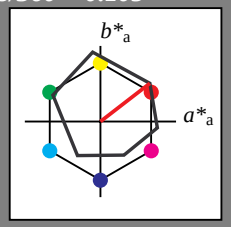
Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 38/360 = 0.105$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

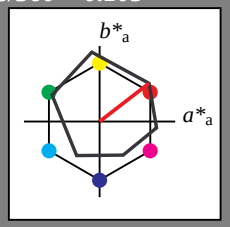
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 38/360 = 0.105$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

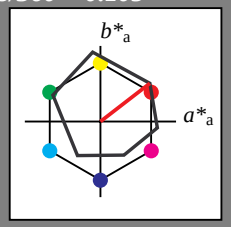
5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

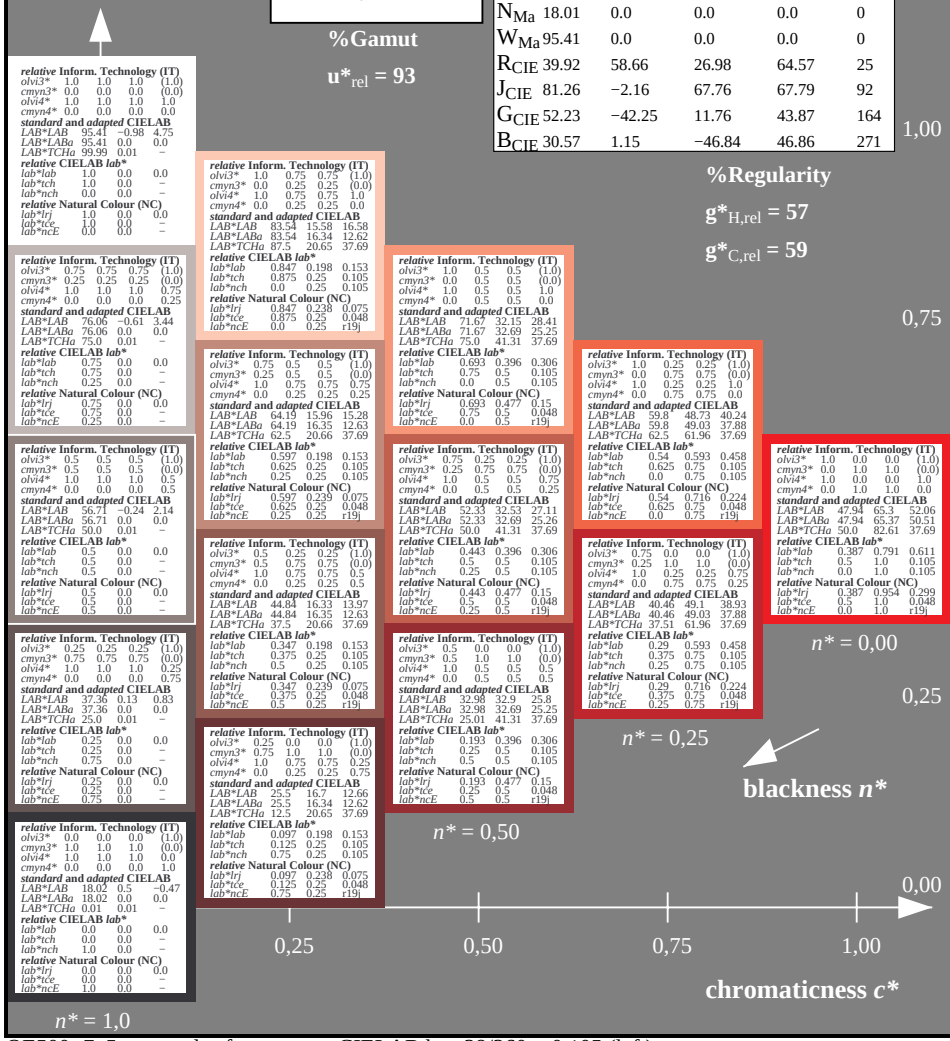
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

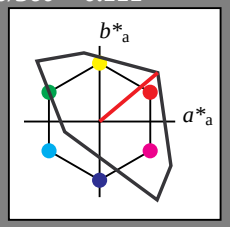


Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

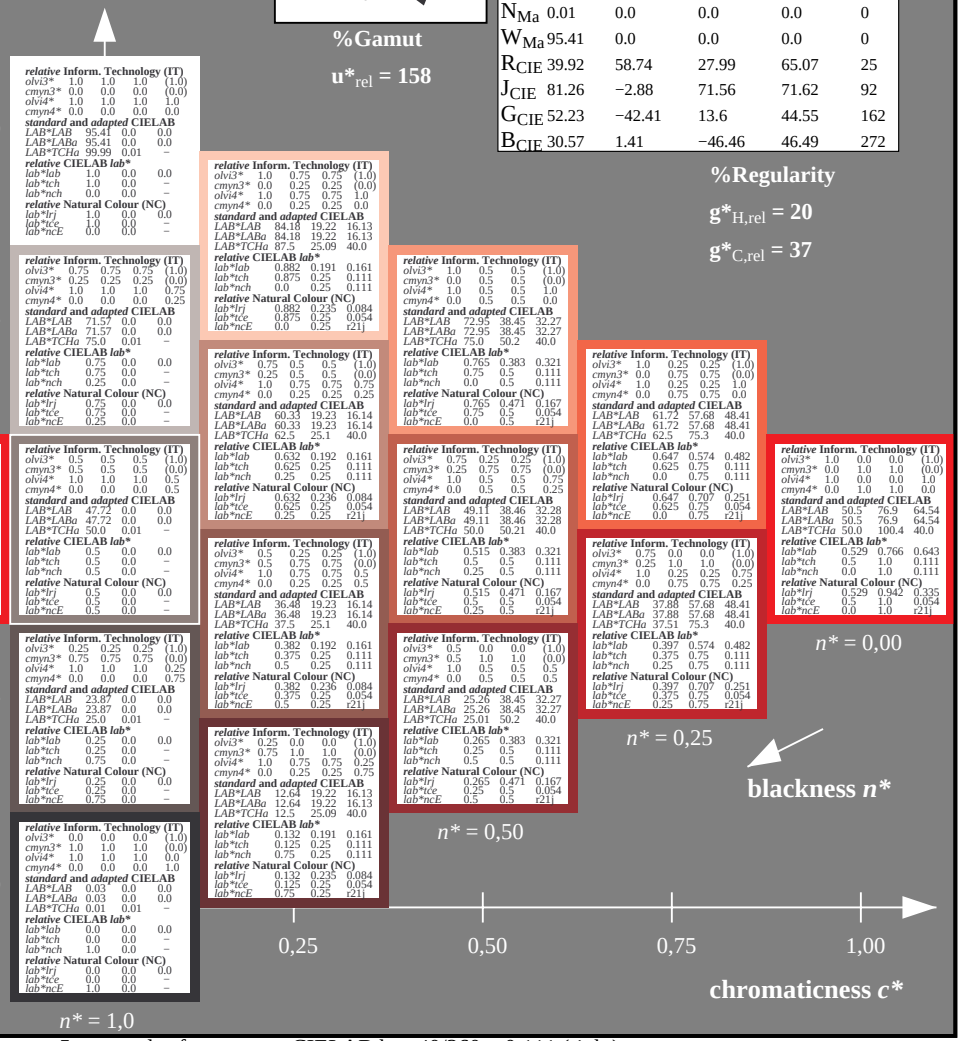
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

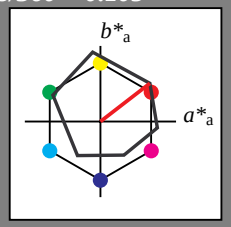
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

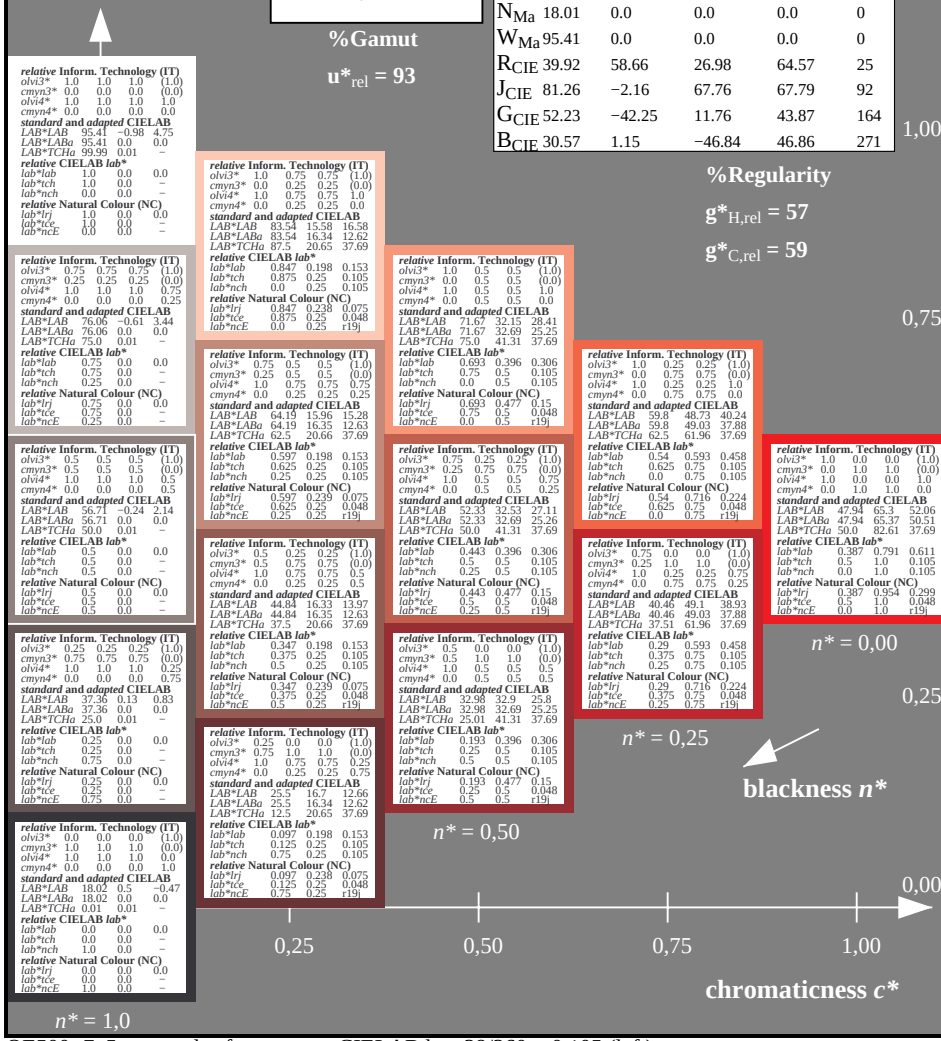
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

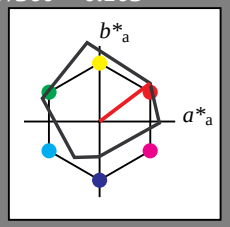
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

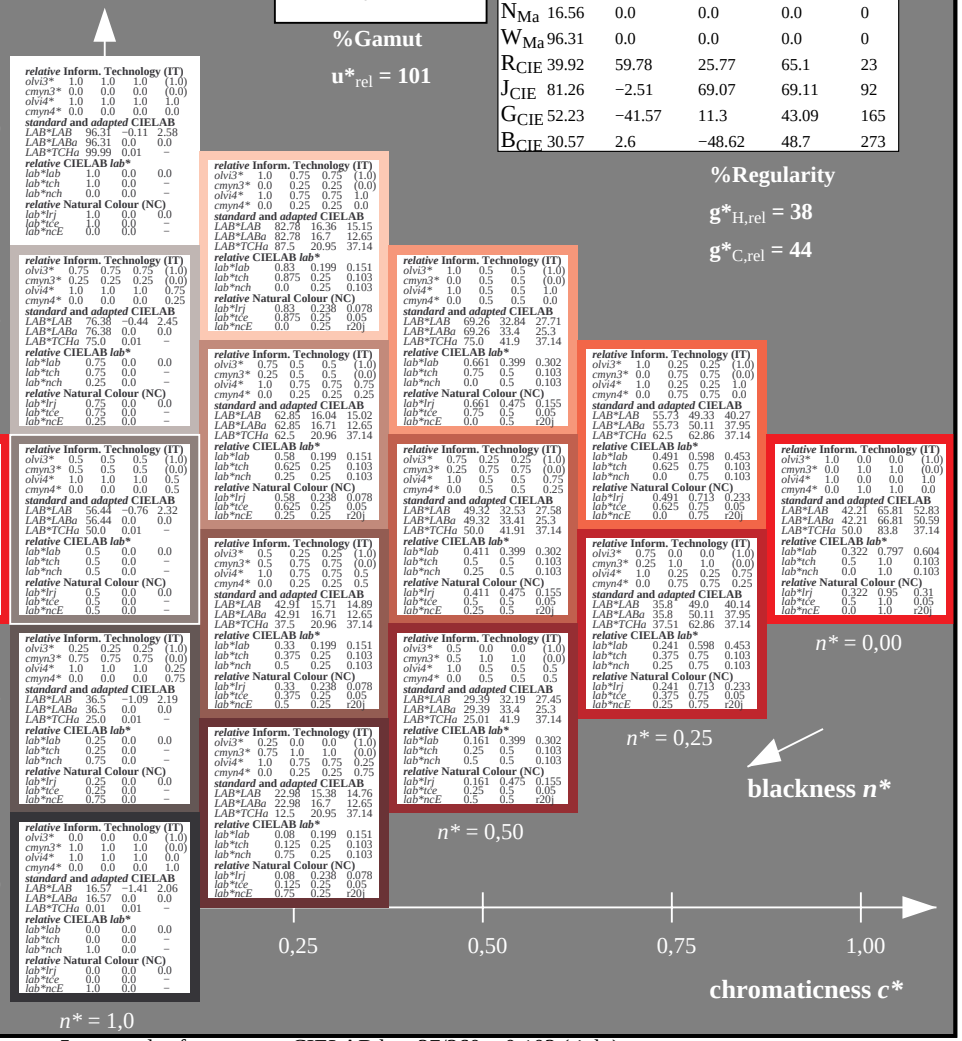
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



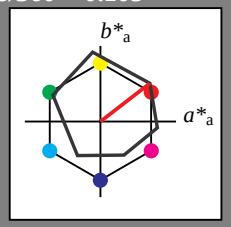
OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

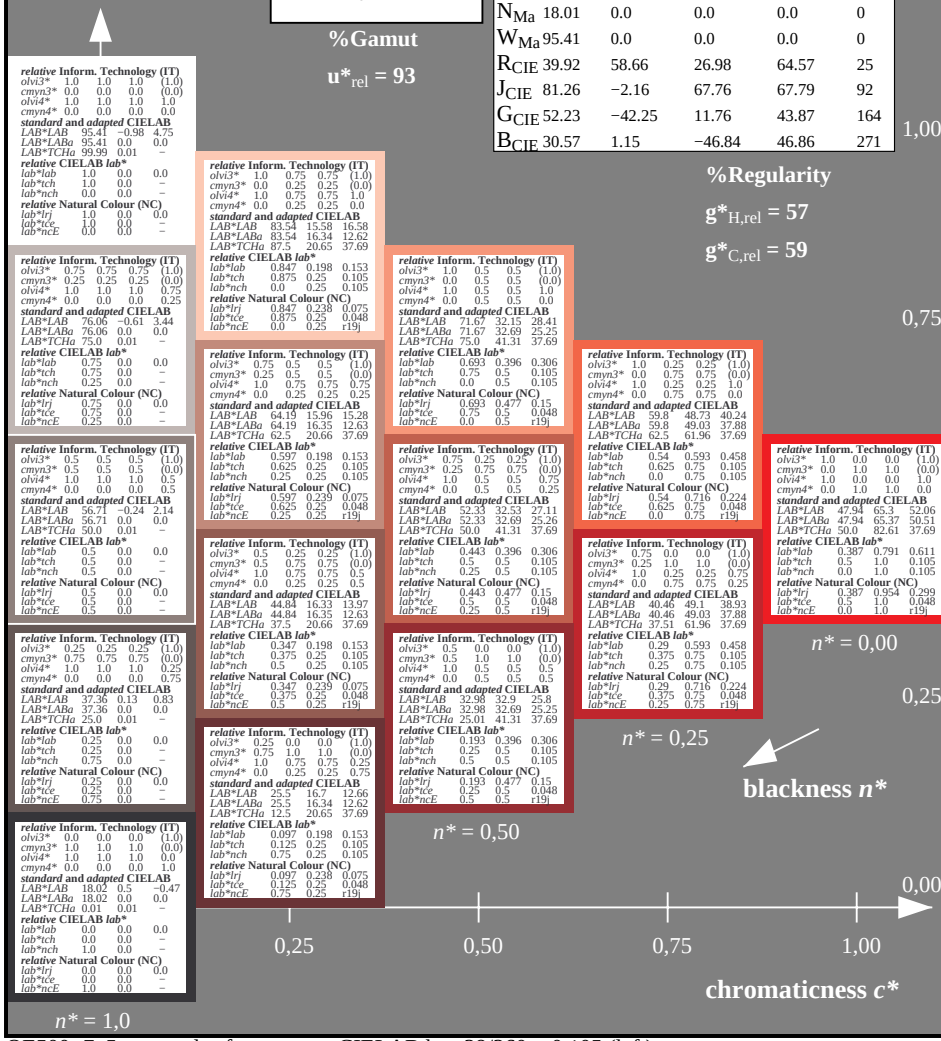
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

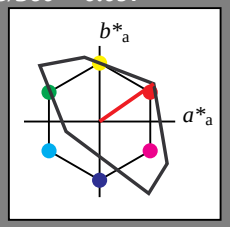


OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

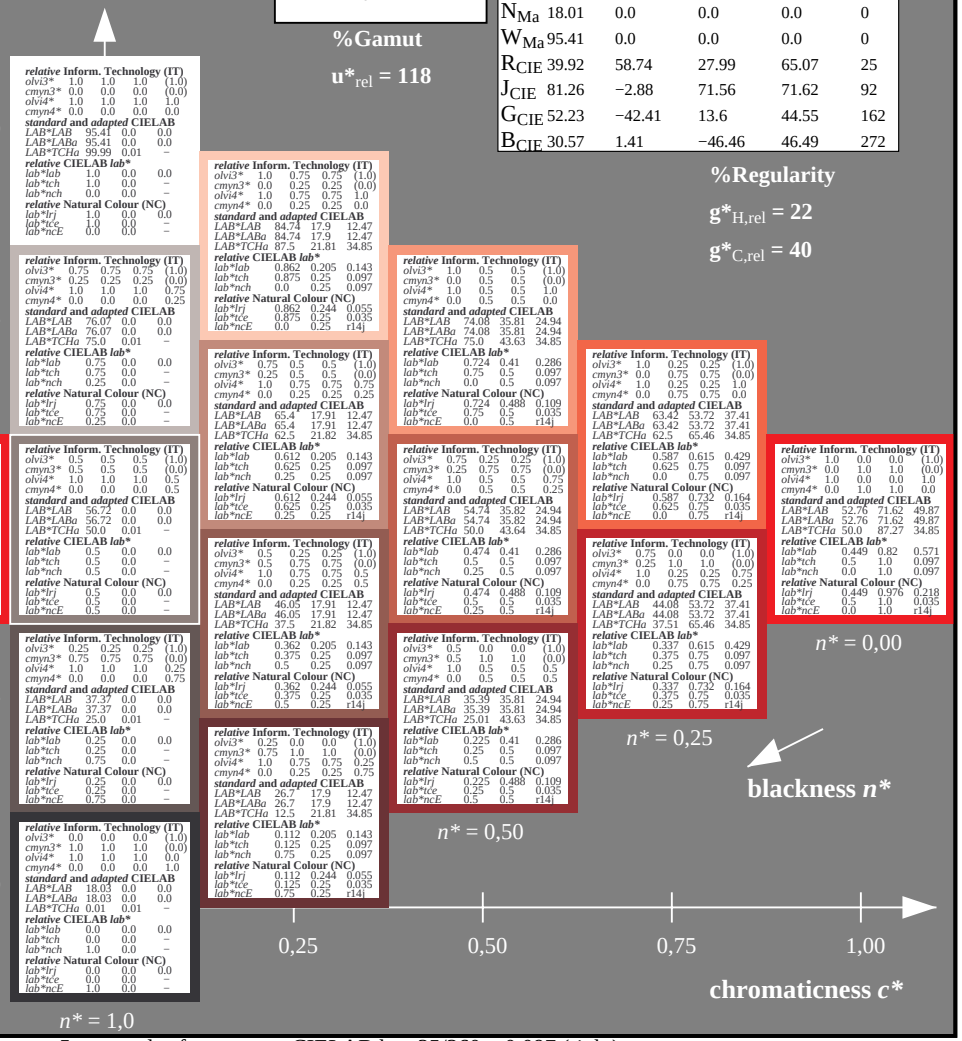
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



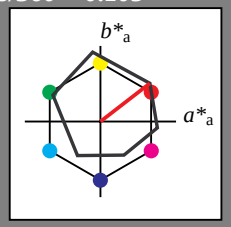
5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

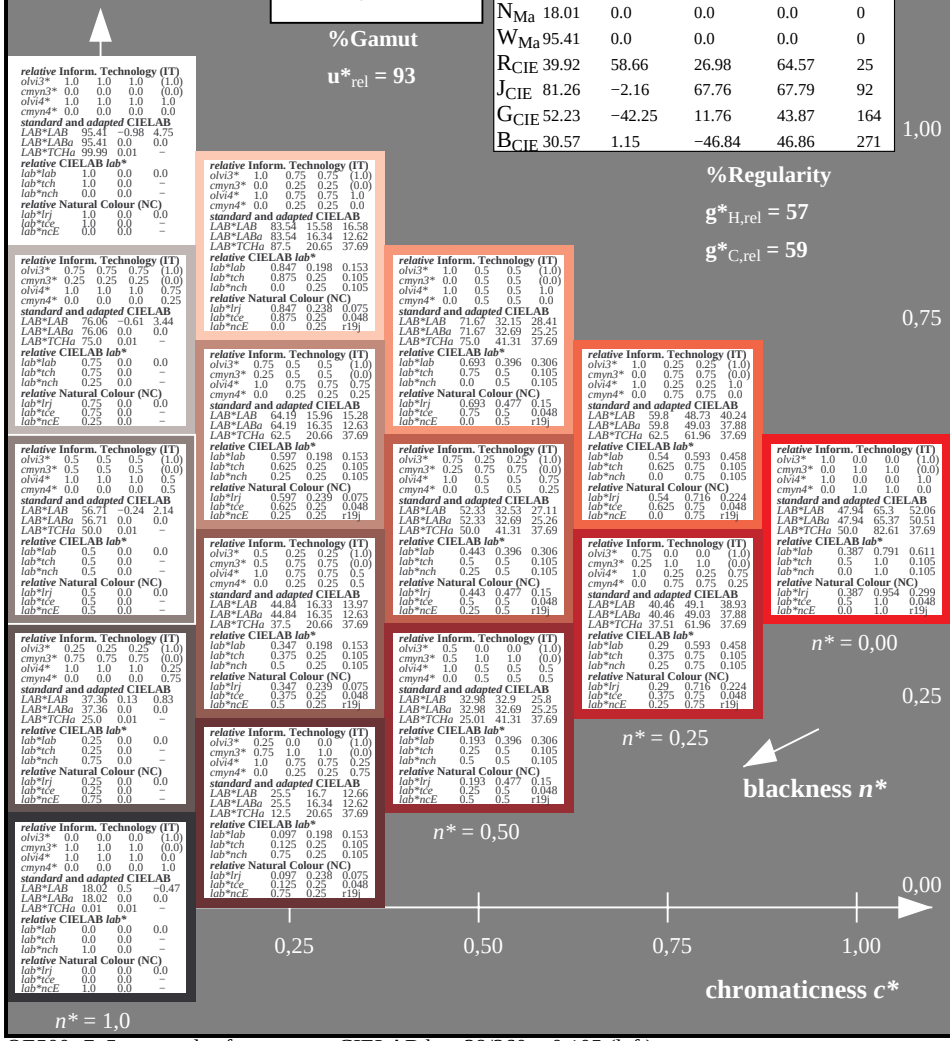
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



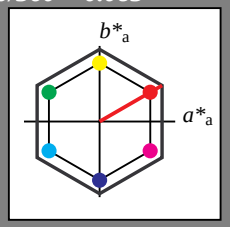
OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

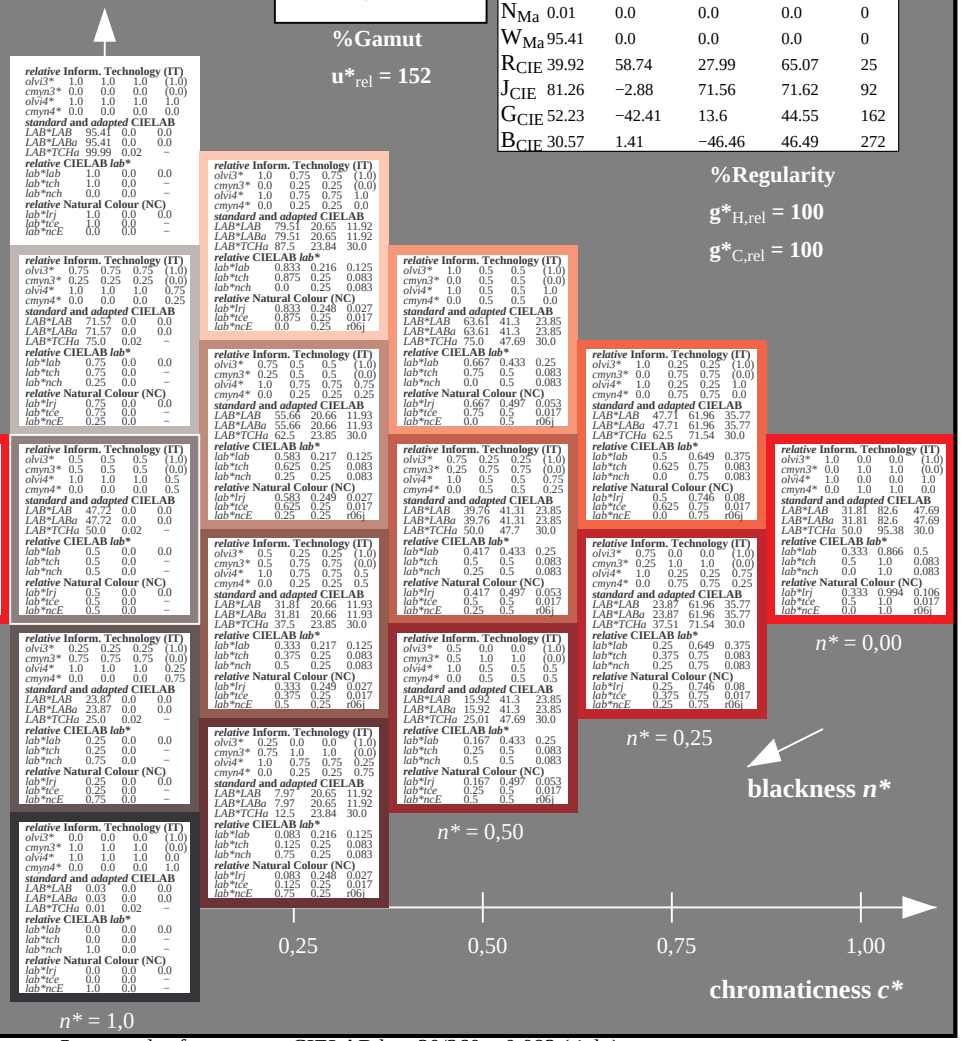
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

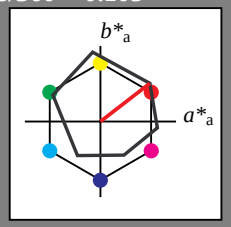


5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

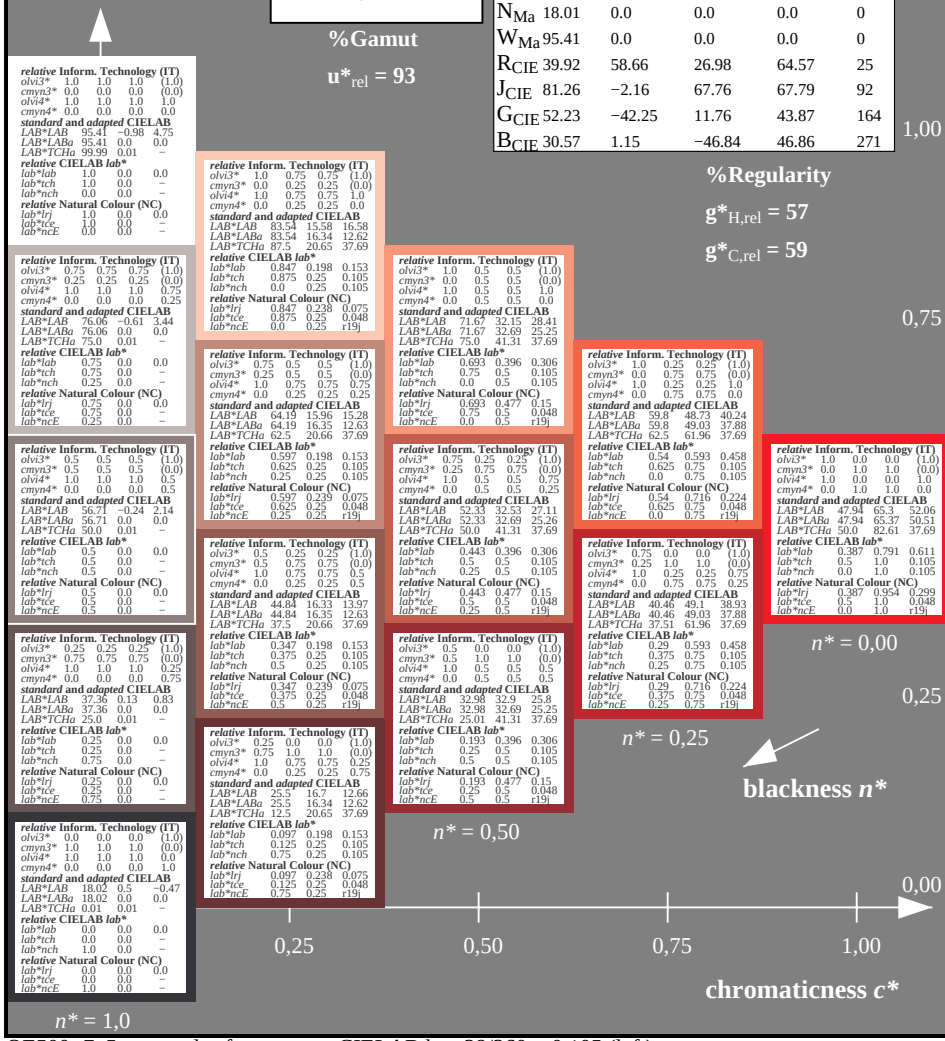
u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

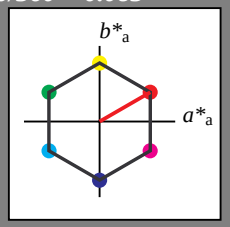
triangle lightness *t**



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0



NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

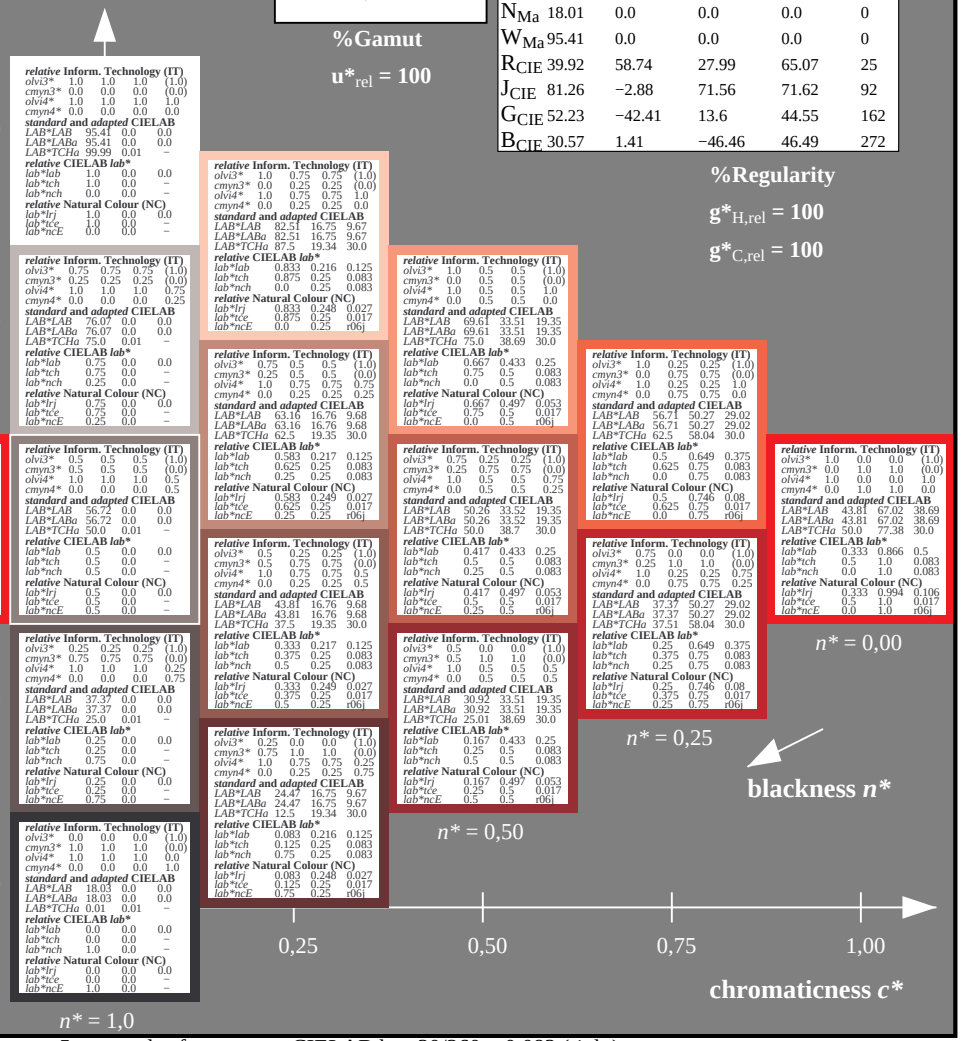
u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

triangle lightness *t**



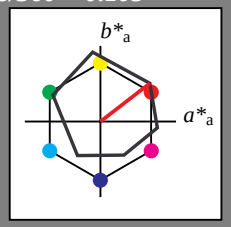
OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

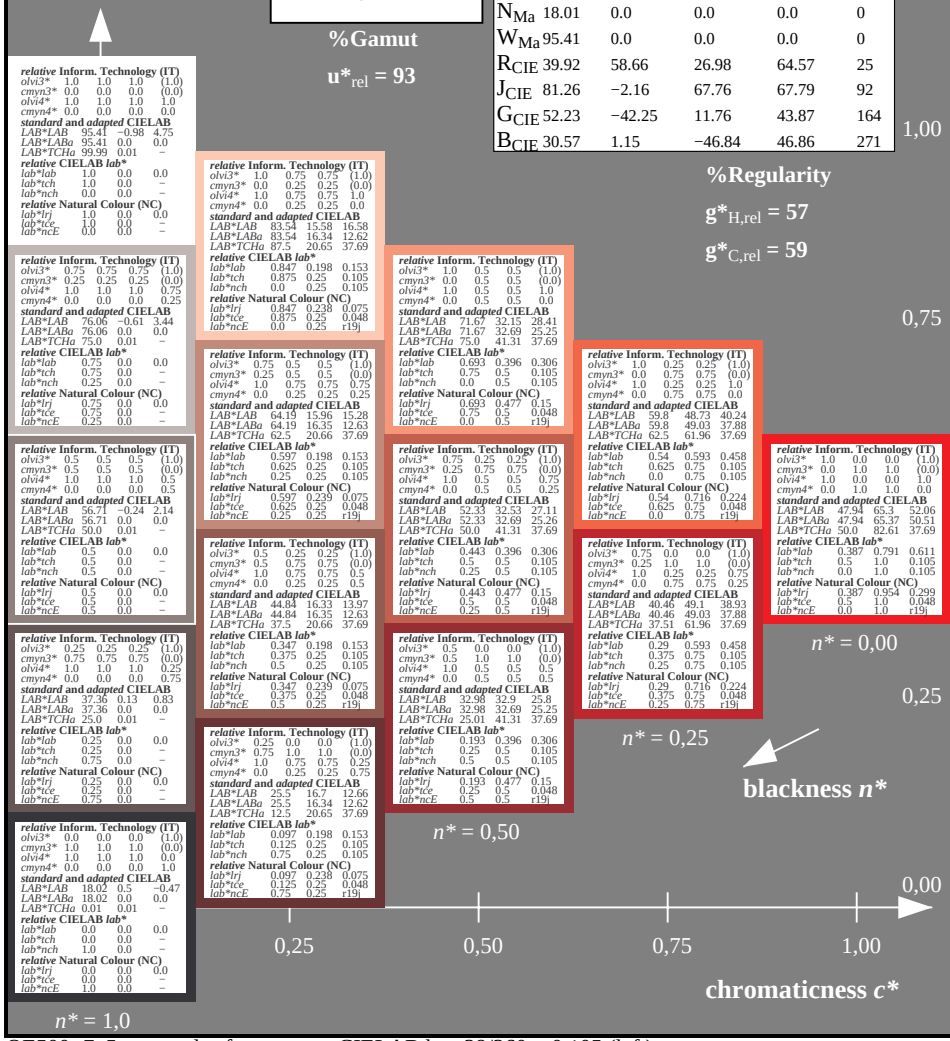
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

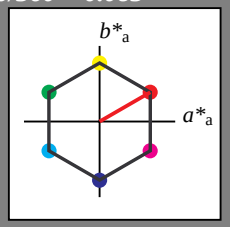


OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

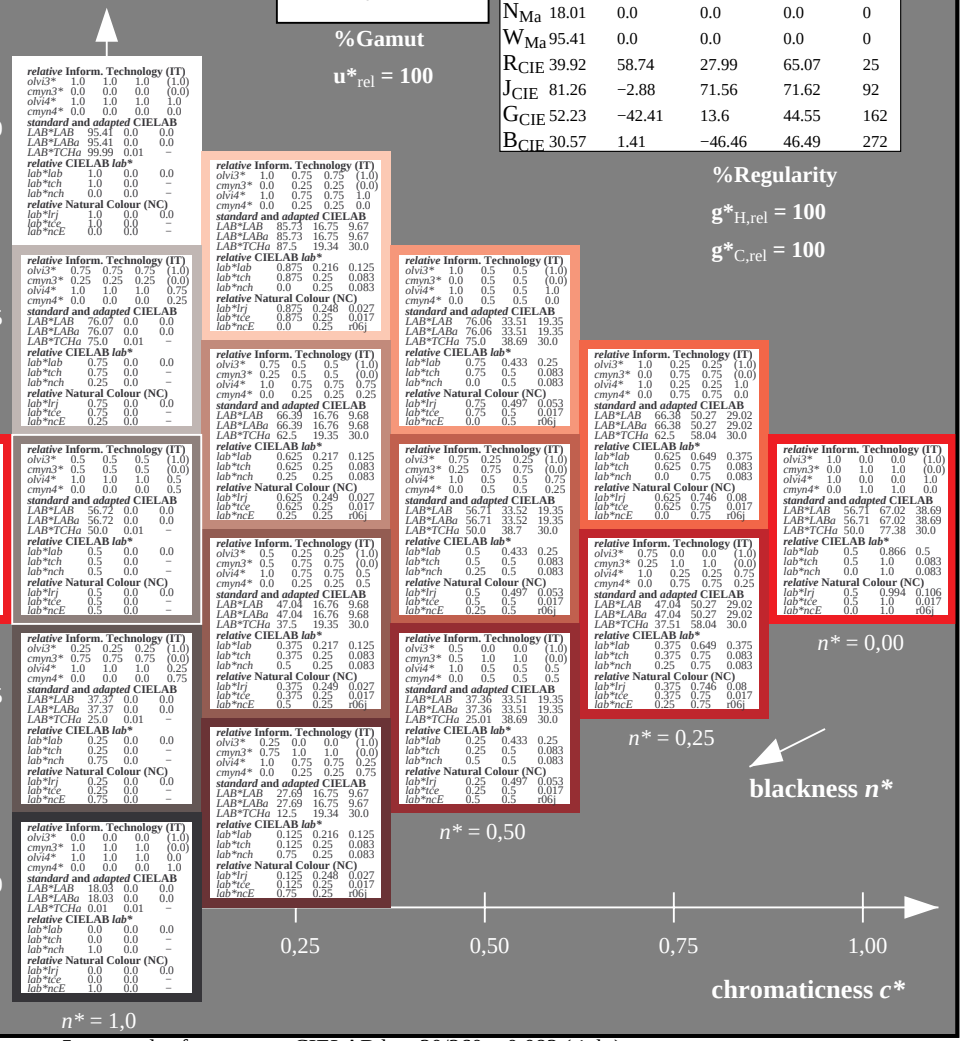
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



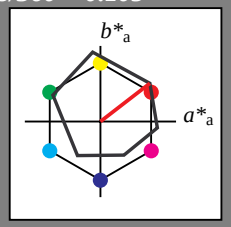
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

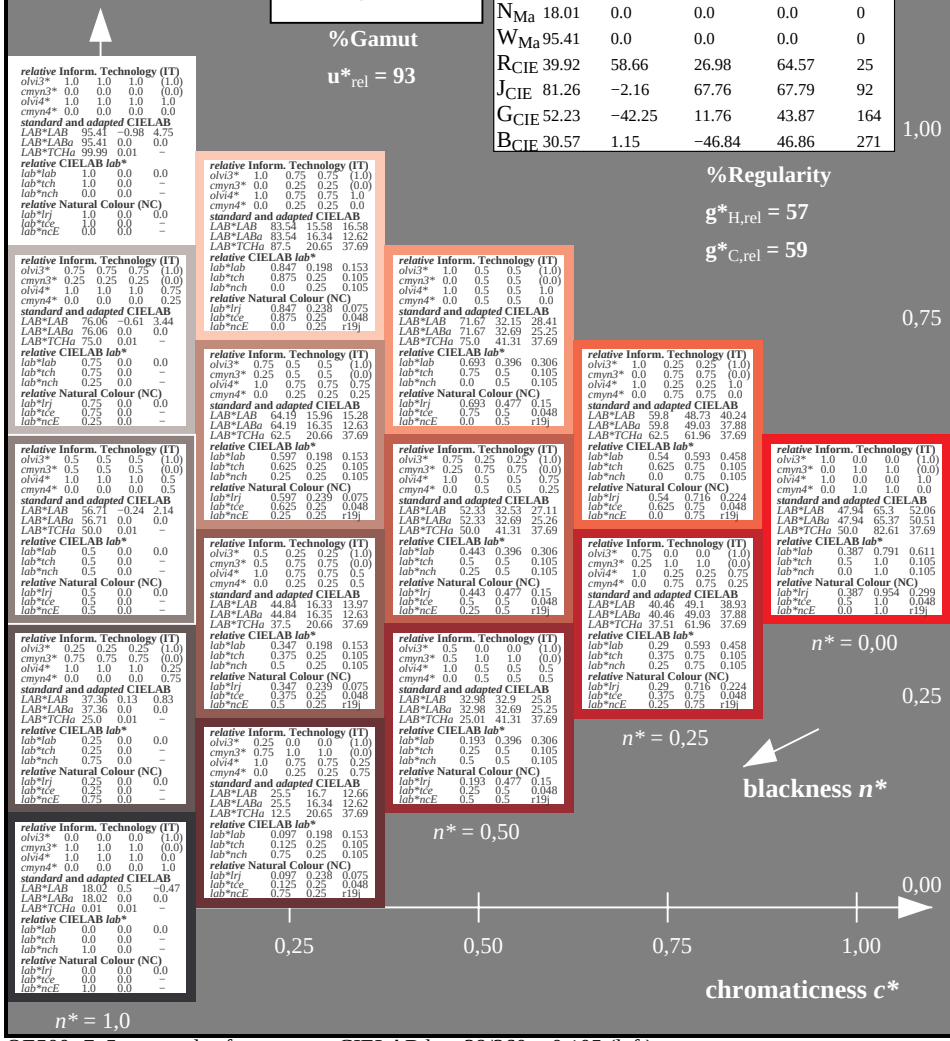
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



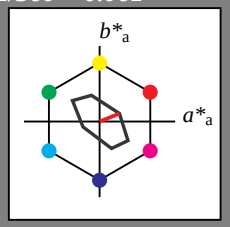
OE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

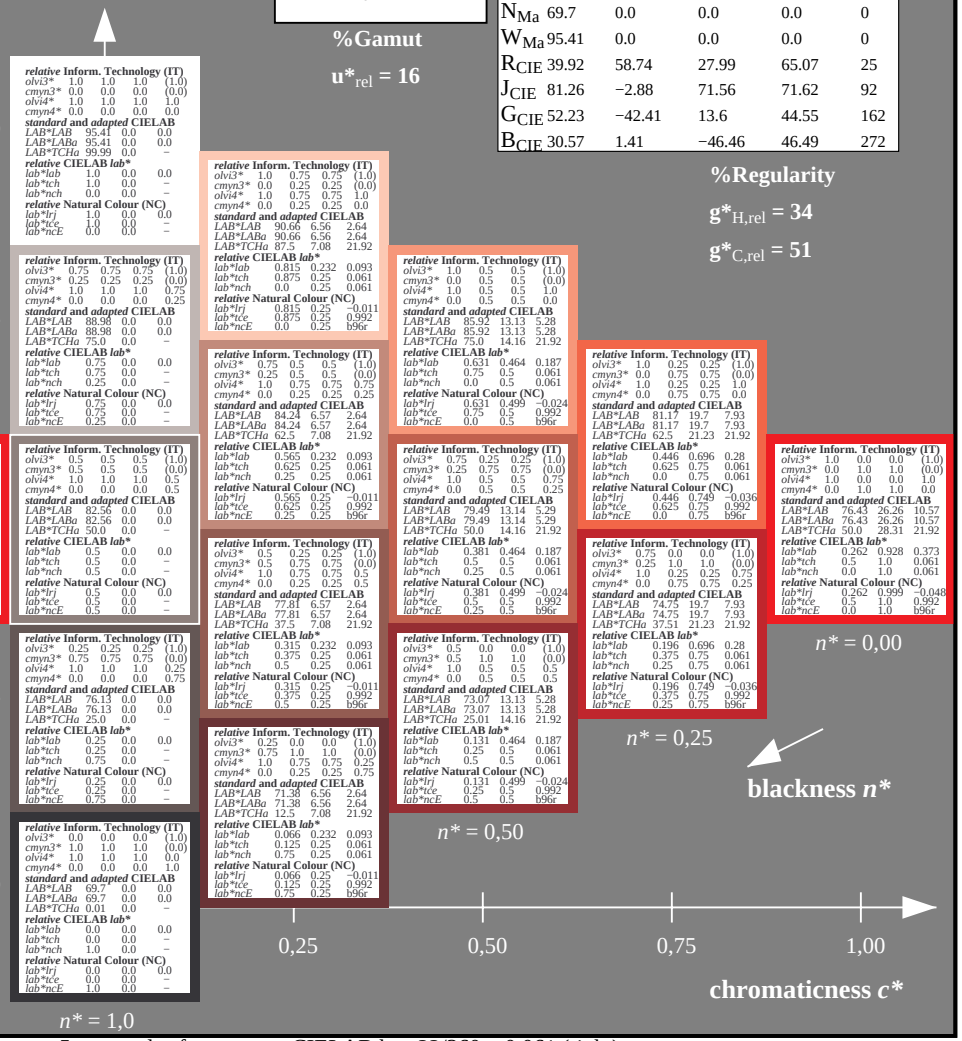
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

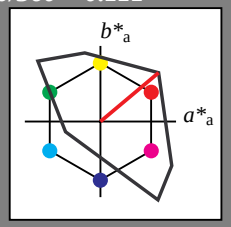
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

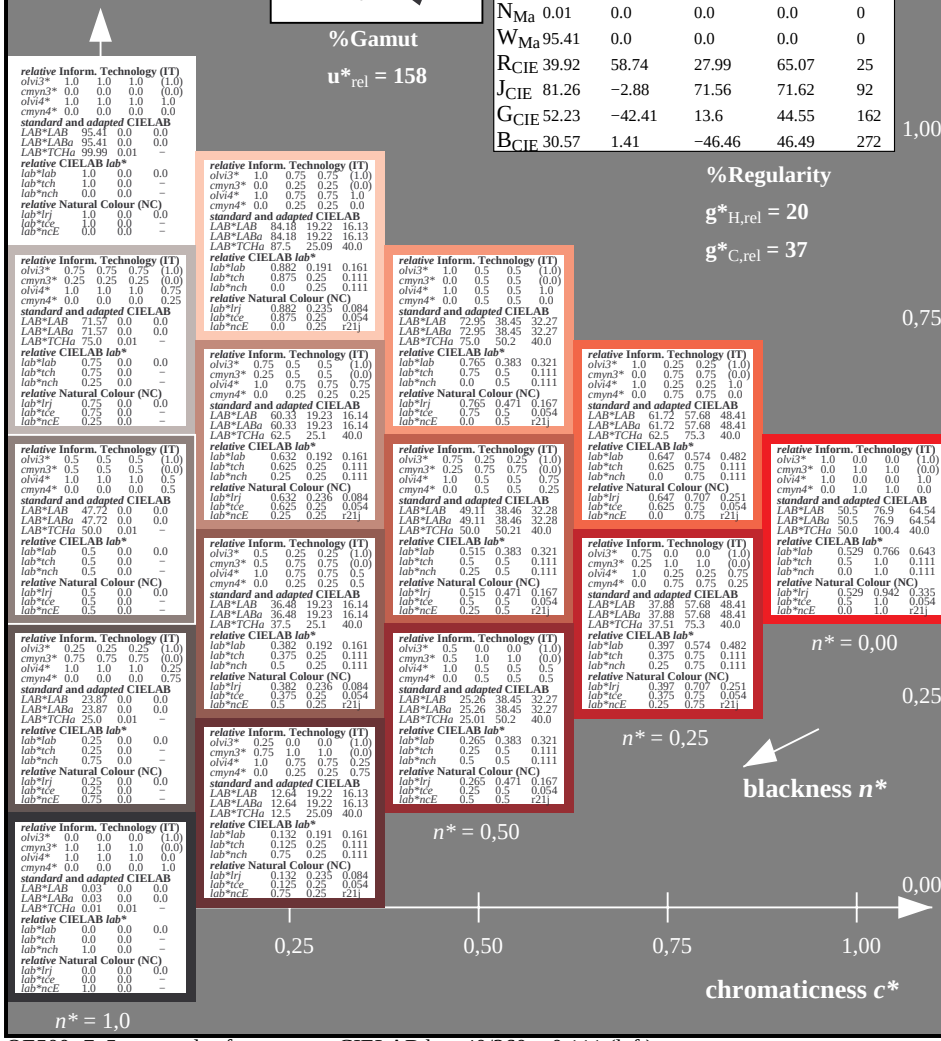
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

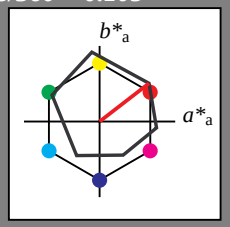
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

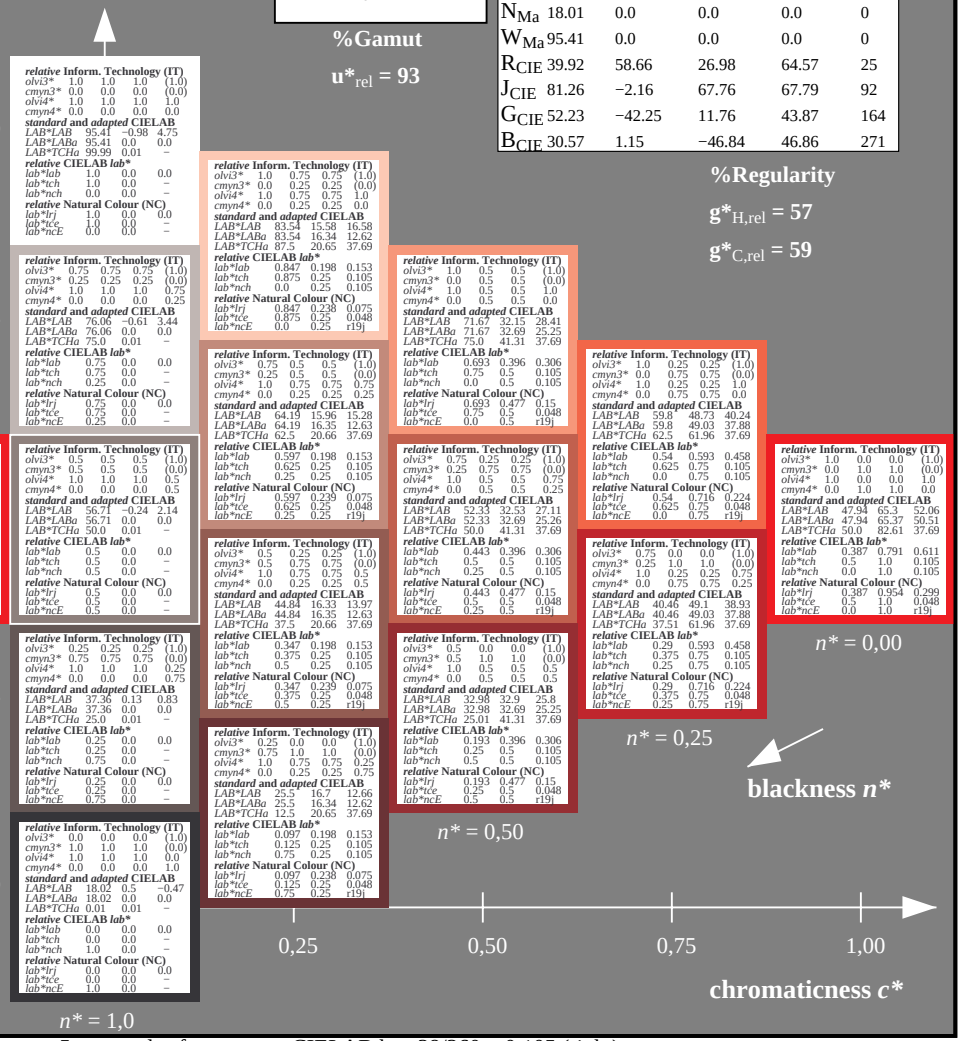
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Television Luminous System TLS00

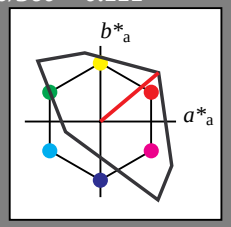
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

triangle lightness t^*

1,00

0,75

0,25

0,00

$n^* = 1,0$

$n^* = 0,50$

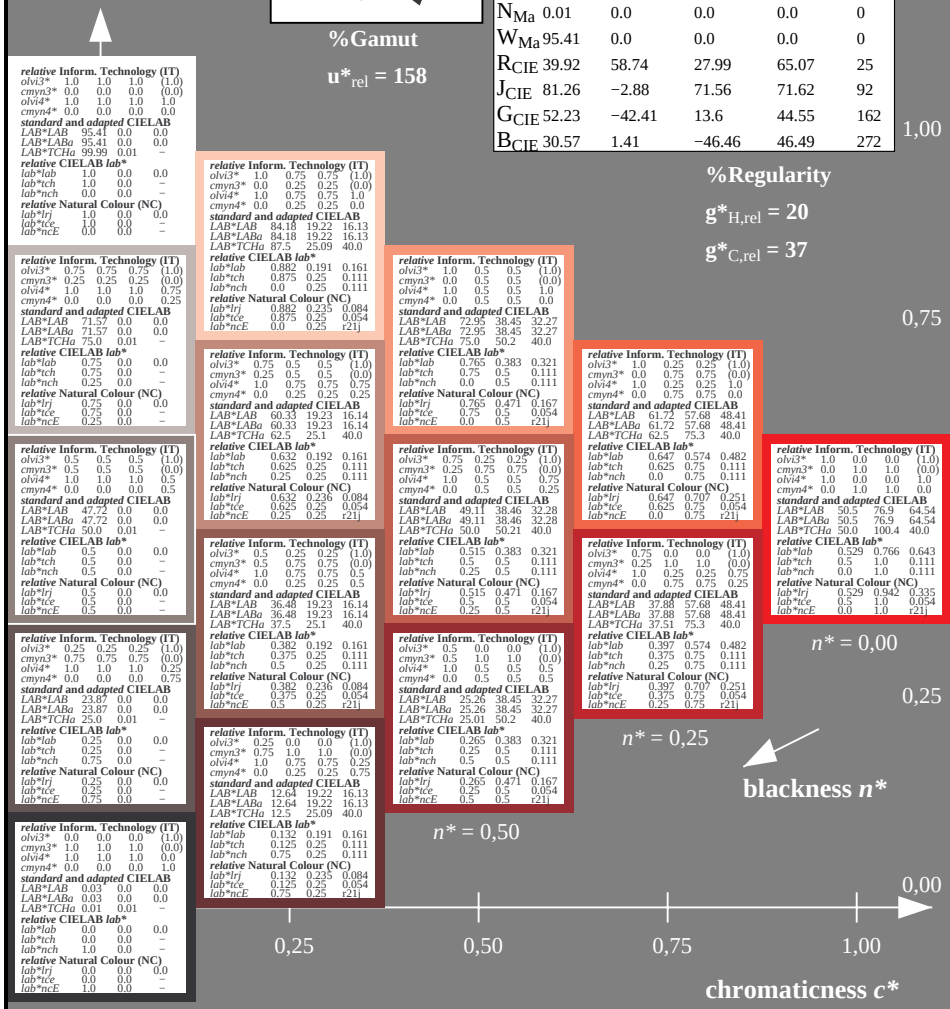
$n^* = 0,25$

$n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*



OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

Output: Colorimetric Television Luminous System TLS00

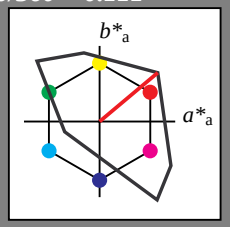
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

triangle lightness t^*

0,75

0,25

0,00

$n^* = 1,0$

$n^* = 0,50$

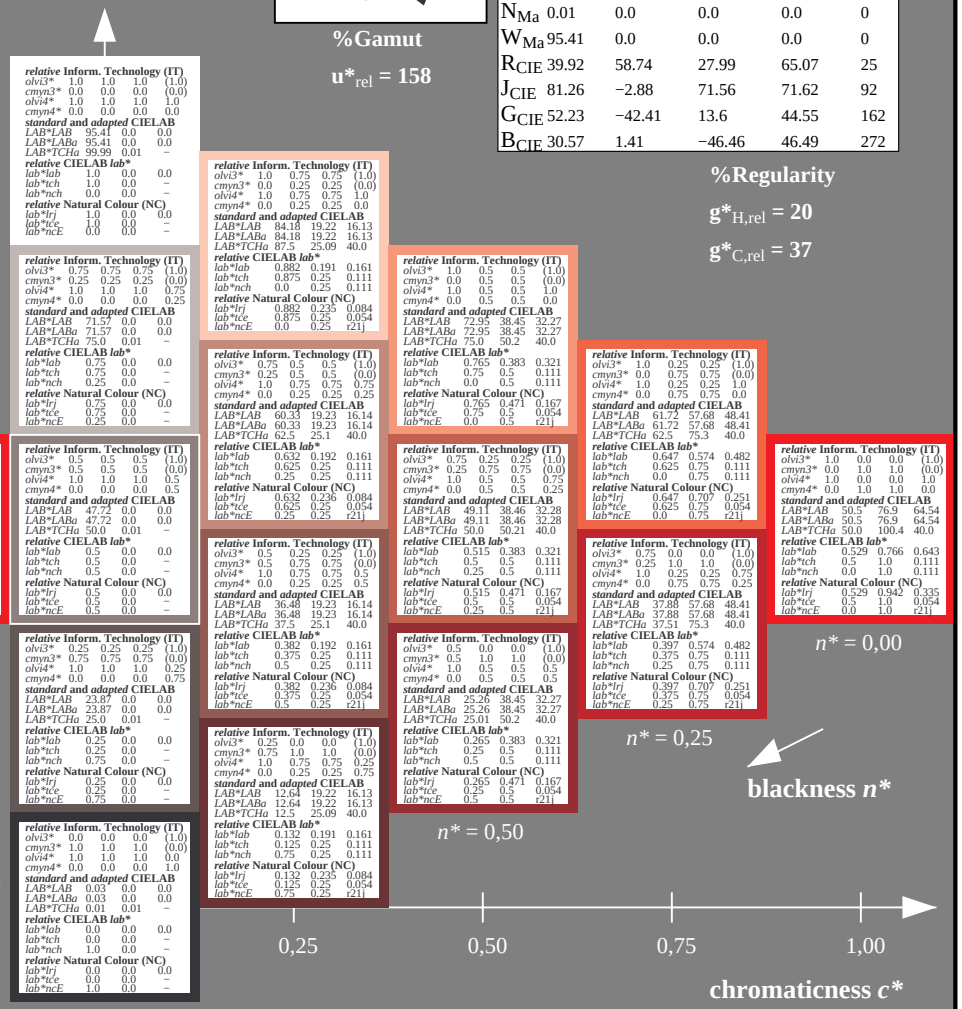
$n^* = 0,25$

$n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*



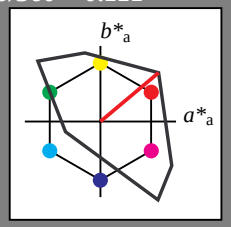
5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

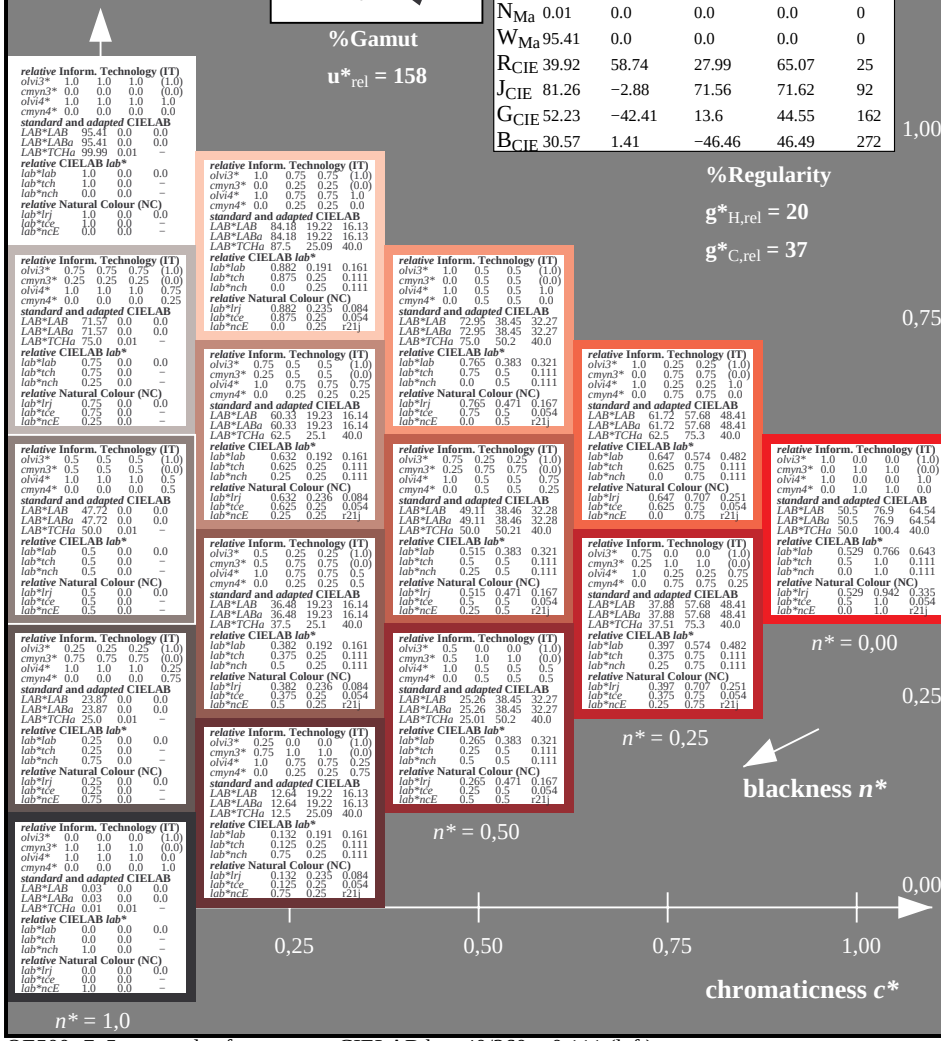
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



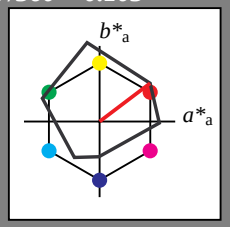
OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

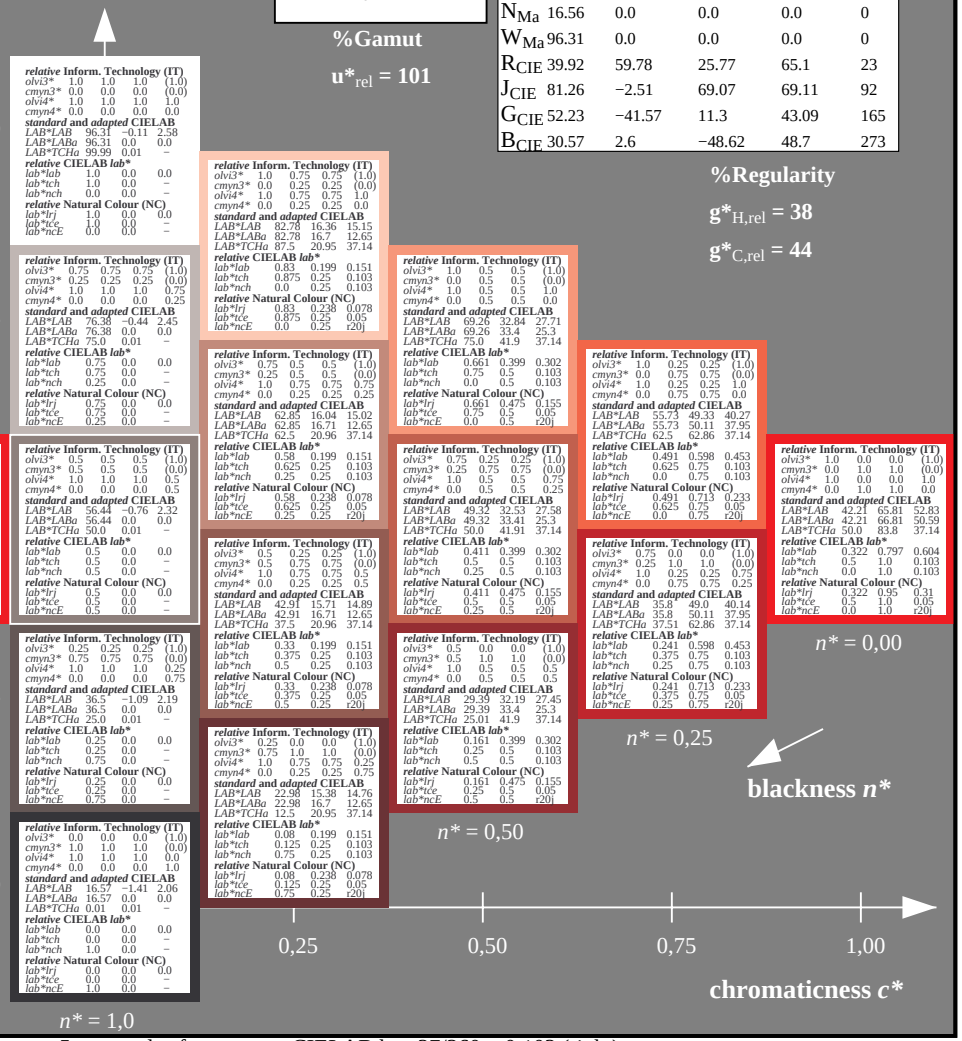
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



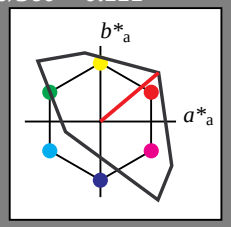
5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

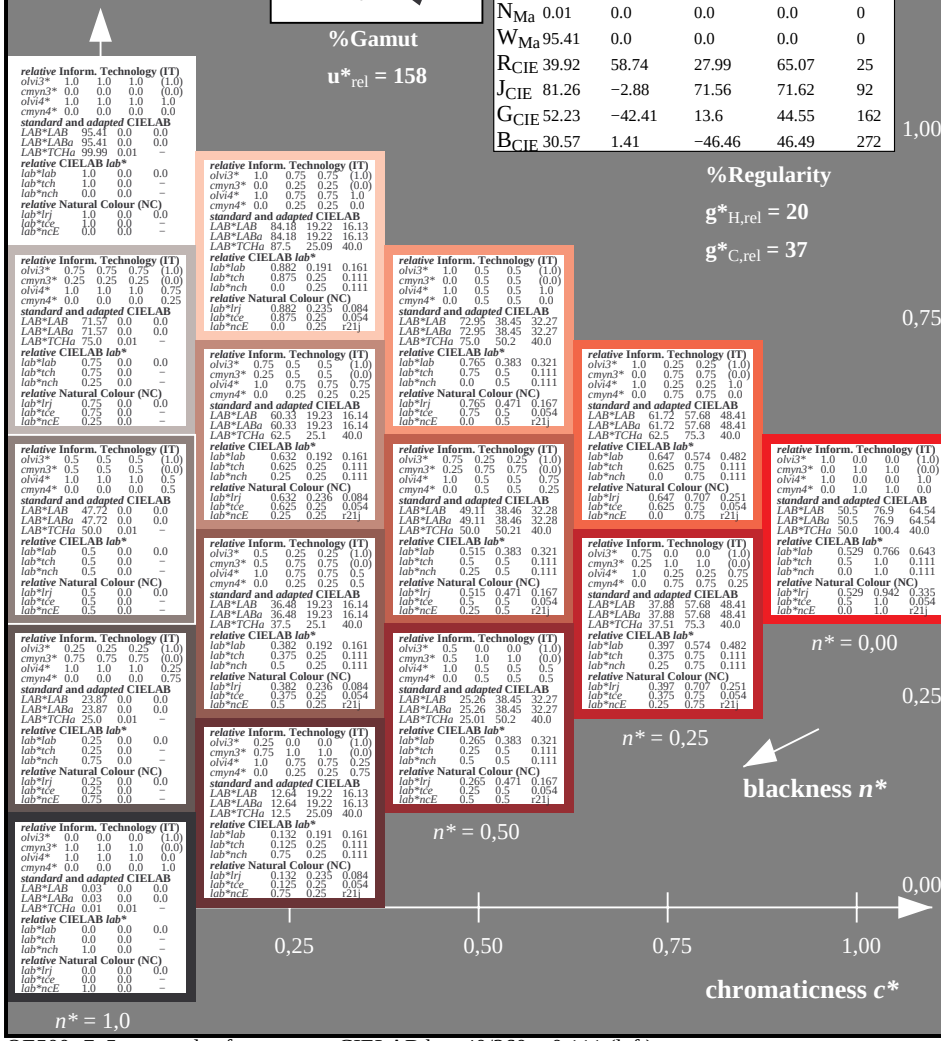
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

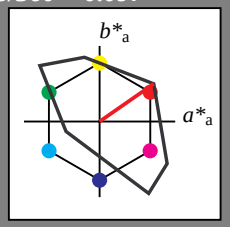


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

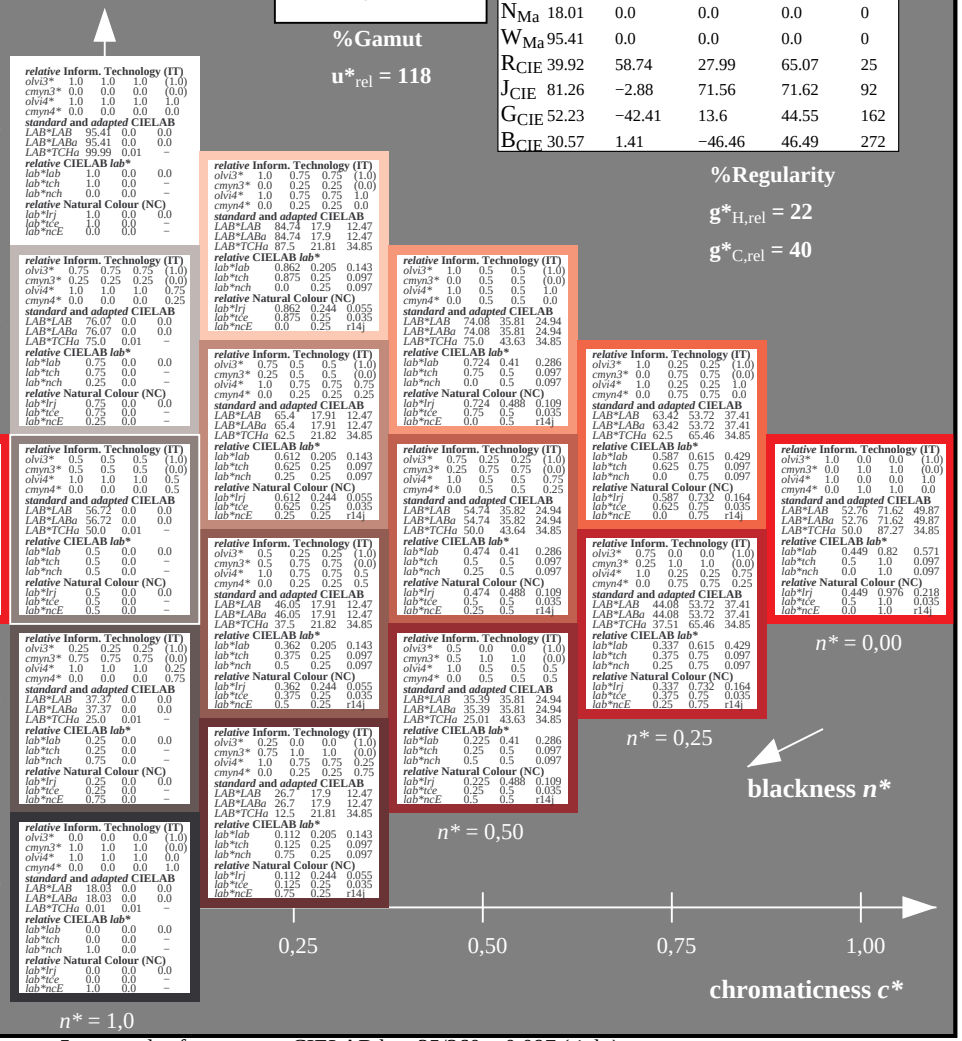
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Television Luminous System TLS00

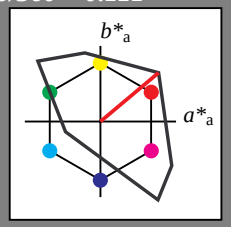
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

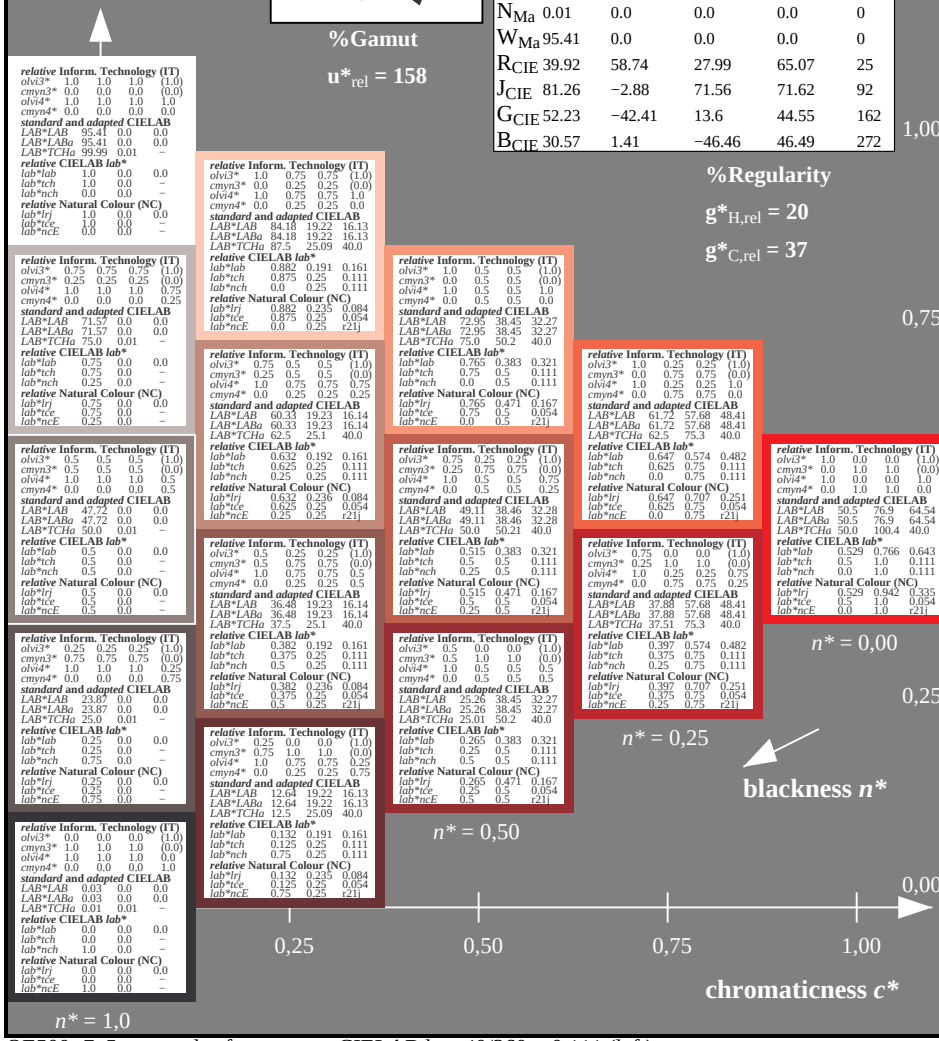
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Natural Luminous System NLS00

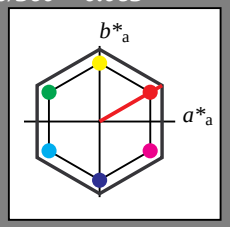
for hue $h^* = lab^*h = 30/360 = 0.083$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0



NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

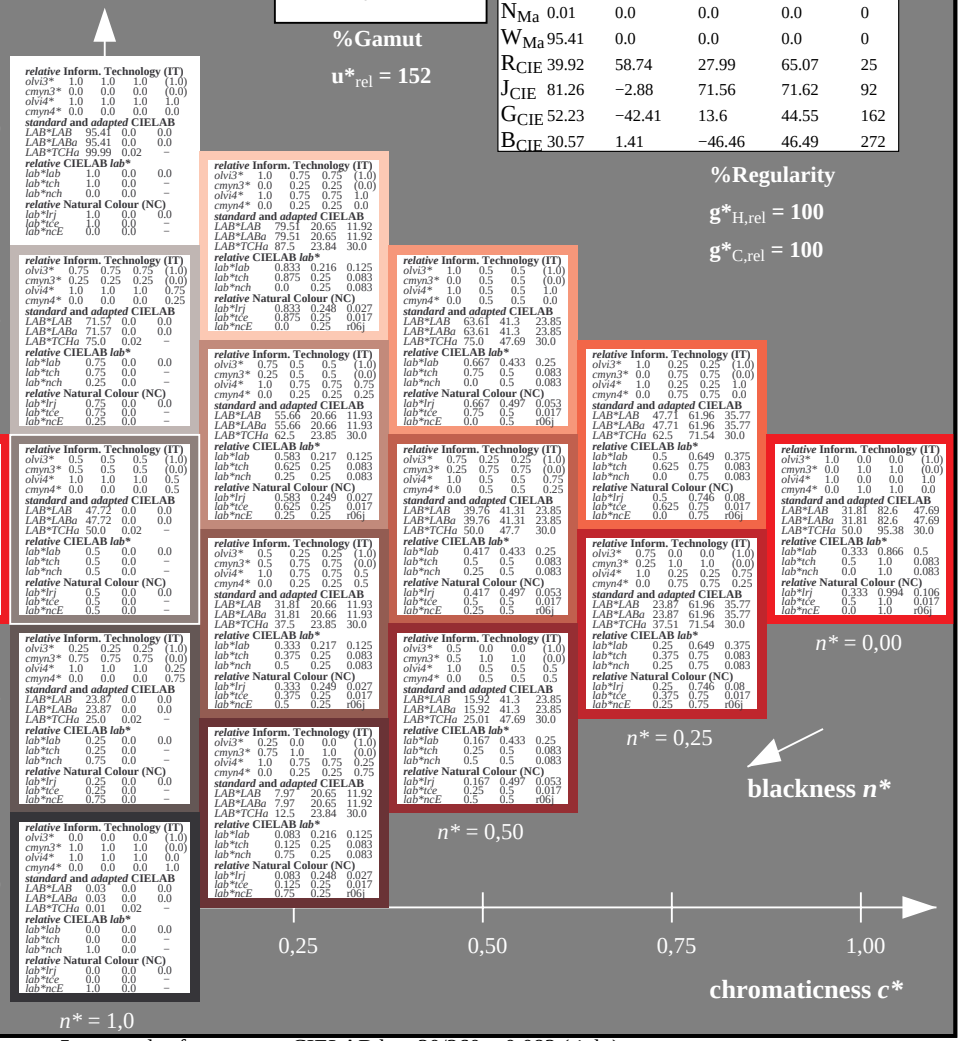
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS00

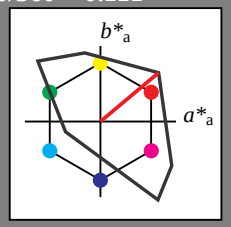
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

Output: Colorimetric Natural Reflective System NRS18

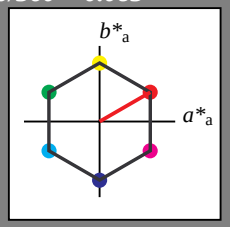
for hue $h^* = lab^*h = 30/360 = 0.083$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0



NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS00

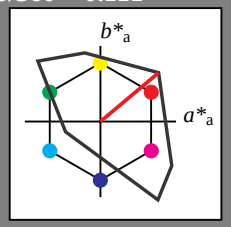
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

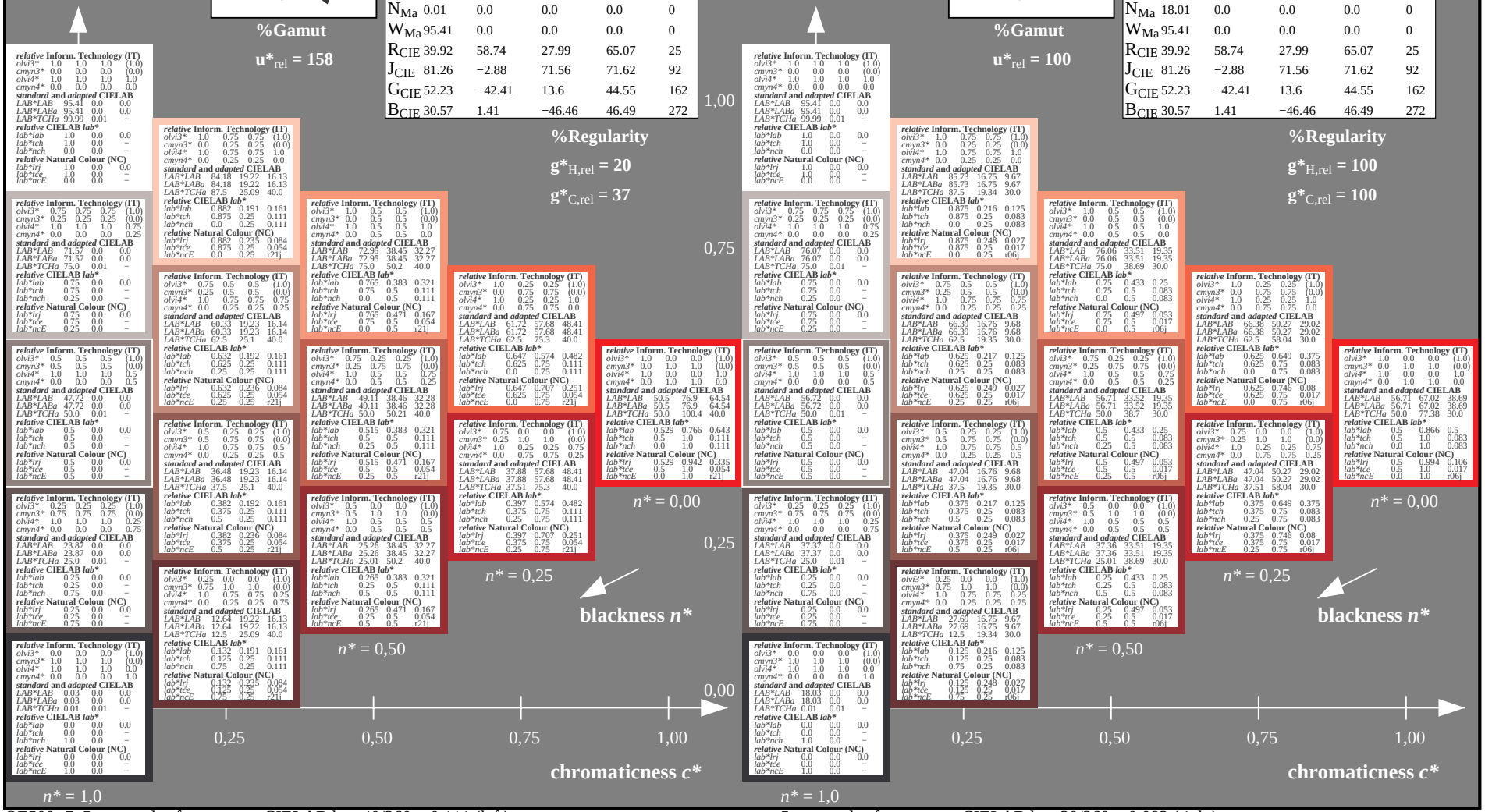
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

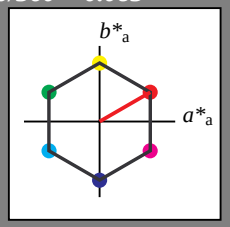
for hue $h^* = lab^*h = 30/360 = 0.083$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS00

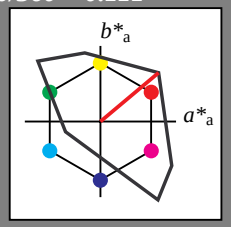
for hue $h^* = lab^*h = 40/360 = 0.111$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

0,25 0,50 0,75 1,00

Output: Colorimetric Television Luminous System TLS70

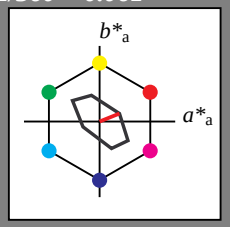
for hue $h^* = lab^*h = 22/360 = 0.061$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

0,25 0,50 0,75 1,00

OE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

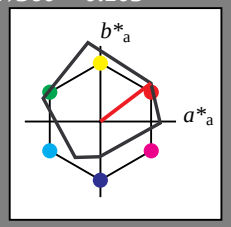
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

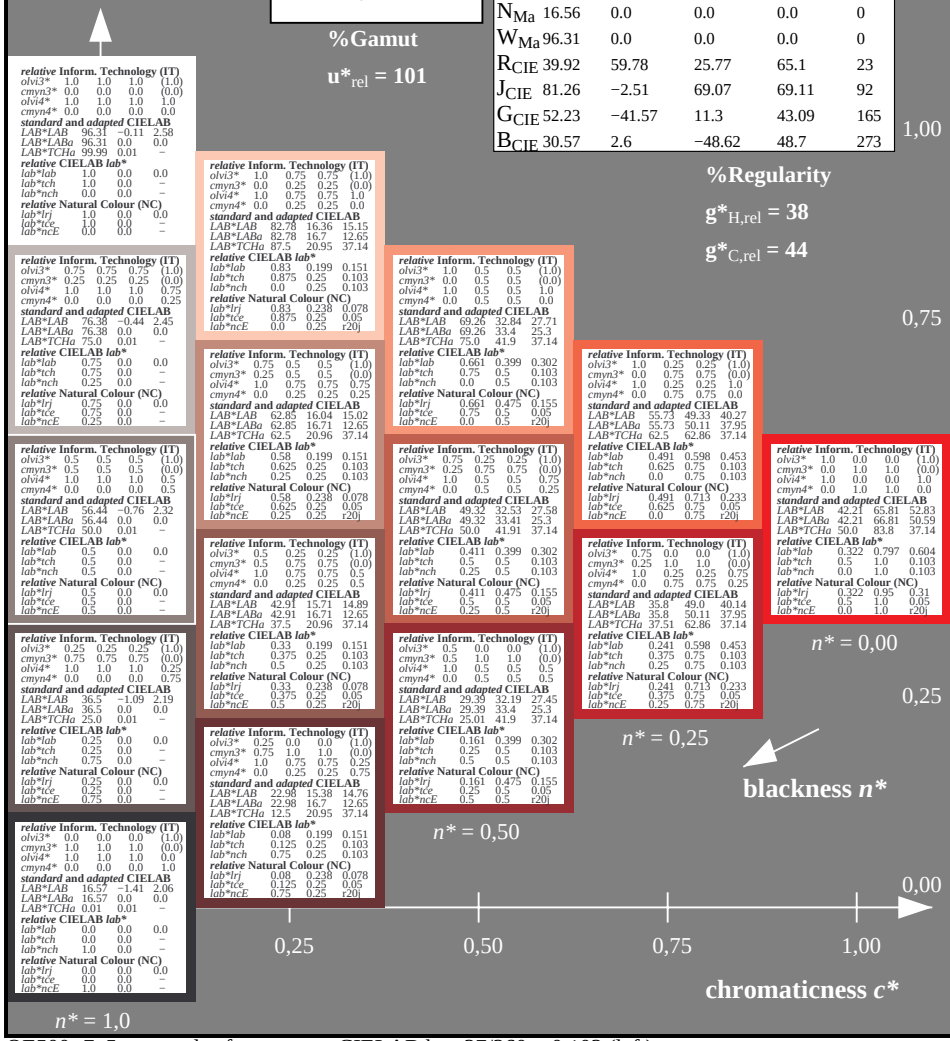
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

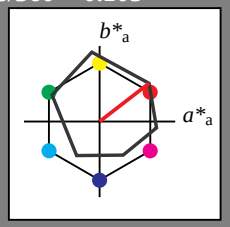
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

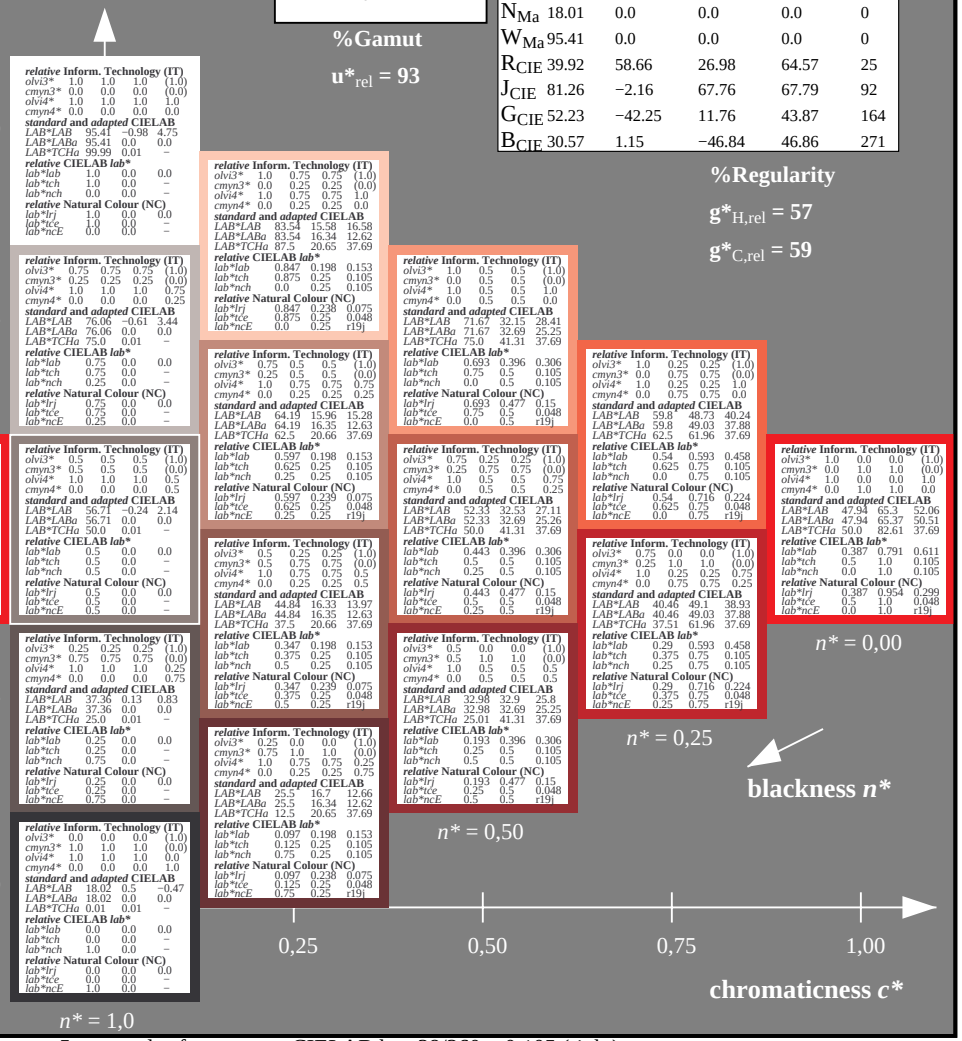
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



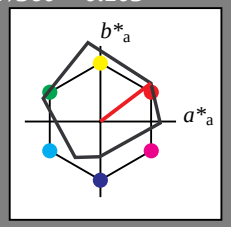
5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

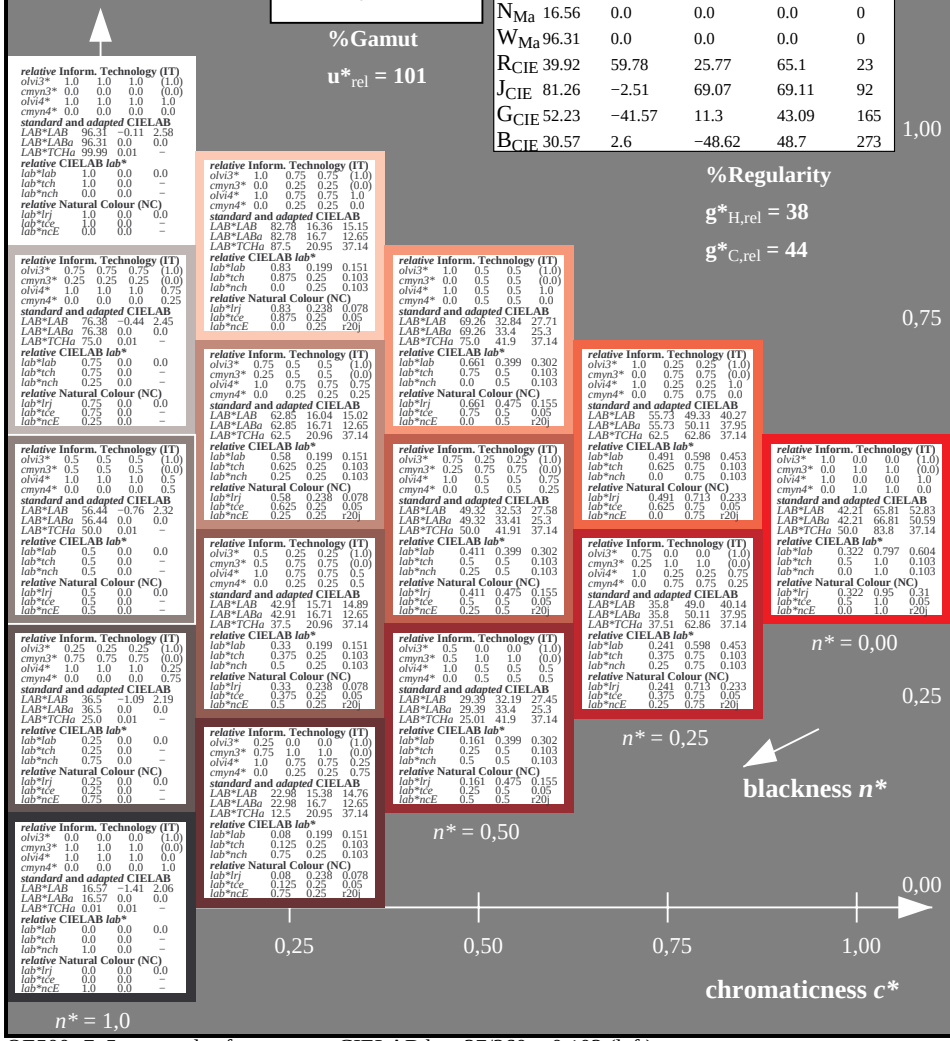
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



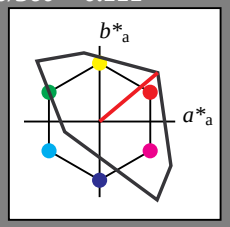
OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

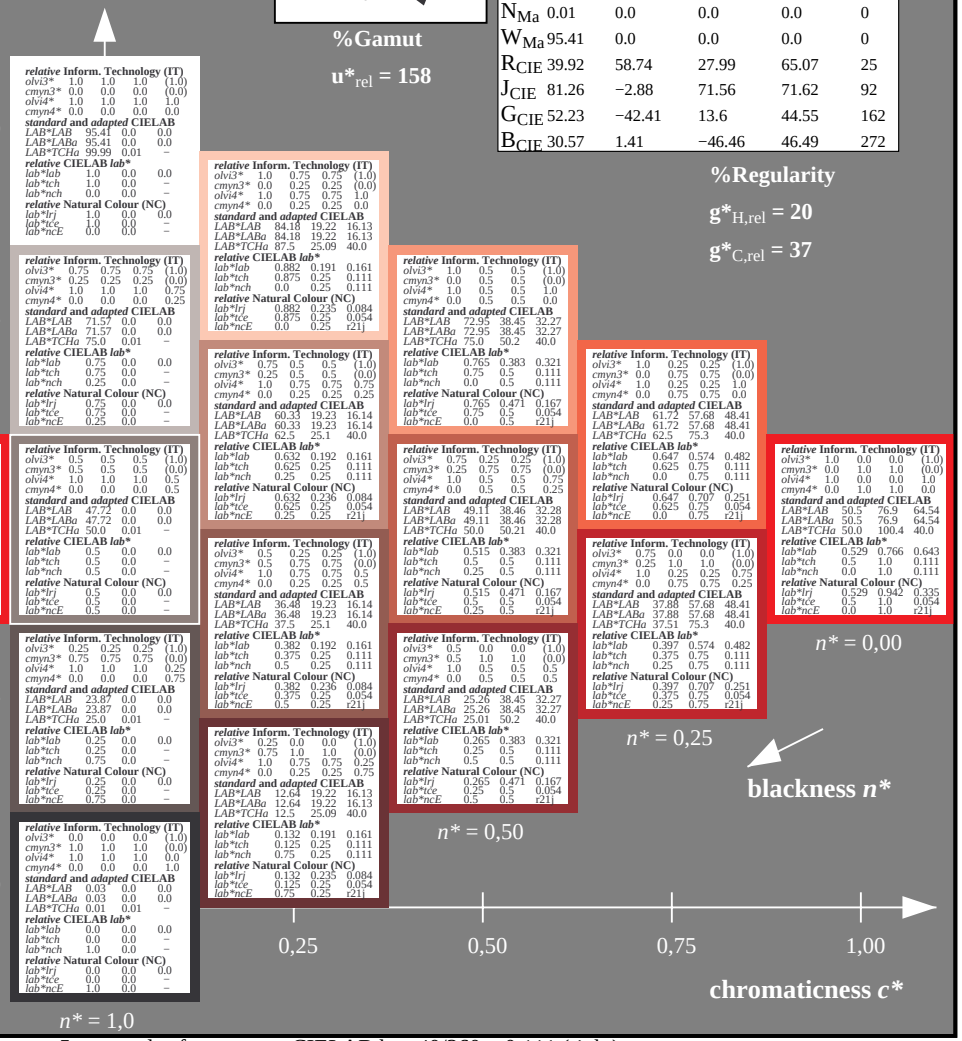
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

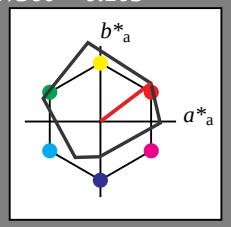
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

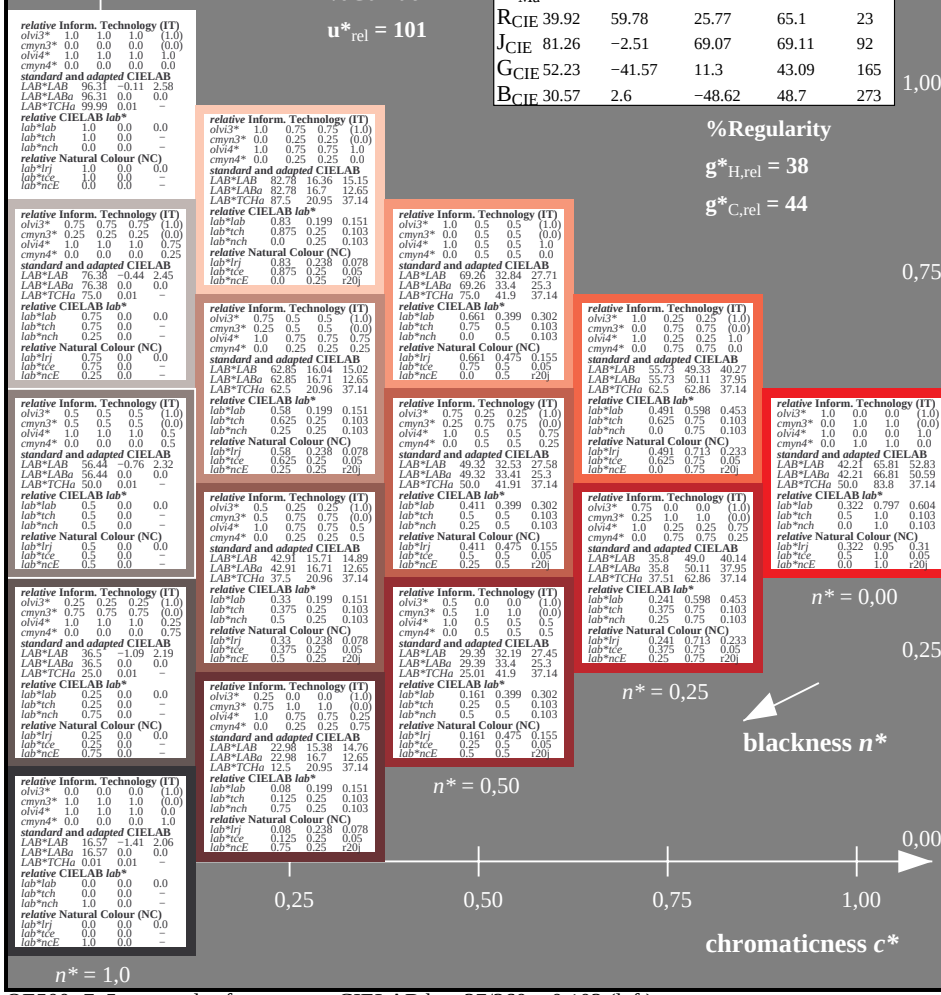
1,00

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

0,75



OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

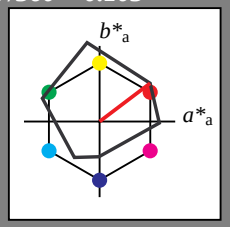
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

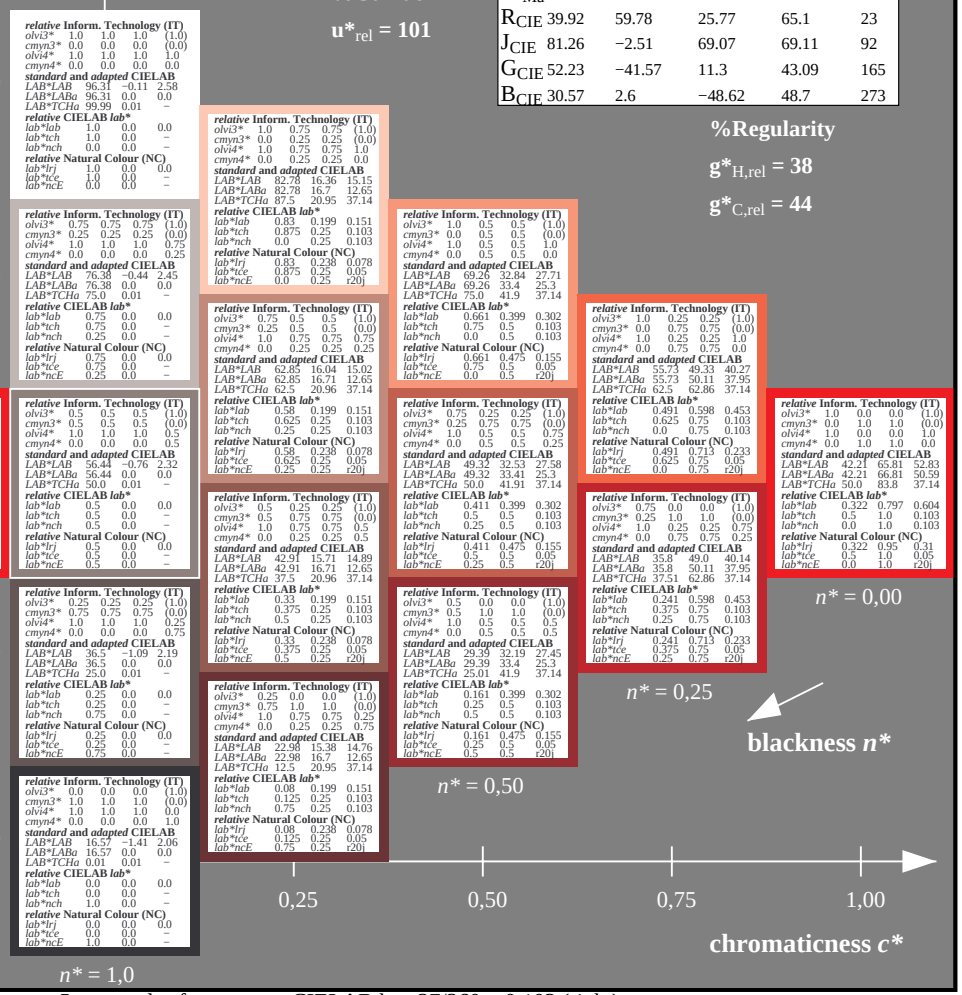
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

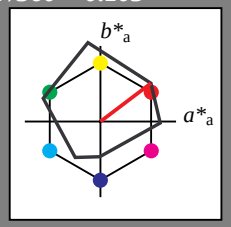
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

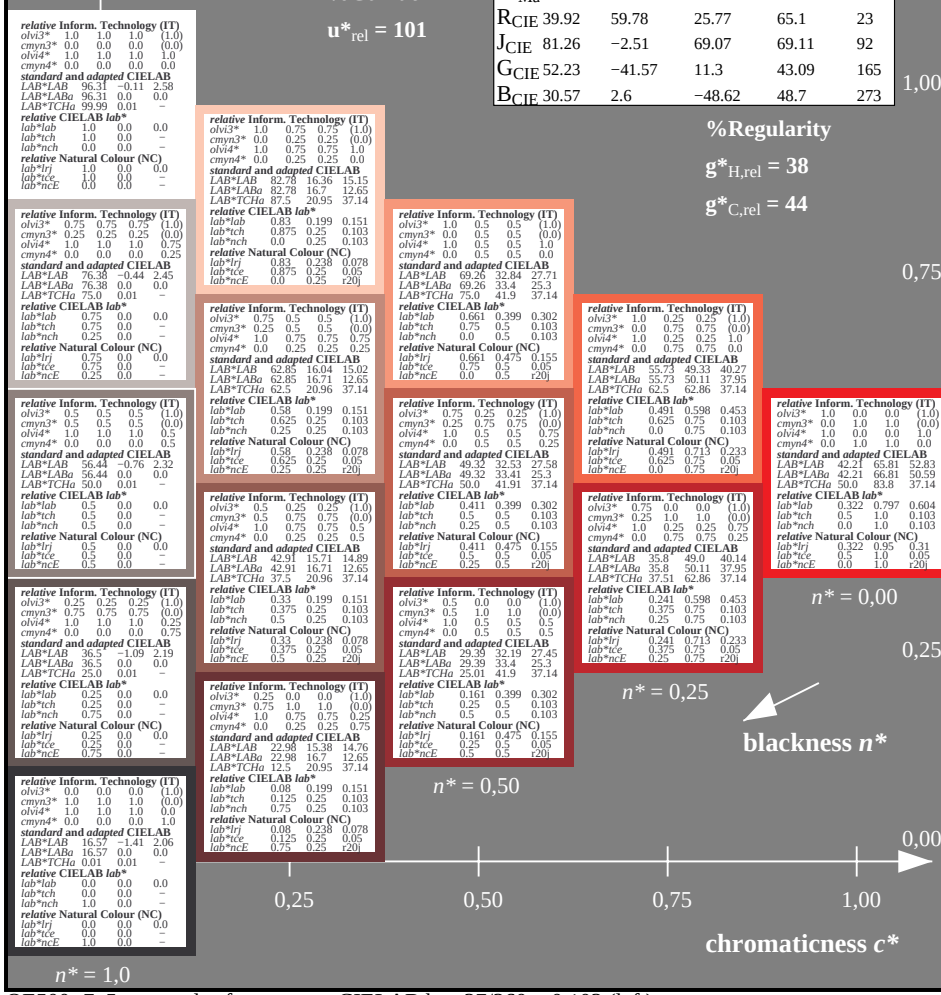
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

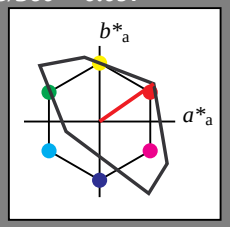
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

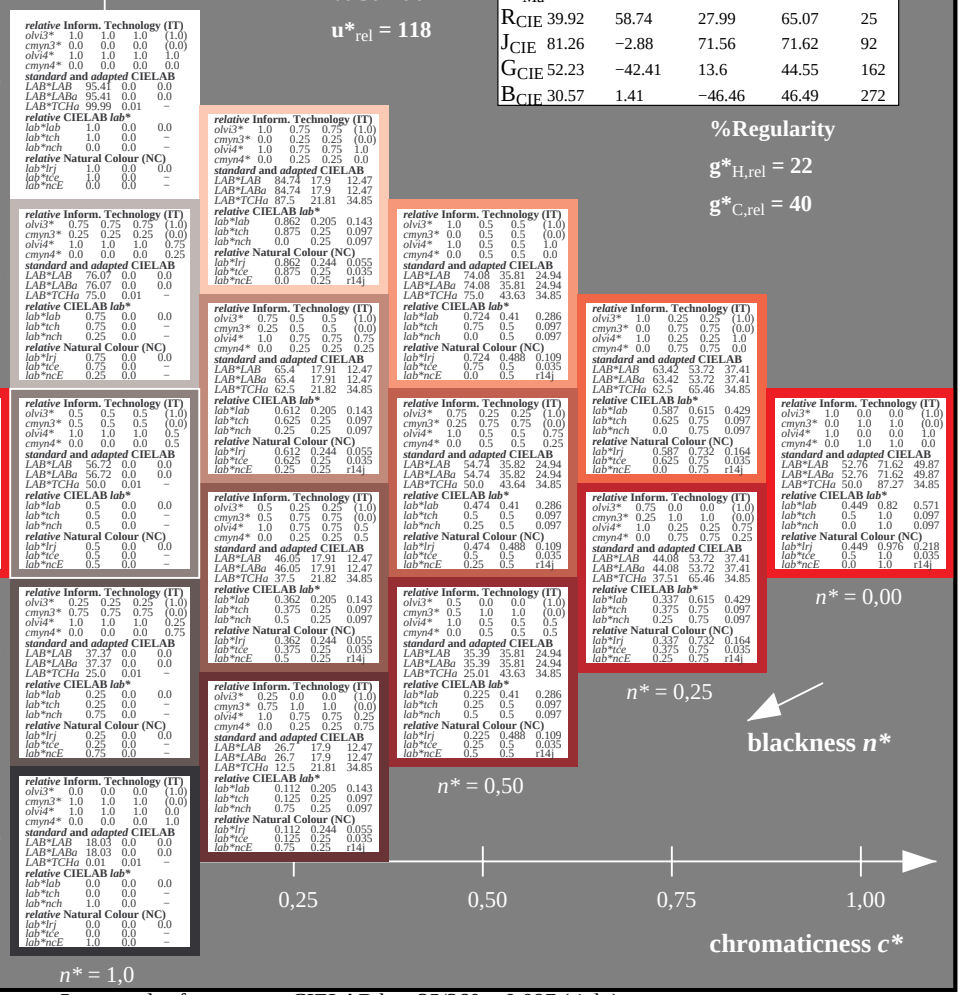
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



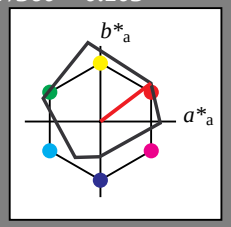
5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

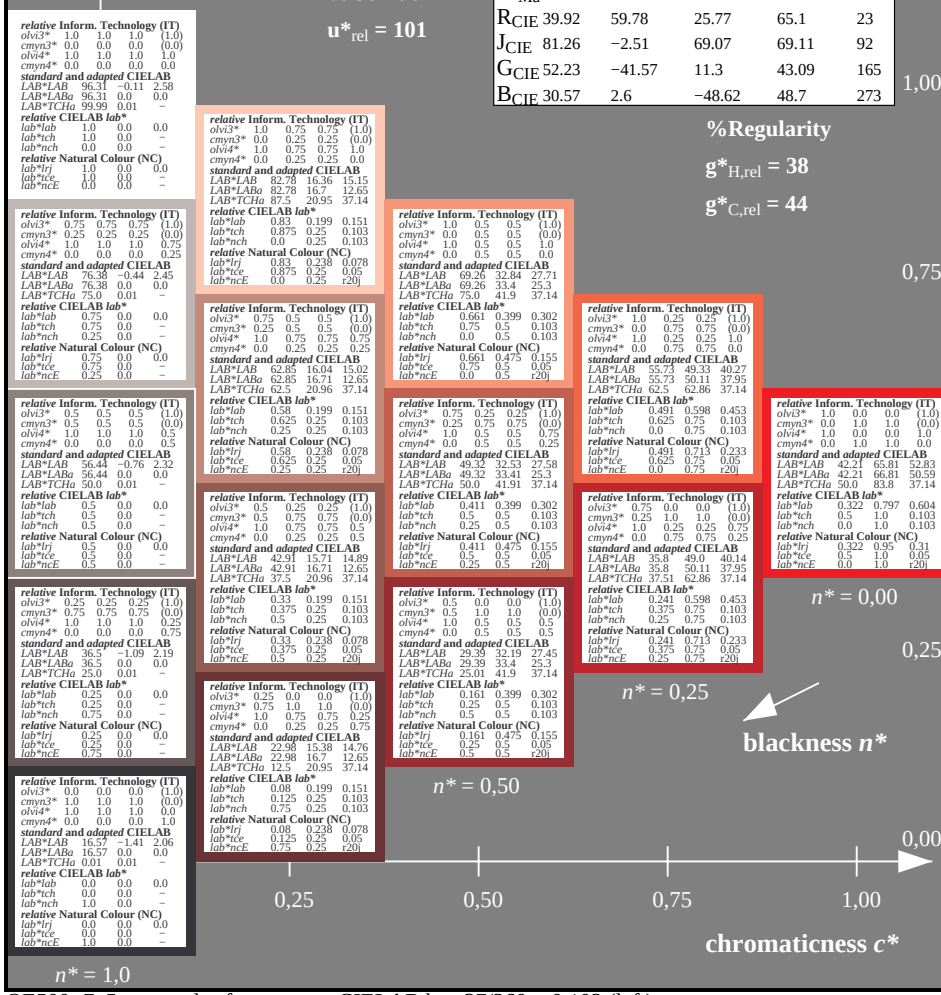
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



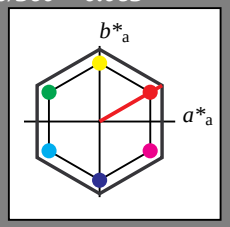
OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

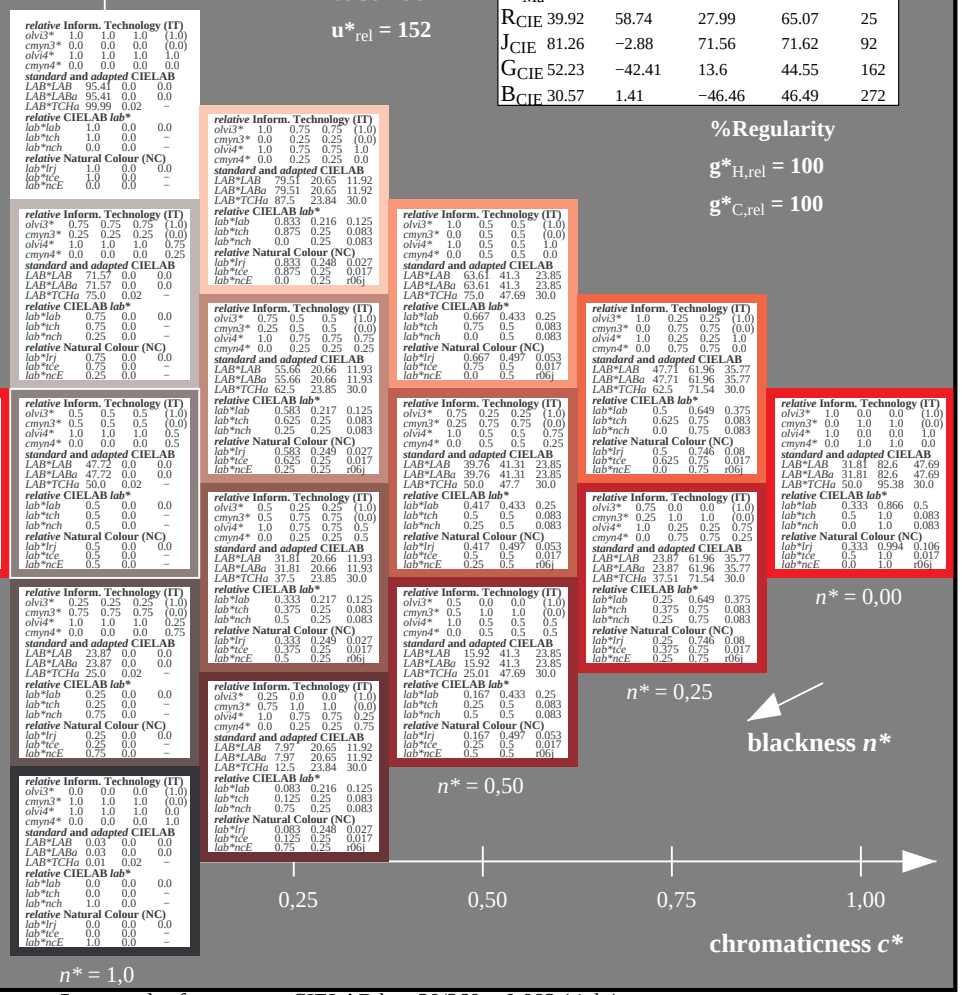
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



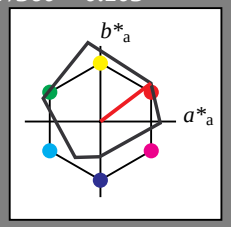
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

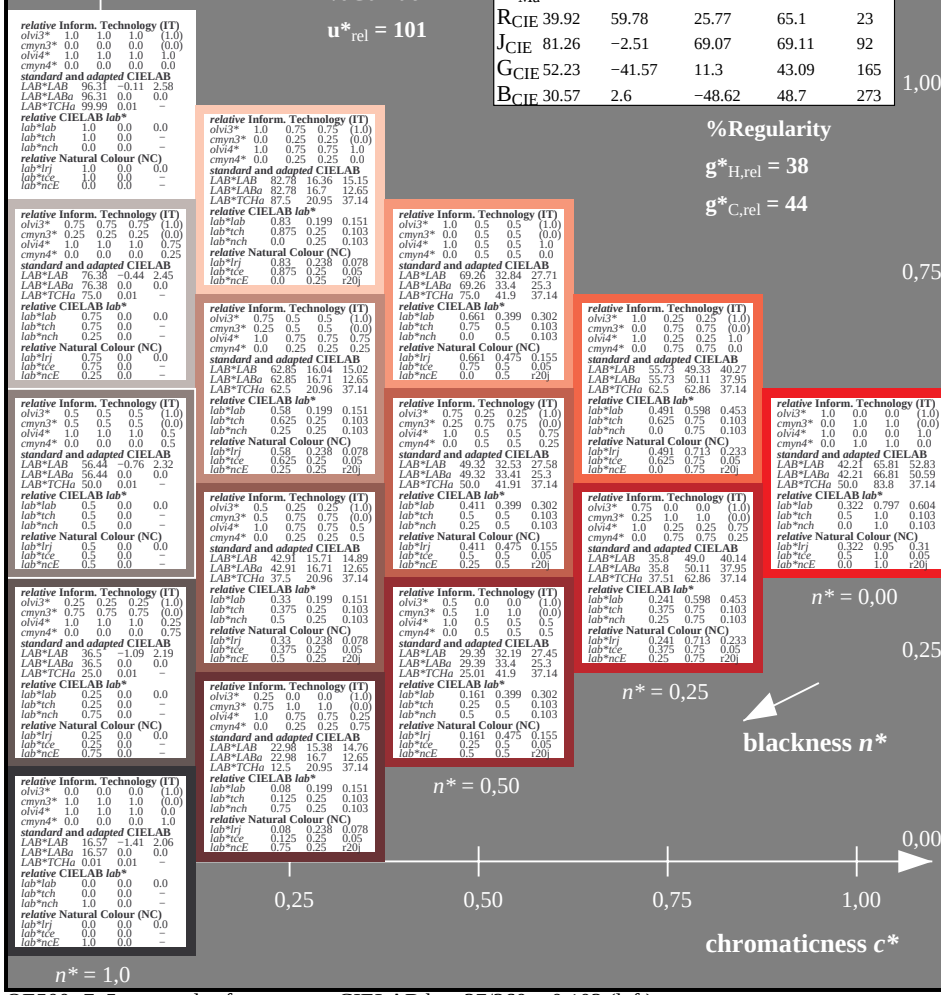
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



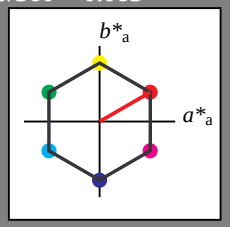
OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

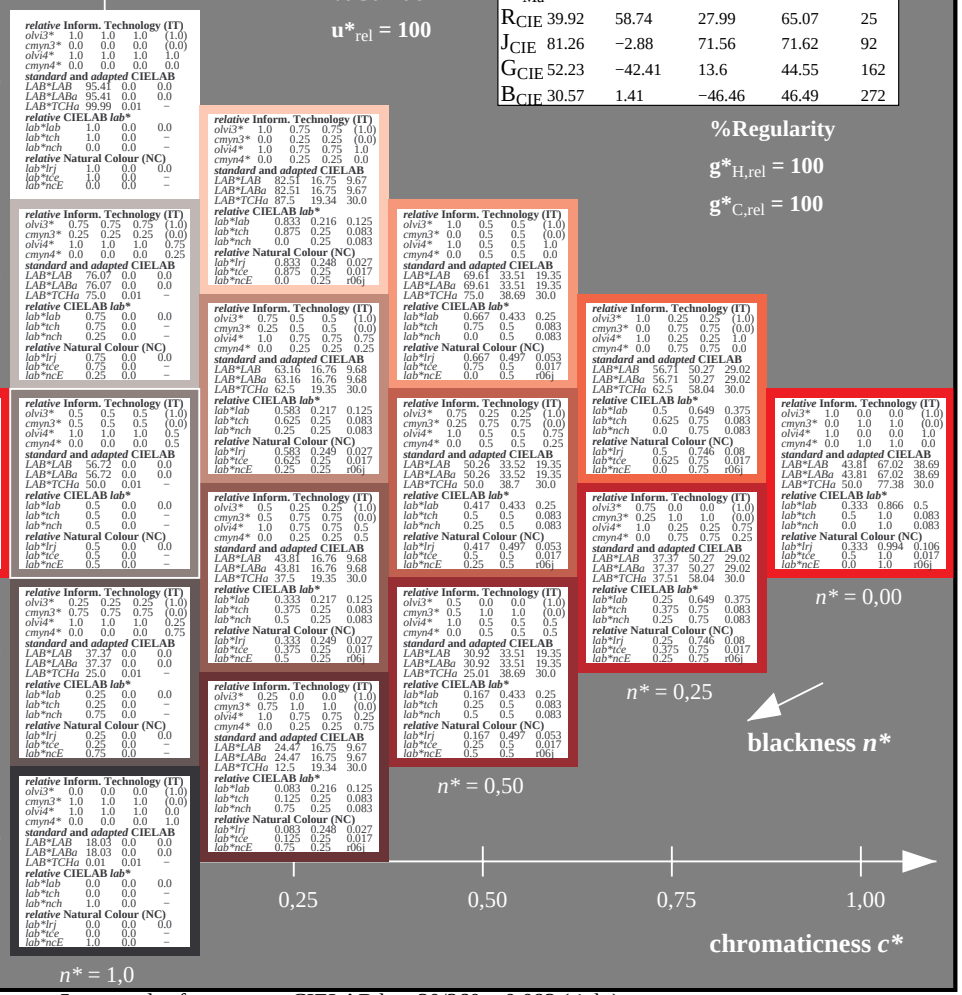
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



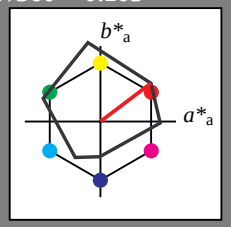
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

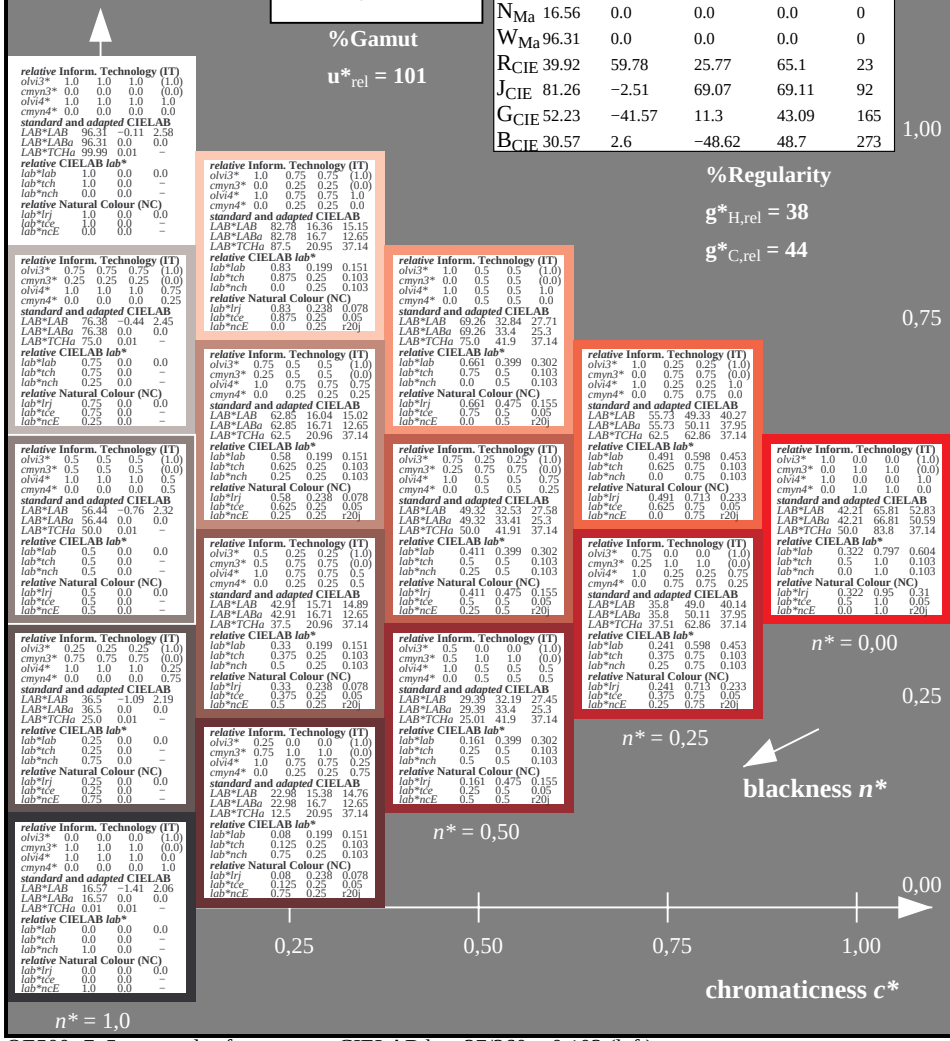
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



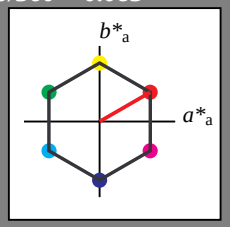
OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

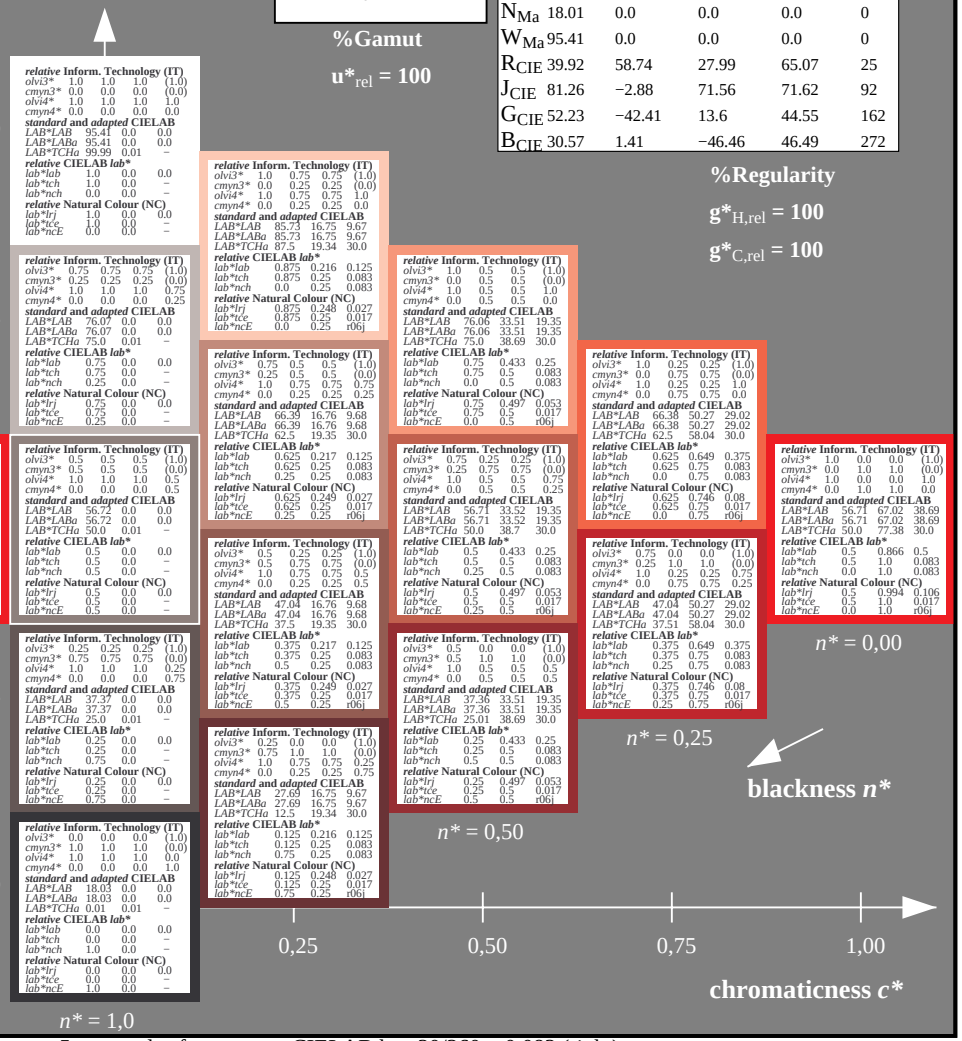
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



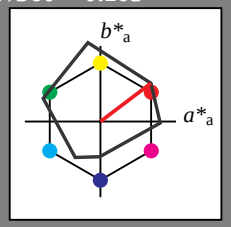
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

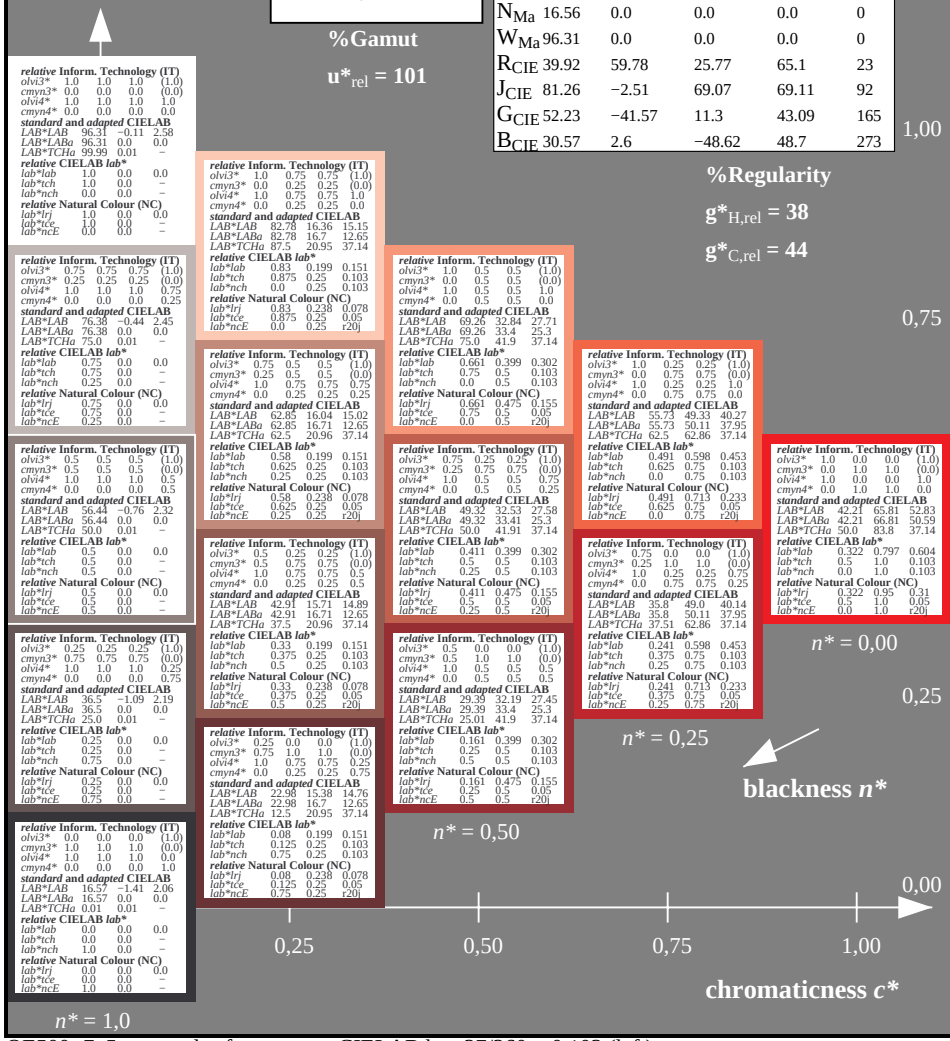
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



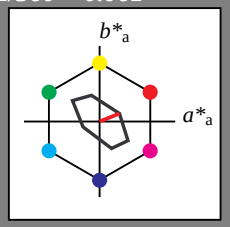
OE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

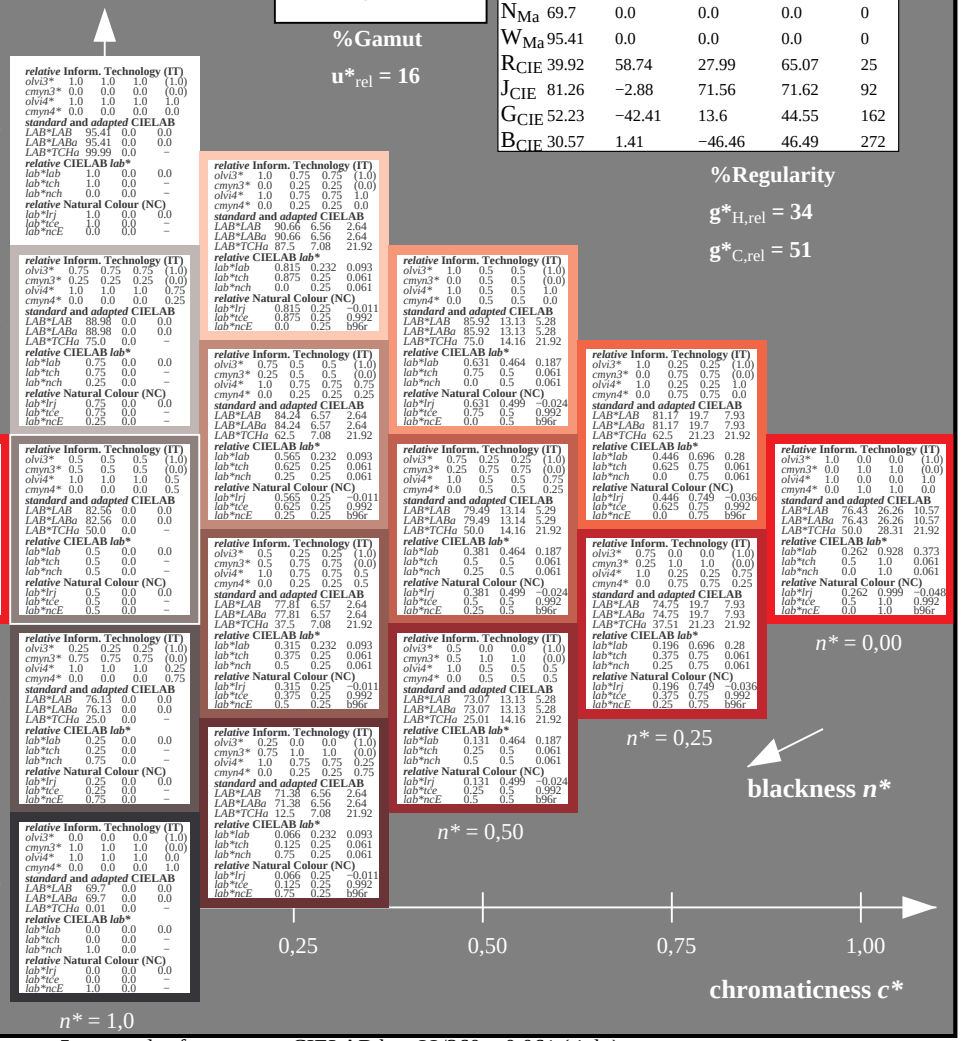
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

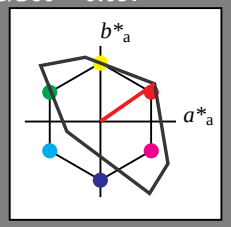
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

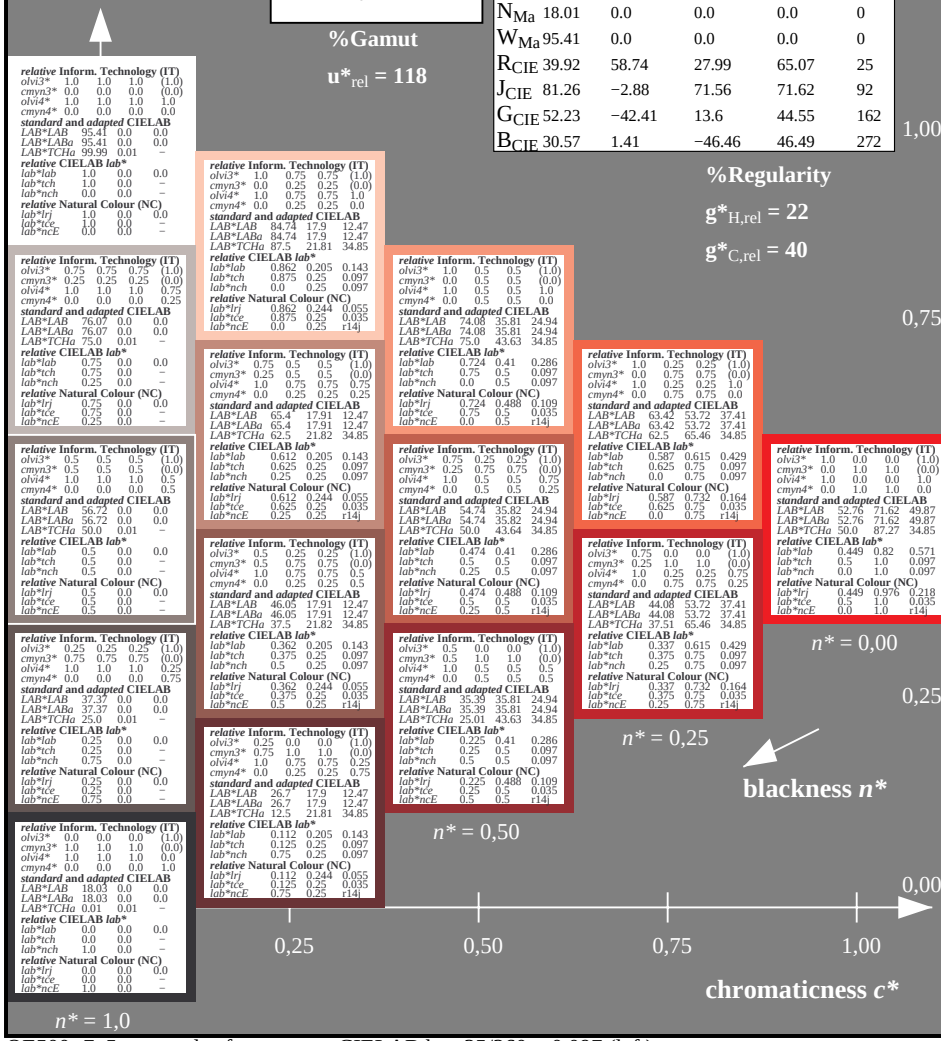
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

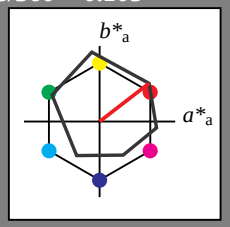
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

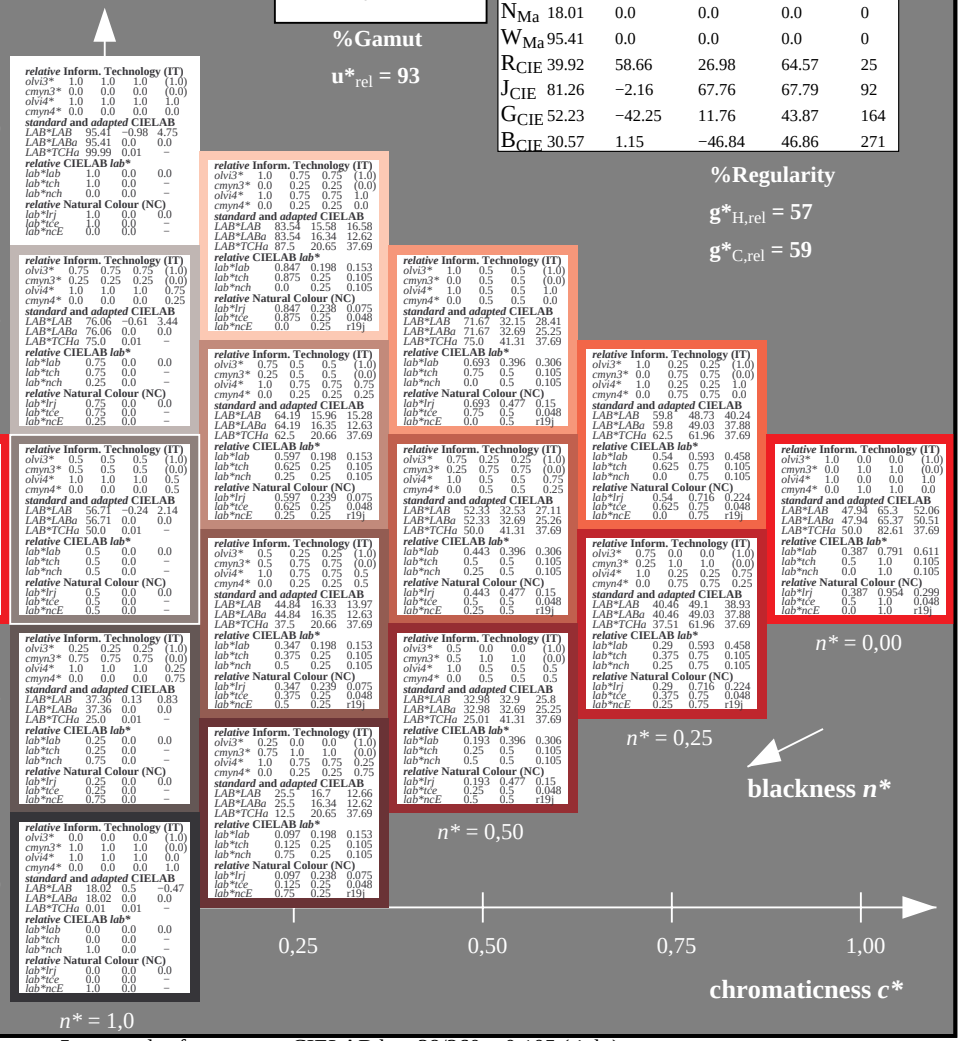
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

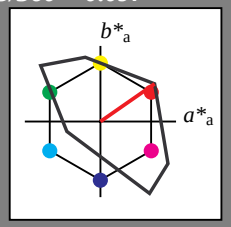
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

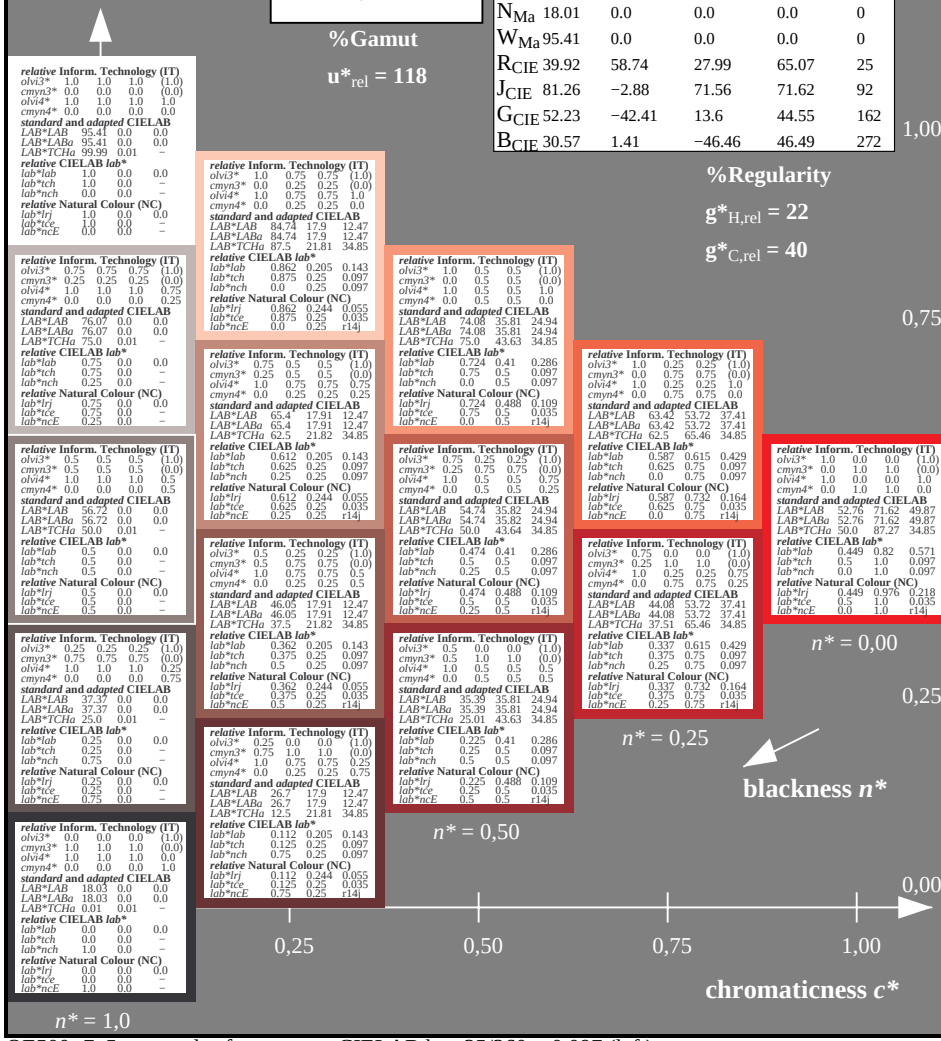
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

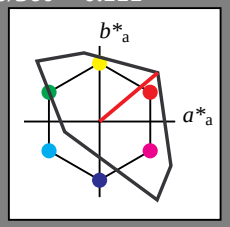
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

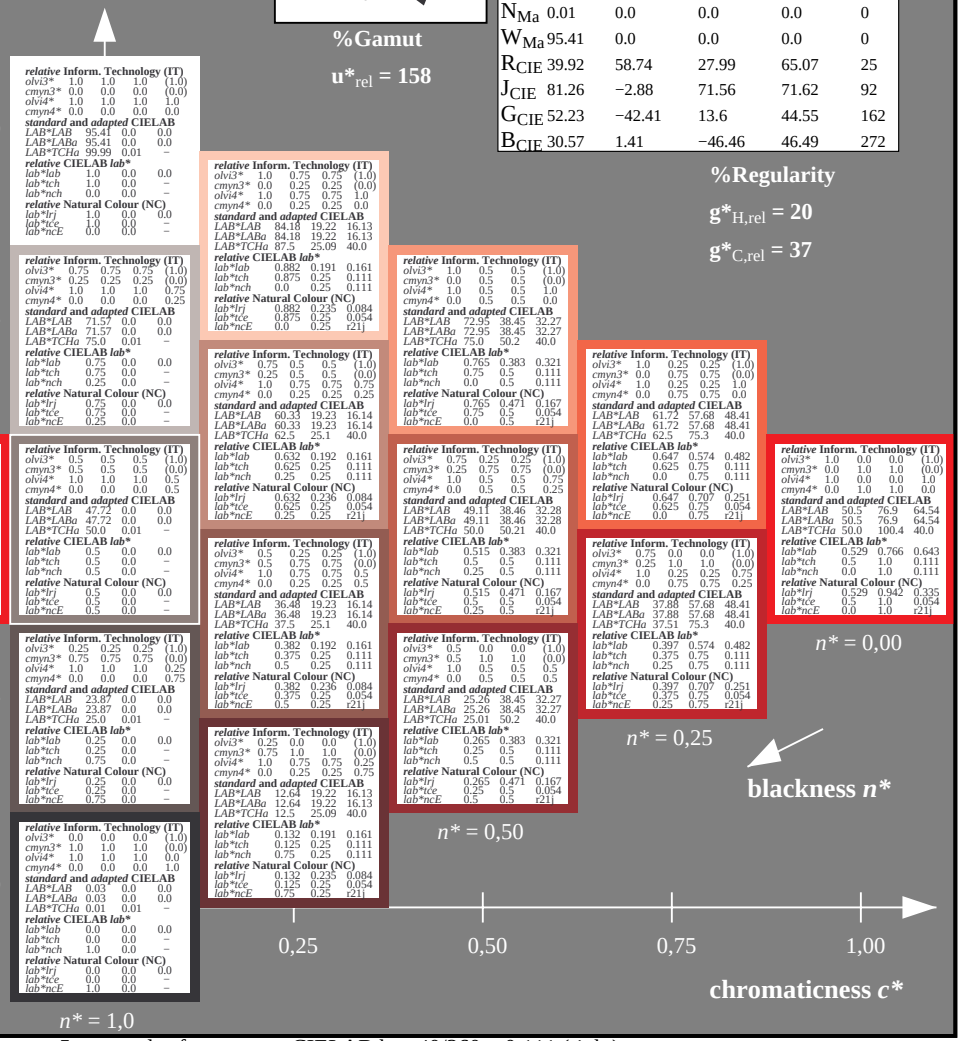
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

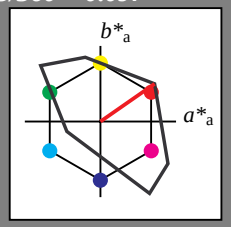
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

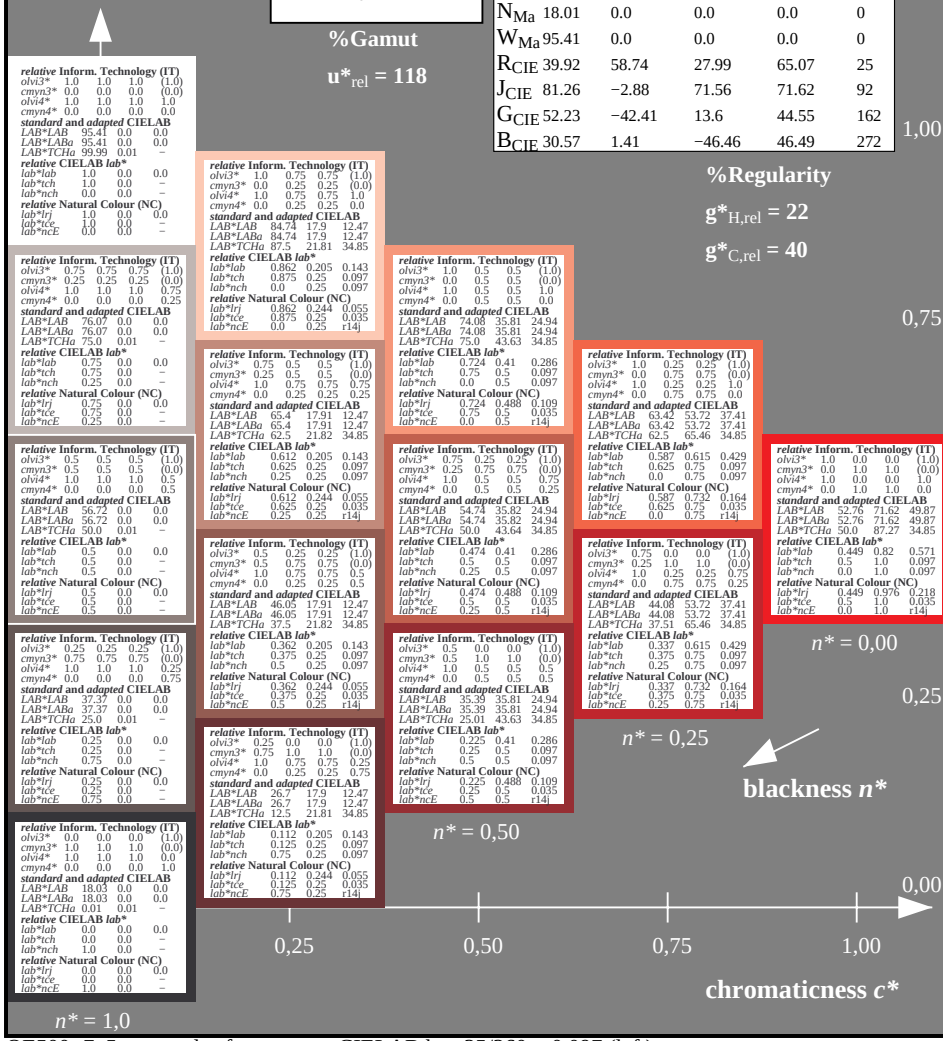
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

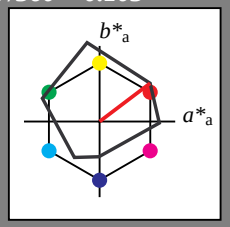
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

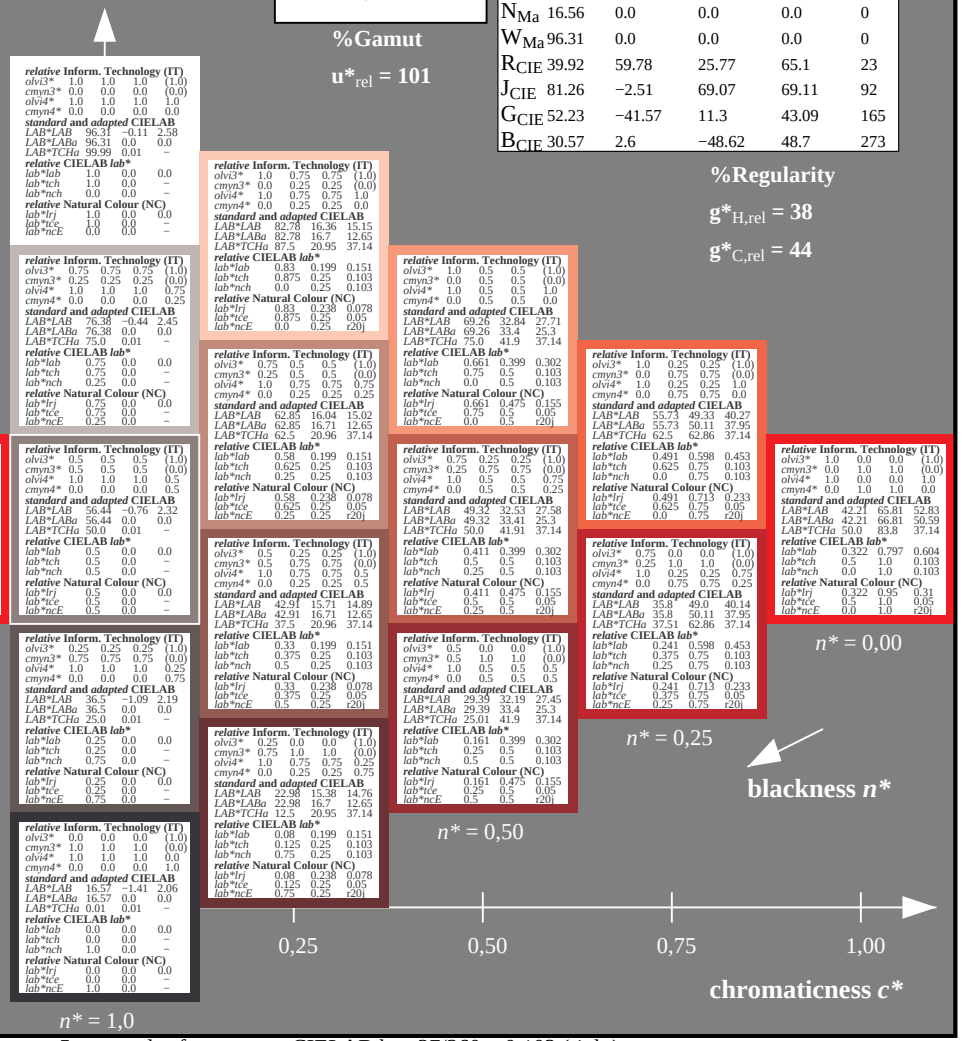
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



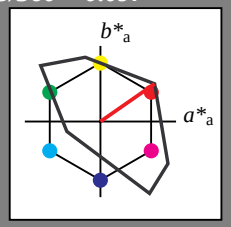
OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Television Luminous System TLS18
for hue *h* = lab*h = 35/360 = 0.097*
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

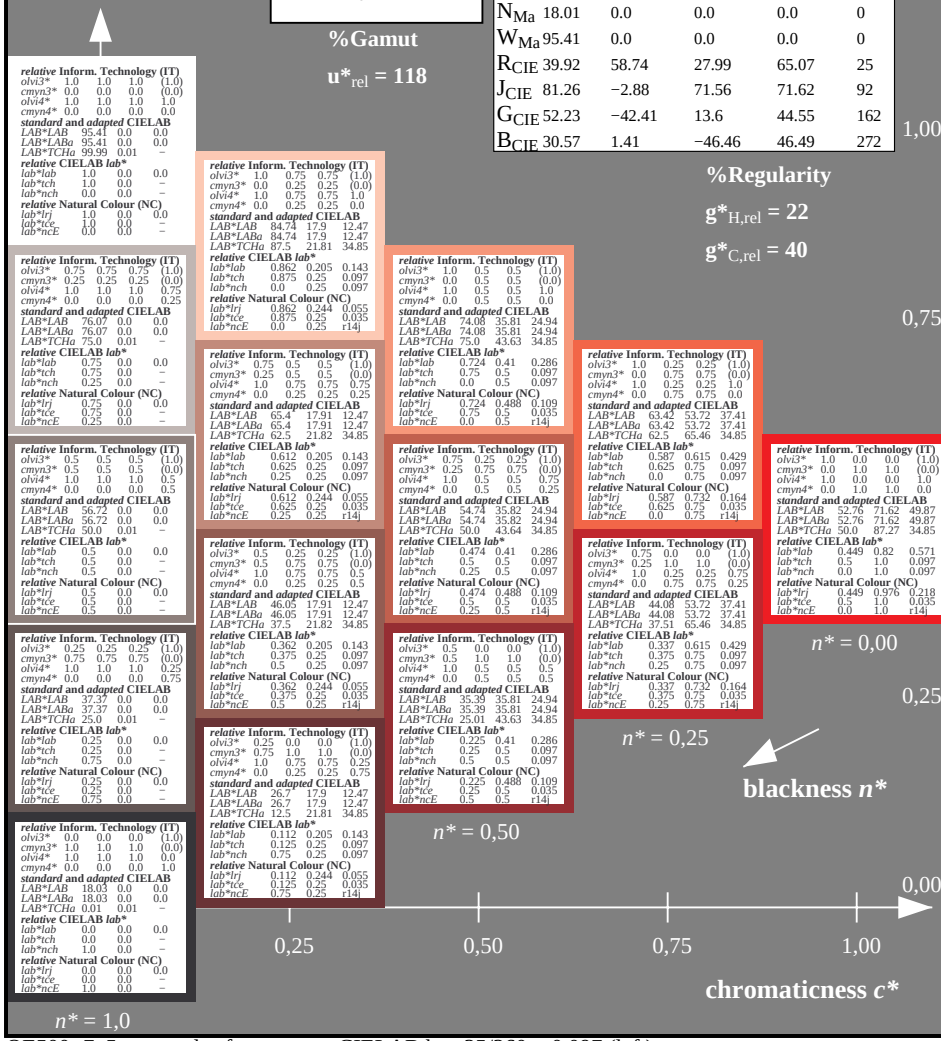
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

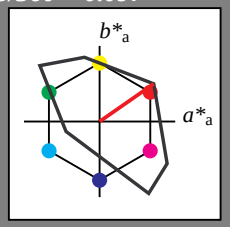


OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

Output: Colorimetric Television Luminous System TLS18
for hue *h* = lab*h = 35/360 = 0.097*
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

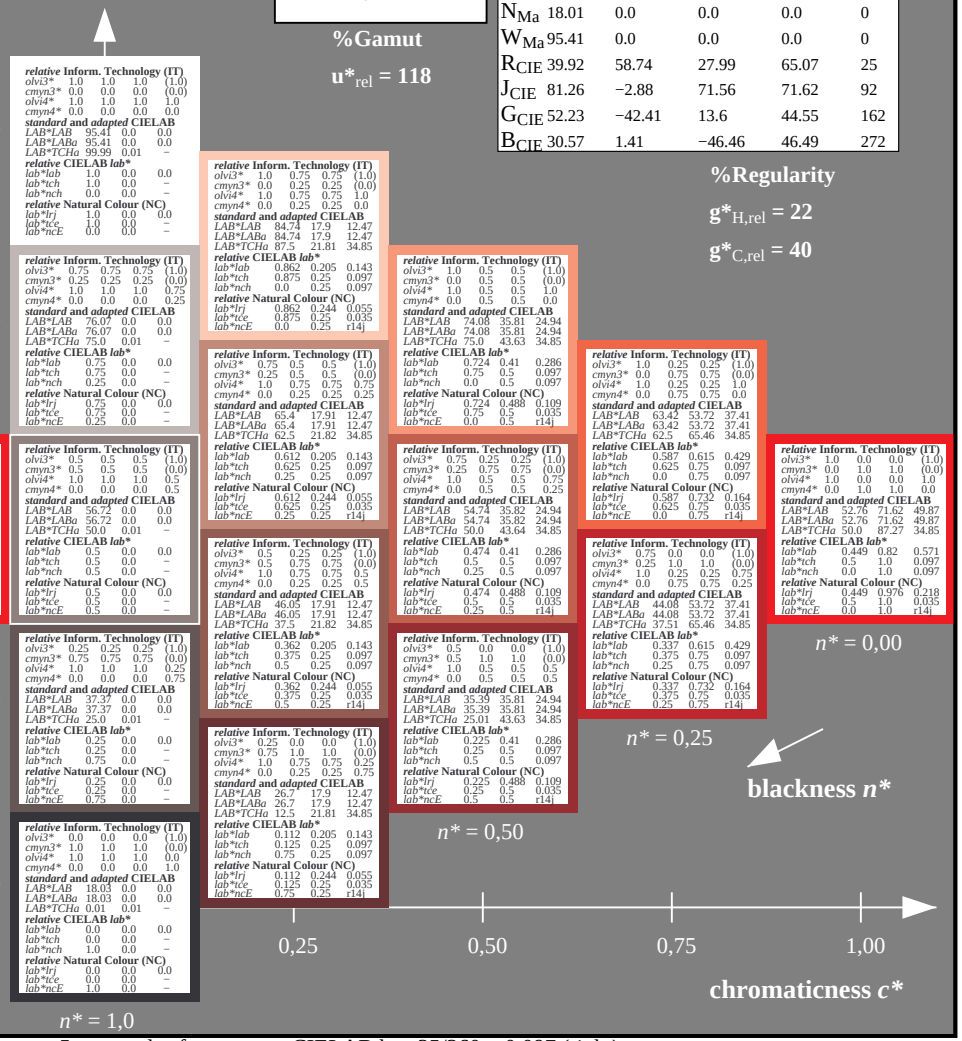
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

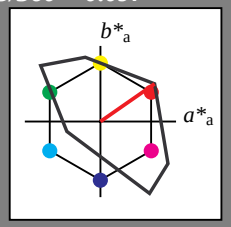
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

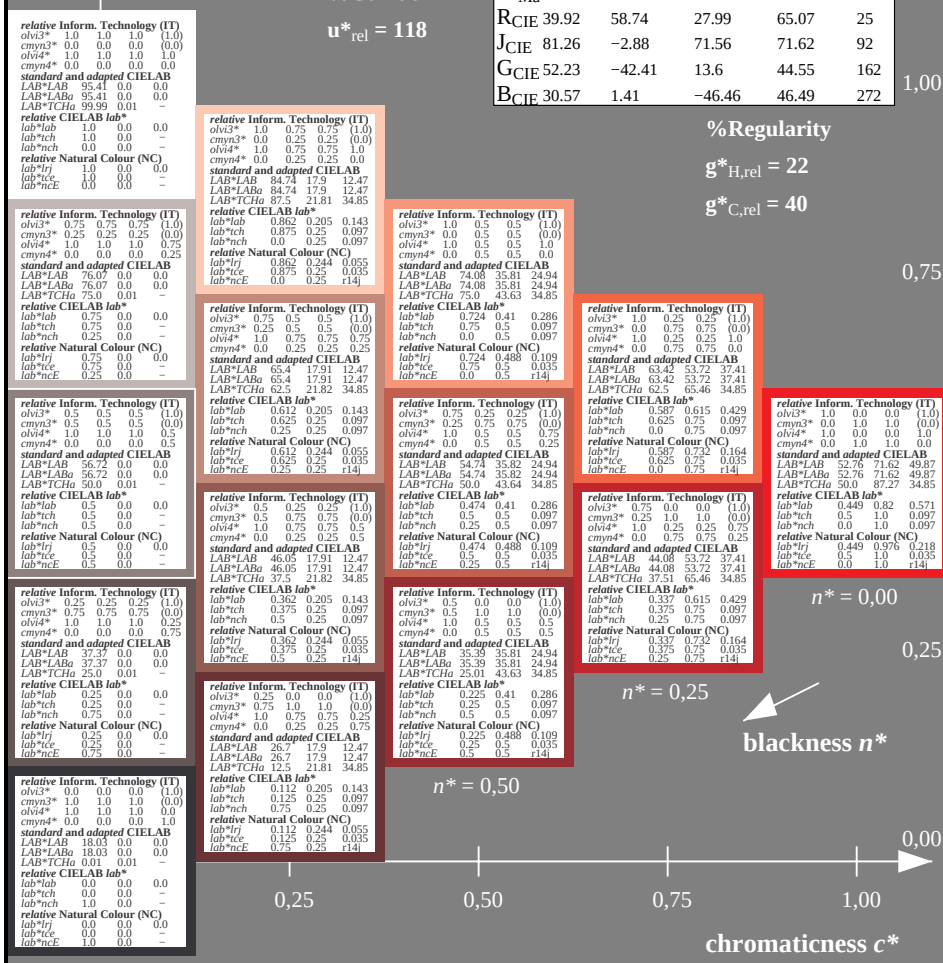
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

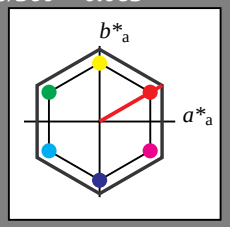
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

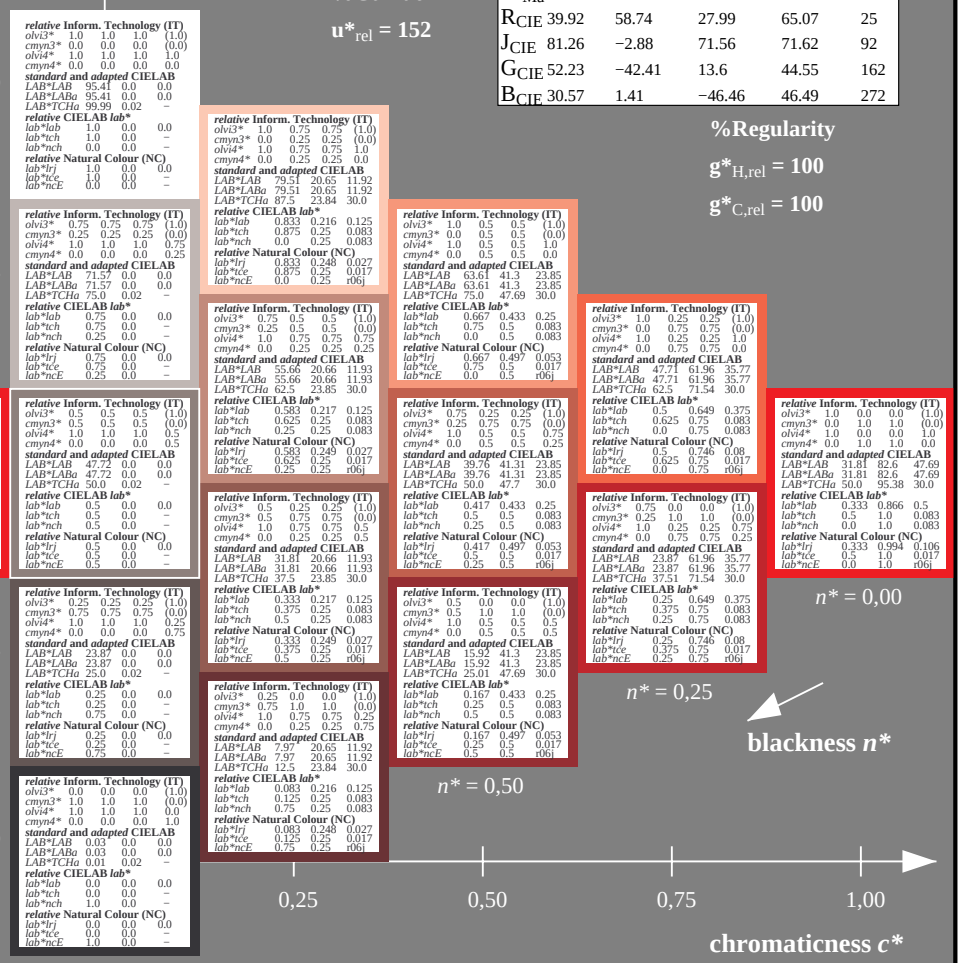
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

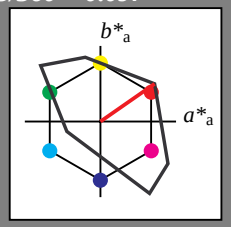
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

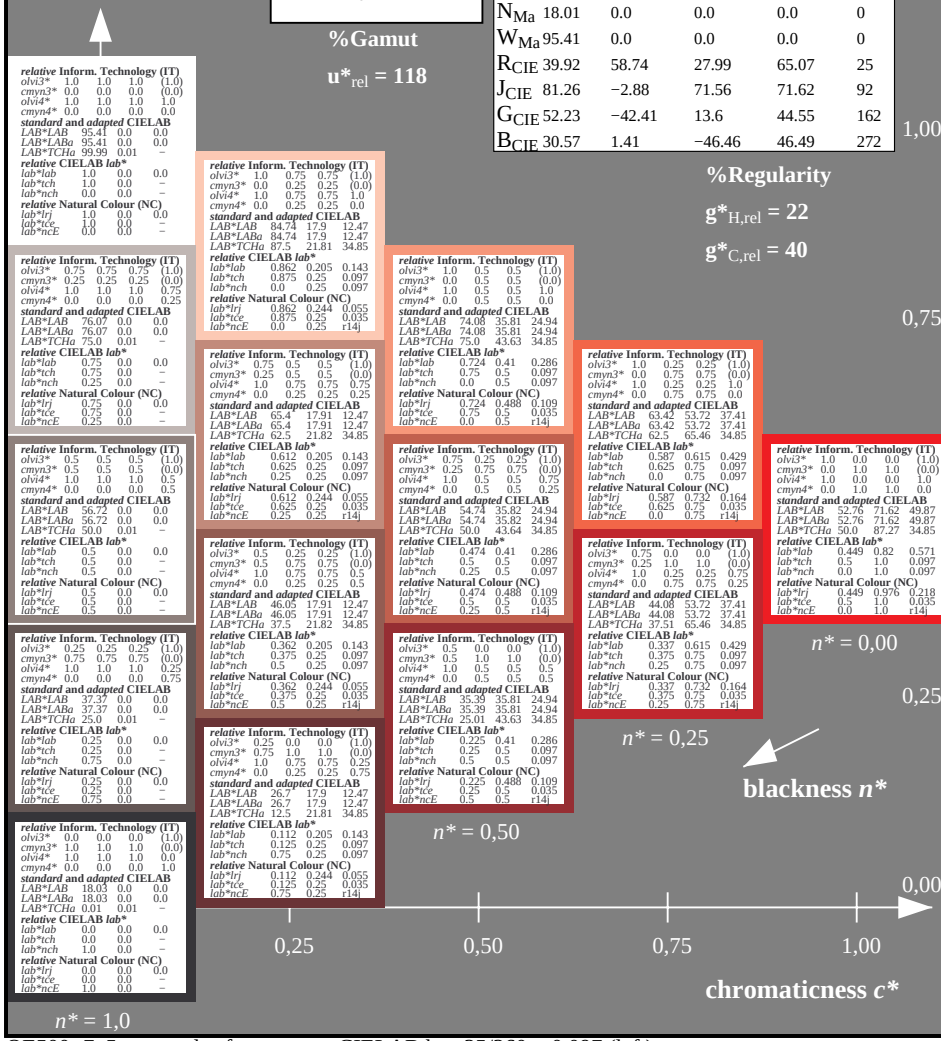
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

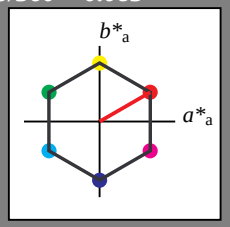
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

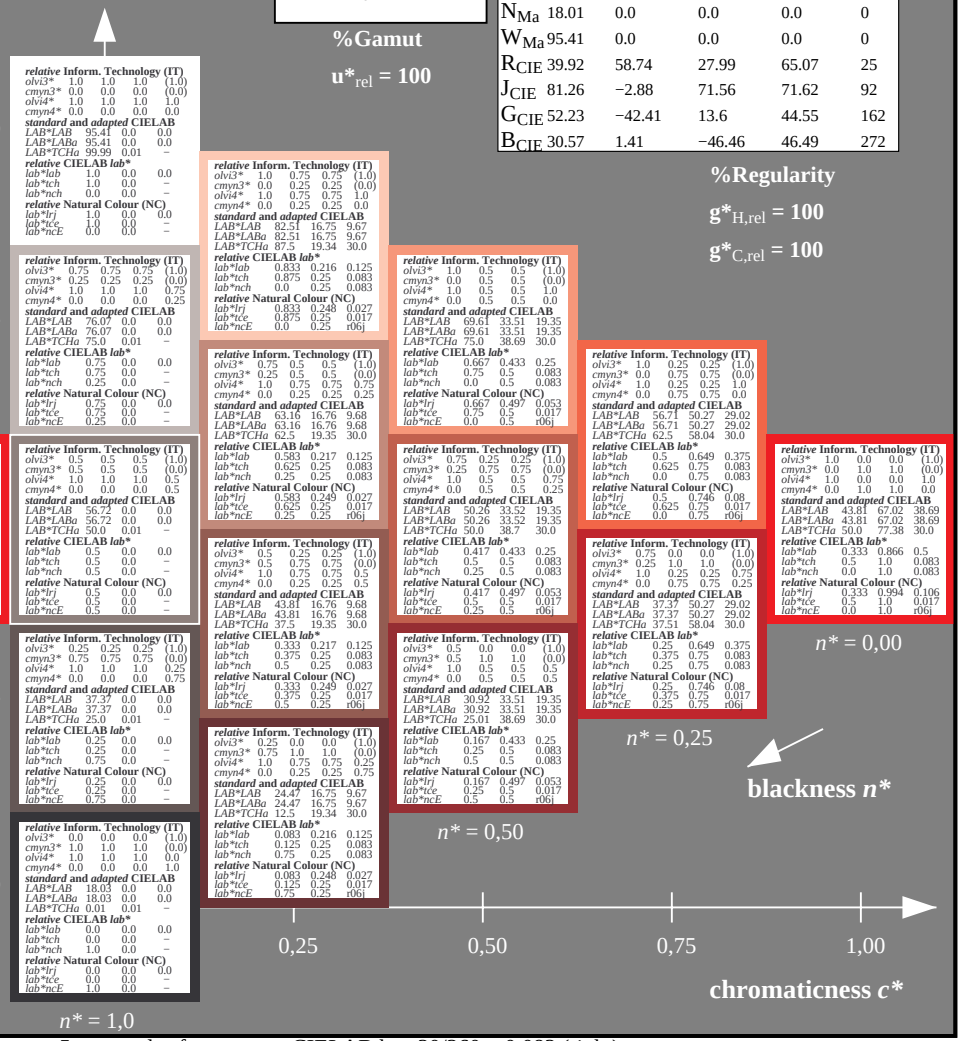
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

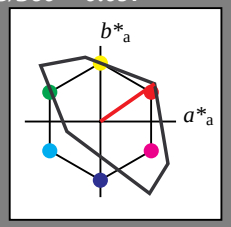
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

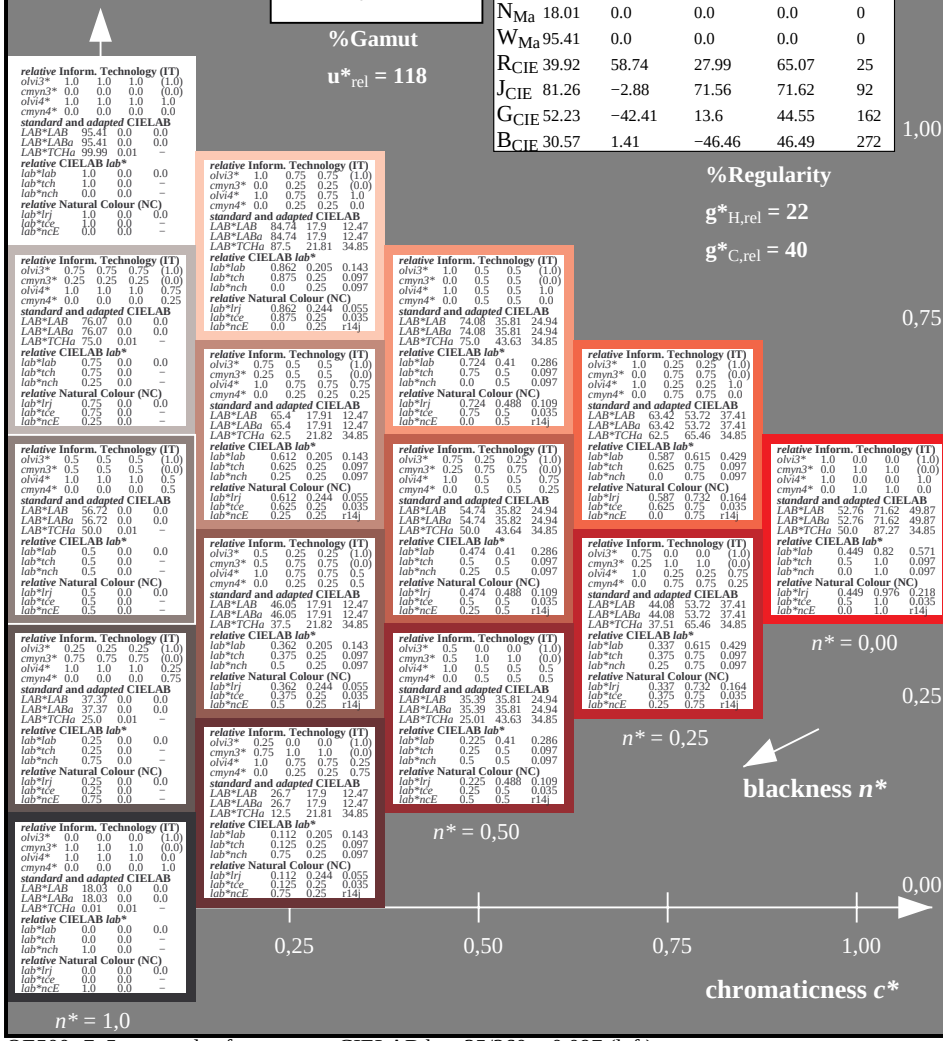
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

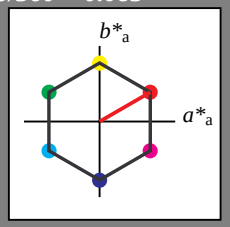
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

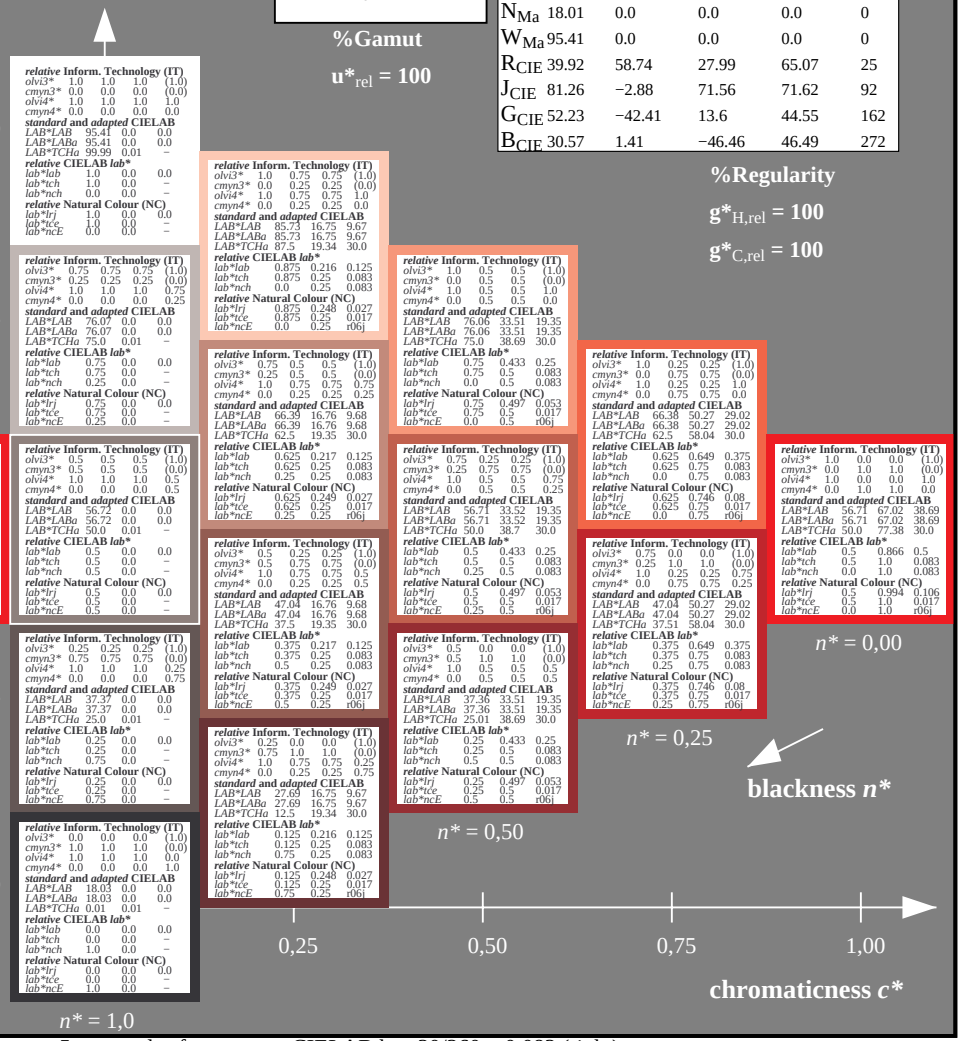
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

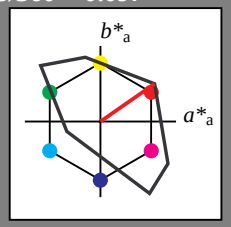
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

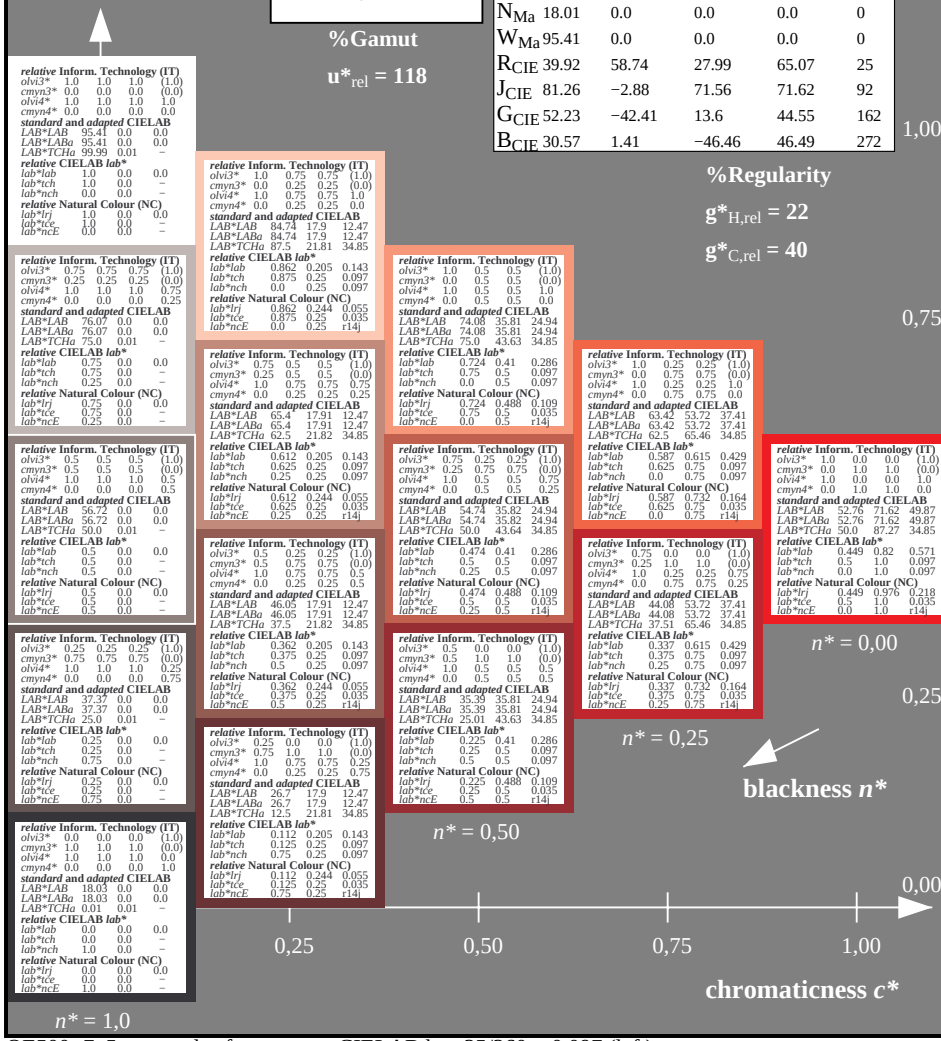
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

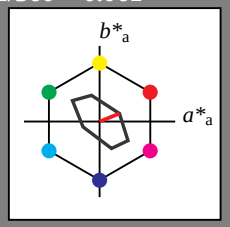


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

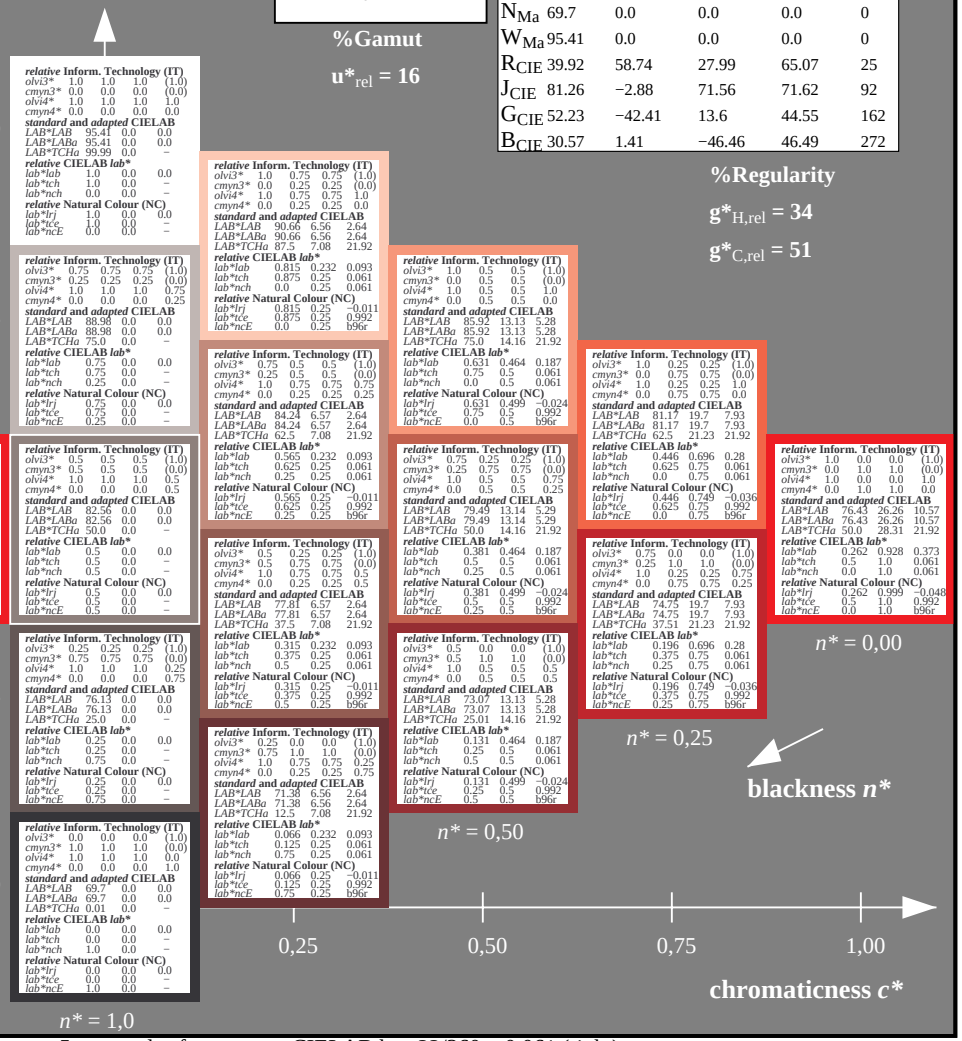
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

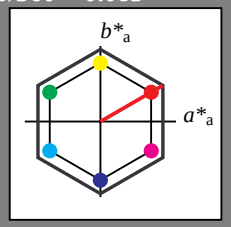
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

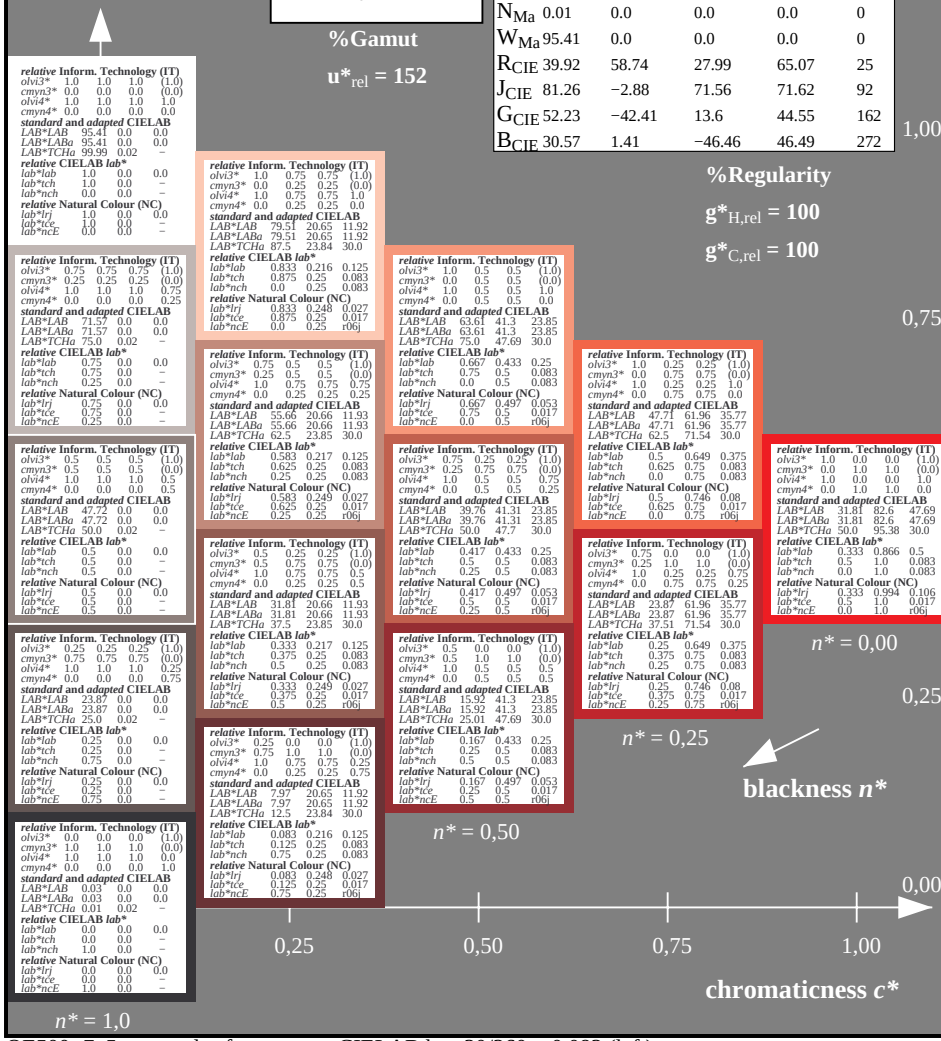
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

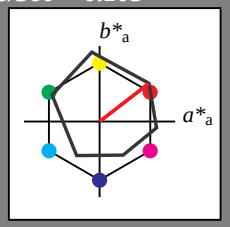
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

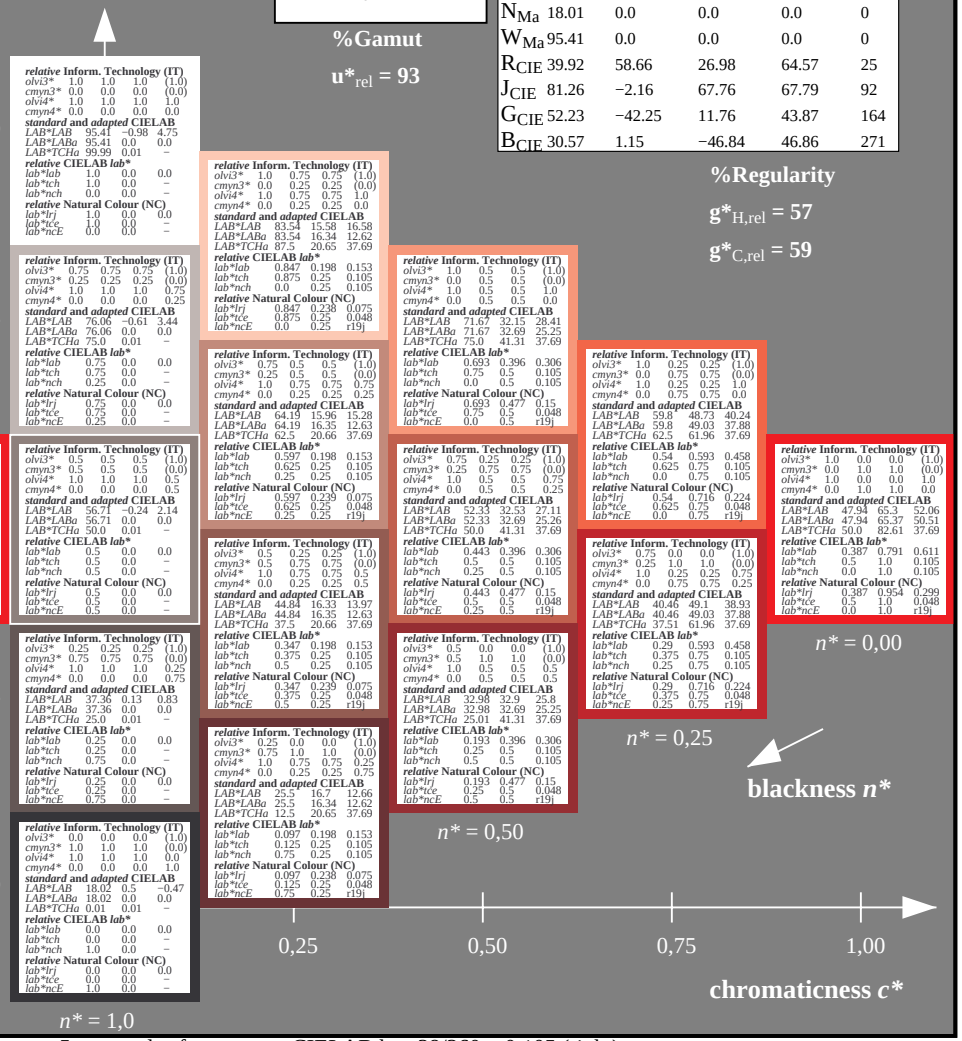
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

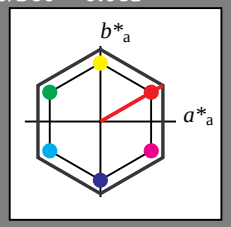
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

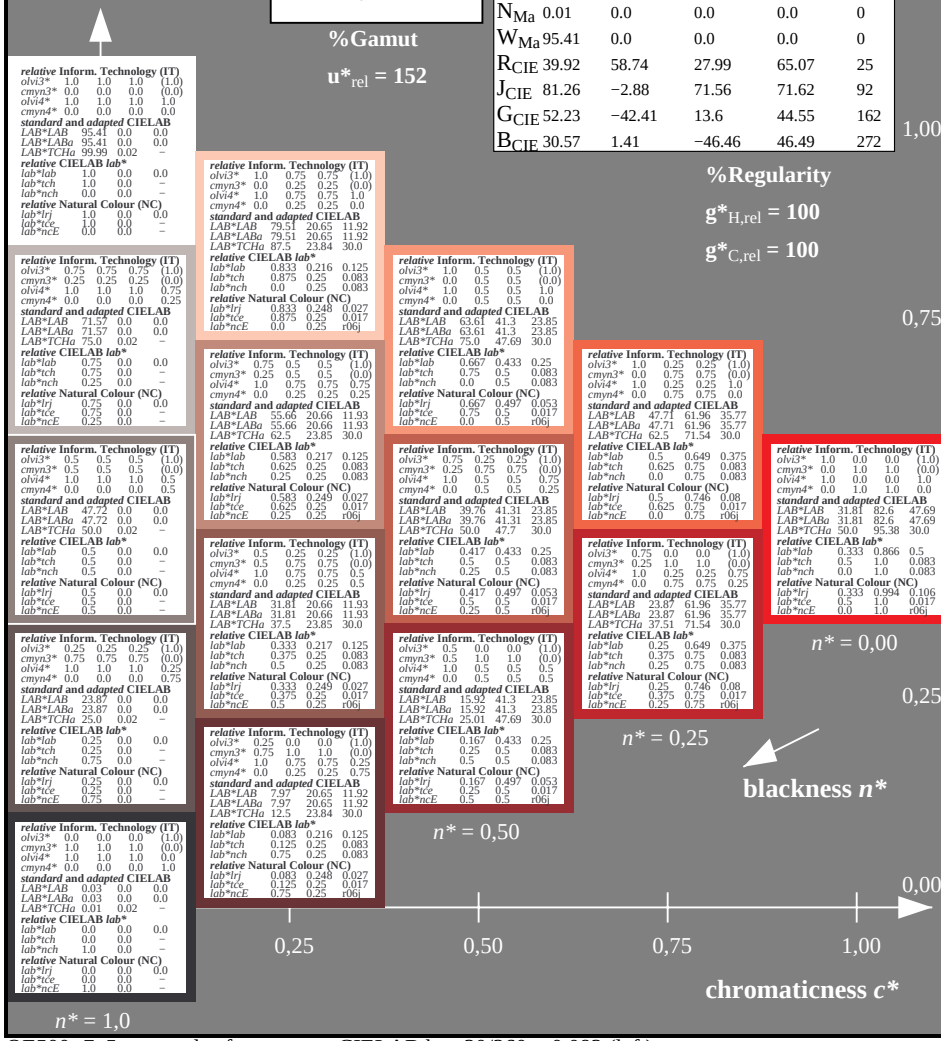
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

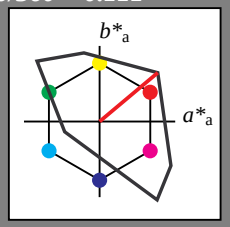
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

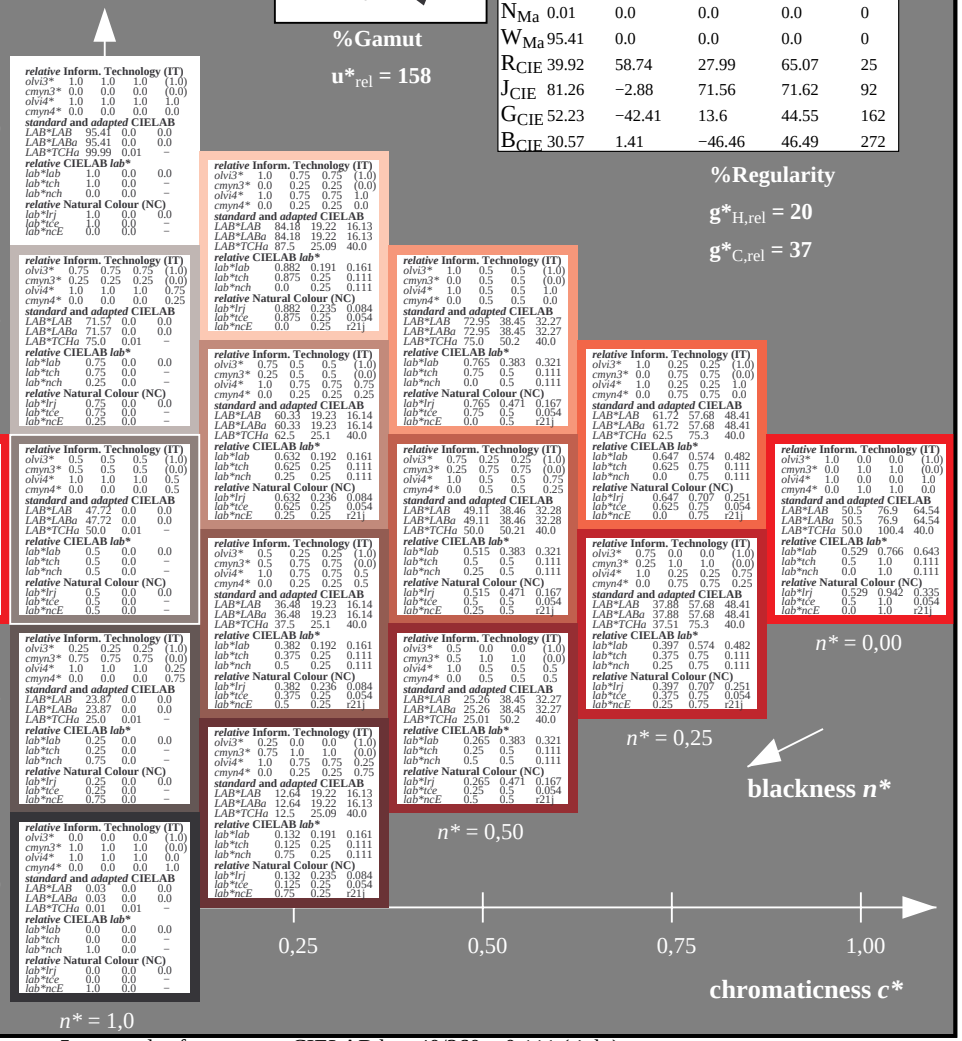
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

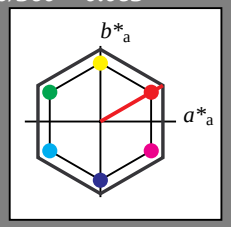
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

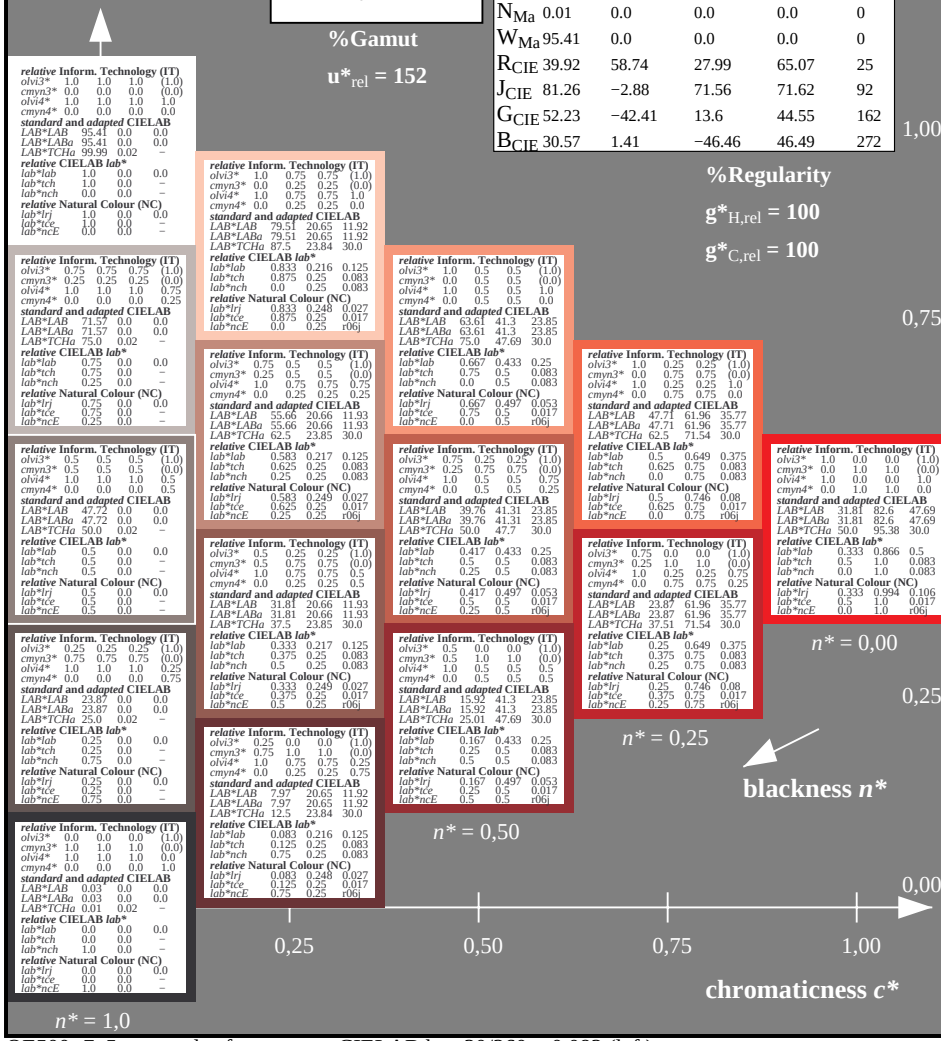
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

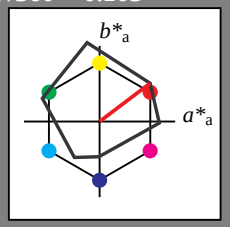
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

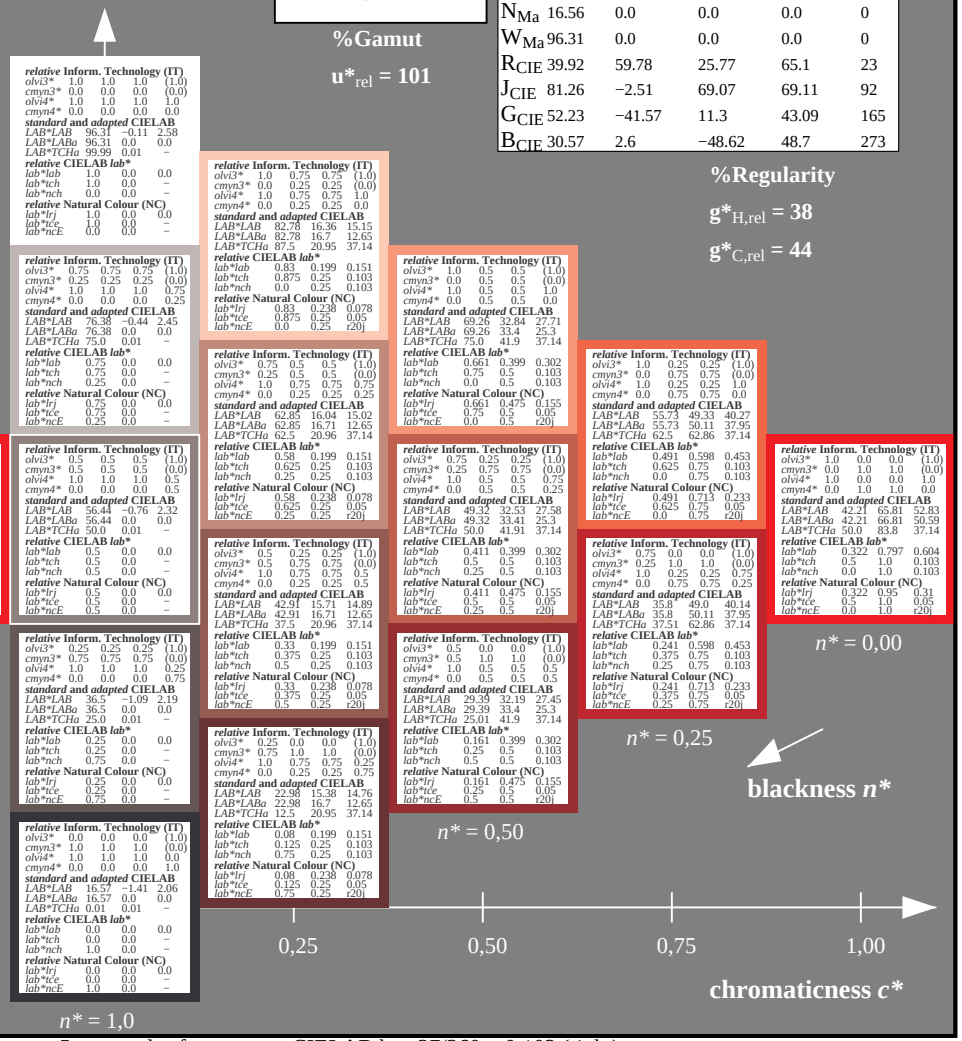
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



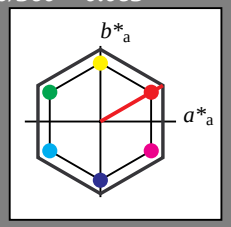
5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

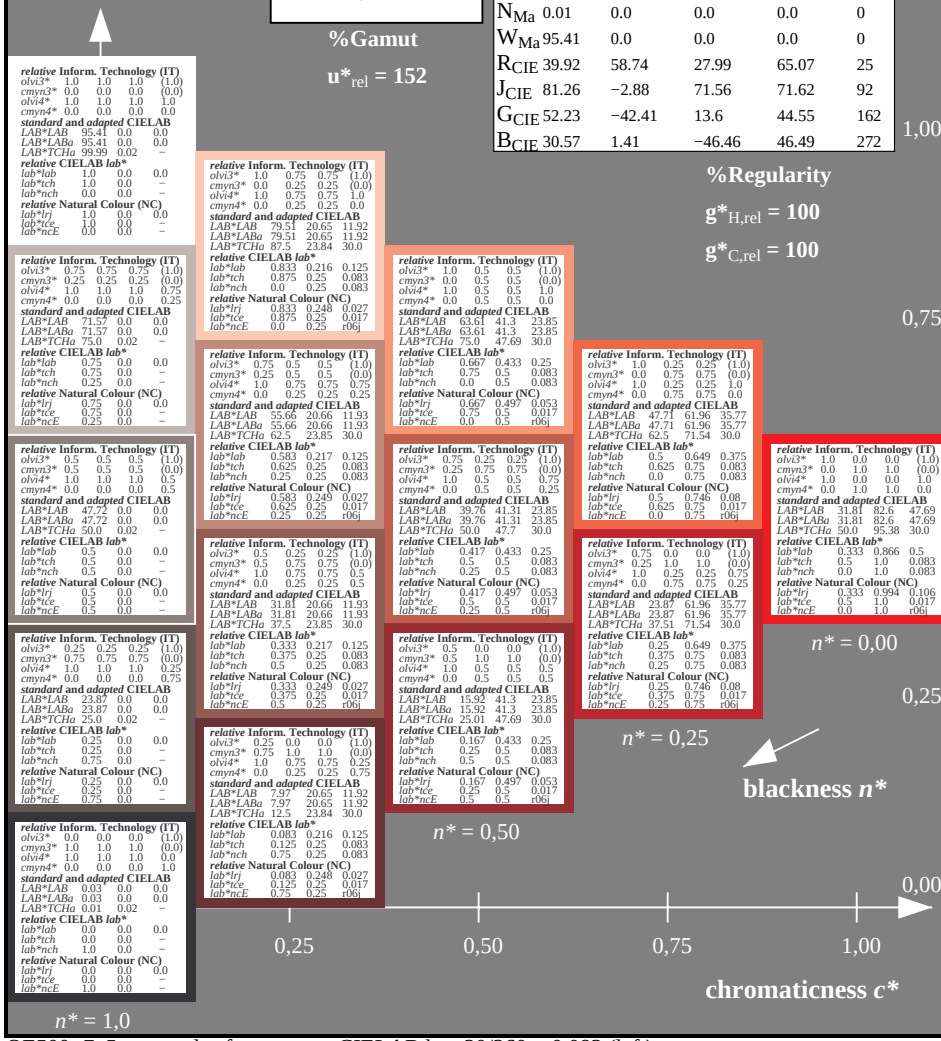
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



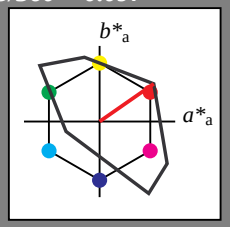
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

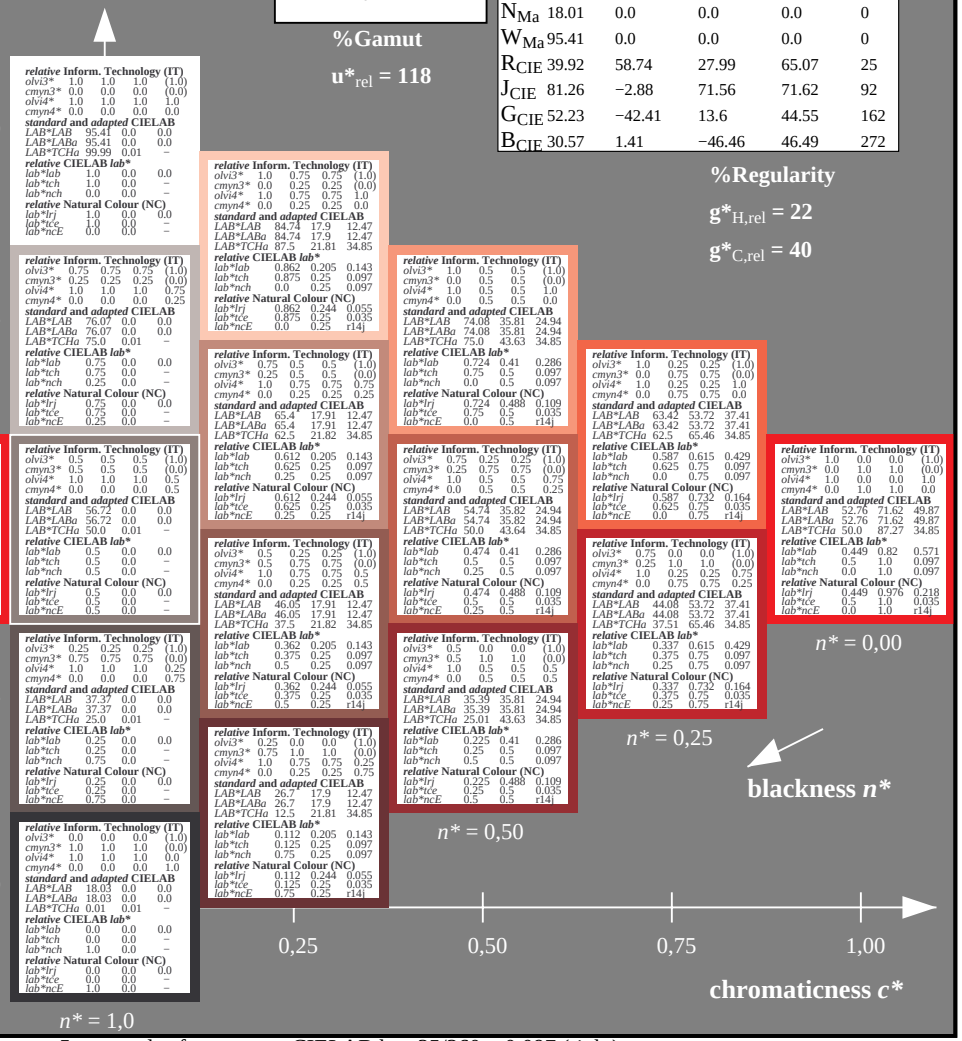
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



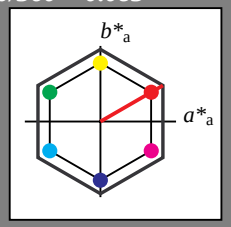
5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

0,25 0,50 0,75 1,00

chromaticness c^*

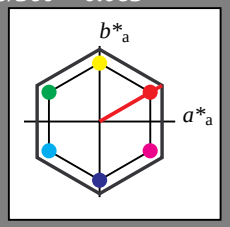
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness n^*

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

0,25 0,50 0,75 1,00

chromaticness c^*

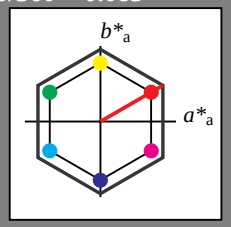
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

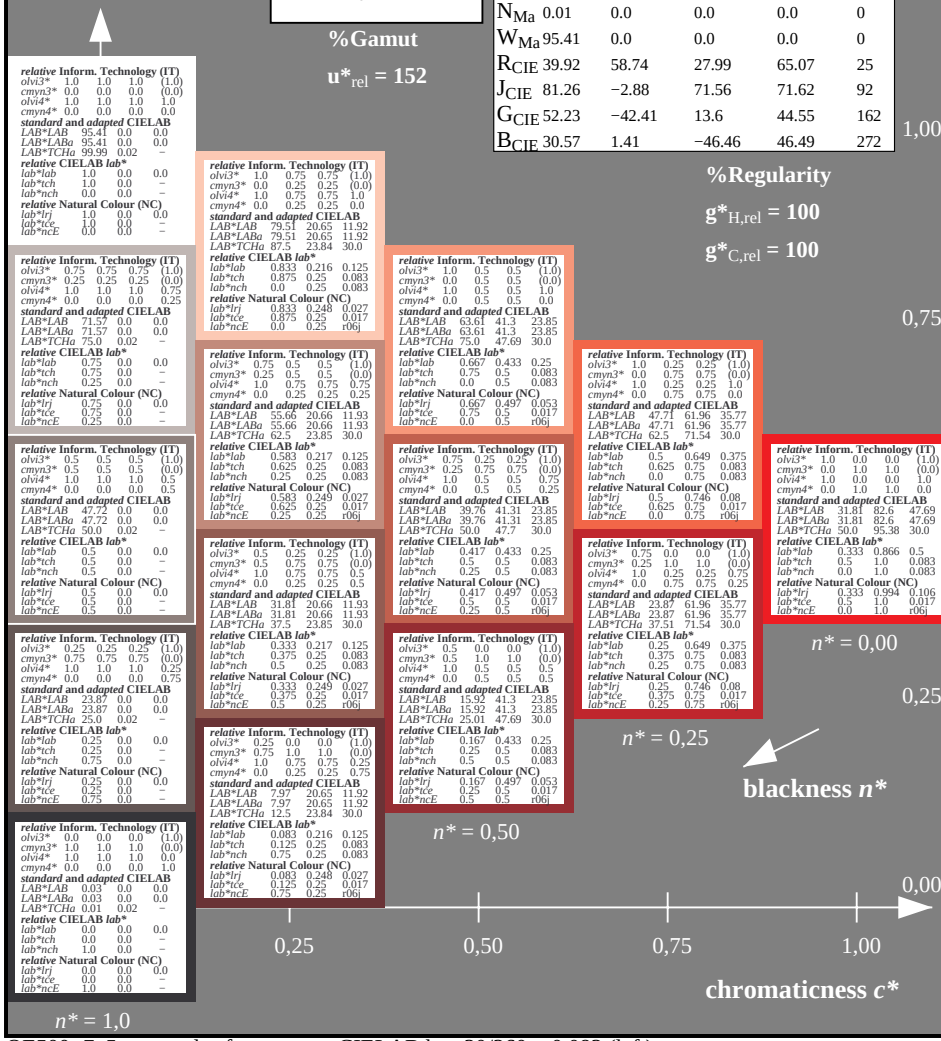
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



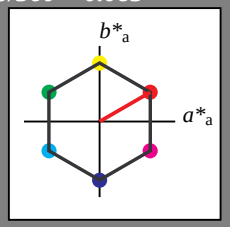
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

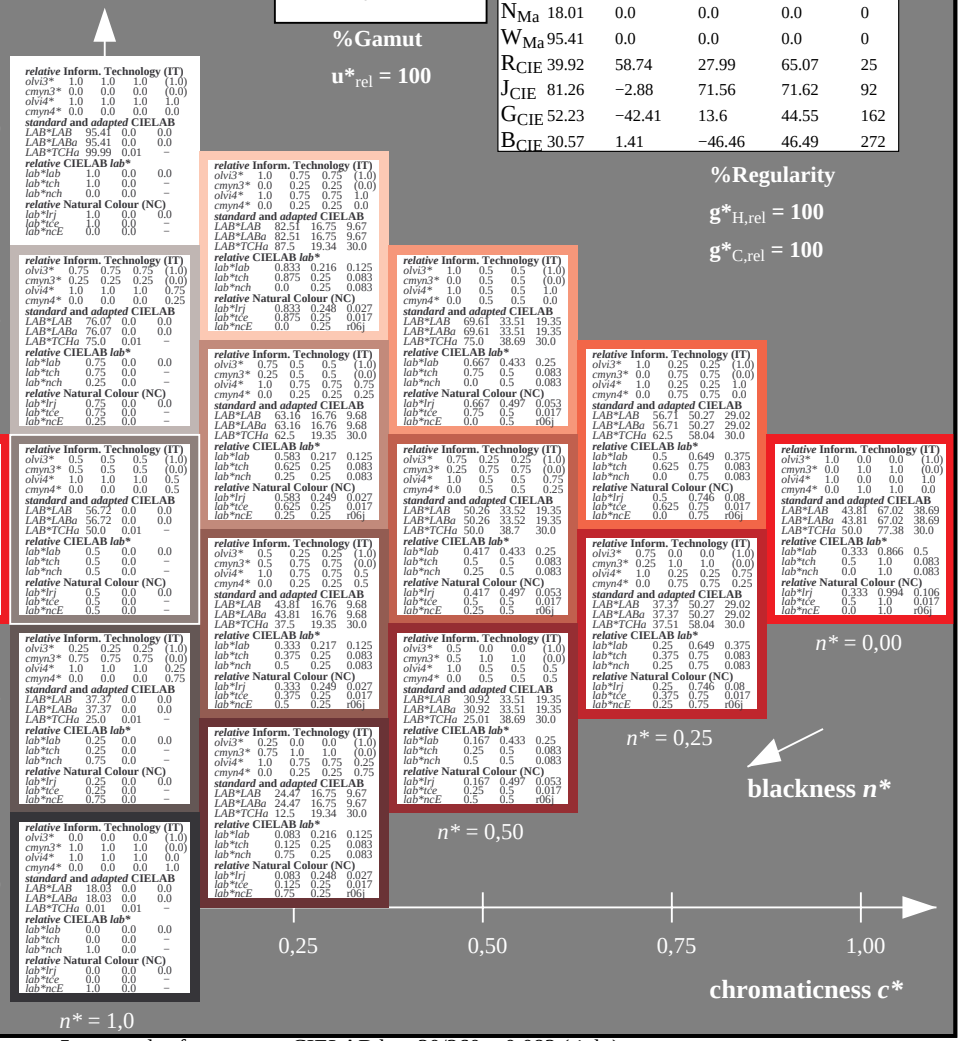
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

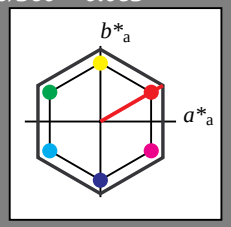
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

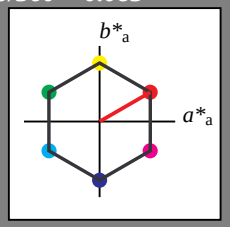
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

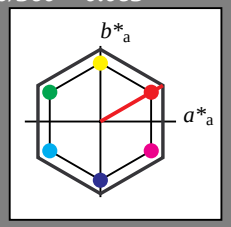
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 32 95 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

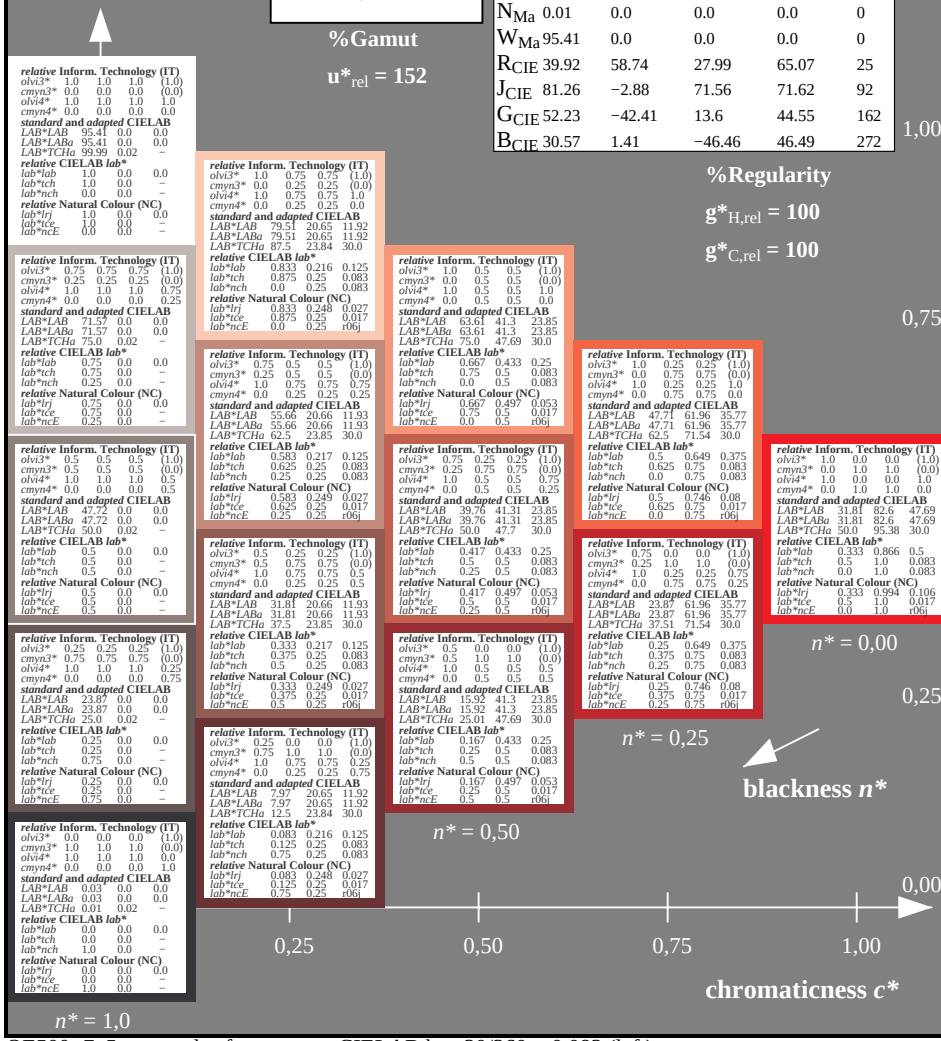
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

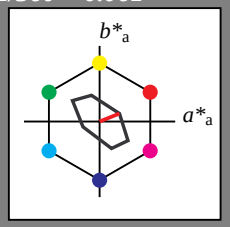


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

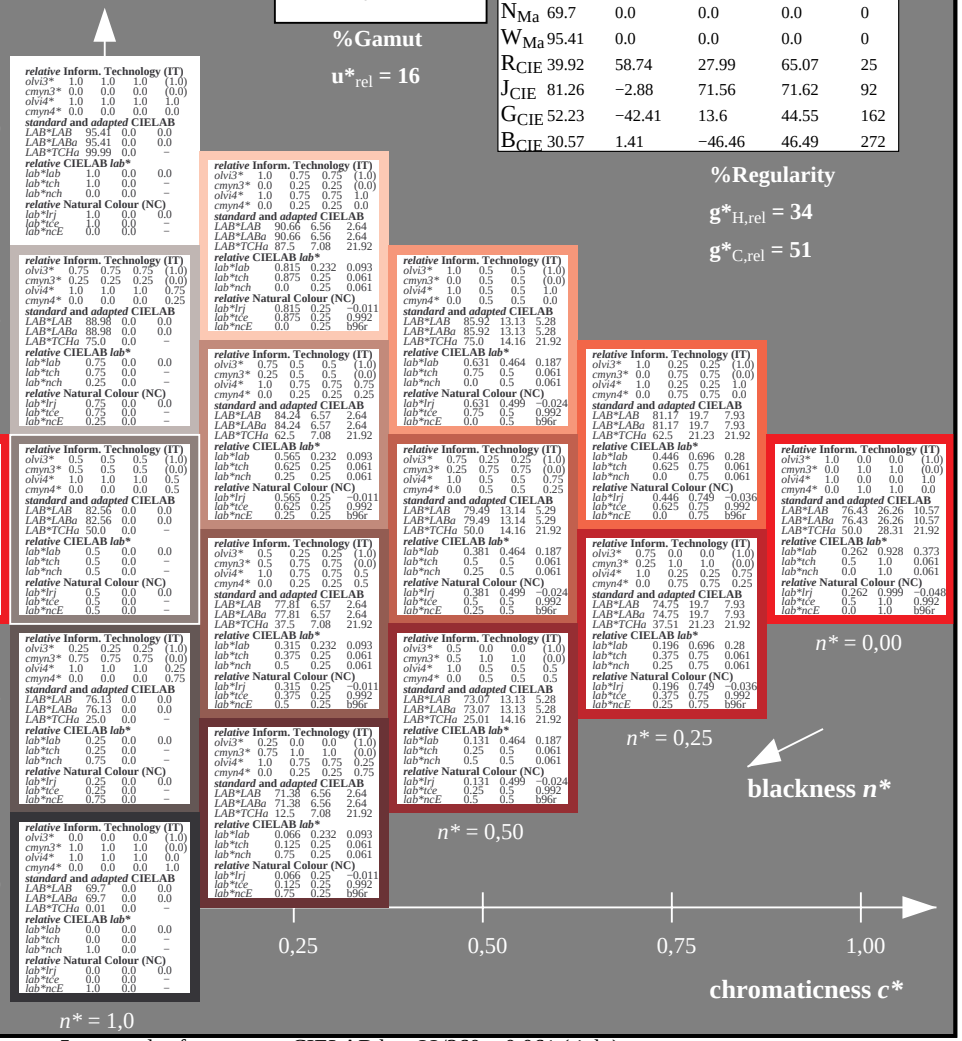
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

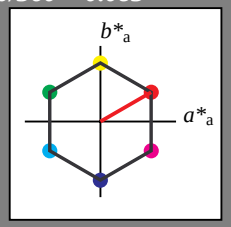
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

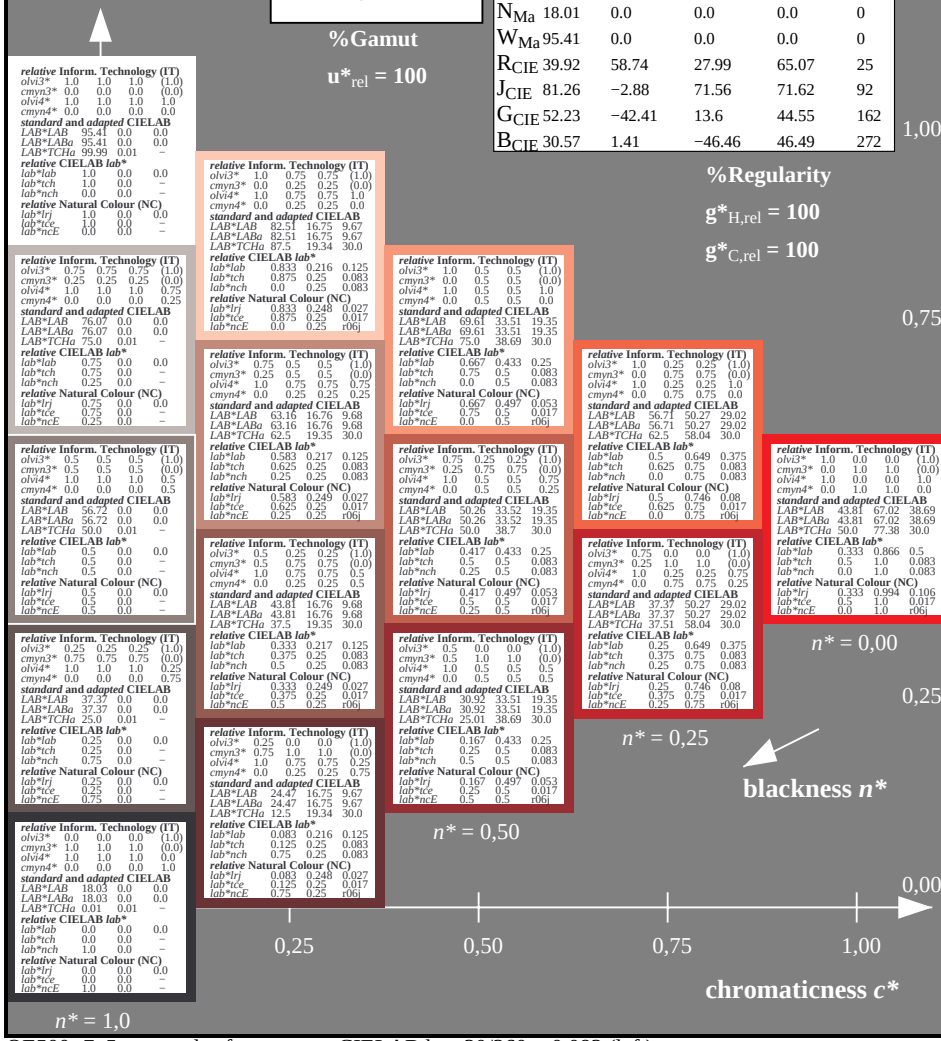
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

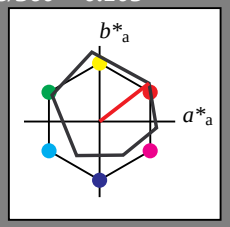
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

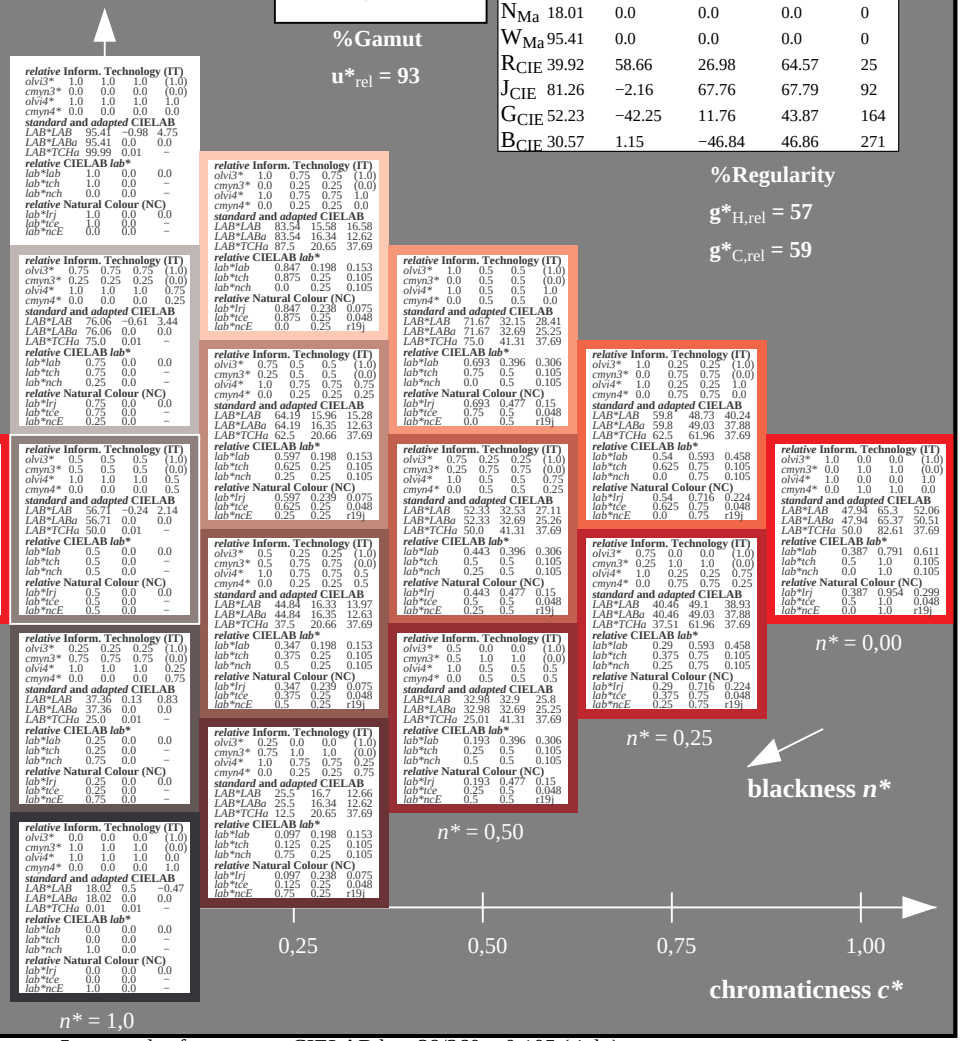
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

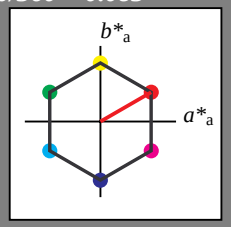
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

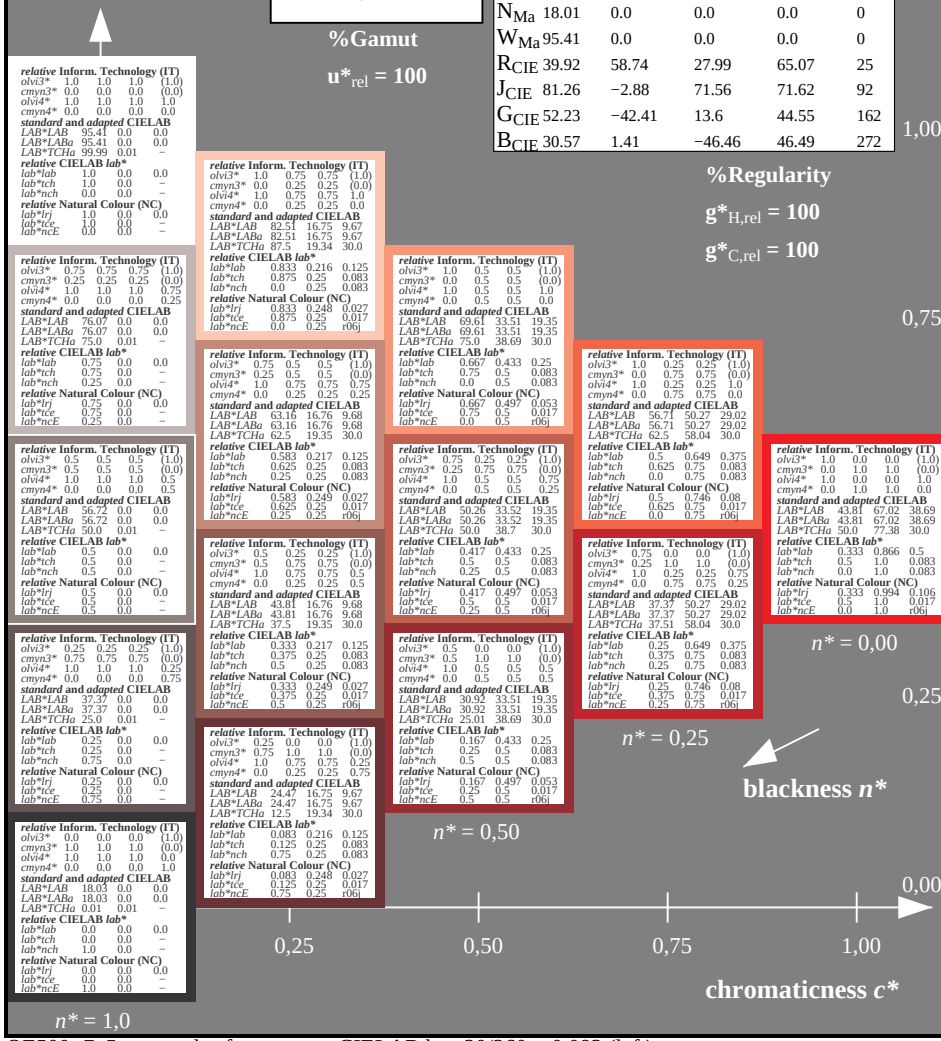
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

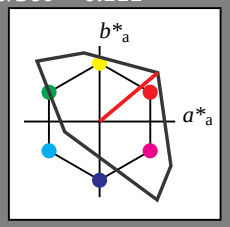
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

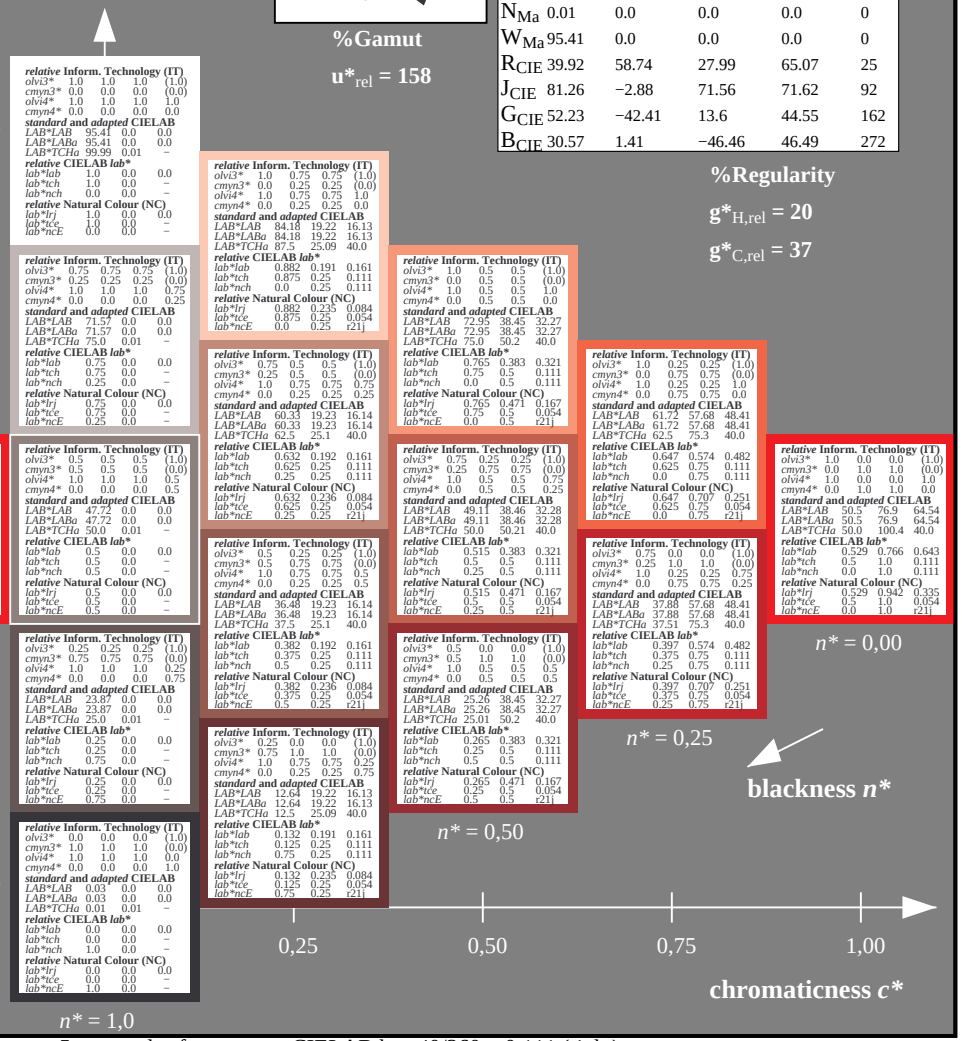
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



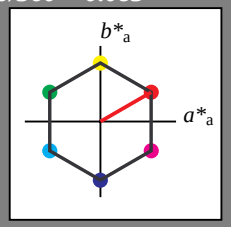
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

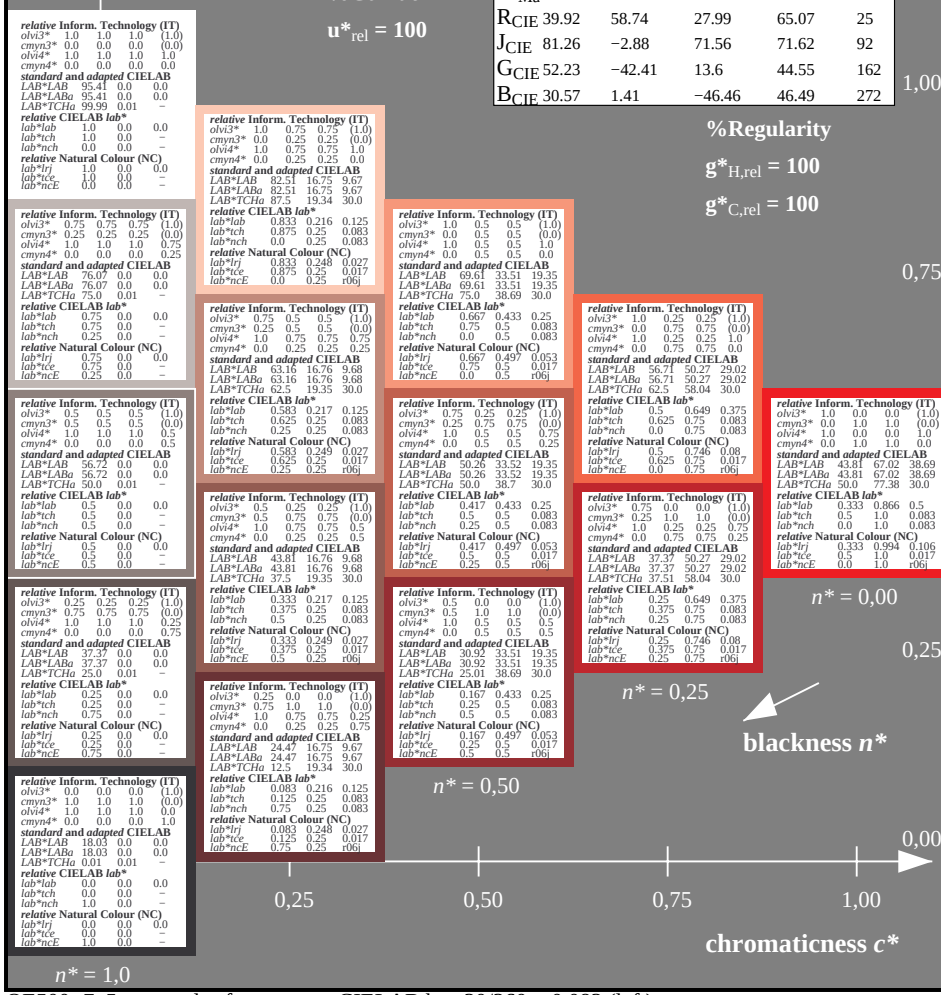
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

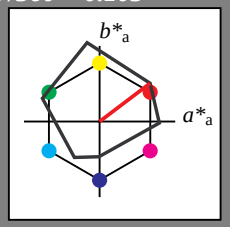


OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 42 84 37
olv*Ma: 1.0 0.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

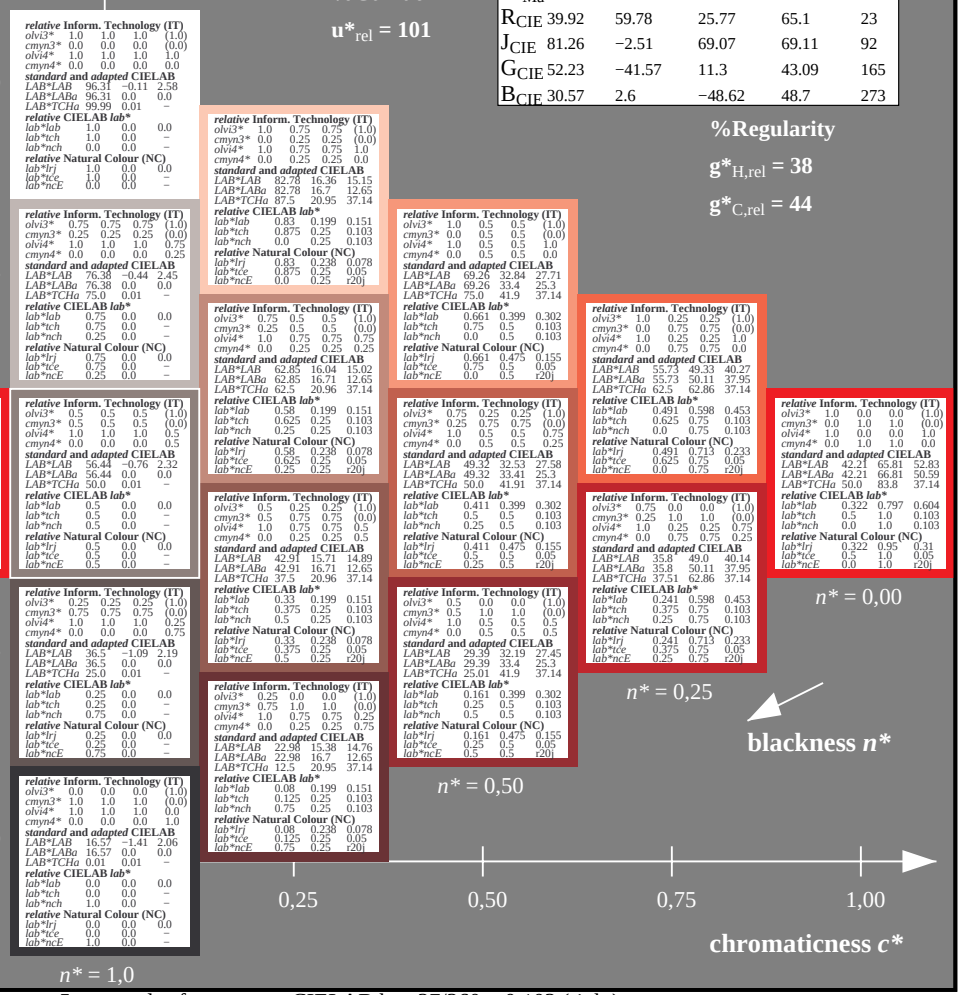
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

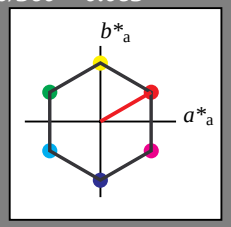
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

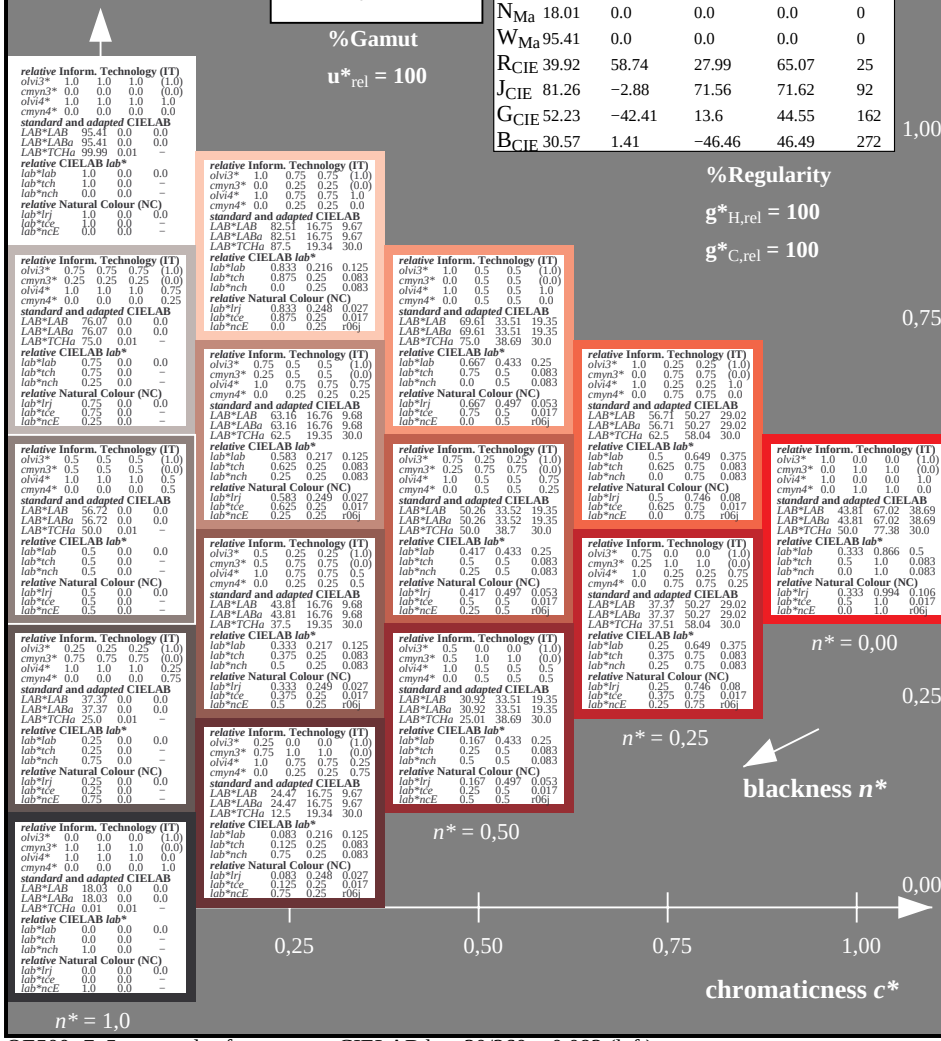
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

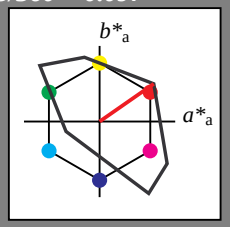
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

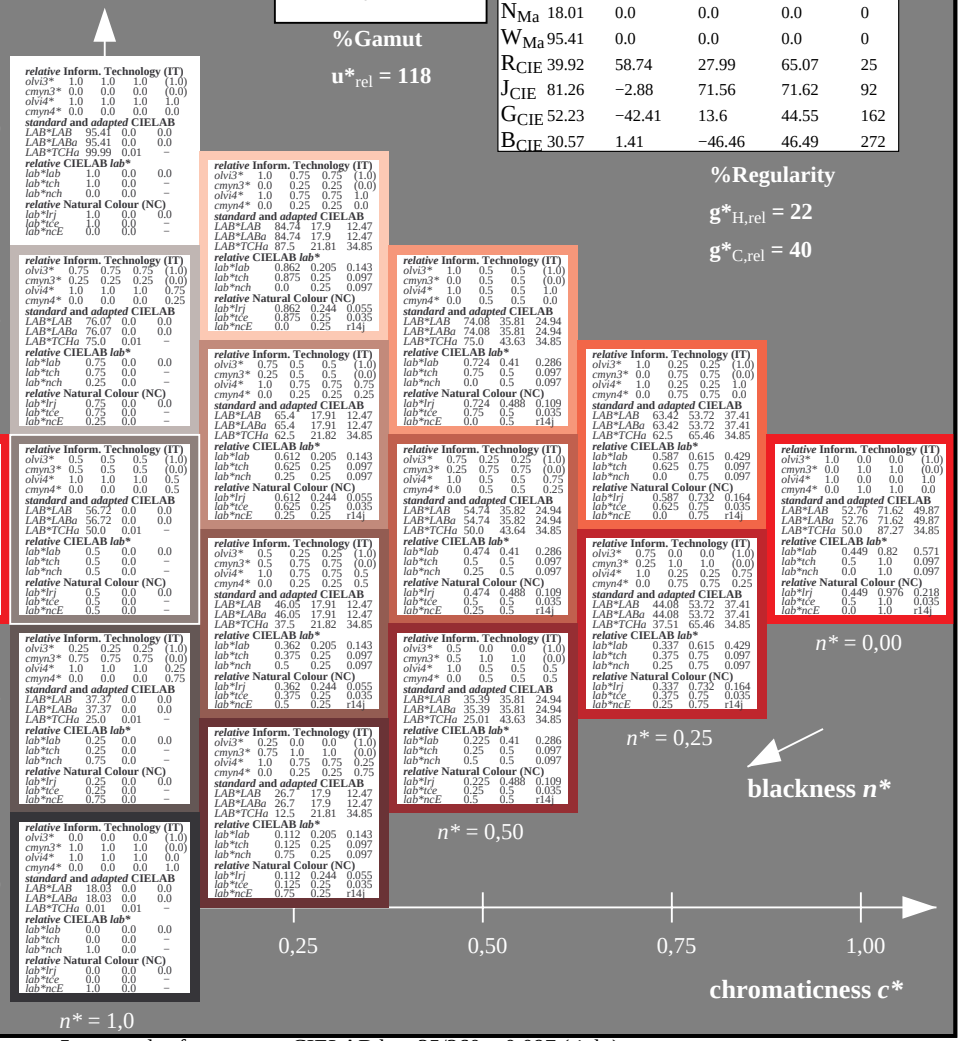
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

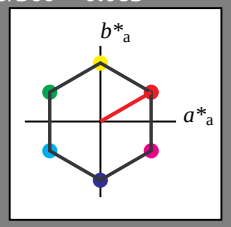
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

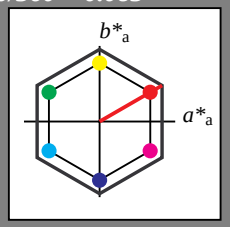
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

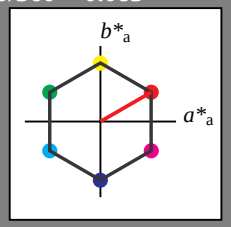
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

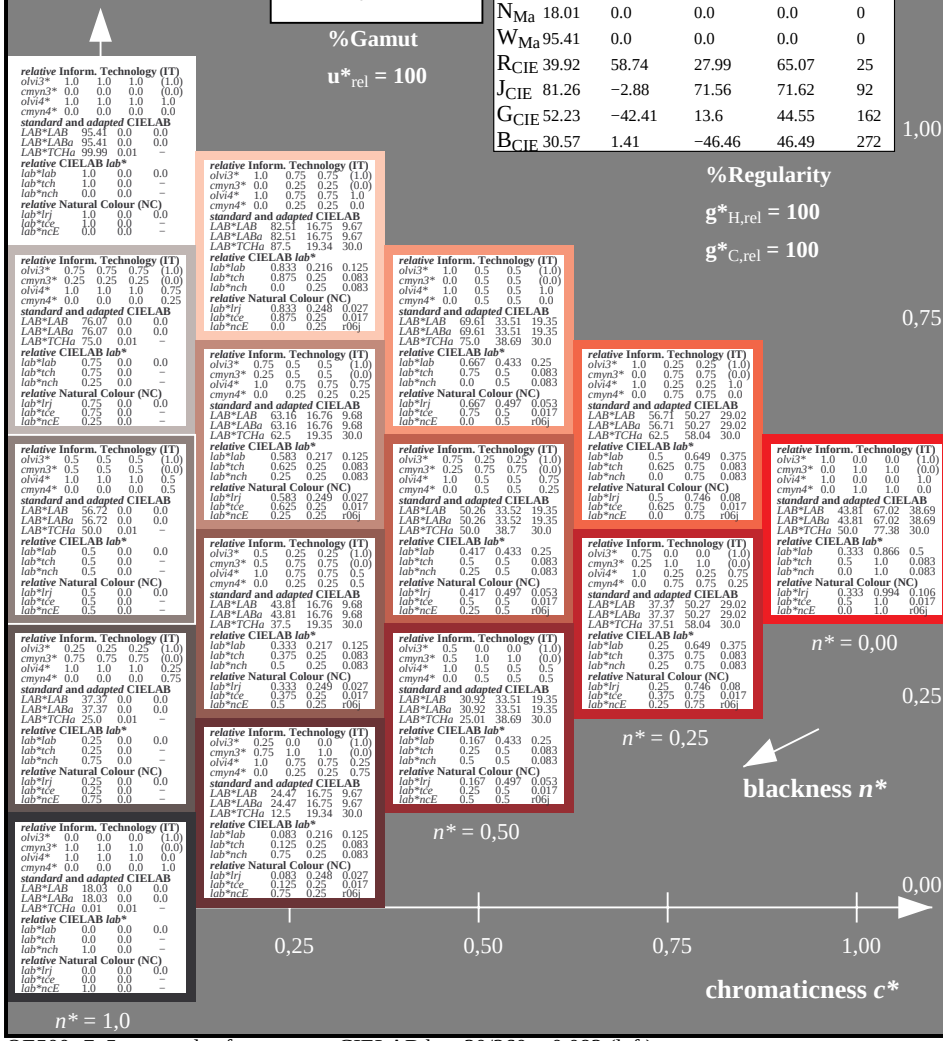
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



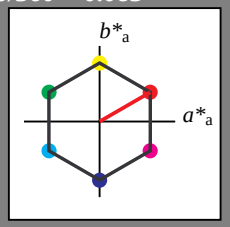
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

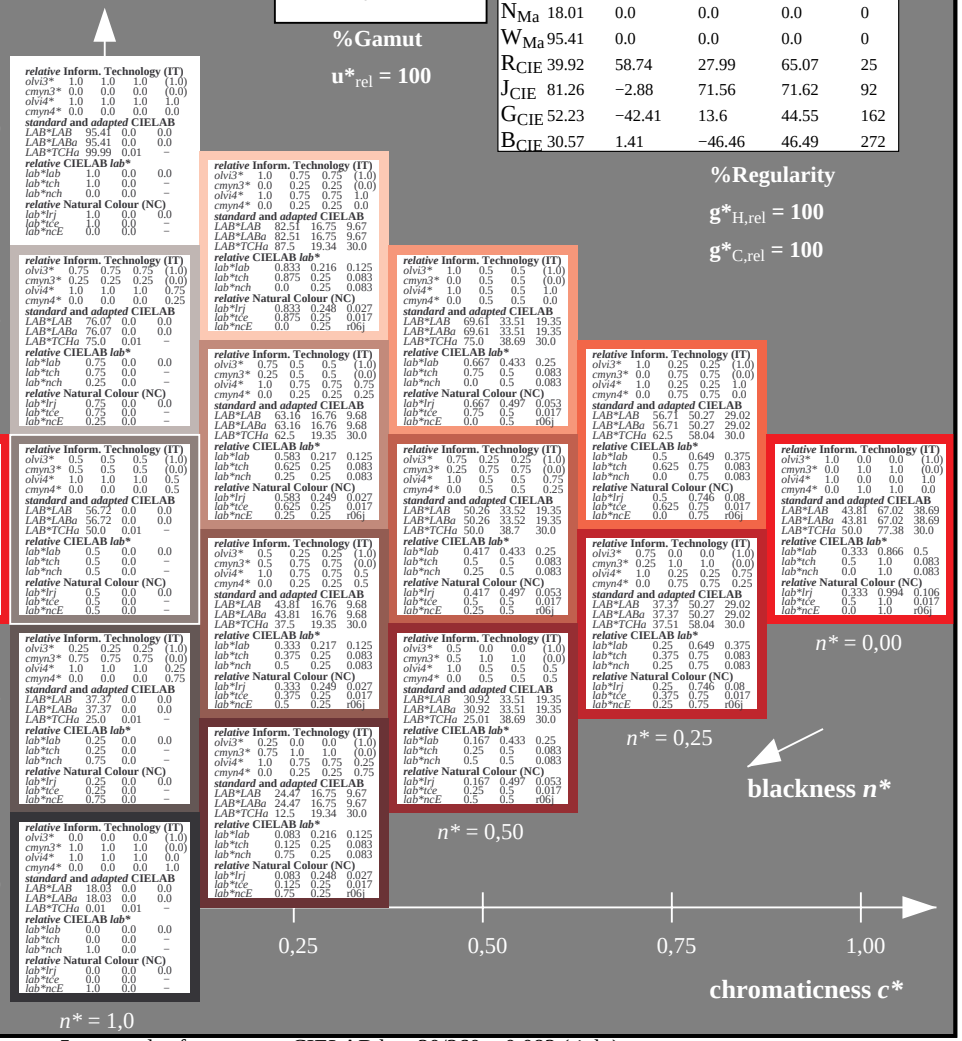
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



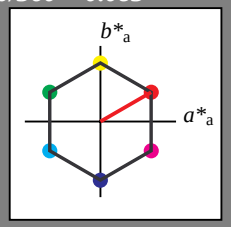
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

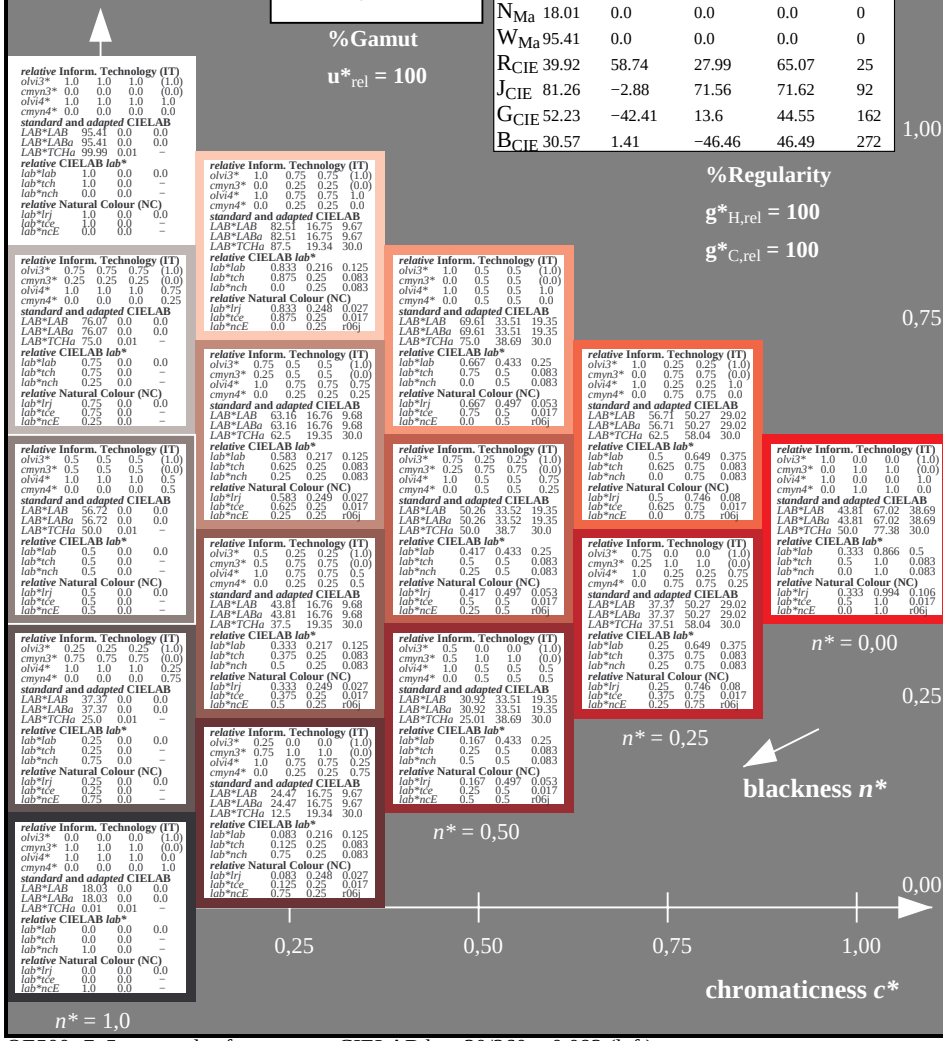
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



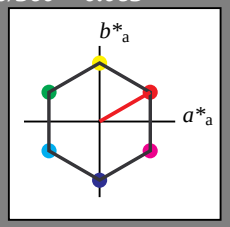
OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

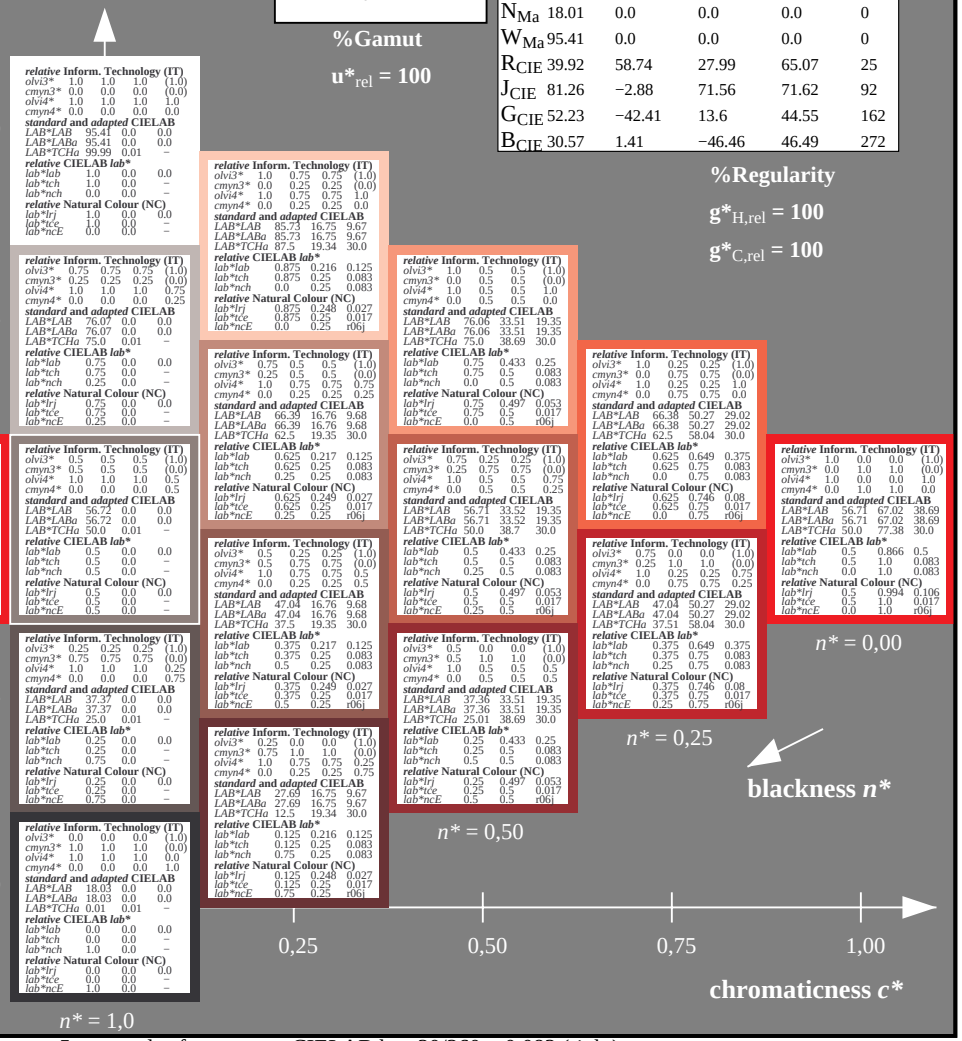
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

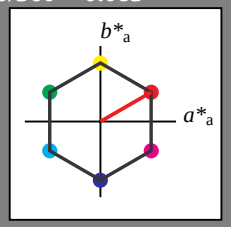
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

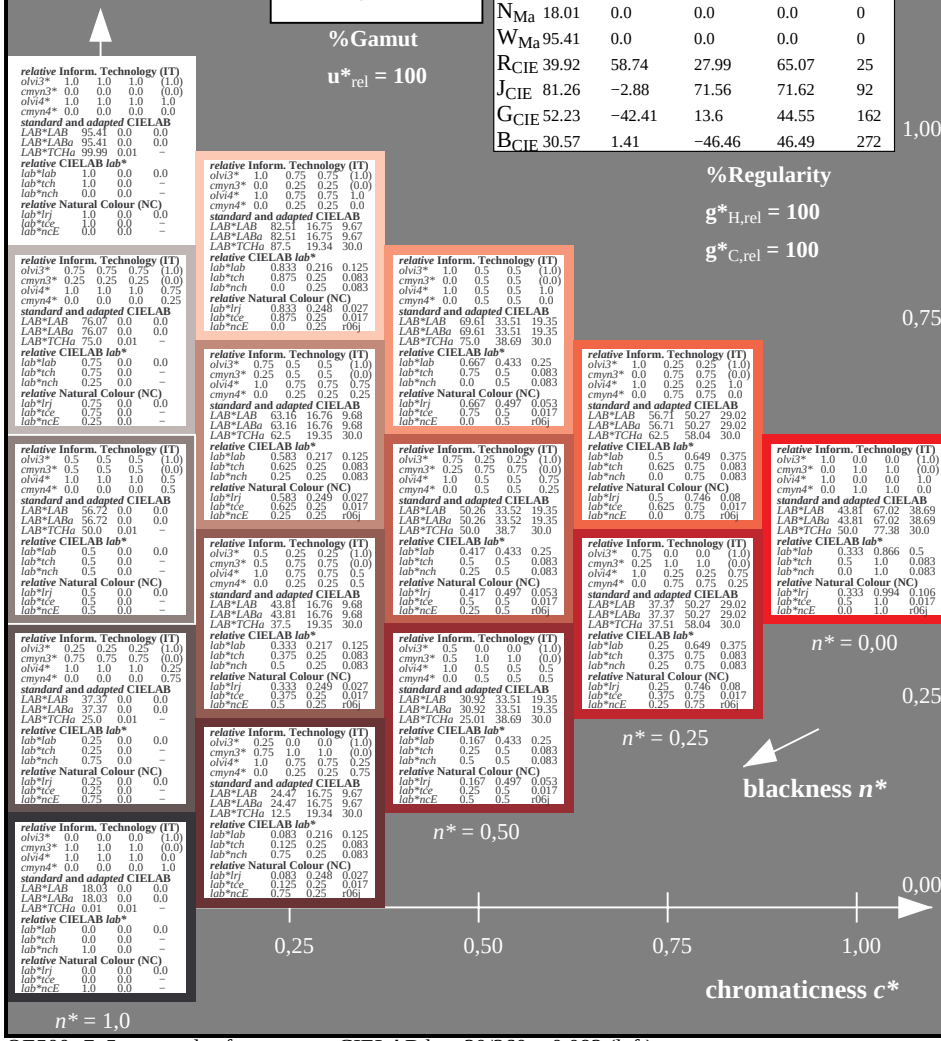
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$

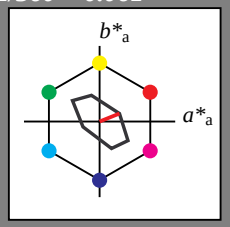
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

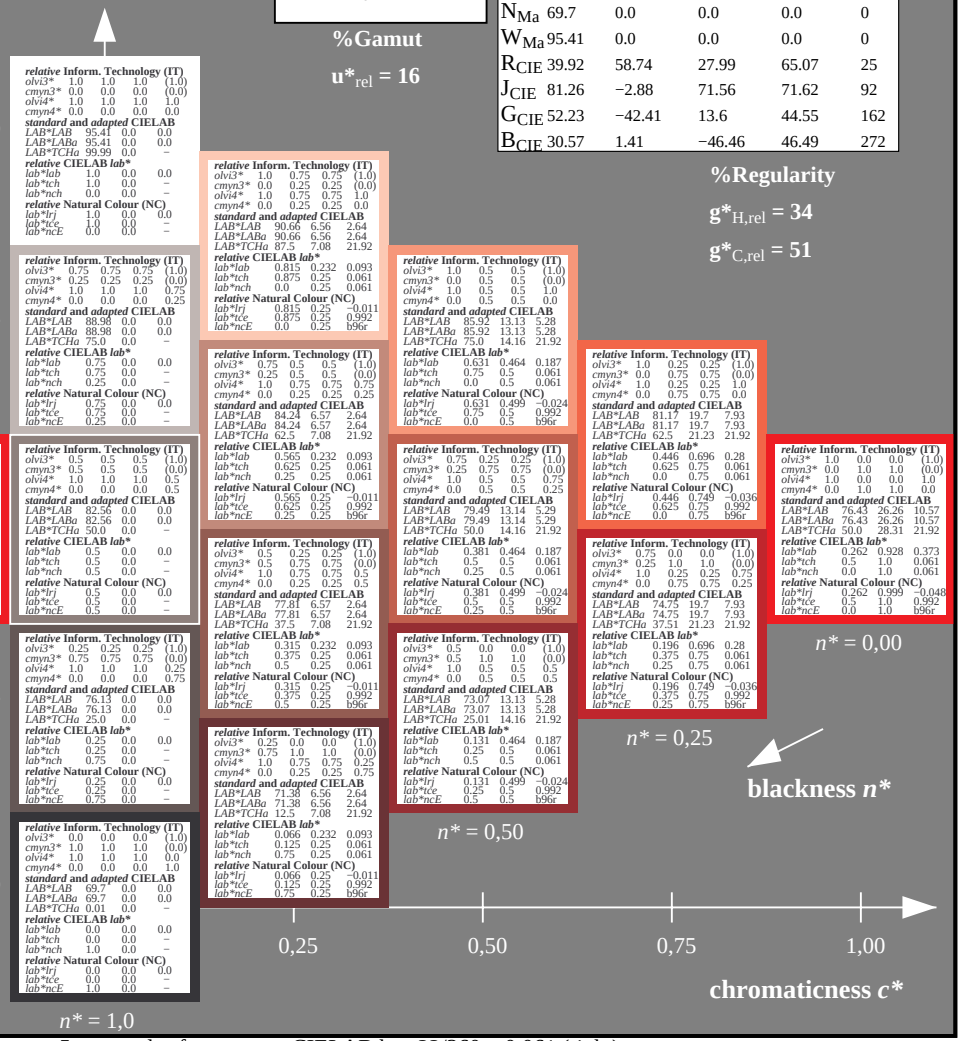
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

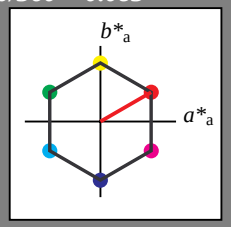
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

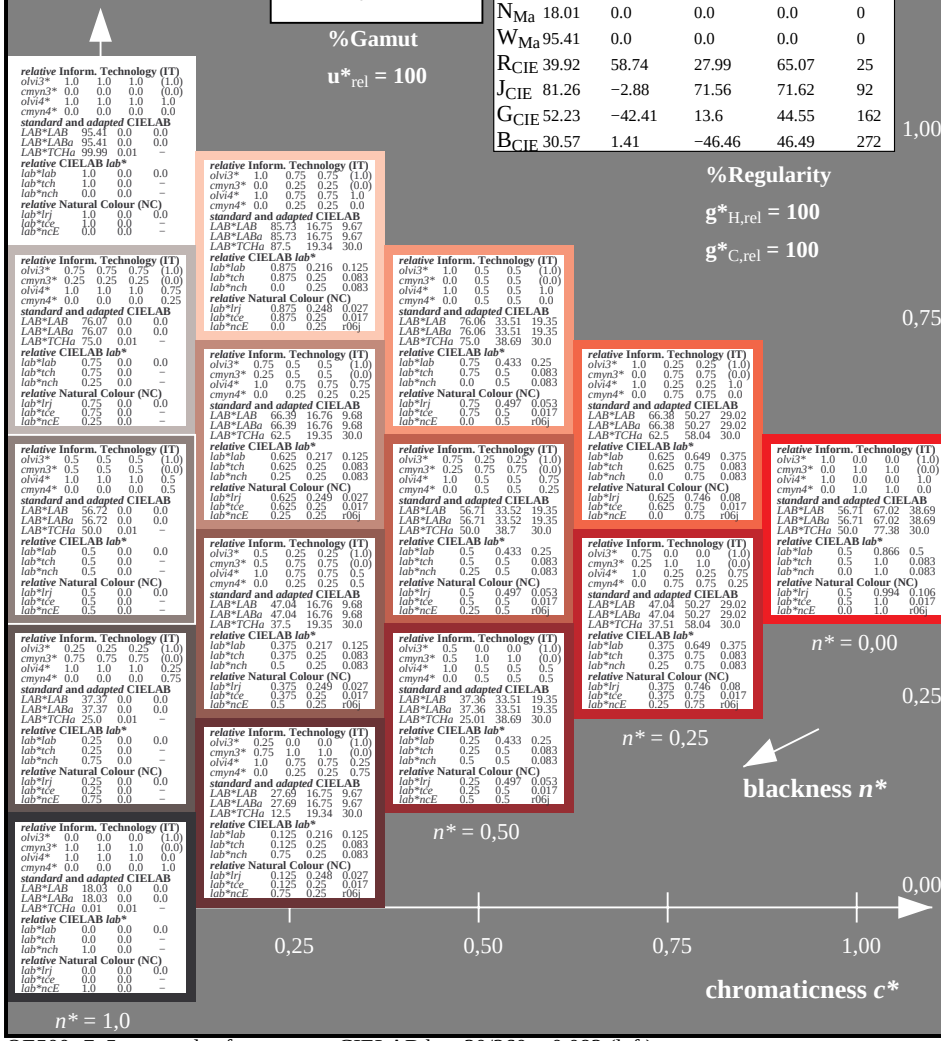
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

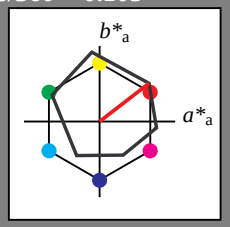
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

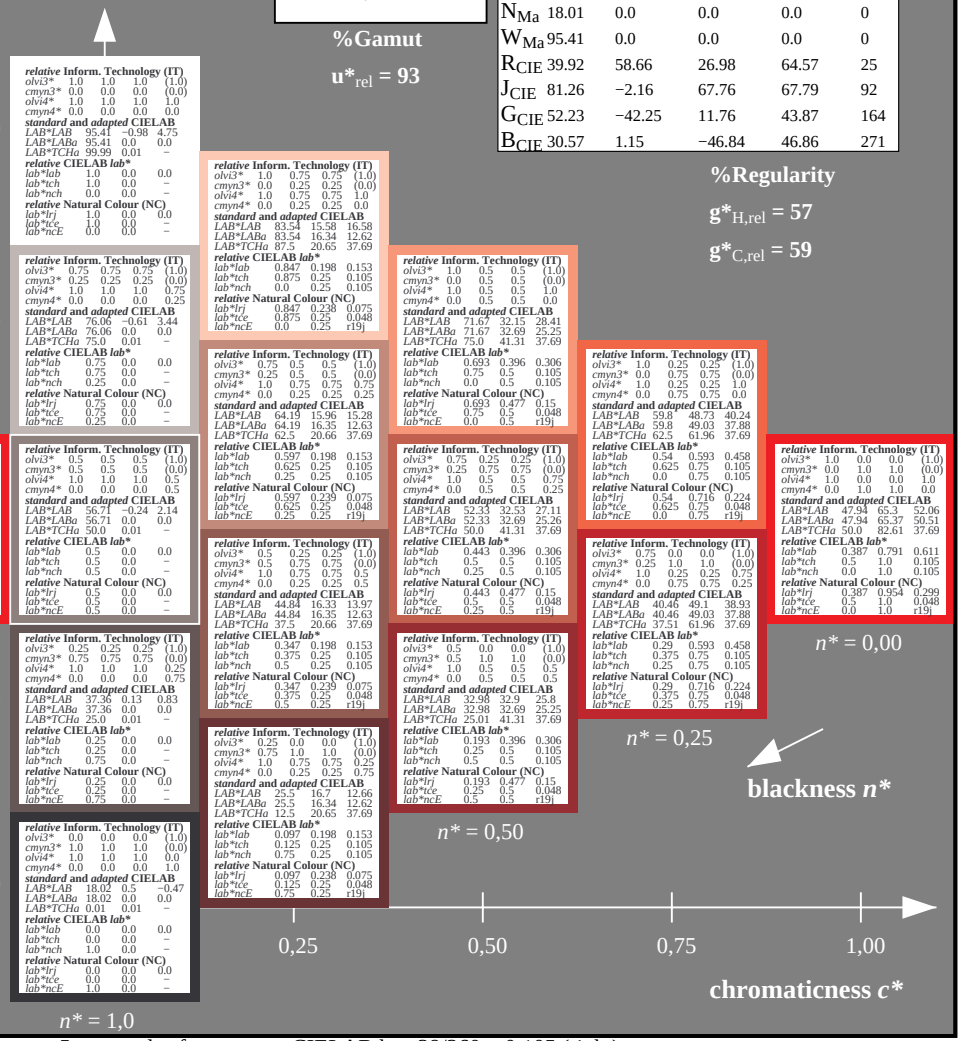
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

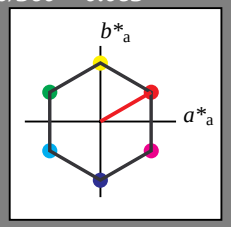
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

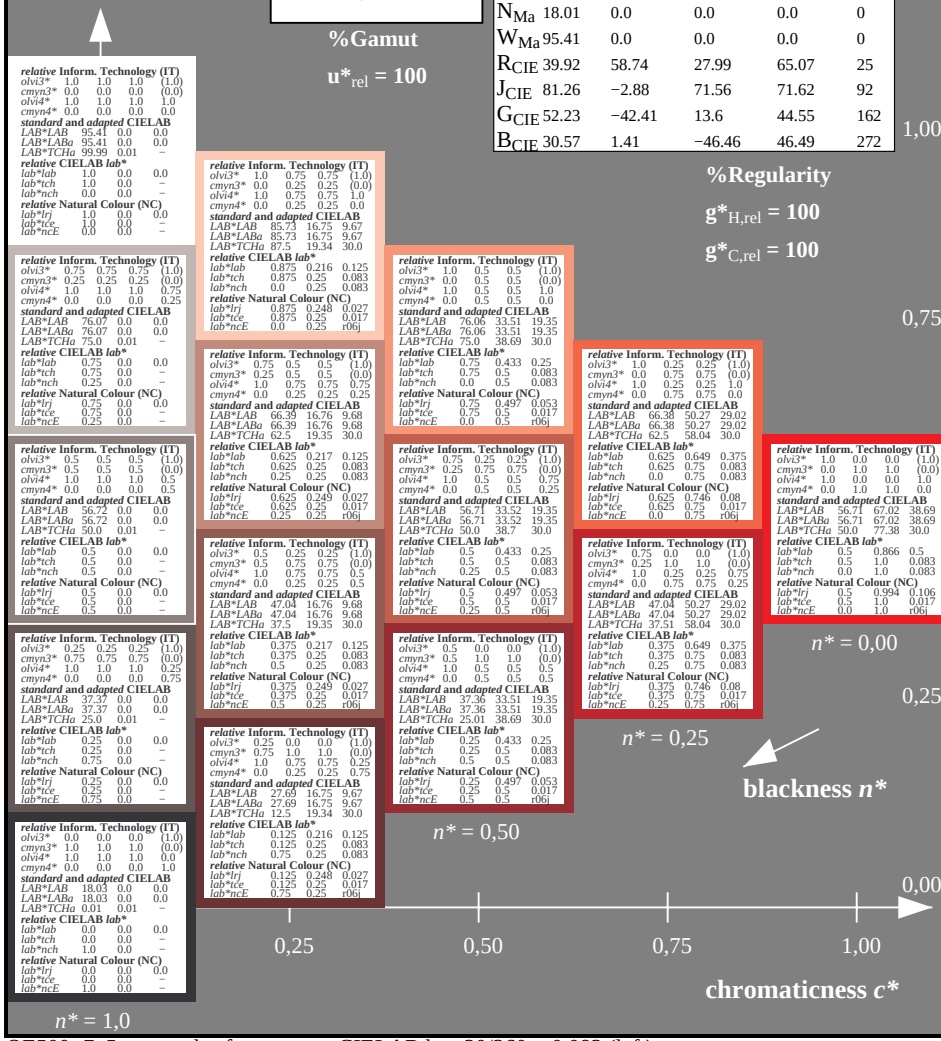
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

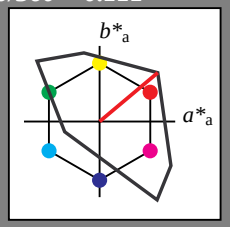
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

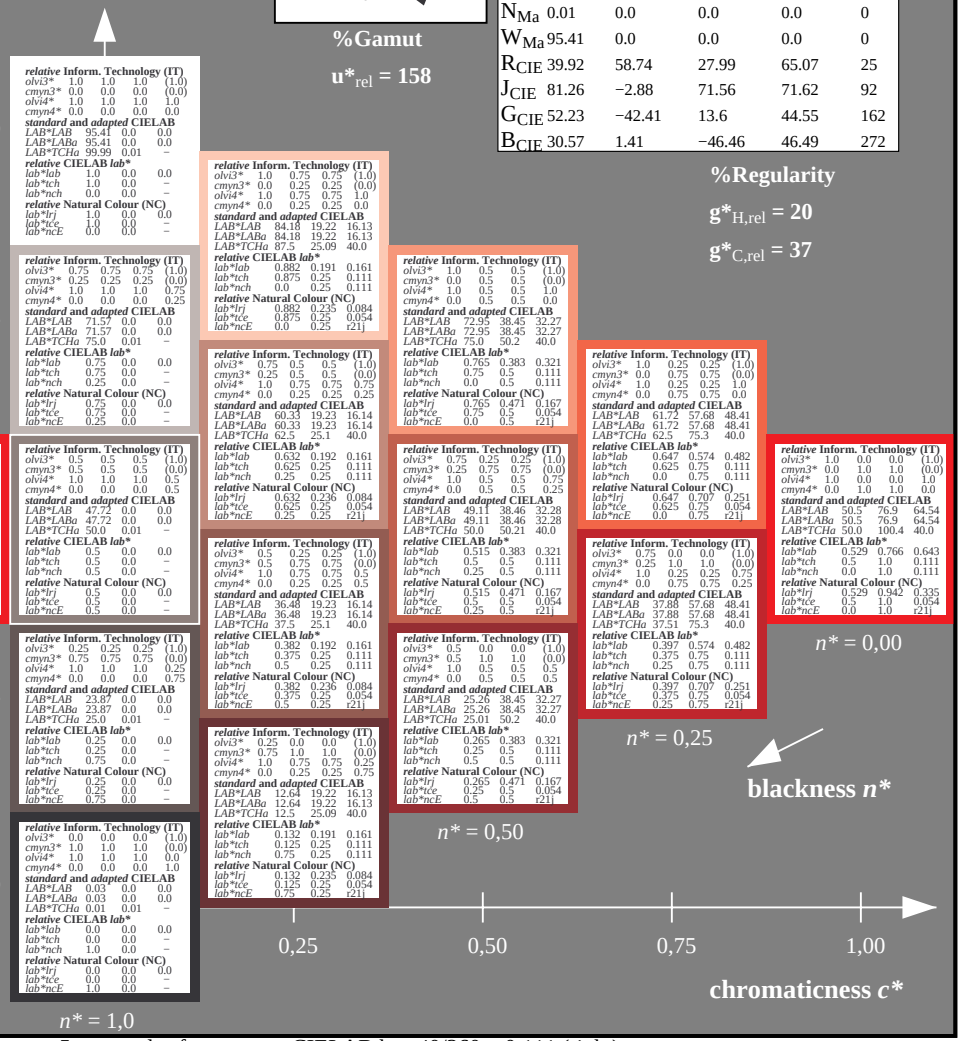
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

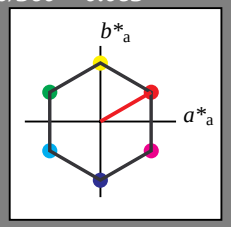
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

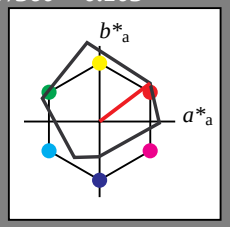
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

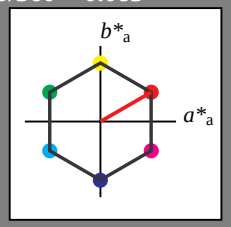
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

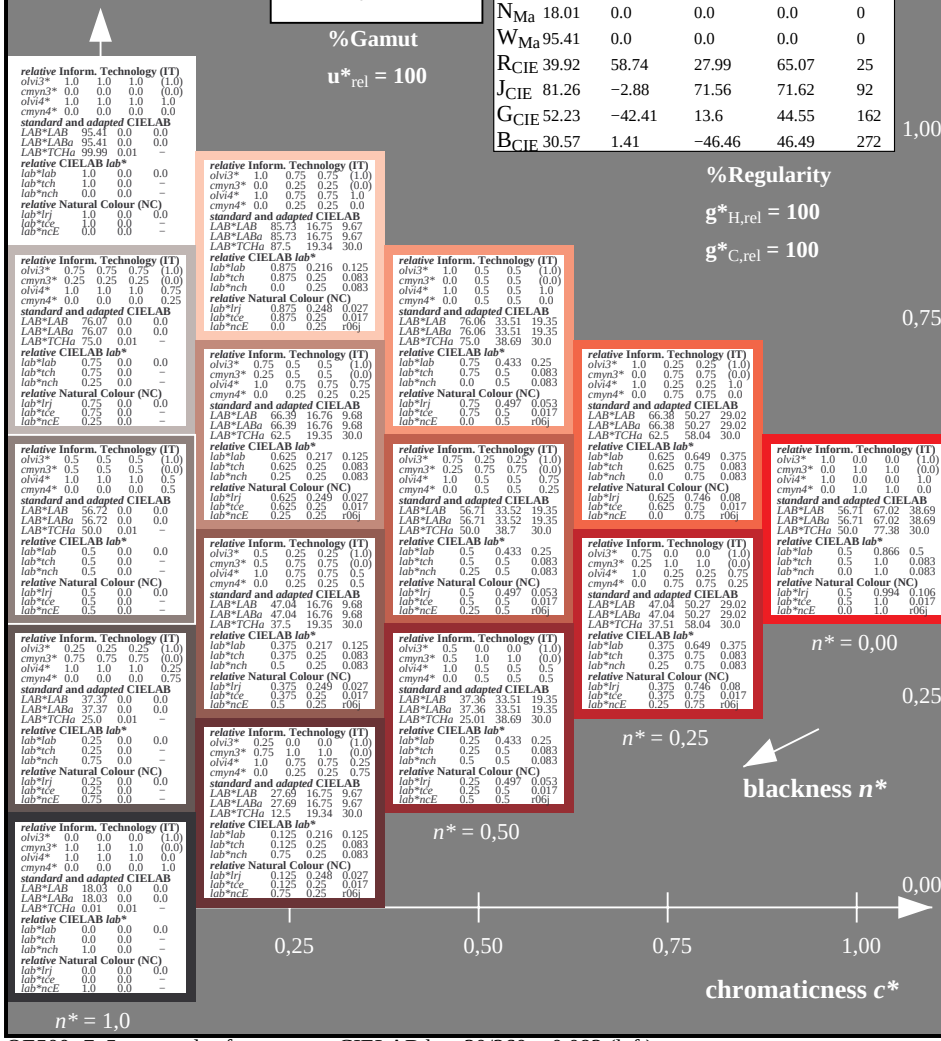
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

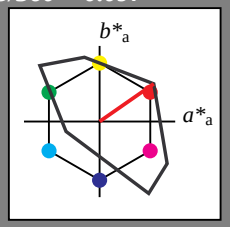
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

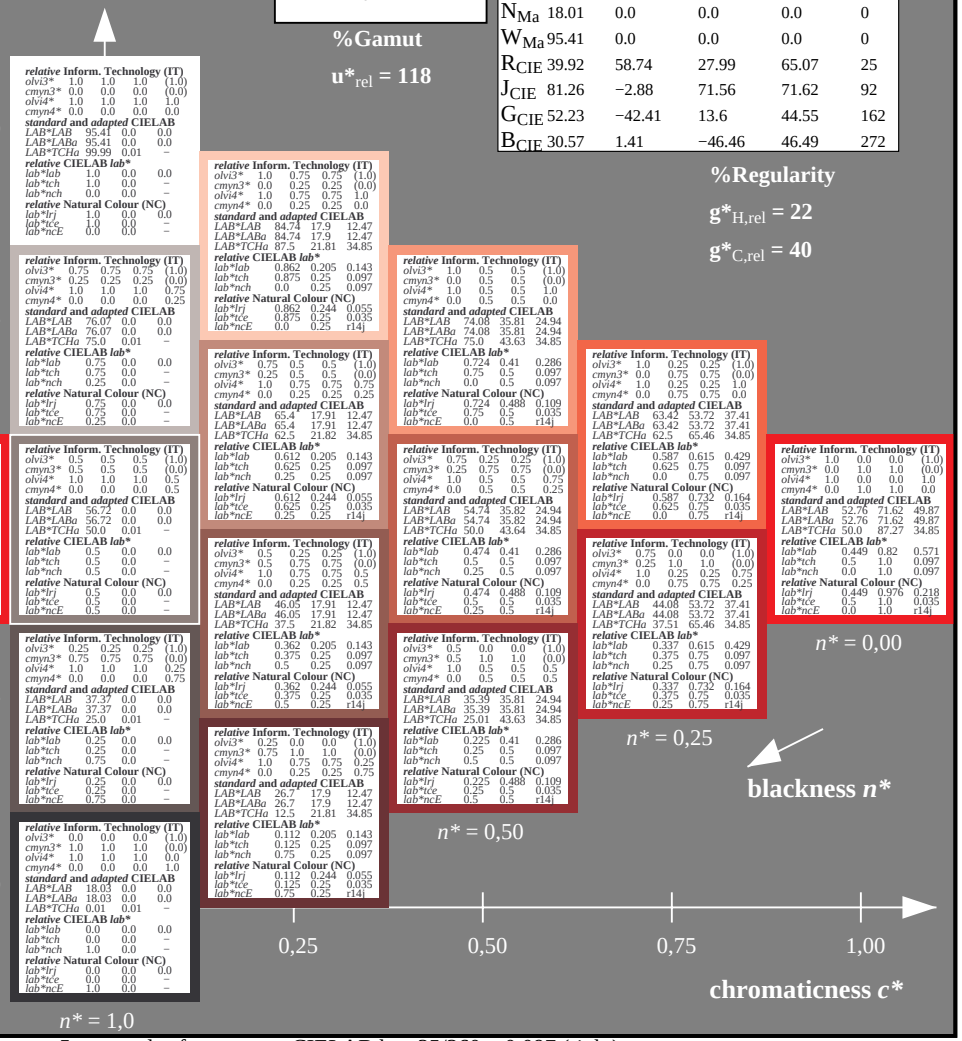
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

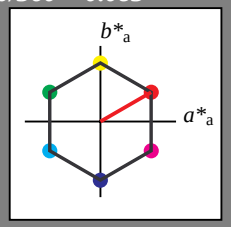
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

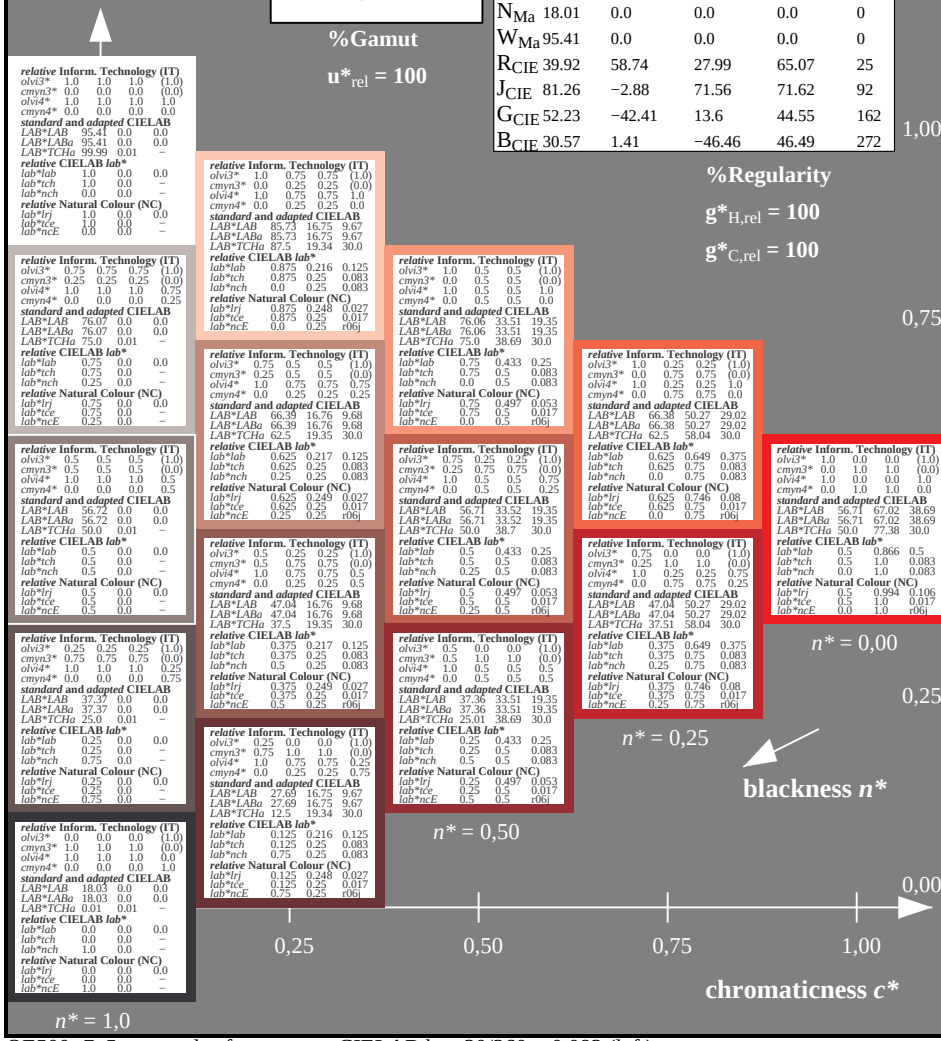
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 30/360 = 0.083$

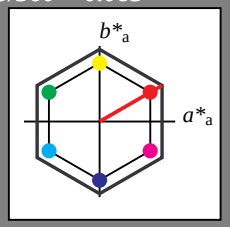
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

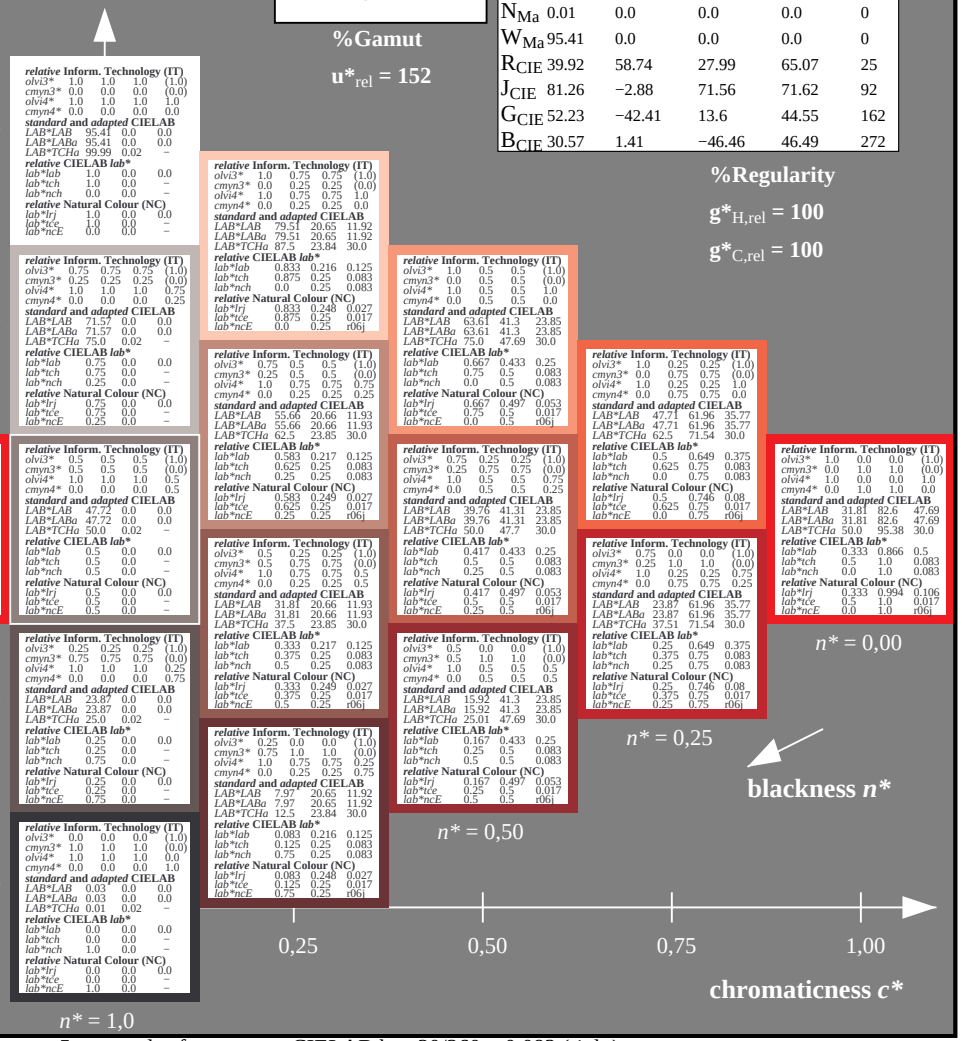
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

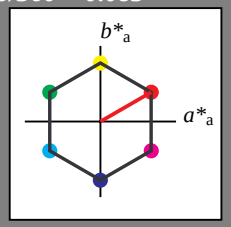
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

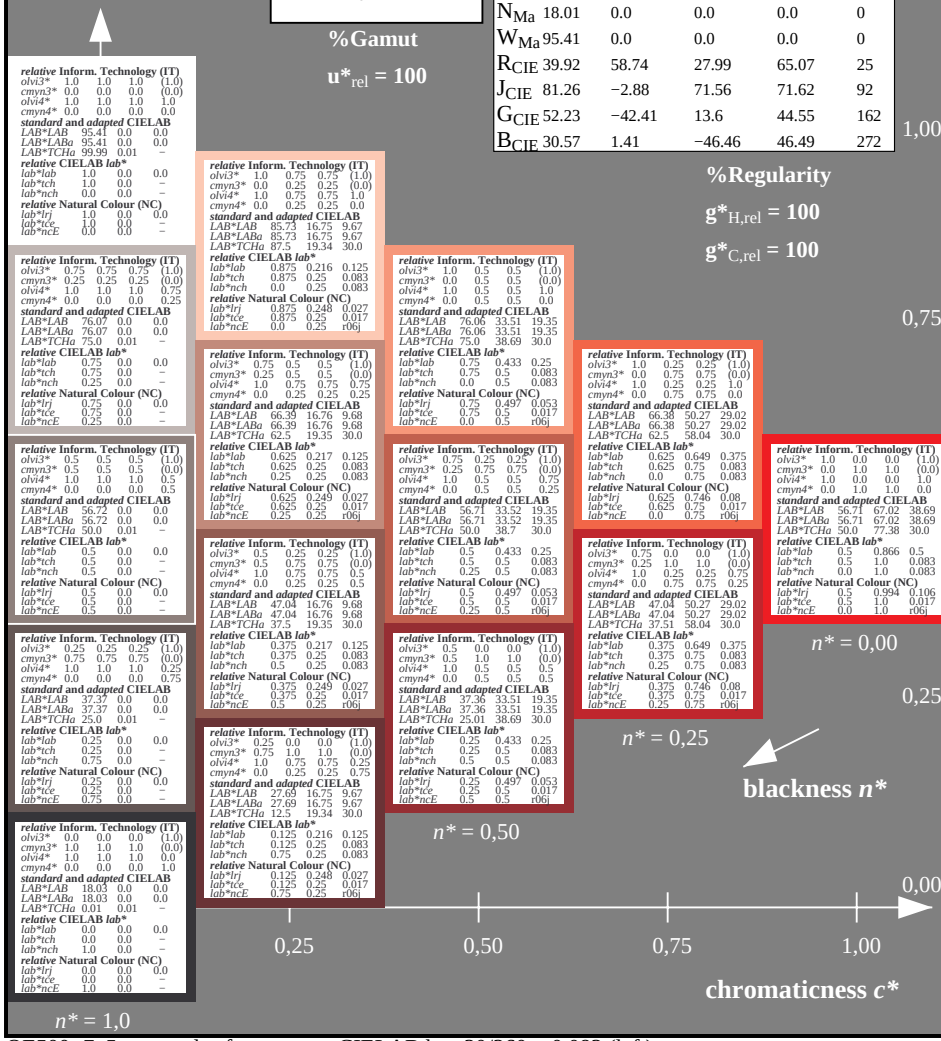
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

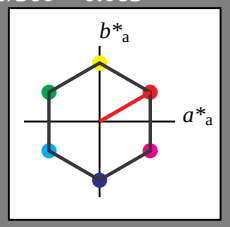
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

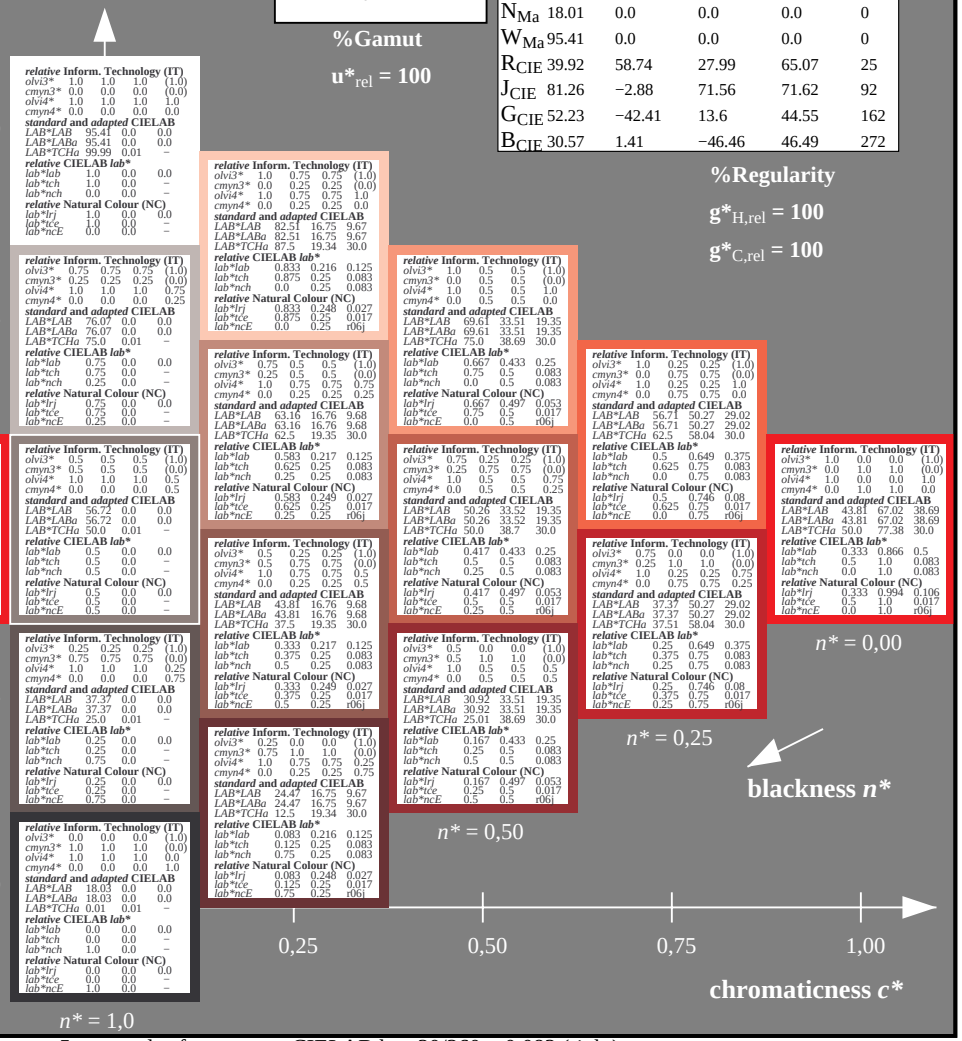
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

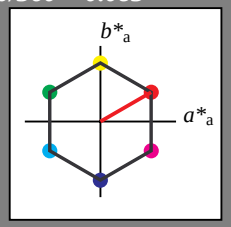


5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

0,25 0,50 0,75 1,00

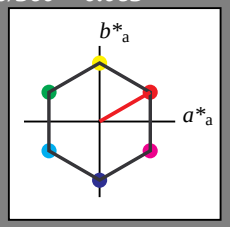
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

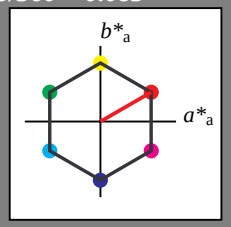
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

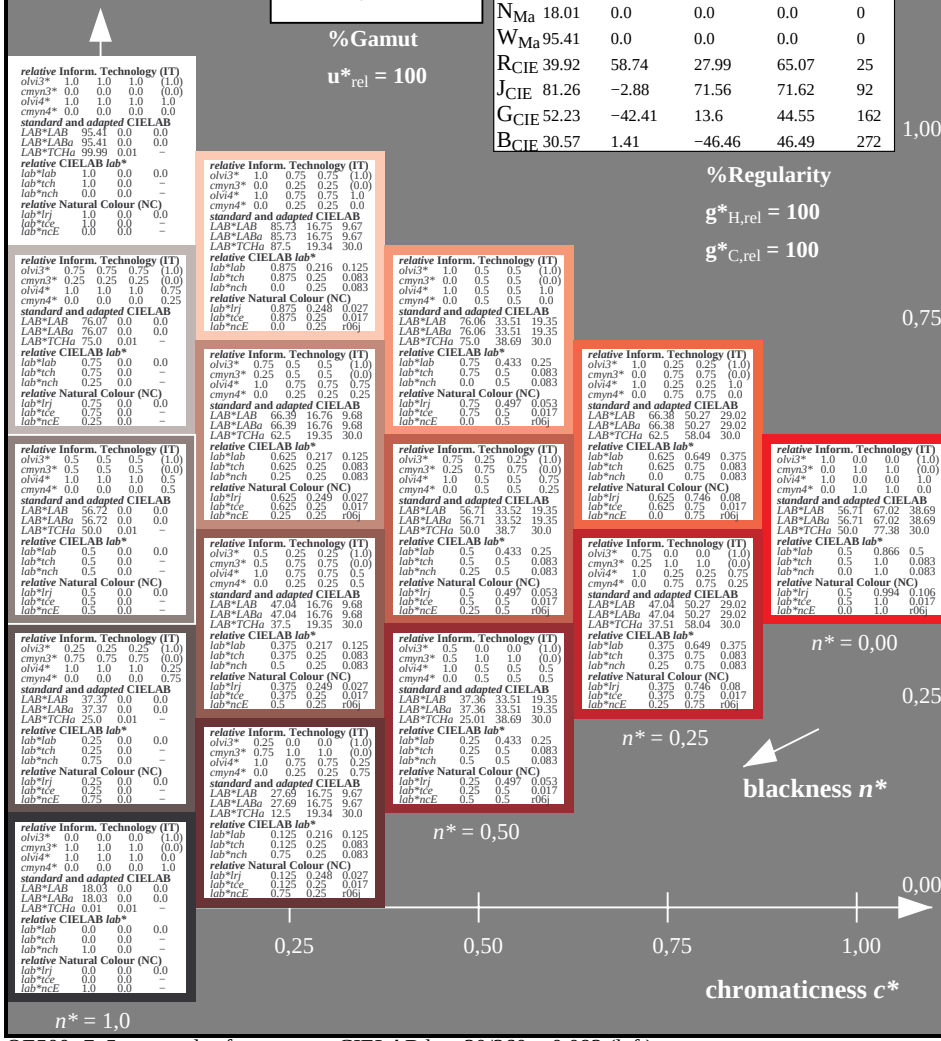
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$

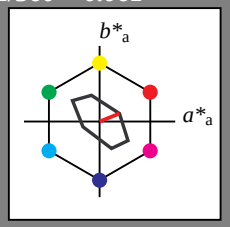
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

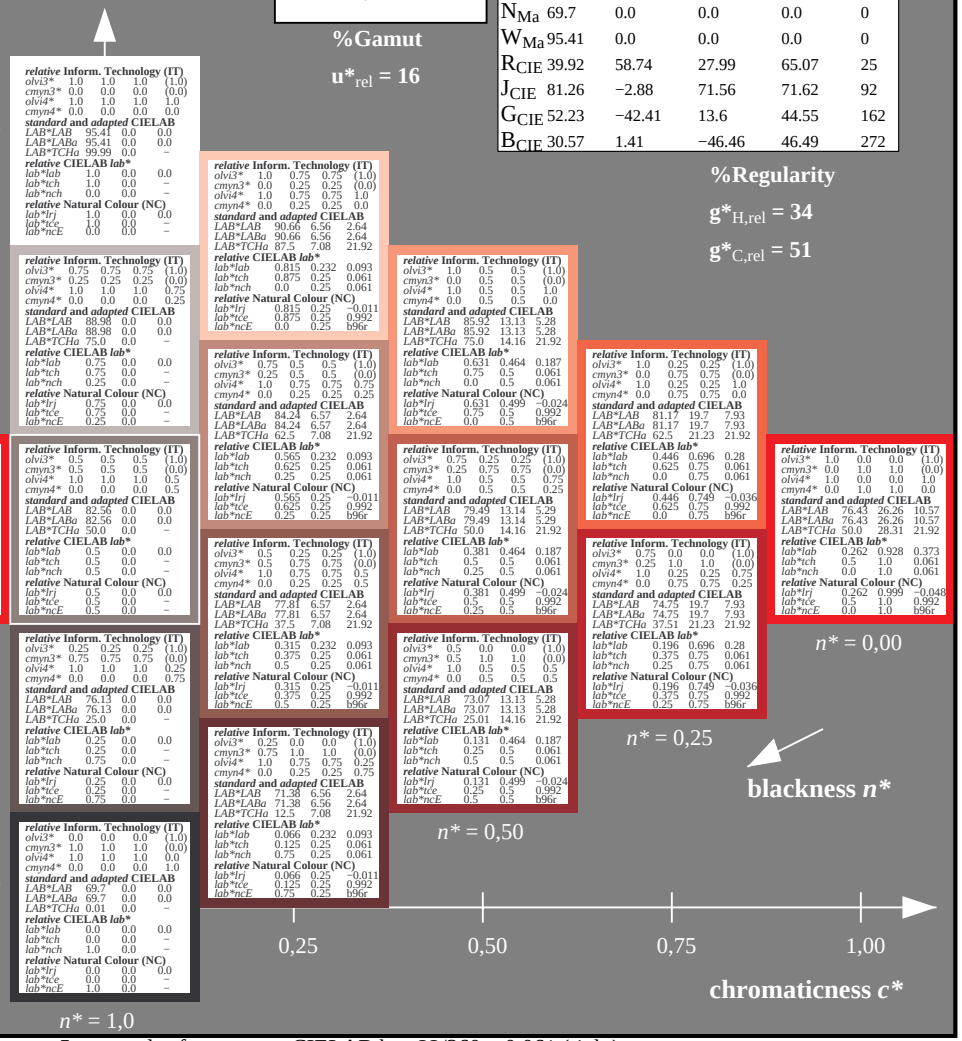
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$

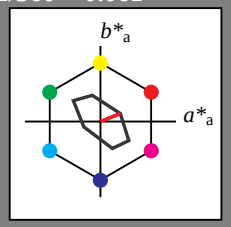
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

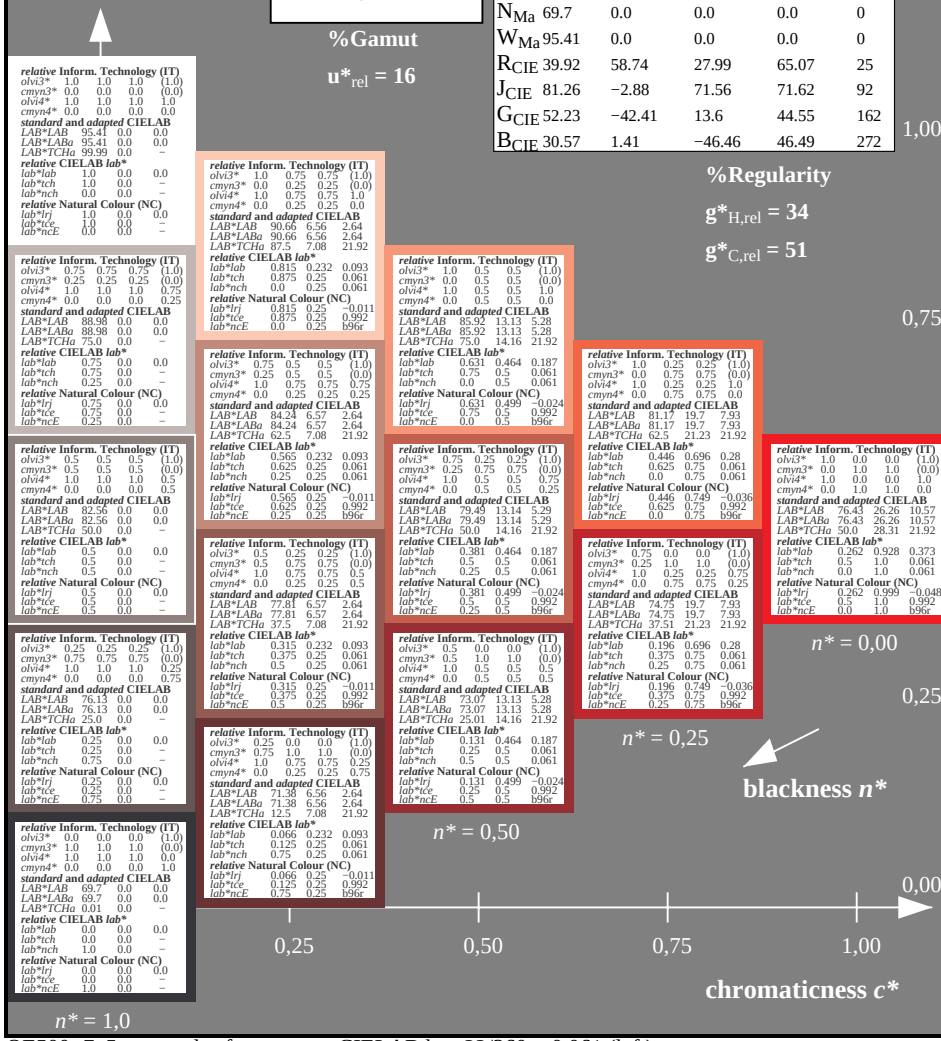
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

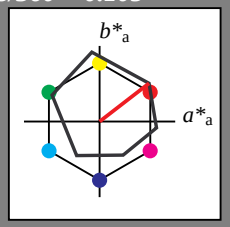
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

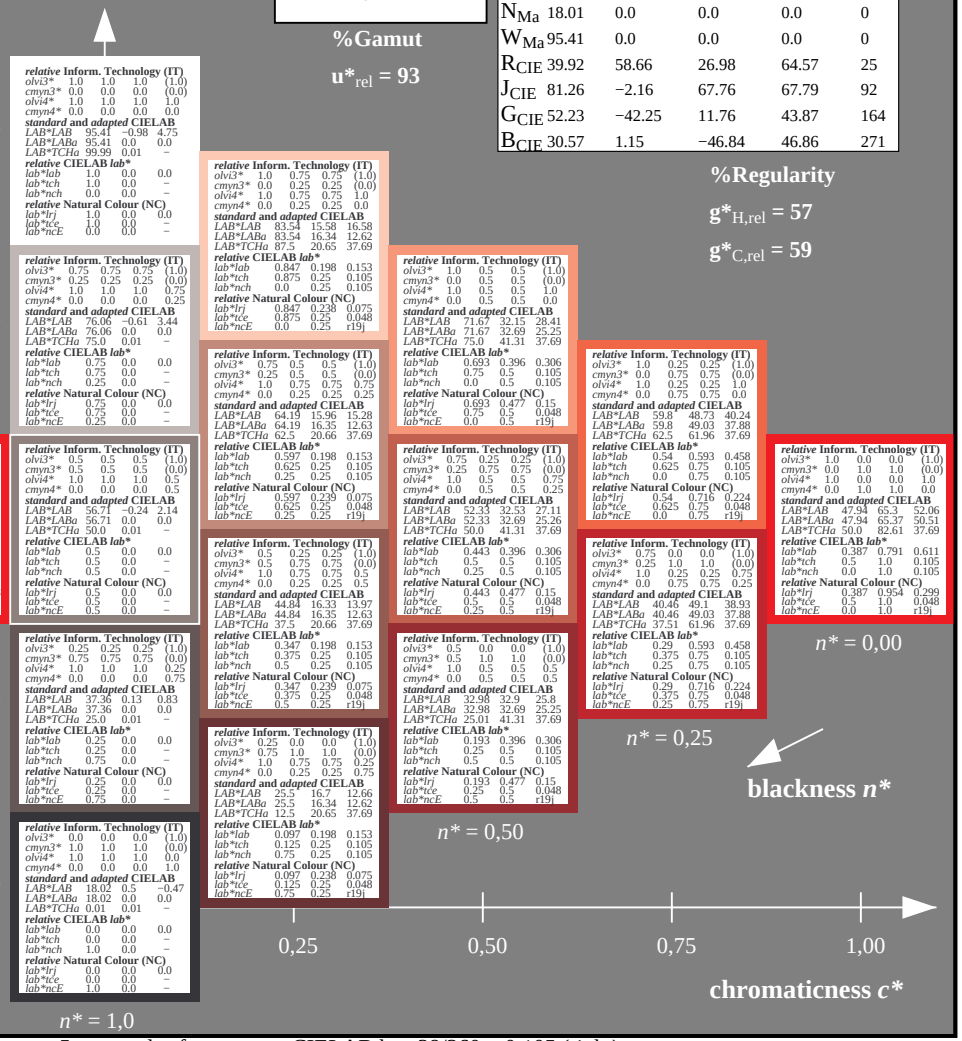
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



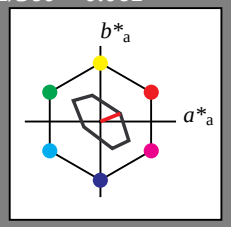
5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

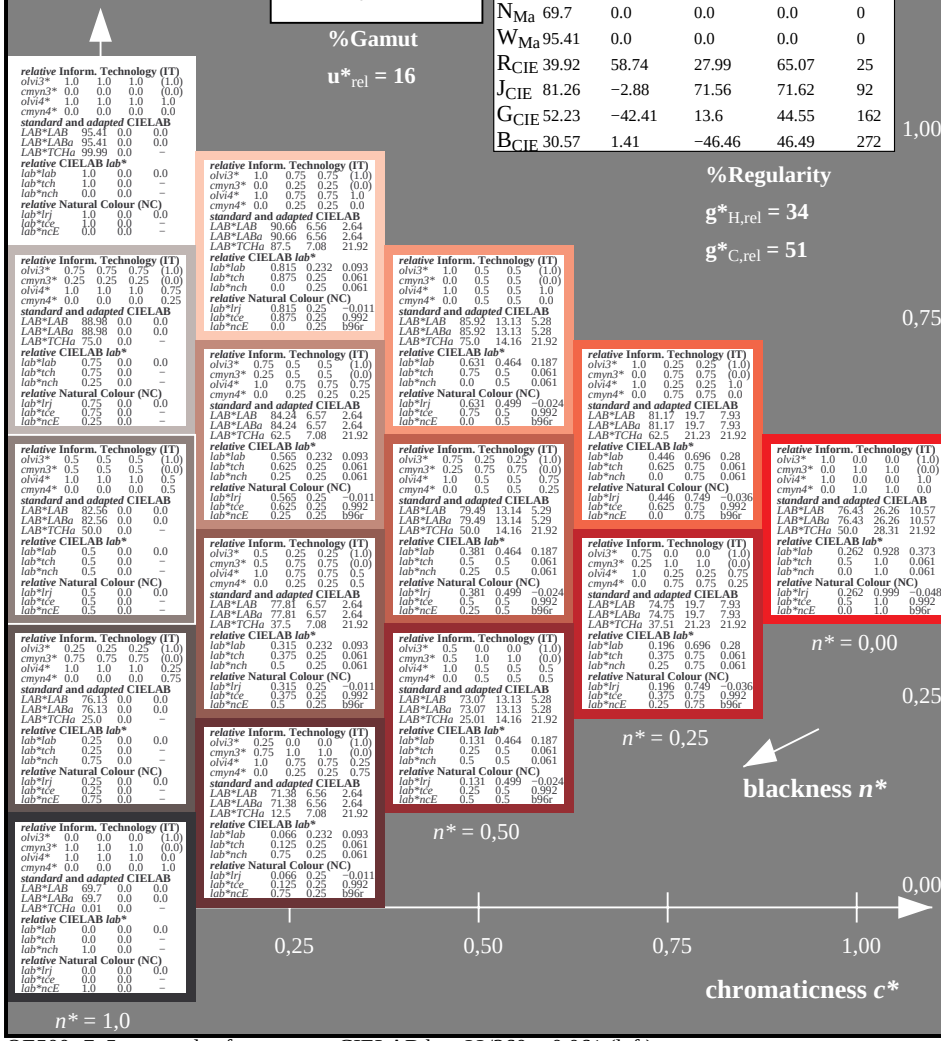
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



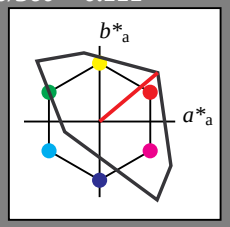
OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

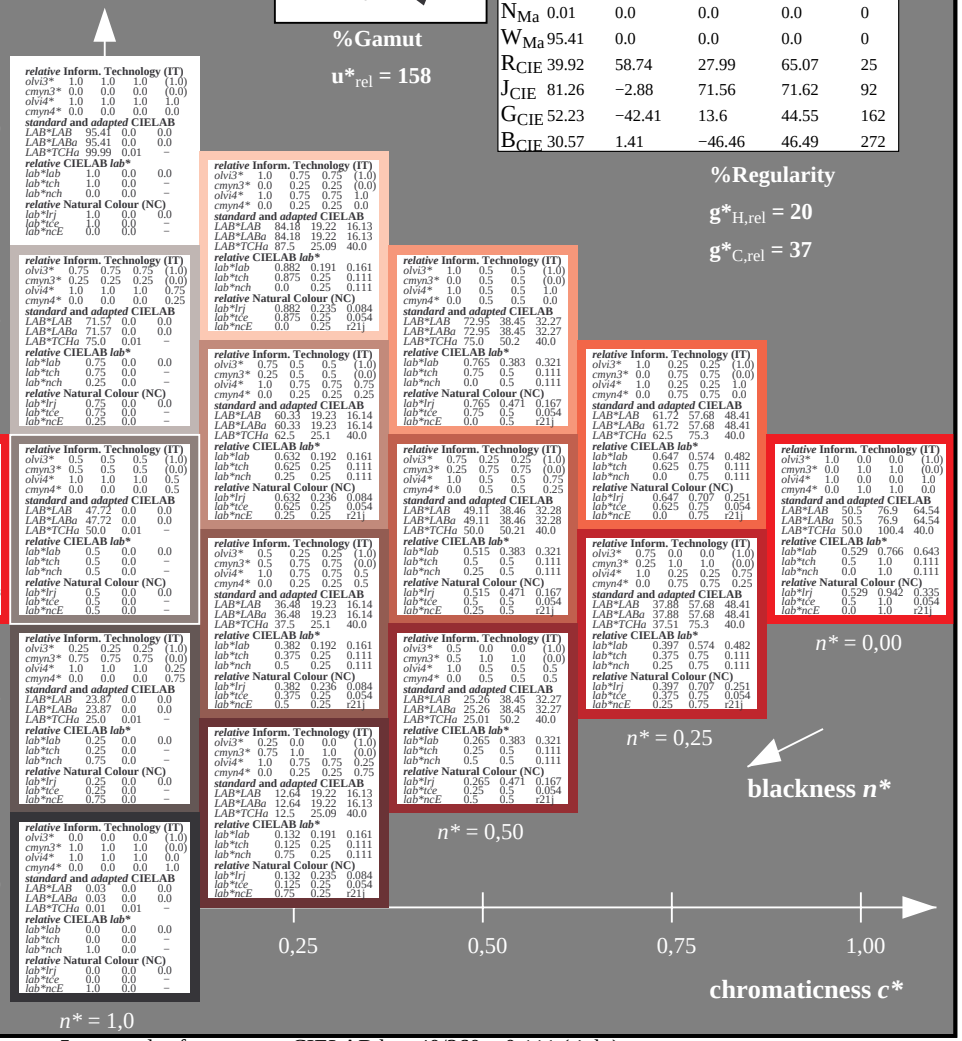
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$

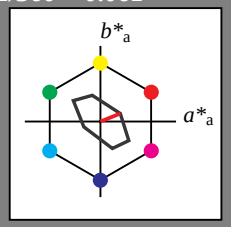
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

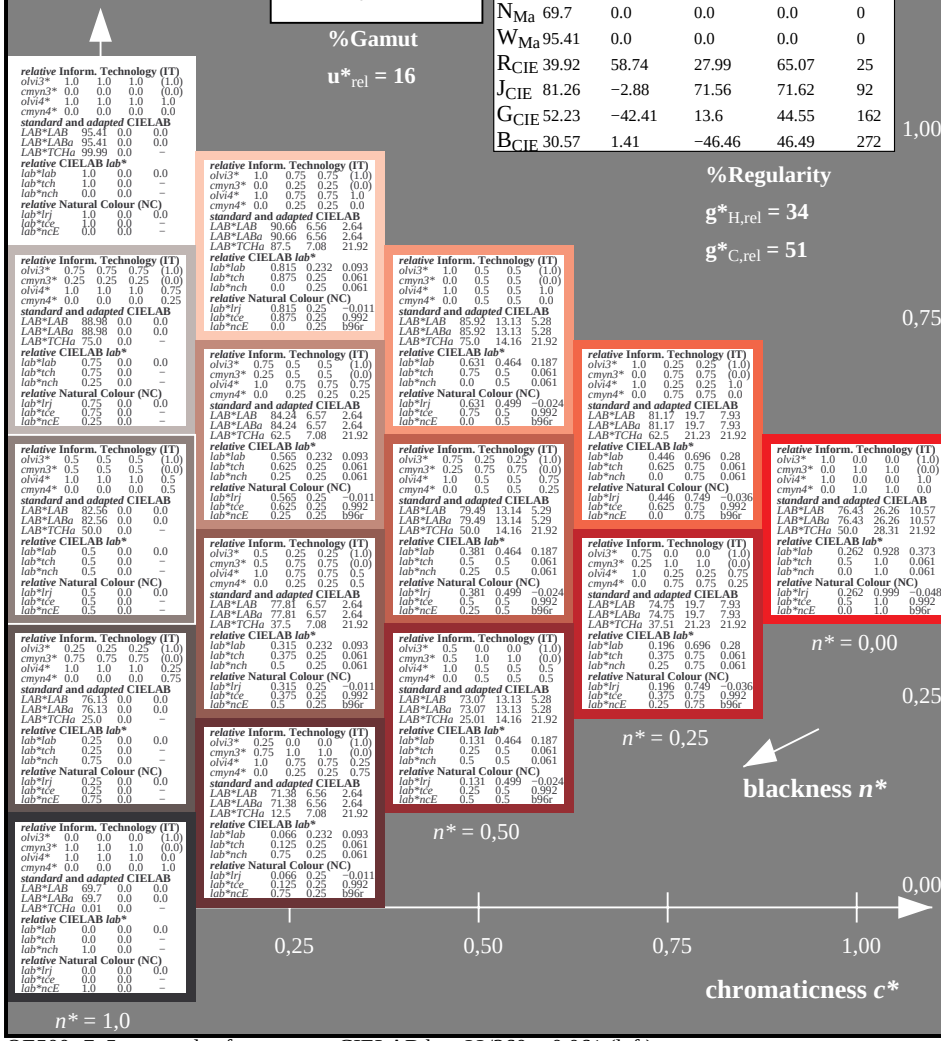
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 37/360 = 0.103$

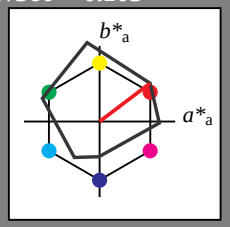
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

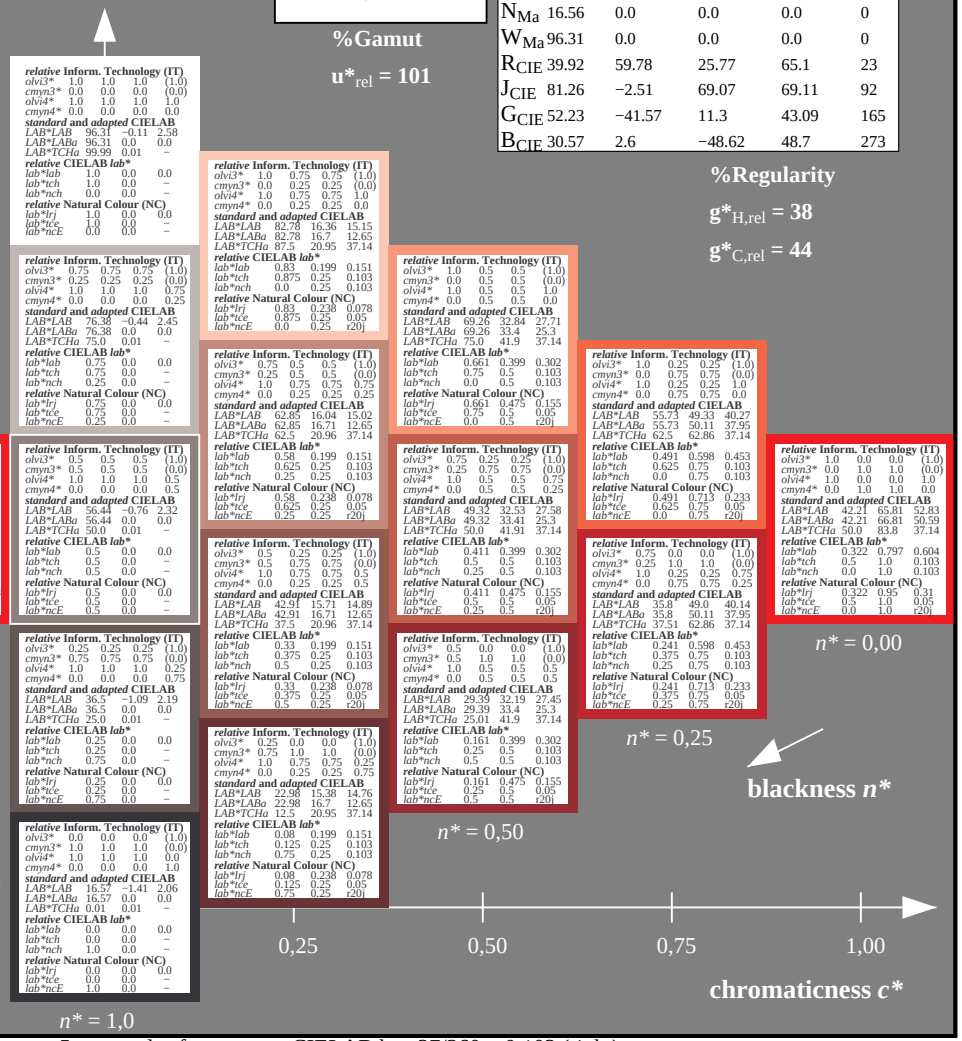
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

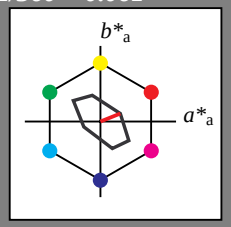
5 step scales for constant CIELAB hue 37/360 = 0.103 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

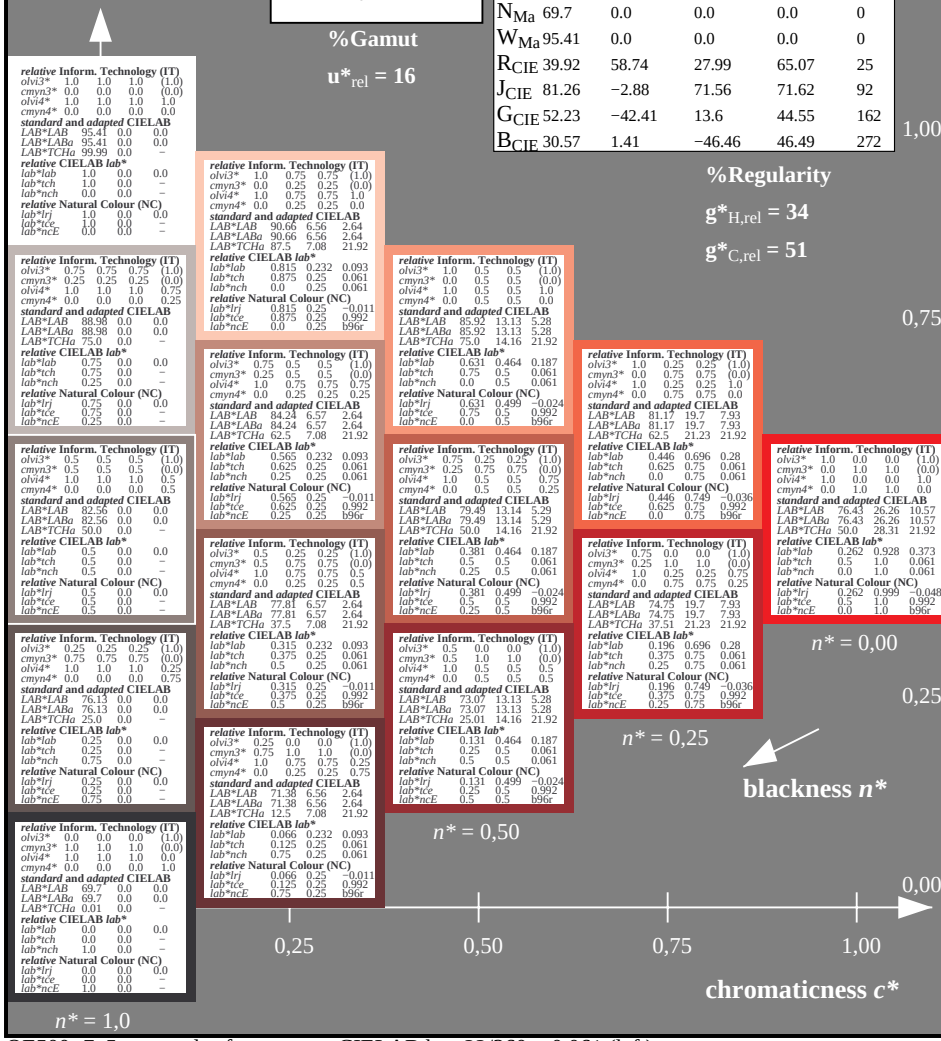
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



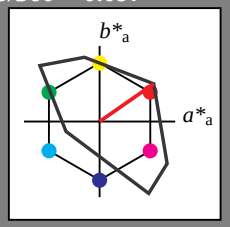
OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

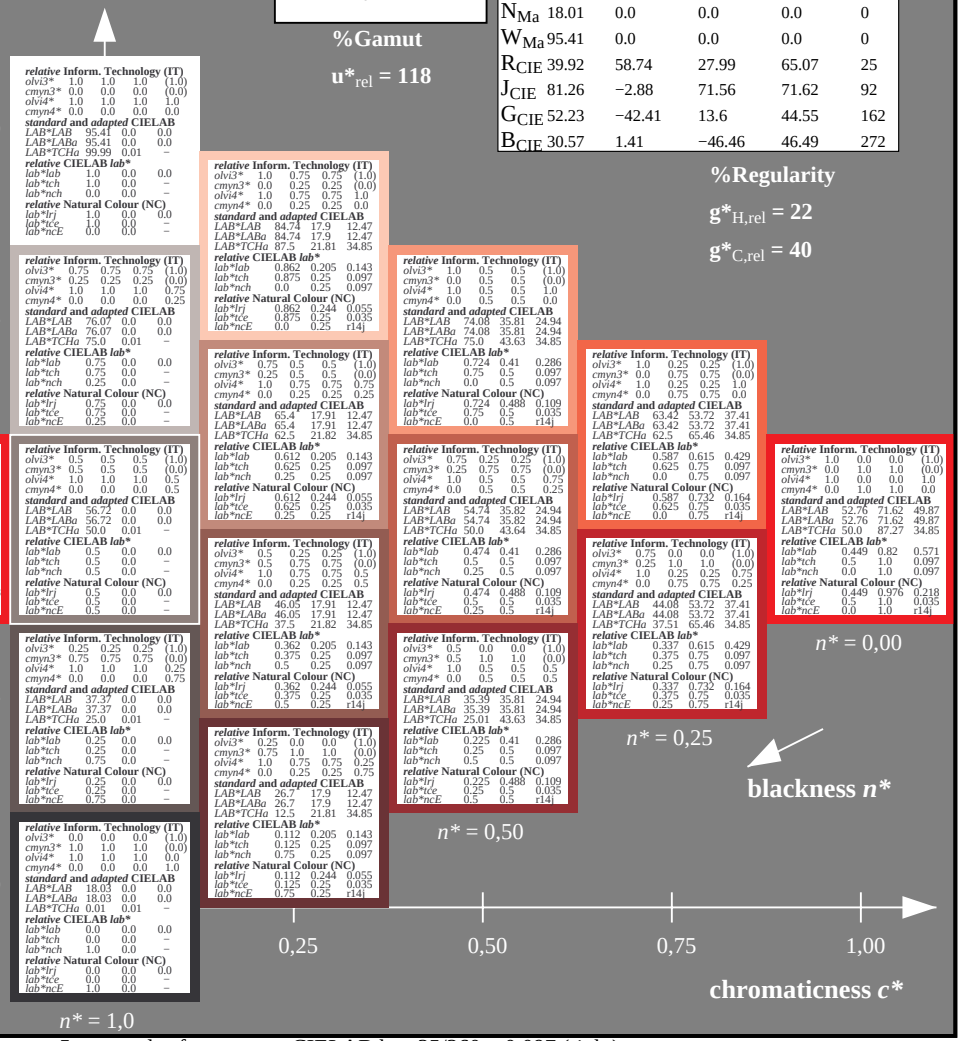
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

Input: Colorimetric Television Luminous System TLS70

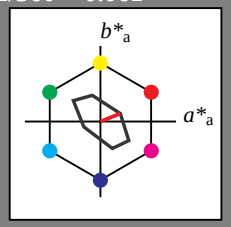
for hue $h^* = lab^*h = 22/360 = 0.061$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

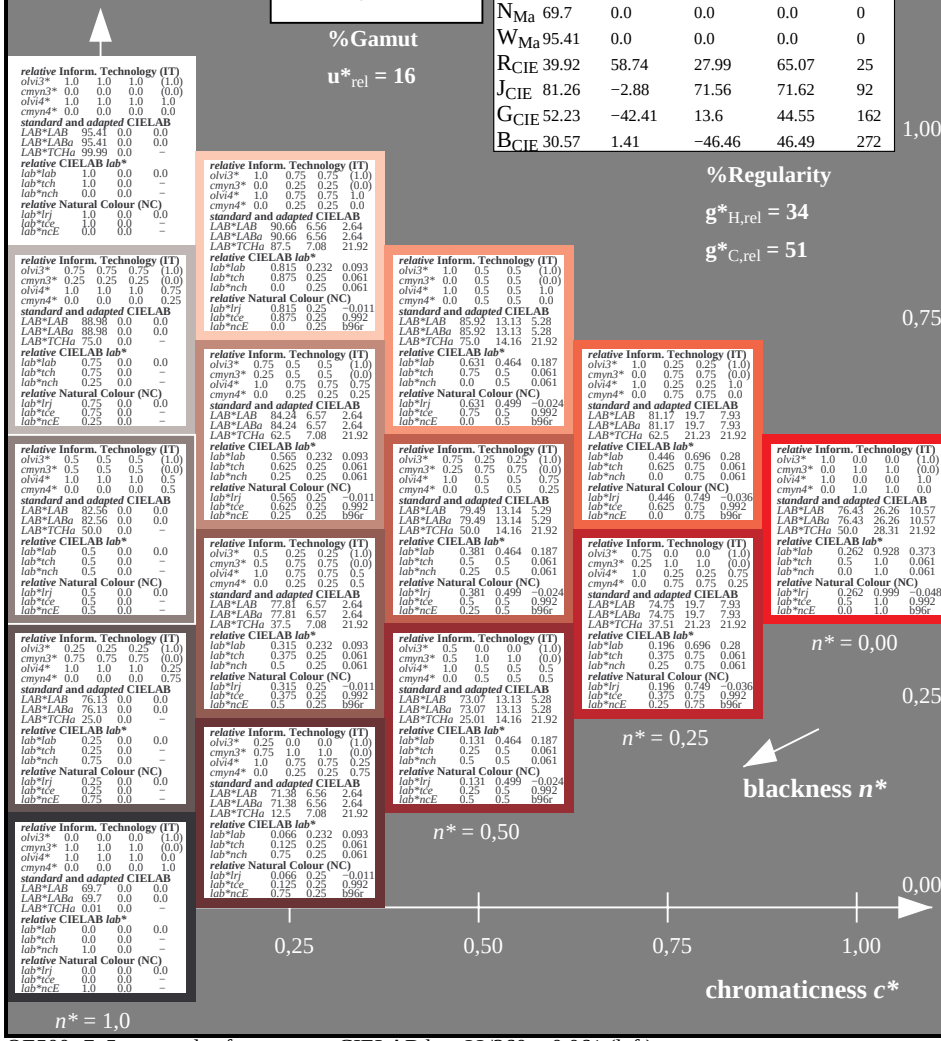
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Natural Luminous System NLS00

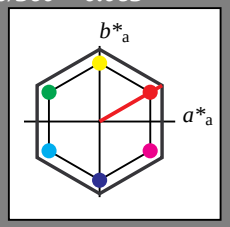
for hue $h^* = lab^*h = 30/360 = 0.083$

*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

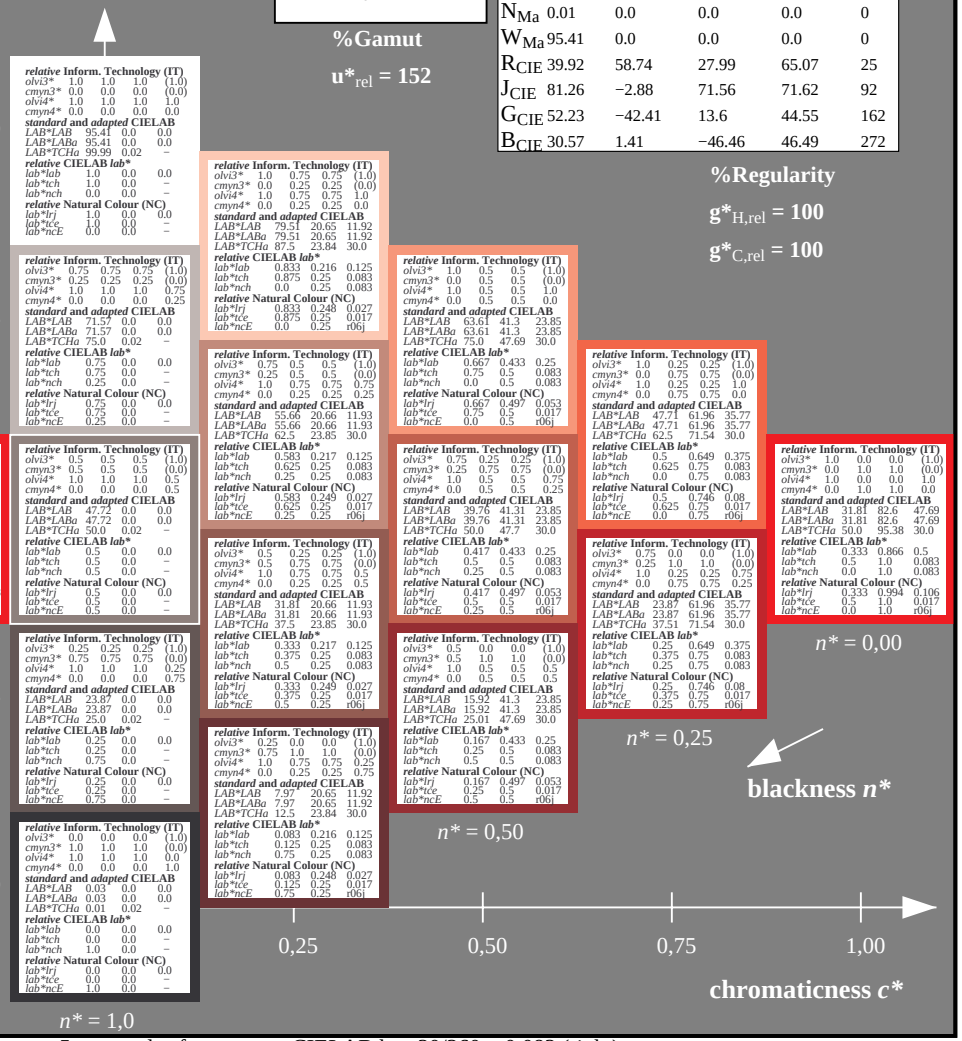
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



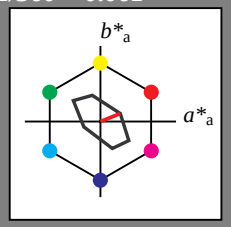
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

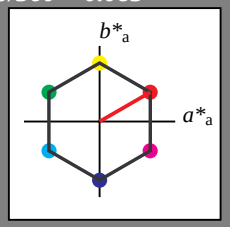
OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 44 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

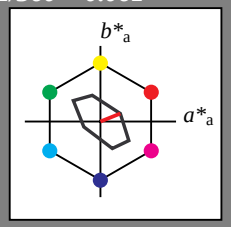
5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

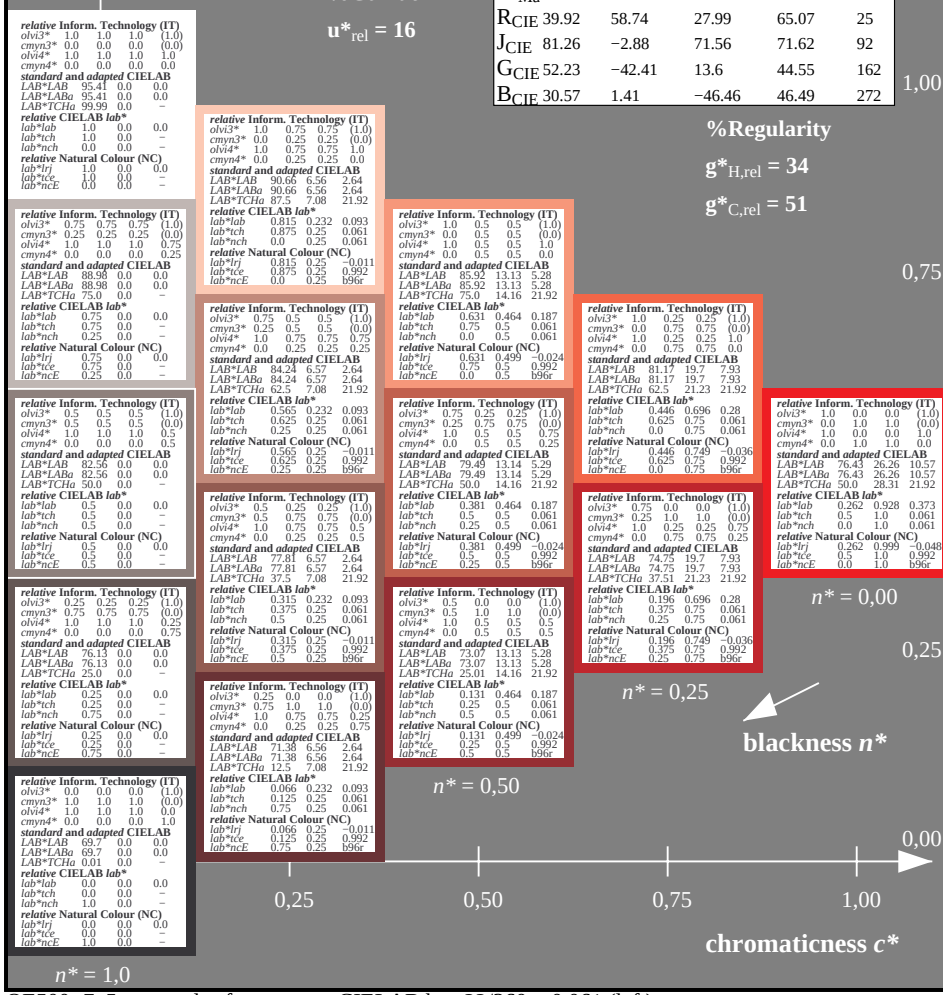
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



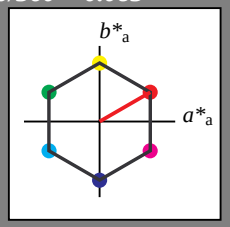
OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

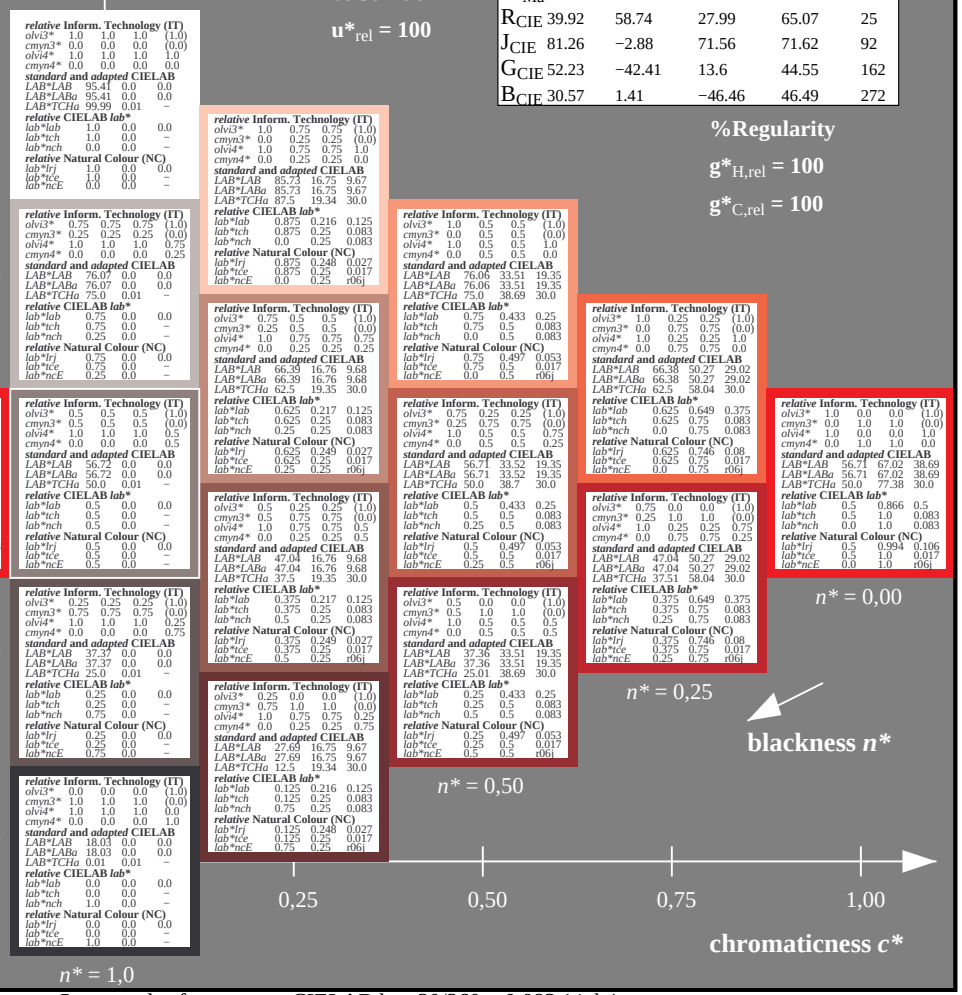
u^*_{rel} = 100

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

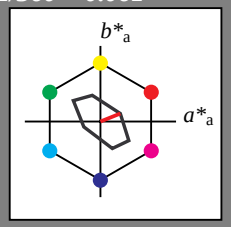


5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

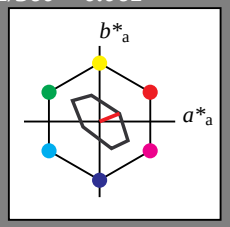
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
*lab*tch* and *lab*nch*

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

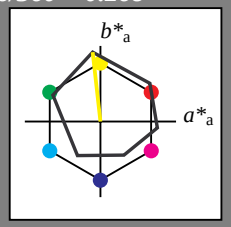
chromaticness c^*

5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

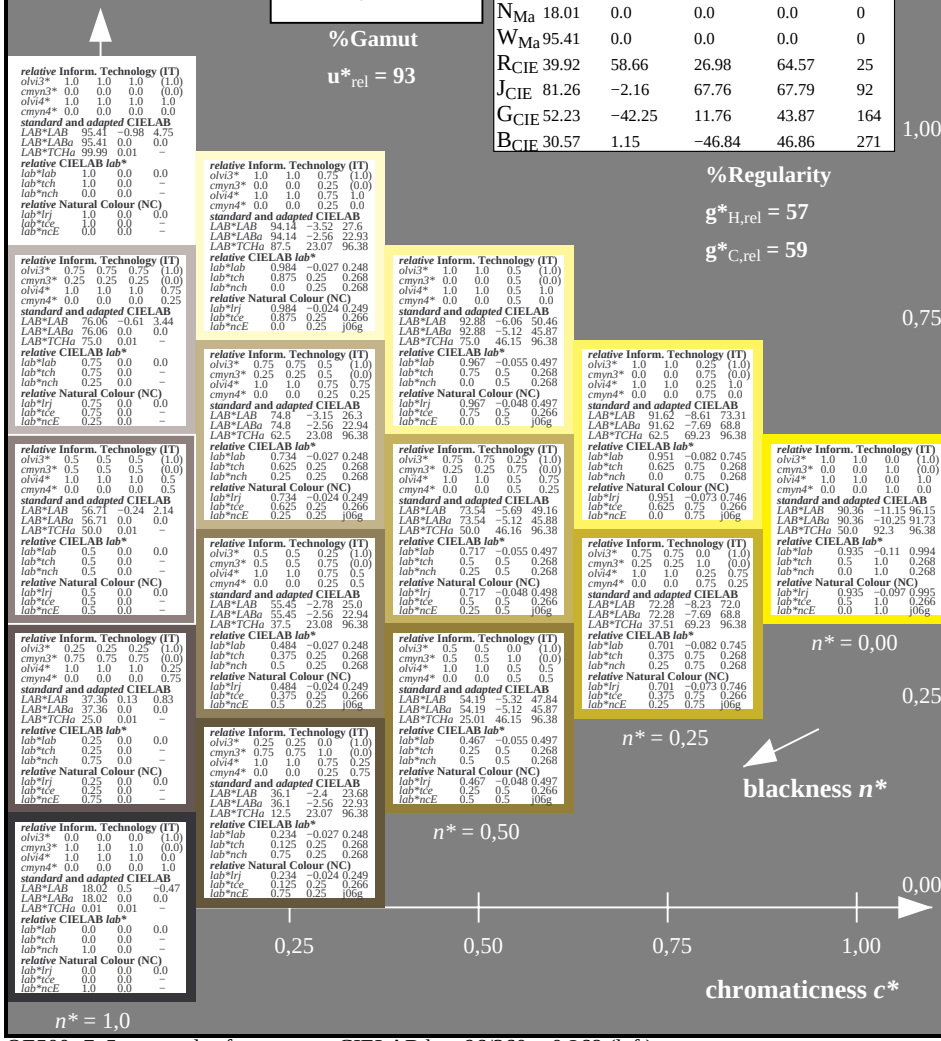
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

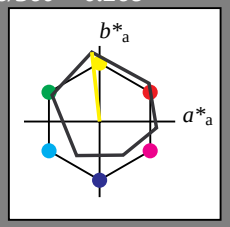


OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

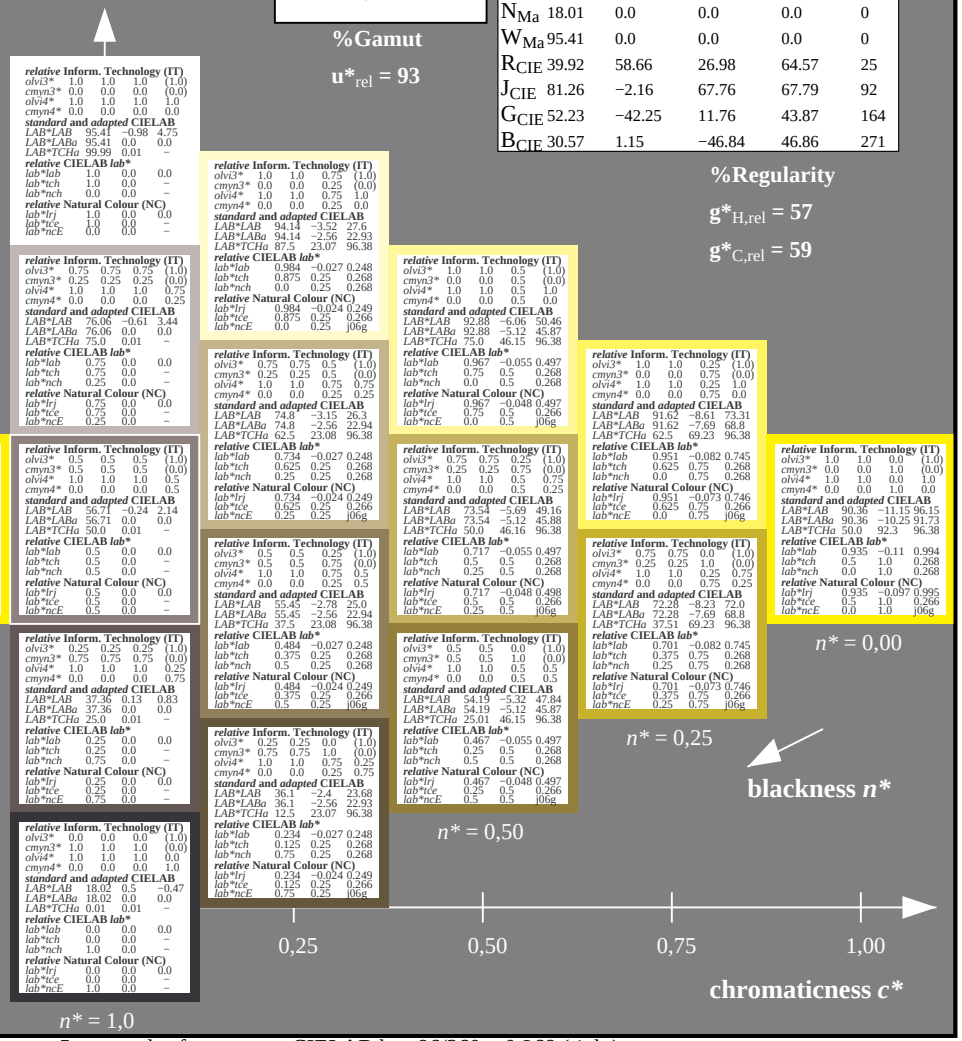
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

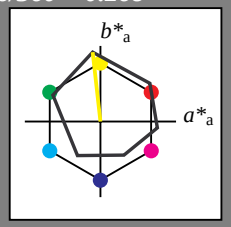


5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

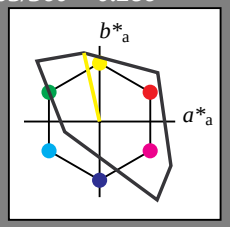
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

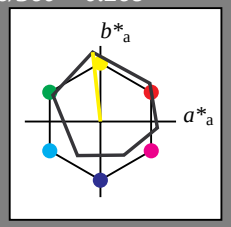
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

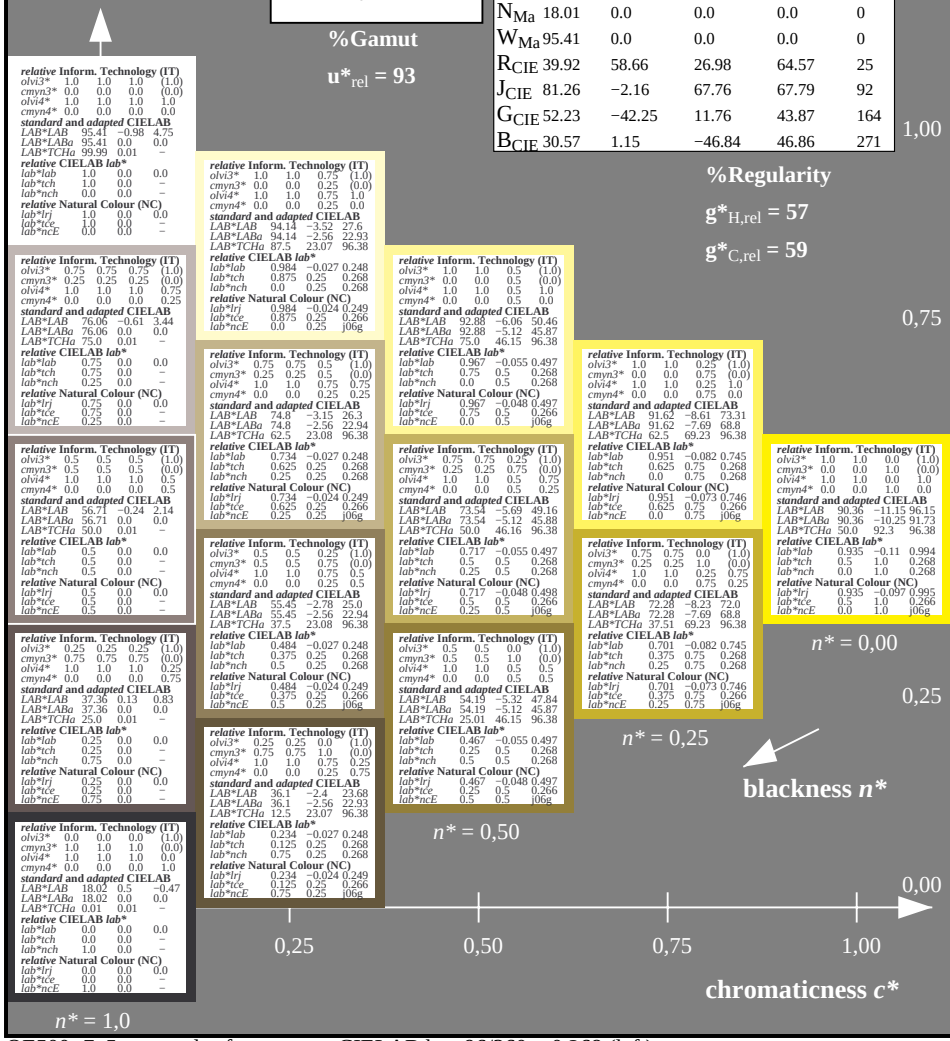
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

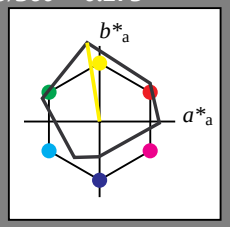


Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

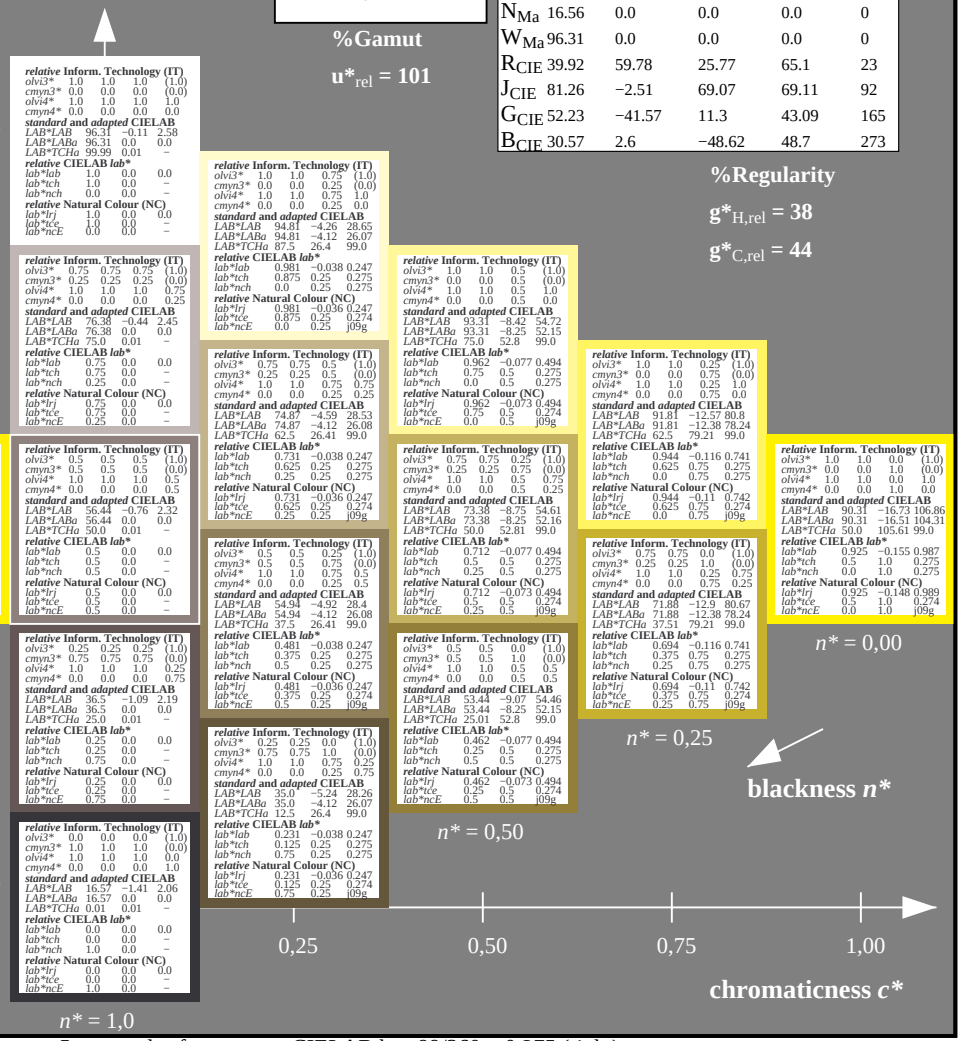
u^*_{rel} = 101

DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

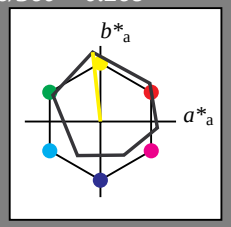
5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

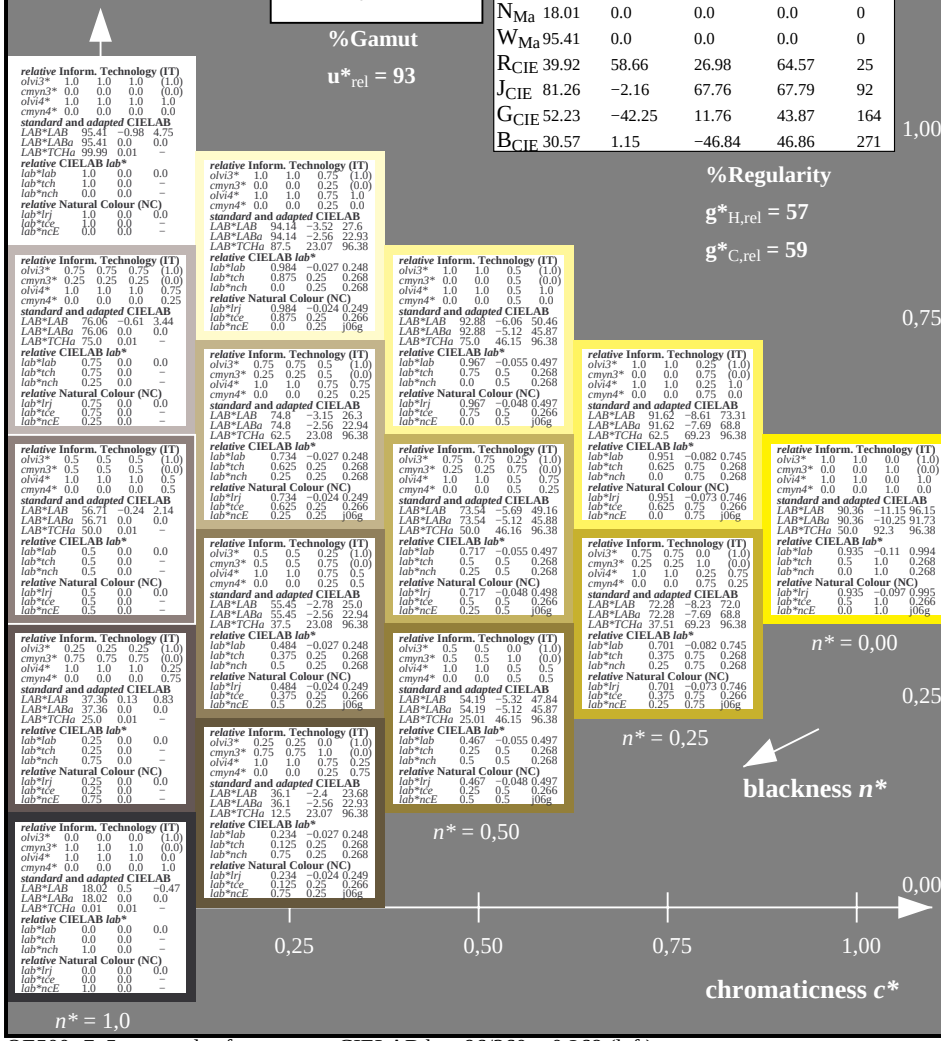
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



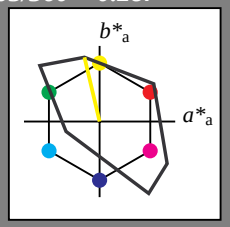
OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

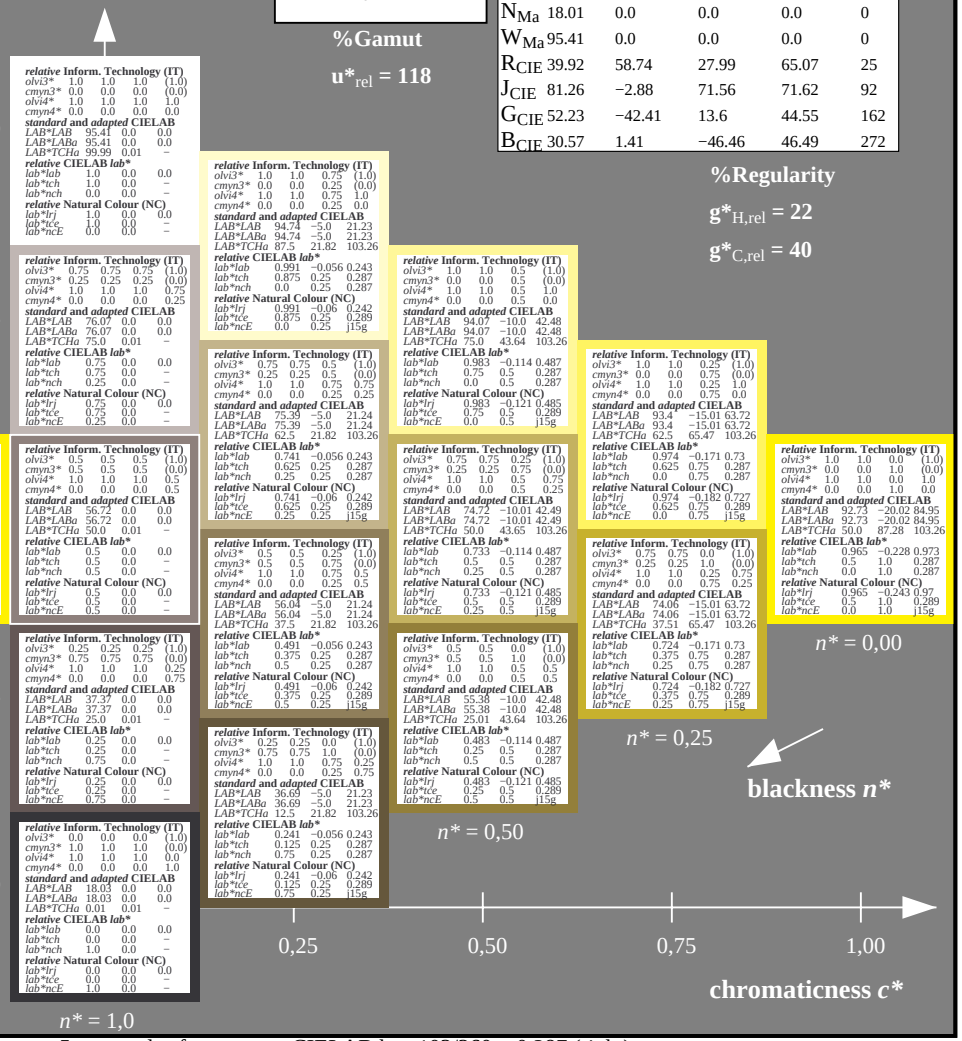
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



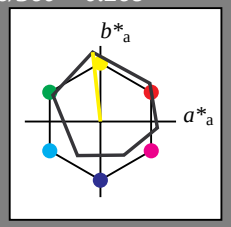
5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

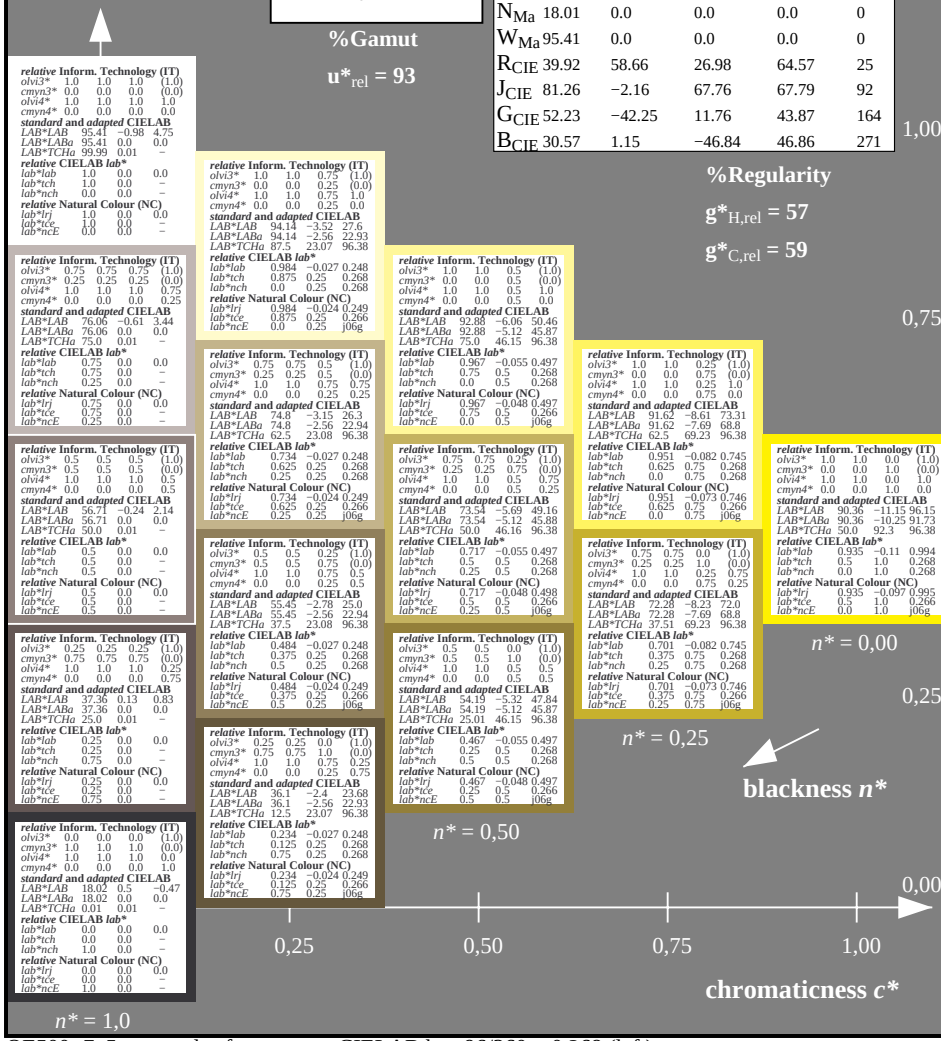
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



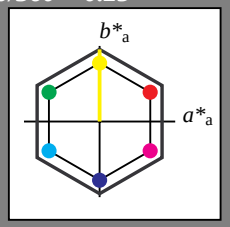
OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

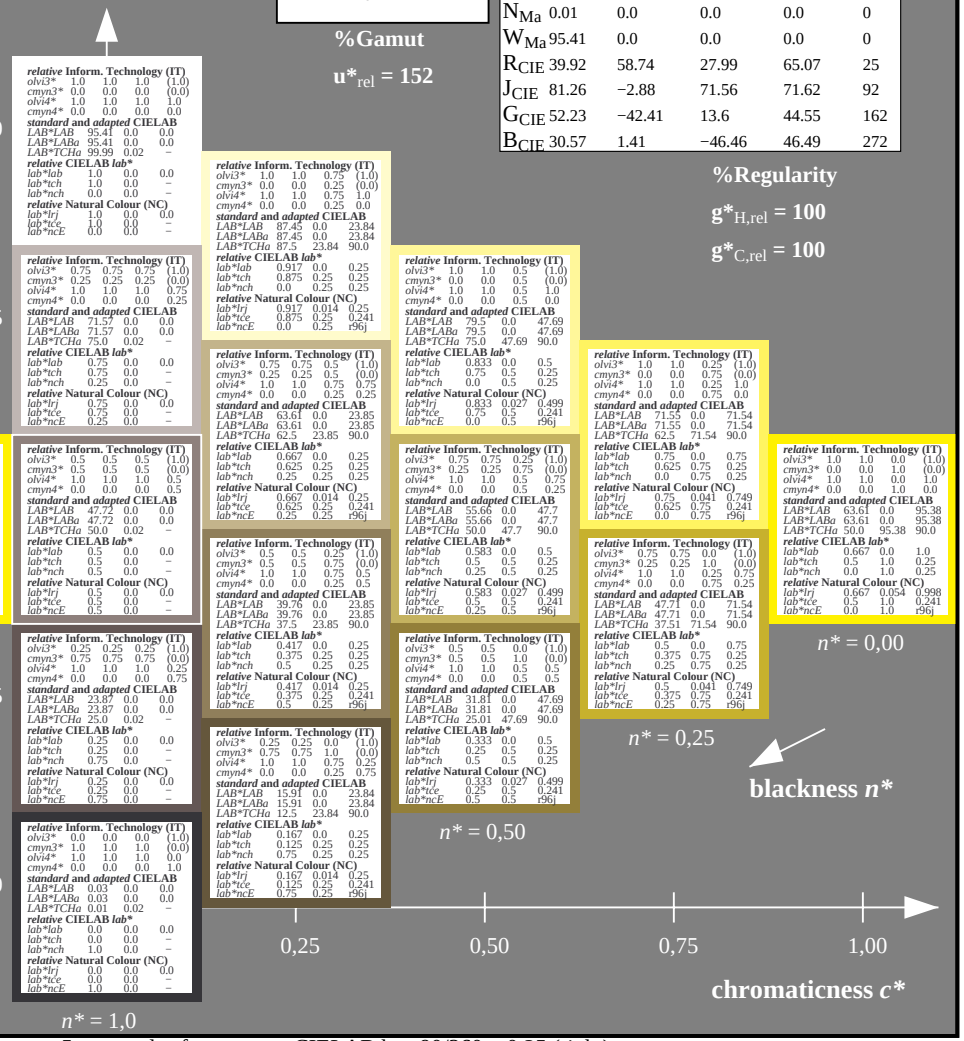
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



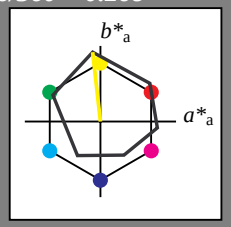
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

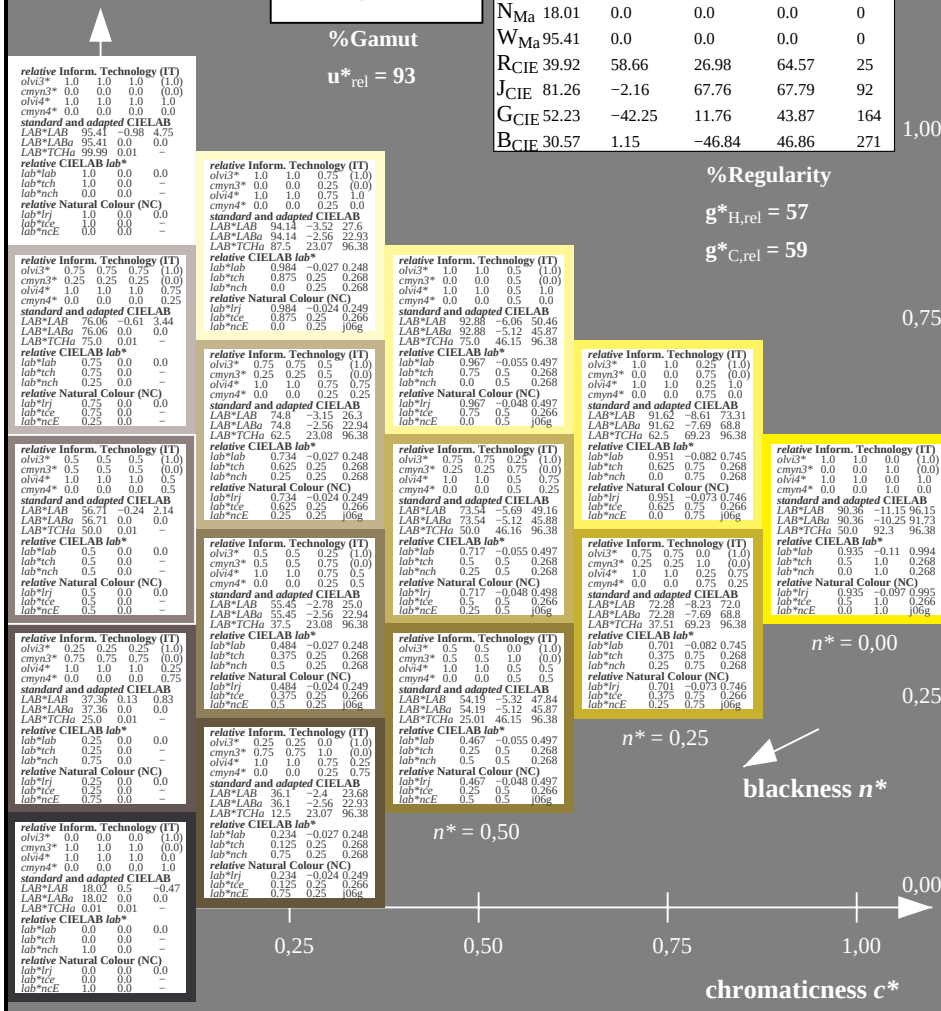
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



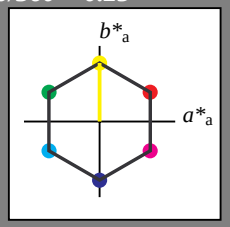
OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

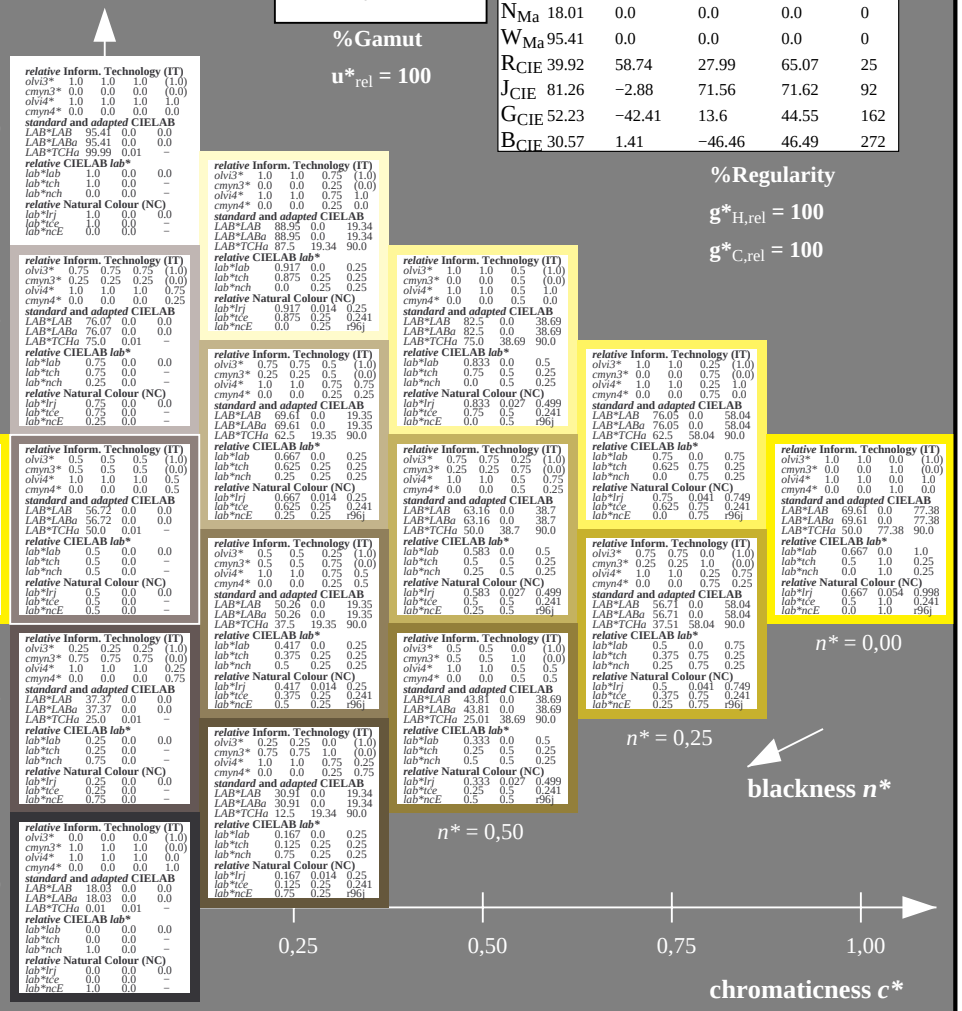
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



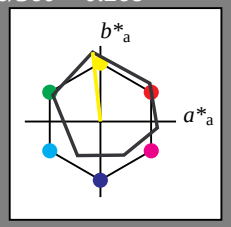
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

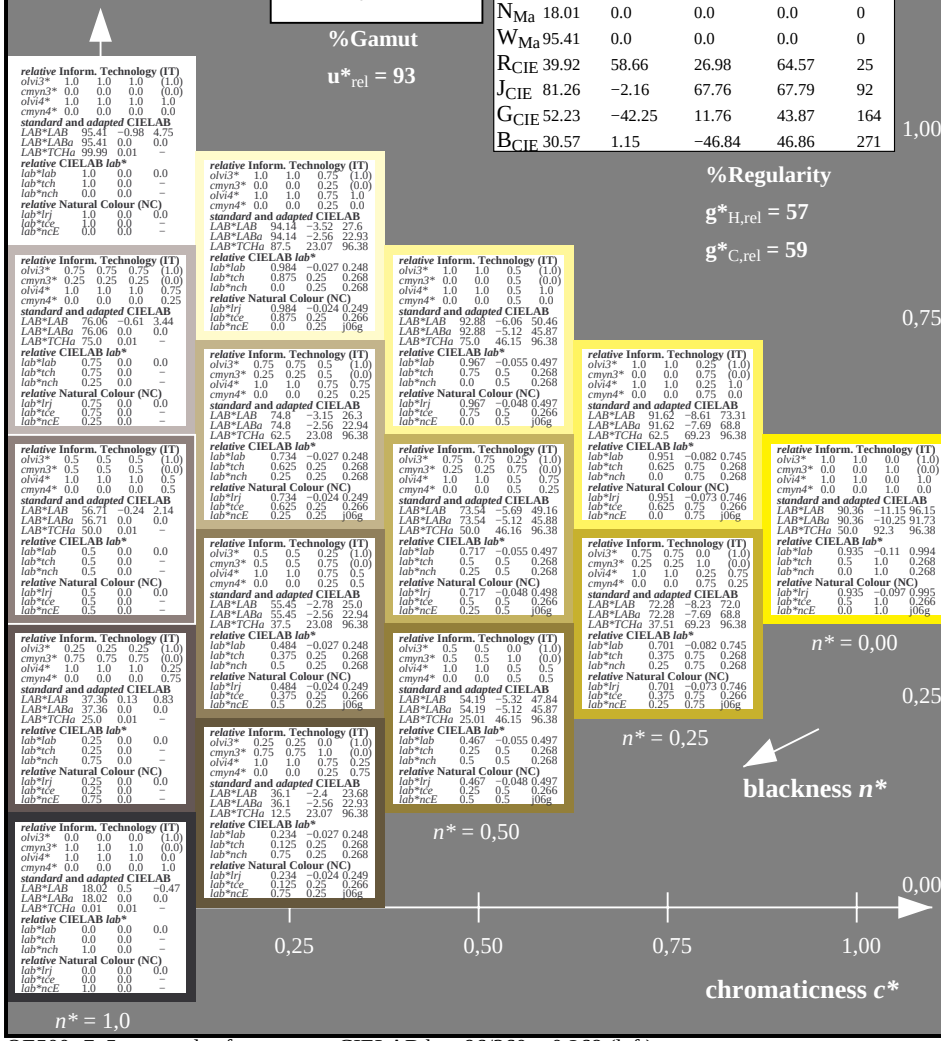
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



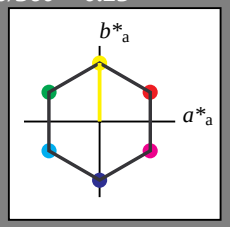
OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

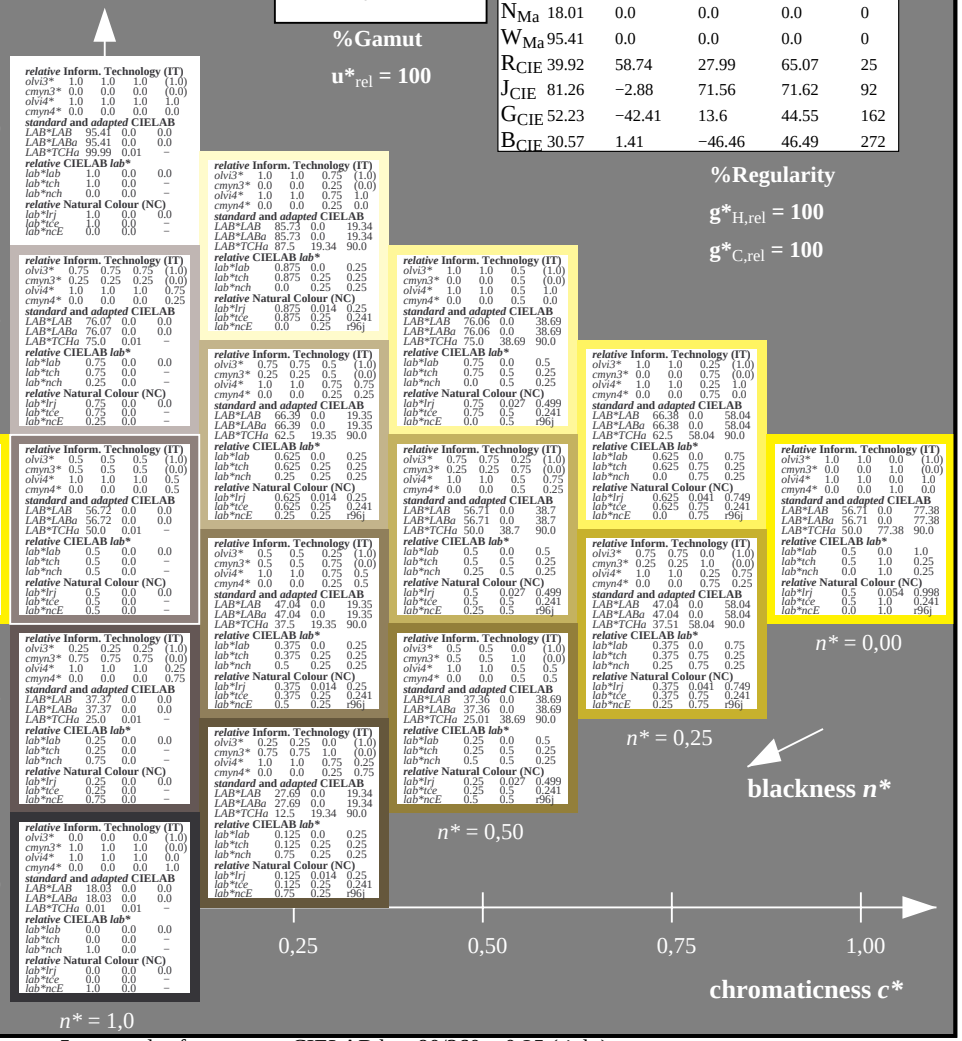
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



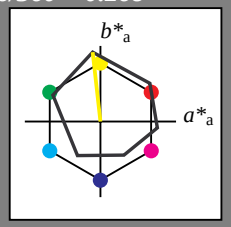
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

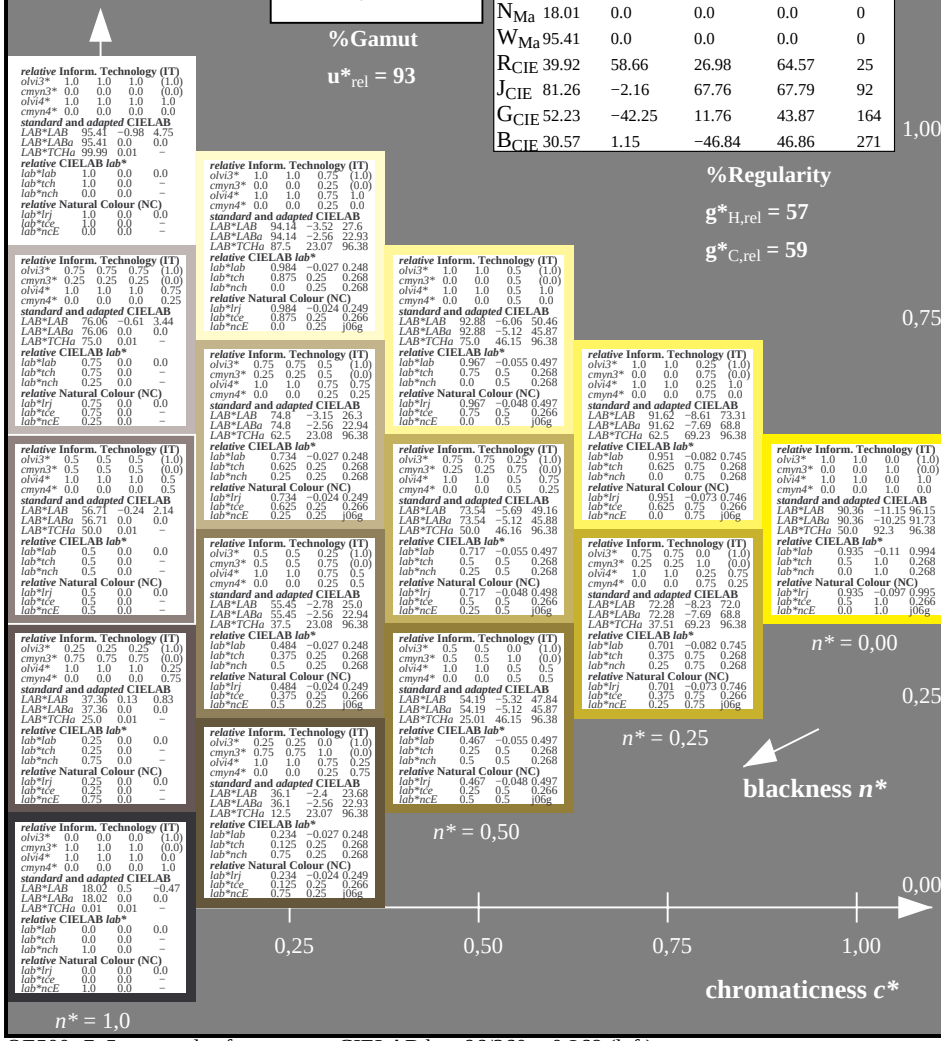
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



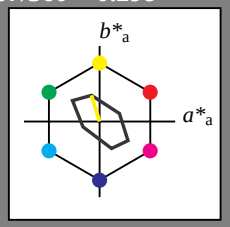
OE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

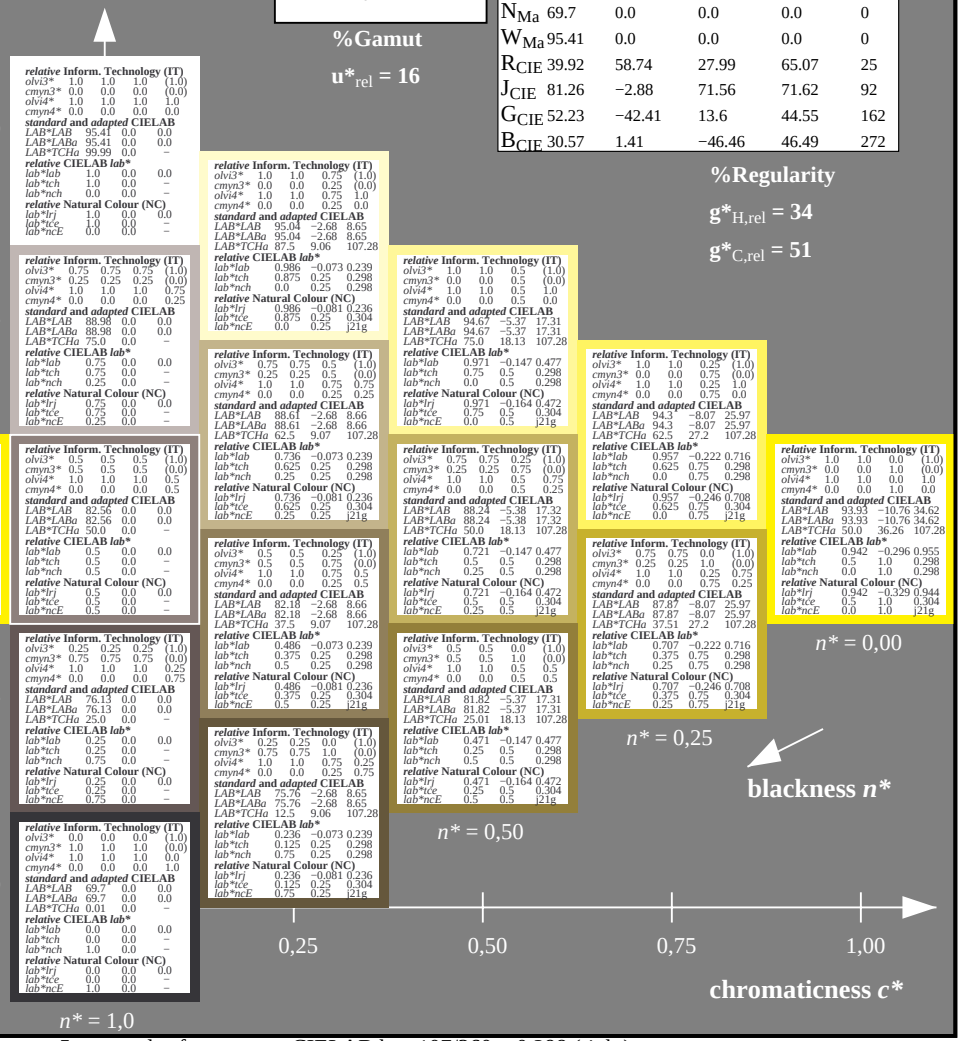
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Television Luminous System TLS00

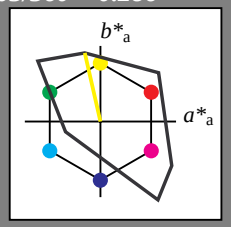
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

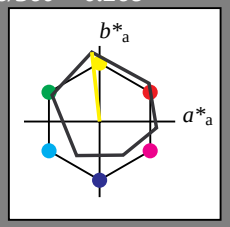
for hue $h^* = lab^*h = 96/360 = 0.268$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Television Luminous System TLS00

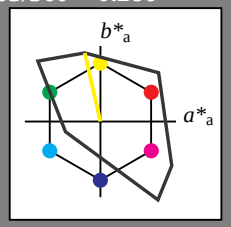
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Television Luminous System TLS00

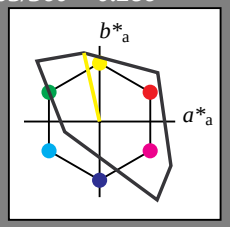
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Television Luminous System TLS00

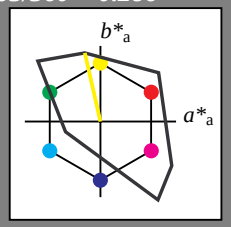
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Printer Reflective System DRSXX

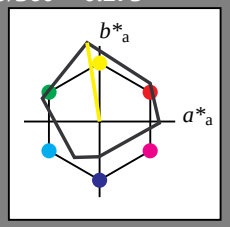
for hue $h^* = lab^*h = 99/360 = 0.275$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

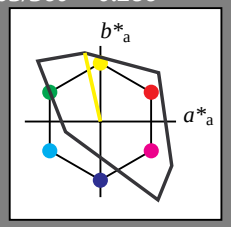
OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.75 (1.0)
*cmyn3** 0.25 0.25 0.25 (0.0)
*olvi4** 1.0 1.0 1.0 0.75
*cmyn4** 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 71.57 0.0 0.0
*LAB*LABa* 71.57 0.0 0.0
*LAB*TCHa* 75.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.75 0.0 0.0
*lab*tch* 0.75 0.0 –
*lab*nch* 0.25 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 0.0
*lab*tce* 0.75 0.0 –
*lab*ncE* 0.25 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 47.72 0.0 0.0
*LAB*LABa* 47.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.25 (1.0)
*cmyn3** 0.75 0.75 0.75 (0.0)
*olvi4** 1.0 1.0 1.0 0.25
*cmyn4** 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 23.87 0.0 0.0
*LAB*LABa* 23.87 0.0 0.0
*LAB*TCHa* 25.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.25 0.0 0.0
*lab*tch* 0.25 0.0 –
*lab*nch* 0.75 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 0.0
*lab*tce* 0.25 0.0 –
*lab*ncE* 0.75 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
*LAB*LAB* 0.03 0.0 0.0
*LAB*LABa* 0.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.75 (1.0)
*cmyn3** 0.0 0.0 0.25 (0.0)
*olvi4** 1.0 1.0 0.75 1.0
*cmyn4** 0.0 0.0 0.25 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 94.71 −5.16 22.68
*LAB*LABa* 94.71 −5.16 22.68
*LAB*TCHa* 87.5 23.26 102.85
relative* CIELAB *lab*
*lab*lab* 0.993 −0.055 0.244
*lab*tch* 0.875 0.25 0.286
*lab*nch* 0.0 0.25 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.993 −0.058 0.243
*lab*tce* 0.875 0.25 0.288
*lab*ncE* 0.0 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.5 (1.0)
*cmyn3** 0.25 0.25 0.5 (0.0)
*olvi4** 1.0 1.0 0.75 0.75
*cmyn4** 0.0 0.0 0.25 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 70.87 −5.17 22.69
*LAB*LABa* 70.87 −5.17 22.69
*LAB*TCHa* 62.5 23.27 102.85
relative* CIELAB *lab*
*lab*lab* 0.743 −0.055 0.244
*lab*tch* 0.625 0.25 0.286
*lab*nch* 0.25 0.25 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.743 −0.058 0.243
*lab*tce* 0.625 0.25 0.288
*lab*ncE* 0.25 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.25 (1.0)
*cmyn3** 0.5 0.5 0.75 (0.0)
*olvi4** 1.0 1.0 0.75 0.5
*cmyn4** 0.0 0.0 0.25 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 47.02 −5.17 22.69
*LAB*LABa* 47.02 −5.17 22.69
*LAB*TCHa* 37.5 23.27 102.85
relative* CIELAB *lab*
*lab*lab* 0.493 −0.055 0.244
*lab*tch* 0.375 0.25 0.286
*lab*nch* 0.5 0.25 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.493 −0.058 0.243
*lab*tce* 0.375 0.25 0.288
*lab*ncE* 0.5 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.0 (1.0)
*cmyn3** 0.75 0.75 1.0 (0.0)
*olvi4** 1.0 1.0 0.75 0.25
*cmyn4** 0.0 0.0 0.25 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 23.17 −5.16 22.68
*LAB*LABa* 23.17 −5.16 22.68
*LAB*TCHa* 12.5 23.26 102.85
relative* CIELAB *lab*
*lab*lab* 0.243 −0.055 0.244
*lab*tch* 0.125 0.25 0.286
*lab*nch* 0.75 0.25 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.243 −0.058 0.243
*lab*tce* 0.125 0.25 0.288
*lab*ncE* 0.75 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.5 (1.0)
*cmyn3** 0.0 0.0 0.5 (0.0)
*olvi4** 1.0 1.0 0.5 1.0
*cmyn4** 0.0 0.0 0.5 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 94.03 −10.34 45.37
*LAB*LABa* 94.03 −10.34 45.37
*LAB*TCHa* 75.0 46.53 102.85
relative* CIELAB *lab*
*lab*lab* 0.985 −0.11 0.487
*lab*tch* 0.75 0.5 0.286
*lab*nch* 0.0 0.5 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.985 −0.116 0.486
*lab*tce* 0.75 0.5 0.288
*lab*ncE* 0.0 0.5 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.25 (1.0)
*cmyn3** 0.25 0.25 0.75 (0.0)
*olvi4** 1.0 1.0 0.5 0.75
*cmyn4** 0.0 0.0 0.5 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 70.19 −10.34 45.38
*LAB*LABa* 70.19 −10.34 45.38
*LAB*TCHa* 50.0 46.54 102.85
relative* CIELAB *lab*
*lab*lab* 0.736 −0.11 0.487
*lab*tch* 0.5 0.5 0.286
*lab*nch* 0.25 0.5 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.736 −0.116 0.486
*lab*tce* 0.5 0.5 0.288
*lab*ncE* 0.25 0.5 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.0 (1.0)
*cmyn3** 0.5 0.5 1.0 (0.0)
*olvi4** 1.0 1.0 0.5 0.5
*cmyn4** 0.0 0.0 0.5 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 46.34 −10.34 45.37
*LAB*LABa* 46.34 −10.34 45.37
*LAB*TCHa* 25.01 46.53 102.85
relative* CIELAB *lab*
*lab*lab* 0.486 −0.11 0.487
*lab*tch* 0.25 0.5 0.286
*lab*nch* 0.5 0.5 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.486 −0.116 0.486
*lab*tce* 0.25 0.5 0.288
*lab*ncE* 0.5 0.5 j15g

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.25 (1.0)
*cmyn3** 0.0 0.0 0.75 (0.0)
*olvi4** 1.0 1.0 0.25 1.0
*cmyn4** 0.0 0.0 0.75 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 93.34 −15.51 68.05
*LAB*LABa* 93.34 −15.51 68.05
*LAB*TCHa* 62.5 69.8 102.85
relative* CIELAB *lab*
*lab*lab* 0.978 −0.166 0.731
*lab*tch* 0.625 0.75 0.286
*lab*nch* 0.0 0.75 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.978 −0.175 0.729
*lab*tce* 0.625 0.75 0.288
*lab*ncE* 0.0 0.75 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.0 (1.0)
*cmyn3** 0.25 0.25 1.0 (0.0)
*olvi4** 1.0 1.0 0.25 0.75
*cmyn4** 0.0 0.0 0.75 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 69.5 −15.51 68.05
*LAB*LABa* 69.5 −15.51 68.05
*LAB*TCHa* 37.51 69.8 102.85
relative* CIELAB *lab*
*lab*lab* 0.728 −0.166 0.731
*lab*tch* 0.375 0.75 0.286
*lab*nch* 0.25 0.75 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.728 −0.175 0.729
*lab*tce* 0.375 0.75 0.288
*lab*ncE* 0.25 0.75 j15g

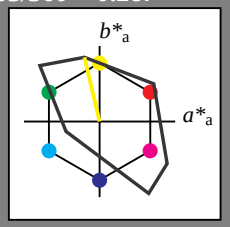
relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.0 (1.0)
*cmyn3** 0.0 0.0 1.0 (0.0)
*olvi4** 1.0 1.0 0.0 0.0
*cmyn4** 0.0 0.0 1.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 92.65 −20.69 90.73
*LAB*LABa* 92.65 −20.69 90.73
*LAB*TCHa* 50.0 93.06 102.85
relative* CIELAB *lab*
*lab*lab* 0.971 −0.221 0.975
*lab*tch* 0.5 1.0 0.286
*lab*nch* 0.0 1.0 0.286
***relative* Natural Colour (NC)**
*lab*lrj* 0.971 −0.233 0.972
*lab*tce* 0.5 1.0 0.288
*lab*ncE* 0.0 1.0 j15g

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.75 (1.0)
*cmyn3** 0.25 0.25 0.25 (0.0)
*olvi4** 1.0 1.0 1.0 0.75
*cmyn4** 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 76.07 0.0 0.0
*LAB*LABa* 76.07 0.0 0.0
*LAB*TCHa* 75.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.75 0.0 0.0
*lab*tch* 0.75 0.0 –
*lab*nch* 0.25 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 0.0
*lab*tce* 0.75 0.0 –
*lab*ncE* 0.25 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.25 (1.0)
*cmyn3** 0.75 0.75 0.75 (0.0)
*olvi4** 1.0 1.0 1.0 0.25
*cmyn4** 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 37.37 0.0 0.0
*LAB*LABa* 37.37 0.0 0.0
*LAB*TCHa* 25.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.25 0.0 0.0
*lab*tch* 0.25 0.0 –
*lab*nch* 0.75 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 0.0
*lab*tce* 0.25 0.0 –
*lab*ncE* 0.75 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.75 (1.0)
*cmyn3** 0.0 0.0 0.25 (0.0)
*olvi4** 1.0 1.0 0.75 1.0
*cmyn4** 0.0 0.0 0.25 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 94.74 −5.0 21.23
*LAB*LABa* 94.74 −5.0 21.23
*LAB*TCHa* 87.5 21.82 103.26
relative* CIELAB *lab*
*lab*lab* 0.991 −0.056 0.243
*lab*tch* 0.875 0.25 0.287
*lab*nch* 0.0 0.25 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.991 −0.06 0.242
*lab*tce* 0.875 0.25 0.289
*lab*ncE* 0.0 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.5 (1.0)
*cmyn3** 0.25 0.25 0.5 (0.0)
*olvi4** 1.0 1.0 0.75 0.75
*cmyn4** 0.0 0.0 0.25 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 75.39 −5.0 21.24
*LAB*LABa* 75.39 −5.0 21.24
*LAB*TCHa* 62.5 21.82 103.26
relative* CIELAB *lab*
*lab*lab* 0.741 −0.056 0.243
*lab*tch* 0.625 0.25 0.287
*lab*nch* 0.25 0.25 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.741 −0.06 0.242
*lab*tce* 0.625 0.25 0.289
*lab*ncE* 0.25 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.25 (1.0)
*cmyn3** 0.5 0.5 0.75 (0.0)
*olvi4** 1.0 1.0 0.75 0.5
*cmyn4** 0.0 0.0 0.25 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 56.04 −5.0 21.24
*LAB*LABa* 56.04 −5.0 21.24
*LAB*TCHa* 37.5 21.82 103.26
relative* CIELAB *lab*
*lab*lab* 0.491 −0.056 0.243
*lab*tch* 0.375 0.25 0.287
*lab*nch* 0.5 0.25 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.491 −0.06 0.242
*lab*tce* 0.375 0.25 0.289
*lab*ncE* 0.5 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.0 (1.0)
*cmyn3** 0.75 0.75 1.0 (0.0)
*olvi4** 1.0 1.0 0.75 0.25
*cmyn4** 0.0 0.0 0.25 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 36.69 −5.0 21.23
*LAB*LABa* 36.69 −5.0 21.23
*LAB*TCHa* 12.5 21.82 103.26
relative* CIELAB *lab*
*lab*lab* 0.241 −0.056 0.243
*lab*tch* 0.125 0.25 0.287
*lab*nch* 0.75 0.25 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.241 −0.06 0.242
*lab*tce* 0.125 0.25 0.289
*lab*ncE* 0.75 0.25 j15g

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.5 (1.0)
*cmyn3** 0.0 0.0 0.5 (0.0)
*olvi4** 1.0 1.0 0.5 1.0
*cmyn4** 0.0 0.0 0.5 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 94.07 −10.0 42.48
*LAB*LABa* 94.07 −10.0 42.48
*LAB*TCHa* 75.0 43.64 103.26
relative* CIELAB *lab*
*lab*lab* 0.983 −0.114 0.487
*lab*tch* 0.75 0.5 0.287
*lab*nch* 0.0 0.5 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.983 −0.121 0.485
*lab*tce* 0.75 0.5 0.289
*lab*ncE* 0.0 0.5 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.25 (1.0)
*cmyn3** 0.25 0.25 0.75 (0.0)
*olvi4** 1.0 1.0 0.5 0.75
*cmyn4** 0.0 0.0 0.5 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 74.72 −10.01 42.49
*LAB*LABa* 74.72 −10.01 42.49
*LAB*TCHa* 50.0 43.65 103.26
relative* CIELAB *lab*
*lab*lab* 0.733 −0.114 0.487
*lab*tch* 0.5 0.5 0.287
*lab*nch* 0.25 0.5 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.733 −0.121 0.485
*lab*tce* 0.5 0.5 0.289
*lab*ncE* 0.25 0.5 j15g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.0 (1.0)
*cmyn3** 0.5 0.5 1.0 (0.0)
*olvi4** 1.0 1.0 0.5 0.5
*cmyn4** 0.0 0.0 0.5 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 55.38 −10.0 42.48
*LAB*LABa* 55.38 −10.0 42.48
*LAB*TCHa* 25.01 43.64 103.26
relative* CIELAB *lab*
*lab*lab* 0.483 −0.114 0.487
*lab*tch* 0.25 0.5 0.287
*lab*nch* 0.5 0.5 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.483 −0.121 0.485
*lab*tce* 0.25 0.5 0.289
*lab*ncE* 0.5 0.5 j15g

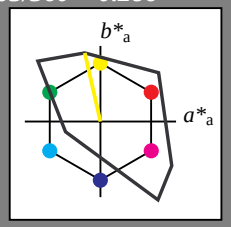
relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 0.25 (1.0)
*cmyn3** 0.0 0.0 0.75 (0.0)
*olvi4** 1.0 1.0 0.25 1.0
*cmyn4** 0.0 0.0 0.75 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 93.73 −20.02 84.95
*LAB*LABa* 93.73 −20.02 84.95
*LAB*TCHa* 50.0 87.28 103.26
relative* CIELAB *lab*
*lab*lab* 0.965 −0.228 0.973
*lab*tch* 0.5 1.0 0.287
*lab*nch* 0.0 1.0 0.287
***relative* Natural Colour (NC)**
*lab*lrj* 0.965 −0.243 0.97
*lab*tce* 0.5 1.0 0.289
*lab*ncE* 0.0 1.0 j15g

5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

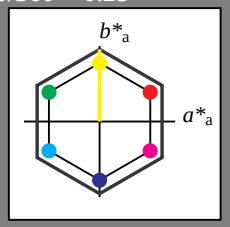
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS00

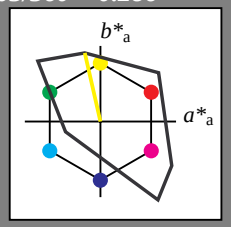
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Natural Reflective System NRS18

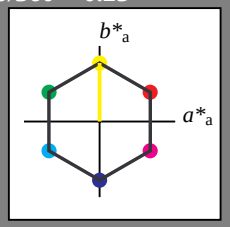
for hue $h^* = lab^*h = 90/360 = 0.25$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS00

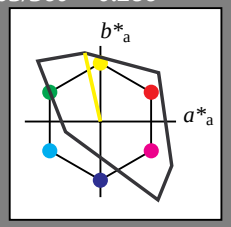
for hue $h^* = lab^*h = 103/360 = 0.286$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

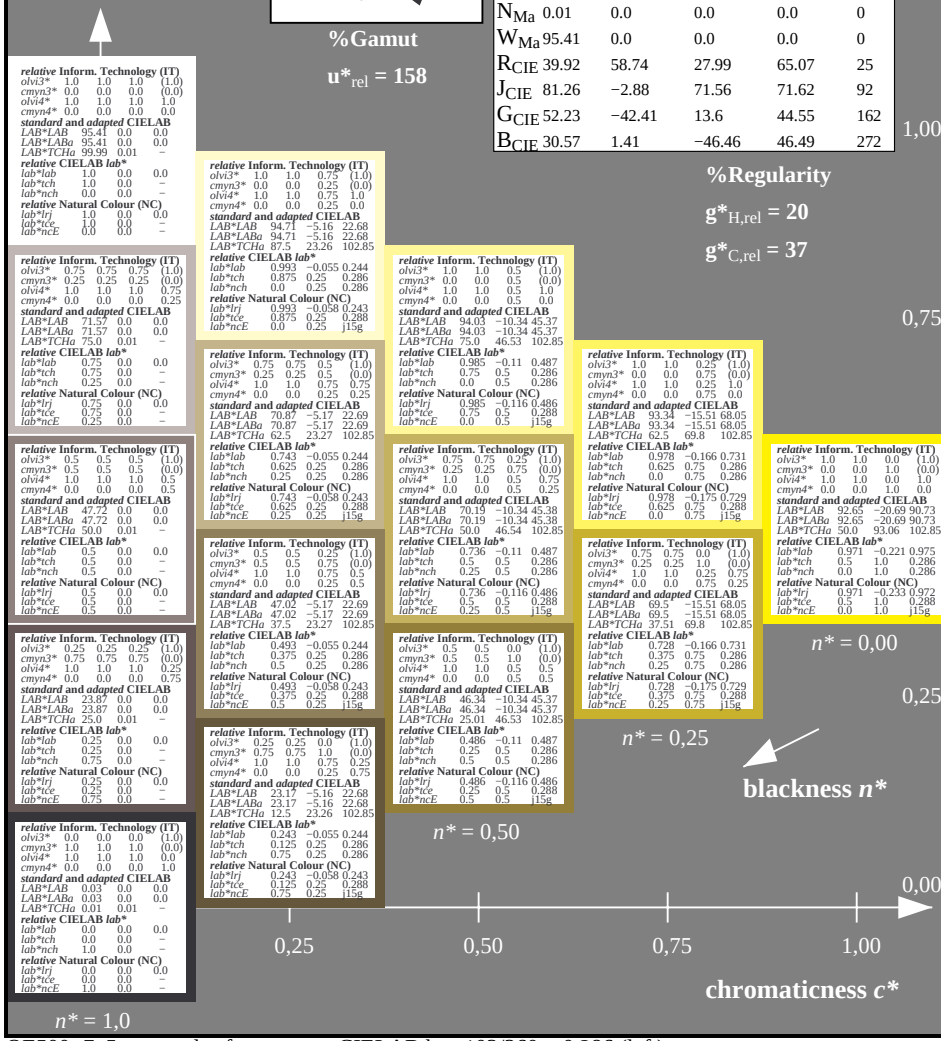
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Standard Reflective System SRS18

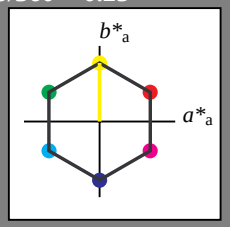
for hue $h^* = lab^*h = 90/360 = 0.25$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

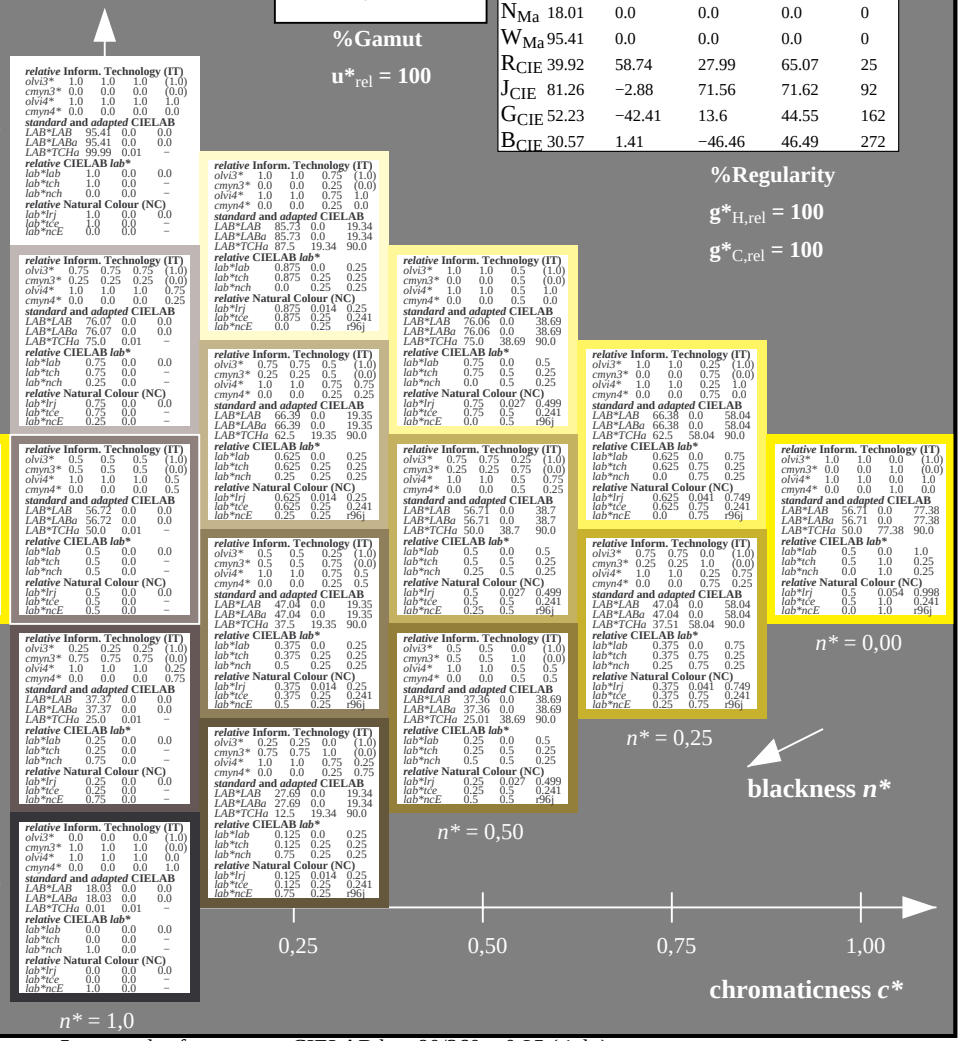
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



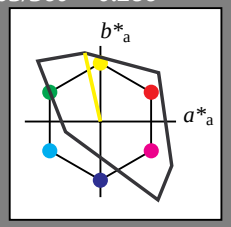
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

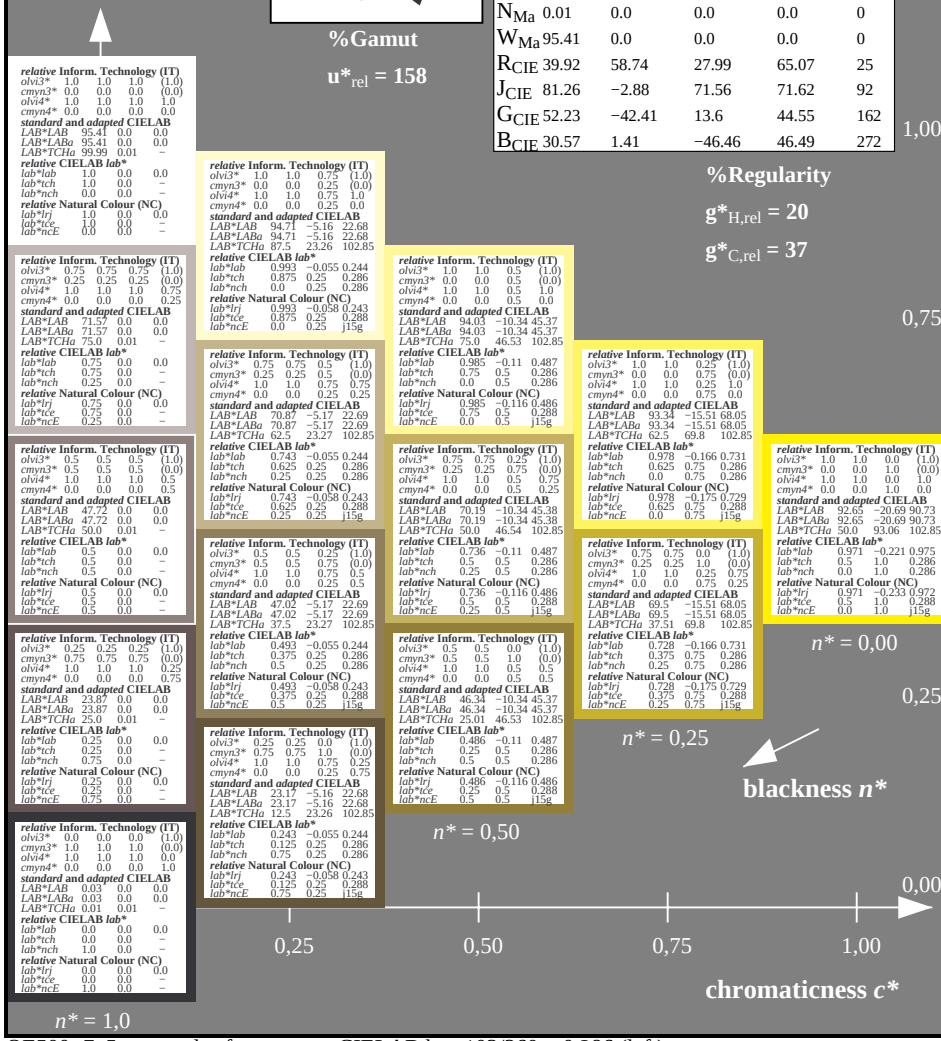
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

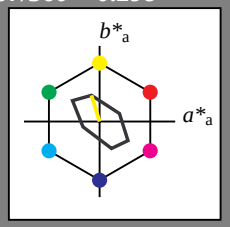


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

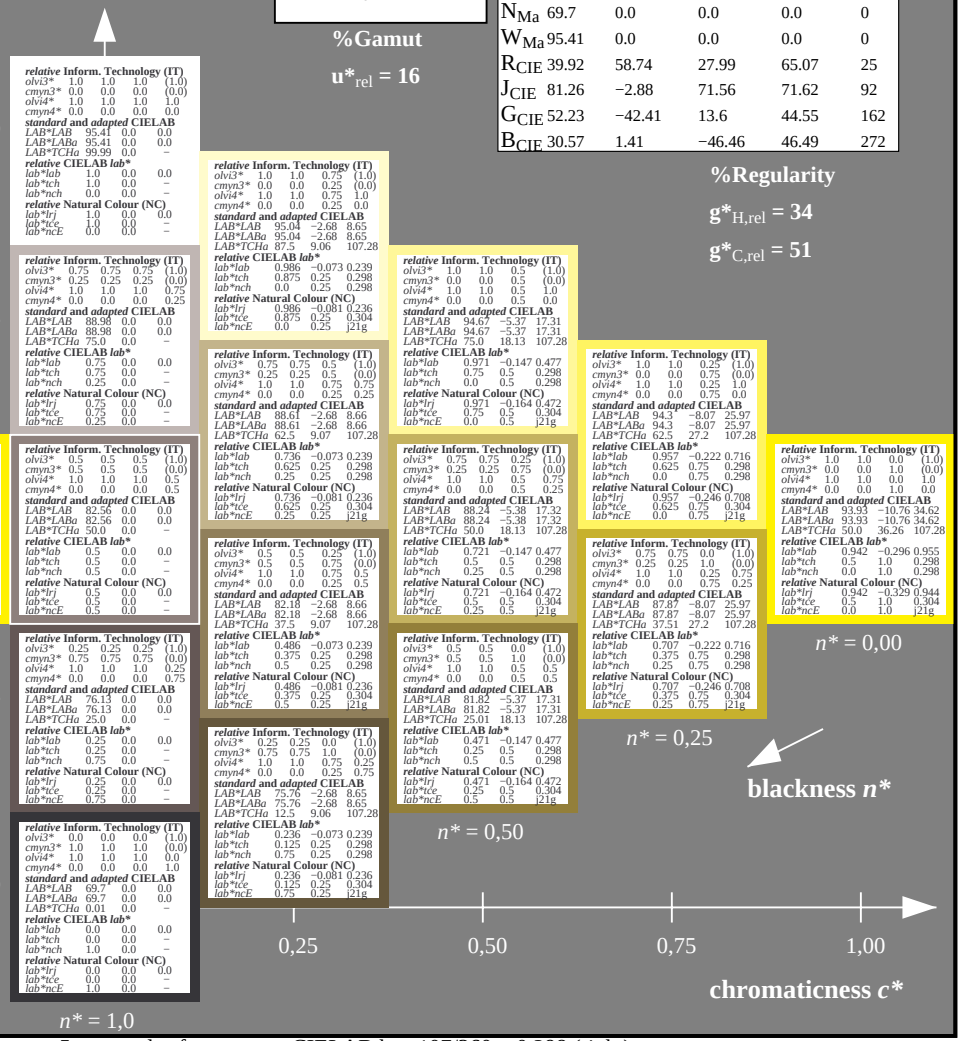
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

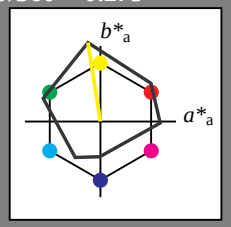
5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

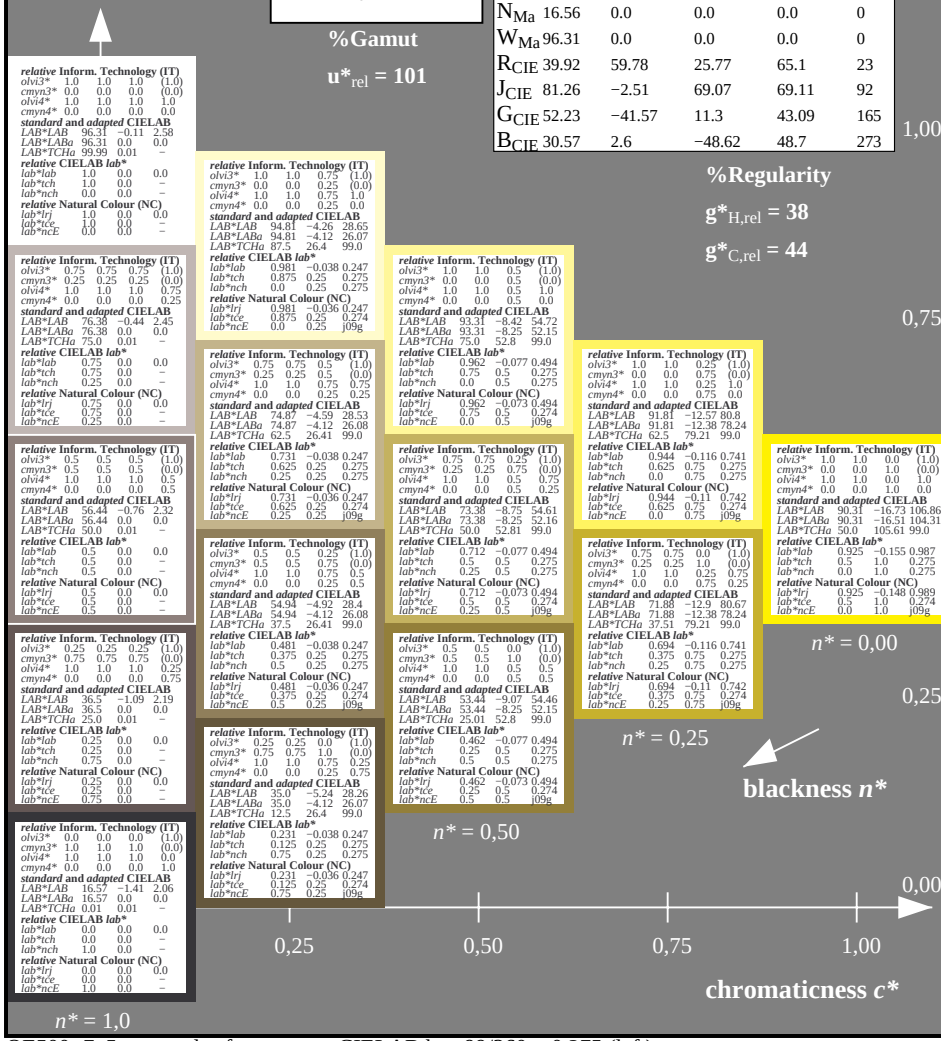
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

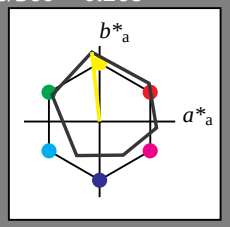


Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

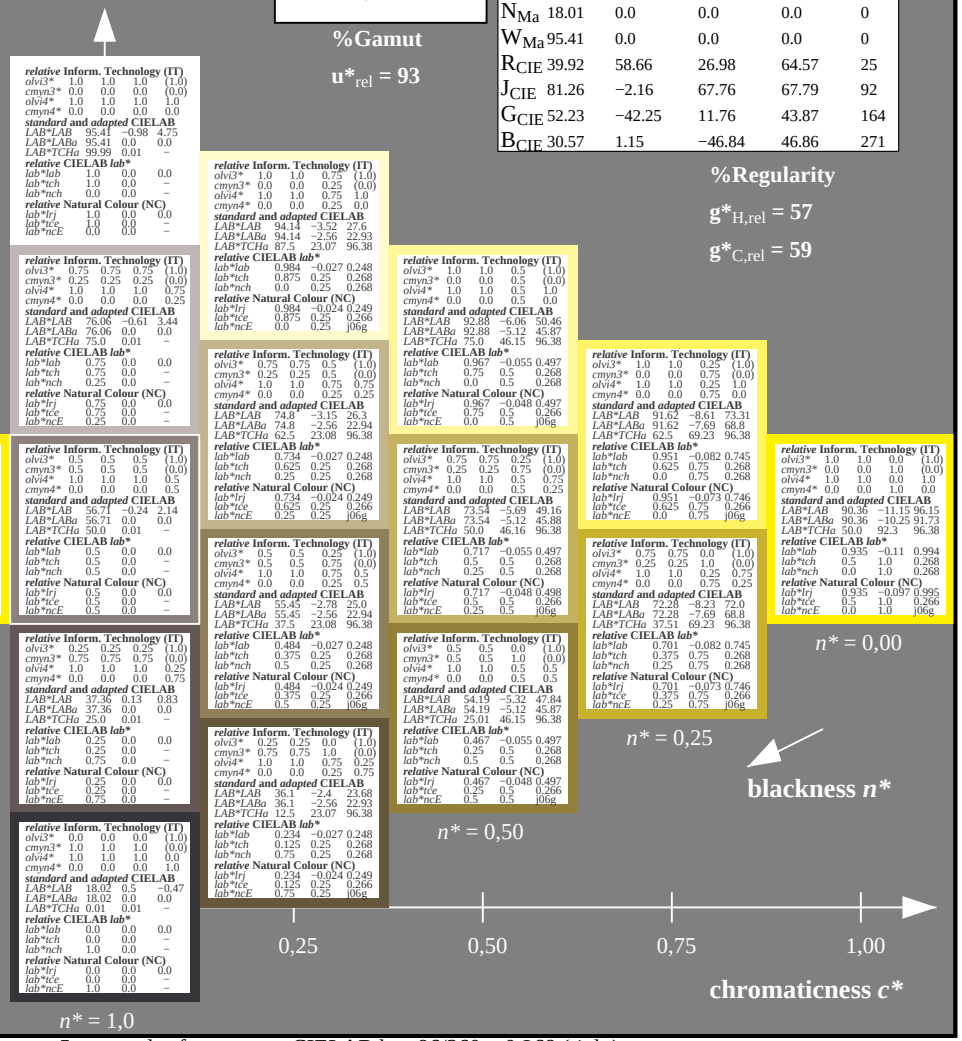
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

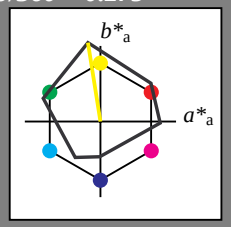
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

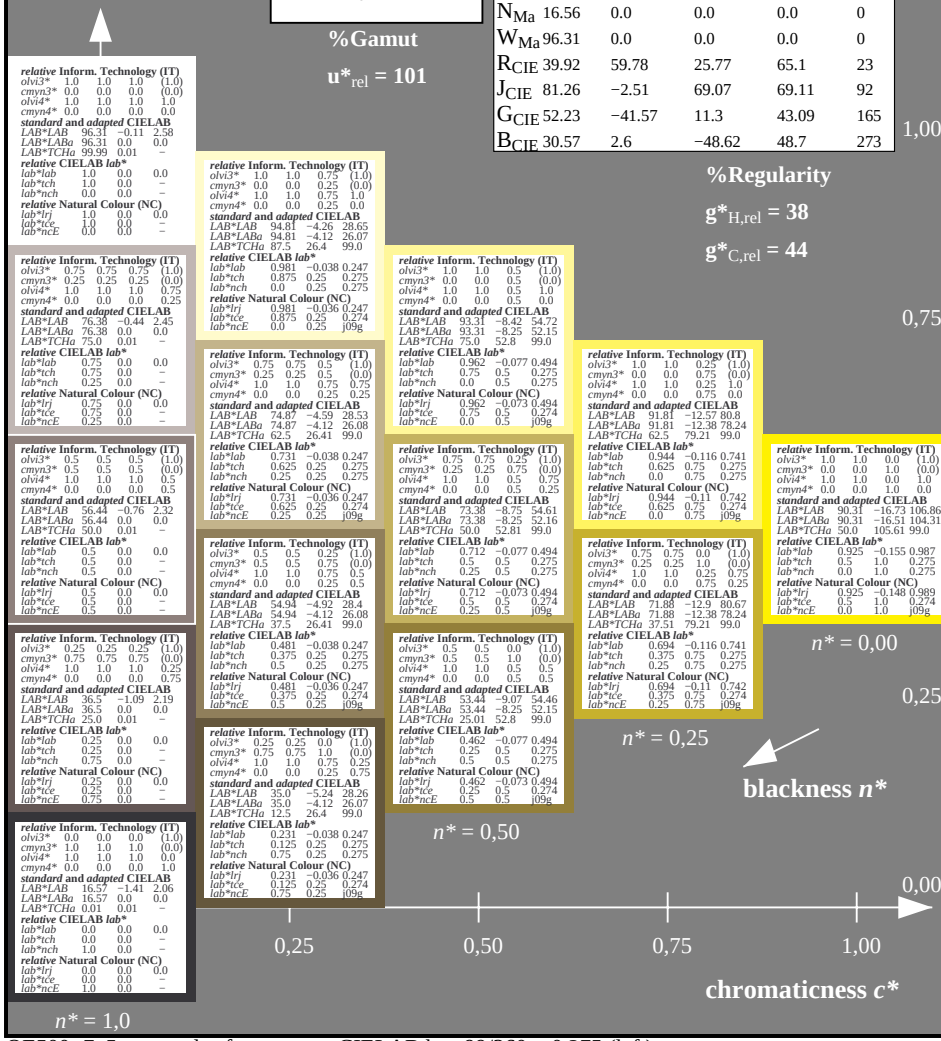
u^*_{rel} = 101

DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

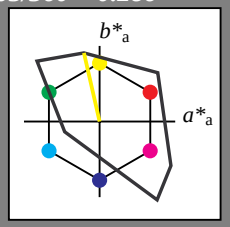


Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

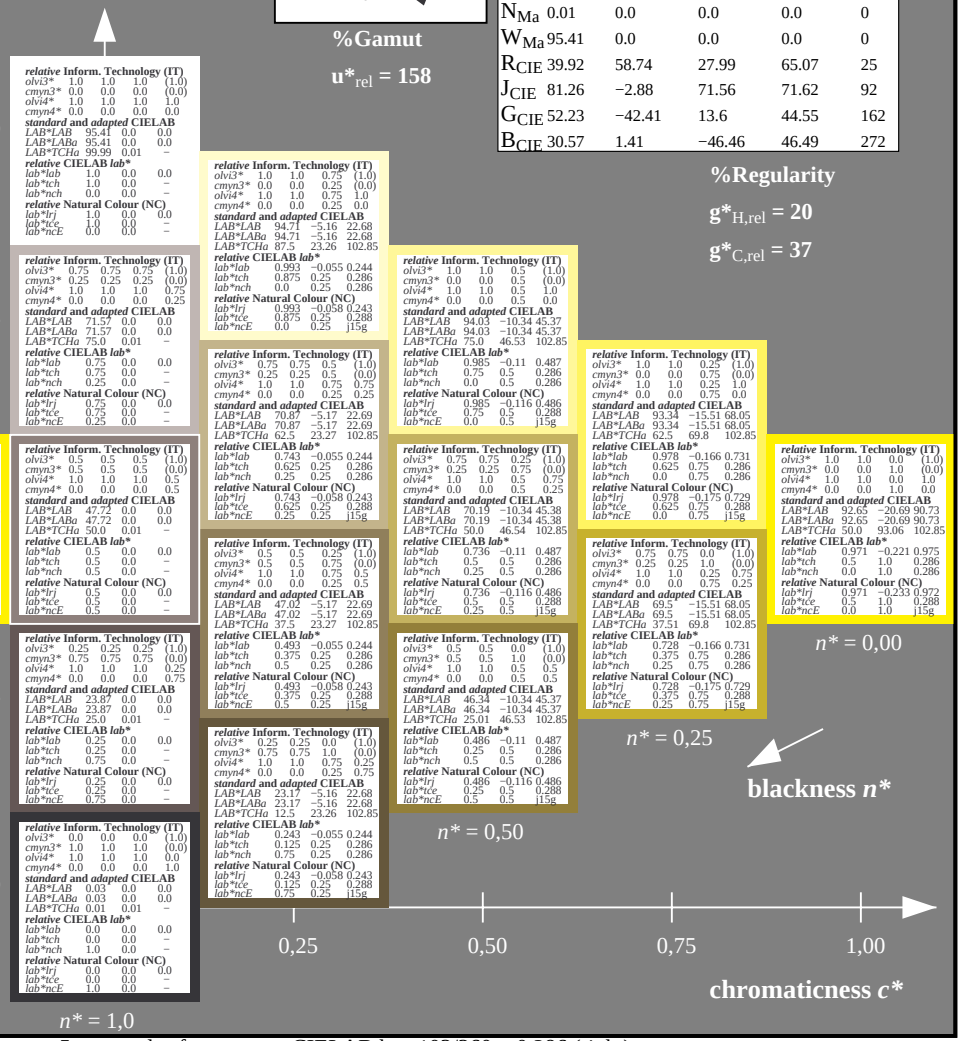
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

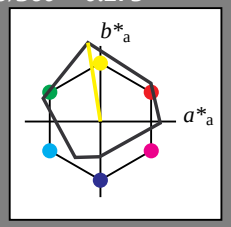
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

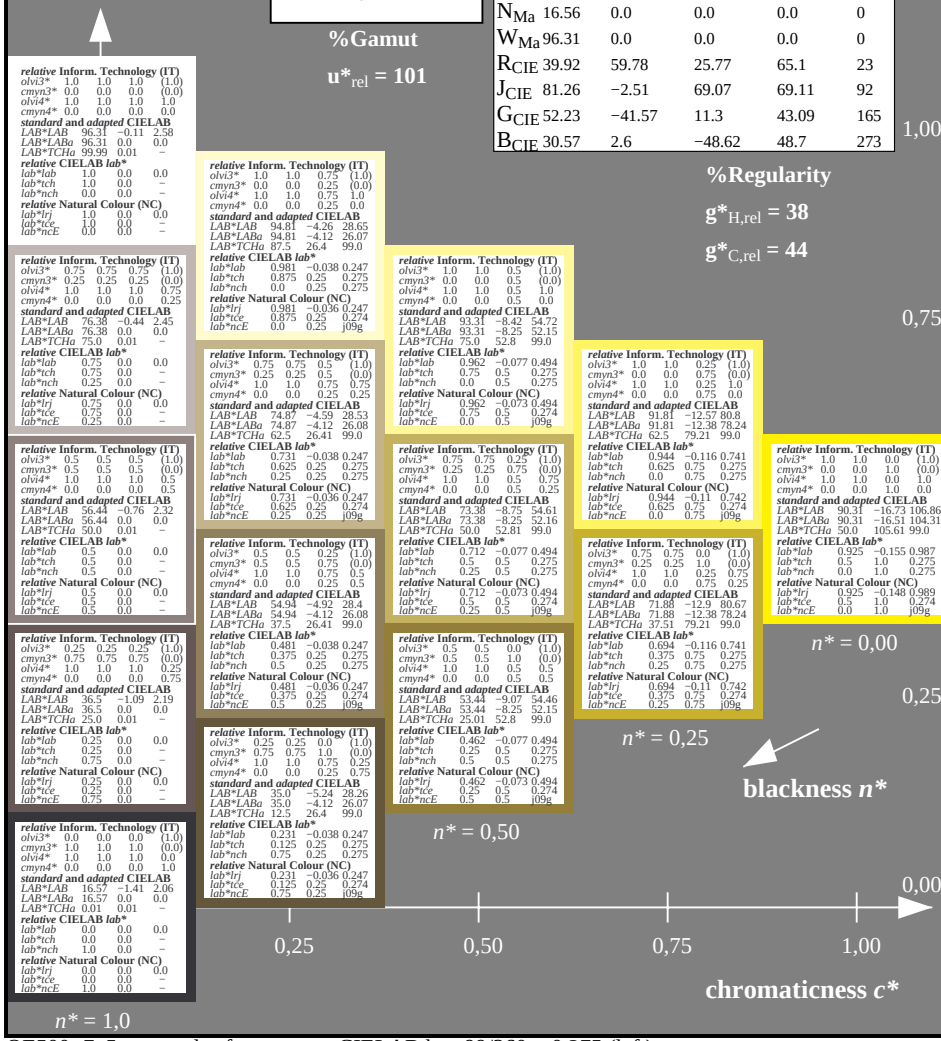
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



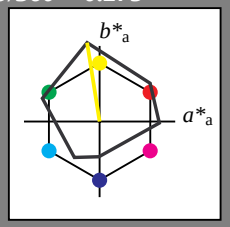
OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

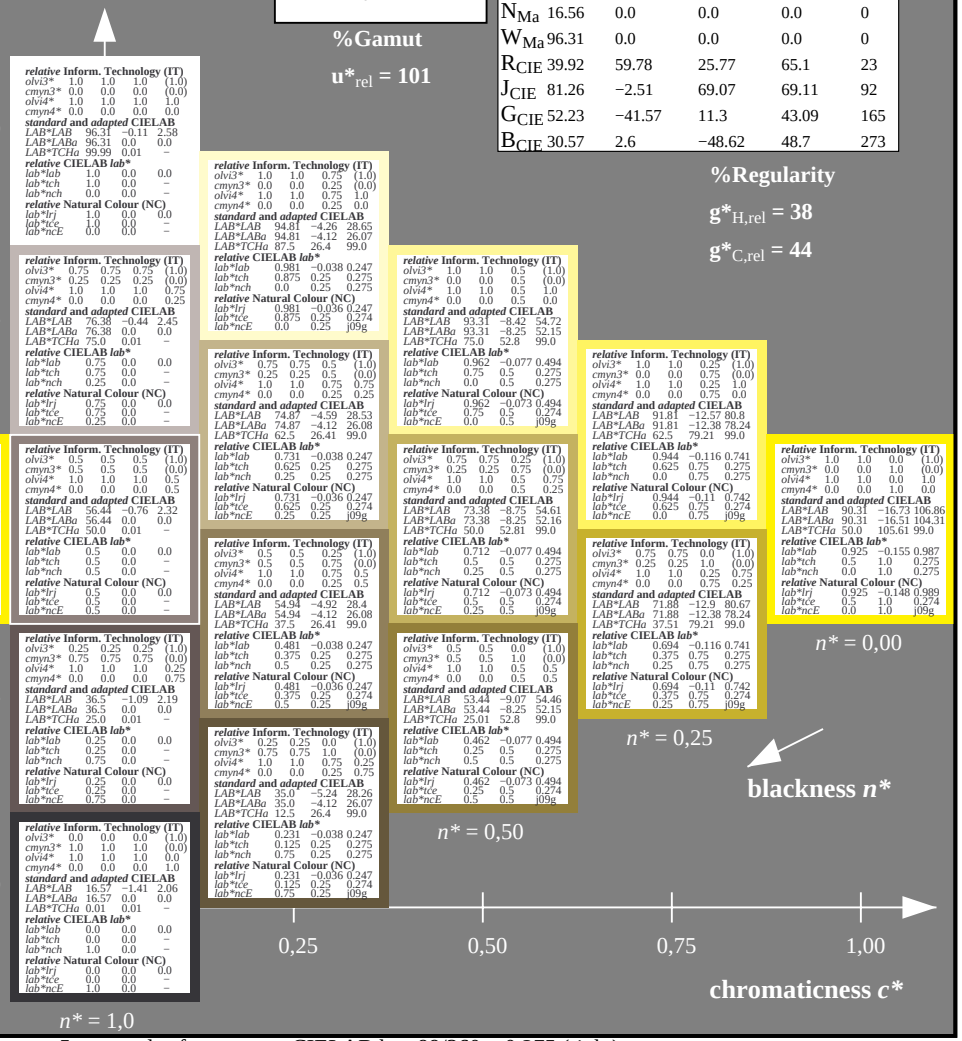
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

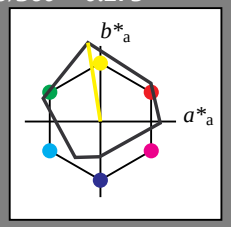


5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

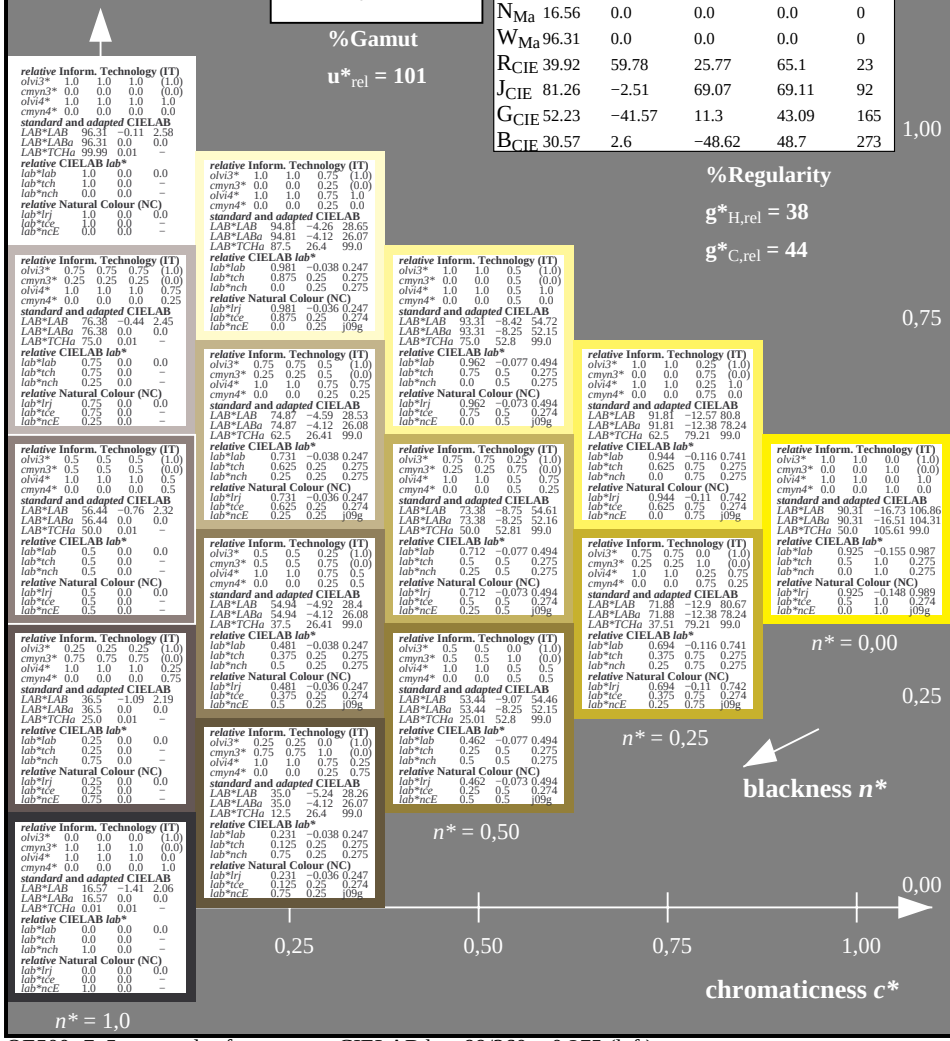
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

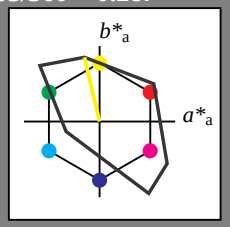


OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

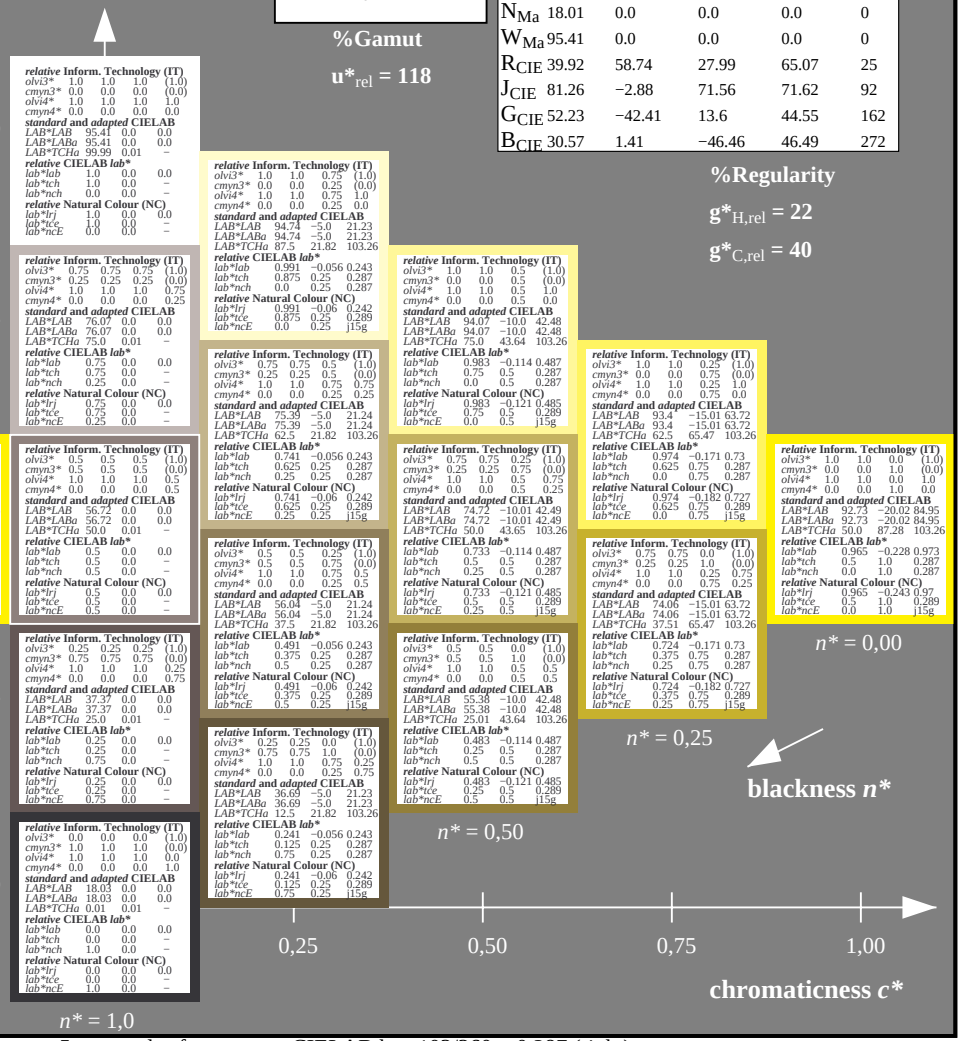
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

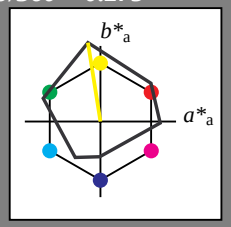


5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

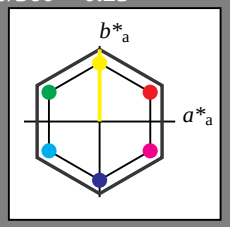
blackness *n**

chromaticness *c**

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness *n**

chromaticness *c**

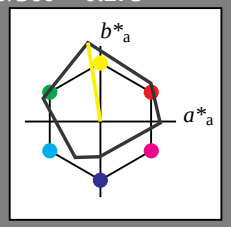
OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

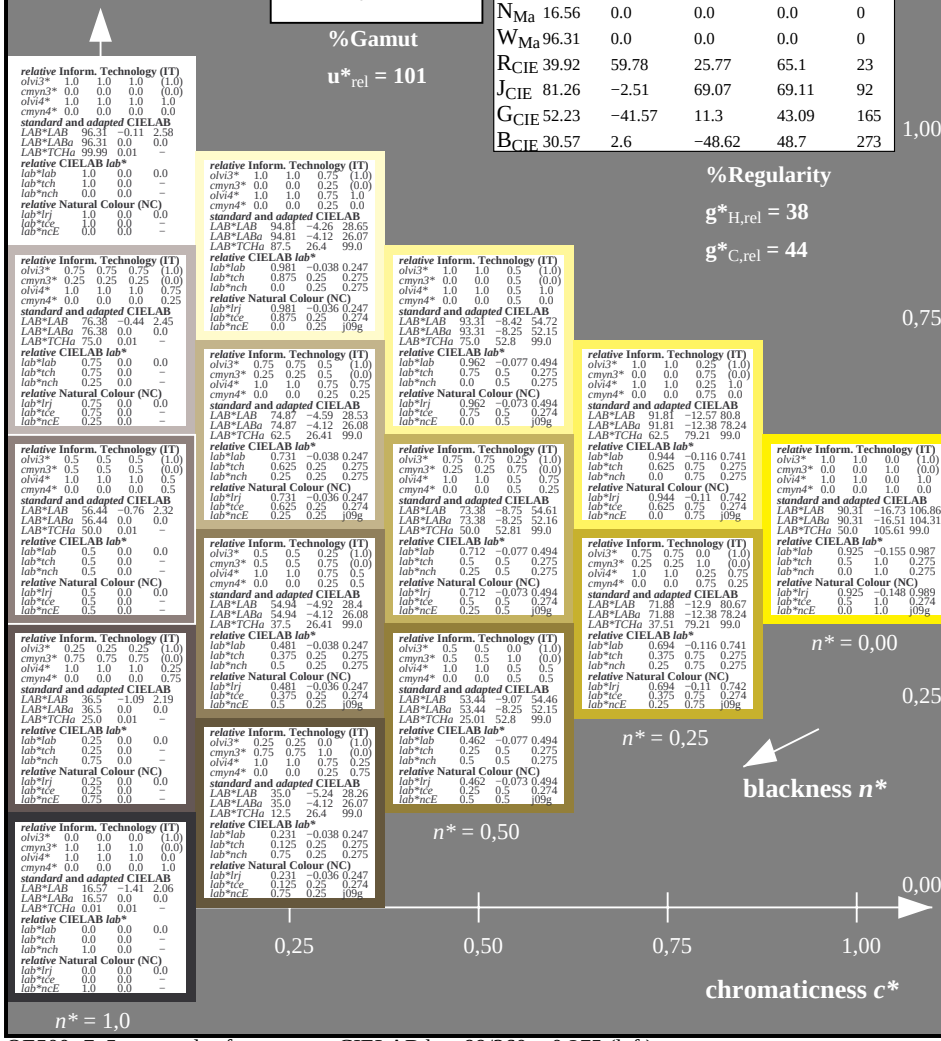
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

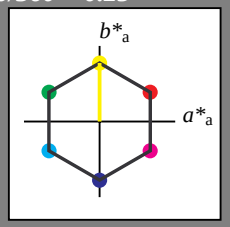


OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

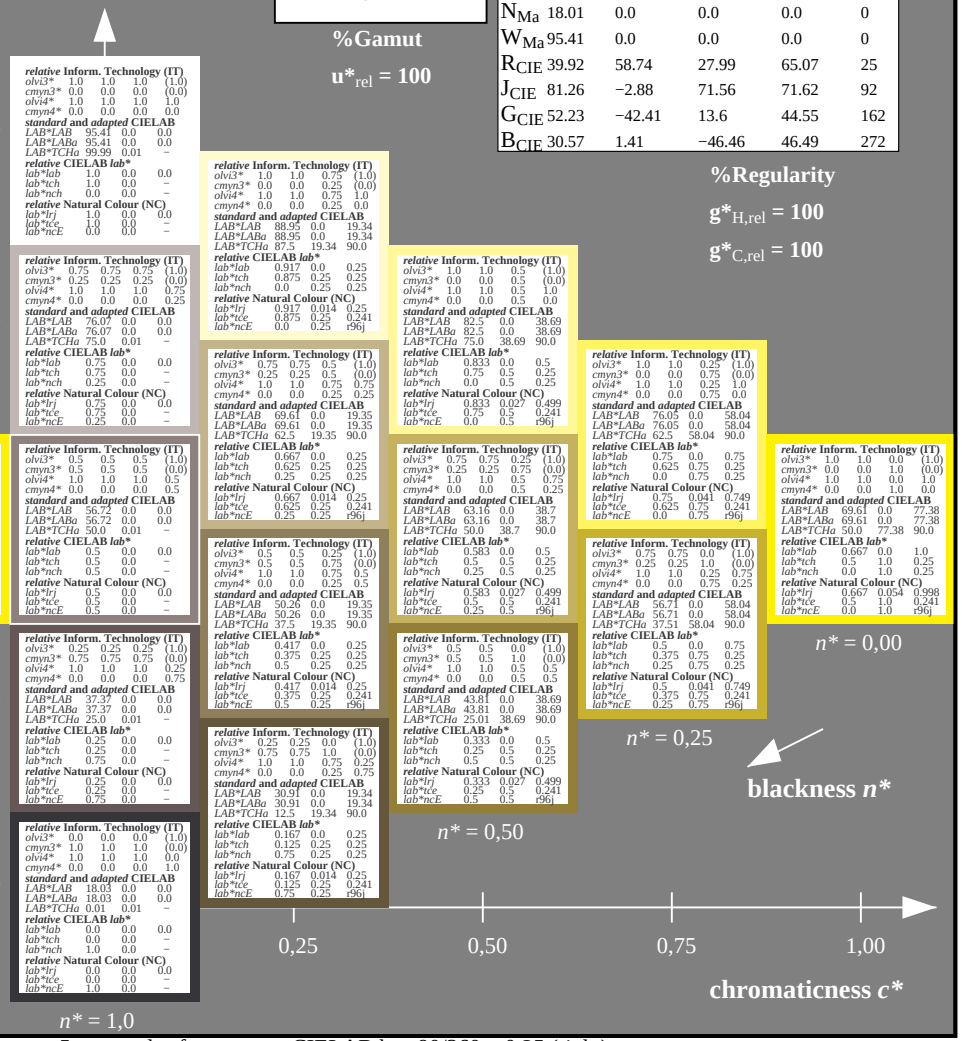
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

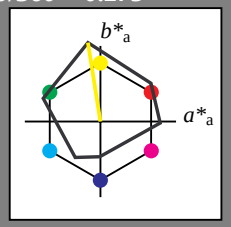


5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

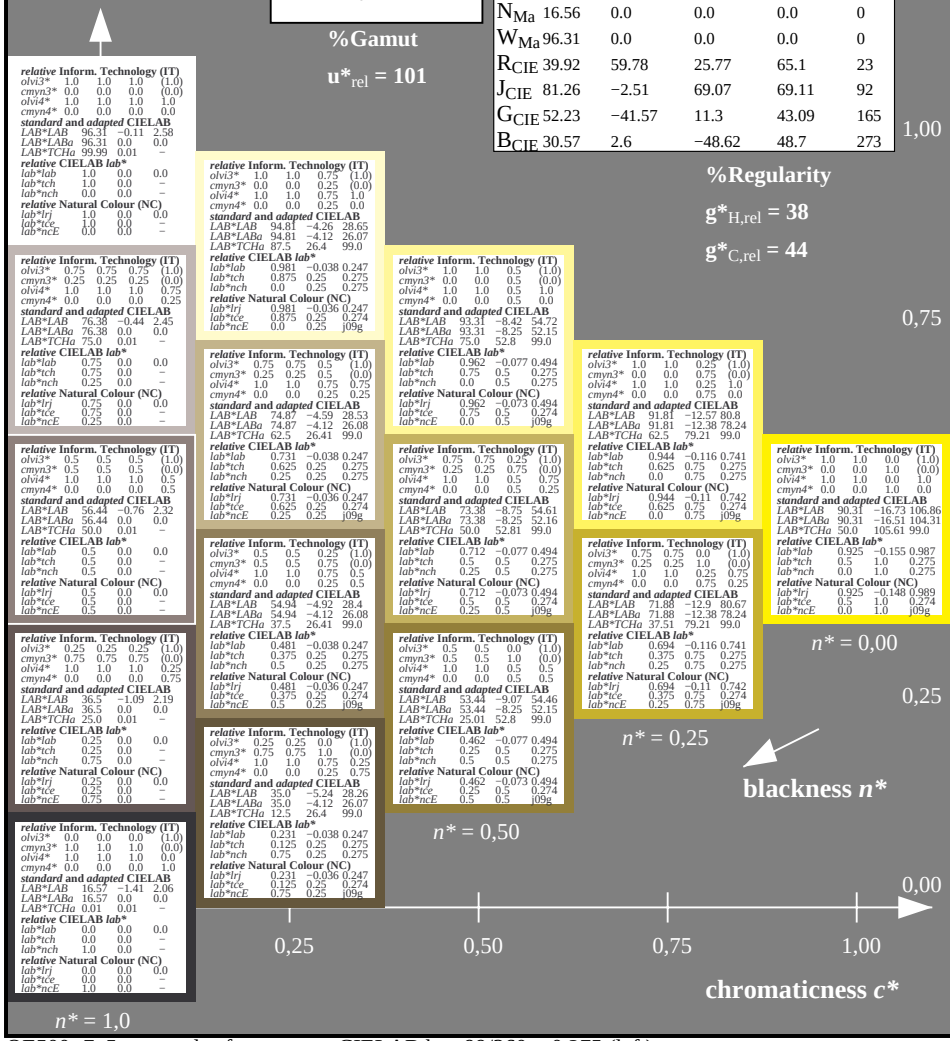
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

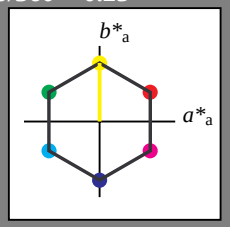
$g^*_{C,rel} = 44$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

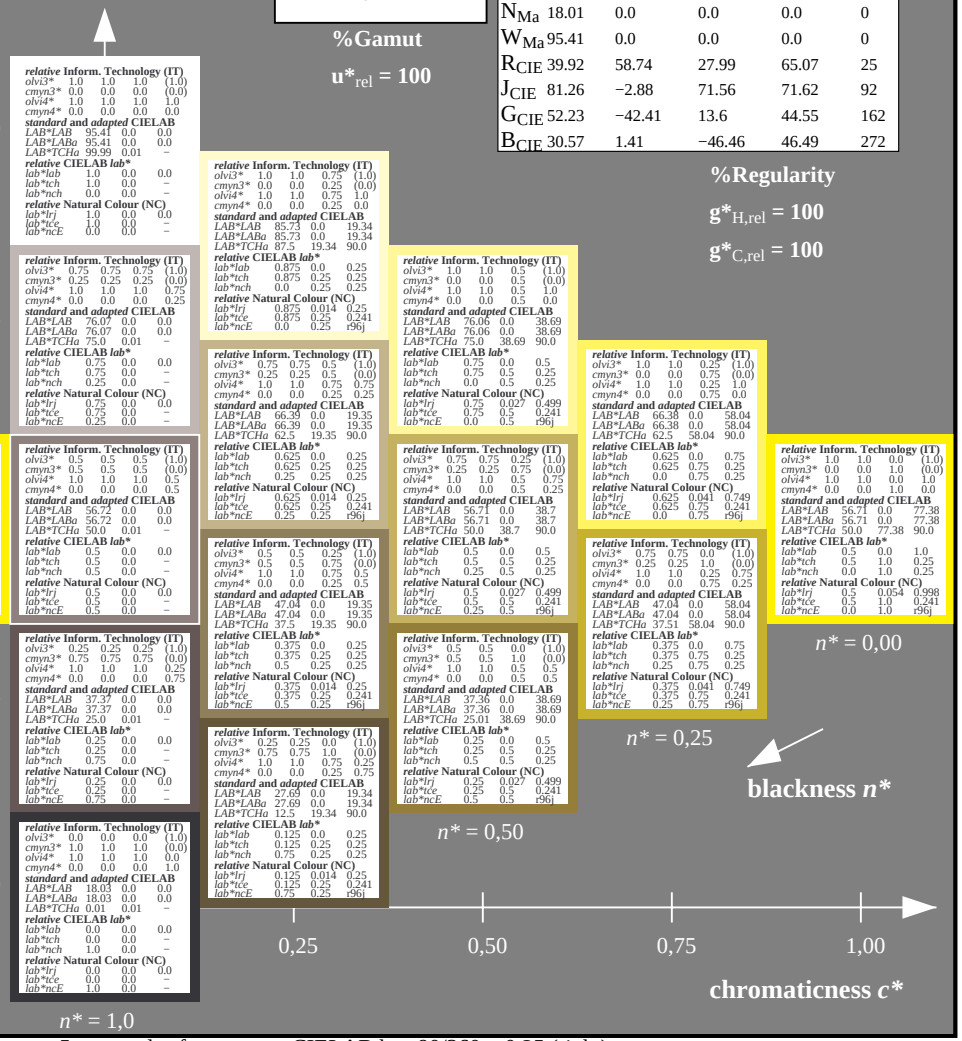
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

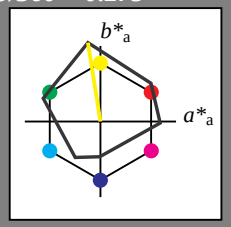
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

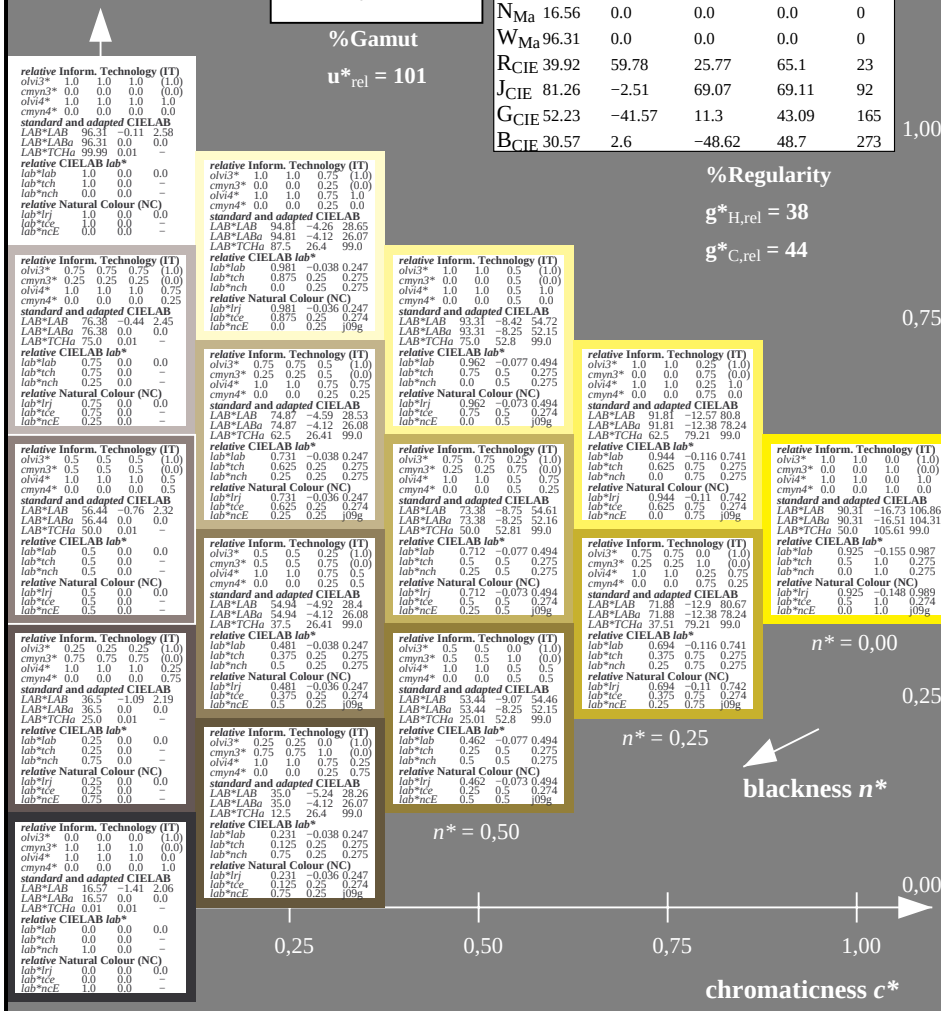
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

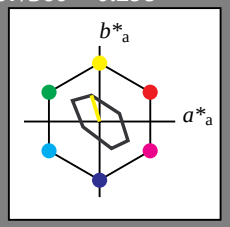


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

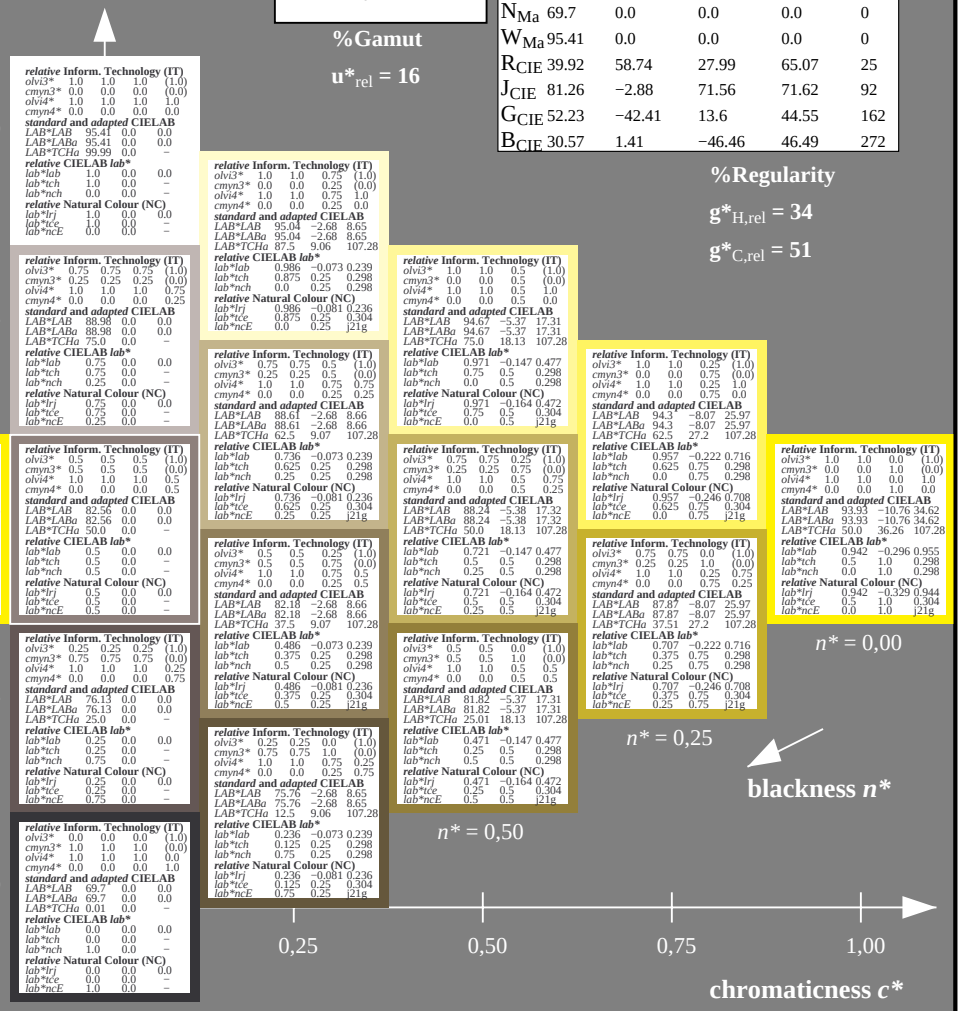
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Television Luminous System TLS18

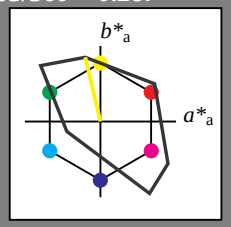
for hue $h^* = lab^*h = 103/360 = 0.287$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

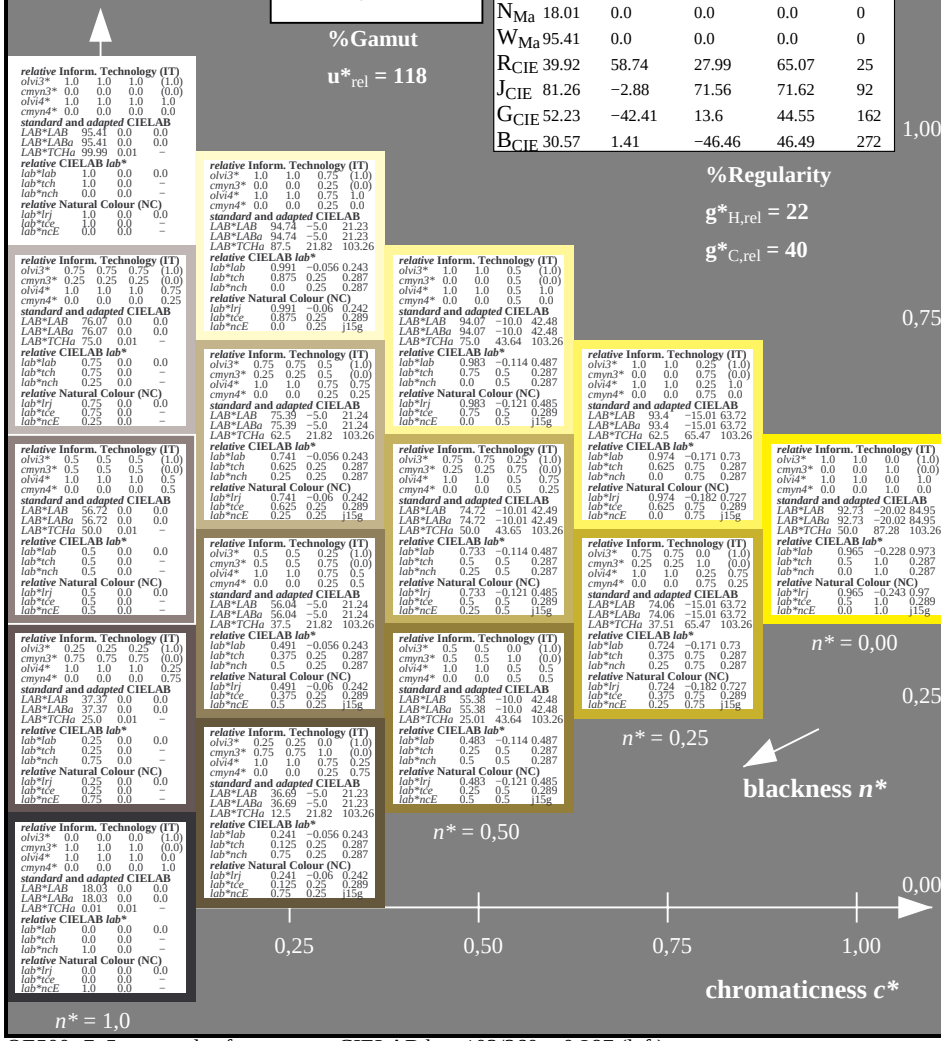
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Offset Reflective System ORS18

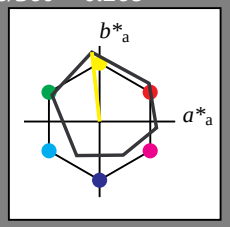
for hue $h^* = lab^*h = 96/360 = 0.268$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

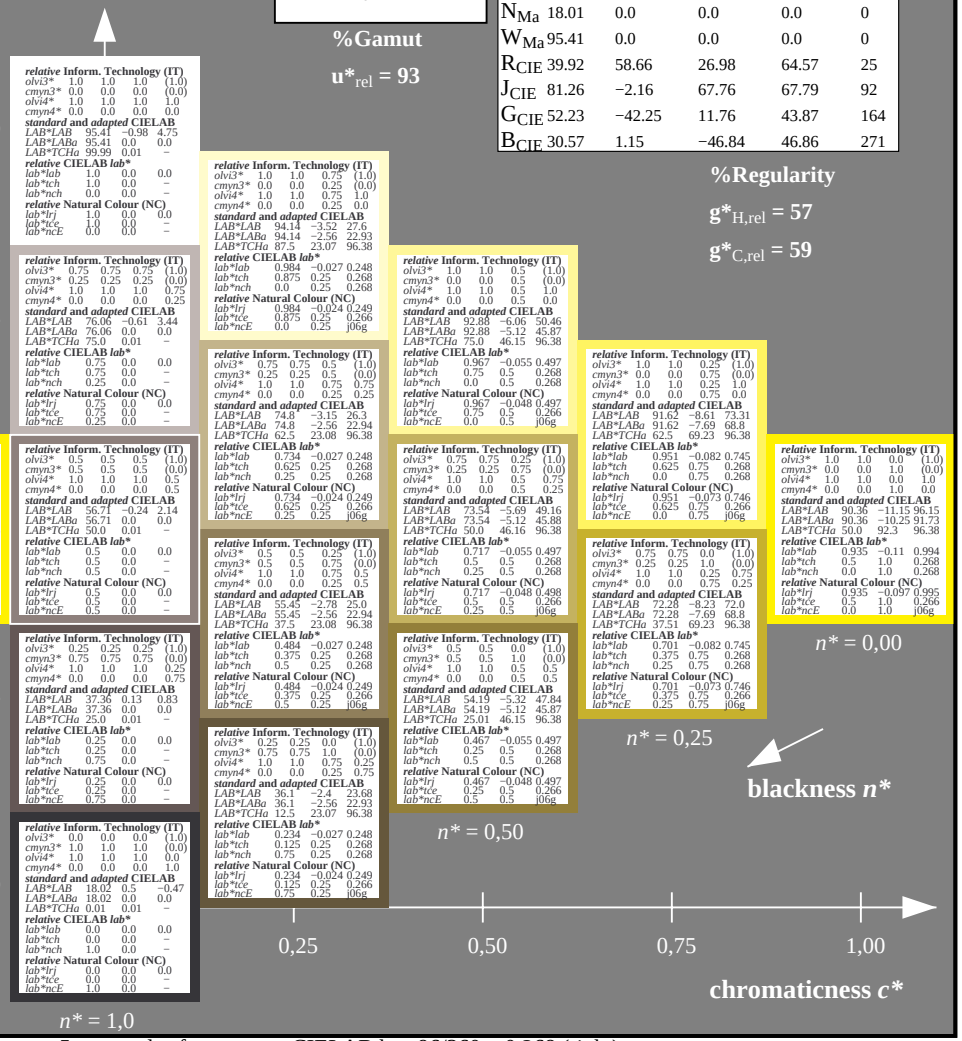
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



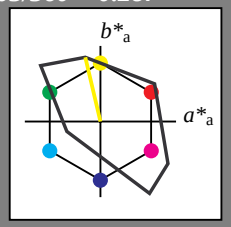
OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

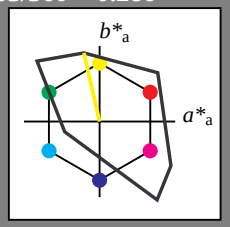
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Television Luminous System TLS18

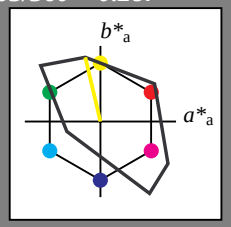
for hue $h^* = lab^*h = 103/360 = 0.287$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Printer Reflective System DRSXX

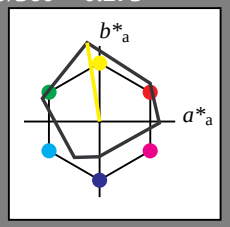
for hue $h^* = lab^*h = 99/360 = 0.275$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

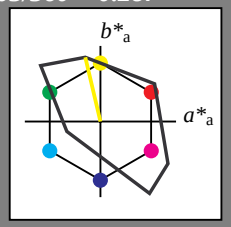
OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

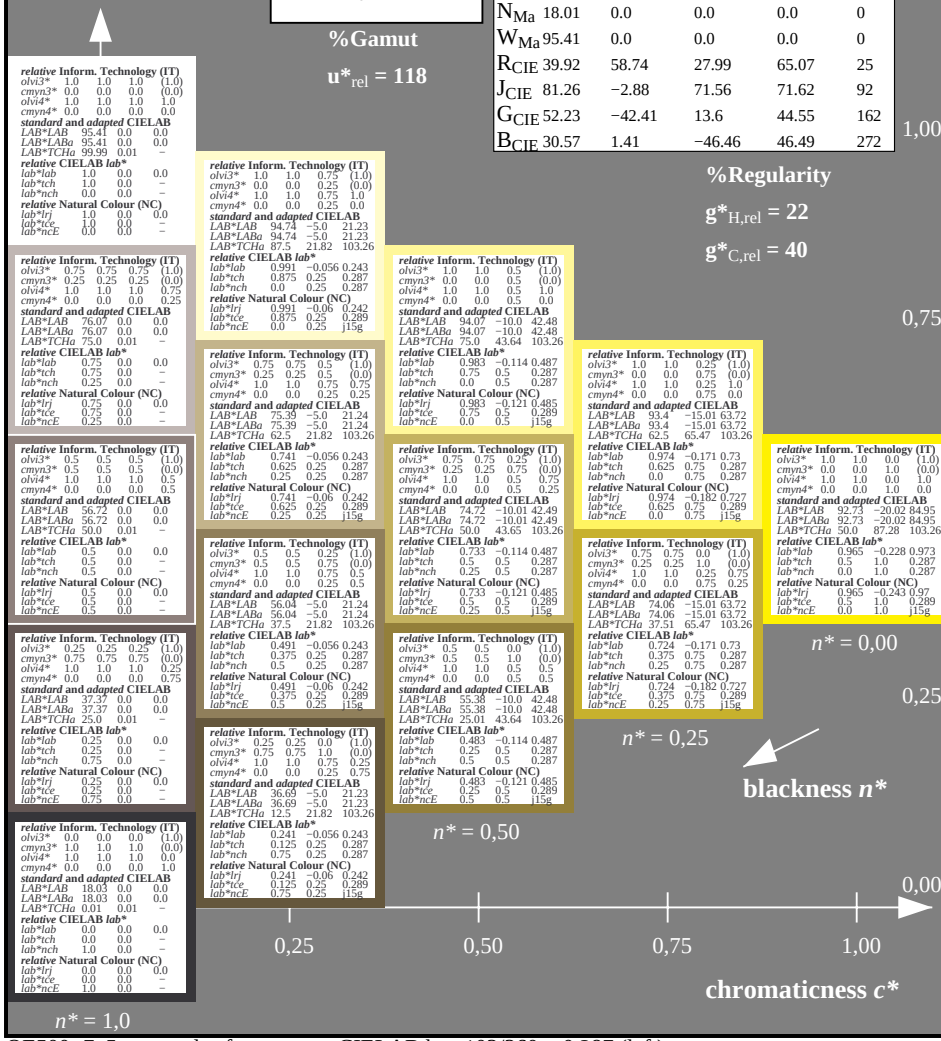
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

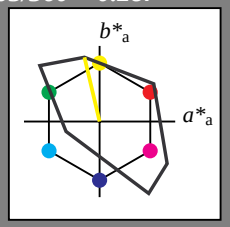


OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

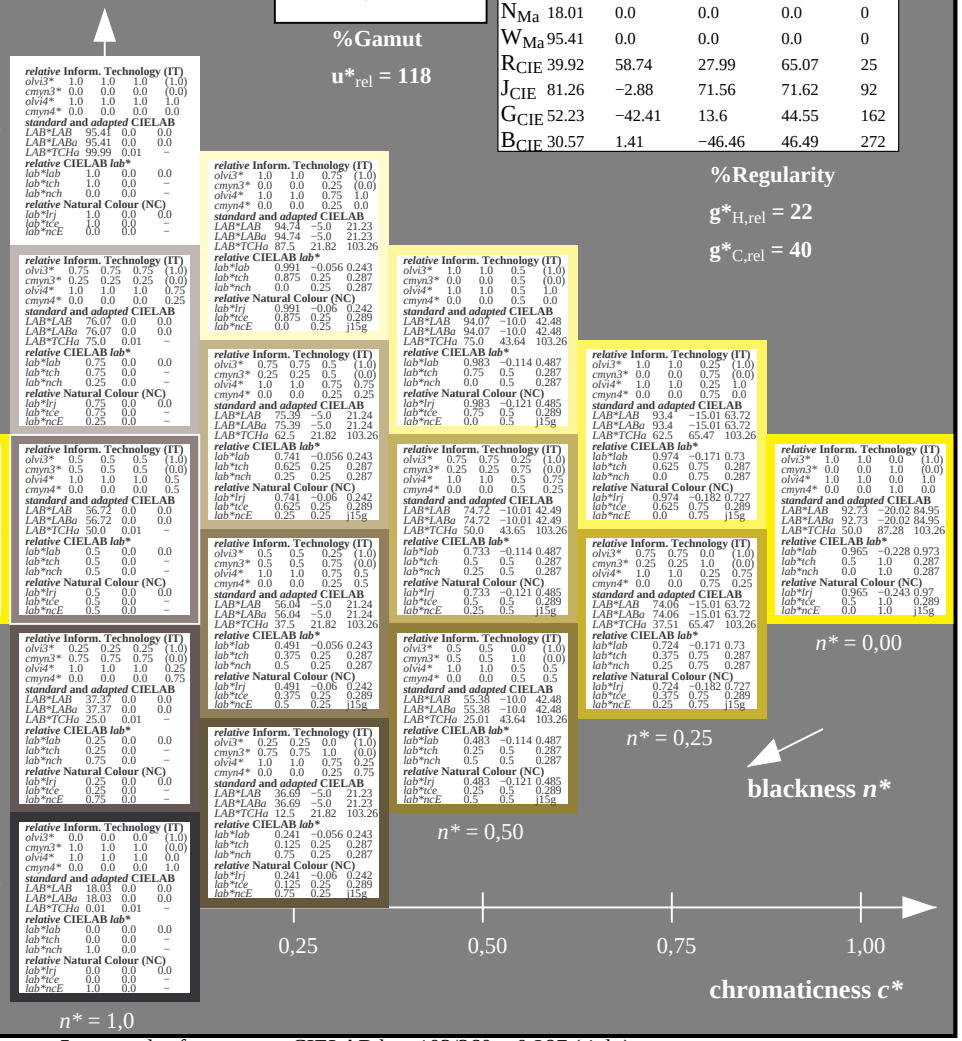
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



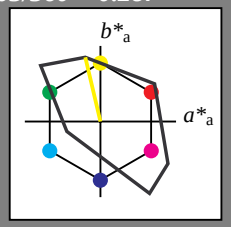
5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

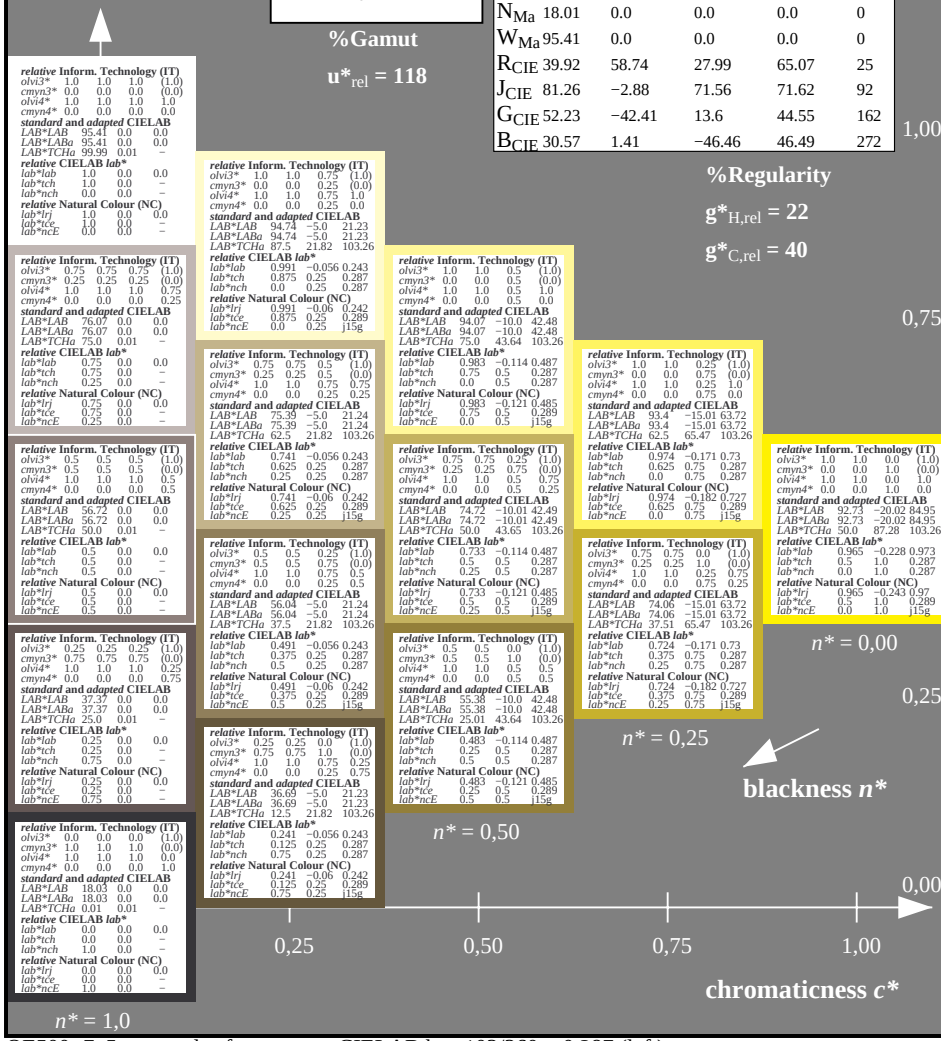
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

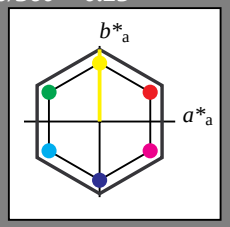


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

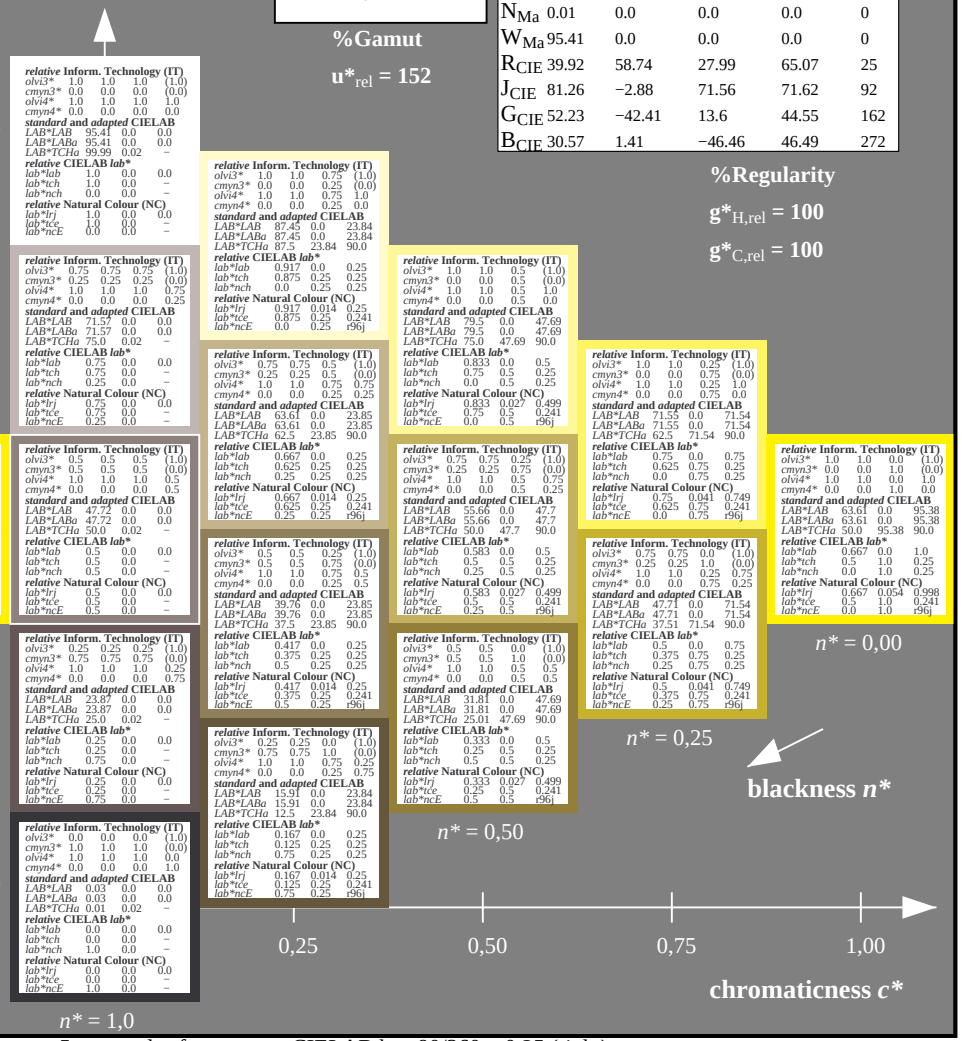
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

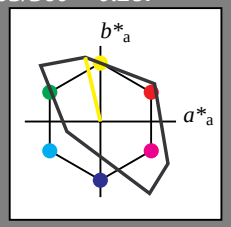
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

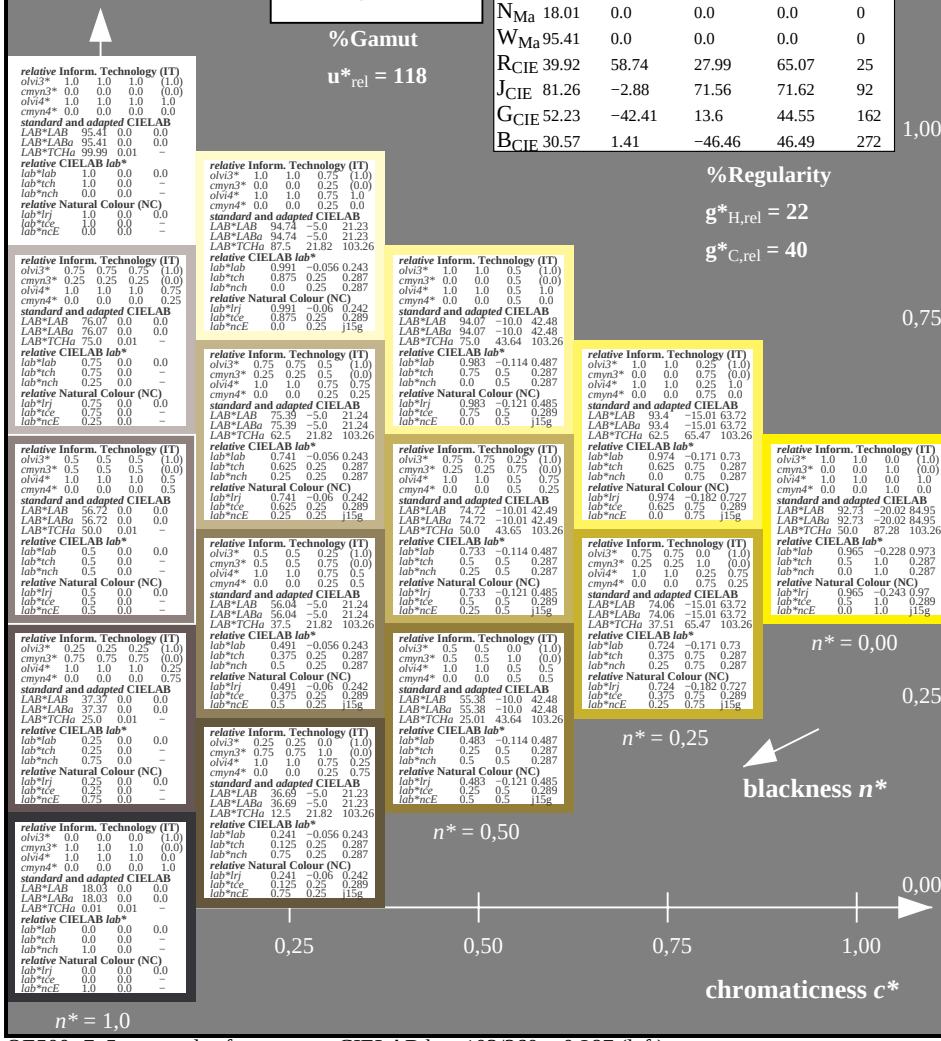
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



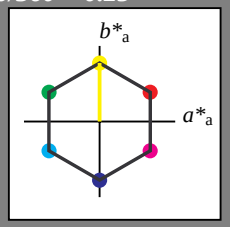
OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

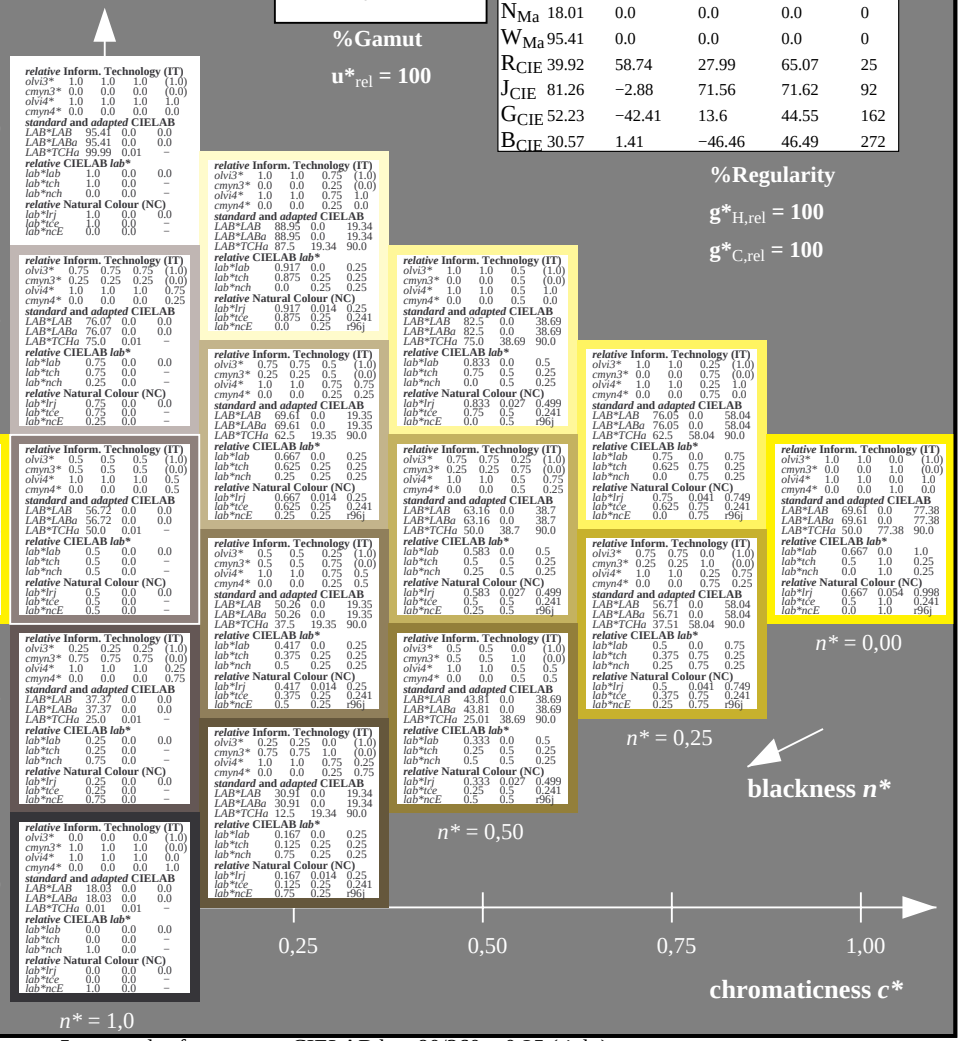
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS18

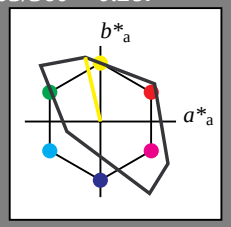
for hue $h^* = lab^*h = 103/360 = 0.287$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

Output: Colorimetric Standard Reflective System SRS18

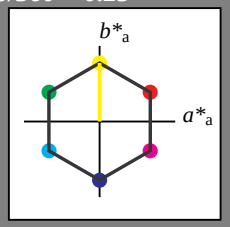
for hue $h^* = lab^*h = 90/360 = 0.25$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

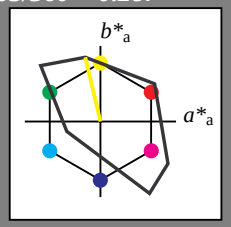
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

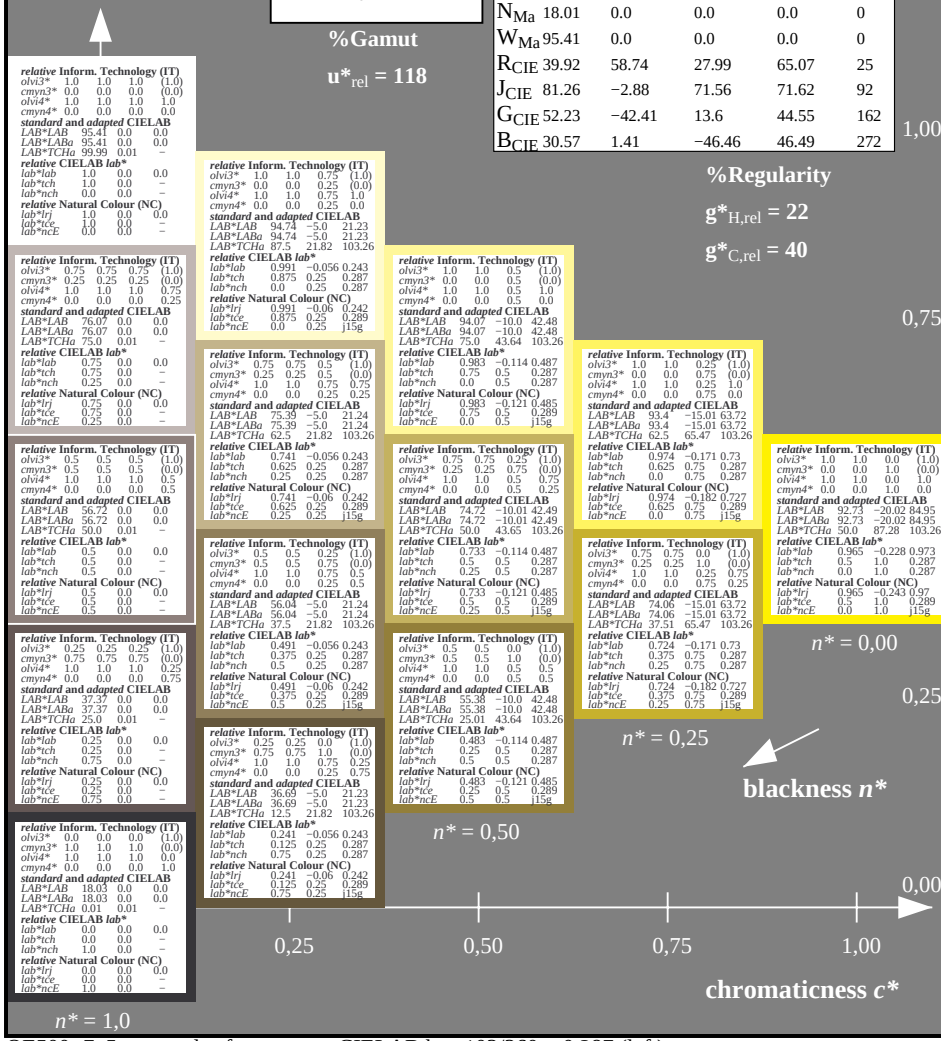
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

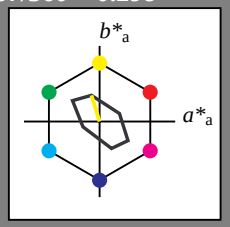


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

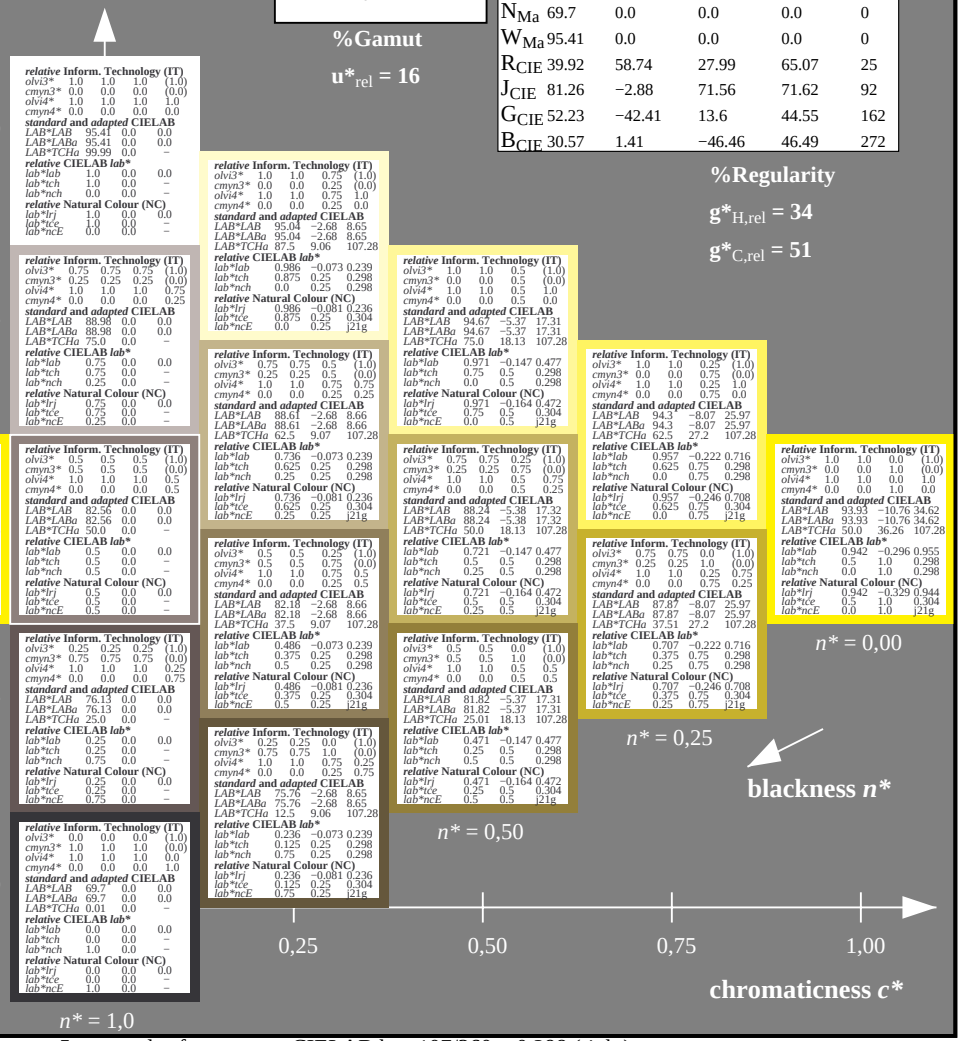
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

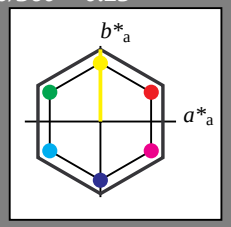
5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

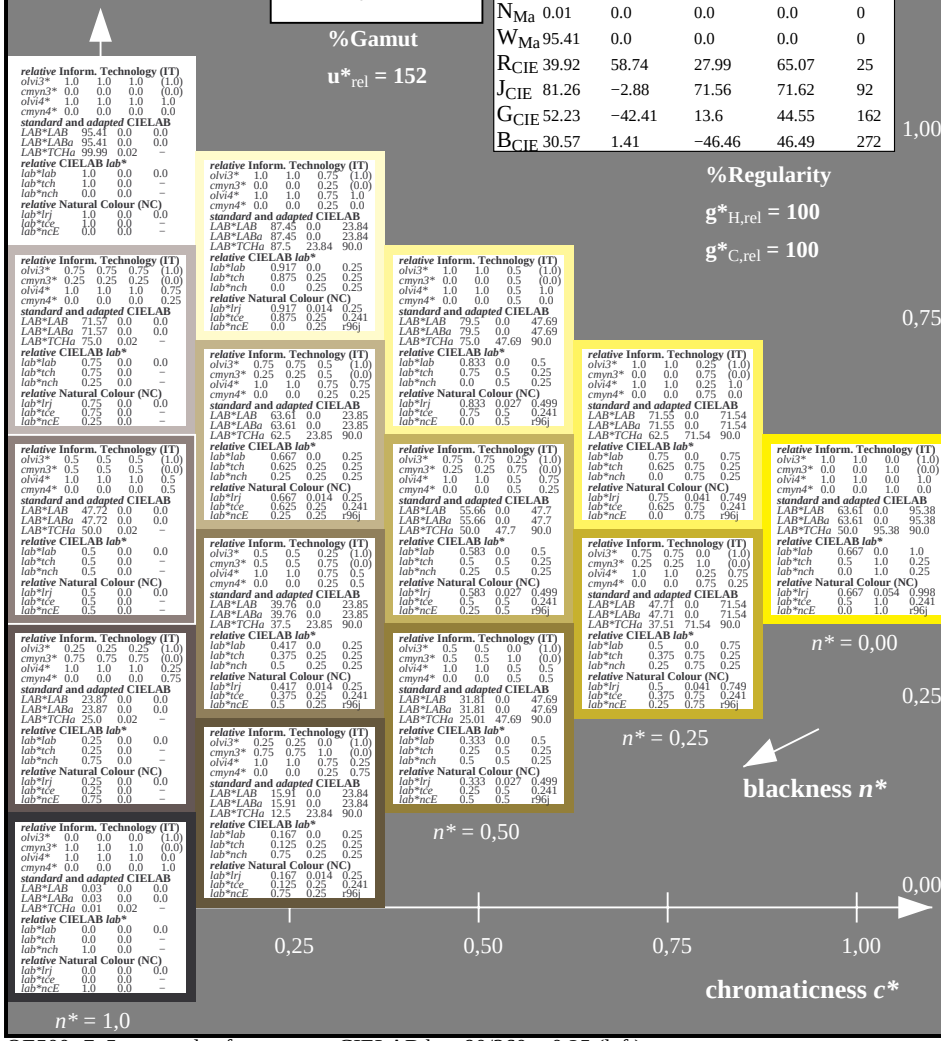
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

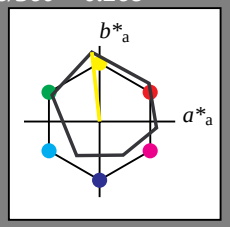


Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

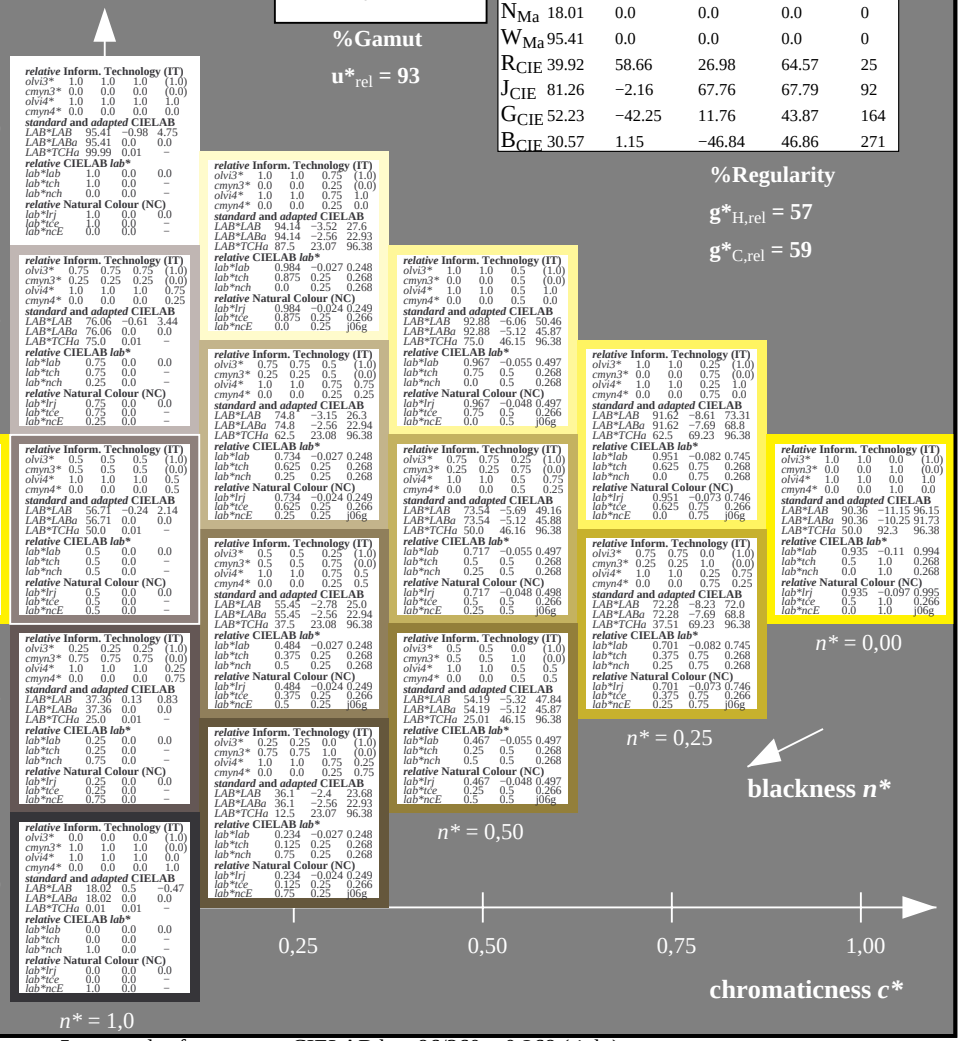
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

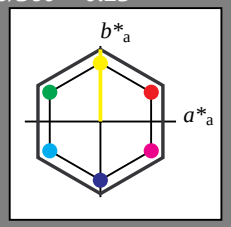
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

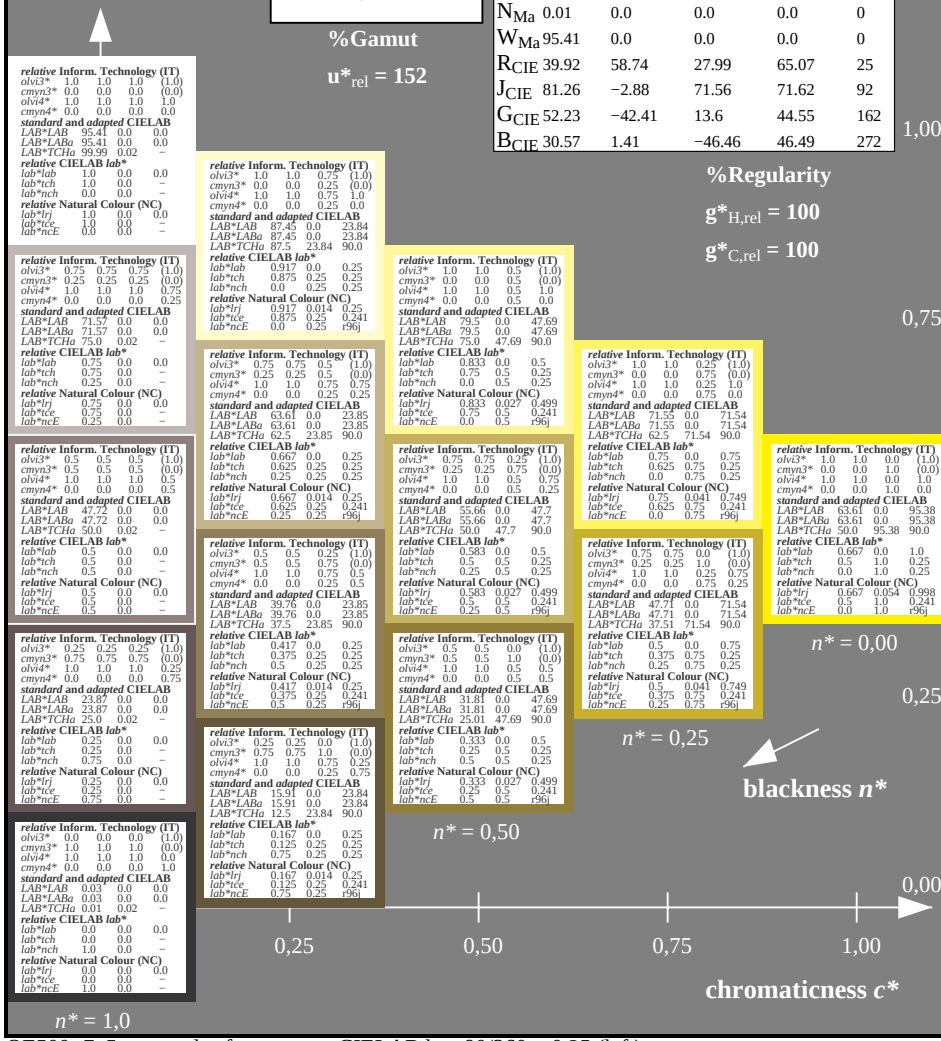
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



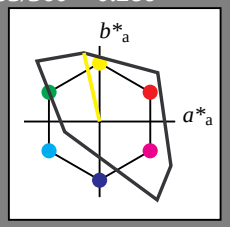
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

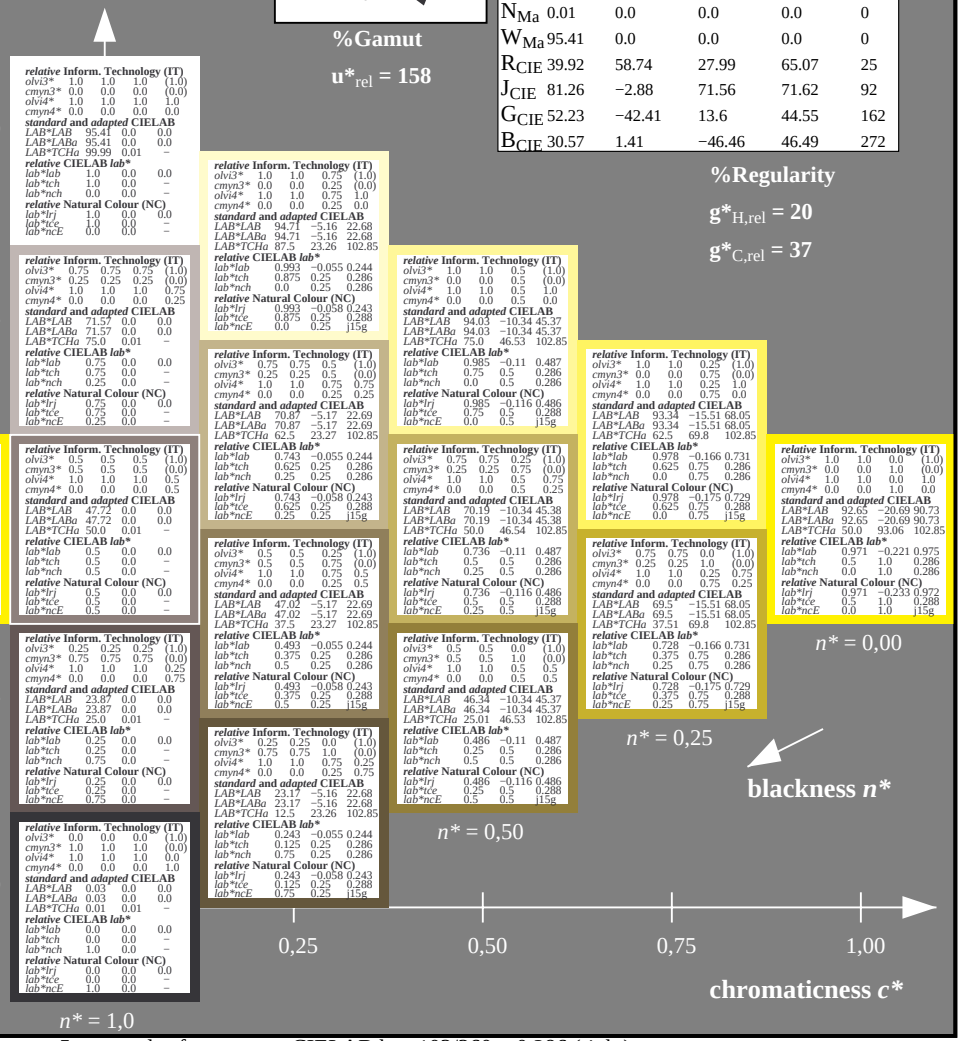
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



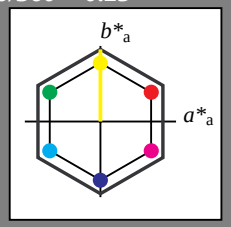
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

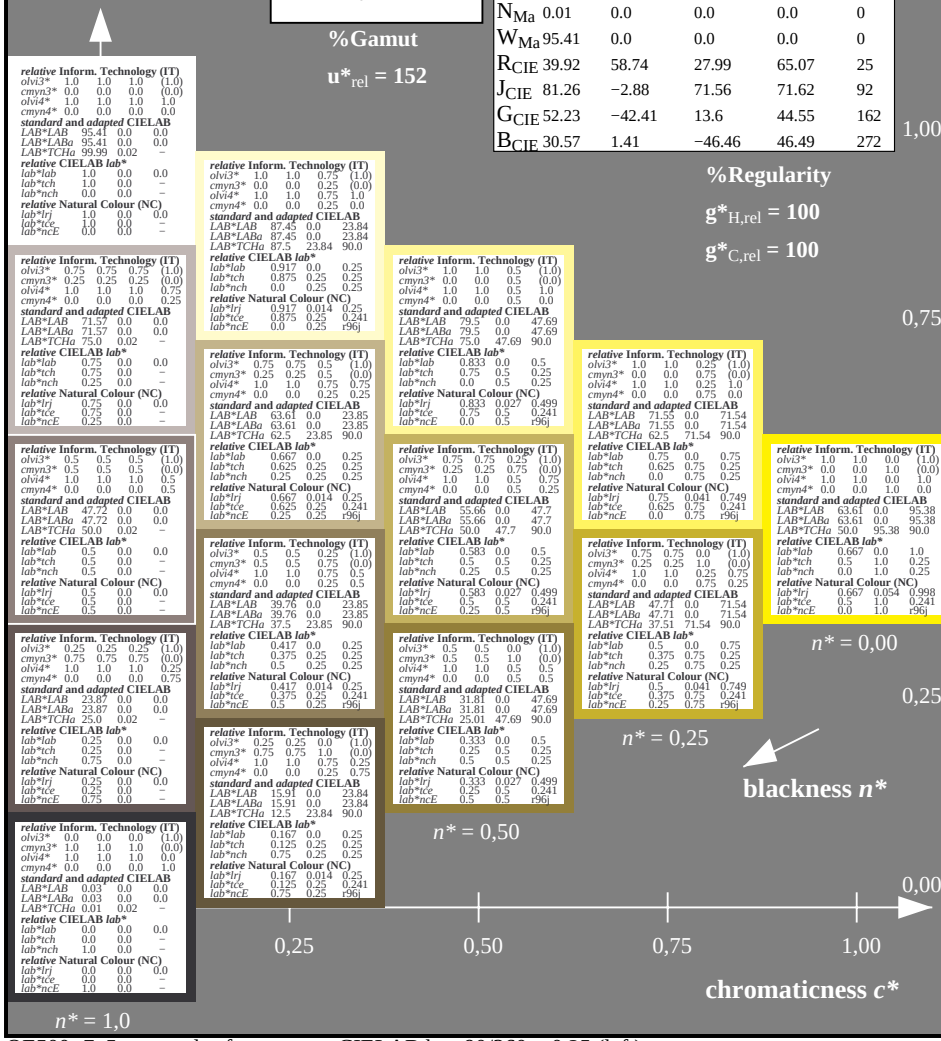
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

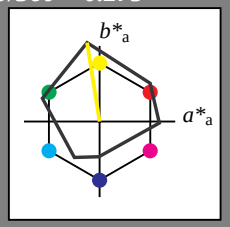


Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

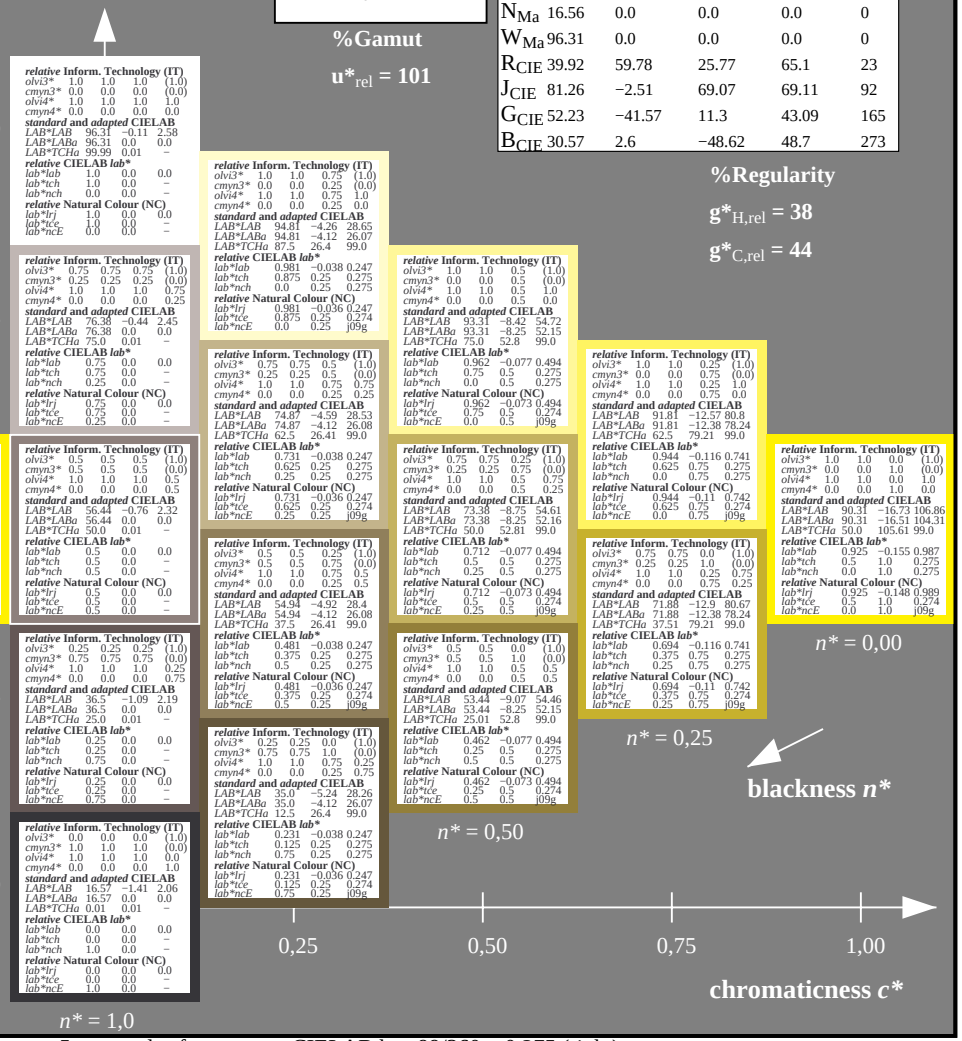
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



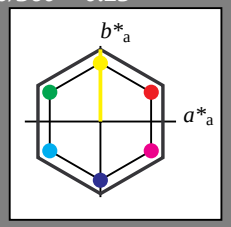
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

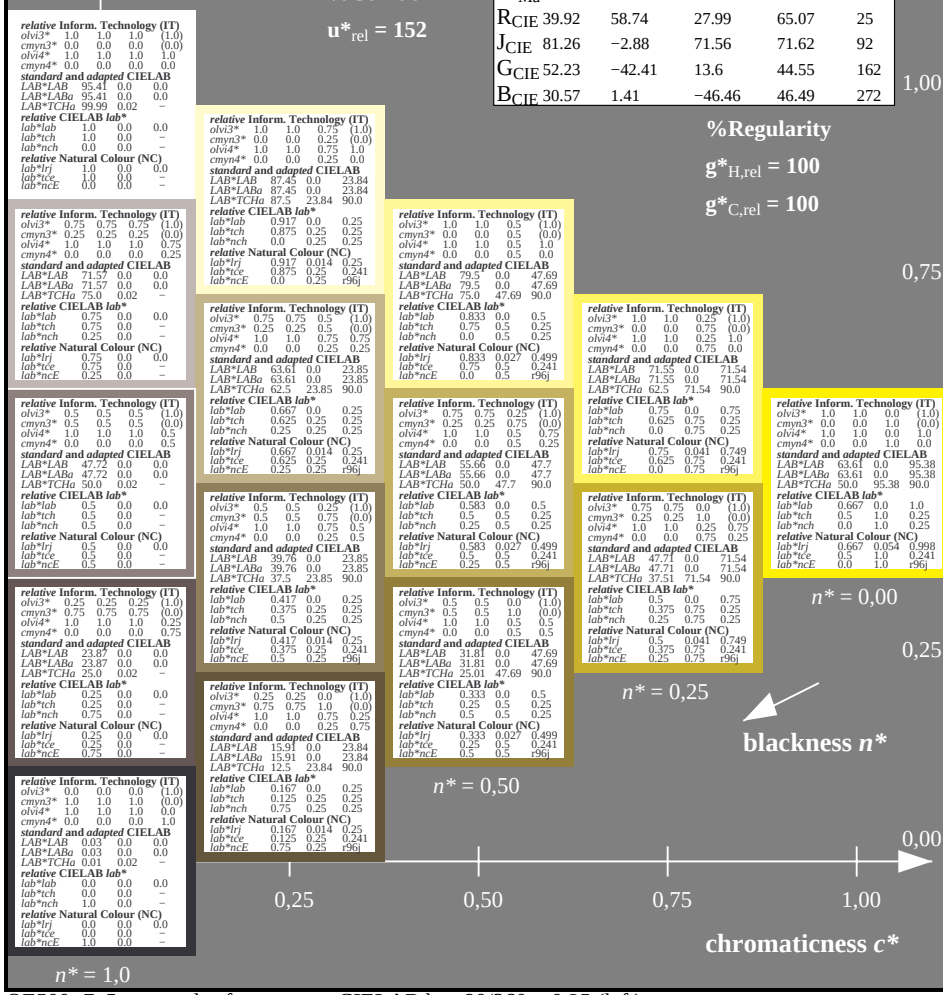
u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

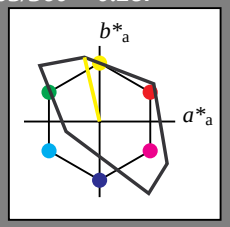
triangle lightness *t**



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

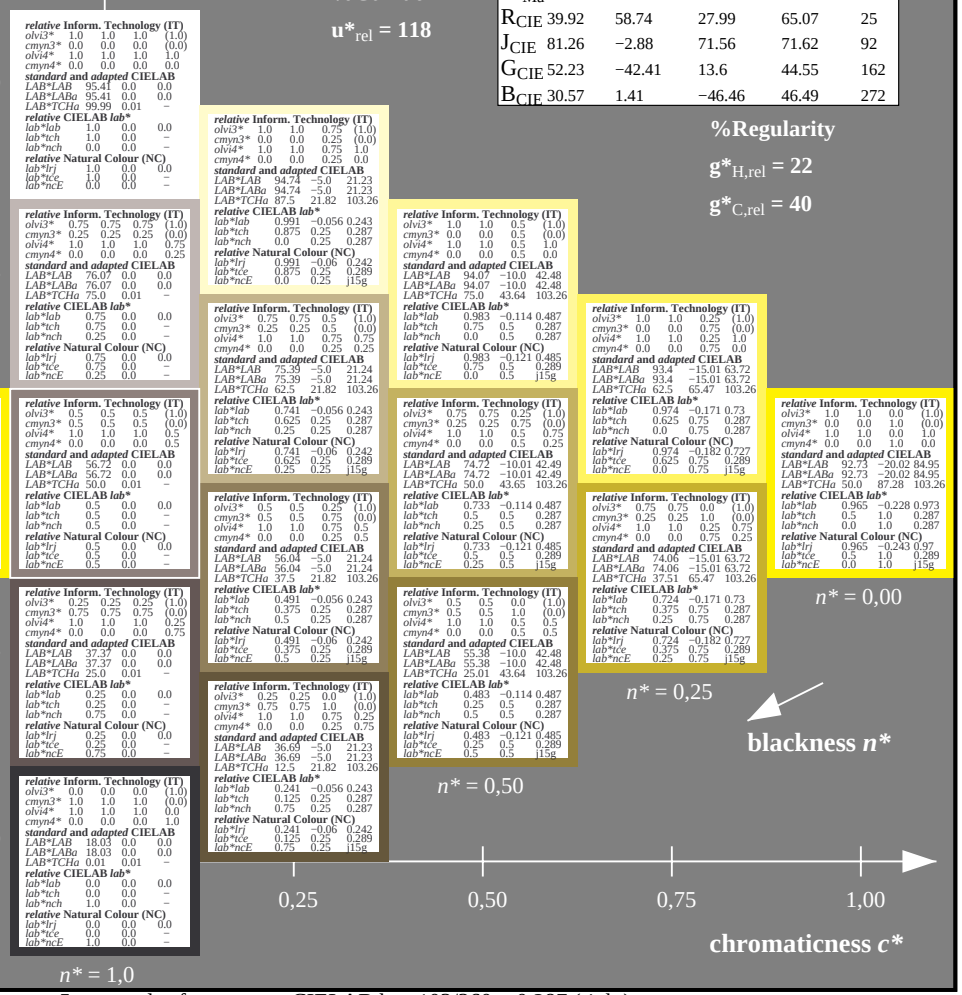
u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

triangle lightness *t**



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

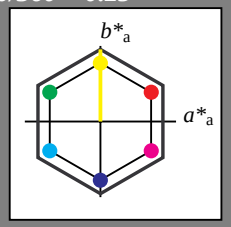
5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

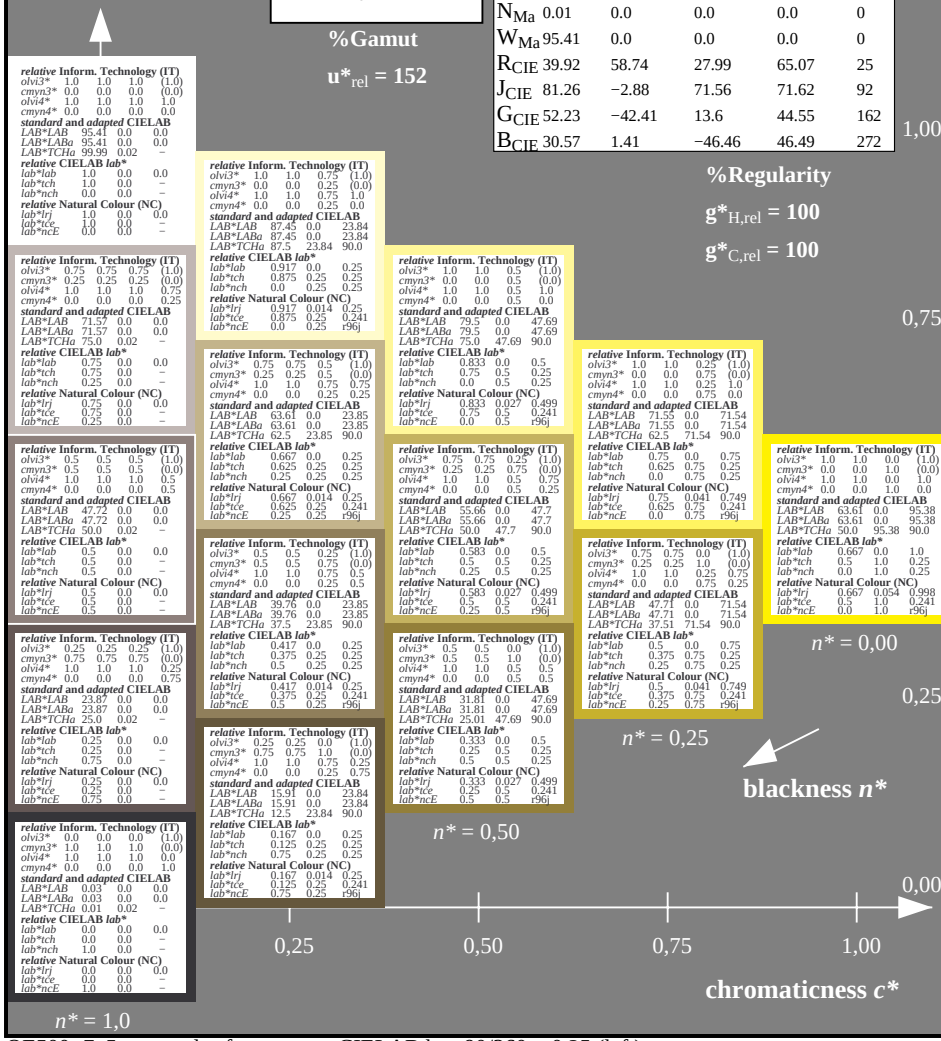
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



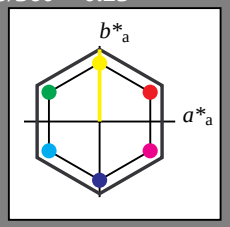
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

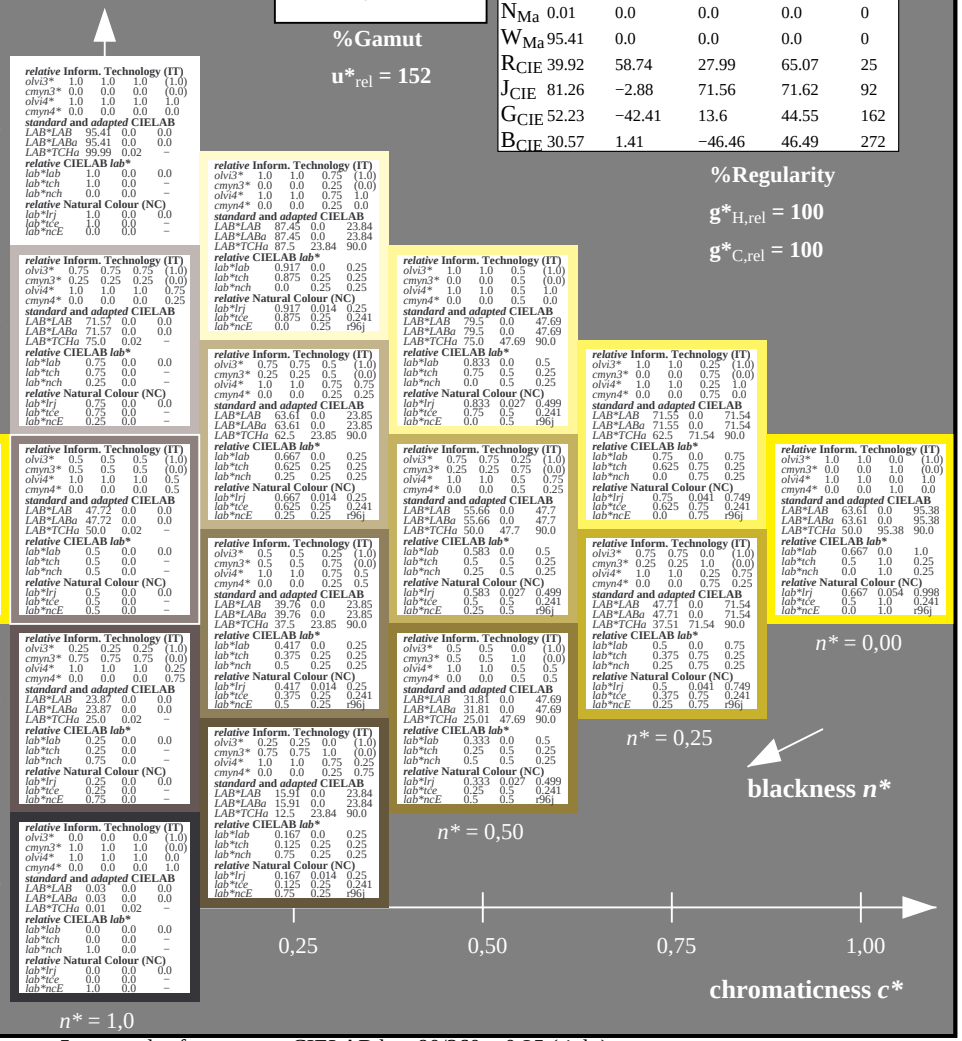
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



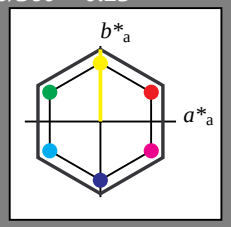
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

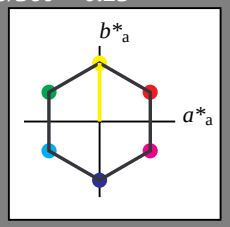
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$

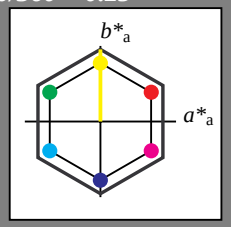
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

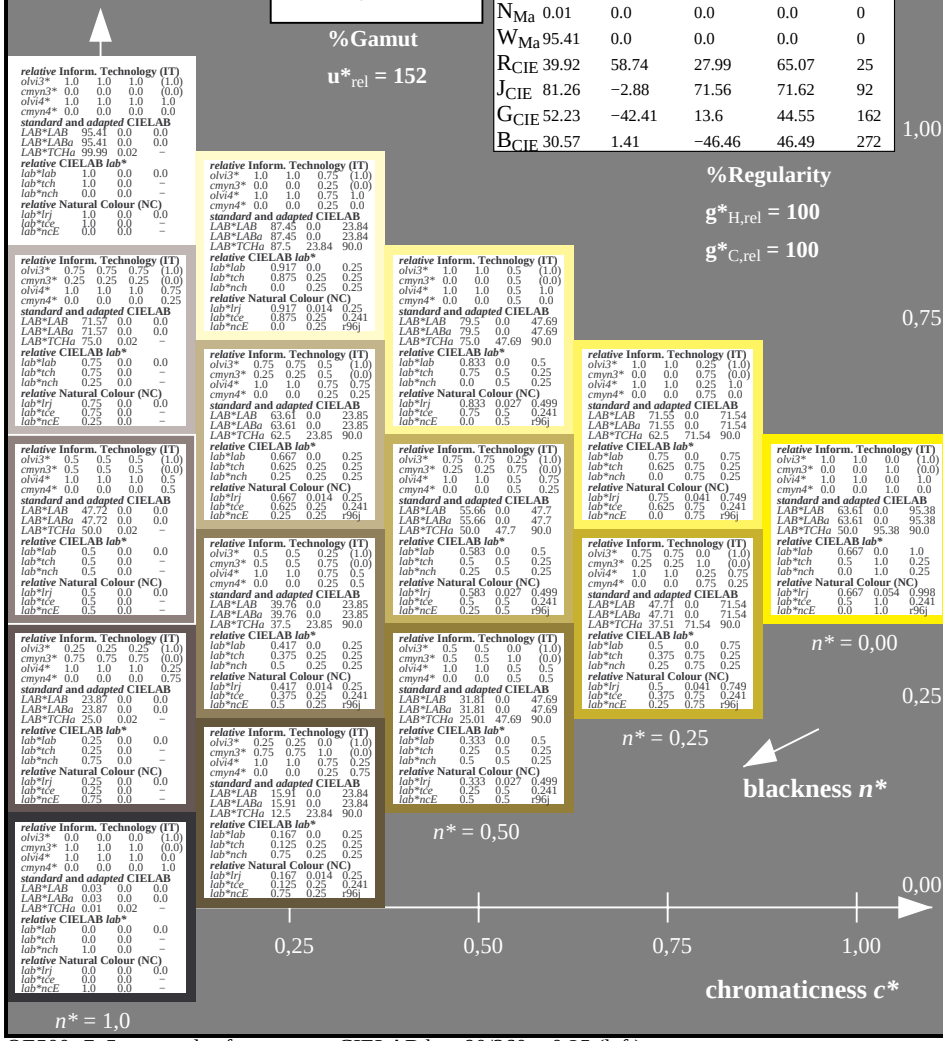
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$

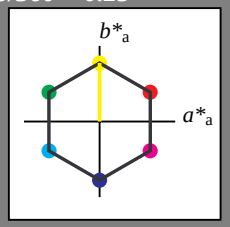
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

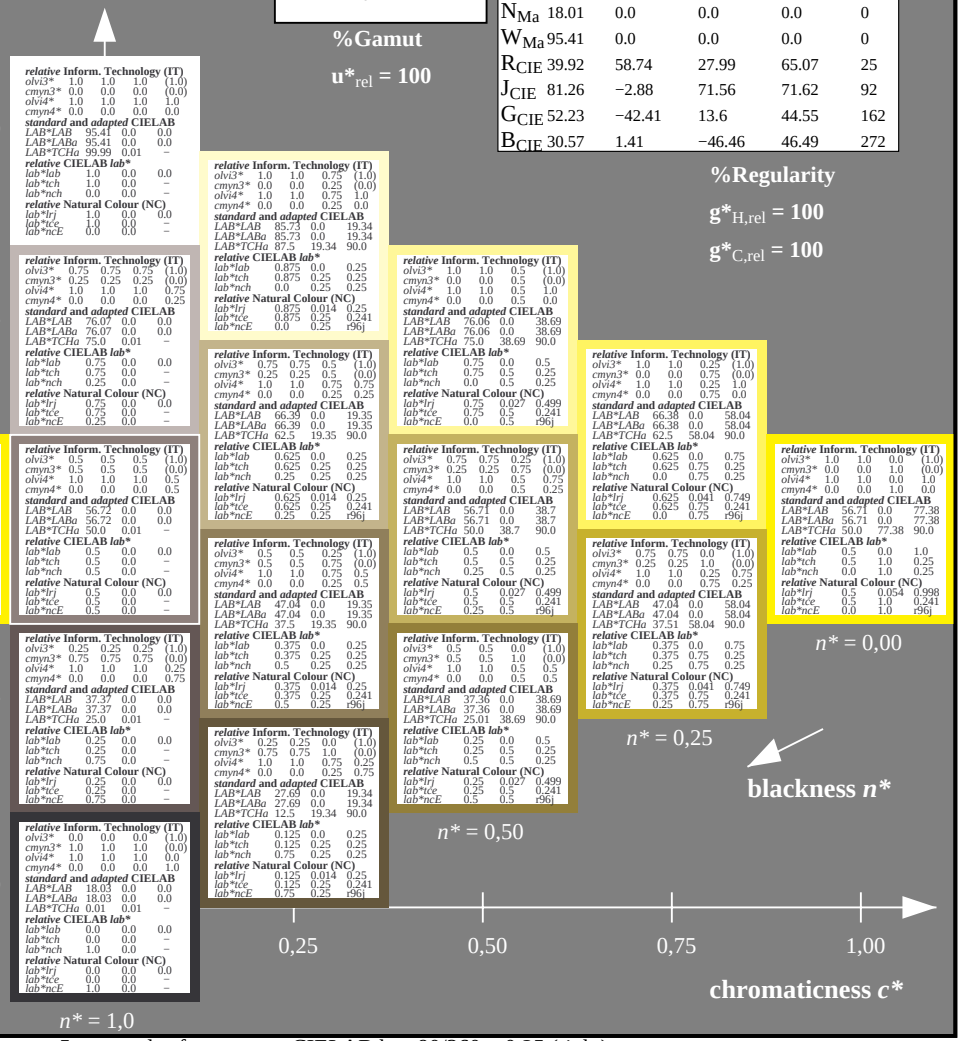
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



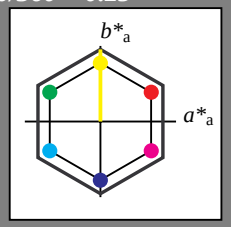
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

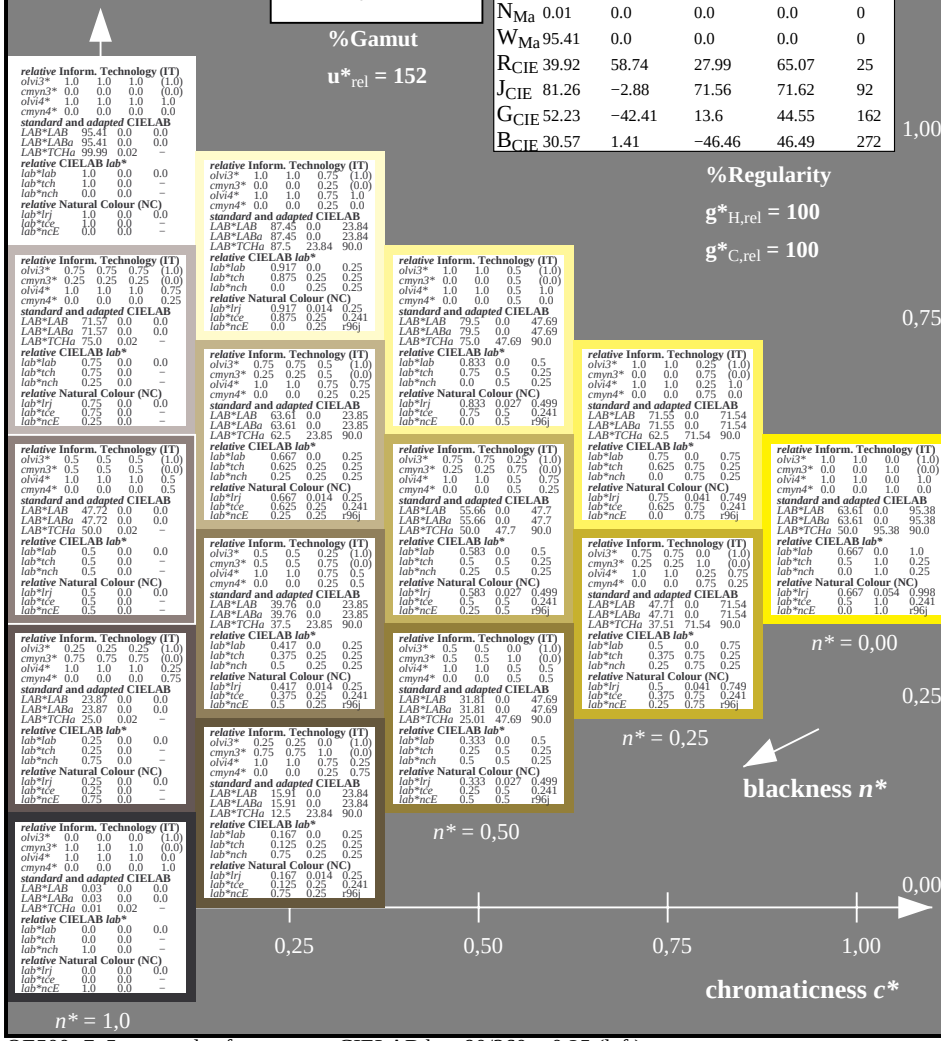
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



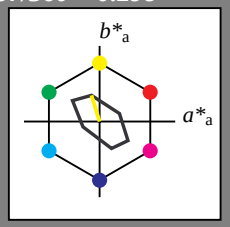
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

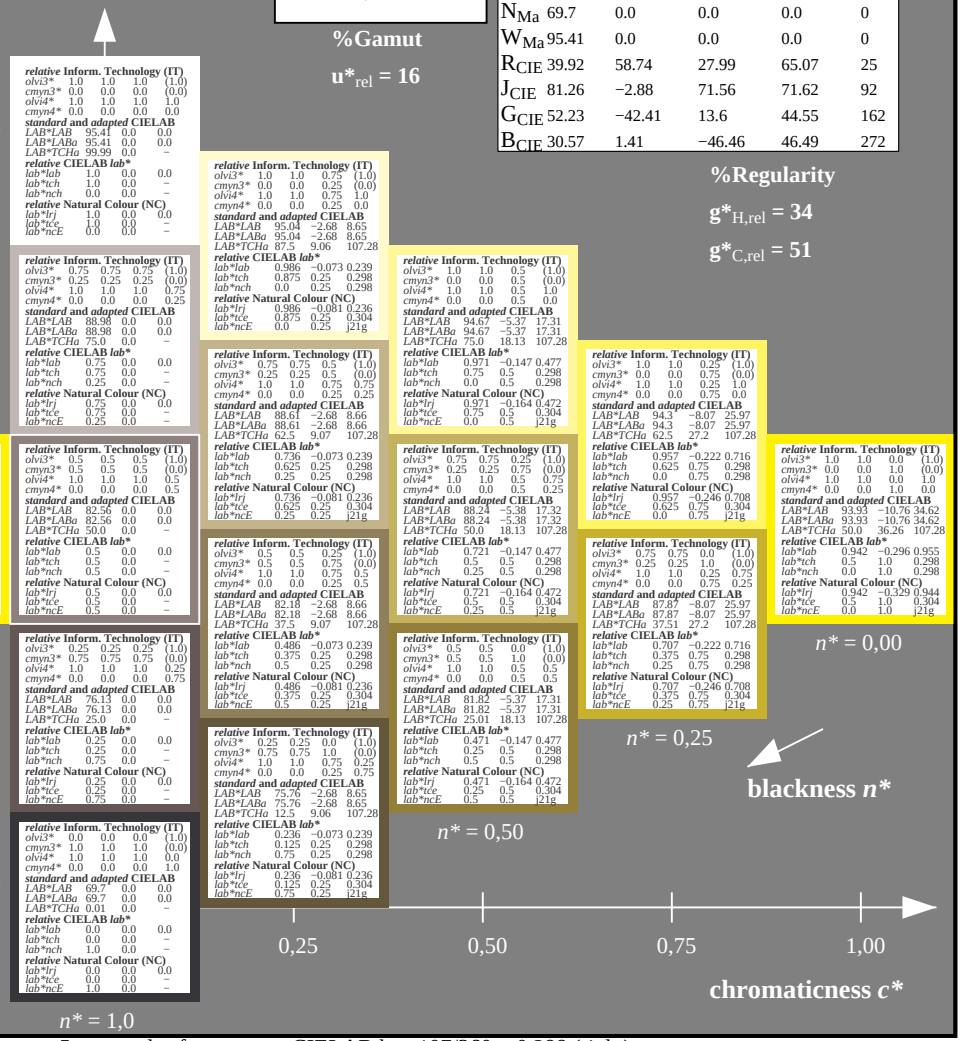
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



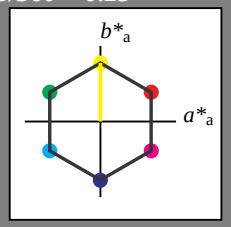
5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

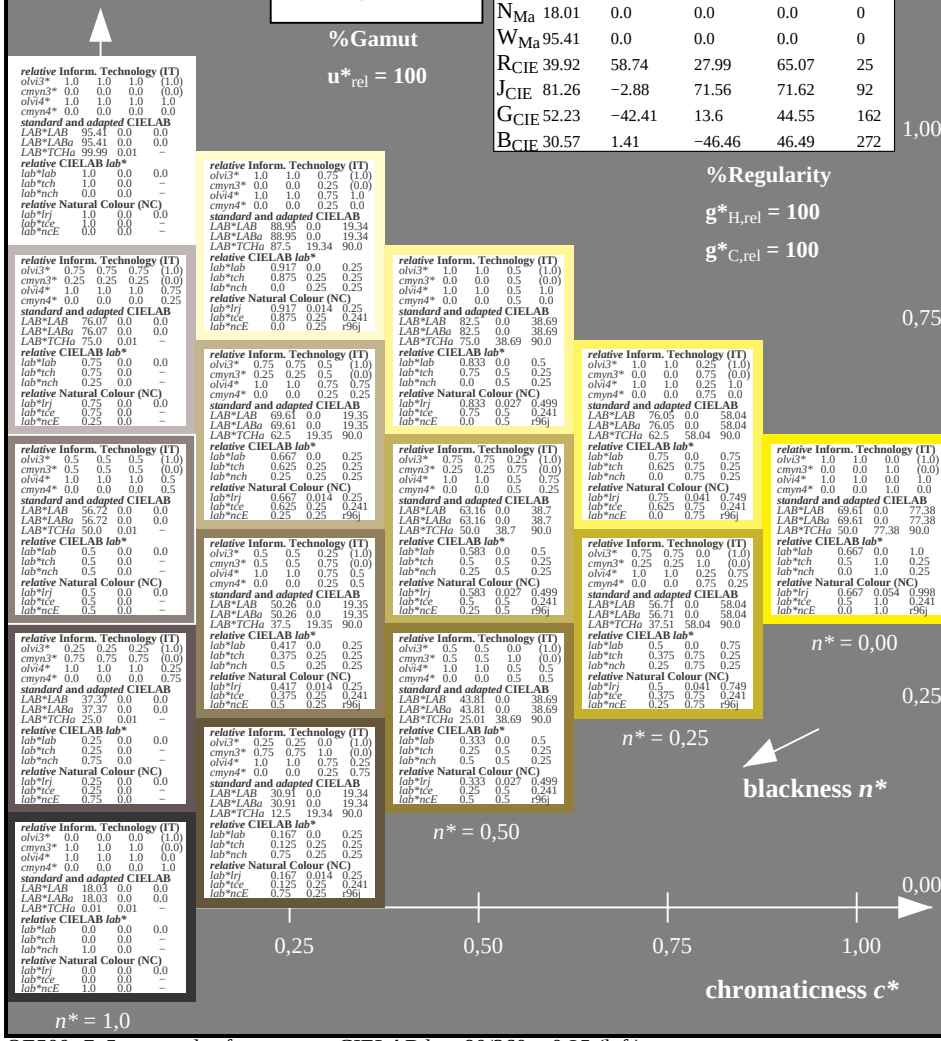
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



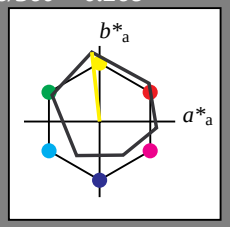
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

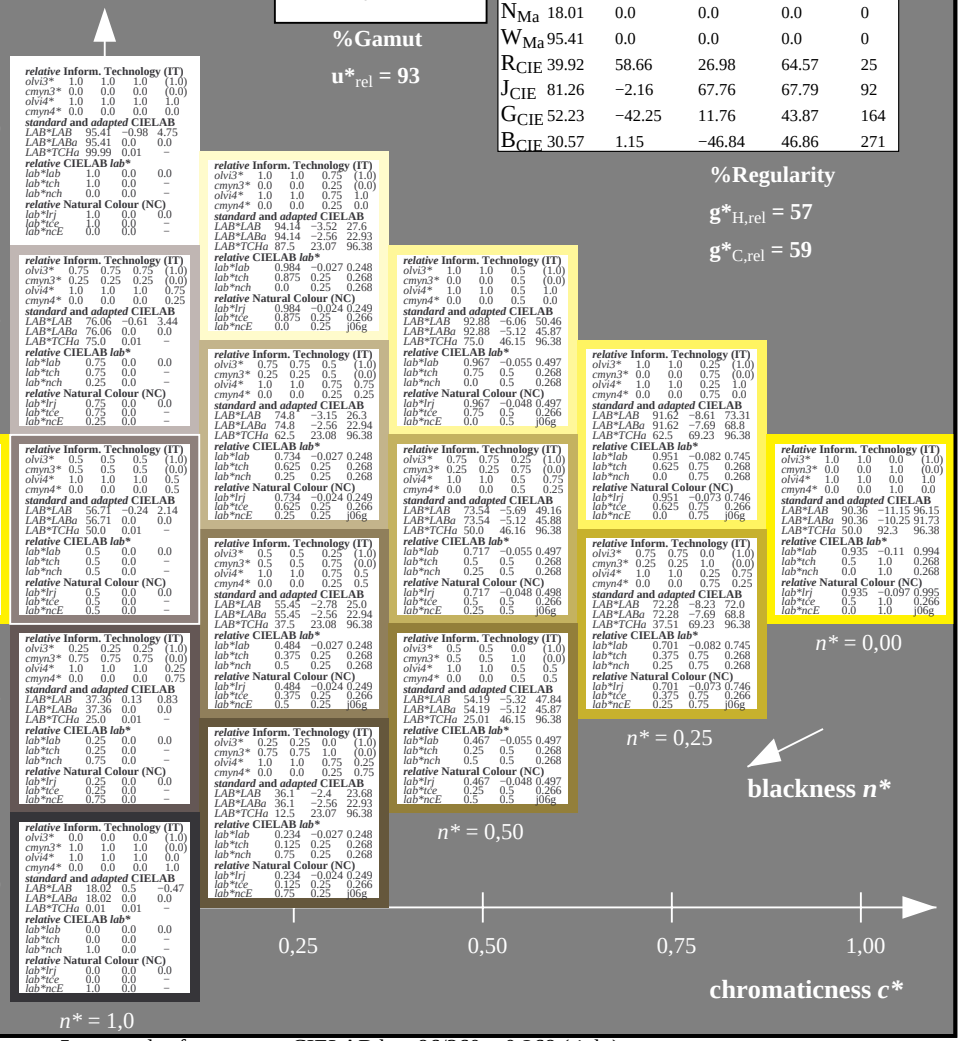
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



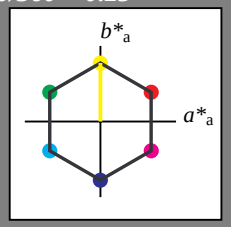
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

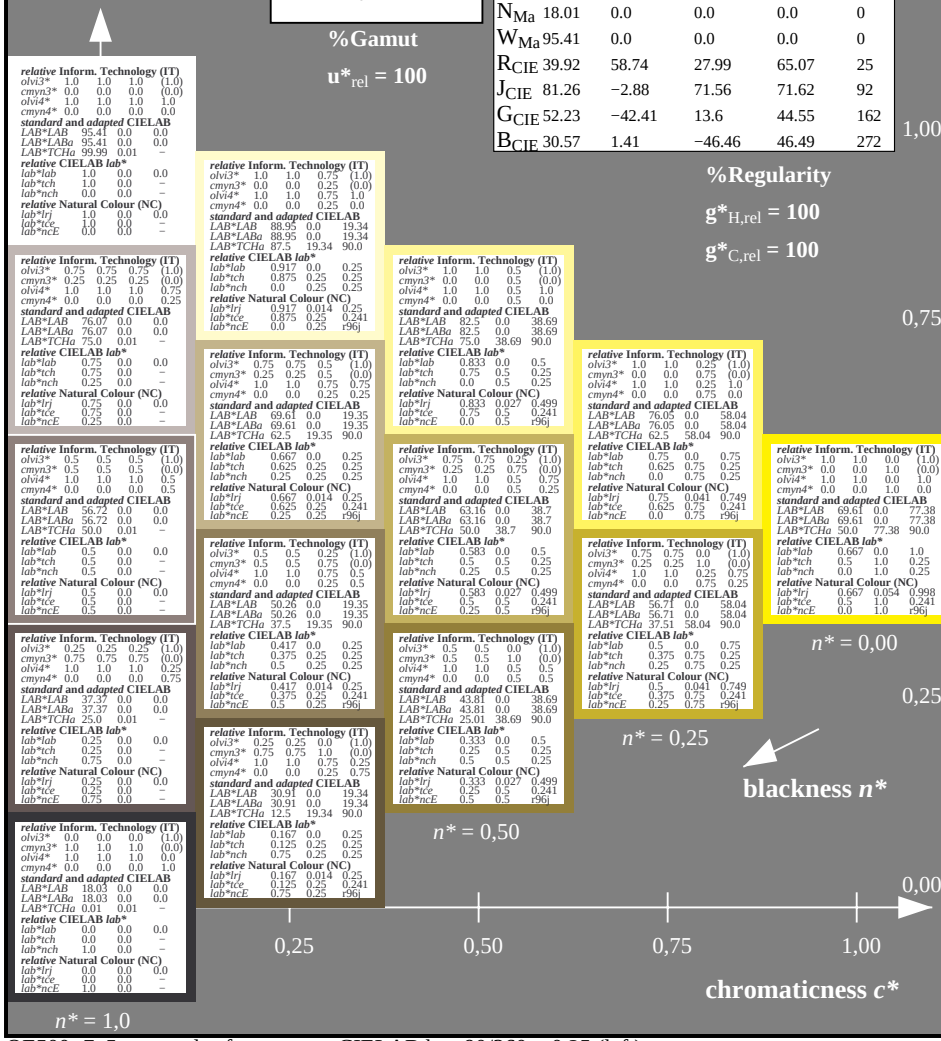
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

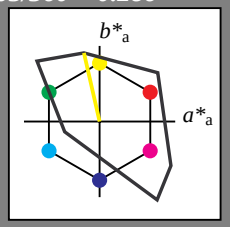


Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

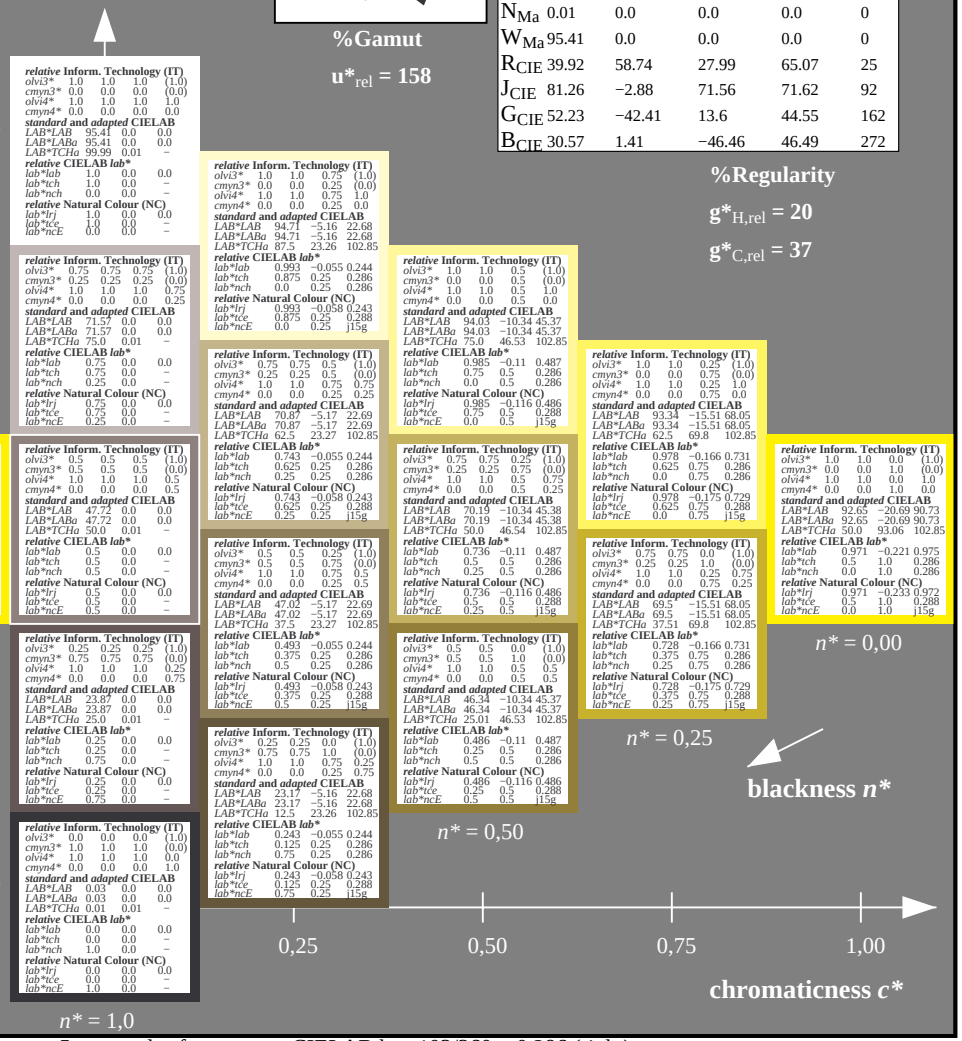
$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

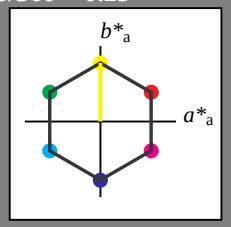
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

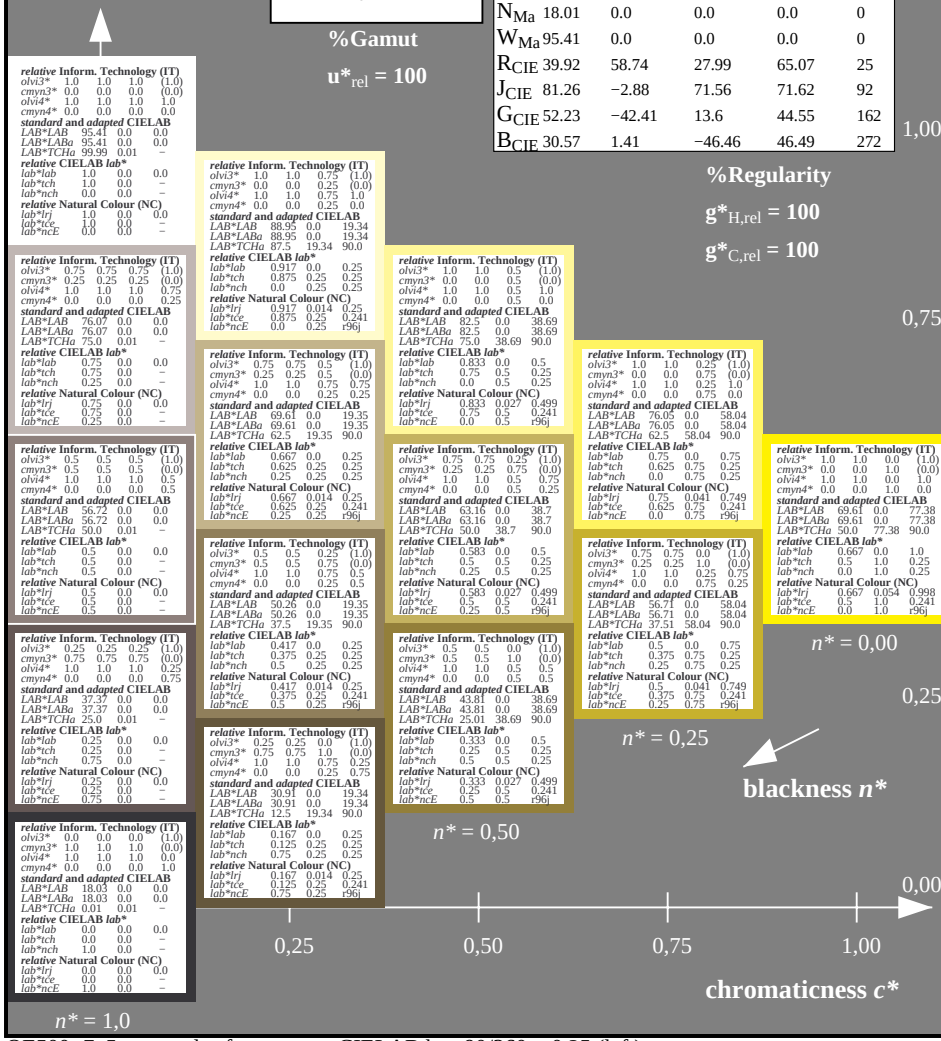
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



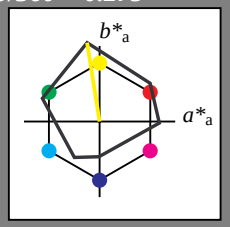
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

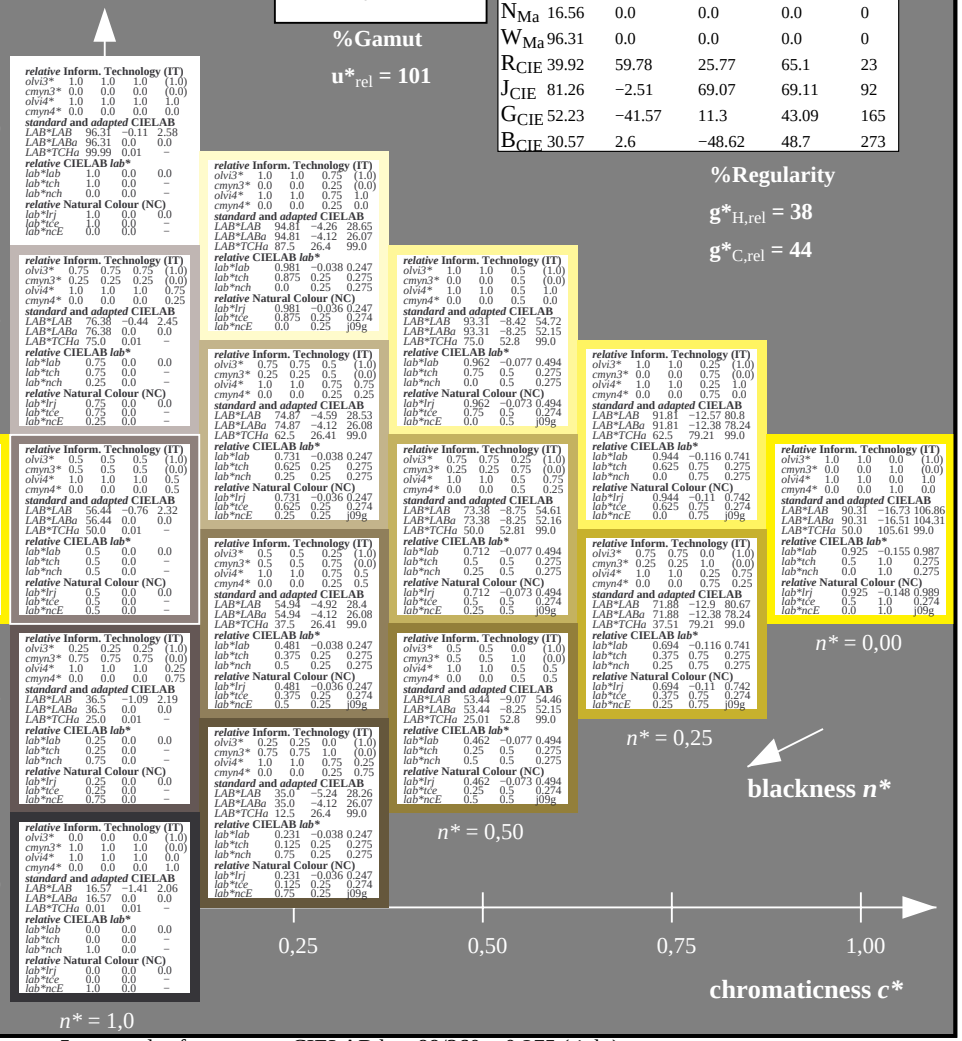
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



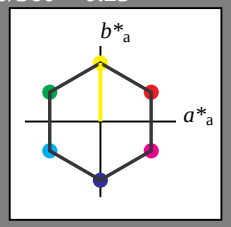
5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

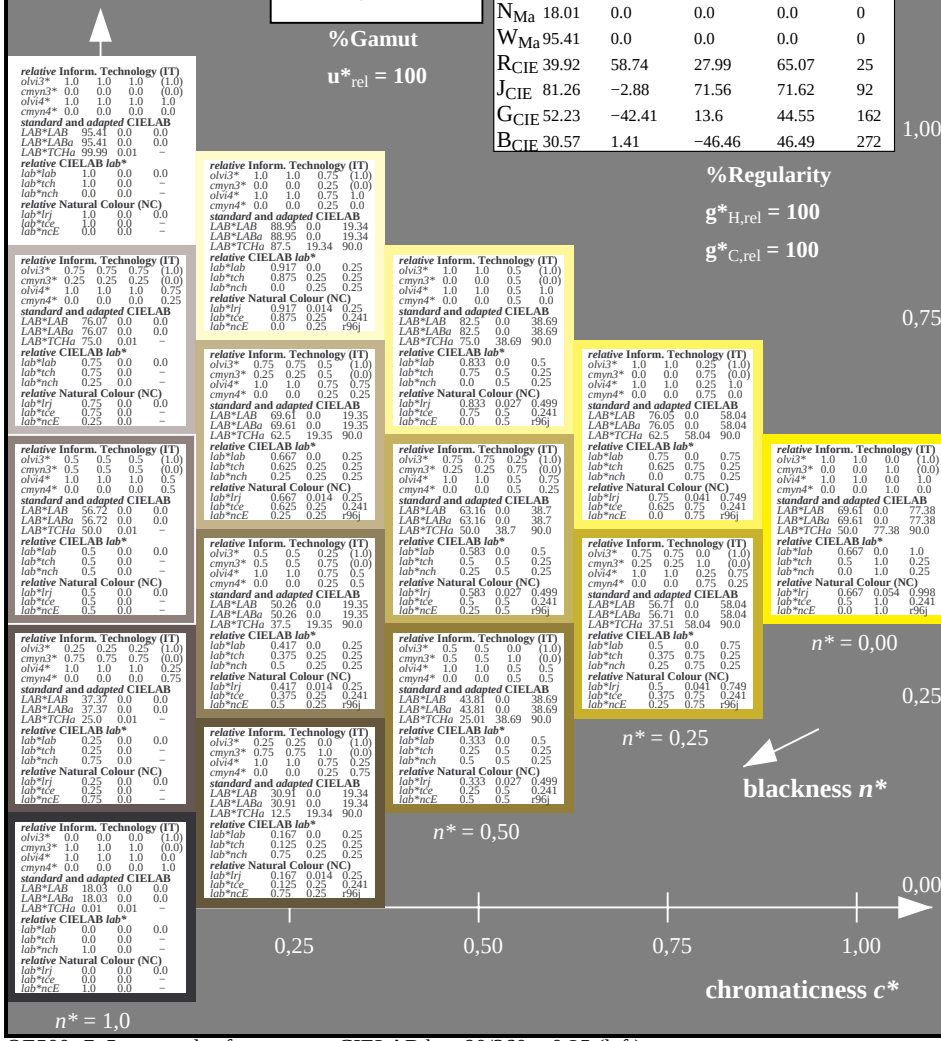
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

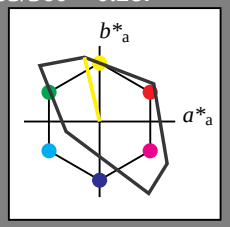


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

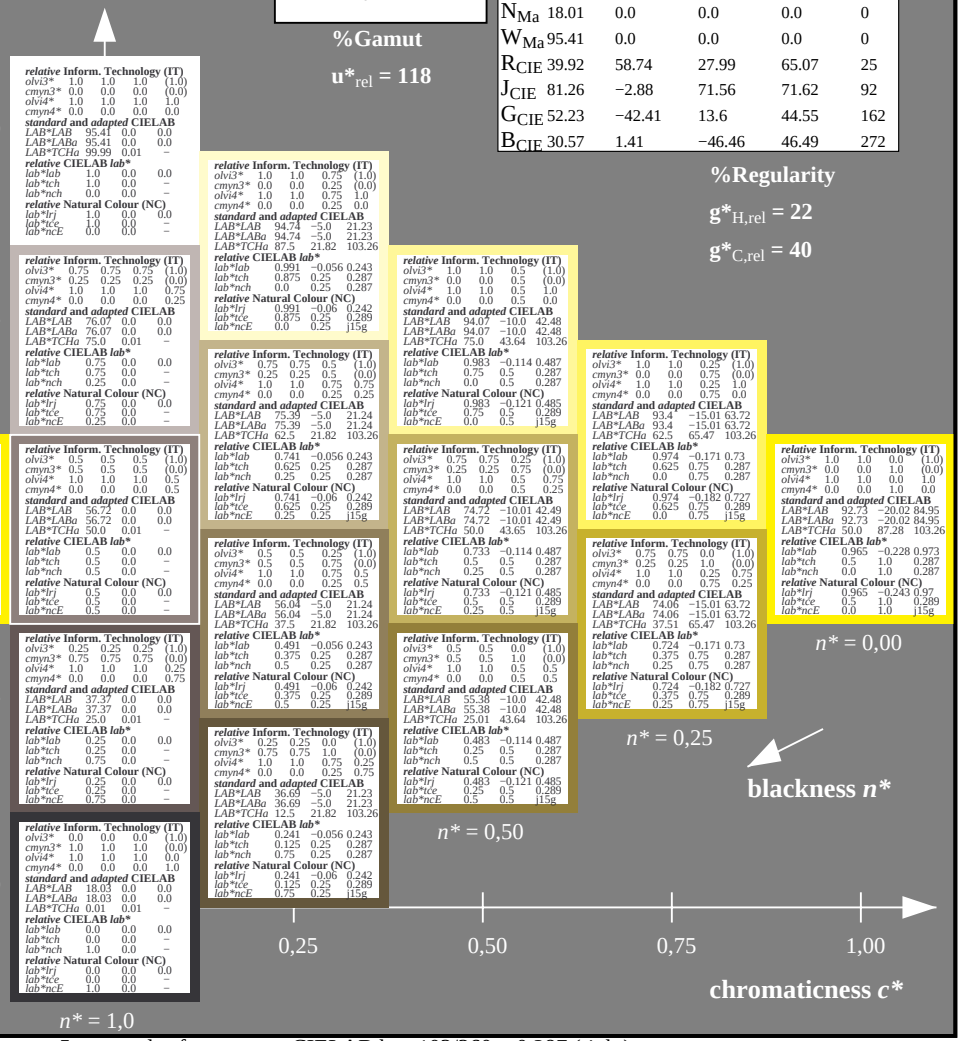
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

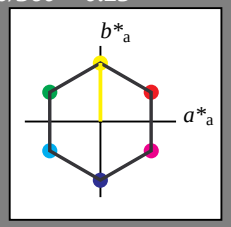
5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

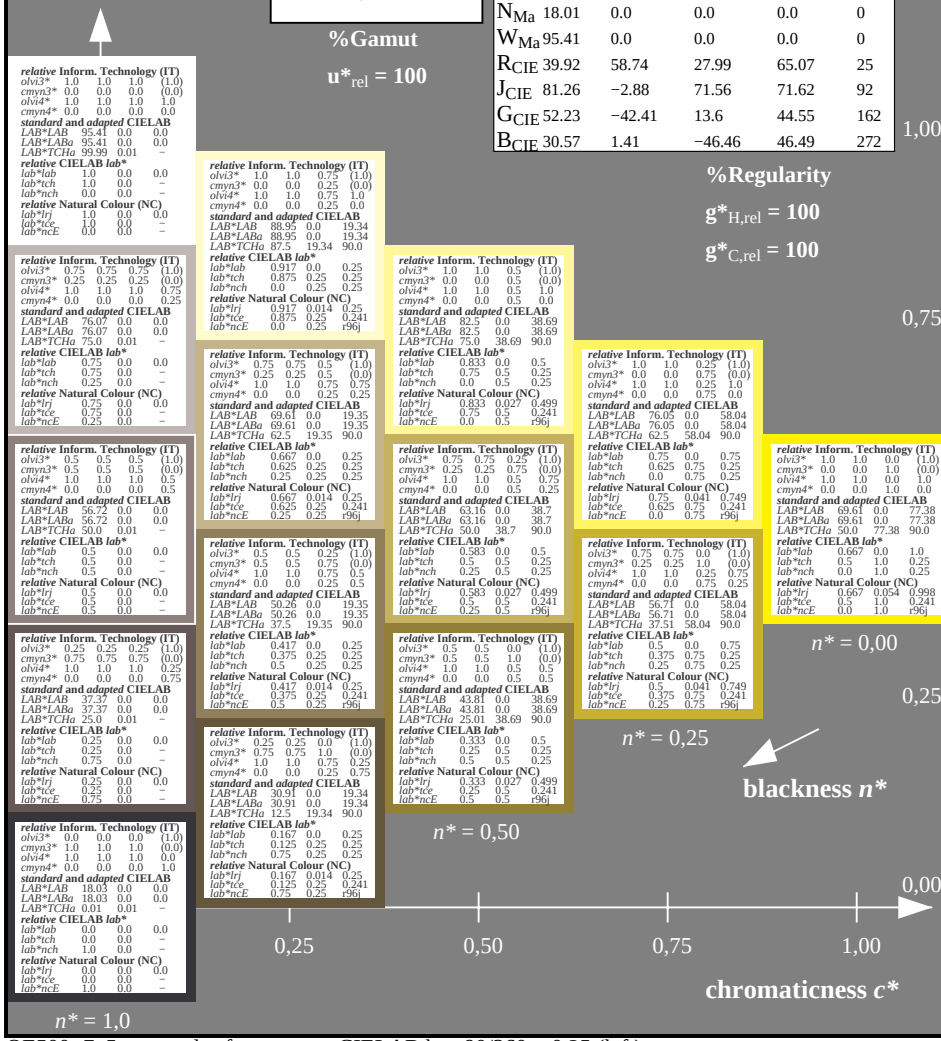
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



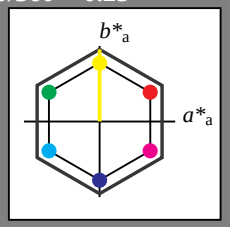
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

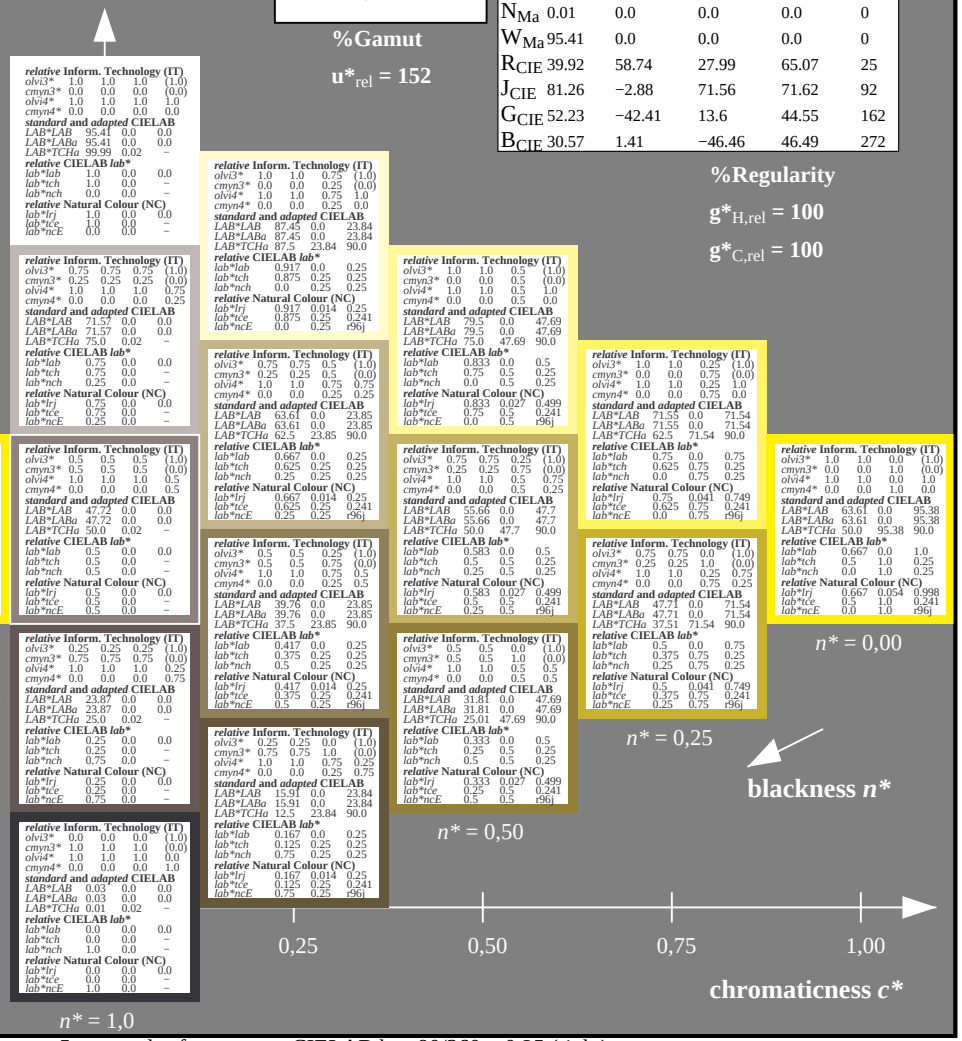
$u^*_{rel} = 152$

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



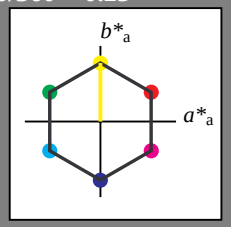
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

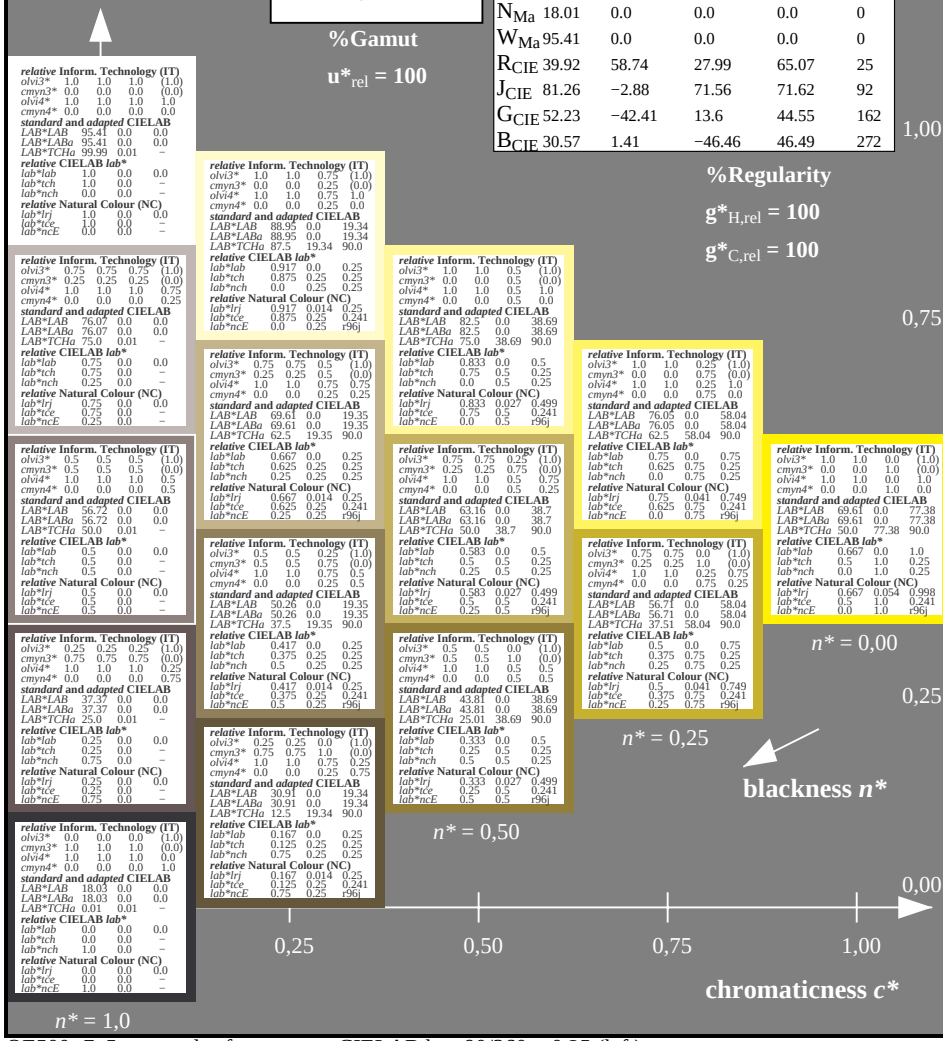
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



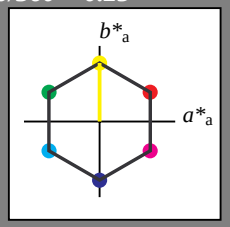
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

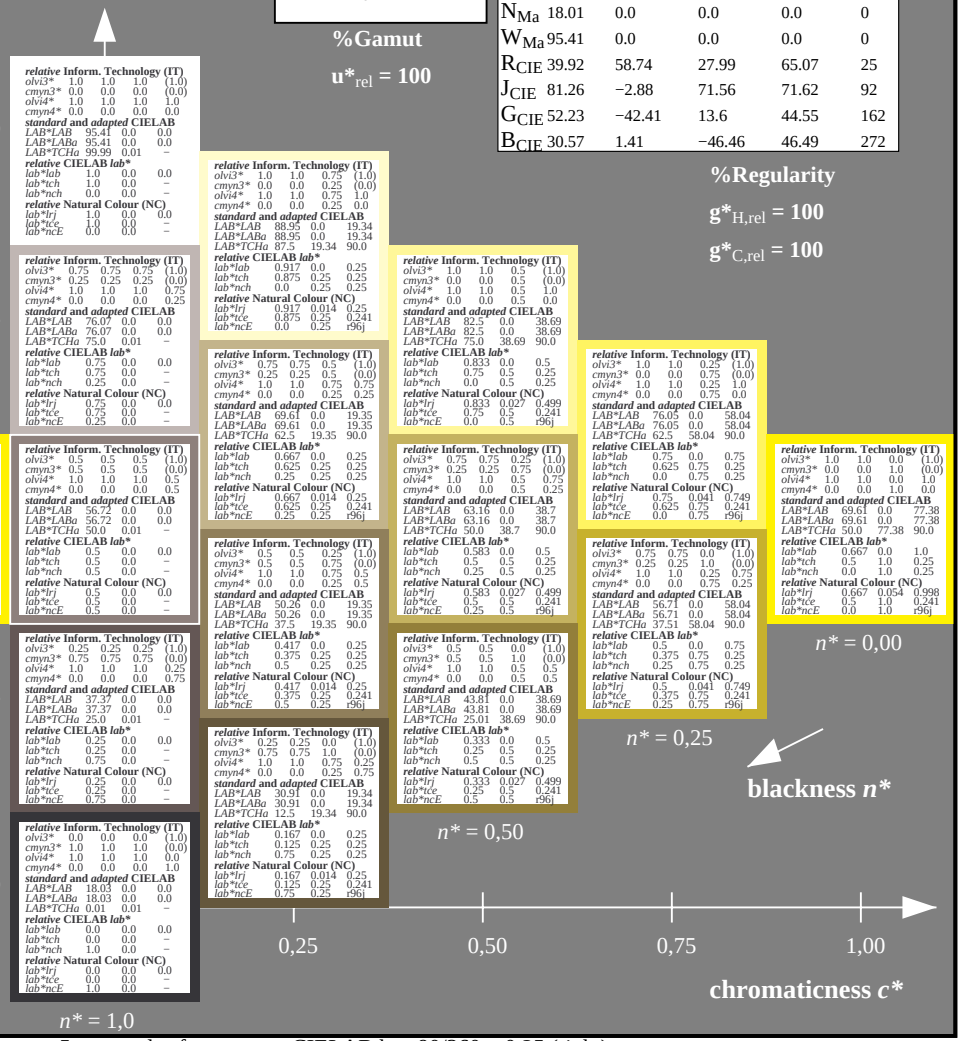
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



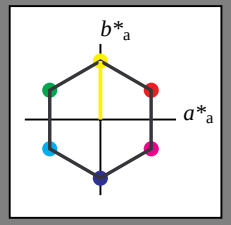
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

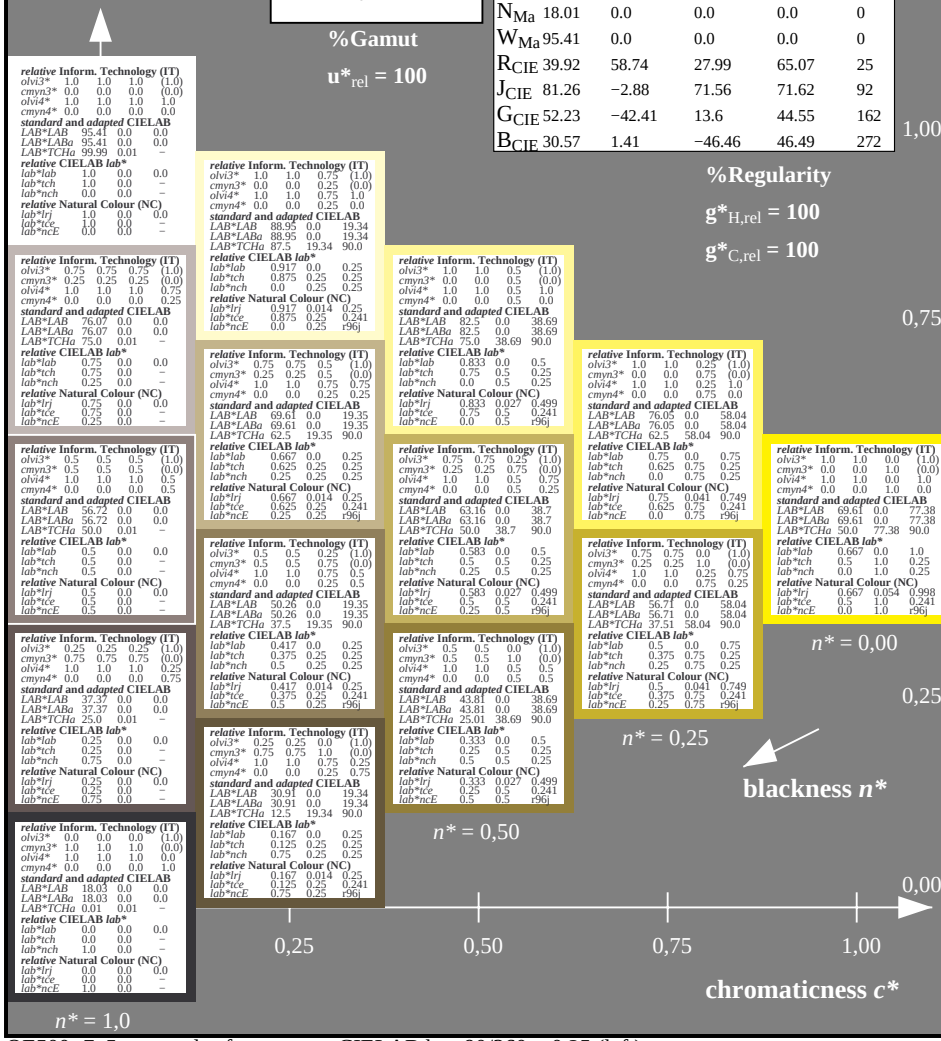
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

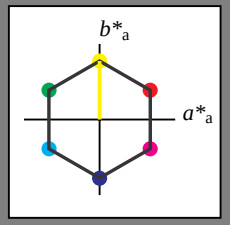


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

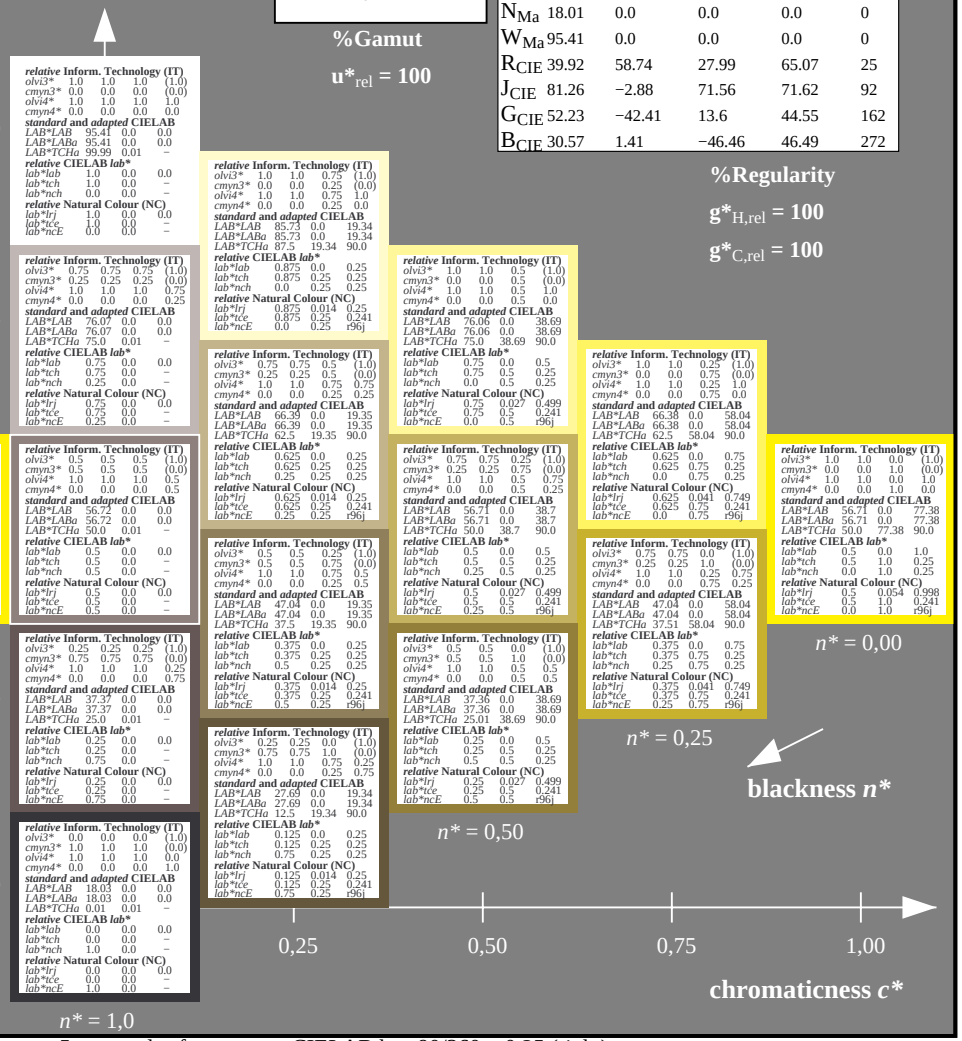
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

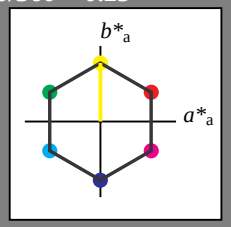
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue *h* = lab*h = 90/360 = 0.25*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

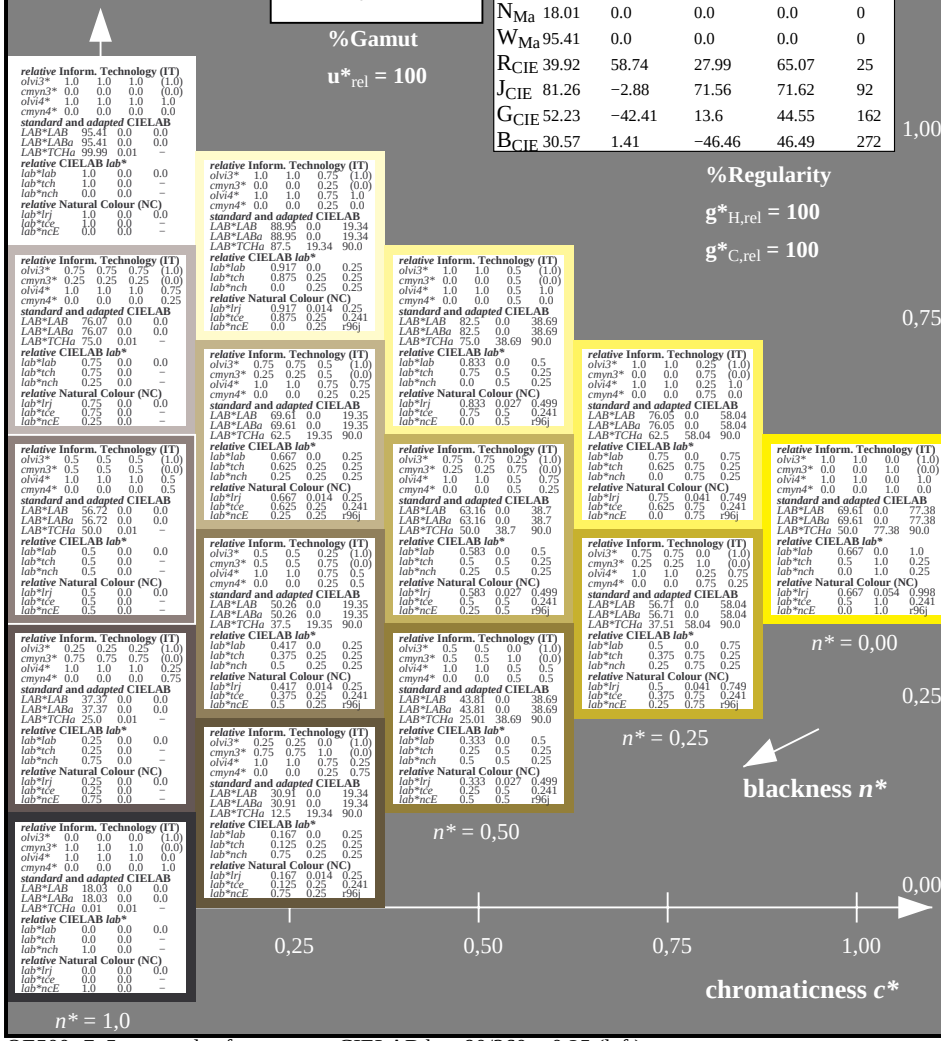
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



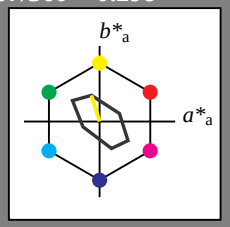
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 107/360 = 0.298*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

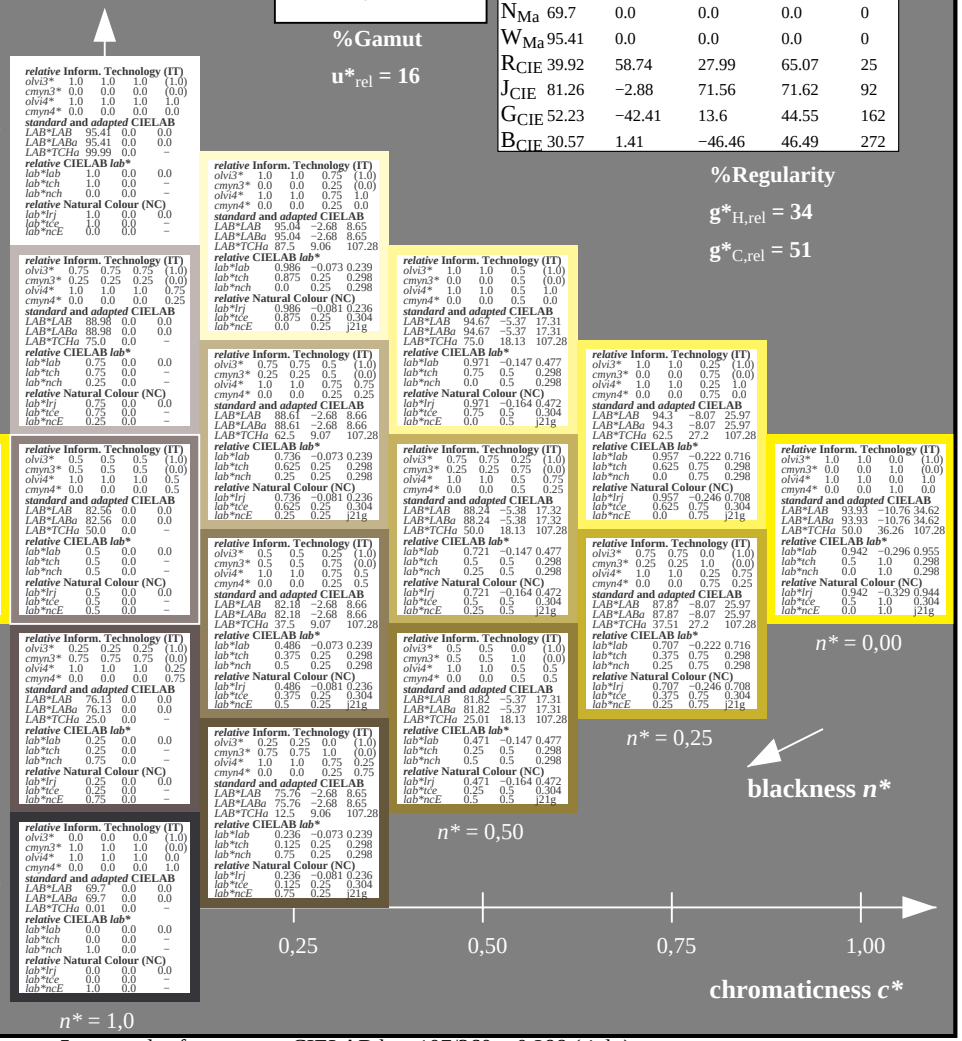
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



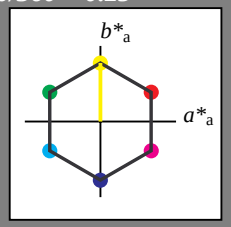
5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

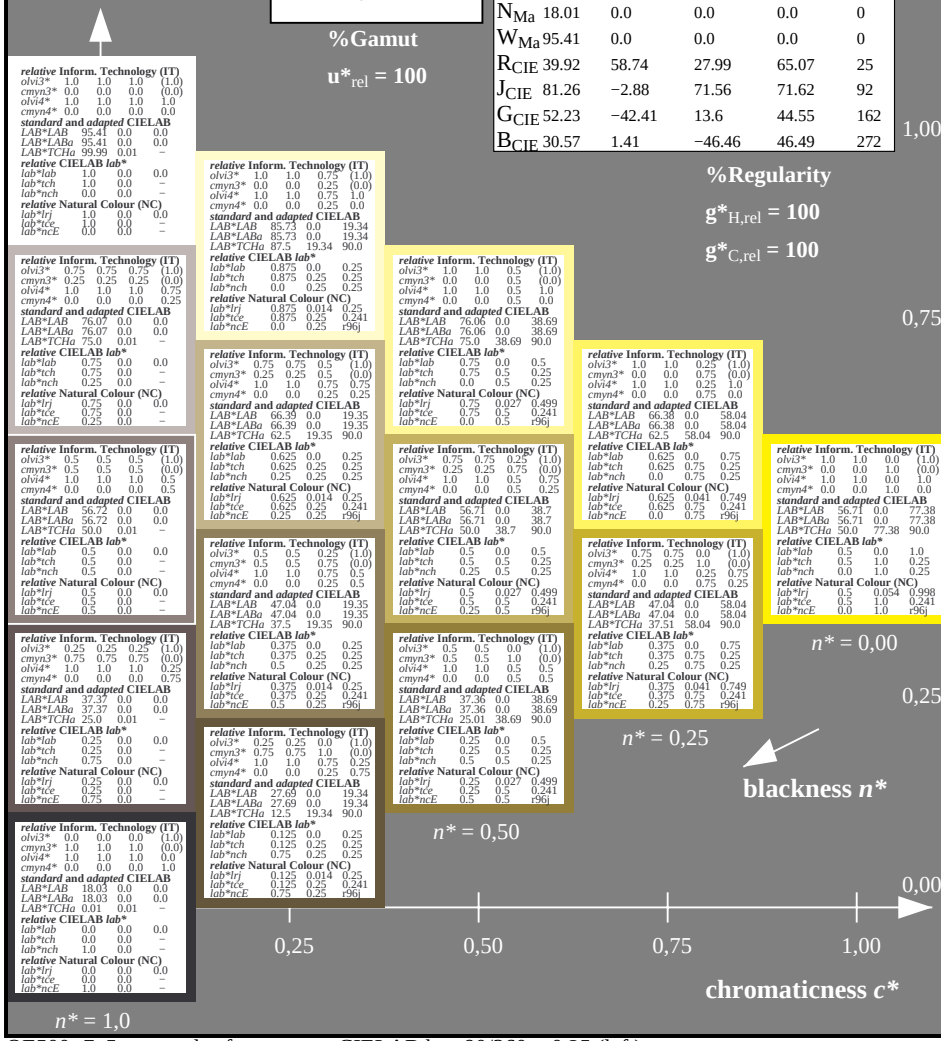
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

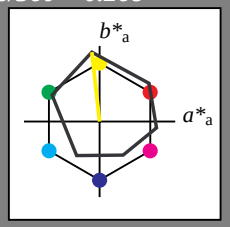


Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

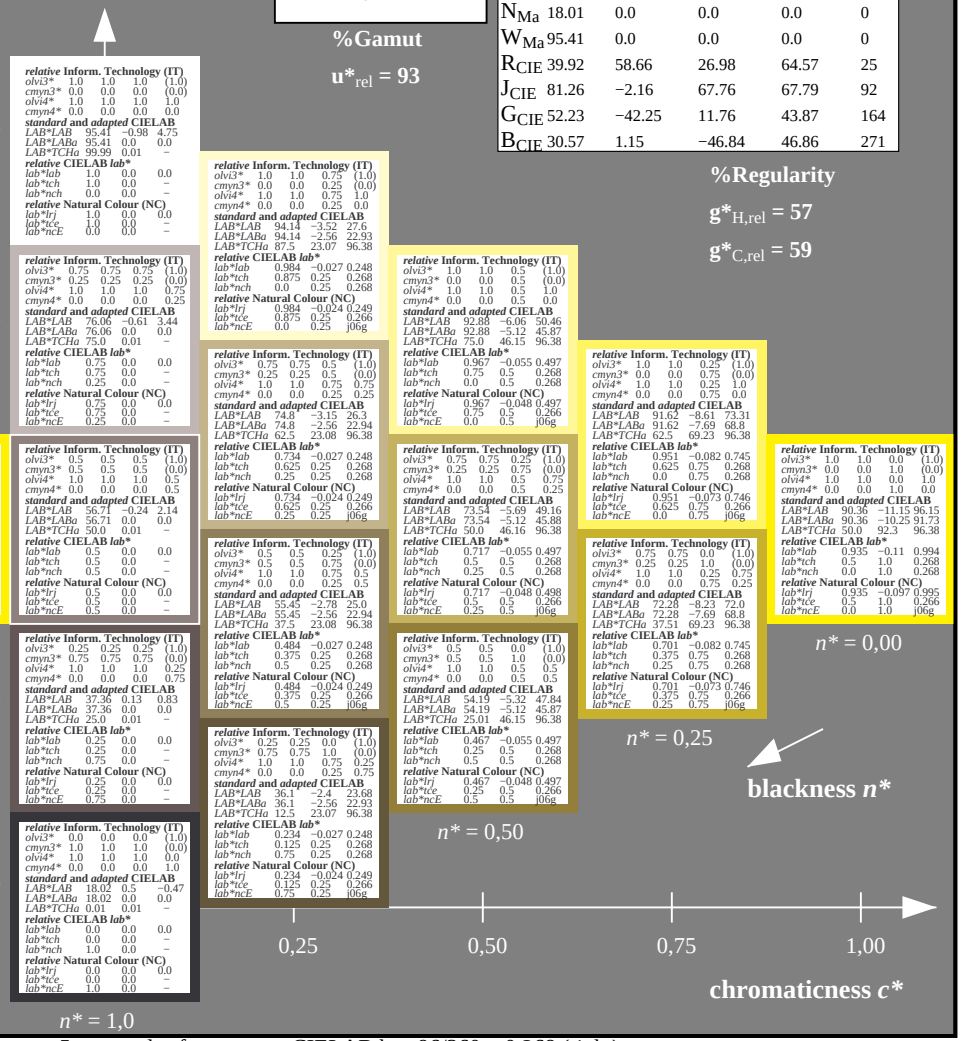
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

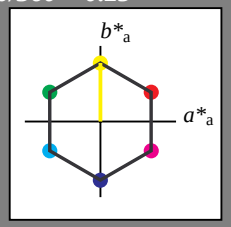
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

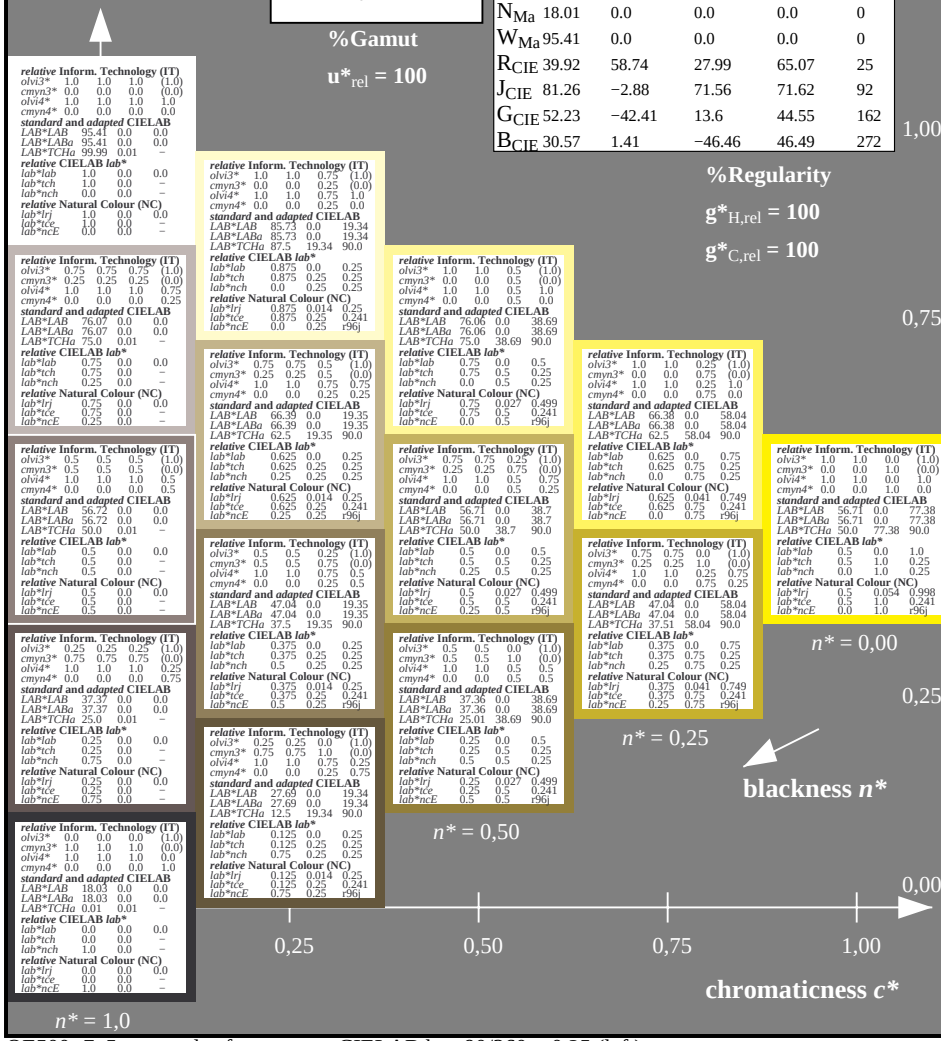
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



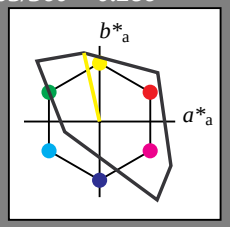
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

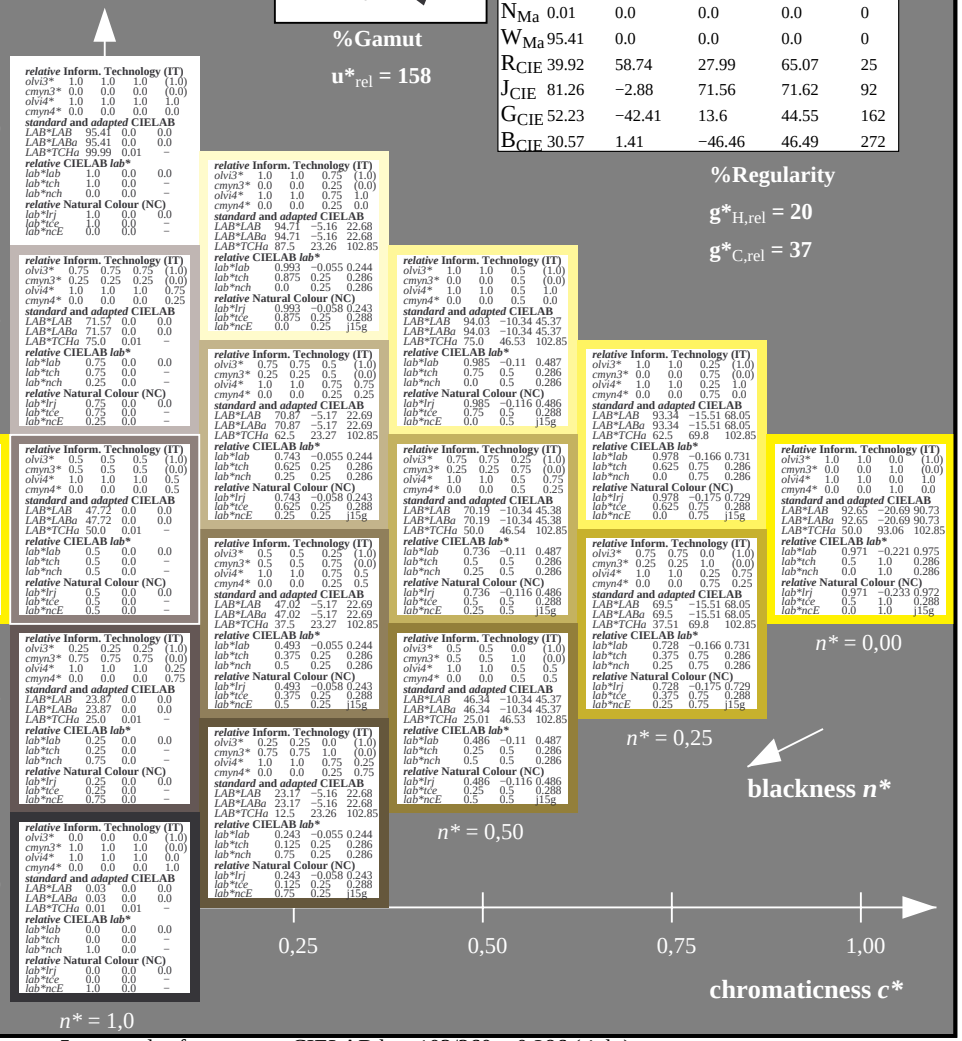
$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



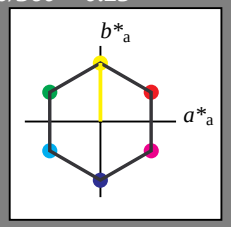
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

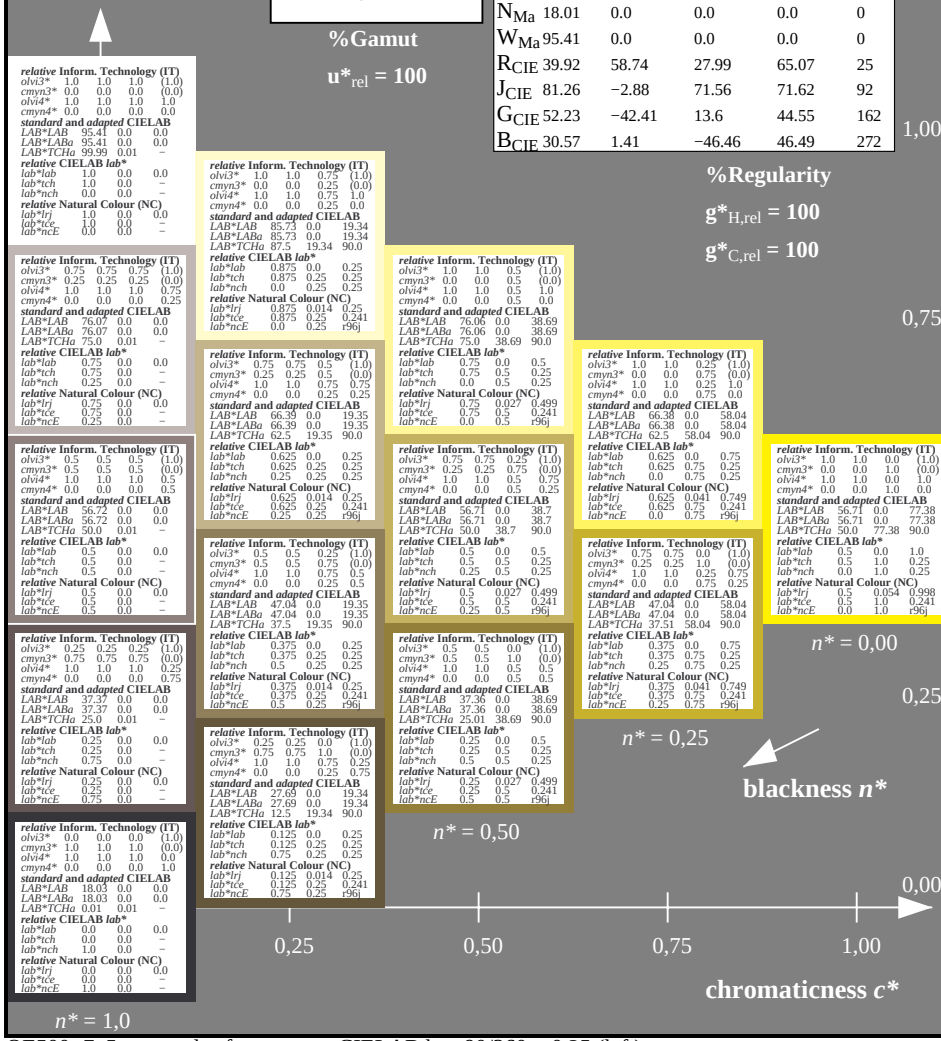
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



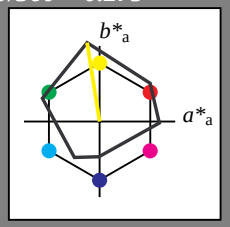
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 99/360 = 0.275$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

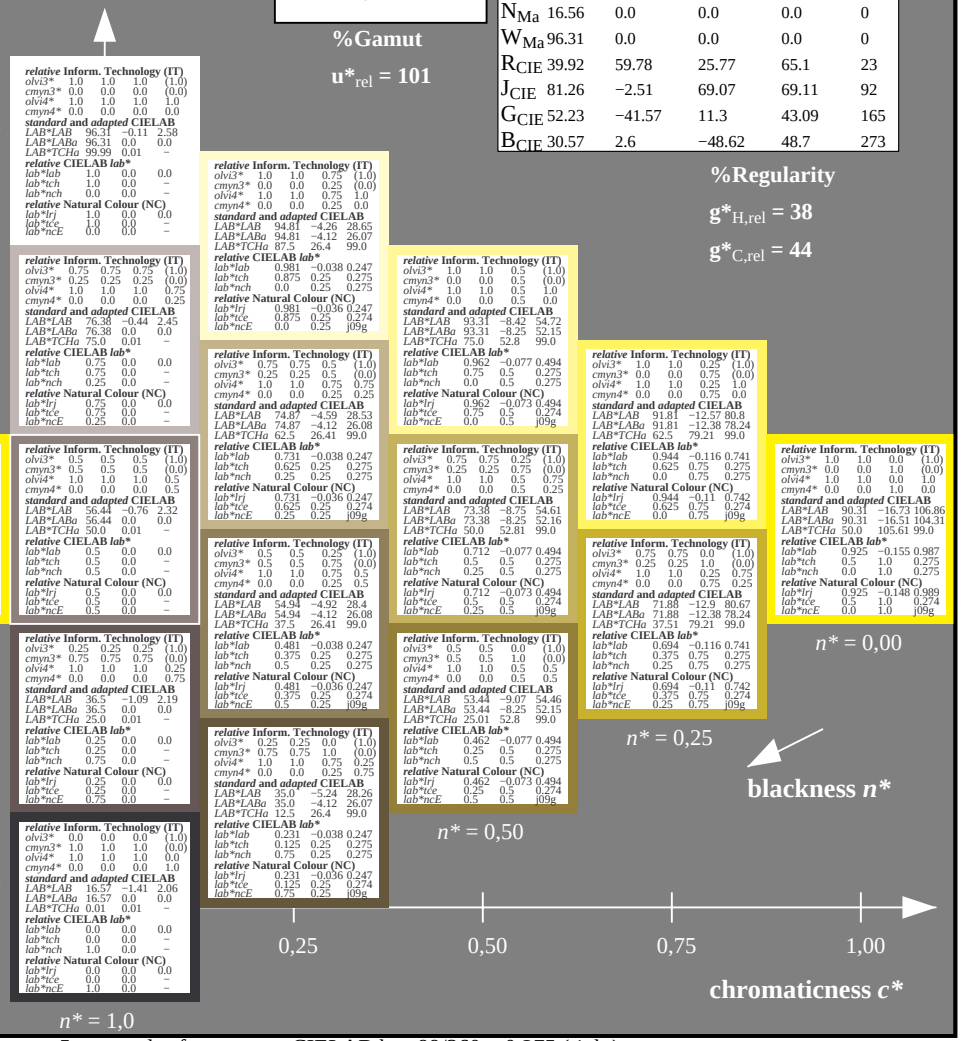
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



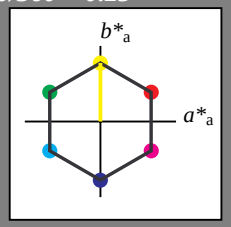
5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

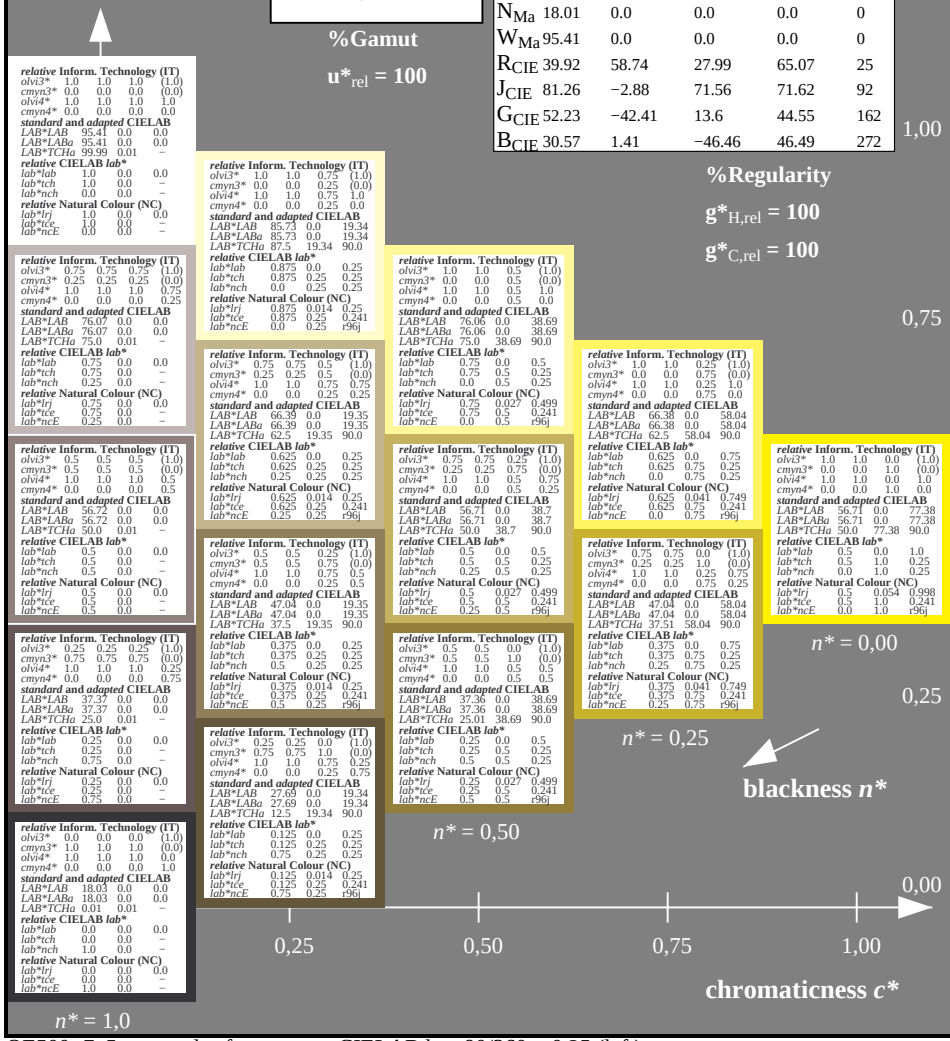
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



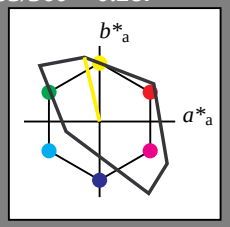
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

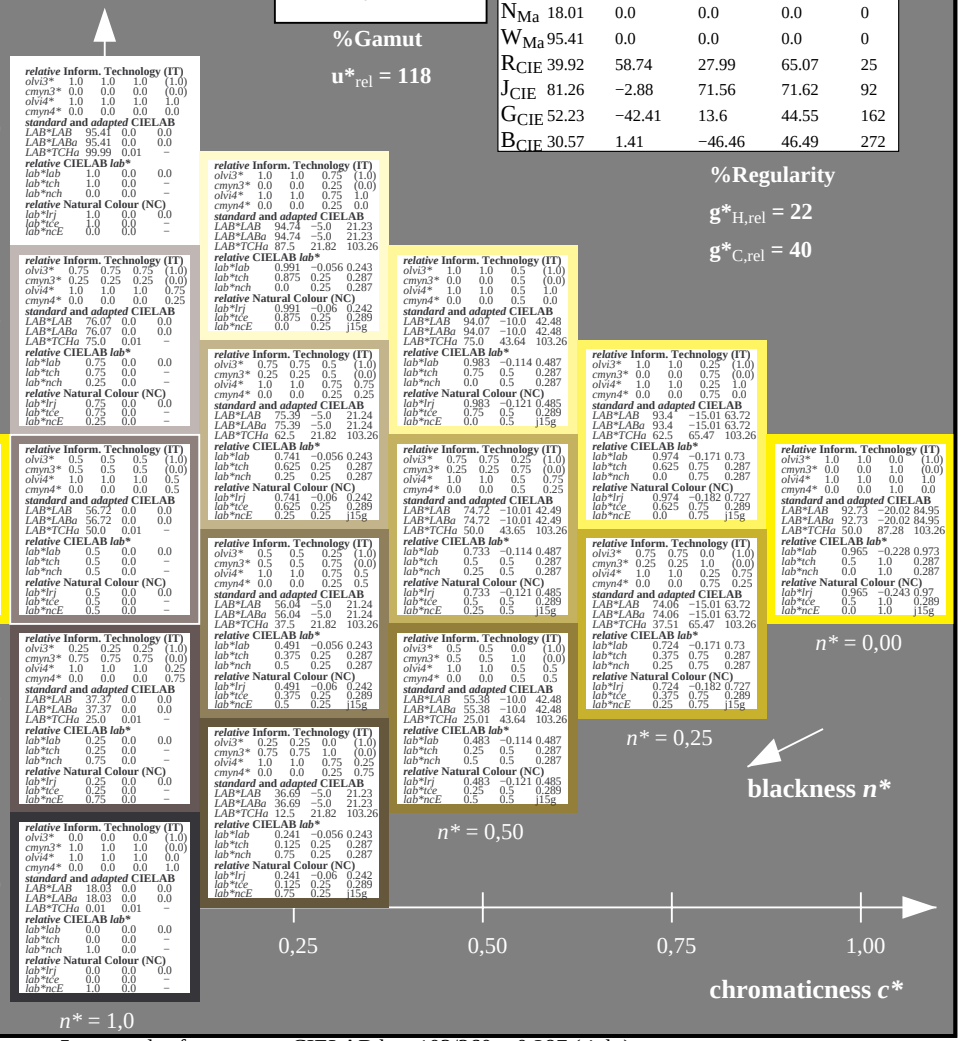
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



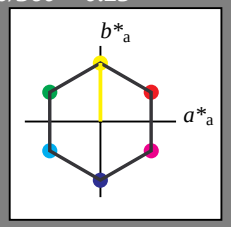
5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

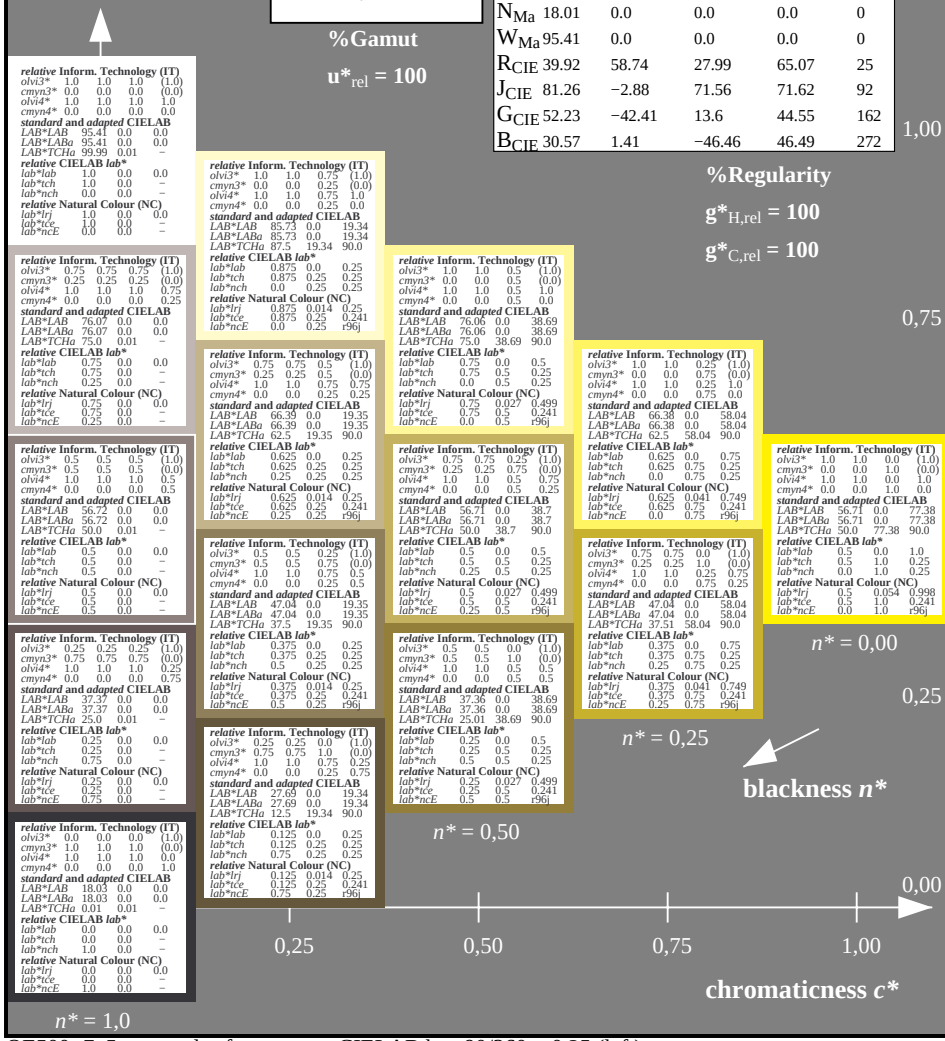
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



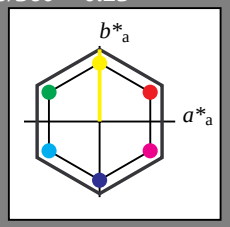
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

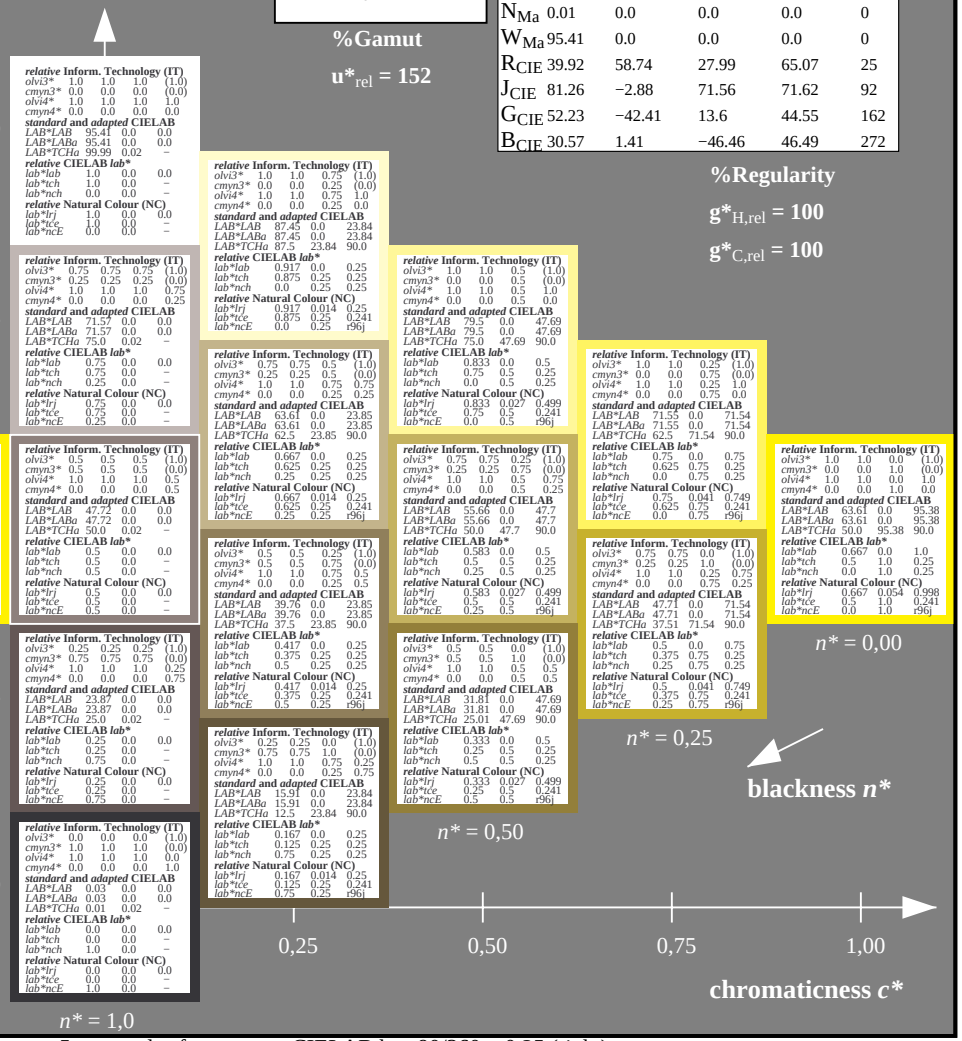
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



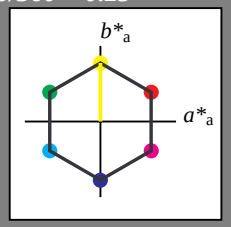
5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

0,25 0,50 0,75 1,00

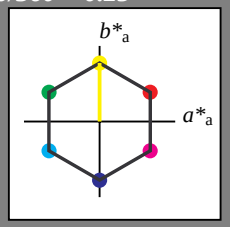
chromaticness c^*

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

blackness n^*

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

0,25 0,50 0,75 1,00

chromaticness c^*

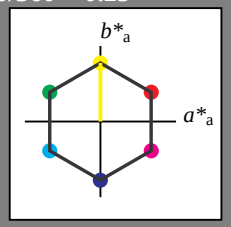
OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

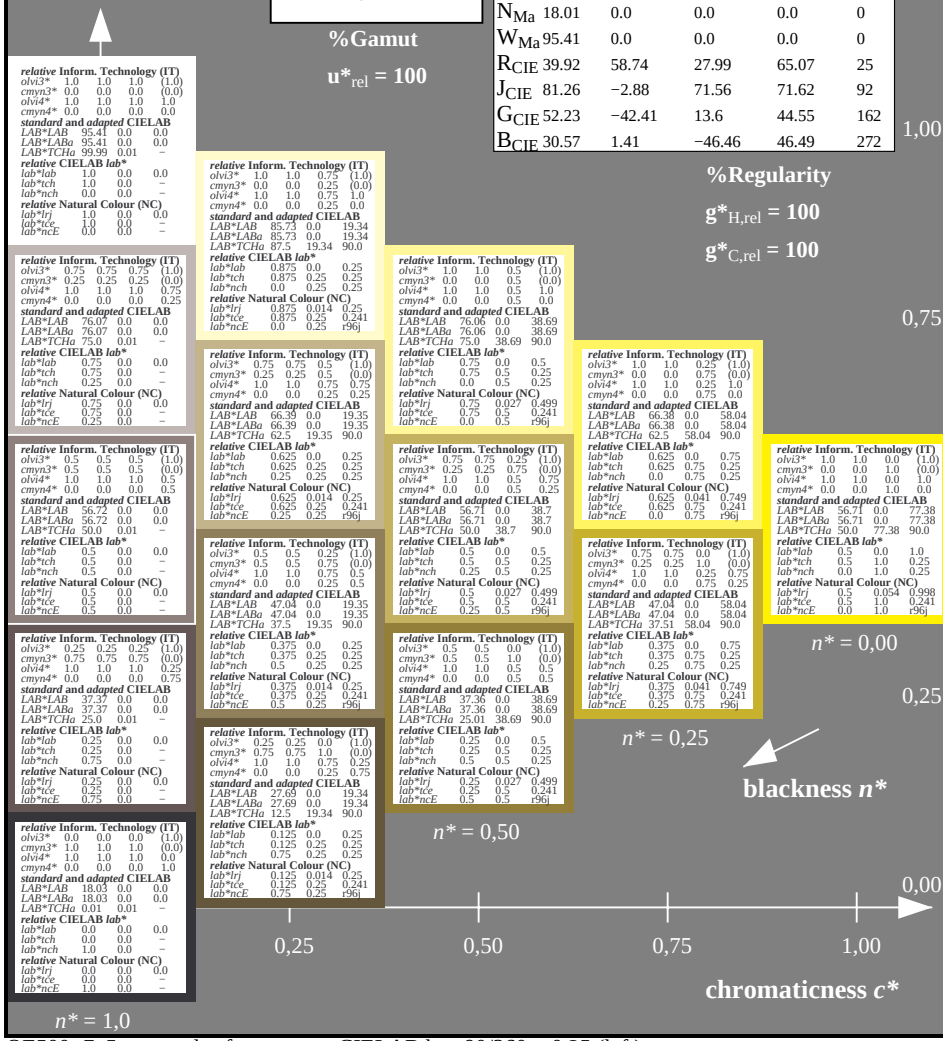
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

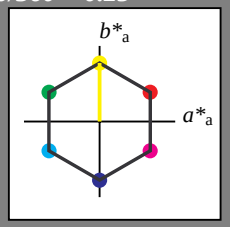
$g^*_{C,rel} = 100$



Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

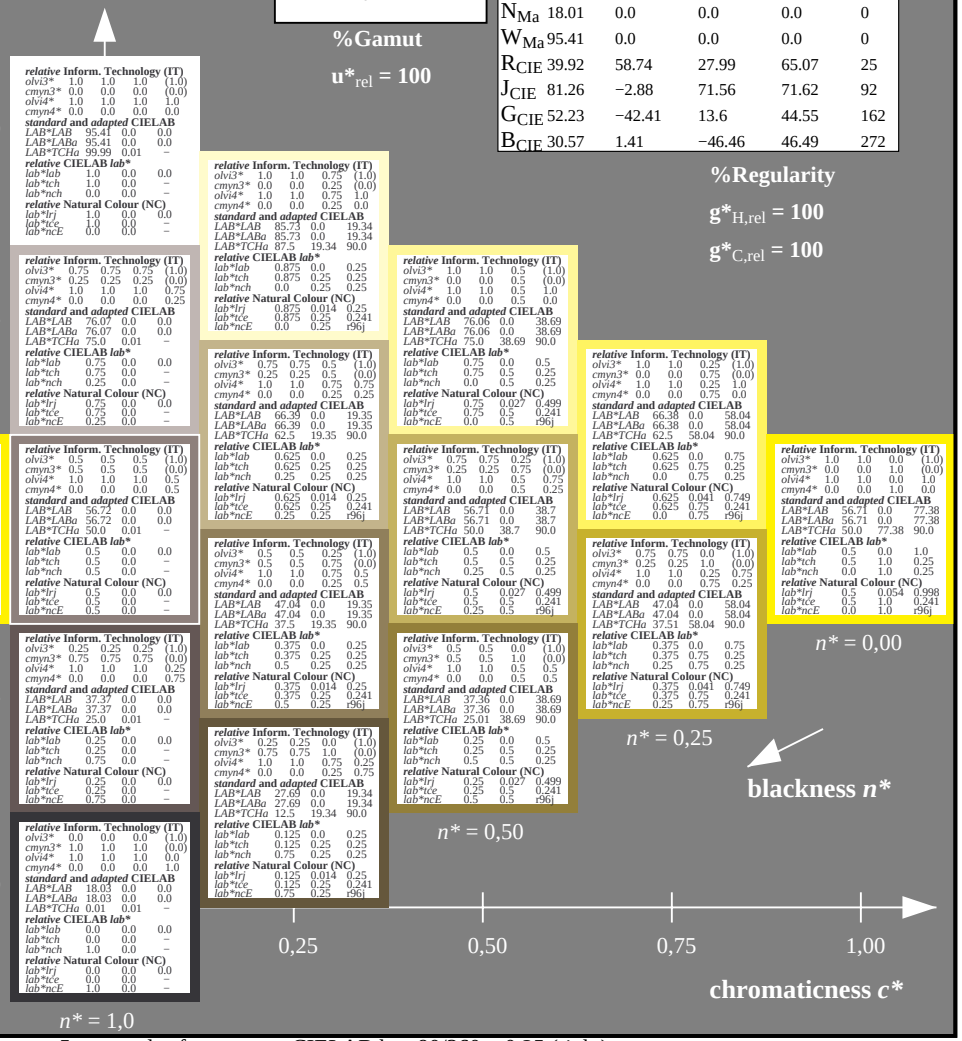
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$

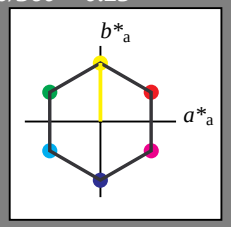
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

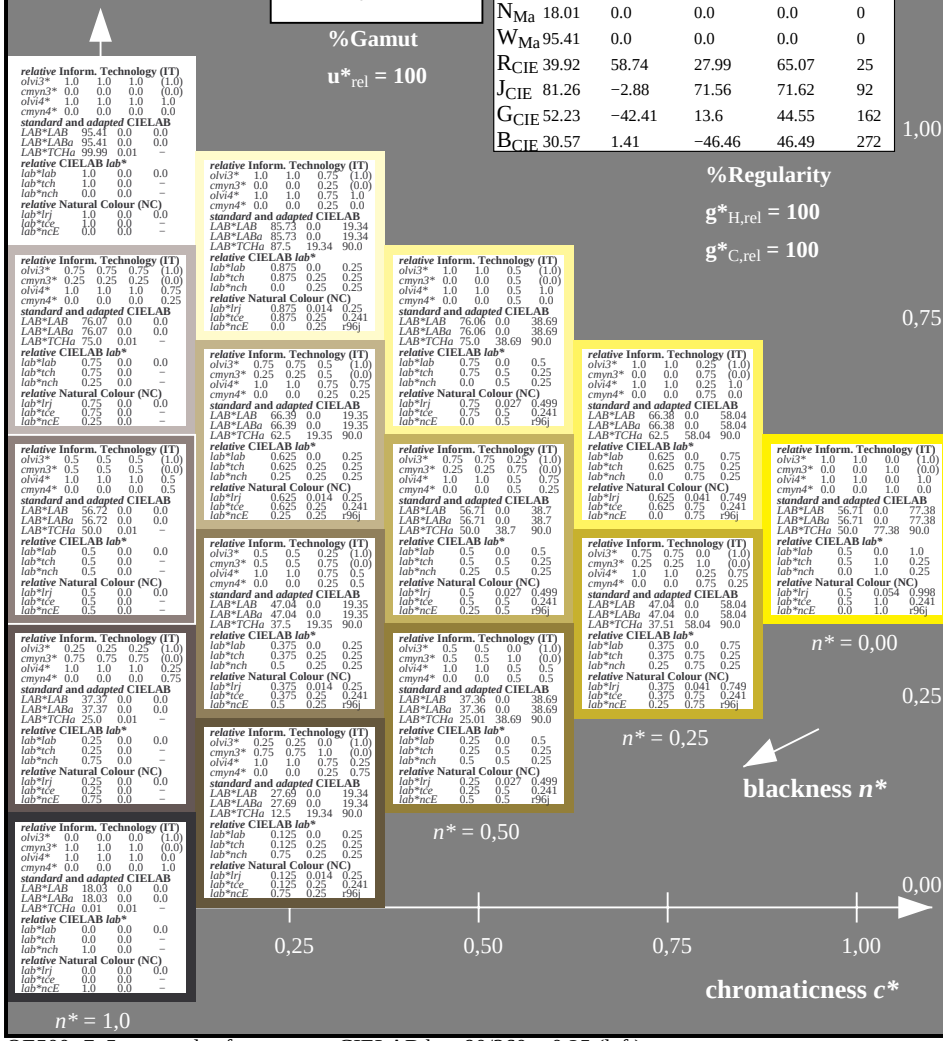
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$

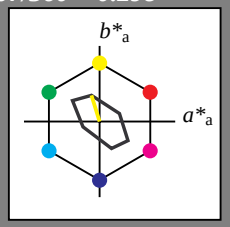
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

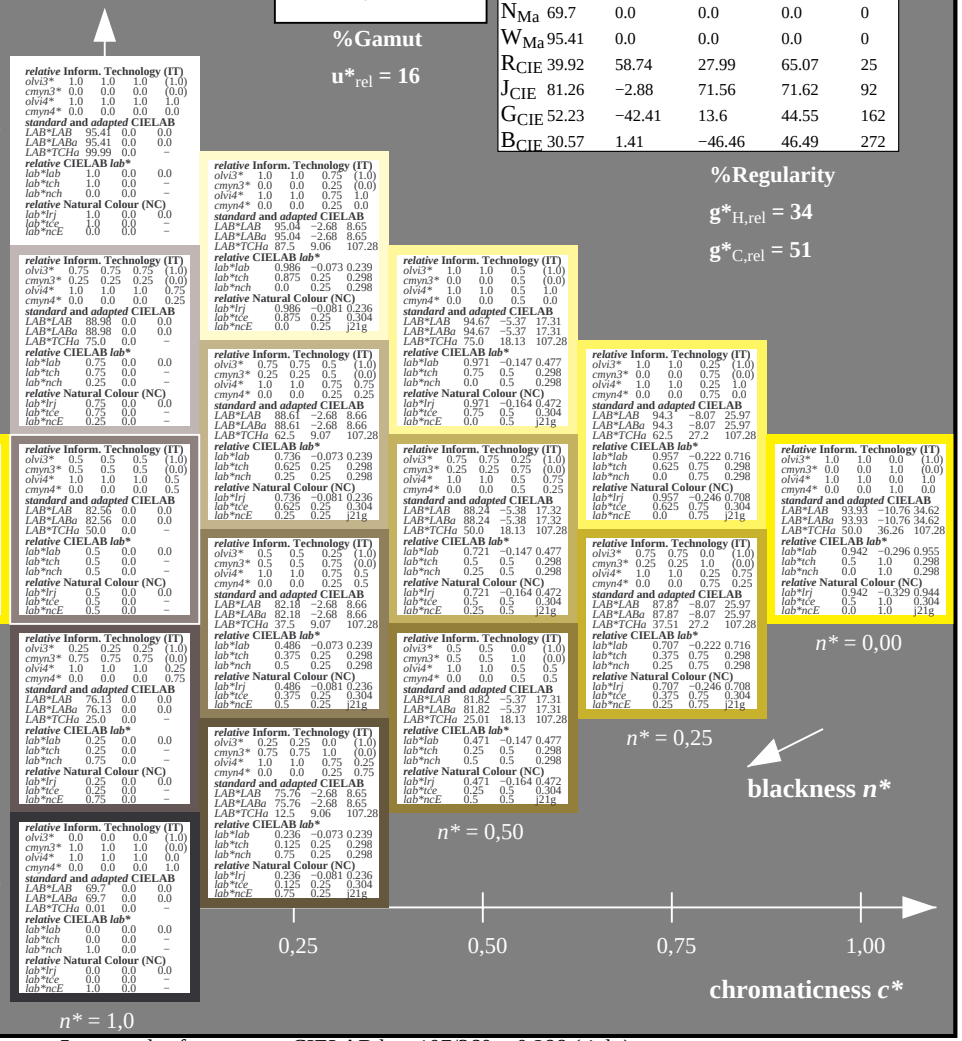
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Television Luminous System TLS70

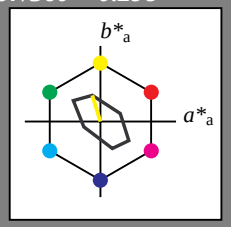
for hue $h^* = lab^*h = 107/360 = 0.298$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

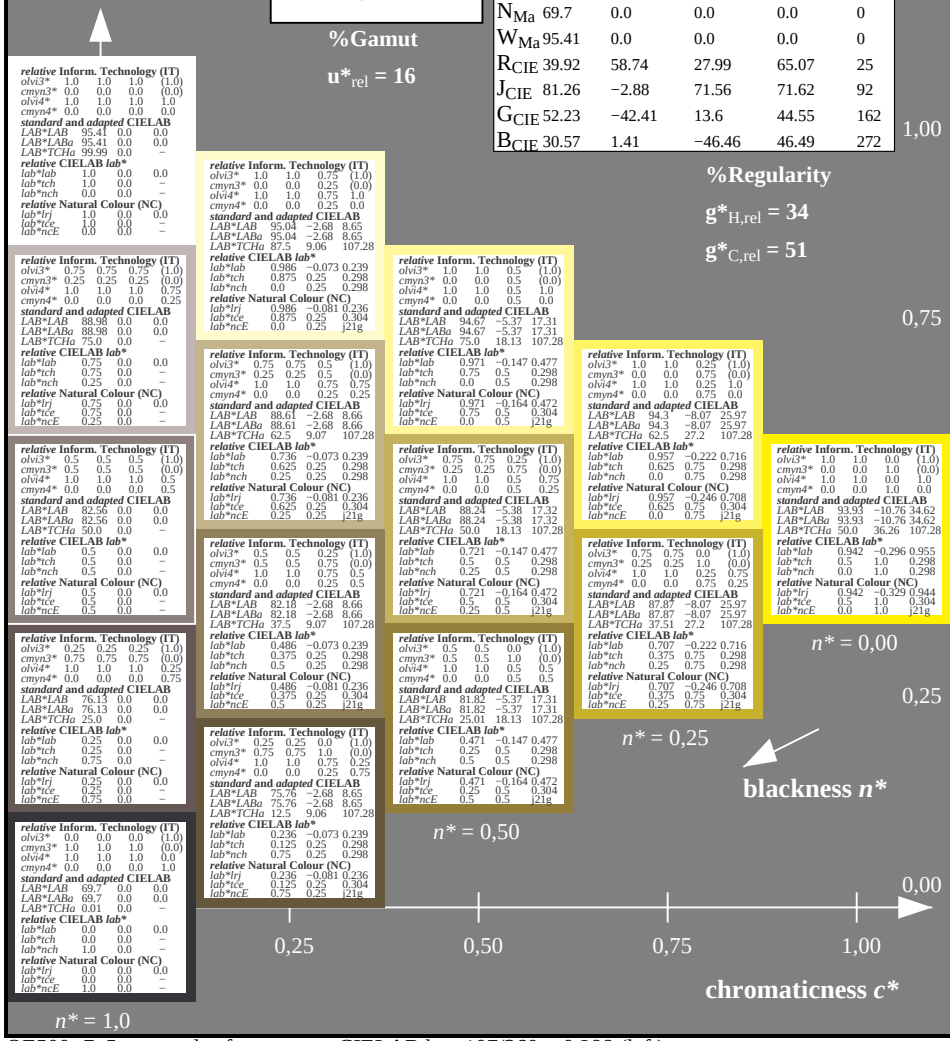
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Offset Reflective System ORS18

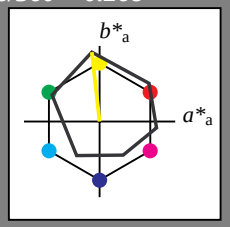
for hue $h^* = lab^*h = 96/360 = 0.268$

*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

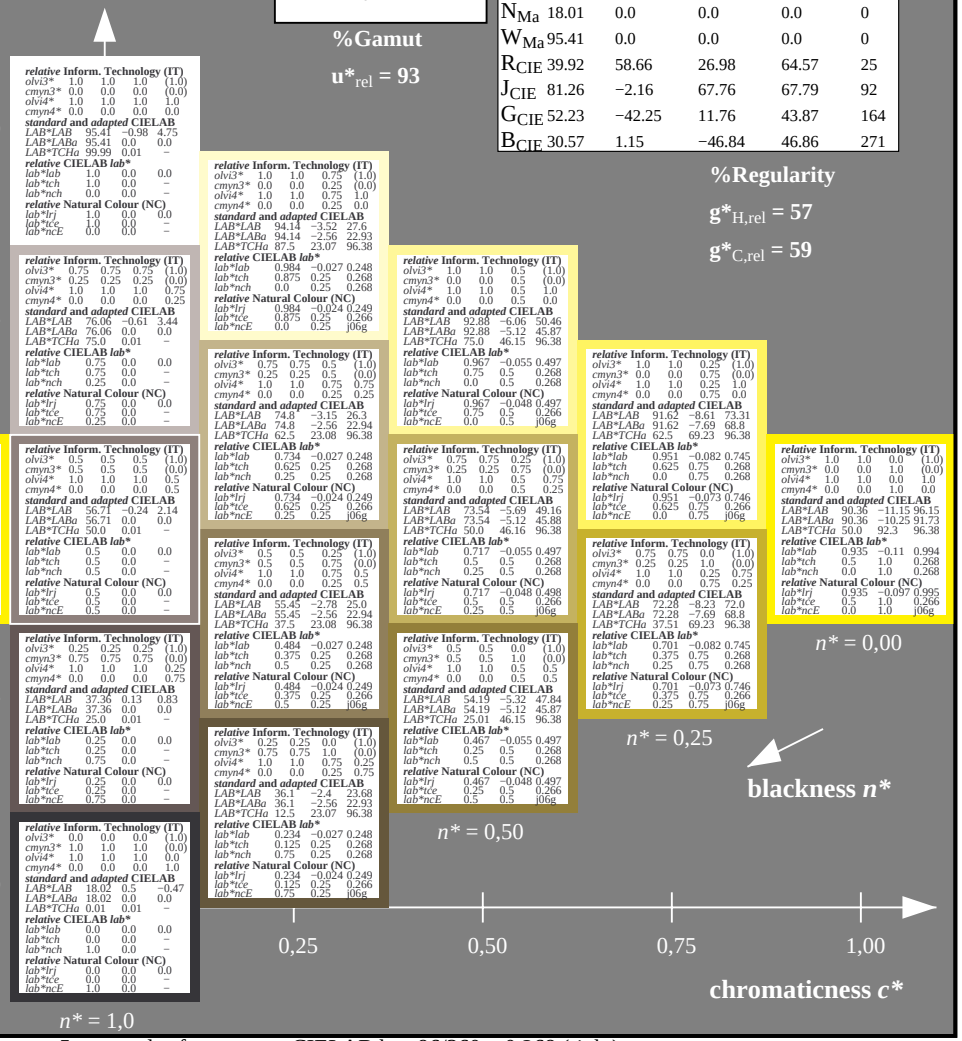
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



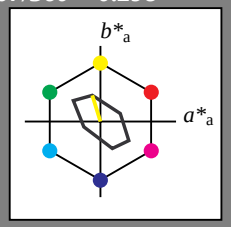
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

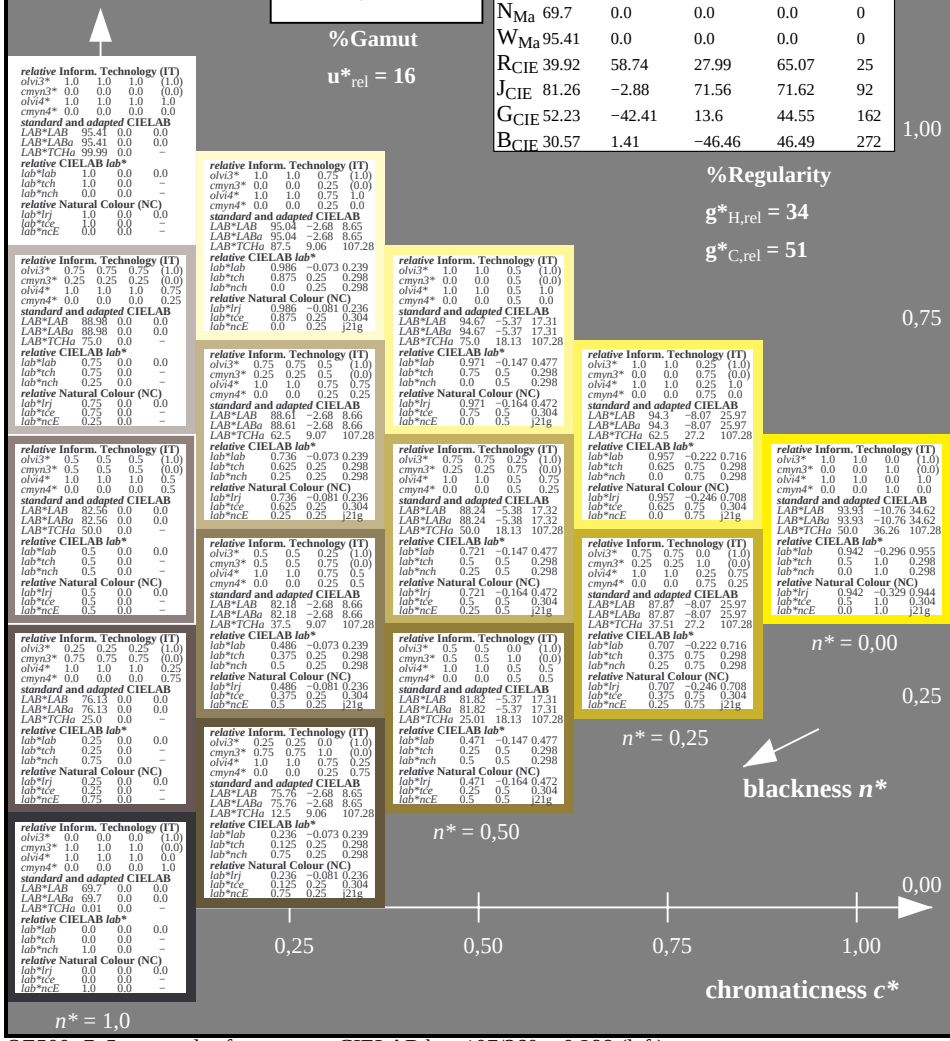
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



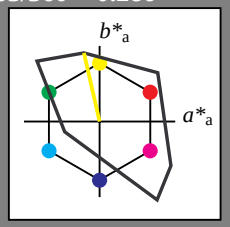
OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 93 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

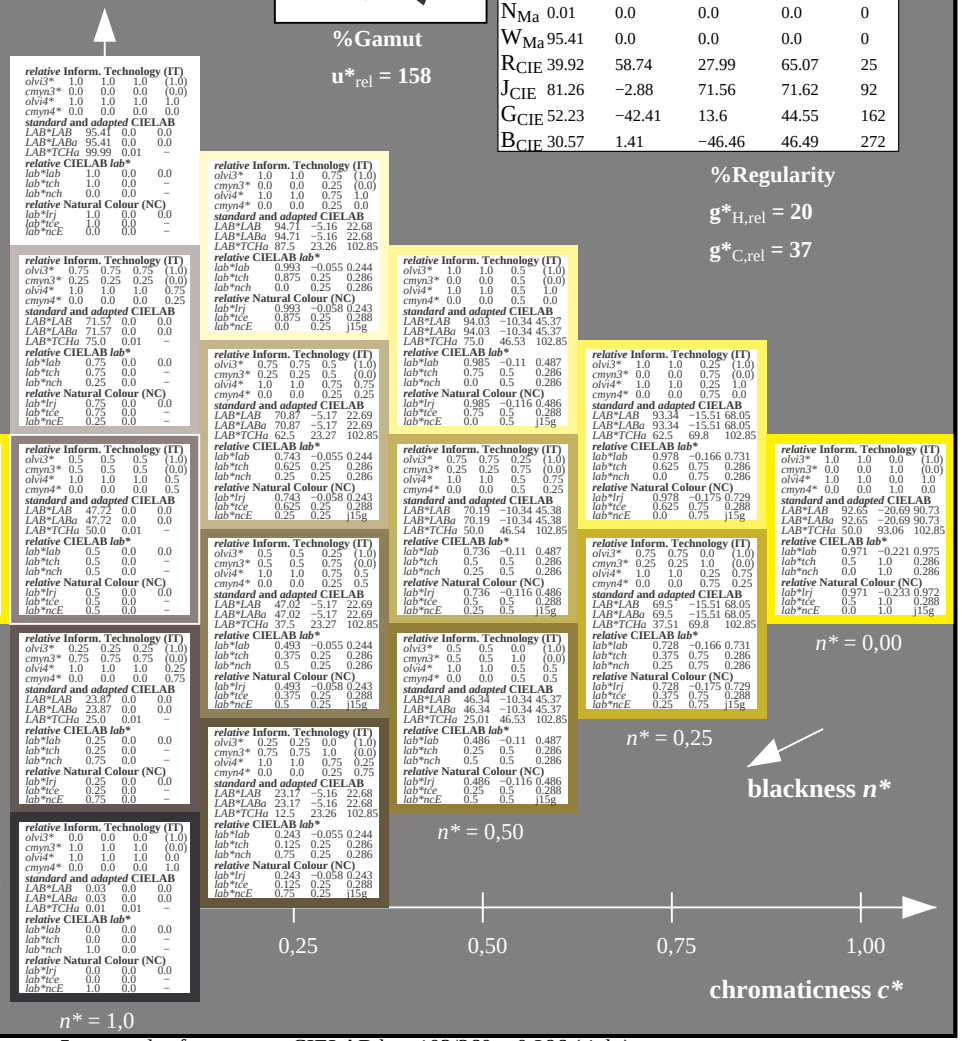
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



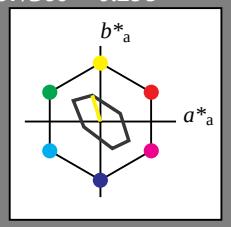
5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

Input: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 107/360 = 0.298*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

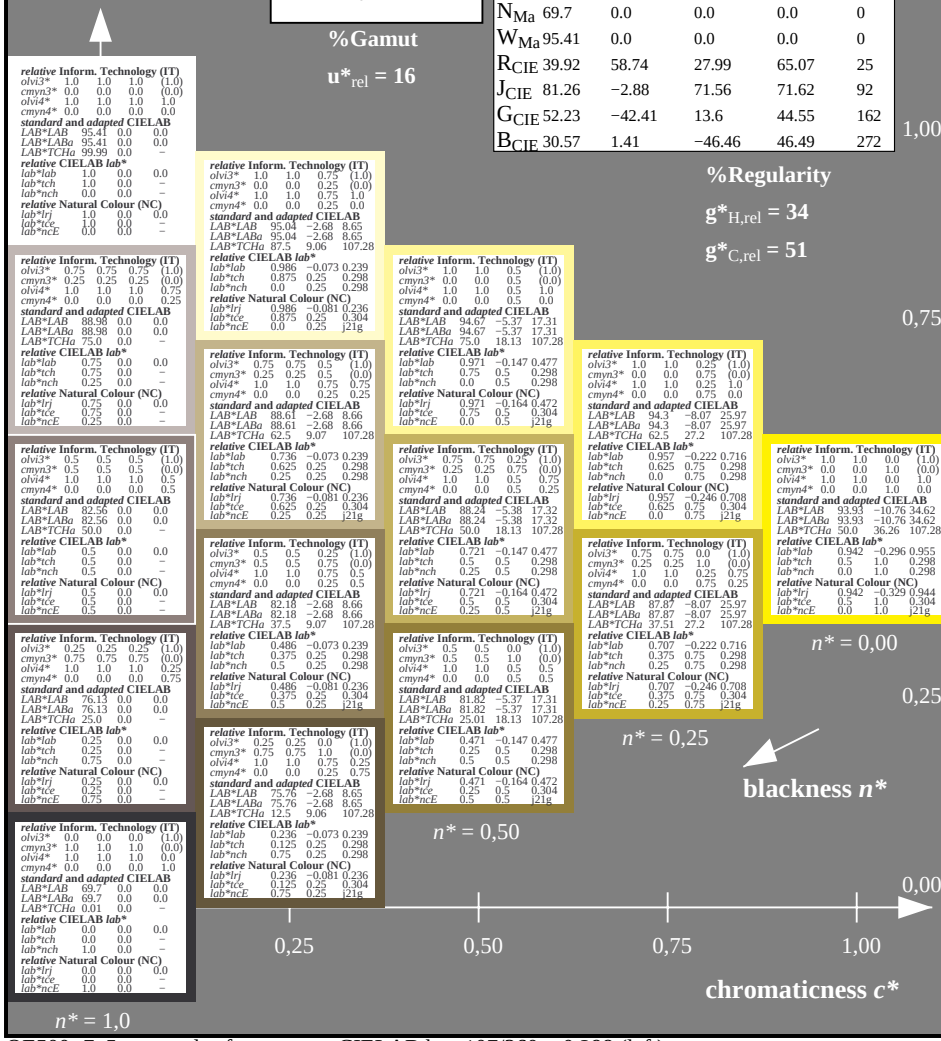
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



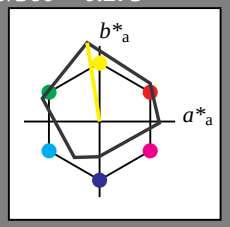
OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 99/360 = 0.275*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 90 106 99
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

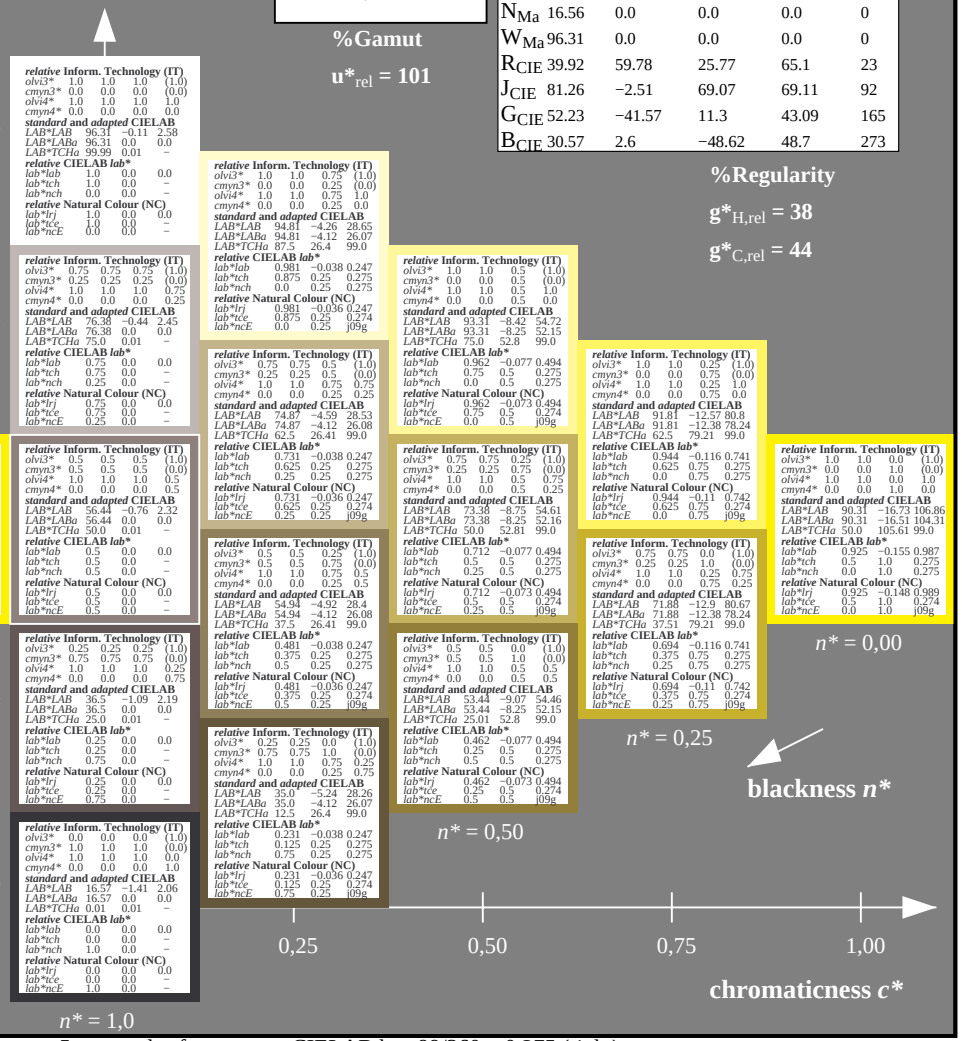
u^*_{rel} = 101

DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



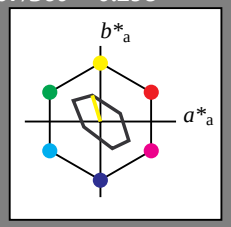
5 step scales for constant CIELAB hue 99/360 = 0.275 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

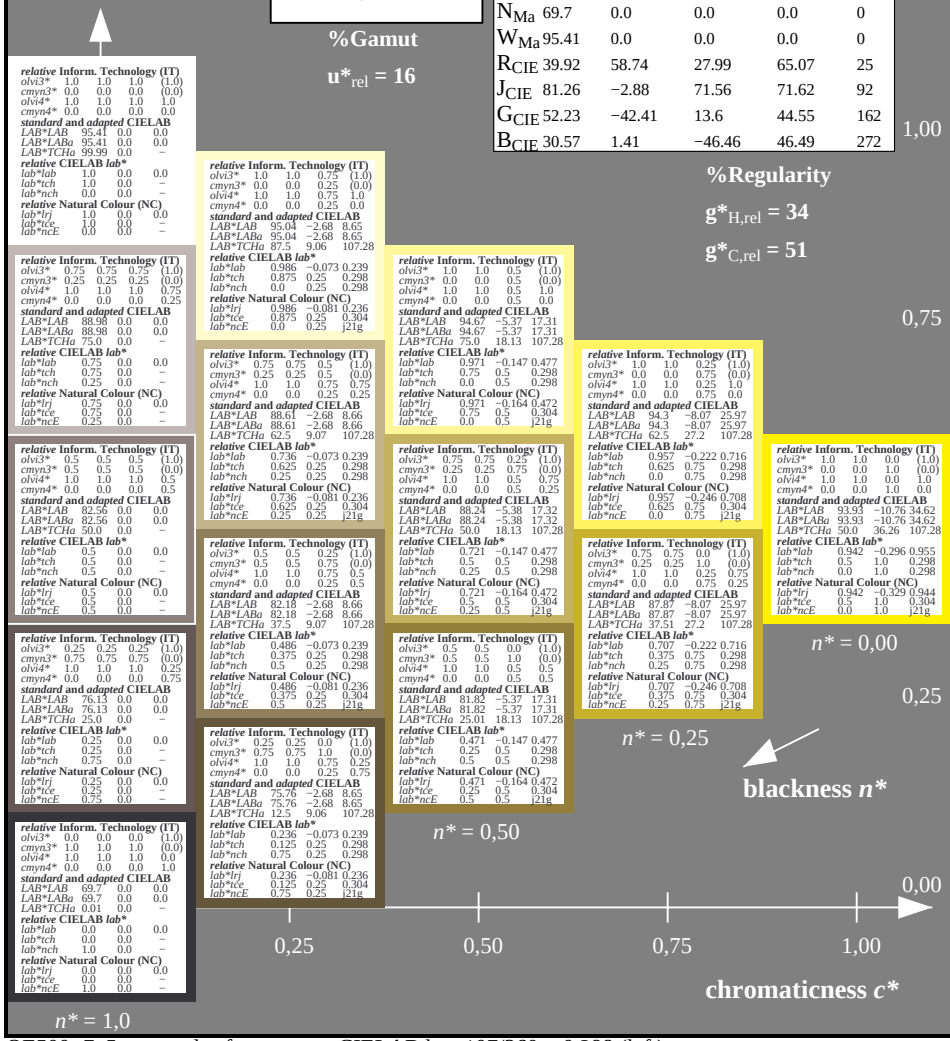
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



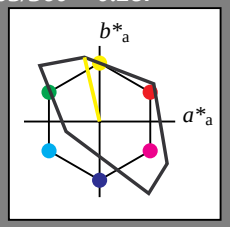
OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

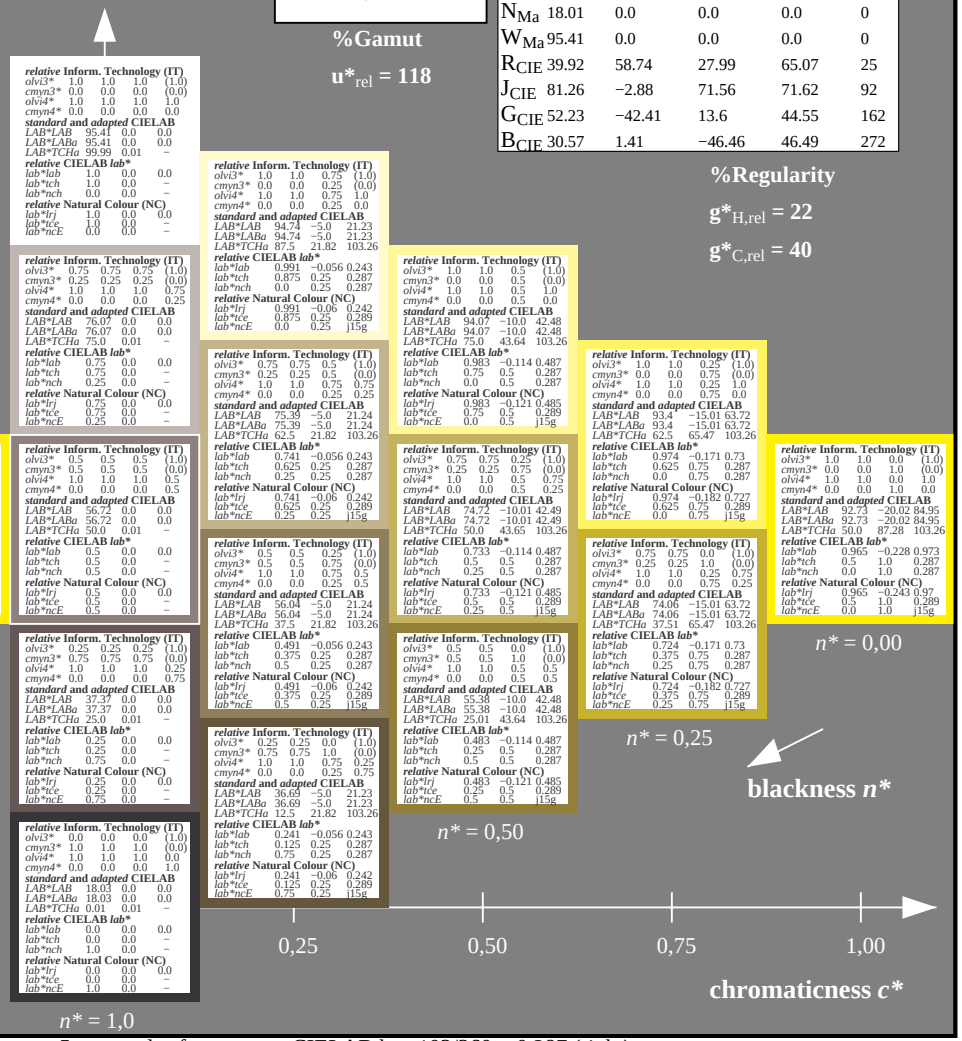
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

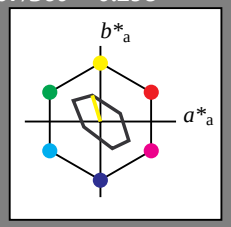


5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

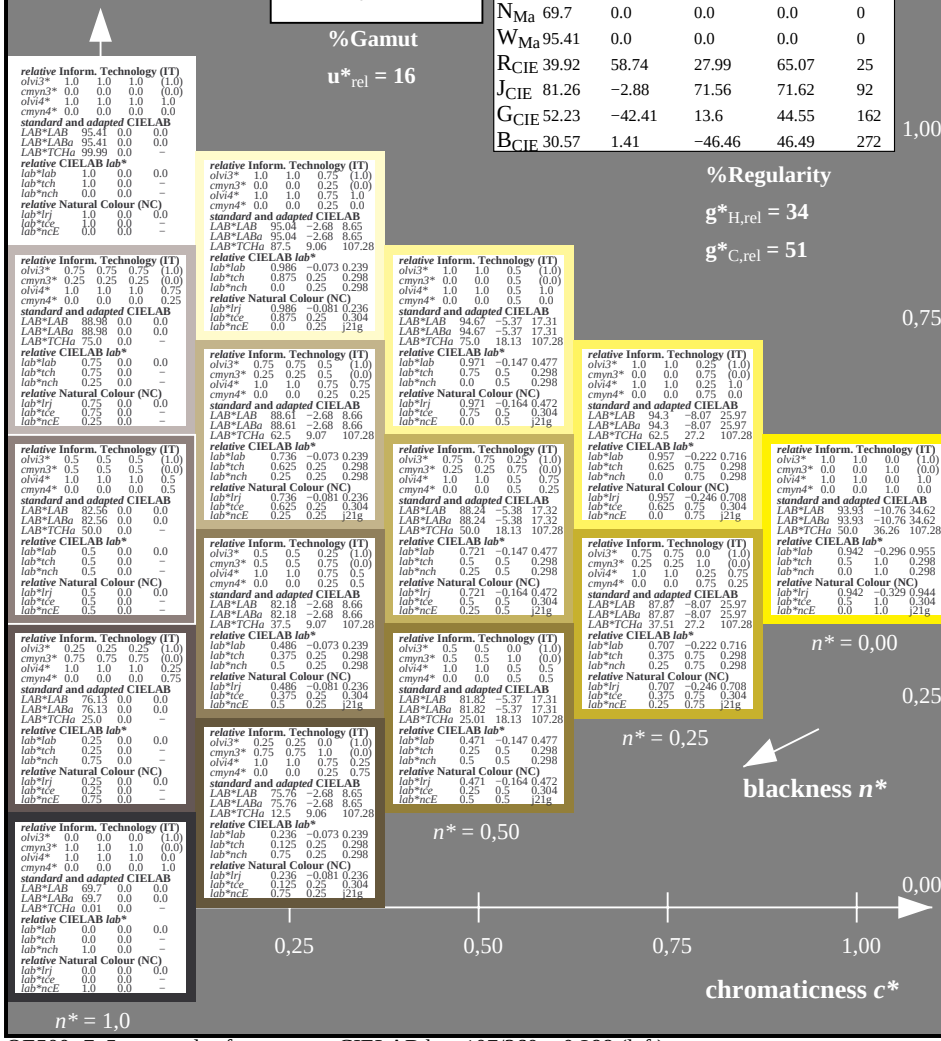
%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

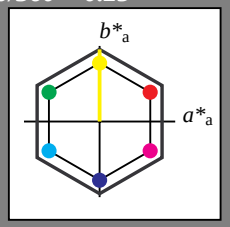
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 90/360 = 0.25$
lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 64 95 90
olv*Ma: 1.0 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

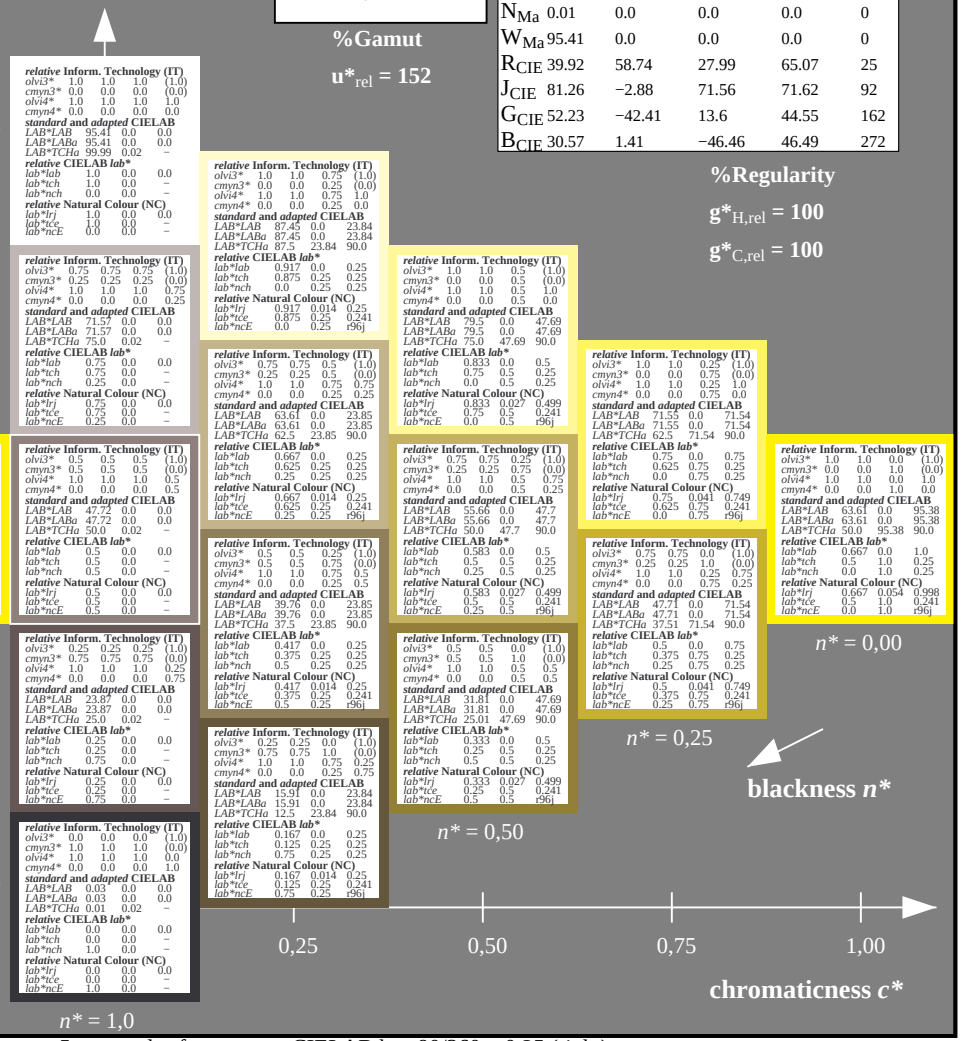
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

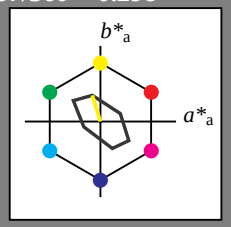


OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 107/360 = 0.298$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

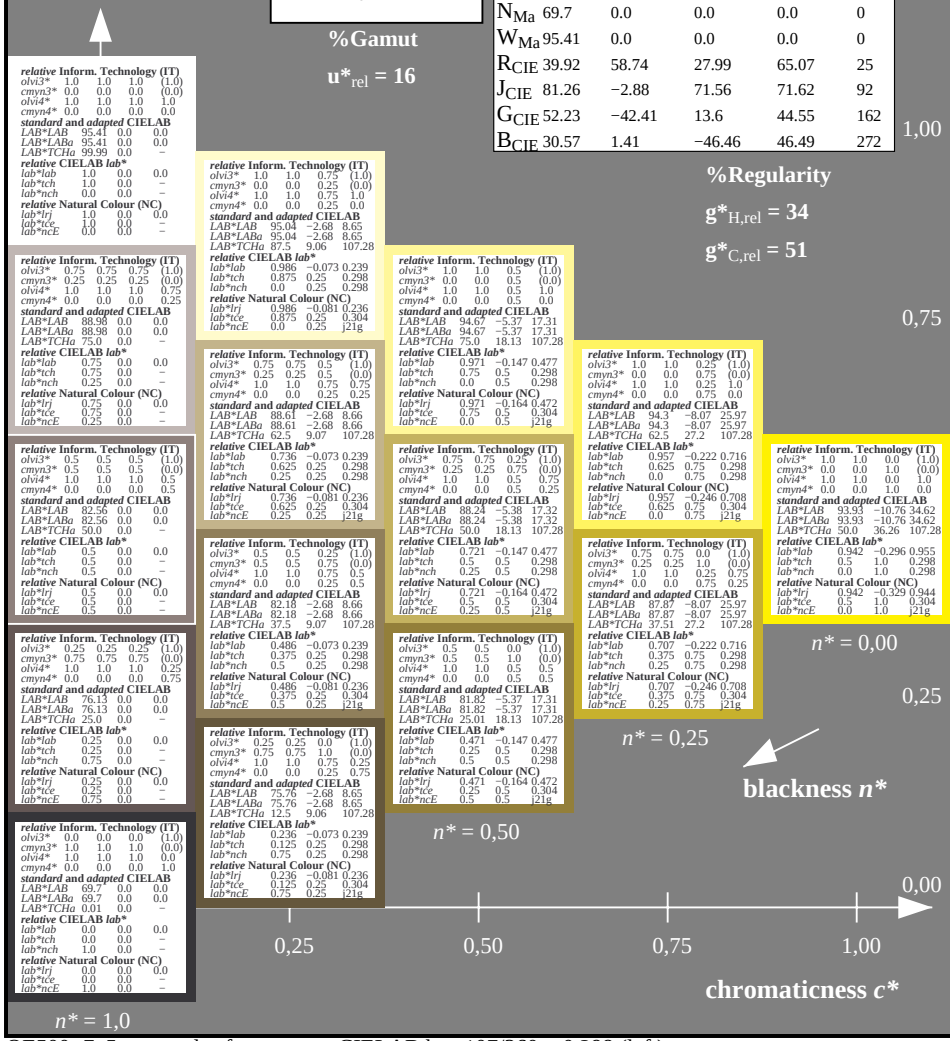
u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

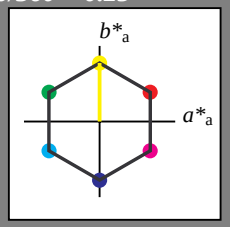
$g^*_{C,rel}$ = 51

triangle lightness *t**



Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

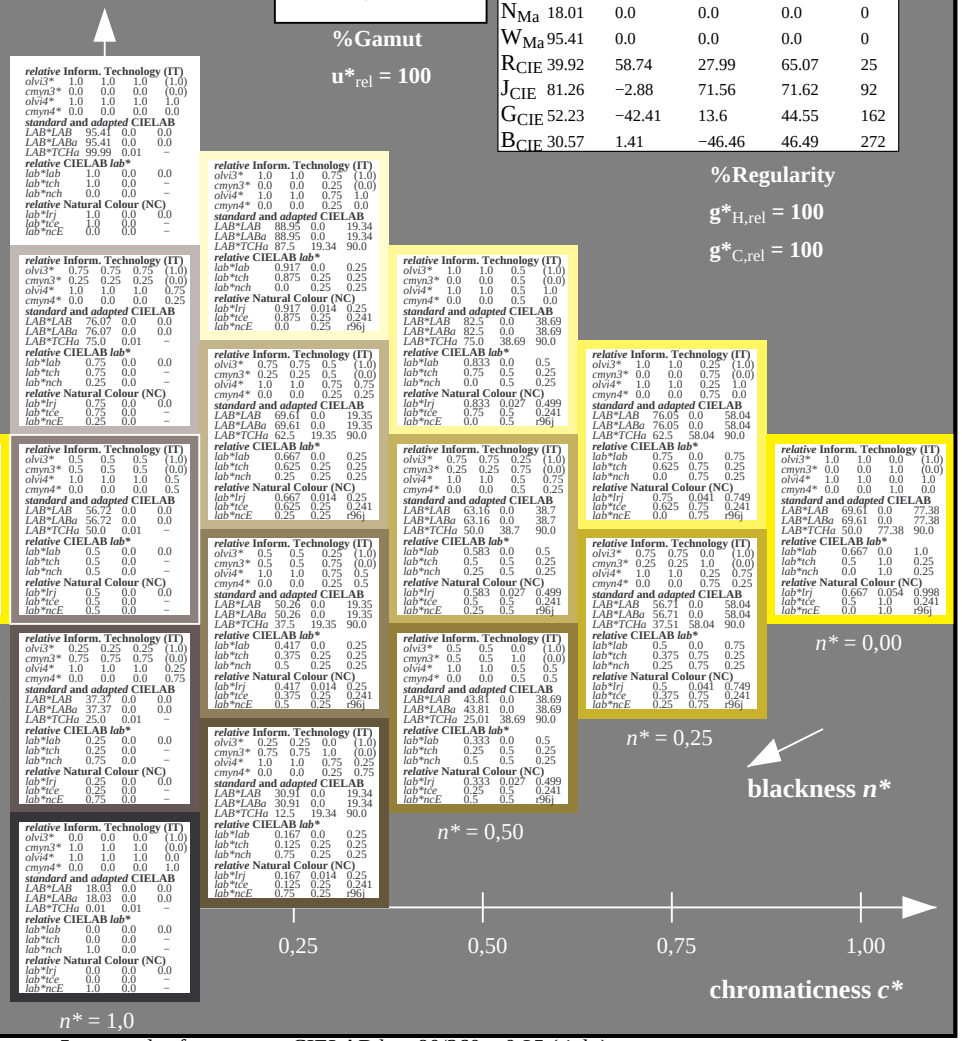
u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

triangle lightness *t**



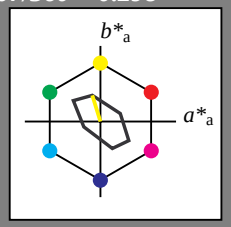
OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0



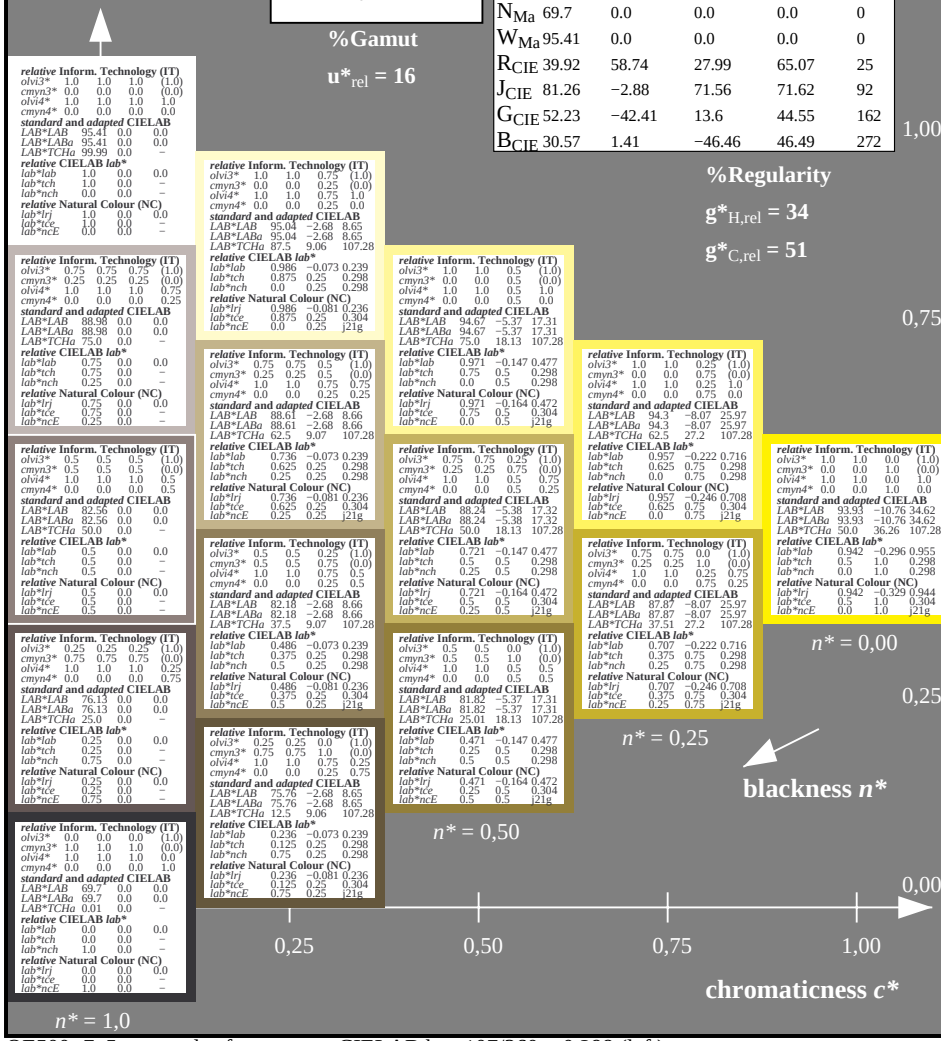
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut
$u^*_{rel} = 16$

%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

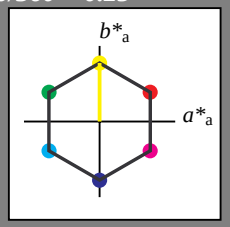


OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0



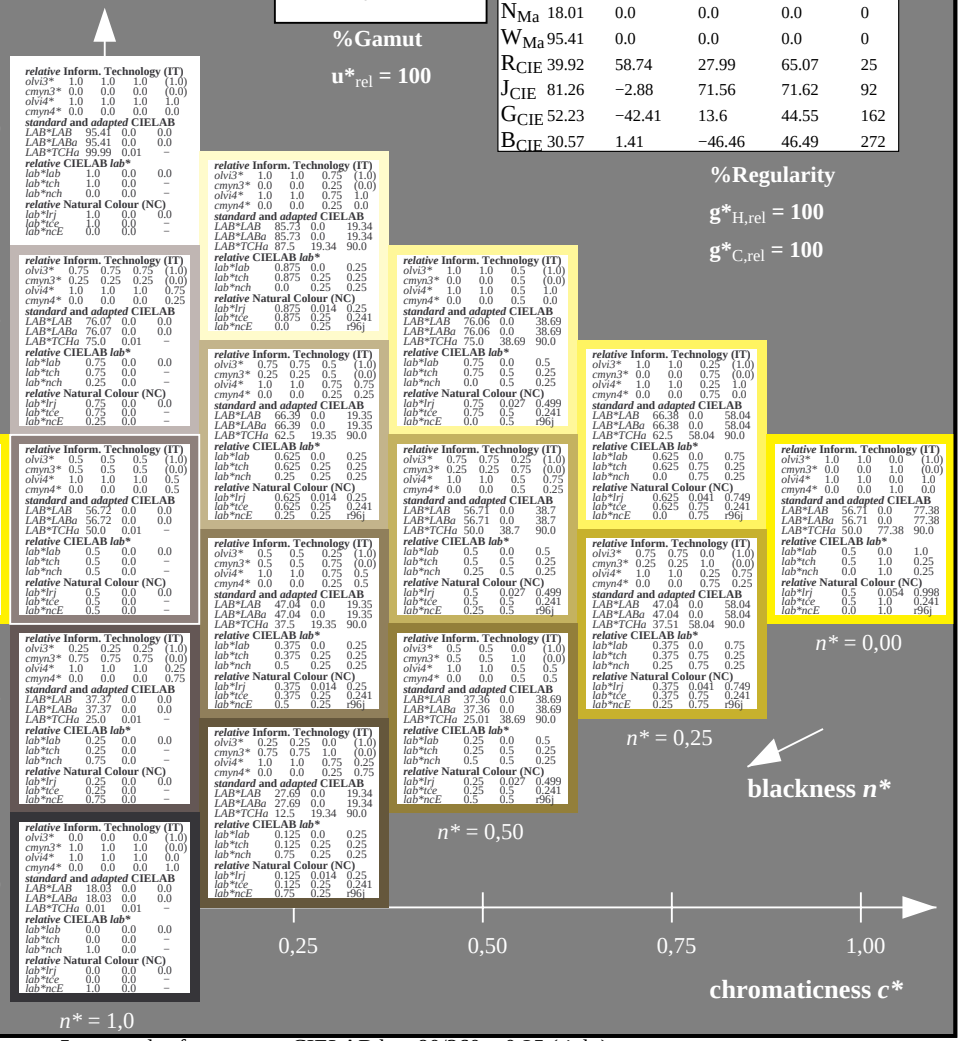
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut
$u^*_{rel} = 100$

%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$

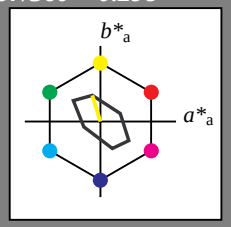


5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 107/360 = 0.298*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

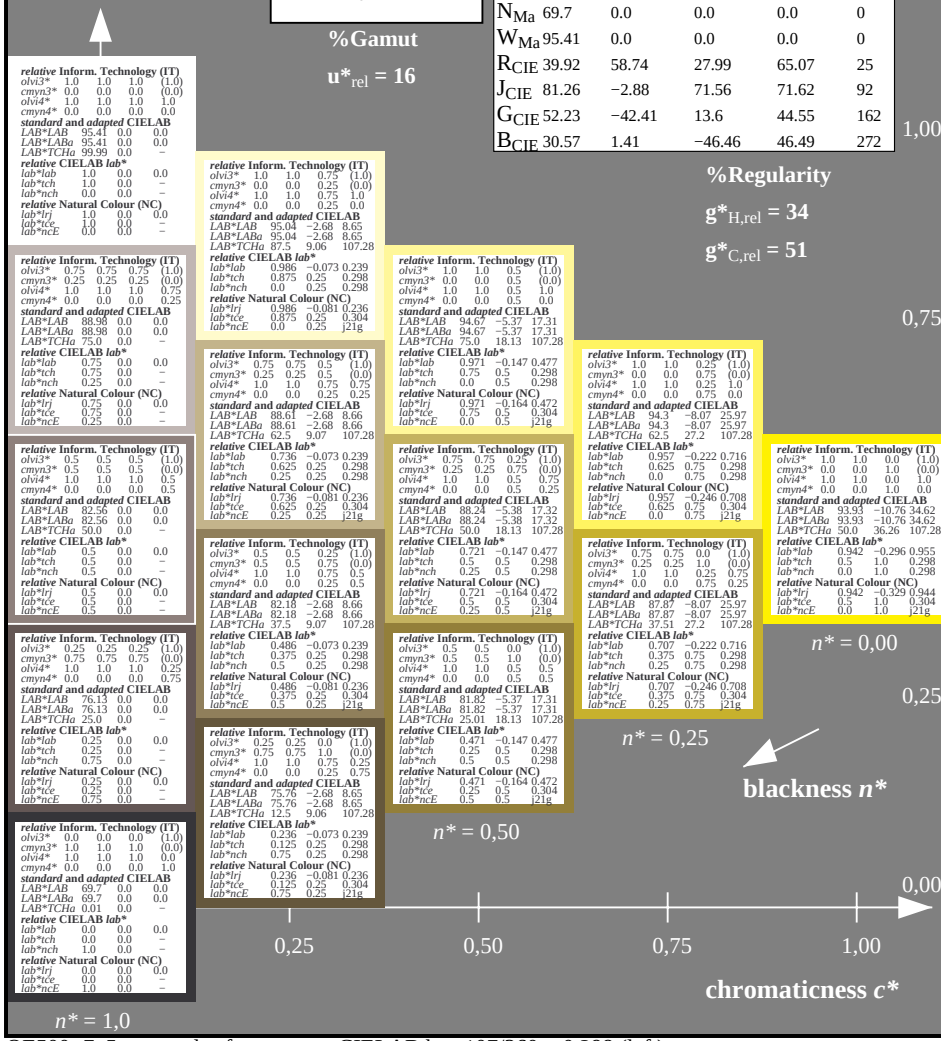
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

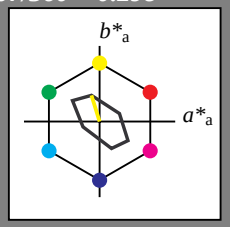
$g^*_{C,rel}$ = 51



Output: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 107/360 = 0.298*
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 94 36 107
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

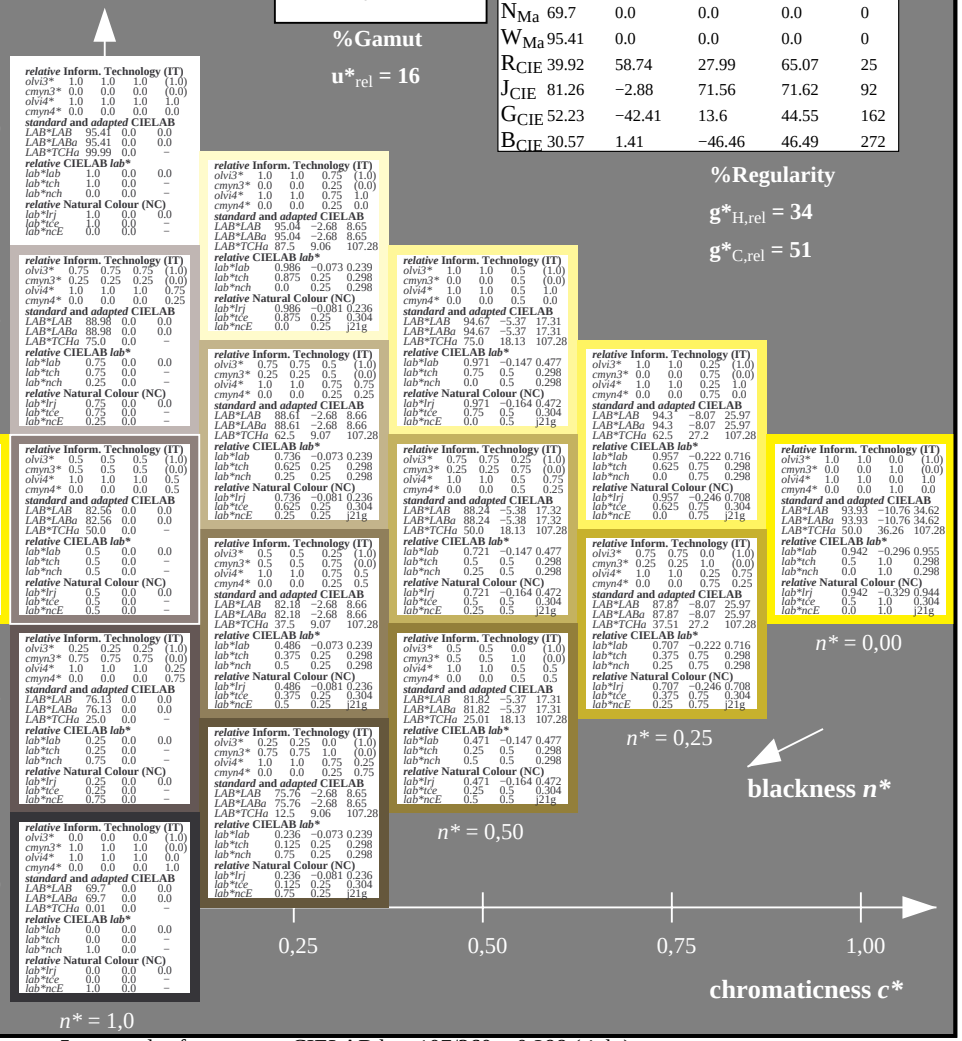
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



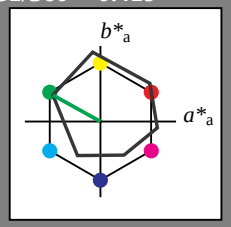
OE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 151/360 = 0.419$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

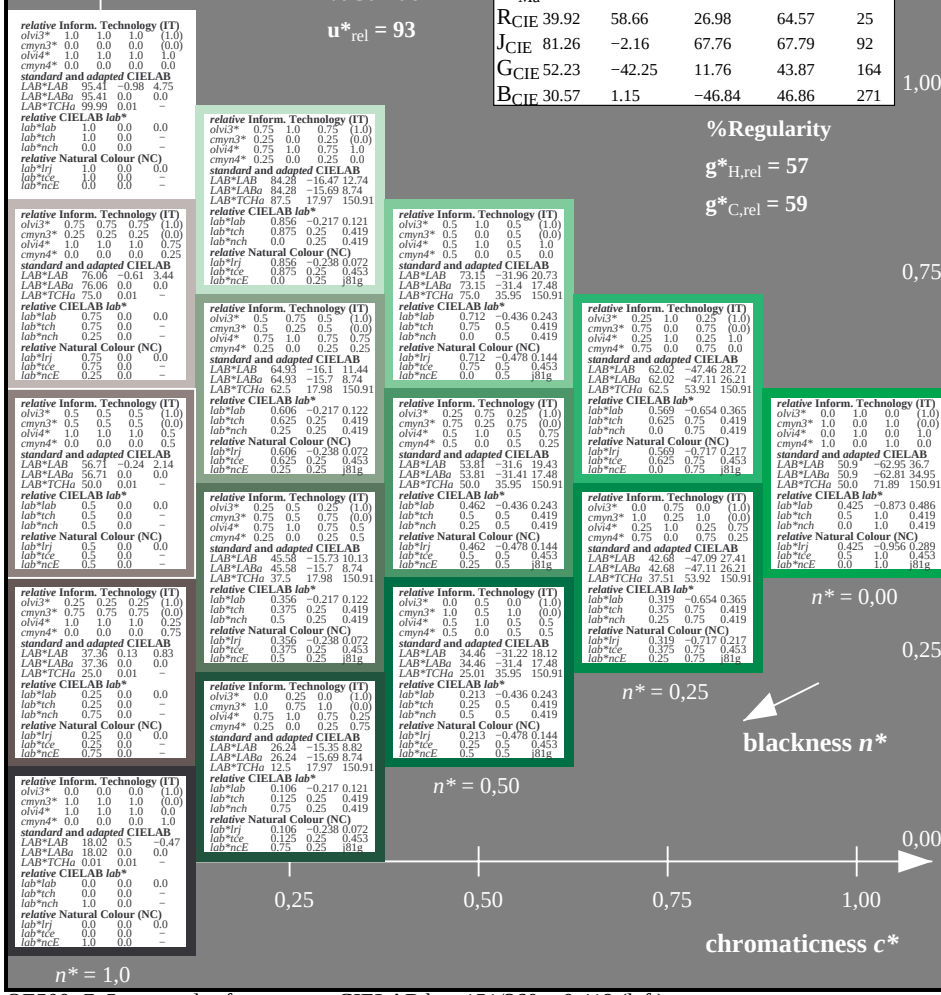
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

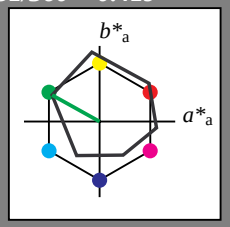


OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 151/360 = 0.419$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

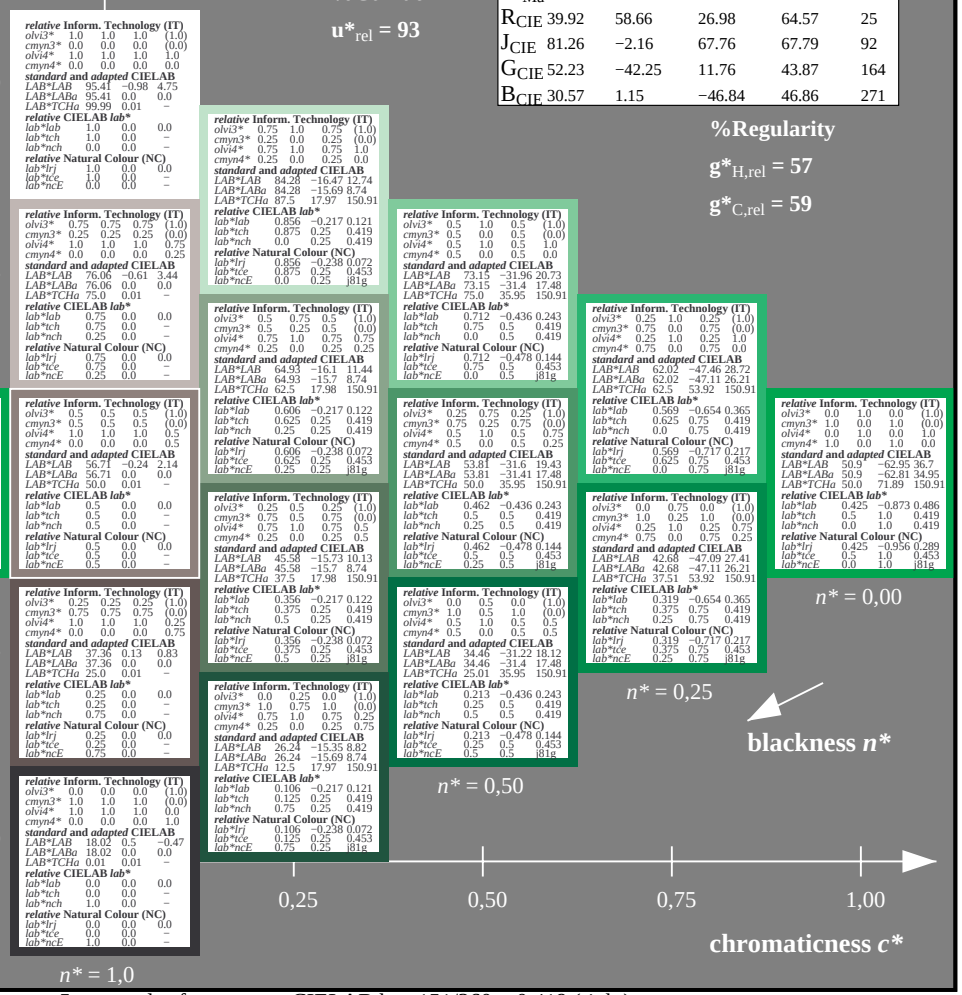
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

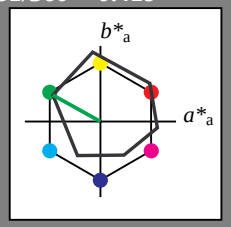


5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

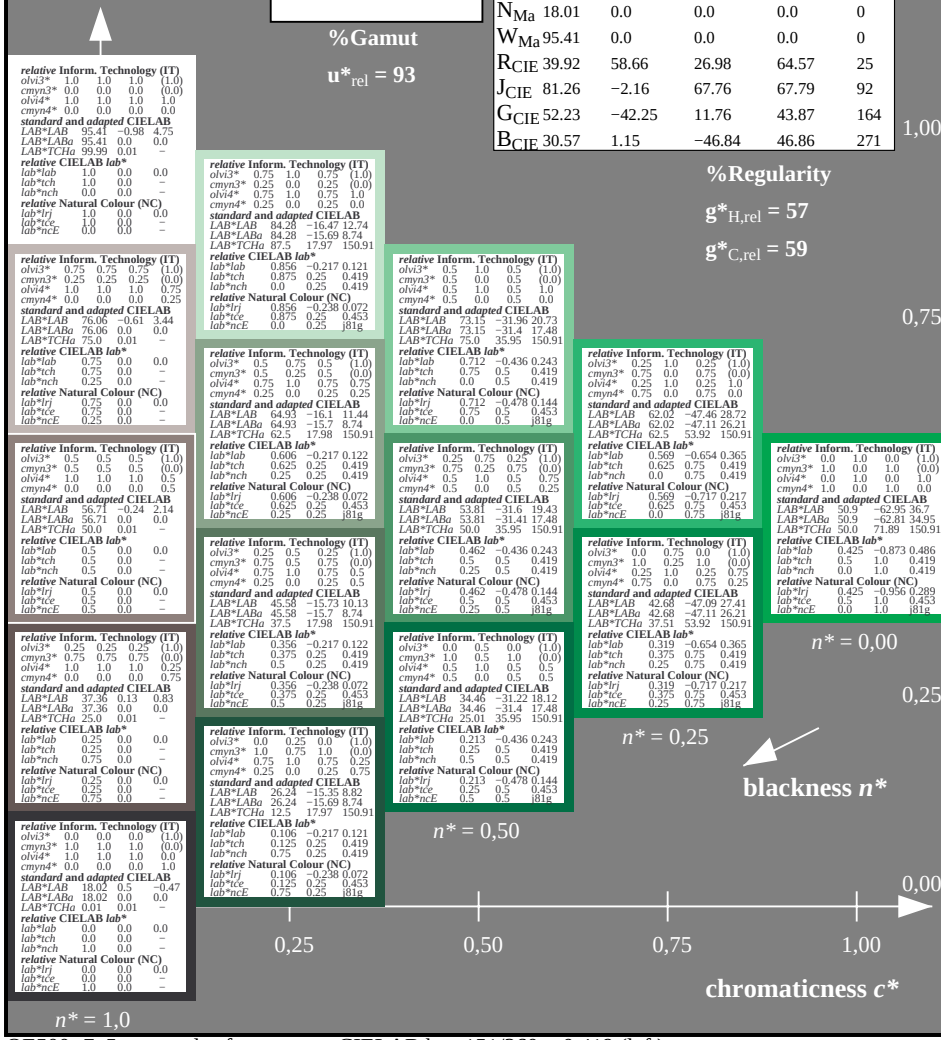
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

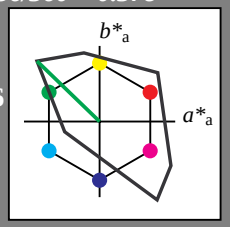
$g^*_{C,rel}$ = 59



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

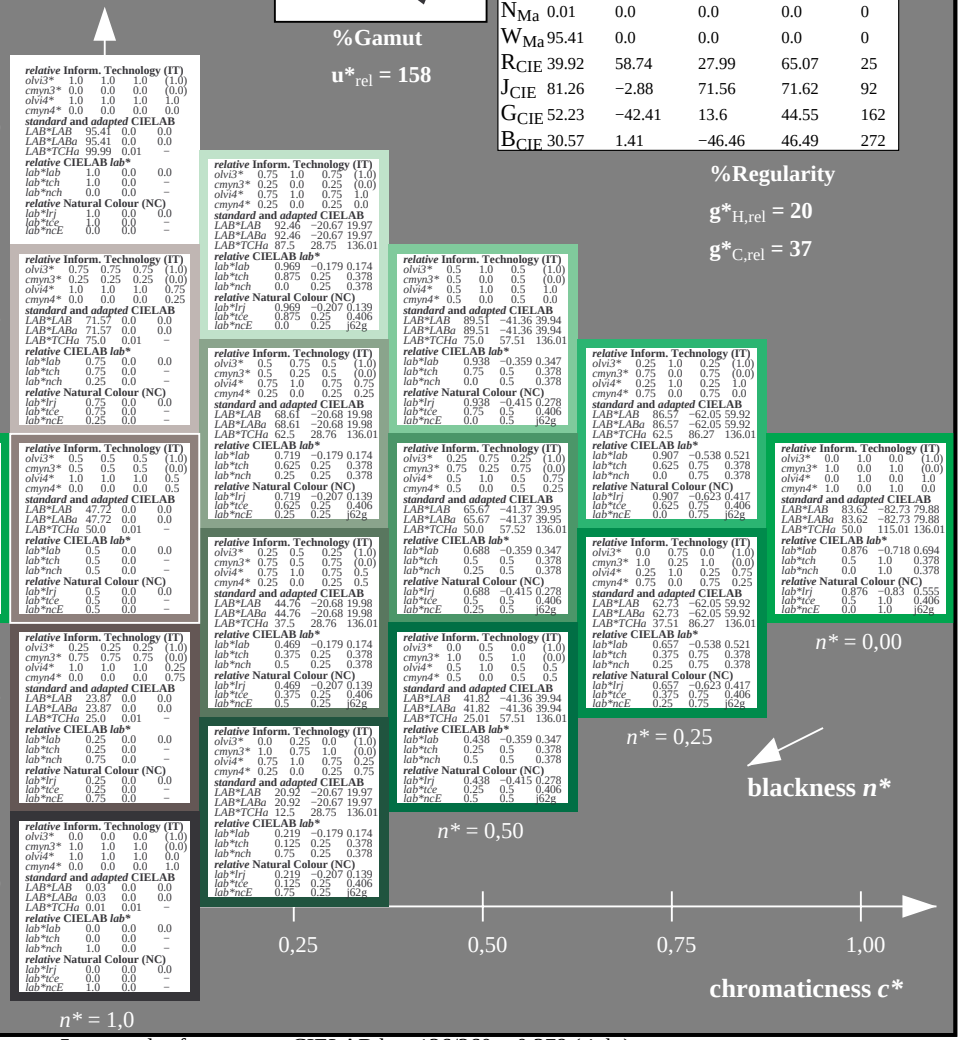
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Offset Reflective System ORS18

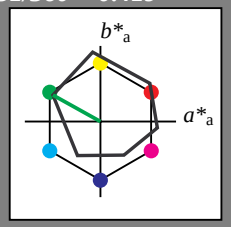
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

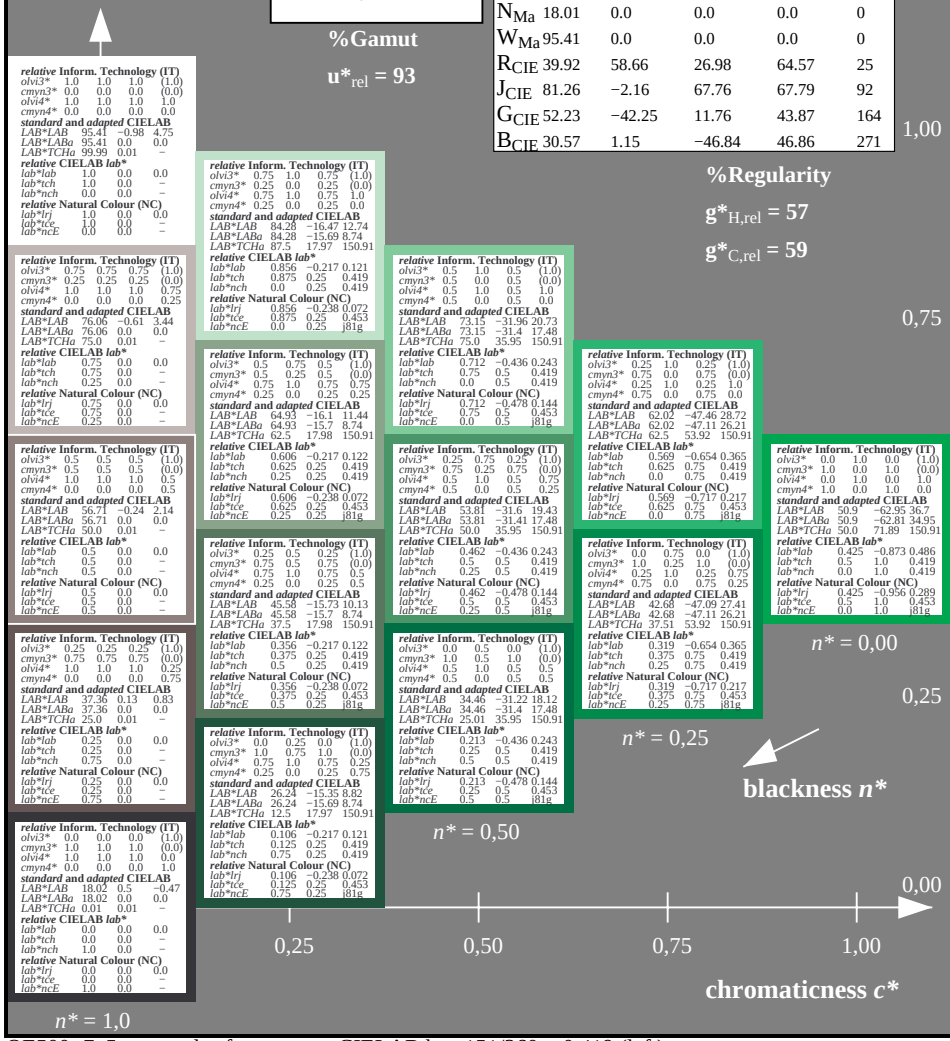
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Printer Reflective System DRSXX

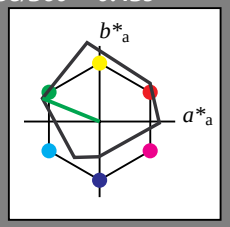
for hue $h^* = lab^*h = 158/360 = 0.439$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

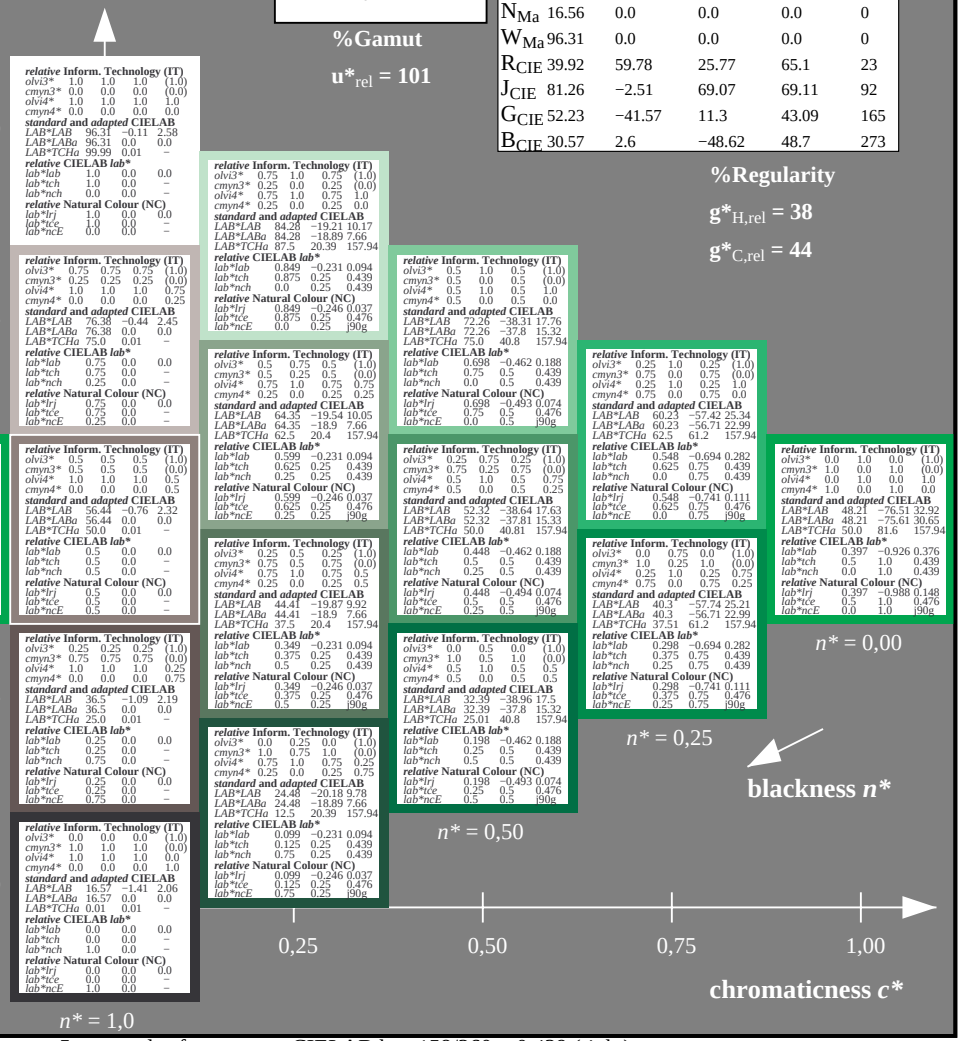
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



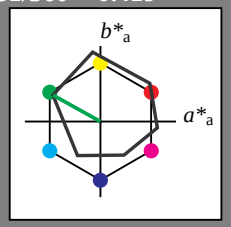
5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

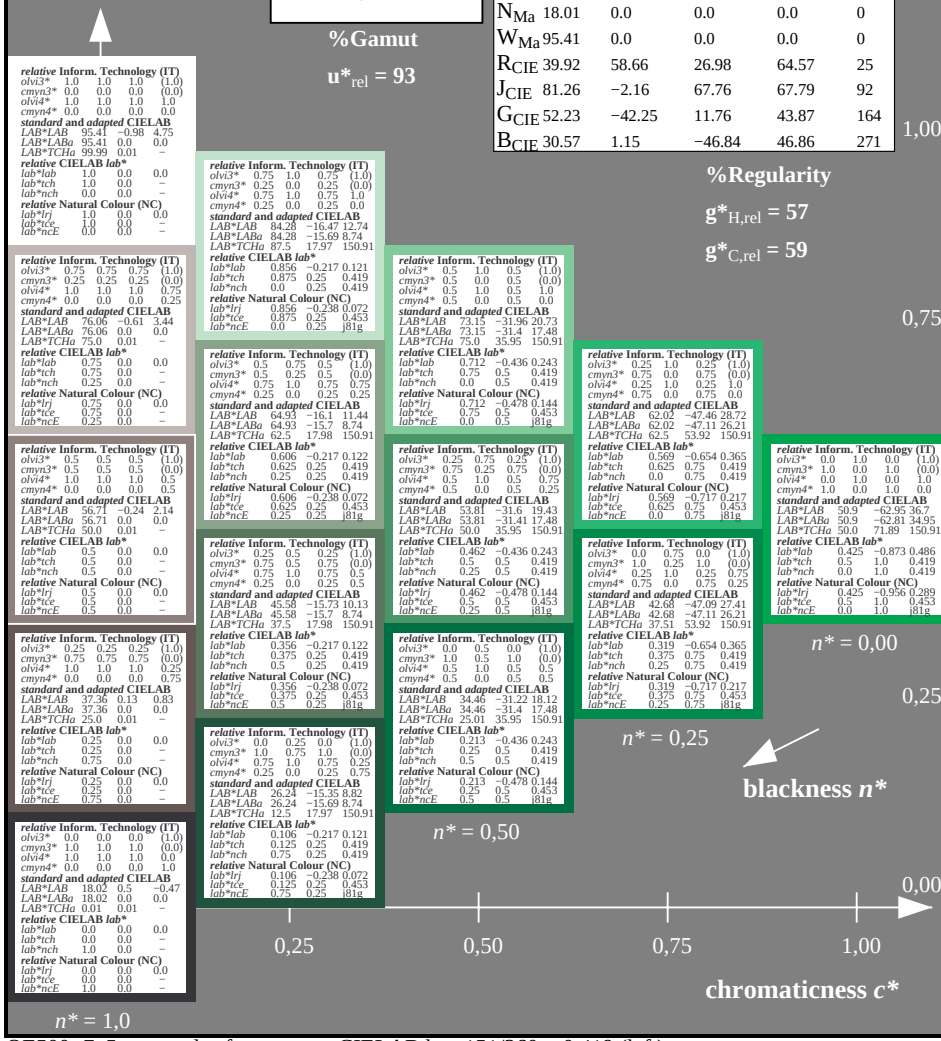
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



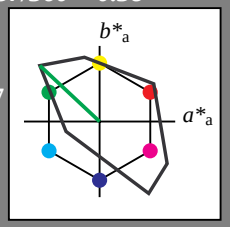
OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

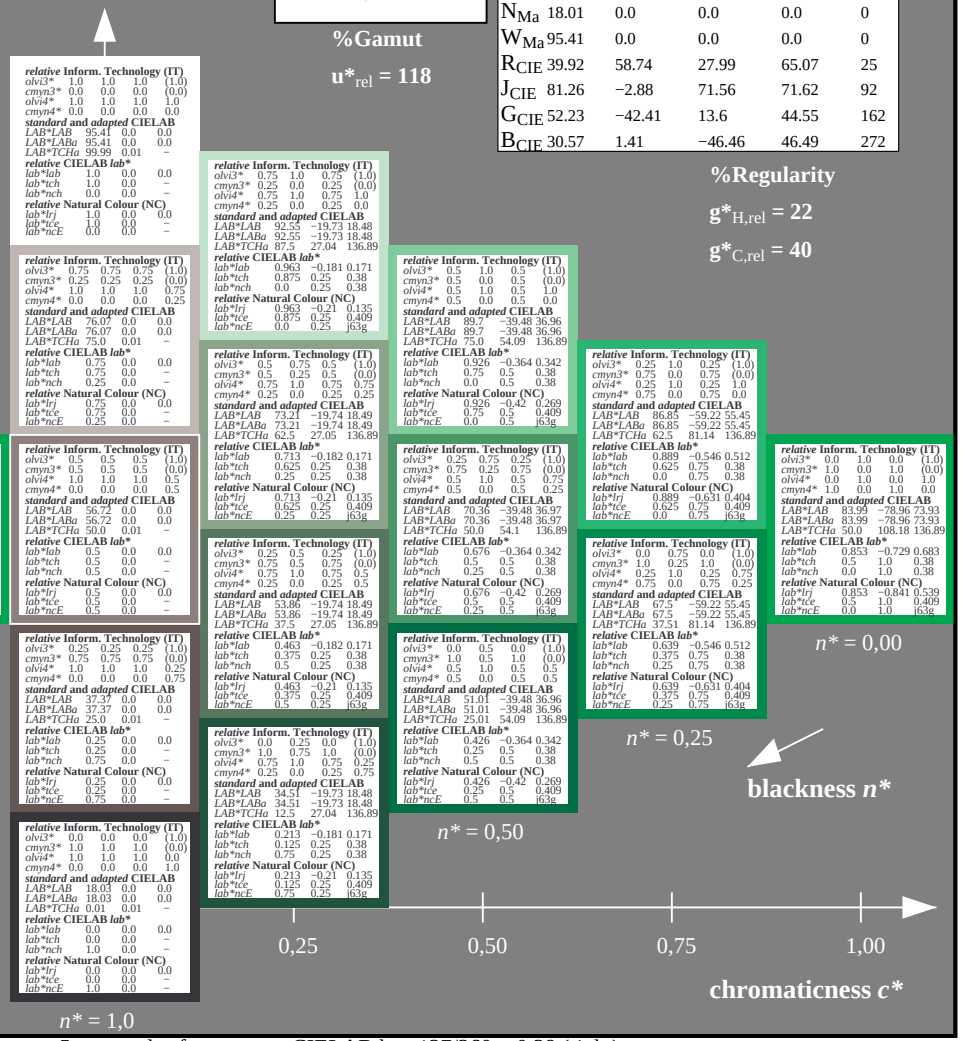
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



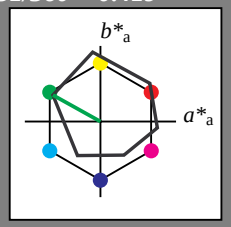
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

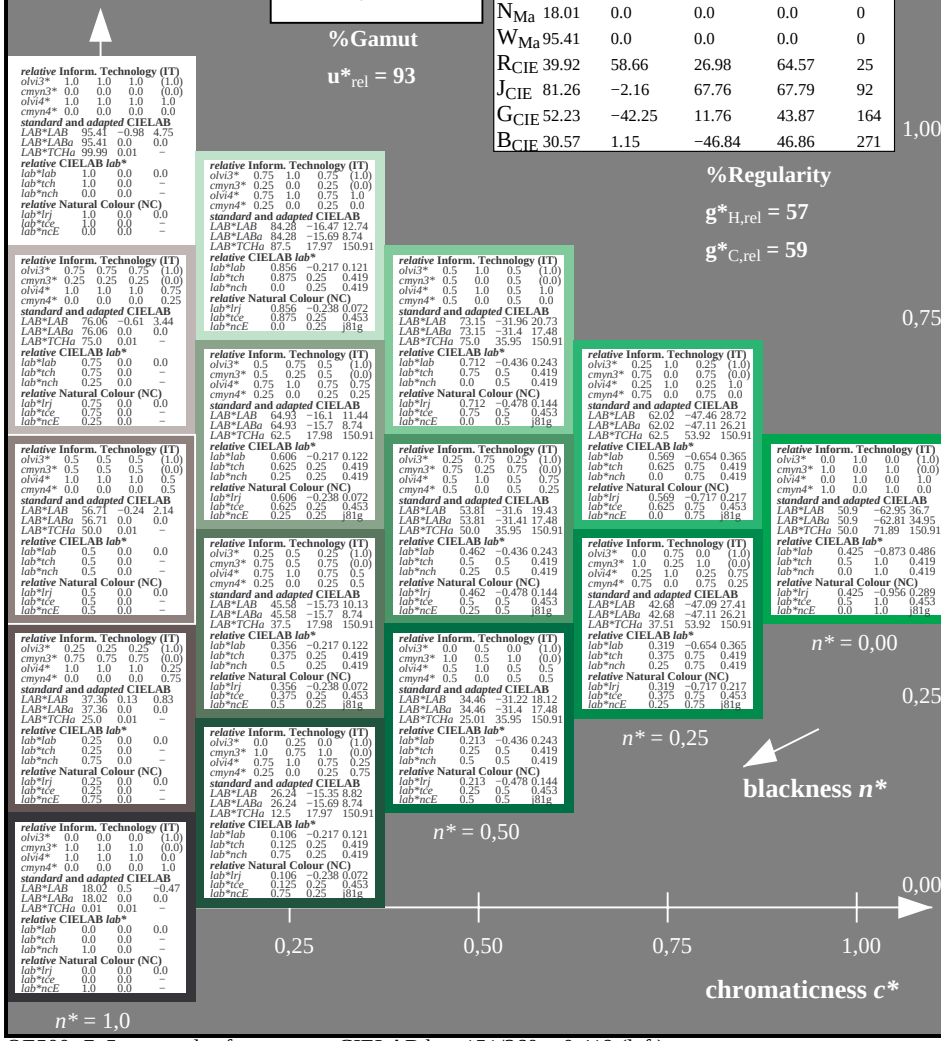
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

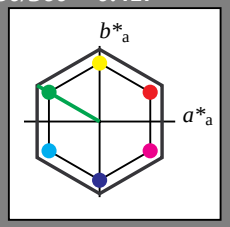


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

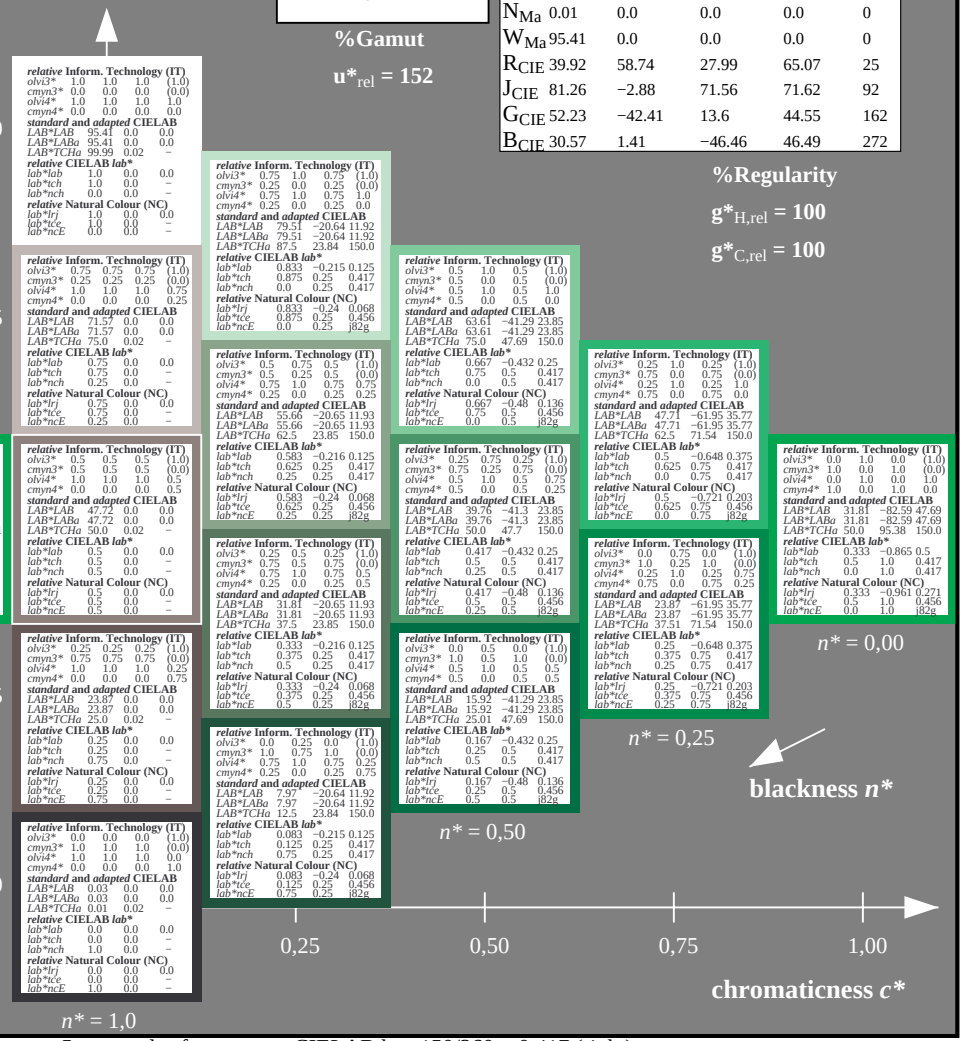
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

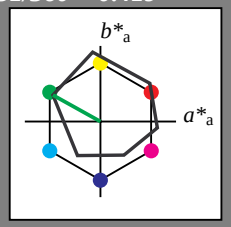
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

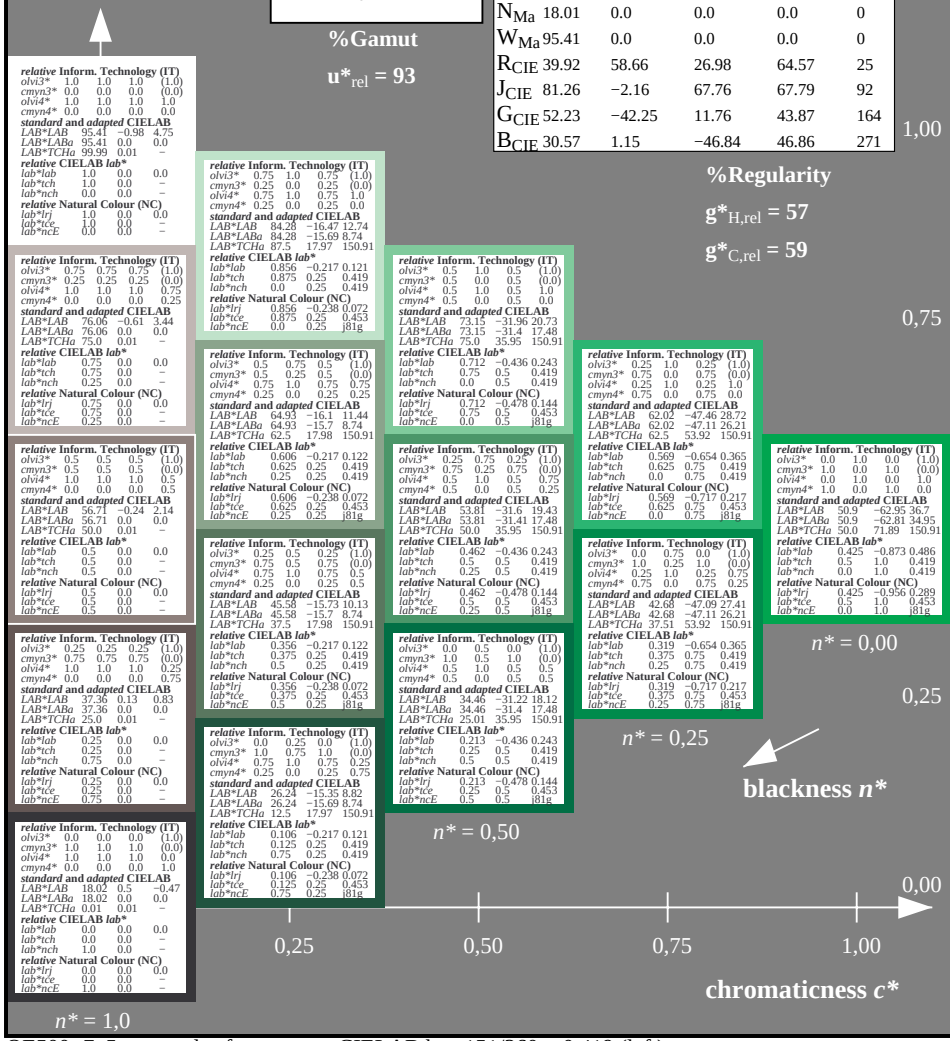
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

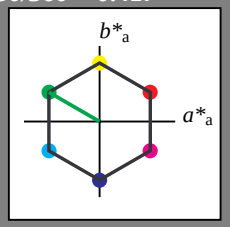


Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

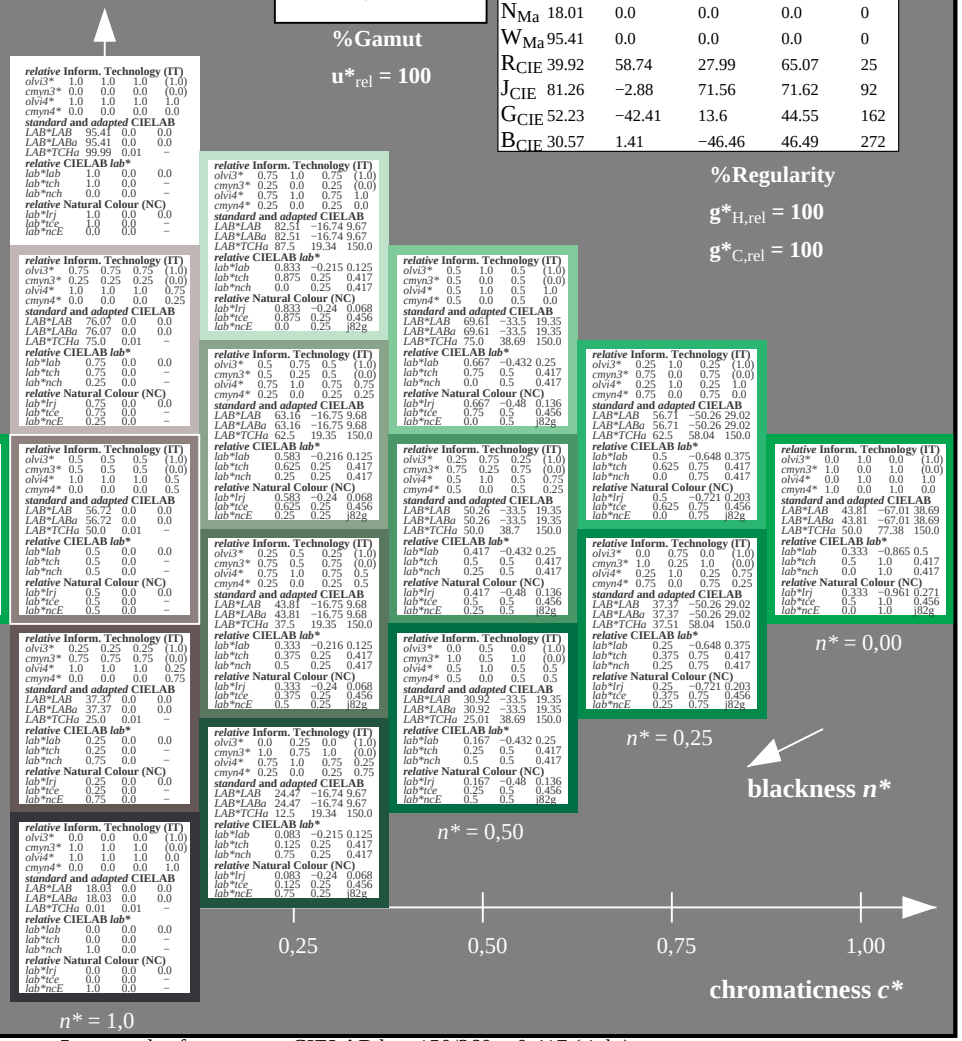
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



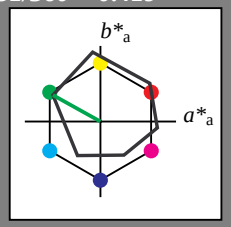
OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 93

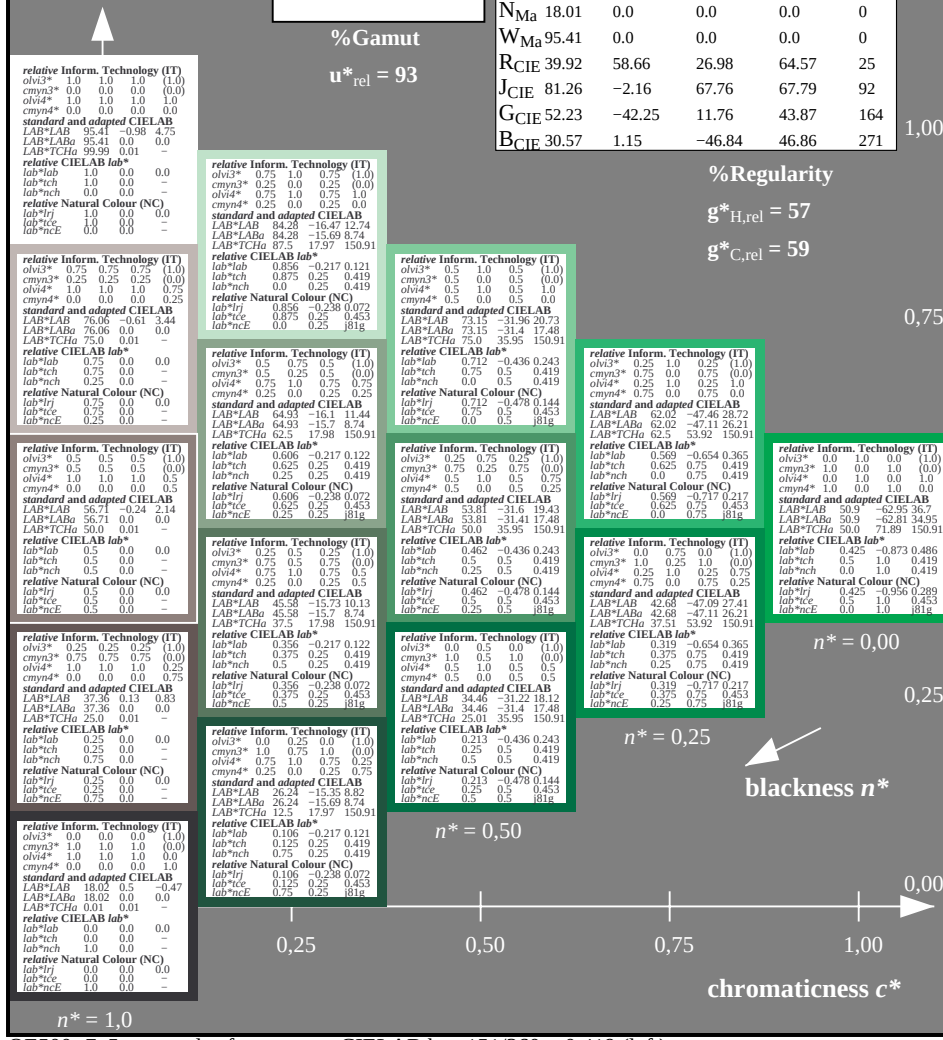
%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

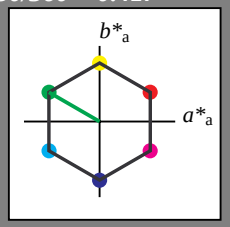


OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 100

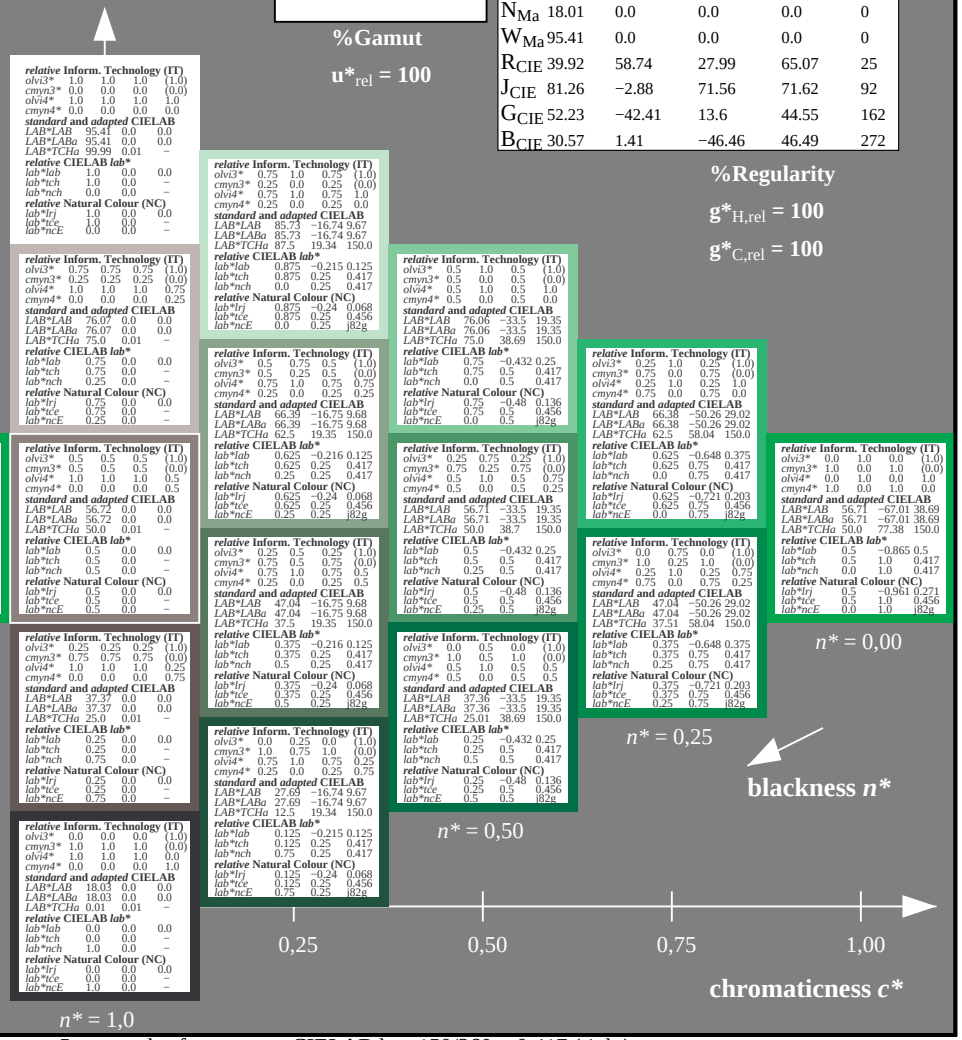
%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Offset Reflective System ORS18

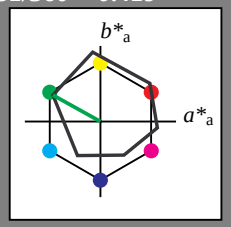
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

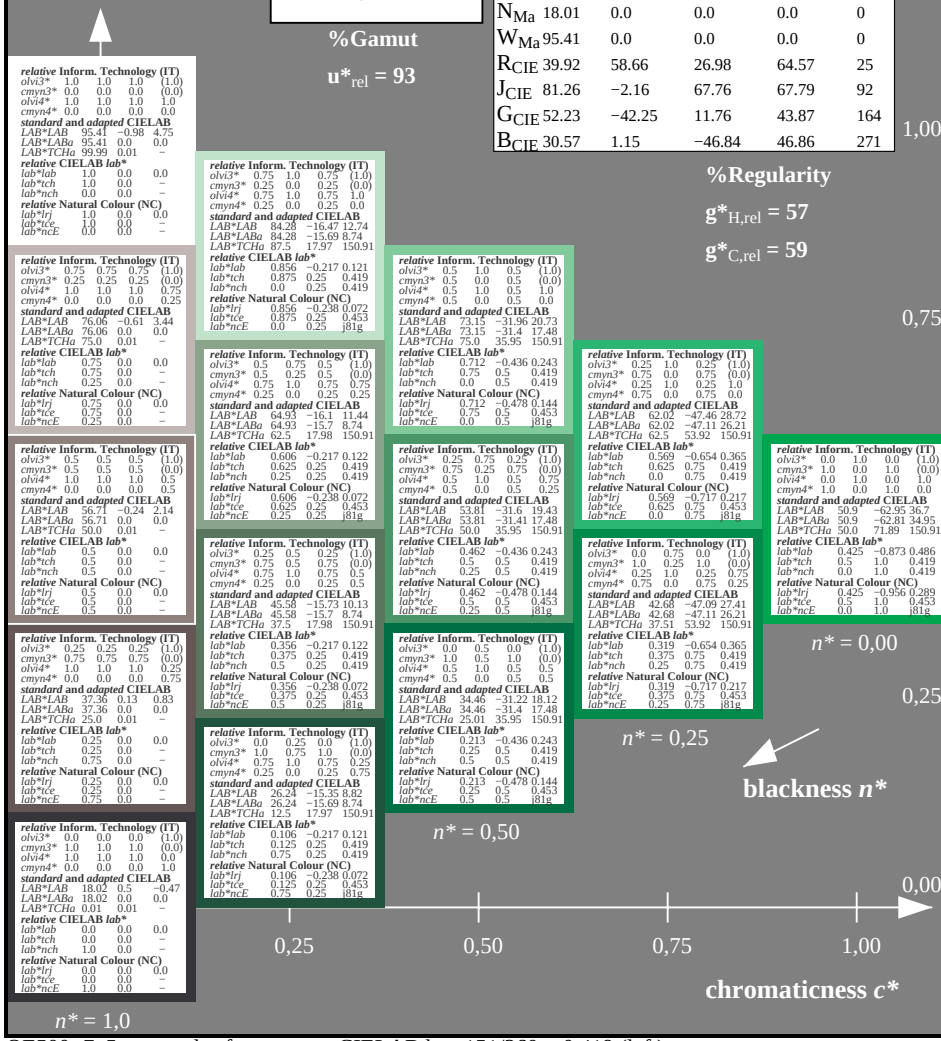
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS70

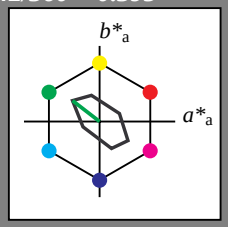
for hue $h^* = lab^*h = 142/360 = 0.395$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0



TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

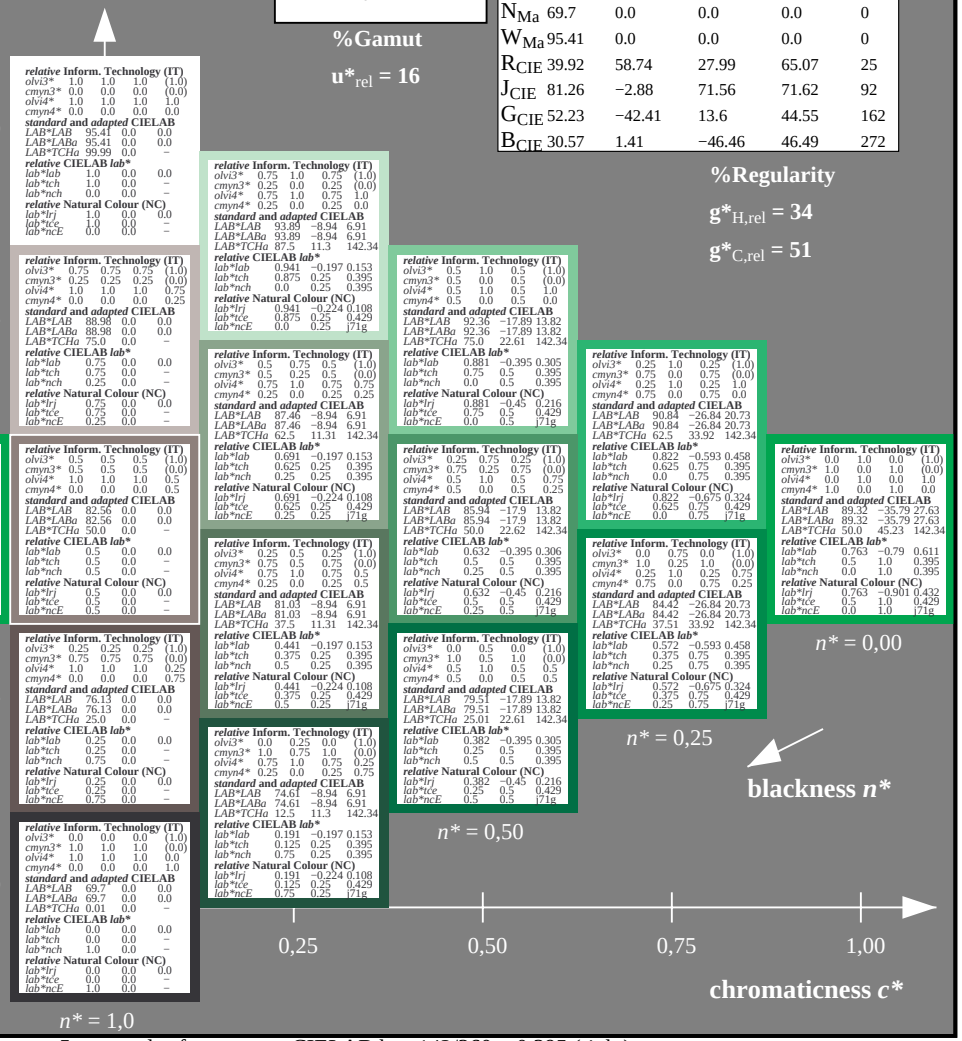
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Television Luminous System TLS00

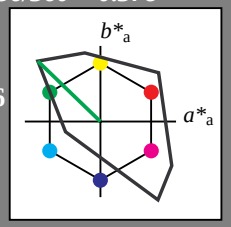
for hue $h^* = lab^*h = 136/360 = 0.378$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

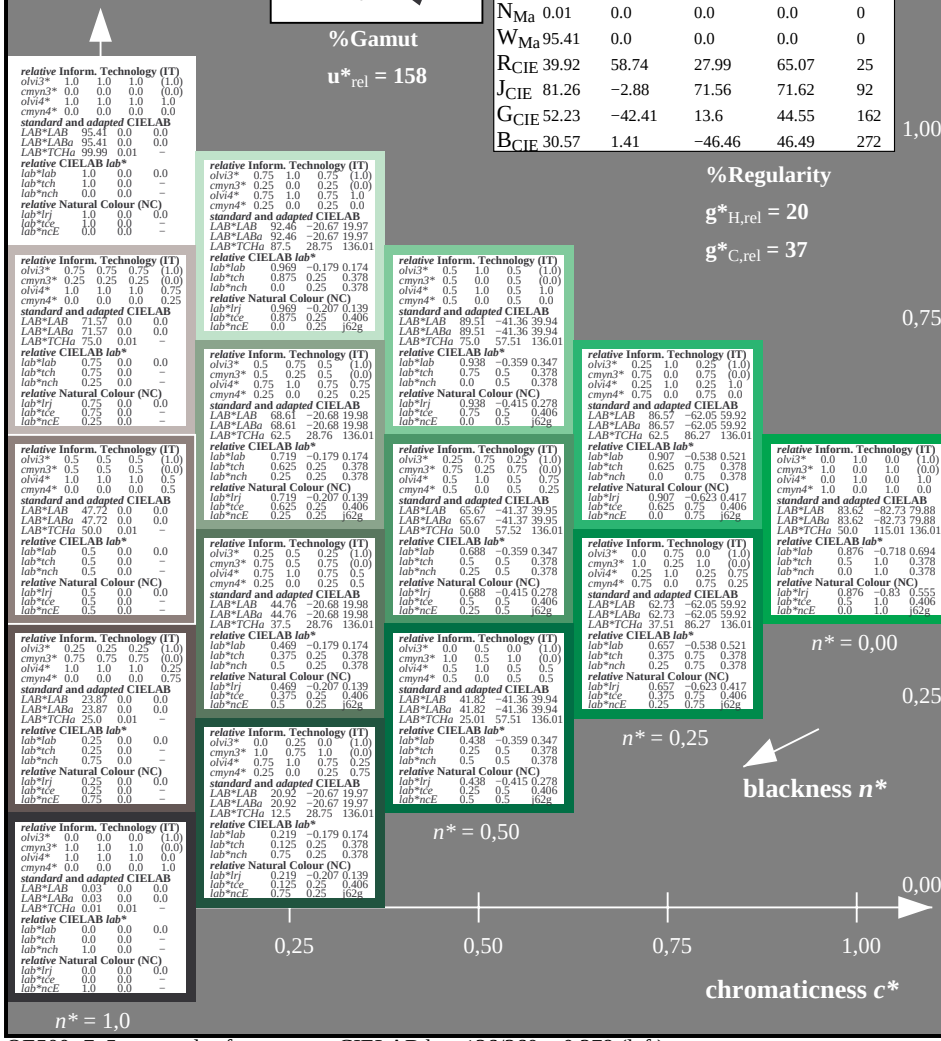
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

Output: Colorimetric Offset Reflective System ORS18

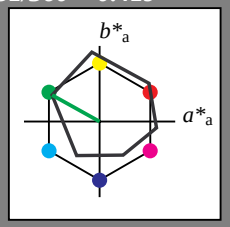
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

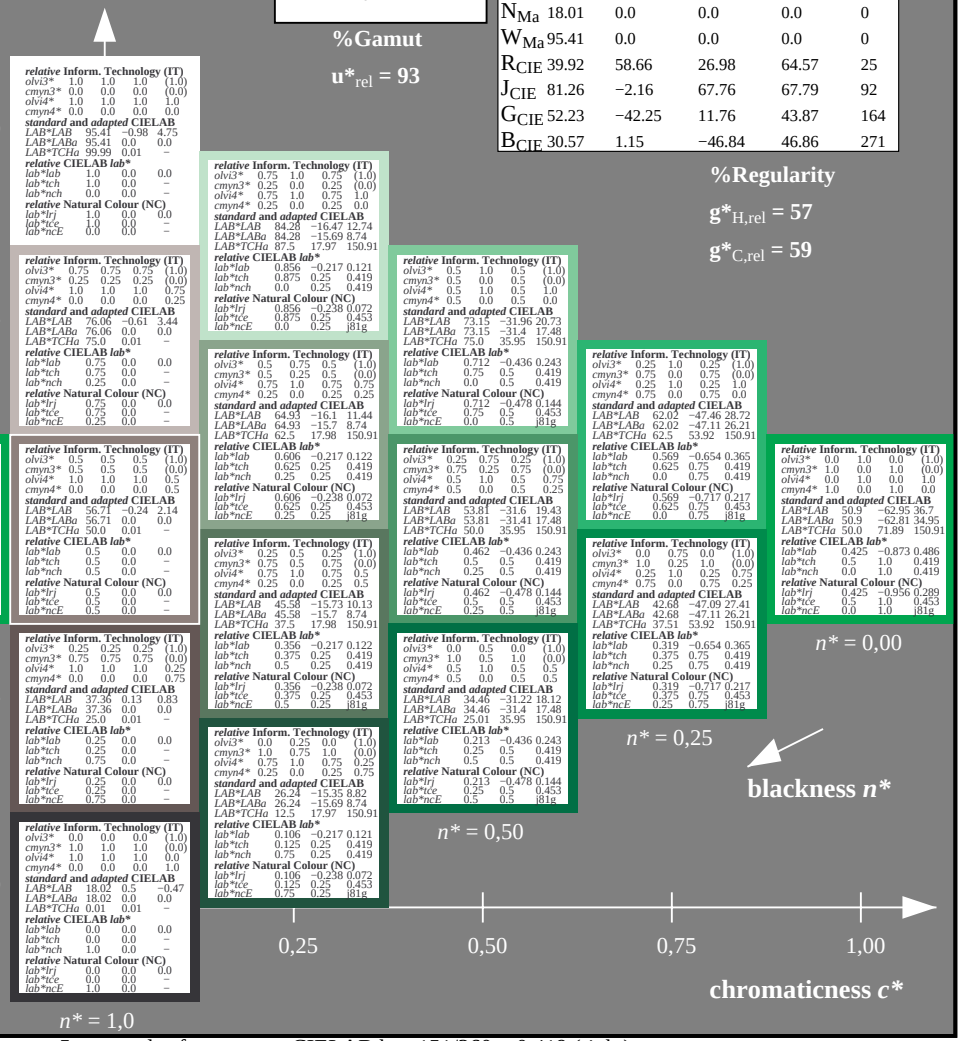
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Television Luminous System TLS00

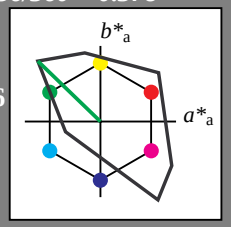
for hue $h^* = lab^*h = 136/360 = 0.378$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

Output: Colorimetric Television Luminous System TLS00

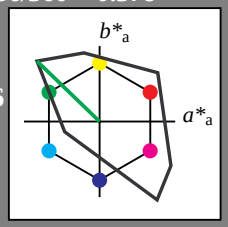
for hue $h^* = lab^*h = 136/360 = 0.378$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Television Luminous System TLS00

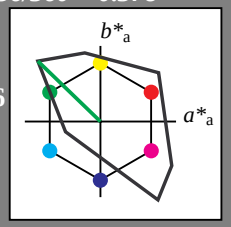
for hue $h^* = lab^*h = 136/360 = 0.378$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative* CIELAB *lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*ncE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.75 1.0 0.75 1.0
cmyn4* 0.25 0.0 0.25 0.0
***standard and adapted* CIELAB**
LAB*LAB 92.46 −20.67 19.97
LAB*LABa 92.46 −20.67 19.97
LAB*TCHa 87.5 28.75 136.01
relative* CIELAB *lab*
lab*lab 0.969 −0.179 0.174
lab*tch 0.875 0.25 0.378
lab*nch 0.0 0.25 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.969 −0.207 0.139
lab*tce 0.875 0.25 0.406
lab*ncE 0.0 0.25 j62g

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 1.0
cmyn4* 0.5 0.0 0.5 0.0
***standard and adapted* CIELAB**
LAB*LAB 89.51 −41.36 39.94
LAB*LABa 89.51 −41.36 39.94
LAB*TCHa 75.0 57.51 136.01
relative* CIELAB *lab*
lab*lab 0.938 −0.359 0.347
lab*tch 0.75 0.5 0.378
lab*nch 0.0 0.5 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.938 −0.415 0.278
lab*tce 0.75 0.5 0.406
lab*ncE 0.0 0.5 j62g

relative Inform. Technology (IT)
olvi3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olvi4* 0.25 1.0 0.25 1.0
cmyn4* 0.75 0.0 0.75 0.0
***standard and adapted* CIELAB**
LAB*LAB 86.57 −62.05 59.92
LAB*LABa 86.57 −62.05 59.92
LAB*TCHa 62.5 86.27 136.01
relative* CIELAB *lab*
lab*lab 0.907 −0.538 0.521
lab*tch 0.625 0.75 0.378
lab*nch 0.0 0.75 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.907 −0.623 0.417
lab*tce 0.625 0.75 0.406
lab*ncE 0.0 0.75 j62g

relative Inform. Technology (IT)
olvi3* 1.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 0.0 1.0 0.0 1.0
cmyn4* 1.0 0.0 1.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 83.62 −82.73 79.88
LAB*LABa 83.62 −82.73 79.88
LAB*TCHa 50.0 115.01 136.01
relative* CIELAB *lab*
lab*lab 0.876 −0.718 0.694
lab*tch 0.5 1.0 0.378
lab*nch 0.0 1.0 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.876 −0.83 0.555
lab*tce 0.5 1.0 0.406
lab*ncE 0.0 1.0 j62g

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*ncE 0.25 0.0 –

relative Inform. Technology (IT)
olvi3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 0.75 1.0 0.75 0.75
cmyn4* 0.25 0.0 0.25 0.25
***standard and adapted* CIELAB**
LAB*LAB 68.61 −20.68 19.98
LAB*LABa 68.61 −20.68 19.98
LAB*TCHa 62.5 28.76 136.01
relative* CIELAB *lab*
lab*lab 0.719 −0.179 0.174
lab*tch 0.625 0.25 0.378
lab*nch 0.25 0.25 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.719 −0.207 0.139
lab*tce 0.625 0.25 0.406
lab*ncE 0.25 0.25 j62g

relative Inform. Technology (IT)
olvi3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
***standard and adapted* CIELAB**
LAB*LAB 65.67 −41.37 39.95
LAB*LABa 65.67 −41.37 39.95
LAB*TCHa 50.0 57.52 136.01
relative* CIELAB *lab*
lab*lab 0.688 −0.359 0.347
lab*tch 0.5 0.5 0.378
lab*nch 0.25 0.5 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.688 −0.415 0.278
lab*tce 0.5 0.5 0.406
lab*ncE 0.25 0.5 j62g

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 1.0 0.25 0.75
cmyn4* 0.75 0.0 0.75 0.25
***standard and adapted* CIELAB**
LAB*LAB 62.73 −62.05 59.92
LAB*LABa 62.73 −62.05 59.92
LAB*TCHa 37.51 86.27 136.01
relative* CIELAB *lab*
lab*lab 0.657 −0.538 0.521
lab*tch 0.375 0.75 0.378
lab*nch 0.25 0.75 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.657 −0.623 0.417
lab*tce 0.375 0.75 0.406
lab*ncE 0.25 0.75 j62g

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 23.87 0.0 0.0
LAB*LABa 23.87 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*ncE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.75 1.0 (0.0)
olvi4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.25 0.75
***standard and adapted* CIELAB**
LAB*LAB 20.92 −20.67 19.97
LAB*LABa 20.92 −20.67 19.97
LAB*TCHa 12.5 28.75 136.01
relative* CIELAB *lab*
lab*lab 0.219 −0.179 0.174
lab*tch 0.125 0.25 0.378
lab*nch 0.75 0.25 0.378
***relative* Natural Colour (NC)**
lab*lrj 0.219 −0.207 0.139
lab*tce 0.125 0.25 0.406
lab*ncE 0.75 0.25 j62g

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 0.01 0.01 –
relative* CIELAB *lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 –
lab*nch 1.0 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.0 0.0 0.0
lab*tce 0.0 0.0 –
lab*ncE 1.0 0.0 –

Output: Colorimetric Printer Reflective System DRSXX

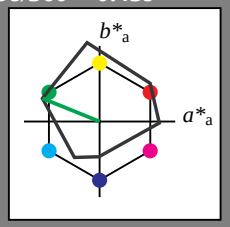
for hue $h^* = lab^*h = 158/360 = 0.439$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 96.31 −0.11 2.58
LAB*LABa 96.31 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative* CIELAB *lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*ncE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.75 1.0 0.75 1.0
cmyn4* 0.25 0.0 0.25 0.0
***standard and adapted* CIELAB**
LAB*LAB 84.28 −19.21 10.17
LAB*LABa 84.28 −18.89 7.66
LAB*TCHa 87.5 20.39 157.94
relative* CIELAB *lab*
lab*lab 0.849 −0.231 0.094
lab*tch 0.875 0.25 0.439
lab*nch 0.0 0.25 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.849 −0.246 0.037
lab*tce 0.875 0.25 0.476
lab*ncE 0.0 0.25 j90g

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 1.0
cmyn4* 0.5 0.0 0.5 0.0
***standard and adapted* CIELAB**
LAB*LAB 72.26 −38.31 17.76
LAB*LABa 72.26 −37.8 15.32
LAB*TCHa 75.0 40.8 157.94
relative* CIELAB *lab*
lab*lab 0.698 −0.462 0.188
lab*tch 0.75 0.5 0.439
lab*nch 0.0 0.5 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.698 −0.493 0.074
lab*tce 0.75 0.5 0.476
lab*ncE 0.0 0.5 j90g

relative Inform. Technology (IT)
olvi3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olvi4* 0.25 1.0 0.25 1.0
cmyn4* 0.75 0.0 0.75 0.0
***standard and adapted* CIELAB**
LAB*LAB 60.23 −57.42 25.34
LAB*LABa 60.23 −56.71 22.99
LAB*TCHa 62.5 61.2 157.94
relative* CIELAB *lab*
lab*lab 0.548 −0.694 0.282
lab*tch 0.625 0.75 0.439
lab*nch 0.0 0.75 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.548 −0.741 0.111
lab*tce 0.625 0.75 0.476
lab*ncE 0.0 0.75 j90g

relative Inform. Technology (IT)
olvi3* 0.0 1.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 0.0 1.0 0.0 1.0
cmyn4* 1.0 0.0 1.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 48.21 −76.51 32.92
LAB*LABa 48.21 −75.61 30.65
LAB*TCHa 50.0 81.6 157.94
relative* CIELAB *lab*
lab*lab 0.397 −0.926 0.376
lab*tch 0.5 1.0 0.439
lab*nch 0.0 1.0 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.397 −0.988 0.148
lab*tce 0.5 1.0 0.476
lab*ncE 0.0 1.0 j90g

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 0.599 −0.231 0.094
lab*tch 0.625 0.25 0.439
lab*nch 0.25 0.25 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.599 −0.246 0.037
lab*tce 0.625 0.25 0.476
lab*ncE 0.25 0.25 j90g

relative Inform. Technology (IT)
olvi3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 56.44 −0.76 2.32
LAB*LABa 56.44 0.0 0.0
LAB*TCHa 50.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 –
lab*nch 0.5 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.5 0.0 0.0
lab*tce 0.5 0.0 –
lab*ncE 0.5 0.0 –

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.5 0.75 (0.0)
olvi4* 0.75 1.0 0.75 0.5
cmyn4* 0.25 0.0 0.25 0.5
***standard and adapted* CIELAB**
LAB*LAB 44.41 −19.87 9.92
LAB*LABa 44.41 −18.9 7.66
LAB*TCHa 37.5 20.4 157.94
relative* CIELAB *lab*
lab*lab 0.349 −0.231 0.094
lab*tch 0.375 0.25 0.439
lab*nch 0.5 0.25 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.349 −0.246 0.037
lab*tce 0.375 0.25 0.476
lab*ncE 0.5 0.25 j90g

relative Inform. Technology (IT)
olvi3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
***standard and adapted* CIELAB**
LAB*LAB 52.32 −38.64 17.63
LAB*LABa 52.32 −37.81 15.33
LAB*TCHa 50.0 40.81 157.94
relative* CIELAB *lab*
lab*lab 0.448 −0.462 0.188
lab*tch 0.5 0.5 0.439
lab*nch 0.25 0.5 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.448 −0.494 0.074
lab*tce 0.5 0.5 0.476
lab*ncE 0.25 0.5 j90g

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 1.0 0.25 0.75
cmyn4* 0.75 0.0 0.75 0.25
***standard and adapted* CIELAB**
LAB*LAB 40.3 −57.74 25.21
LAB*LABa 40.3 −56.71 22.99
LAB*TCHa 37.51 61.2 157.94
relative* CIELAB *lab*
lab*lab 0.298 −0.694 0.282
lab*tch 0.375 0.75 0.439
lab*nch 0.25 0.75 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.298 −0.741 0.111
lab*tce 0.375 0.75 0.476
lab*ncE 0.25 0.75 j90g

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
LAB*LAB 16.57 −1.41 2.06
LAB*LABa 16.57 0.0 0.0
LAB*TCHa 0.01 0.01 –
relative* CIELAB *lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 –
lab*nch 1.0 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.0 0.0 0.0
lab*tce 0.0 0.0 –
lab*ncE 1.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 36.5 −1.09 2.19
LAB*LABa 36.5 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*ncE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.75 1.0 (0.0)
olvi4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.25 0.75
***standard and adapted* CIELAB**
LAB*LAB 24.48 −20.18 9.78
LAB*LABa 24.48 −18.89 7.66
LAB*TCHa 12.5 20.39 157.94
relative* CIELAB *lab*
lab*lab 0.099 −0.231 0.094
lab*tch 0.125 0.25 0.439
lab*nch 0.75 0.25 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.099 −0.246 0.037
lab*tce 0.125 0.25 0.476
lab*ncE 0.75 0.25 j90g

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.75 1.0 (0.0)
olvi4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.25 0.75
***standard and adapted* CIELAB**
LAB*LAB 32.39 −38.96 17.5
LAB*LABa 32.39 −37.8 15.32
LAB*TCHa 25.01 40.8 157.94
relative* CIELAB *lab*
lab*lab 0.198 −0.462 0.188
lab*tch 0.25 0.5 0.439
lab*nch 0.5 0.5 0.439
***relative* Natural Colour (NC)**
lab*lrj 0.198 −0.493 0.074
lab*tce 0.25 0.5 0.476
lab*ncE 0.5 0.5 j90g

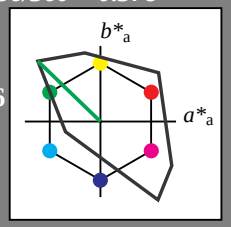
OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 158

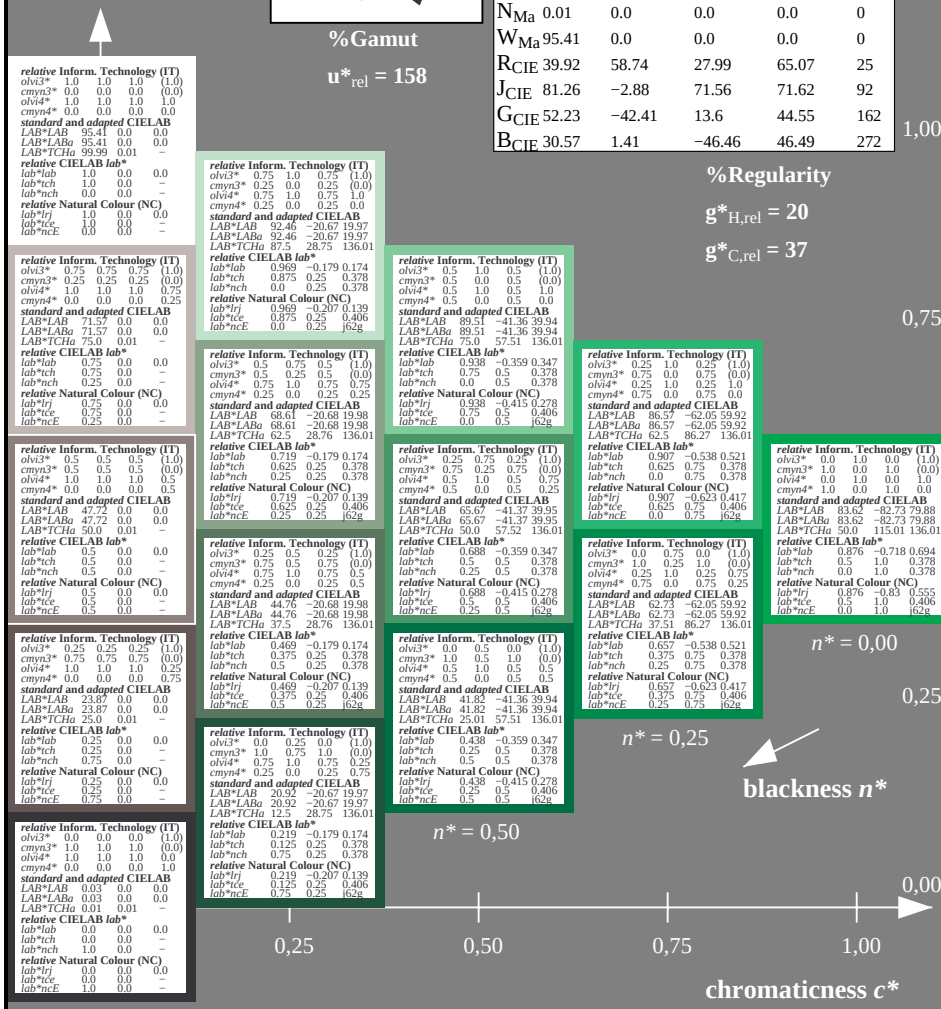
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

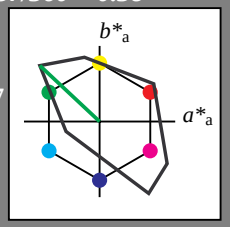


OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 118

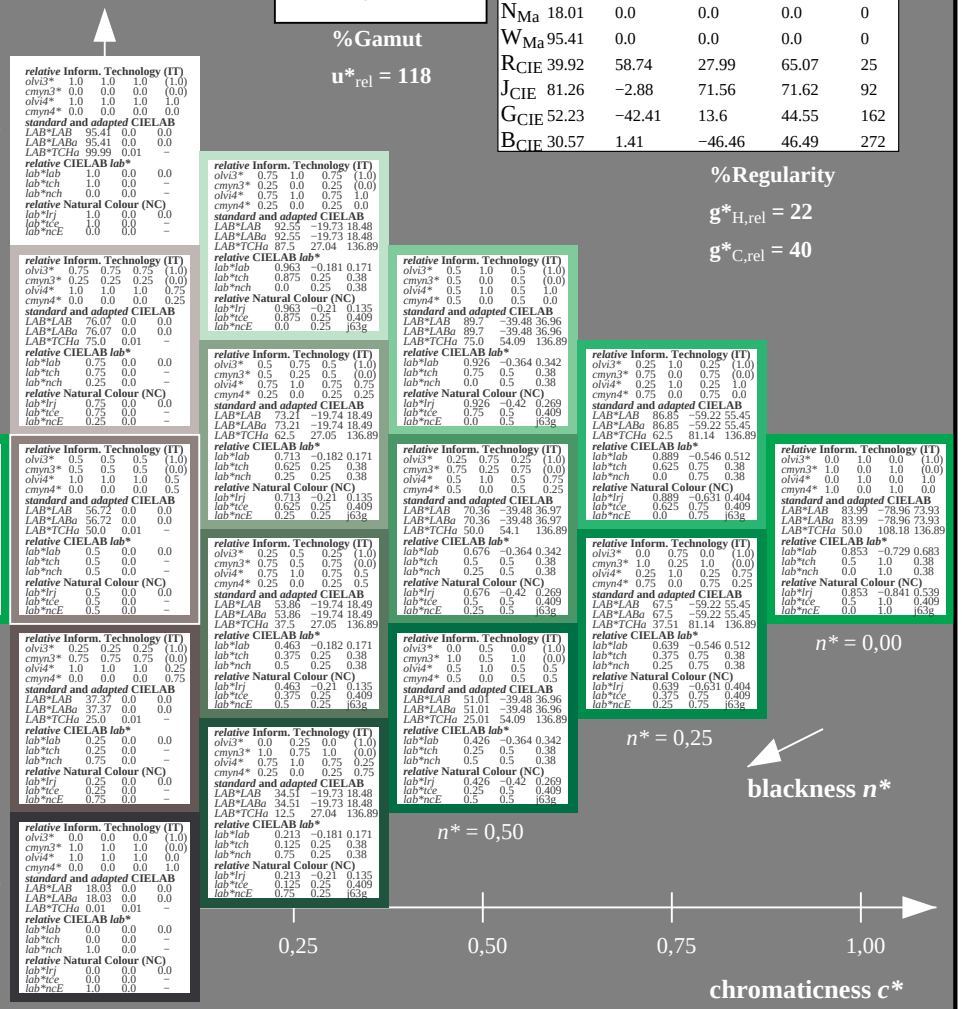
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

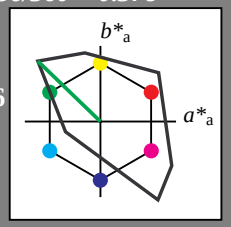


5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

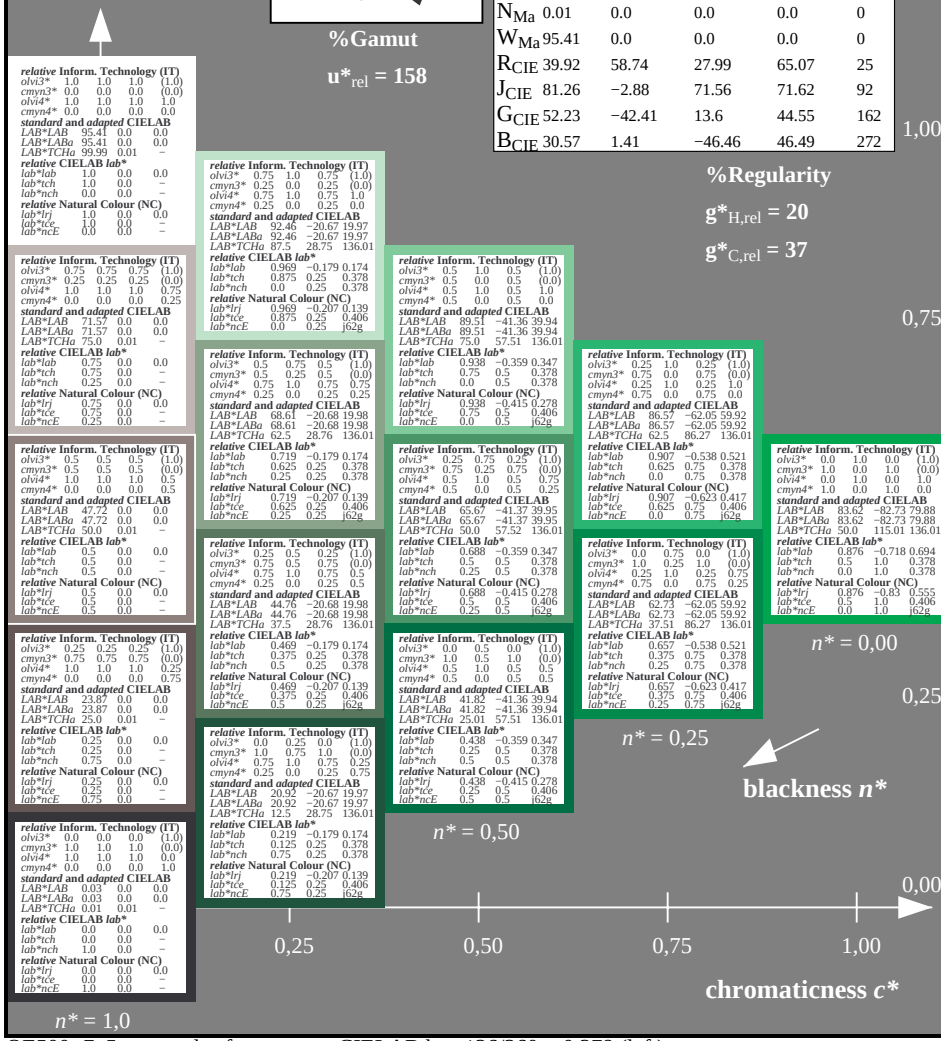
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

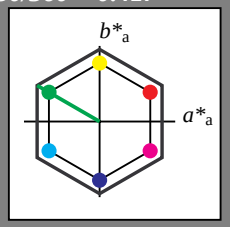
$g^*_{C,rel}$ = 37



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

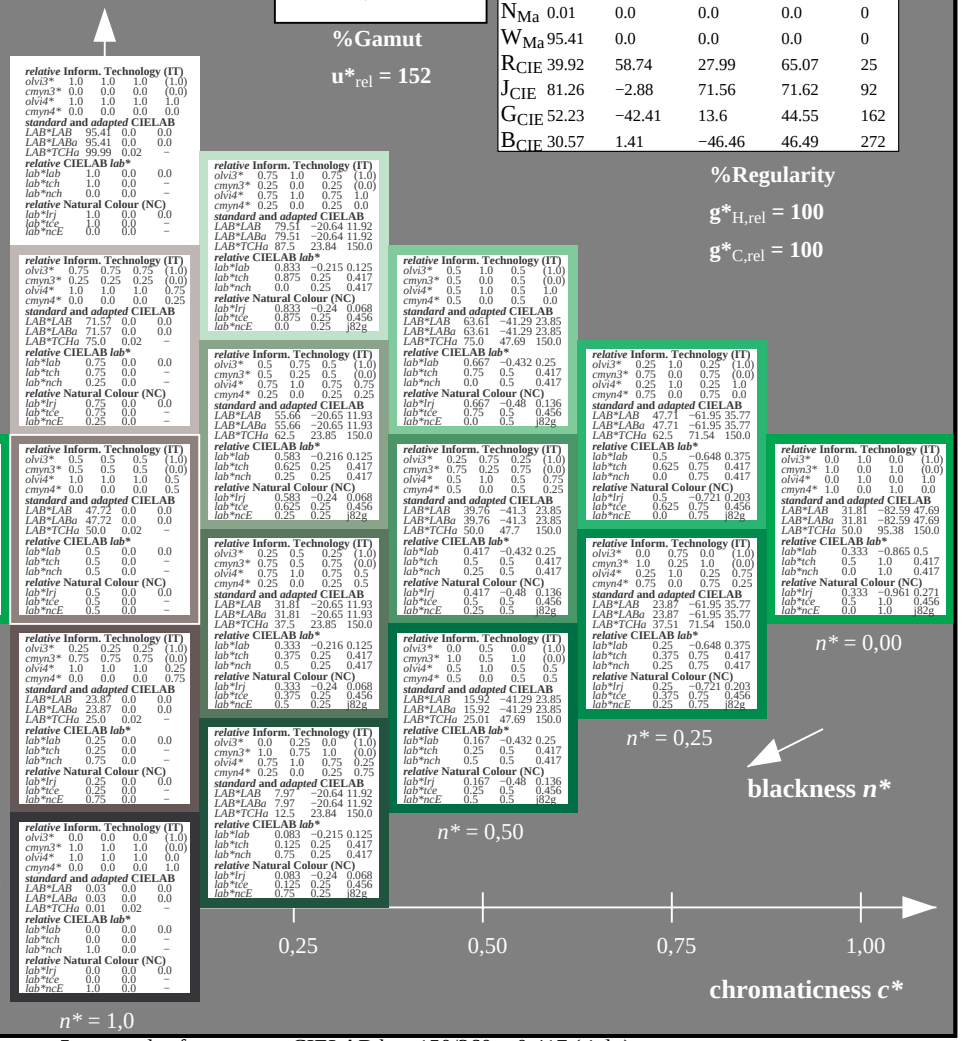
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



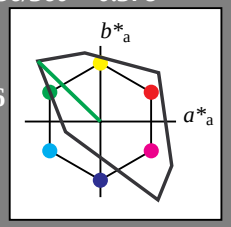
OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

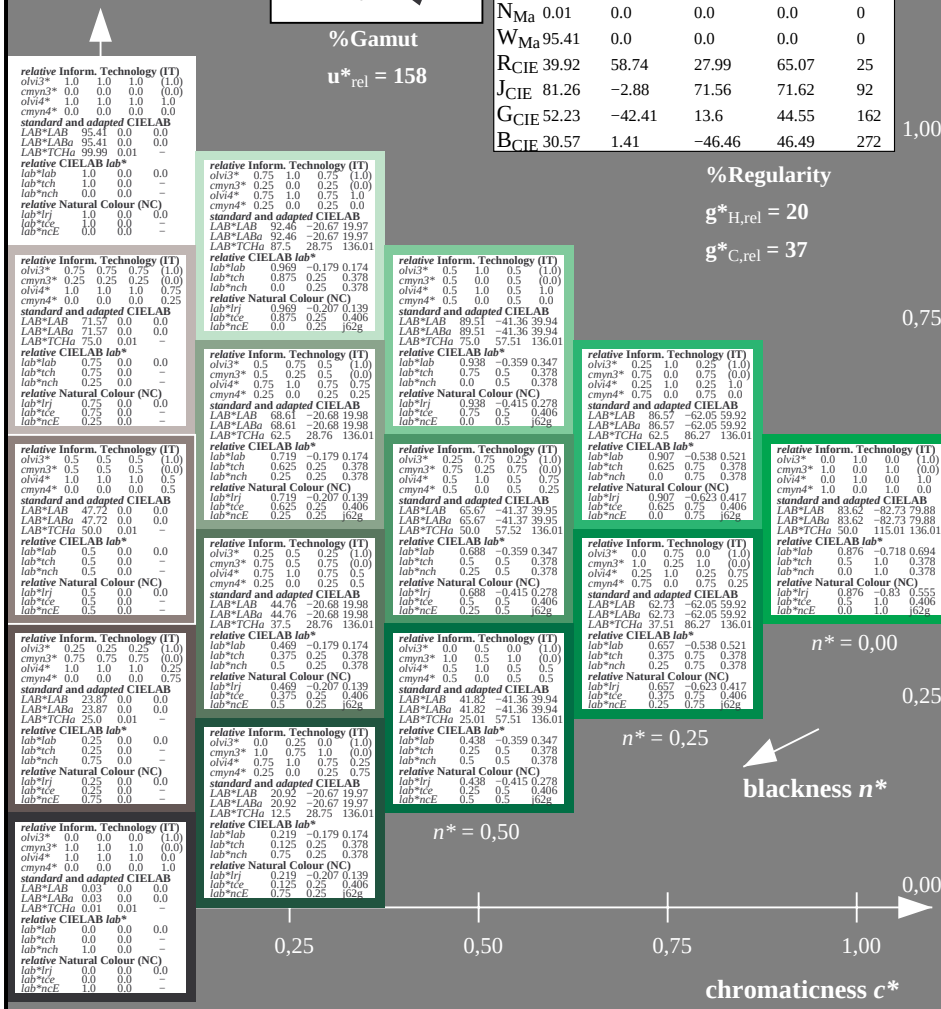
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

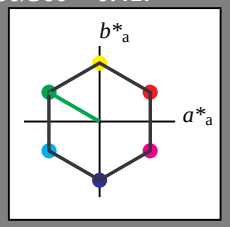


OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

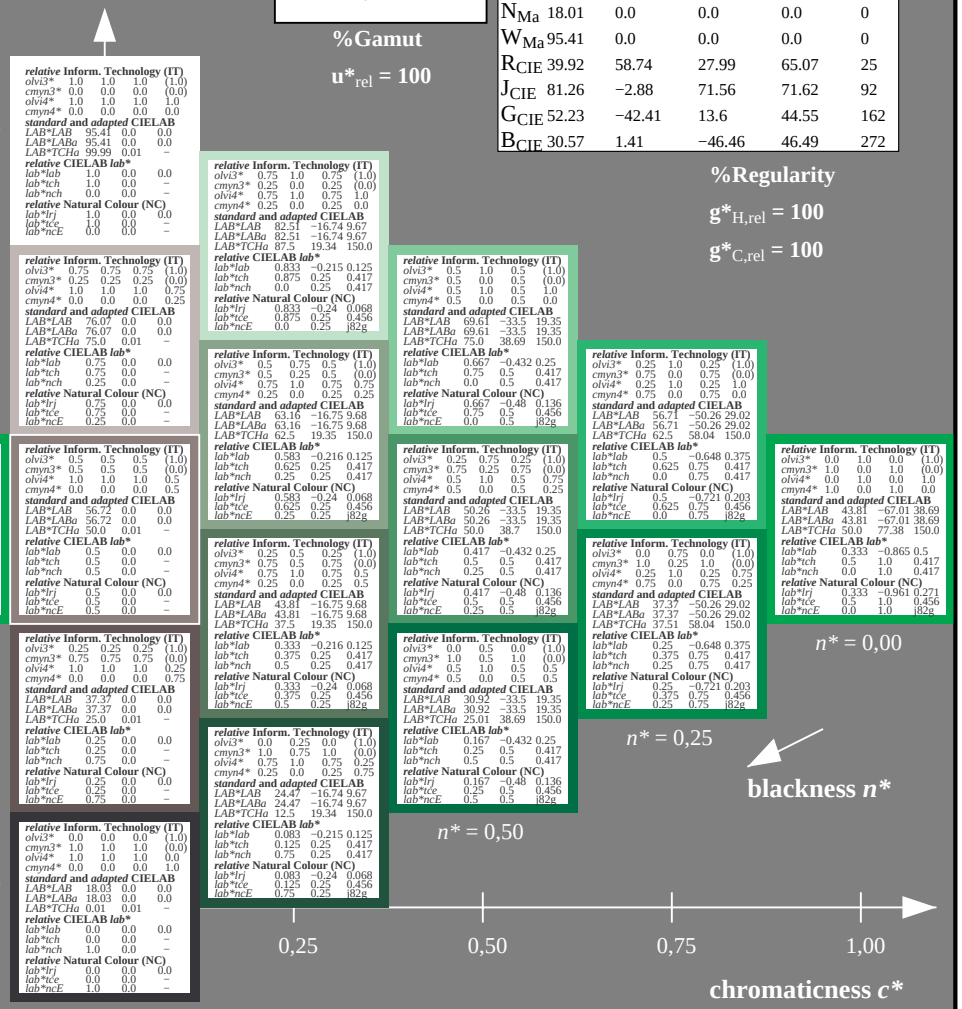
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS00

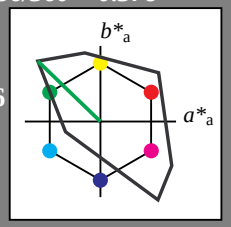
for hue $h^* = lab^*h = 136/360 = 0.378$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

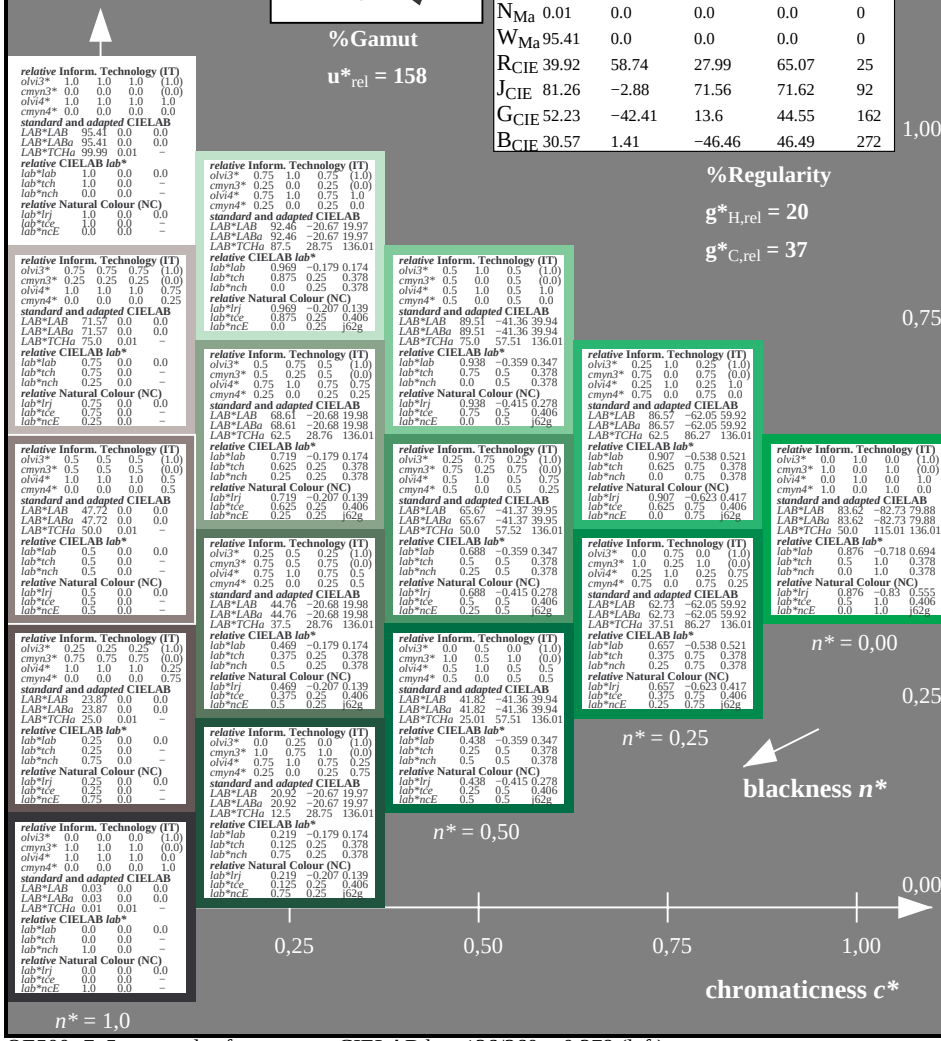
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

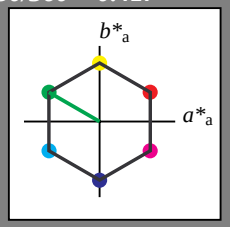
for hue $h^* = lab^*h = 150/360 = 0.417$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

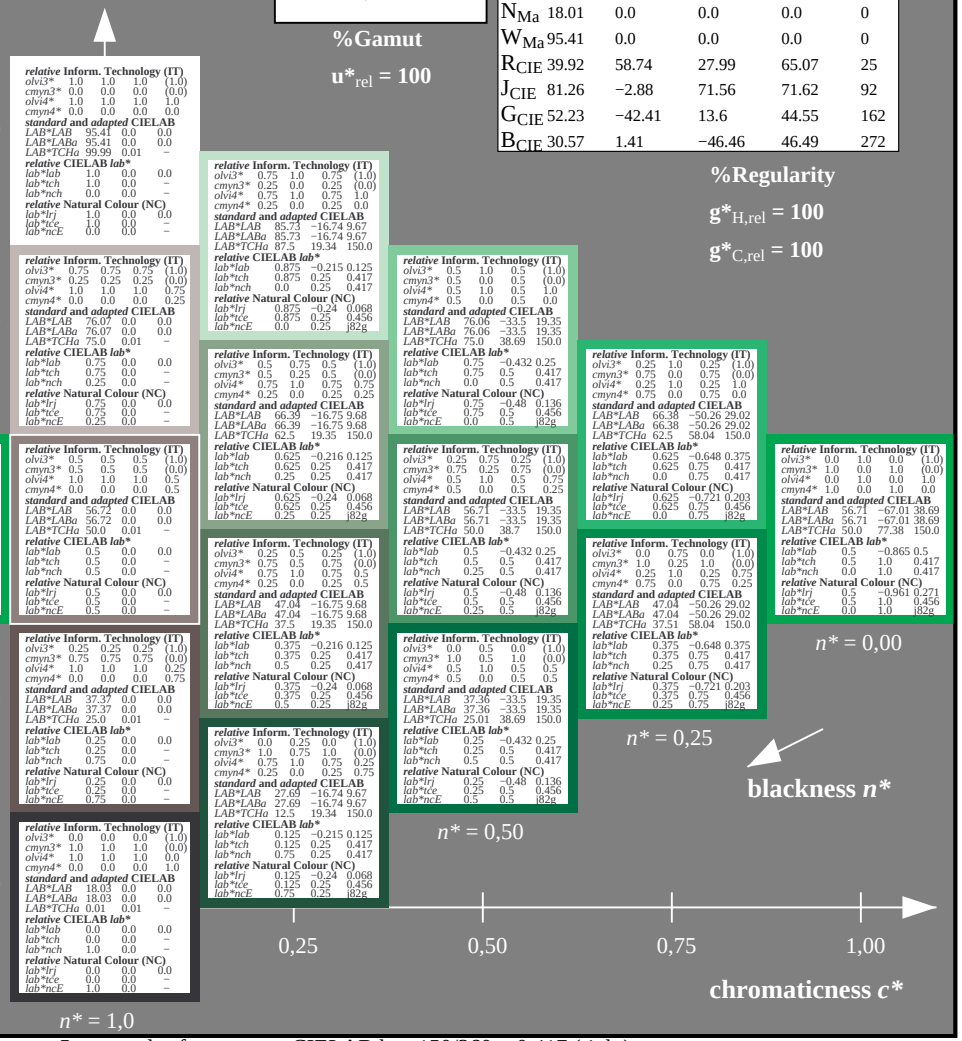
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$

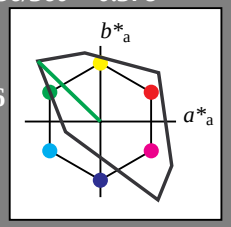
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

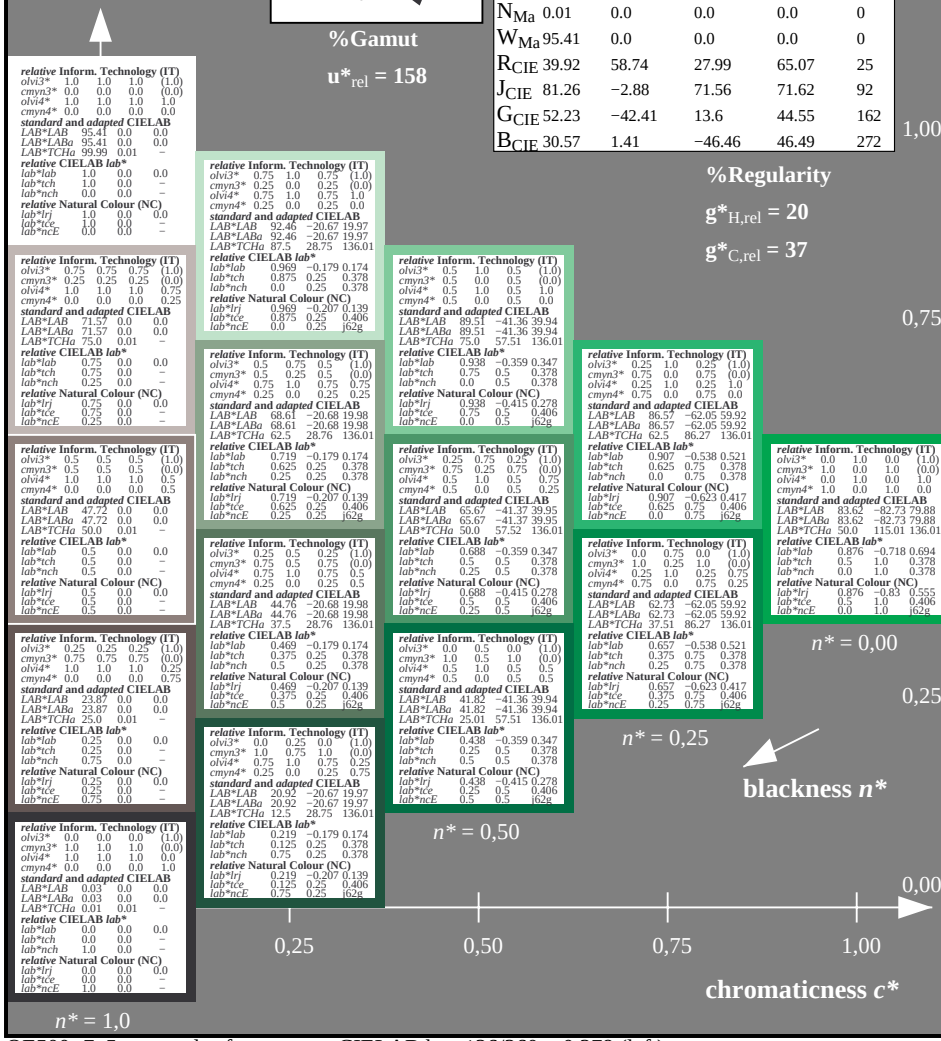
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$

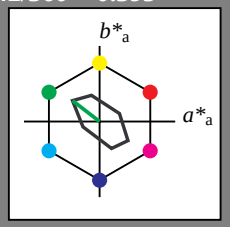
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

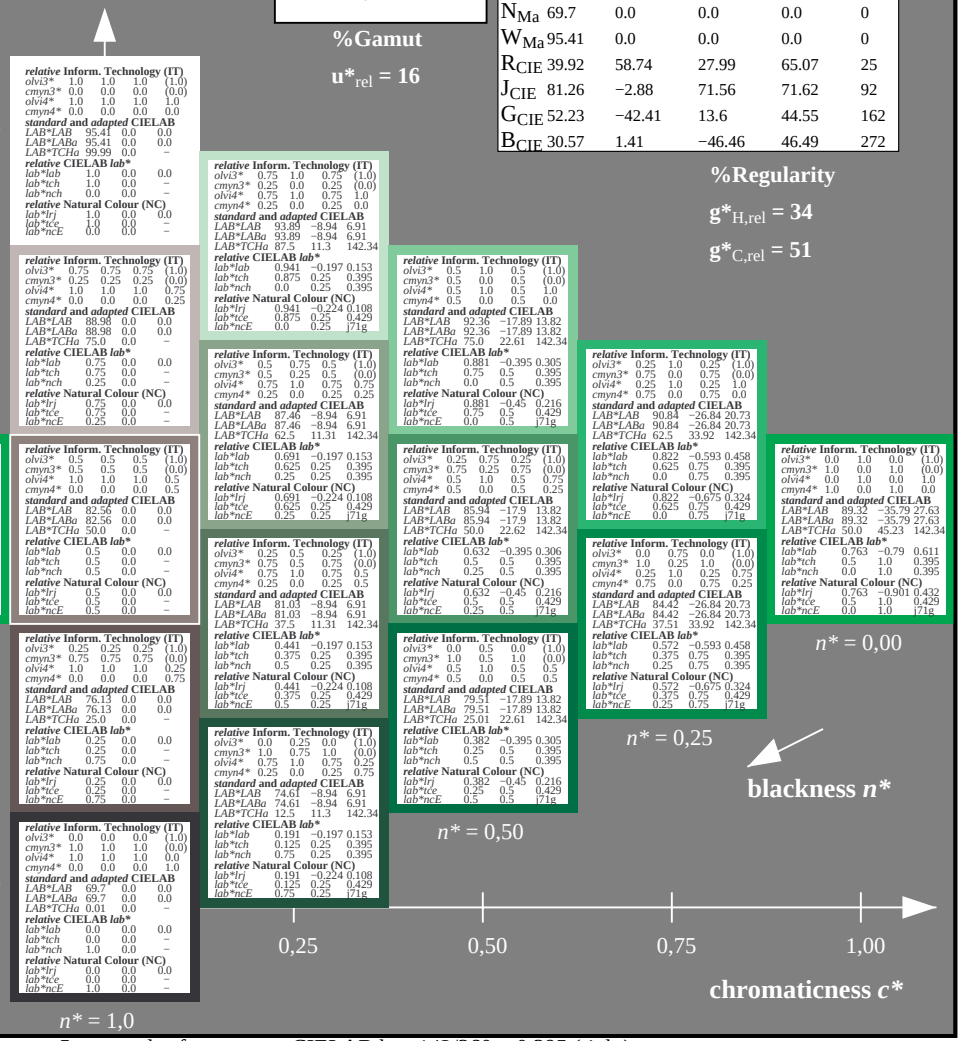
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

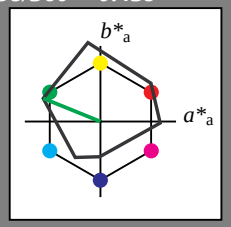
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

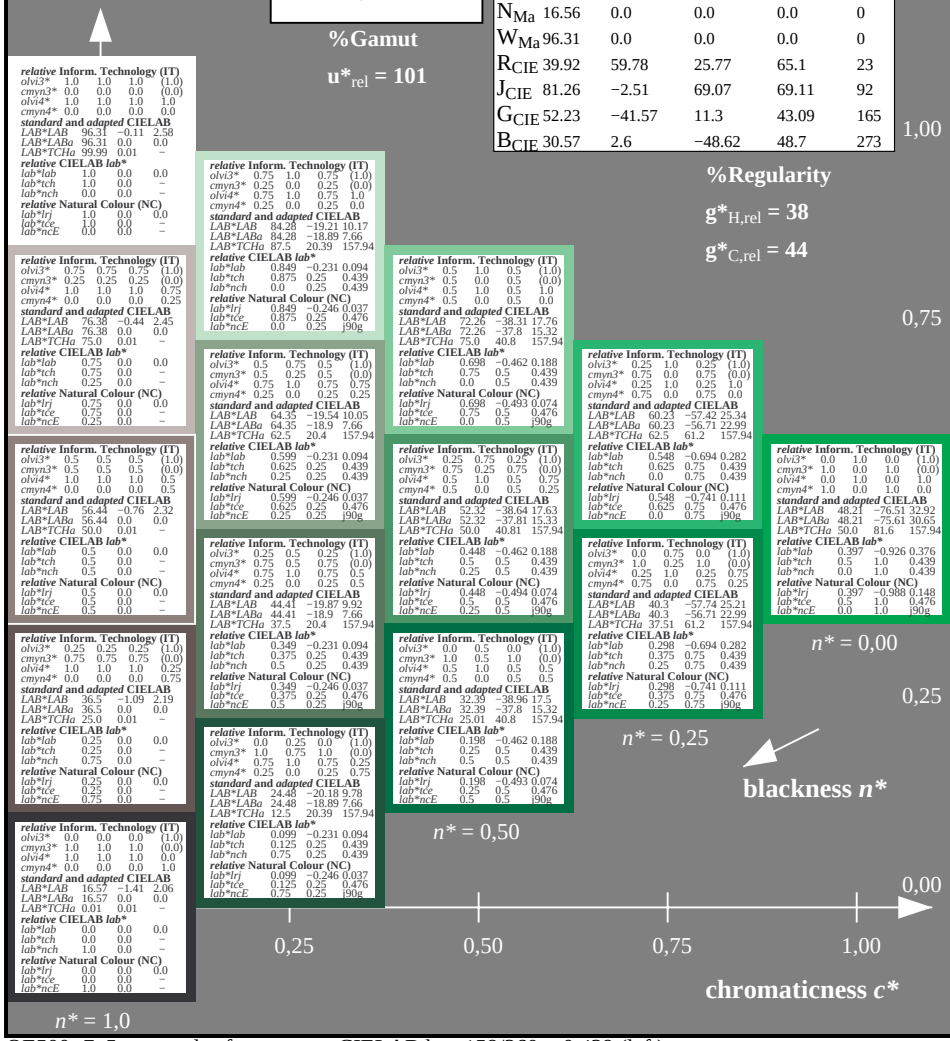
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

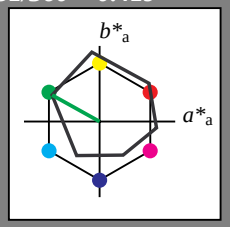
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

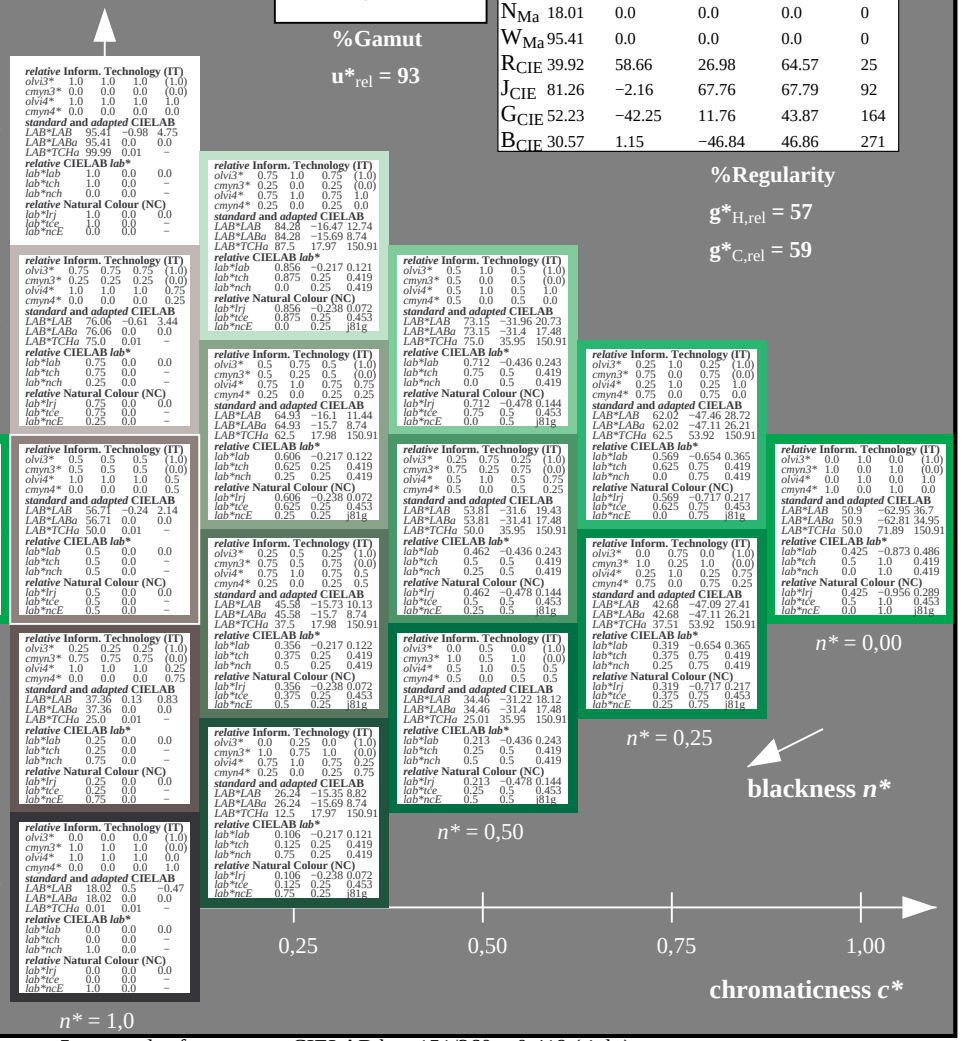
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

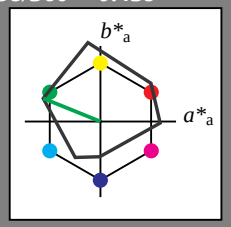


5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 158/360 = 0.439*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 48 82 158
olv*Ma: 0.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

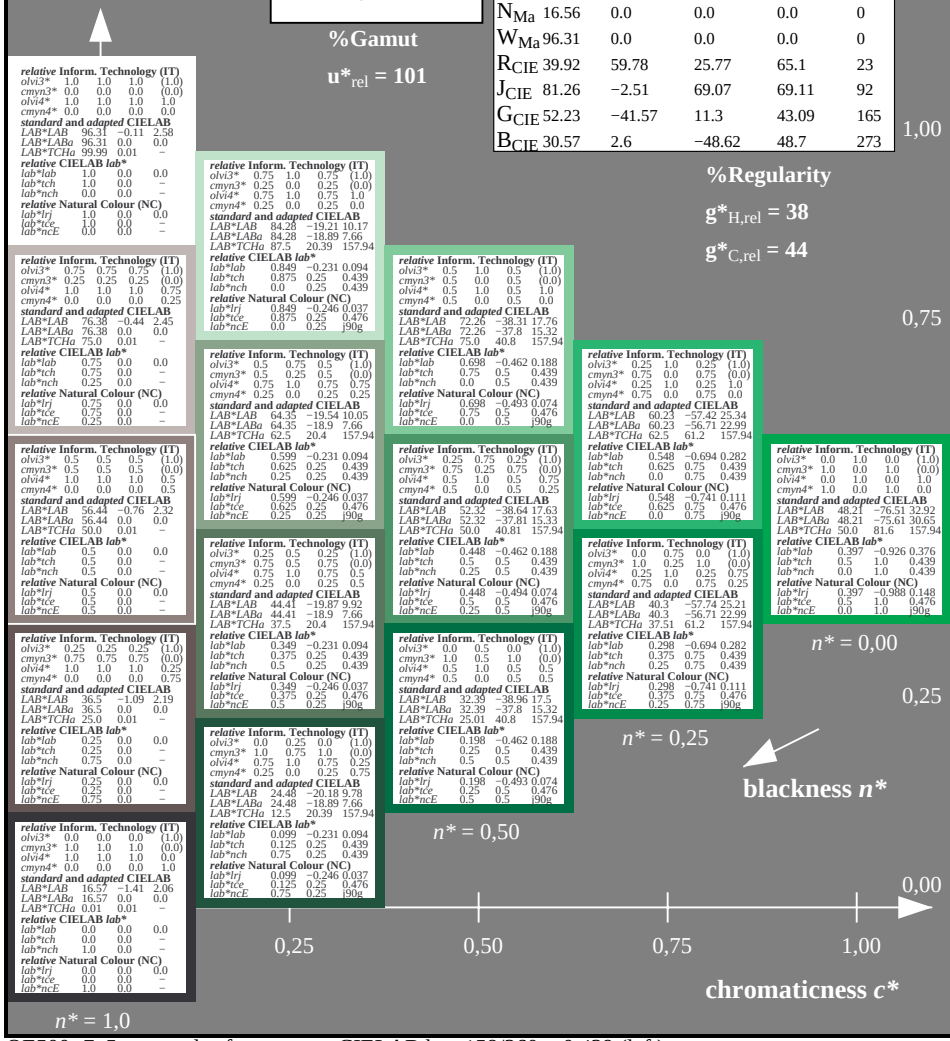
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

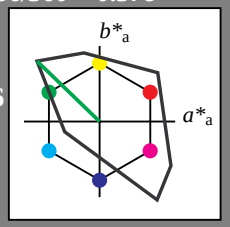


OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Television Luminous System TLS00

for hue *h* = lab*h = 136/360 = 0.378*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

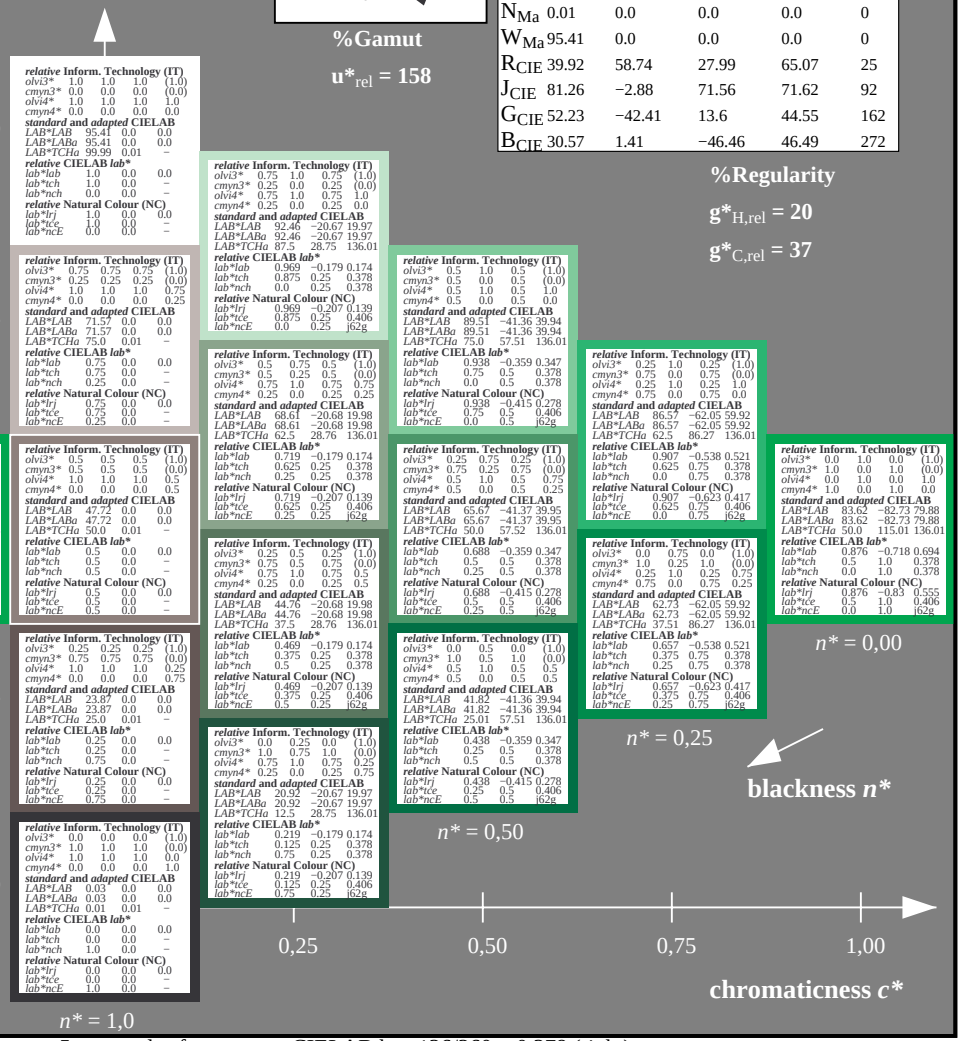
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Printer Reflective System DRSXX

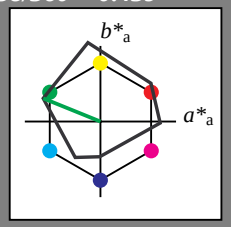
for hue $h^* = lab^*h = 158/360 = 0.439$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

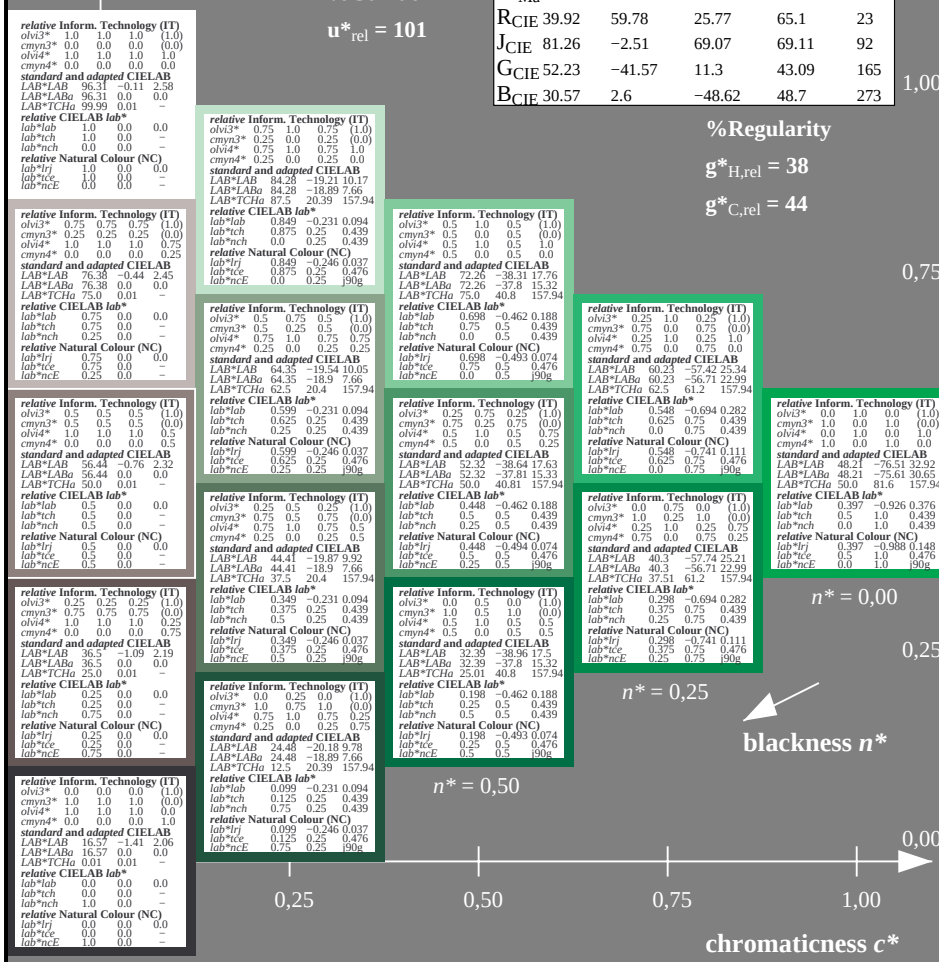
$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*



OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Printer Reflective System DRSXX

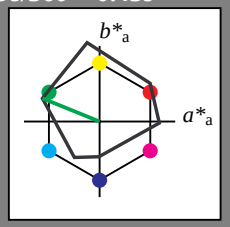
for hue $h^* = lab^*h = 158/360 = 0.439$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

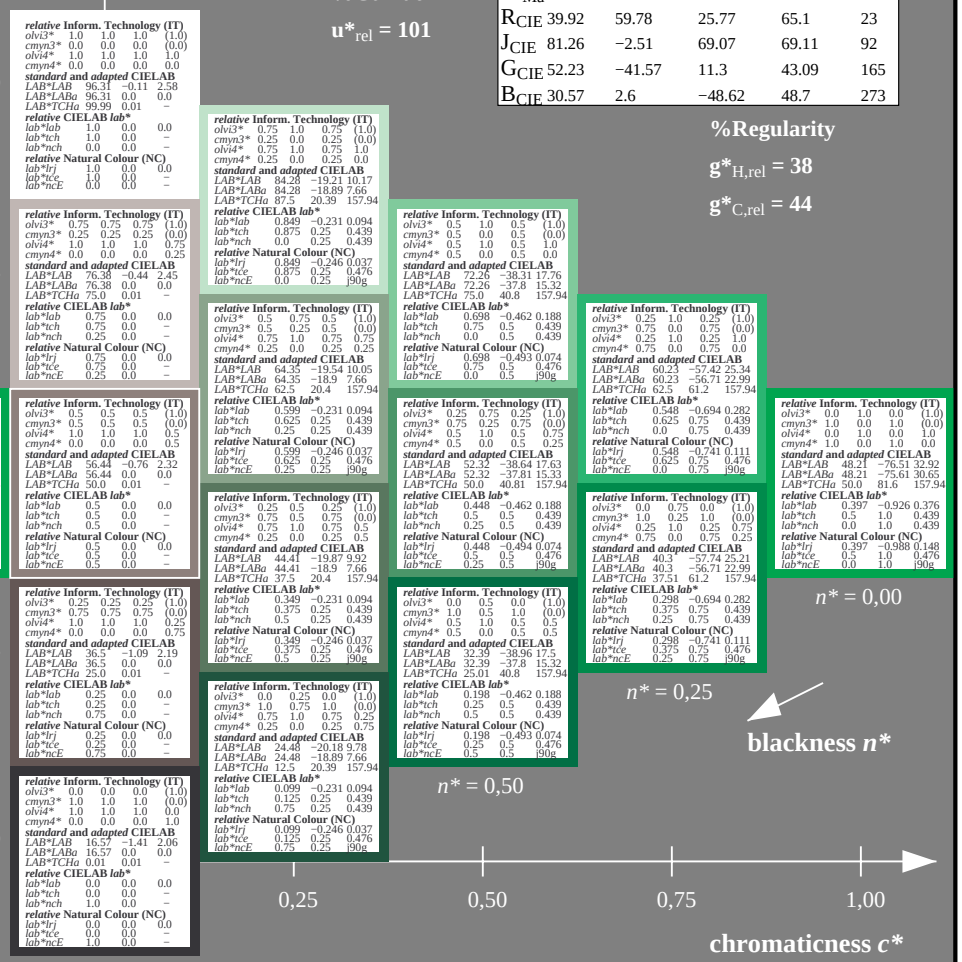
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



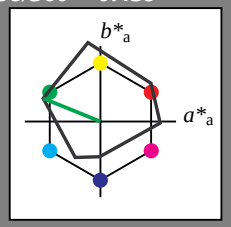
5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 158/360 = 0.439*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 48 82 158
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

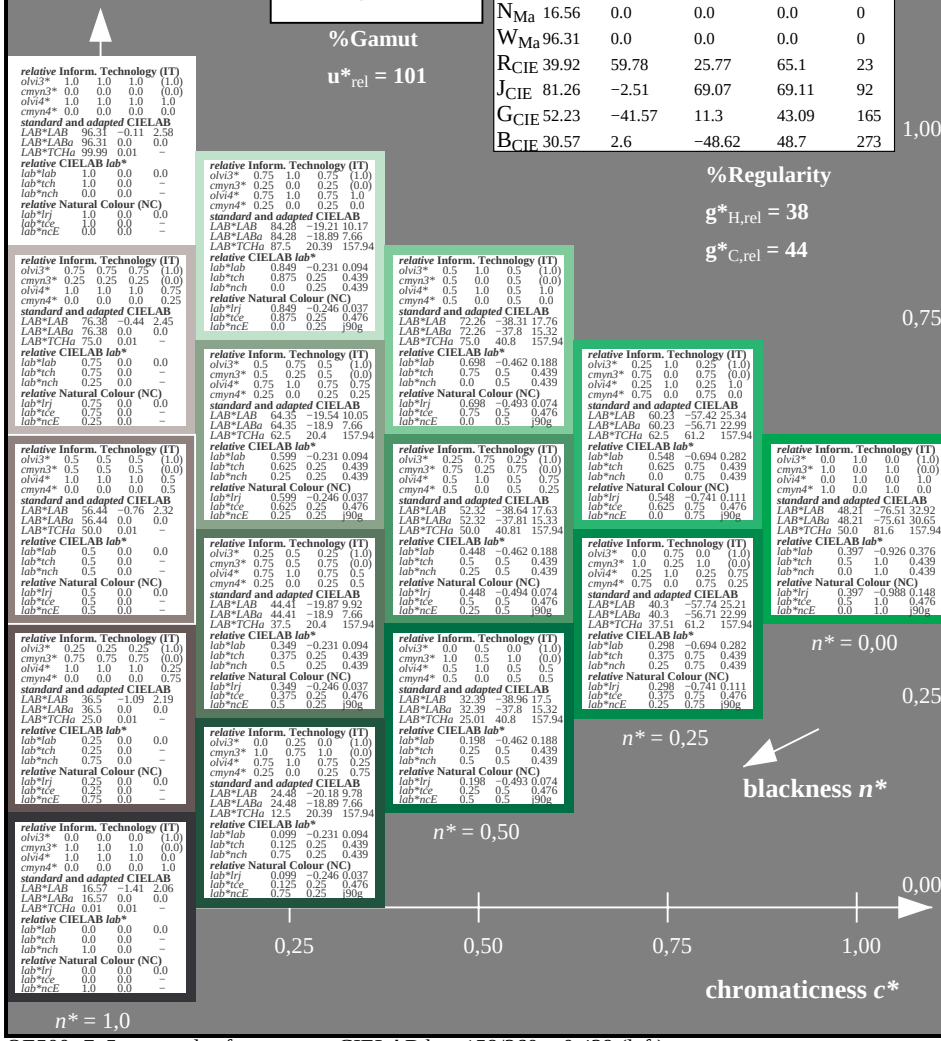
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



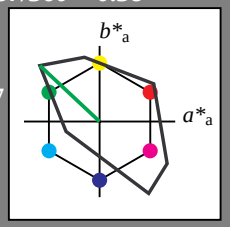
OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 137/360 = 0.38*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

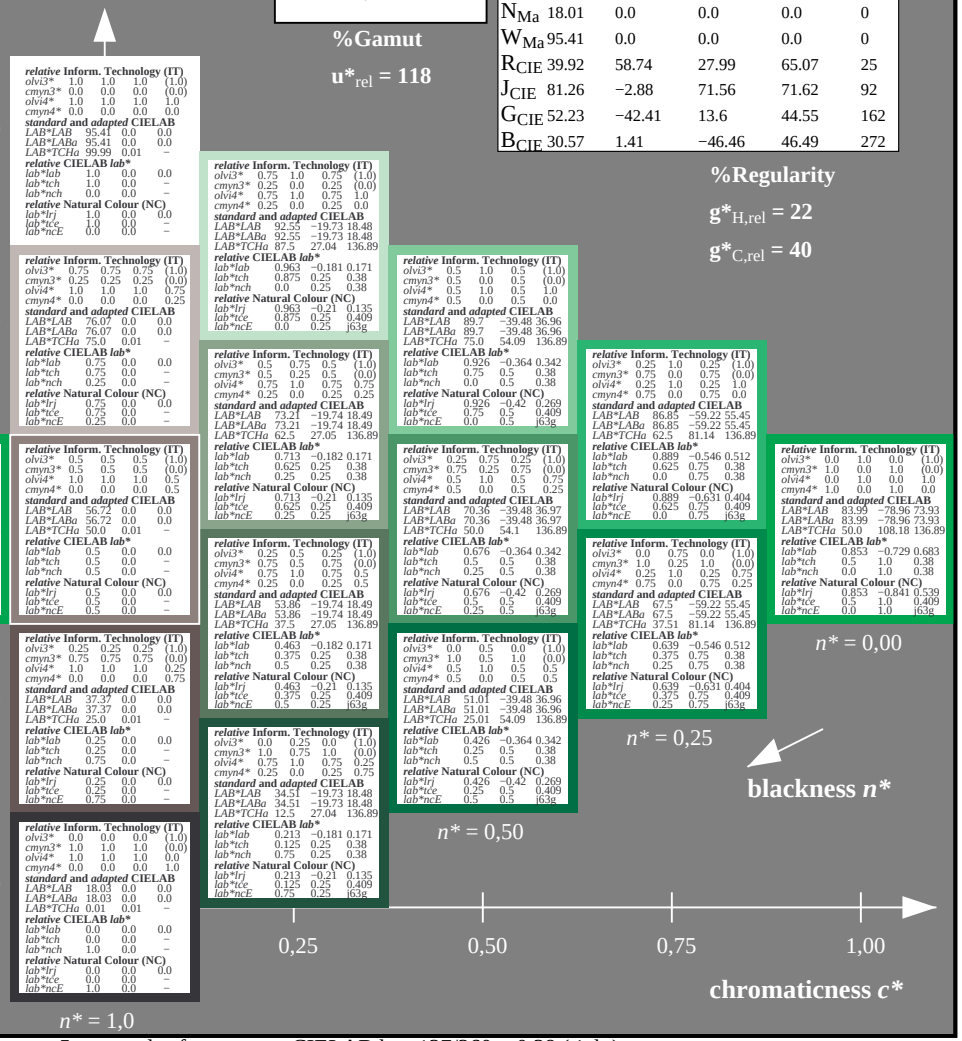
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



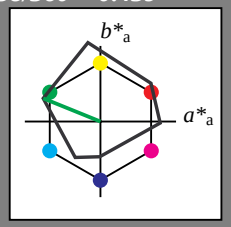
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 158/360 = 0.439*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 48 82 158
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

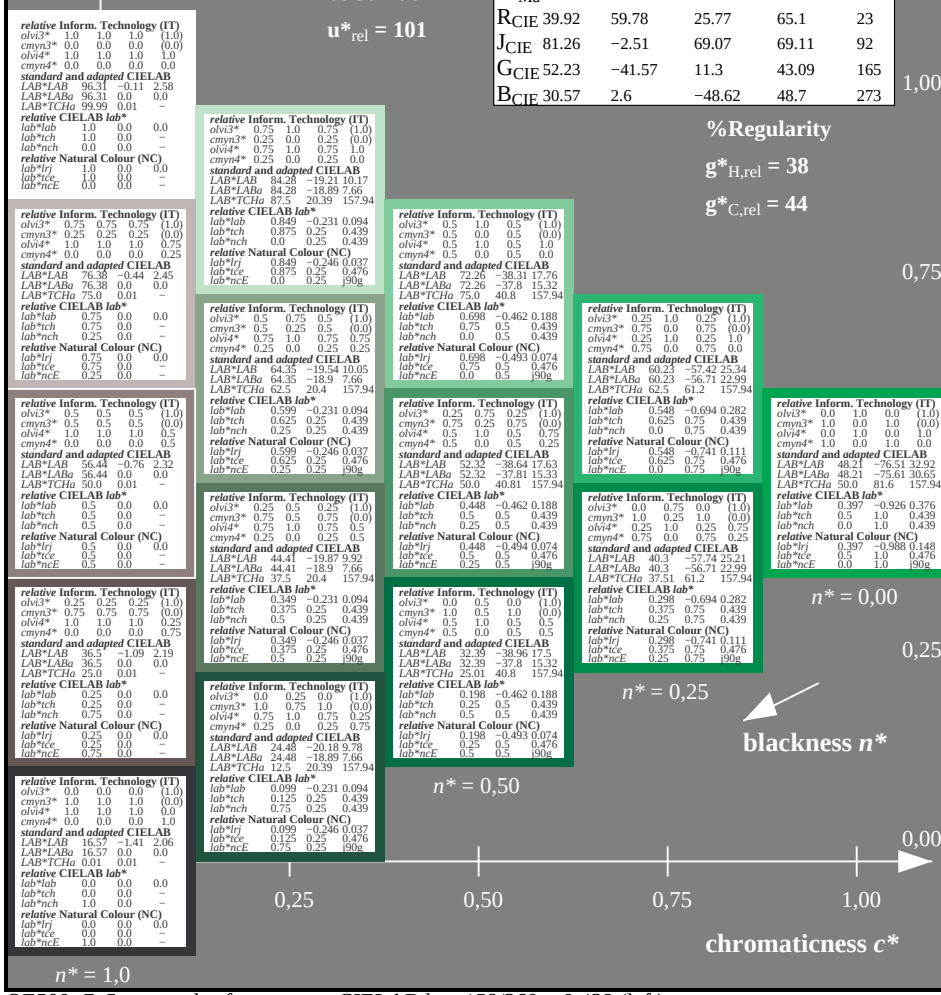
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



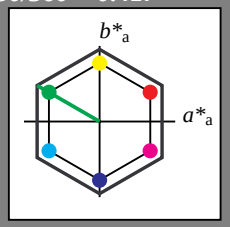
OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 150/360 = 0.417*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

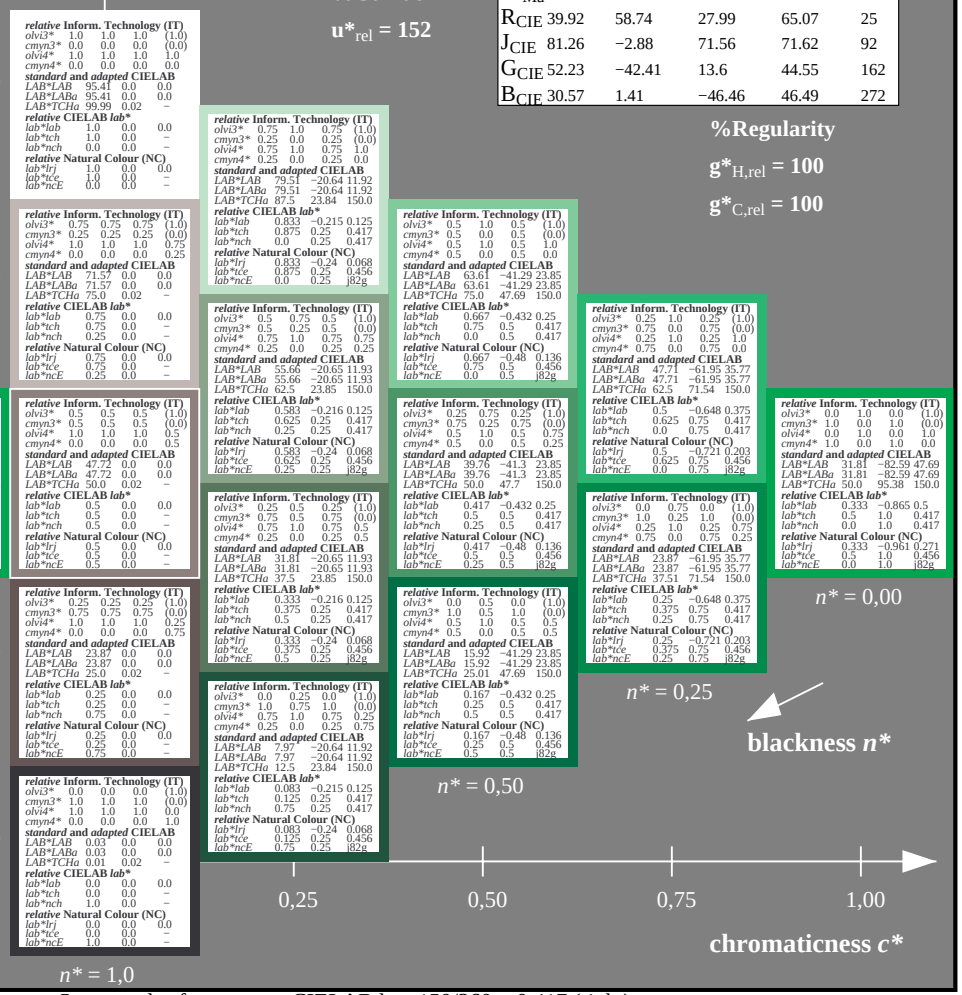
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



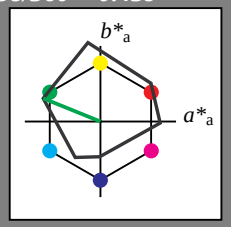
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 48 82 158
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

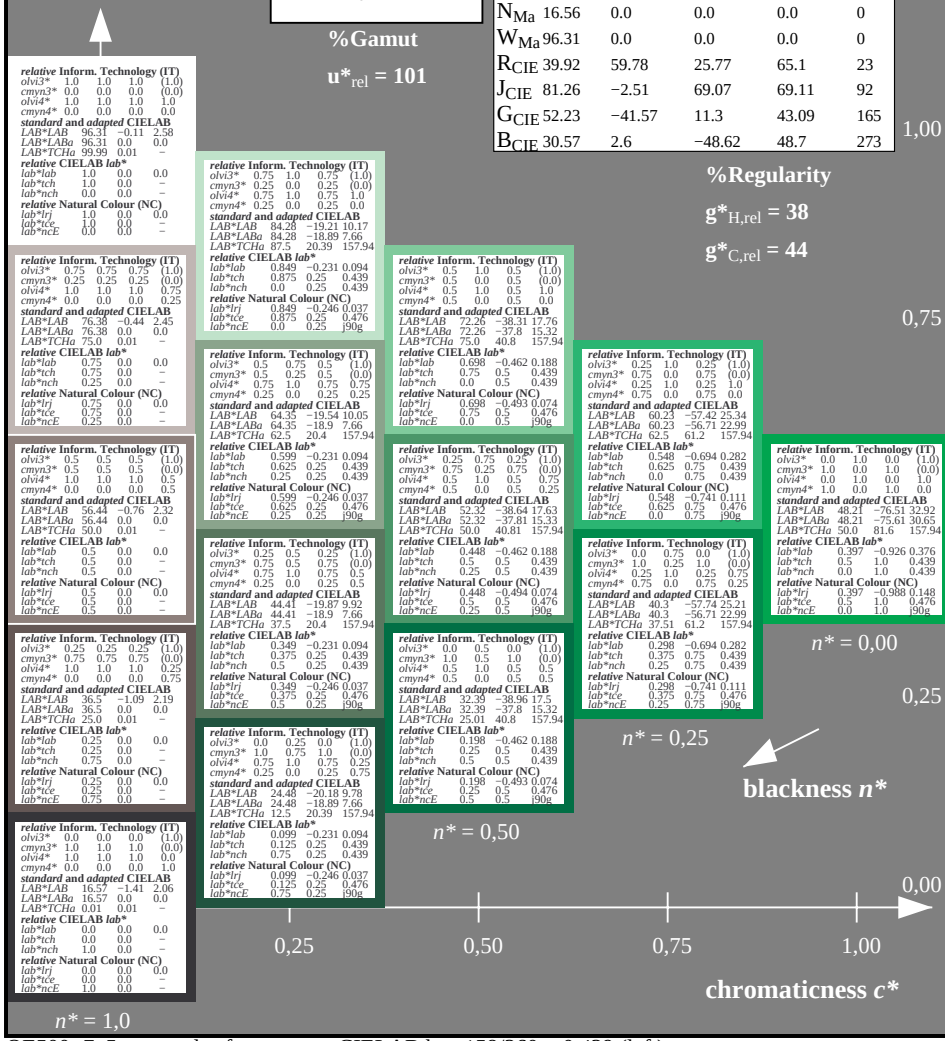
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



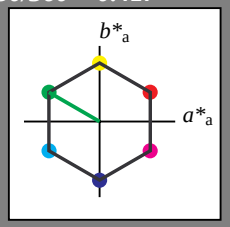
OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

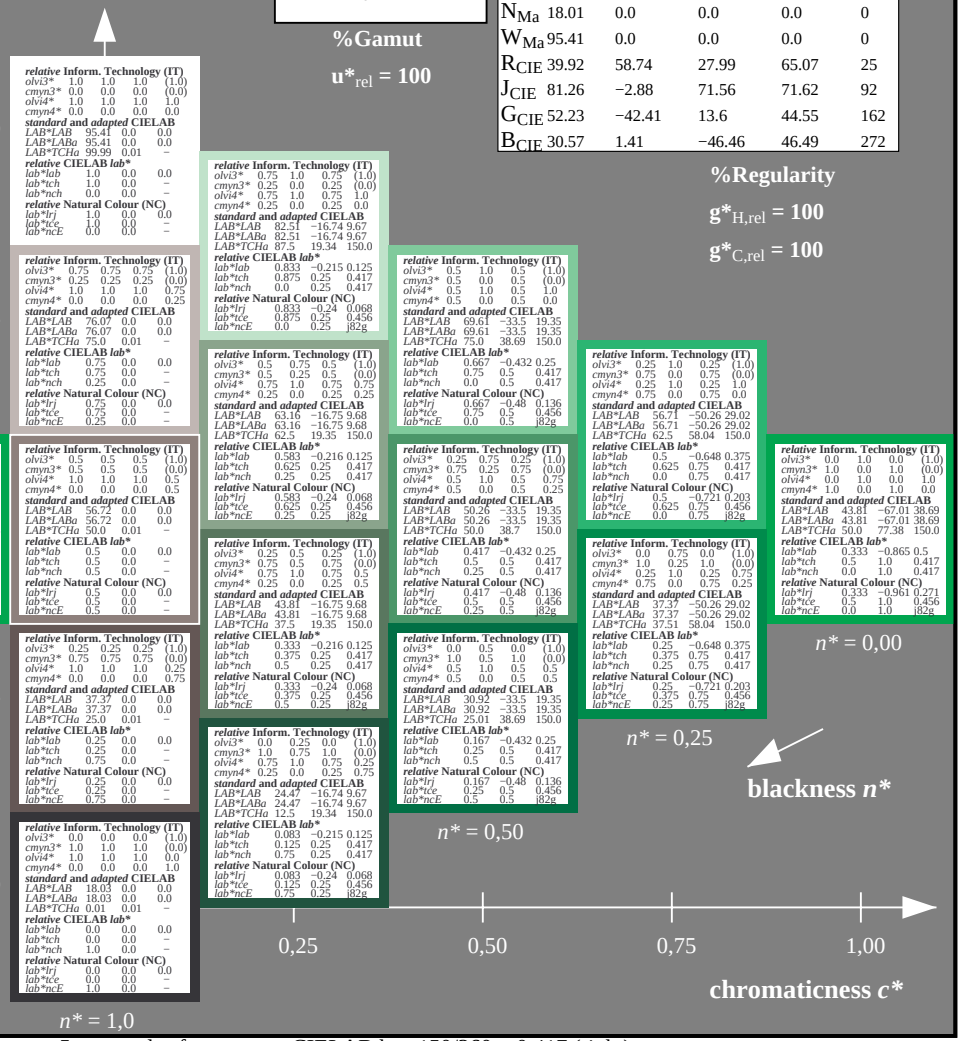
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Printer Reflective System DRSXX

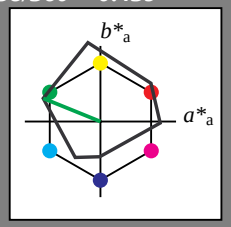
for hue $h^* = lab^*h = 158/360 = 0.439$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

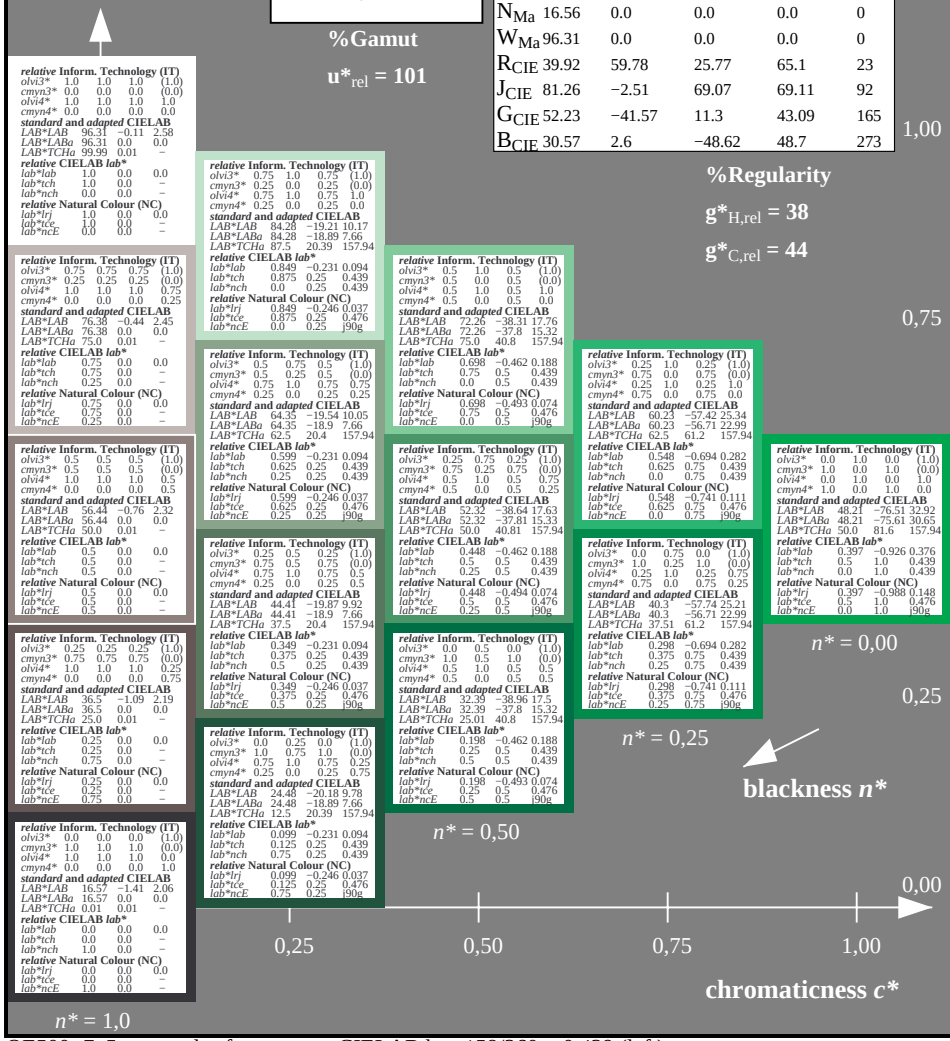
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Standard Reflective System SRS18

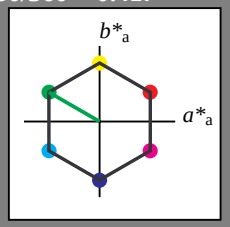
for hue $h^* = lab^*h = 150/360 = 0.417$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

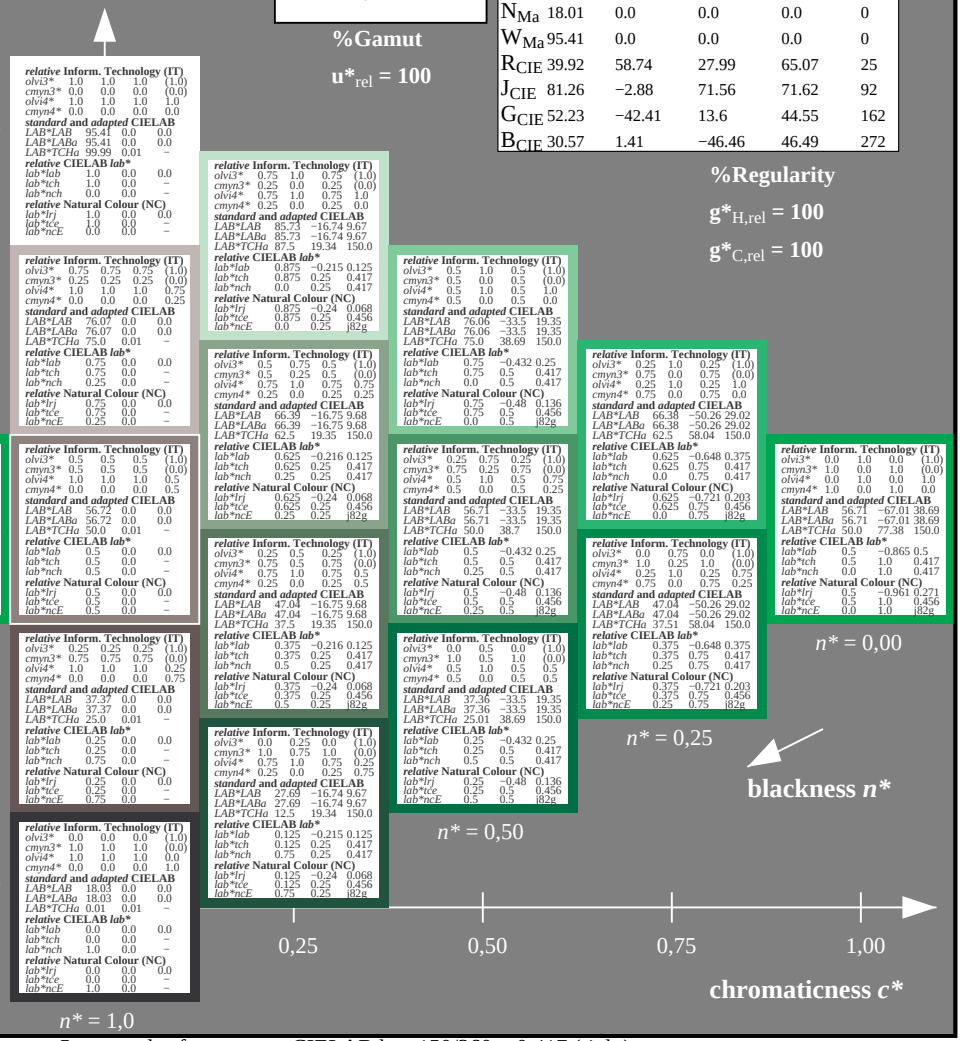
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

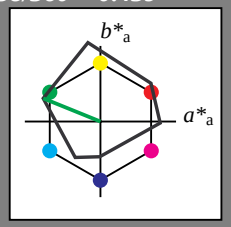
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

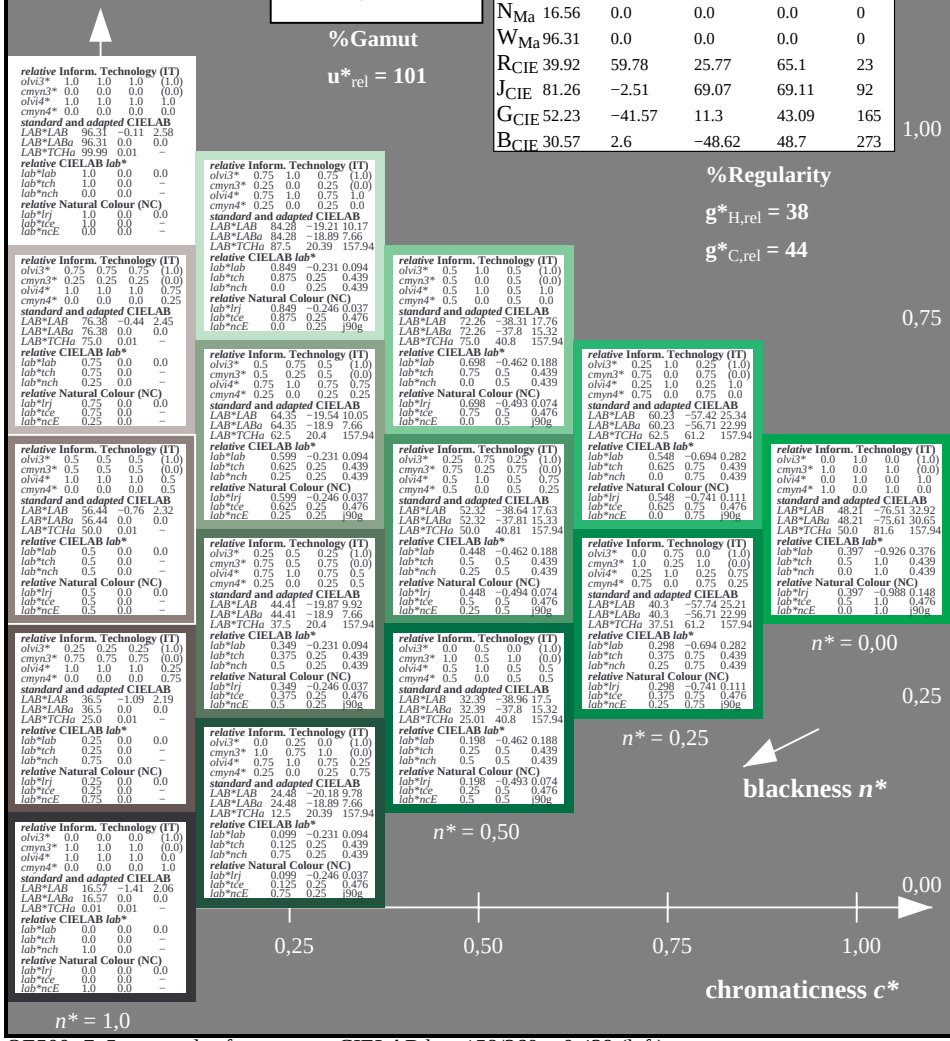
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$

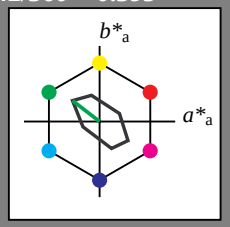
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

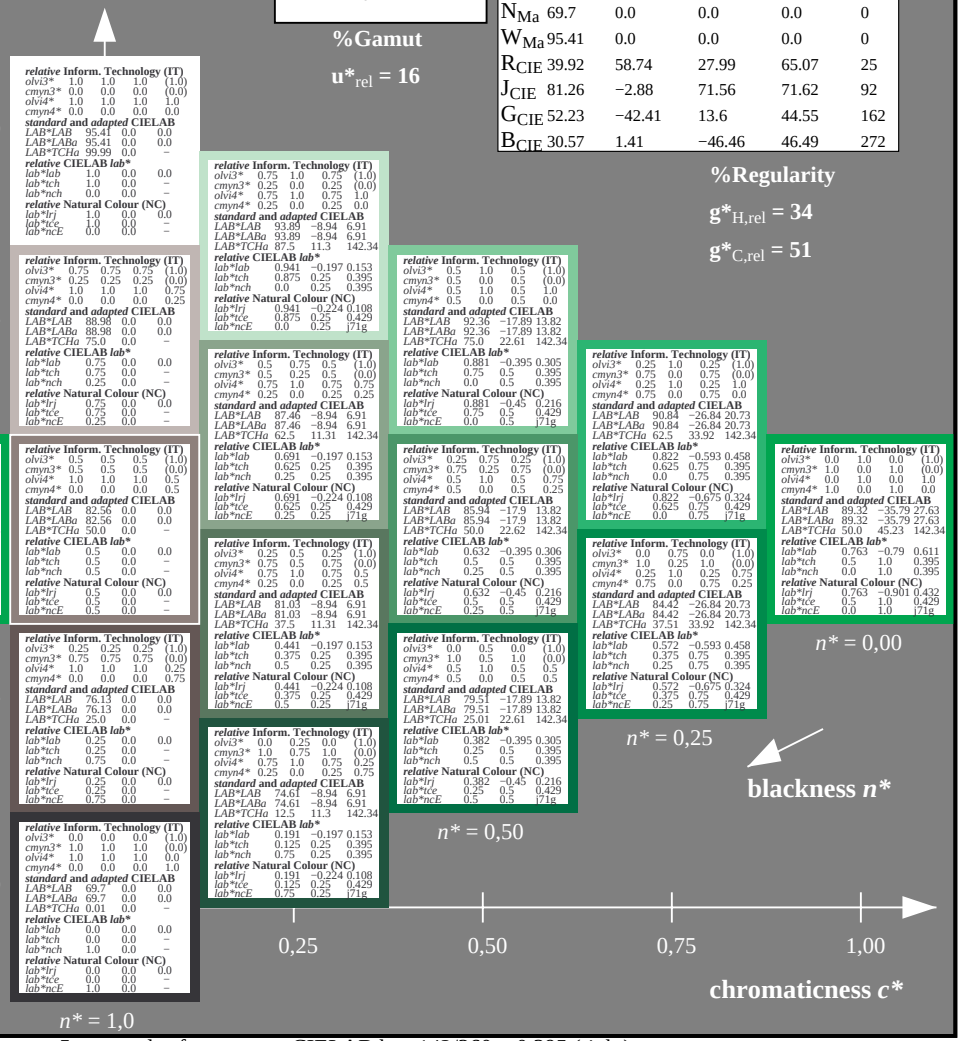
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Television Luminous System TLS18

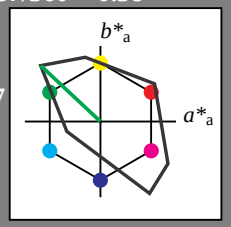
for hue $h^* = lab^*h = 137/360 = 0.38$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

triangle lightness t^*

1,00

0,75

0,25

0,00

$n^* = 1{,}0$ $n^* = 0{,}75$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

Output: Colorimetric Offset Reflective System ORS18

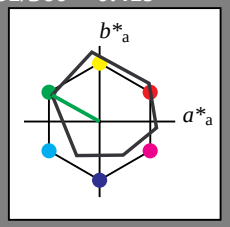
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

triangle lightness t^*

1,00

0,75

0,25

0,00

$n^* = 1{,}0$ $n^* = 0{,}75$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

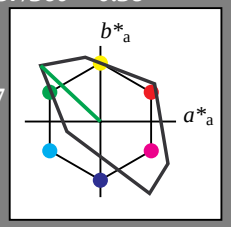
5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 137/360 = 0.38*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

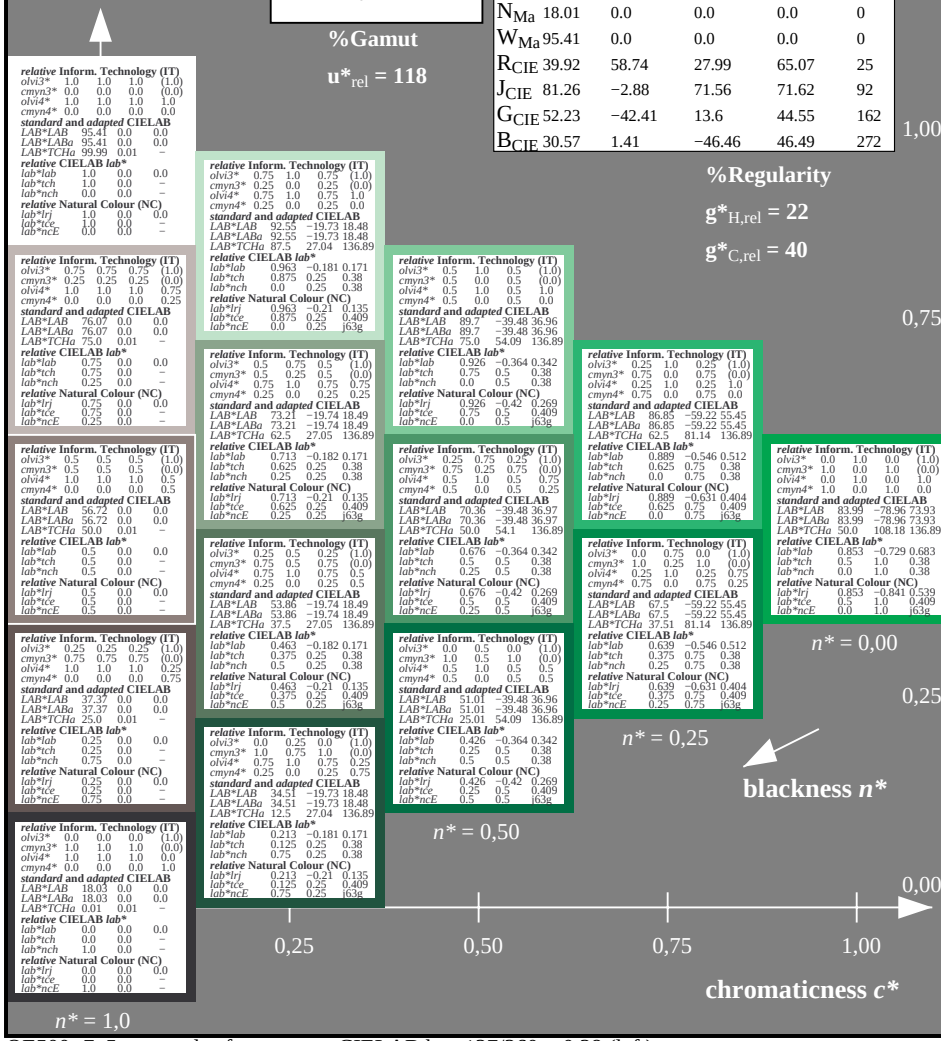
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

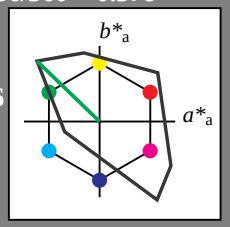


Output: Colorimetric Television Luminous System TLS00

for hue *h* = lab*h = 136/360 = 0.378*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

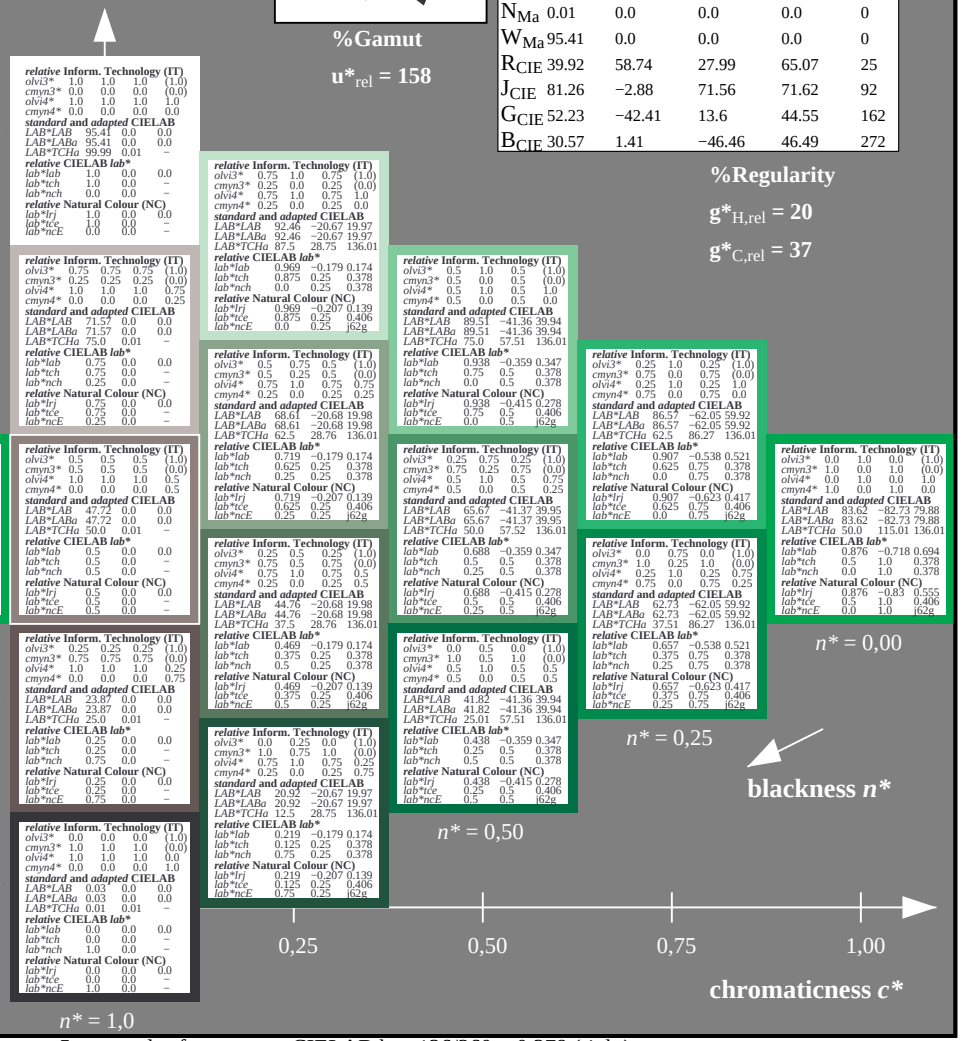
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



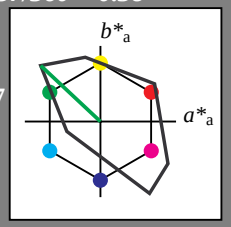
OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

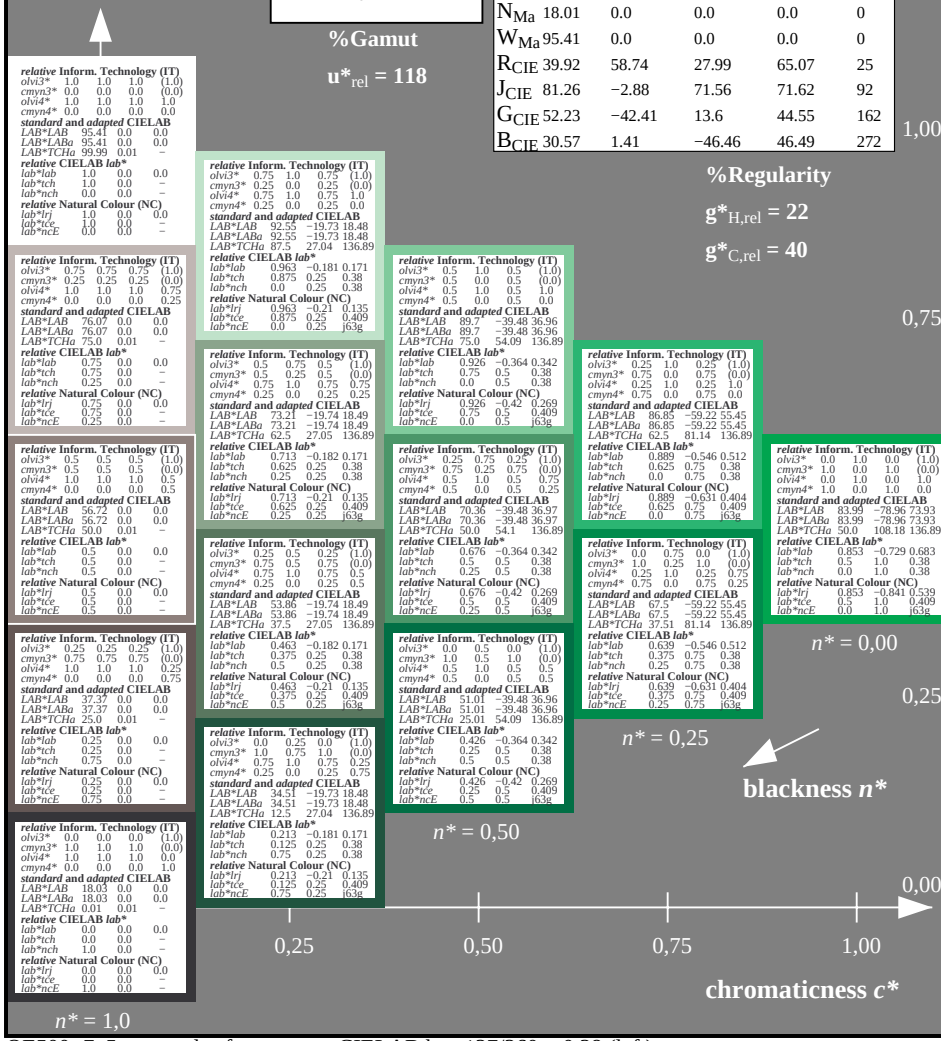
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

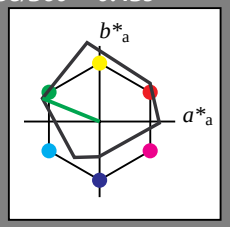
$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 158/360 = 0.439$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 48 82 158
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

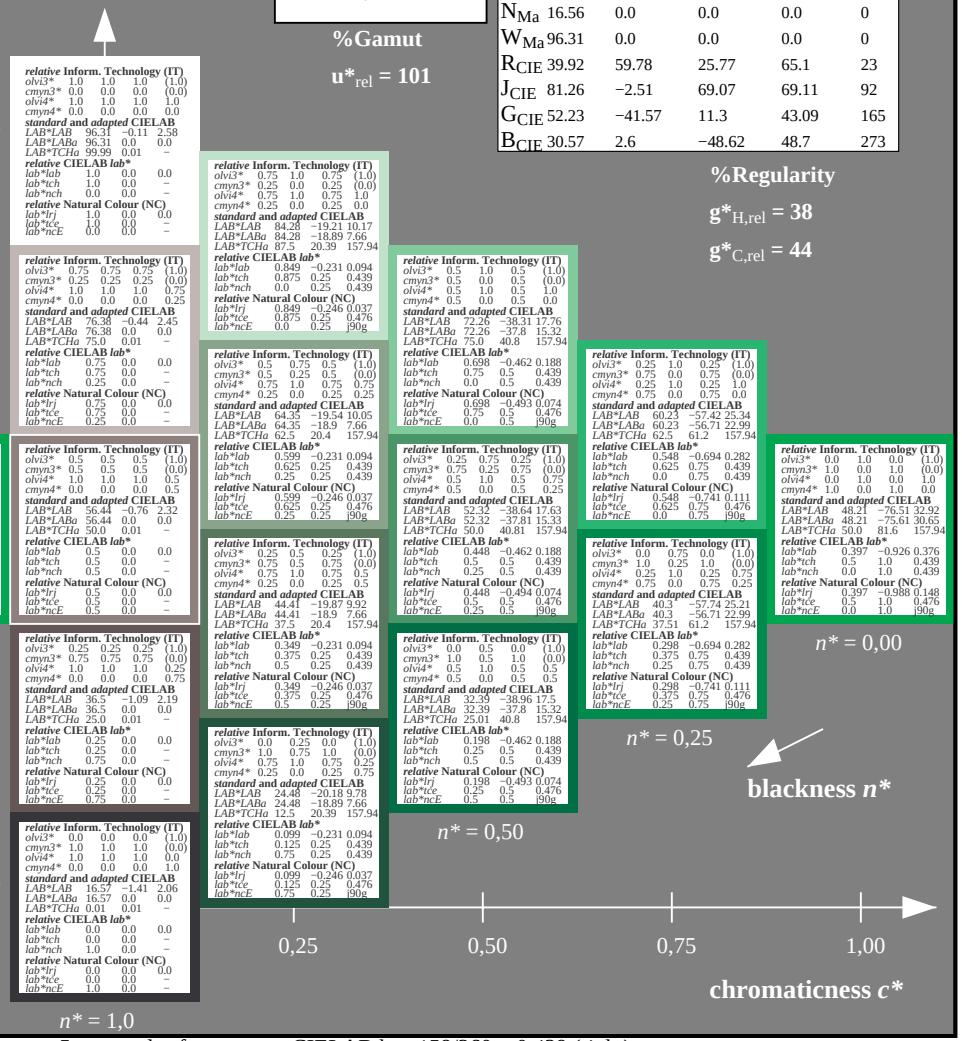
$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



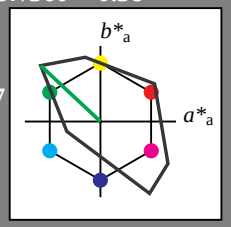
OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

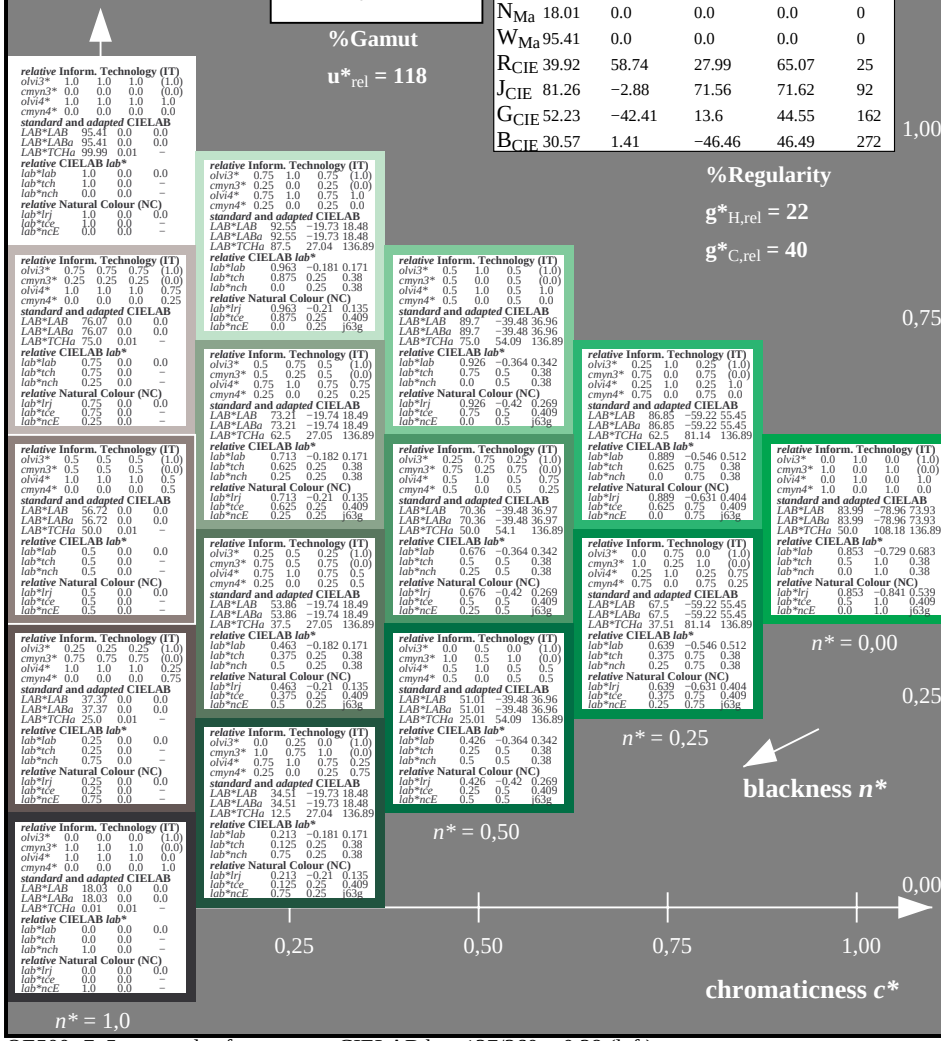
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

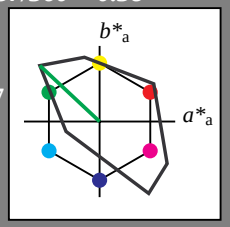
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

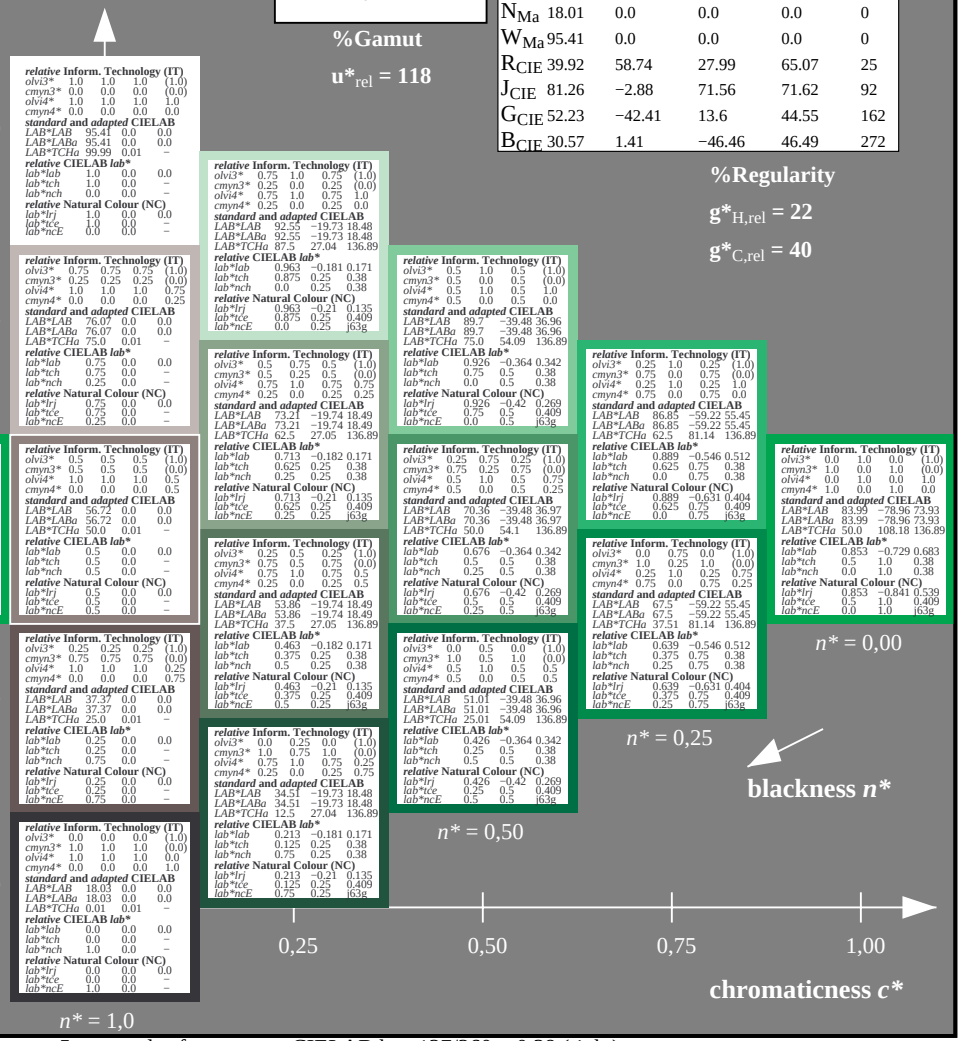
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

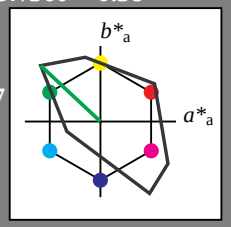
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

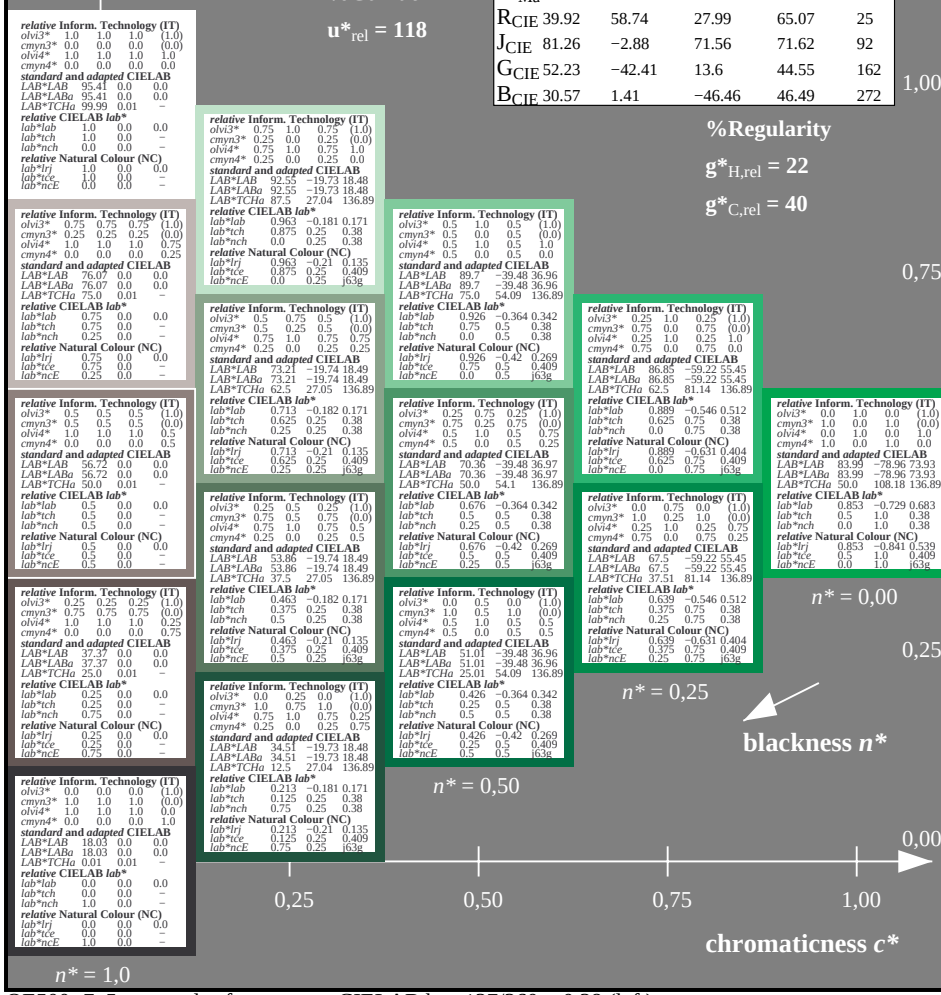
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

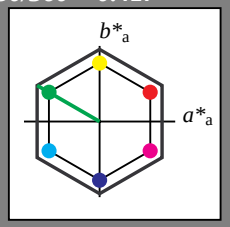


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

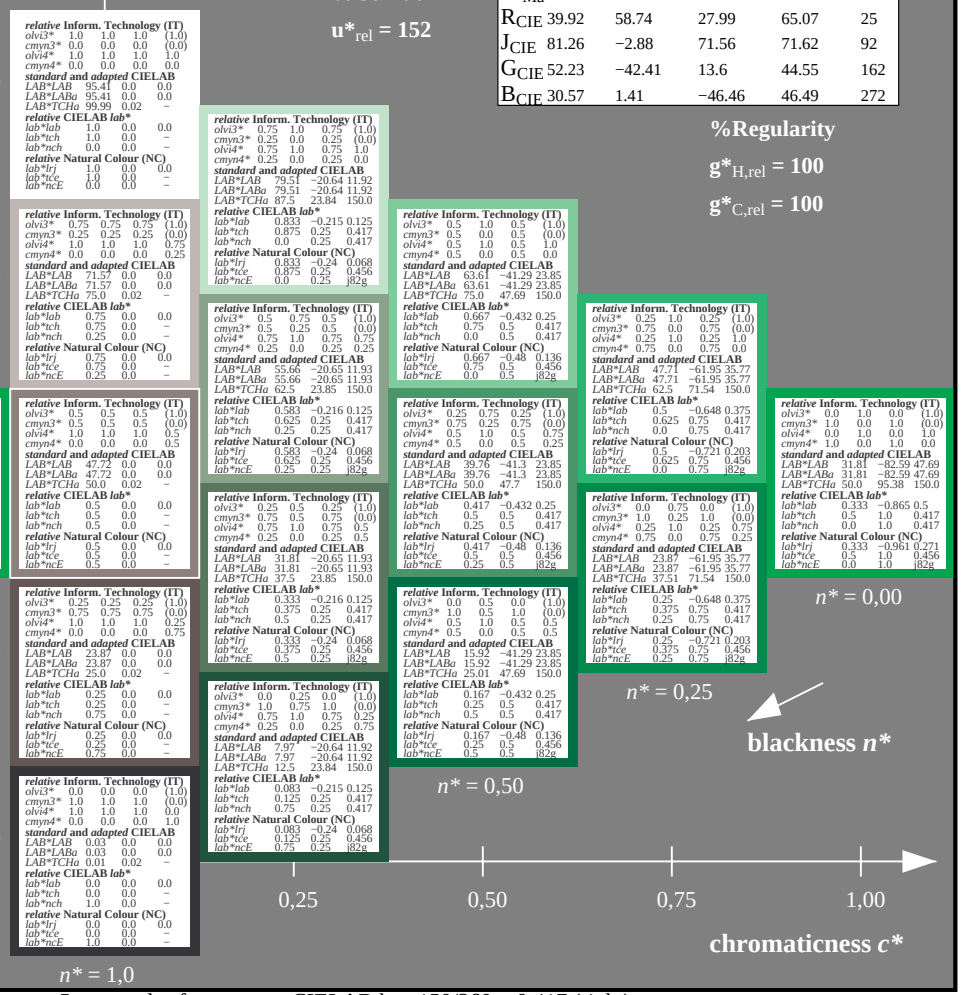
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

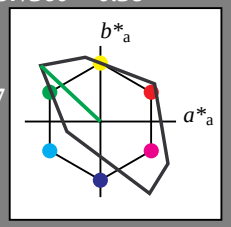
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

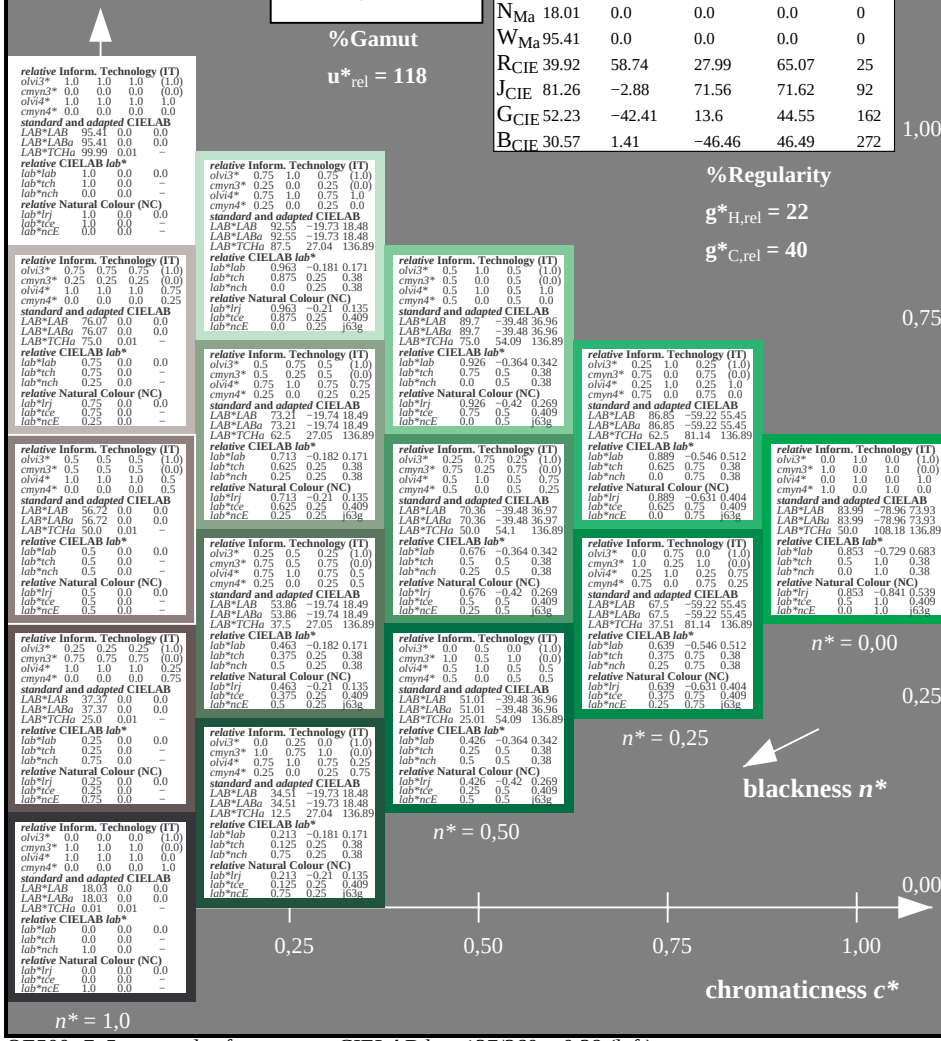
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



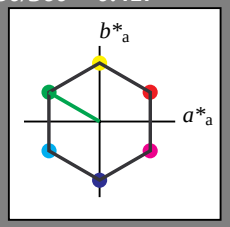
OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

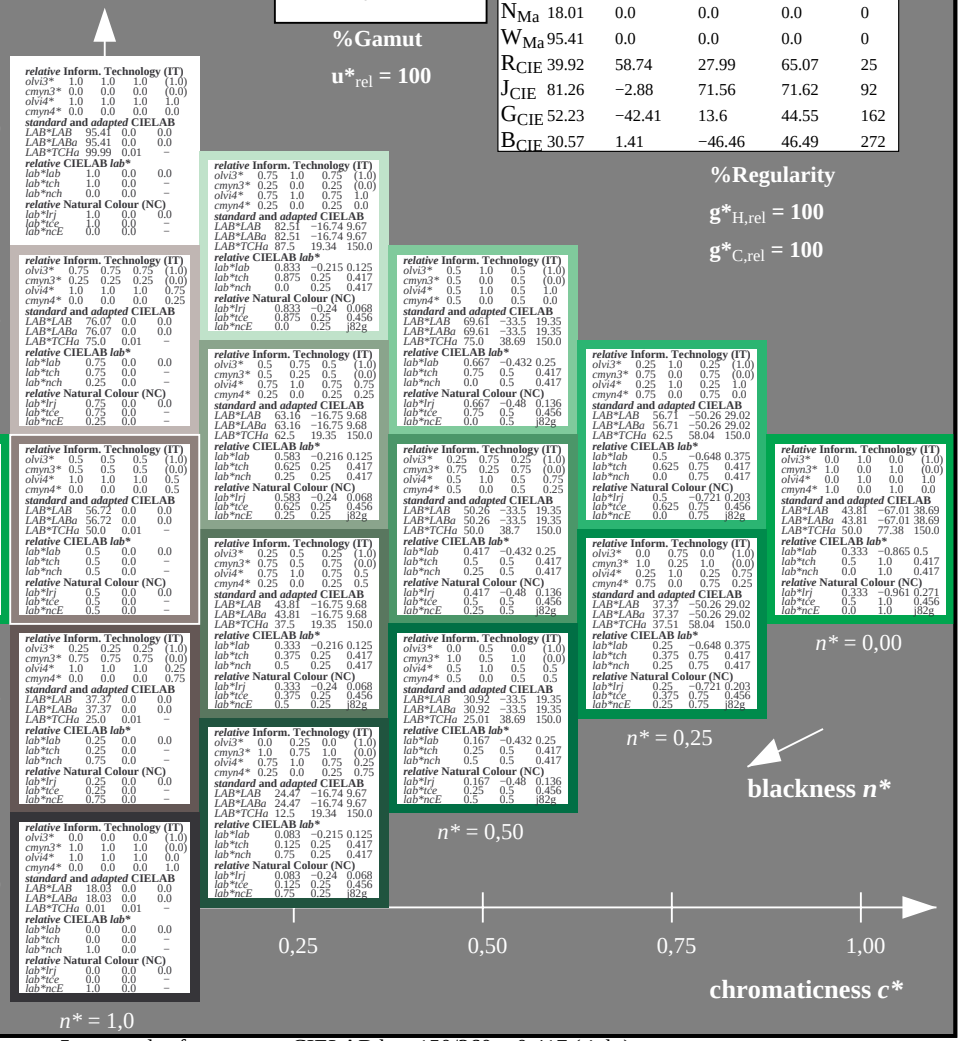
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



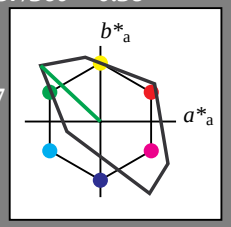
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

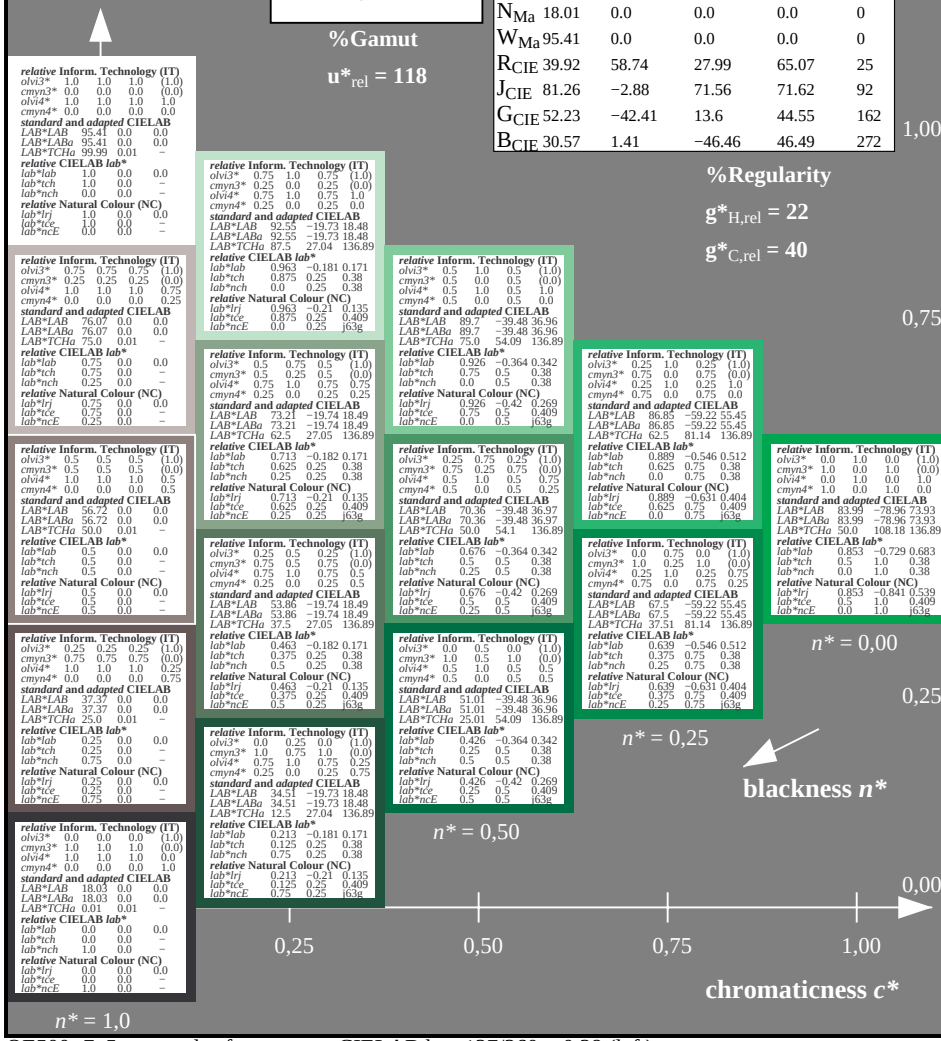
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



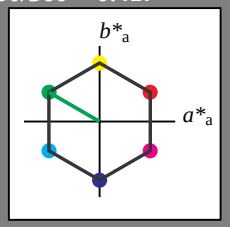
OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

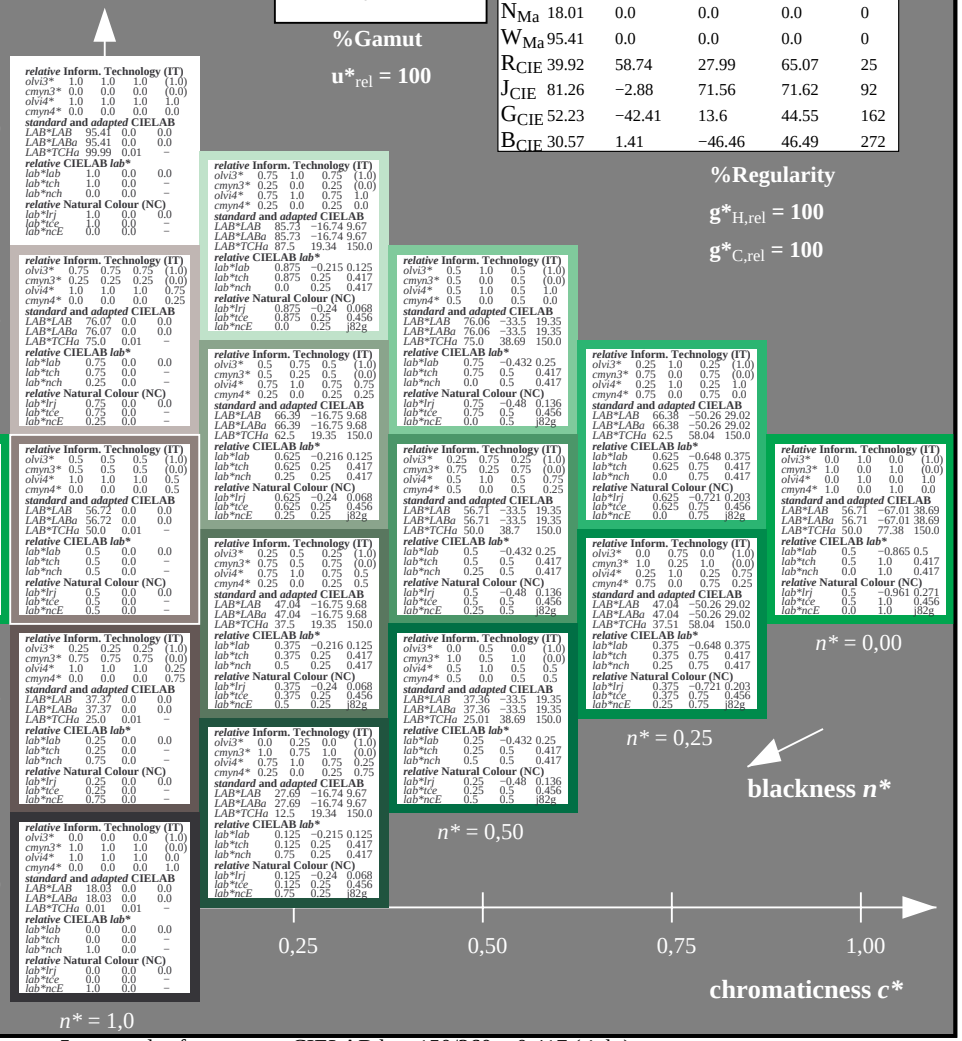
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



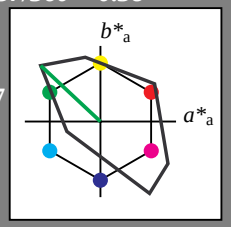
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

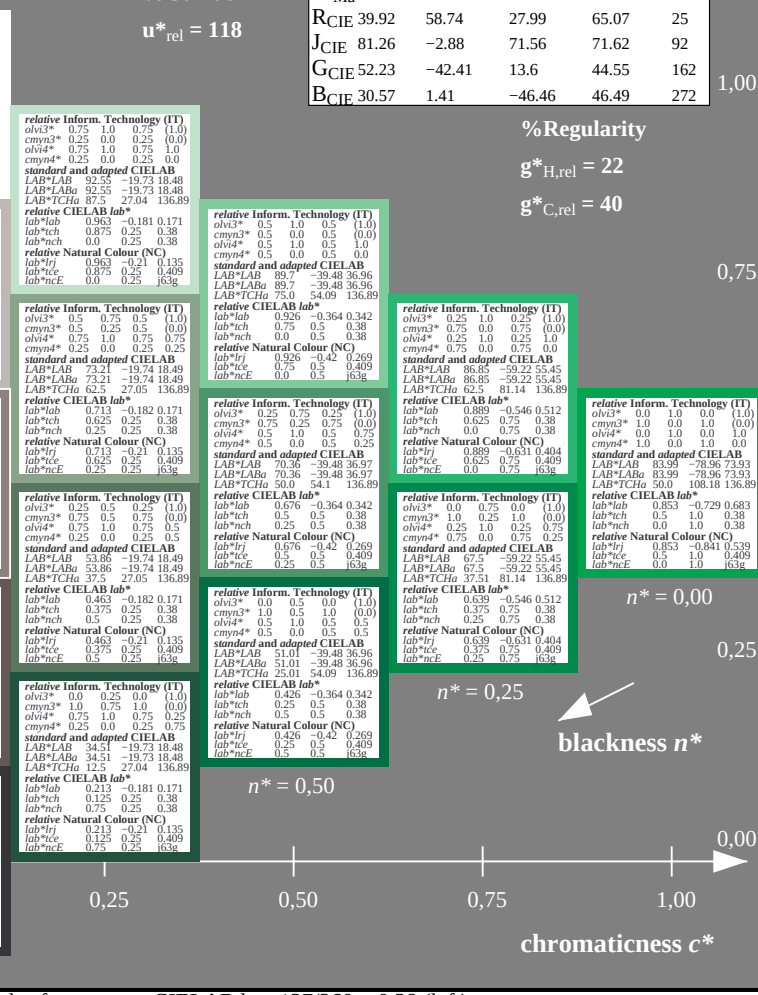
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



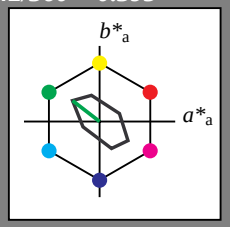
OE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

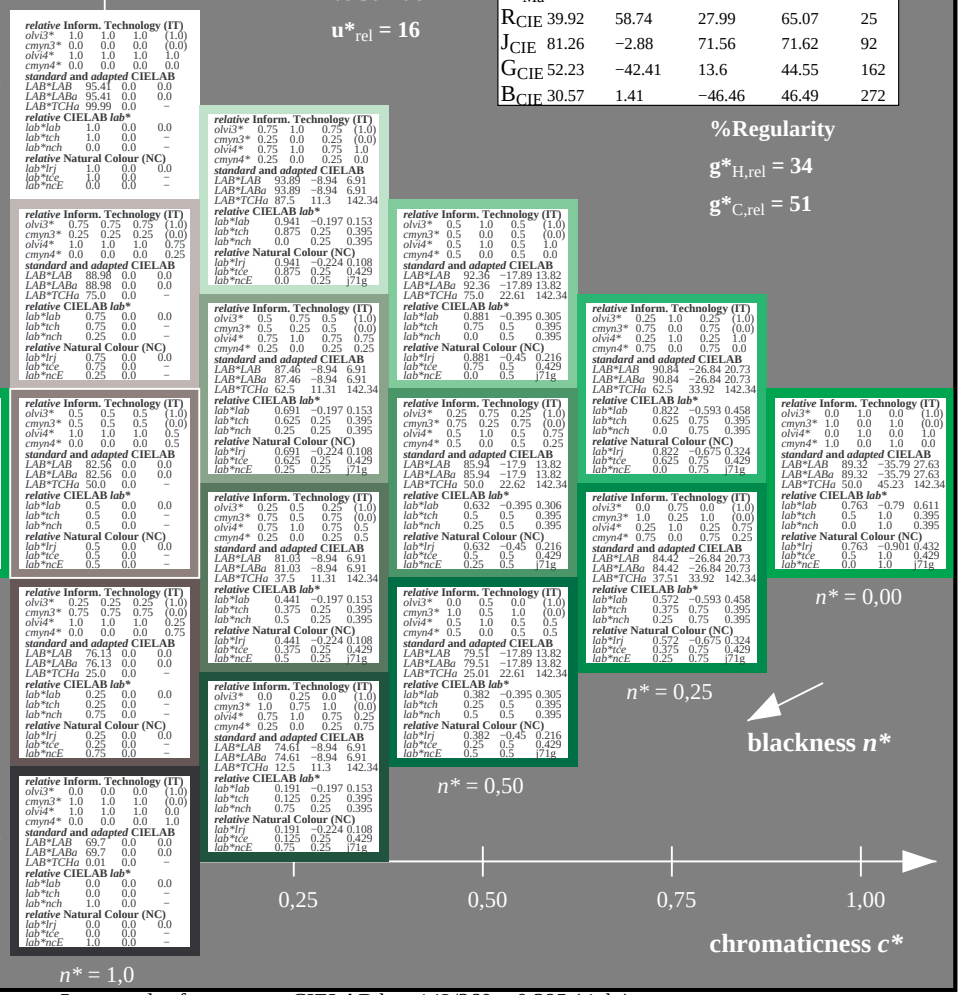
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Natural Luminous System NLS00

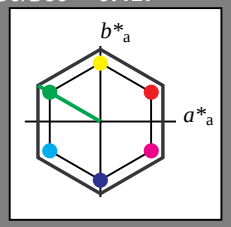
for hue $h^* = lab^*h = 150/360 = 0.417$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

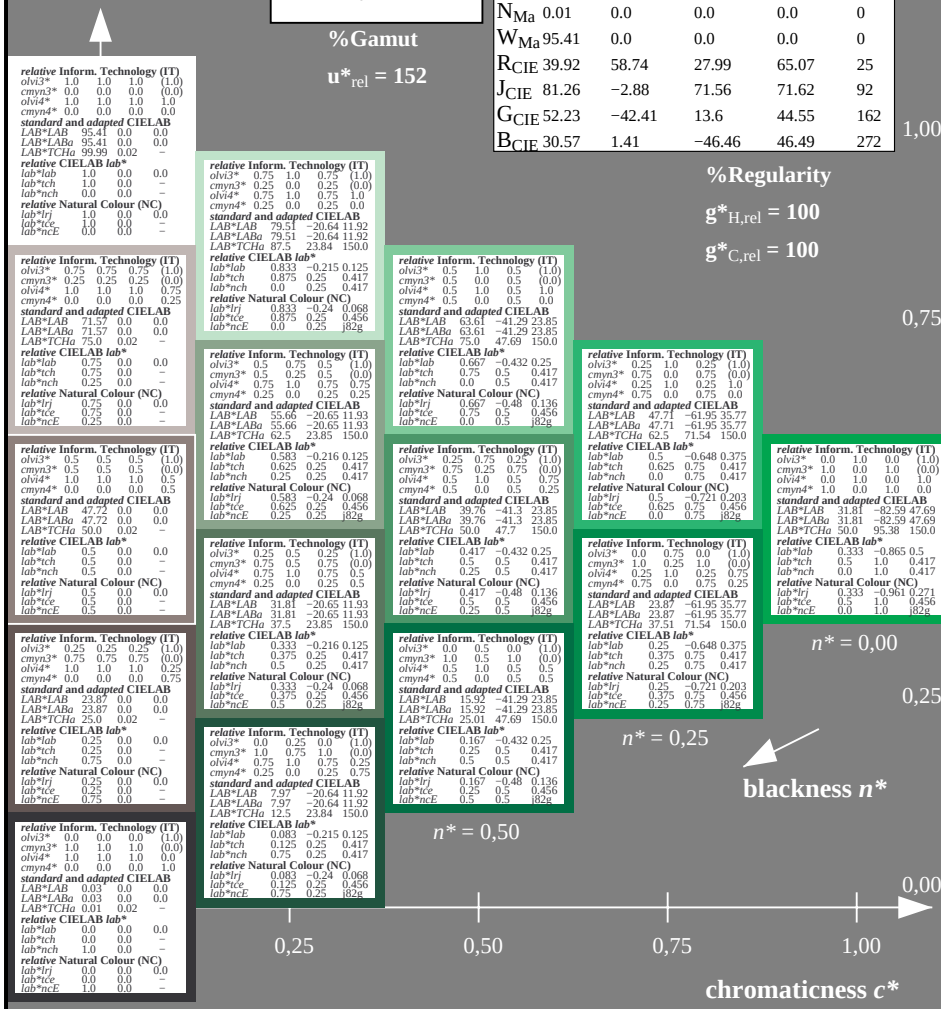
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Offset Reflective System ORS18

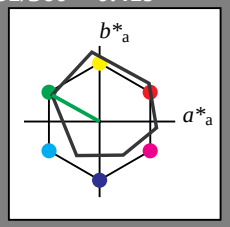
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

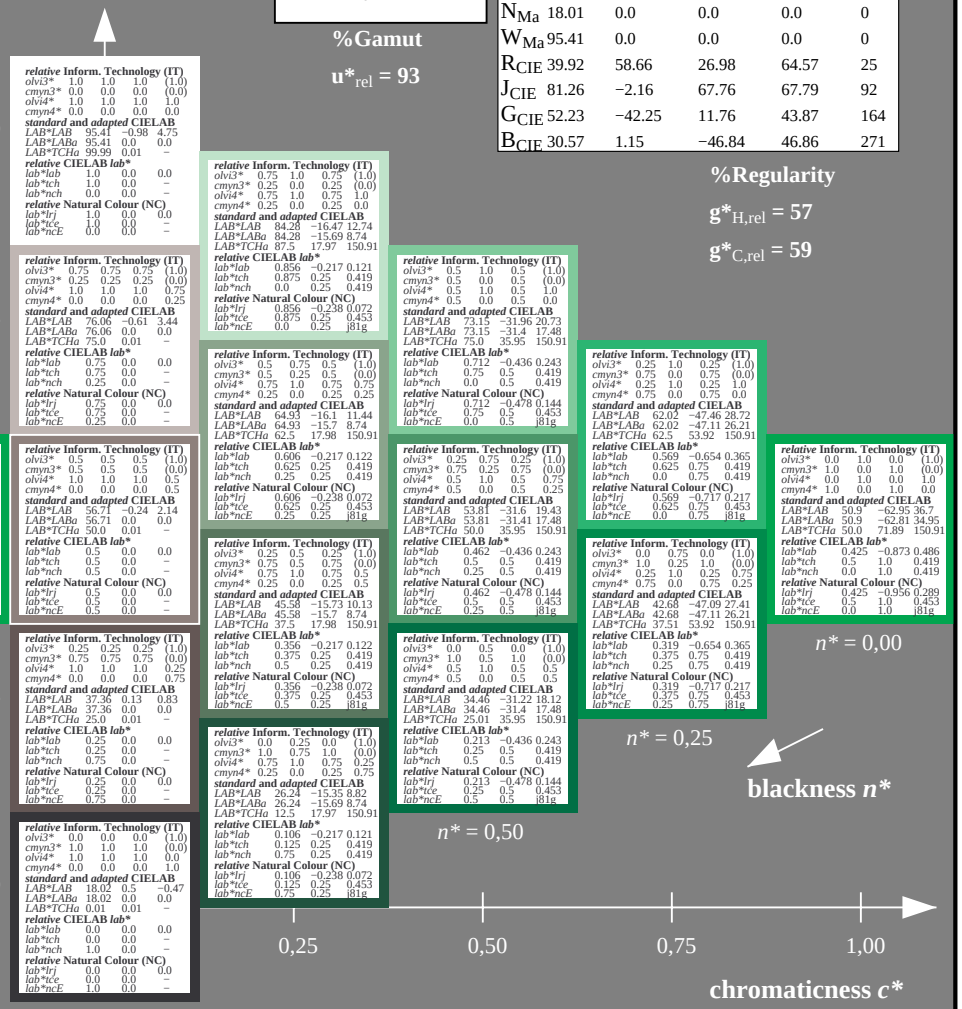
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

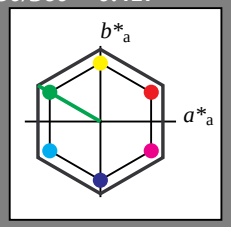


5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 152

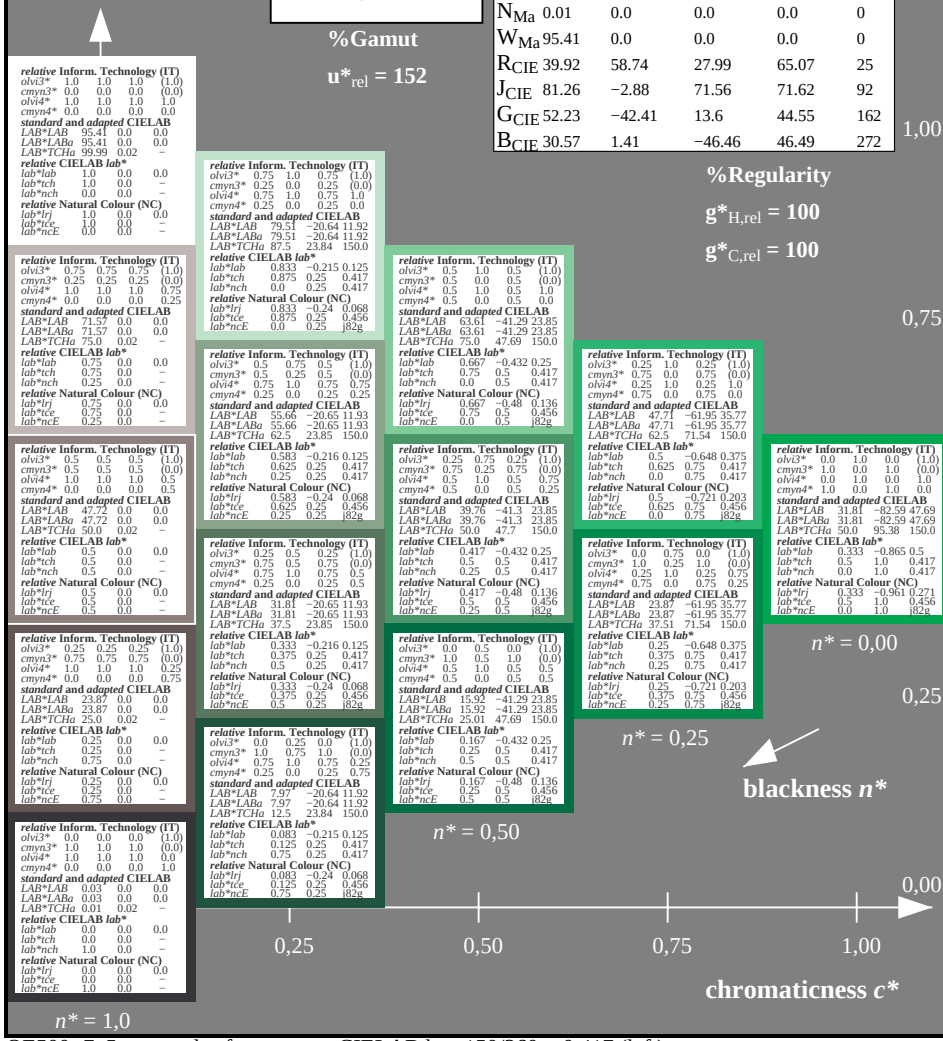
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

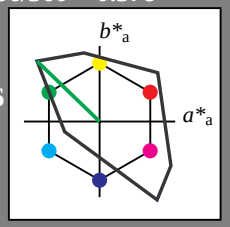
$g^*_{C,rel}$ = 100



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 158

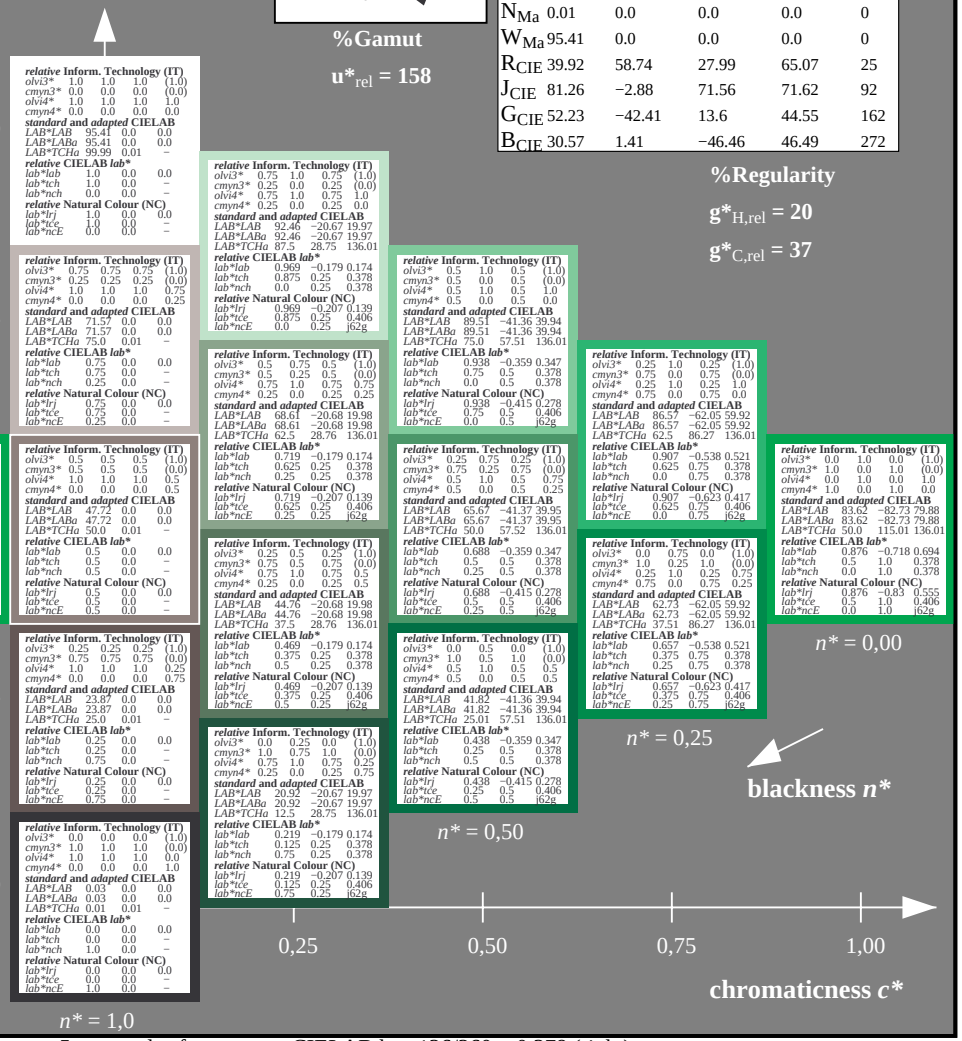
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$

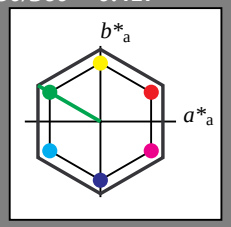
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

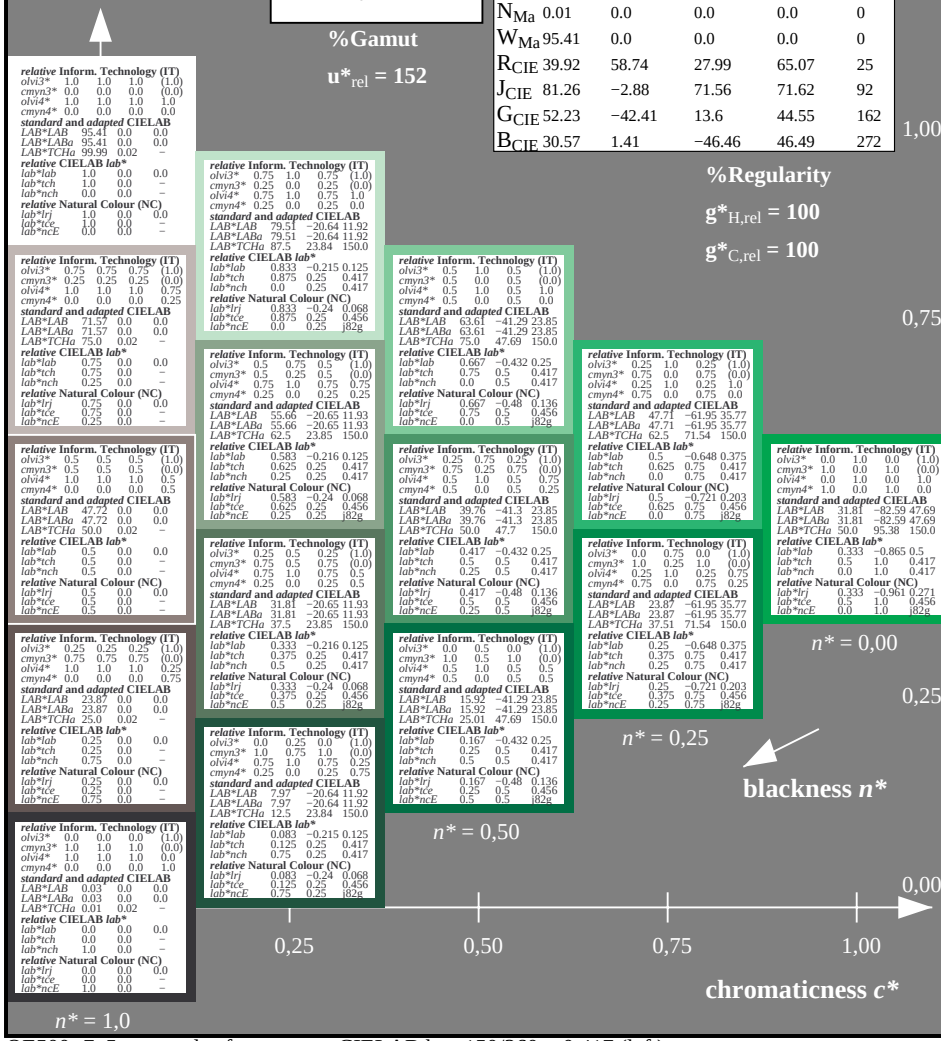
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

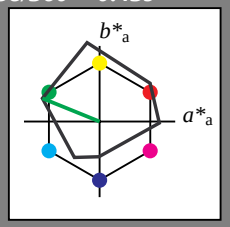
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

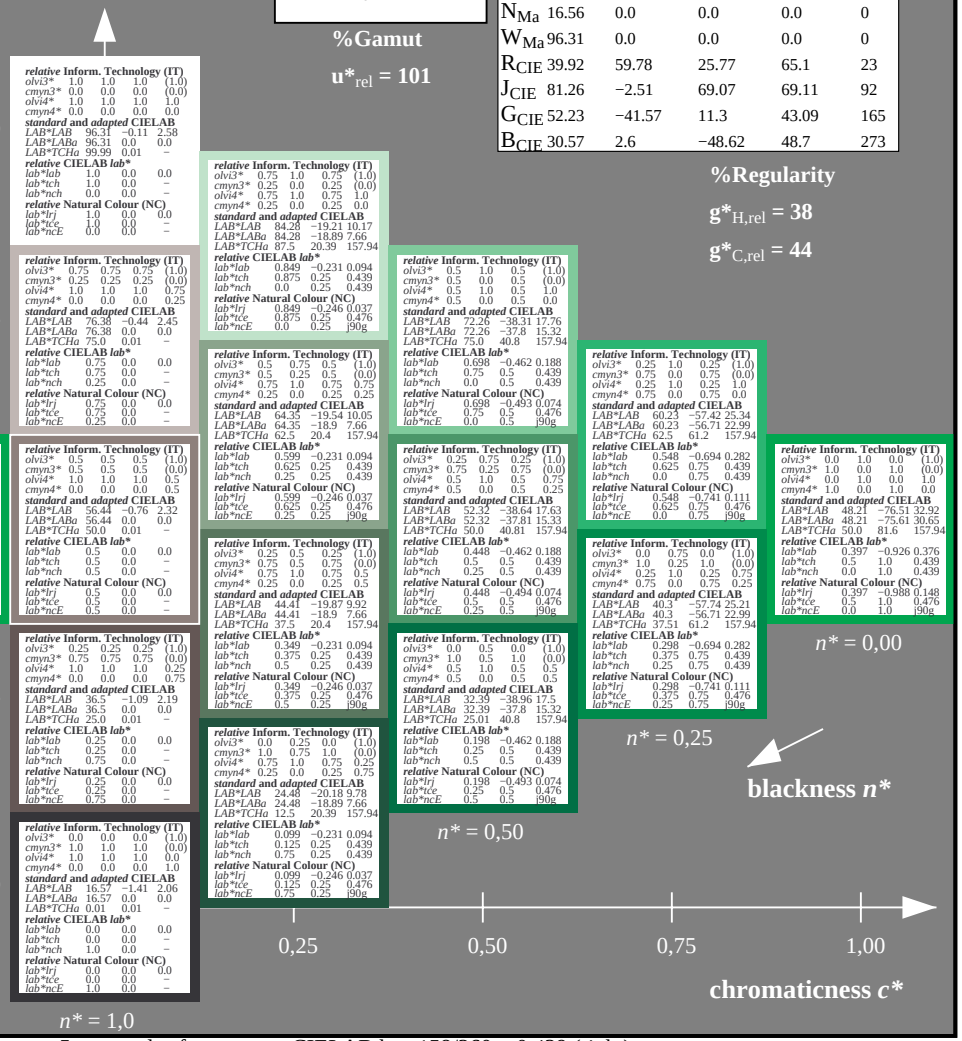
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

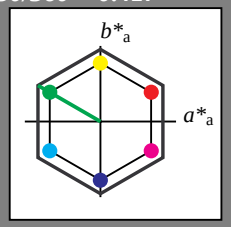
5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 150/360 = 0.417*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

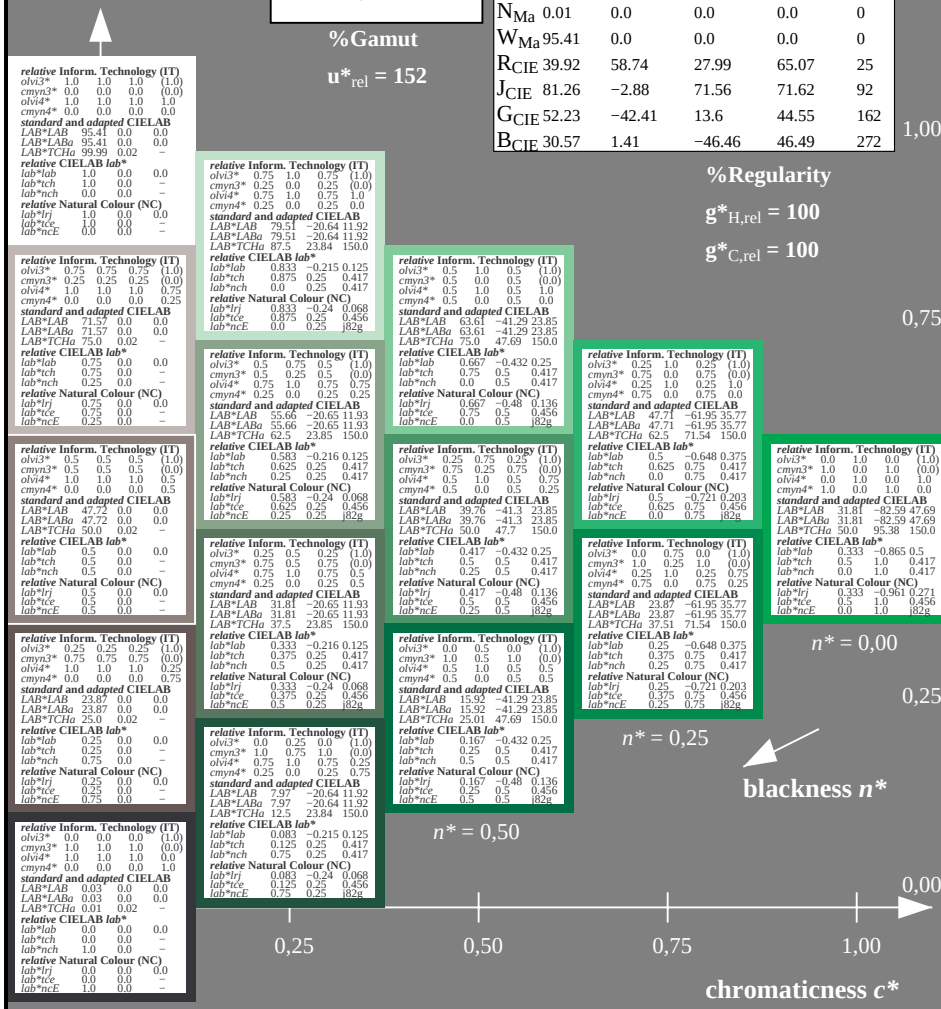
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

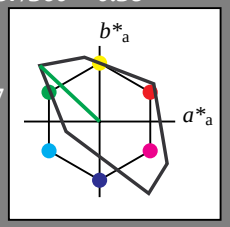


Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 137/360 = 0.38*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

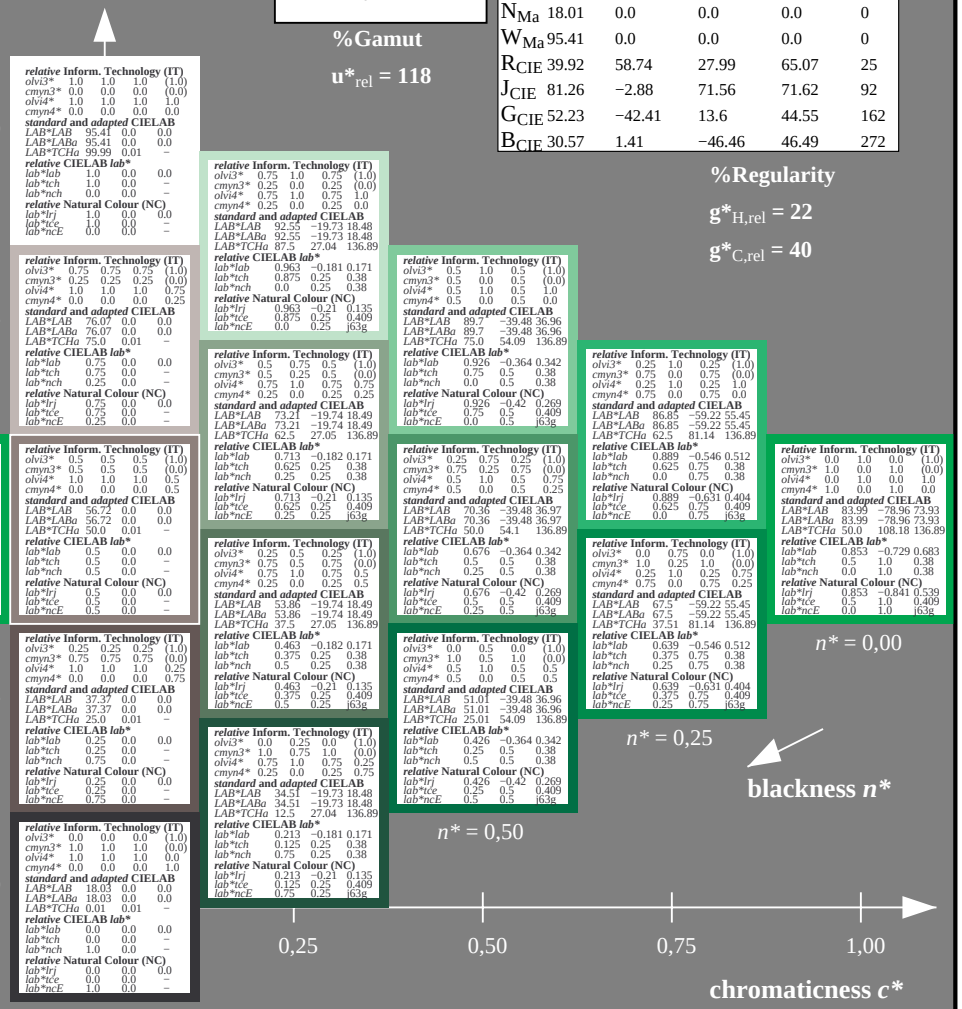
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



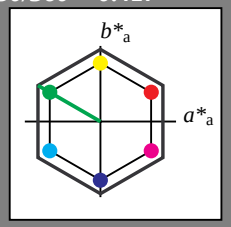
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

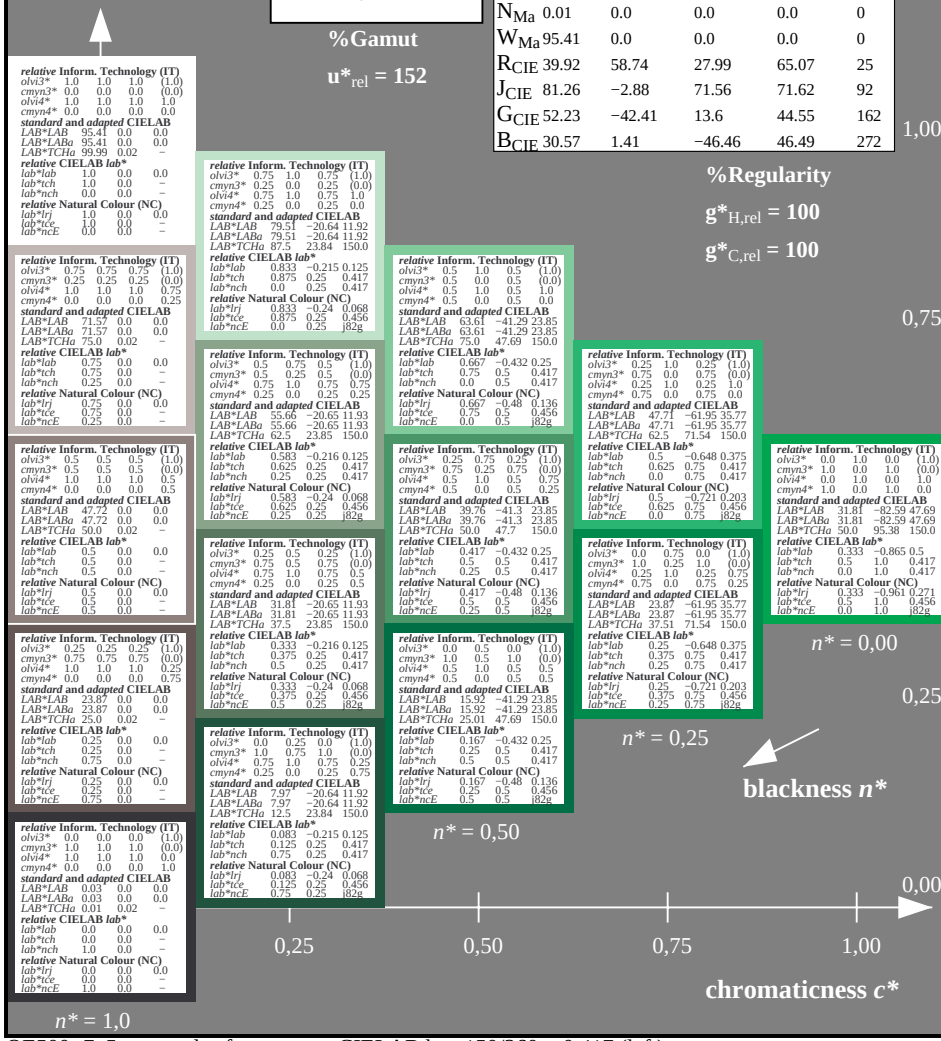
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

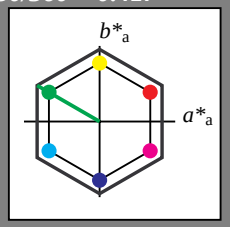


OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

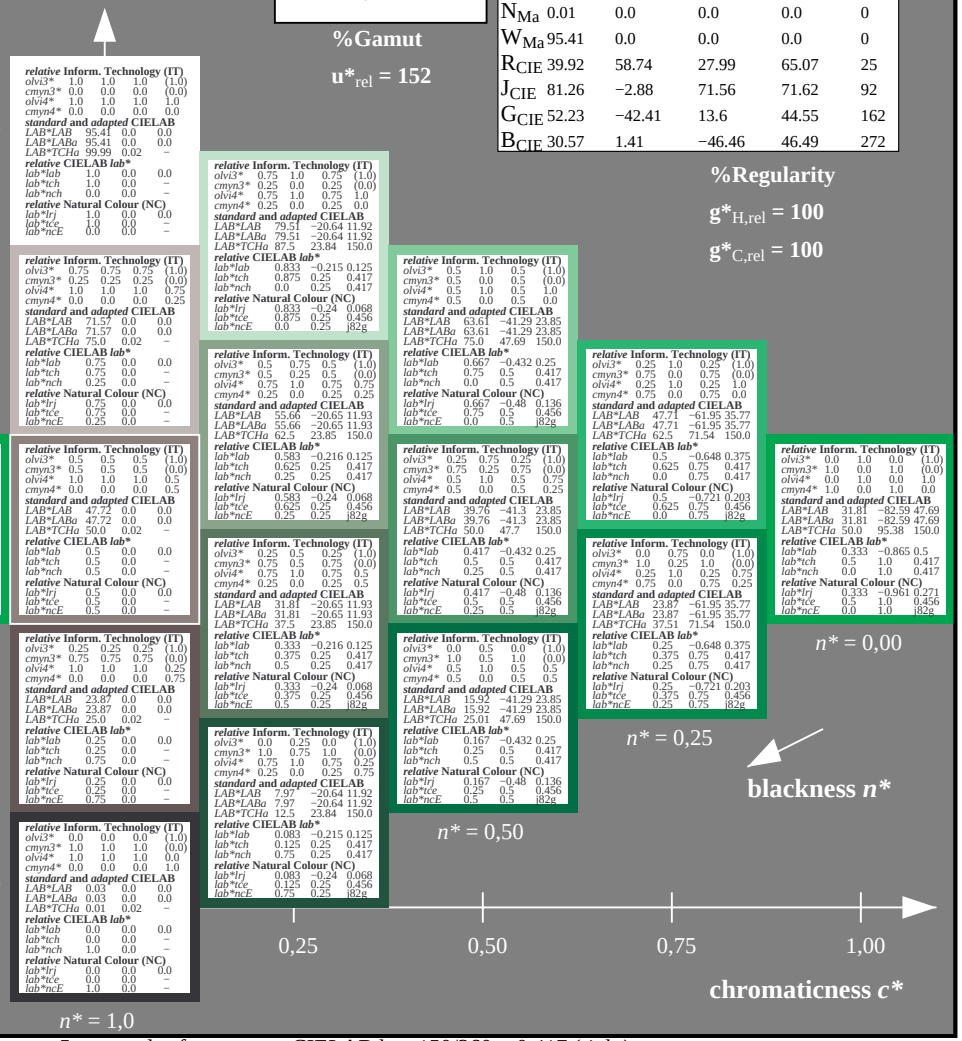
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



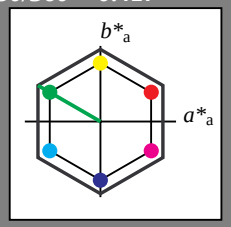
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

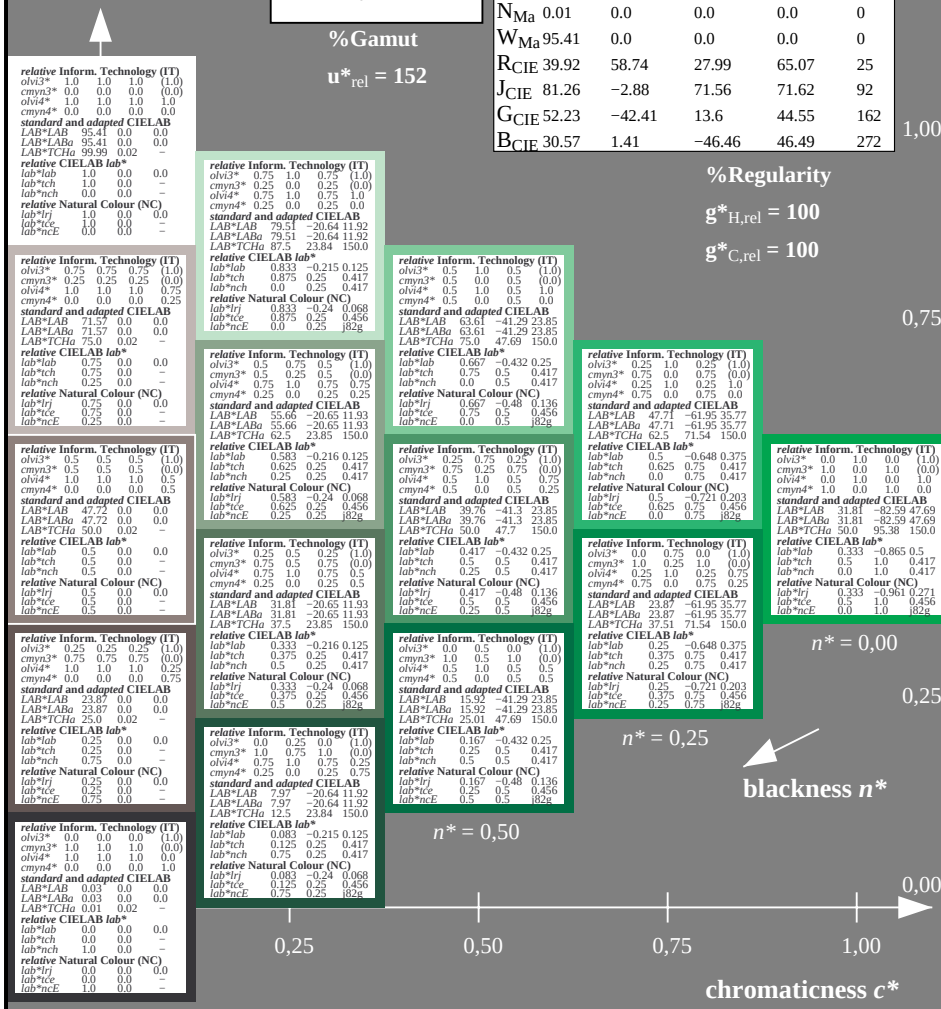
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



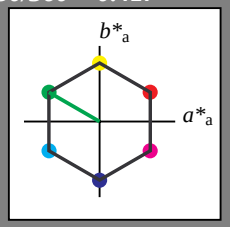
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

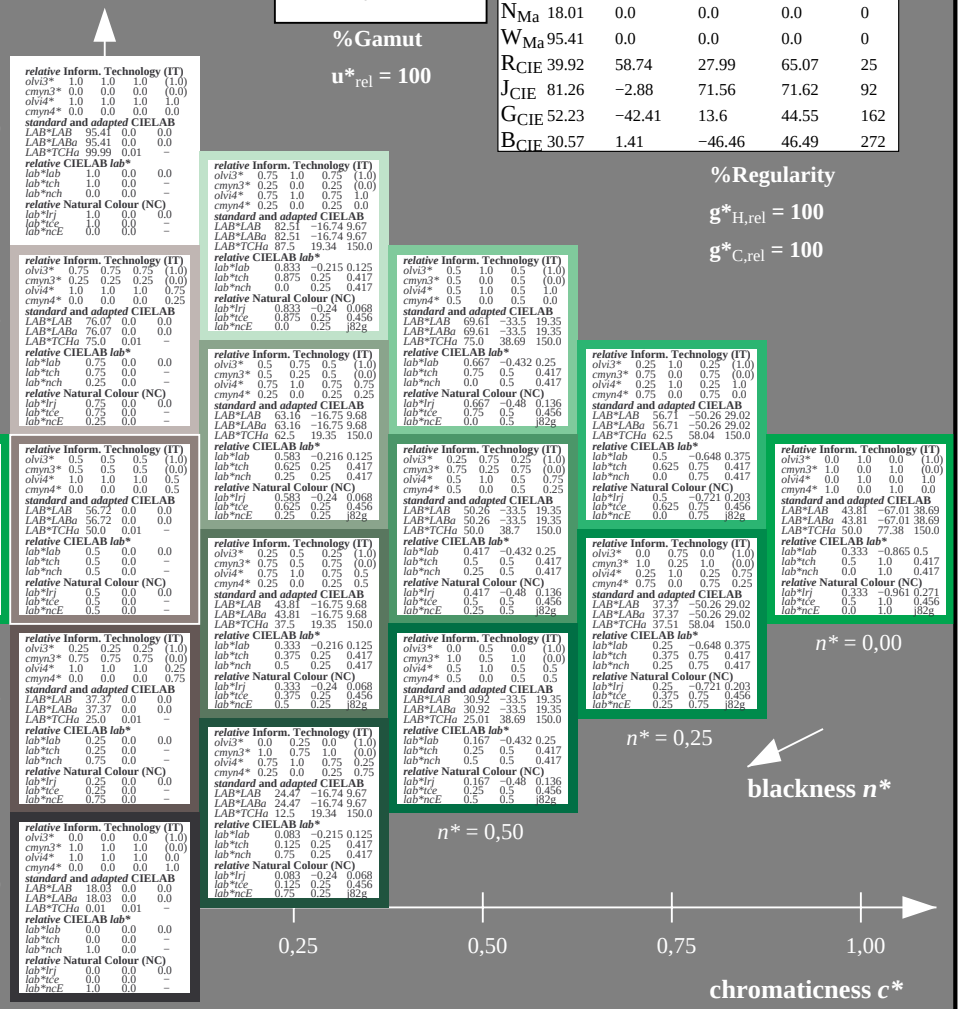
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$

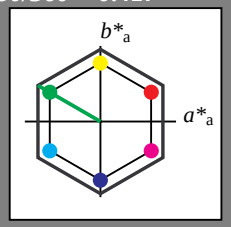
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

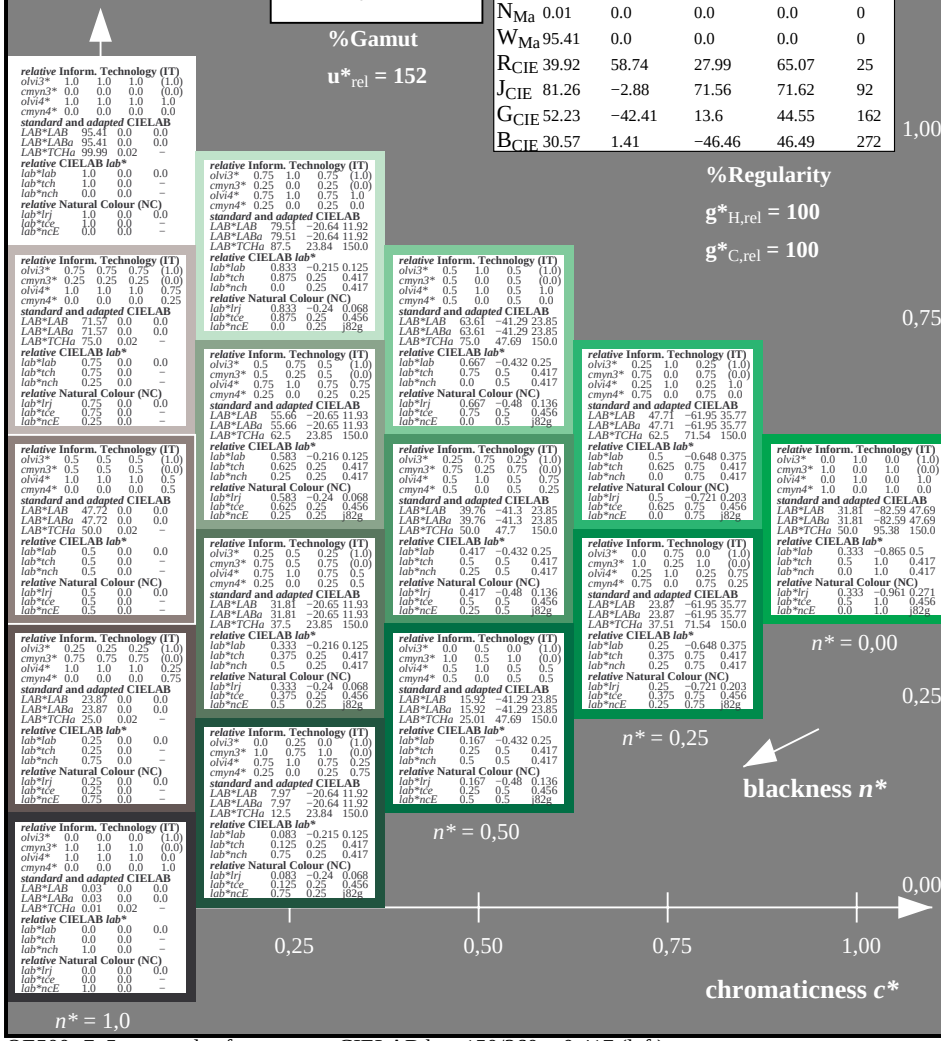
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

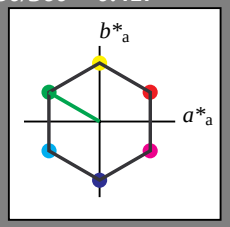
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

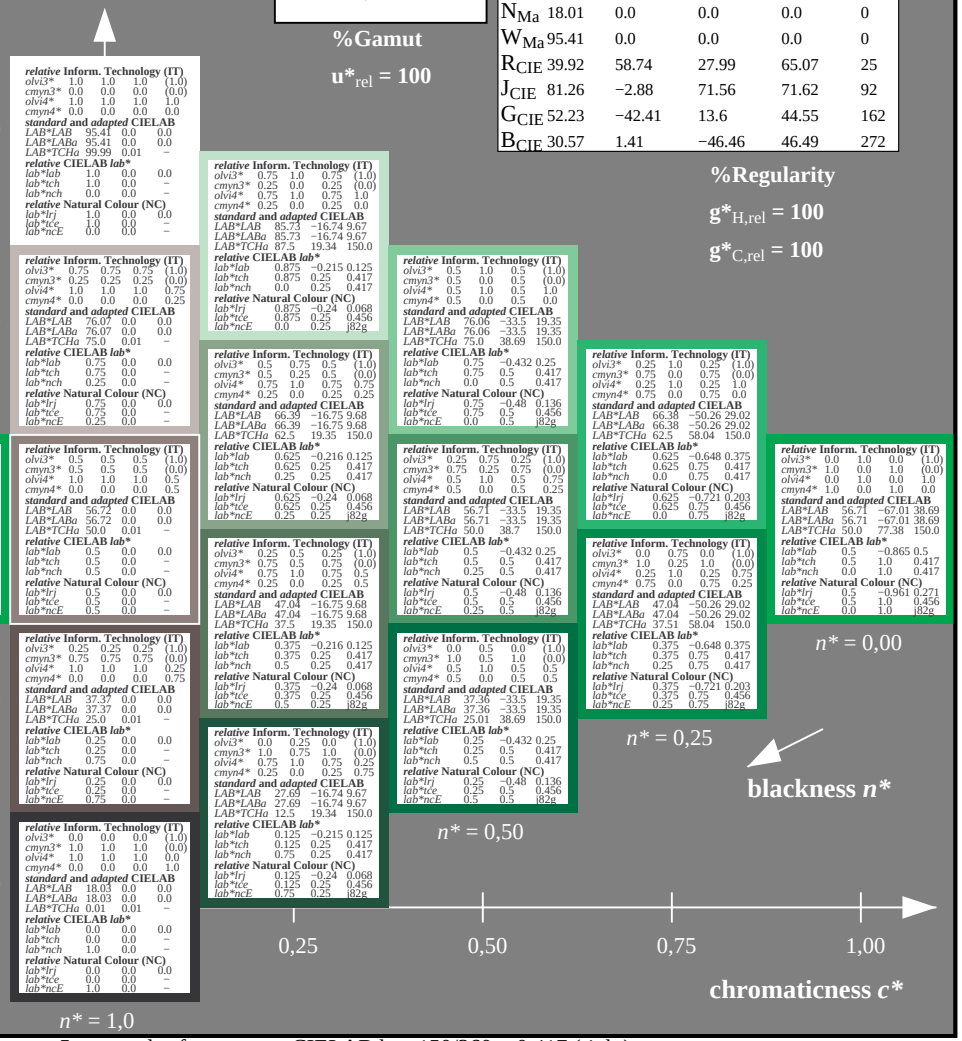
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



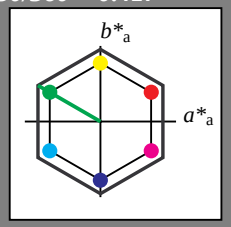
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

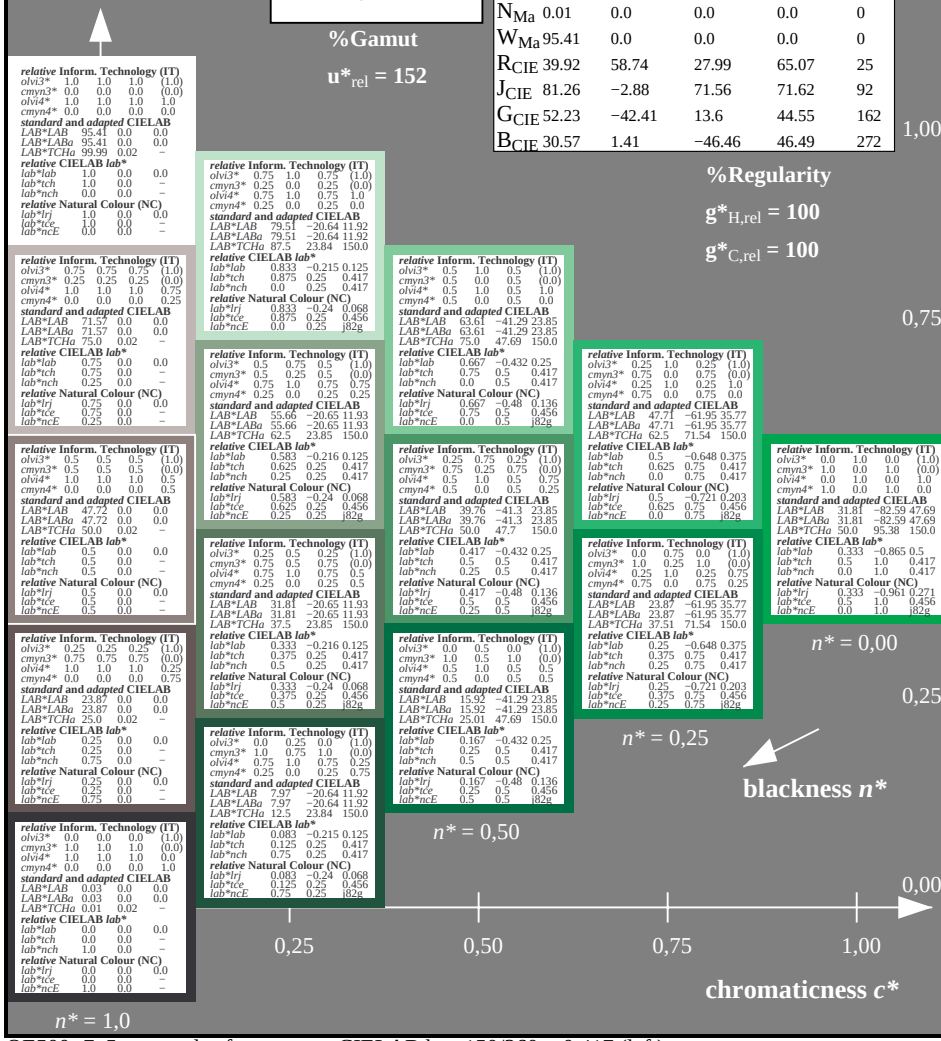
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

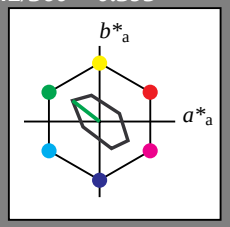


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

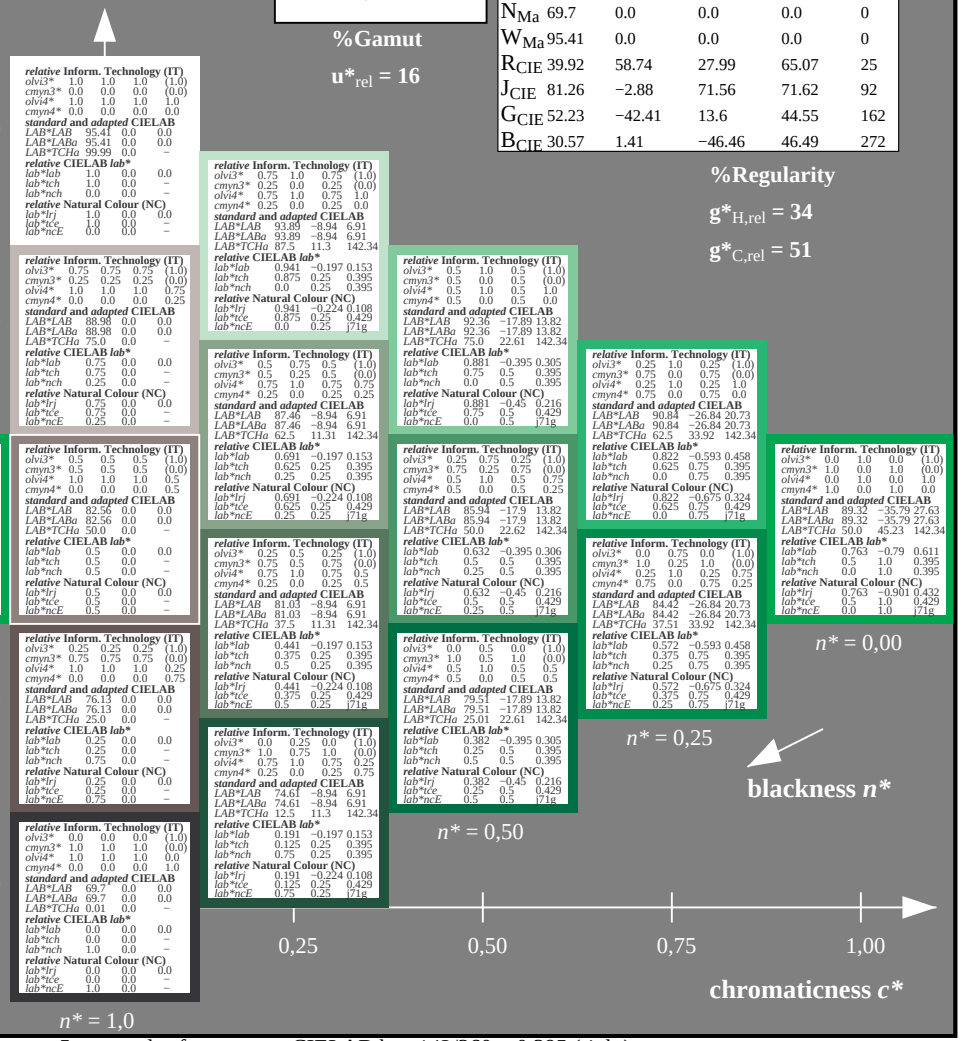
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Natural Reflective System NRS18

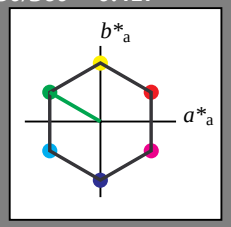
for hue $h^* = lab^*h = 150/360 = 0.417$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

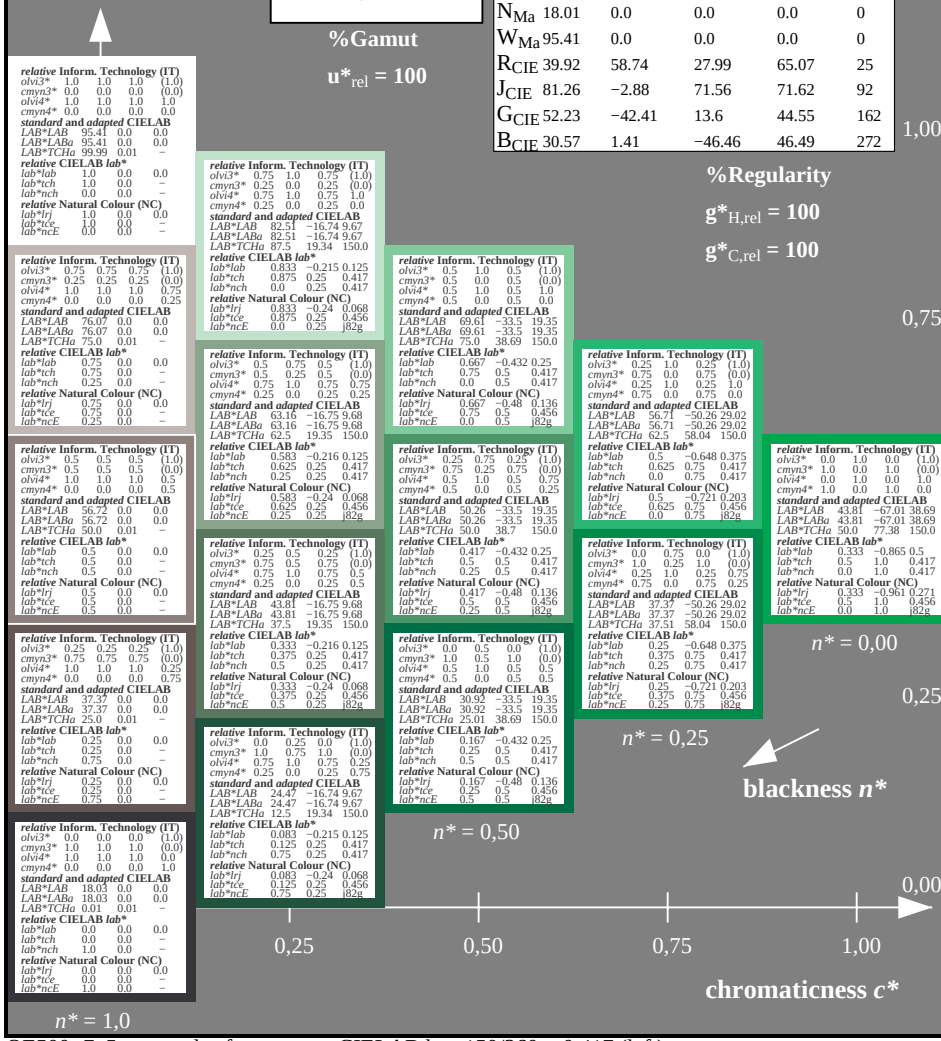
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Offset Reflective System ORS18

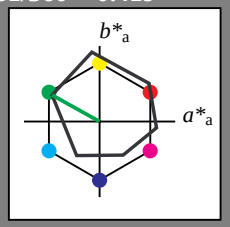
for hue $h^* = lab^*h = 151/360 = 0.419$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

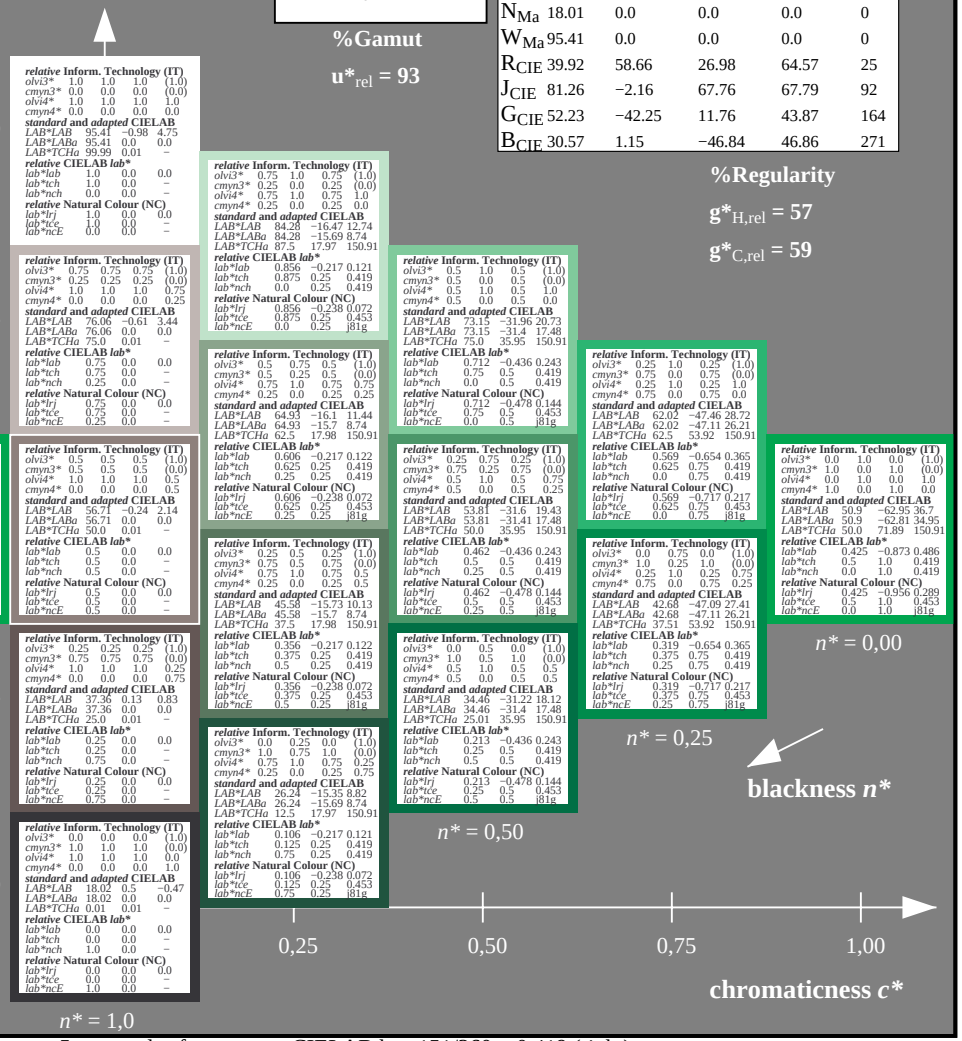
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



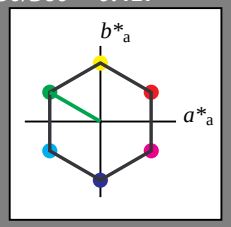
5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

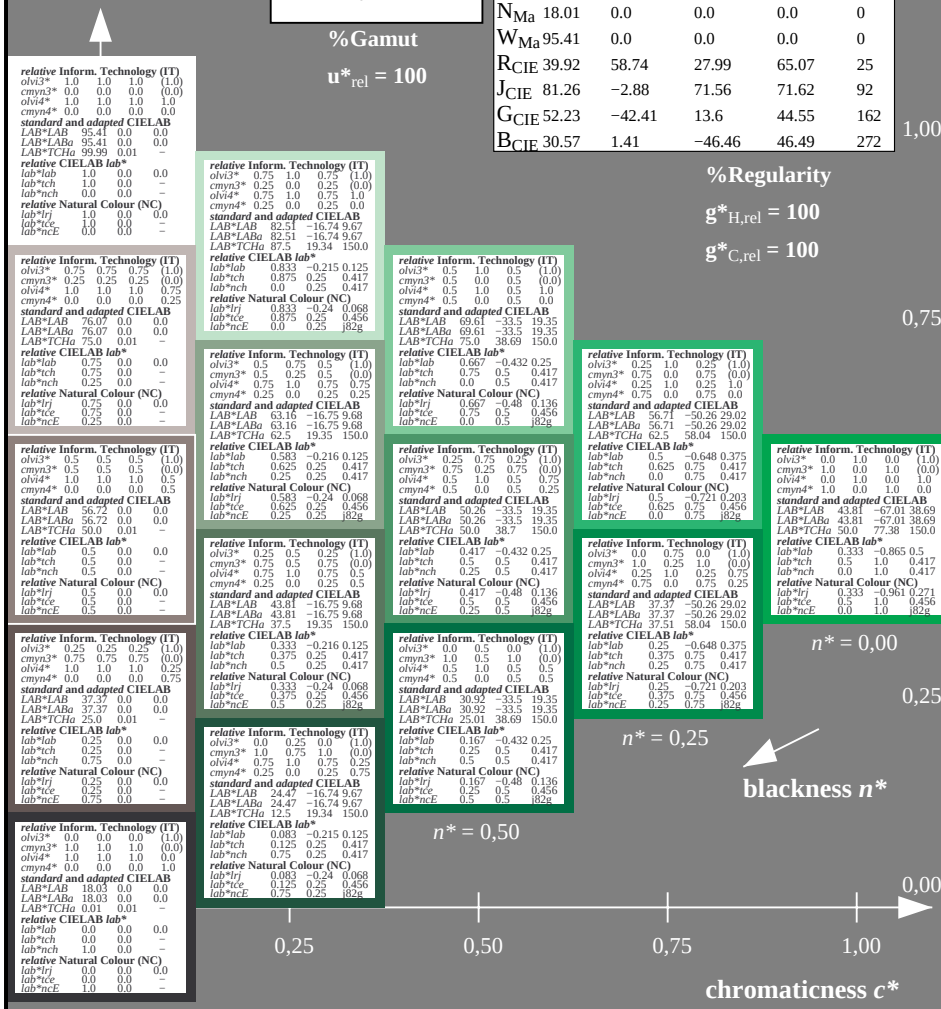
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

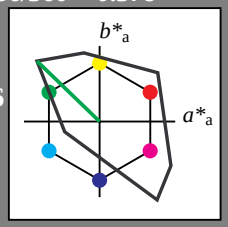


Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

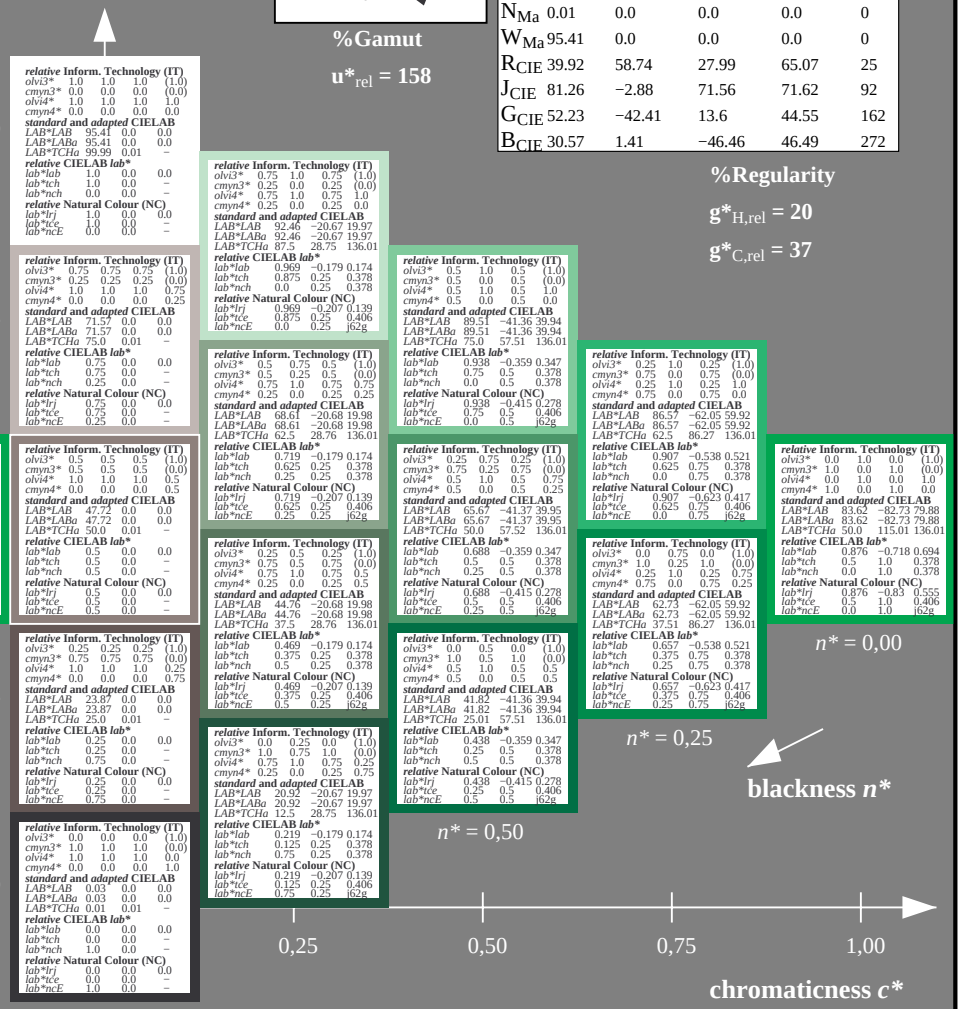
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

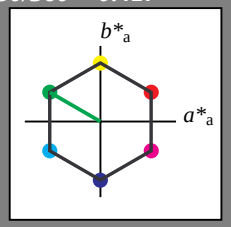
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

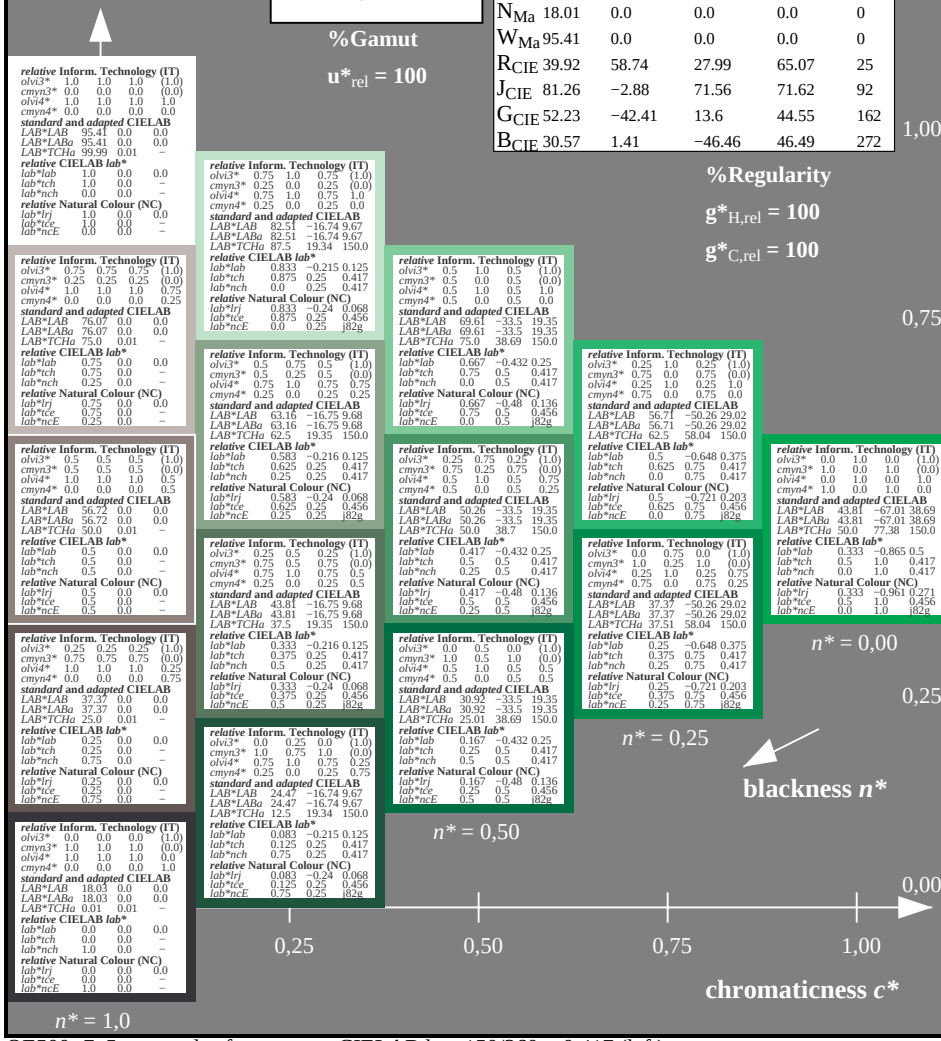
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

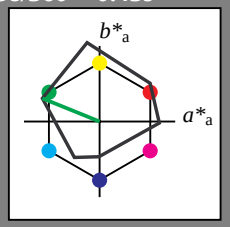
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

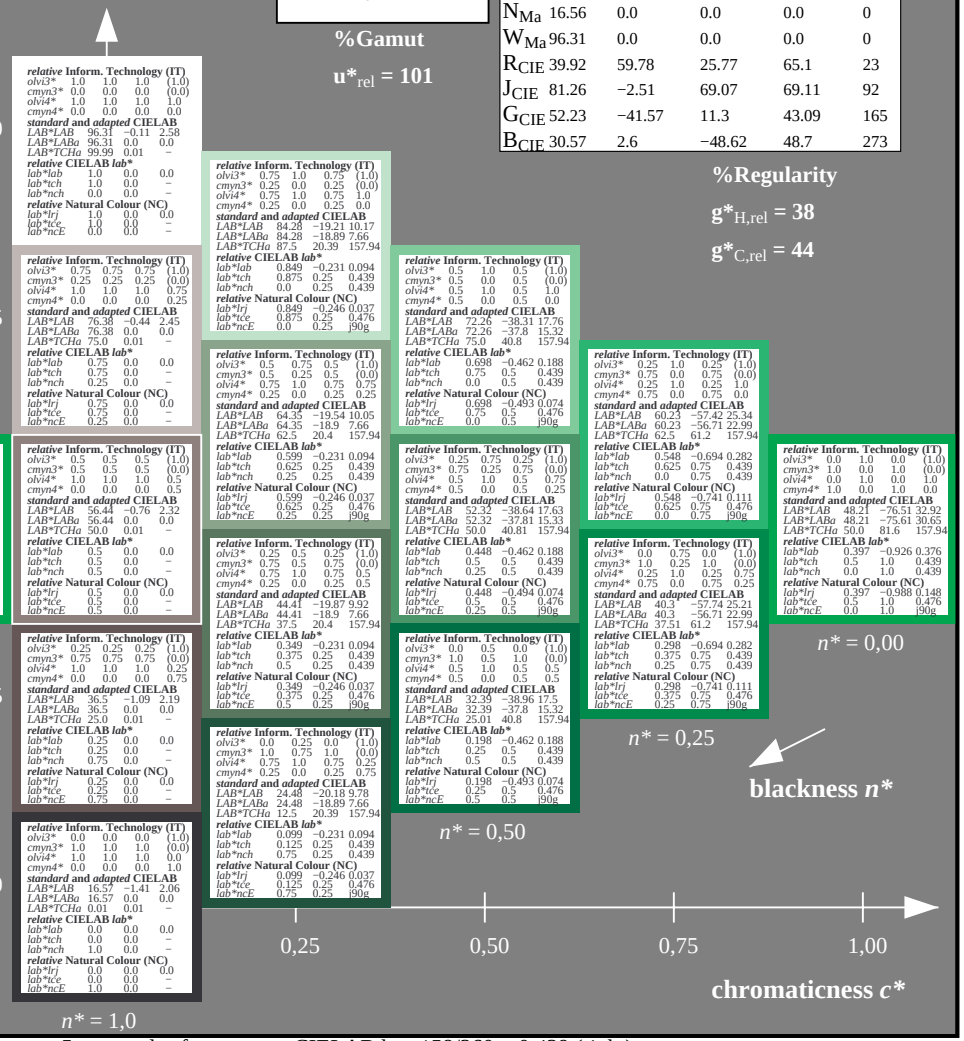
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



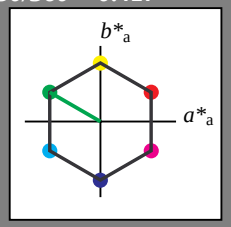
5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

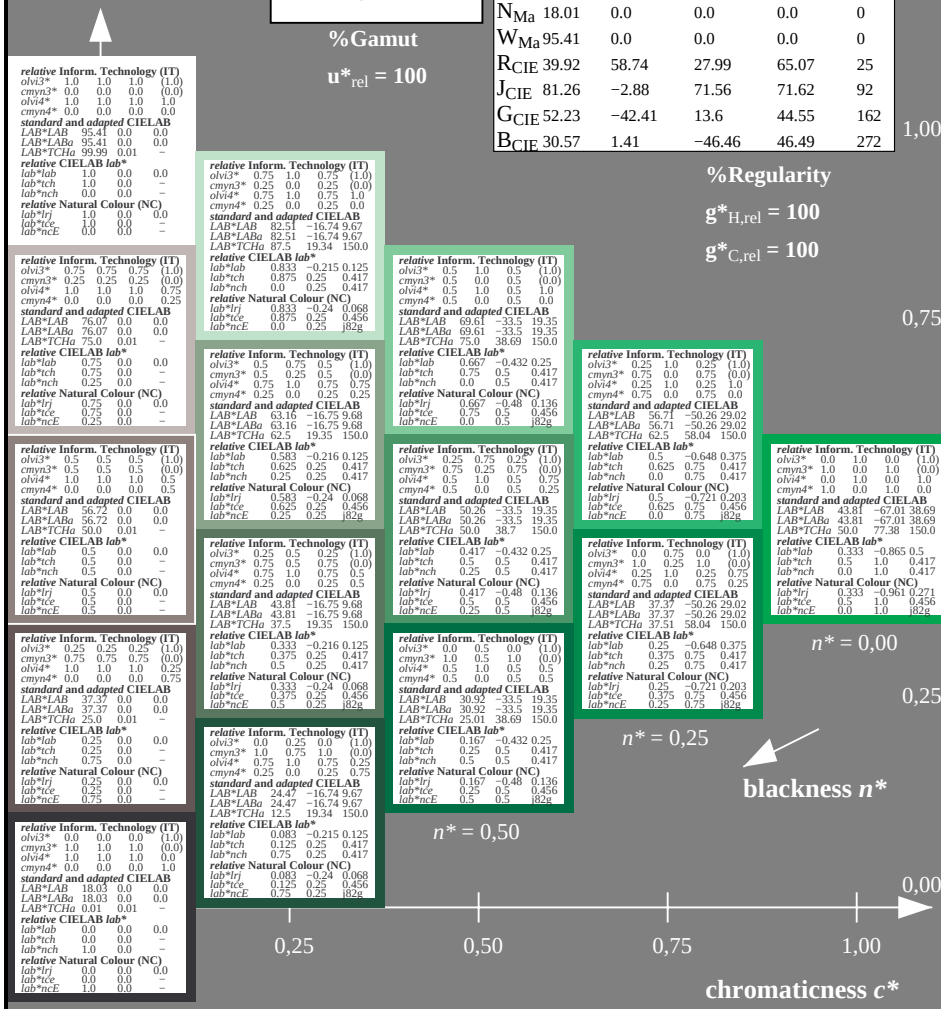
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

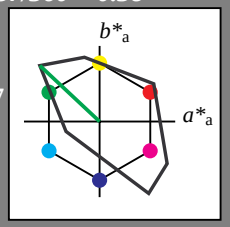


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

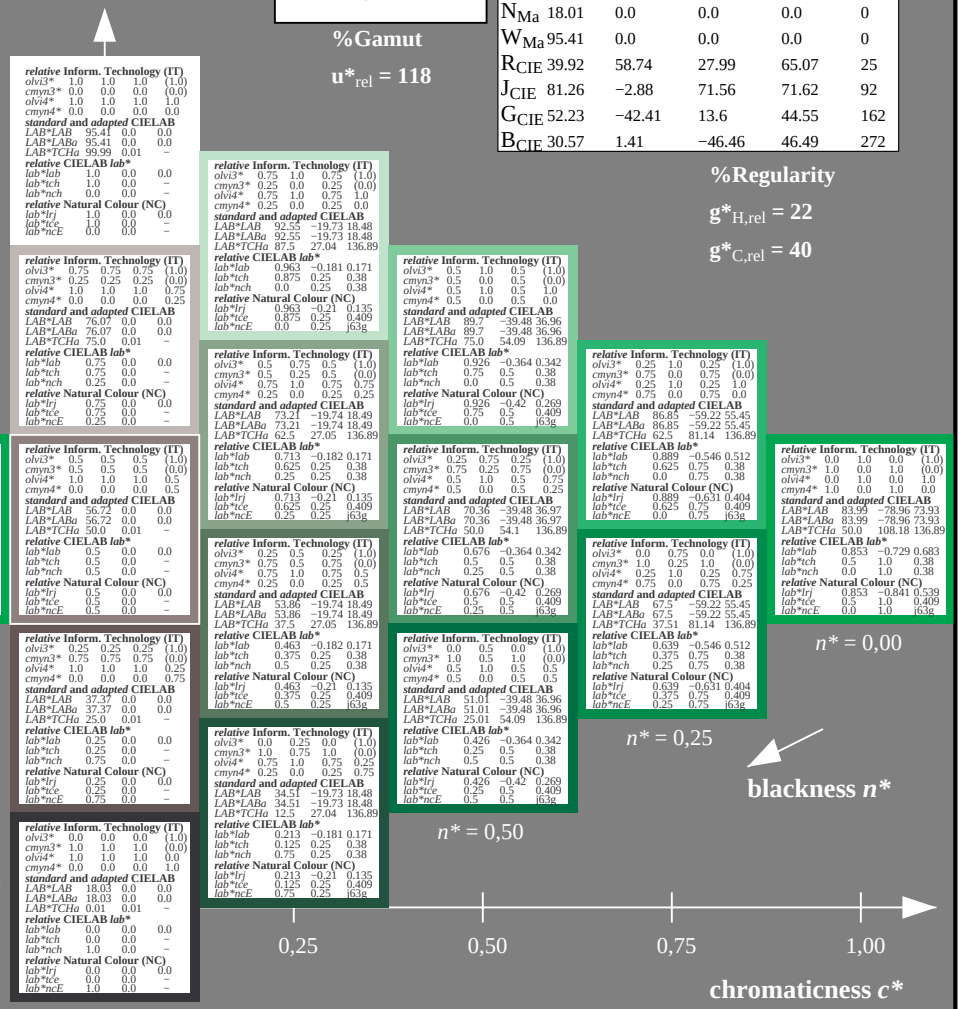
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

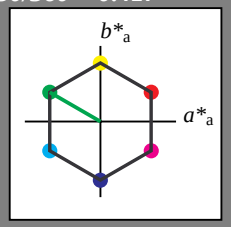
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

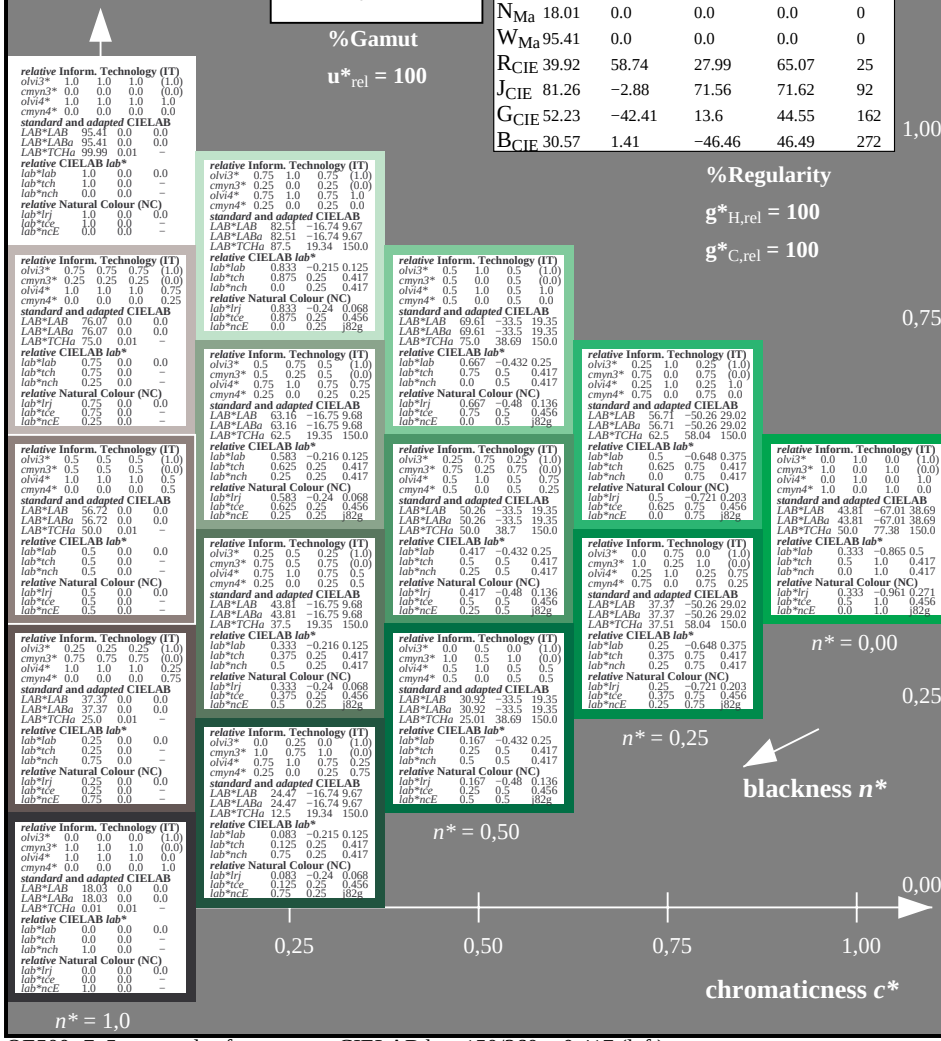
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

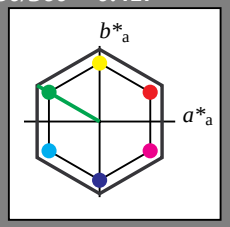


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

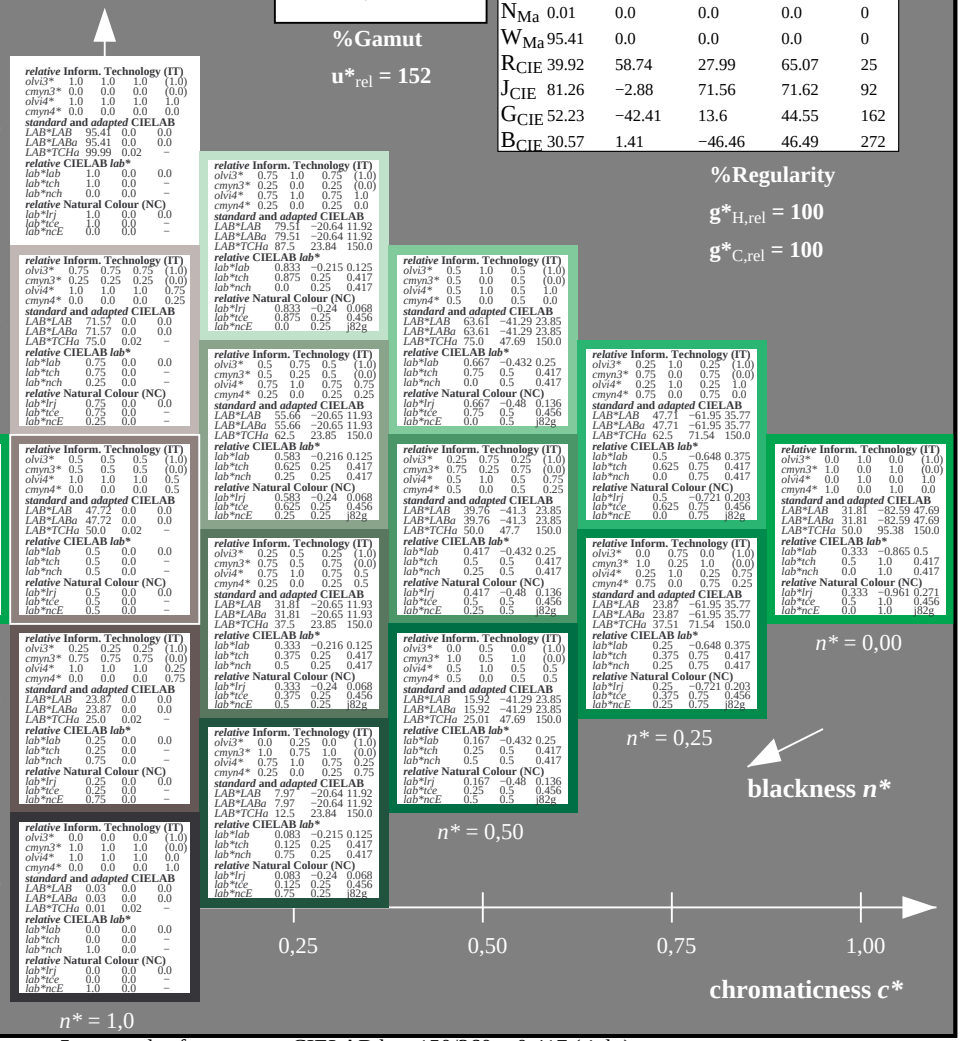
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



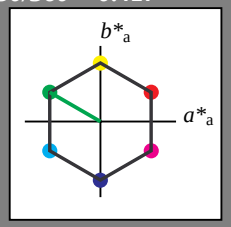
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.75 (1.0)
*cmyn3** 0.25 0.25 0.25 (0.0)
*olvi4** 1.0 1.0 1.0 0.75
*cmyn4** 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 76.07 0.0 0.0
*LAB*LABa* 76.07 0.0 0.0
*LAB*TCHa* 75.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.75 0.0 0.0
*lab*tch* 0.75 0.0 –
*lab*nch* 0.25 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 0.0
*lab*tce* 0.75 0.0 –
*lab*ncE* 0.25 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.25 (1.0)
*cmyn3** 0.75 0.75 0.75 (0.0)
*olvi4** 1.0 1.0 1.0 0.25
*cmyn4** 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 37.37 0.0 0.0
*LAB*LABa* 37.37 0.0 0.0
*LAB*TCHa* 25.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.25 0.0 0.0
*lab*tch* 0.25 0.0 –
*lab*nch* 0.75 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 0.0
*lab*tce* 0.25 0.0 –
*lab*ncE* 0.75 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 1,0

relative **Inform. Technology (IT)**
*olvi3** 0.75 1.0 0.75 (1.0)
*cmyn3** 0.25 0.0 0.25 (0.0)
*olvi4** 0.75 1.0 0.75 1.0
*cmyn4** 0.25 0.0 0.25 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 82.51 −16.74 9.67
*LAB*LABa* 82.51 −16.74 9.67
*LAB*TCHa* 87.5 19.34 150.0
relative* CIELAB *lab*
*lab*lab* 0.833 −0.215 0.125
*lab*tch* 0.875 0.25 0.417
*lab*nch* 0.0 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.833 −0.24 0.068
*lab*tce* 0.875 0.25 0.456
*lab*ncE* 0.0 0.25 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.75 0.5 (1.0)
*cmyn3** 0.5 0.25 0.5 (0.0)
*olvi4** 0.75 1.0 0.75 0.75
*cmyn4** 0.25 0.0 0.25 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 63.16 −16.75 9.68
*LAB*LABa* 63.16 −16.75 9.68
*LAB*TCHa* 62.5 19.35 150.0
relative* CIELAB *lab*
*lab*lab* 0.583 −0.216 0.125
*lab*tch* 0.625 0.25 0.417
*lab*nch* 0.25 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.583 −0.24 0.068
*lab*tce* 0.625 0.25 0.456
*lab*ncE* 0.25 0.25 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.75 0.25 (1.0)
*cmyn3** 0.75 0.25 0.75 (0.0)
*olvi4** 0.5 1.0 0.5 0.75
*cmyn4** 0.5 0.0 0.5 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 50.26 −33.5 19.35
*LAB*LABa* 50.26 −33.5 19.35
*LAB*TCHa* 50.0 38.7 150.0
relative* CIELAB *lab*
*lab*lab* 0.417 −0.432 0.25
*lab*tch* 0.5 0.5 0.417
*lab*nch* 0.25 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.417 −0.48 0.136
*lab*tce* 0.5 0.5 0.456
*lab*ncE* 0.25 0.5 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.25 0.0 (1.0)
*cmyn3** 1.0 0.75 1.0 (0.0)
*olvi4** 0.75 1.0 0.75 0.25
*cmyn4** 0.25 0.0 0.25 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 24.47 −16.74 9.67
*LAB*LABa* 24.47 −16.74 9.67
*LAB*TCHa* 12.5 19.34 150.0
relative* CIELAB *lab*
*lab*lab* 0.083 −0.215 0.125
*lab*tch* 0.125 0.25 0.417
*lab*nch* 0.75 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.083 −0.24 0.068
*lab*tce* 0.125 0.25 0.456
*lab*ncE* 0.75 0.25 j82g

*n** = 0,50

relative **Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.5 (1.0)
*cmyn3** 0.5 0.0 0.5 (0.0)
*olvi4** 0.5 1.0 0.5 1.0
*cmyn4** 0.5 0.0 0.5 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 69.61 −33.5 19.35
*LAB*LABa* 69.61 −33.5 19.35
*LAB*TCHa* 75.0 38.69 150.0
relative* CIELAB *lab*
*lab*lab* 0.667 −0.432 0.25
*lab*tch* 0.75 0.5 0.417
*lab*nch* 0.0 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.667 −0.48 0.136
*lab*tce* 0.75 0.5 0.456
*lab*ncE* 0.0 0.5 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.25 1.0 0.25 (1.0)
*cmyn3** 0.75 0.0 0.75 (0.0)
*olvi4** 0.25 1.0 0.25 1.0
*cmyn4** 0.75 0.0 0.75 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 56.71 −50.26 29.02
*LAB*LABa* 56.71 −50.26 29.02
*LAB*TCHa* 62.5 58.04 150.0
relative* CIELAB *lab*
*lab*lab* 0.5 −0.648 0.375
*lab*tch* 0.625 0.75 0.417
*lab*nch* 0.0 0.75 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.721 0.203
*lab*tce* 0.625 0.75 0.456
*lab*ncE* 0.0 0.75 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.75 0.0 (1.0)
*cmyn3** 1.0 0.25 1.0 (0.0)
*olvi4** 0.25 1.0 0.25 0.75
*cmyn4** 0.75 0.0 0.75 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 37.37 −50.26 29.02
*LAB*LABa* 37.37 −50.26 29.02
*LAB*TCHa* 37.51 58.04 150.0
relative* CIELAB *lab*
*lab*lab* 0.25 −0.648 0.375
*lab*tch* 0.375 0.75 0.417
*lab*nch* 0.25 0.75 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.721 0.203
*lab*tce* 0.375 0.75 0.456
*lab*ncE* 0.25 0.75 j82g

*n** = 0,25

relative **Inform. Technology (IT)**
*olvi3** 1.0 0.0 1.0 (1.0)
*cmyn3** 1.0 0.0 1.0 (0.0)
*olvi4** 0.0 1.0 0.0 1.0
*cmyn4** 1.0 0.0 1.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 43.81 −67.01 38.69
*LAB*LABa* 43.81 −67.01 38.69
*LAB*TCHa* 50.0 77.38 150.0
relative* CIELAB *lab*
*lab*lab* 0.333 −0.865 0.5
*lab*tch* 0.5 1.0 0.417
*lab*nch* 0.0 1.0 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.333 −0.961 0.271
*lab*tce* 0.5 1.0 0.456
*lab*ncE* 0.0 1.0 j82g

*n** = 0,00

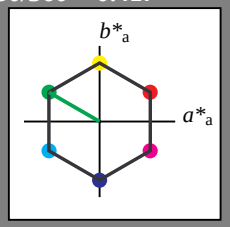
blackness n^*

chromaticness c^*

Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

relative **Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.75 0.75 0.75 (1.0)
*cmyn3** 0.25 0.25 0.25 (0.0)
*olvi4** 1.0 1.0 1.0 0.75
*cmyn4** 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 76.07 0.0 0.0
*LAB*LABa* 76.07 0.0 0.0
*LAB*TCHa* 75.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.75 0.0 0.0
*lab*tch* 0.75 0.0 –
*lab*nch* 0.25 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 0.0
*lab*tce* 0.75 0.0 –
*lab*ncE* 0.25 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard and adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.25 0.25 (1.0)
*cmyn3** 0.75 0.75 0.75 (0.0)
*olvi4** 1.0 1.0 1.0 0.25
*cmyn4** 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 37.37 0.0 0.0
*LAB*LABa* 37.37 0.0 0.0
*LAB*TCHa* 25.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.25 0.0 0.0
*lab*tch* 0.25 0.0 –
*lab*nch* 0.75 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 0.0
*lab*tce* 0.25 0.0 –
*lab*ncE* 0.75 0.0 –

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard and adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 1,0

relative **Inform. Technology (IT)**
*olvi3** 0.75 1.0 0.75 (1.0)
*cmyn3** 0.25 0.0 0.25 (0.0)
*olvi4** 0.75 1.0 0.75 1.0
*cmyn4** 0.25 0.0 0.25 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 82.51 −16.74 9.67
*LAB*LABa* 82.51 −16.74 9.67
*LAB*TCHa* 87.5 19.34 150.0
relative* CIELAB *lab*
*lab*lab* 0.833 −0.215 0.125
*lab*tch* 0.875 0.25 0.417
*lab*nch* 0.0 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.833 −0.24 0.068
*lab*tce* 0.875 0.25 0.456
*lab*ncE* 0.0 0.25 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.5 0.75 0.5 (1.0)
*cmyn3** 0.5 0.25 0.5 (0.0)
*olvi4** 0.75 1.0 0.75 0.75
*cmyn4** 0.25 0.0 0.25 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 63.16 −16.75 9.68
*LAB*LABa* 63.16 −16.75 9.68
*LAB*TCHa* 62.5 19.35 150.0
relative* CIELAB *lab*
*lab*lab* 0.583 −0.216 0.125
*lab*tch* 0.625 0.25 0.417
*lab*nch* 0.25 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.583 −0.24 0.068
*lab*tce* 0.625 0.25 0.456
*lab*ncE* 0.25 0.25 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.25 0.75 0.25 (1.0)
*cmyn3** 0.75 0.25 0.75 (0.0)
*olvi4** 0.5 1.0 0.5 0.75
*cmyn4** 0.5 0.0 0.5 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 50.26 −33.5 19.35
*LAB*LABa* 50.26 −33.5 19.35
*LAB*TCHa* 50.0 38.7 150.0
relative* CIELAB *lab*
*lab*lab* 0.417 −0.432 0.25
*lab*tch* 0.5 0.5 0.417
*lab*nch* 0.25 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.417 −0.48 0.136
*lab*tce* 0.5 0.5 0.456
*lab*ncE* 0.25 0.5 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.25 0.0 (1.0)
*cmyn3** 1.0 0.75 1.0 (0.0)
*olvi4** 0.75 1.0 0.75 0.25
*cmyn4** 0.25 0.0 0.25 0.75
***standard and adapted* CIELAB**
*LAB*LAB* 24.47 −16.74 9.67
*LAB*LABa* 24.47 −16.74 9.67
*LAB*TCHa* 12.5 19.34 150.0
relative* CIELAB *lab*
*lab*lab* 0.083 −0.215 0.125
*lab*tch* 0.125 0.25 0.417
*lab*nch* 0.75 0.25 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.083 −0.24 0.068
*lab*tce* 0.125 0.25 0.456
*lab*ncE* 0.75 0.25 j82g

*n** = 0,50

relative **Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.5 (1.0)
*cmyn3** 0.5 0.0 0.5 (0.0)
*olvi4** 0.5 1.0 0.5 1.0
*cmyn4** 0.5 0.0 0.5 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 69.61 −33.5 19.35
*LAB*LABa* 69.61 −33.5 19.35
*LAB*TCHa* 75.0 38.69 150.0
relative* CIELAB *lab*
*lab*lab* 0.667 −0.432 0.25
*lab*tch* 0.75 0.5 0.417
*lab*nch* 0.0 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.667 −0.48 0.136
*lab*tce* 0.75 0.5 0.456
*lab*ncE* 0.0 0.5 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.25 1.0 0.25 (1.0)
*cmyn3** 0.75 0.0 0.75 (0.0)
*olvi4** 0.25 1.0 0.25 1.0
*cmyn4** 0.75 0.0 0.75 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 56.71 −50.26 29.02
*LAB*LABa* 56.71 −50.26 29.02
*LAB*TCHa* 62.5 58.04 150.0
relative* CIELAB *lab*
*lab*lab* 0.5 −0.648 0.375
*lab*tch* 0.625 0.75 0.417
*lab*nch* 0.0 0.75 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.721 0.203
*lab*tce* 0.625 0.75 0.456
*lab*ncE* 0.0 0.75 j82g

relative **Inform. Technology (IT)**
*olvi3** 0.0 0.75 0.0 (1.0)
*cmyn3** 1.0 0.25 1.0 (0.0)
*olvi4** 0.25 1.0 0.25 0.75
*cmyn4** 0.75 0.0 0.75 0.25
***standard and adapted* CIELAB**
*LAB*LAB* 37.37 −50.26 29.02
*LAB*LABa* 37.37 −50.26 29.02
*LAB*TCHa* 37.51 58.04 150.0
relative* CIELAB *lab*
*lab*lab* 0.25 −0.648 0.375
*lab*tch* 0.375 0.75 0.417
*lab*nch* 0.25 0.75 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.721 0.203
*lab*tce* 0.375 0.75 0.456
*lab*ncE* 0.25 0.75 j82g

*n** = 0,25

relative **Inform. Technology (IT)**
*olvi3** 1.0 0.0 1.0 (1.0)
*cmyn3** 1.0 0.0 1.0 (0.0)
*olvi4** 0.0 1.0 0.0 1.0
*cmyn4** 1.0 0.0 1.0 0.0
***standard and adapted* CIELAB**
*LAB*LAB* 43.81 −67.01 38.69
*LAB*LABa* 43.81 −67.01 38.69
*LAB*TCHa* 50.0 77.38 150.0
relative* CIELAB *lab*
*lab*lab* 0.333 −0.865 0.5
*lab*tch* 0.5 1.0 0.417
*lab*nch* 0.0 1.0 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.333 −0.961 0.271
*lab*tce* 0.5 1.0 0.456
*lab*ncE* 0.0 1.0 j82g

*n** = 0,00

blackness n^*

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

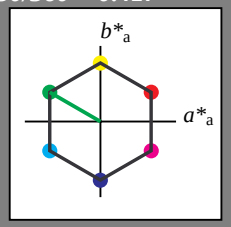
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

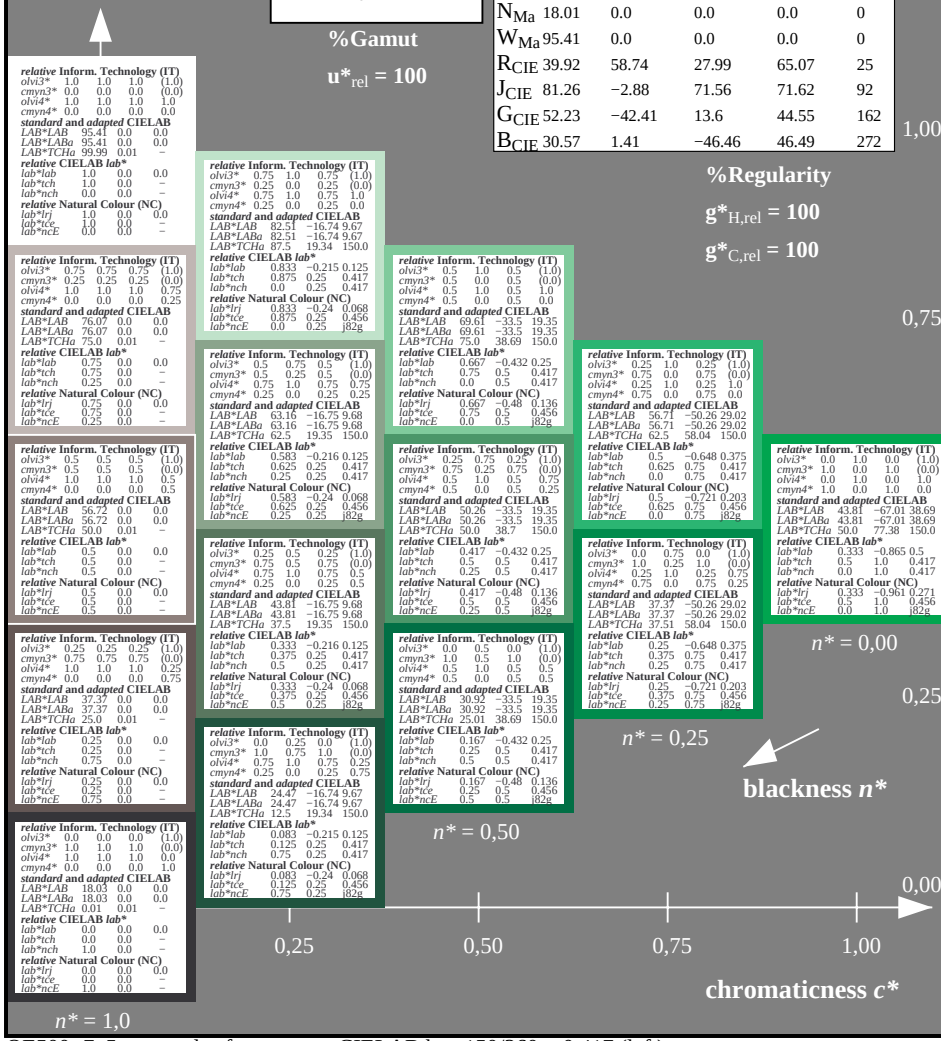
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

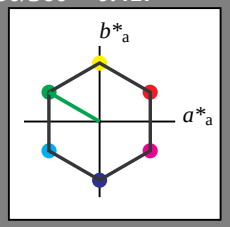


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

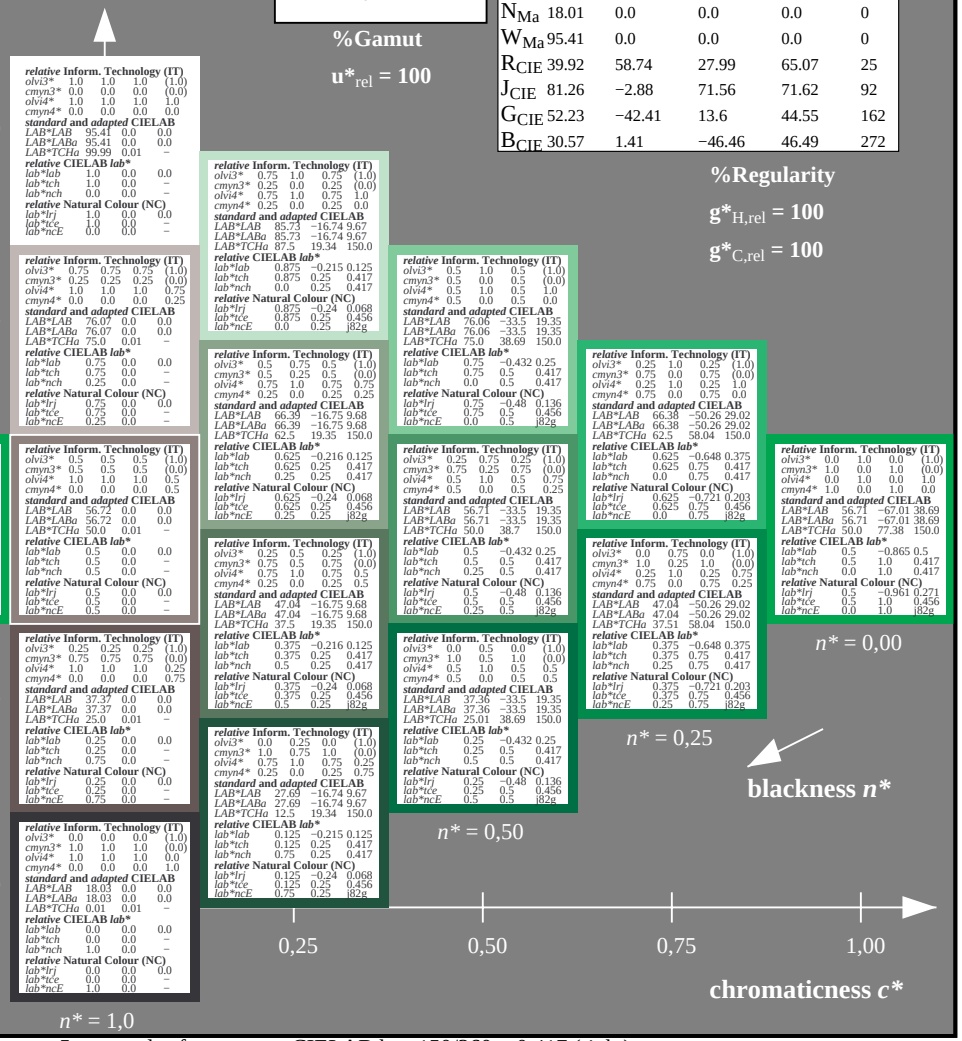
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

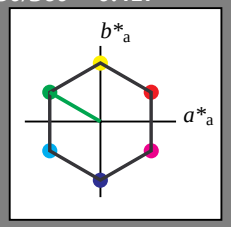
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

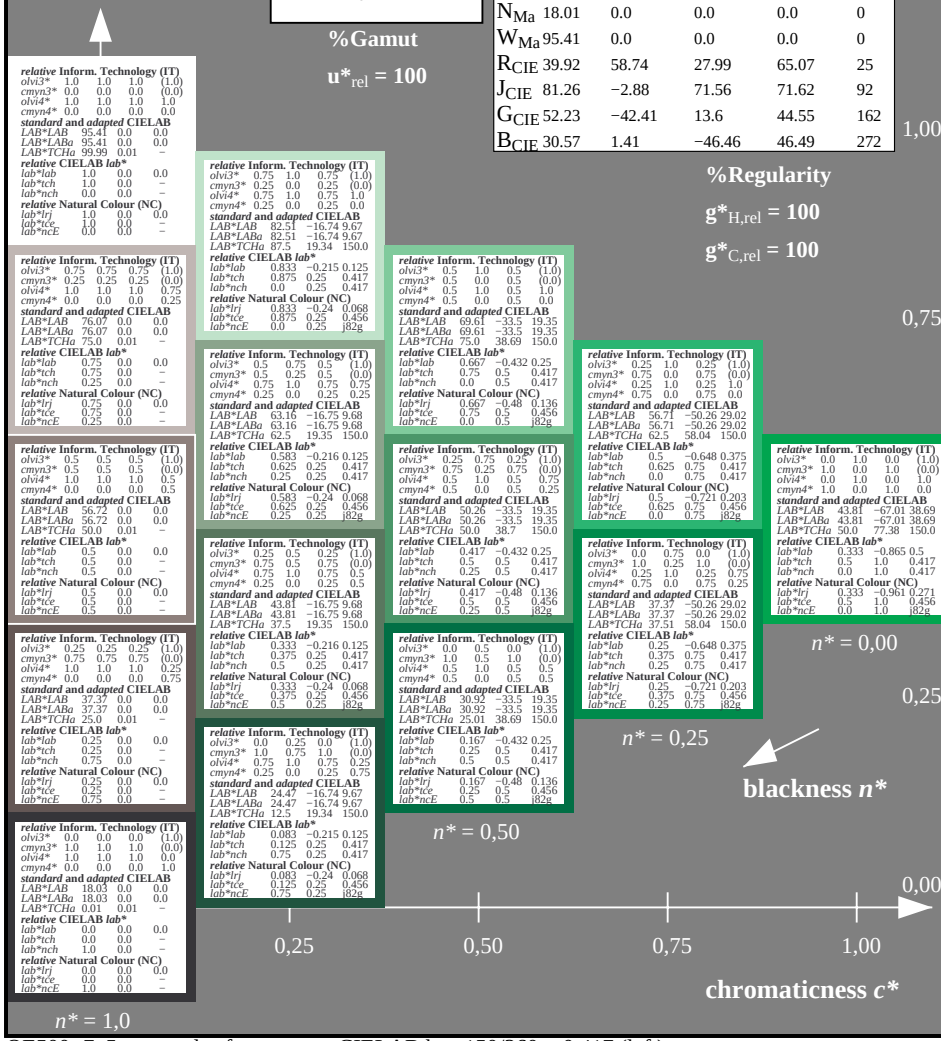
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



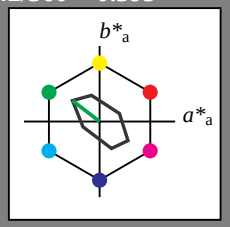
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

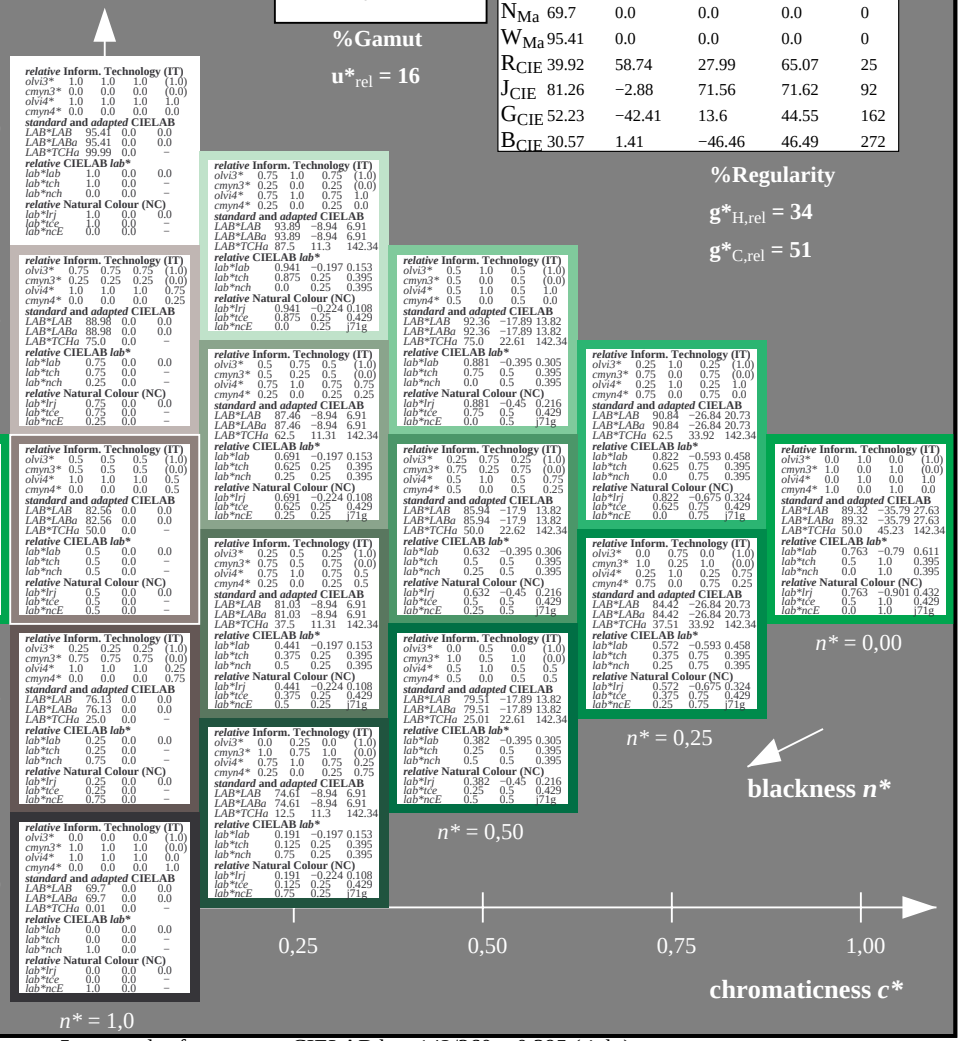
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

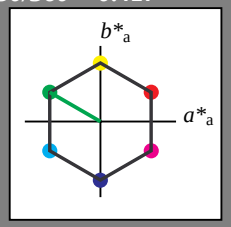
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

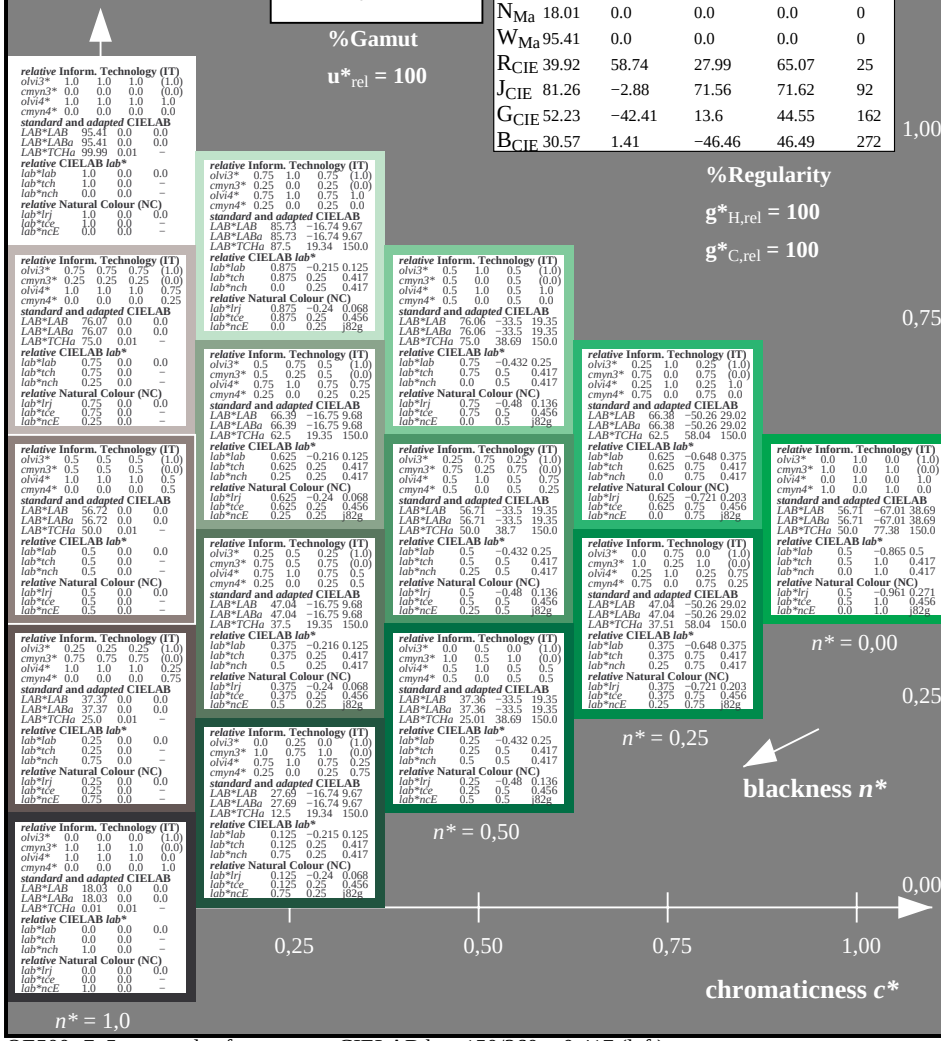
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

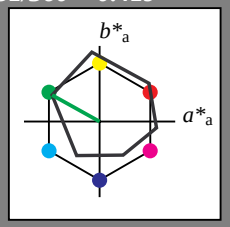
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

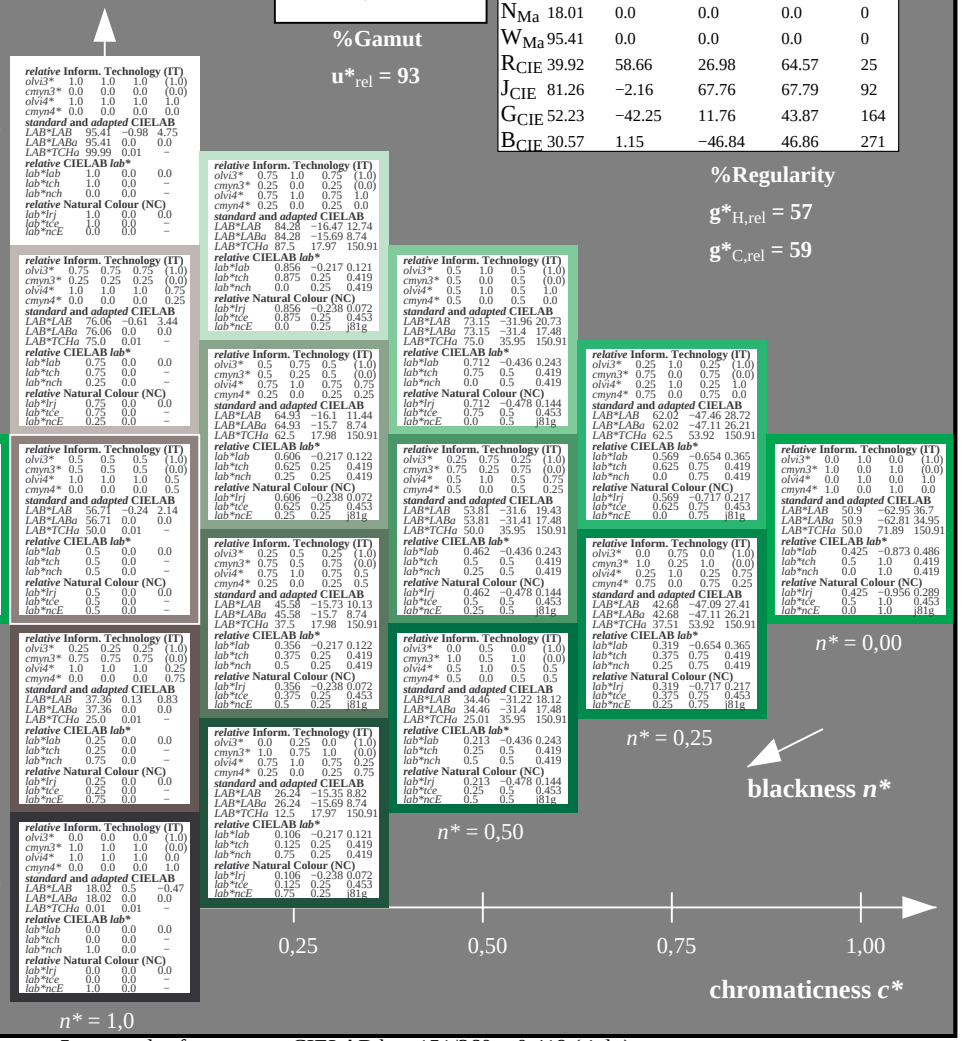
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

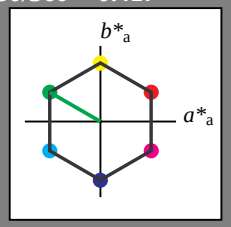
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

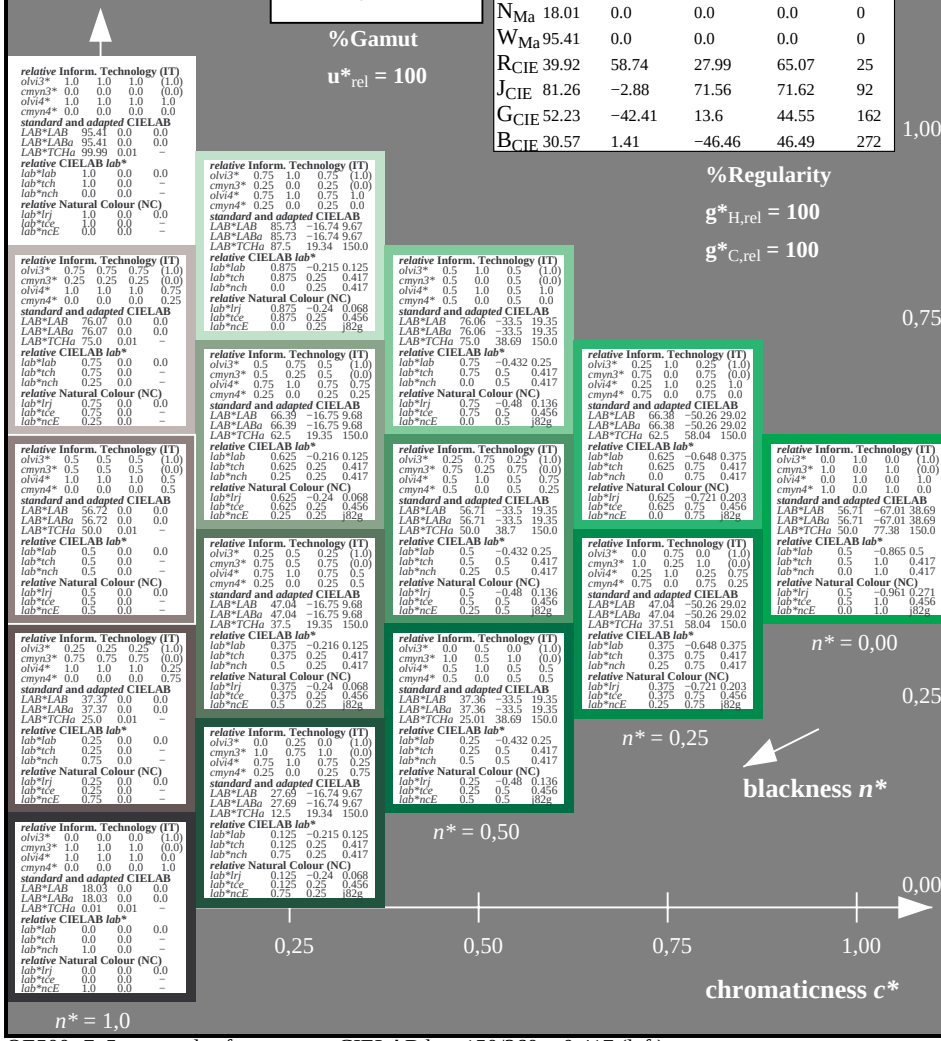
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$

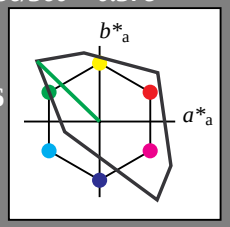
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

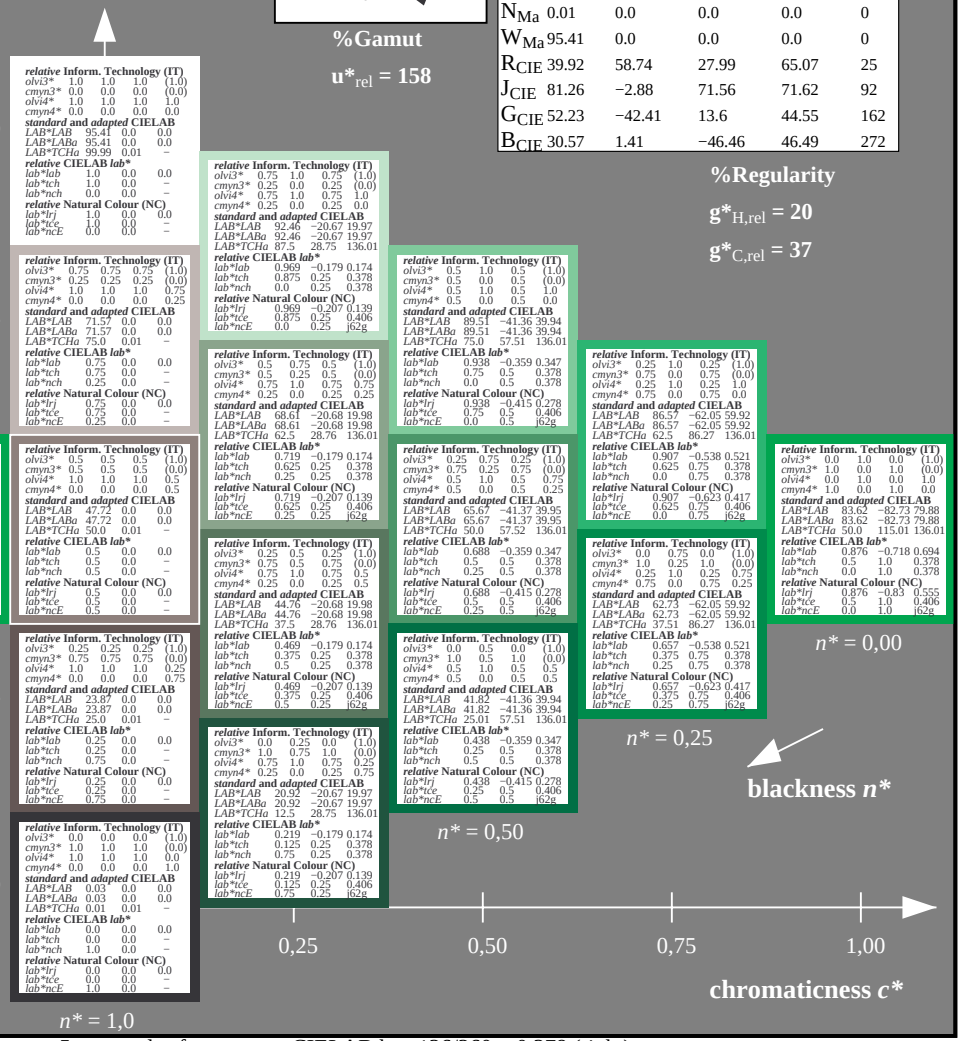
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

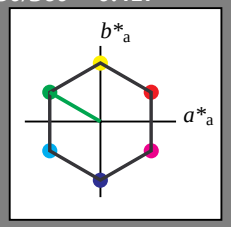
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

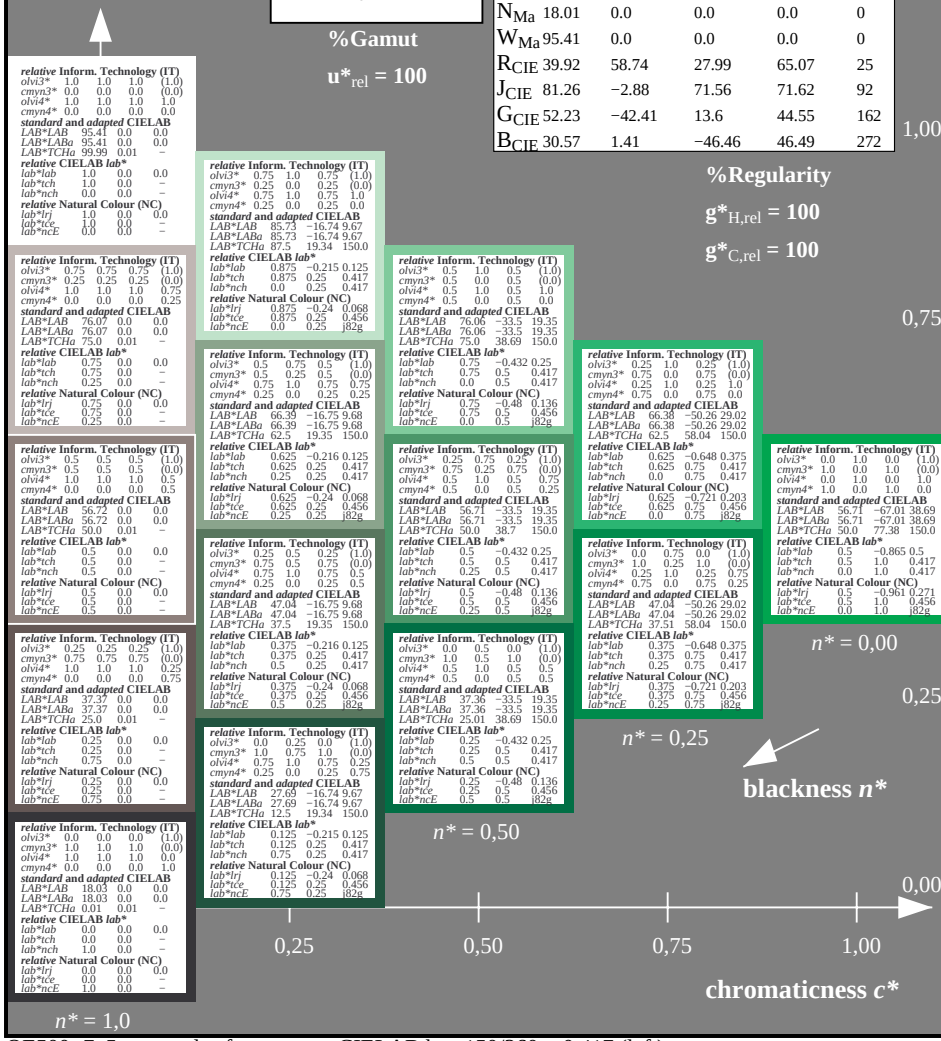
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

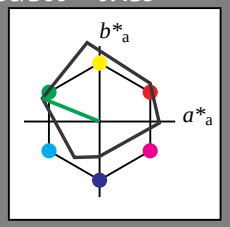
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

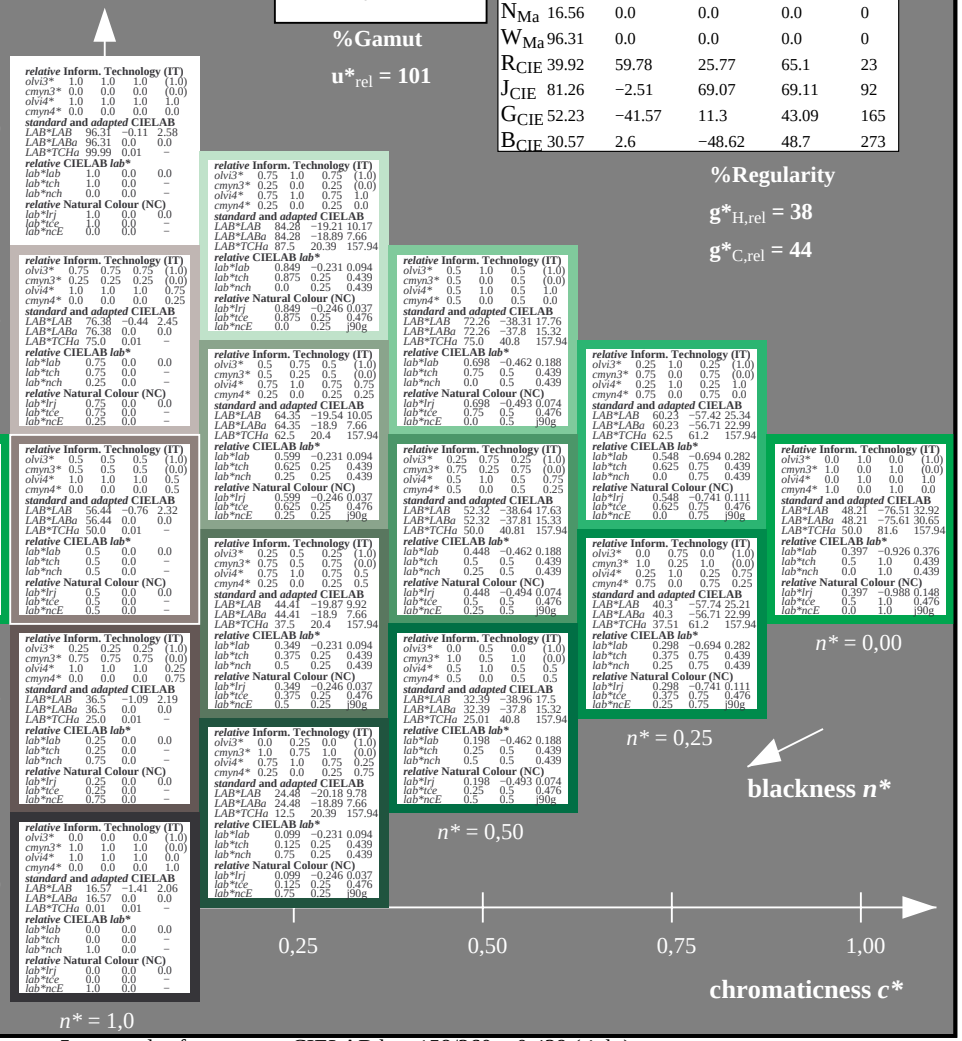
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Standard Reflective System SRS18

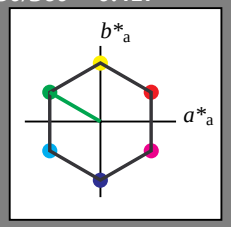
for hue $h^* = lab^*h = 150/360 = 0.417$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

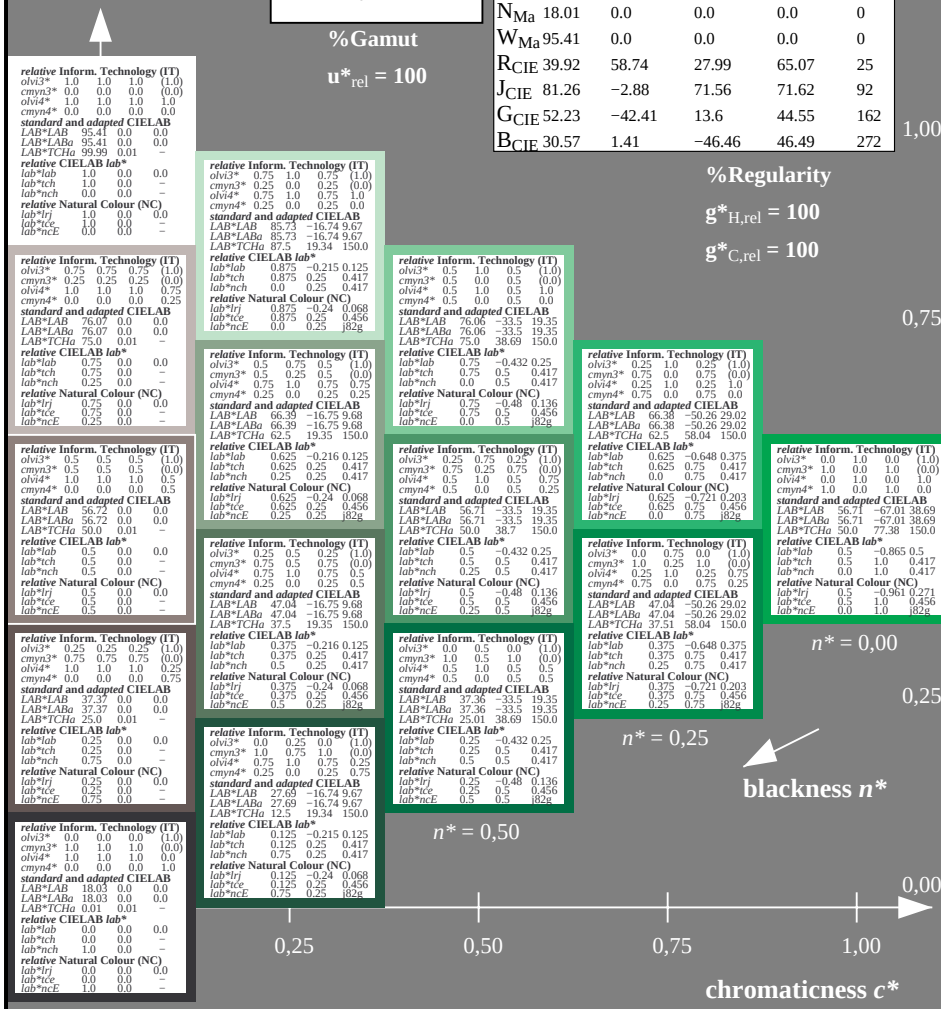
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS18

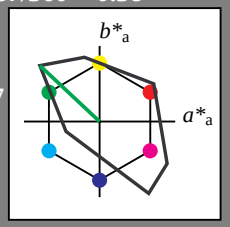
for hue $h^* = lab^*h = 137/360 = 0.38$

*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

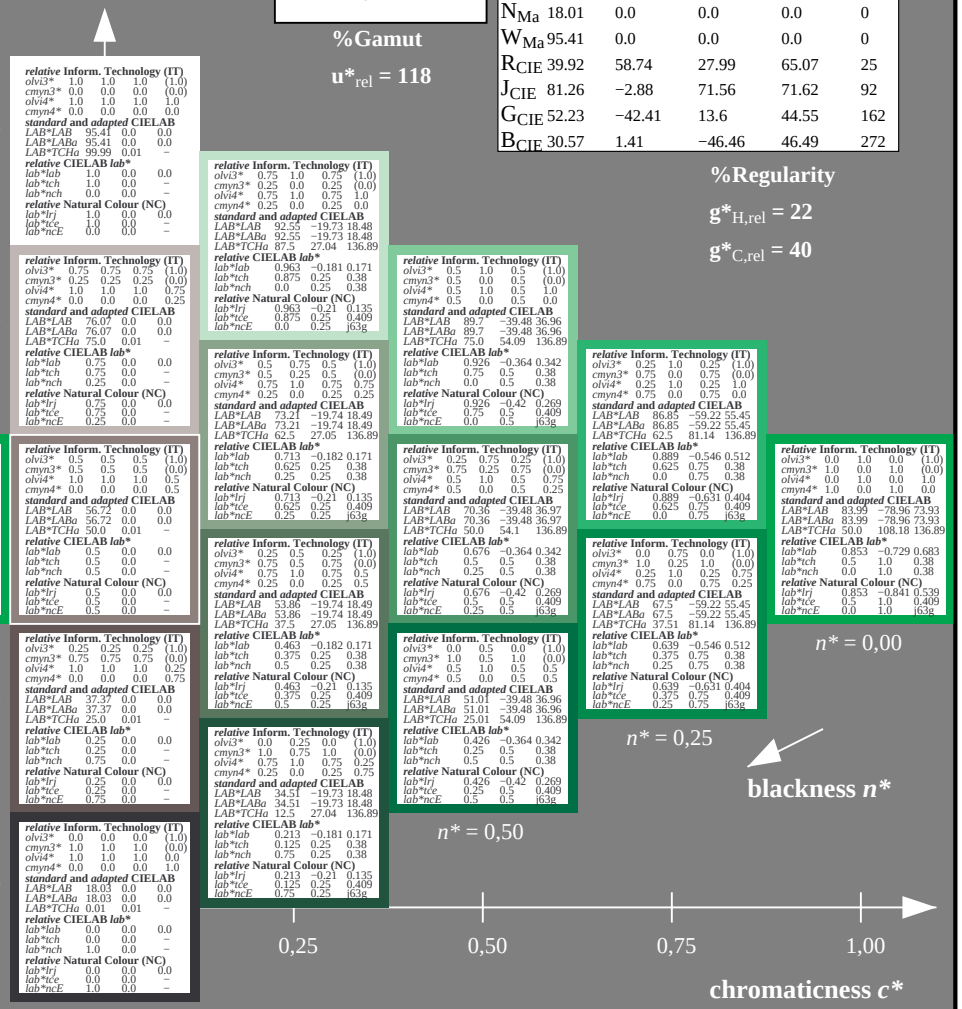
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

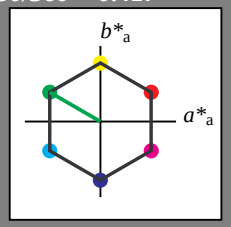
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

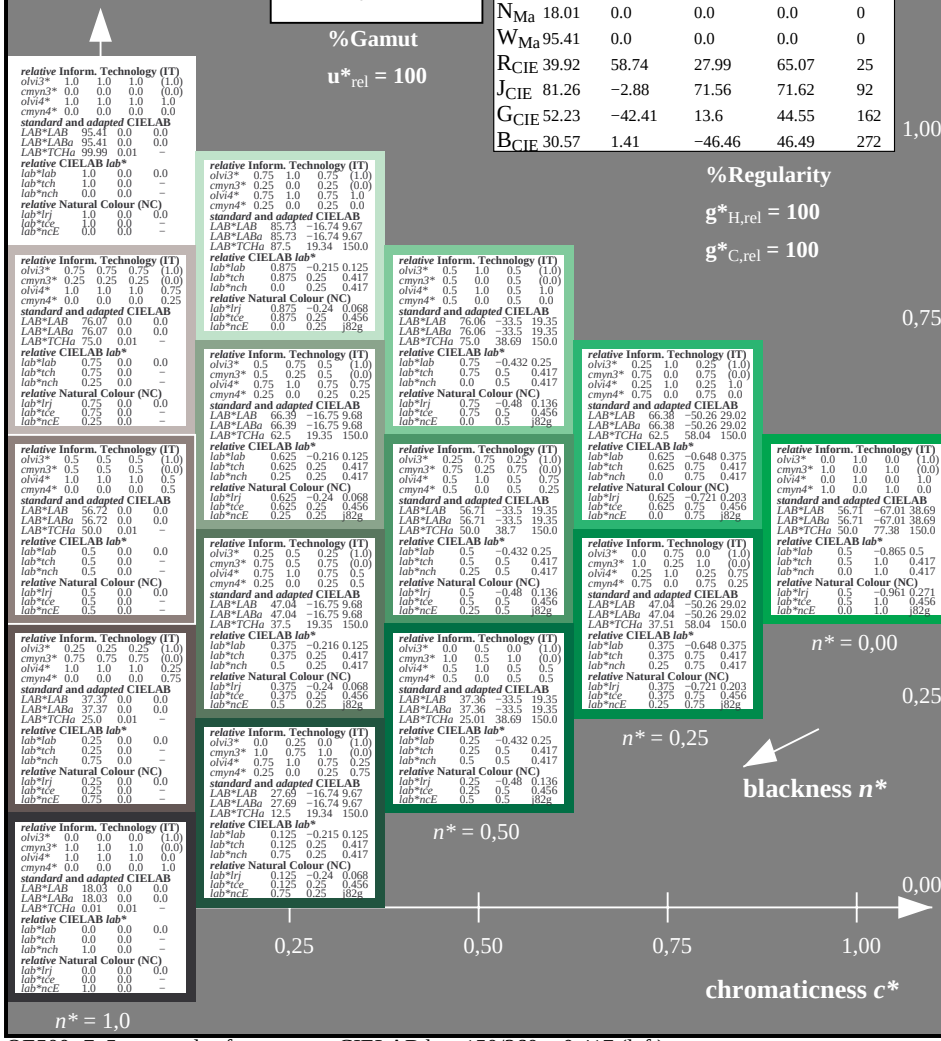
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



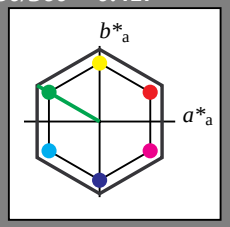
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

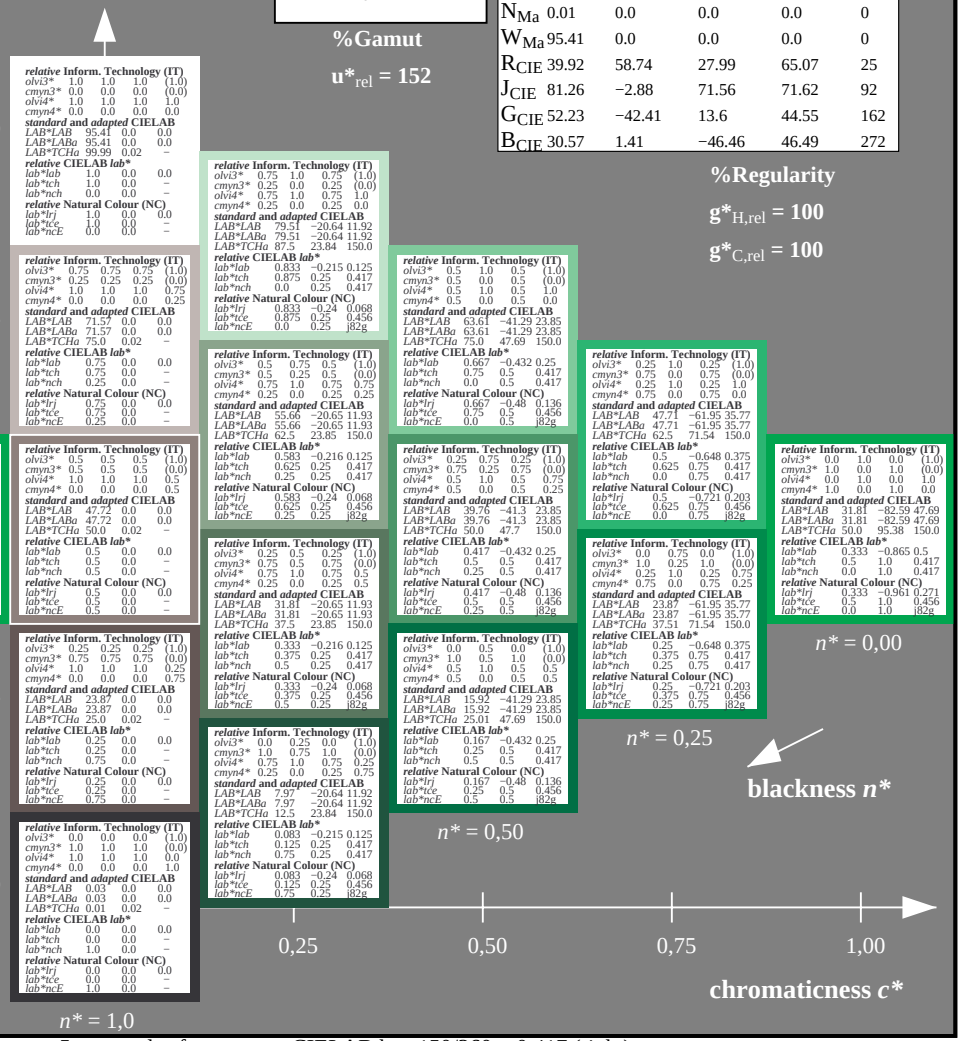
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



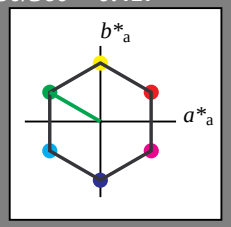
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

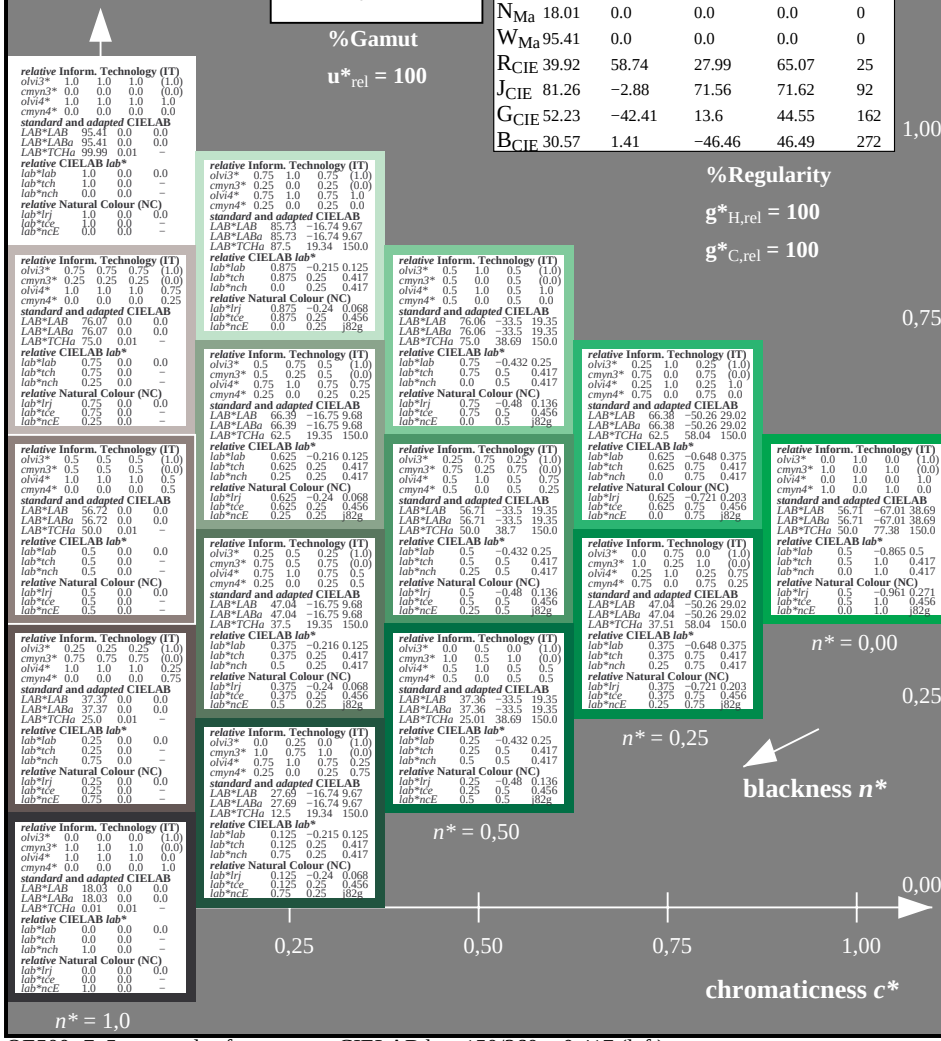
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



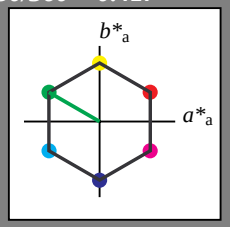
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

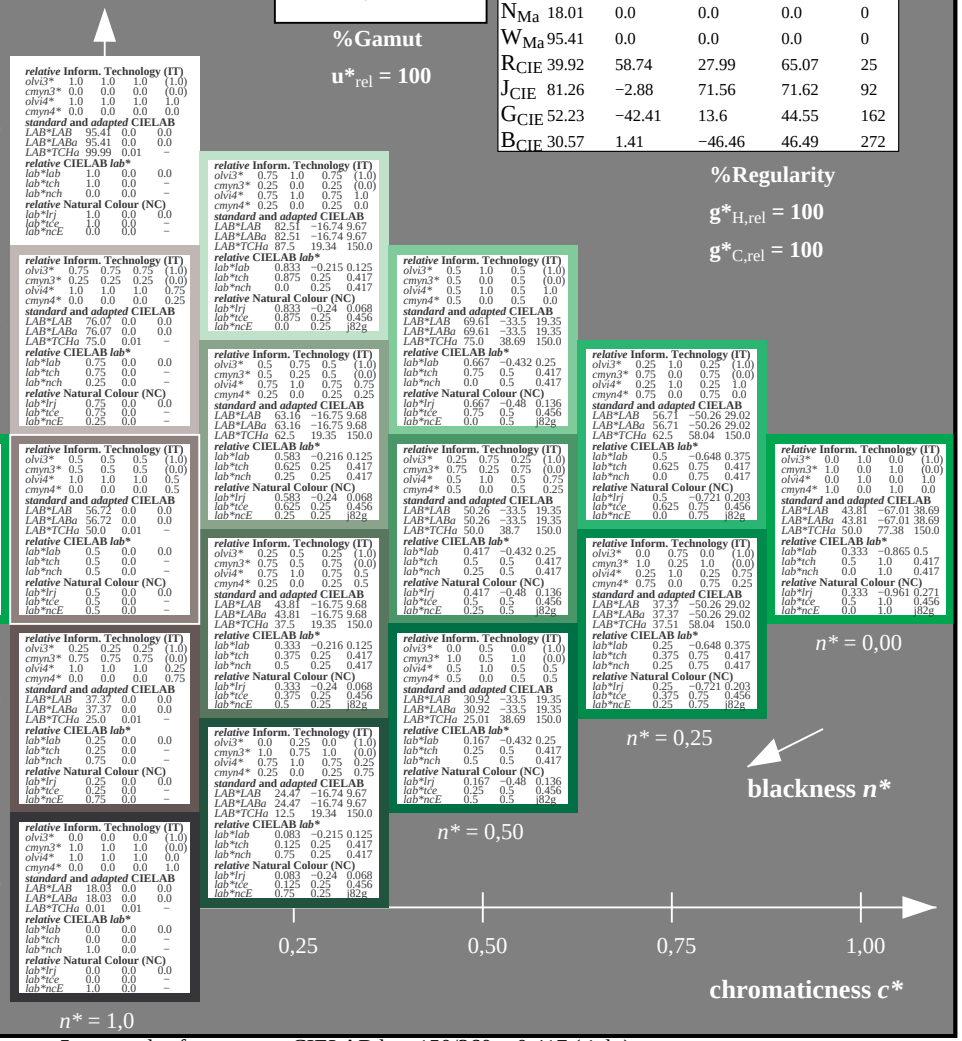
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

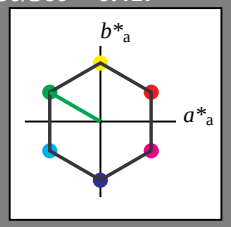


5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

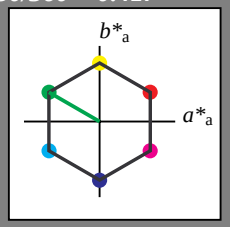
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

blackness n^*

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

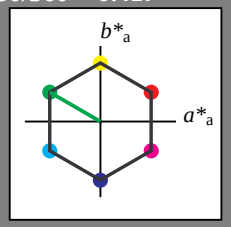
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

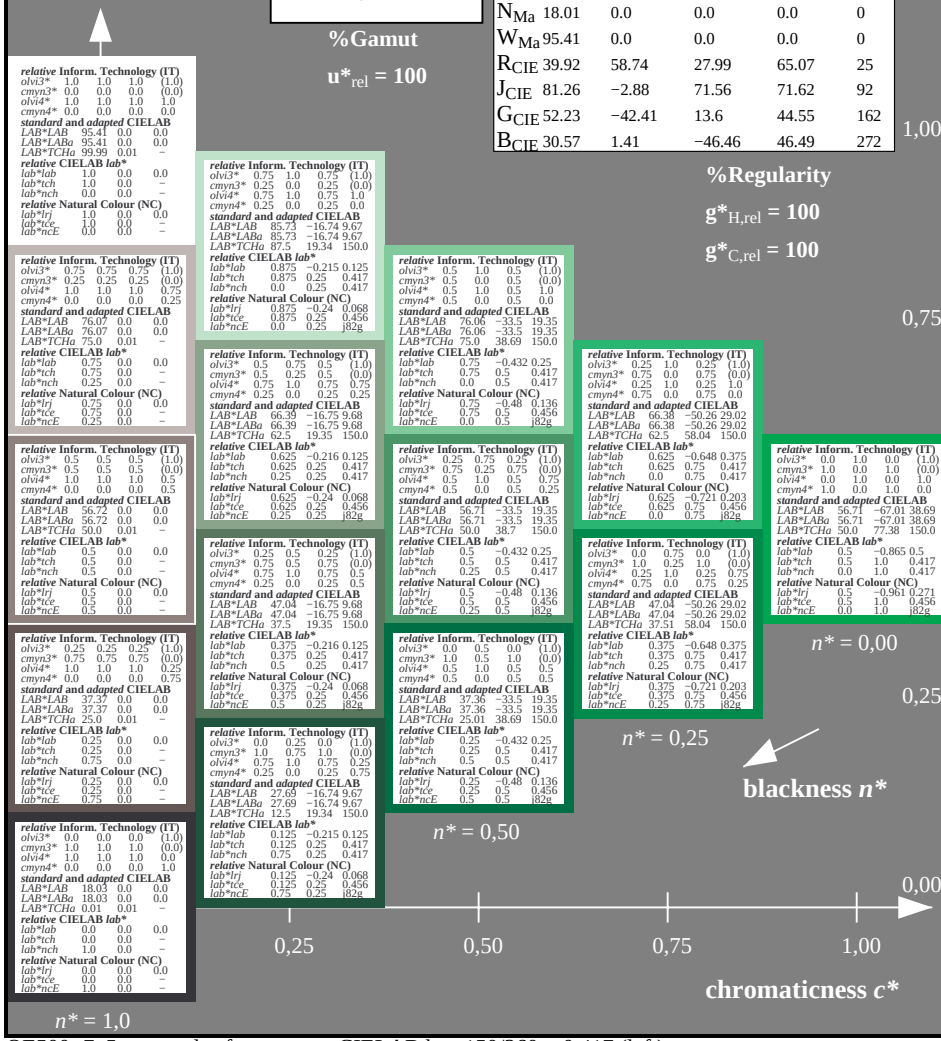
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

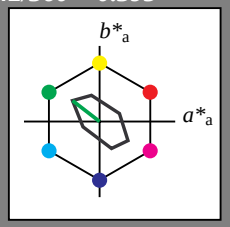


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

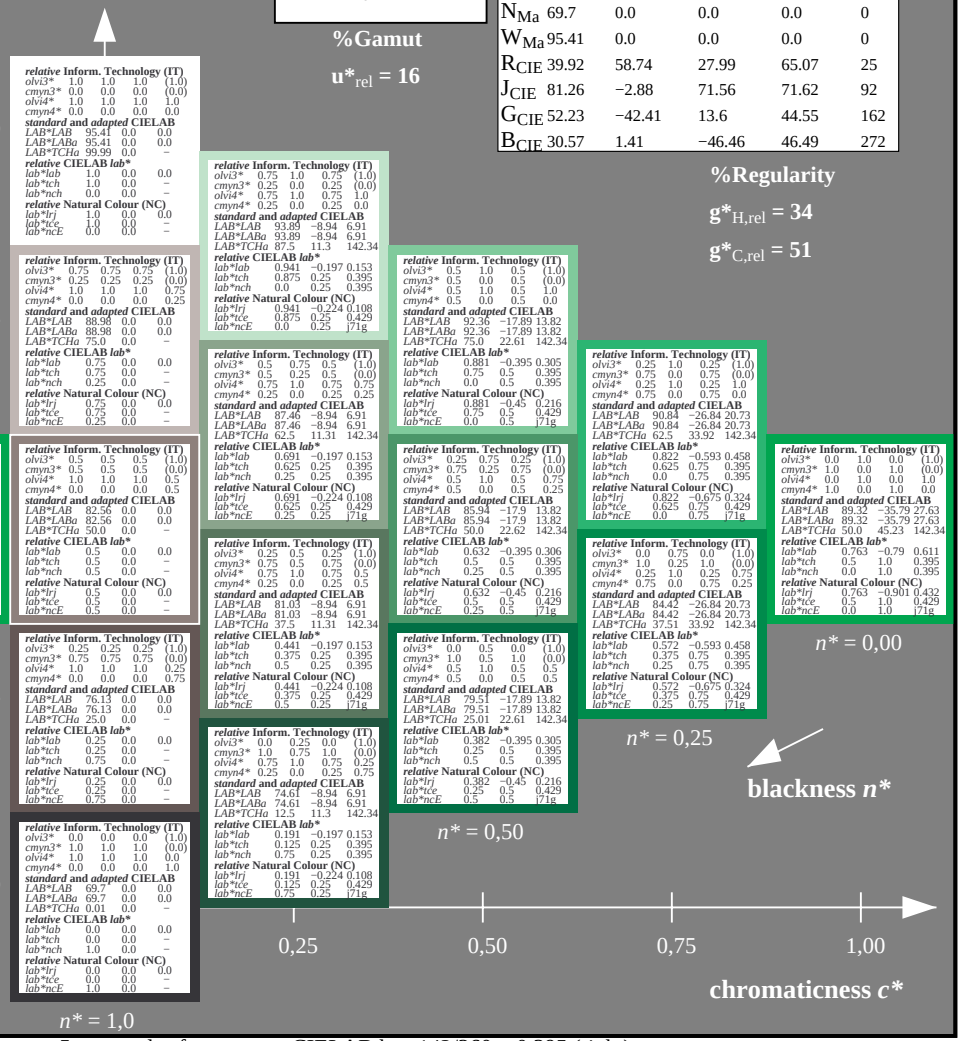
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



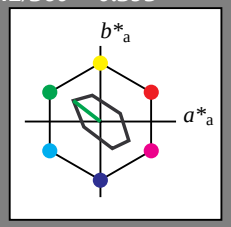
OE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 142/360 = 0.395*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

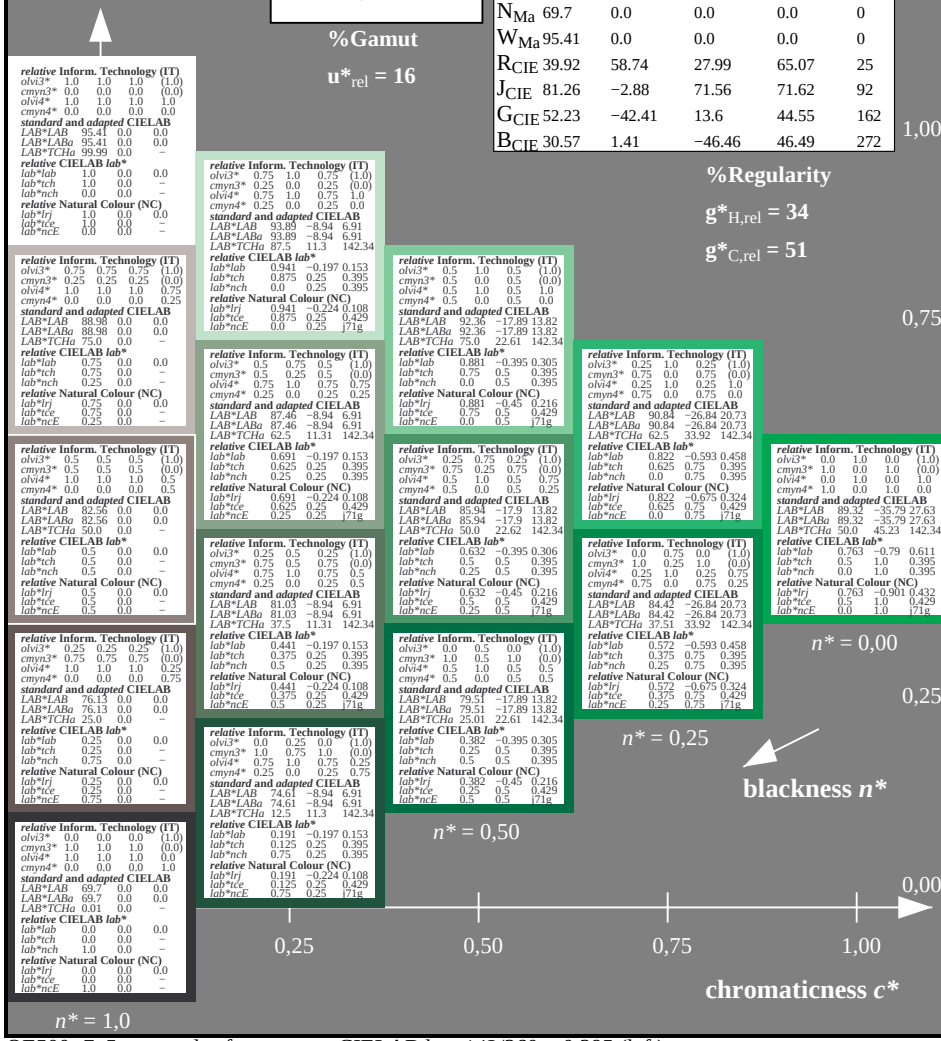
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

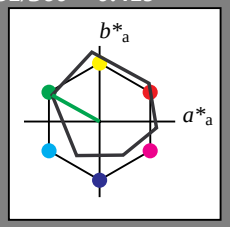
$g^*_{C,rel}$ = 51



Output: Colorimetric Offset Reflective System ORS18
for hue *h* = lab*h = 151/360 = 0.419*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

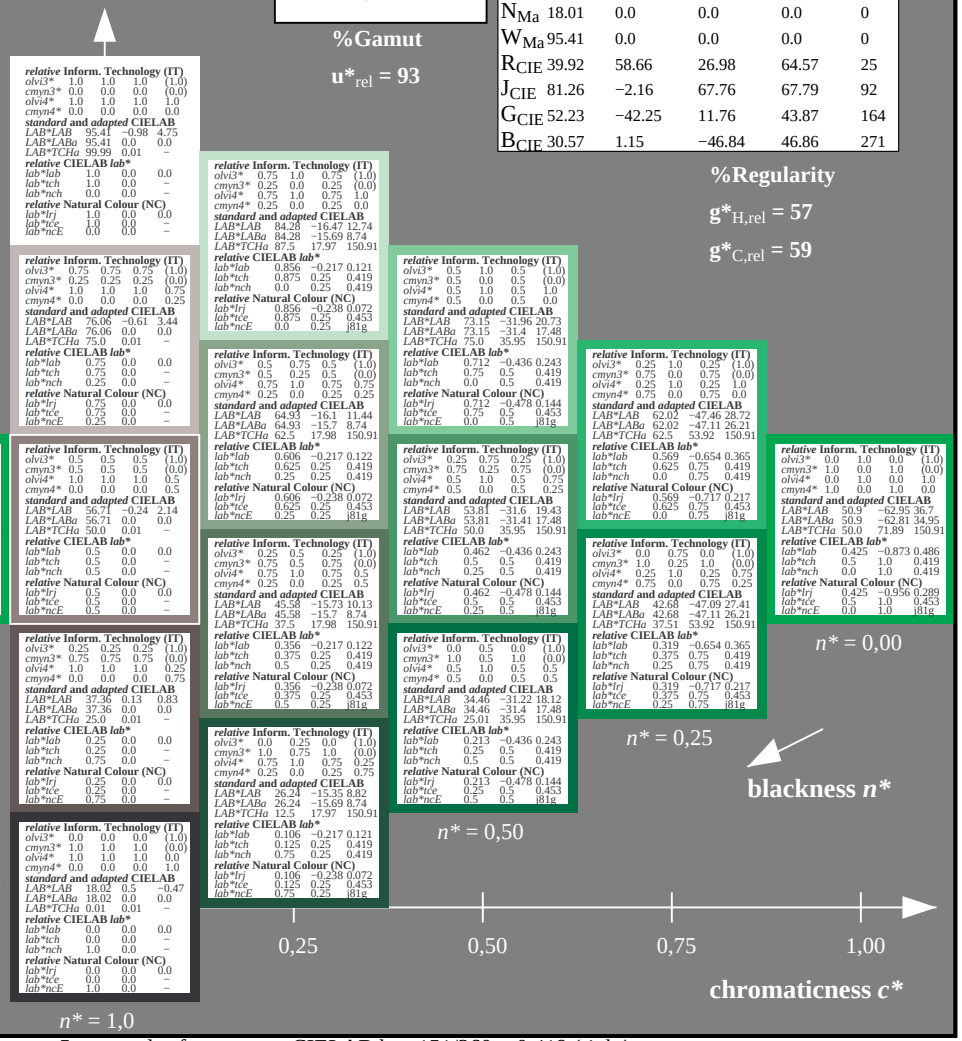
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

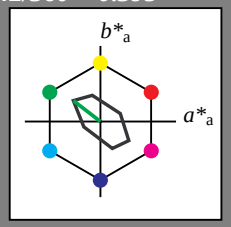
5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 142/360 = 0.395*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

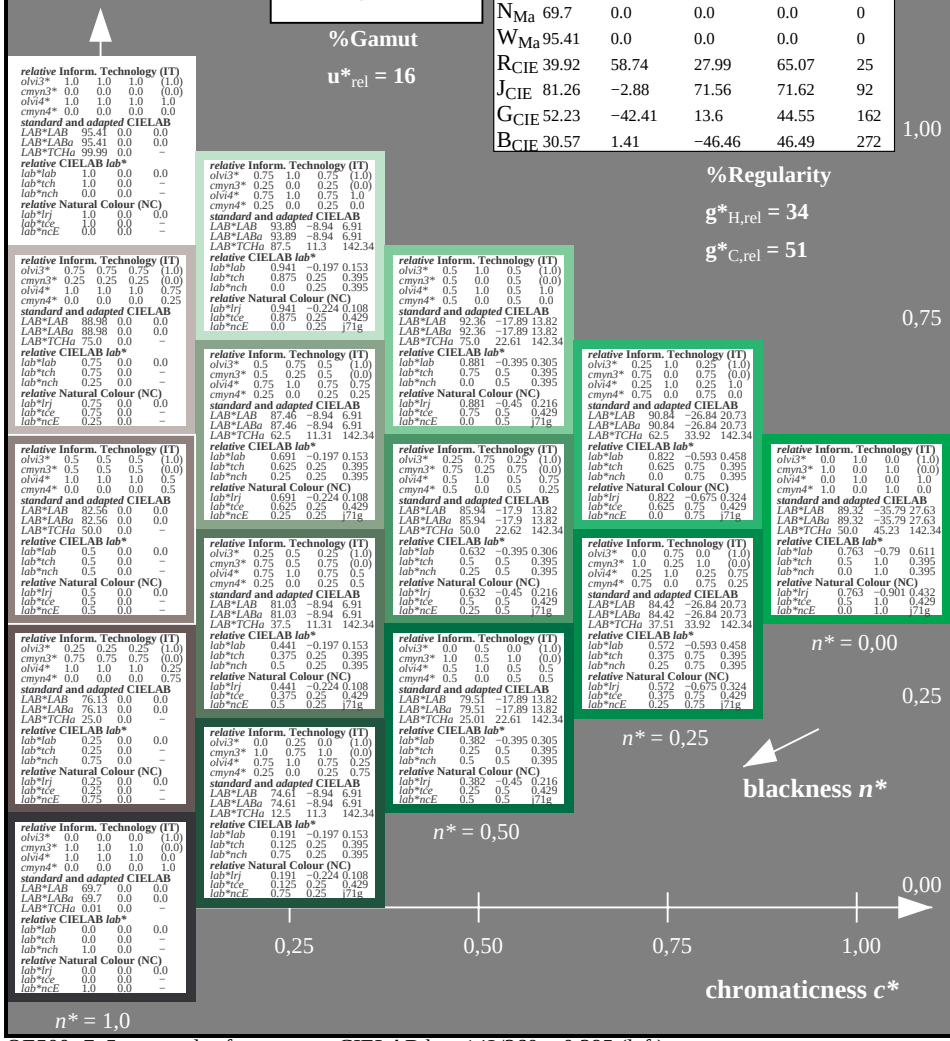
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



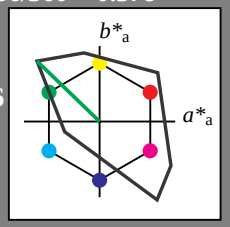
OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

Output: Colorimetric Television Luminous System TLS00

for hue *h* = lab*h = 136/360 = 0.378*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

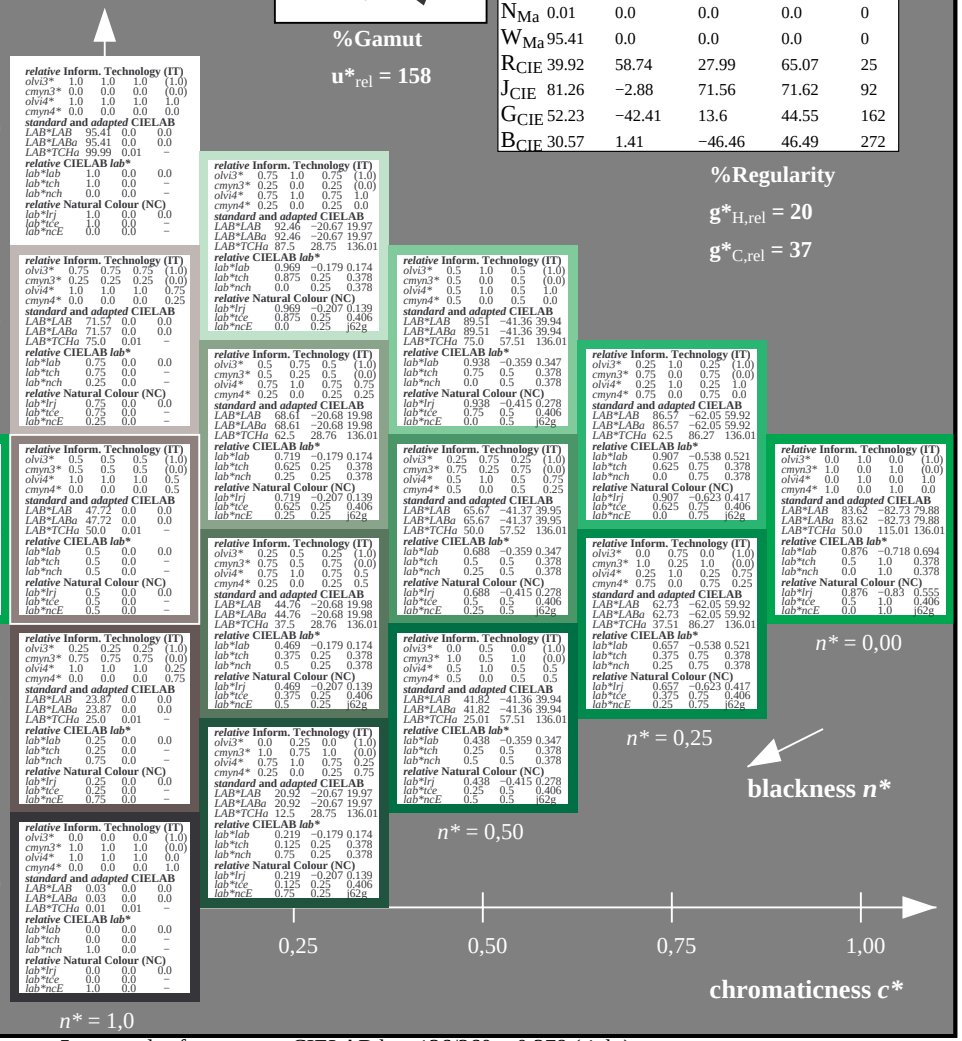
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$

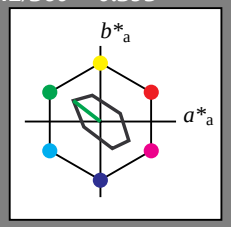
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

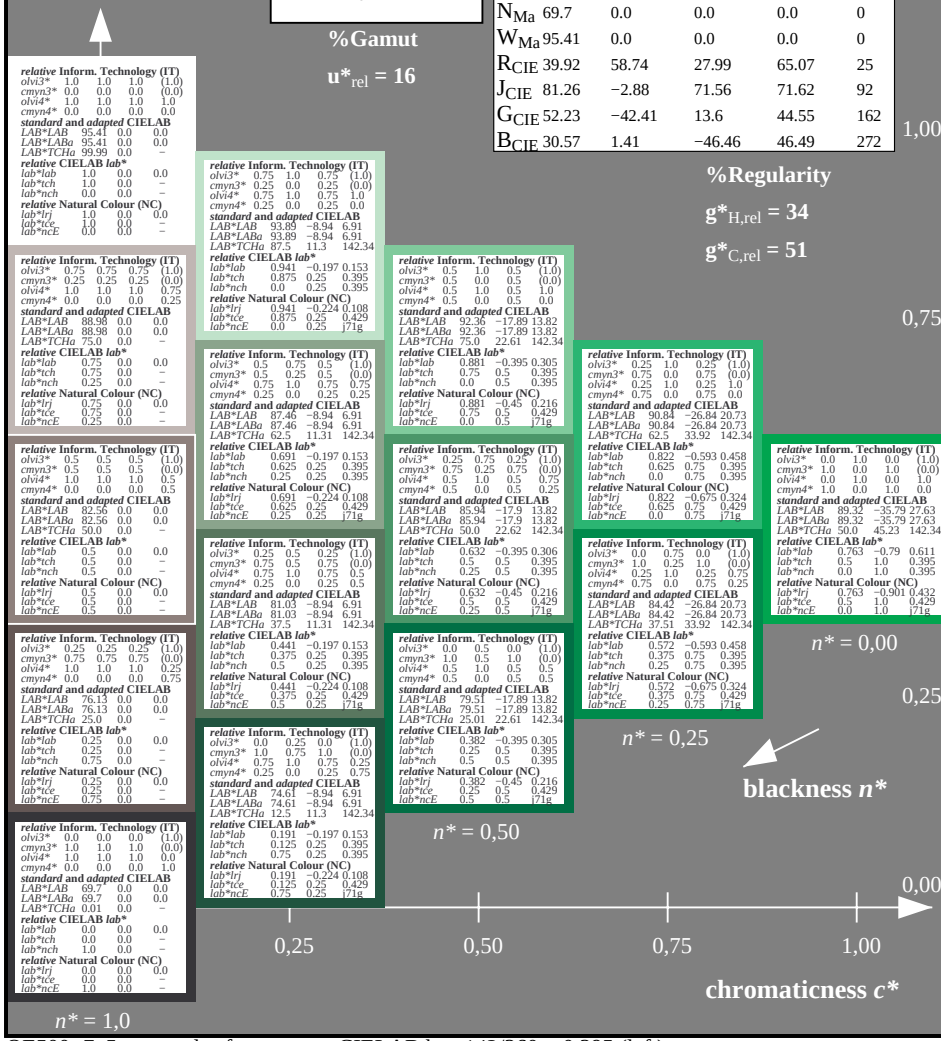
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

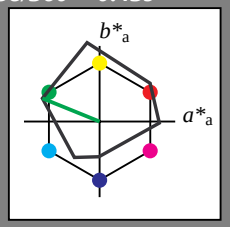
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

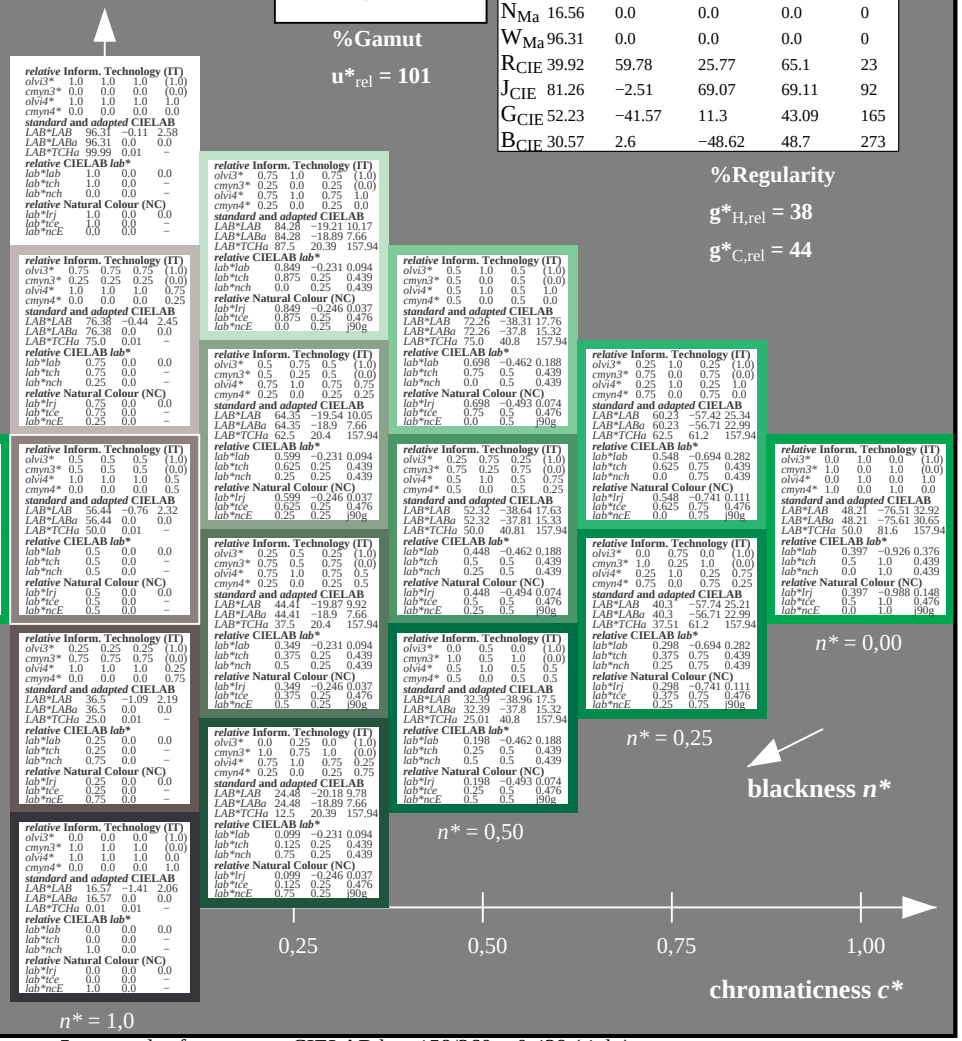
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



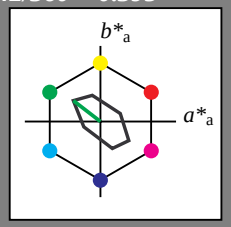
5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 142/360 = 0.395*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

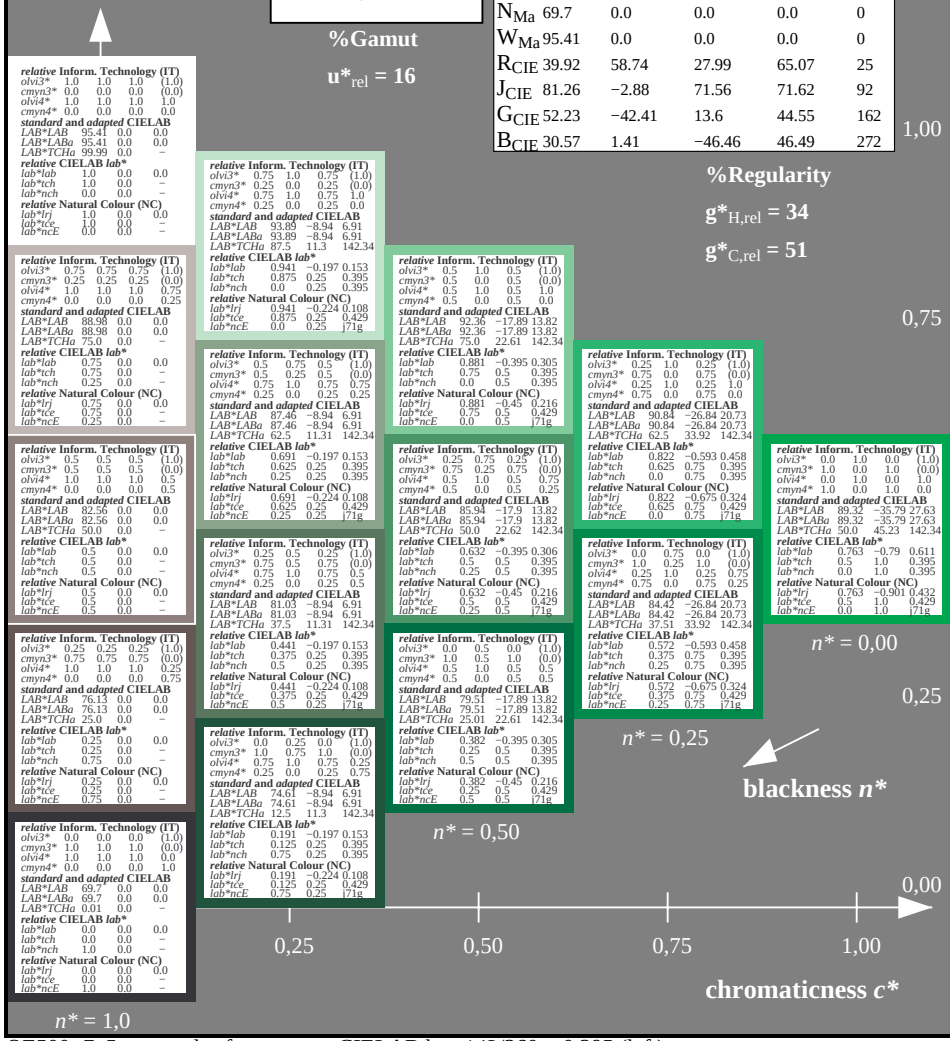
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



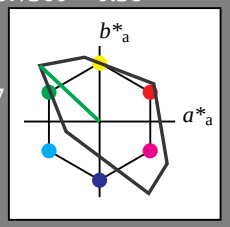
OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 137/360 = 0.38*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

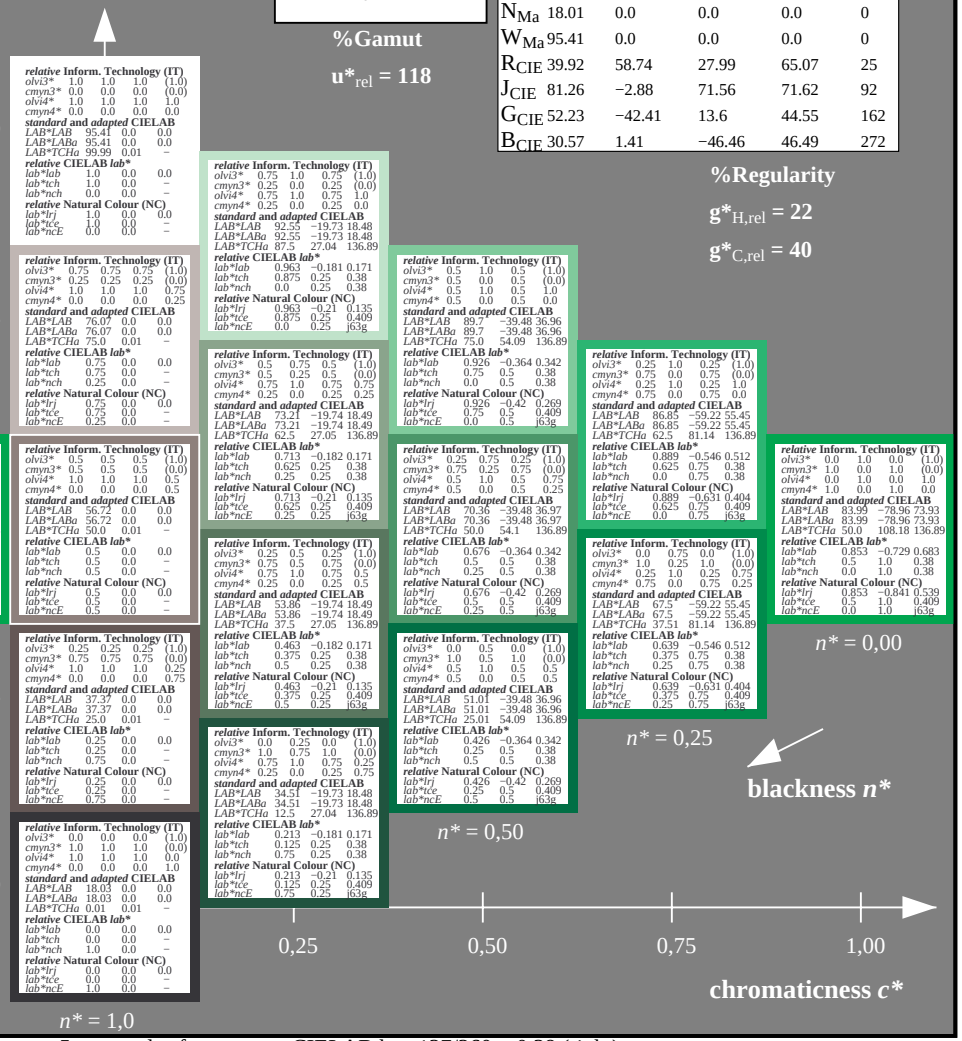
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



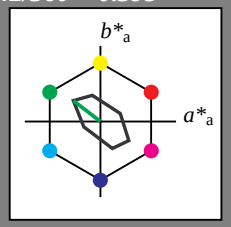
5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

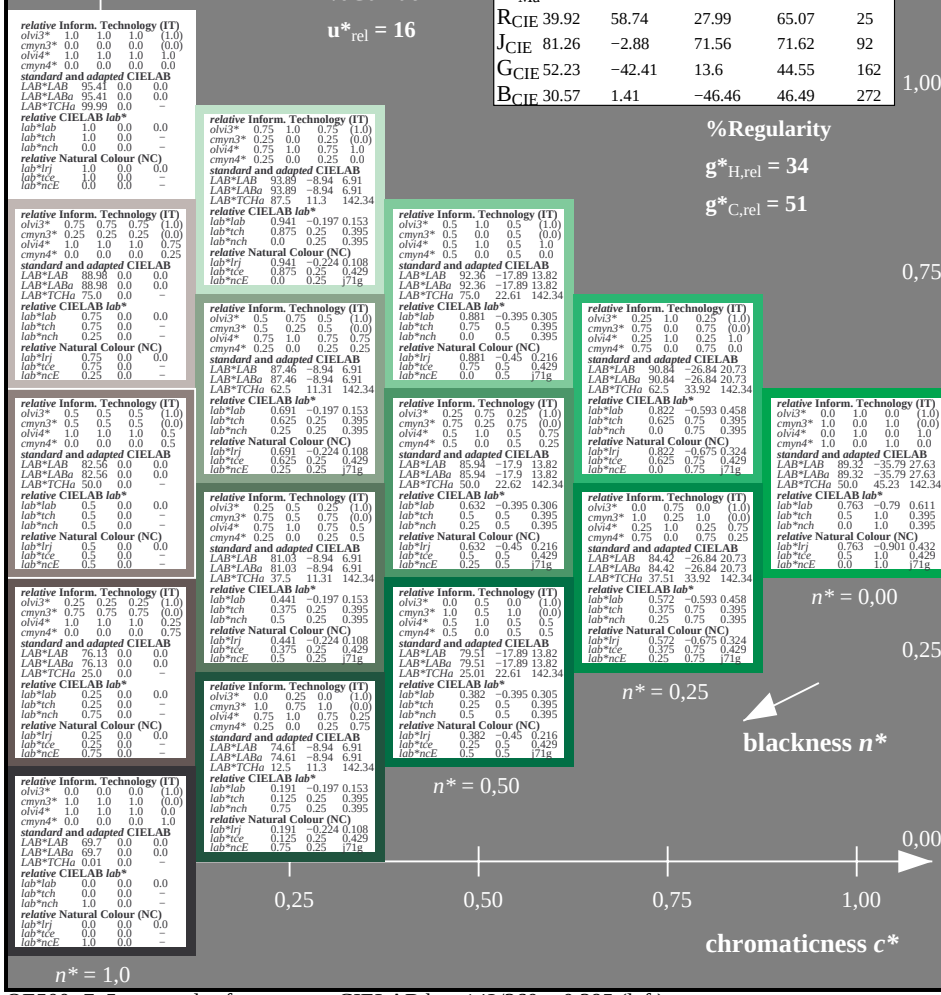
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

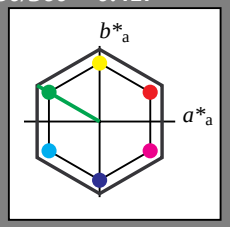


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 32 95 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

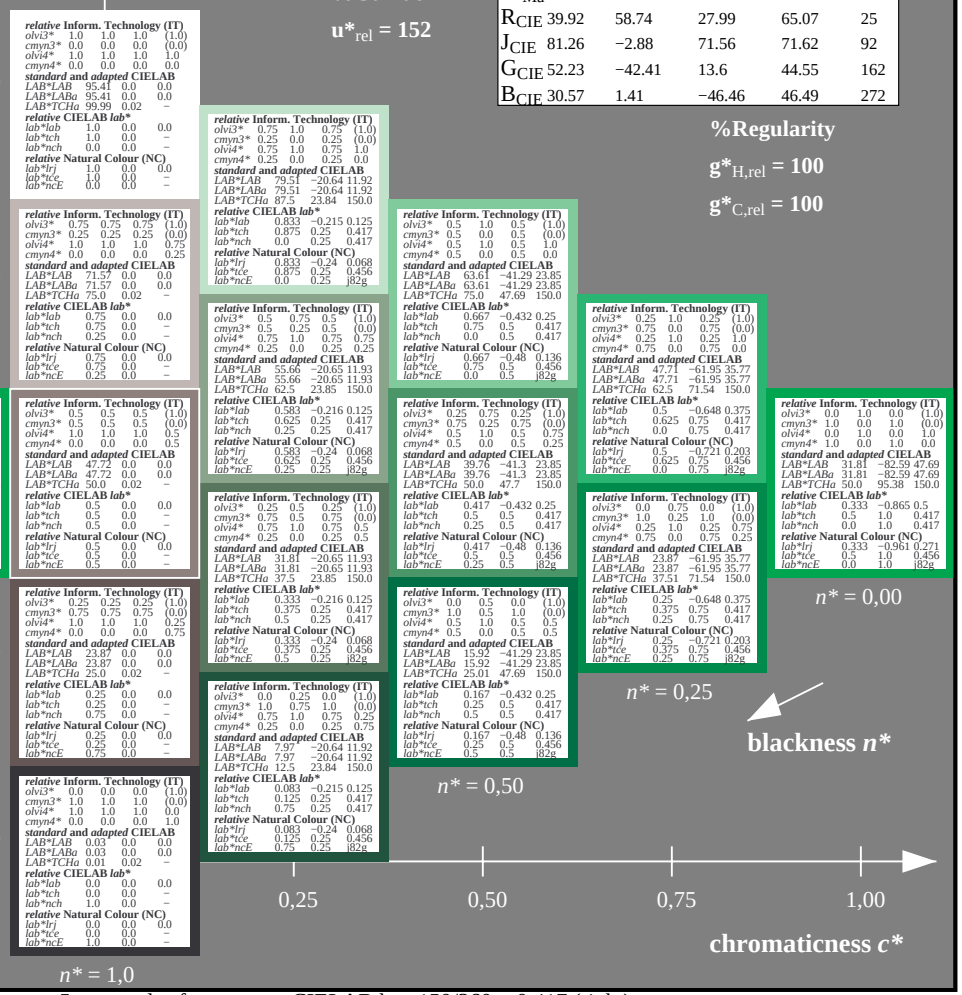
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

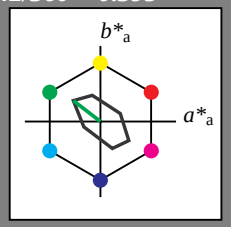
5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

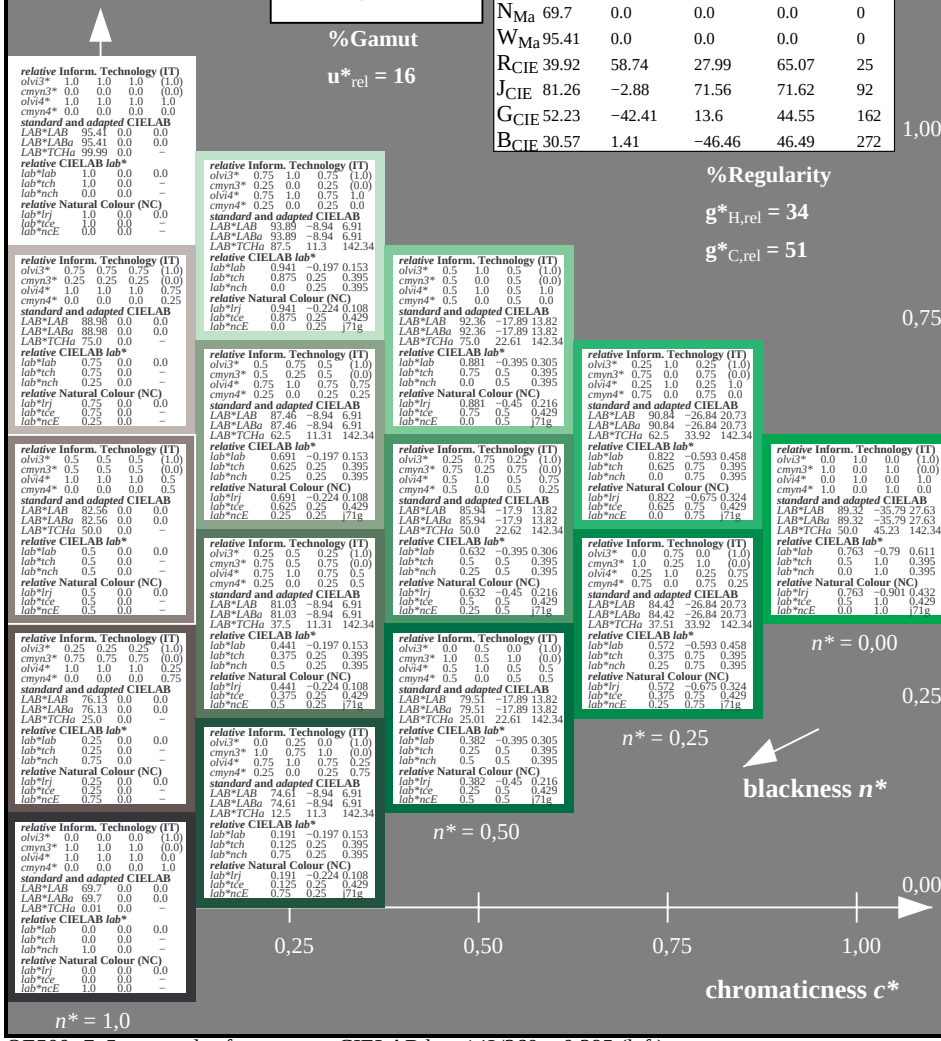
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



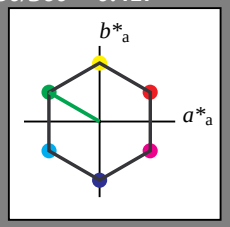
OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

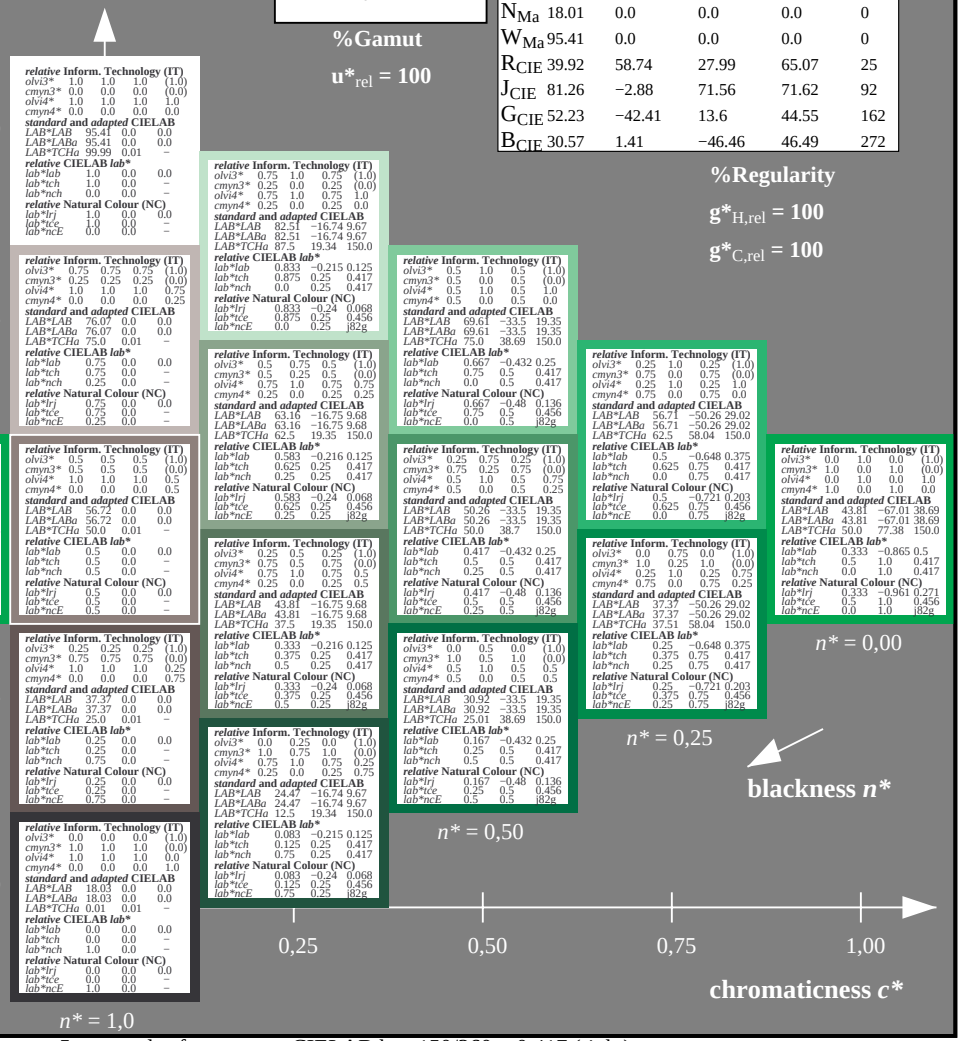
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

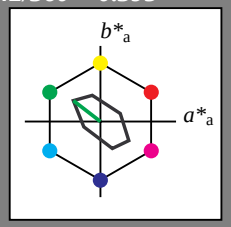


5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

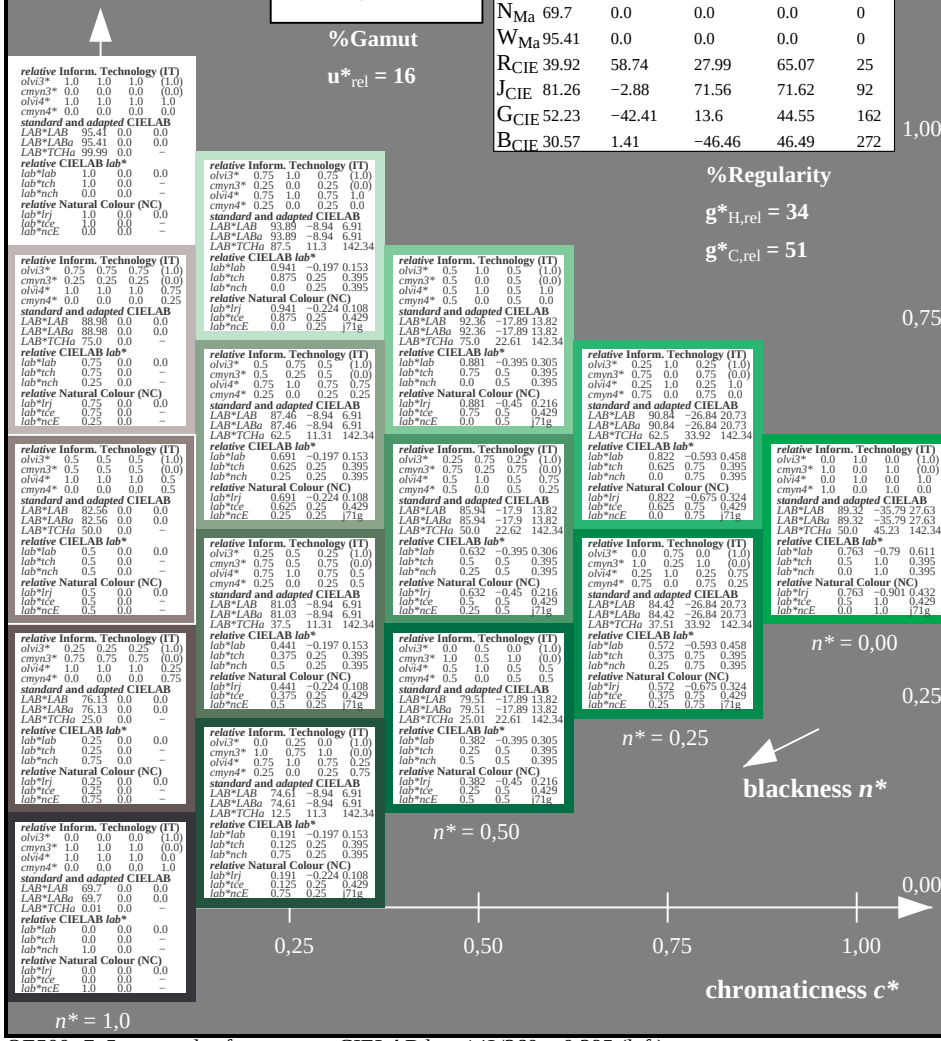
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

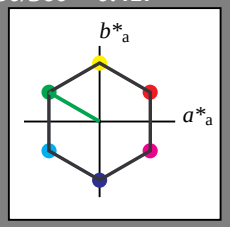
$g^*_{C,rel} = 51$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
*lab*tch* and *lab*nch*

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

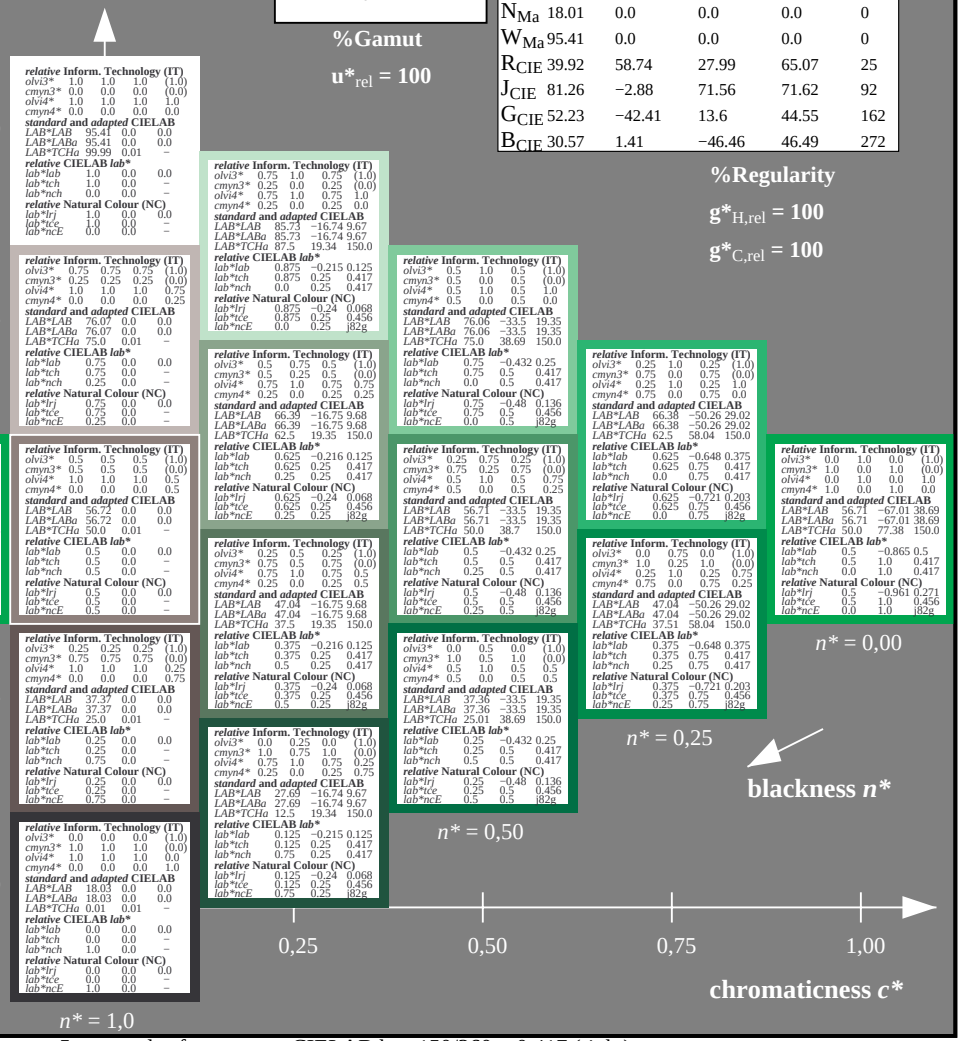
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



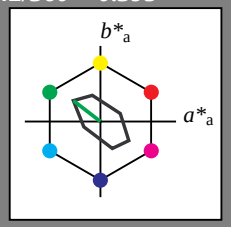
OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 142/360 = 0.395*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

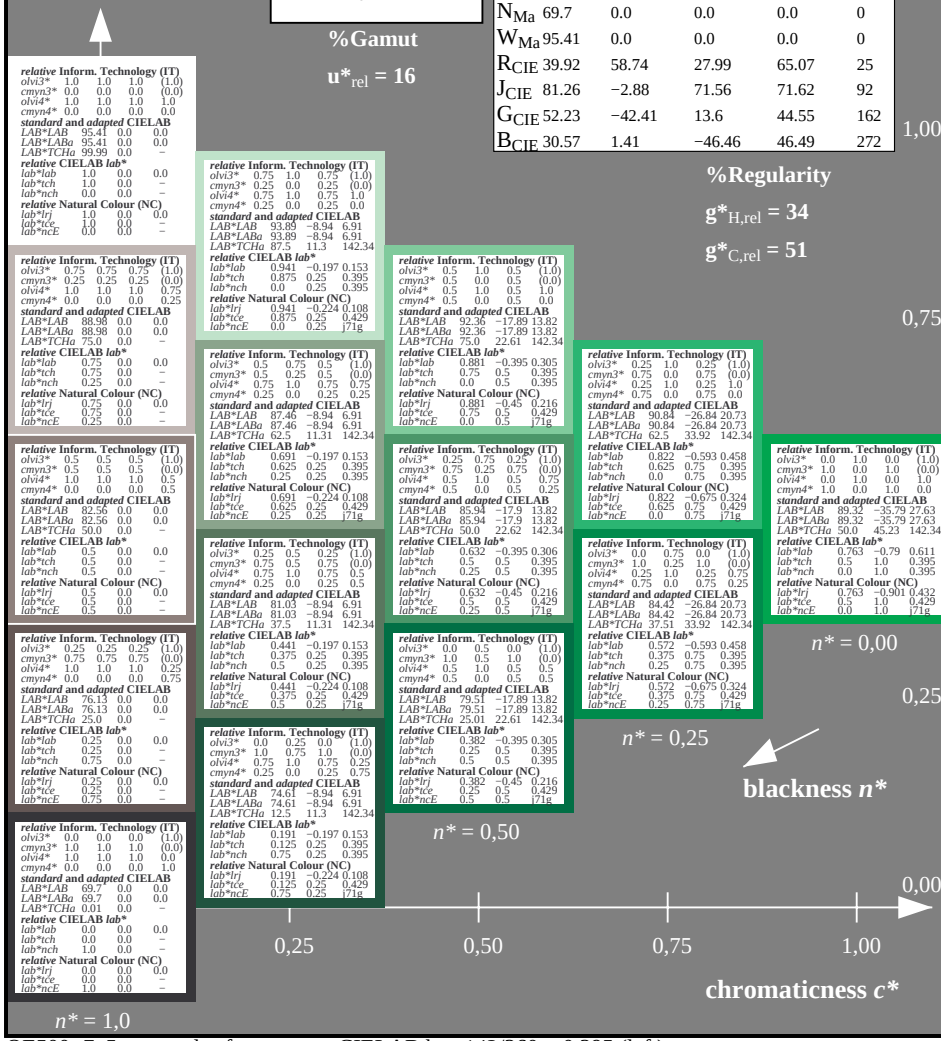
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

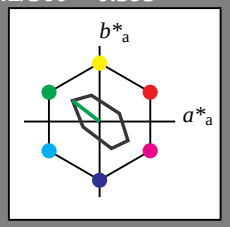


OE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

Output: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 142/360 = 0.395*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 89 45 142
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

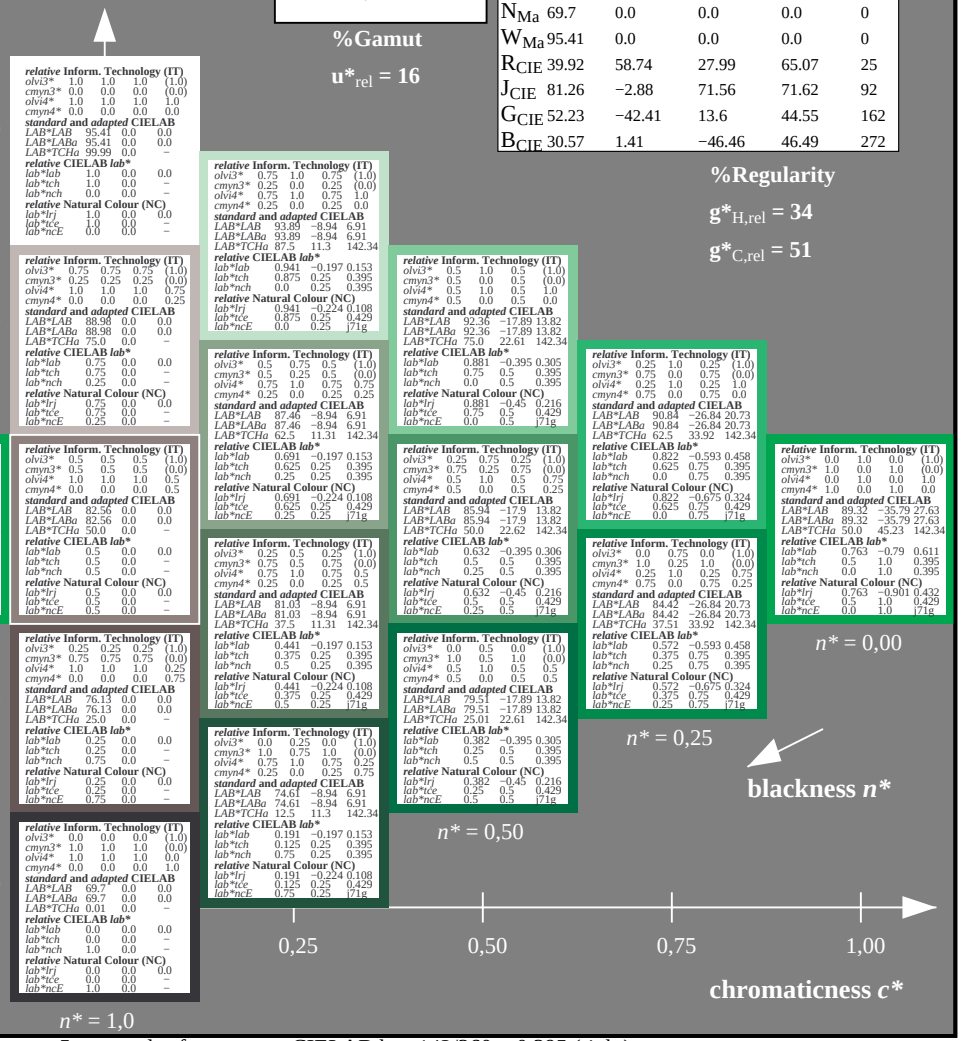
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

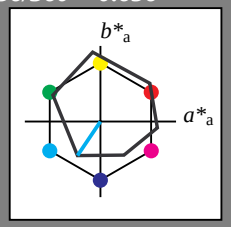


5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 236/360 = 0.656$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

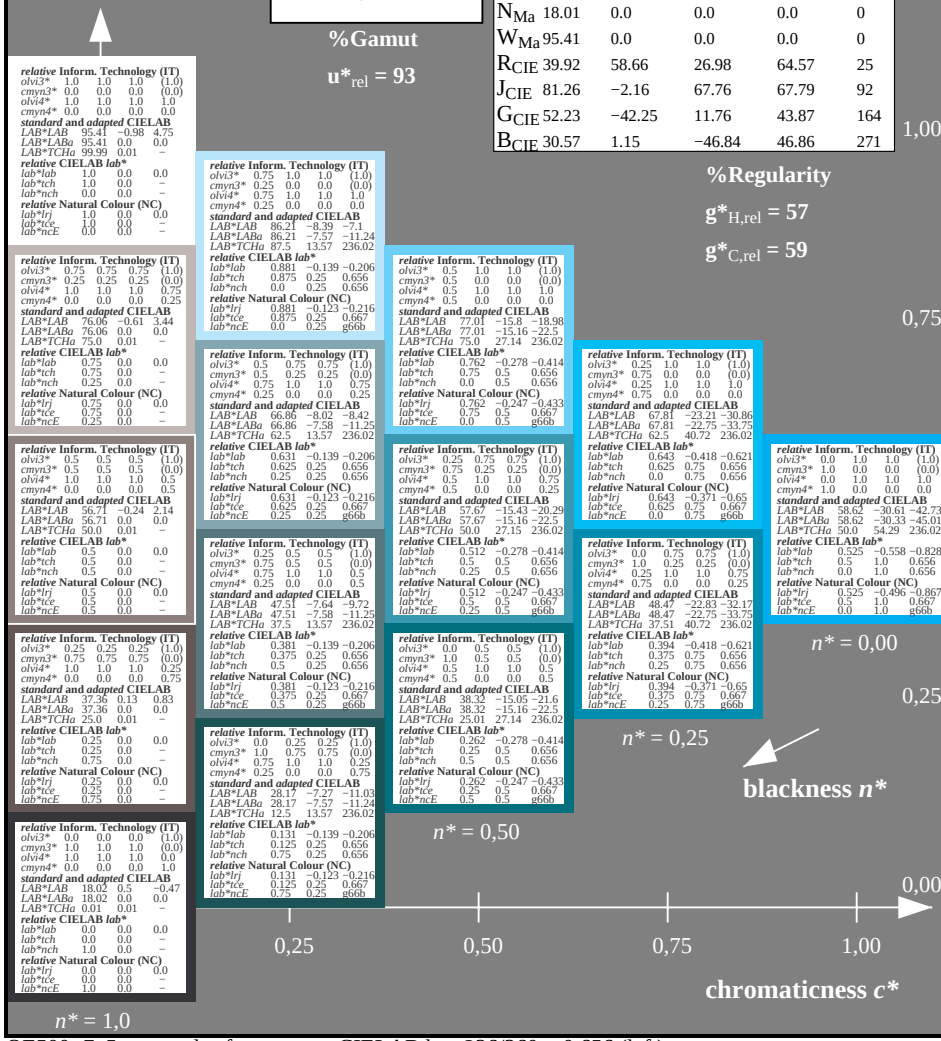
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

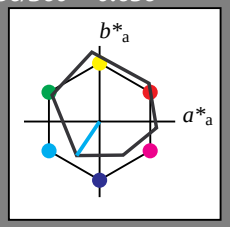


OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 236/360 = 0.656$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

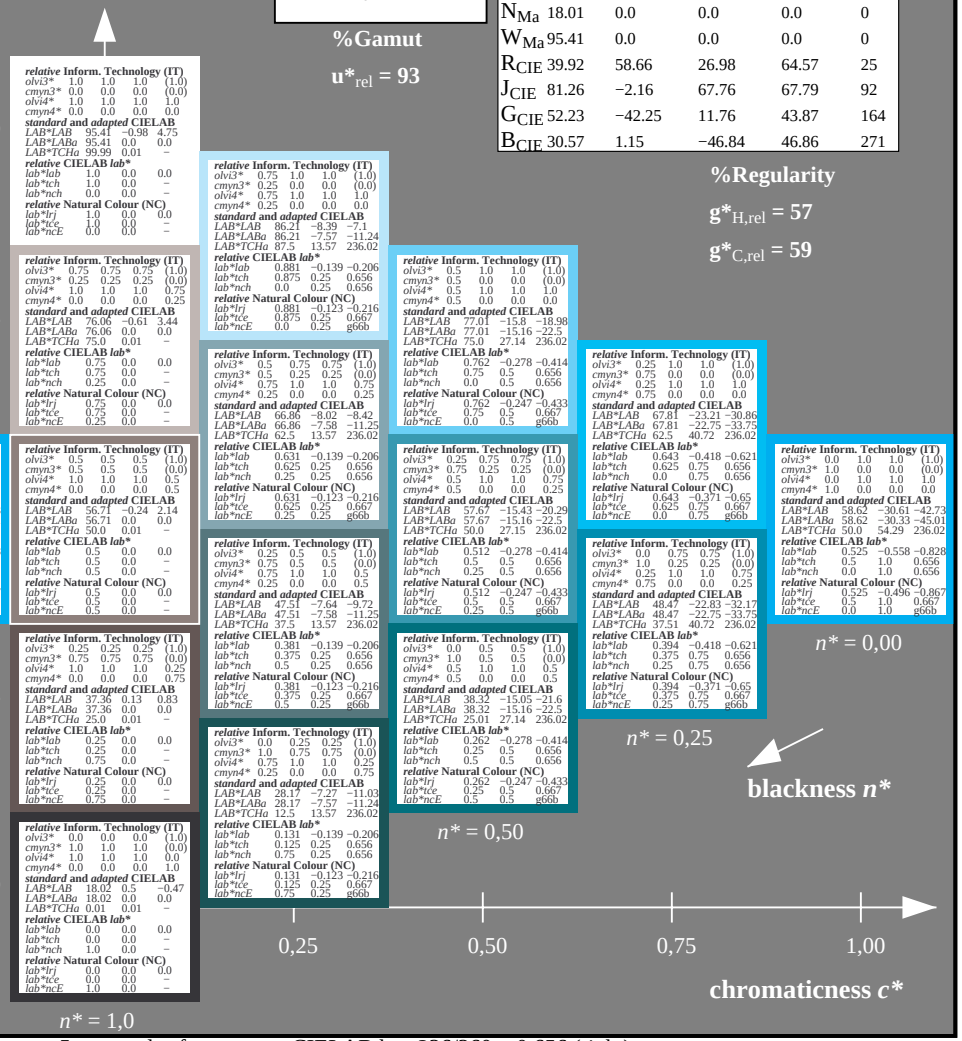
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



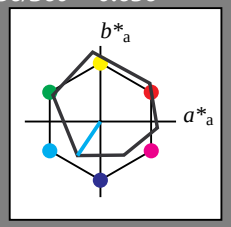
5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

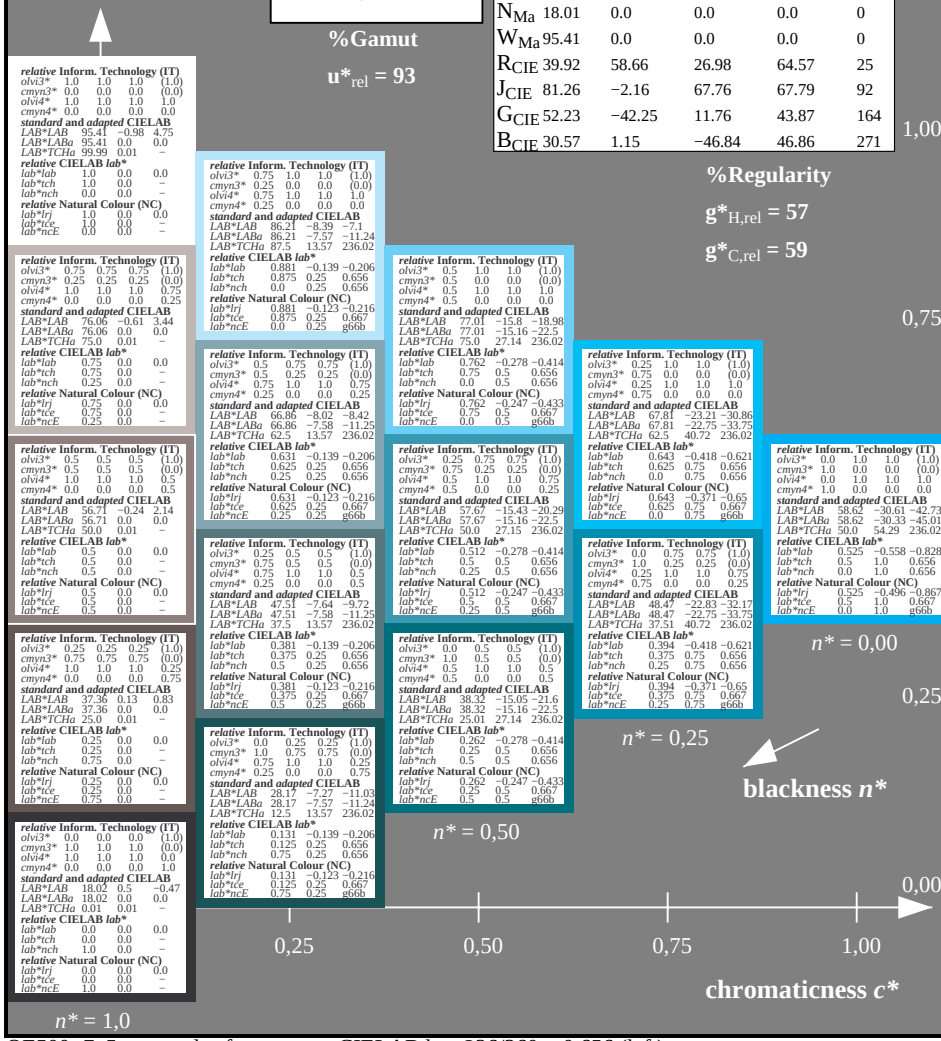
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



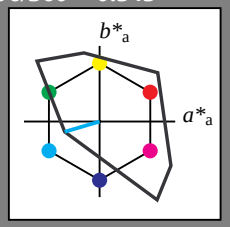
OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

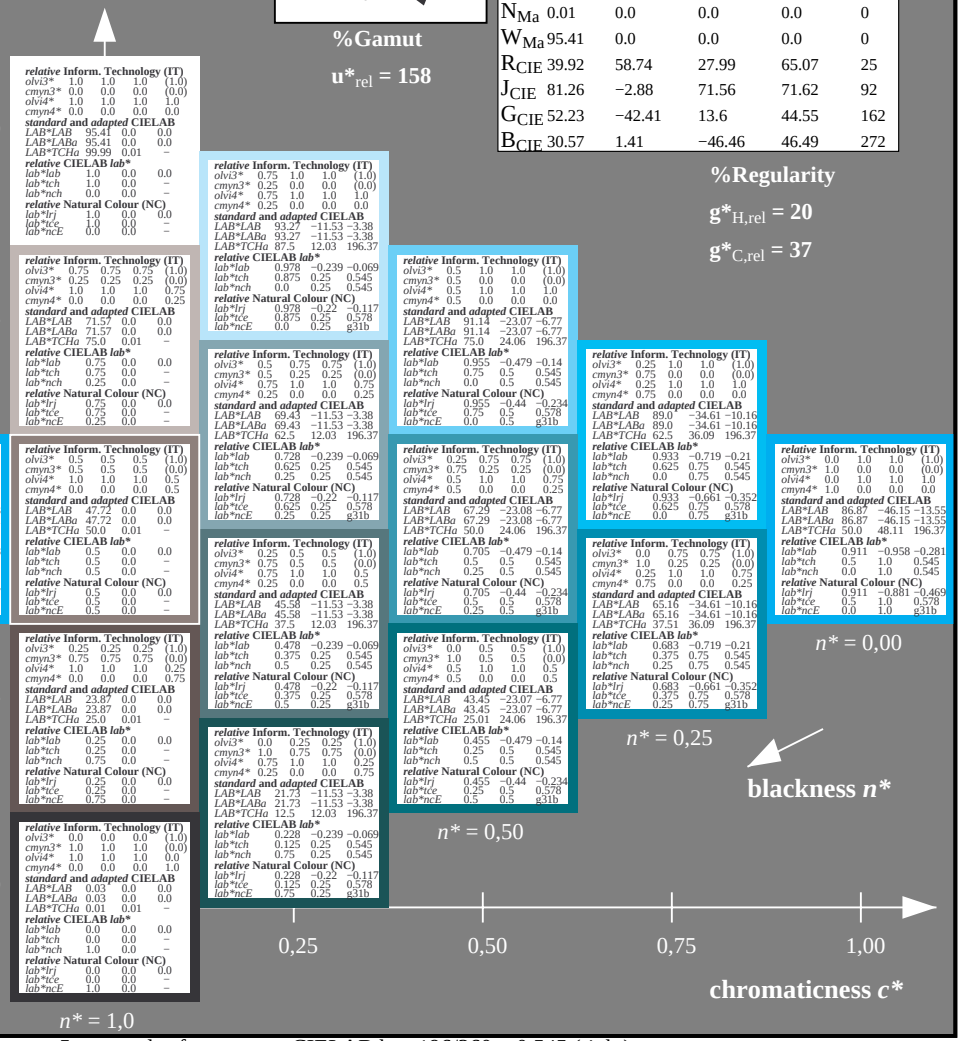
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

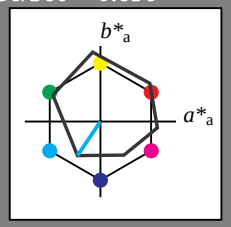
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

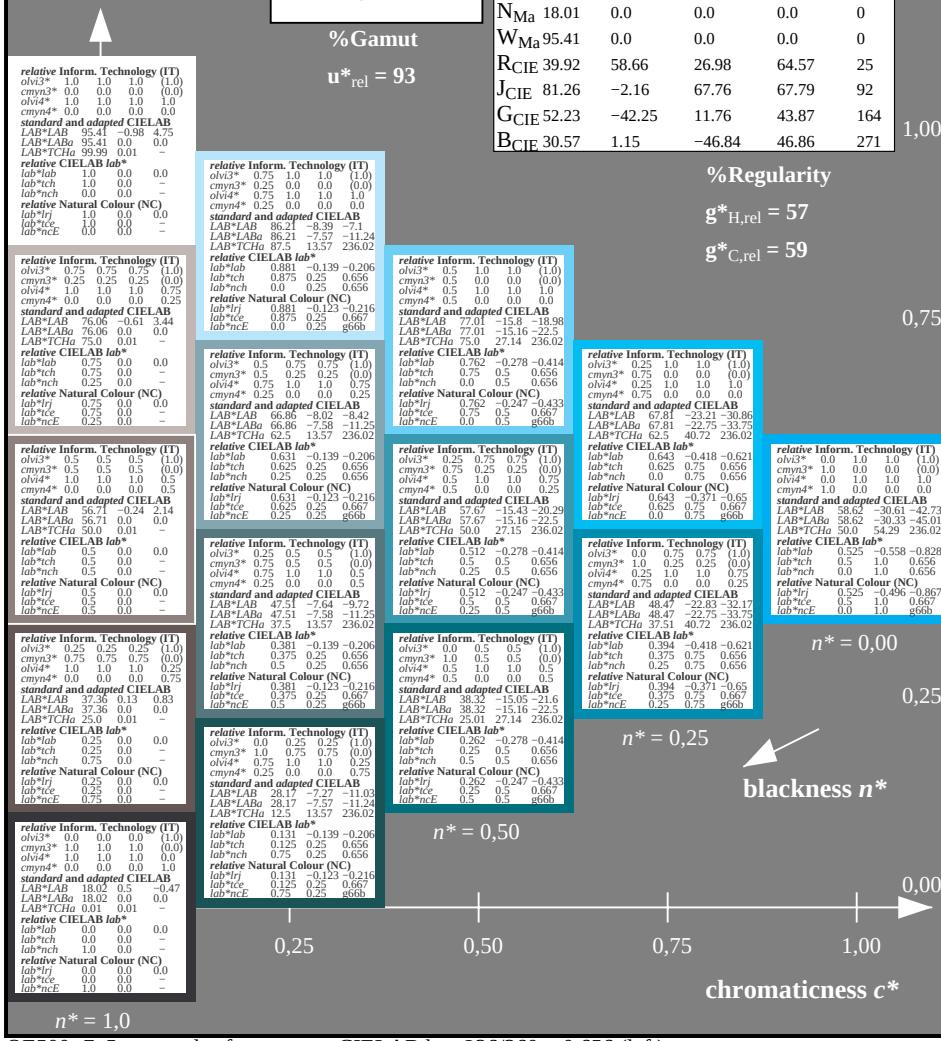
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

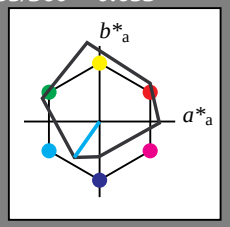
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

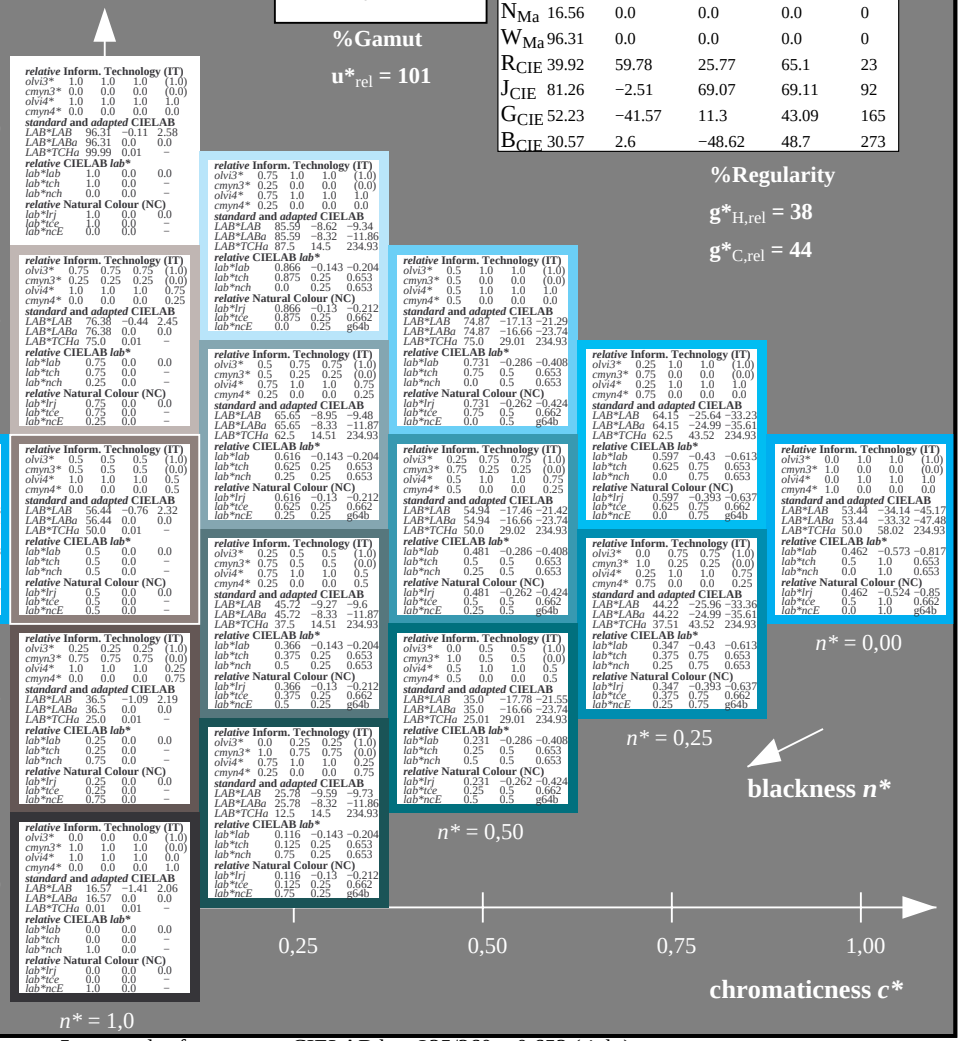
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



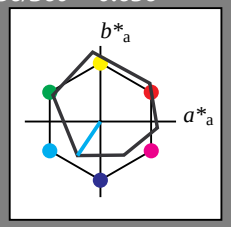
OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

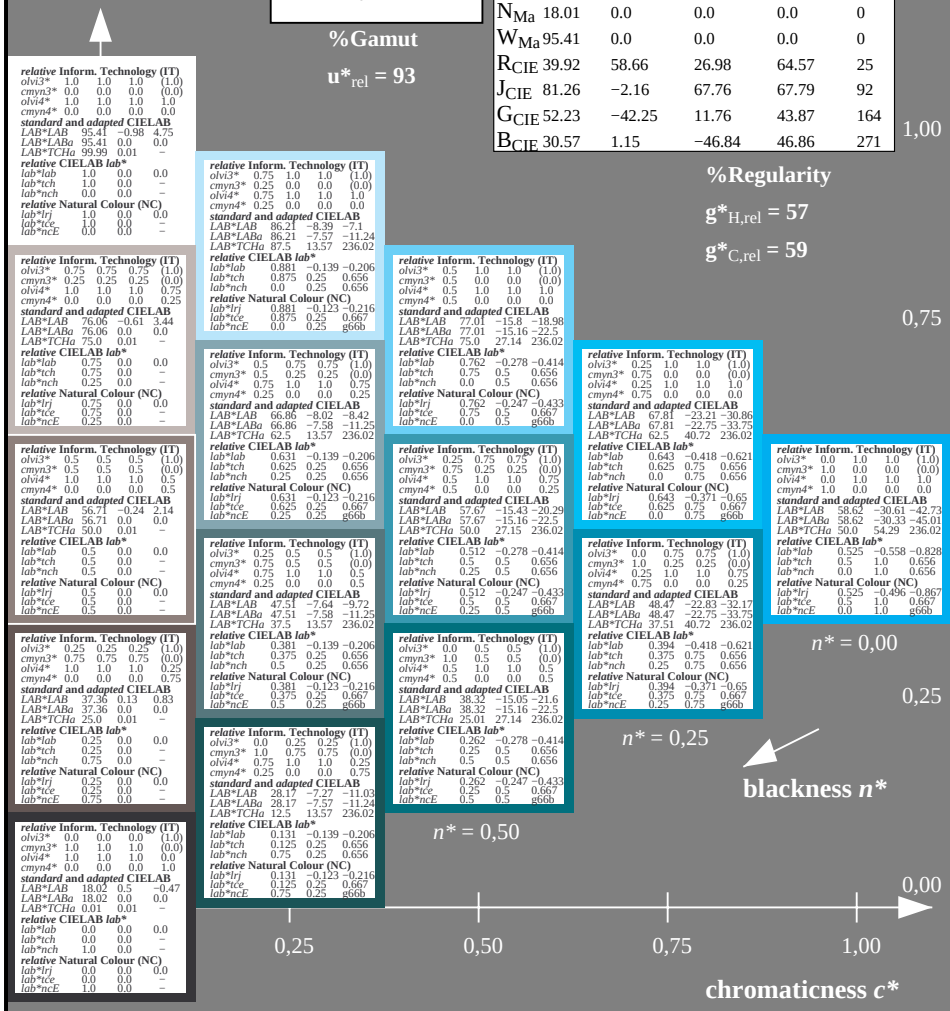
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

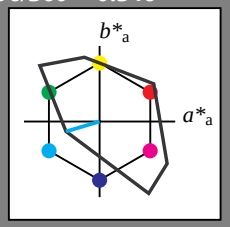
$g^*_{C,rel}$ = 59



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

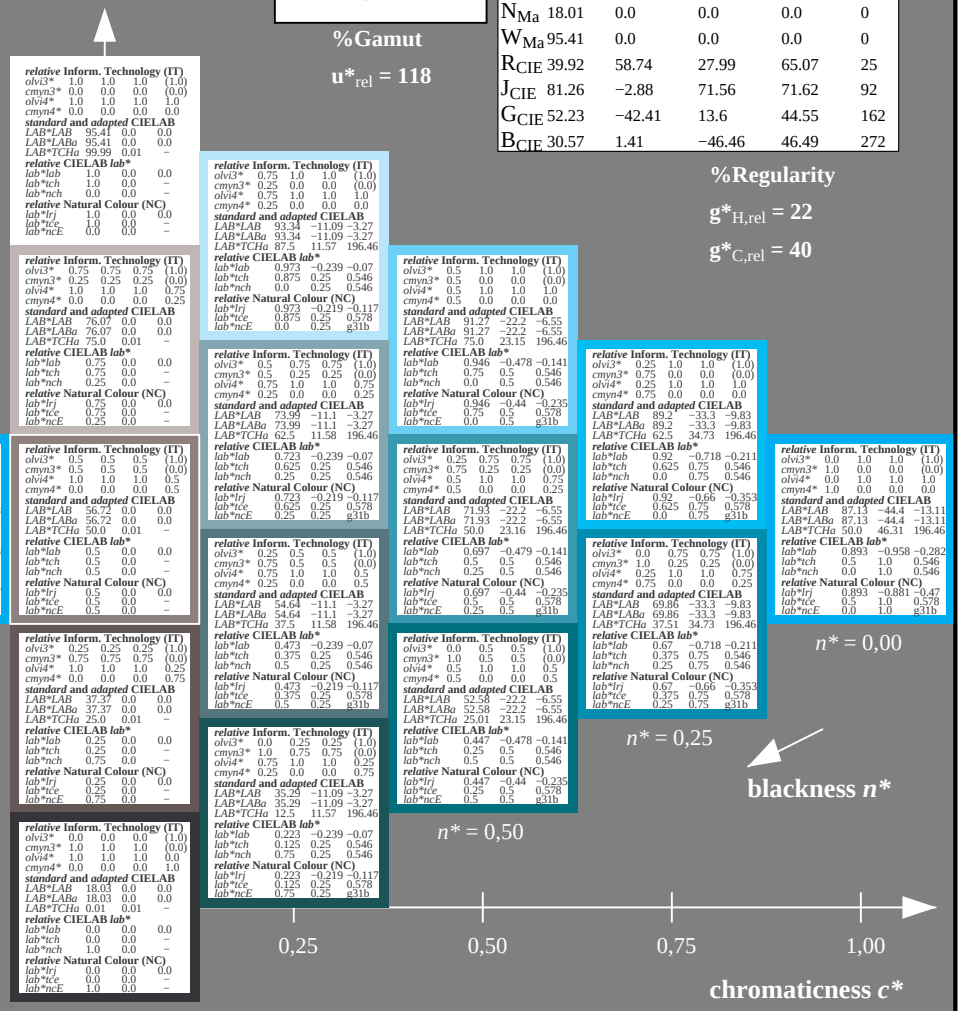
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



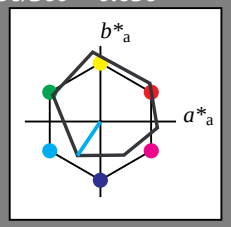
OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 236/360 = 0.656*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

u^*_{rel} = 93

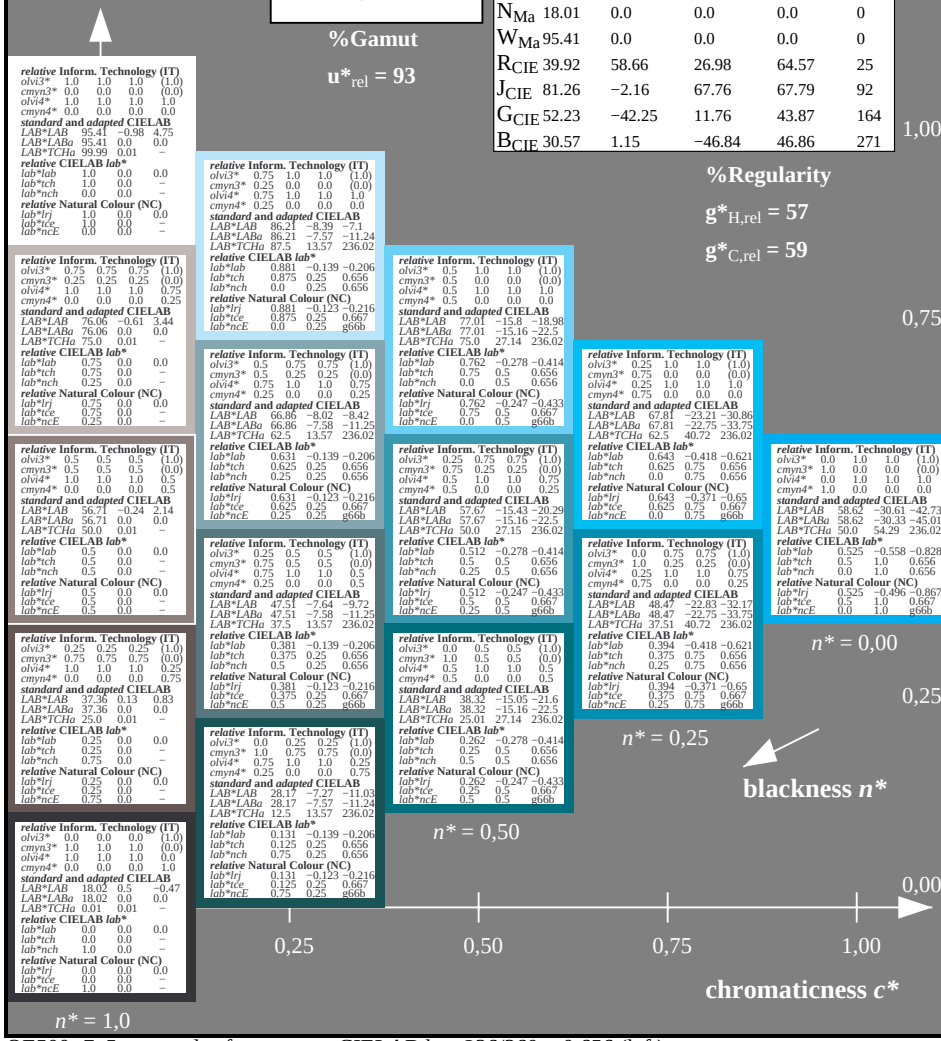
%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

blackness *n**

chromaticness *c**

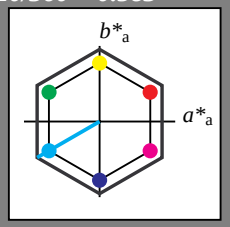


OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 210/360 = 0.583*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 152

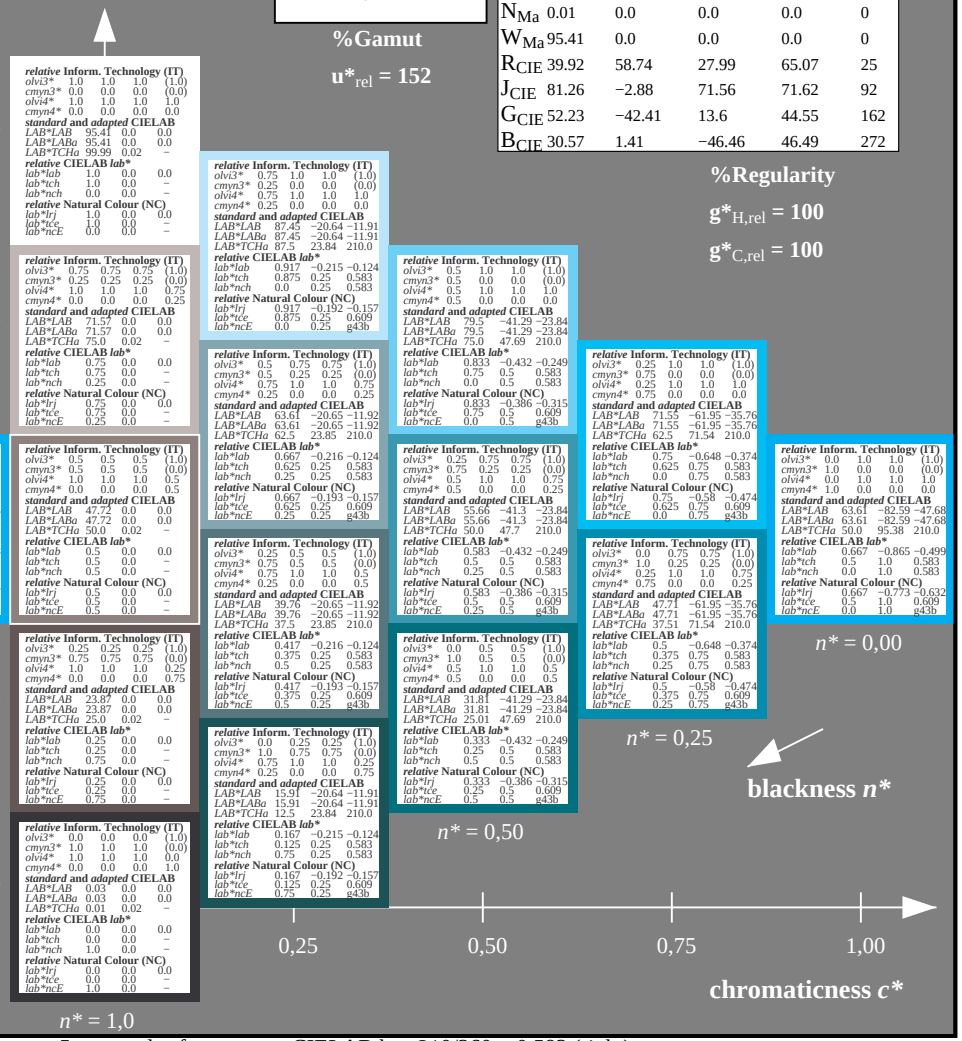
%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness *n**

chromaticness *c**



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

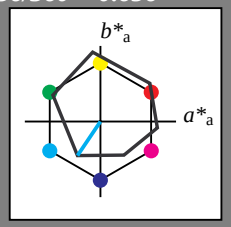
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

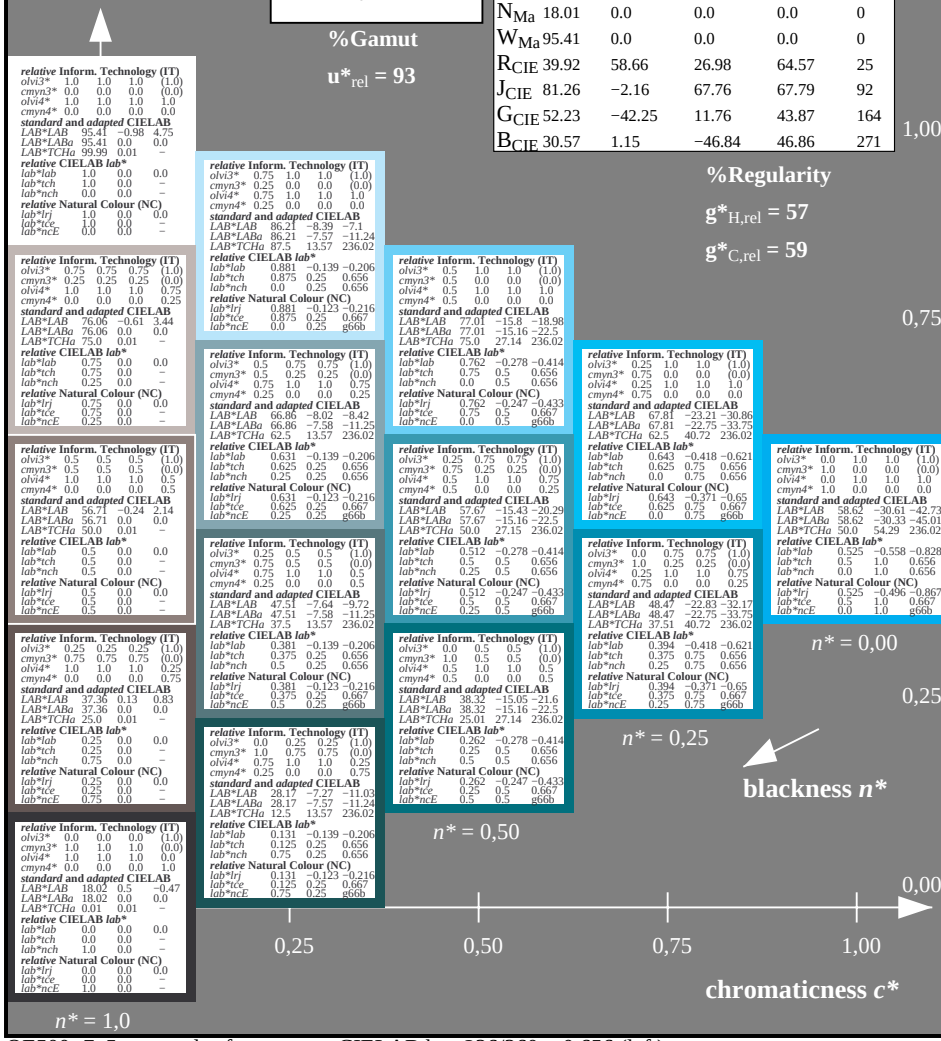
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

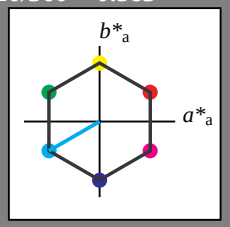
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

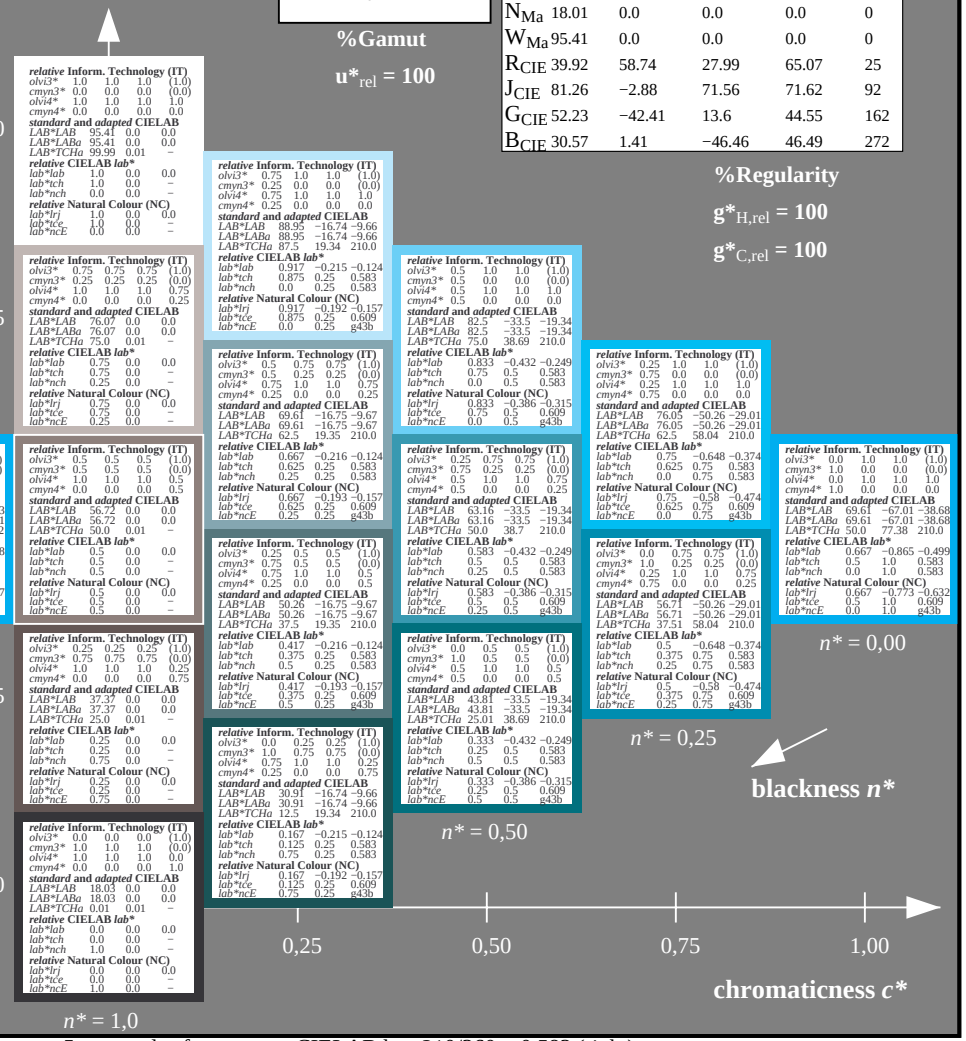
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

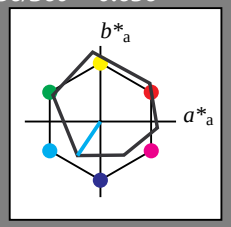
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

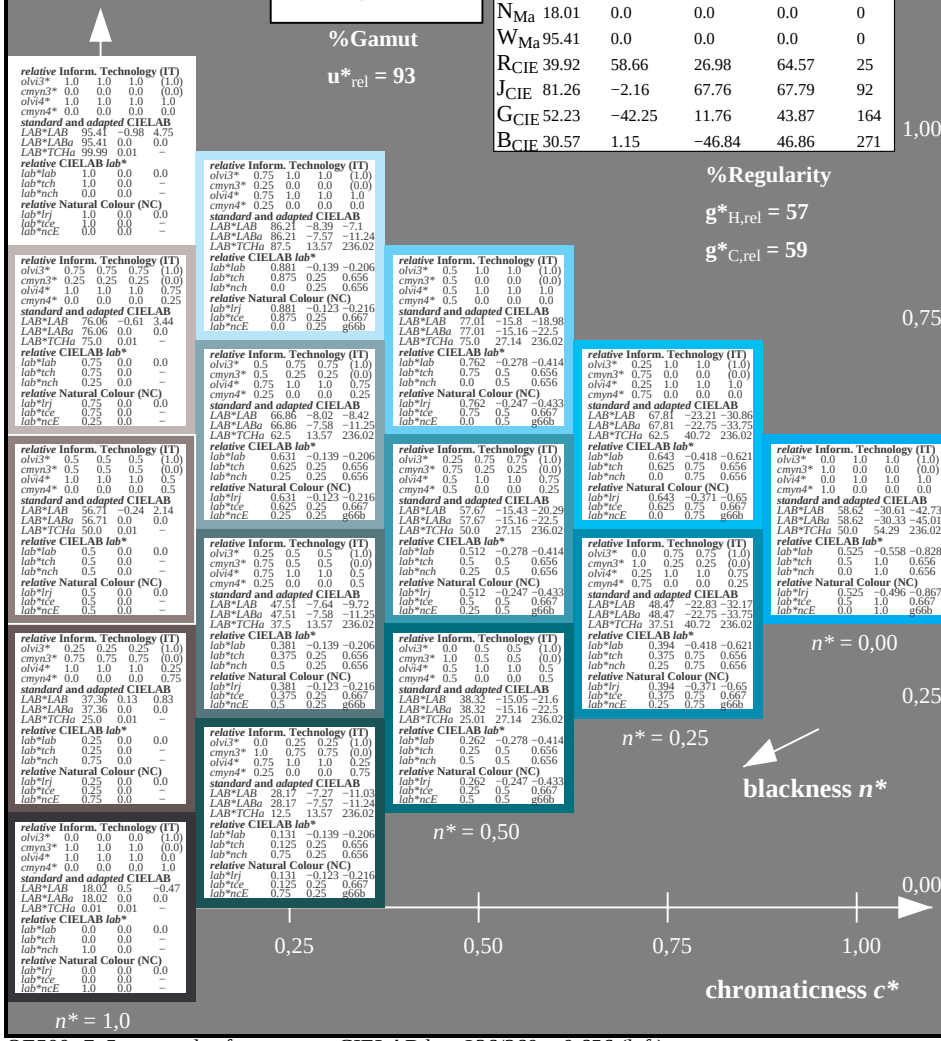
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

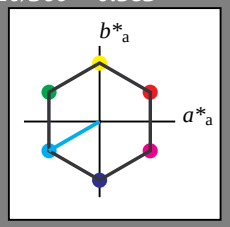


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

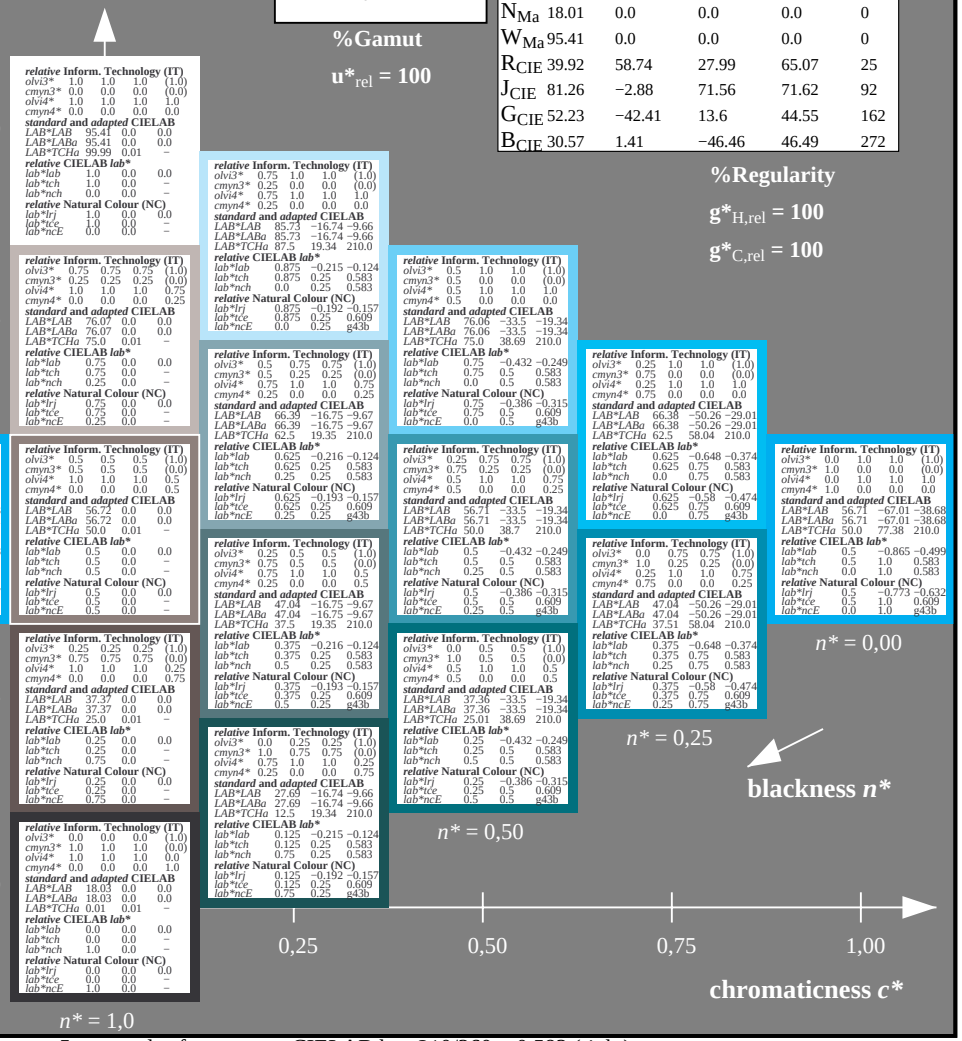
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



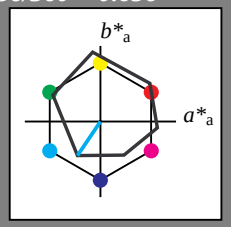
OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

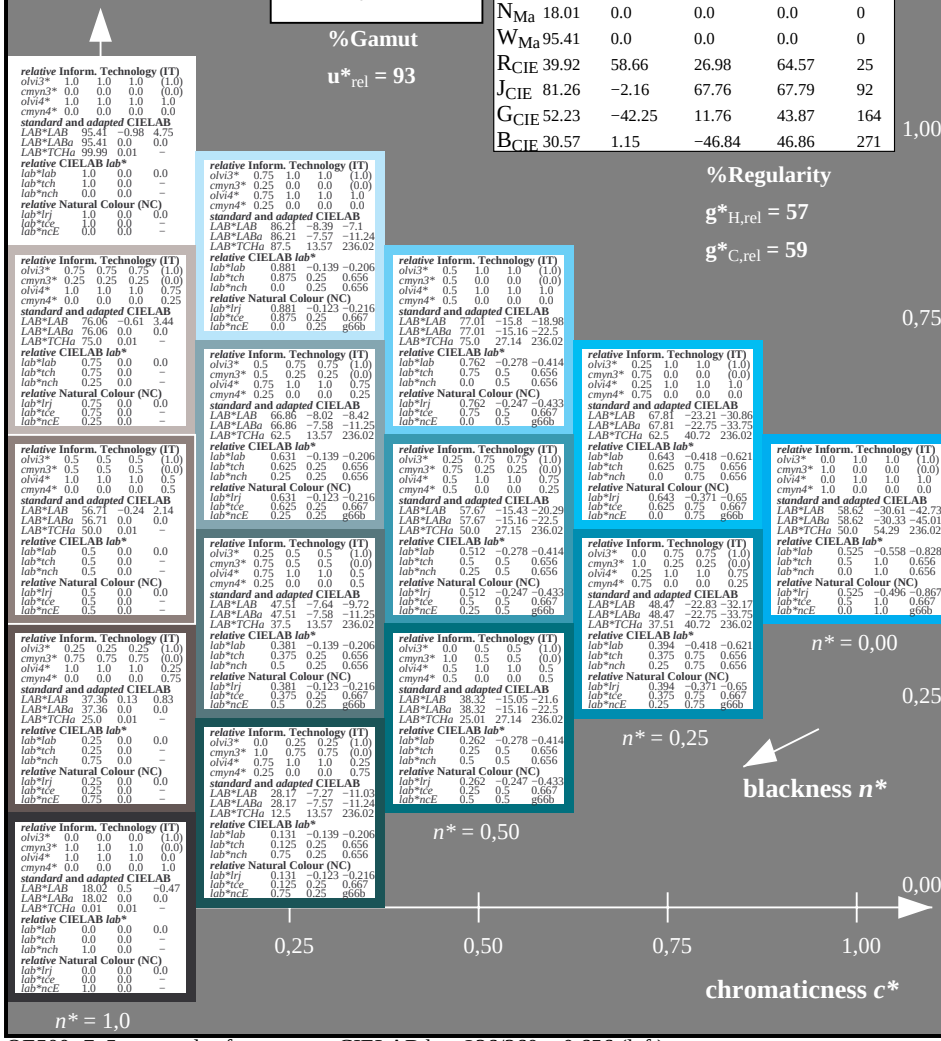
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

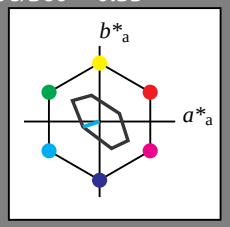


OE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

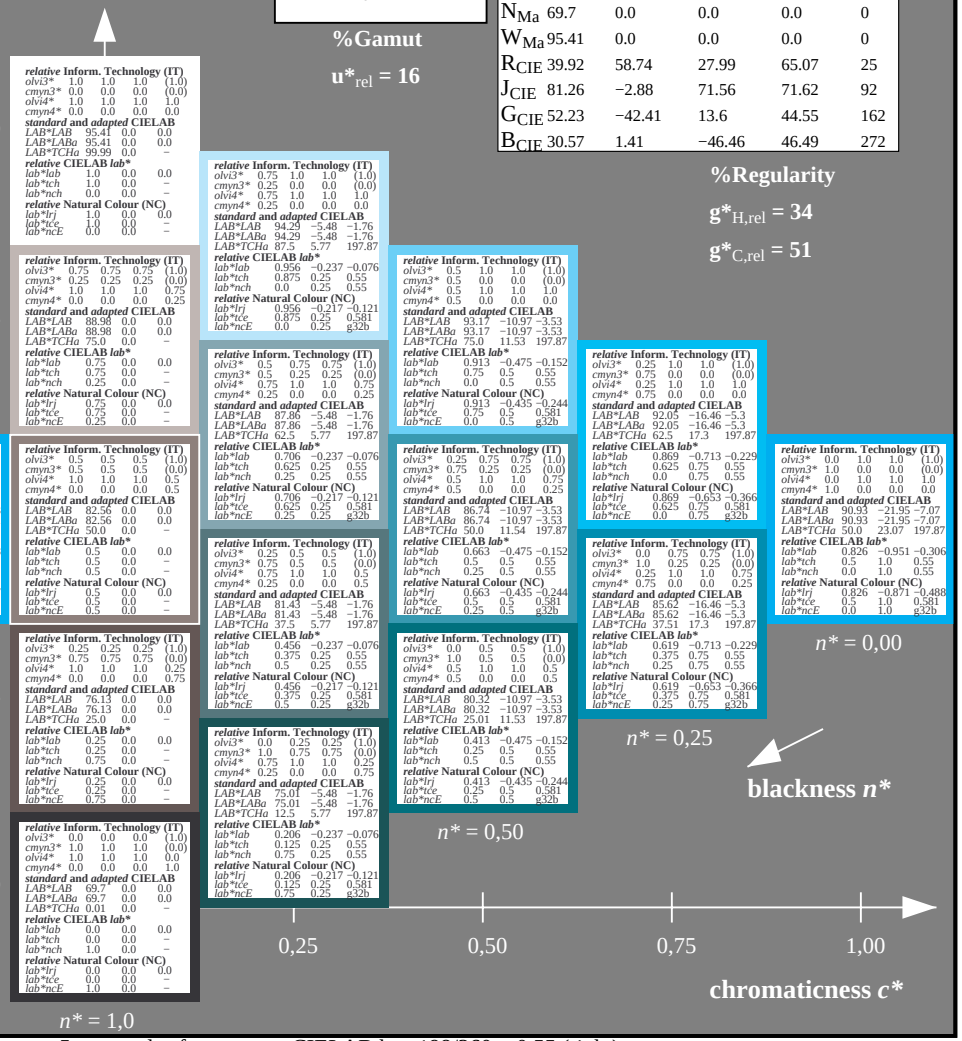
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Television Luminous System TLS00

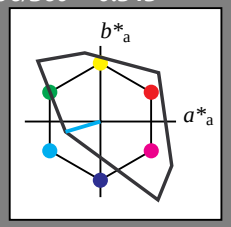
for hue $h^* = lab^*h = 196/360 = 0.545$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

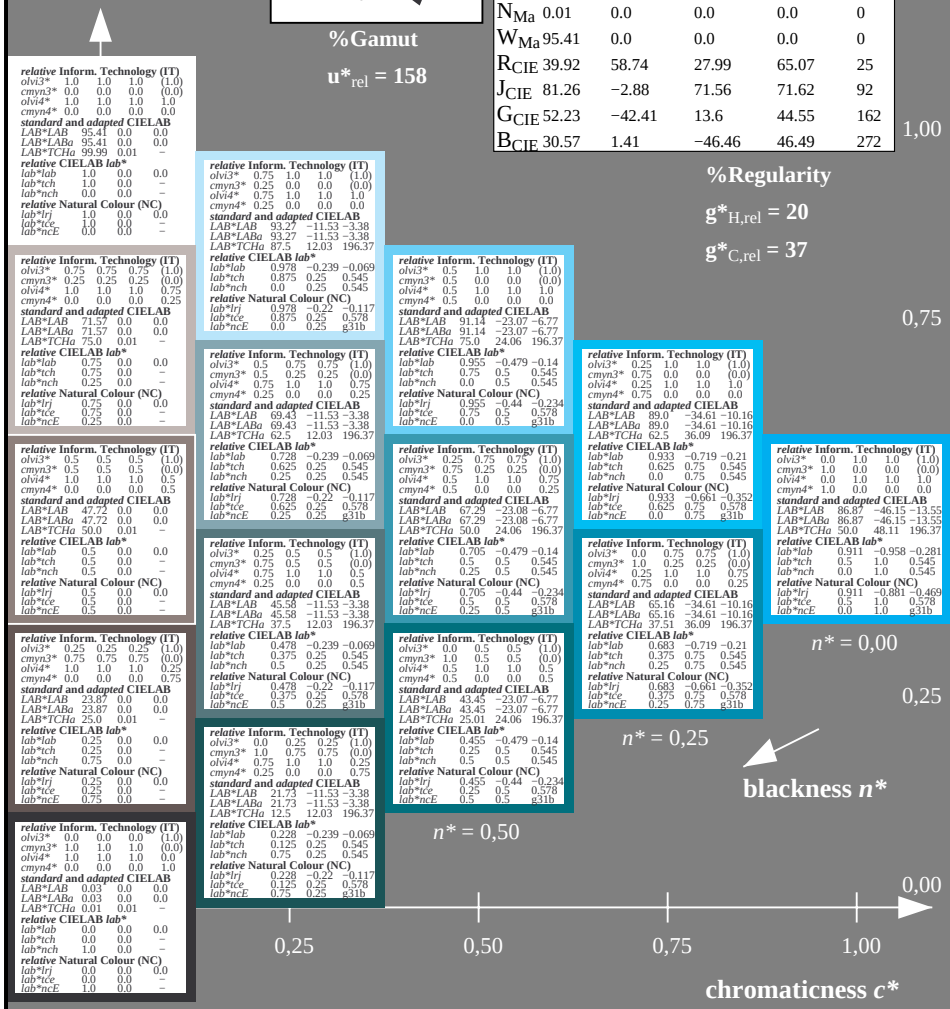
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

Output: Colorimetric Offset Reflective System ORS18

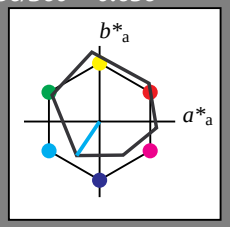
for hue $h^* = lab^*h = 236/360 = 0.656$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

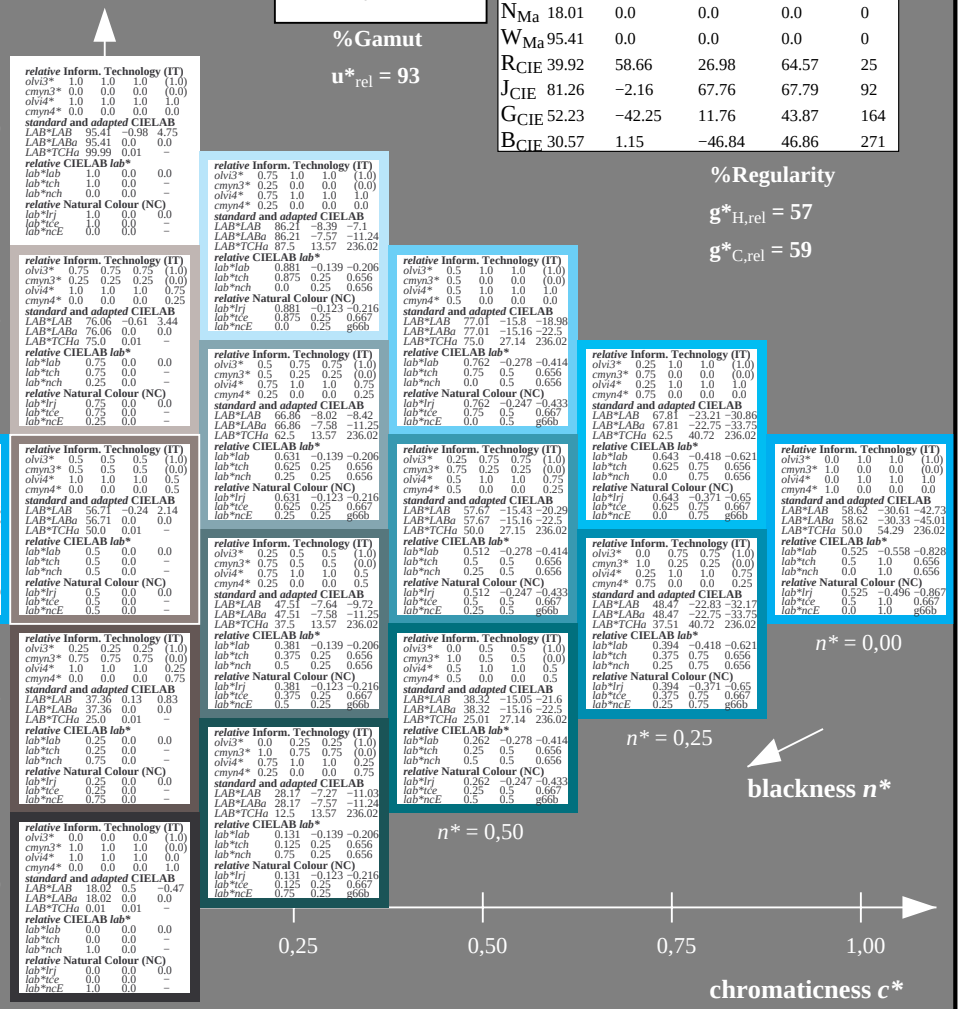
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

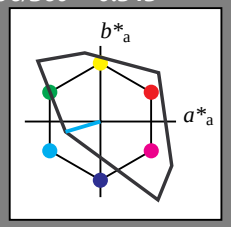
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

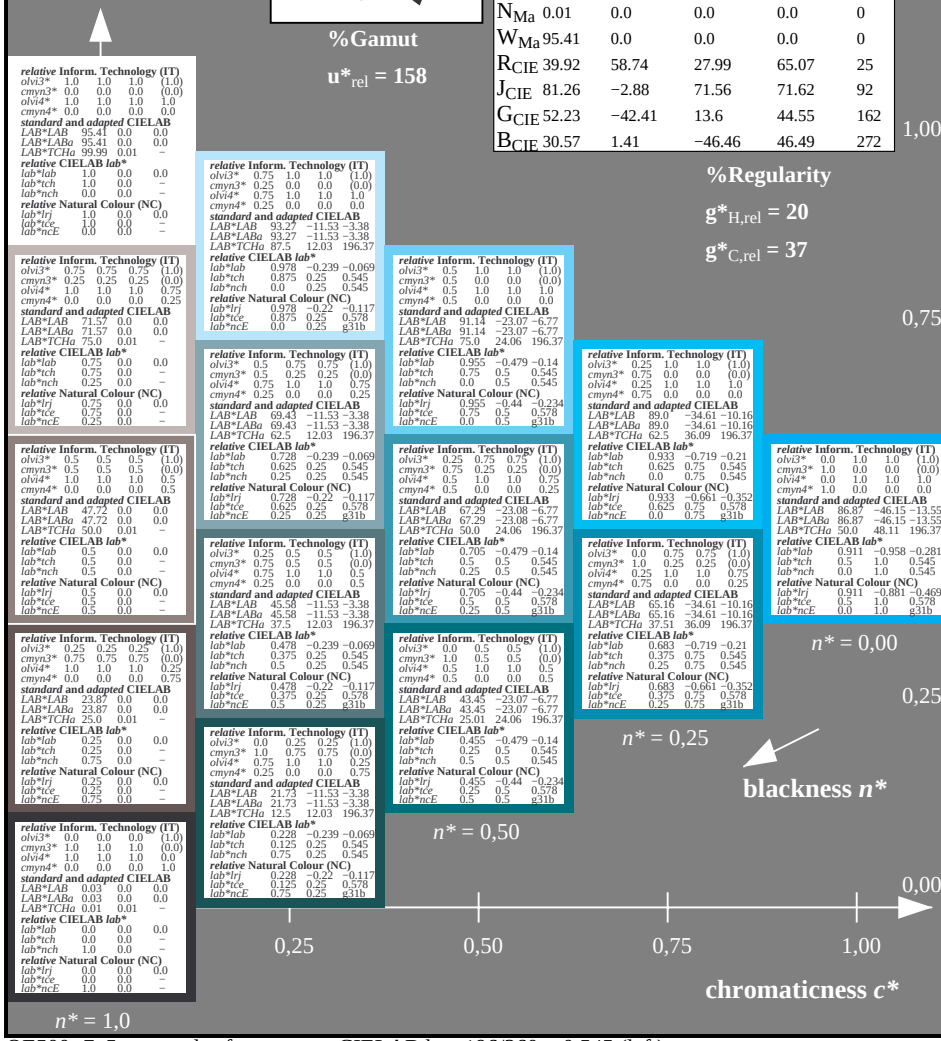
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

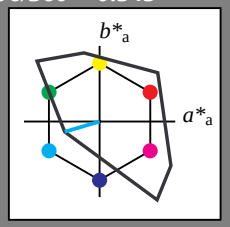
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

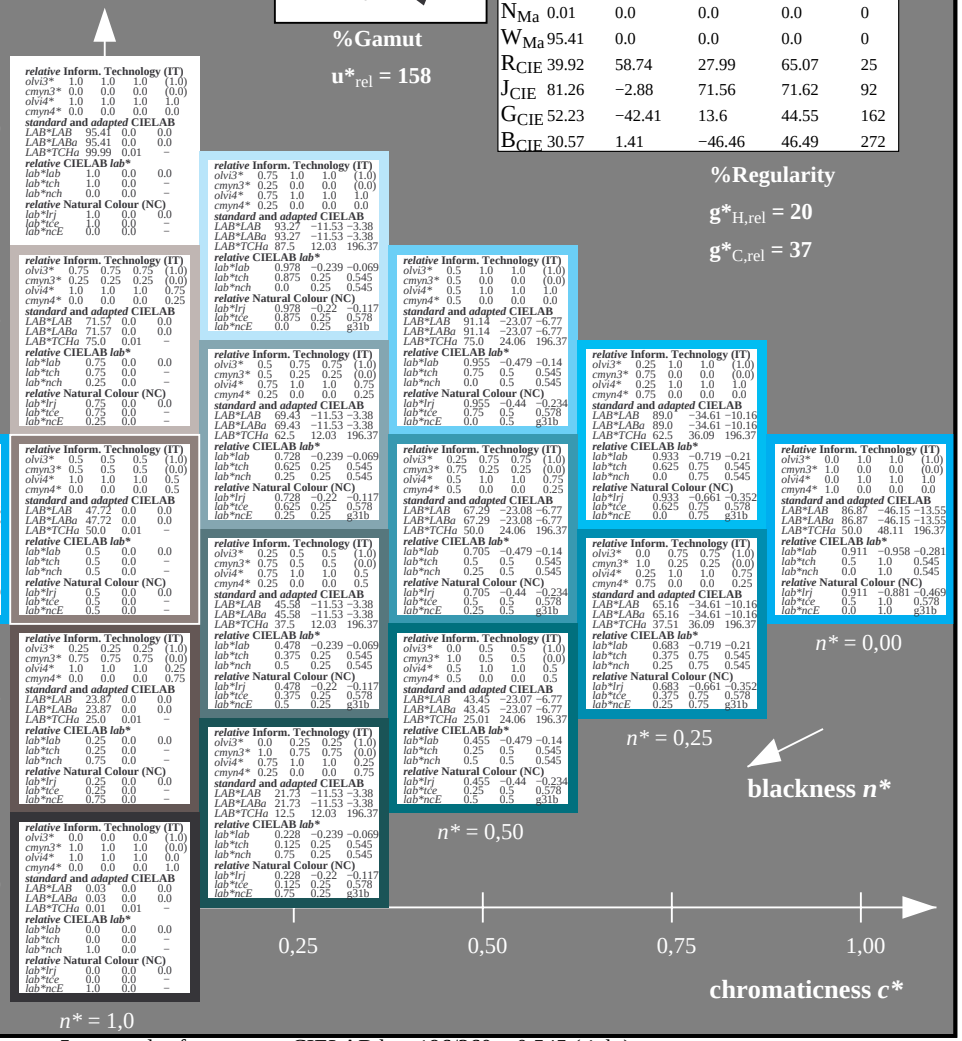
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

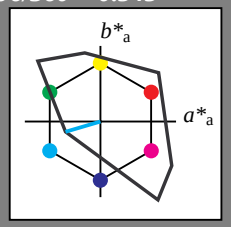
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

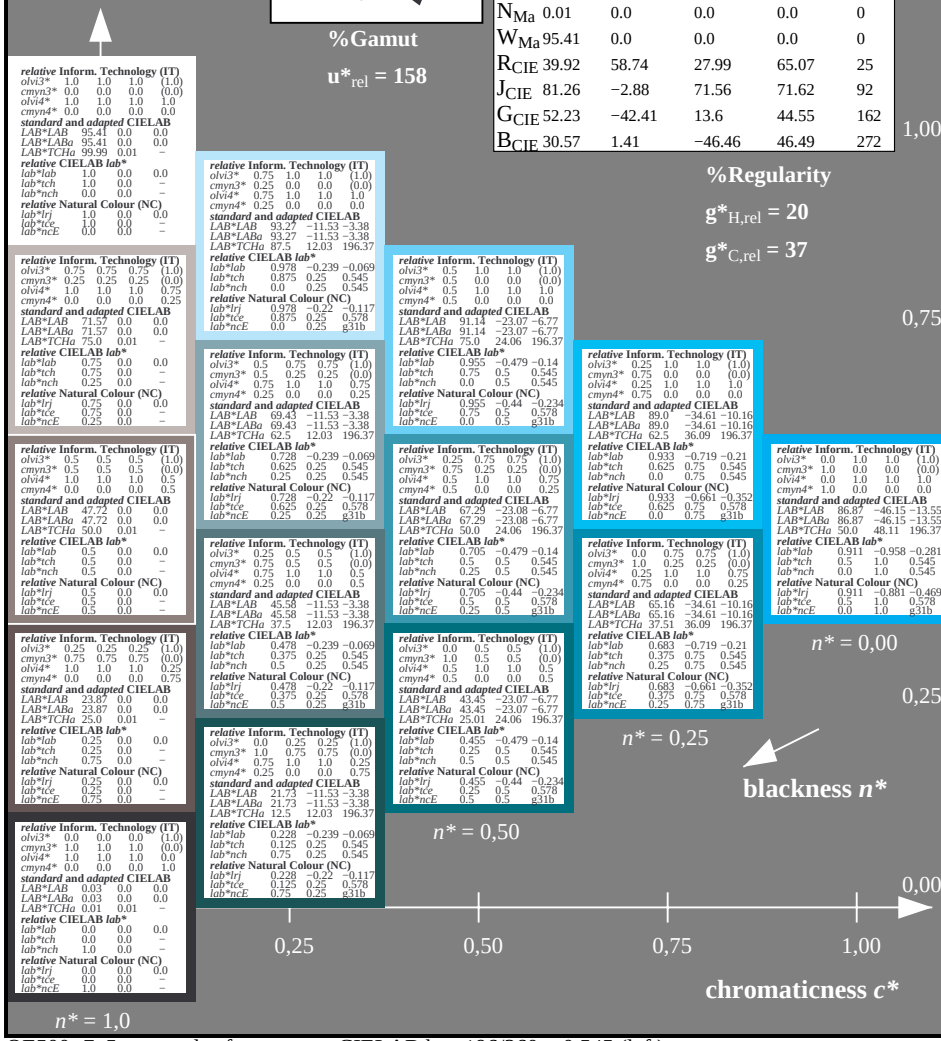
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

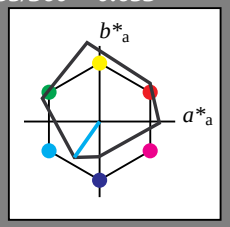
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

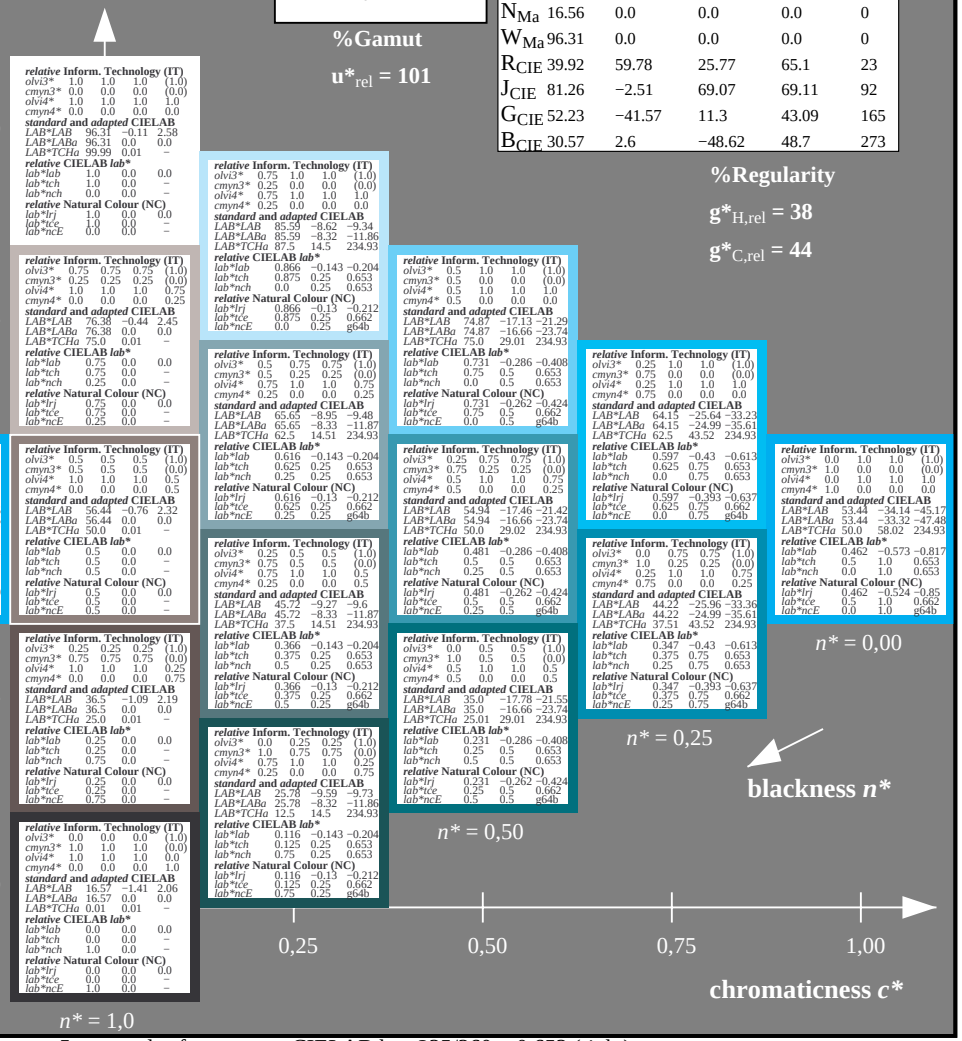
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

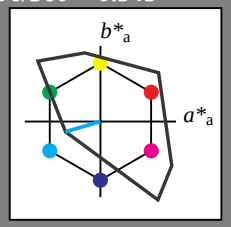
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

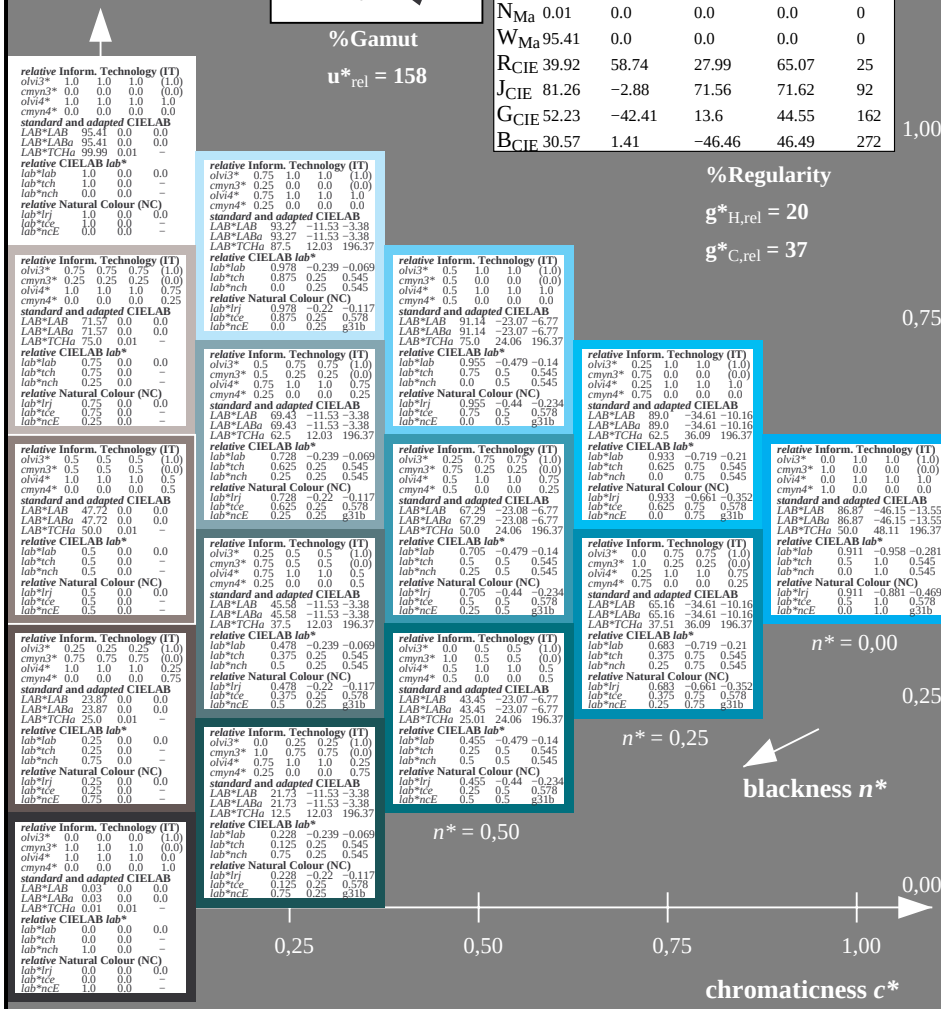
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

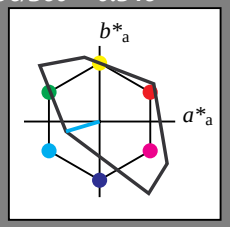


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

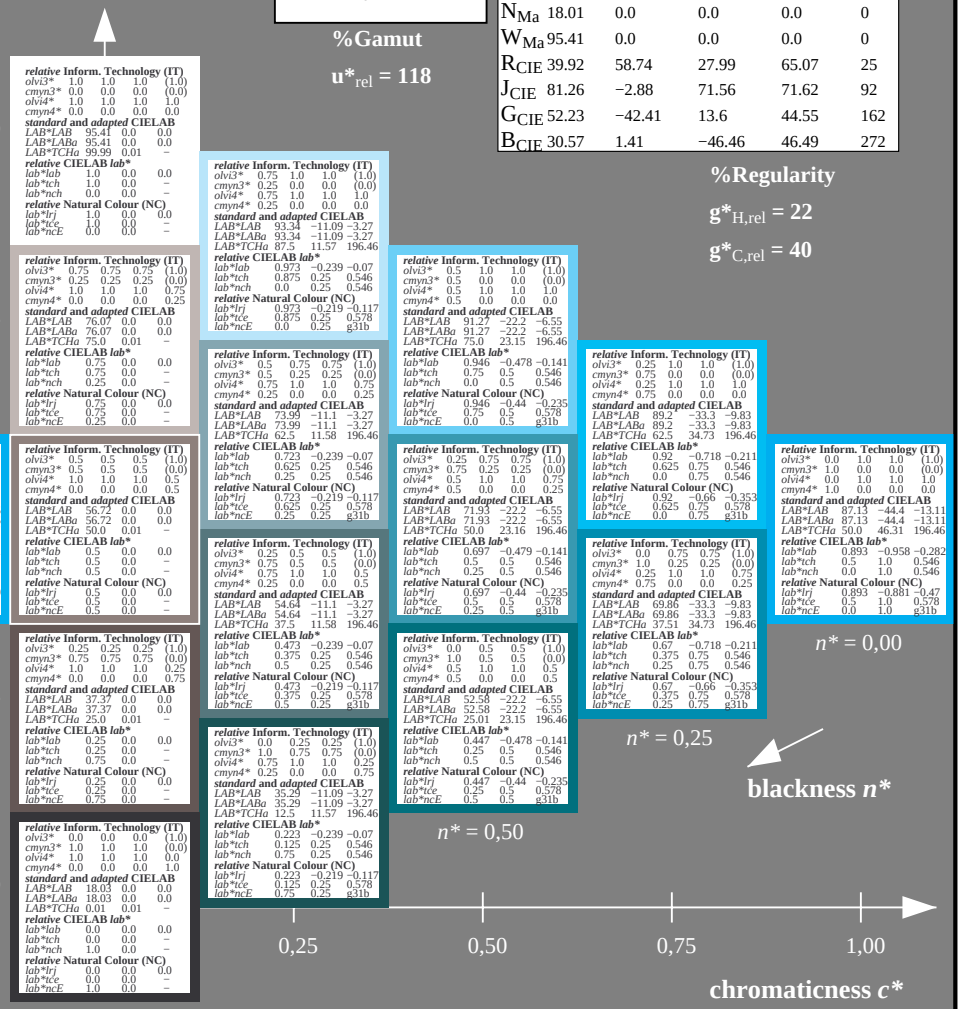
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

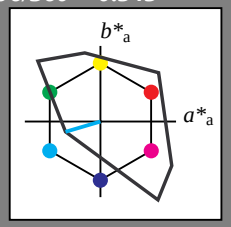
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

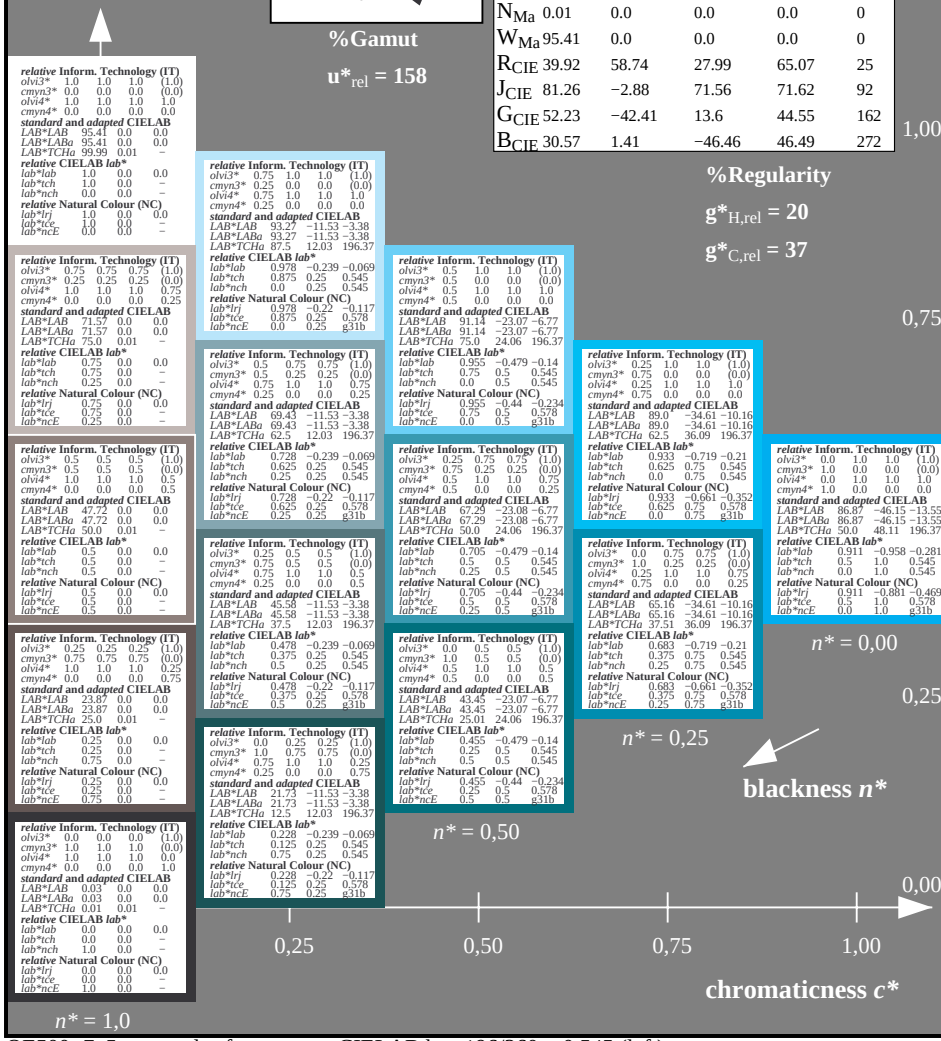
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

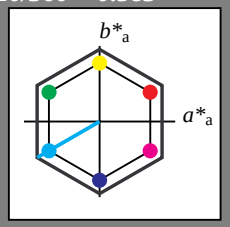
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

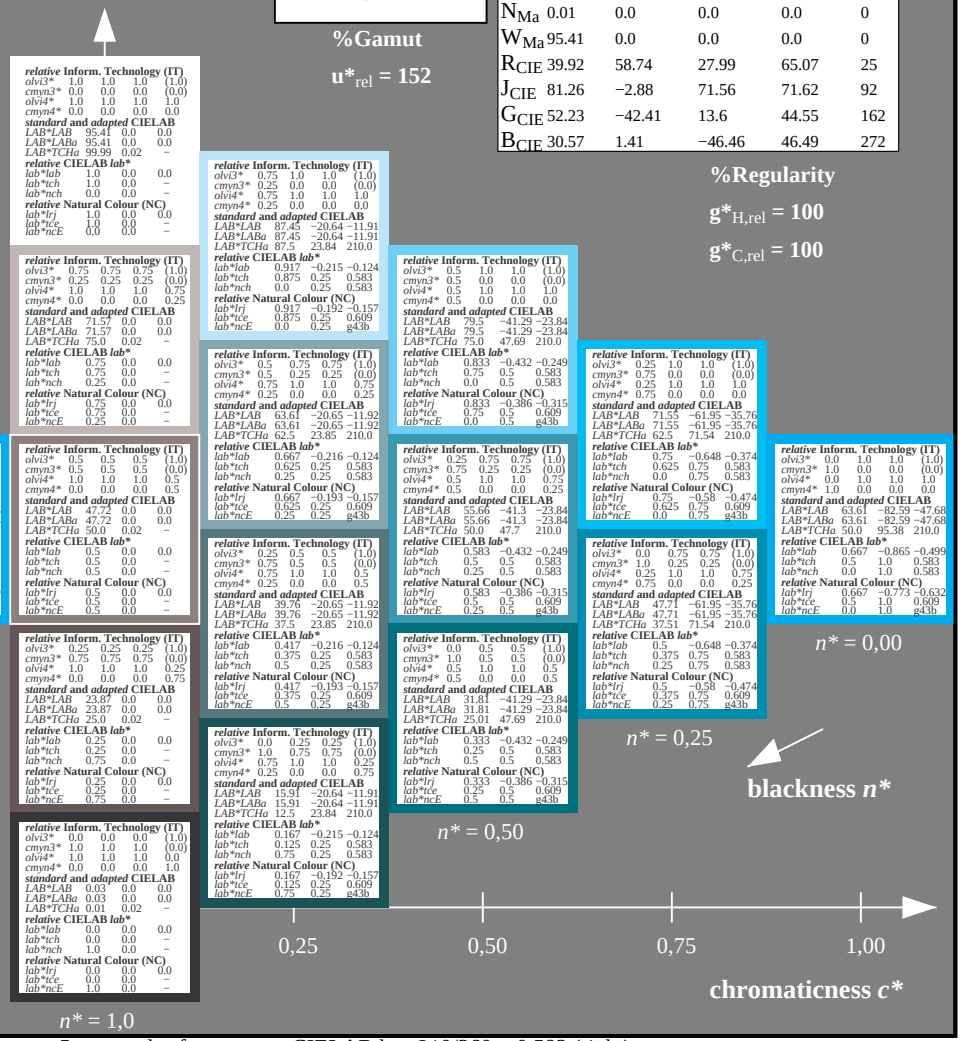
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



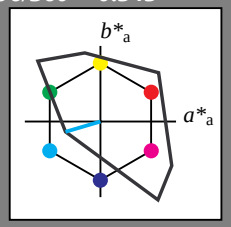
OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

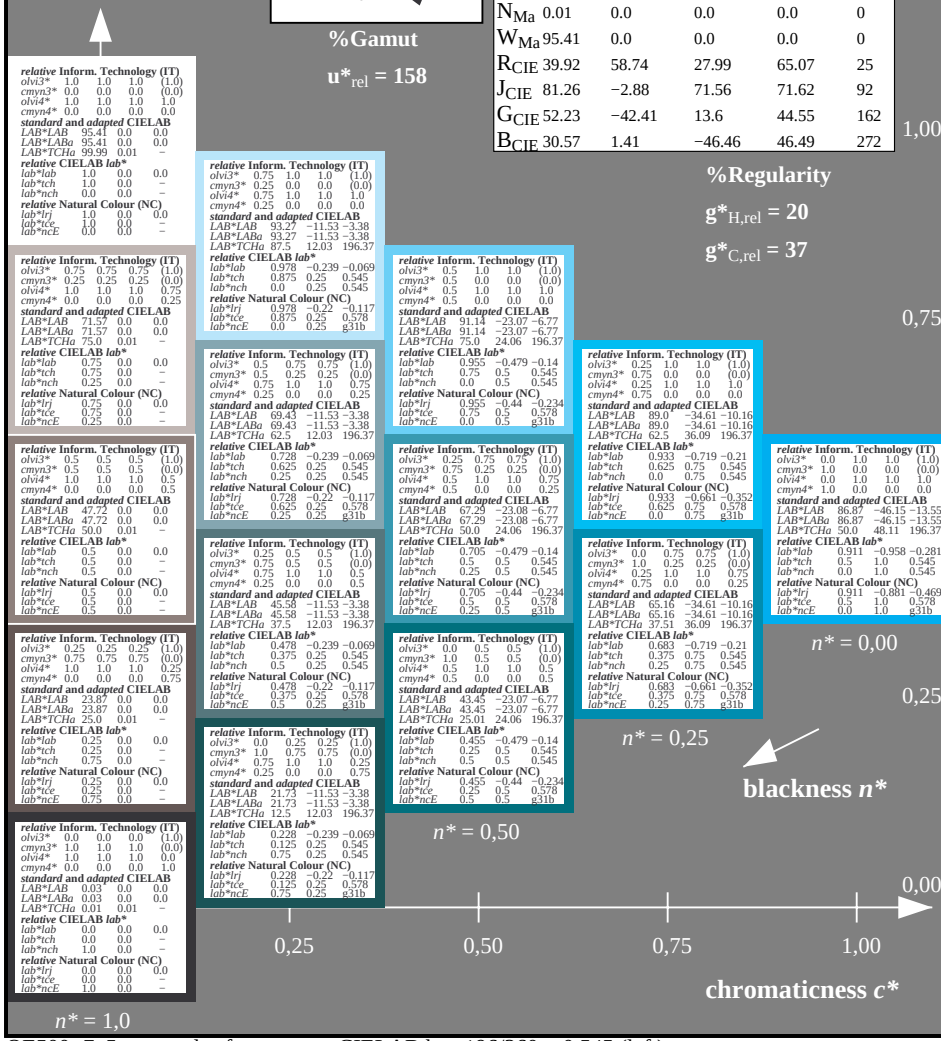
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

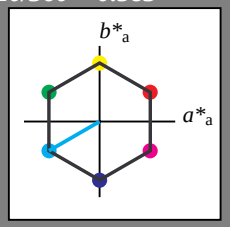


OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

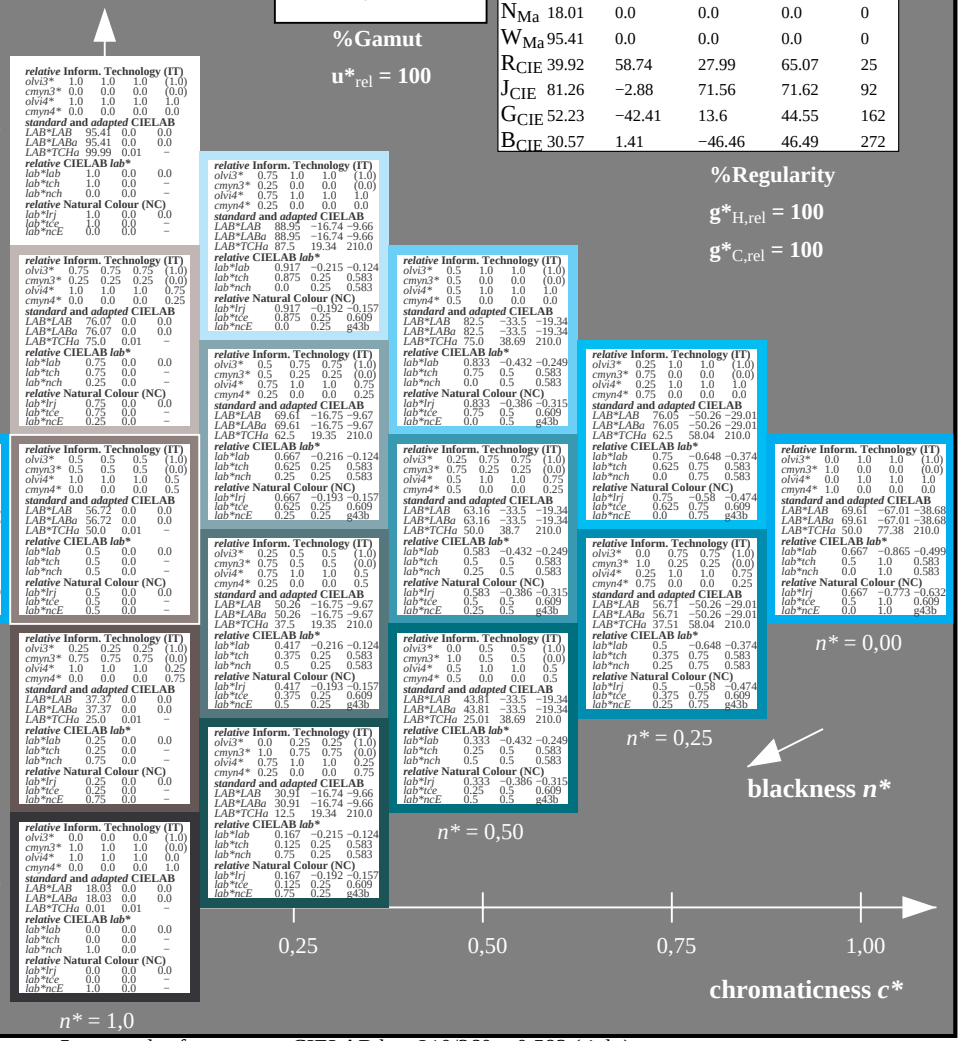
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS00

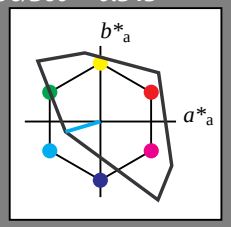
for hue $h^* = lab^*h = 196/360 = 0.545$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0



%Gamut

$u^*_{rel} = 158$

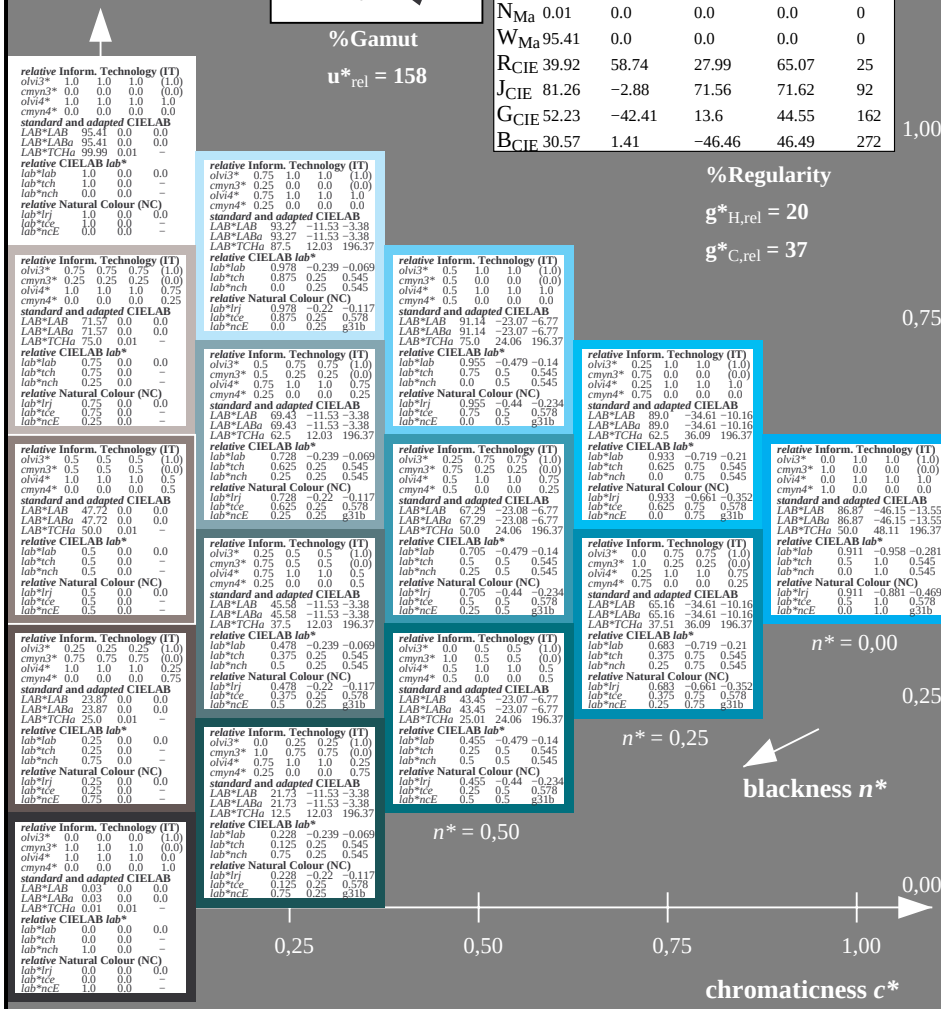
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

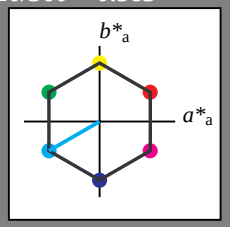
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0



%Gamut

$u^*_{rel} = 100$

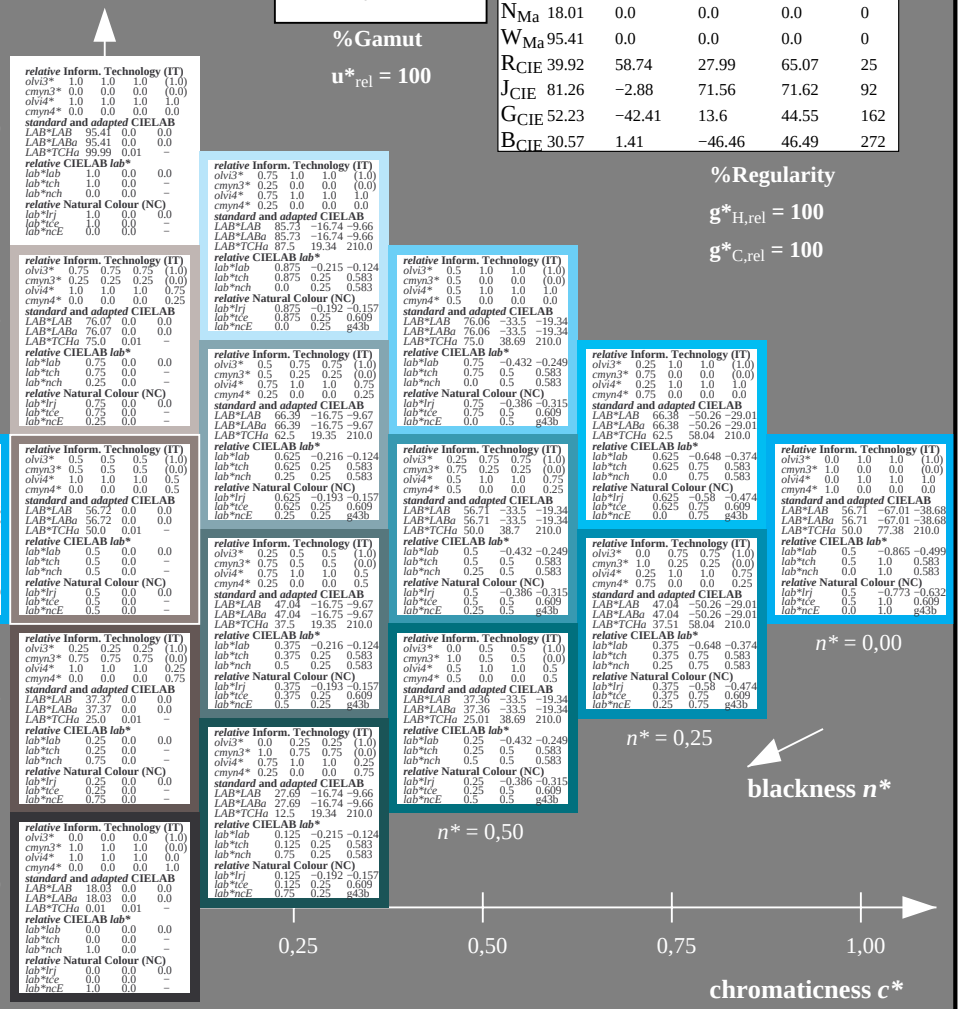
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

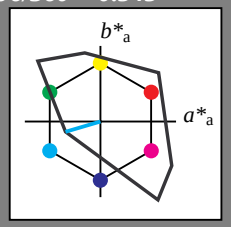
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

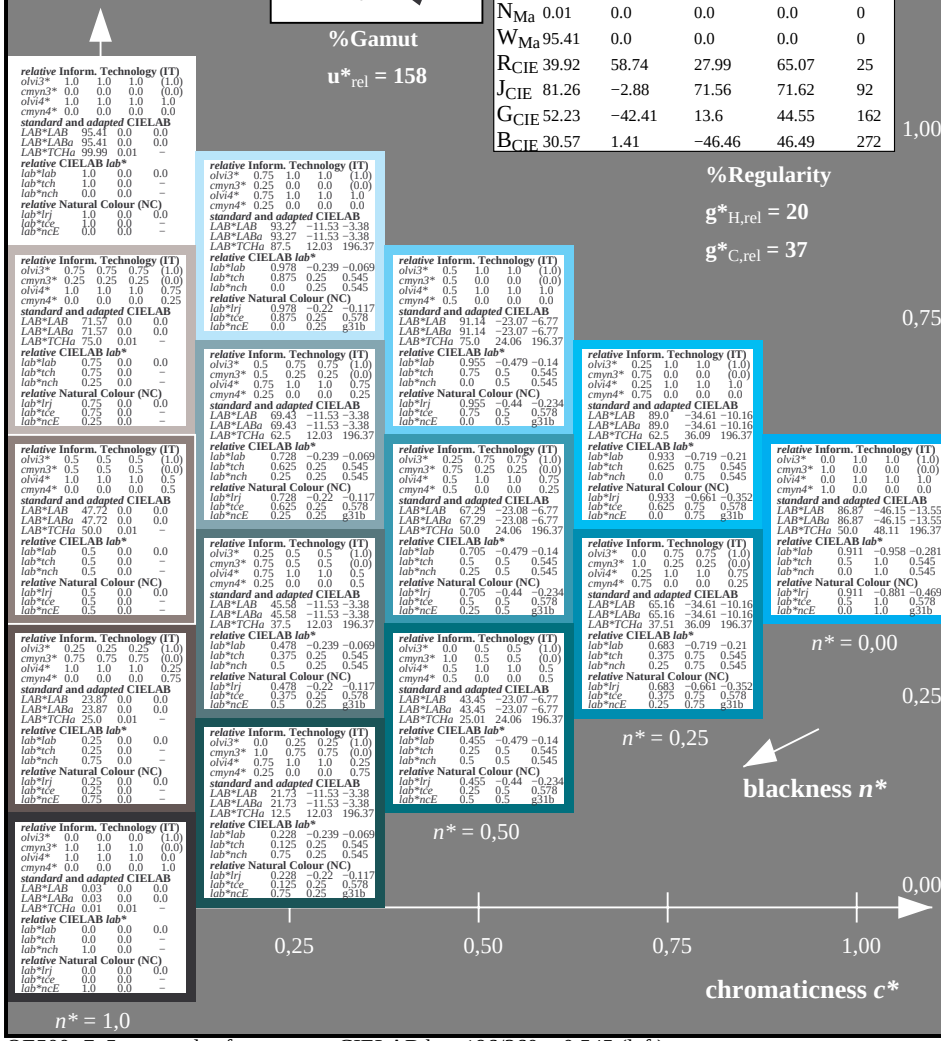
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



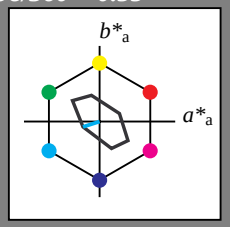
OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

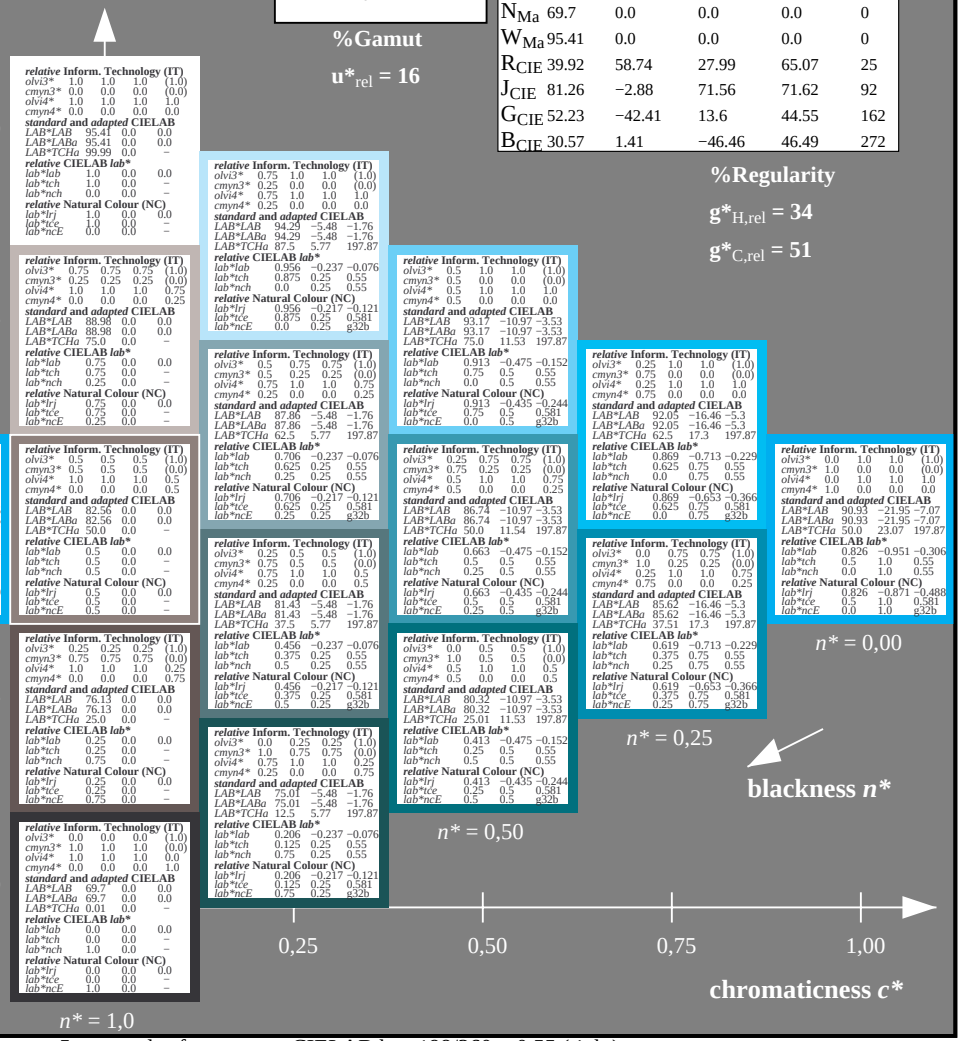
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

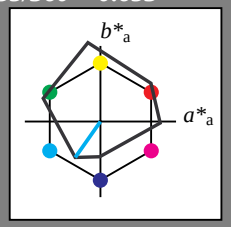
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

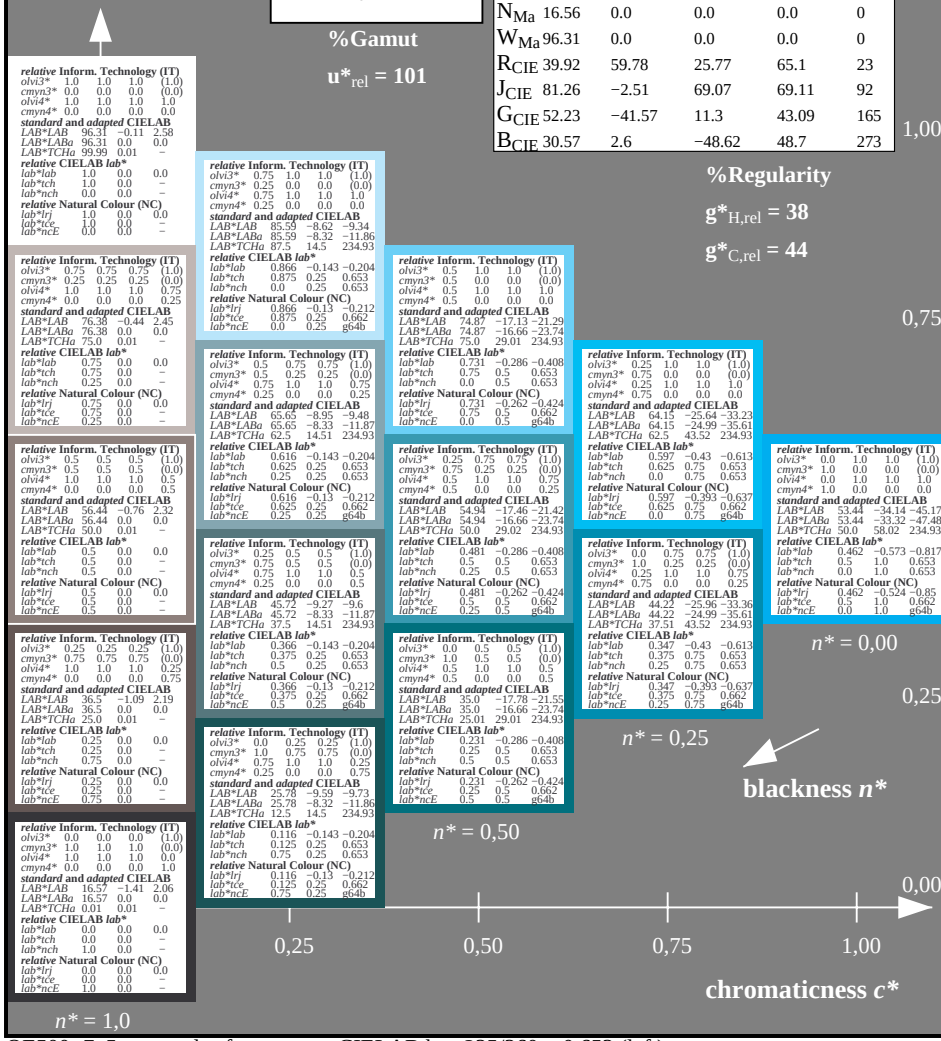
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

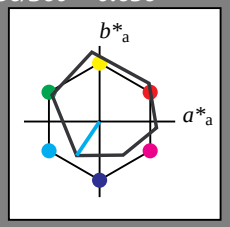
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

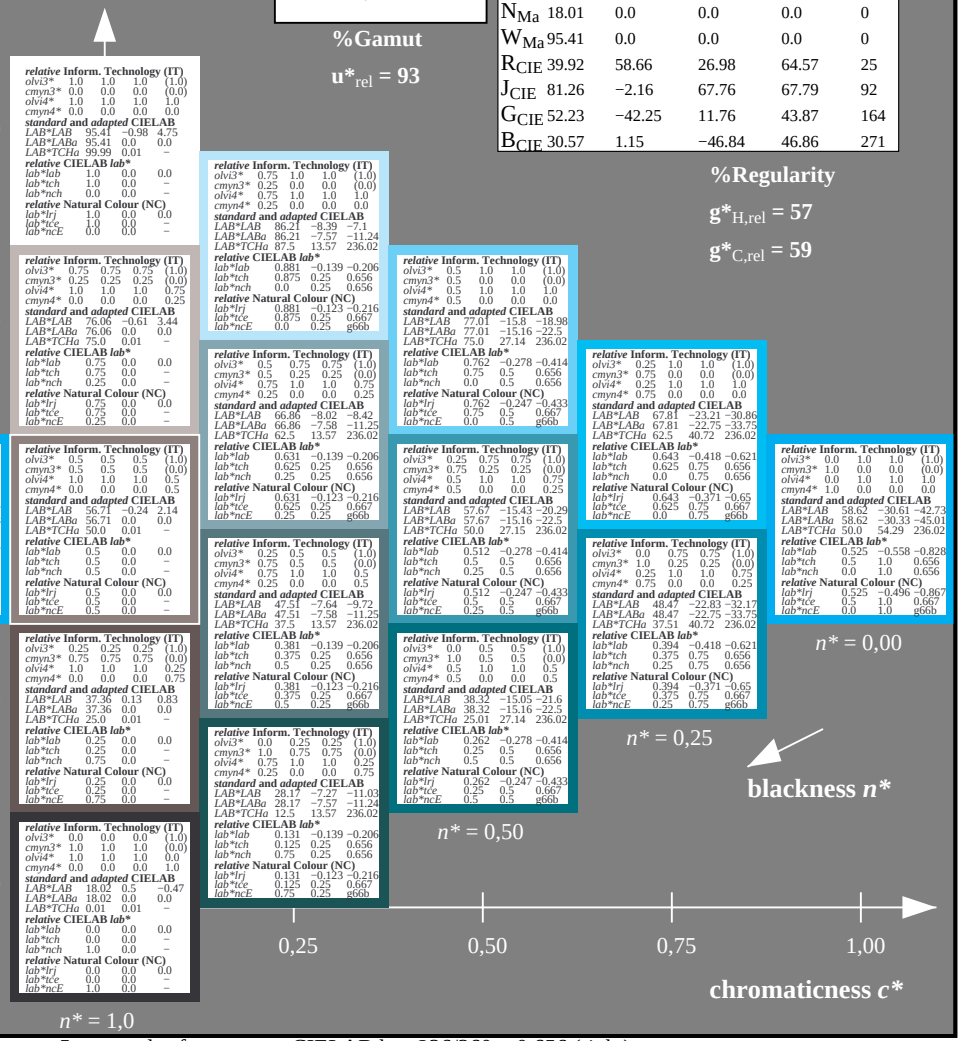
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

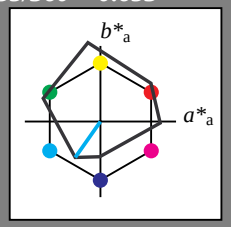


5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

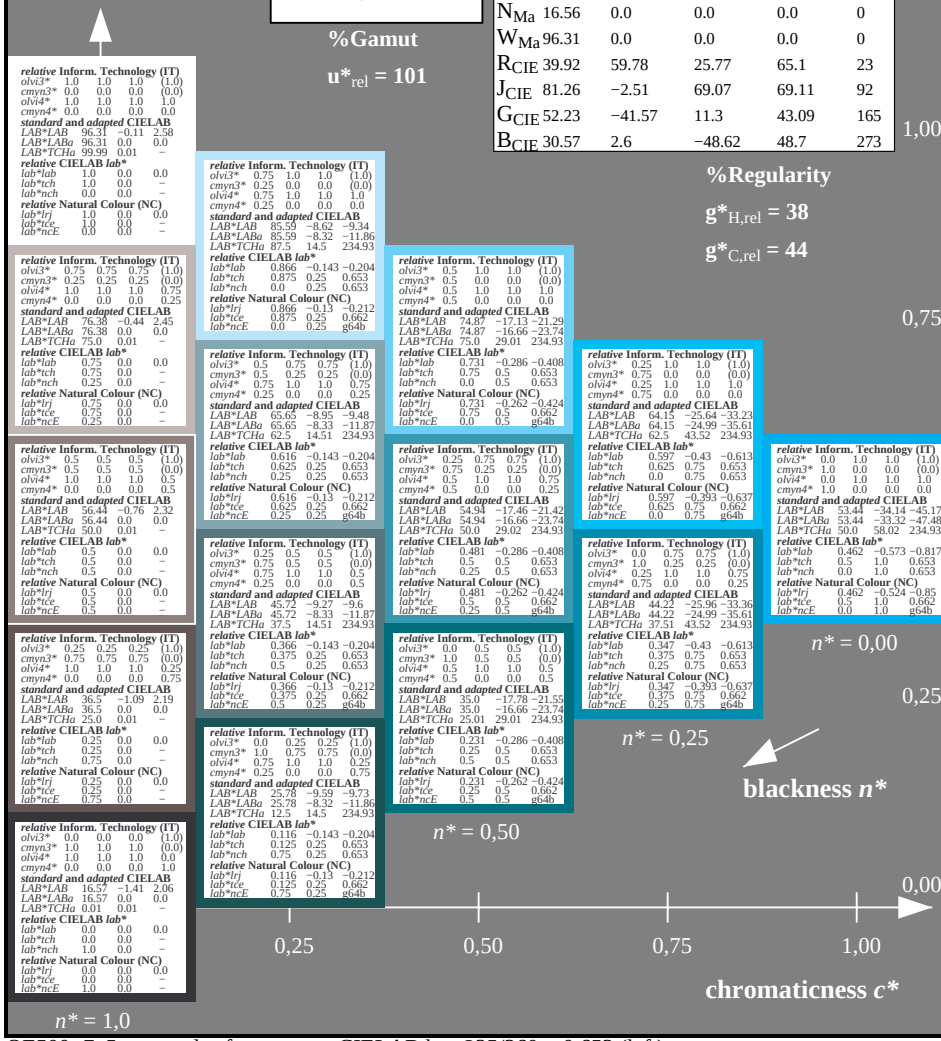
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

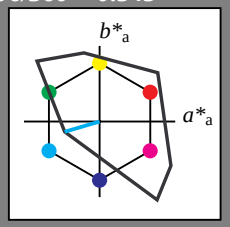


OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

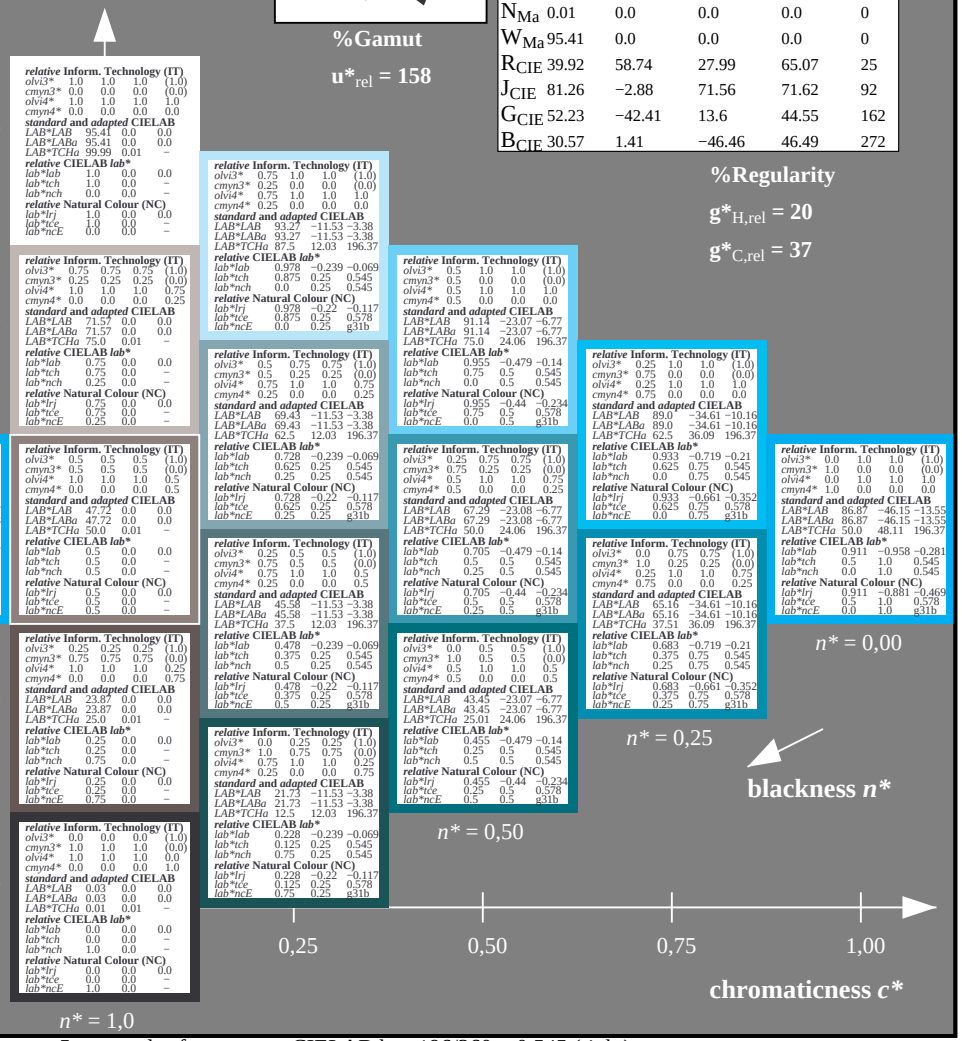
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Printer Reflective System DRSXX

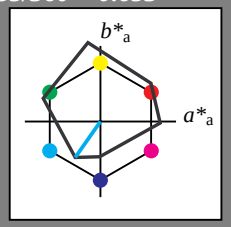
for hue $h^* = lab^*h = 235/360 = 0.653$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

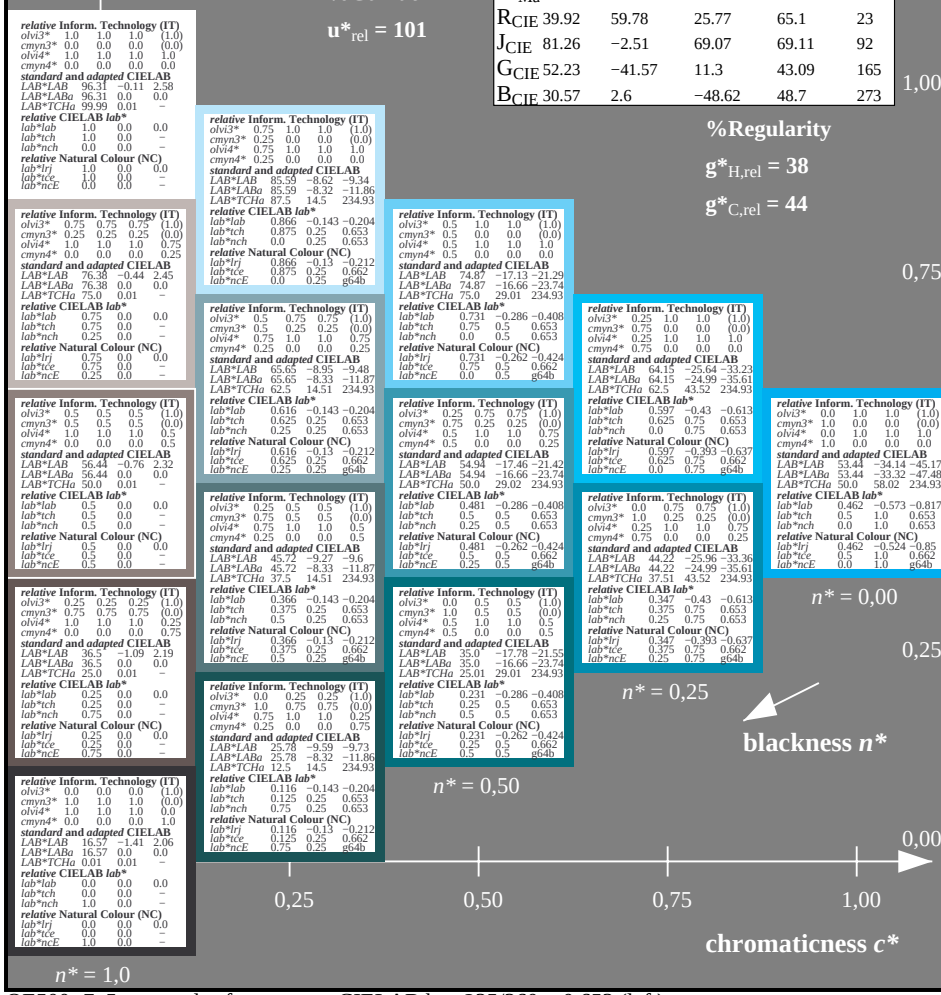
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Printer Reflective System DRSXX

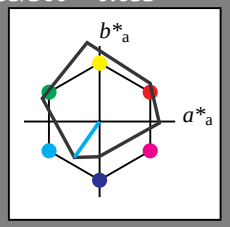
for hue $h^* = lab^*h = 235/360 = 0.653$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

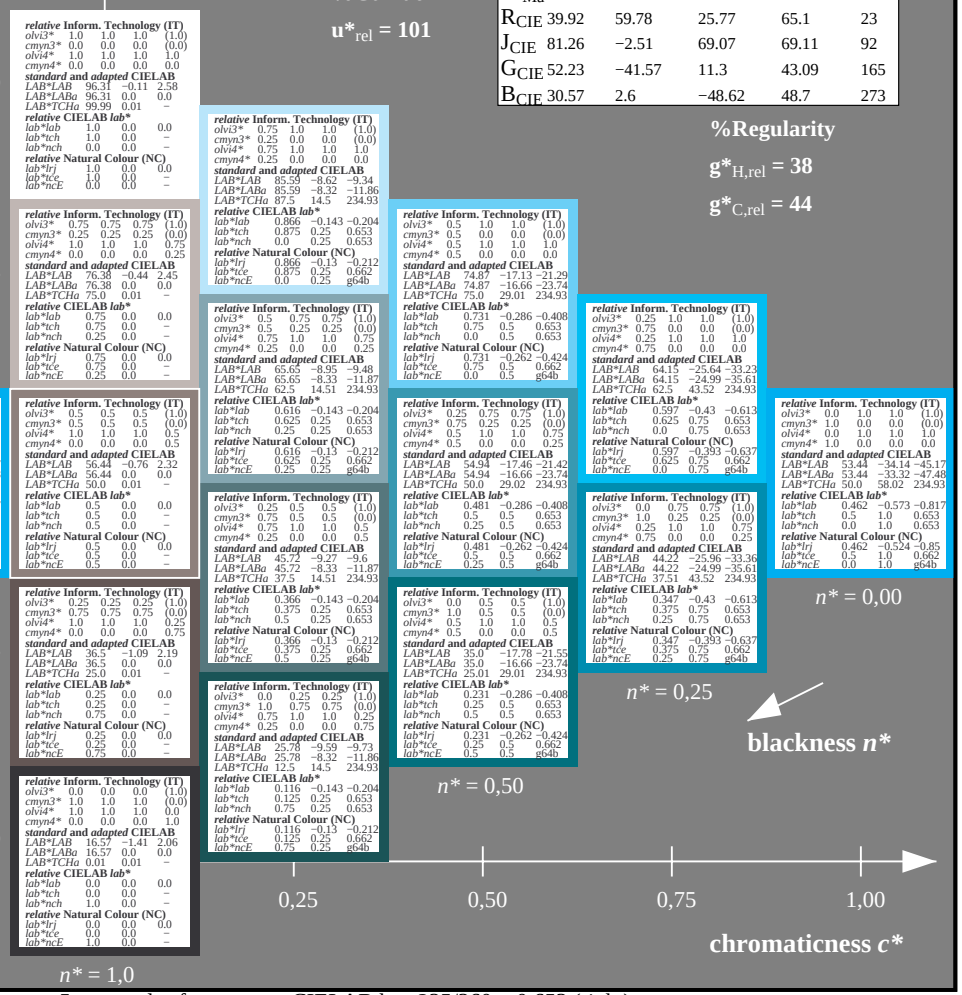
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

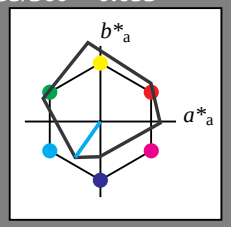


5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

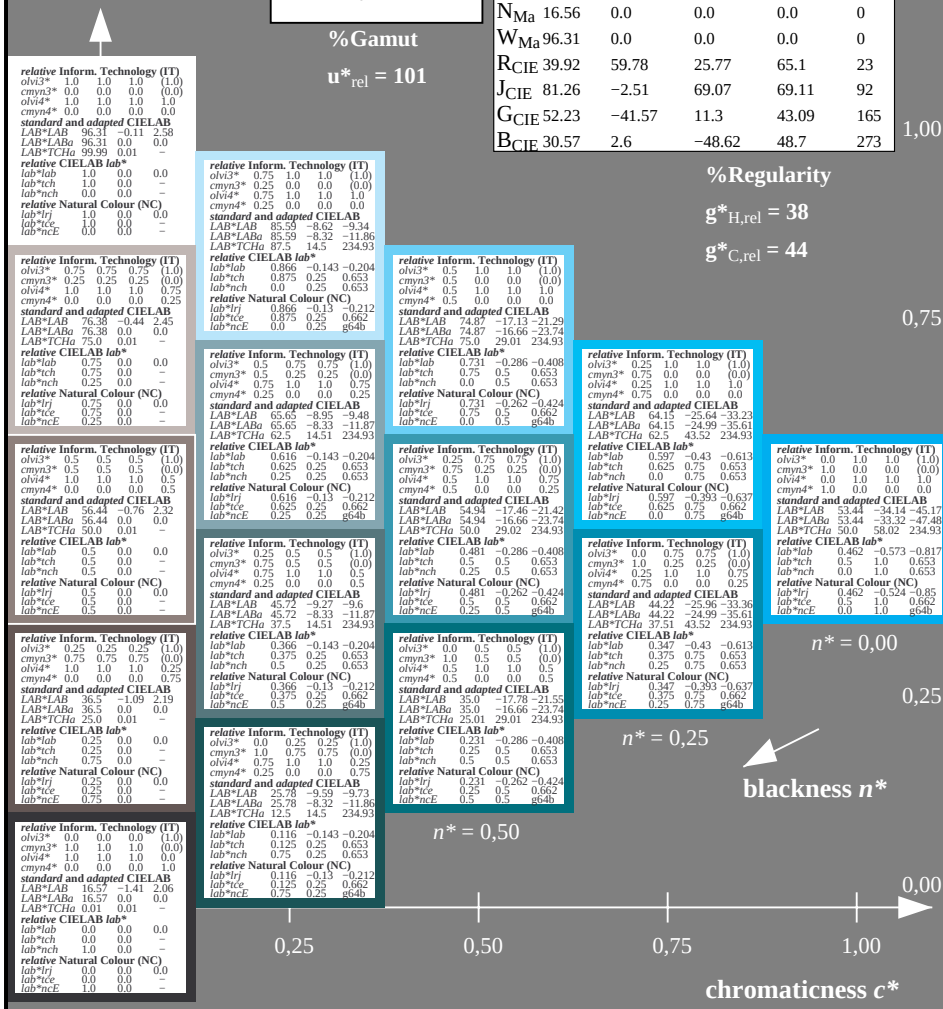
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

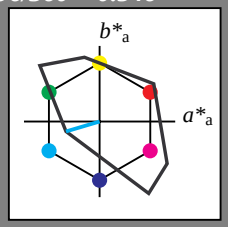
$g^*_{C,rel}$ = 44



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

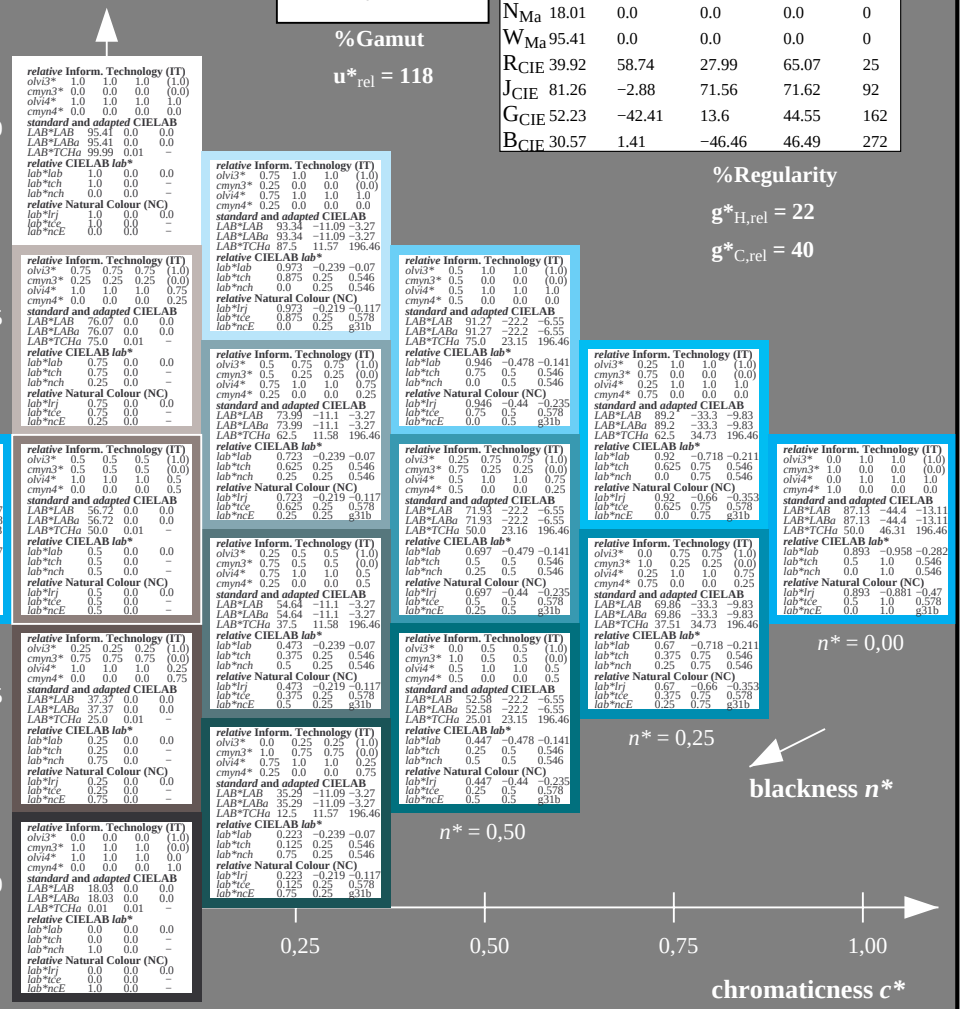
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

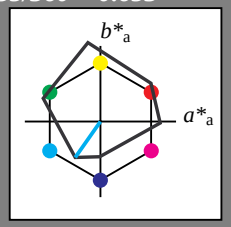
5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h = *lab*h* = 235/360 = 0.653**
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

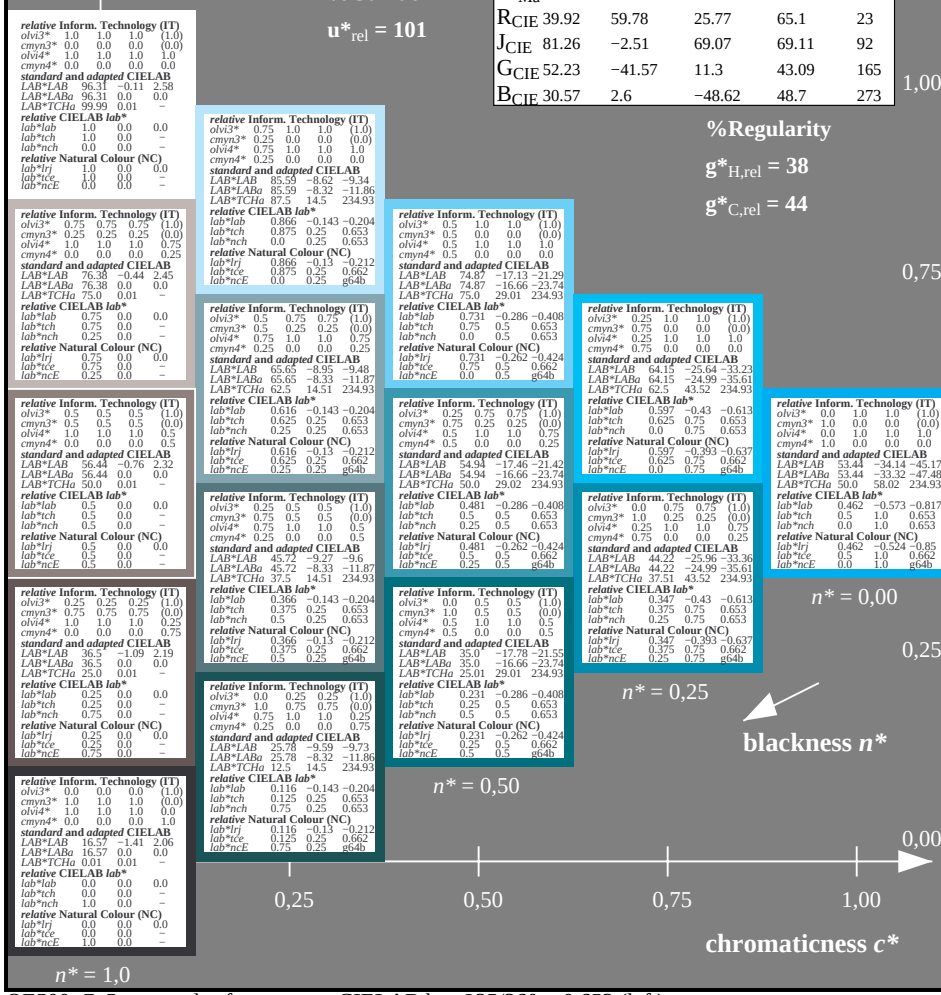
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



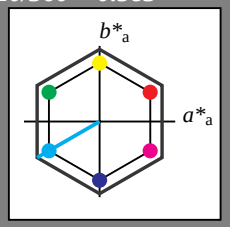
OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 210/360 = 0.583**
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

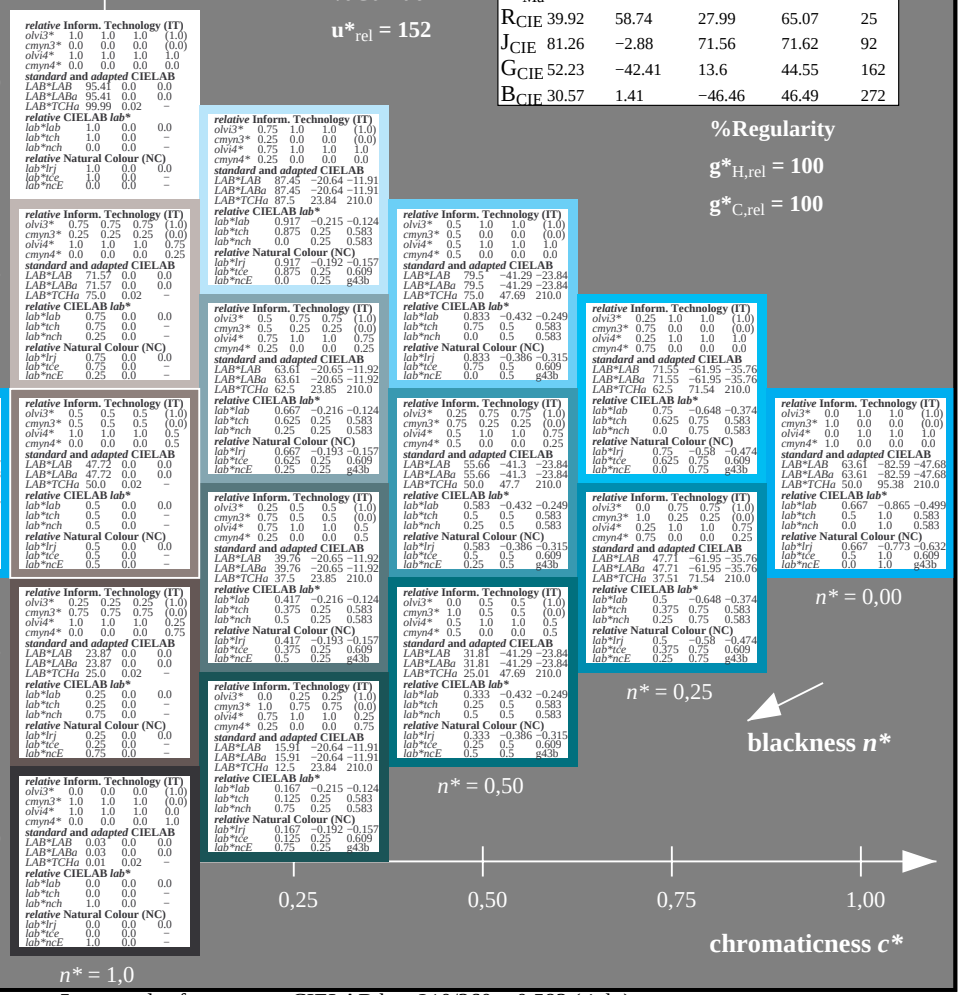
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

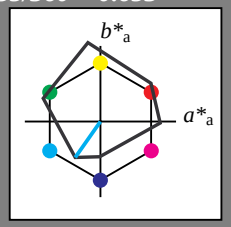


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

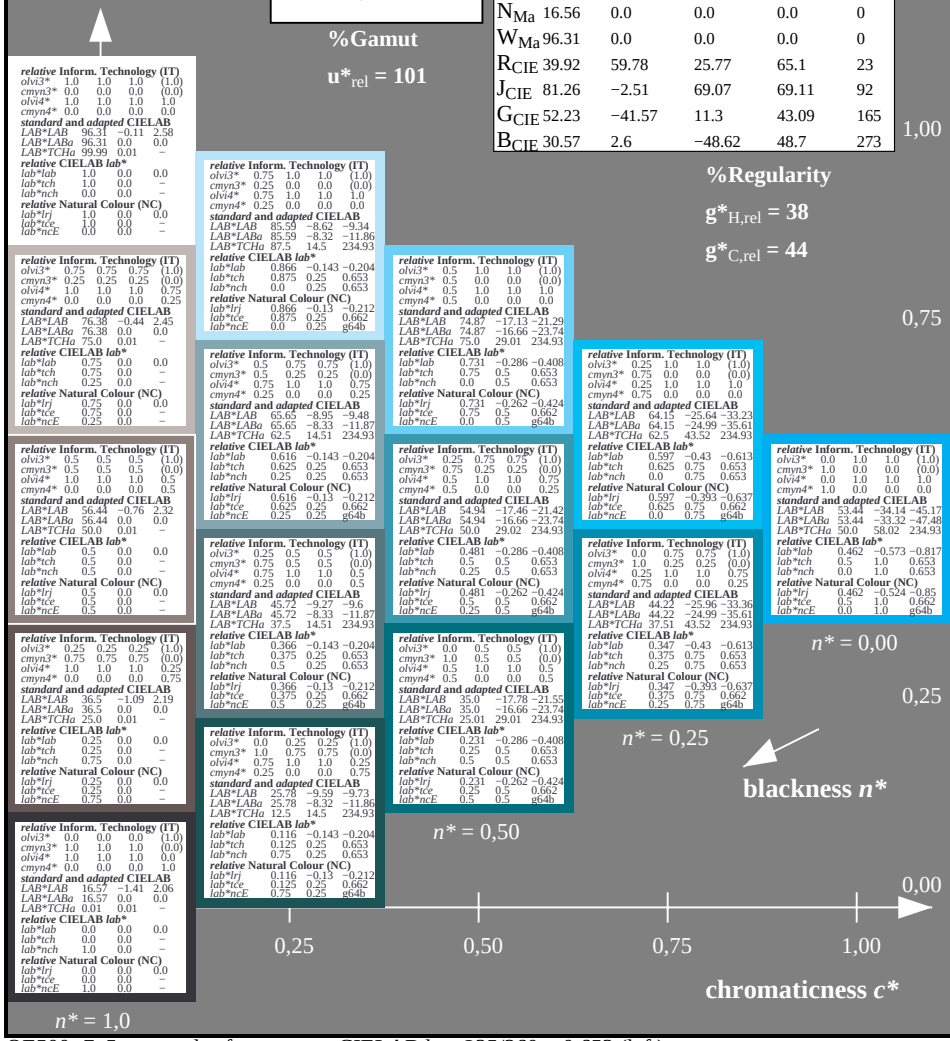
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

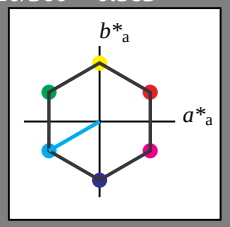


OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

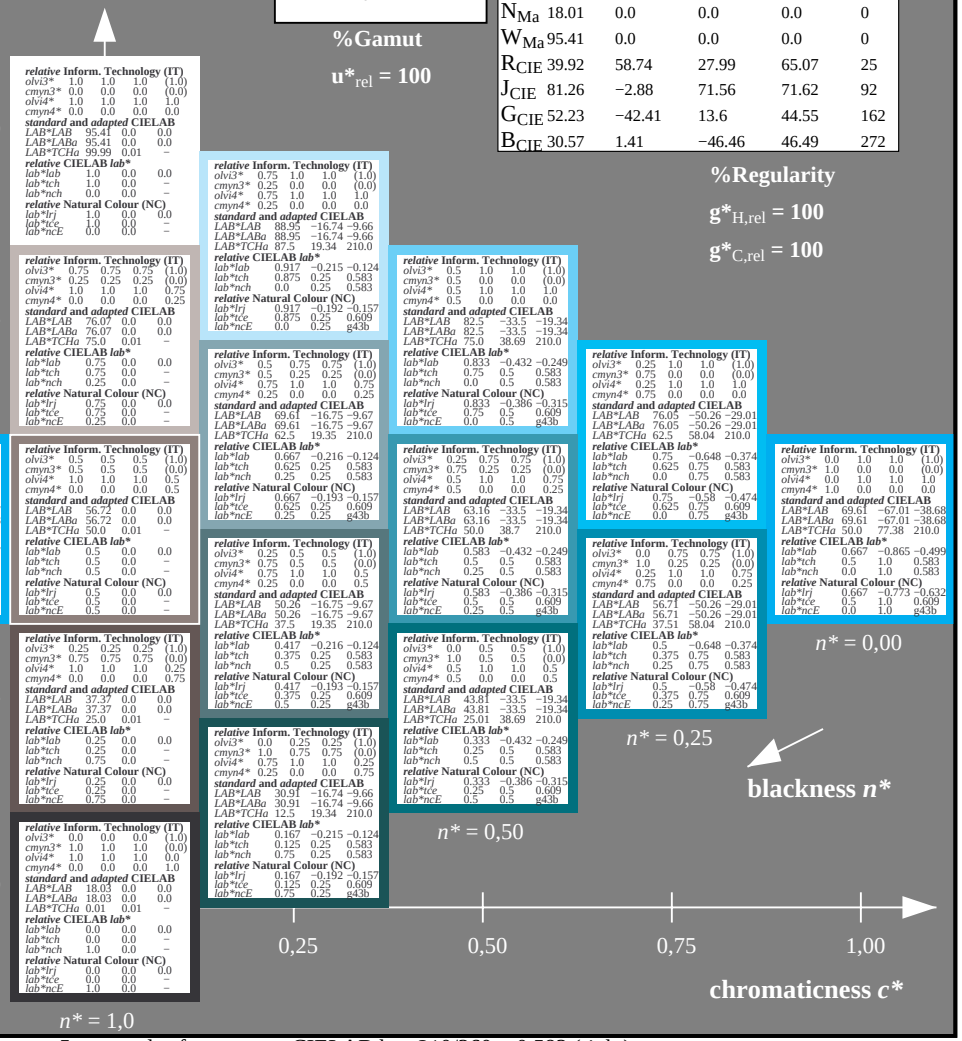
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Printer Reflective System DRSXX

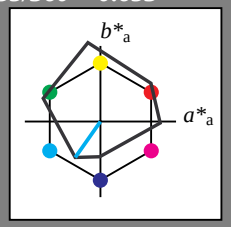
for hue $h^* = lab^*h = 235/360 = 0.653$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

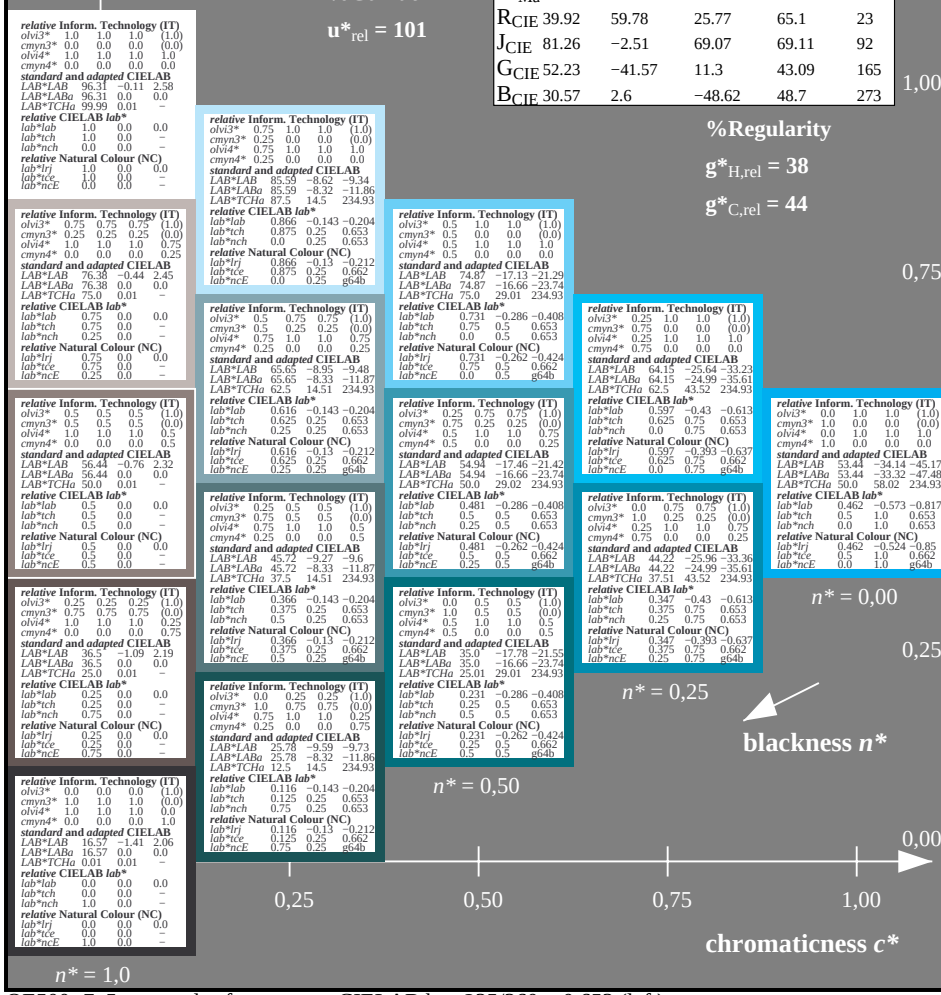
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



Output: Colorimetric Standard Reflective System SRS18

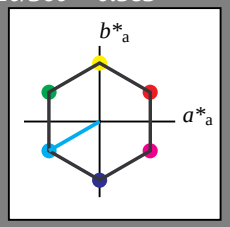
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

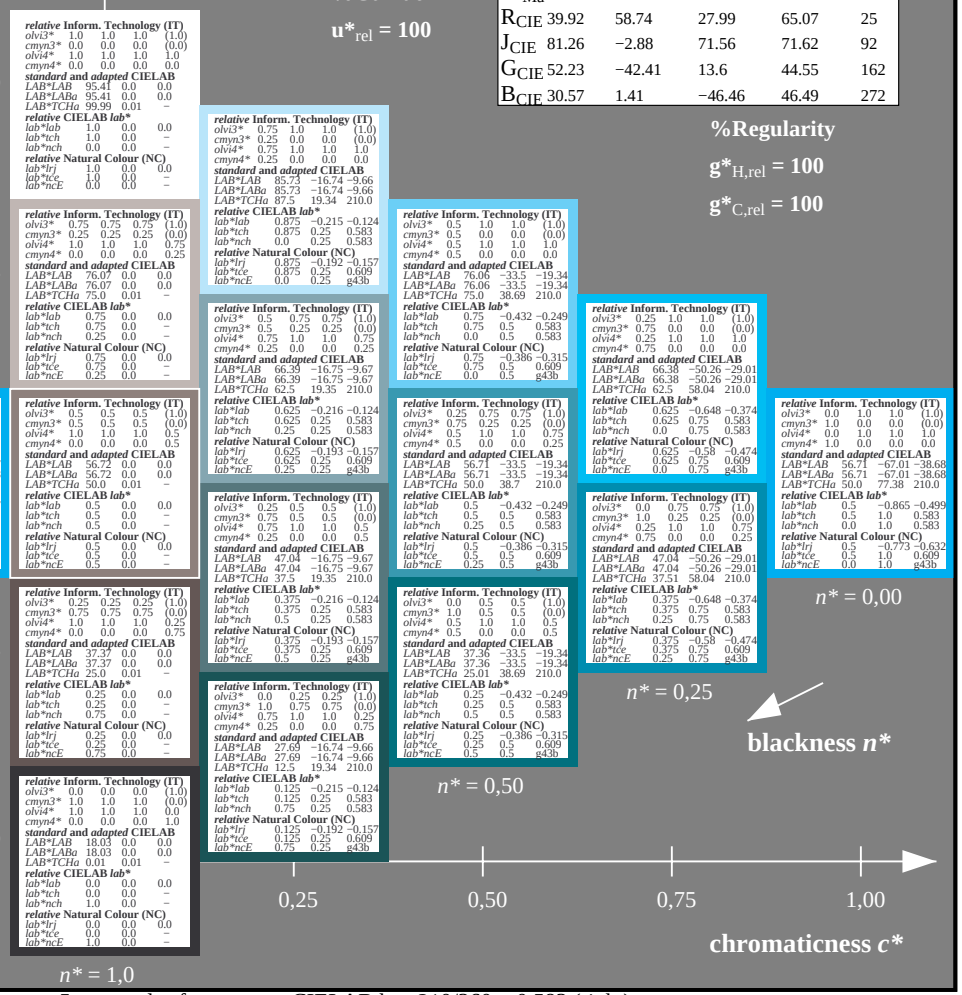
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

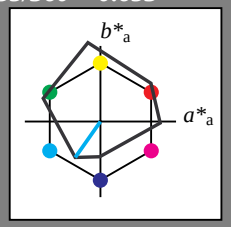
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 235/360 = 0.653*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

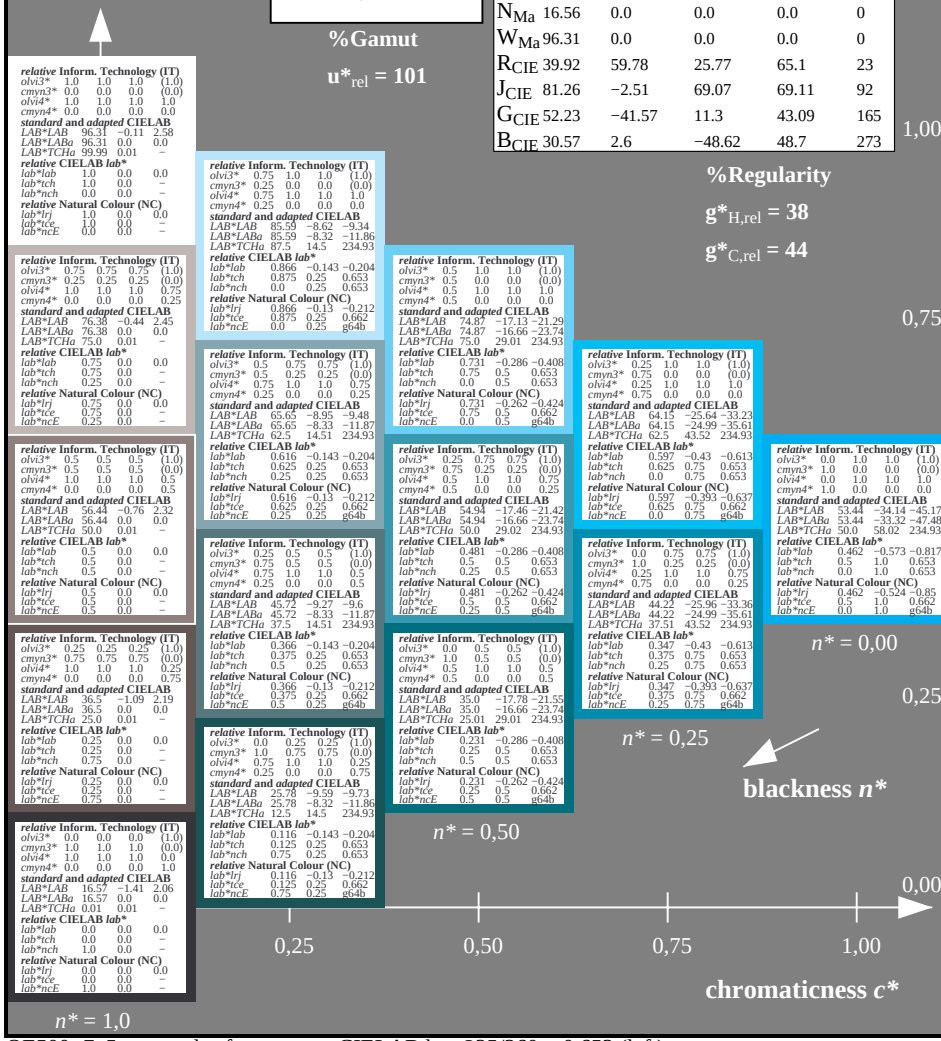
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



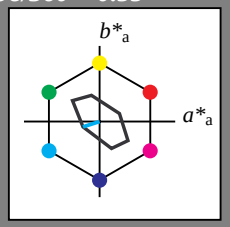
OE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 198/360 = 0.55*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

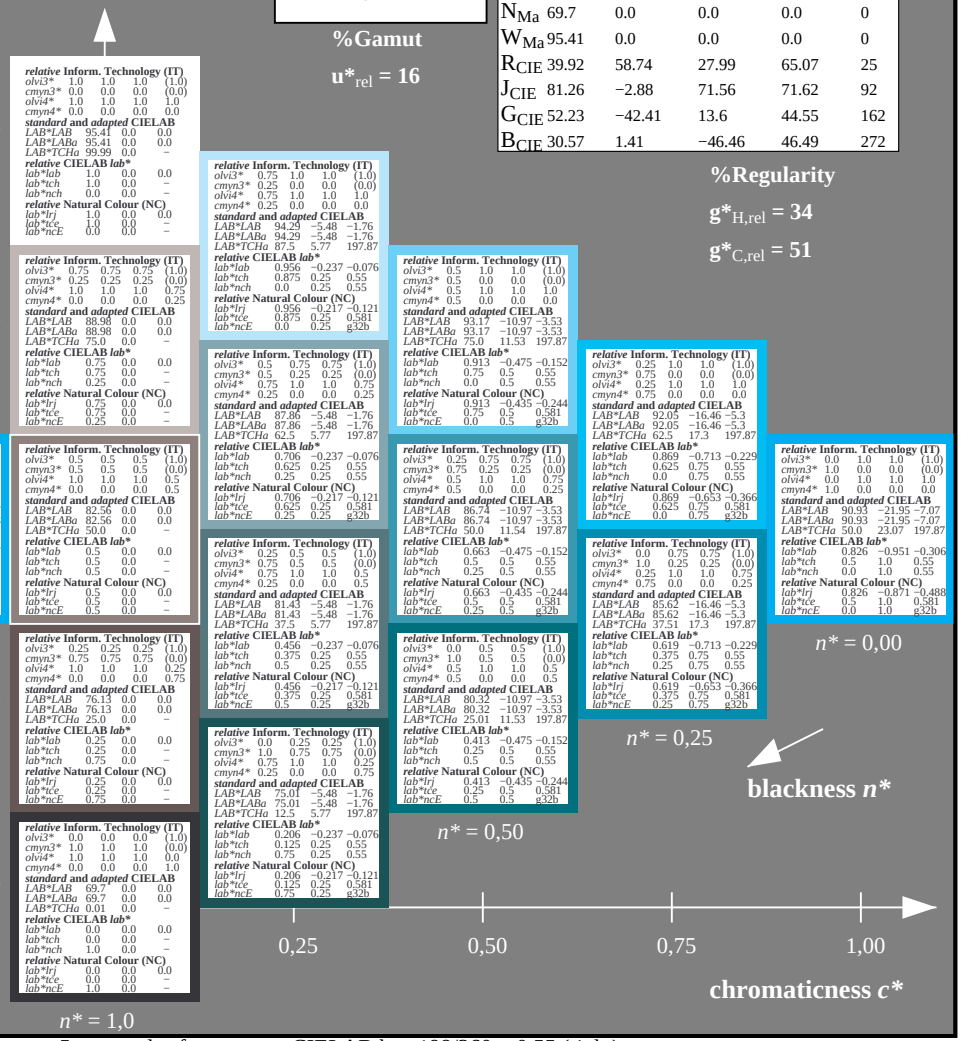
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

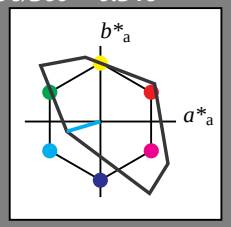
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

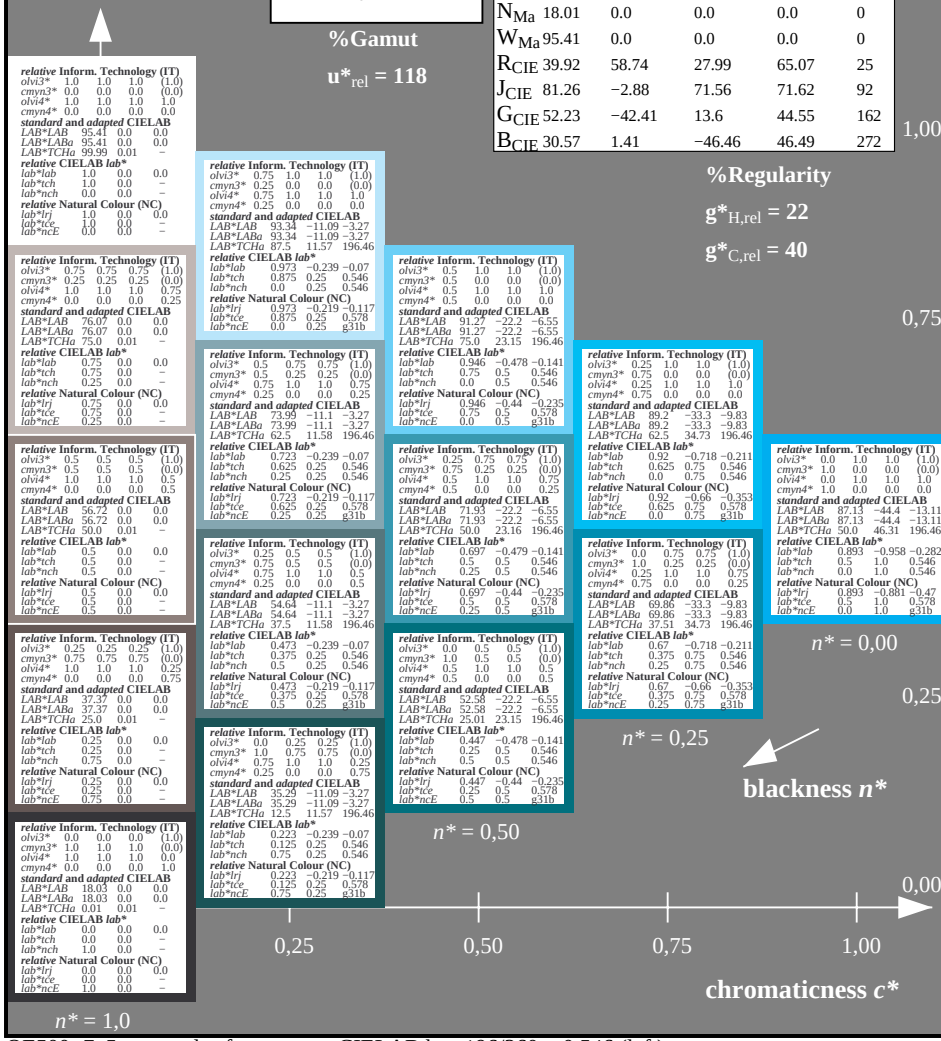
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

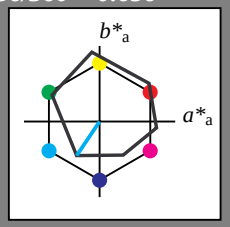
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

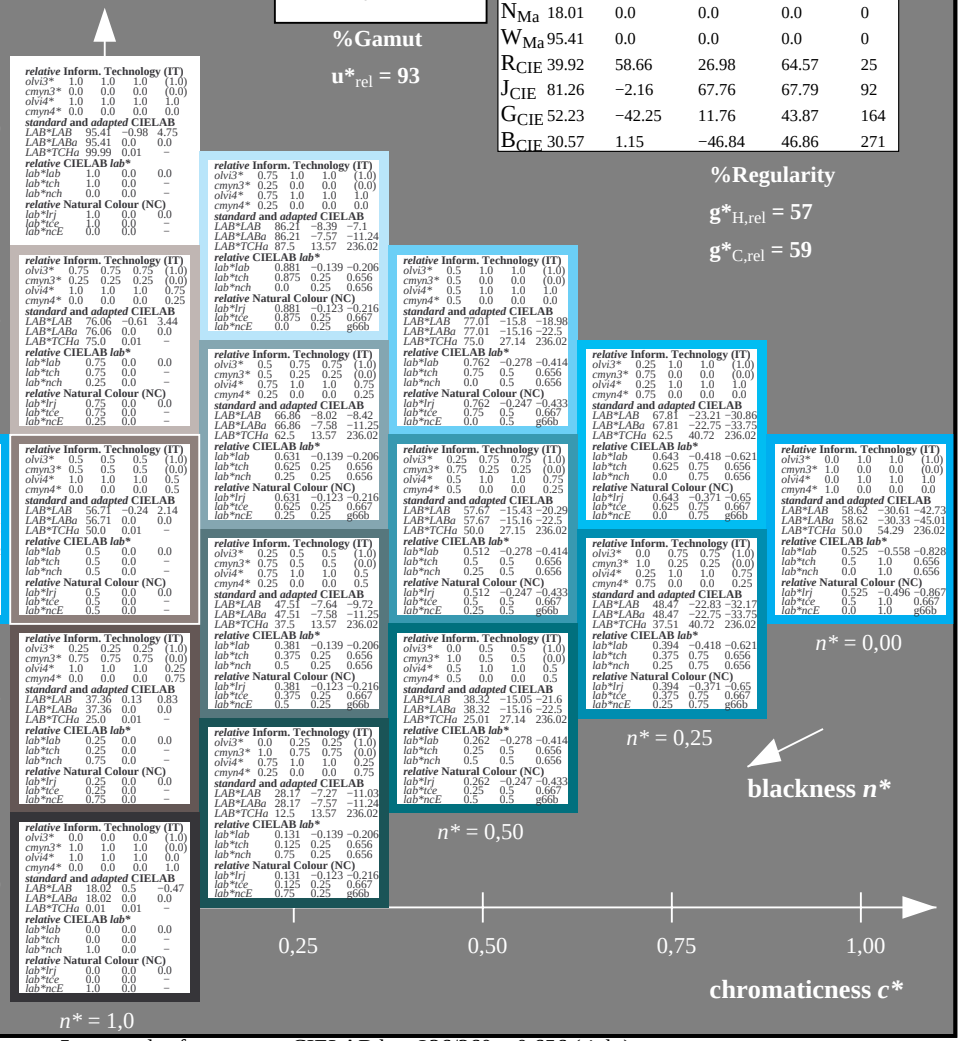
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

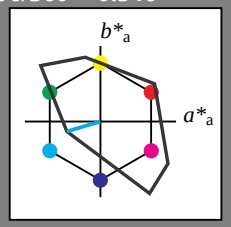
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

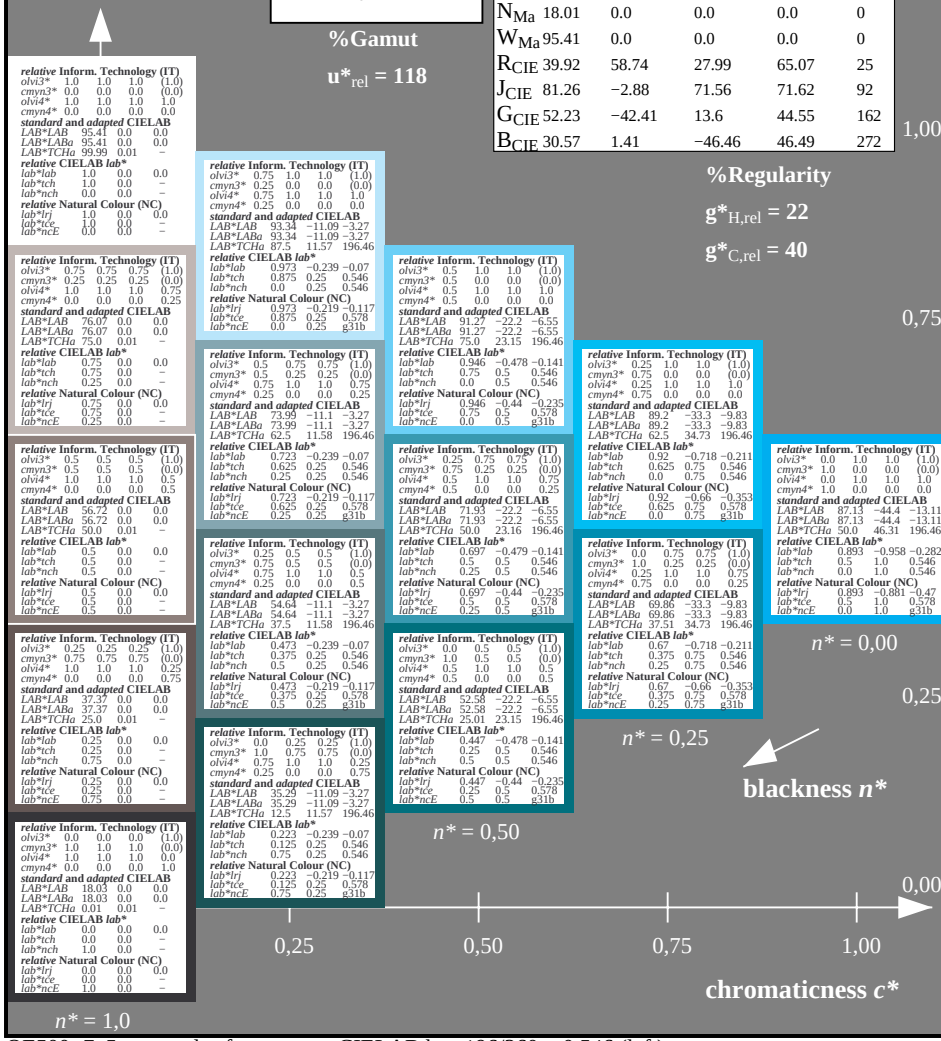
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

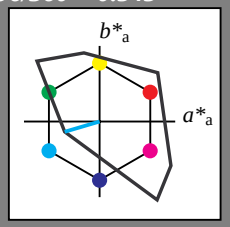
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

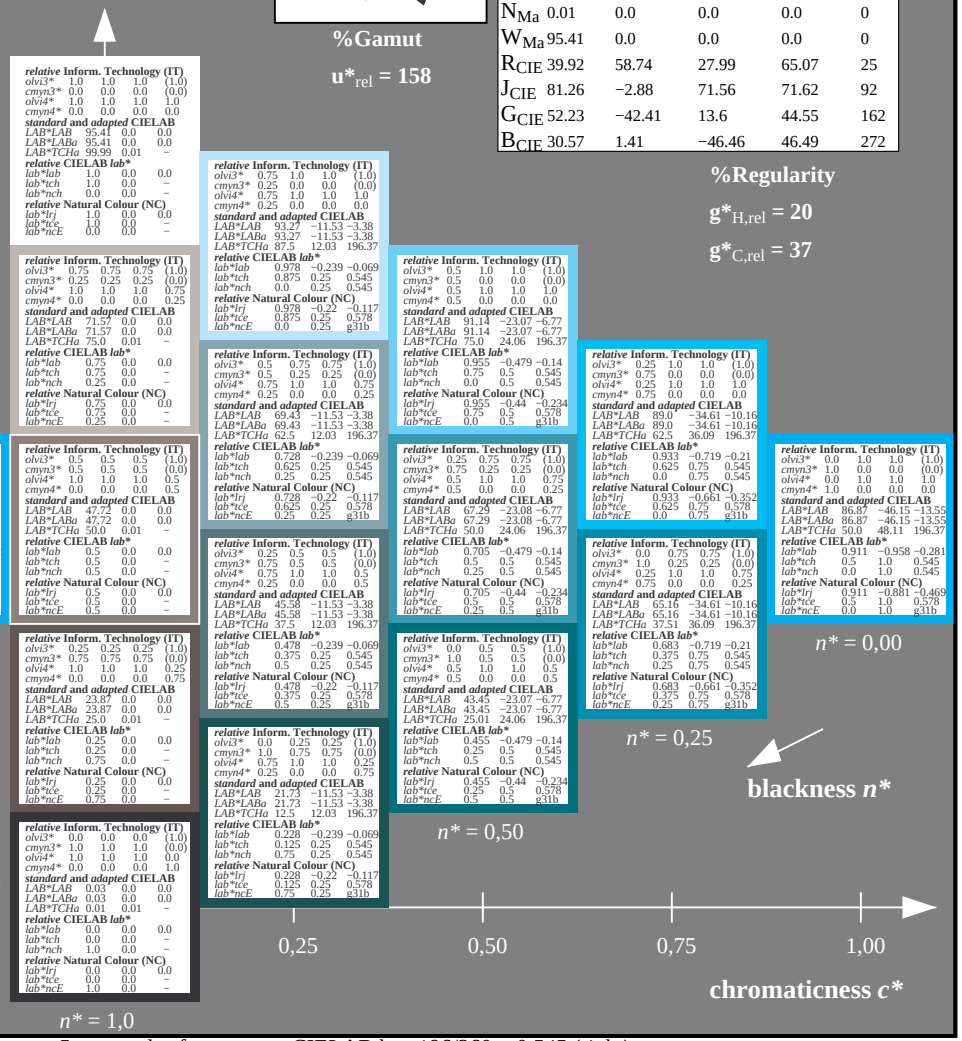
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

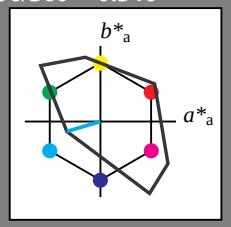
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

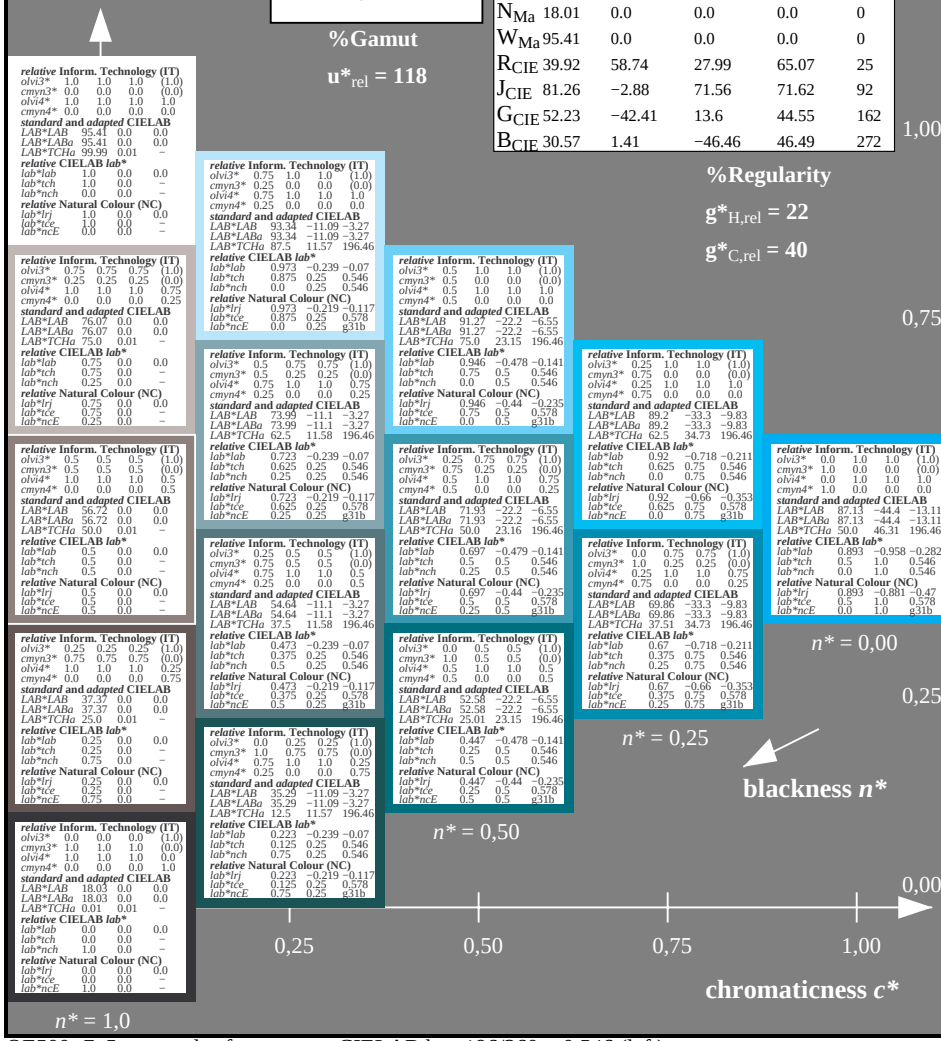
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

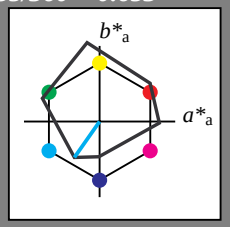
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

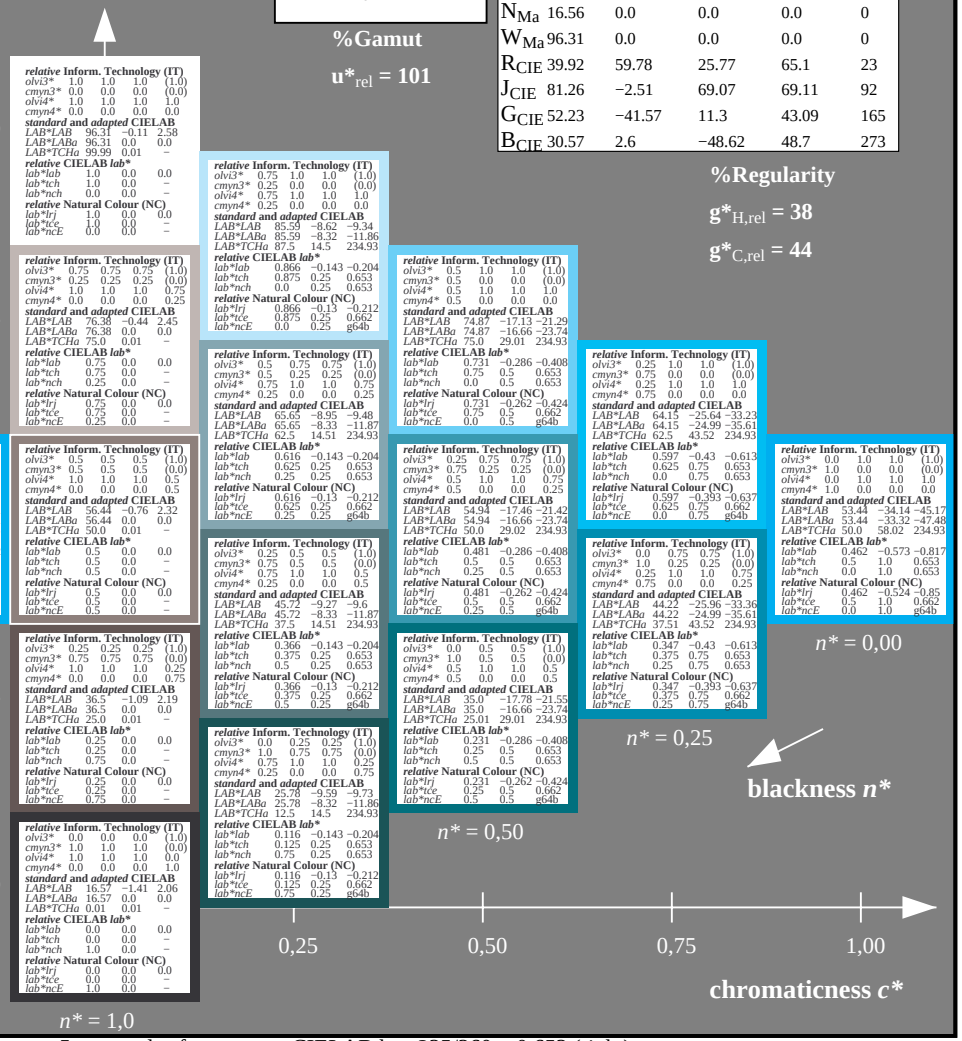
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



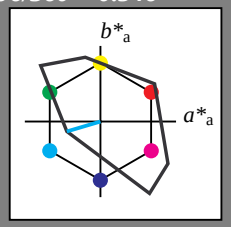
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

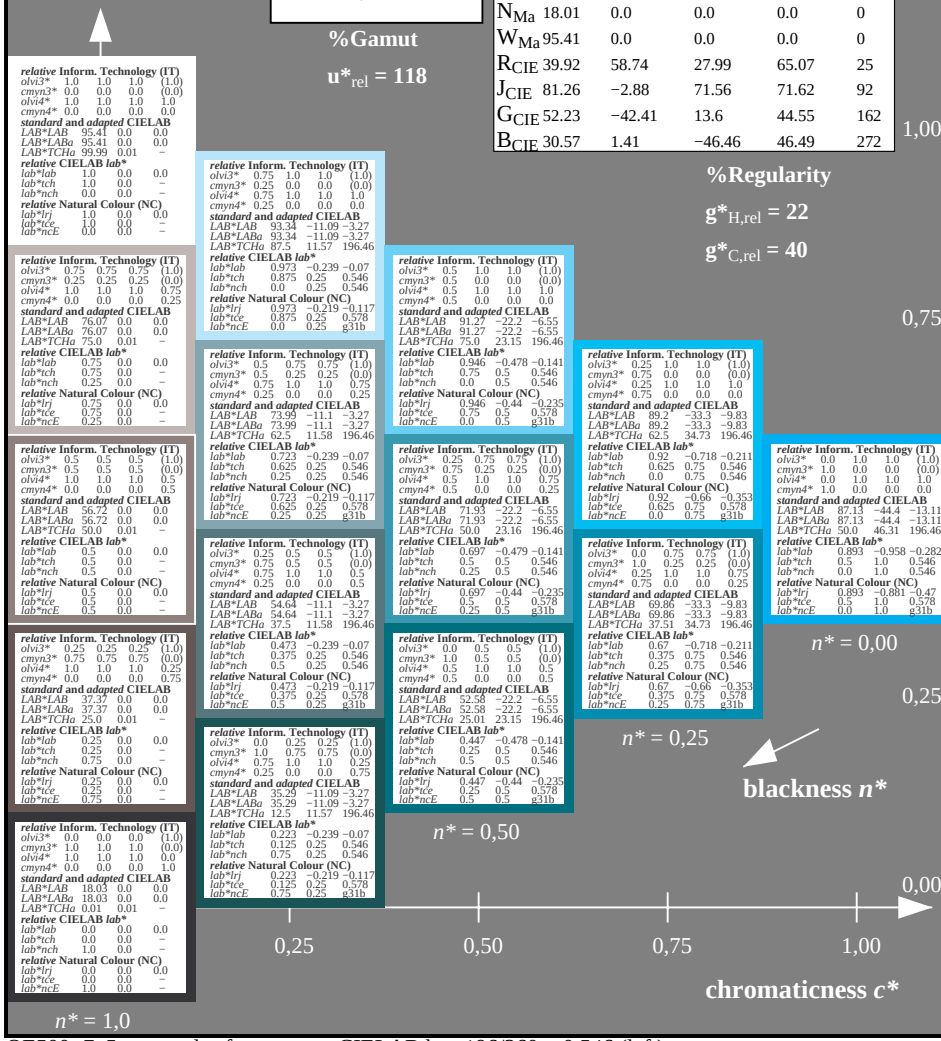
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



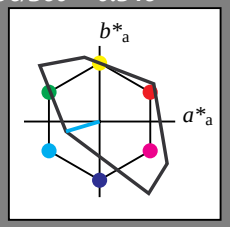
OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

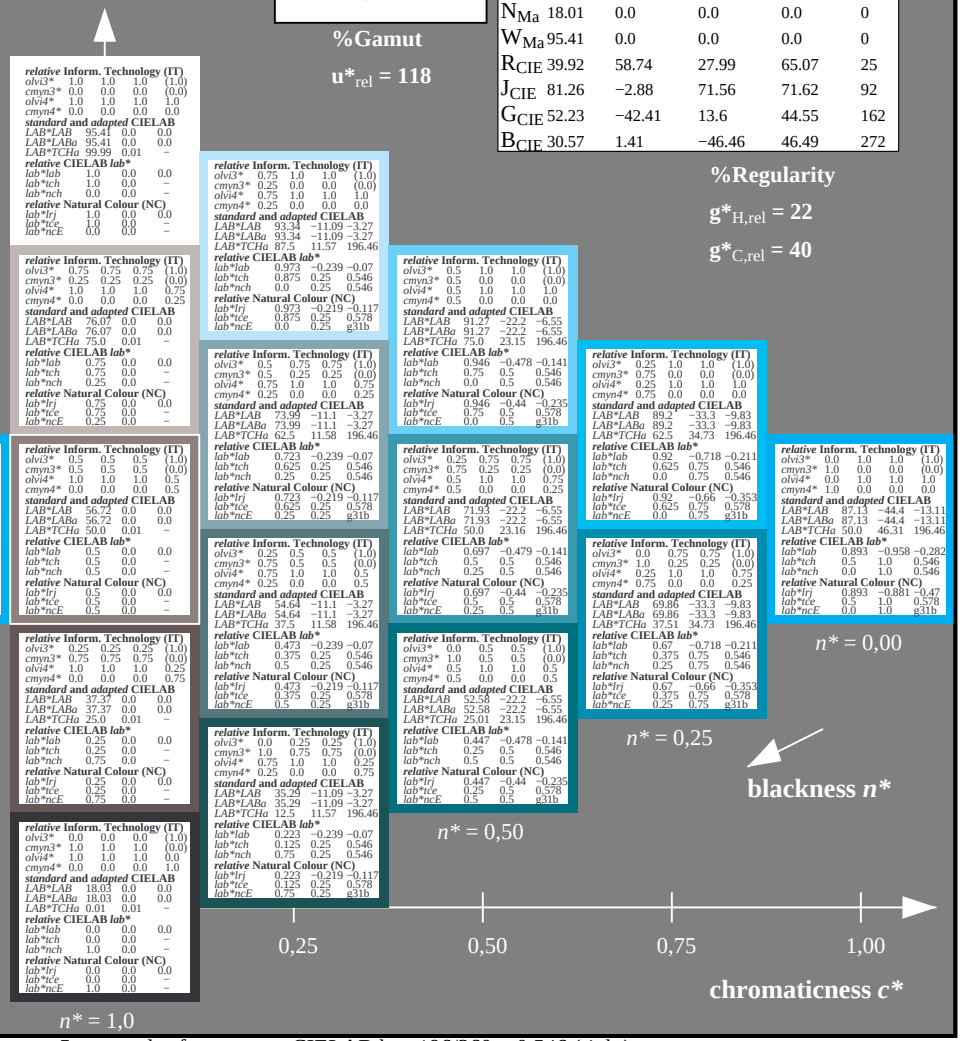
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

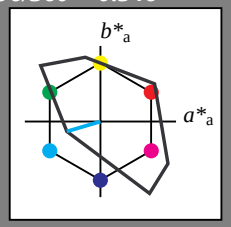
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

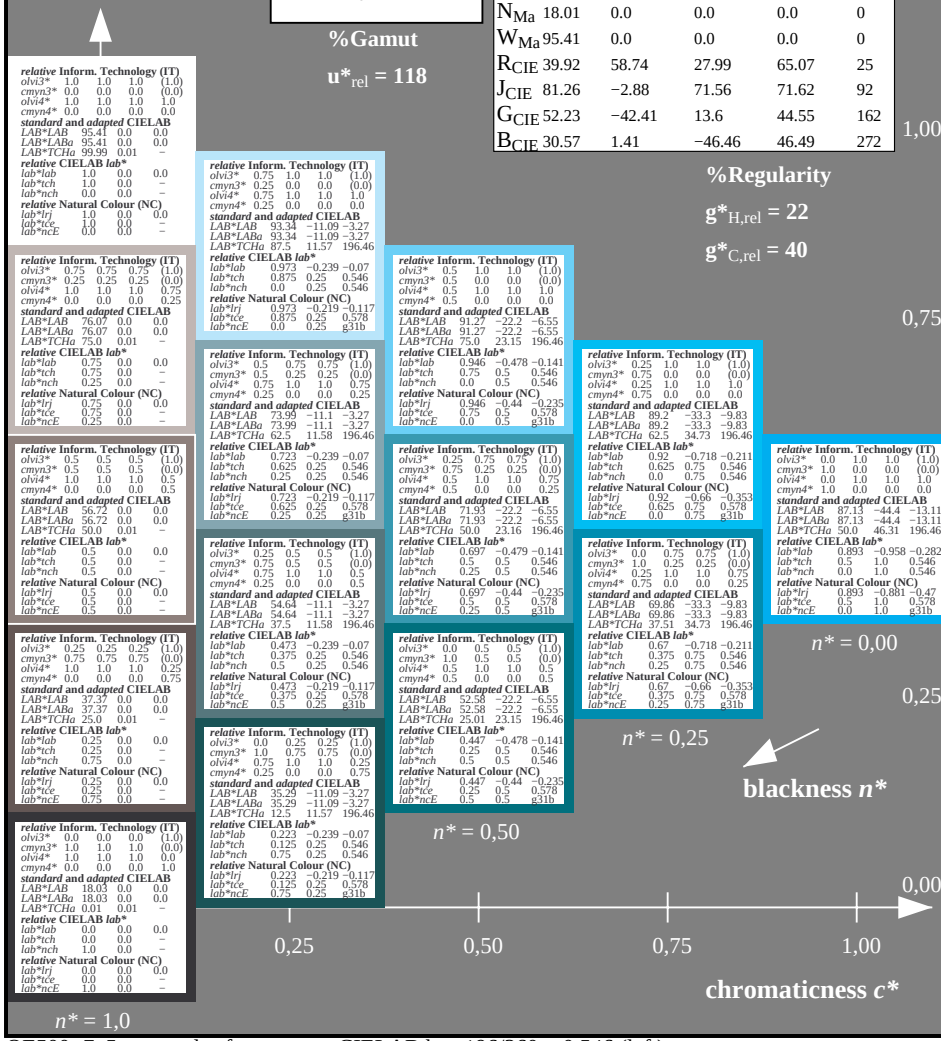
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

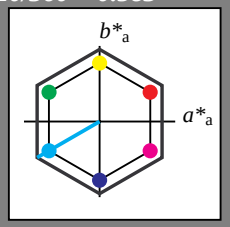
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

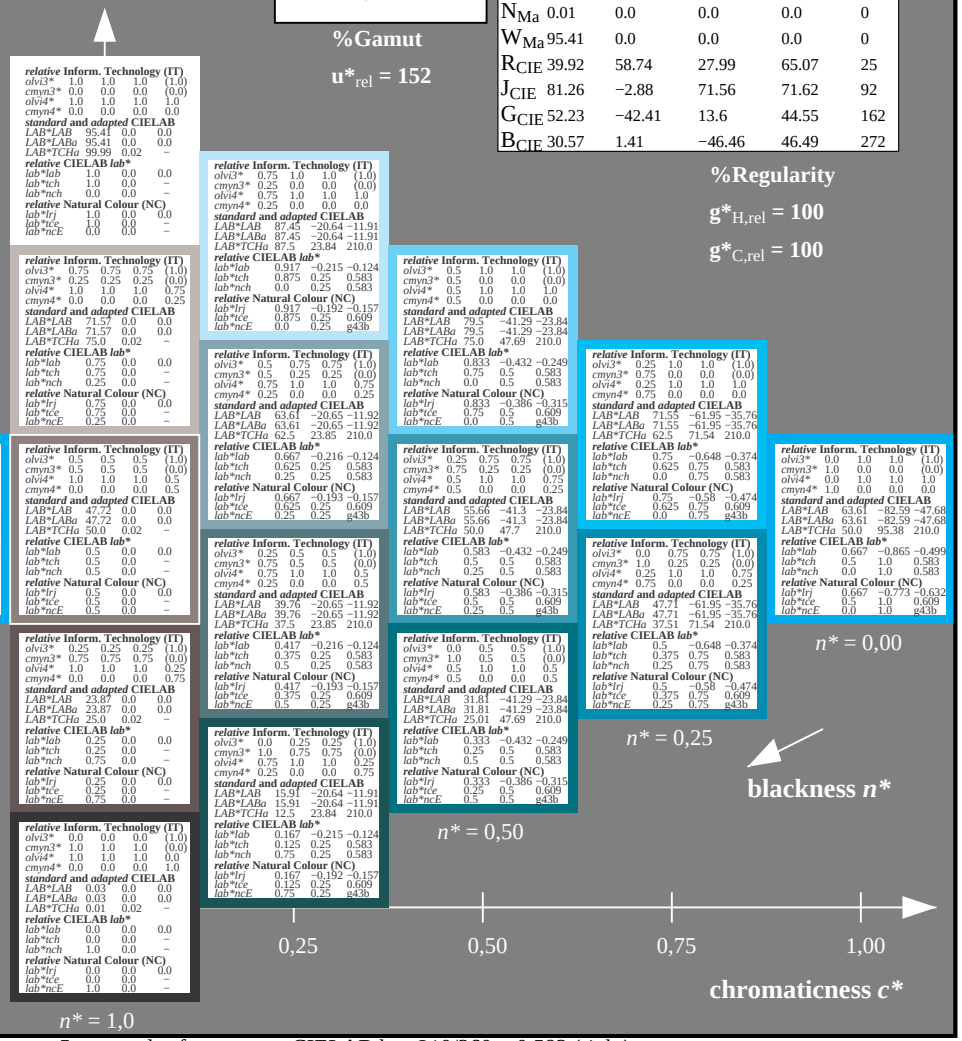
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

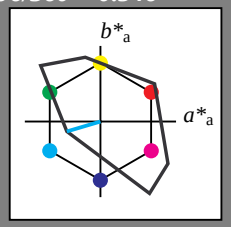
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

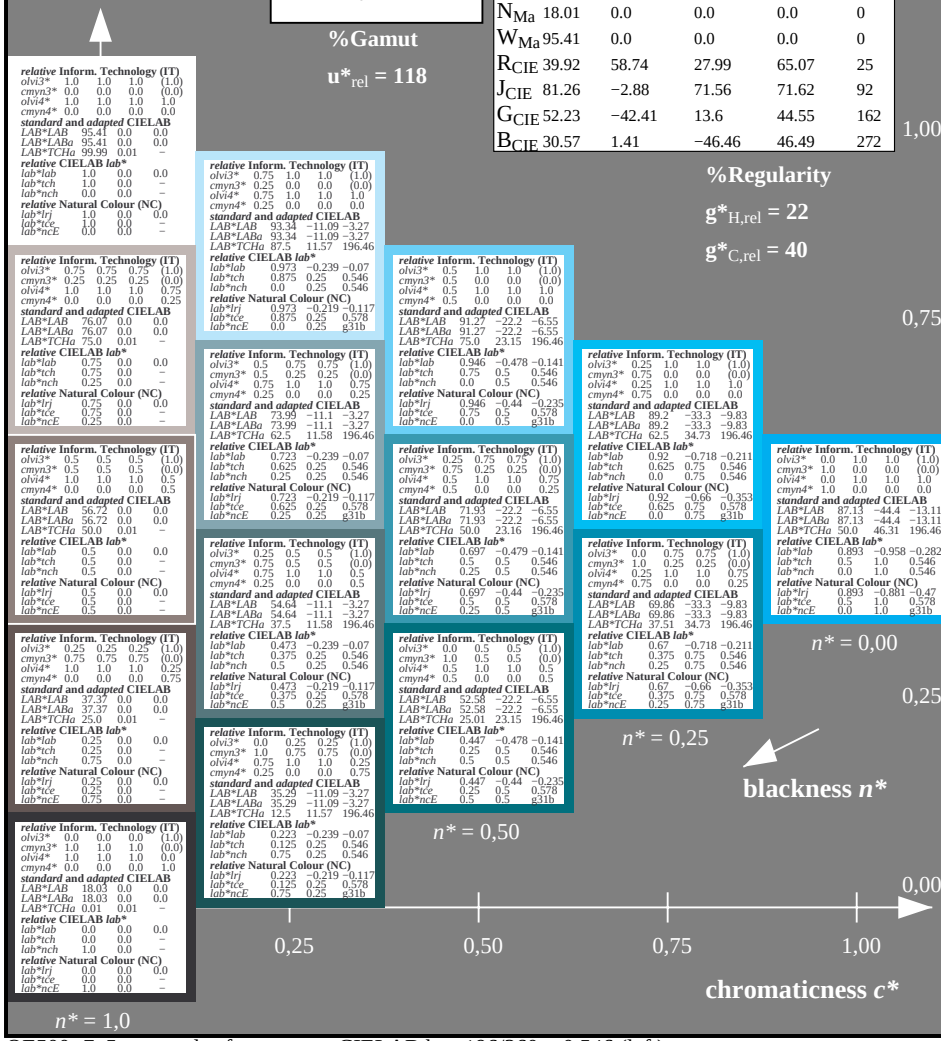
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

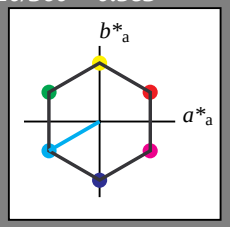
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

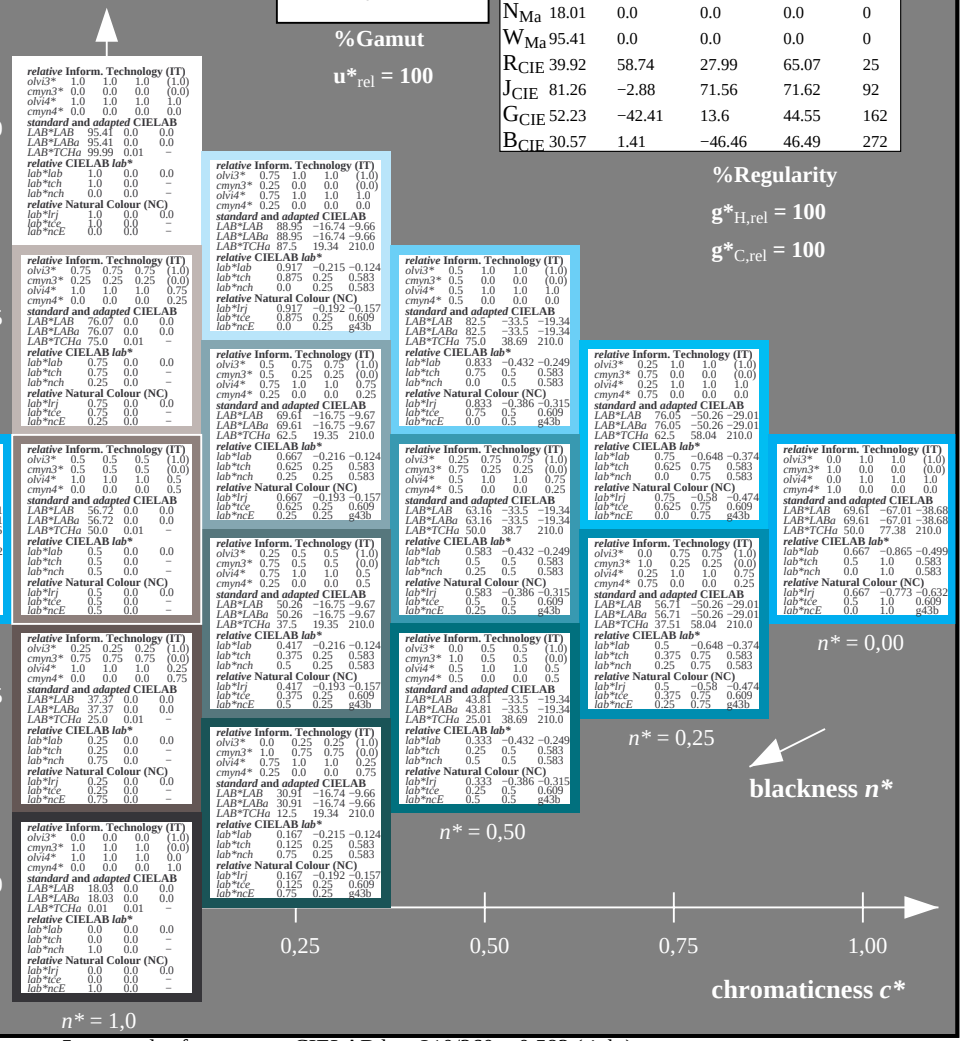
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

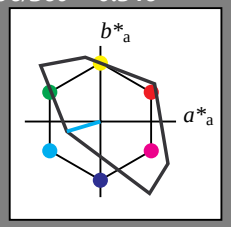


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

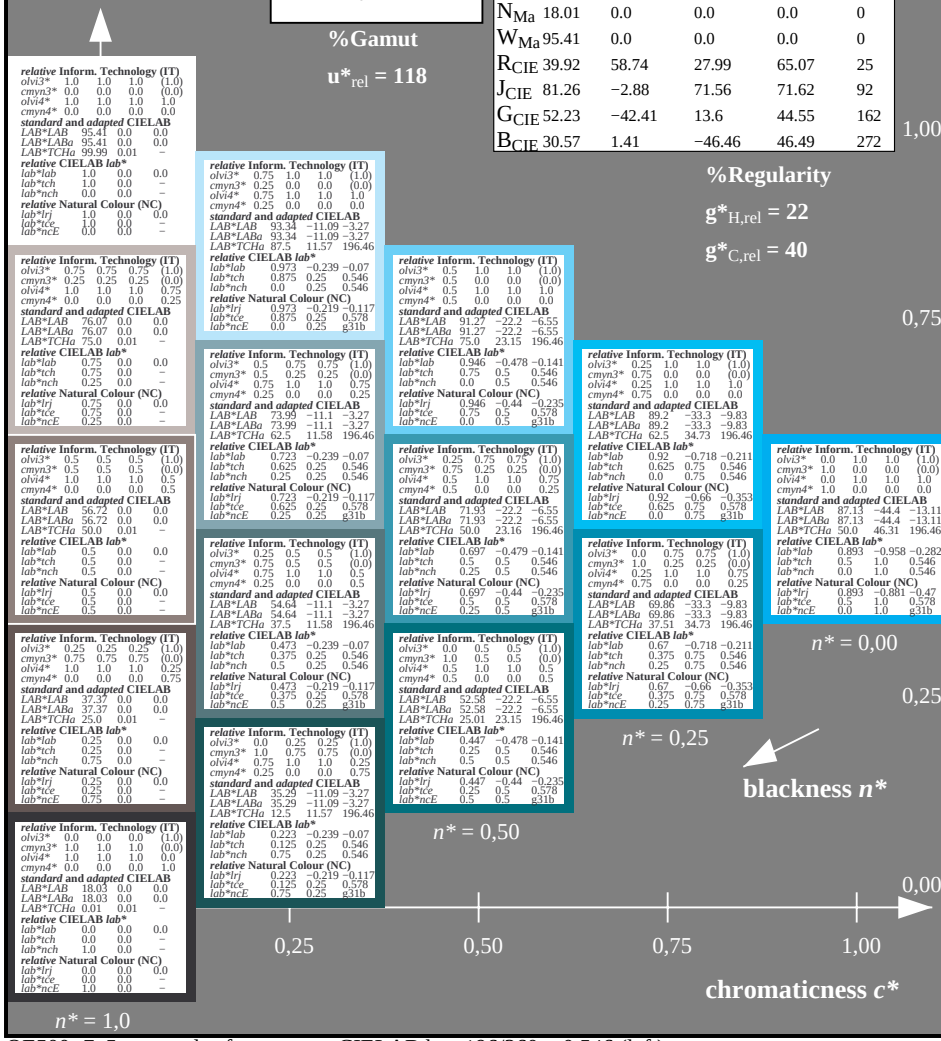
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

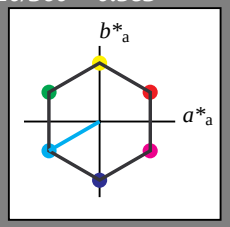


OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

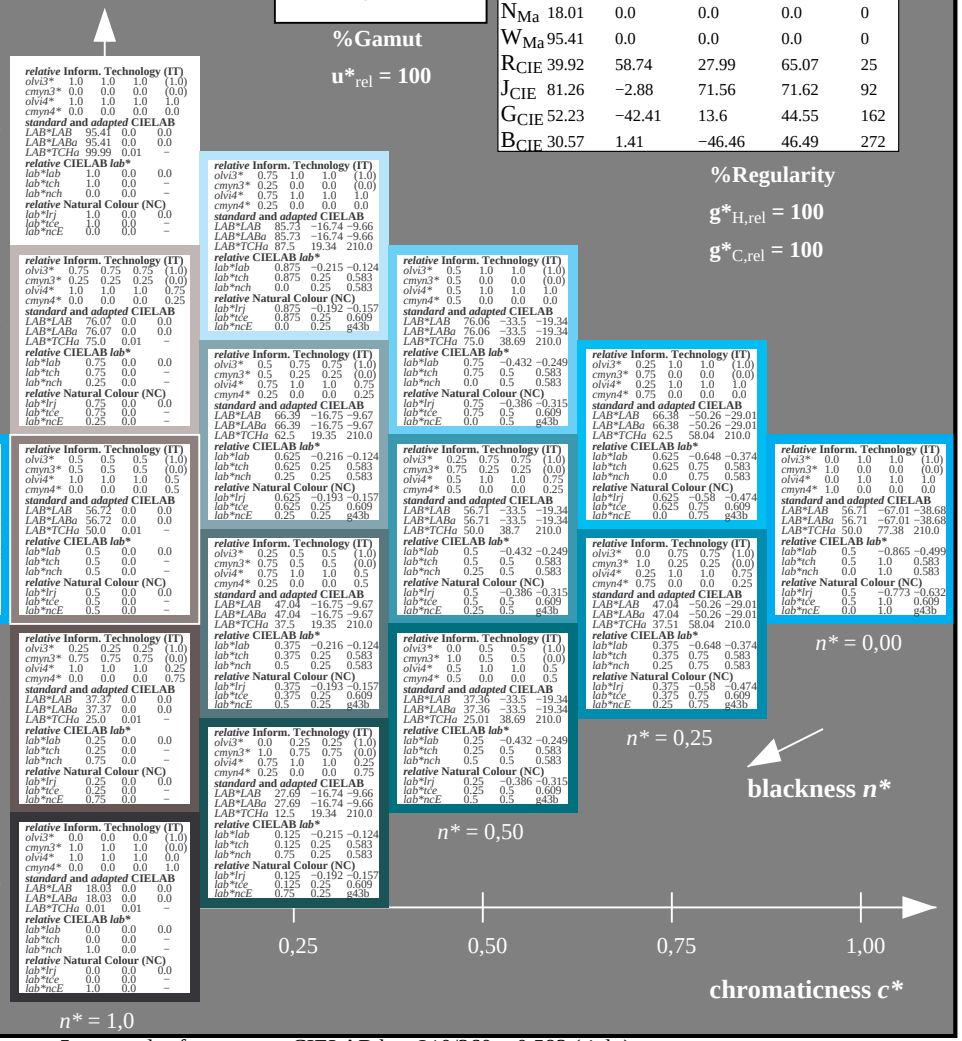
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



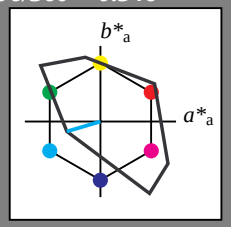
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

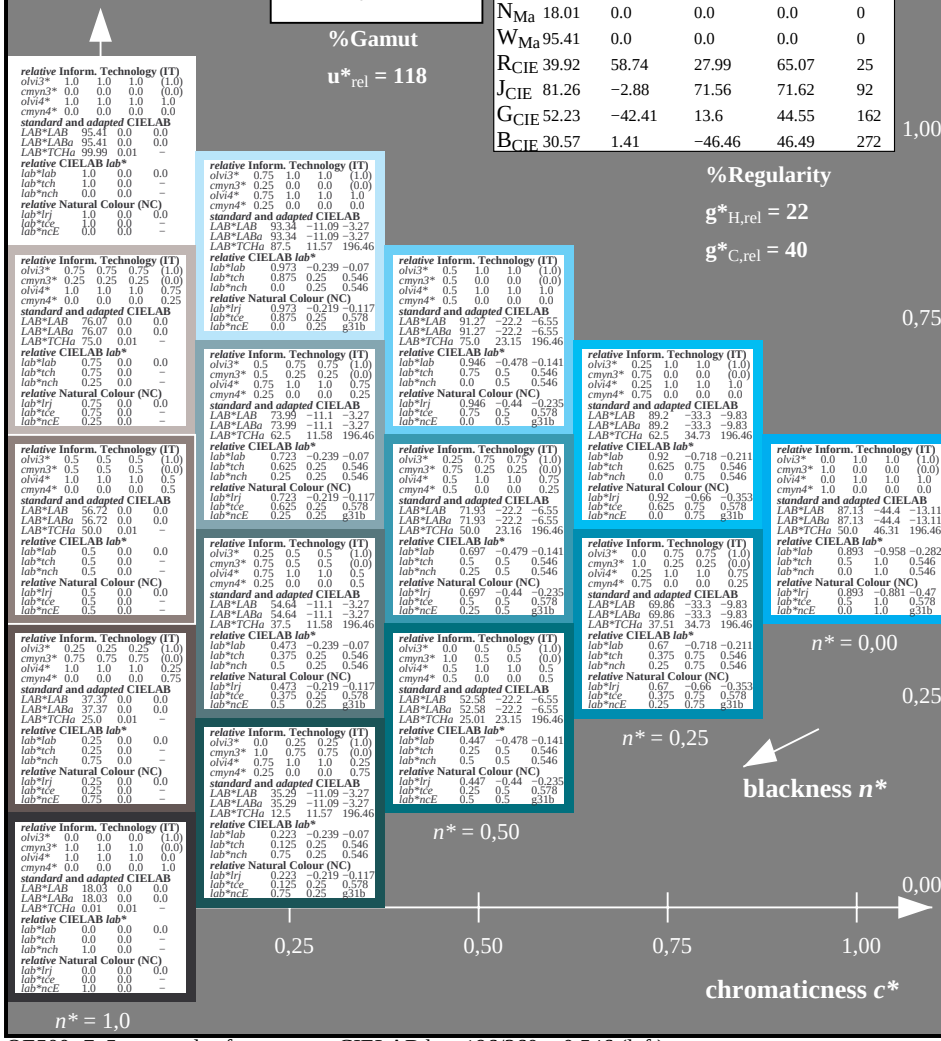
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

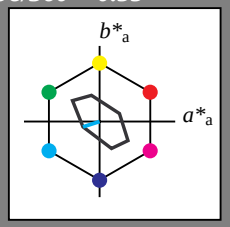


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

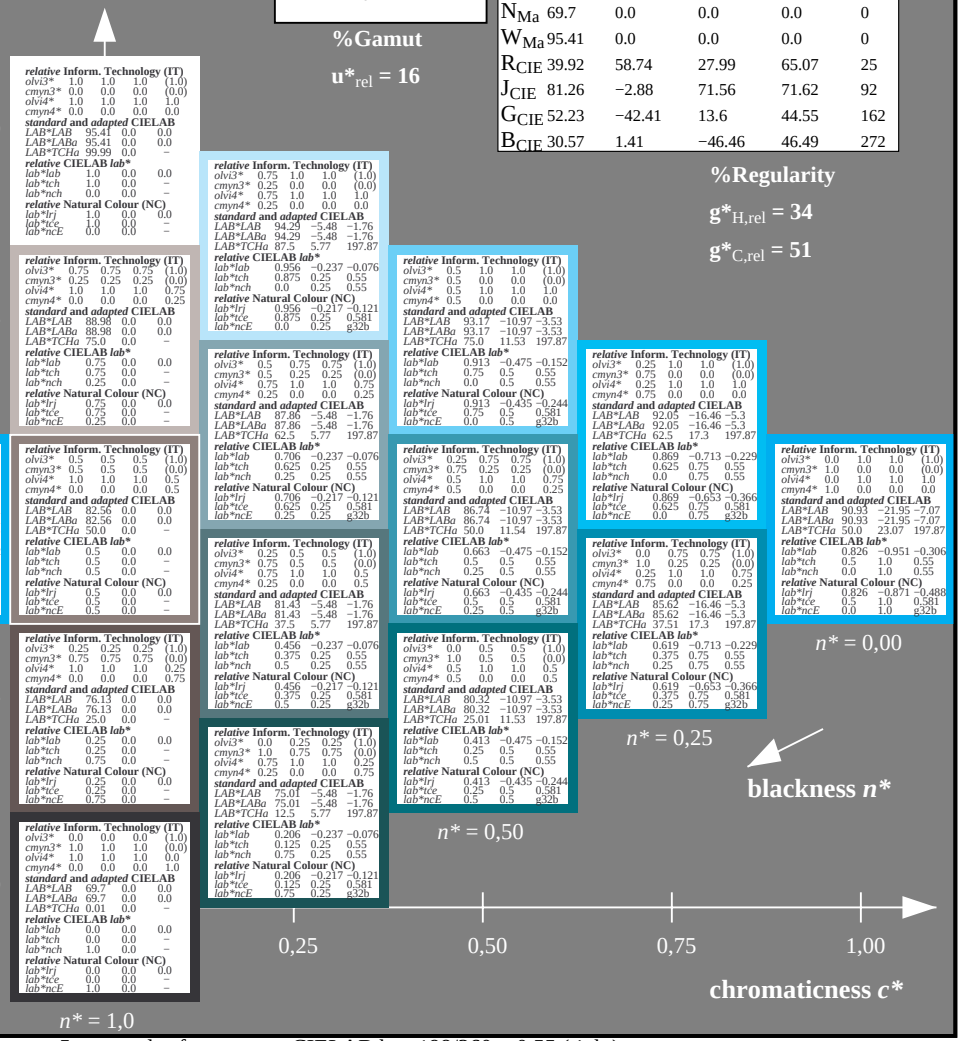
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

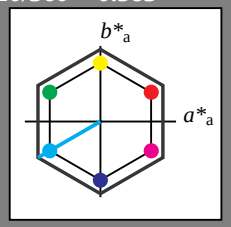
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

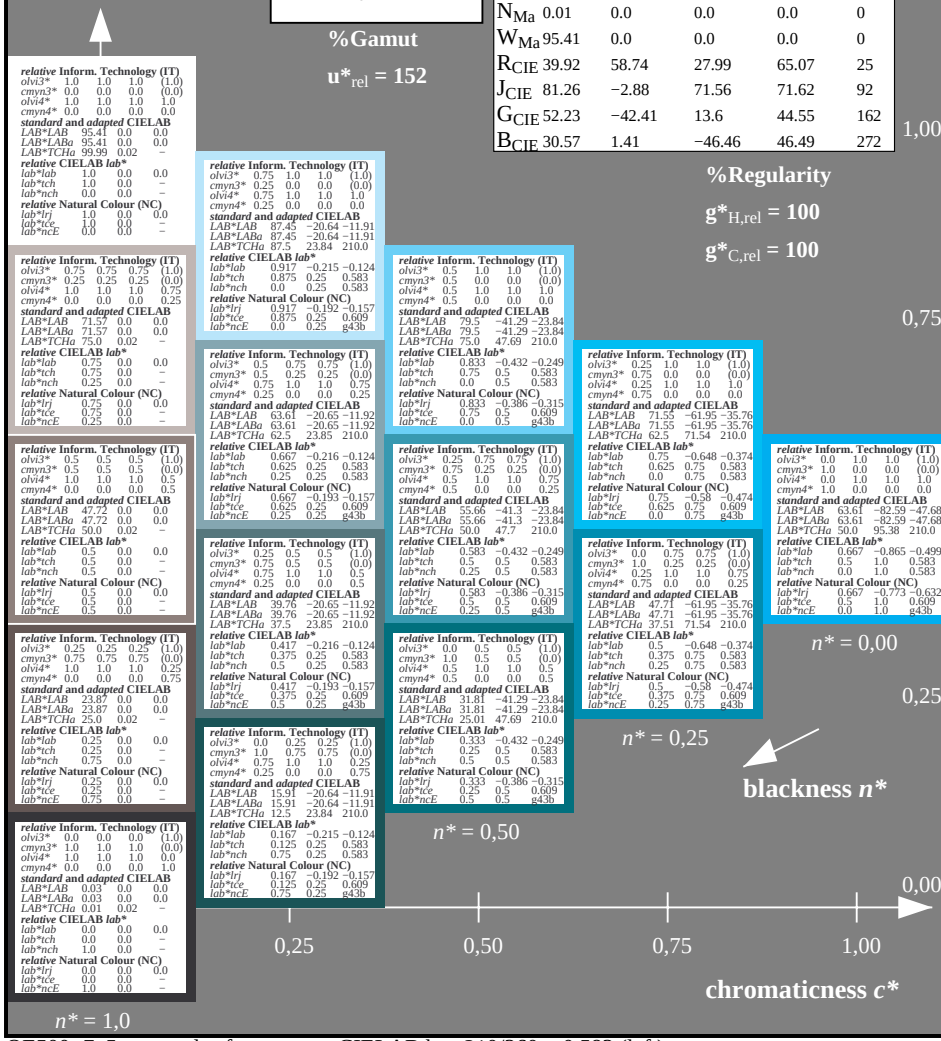
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

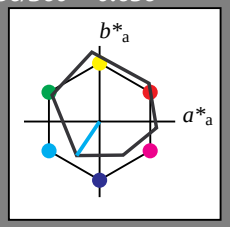
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

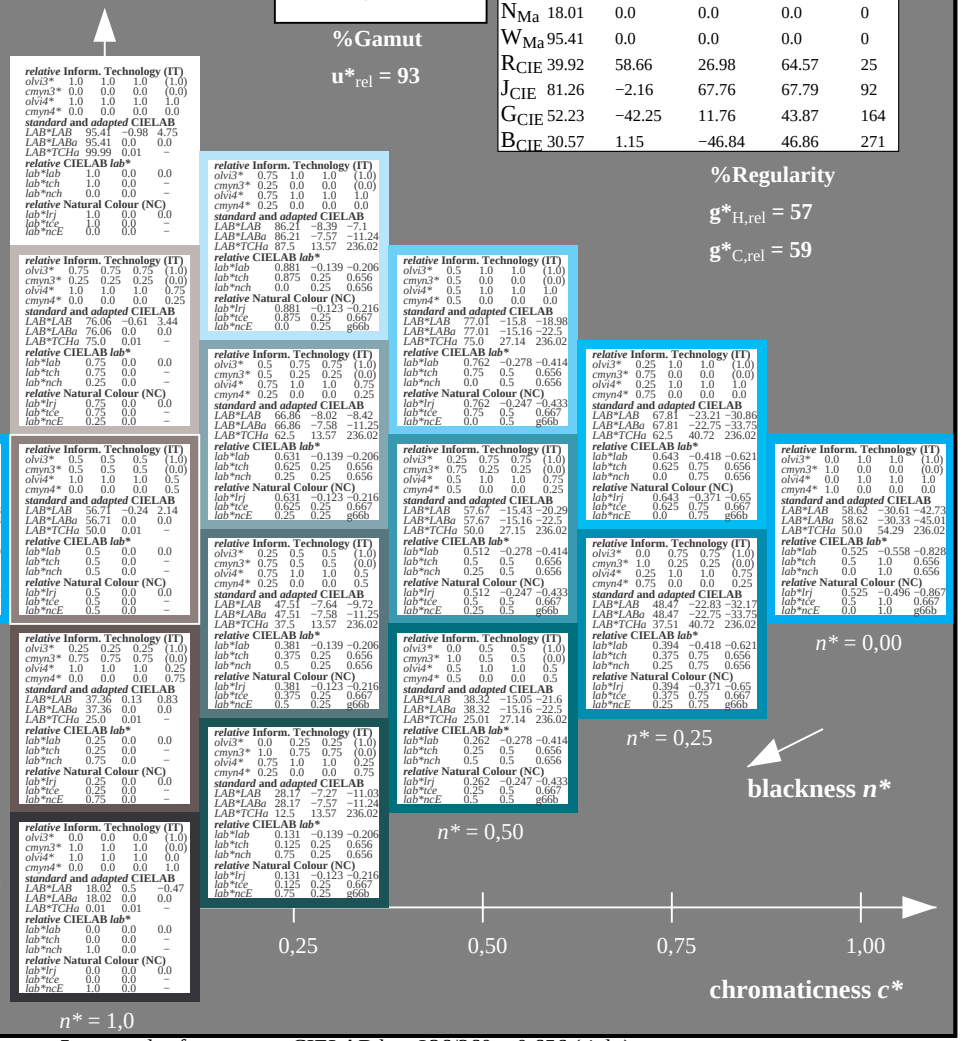
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



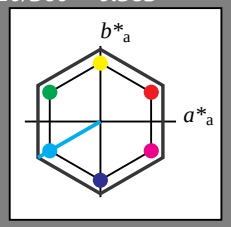
5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

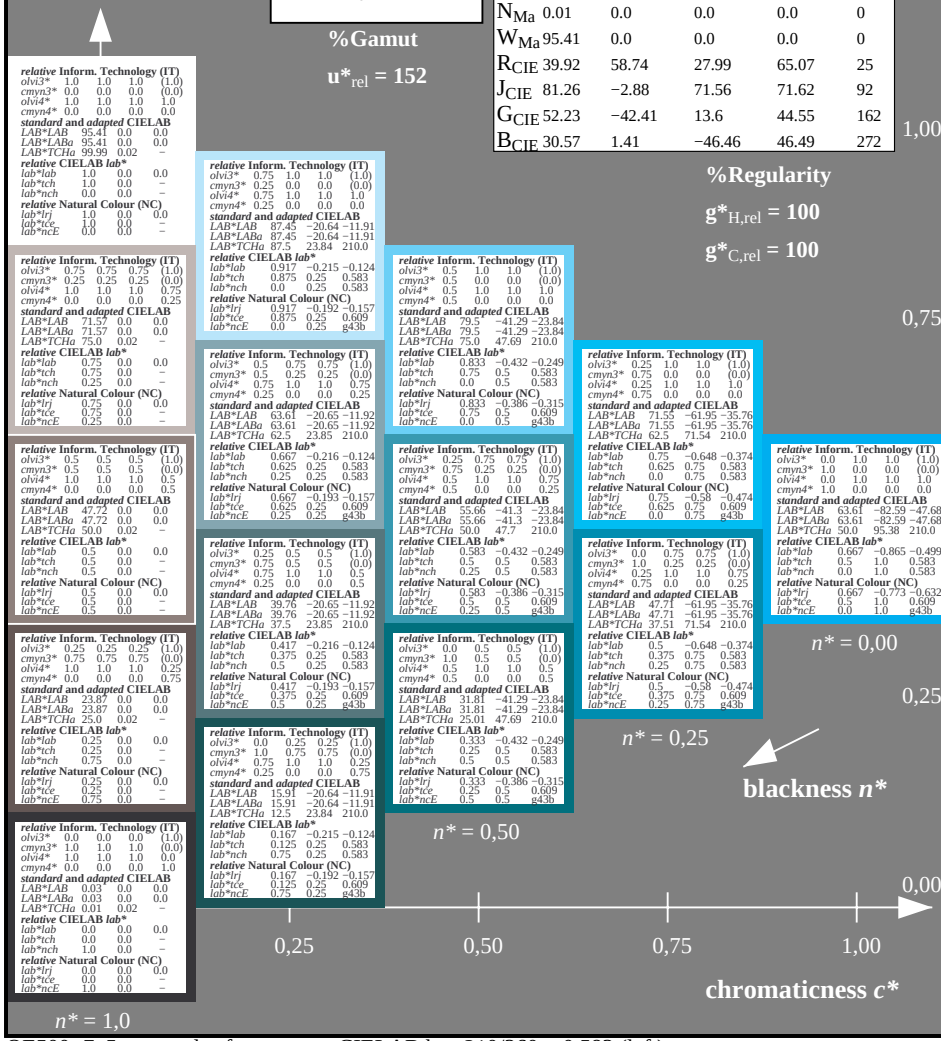
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



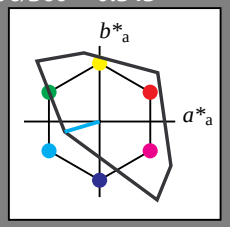
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

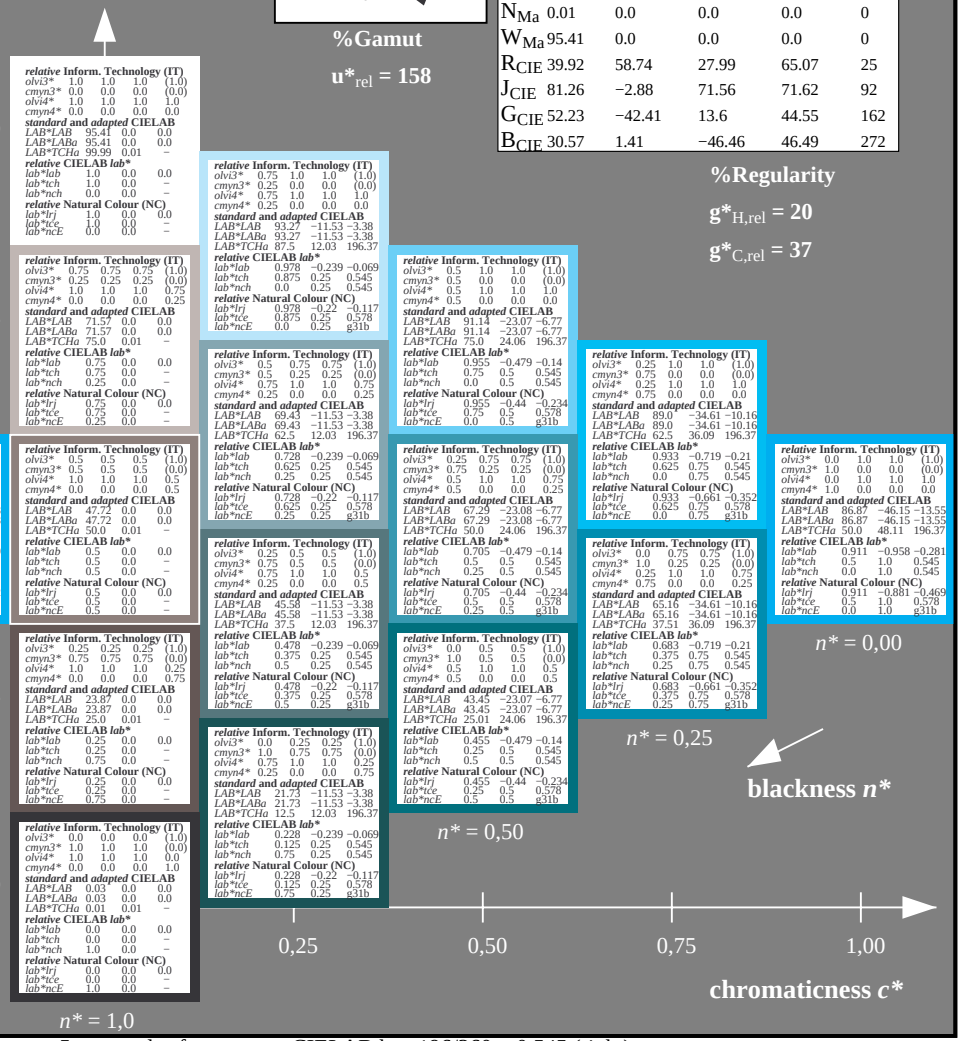
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Natural Luminous System NLS00

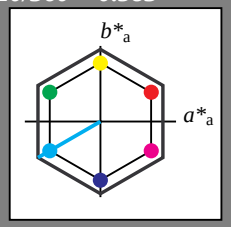
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

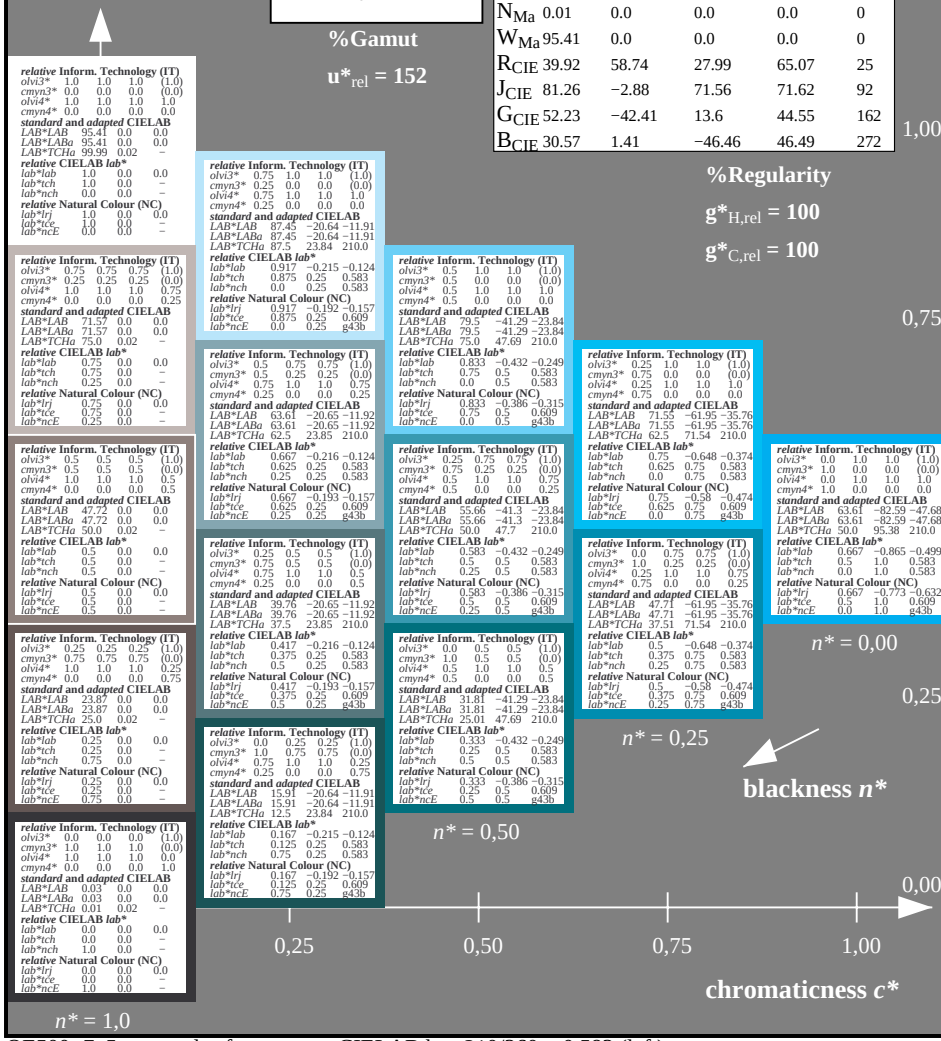
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Printer Reflective System DRSXX

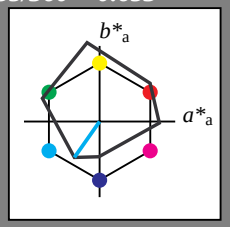
for hue $h^* = lab^*h = 235/360 = 0.653$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

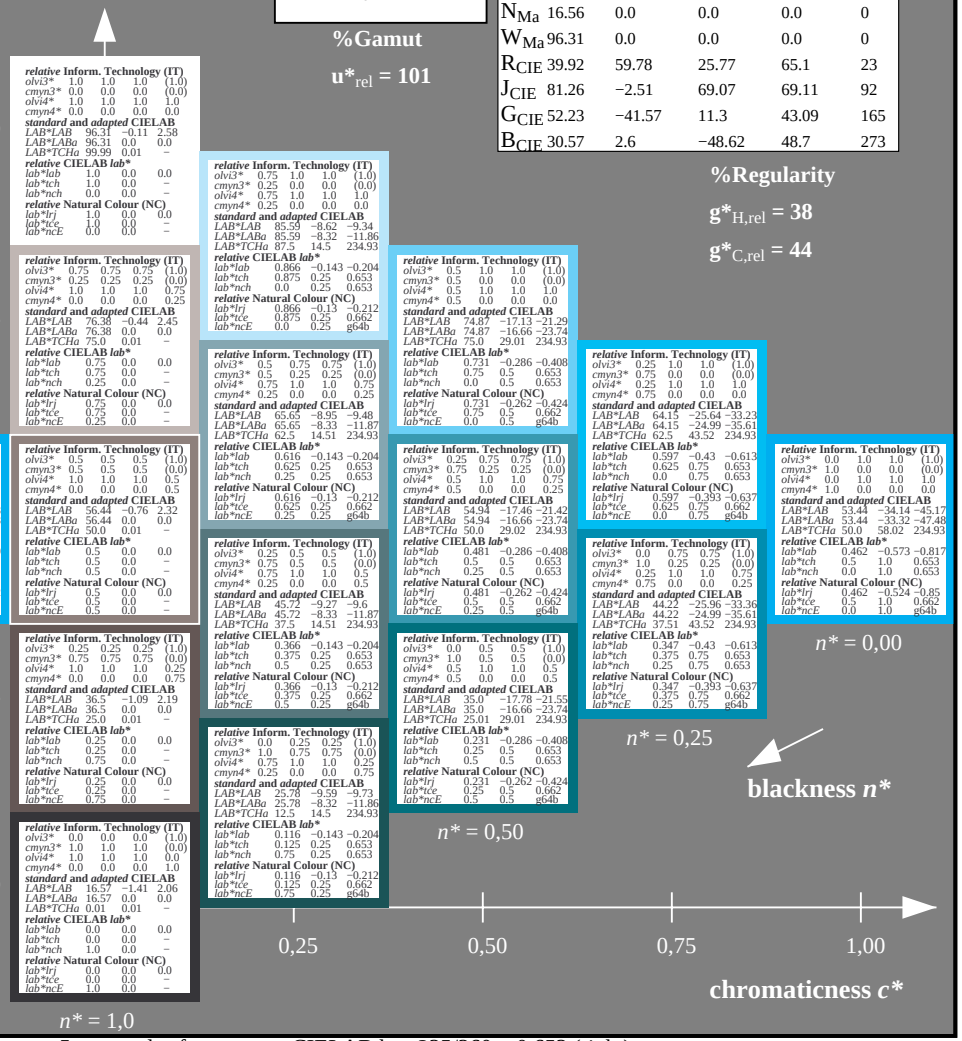
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



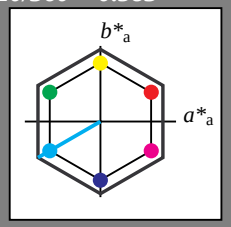
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

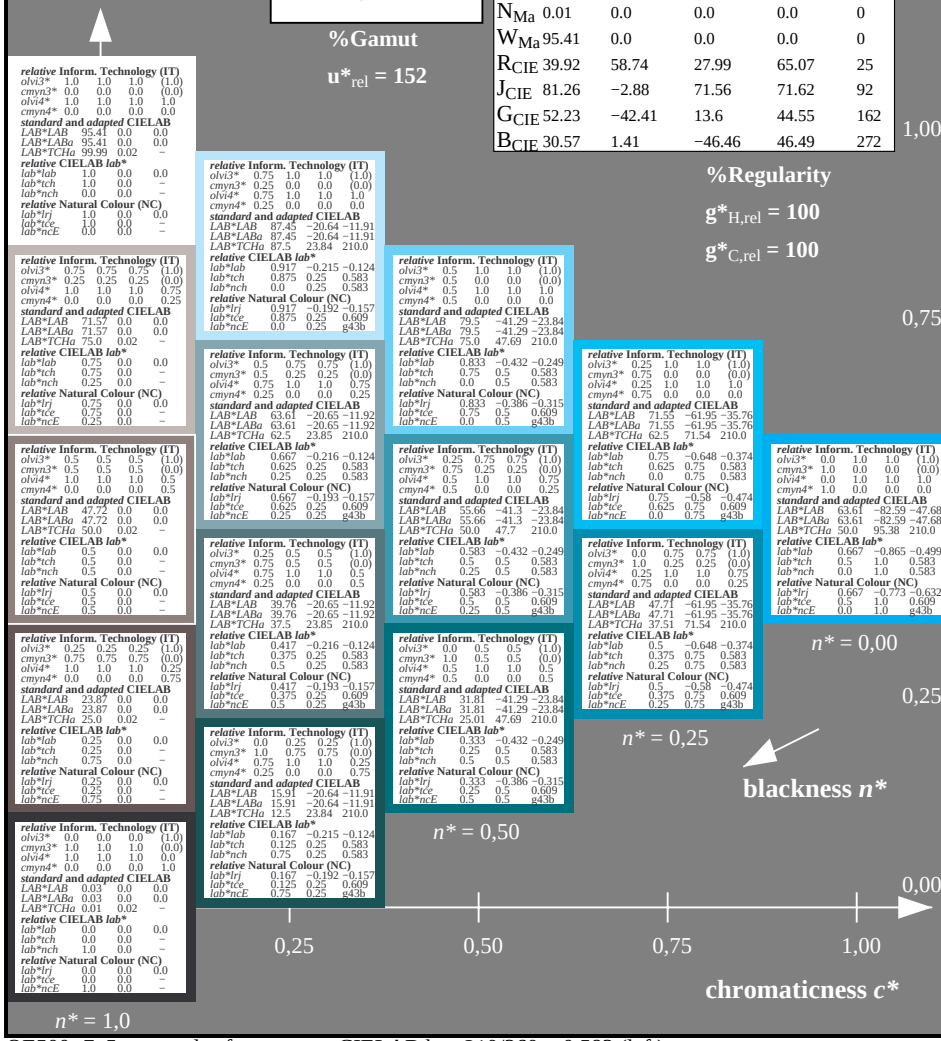
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



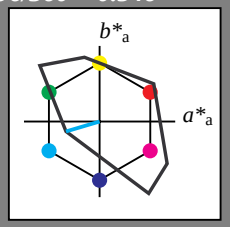
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

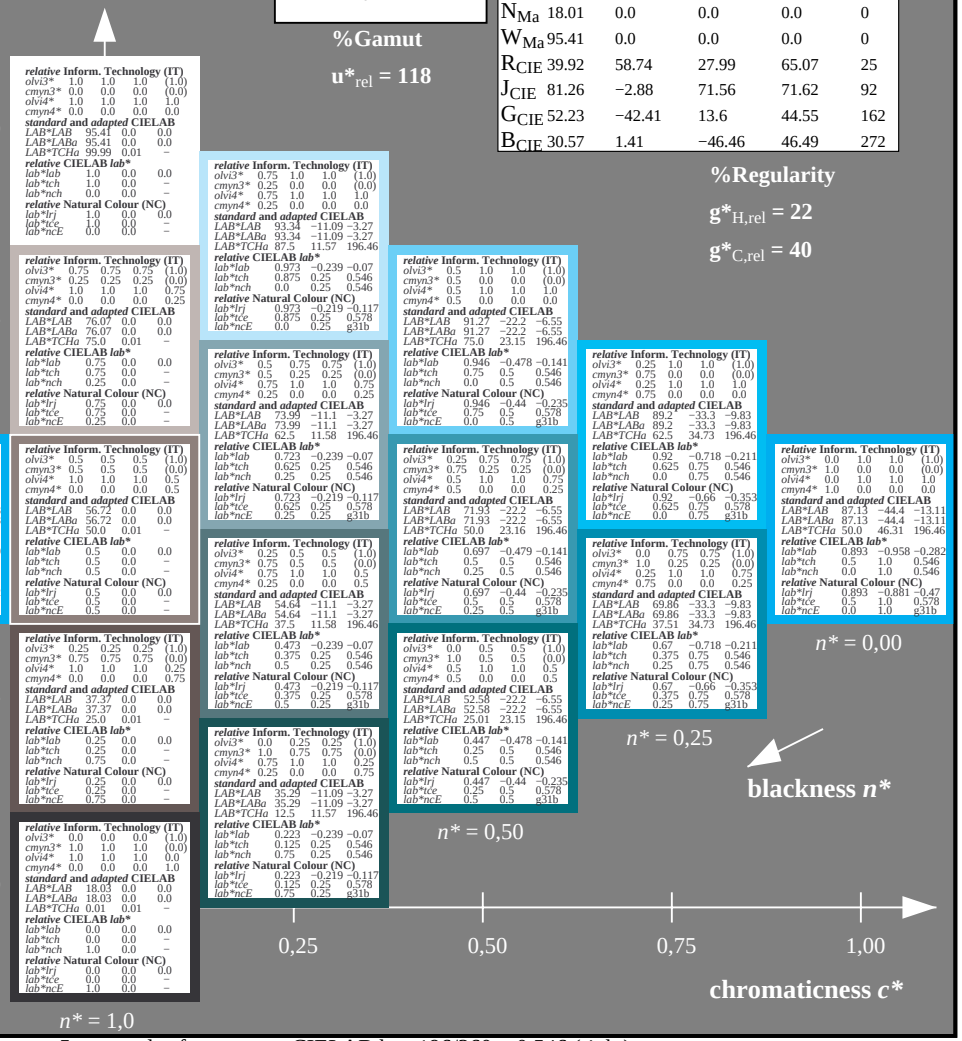
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



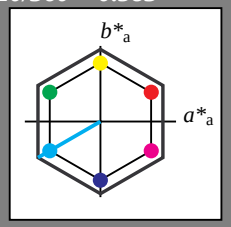
5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

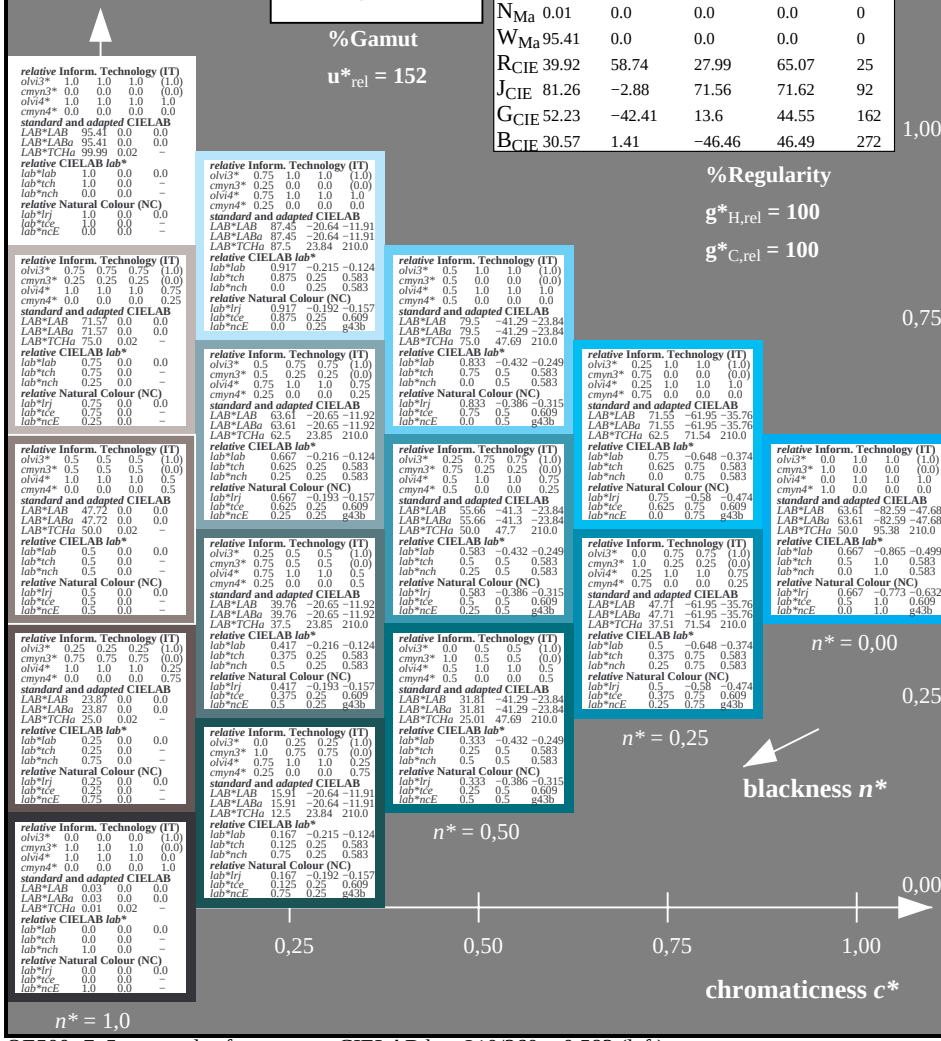
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



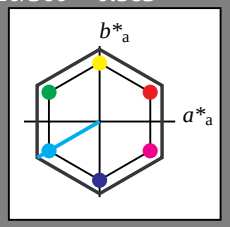
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

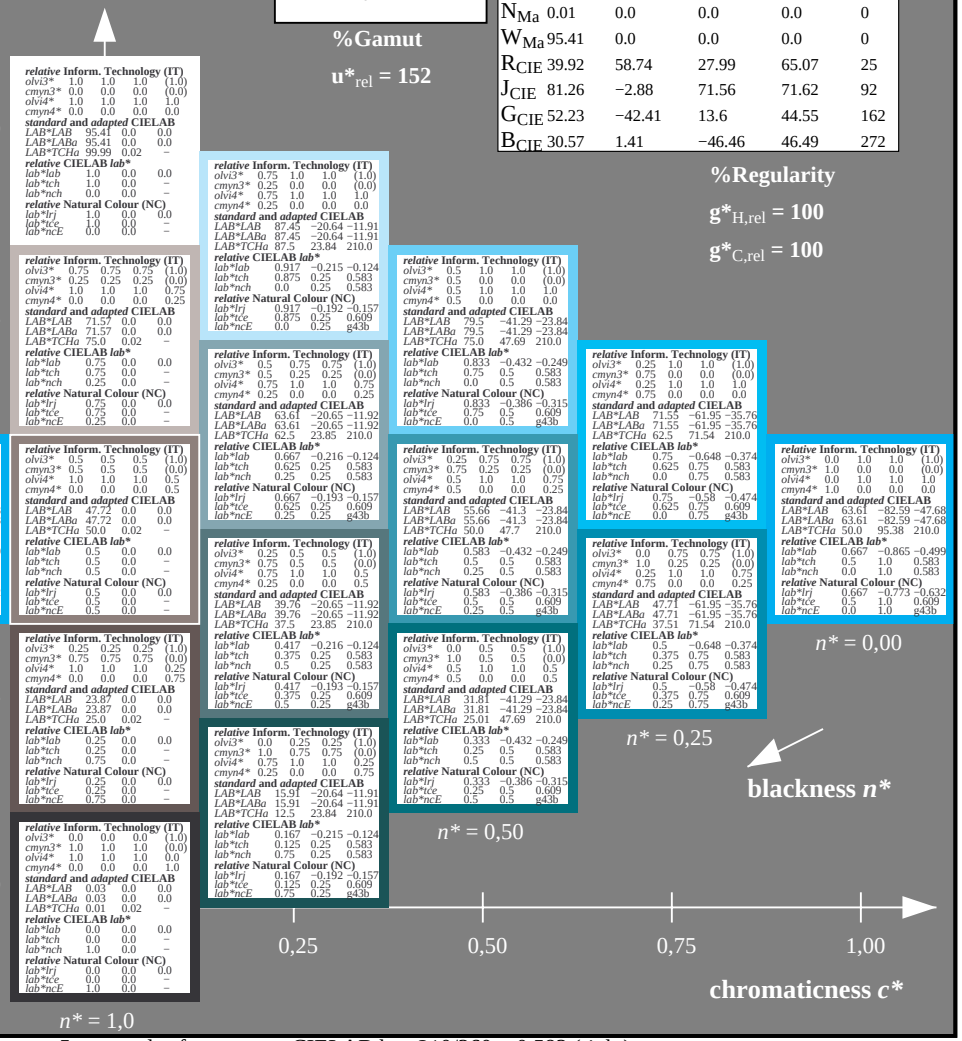
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

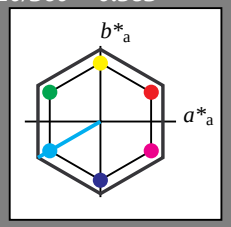


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

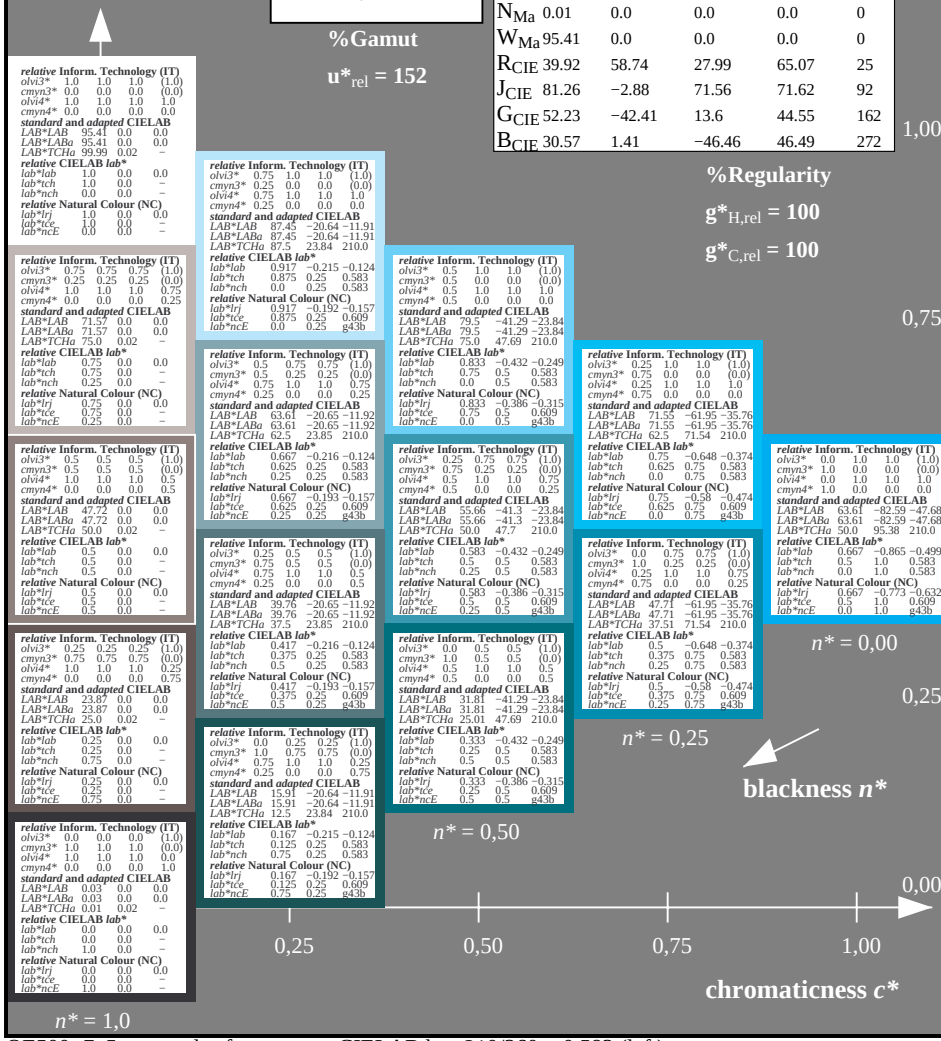
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

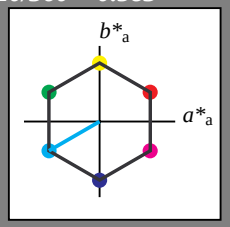


OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

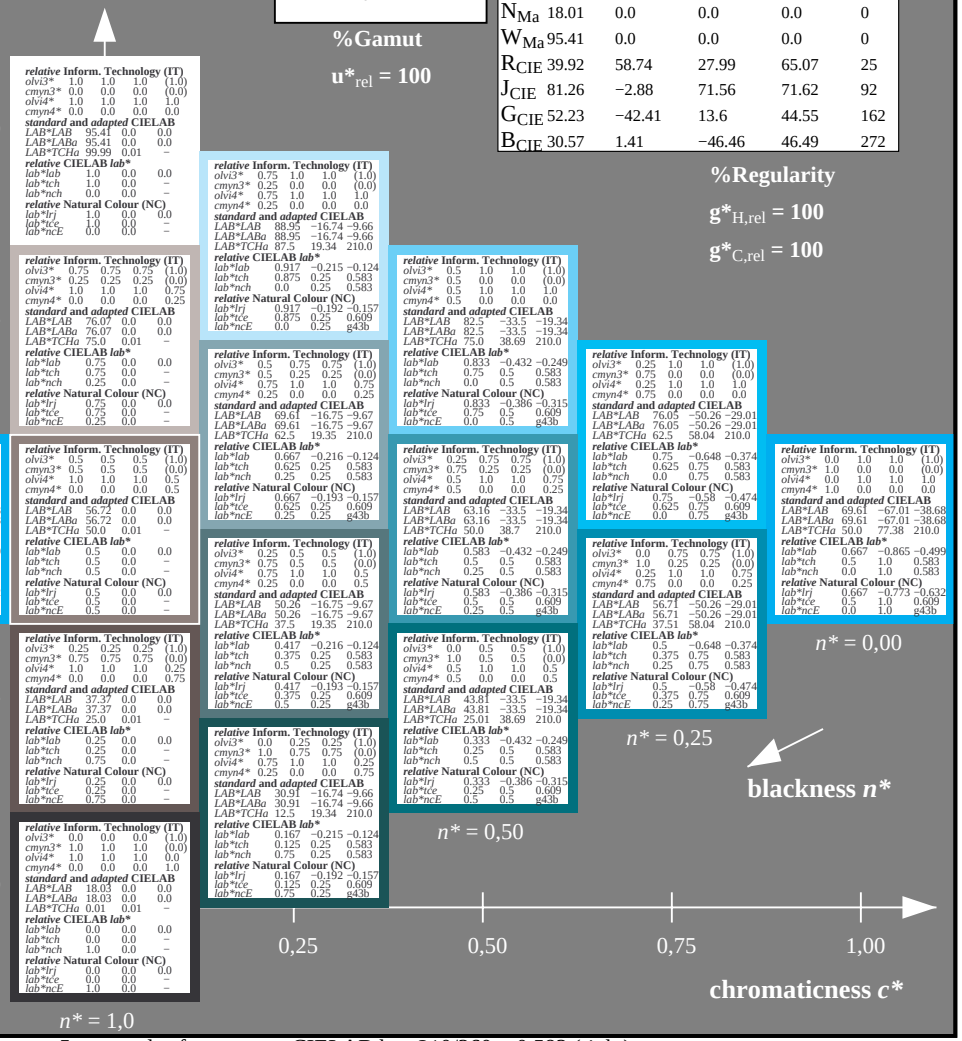
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Luminous System NLS00

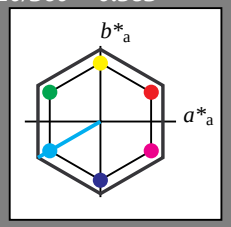
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

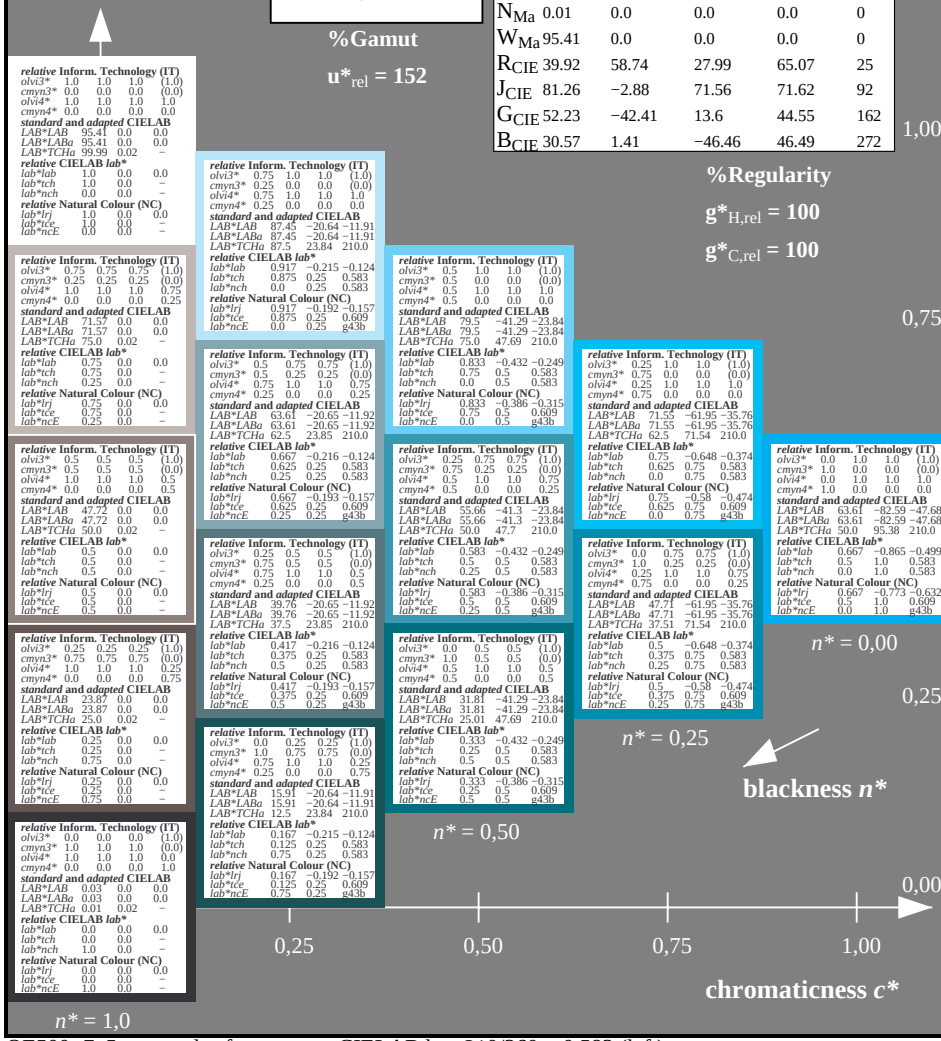
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Standard Reflective System SRS18

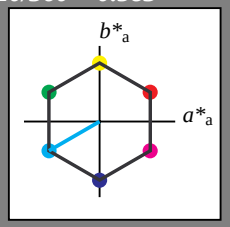
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

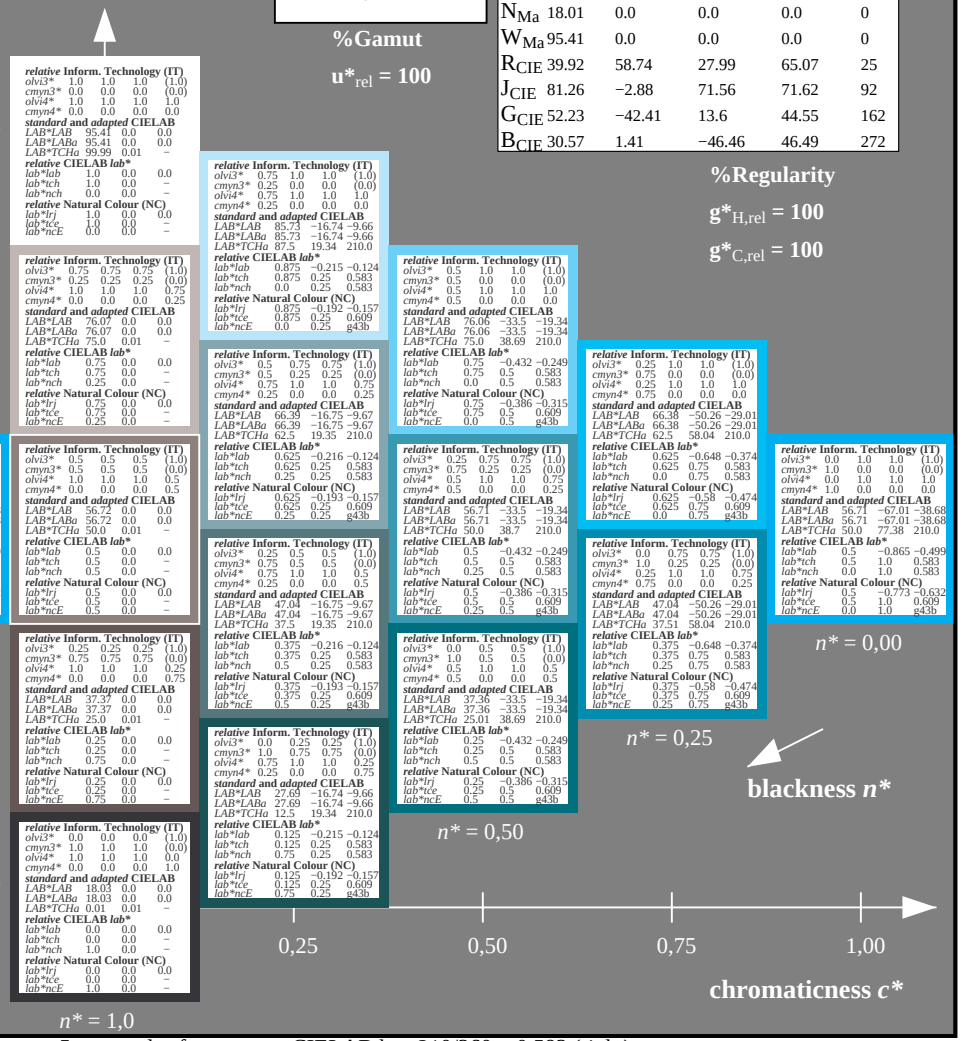
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

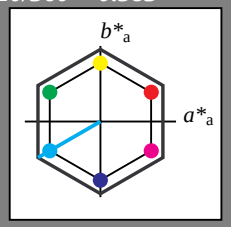


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

blackness n^*

n^* = 1,0 n^* = 0,50 n^* = 0,25 n^* = 0,00

0,25 0,50 0,75 1,00

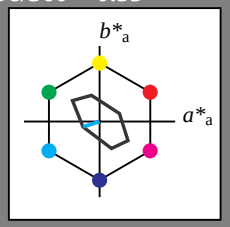
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

blackness n^*

n^* = 1,0 n^* = 0,50 n^* = 0,25 n^* = 0,00

0,25 0,50 0,75 1,00

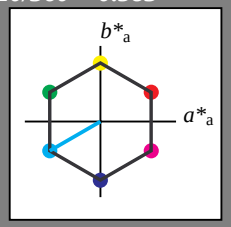
chromaticness c^*

5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

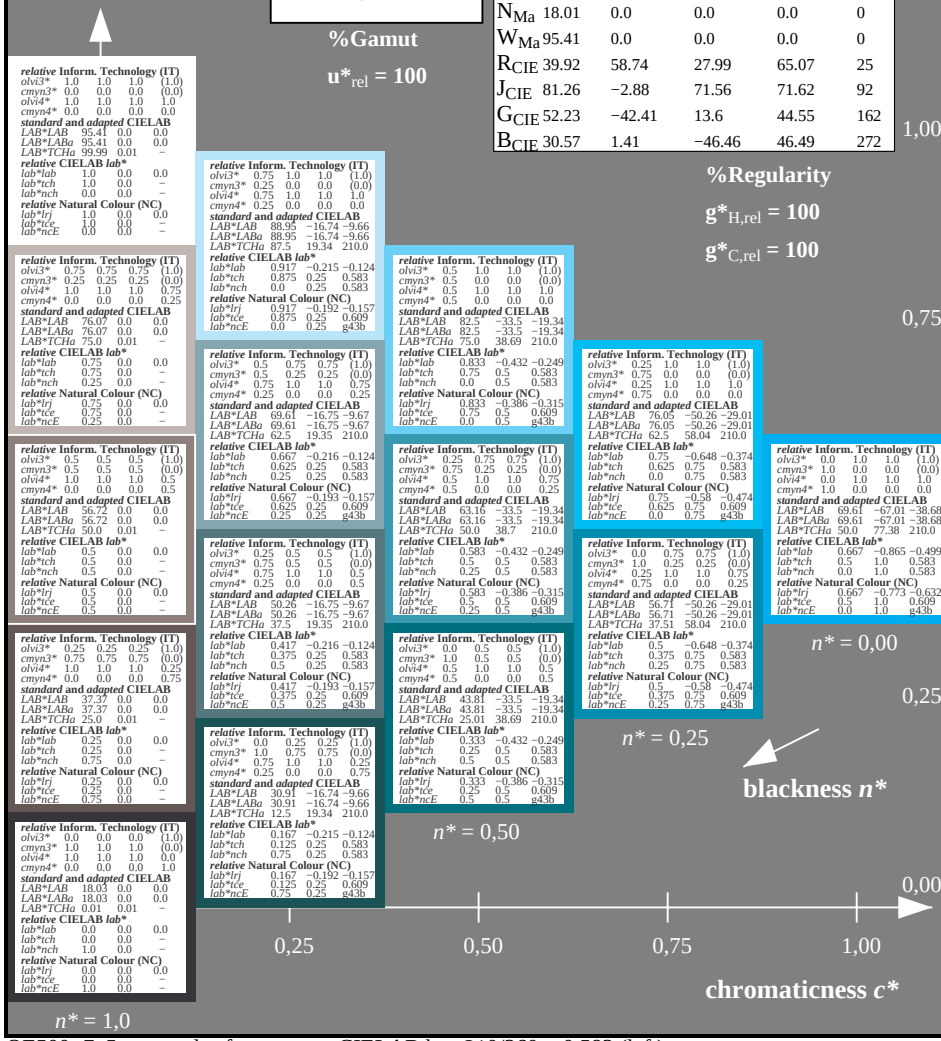
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

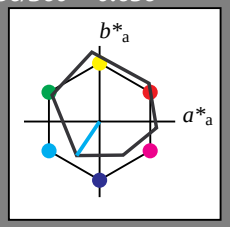


OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

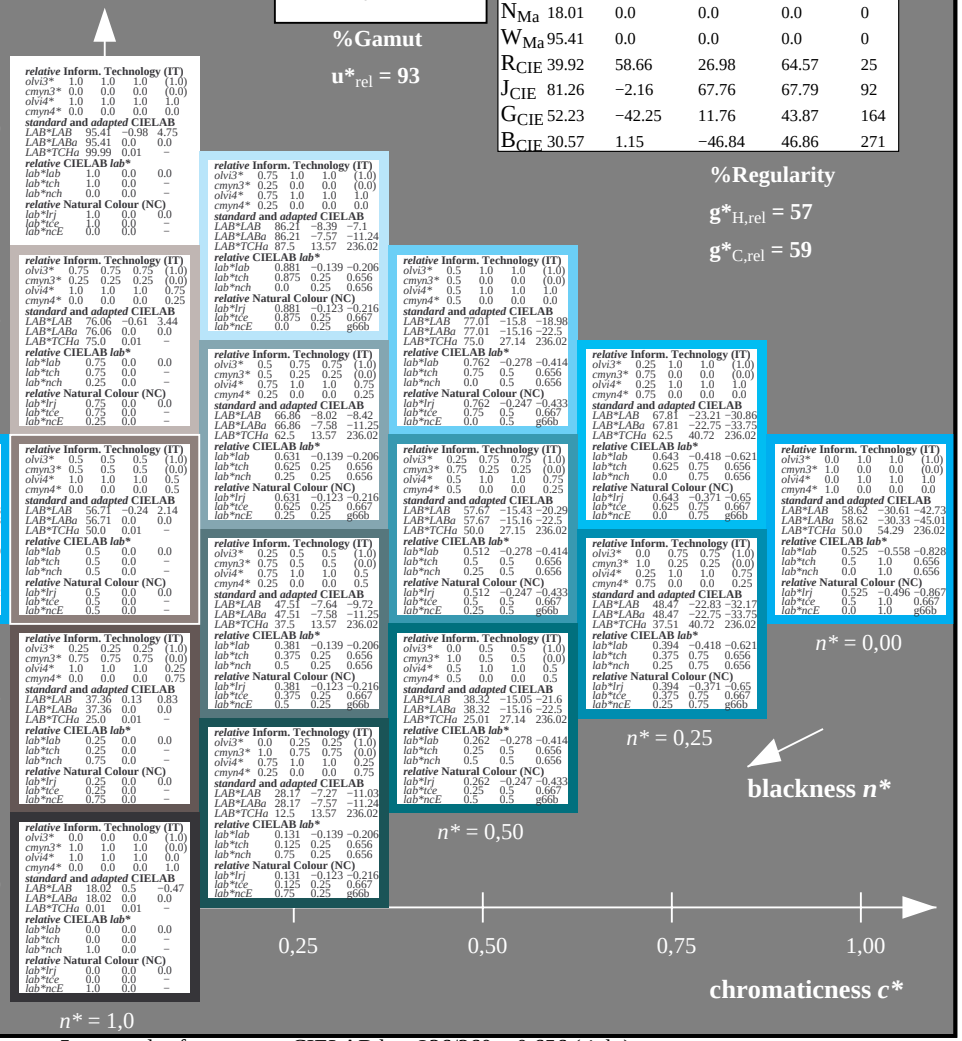
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



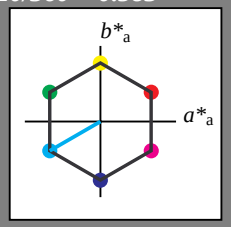
5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

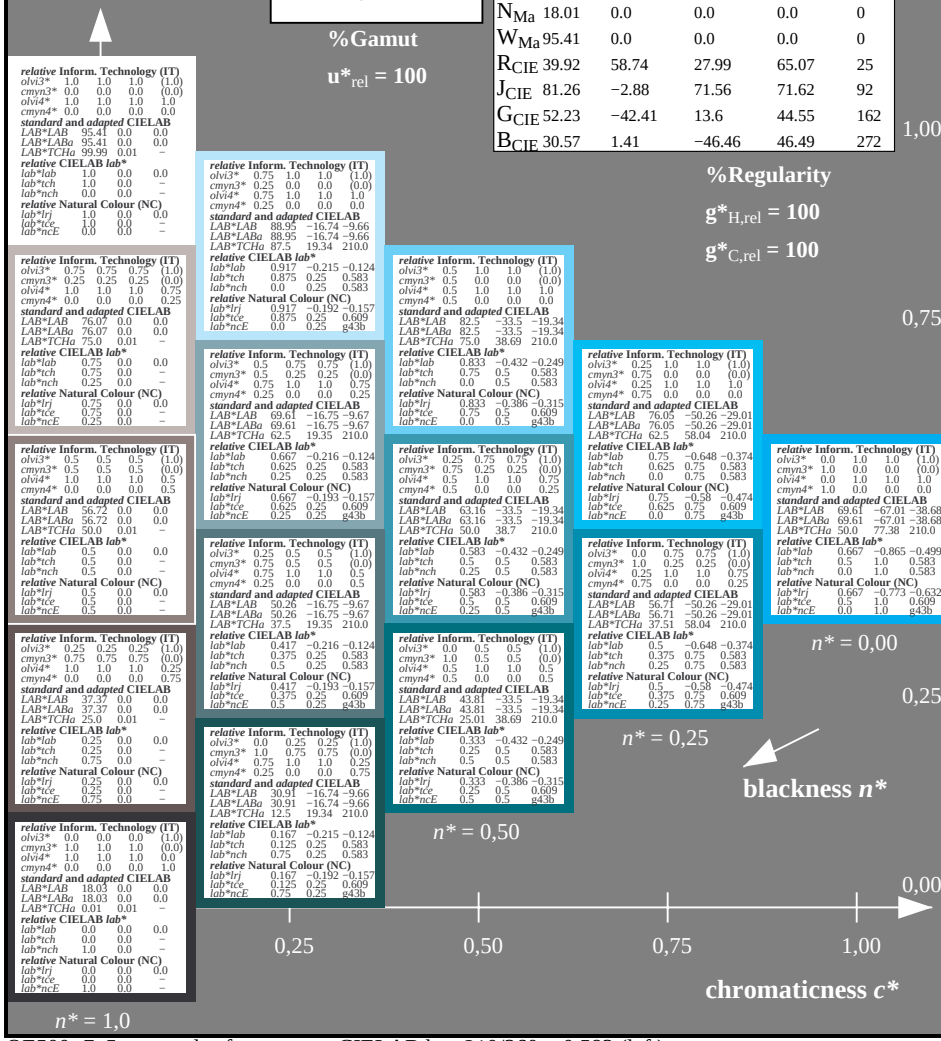
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



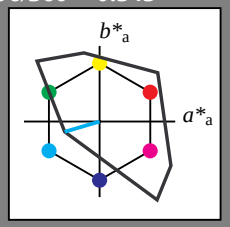
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

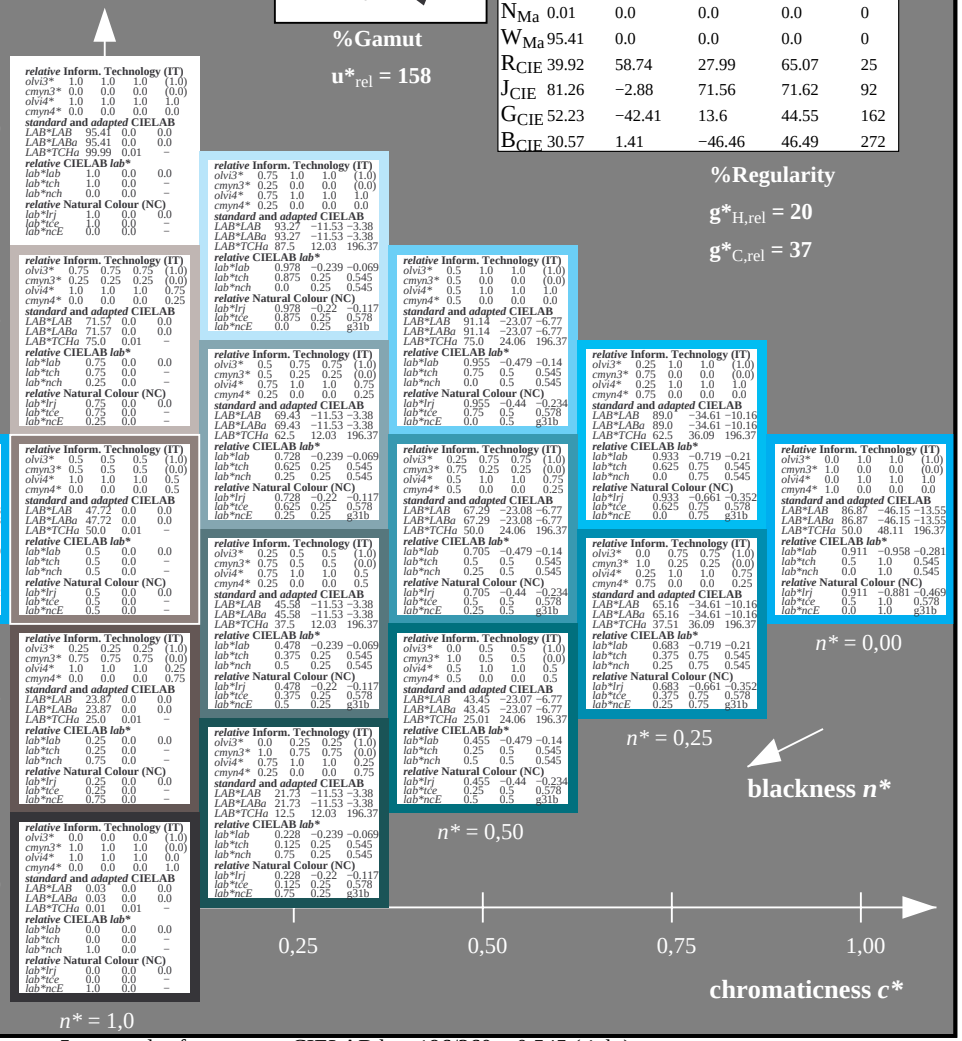
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

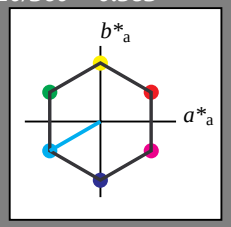
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

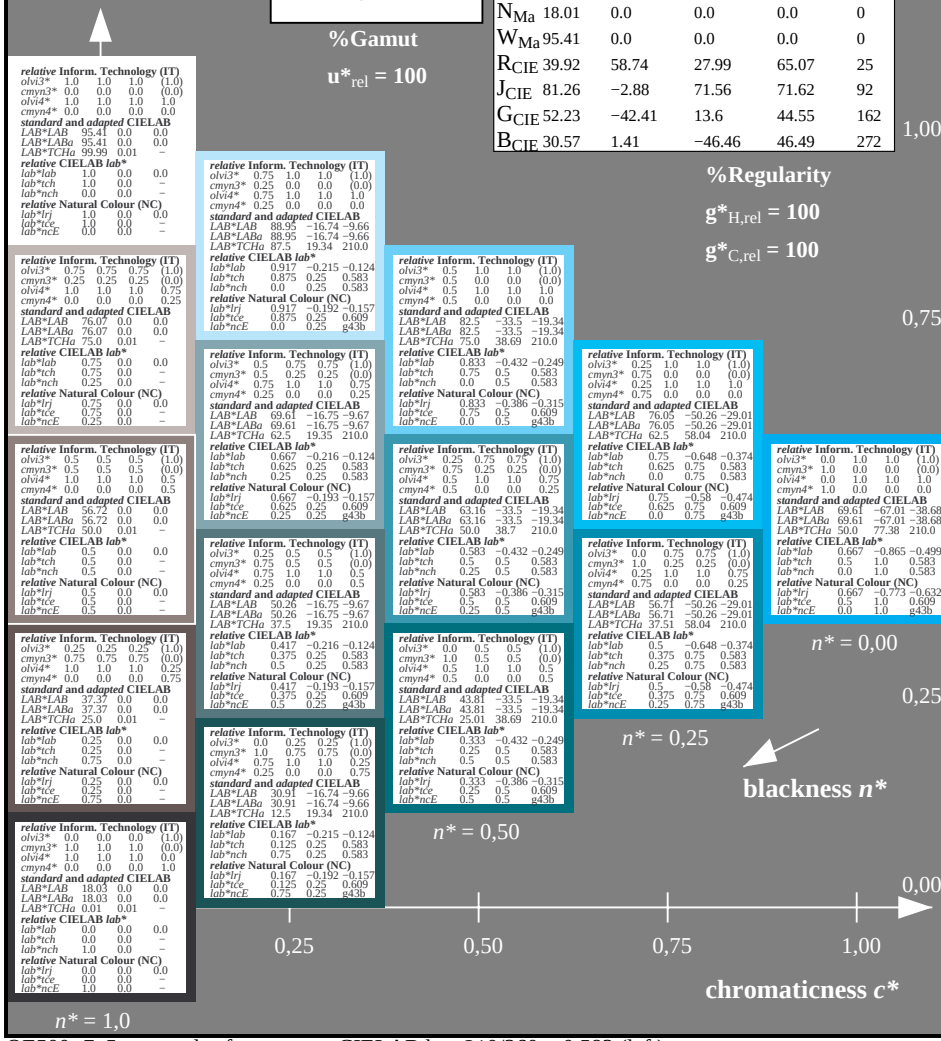
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

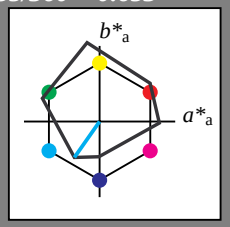
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

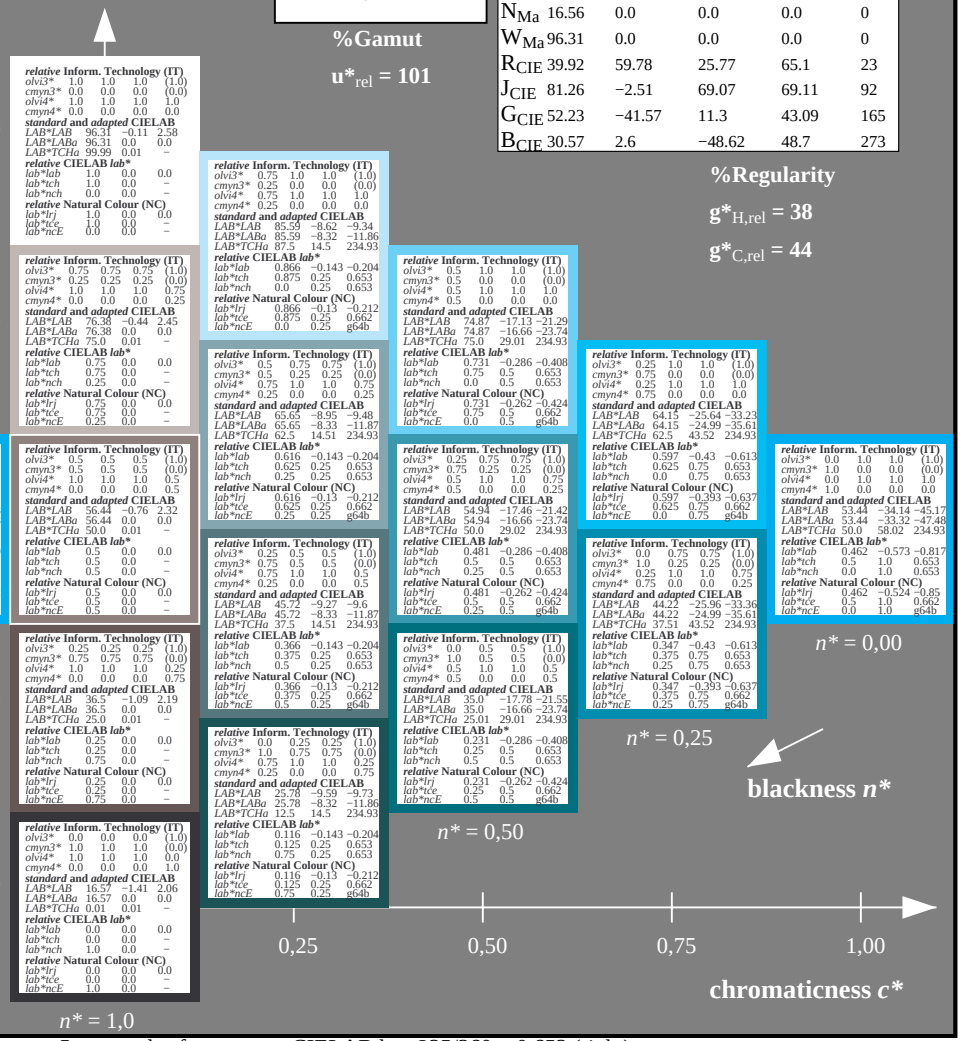
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



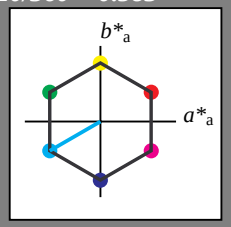
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue *h* = lab*h = 210/360 = 0.583*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

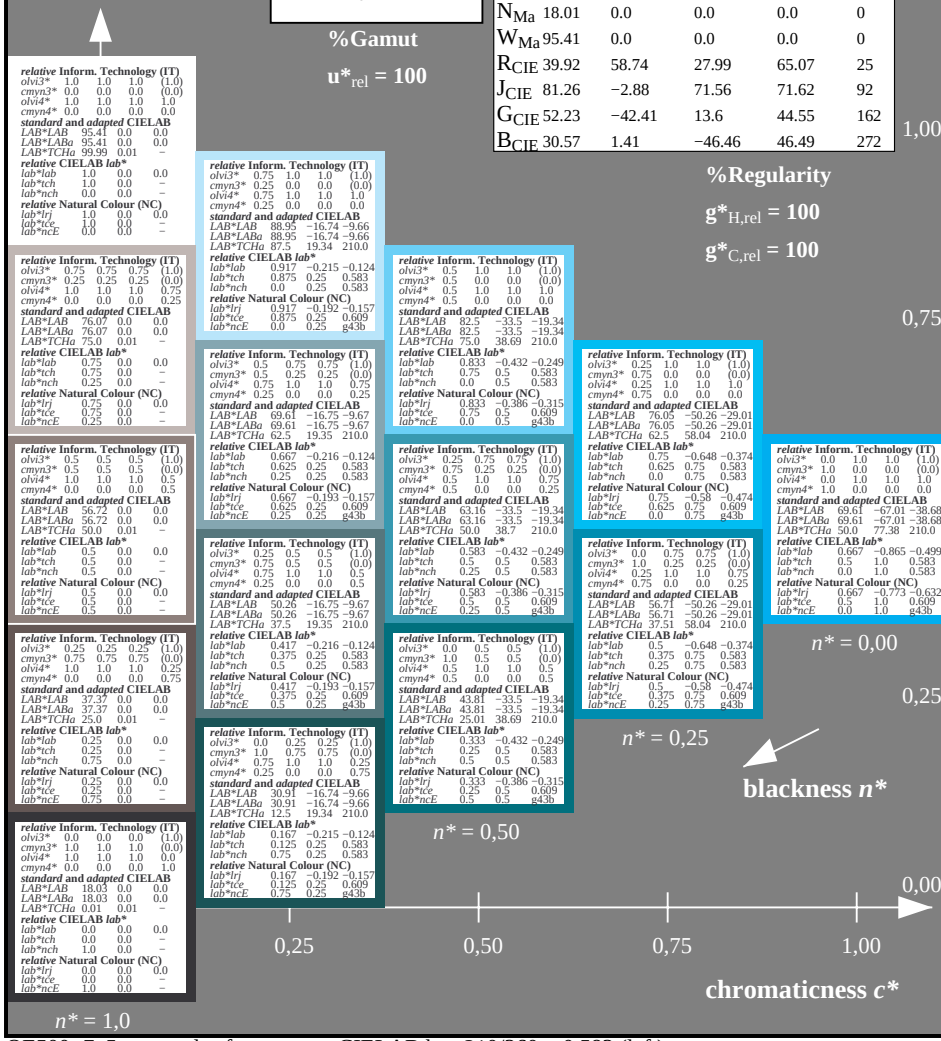
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



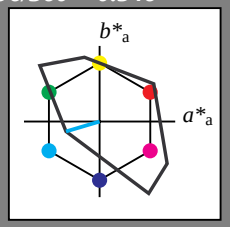
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 196/360 = 0.546*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

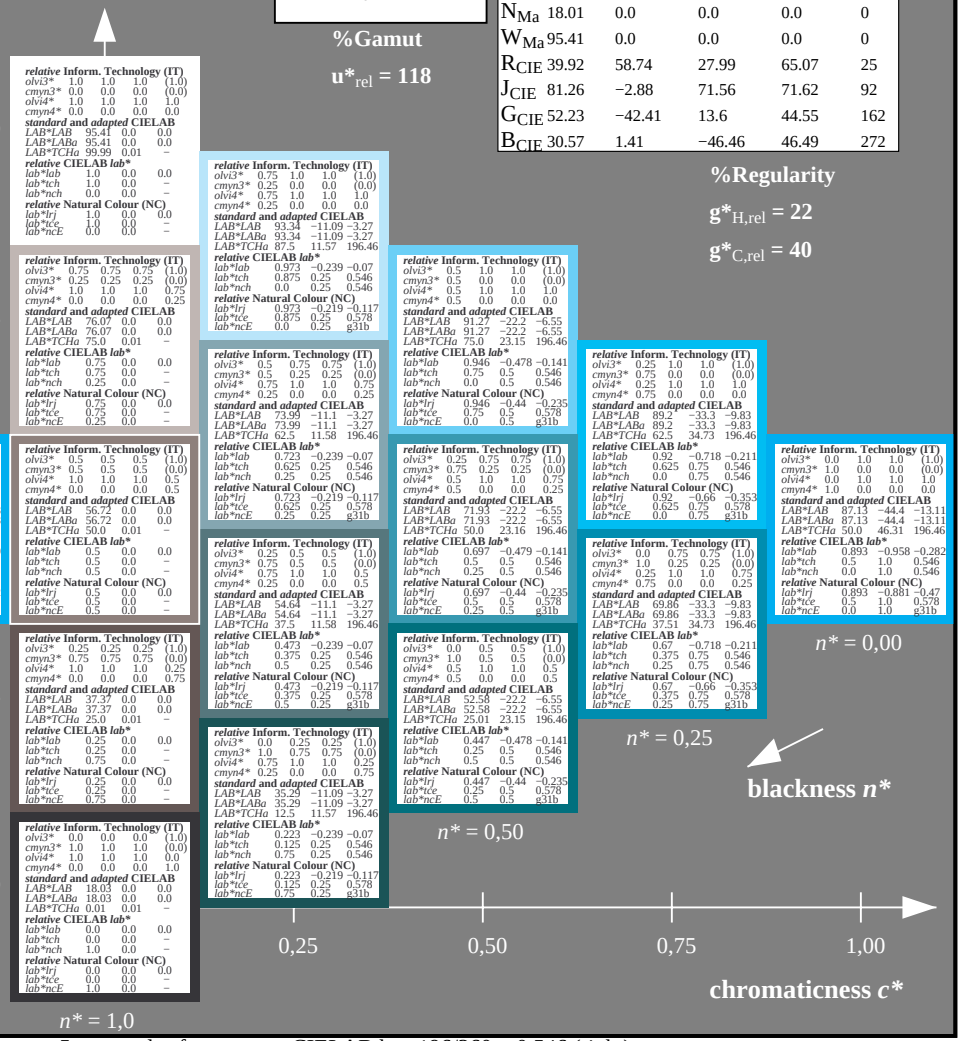
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



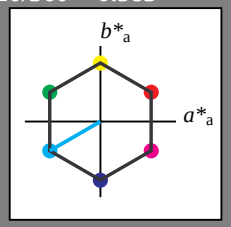
5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

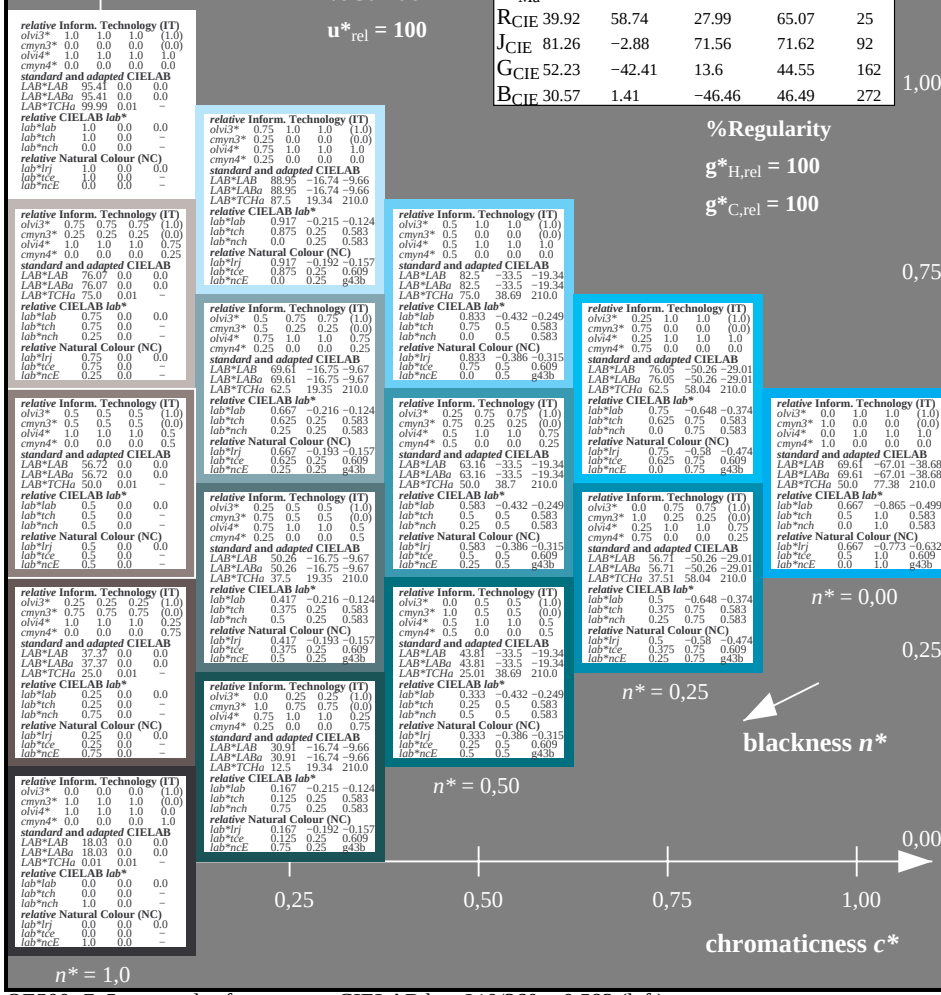
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



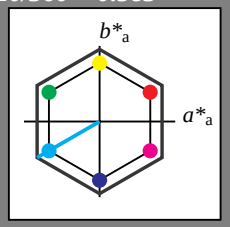
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

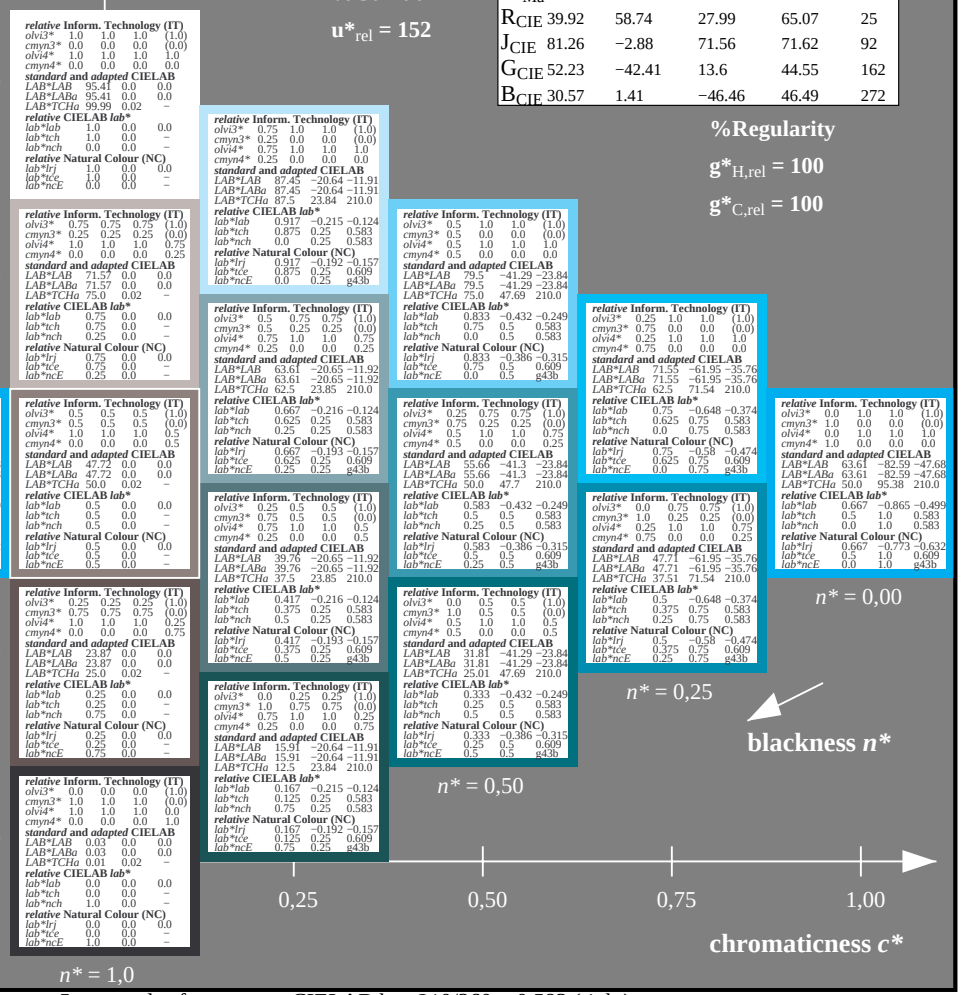
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



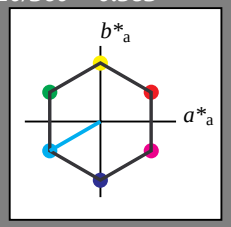
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

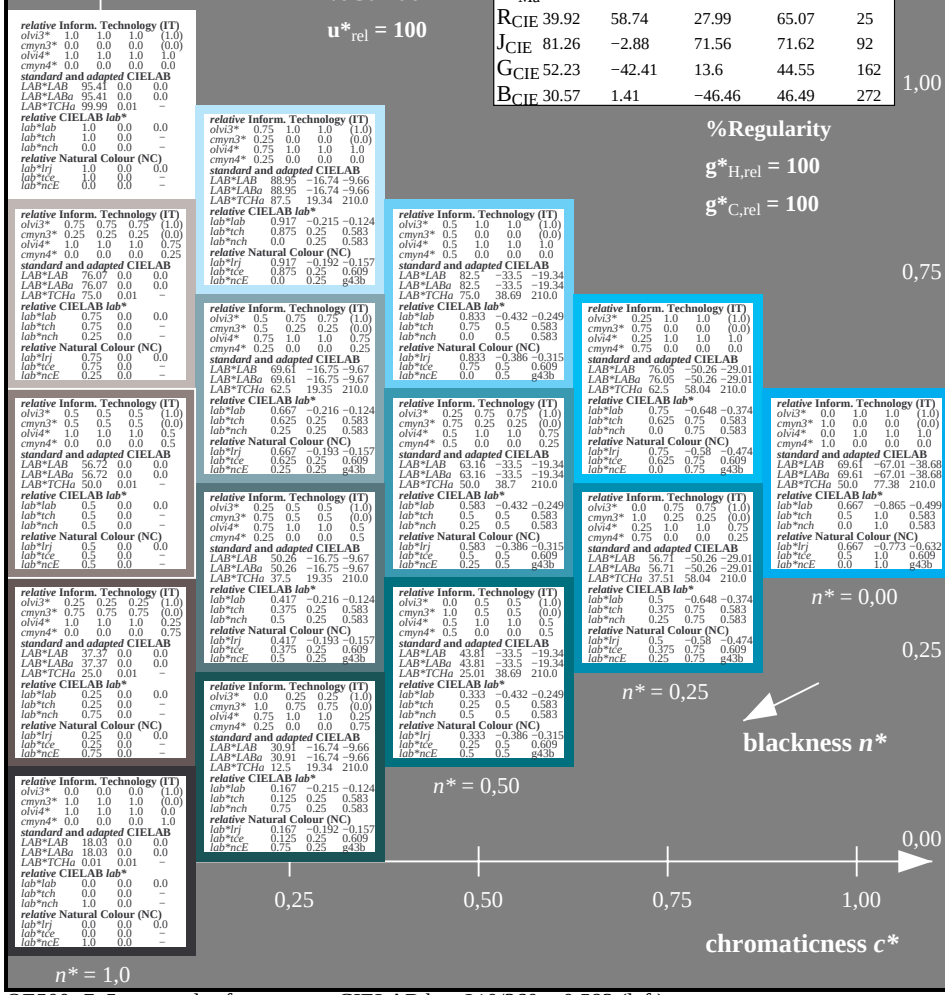
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



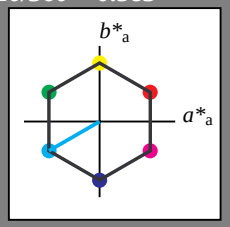
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

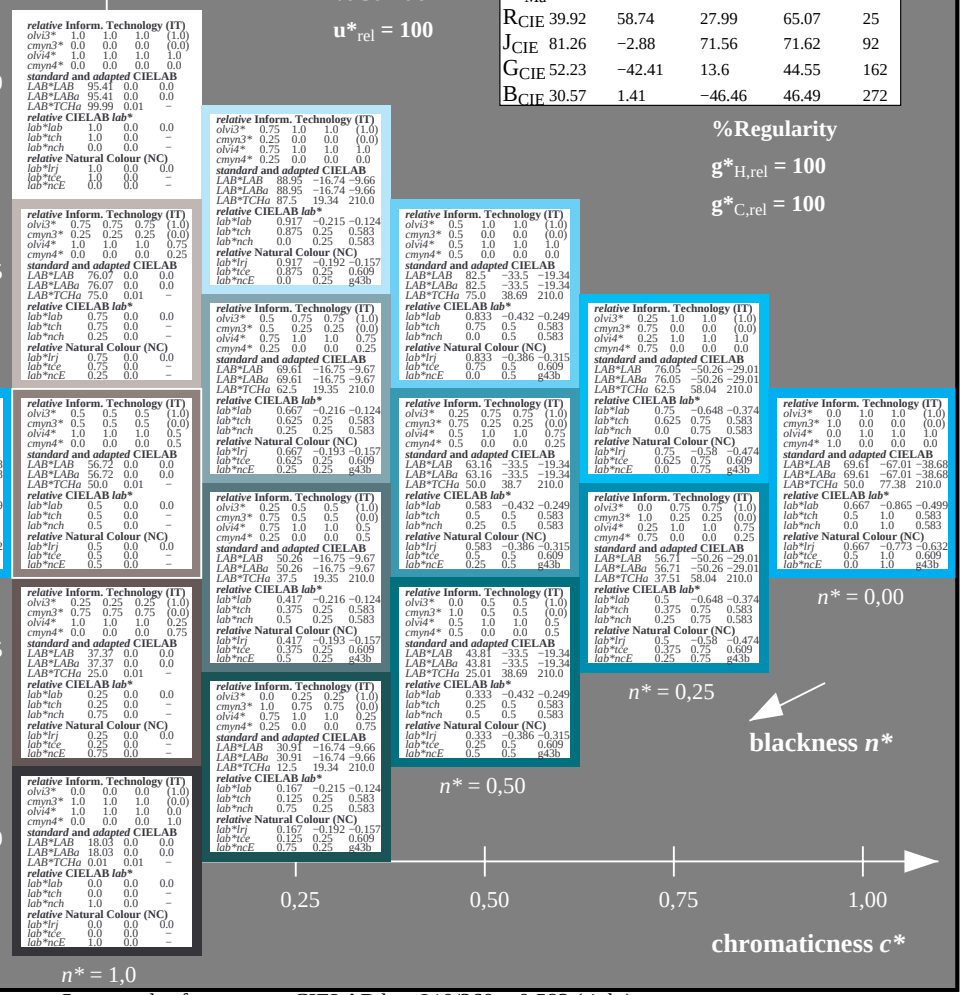
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Reflective System NRS18

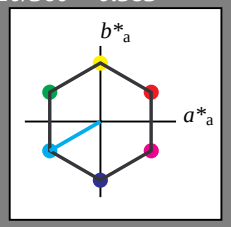
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

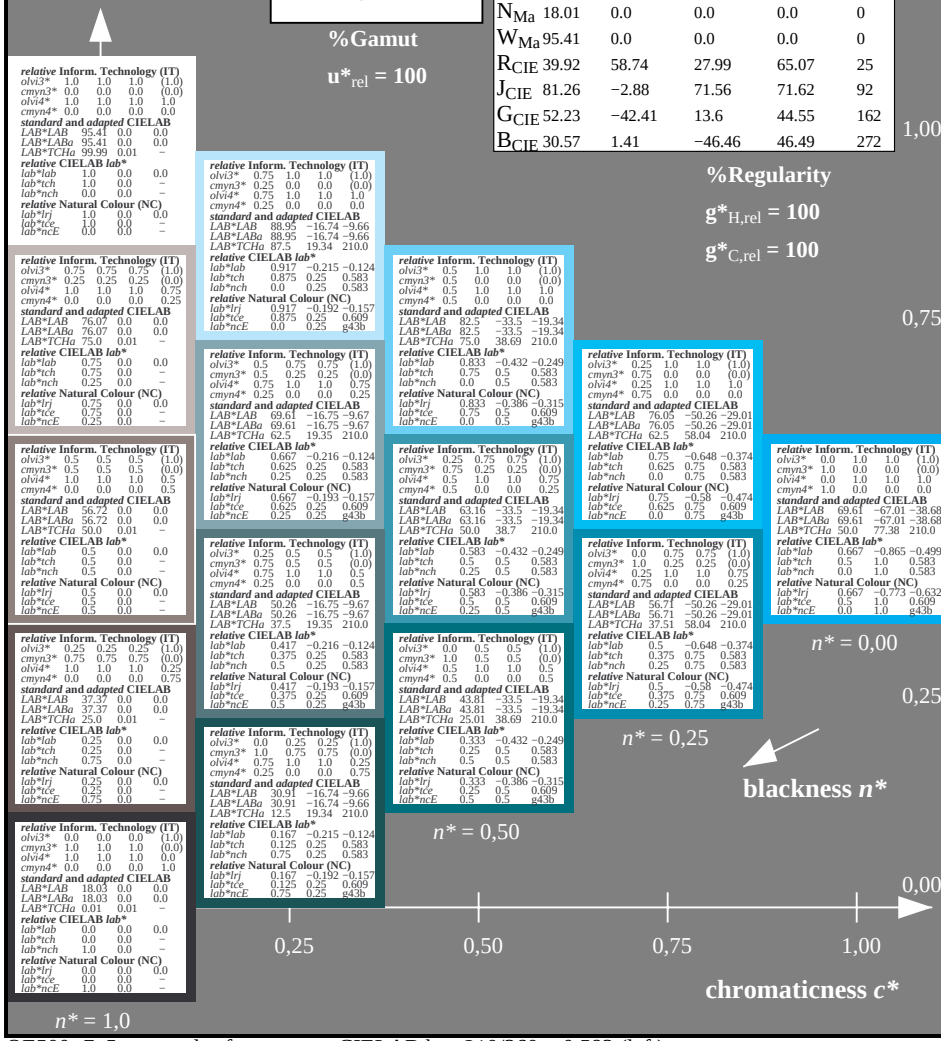
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Standard Reflective System SRS18

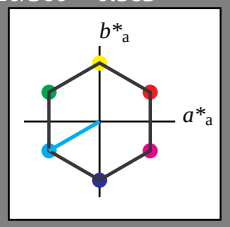
for hue $h^* = lab^*h = 210/360 = 0.583$

*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

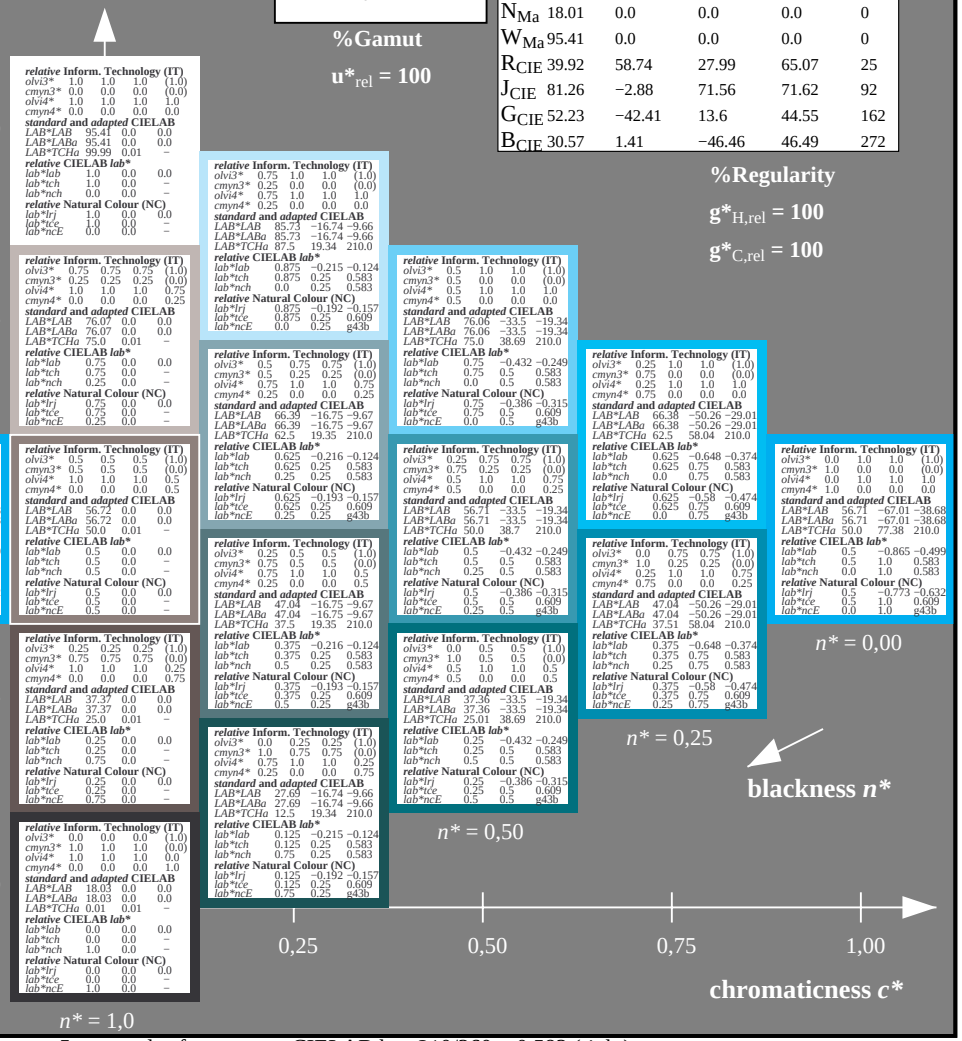
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



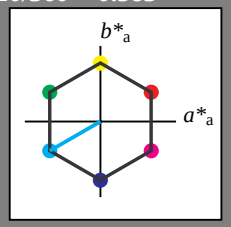
5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

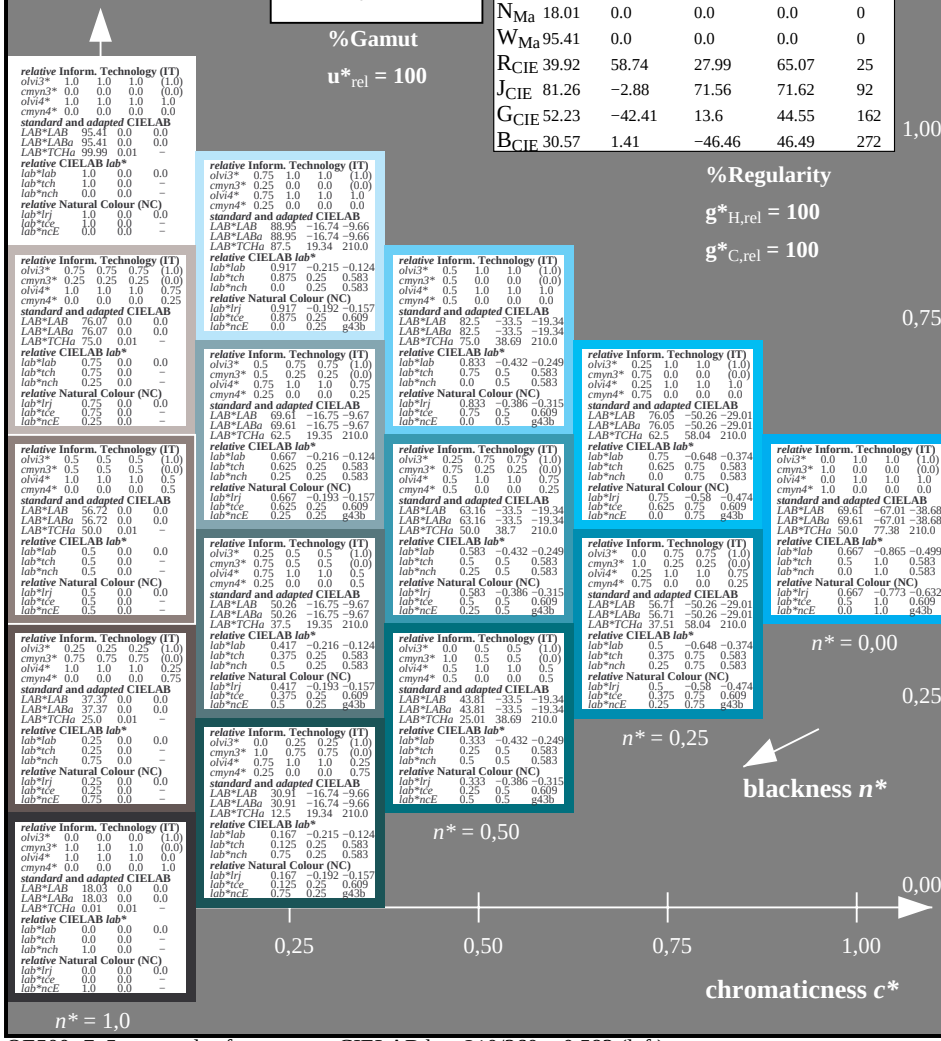
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



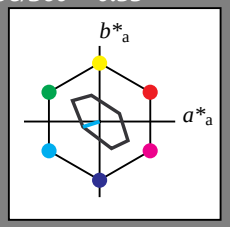
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

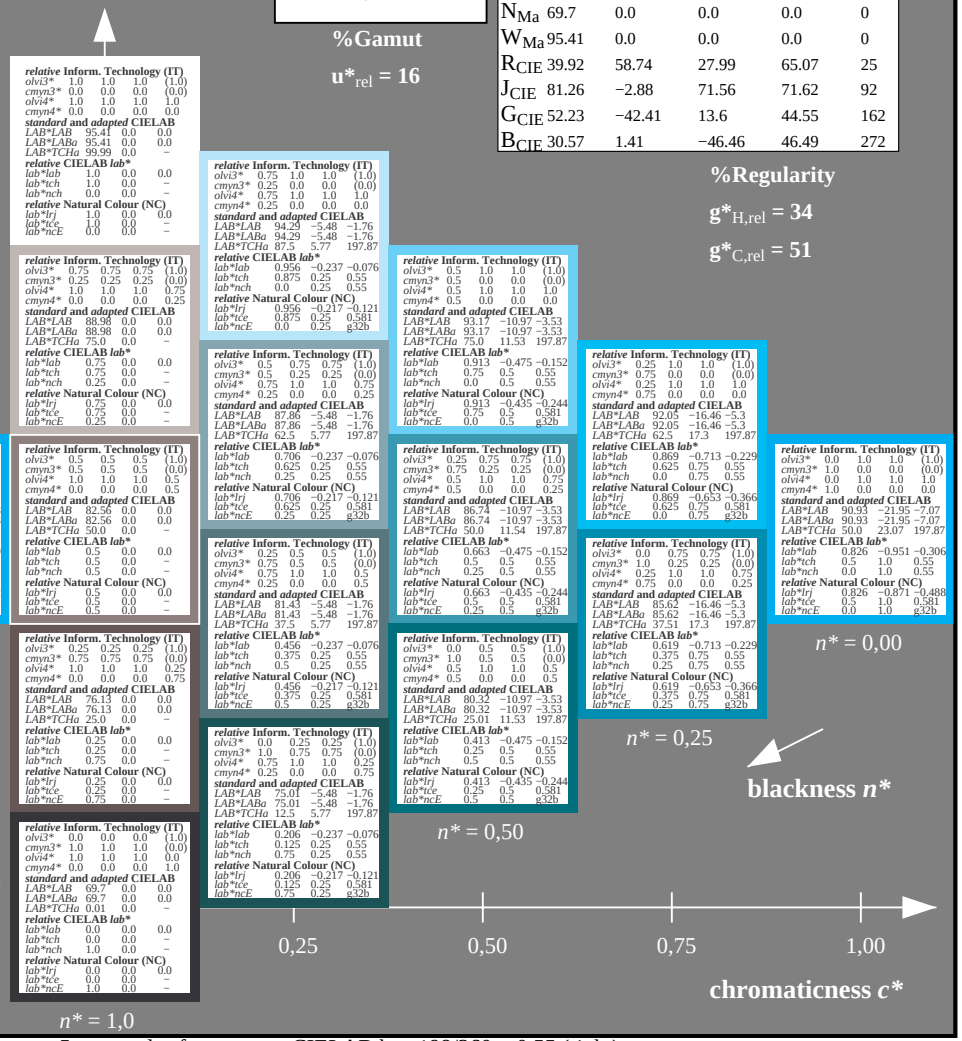
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



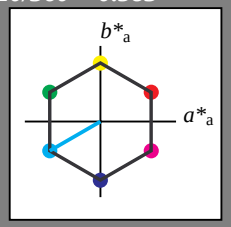
5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

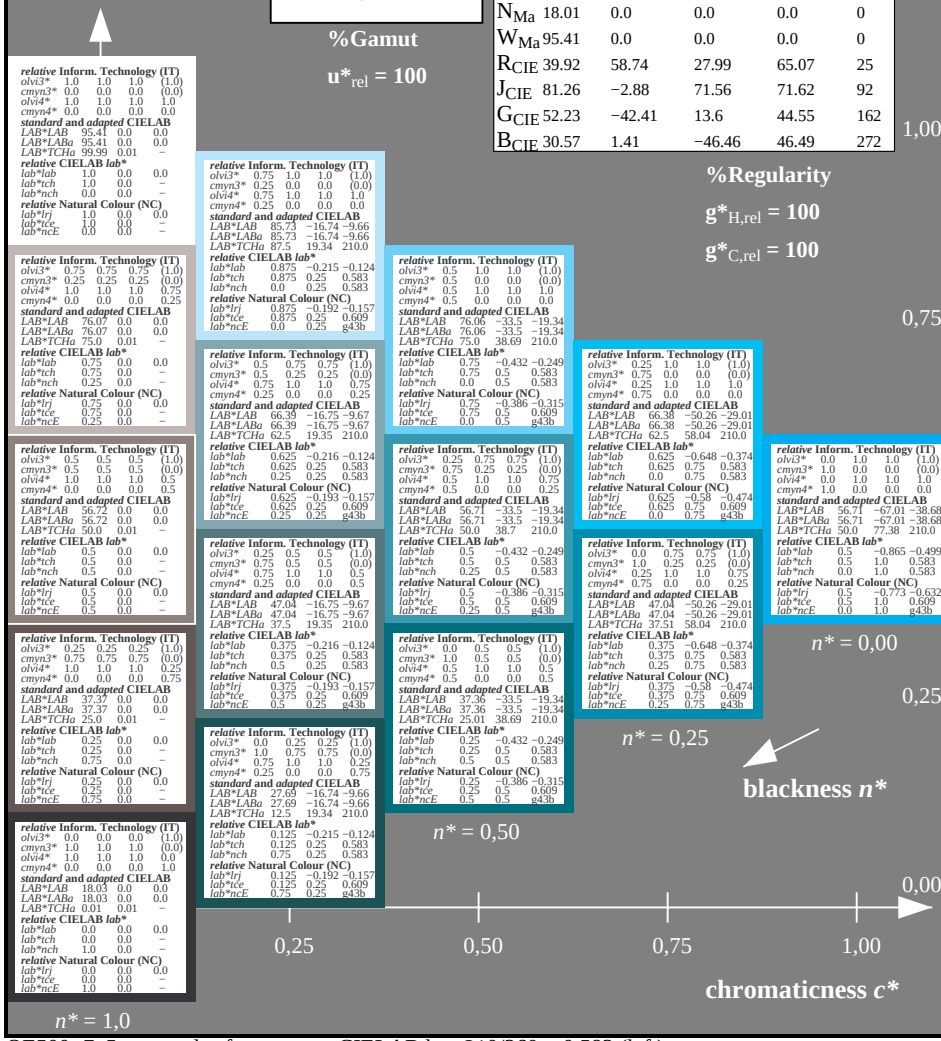
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



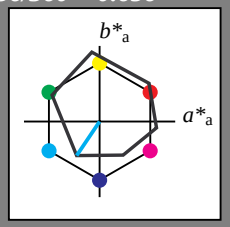
OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

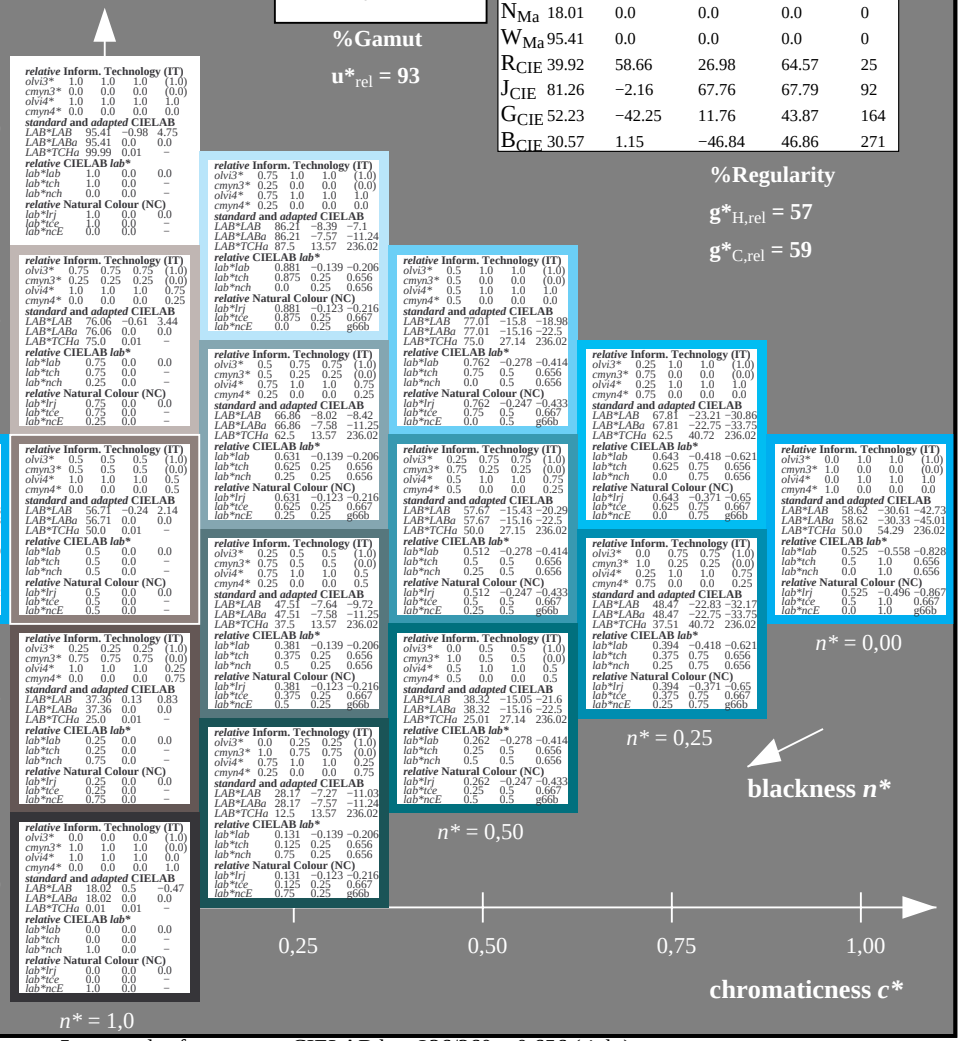
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

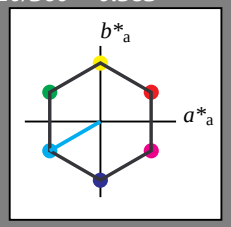


5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

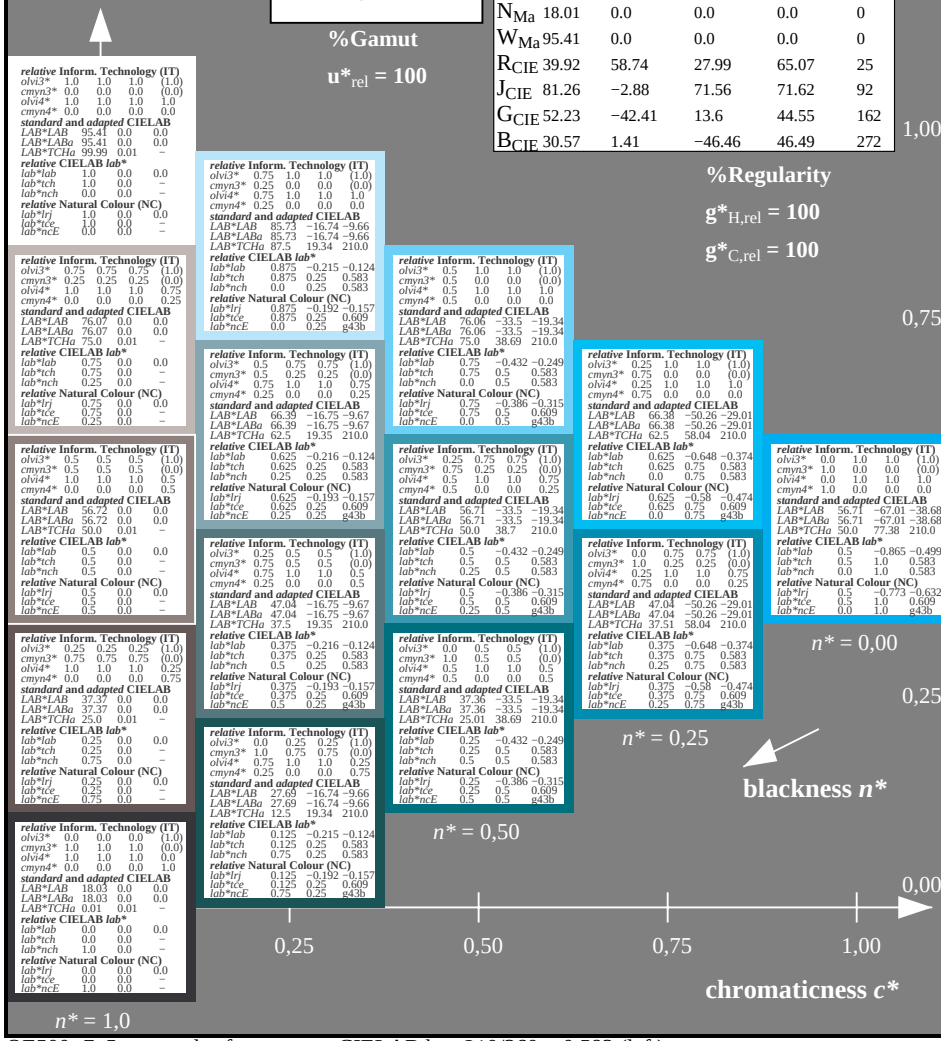
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

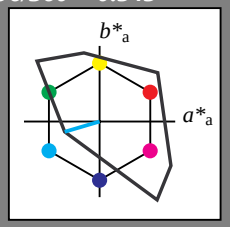


OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

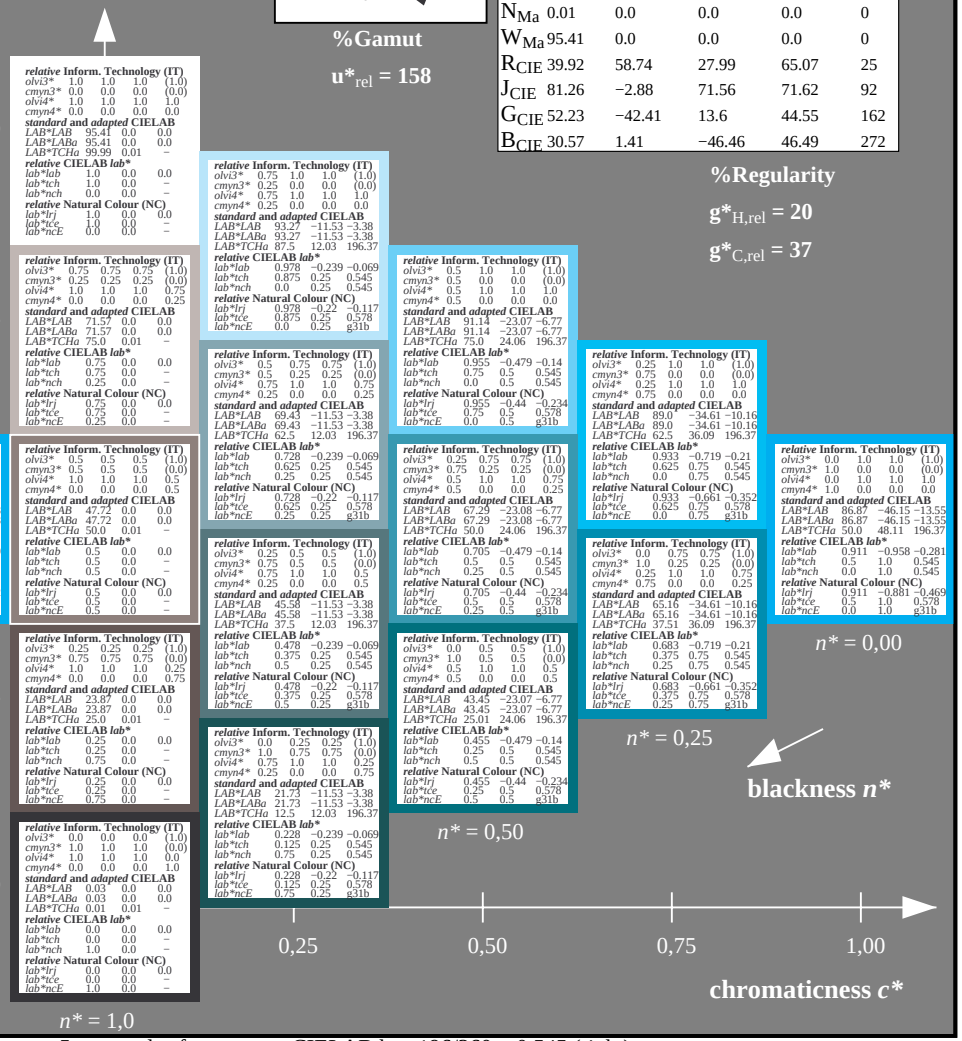
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

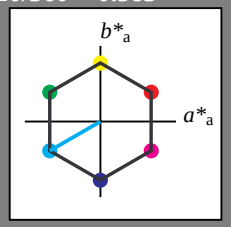
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

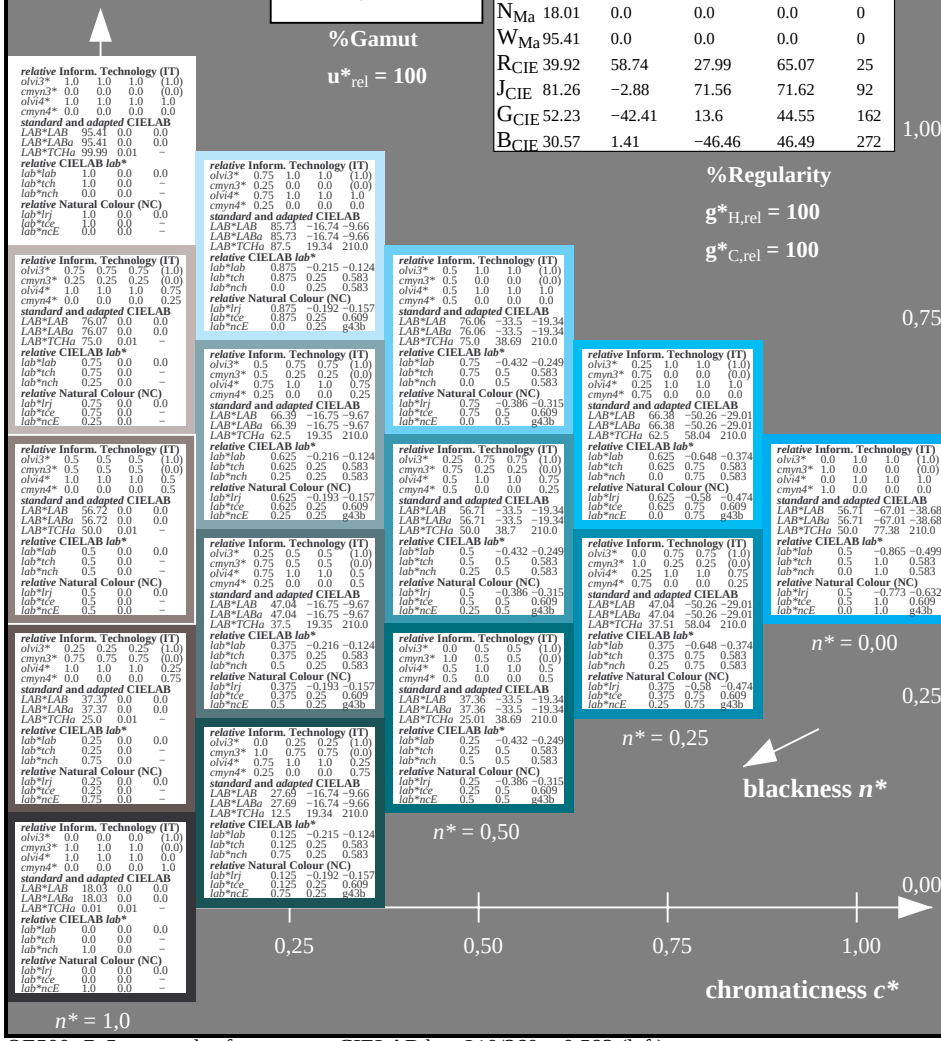
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

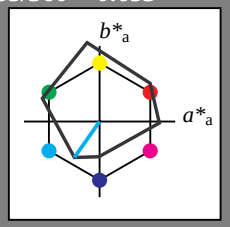
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

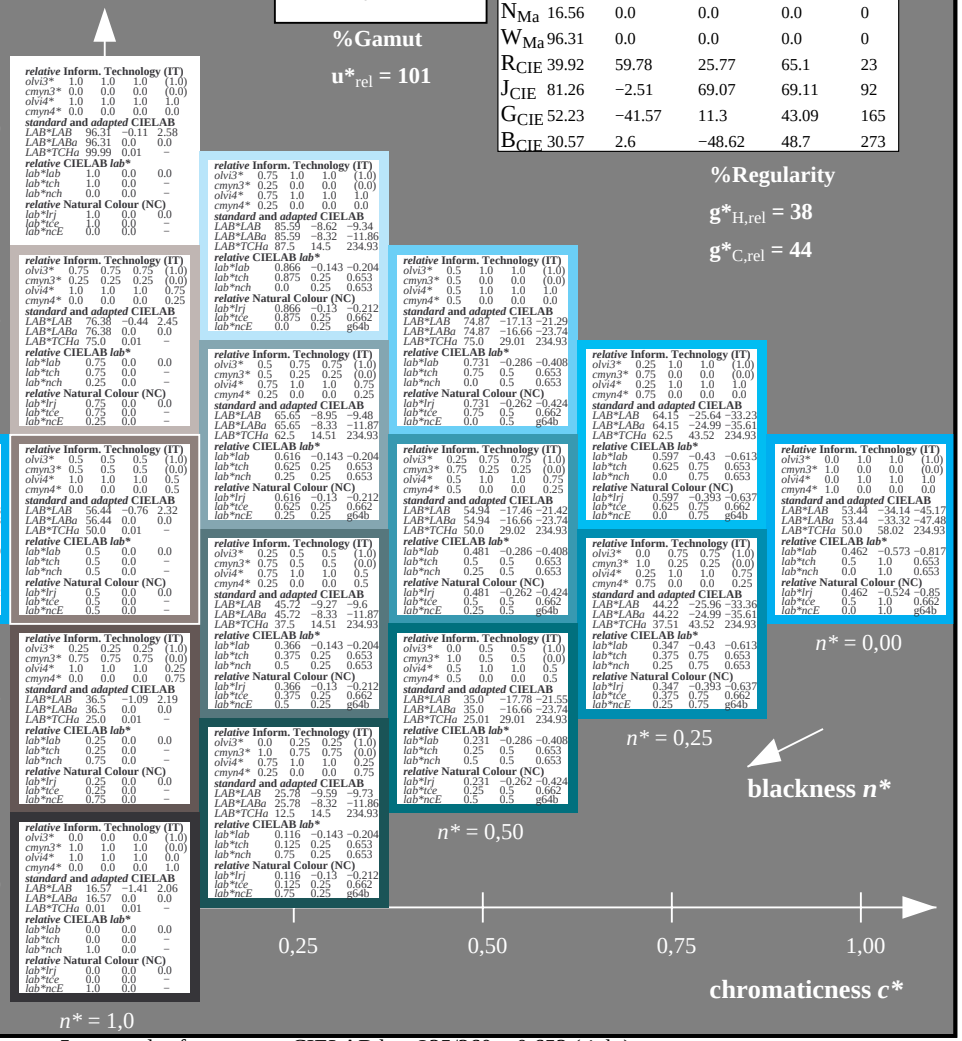
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



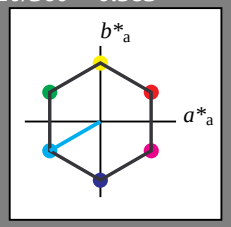
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

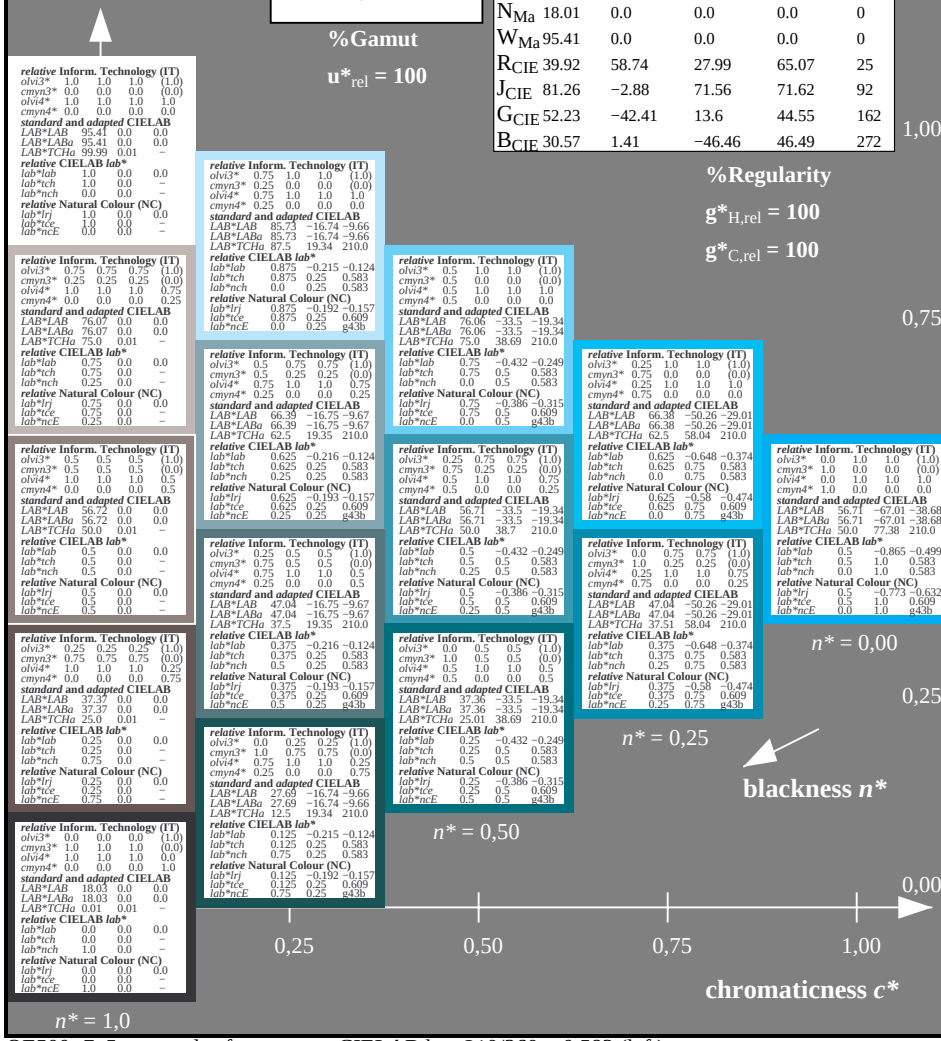
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

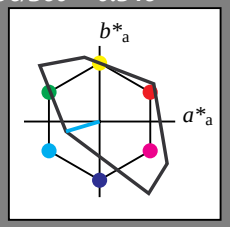


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

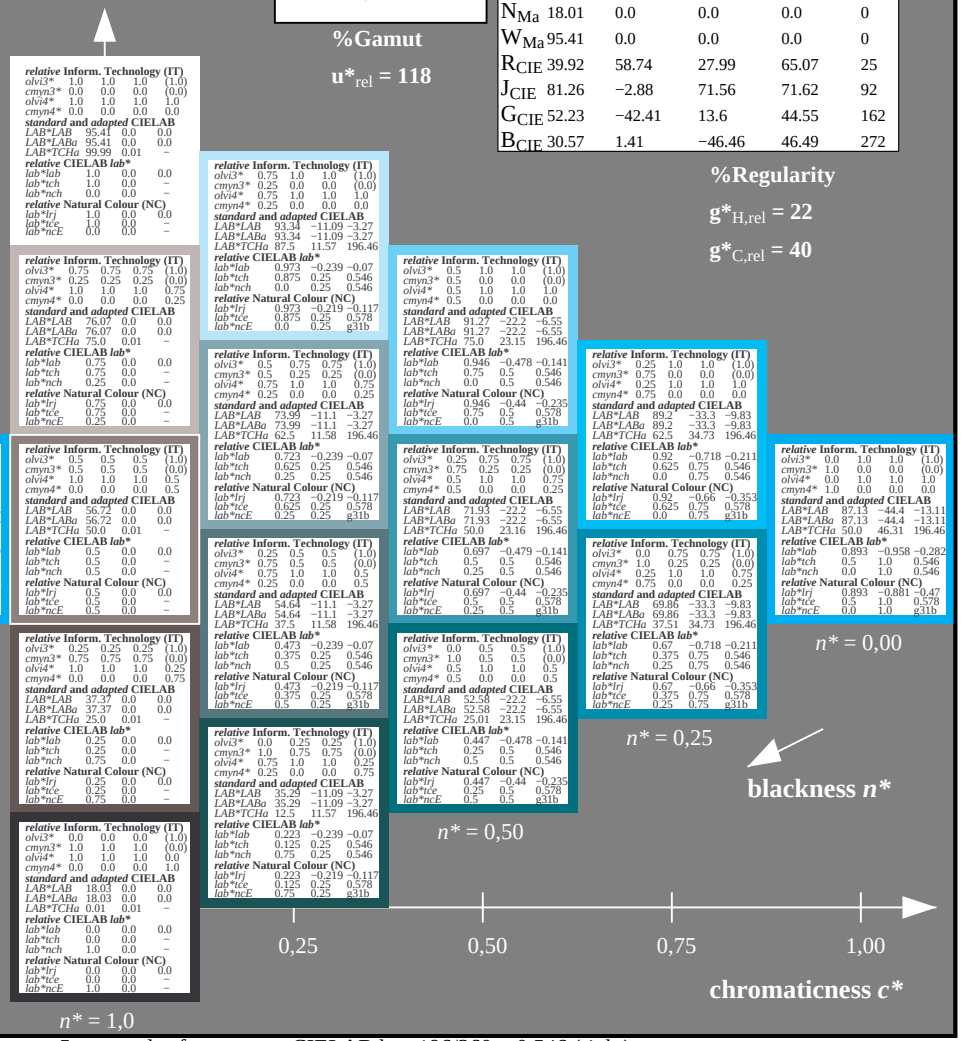
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

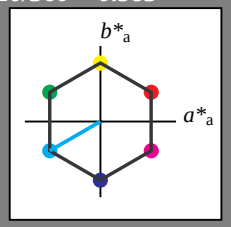
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

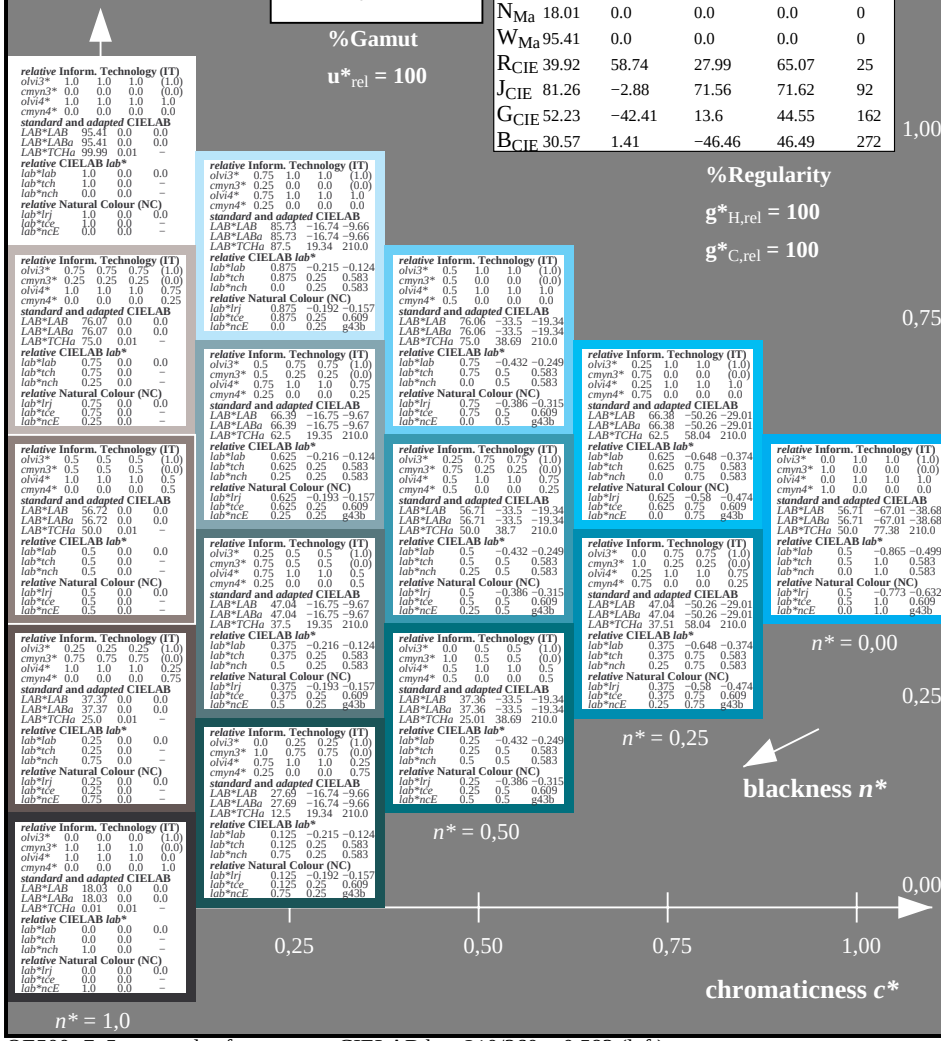
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

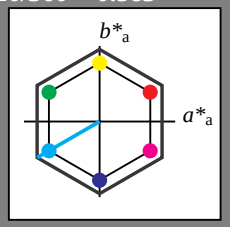
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

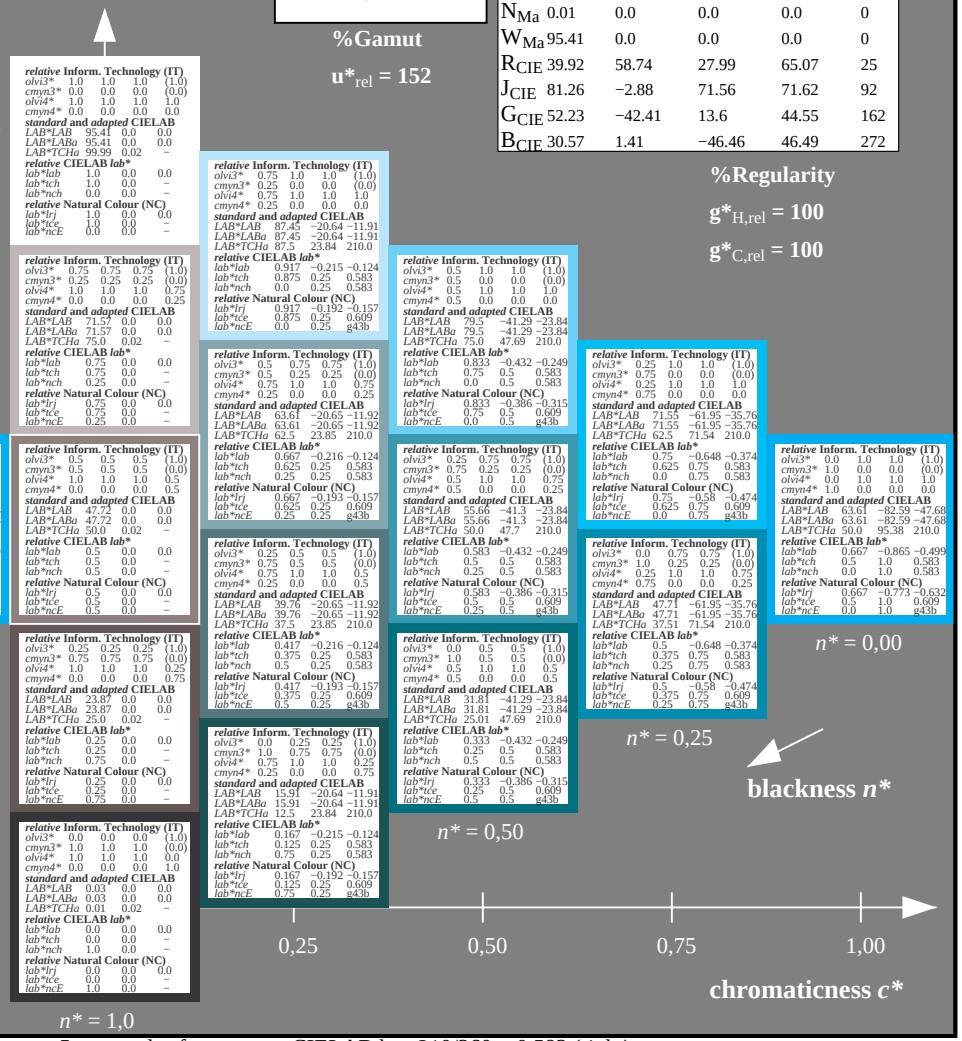
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

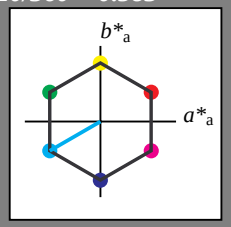


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

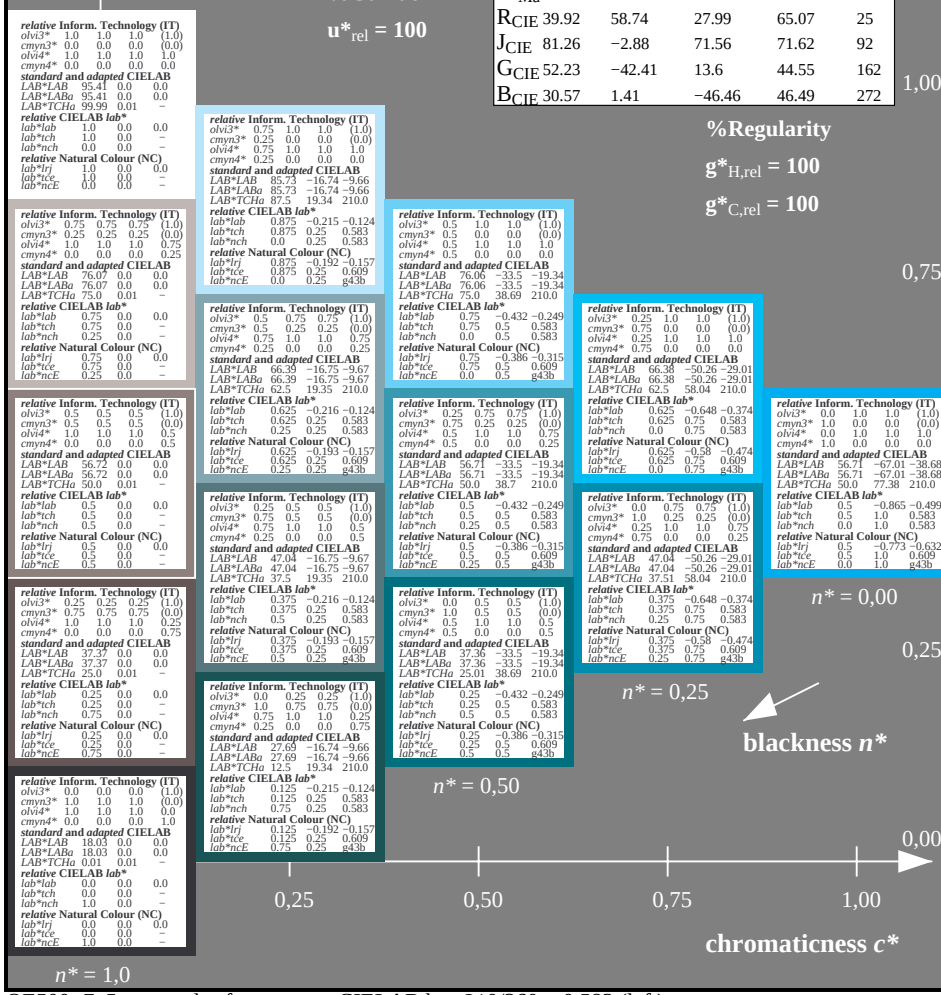
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

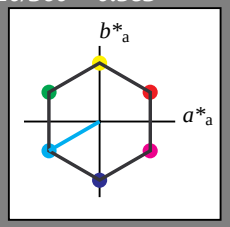


OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

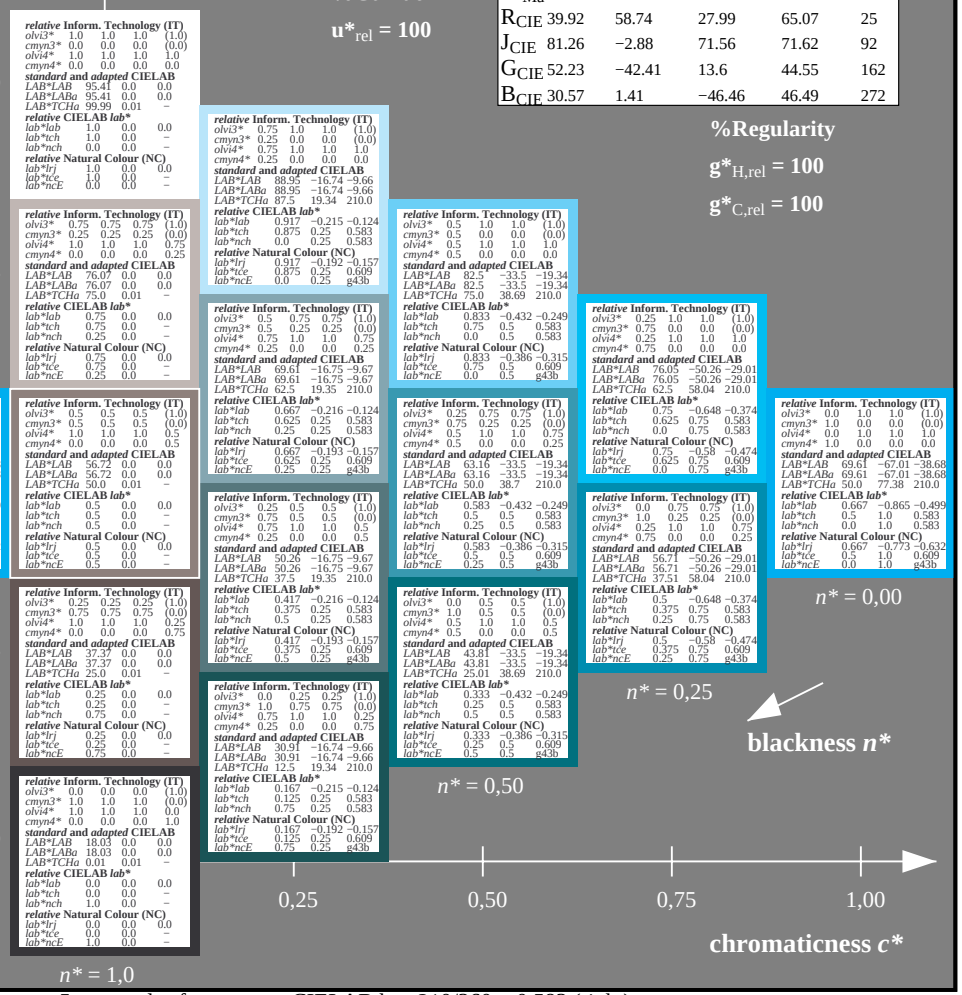
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

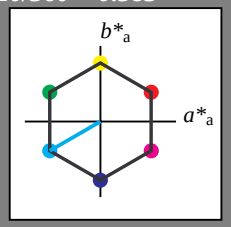


5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

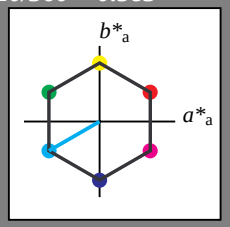
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

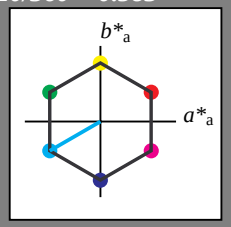
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

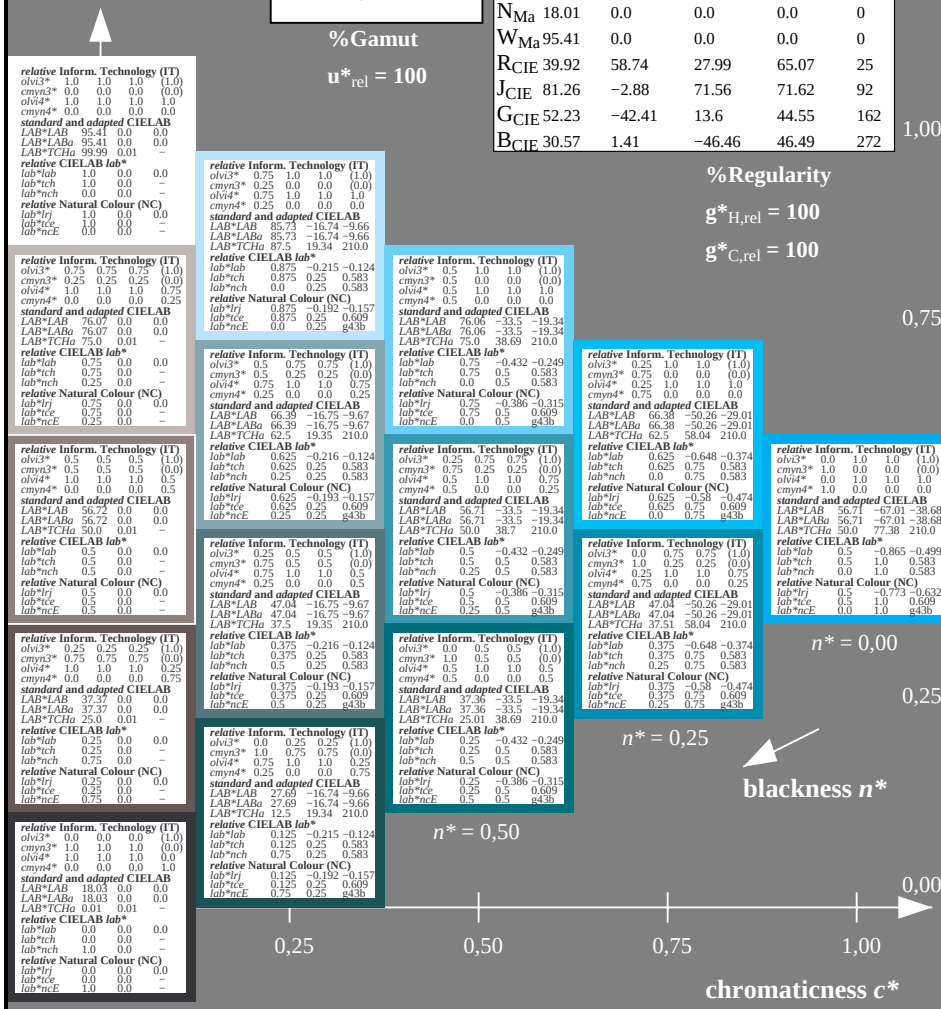
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

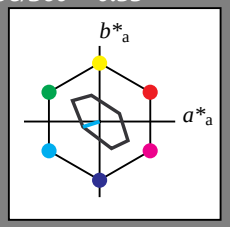
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

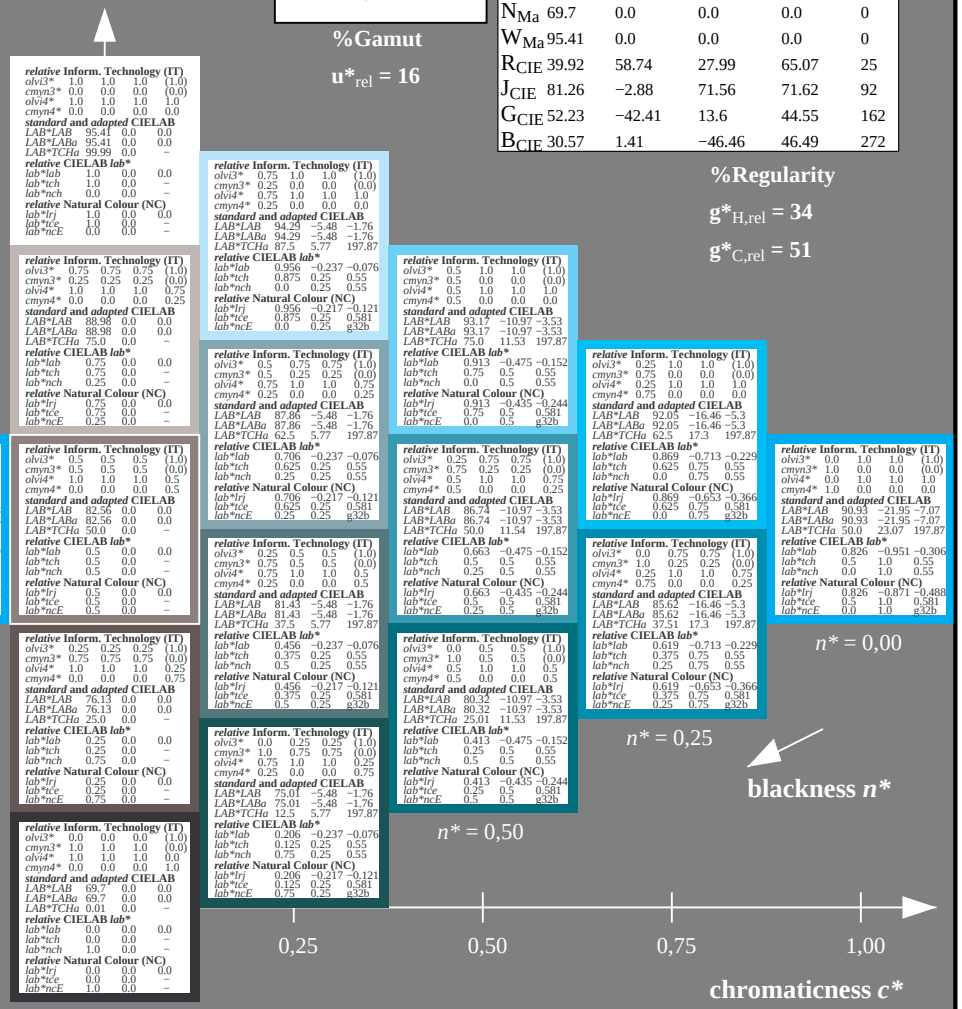
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

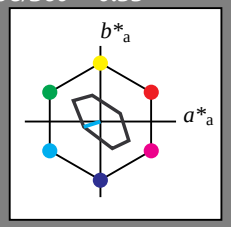
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

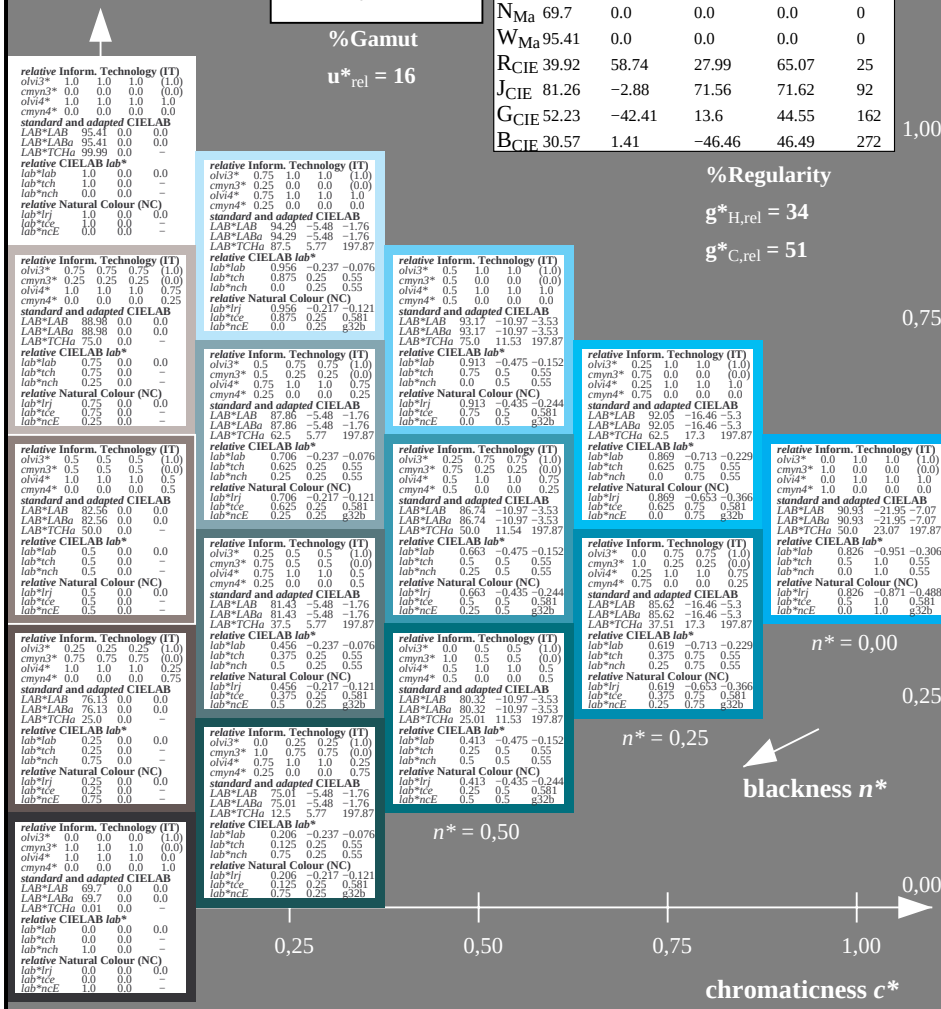
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

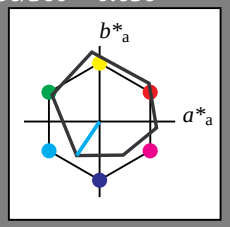
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

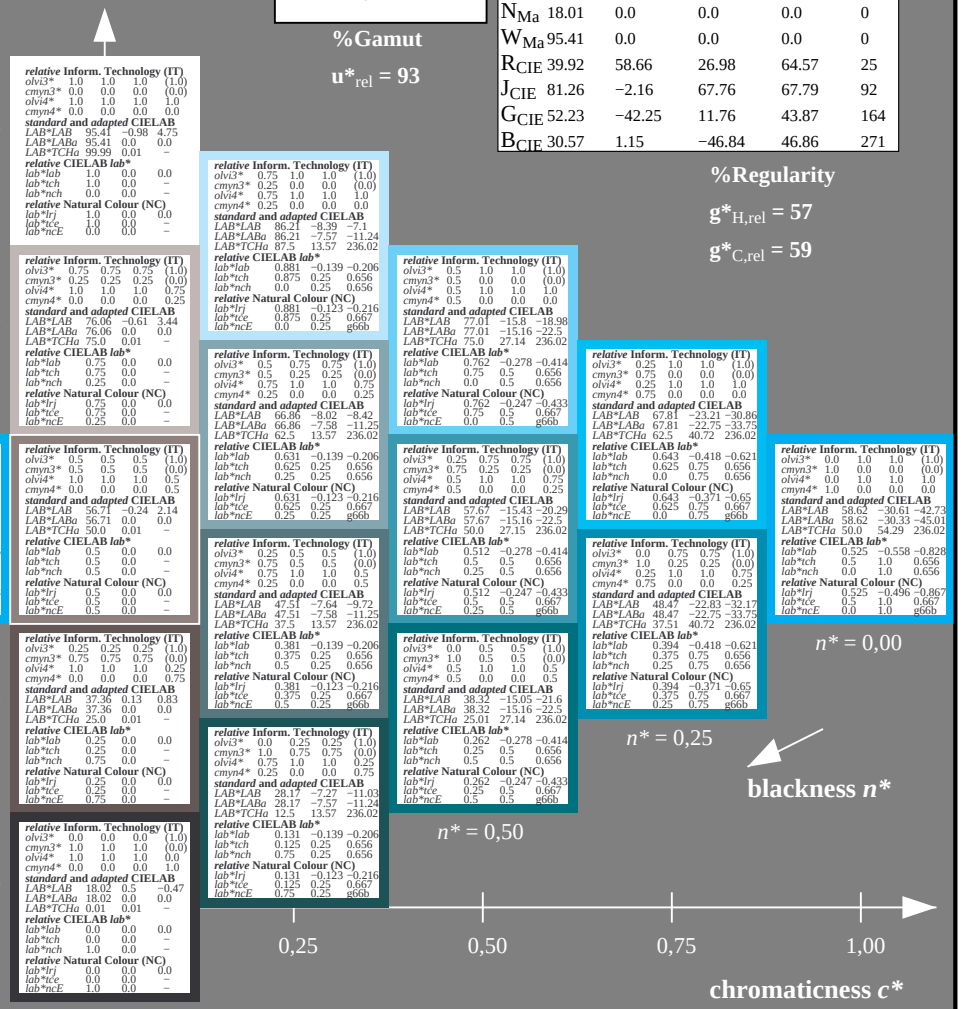
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

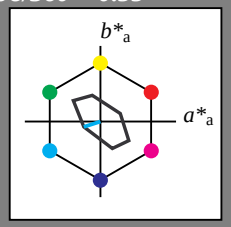
5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 198/360 = 0.55*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

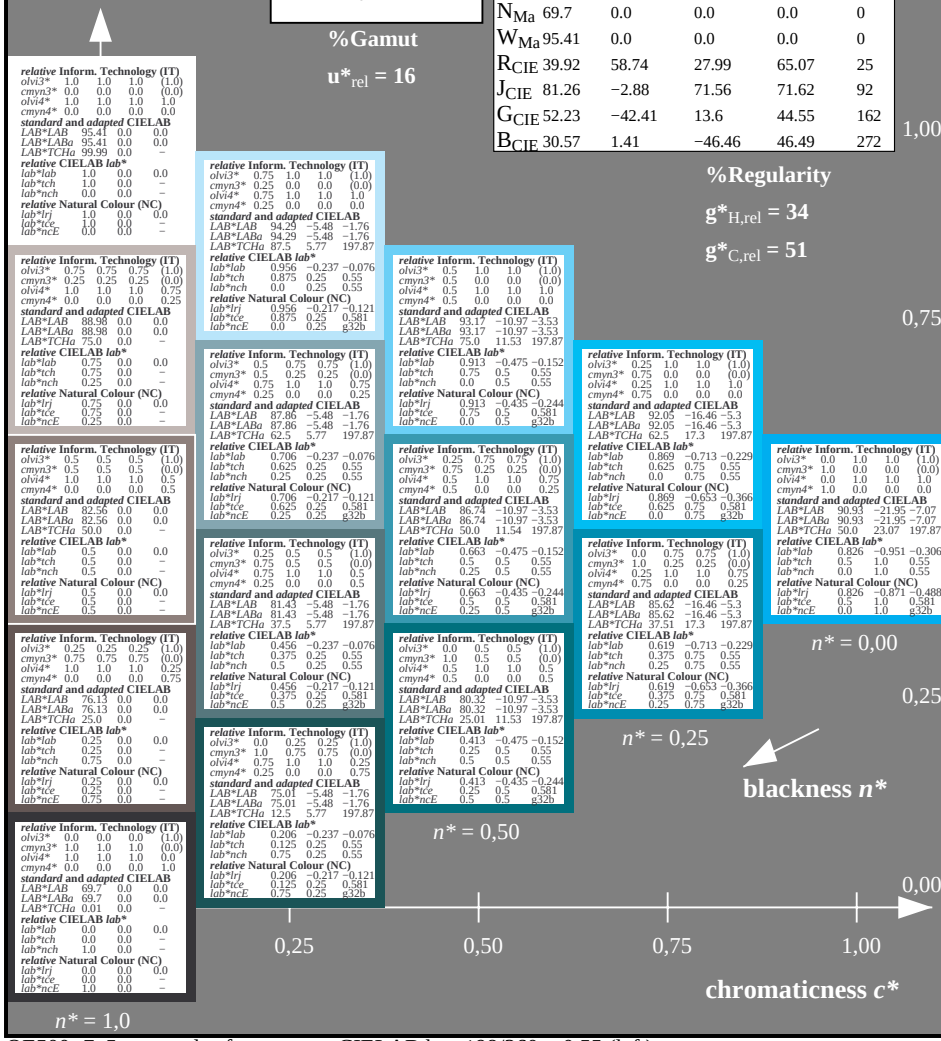
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



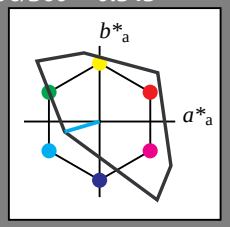
OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

Output: Colorimetric Television Luminous System TLS00

for hue *h* = lab*h = 196/360 = 0.545*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

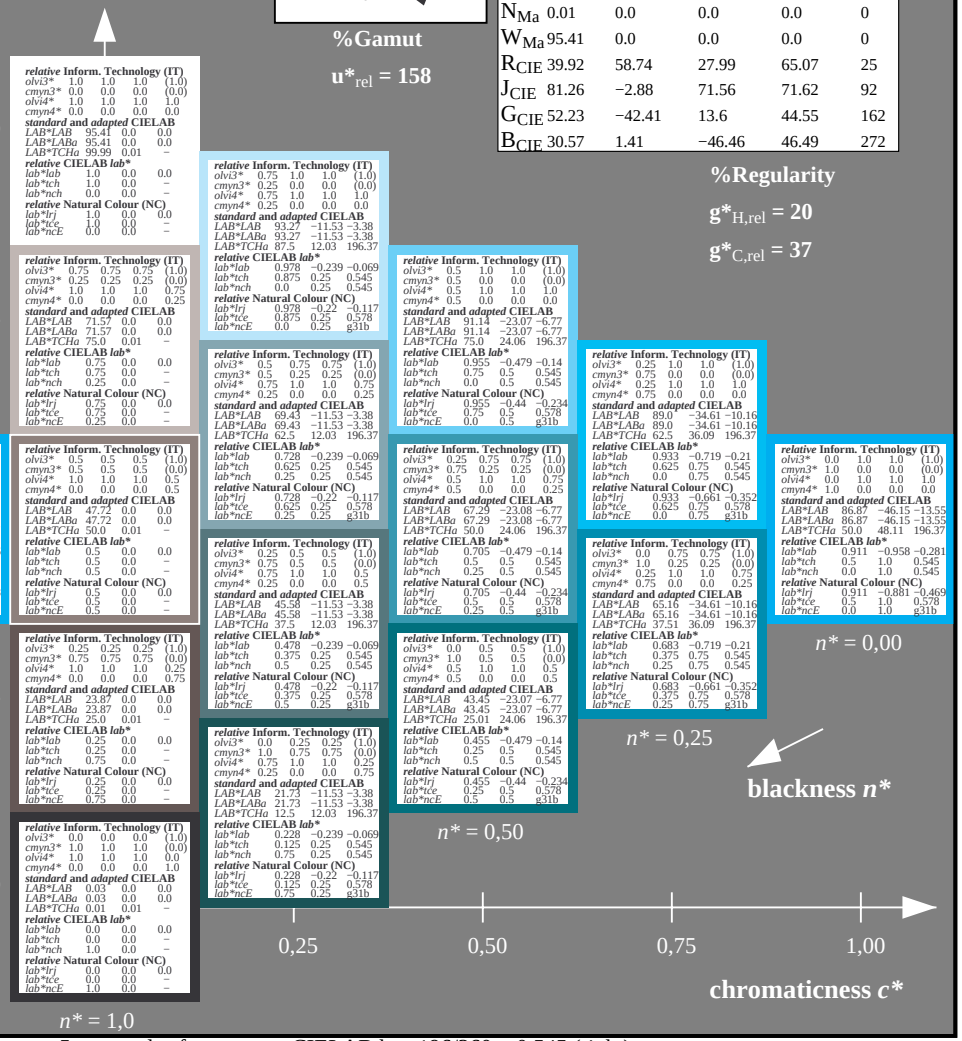
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

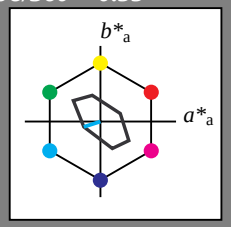


5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 198/360 = 0.55*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

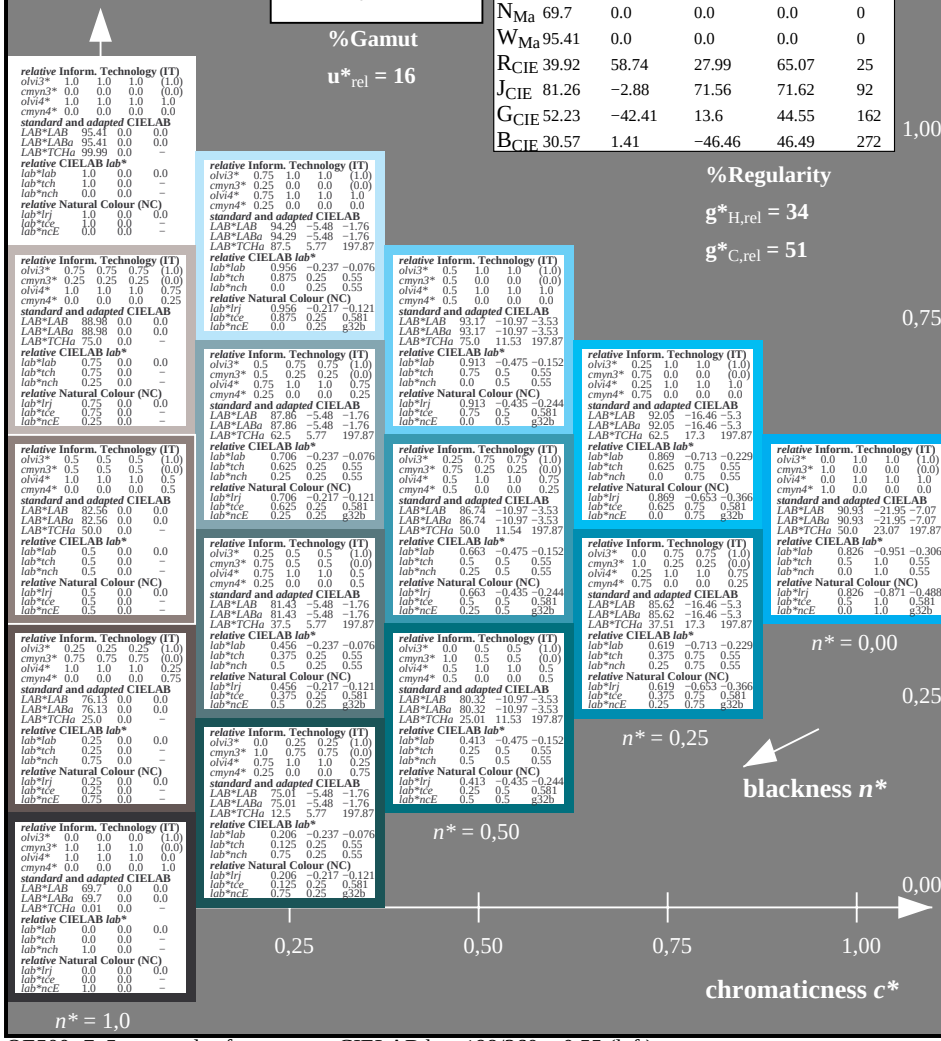
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

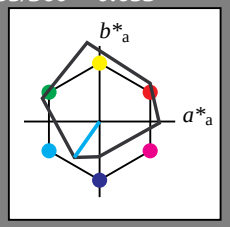


OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

Output: Colorimetric Printer Reflective System DRSXX
for hue *h* = lab*h = 235/360 = 0.653*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 53 58 235
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

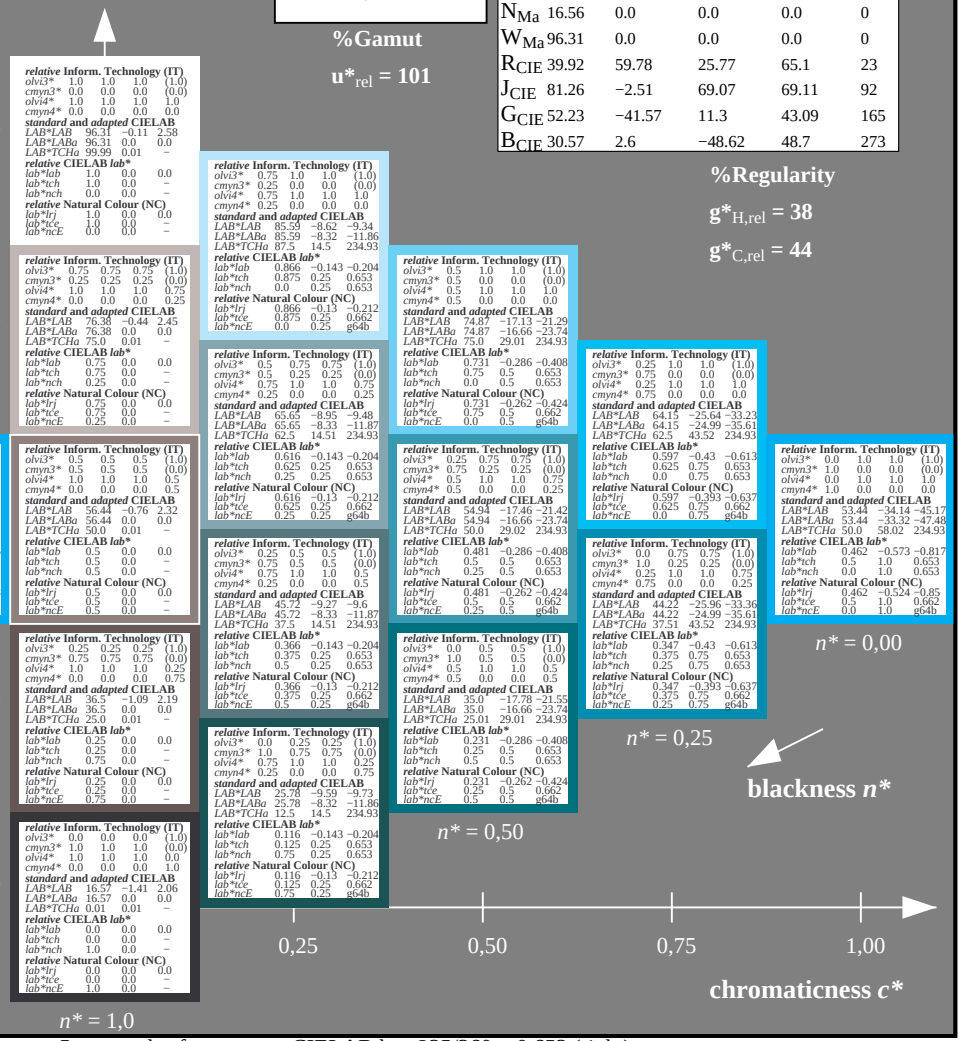
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



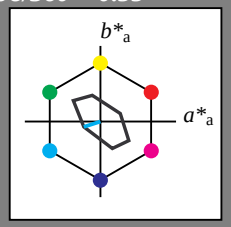
5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

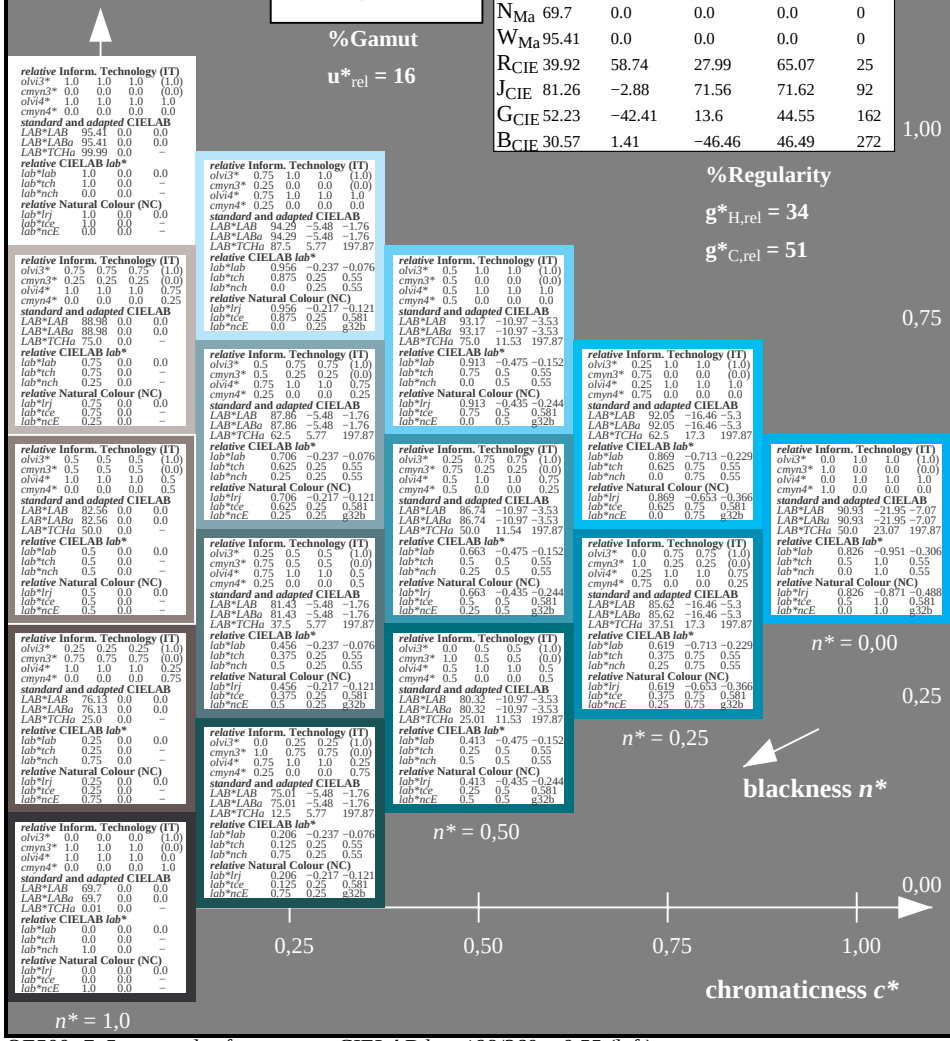
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



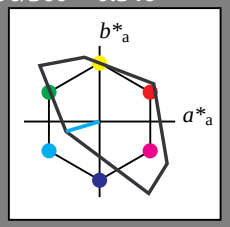
OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

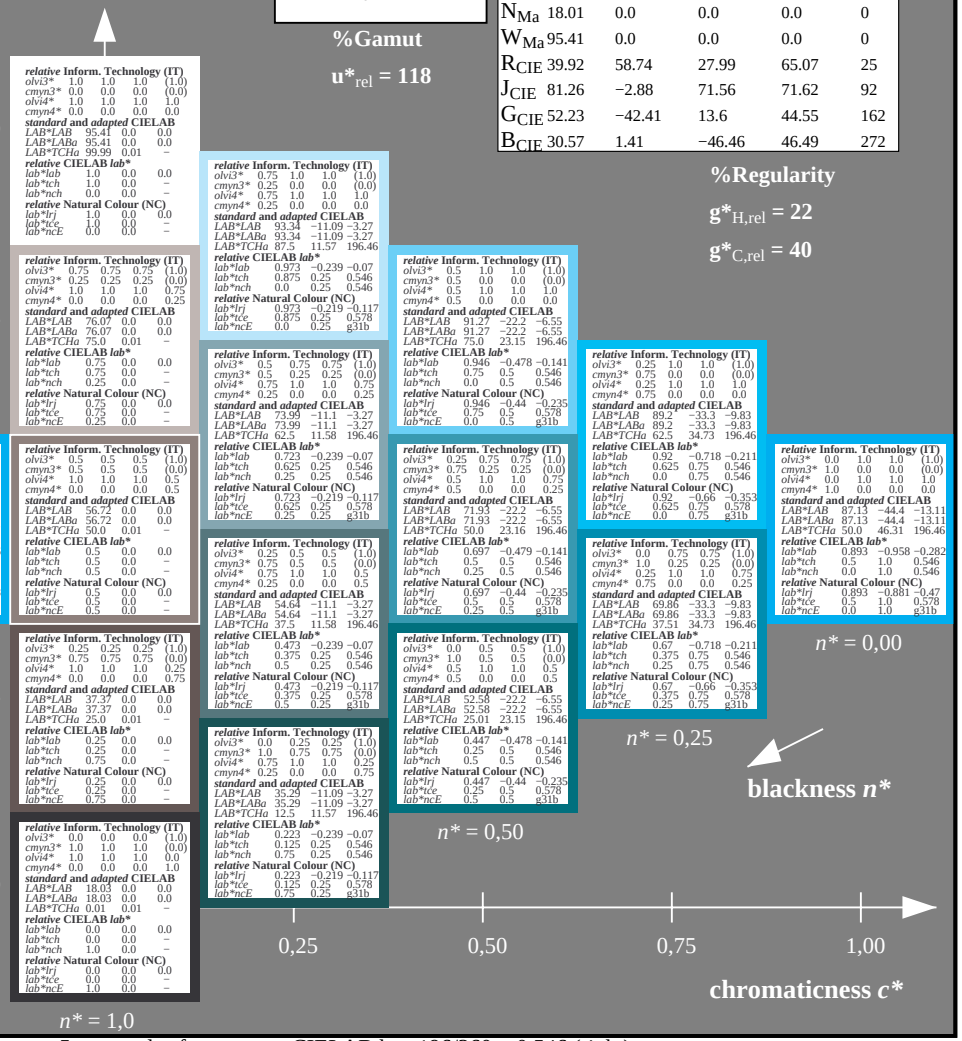
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

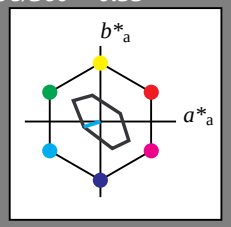
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

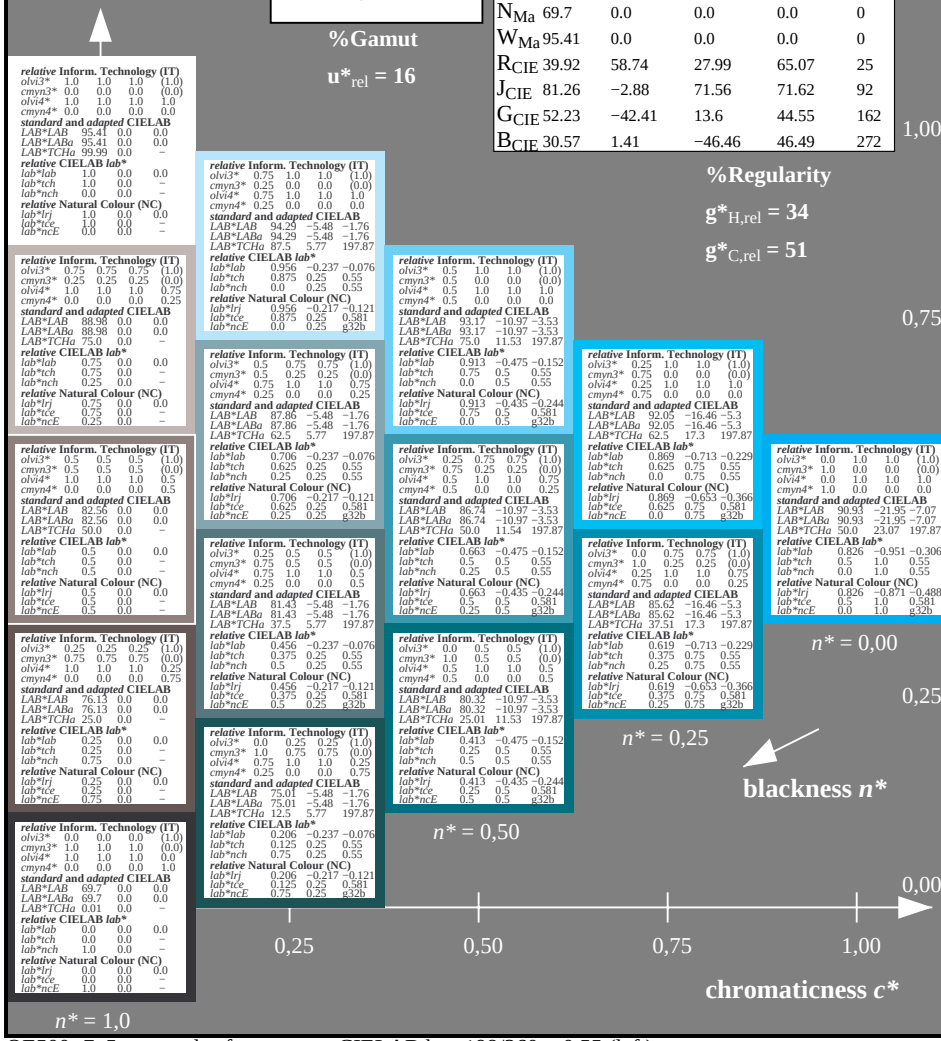
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

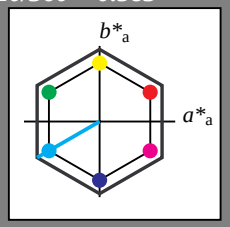
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

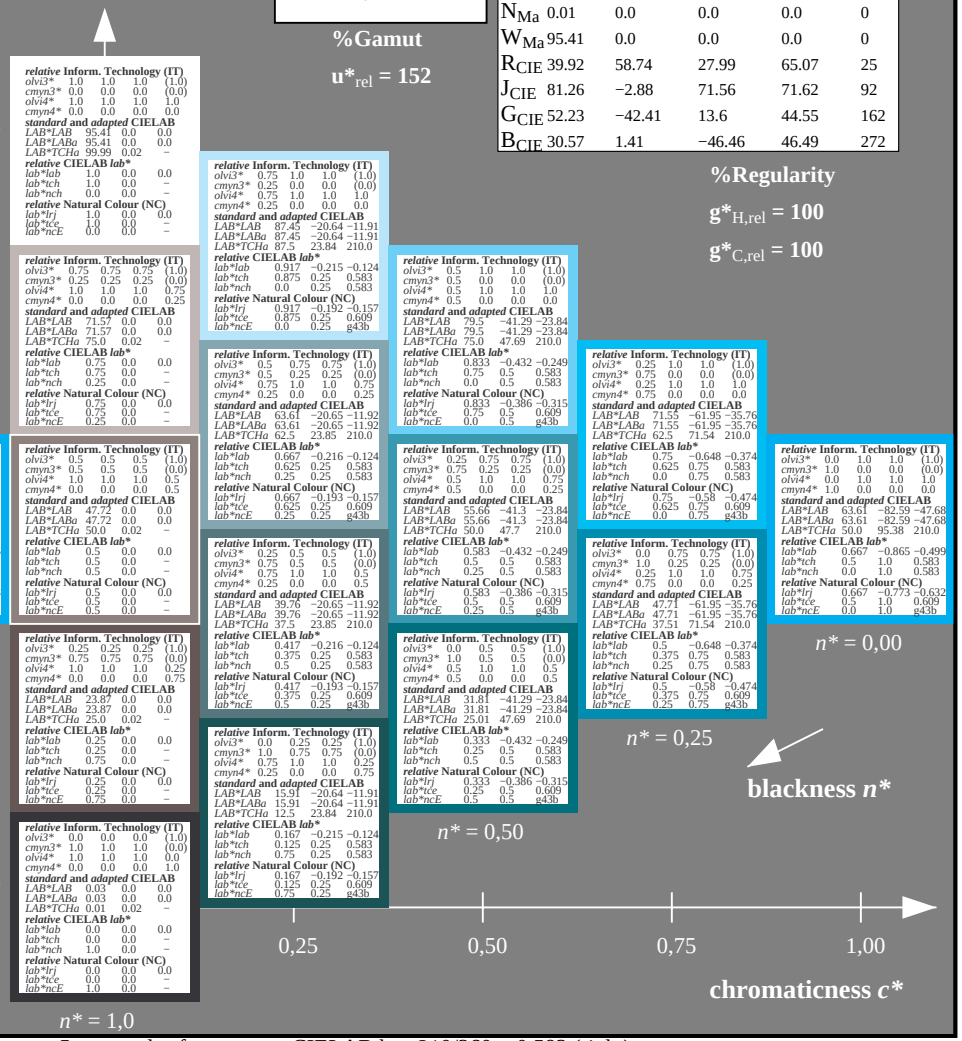
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



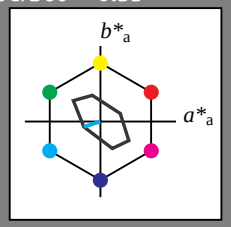
OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

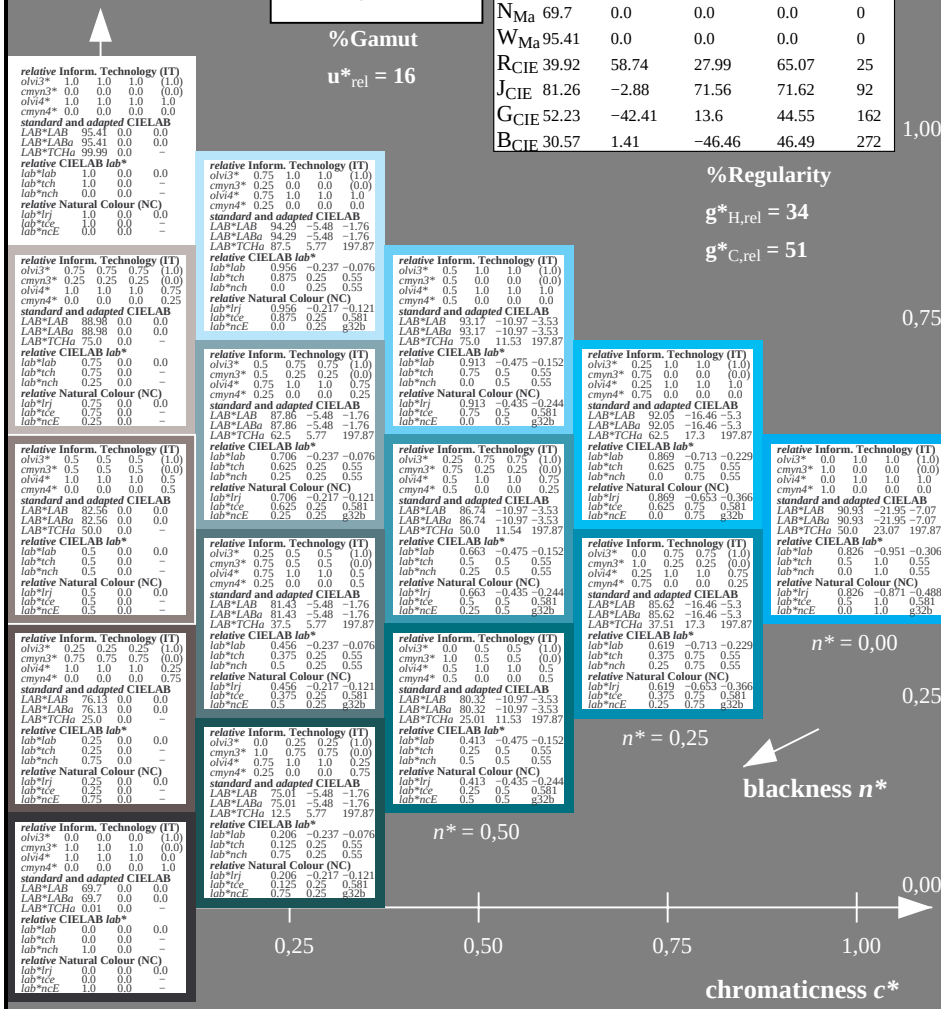
%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

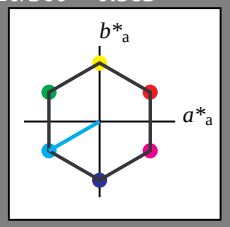
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 70 77 210
olv*Ma: 0.0 1.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

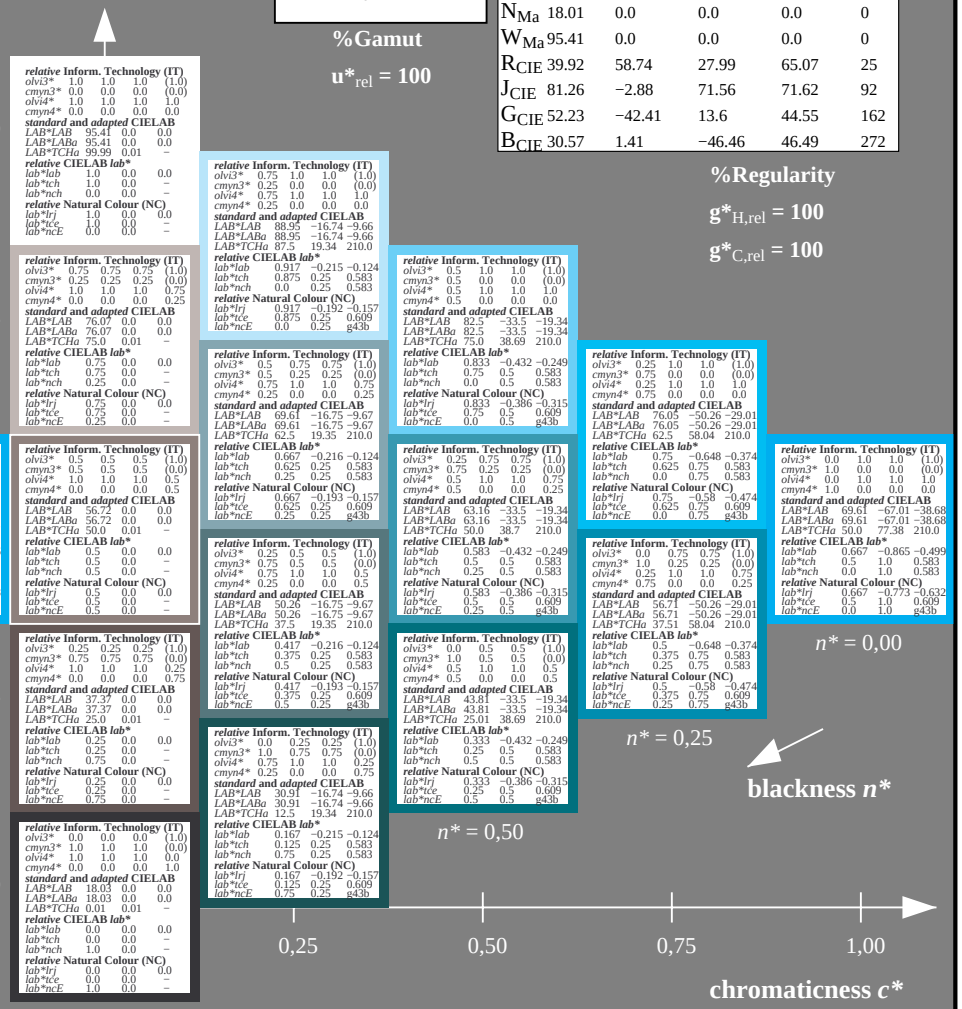
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

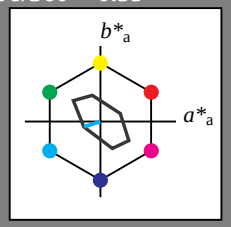
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

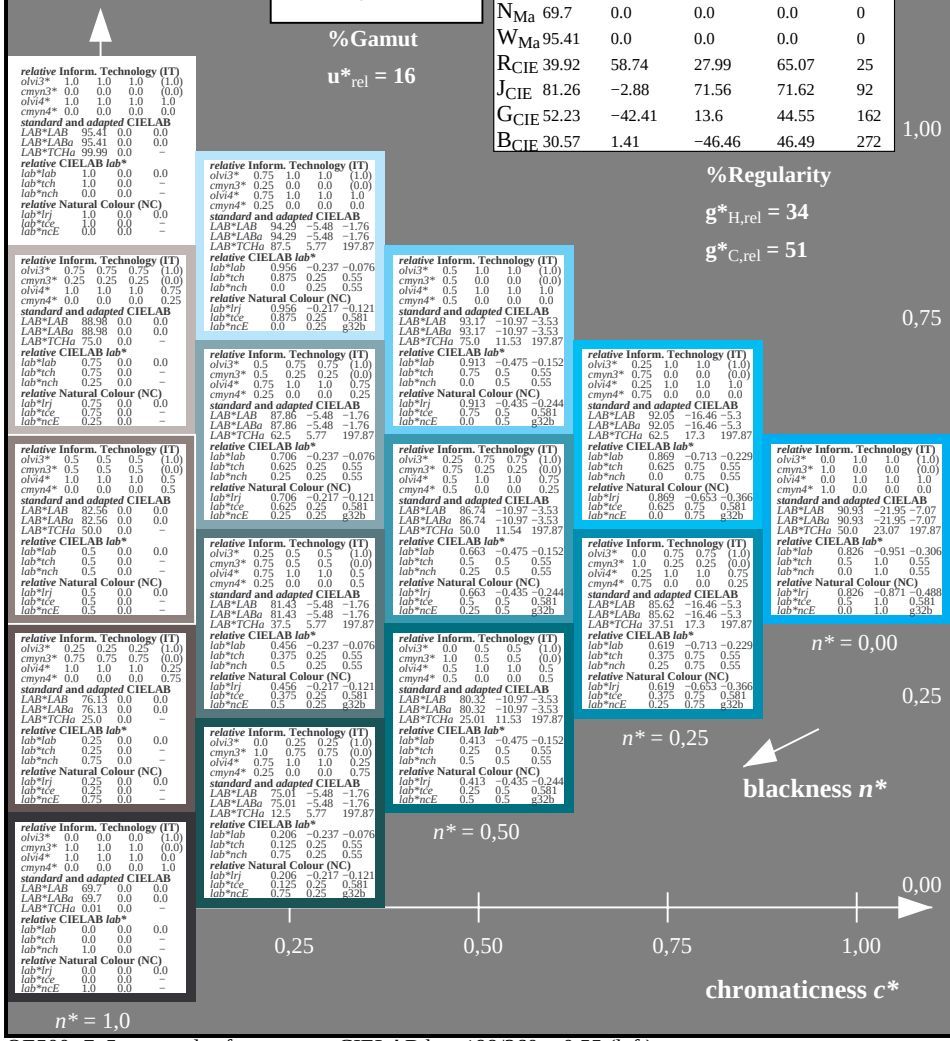
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

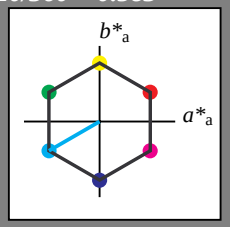
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

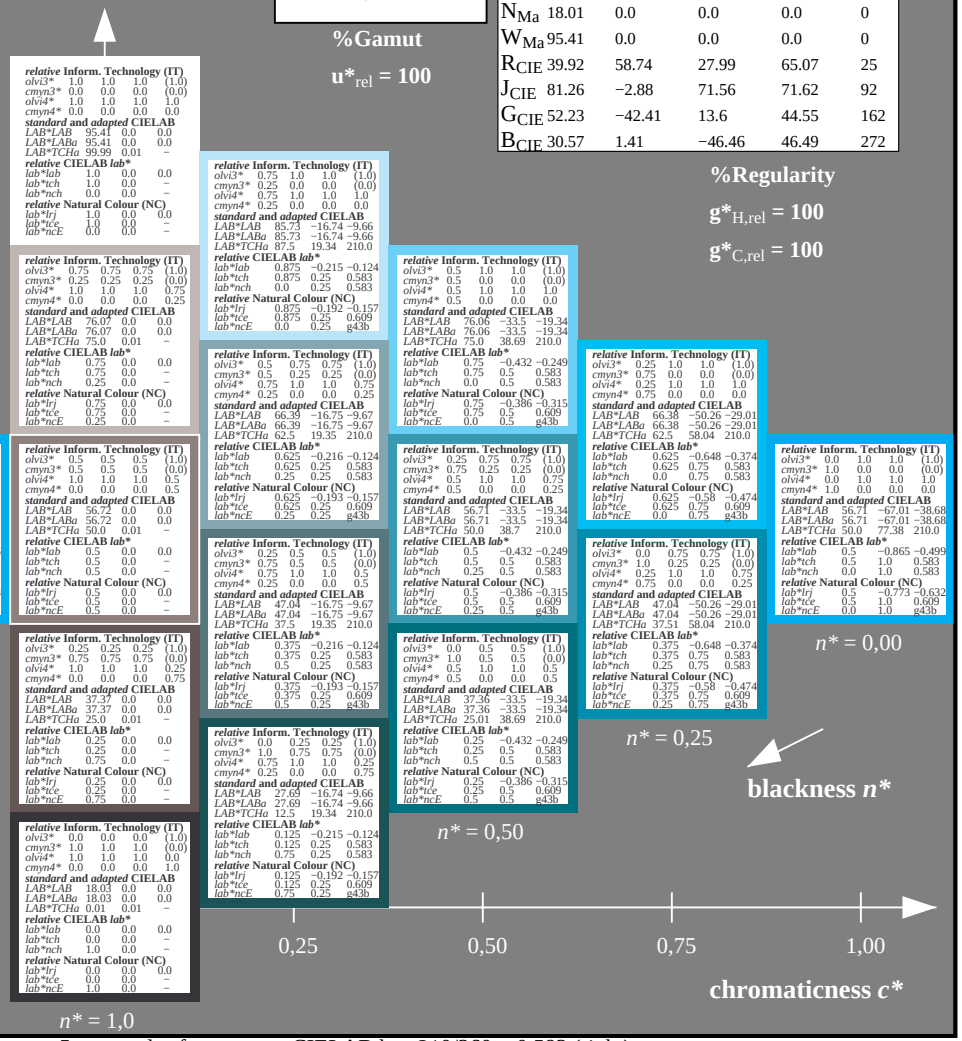
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



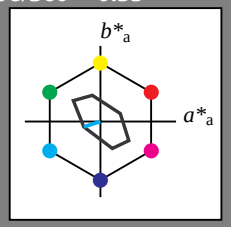
OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 198/360 = 0.55*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

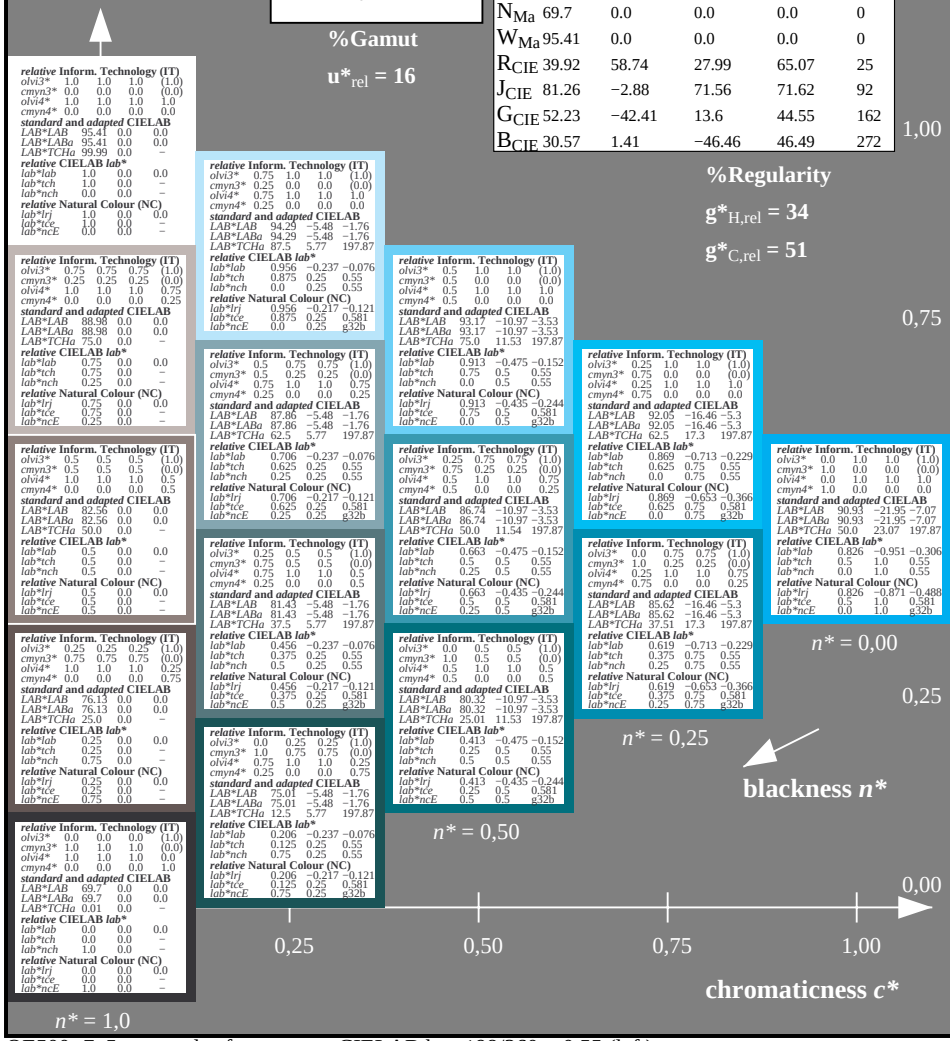
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

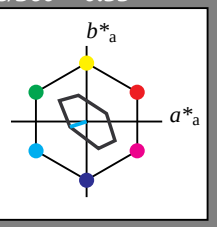


OE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

Output: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 198/360 = 0.55*
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 91 23 198
olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

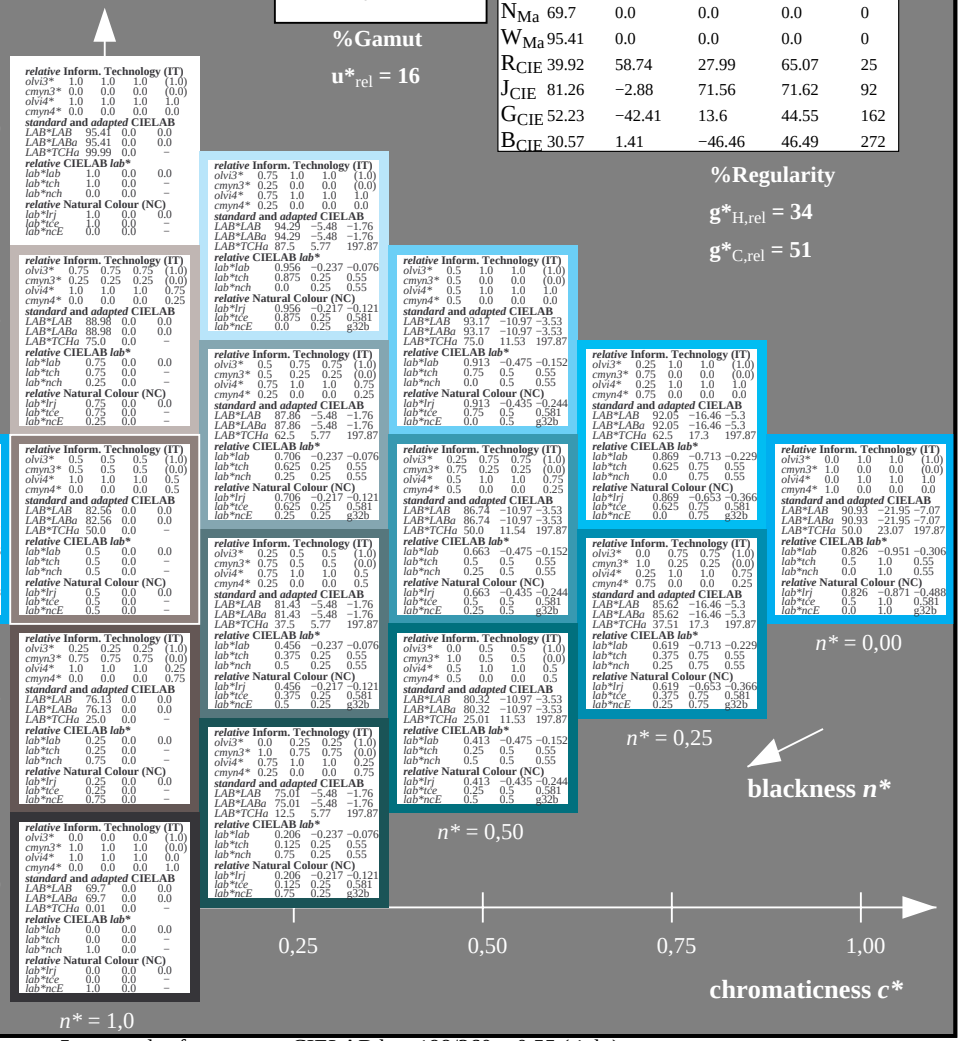
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

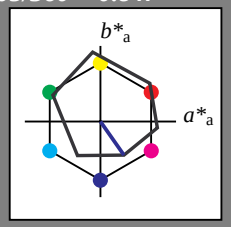


5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

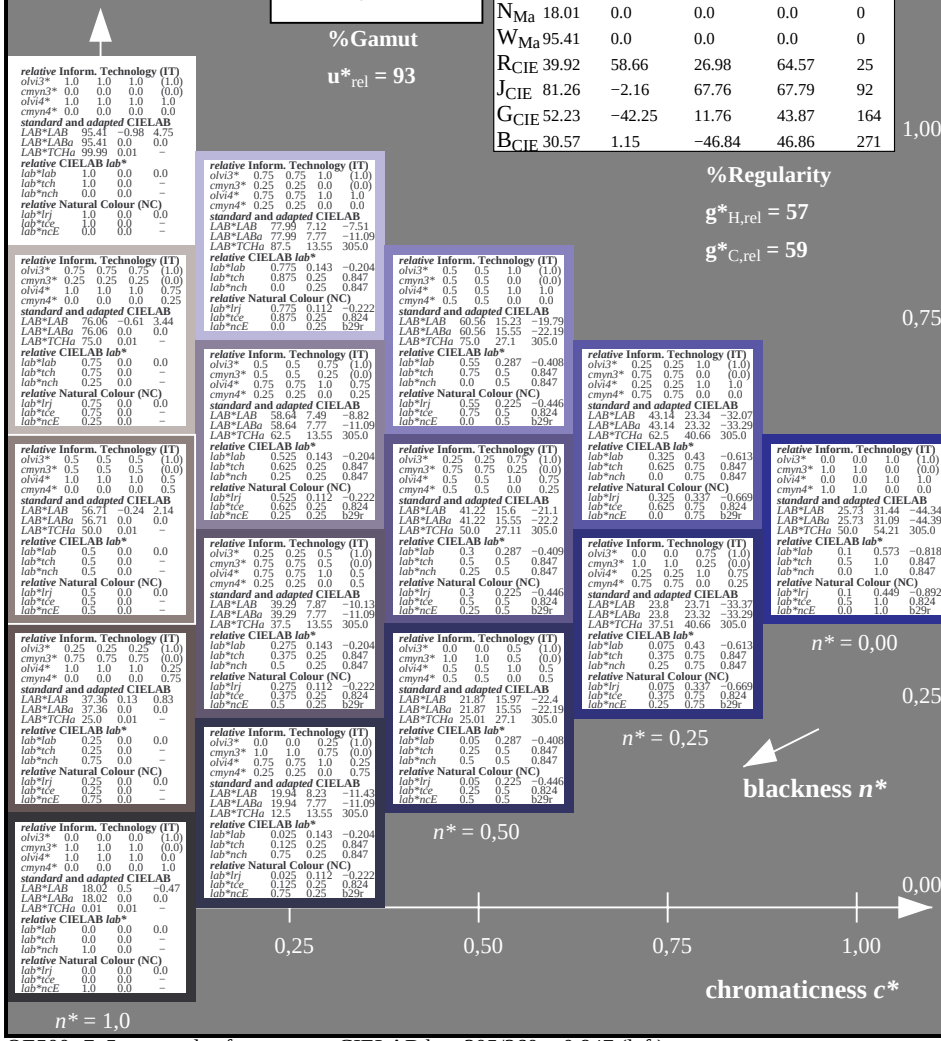
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

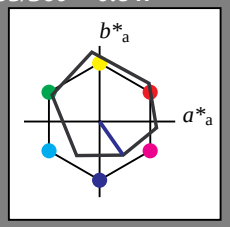


OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

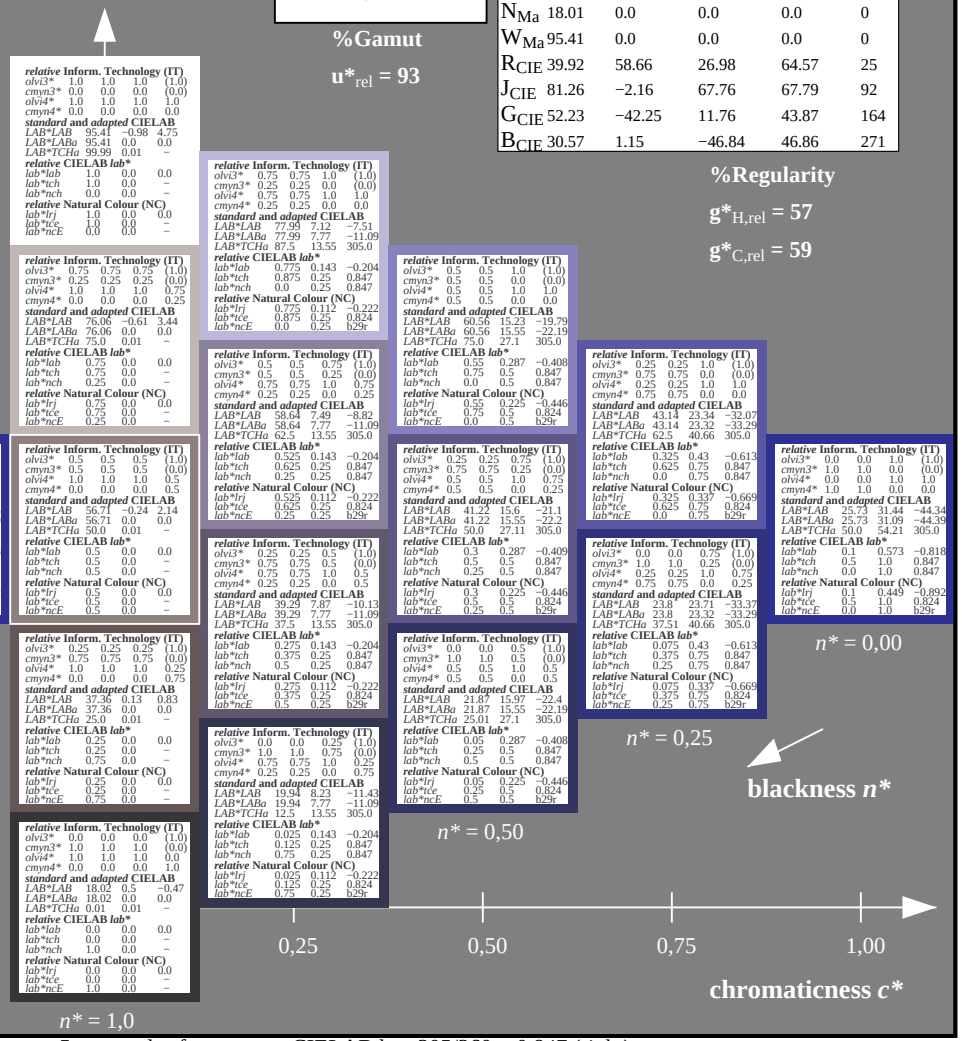
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

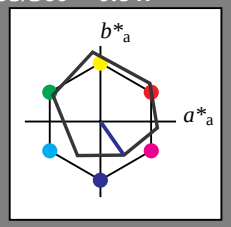


5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

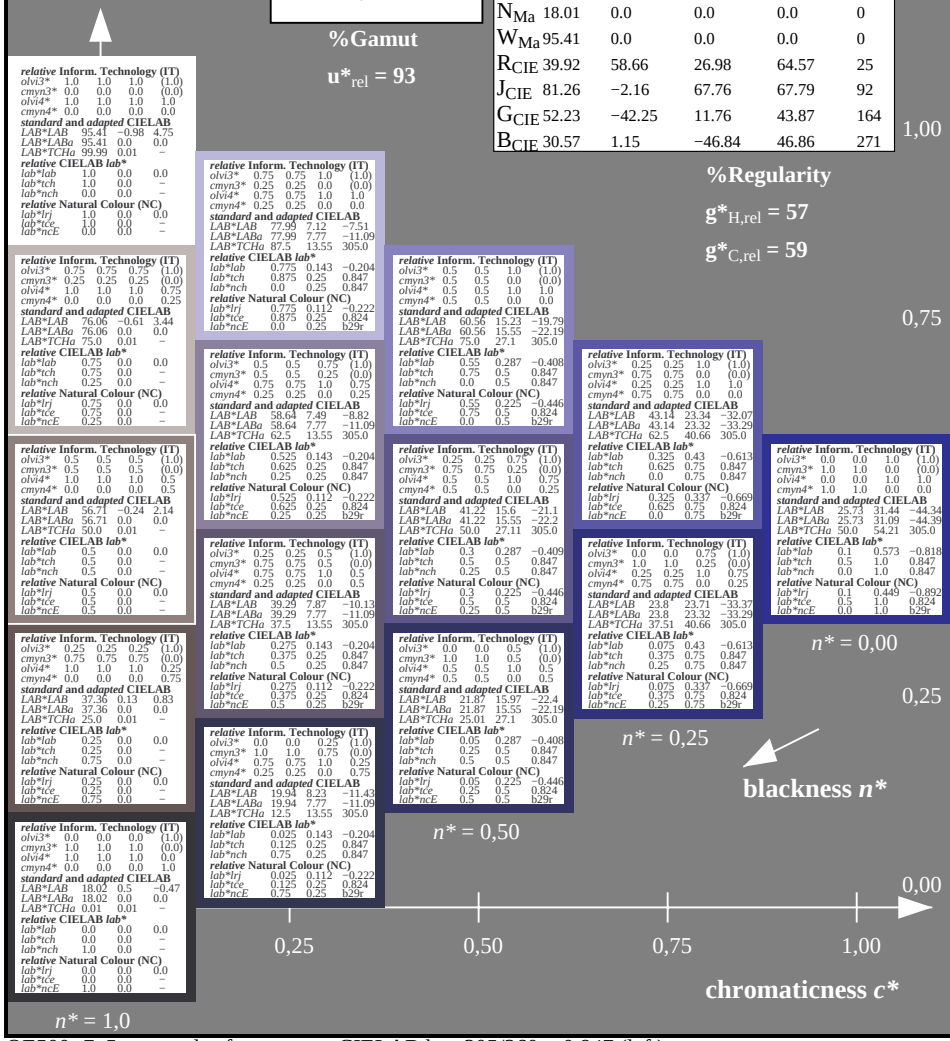
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

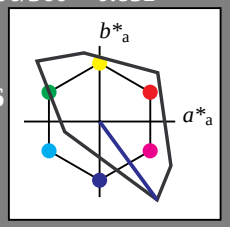
$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

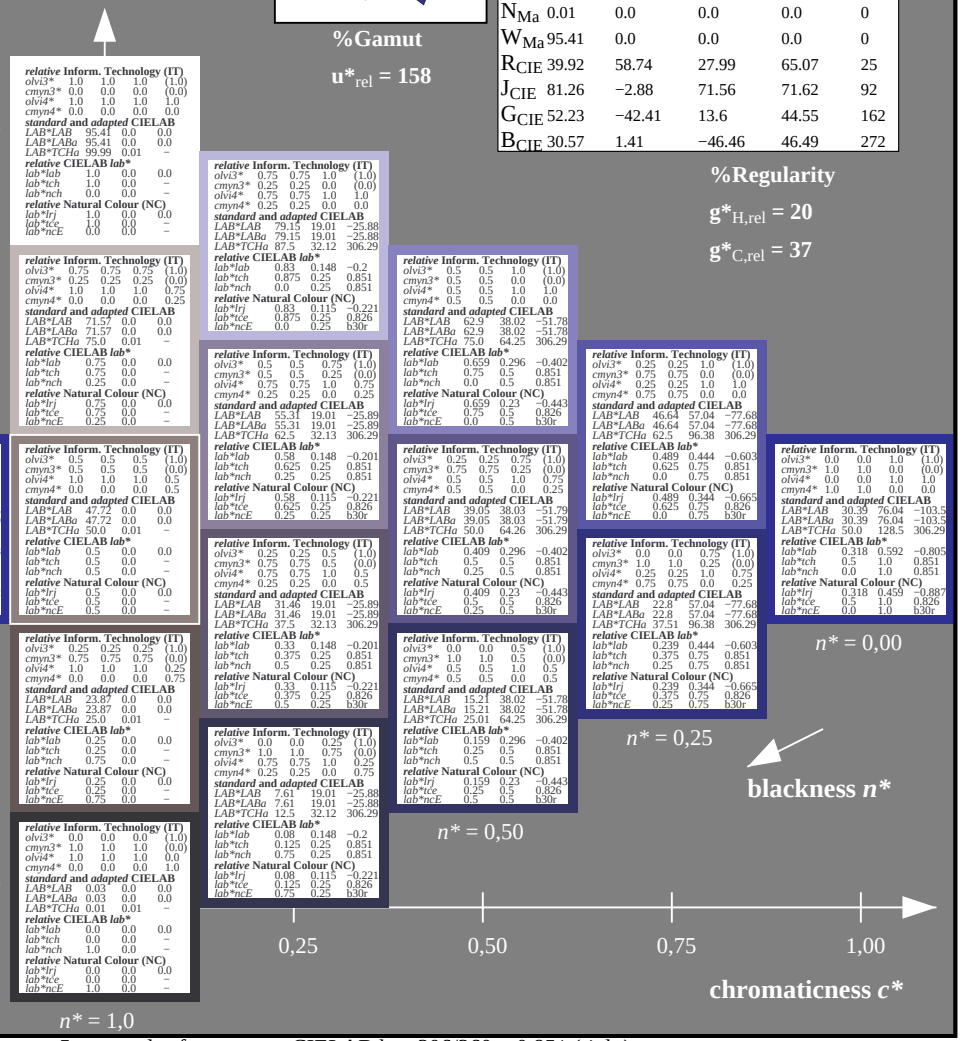
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



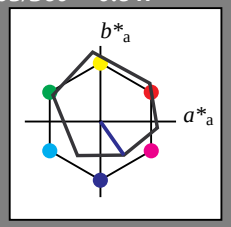
OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

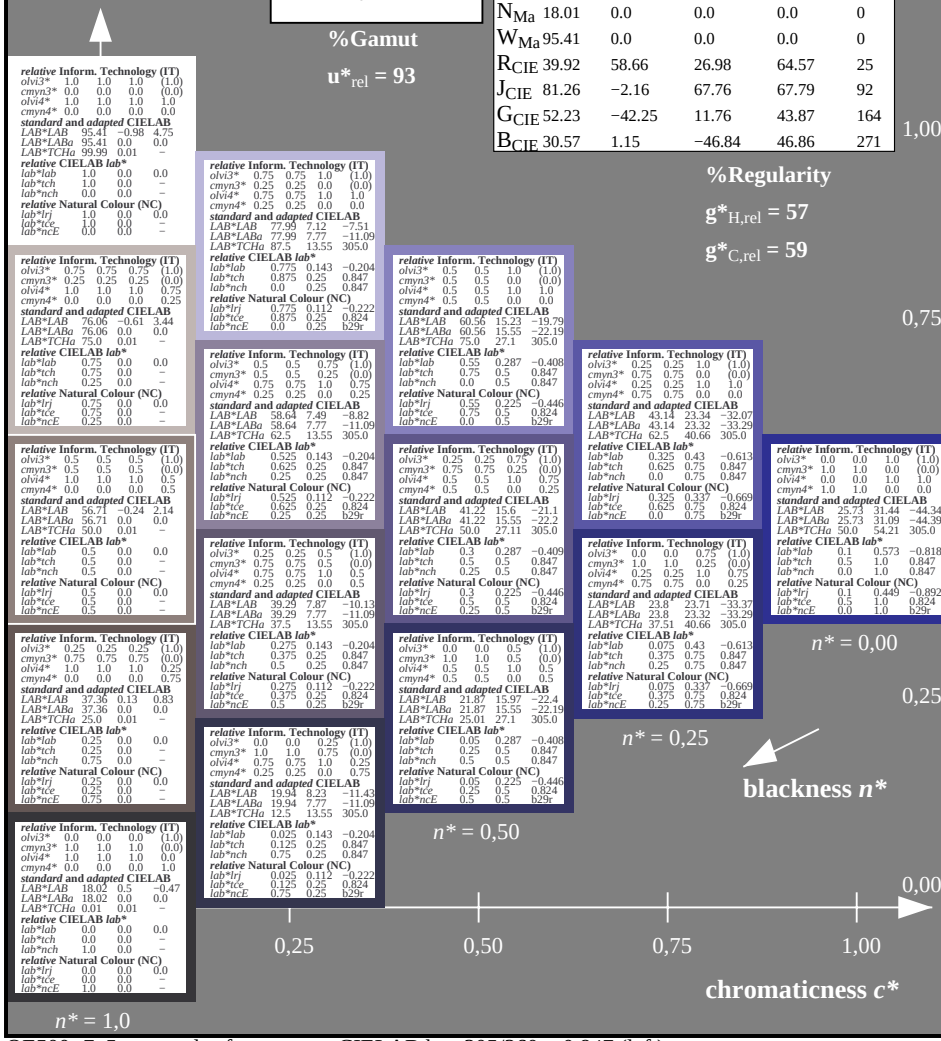
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

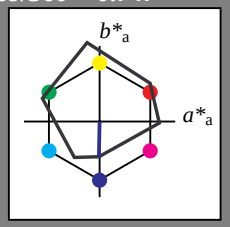


OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

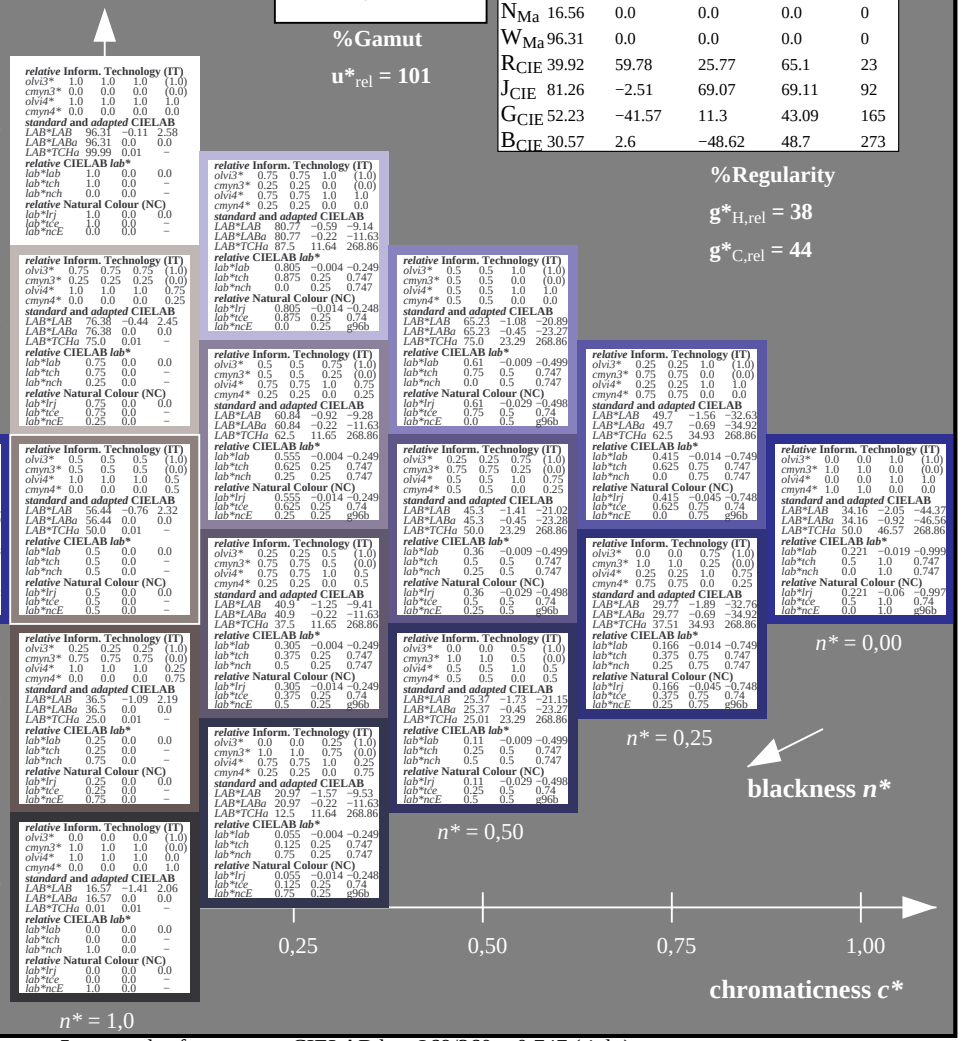
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



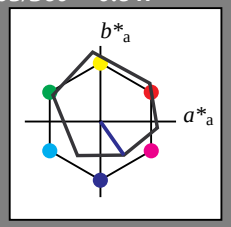
5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

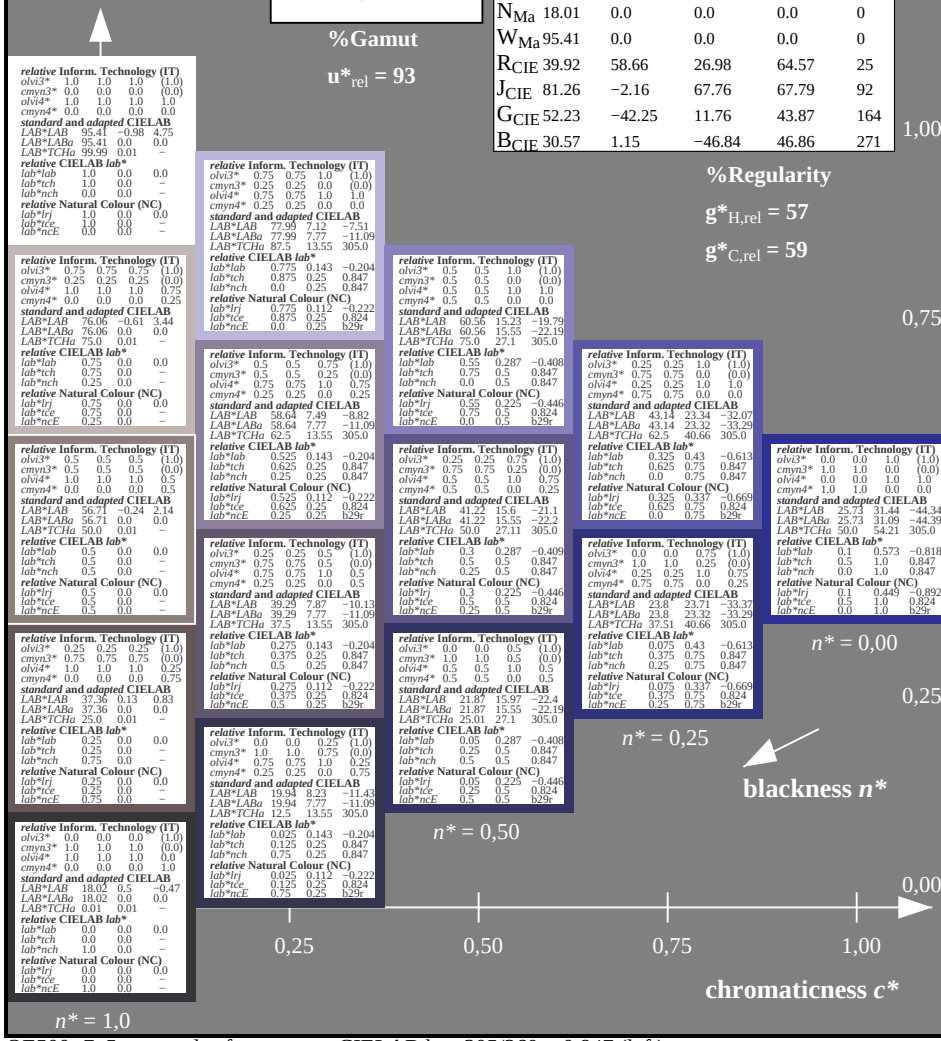
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



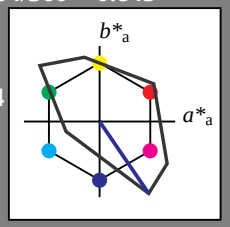
OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

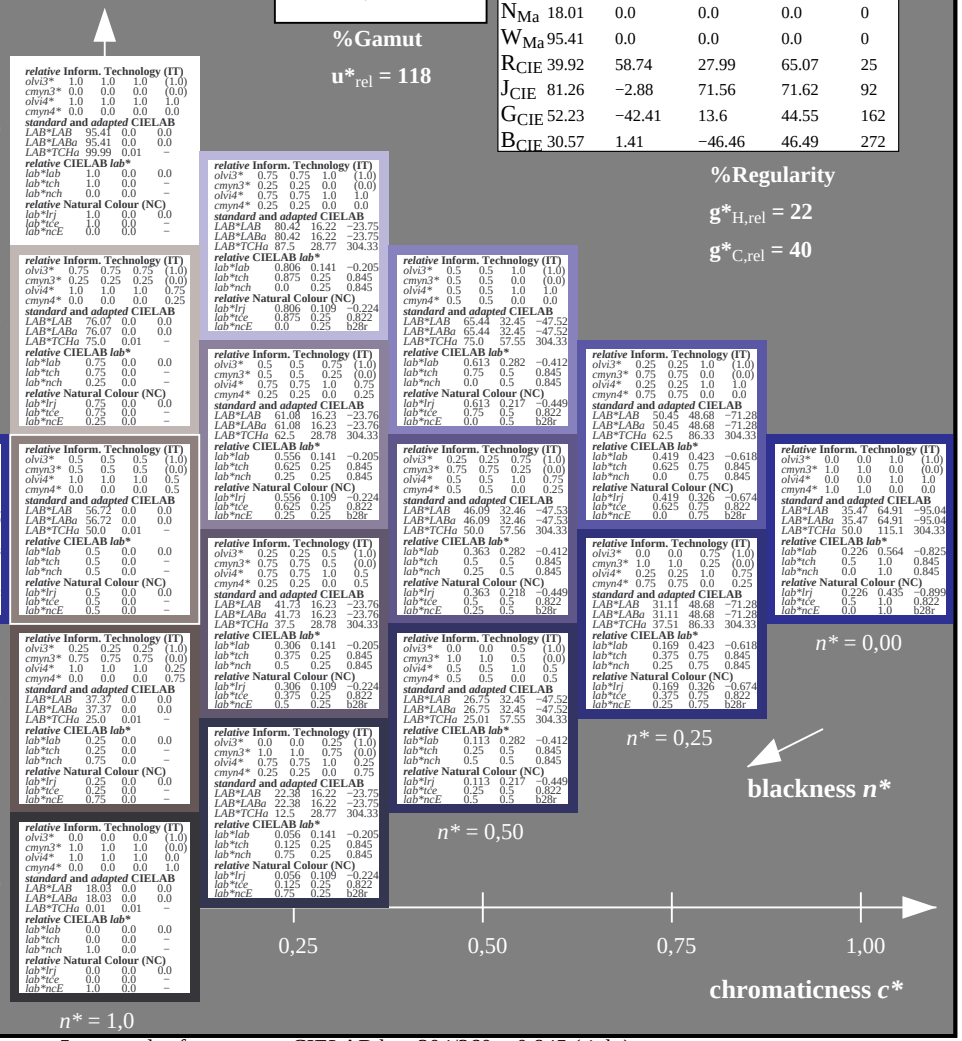
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



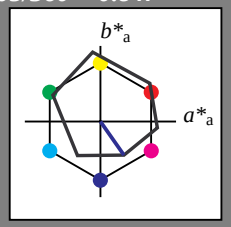
5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

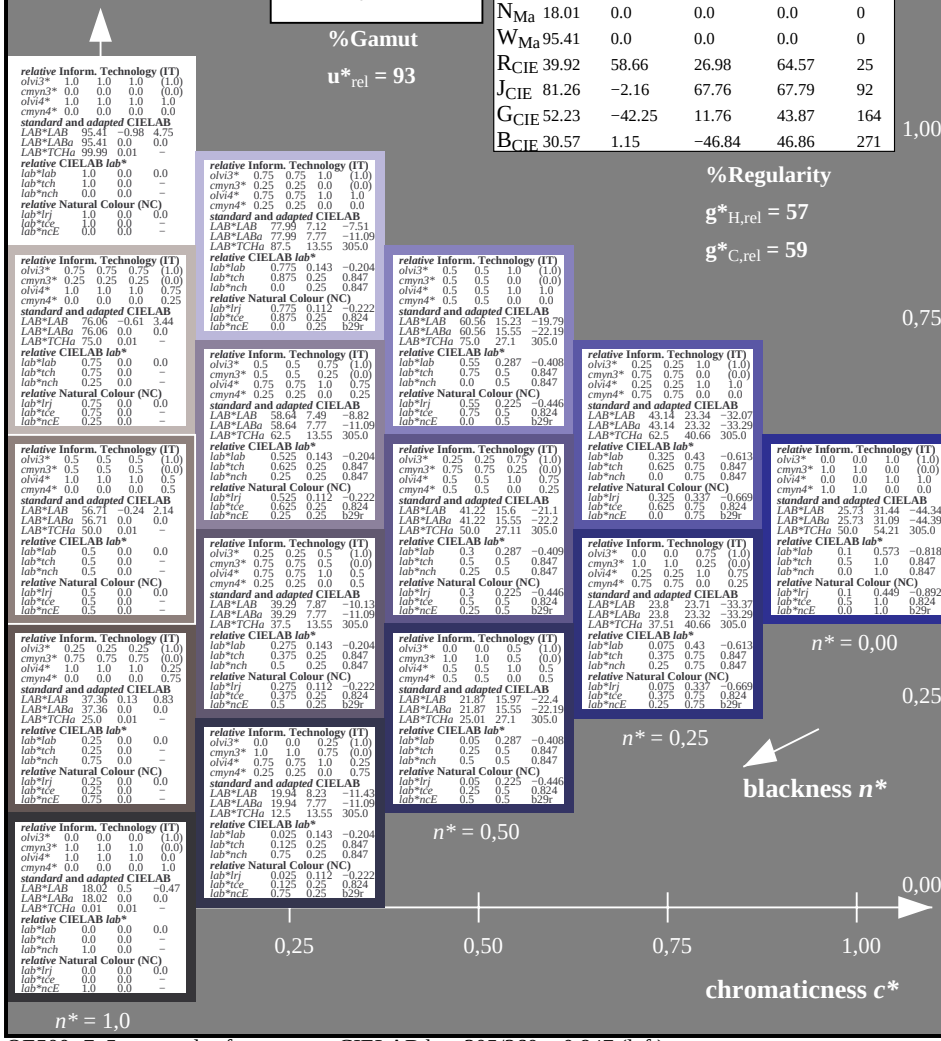
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

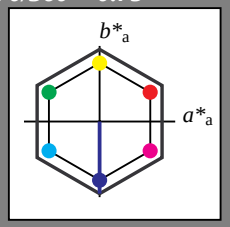


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

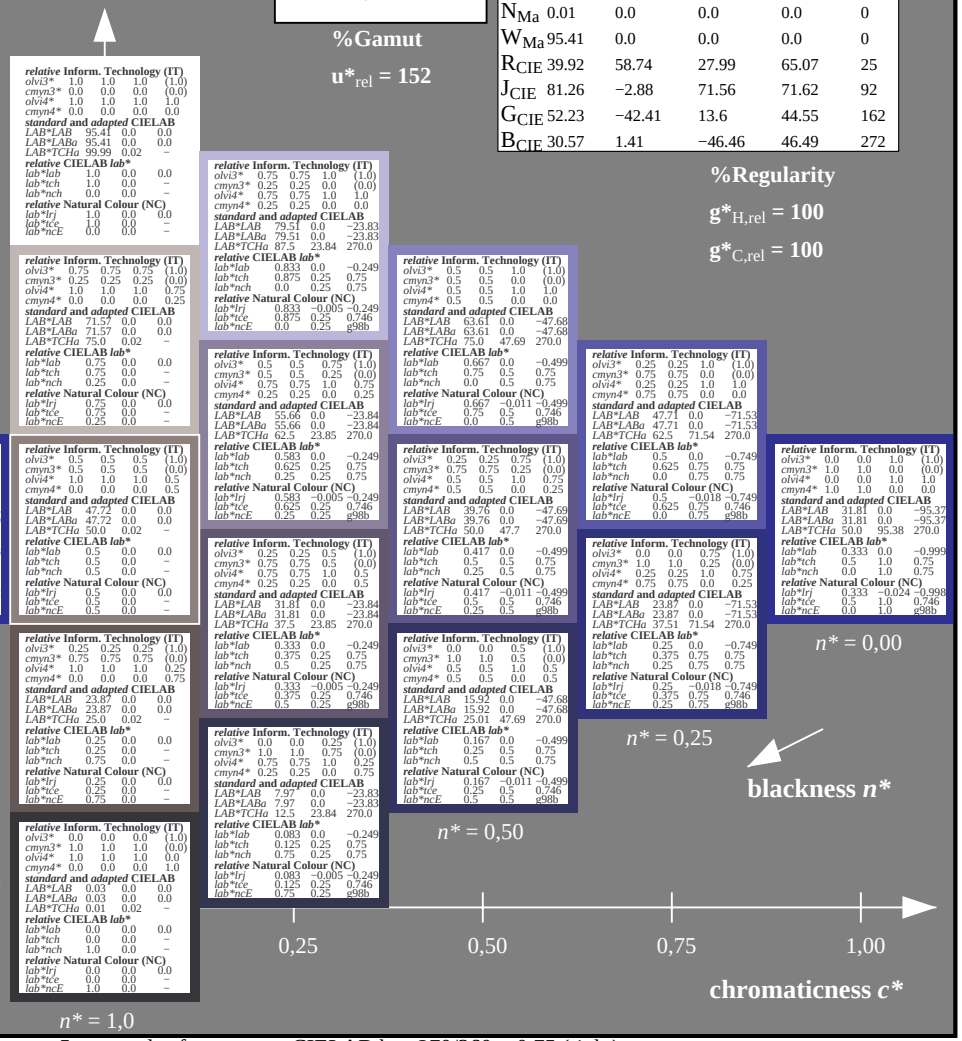
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

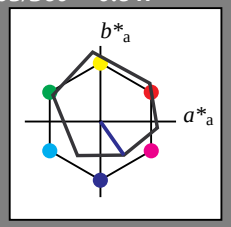
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

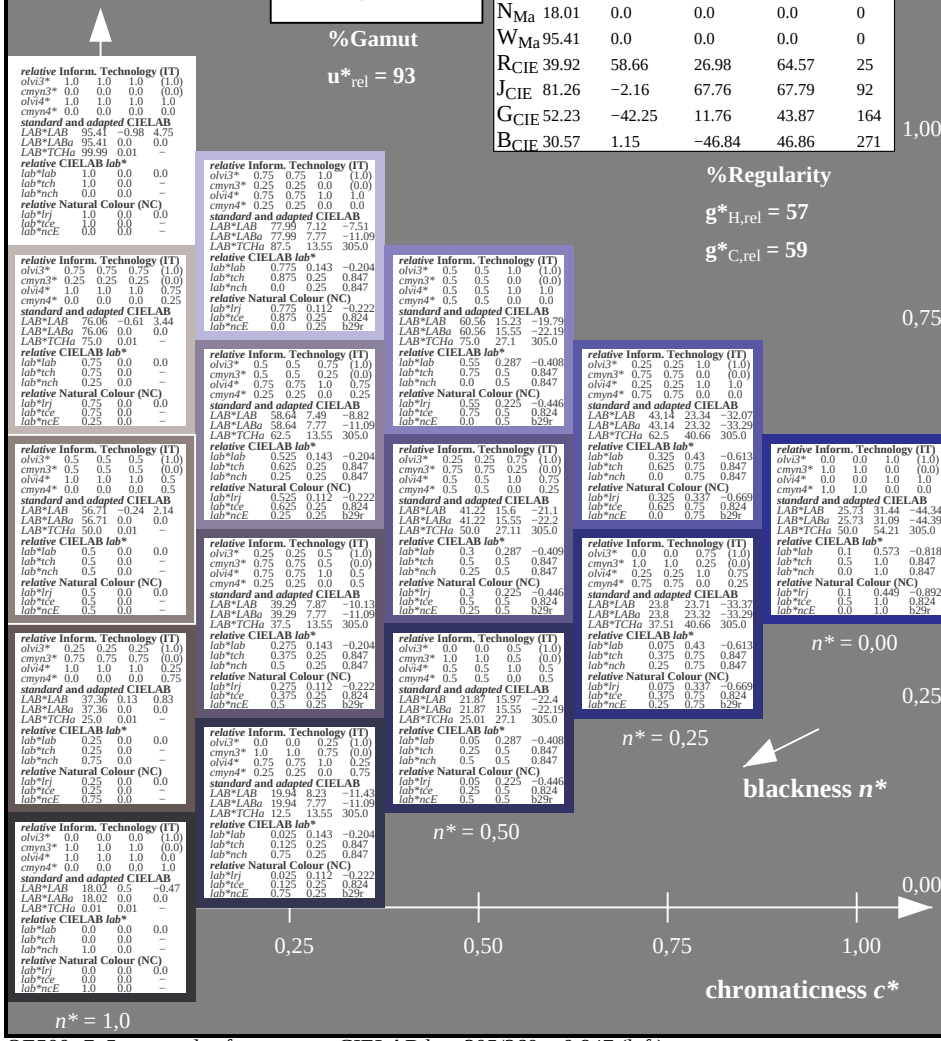
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

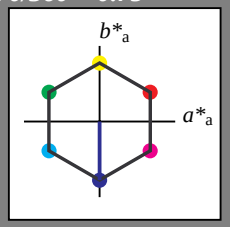


Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

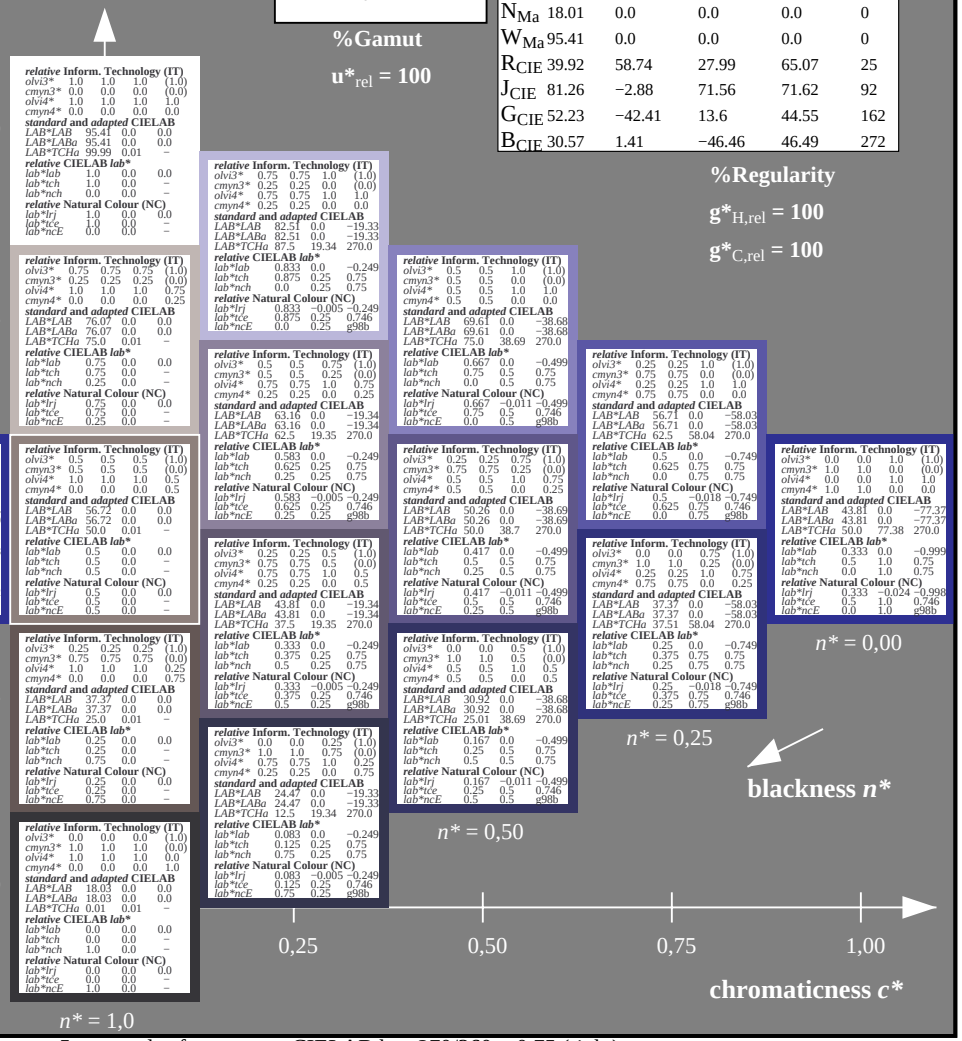
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



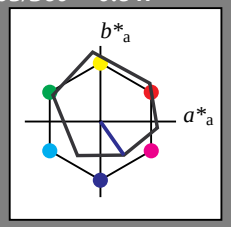
OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

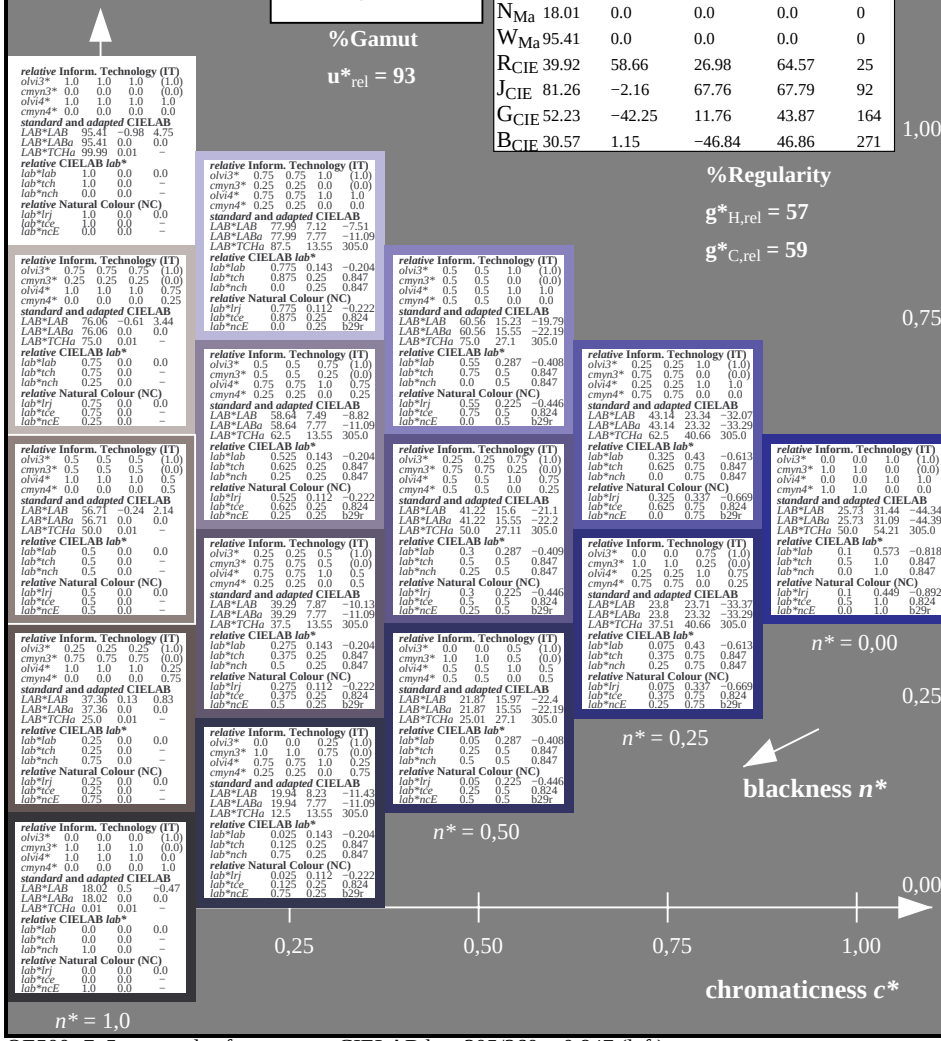
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

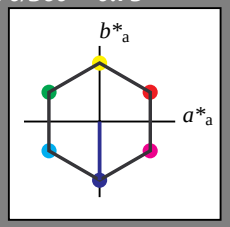
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

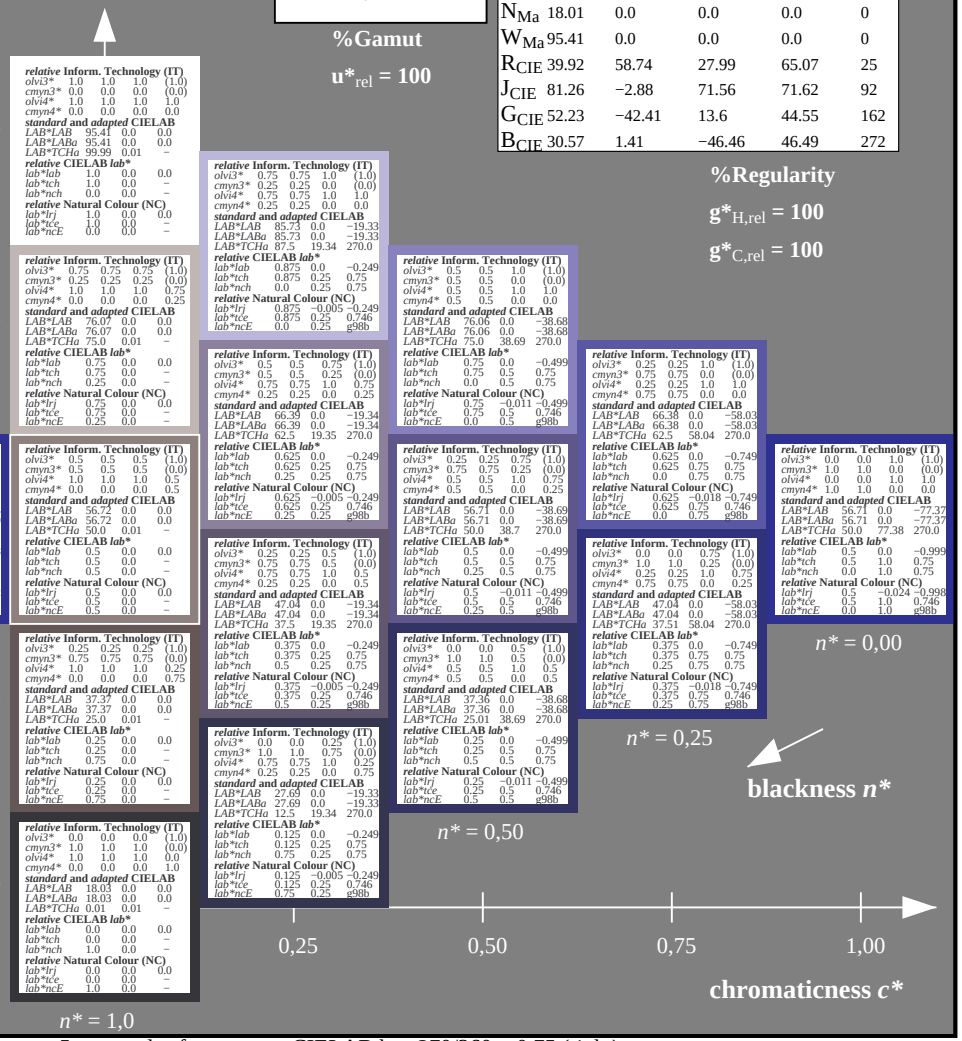
%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

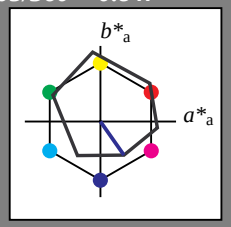
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 305/360 = 0.847*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

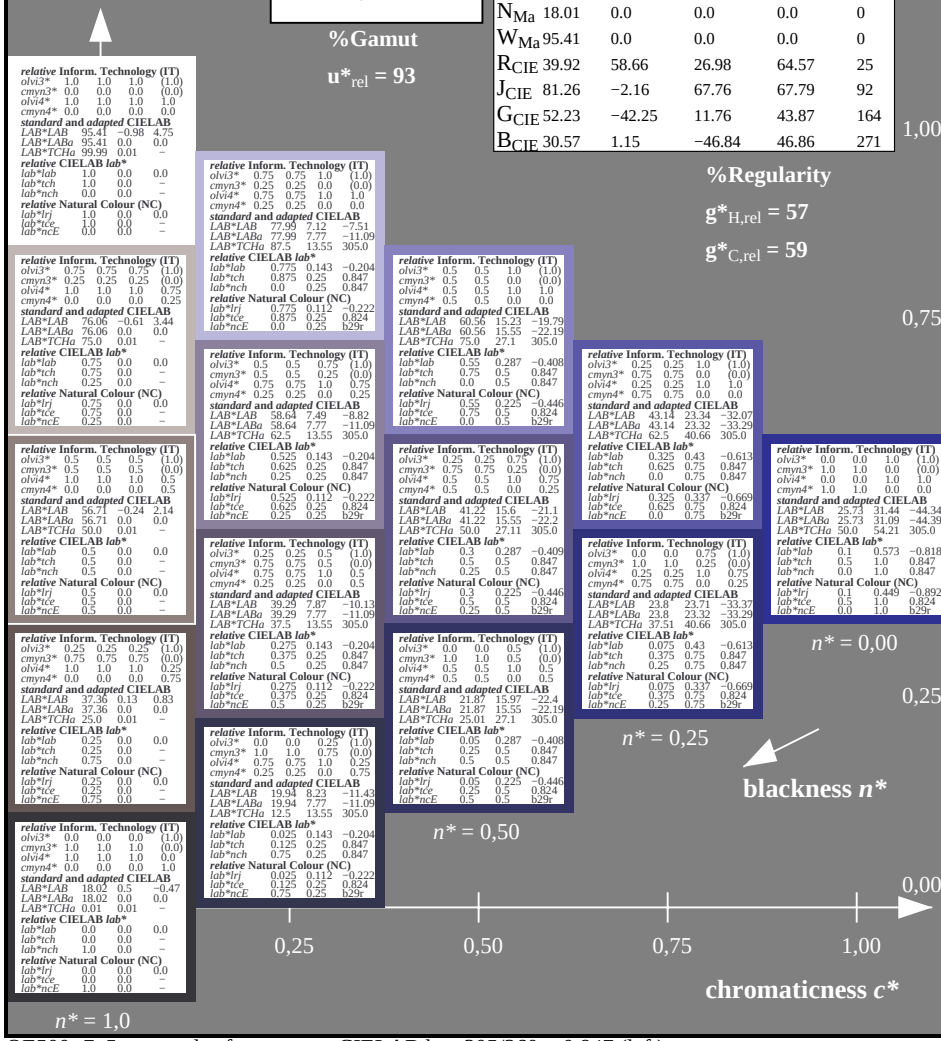
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



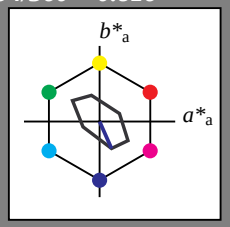
OE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 294/360 = 0.816*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

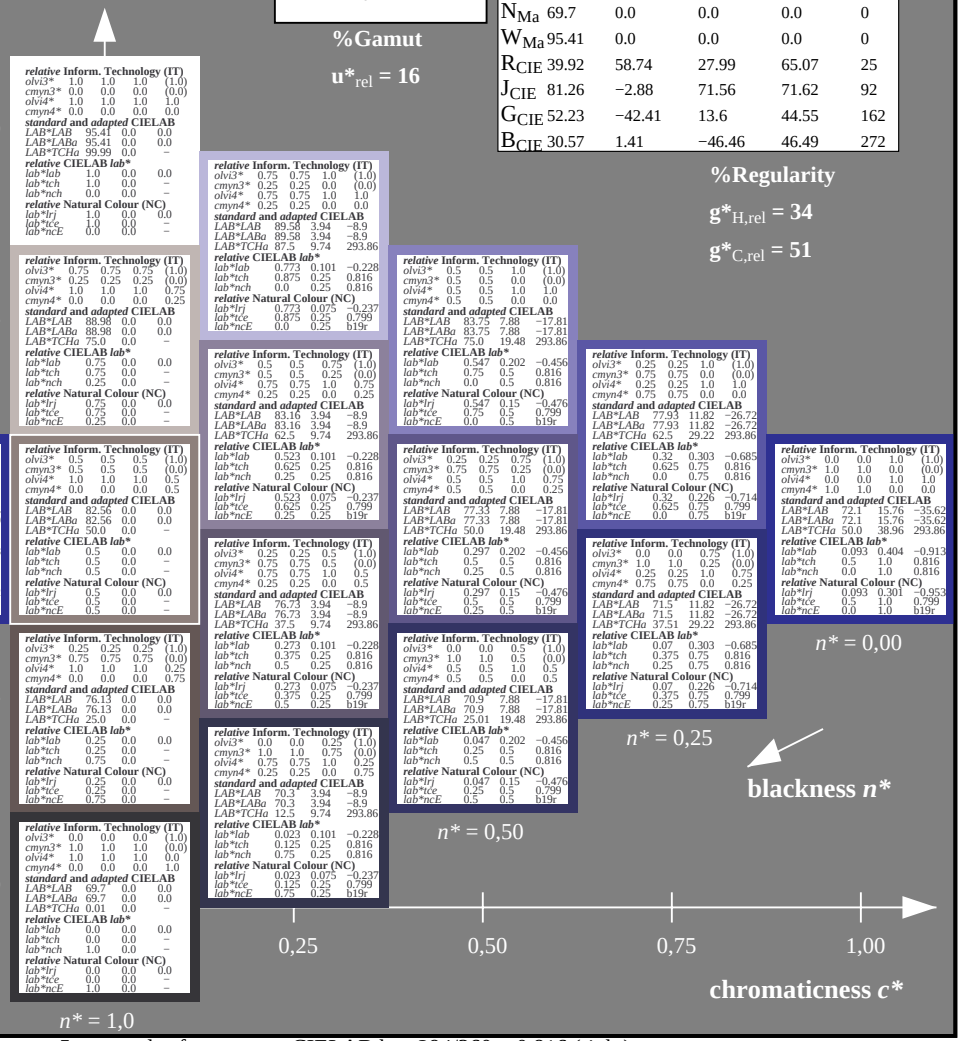
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Television Luminous System TLS00

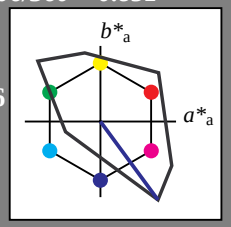
for hue $h^* = lab^*h = 306/360 = 0.851$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

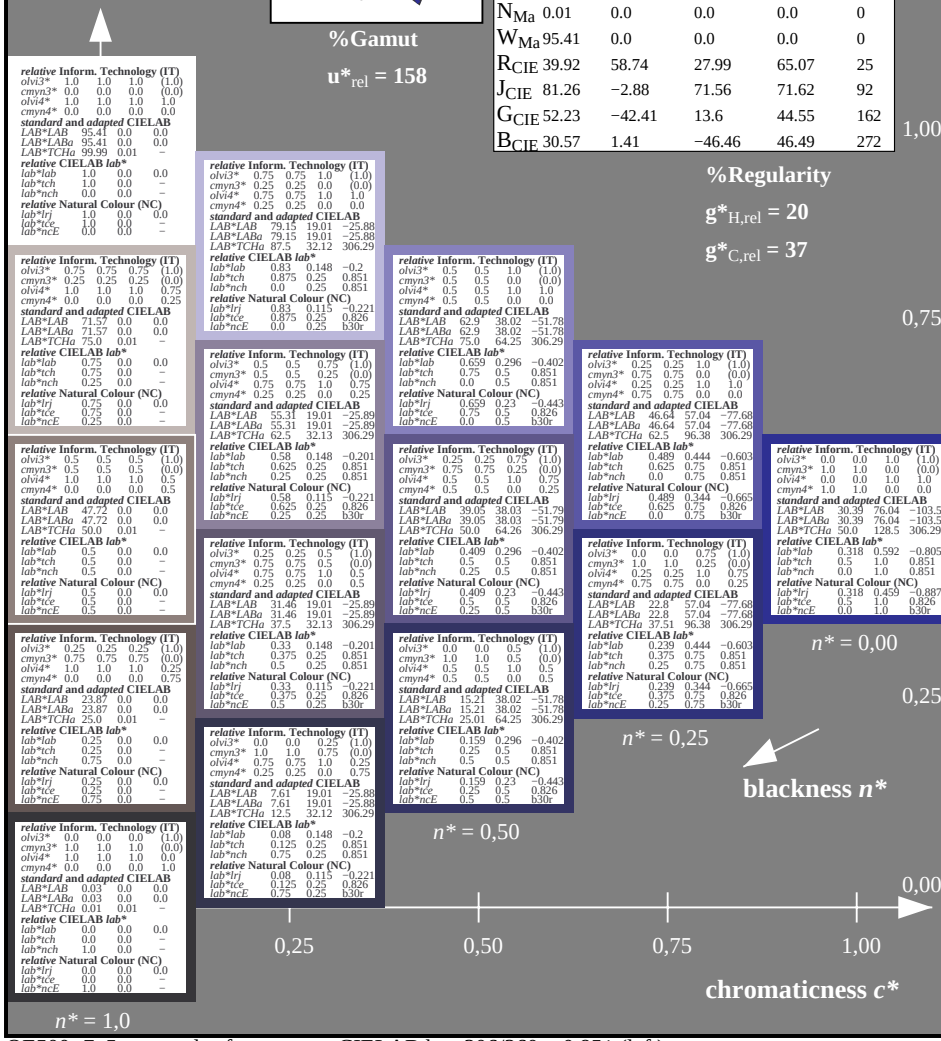
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

Output: Colorimetric Offset Reflective System ORS18

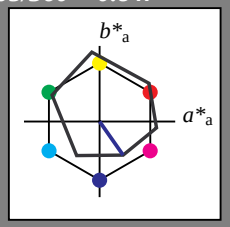
for hue $h^* = lab^*h = 305/360 = 0.847$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

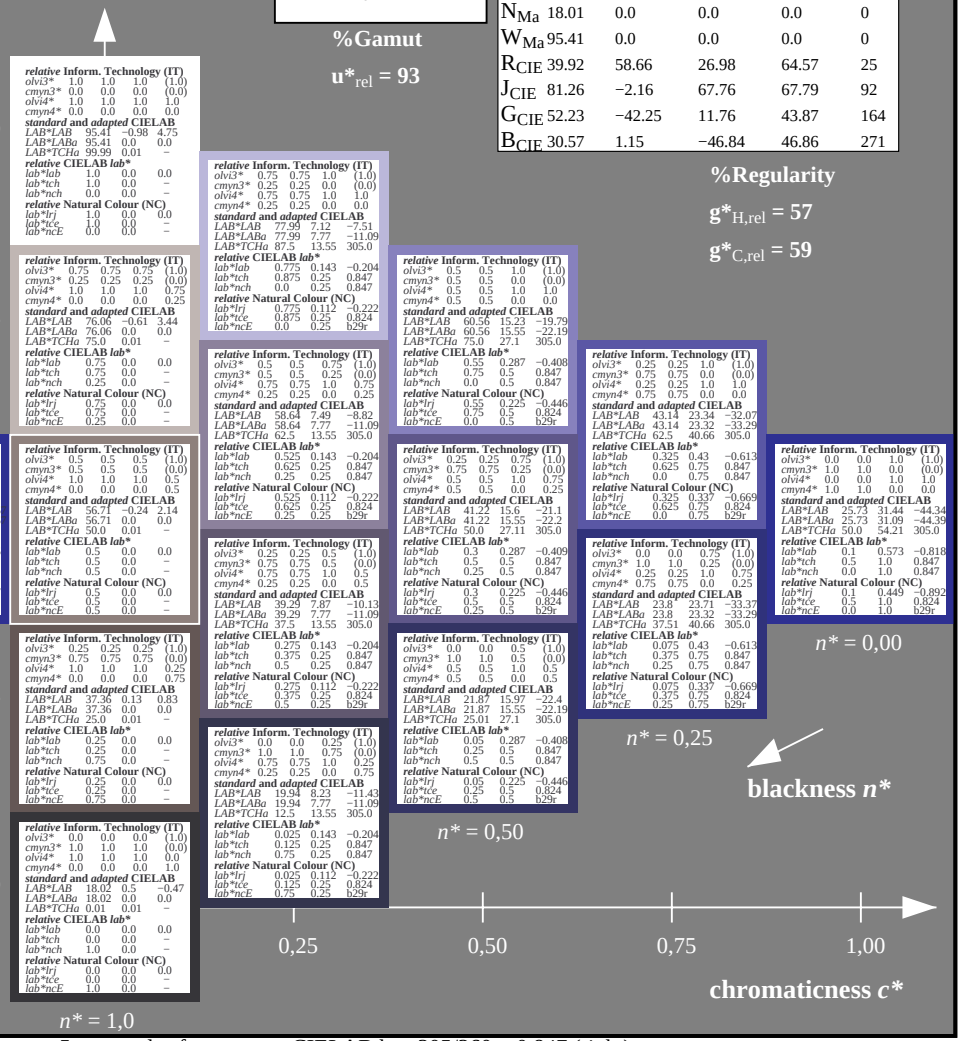
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Television Luminous System TLS00

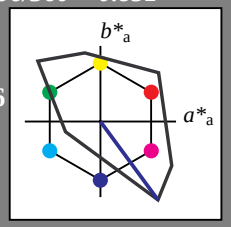
for hue $h^* = lab^*h = 306/360 = 0.851$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

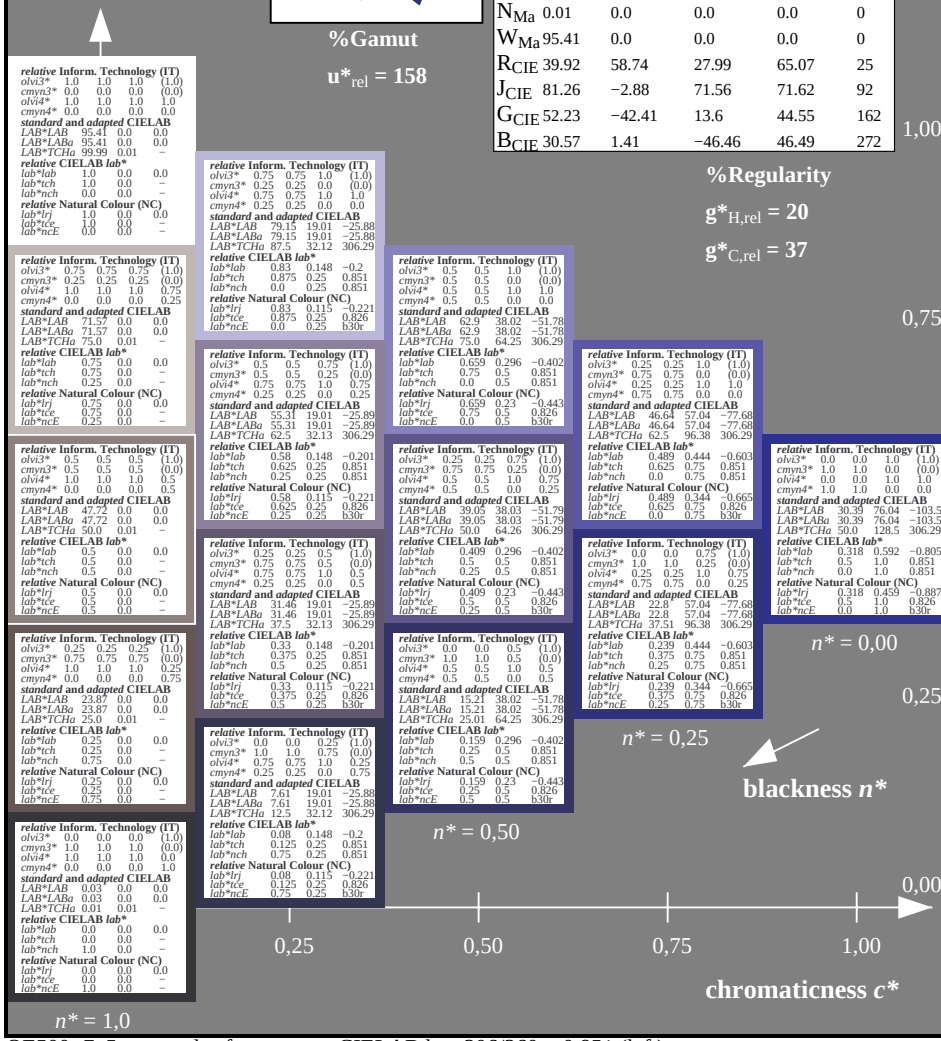
u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

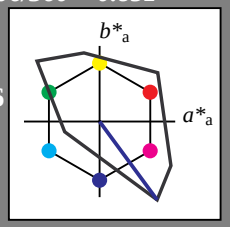
for hue $h^* = lab^*h = 306/360 = 0.851$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

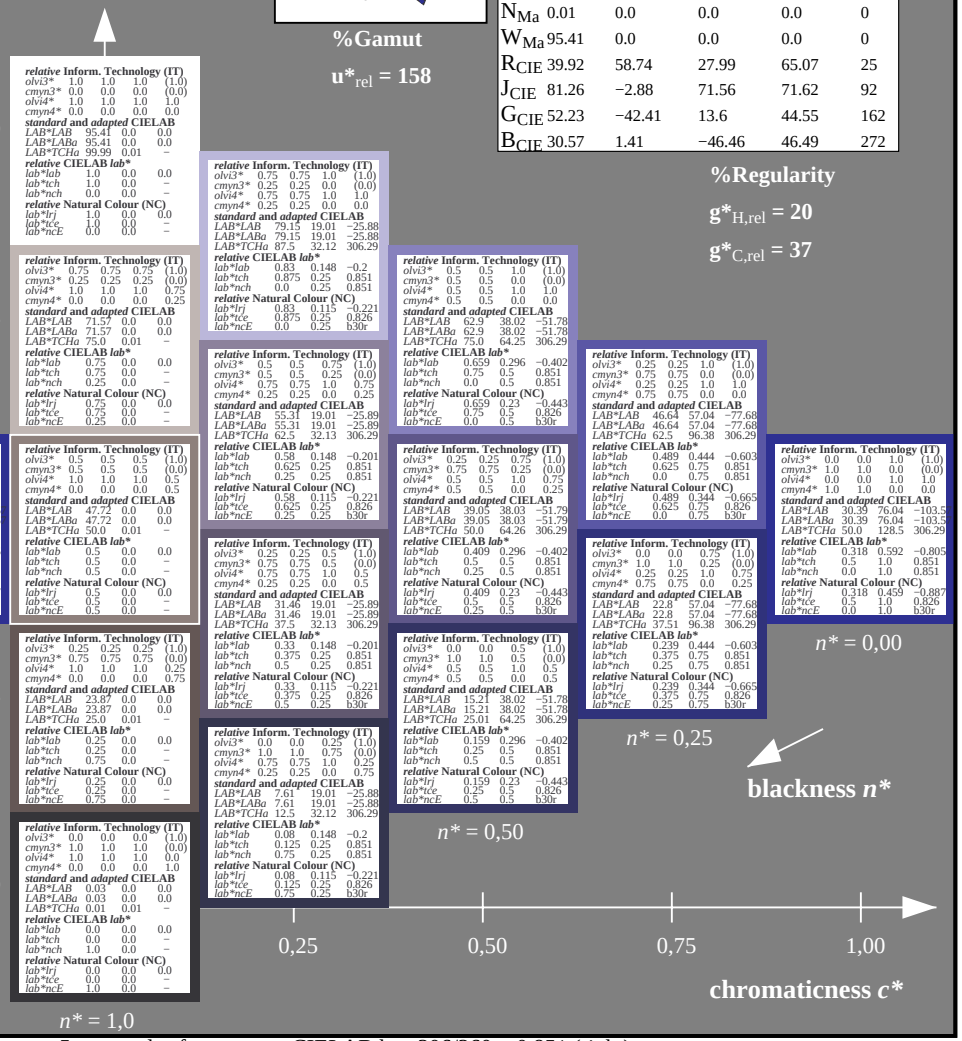
u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

triangle lightness t^*



OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Television Luminous System TLS00

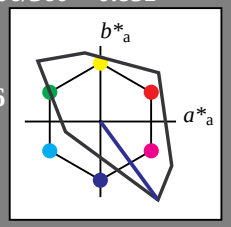
for hue $h^* = lab^*h = 306/360 = 0.851$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

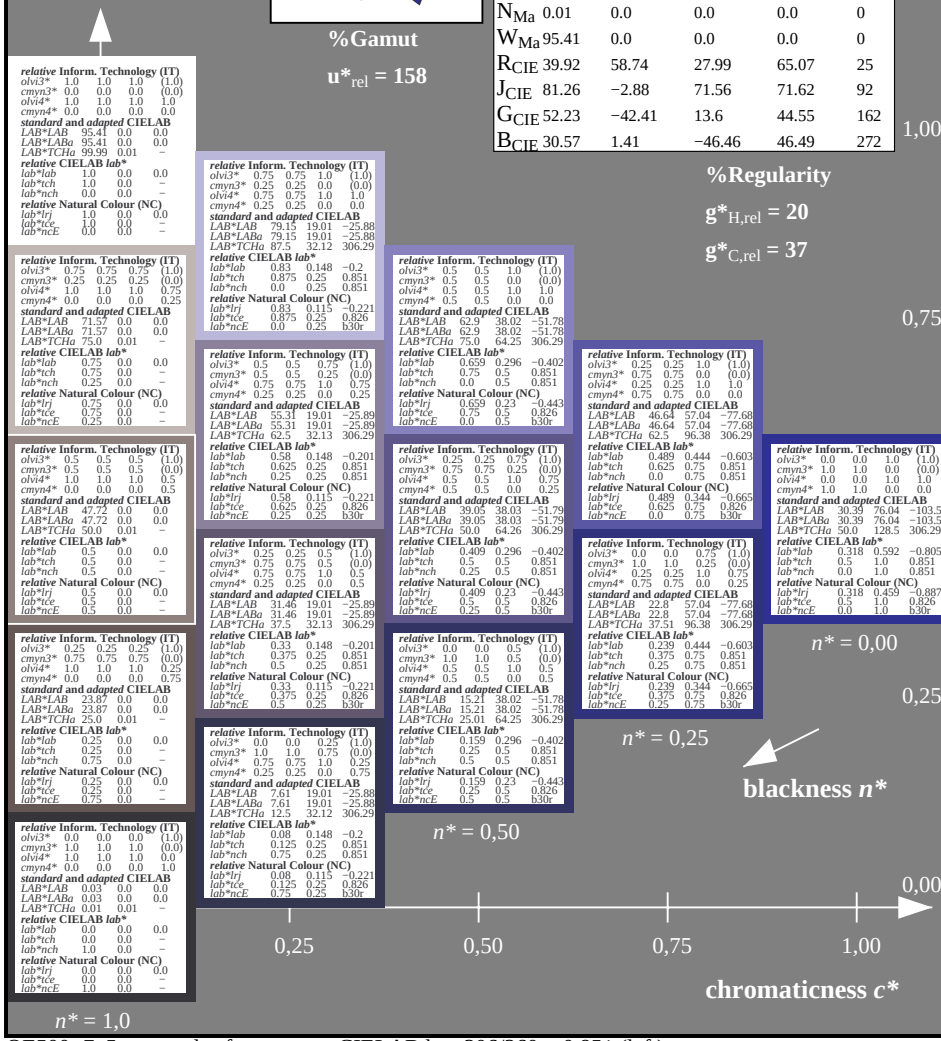
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Printer Reflective System DRSXX

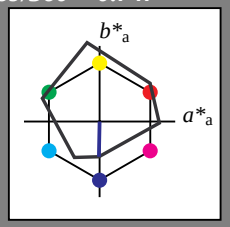
for hue $h^* = lab^*h = 269/360 = 0.747$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

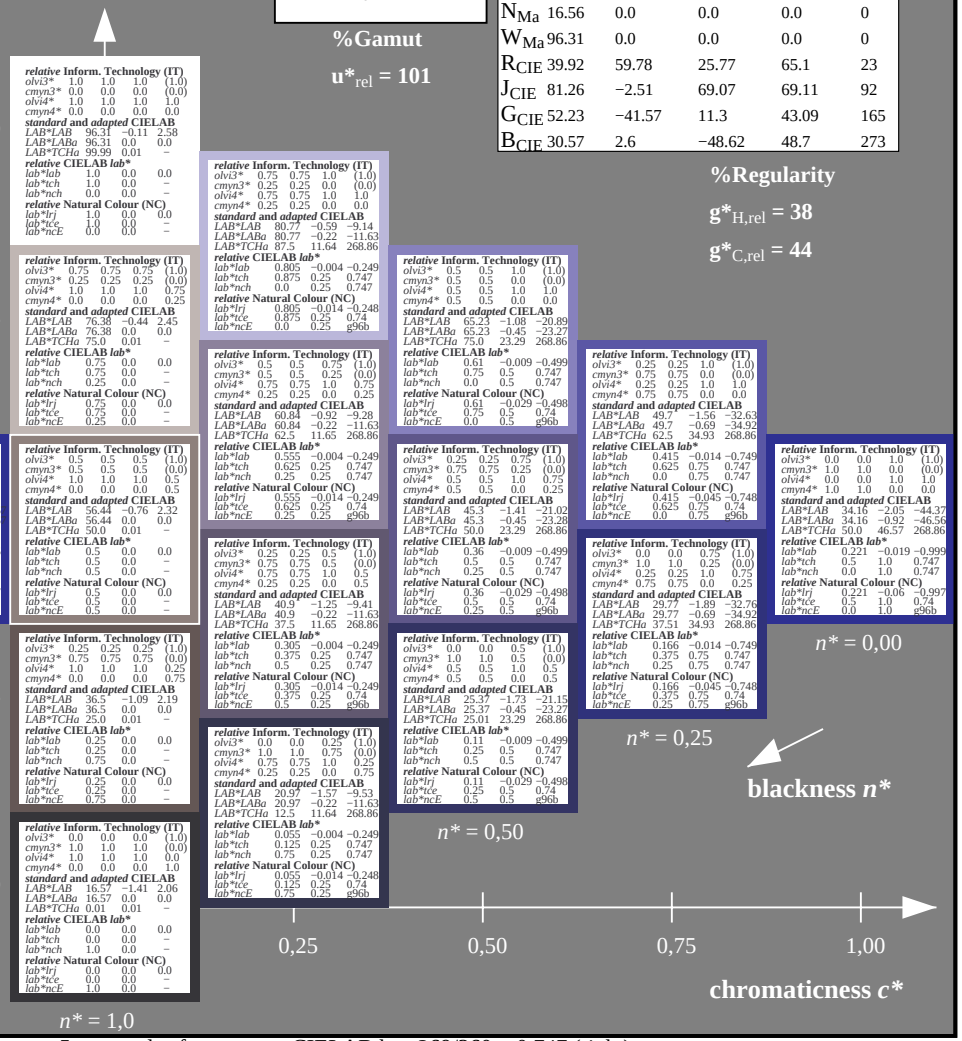
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



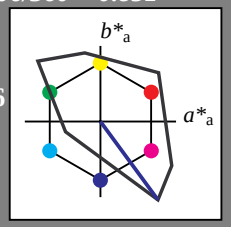
OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

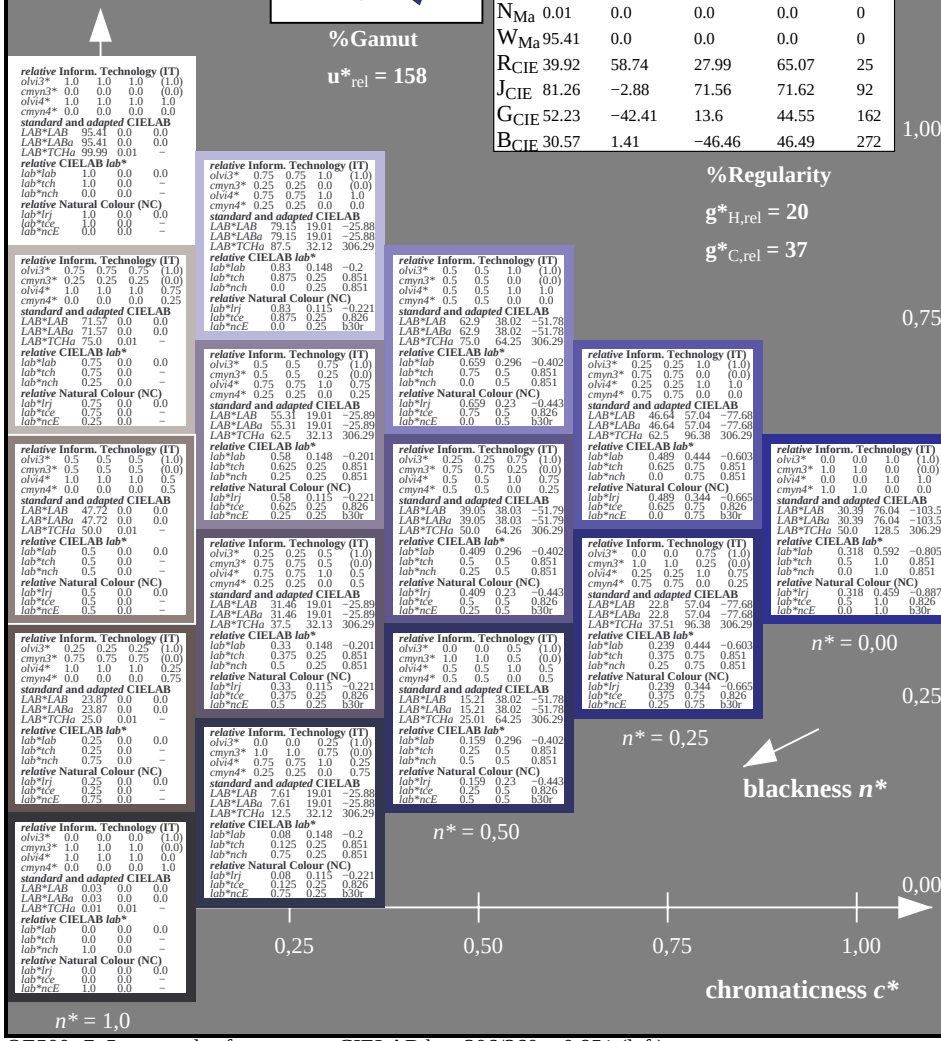
%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

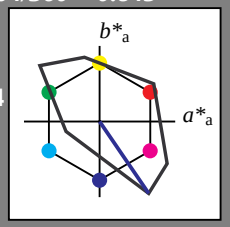
$g^*_{C,rel}$ = 37



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

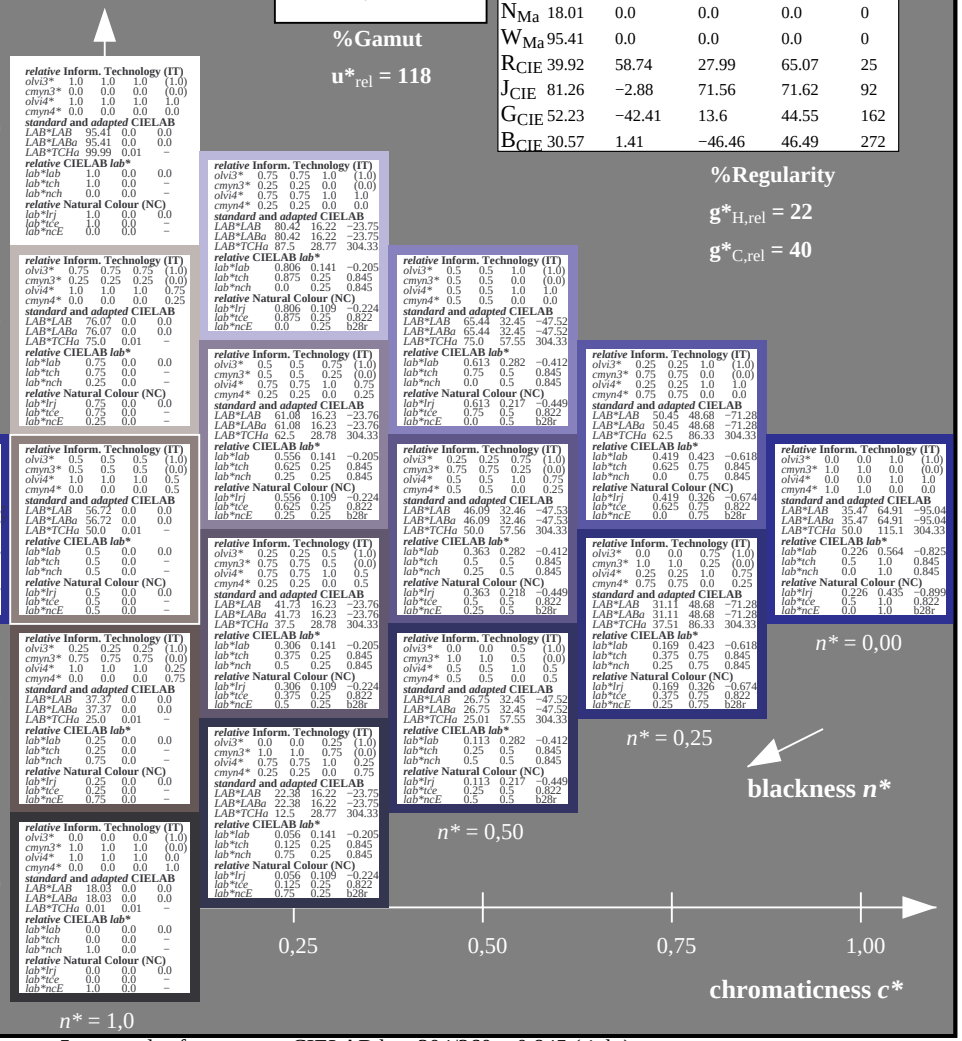
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



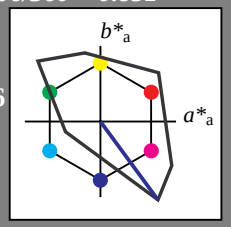
OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

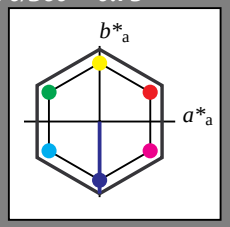
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS00

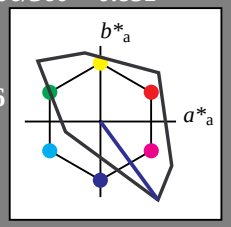
for hue $h^* = lab^*h = 306/360 = 0.851$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Natural Reflective System NRS18

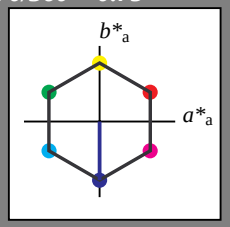
for hue $h^* = lab^*h = 270/360 = 0.75$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

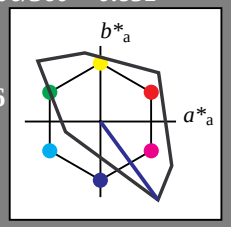
OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



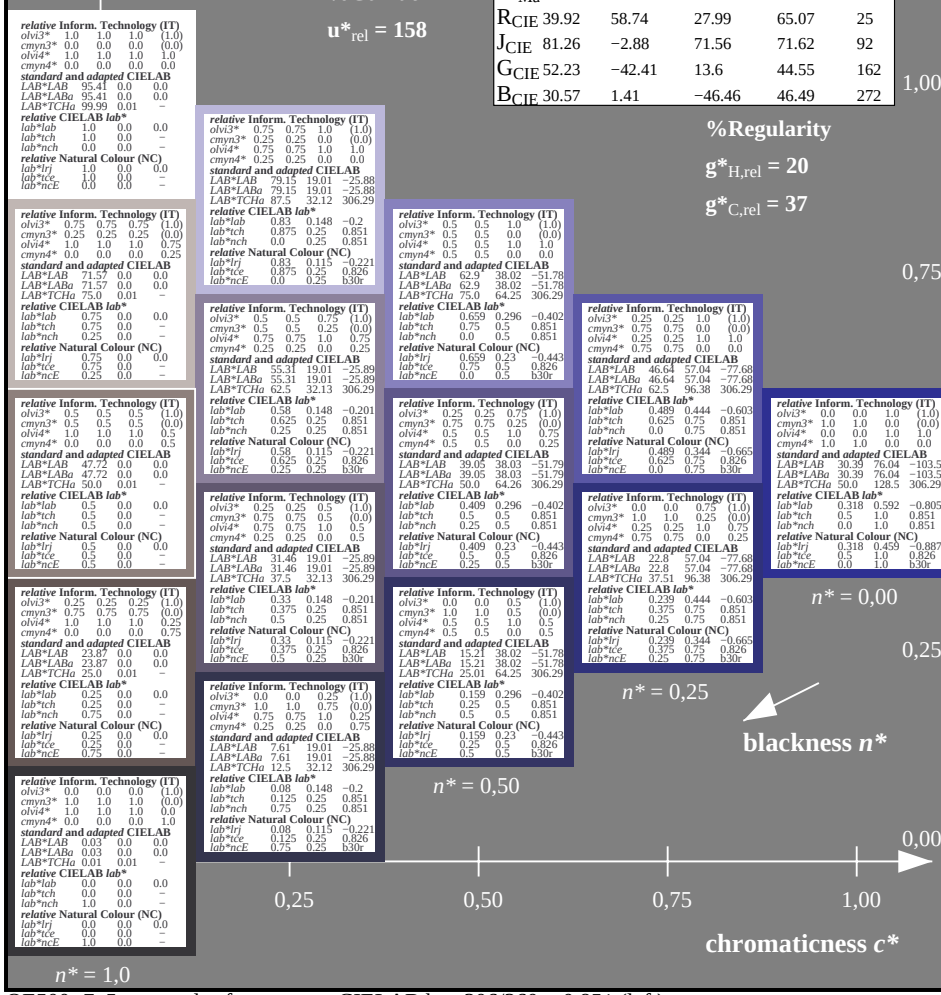
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut
$u^*_{rel} = 158$

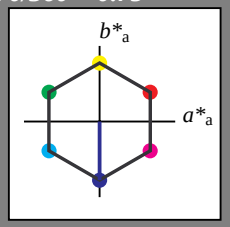
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0



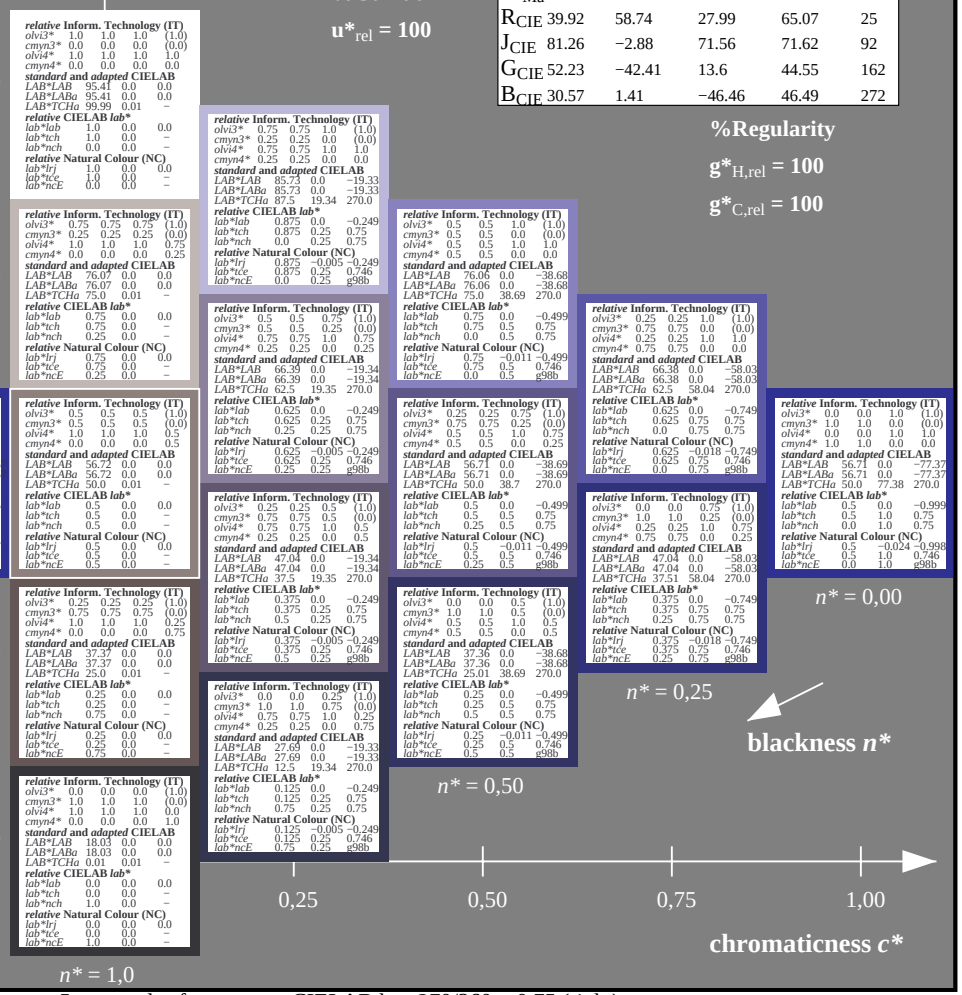
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut
$u^*_{rel} = 100$

%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

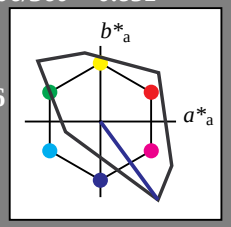
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

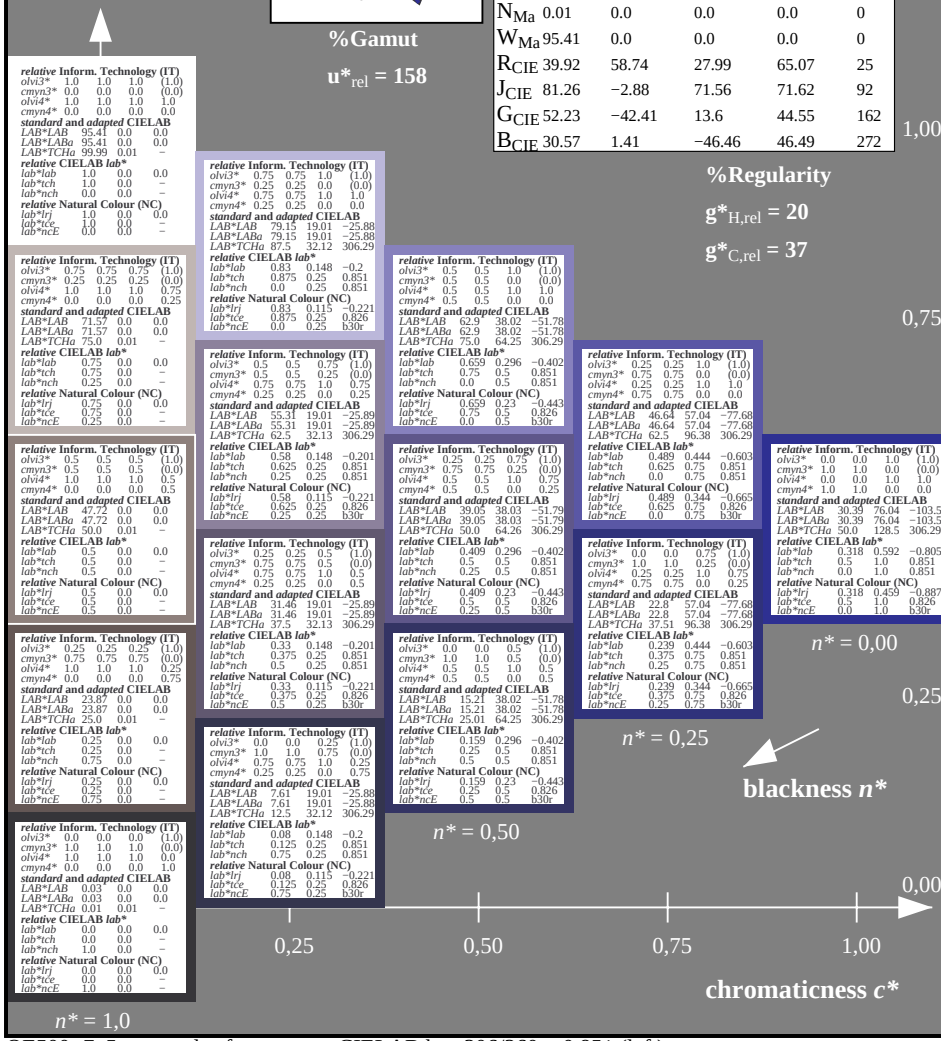
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

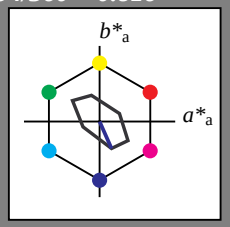


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

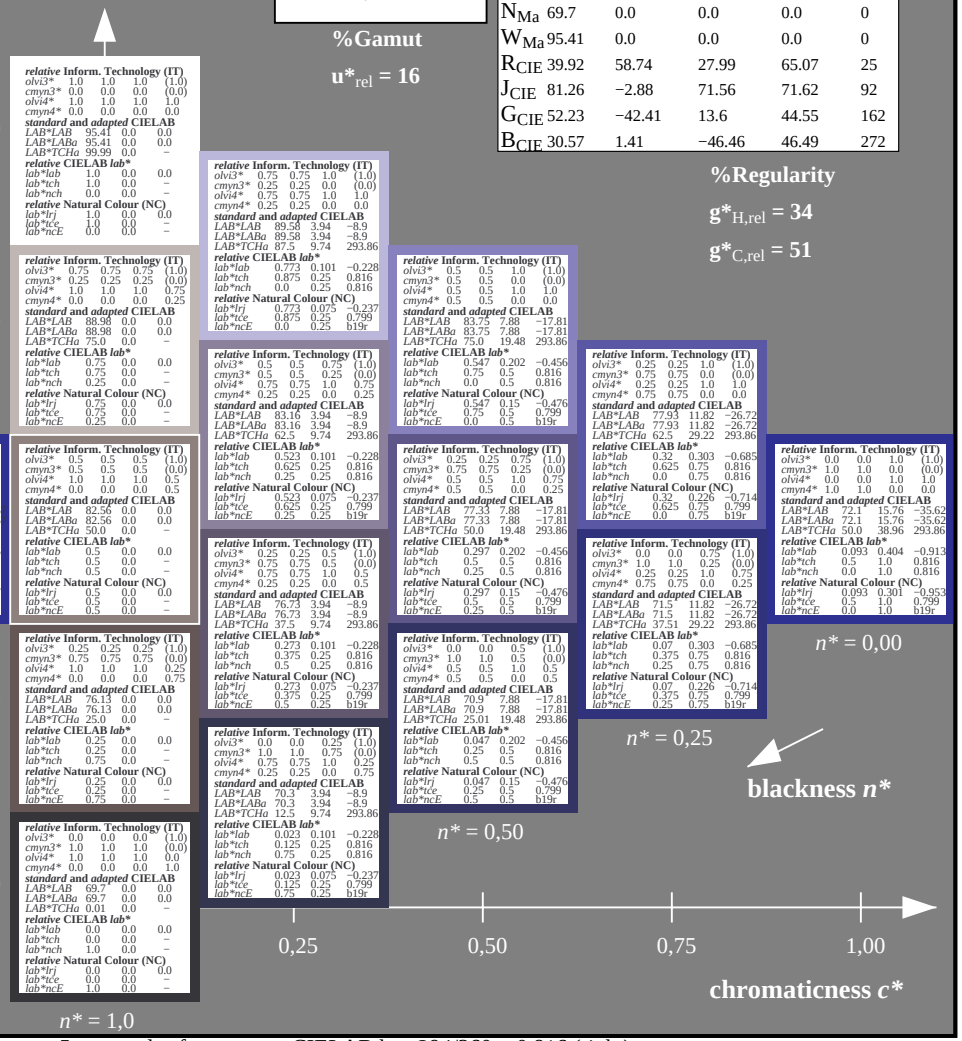
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Printer Reflective System DRSXX

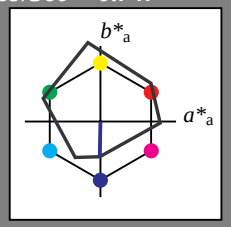
for hue $h^* = lab^*h = 269/360 = 0.747$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

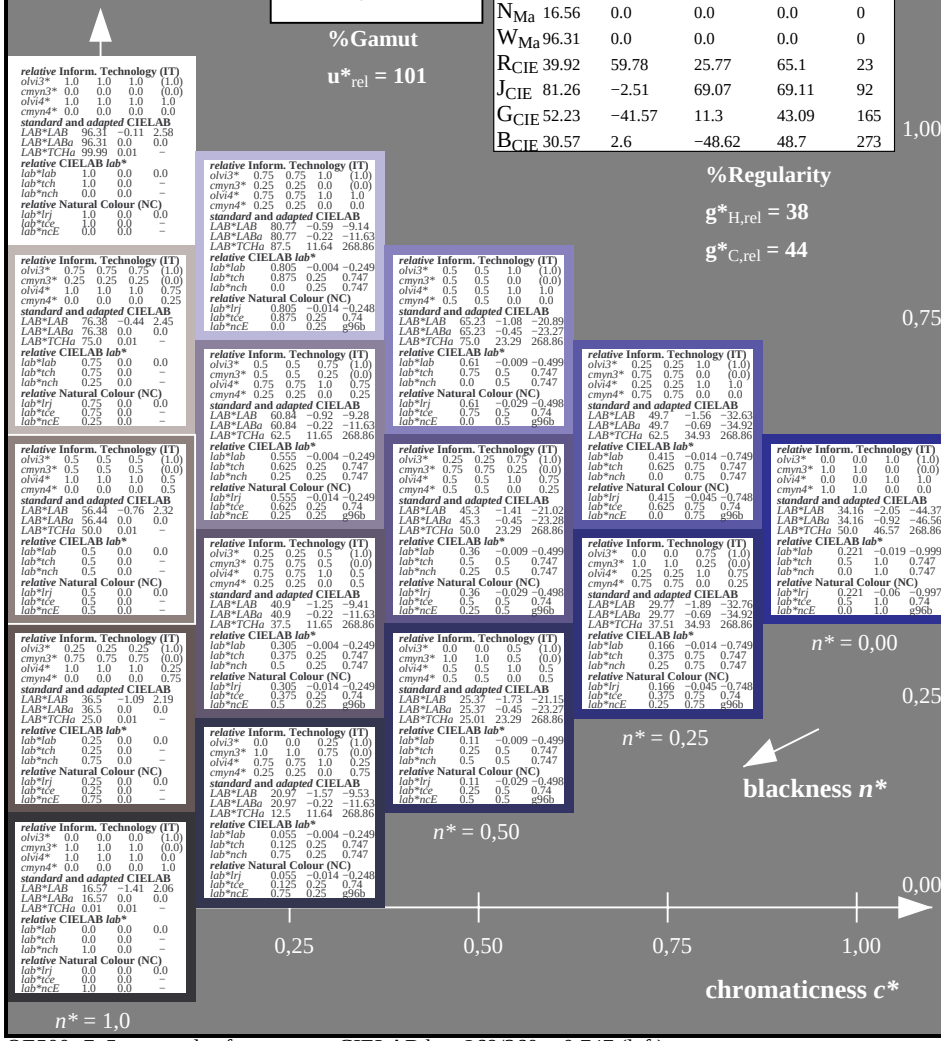
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Offset Reflective System ORS18

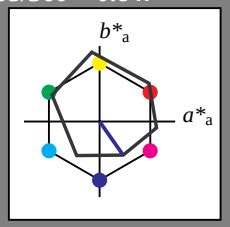
for hue $h^* = lab^*h = 305/360 = 0.847$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

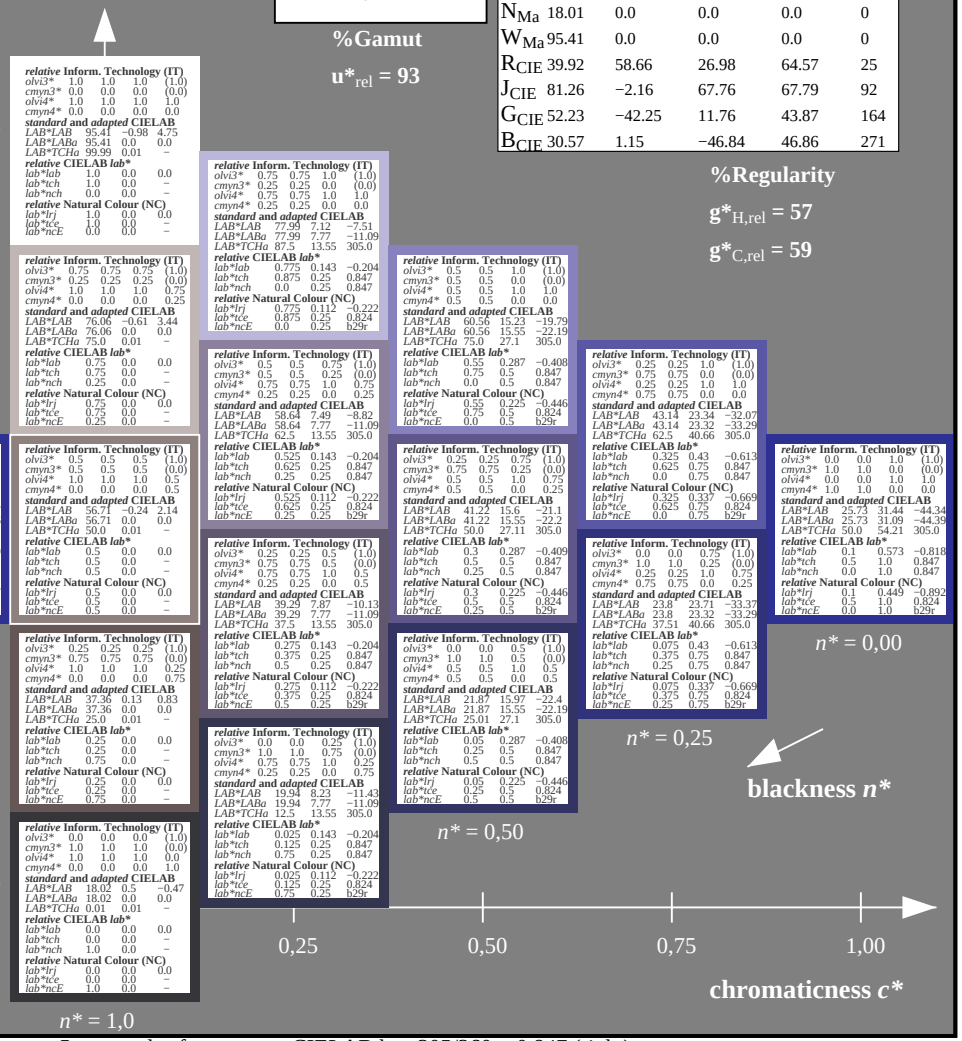
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

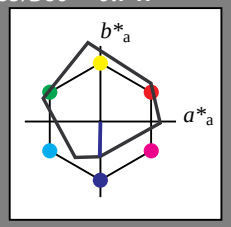


5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

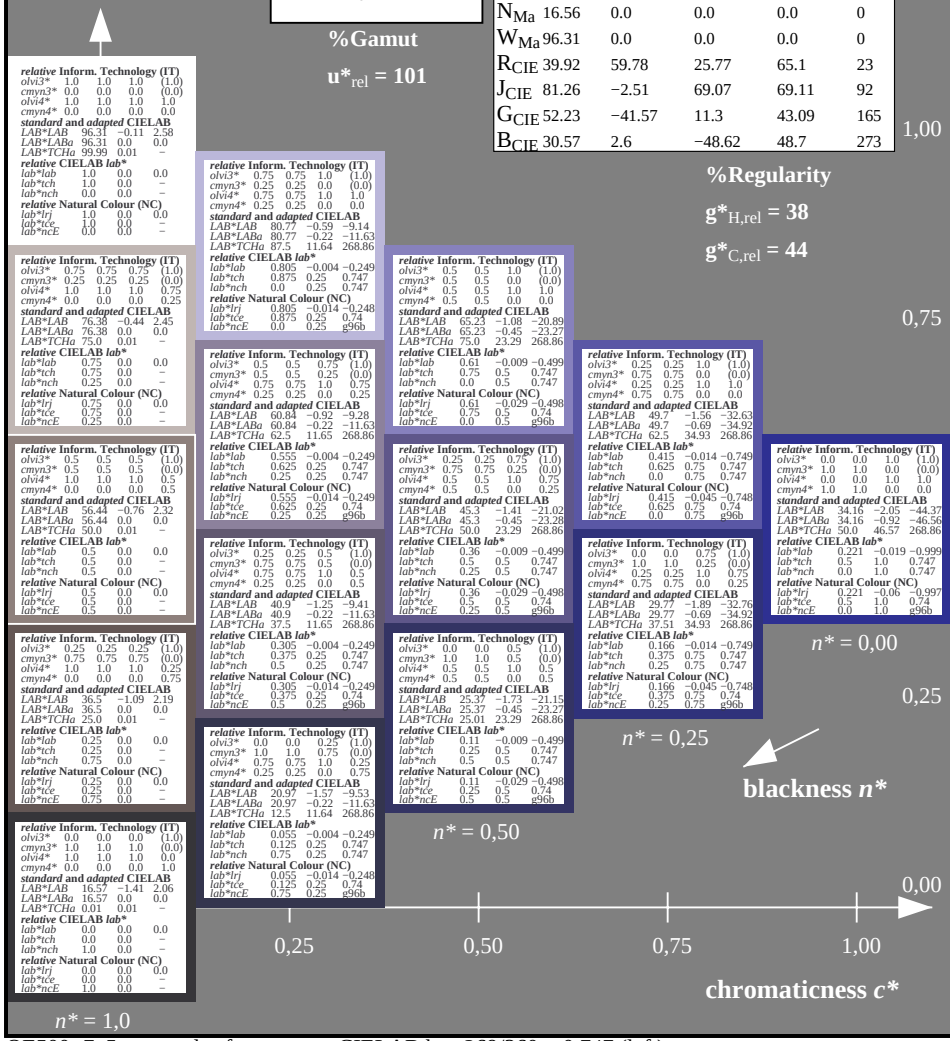
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

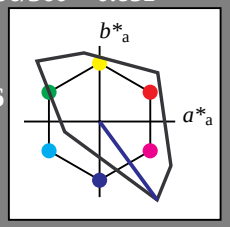


OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

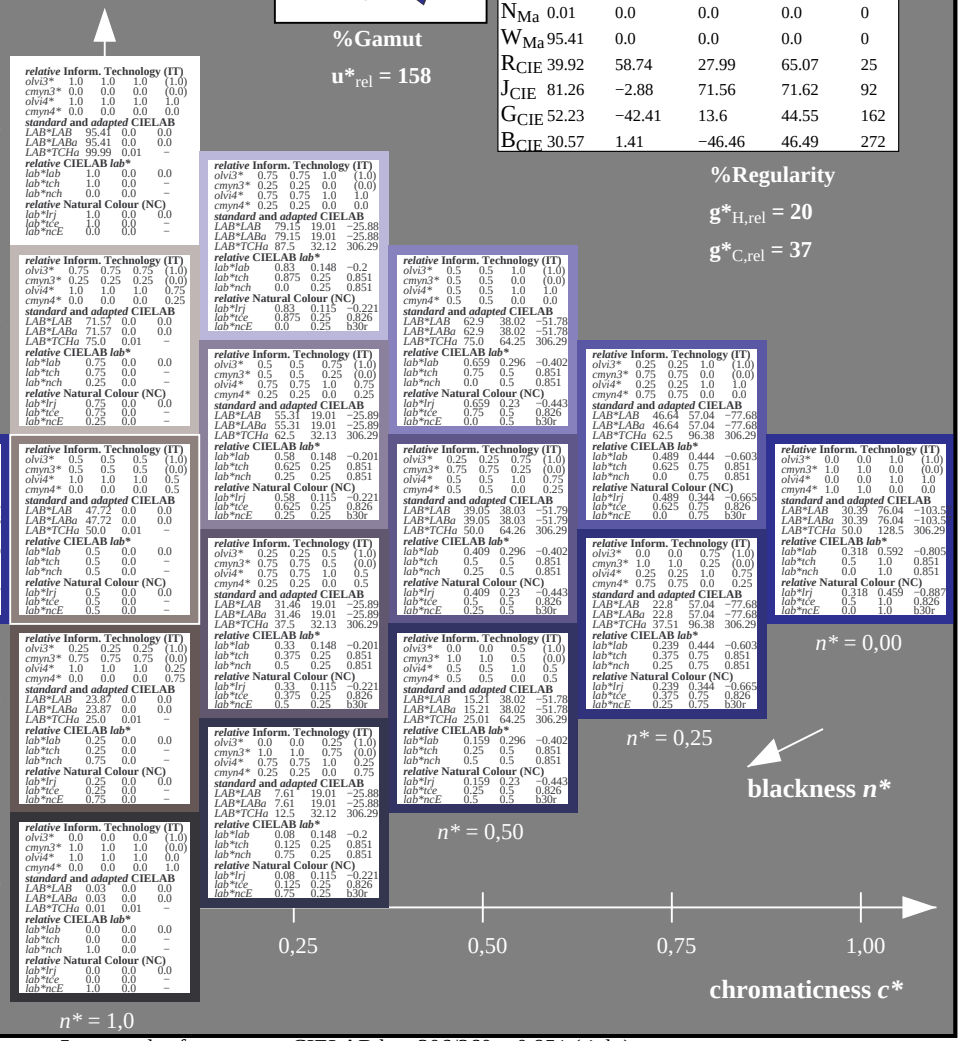
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

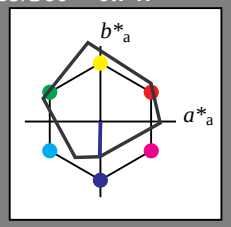


5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

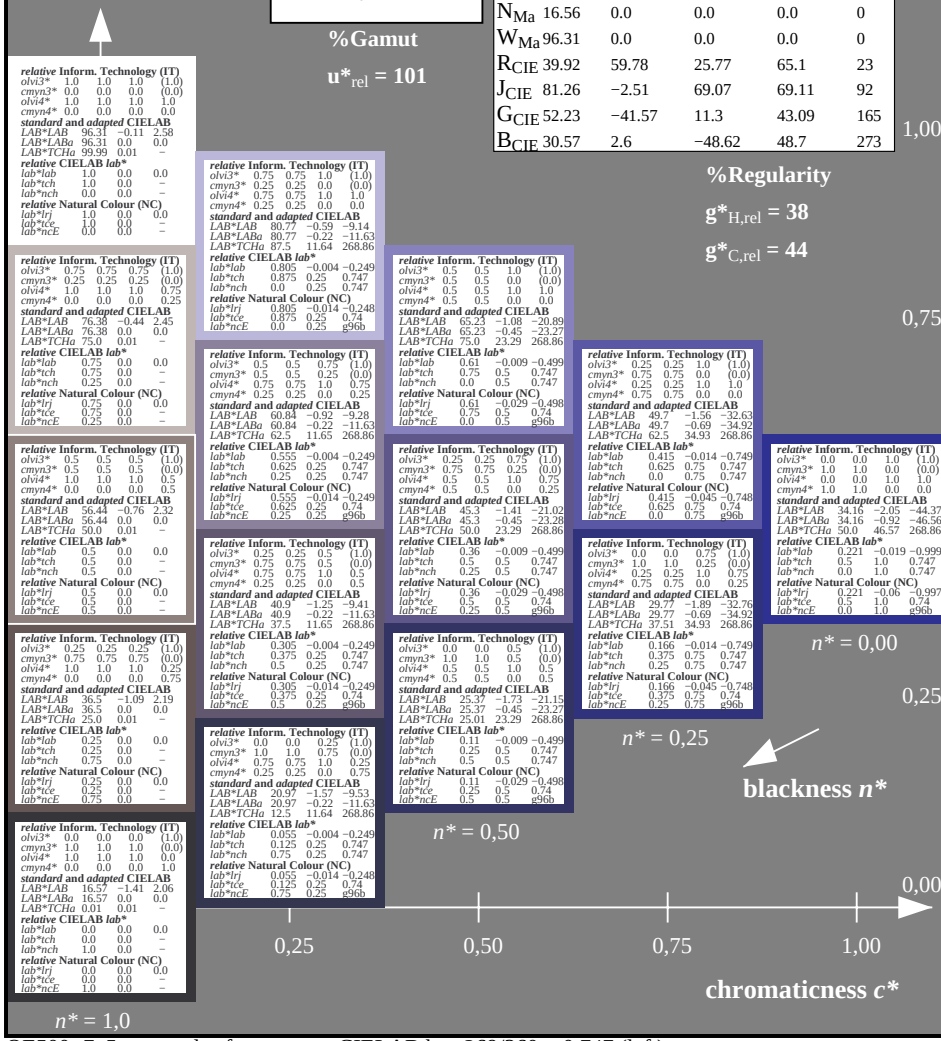
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

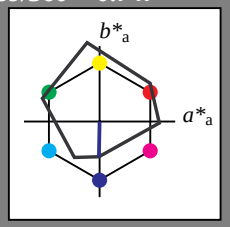


OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

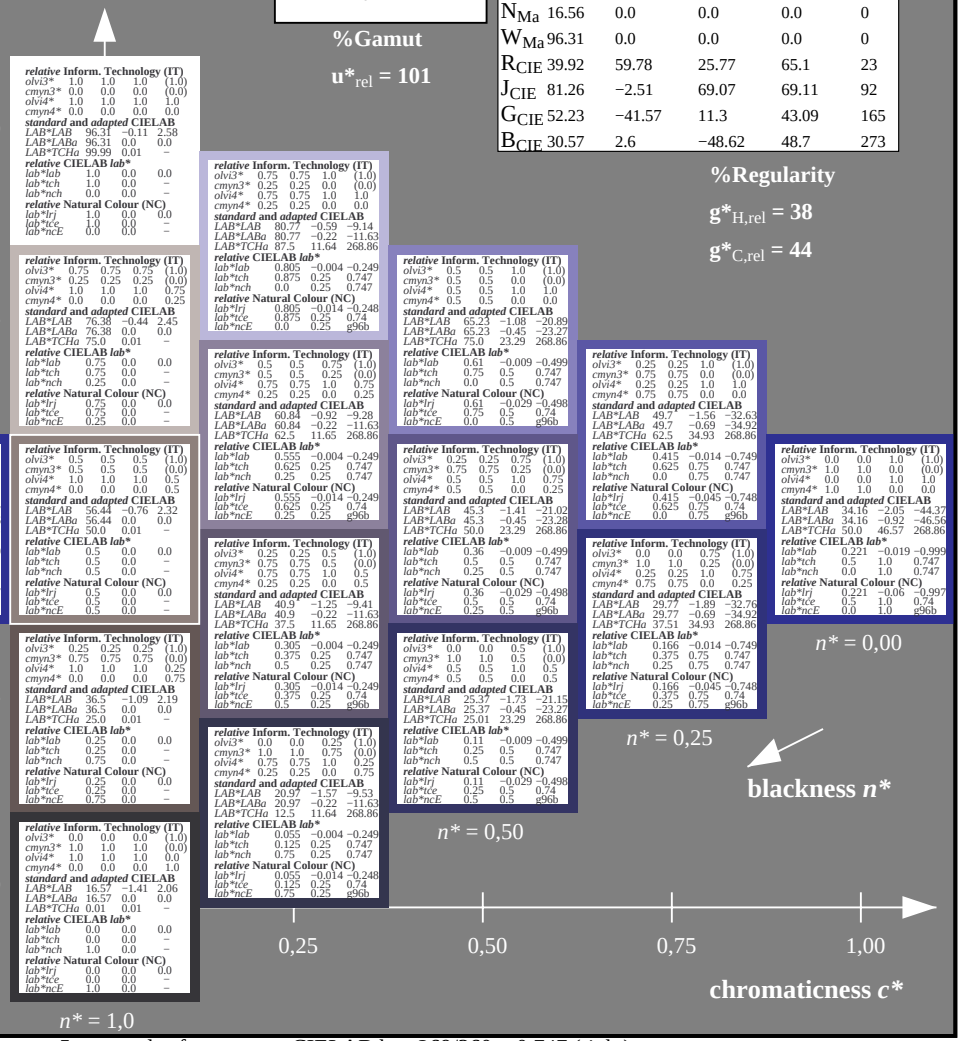
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

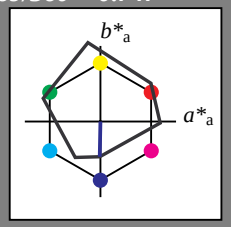


5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

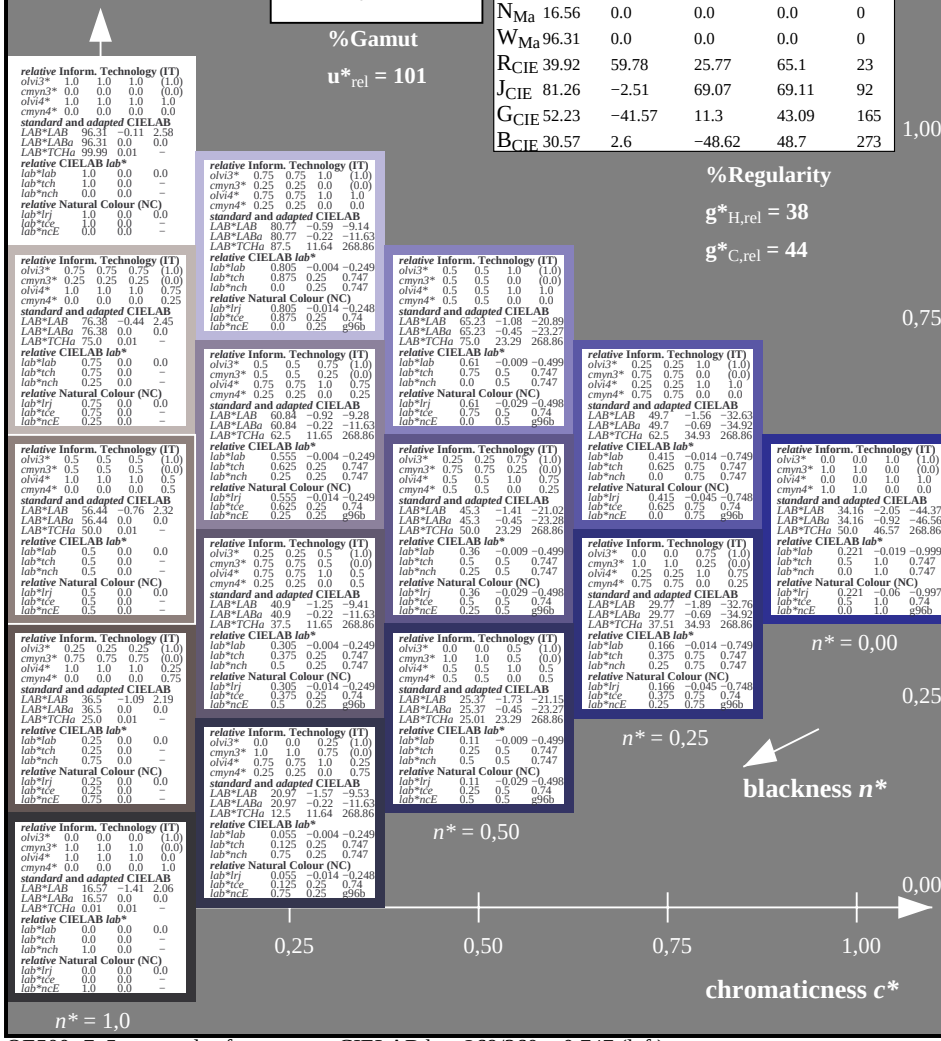
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

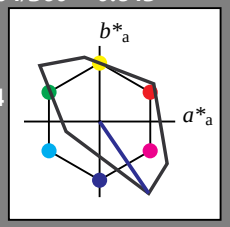


OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

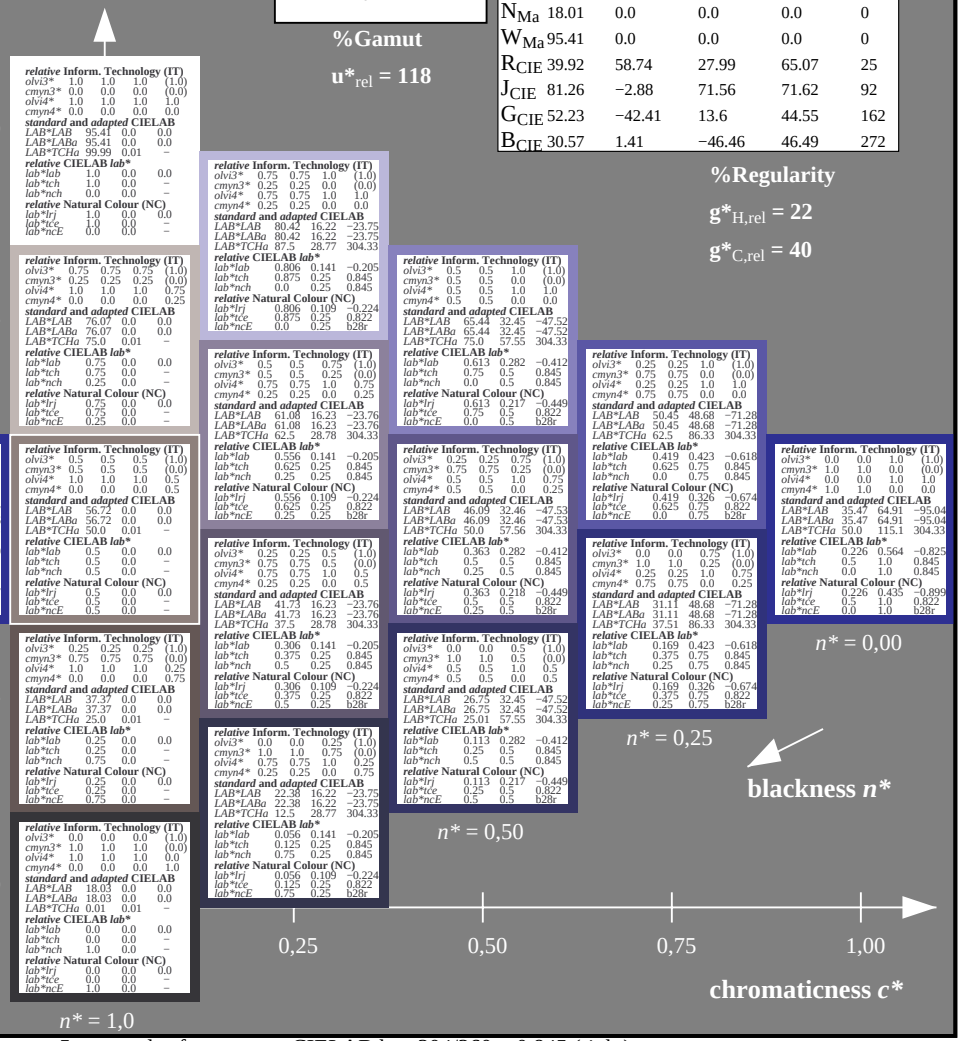
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

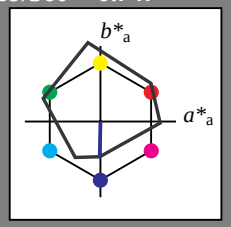


5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

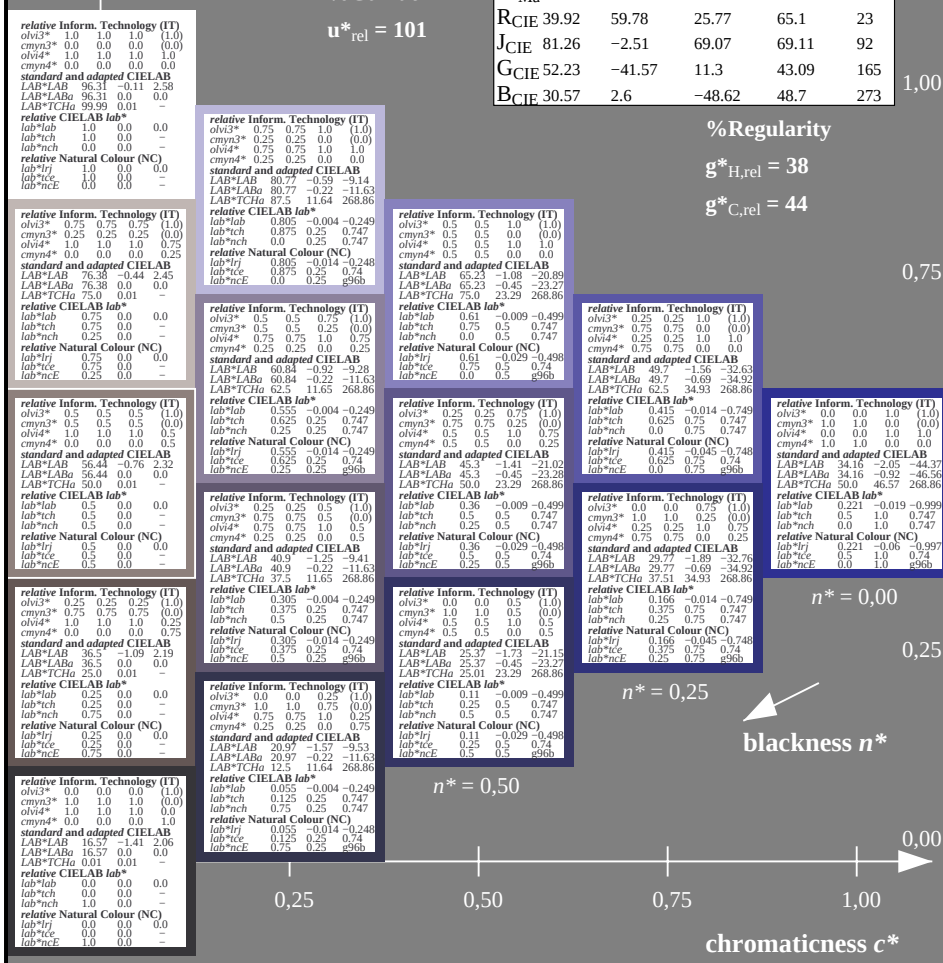
u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

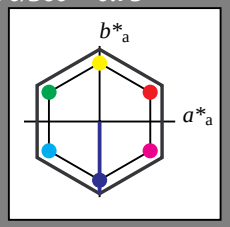
triangle lightness *t**



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

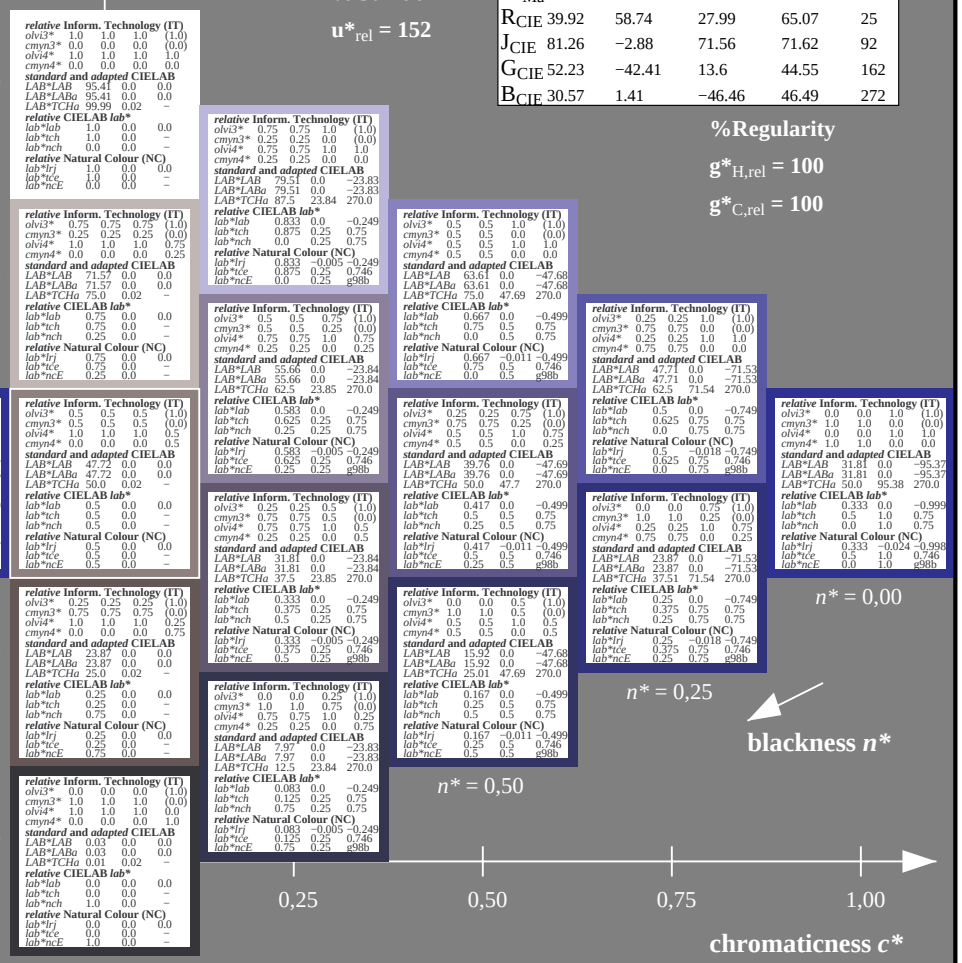
u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

triangle lightness *t**



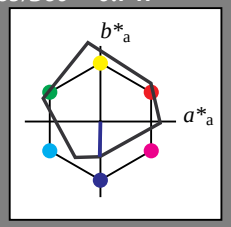
OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

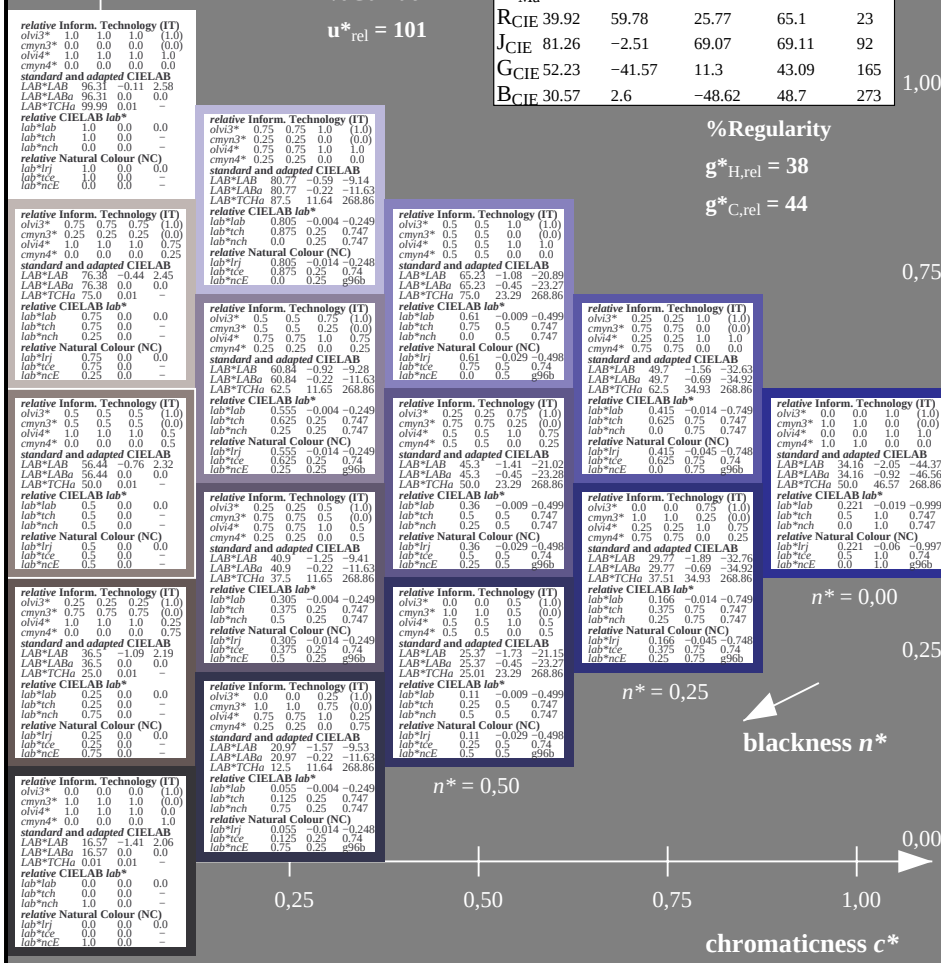
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

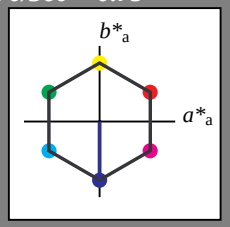


OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

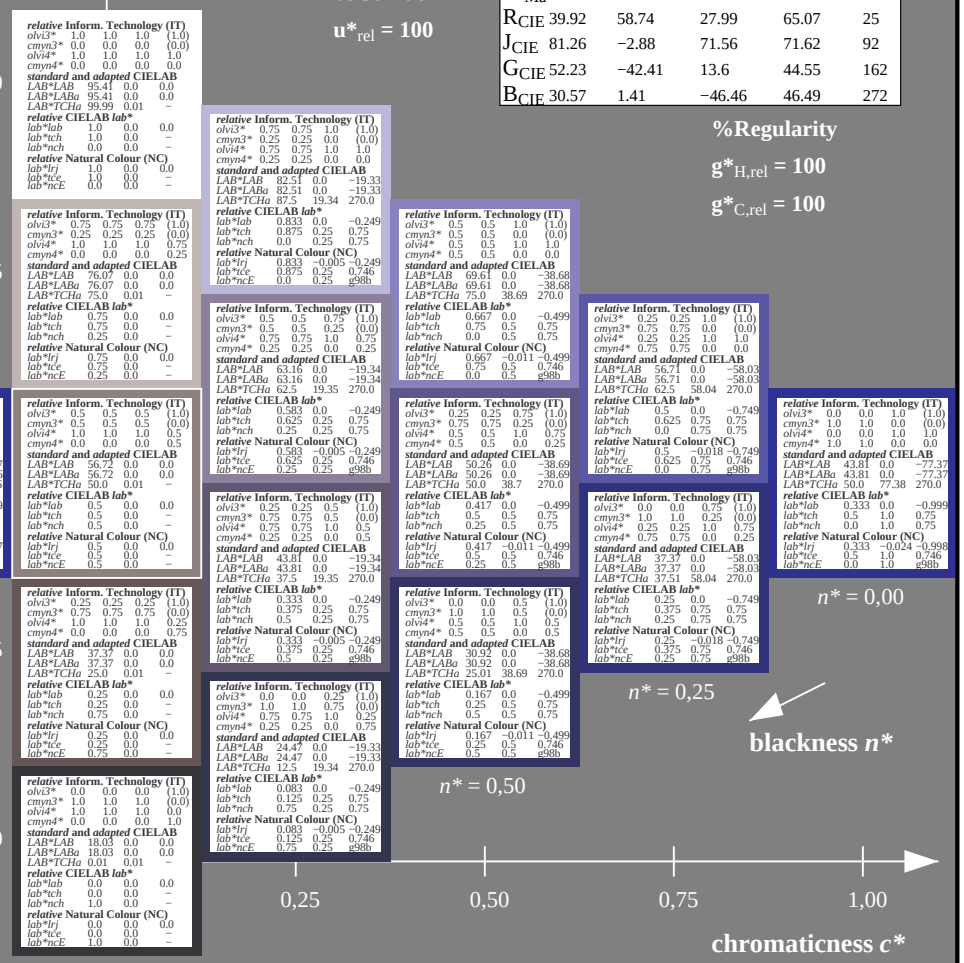
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



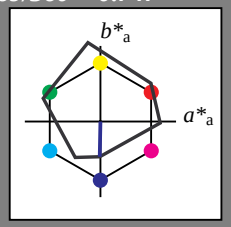
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

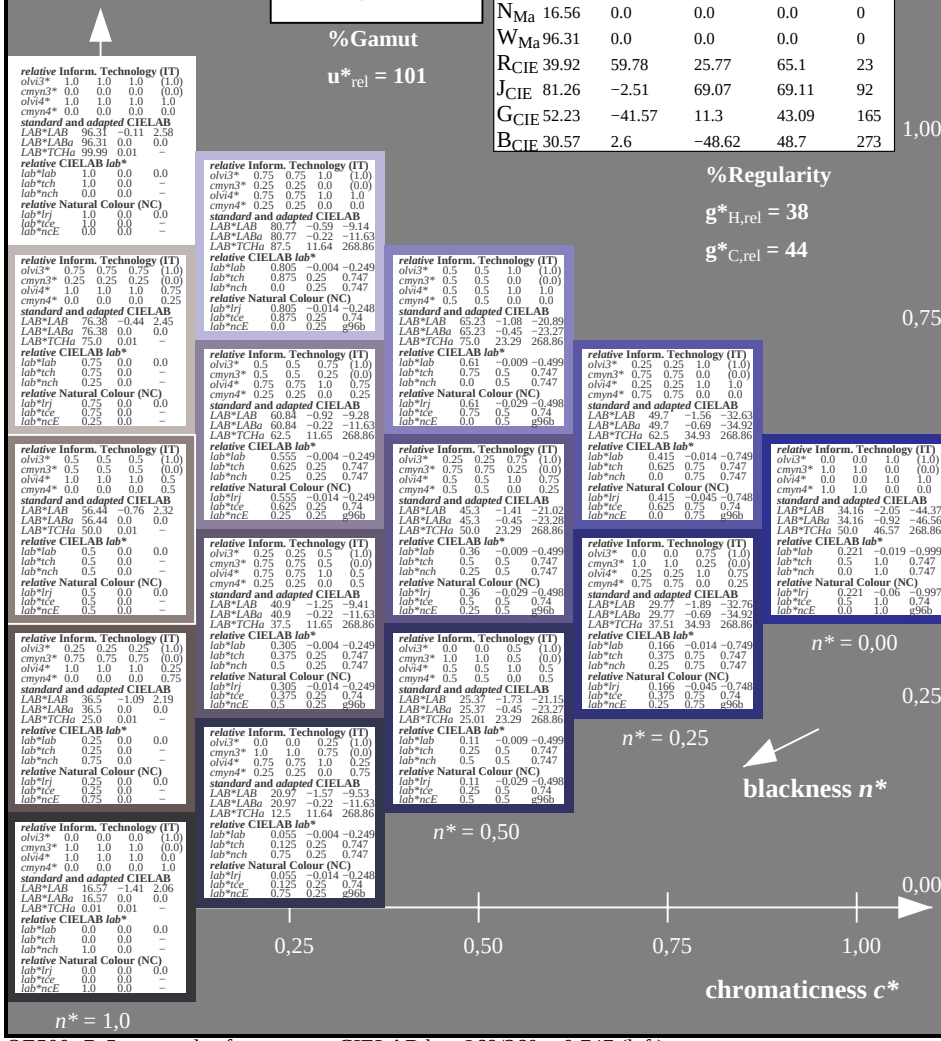
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



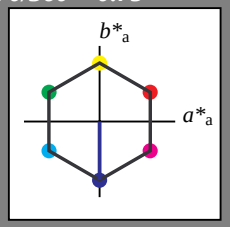
OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

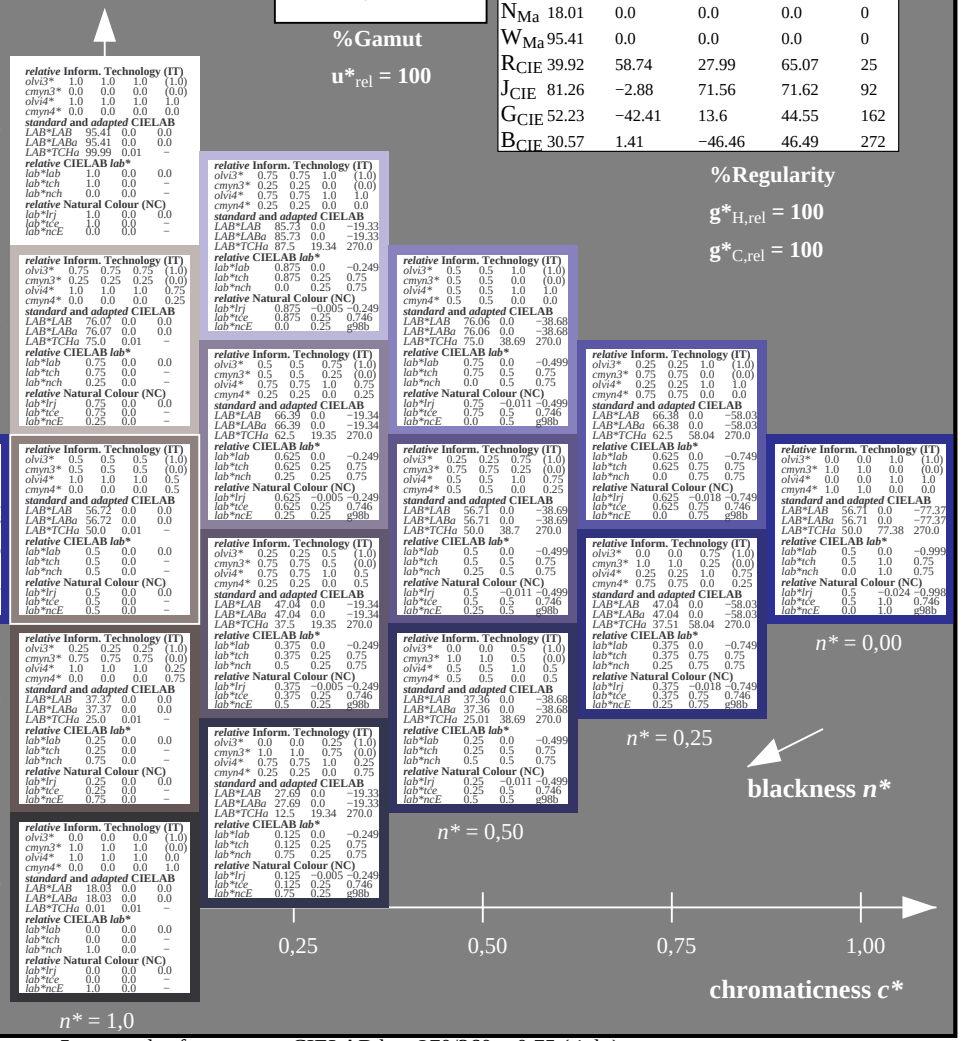
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



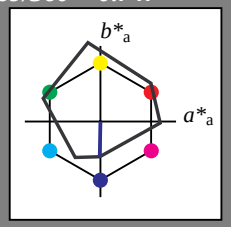
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

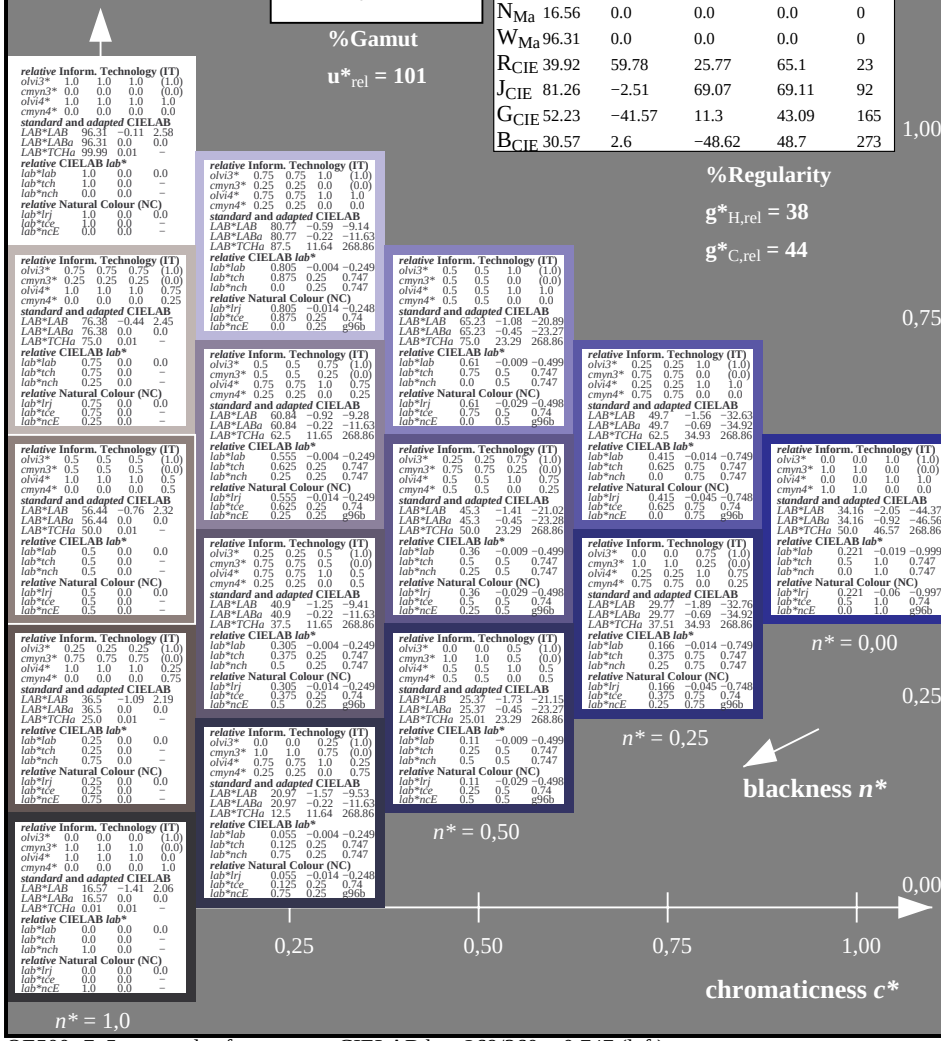
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

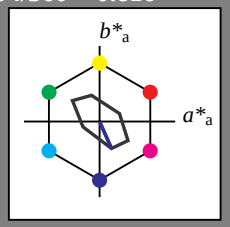


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

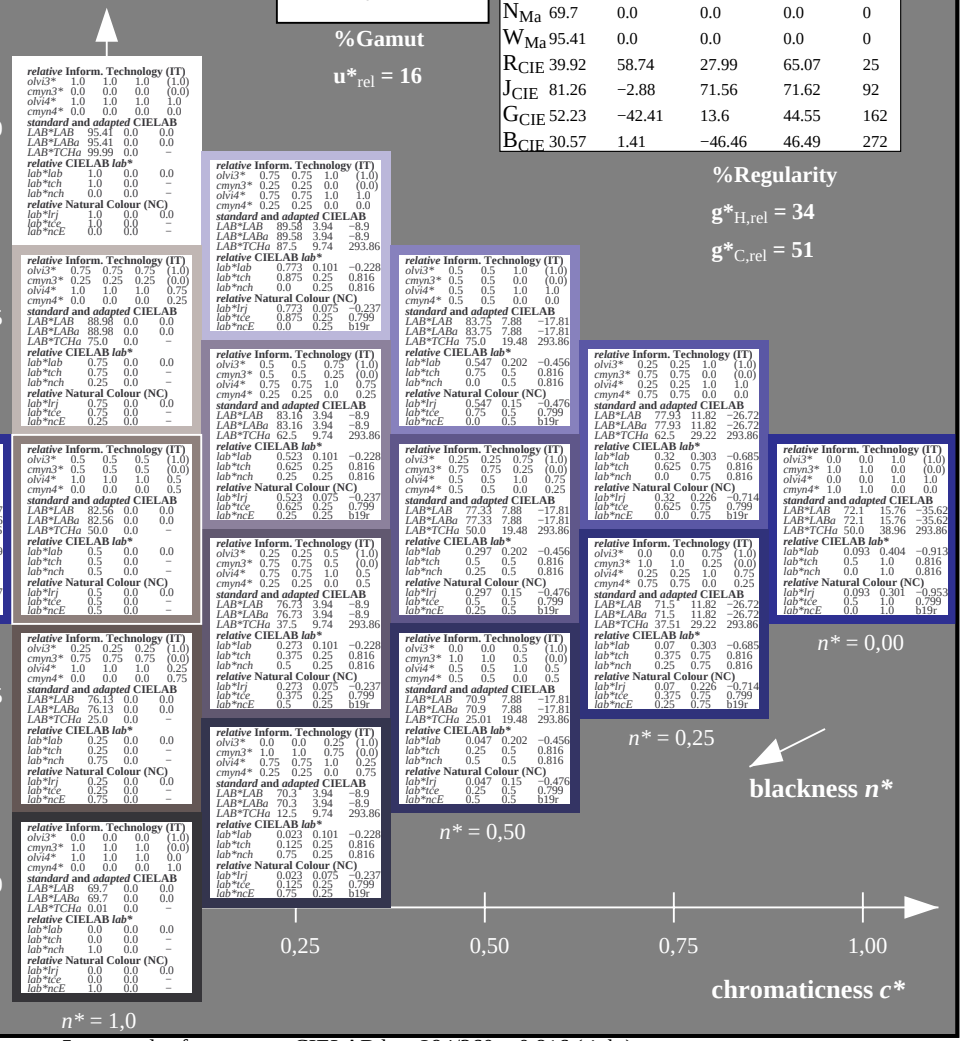
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



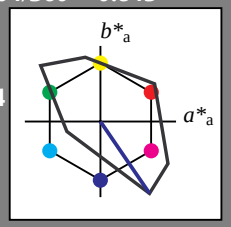
OE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

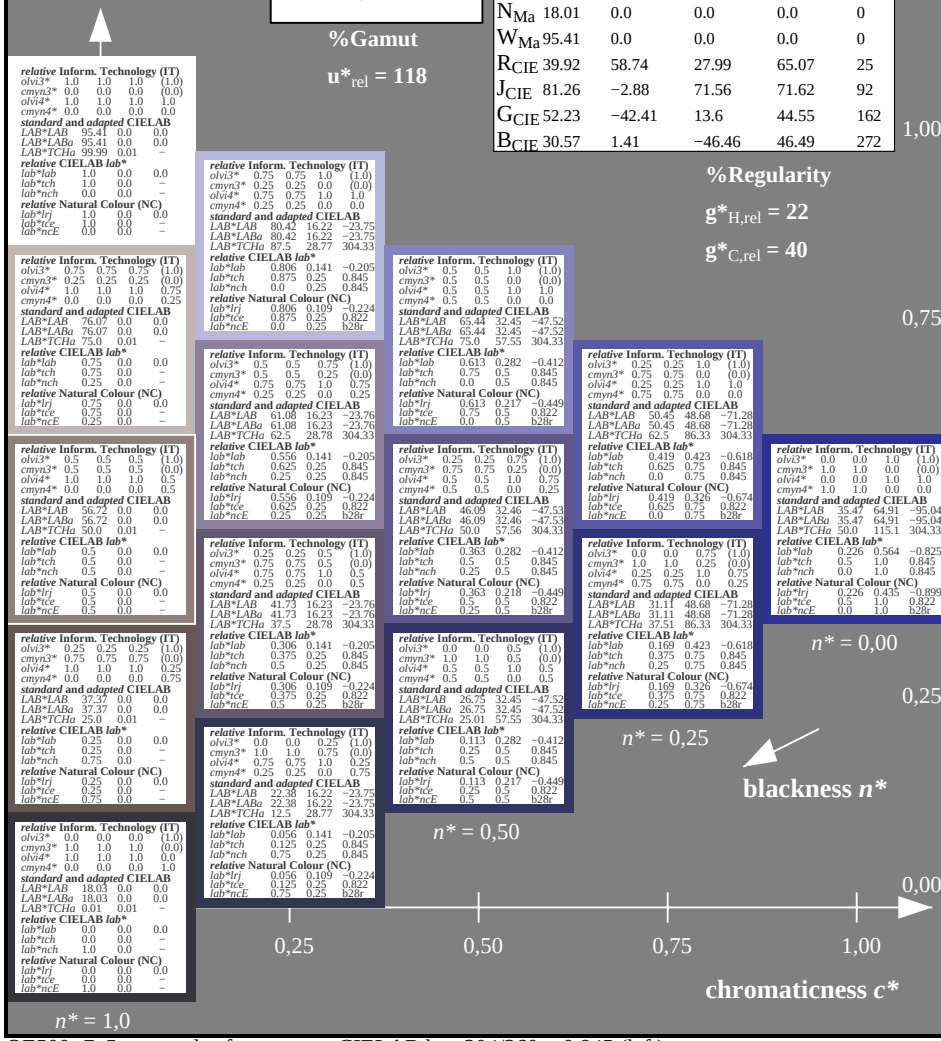
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

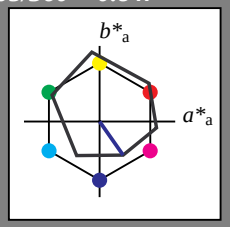


OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

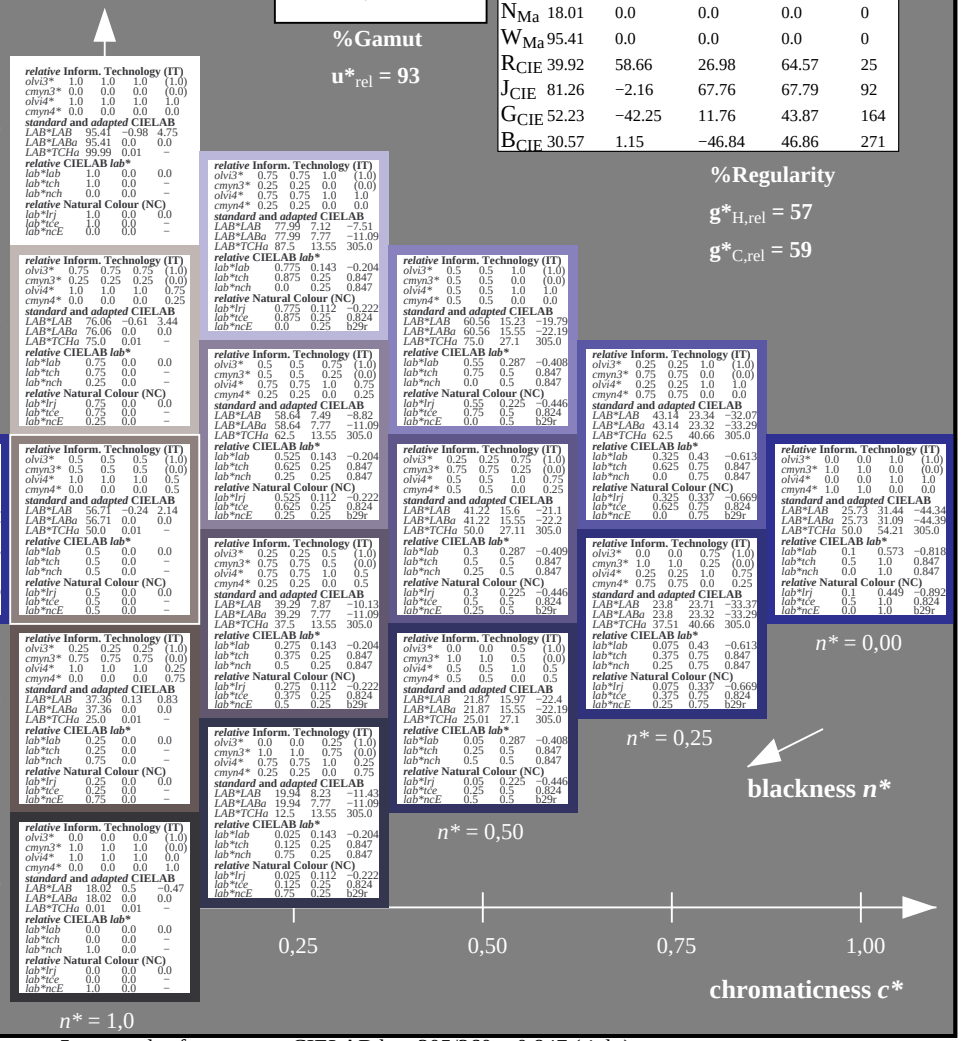
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

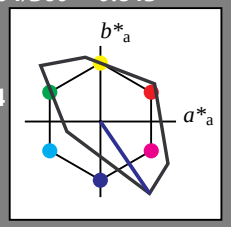


5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

blackness *n**

chromaticness *c**

$n^* = 1{,}0$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

0,25 0,50 0,75 1,00

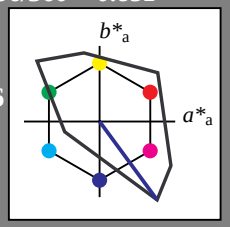
0,00 0,25 0,50 0,75 1,00

OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

blackness *n**

chromaticness *c**

$n^* = 1{,}0$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

0,25 0,50 0,75 1,00

0,00 0,25 0,50 0,75 1,00

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Television Luminous System TLS18

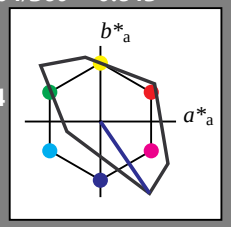
for hue $h^* = lab^*h = 304/360 = 0.845$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

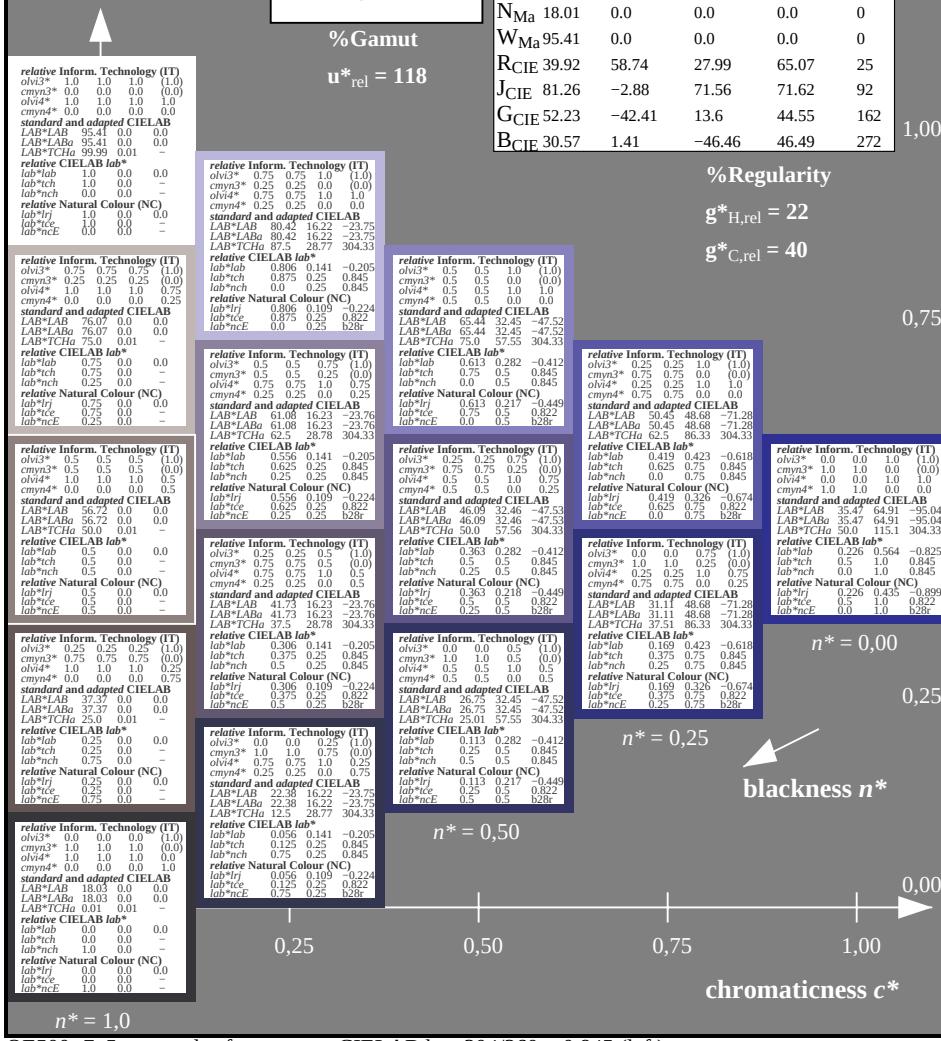
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX

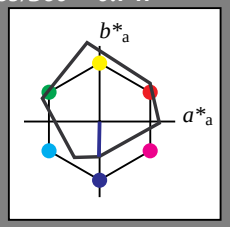
for hue $h^* = lab^*h = 269/360 = 0.747$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

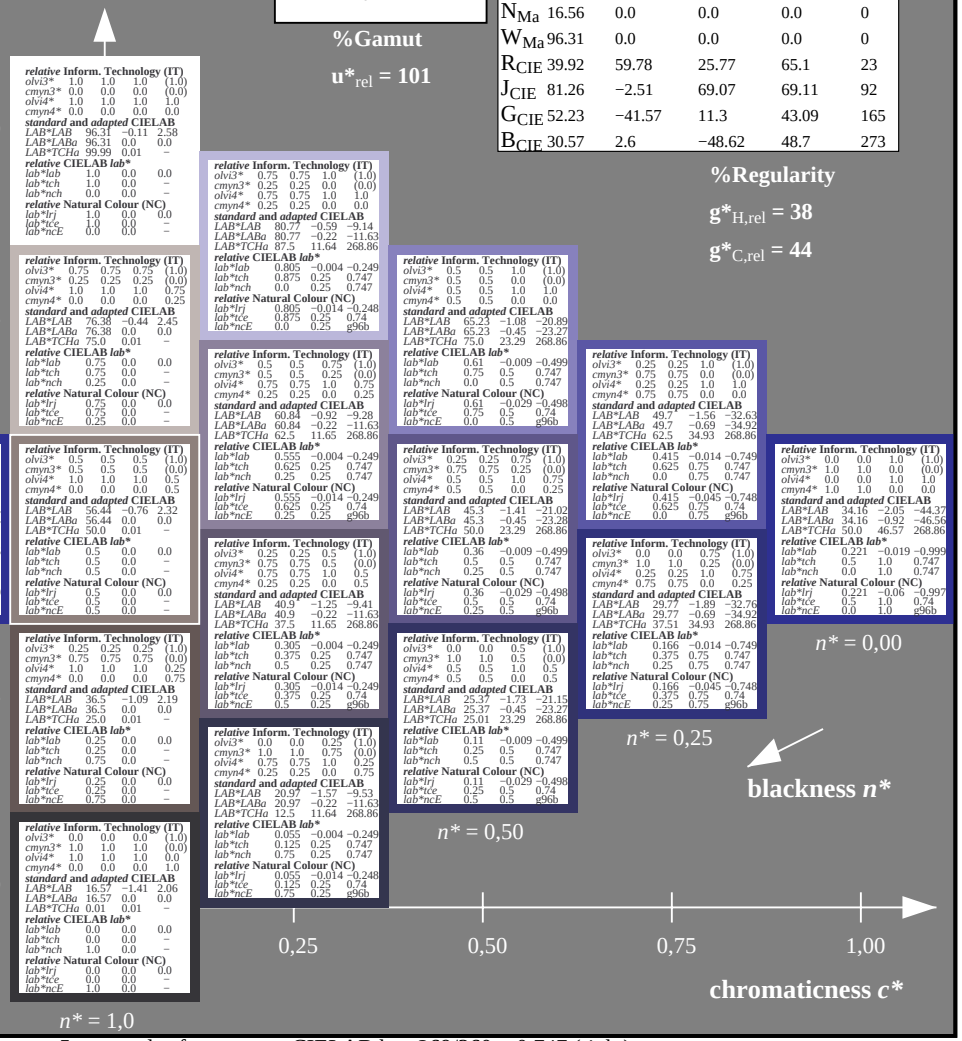
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



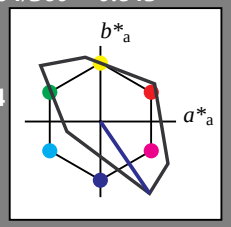
OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

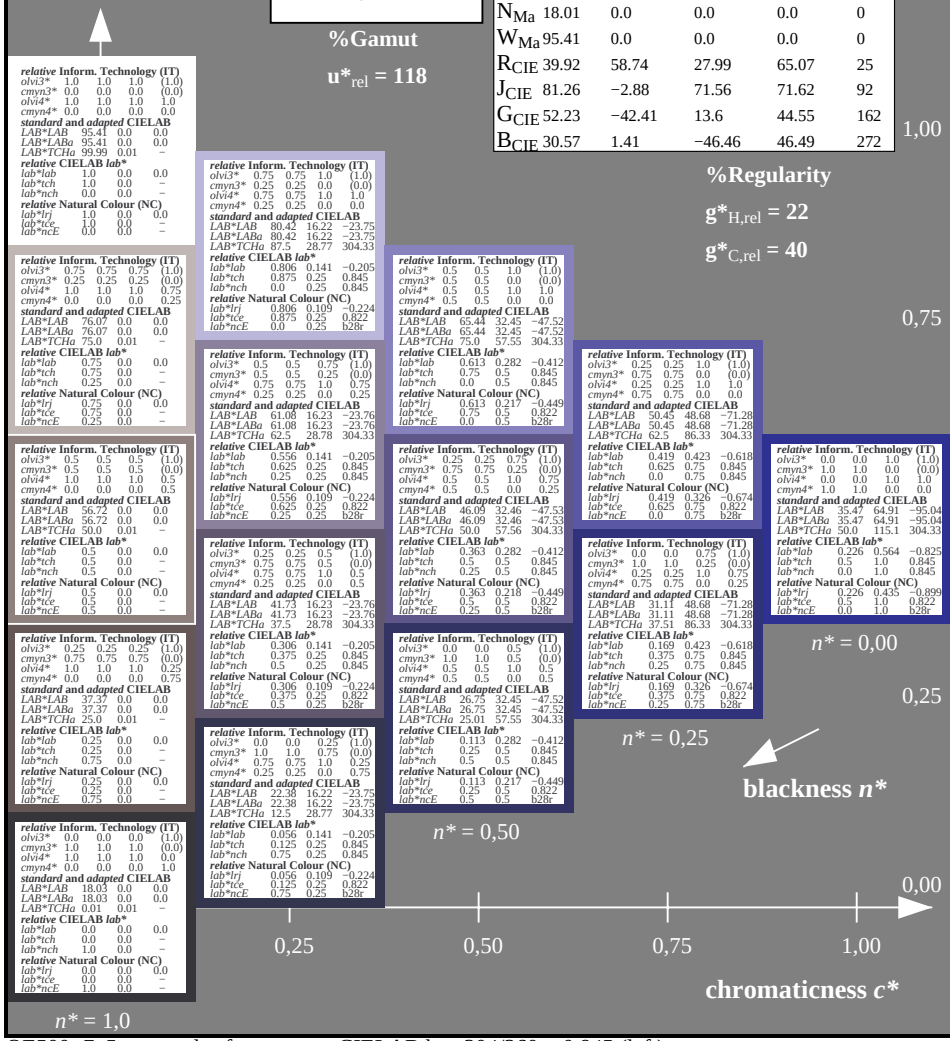
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

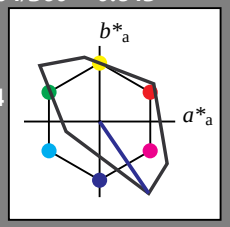


OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

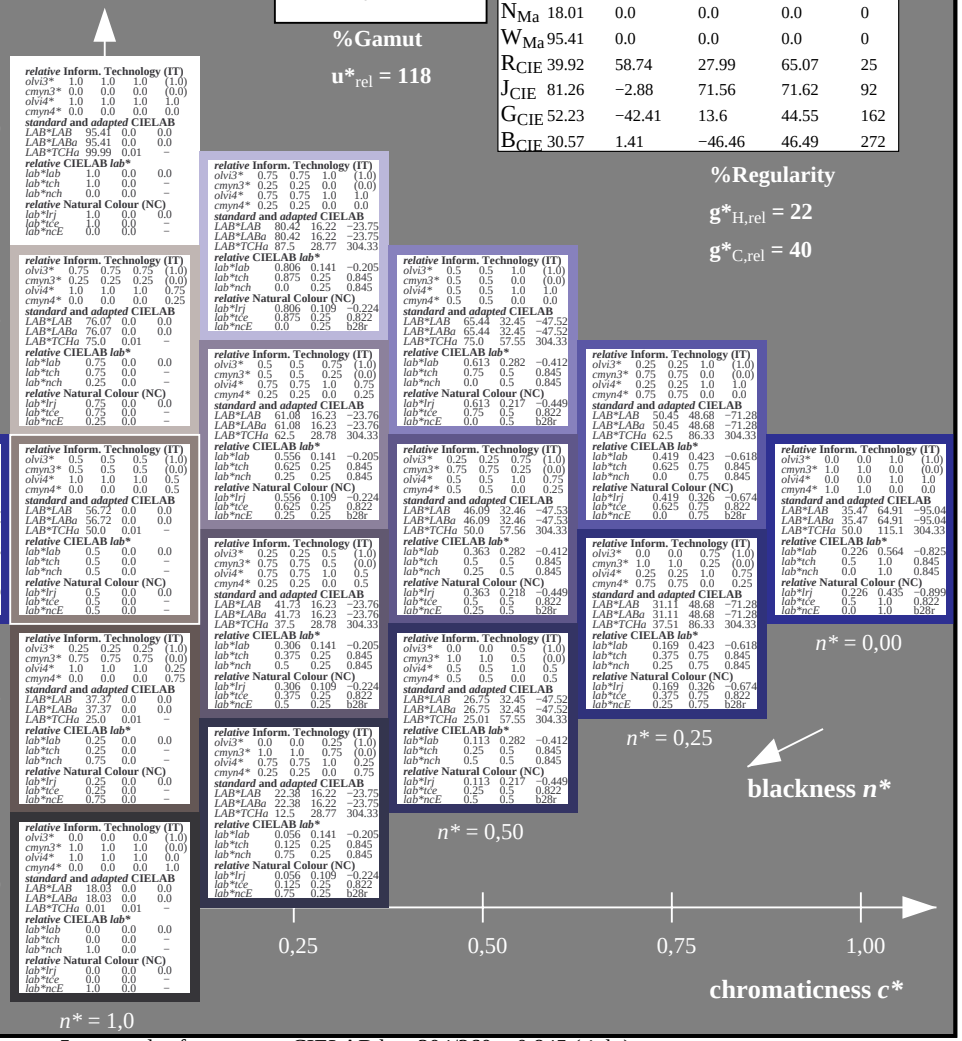
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

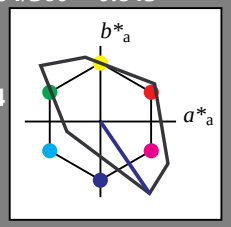


5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

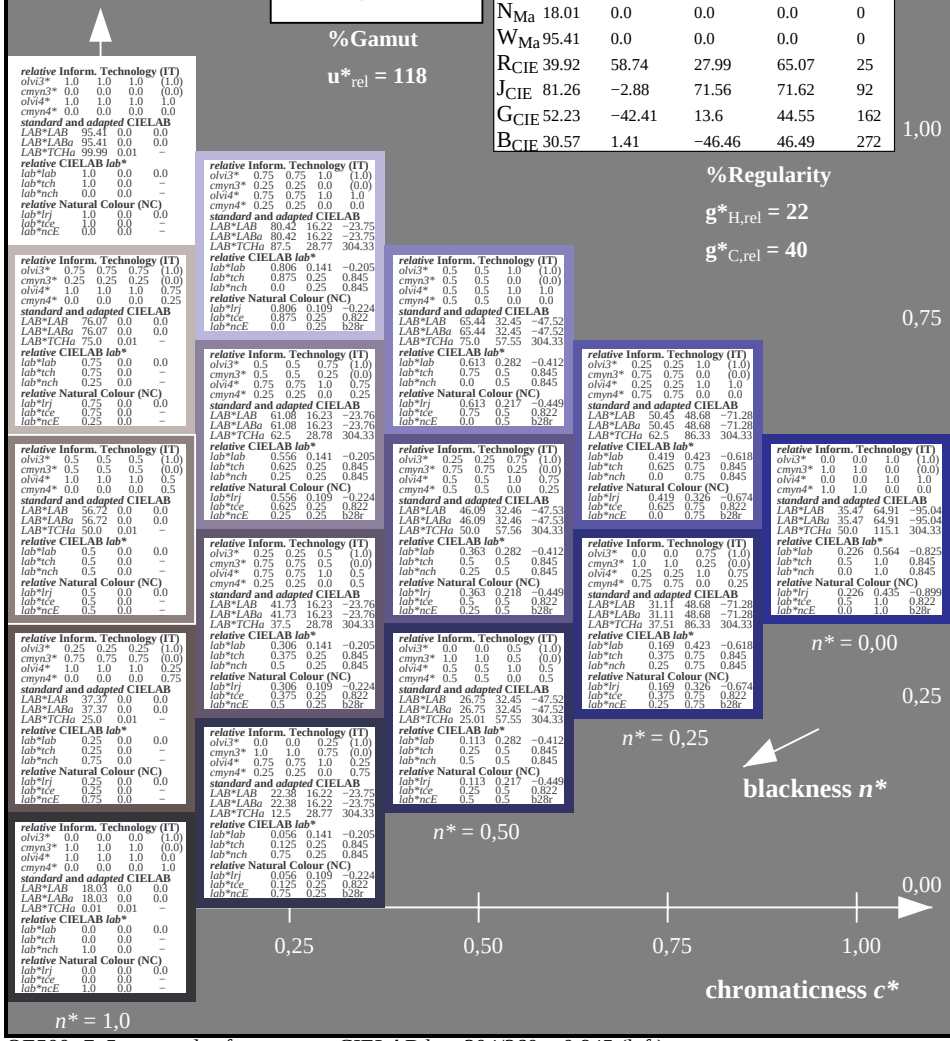
u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

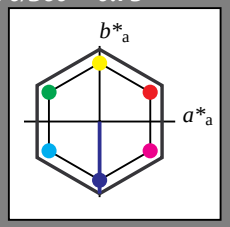
triangle lightness *t**



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

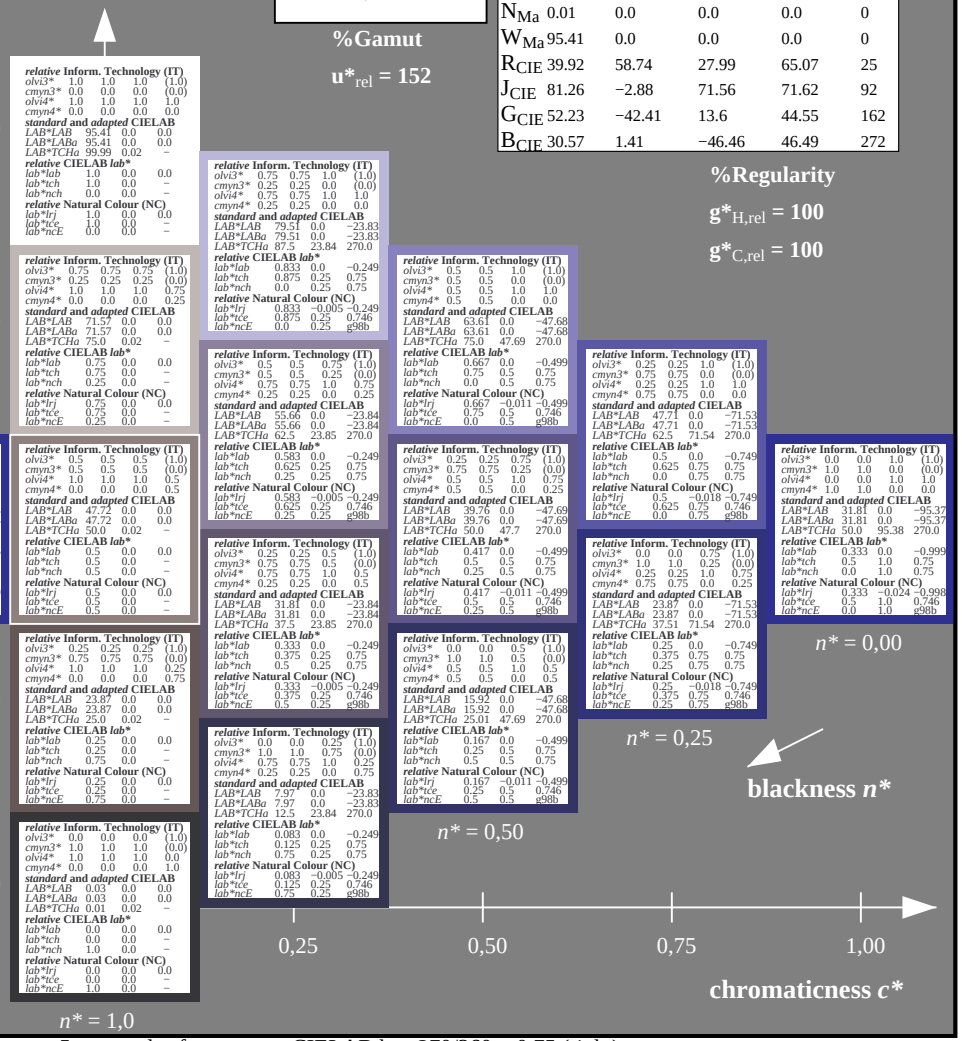
u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

triangle lightness *t**



OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

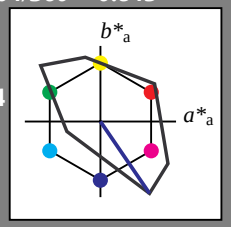
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

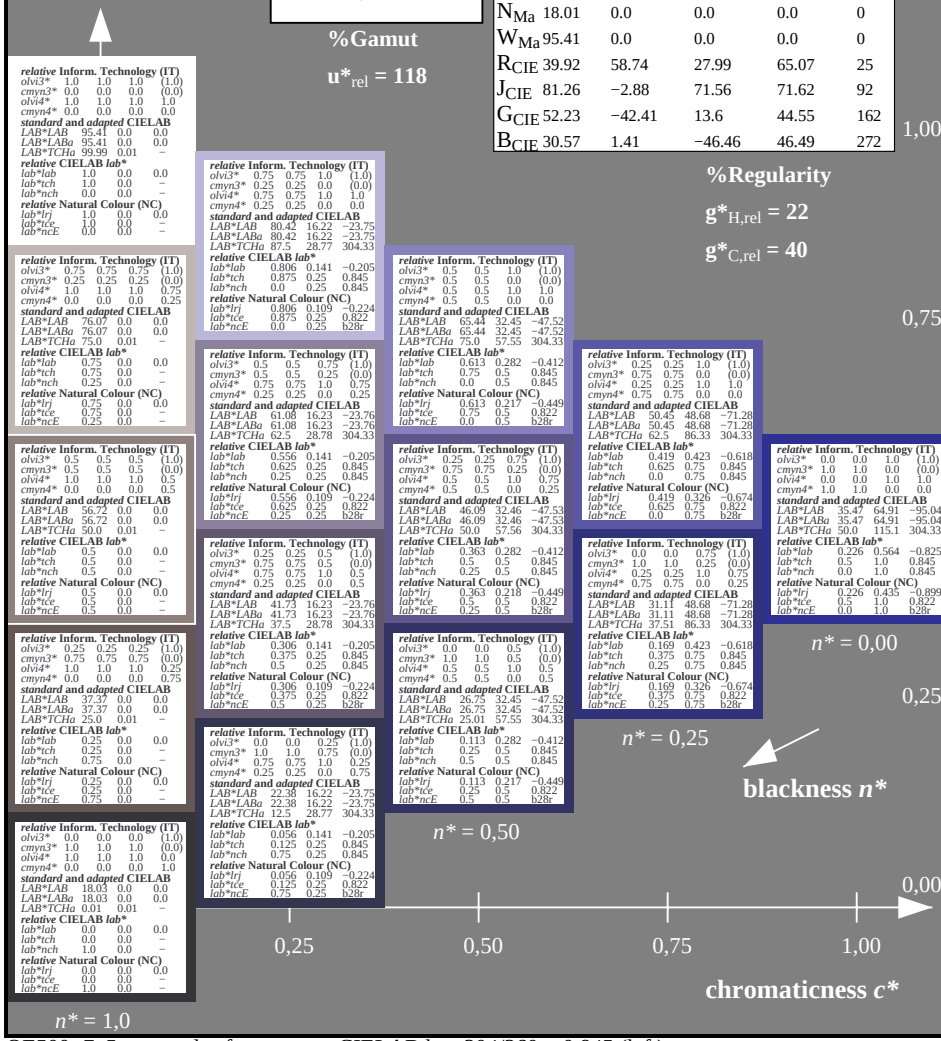
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



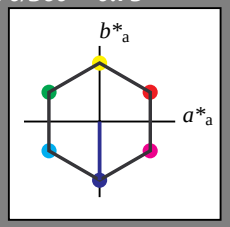
OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

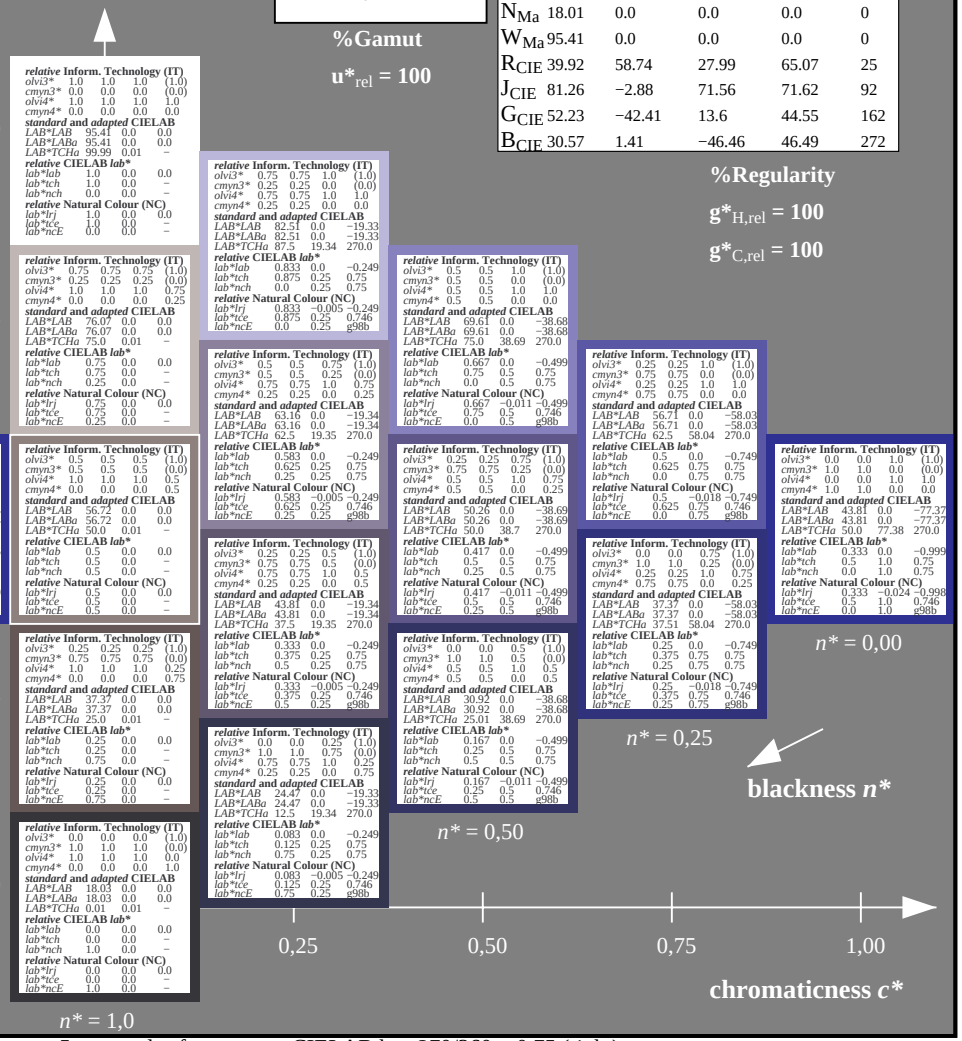
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

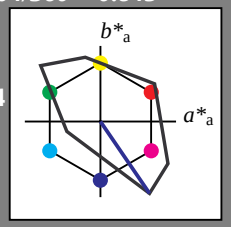


5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

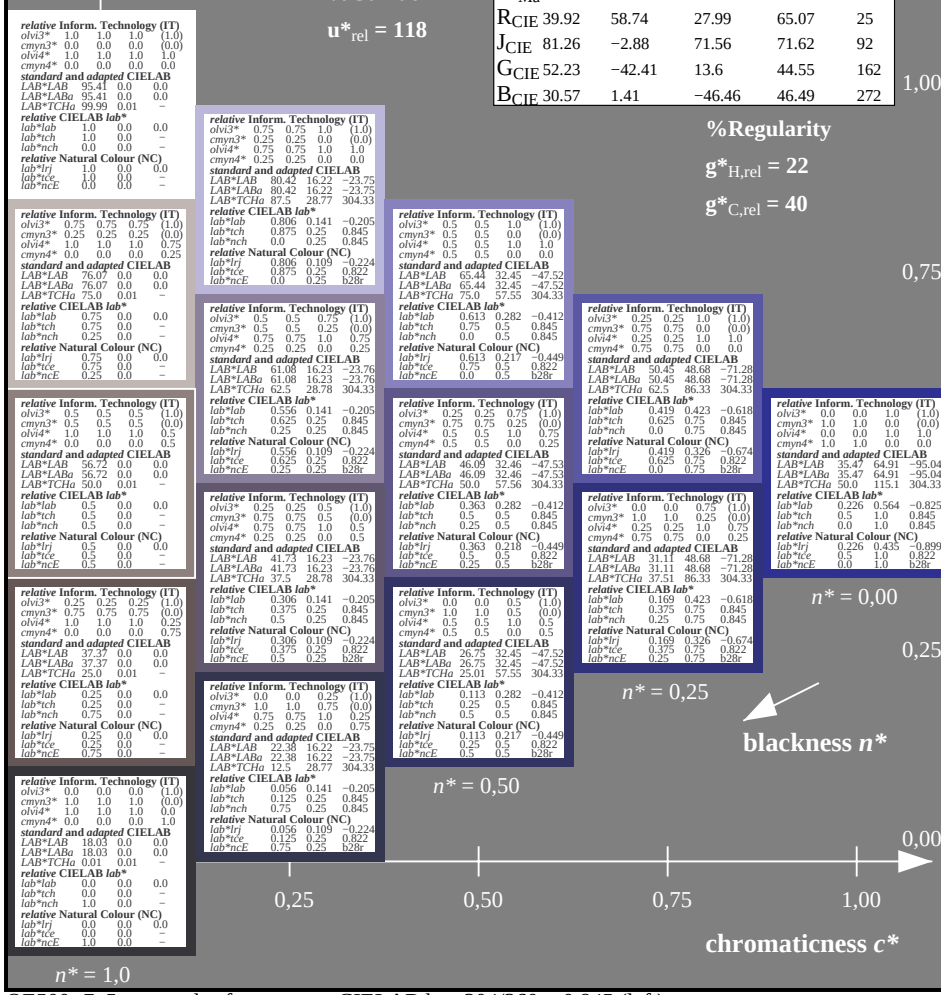
u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

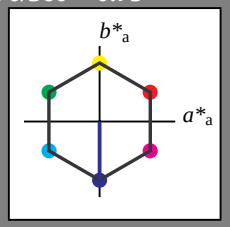


OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

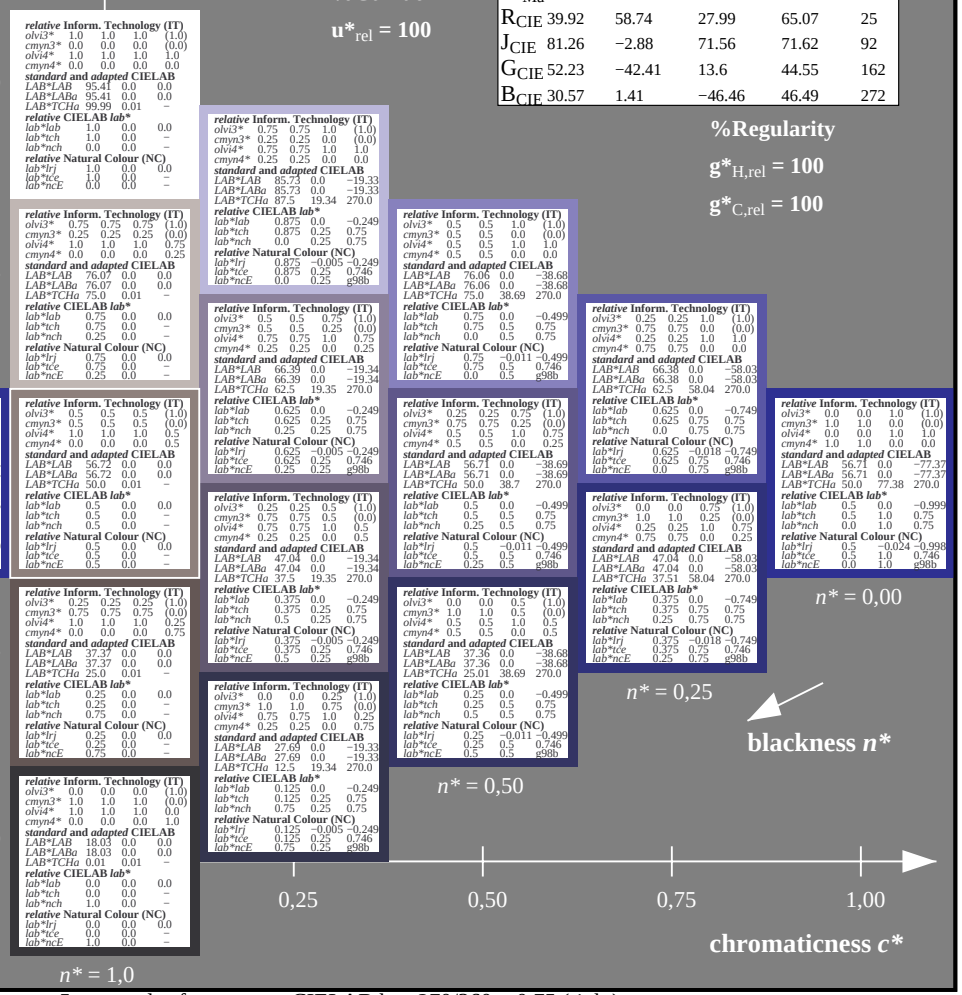
u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

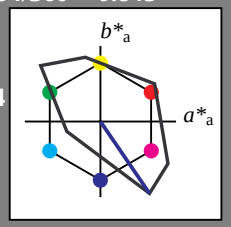


5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

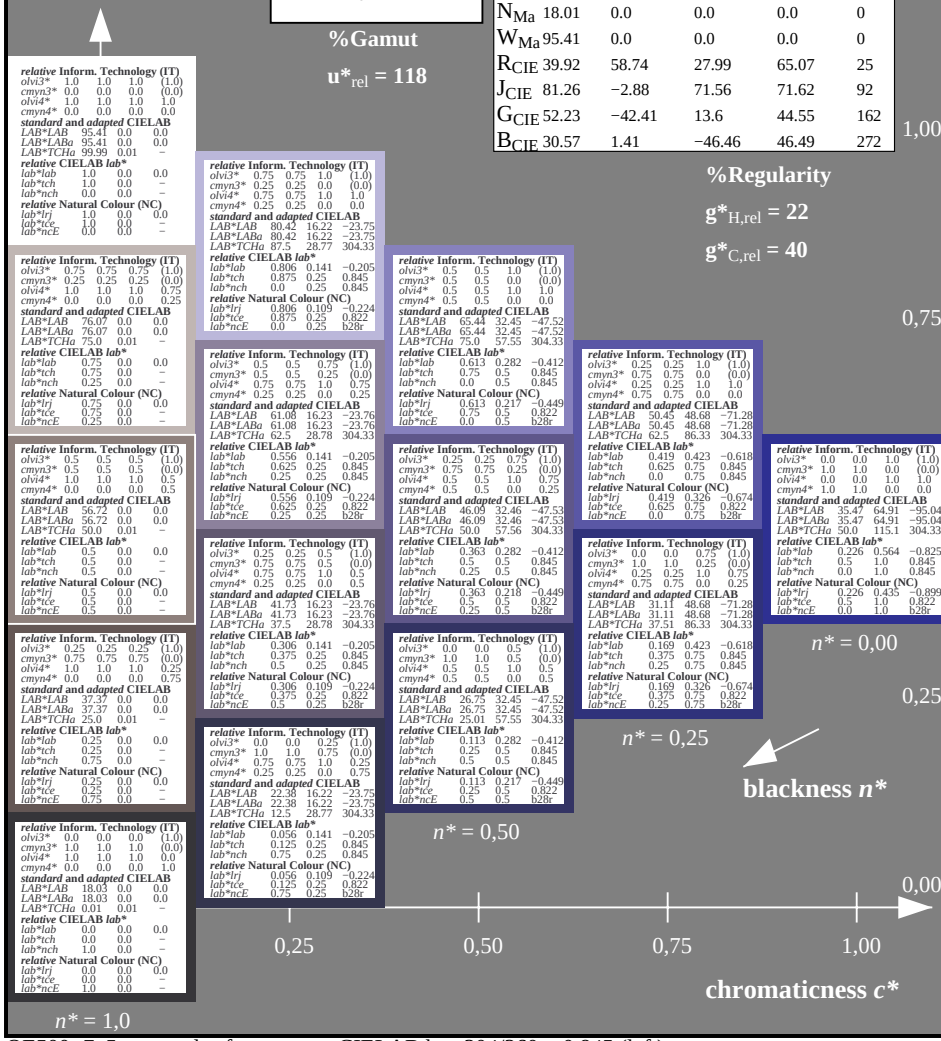
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

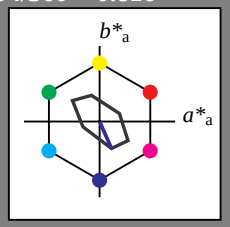
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

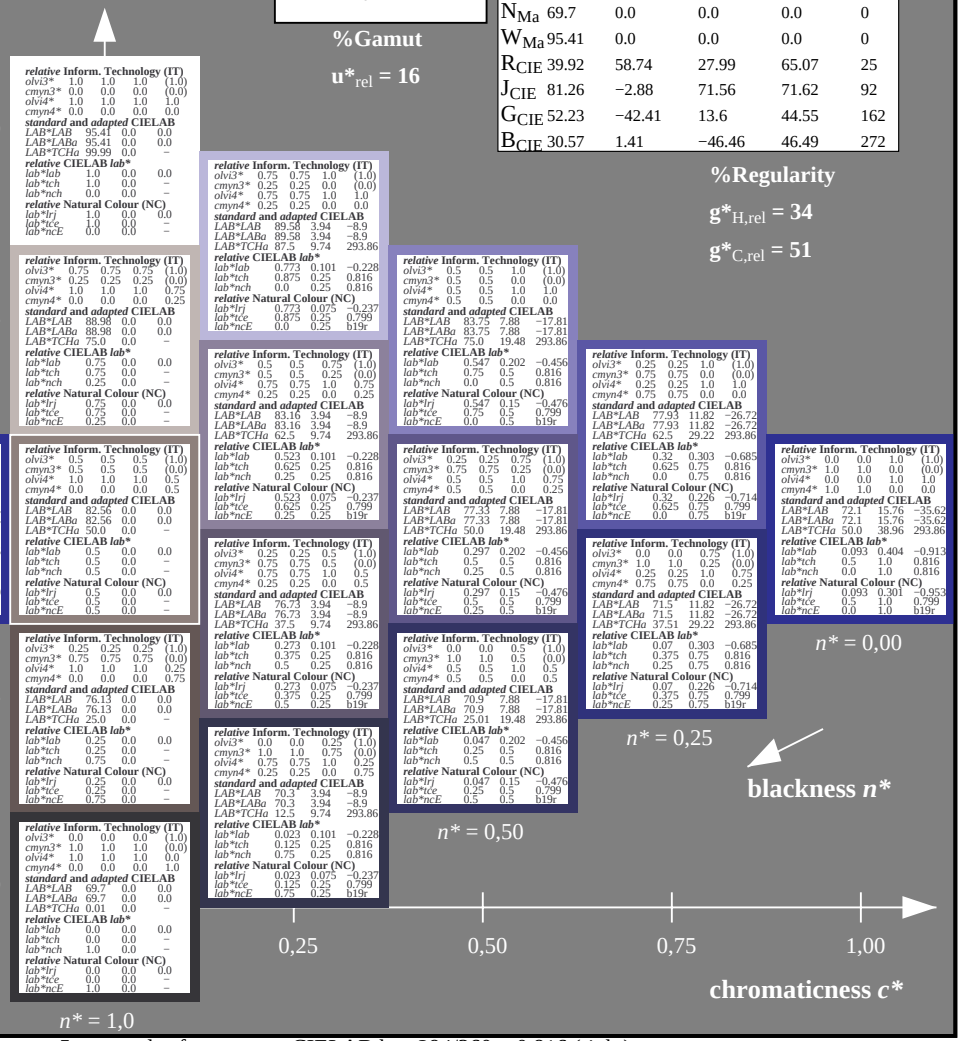
%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

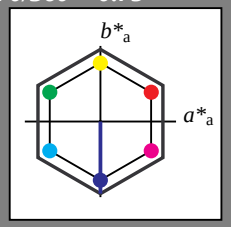
5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 270/360 = 0.75*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

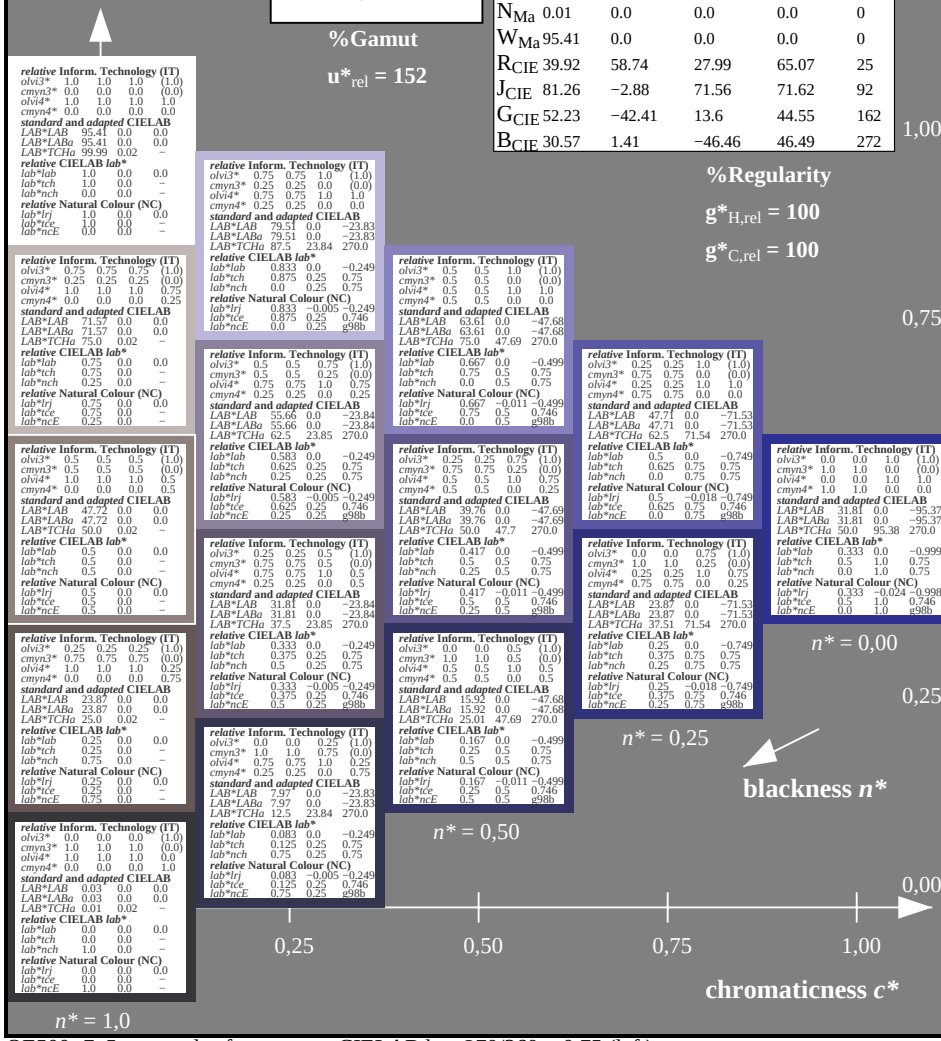
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

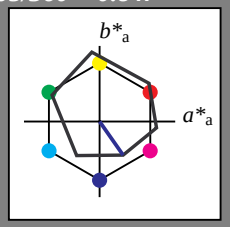


Output: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 305/360 = 0.847*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

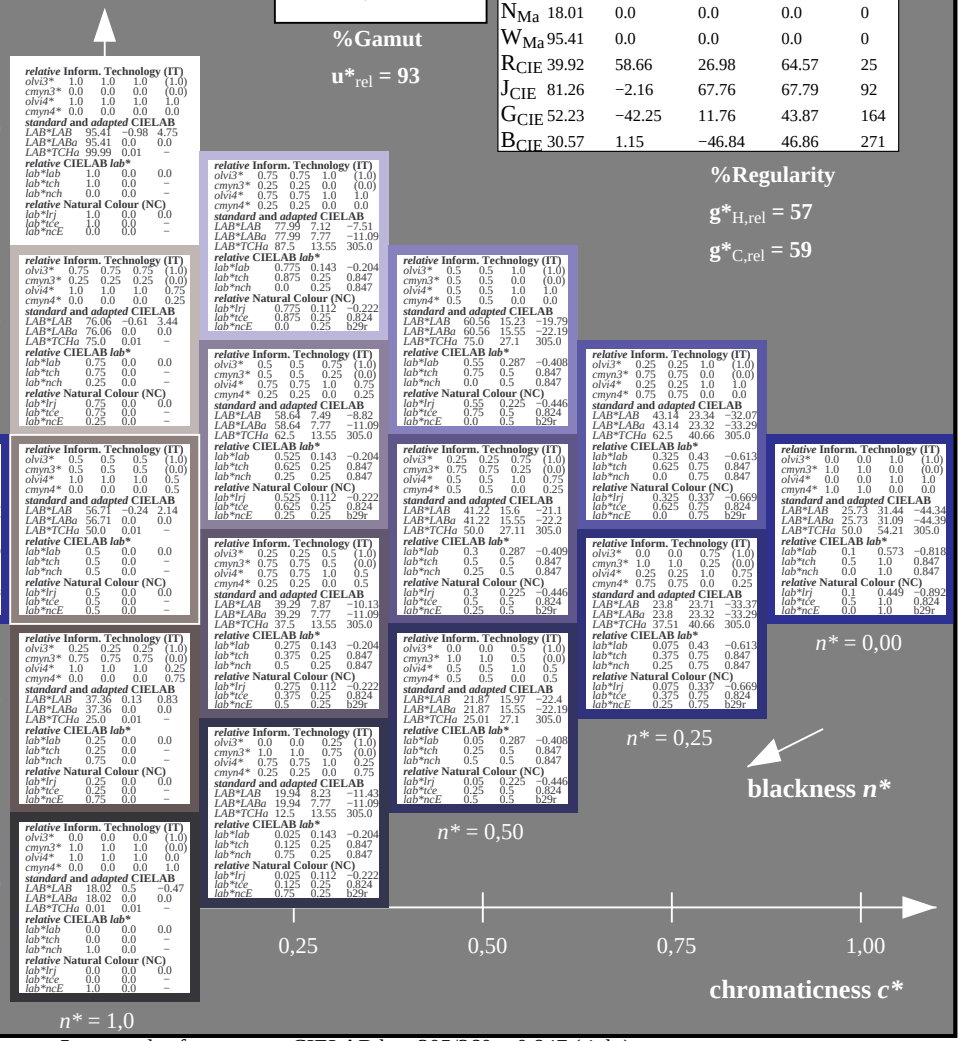
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

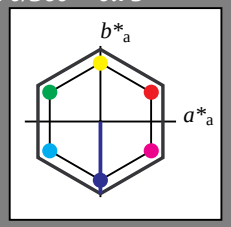
5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

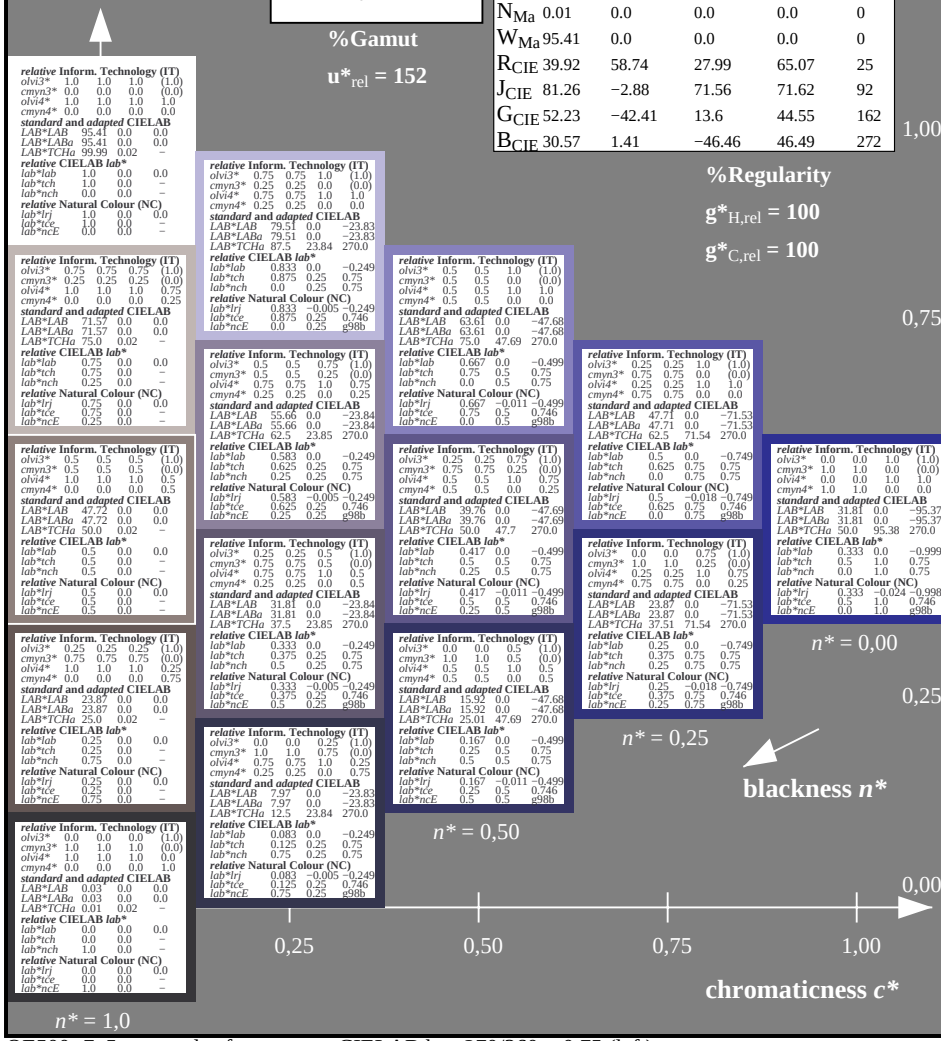
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



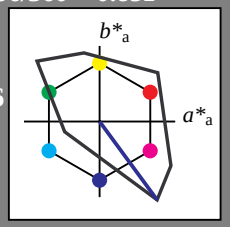
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

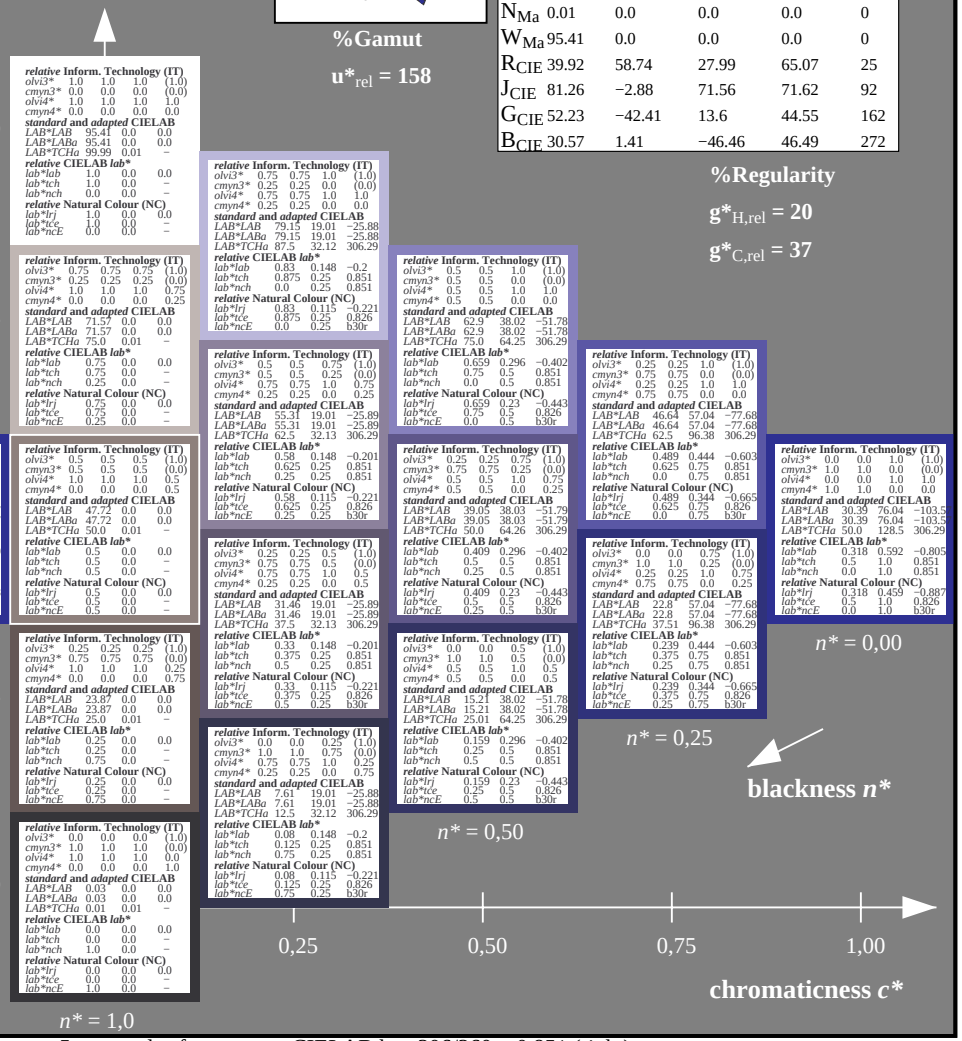
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Natural Luminous System NLS00

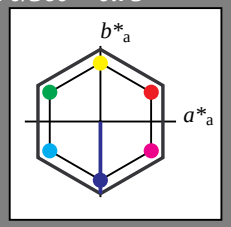
for hue $h^* = lab^*h = 270/360 = 0.75$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0



NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

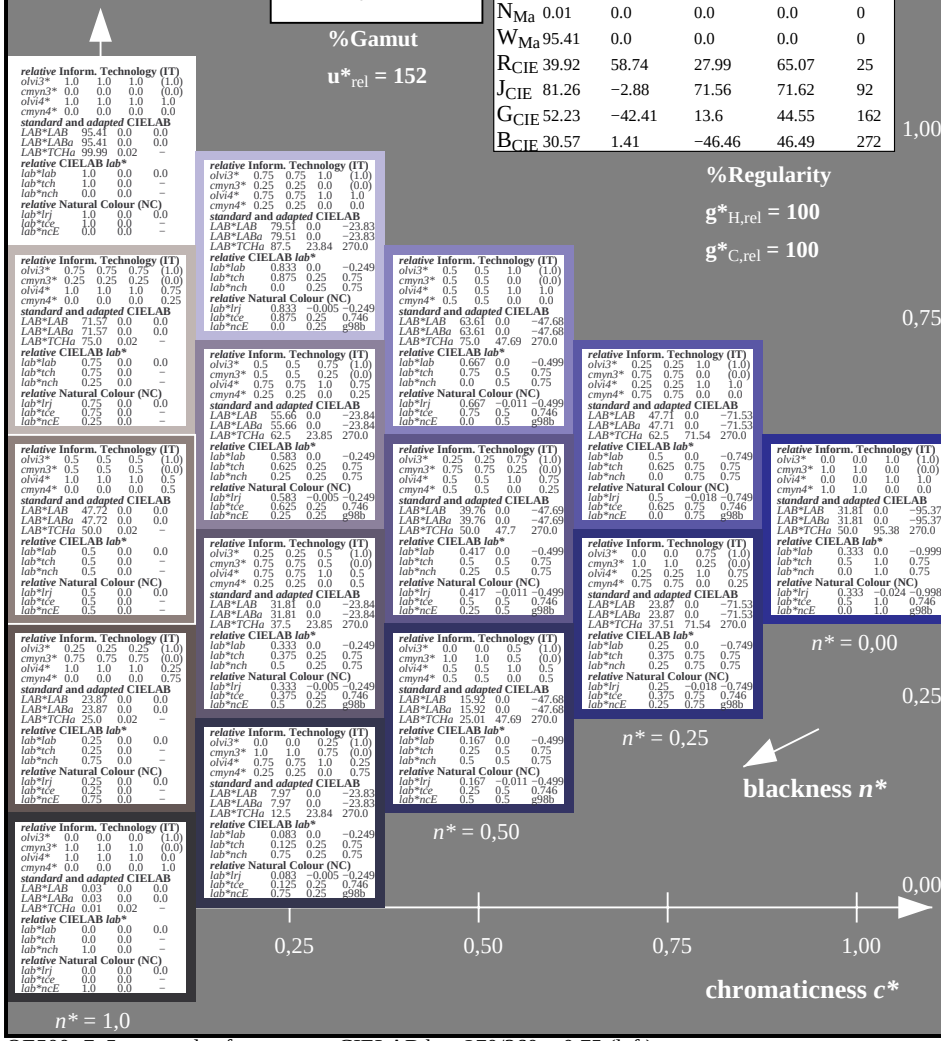
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



Output: Colorimetric Printer Reflective System DRSXX

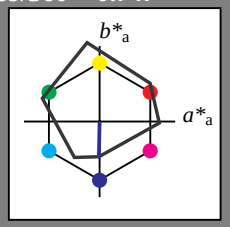
for hue $h^* = lab^*h = 269/360 = 0.747$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0



DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

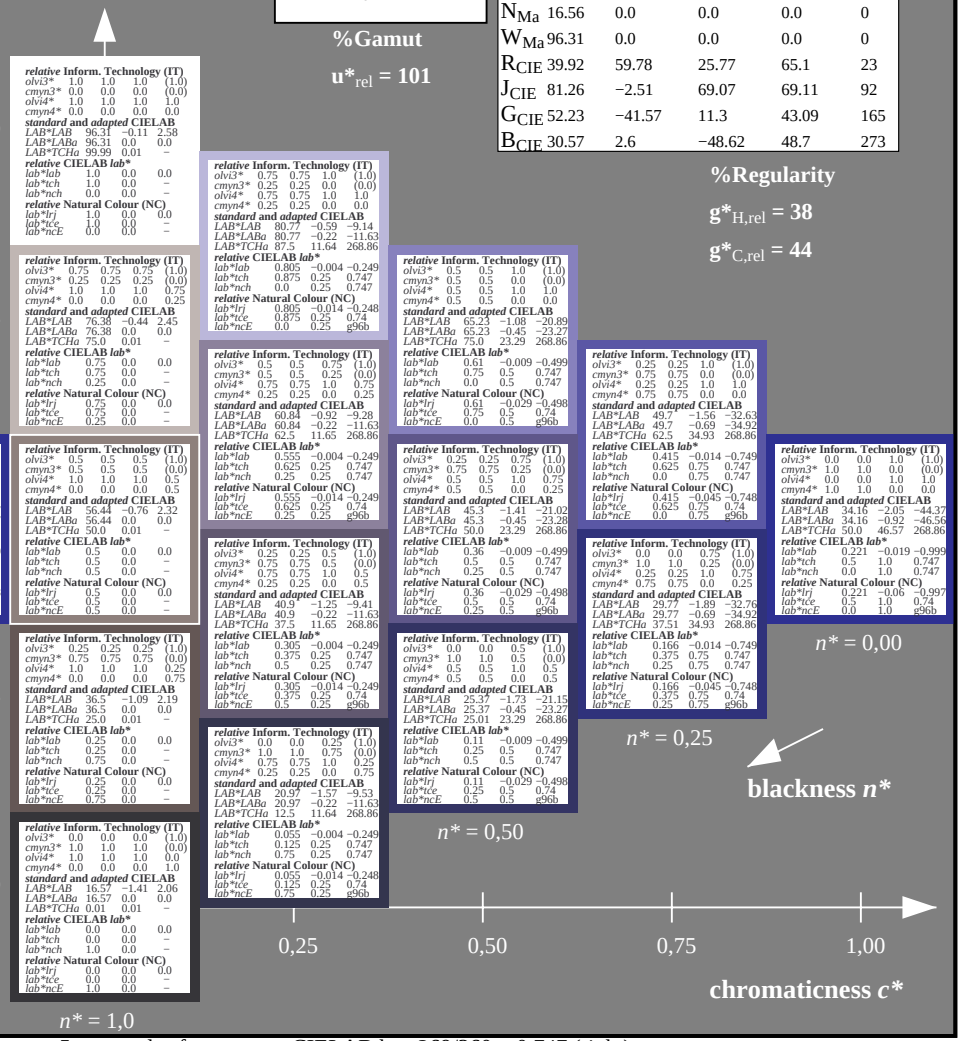
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

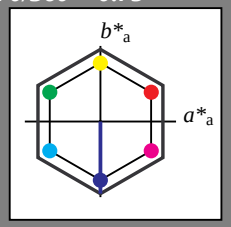
5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 270/360 = 0.75*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

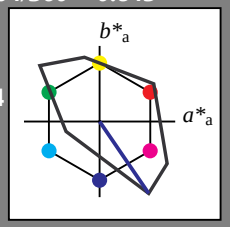
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 304/360 = 0.845*
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

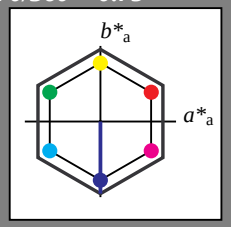
5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

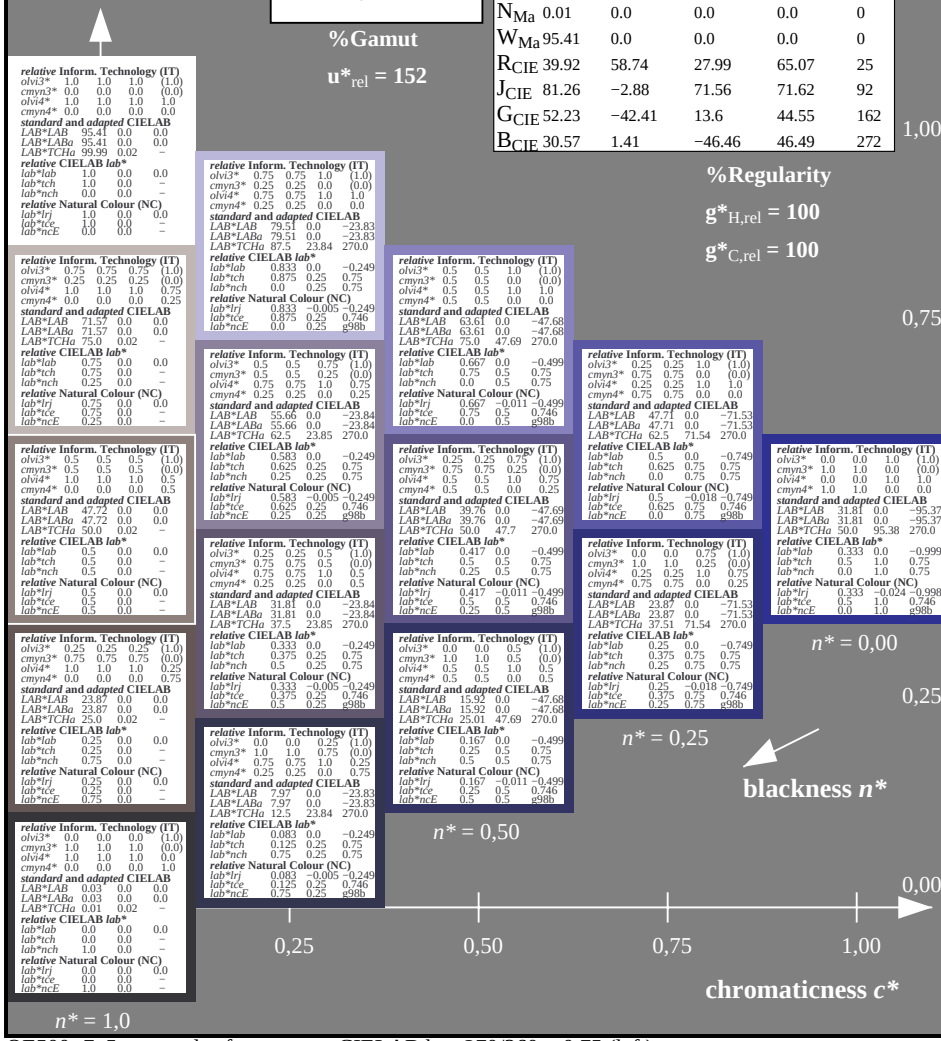
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



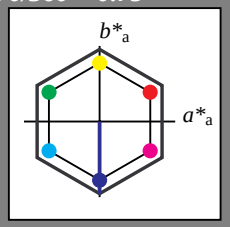
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

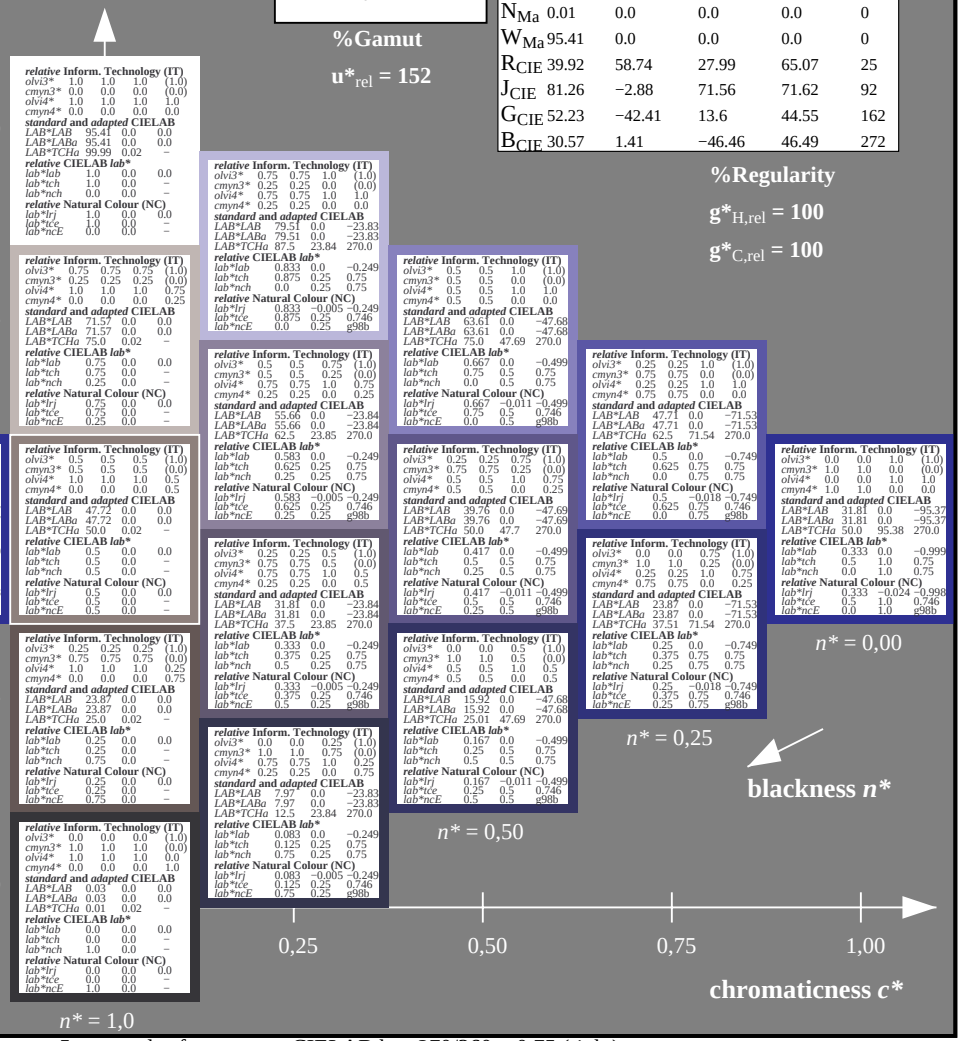
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$

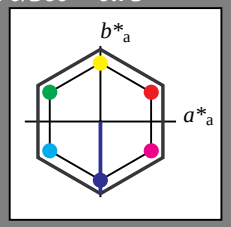
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

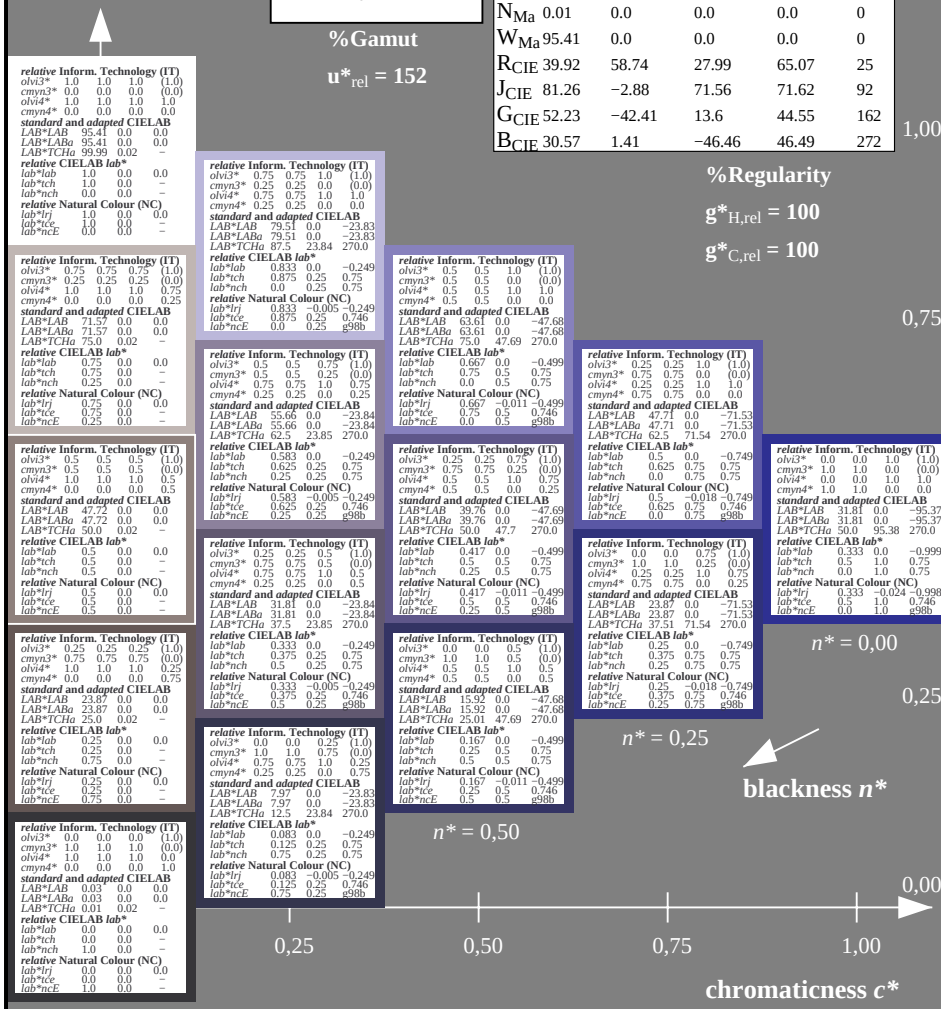
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

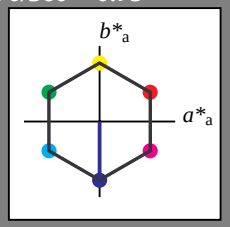
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

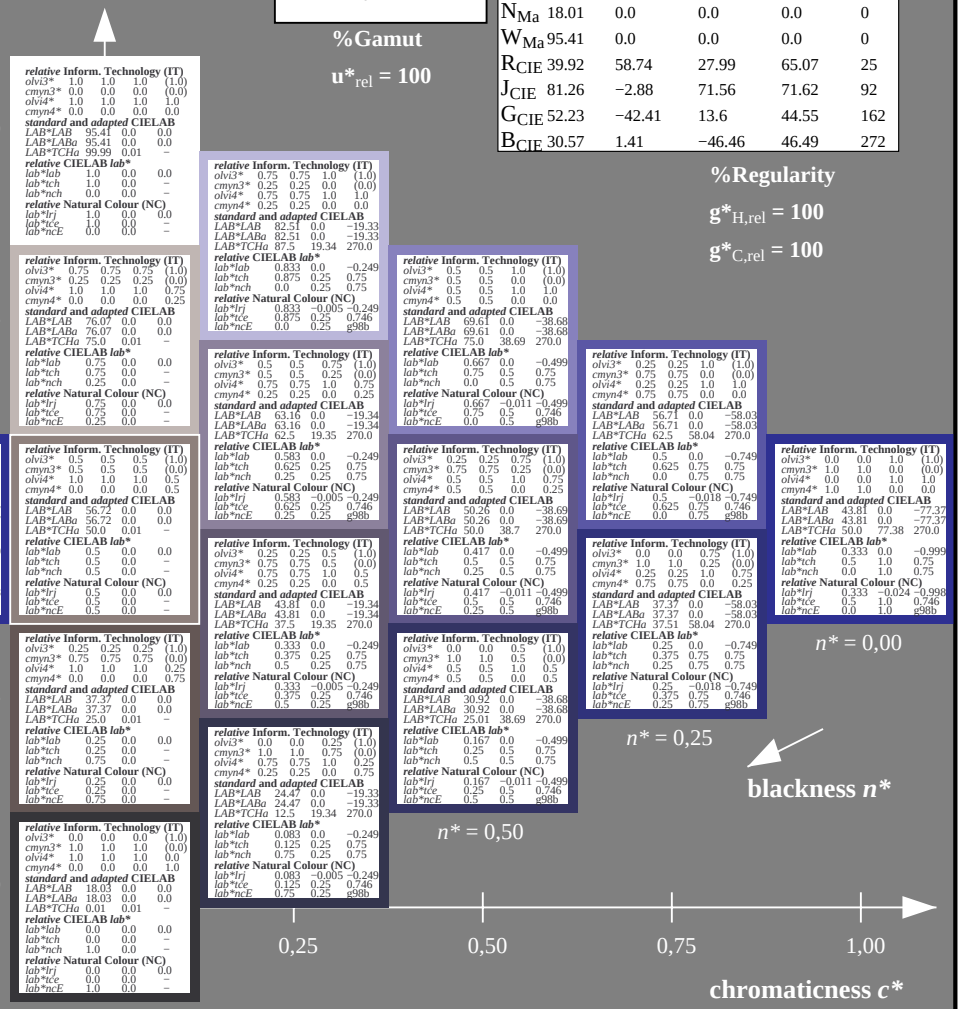
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$

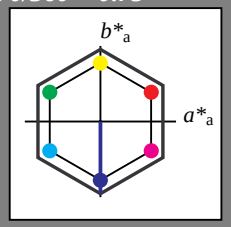
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

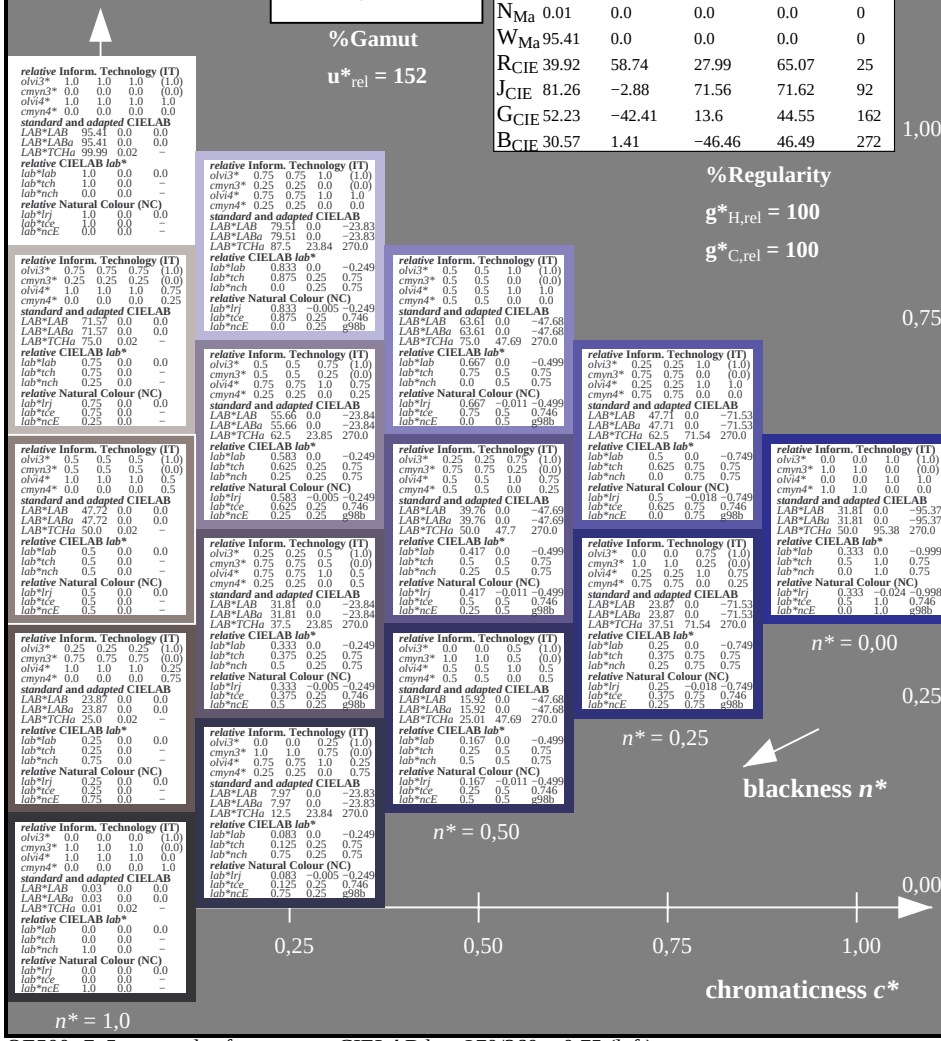
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

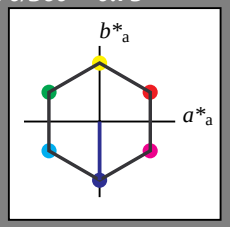
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

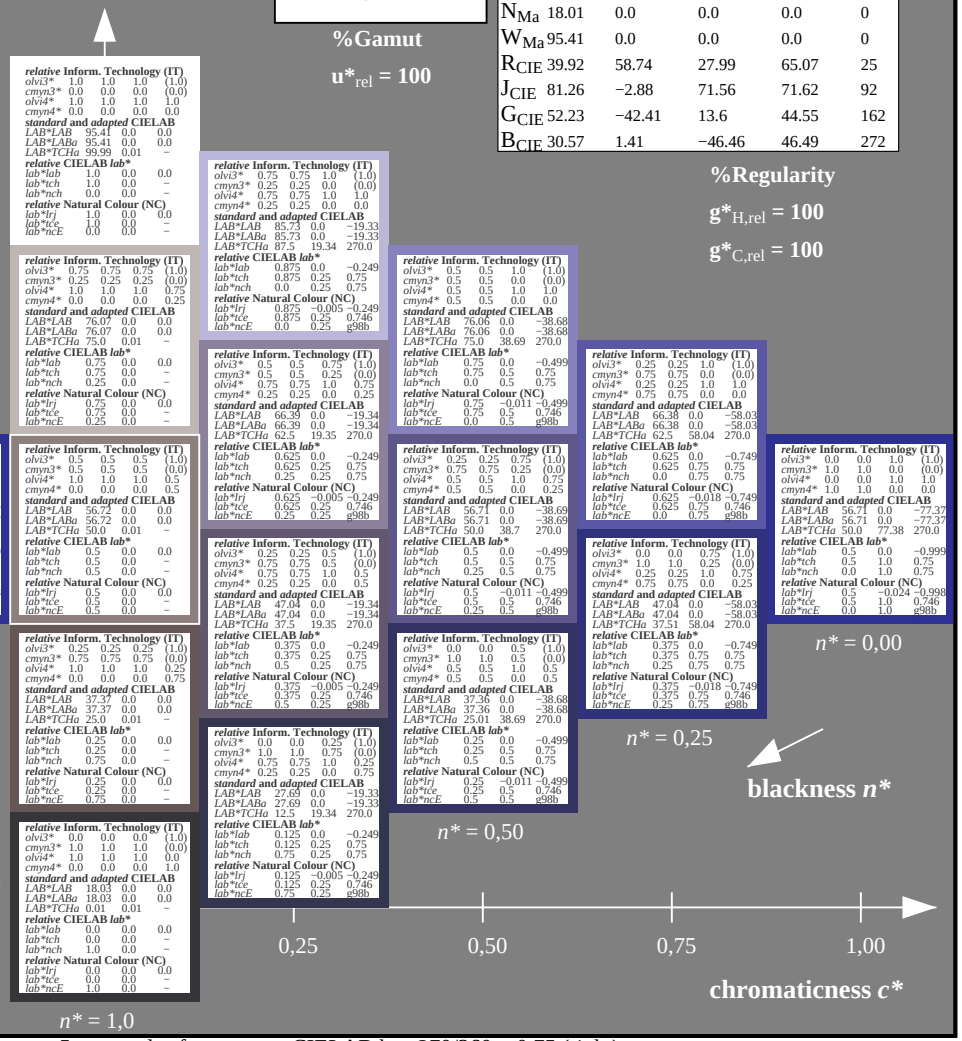
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

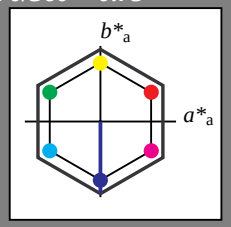
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

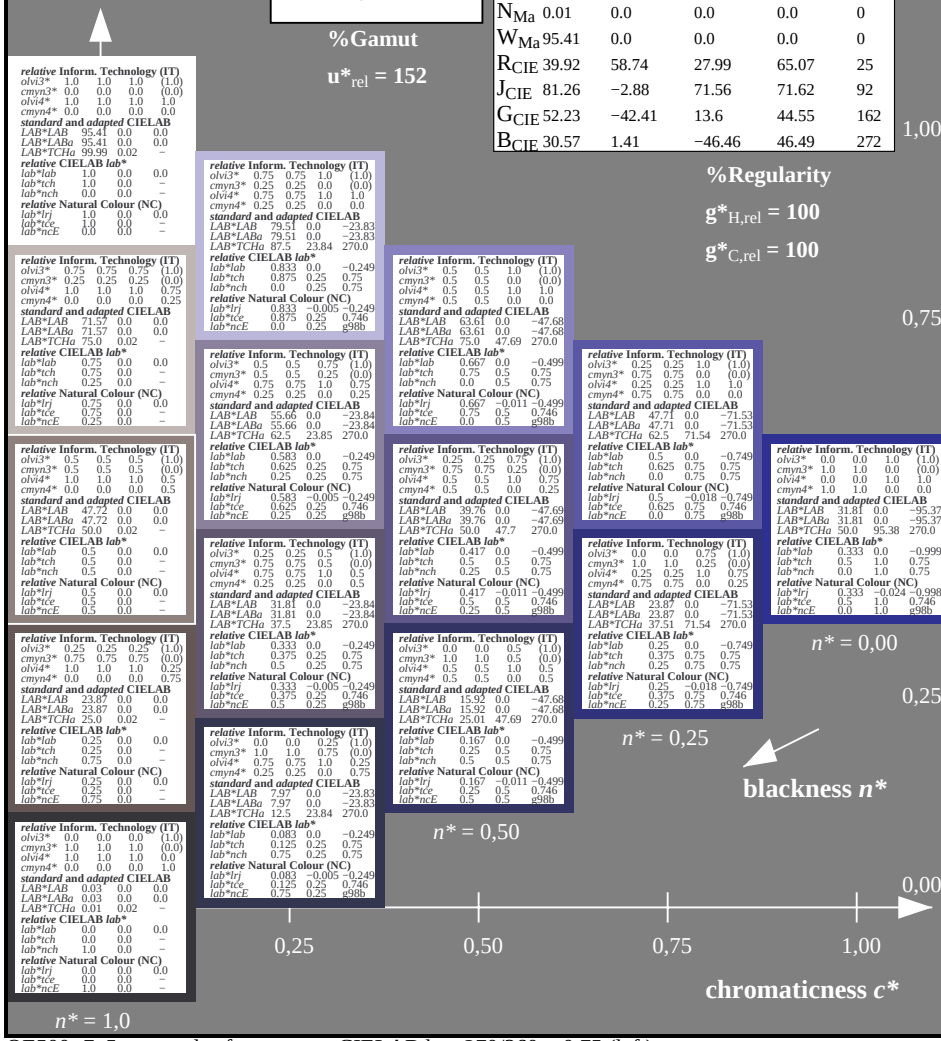
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



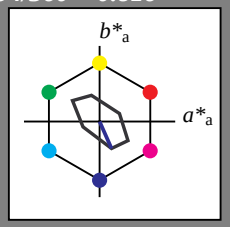
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

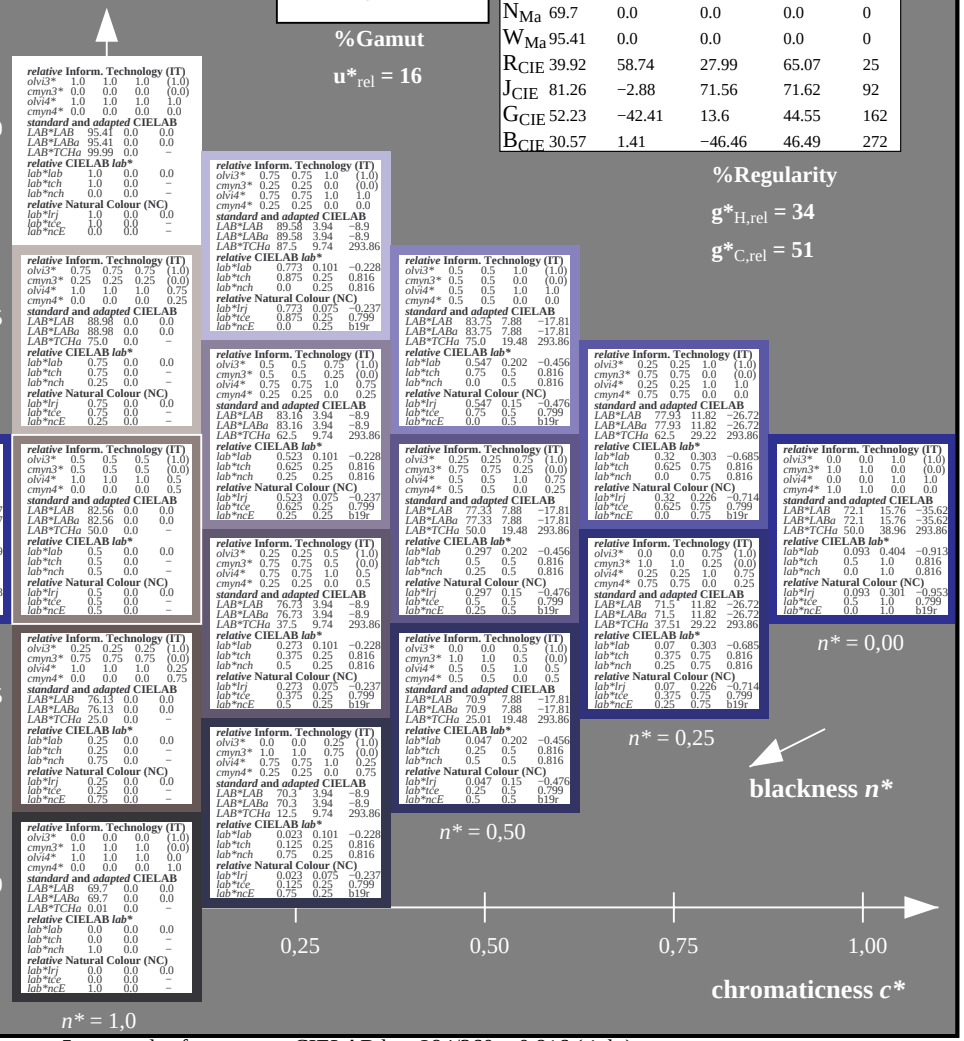
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

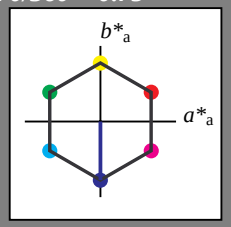
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

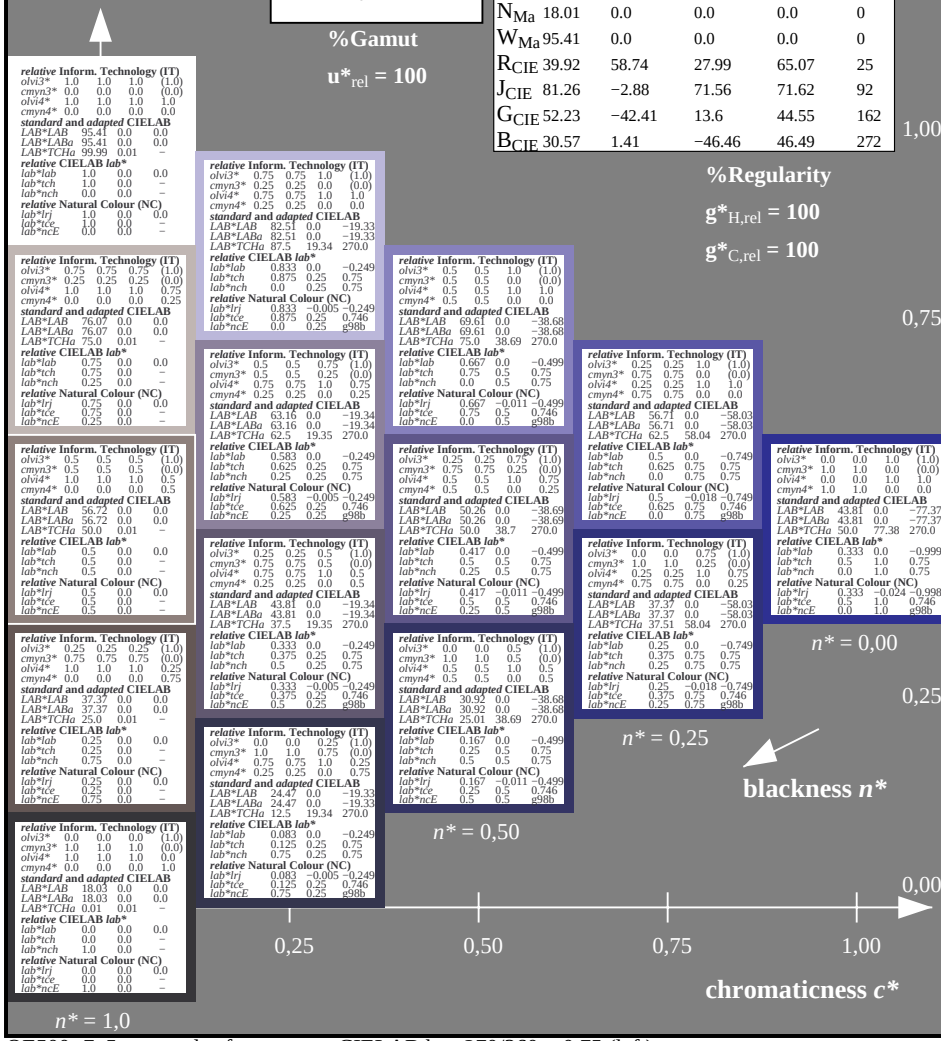
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$

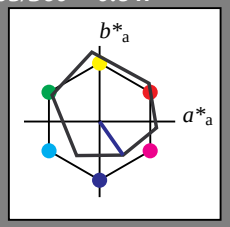
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

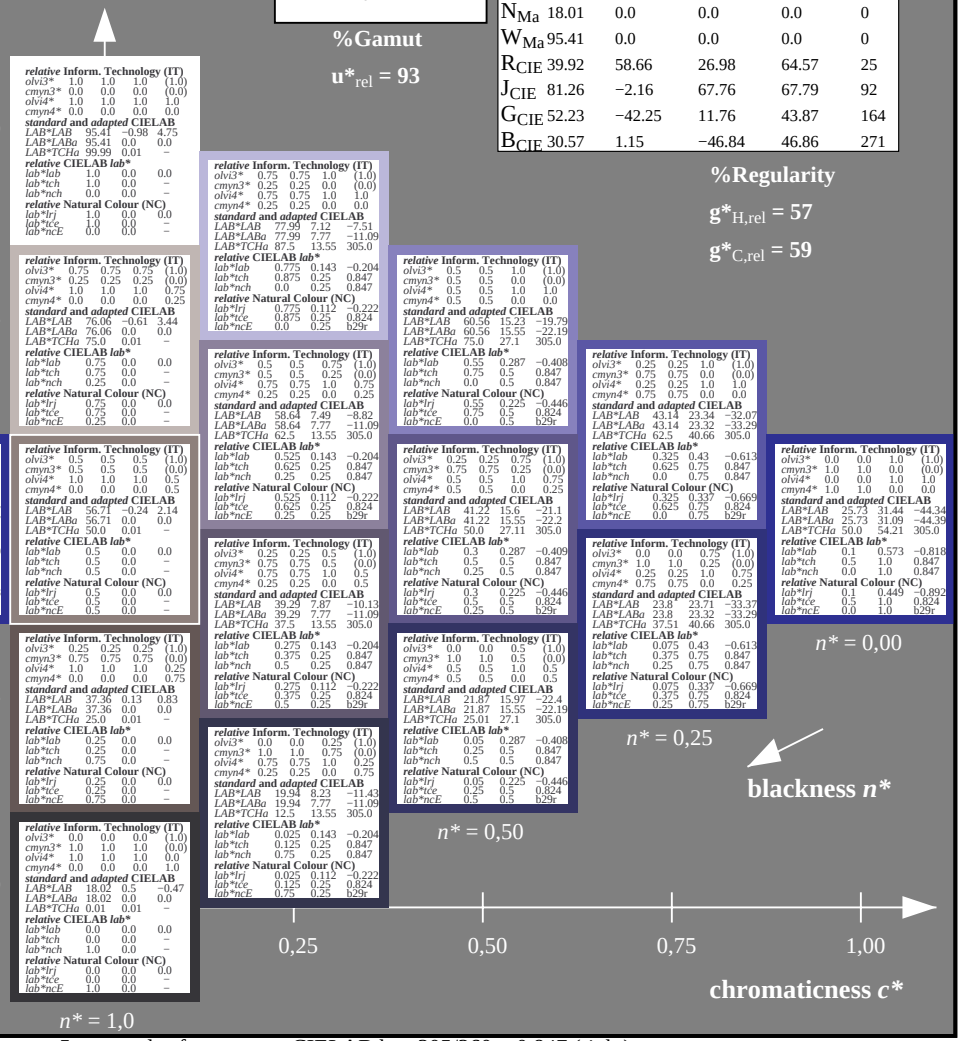
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

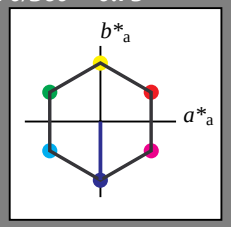
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

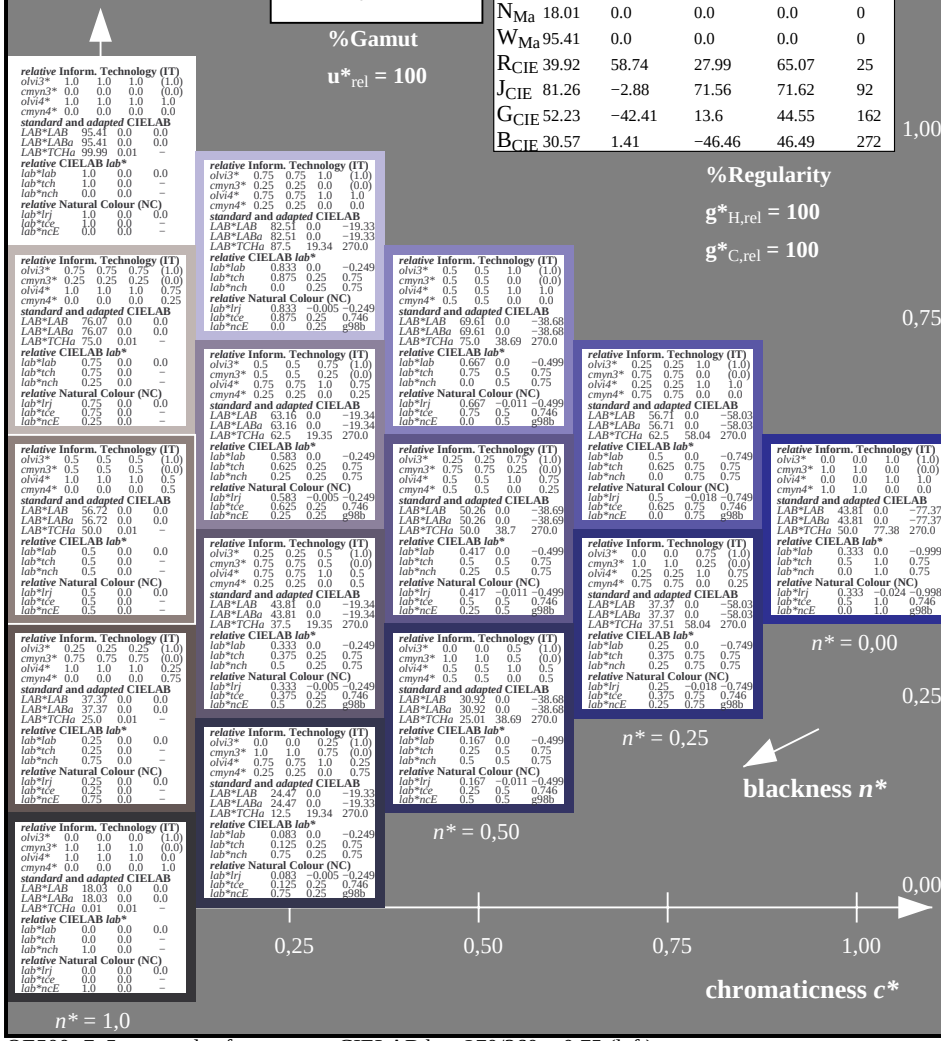
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

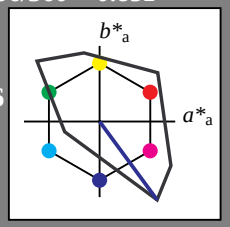
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

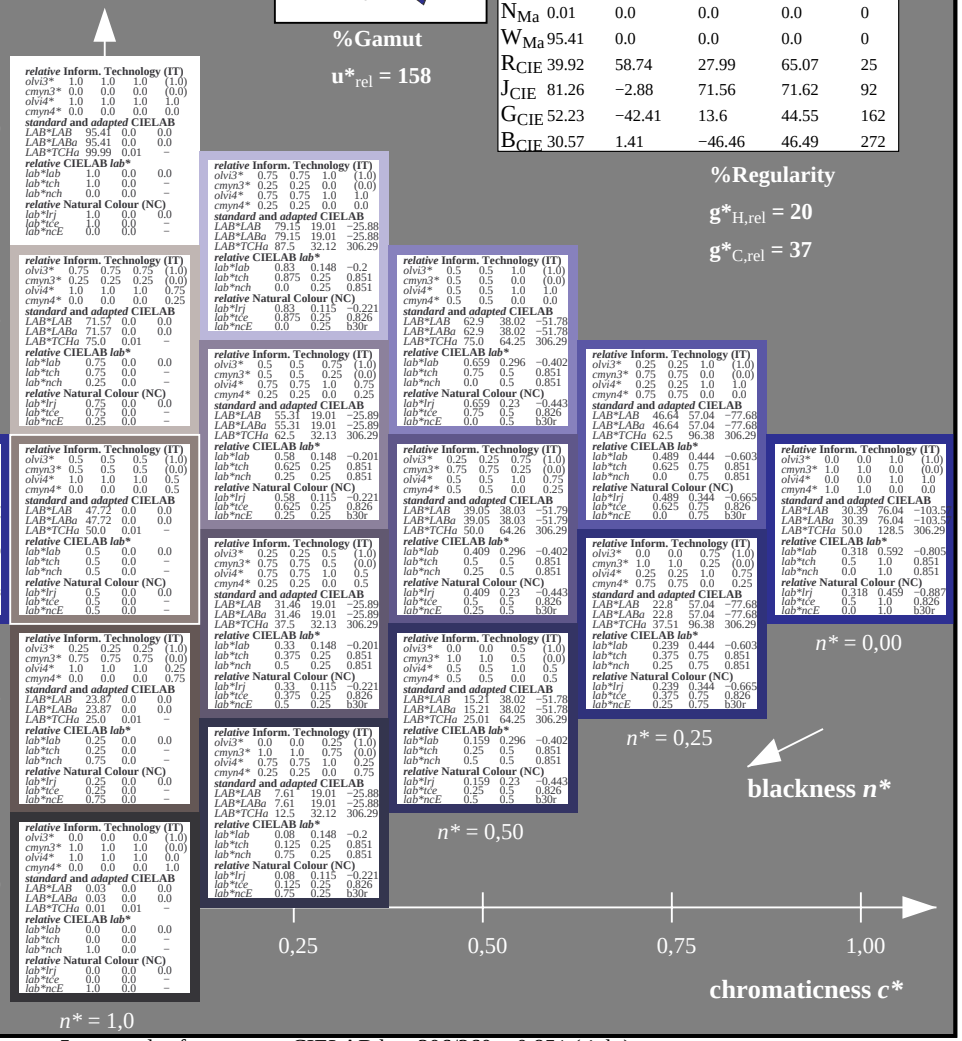
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Natural Reflective System NRS18

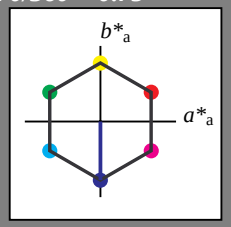
for hue $h^* = lab^*h = 270/360 = 0.75$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

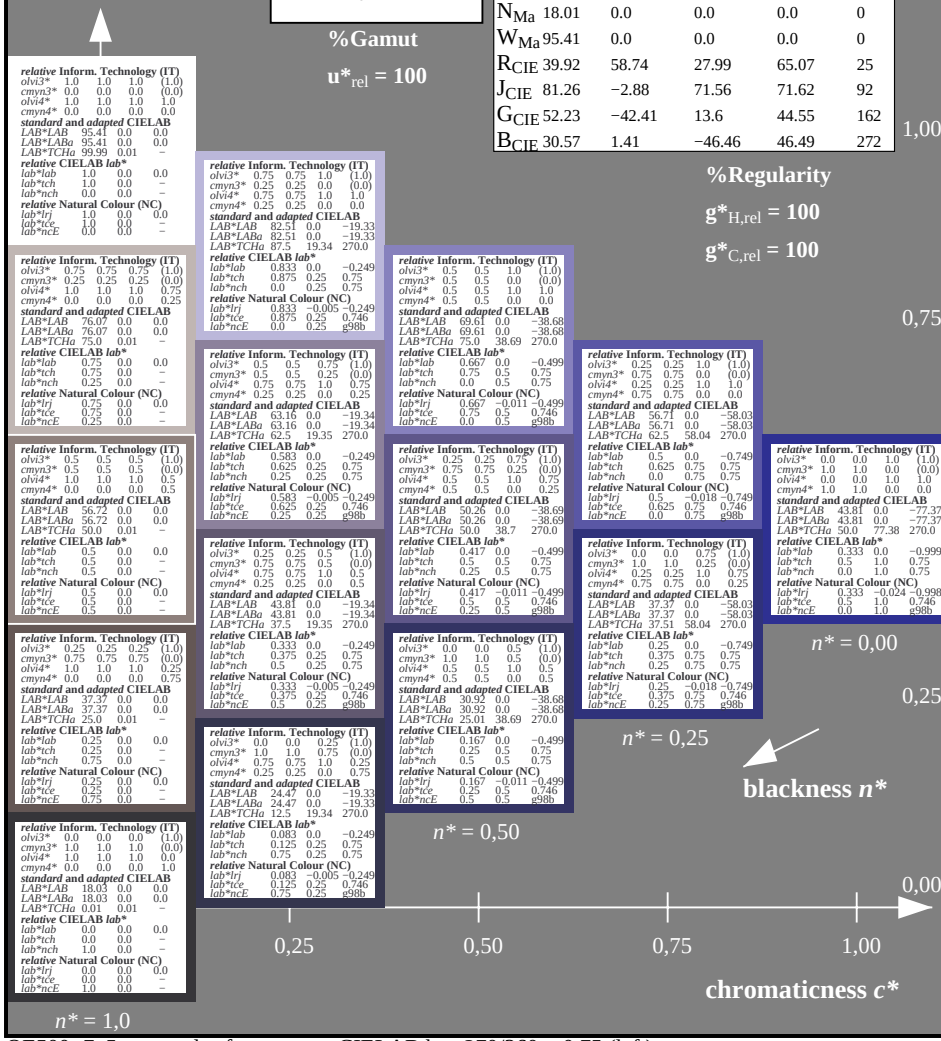
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Printer Reflective System DRSXX

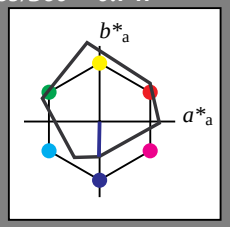
for hue $h^* = lab^*h = 269/360 = 0.747$

*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

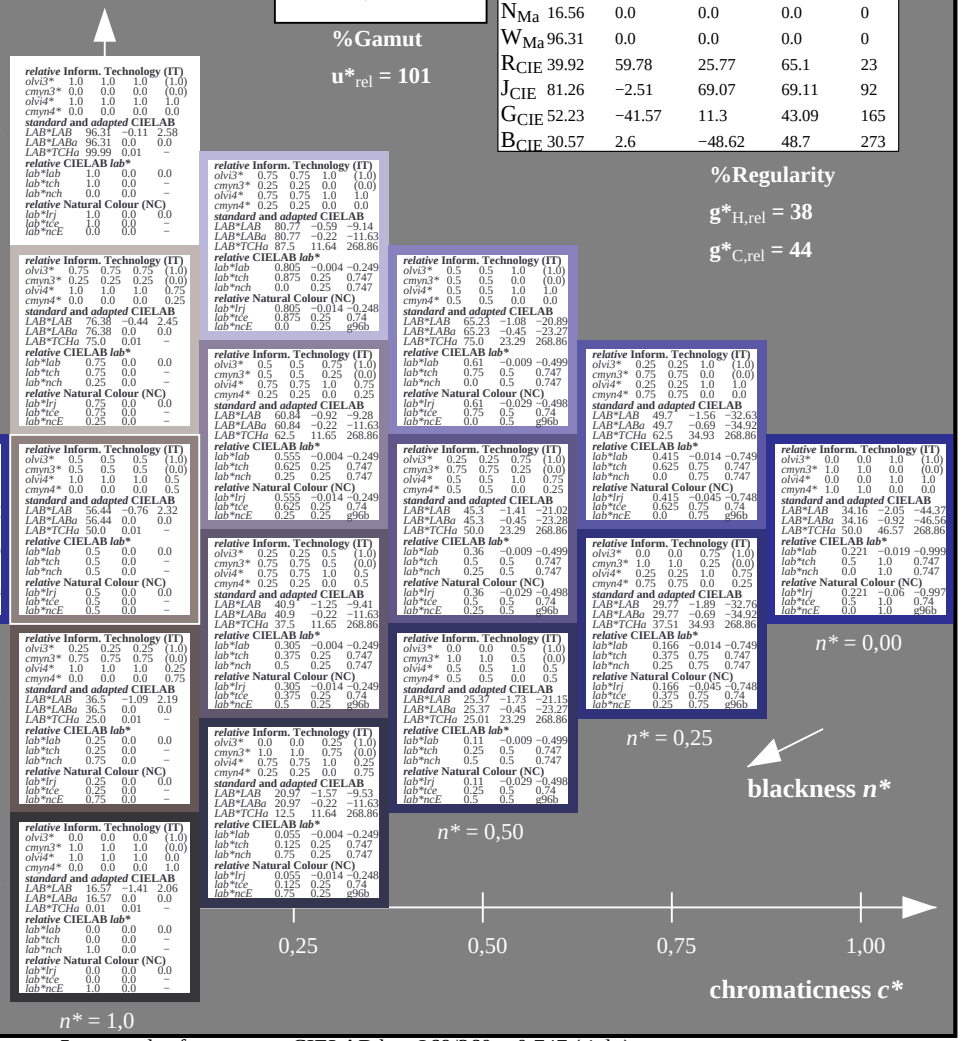
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



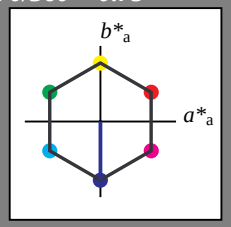
5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

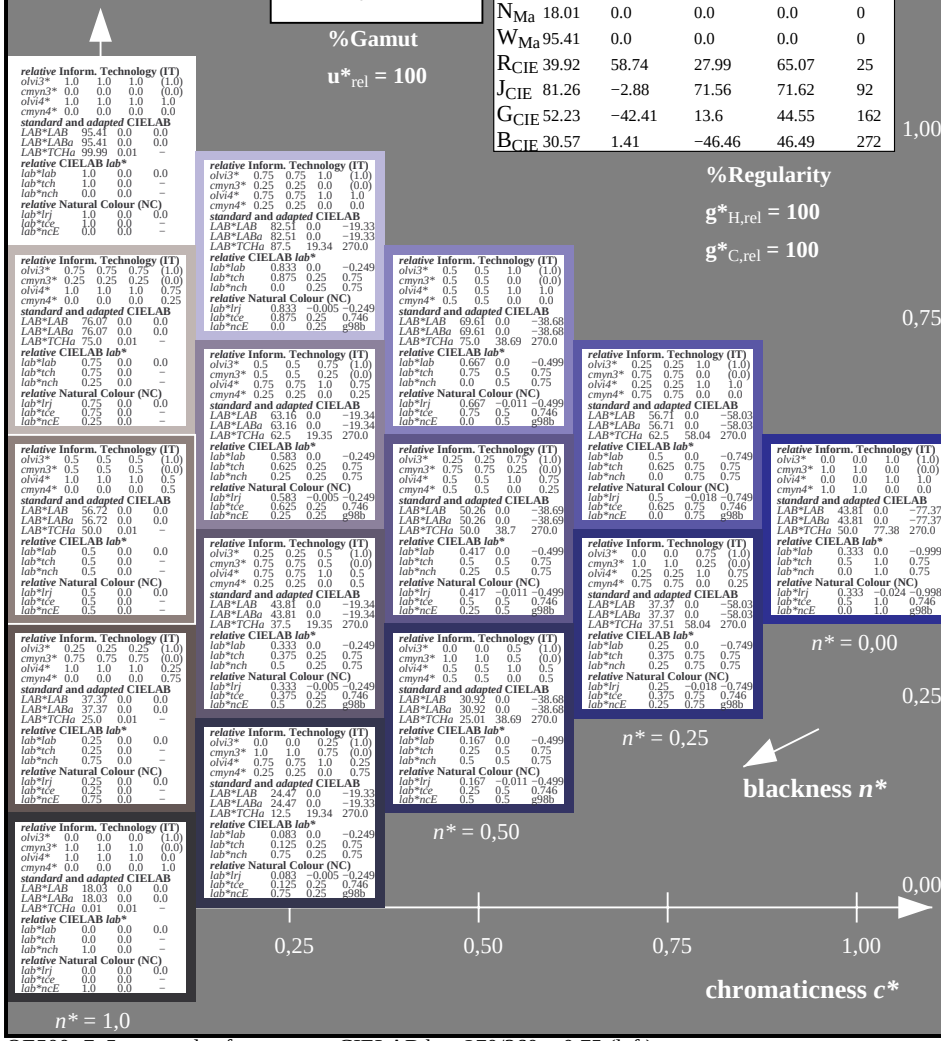
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



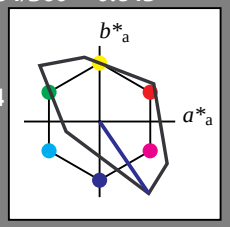
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

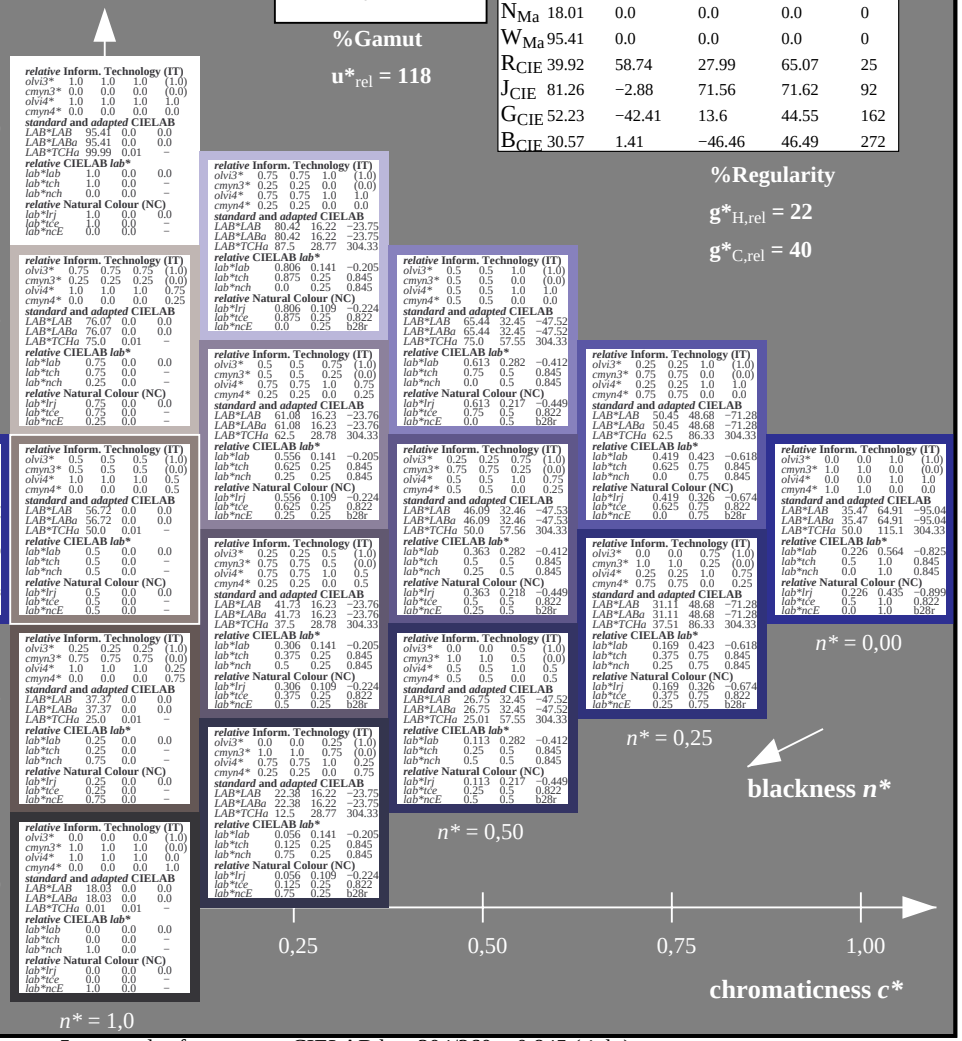
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



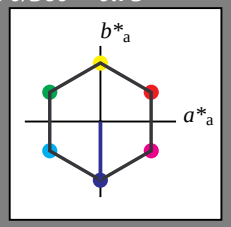
5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

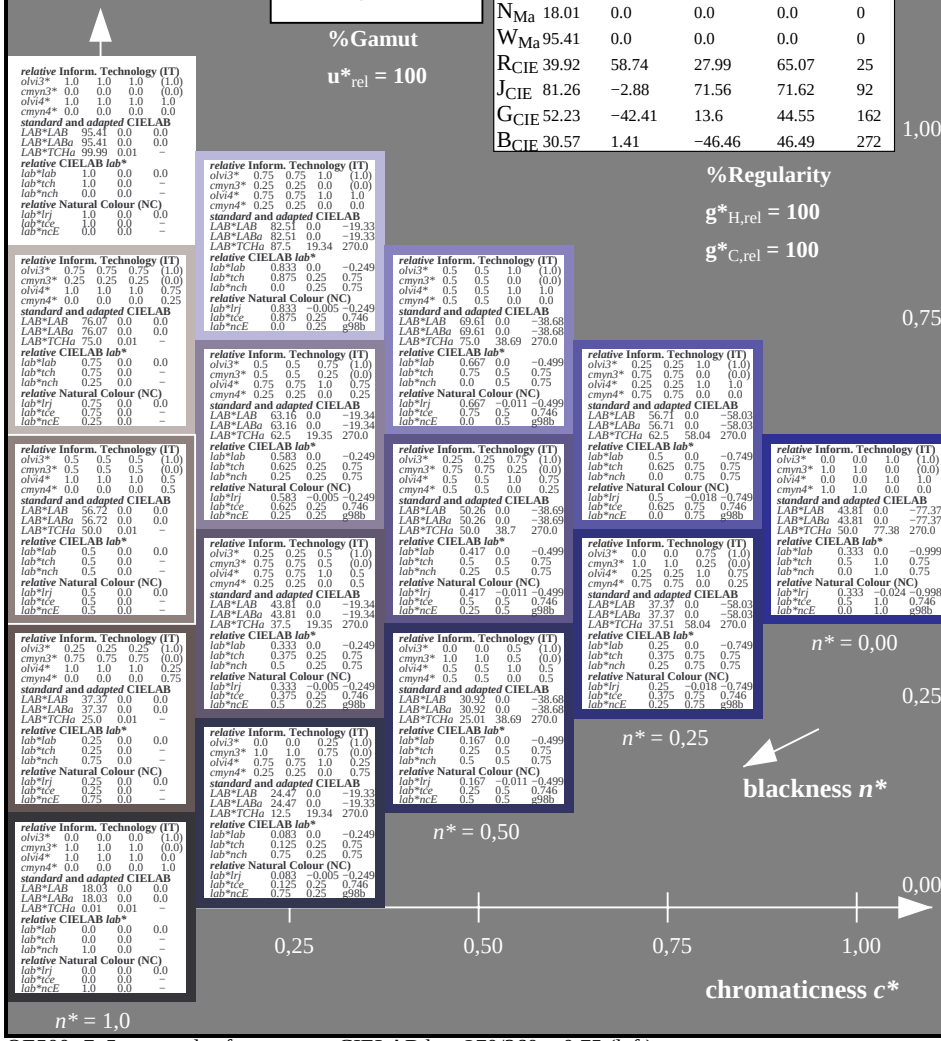
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



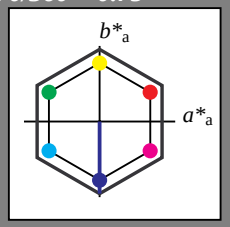
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

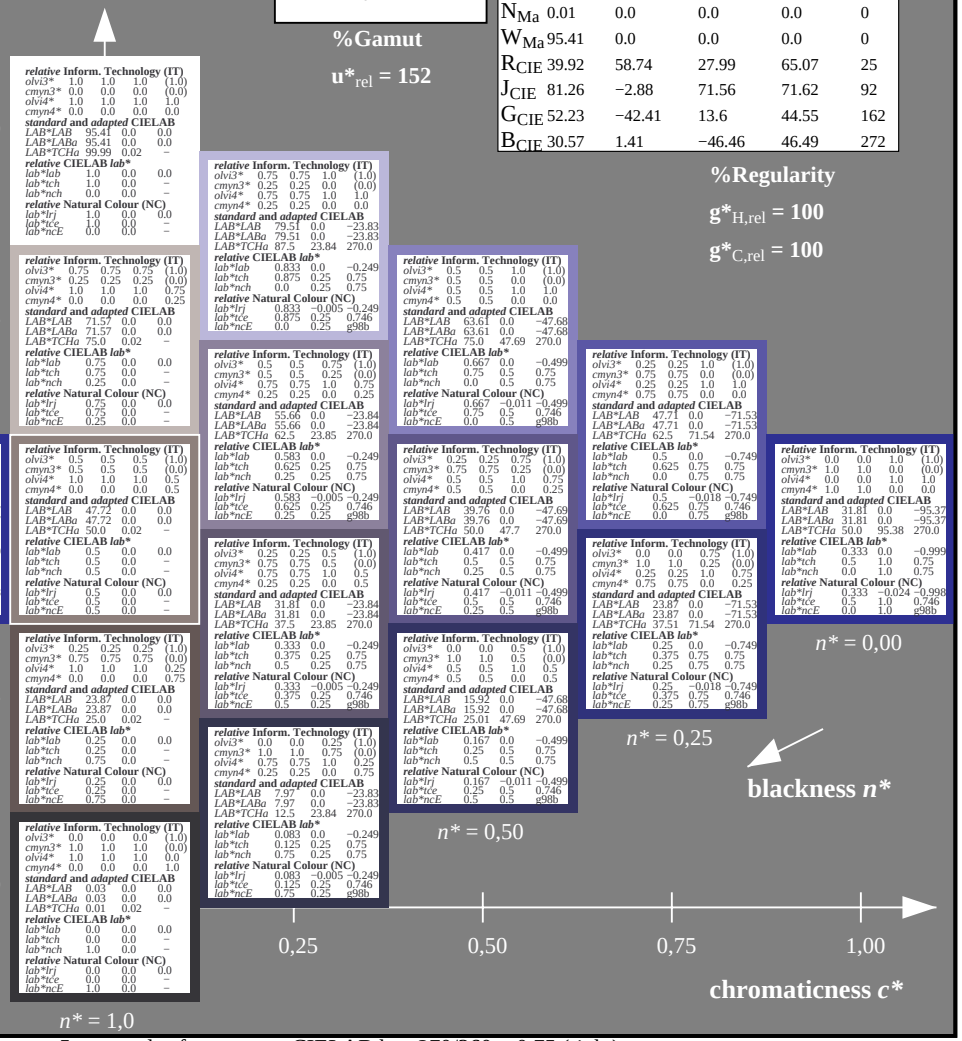
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



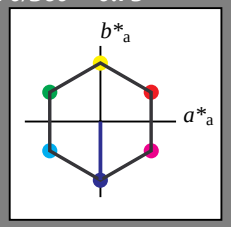
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

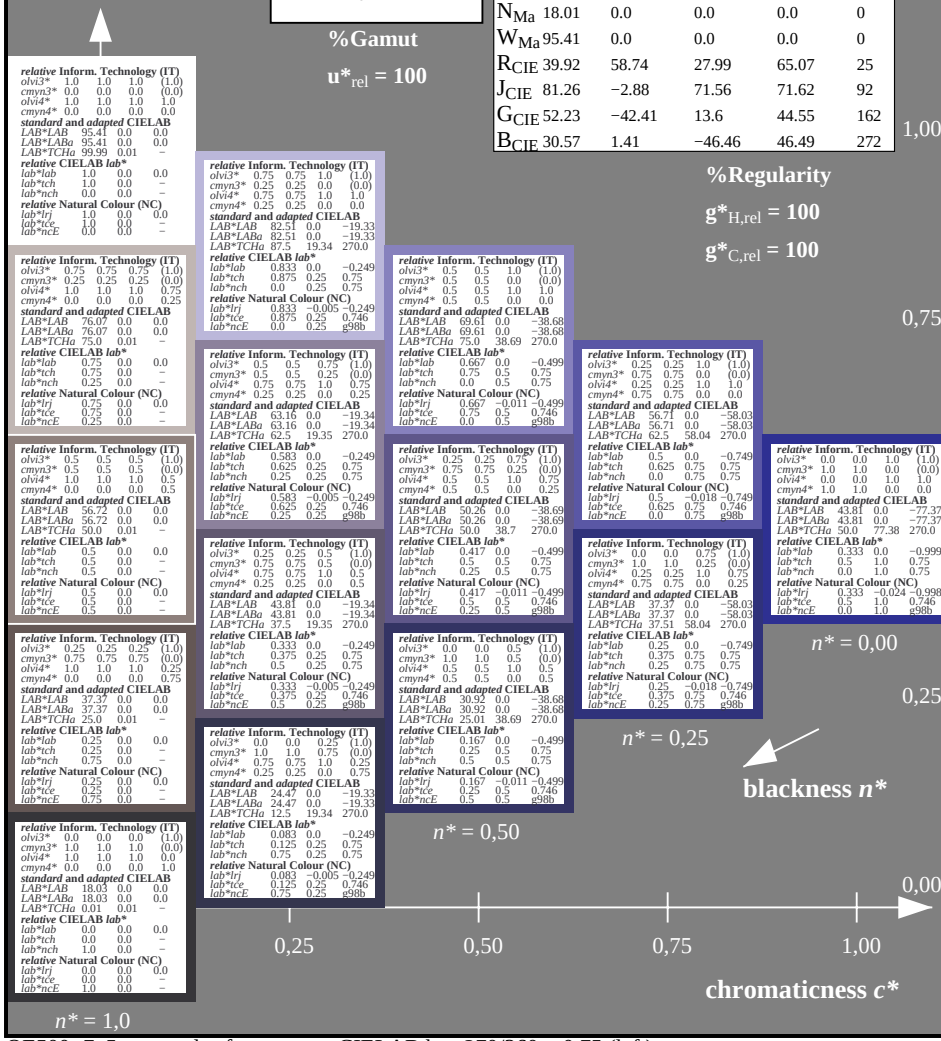
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



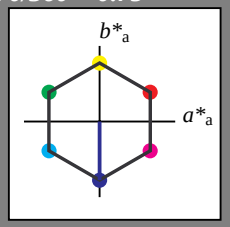
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

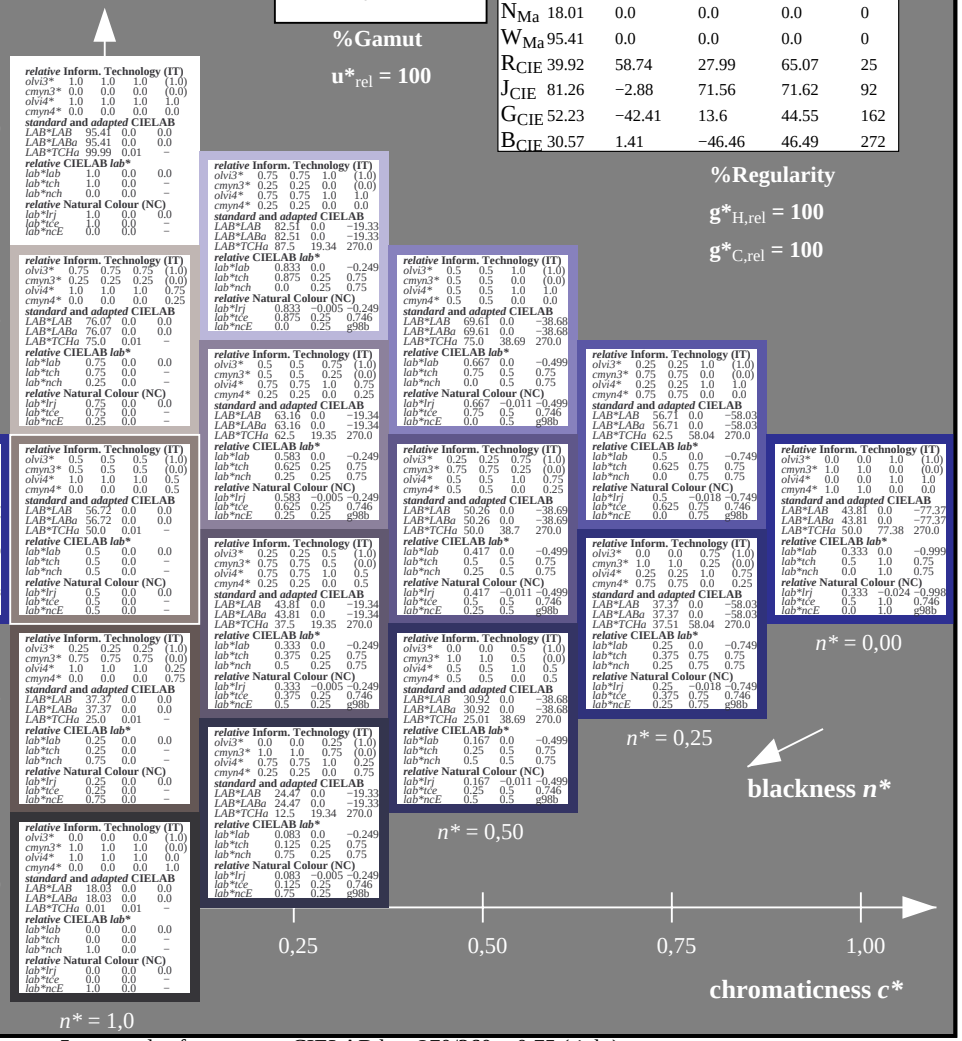
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

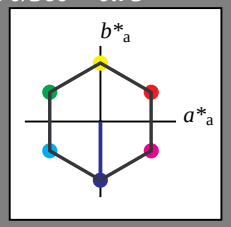
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

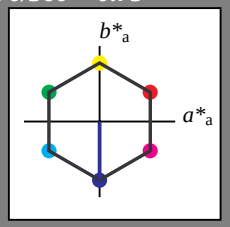
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

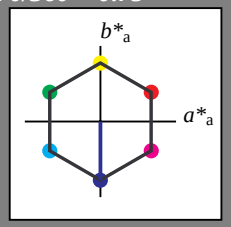
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

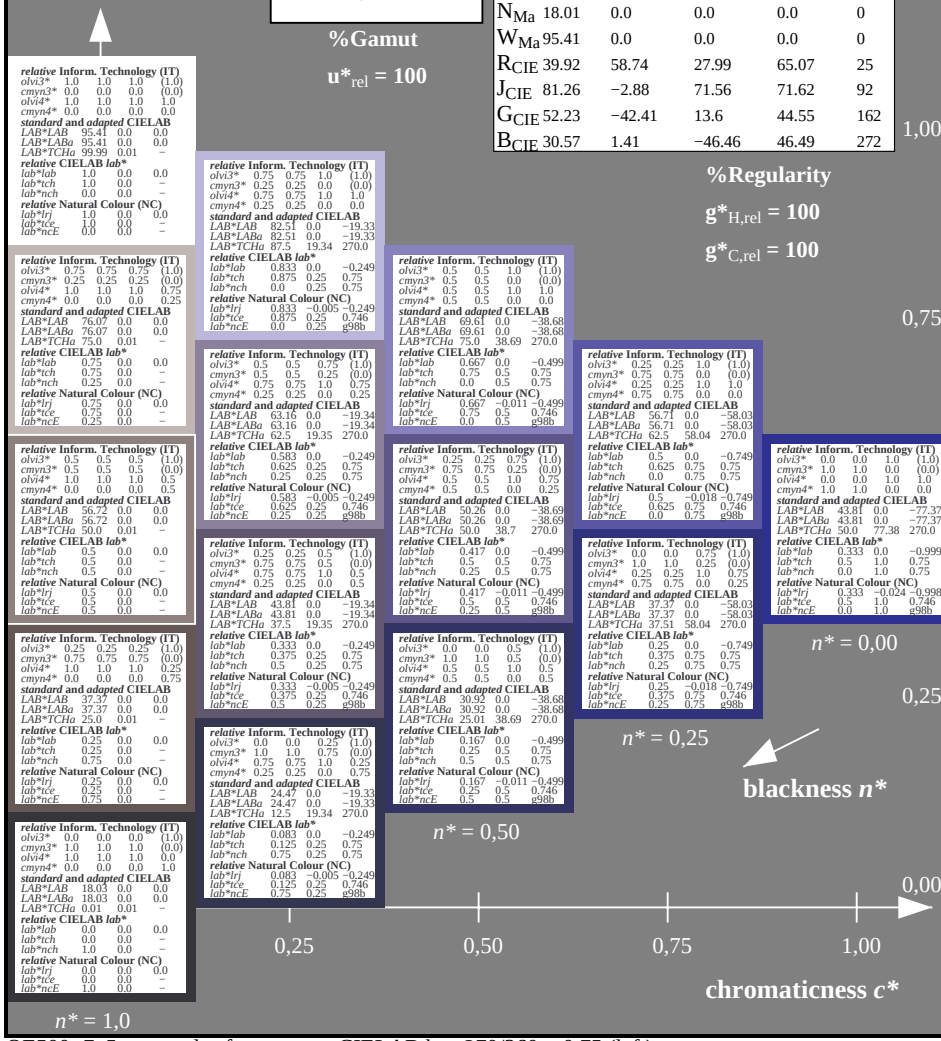
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

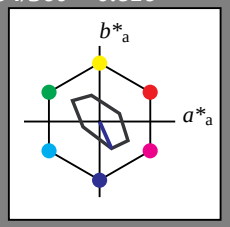


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

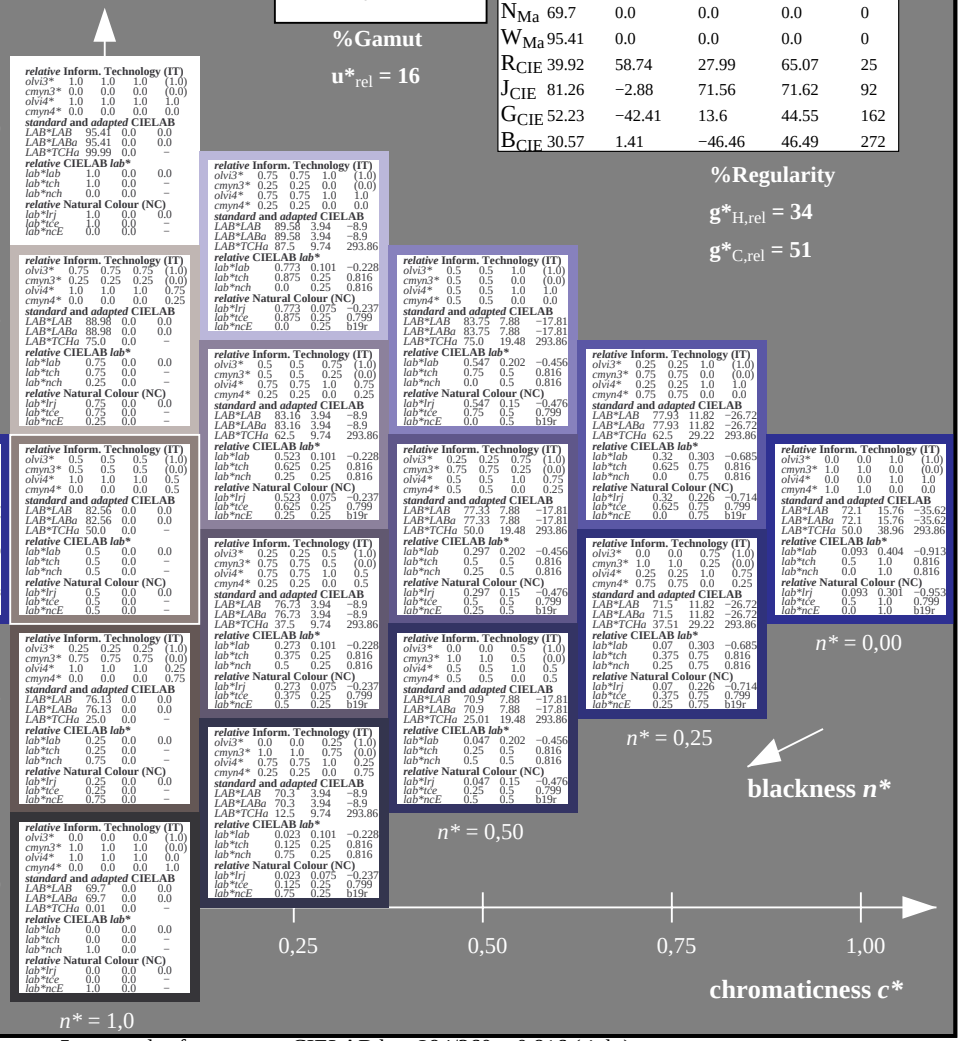
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

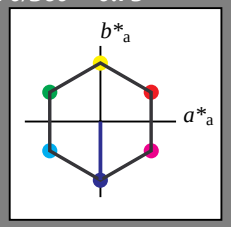
5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

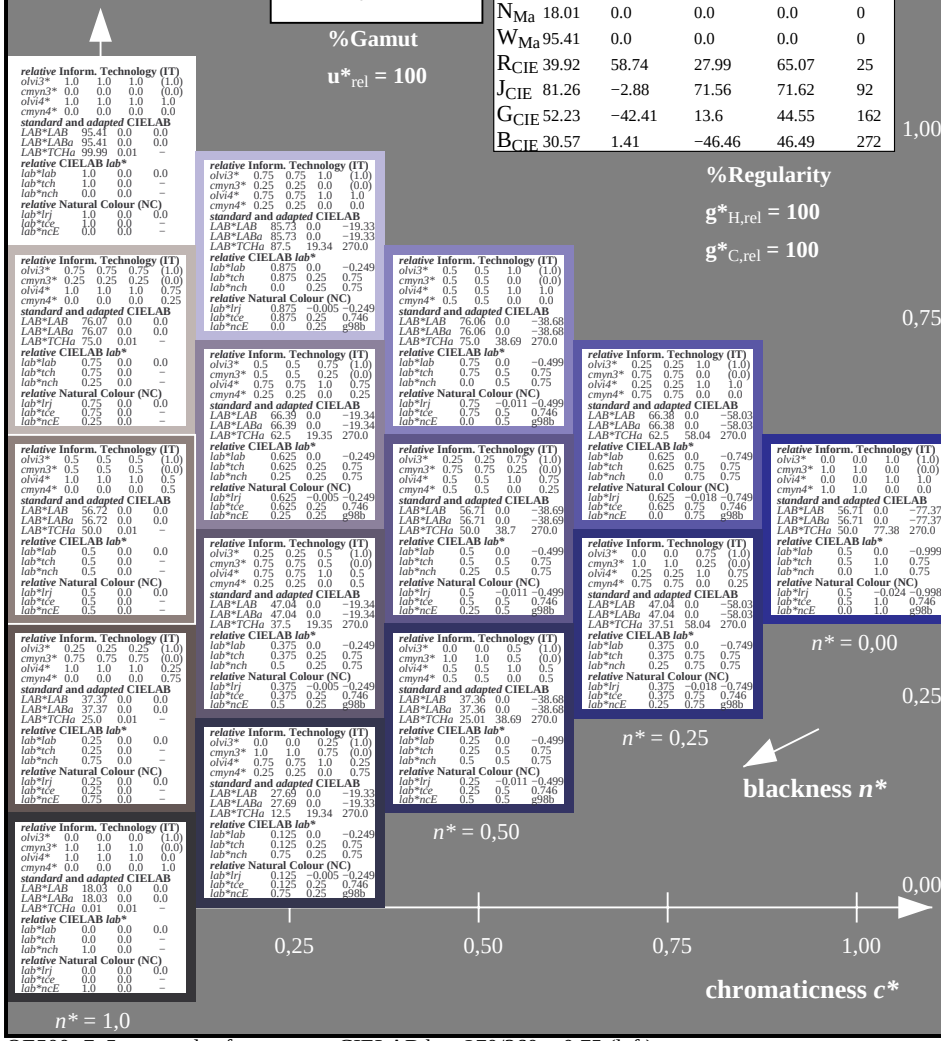
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



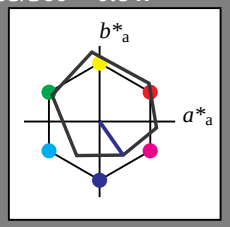
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

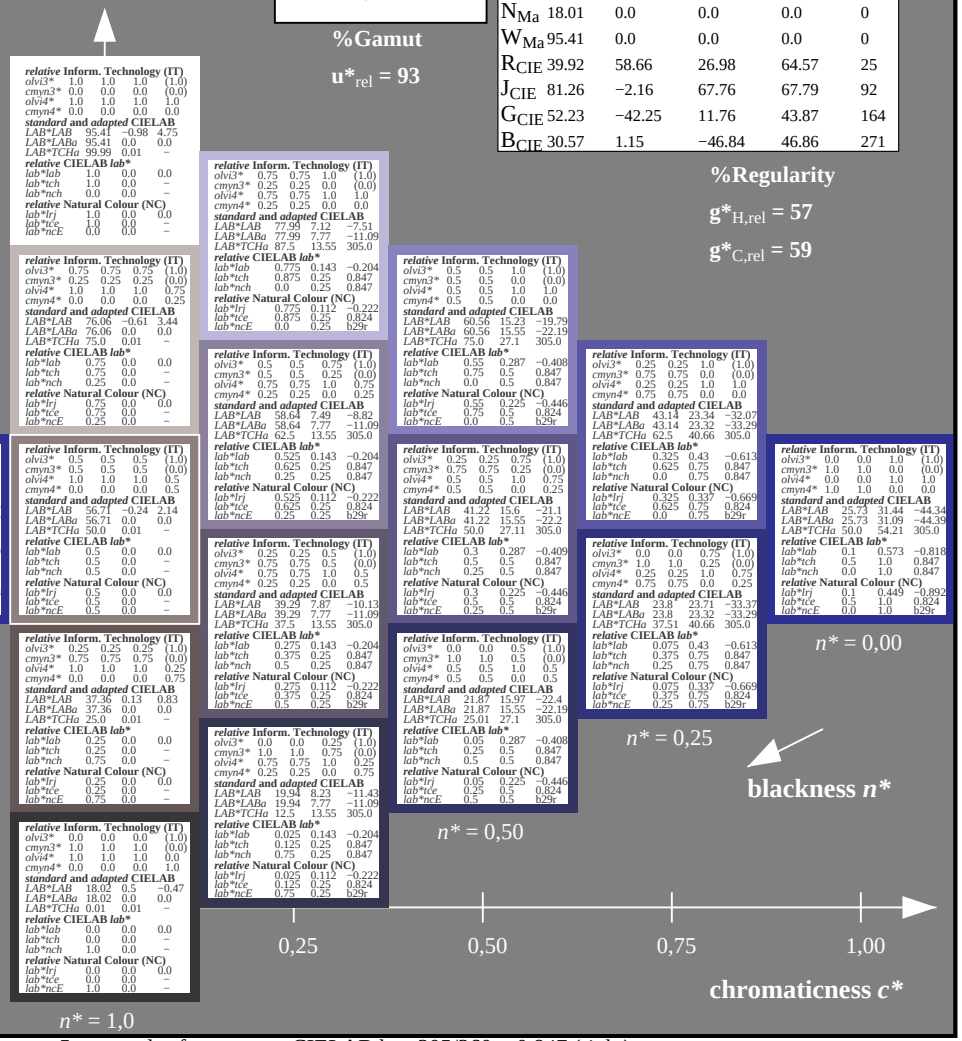
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

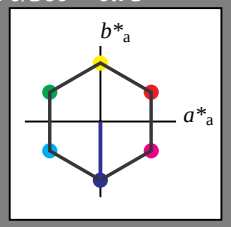
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

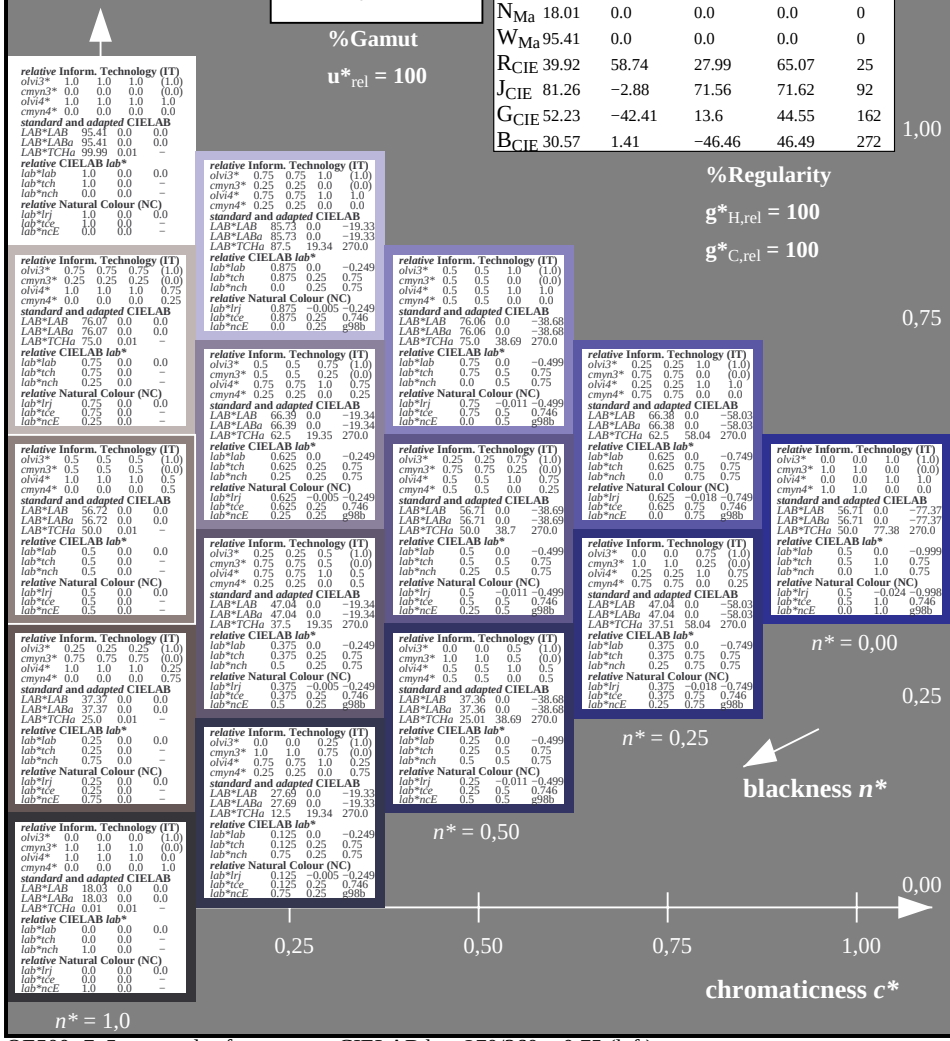
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

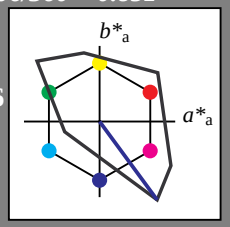
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

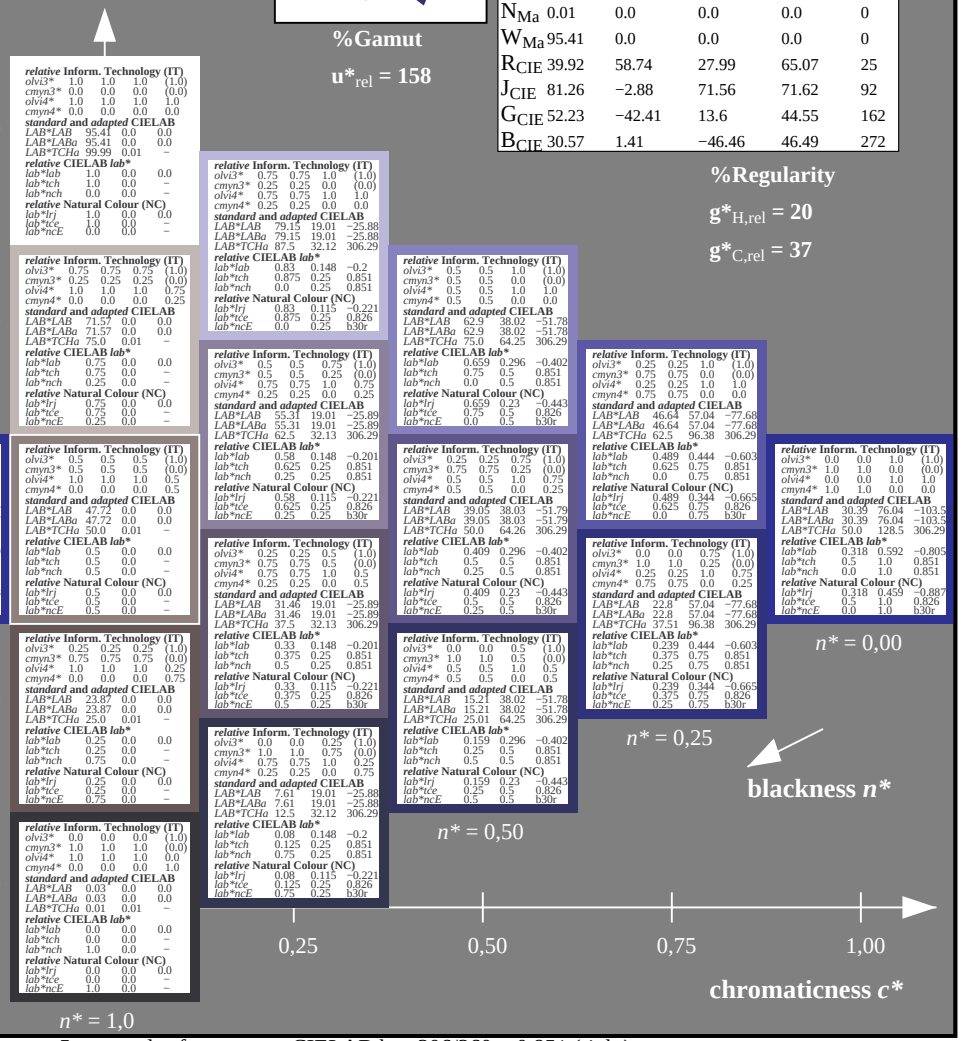
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

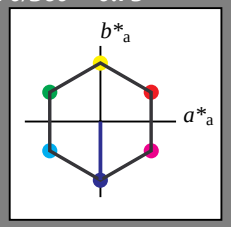
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

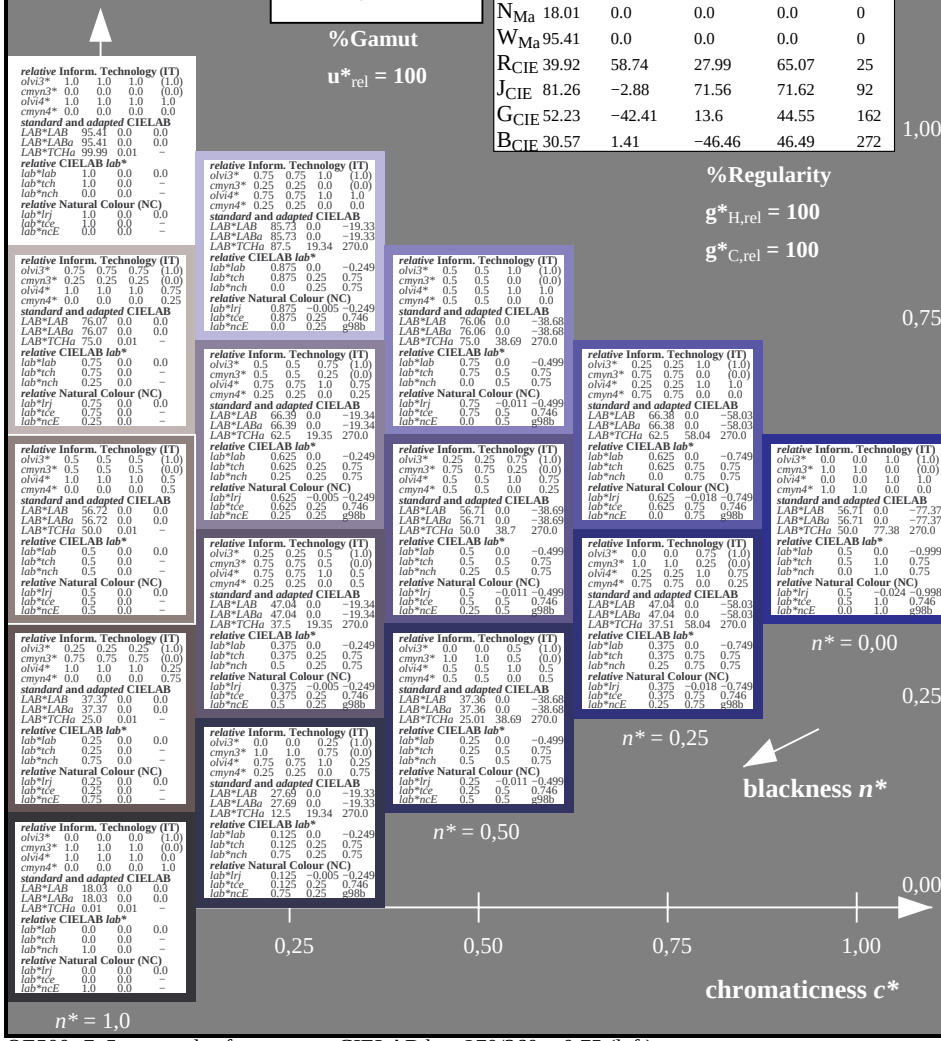
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$

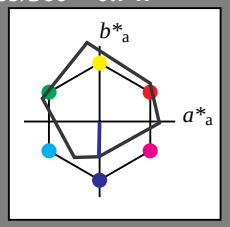
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

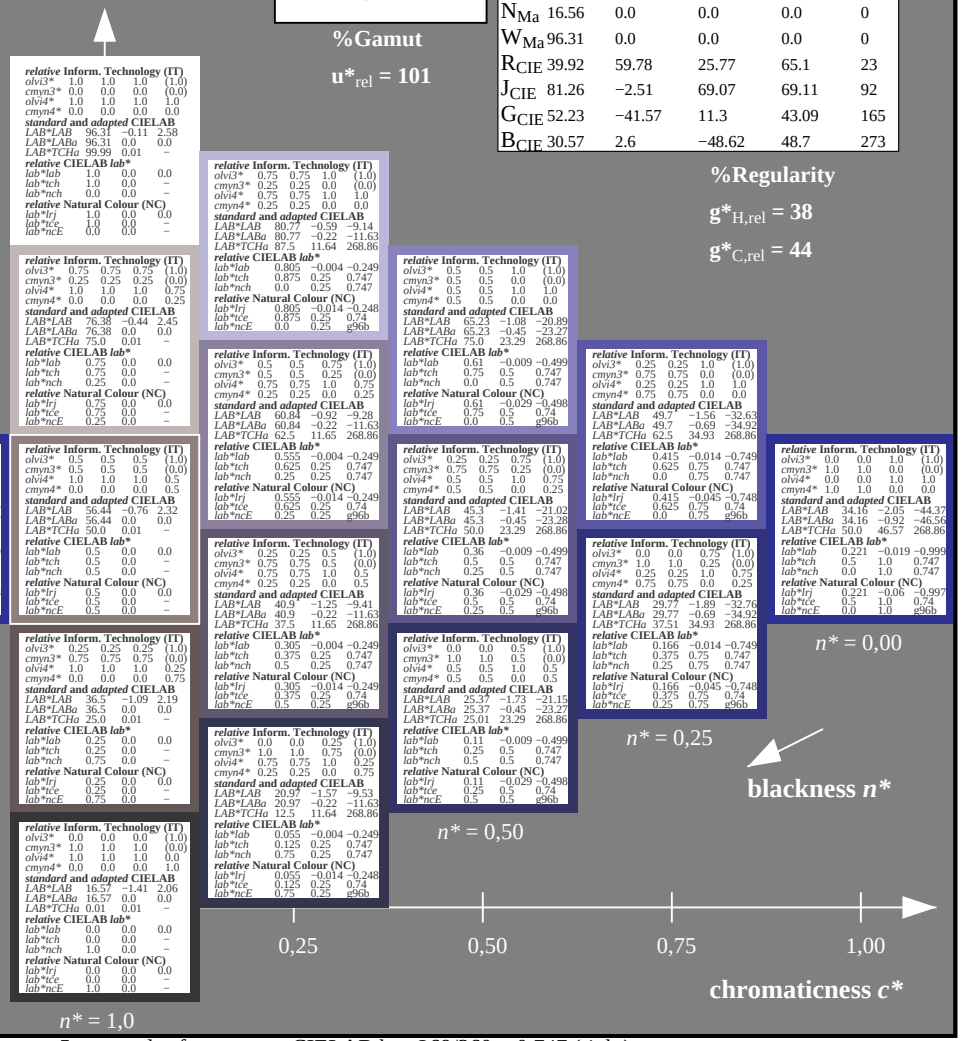
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



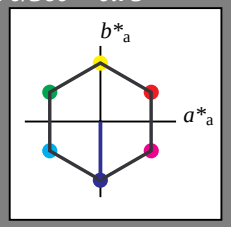
5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

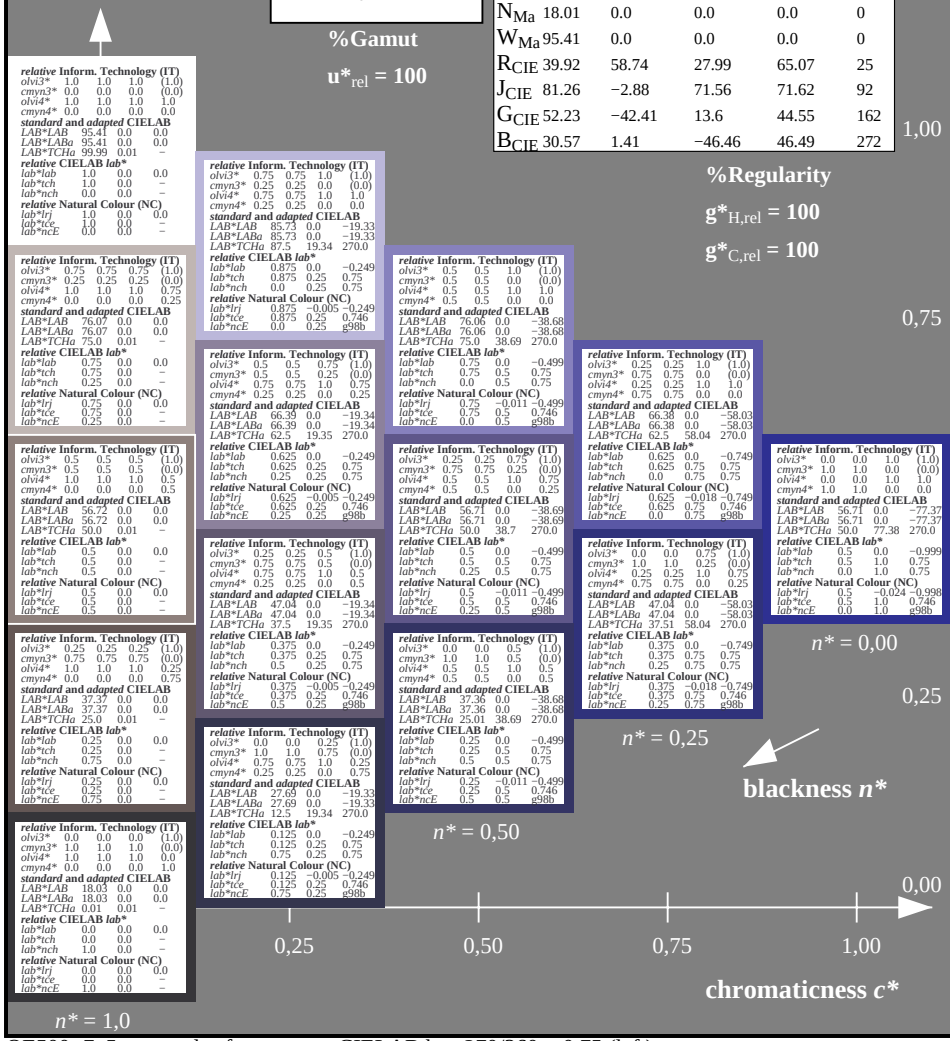
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



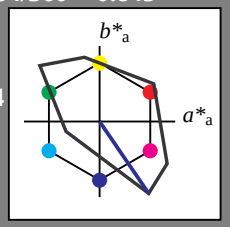
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

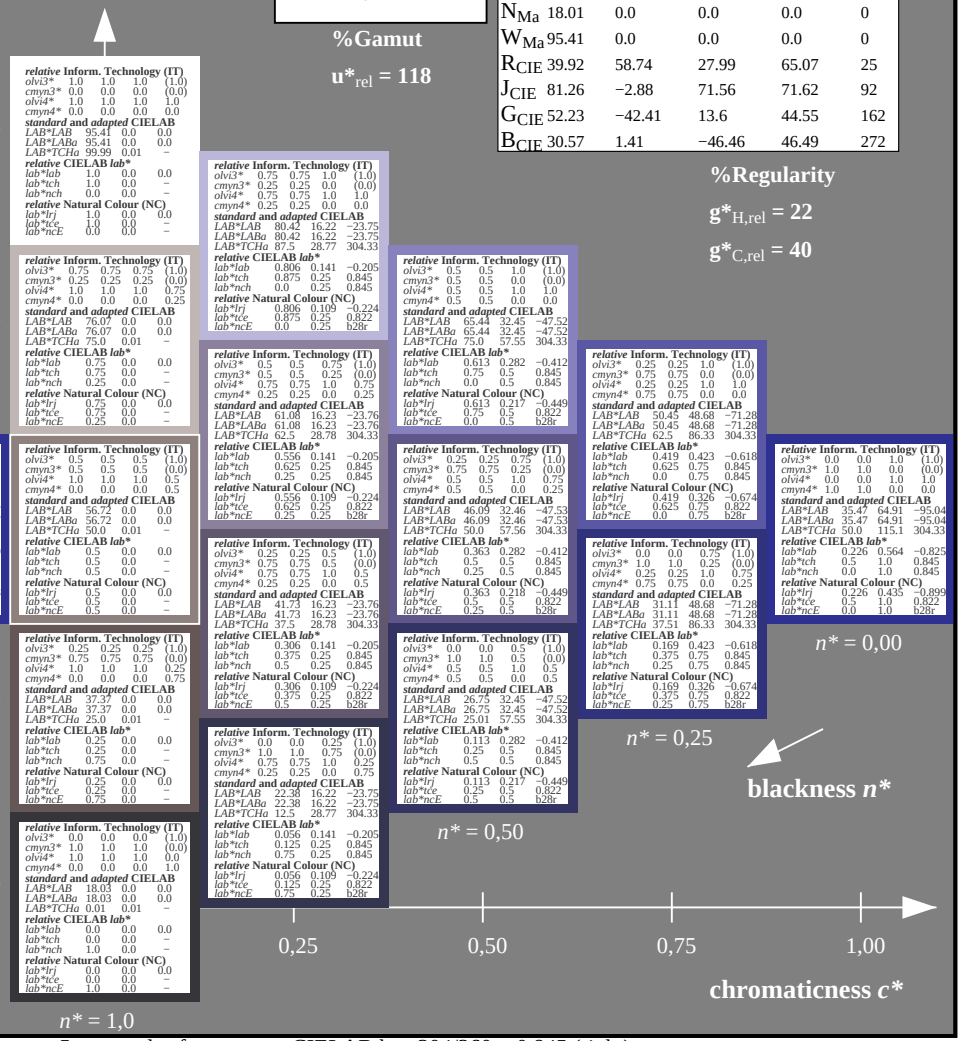
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



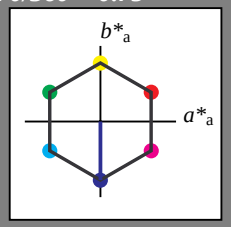
5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

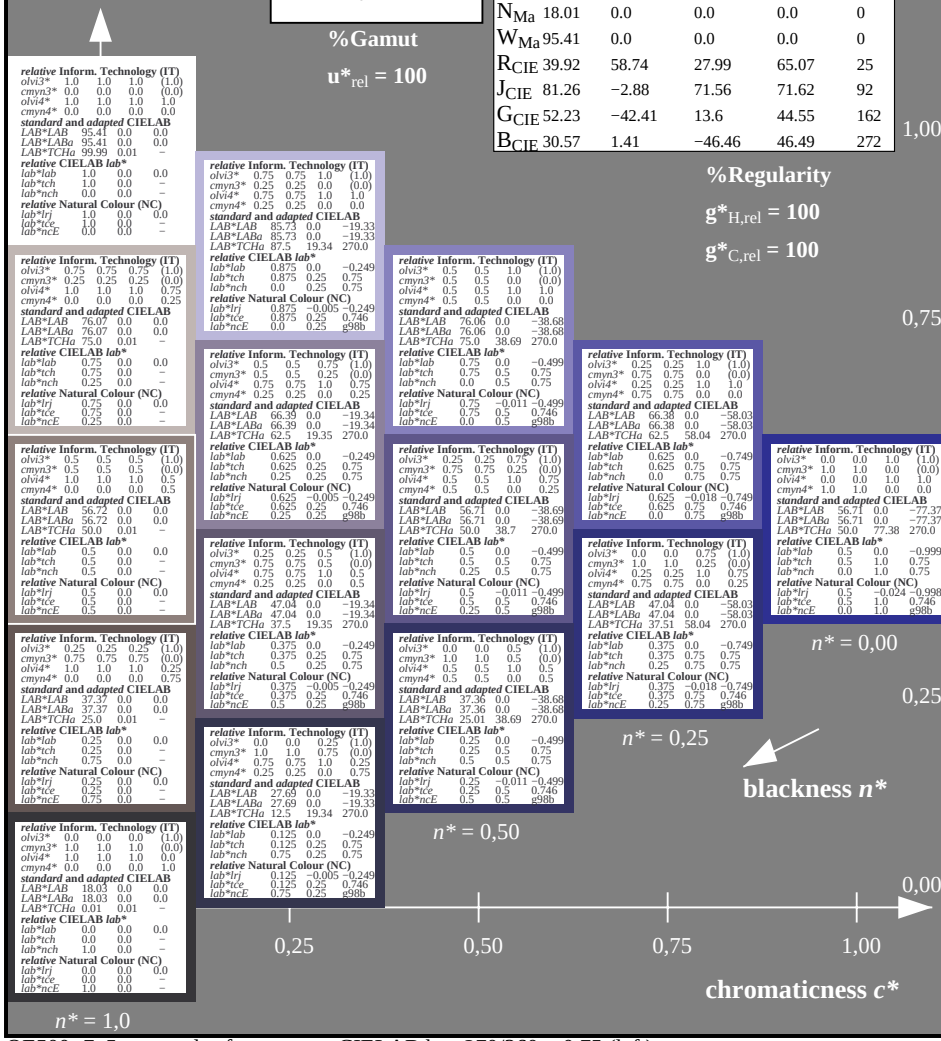
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



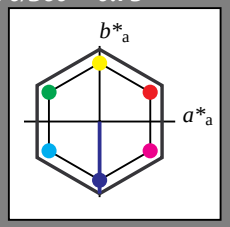
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

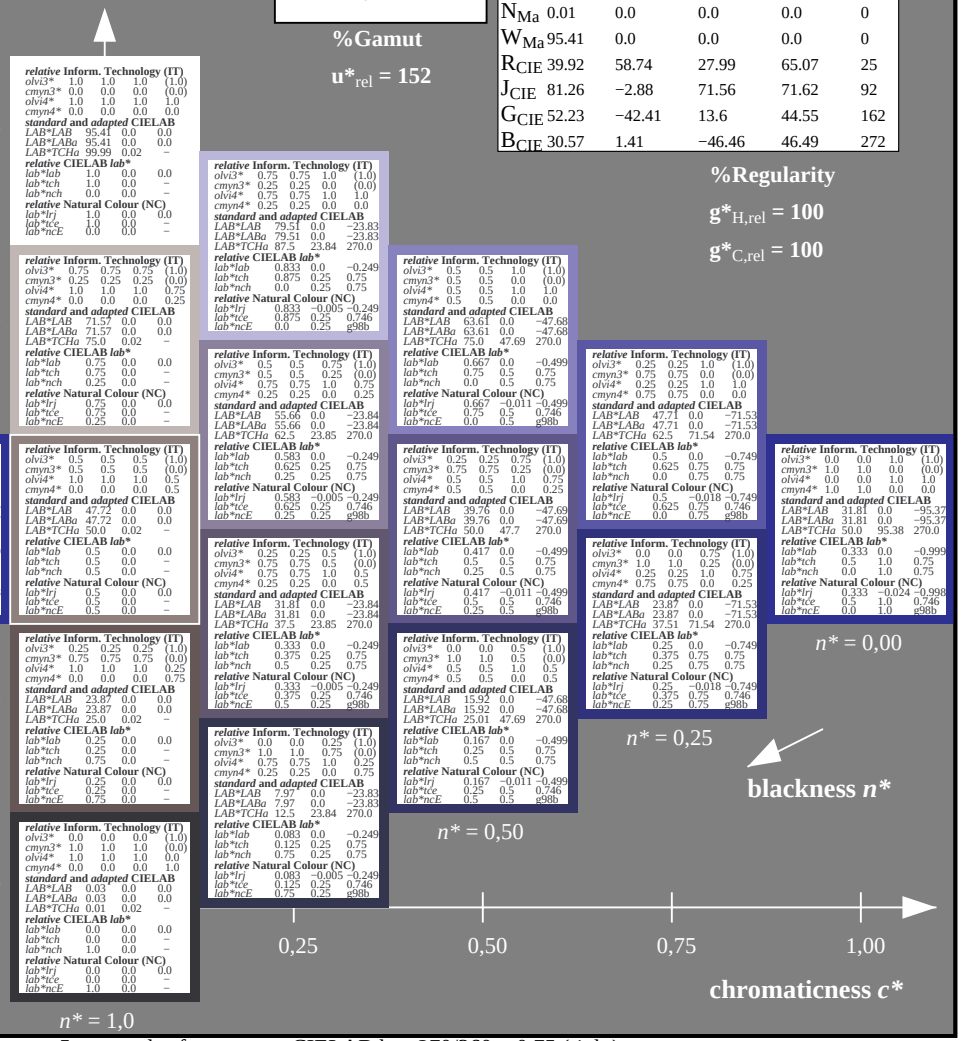
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



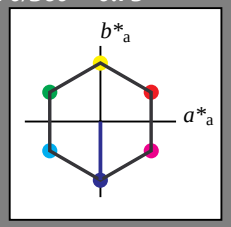
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

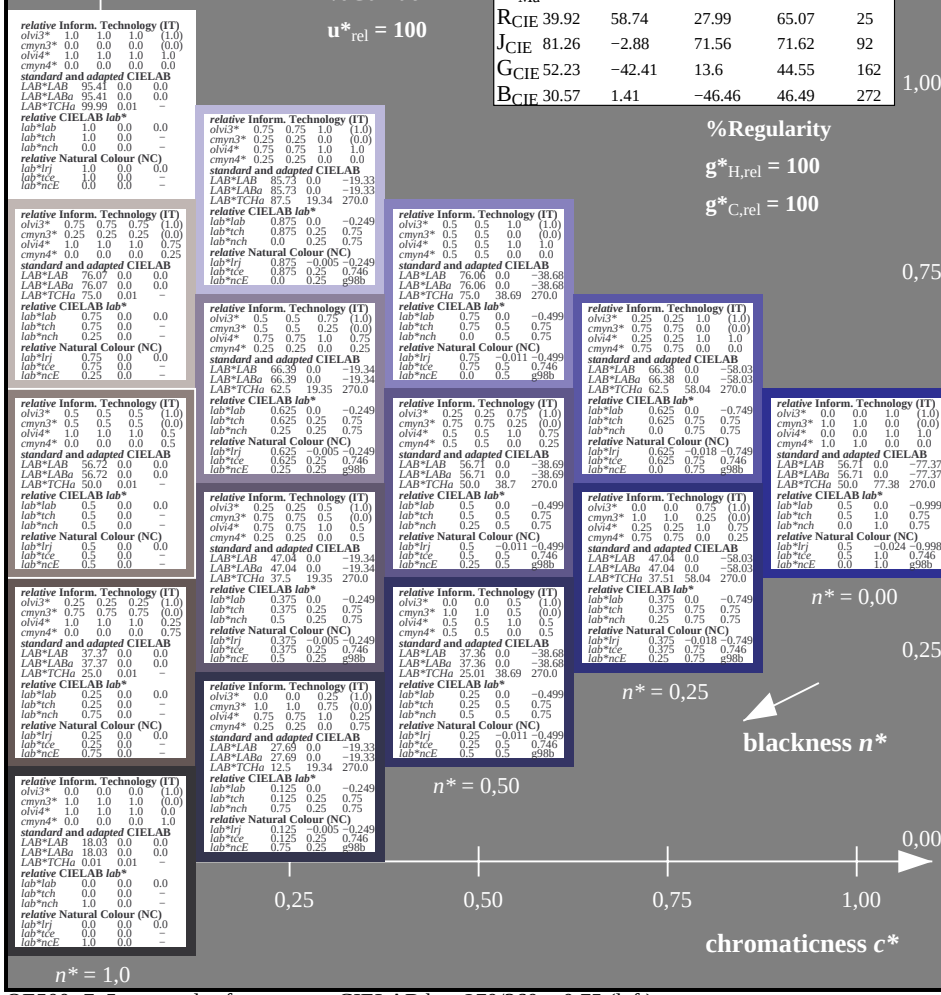
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



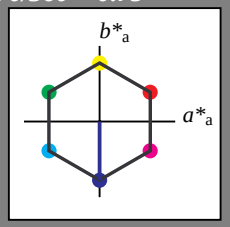
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

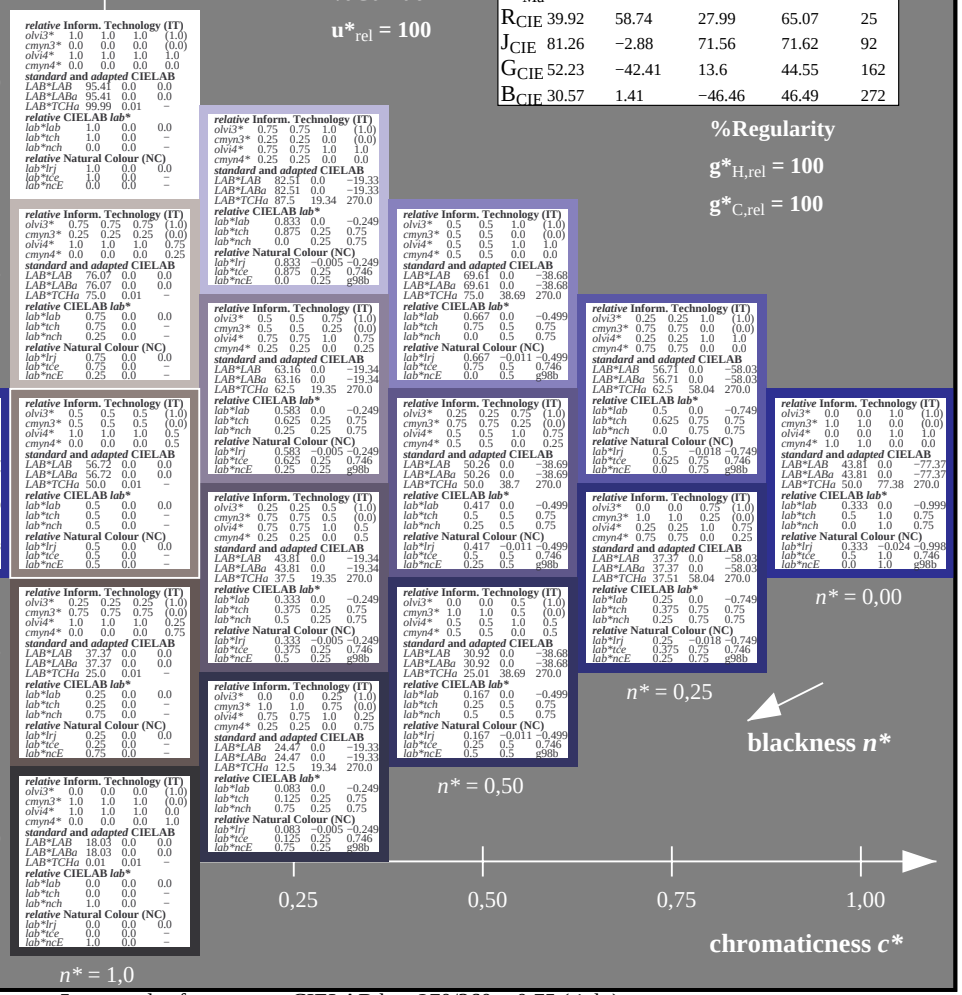
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



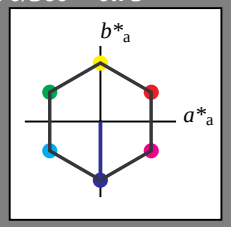
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

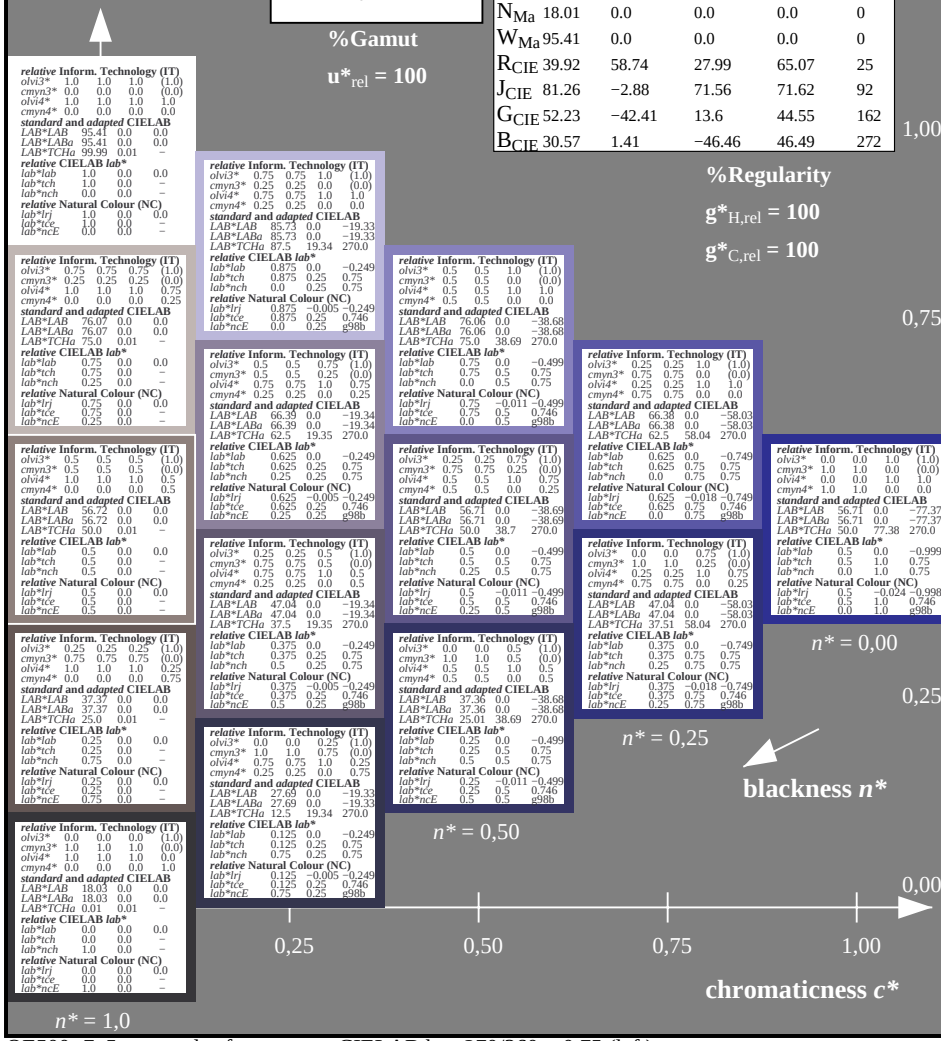
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



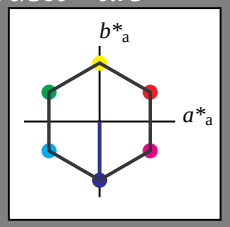
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

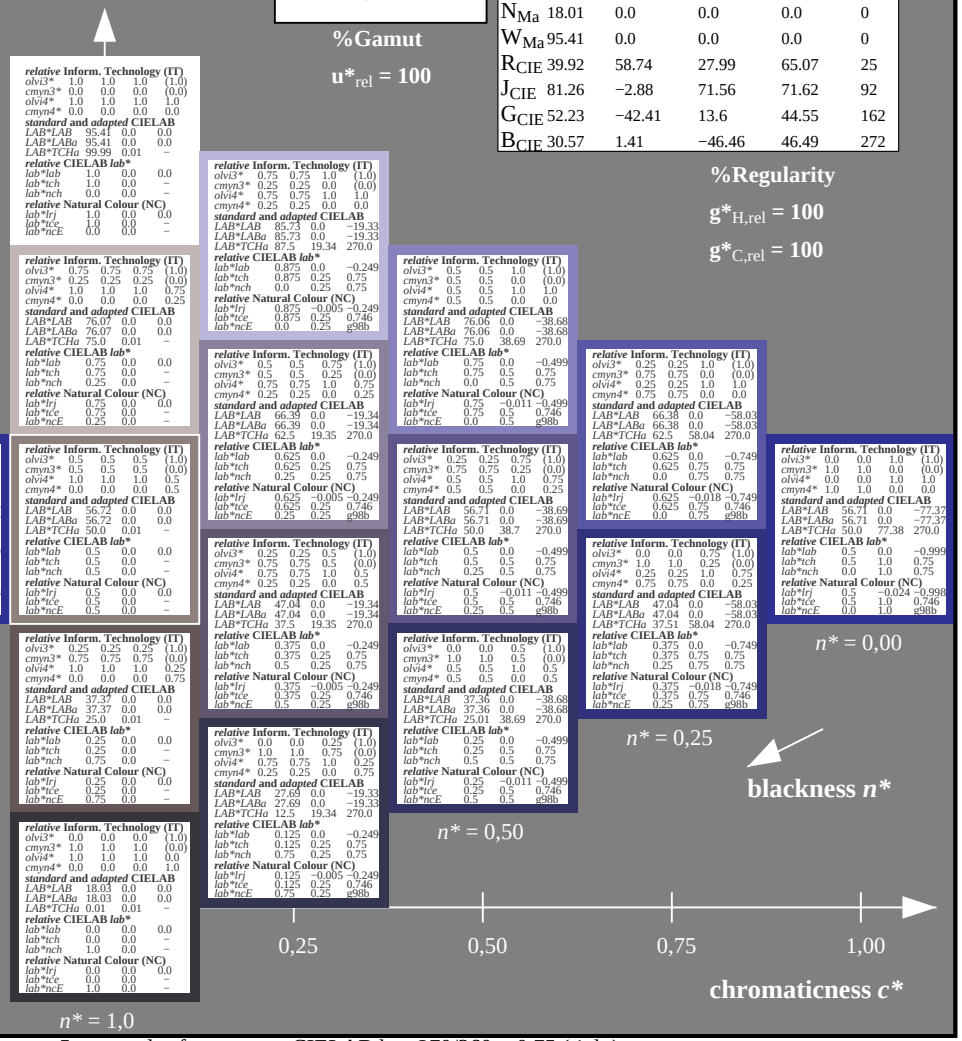
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



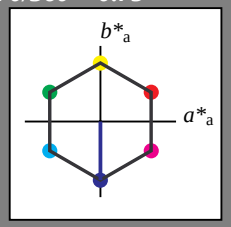
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

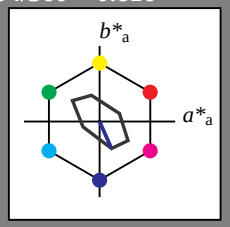
OE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

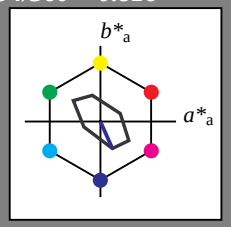
chromaticness c^*

5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

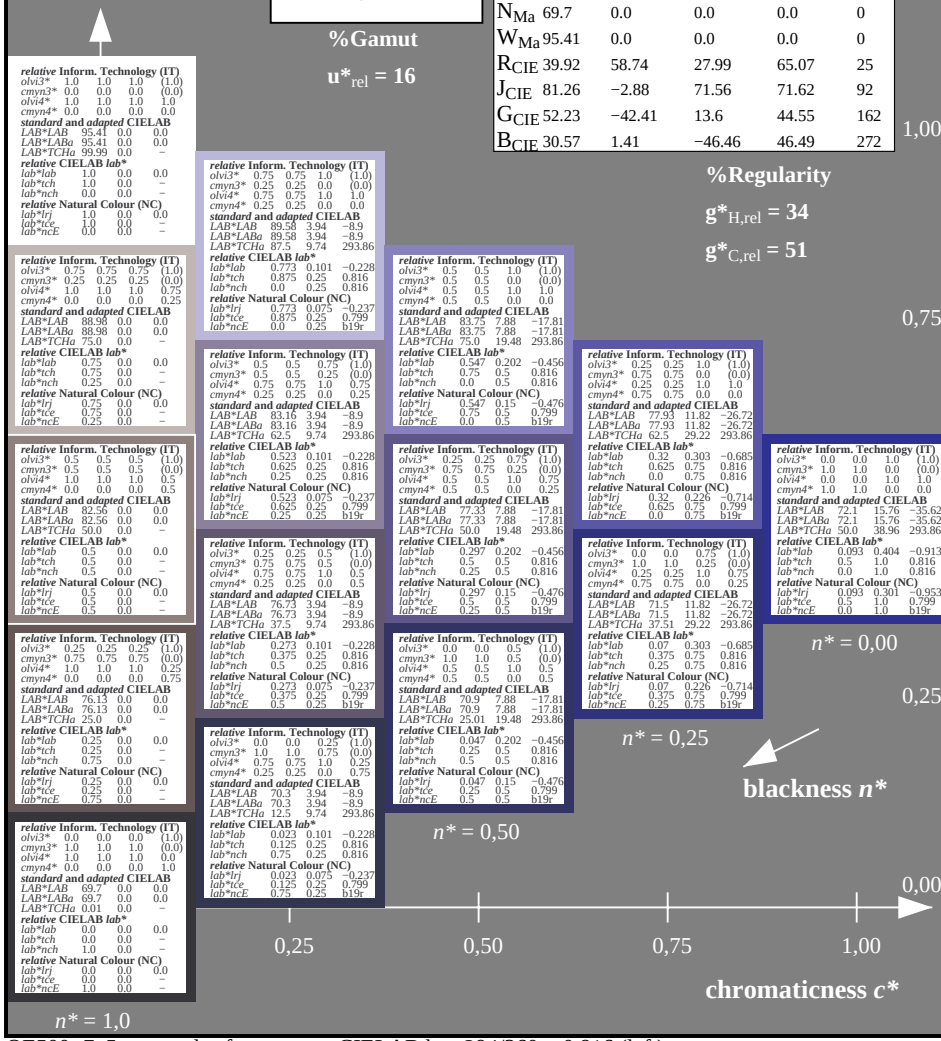
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

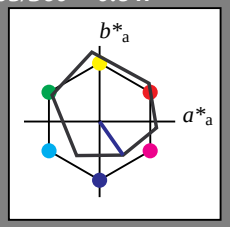


OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

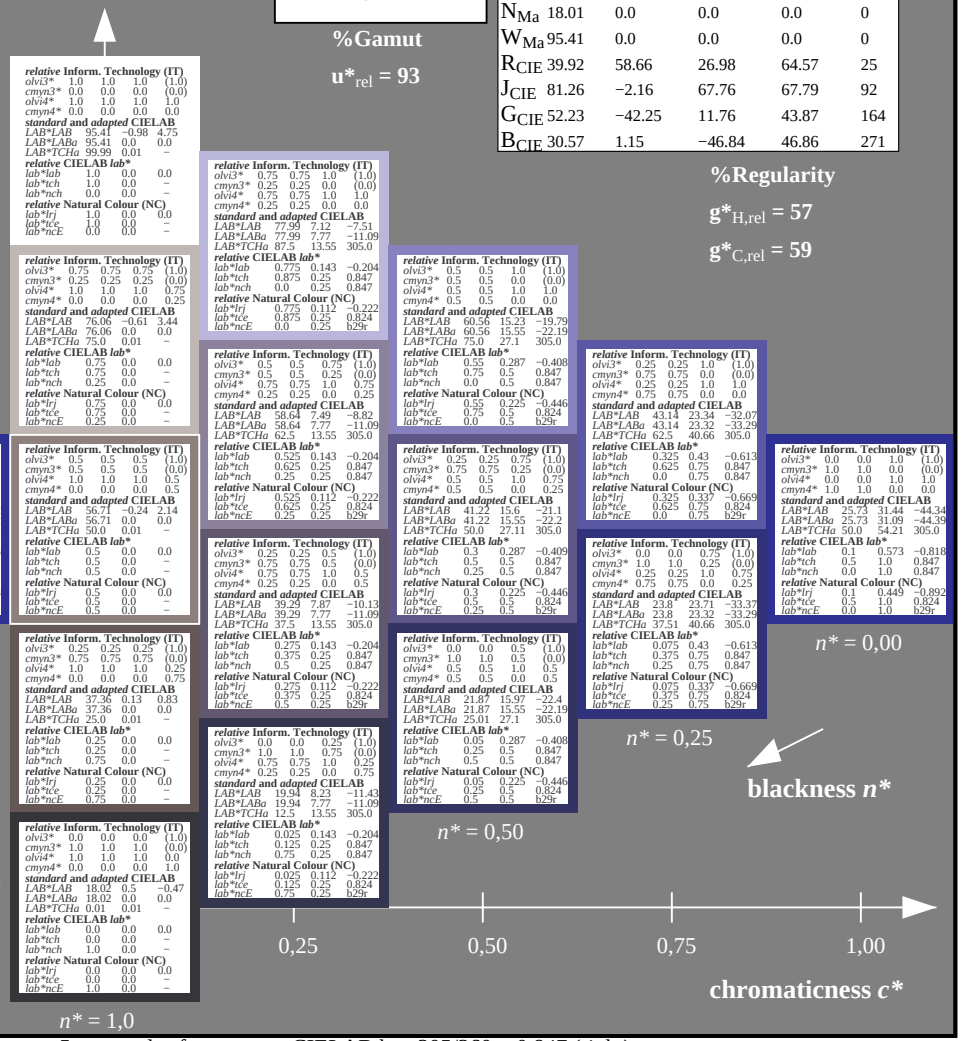
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

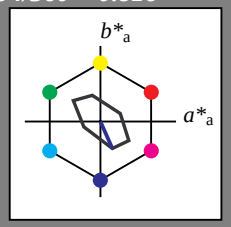


5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

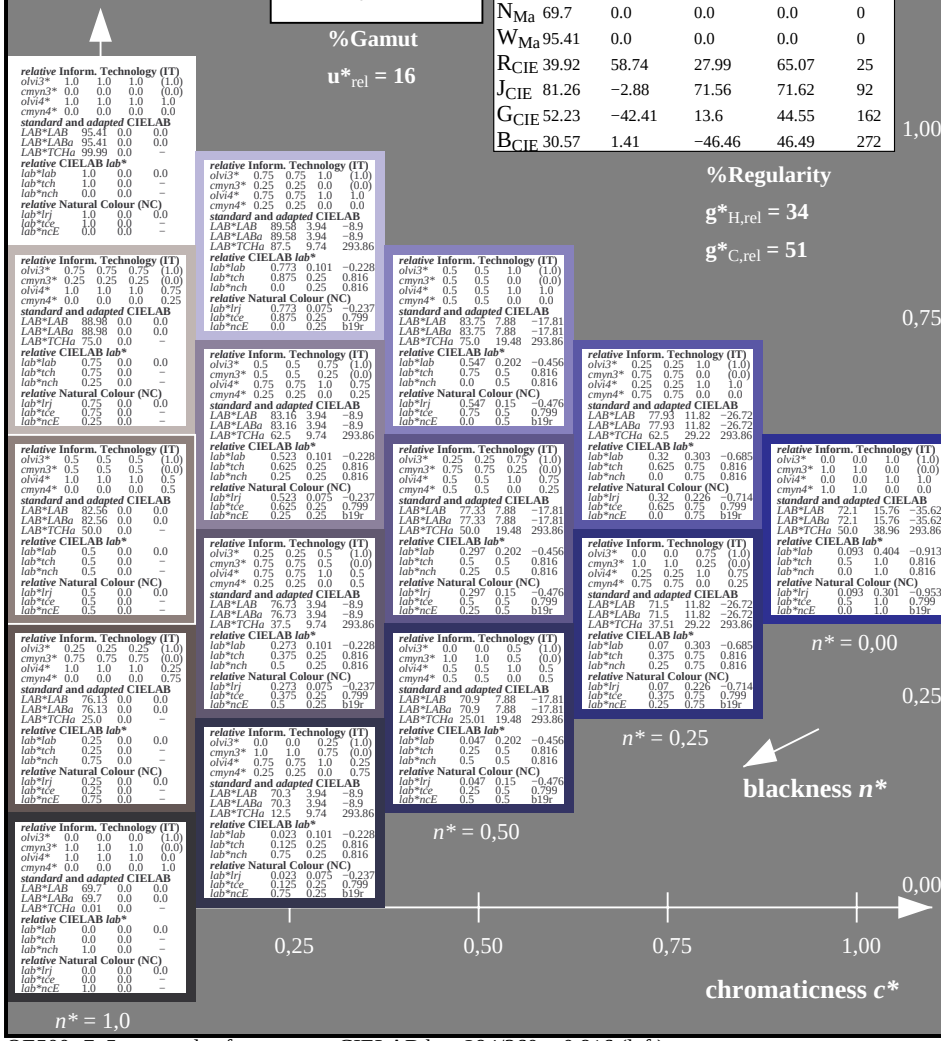
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

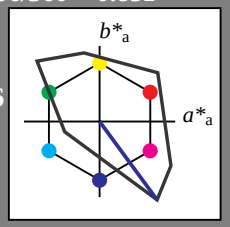


OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

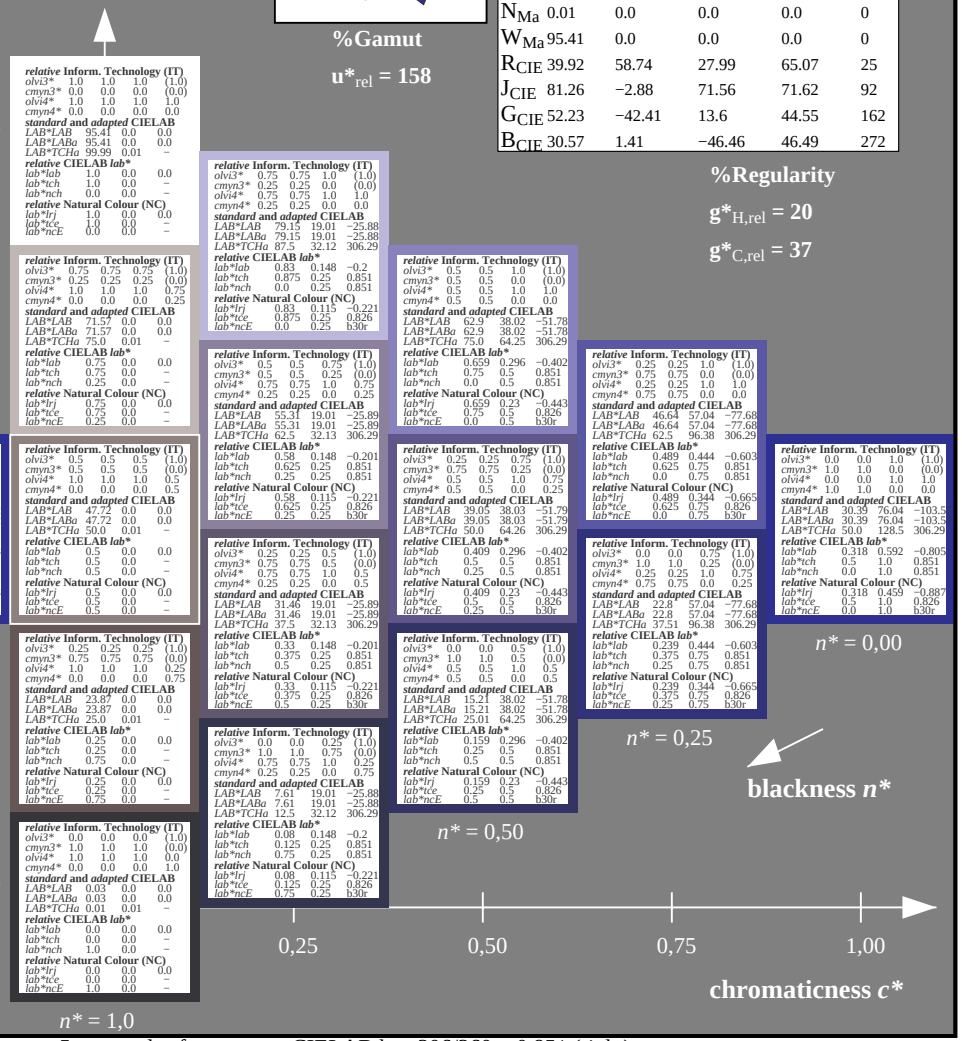
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

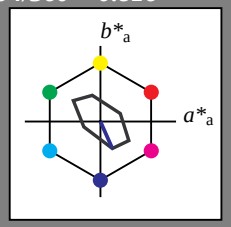


5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

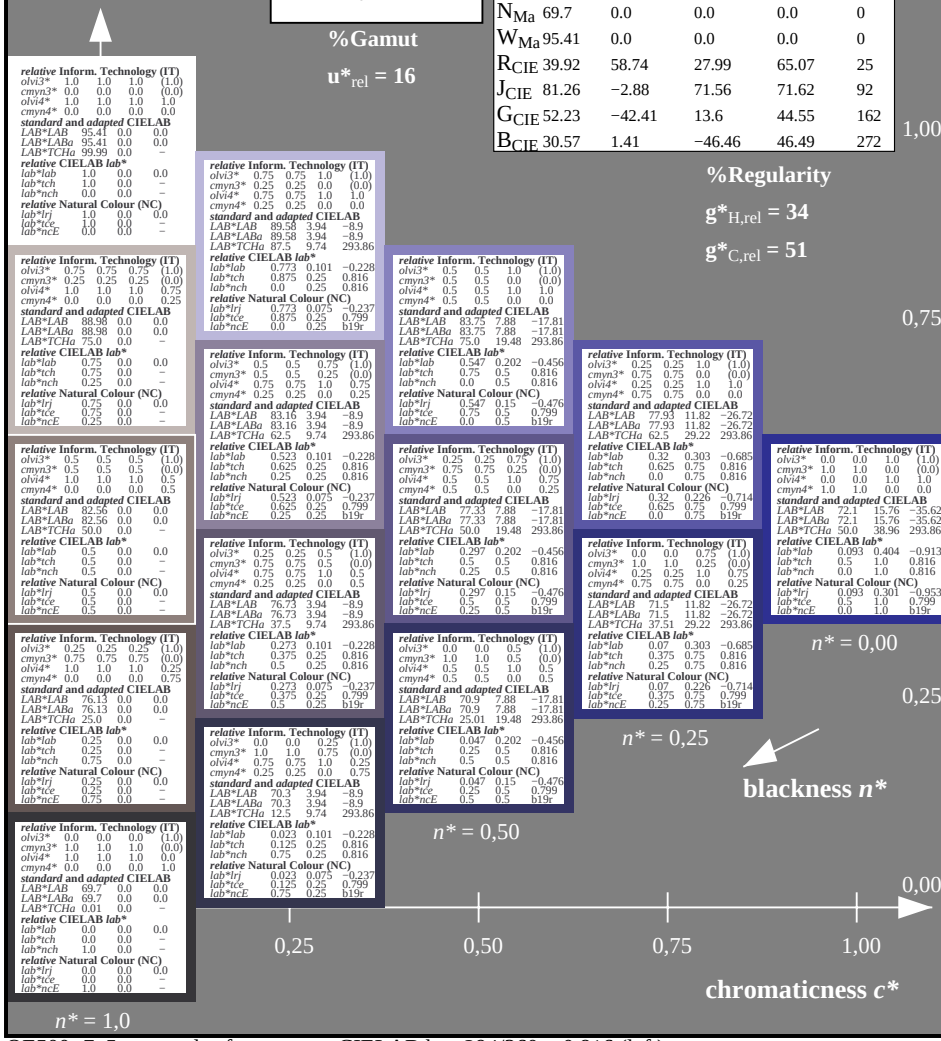


TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut
$u^*_{rel} = 16$

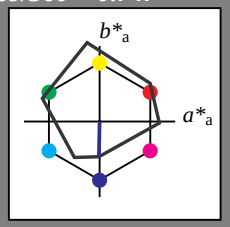
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0

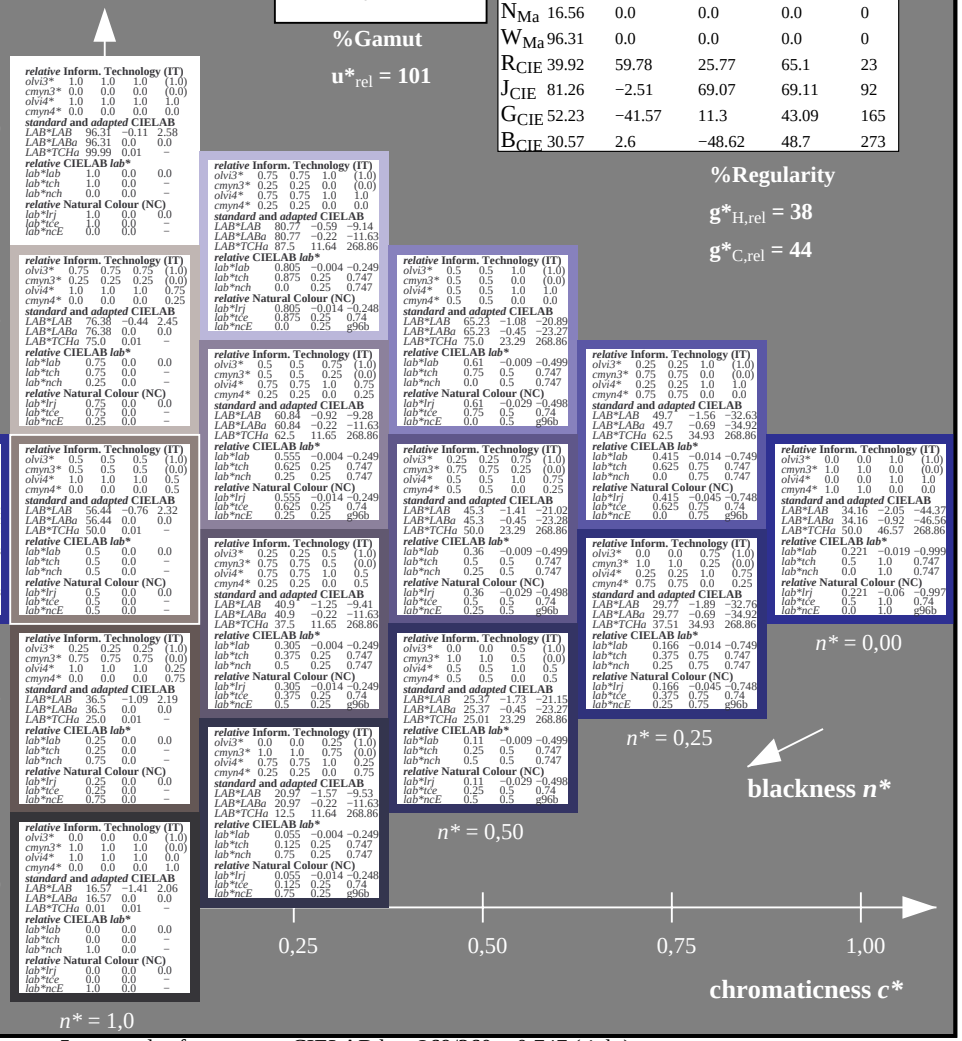


DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut
$u^*_{rel} = 101$

%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



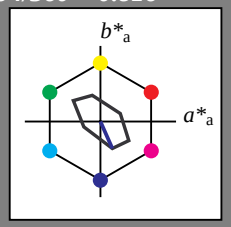
OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

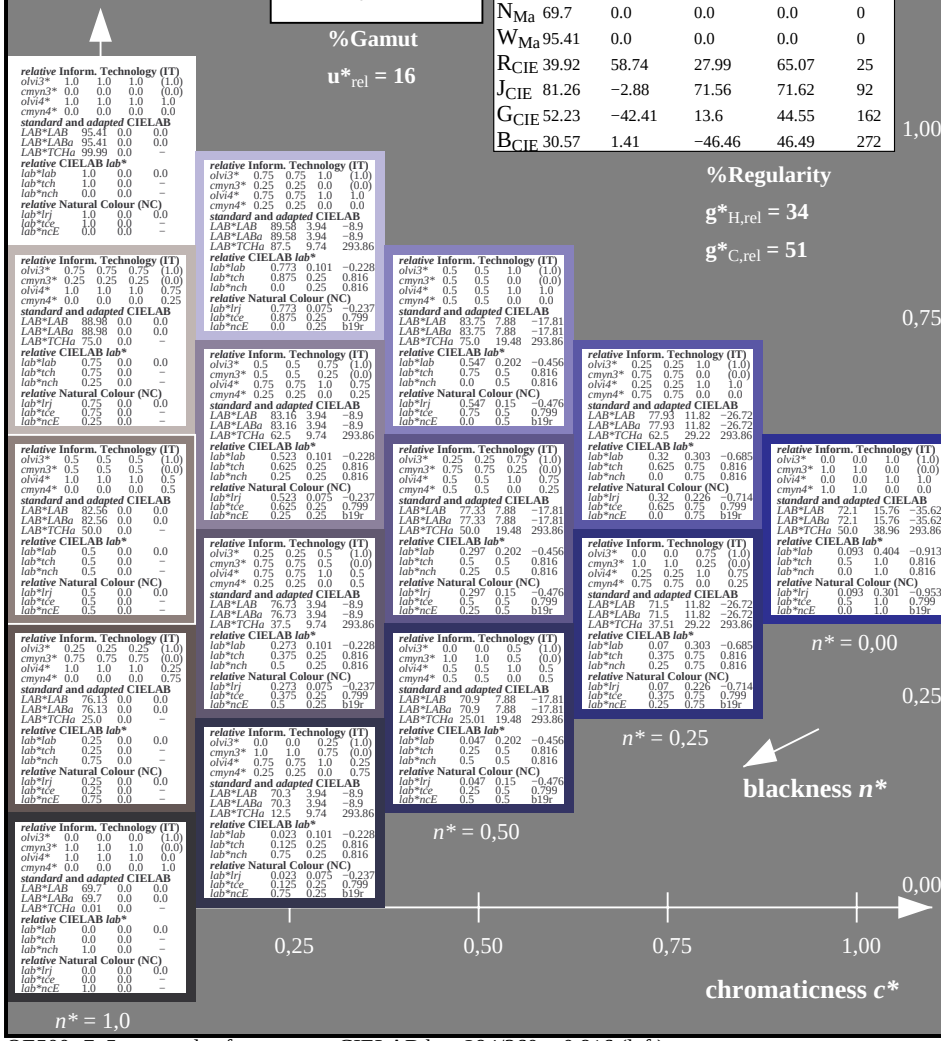
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

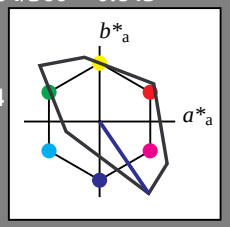


OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

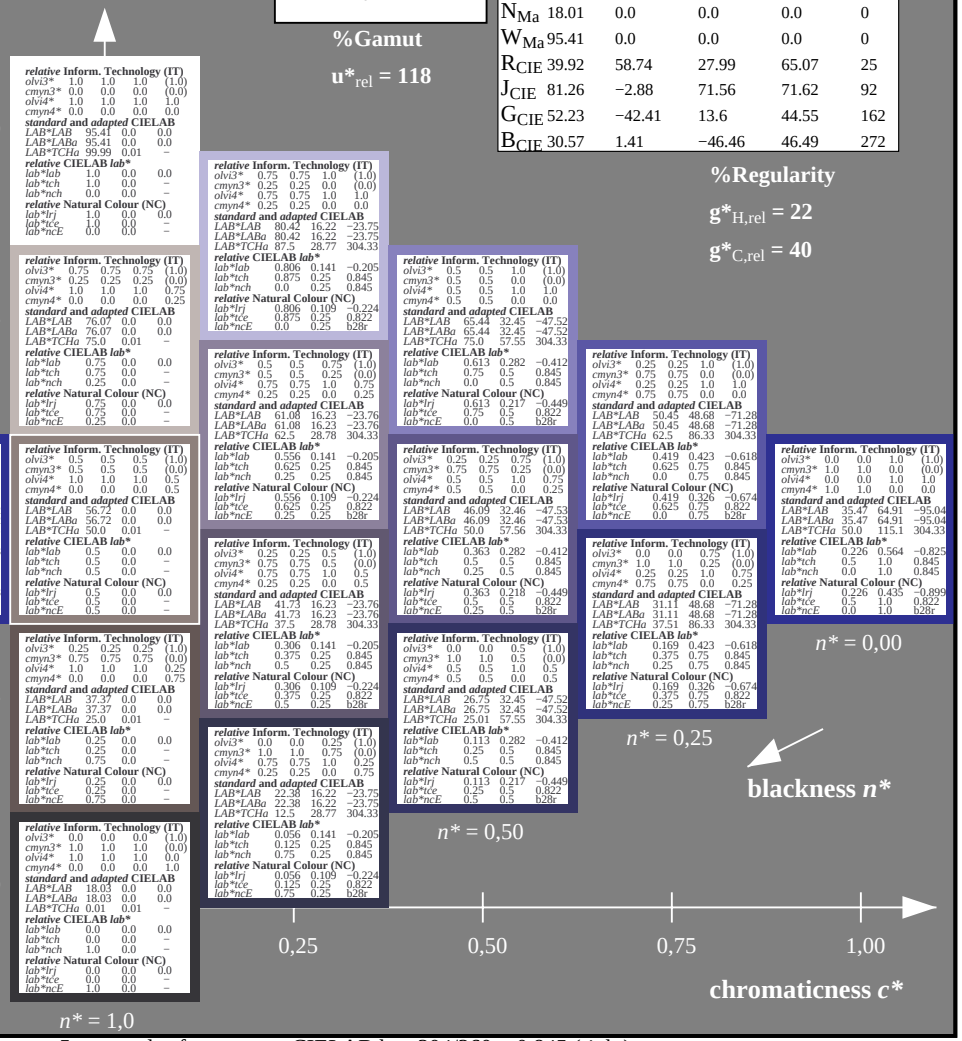
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

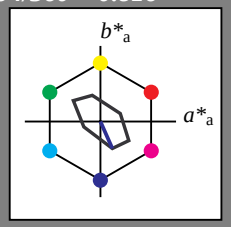


5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

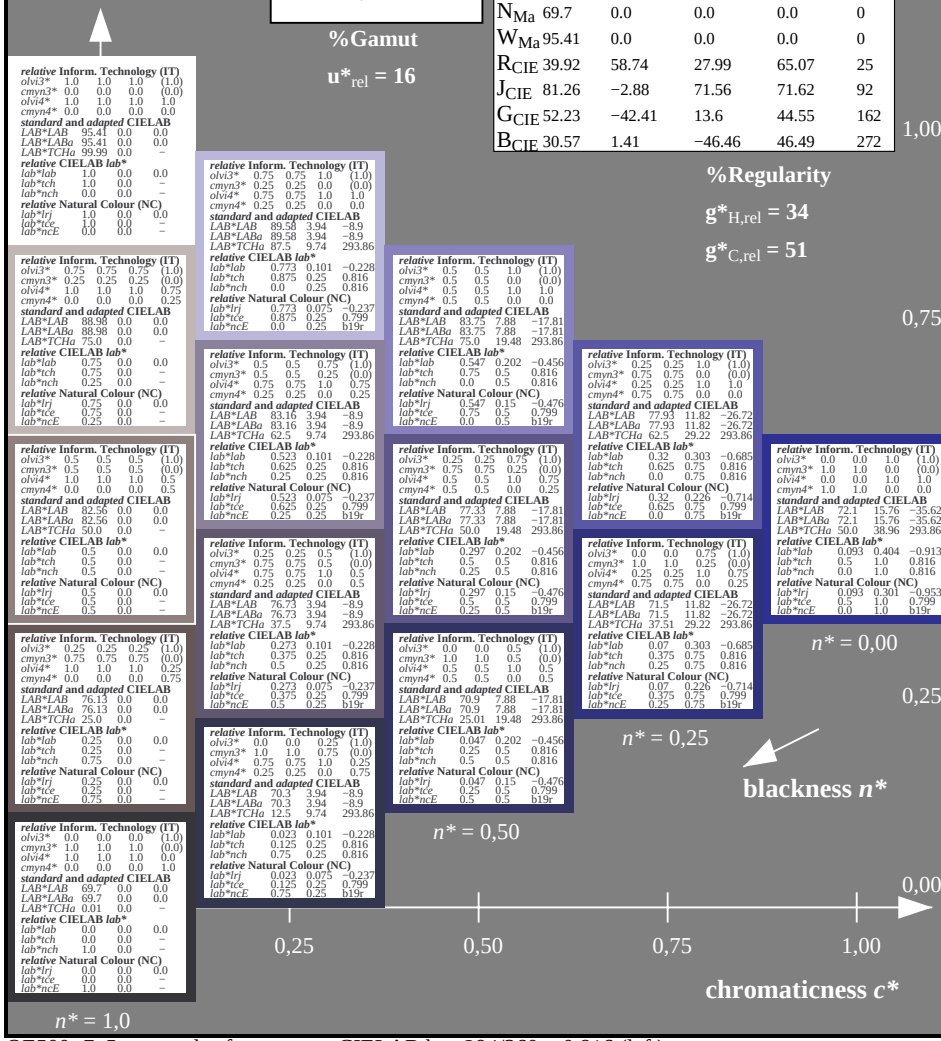
%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

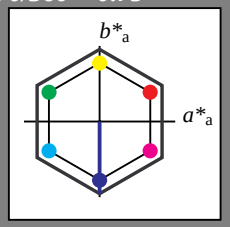
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 32 95 270
olv*Ma: 0.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

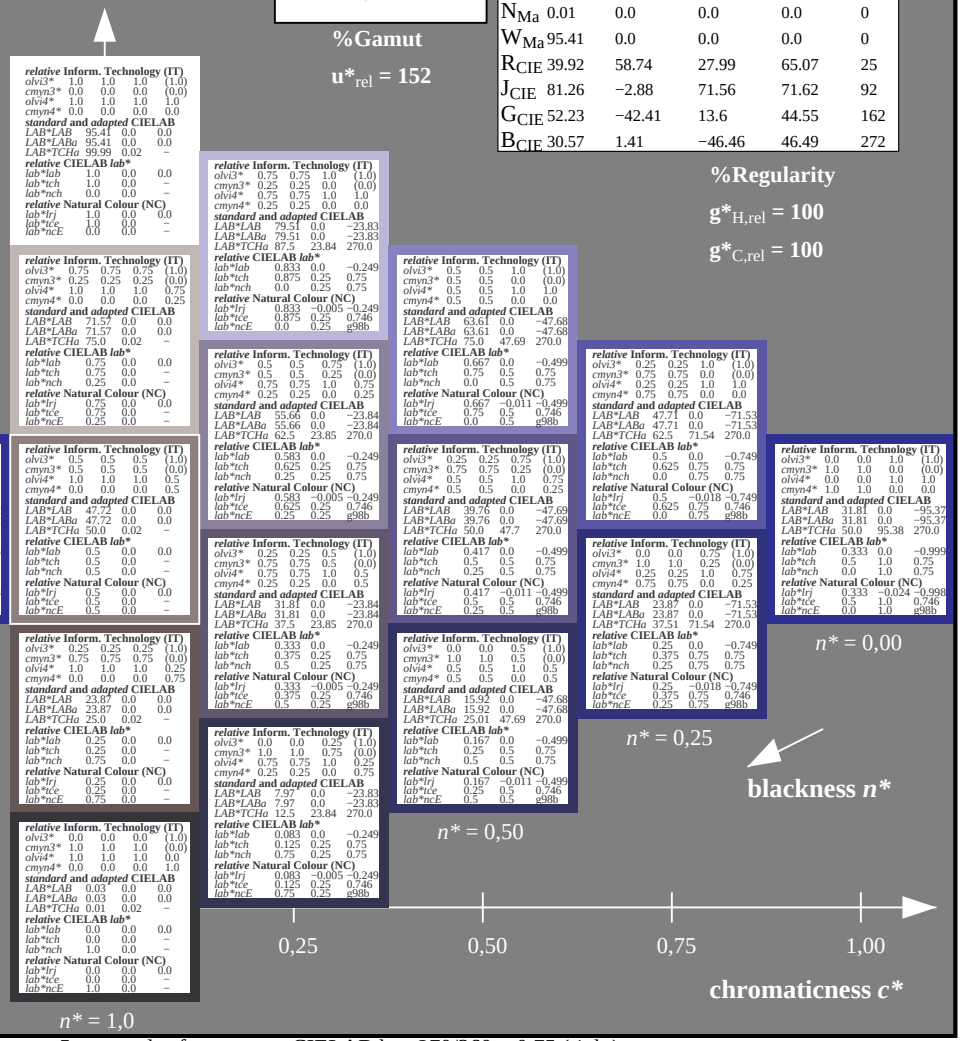
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



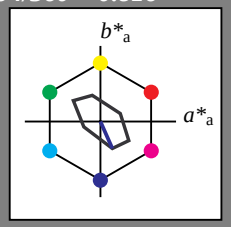
OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

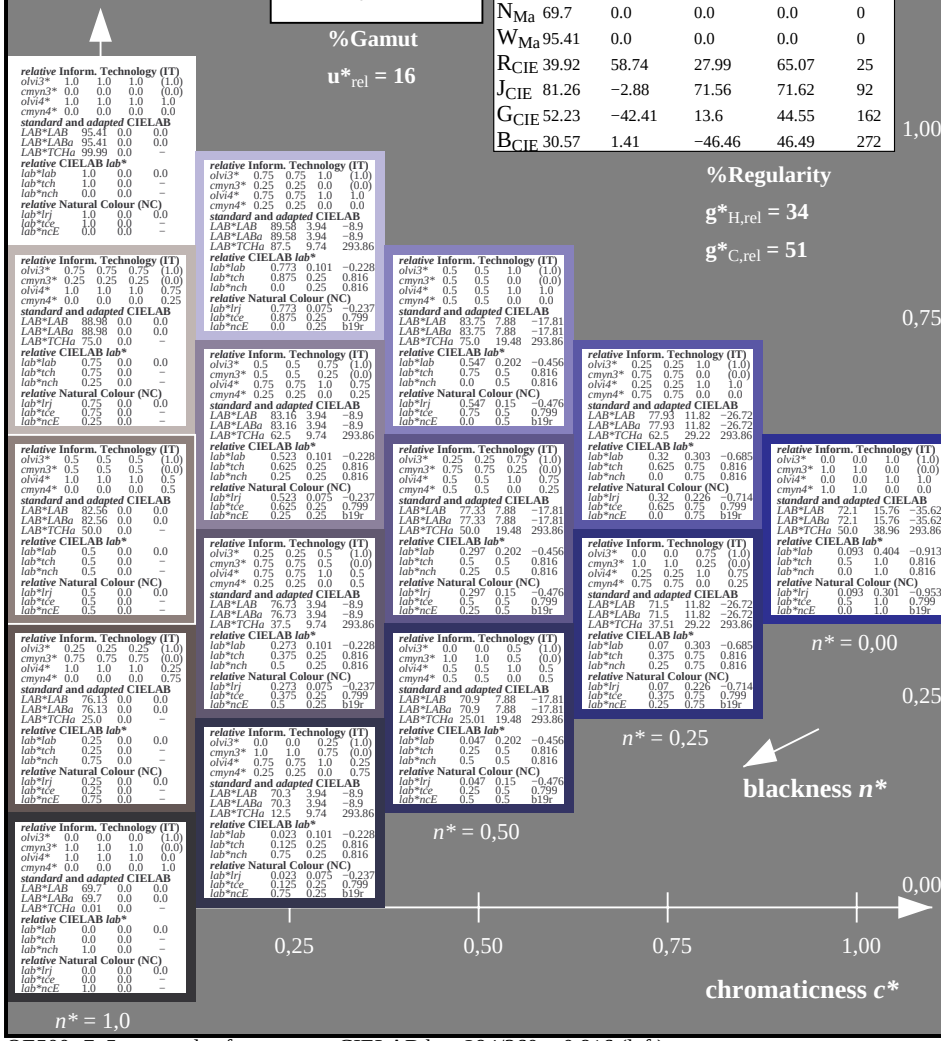
%Gamut

u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

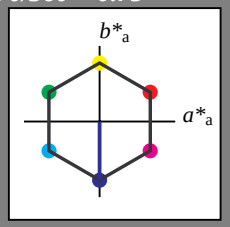
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

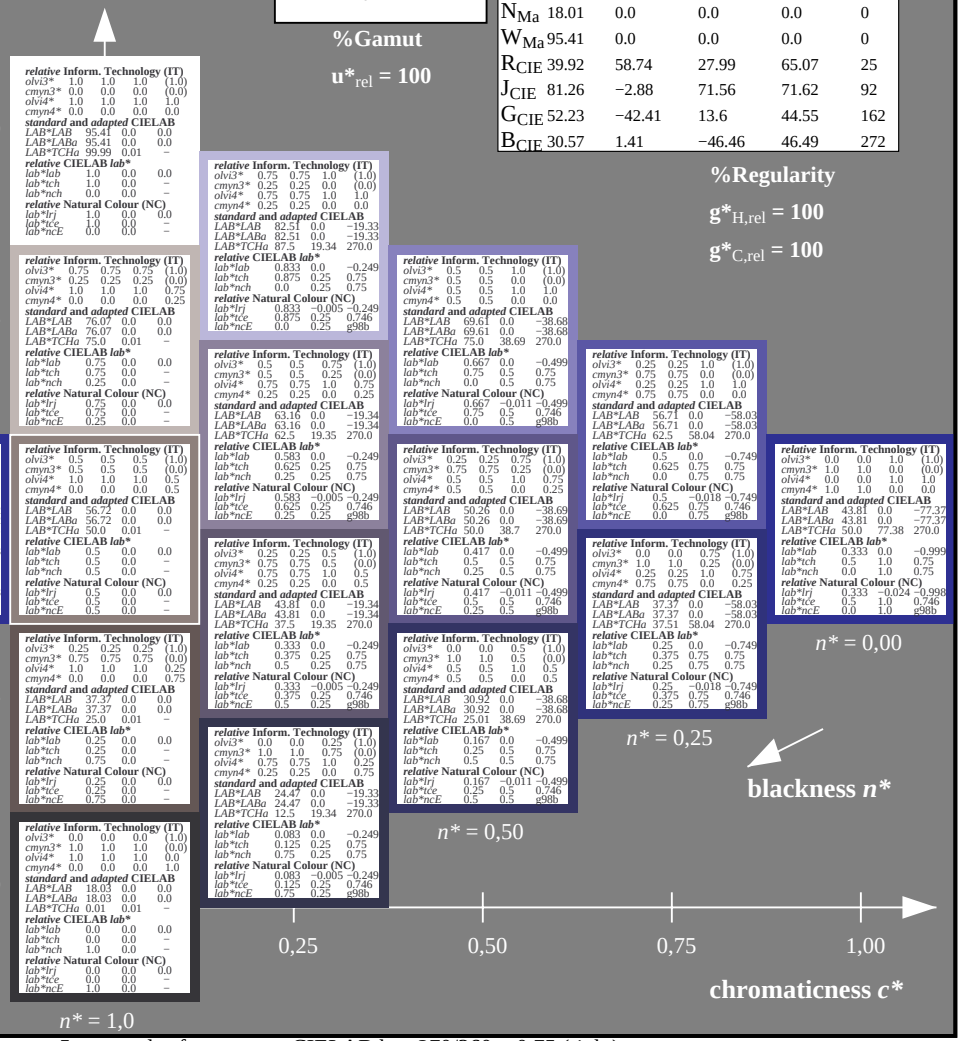
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

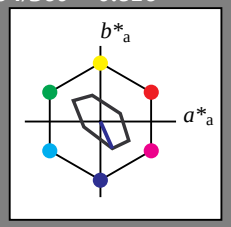
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

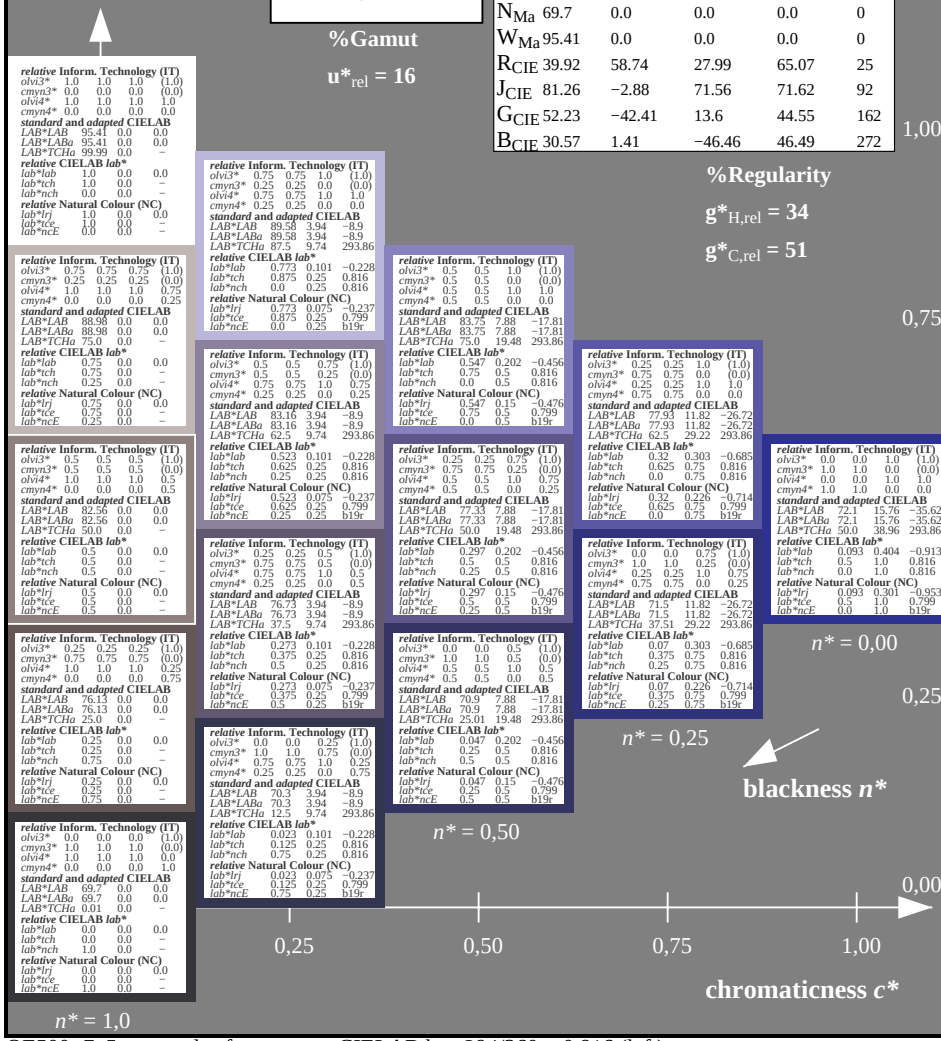
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



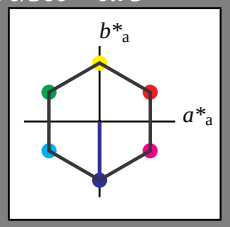
OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

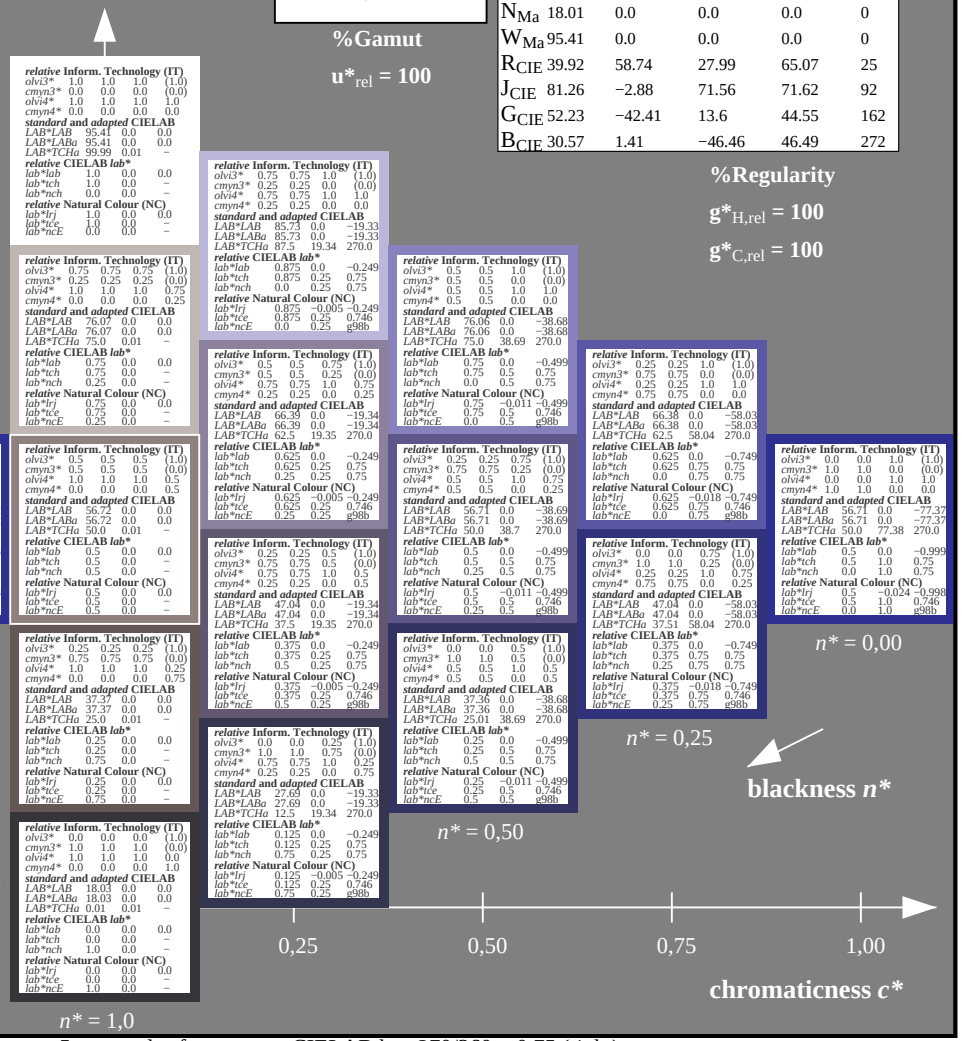
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

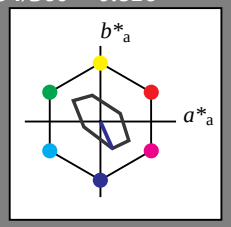


5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

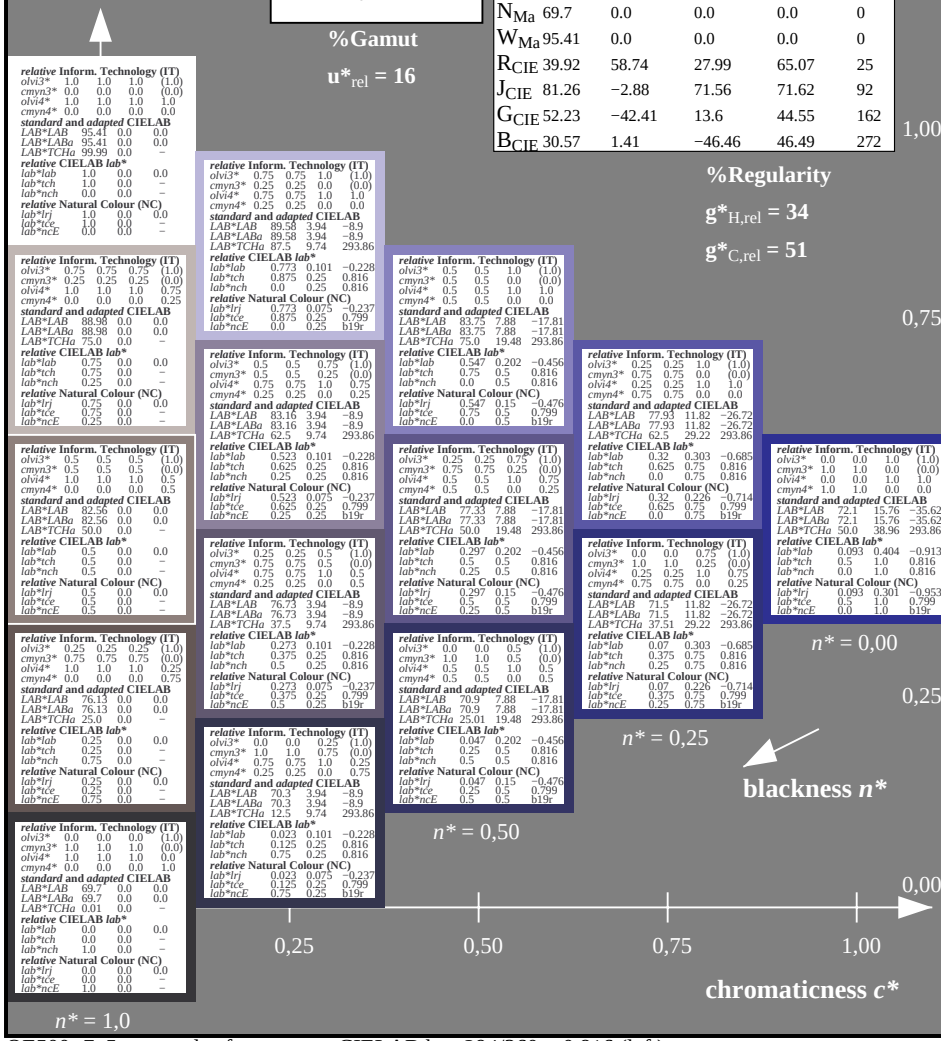
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

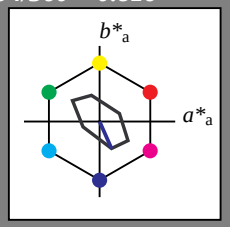


OE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

Output: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 294/360 = 0.816$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 72 39 294
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

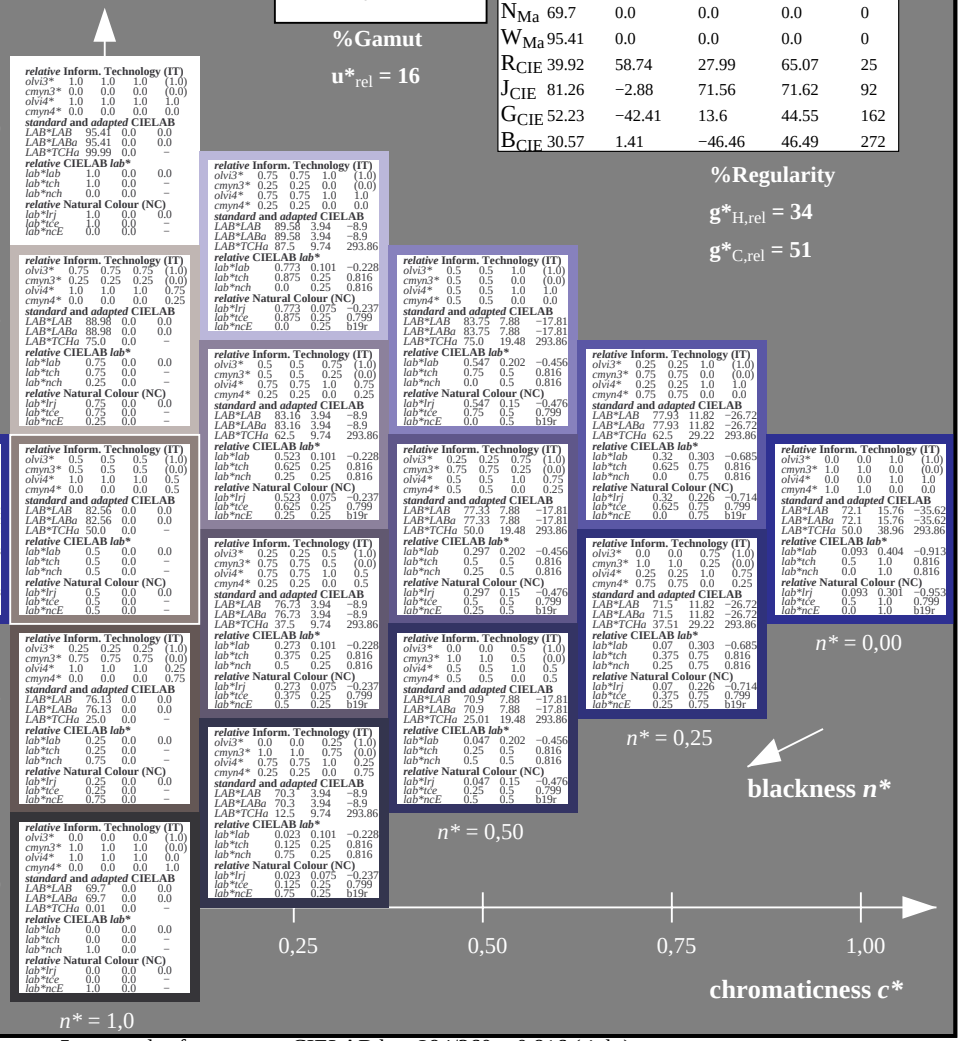
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

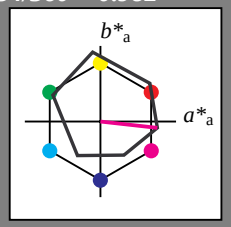


5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

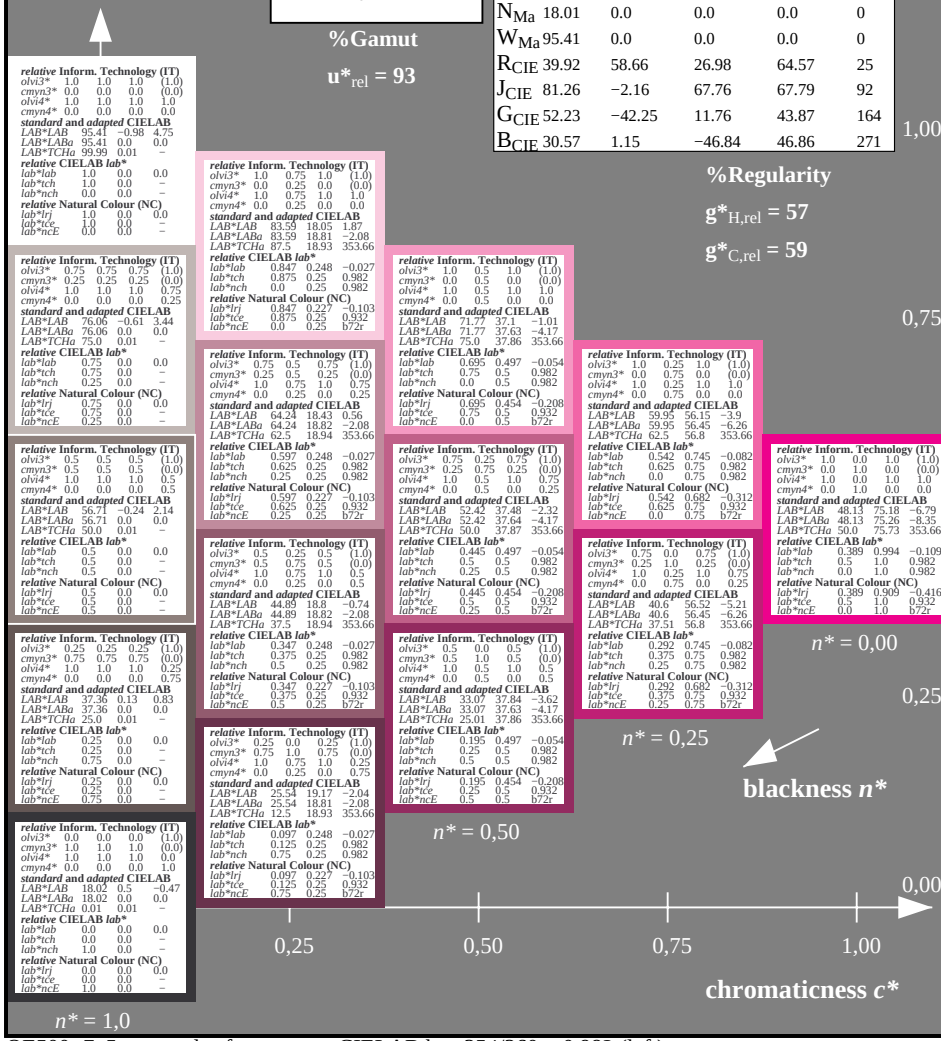
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

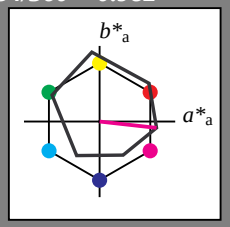


OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

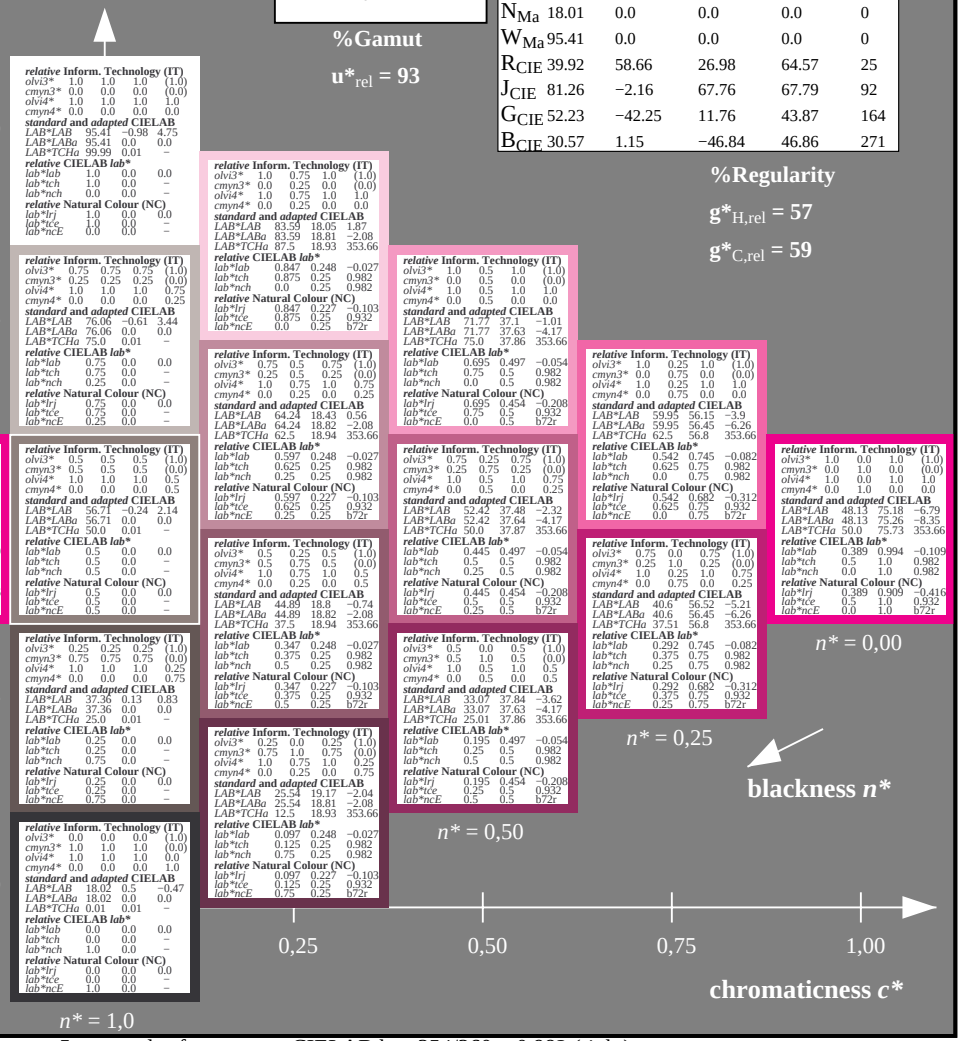
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



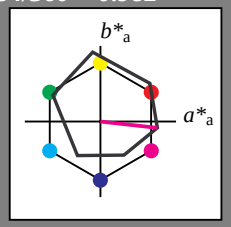
5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

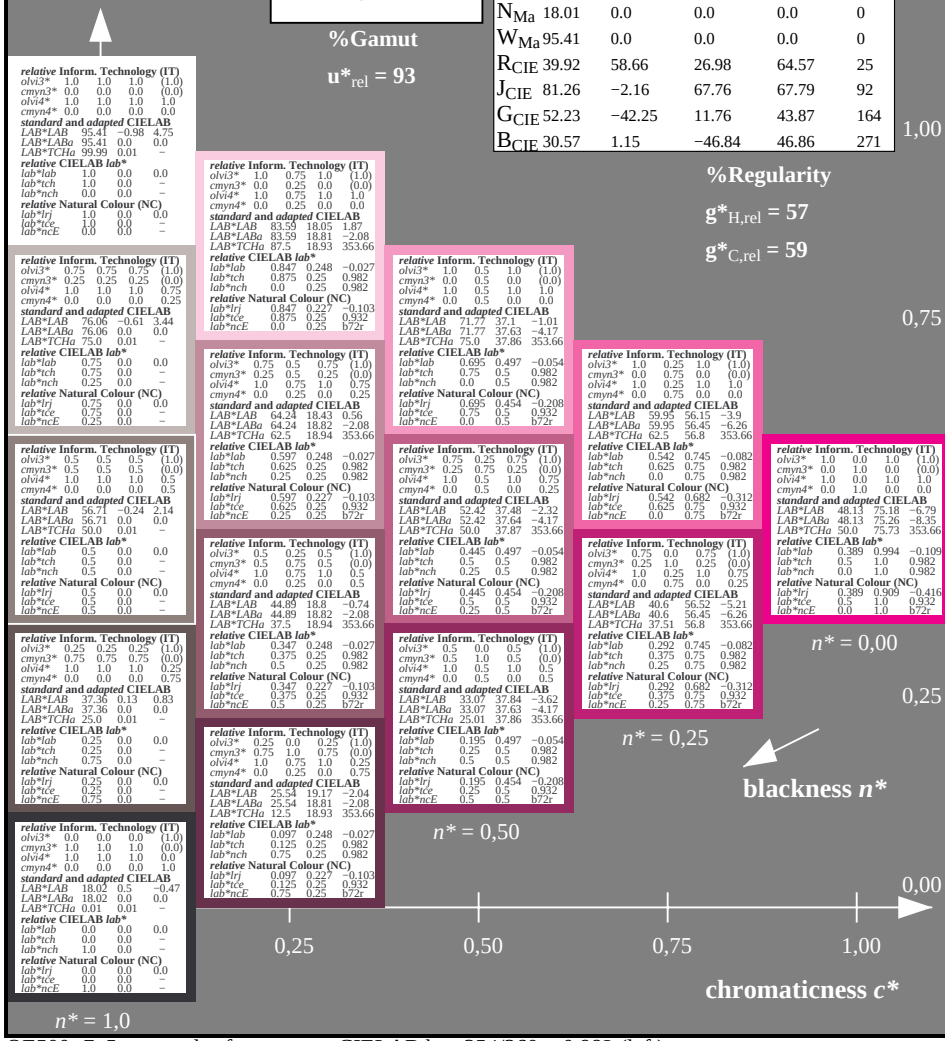
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



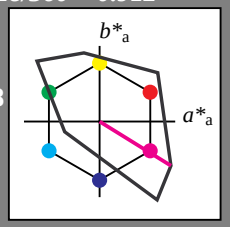
OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

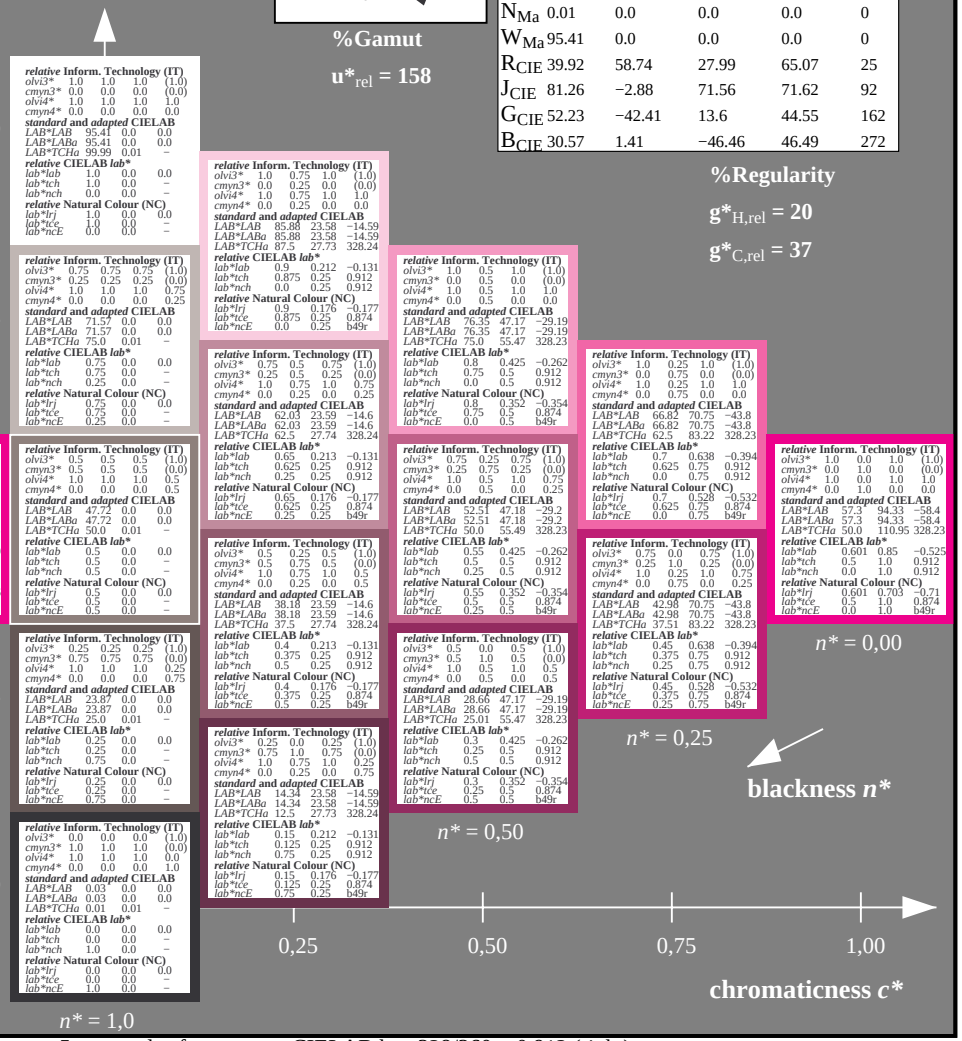
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

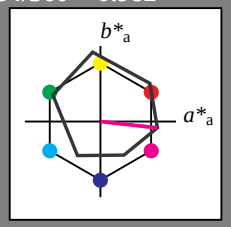


5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

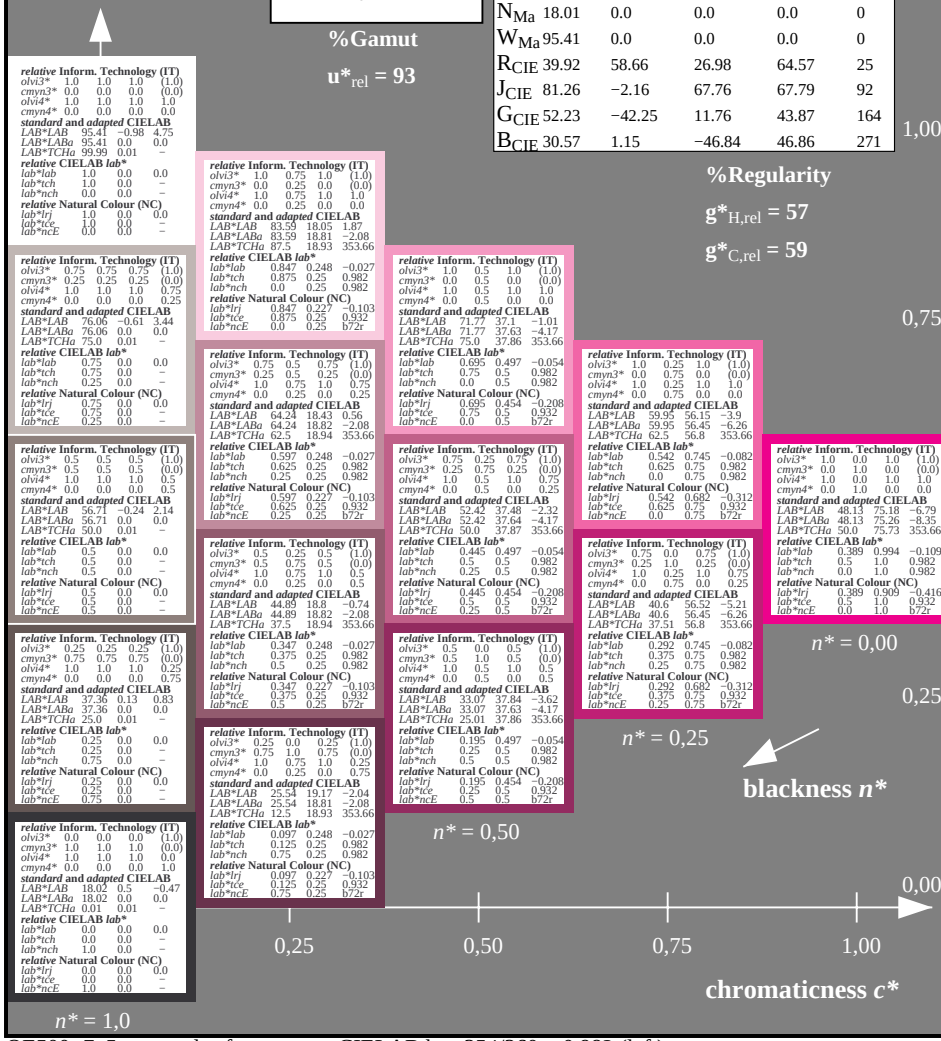
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

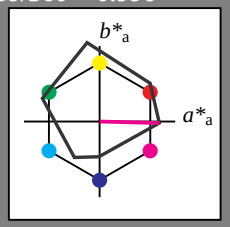


OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

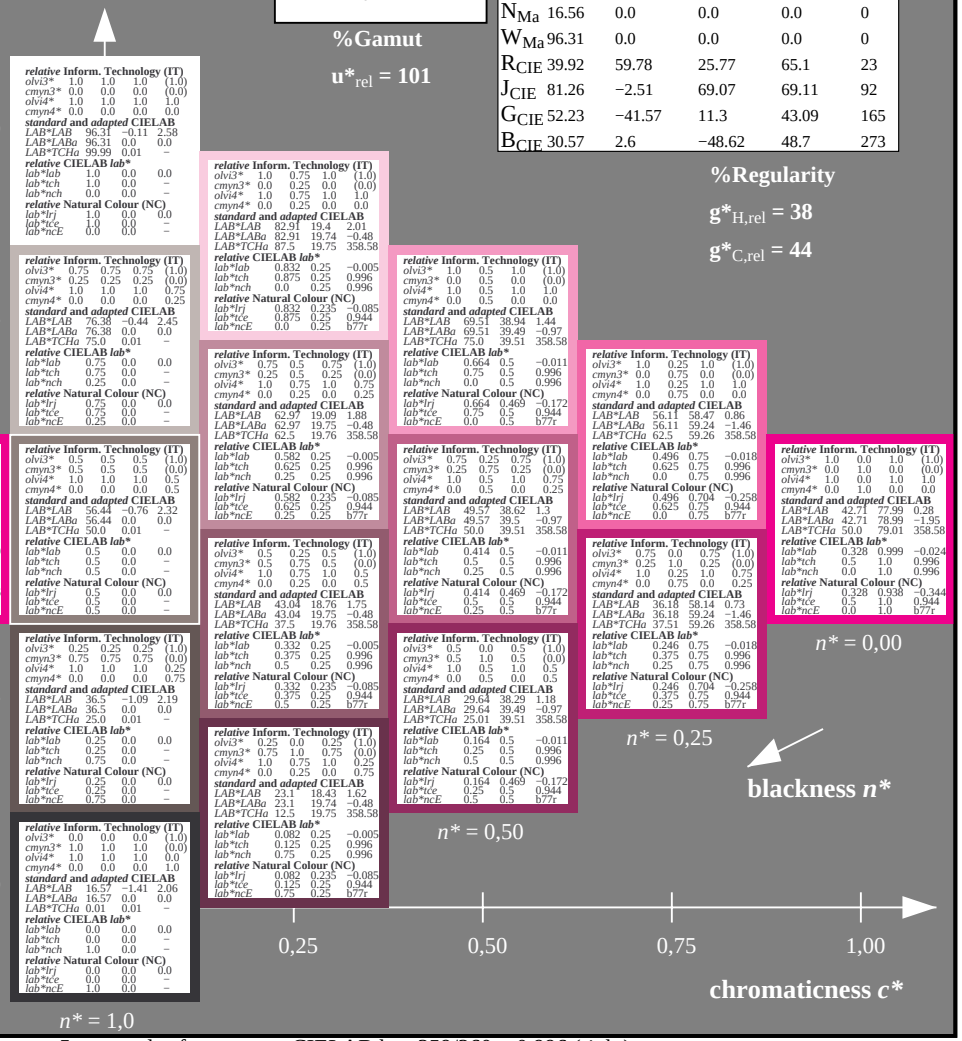
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



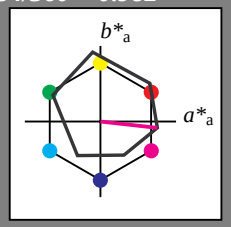
5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 354/360 = 0.982*
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

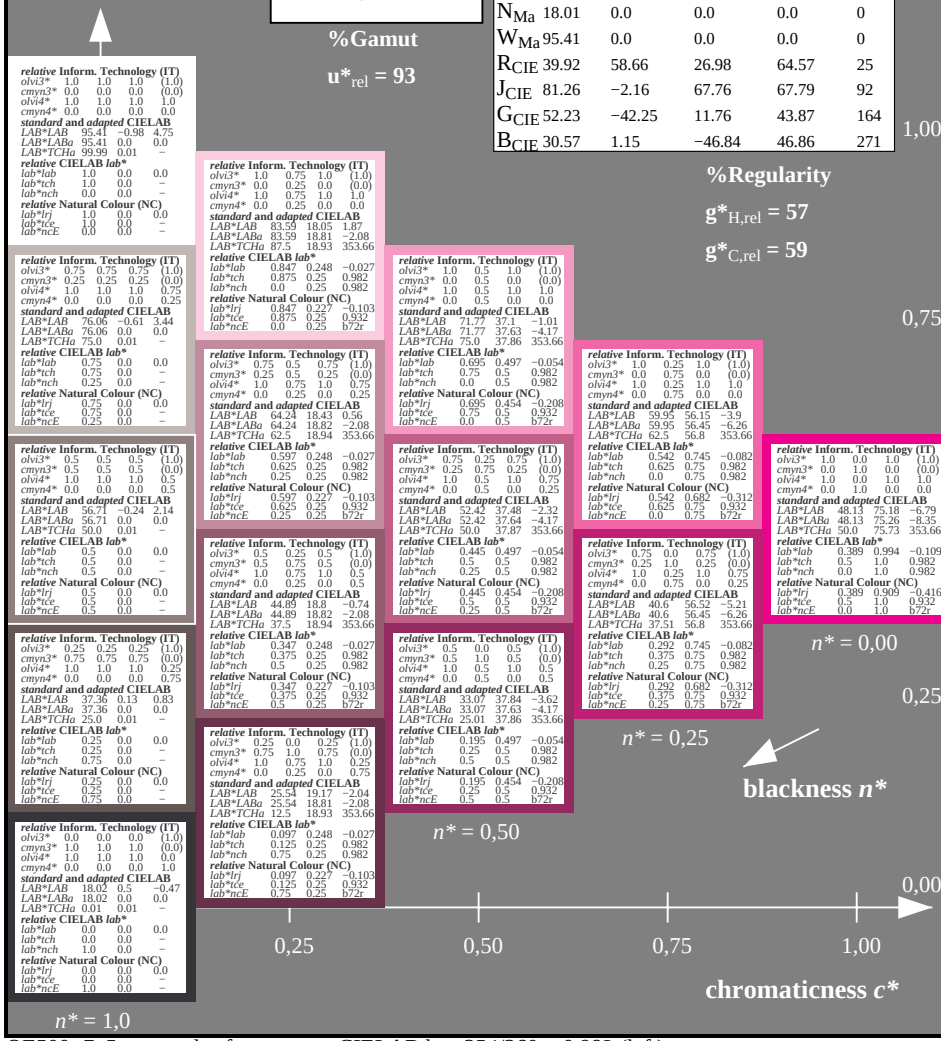
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

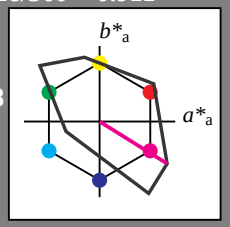


Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 328/360 = 0.911*
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

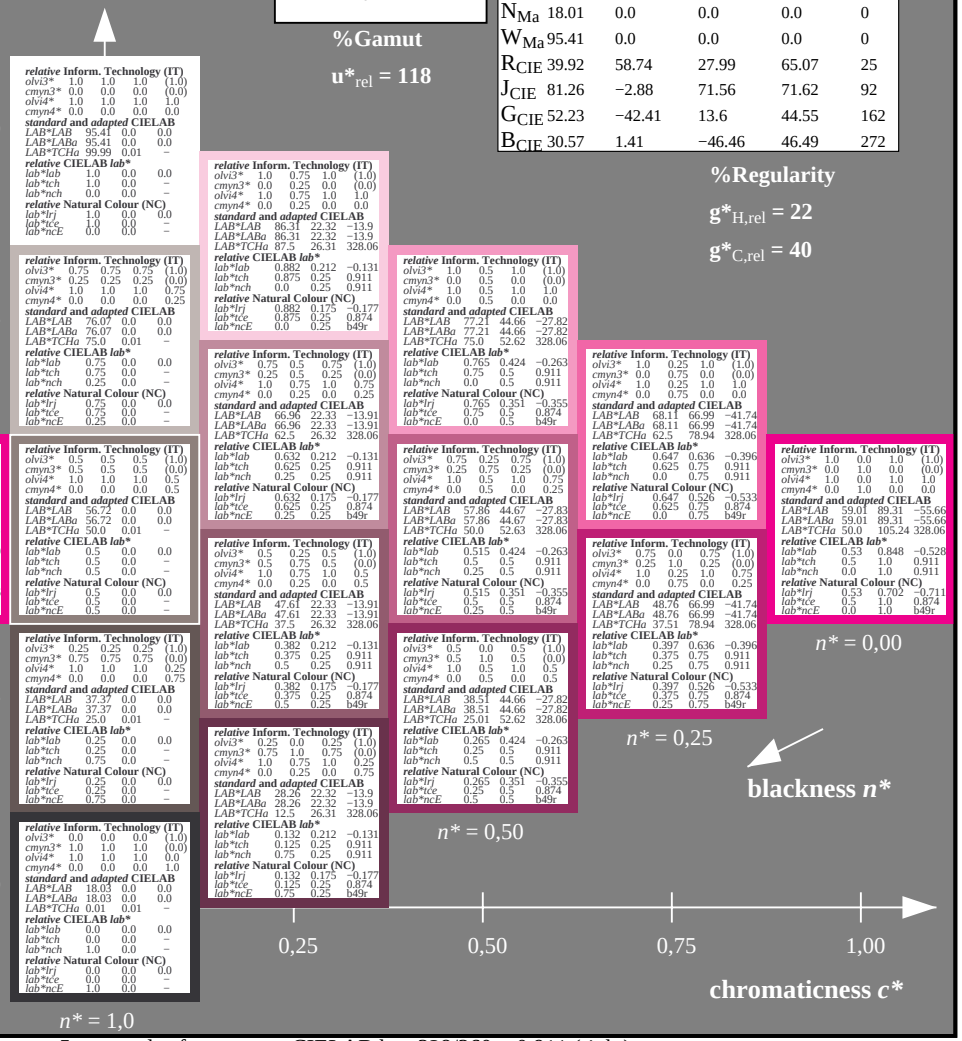
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

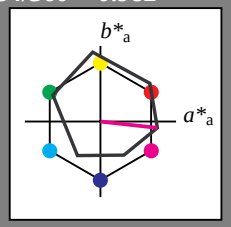
5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

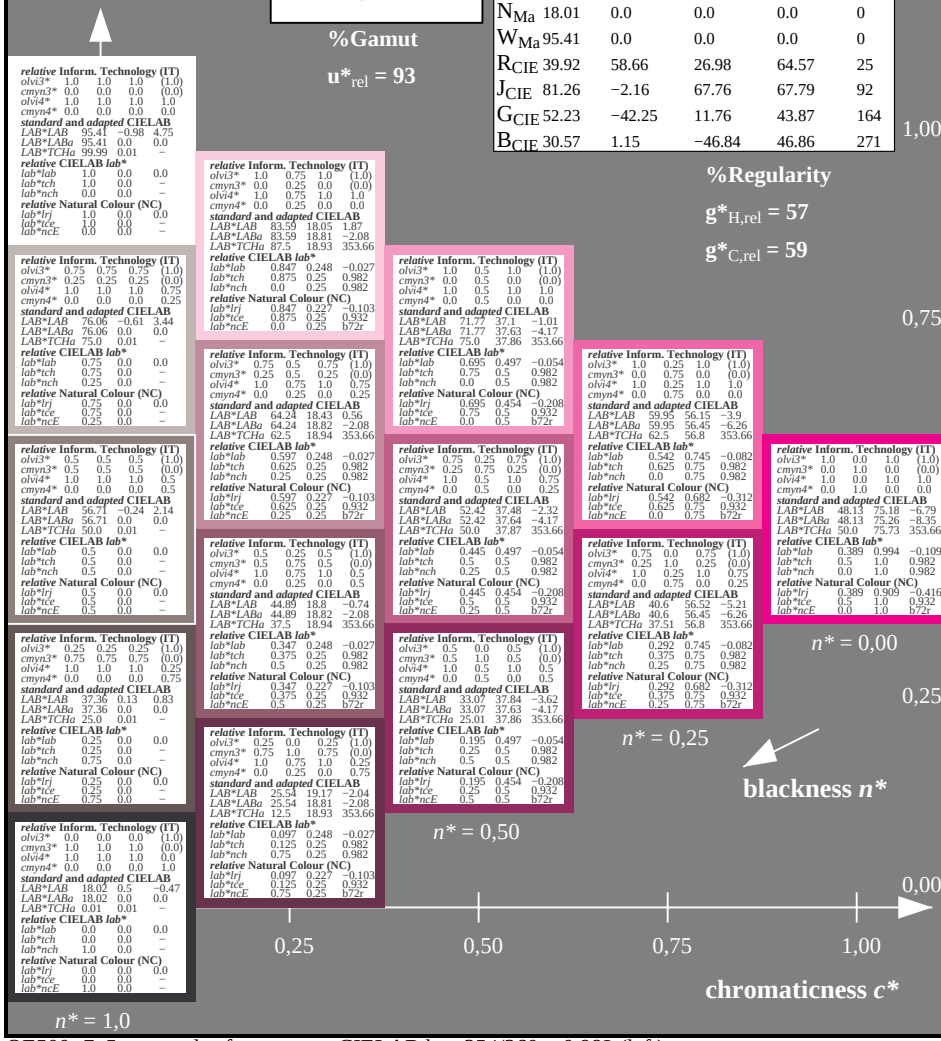
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



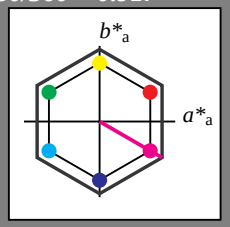
OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

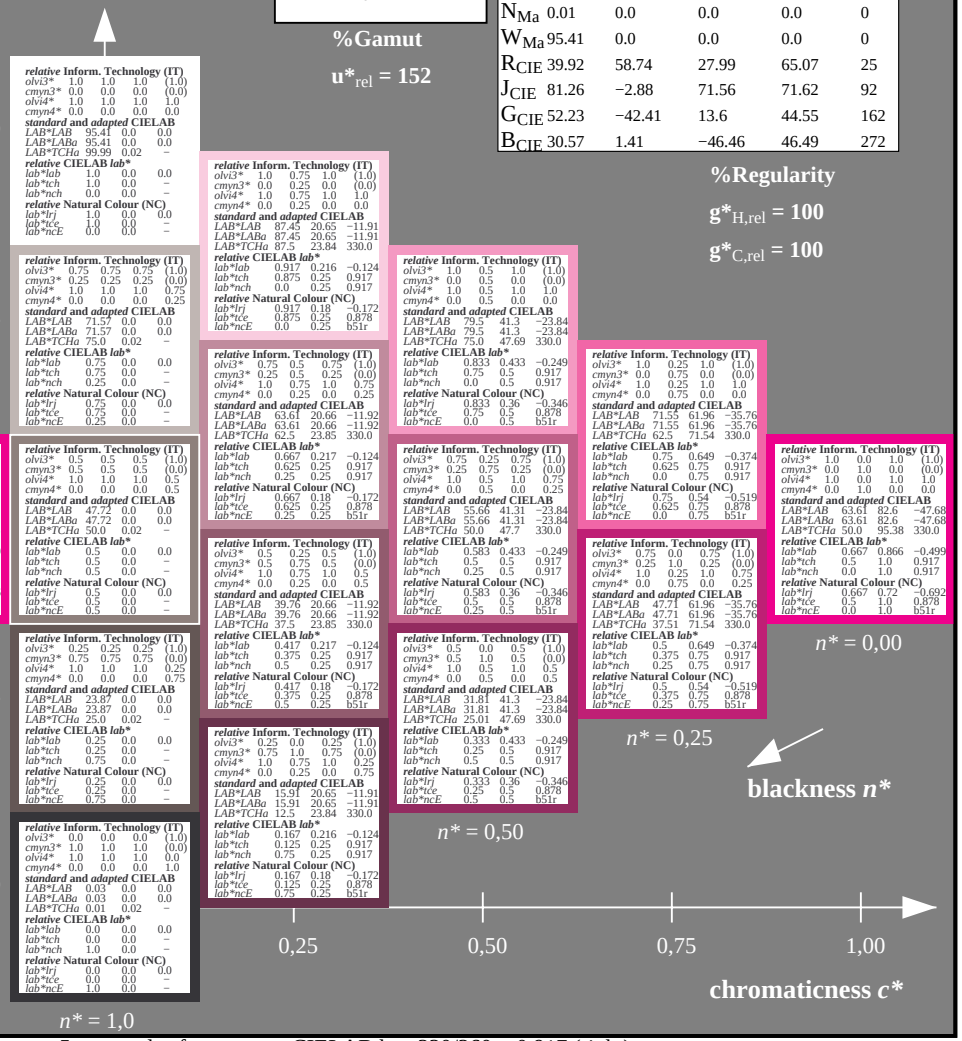
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



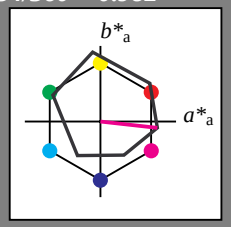
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

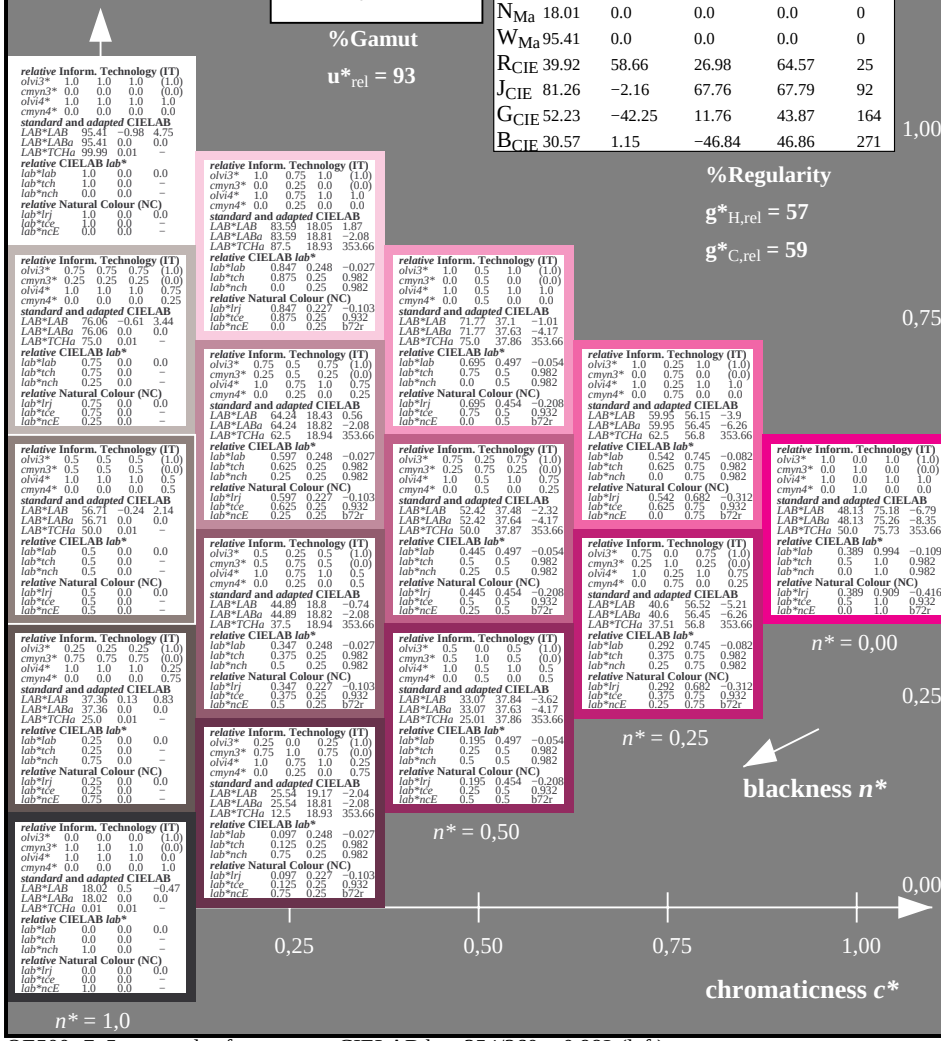
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



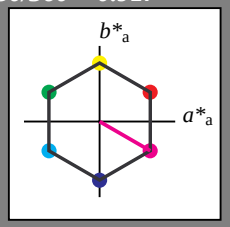
OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

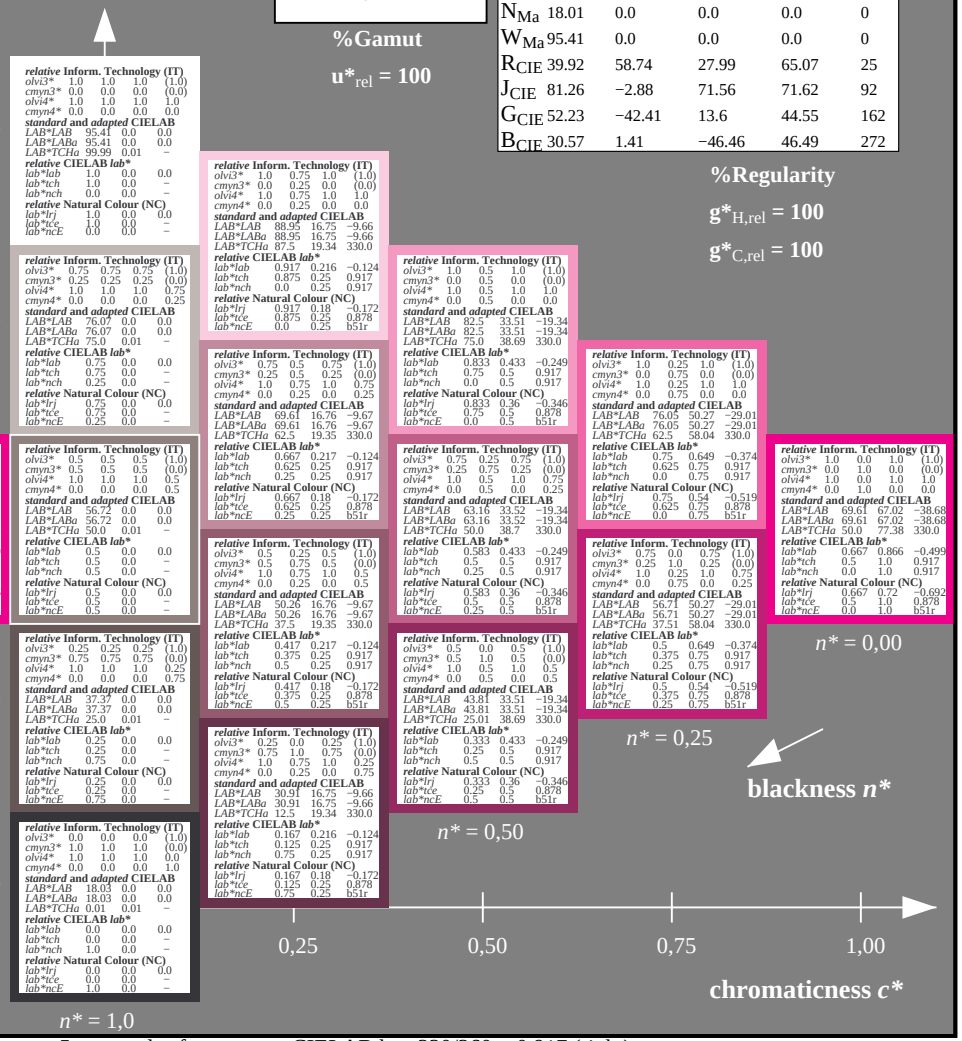
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



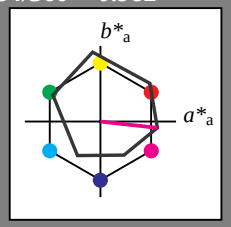
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab^*tch and lab^*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

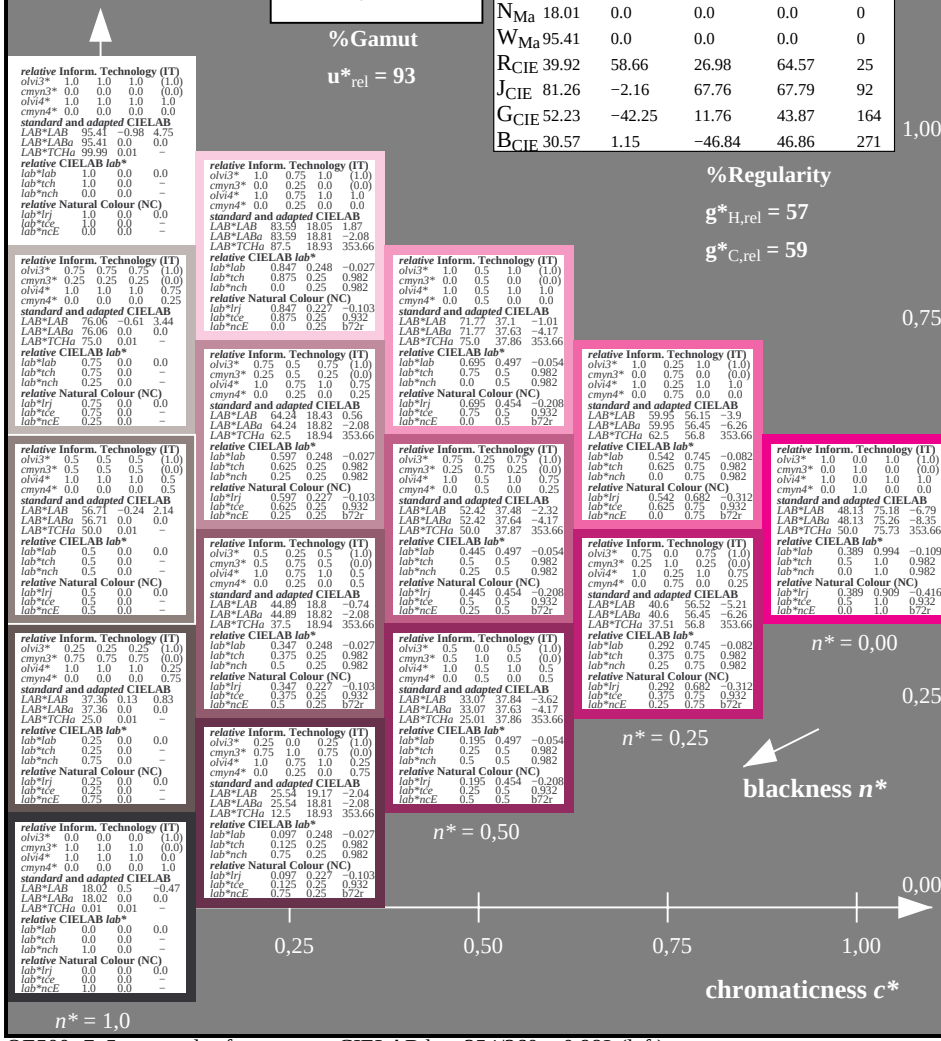
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

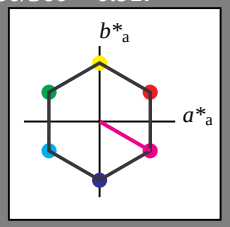


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab^*tch and lab^*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

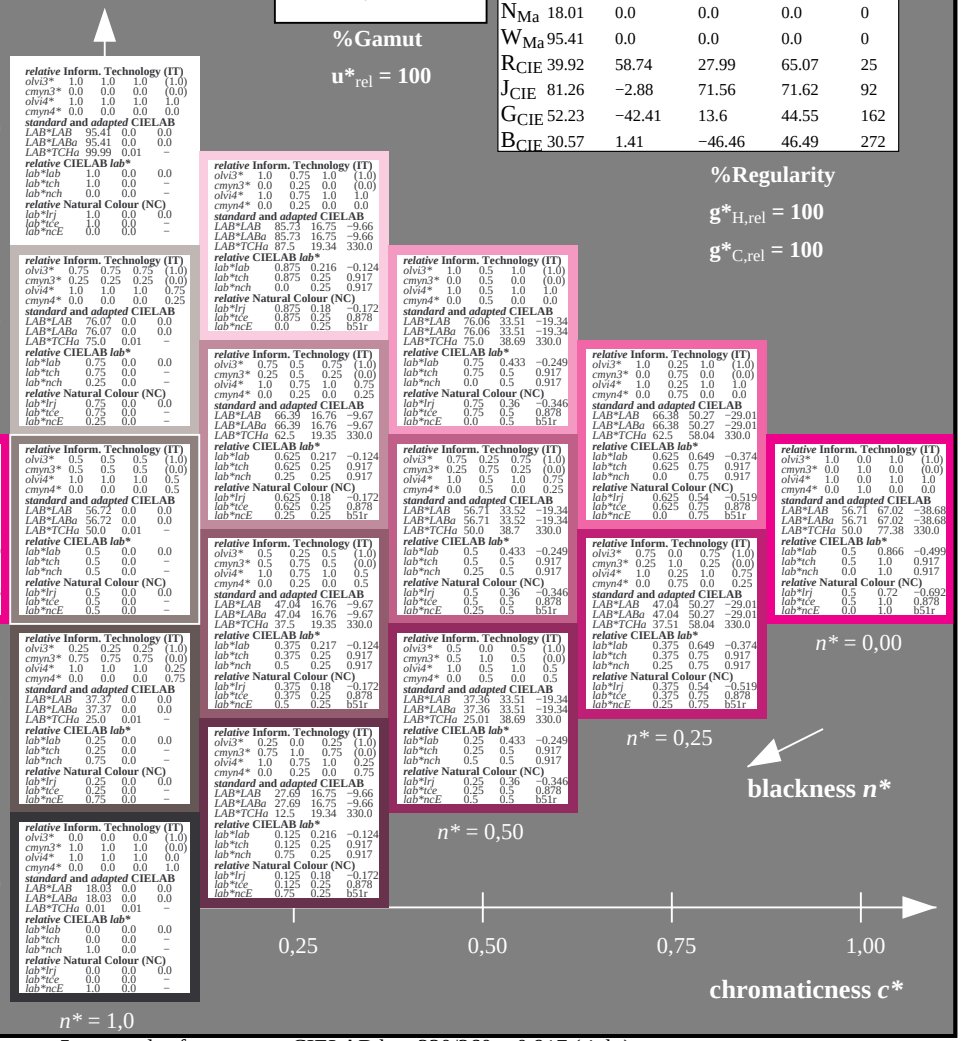
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



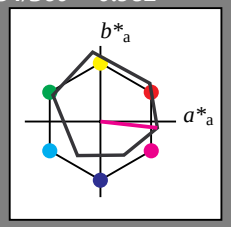
OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab^*tch and lab^*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

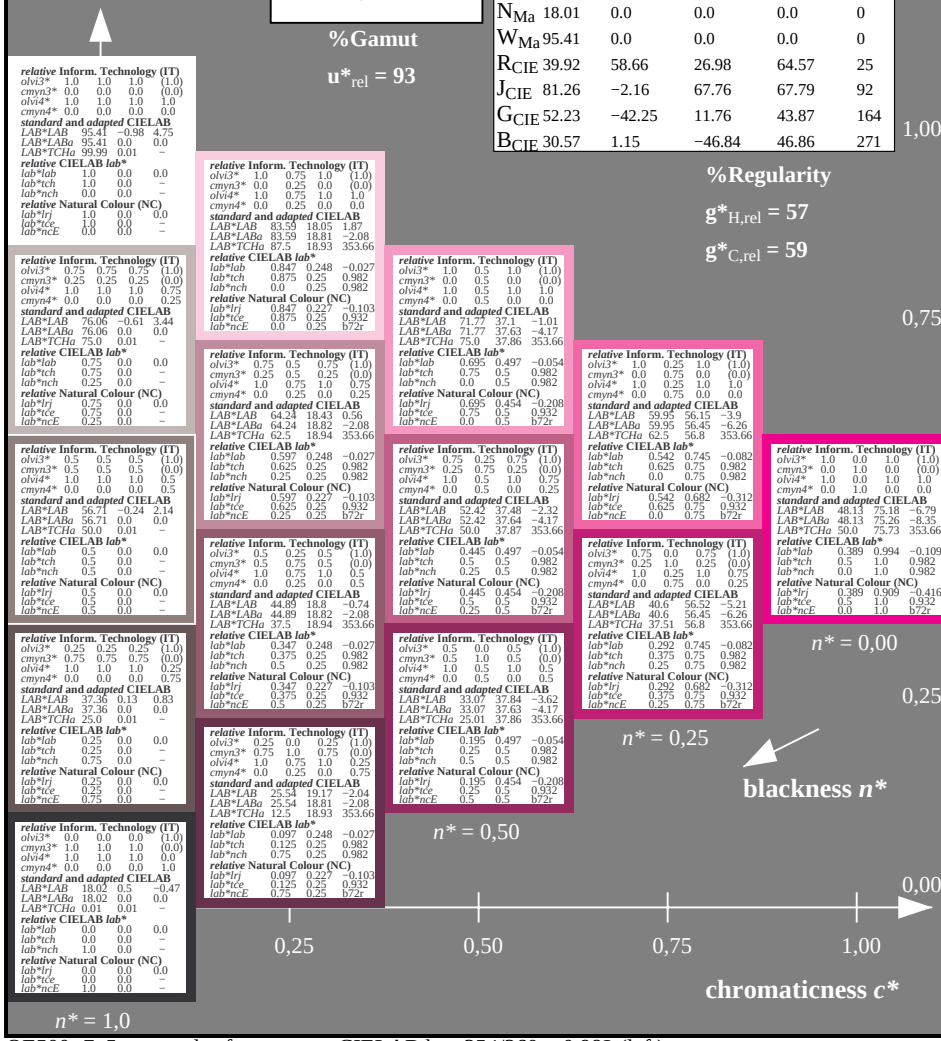
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

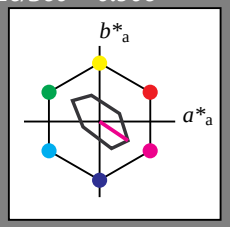


OE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab^*tch and lab^*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

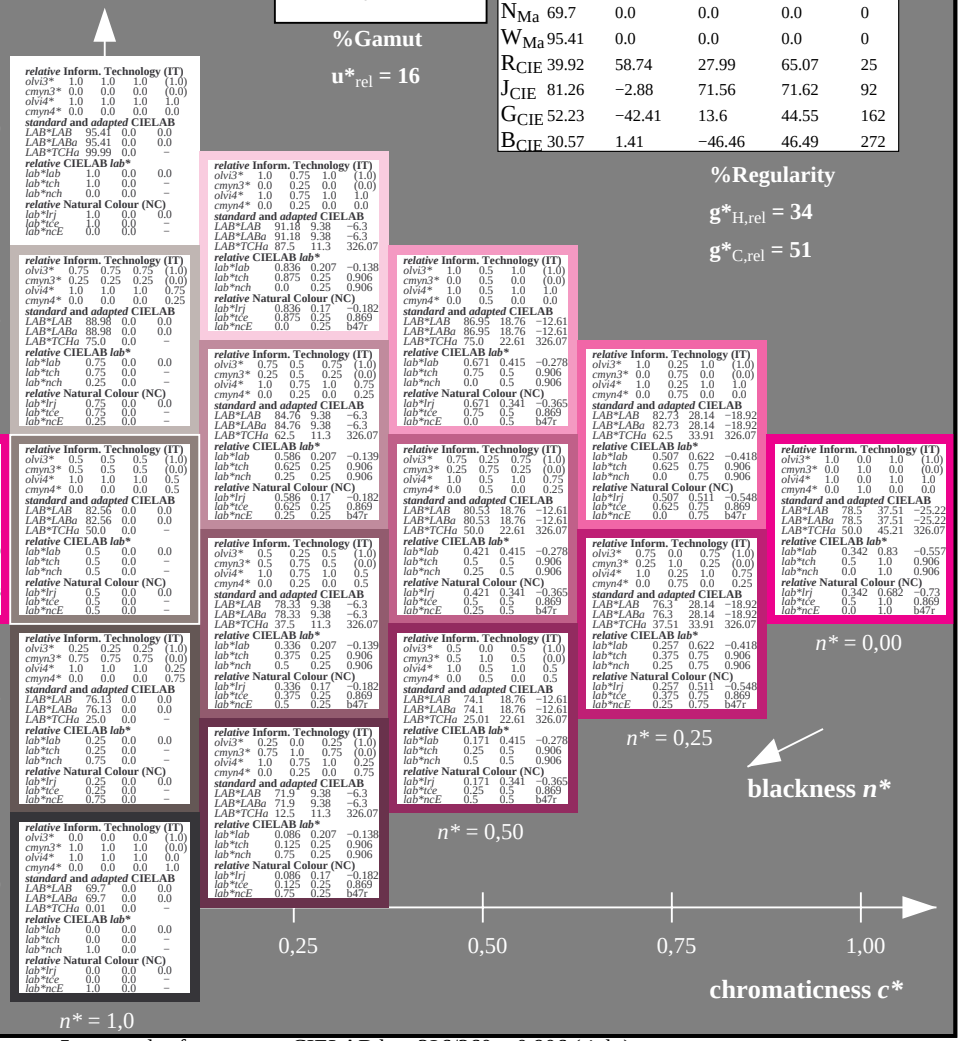
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

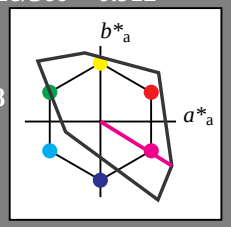


5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

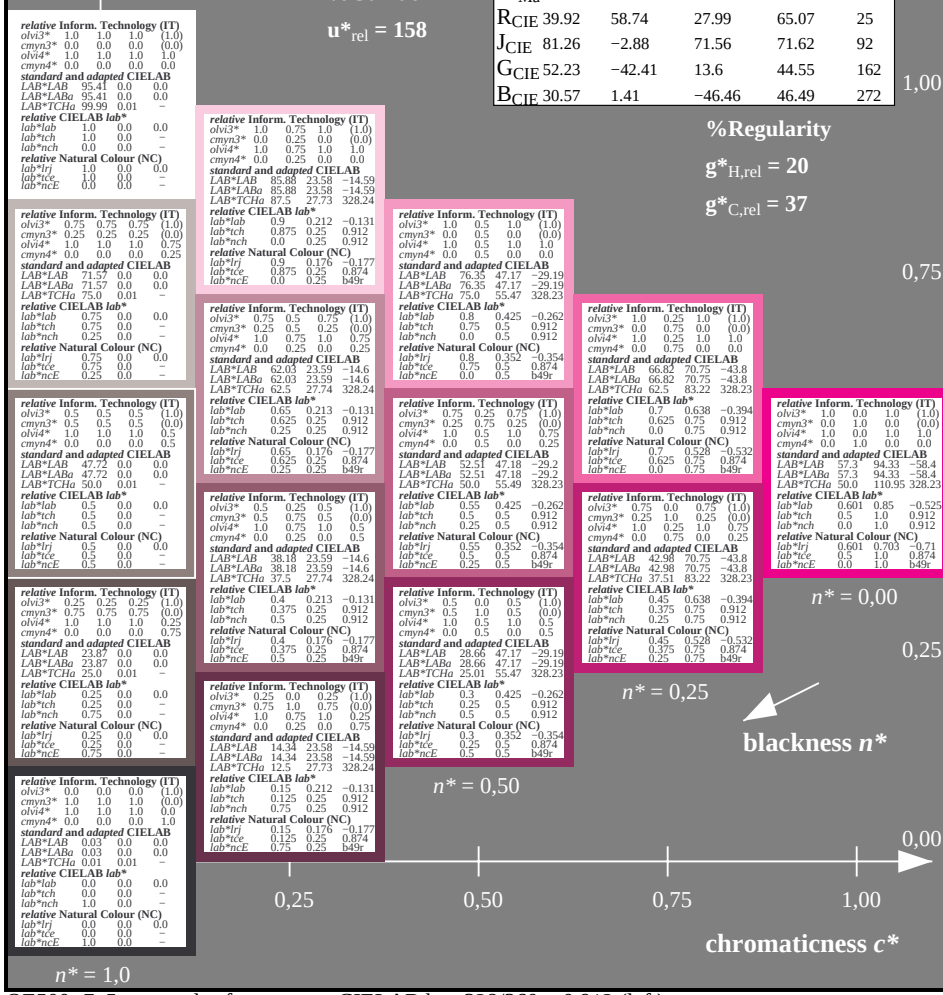
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

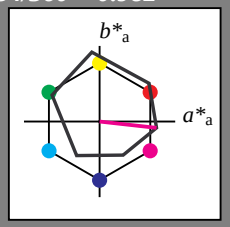


OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

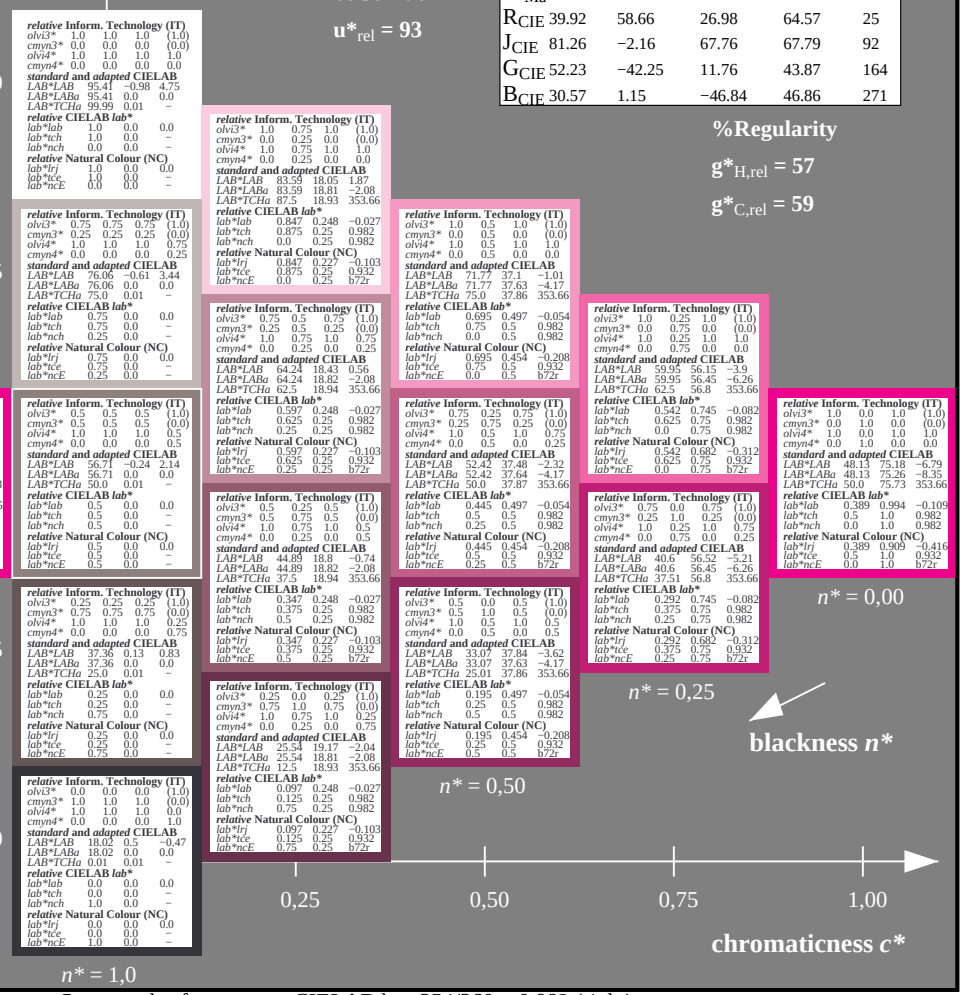
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

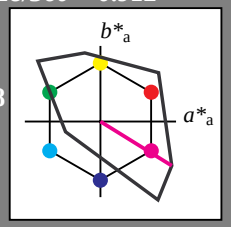


5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness n^*

0,25 0,50 0,75 1,00

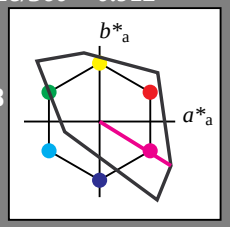
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

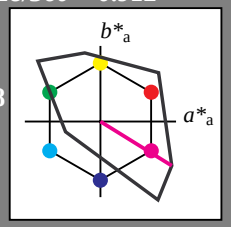
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

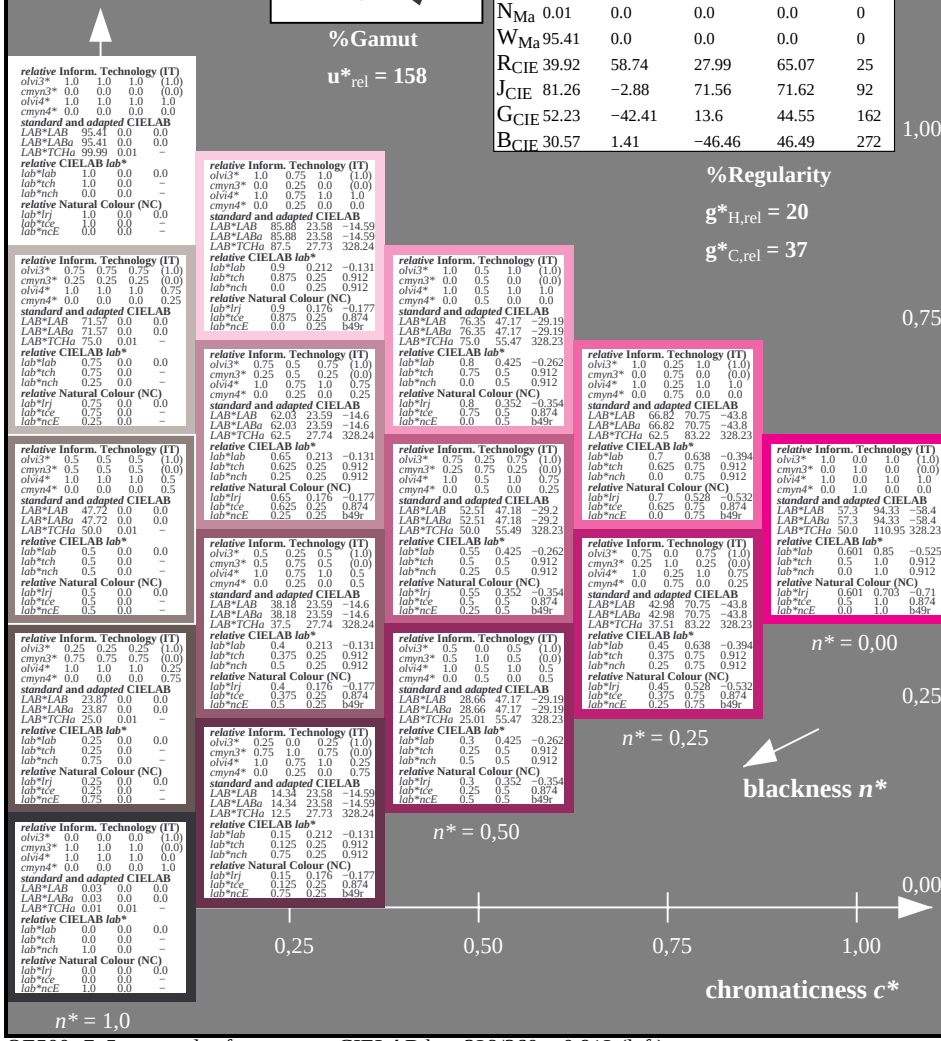
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

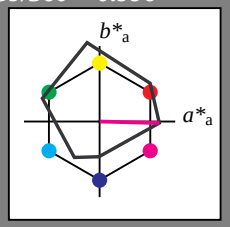
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

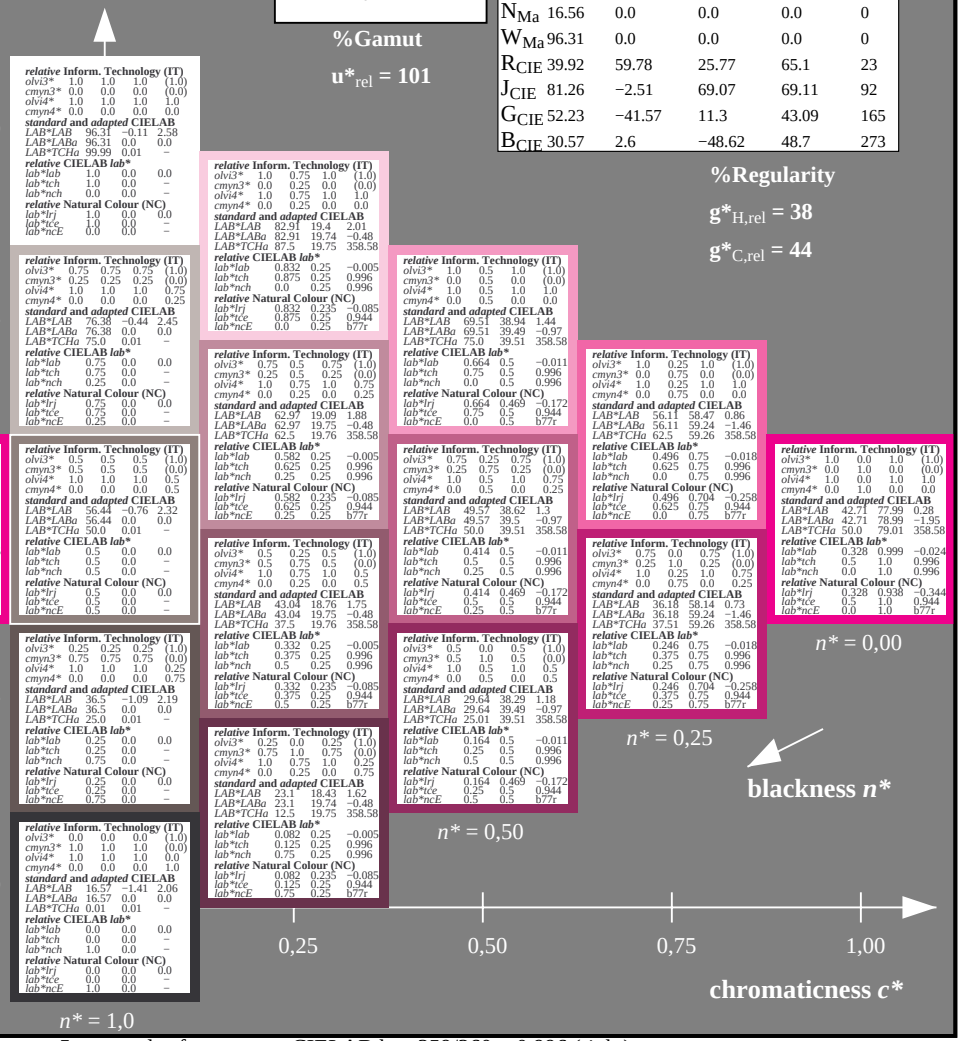
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

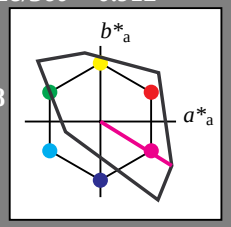
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

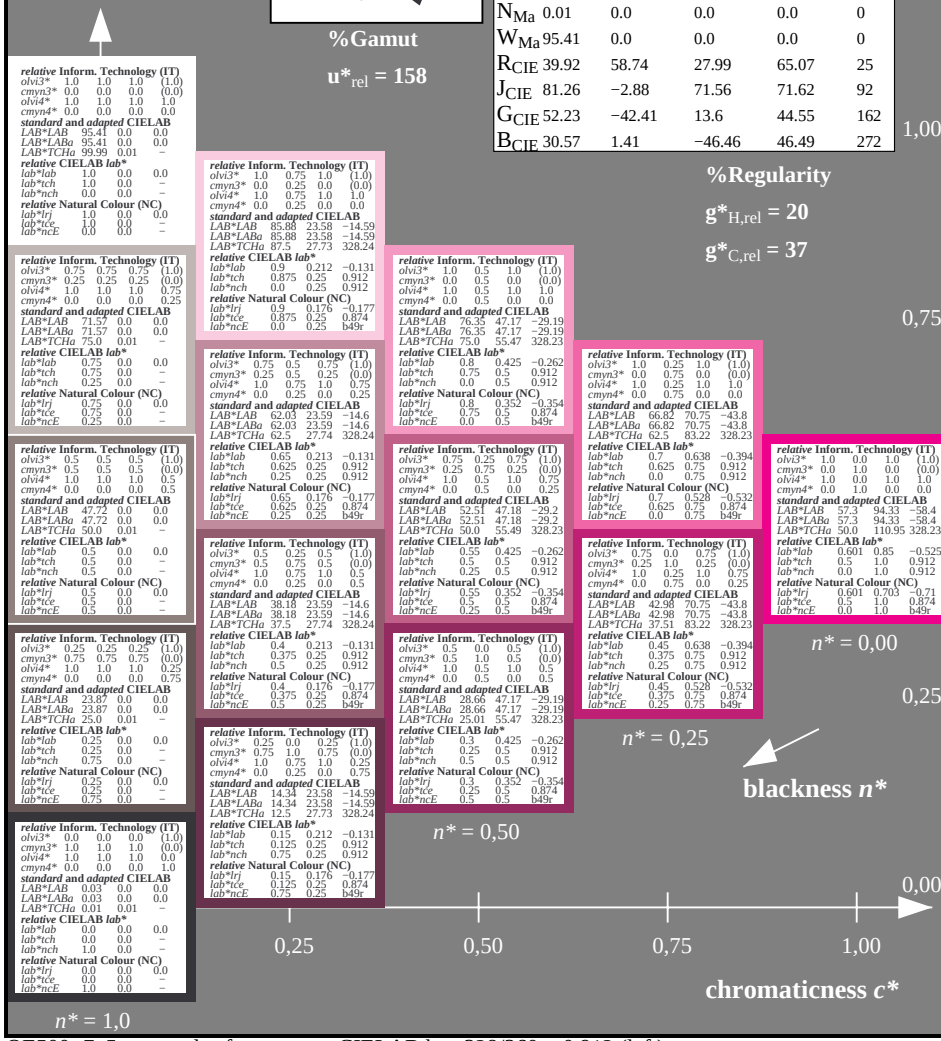
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

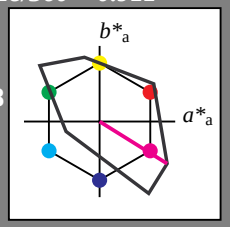
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

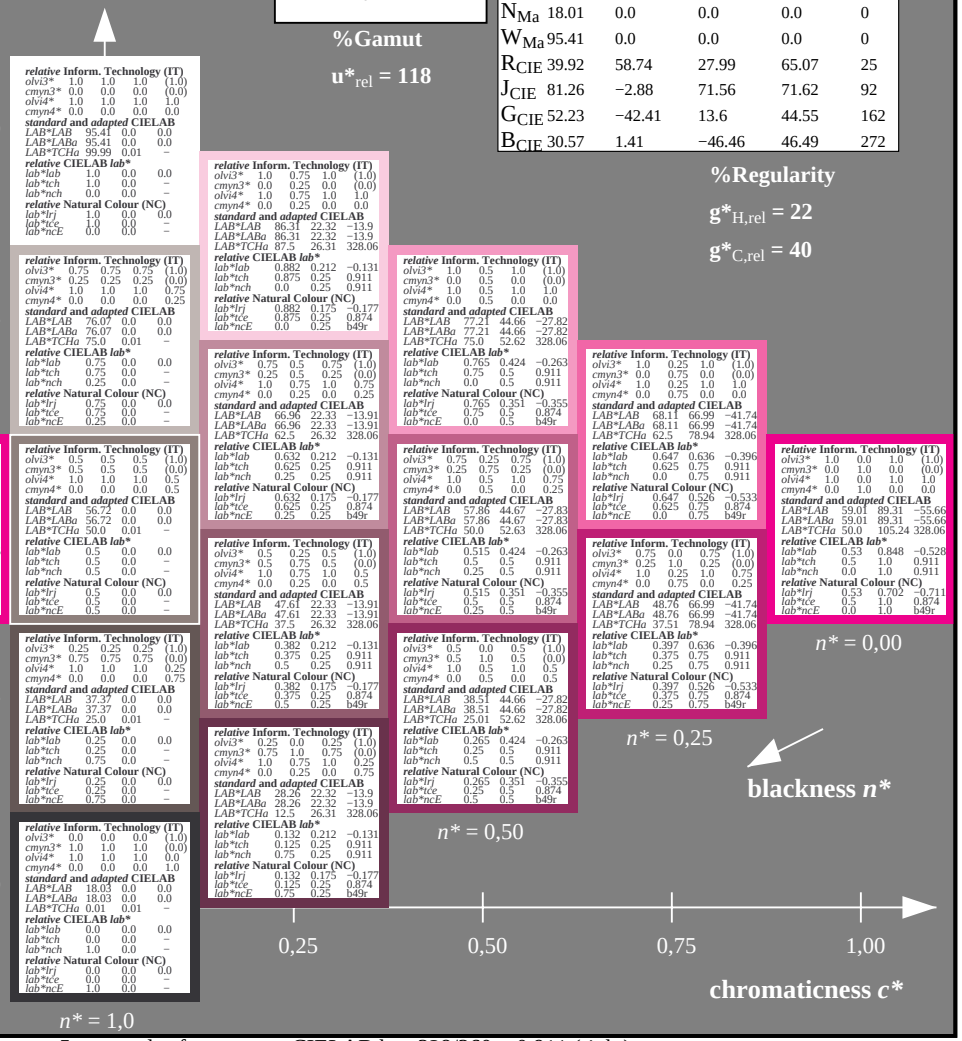
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

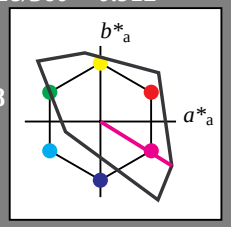


5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 158

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

blackness *n**

chromaticness *c**

$n^* = 1{,}0$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

0,25 0,50 0,75 1,00

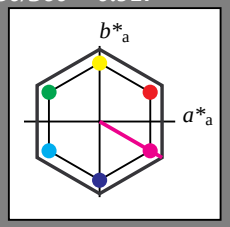
0,00 0,25 0,50 0,75 1,00

OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness *n**

chromaticness *c**

$n^* = 1{,}0$ $n^* = 0{,}50$ $n^* = 0{,}25$ $n^* = 0{,}00$

0,25 0,50 0,75 1,00

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

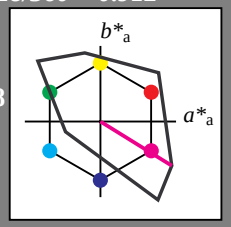
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

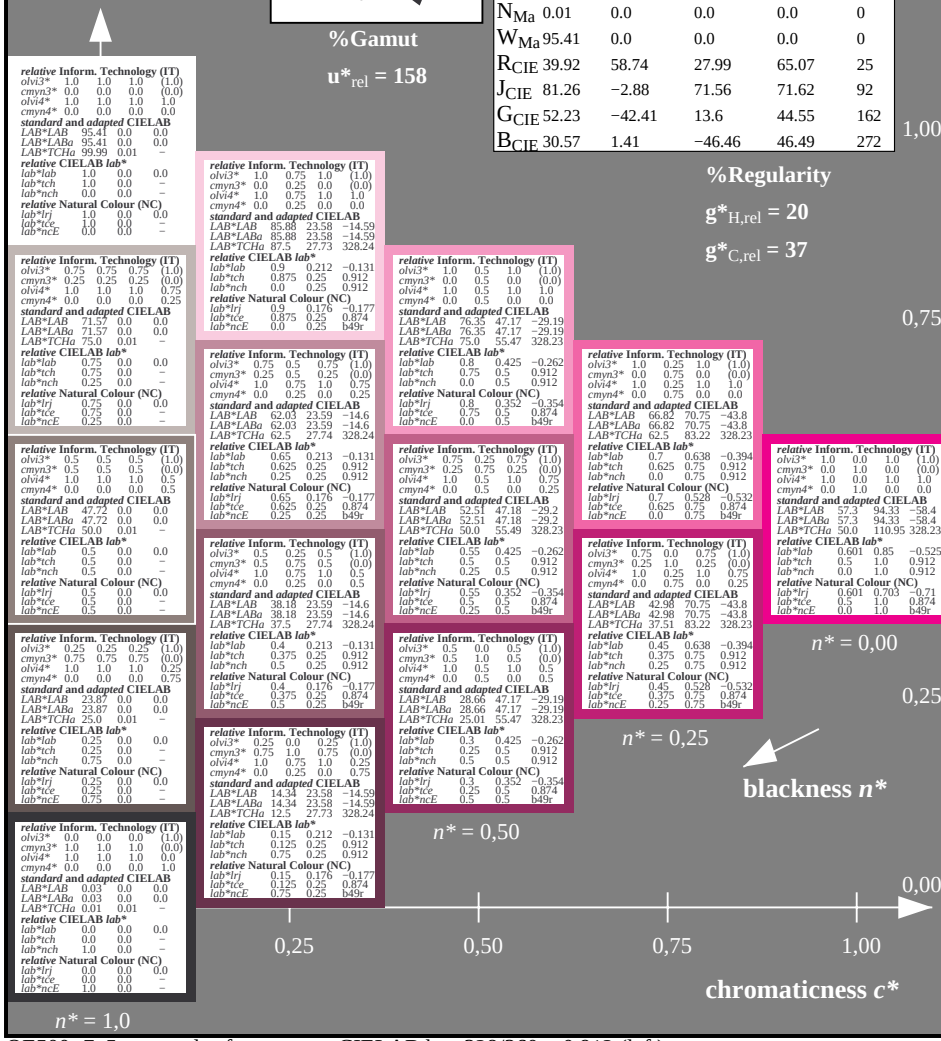
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

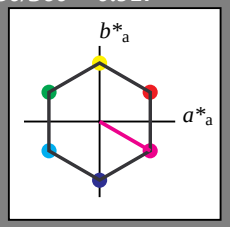
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

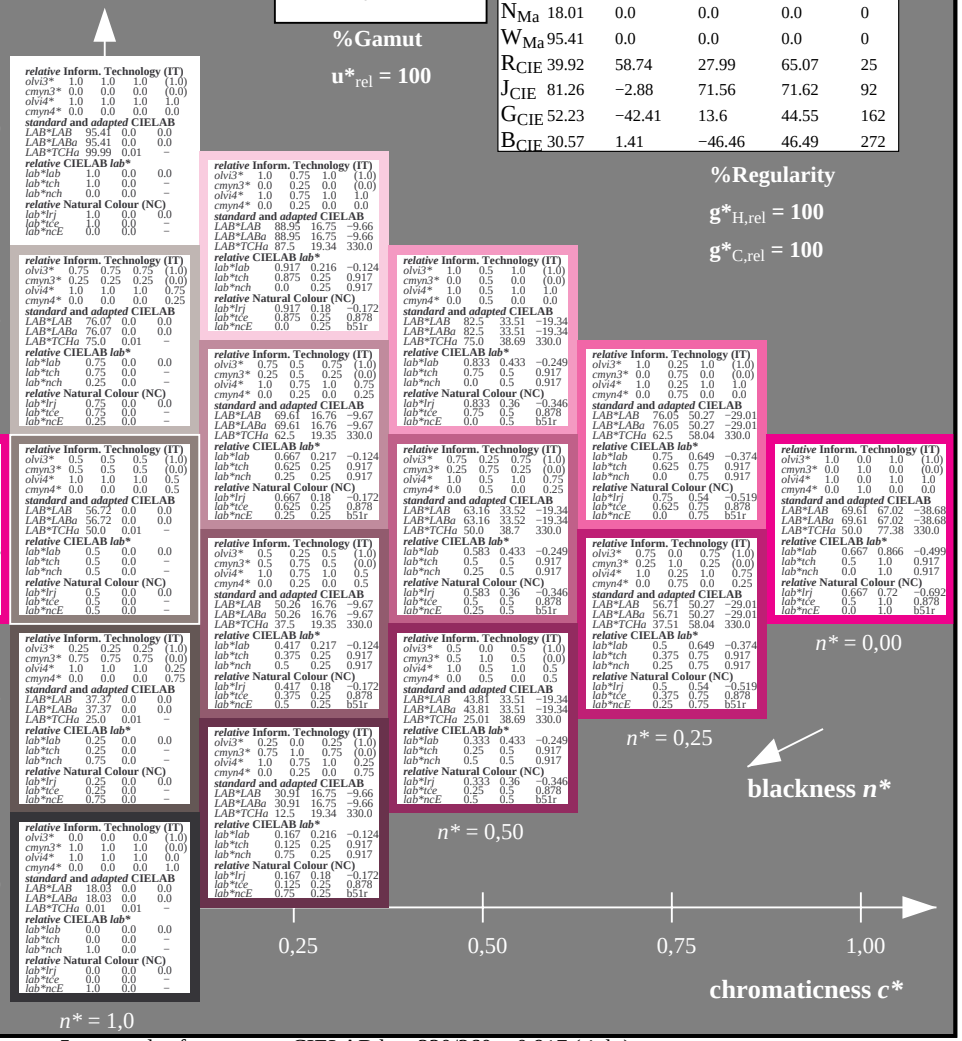
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

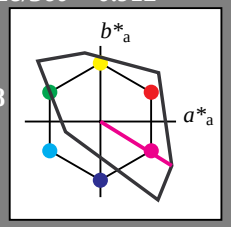
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

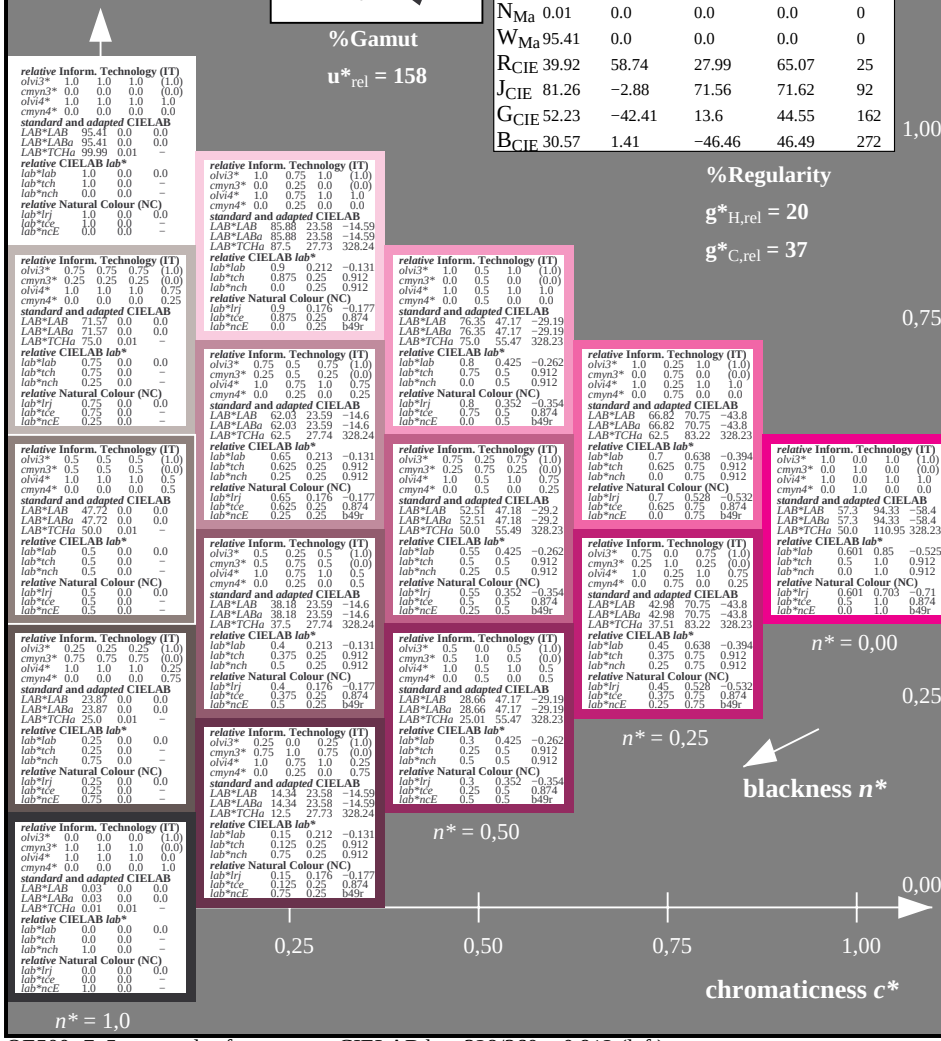
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

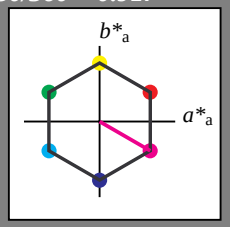
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

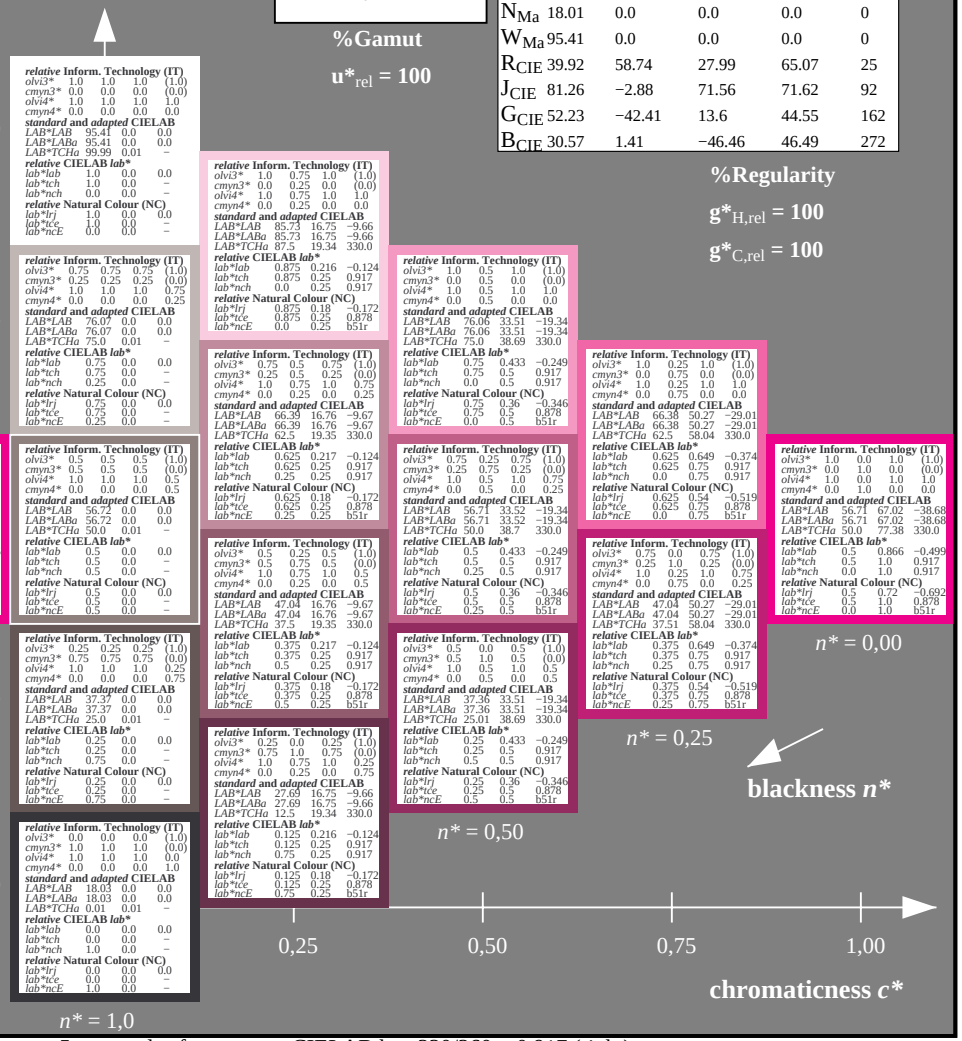
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

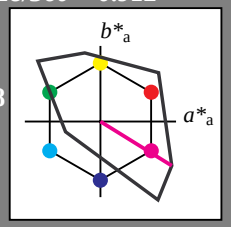
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

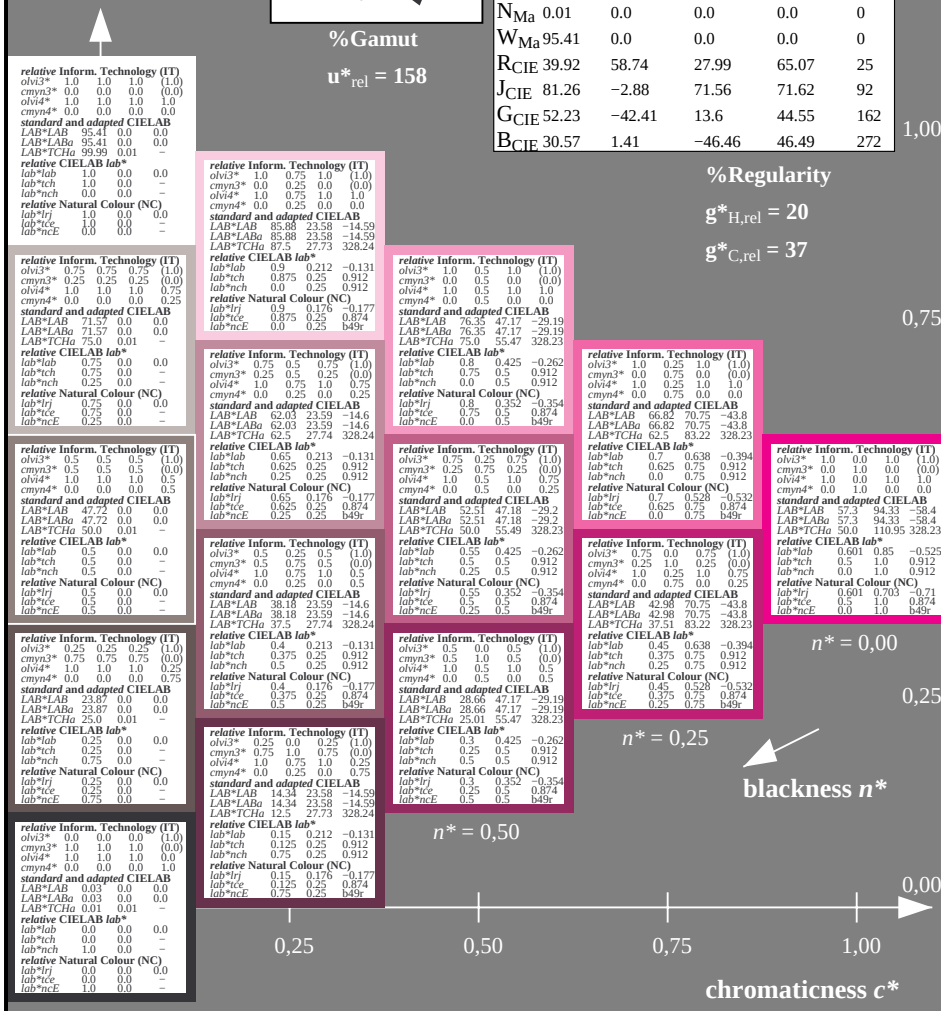
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$

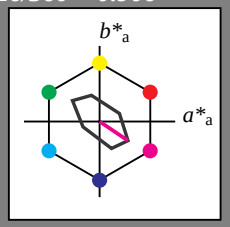
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

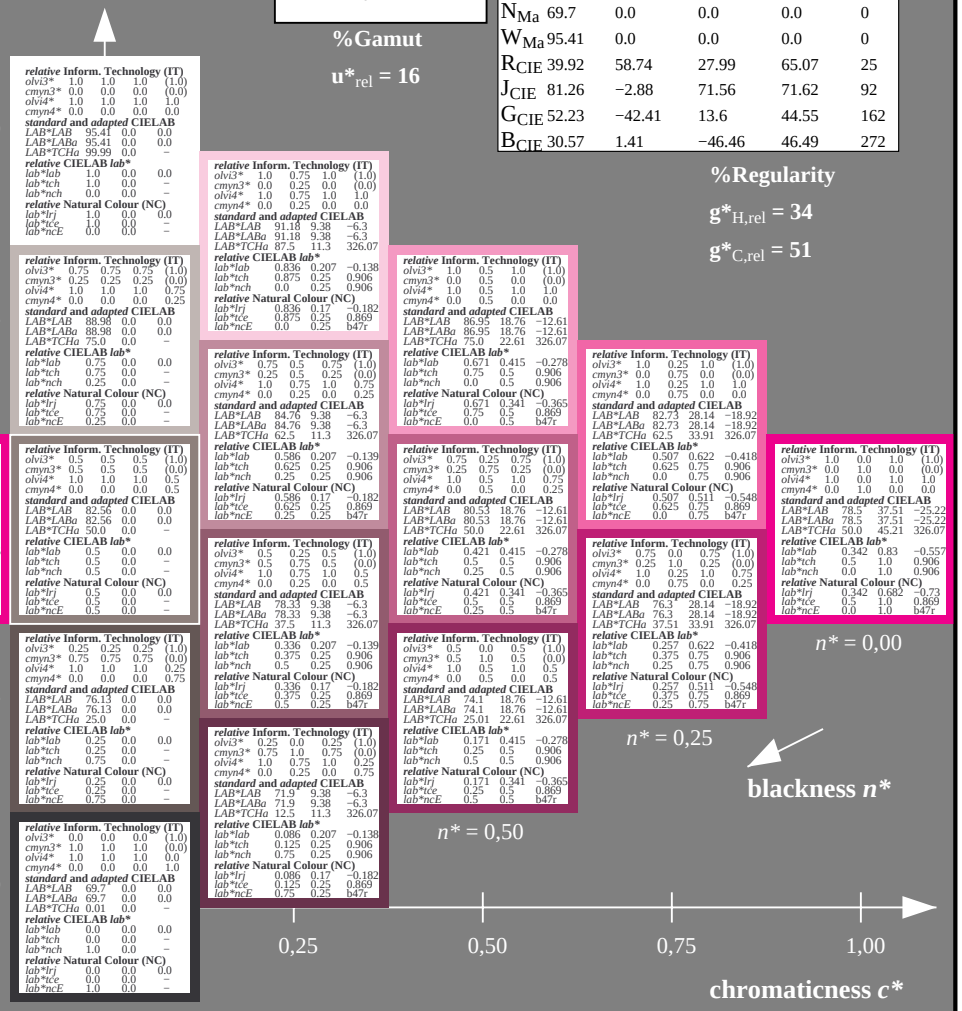
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

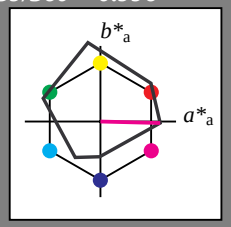


5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

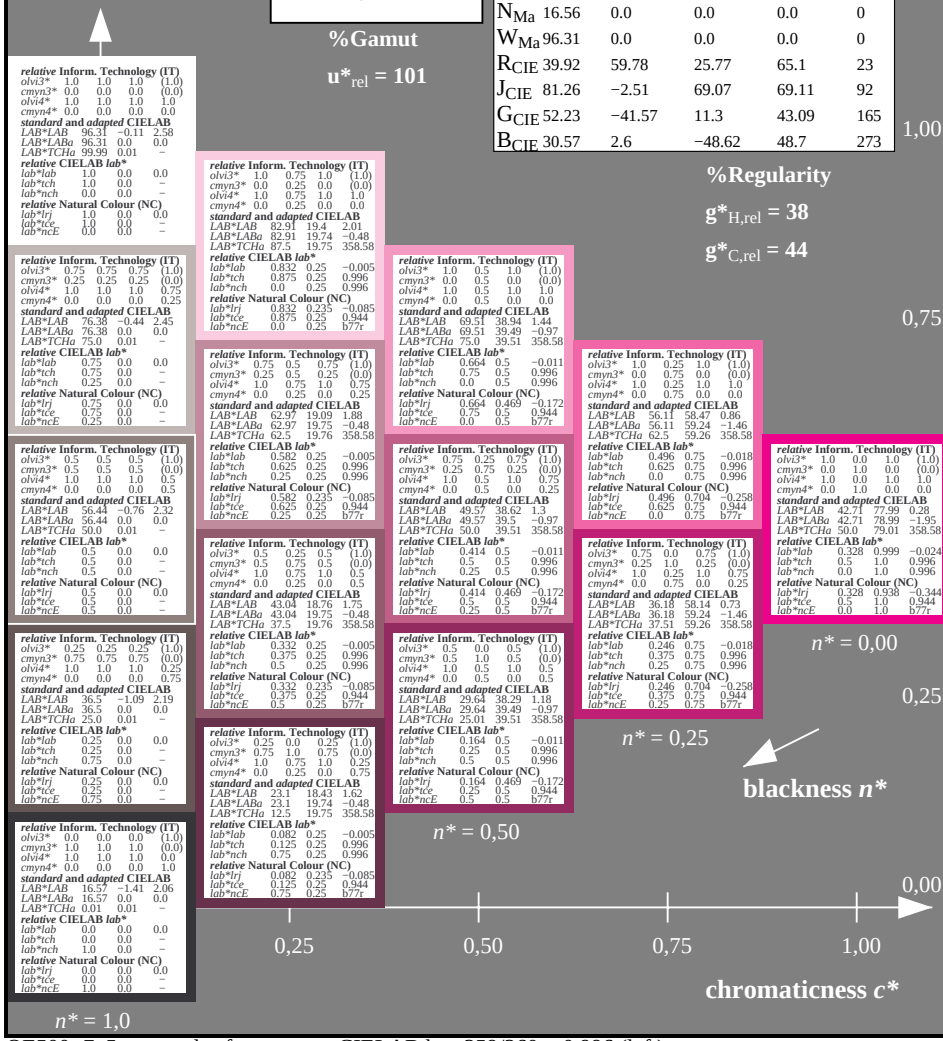
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

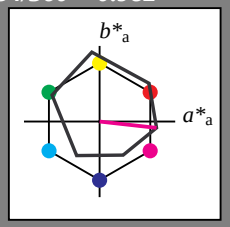


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

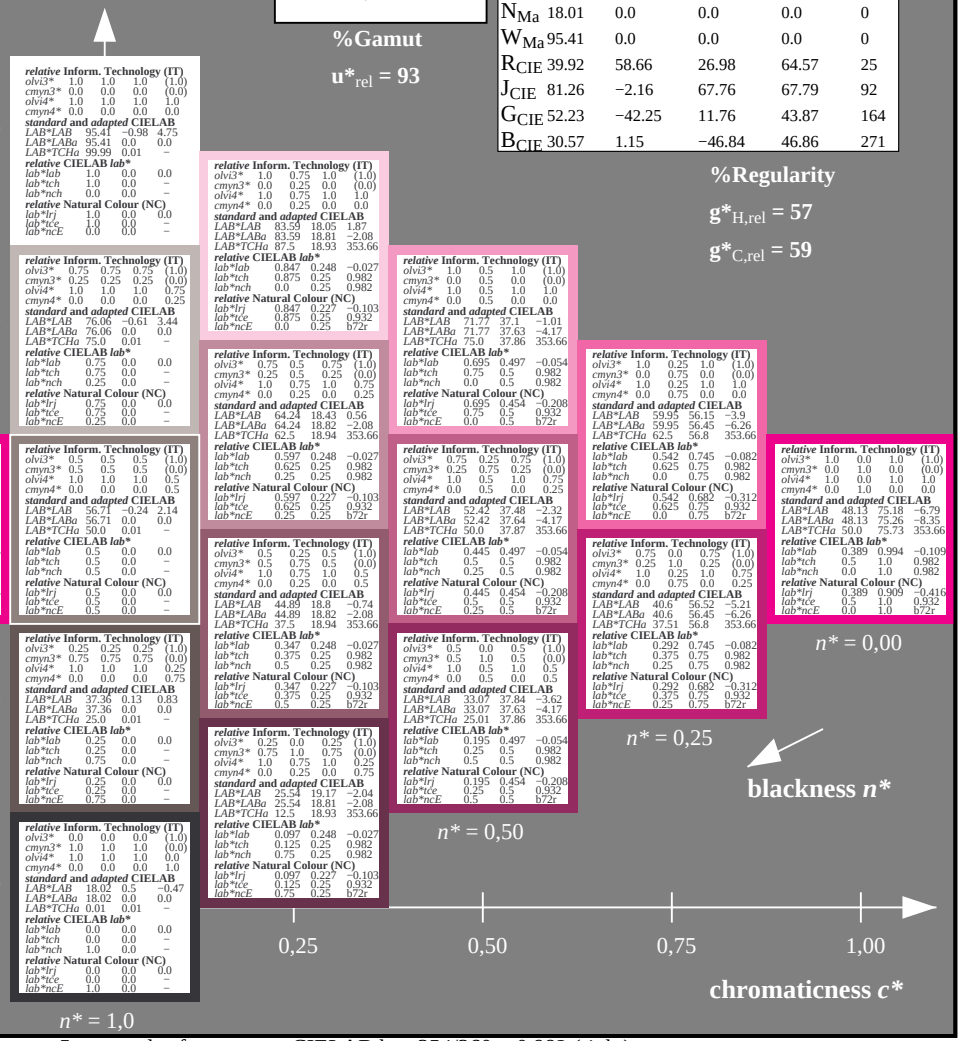
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

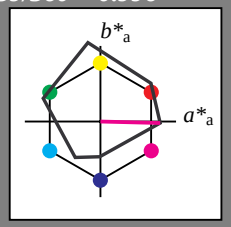


5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

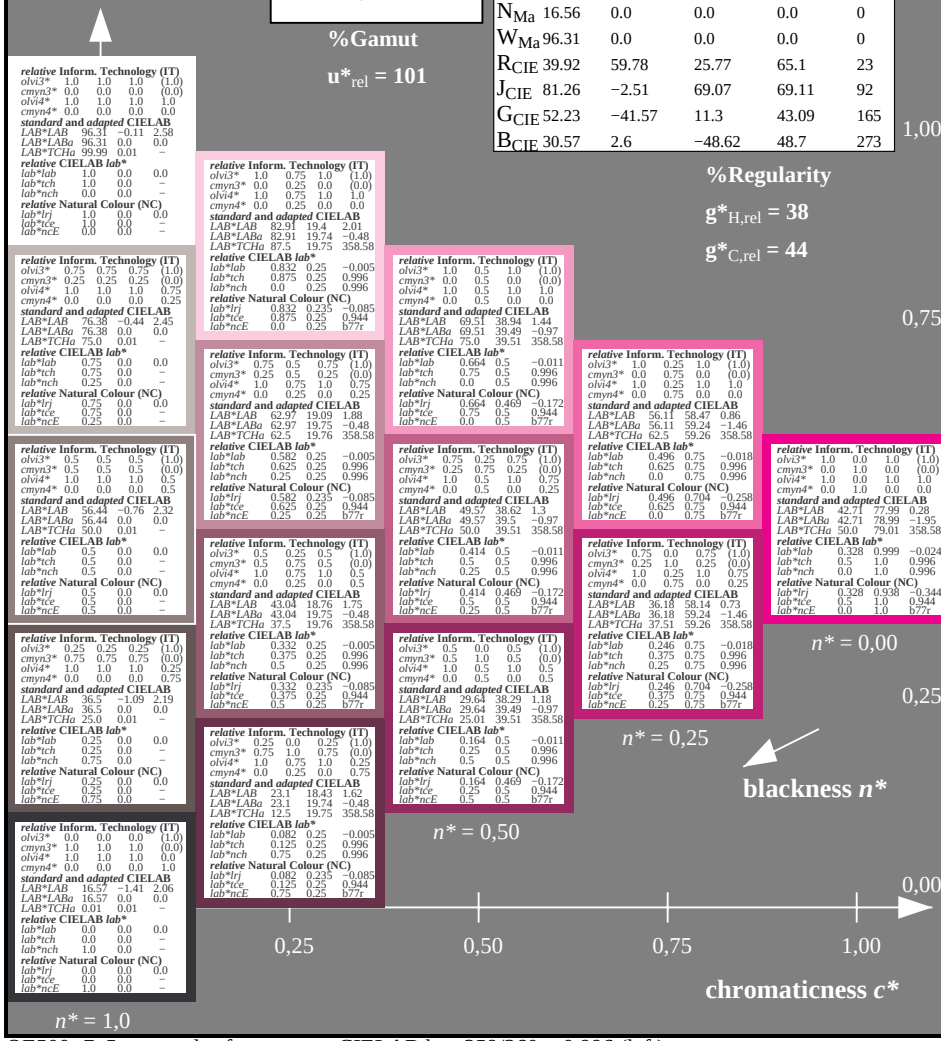
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

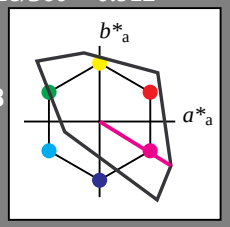


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

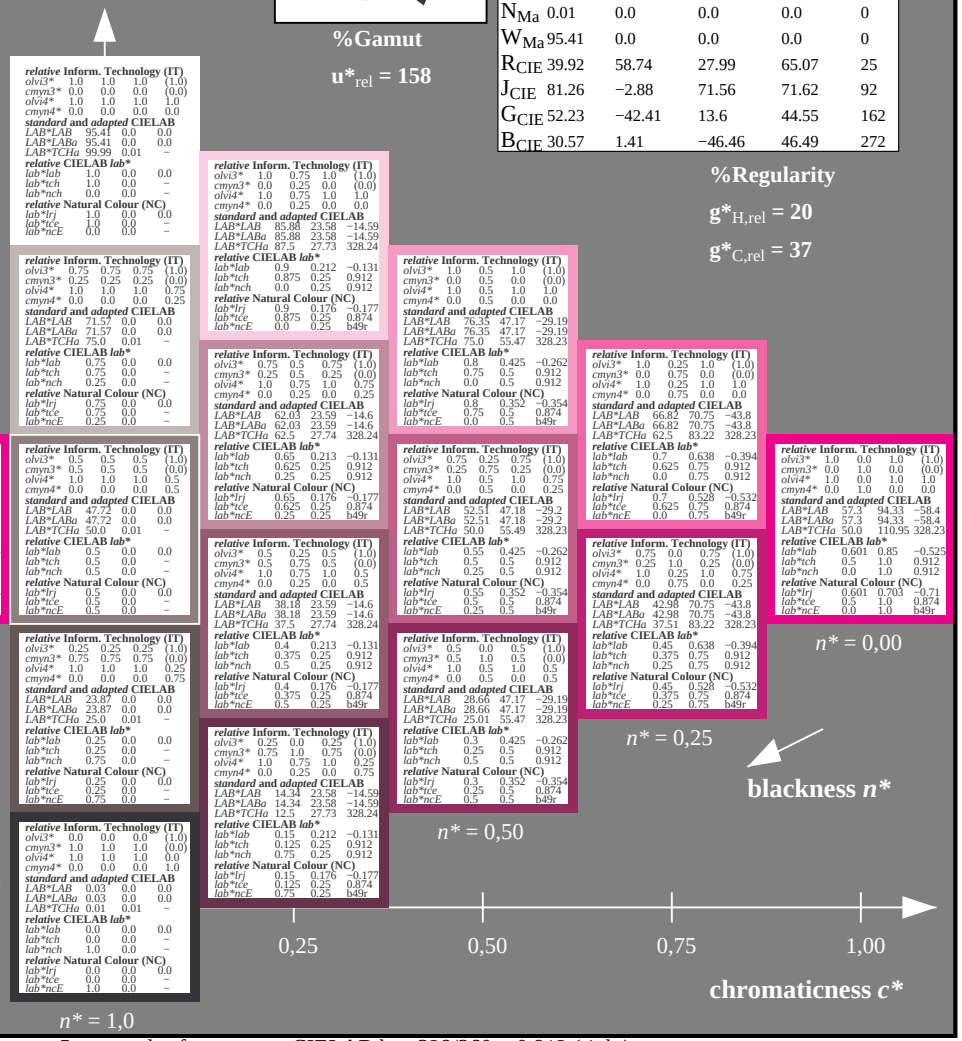
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

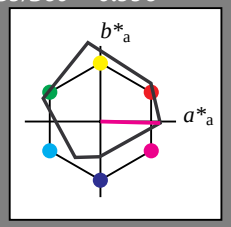


5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 359/360 = 0.996$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

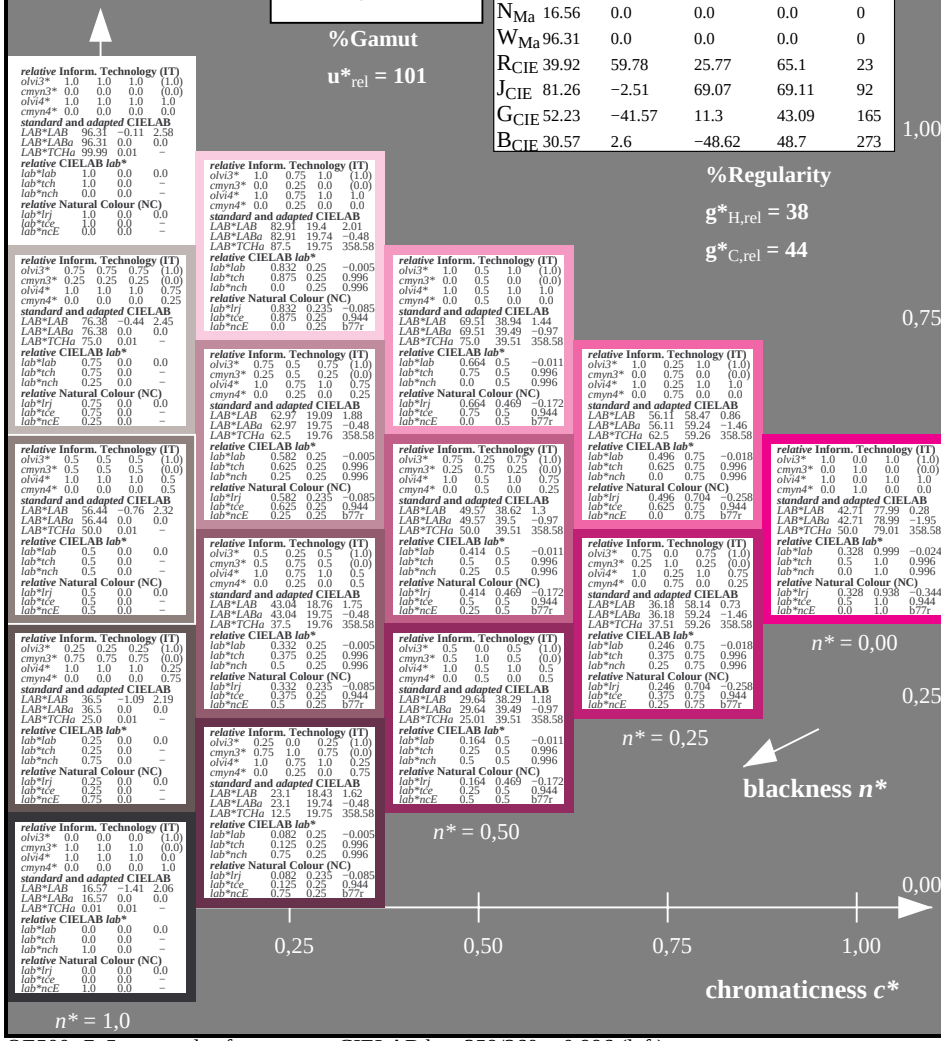
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

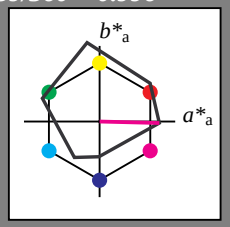


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 359/360 = 0.996$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

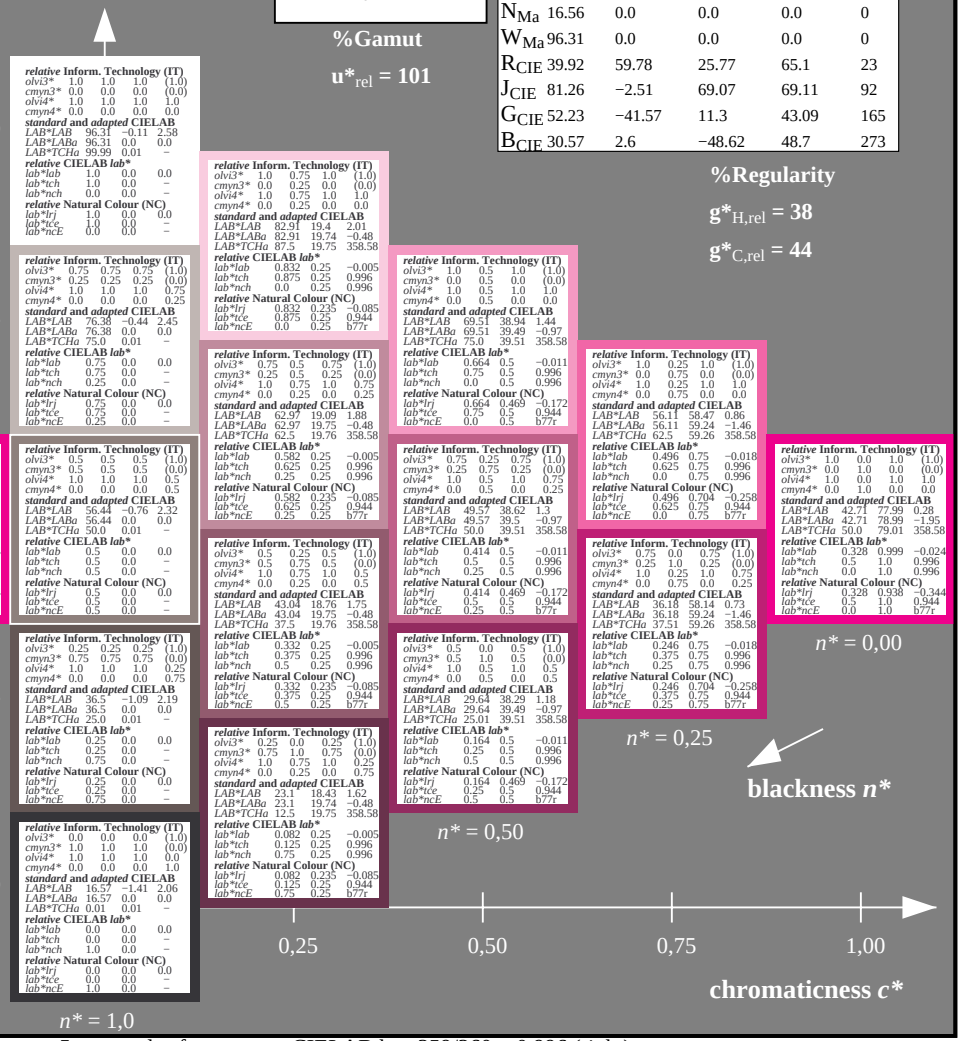
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

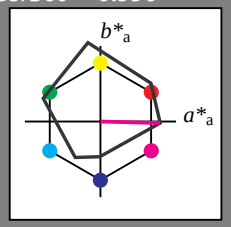


5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

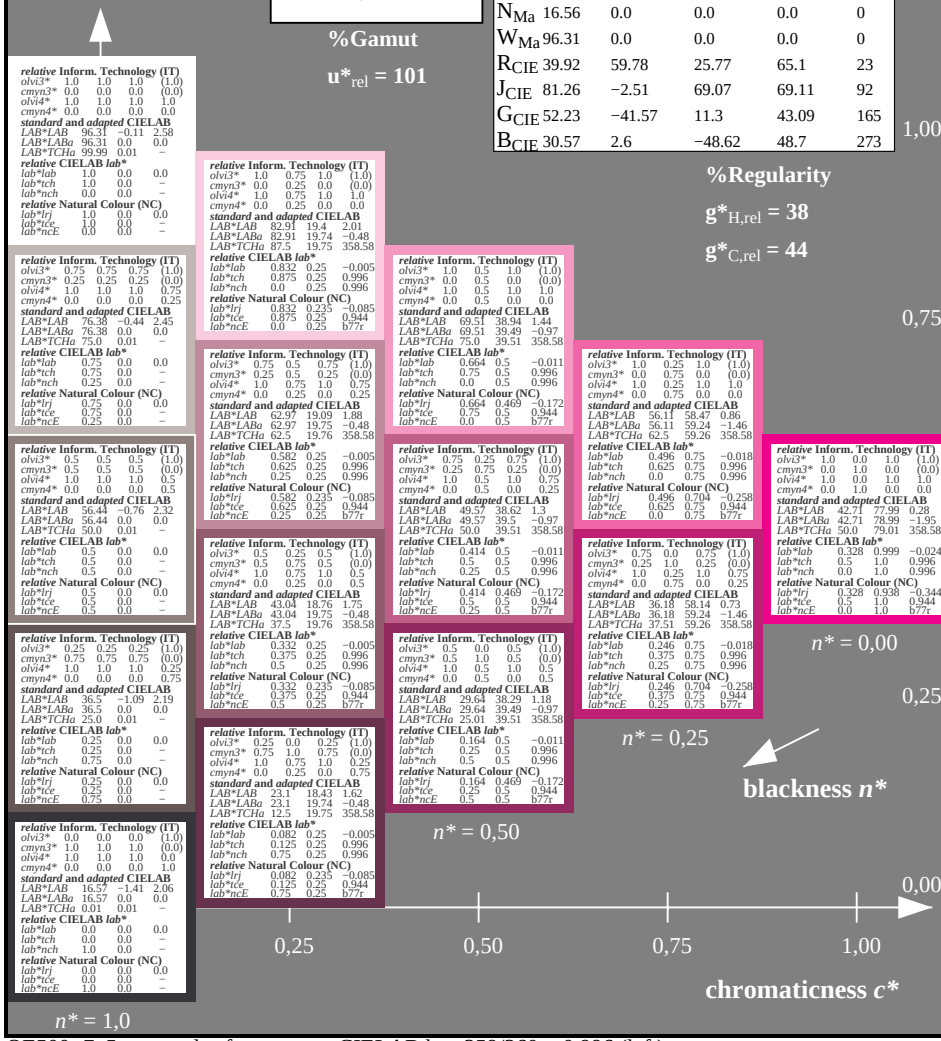
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

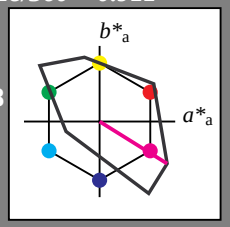


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

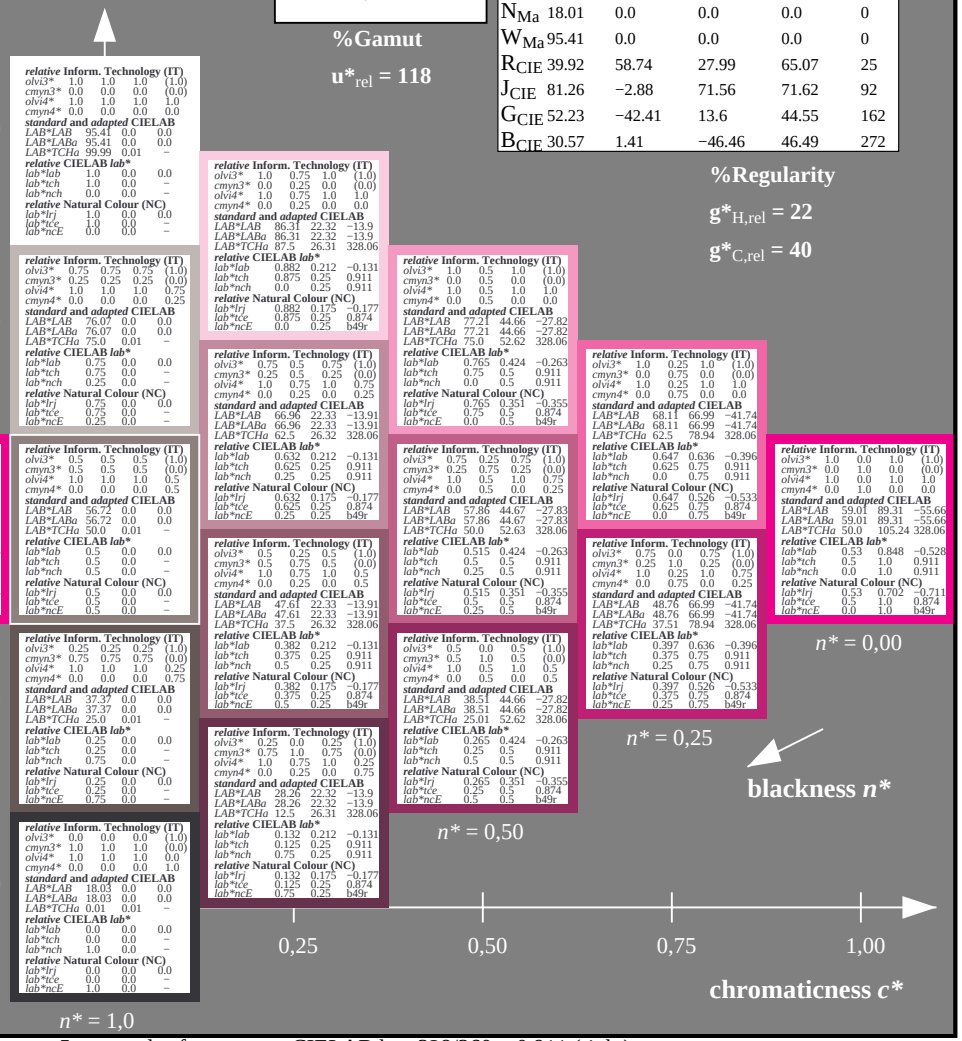
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

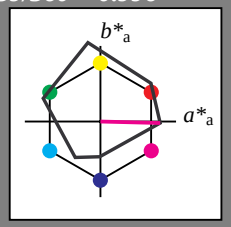


5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

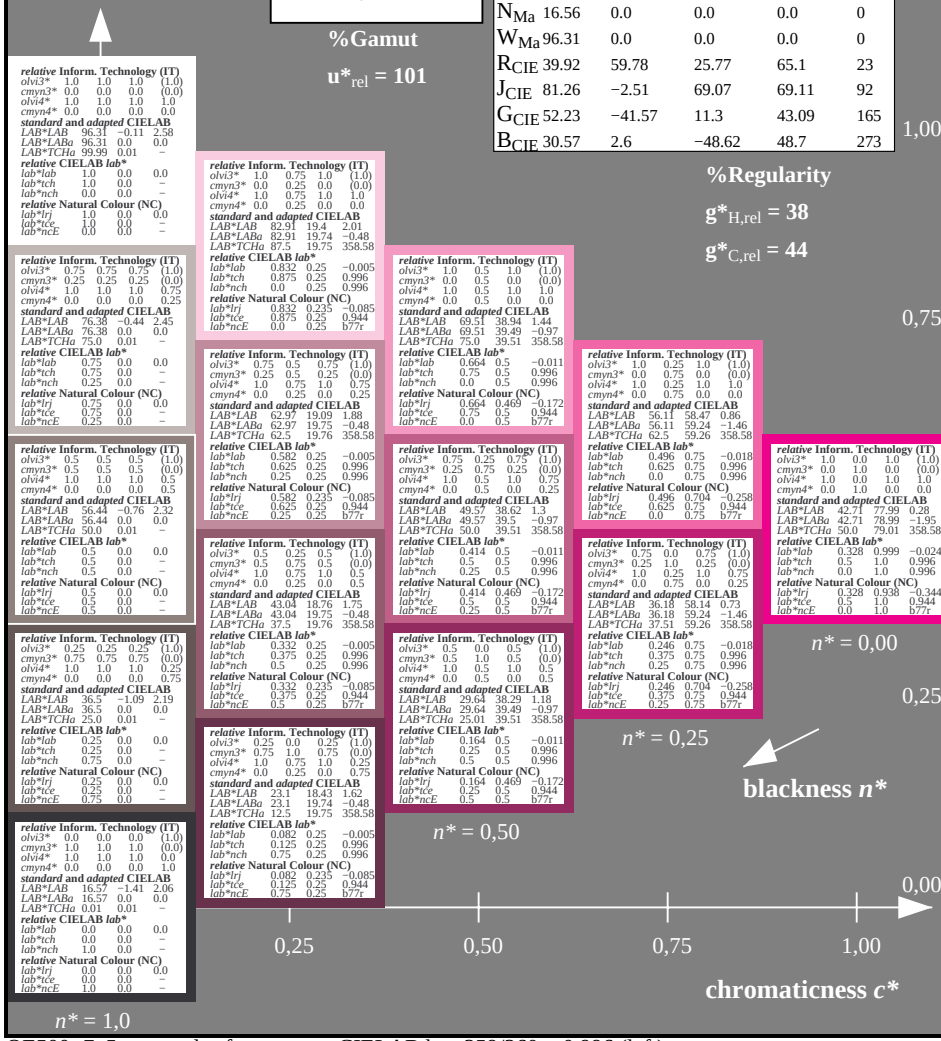
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

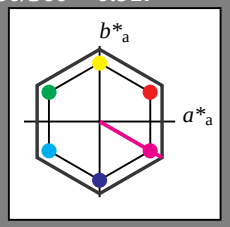


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

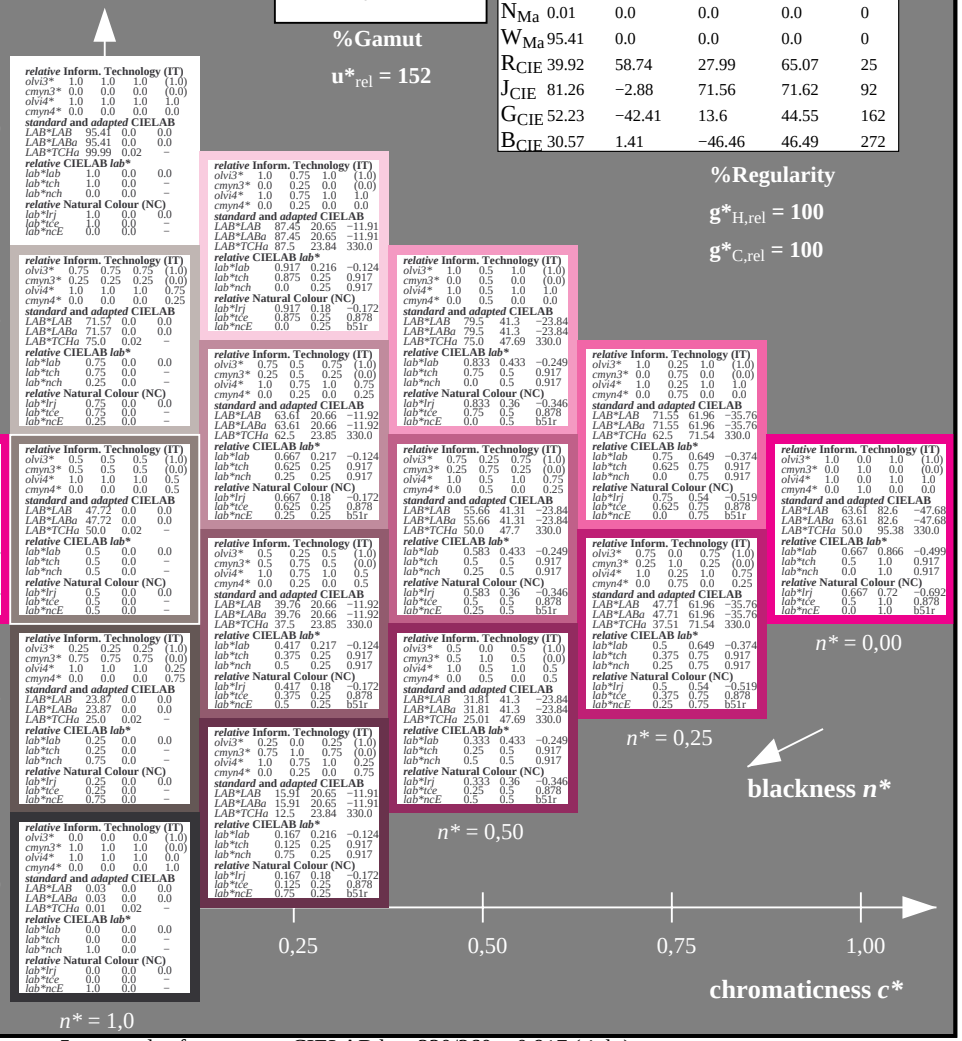
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



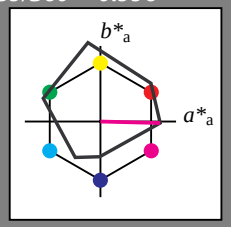
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

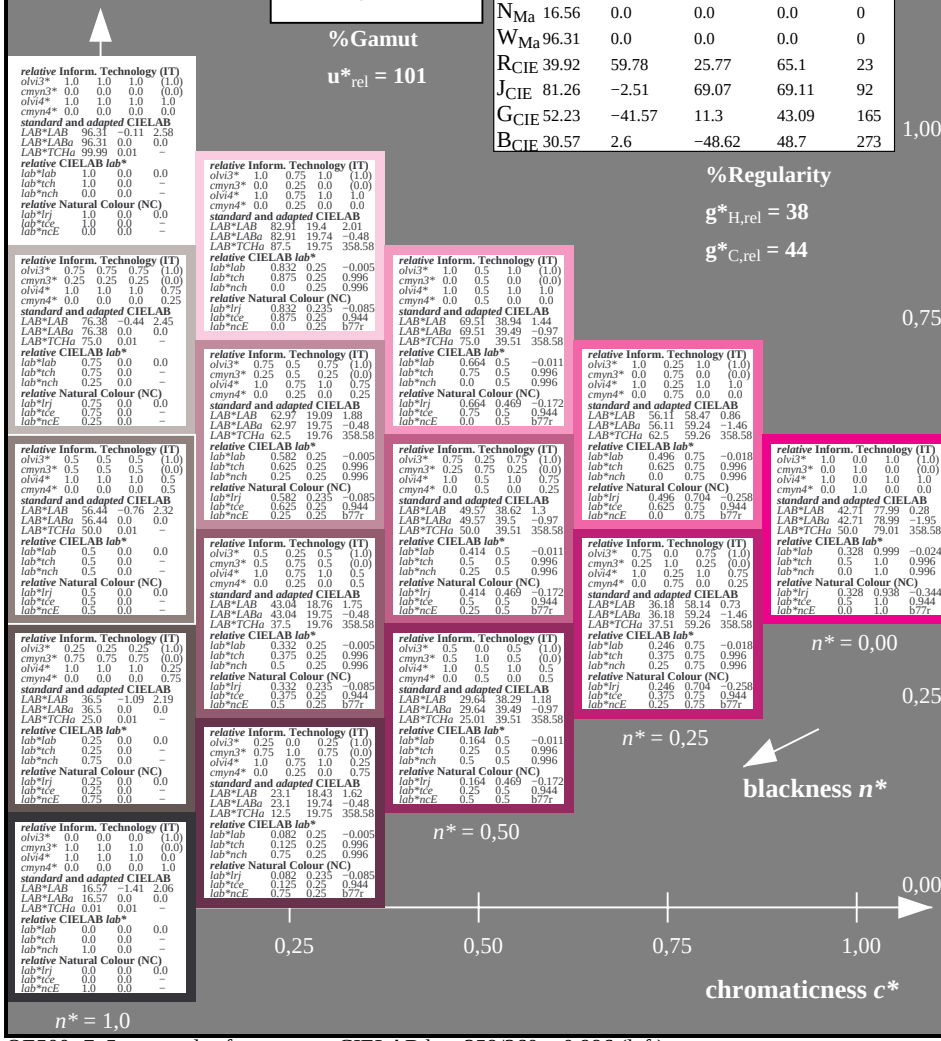
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



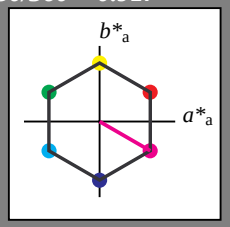
OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

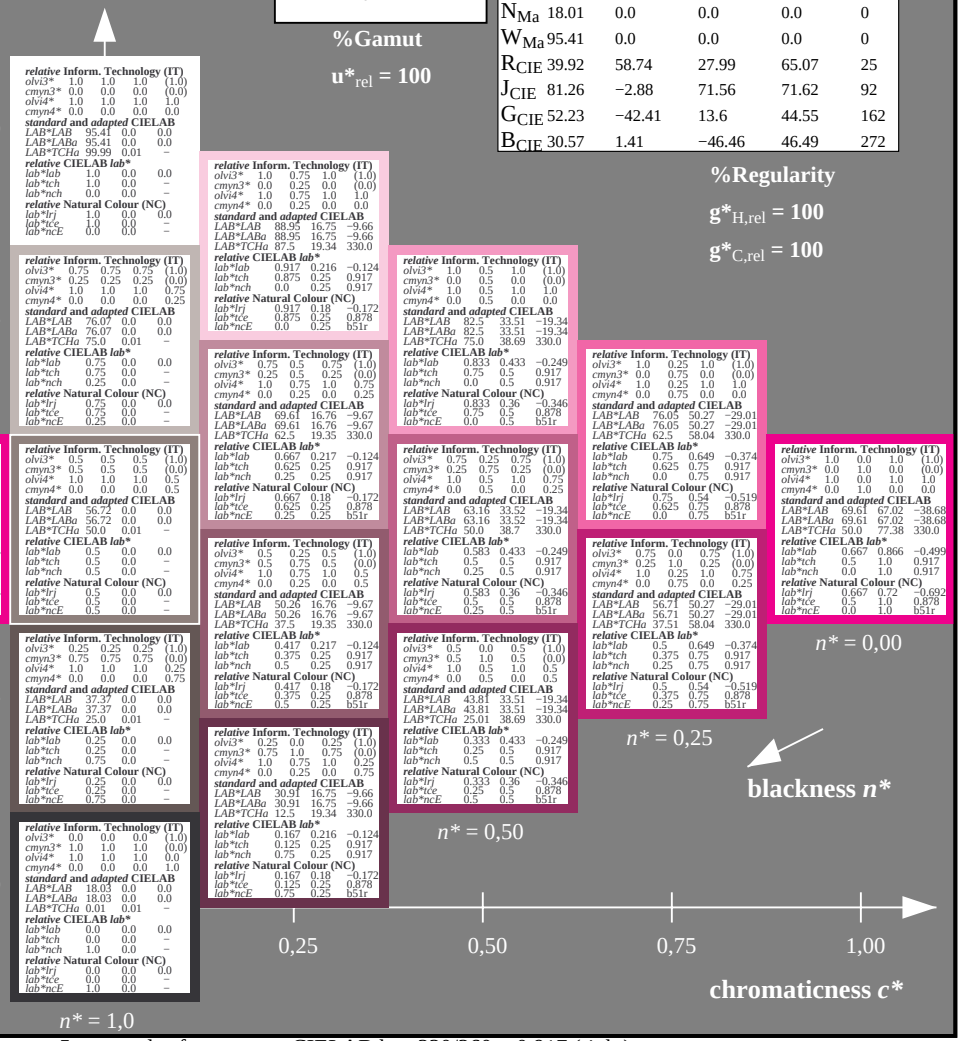
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

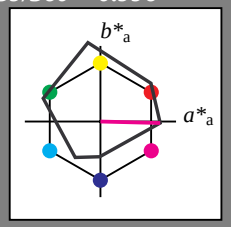


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

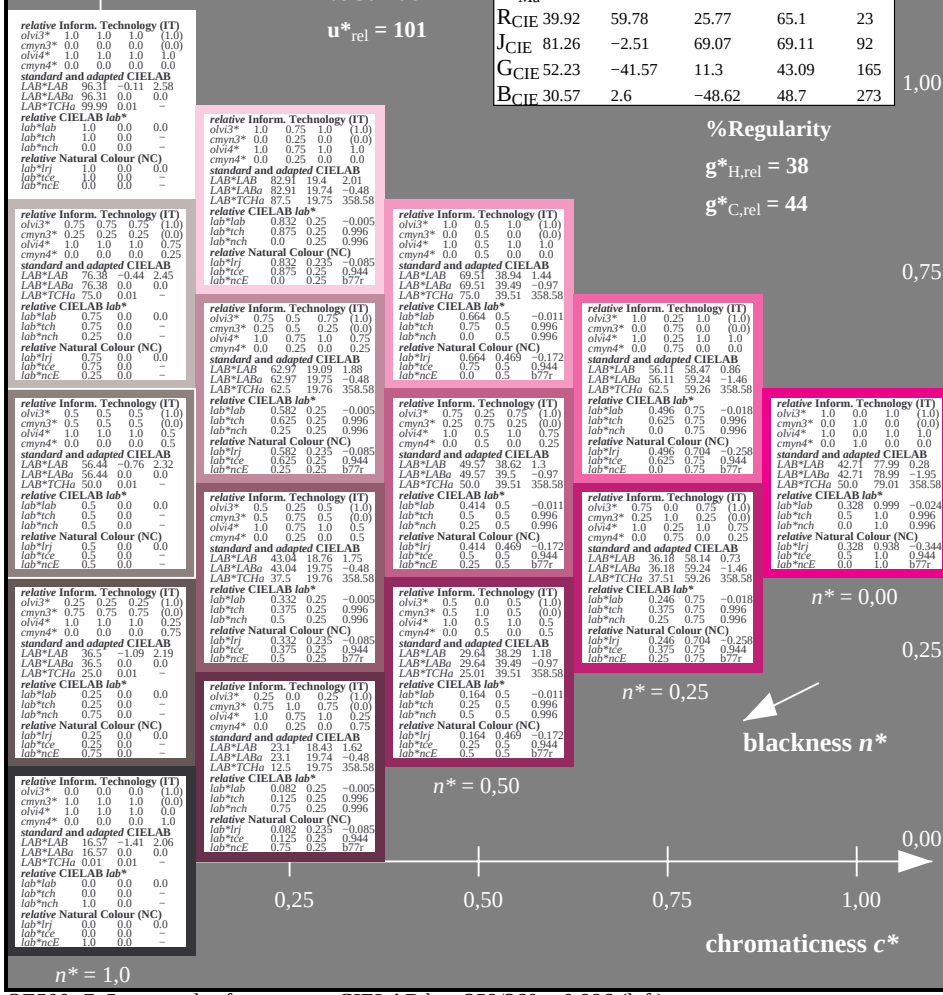
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

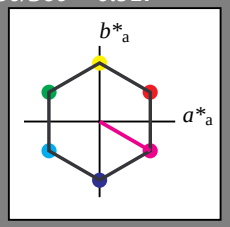


OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

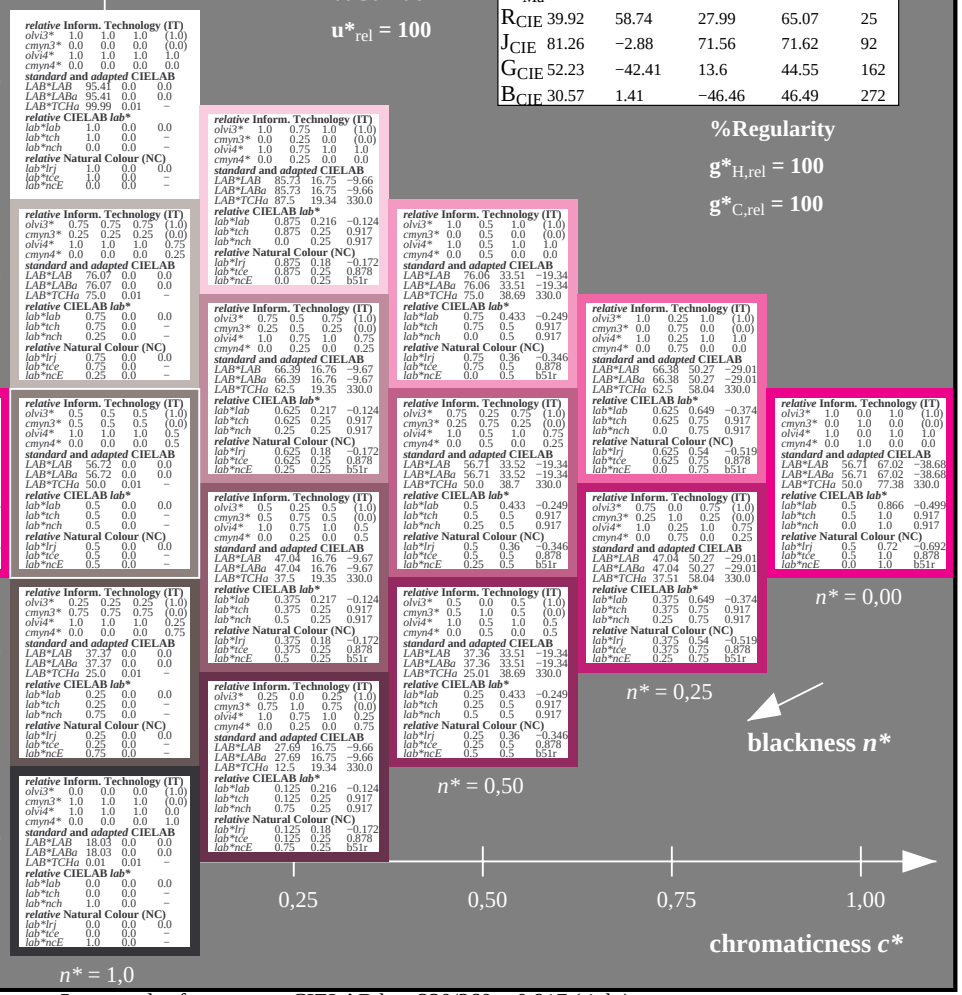
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



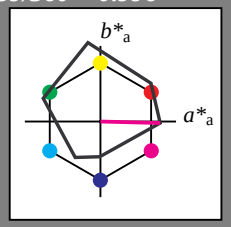
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

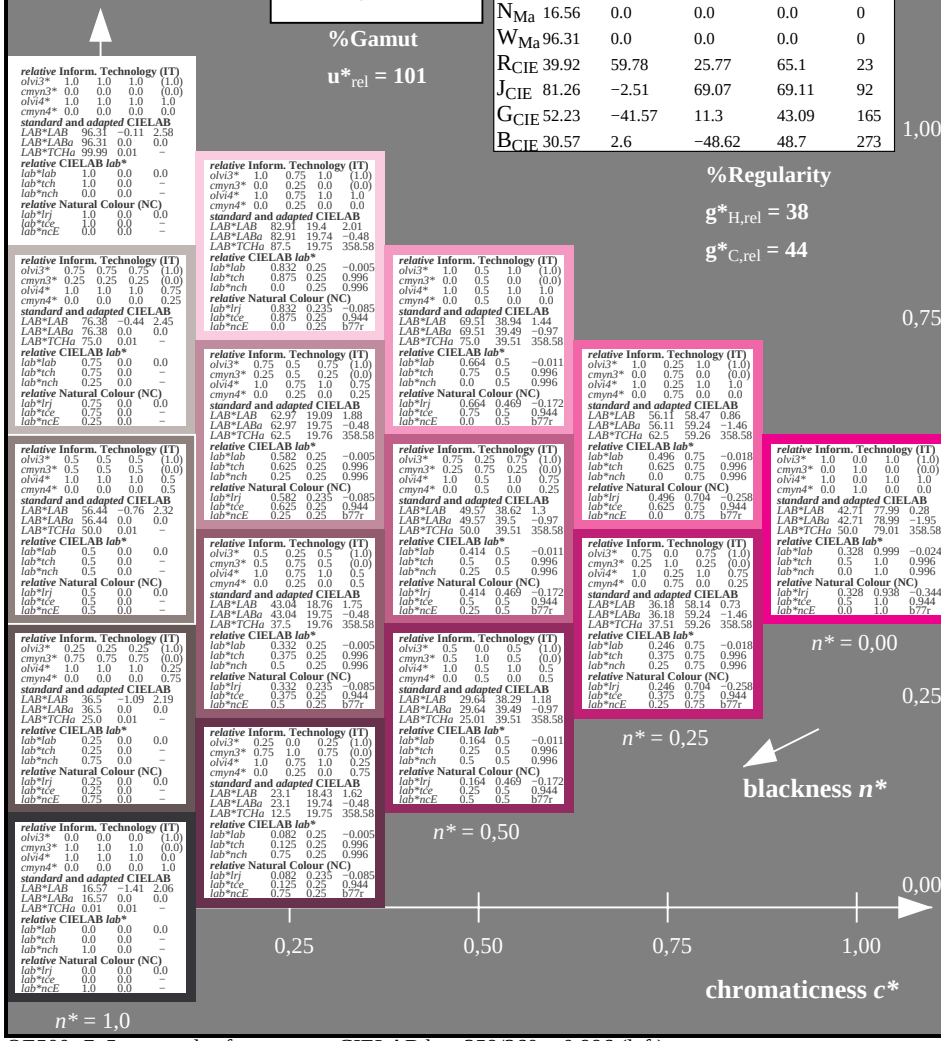
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



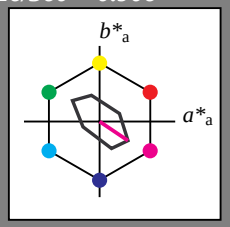
OE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

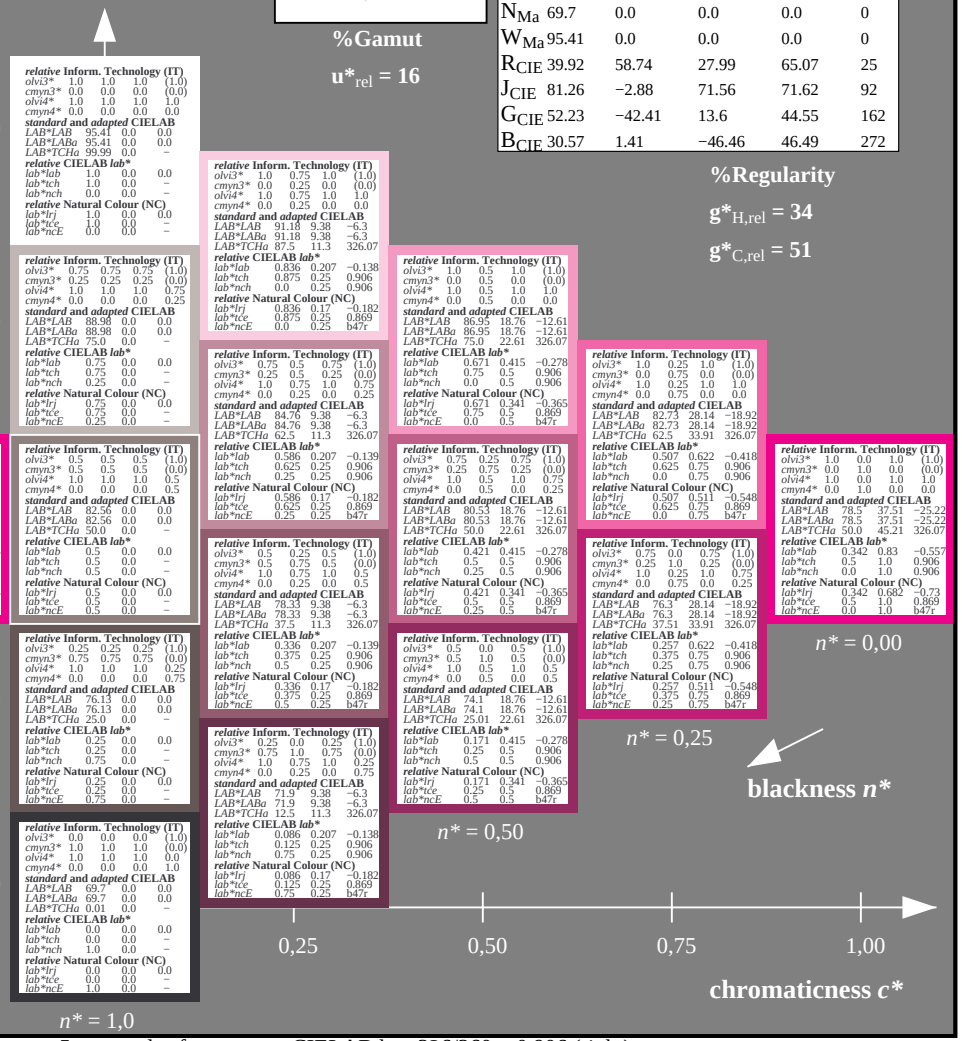
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

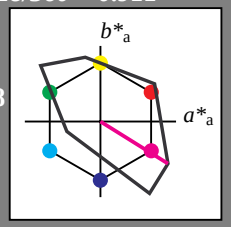


5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

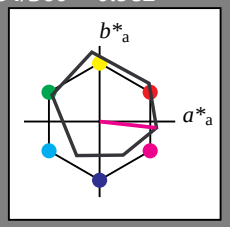
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Television Luminous System TLS18

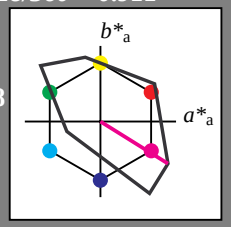
for hue $h^* = lab^*h = 328/360 = 0.911$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

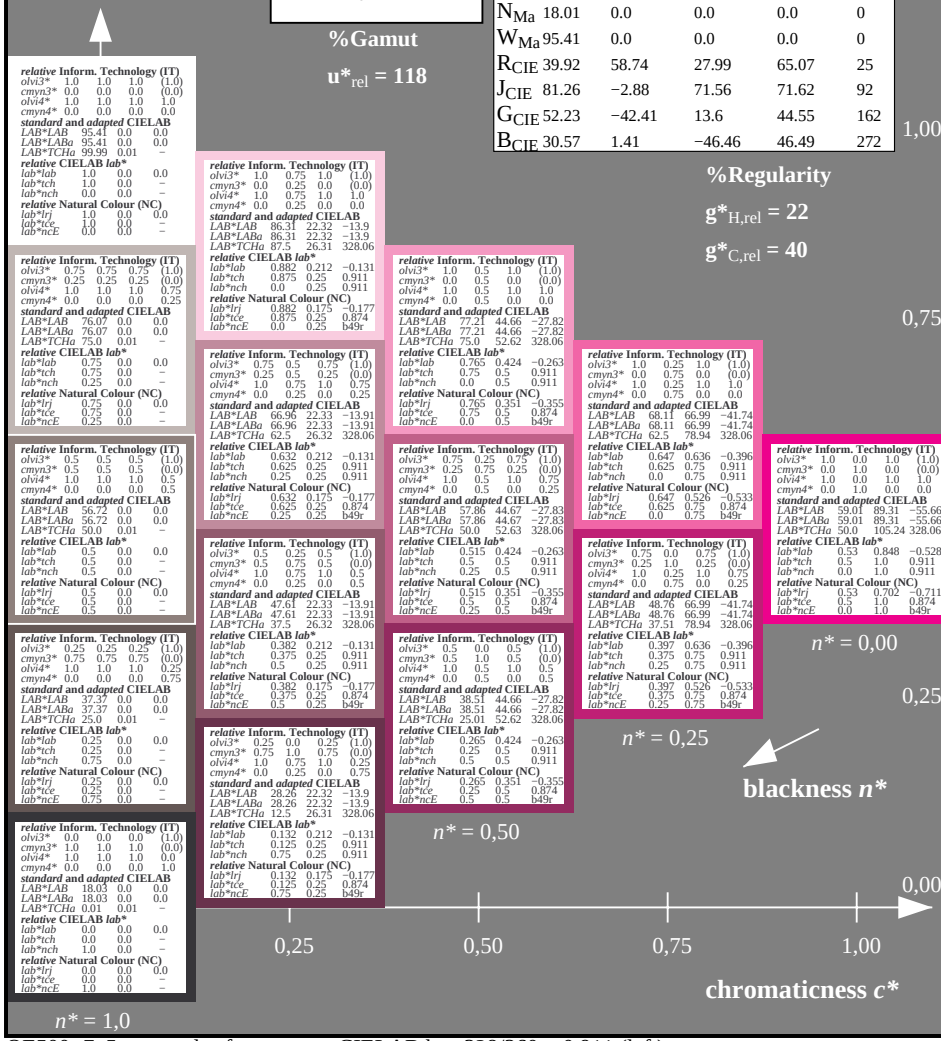
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Television Luminous System TLS00

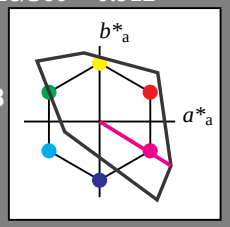
for hue $h^* = lab^*h = 328/360 = 0.912$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

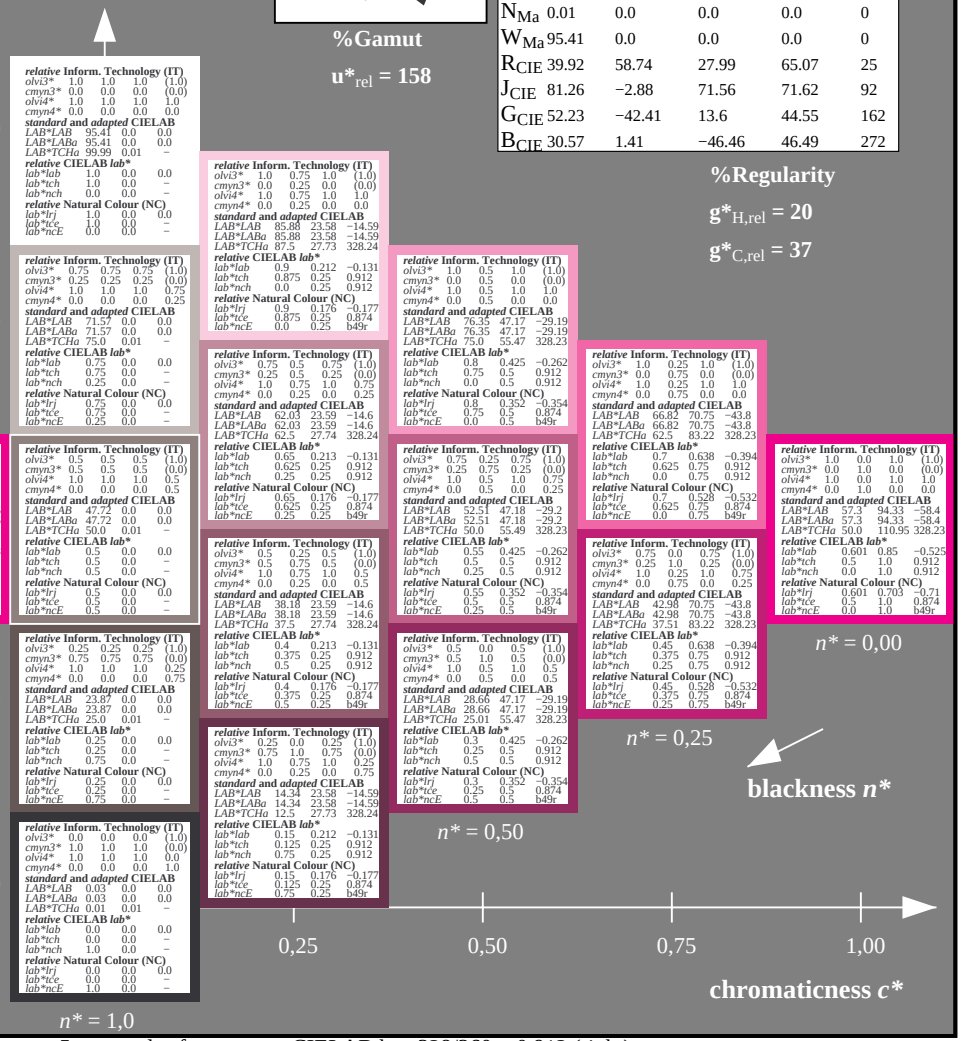
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

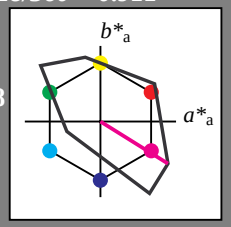
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

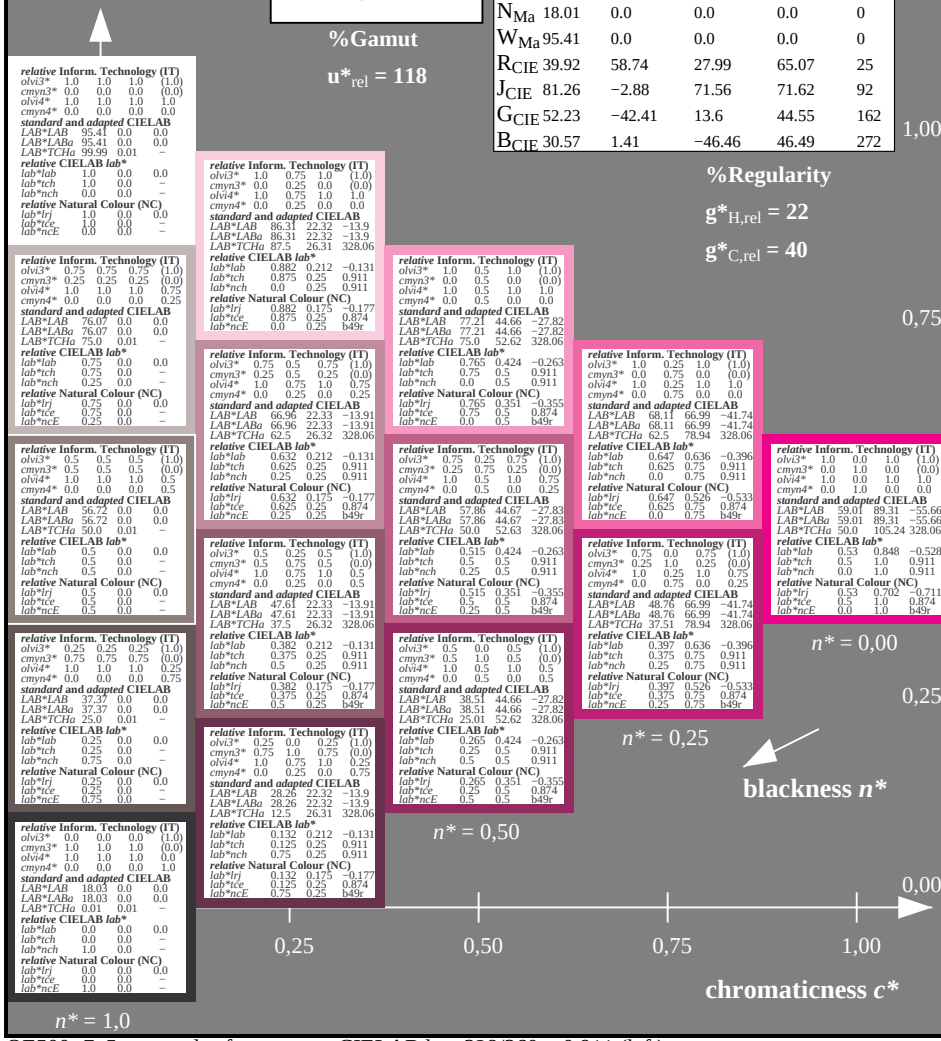
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

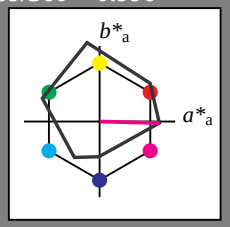
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

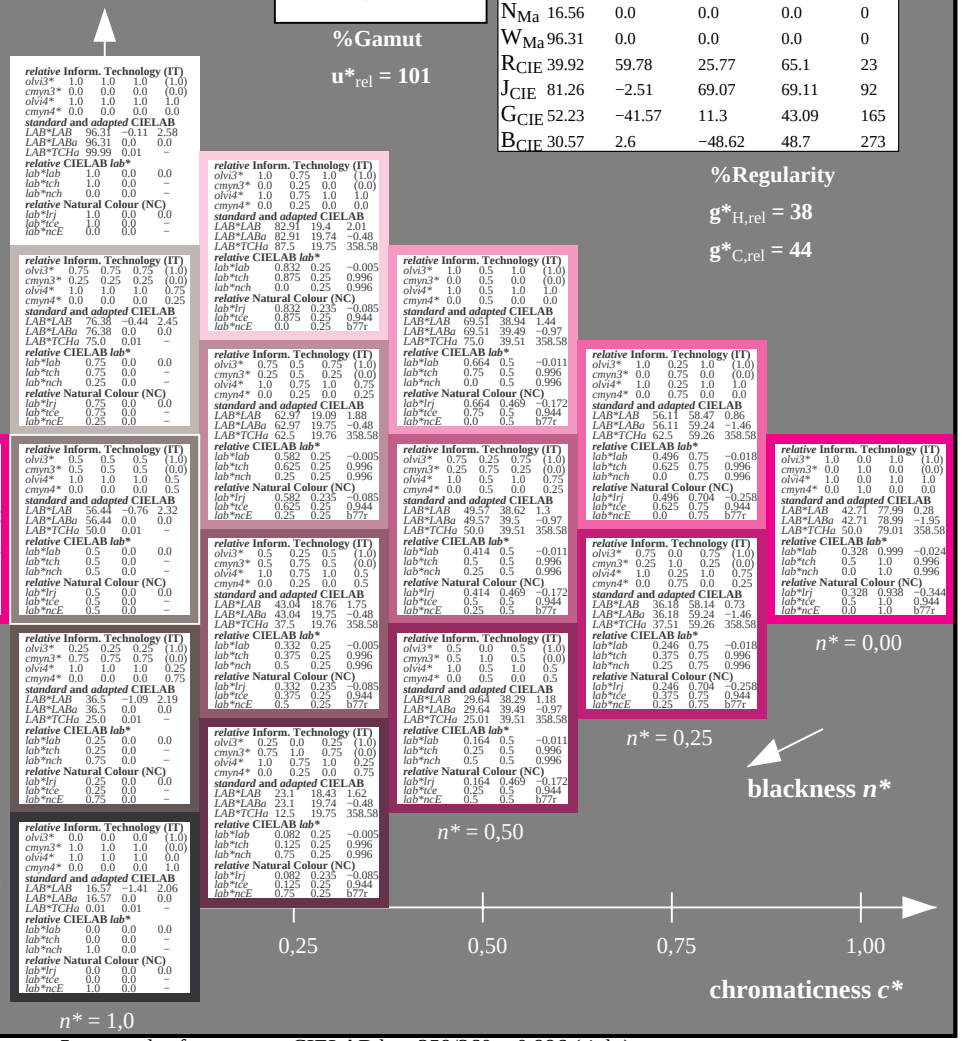
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

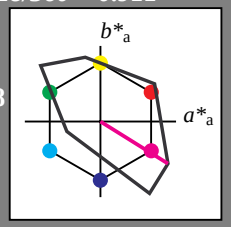


5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

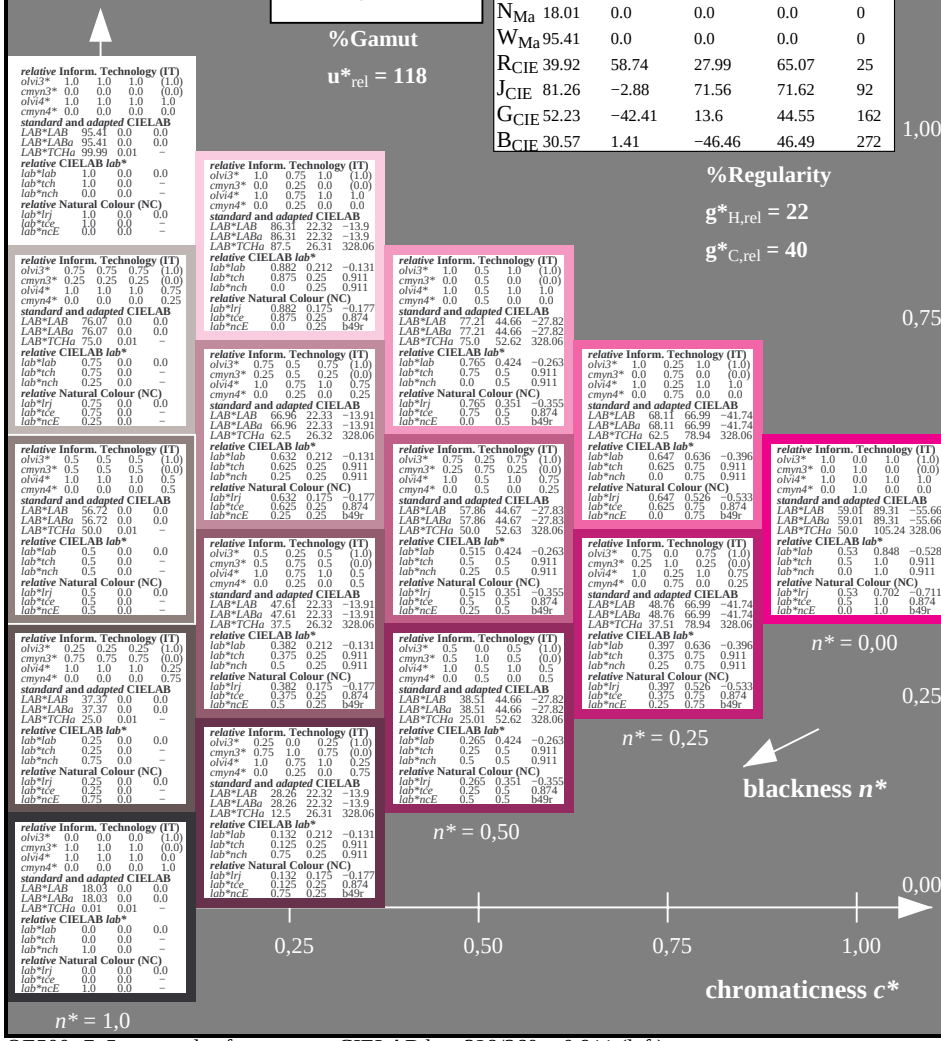
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

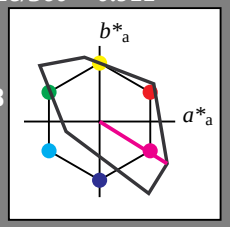


OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

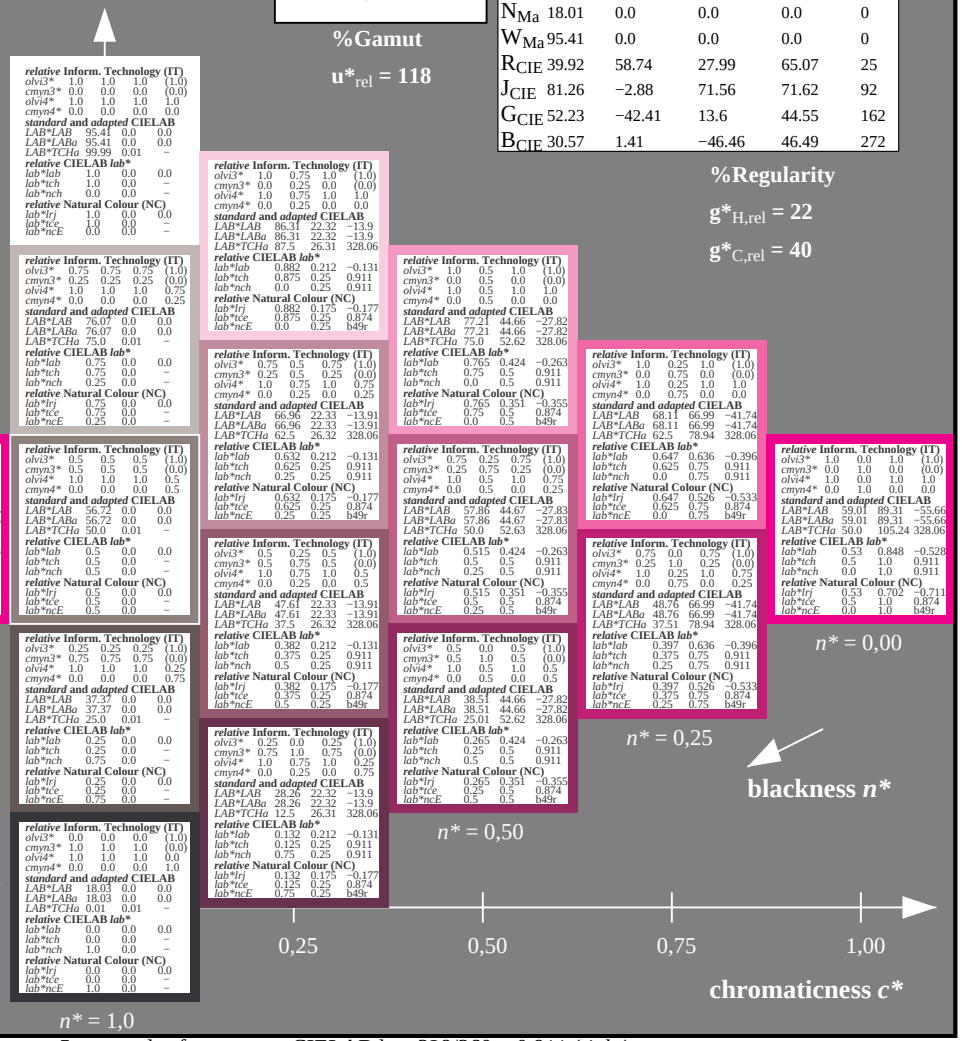
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Television Luminous System TLS18

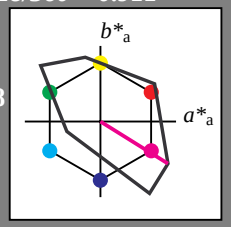
for hue $h^* = lab^*h = 328/360 = 0.911$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

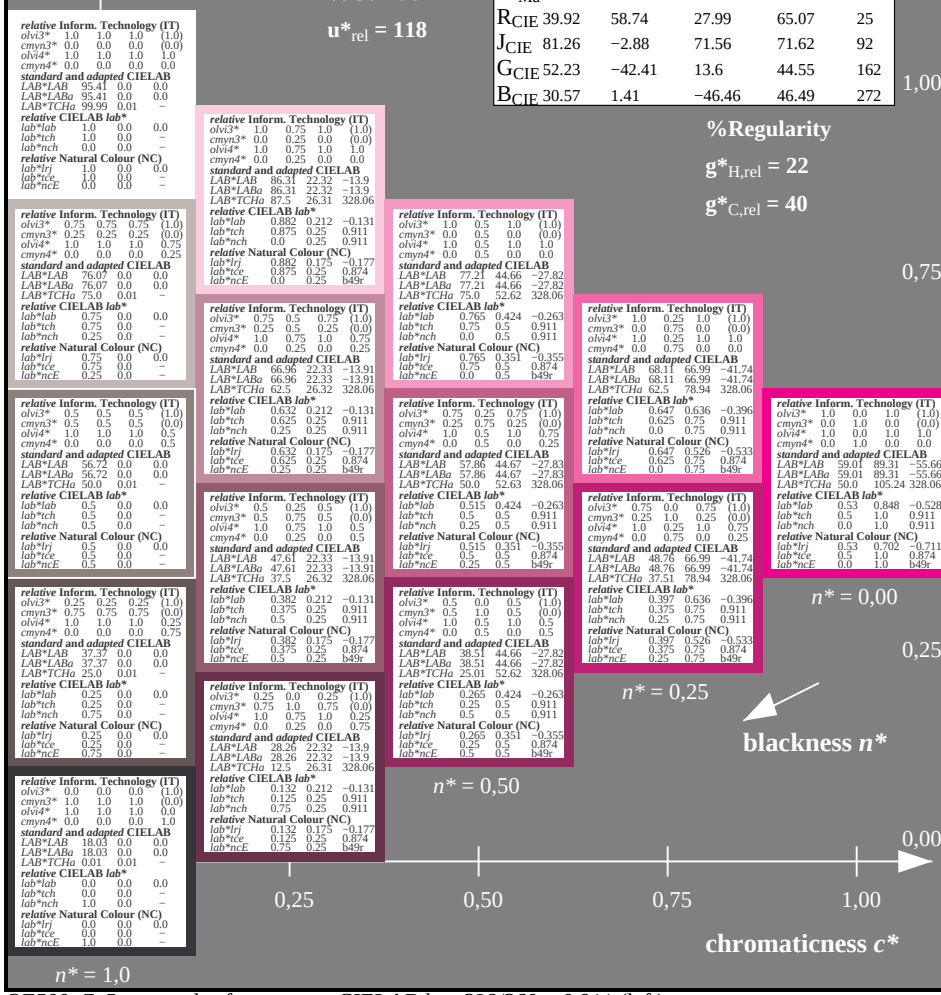
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Natural Luminous System NLS00

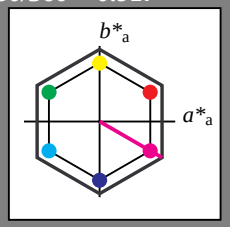
for hue $h^* = lab^*h = 330/360 = 0.917$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

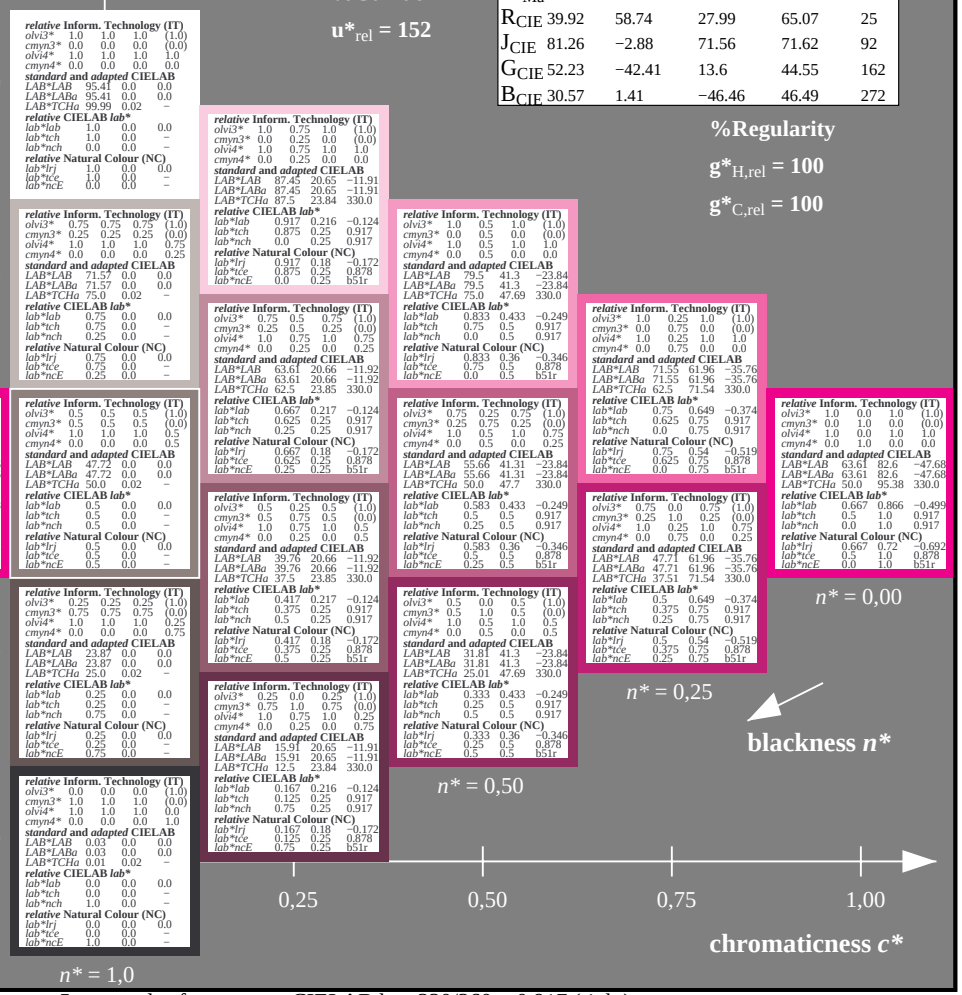
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

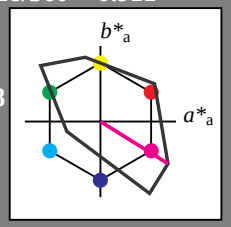


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

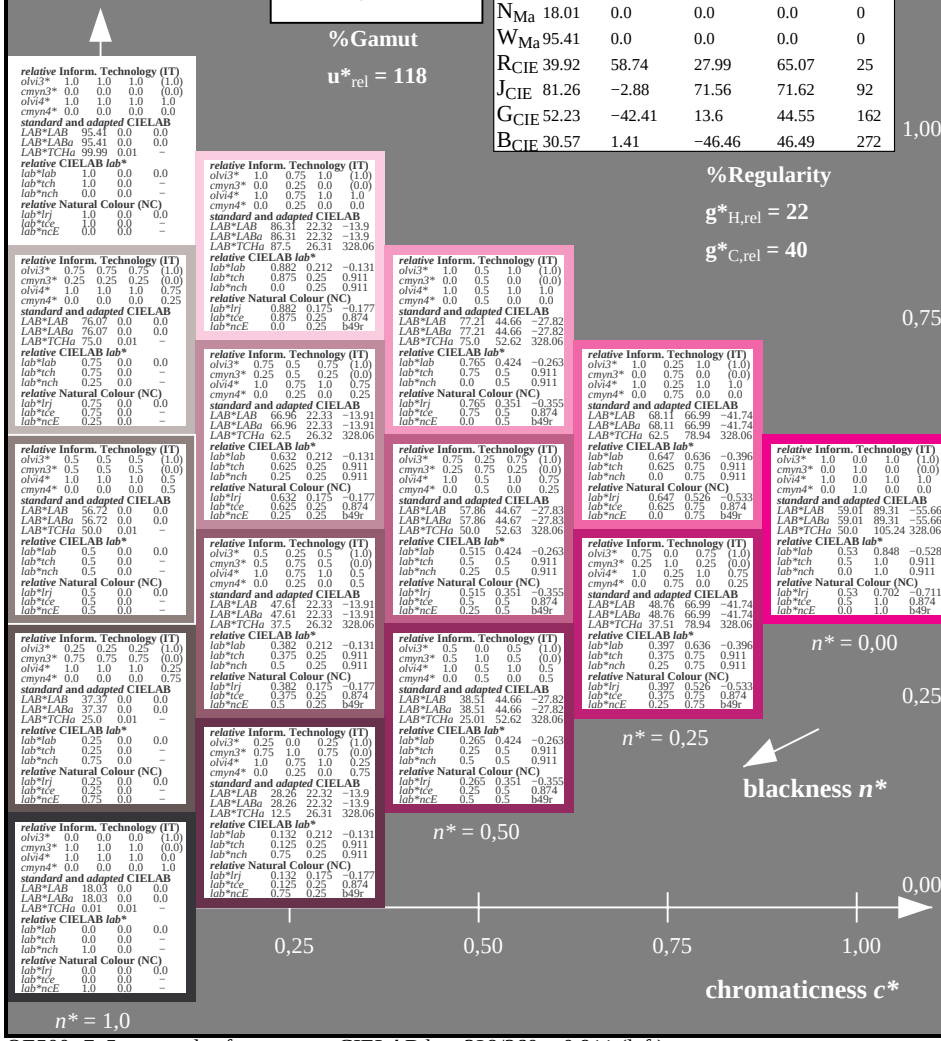
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

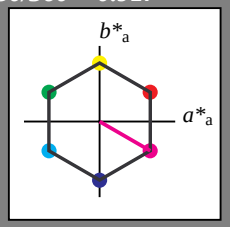
$g^*_{C,rel}$ = 40



Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

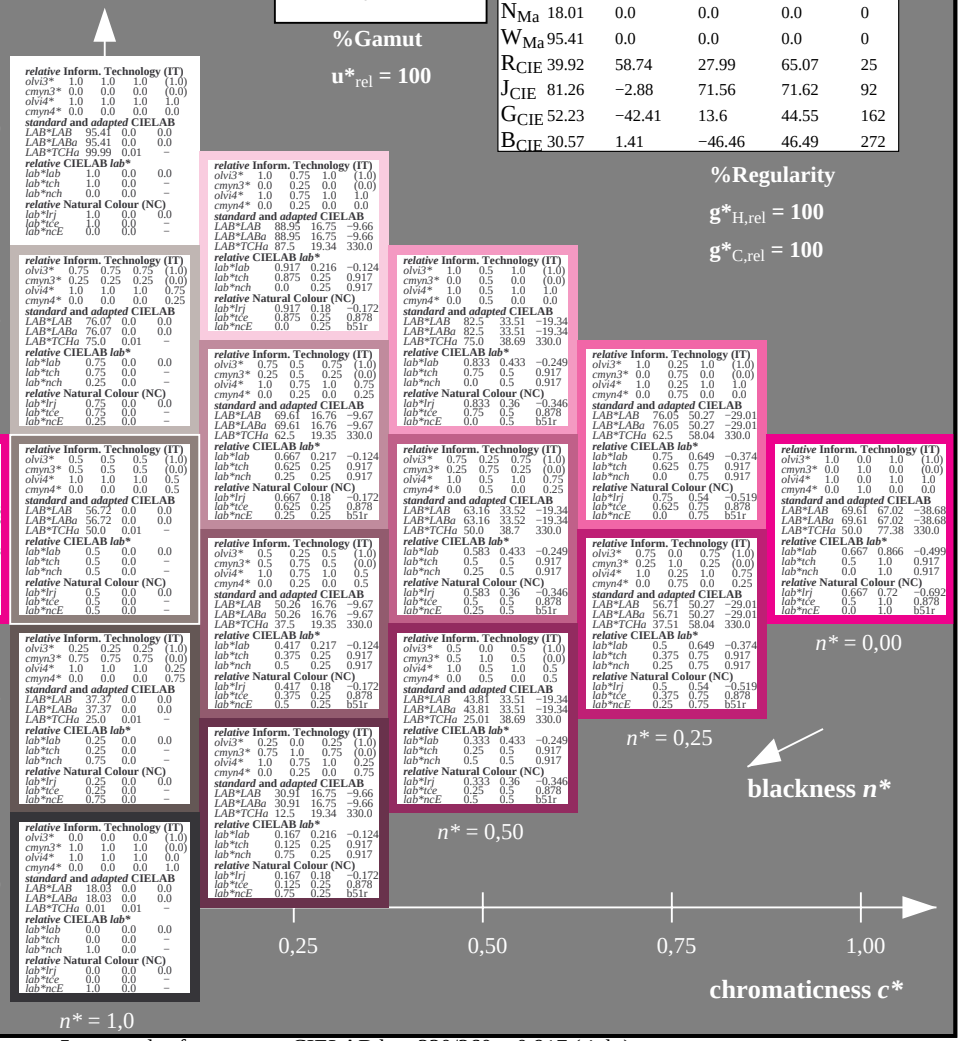
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

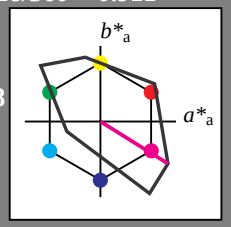
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

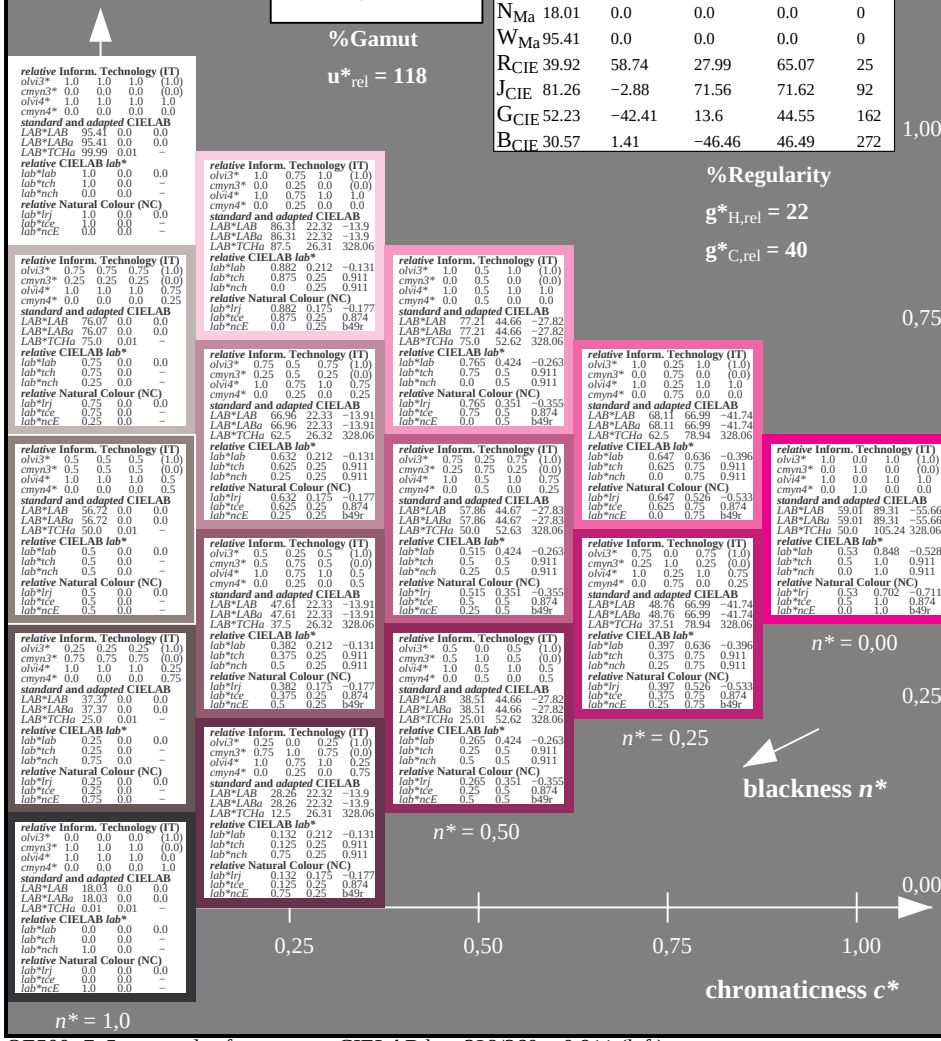
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

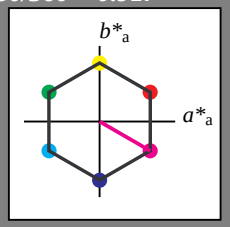


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

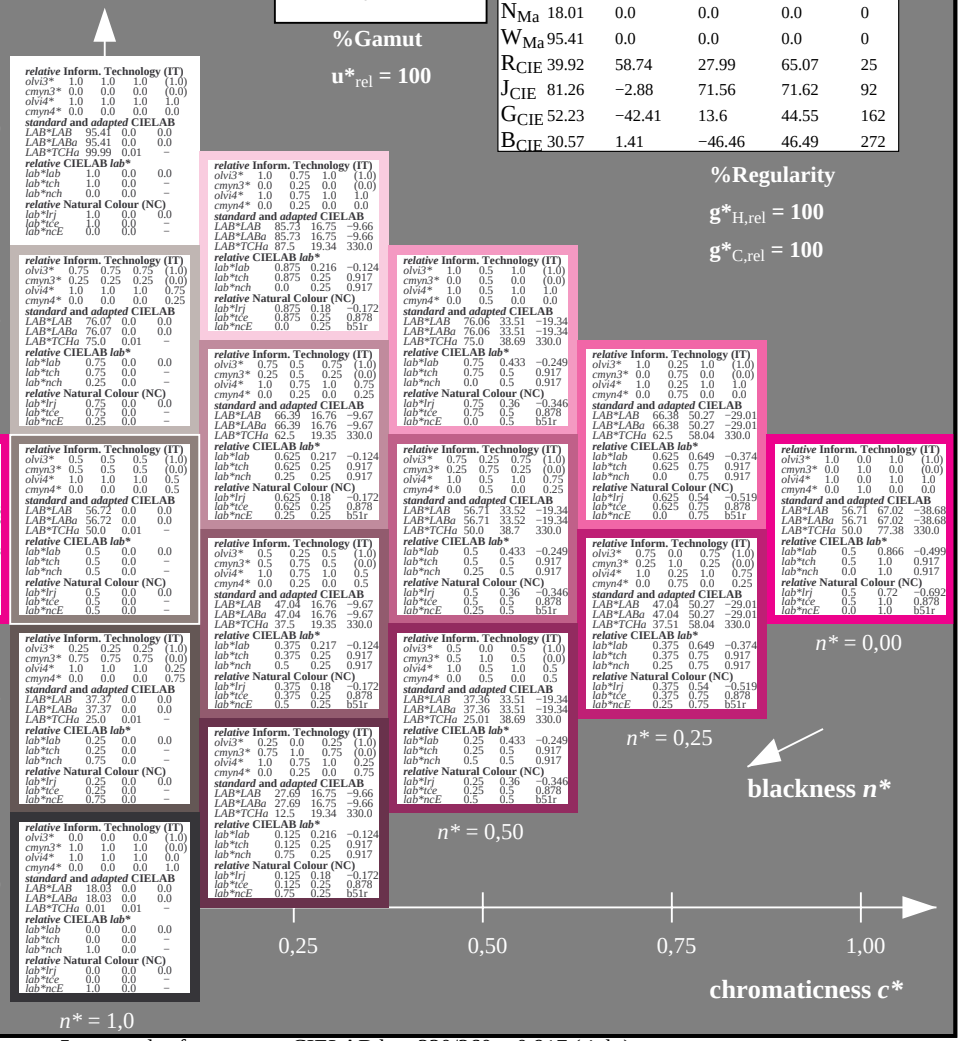
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS18

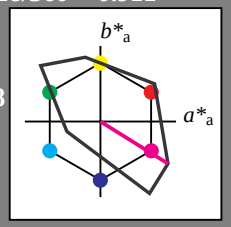
for hue $h^* = lab^*h = 328/360 = 0.911$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0



%Gamut

$u^*_{rel} = 118$

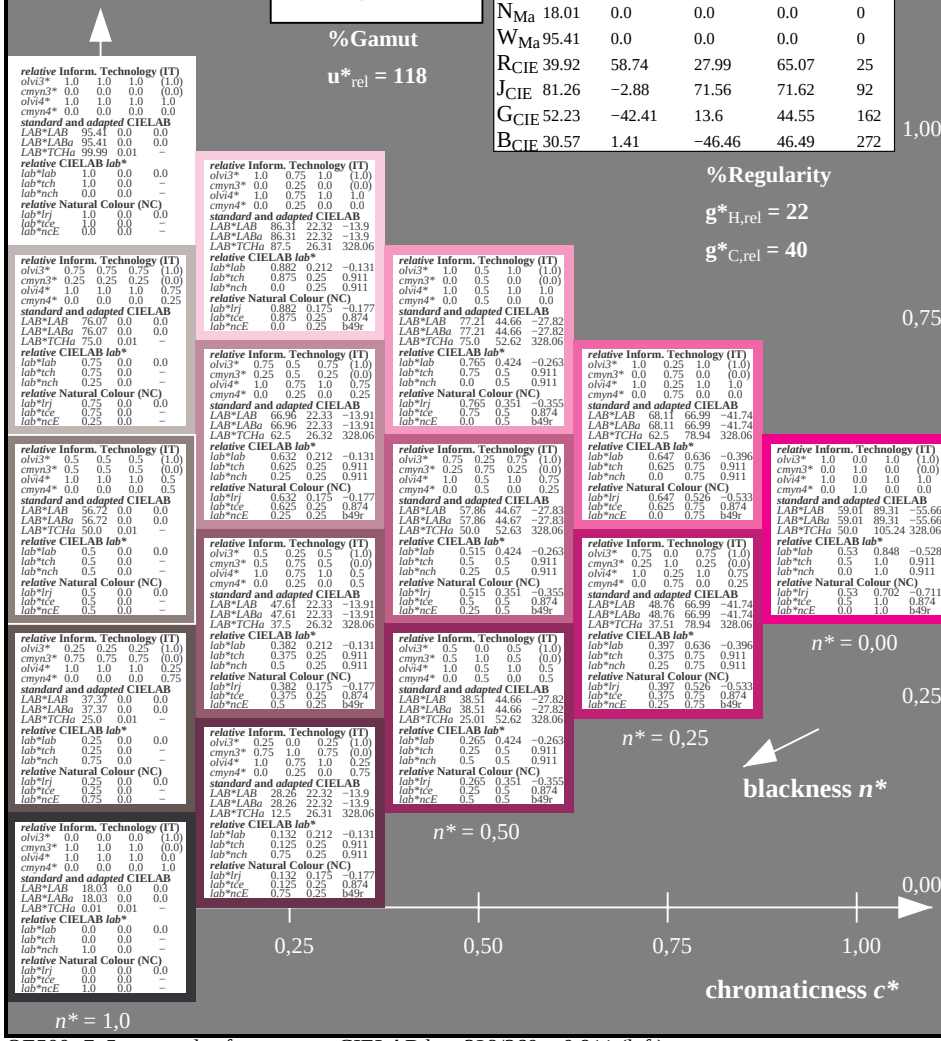
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Television Luminous System TLS70

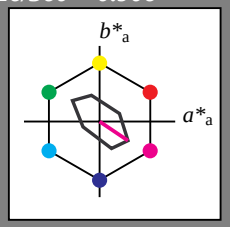
for hue $h^* = lab^*h = 326/360 = 0.906$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0



%Gamut

$u^*_{rel} = 16$

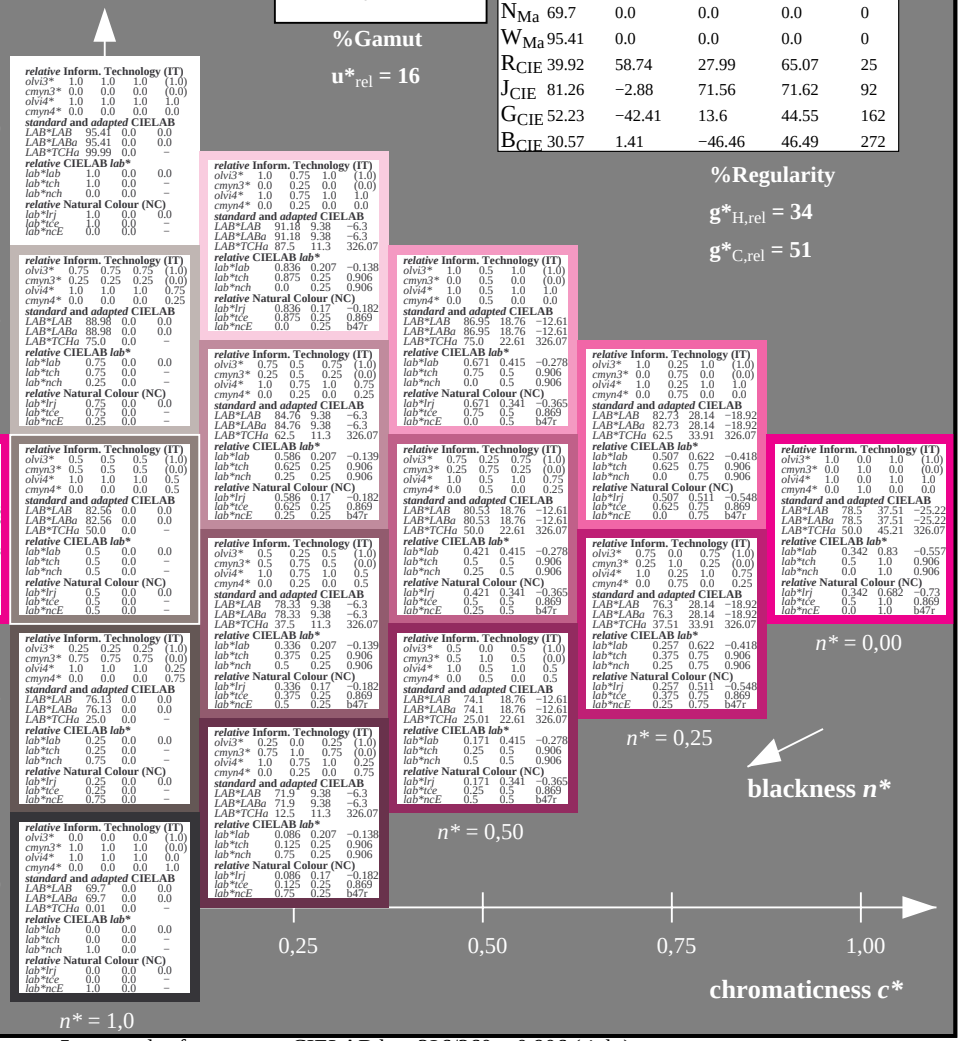
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

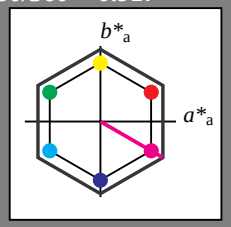


5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

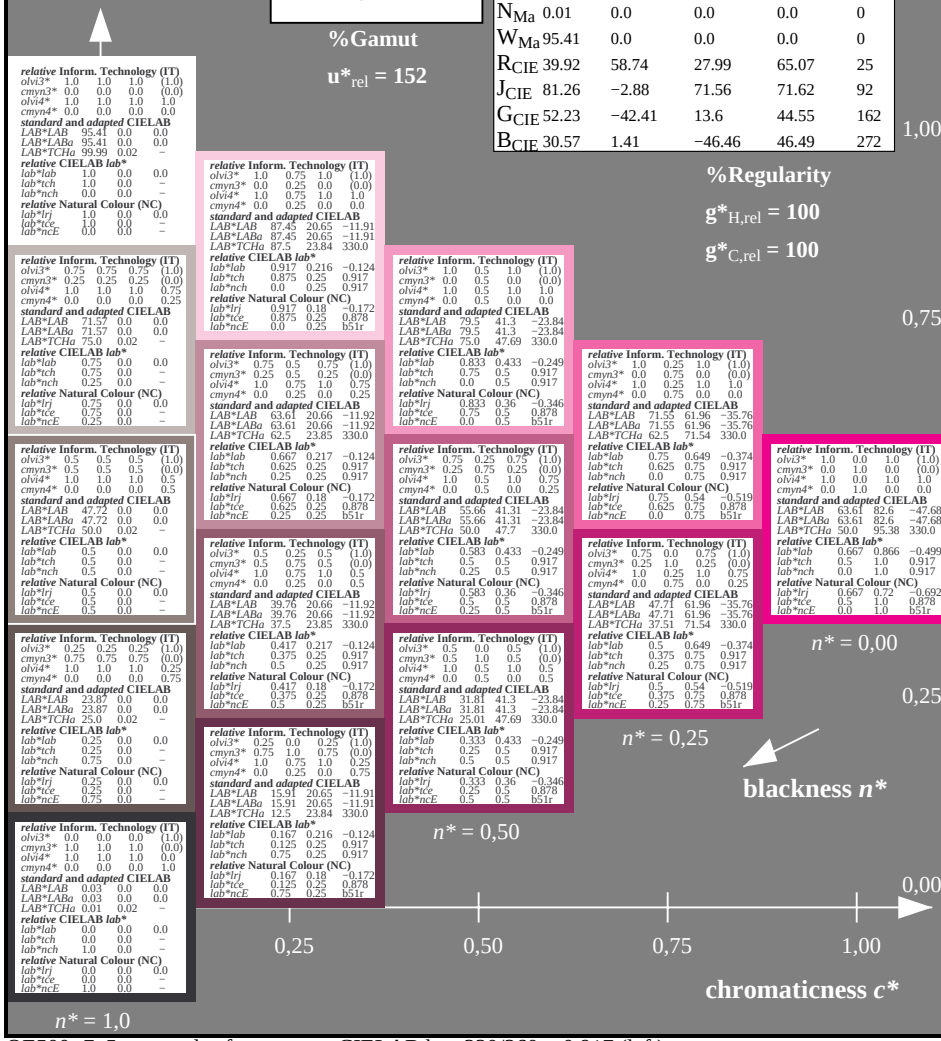


NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut
$u^*_{rel} = 152$

%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$

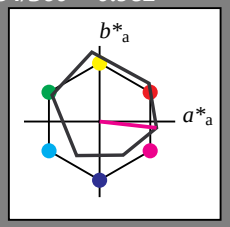


OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

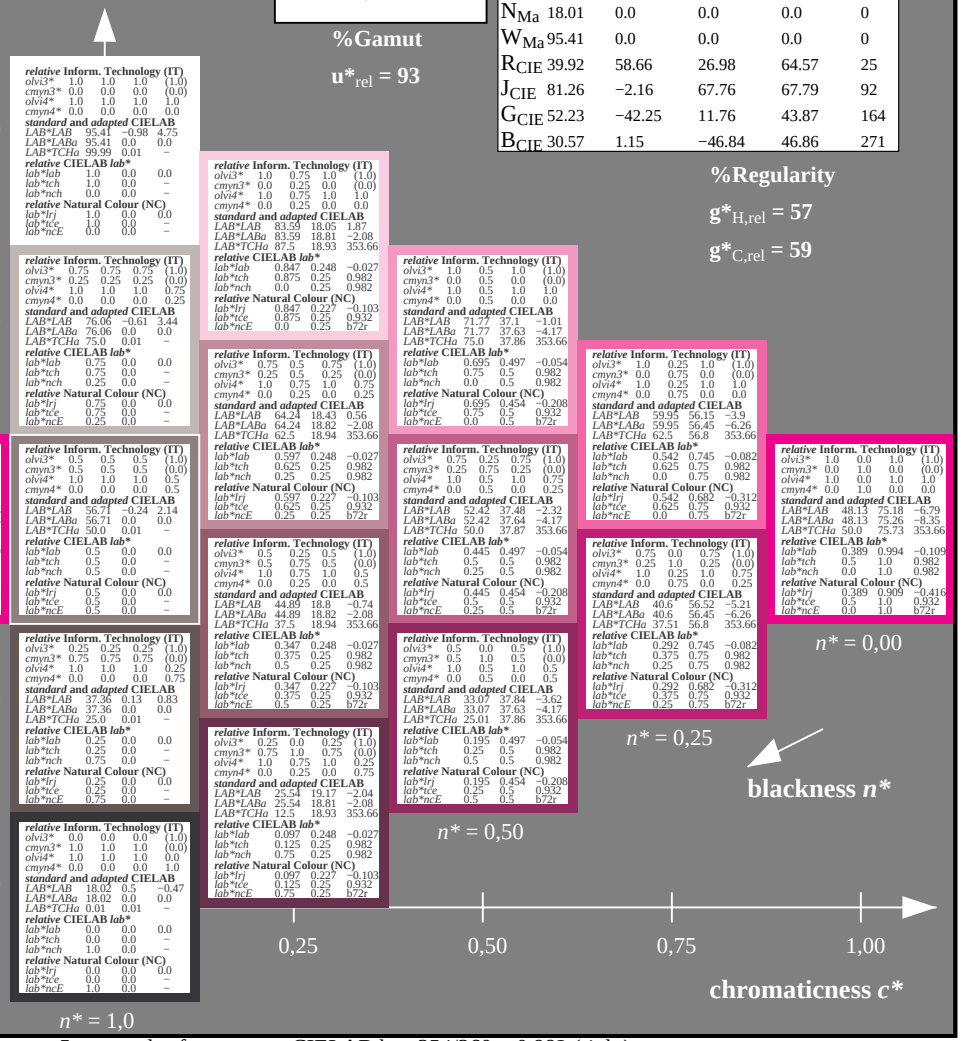


ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut
$u^*_{rel} = 93$

%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



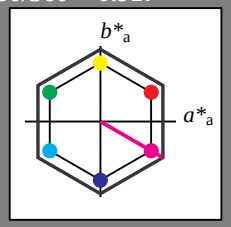
5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

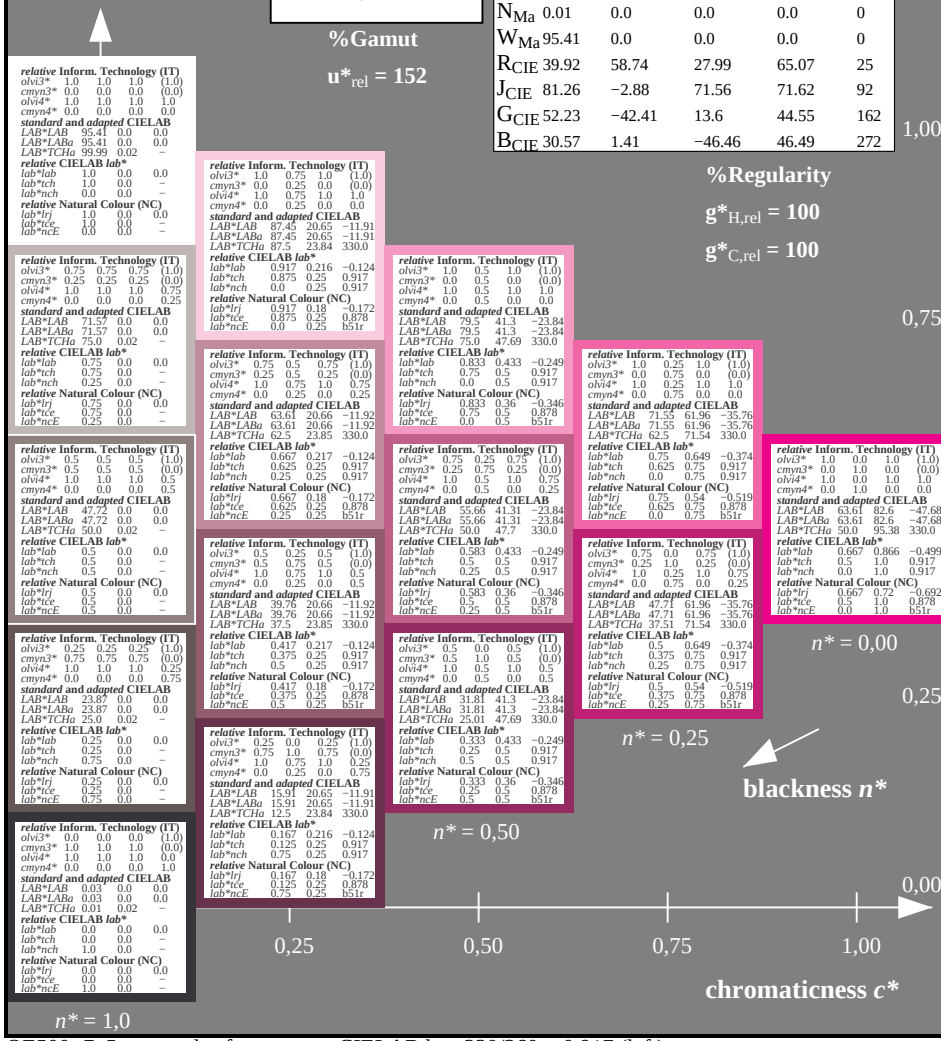
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



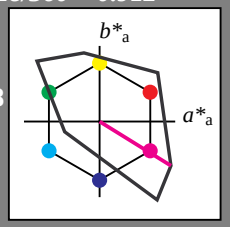
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

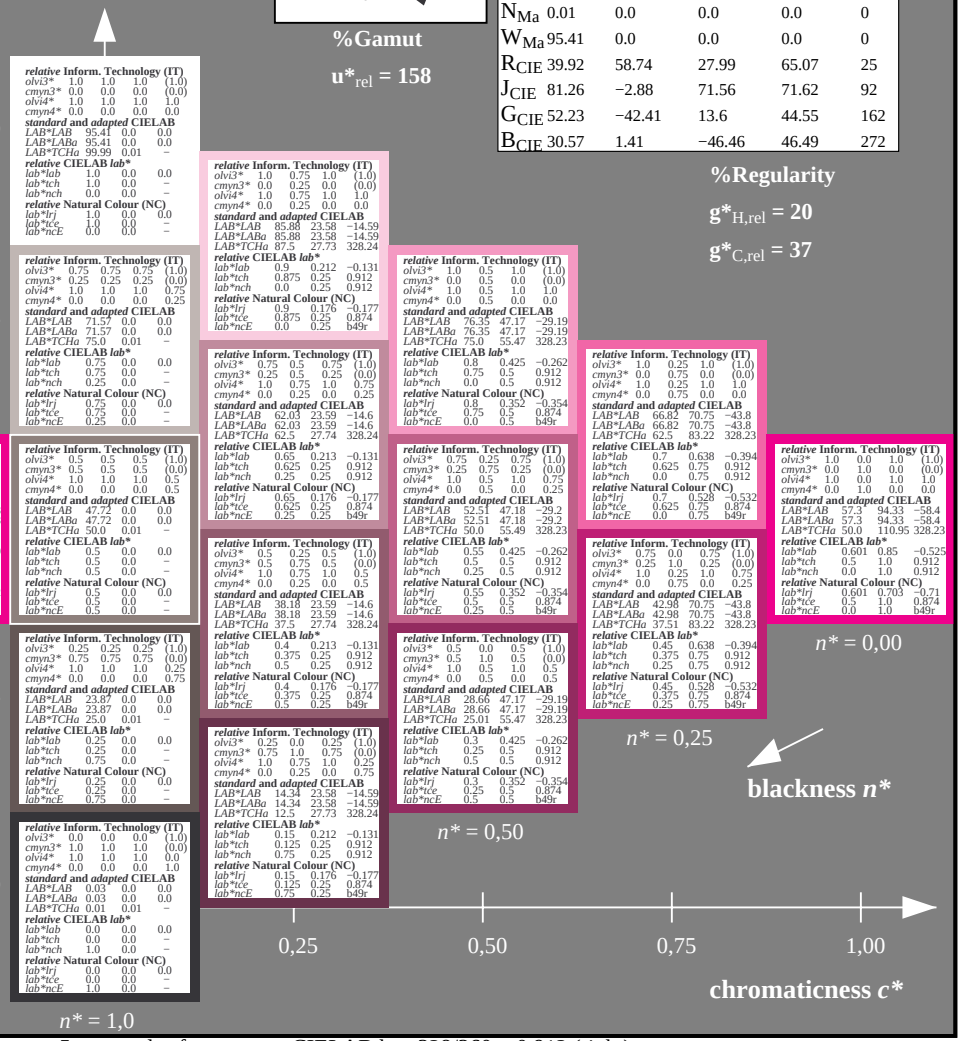
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

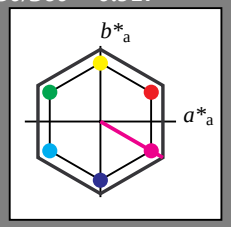
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

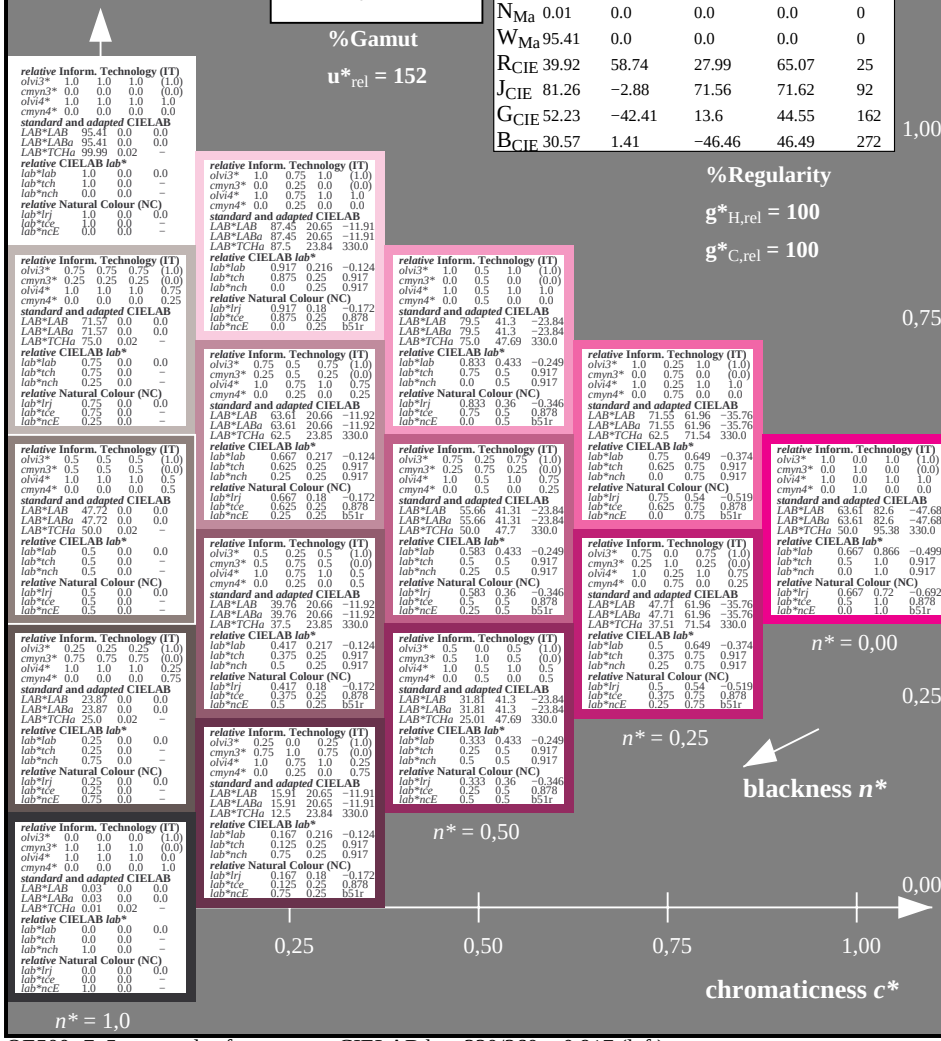
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

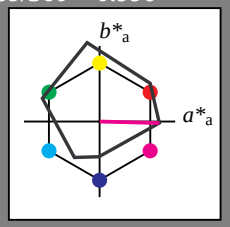
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

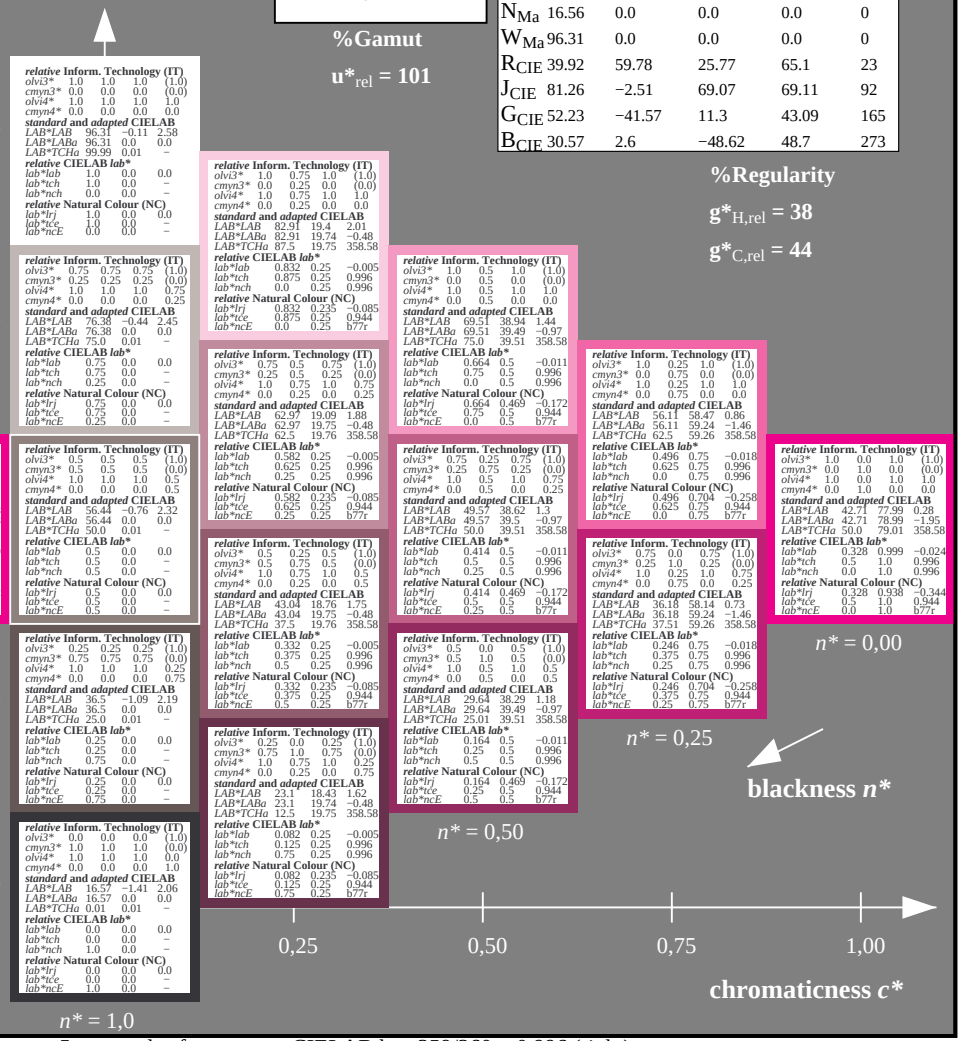
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

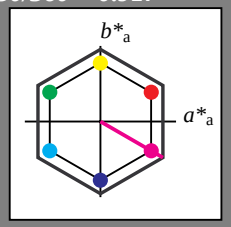
5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

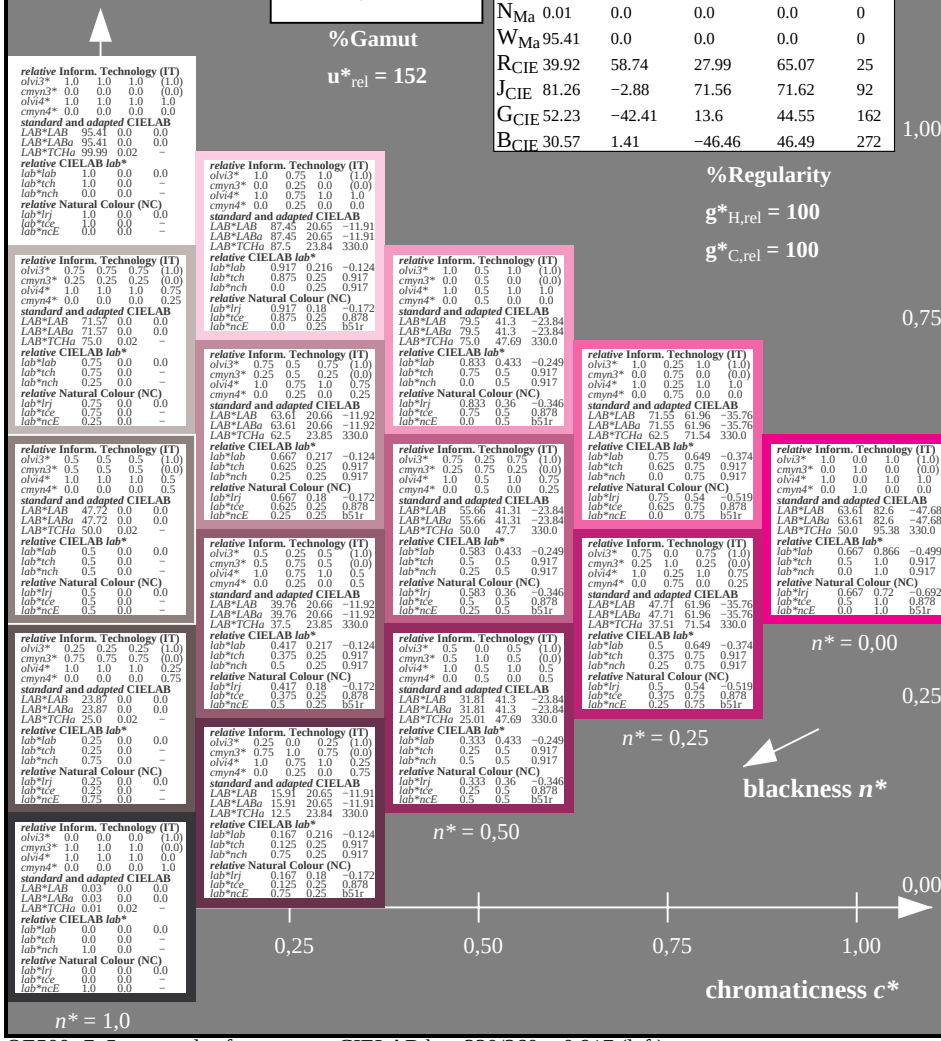
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



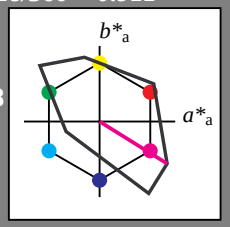
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

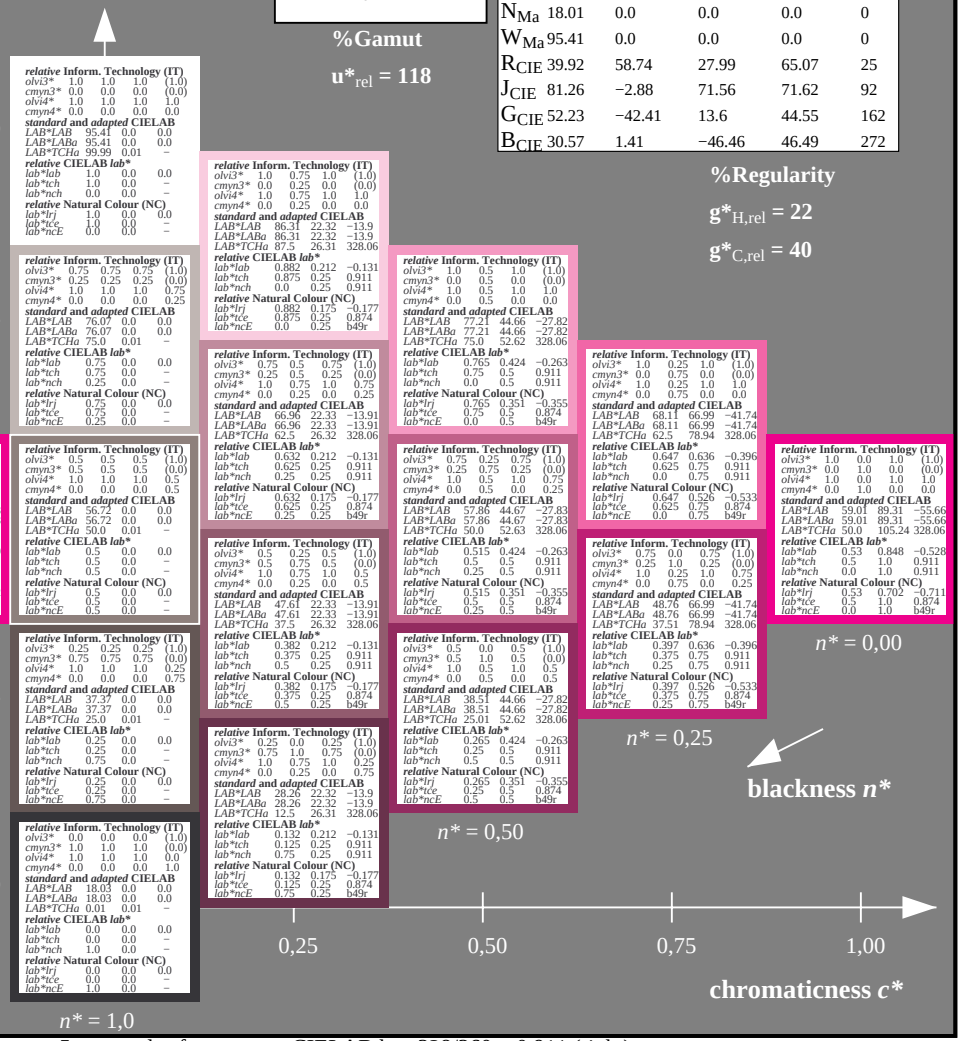
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



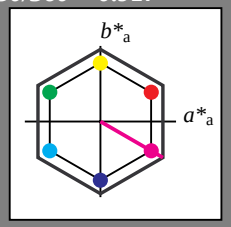
5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

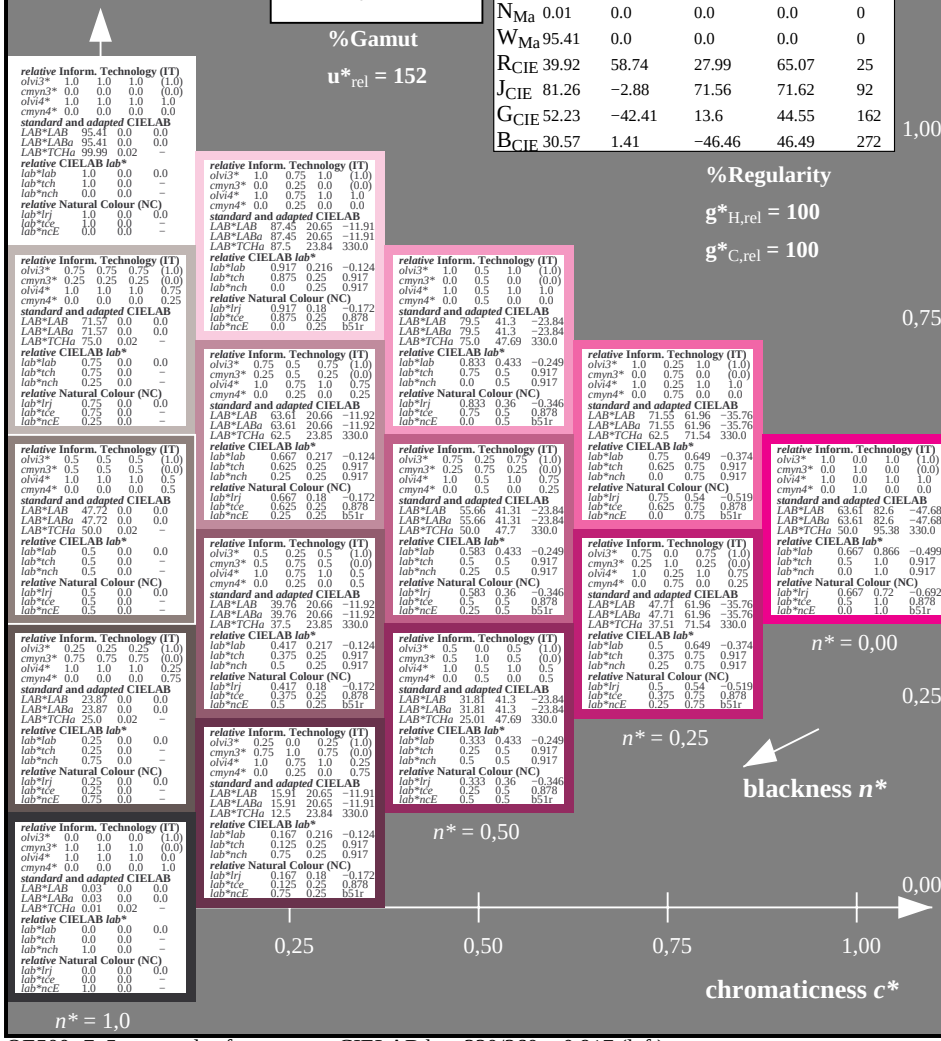
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



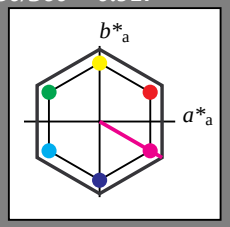
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

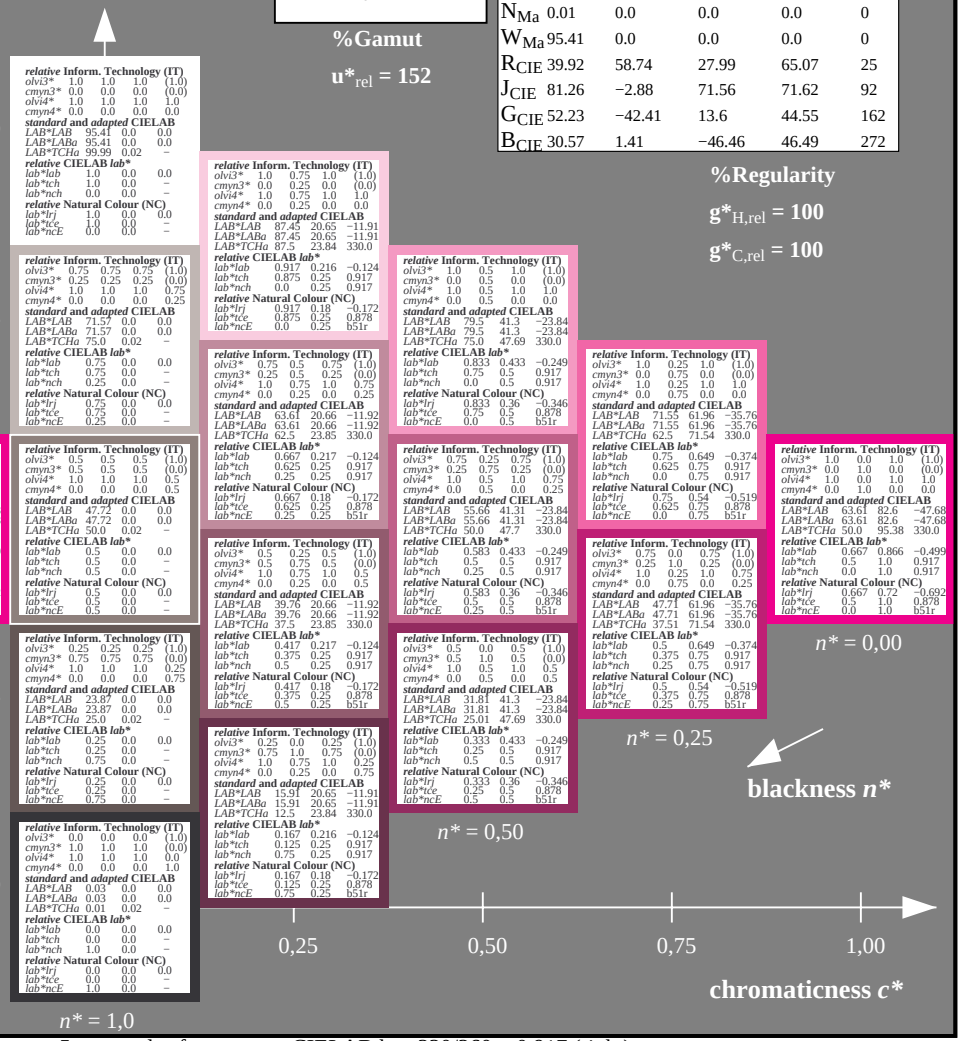
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

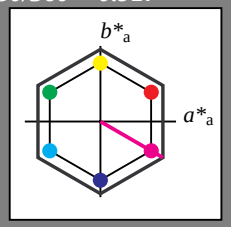


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

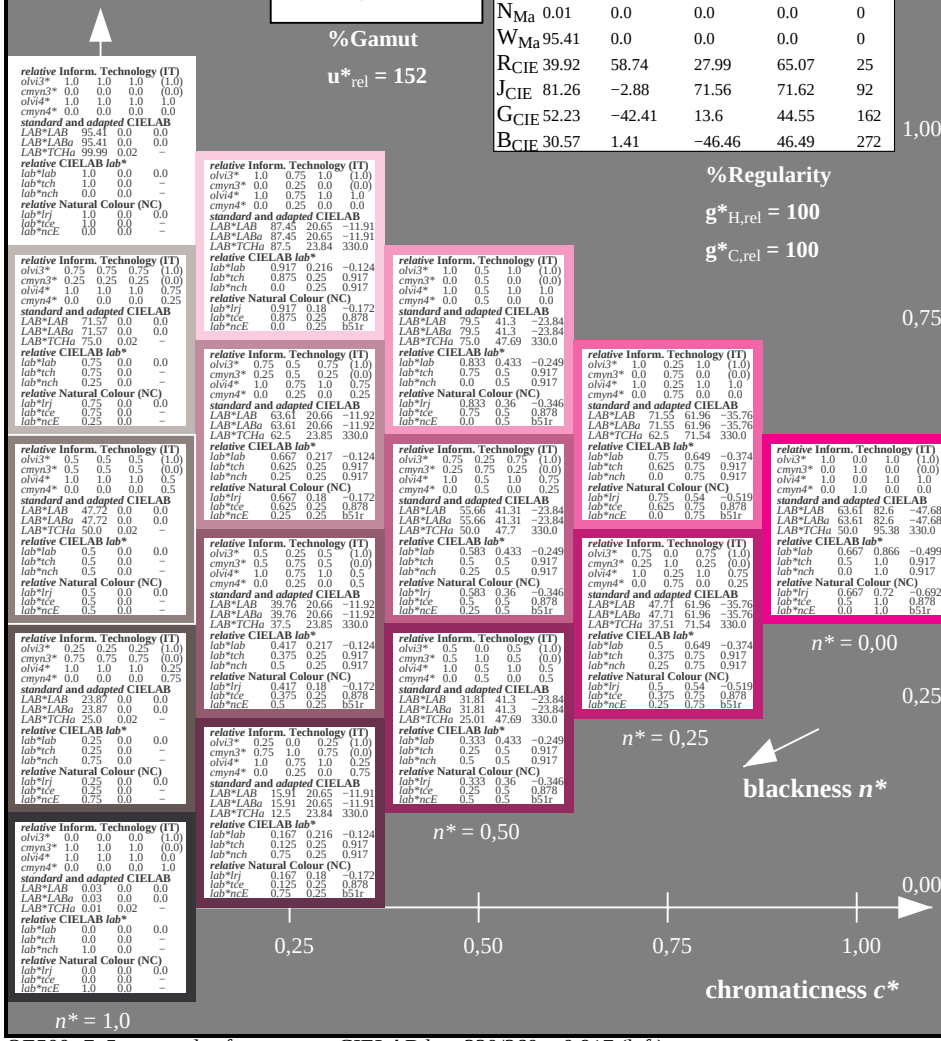
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

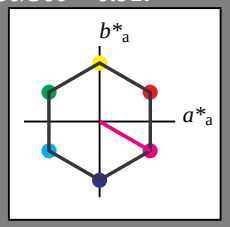


OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

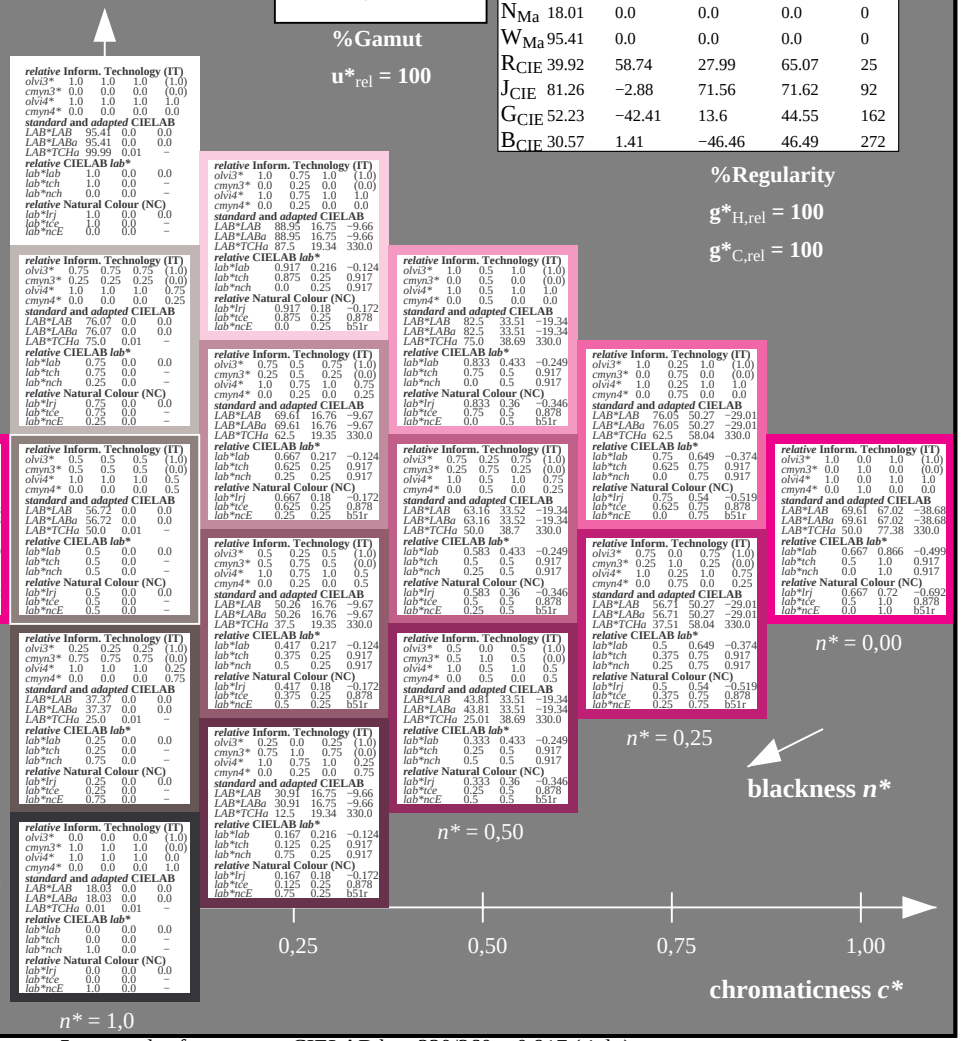
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

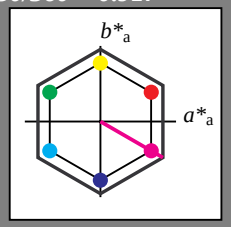


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

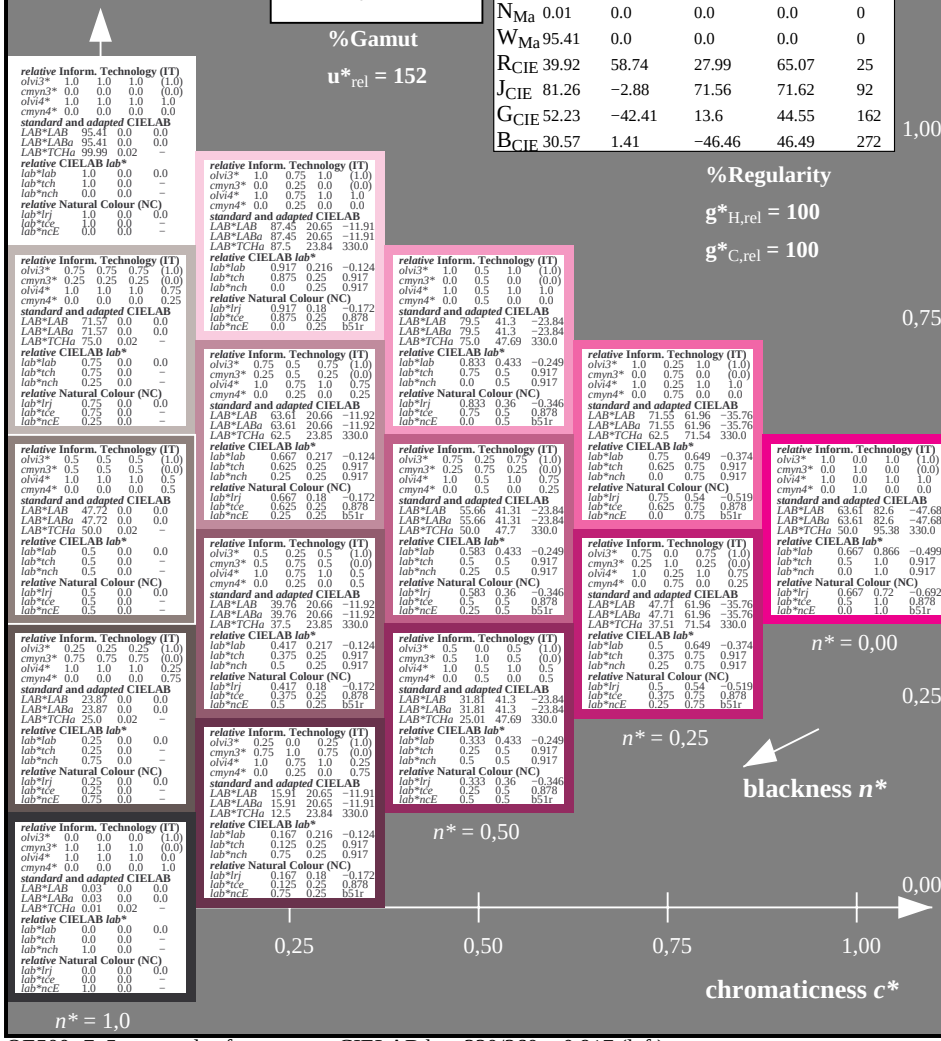
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

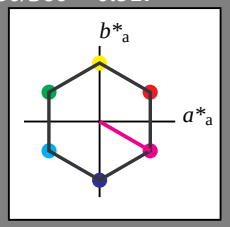


OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

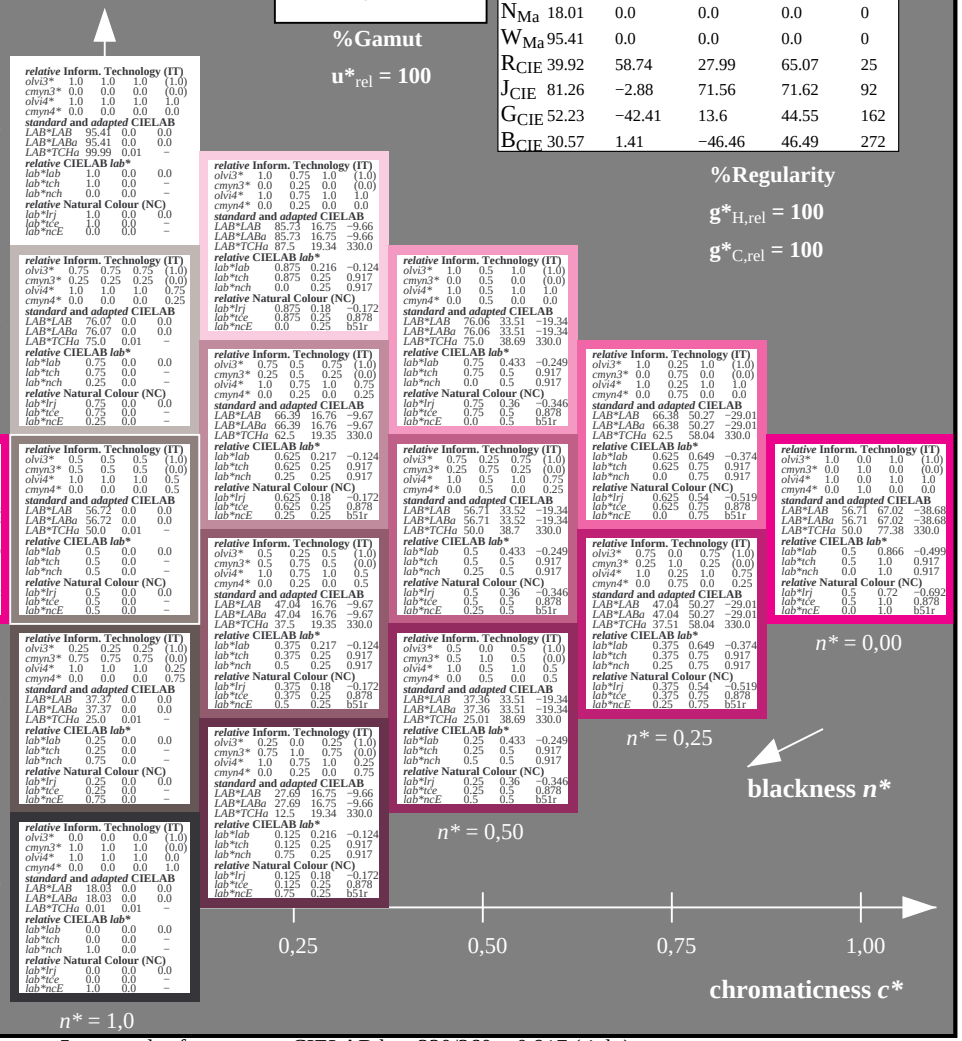
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



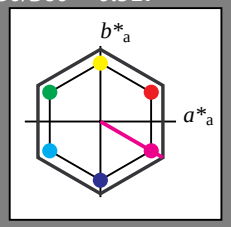
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

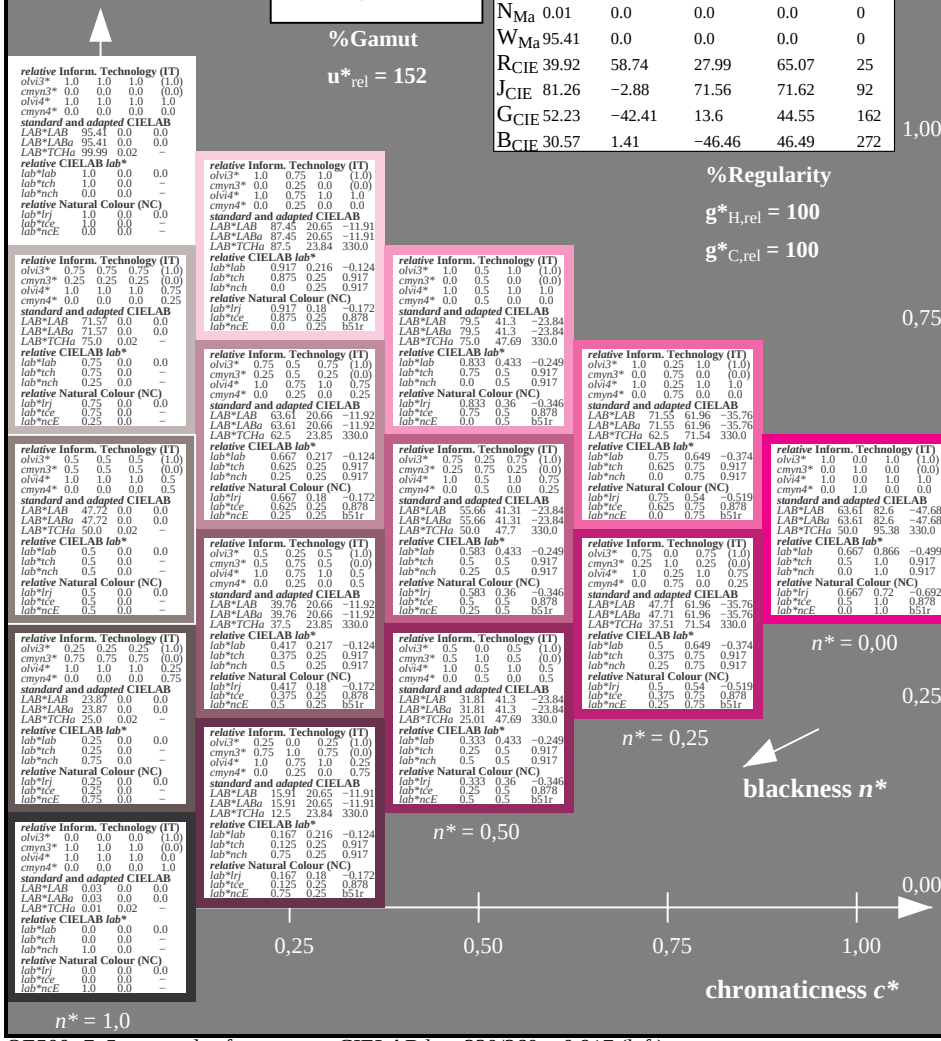
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



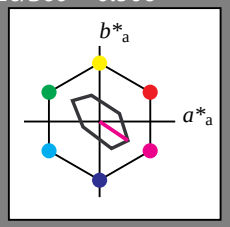
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

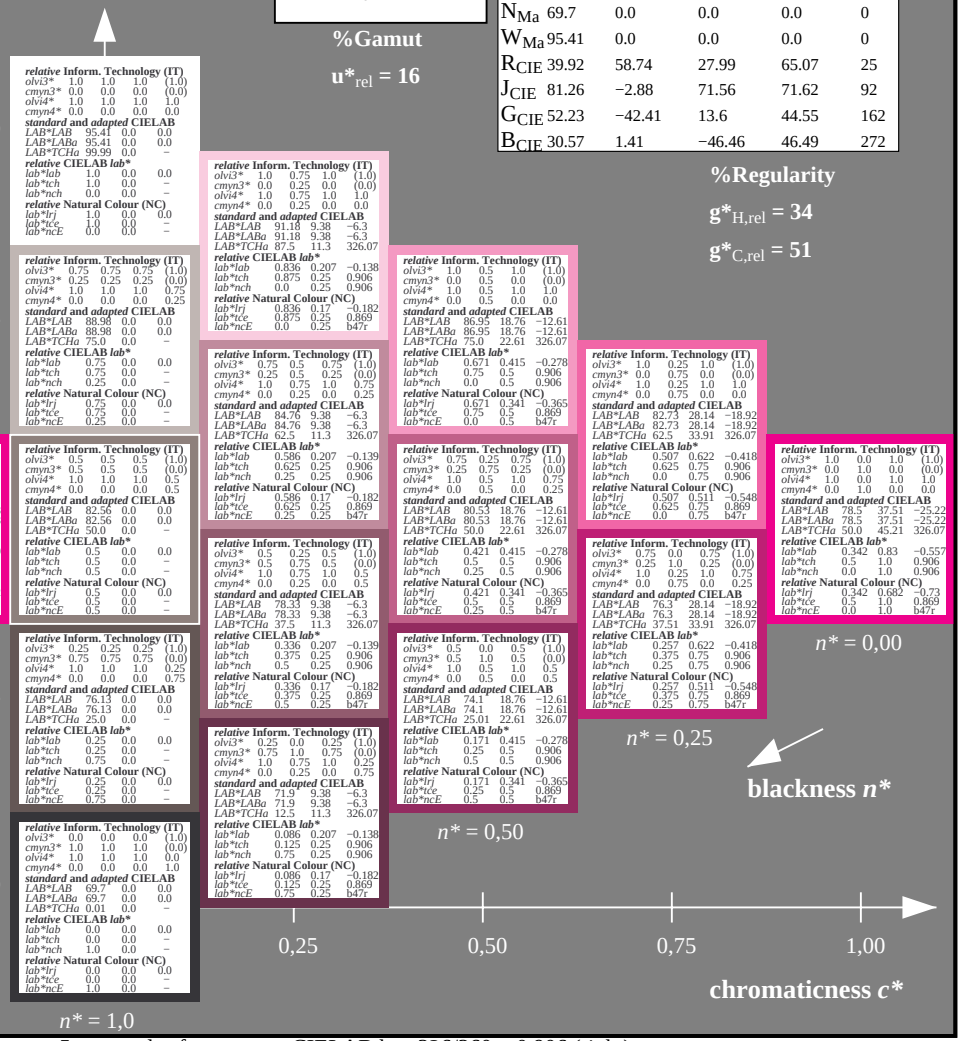
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



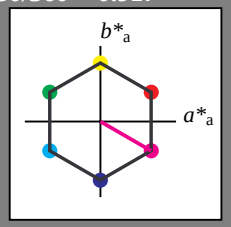
5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue *h = *lab*h* = 330/360 = 0.917**
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 100

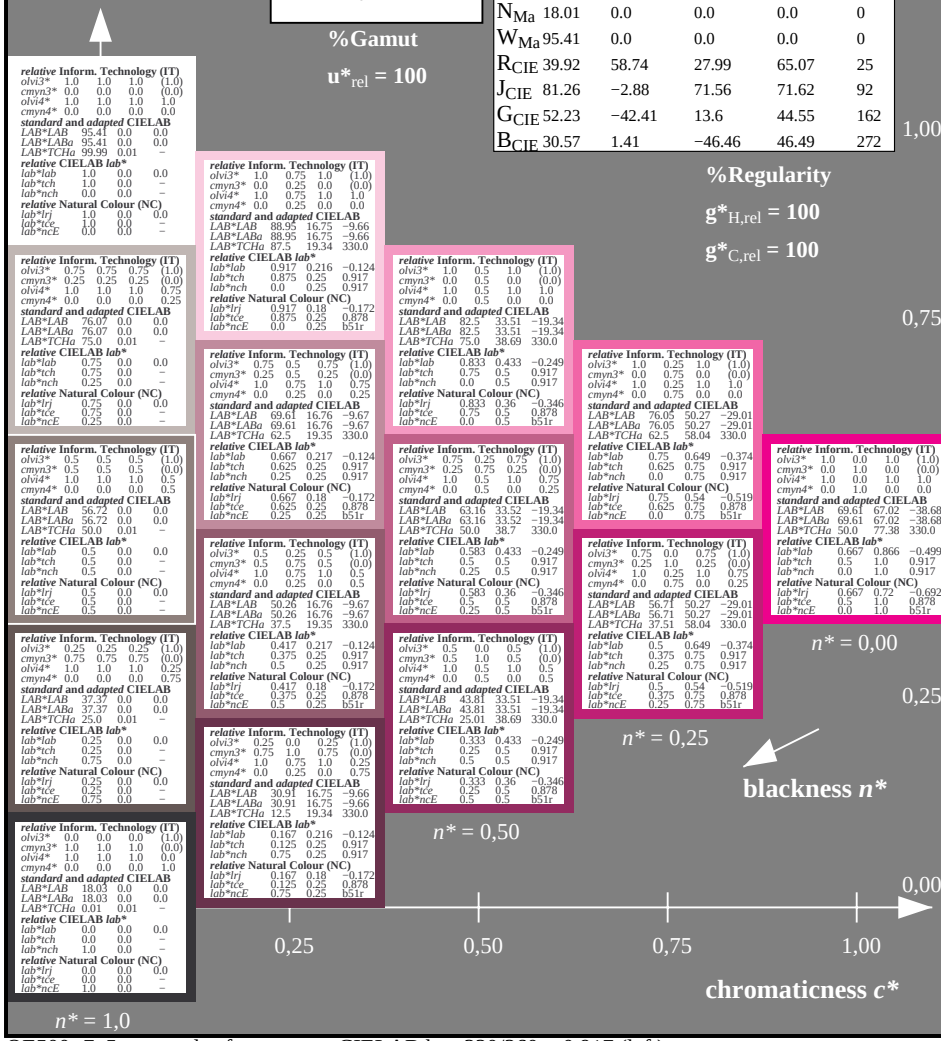
NRS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 100

g*C,rel = 100

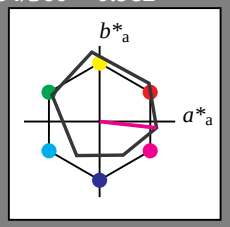


Output: Colorimetric Offset Reflective System ORS18

for hue *h = *lab*h* = 354/360 = 0.982**
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 93

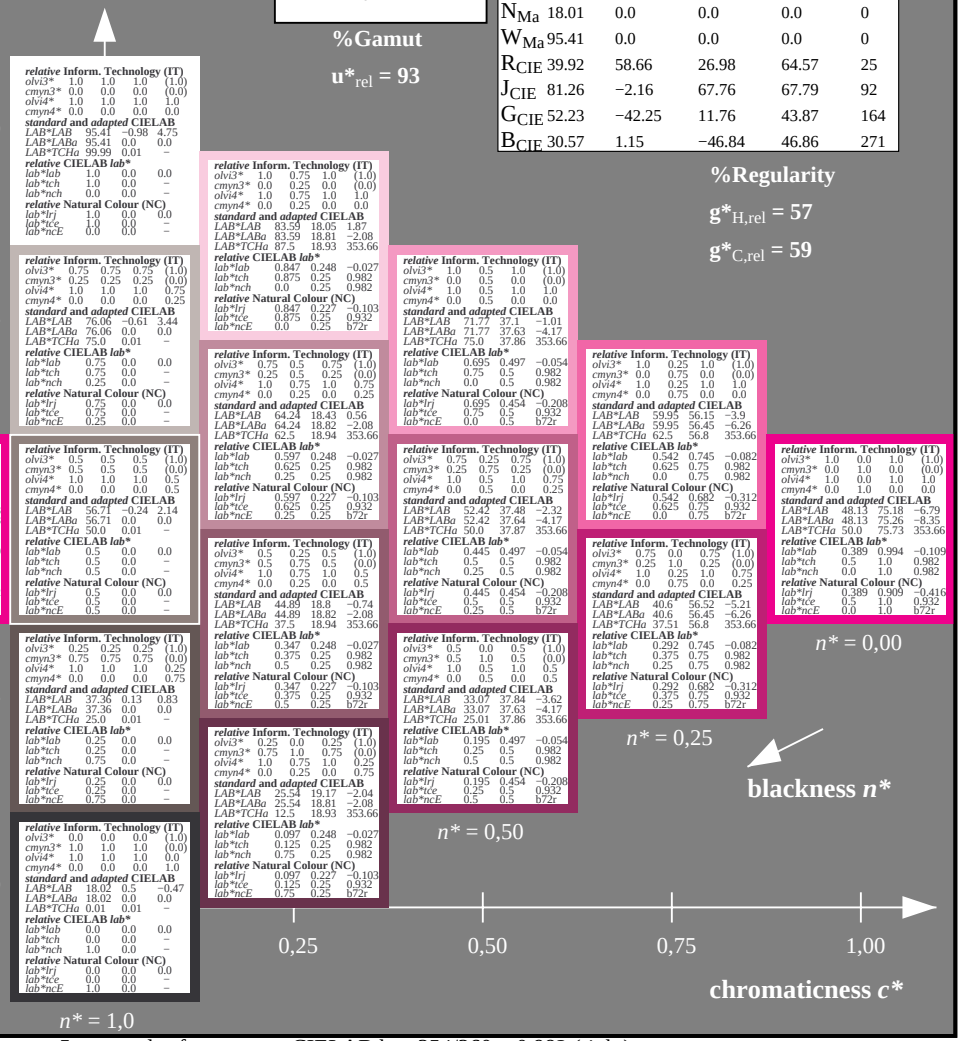
ORS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

g*H,rel = 57

g*C,rel = 59



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

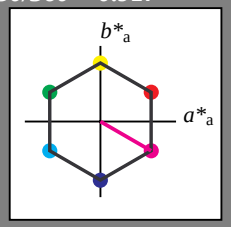
5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

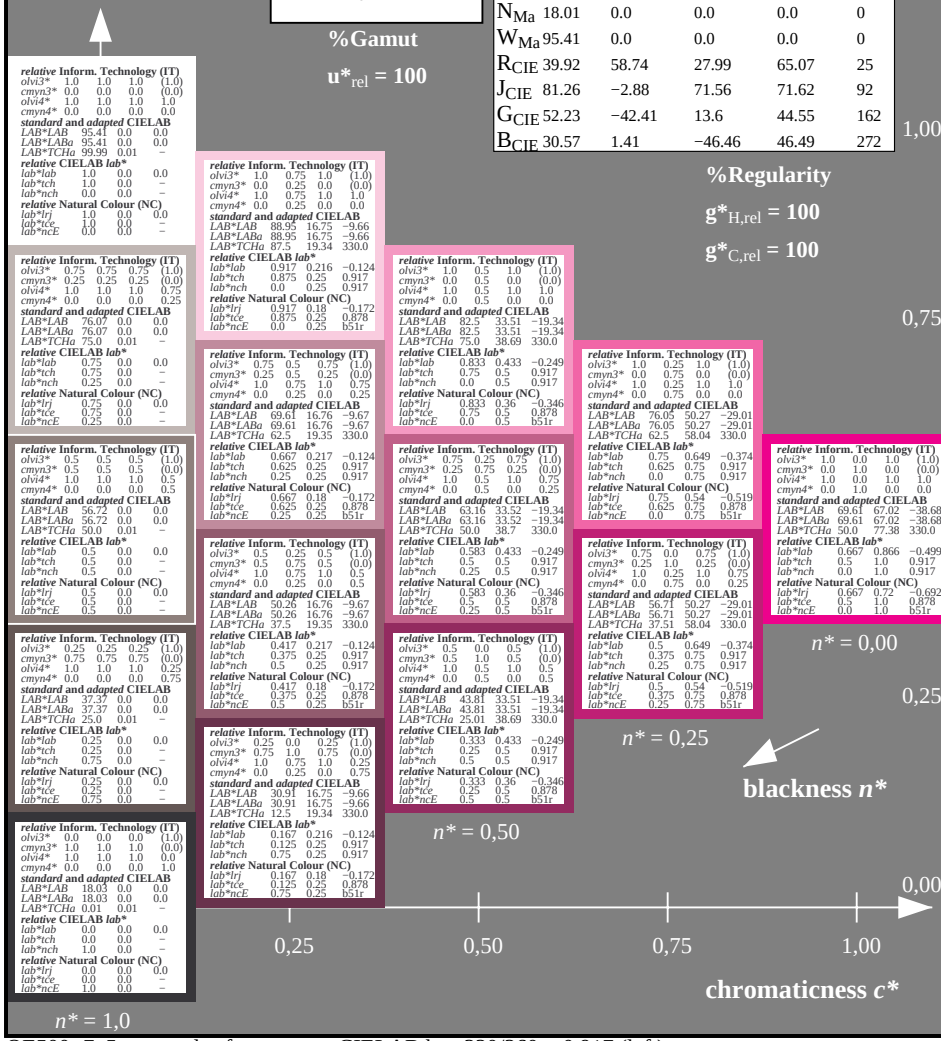
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



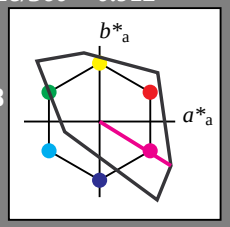
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

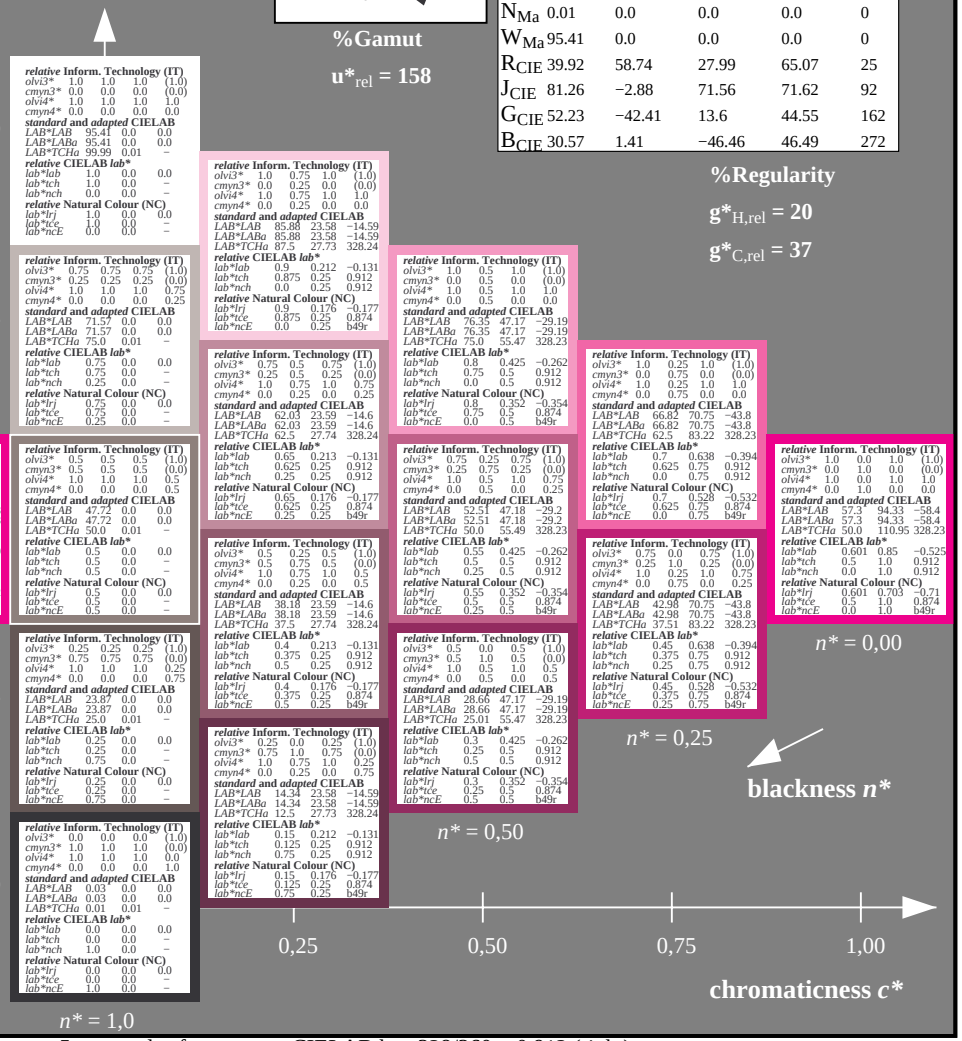
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

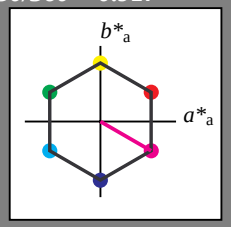
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

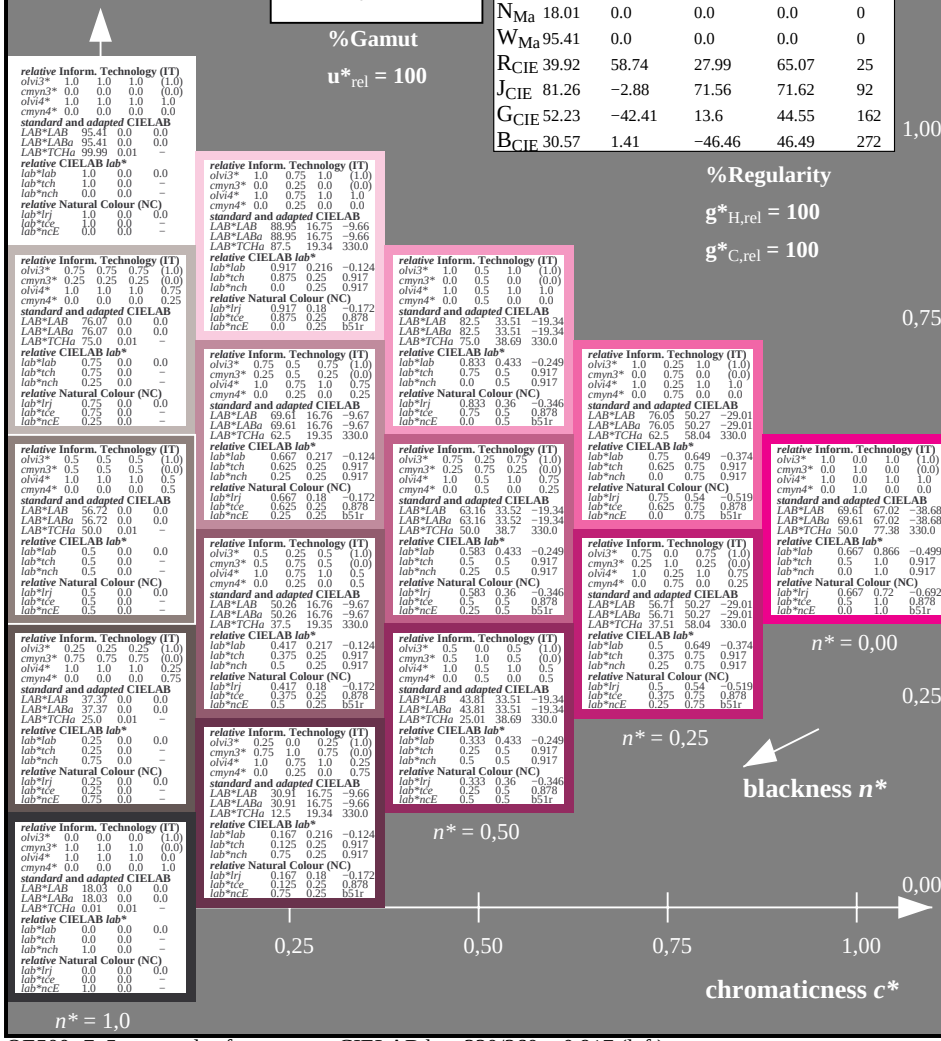
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

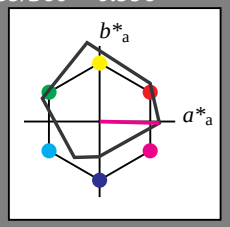
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

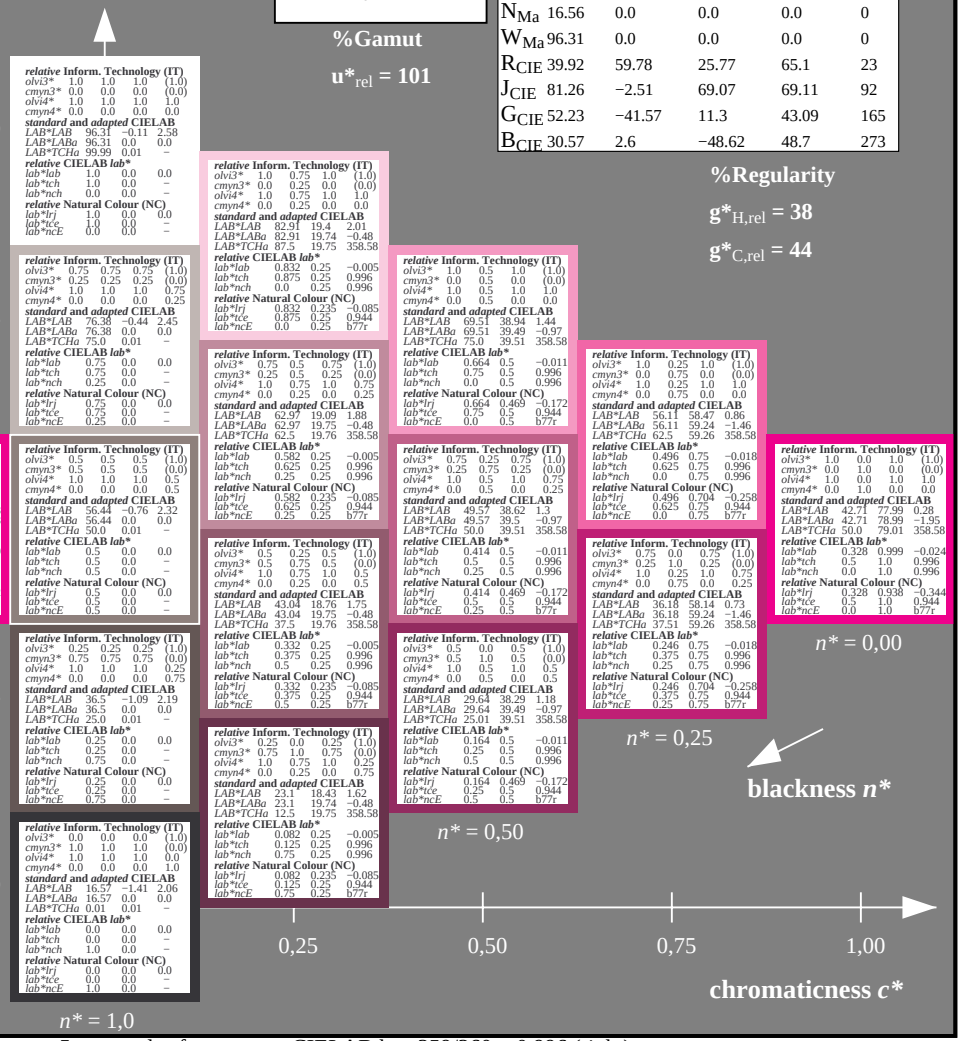
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



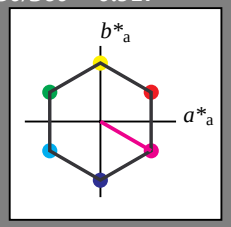
5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

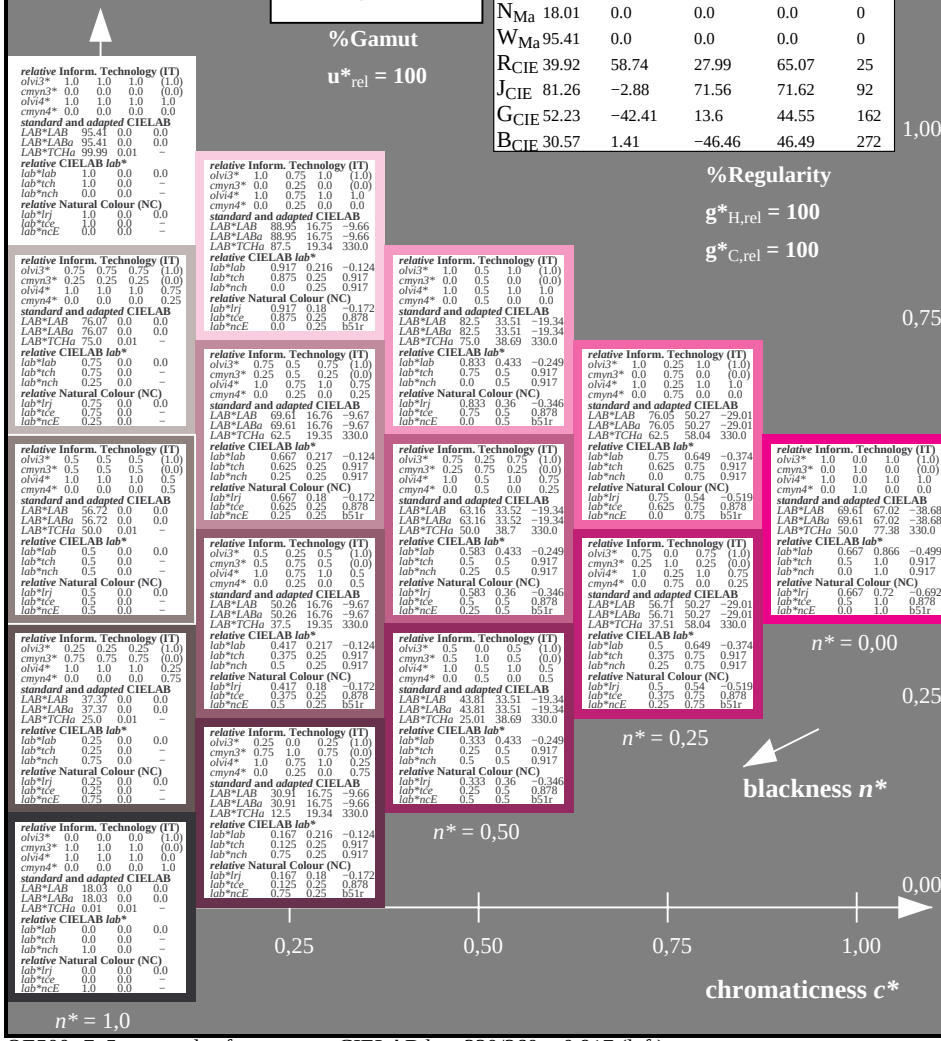
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



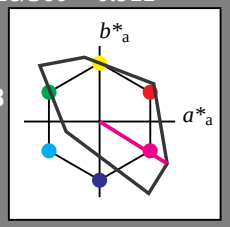
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

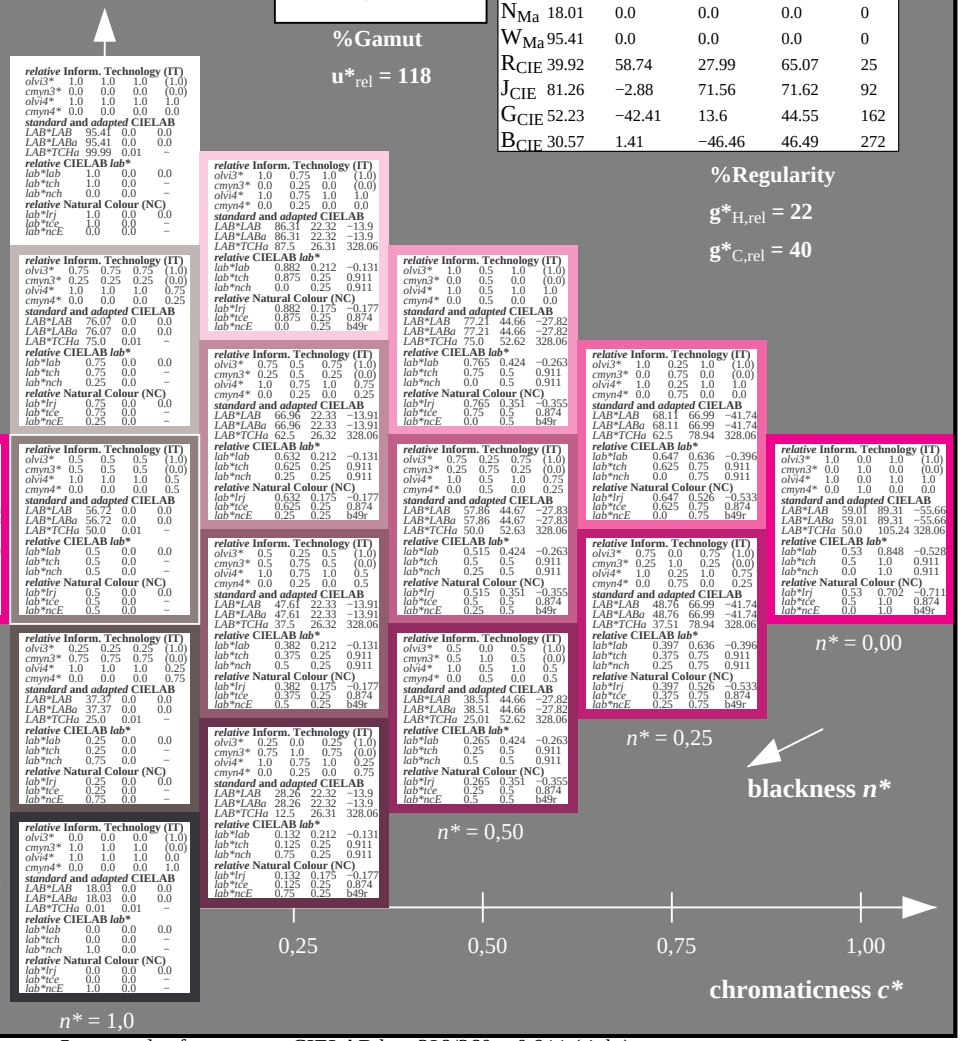
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



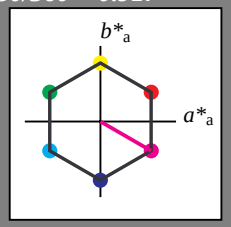
5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

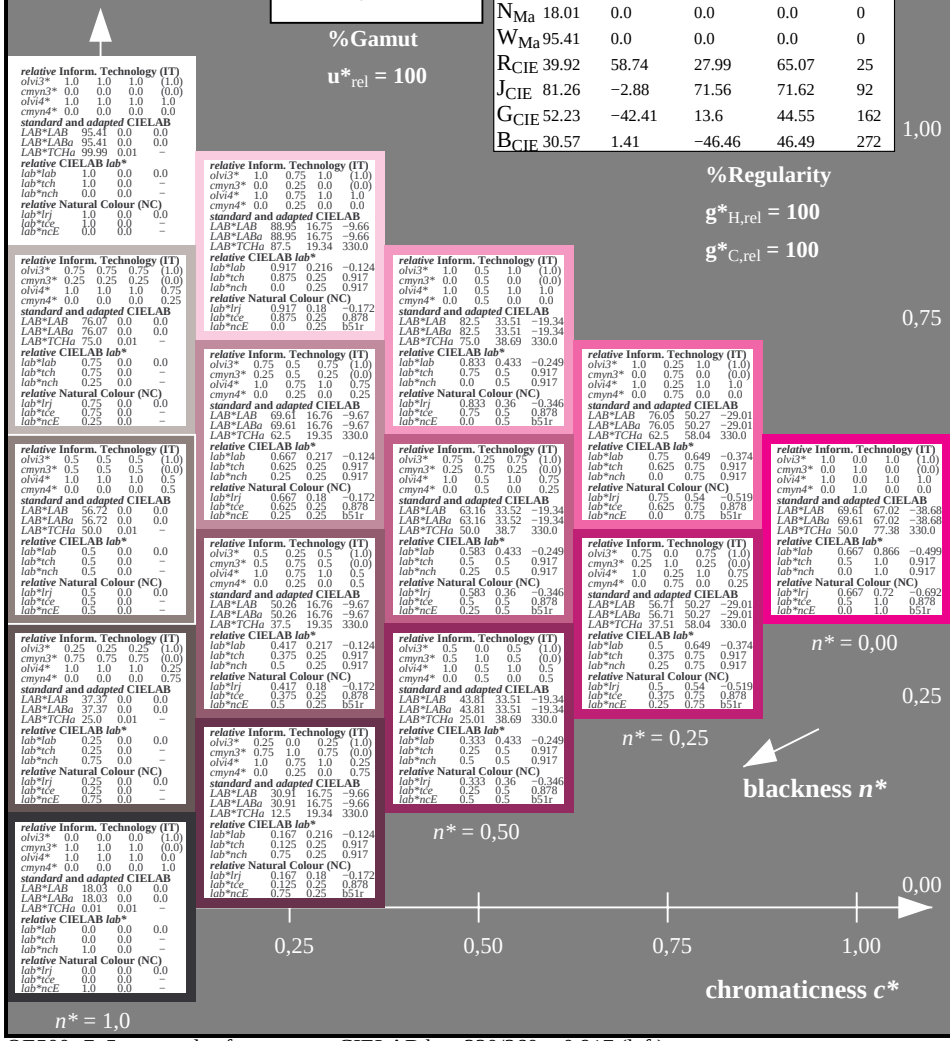
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



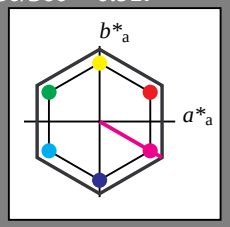
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

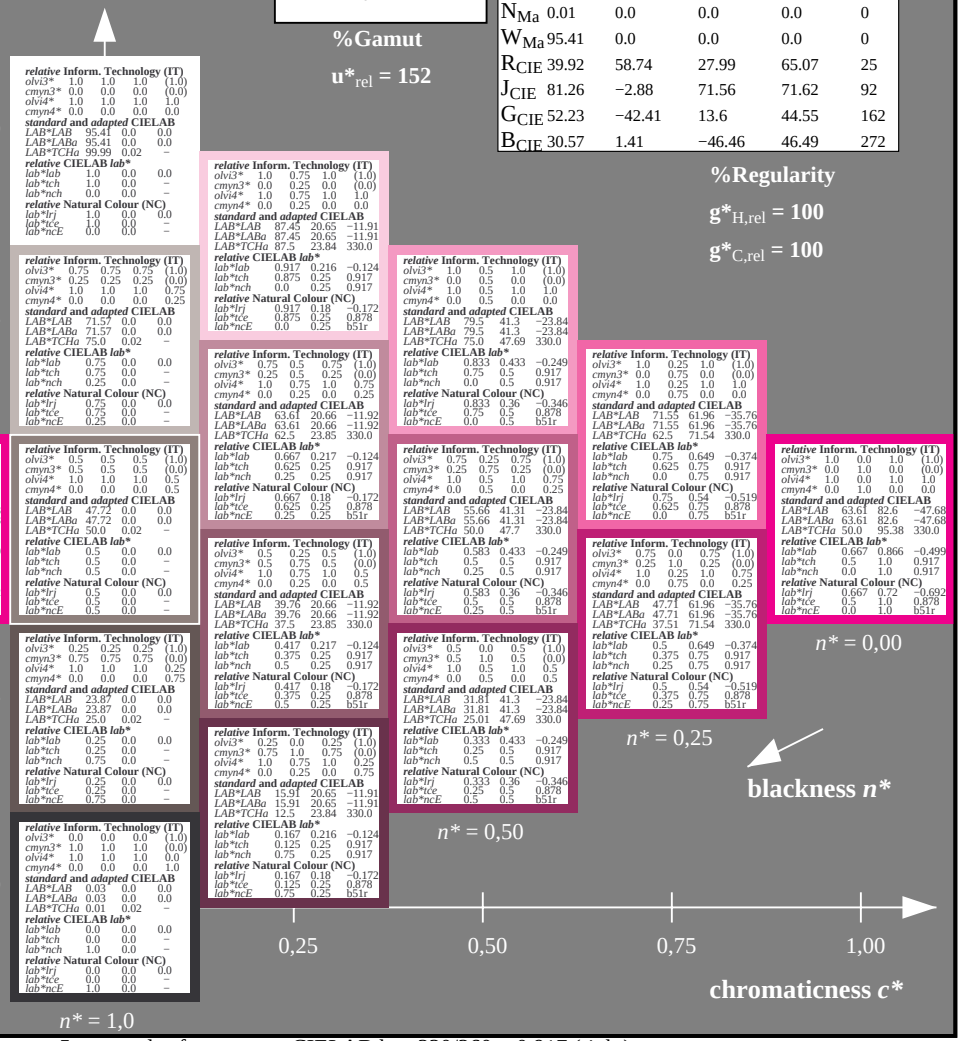
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

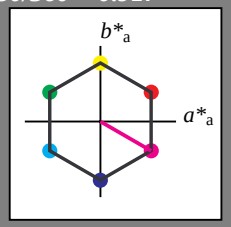
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

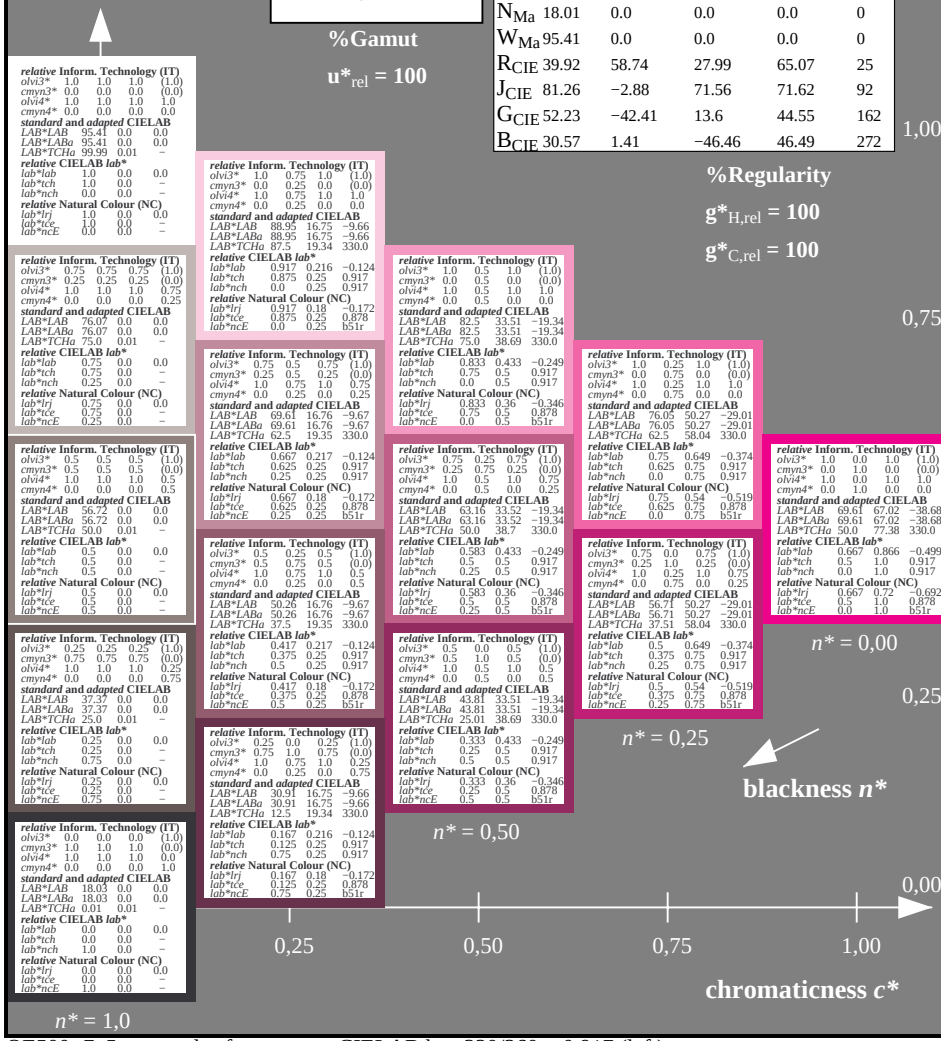
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

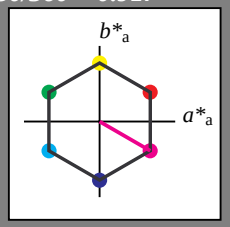
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

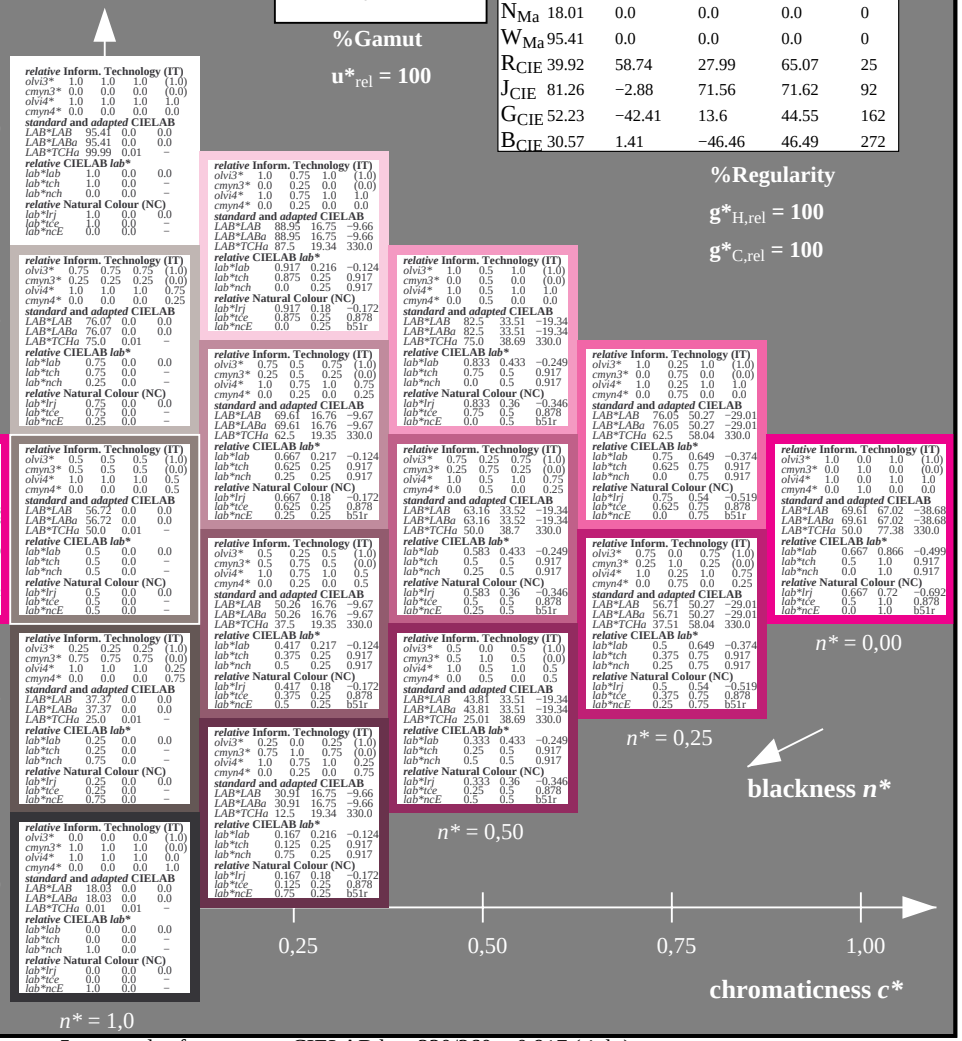
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Reflective System NRS18

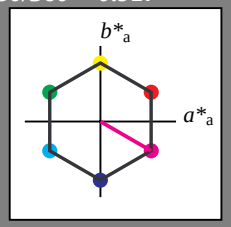
for hue $h^* = lab^*h = 330/360 = 0.917$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Standard Reflective System SRS18

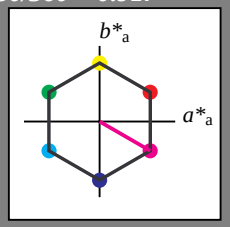
for hue $h^* = lab^*h = 330/360 = 0.917$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

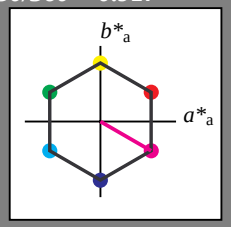
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

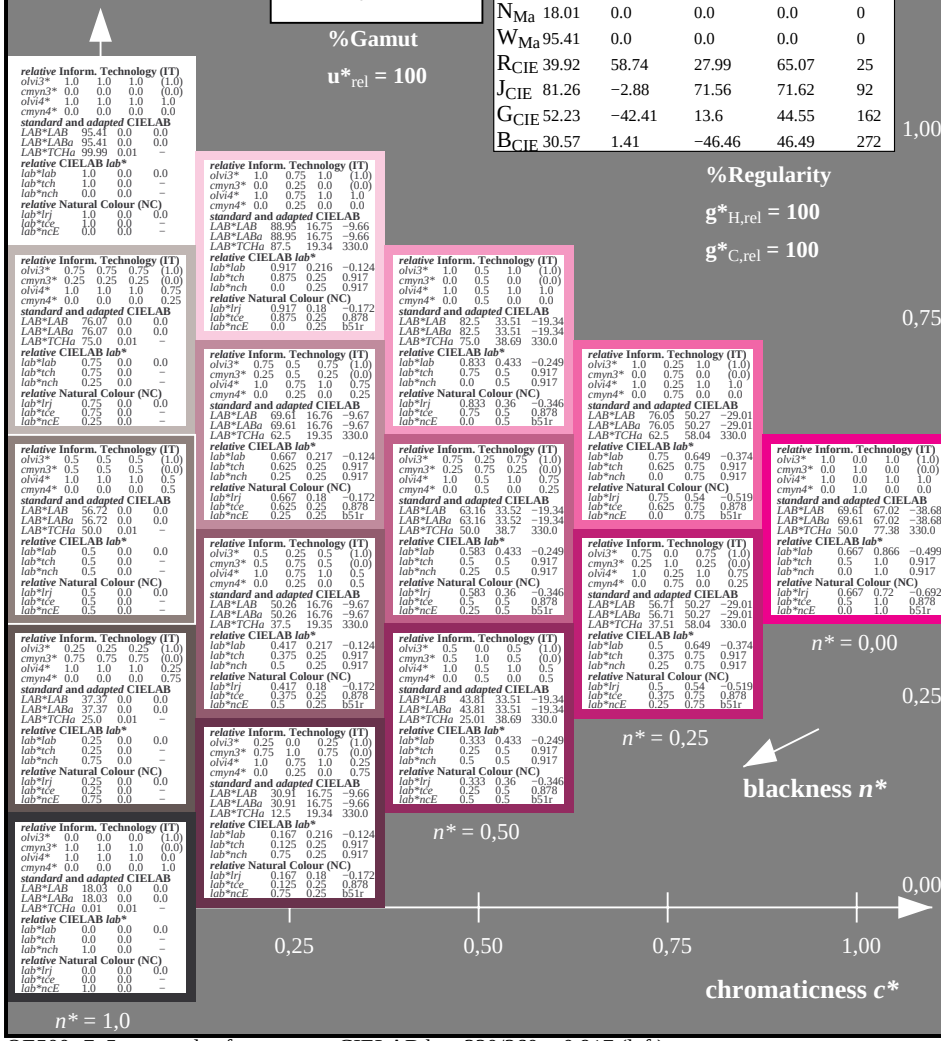
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



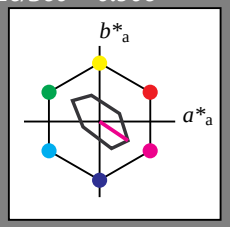
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

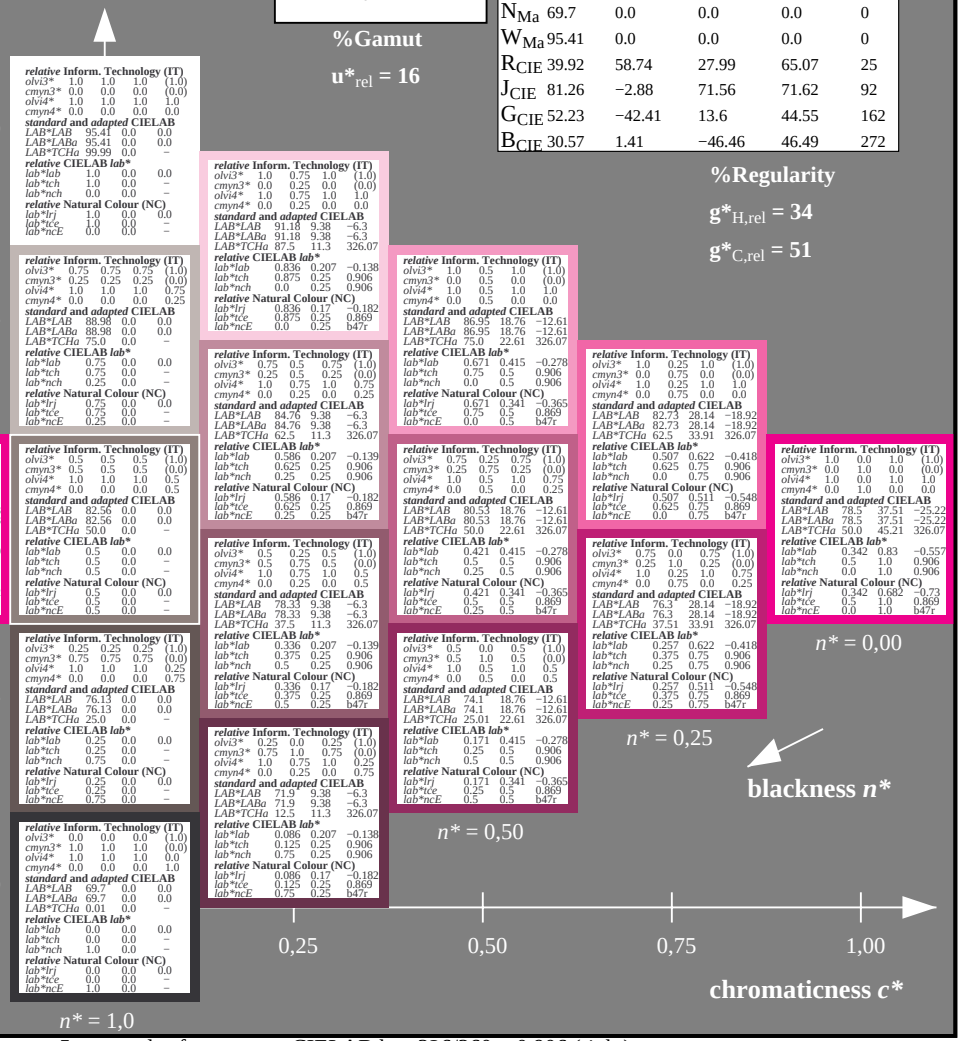
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



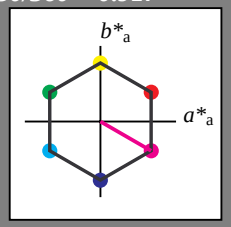
5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

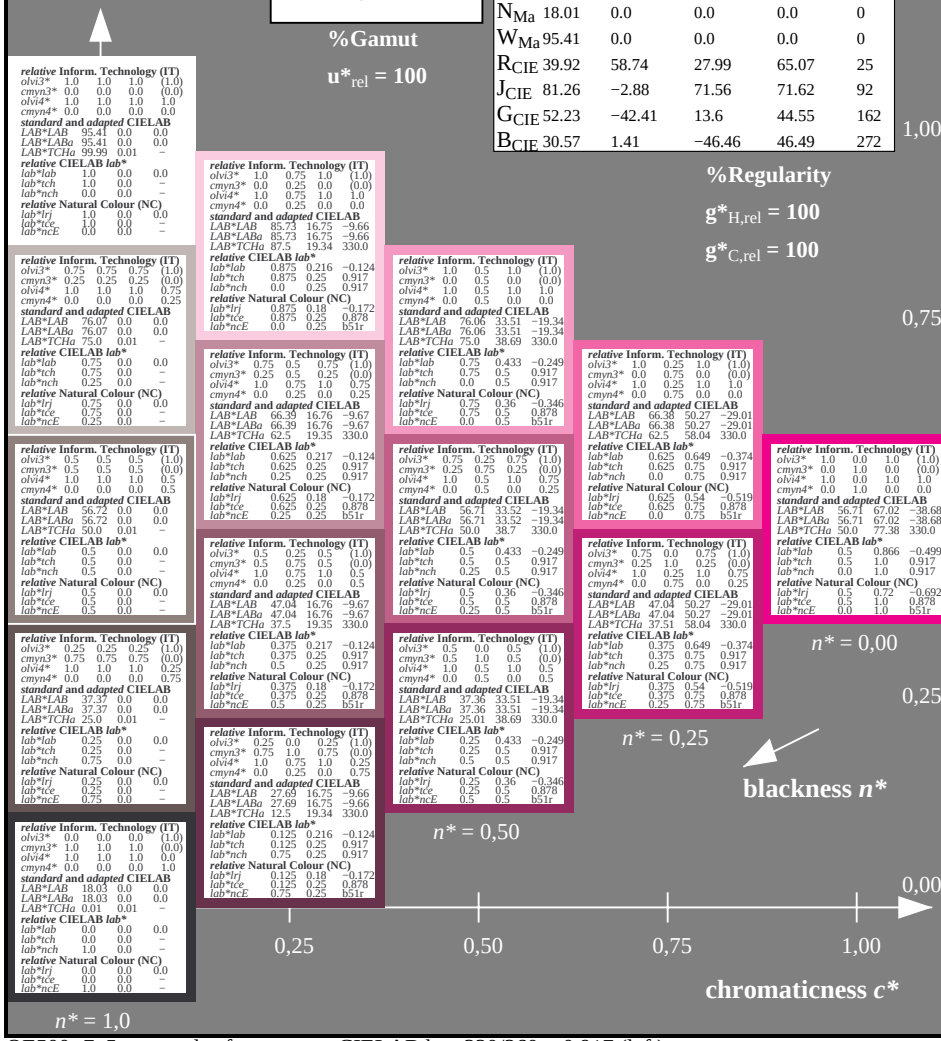
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



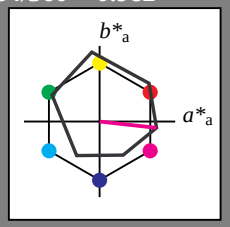
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
*lab*tch* and *lab*nch*

D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

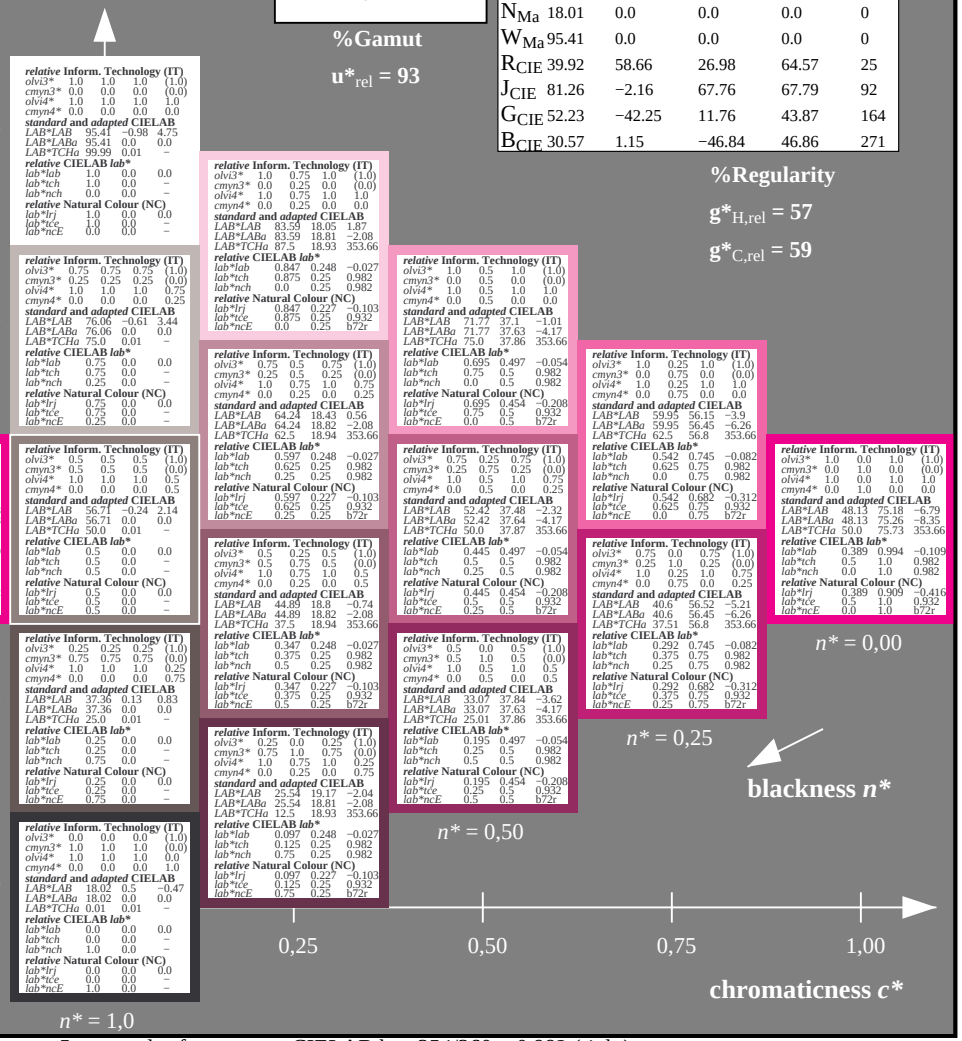
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

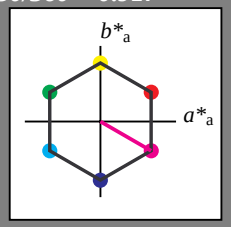
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

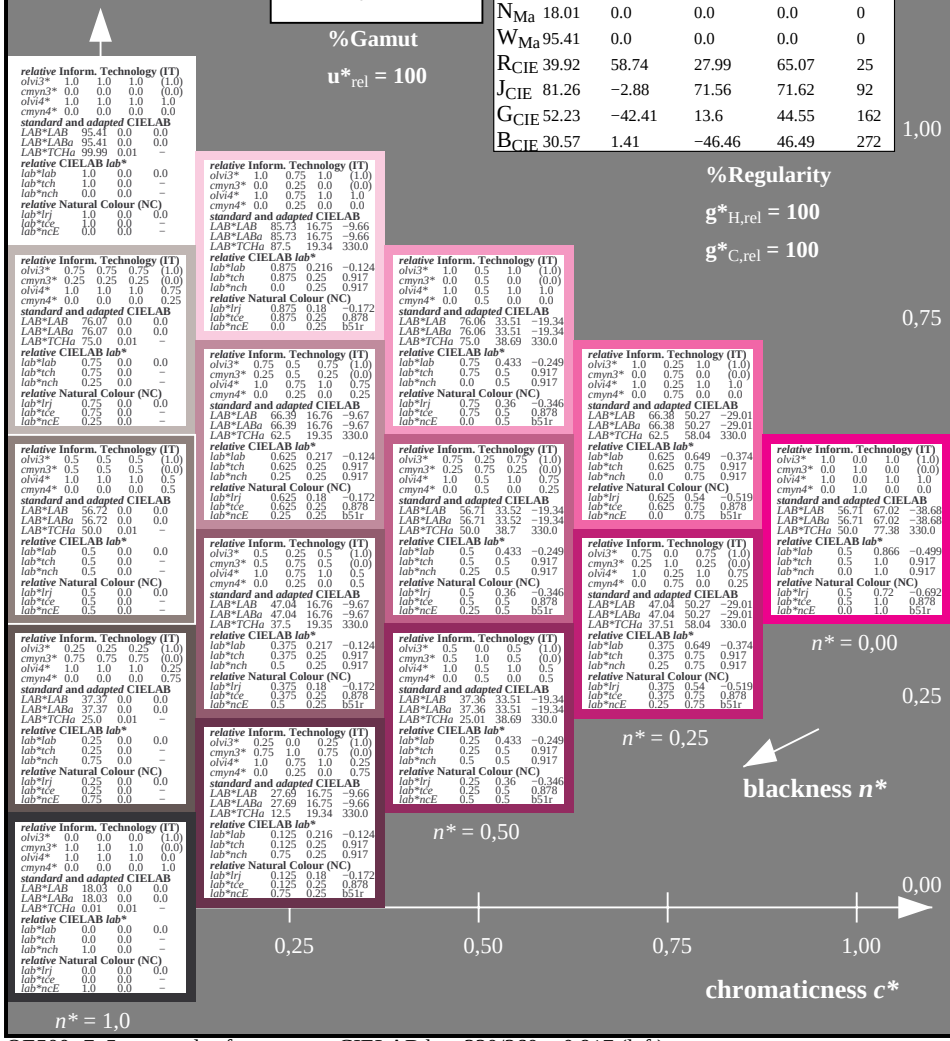
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

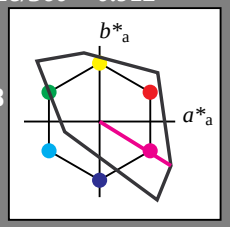
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

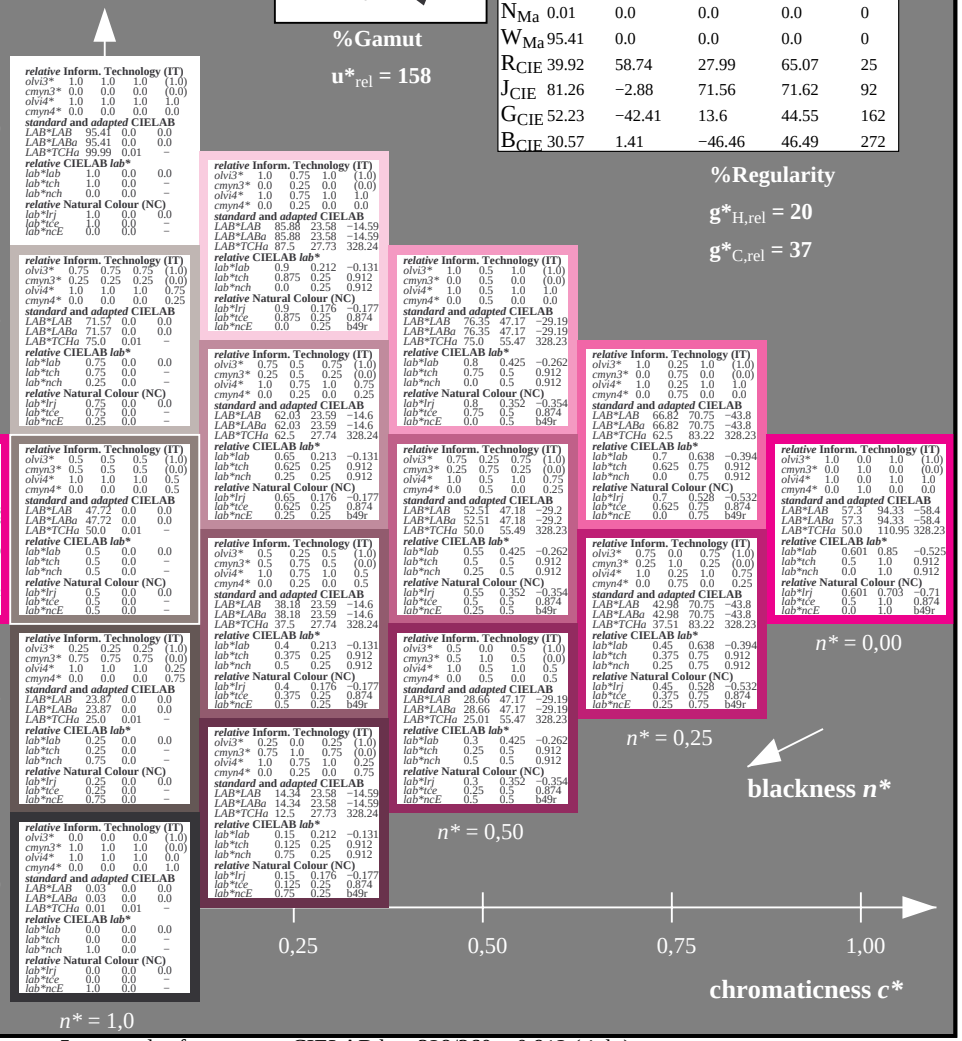
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

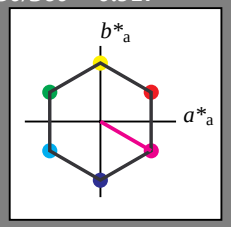
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

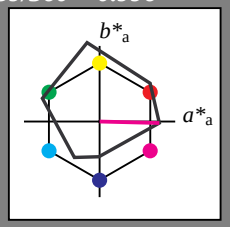
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Standard Reflective System SRS18

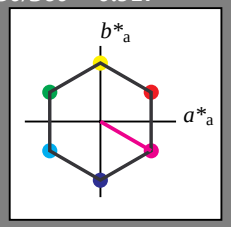
for hue $h^* = lab^*h = 330/360 = 0.917$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

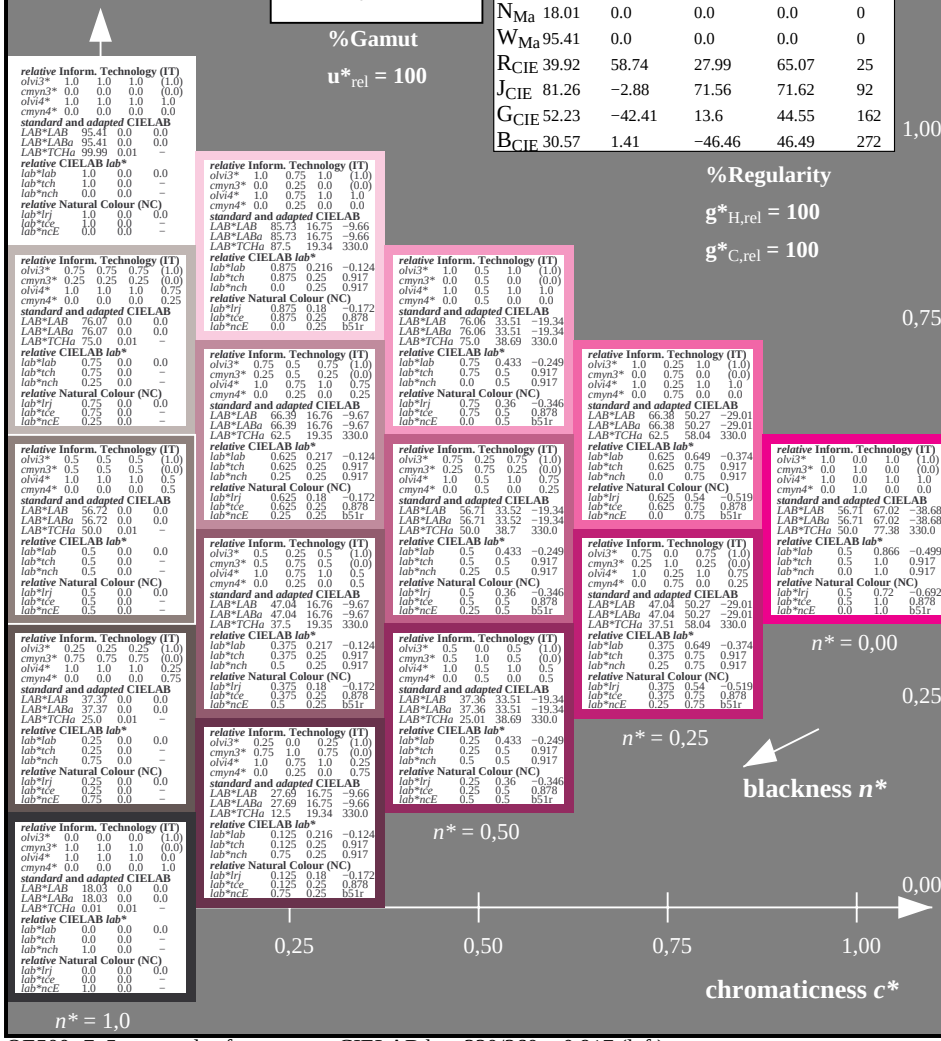
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS18

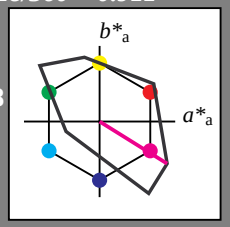
for hue $h^* = lab^*h = 328/360 = 0.911$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

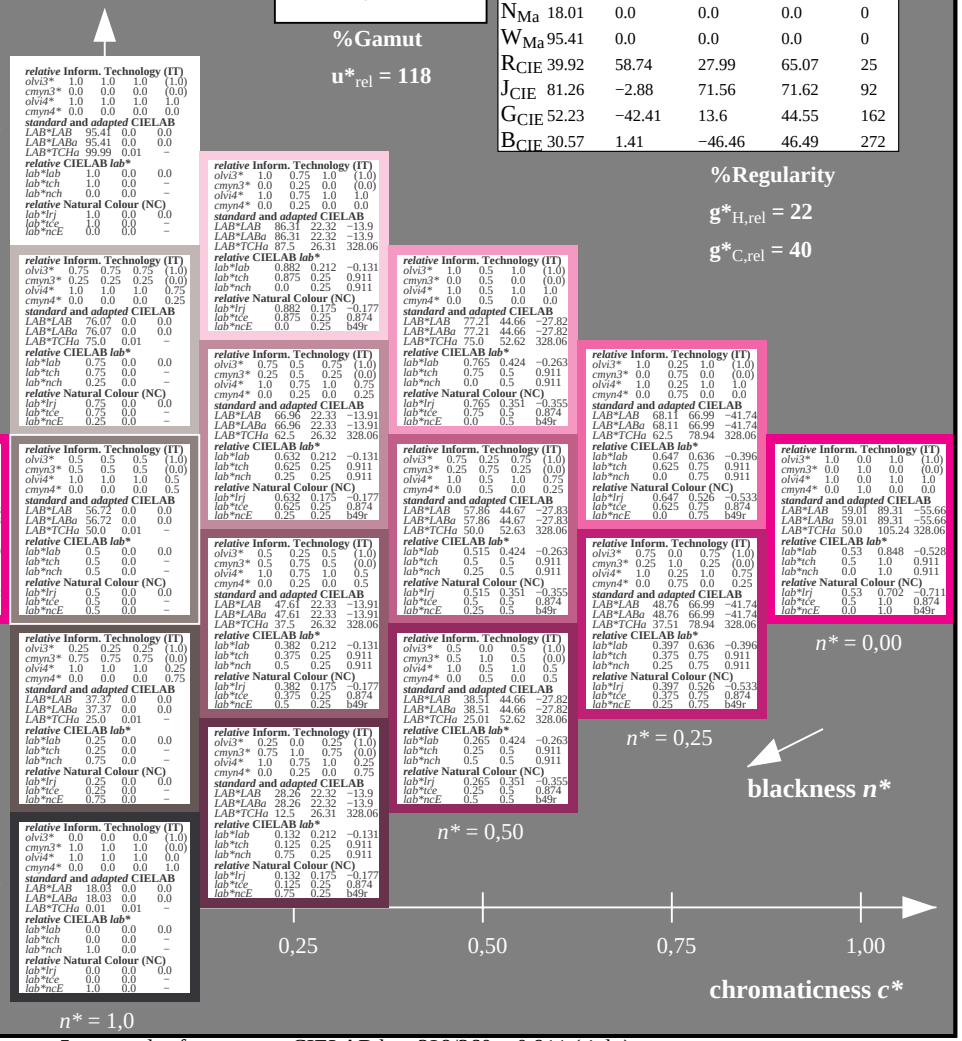
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

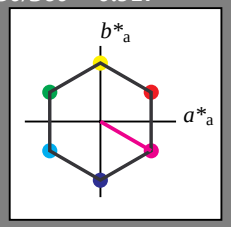
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

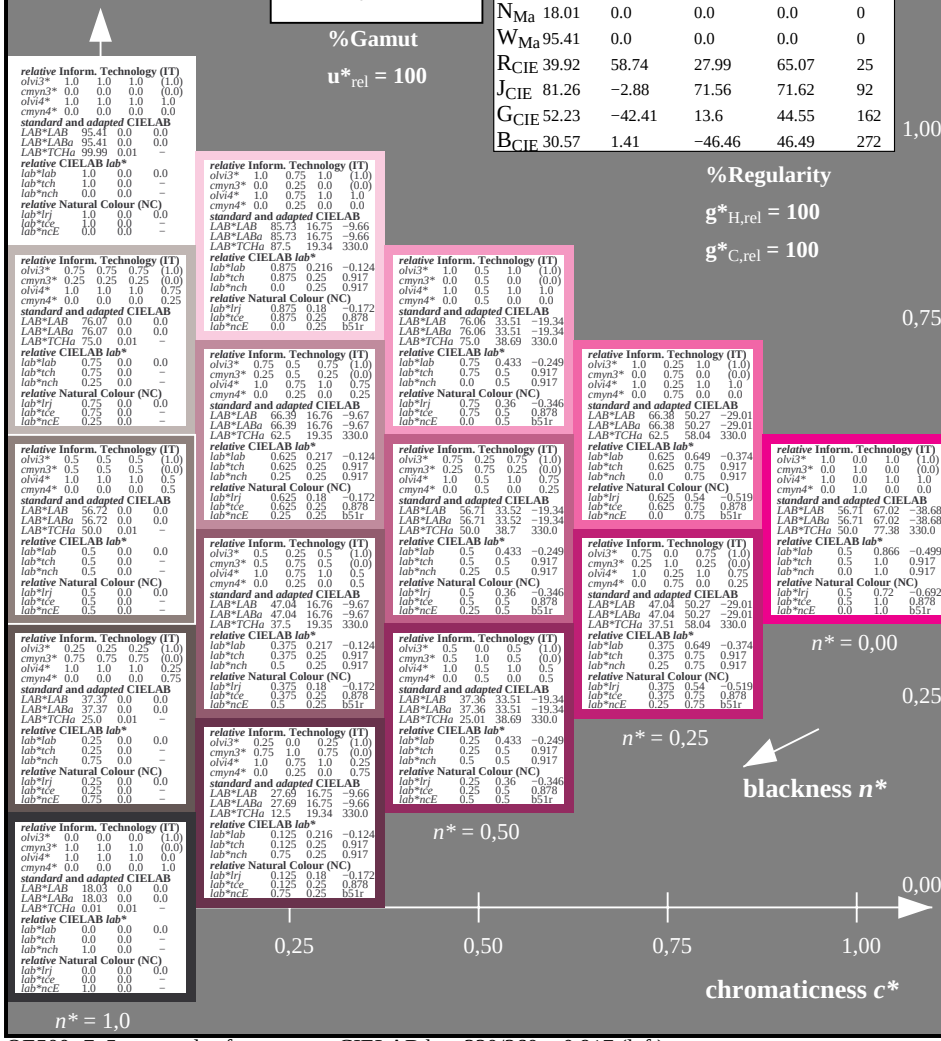
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

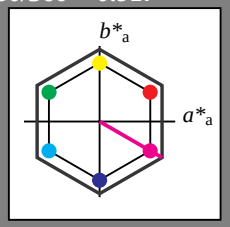
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

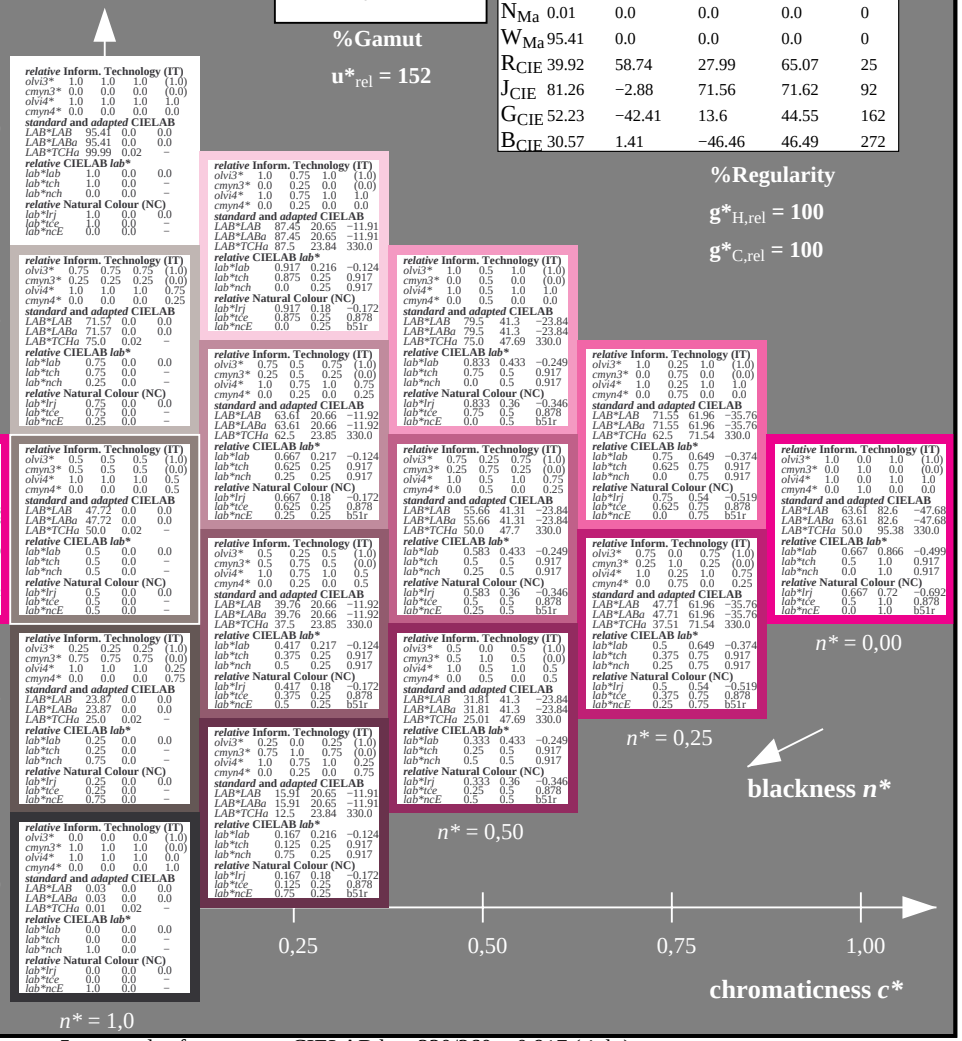
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



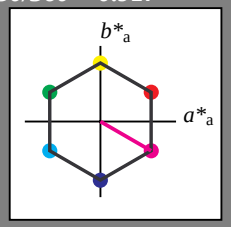
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

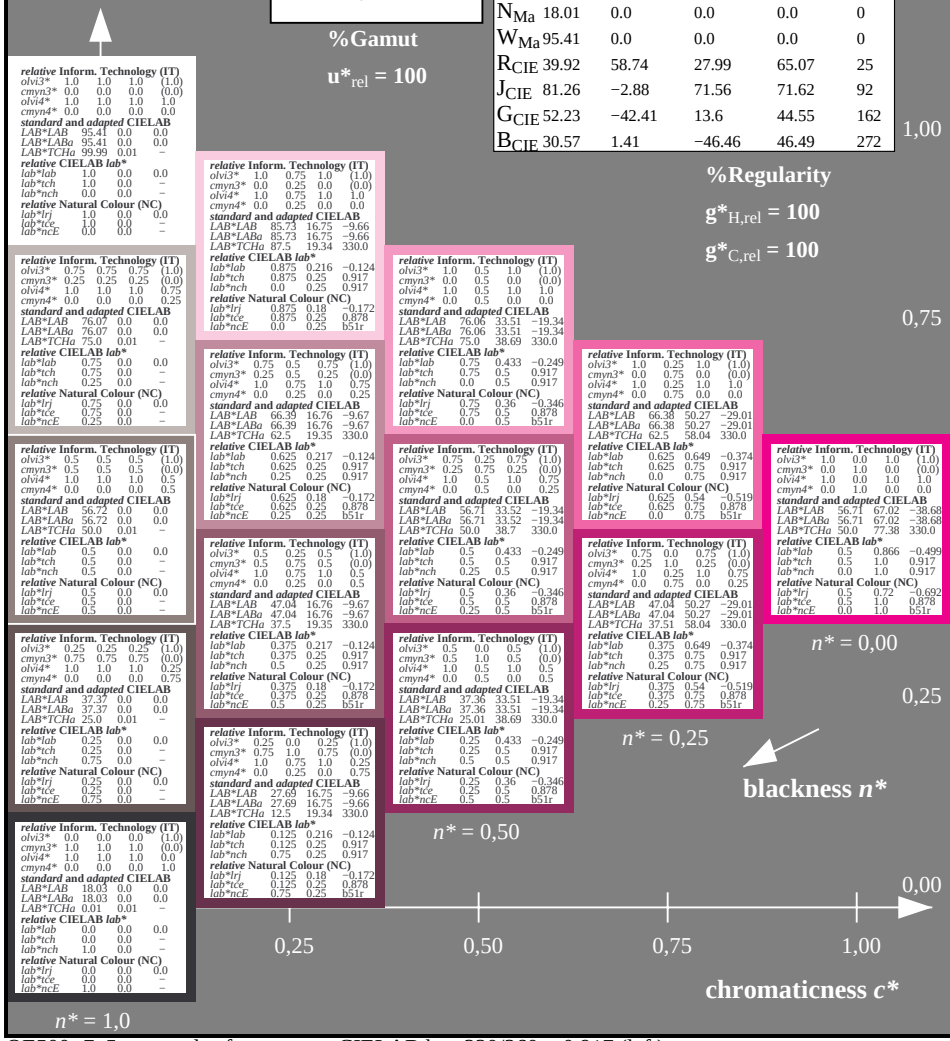
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



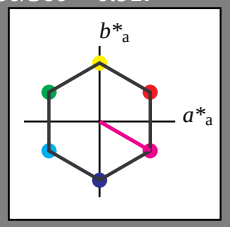
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

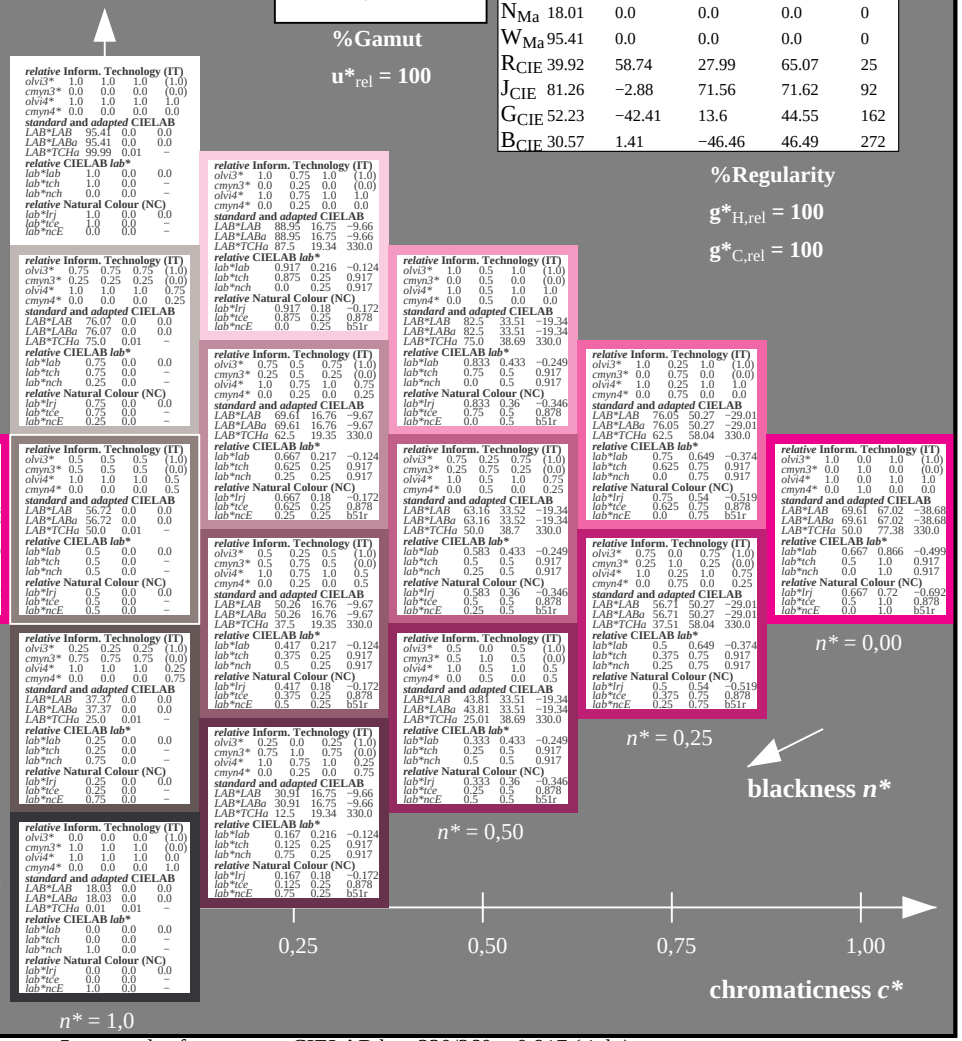
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

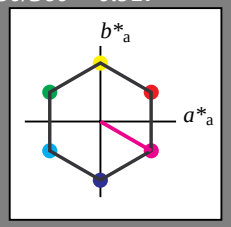


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

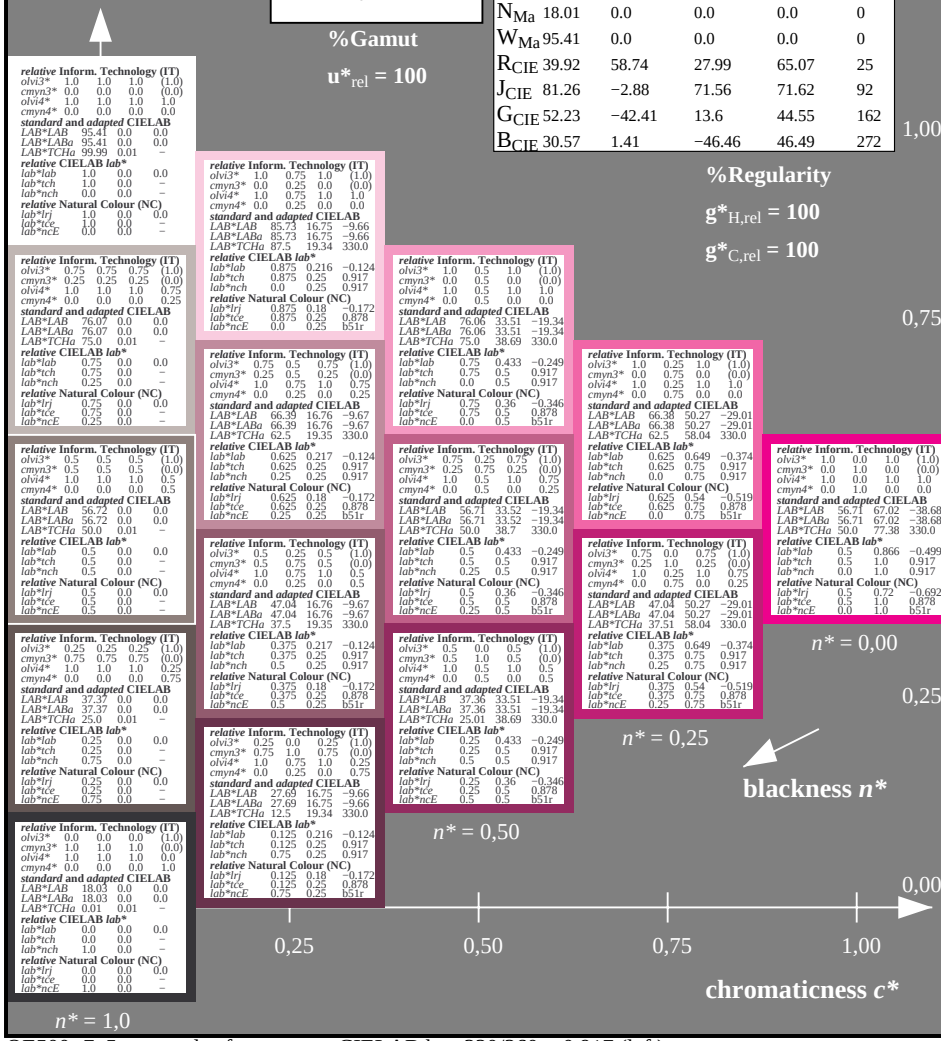
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

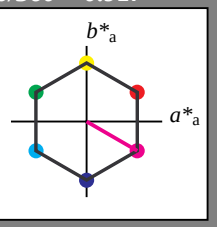
$g^*_{C,rel} = 100$



Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

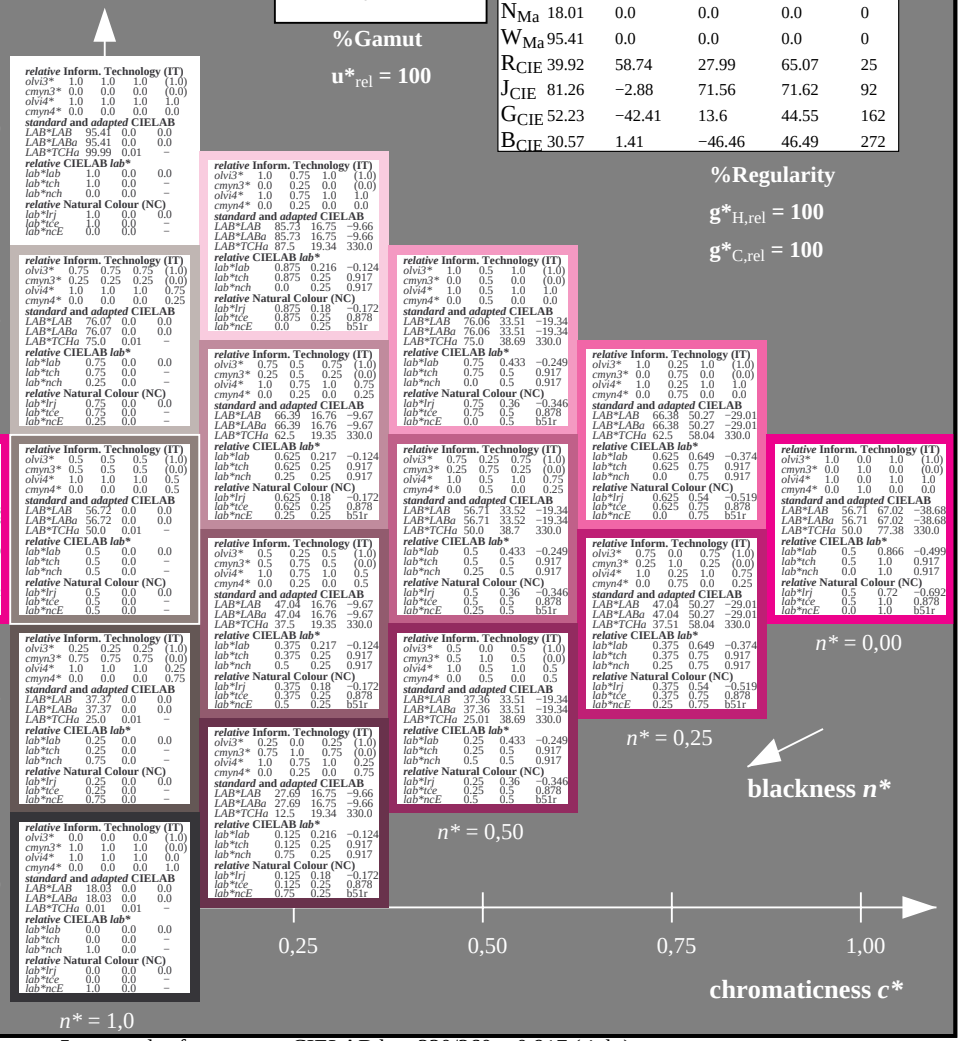
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

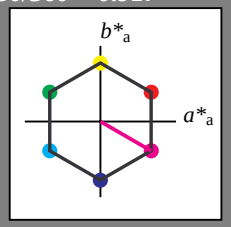
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

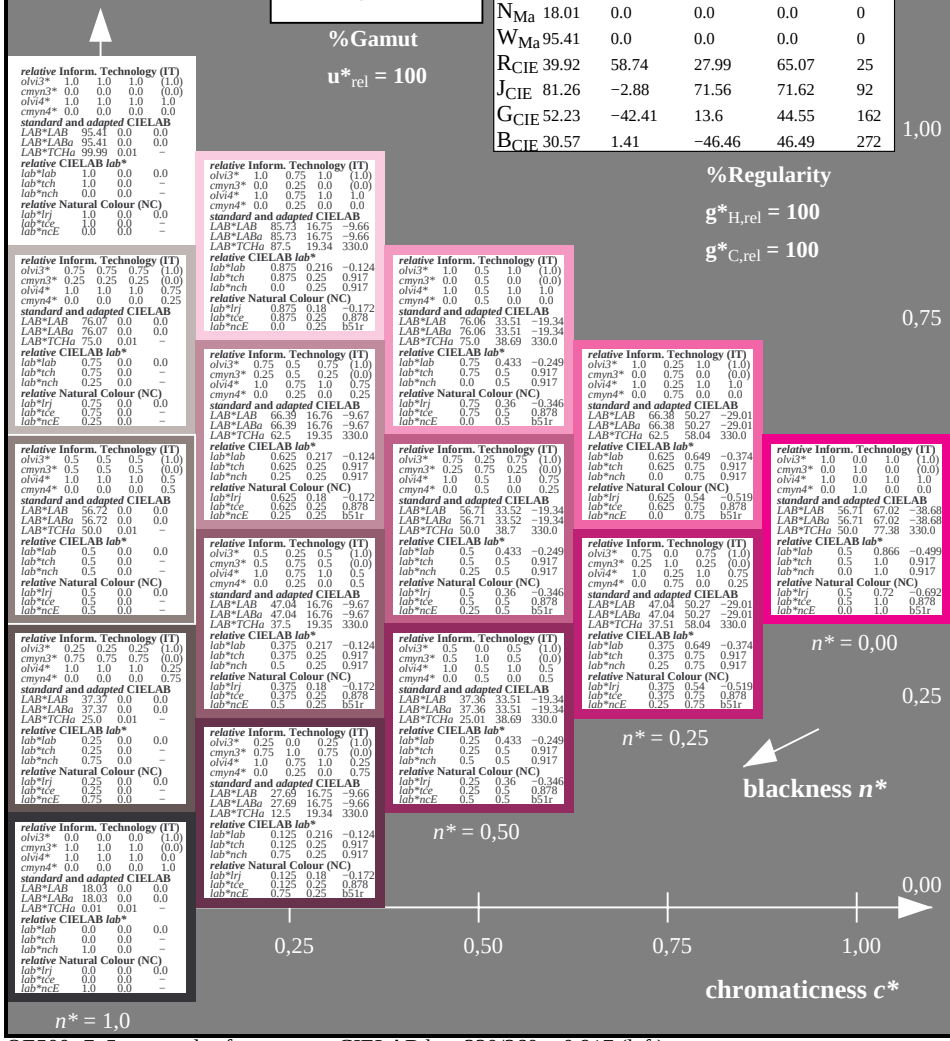
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



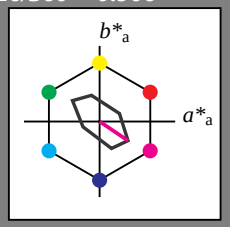
OE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

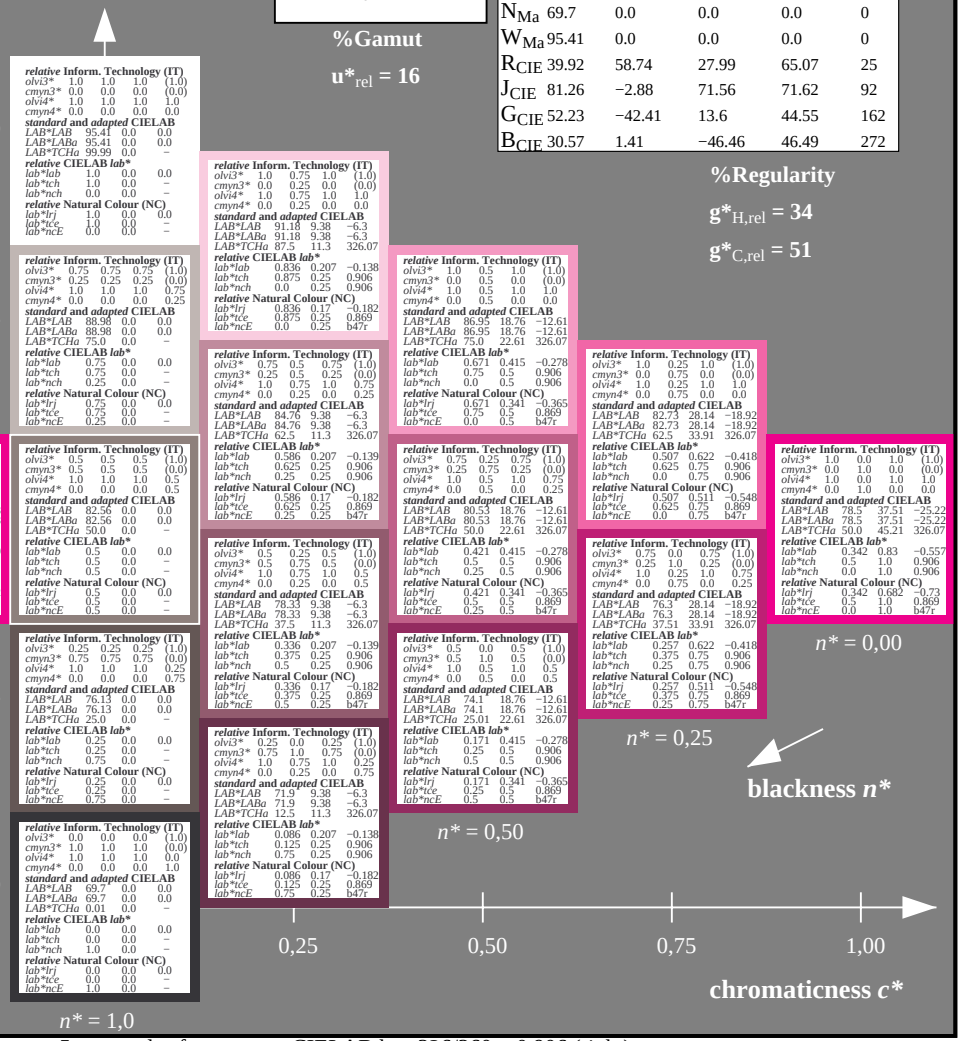
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$

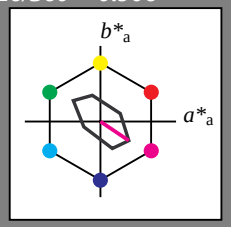
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

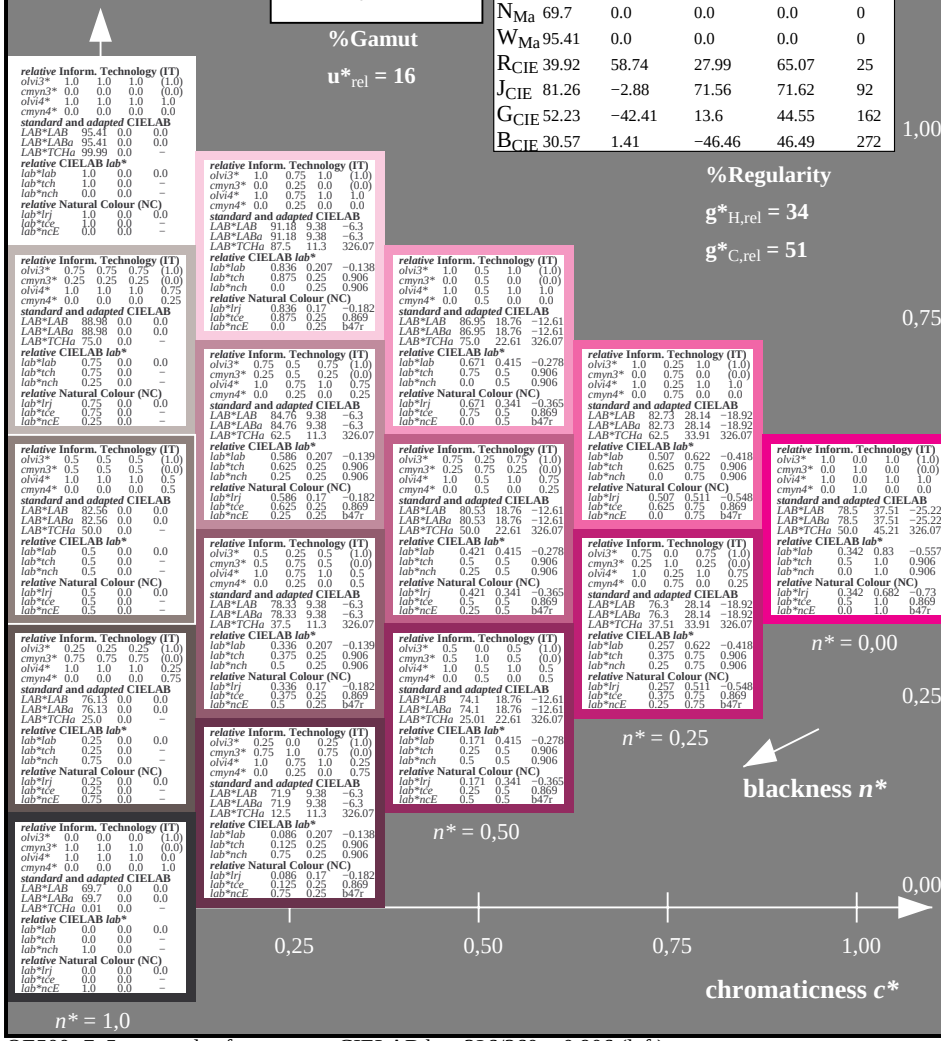
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

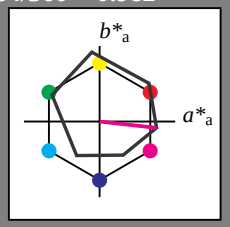
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

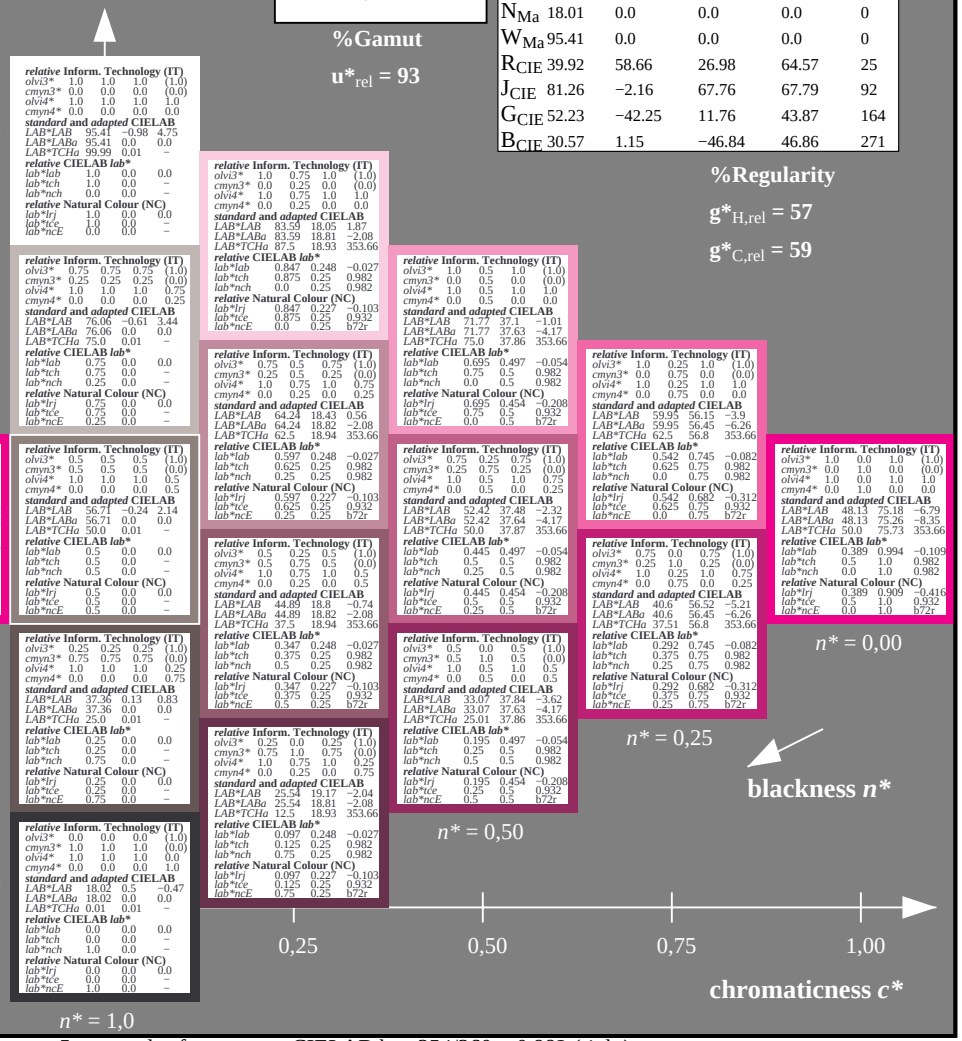
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



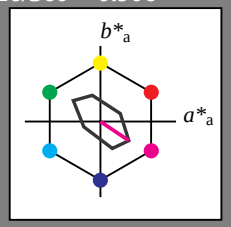
5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

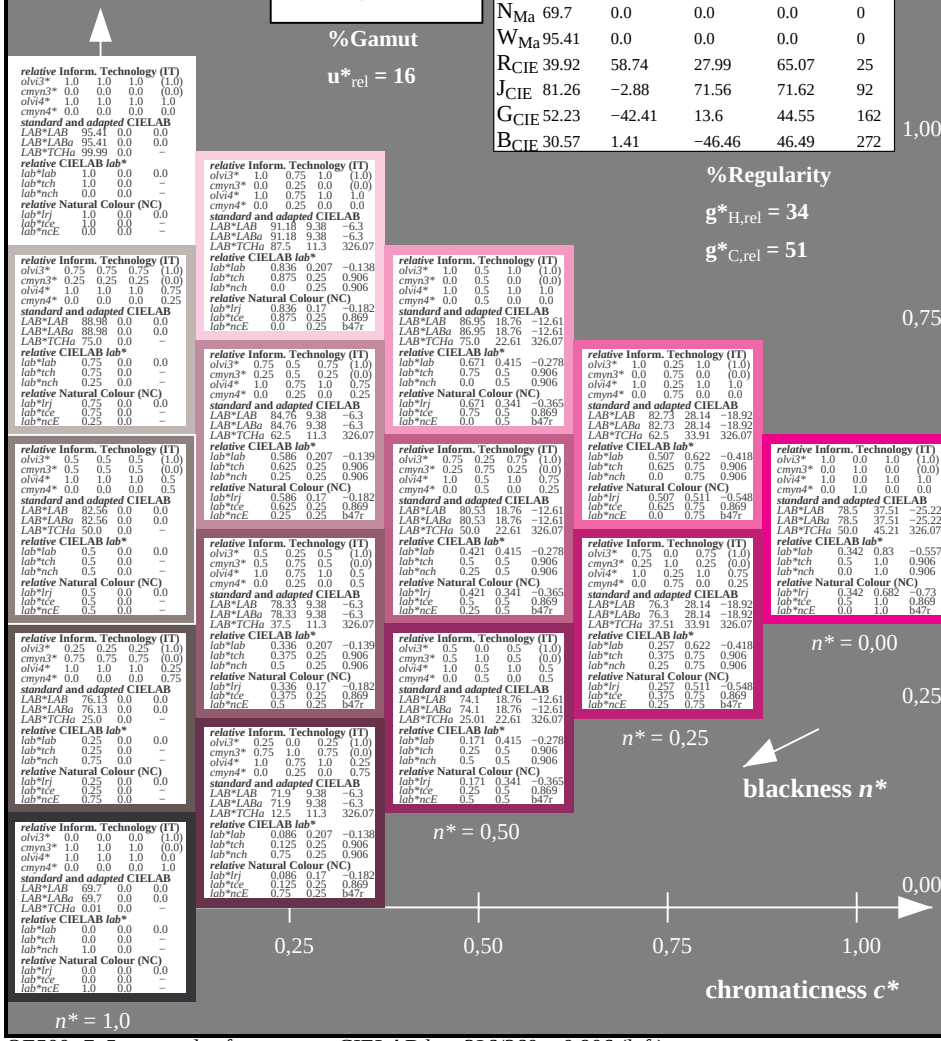
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

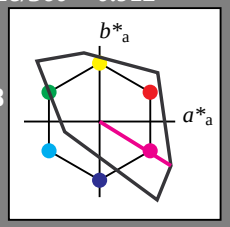


Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

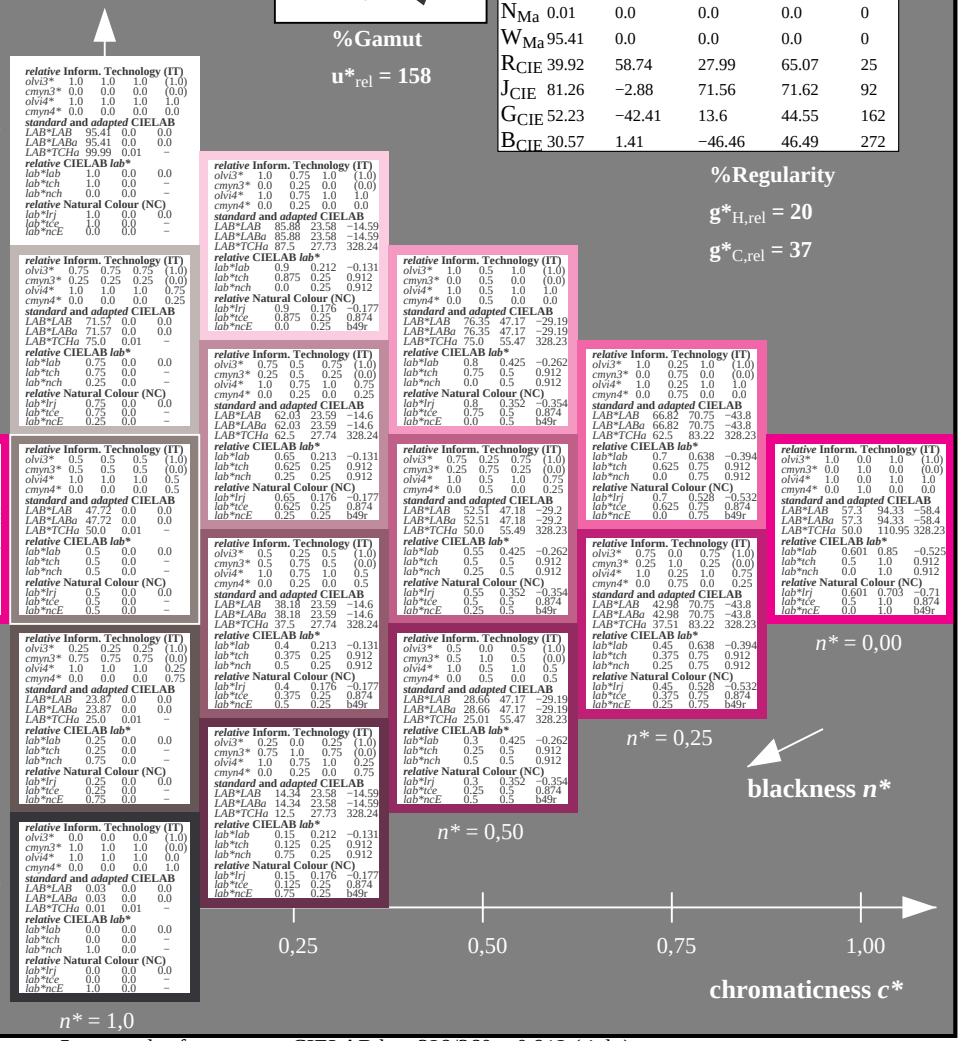
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Television Luminous System TLS70

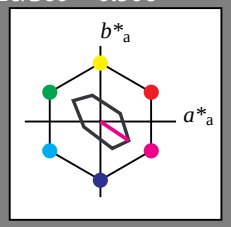
for hue $h^* = lab^*h = 326/360 = 0.906$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

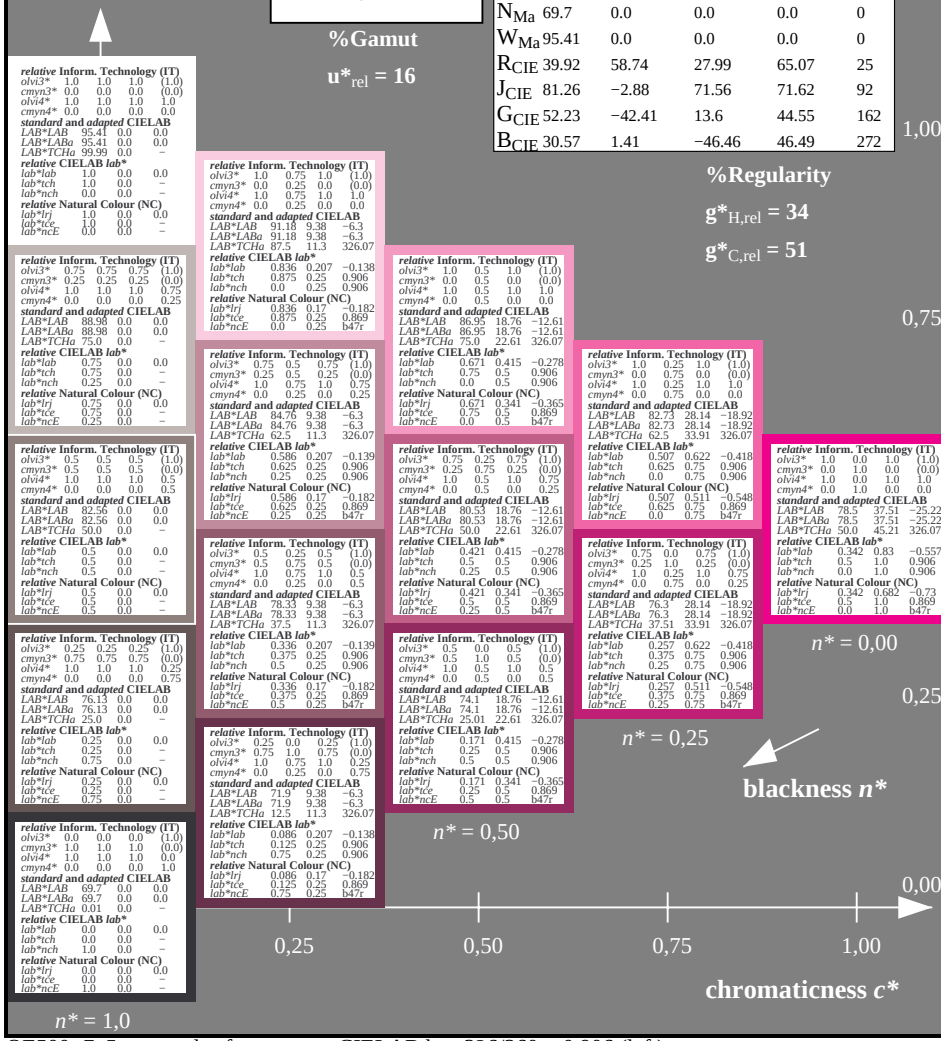
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

Output: Colorimetric Printer Reflective System DRSXX

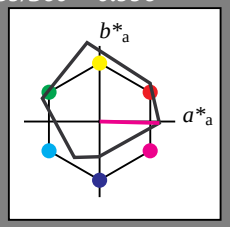
for hue $h^* = lab^*h = 359/360 = 0.996$

*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

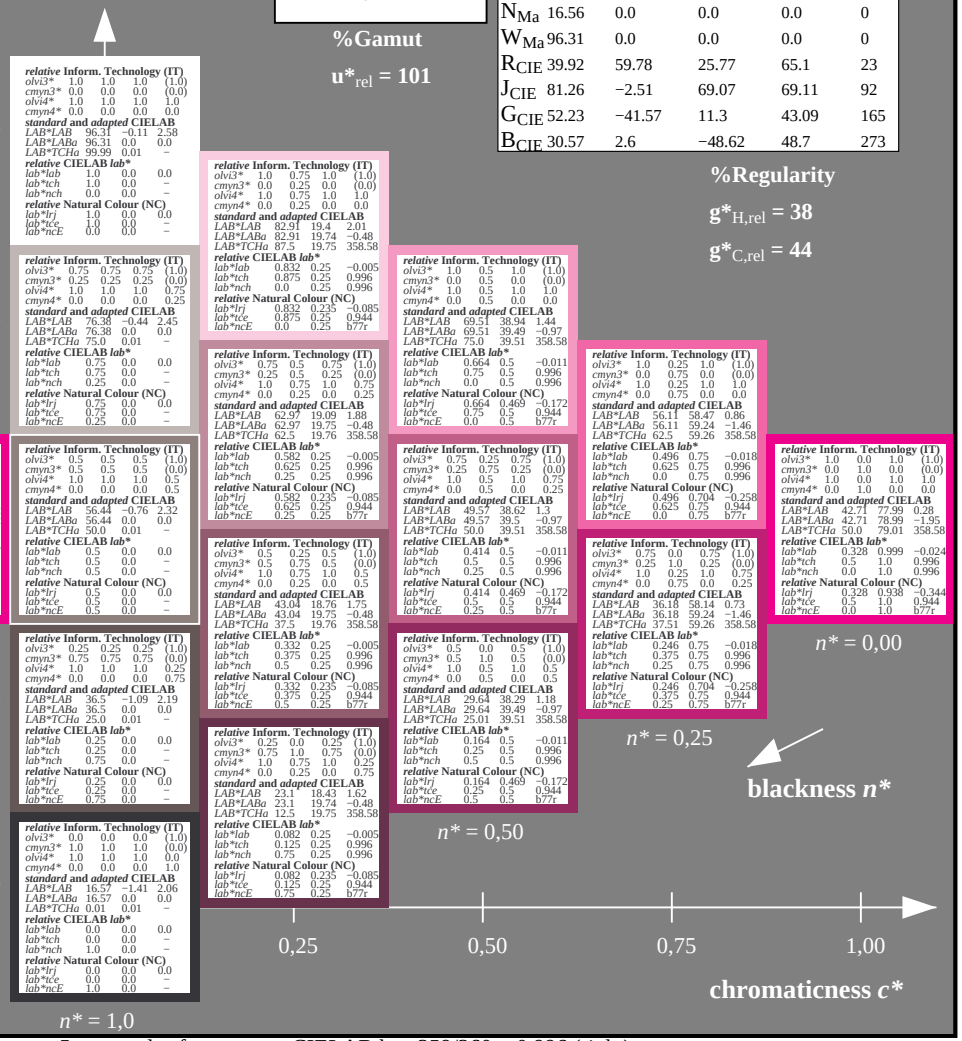
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



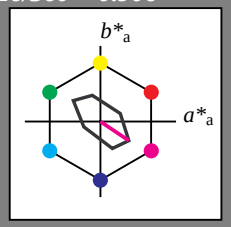
5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

1,00

0,75

0,25

0,00

n^* = 1,0

n^* = 0,50

n^* = 0,25

n^* = 0,00

blackness n^*

0,25 0,50 0,75 1,00

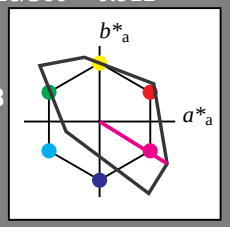
chromaticness c^*

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

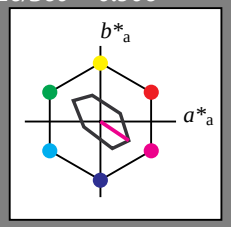
5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

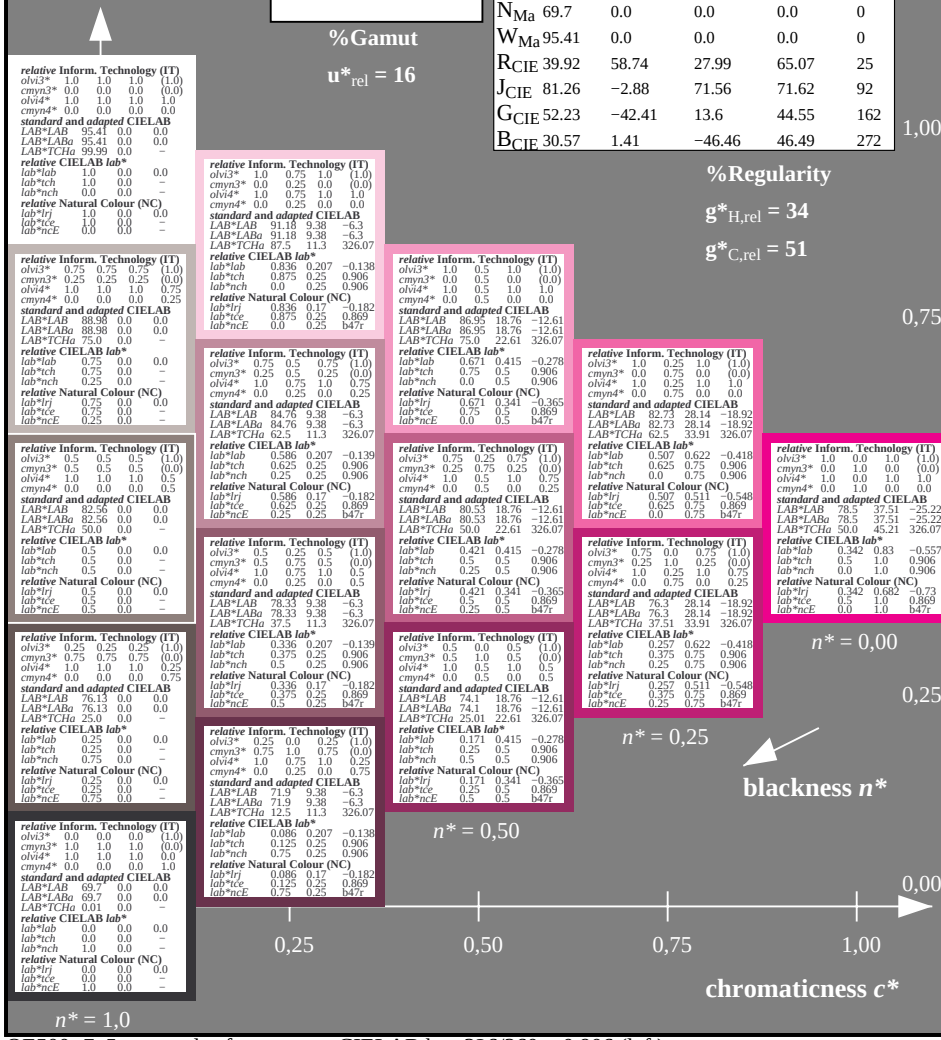
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

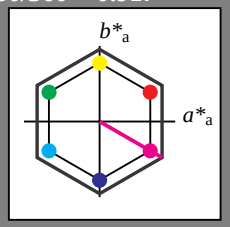


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

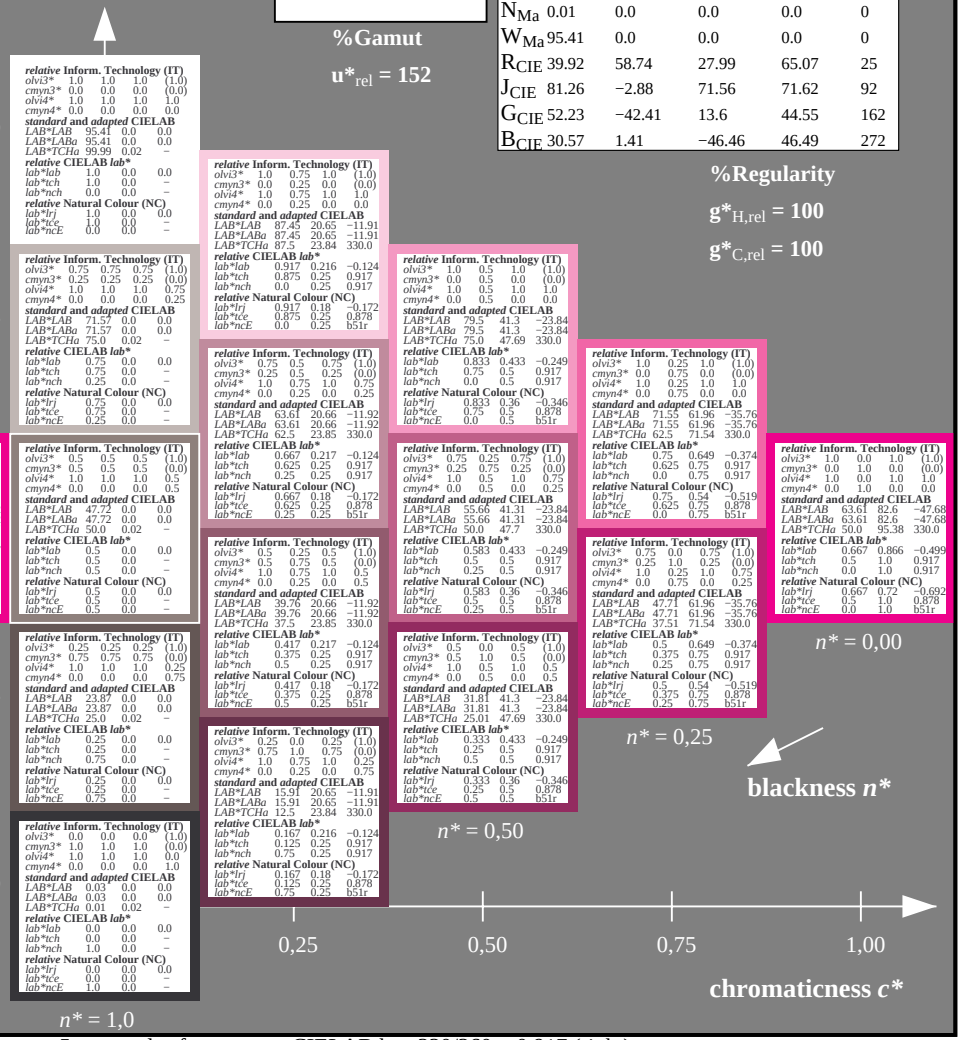
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



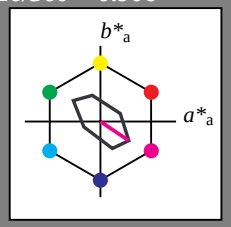
OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

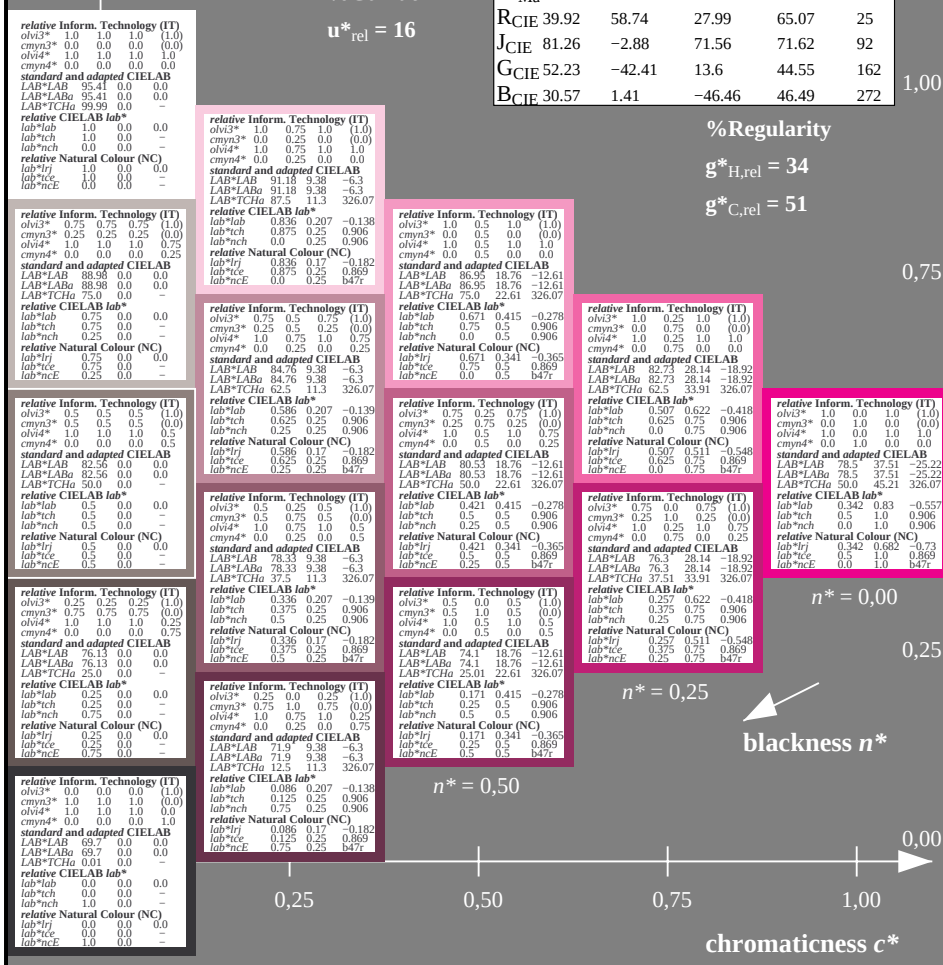
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

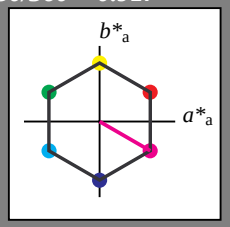
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

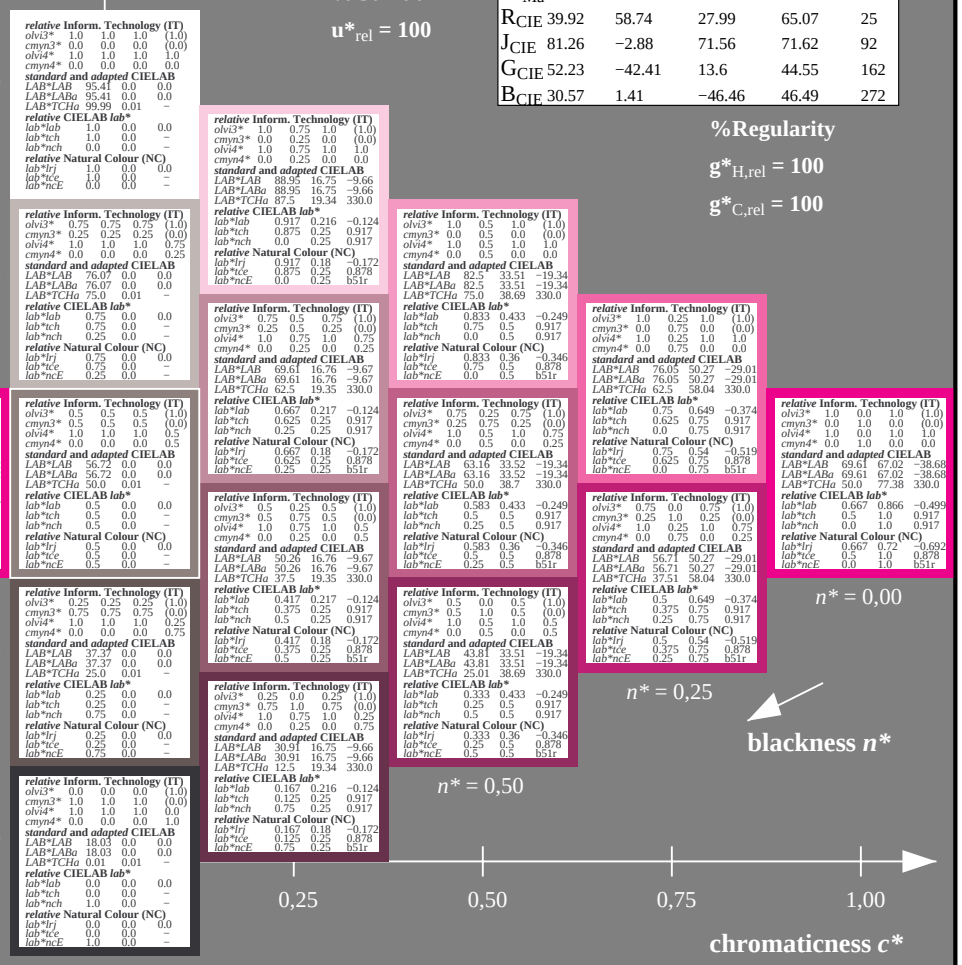
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

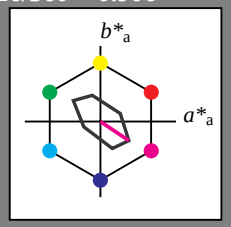
5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

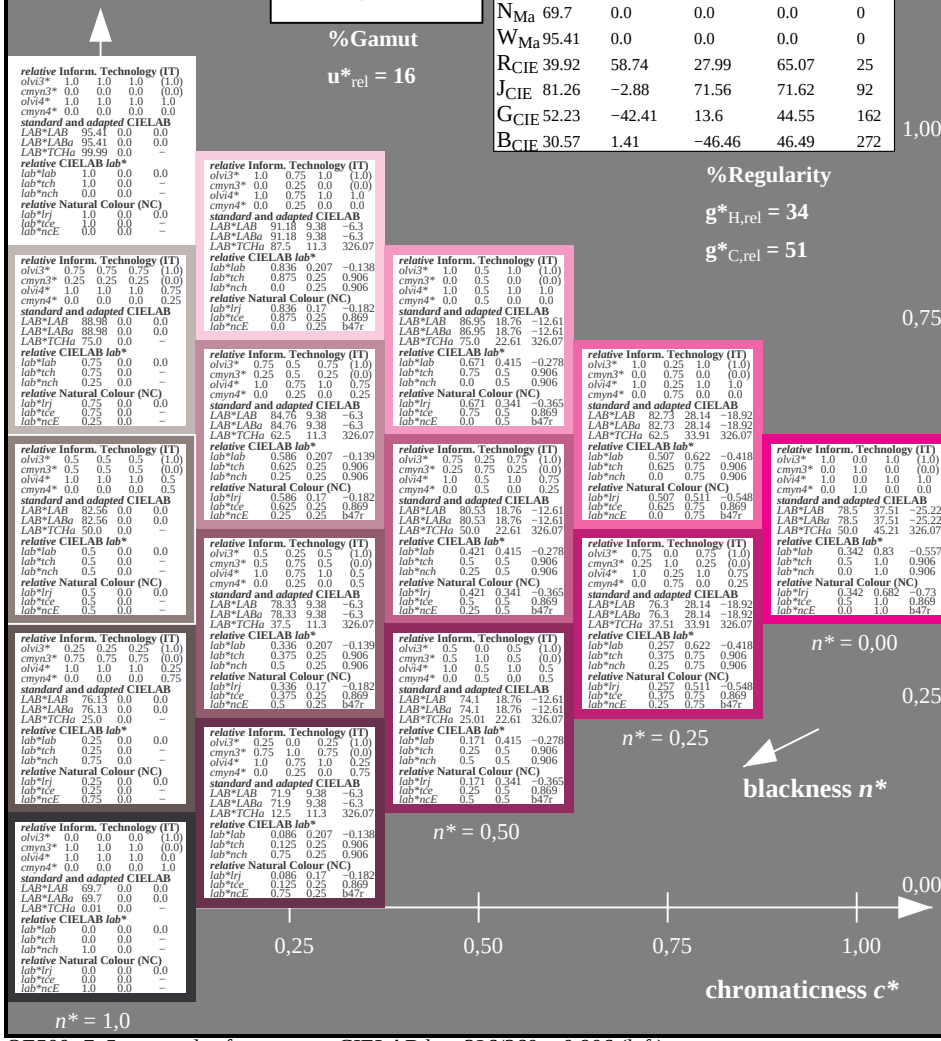
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



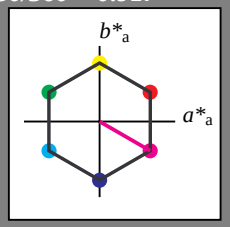
OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

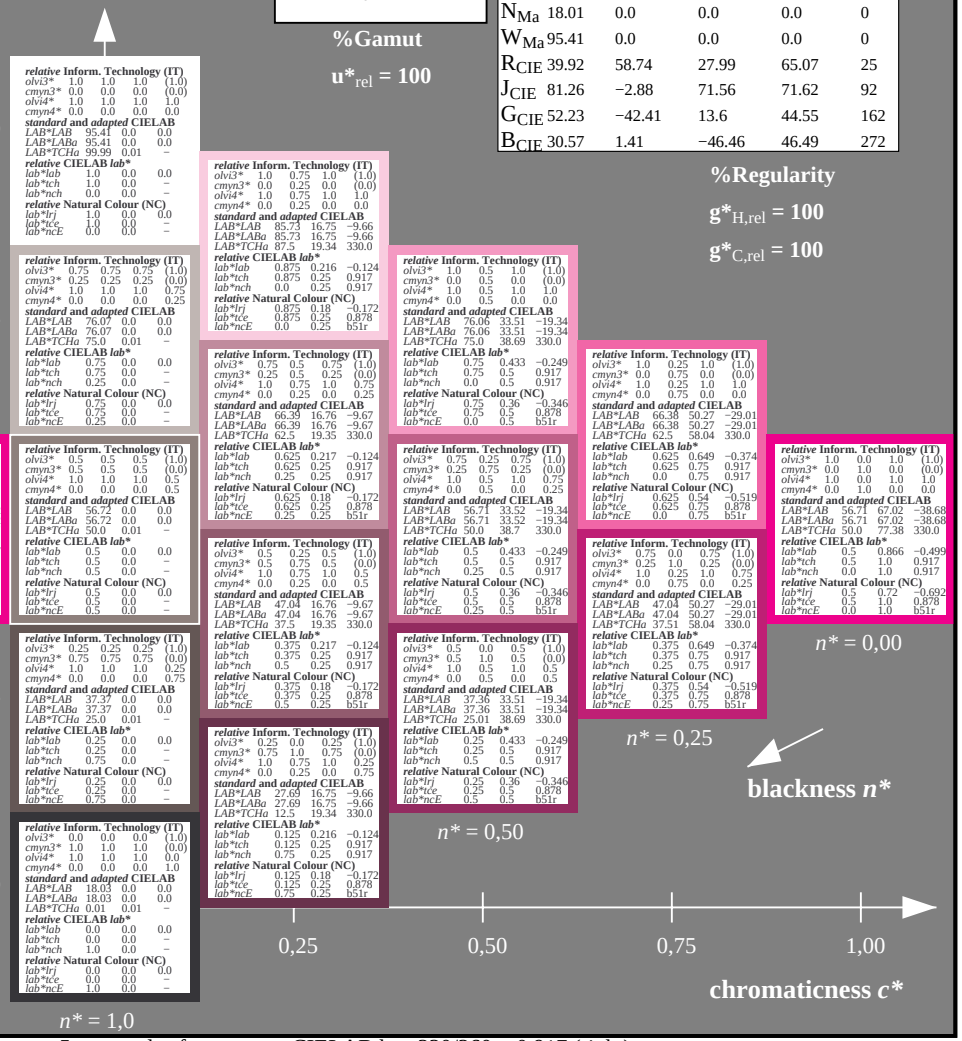
u^*_{rel} = 100

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

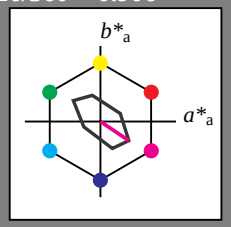


5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

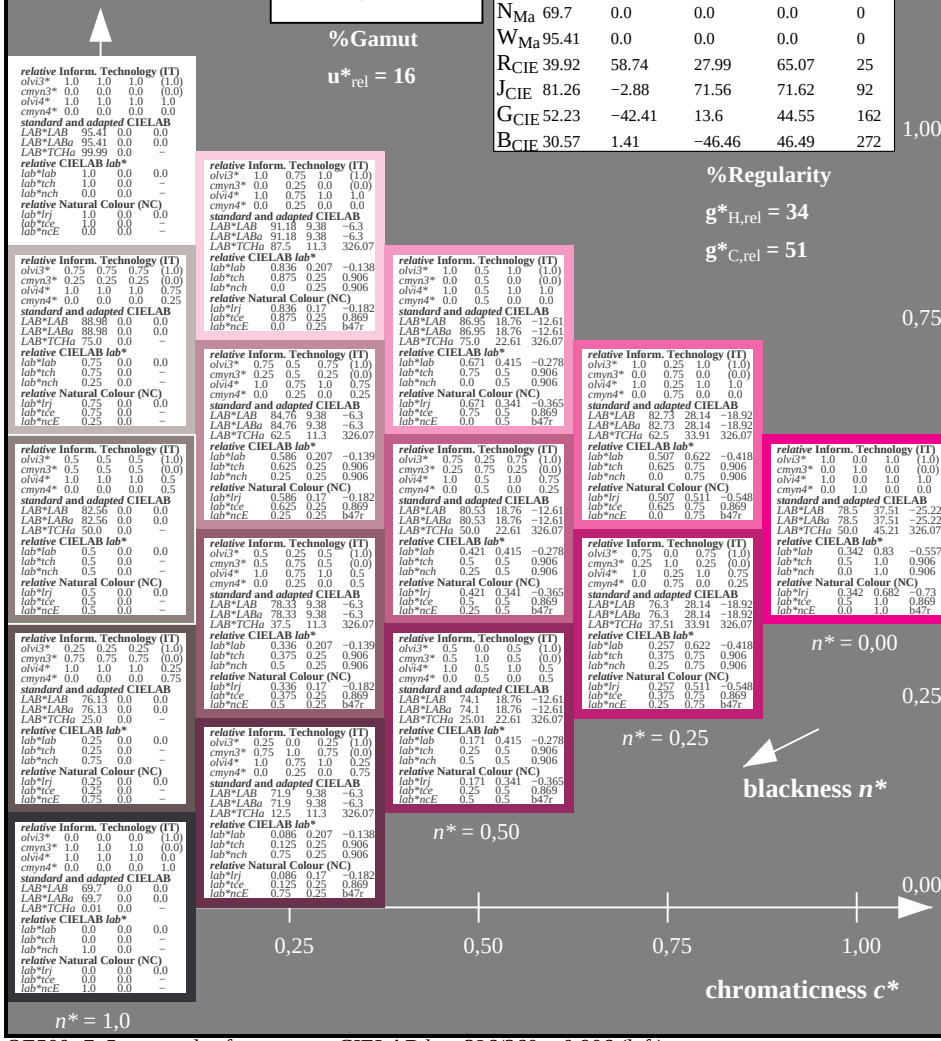
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

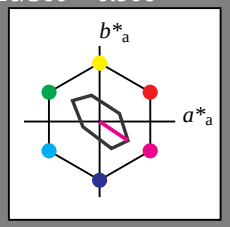


OE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

Output: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 326/360 = 0.906$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

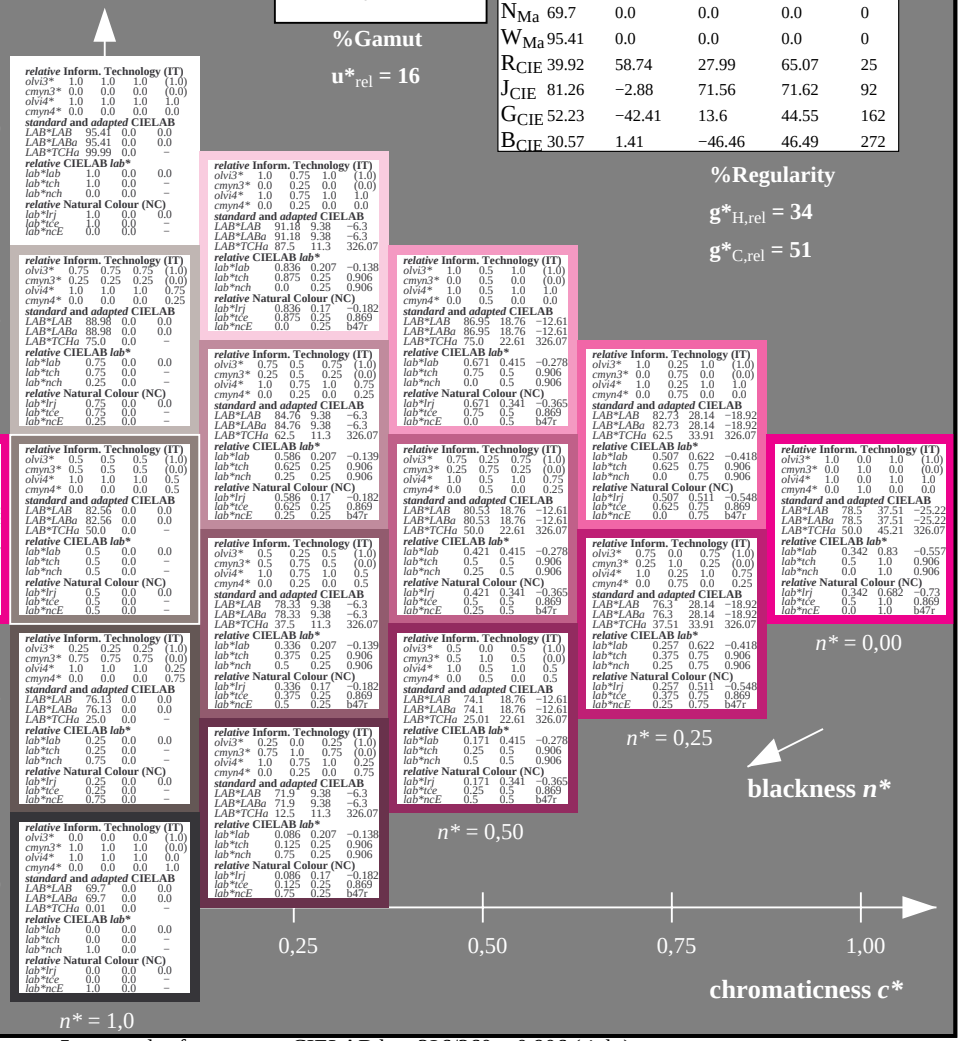
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

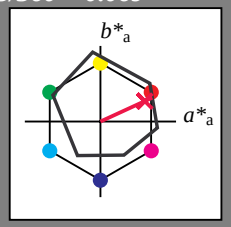


5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

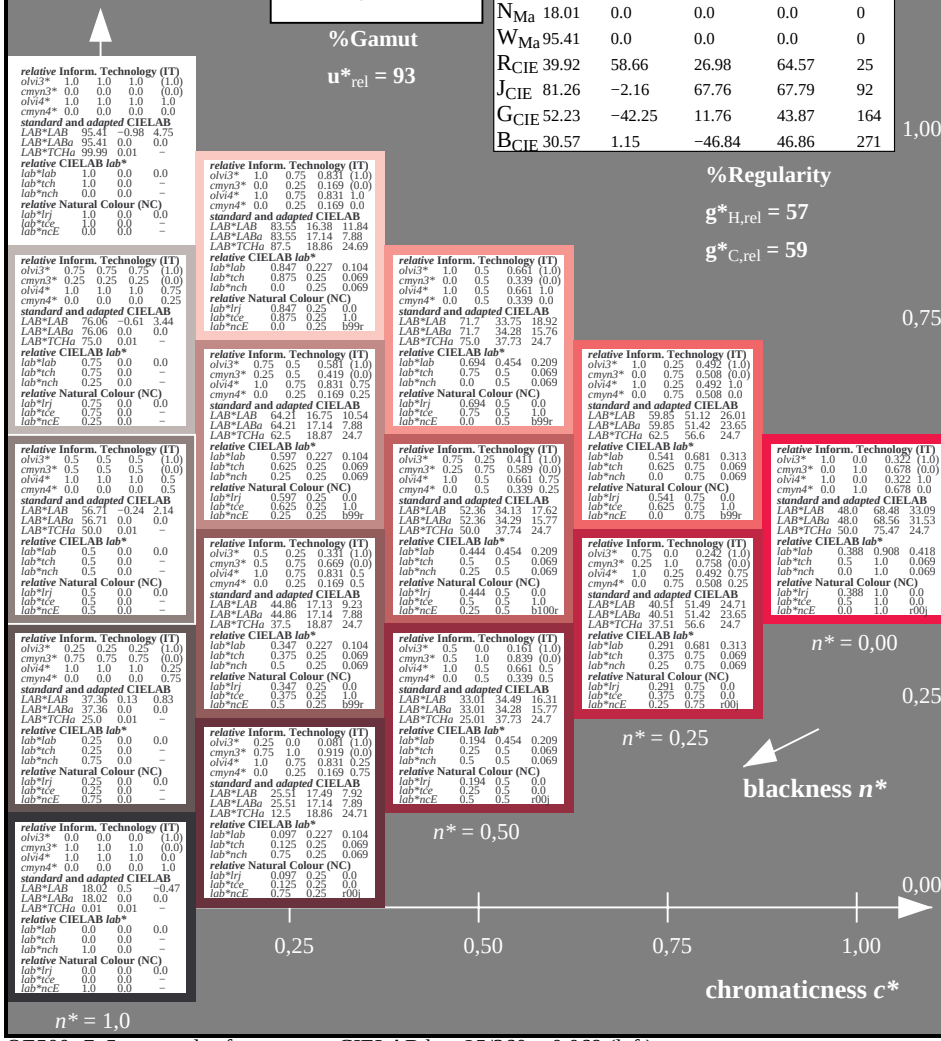
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

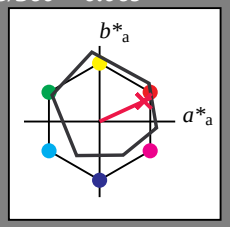


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

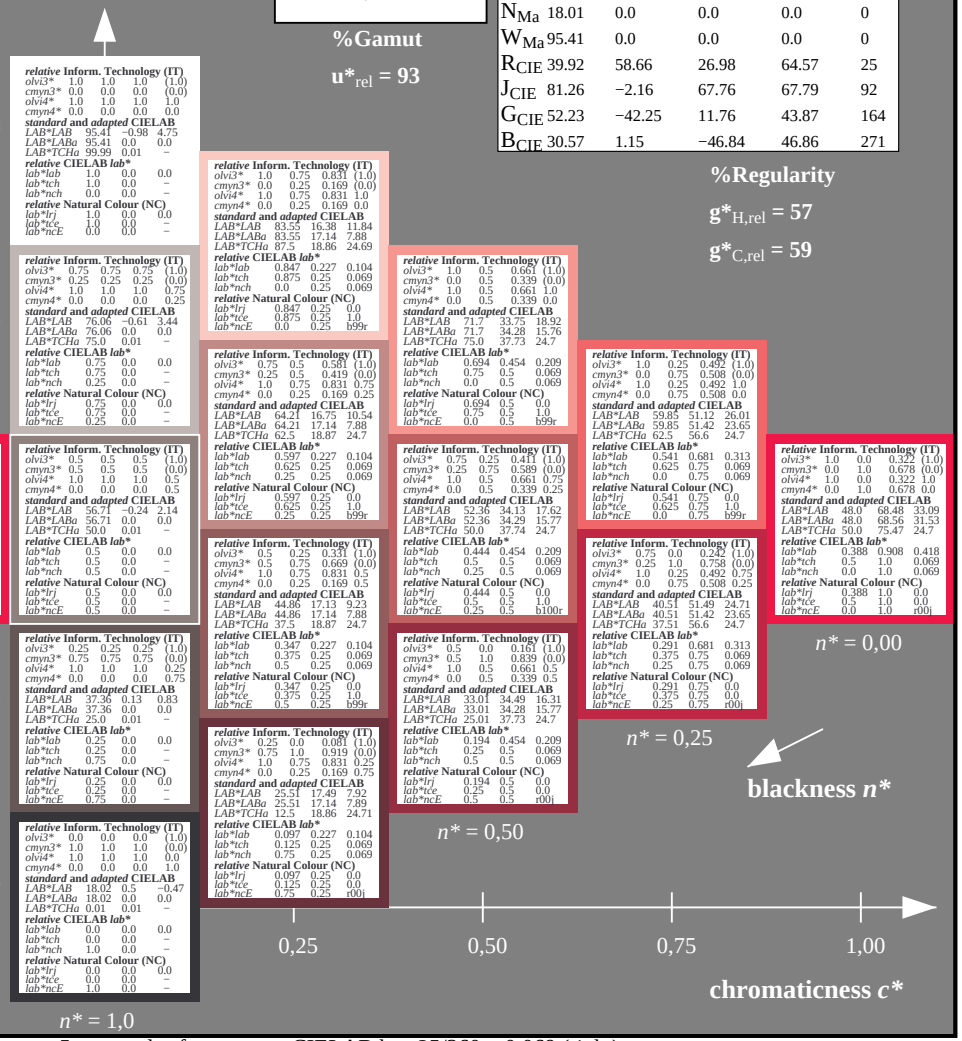
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

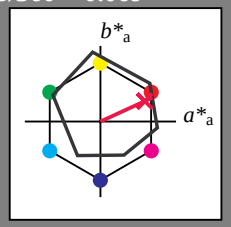


5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

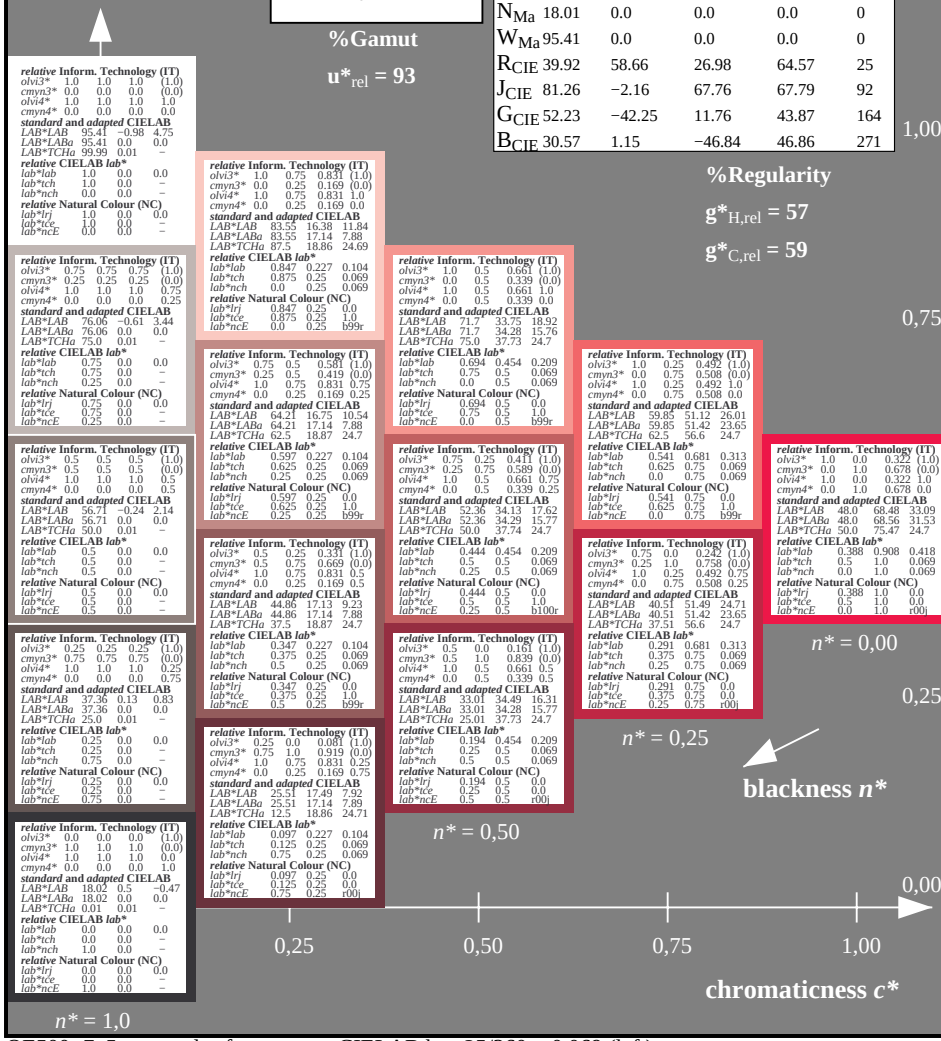
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

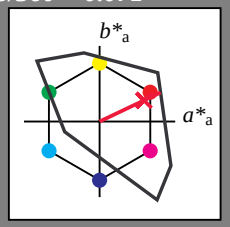


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

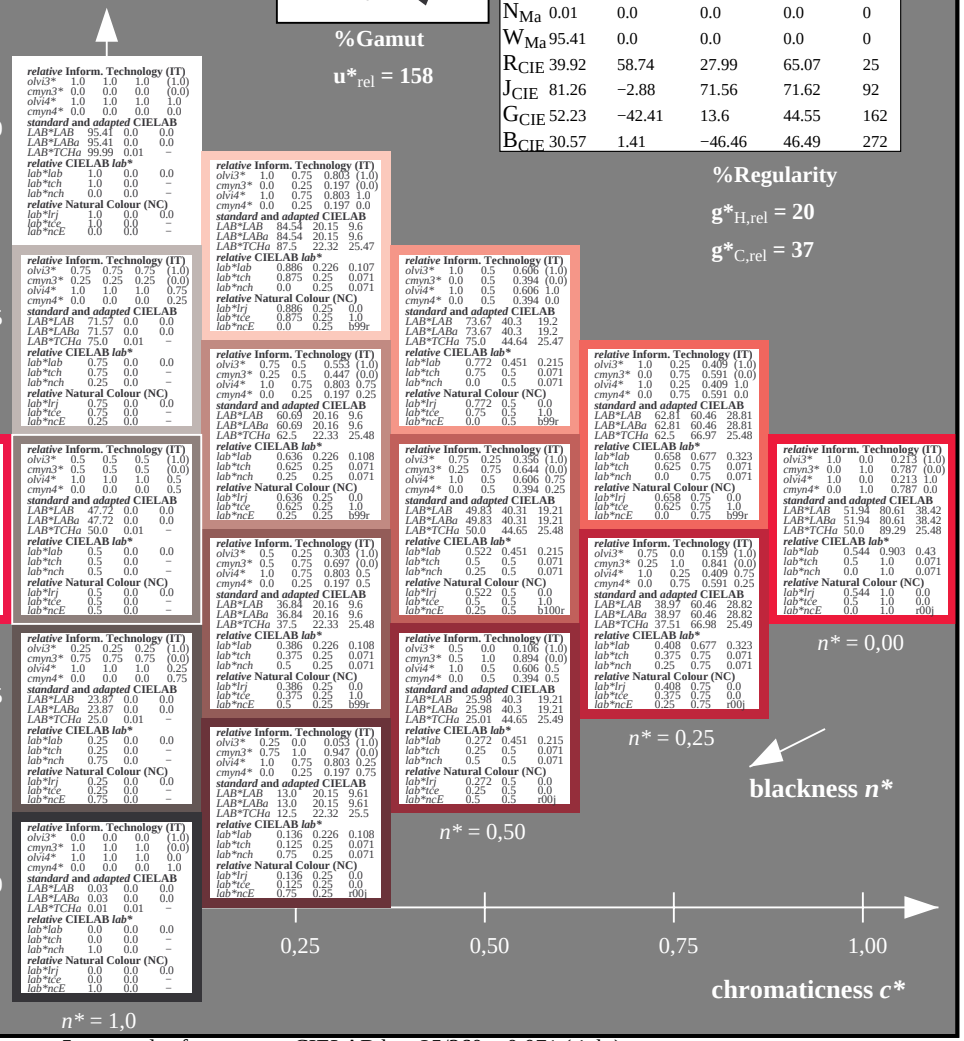
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



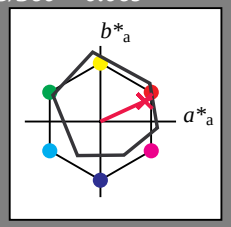
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

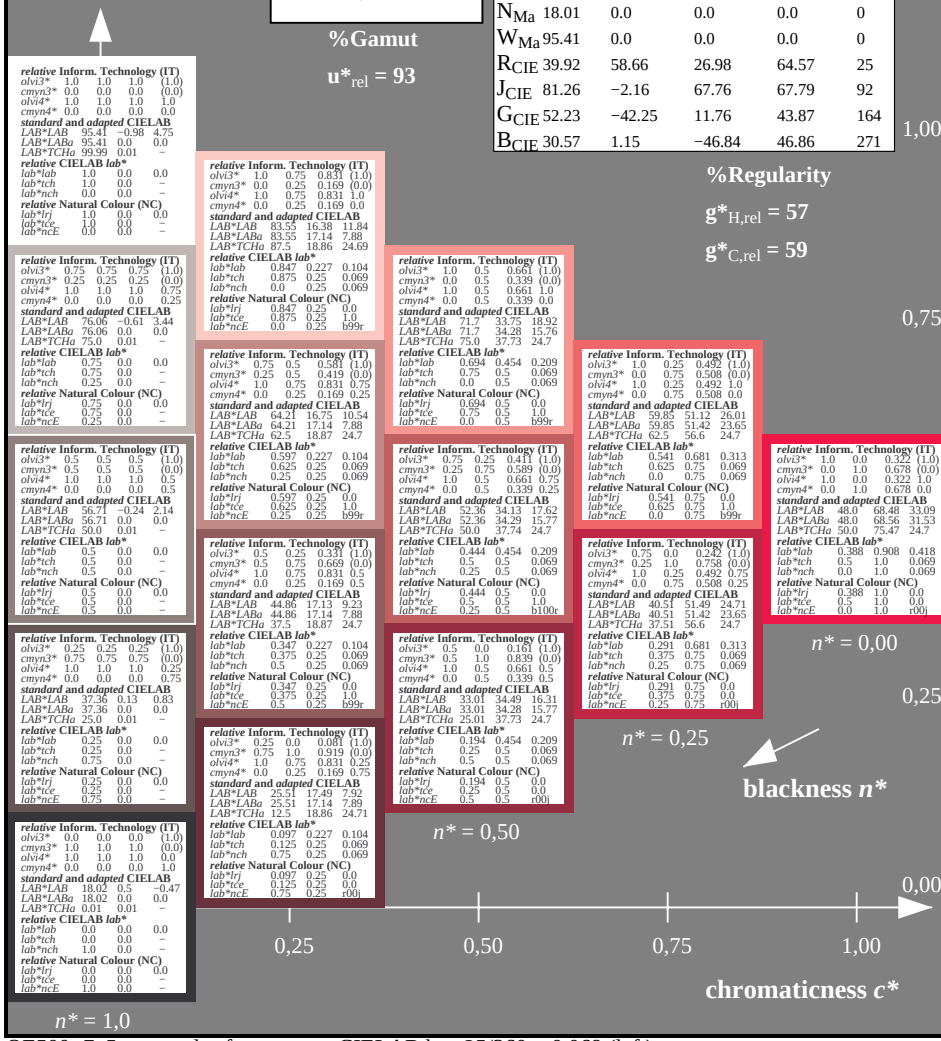
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

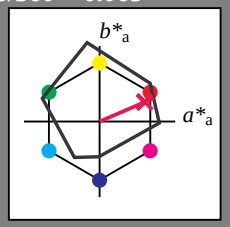


Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

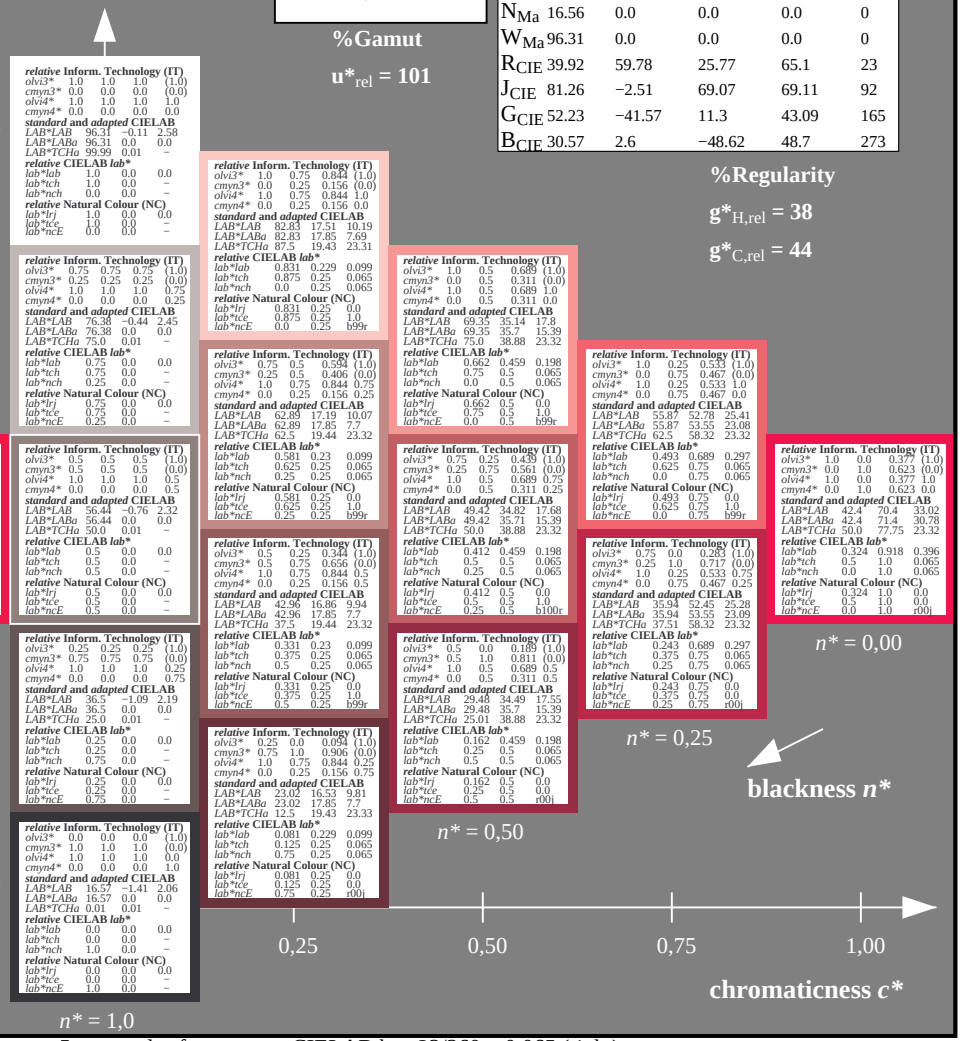
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

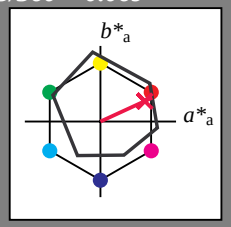
5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

u^*_{rel} = 93

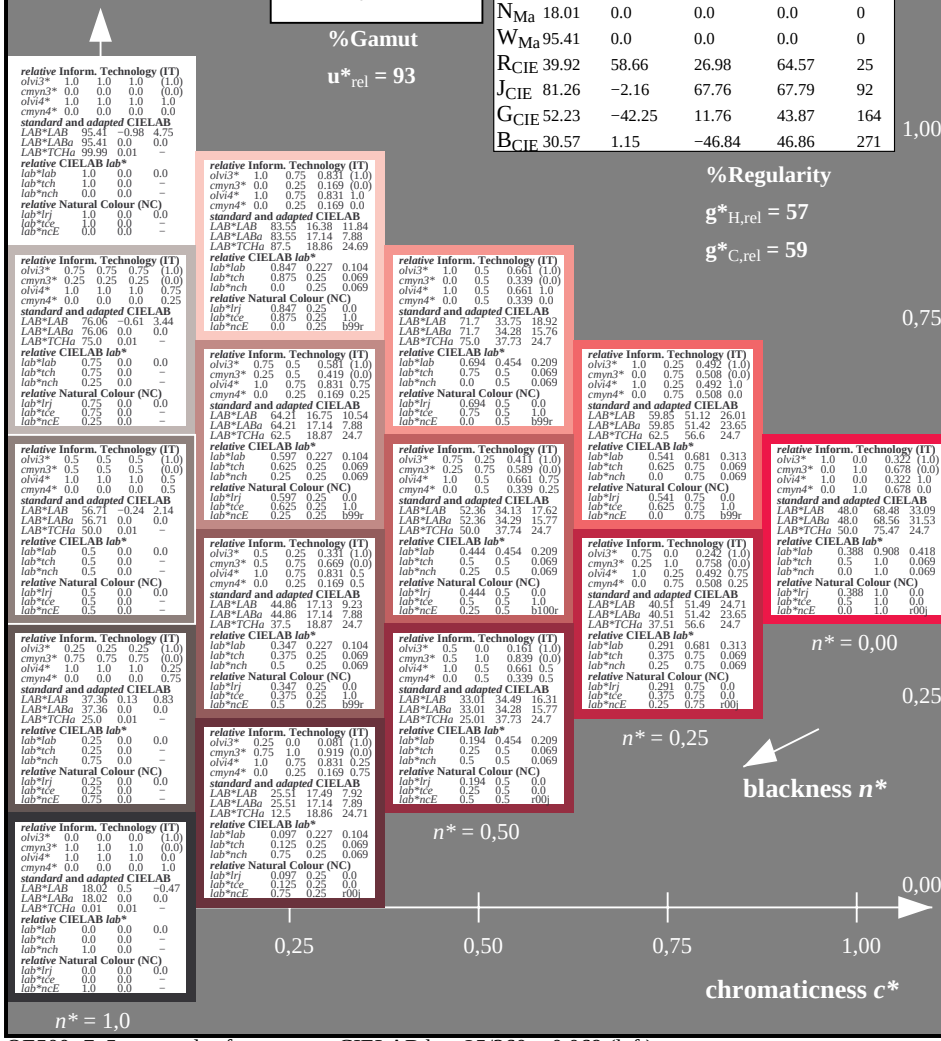
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



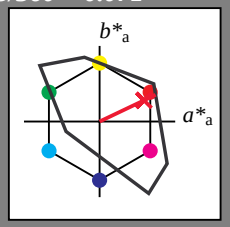
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

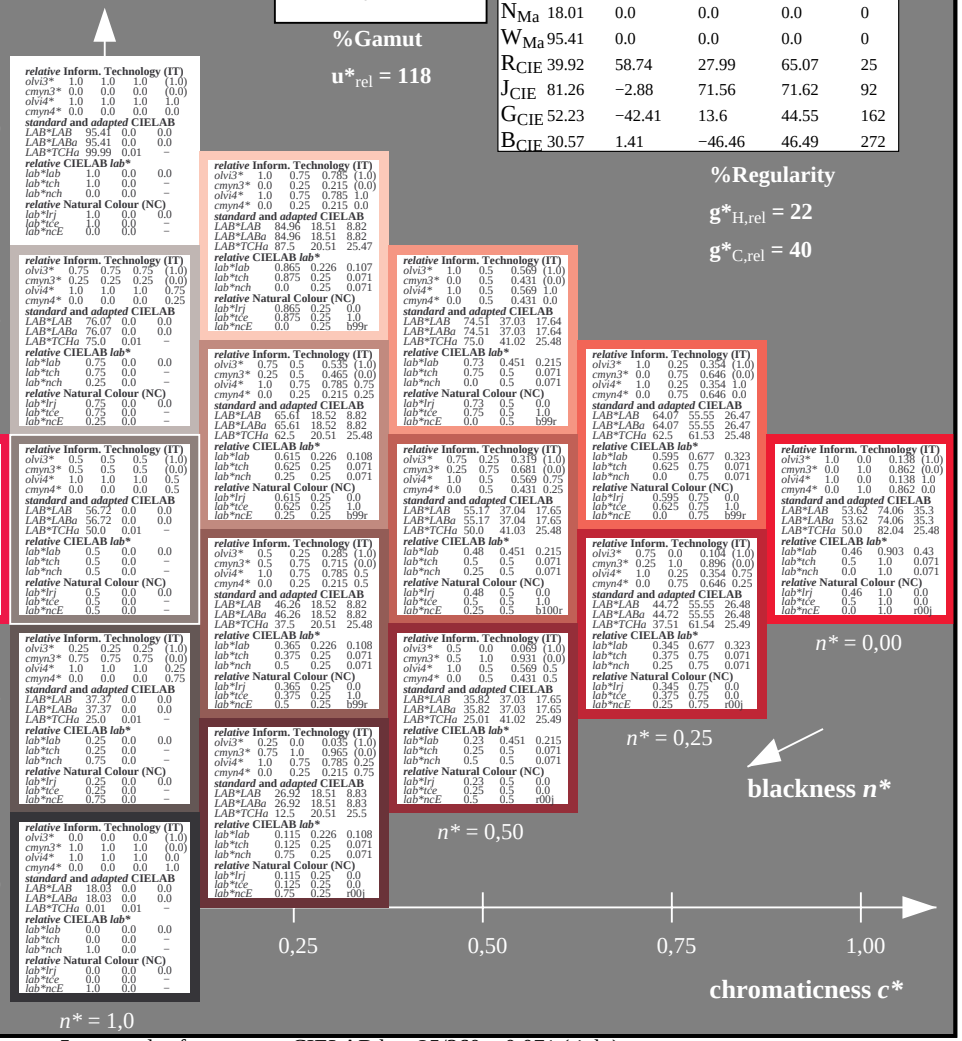
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



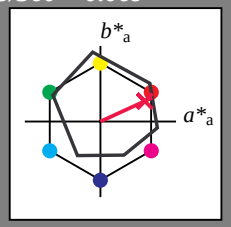
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

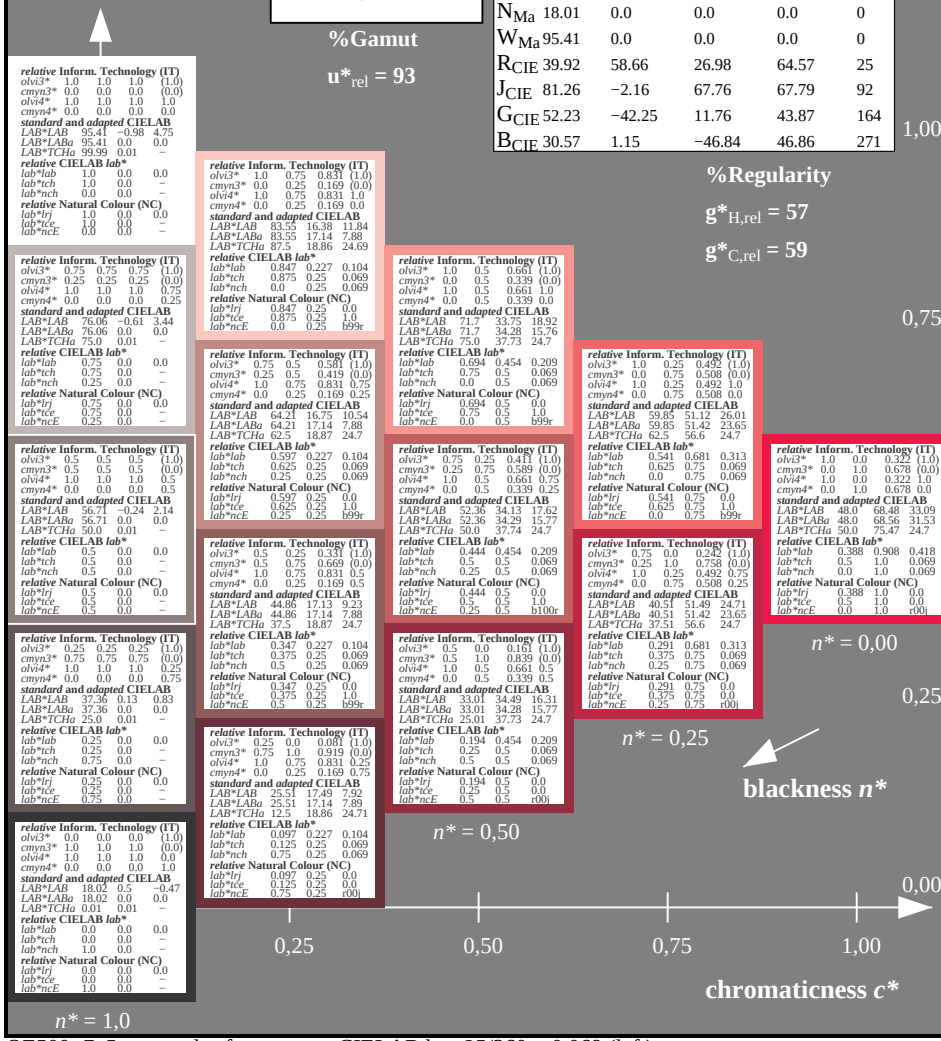
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



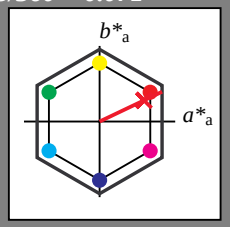
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

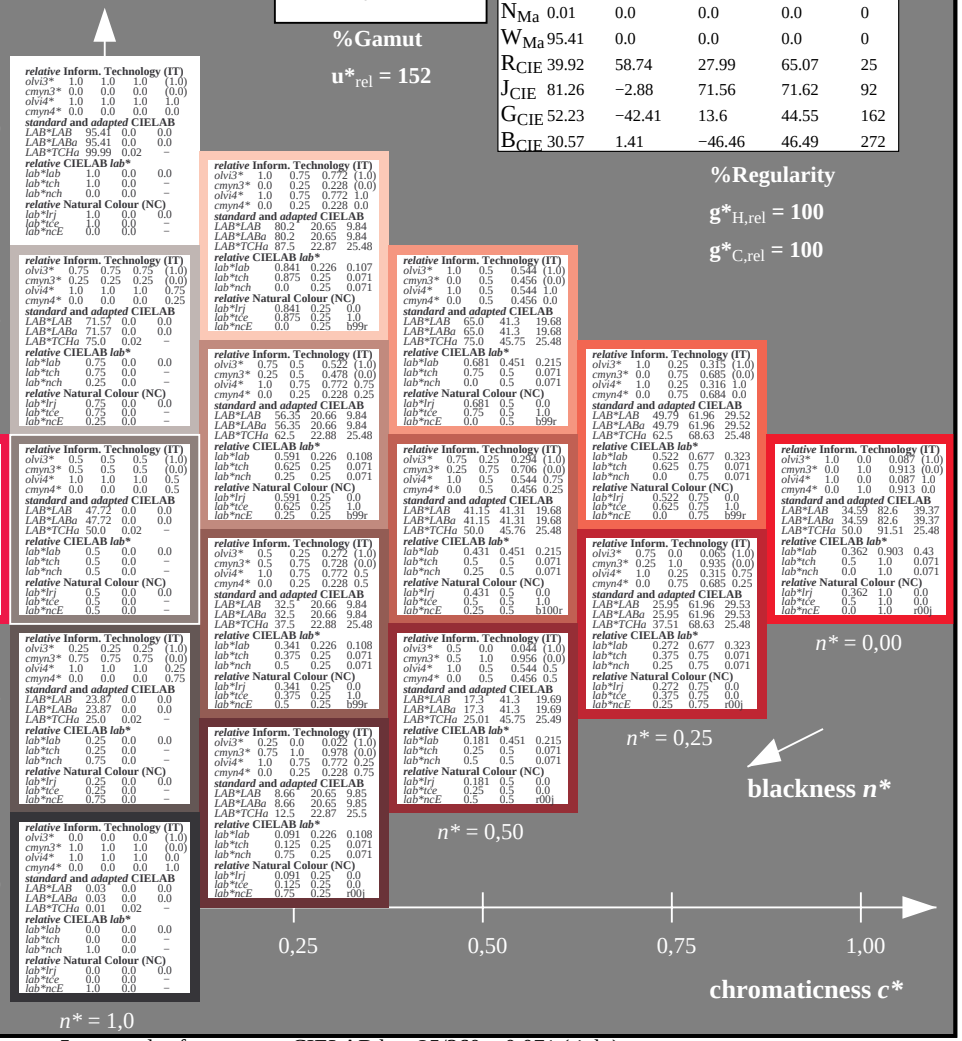
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



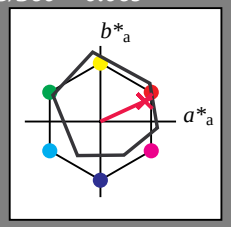
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

u^*_{rel} = 93

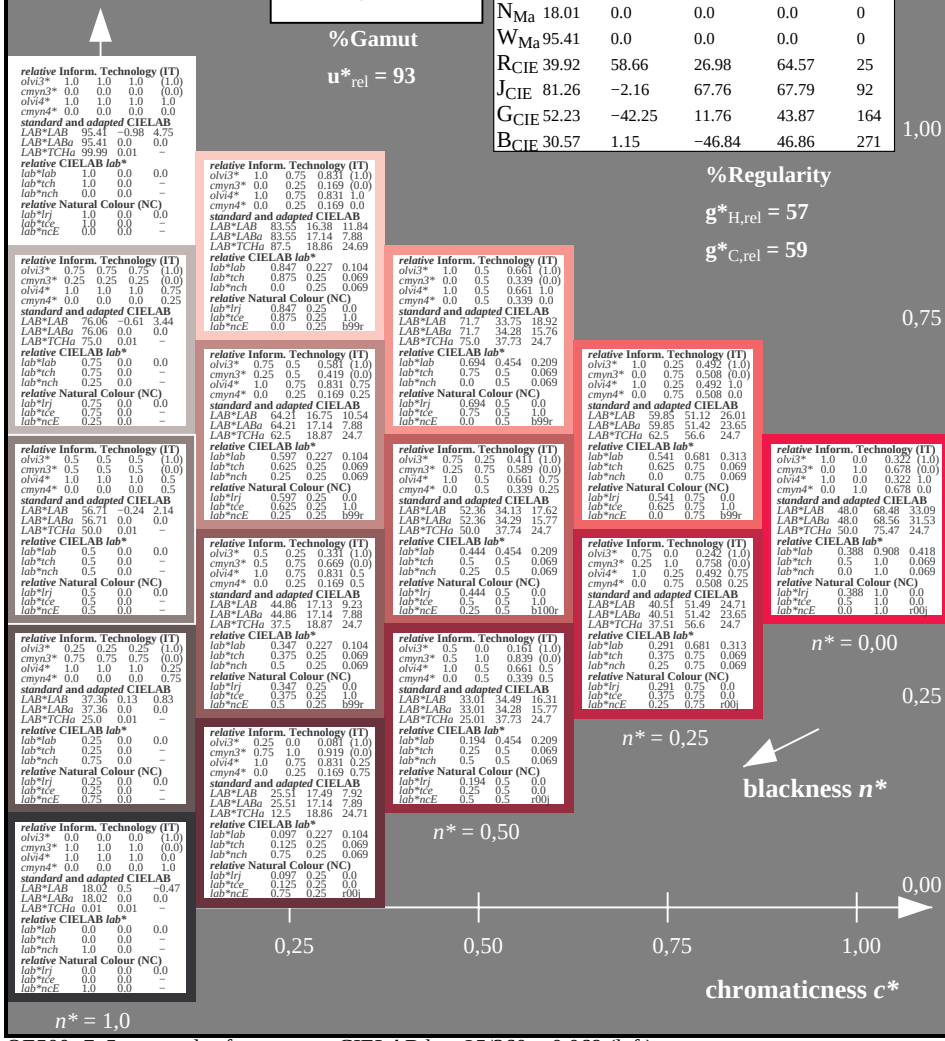
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



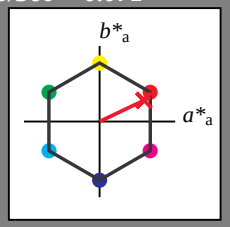
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 100

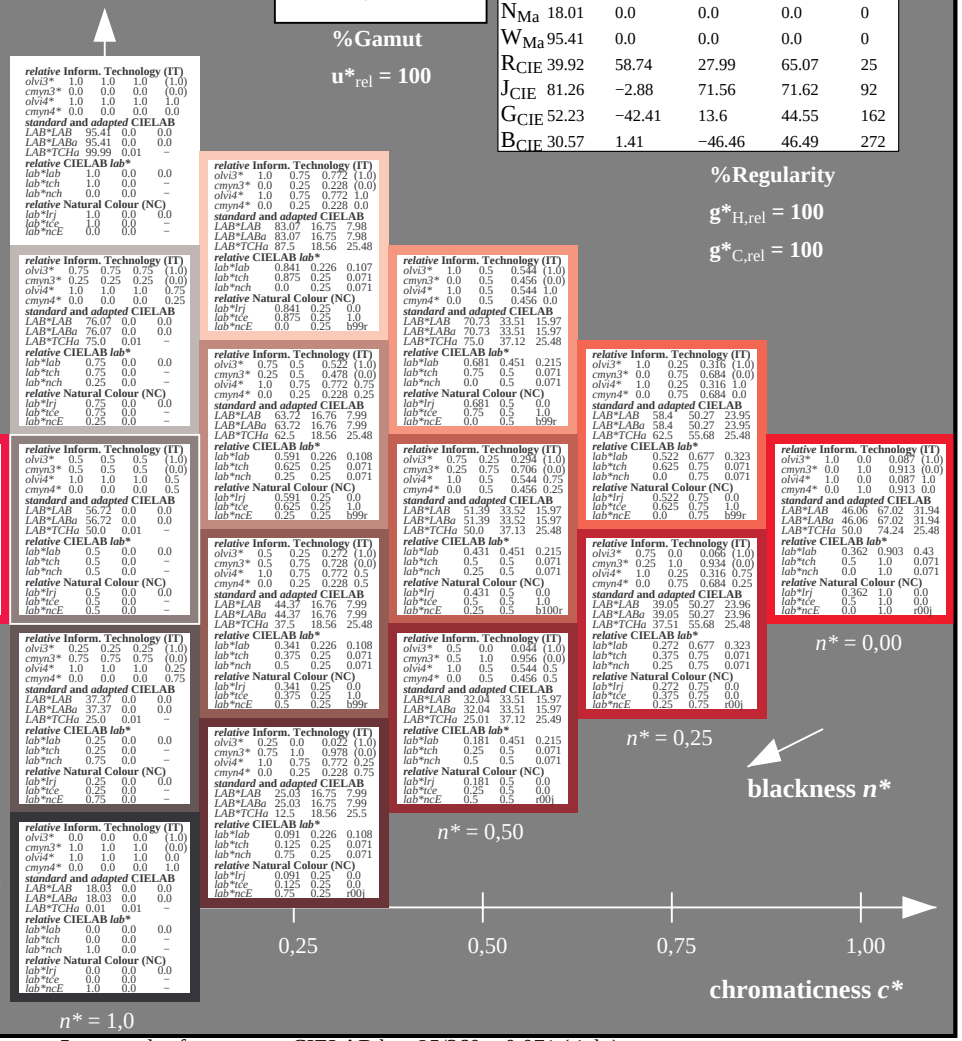
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

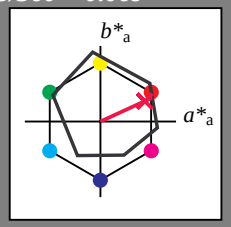


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

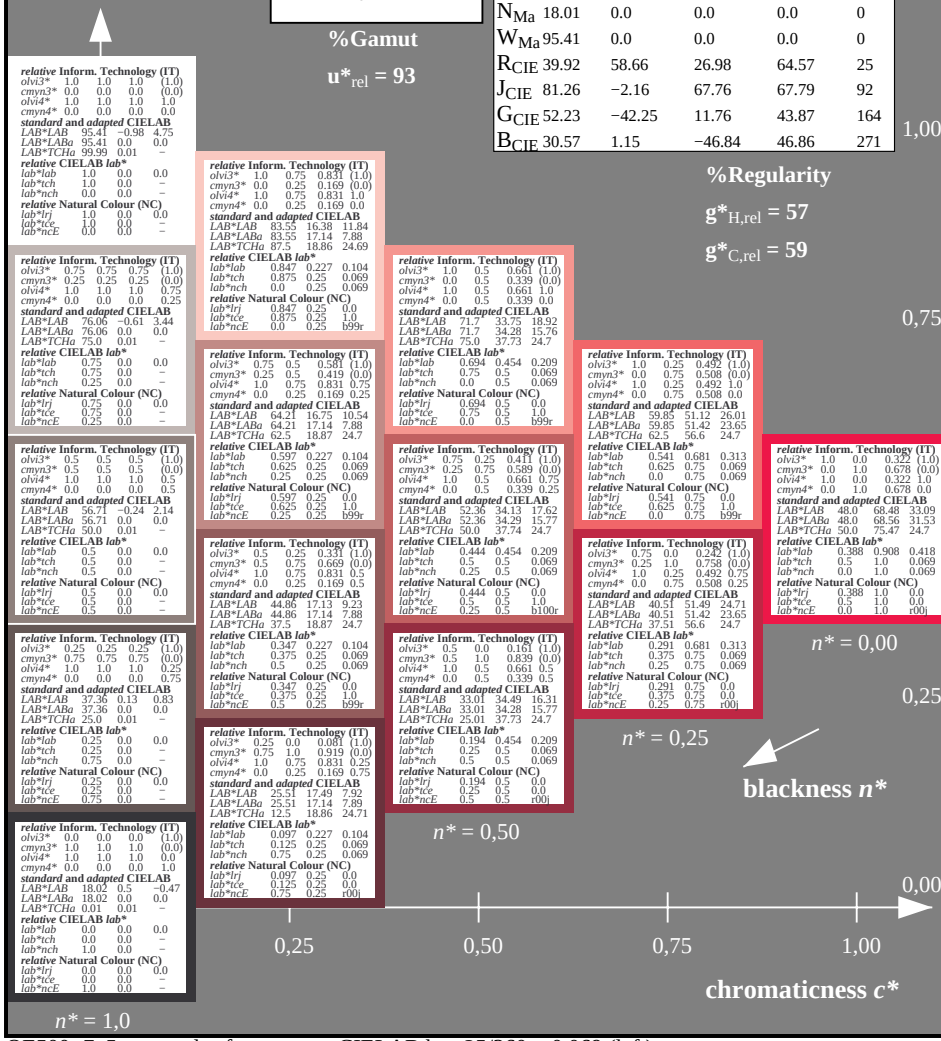
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

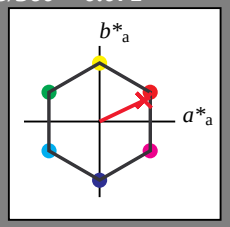


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

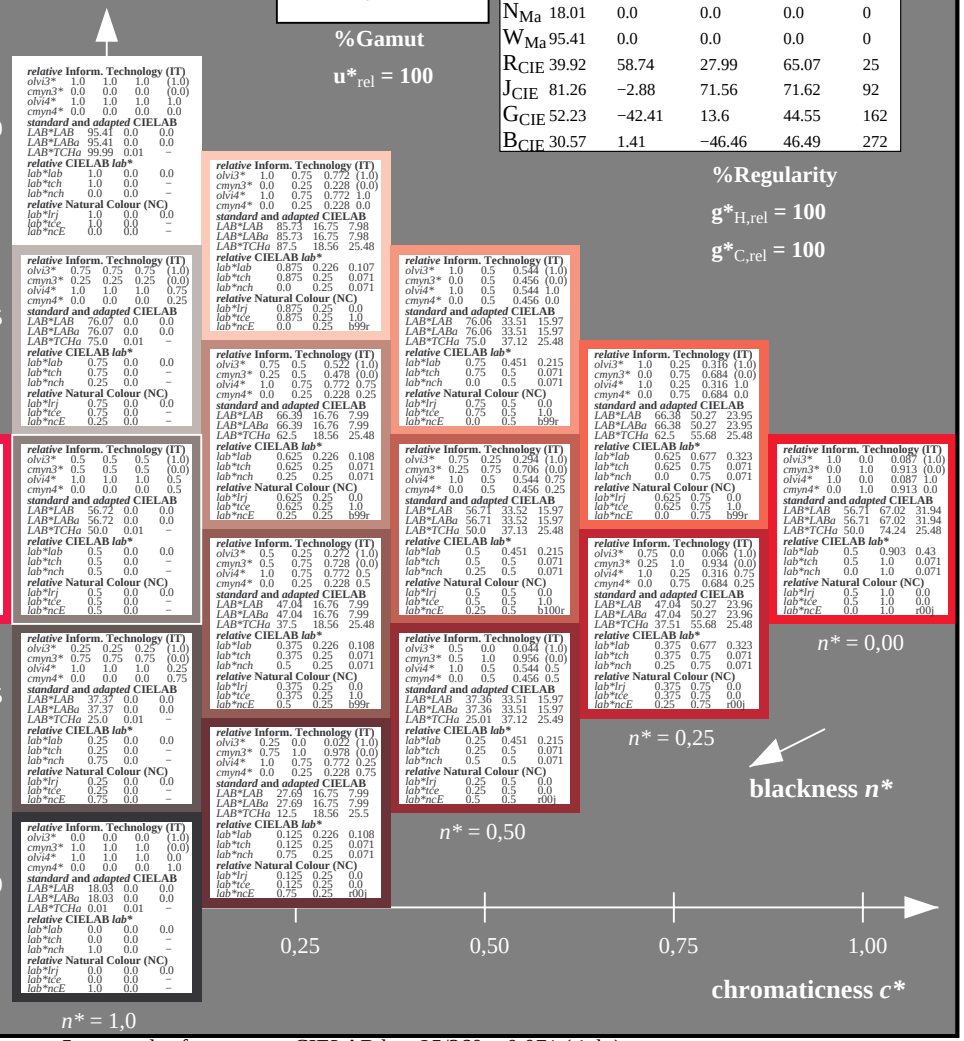
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

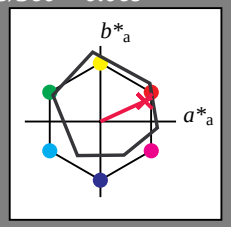


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

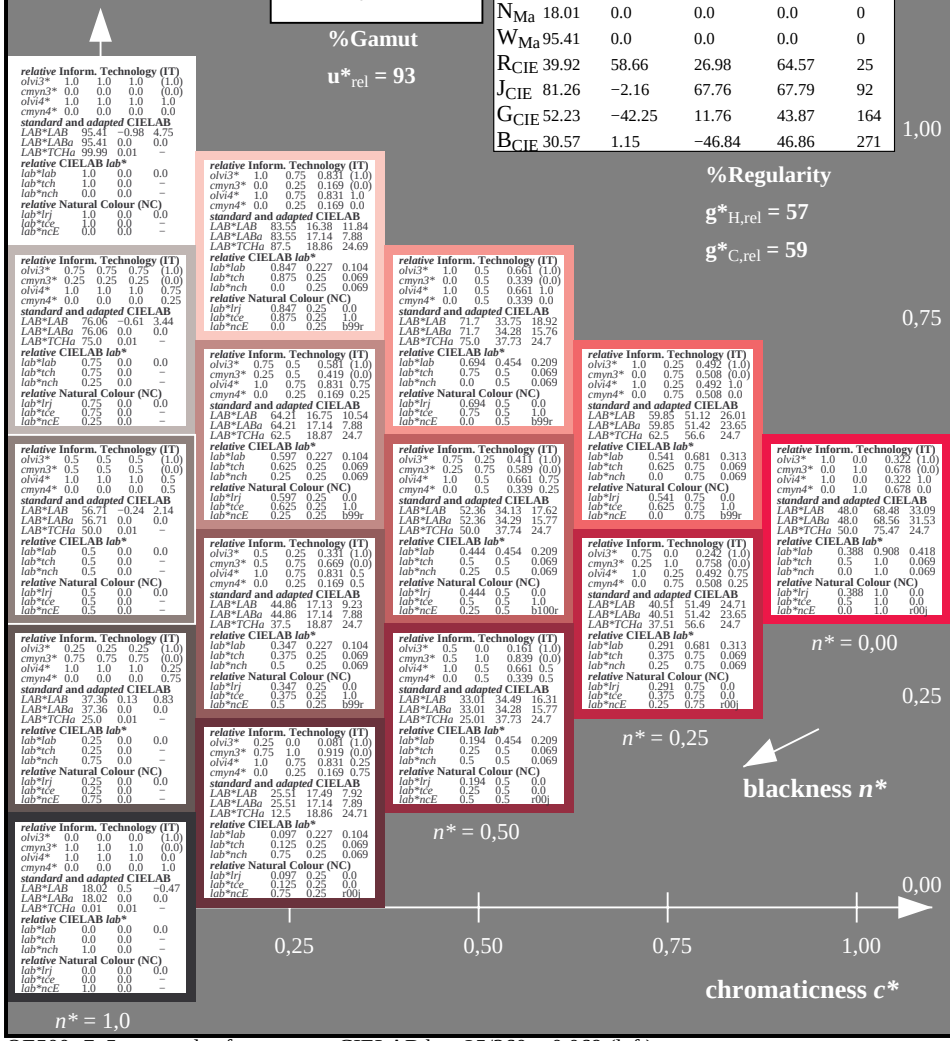
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

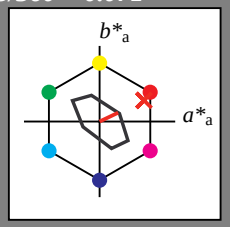


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

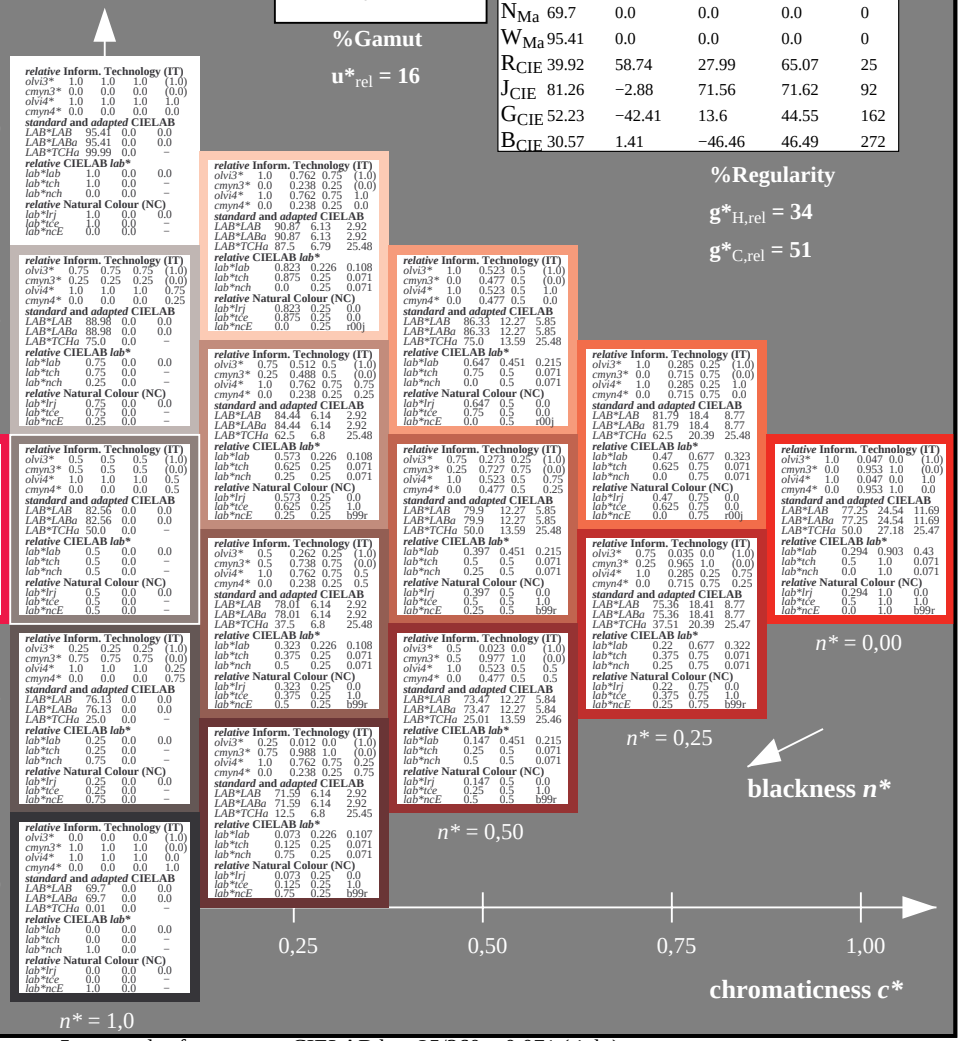
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

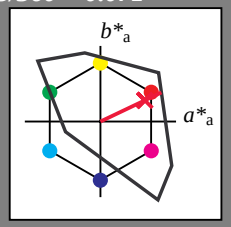


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

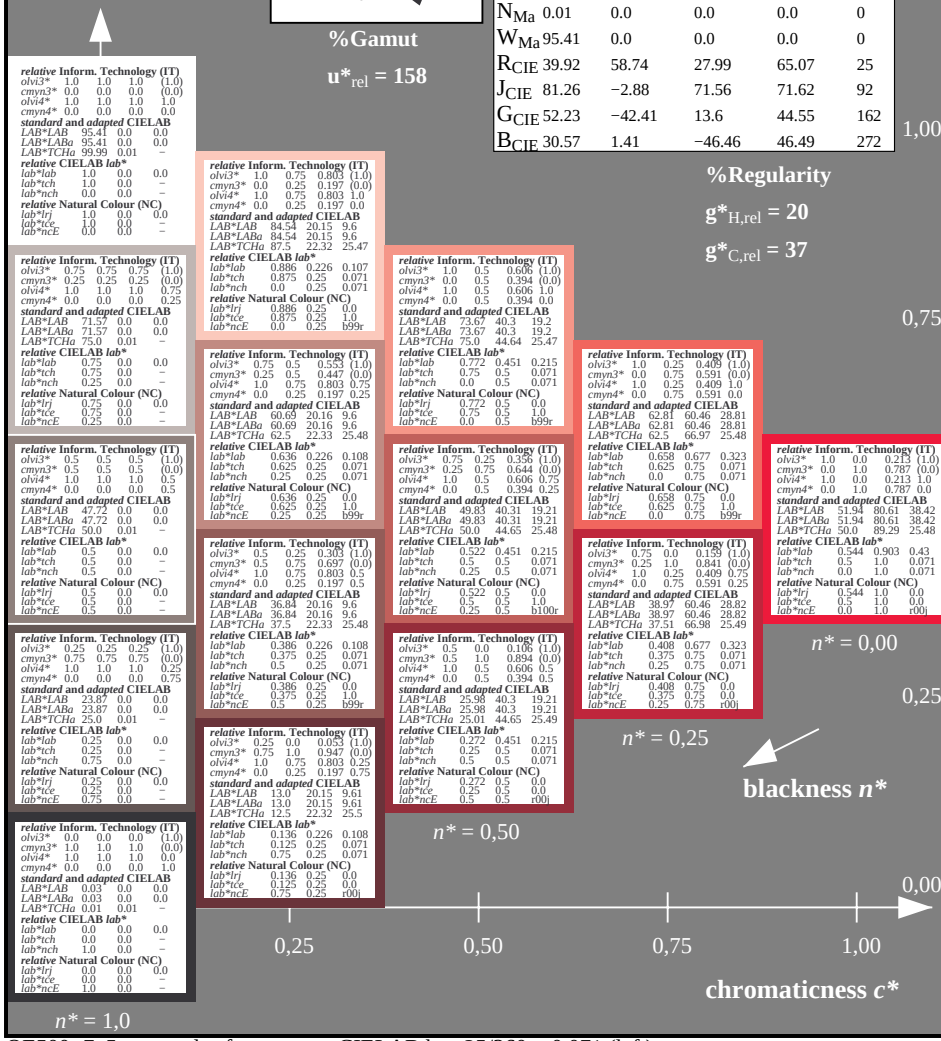
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

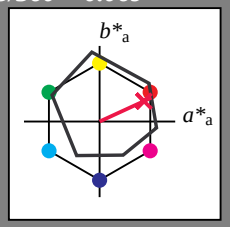
$g^*_{C,rel}$ = 37



Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

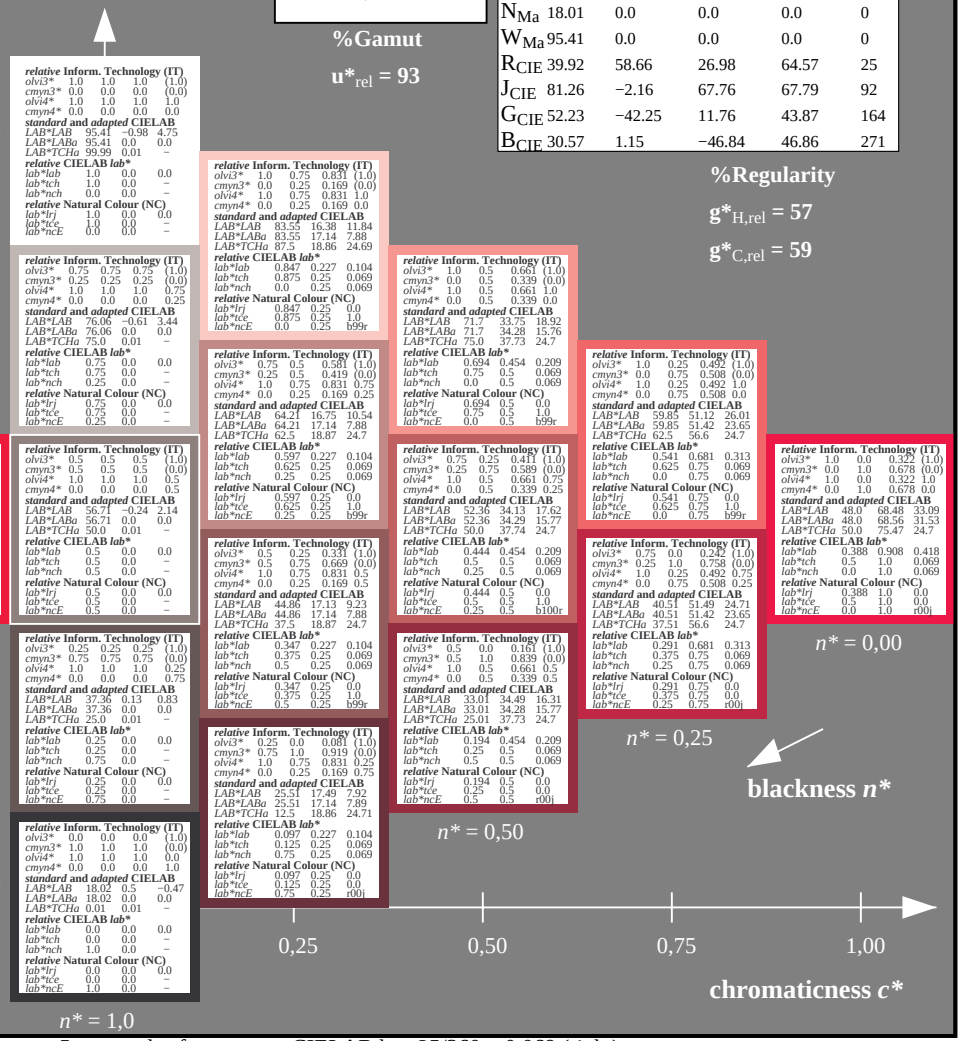
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



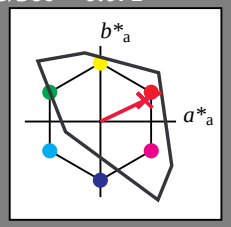
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

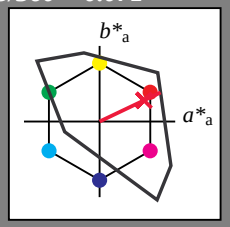
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

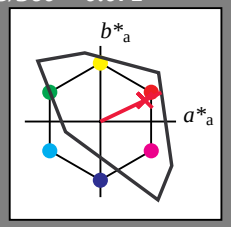
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

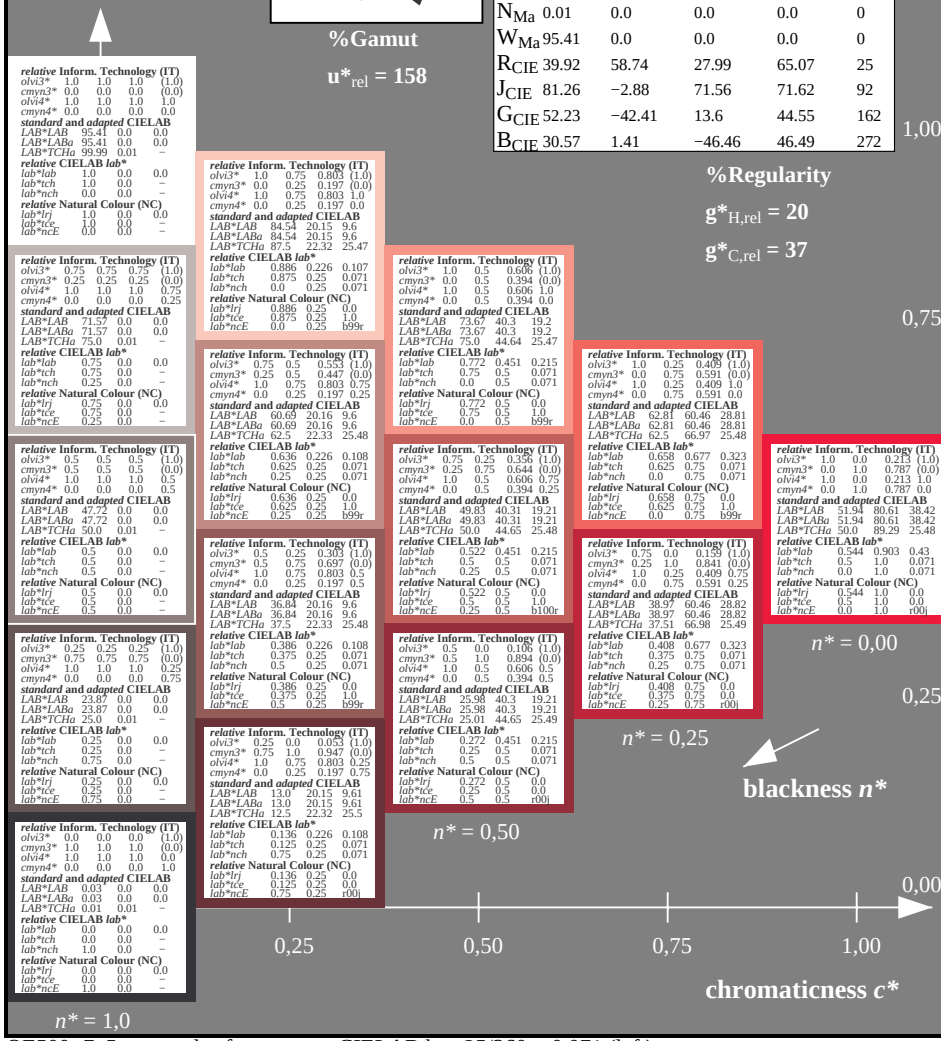
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$

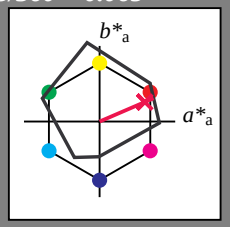
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

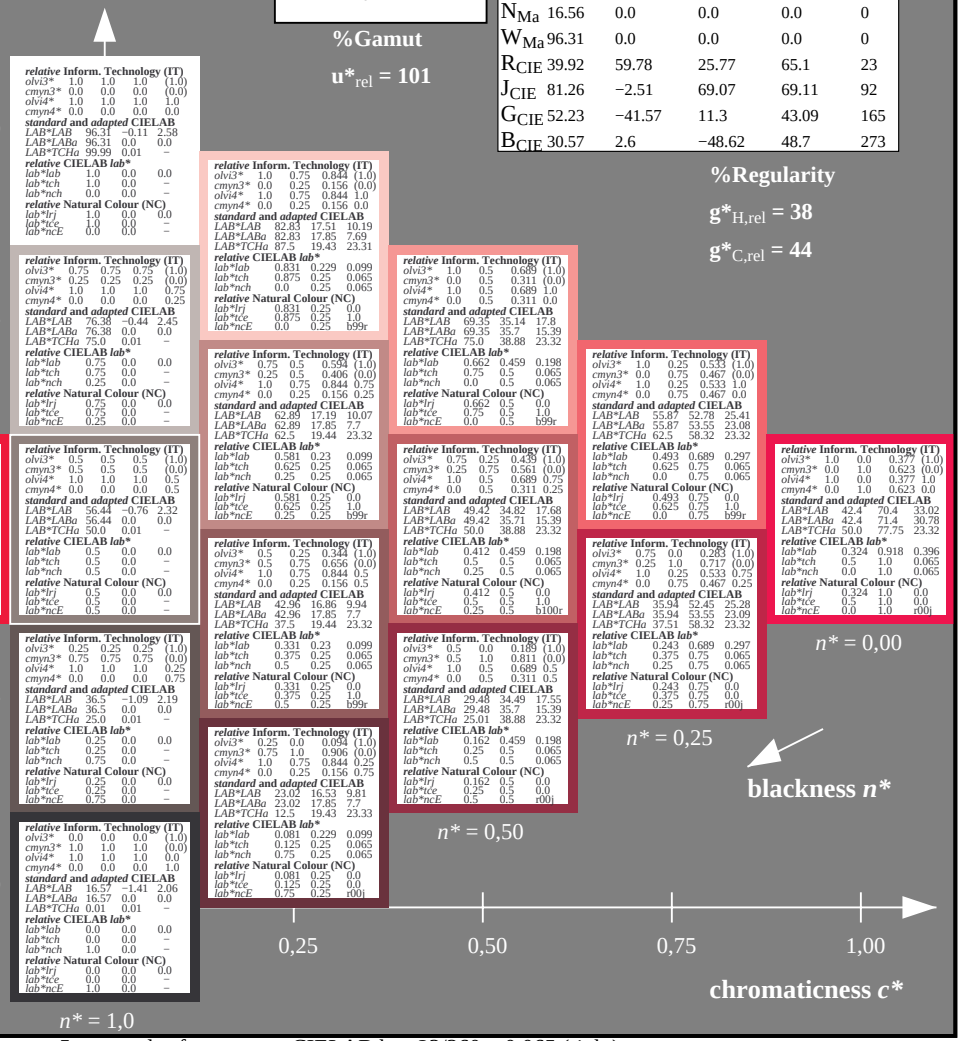
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

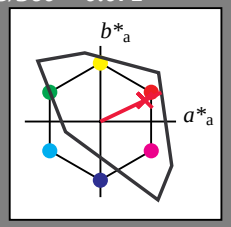


5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

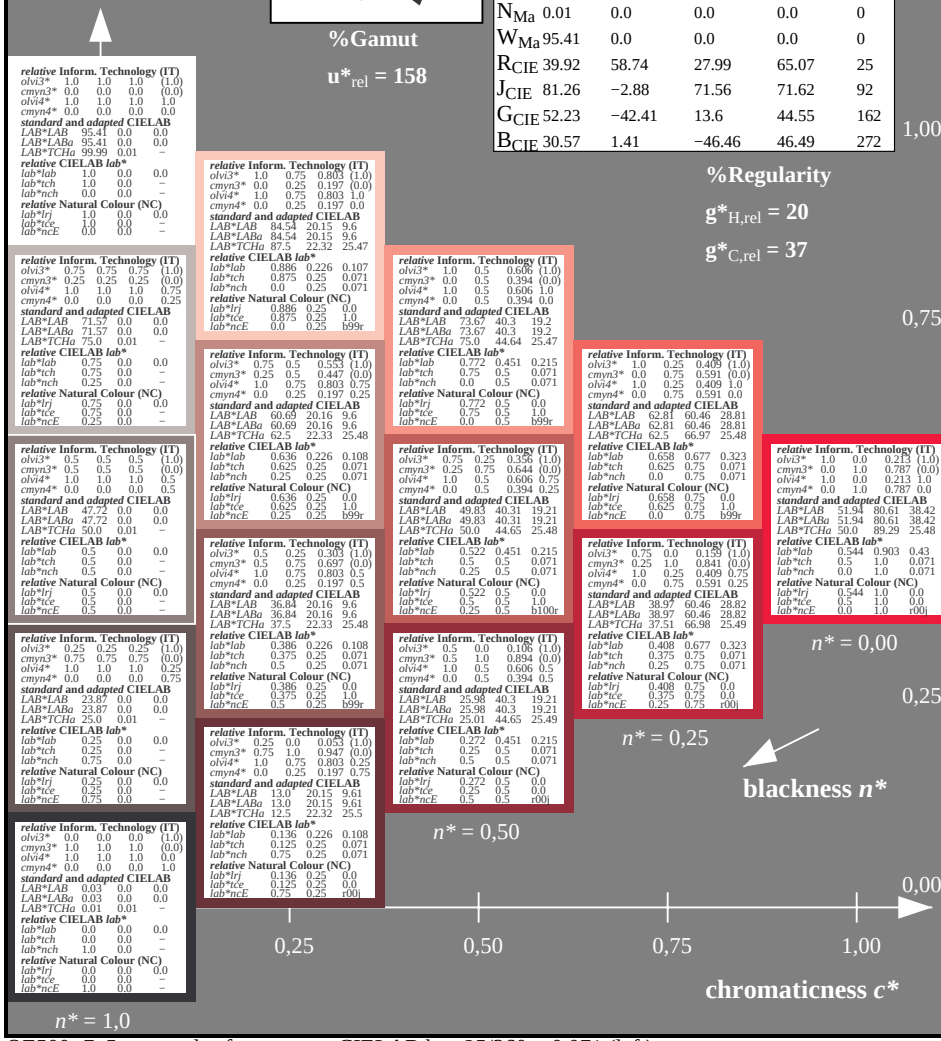
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

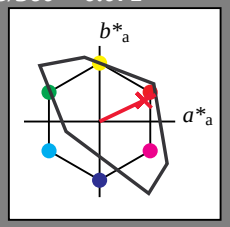


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

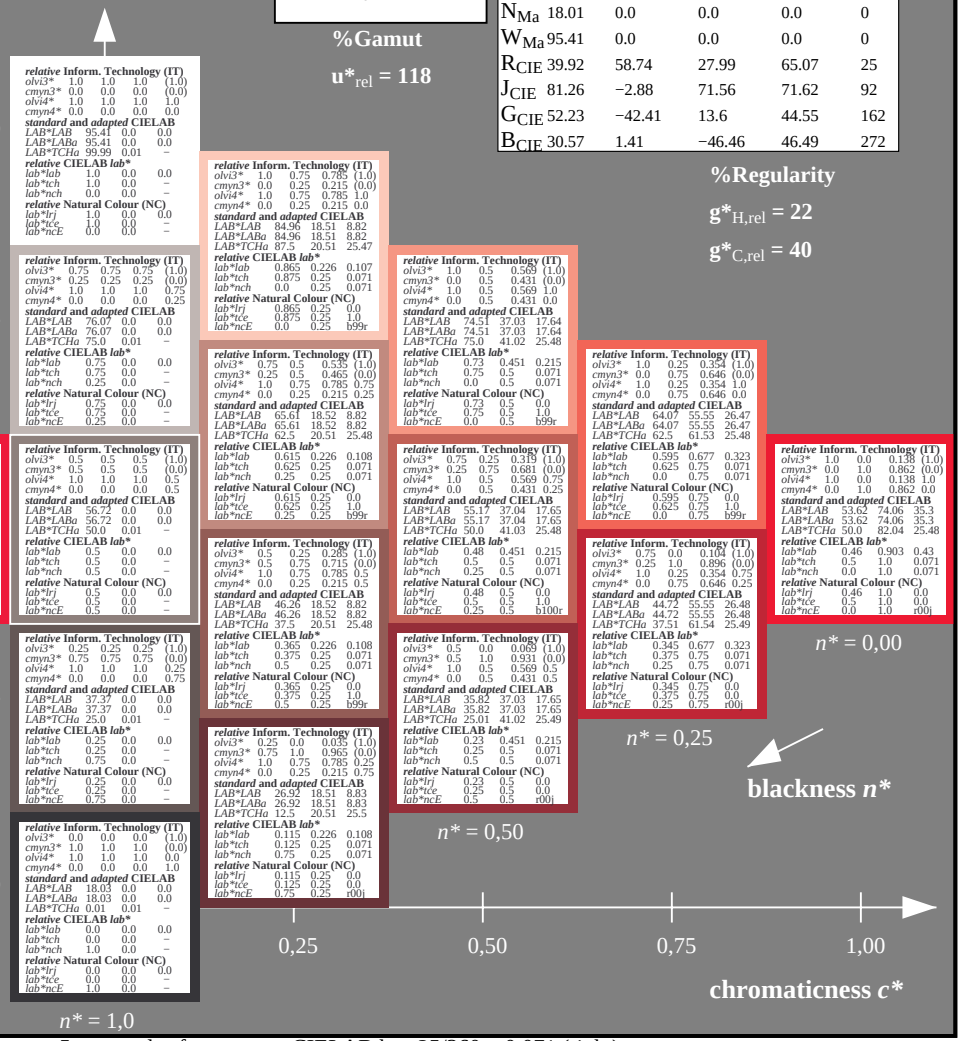
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00

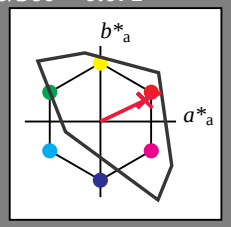
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Luminous System NLS00

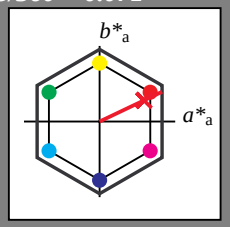
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

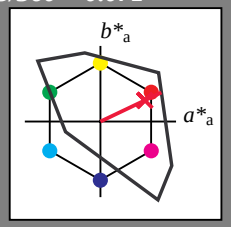
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

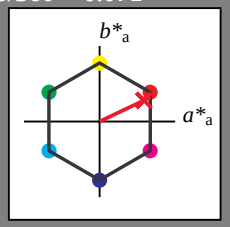
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 100

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00

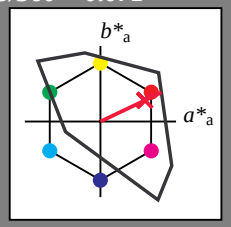
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

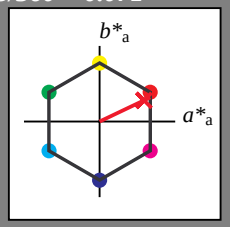
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

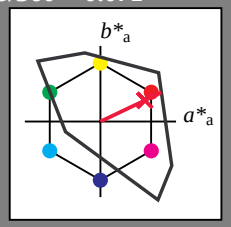
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

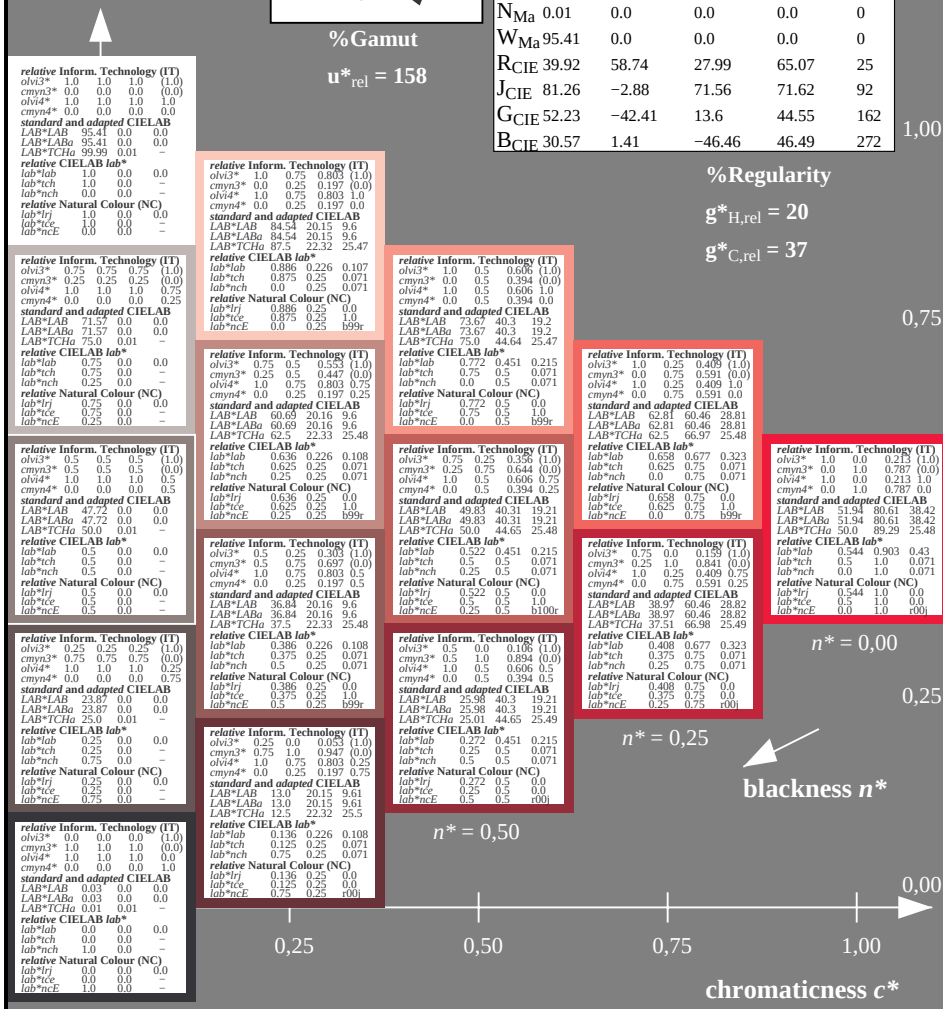
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



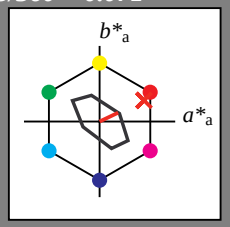
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

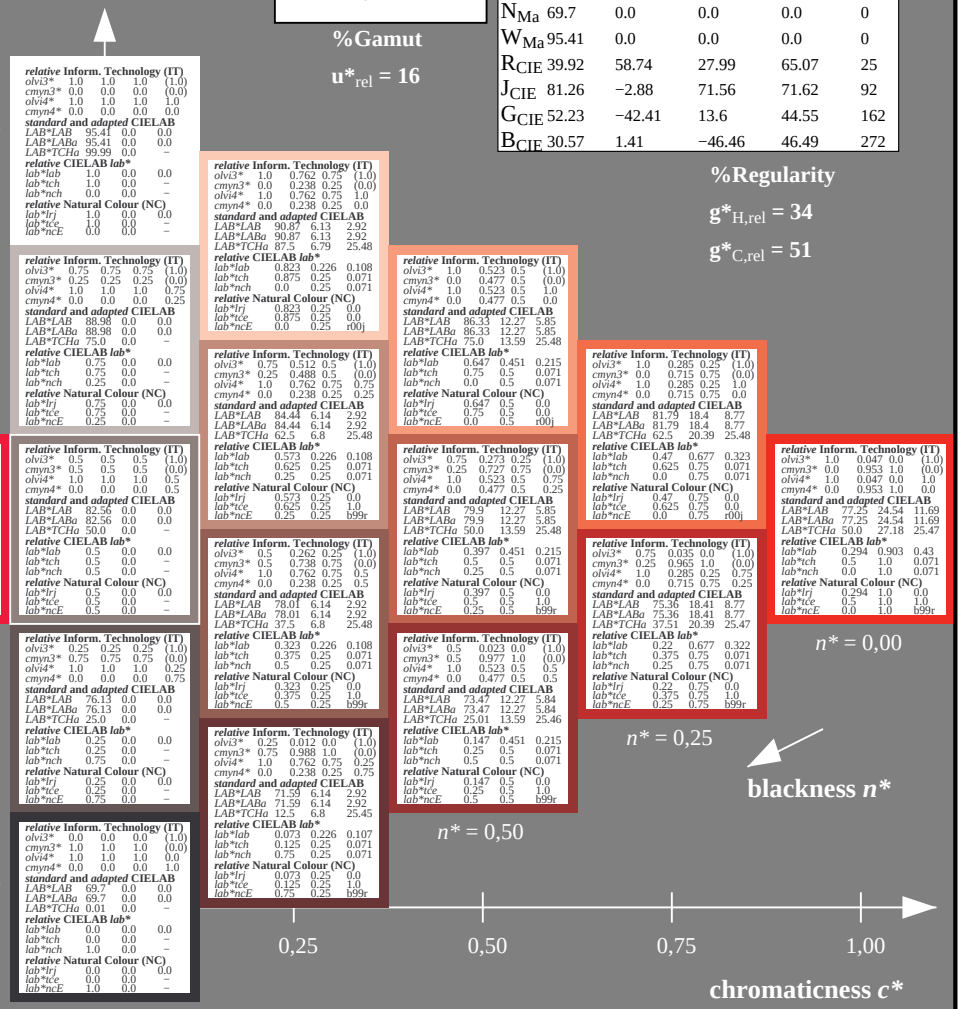
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

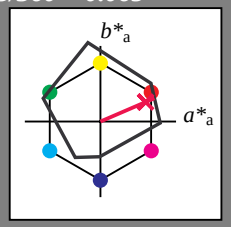


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

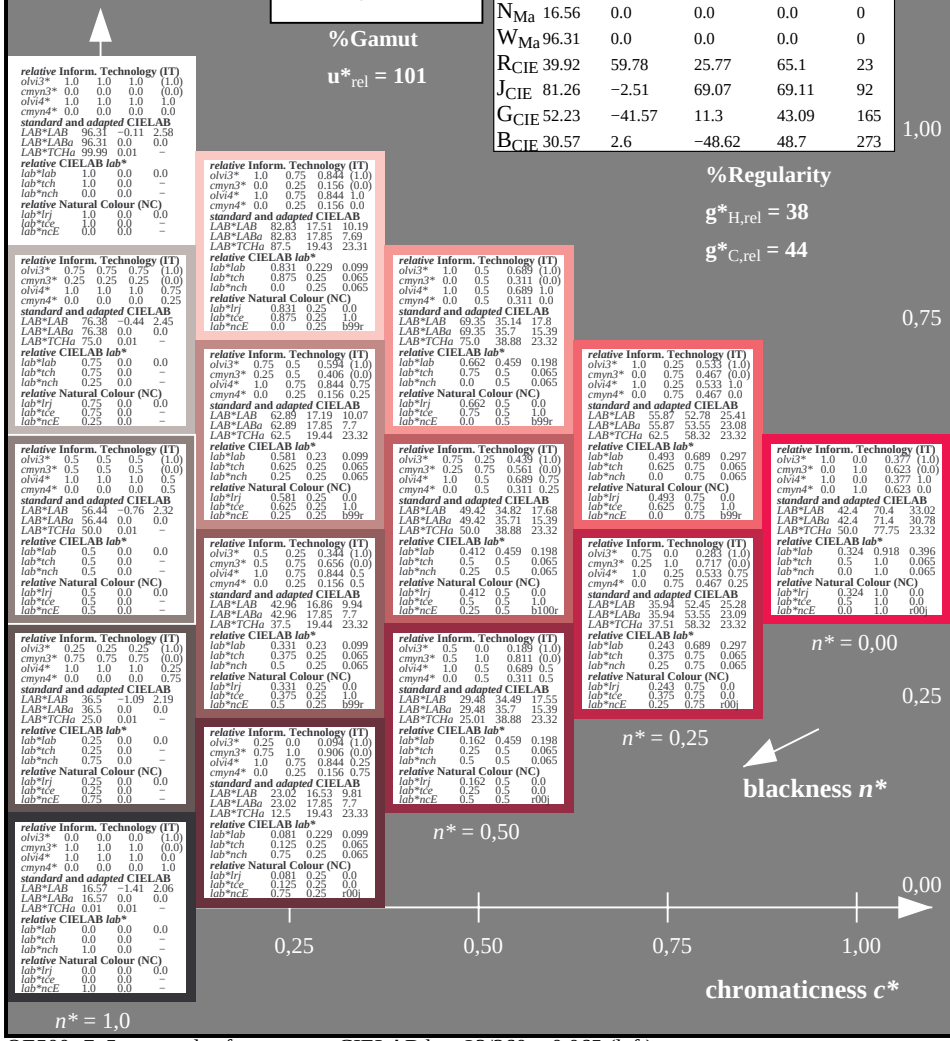
$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

triangle lightness t^*

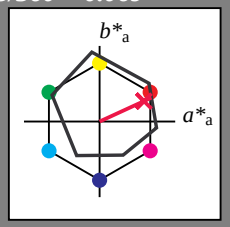


OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

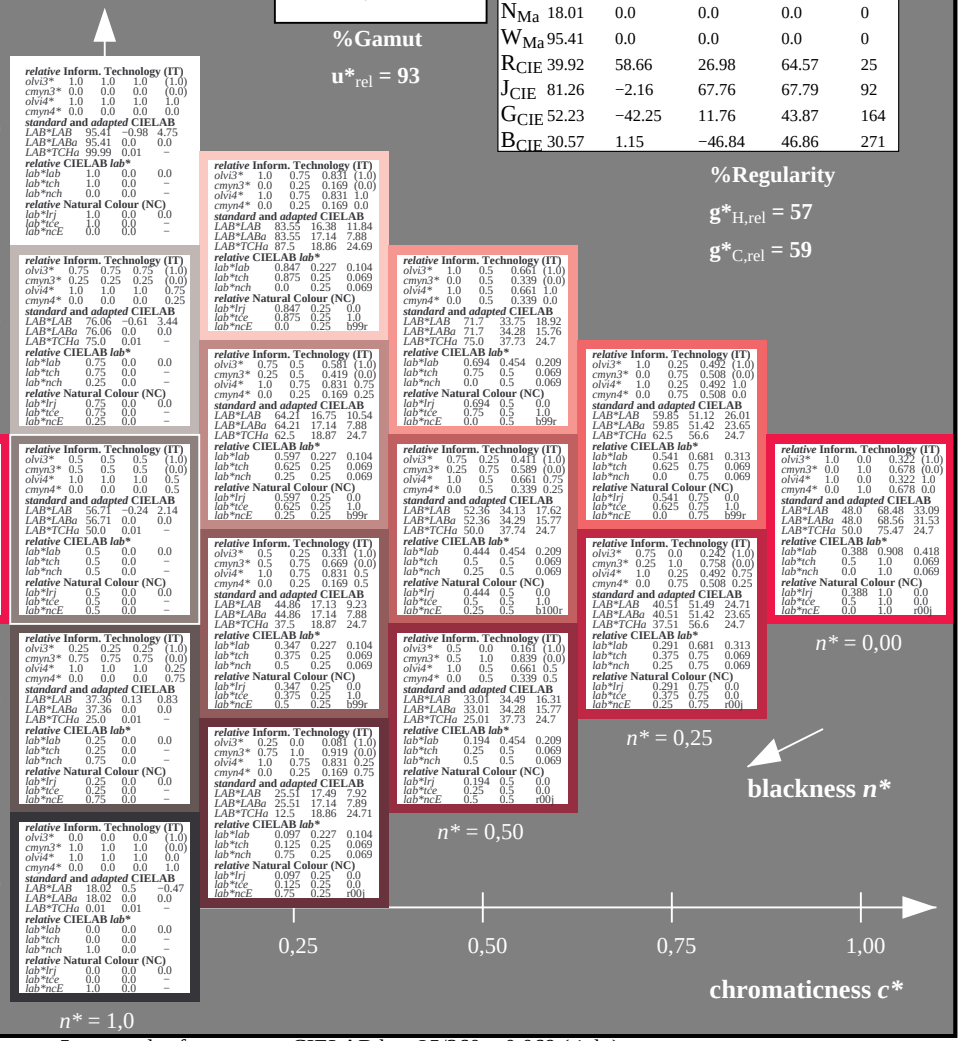
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

triangle lightness t^*



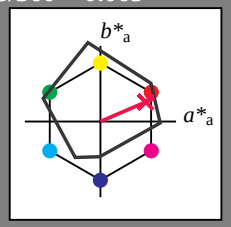
5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

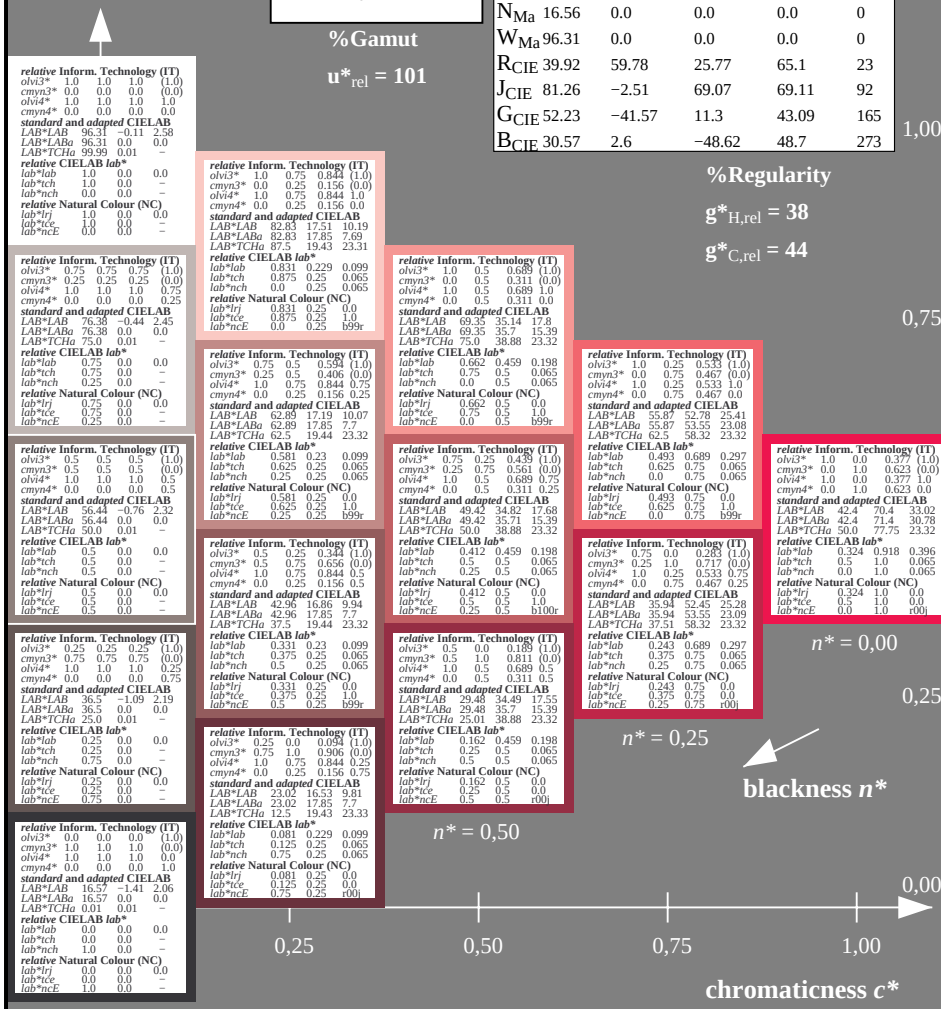
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



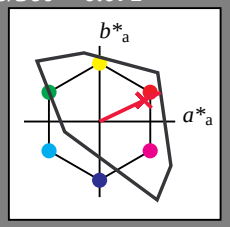
OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

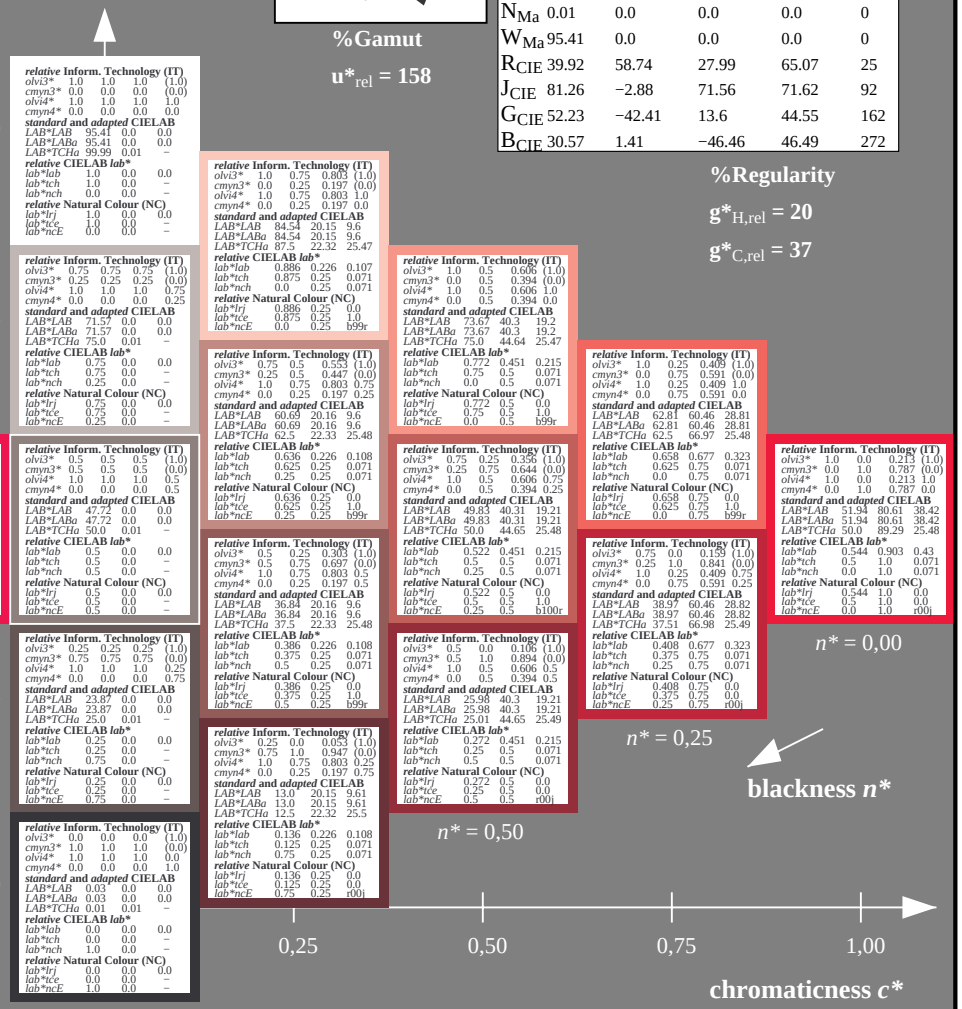
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



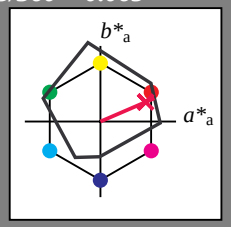
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

u^*_{rel} = 101

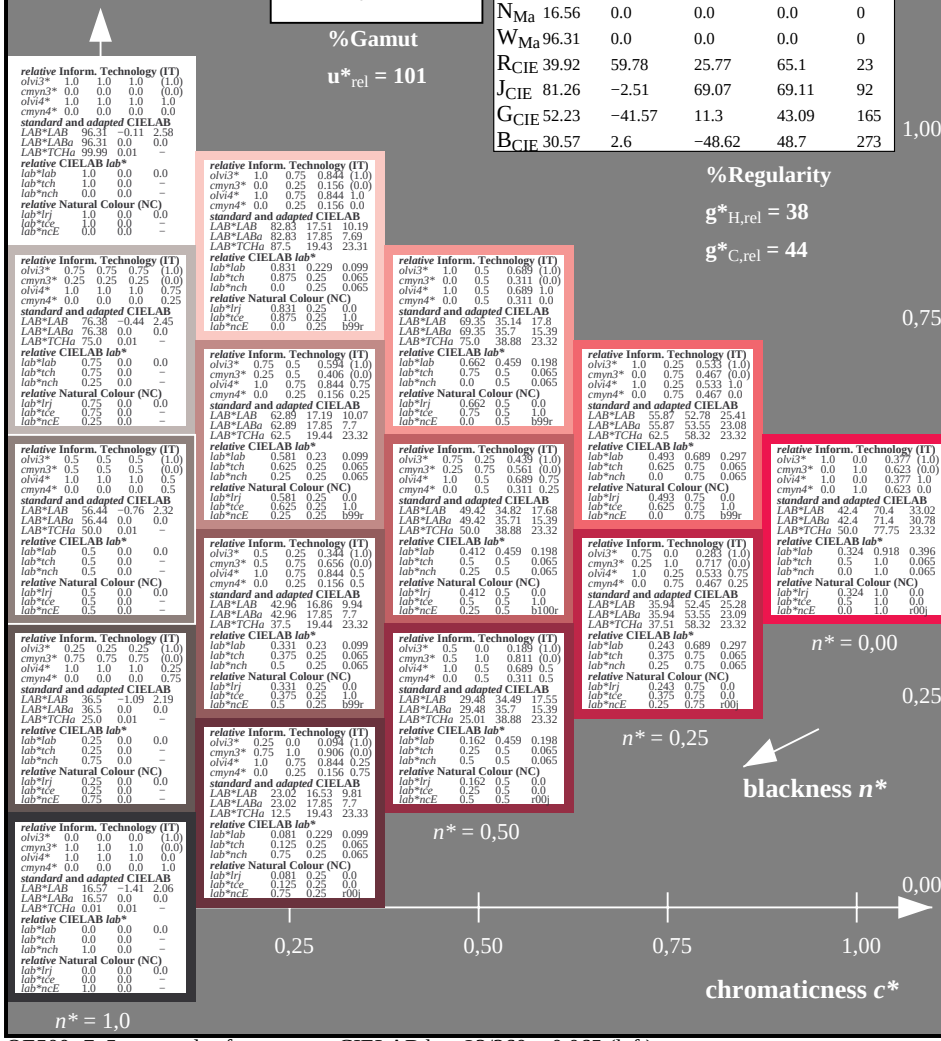
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



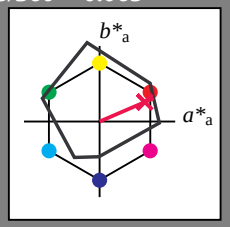
OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

u^*_{rel} = 101

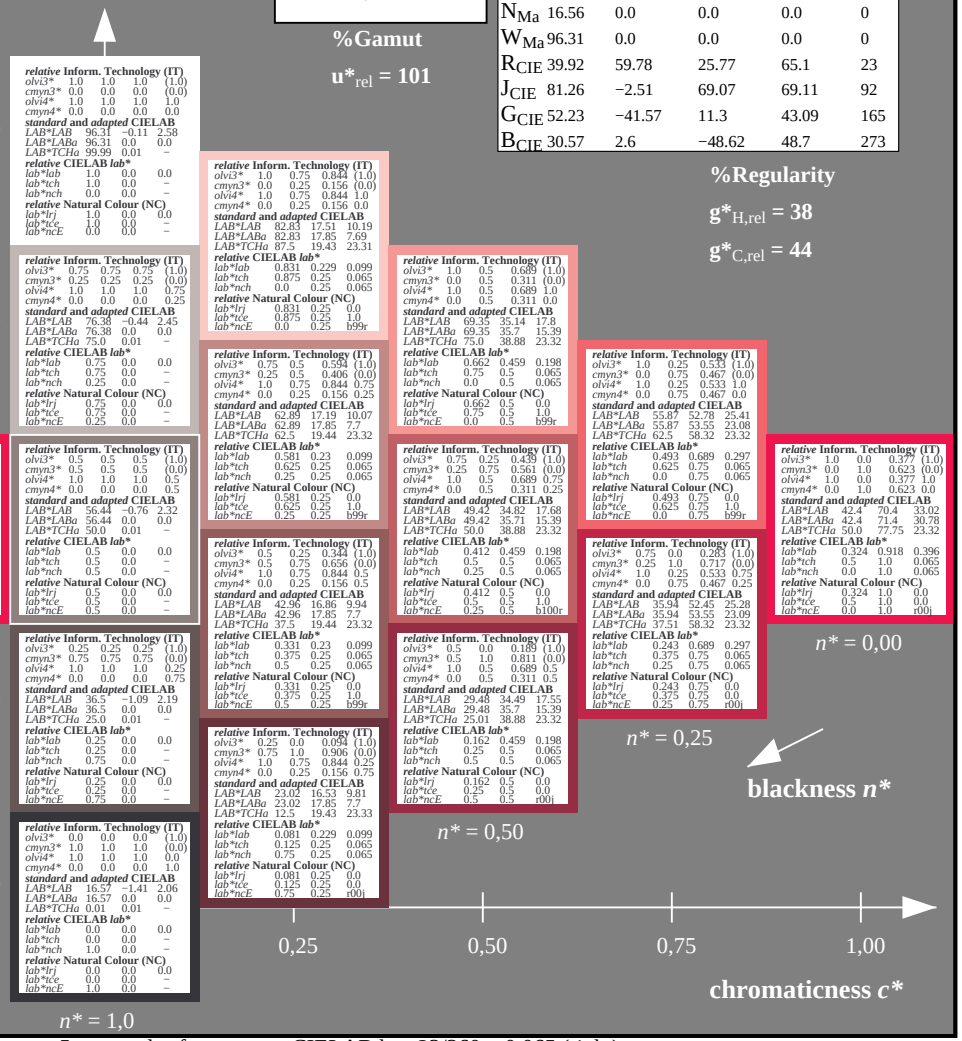
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

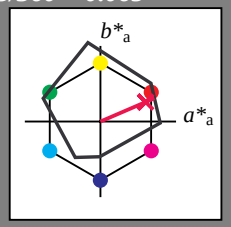


5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

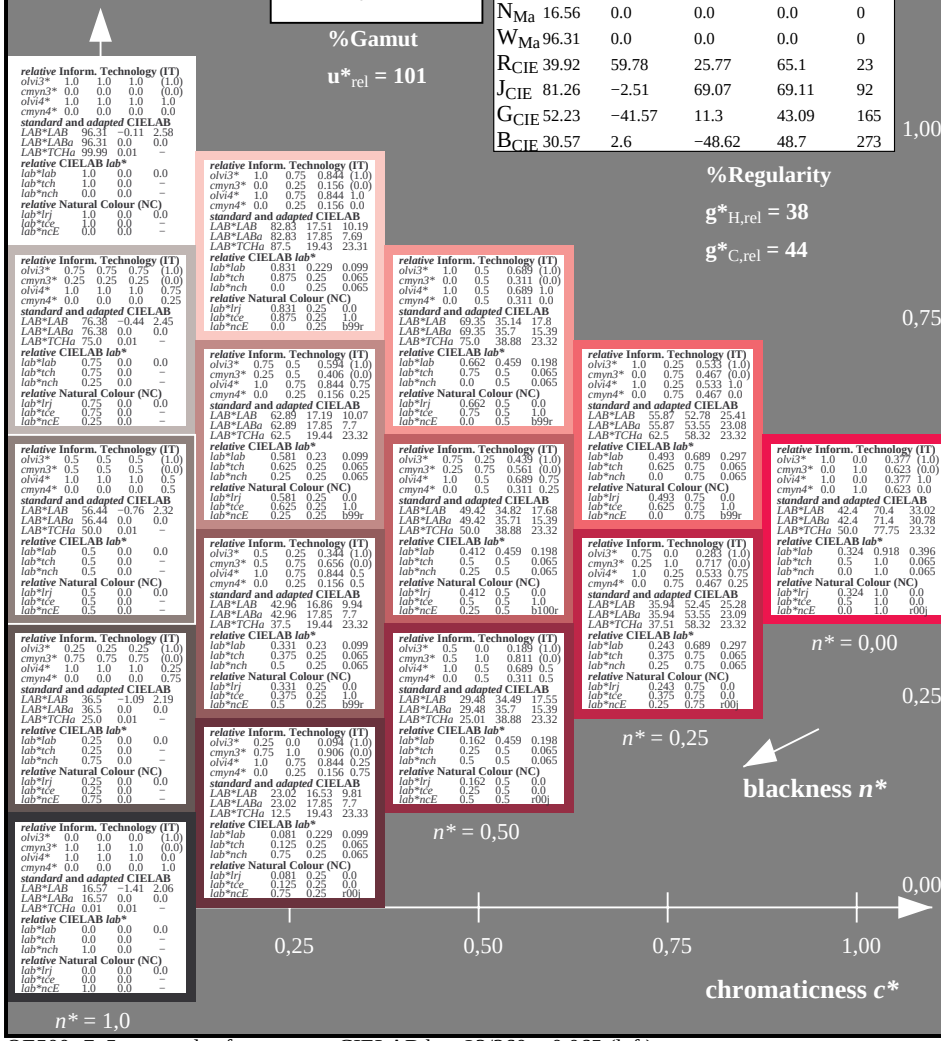
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

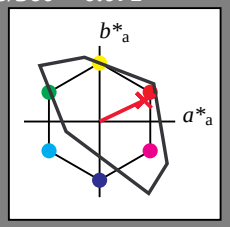
$g^*_{C,rel} = 44$



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

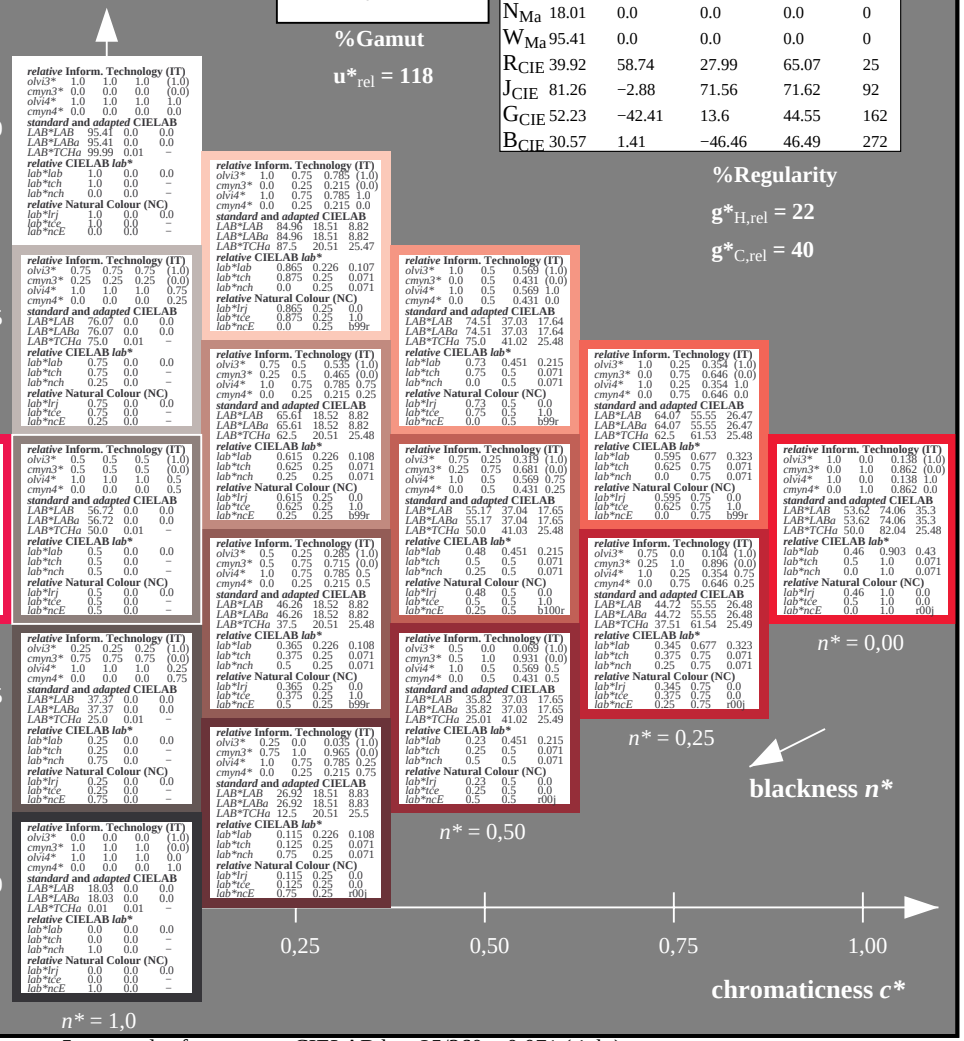
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



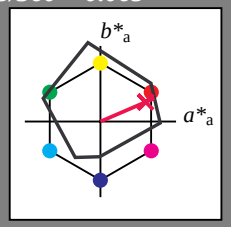
OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

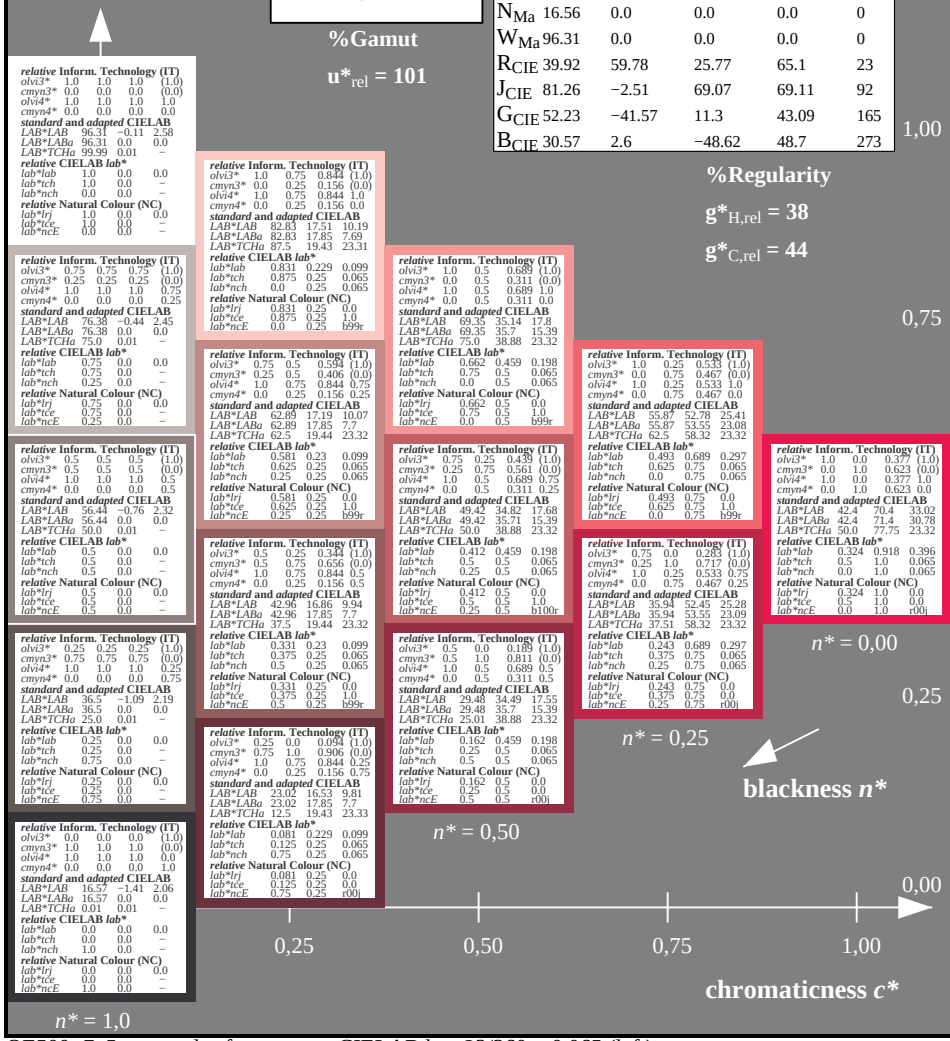
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

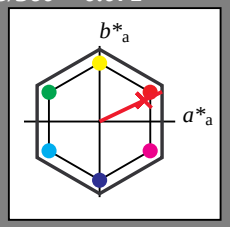
$g^*_{C,rel}$ = 44



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

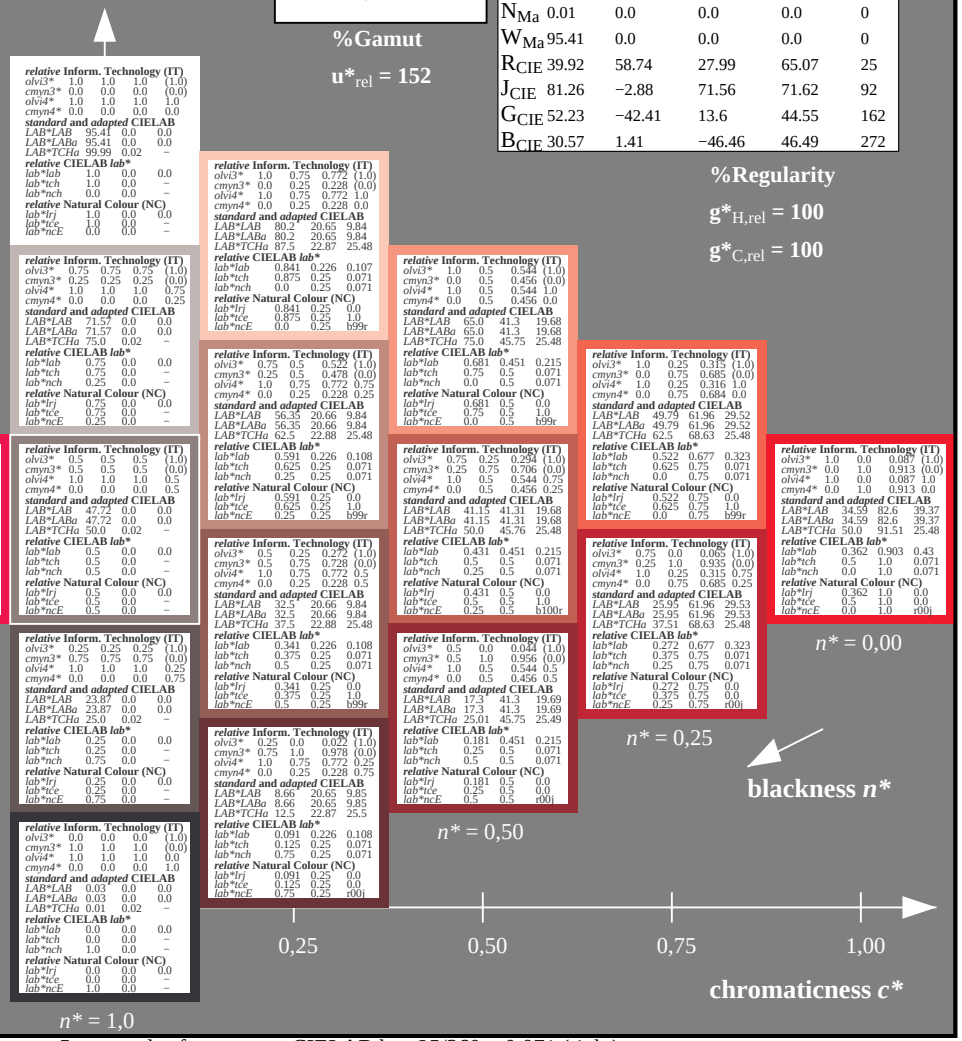
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

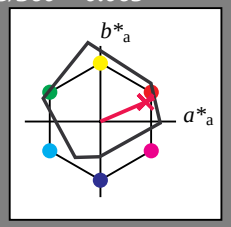
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

u^*_{rel} = 101

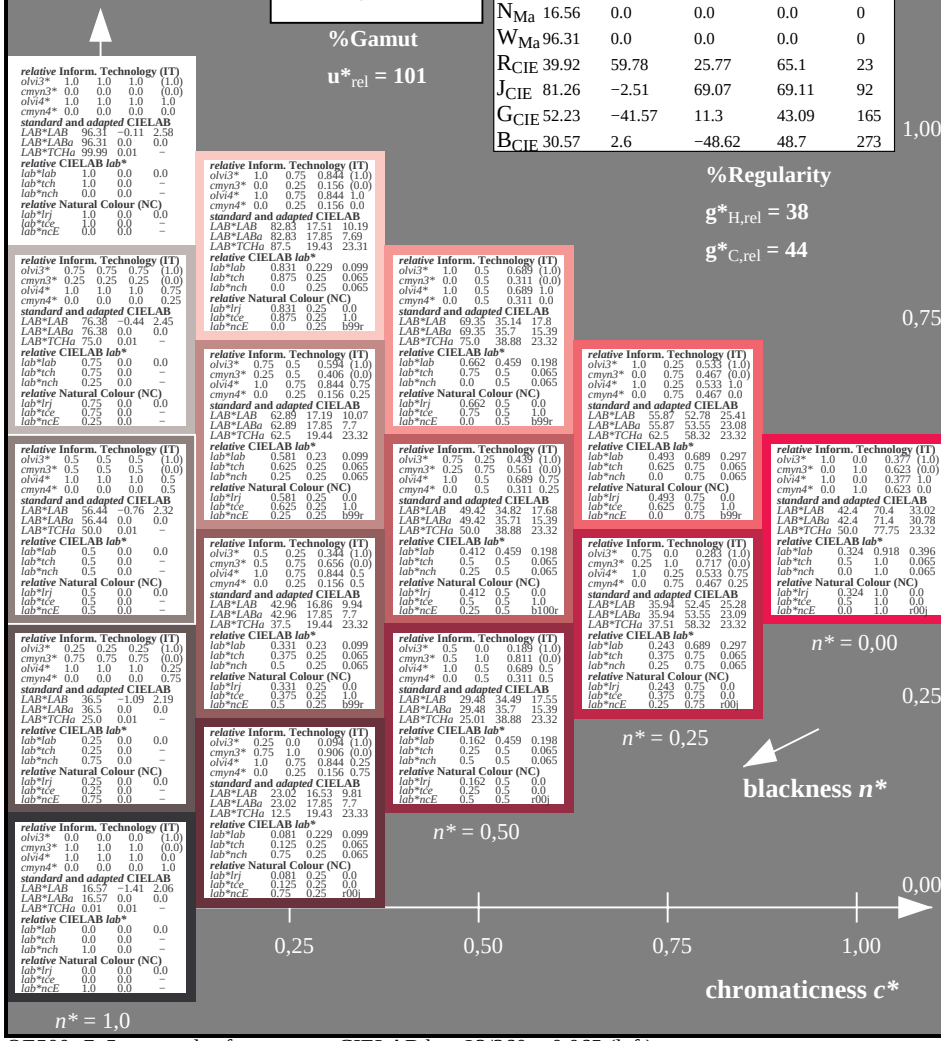
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



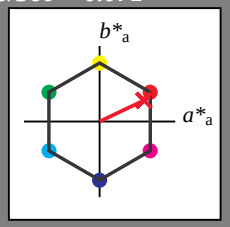
OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 100

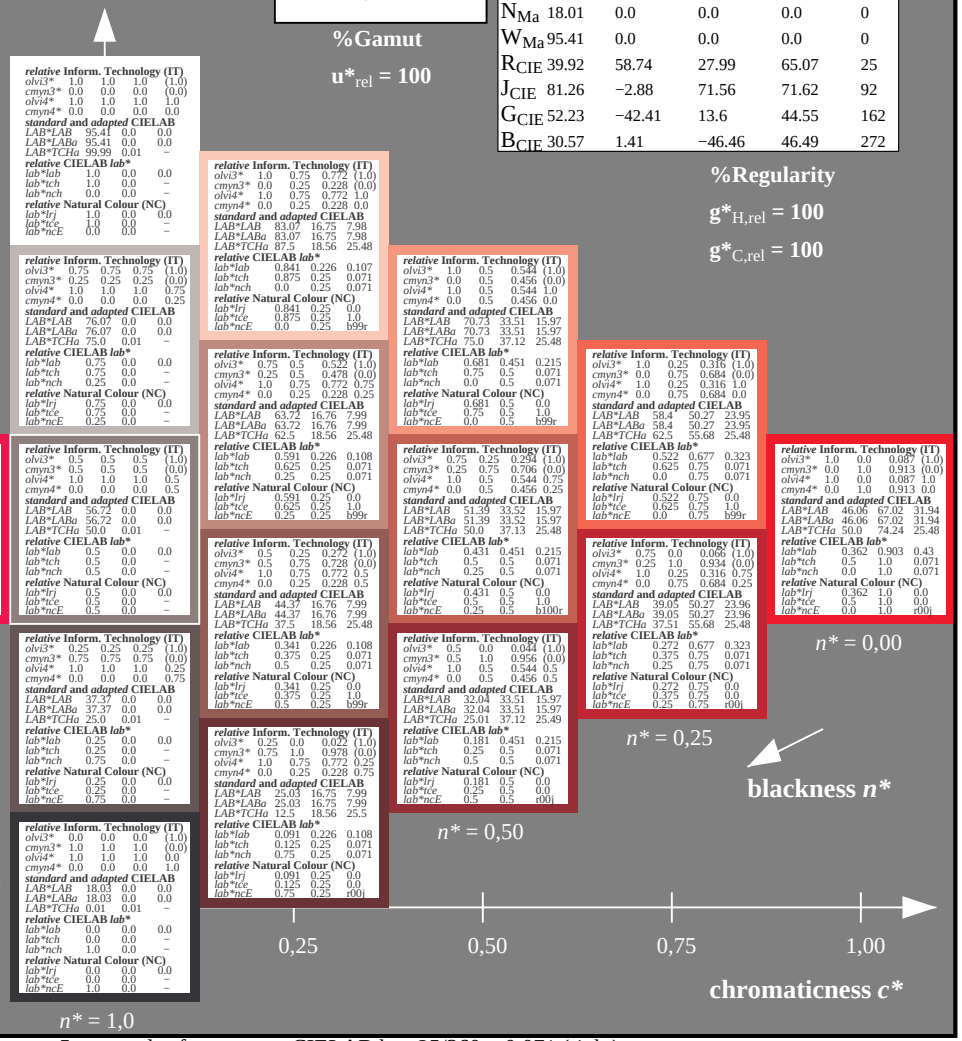
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

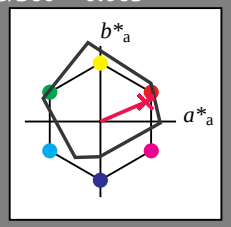


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

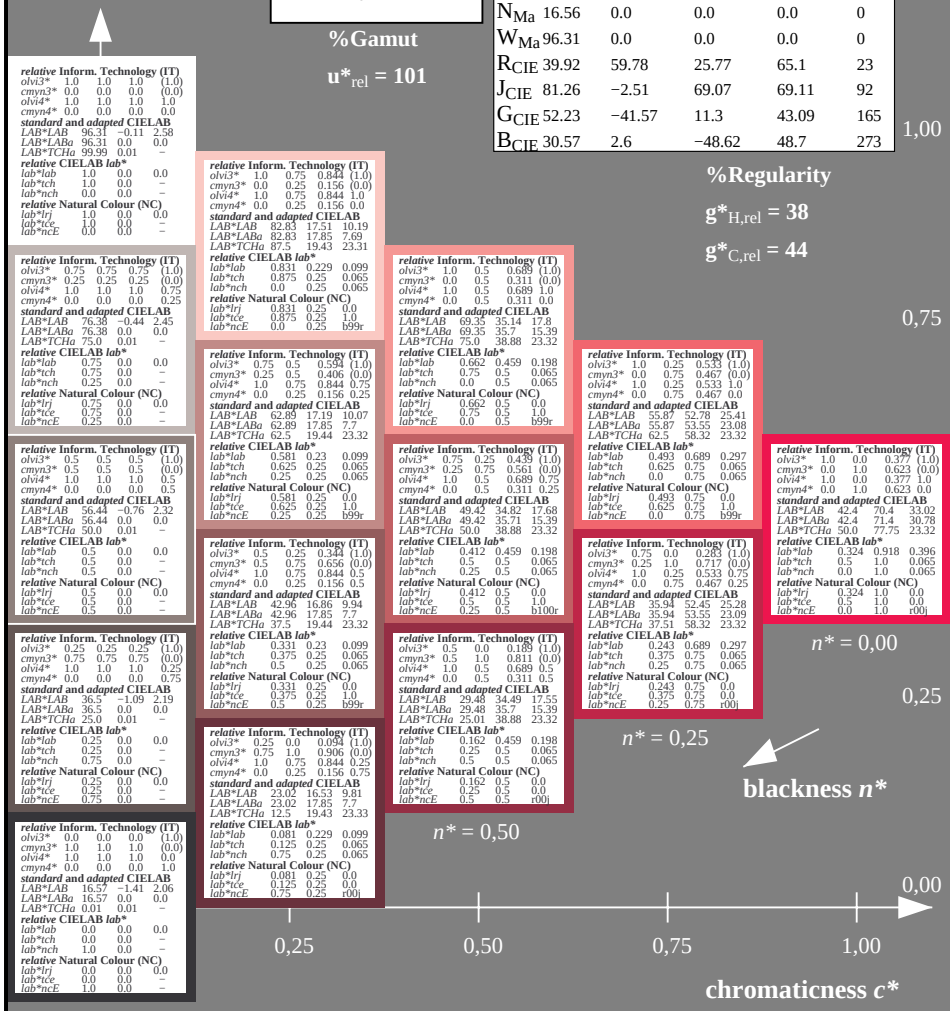
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

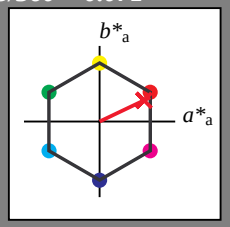
$g^*_{C,rel} = 44$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

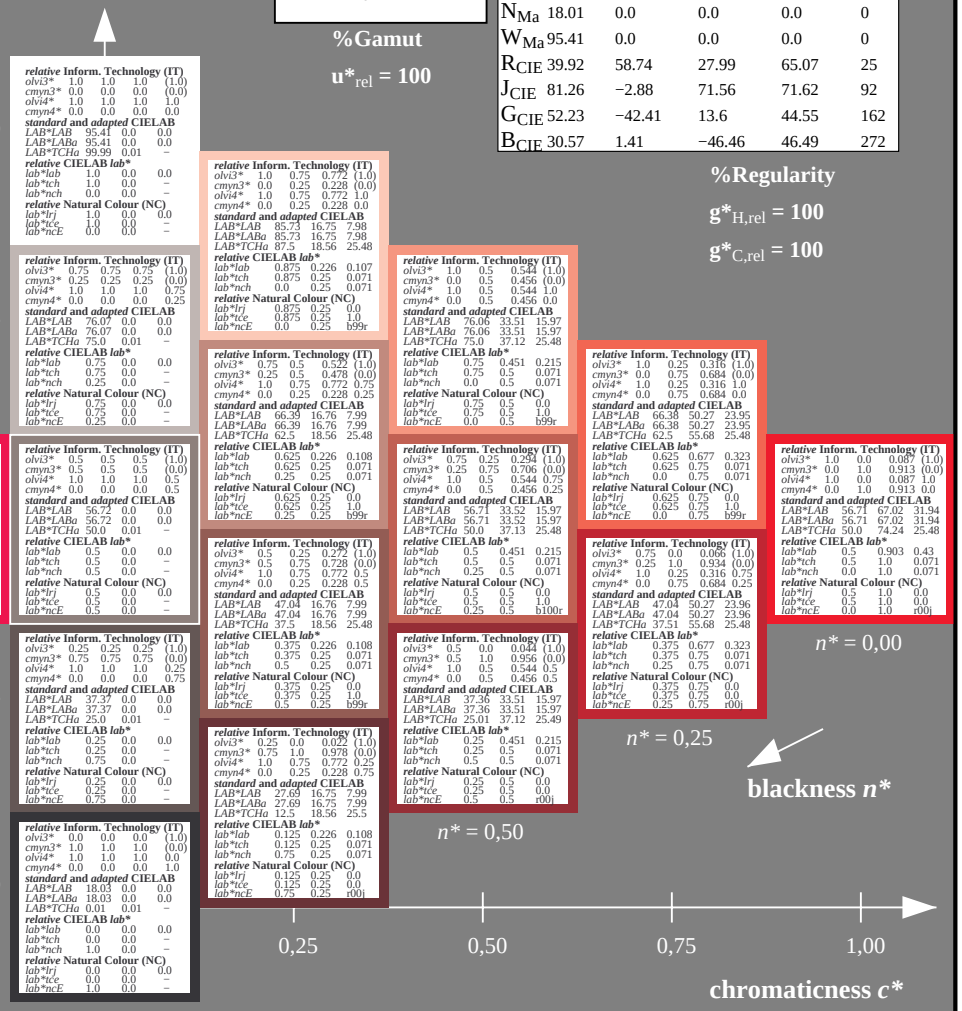
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



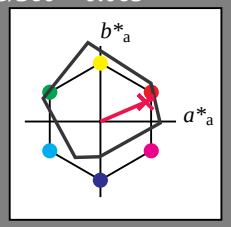
OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

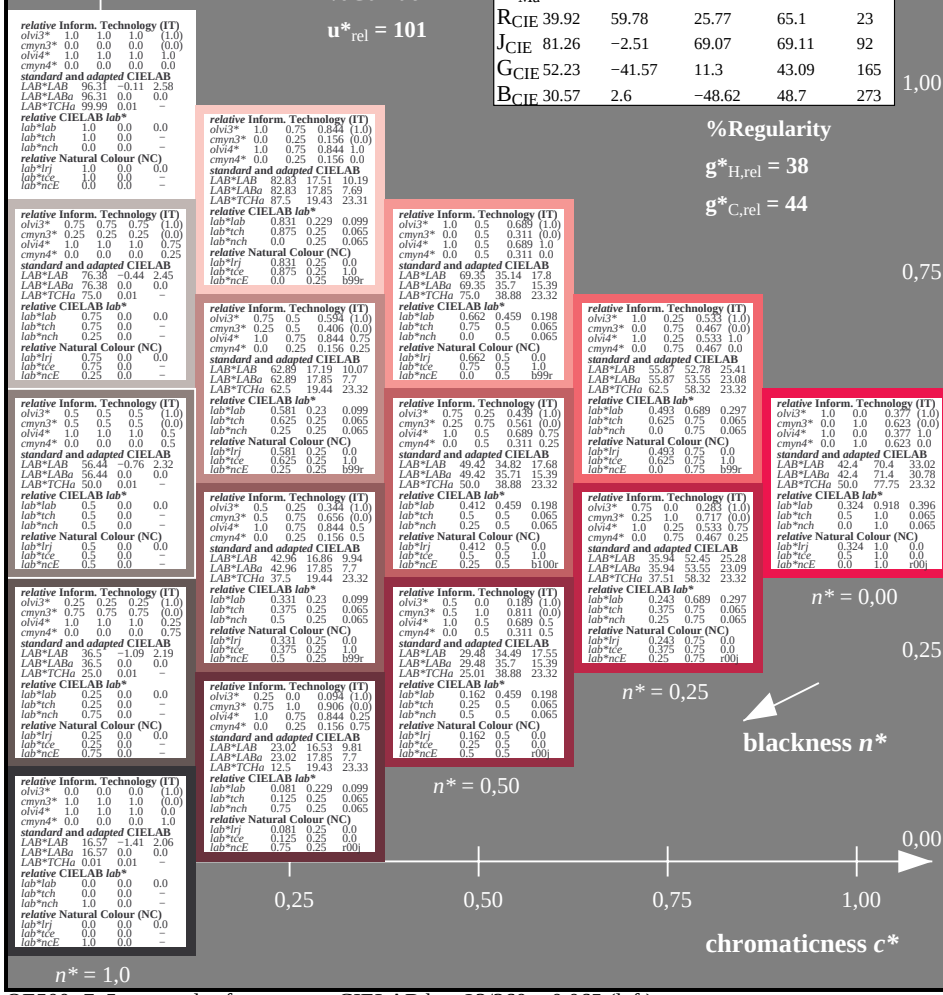
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

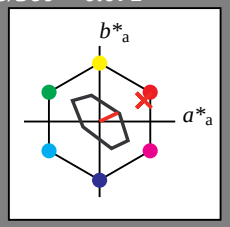


OE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

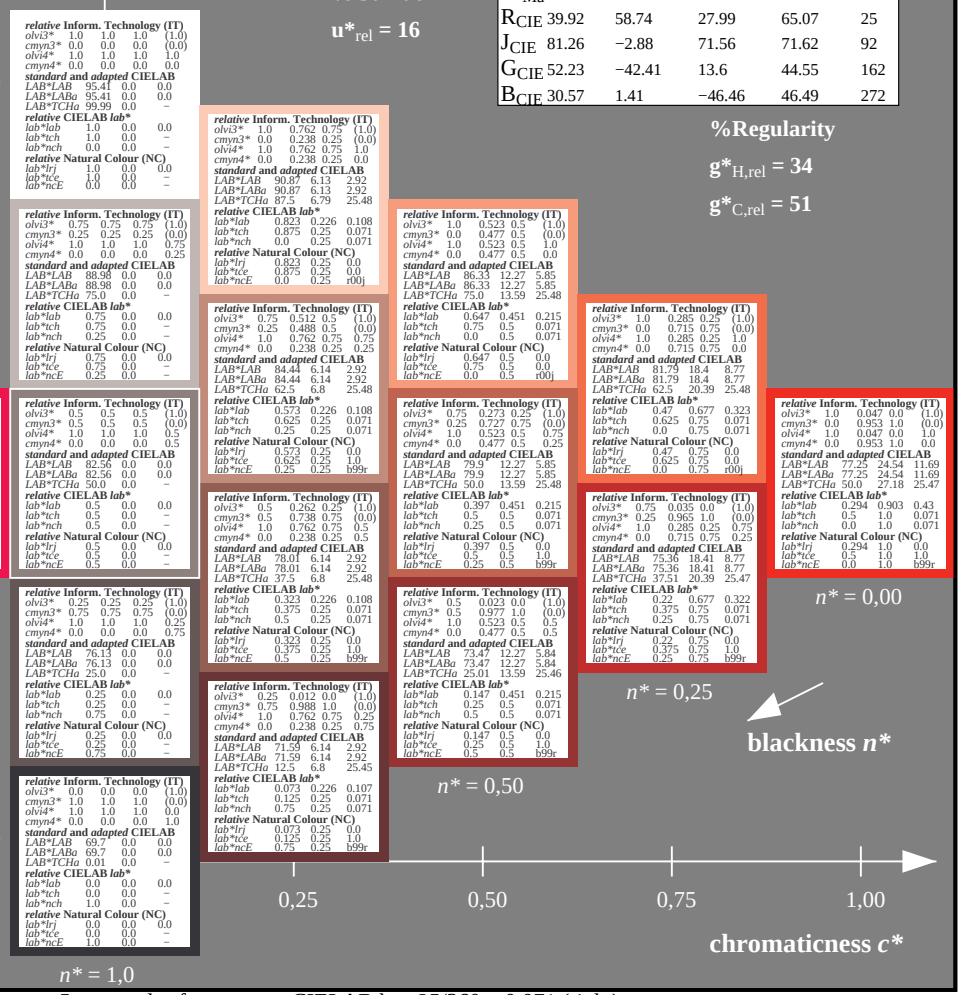
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

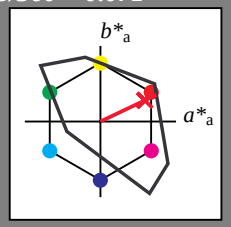
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

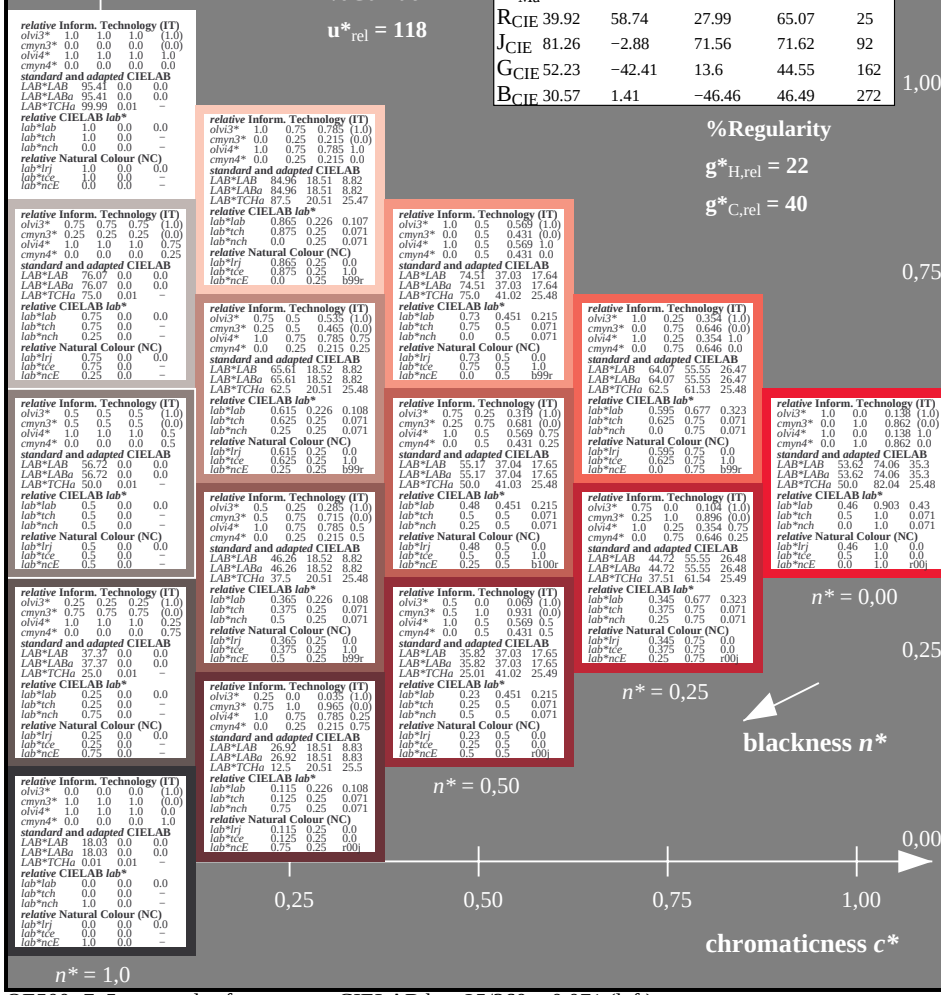
u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

triangle lightness *t**



Output: Colorimetric Offset Reflective System ORS18

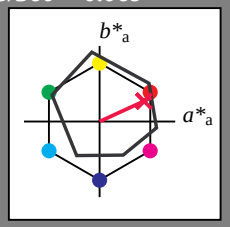
for hue $h^* = lab^*h = 25/360 = 0.069$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

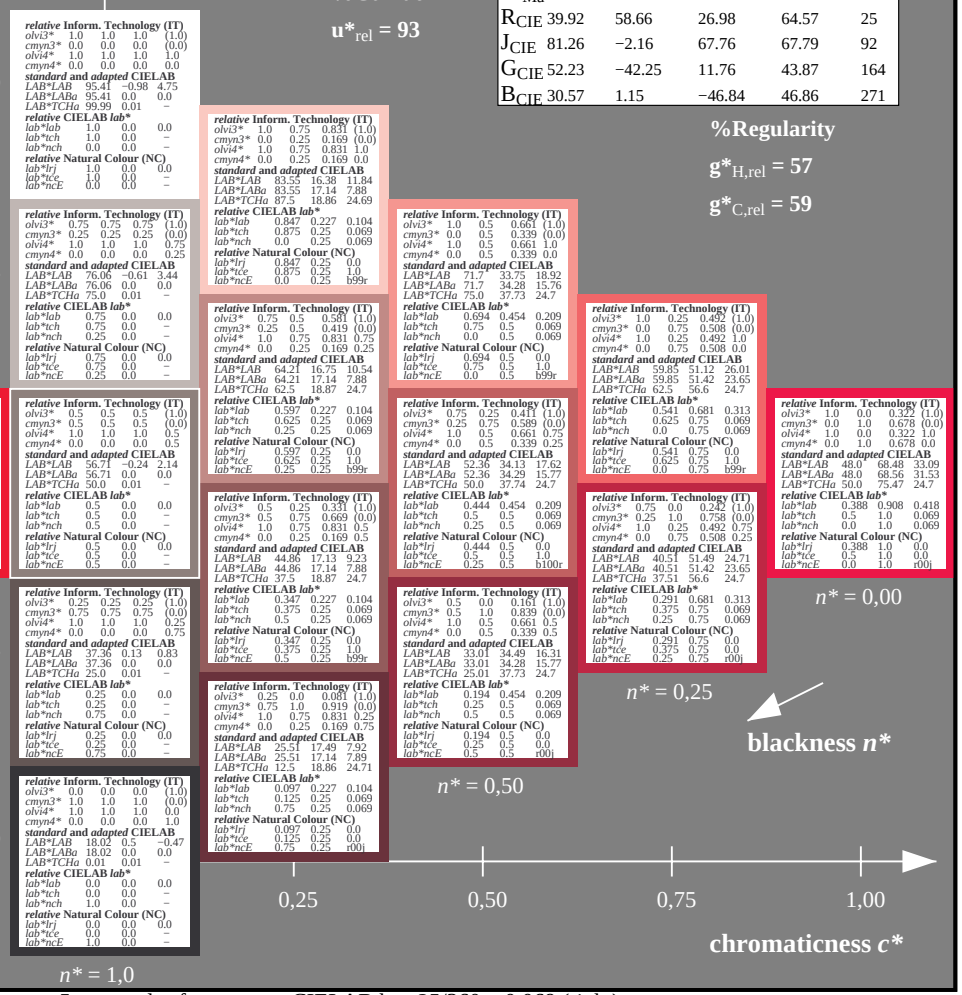
u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

triangle lightness *t**



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

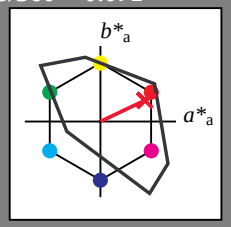
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

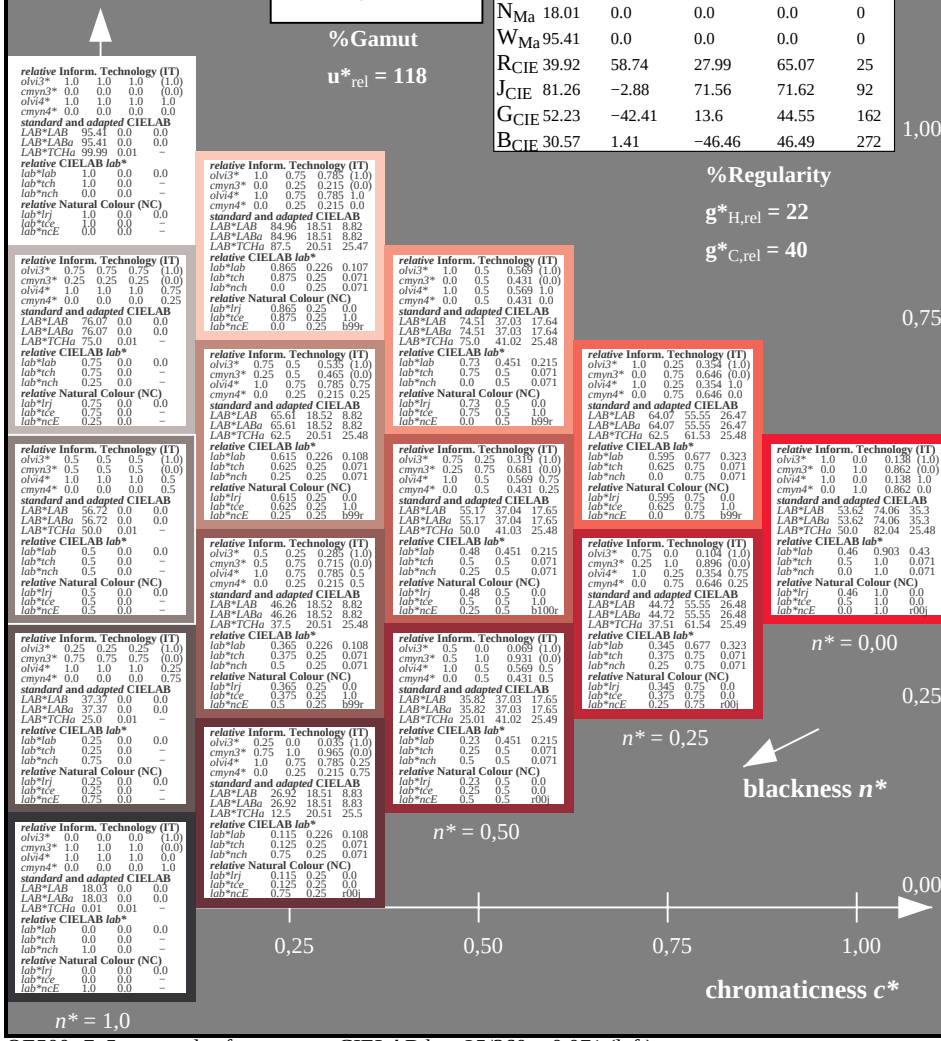
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

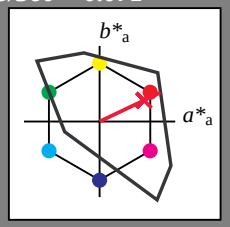
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

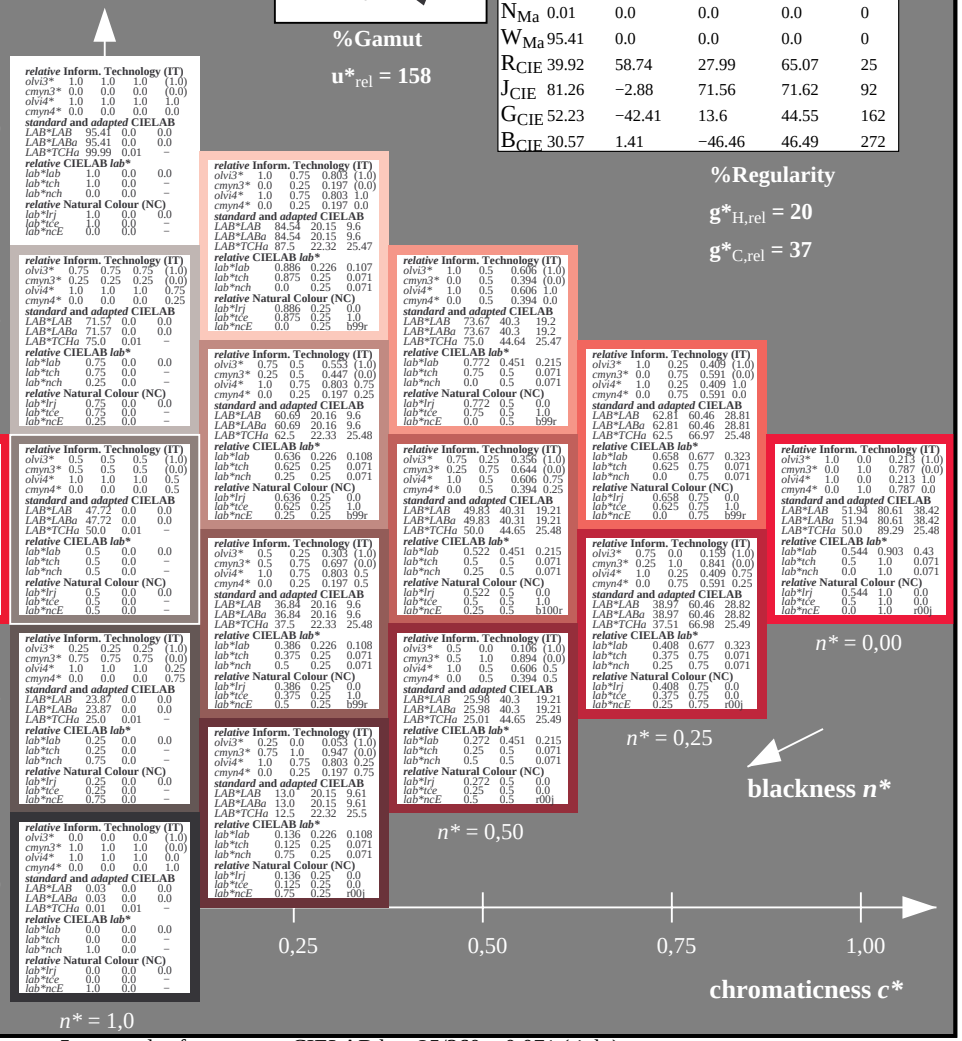
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

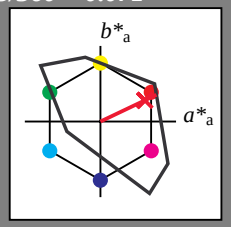
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

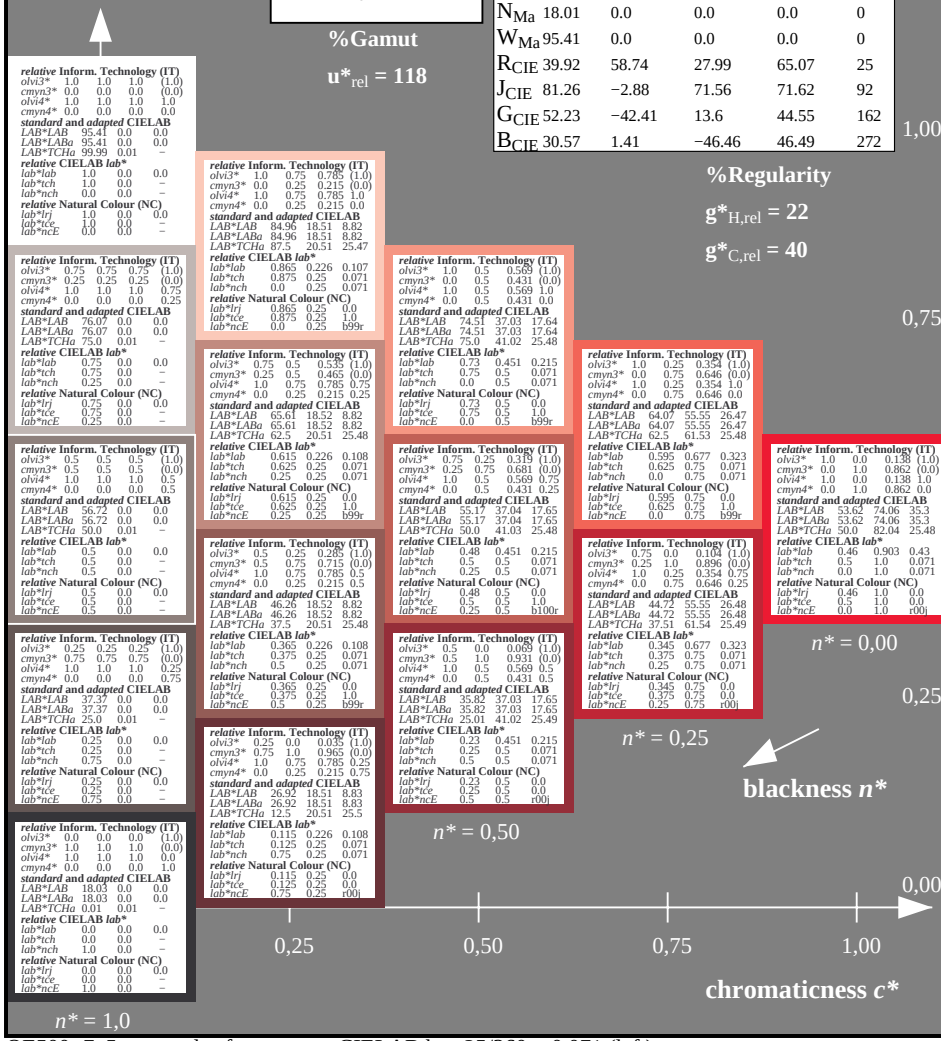
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

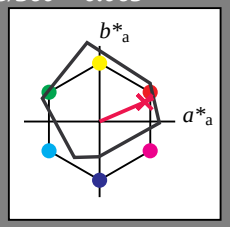


Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

u^*_{rel} = 101

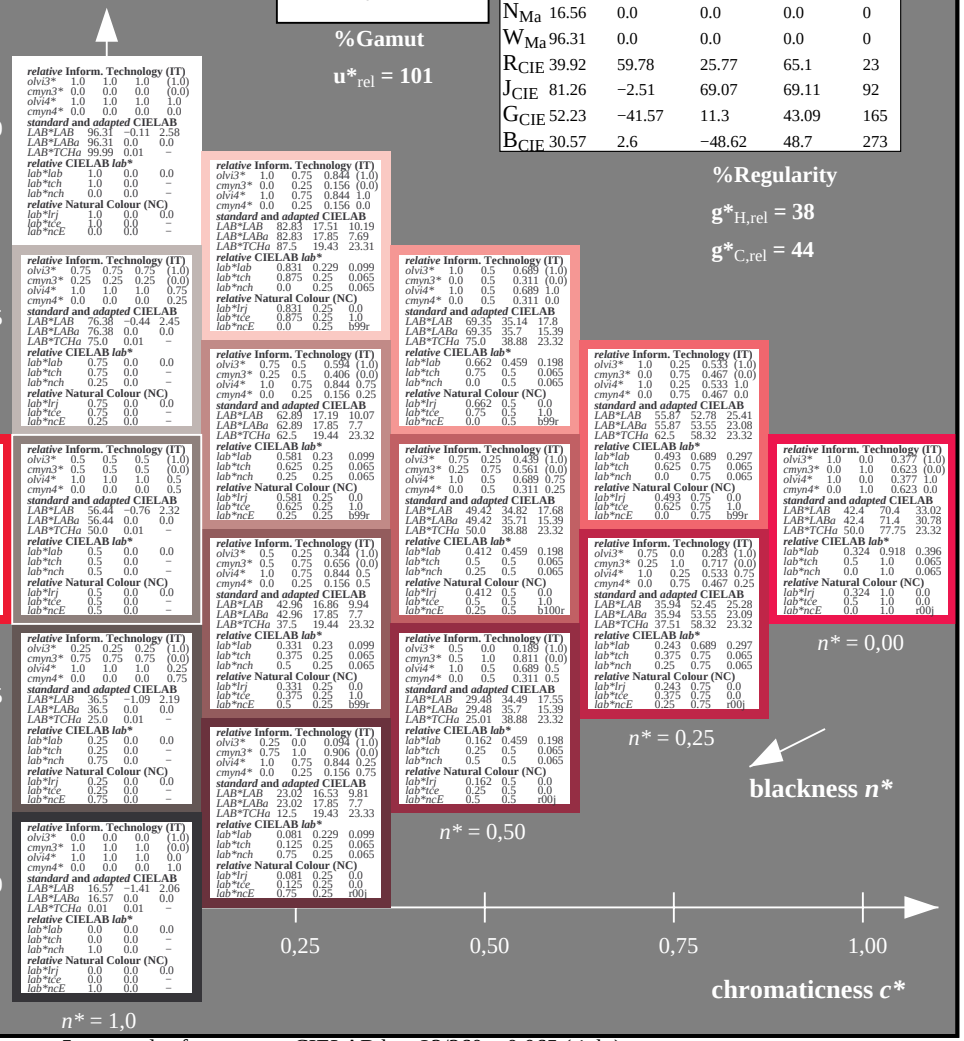
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



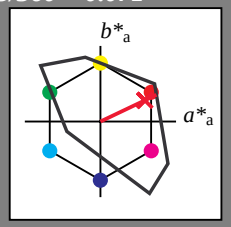
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

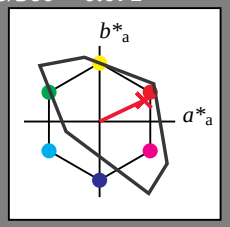
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

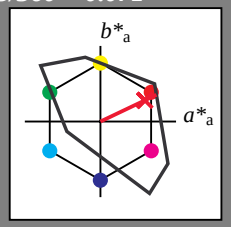
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14



triangle lightness t^*

%Gamut

u^*_{rel} = 118

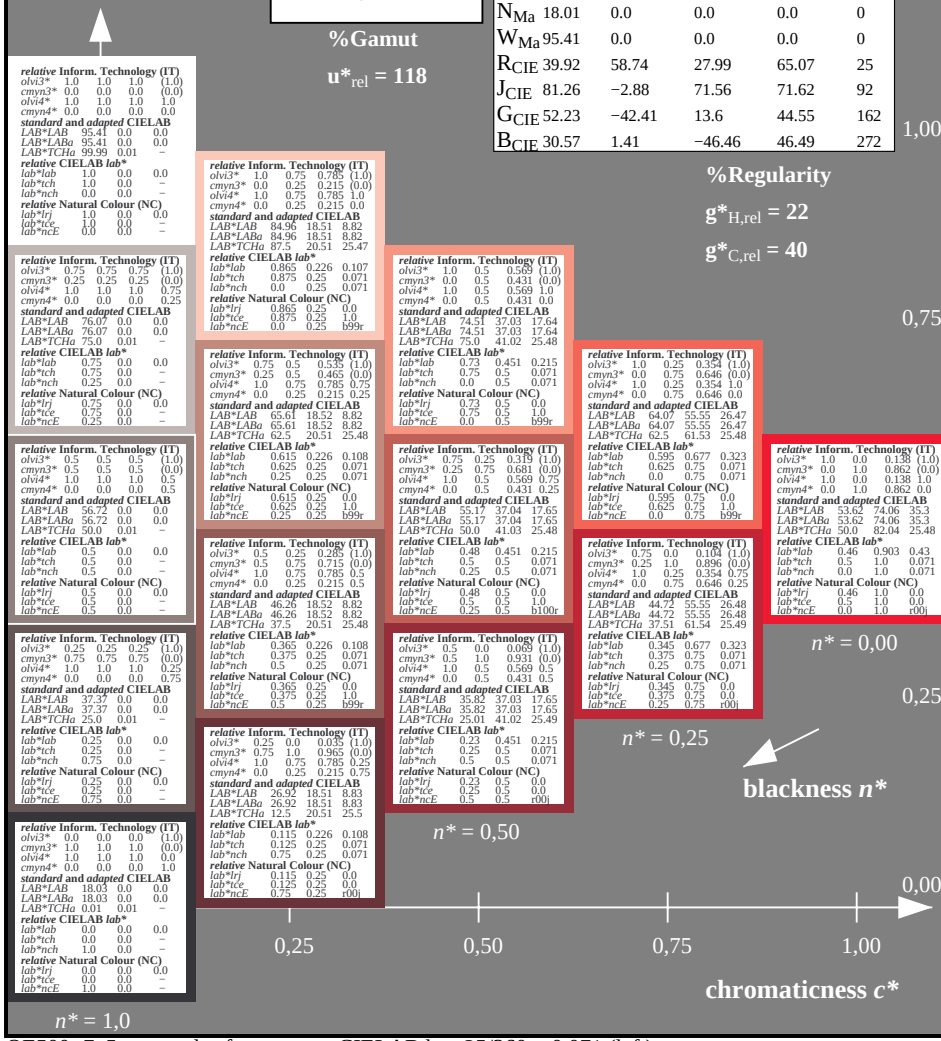
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Luminous System NLS00

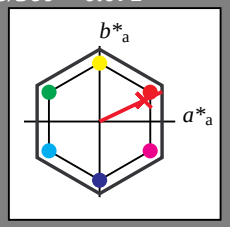
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

u^*_{rel} = 152

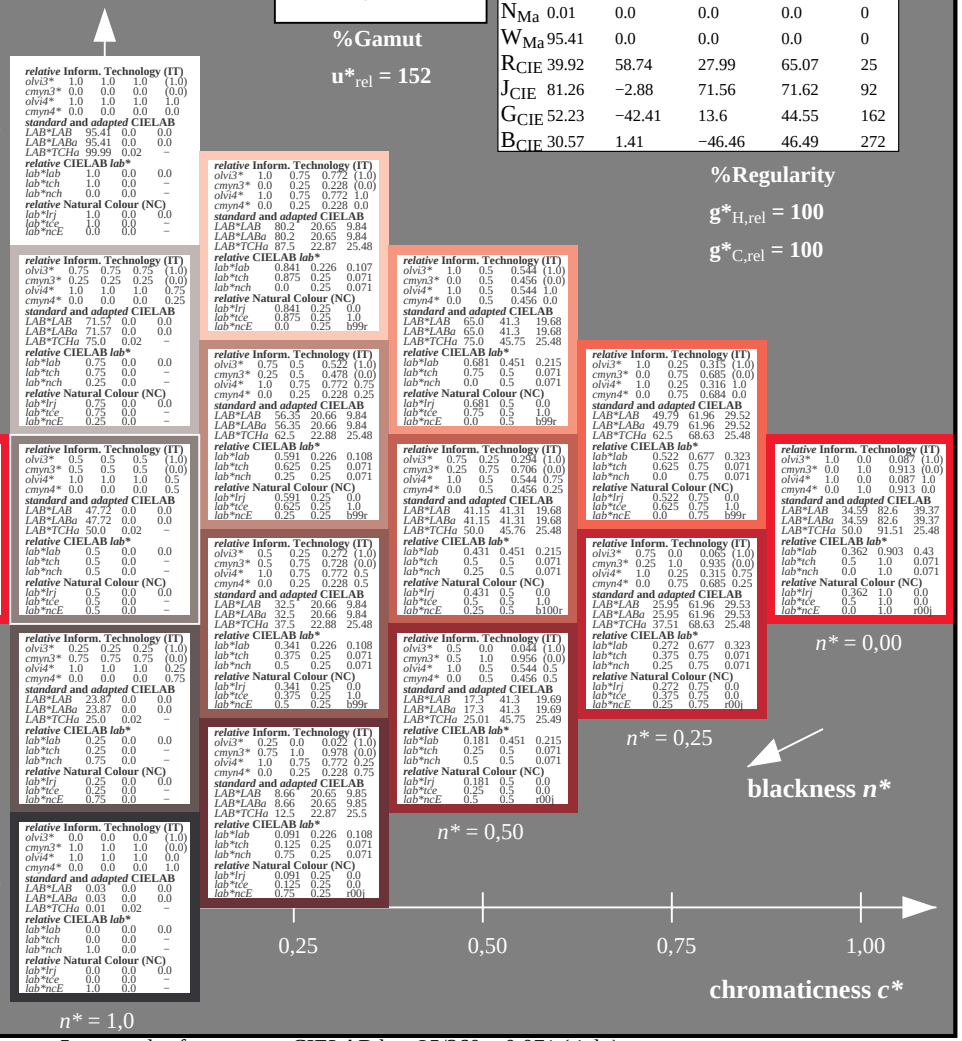
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



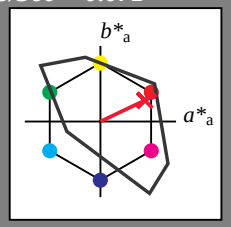
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

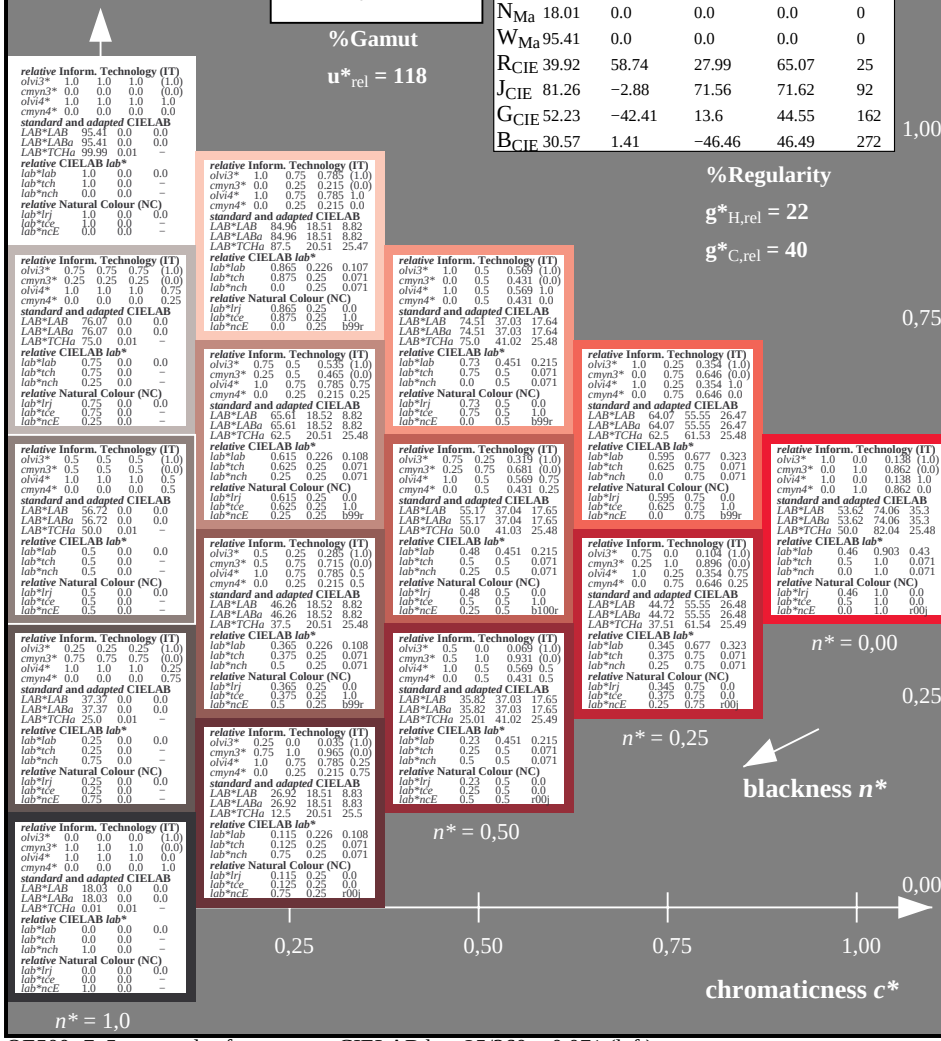
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



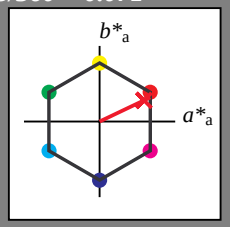
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

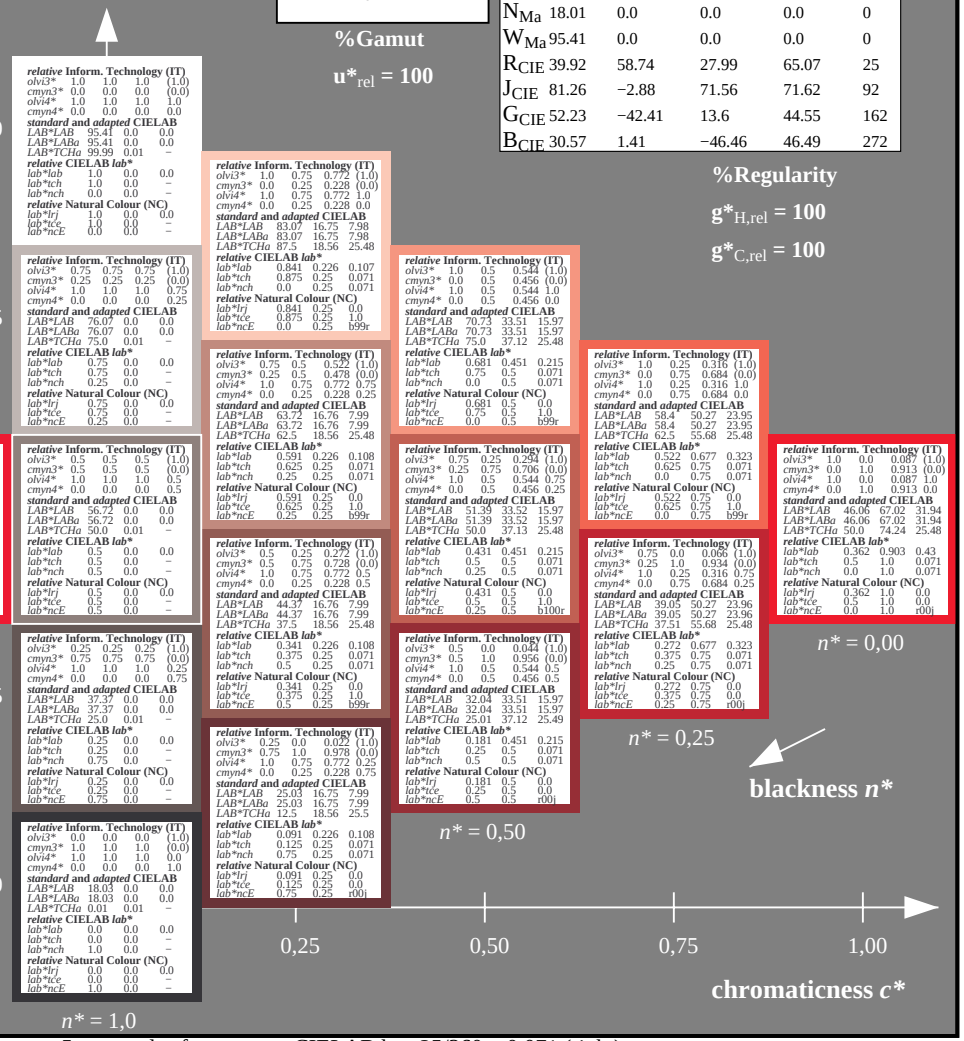
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

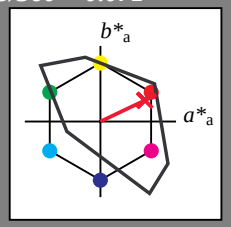
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

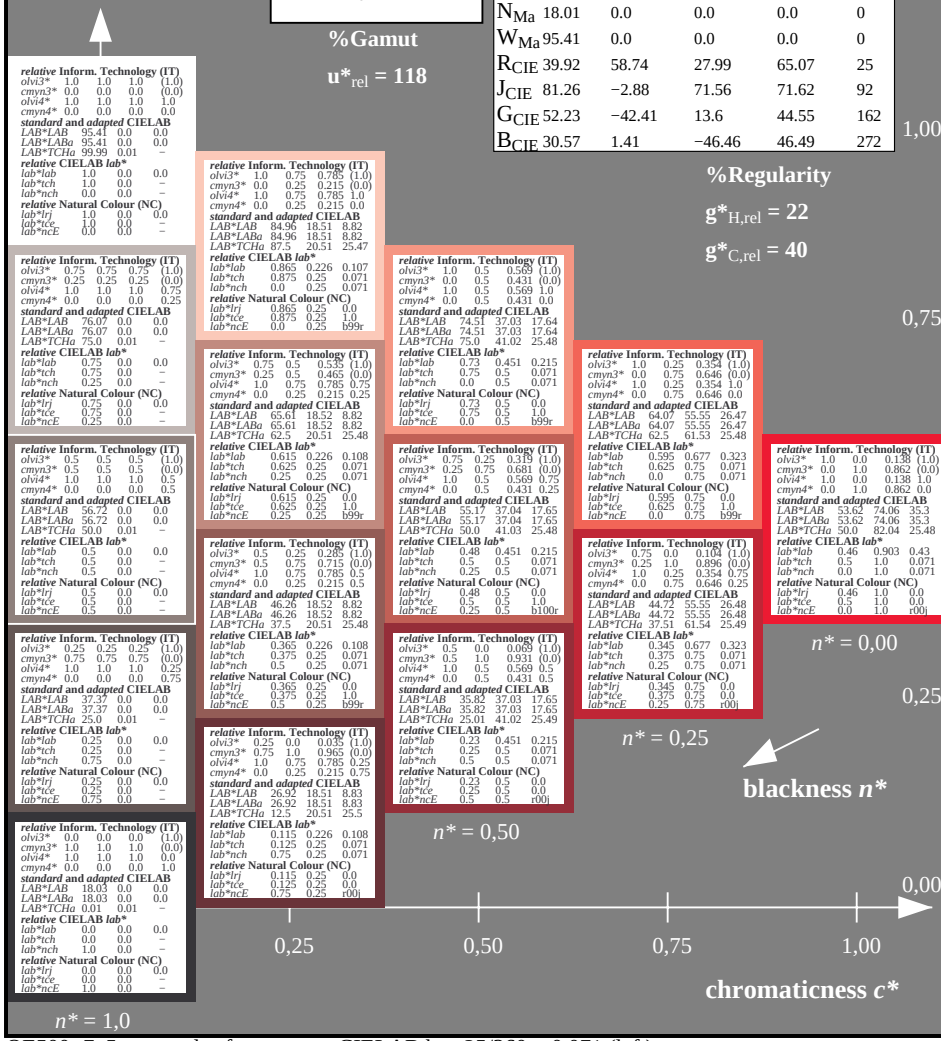
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

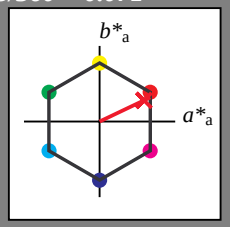
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

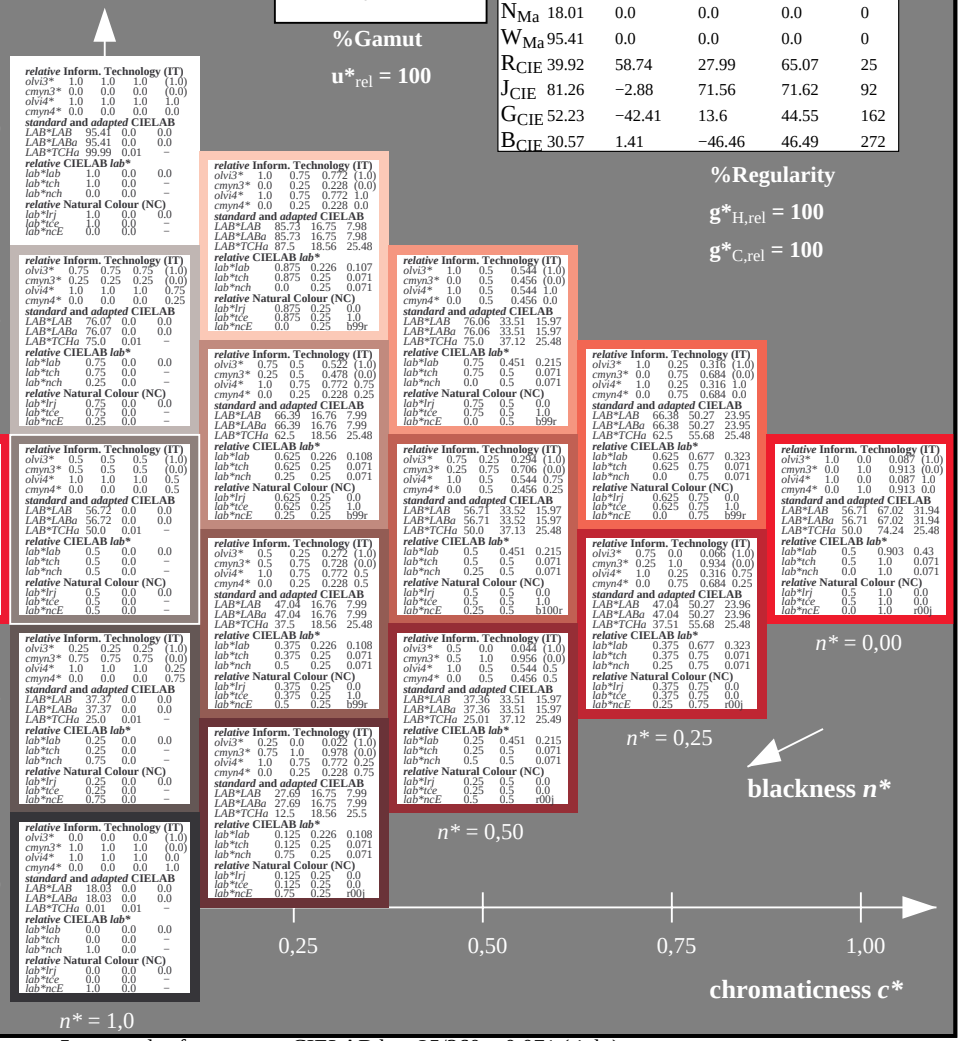
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

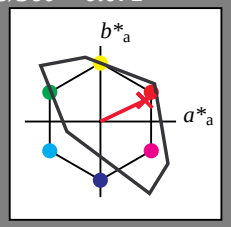
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

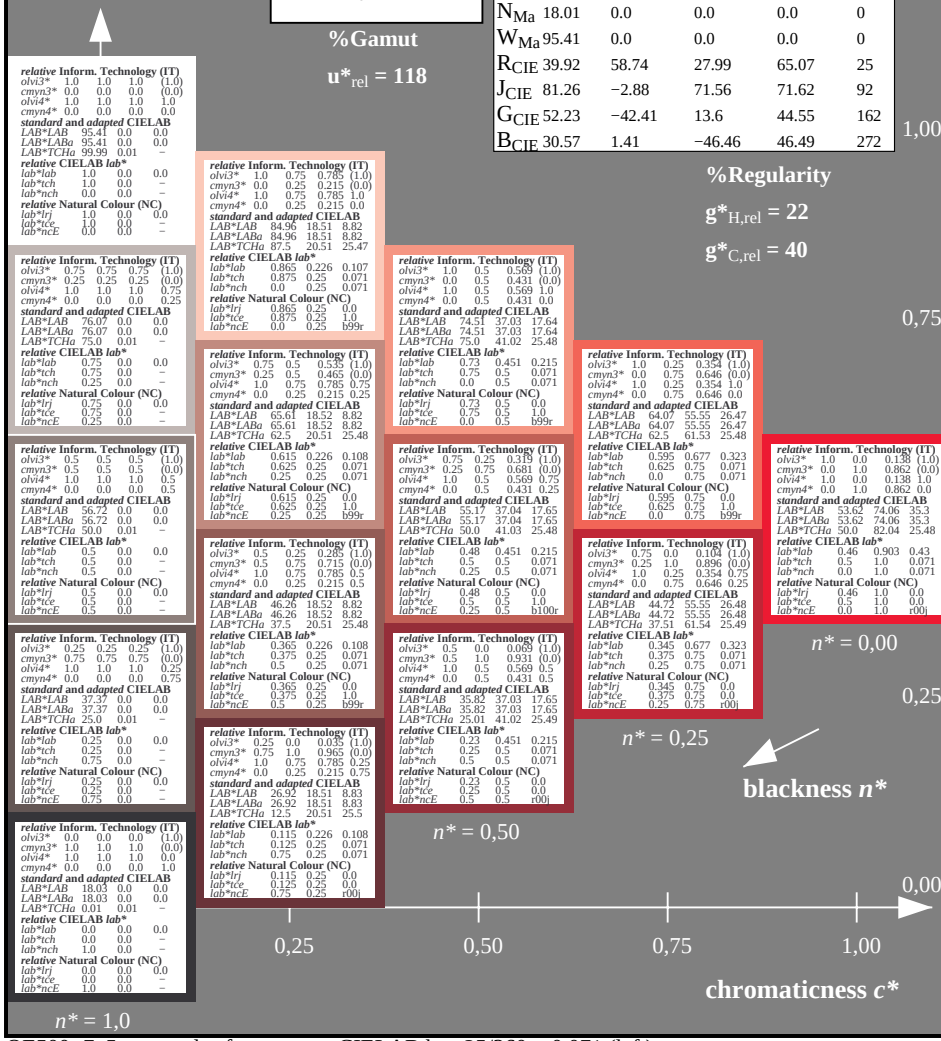
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$

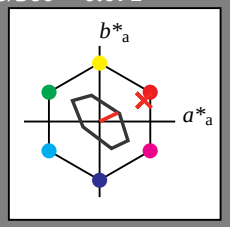
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

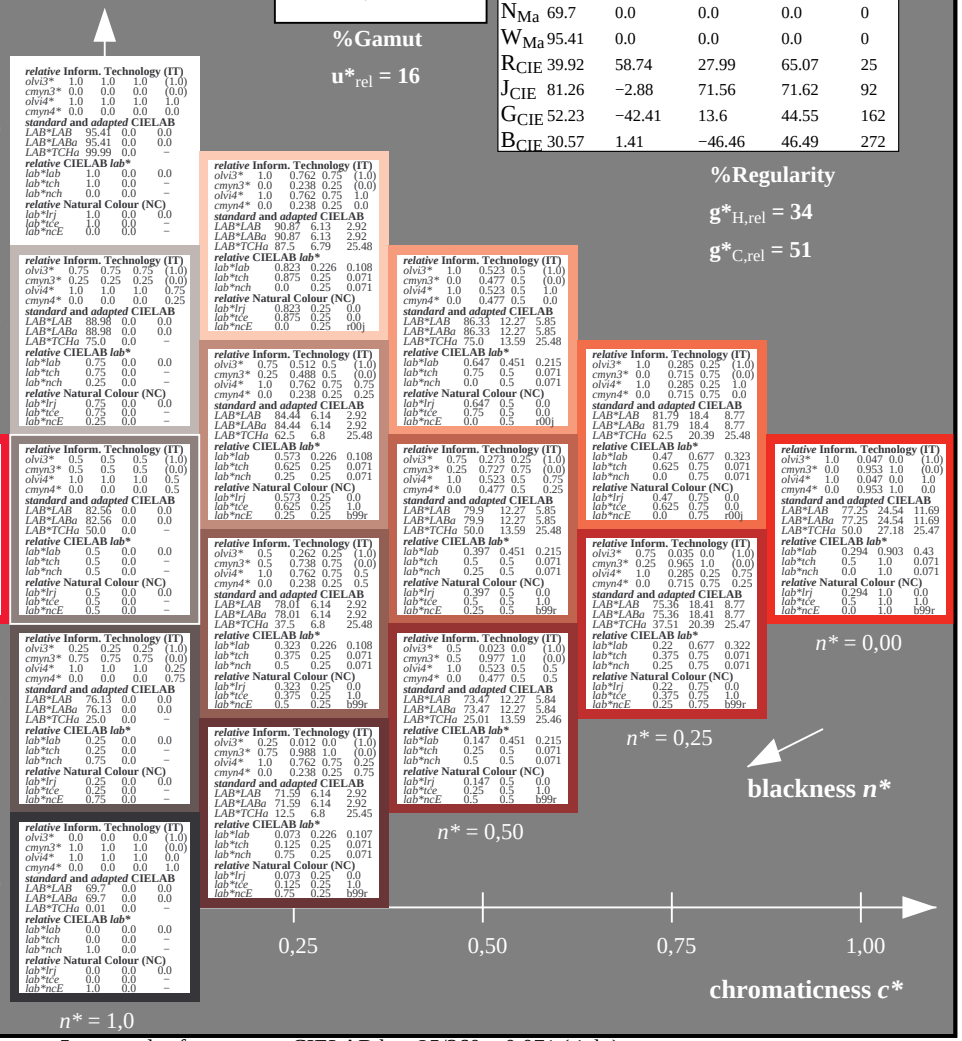
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00

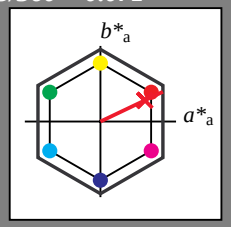
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

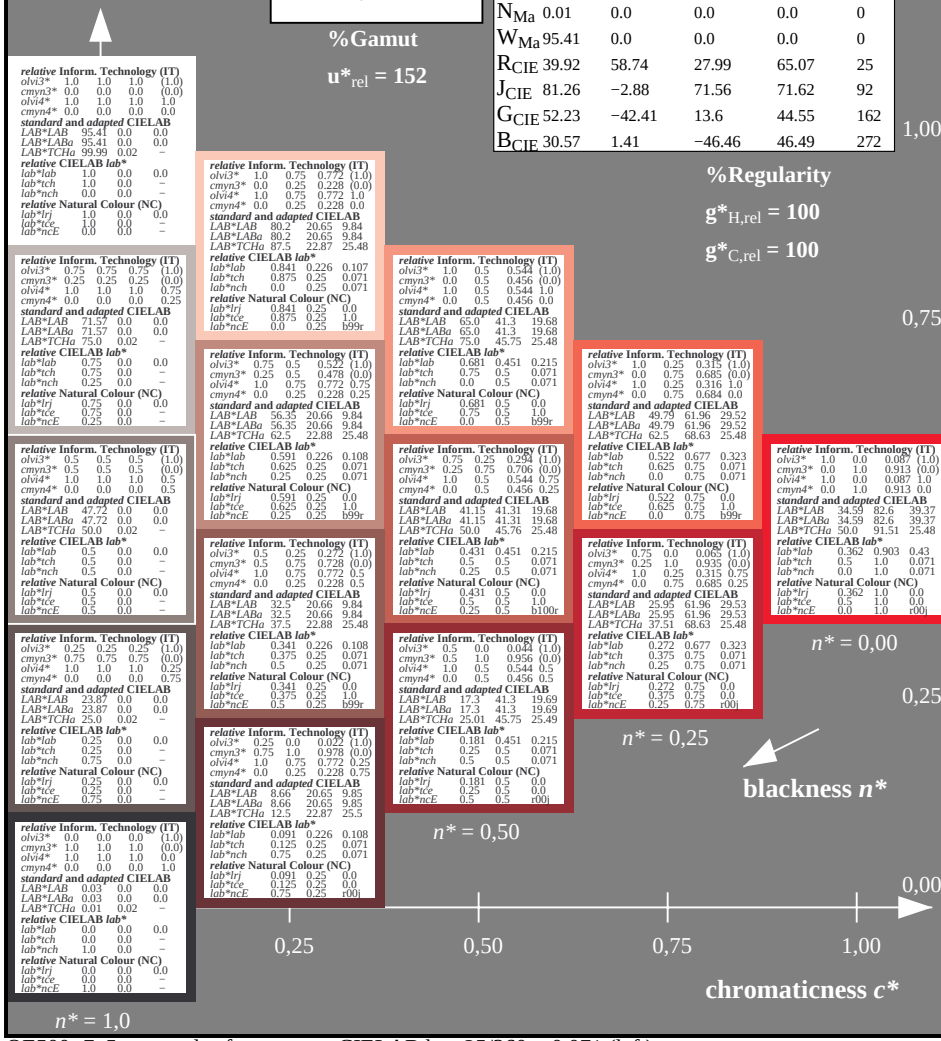
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Offset Reflective System ORS18

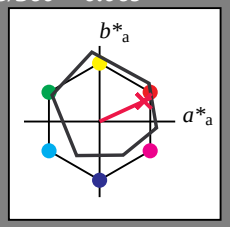
for hue $h^* = lab^*h = 25/360 = 0.069$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

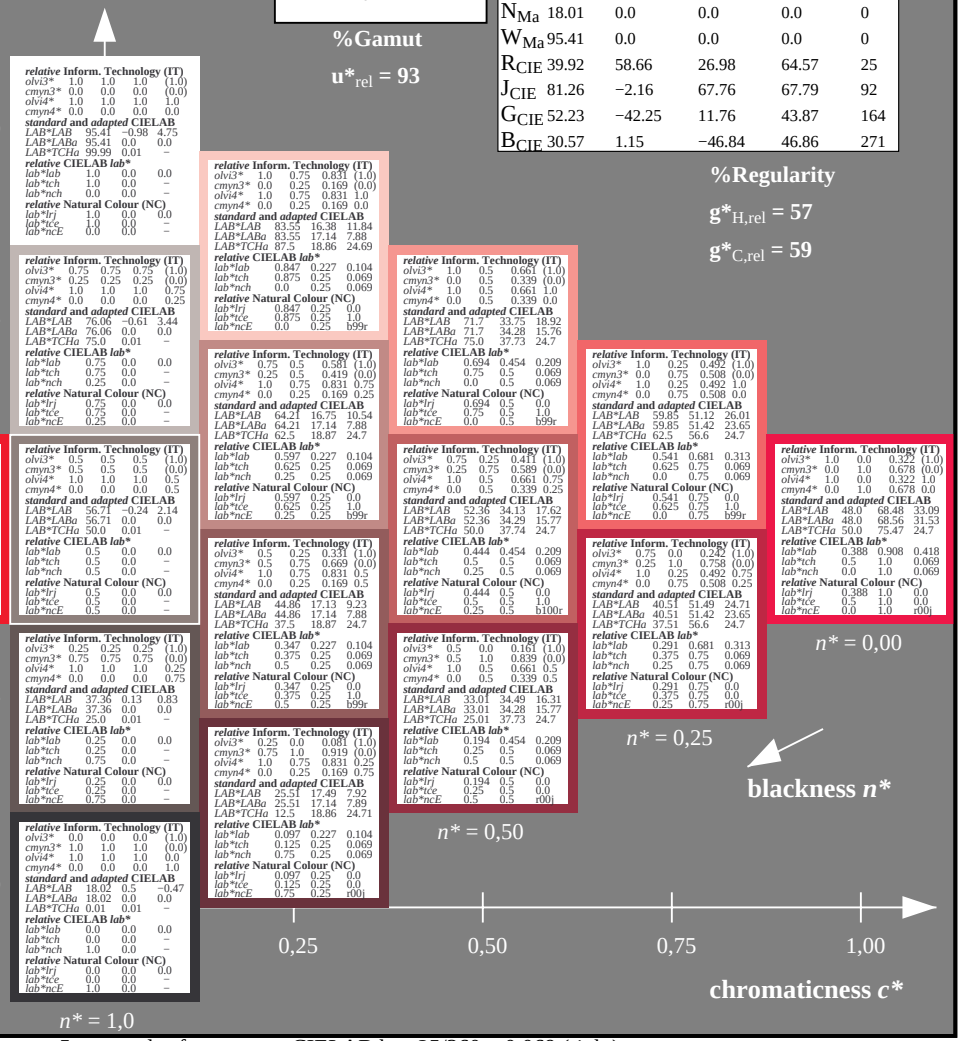
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



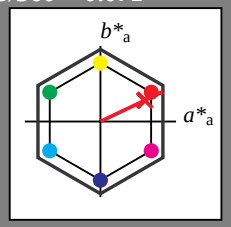
5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 152

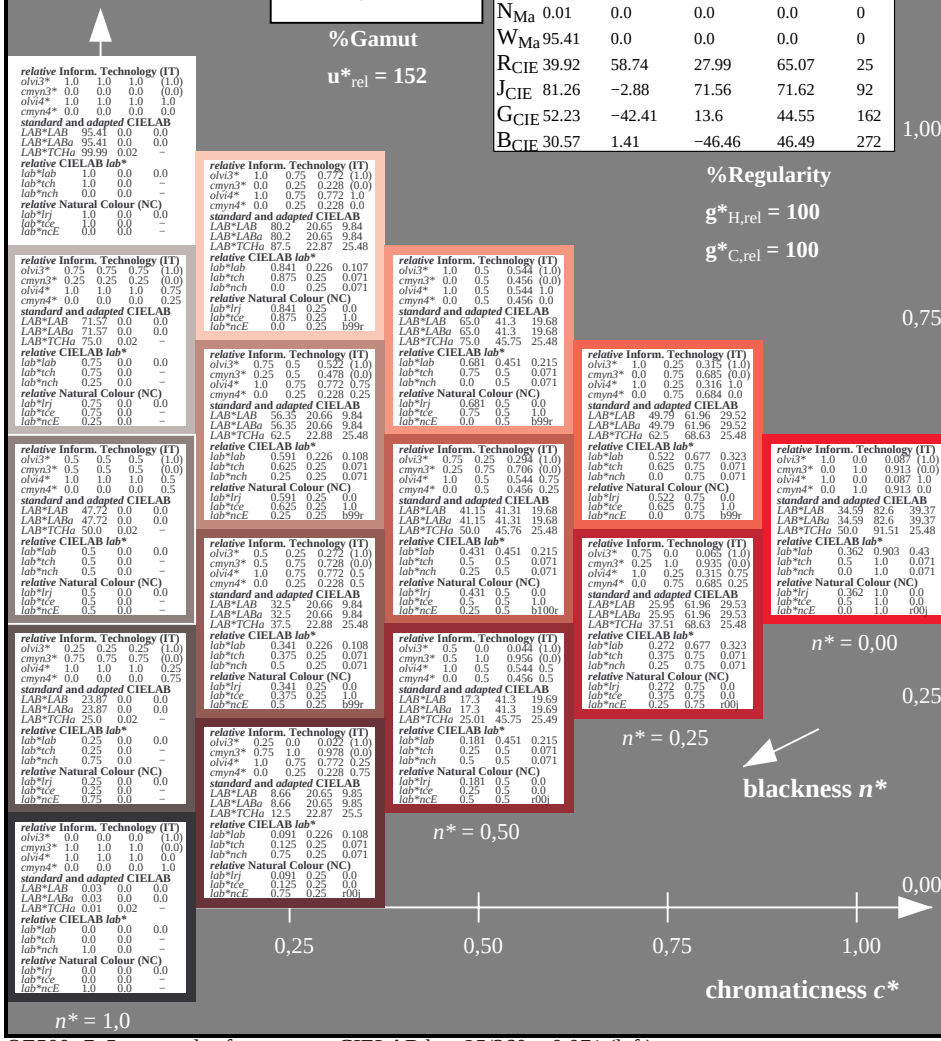
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



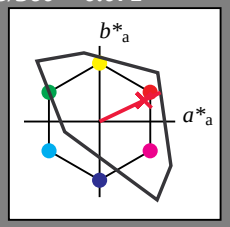
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

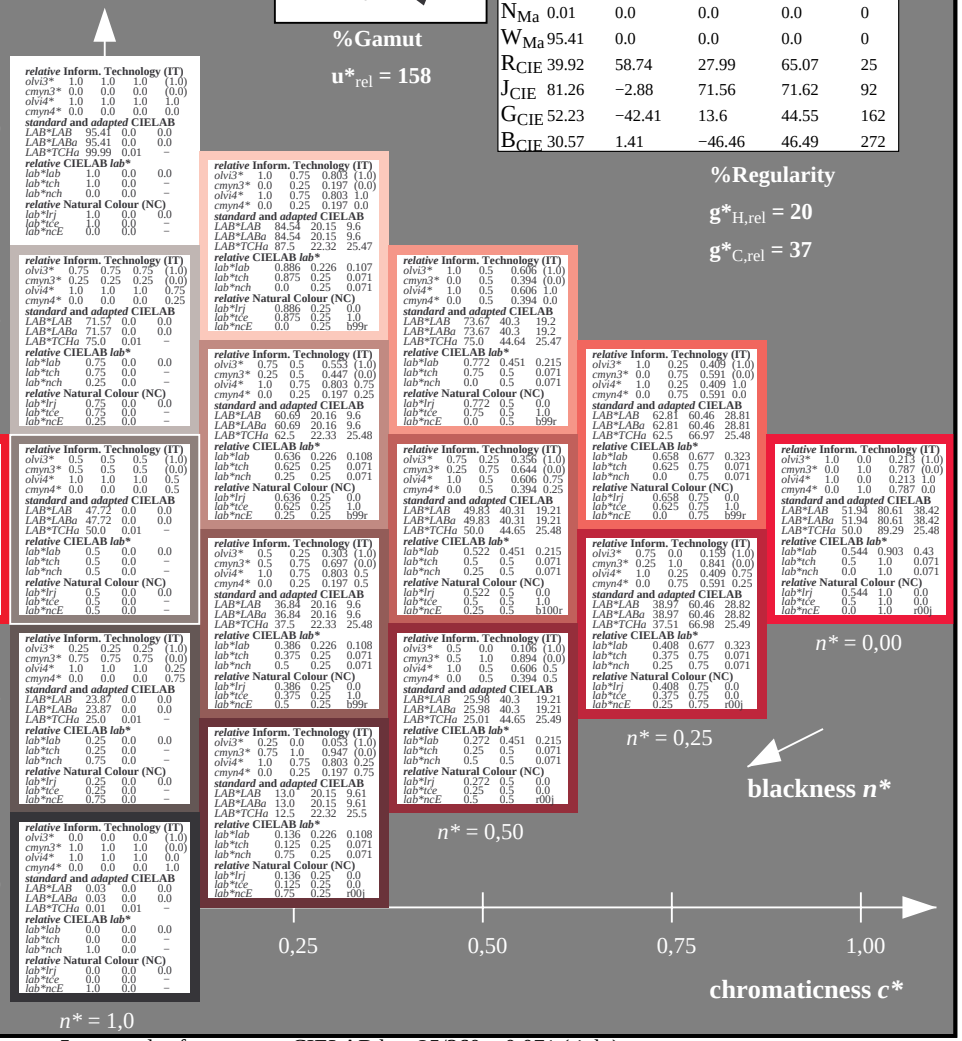
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

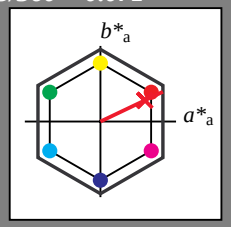


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

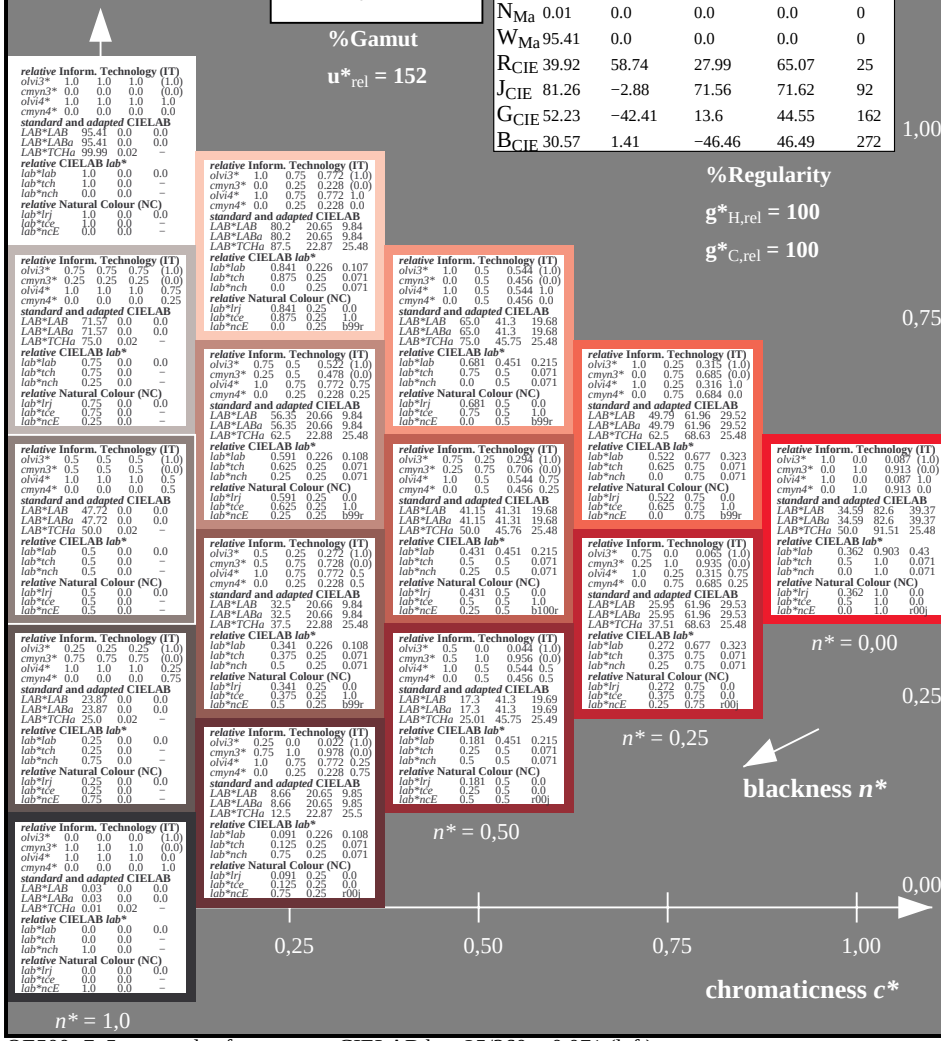
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

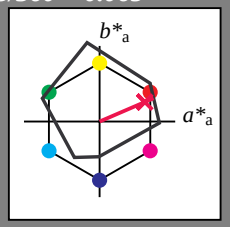


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

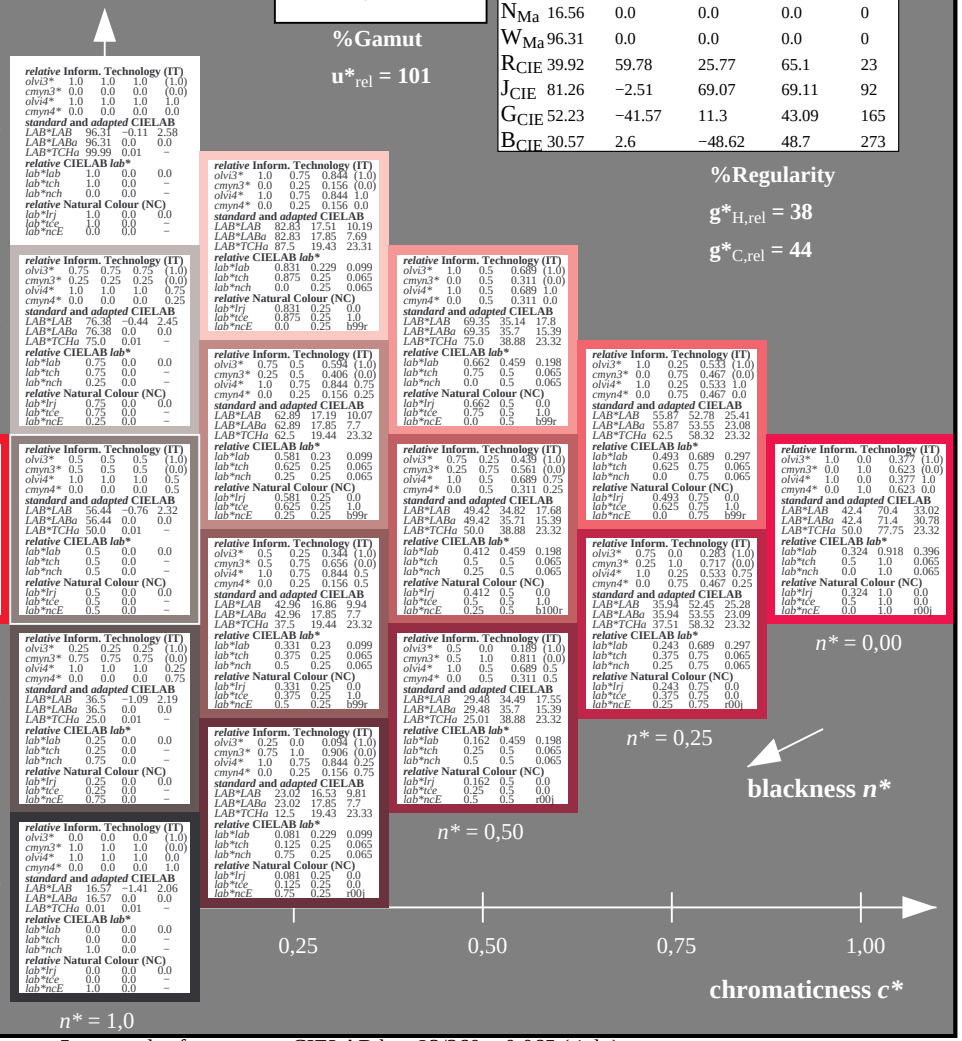
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



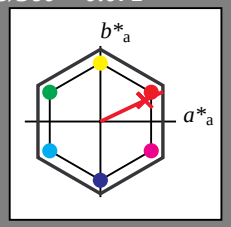
5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

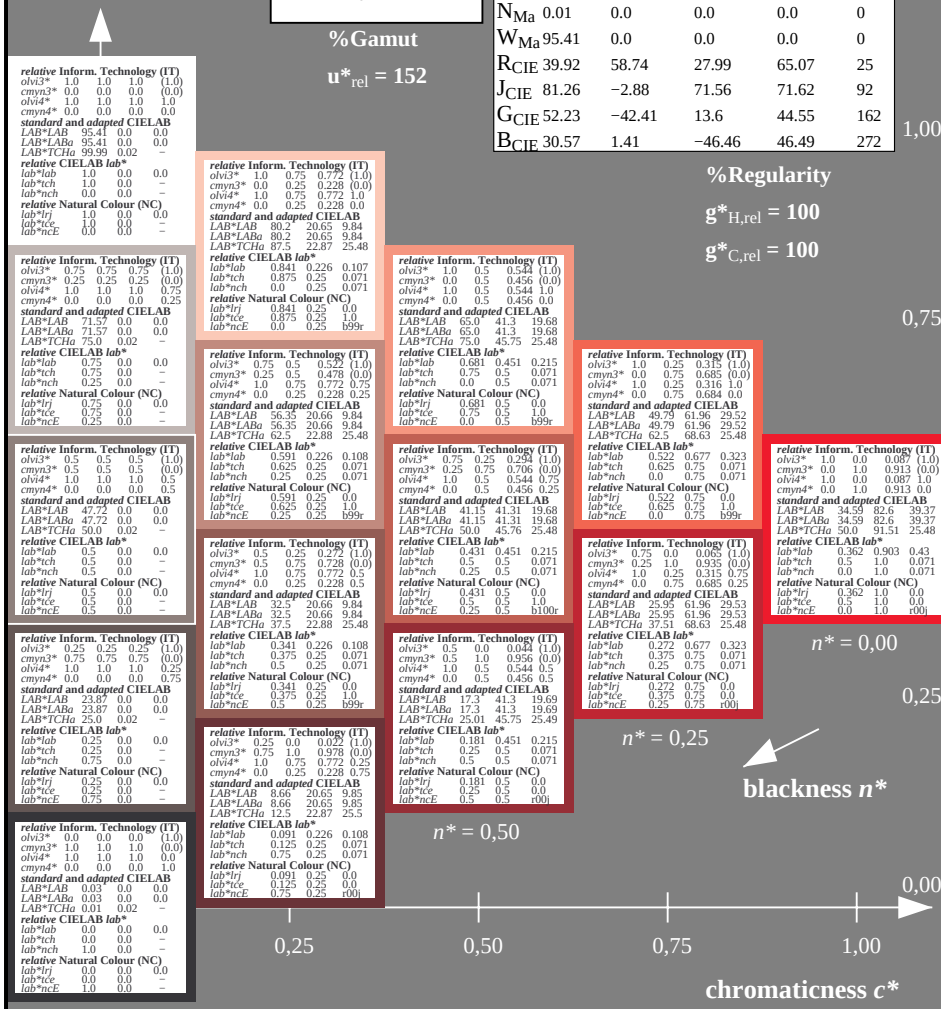
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



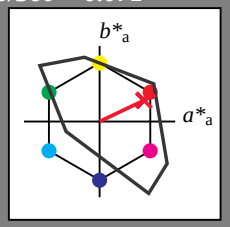
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

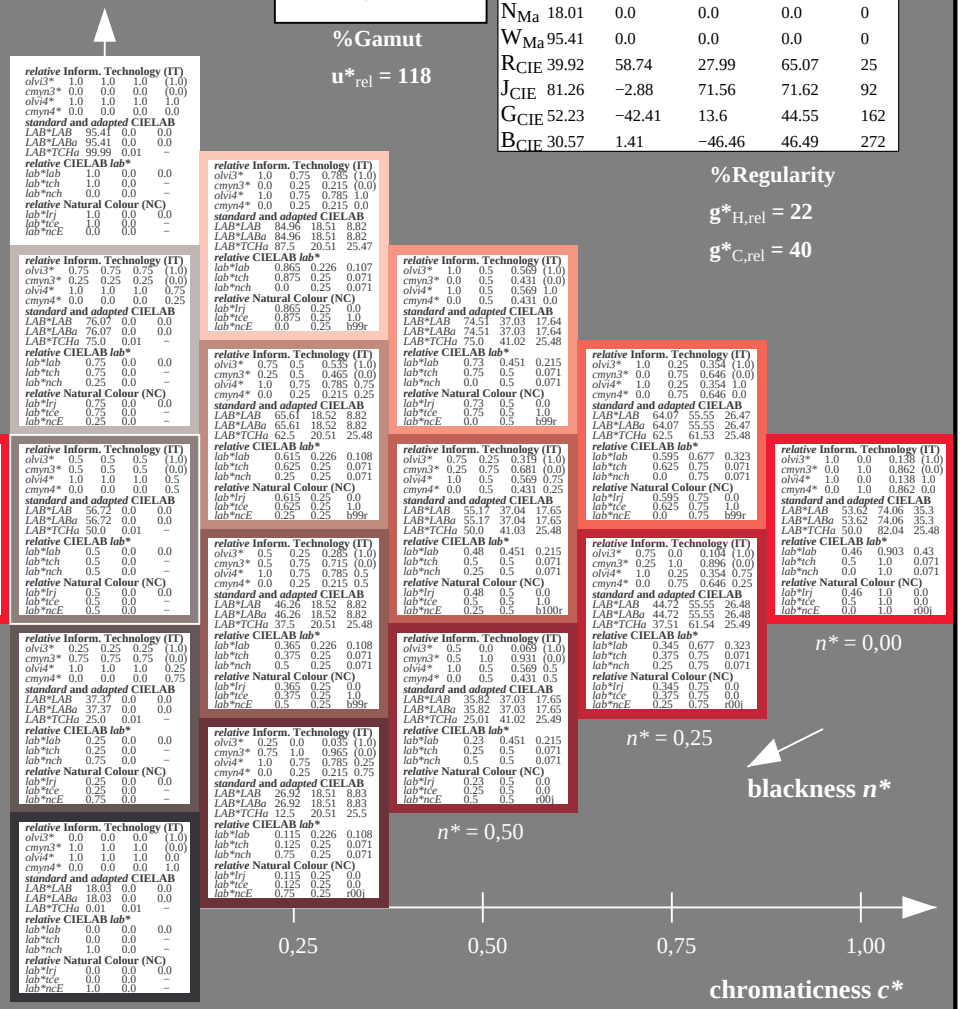
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

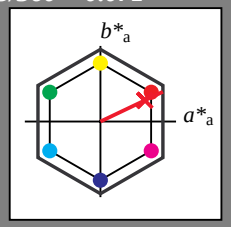


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00
for hue *h = *lab*h* = 25/360 = 0.071**
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

u^*_{rel} = 152

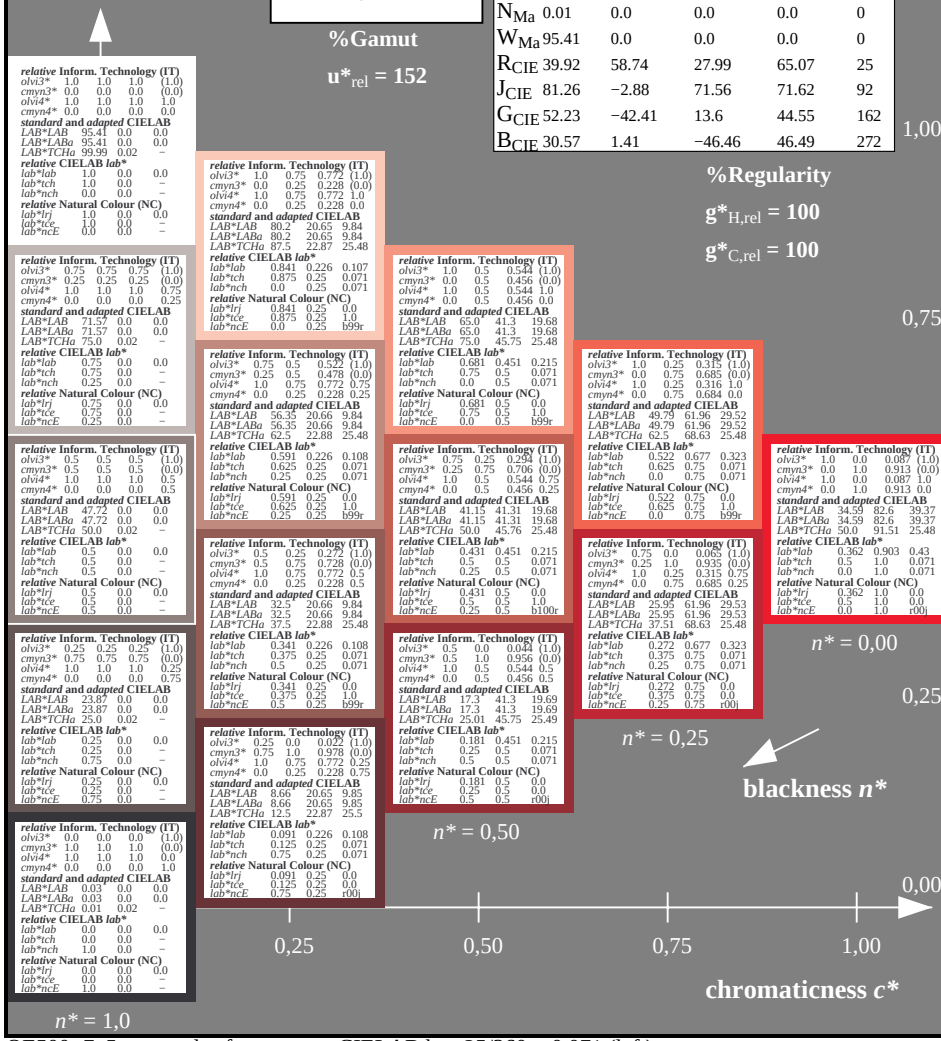
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

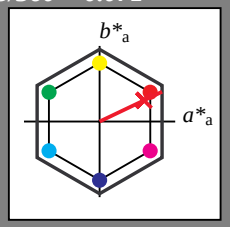


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Luminous System NLS00
for hue *h = *lab*h* = 25/360 = 0.071**
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

u^*_{rel} = 152

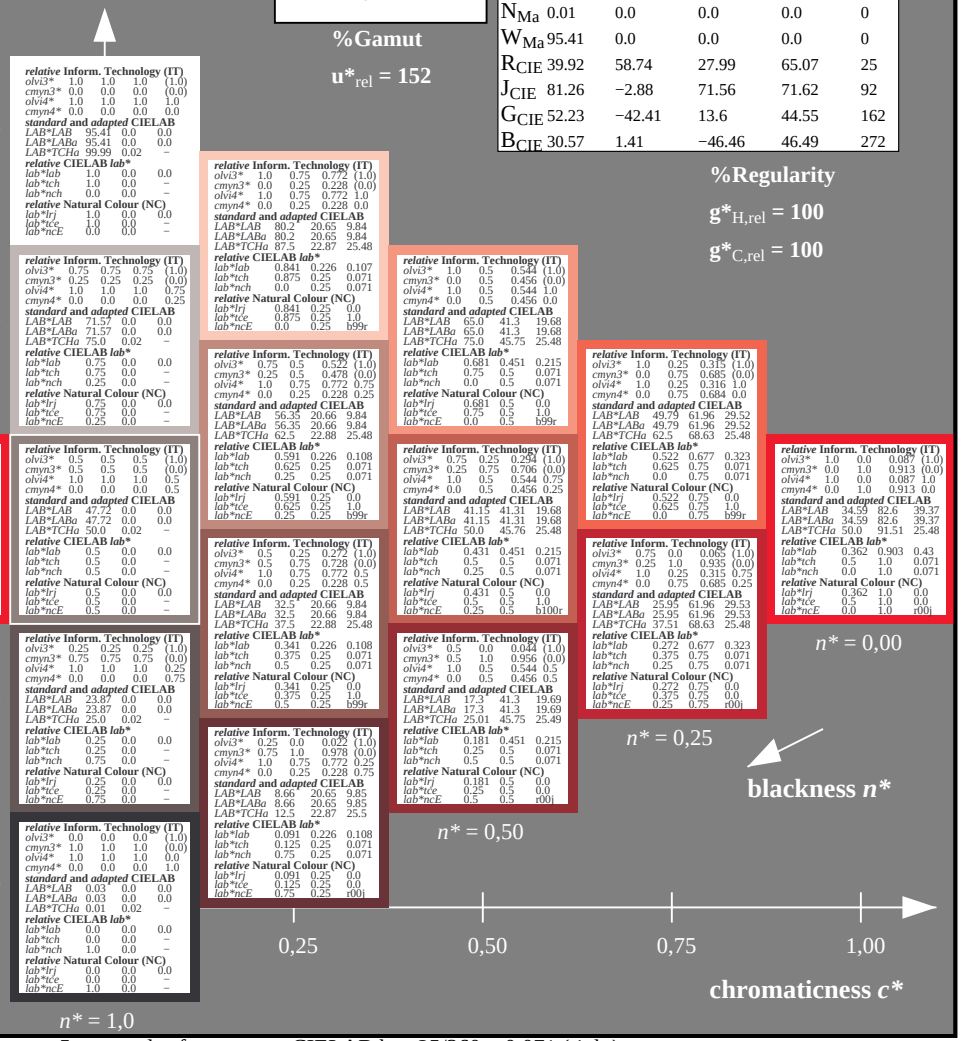
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

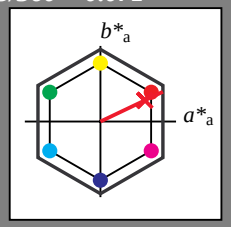


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

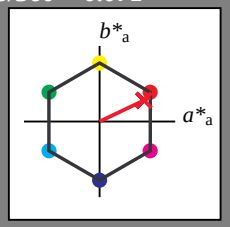
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness n^*

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

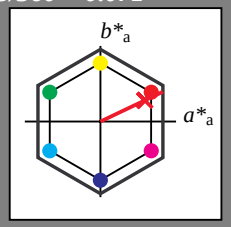
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

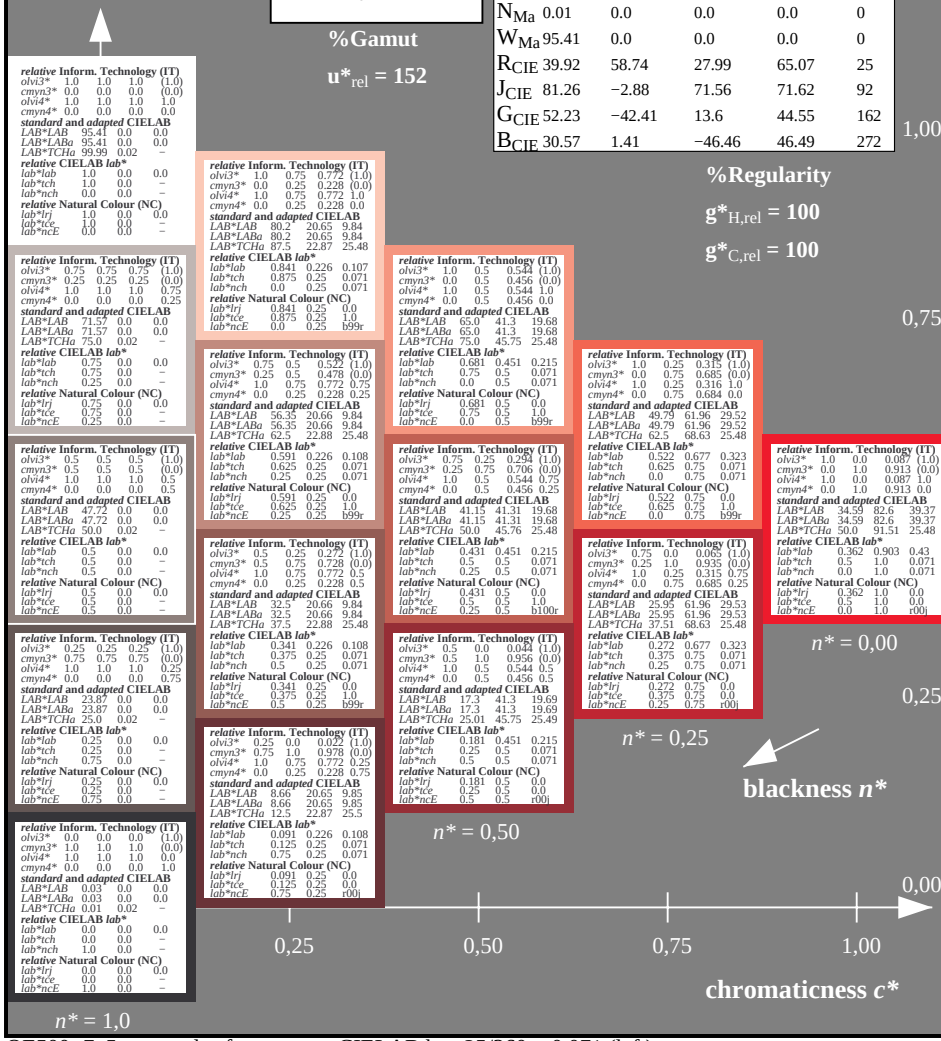
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

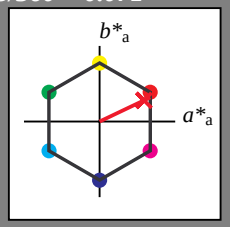
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

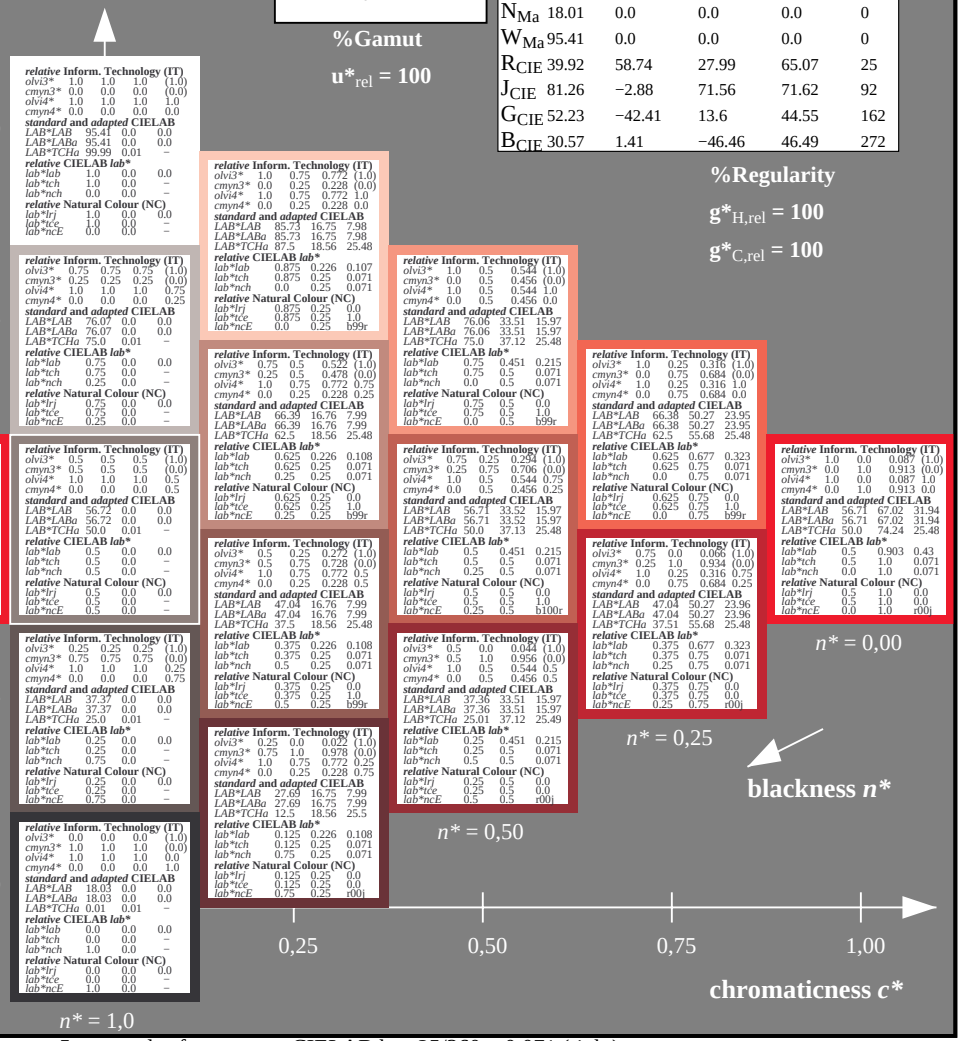
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

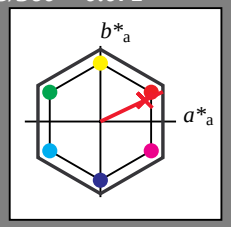


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

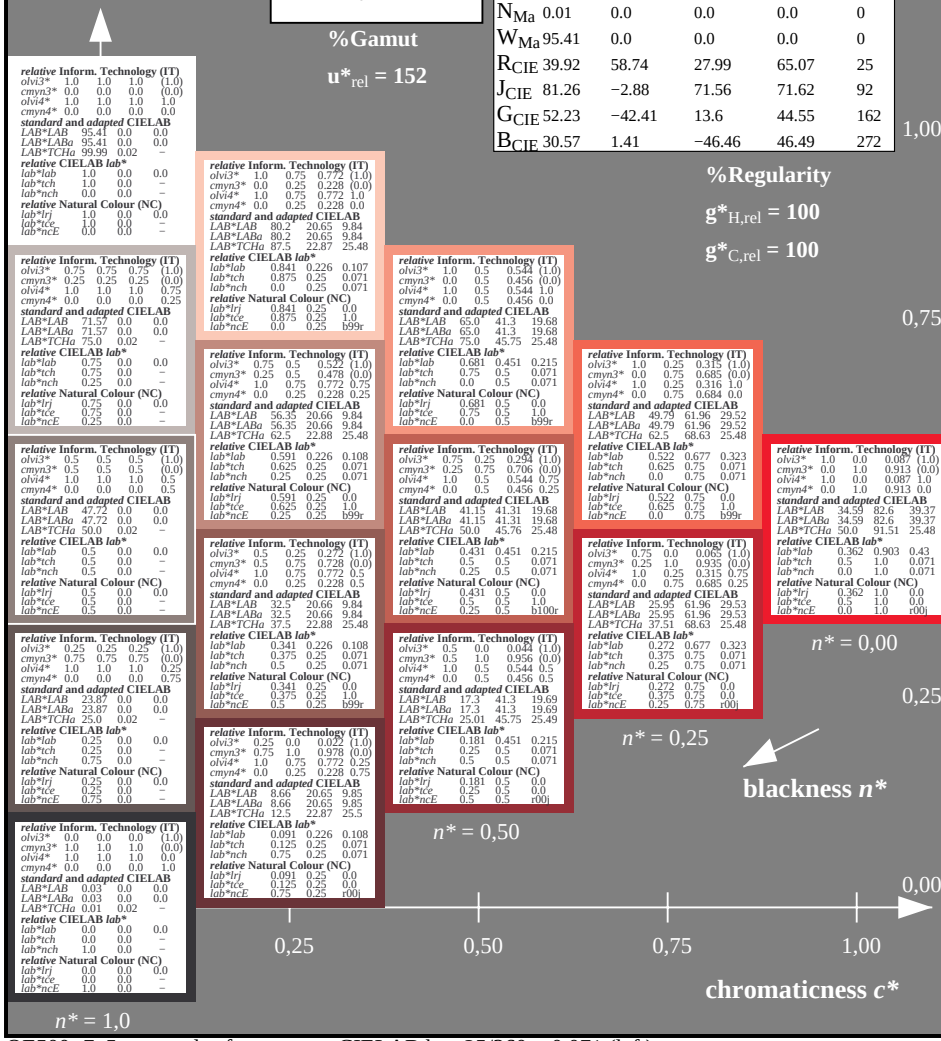


NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut
$u^*_{rel} = 152$

%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$

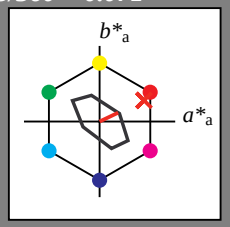


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

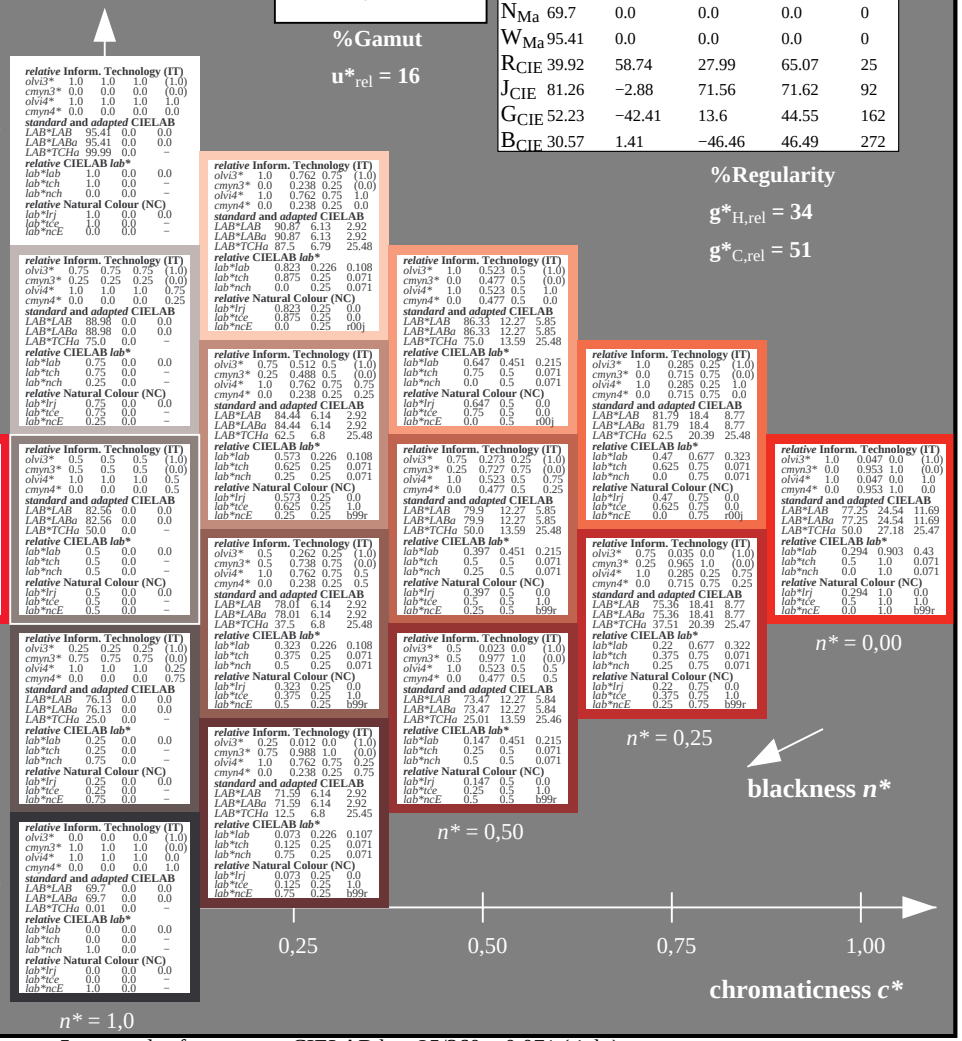


TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut
$u^*_{rel} = 16$

%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



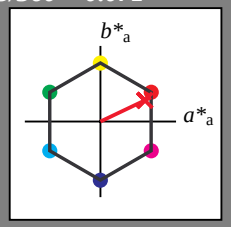
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

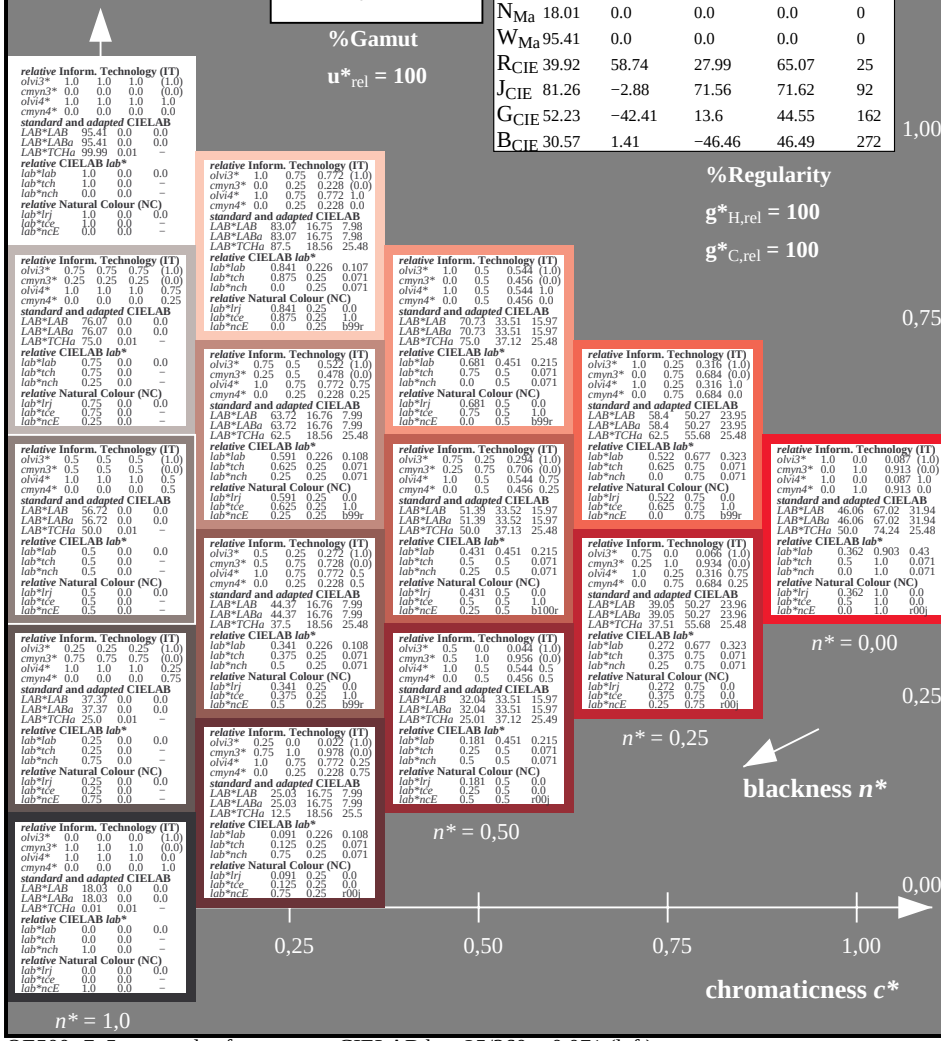
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



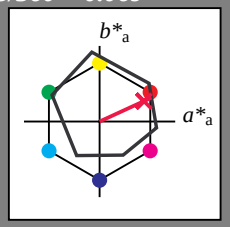
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

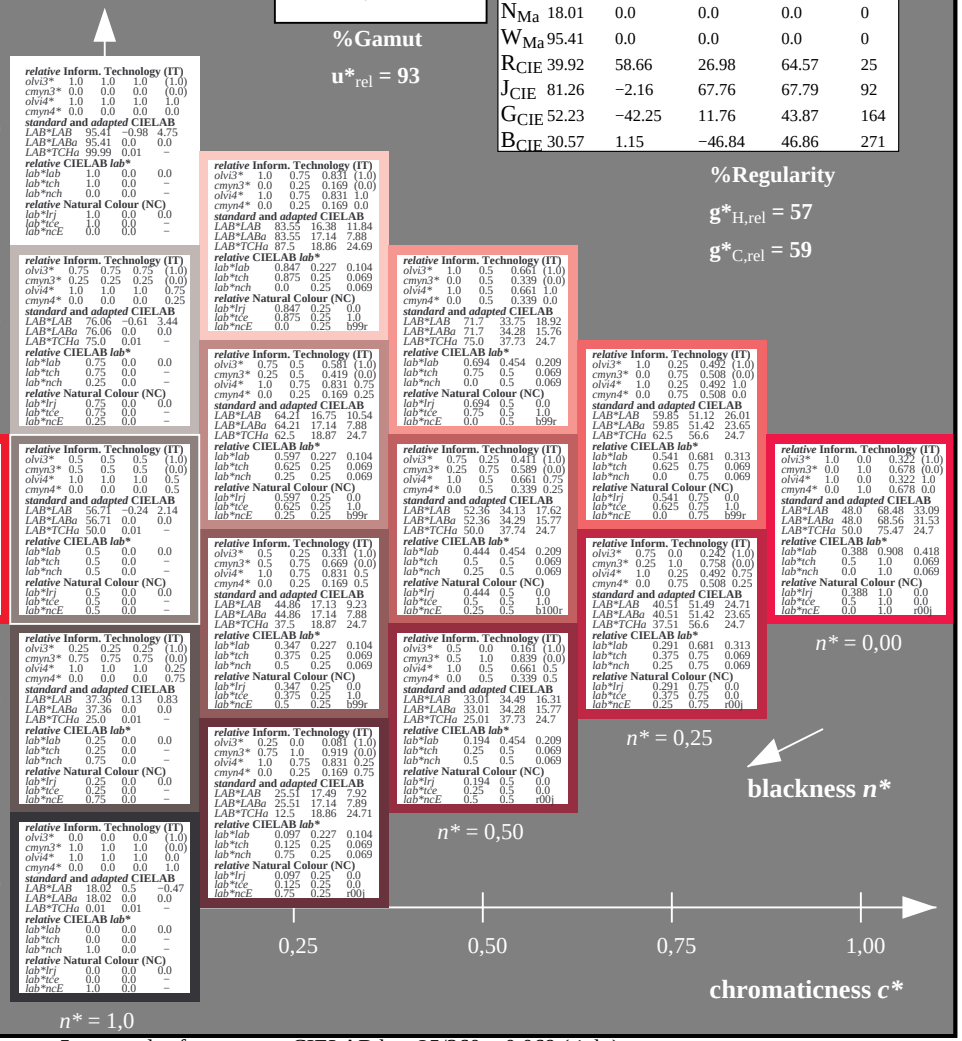
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



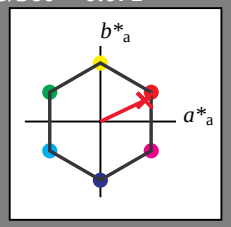
5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

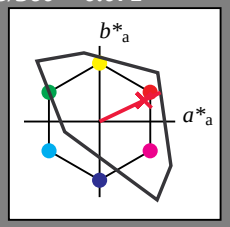
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

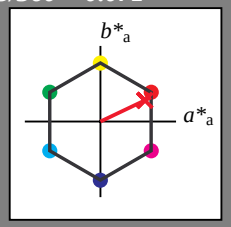
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

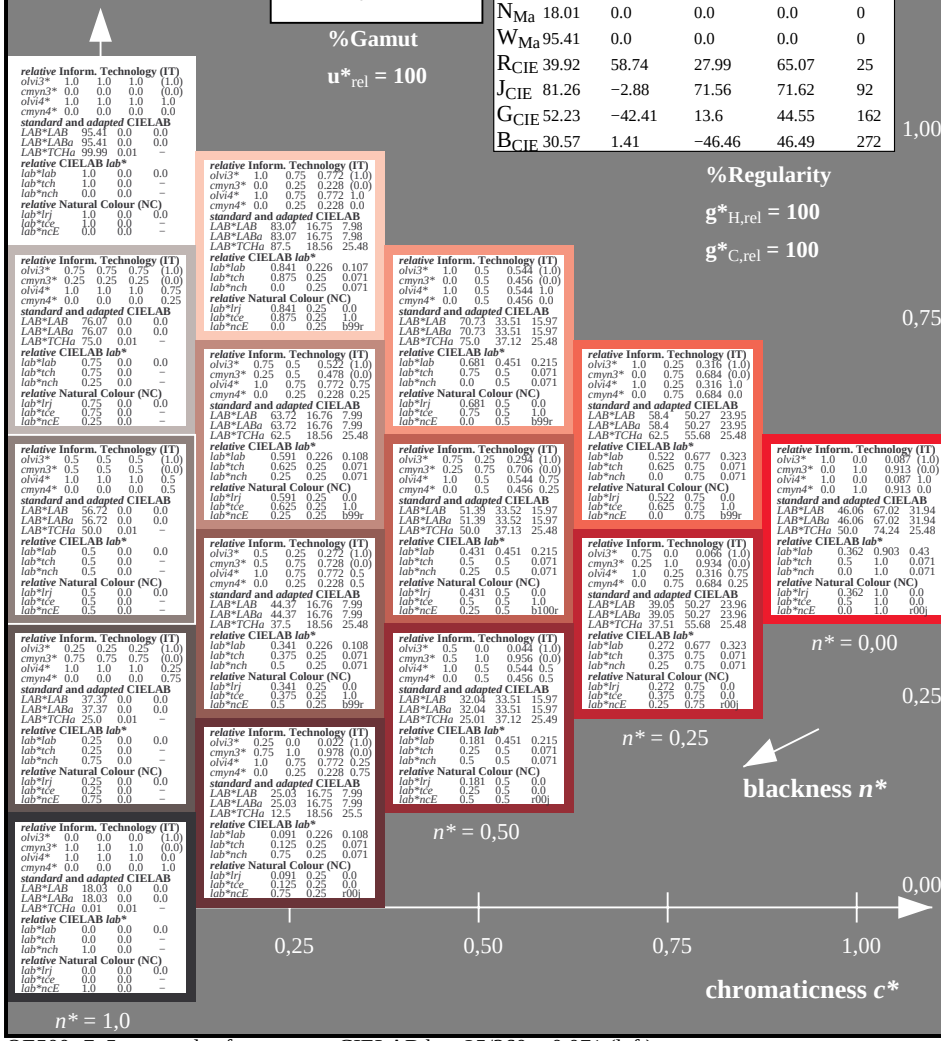
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$

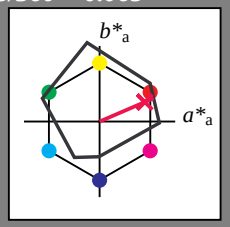
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

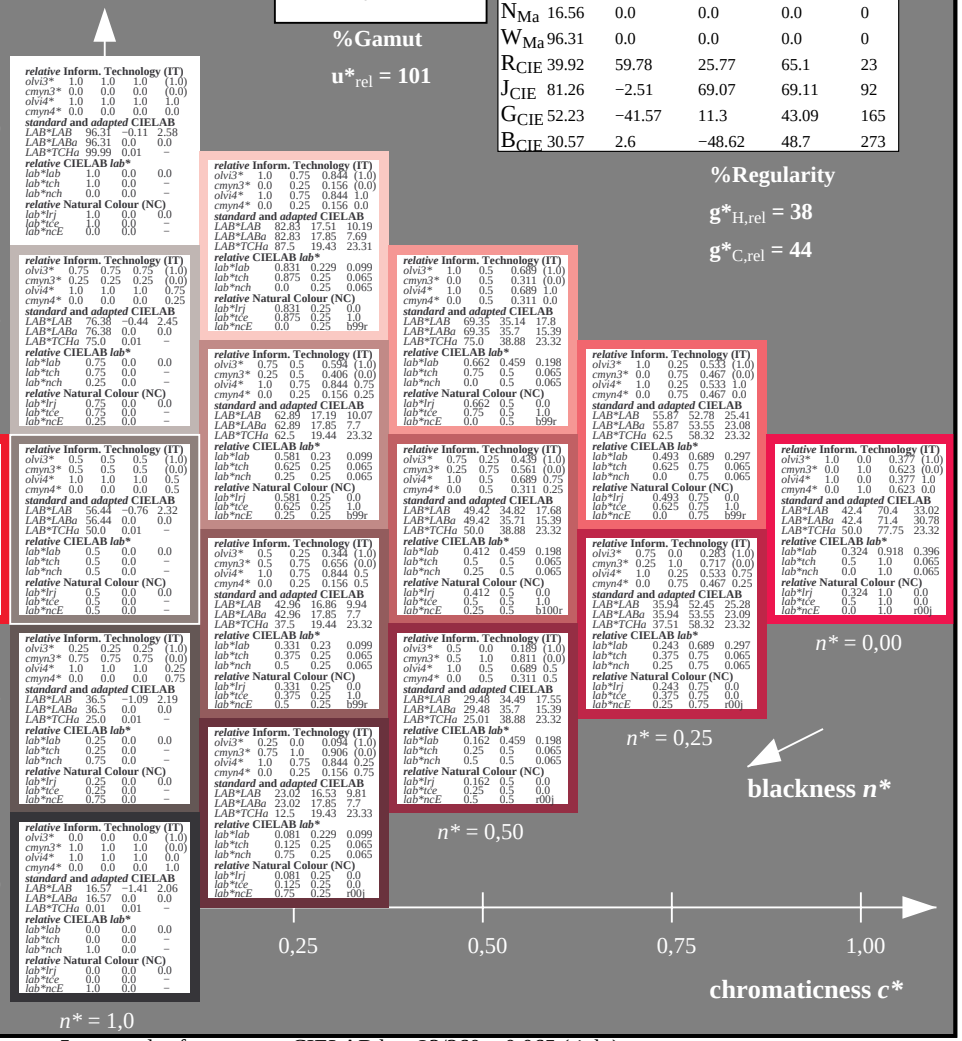
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



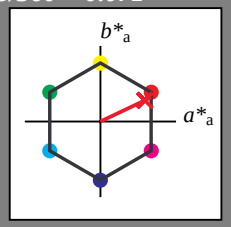
5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

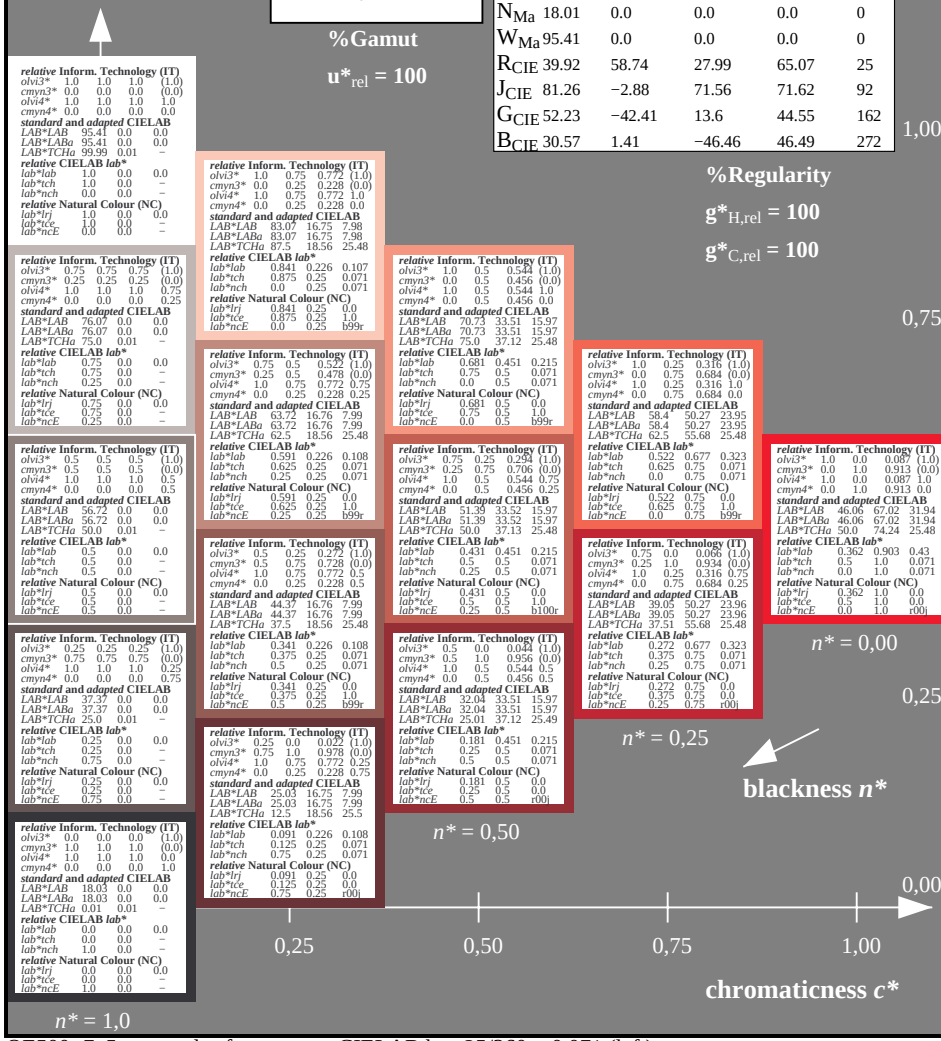
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



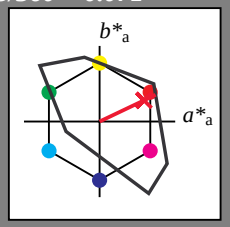
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

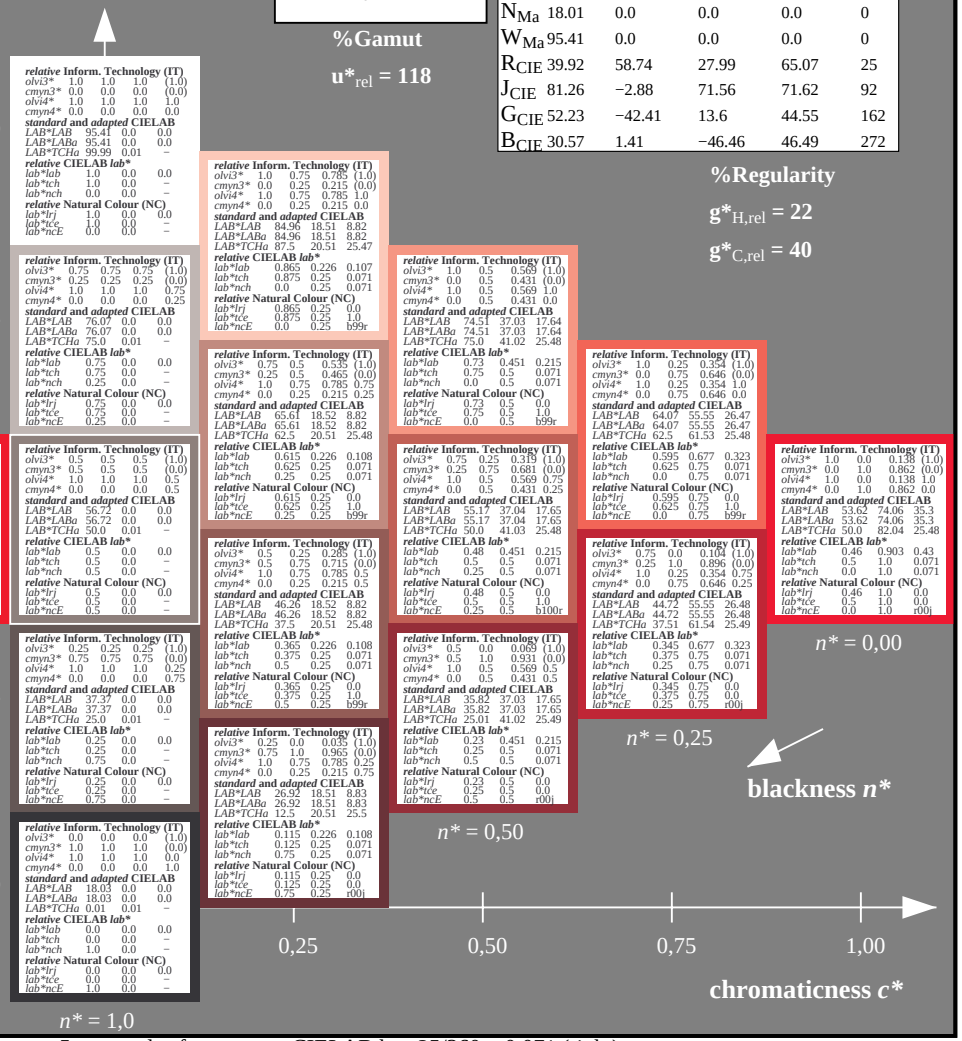
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



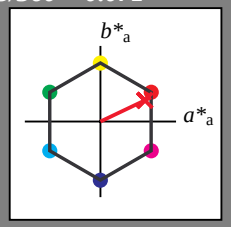
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 100

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

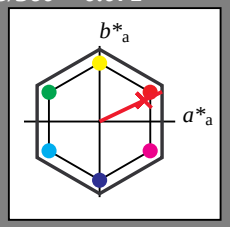
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

u^*_{rel} = 152

NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

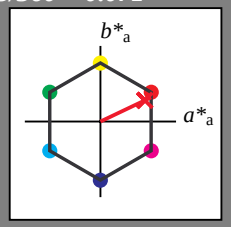
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

1,00

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

0,75

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative CIELAB *lab**
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*nCE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 1.0 0.75 0.772 (1.0)
cmyn3* 0.0 0.25 0.228 (0.0)
olvi4* 1.0 0.75 0.772 1.0
cmyn4* 0.0 0.25 0.228 0.0
standard and adapted CIELAB
LAB*LAB 83.07 16.75 7.98
LAB*LABa 83.07 16.75 7.98
LAB*TCHa 87.5 18.56 25.48
relative CIELAB *lab**
lab*lab 0.841 0.226 0.107
lab*tch 0.875 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.841 0.25 0.0
lab*tce 0.875 0.25 1.0
lab*nCE 0.0 0.25 b99r

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative CIELAB *lab**
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
relative Natural Colour (NC)
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*nCE 0.25 0.0 –

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.544 (1.0)
cmyn3* 0.0 0.5 0.456 (0.0)
olvi4* 1.0 0.5 0.544 1.0
cmyn4* 0.0 0.5 0.456 0.0
standard and adapted CIELAB
LAB*LAB 70.73 33.51 15.97
LAB*LABa 70.73 33.51 15.97
LAB*TCHa 75.0 37.12 25.48
relative CIELAB *lab**
lab*lab 0.681 0.451 0.215
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.681 0.5 0.0
lab*tce 0.75 0.5 1.0
lab*nCE 0.0 0.5 b99r

relative Inform. Technology (IT)
olvi3* 1.0 0.25 0.316 (1.0)
cmyn3* 0.0 0.75 0.684 (0.0)
olvi4* 1.0 0.25 0.316 1.0
cmyn4* 0.0 0.75 0.684 0.0
standard and adapted CIELAB
LAB*LAB 58.4 50.27 23.95
LAB*LABa 58.4 50.27 23.95
LAB*TCHa 62.5 55.68 25.48
relative CIELAB *lab**
lab*lab 0.522 0.677 0.323
lab*tch 0.625 0.75 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*lrj 0.522 0.75 0.0
lab*tce 0.625 0.75 1.0
lab*nCE 0.0 0.75 b99r

relative Inform. Technology (IT)
olvi3* 1.0 0.0 0.087 (1.0)
cmyn3* 0.0 1.0 0.913 (0.0)
olvi4* 1.0 0.0 0.087 1.0
cmyn4* 0.0 1.0 0.913 0.0
standard and adapted CIELAB
LAB*LAB 46.06 67.02 31.94
LAB*LABa 46.06 67.02 31.94
LAB*TCHa 50.0 74.24 25.48
relative CIELAB *lab**
lab*lab 0.362 0.903 0.43
lab*tch 0.5 1.0 0.071
lab*nch 0.0 1.0 0.071
relative Natural Colour (NC)
lab*lrj 0.362 1.0 0.0
lab*tce 0.5 1.0 0.0
lab*nCE 0.0 1.0 r00j

*n** = 0,00

0,25

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*TCHa 50.0 0.01 –
relative CIELAB *lab**
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 –
lab*nch 0.5 0.0 –
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*tce 0.5 0.0 –
lab*nCE 0.5 0.0 –

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative CIELAB *lab**
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
relative Natural Colour (NC)
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*nCE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.272 (1.0)
cmyn3* 0.5 0.75 0.728 (0.0)
olvi4* 1.0 0.75 0.772 0.5
cmyn4* 0.0 0.25 0.228 0.5
standard and adapted CIELAB
LAB*LAB 44.37 16.76 7.99
LAB*LABa 44.37 16.76 7.99
LAB*TCHa 37.5 18.56 25.48
relative CIELAB *lab**
lab*lab 0.341 0.226 0.108
lab*tch 0.375 0.25 0.071
lab*nch 0.5 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.341 0.25 0.0
lab*tce 0.375 0.25 1.0
lab*nCE 0.5 0.25 b99r

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.294 (1.0)
cmyn3* 0.25 0.75 0.706 (0.0)
olvi4* 1.0 0.5 0.544 0.75
cmyn4* 0.0 0.5 0.456 0.25
standard and adapted CIELAB
LAB*LAB 51.39 33.52 15.97
LAB*LABa 51.39 33.52 15.97
LAB*TCHa 50.0 37.13 25.48
relative CIELAB *lab**
lab*lab 0.431 0.451 0.215
lab*tch 0.5 0.5 0.071
lab*nch 0.25 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.431 0.5 0.0
lab*tce 0.5 0.5 1.0
lab*nCE 0.25 0.5 b100r

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.044 (1.0)
cmyn3* 0.5 1.0 0.956 (0.0)
olvi4* 1.0 0.5 0.544 0.5
cmyn4* 0.0 0.5 0.456 0.5
standard and adapted CIELAB
LAB*LAB 32.04 33.51 15.97
LAB*LABa 32.04 33.51 15.97
LAB*TCHa 25.01 37.12 25.49
relative CIELAB *lab**
lab*lab 0.181 0.451 0.215
lab*tch 0.25 0.5 0.071
lab*nch 0.5 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.181 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nCE 0.5 0.5 r00j

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.022 (1.0)
cmyn3* 0.75 1.0 0.978 (0.0)
olvi4* 1.0 0.75 0.772 0.25
cmyn4* 0.0 0.25 0.228 0.75
standard and adapted CIELAB
LAB*LAB 25.03 16.75 7.99
LAB*LABa 25.03 16.75 7.99
LAB*TCHa 12.5 18.56 25.5
relative CIELAB *lab**
lab*lab 0.091 0.226 0.108
lab*tch 0.125 0.25 0.071
lab*nch 0.75 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.091 0.25 0.0
lab*tce 0.125 0.25 0.0
lab*nCE 0.75 0.25 r00j

*n** = 0,50

0,00

0,25 0,50 0,75 1,00

chromaticness c^*

*n** = 1,0

blackness n^*

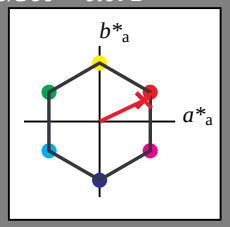
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative CIELAB *lab**
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*nCE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 1.0 0.75 0.772 (1.0)
cmyn3* 0.0 0.25 0.228 (0.0)
olvi4* 1.0 0.75 0.772 1.0
cmyn4* 0.0 0.25 0.228 0.0
standard and adapted CIELAB
LAB*LAB 83.07 16.75 7.98
LAB*LABa 83.07 16.75 7.98
LAB*TCHa 87.5 18.56 25.48
relative CIELAB *lab**
lab*lab 0.841 0.226 0.107
lab*tch 0.875 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.841 0.25 0.0
lab*tce 0.875 0.25 1.0
lab*nCE 0.0 0.25 b99r

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative CIELAB *lab**
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
relative Natural Colour (NC)
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*nCE 0.25 0.0 –

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.544 (1.0)
cmyn3* 0.0 0.5 0.456 (0.0)
olvi4* 1.0 0.5 0.544 1.0
cmyn4* 0.0 0.5 0.456 0.0
standard and adapted CIELAB
LAB*LAB 70.73 33.51 15.97
LAB*LABa 70.73 33.51 15.97
LAB*TCHa 75.0 37.12 25.48
relative CIELAB *lab**
lab*lab 0.681 0.451 0.215
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.681 0.5 0.0
lab*tce 0.75 0.5 1.0
lab*nCE 0.0 0.5 b99r

relative Inform. Technology (IT)
olvi3* 1.0 0.25 0.316 (1.0)
cmyn3* 0.0 0.75 0.684 (0.0)
olvi4* 1.0 0.25 0.316 1.0
cmyn4* 0.0 0.75 0.684 0.0
standard and adapted CIELAB
LAB*LAB 58.4 50.27 23.95
LAB*LABa 58.4 50.27 23.95
LAB*TCHa 62.5 55.68 25.48
relative CIELAB *lab**
lab*lab 0.522 0.677 0.323
lab*tch 0.625 0.75 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*lrj 0.522 0.75 0.0
lab*tce 0.625 0.75 1.0
lab*nCE 0.0 0.75 b99r

relative Inform. Technology (IT)
olvi3* 1.0 0.0 0.087 (1.0)
cmyn3* 0.0 1.0 0.913 (0.0)
olvi4* 1.0 0.0 0.087 1.0
cmyn4* 0.0 1.0 0.913 0.0
standard and adapted CIELAB
LAB*LAB 46.06 67.02 31.94
LAB*LABa 46.06 67.02 31.94
LAB*TCHa 50.0 74.24 25.48
relative CIELAB *lab**
lab*lab 0.362 0.903 0.43
lab*tch 0.5 1.0 0.071
lab*nch 0.0 1.0 0.071
relative Natural Colour (NC)
lab*lrj 0.362 1.0 0.0
lab*tce 0.5 1.0 0.0
lab*nCE 0.0 1.0 r00j

*n** = 0,00

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*TCHa 50.0 0.01 –
relative CIELAB *lab**
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 –
lab*nch 0.5 0.0 –
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*tce 0.5 0.0 –
lab*nCE 0.5 0.0 –

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative CIELAB *lab**
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
relative Natural Colour (NC)
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*nCE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.272 (1.0)
cmyn3* 0.5 0.75 0.728 (0.0)
olvi4* 1.0 0.75 0.772 0.5
cmyn4* 0.0 0.25 0.228 0.5
standard and adapted CIELAB
LAB*LAB 44.37 16.76 7.99
LAB*LABa 44.37 16.76 7.99
LAB*TCHa 37.5 18.56 25.48
relative CIELAB *lab**
lab*lab 0.341 0.226 0.108
lab*tch 0.375 0.25 0.071
lab*nch 0.5 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.341 0.25 0.0
lab*tce 0.375 0.25 1.0
lab*nCE 0.5 0.25 b99r

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.294 (1.0)
cmyn3* 0.25 0.75 0.706 (0.0)
olvi4* 1.0 0.5 0.544 0.75
cmyn4* 0.0 0.5 0.456 0.25
standard and adapted CIELAB
LAB*LAB 51.39 33.52 15.97
LAB*LABa 51.39 33.52 15.97
LAB*TCHa 50.0 37.13 25.48
relative CIELAB *lab**
lab*lab 0.431 0.451 0.215
lab*tch 0.5 0.5 0.071
lab*nch 0.25 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.431 0.5 0.0
lab*tce 0.5 0.5 1.0
lab*nCE 0.25 0.5 b100r

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.044 (1.0)
cmyn3* 0.5 1.0 0.956 (0.0)
olvi4* 1.0 0.5 0.544 0.5
cmyn4* 0.0 0.5 0.456 0.5
standard and adapted CIELAB
LAB*LAB 32.04 33.51 15.97
LAB*LABa 32.04 33.51 15.97
LAB*TCHa 25.01 37.12 25.49
relative CIELAB *lab**
lab*lab 0.181 0.451 0.215
lab*tch 0.25 0.5 0.071
lab*nch 0.5 0.5 0.071
relative Natural Colour (NC)
lab*lrj 0.181 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nCE 0.5 0.5 r00j

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.022 (1.0)
cmyn3* 0.75 1.0 0.978 (0.0)
olvi4* 1.0 0.75 0.772 0.25
cmyn4* 0.0 0.25 0.228 0.75
standard and adapted CIELAB
LAB*LAB 25.03 16.75 7.99
LAB*LABa 25.03 16.75 7.99
LAB*TCHa 12.5 18.56 25.5
relative CIELAB *lab**
lab*lab 0.091 0.226 0.108
lab*tch 0.125 0.25 0.071
lab*nch 0.75 0.25 0.071
relative Natural Colour (NC)
lab*lrj 0.091 0.25 0.0
lab*tce 0.125 0.25 0.0
lab*nCE 0.75 0.25 r00j

*n** = 0,25

*n** = 0,50

0,25 0,50 0,75 1,00

chromaticness c^*

*n** = 1,0

blackness n^*

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

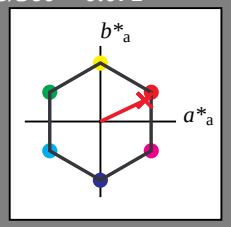
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

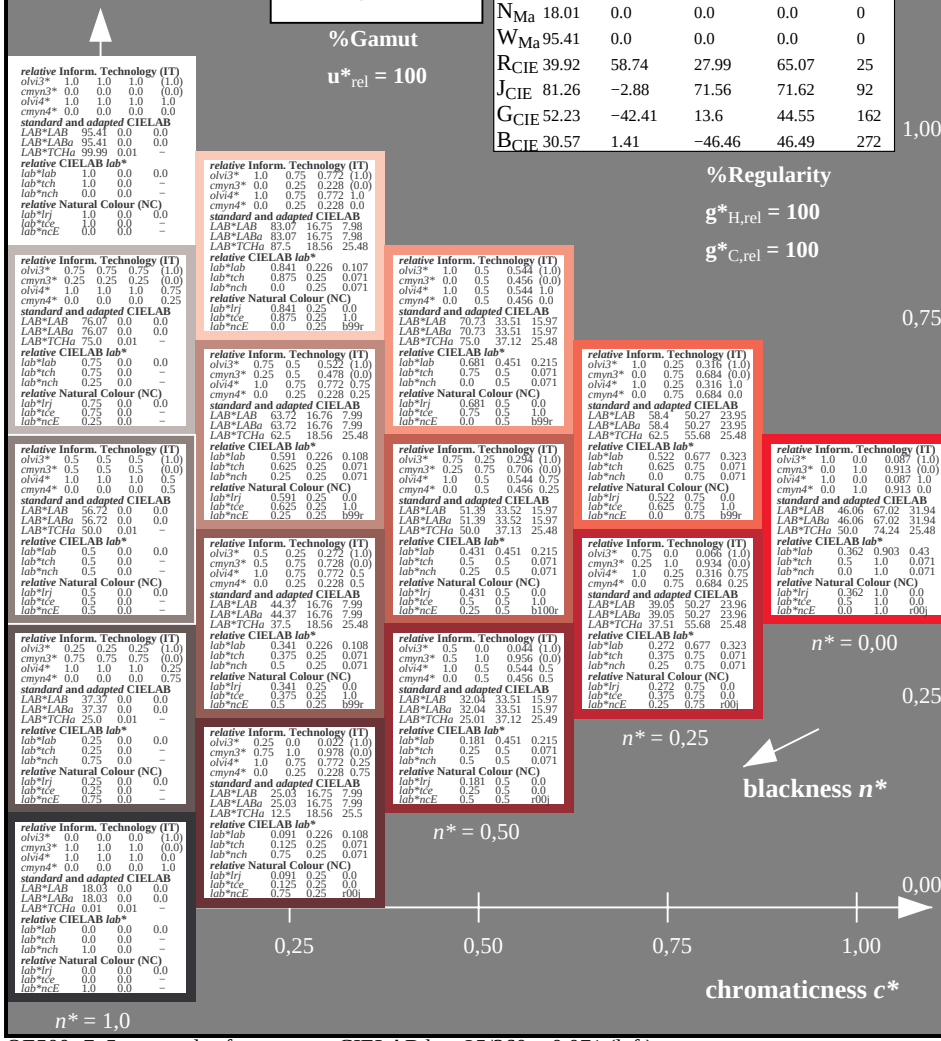
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

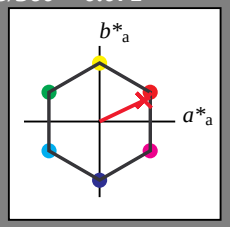
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

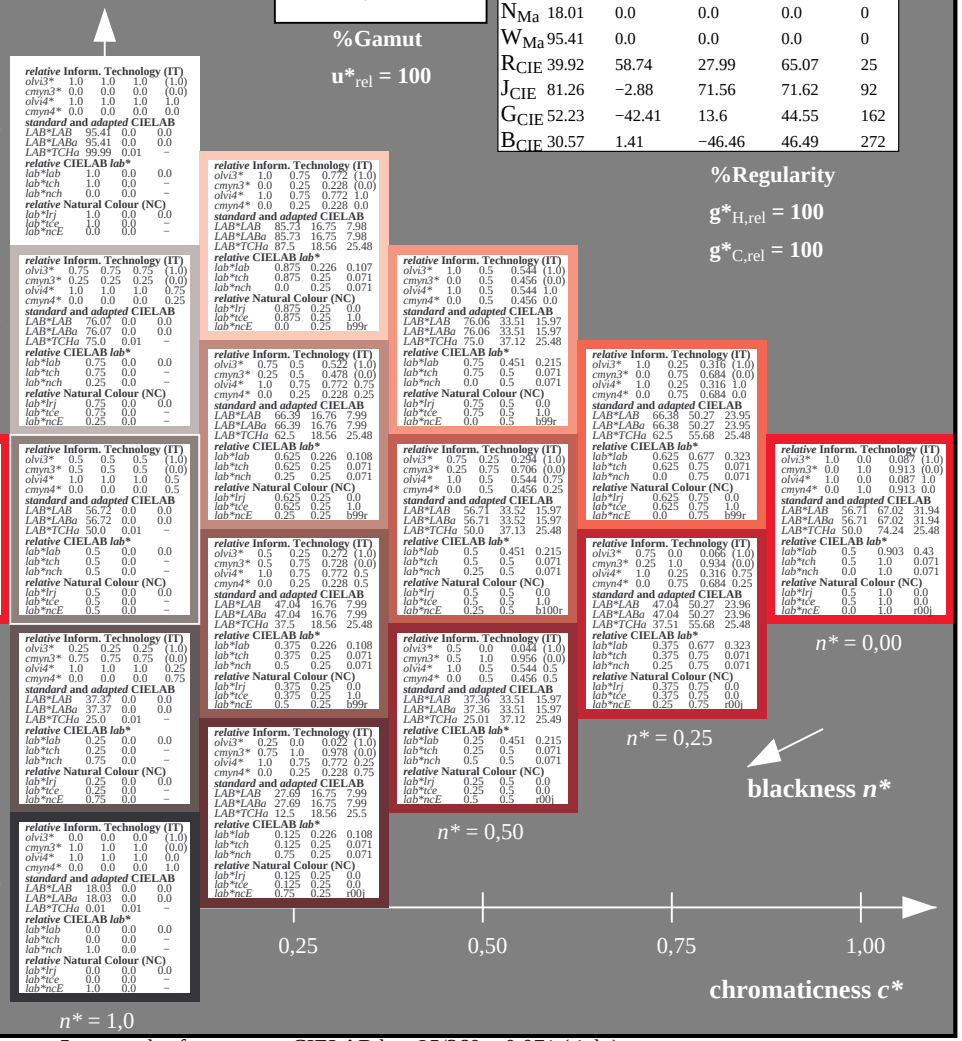
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



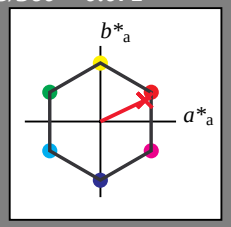
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

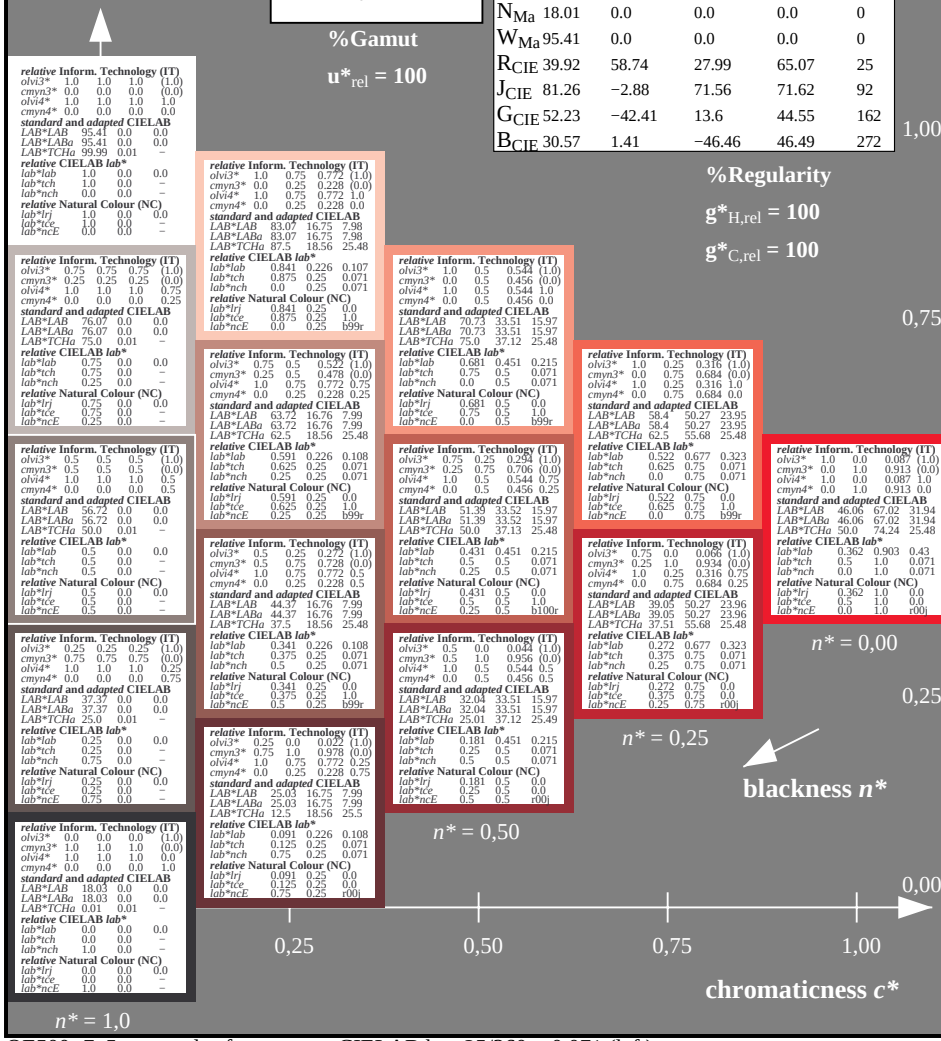
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



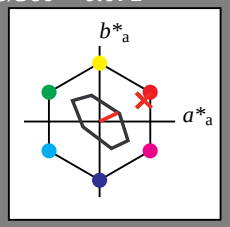
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

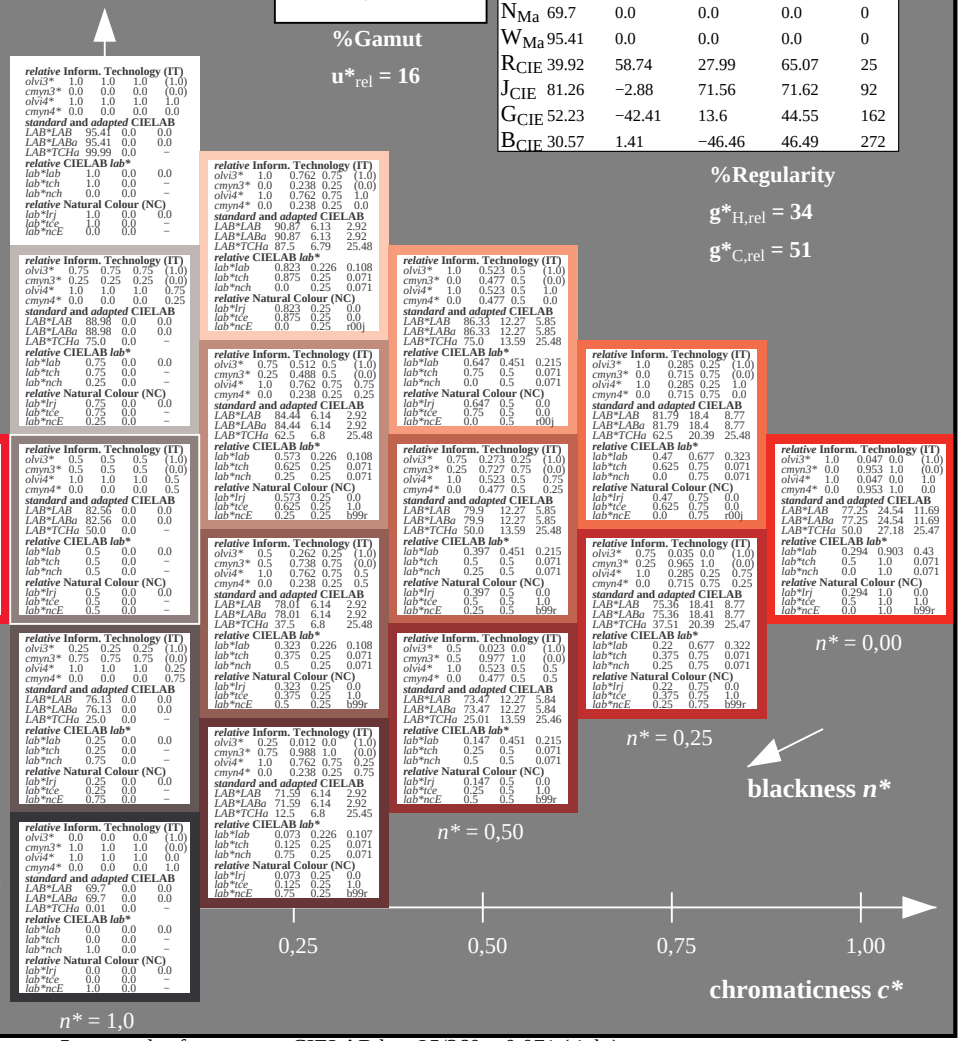
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

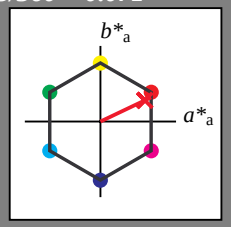
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

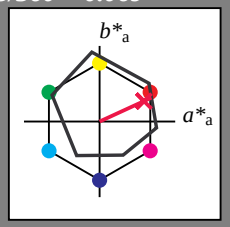
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

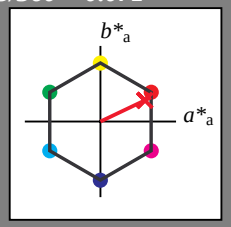
5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

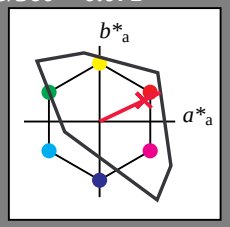
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 52 89 25
olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

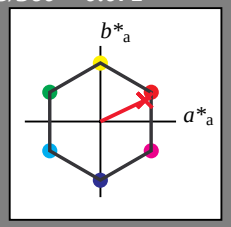
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

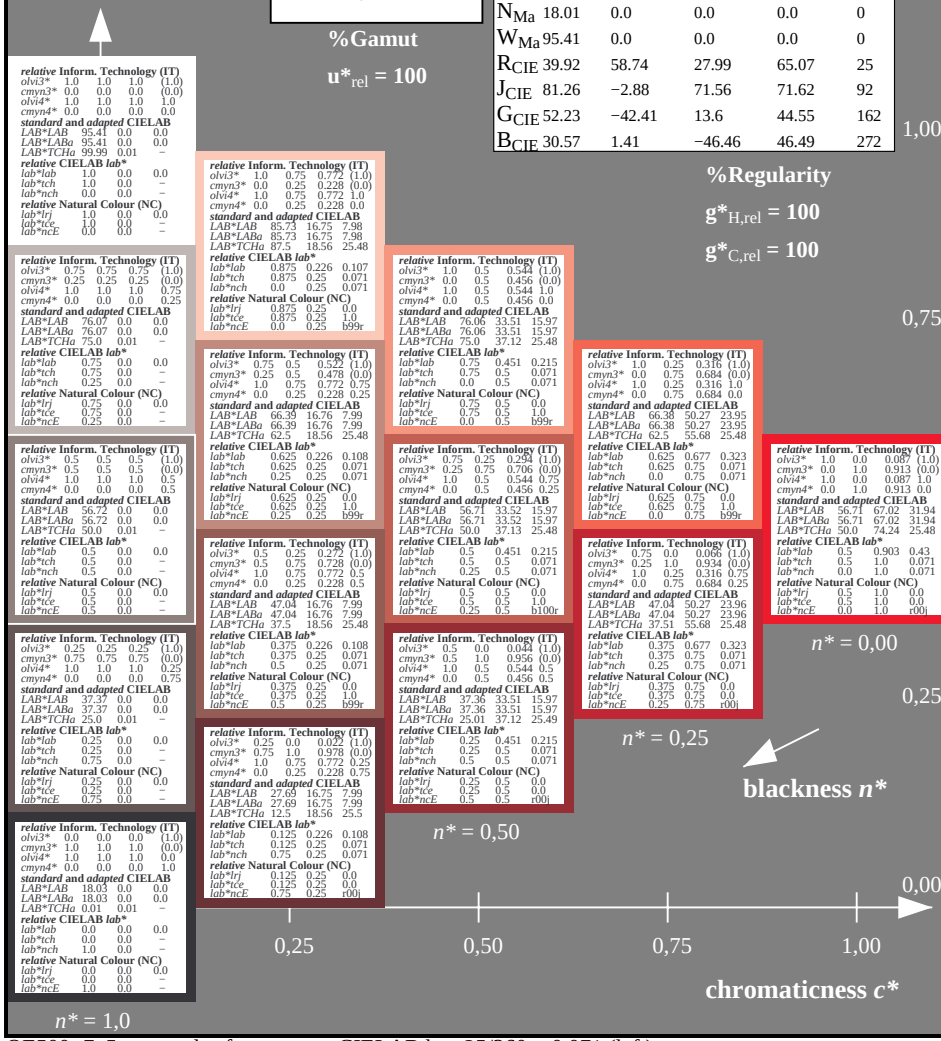
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



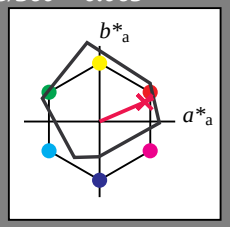
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 42 78 23
olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

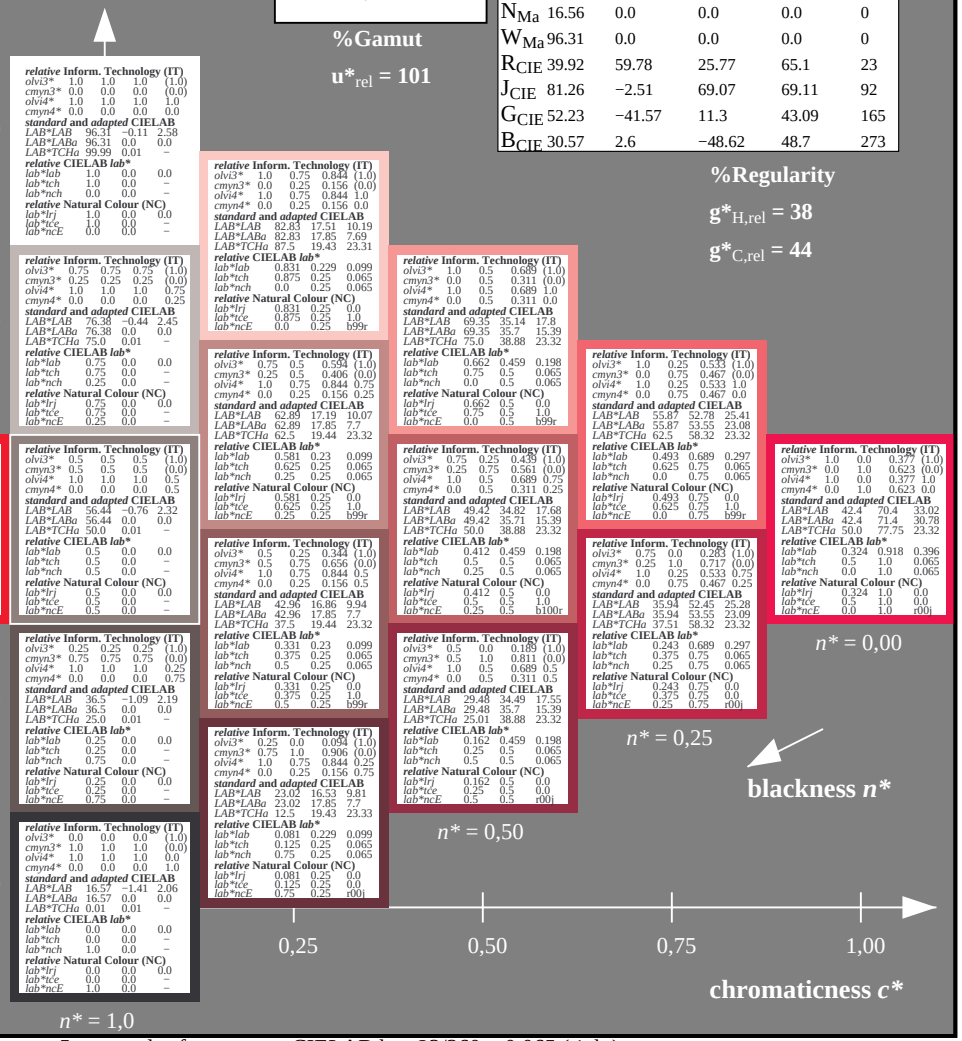
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



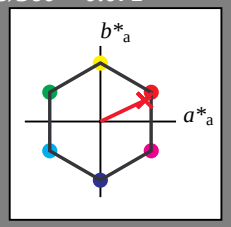
5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

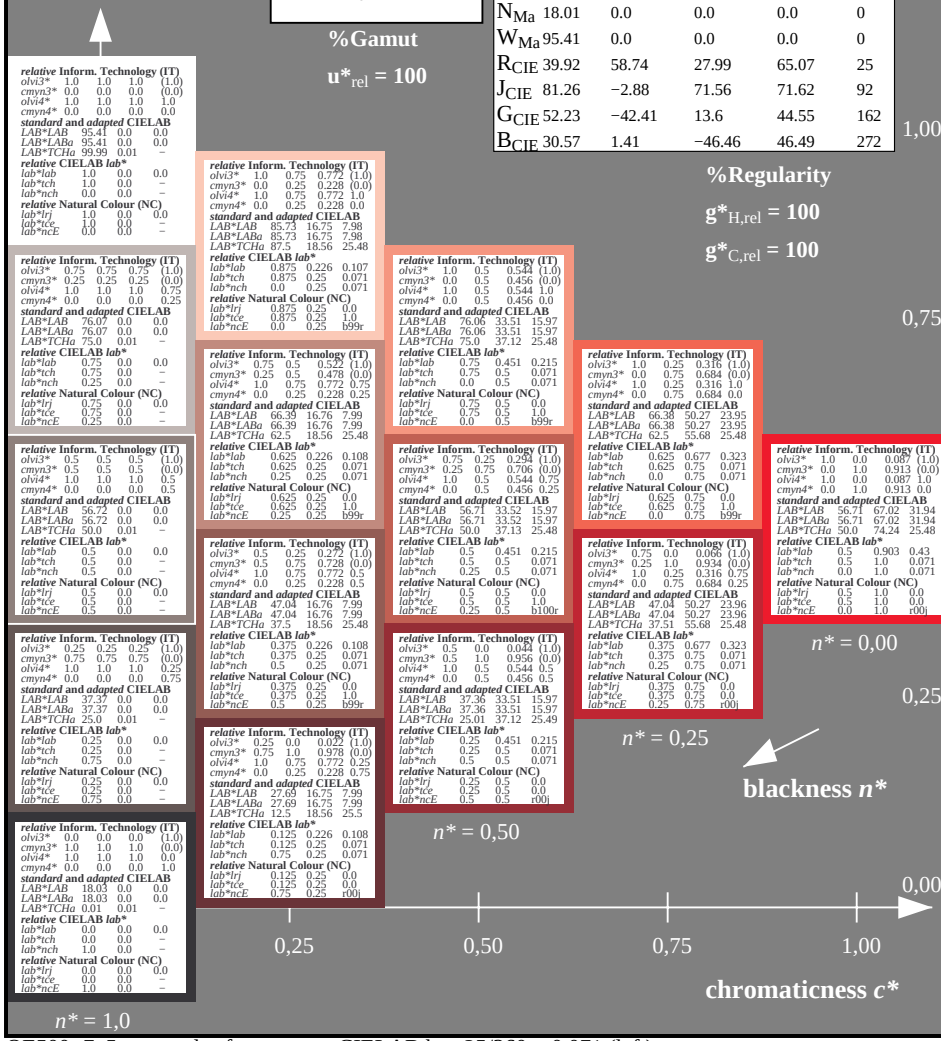
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



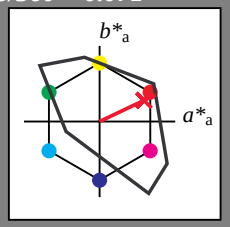
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

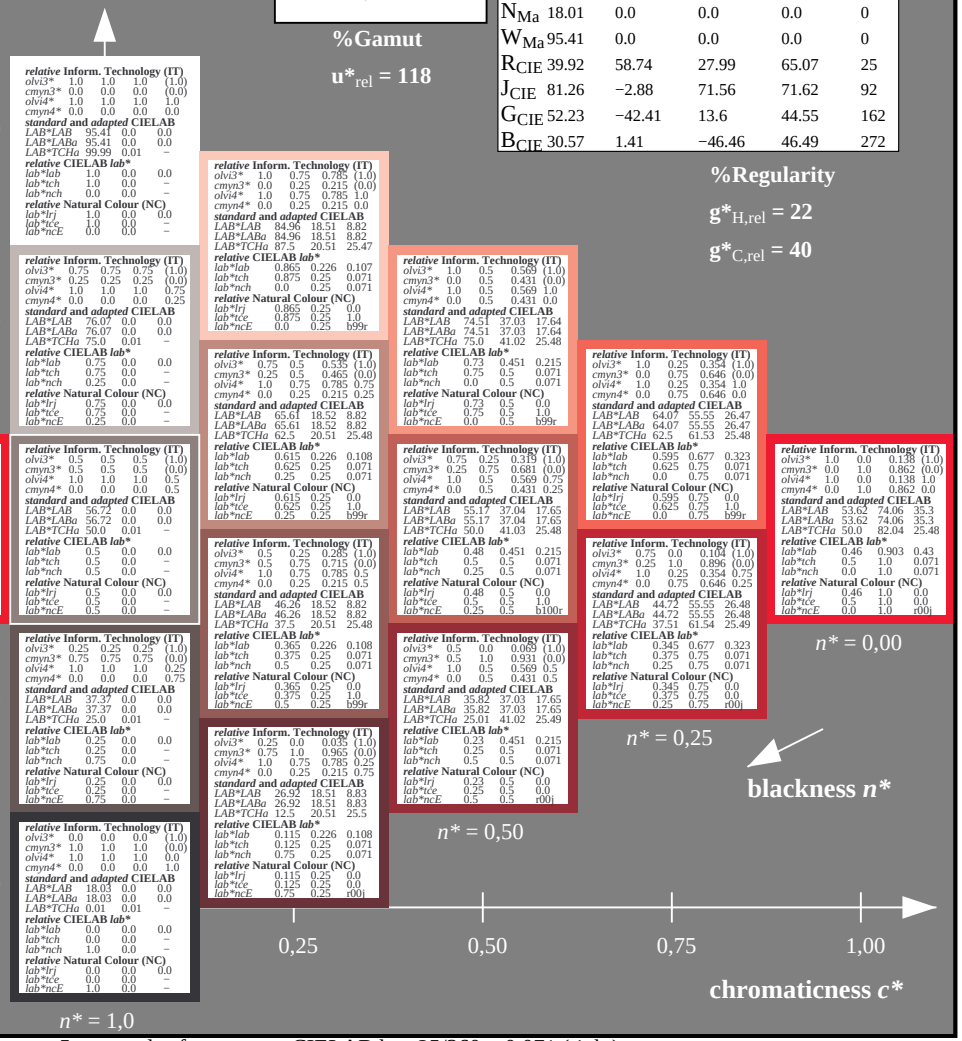
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



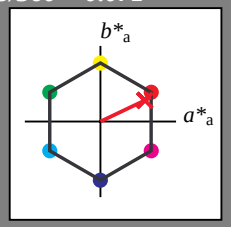
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

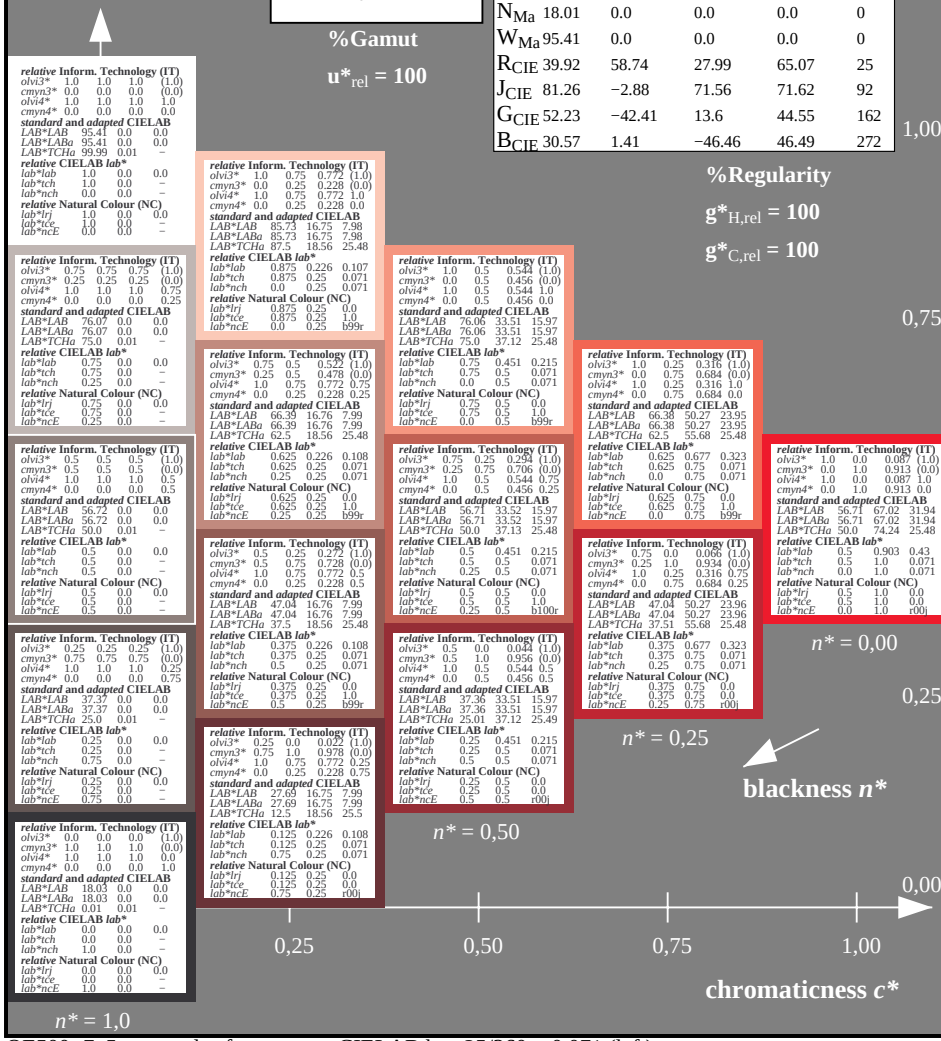
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



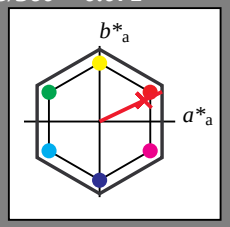
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

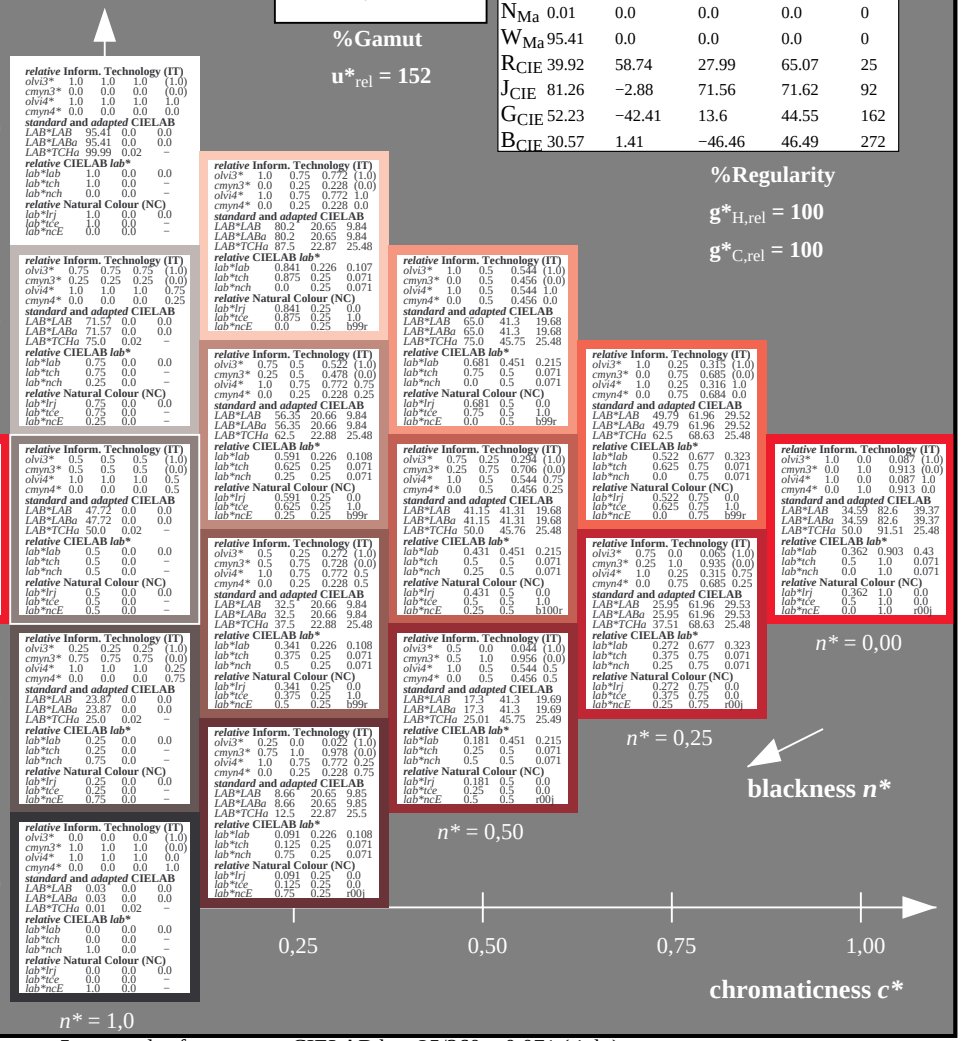
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



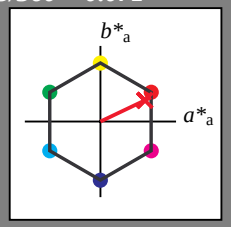
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

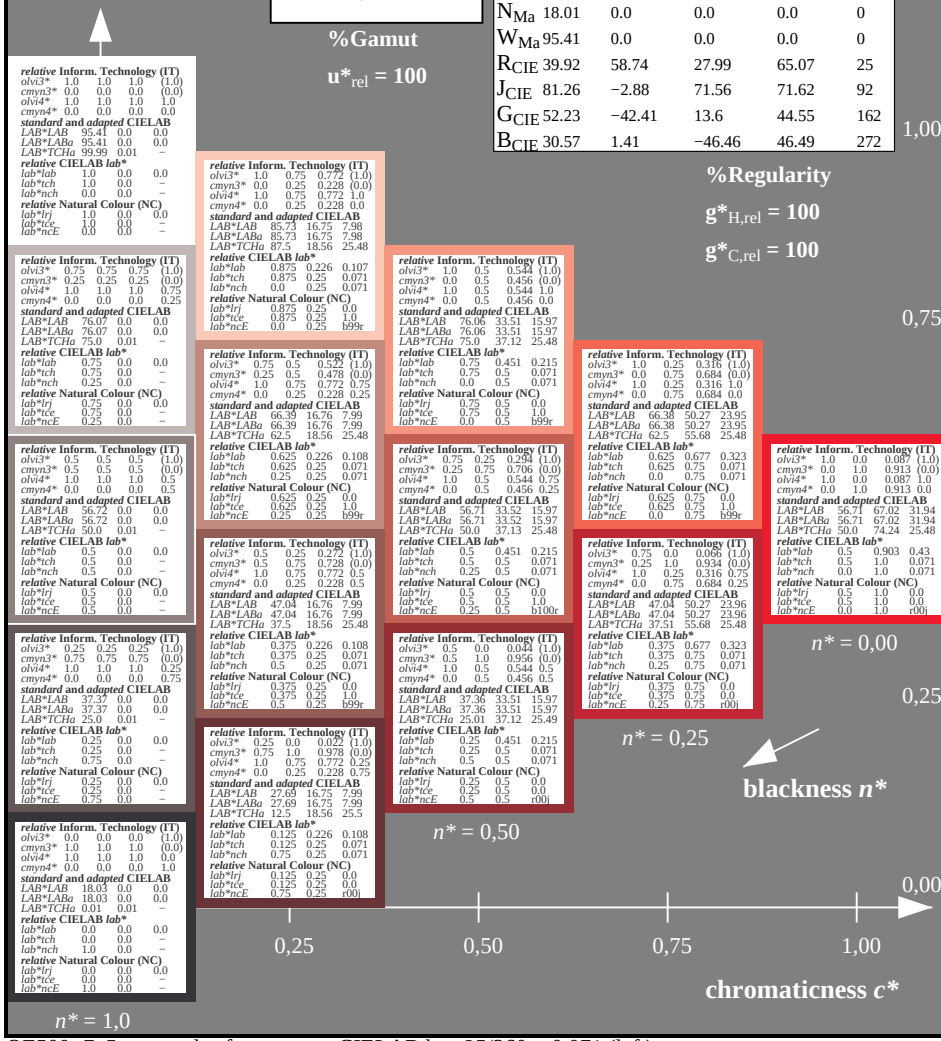
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



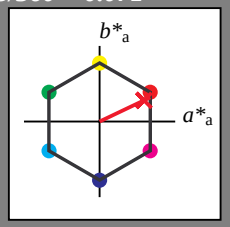
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

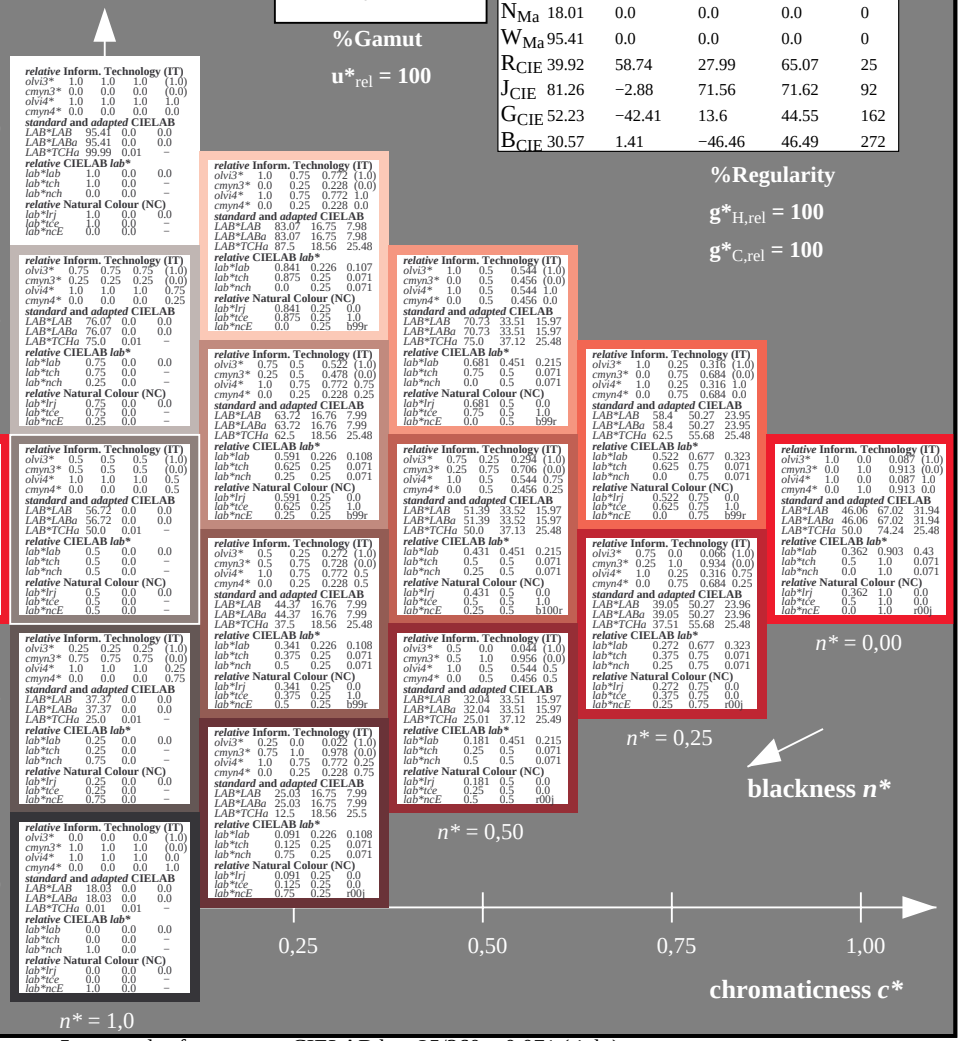
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

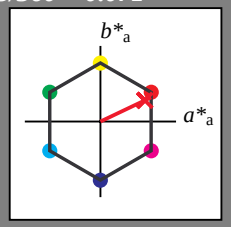


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

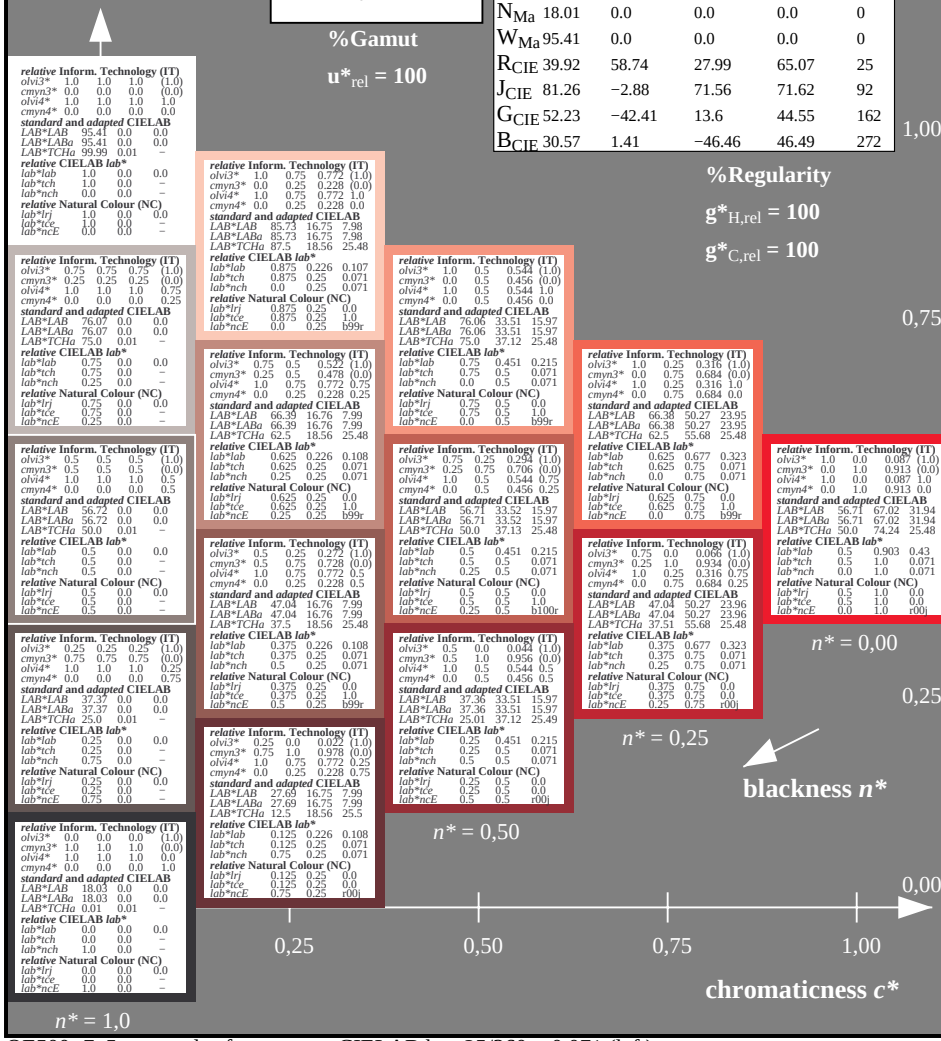
SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

1,00

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

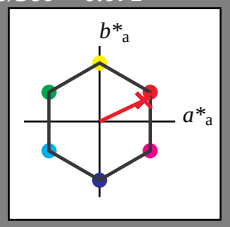


OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

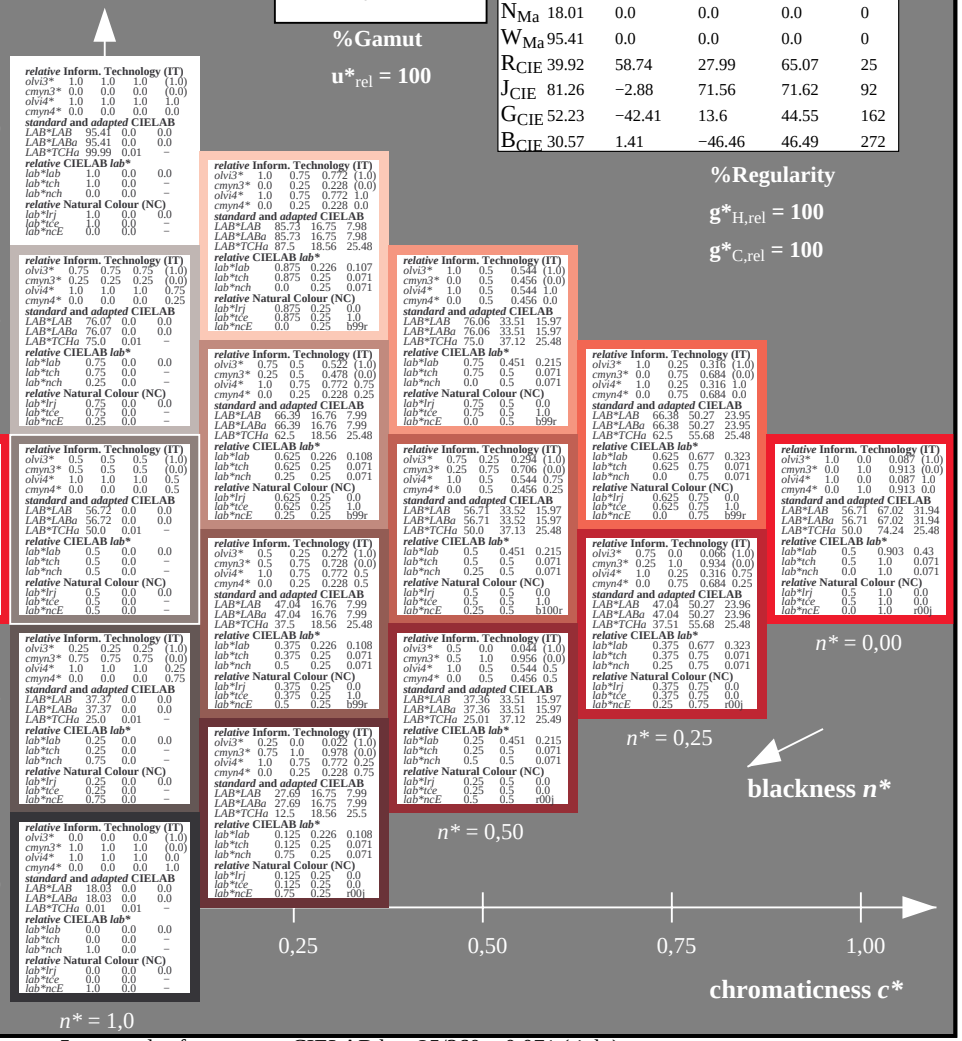
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



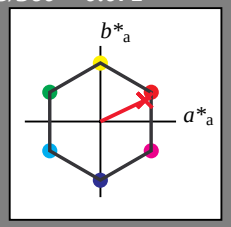
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

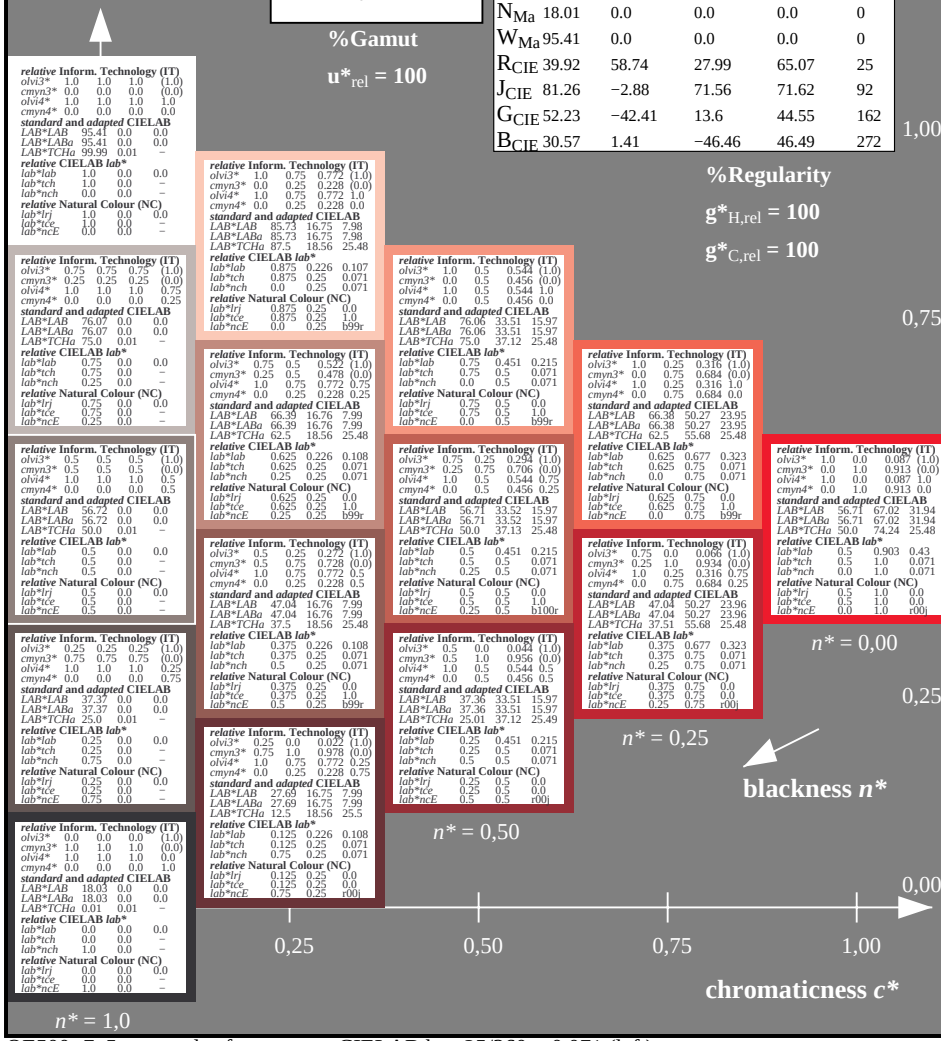
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



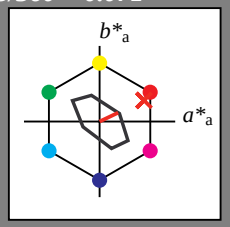
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

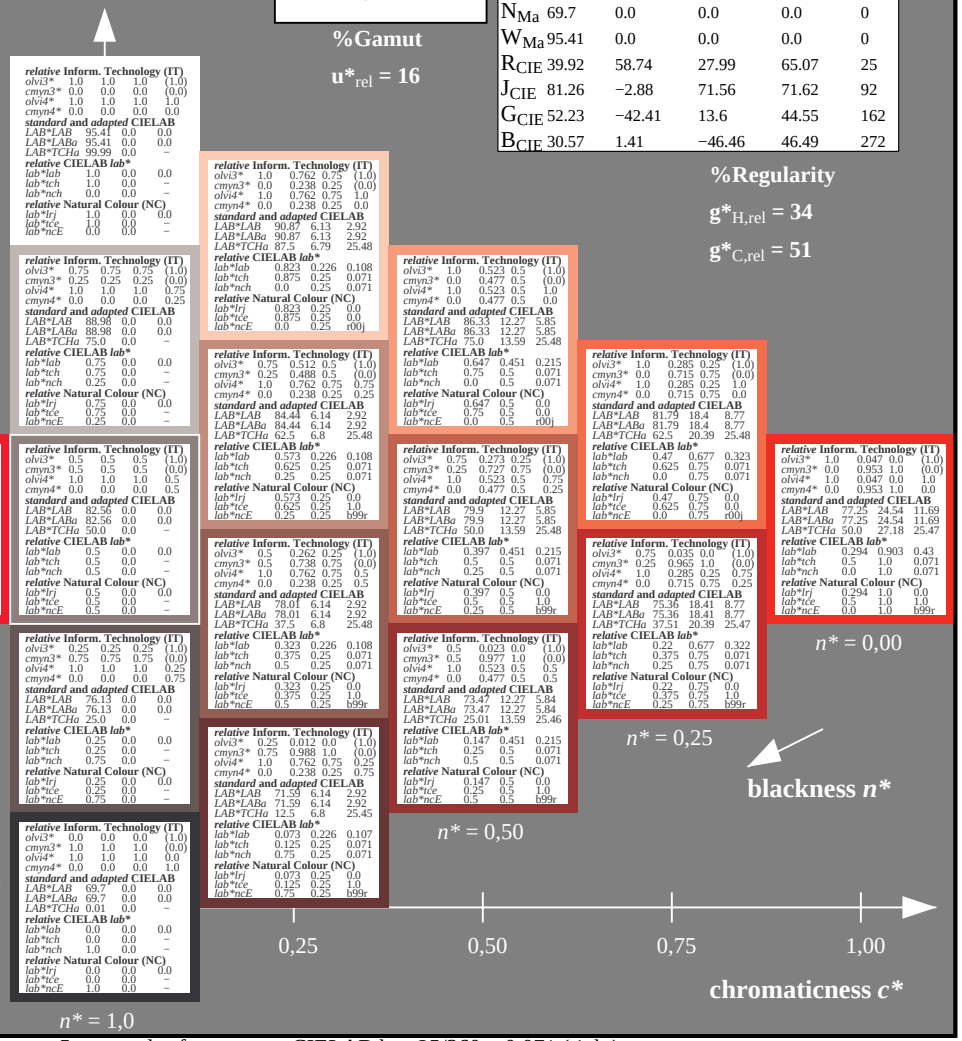
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

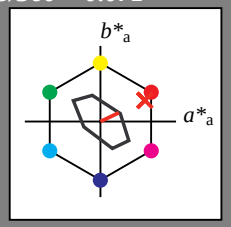
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0



TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

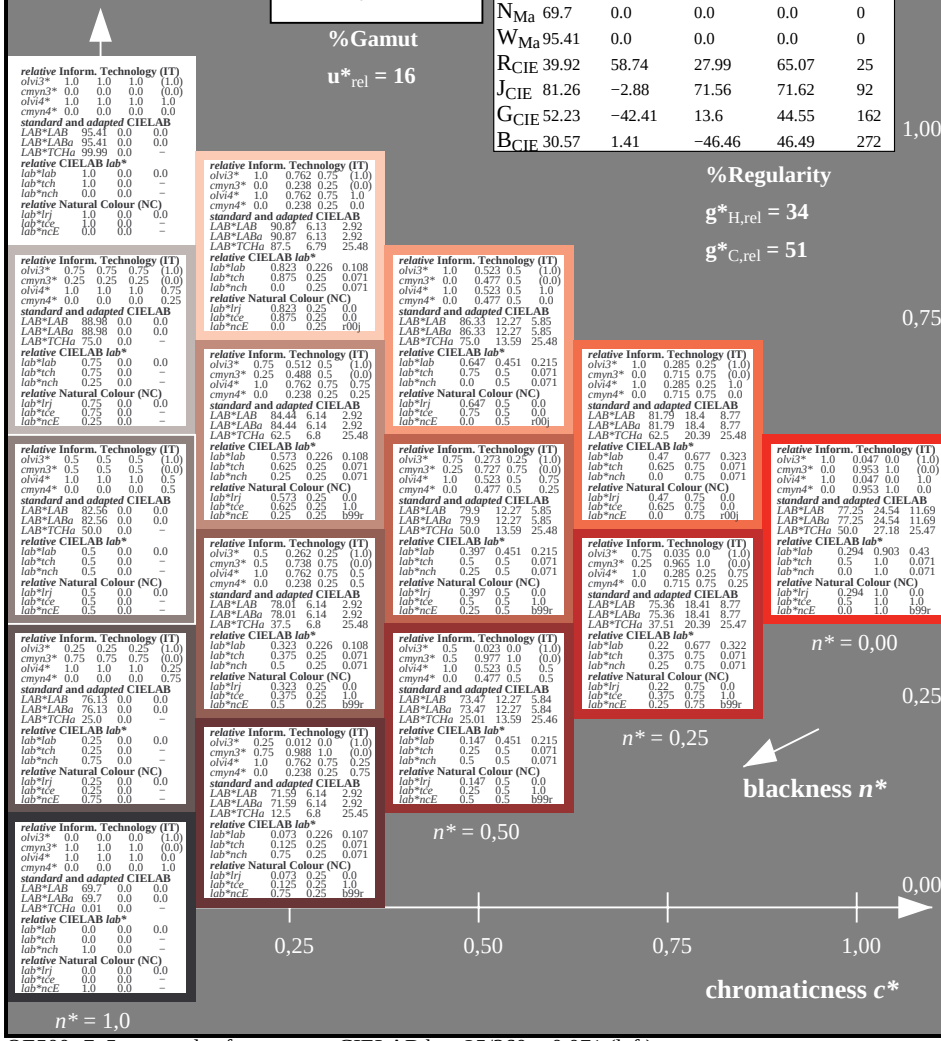
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Offset Reflective System ORS18

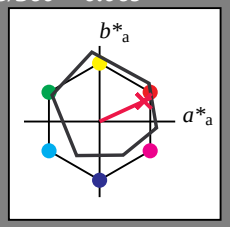
for hue $h^* = lab^*h = 25/360 = 0.069$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

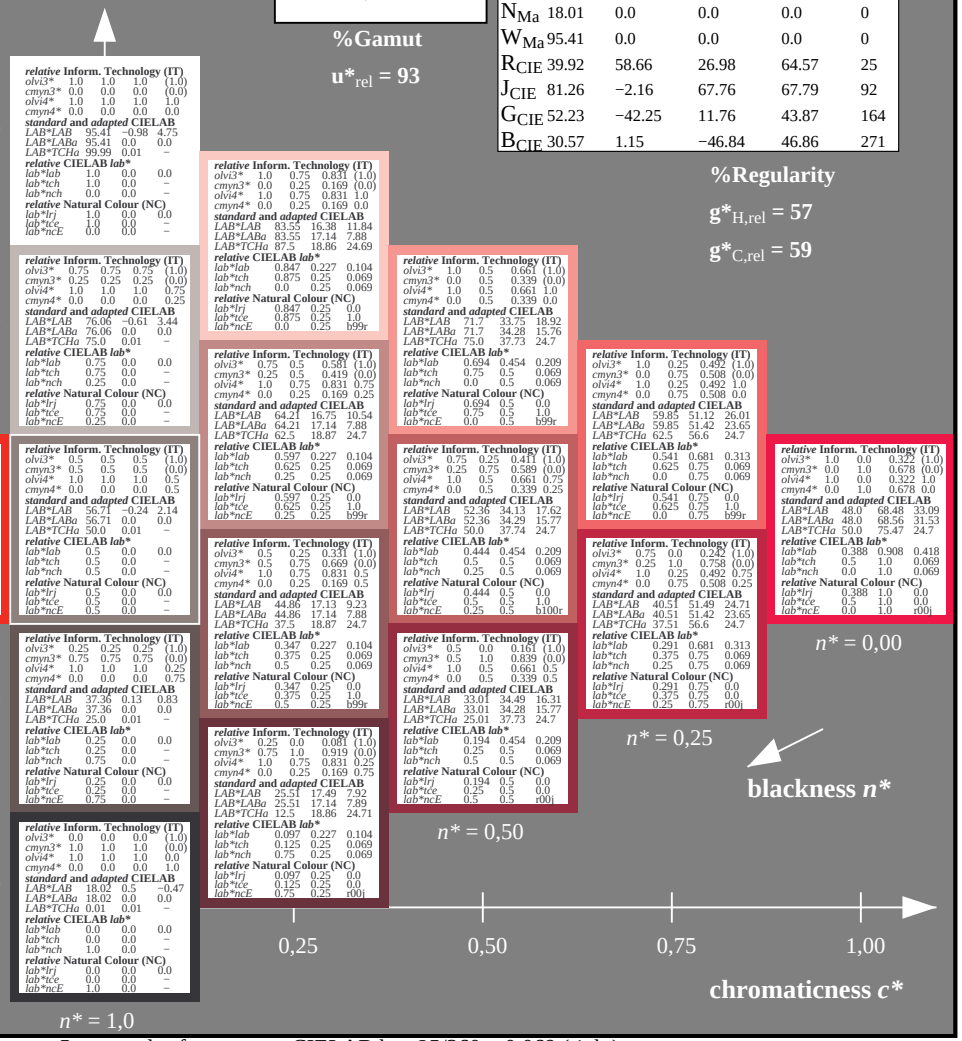
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Television Luminous System TLS70

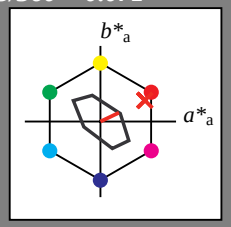
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

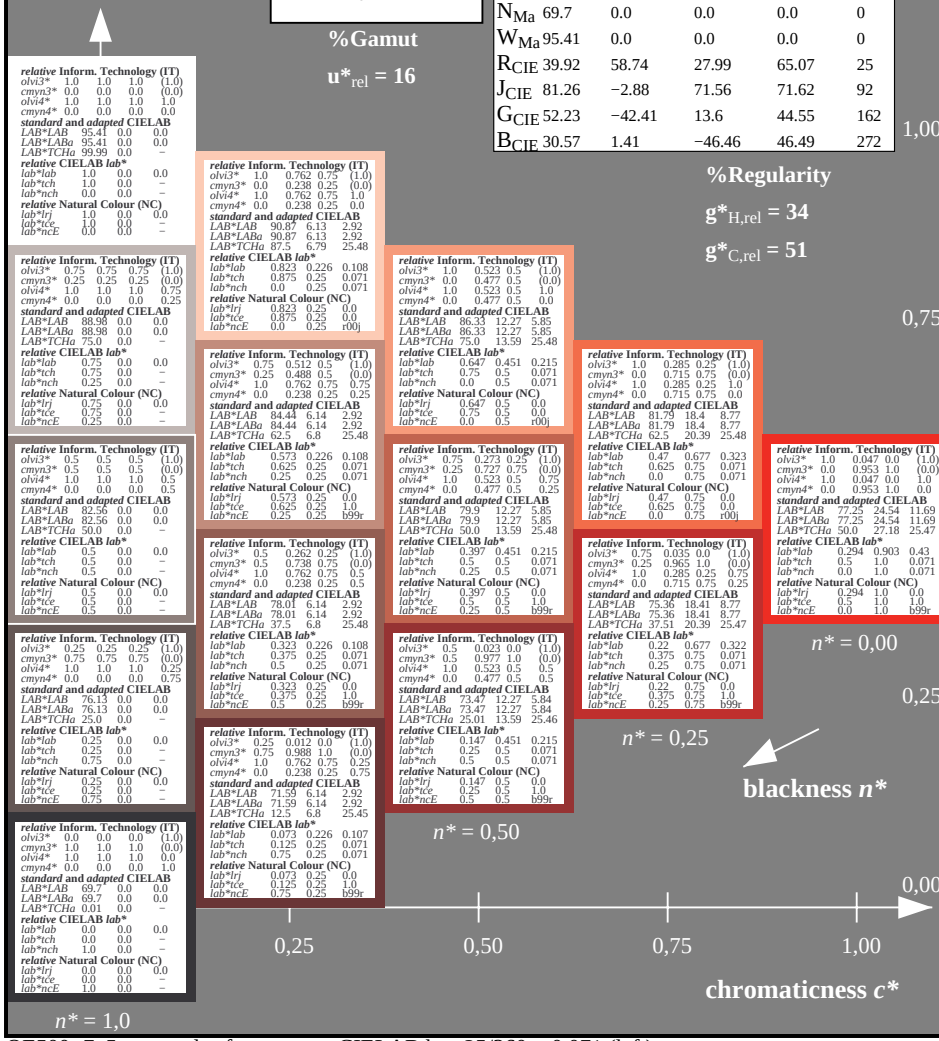
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS00

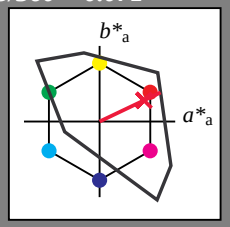
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

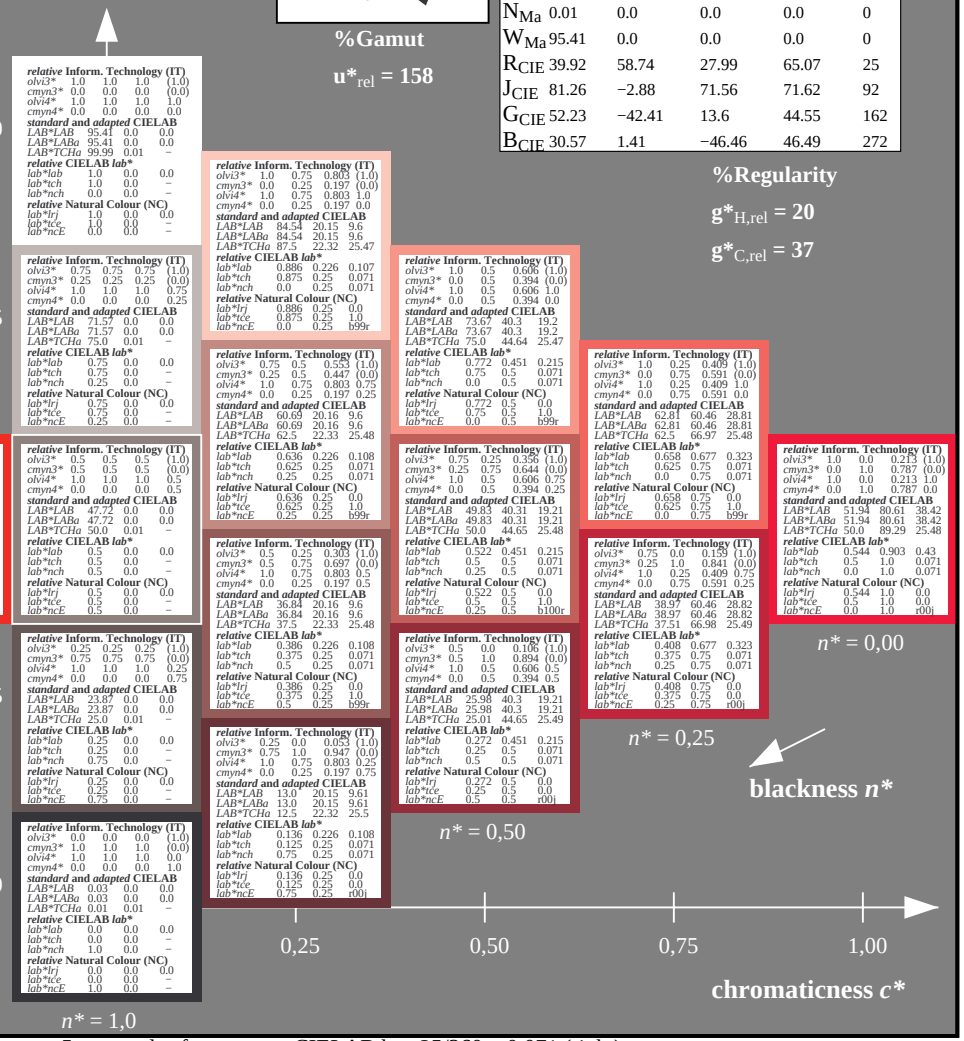
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$

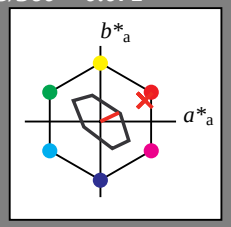
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$

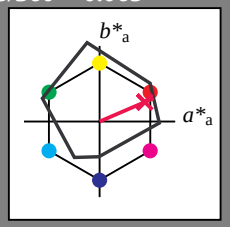
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$

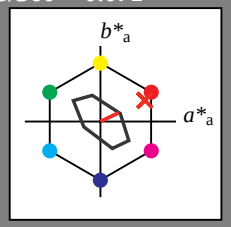
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

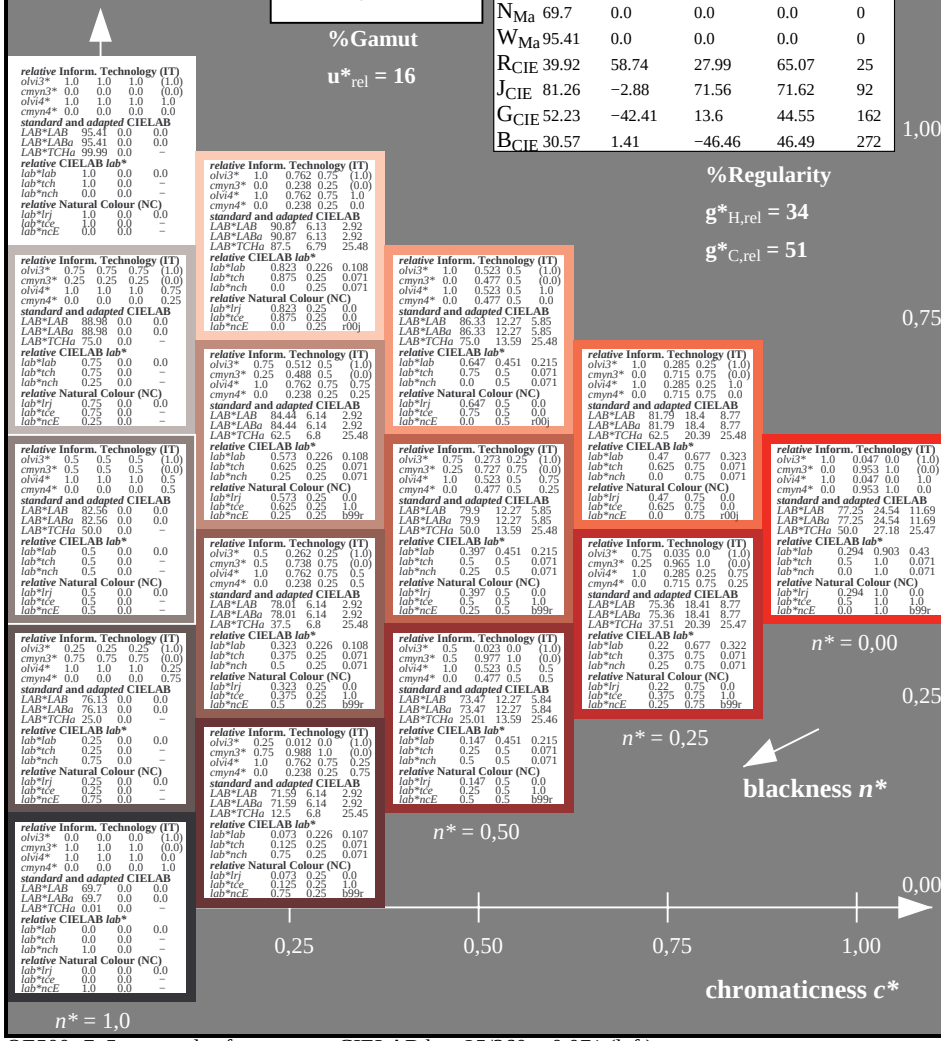
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

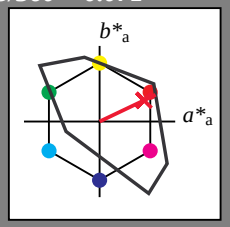
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

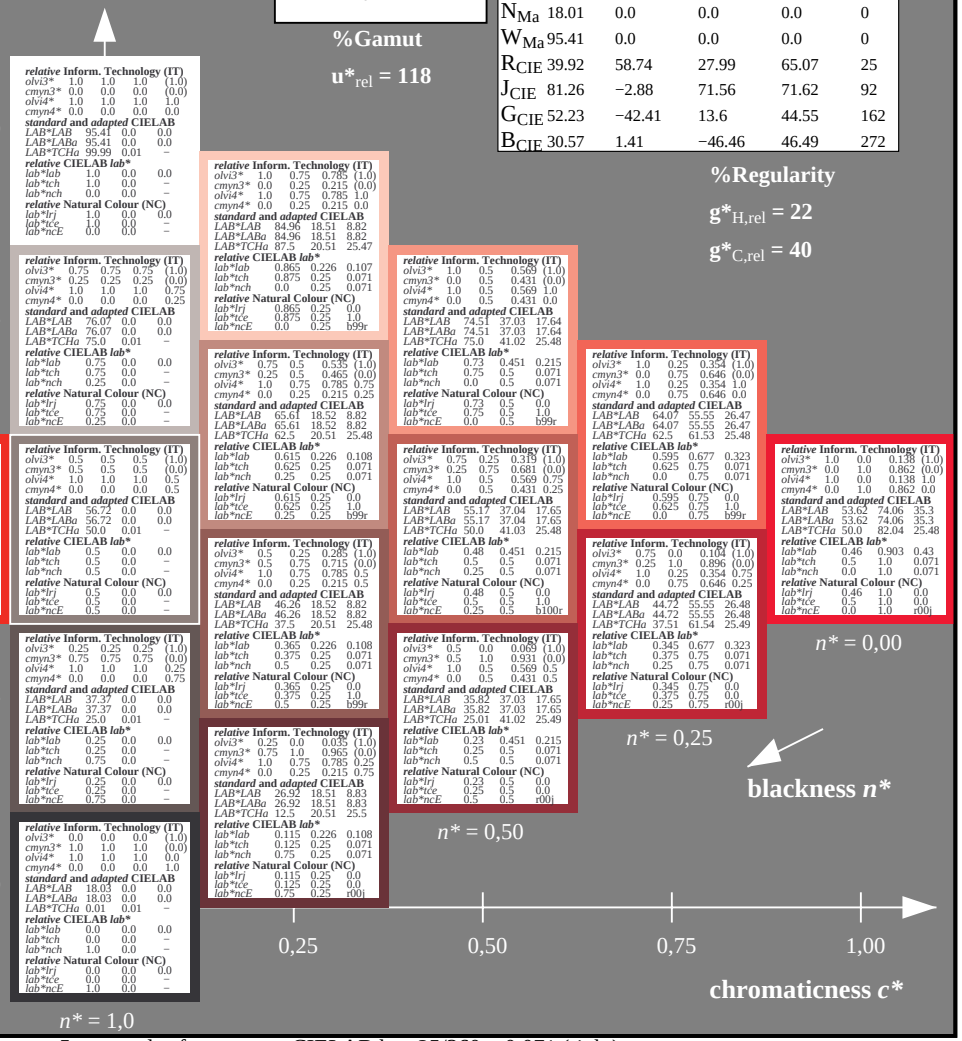
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

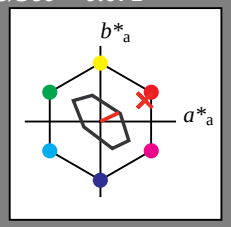
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

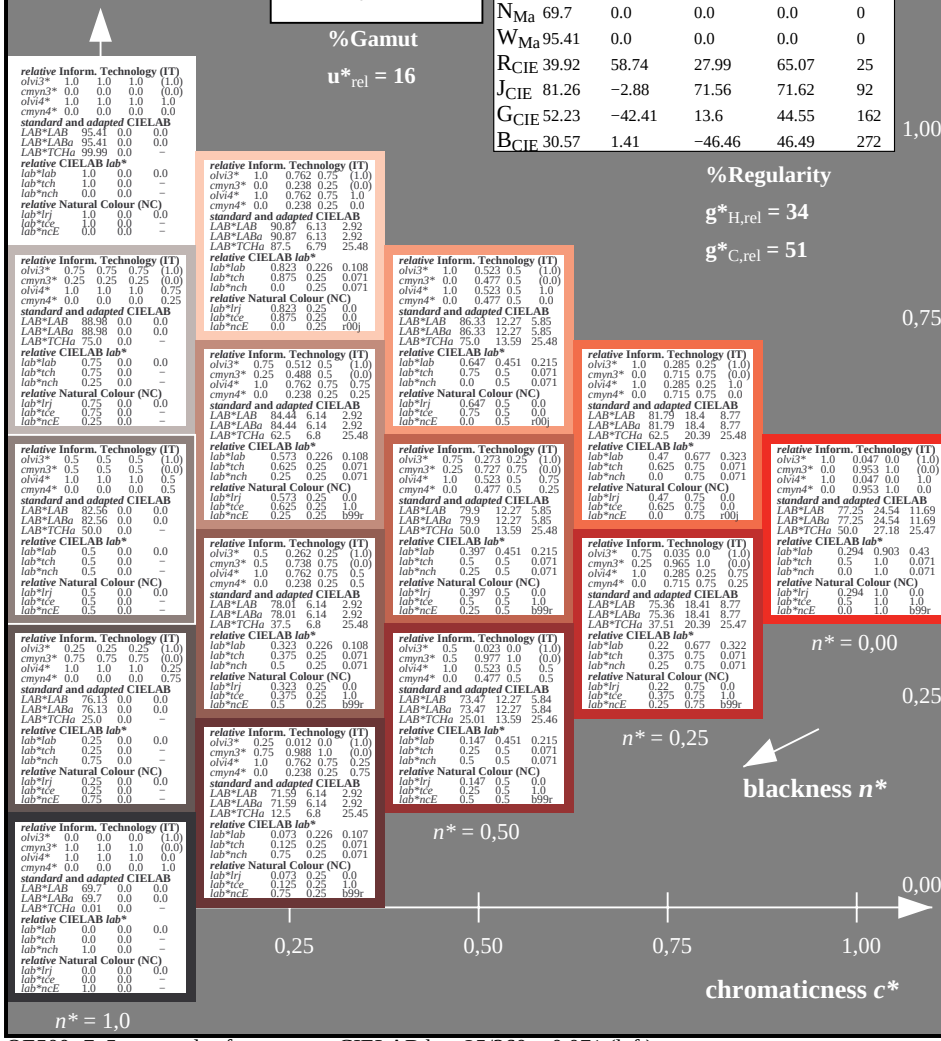
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Natural Luminous System NLS00

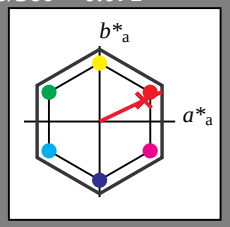
for hue $h^* = lab^*h = 25/360 = 0.071$

*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

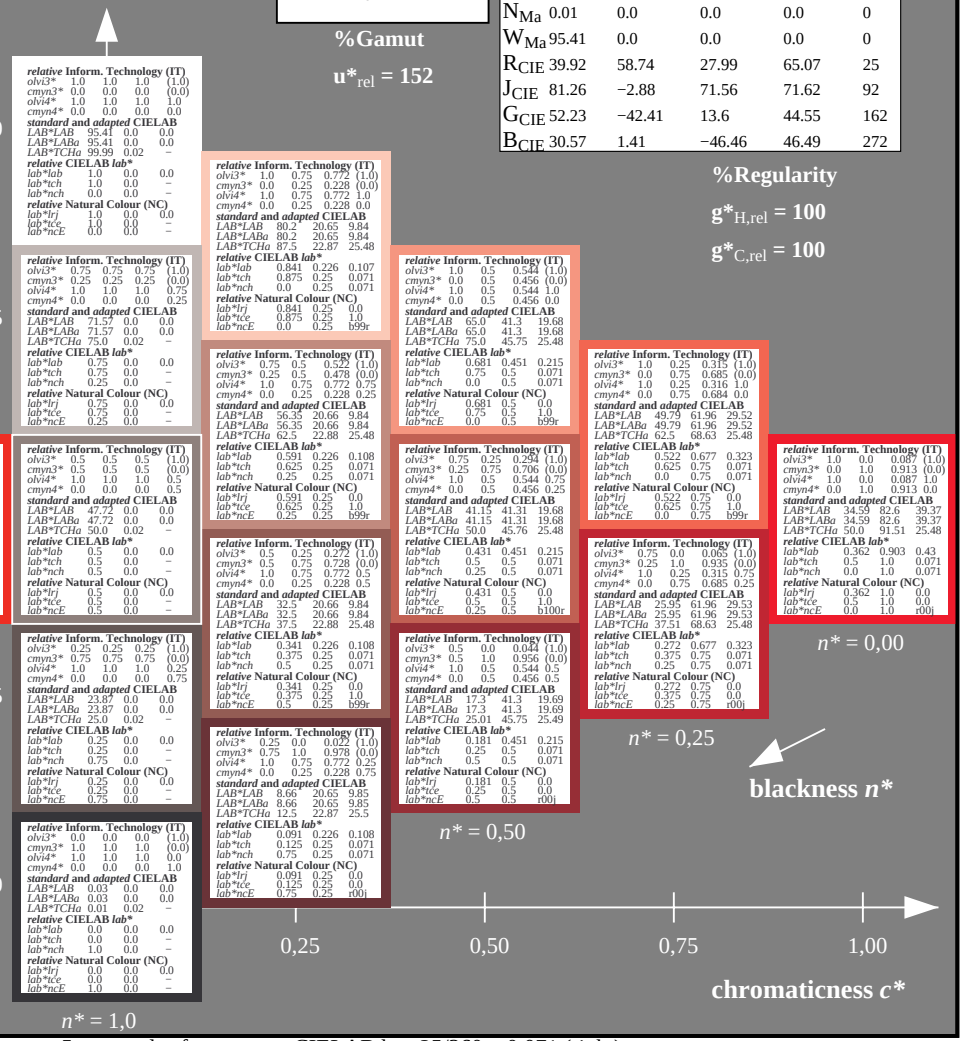
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



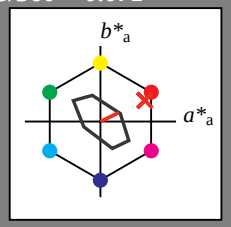
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 16

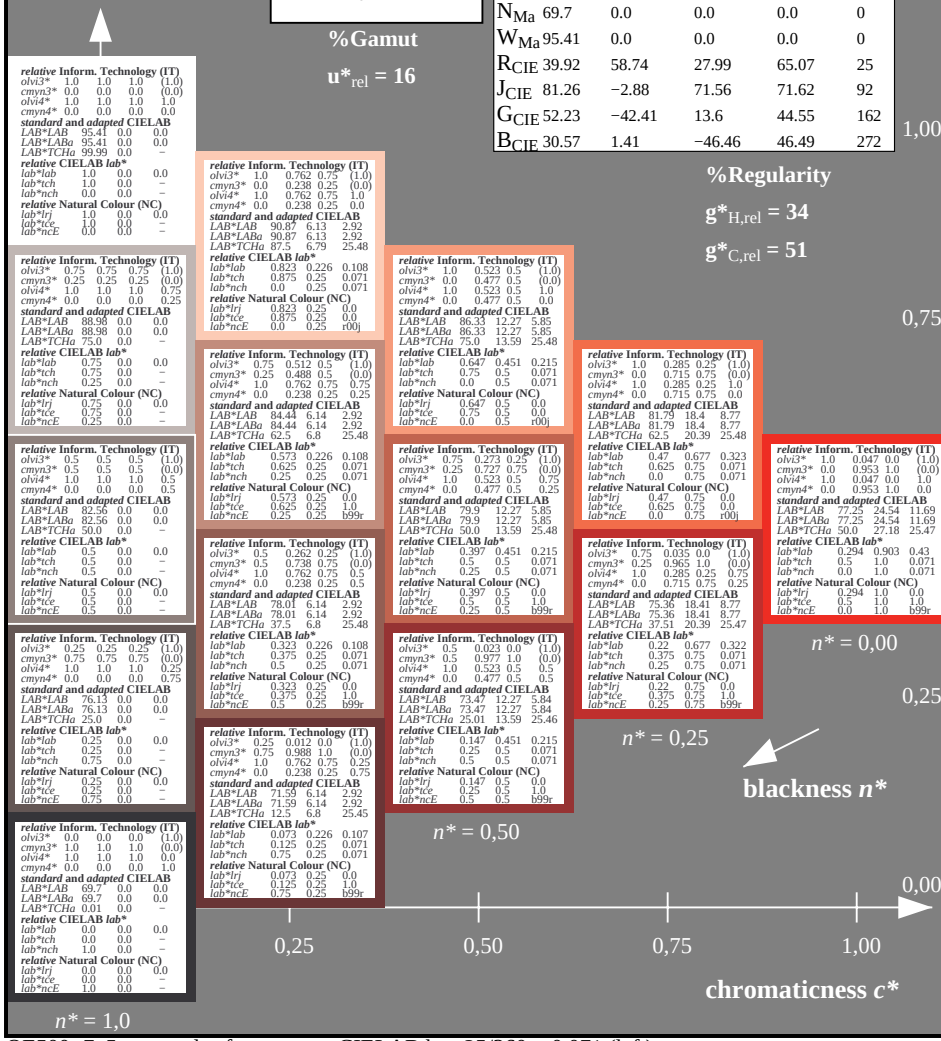
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

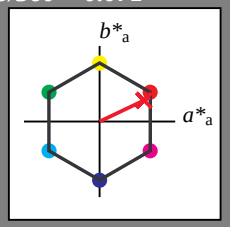
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 46 74 25
olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

u^*_{rel} = 100

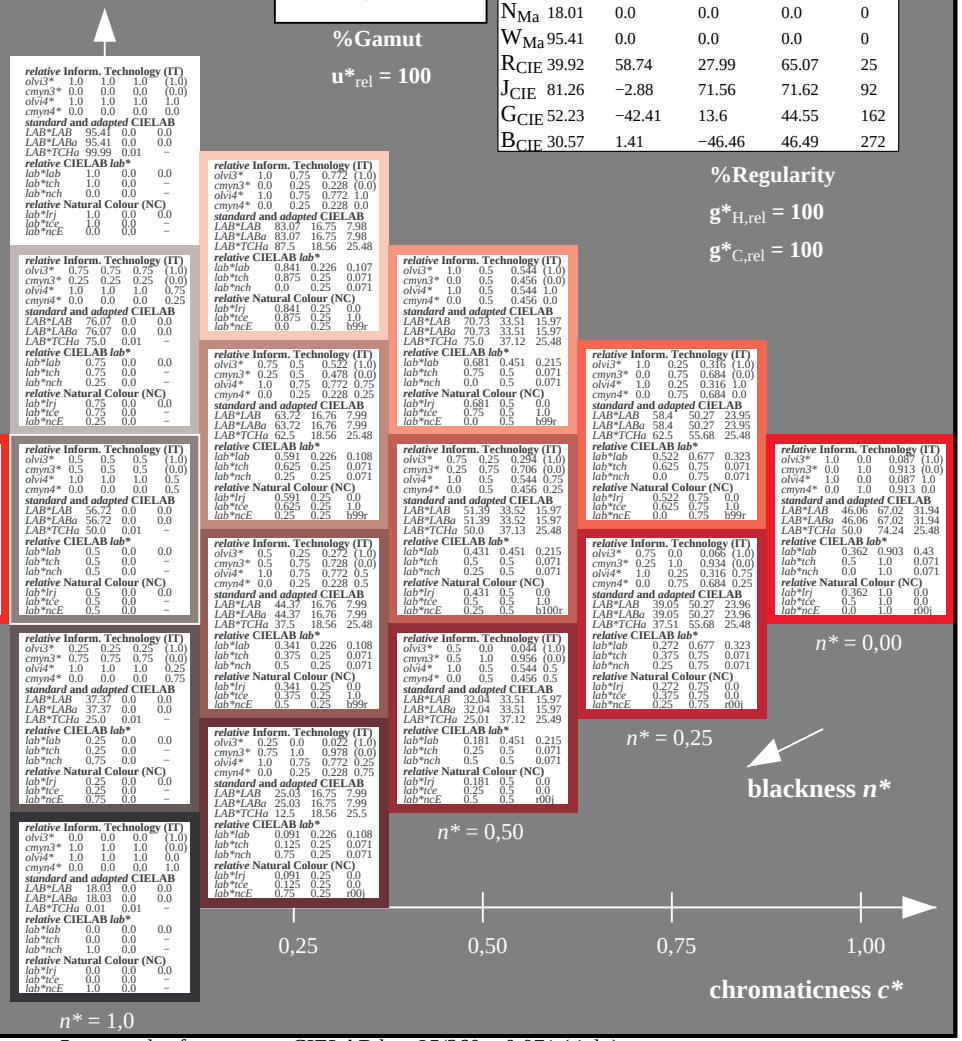
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



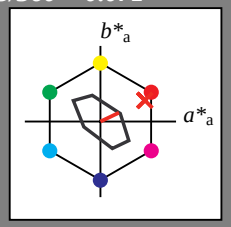
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0



triangle lightness t^*

%Gamut

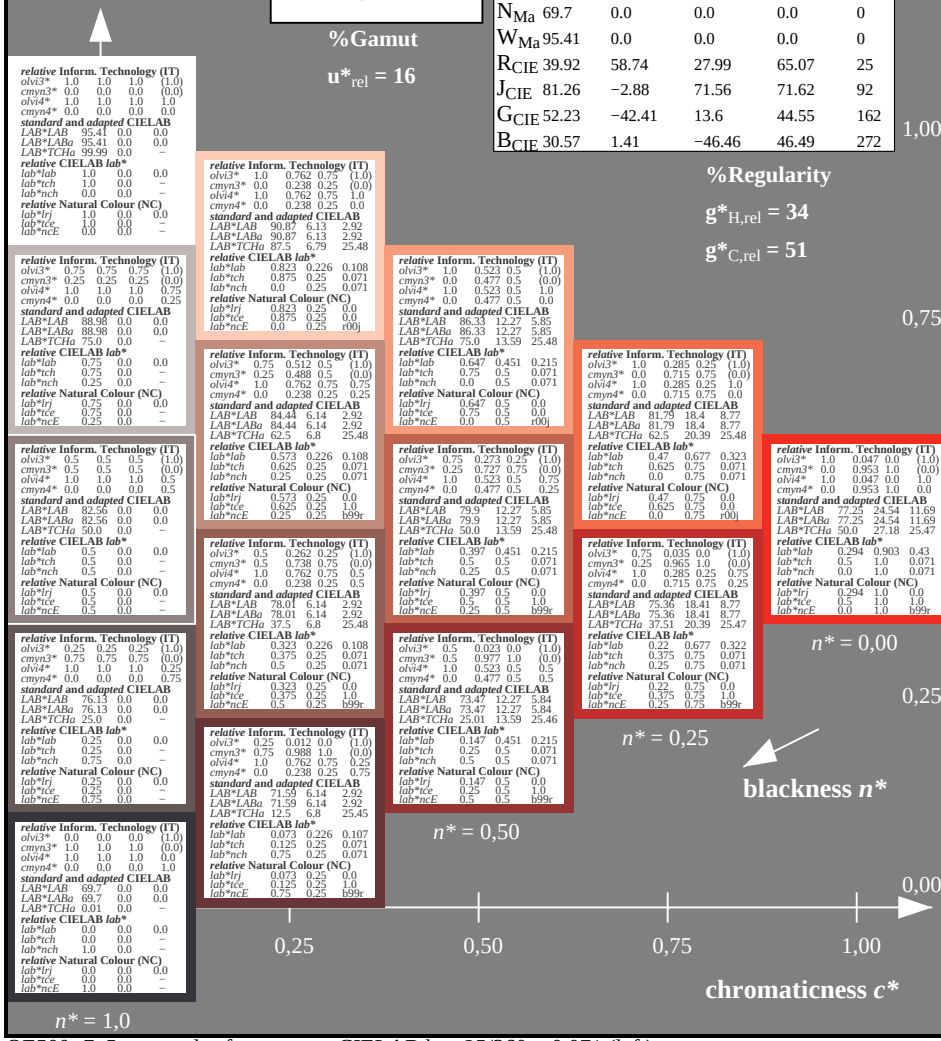
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

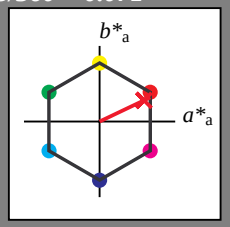
$g^*_{C,rel} = 51$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09



triangle lightness t^*

%Gamut

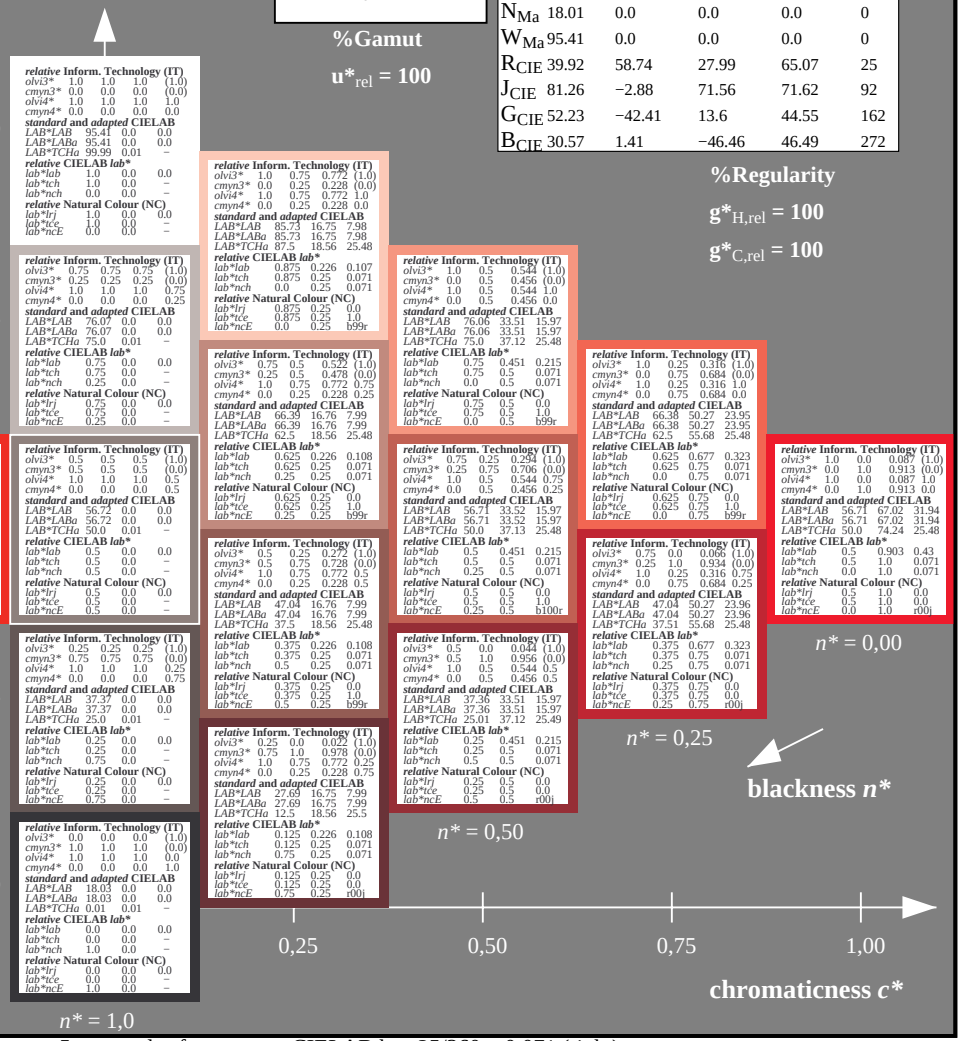
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

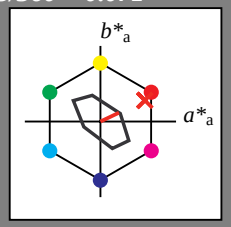
5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

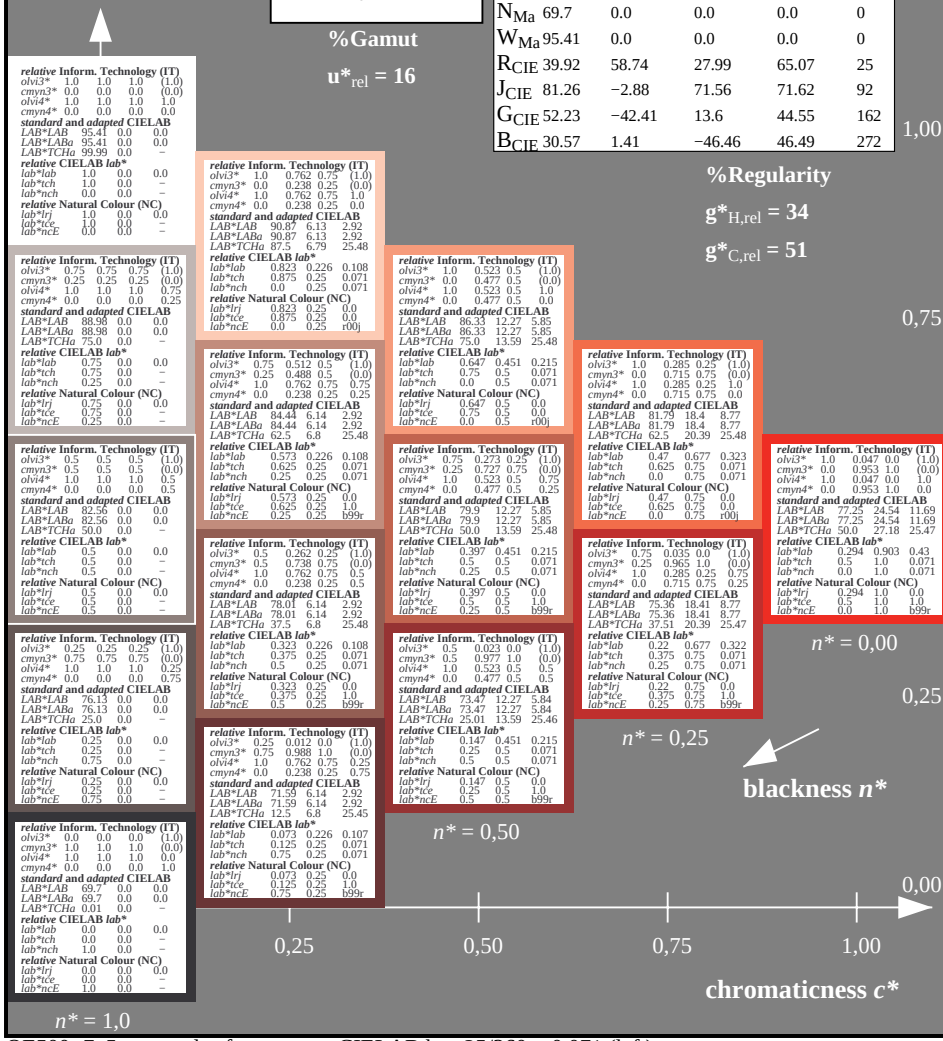
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



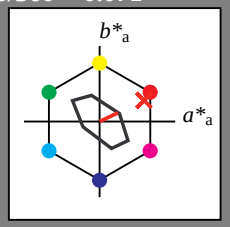
OE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 77 27 25
olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

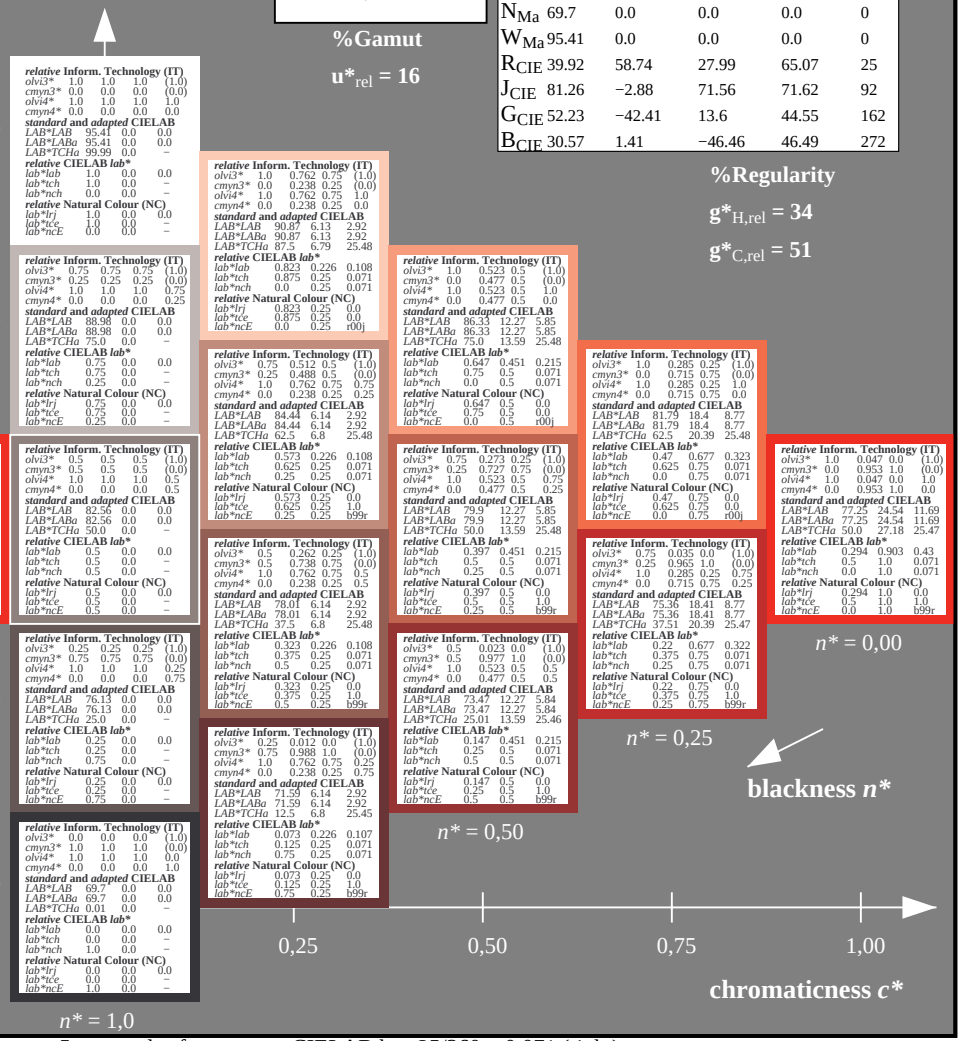
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

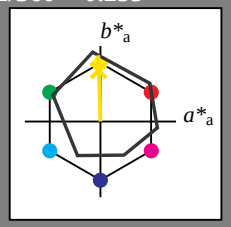


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 92/360 = 0.255$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

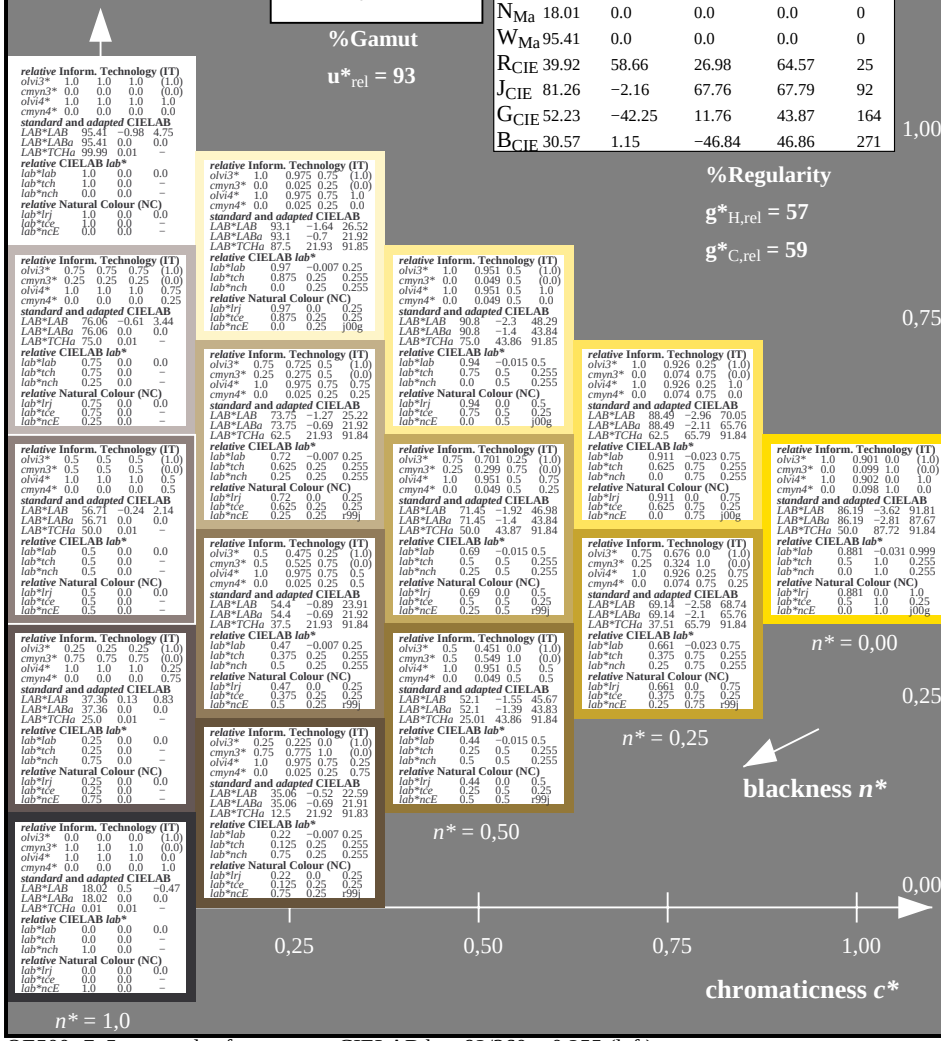
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

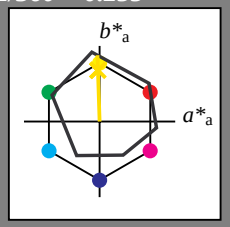


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 92/360 = 0.255$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

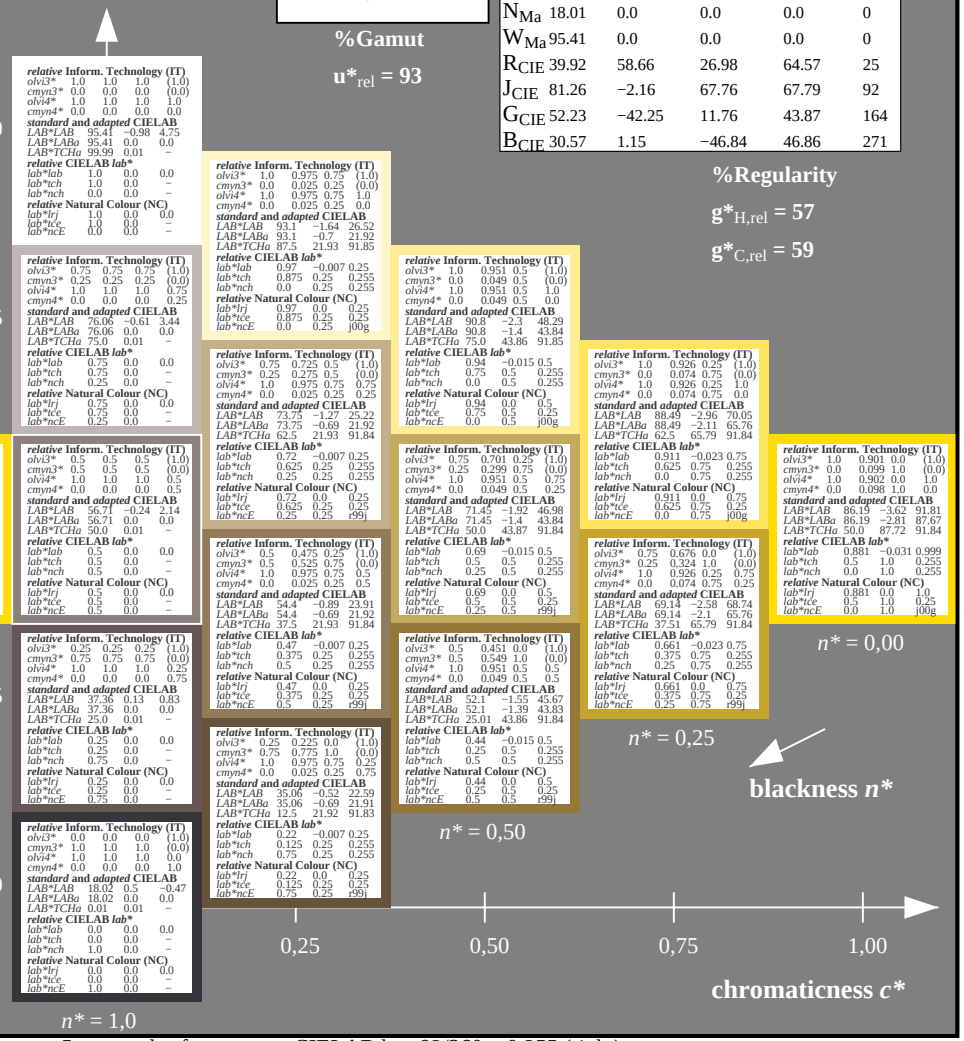
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

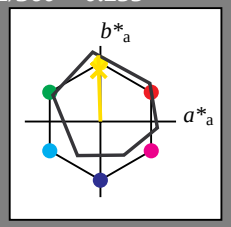
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

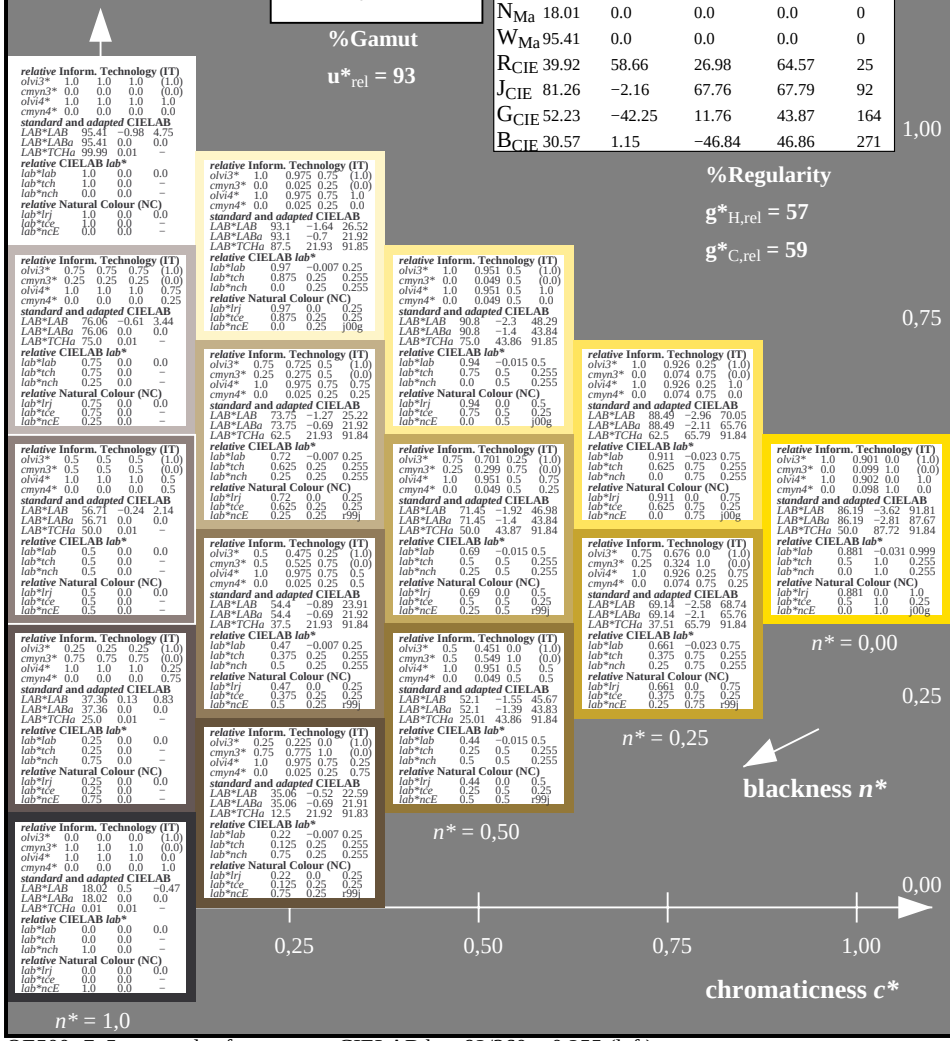
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

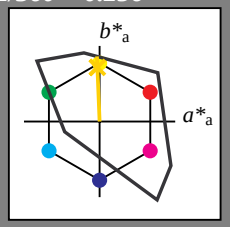
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

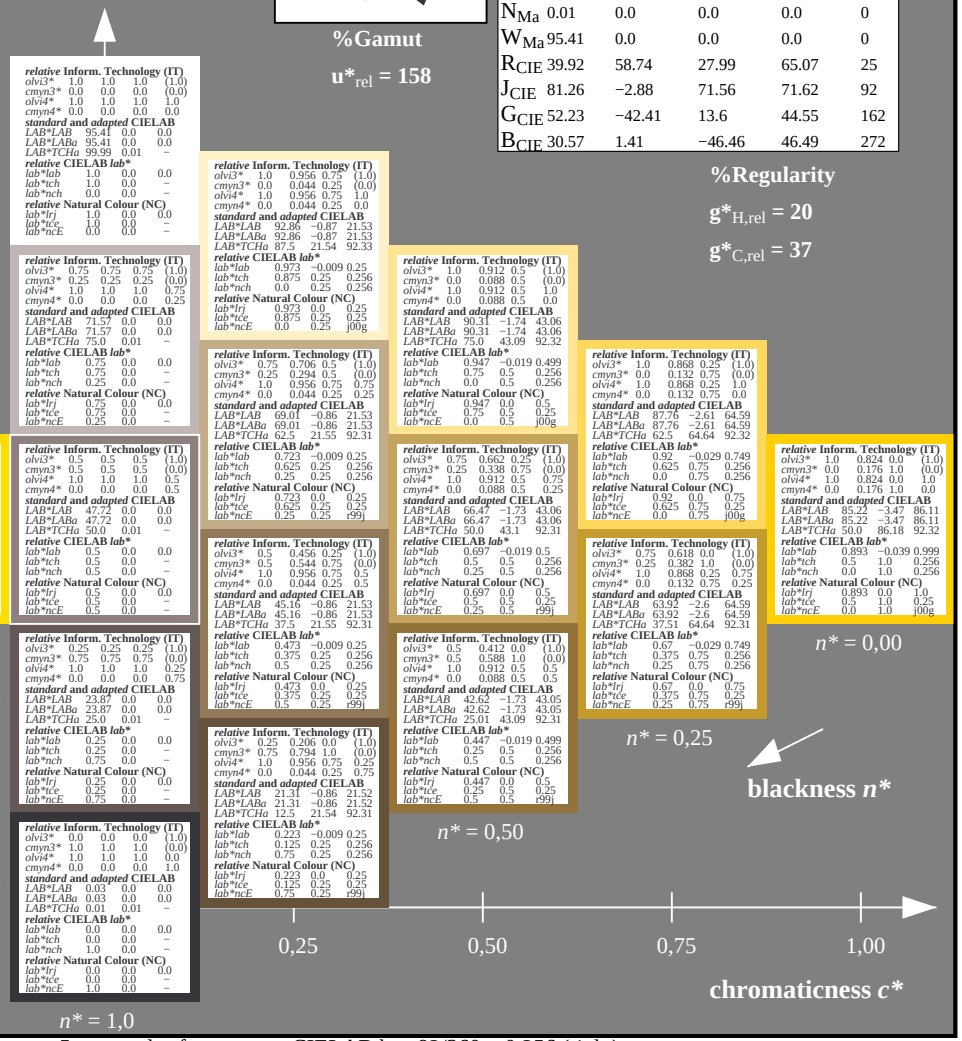
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

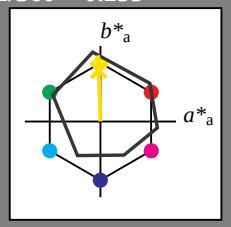


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

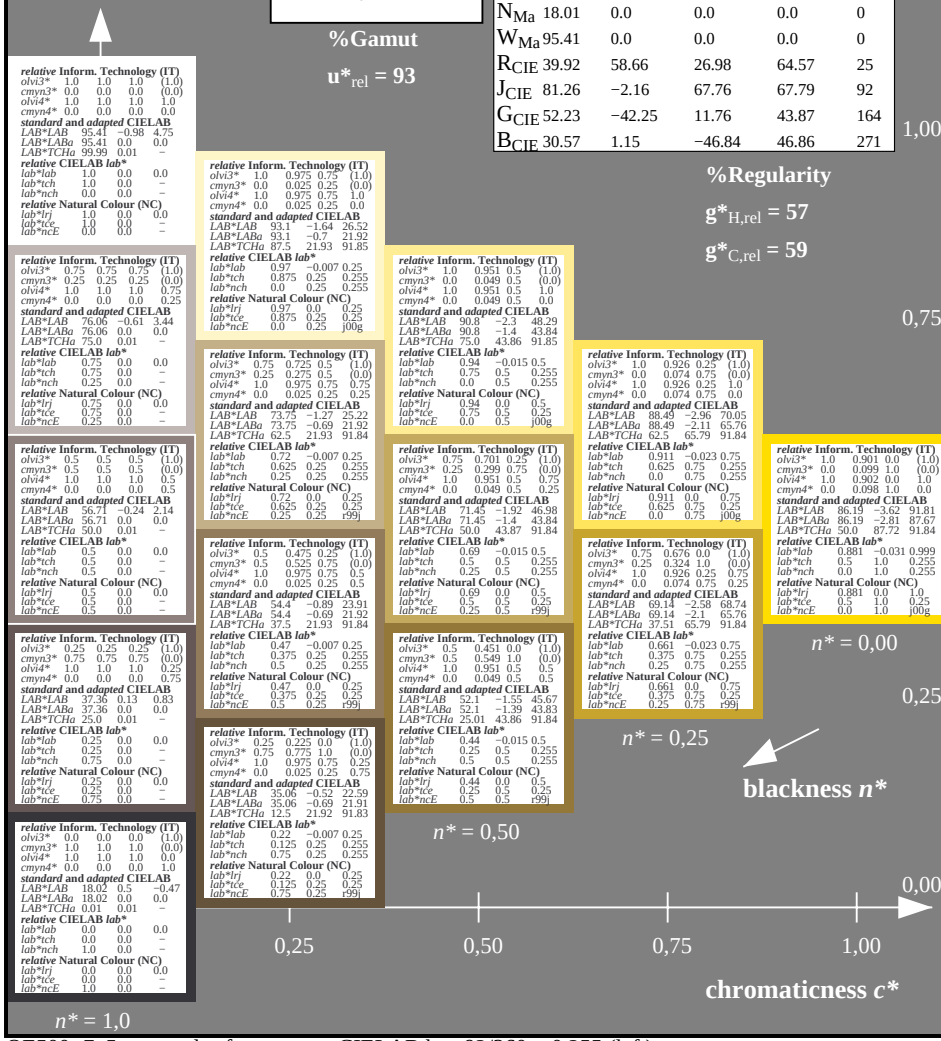
u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

triangle lightness *t**

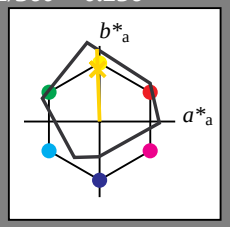


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

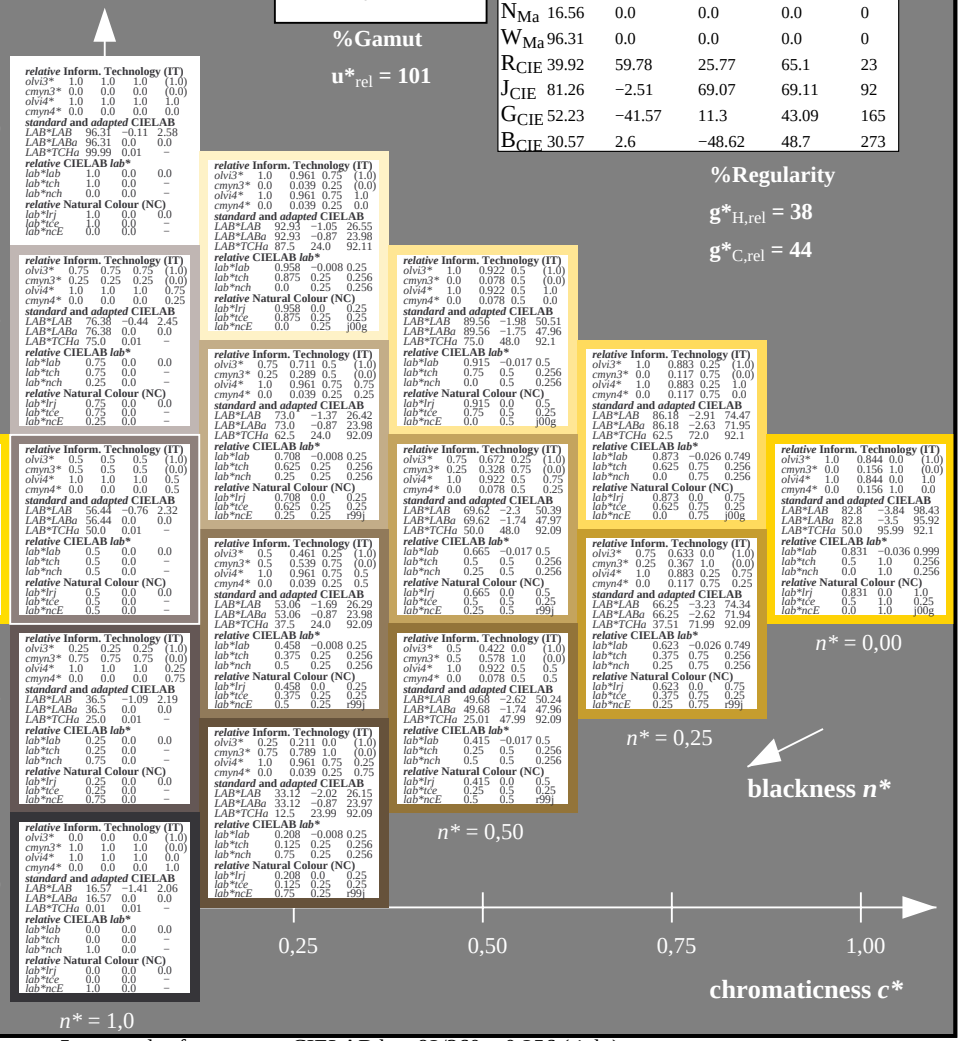
u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

triangle lightness *t**



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

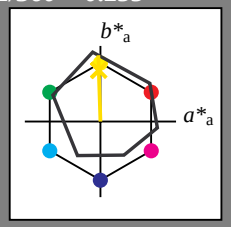
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

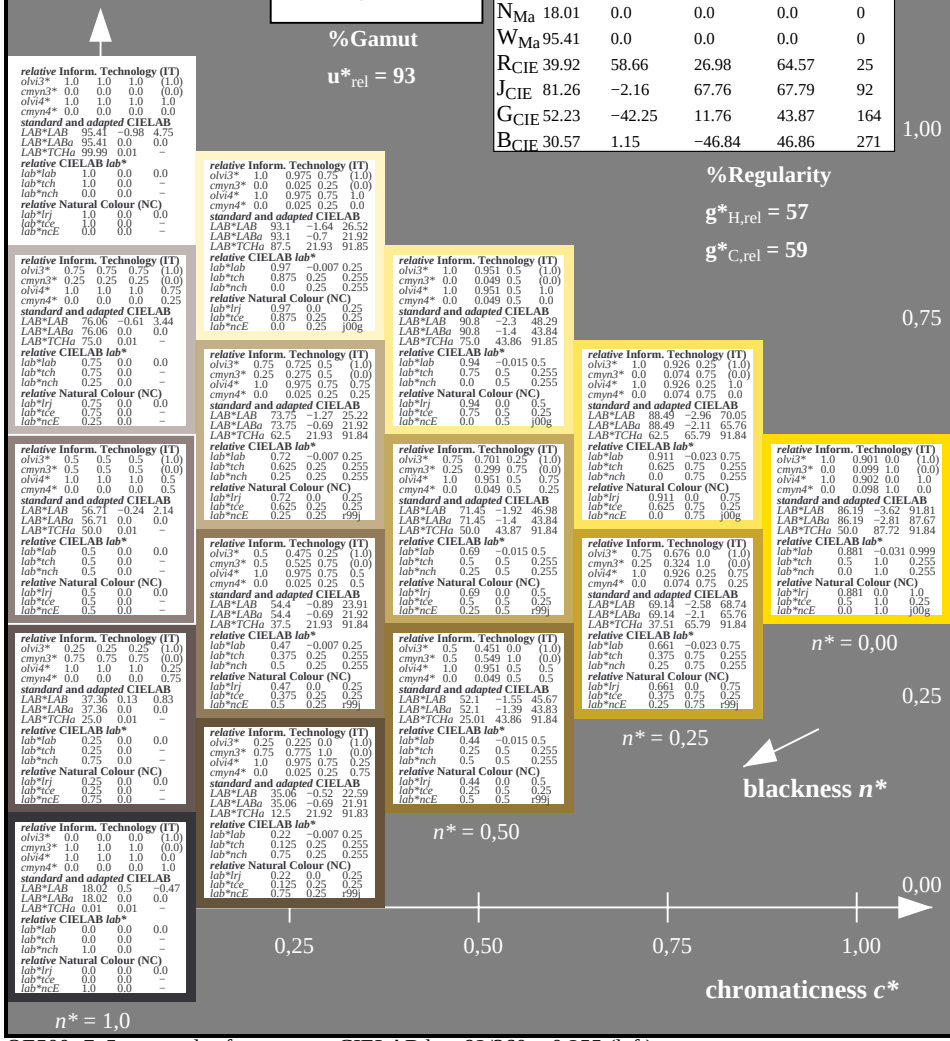
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

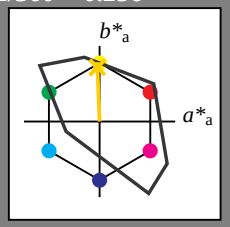
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

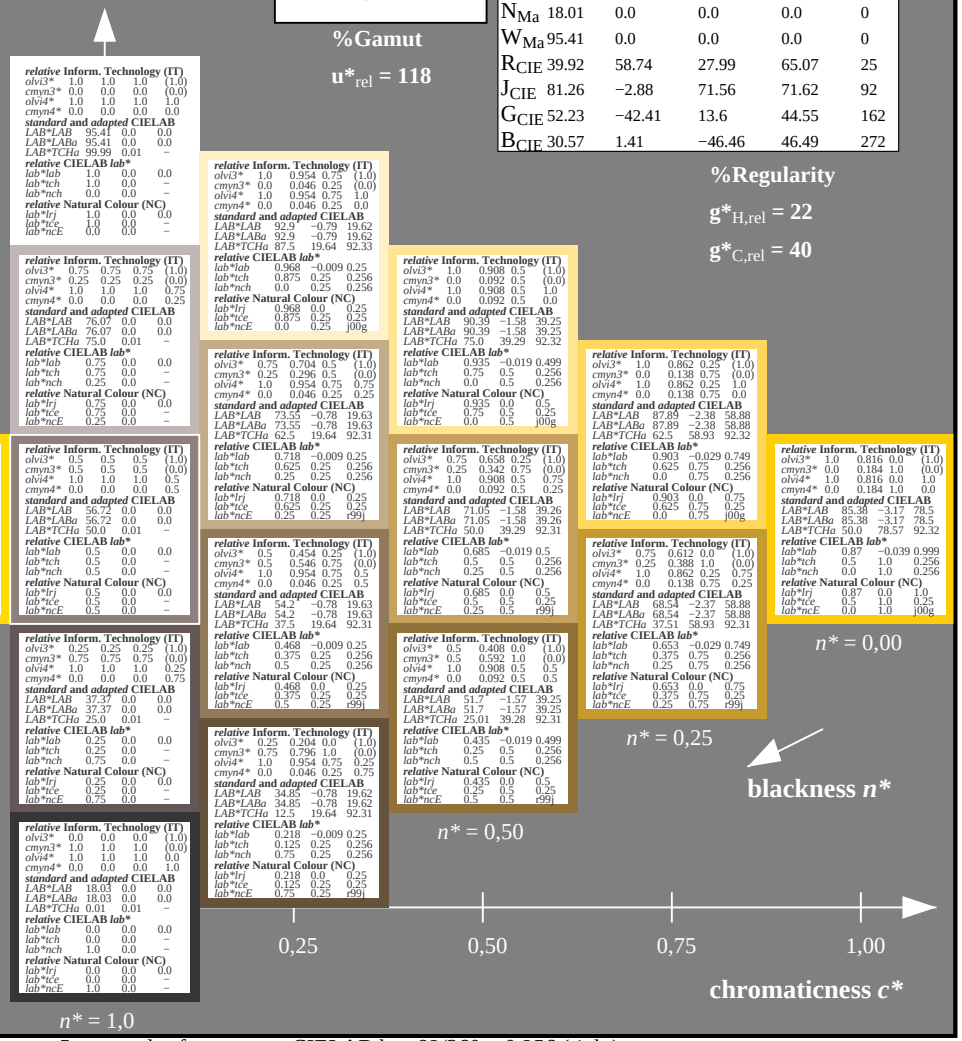
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



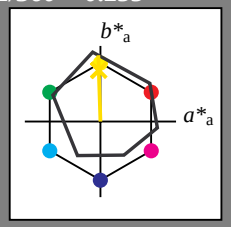
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

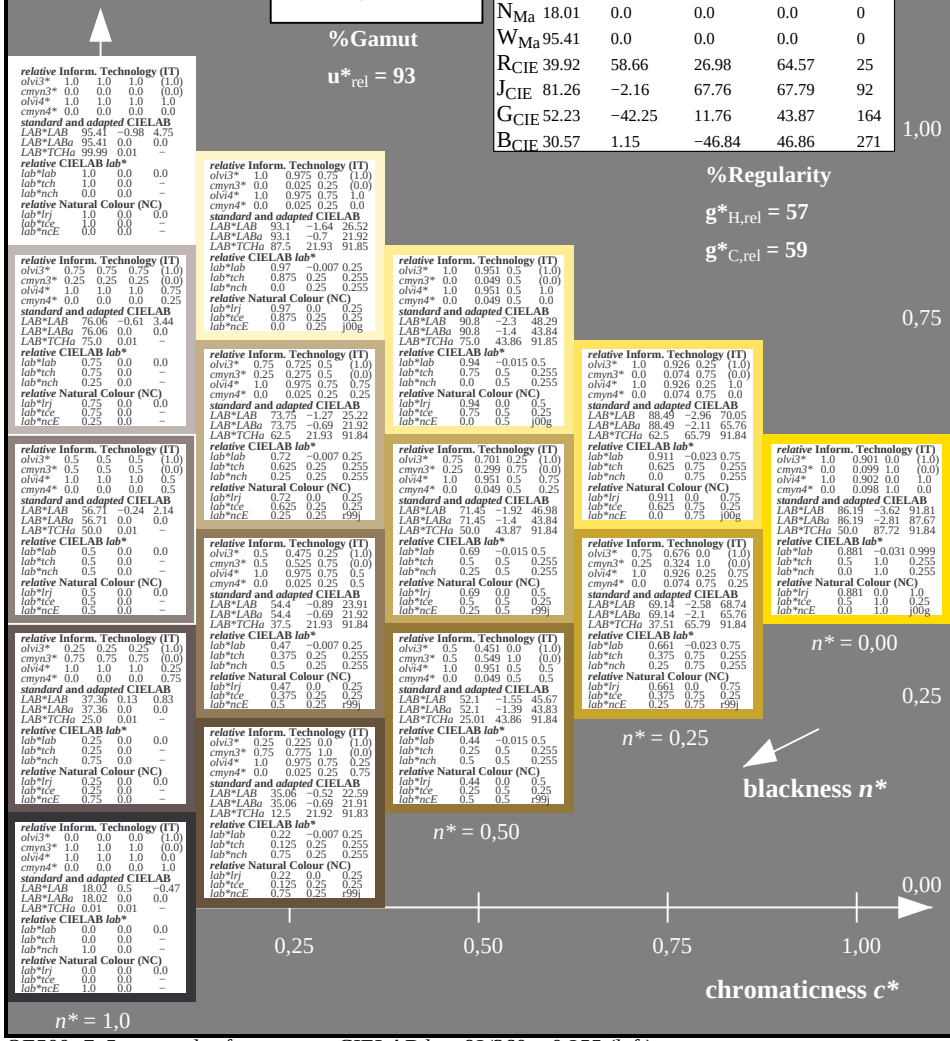
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



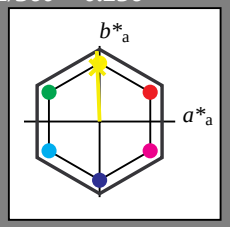
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

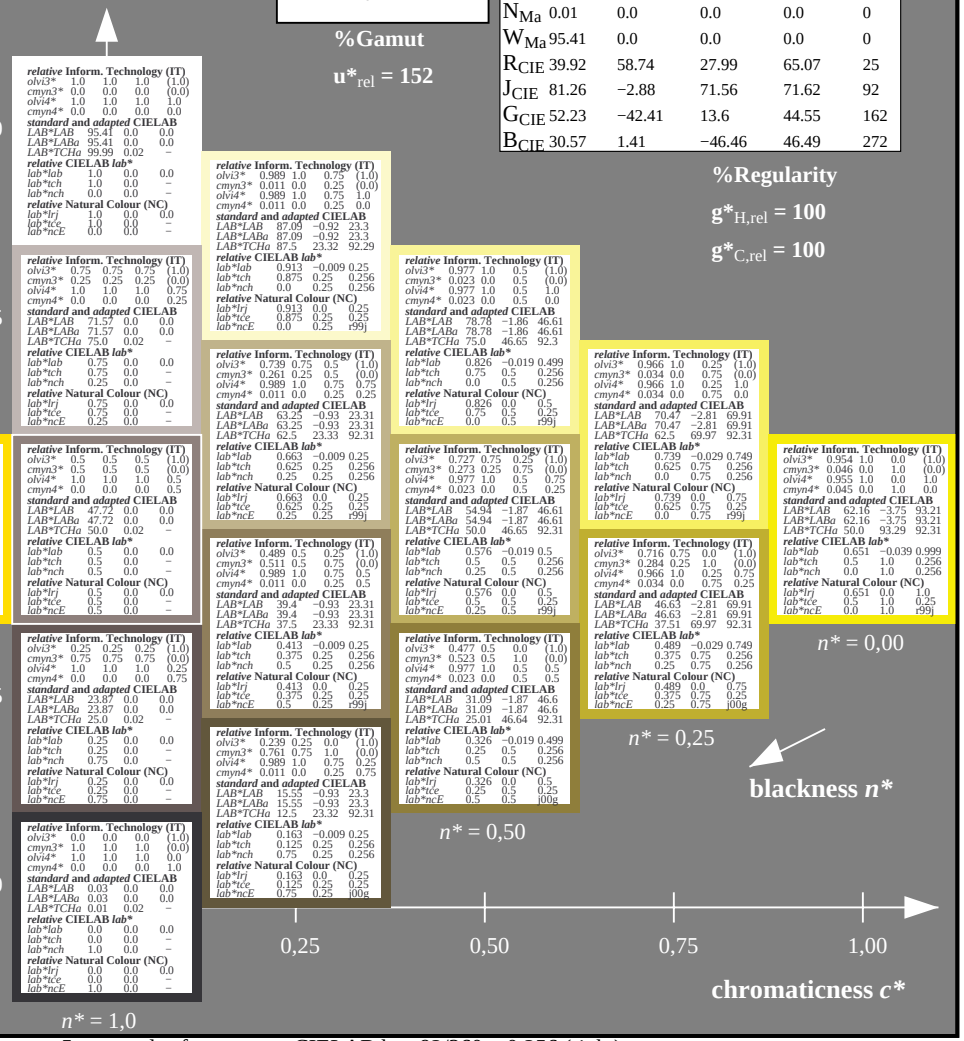
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

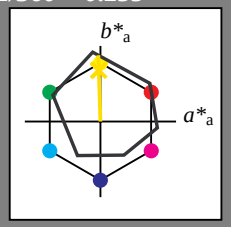
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

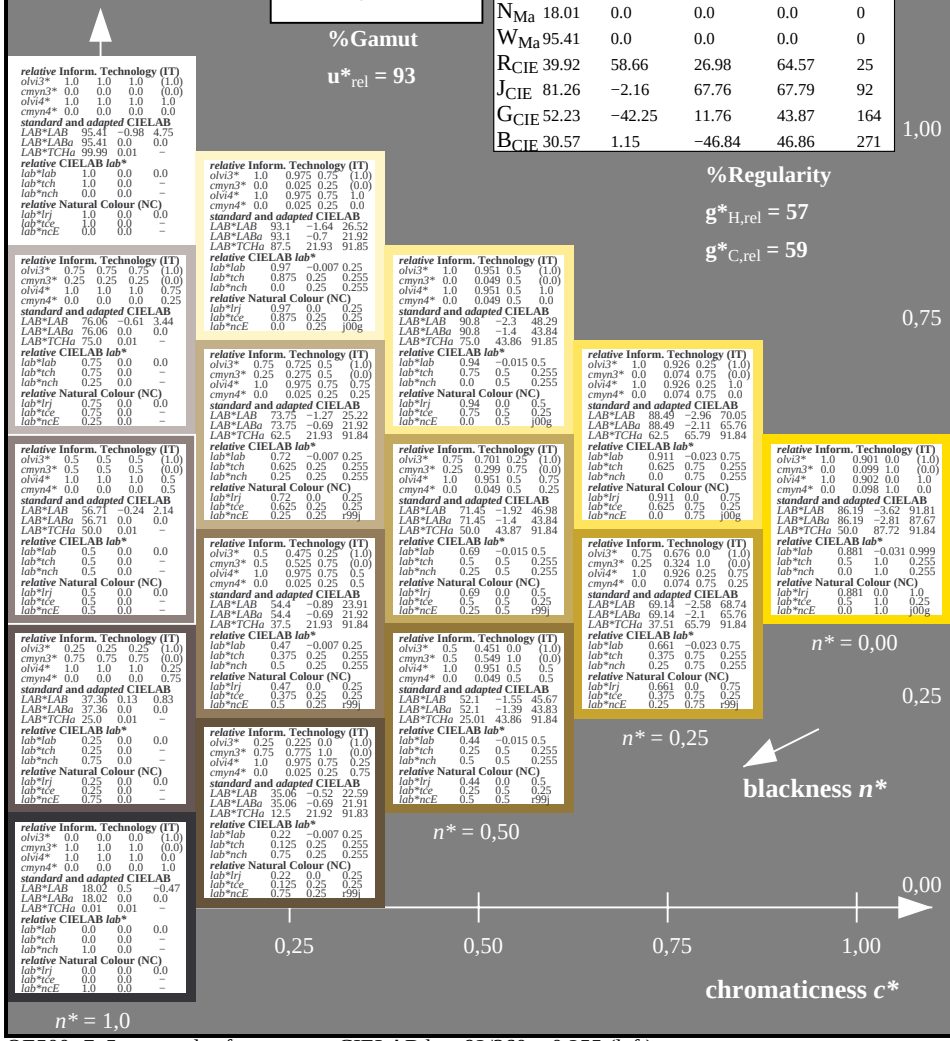
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

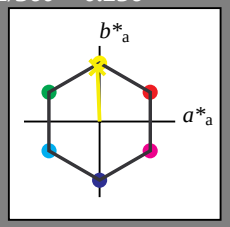
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

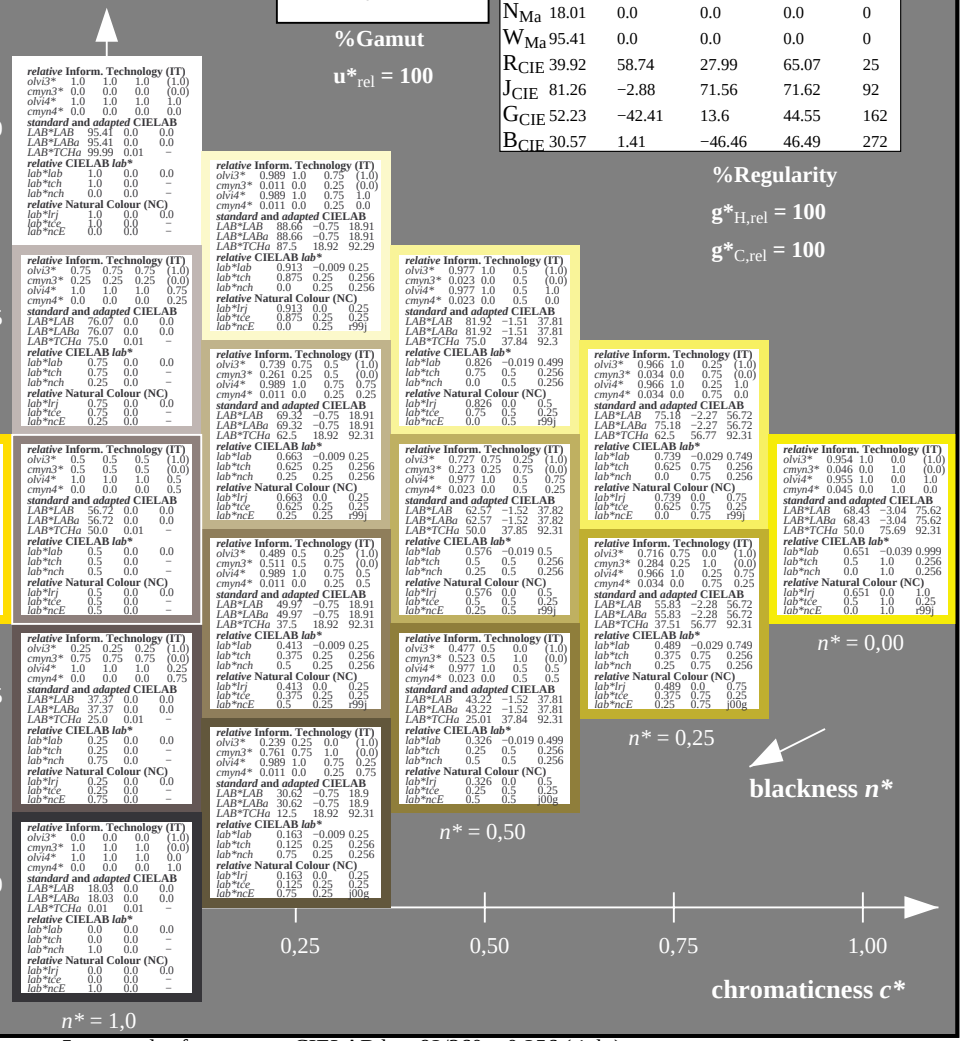
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



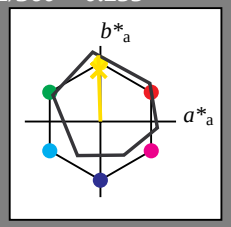
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

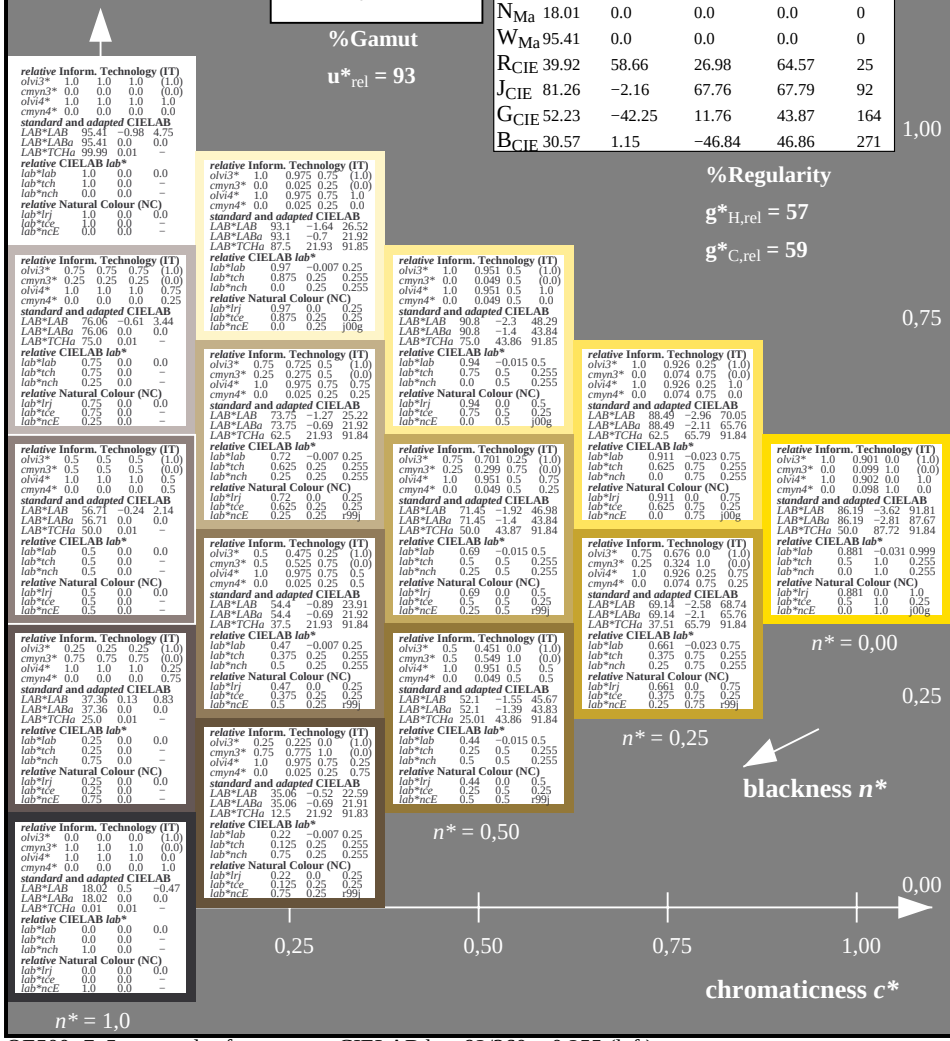
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



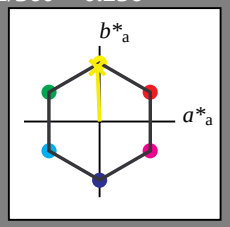
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

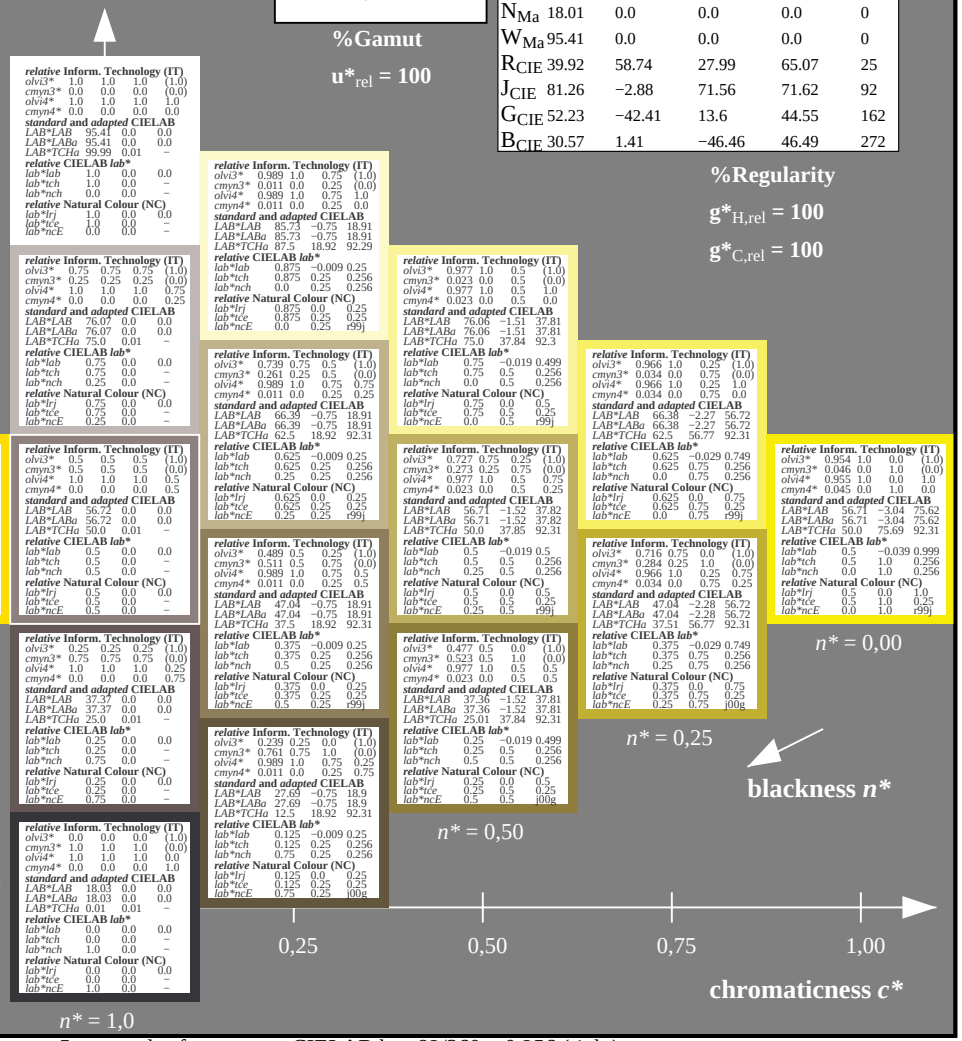
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

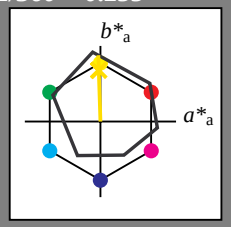
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

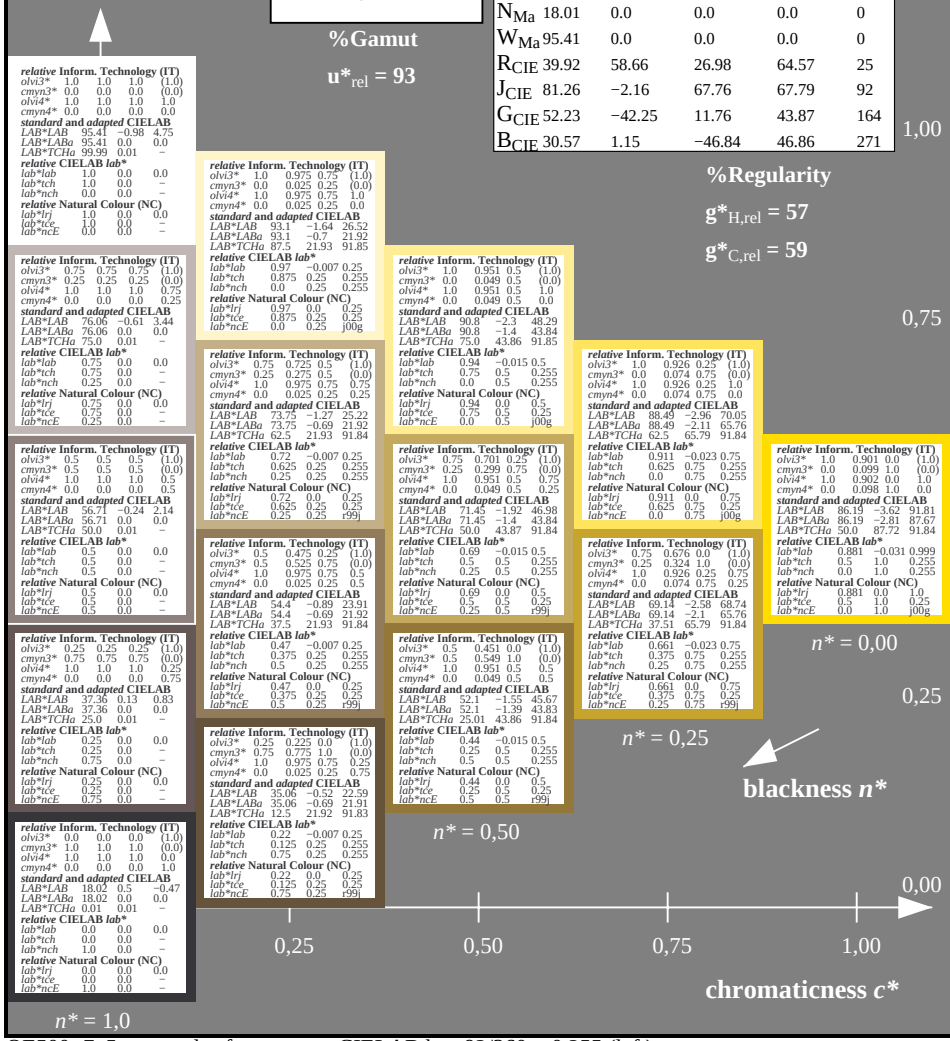
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

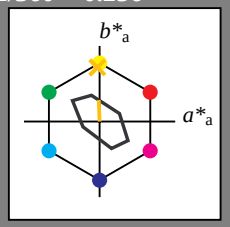
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

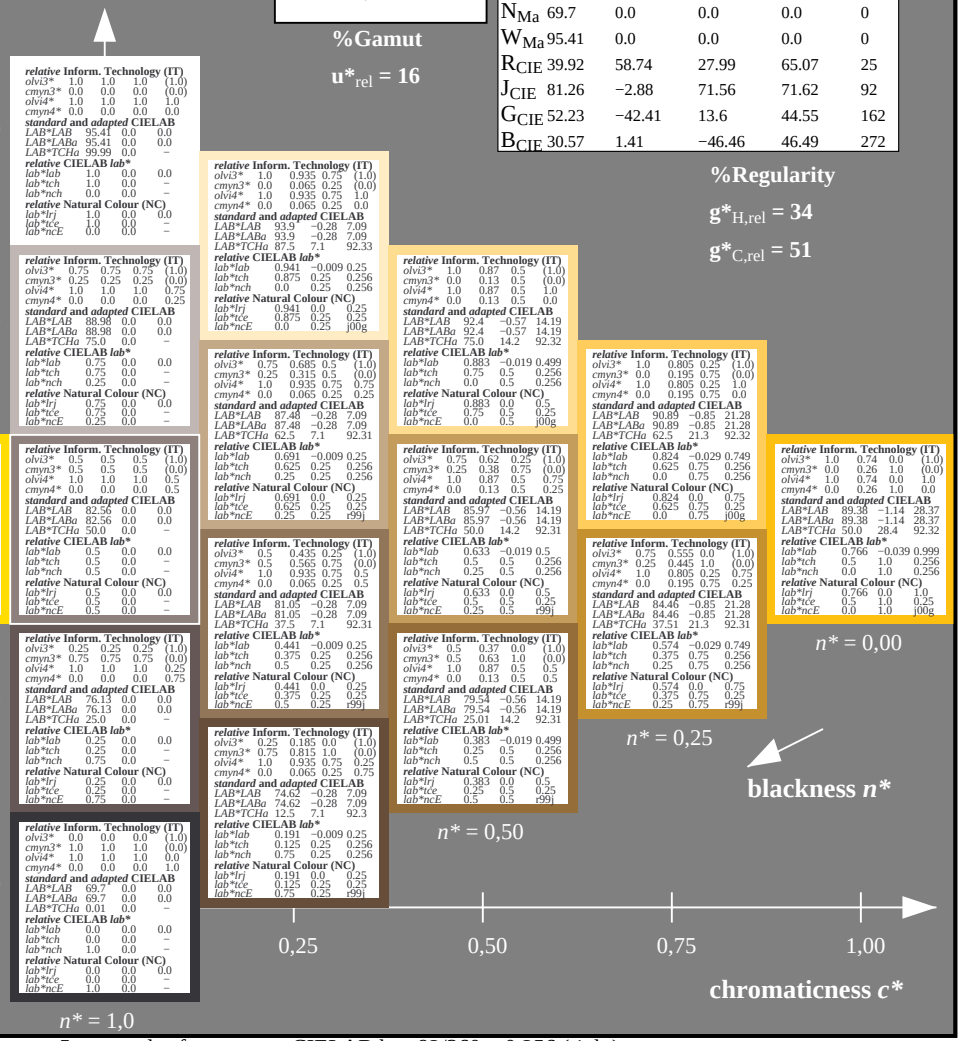
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

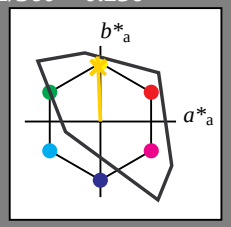
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 158

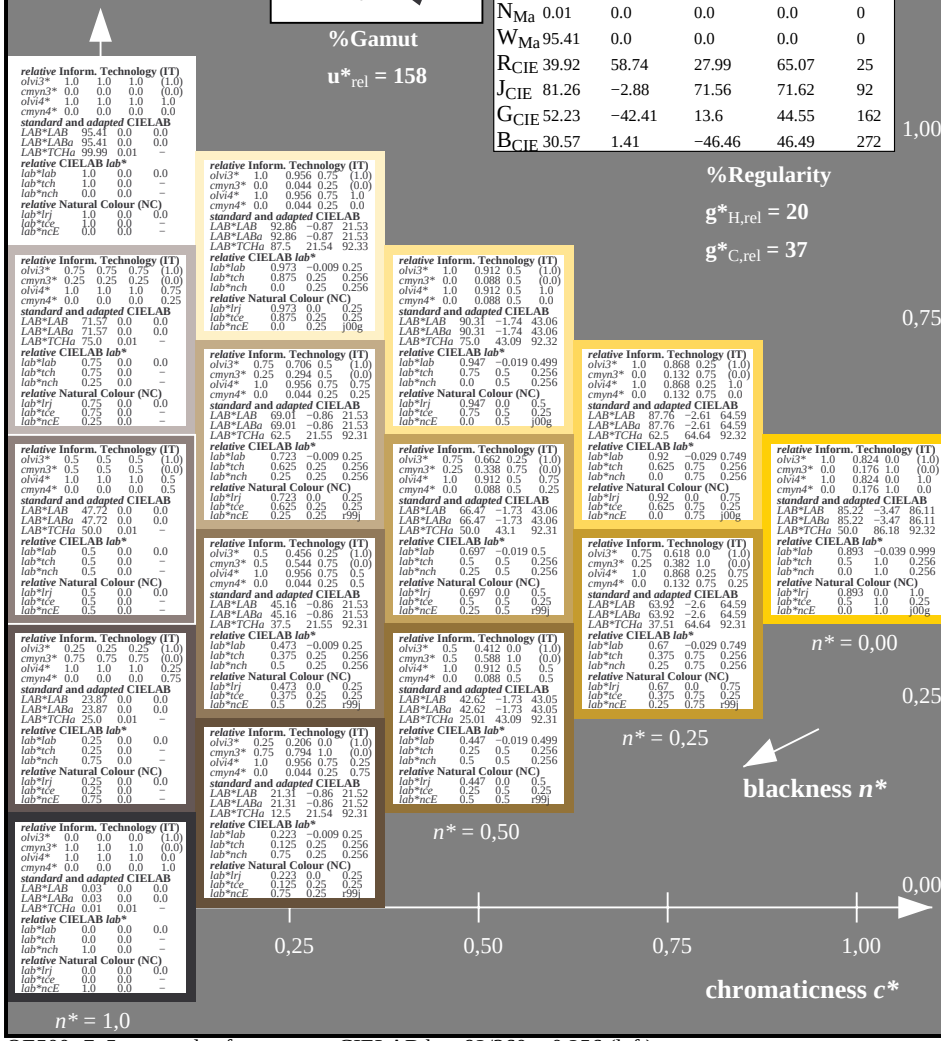
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

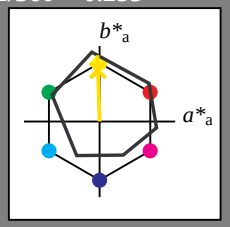
for hue $h^* = lab^*h = 92/360 = 0.255$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



triangle lightness t^*

%Gamut

u^*_{rel} = 93

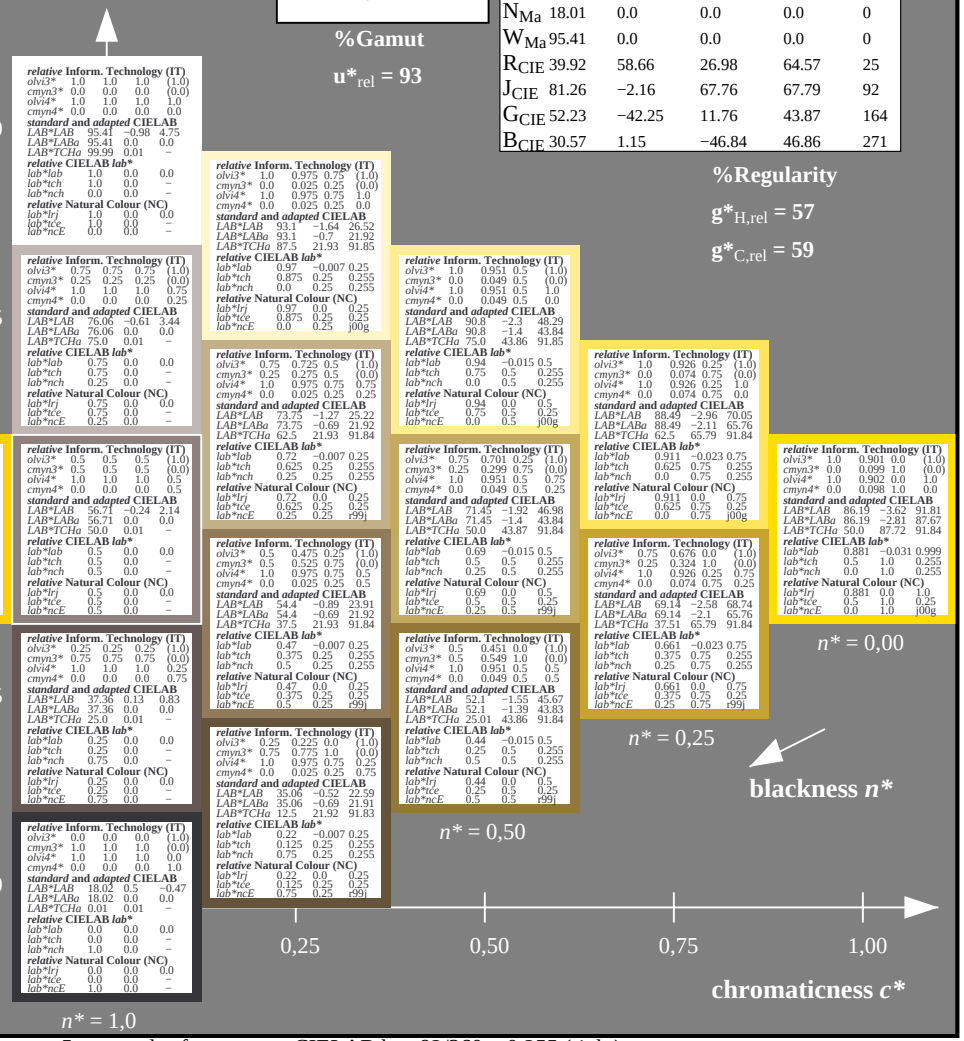
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

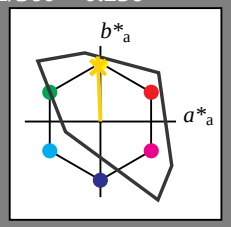


5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

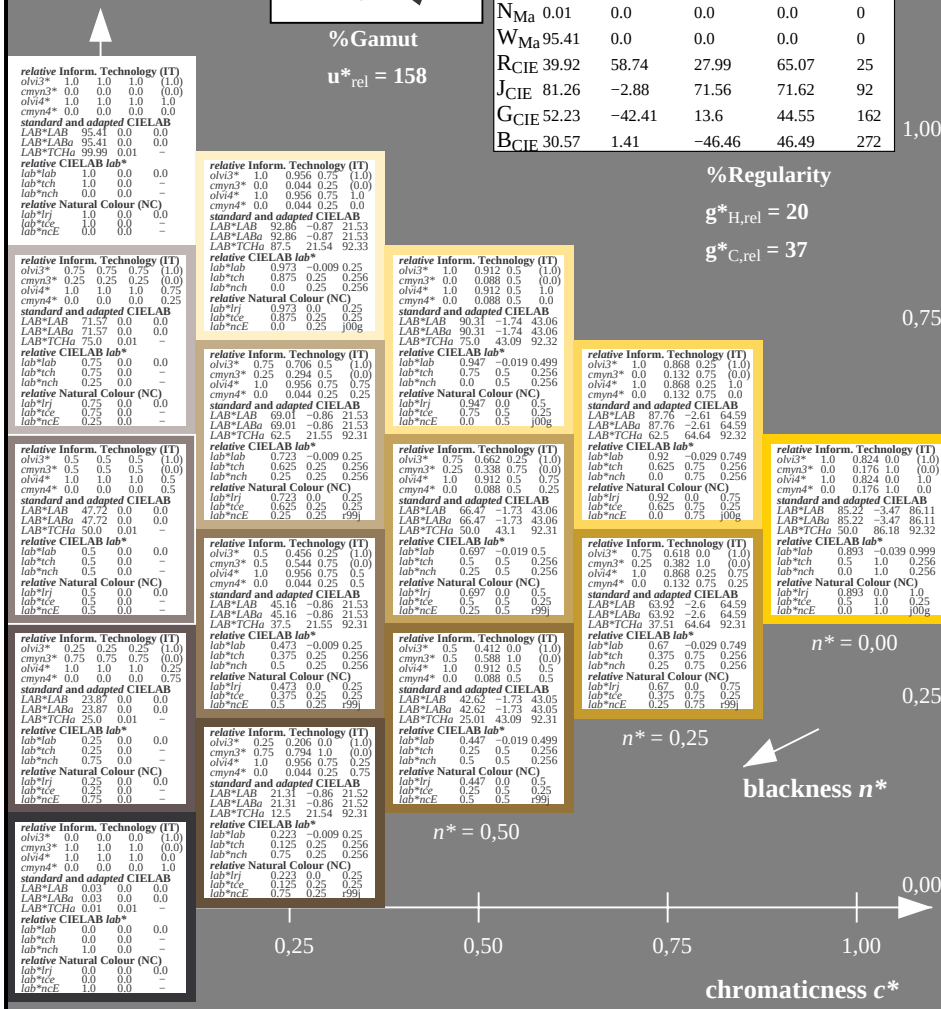
1,00

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

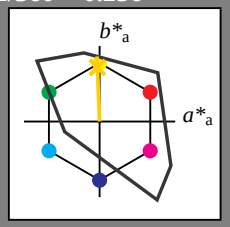
0,75



Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

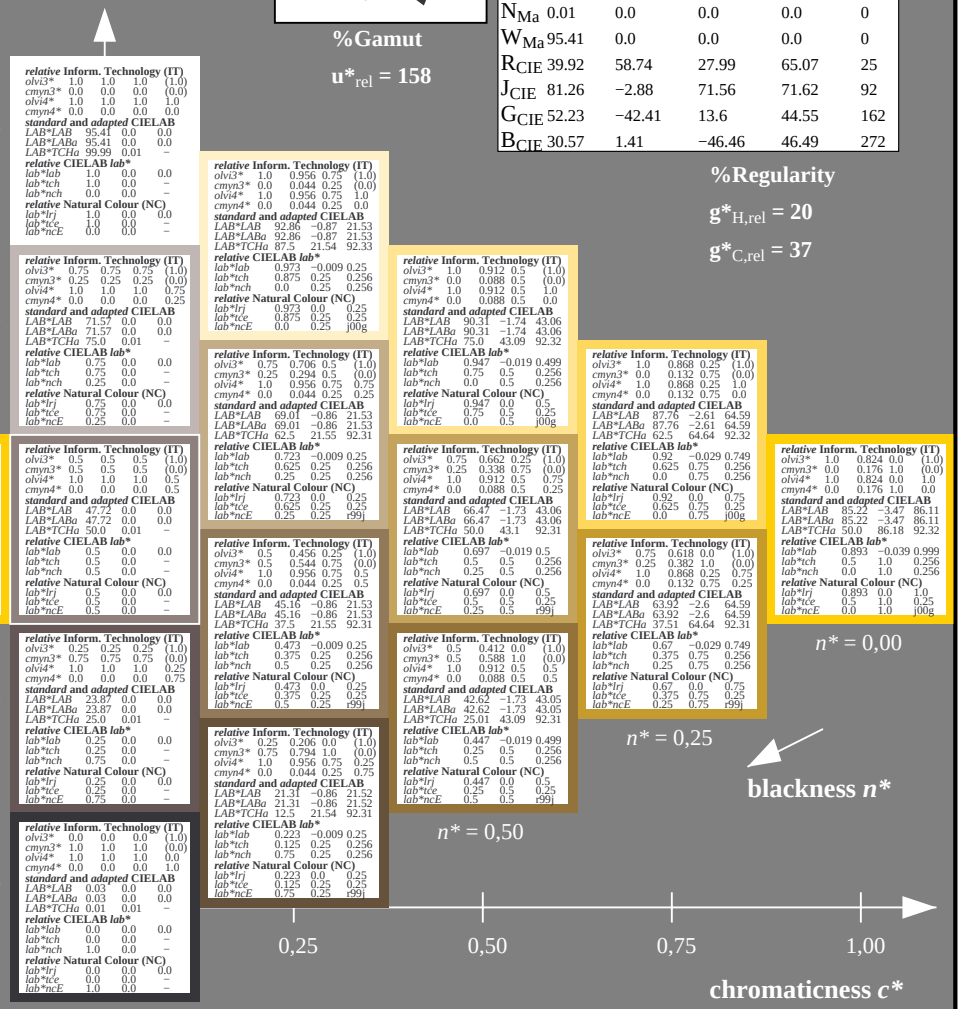
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

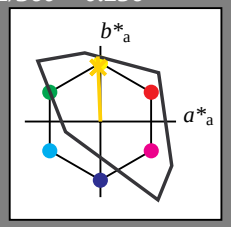
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

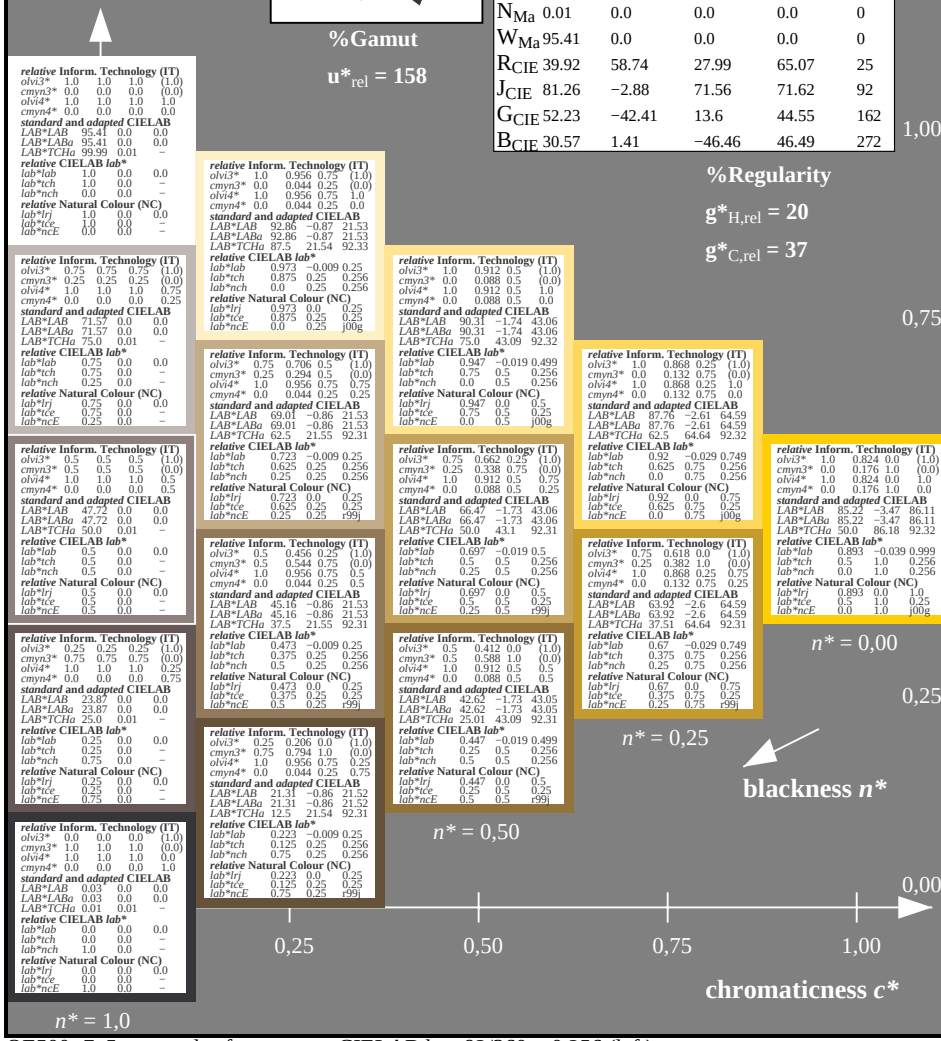
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

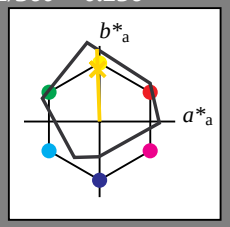
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

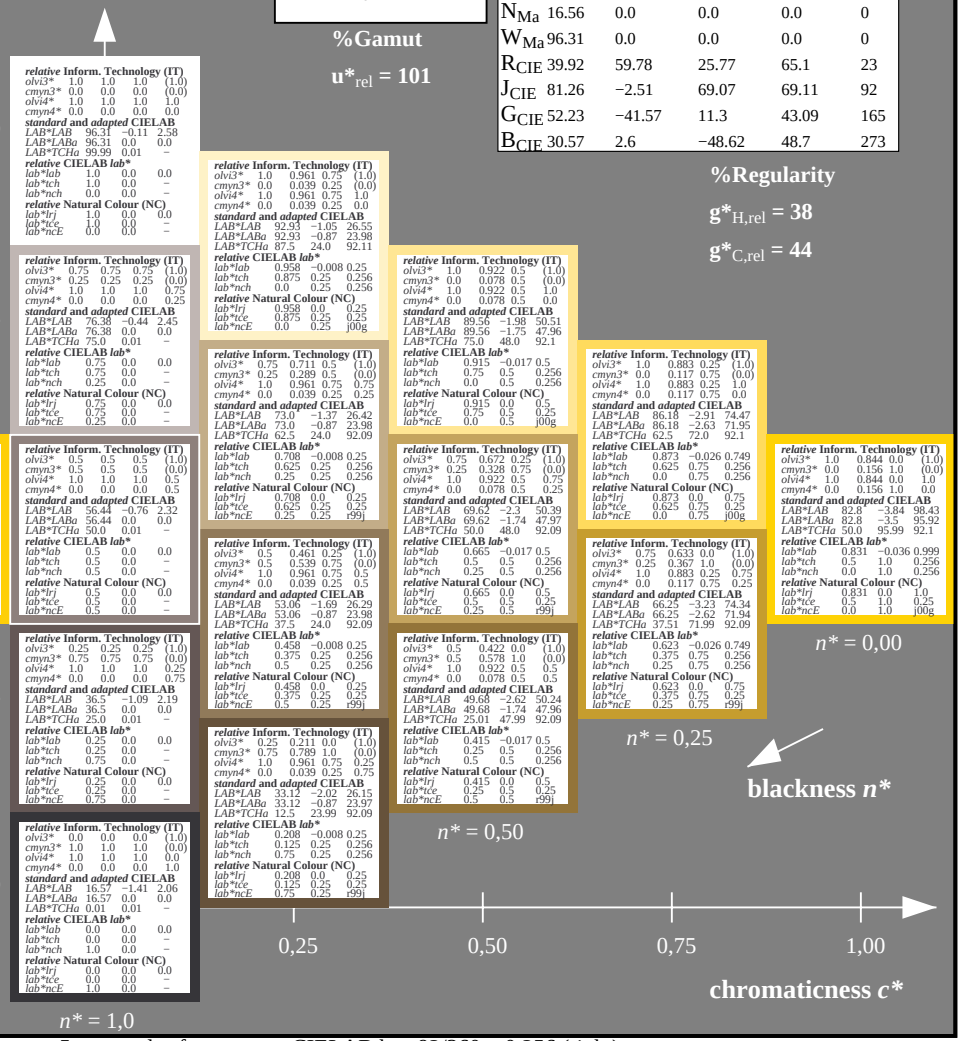
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



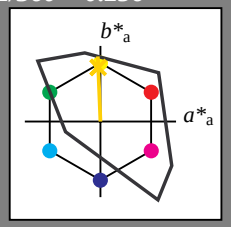
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

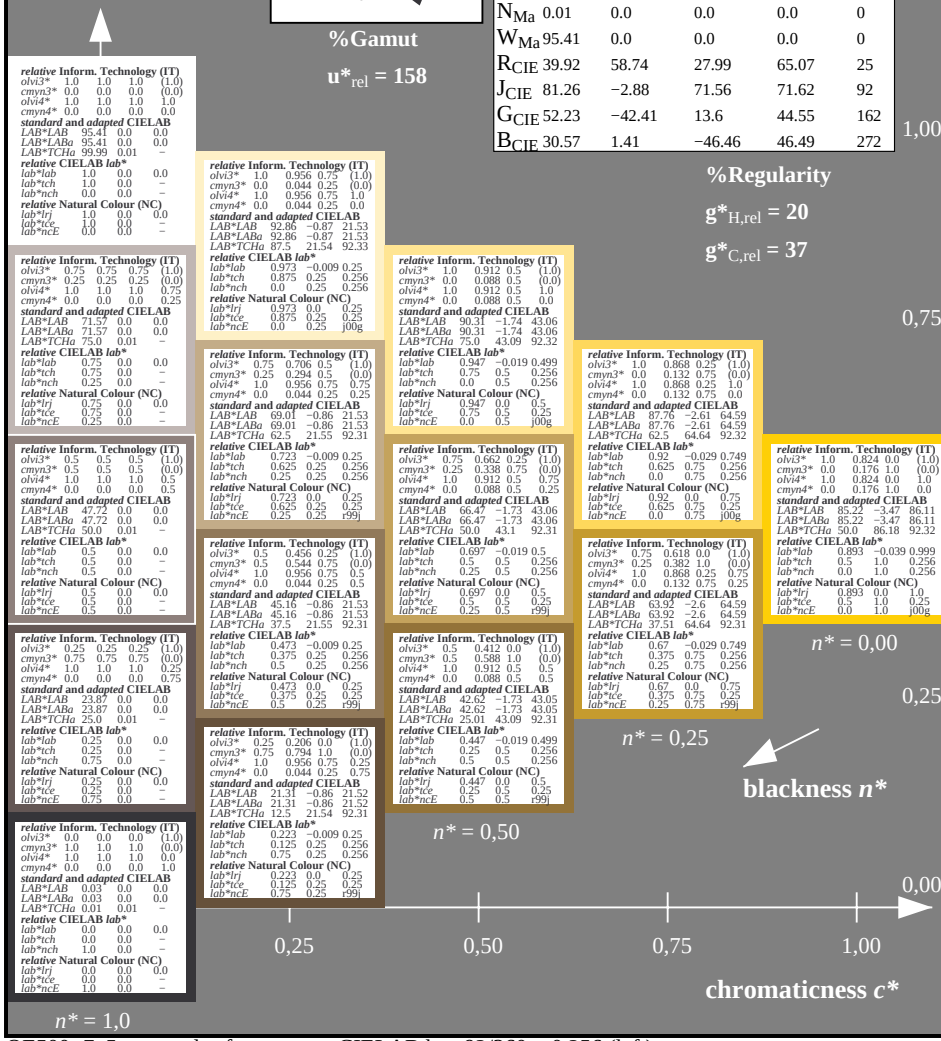
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

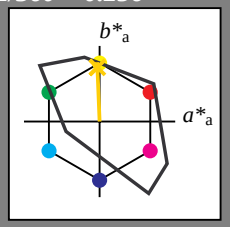


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

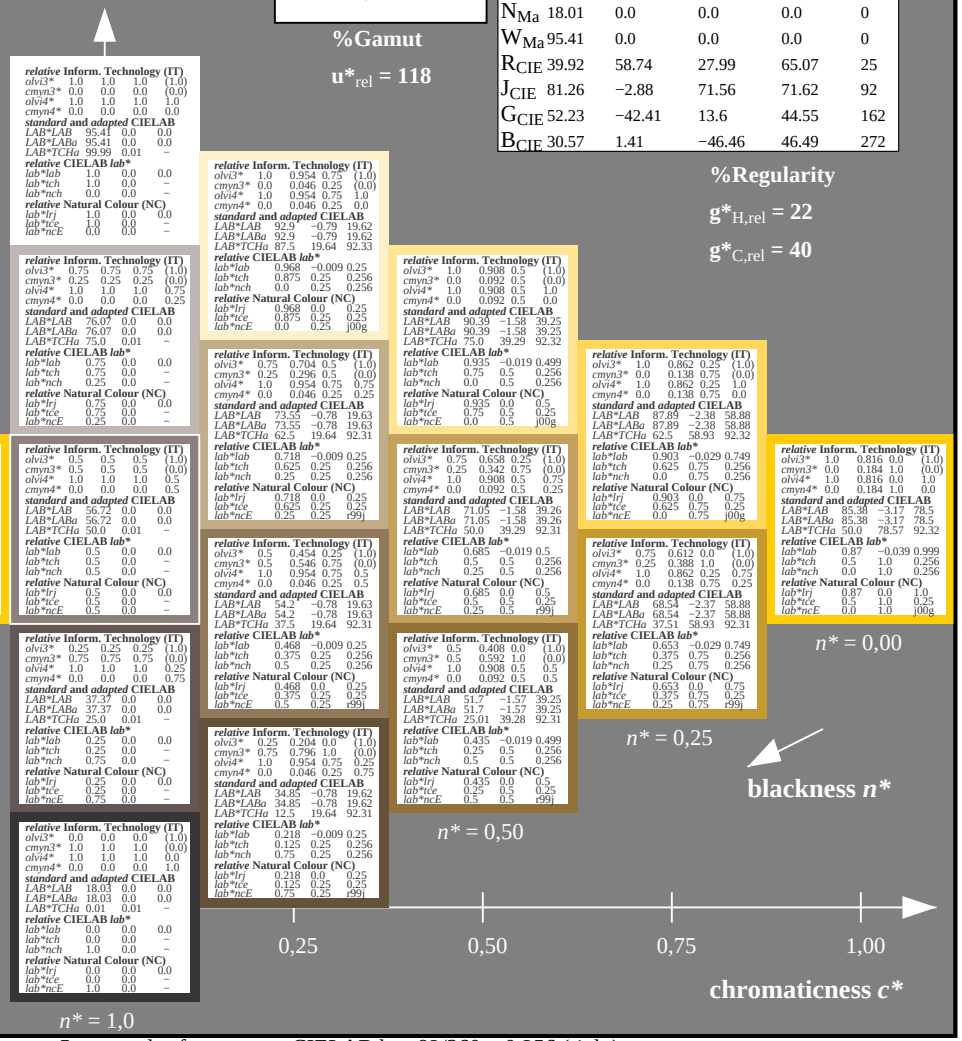
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

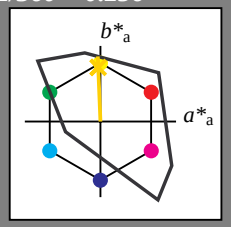
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

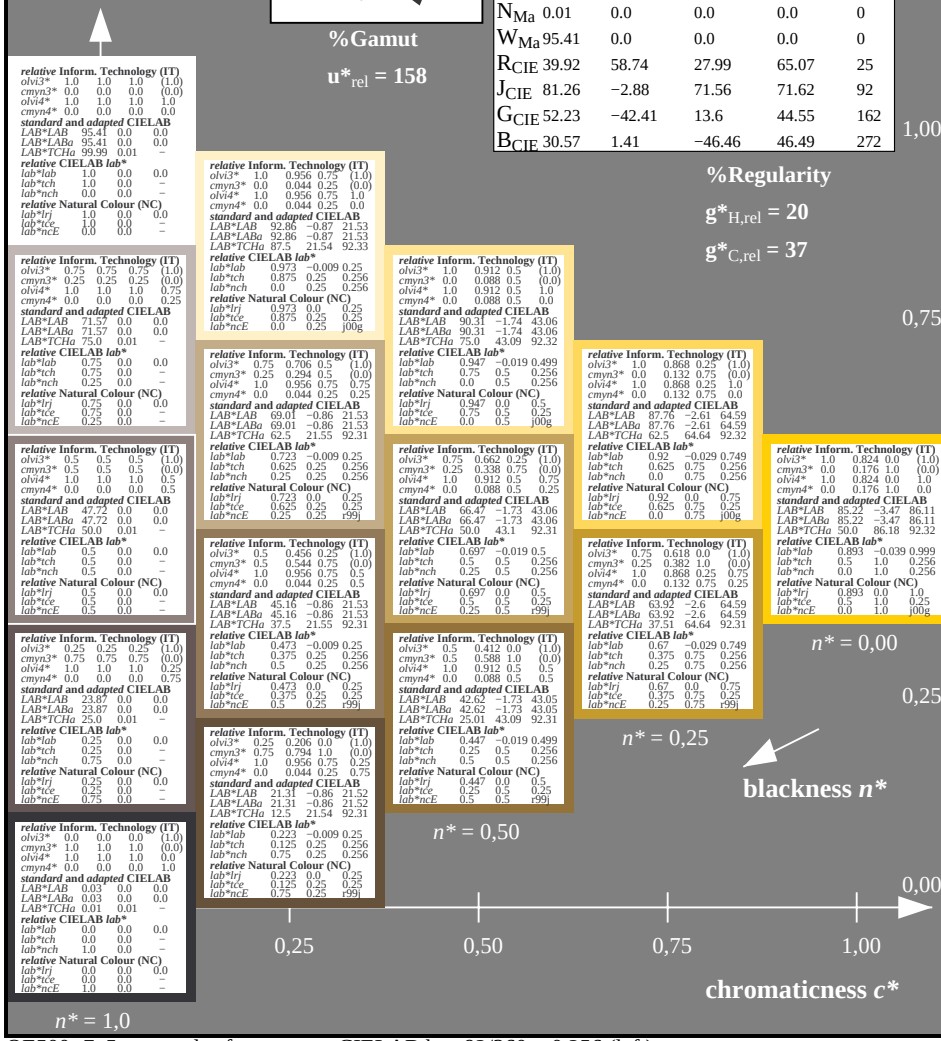
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

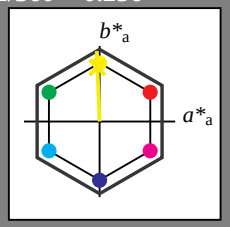
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

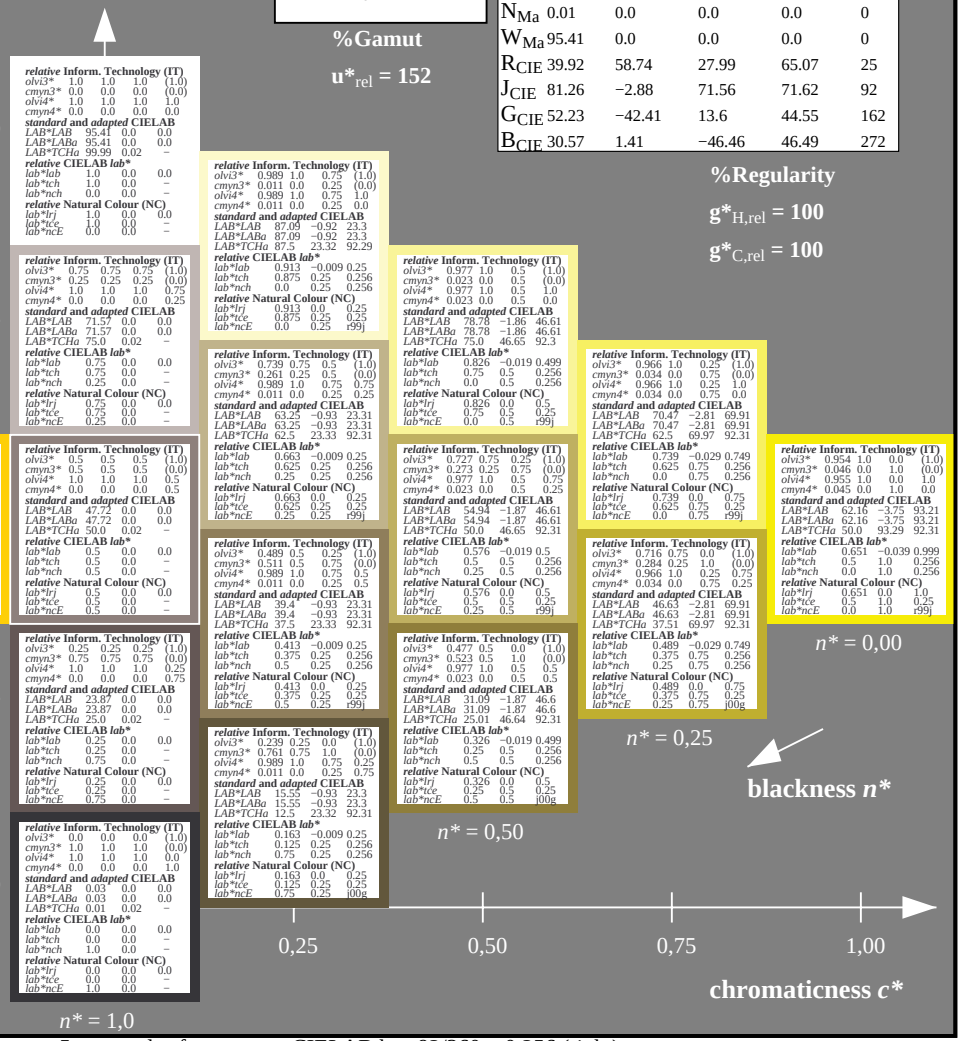
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



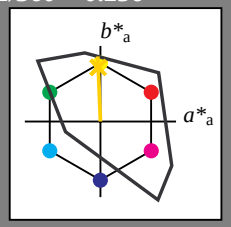
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

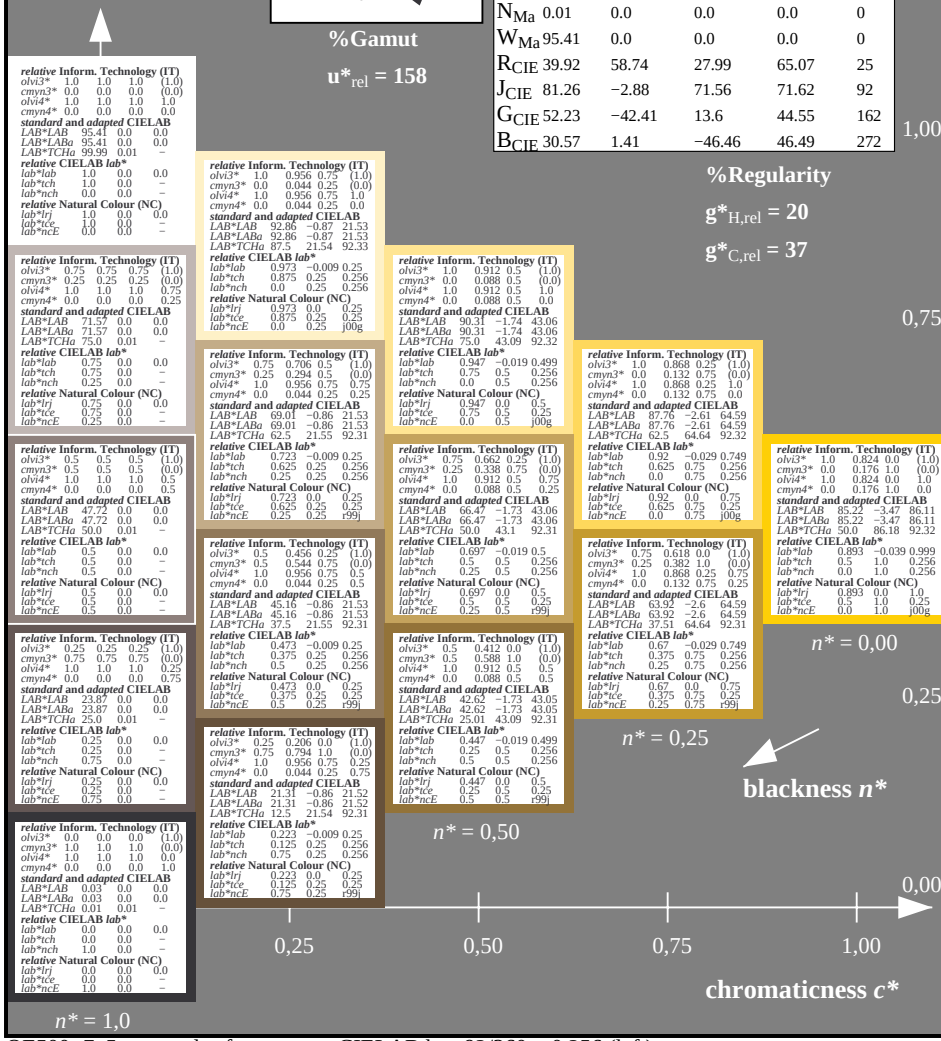
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



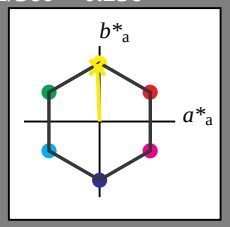
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

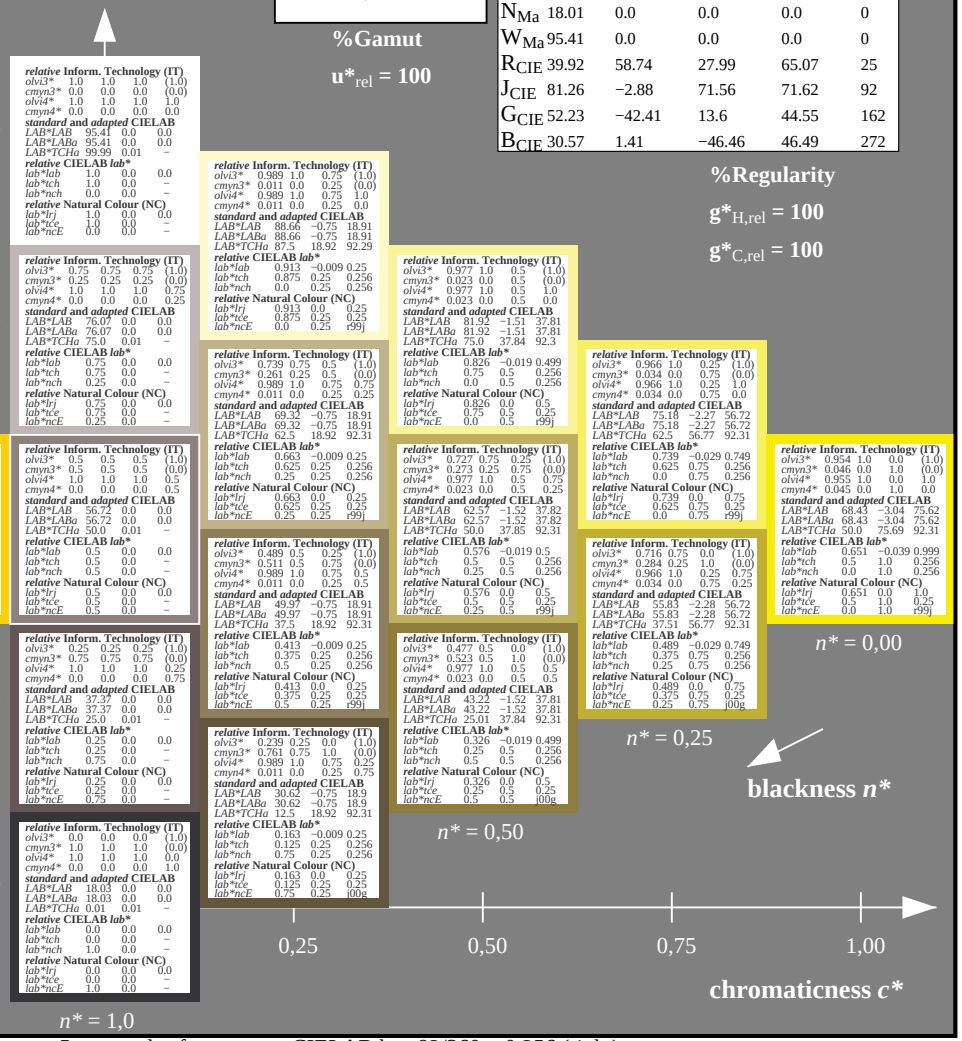
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

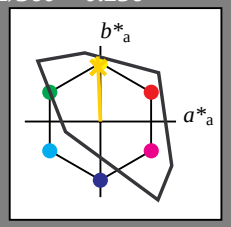
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

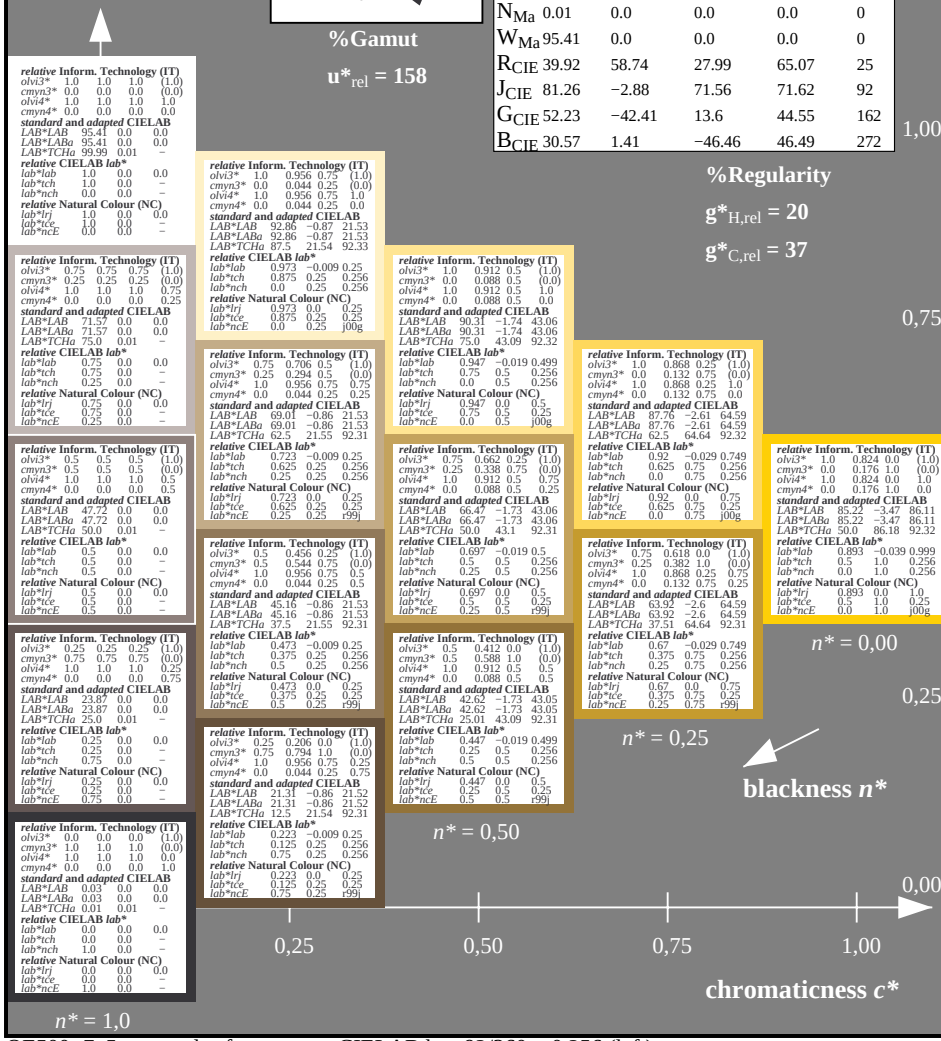
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

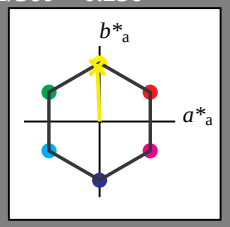
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

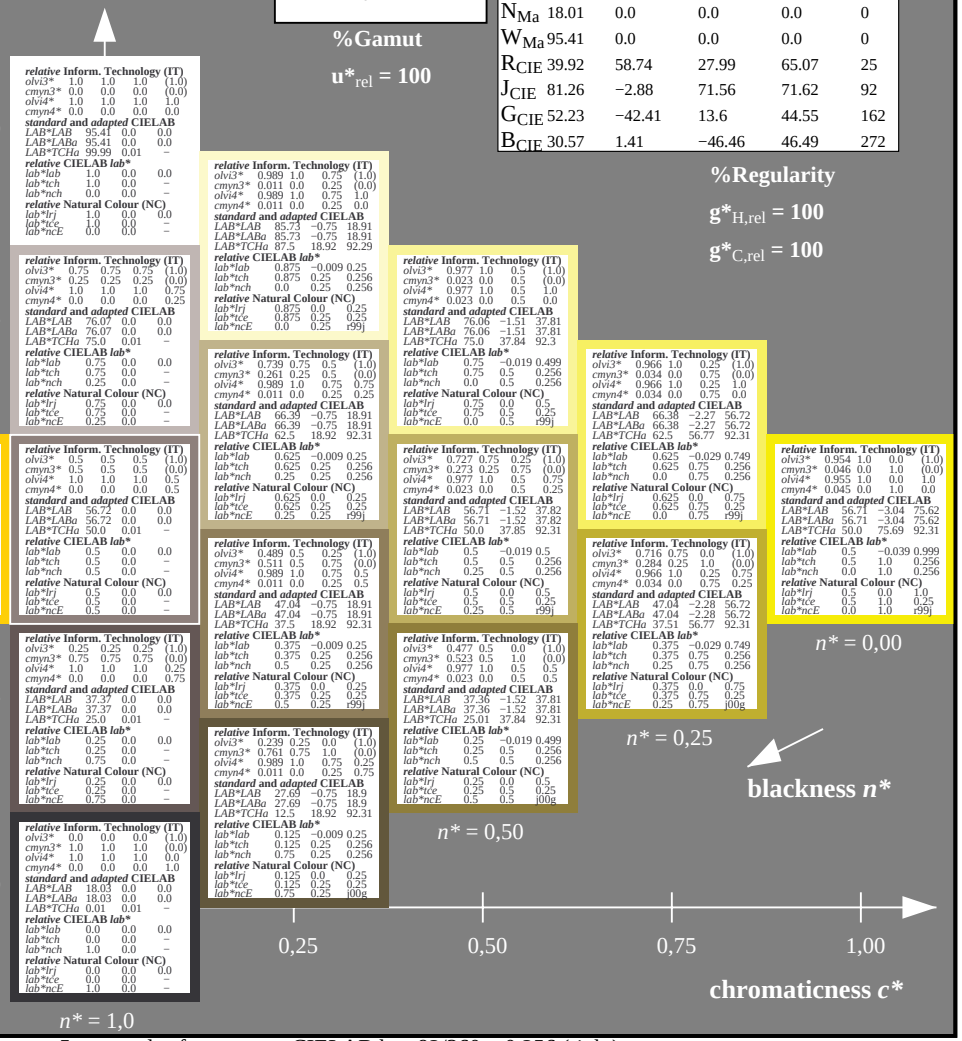
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS00

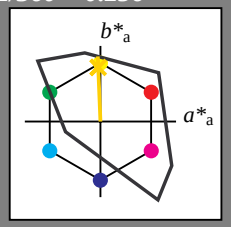
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0



%Gamut

$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

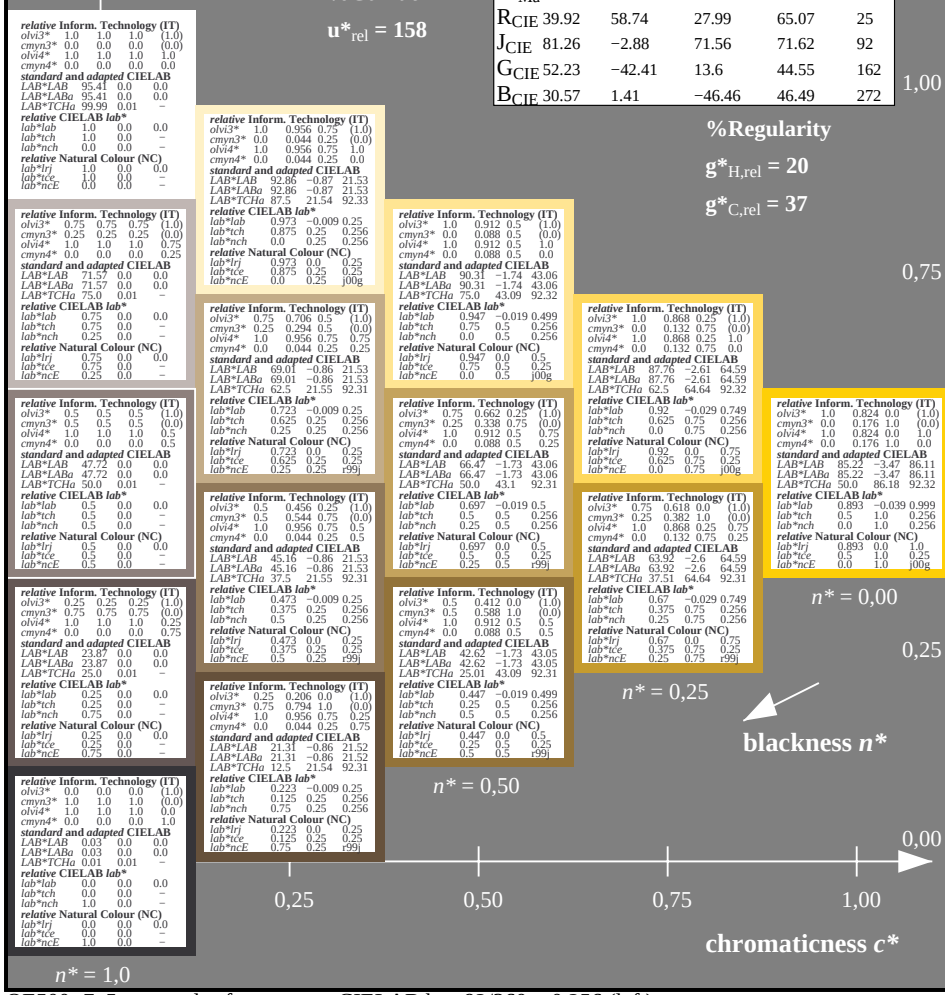
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS70

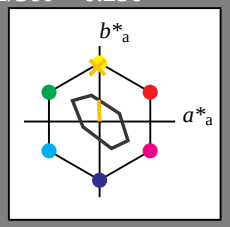
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



%Gamut

$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

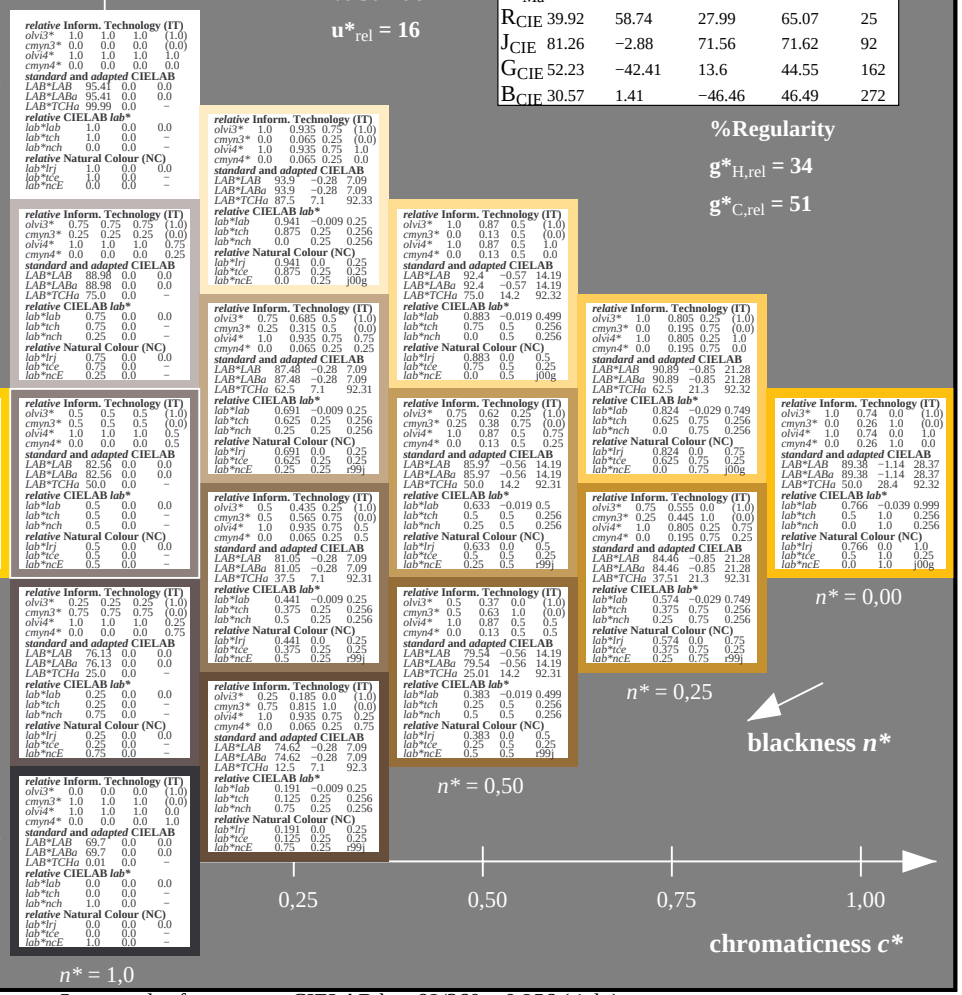
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

triangle lightness t^*



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

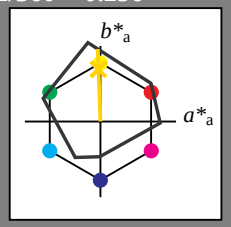
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

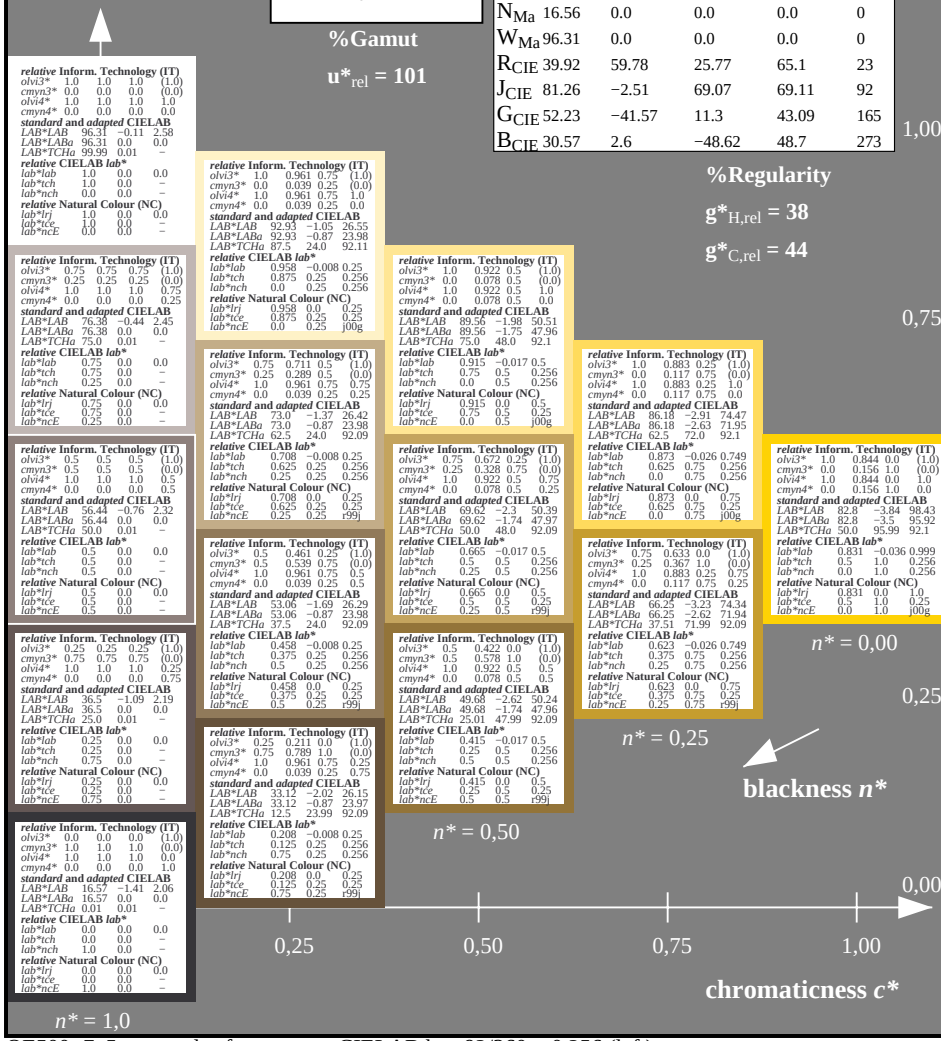
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



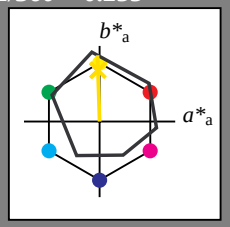
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

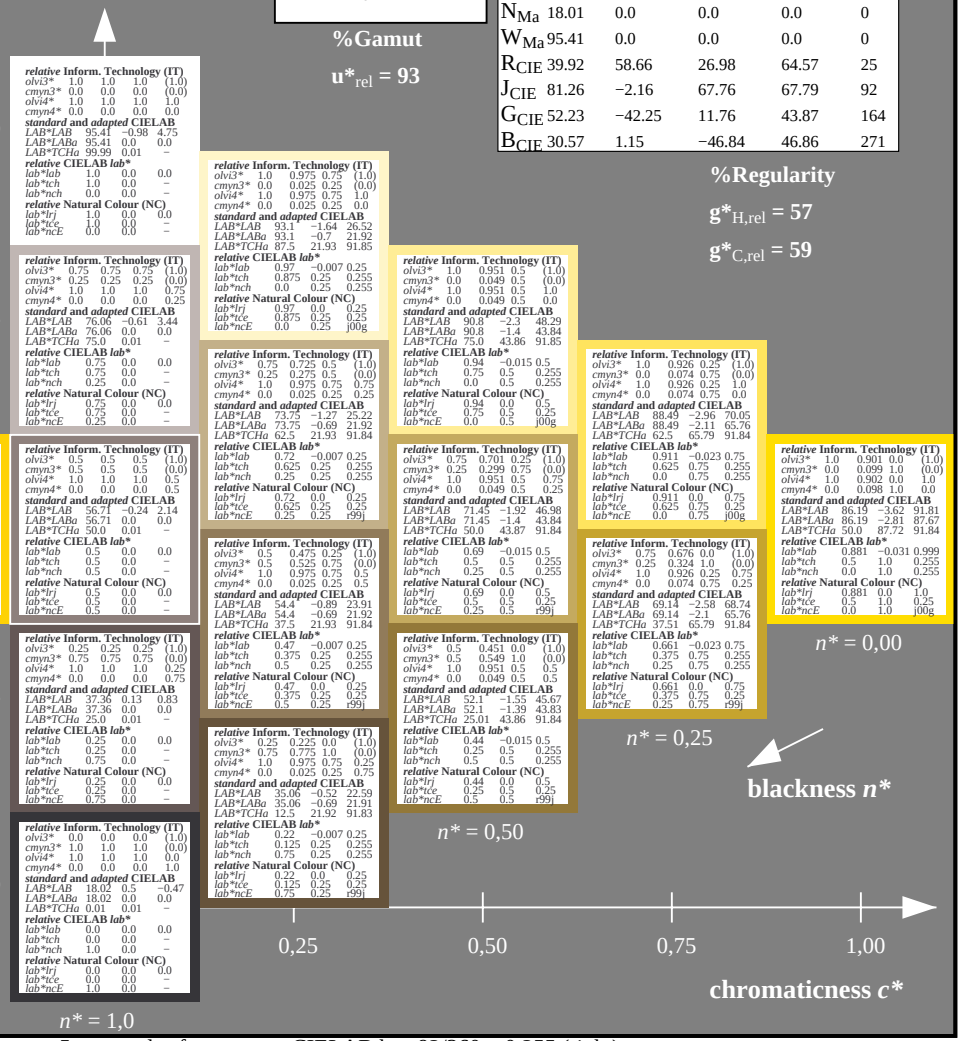
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



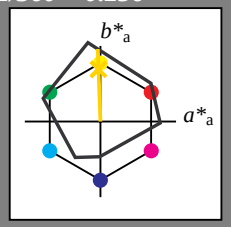
5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

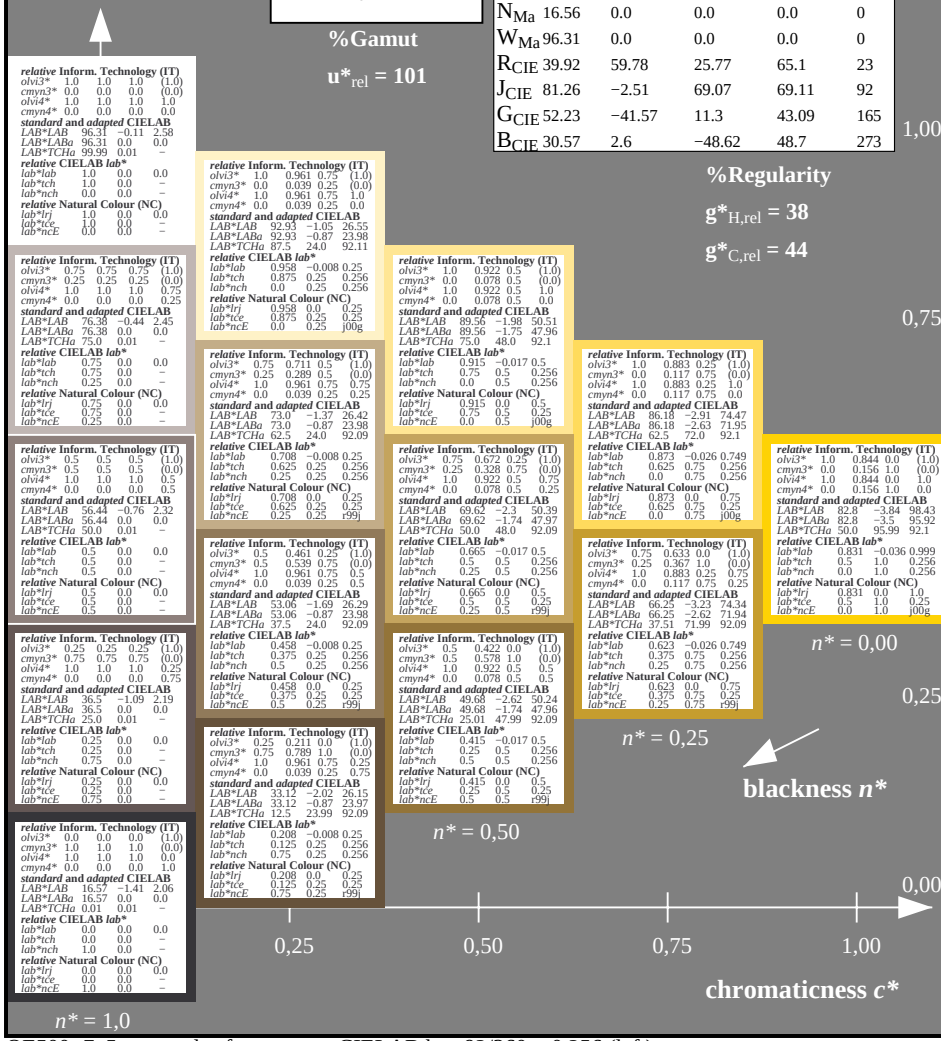
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



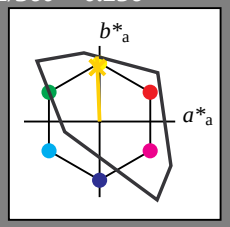
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

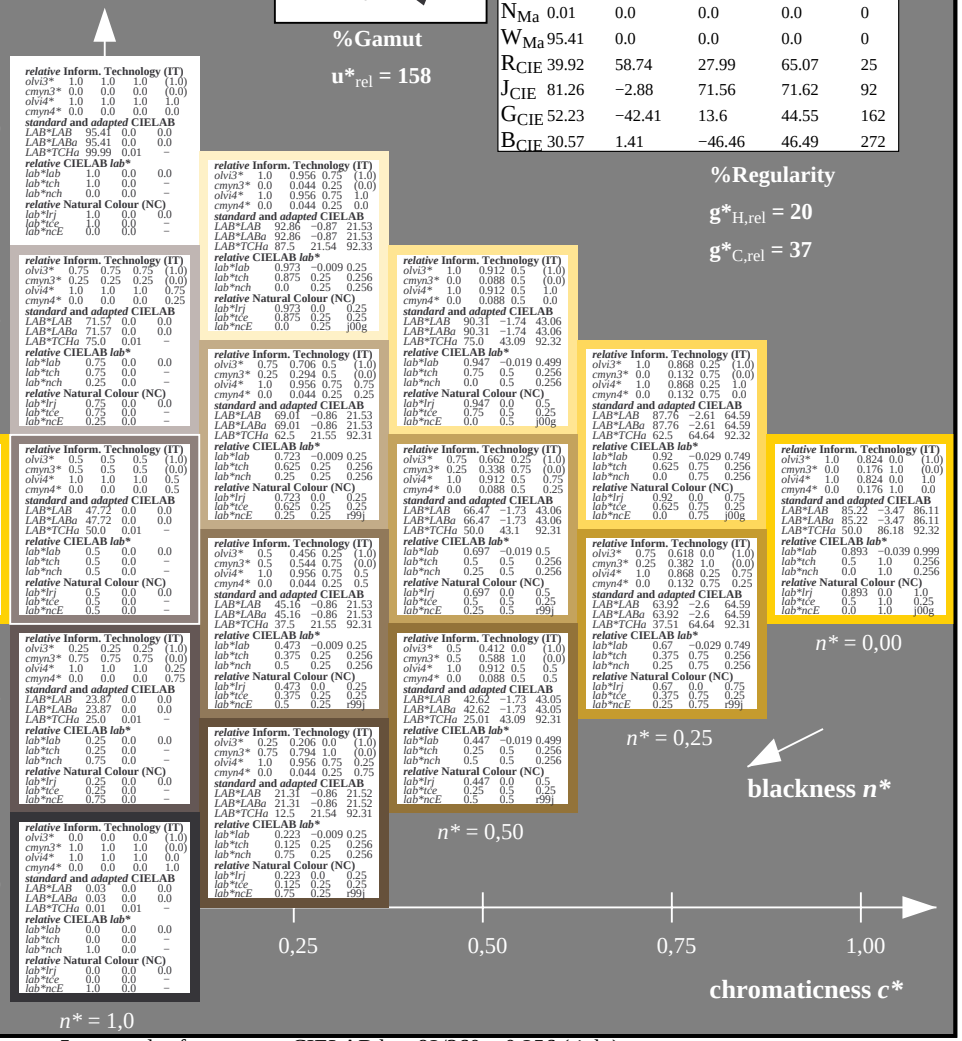
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



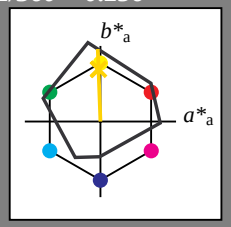
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

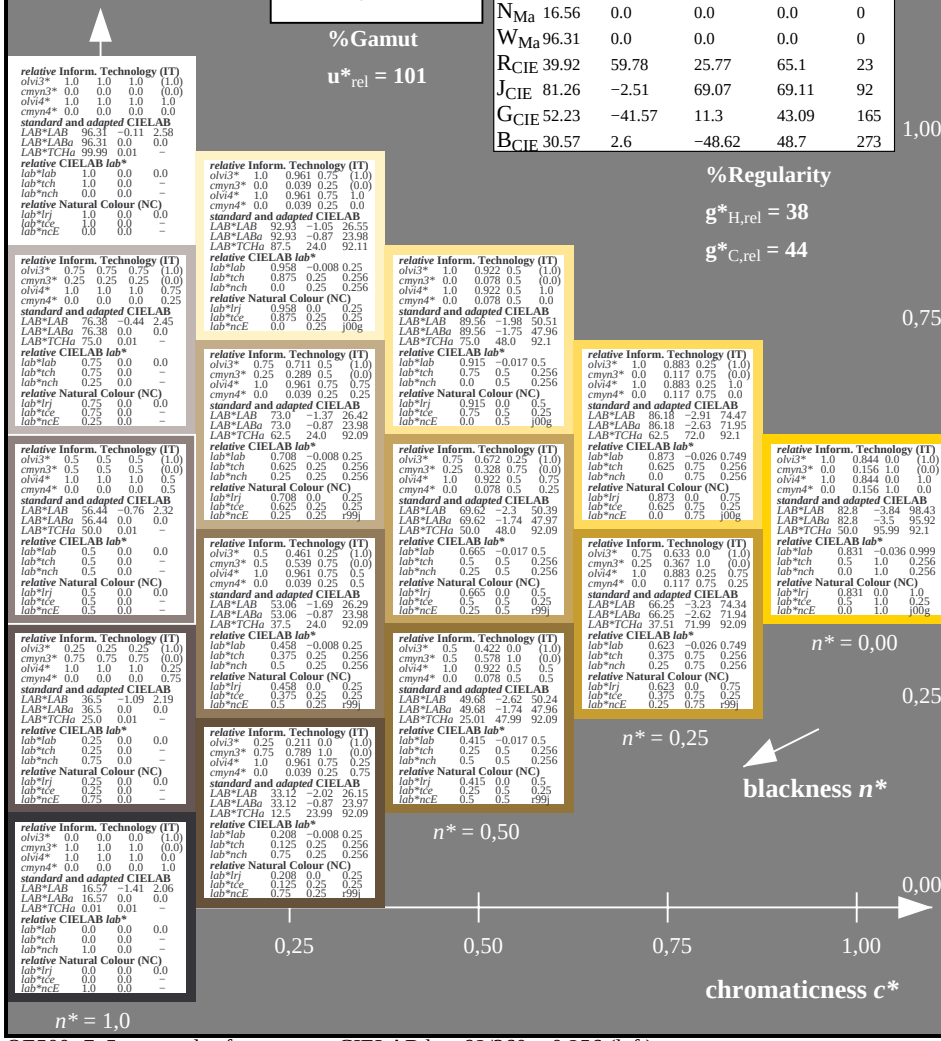
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



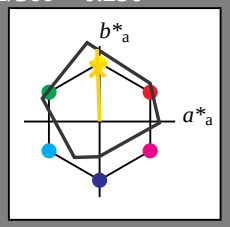
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

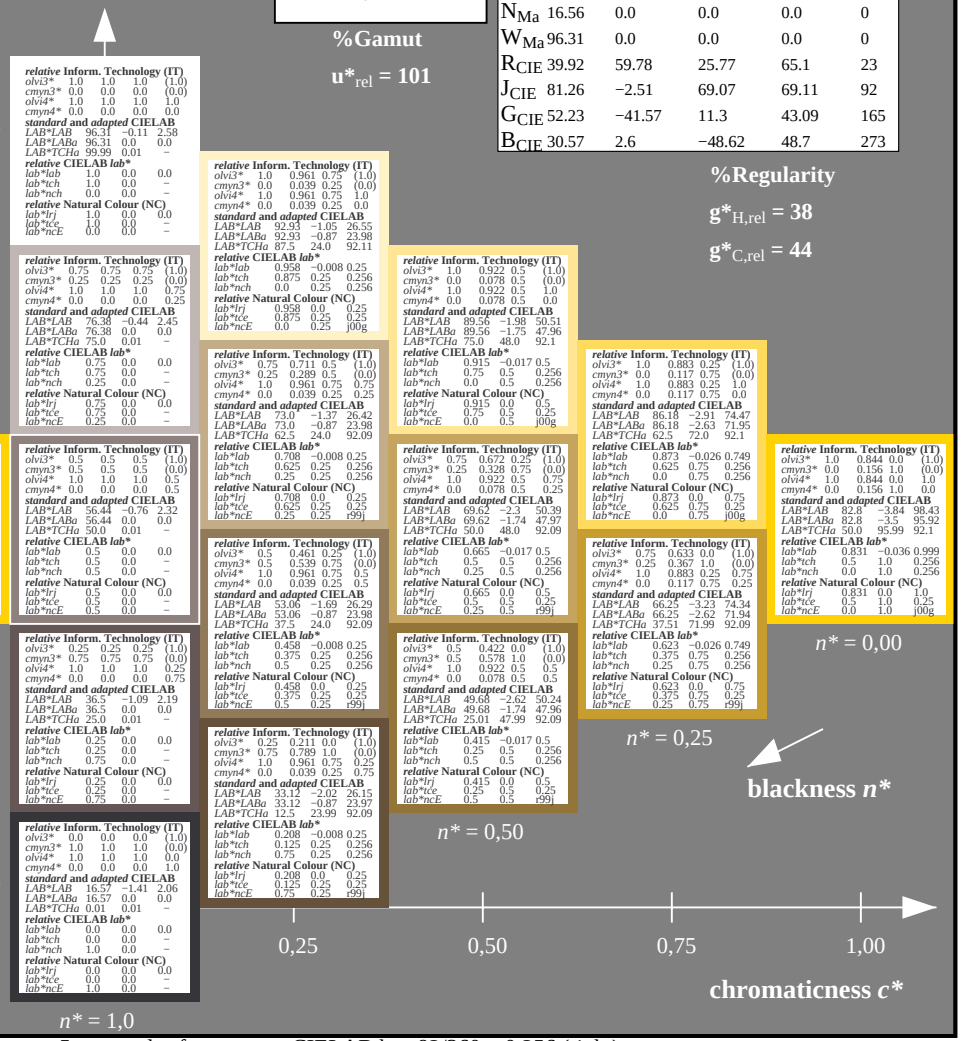
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



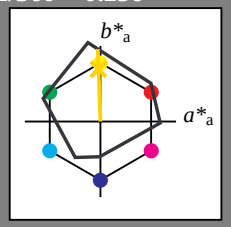
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

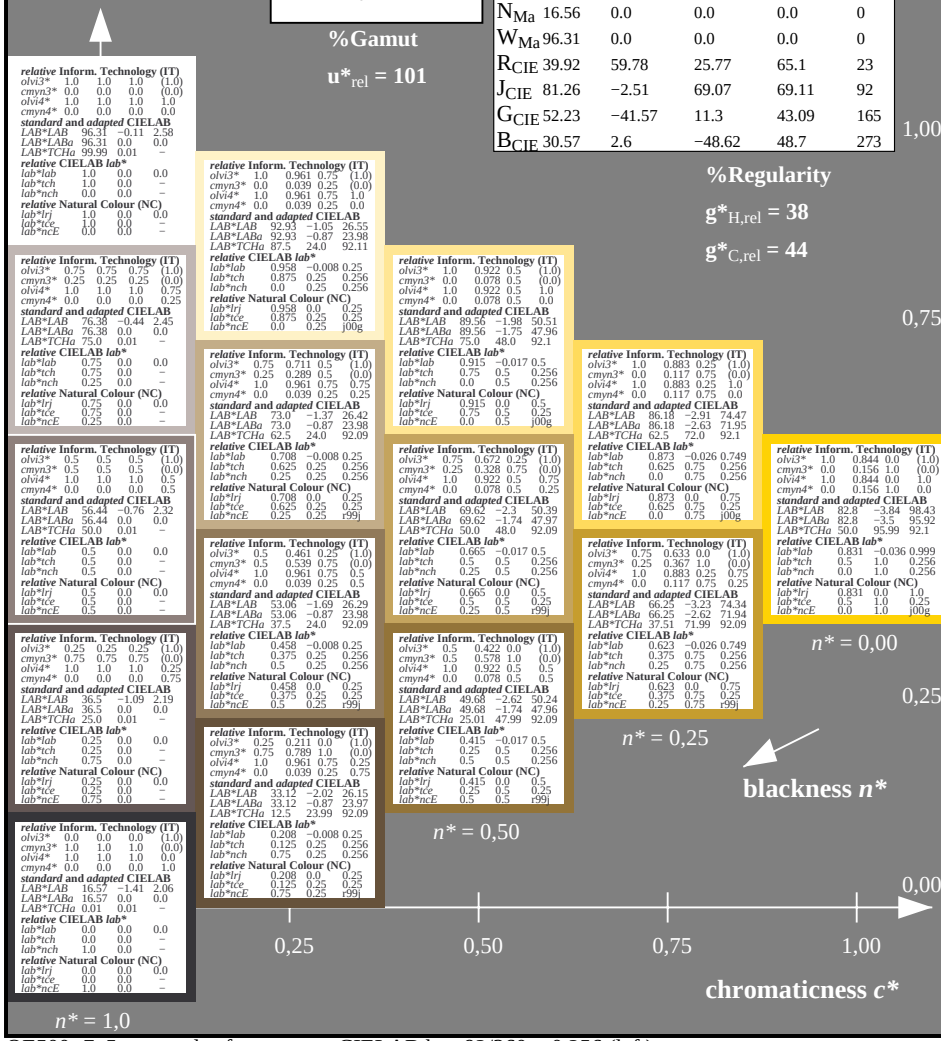
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



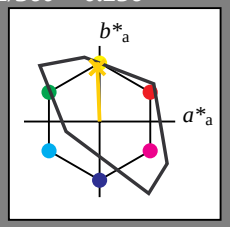
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

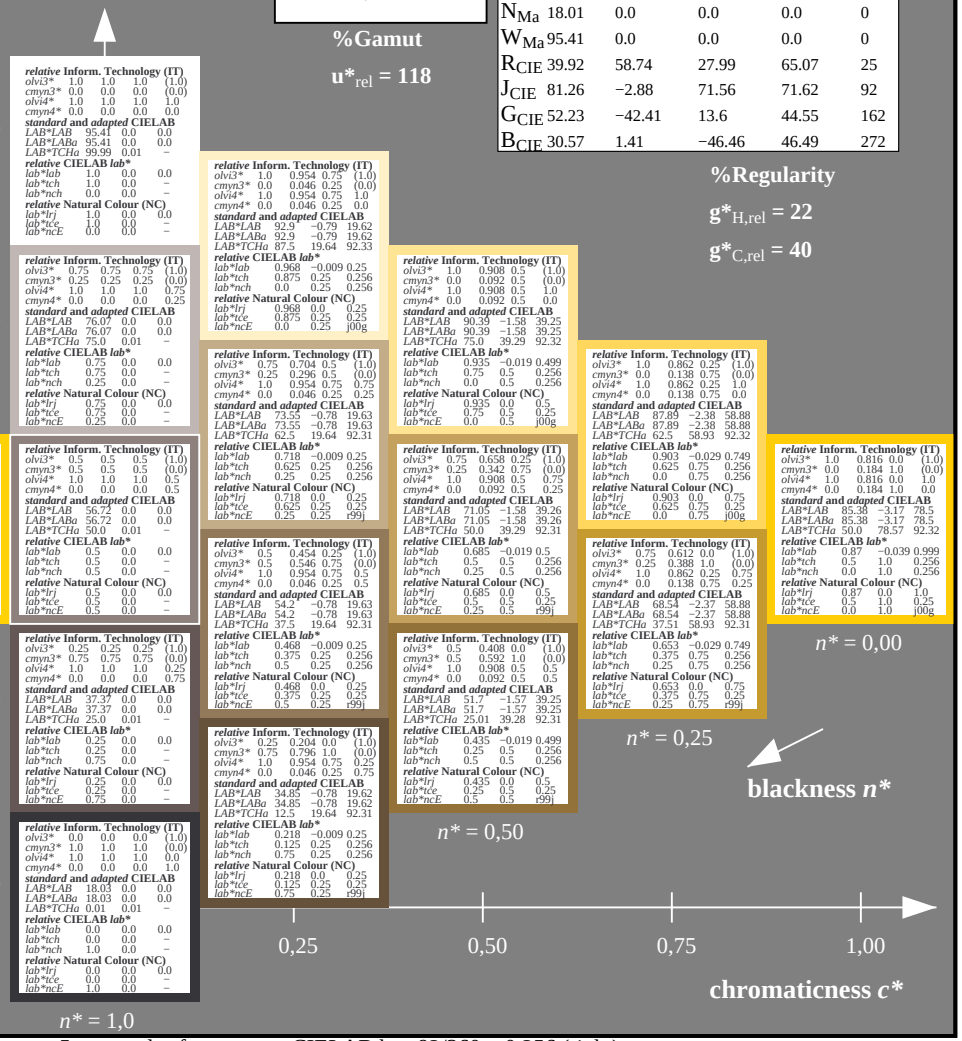
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



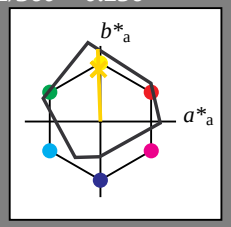
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

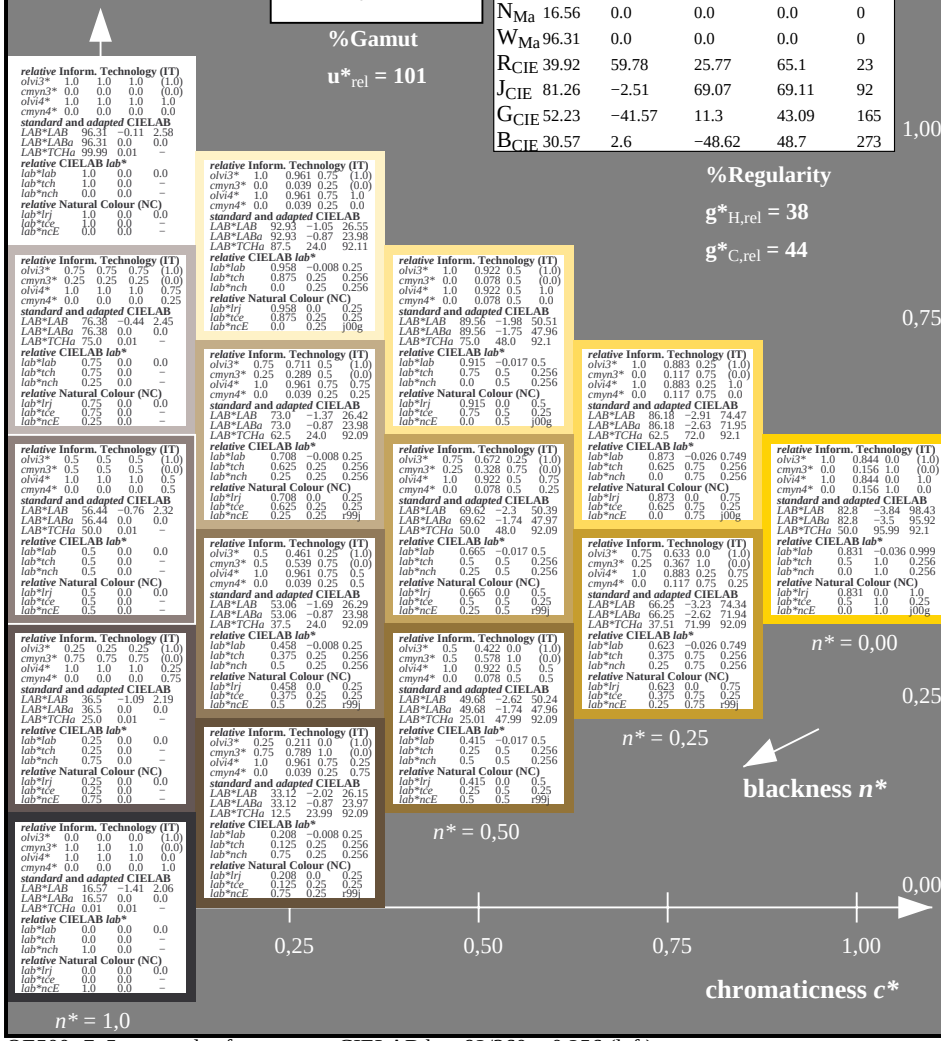
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



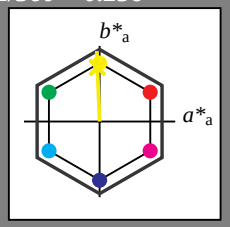
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

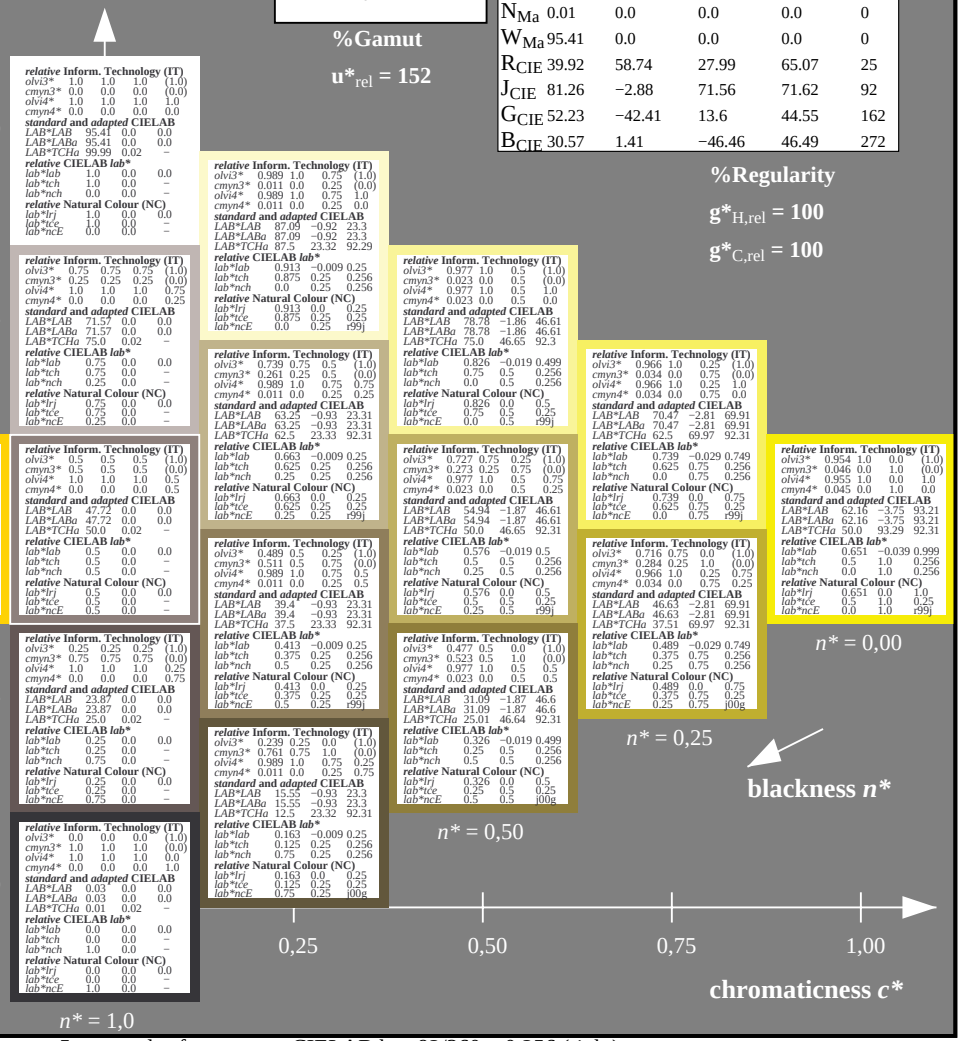
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



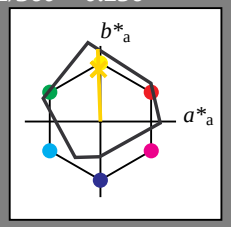
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
lab^*tch and lab^*nch

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

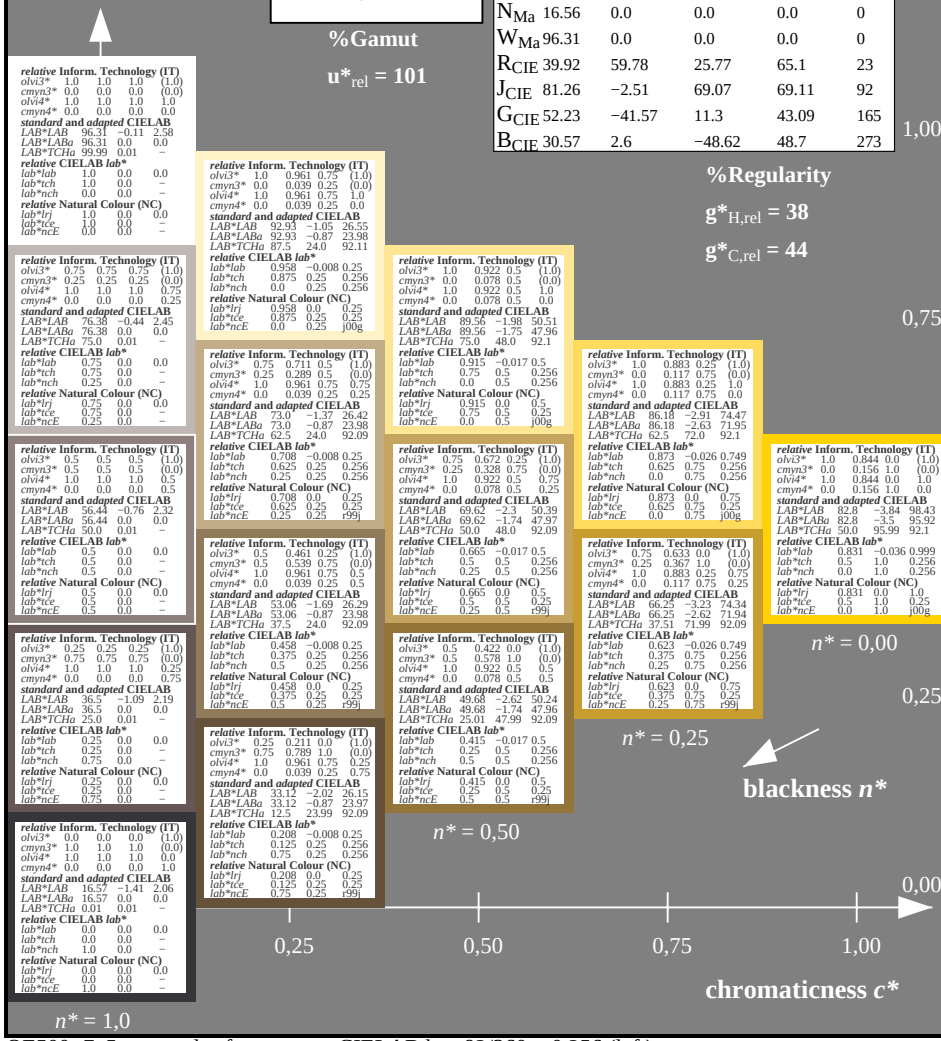
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



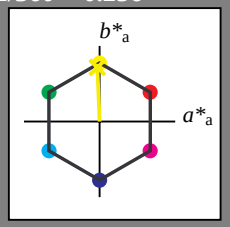
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab^*tch and lab^*nch

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

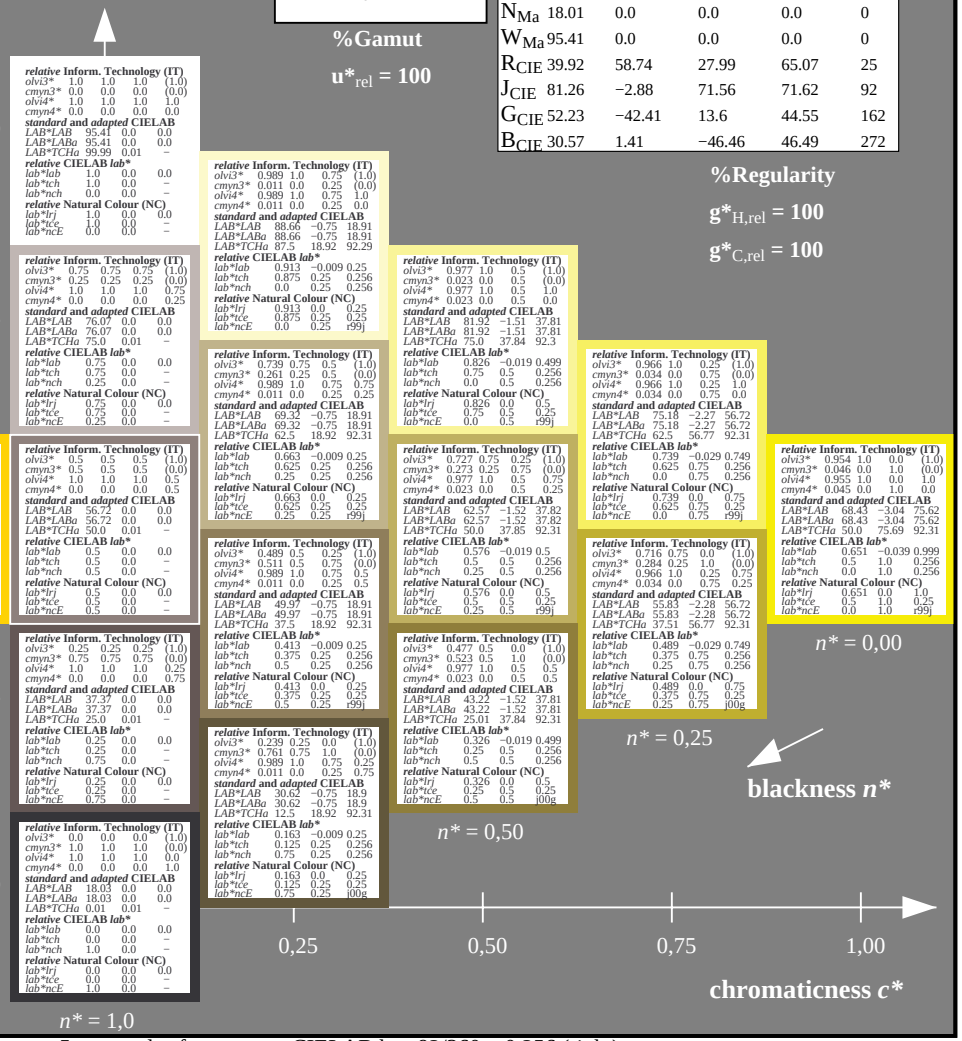
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



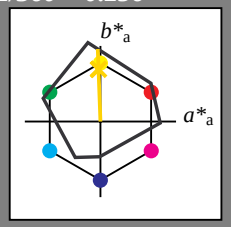
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

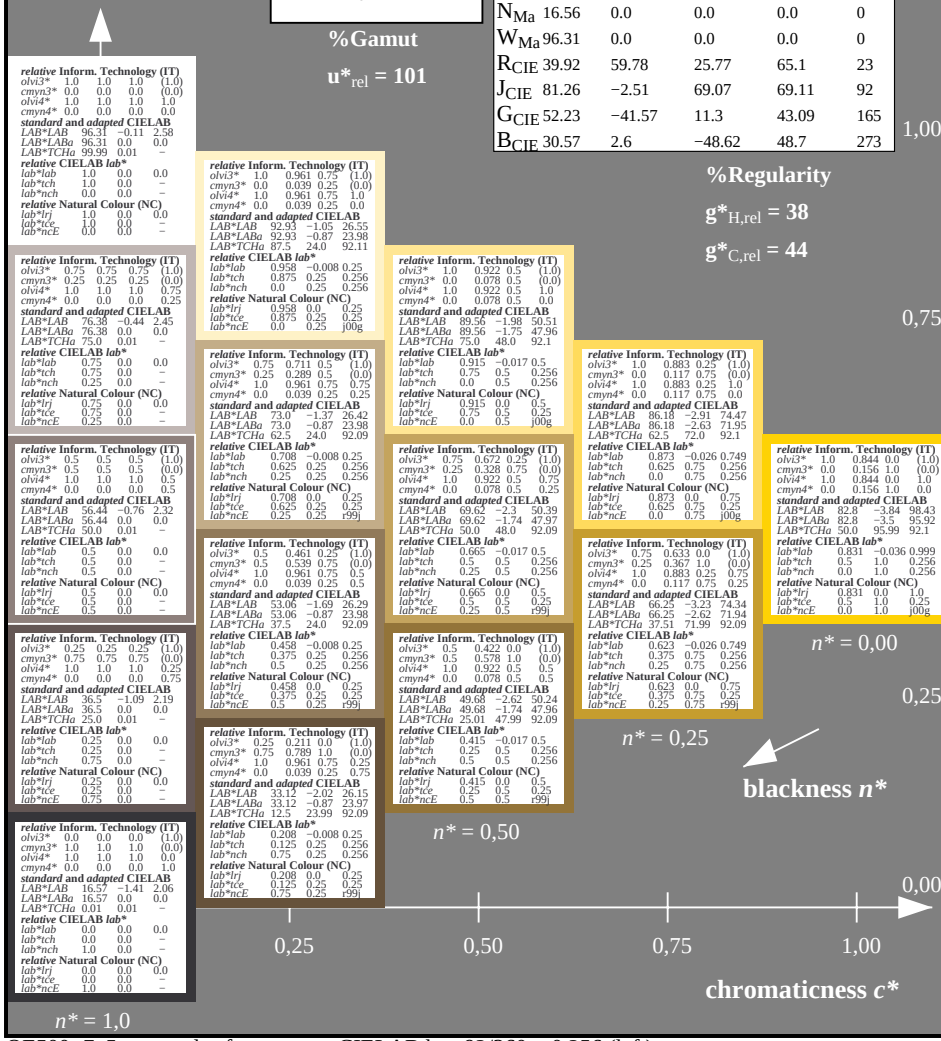
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



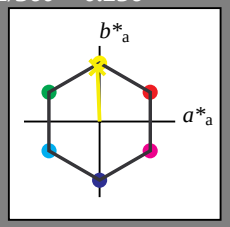
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

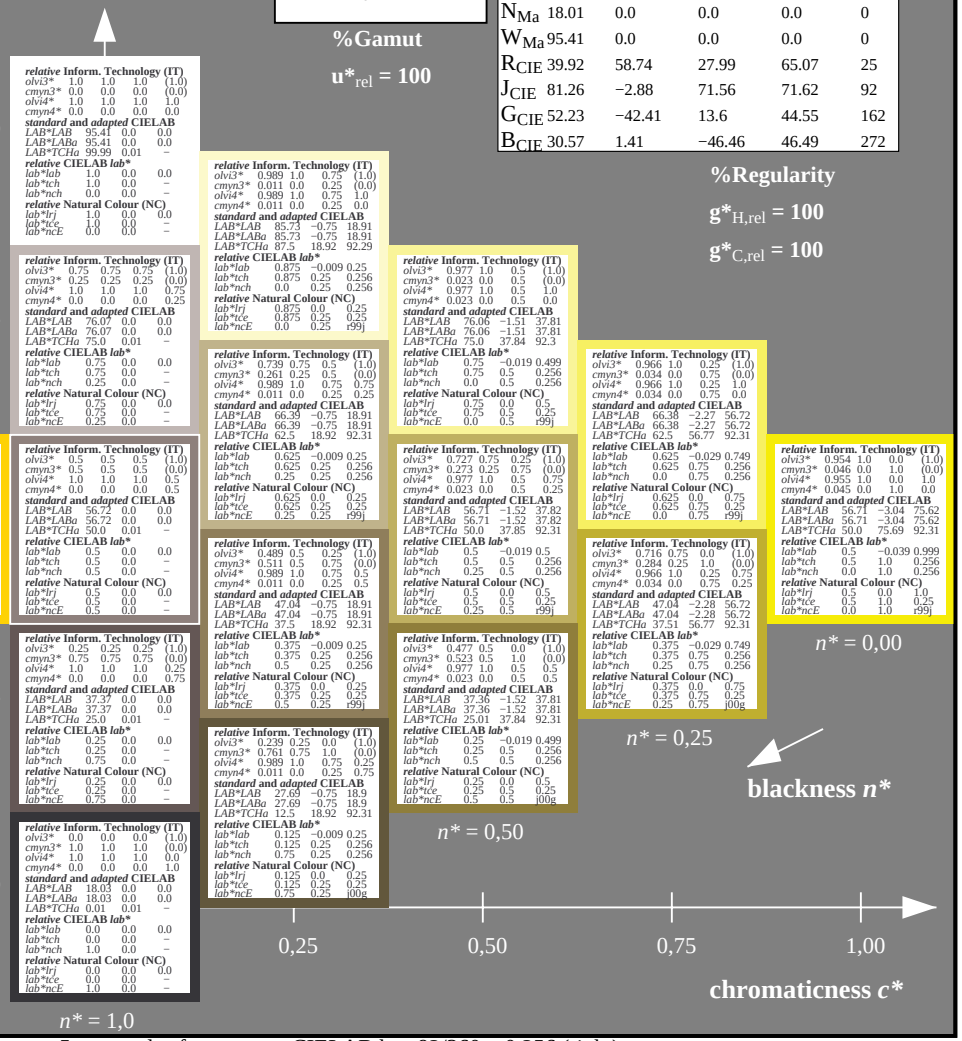
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



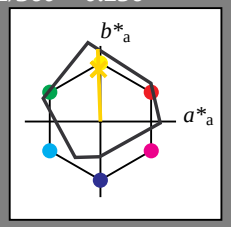
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

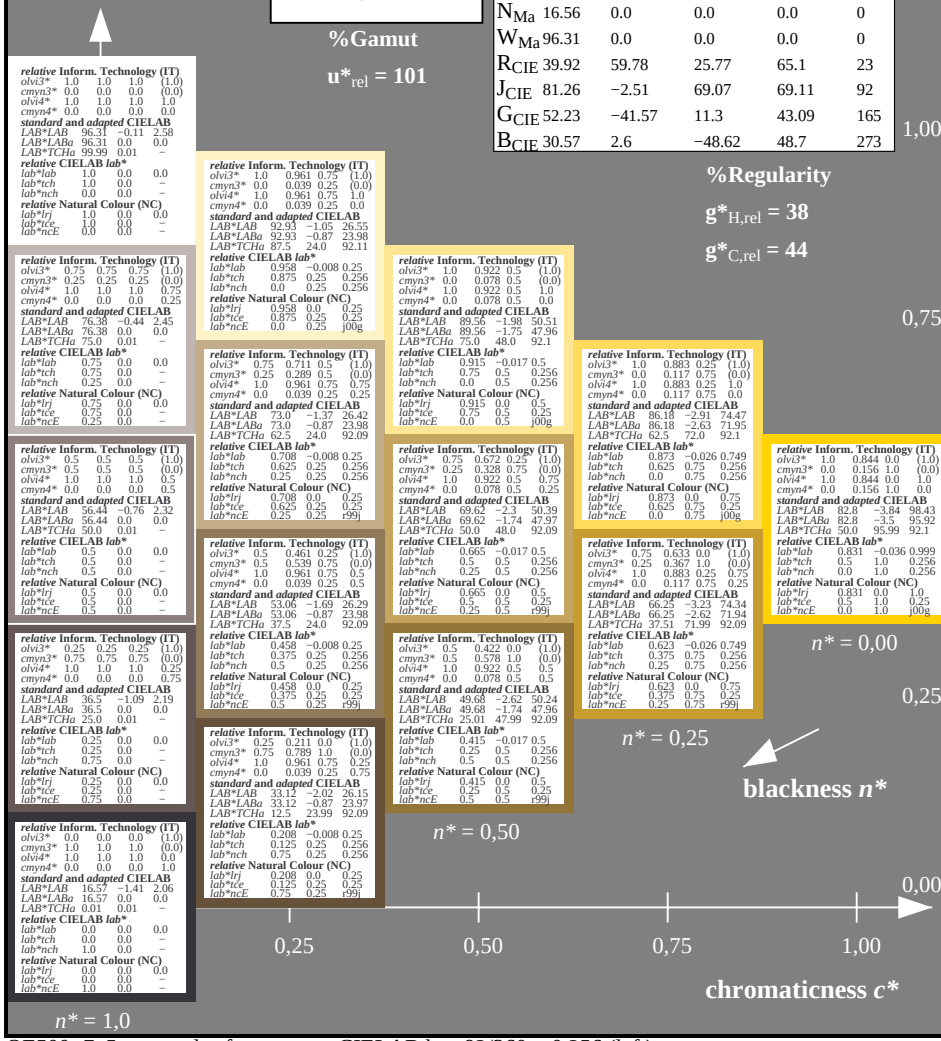
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



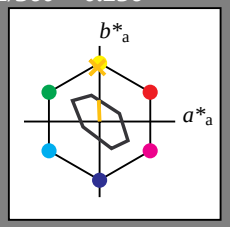
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

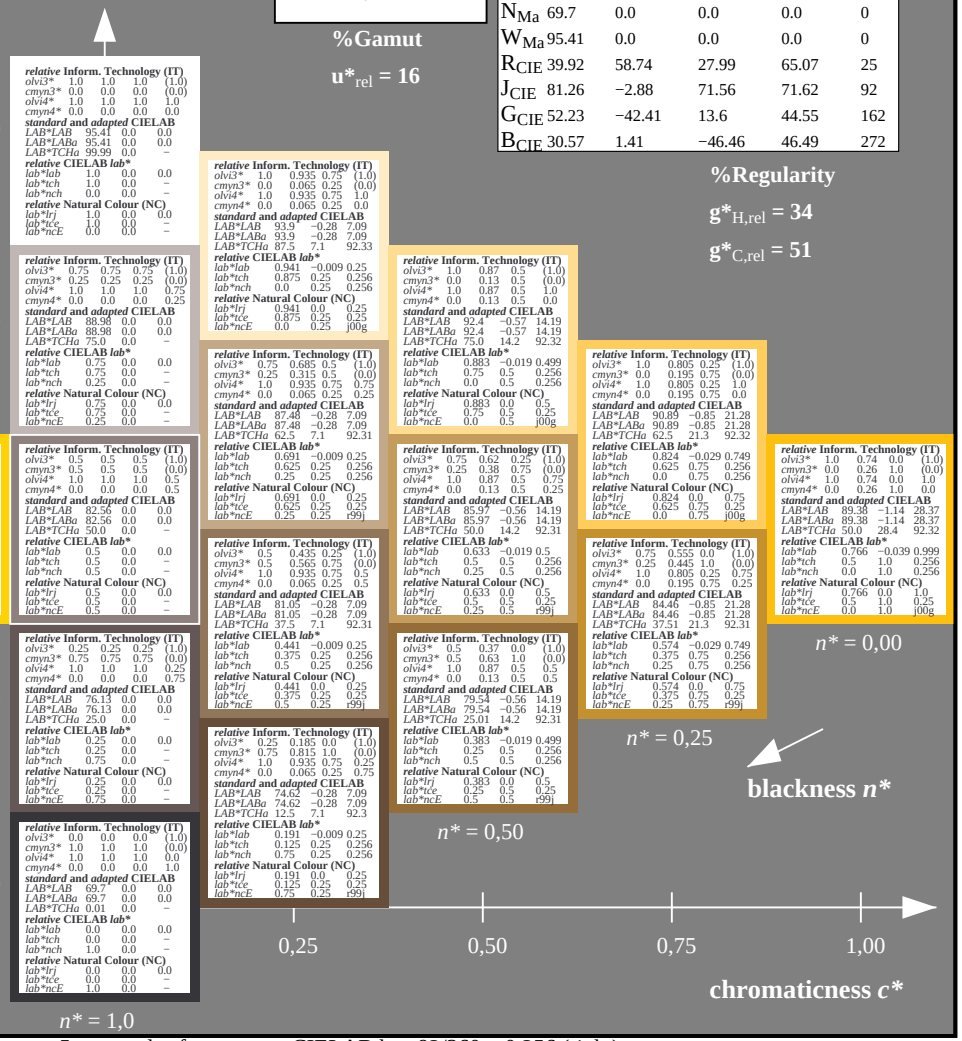
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

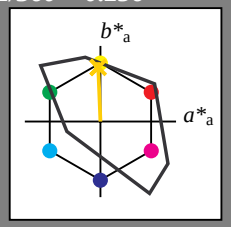
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0



TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

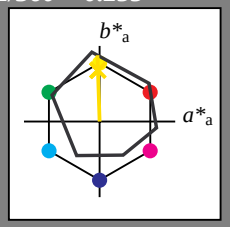
for hue $h^* = lab^*h = 92/360 = 0.255$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

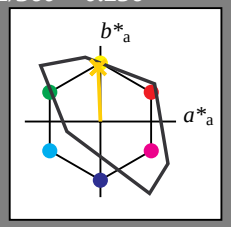
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

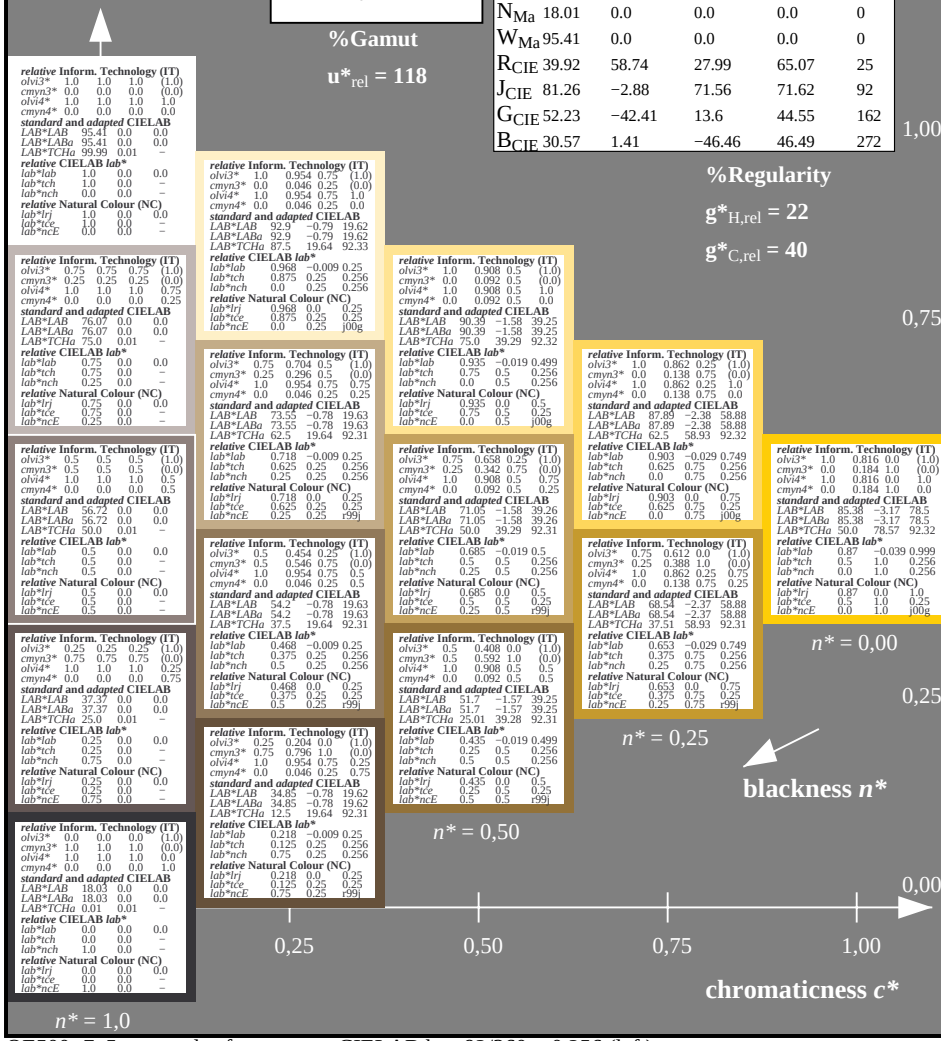
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

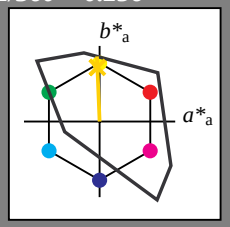
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

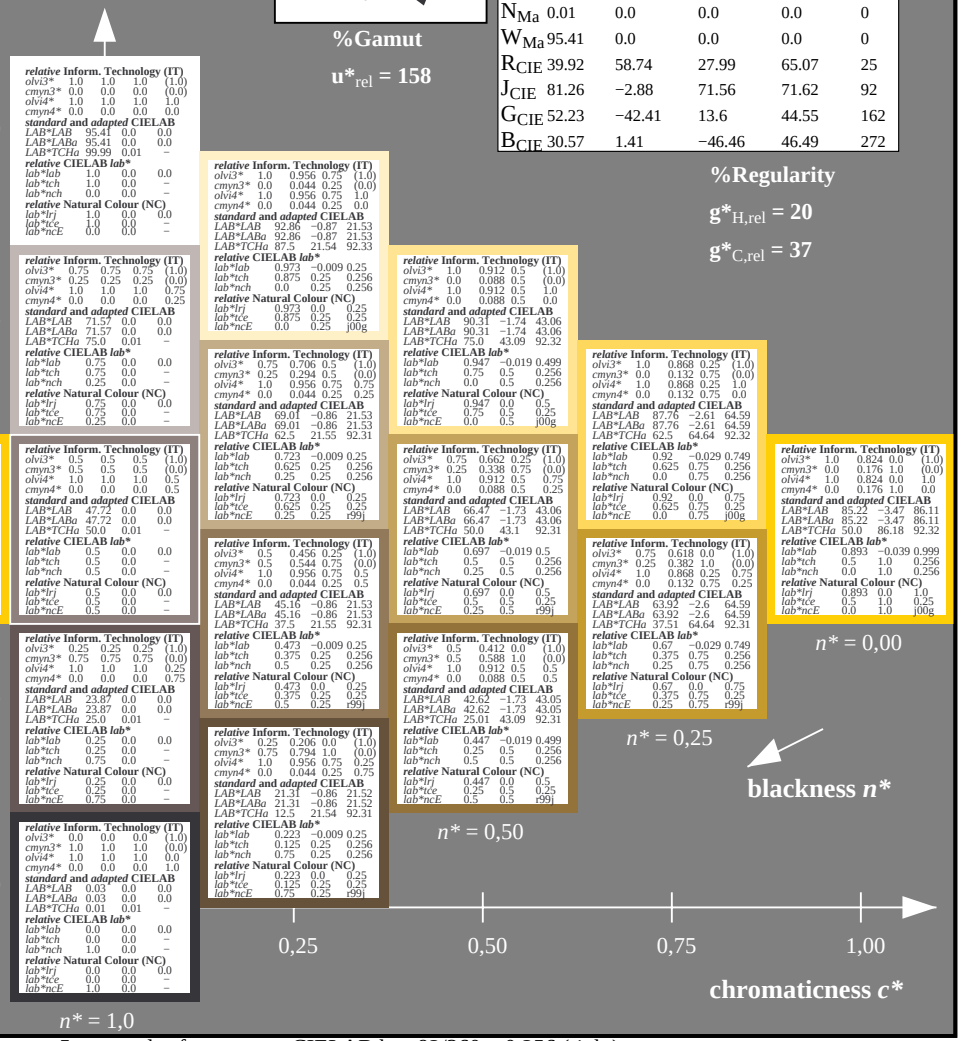
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

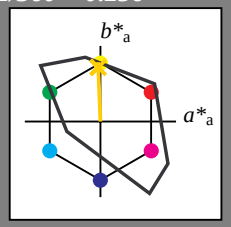
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

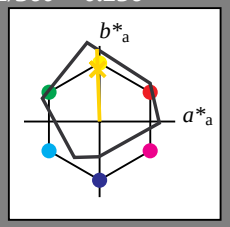
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

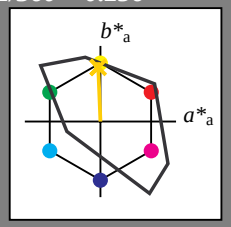
chromaticness c^*

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

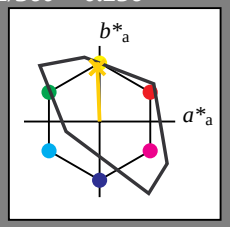
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

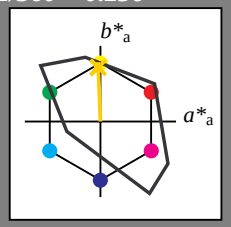
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

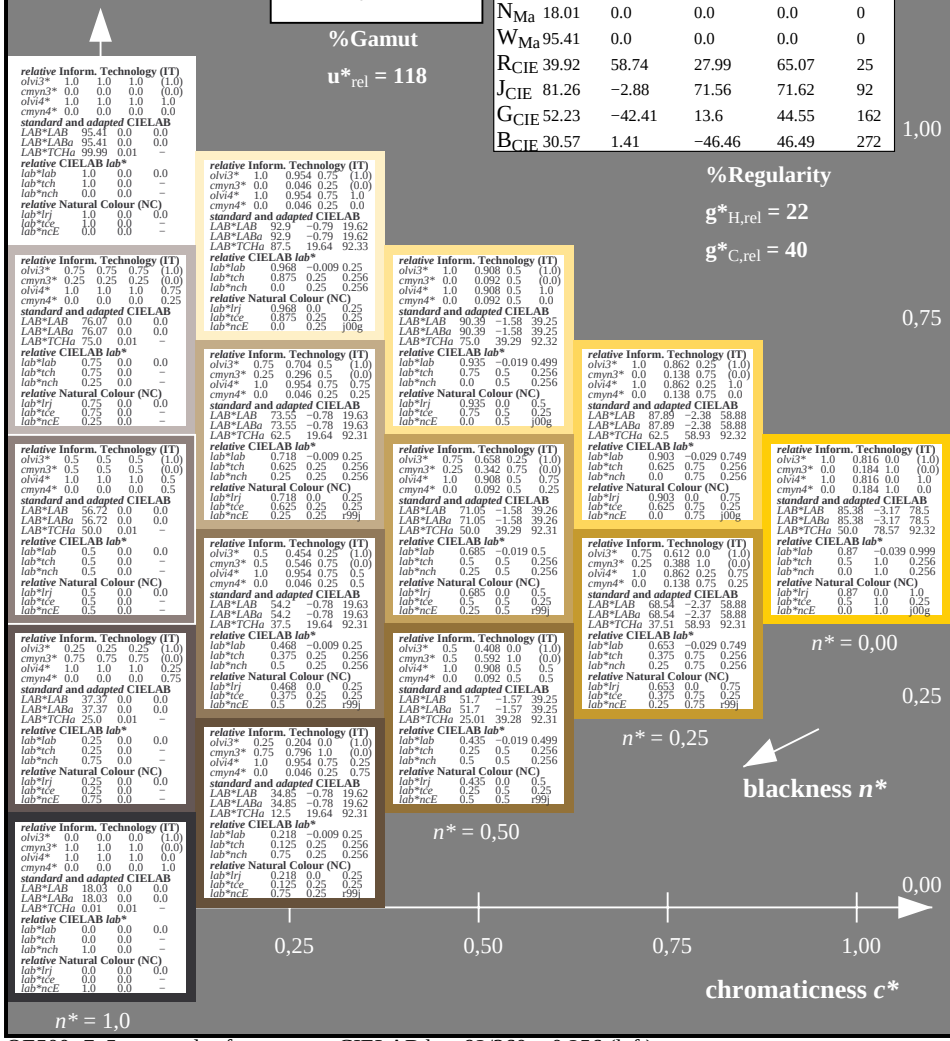
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

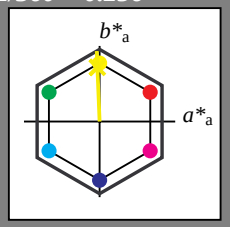


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

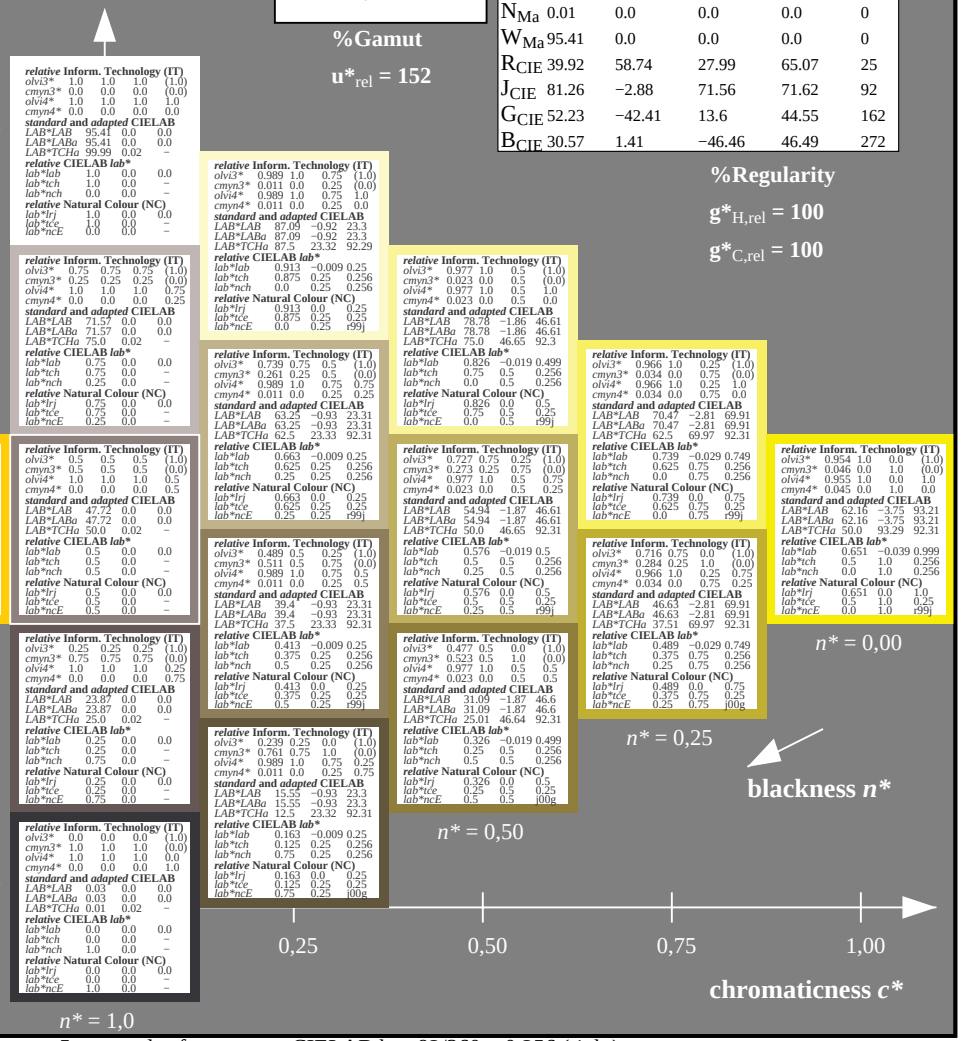
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

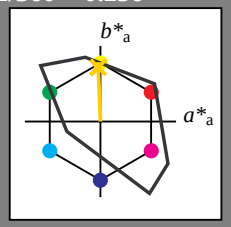
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

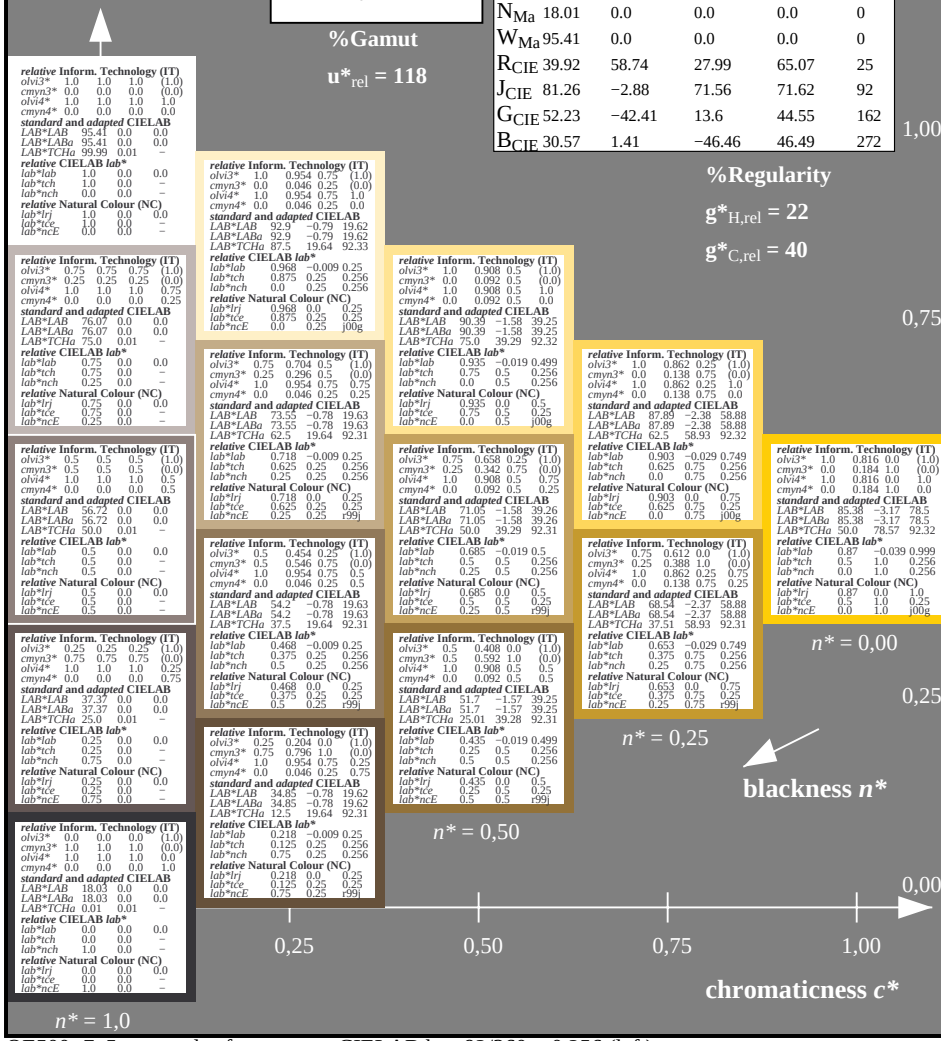
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

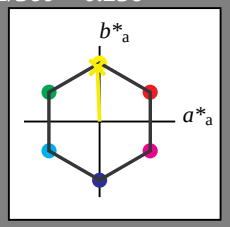
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

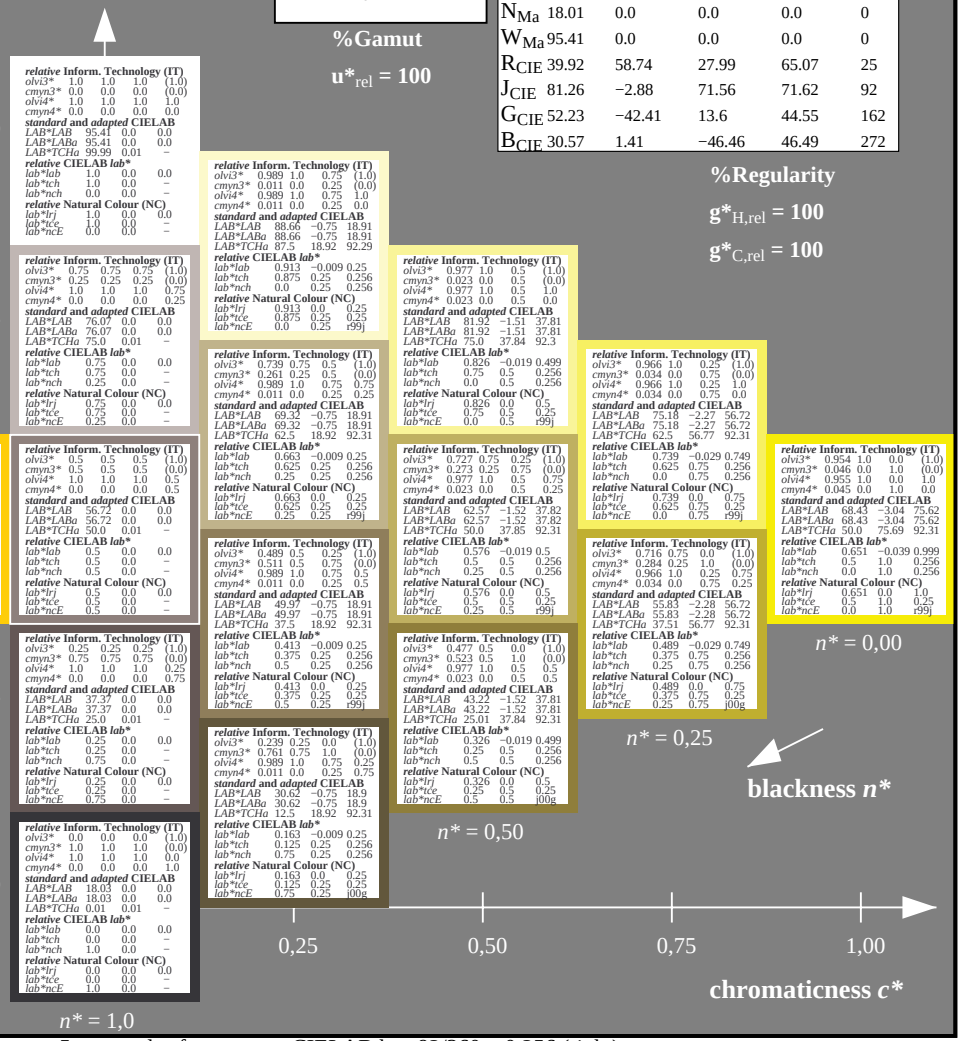
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

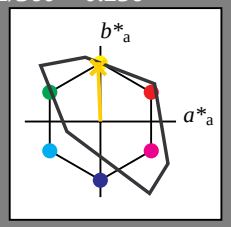
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

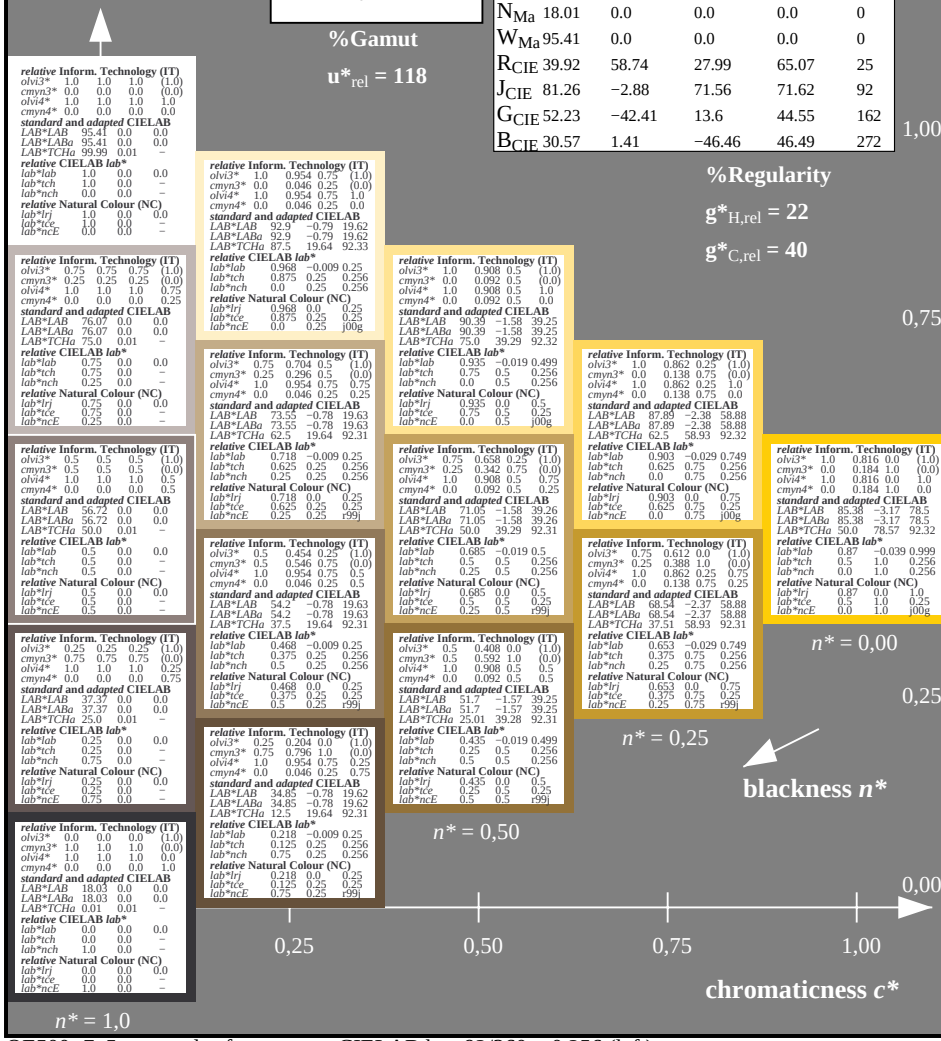
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Standard Reflective System SRS18

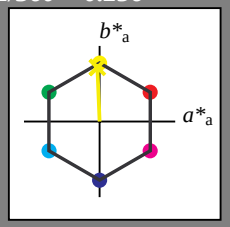
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

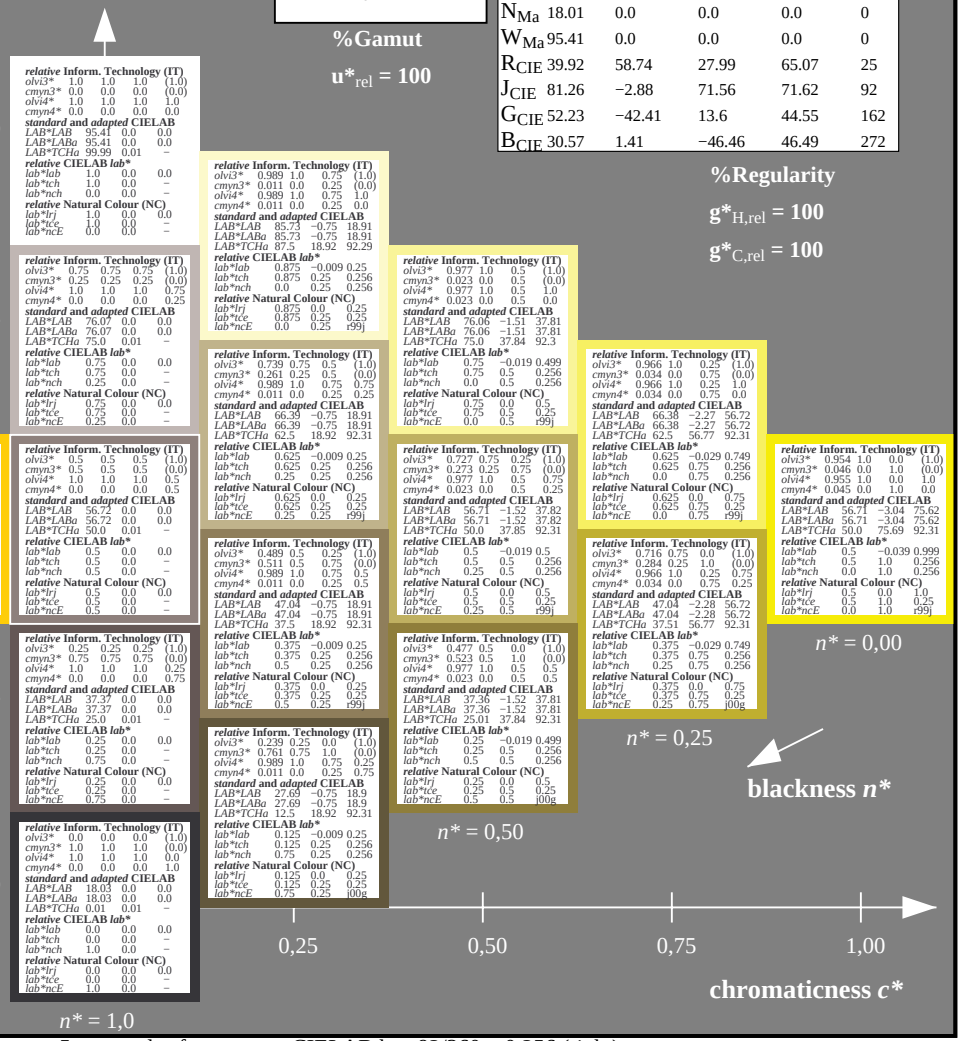
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

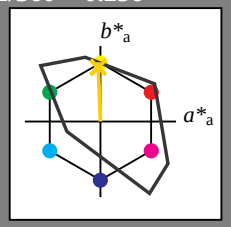
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

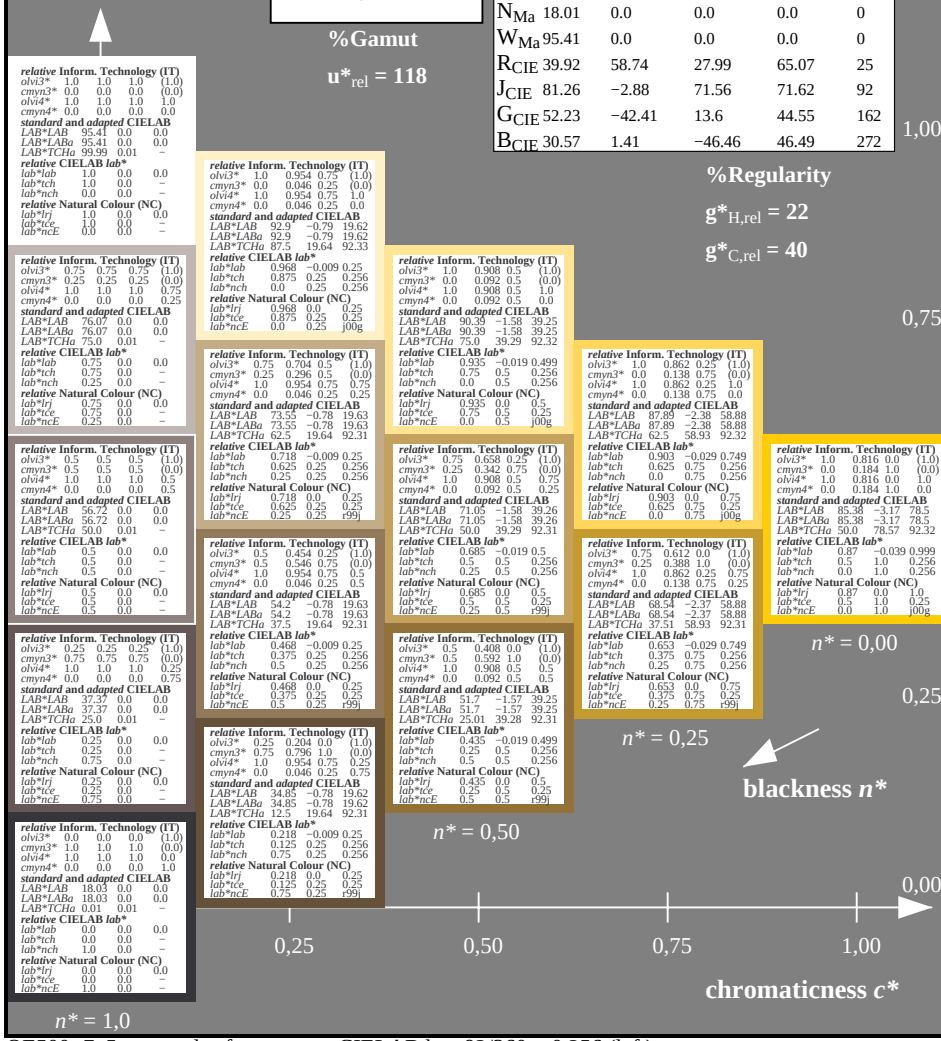
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

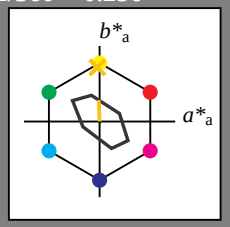
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

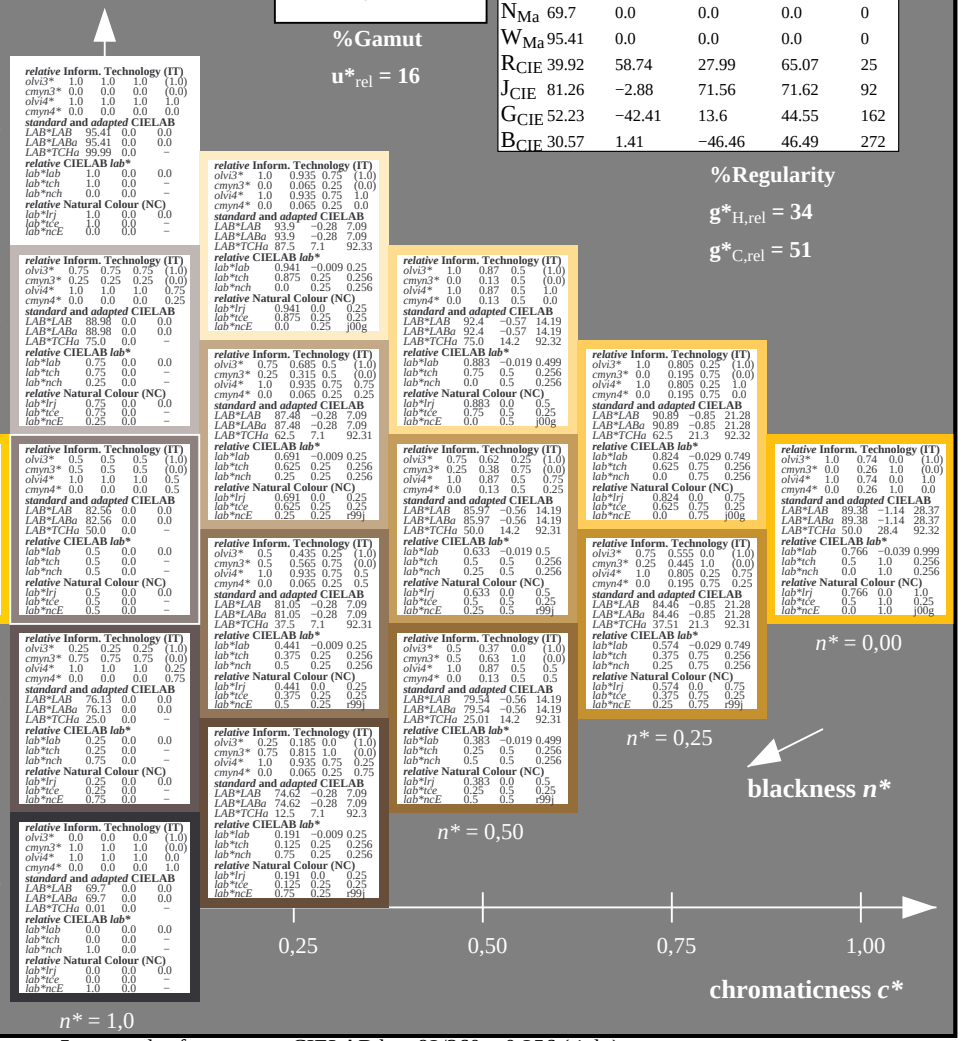
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

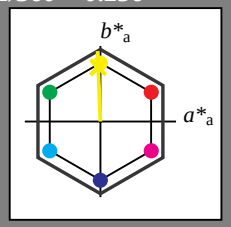
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0



NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

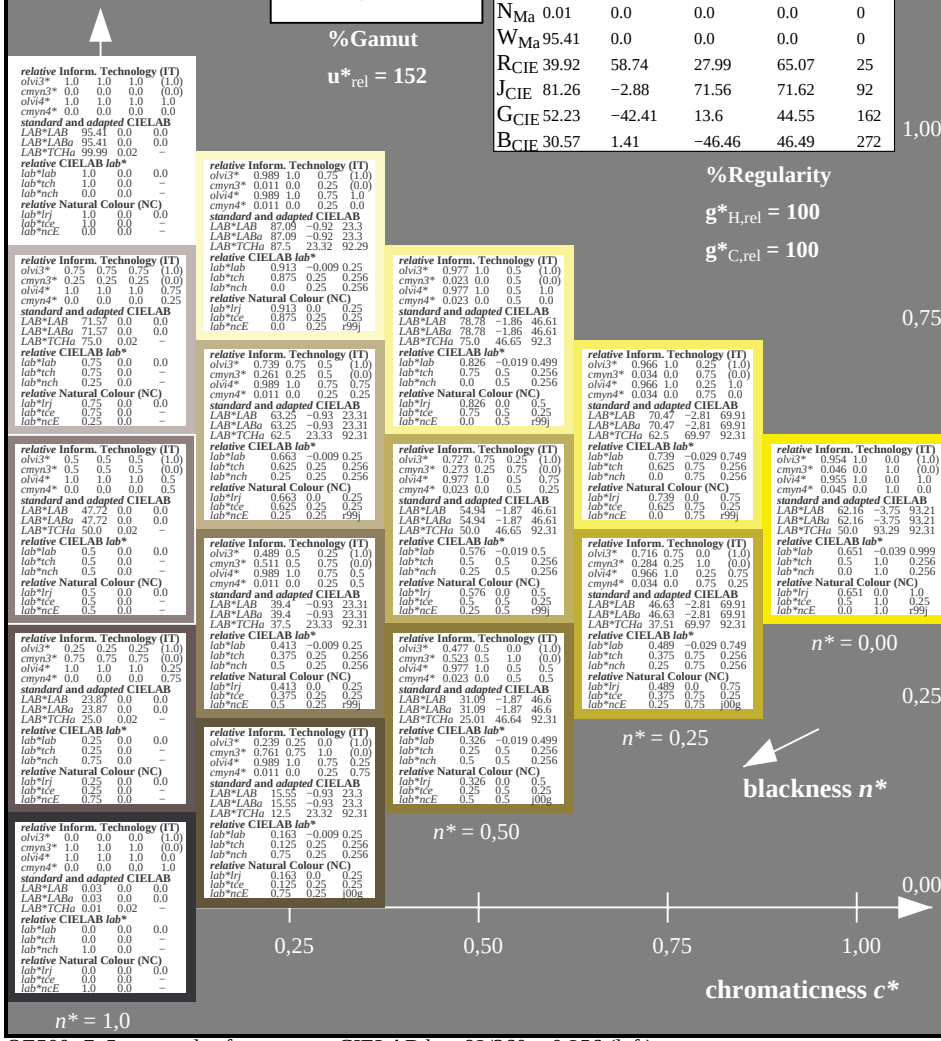
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Offset Reflective System ORS18

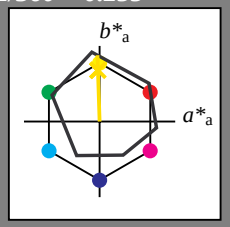
for hue $h^* = lab^*h = 92/360 = 0.255$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

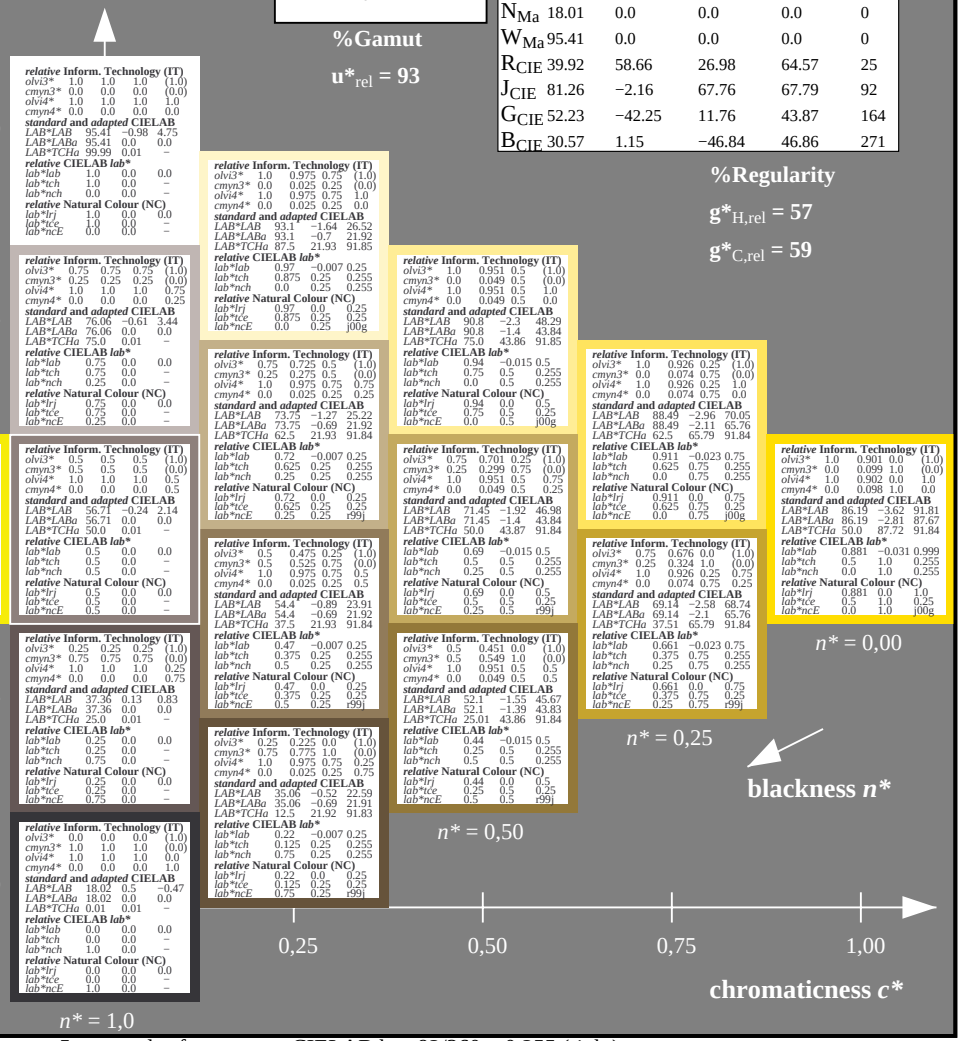
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

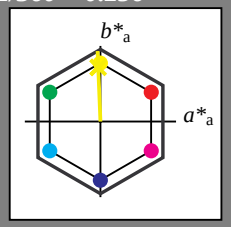
5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

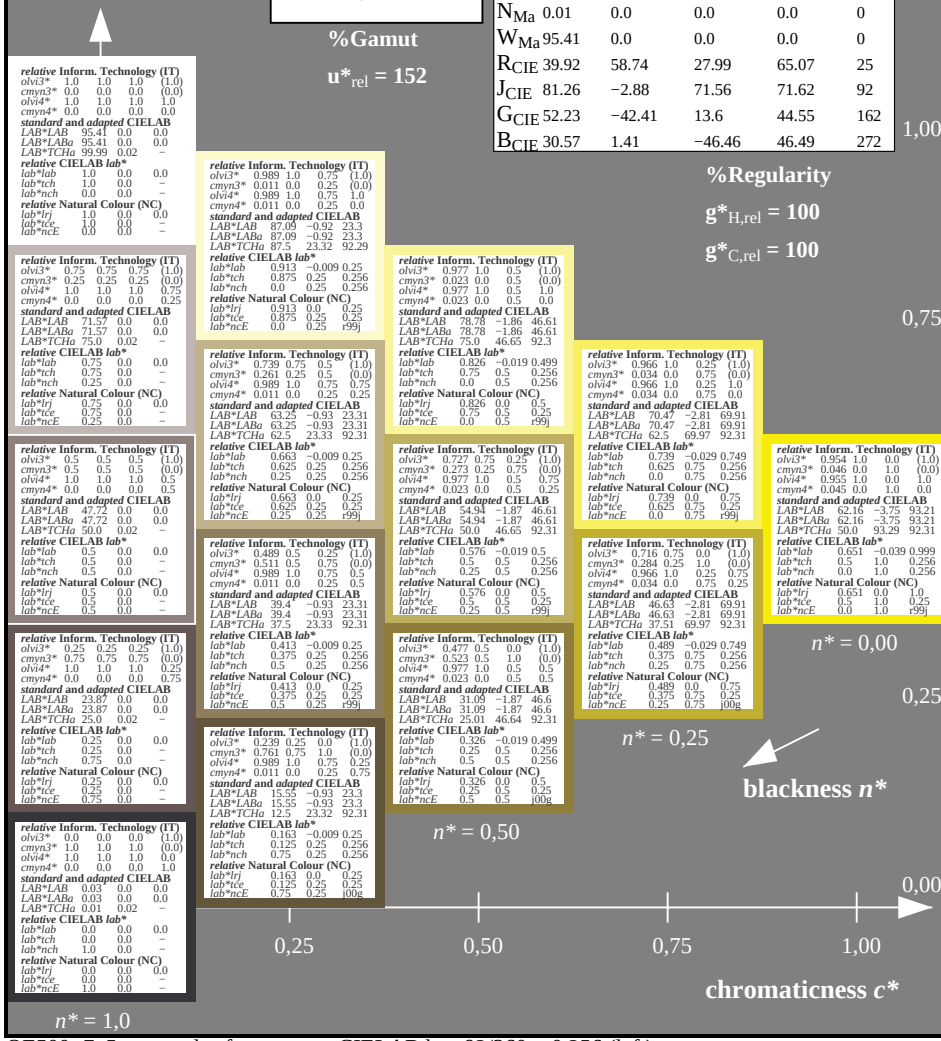
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



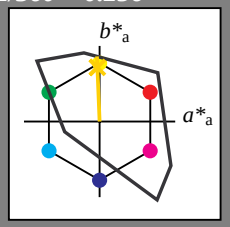
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

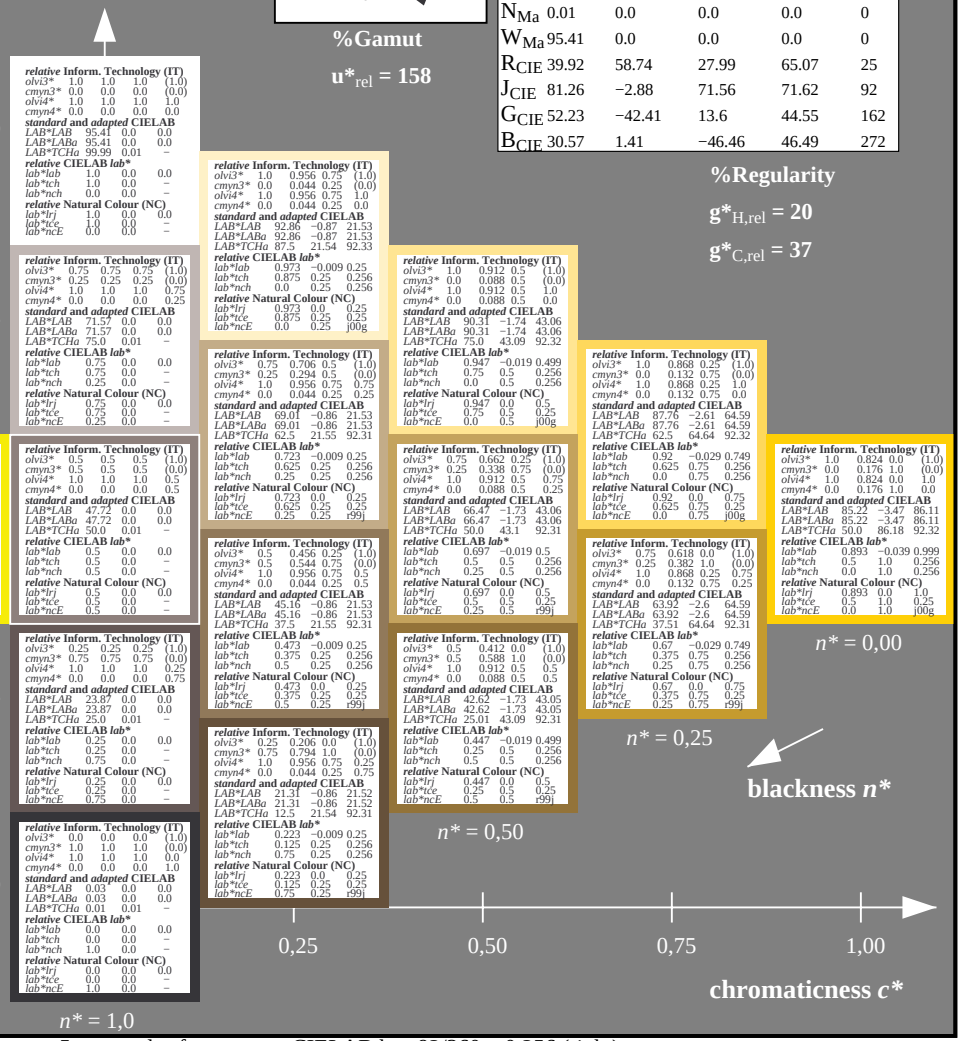
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

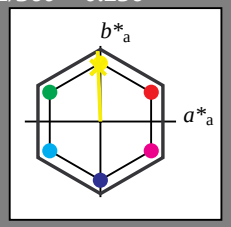


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

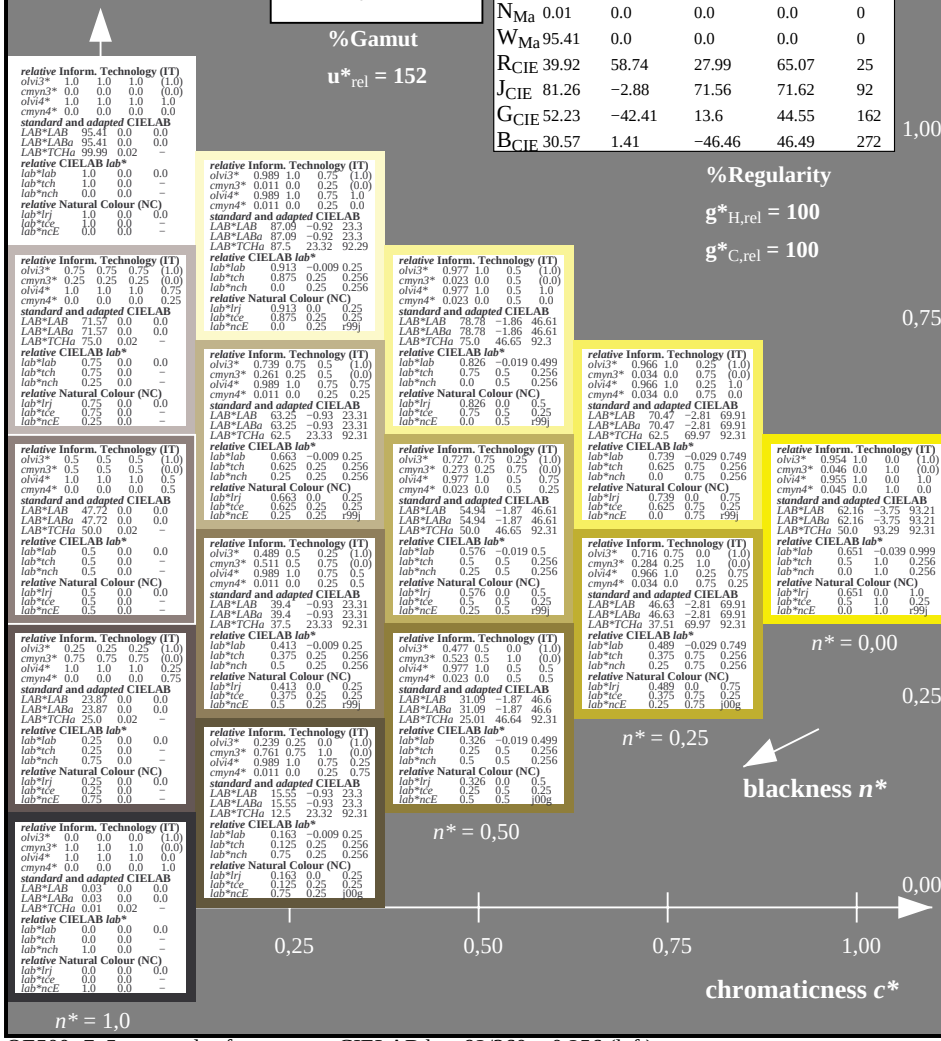
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

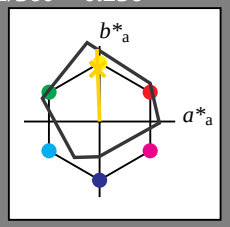


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

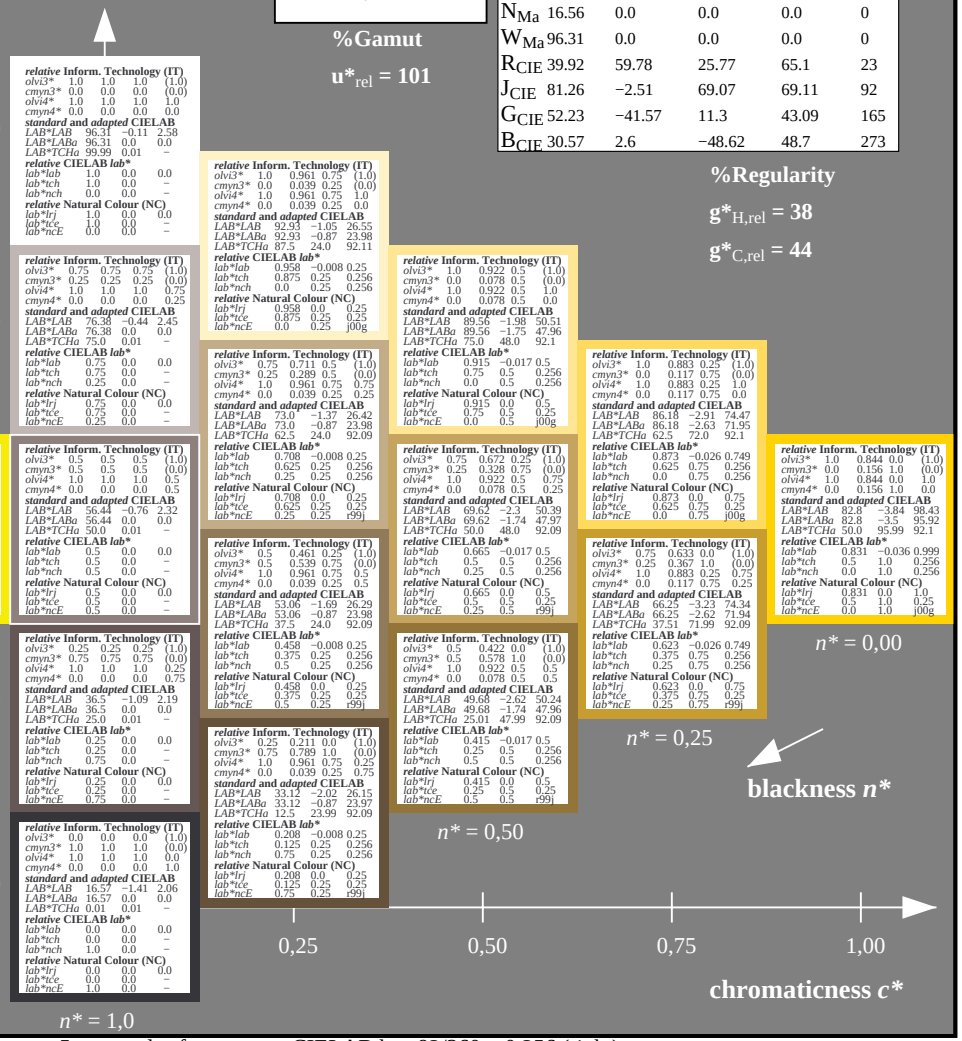
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

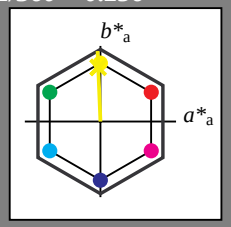


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

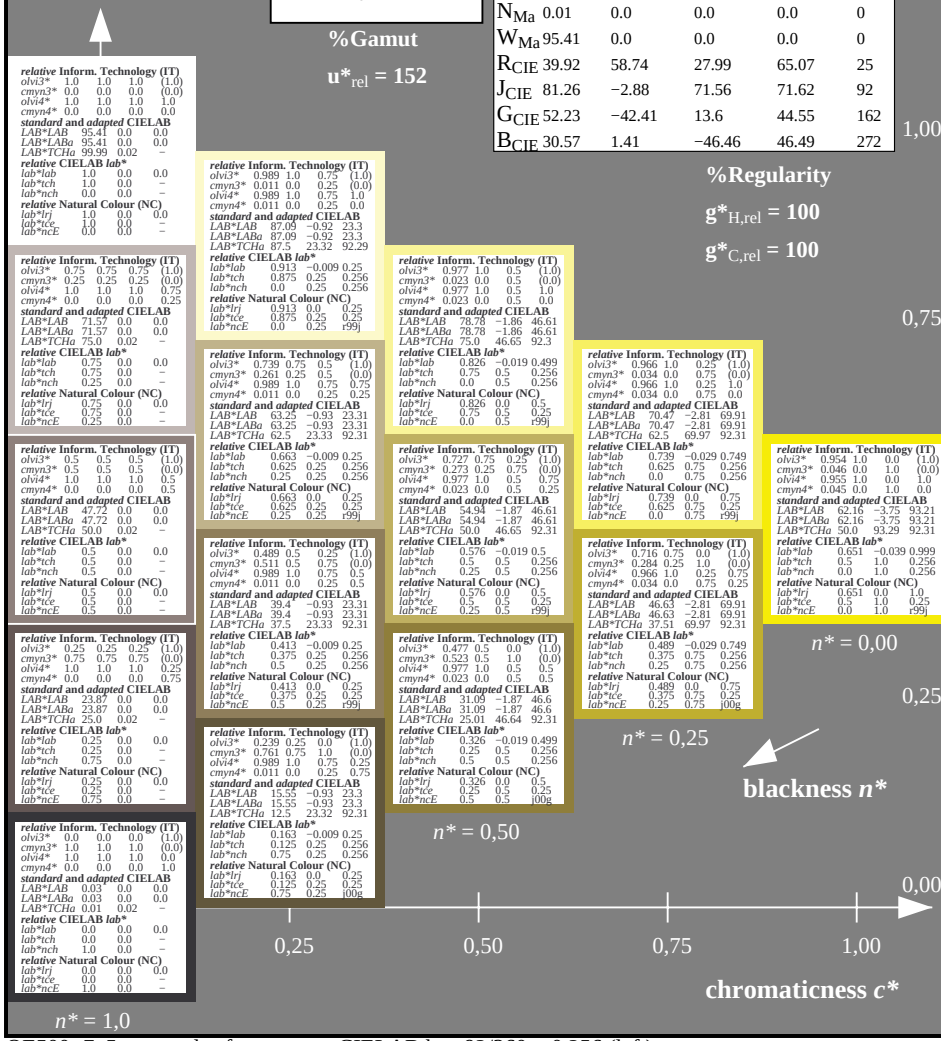
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

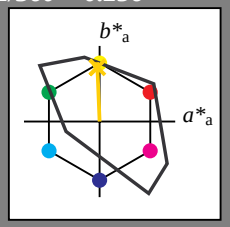


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

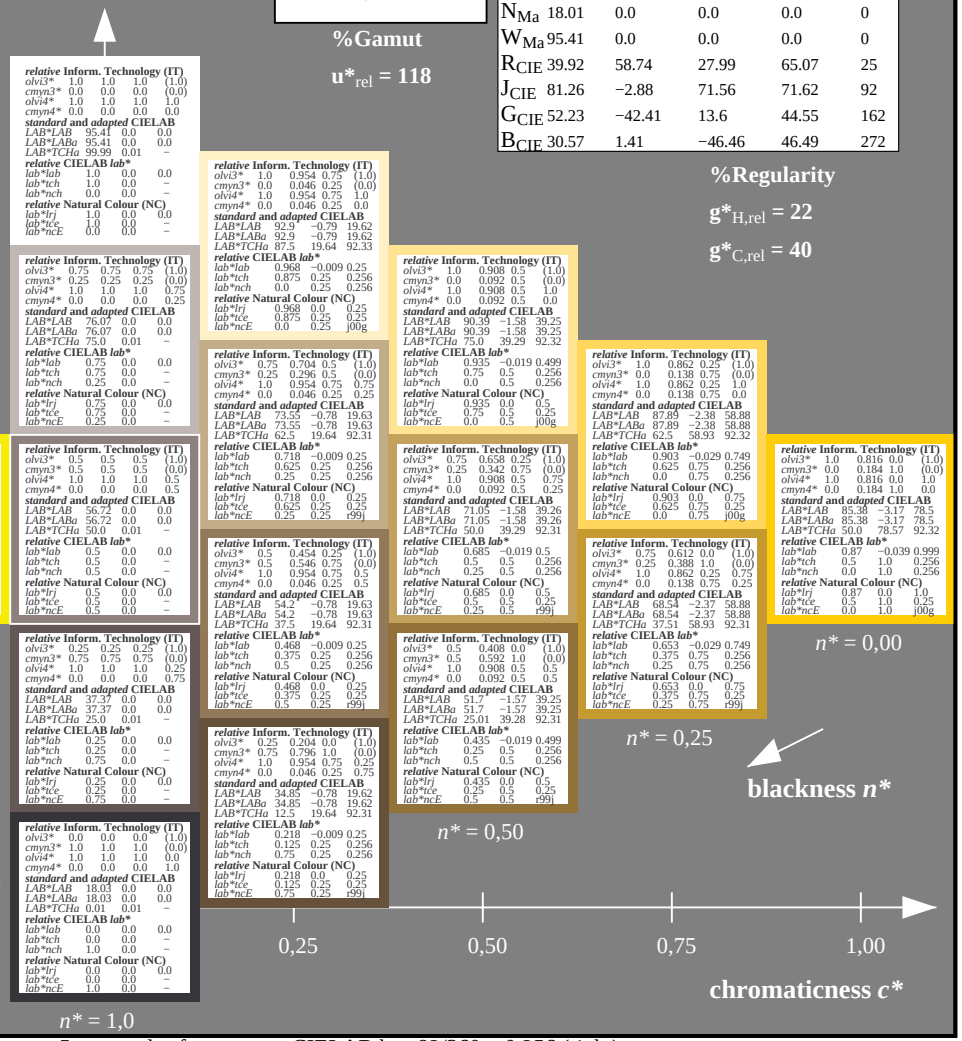
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



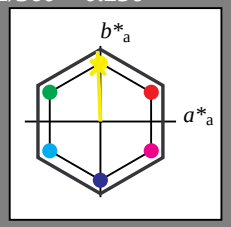
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

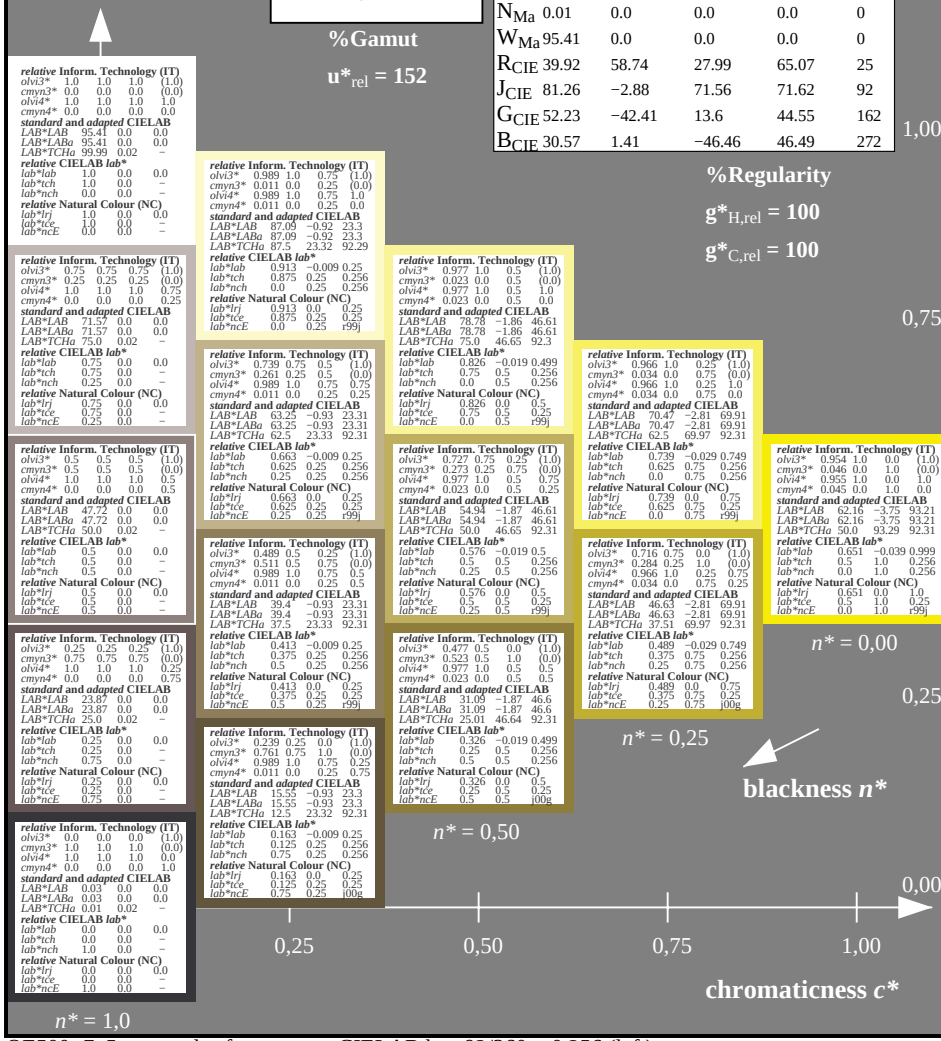
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



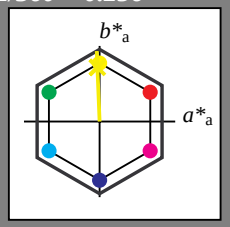
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

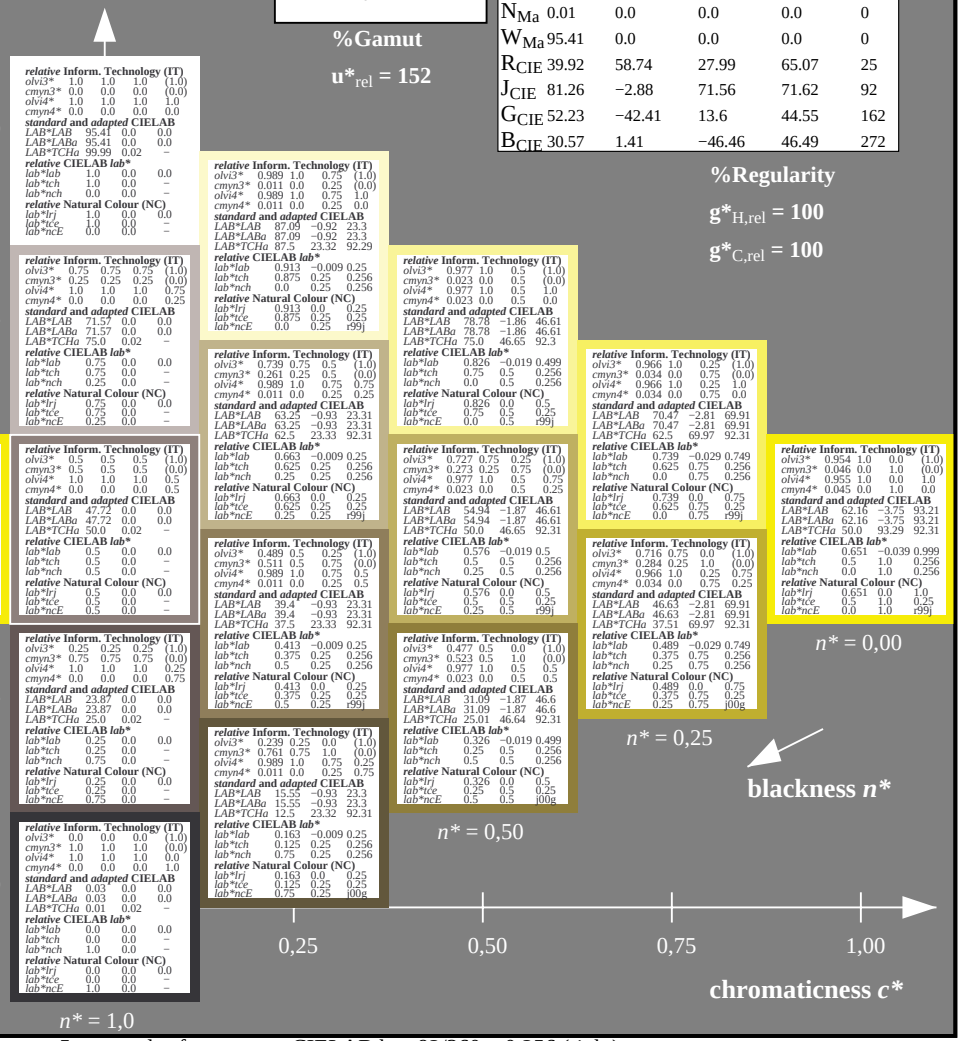
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

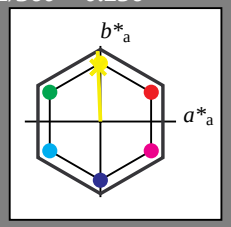
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

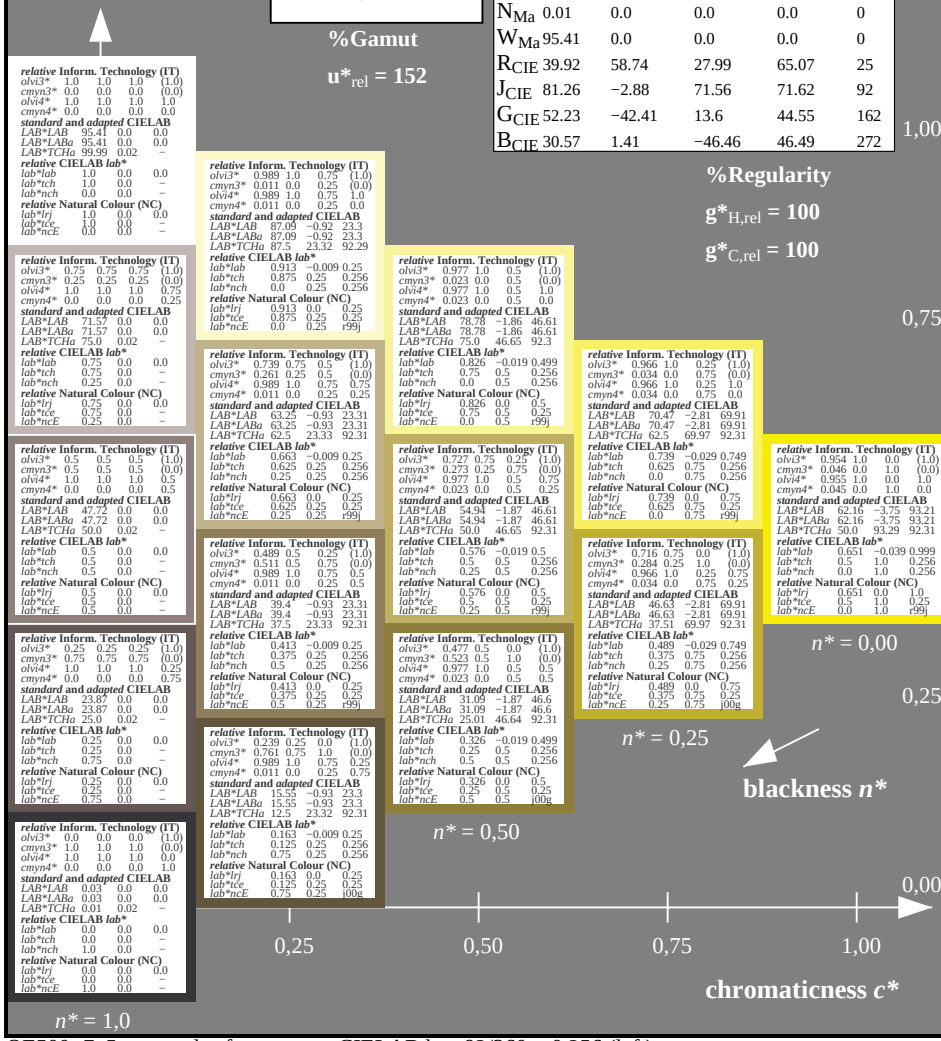
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

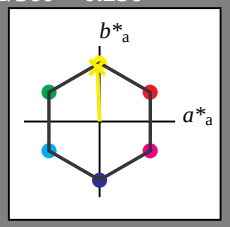
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

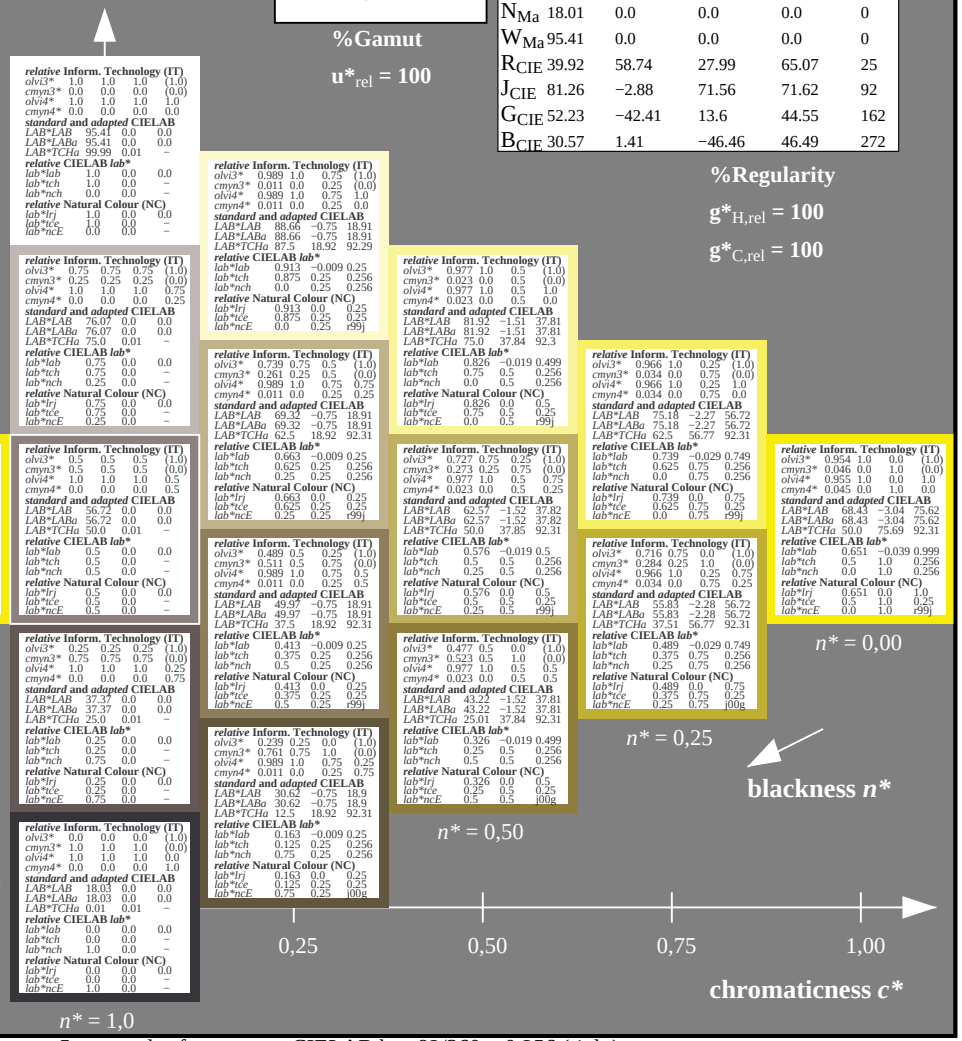
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

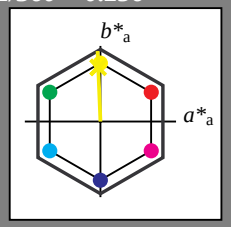
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

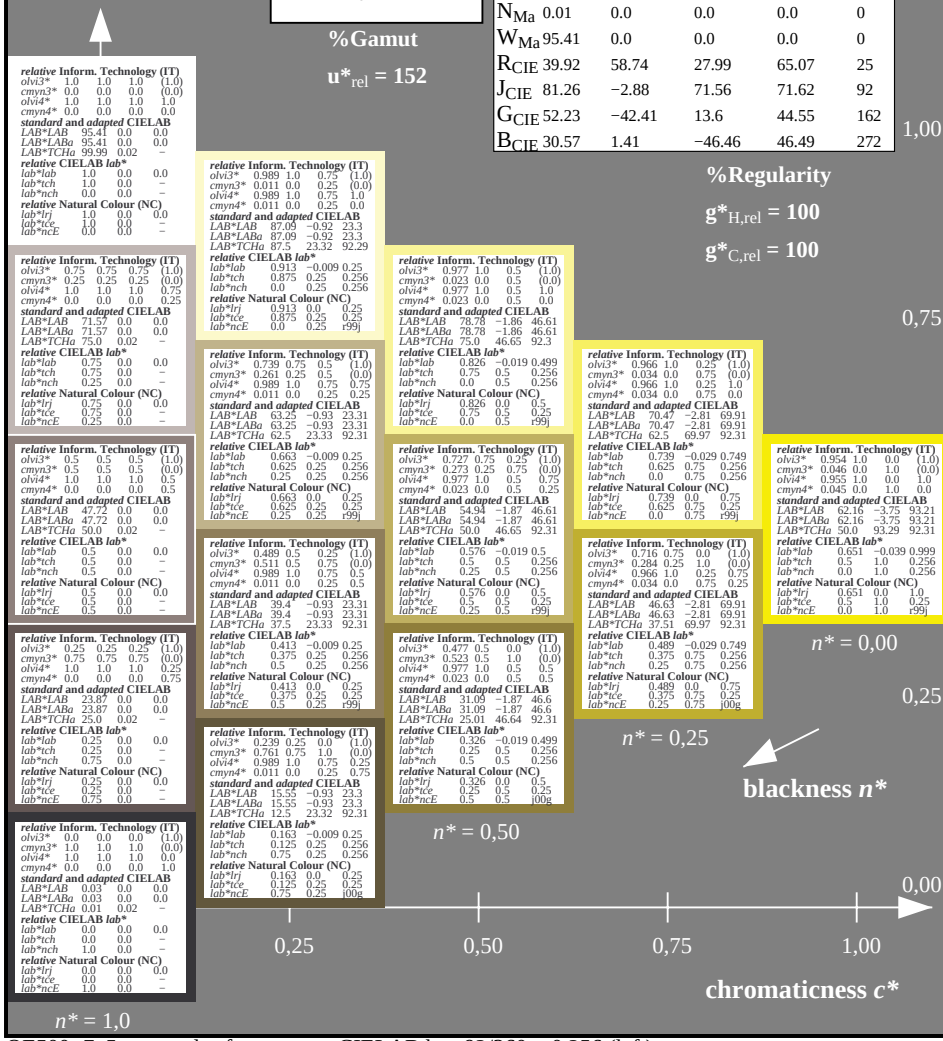
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

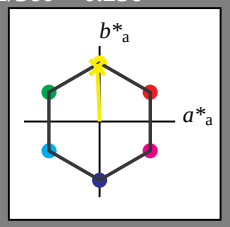
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

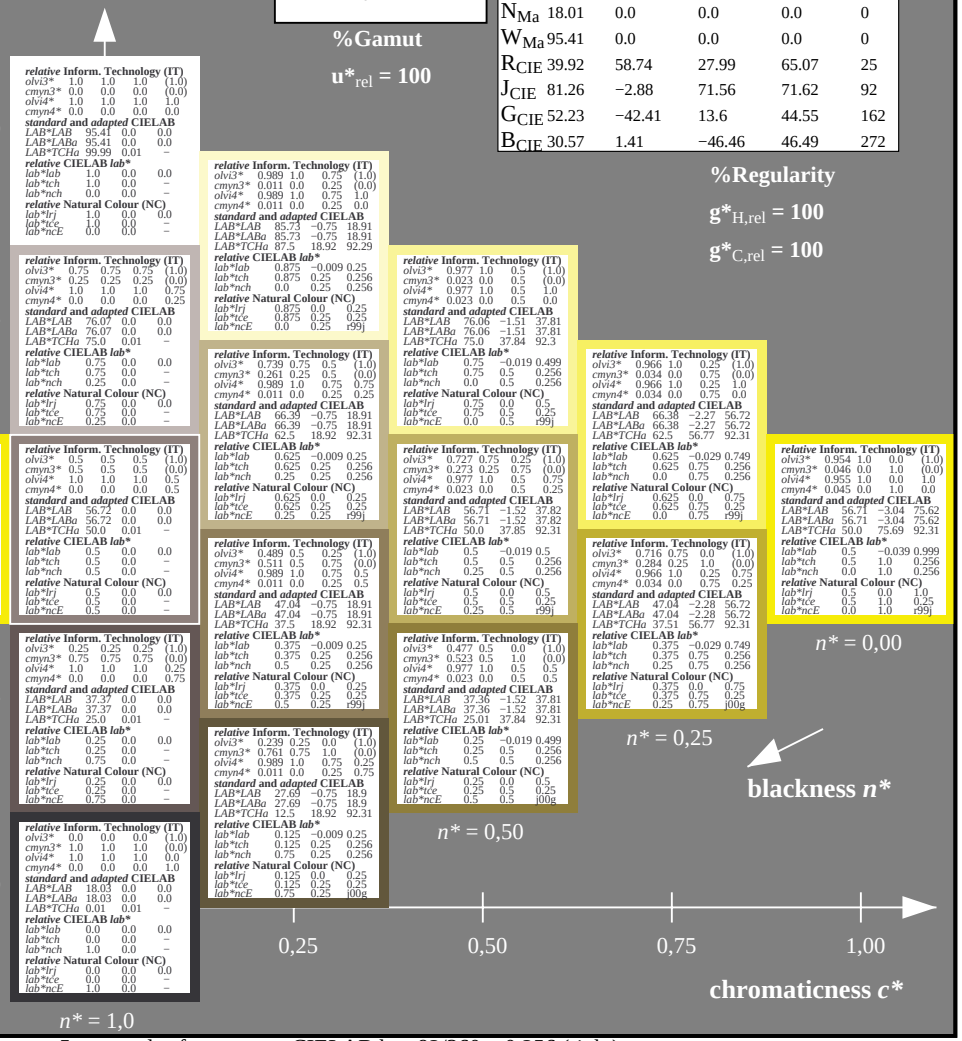
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

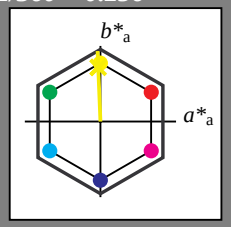
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

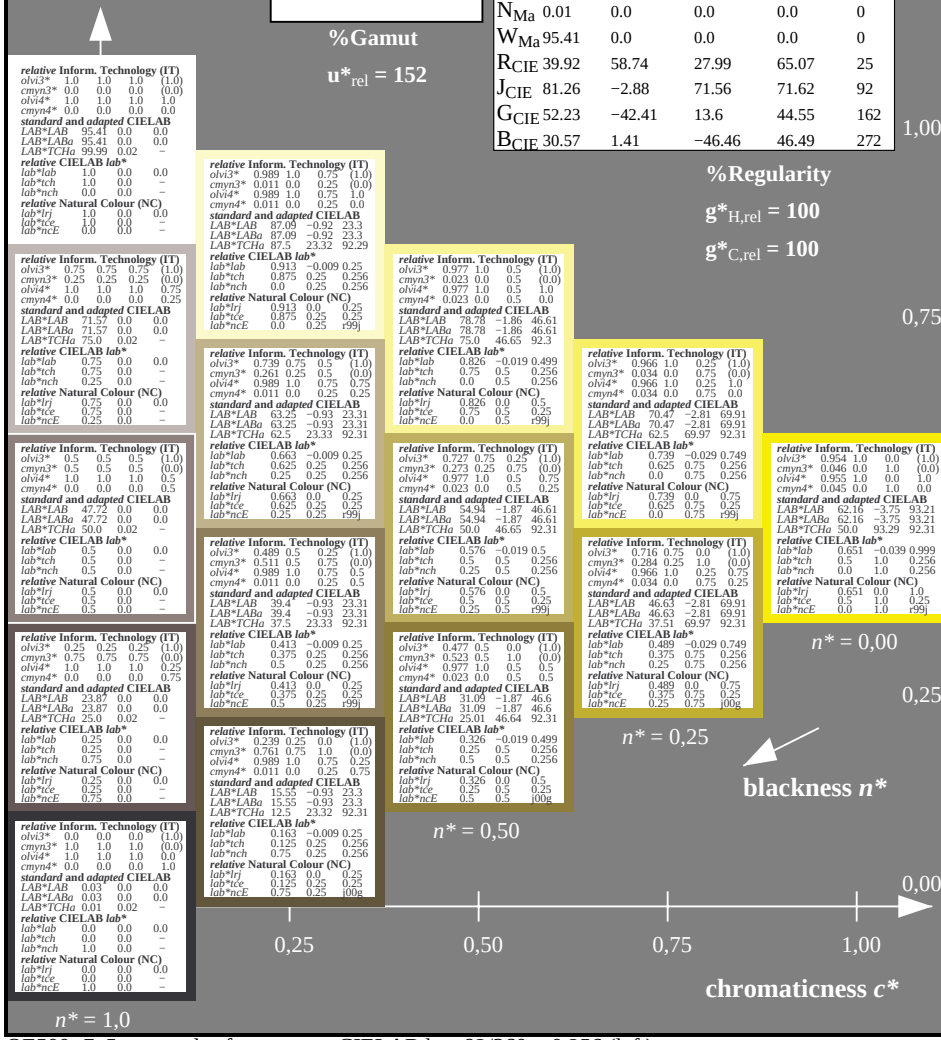
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS70

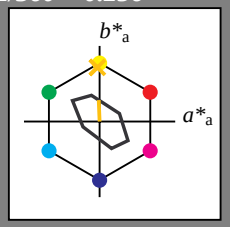
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

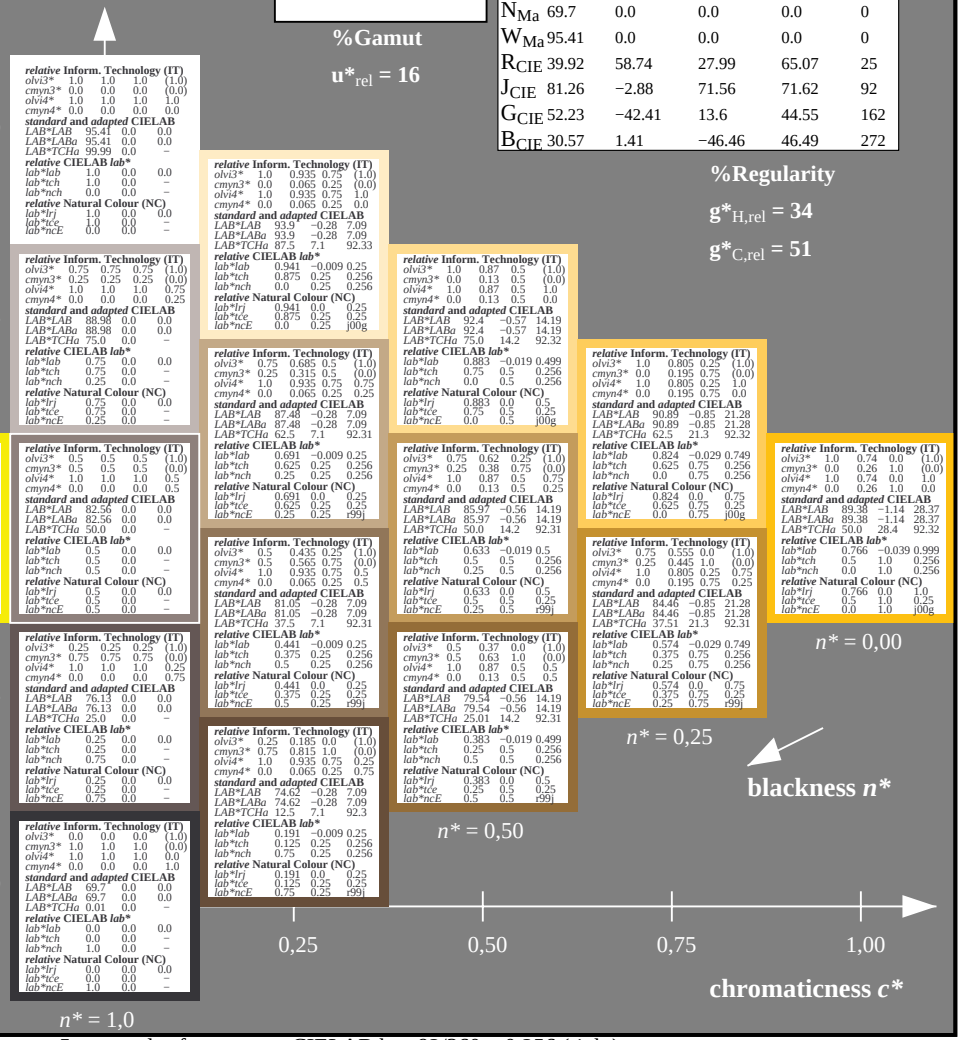
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

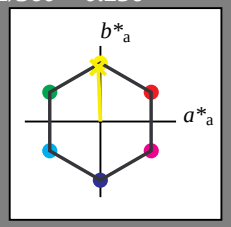
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

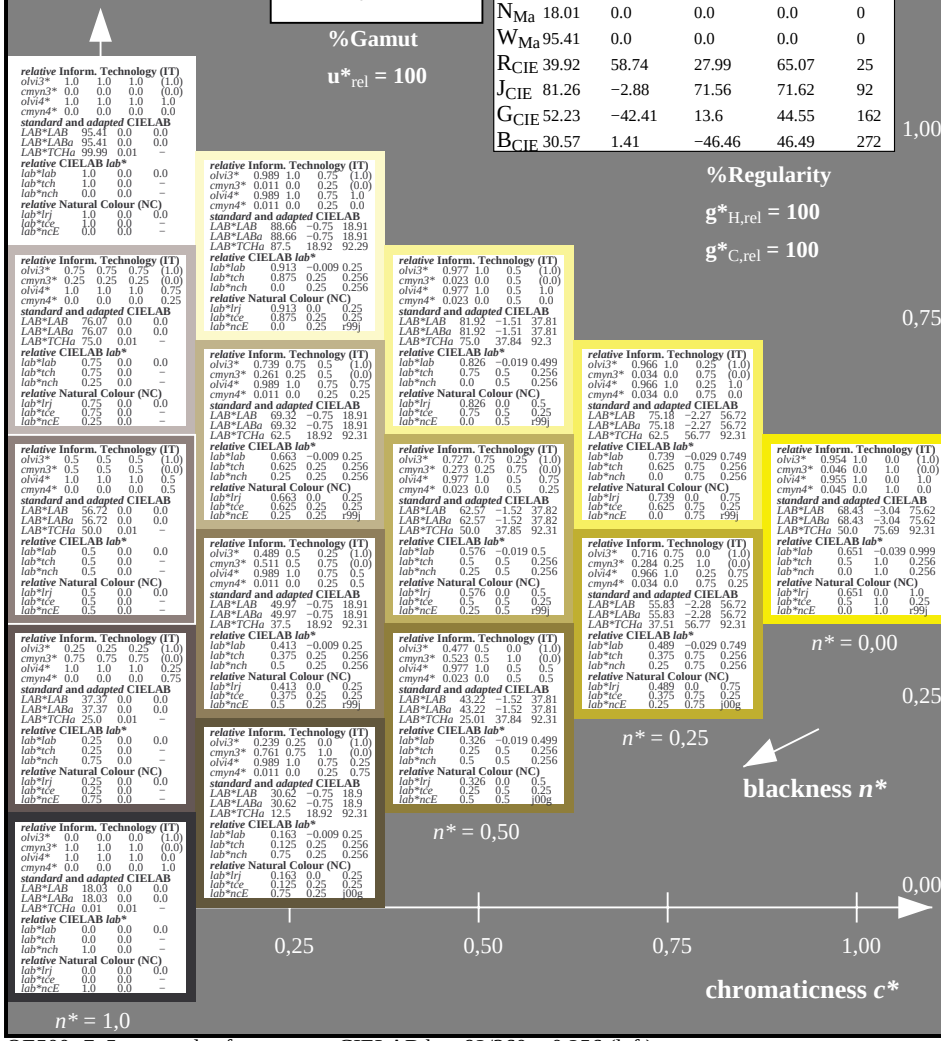
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



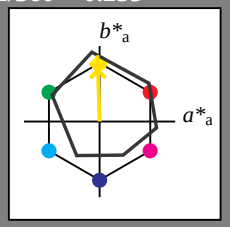
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

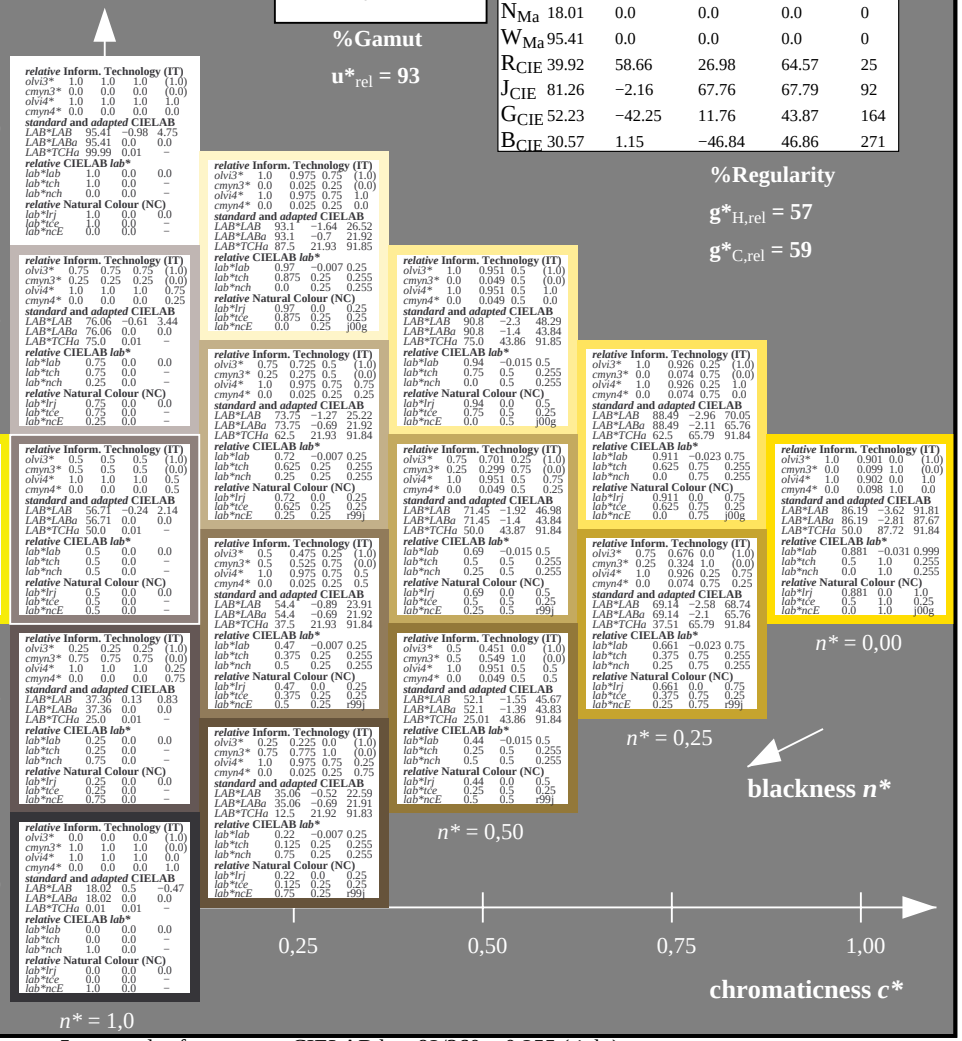
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

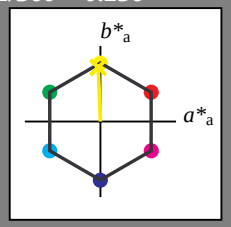
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

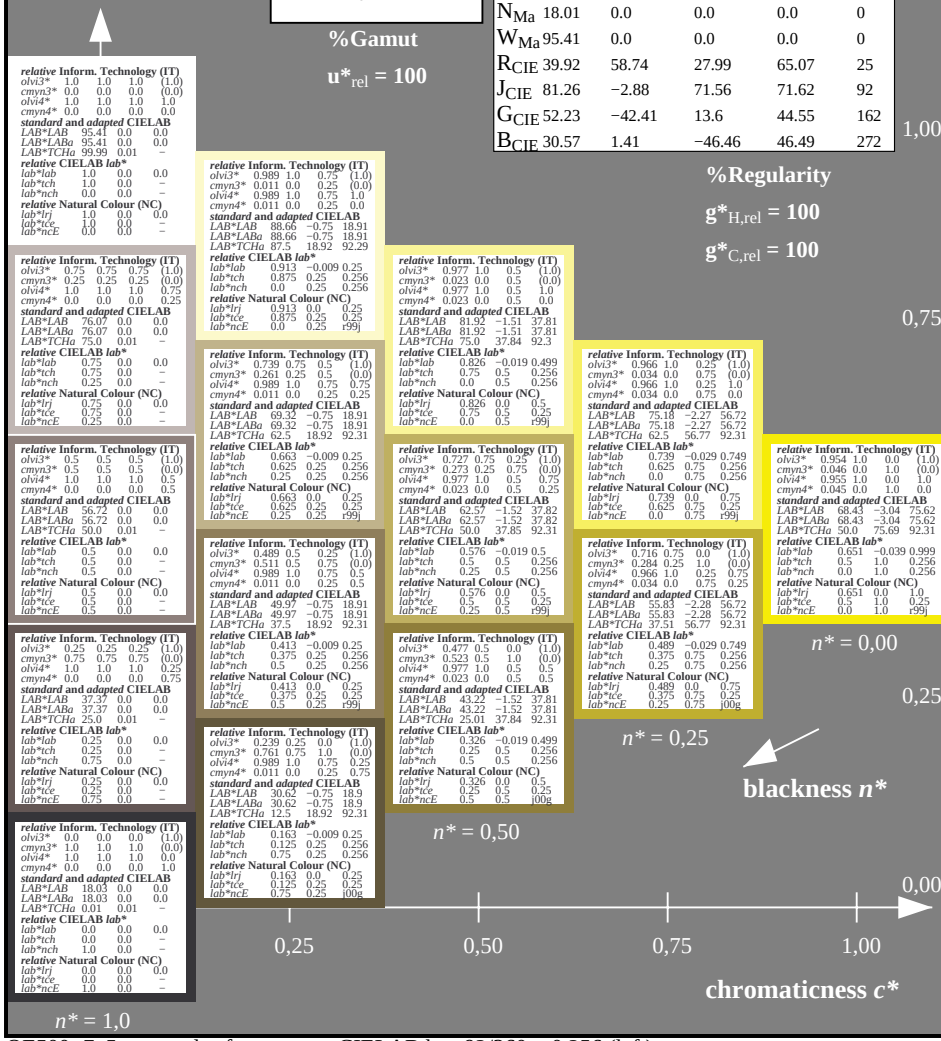
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

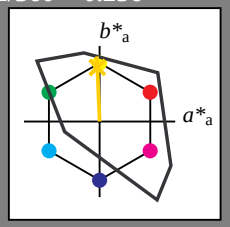
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

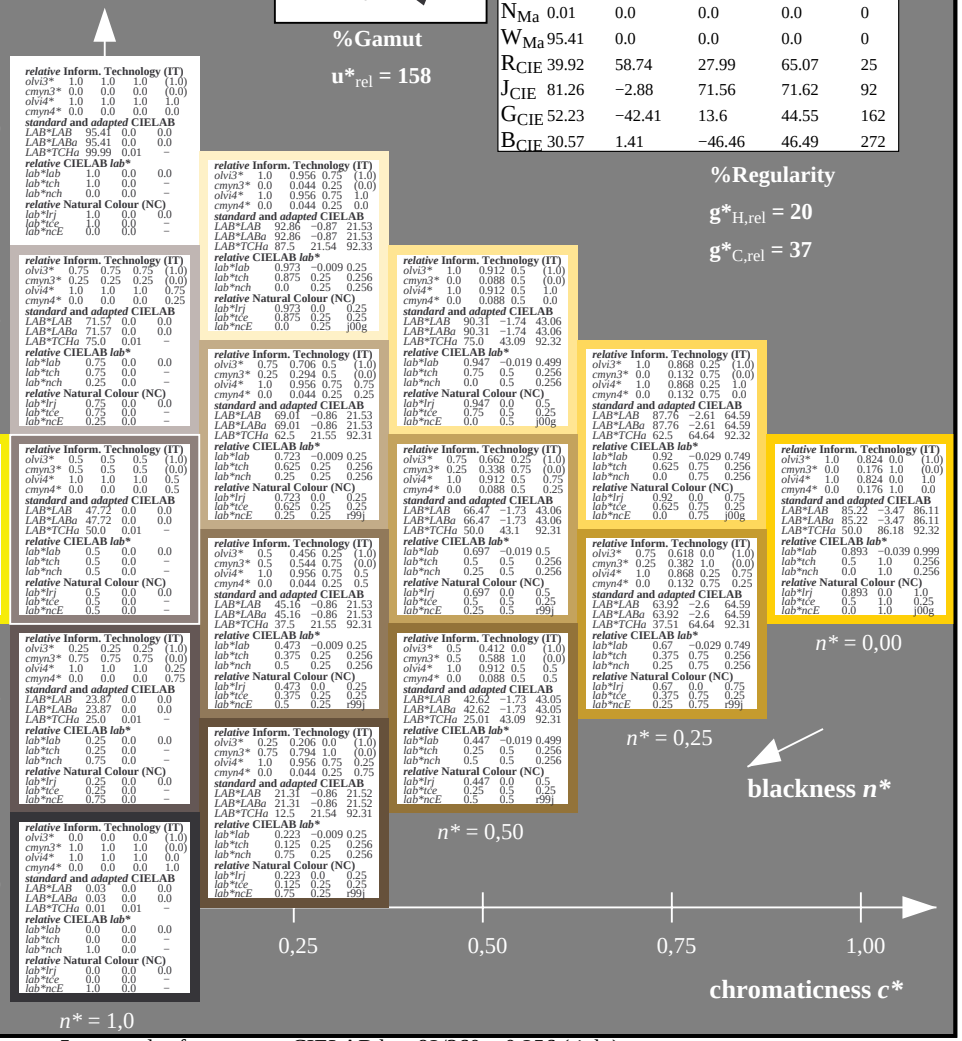
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

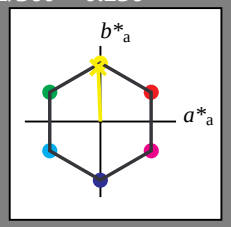
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

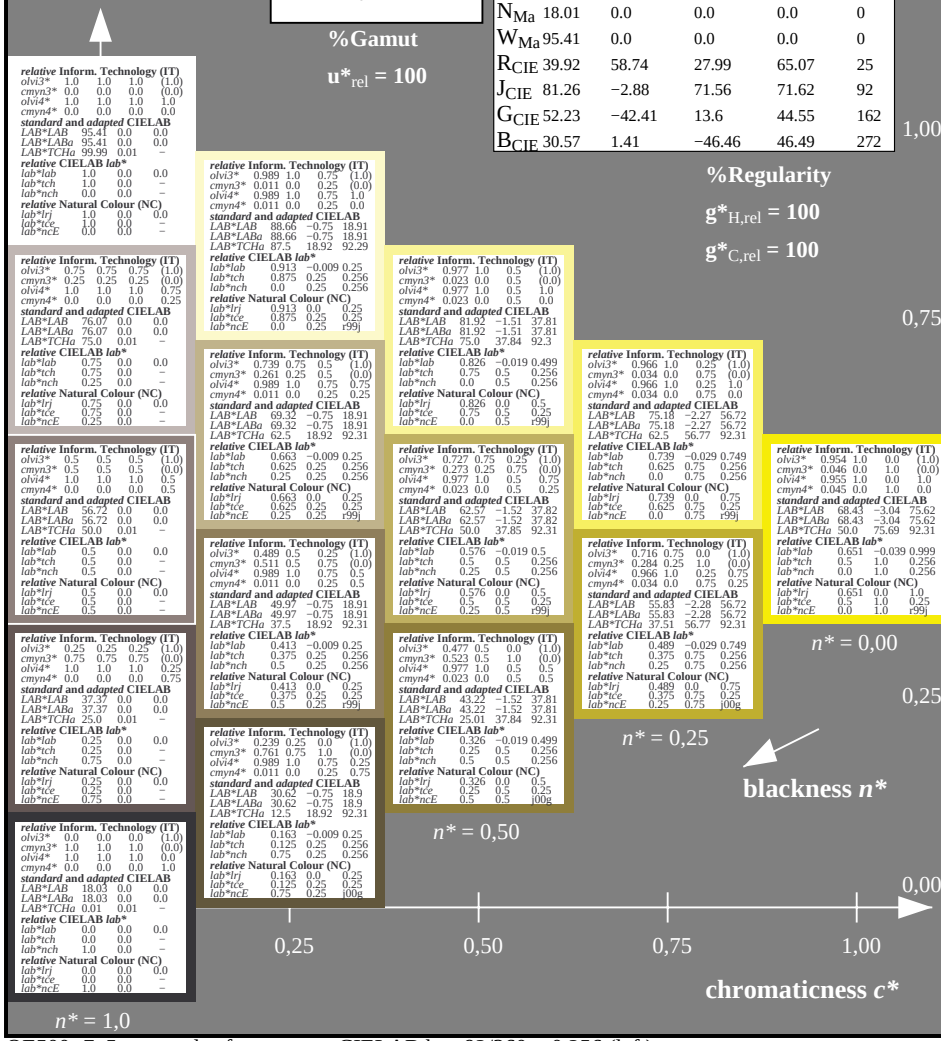
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

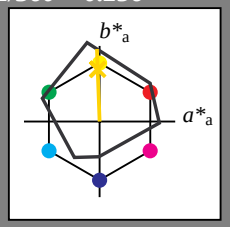
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

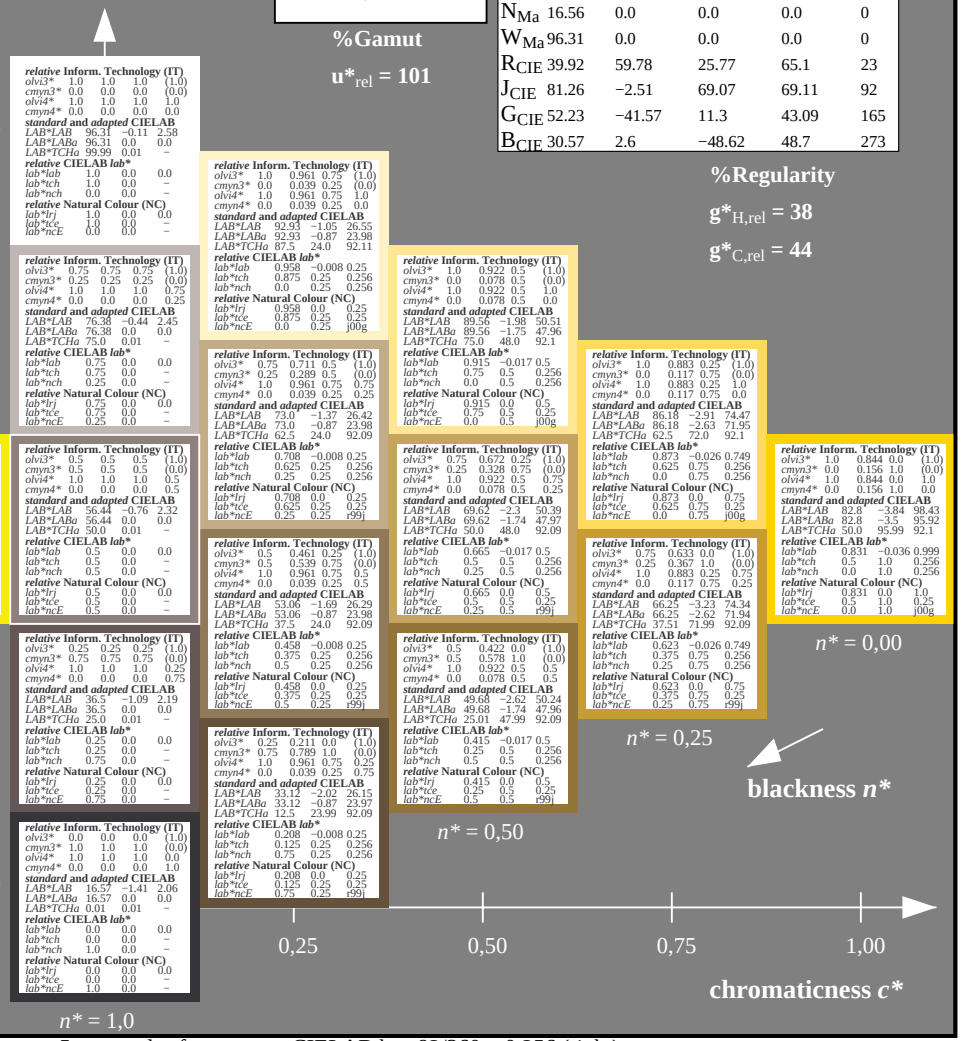
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

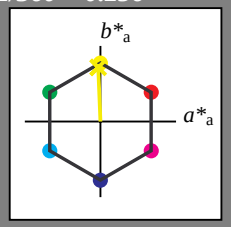
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

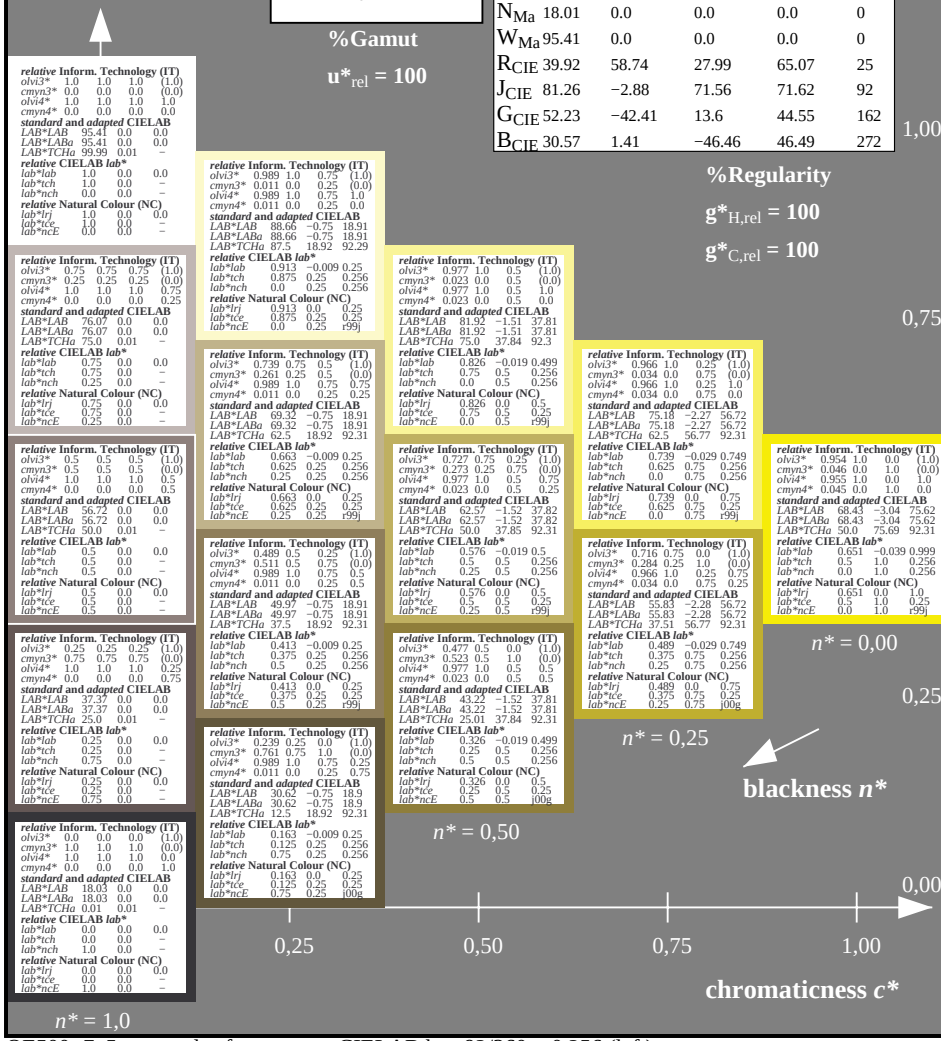
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

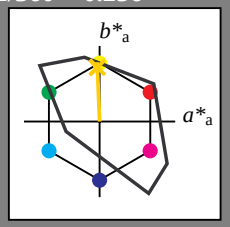
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

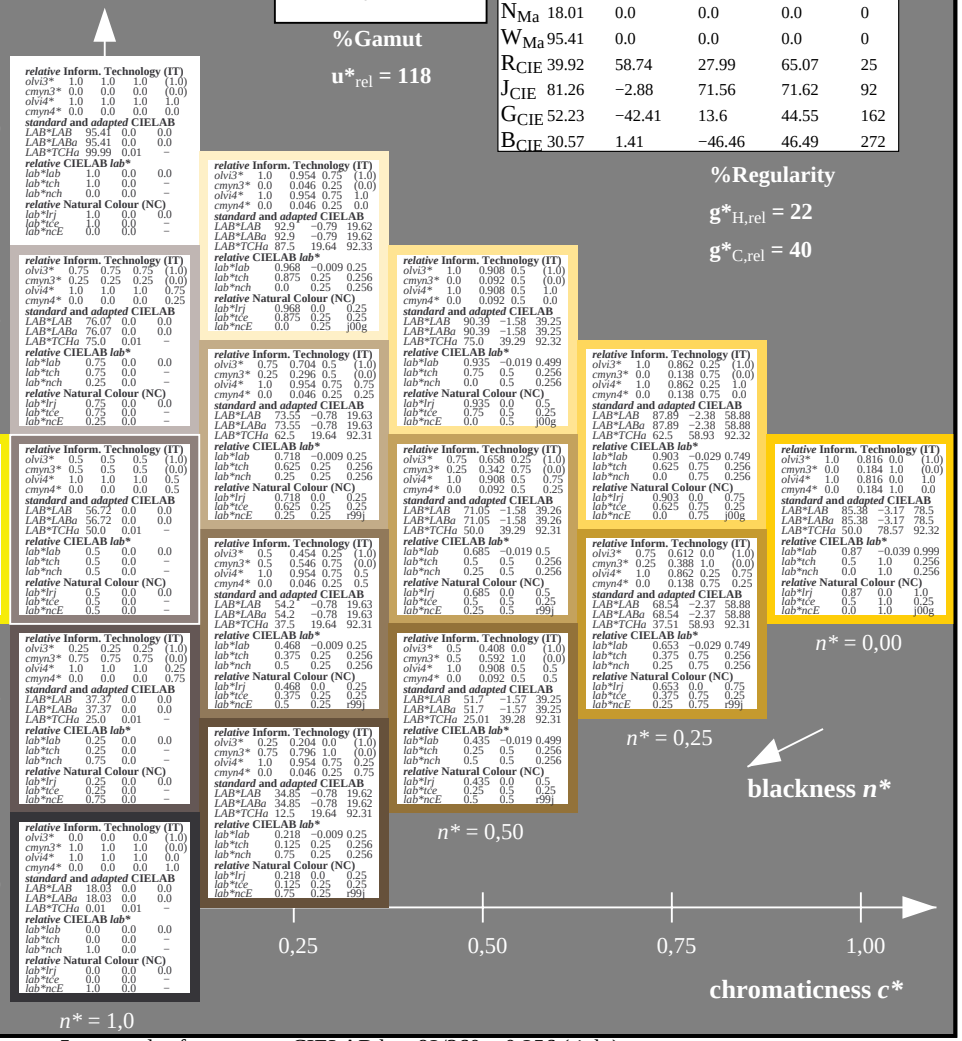
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



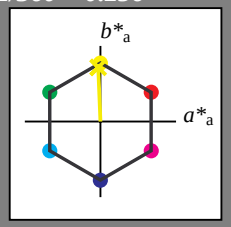
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

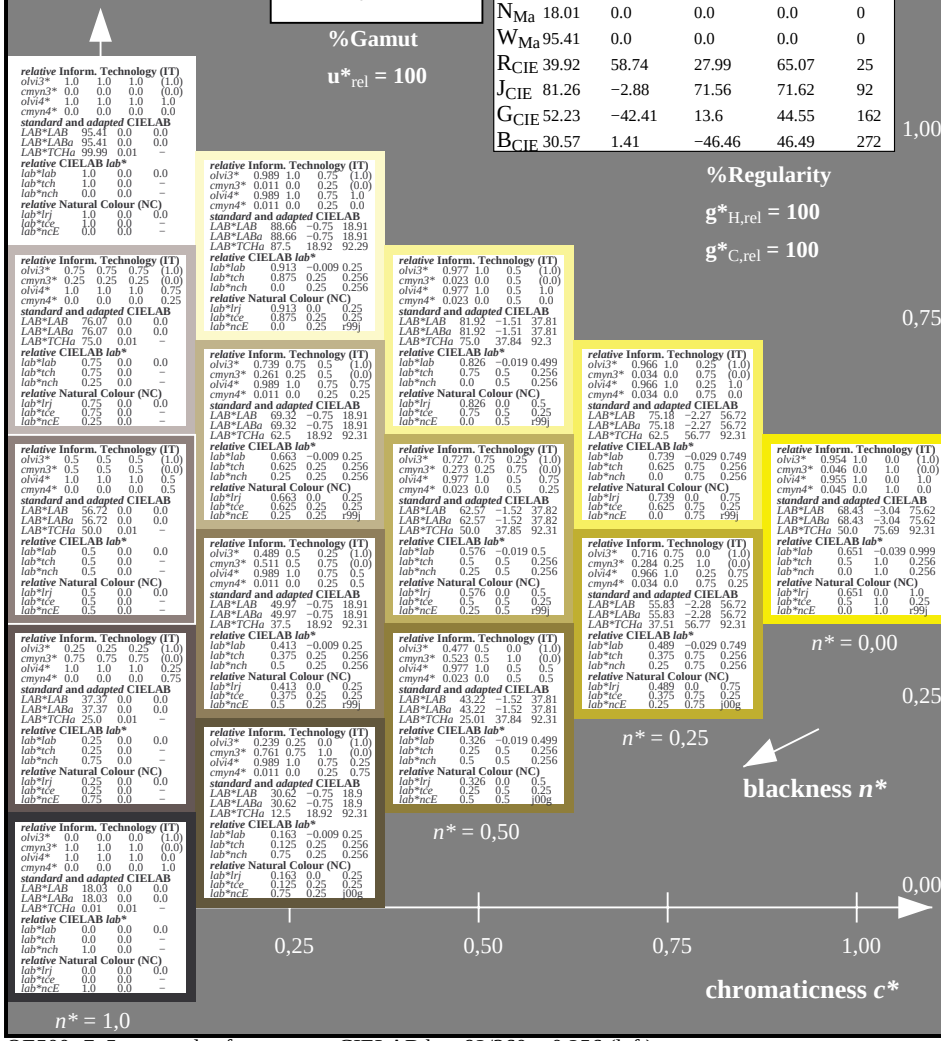
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

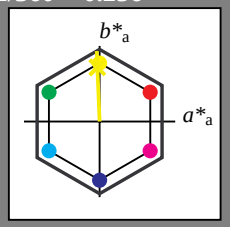


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

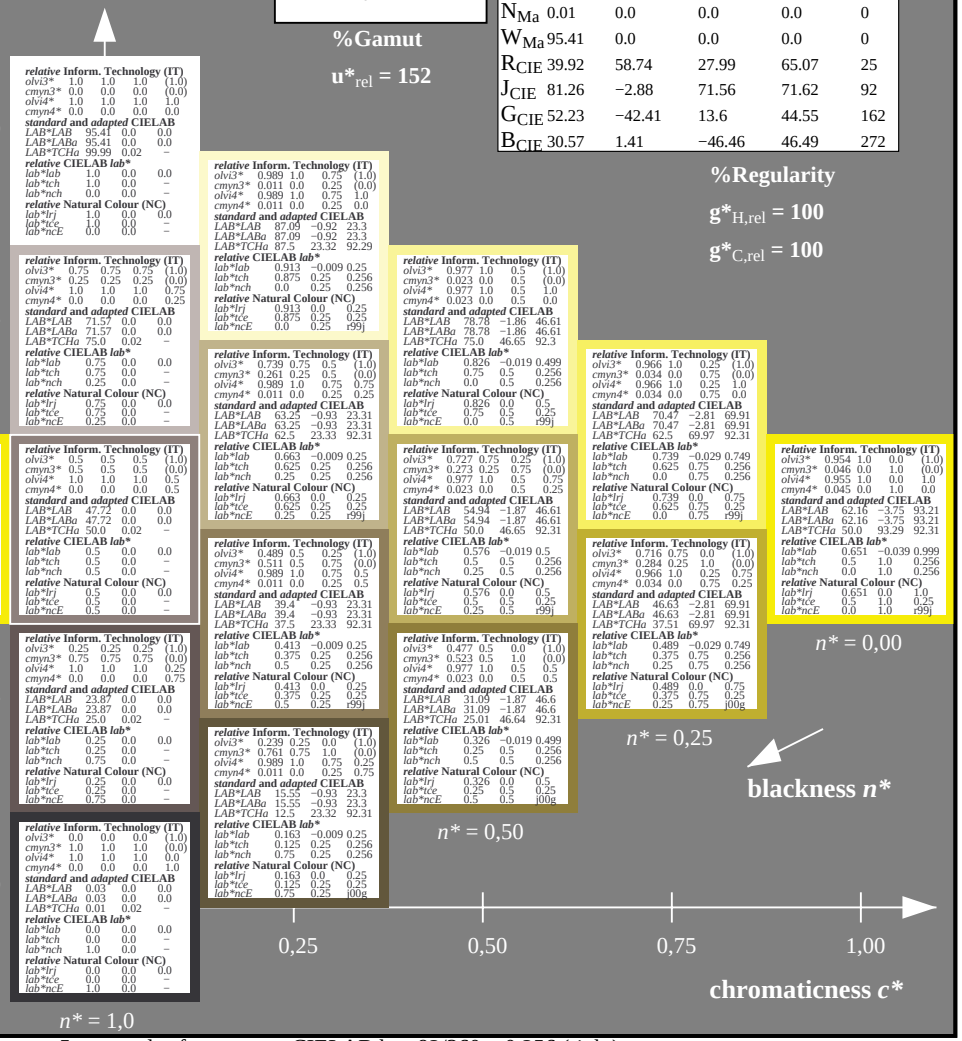
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

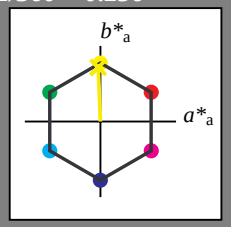
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

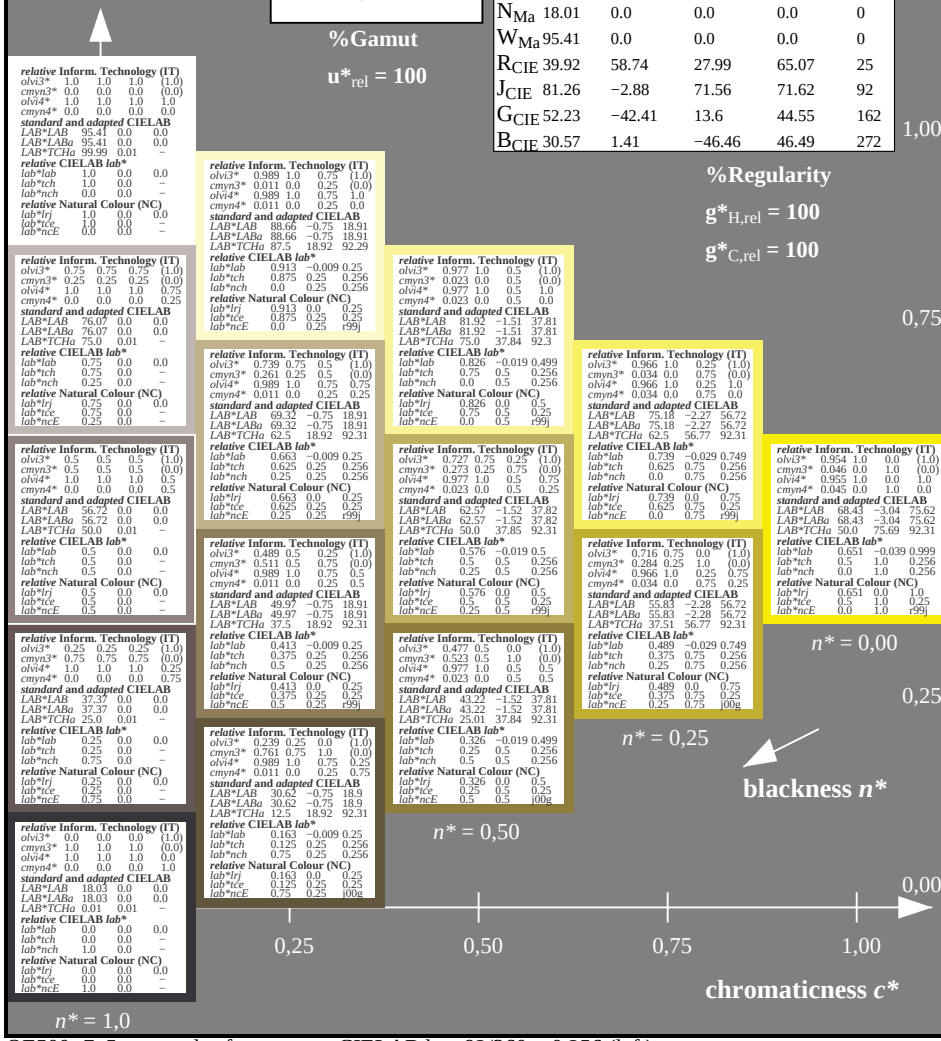
1,00

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

0,75



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*nCE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.989 1.0 0.75 (1.0)
cmyn3* 0.011 0.0 0.25 (0.0)
olvi4* 0.989 1.0 0.75 1.0
cmyn4* 0.011 0.0 0.25 0.0
standard and adapted CIELAB
LAB*LAB 88.66 −0.75 18.91
LAB*LABa 88.66 −0.75 18.91
LAB*TCHa 87.5 18.92 92.29
relative CIELAB lab*
lab*lab 0.913 −0.009 0.25
lab*tch 0.875 0.25 0.256
lab*nch 0.0 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.913 0.0 0.25
lab*tce 0.875 0.25 0.25
lab*nCE 0.0 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.977 1.0 0.5 (1.0)
cmyn3* 0.023 0.0 0.5 (0.0)
olvi4* 0.977 1.0 0.5 1.0
cmyn4* 0.023 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 81.92 −1.51 37.81
LAB*LABa 81.92 −1.51 37.81
LAB*TCHa 75.0 37.84 92.3
relative CIELAB lab*
lab*lab 0.826 −0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.826 0.0 0.5
lab*tce 0.75 0.5 0.25
lab*nCE 0.0 0.5 r99j

relative Inform. Technology (IT)
olvi3* 0.966 1.0 0.25 (1.0)
cmyn3* 0.034 0.0 0.75 (0.0)
olvi4* 0.966 1.0 0.25 1.0
cmyn4* 0.034 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 75.18 −2.27 56.72
LAB*LABa 75.18 −2.27 56.72
LAB*TCHa 62.5 56.77 92.31
relative CIELAB lab*
lab*lab 0.739 −0.029 0.749
lab*tch 0.625 0.75 0.256
lab*nch 0.0 0.75 0.256
relative Natural Colour (NC)
lab*lrj 0.739 0.0 0.75
lab*tce 0.625 0.75 0.25
lab*nCE 0.0 0.75 r99j

relative Inform. Technology (IT)
olvi3* 0.954 1.0 0.0 (1.0)
cmyn3* 0.046 0.0 1.0 (0.0)
olvi4* 0.955 1.0 0.0 1.0
cmyn4* 0.045 0.0 1.0 0.0
standard and adapted CIELAB
LAB*LAB 68.43 −3.04 75.62
LAB*LABa 68.43 −3.04 75.62
LAB*TCHa 50.0 75.69 92.31
relative CIELAB lab*
lab*lab 0.651 −0.039 0.999
lab*tch 0.5 1.0 0.256
lab*nch 0.0 1.0 0.256
relative Natural Colour (NC)
lab*lrj 0.651 0.0 1.0
lab*tce 0.5 1.0 0.25
lab*nCE 0.0 1.0 r99j

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
relative Natural Colour (NC)
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*nCE 0.25 0.0 –

relative Inform. Technology (IT)
olvi3* 0.739 0.75 0.5 (1.0)
cmyn3* 0.261 0.25 0.5 (0.0)
olvi4* 0.989 1.0 0.75 0.75
cmyn4* 0.011 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 69.32 −0.75 18.91
LAB*LABa 69.32 −0.75 18.91
LAB*TCHa 62.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.663 −0.009 0.25
lab*tch 0.625 0.25 0.256
lab*nch 0.25 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.663 0.0 0.25
lab*tce 0.625 0.25 0.25
lab*nCE 0.25 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.727 0.75 0.25 (1.0)
cmyn3* 0.273 0.25 0.75 (0.0)
olvi4* 0.977 1.0 0.5 0.75
cmyn4* 0.023 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 62.57 −1.52 37.82
LAB*LABa 62.57 −1.52 37.82
LAB*TCHa 50.0 37.85 92.31
relative CIELAB lab*
lab*lab 0.576 −0.019 0.5
lab*tch 0.5 0.5 0.256
lab*nch 0.25 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.576 0.0 0.5
lab*tce 0.5 0.5 0.25
lab*nCE 0.25 0.5 r99j

relative Inform. Technology (IT)
olvi3* 0.716 0.75 0.0 (1.0)
cmyn3* 0.284 0.25 1.0 (0.0)
olvi4* 0.966 1.0 0.25 0.75
cmyn4* 0.034 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 55.83 −2.28 56.72
LAB*LABa 55.83 −2.28 56.72
LAB*TCHa 37.51 56.77 92.31
relative CIELAB lab*
lab*lab 0.489 −0.029 0.749
lab*tch 0.375 0.75 0.256
lab*nch 0.25 0.75 0.256
relative Natural Colour (NC)
lab*lrj 0.489 0.0 0.75
lab*tce 0.375 0.75 0.25
lab*nCE 0.25 0.75 j00g

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
relative Natural Colour (NC)
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*nCE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.489 0.5 0.25 (1.0)
cmyn3* 0.511 0.5 0.75 (0.0)
olvi4* 0.989 1.0 0.75 0.5
cmyn4* 0.011 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 49.97 −0.75 18.91
LAB*LABa 49.97 −0.75 18.91
LAB*TCHa 37.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.413 −0.009 0.25
lab*tch 0.375 0.25 0.256
lab*nch 0.5 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.413 0.0 0.25
lab*tce 0.375 0.25 0.25
lab*nCE 0.5 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.477 0.5 0.0 (1.0)
cmyn3* 0.523 0.5 1.0 (0.0)
olvi4* 0.977 1.0 0.5 0.5
cmyn4* 0.023 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 43.22 −1.52 37.81
LAB*LABa 43.22 −1.52 37.81
LAB*TCHa 25.01 37.84 92.31
relative CIELAB lab*
lab*lab 0.326 −0.019 0.499
lab*tch 0.25 0.5 0.256
lab*nch 0.5 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.326 0.0 0.5
lab*tce 0.25 0.5 0.25
lab*nCE 0.5 0.5 j00g

relative Inform. Technology (IT)
olvi3* 0.239 0.25 0.0 (1.0)
cmyn3* 0.761 0.75 1.0 (0.0)
olvi4* 0.989 1.0 0.75 0.25
cmyn4* 0.011 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 30.62 −0.75 18.9
LAB*LABa 30.62 −0.75 18.9
LAB*TCHa 12.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.163 −0.009 0.25
lab*tch 0.125 0.25 0.256
lab*nch 0.75 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.163 0.0 0.25
lab*tce 0.125 0.25 0.25
lab*nCE 0.75 0.25 j00g

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 –
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 –
lab*nch 1.0 0.0 –
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*tce 0.0 0.0 –
lab*nCE 1.0 0.0 –

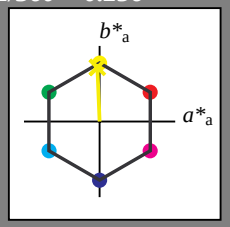
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

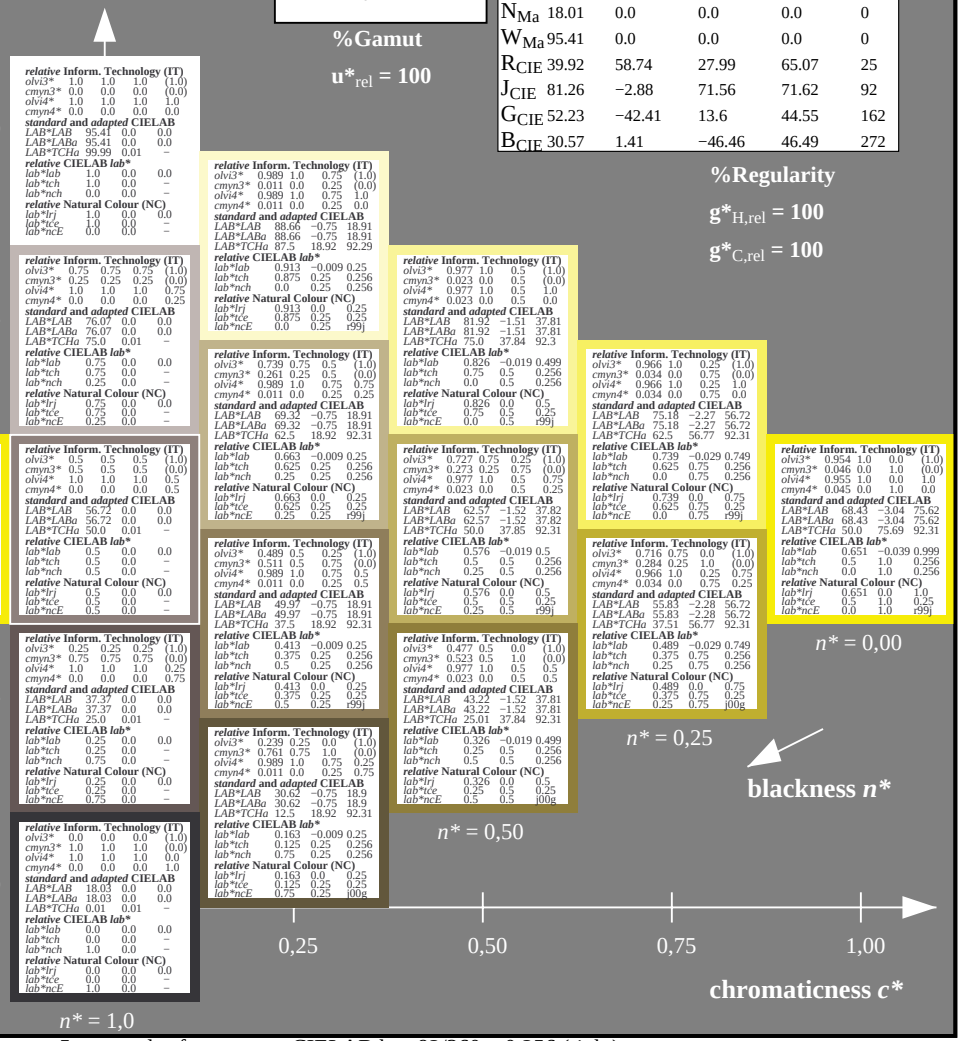
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 –
relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 –
lab*nch 0.0 0.0 –
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*tce 1.0 0.0 –
lab*nCE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.989 1.0 0.75 (1.0)
cmyn3* 0.011 0.0 0.25 (0.0)
olvi4* 0.989 1.0 0.75 1.0
cmyn4* 0.011 0.0 0.25 0.0
standard and adapted CIELAB
LAB*LAB 88.66 −0.75 18.91
LAB*LABa 88.66 −0.75 18.91
LAB*TCHa 87.5 18.92 92.29
relative CIELAB lab*
lab*lab 0.913 −0.009 0.25
lab*tch 0.875 0.25 0.256
lab*nch 0.0 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.913 0.0 0.25
lab*tce 0.875 0.25 0.25
lab*nCE 0.0 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.977 1.0 0.5 (1.0)
cmyn3* 0.023 0.0 0.5 (0.0)
olvi4* 0.977 1.0 0.5 1.0
cmyn4* 0.023 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 81.92 −1.51 37.81
LAB*LABa 81.92 −1.51 37.81
LAB*TCHa 75.0 37.84 92.3
relative CIELAB lab*
lab*lab 0.826 −0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.826 0.0 0.5
lab*tce 0.75 0.5 0.25
lab*nCE 0.0 0.5 r99j

relative Inform. Technology (IT)
olvi3* 0.966 1.0 0.25 (1.0)
cmyn3* 0.034 0.0 0.75 (0.0)
olvi4* 0.966 1.0 0.25 1.0
cmyn4* 0.034 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 75.18 −2.27 56.72
LAB*LABa 75.18 −2.27 56.72
LAB*TCHa 62.5 56.77 92.31
relative CIELAB lab*
lab*lab 0.739 −0.029 0.749
lab*tch 0.625 0.75 0.256
lab*nch 0.0 0.75 0.256
relative Natural Colour (NC)
lab*lrj 0.739 0.0 0.75
lab*tce 0.625 0.75 0.25
lab*nCE 0.0 0.75 r99j

relative Inform. Technology (IT)
olvi3* 0.954 1.0 0.0 (1.0)
cmyn3* 0.046 0.0 1.0 (0.0)
olvi4* 0.955 1.0 0.0 1.0
cmyn4* 0.045 0.0 1.0 0.0
standard and adapted CIELAB
LAB*LAB 68.43 −3.04 75.62
LAB*LABa 68.43 −3.04 75.62
LAB*TCHa 50.0 75.69 92.31
relative CIELAB lab*
lab*lab 0.651 −0.039 0.999
lab*tch 0.5 1.0 0.256
lab*nch 0.0 1.0 0.256
relative Natural Colour (NC)
lab*lrj 0.651 0.0 1.0
lab*tce 0.5 1.0 0.25
lab*nCE 0.0 1.0 r99j

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
relative Natural Colour (NC)
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*nCE 0.25 0.0 –

relative Inform. Technology (IT)
olvi3* 0.739 0.75 0.5 (1.0)
cmyn3* 0.261 0.25 0.5 (0.0)
olvi4* 0.989 1.0 0.75 0.75
cmyn4* 0.011 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 69.32 −0.75 18.91
LAB*LABa 69.32 −0.75 18.91
LAB*TCHa 62.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.663 −0.009 0.25
lab*tch 0.625 0.25 0.256
lab*nch 0.25 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.663 0.0 0.25
lab*tce 0.625 0.25 0.25
lab*nCE 0.25 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.727 0.75 0.25 (1.0)
cmyn3* 0.273 0.25 0.75 (0.0)
olvi4* 0.977 1.0 0.5 0.75
cmyn4* 0.023 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 62.57 −1.52 37.82
LAB*LABa 62.57 −1.52 37.82
LAB*TCHa 50.0 37.85 92.31
relative CIELAB lab*
lab*lab 0.576 −0.019 0.5
lab*tch 0.5 0.5 0.256
lab*nch 0.25 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.576 0.0 0.5
lab*tce 0.5 0.5 0.25
lab*nCE 0.25 0.5 r99j

relative Inform. Technology (IT)
olvi3* 0.716 0.75 0.0 (1.0)
cmyn3* 0.284 0.25 1.0 (0.0)
olvi4* 0.966 1.0 0.25 0.75
cmyn4* 0.034 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 55.83 −2.28 56.72
LAB*LABa 55.83 −2.28 56.72
LAB*TCHa 37.51 56.77 92.31
relative CIELAB lab*
lab*lab 0.489 −0.029 0.749
lab*tch 0.375 0.75 0.256
lab*nch 0.25 0.75 0.256
relative Natural Colour (NC)
lab*lrj 0.489 0.0 0.75
lab*tce 0.375 0.75 0.25
lab*nCE 0.25 0.75 j00g

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
relative Natural Colour (NC)
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*nCE 0.75 0.0 –

relative Inform. Technology (IT)
olvi3* 0.489 0.5 0.25 (1.0)
cmyn3* 0.511 0.5 0.75 (0.0)
olvi4* 0.989 1.0 0.75 0.5
cmyn4* 0.011 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 49.97 −0.75 18.91
LAB*LABa 49.97 −0.75 18.91
LAB*TCHa 37.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.413 −0.009 0.25
lab*tch 0.375 0.25 0.256
lab*nch 0.5 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.413 0.0 0.25
lab*tce 0.375 0.25 0.25
lab*nCE 0.5 0.25 r99j

relative Inform. Technology (IT)
olvi3* 0.477 0.5 0.0 (1.0)
cmyn3* 0.523 0.5 1.0 (0.0)
olvi4* 0.977 1.0 0.5 0.5
cmyn4* 0.023 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 43.22 −1.52 37.81
LAB*LABa 43.22 −1.52 37.81
LAB*TCHa 25.01 37.84 92.31
relative CIELAB lab*
lab*lab 0.326 −0.019 0.499
lab*tch 0.25 0.5 0.256
lab*nch 0.5 0.5 0.256
relative Natural Colour (NC)
lab*lrj 0.326 0.0 0.5
lab*tce 0.25 0.5 0.25
lab*nCE 0.5 0.5 j00g

relative Inform. Technology (IT)
olvi3* 0.239 0.25 0.0 (1.0)
cmyn3* 0.761 0.75 1.0 (0.0)
olvi4* 0.989 1.0 0.75 0.25
cmyn4* 0.011 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 30.62 −0.75 18.9
LAB*LABa 30.62 −0.75 18.9
LAB*TCHa 12.5 18.92 92.31
relative CIELAB lab*
lab*lab 0.163 −0.009 0.25
lab*tch 0.125 0.25 0.256
lab*nch 0.75 0.25 0.256
relative Natural Colour (NC)
lab*lrj 0.163 0.0 0.25
lab*tce 0.125 0.25 0.25
lab*nCE 0.75 0.25 j00g

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 –
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 –
lab*nch 1.0 0.0 –
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*tce 0.0 0.0 –
lab*nCE 1.0 0.0 –

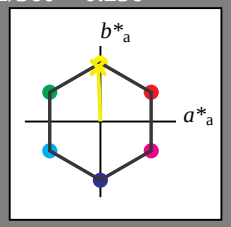
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

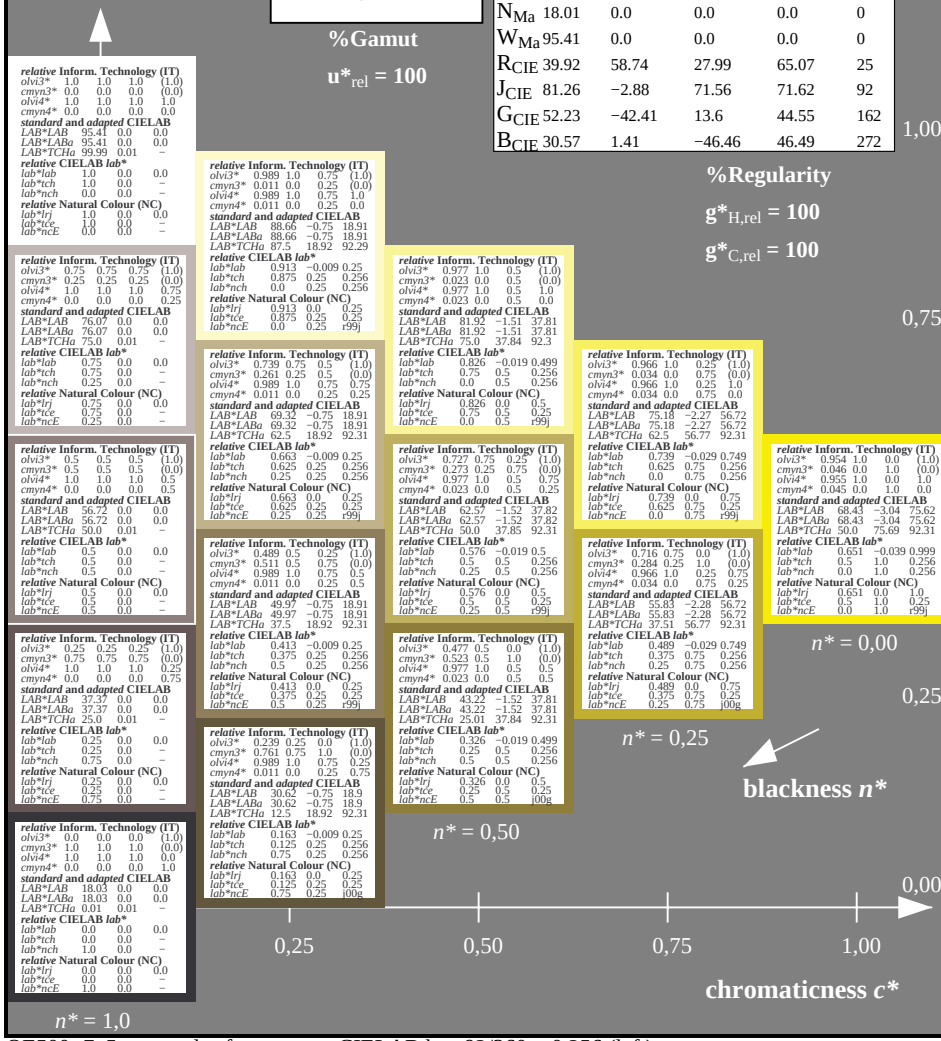
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

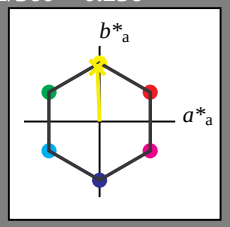


Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

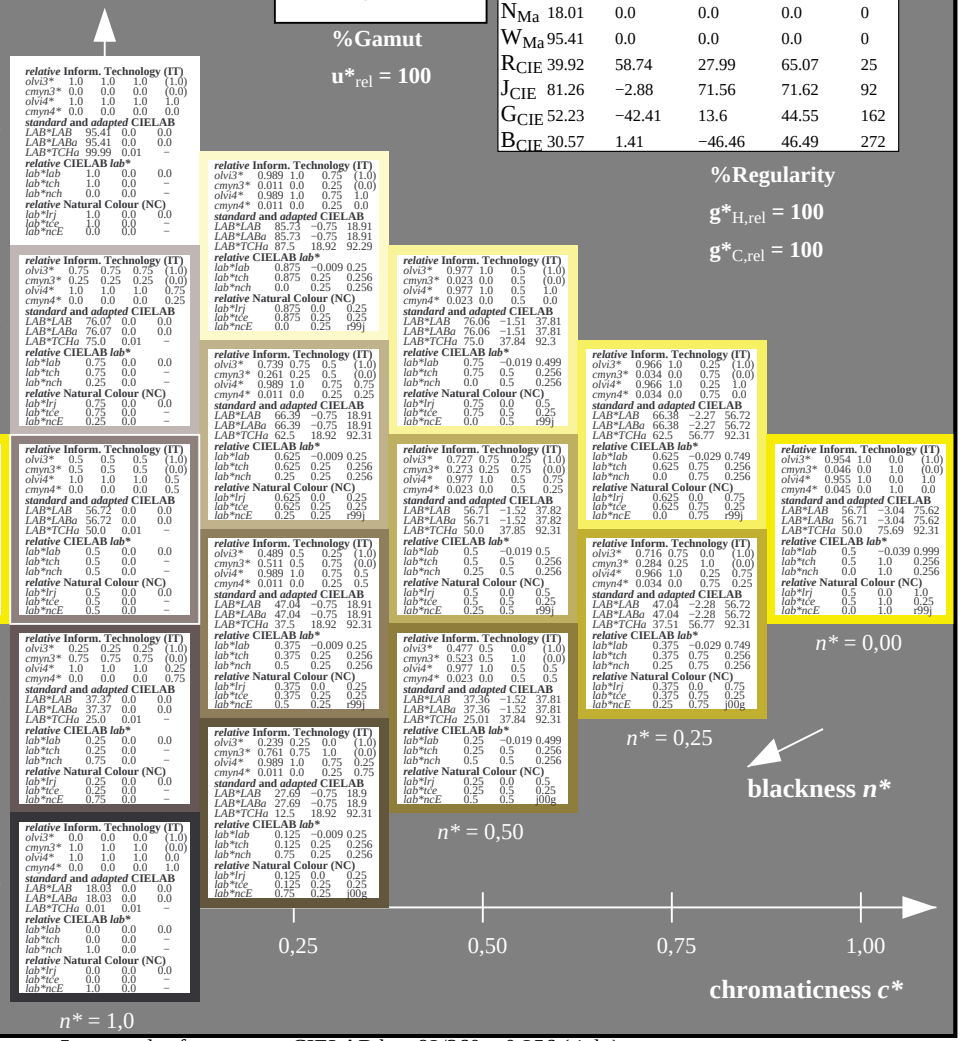
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

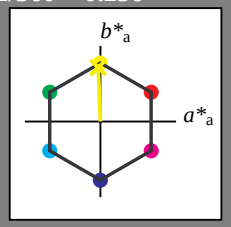
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

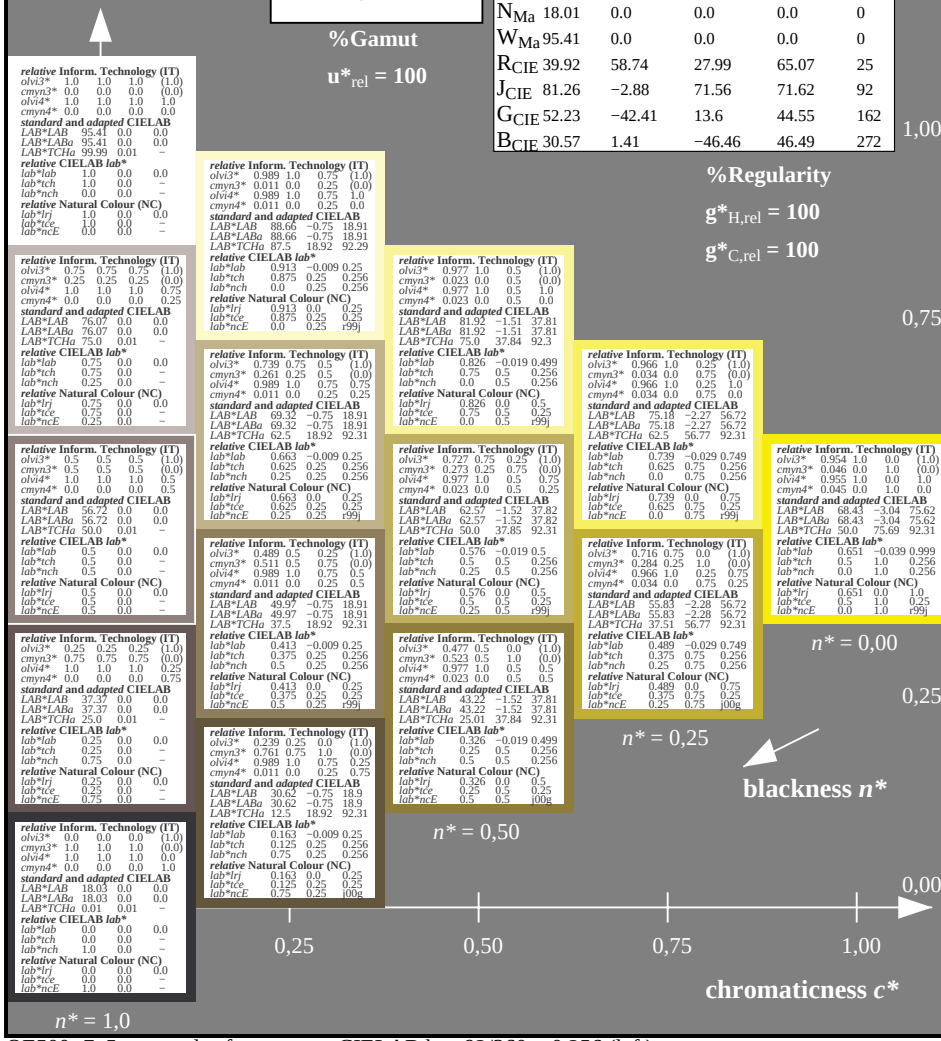
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

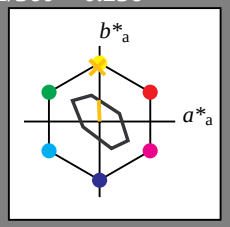
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

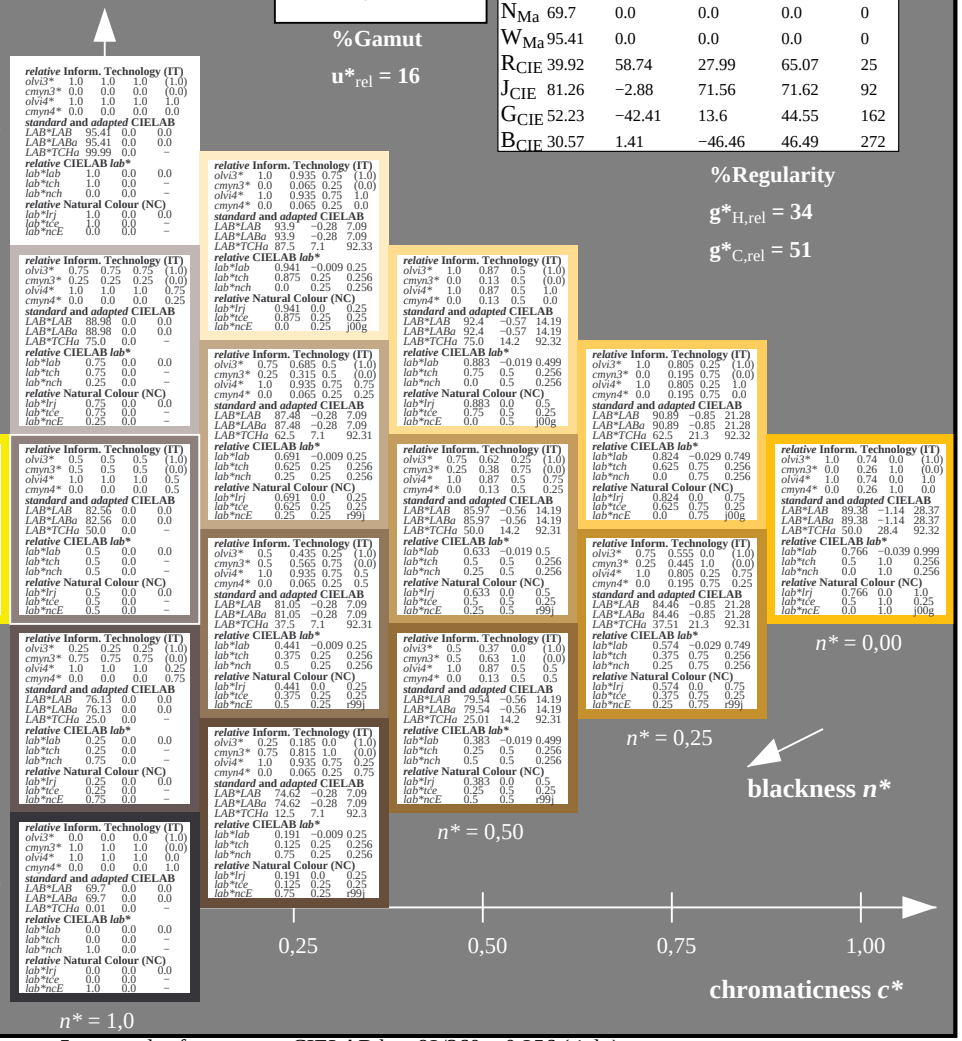
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

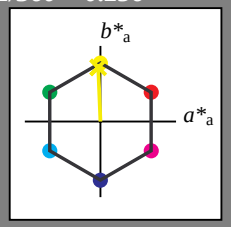
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

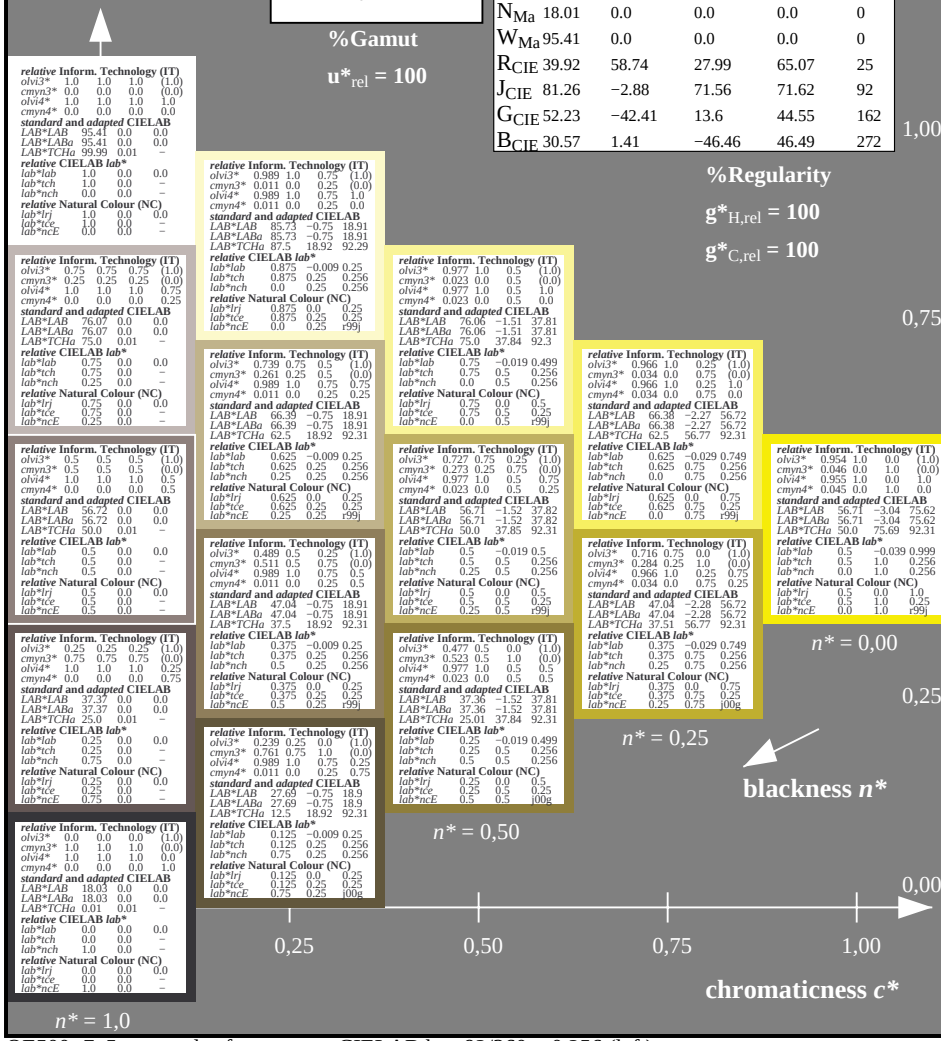
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

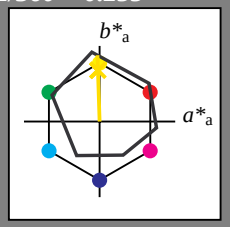
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

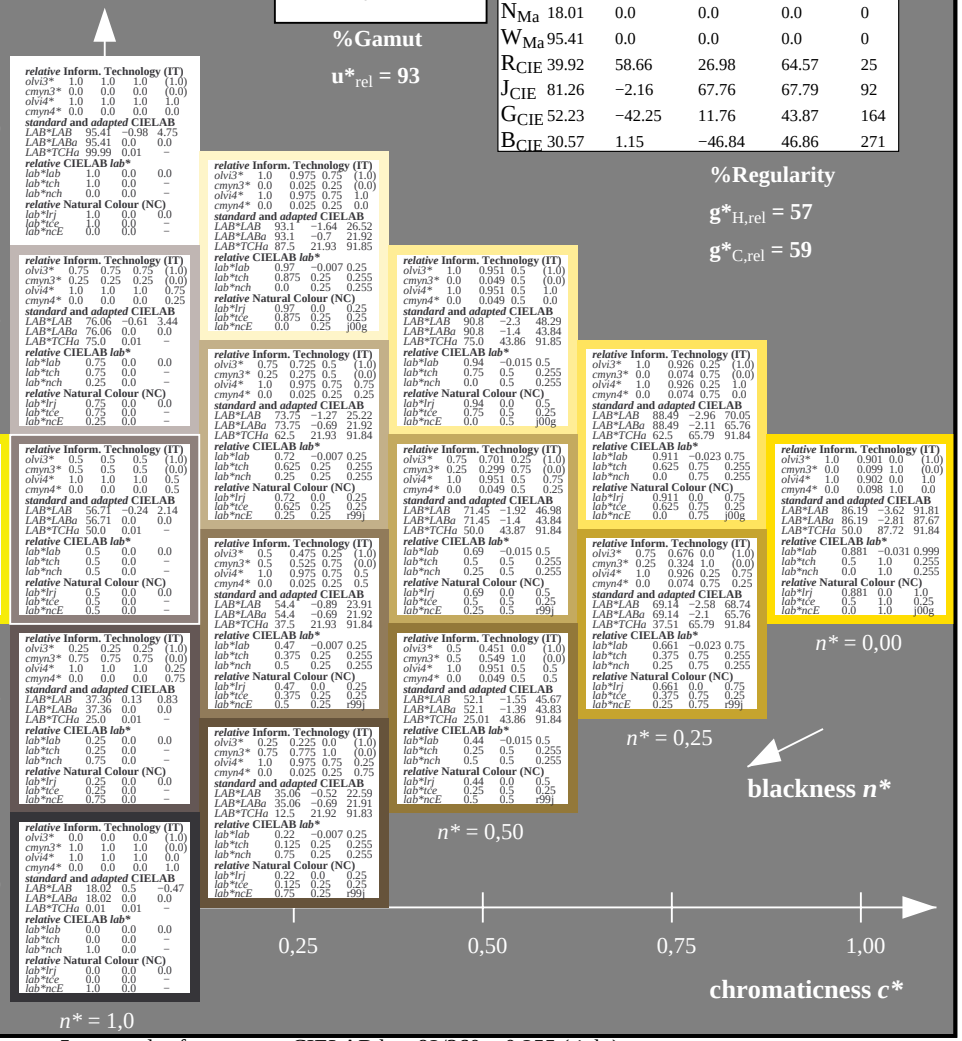
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Standard Reflective System SRS18

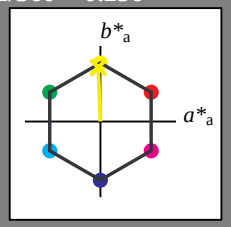
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

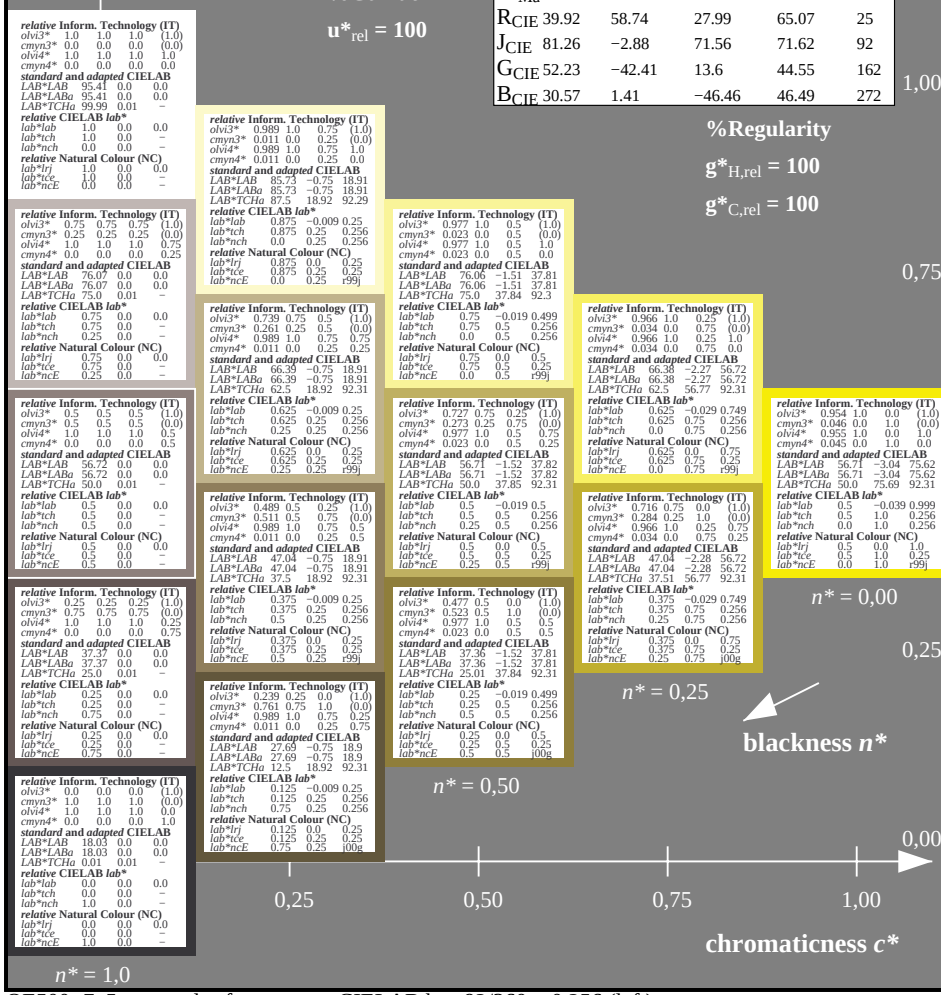
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

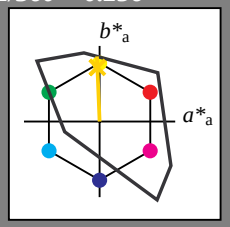
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

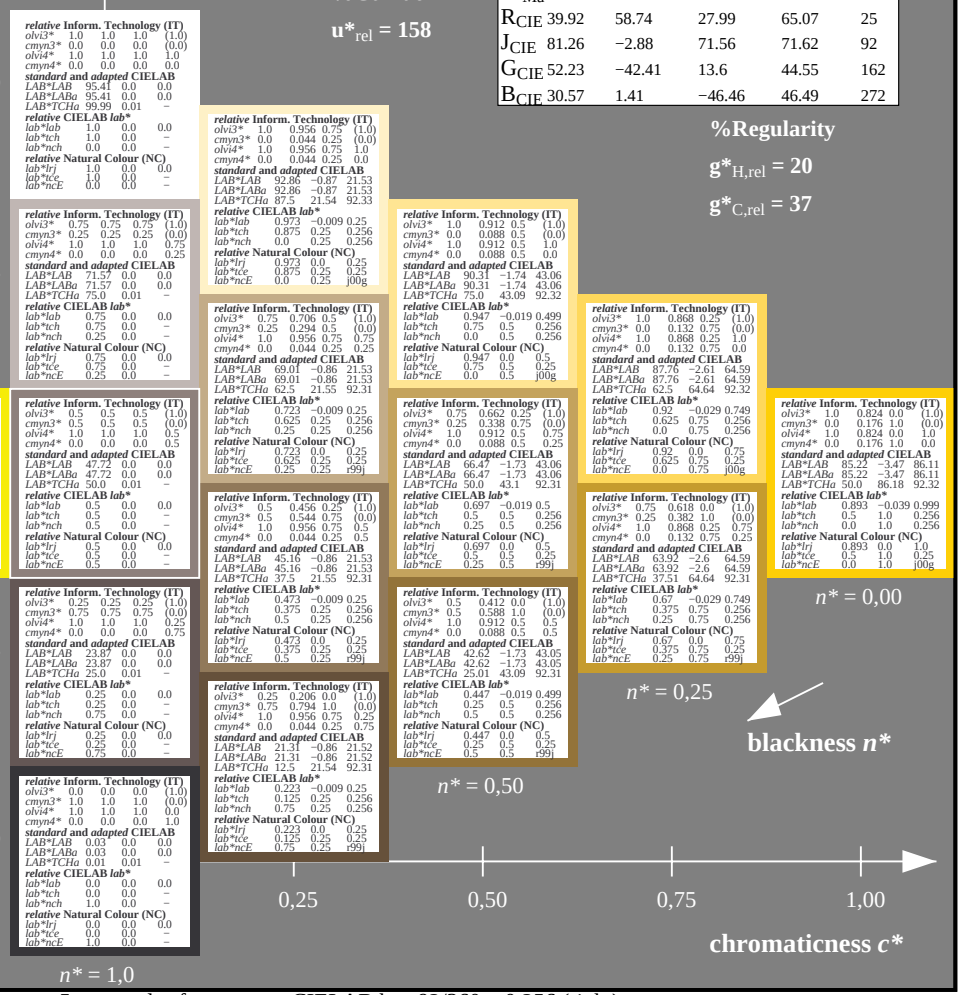
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



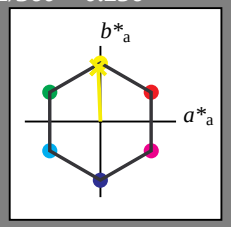
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

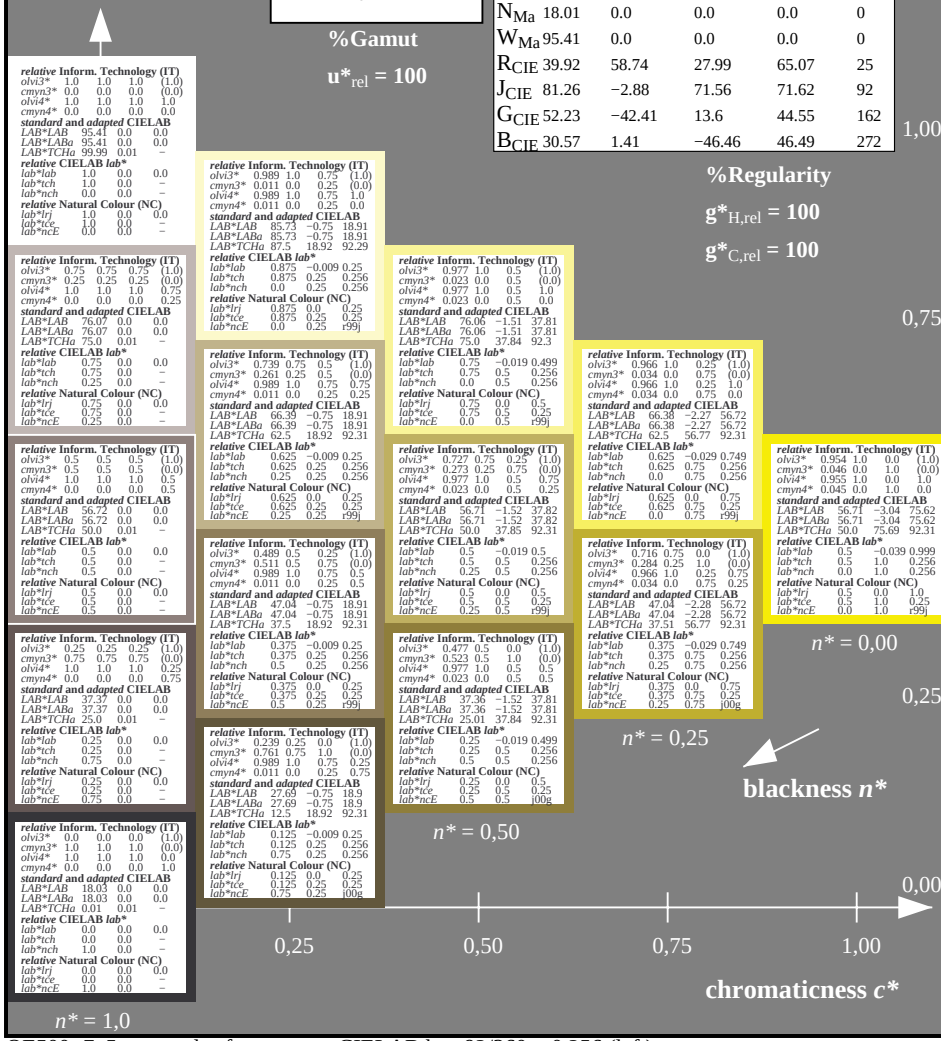
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



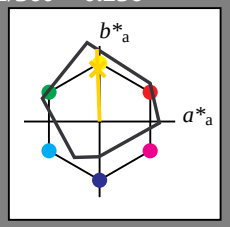
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

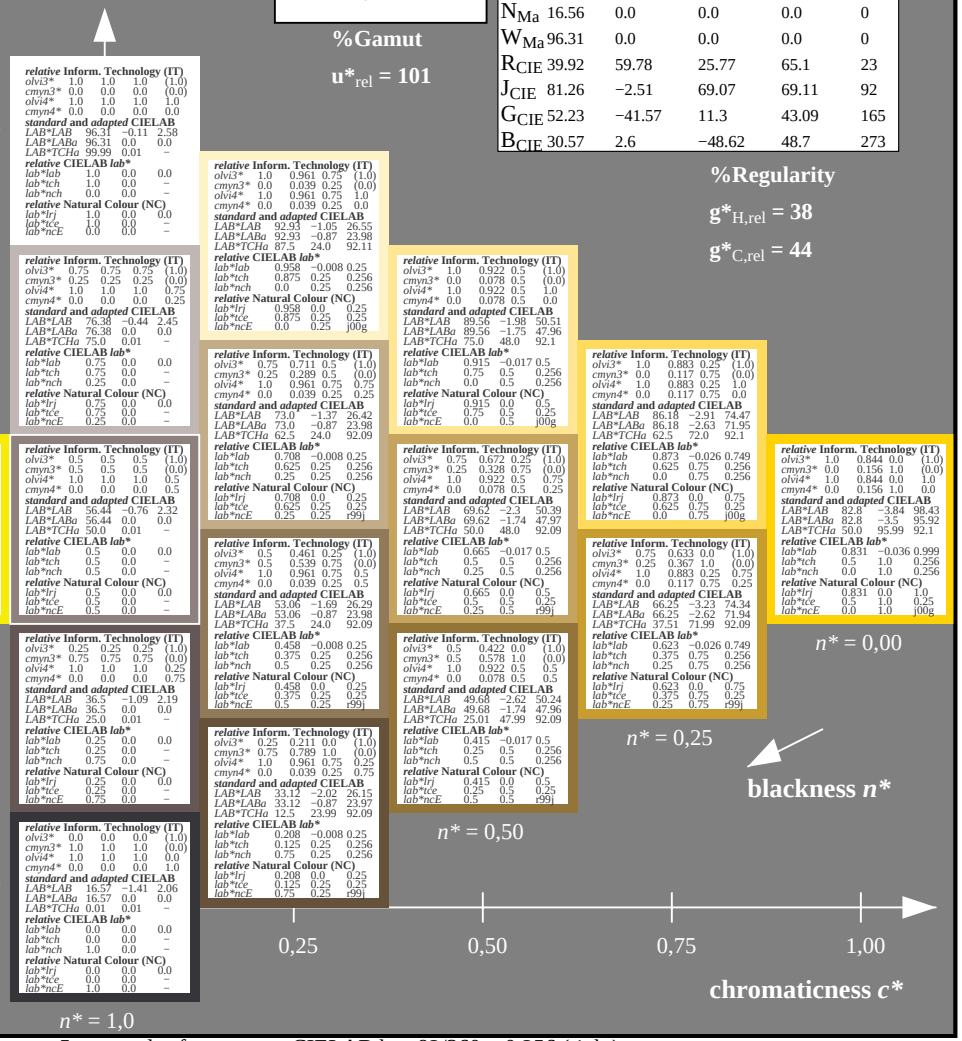
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

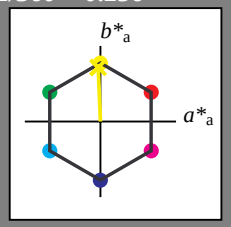
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

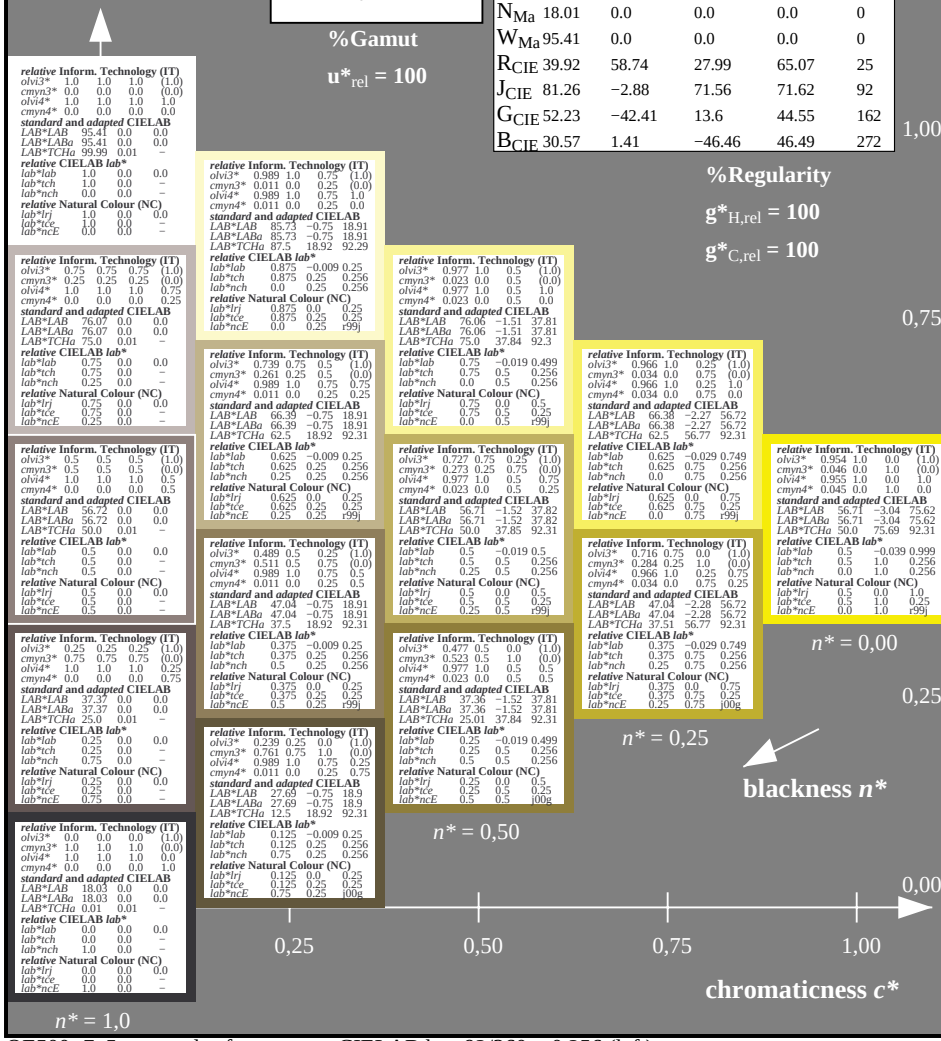
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

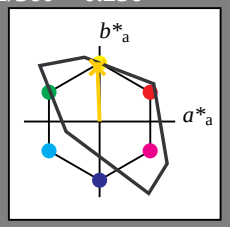
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

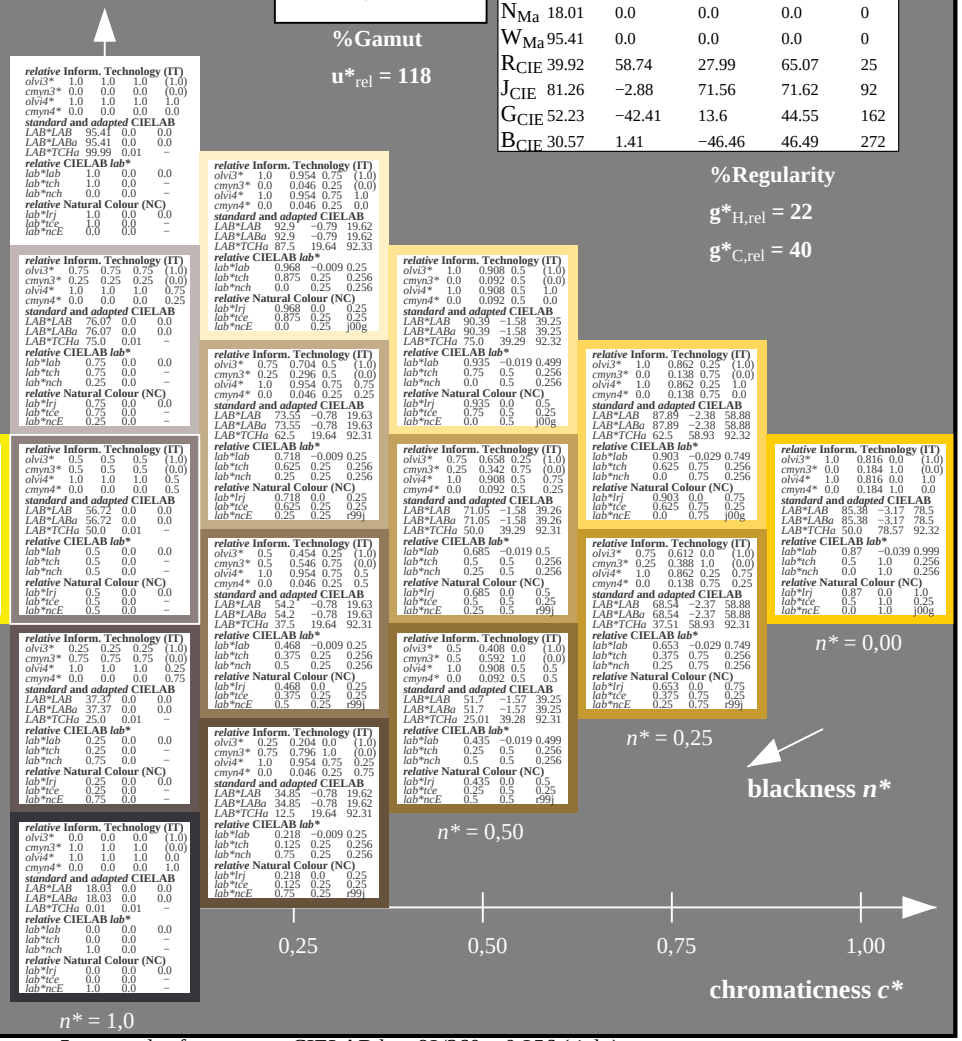
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



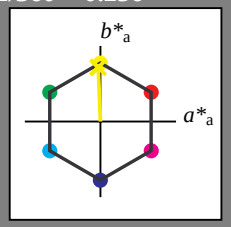
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

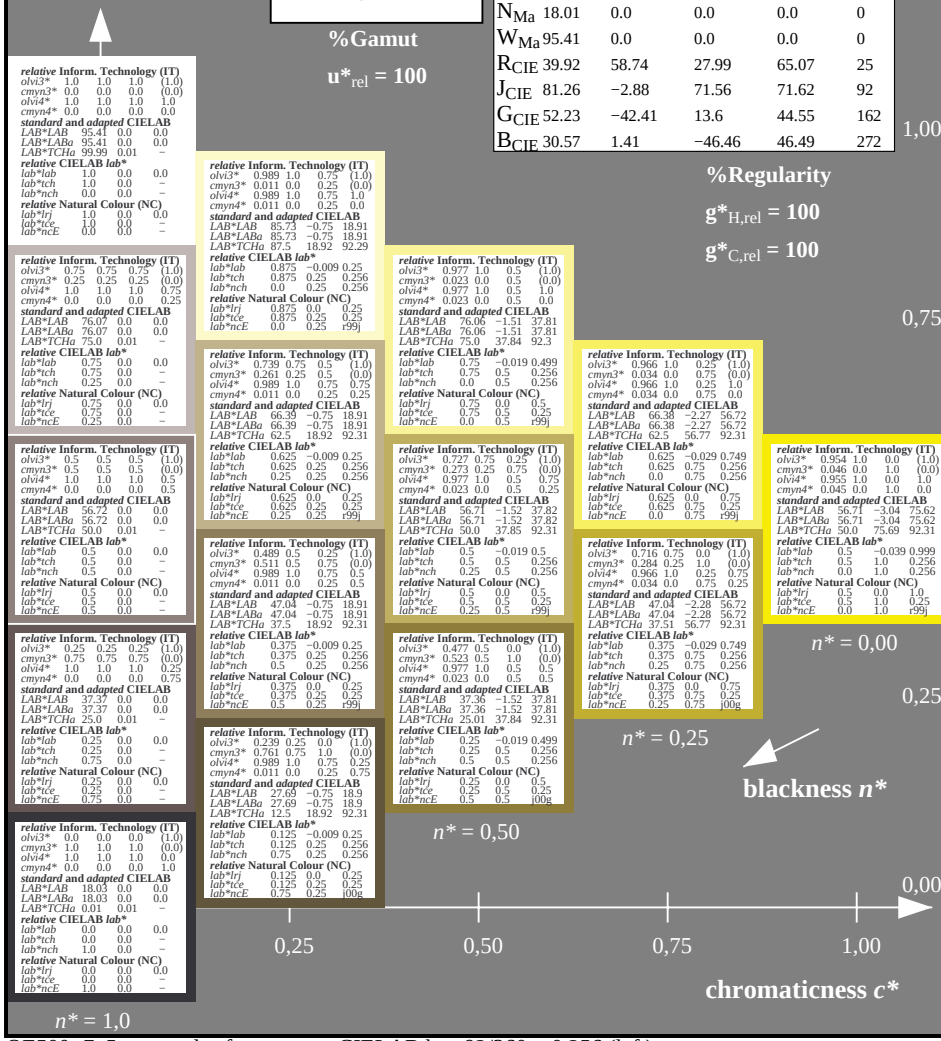
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



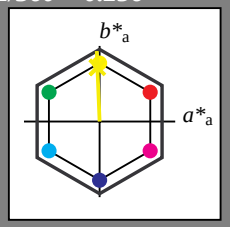
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 62 93 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

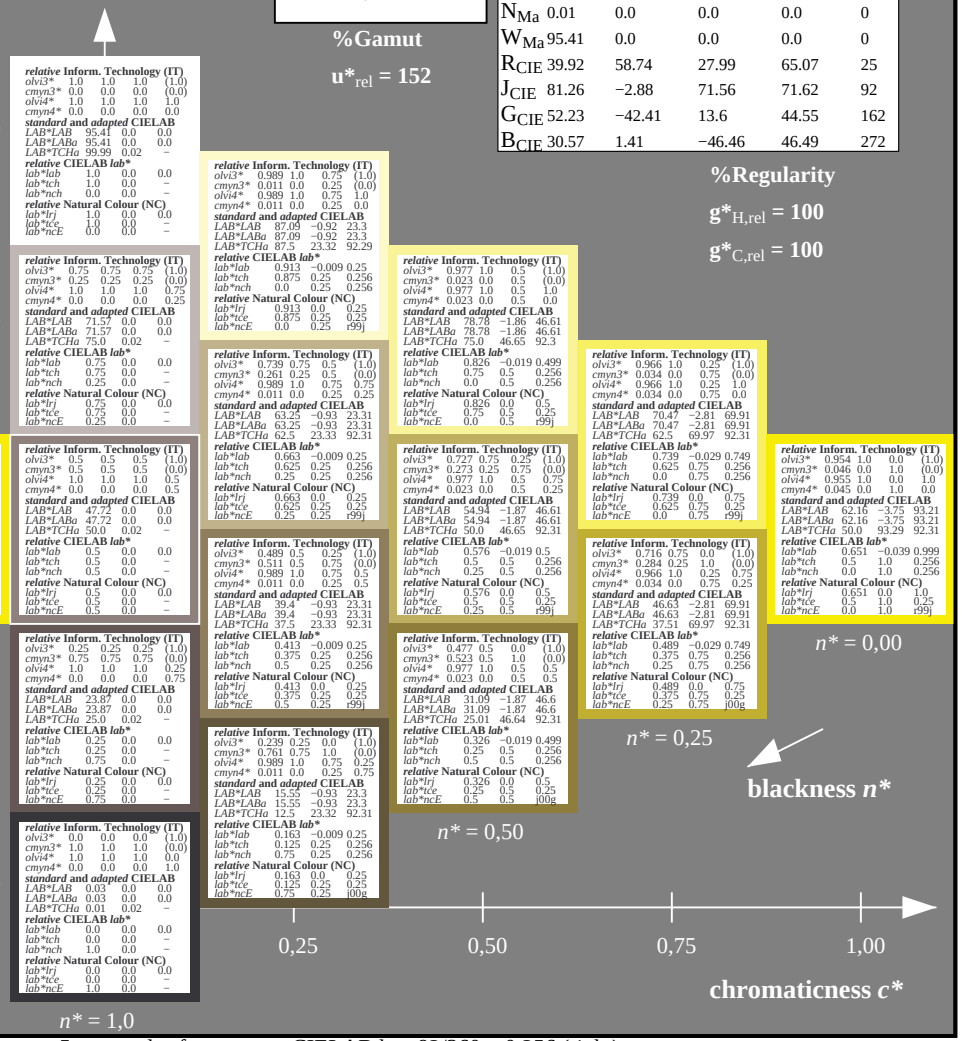
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

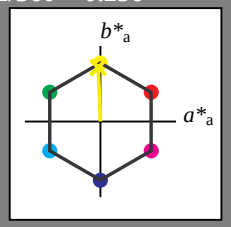


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

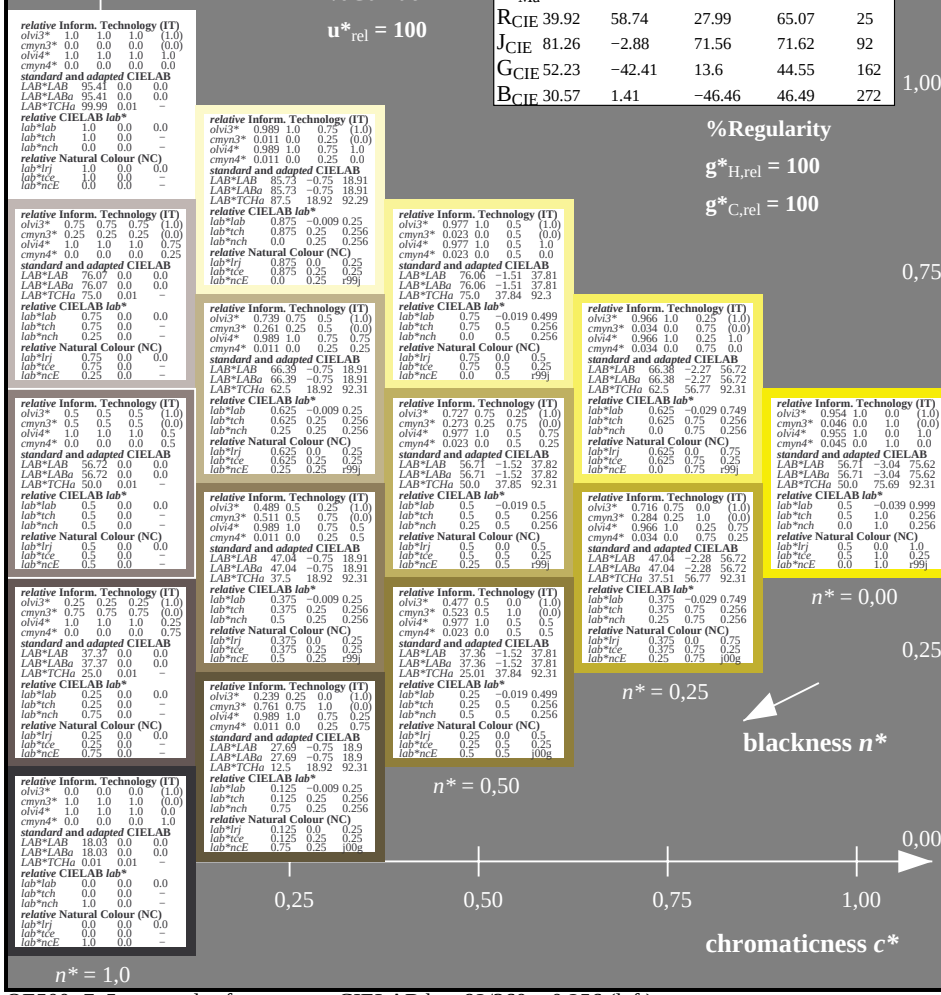
1,00

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

0,75

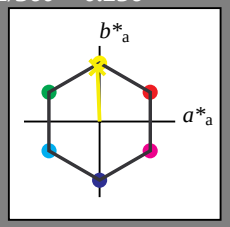


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 68 76 92
olv*Ma: 0.95 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

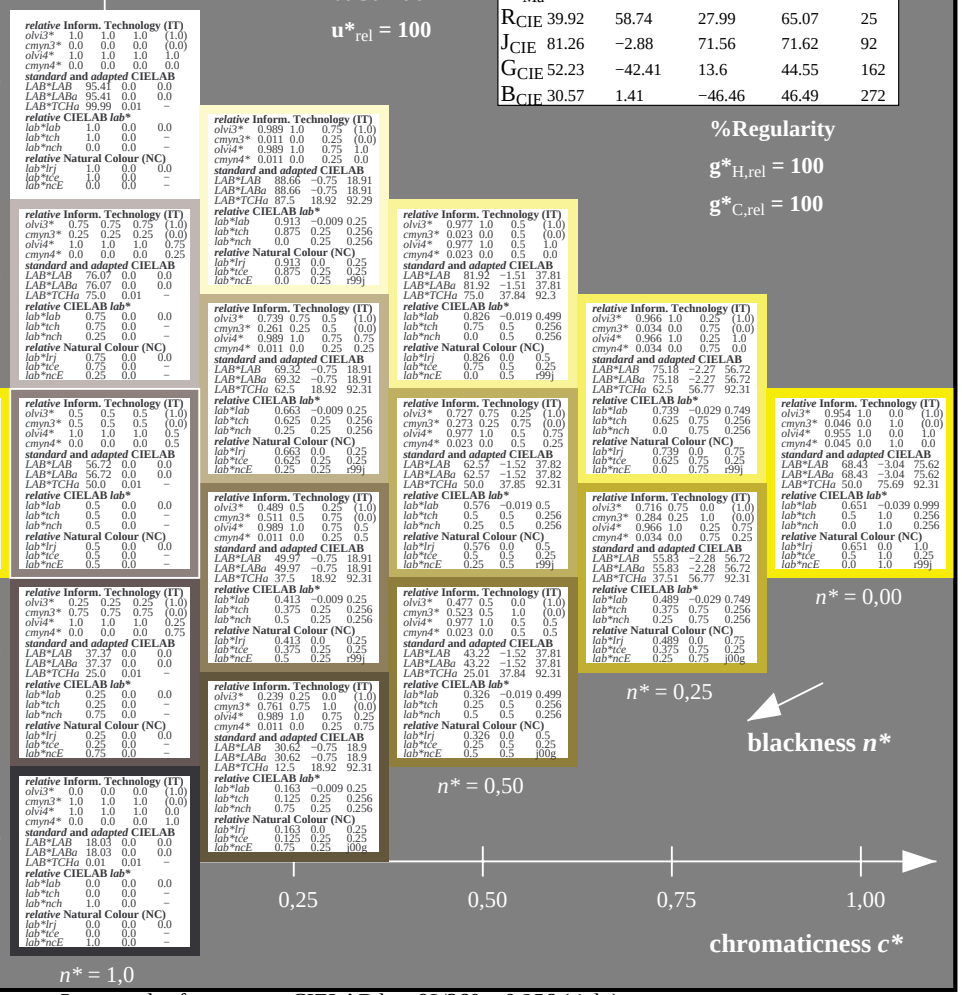
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

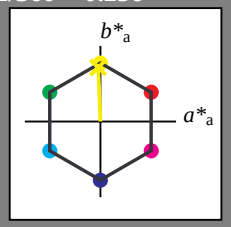


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

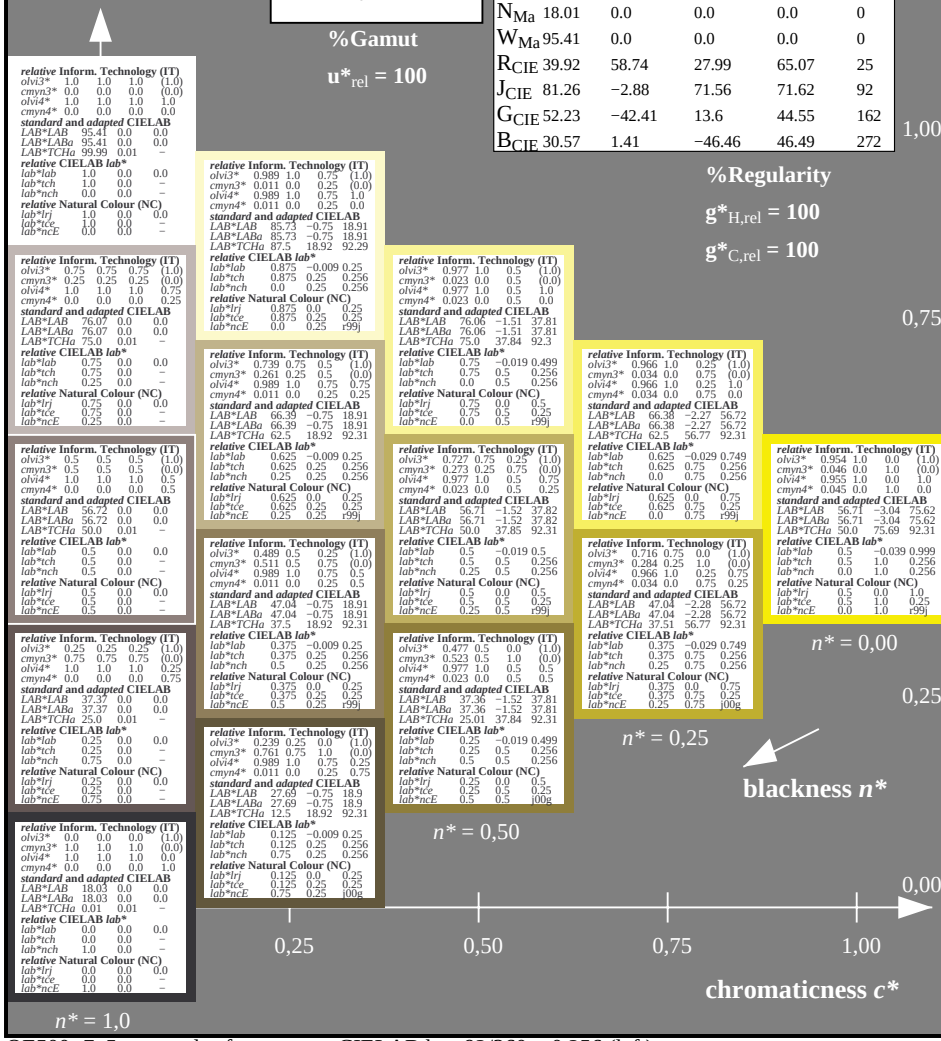
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

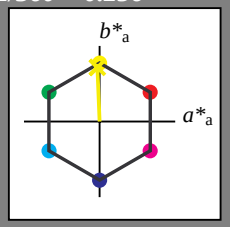


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

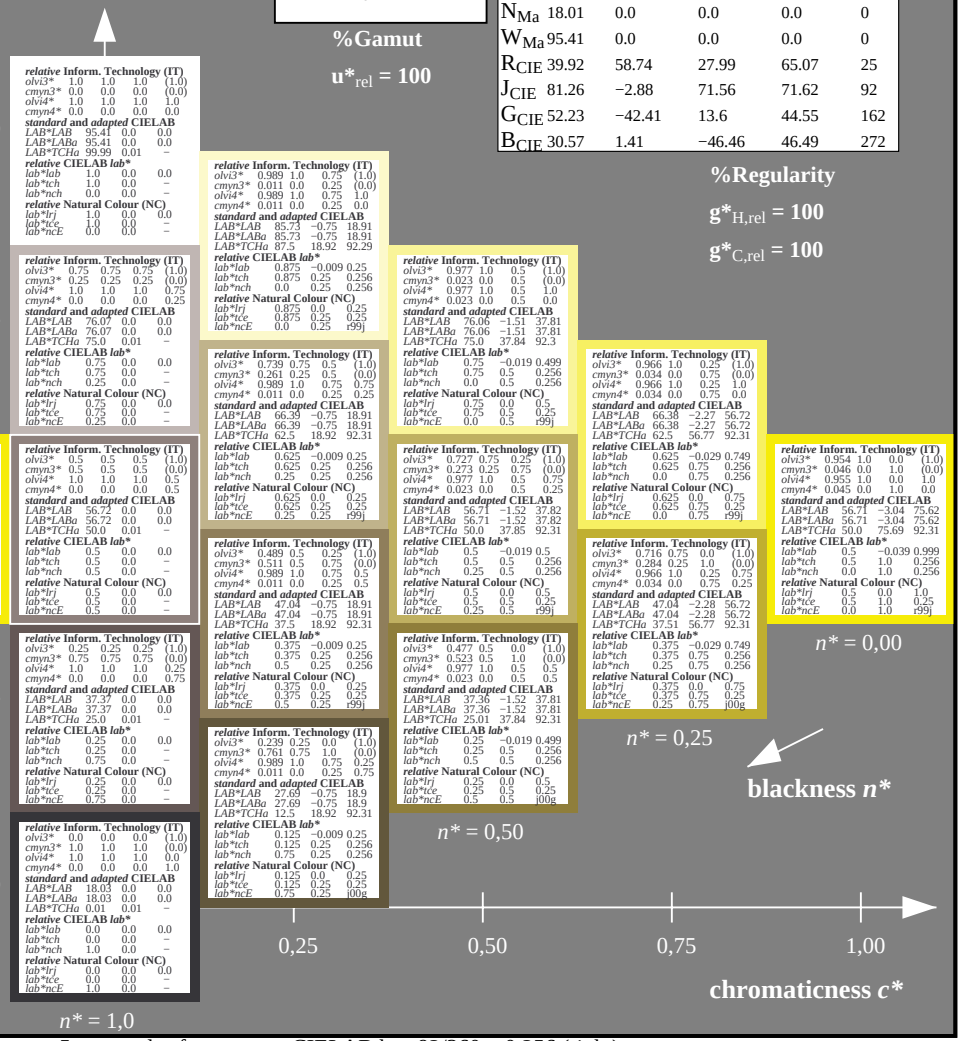
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Standard Reflective System SRS18

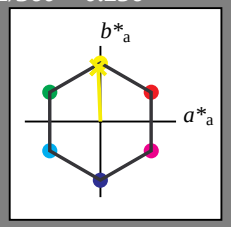
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

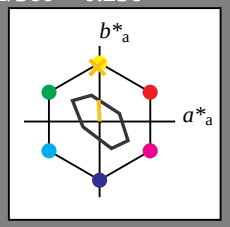
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

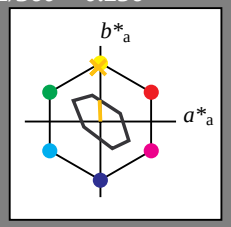
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

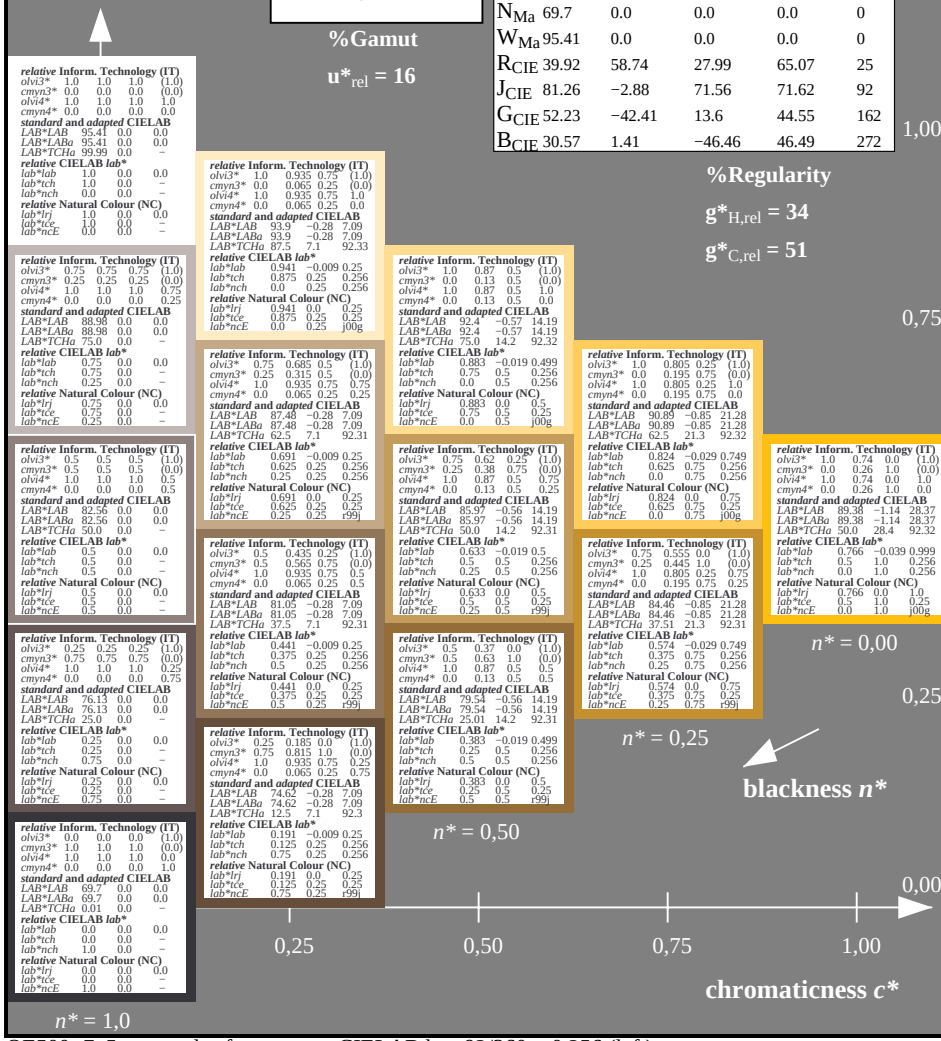
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

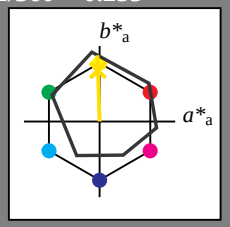
for hue $h^* = lab^*h = 92/360 = 0.255$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

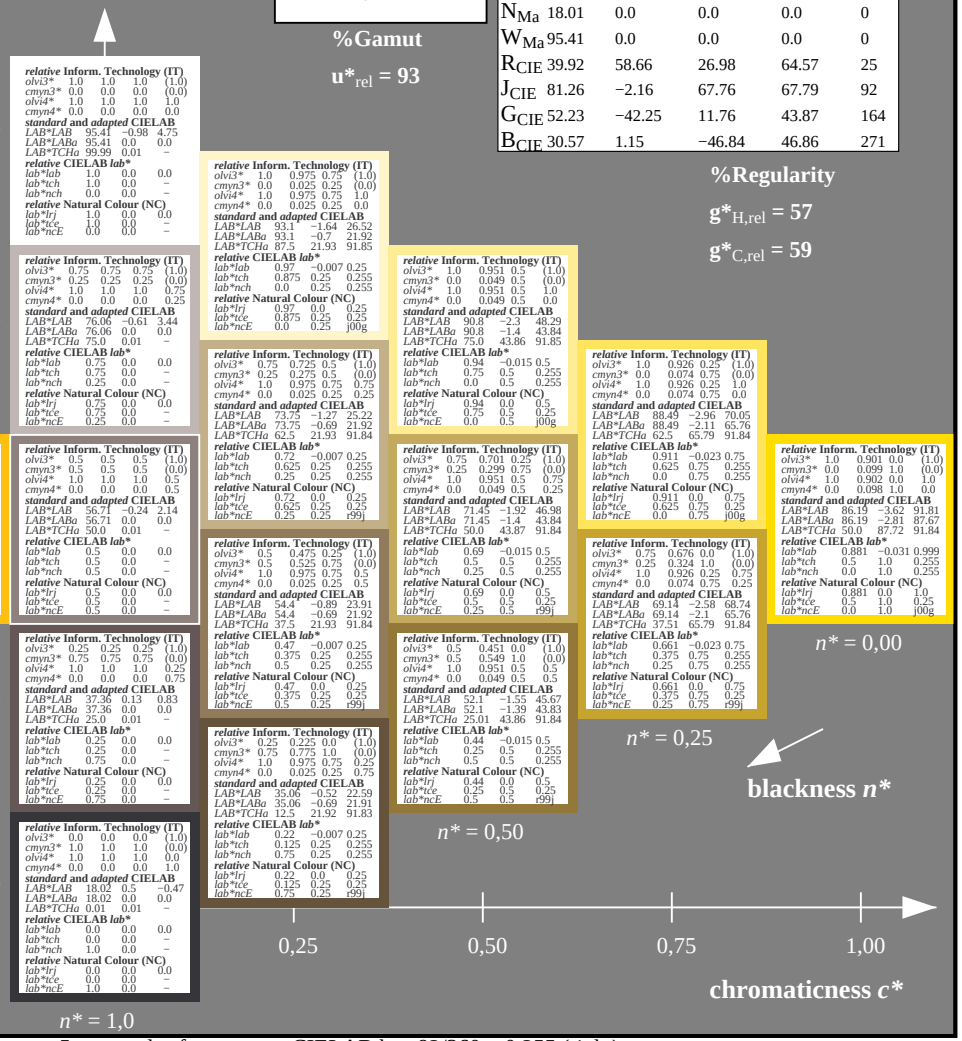
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

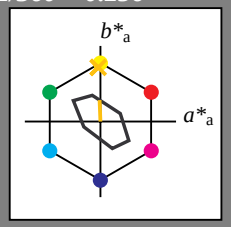


5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

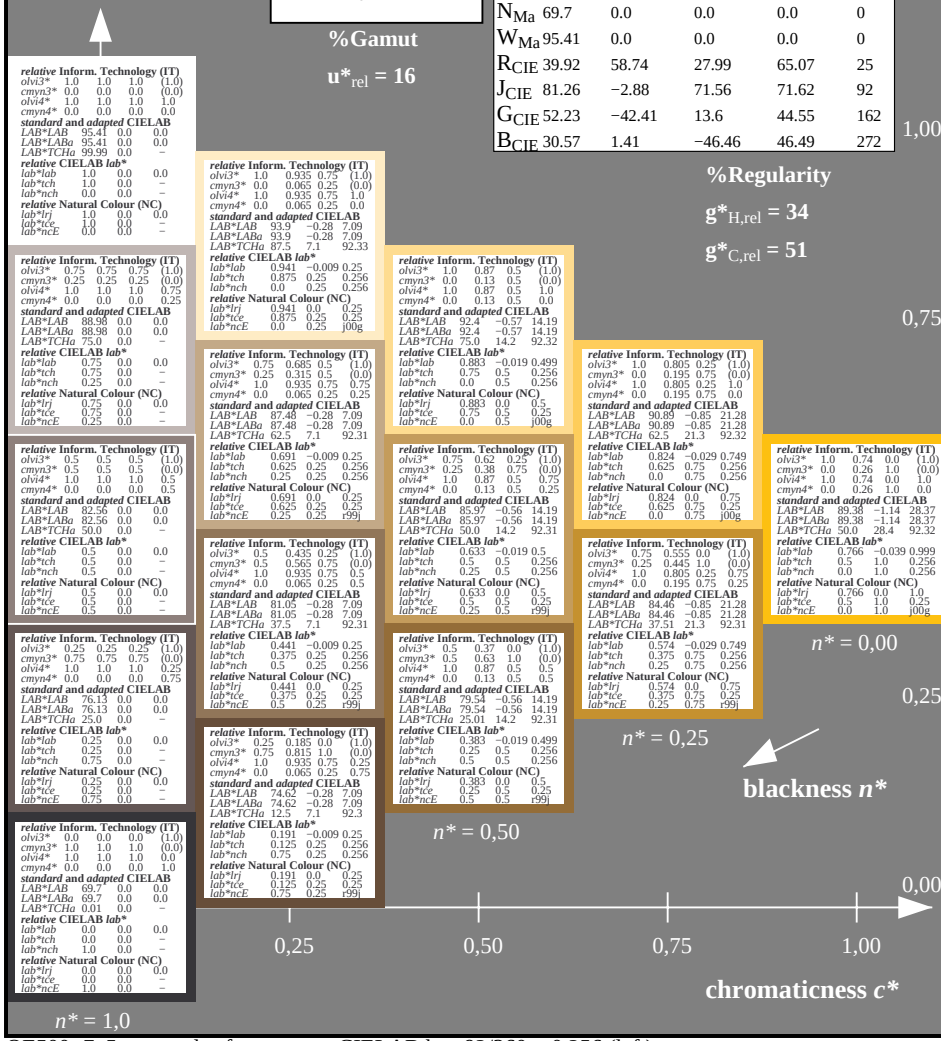
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

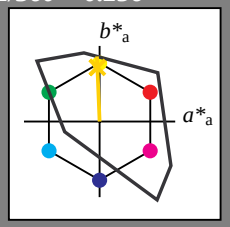


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 86 92
olv*Ma: 1.0 0.82 0.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

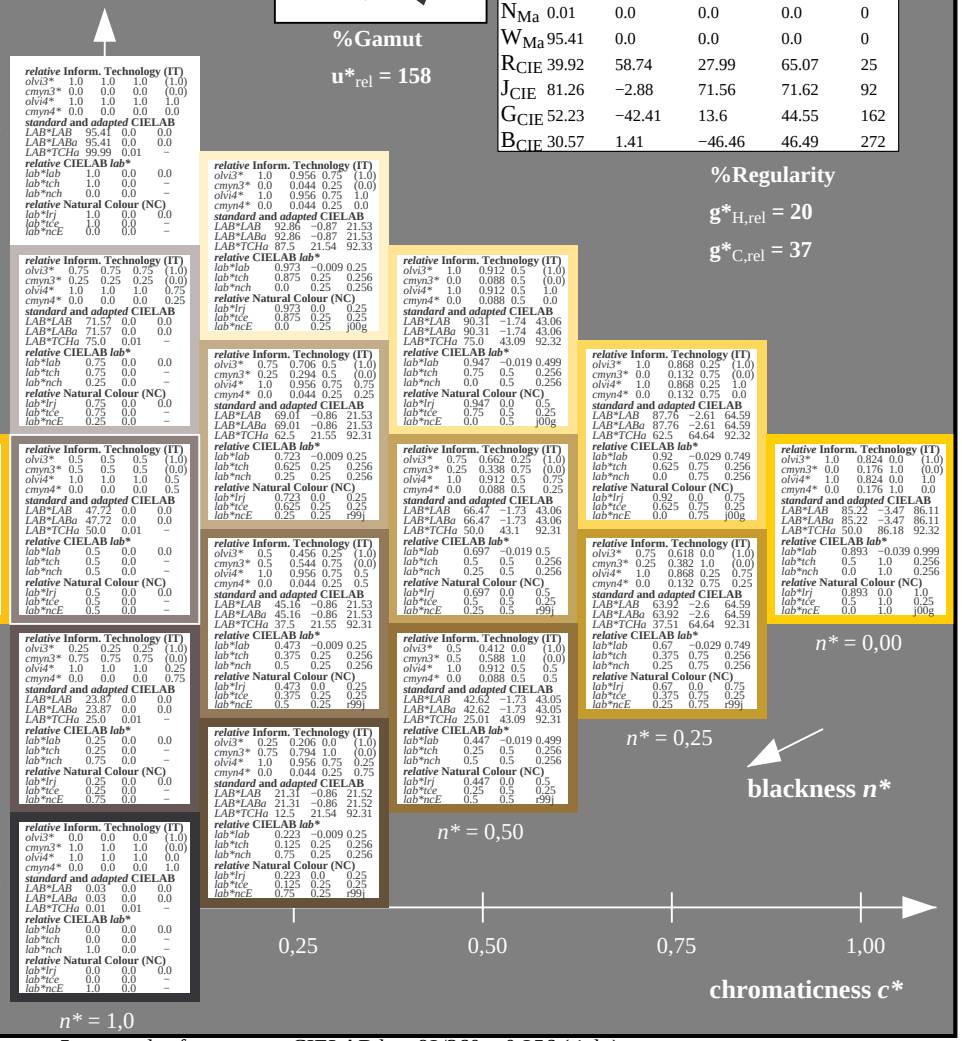
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

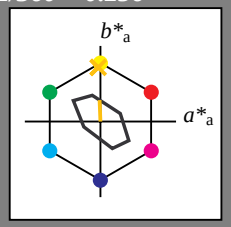
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

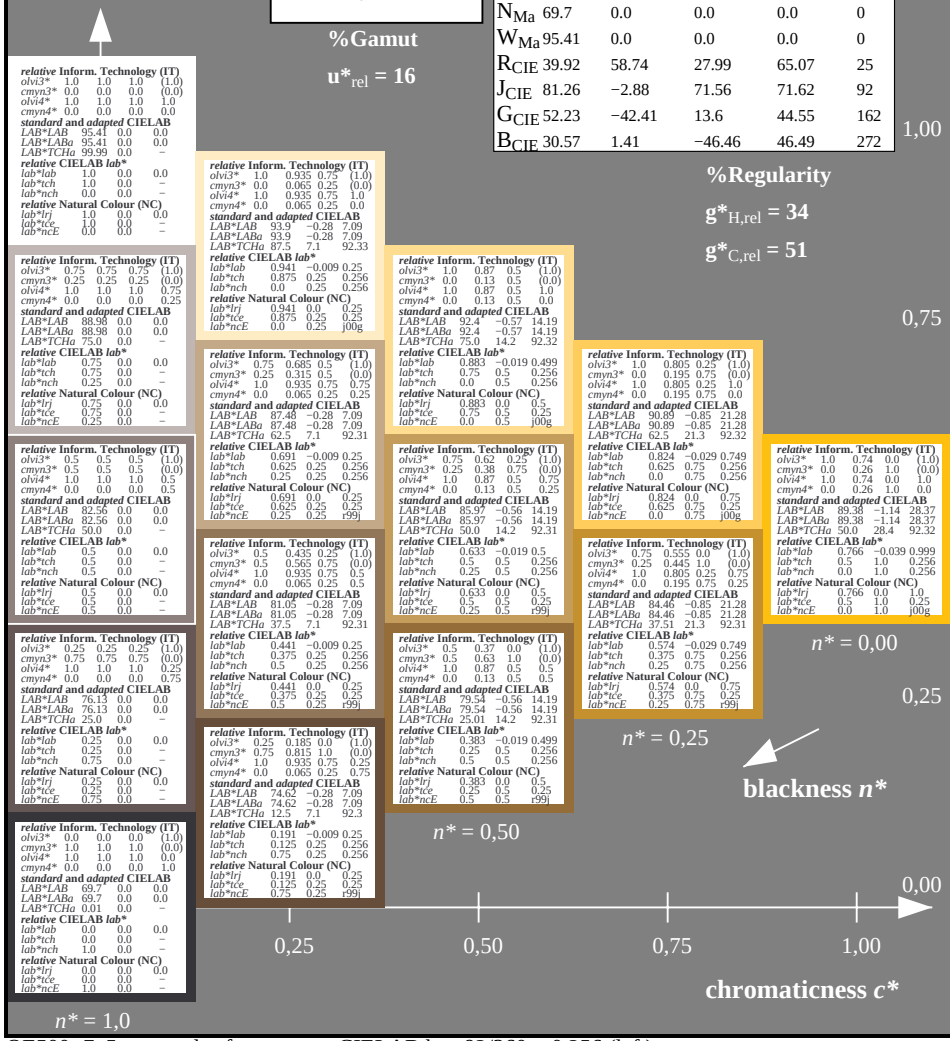
$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

triangle lightness t^*



Output: Colorimetric Printer Reflective System DRSXX

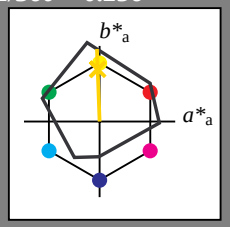
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

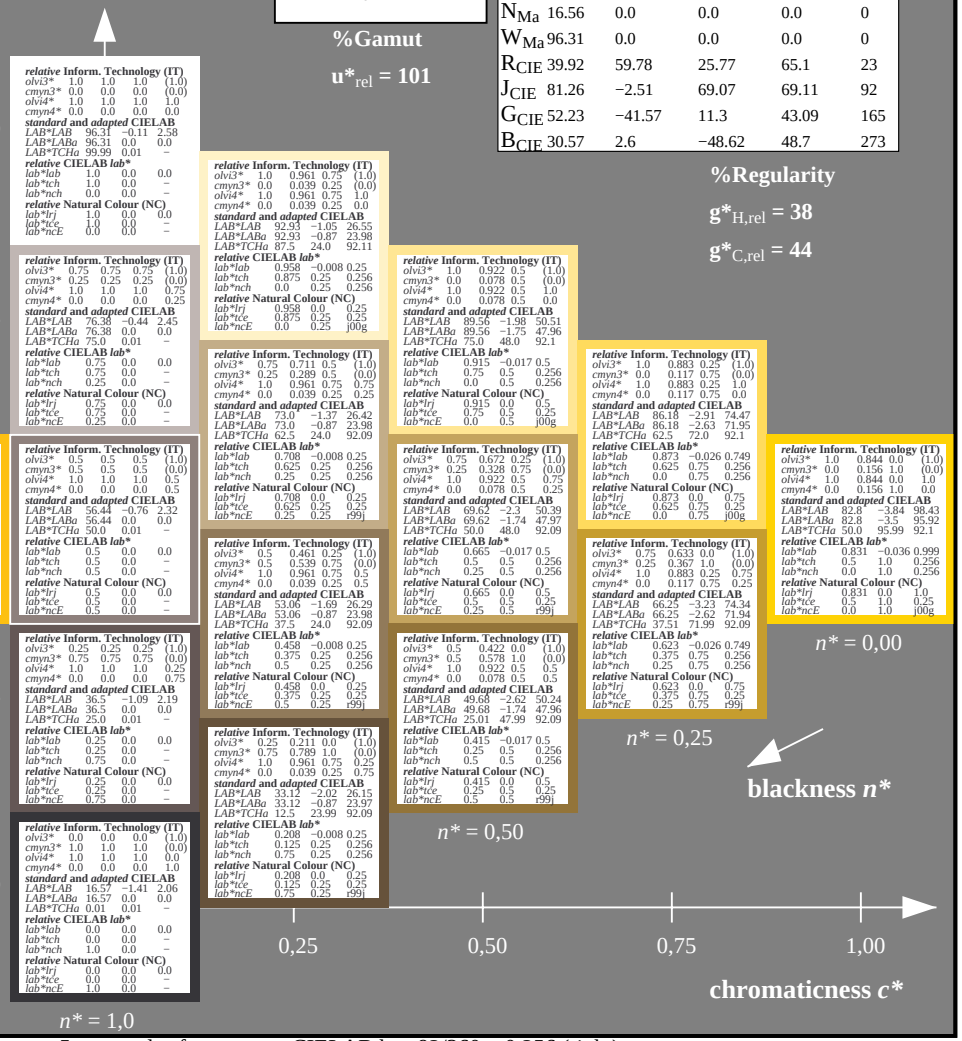
$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

triangle lightness t^*



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

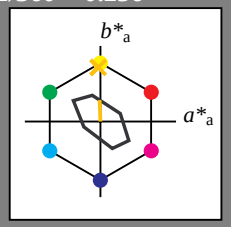
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

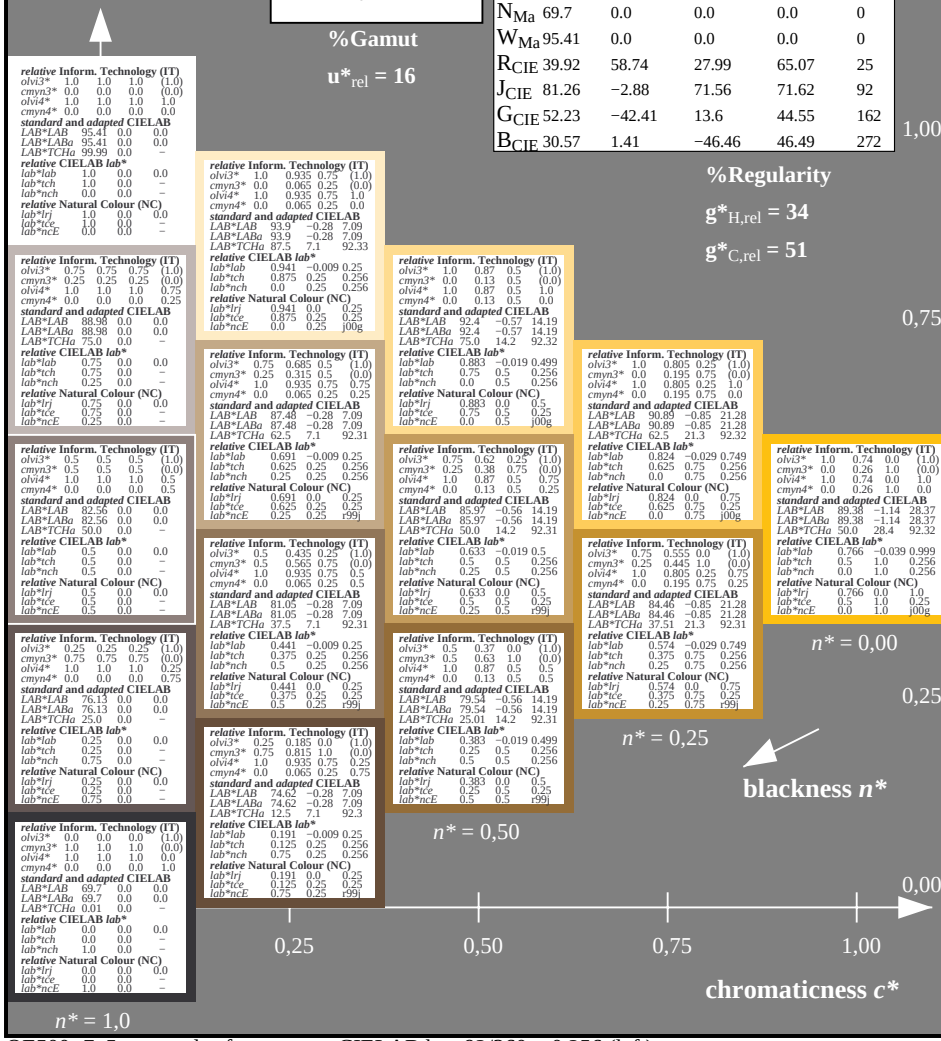
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



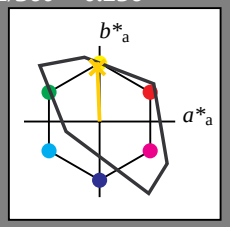
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

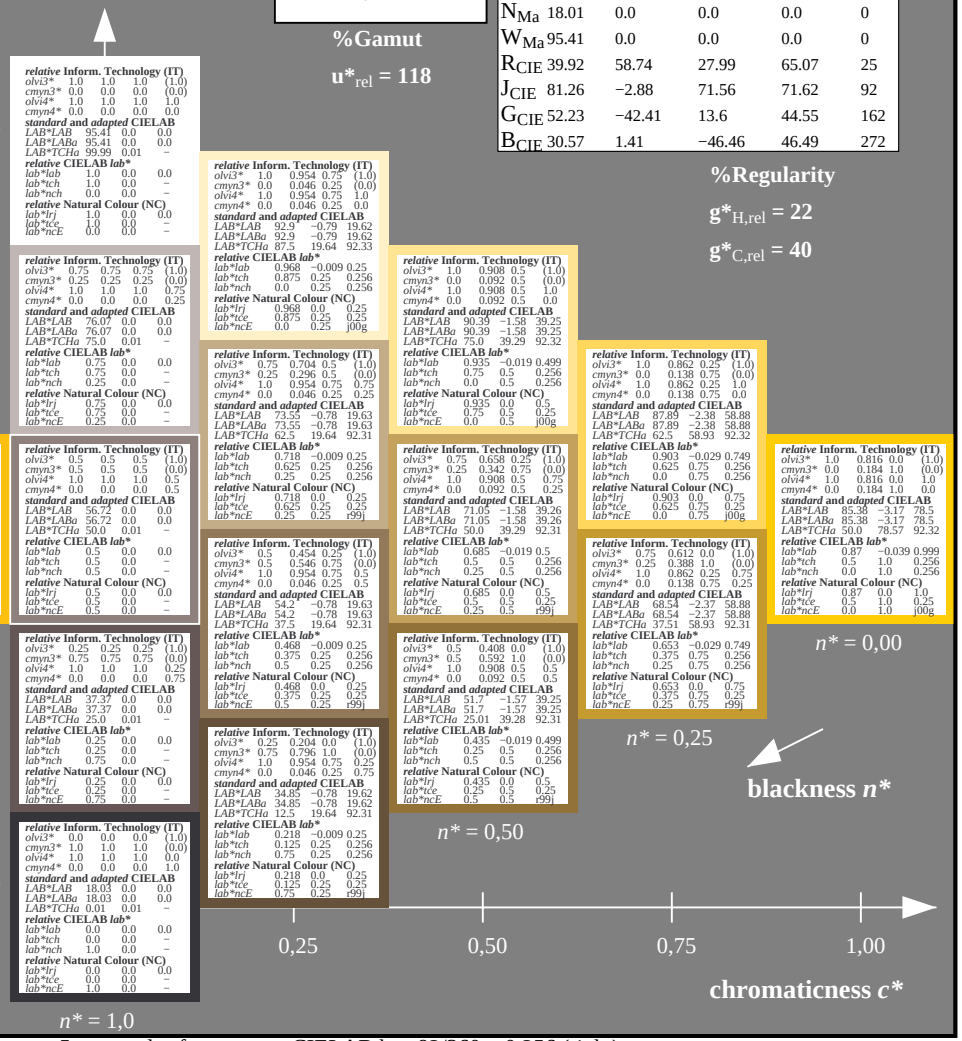
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

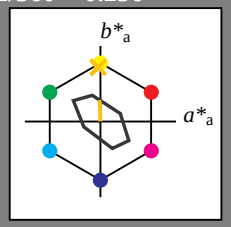
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

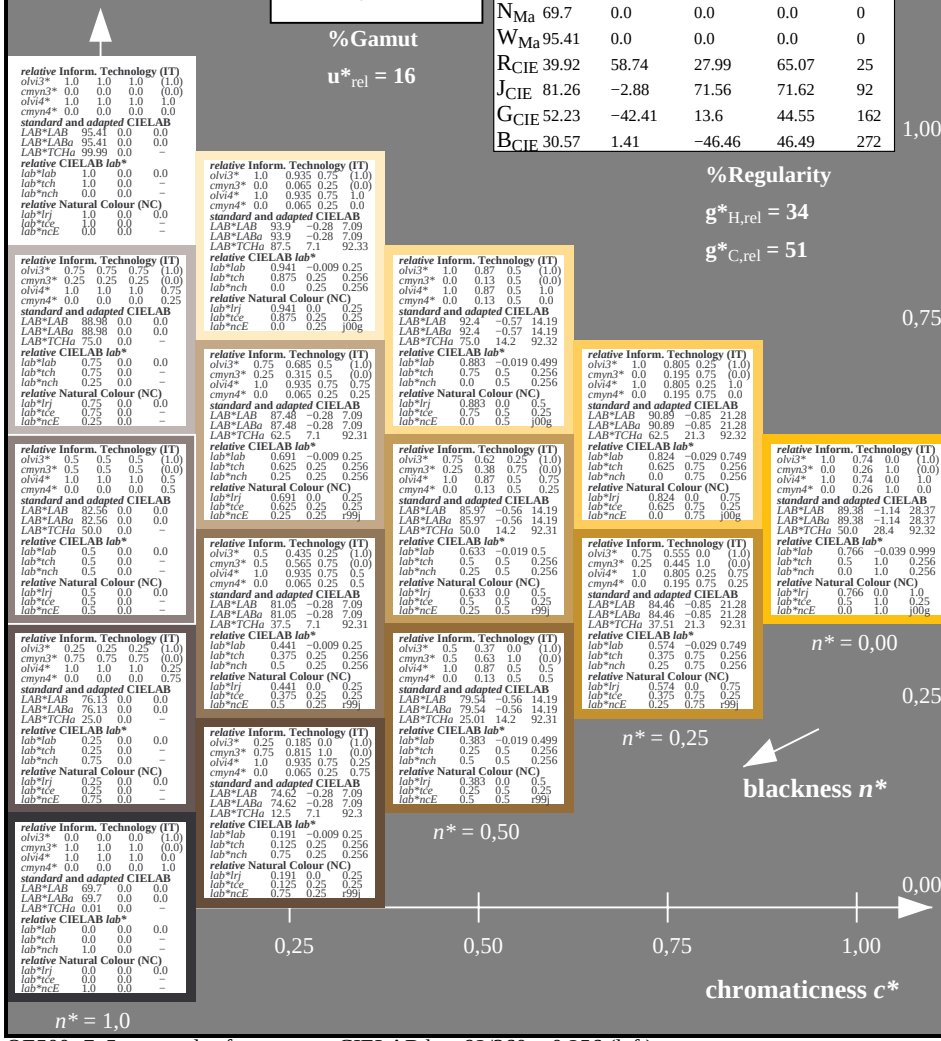
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

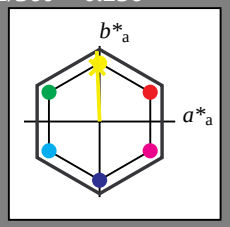
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

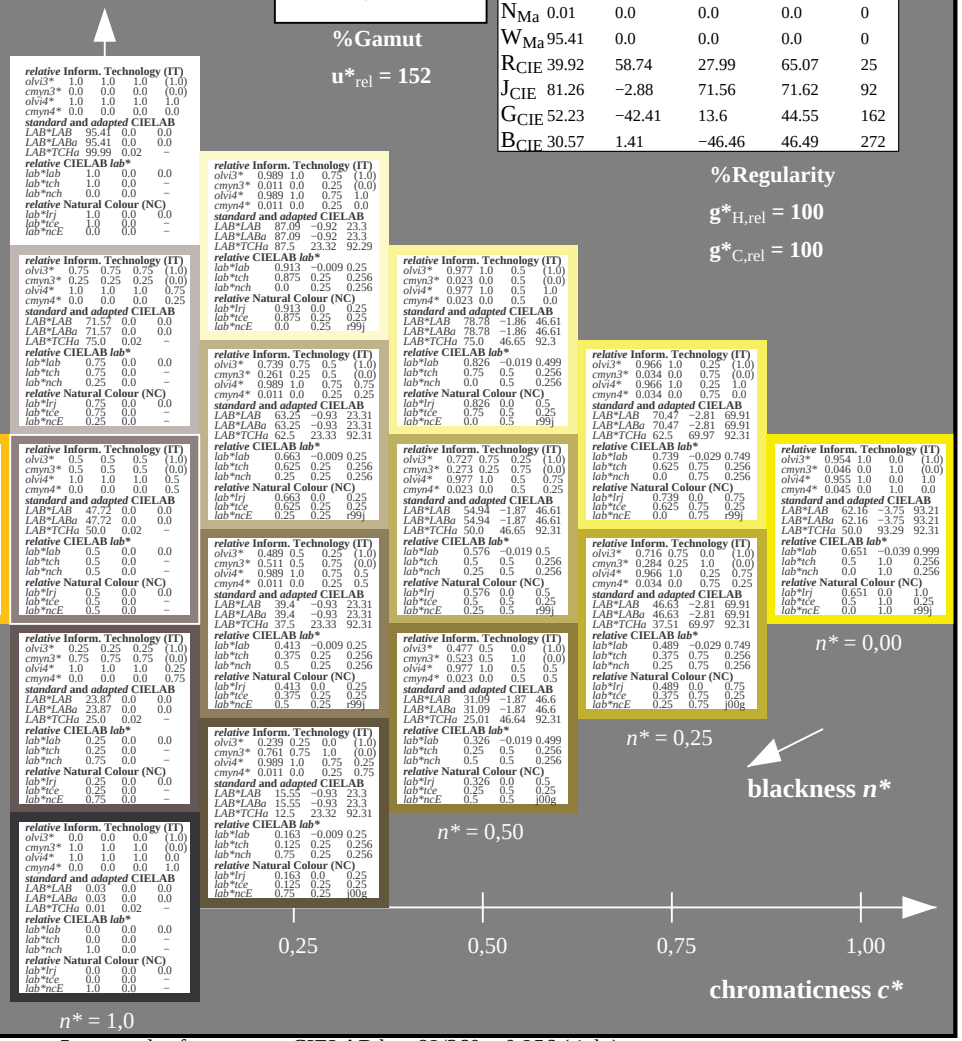
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

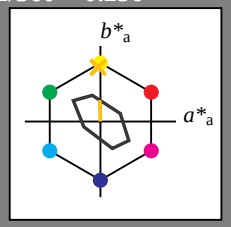
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

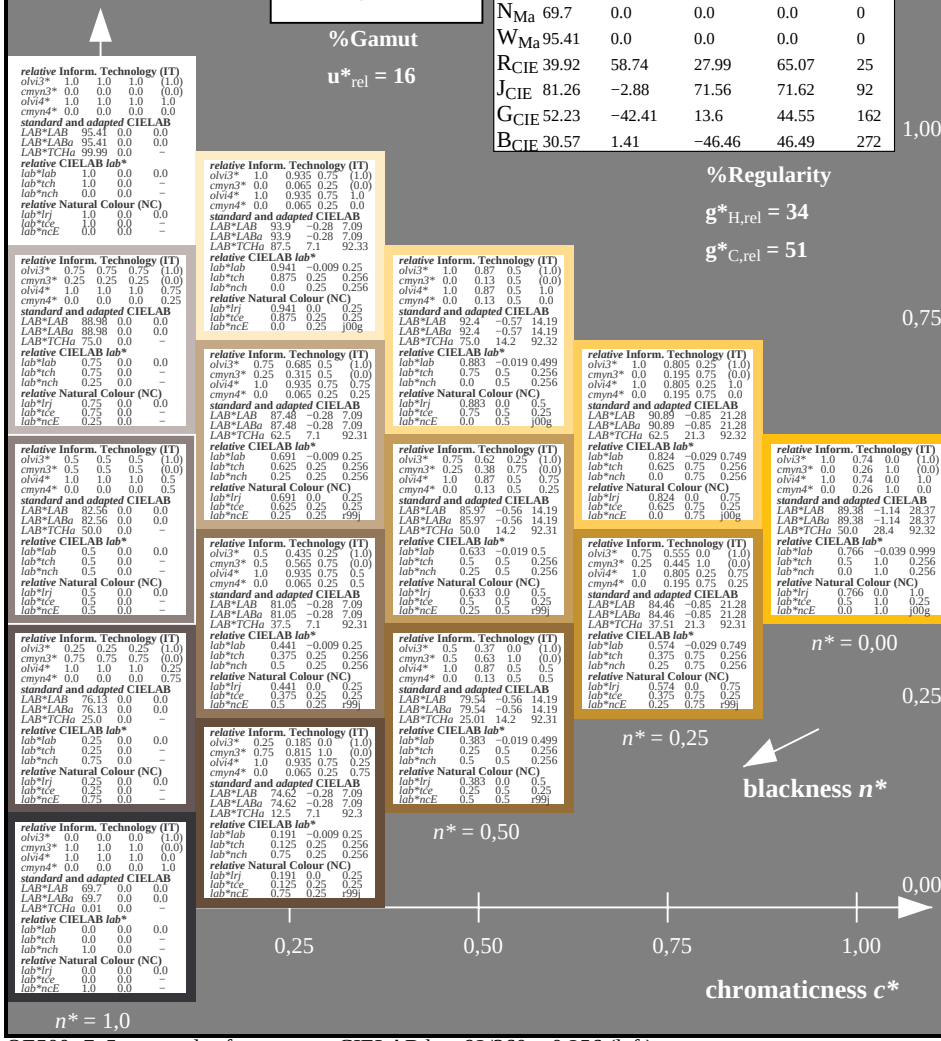
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Natural Reflective System NRS18

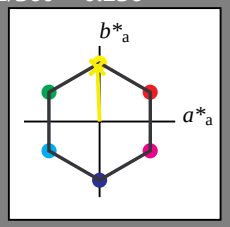
for hue $h^* = lab^*h = 92/360 = 0.256$

*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

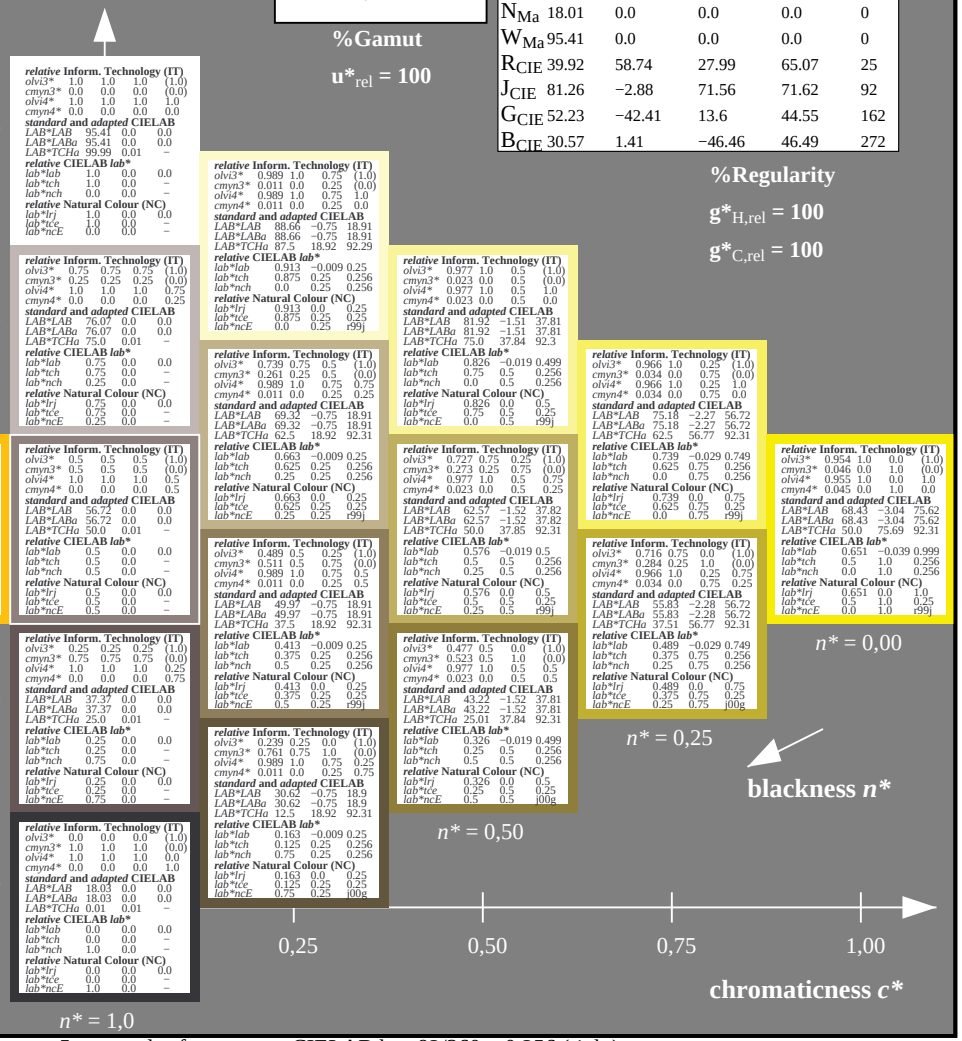
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

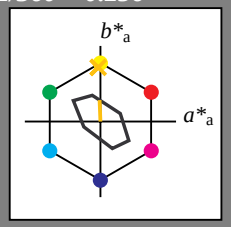
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

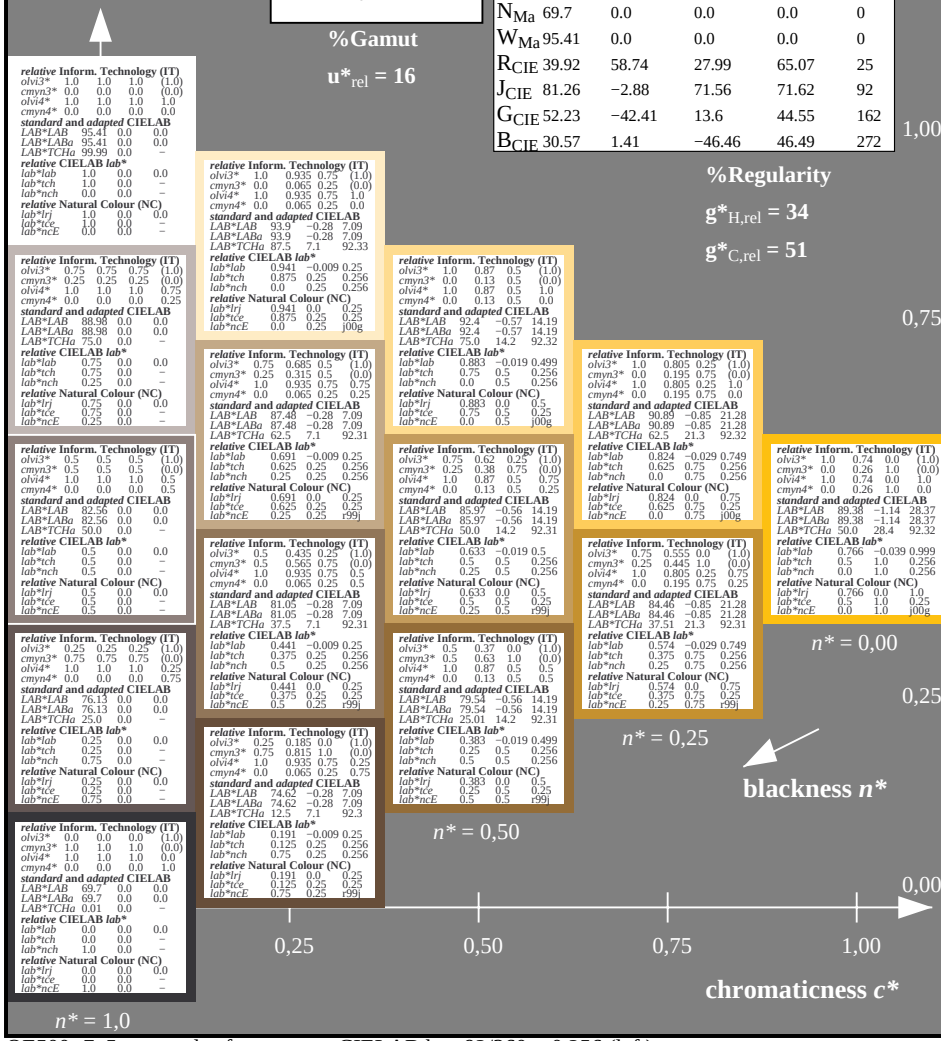
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

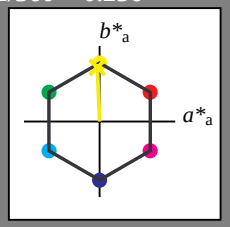
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

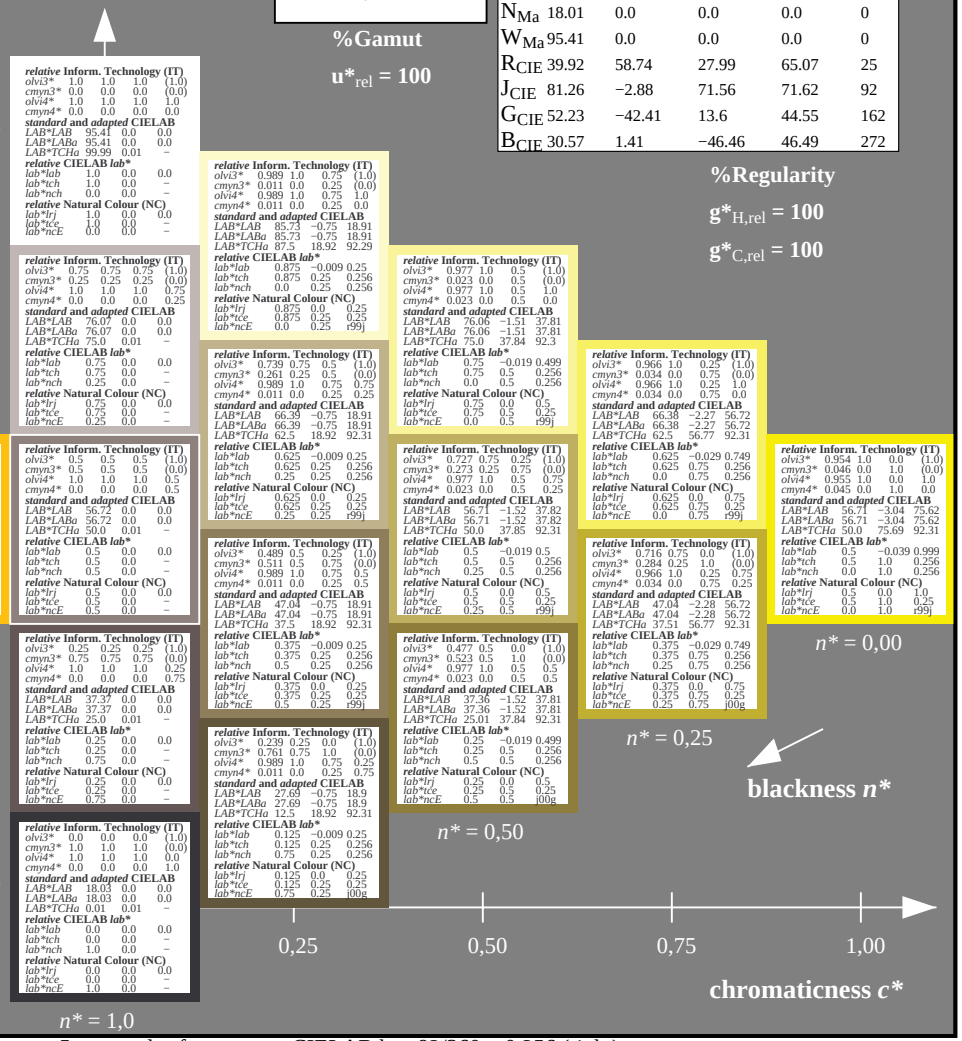
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



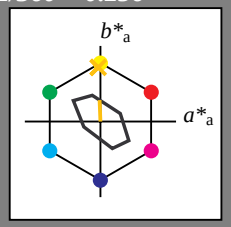
OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

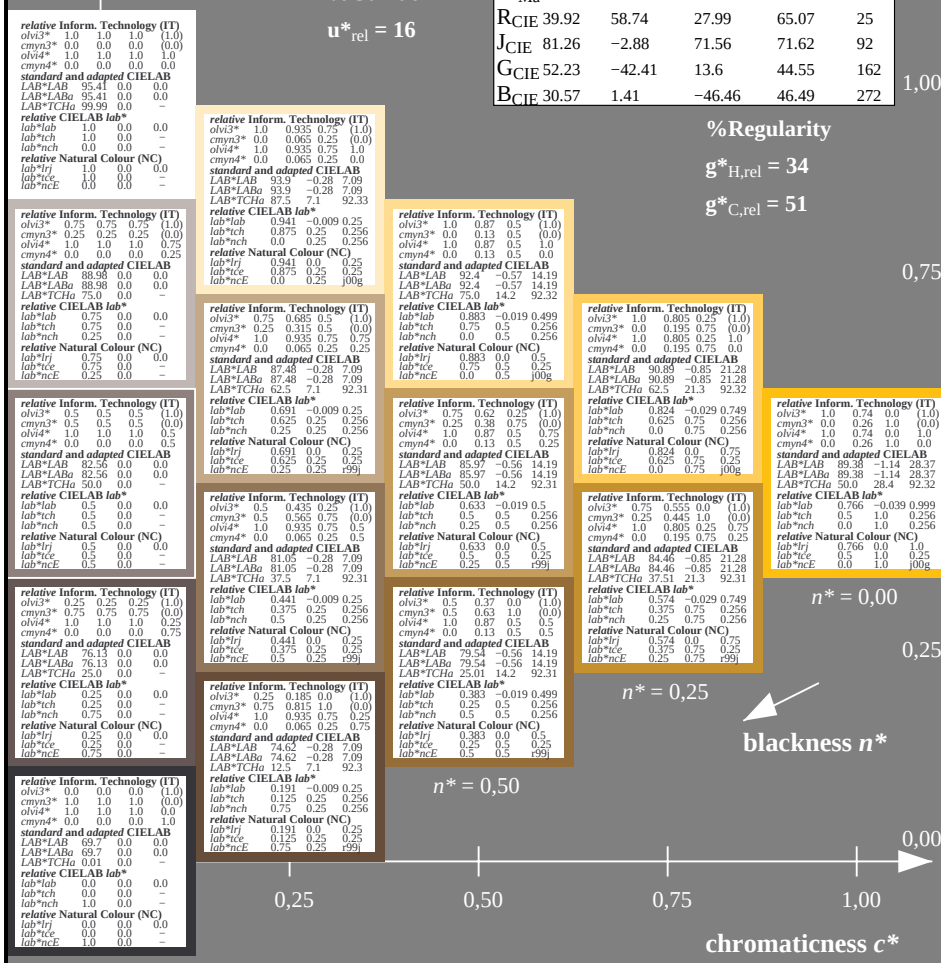
$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

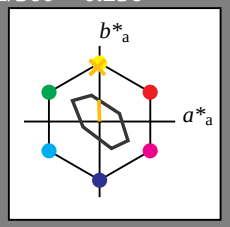


OE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

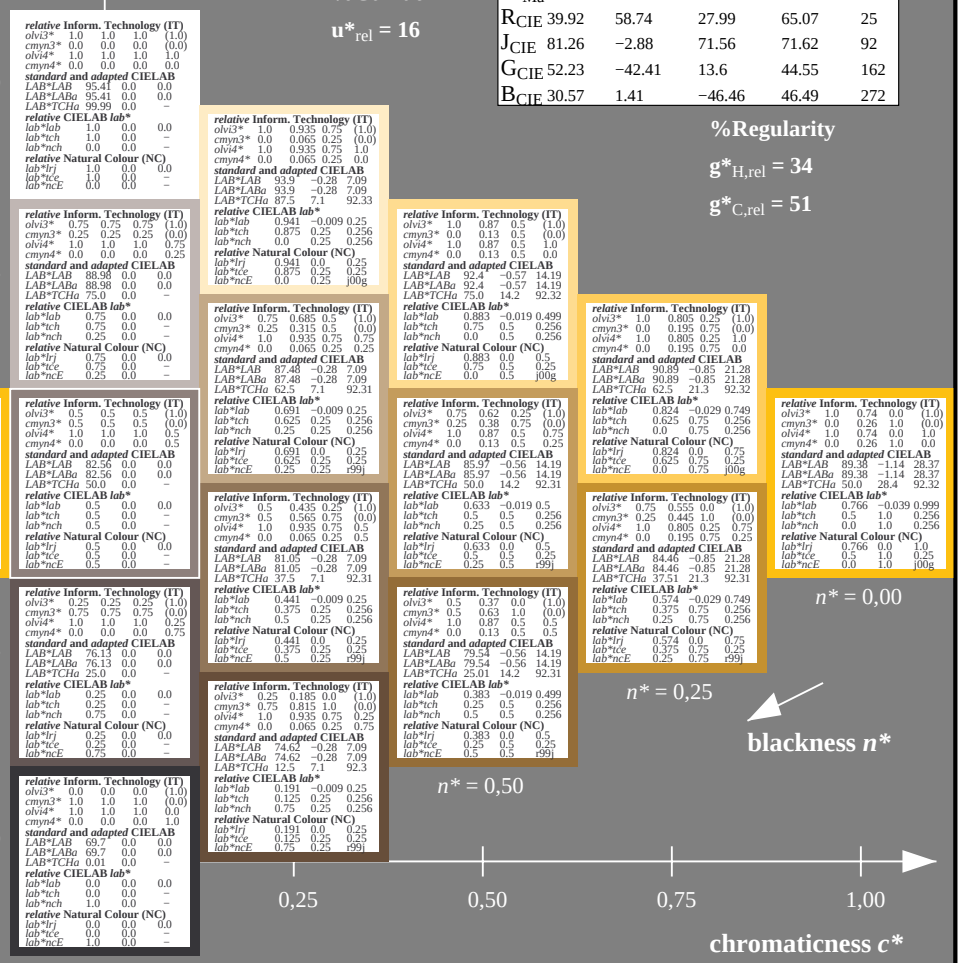
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

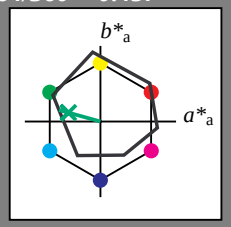


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

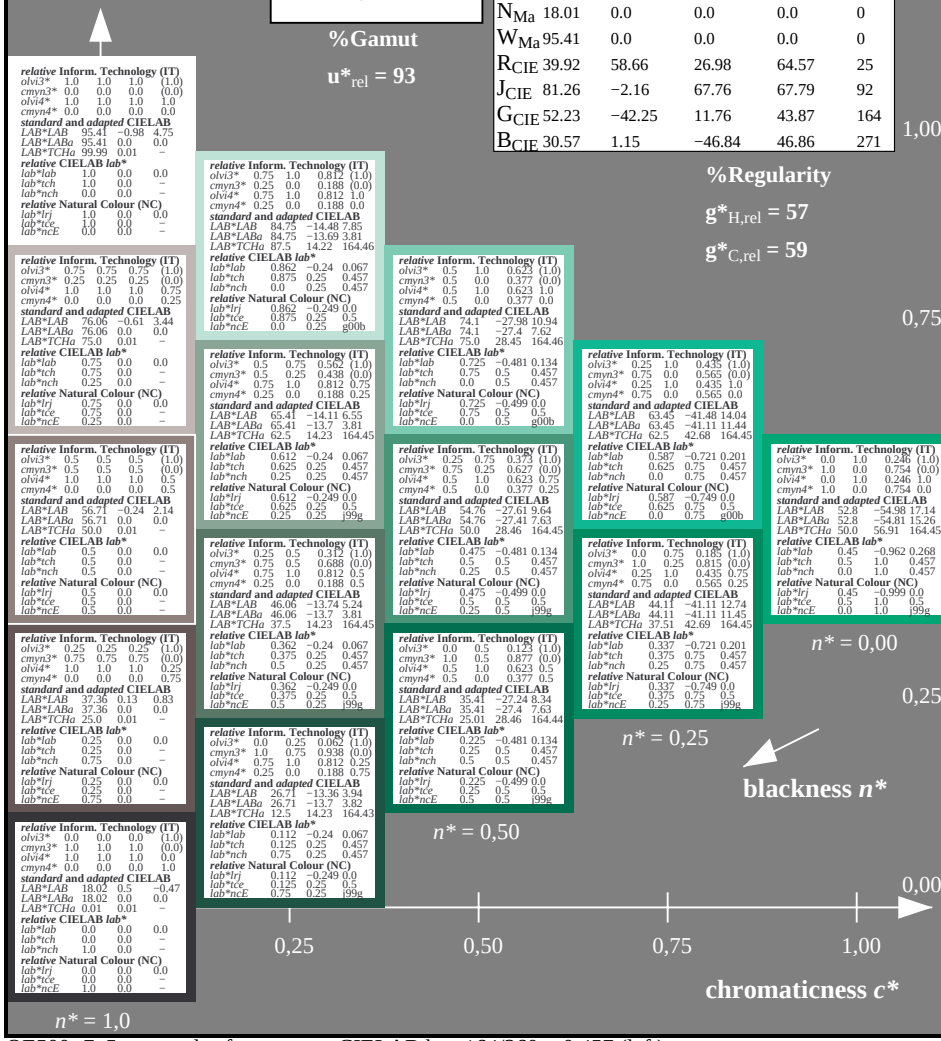
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

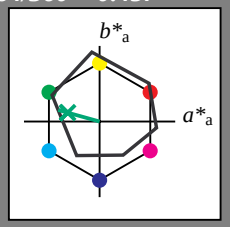


OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

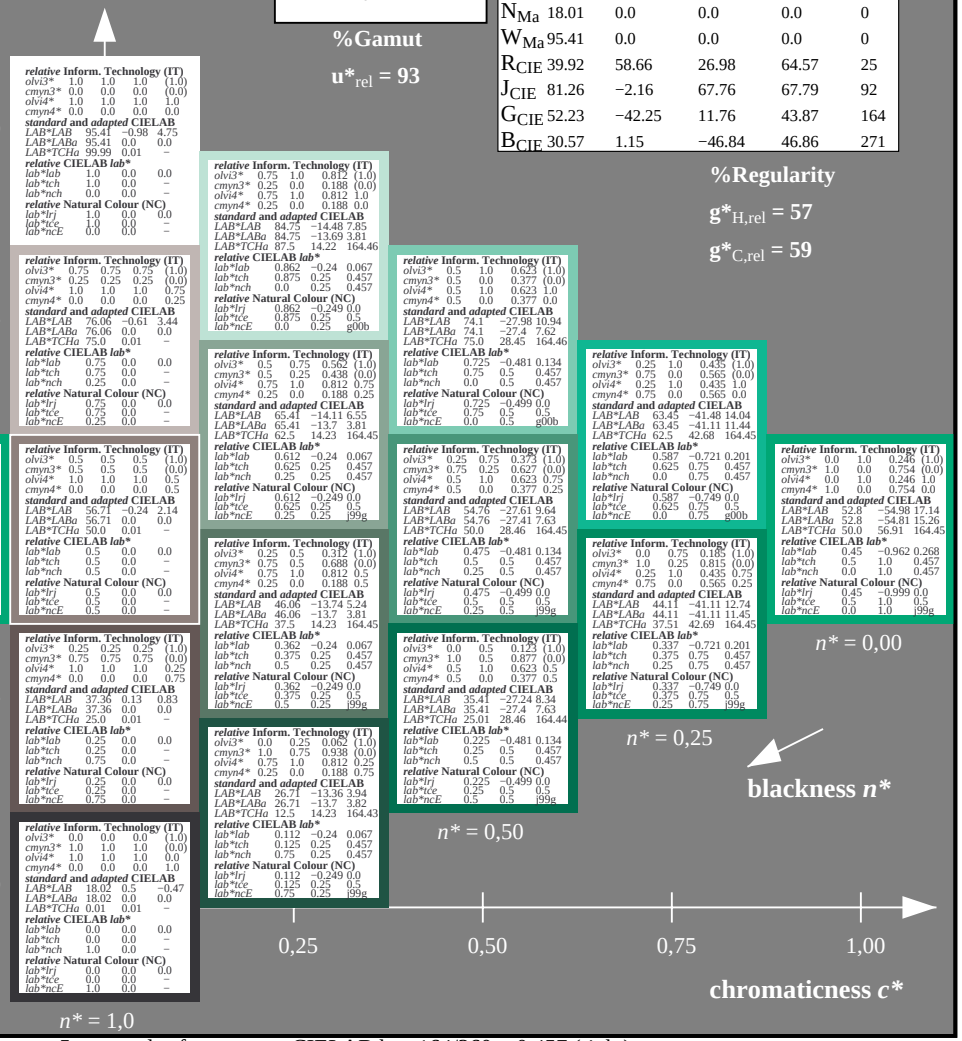
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

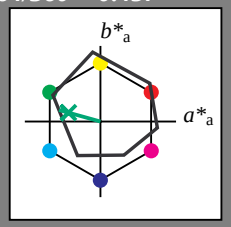


5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

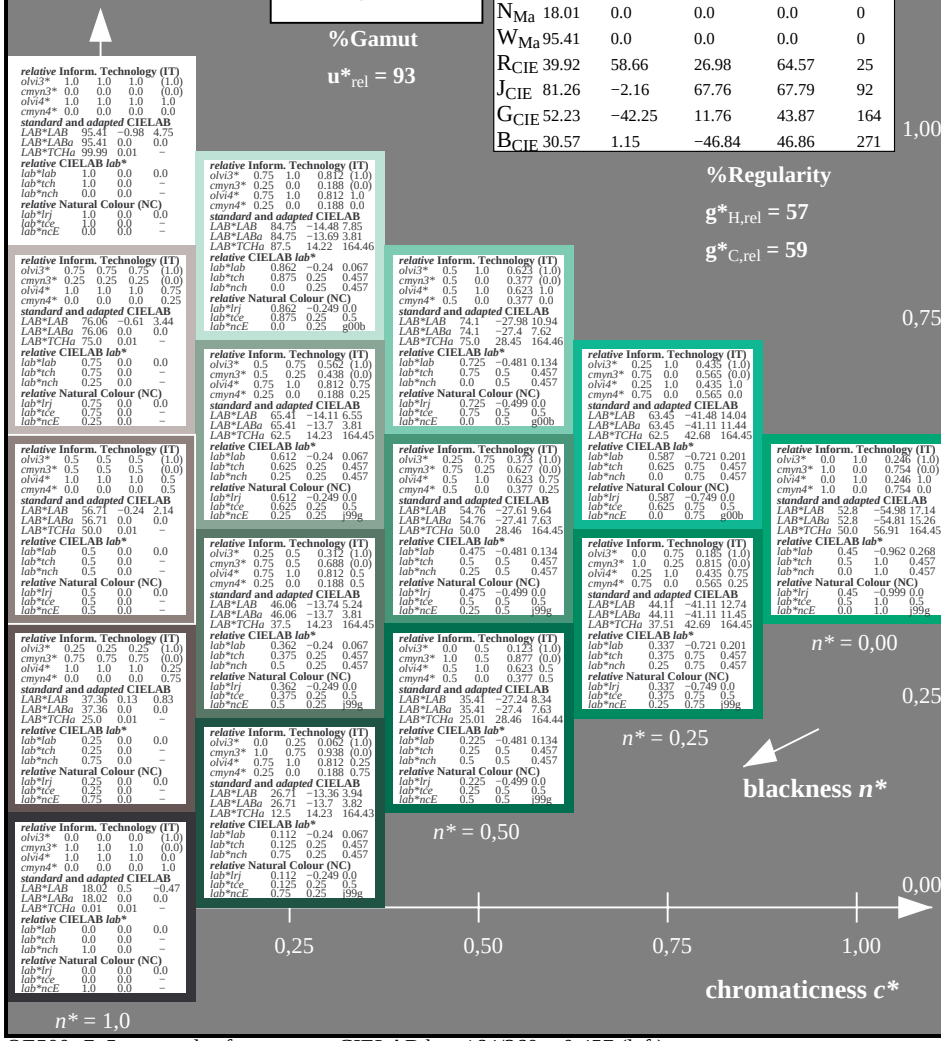
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

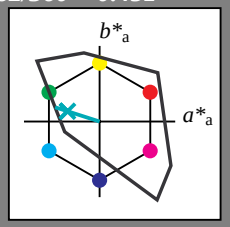
$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

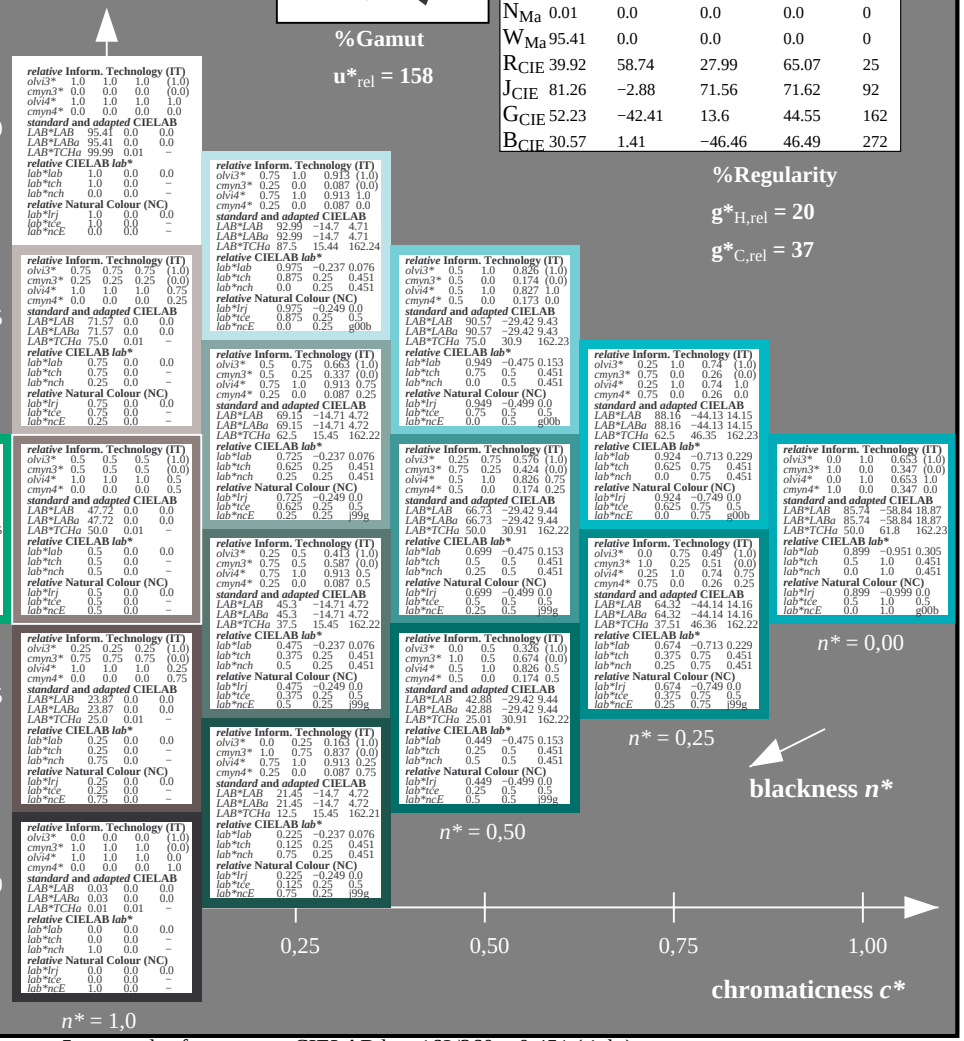
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



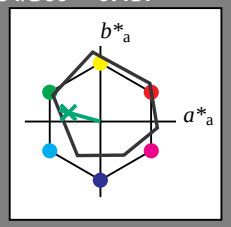
OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



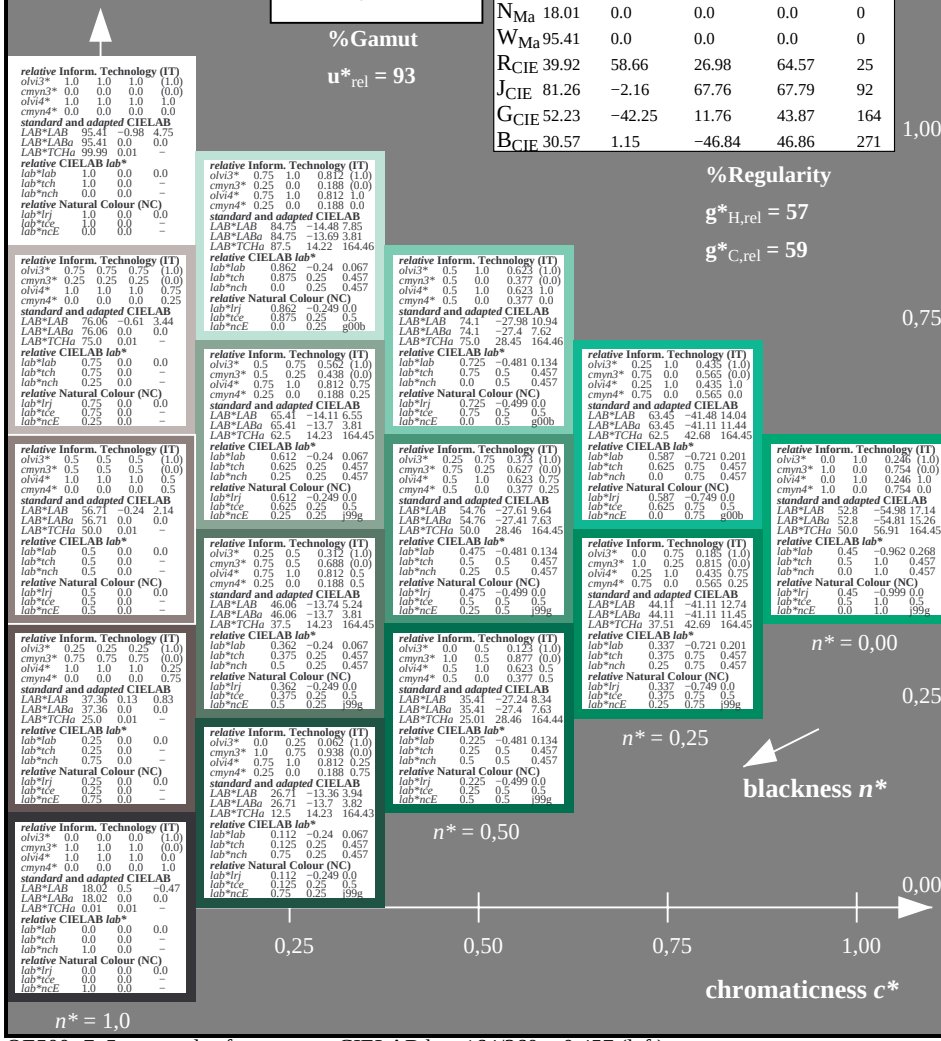
triangle lightness t^*

%Gamut
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$

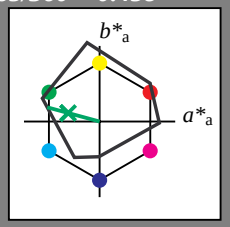


OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15



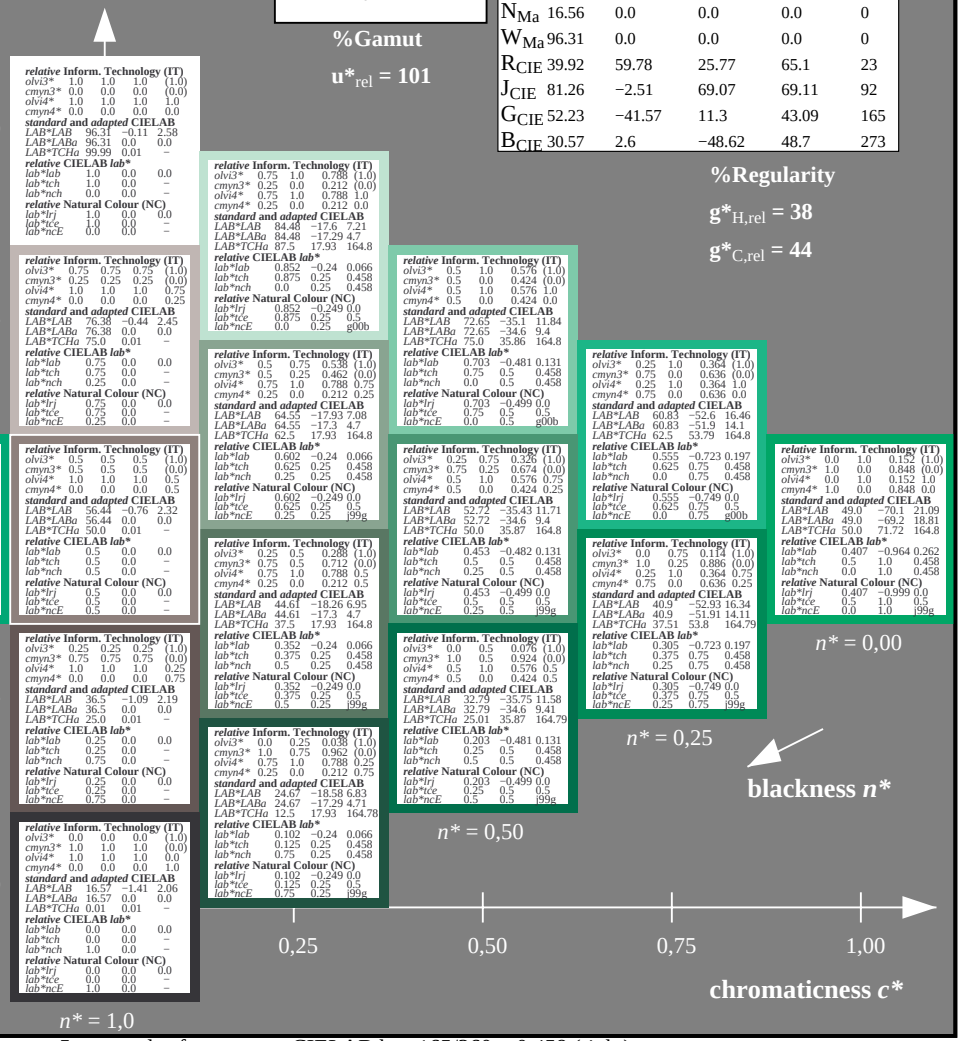
triangle lightness t^*

%Gamut
$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$

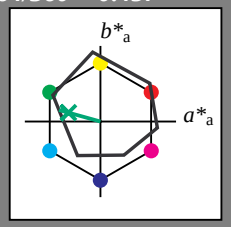


5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 164/360 = 0.457*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



%Gamut

u^*_{rel} = 93

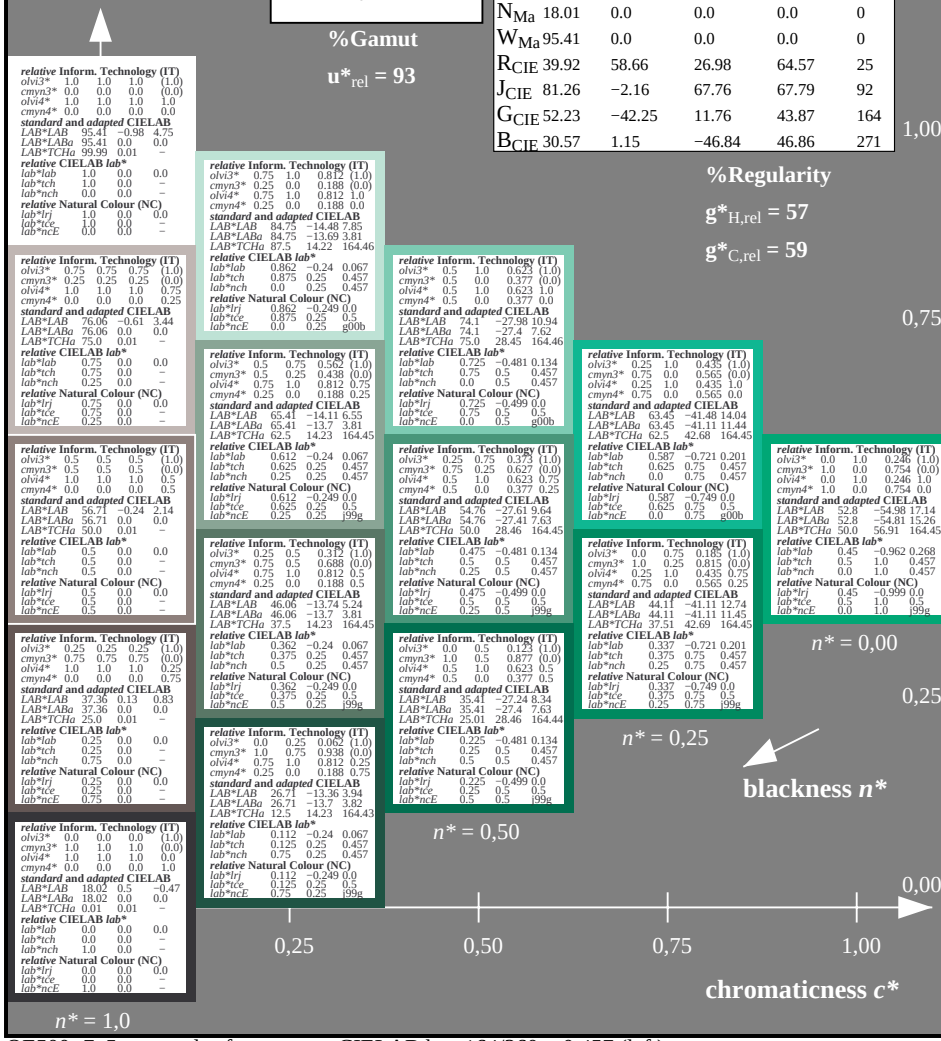
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

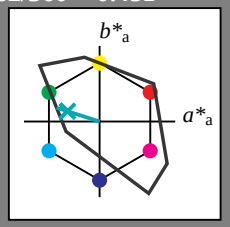
$g^*_{C,rel}$ = 59



Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64



%Gamut

u^*_{rel} = 118

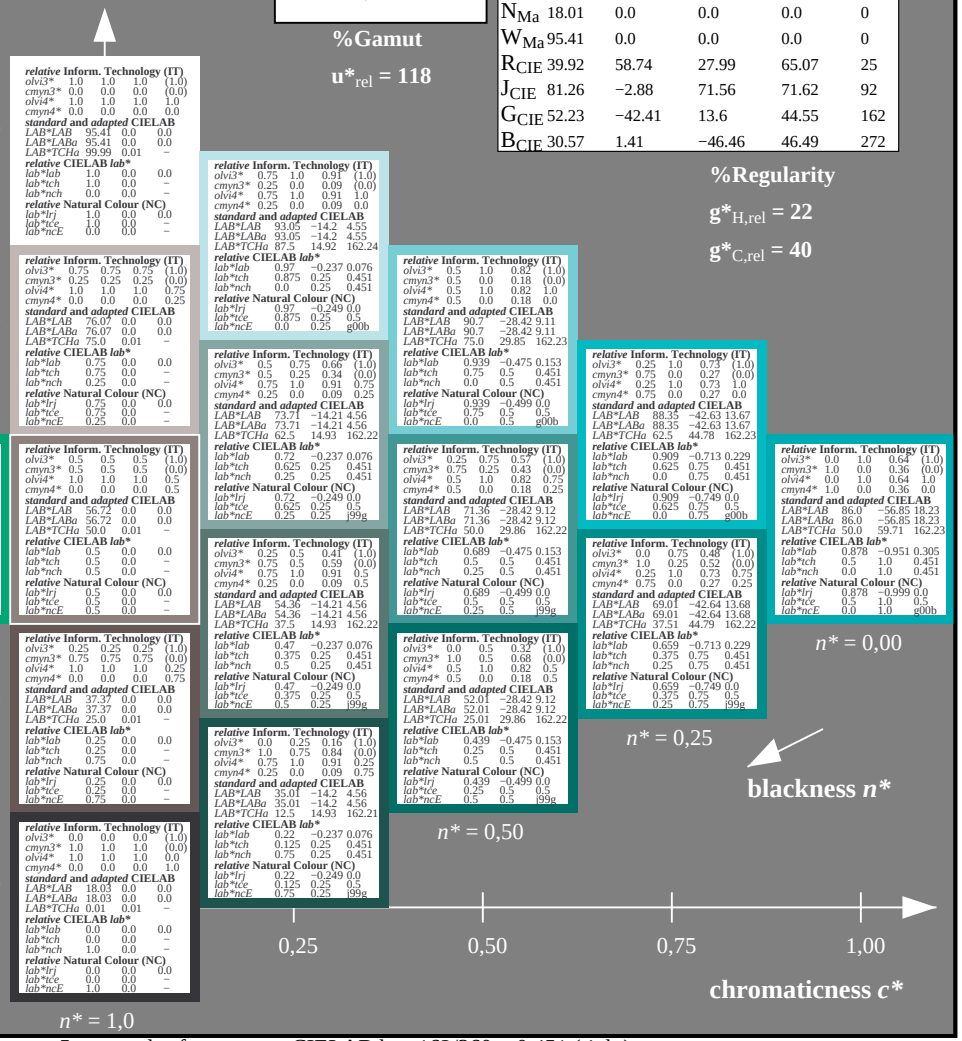
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

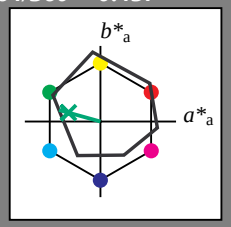
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

u^*_{rel} = 93

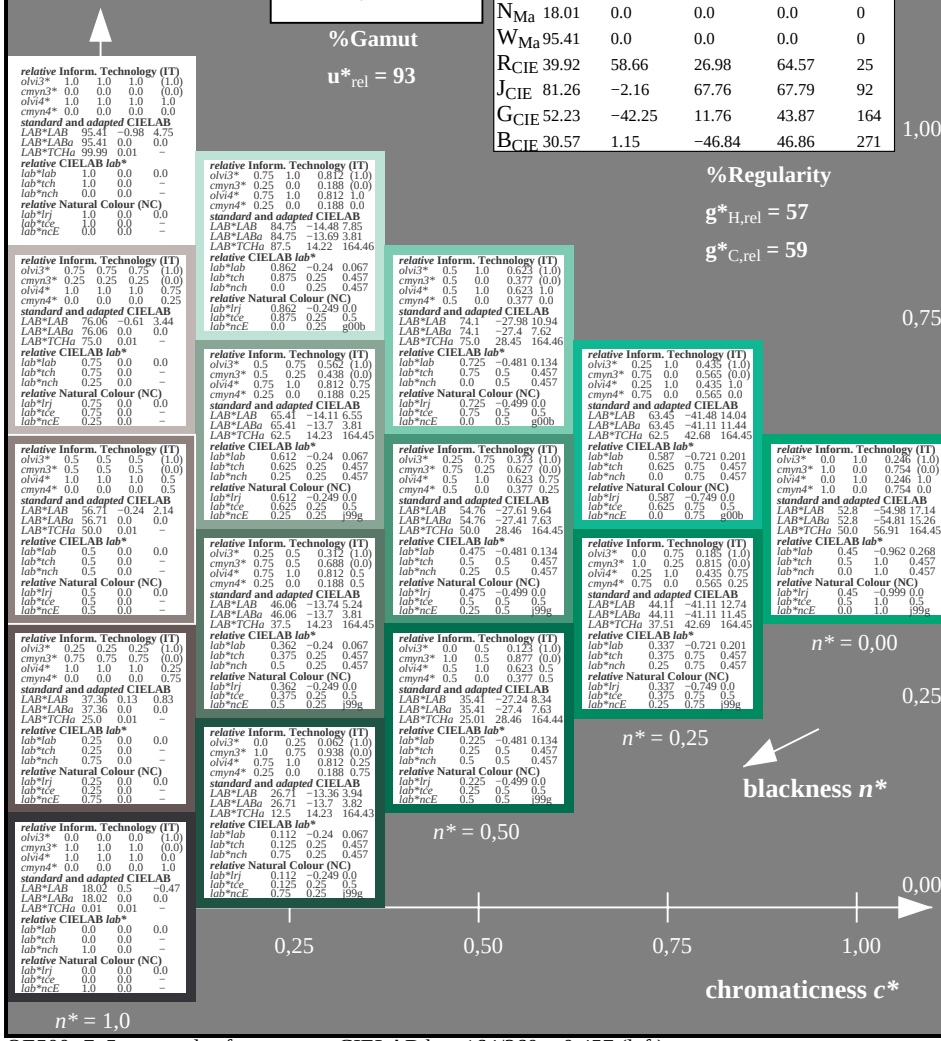
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

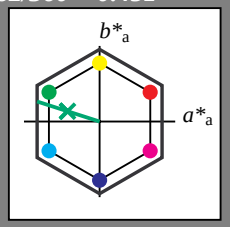


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

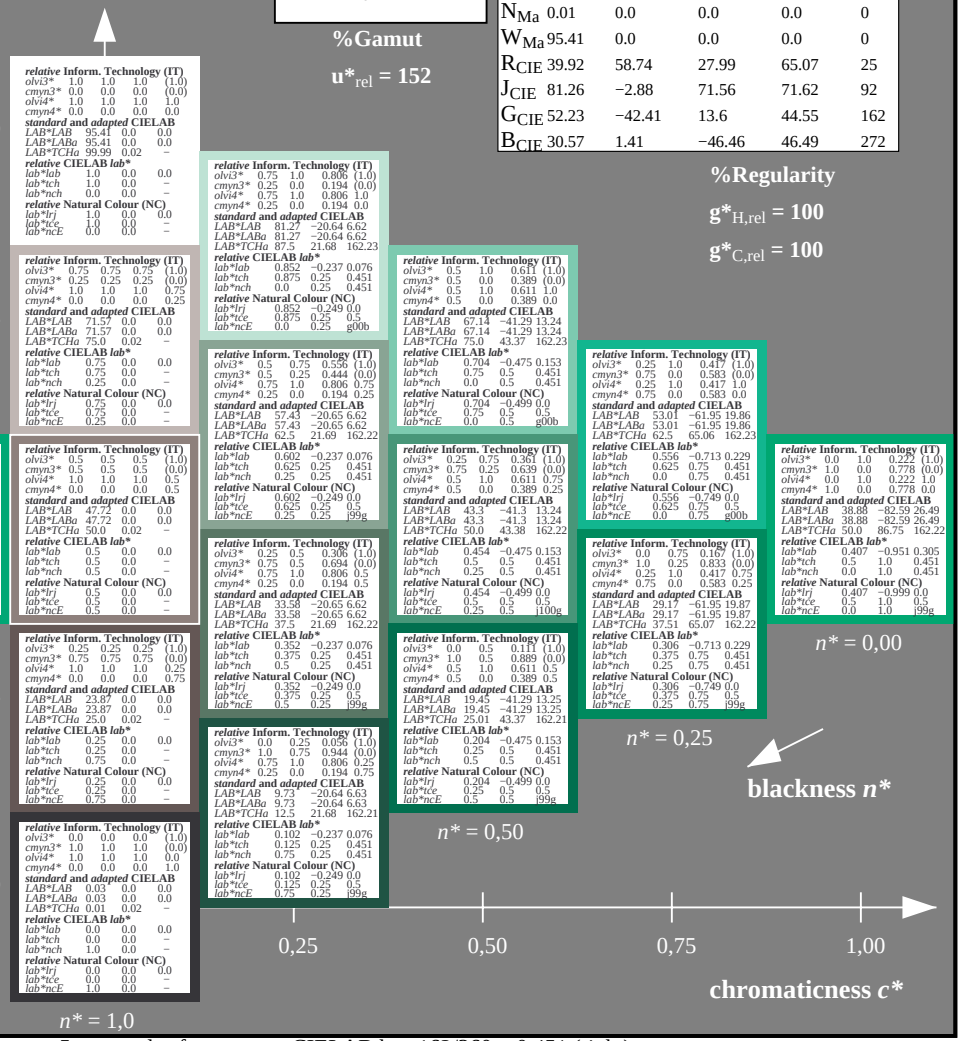
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



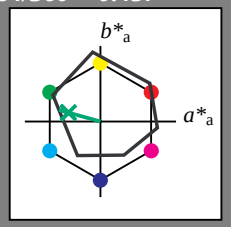
OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Gamut

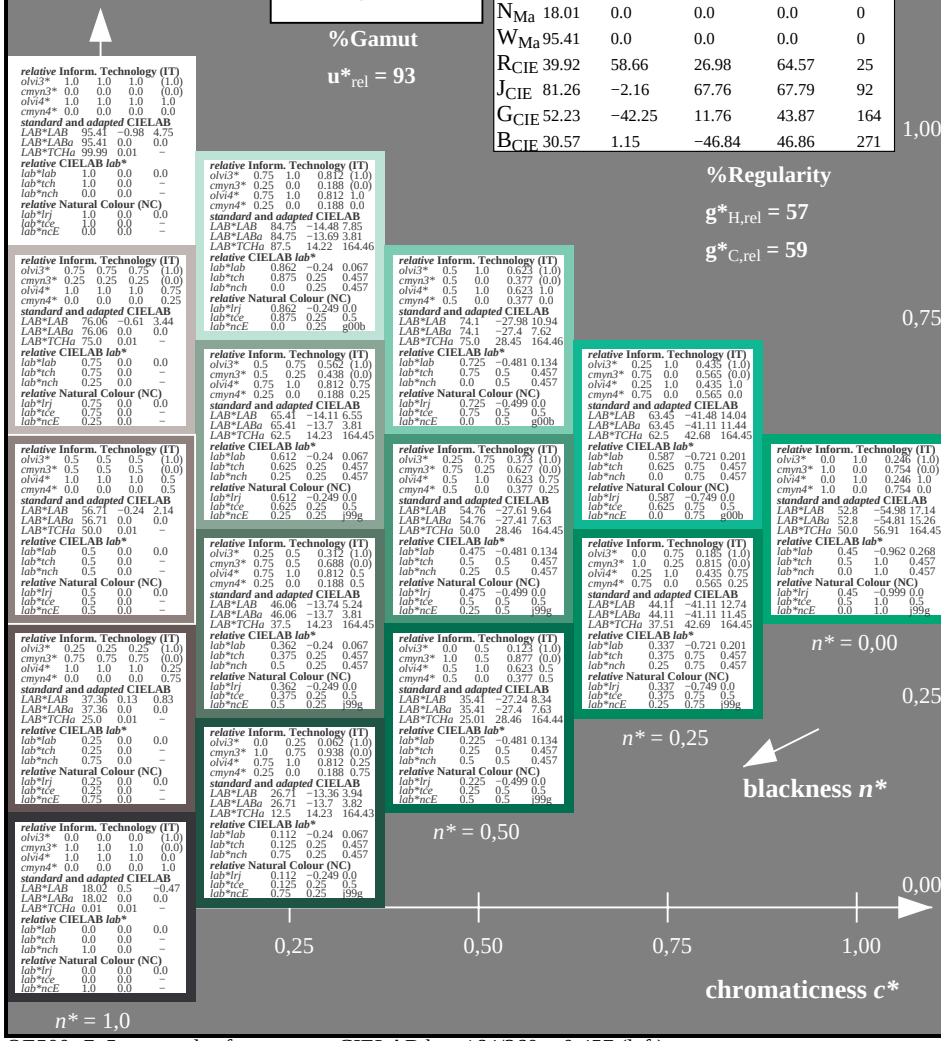
u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

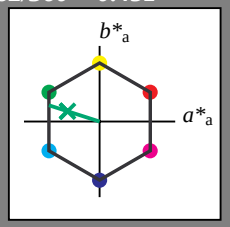
triangle lightness *t**



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

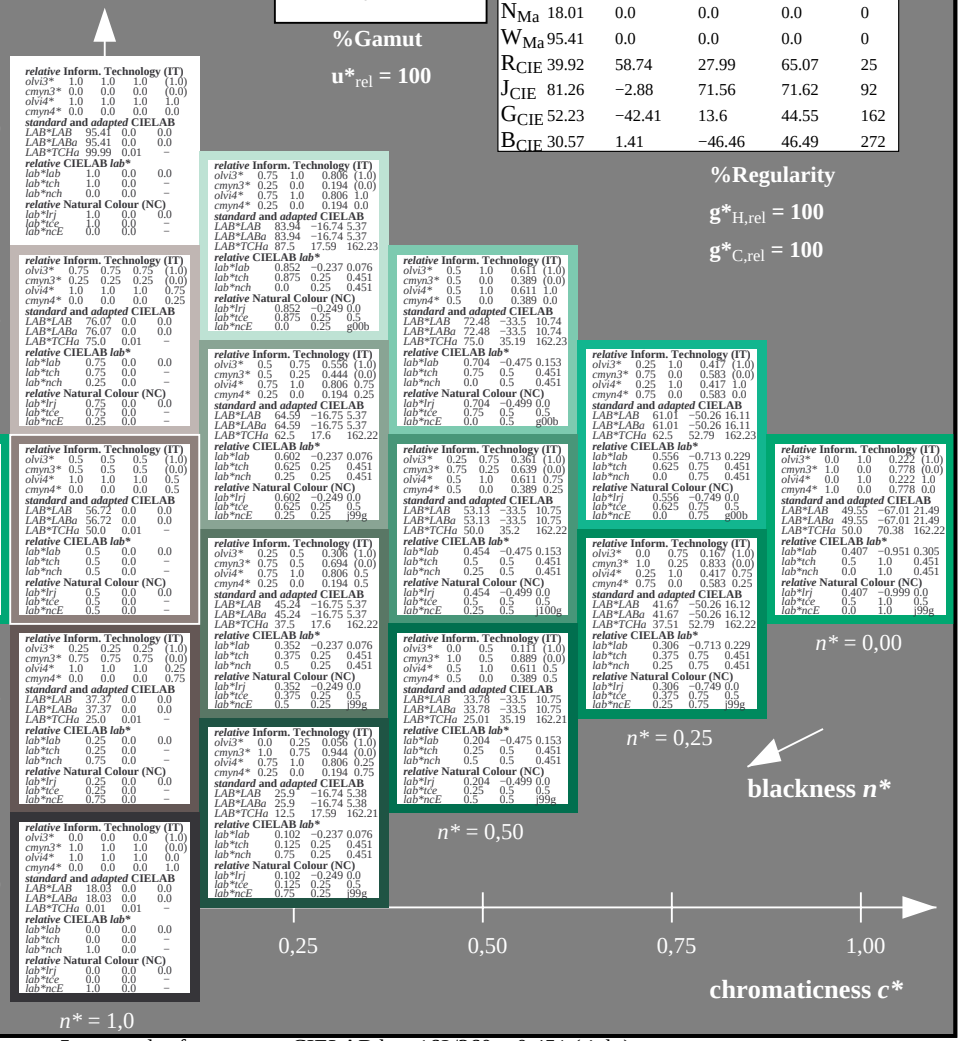
u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

triangle lightness *t**



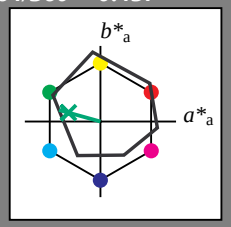
OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

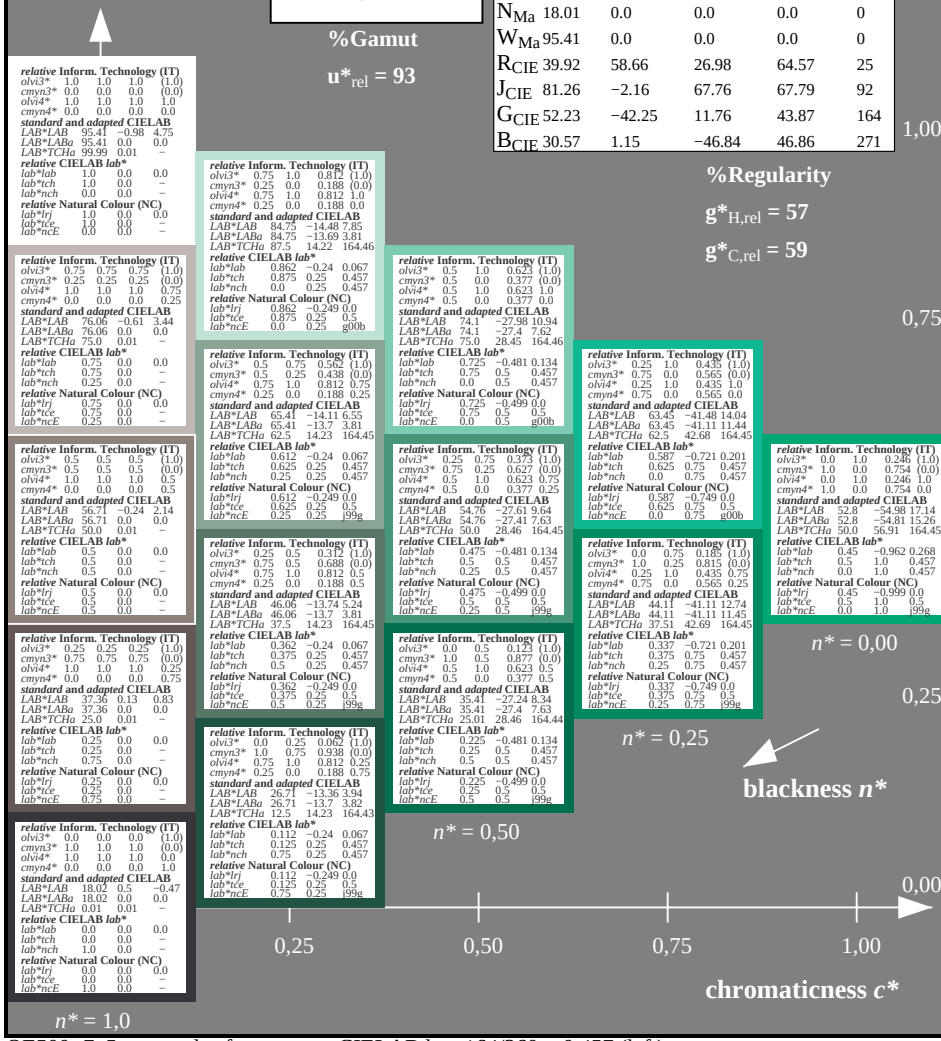
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

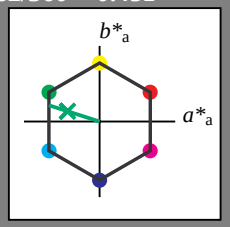
$g^*_{C,rel}$ = 59



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

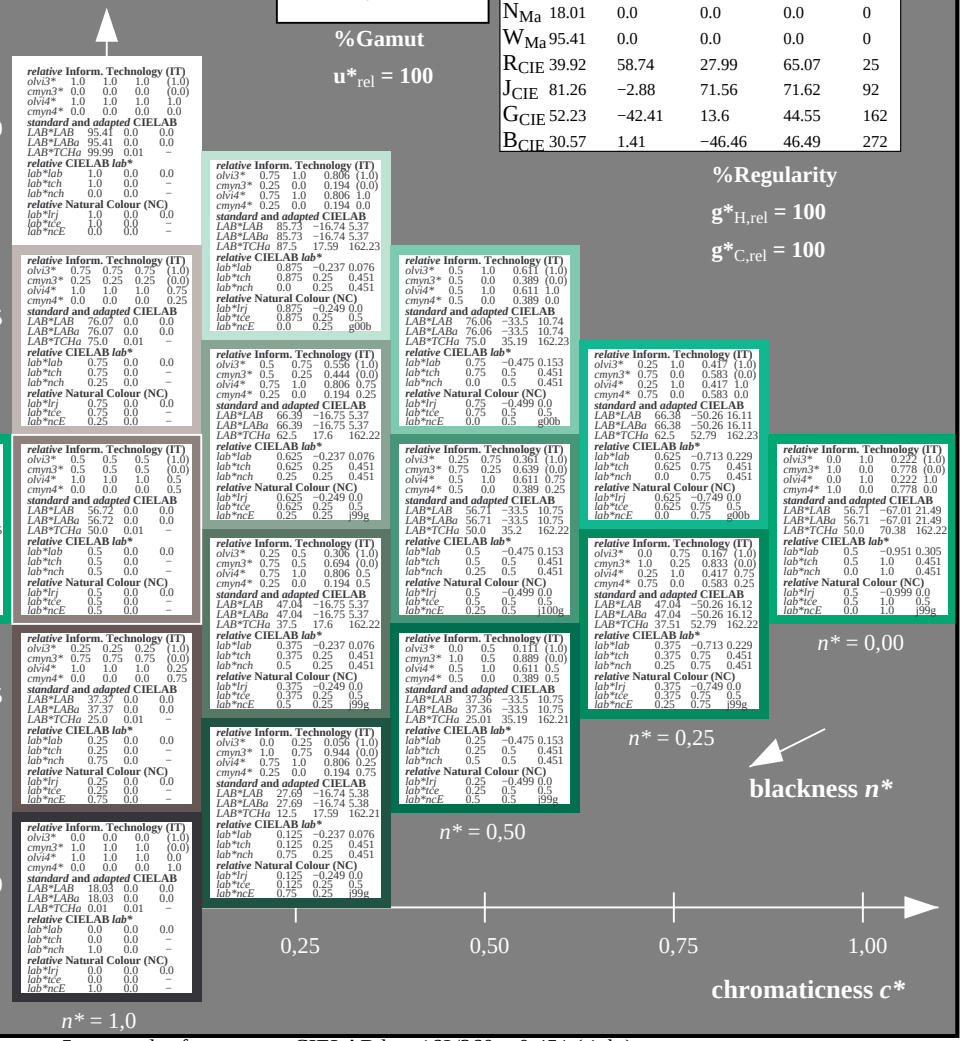
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

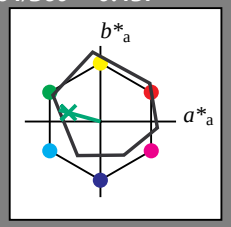
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

u^*_{rel} = 93

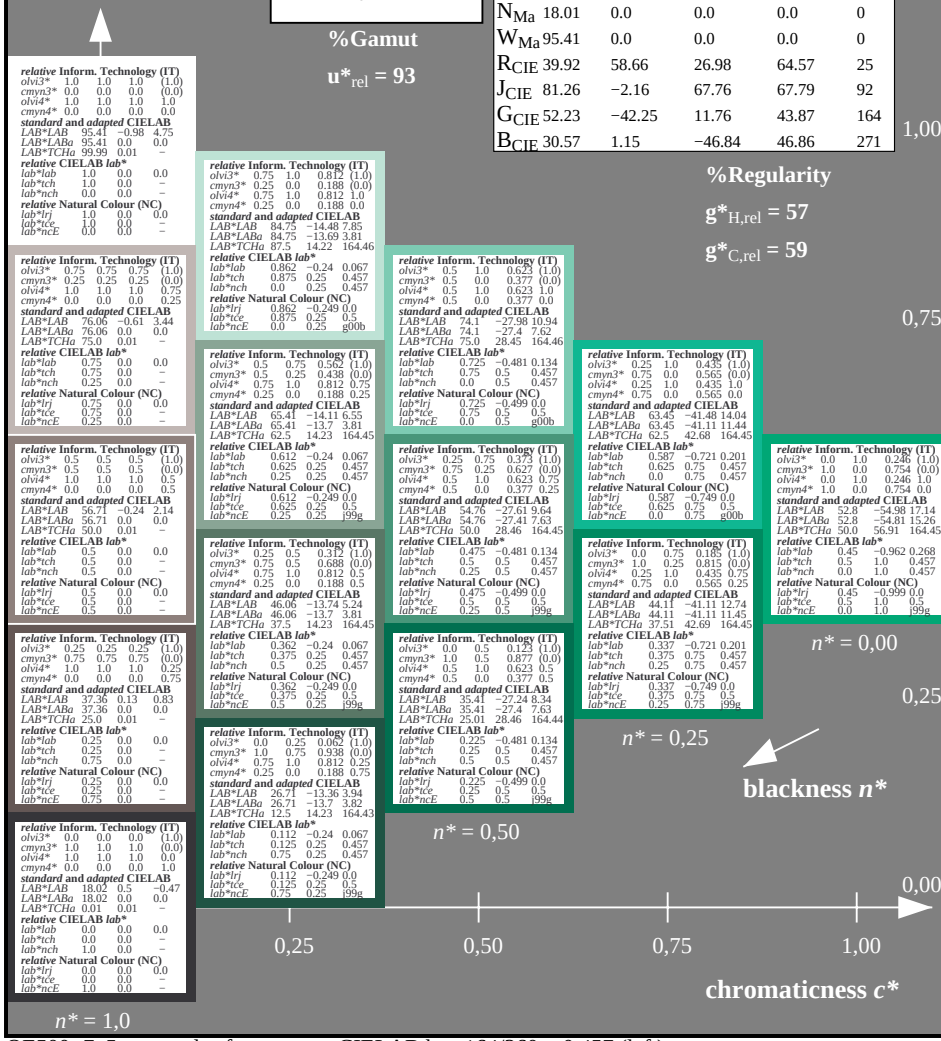
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

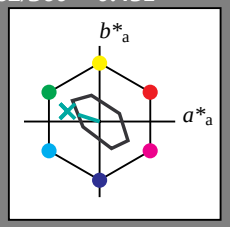


Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

u^*_{rel} = 16

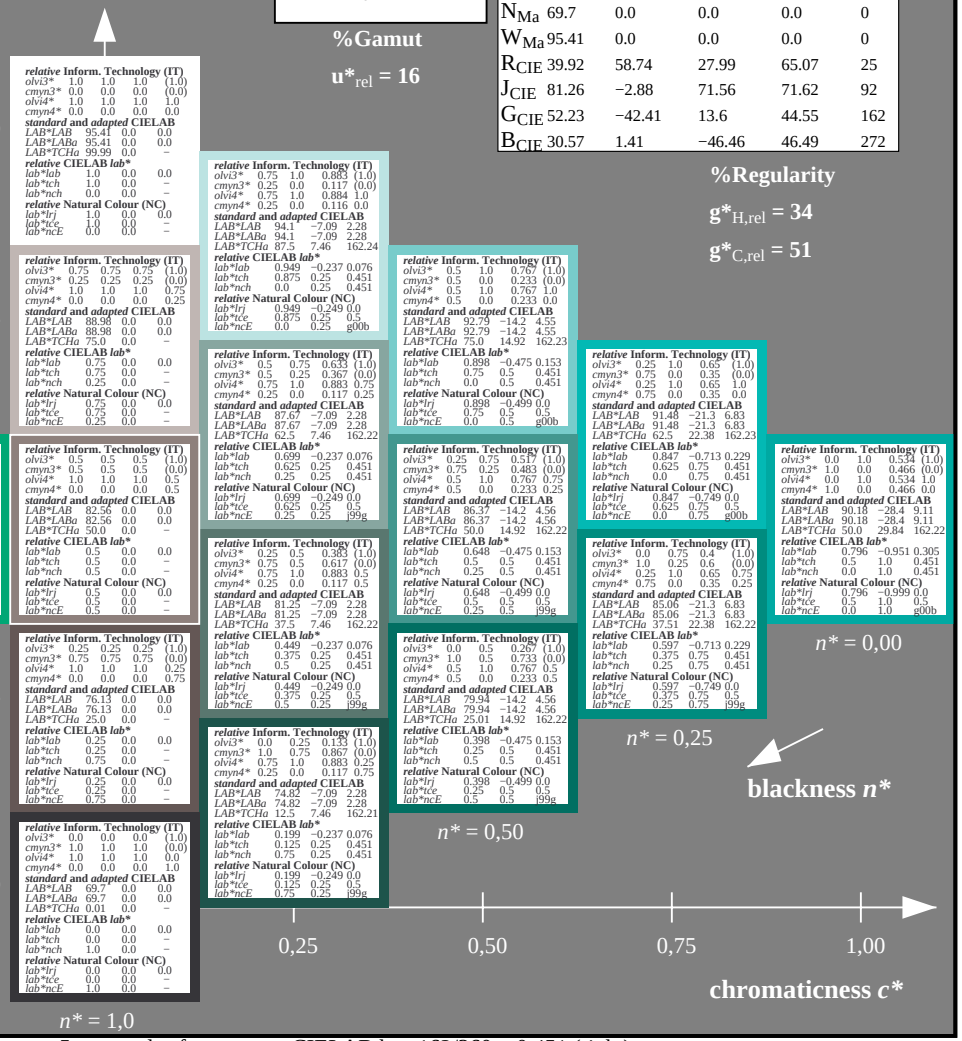
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



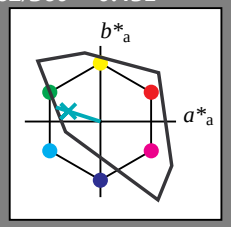
OE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00
for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness *t**



%Gamut

u^*_{rel} = 158

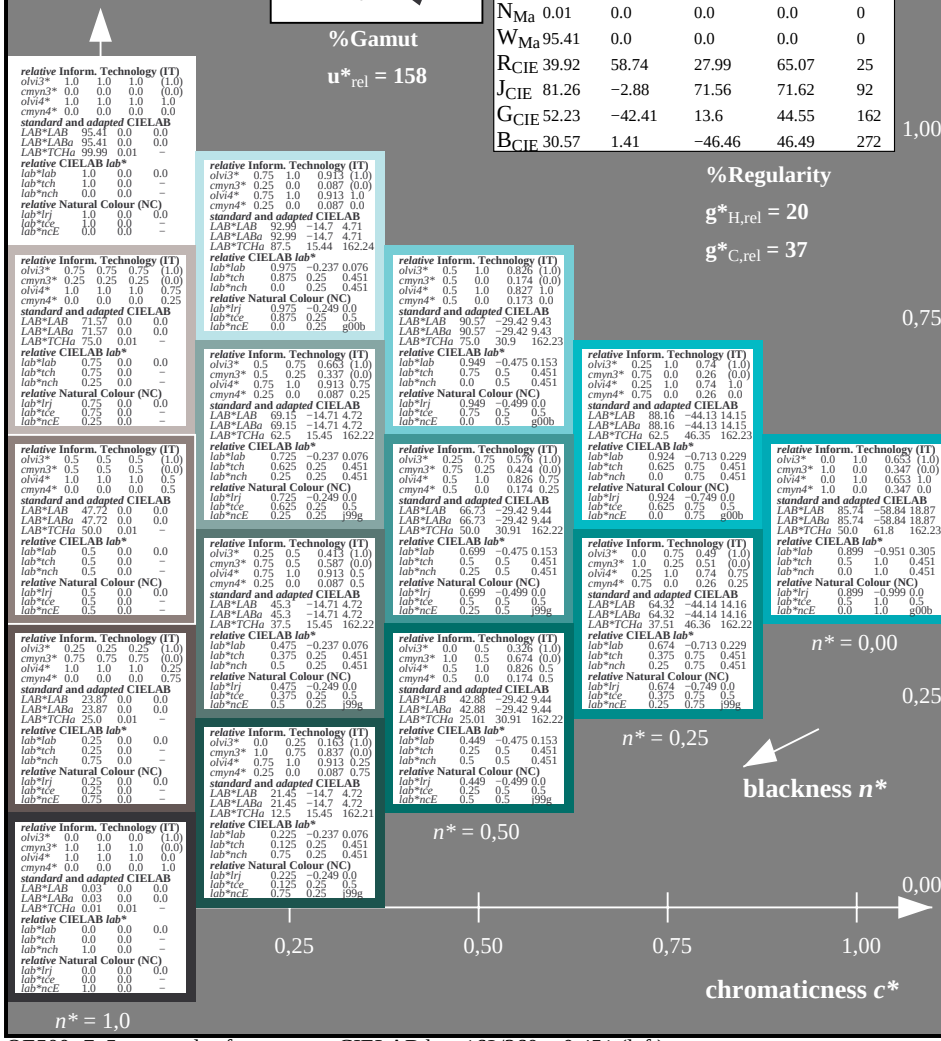
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

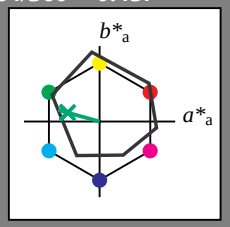
$g^*_{C,rel}$ = 37



Output: Colorimetric Offset Reflective System ORS18
for hue *h* = lab*h = 164/360 = 0.457*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness *t**



%Gamut

u^*_{rel} = 93

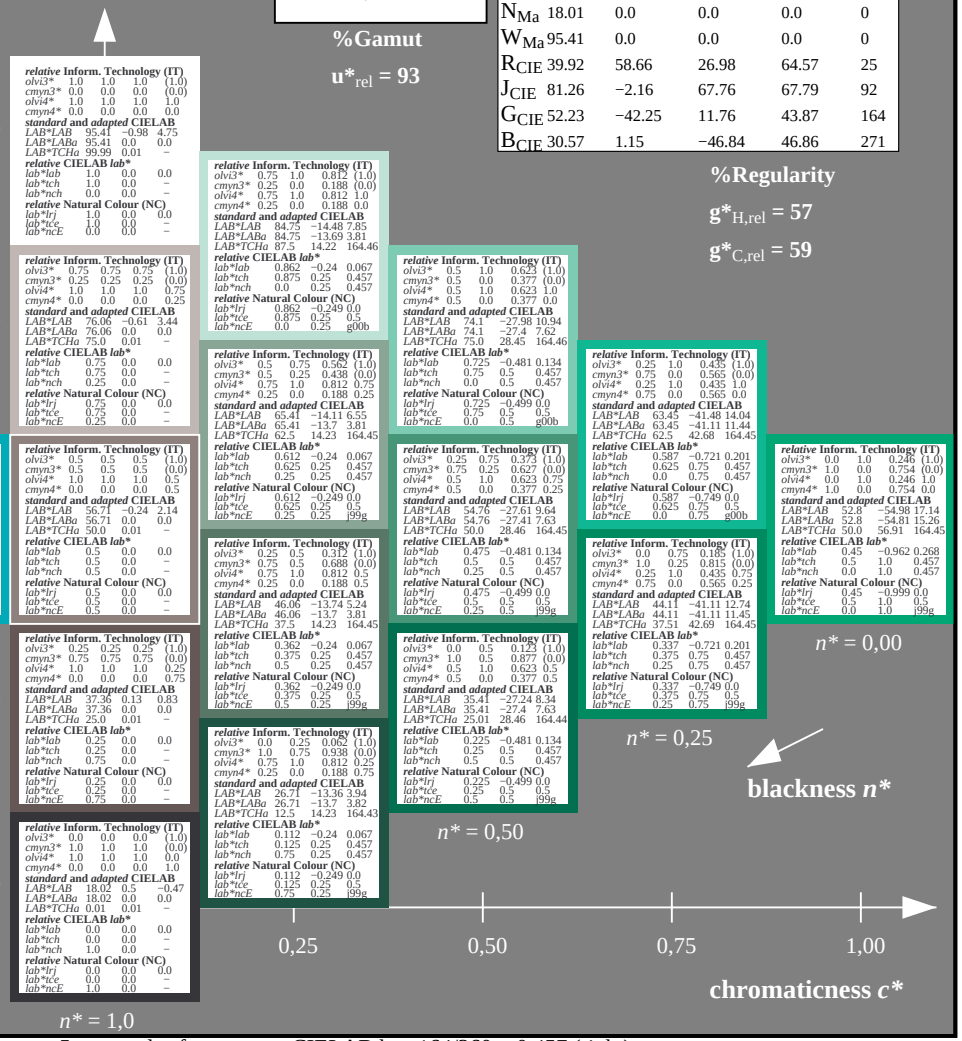
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



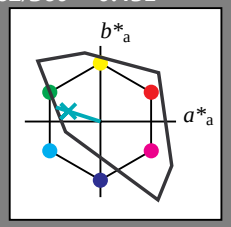
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness n^*

0,25 0,50 0,75 1,00

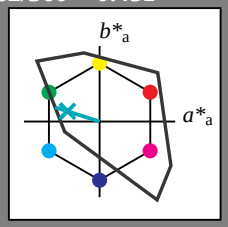
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00

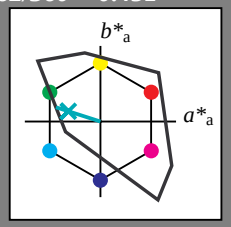
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

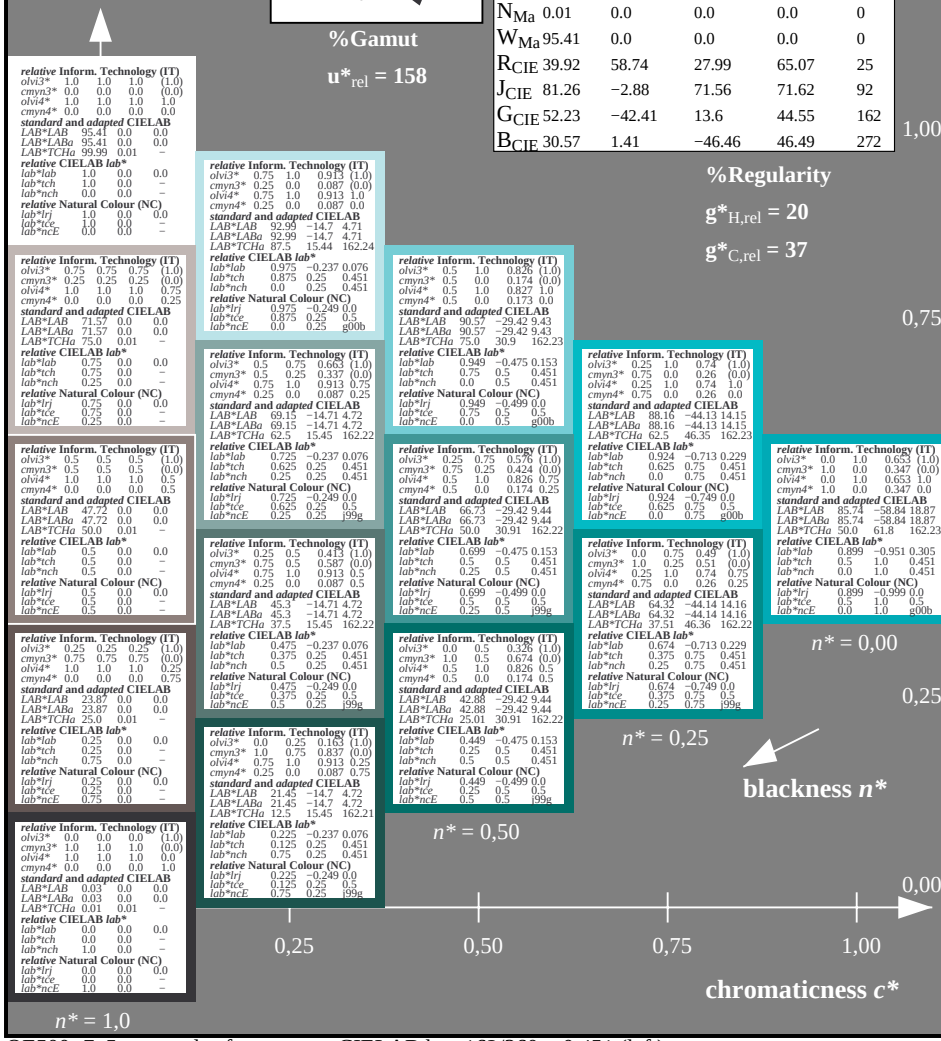
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Printer Reflective System DRSXX

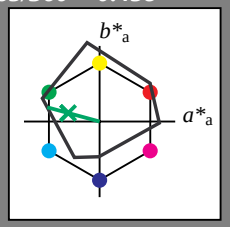
for hue $h^* = lab^*h = 165/360 = 0.458$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

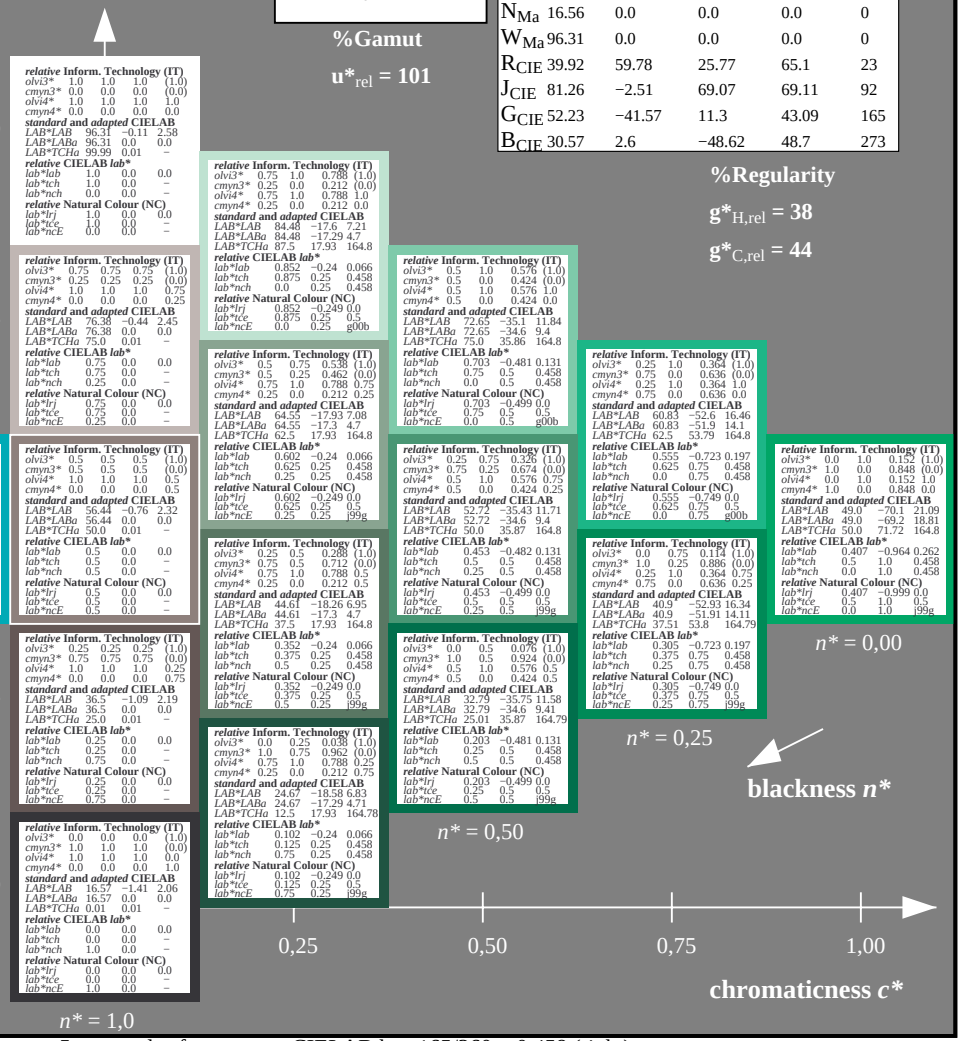
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

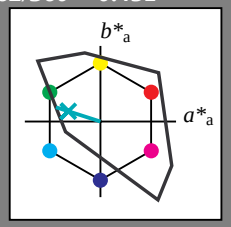
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

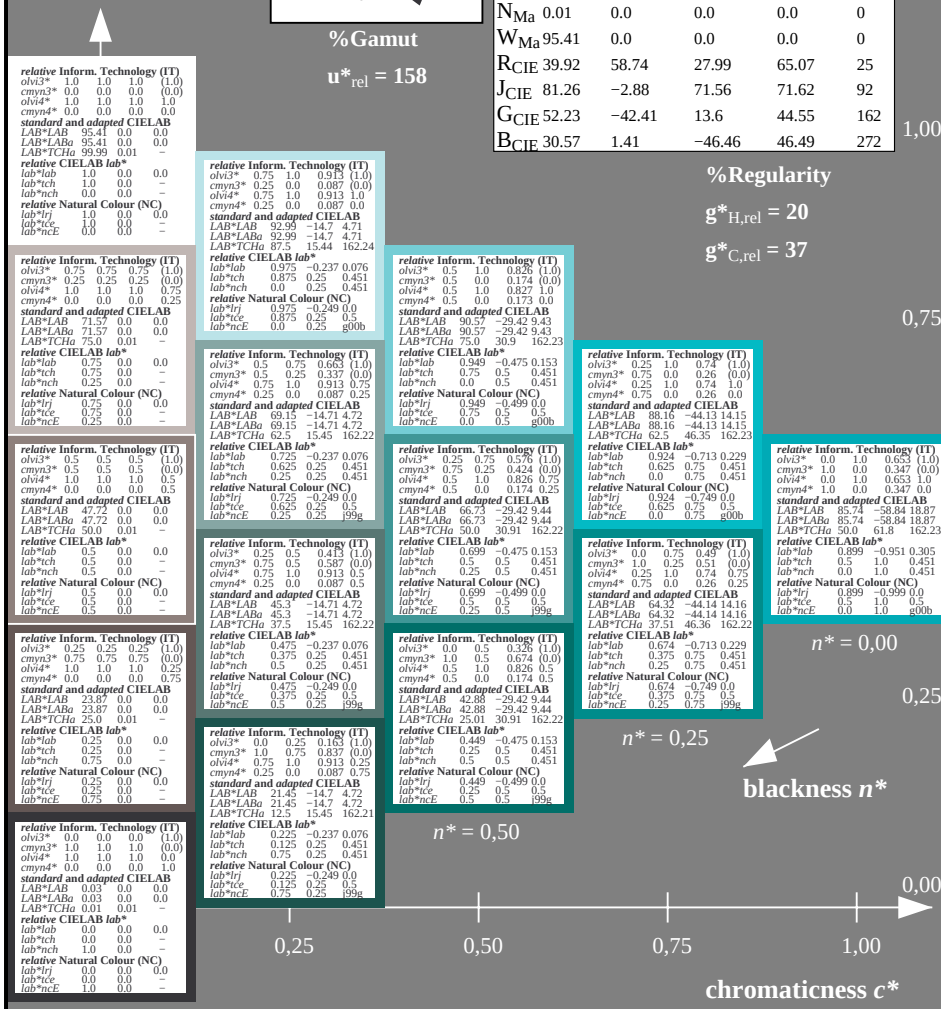
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

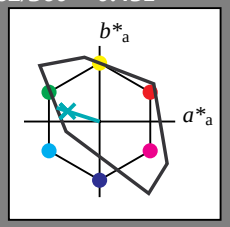
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

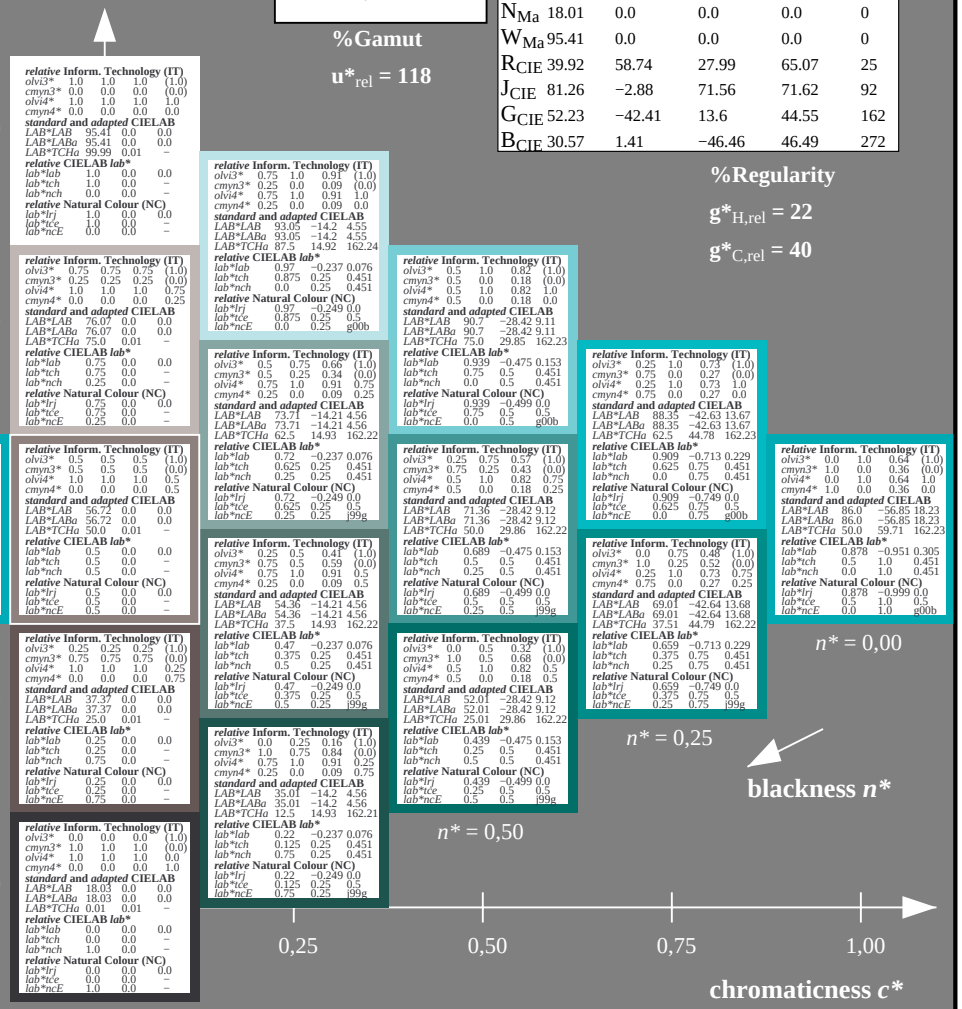
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00

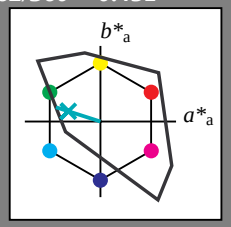
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

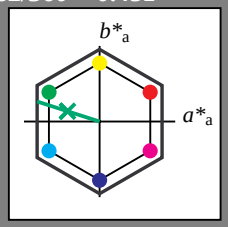
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00

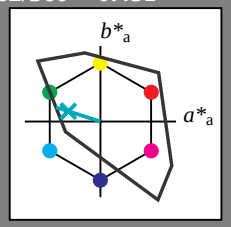
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18

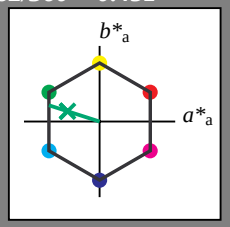
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00

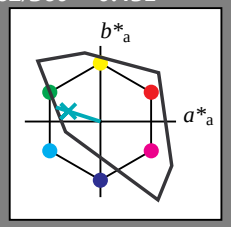
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Standard Reflective System SRS18

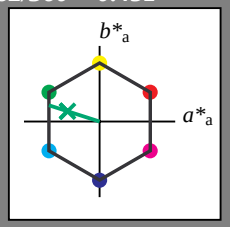
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

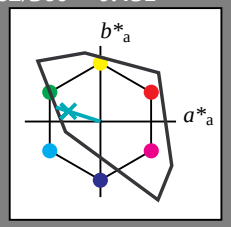
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

u^*_{rel} = 158

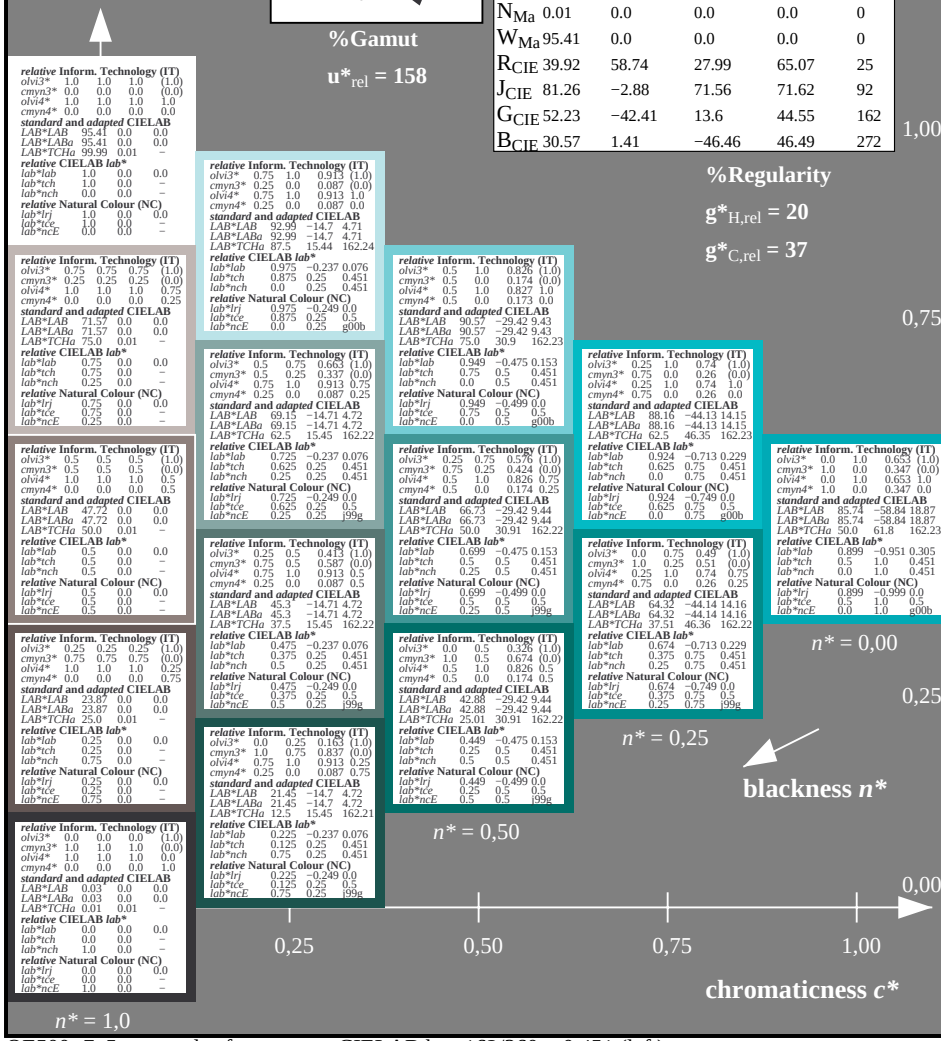
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



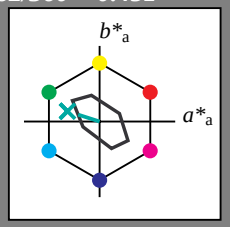
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

u^*_{rel} = 16

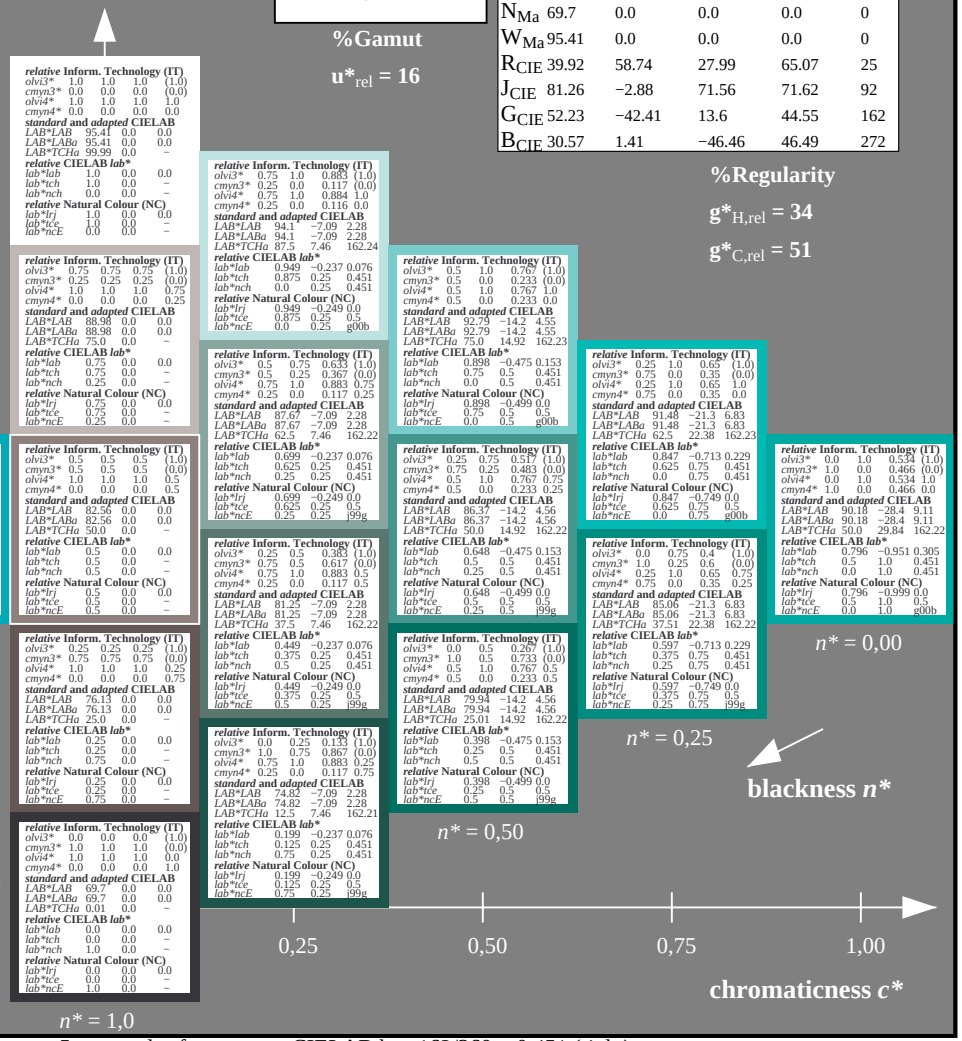
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

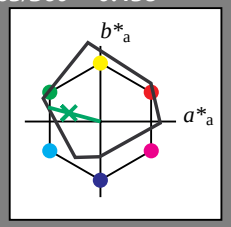


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

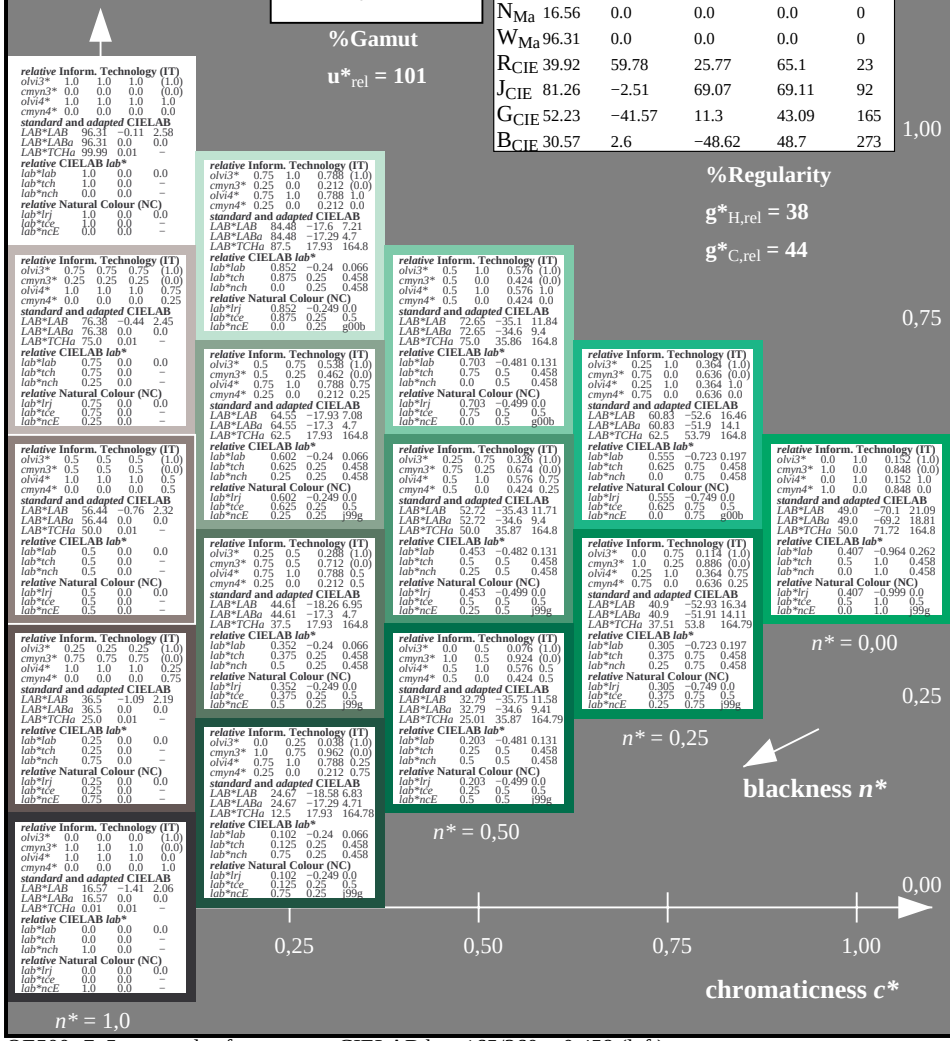
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

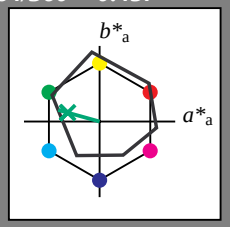


OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

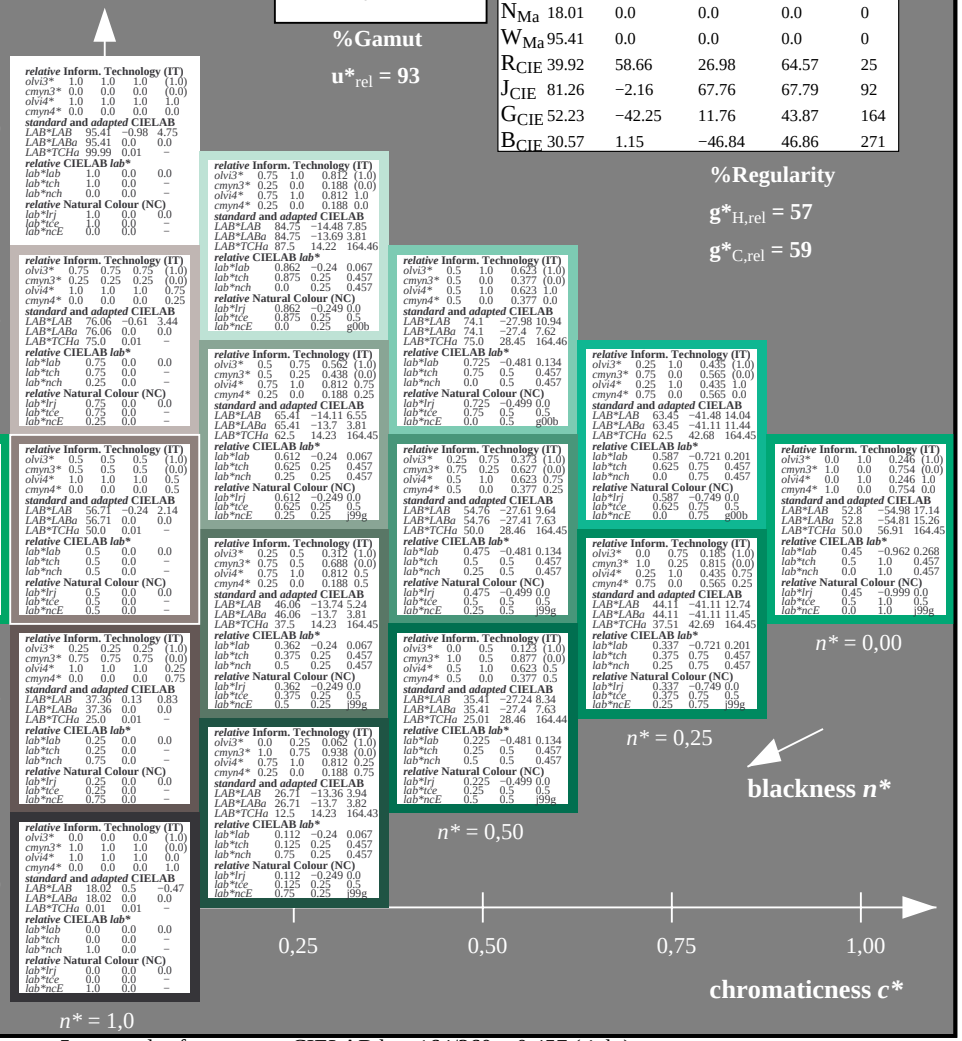
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



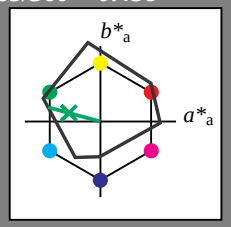
5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

u^*_{rel} = 101

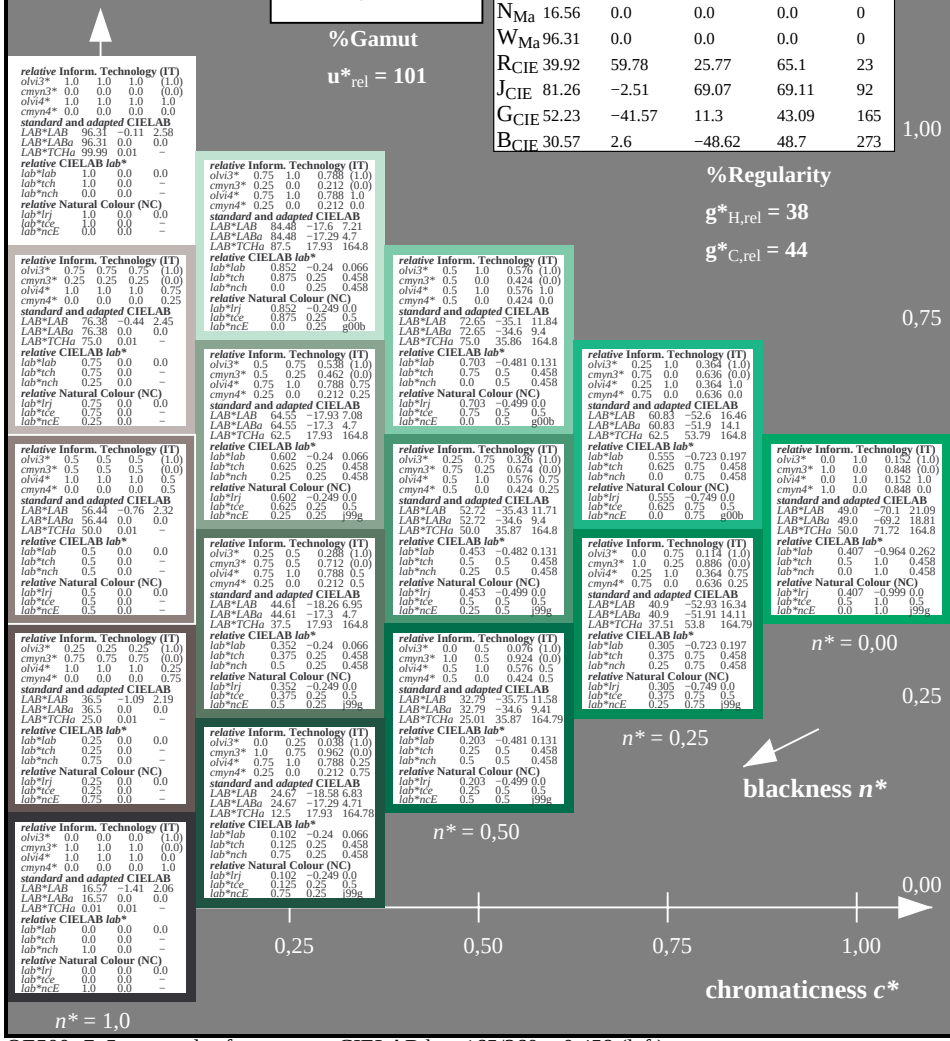
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



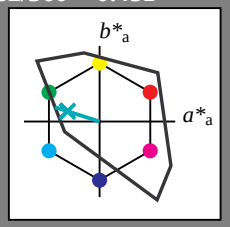
OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

u^*_{rel} = 158

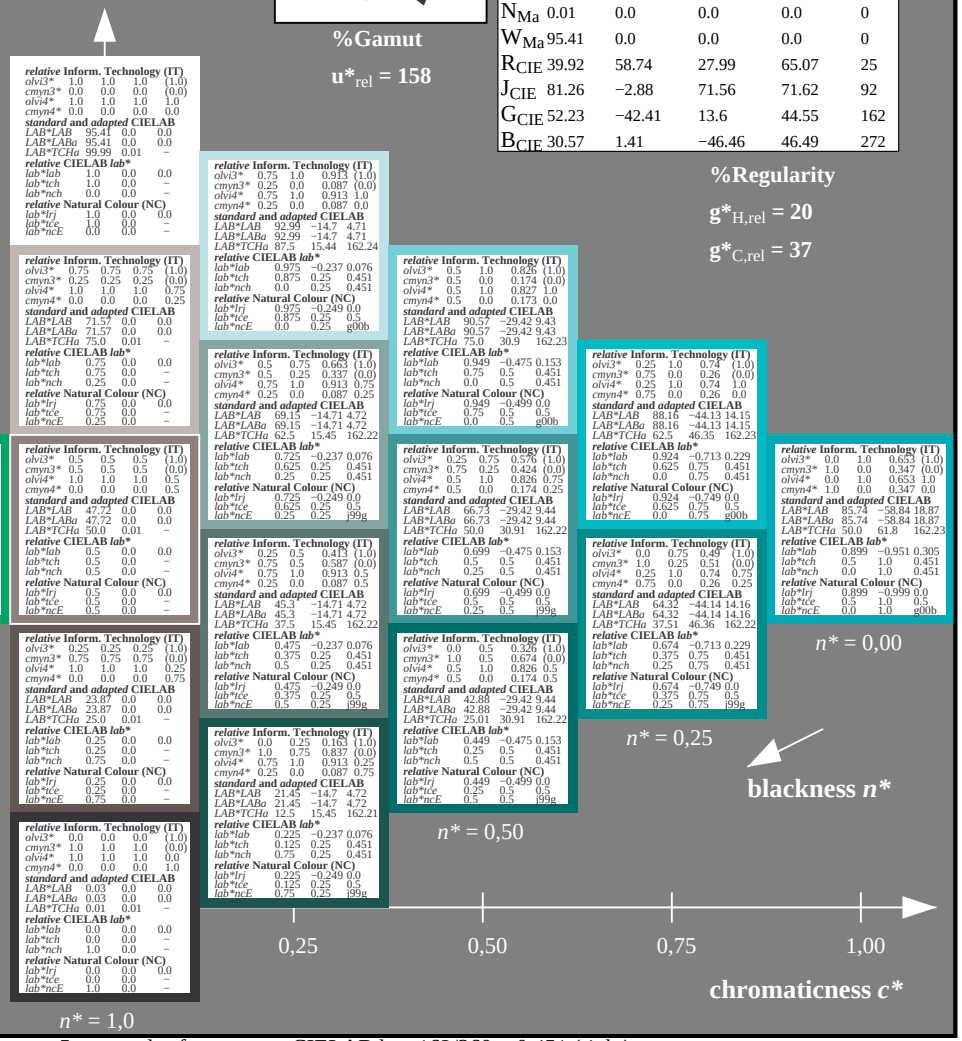
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$

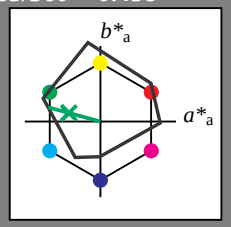
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

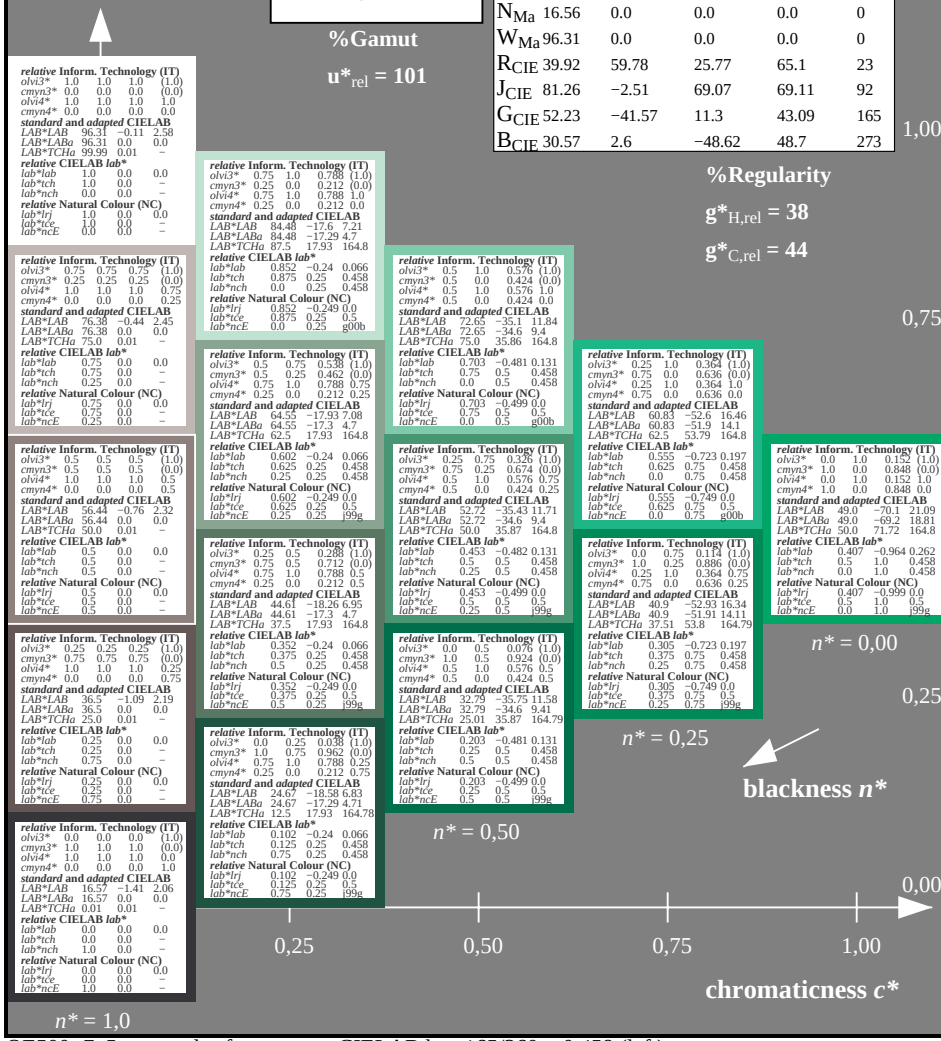
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$

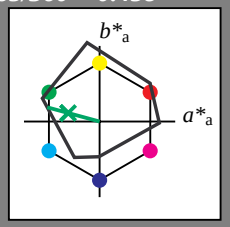
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

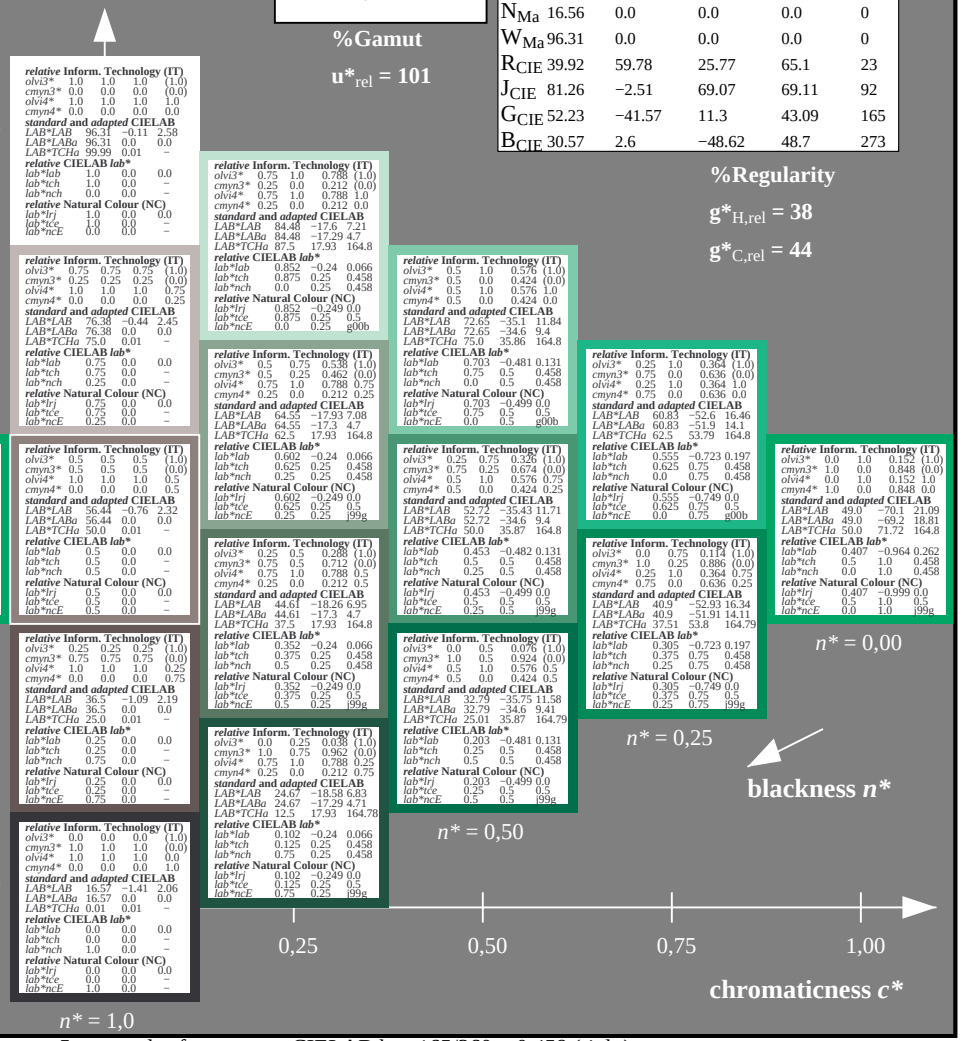
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



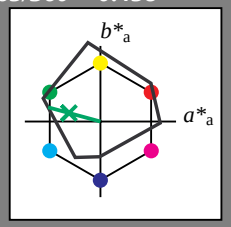
5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

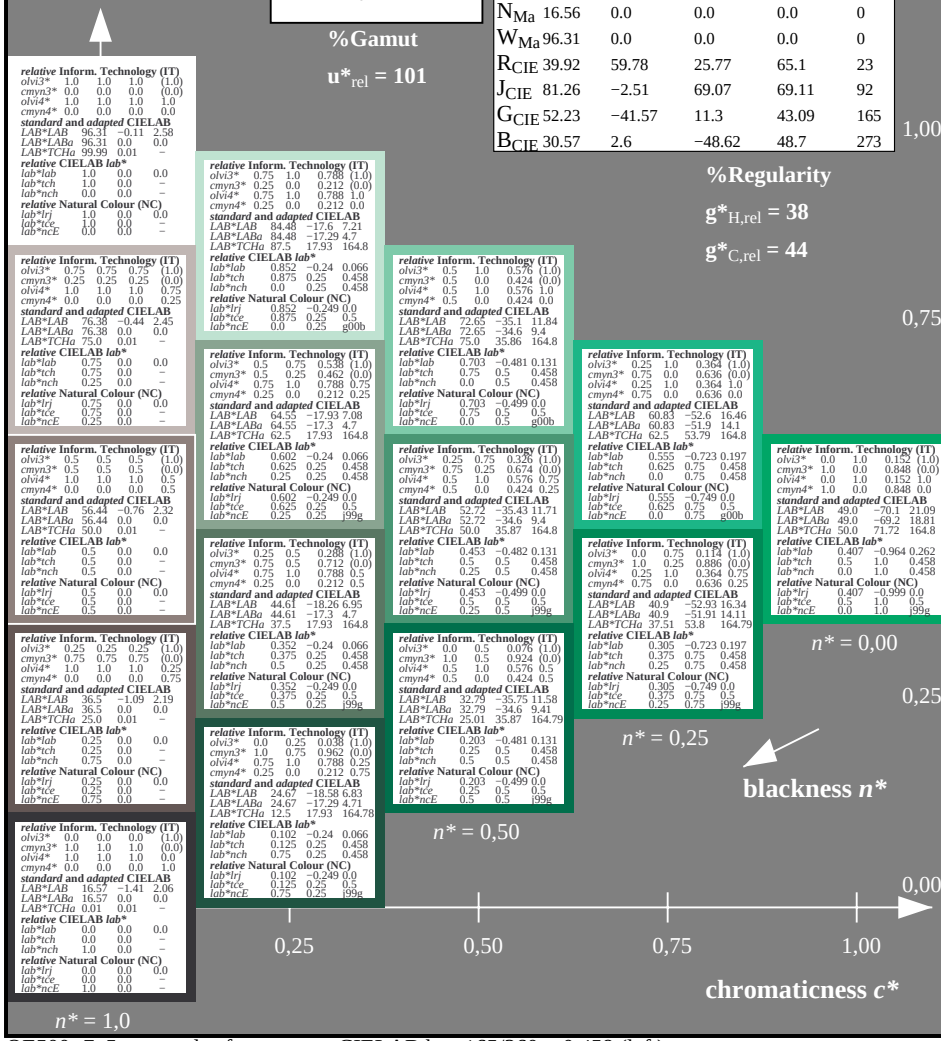
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



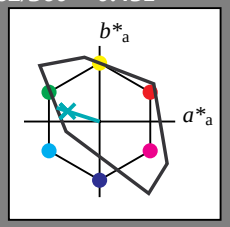
OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

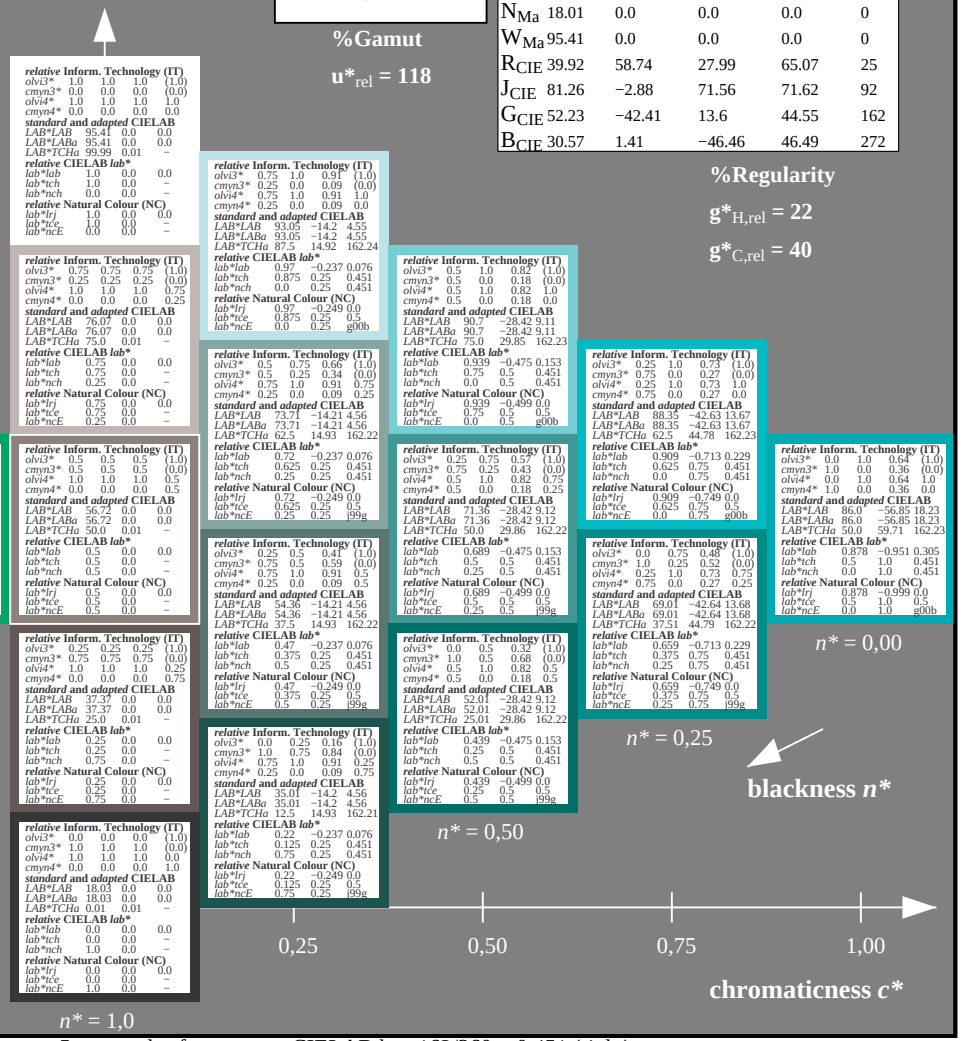
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



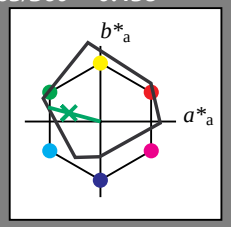
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 165/360 = 0.458*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness *t**



%Gamut

u^*_{rel} = 101

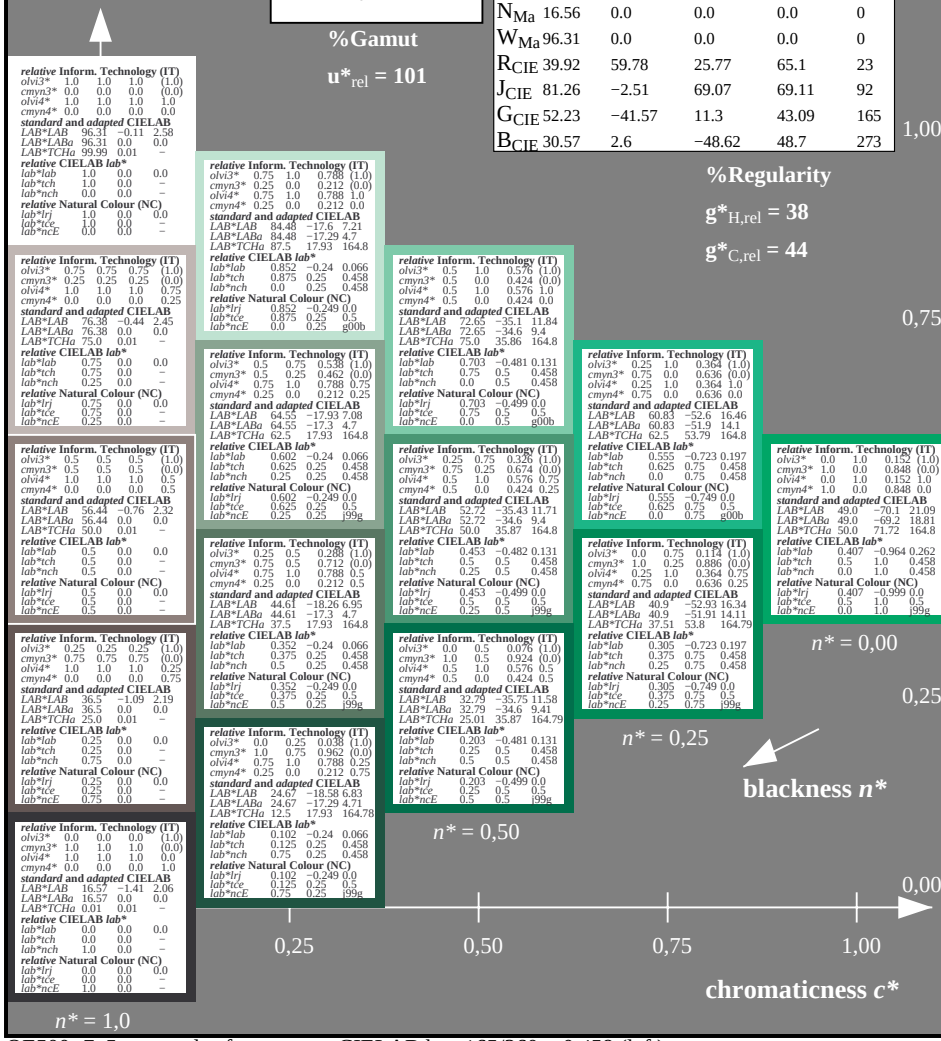
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

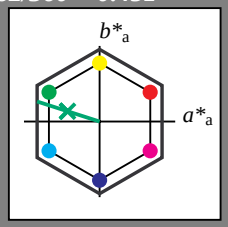


Output: Colorimetric Natural Luminous System NLS00

for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness *t**



%Gamut

u^*_{rel} = 152

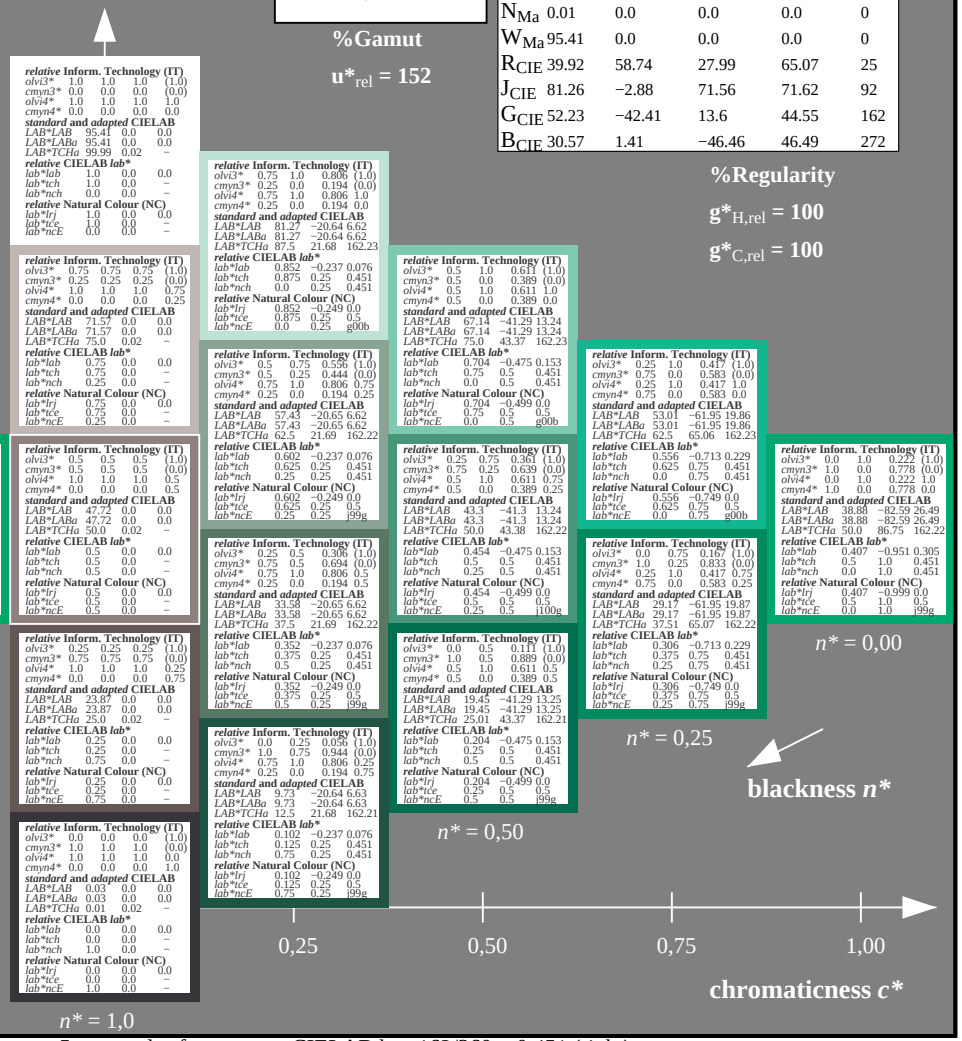
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

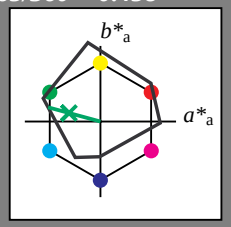
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

u^*_{rel} = 101

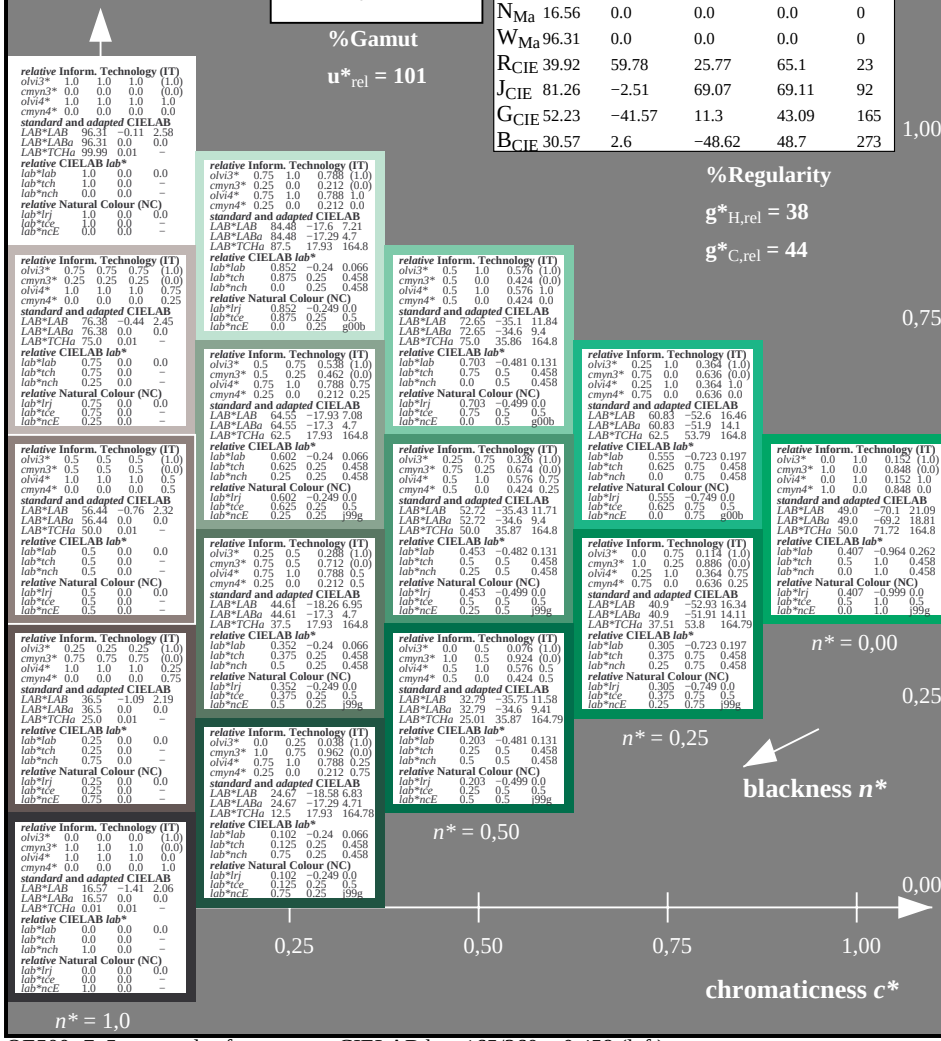
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



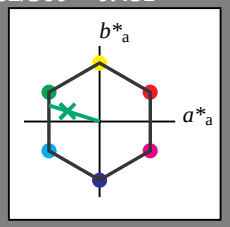
OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 100

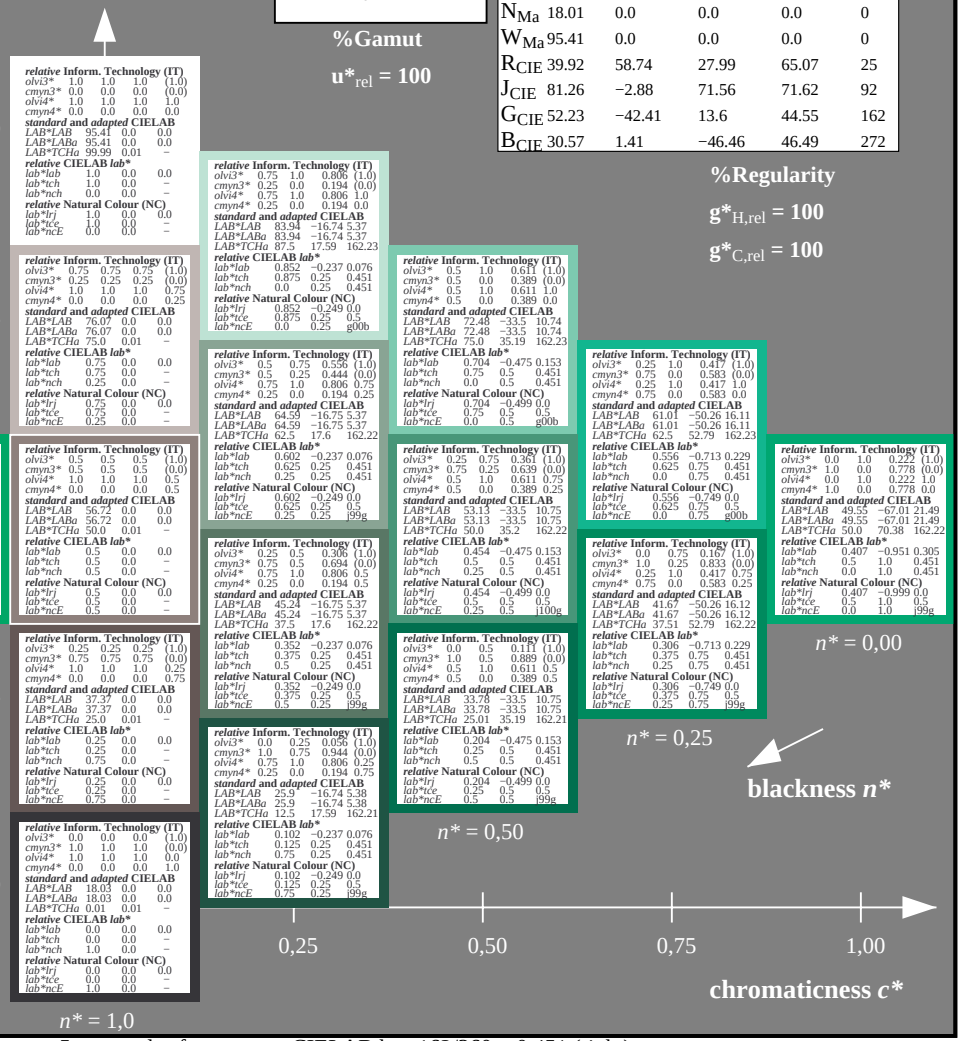
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



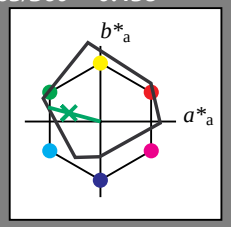
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

u^*_{rel} = 101

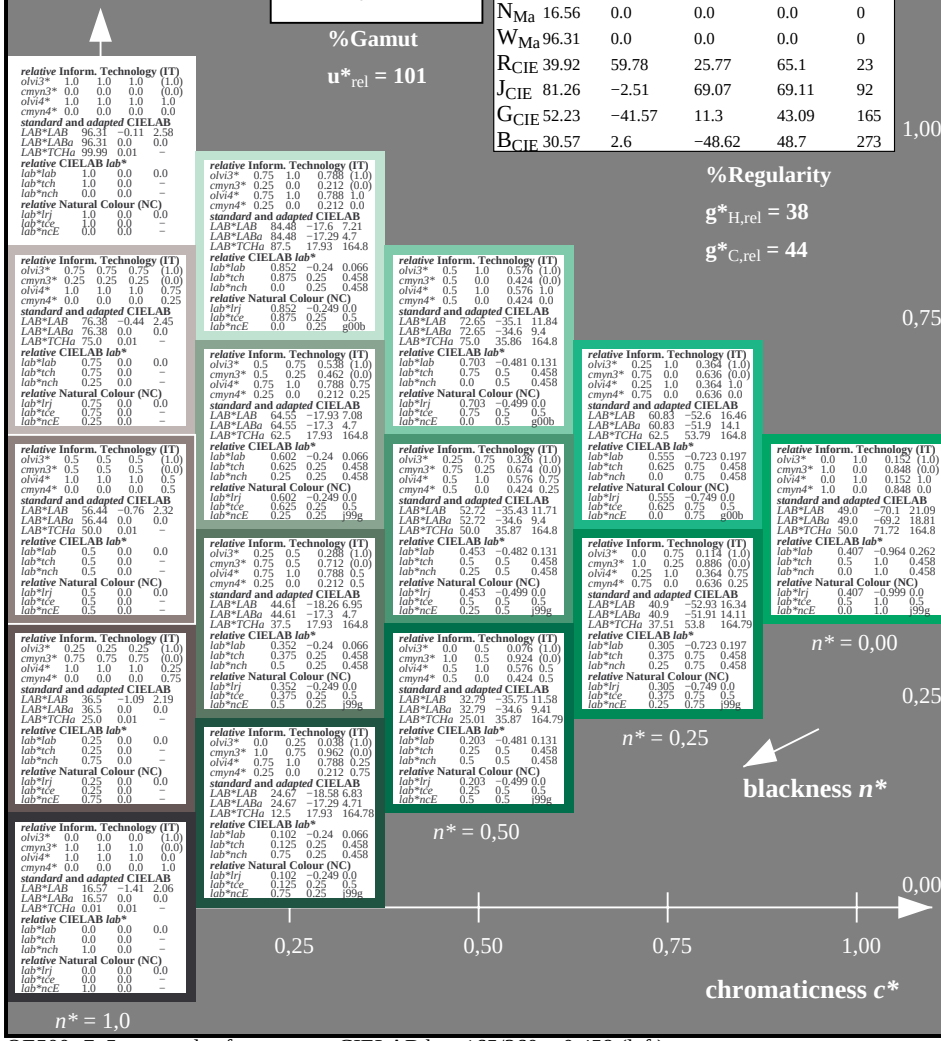
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



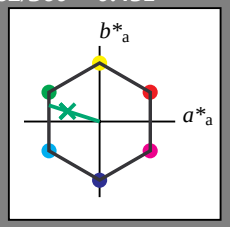
OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 100

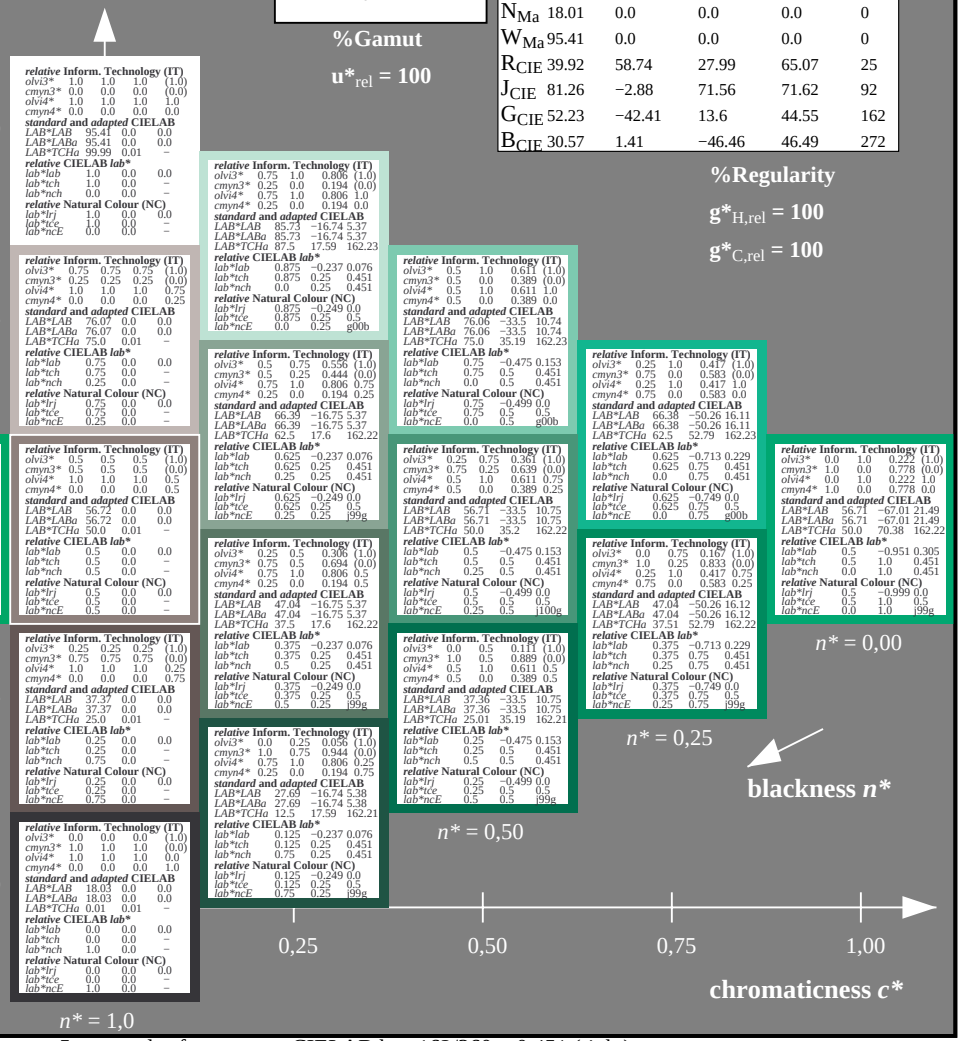
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

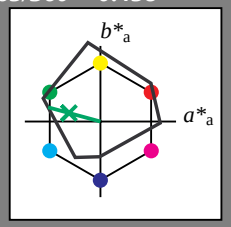


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 165/360 = 0.458*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Gamut

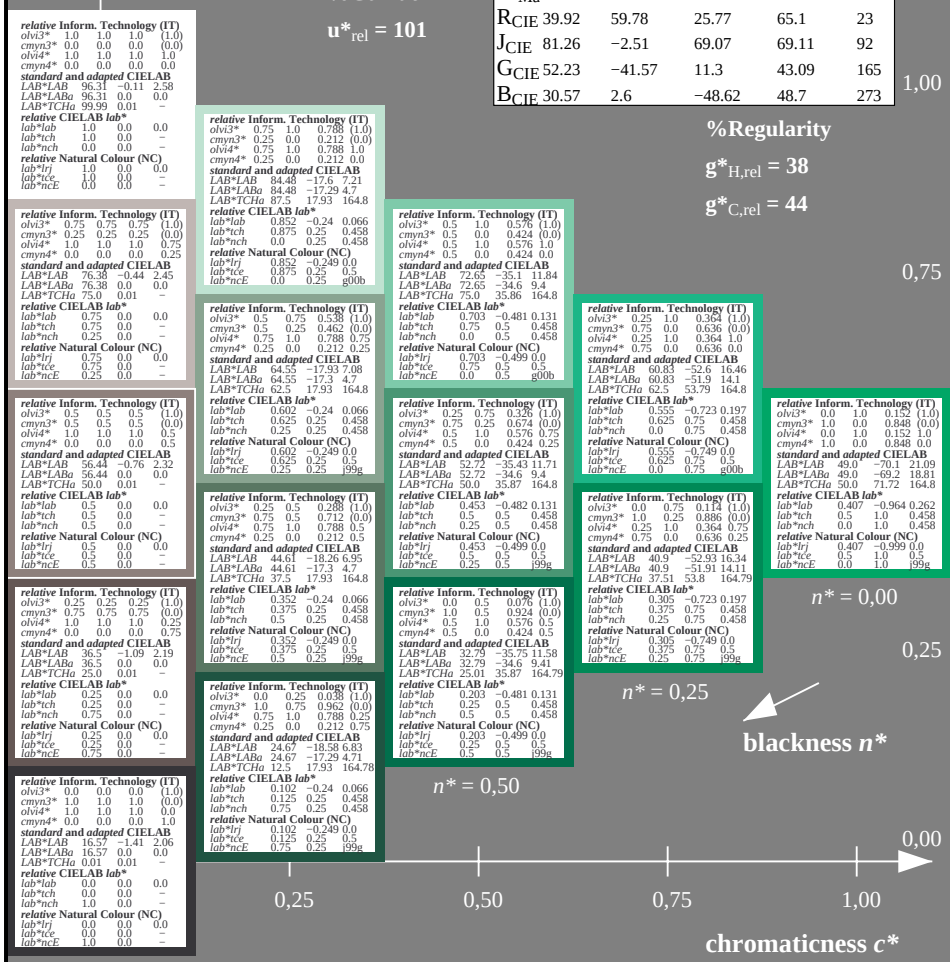
u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

triangle lightness *t**

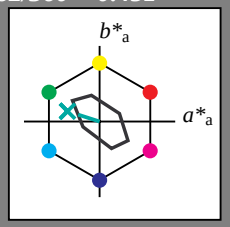


OE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

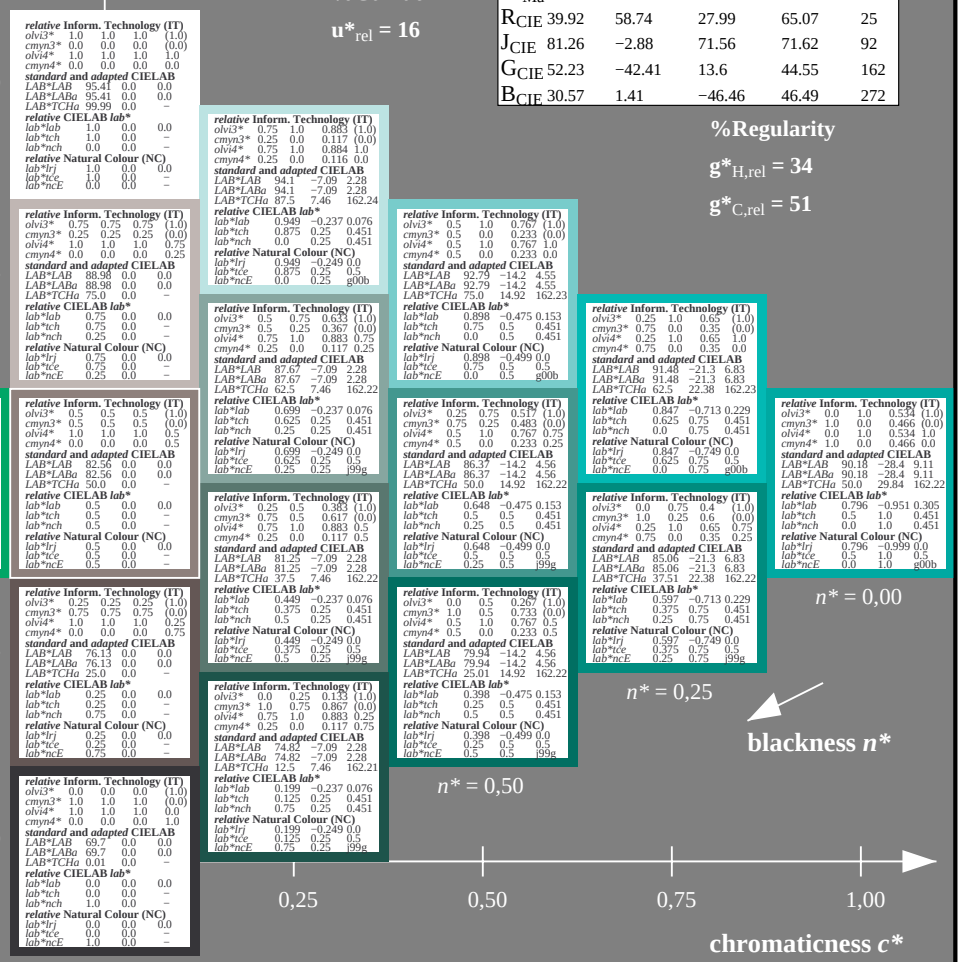
u^*_{rel} = 16

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

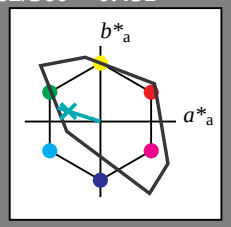
triangle lightness *t**



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18
for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness *t**

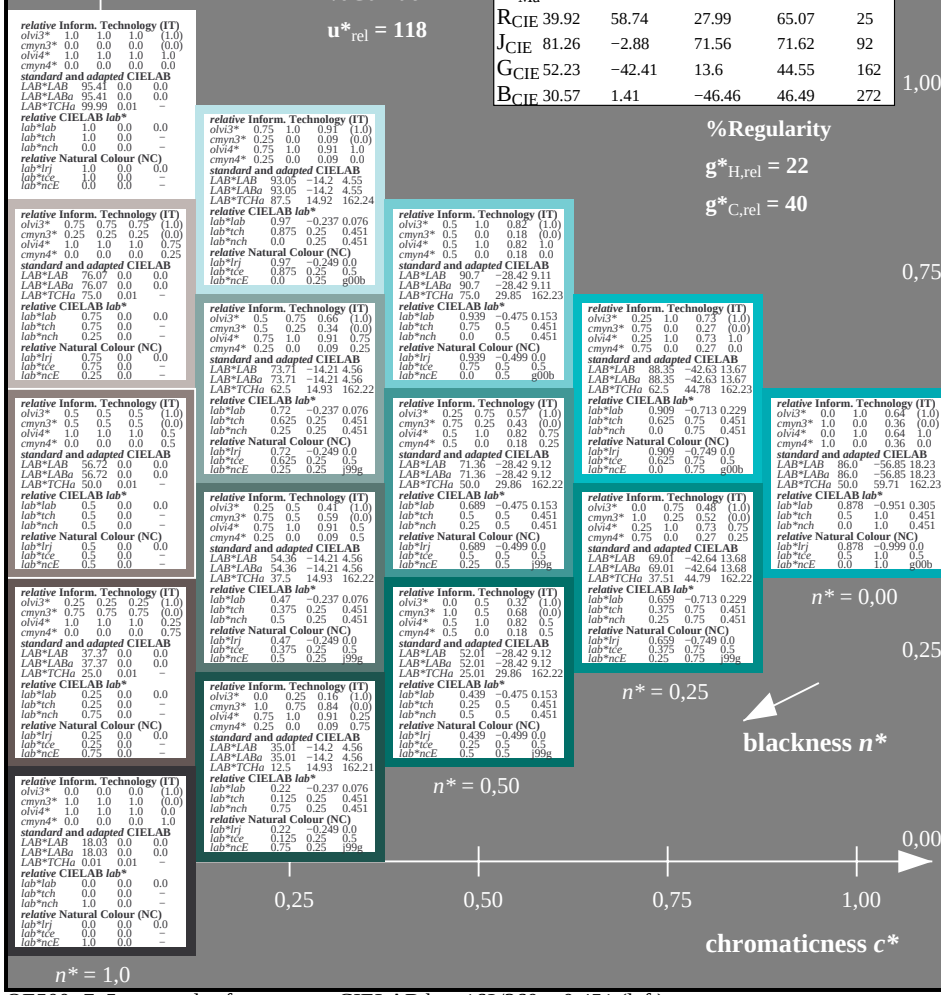
%Gamut

u^*_{rel} = 118

%Regularity

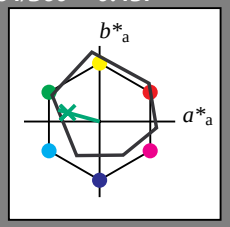
$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



Output: Colorimetric Offset Reflective System ORS18
for hue *h* = lab*h = 164/360 = 0.457*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness *t**

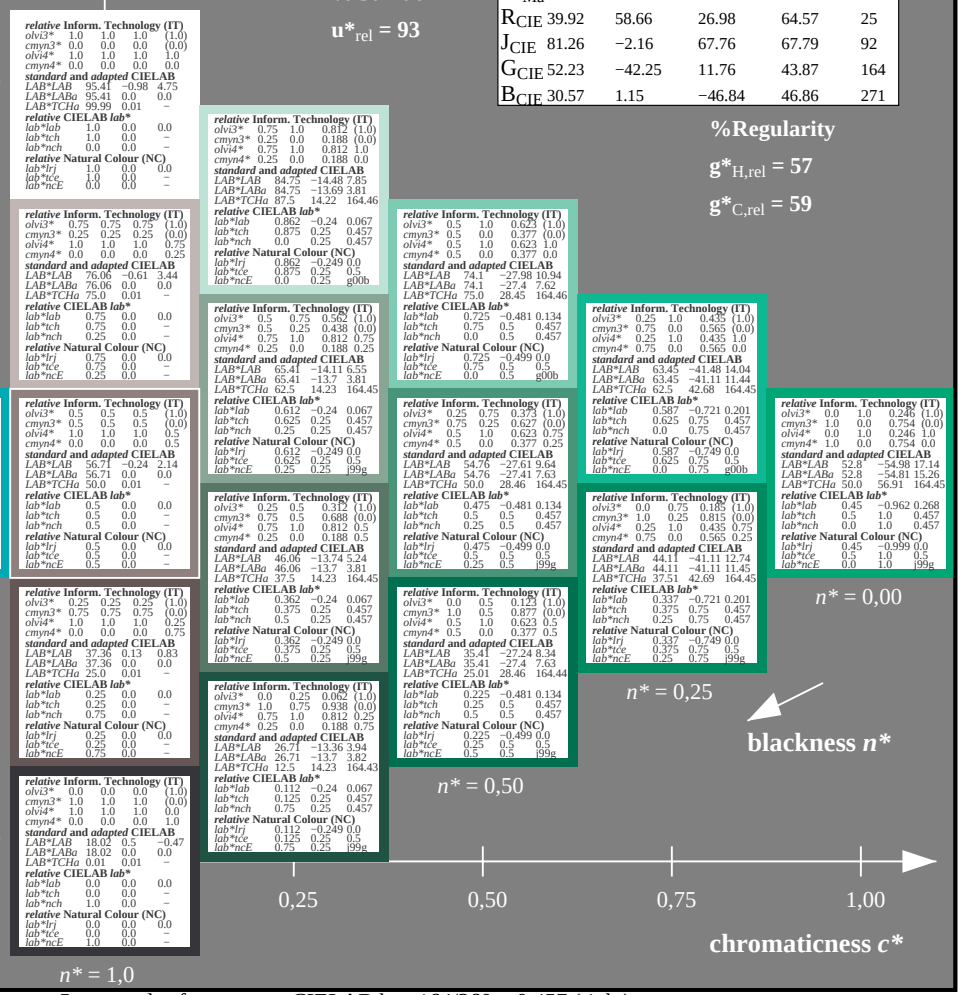
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Television Luminous System TLS18

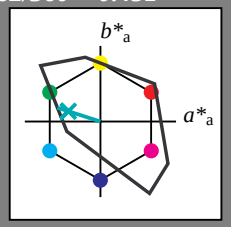
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

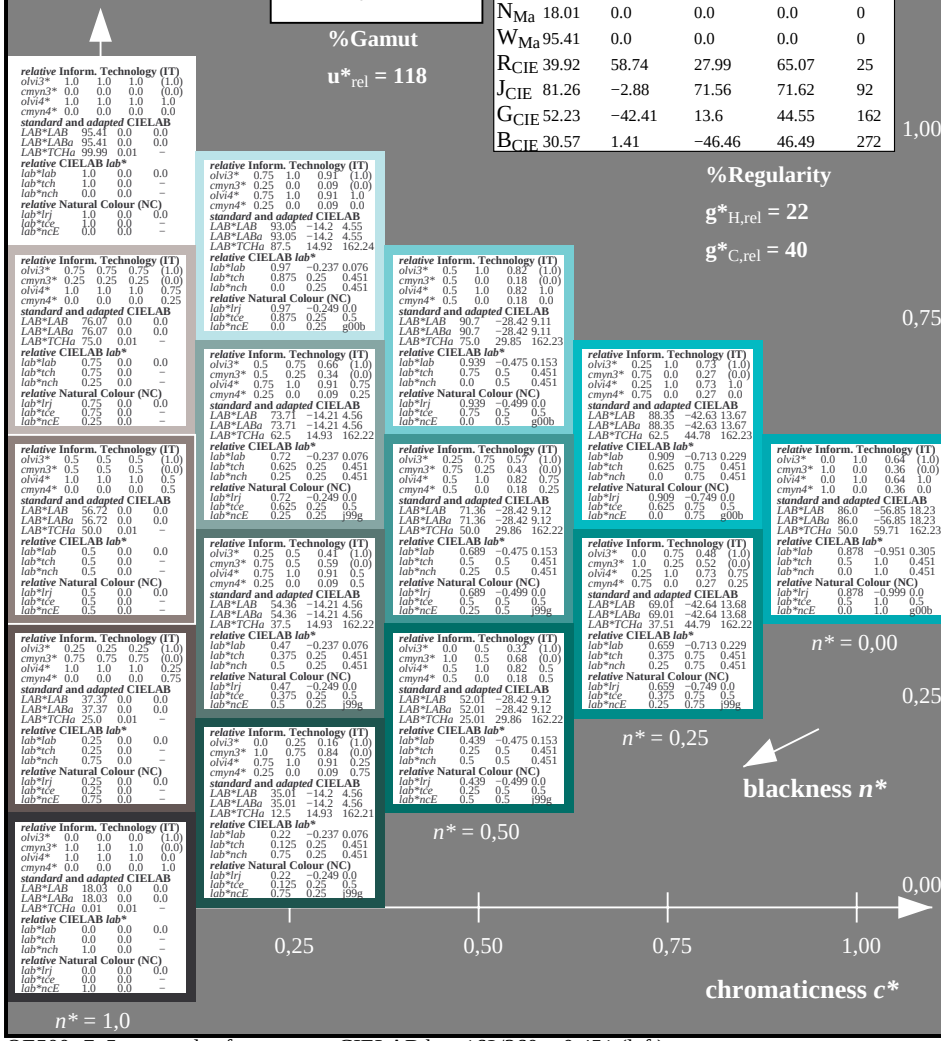
$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

triangle lightness t^*



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS00

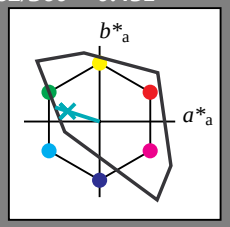
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

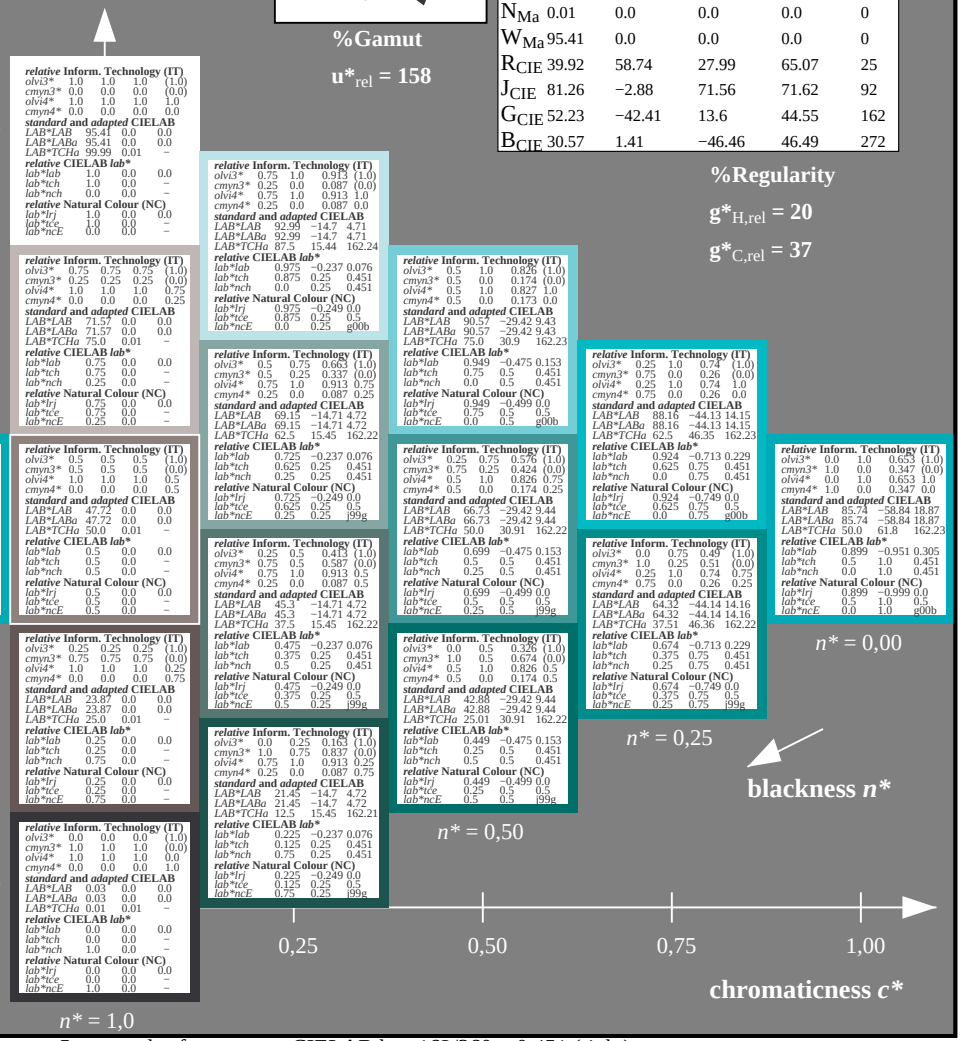
$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

triangle lightness t^*



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

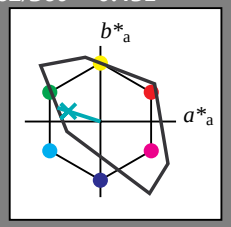
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

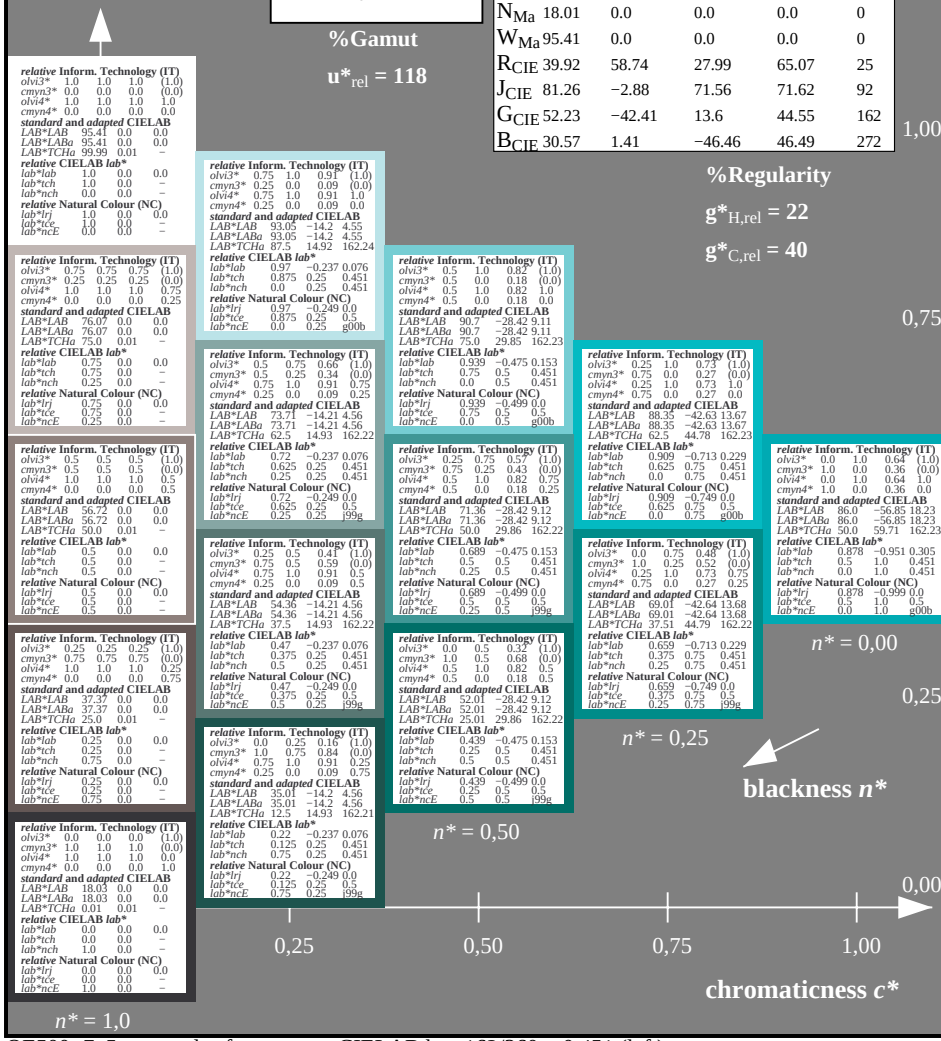
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$

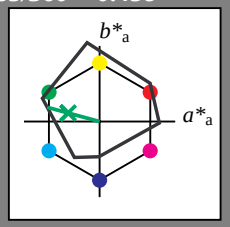
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

u^*_{rel} = 101

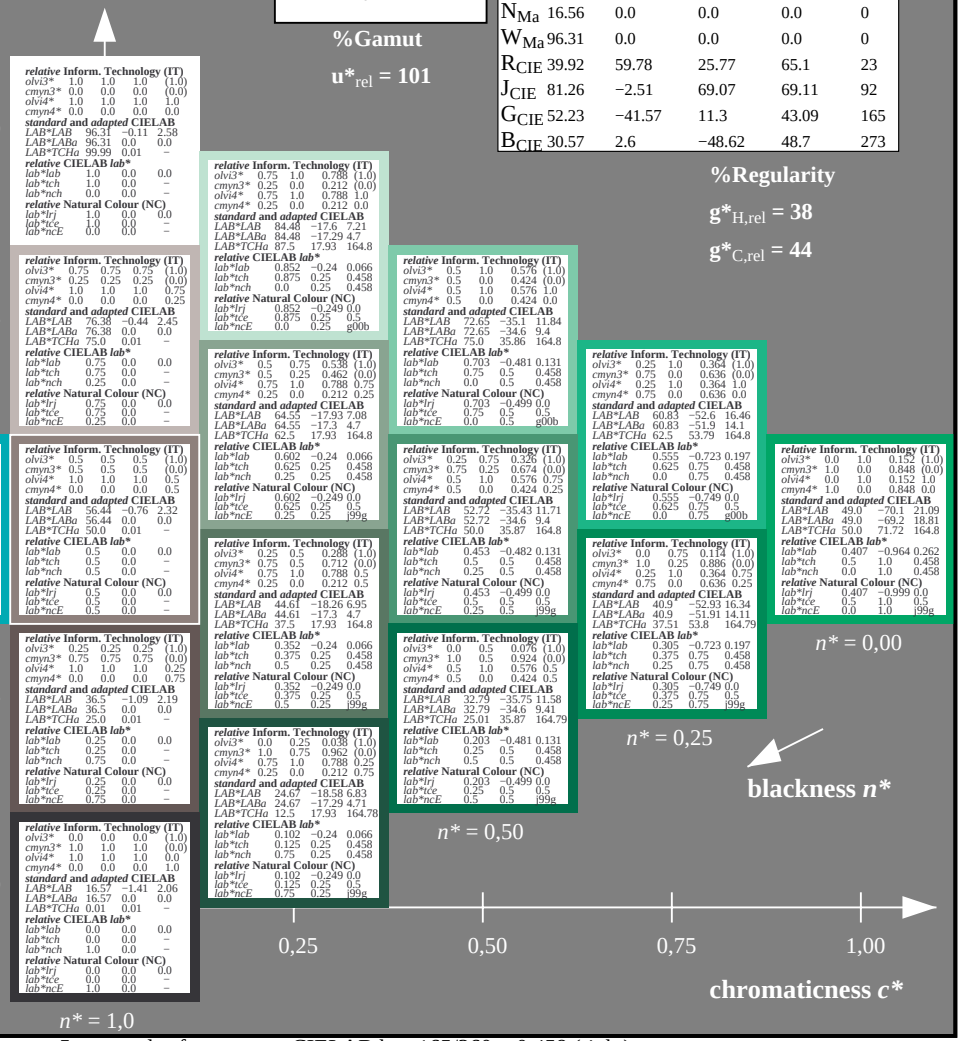
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

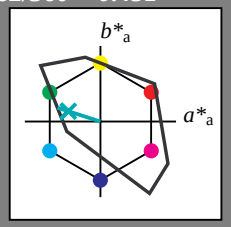


5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

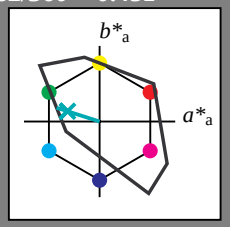
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

blackness n^*

n^* = 0,00 | n^* = 0,25 | n^* = 0,50 | n^* = 1,0

0,25 | 0,50 | 0,75 | 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

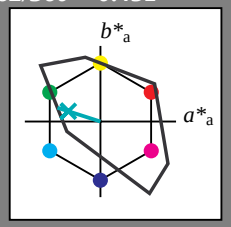
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

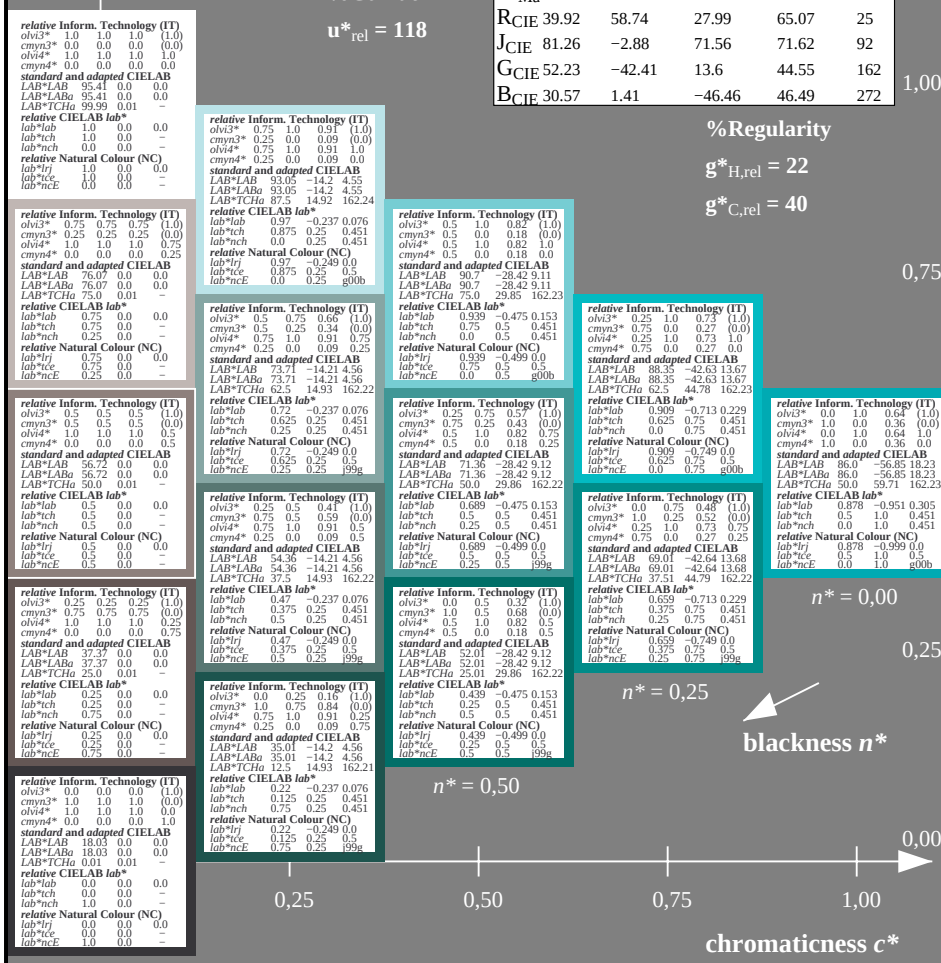
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

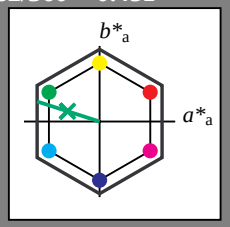
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

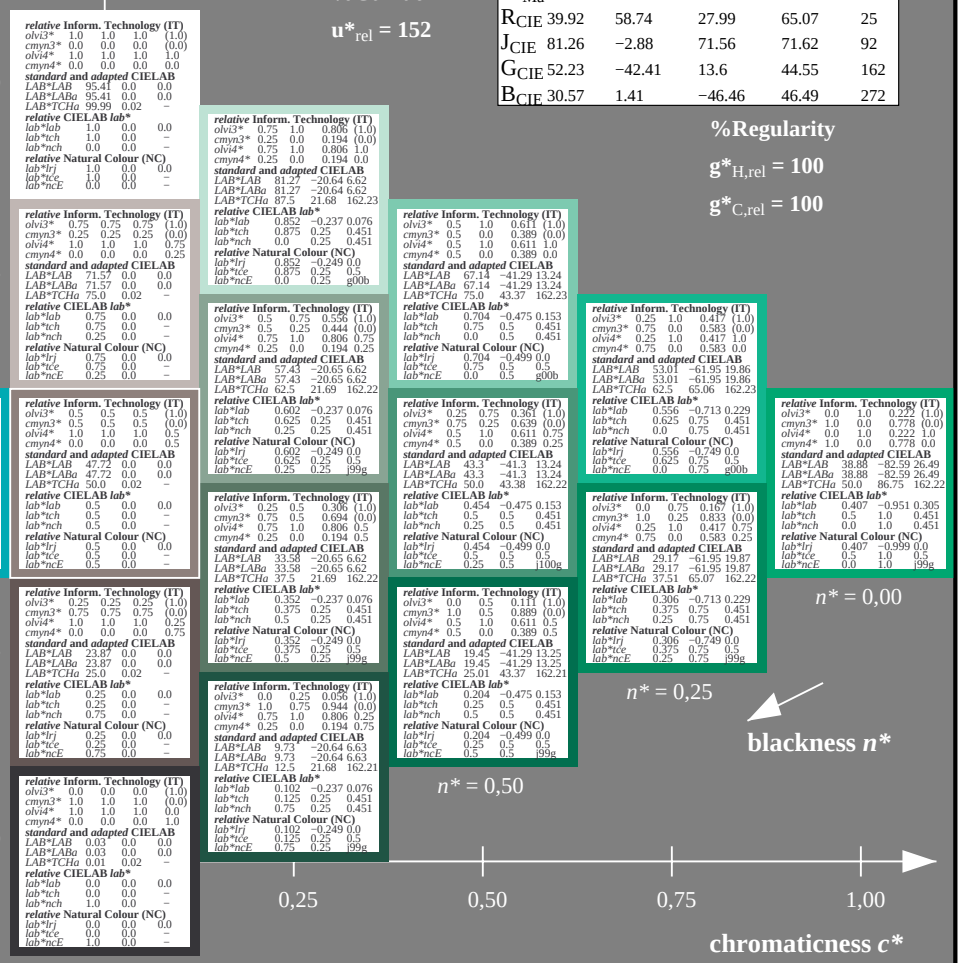
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

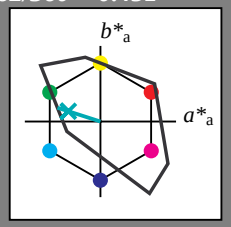
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

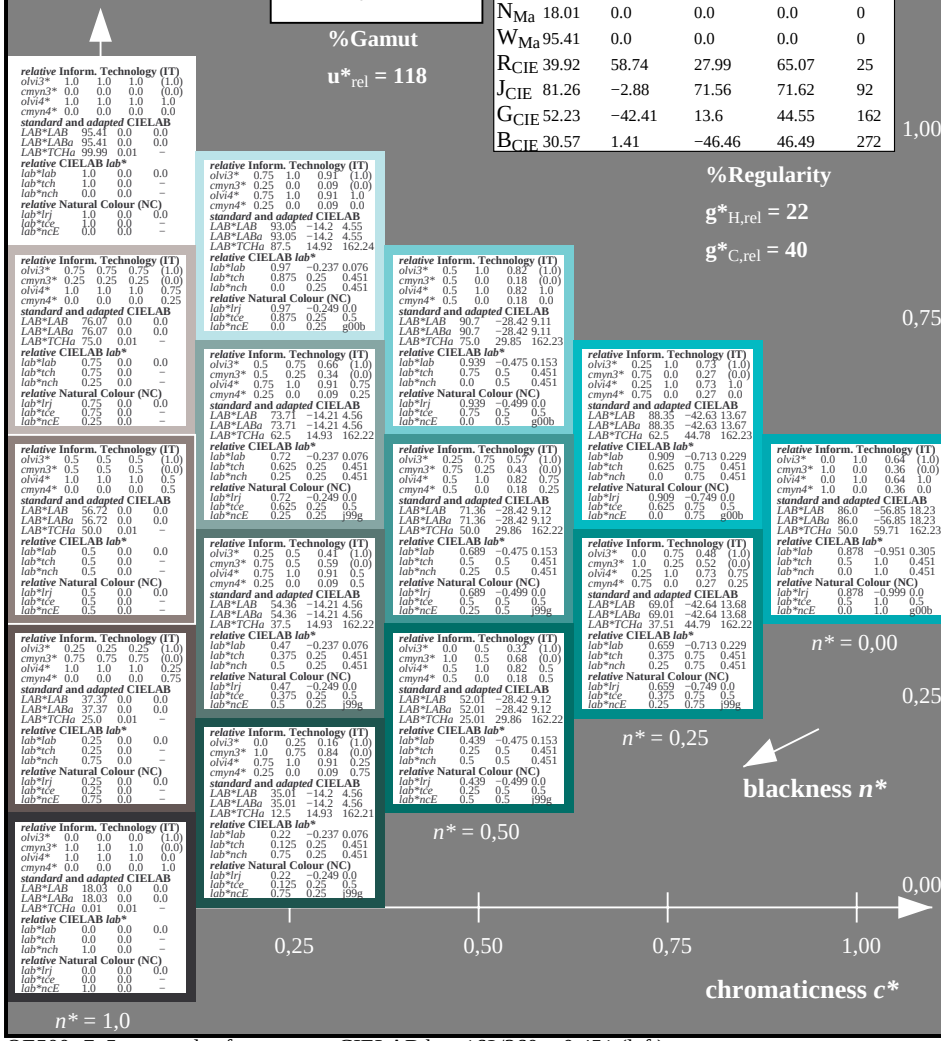
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

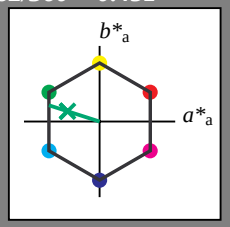
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

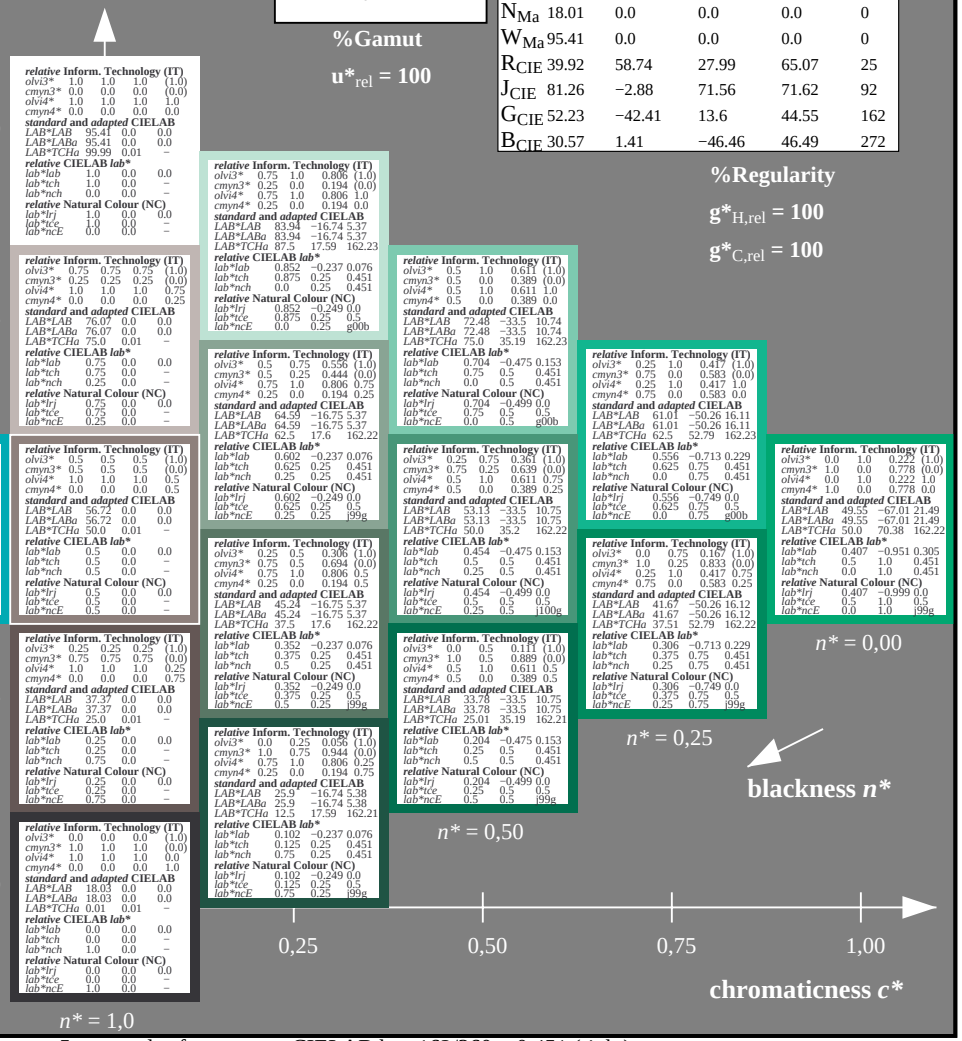
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18

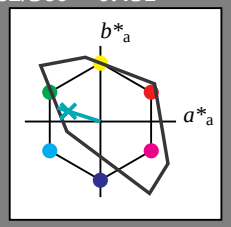
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

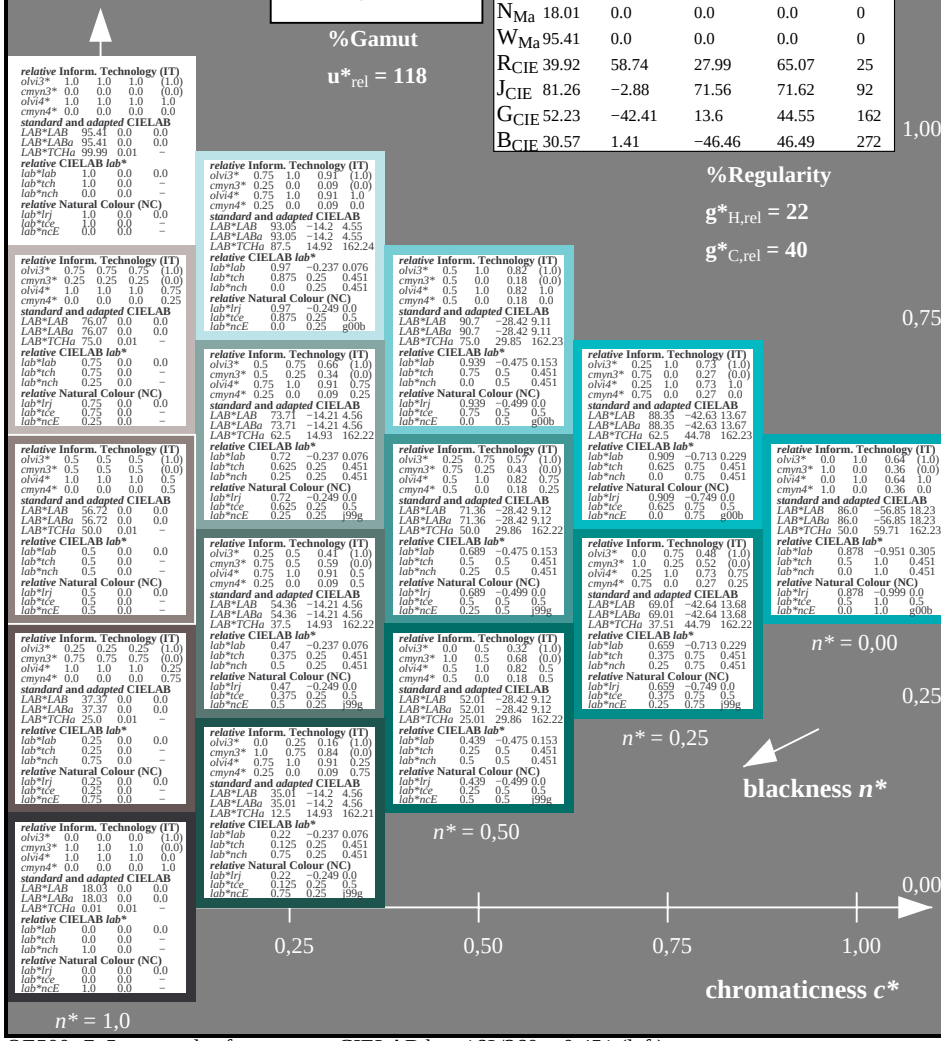
%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Standard Reflective System SRS18

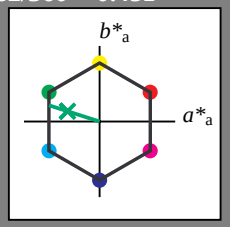
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

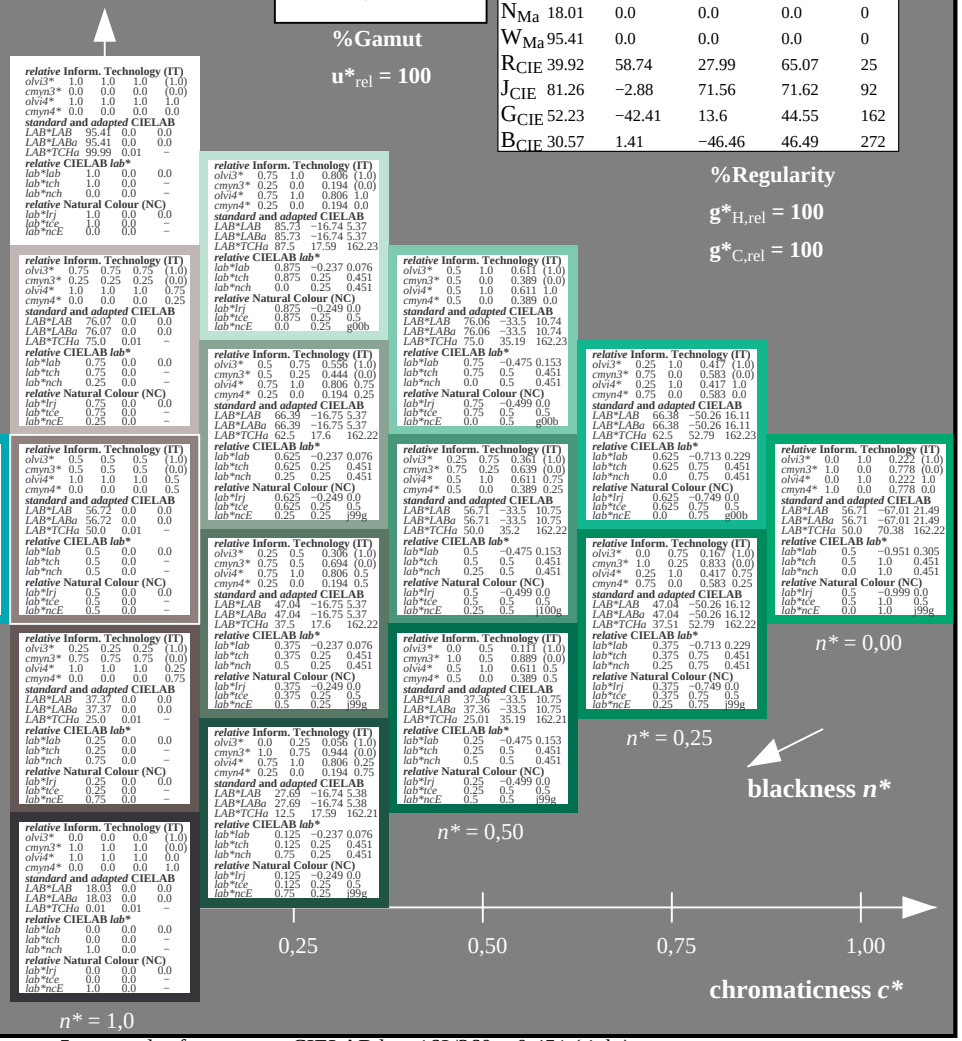
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

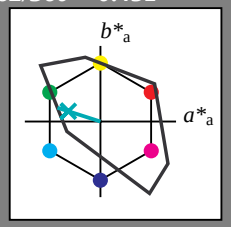


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

blackness n^*

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

0,25 0,50 0,75 1,00

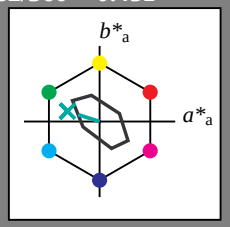
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53



%Gamut

u^*_{rel} = 16

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

blackness n^*

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

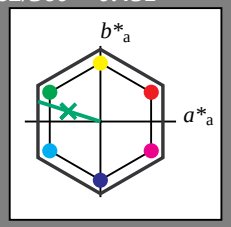
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

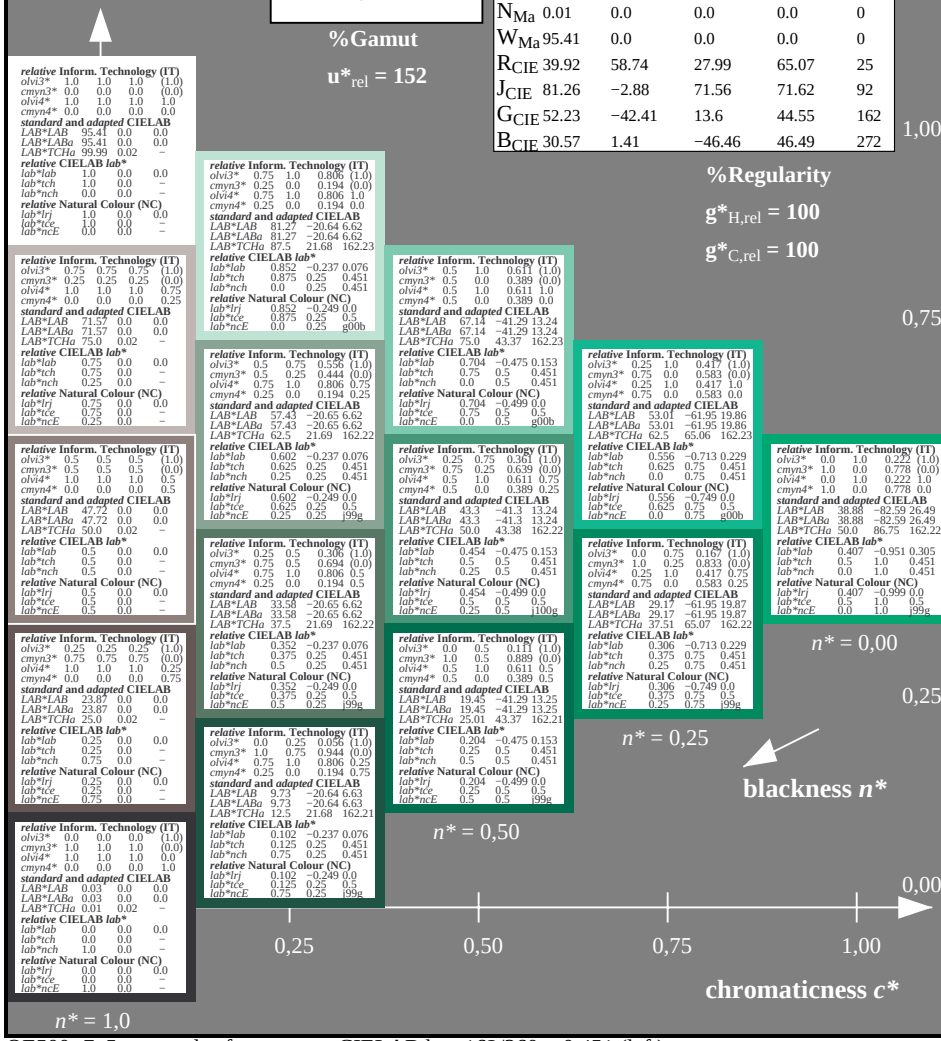
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Offset Reflective System ORS18

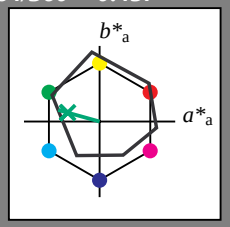
for hue $h^* = lab^*h = 164/360 = 0.457$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

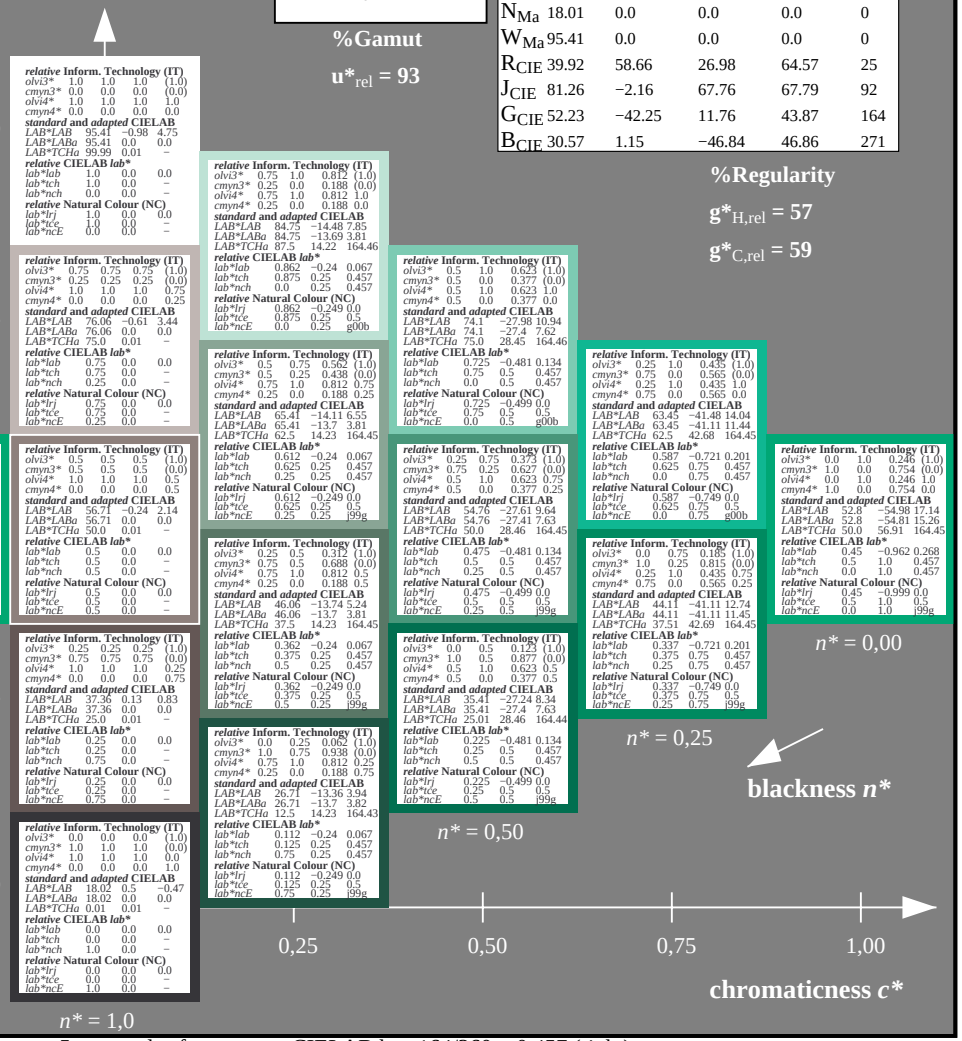
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

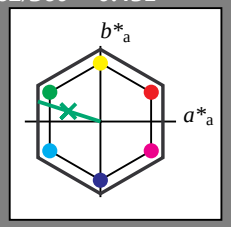
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

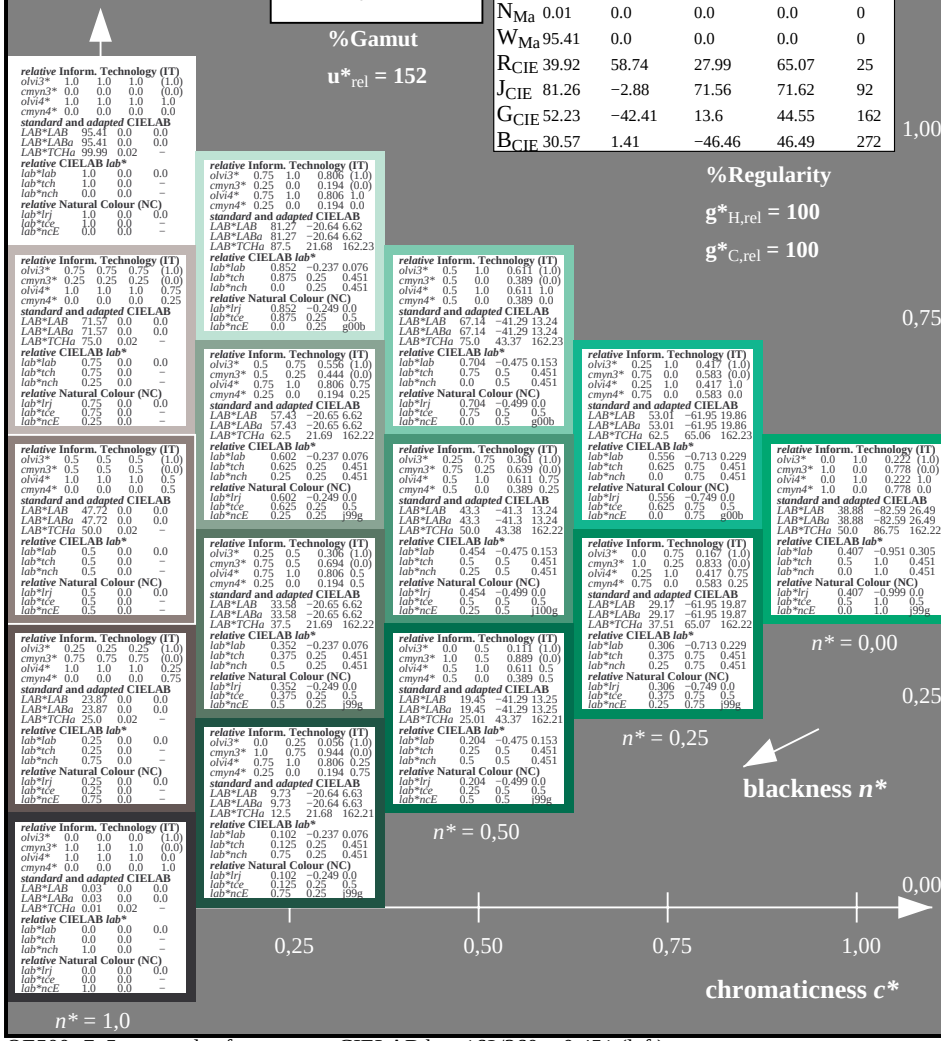
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

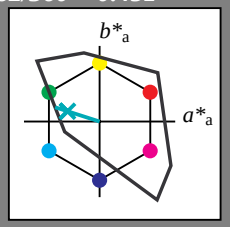
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

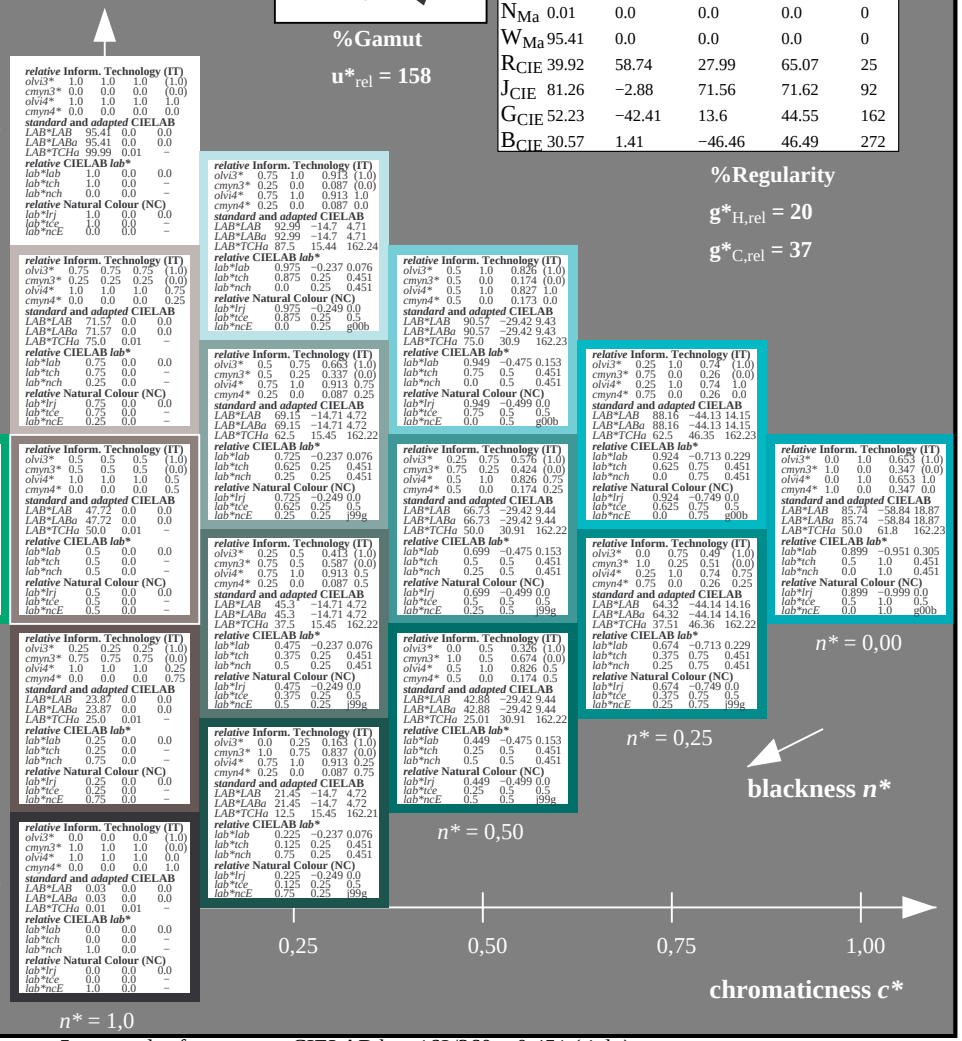
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

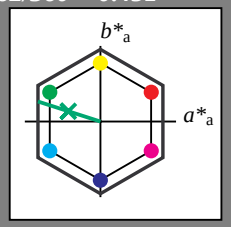
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

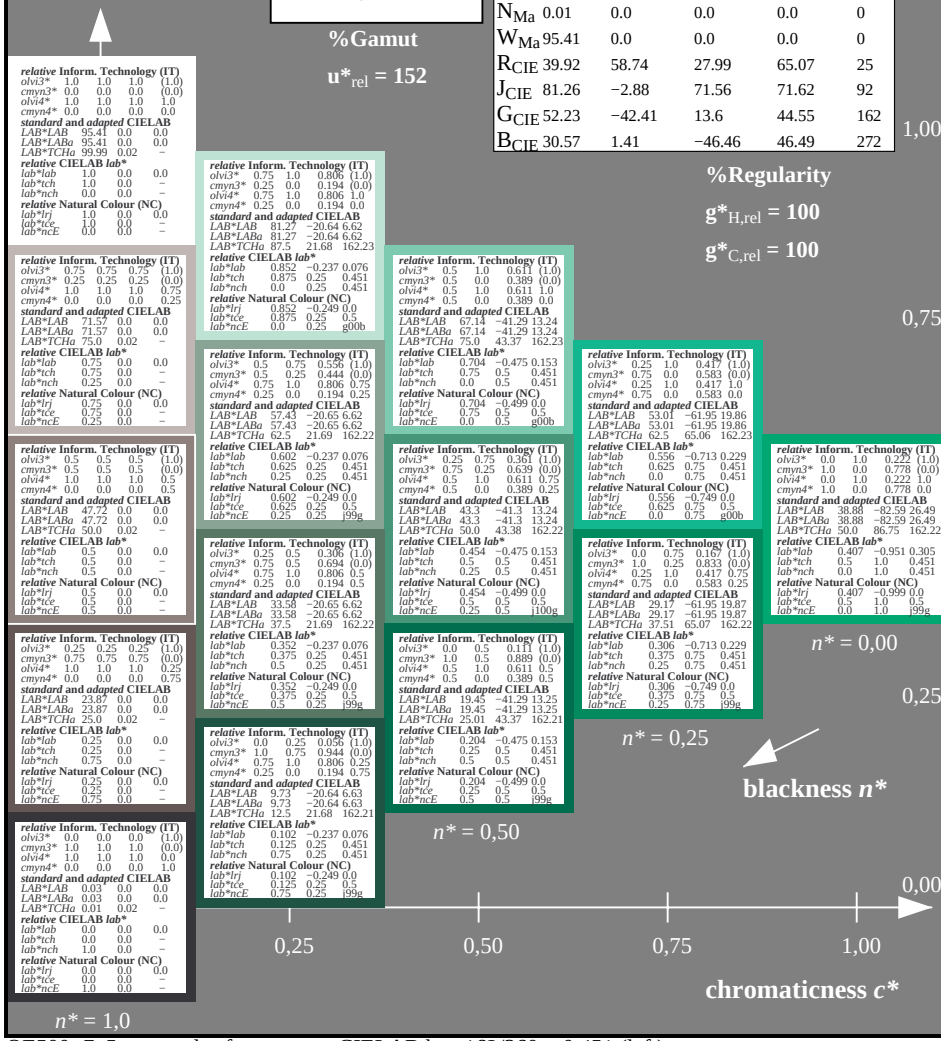
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Printer Reflective System DRSXX

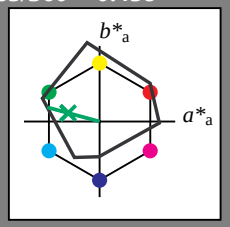
for hue $h^* = lab^*h = 165/360 = 0.458$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

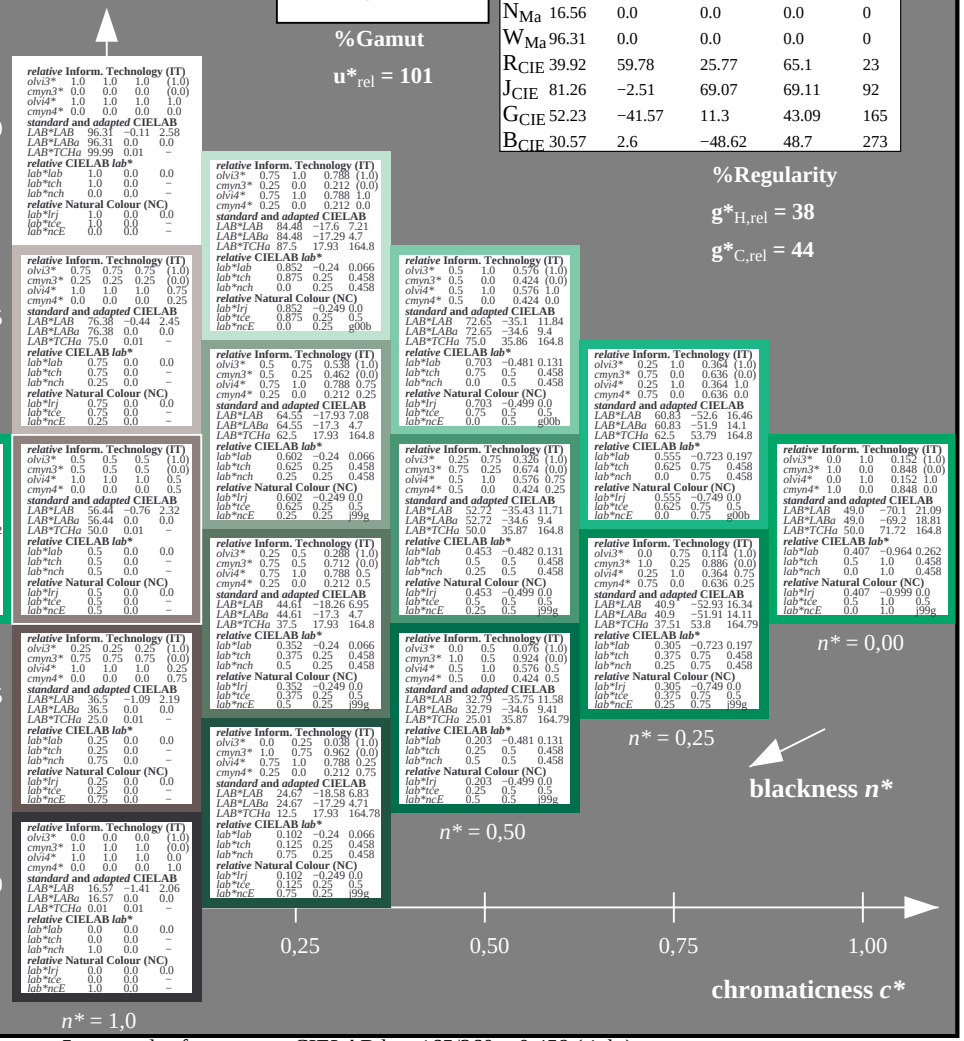
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



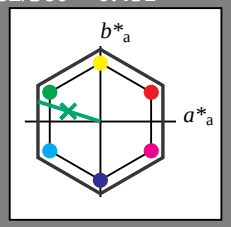
5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

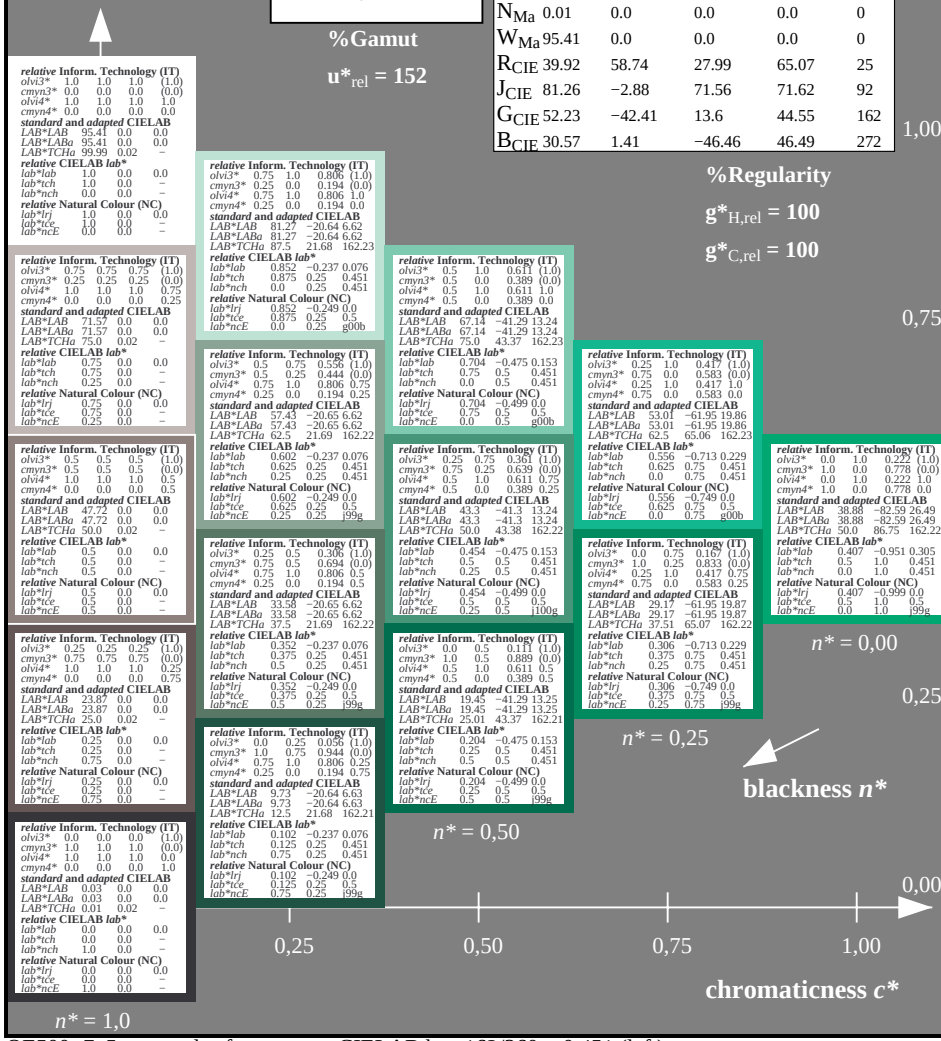
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



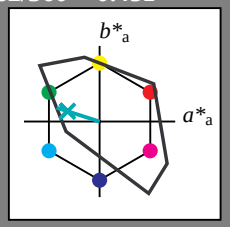
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

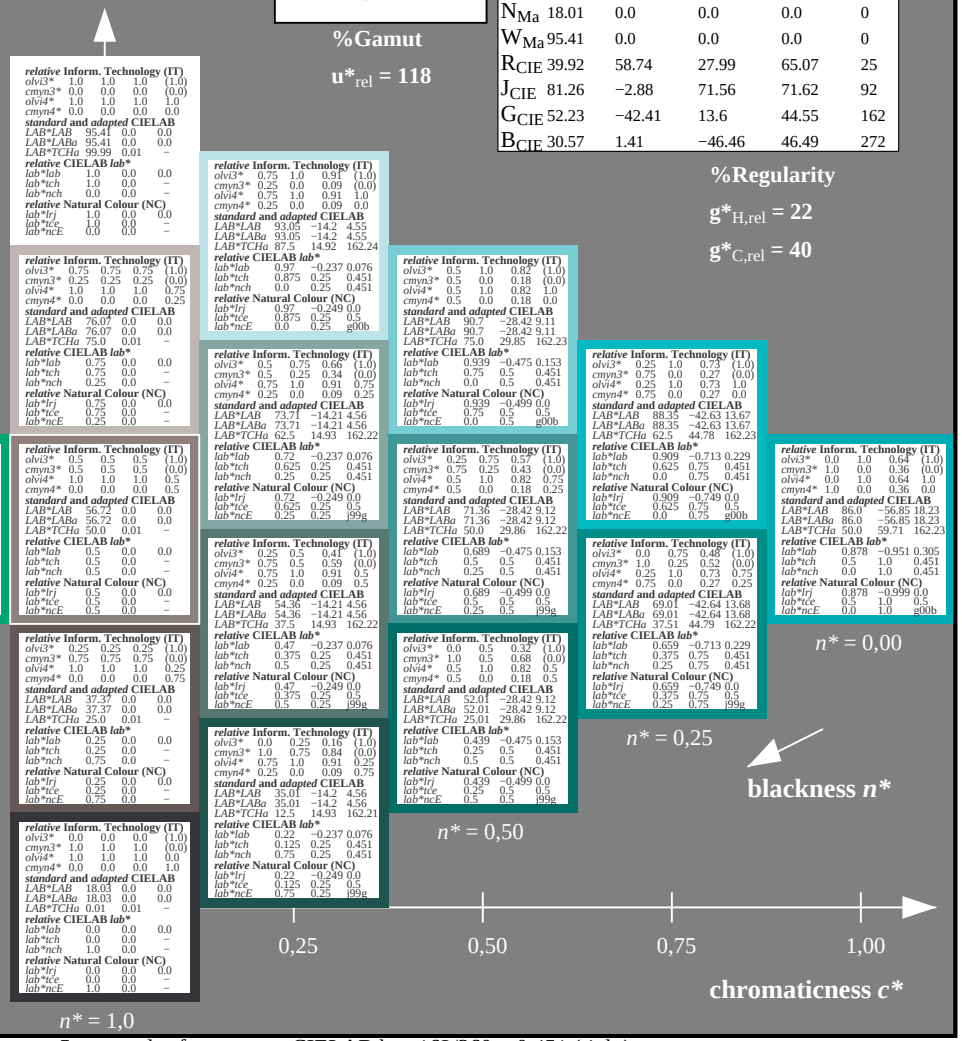
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



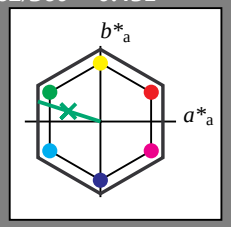
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

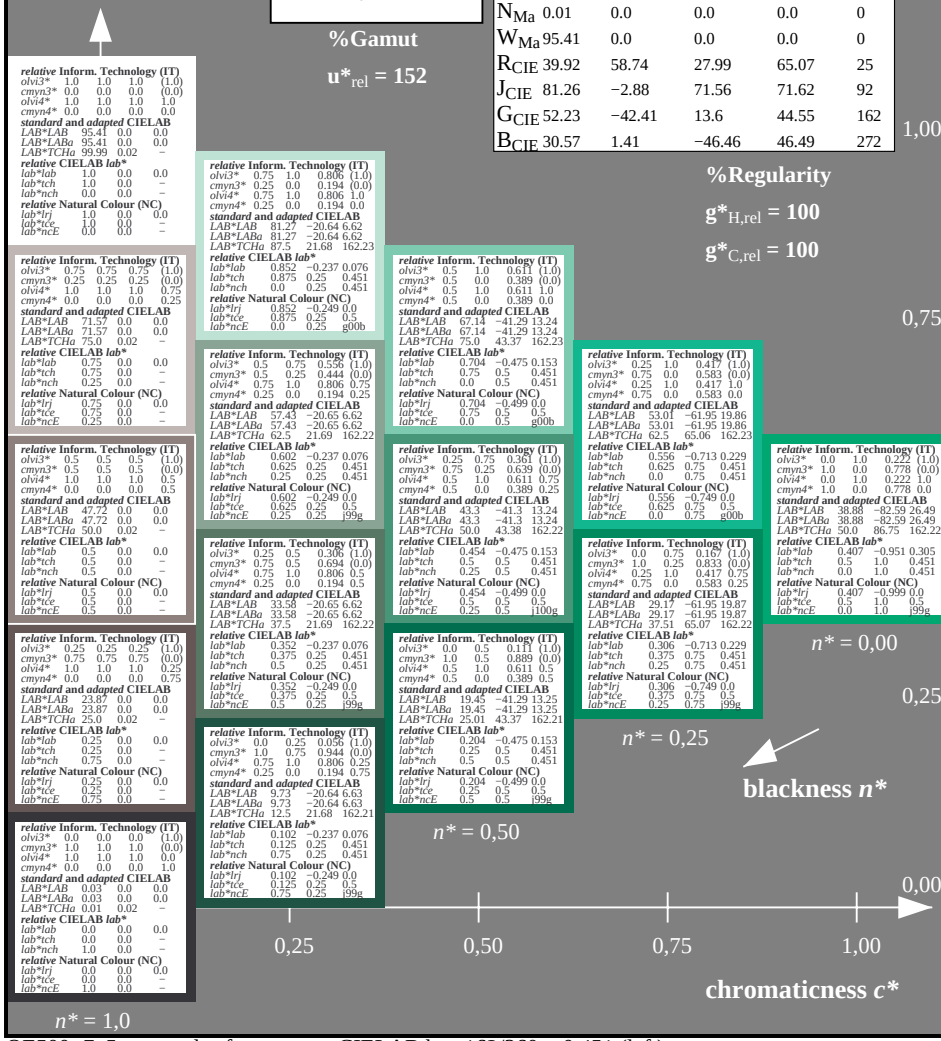
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



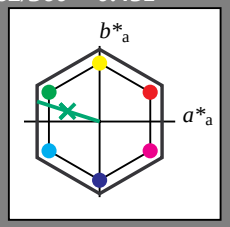
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

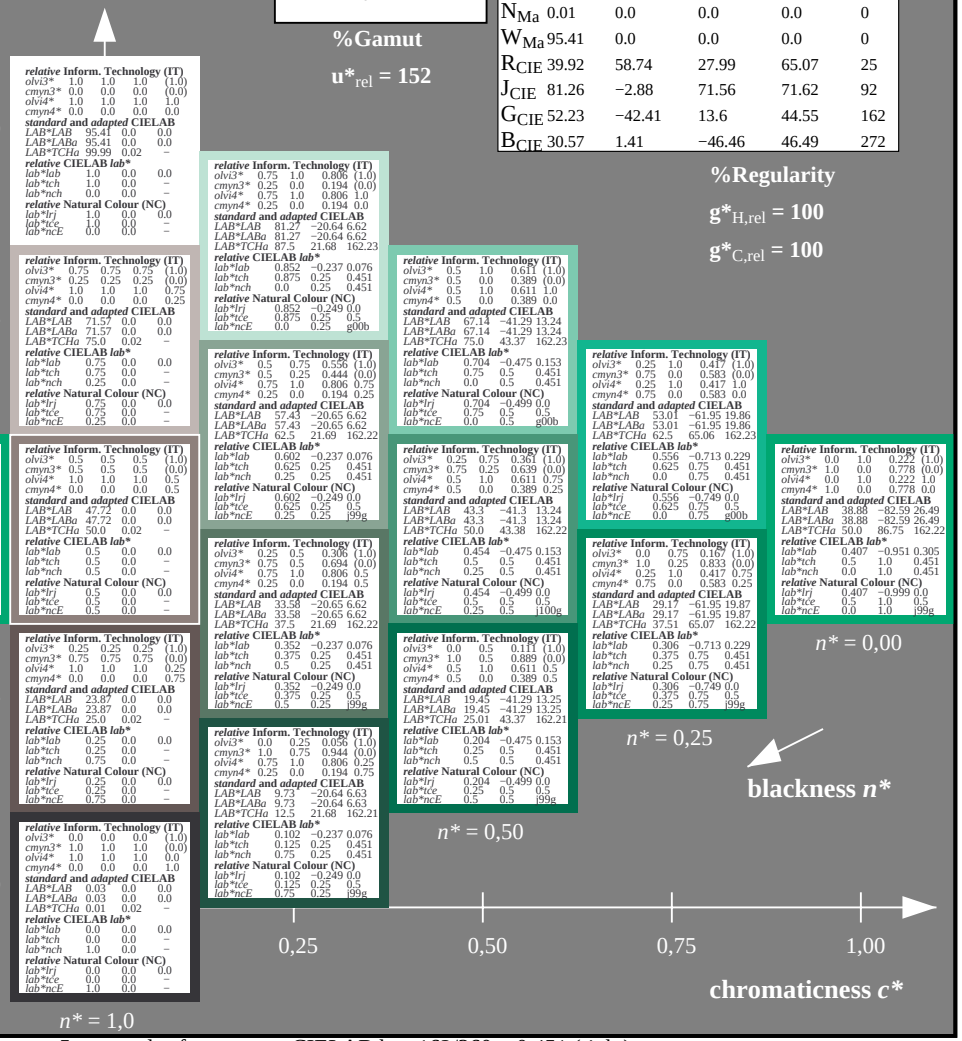
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

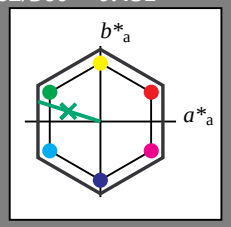


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

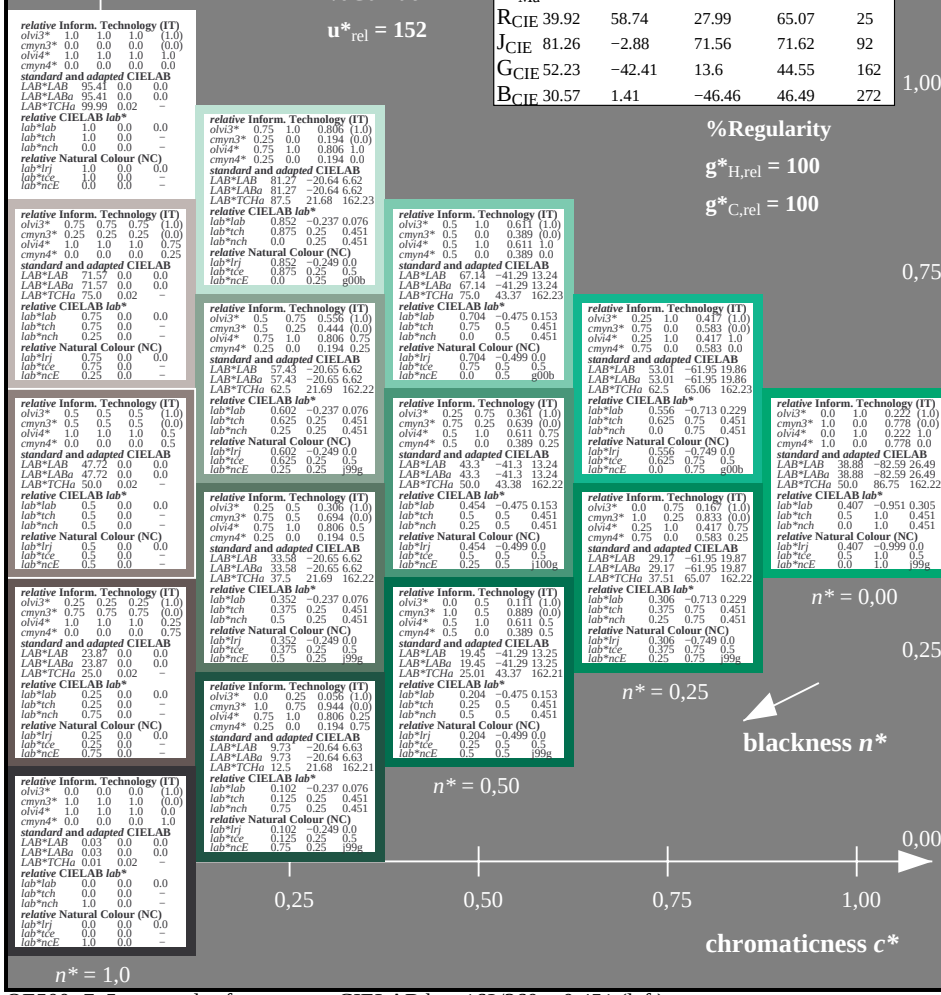
%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

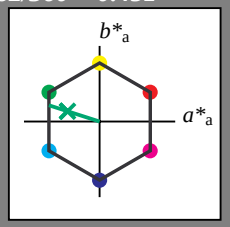


OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

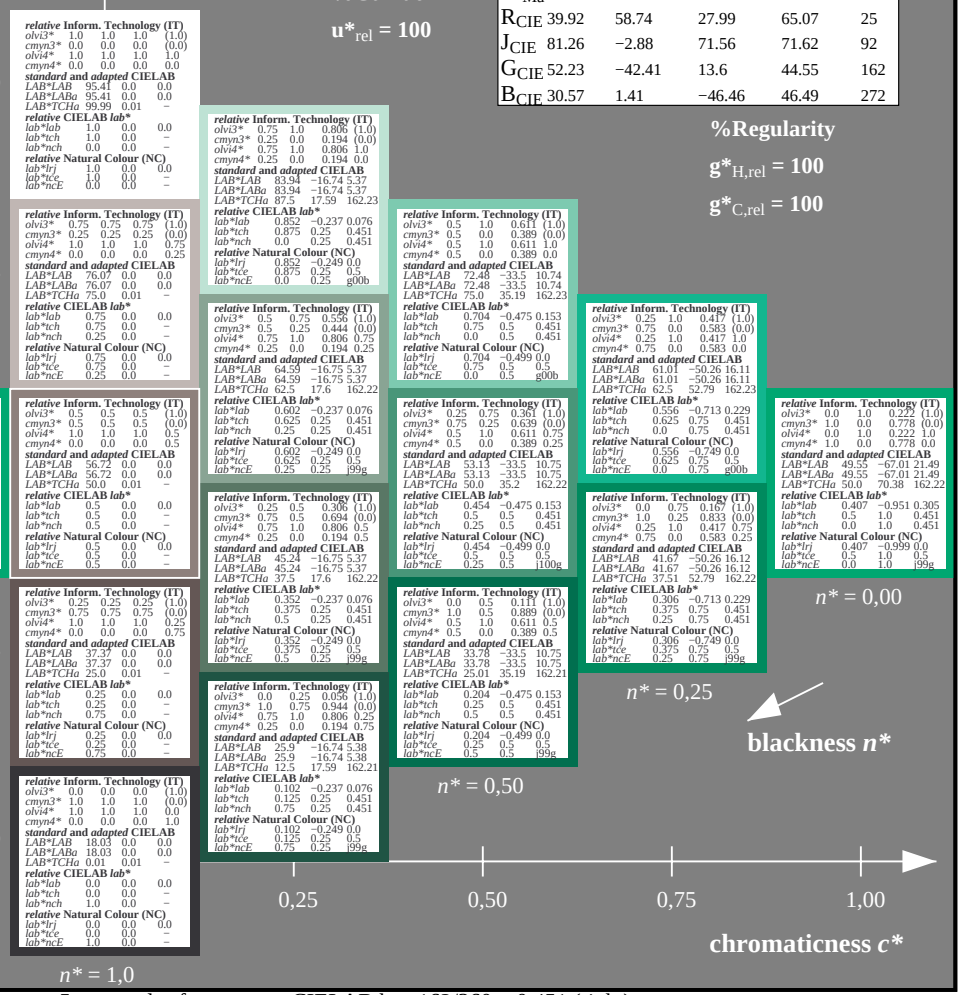
%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

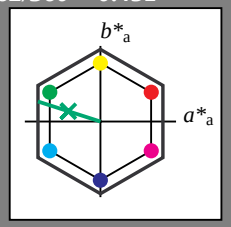
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Standard Reflective System SRS18

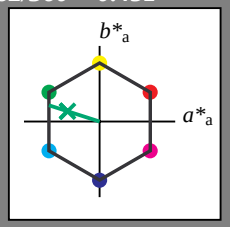
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Luminous System NLS00

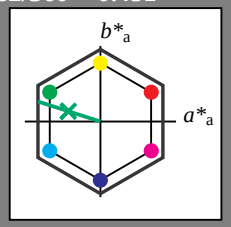
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

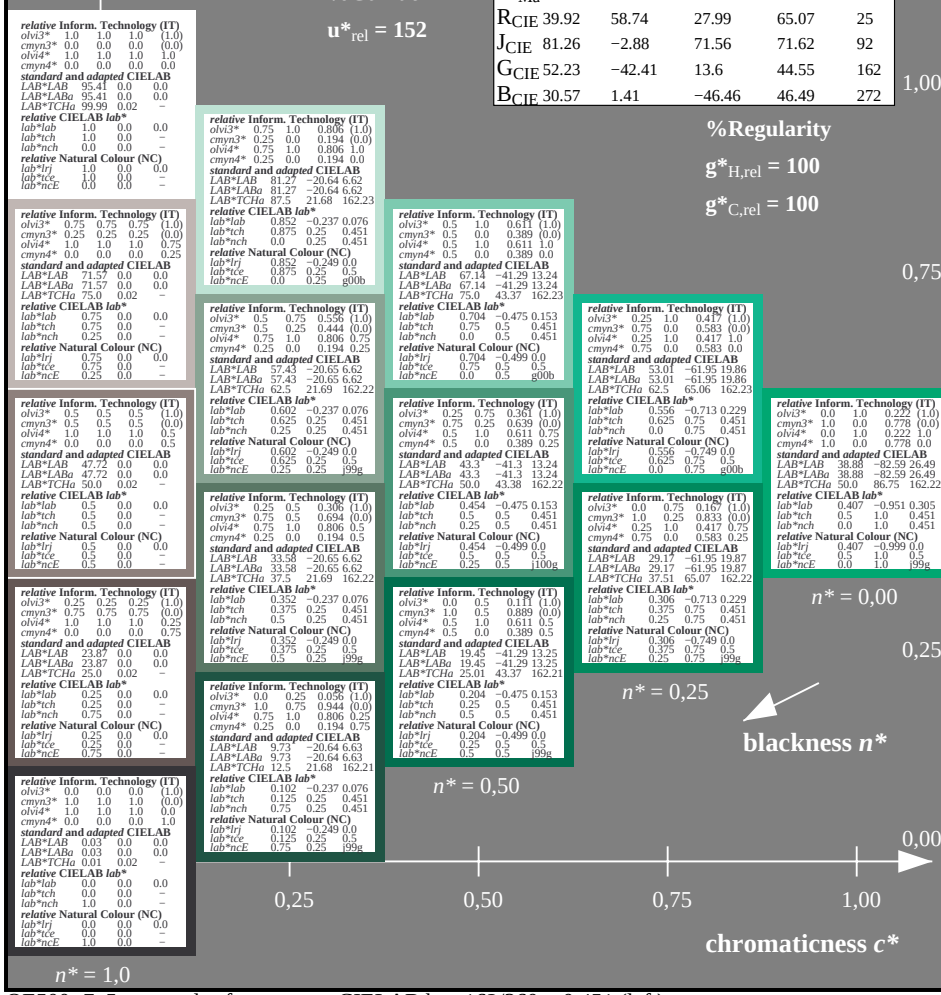
%Gamut

$u^*_{rel} = 152$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70

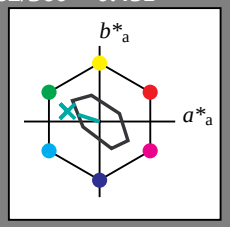
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

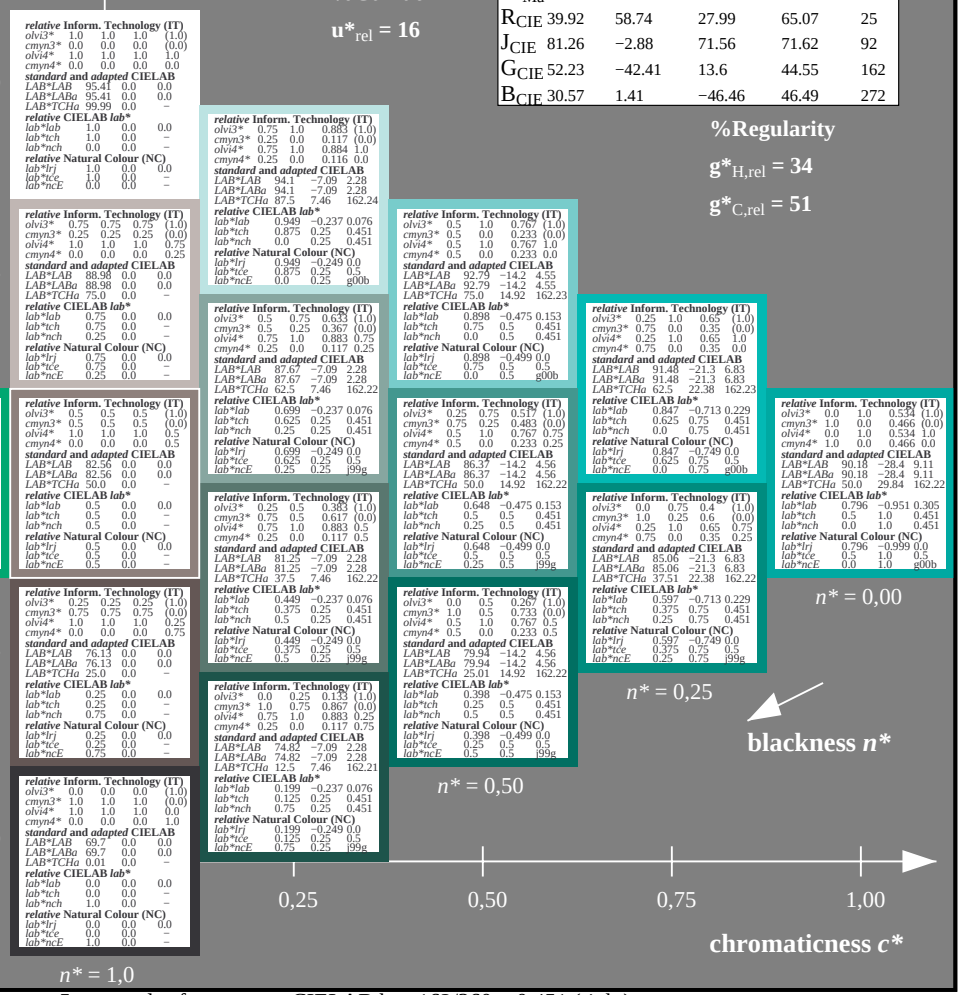
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



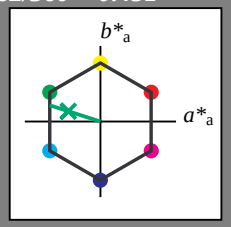
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

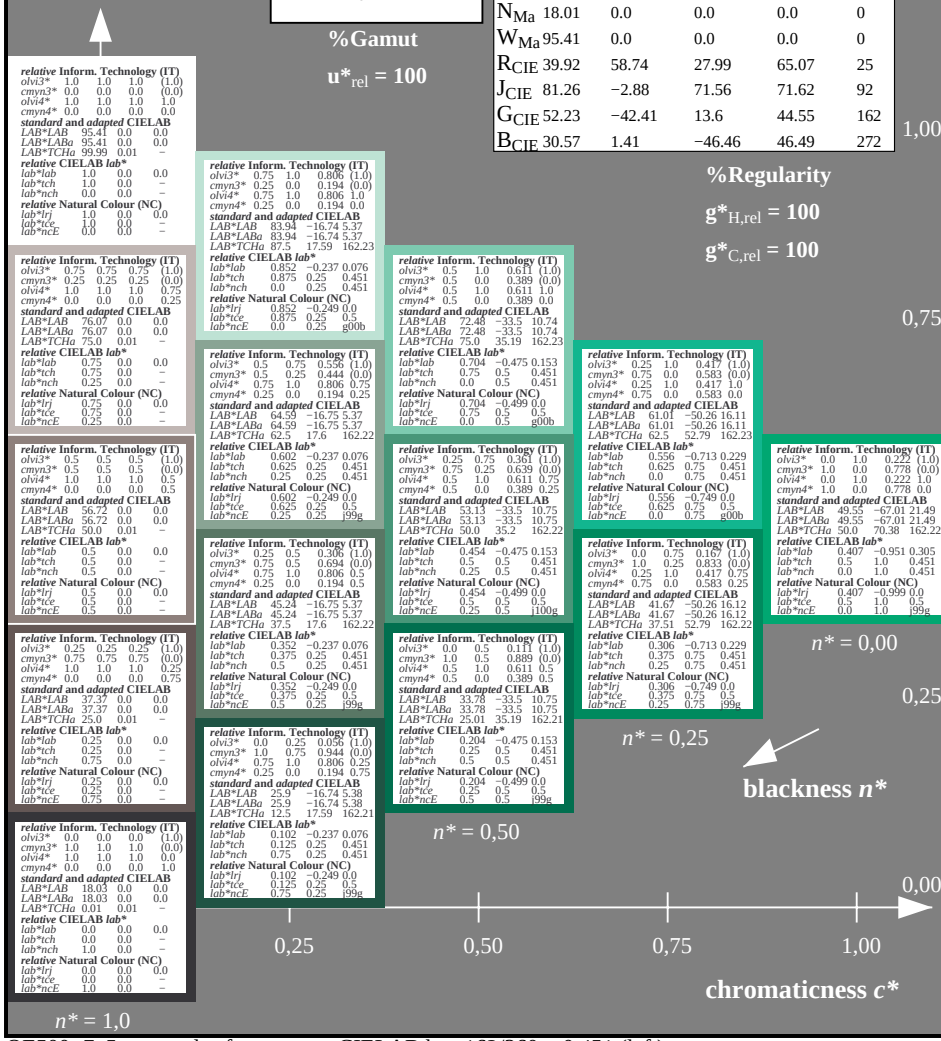
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

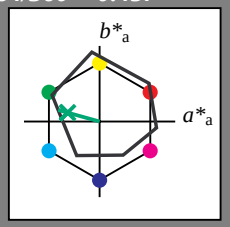


Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

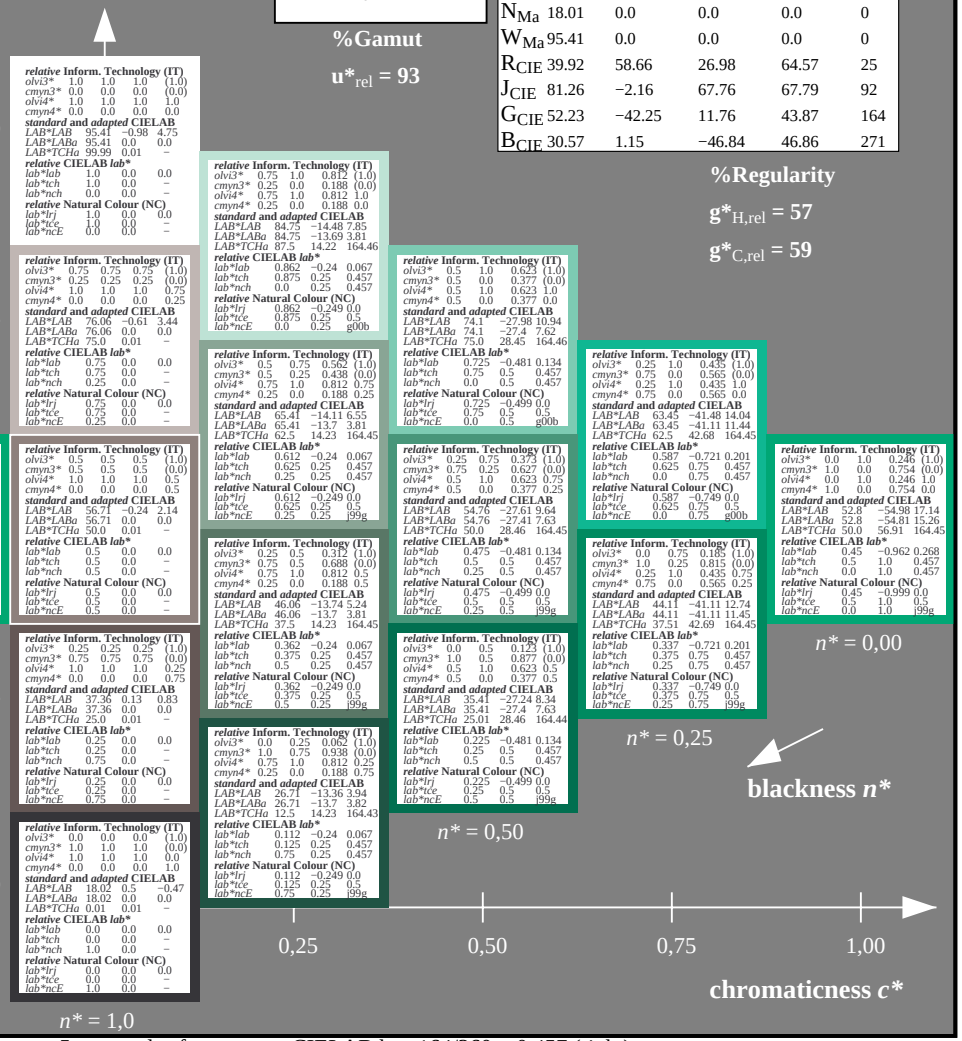
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

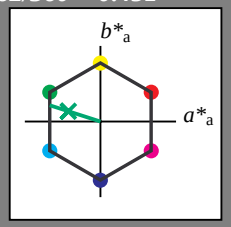
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

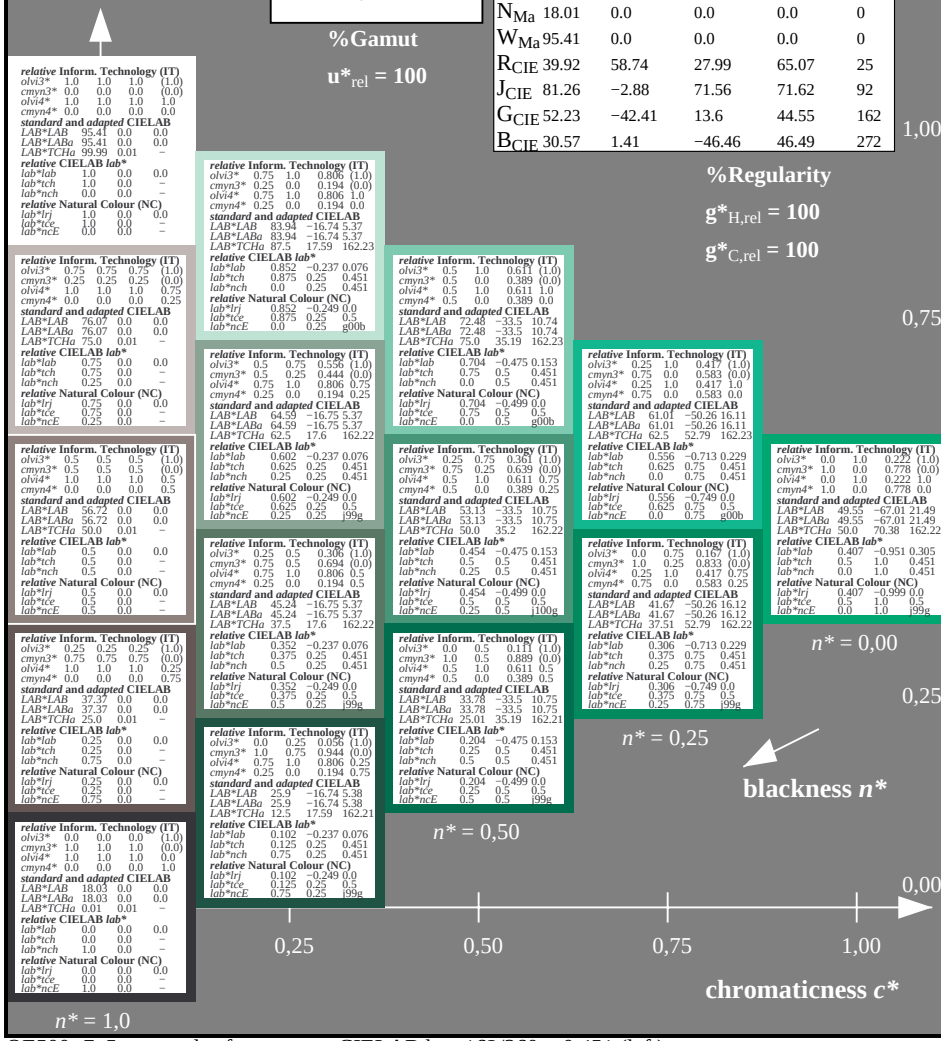
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

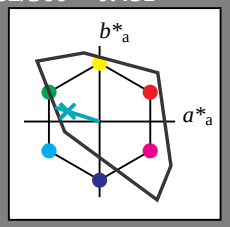
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

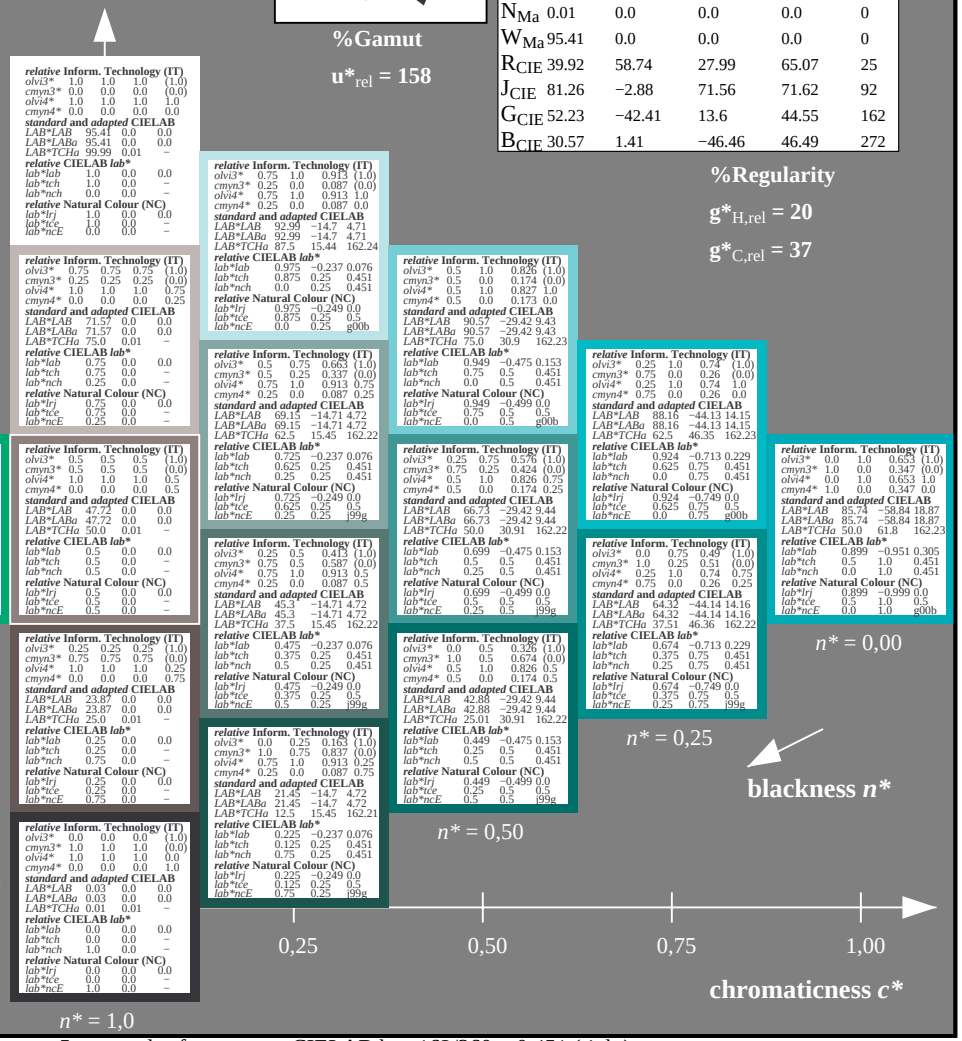
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



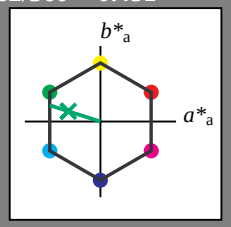
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

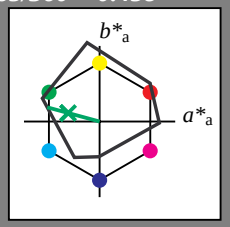
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

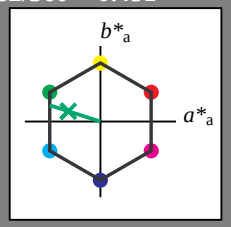
5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 100

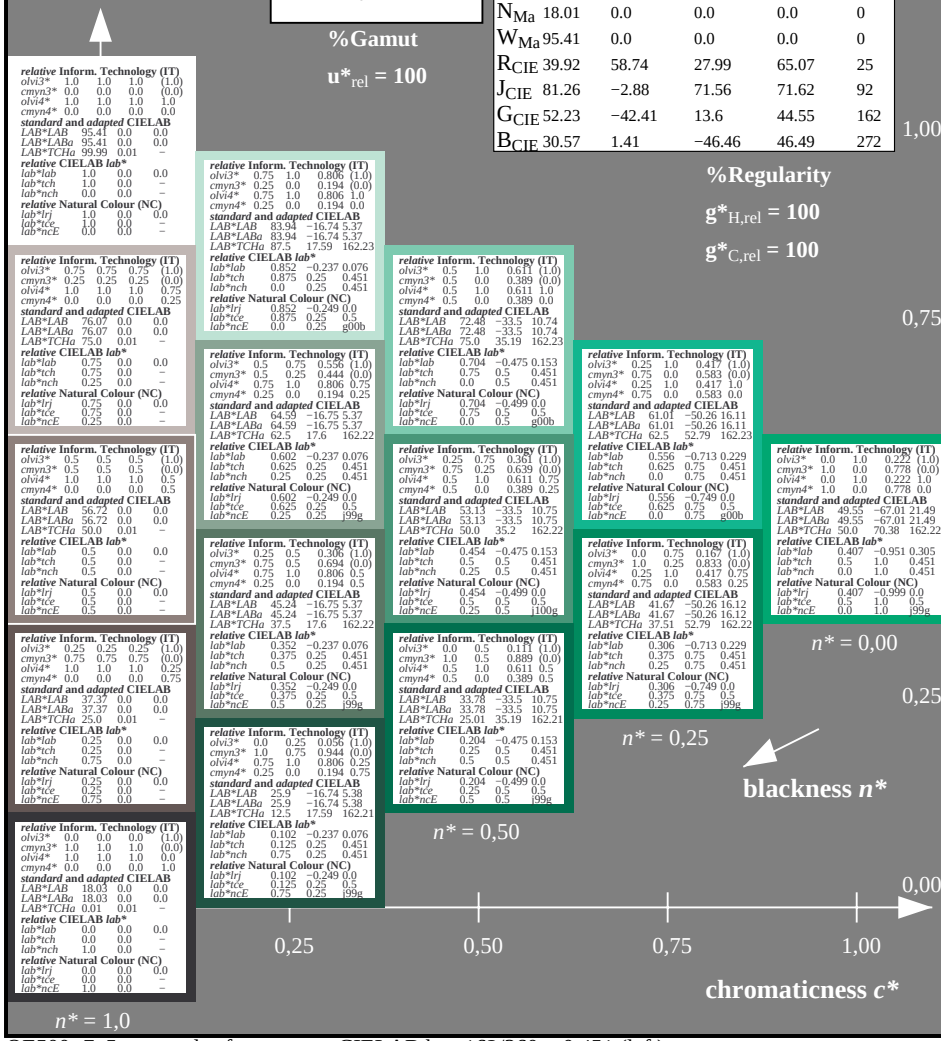
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

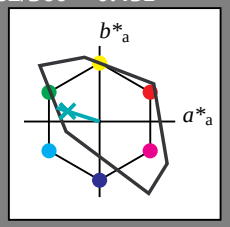


Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

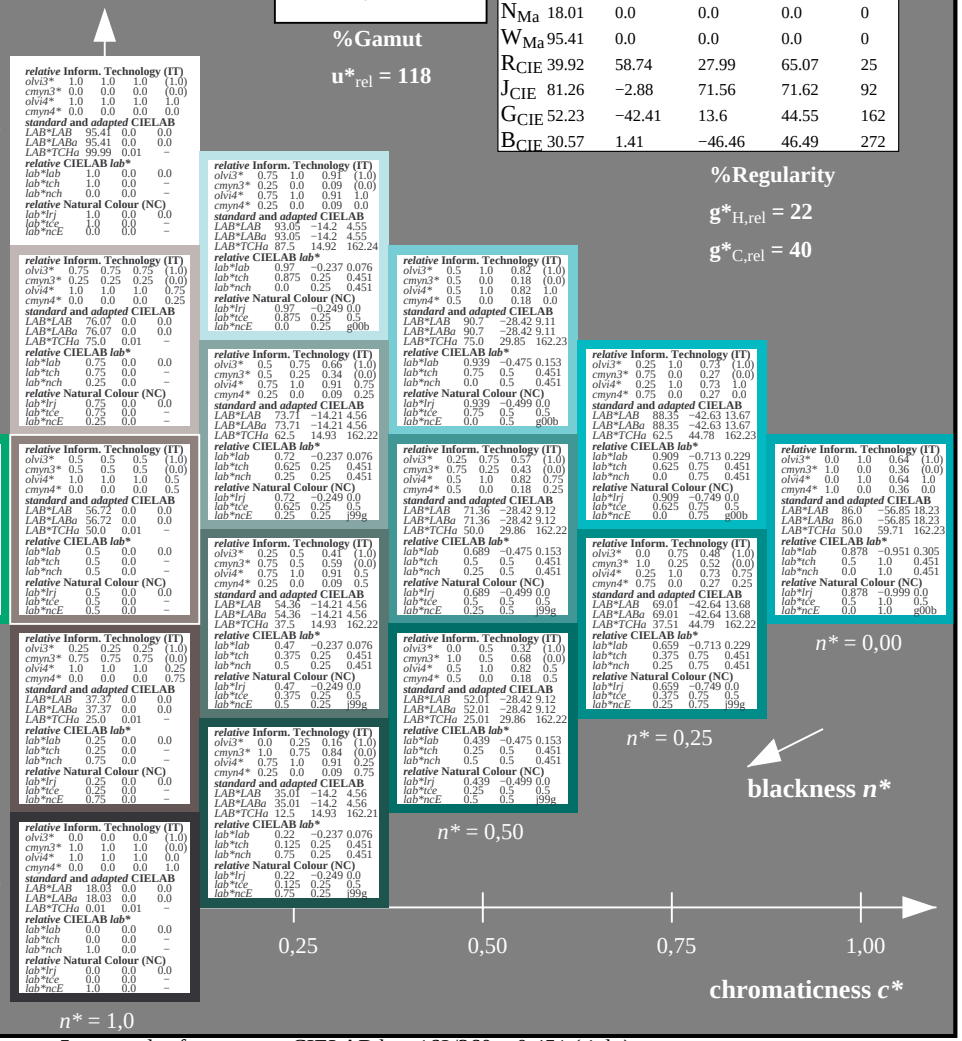
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

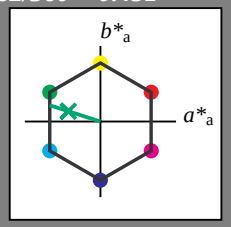
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

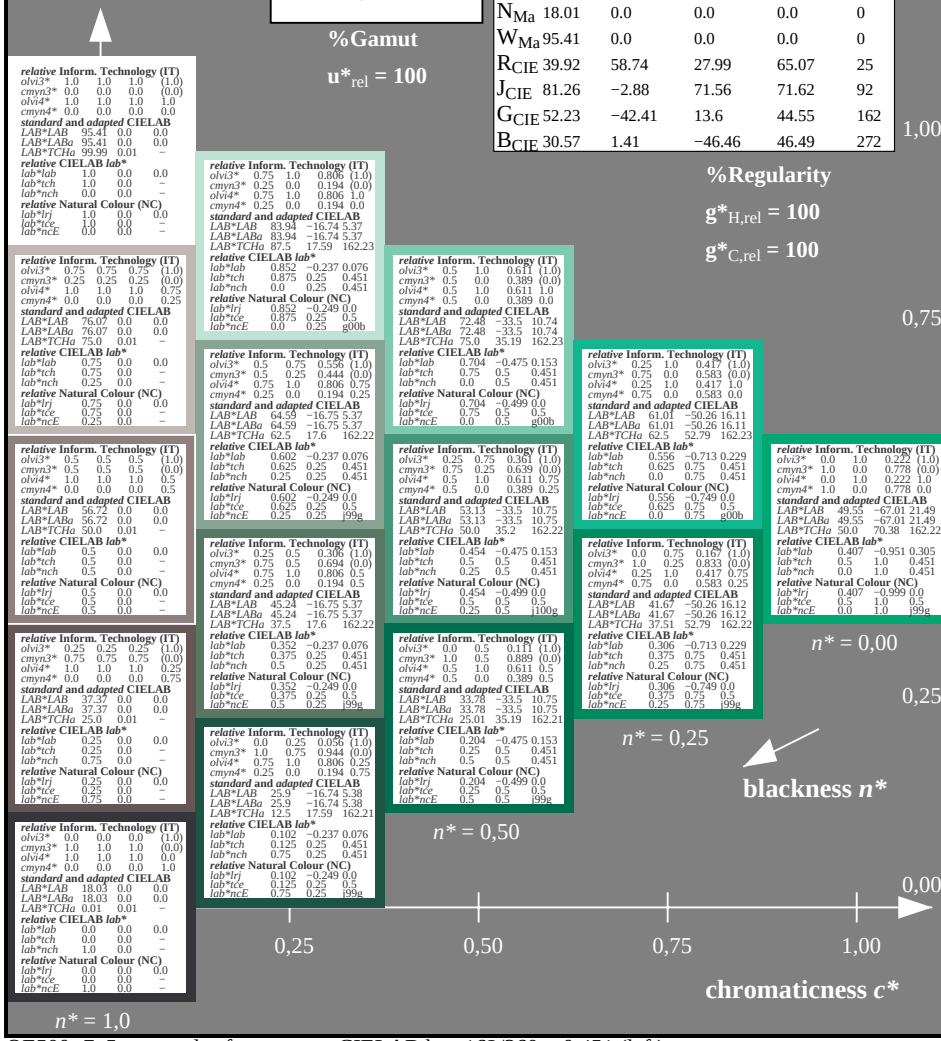
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



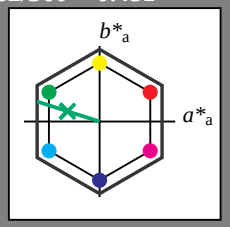
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

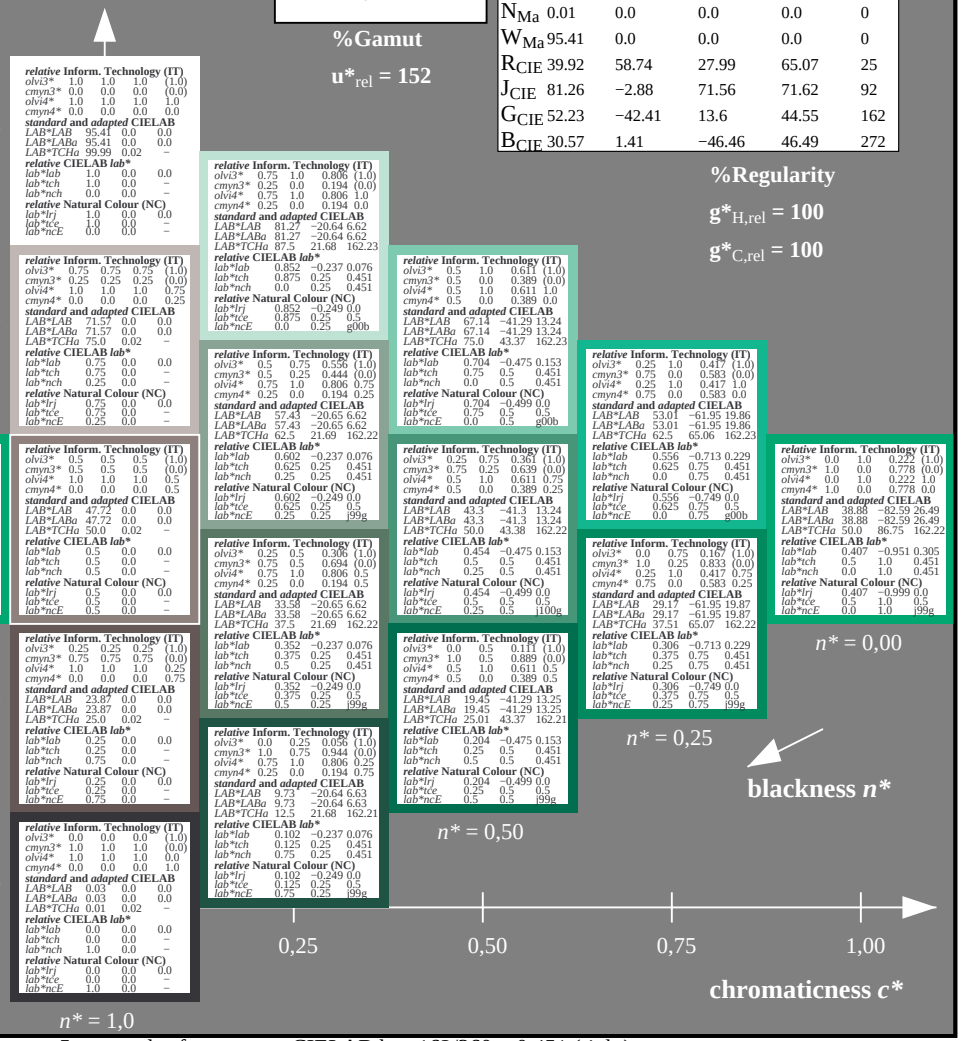
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

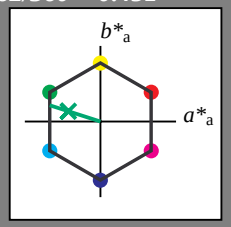


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

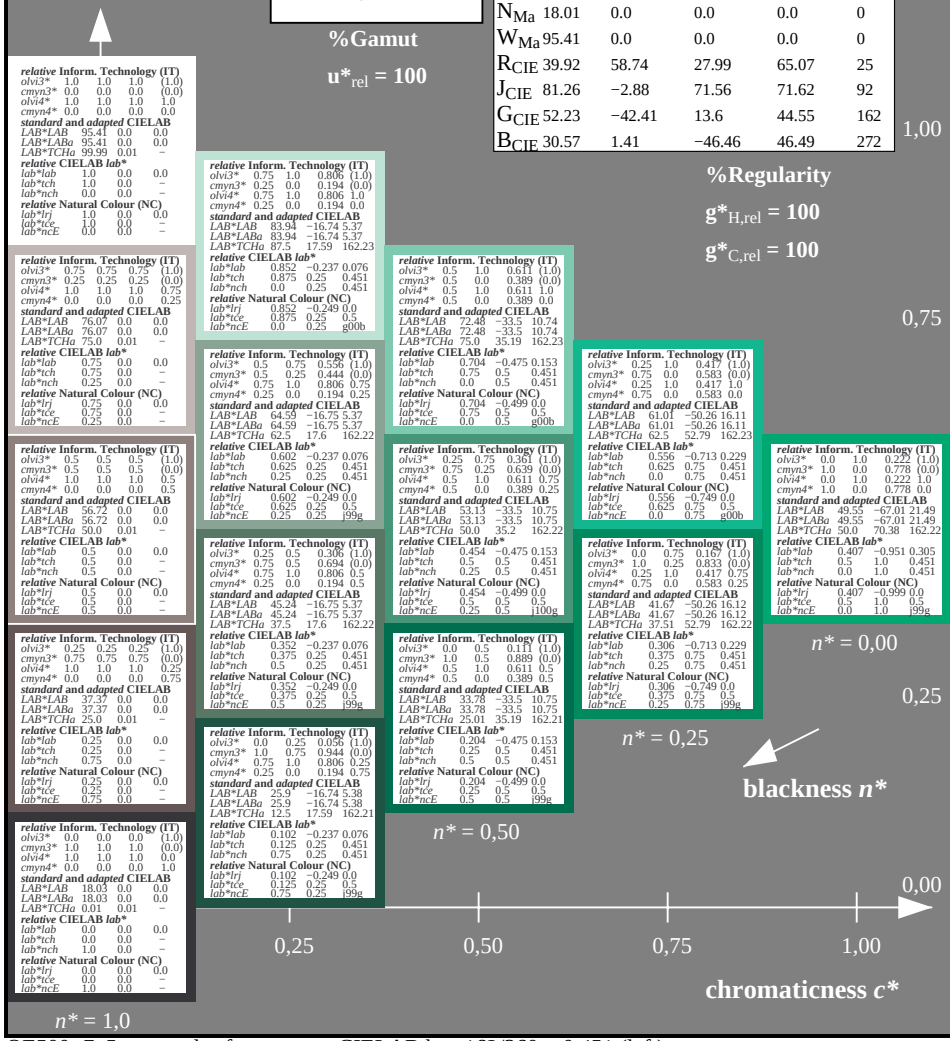
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

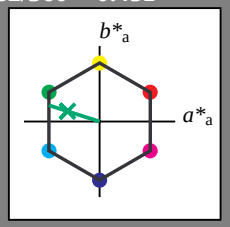


OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

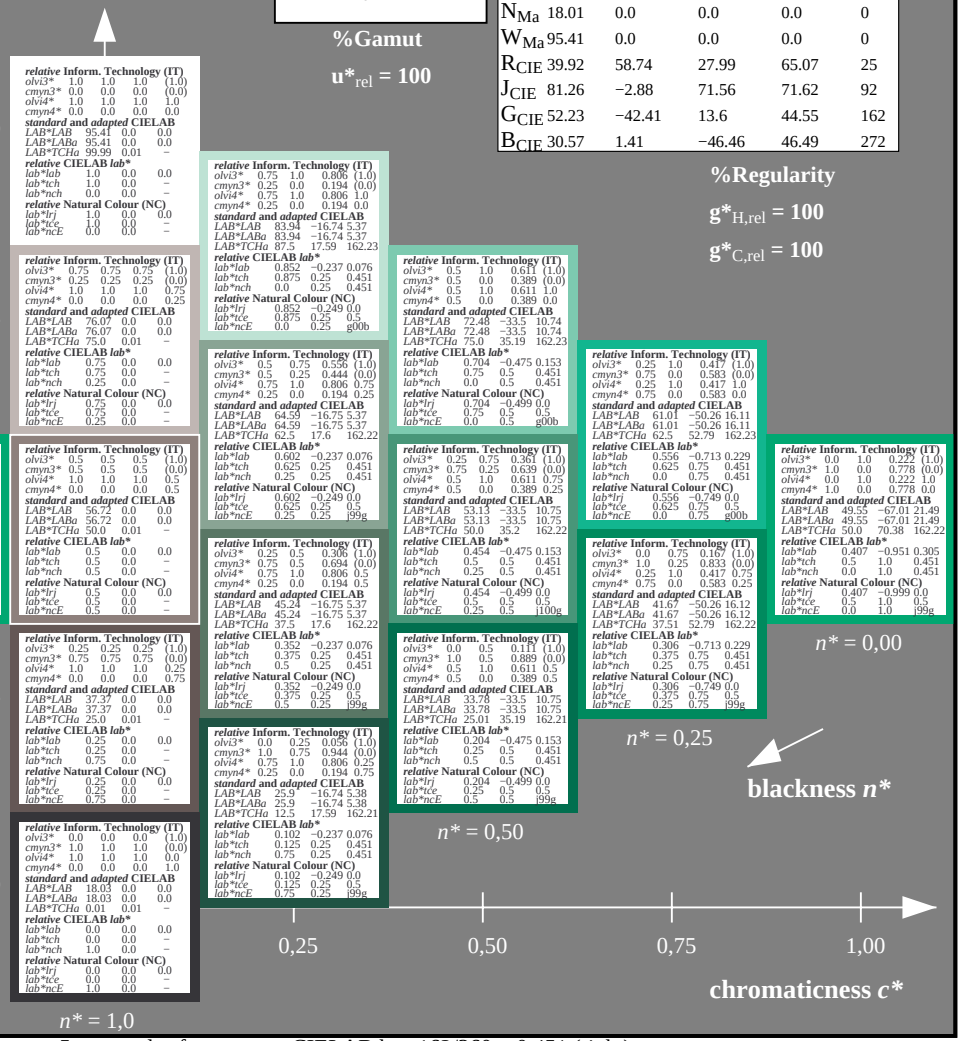
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

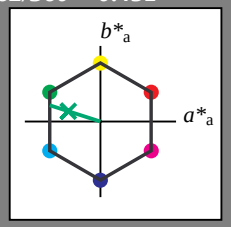


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

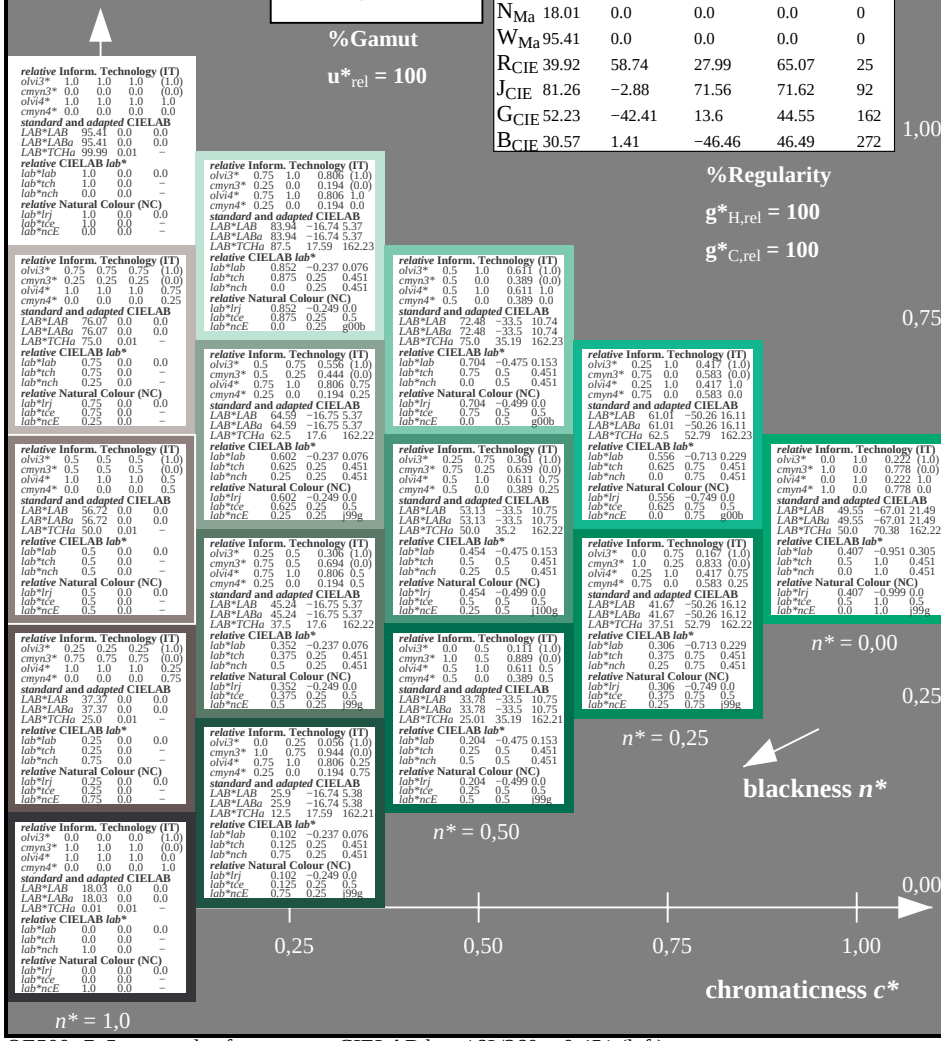
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

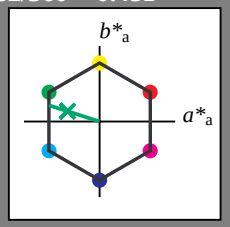
$g^*_{C,rel} = 100$



Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

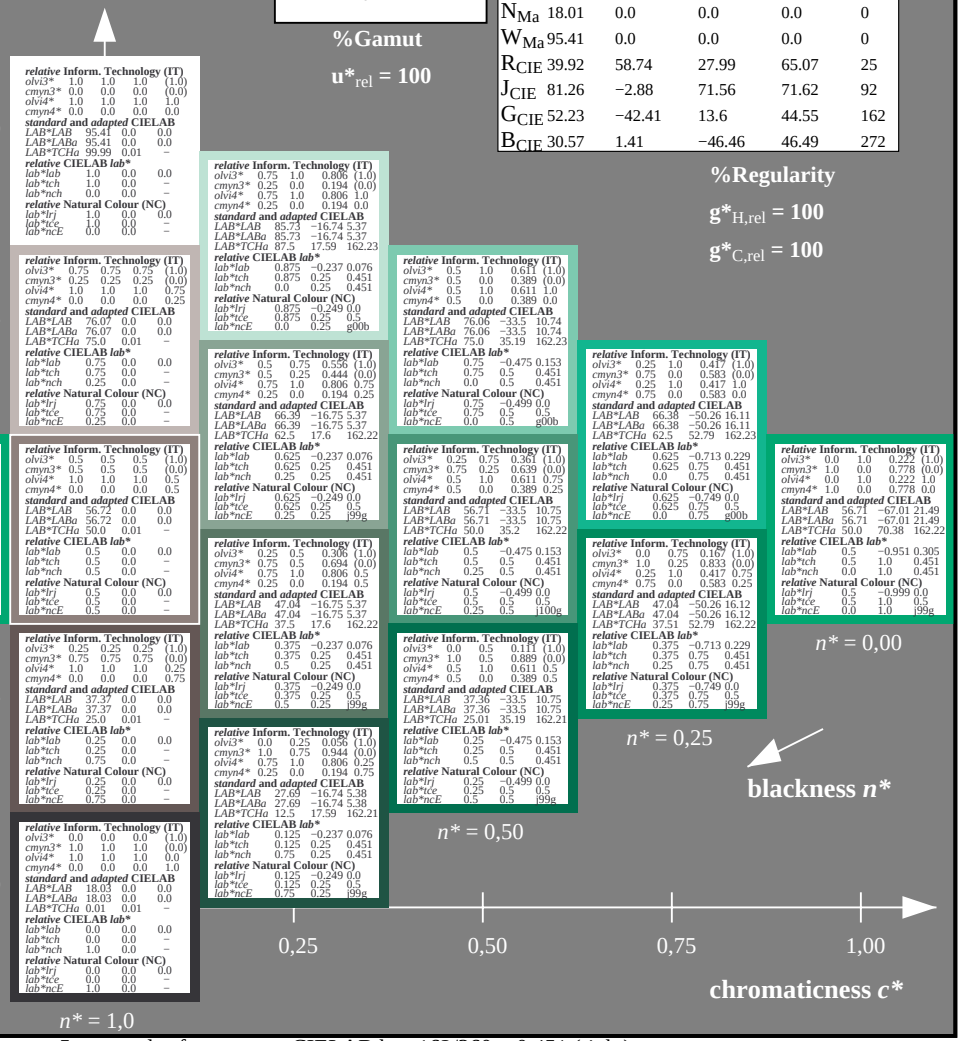
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

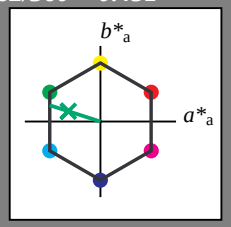
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

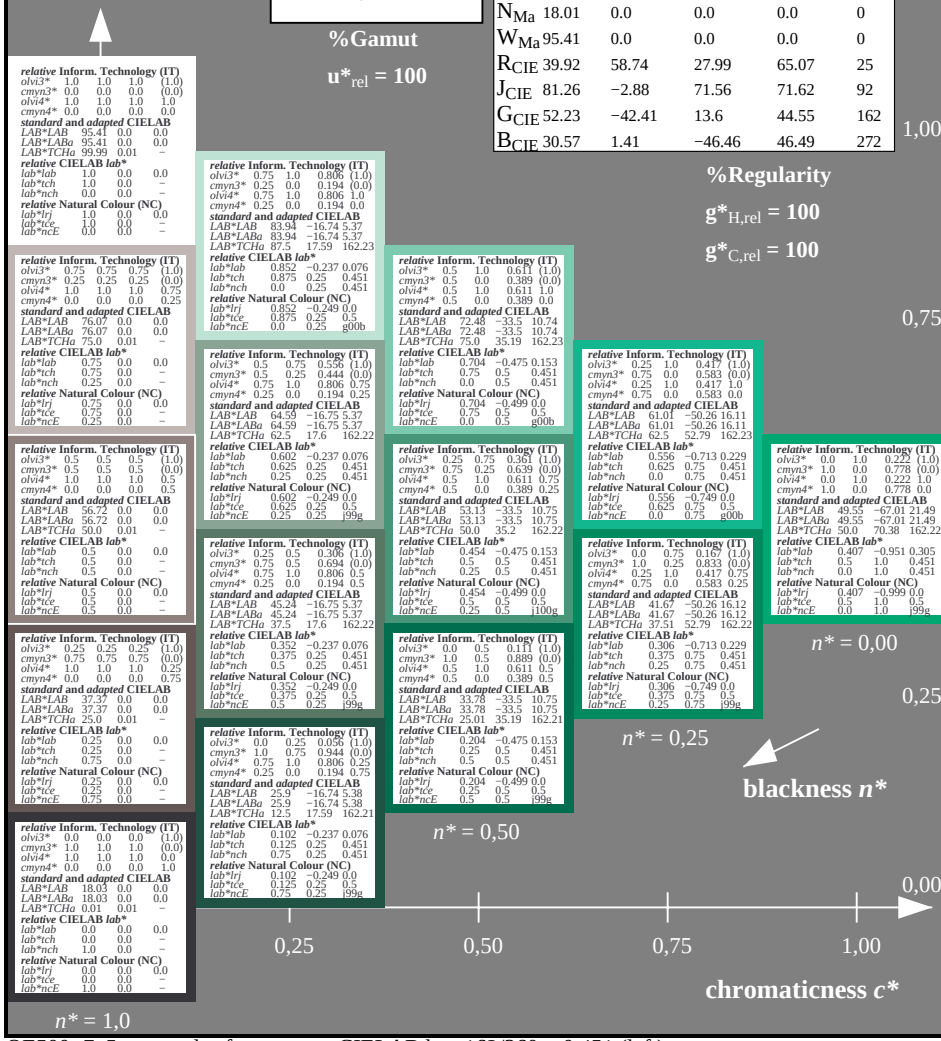
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

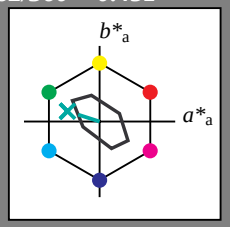
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

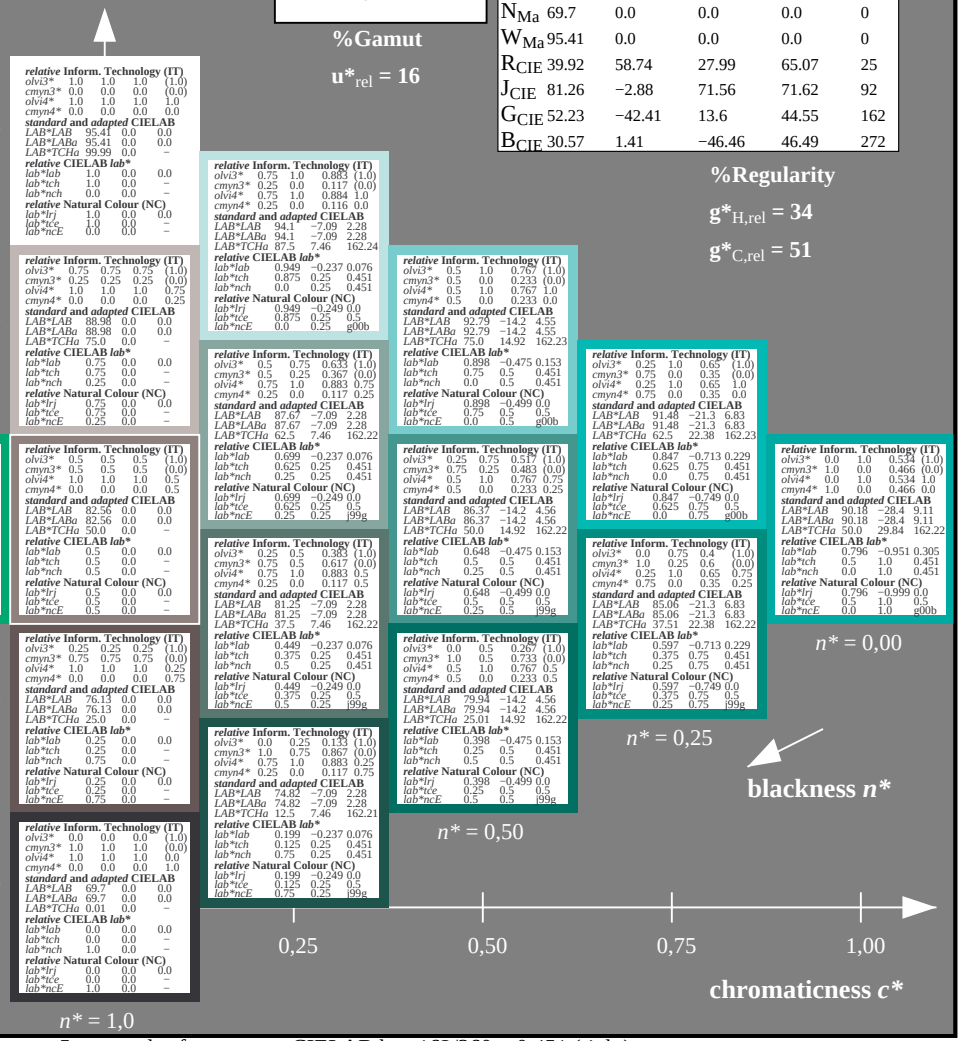
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



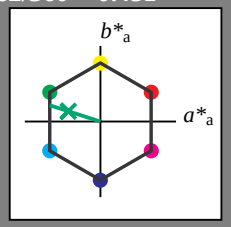
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

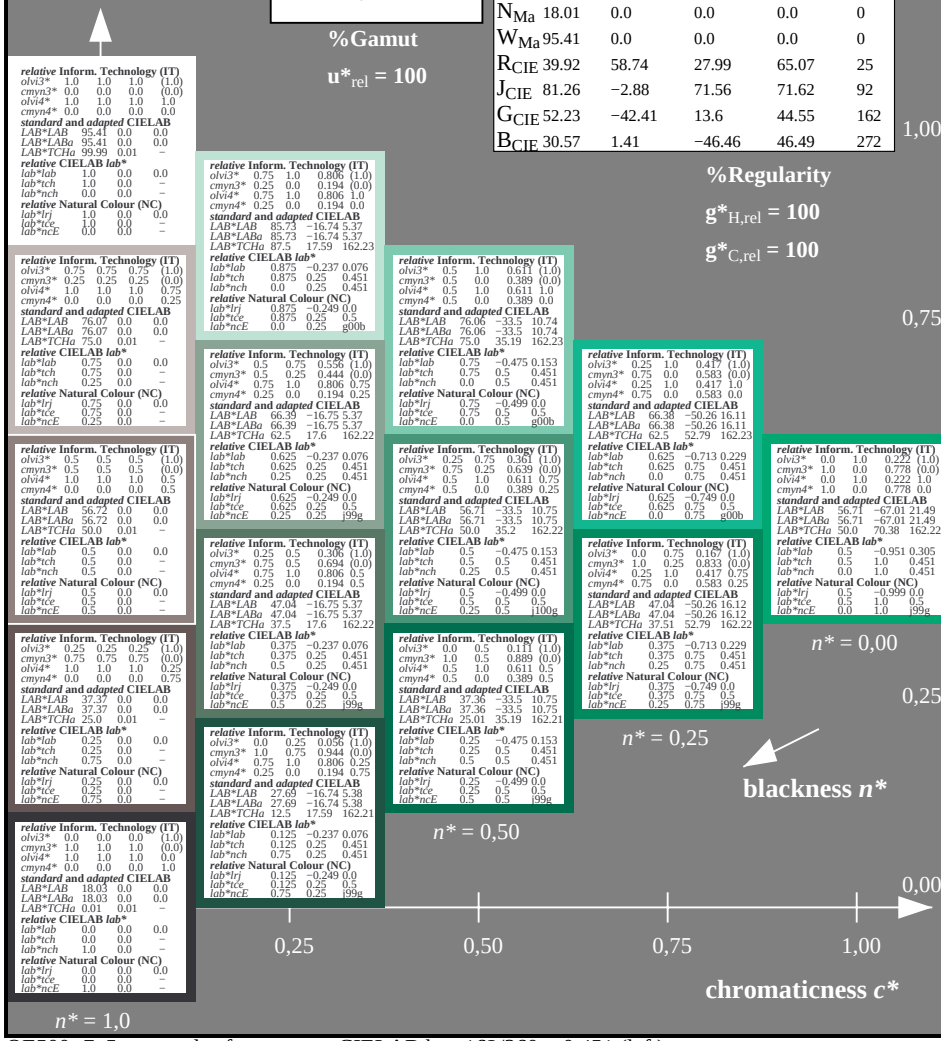
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



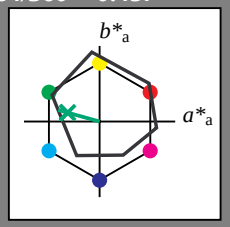
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

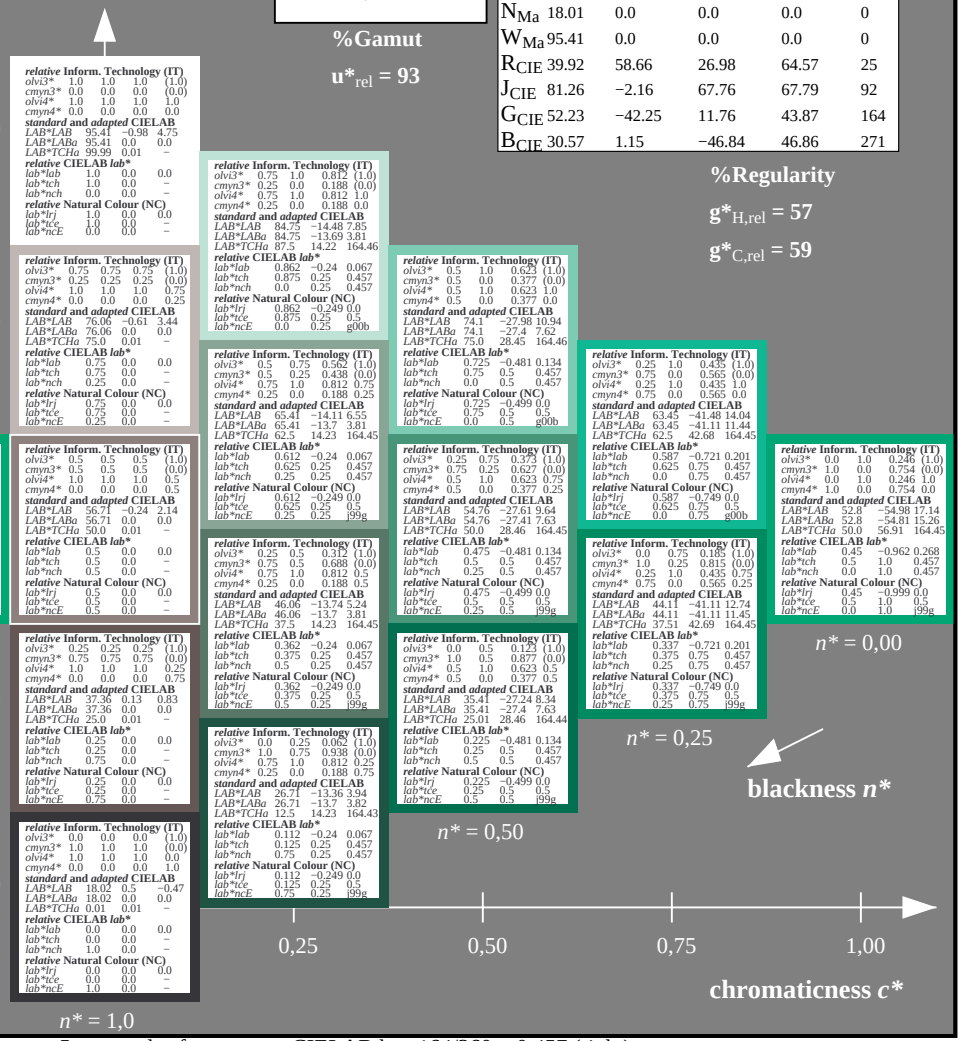
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

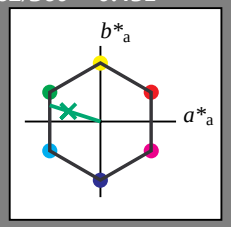
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

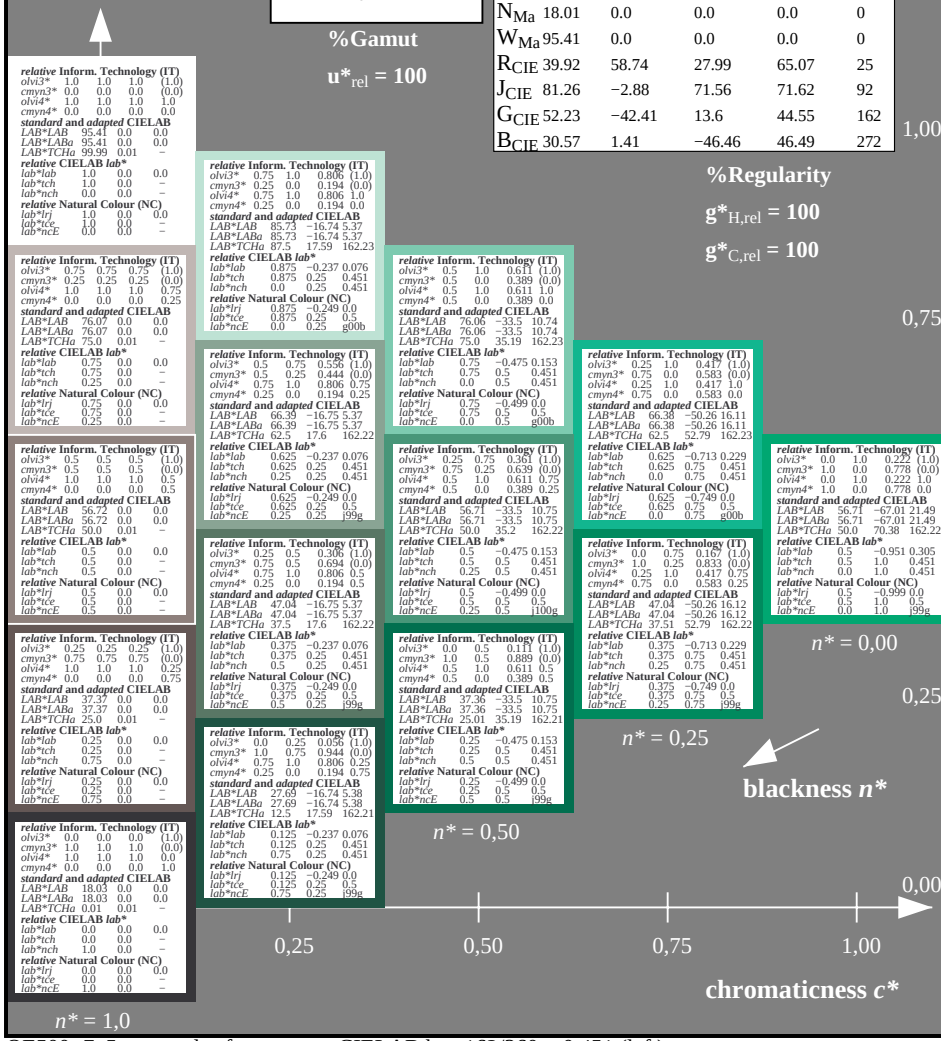
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

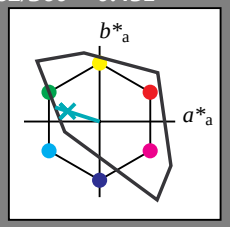
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

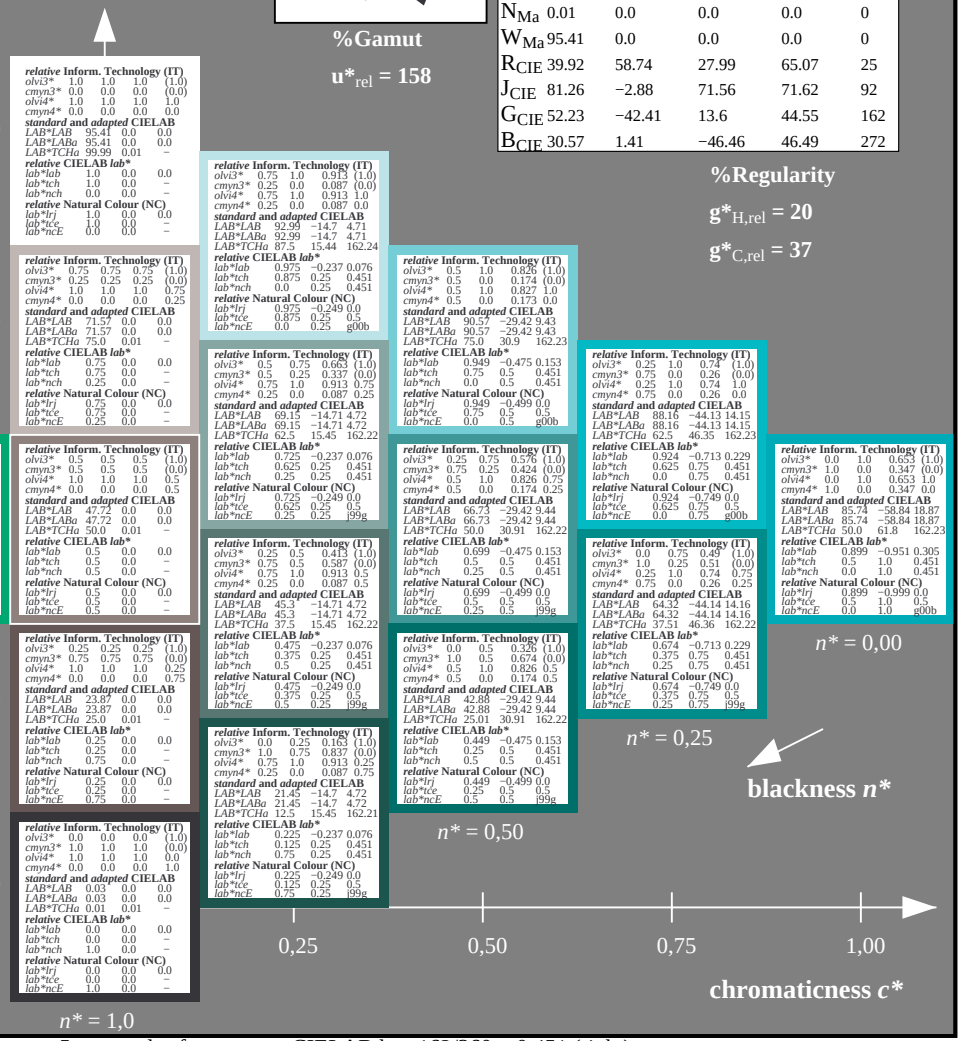
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



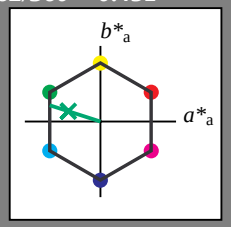
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

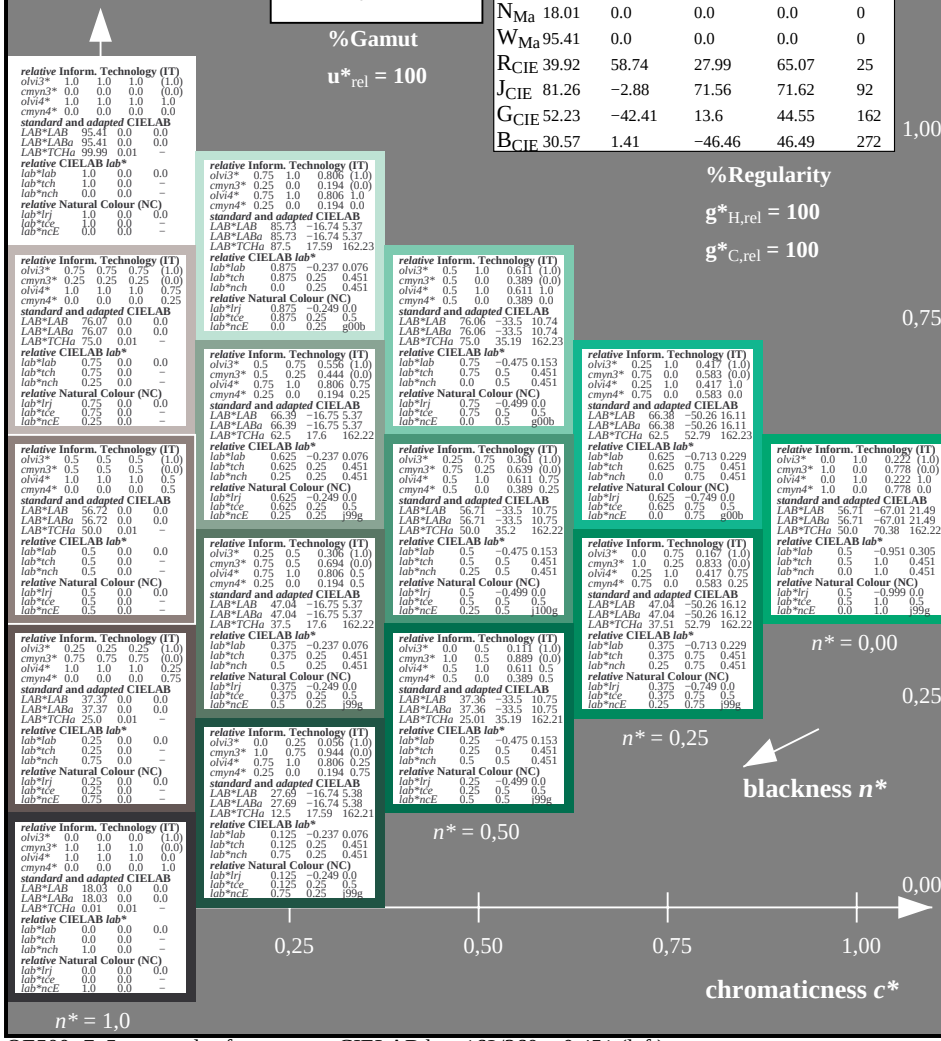
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

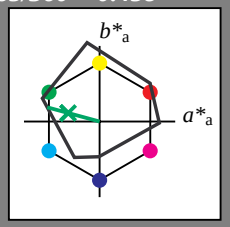


Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

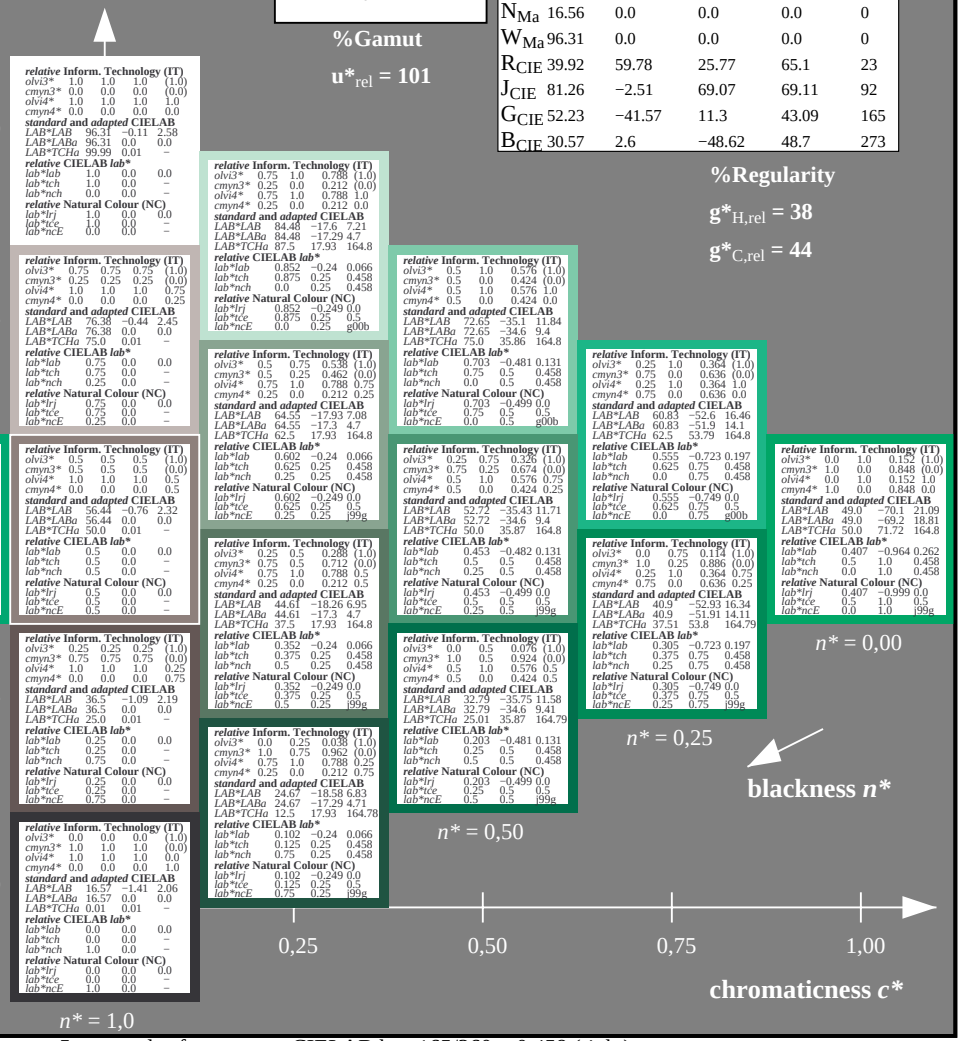
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

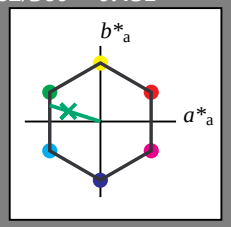
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

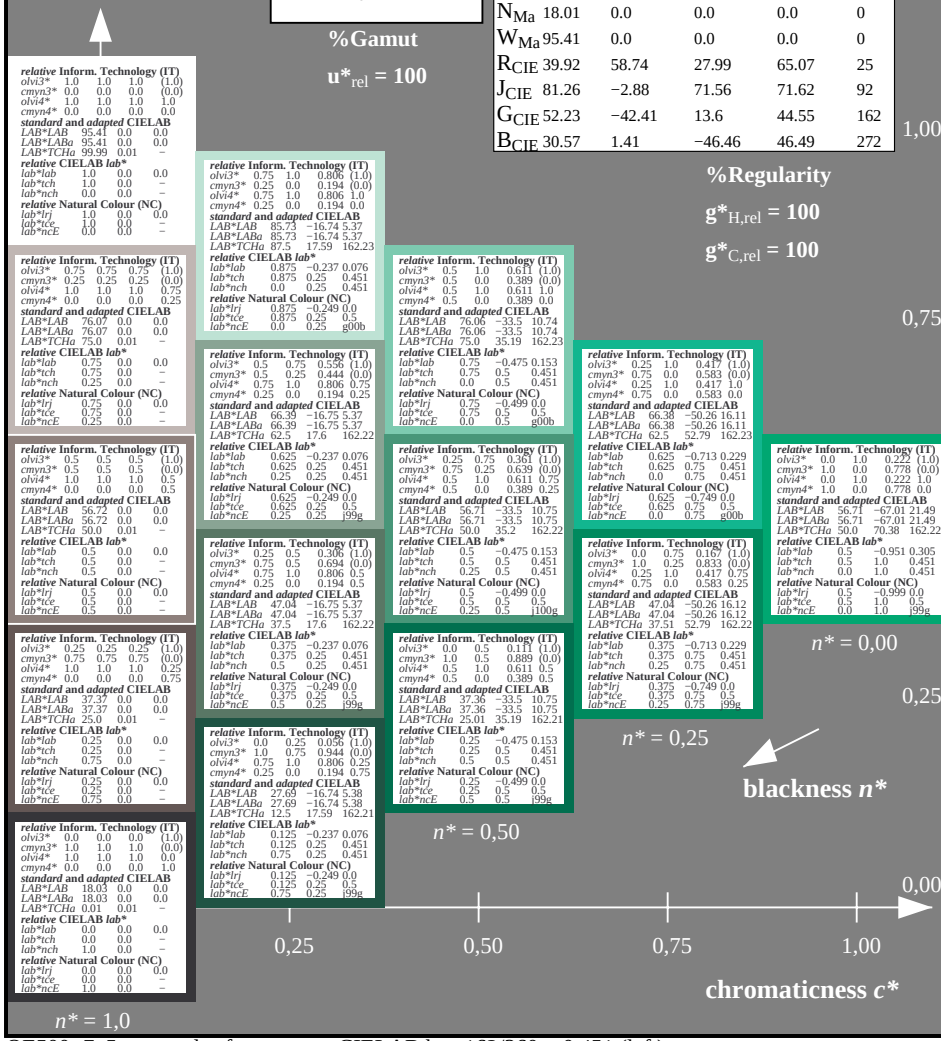
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

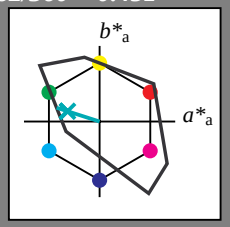
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

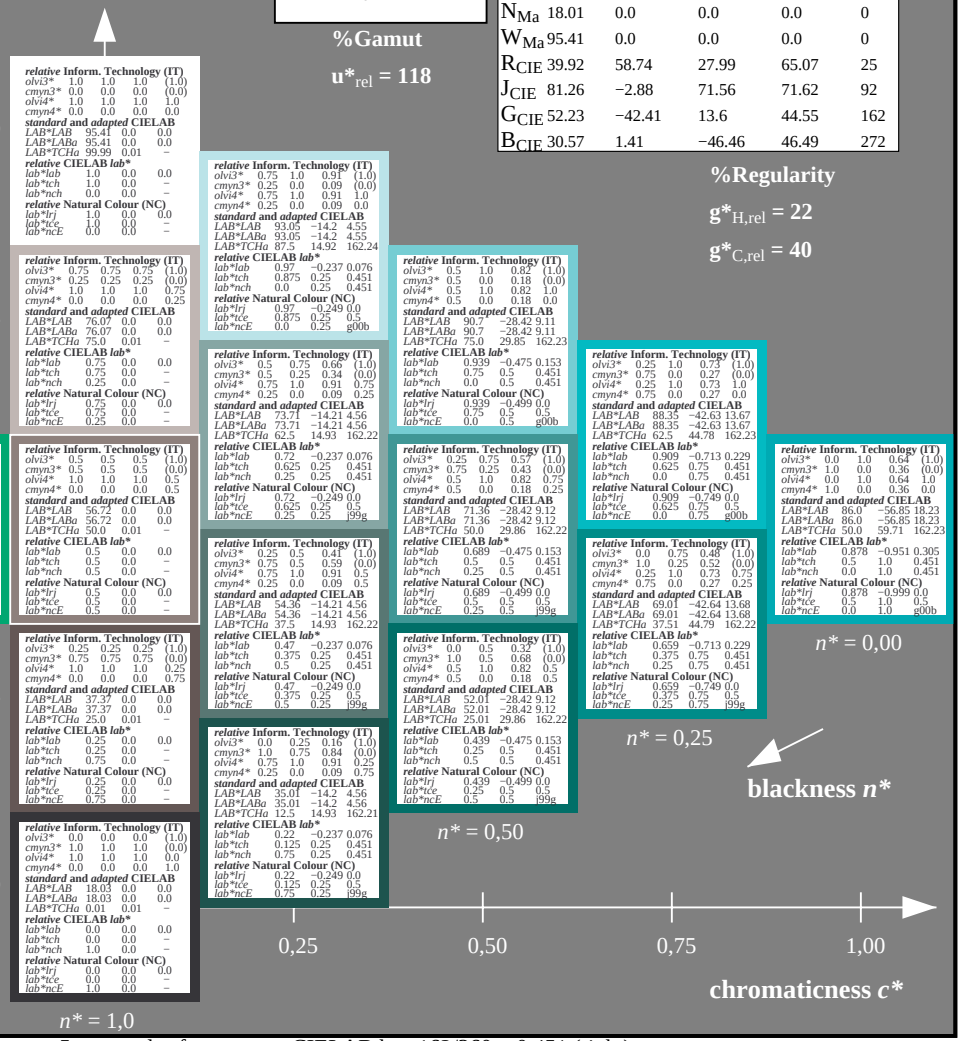
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18

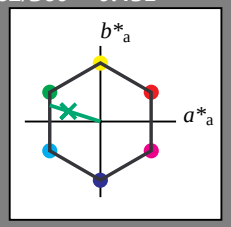
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 100

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

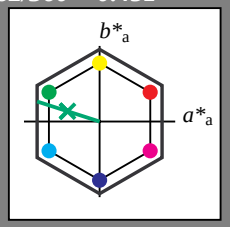
for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22



NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

u^*_{rel} = 152

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

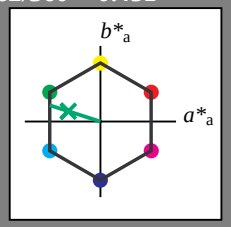
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

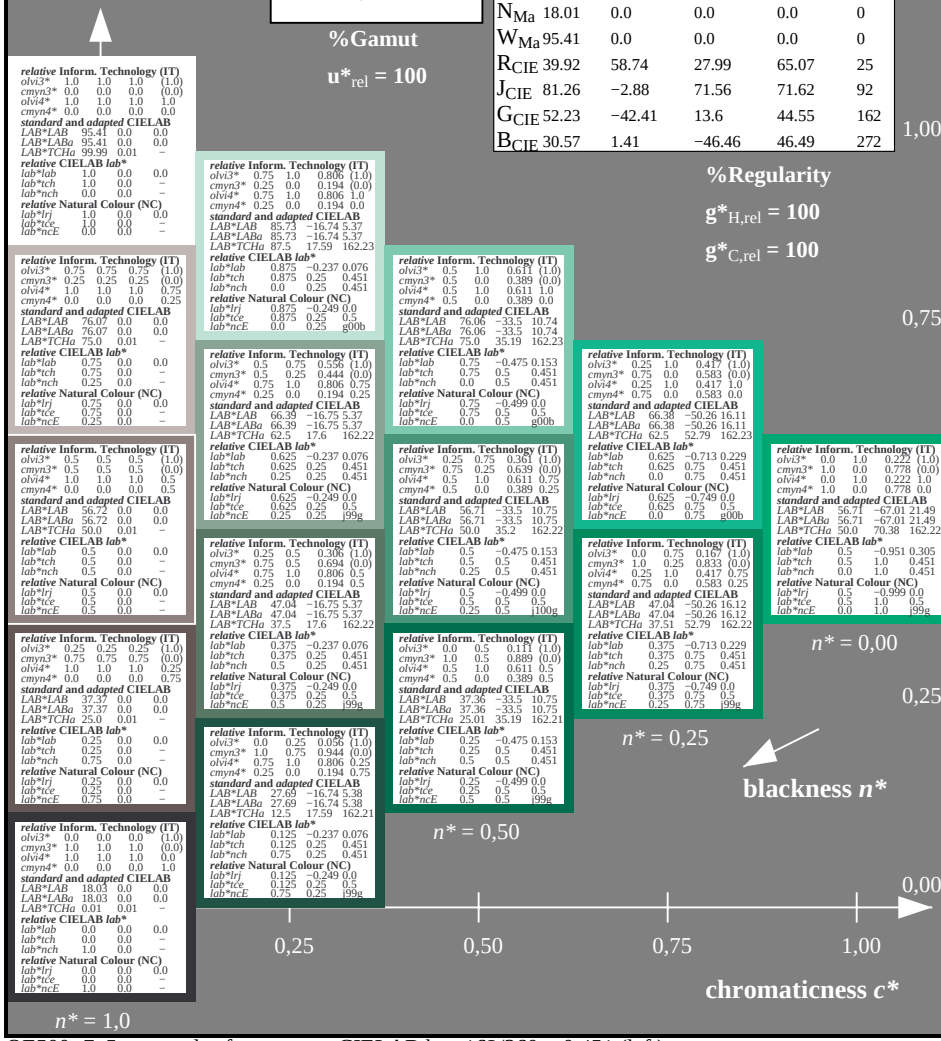
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



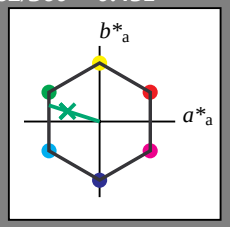
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

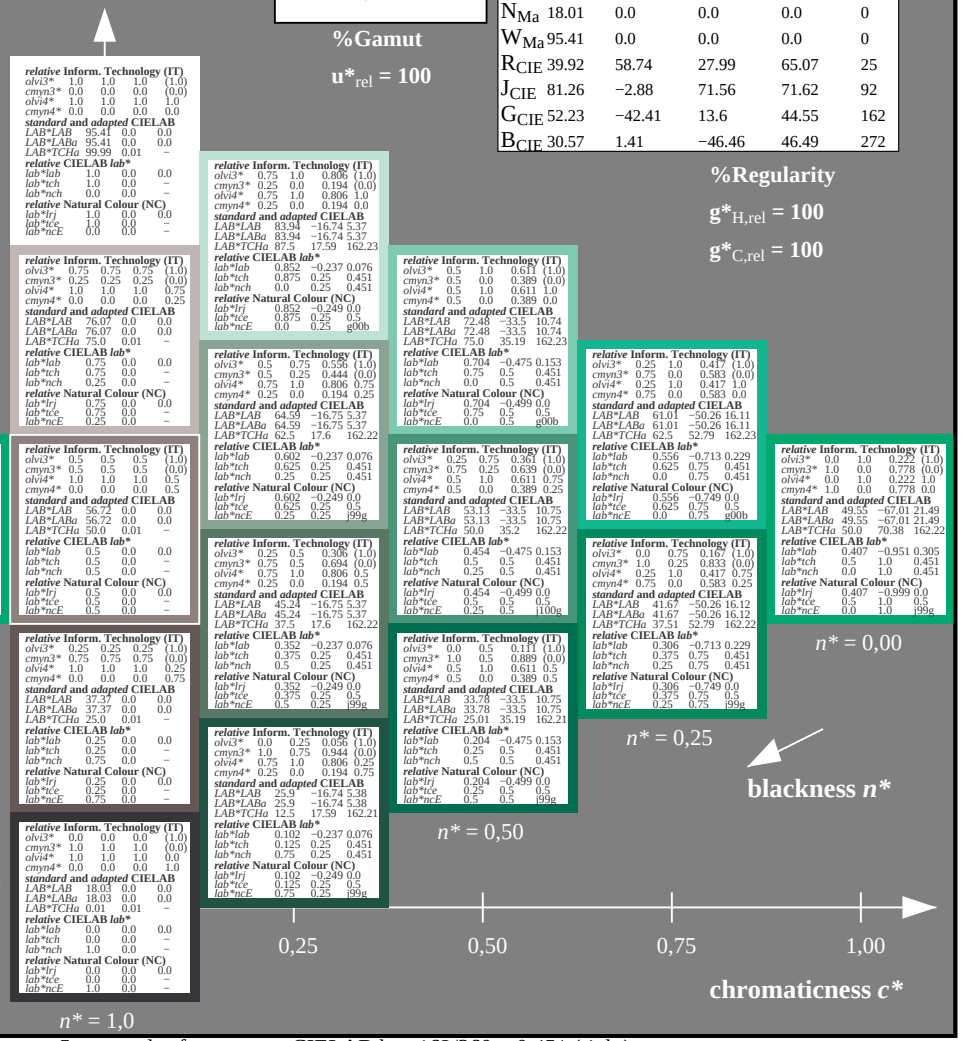
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

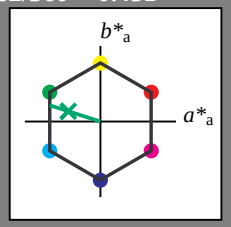


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

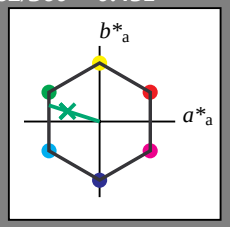
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

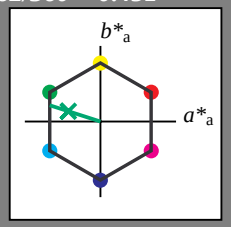
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

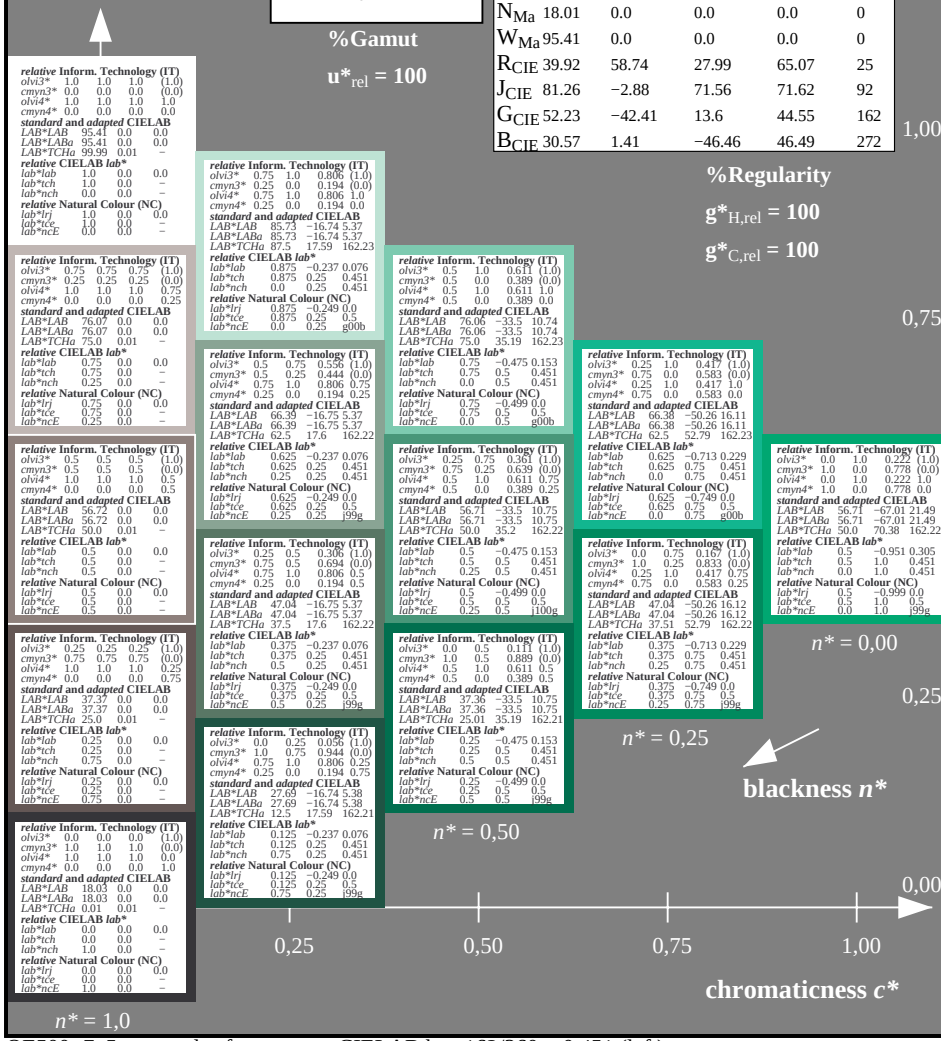
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

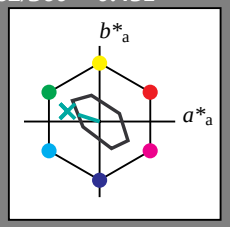
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

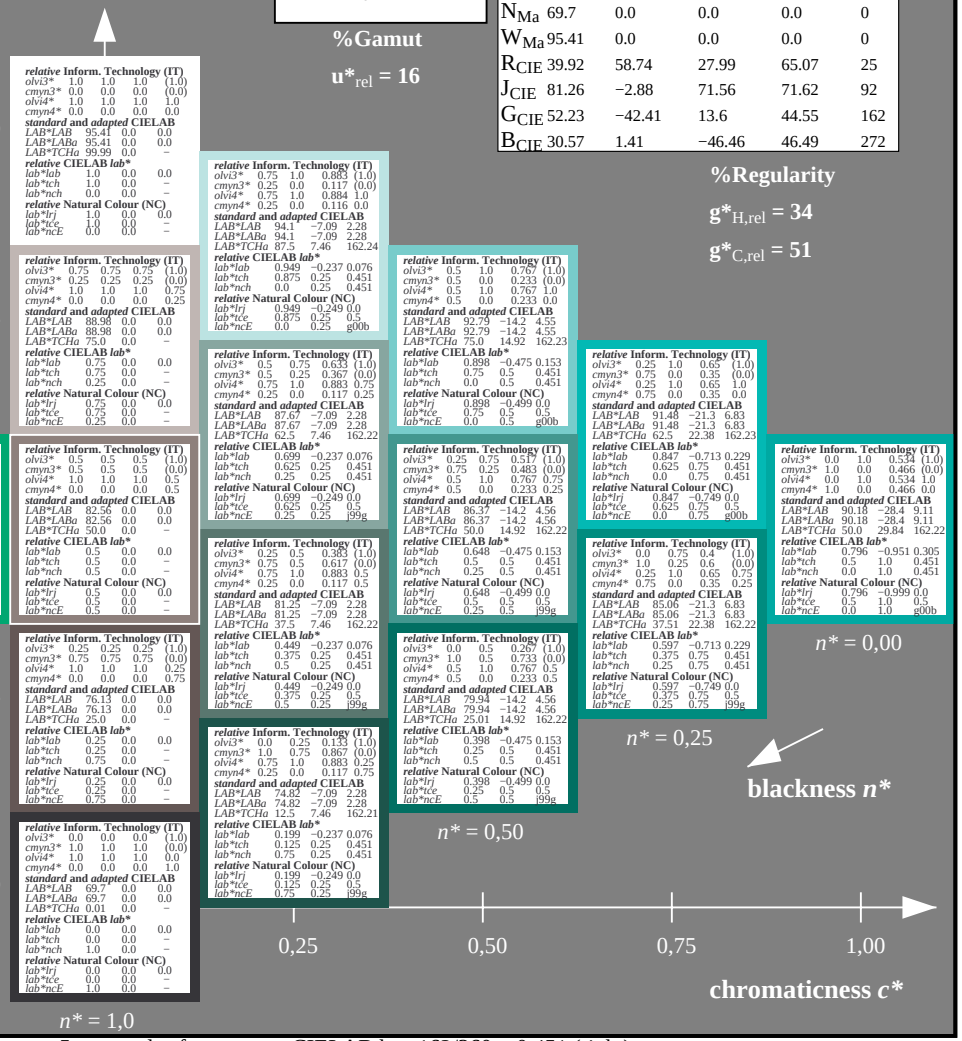
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

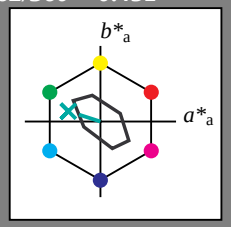
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

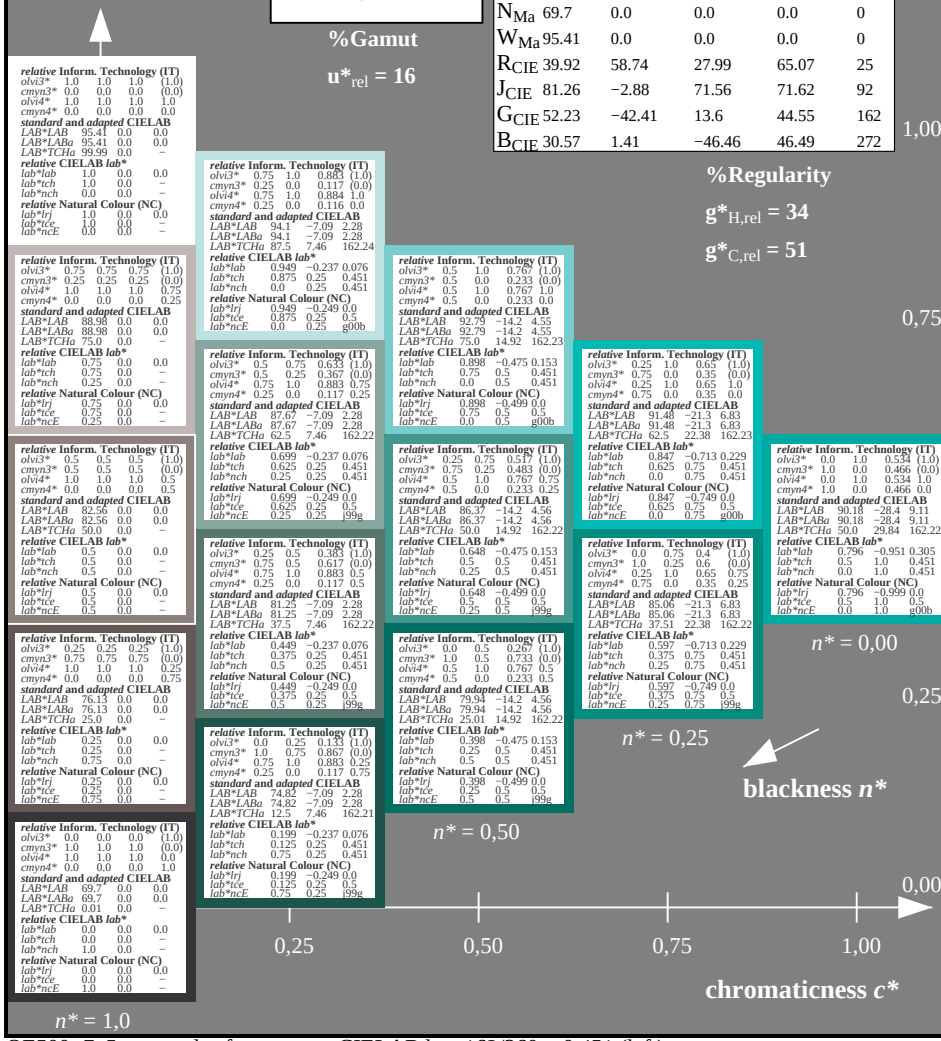
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$

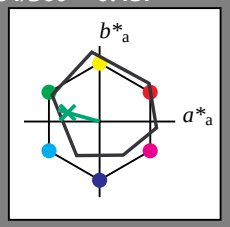
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

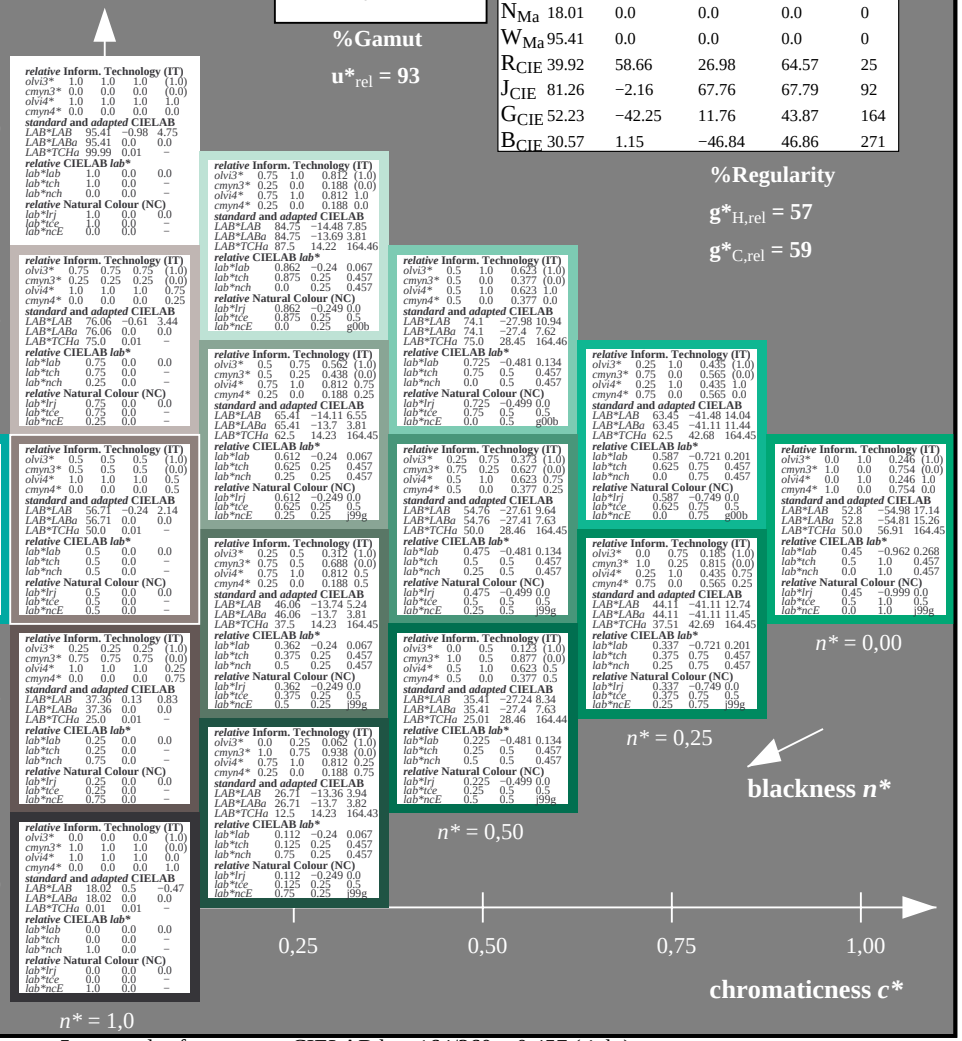
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

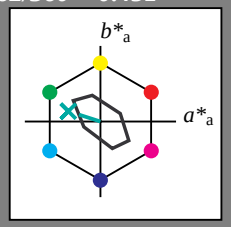
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

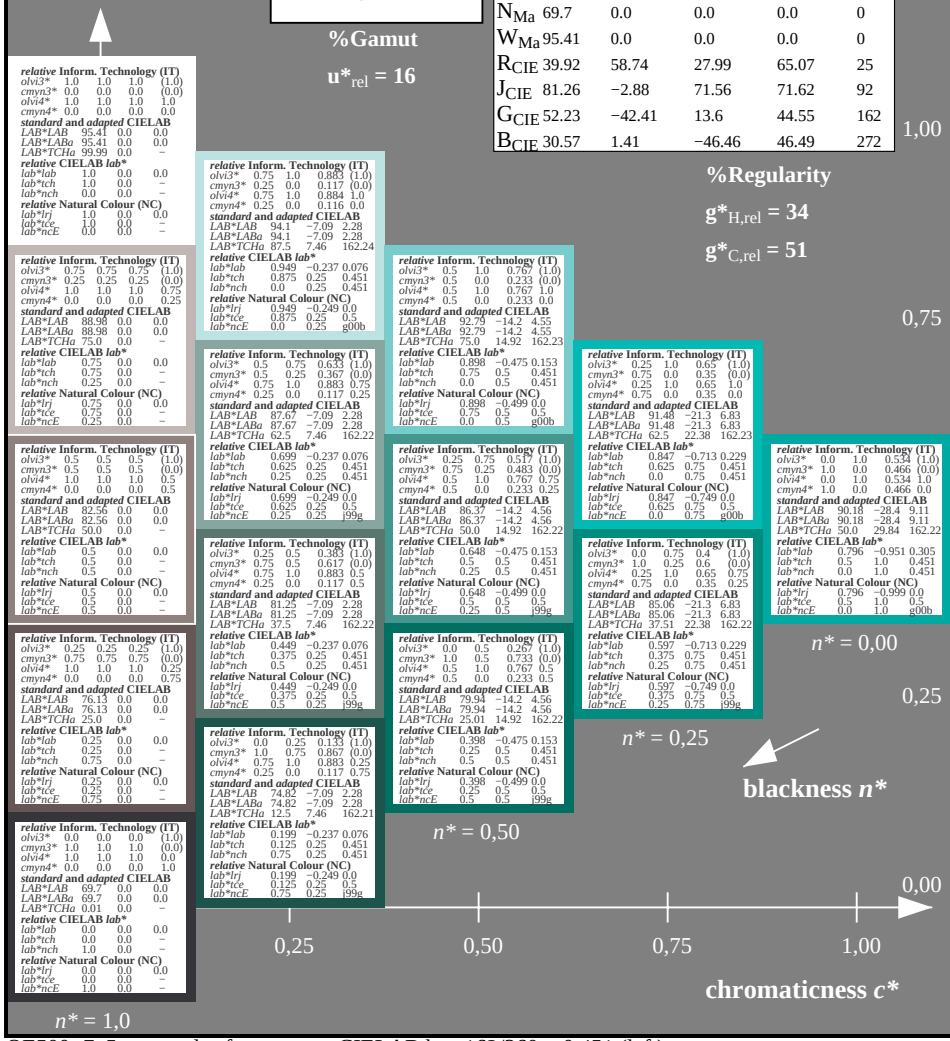
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

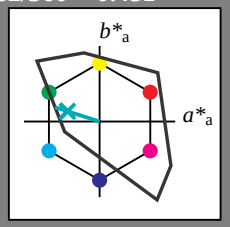
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

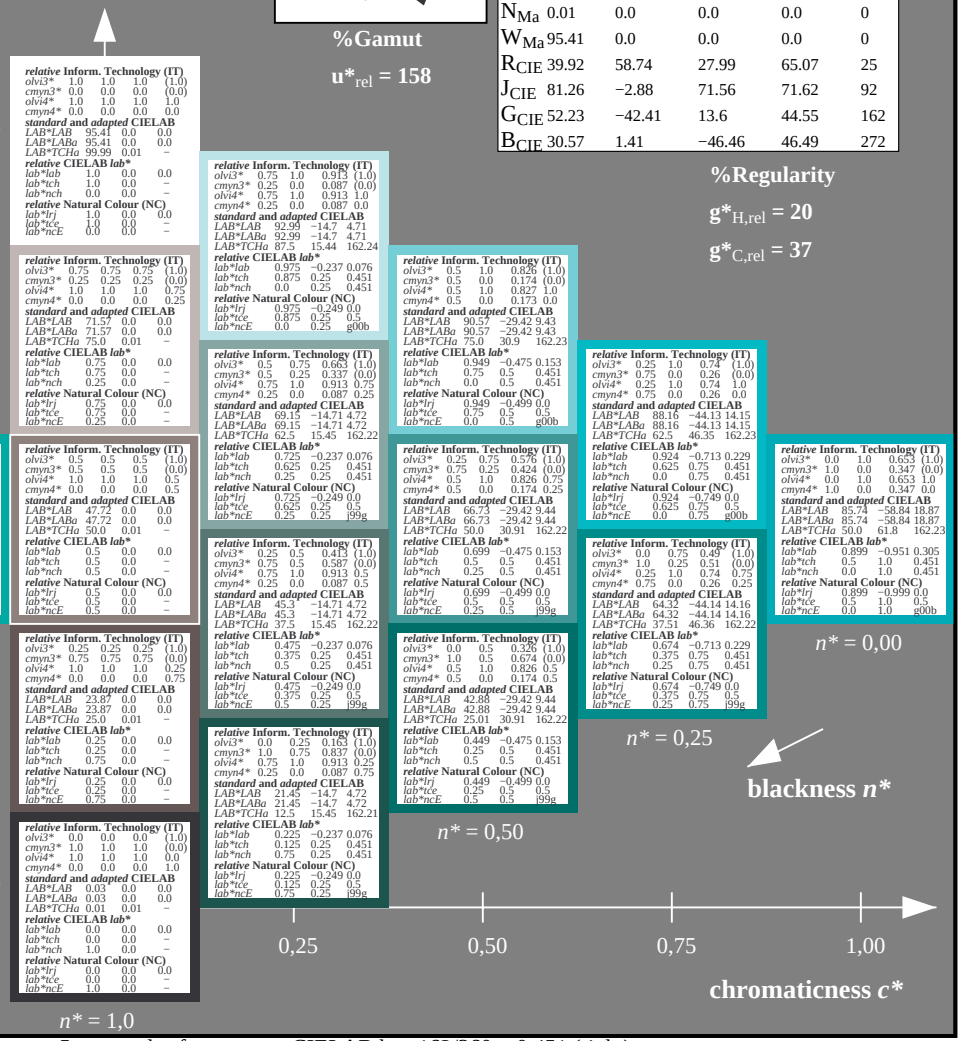
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



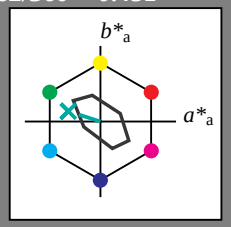
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70
for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness *t**



%Gamut

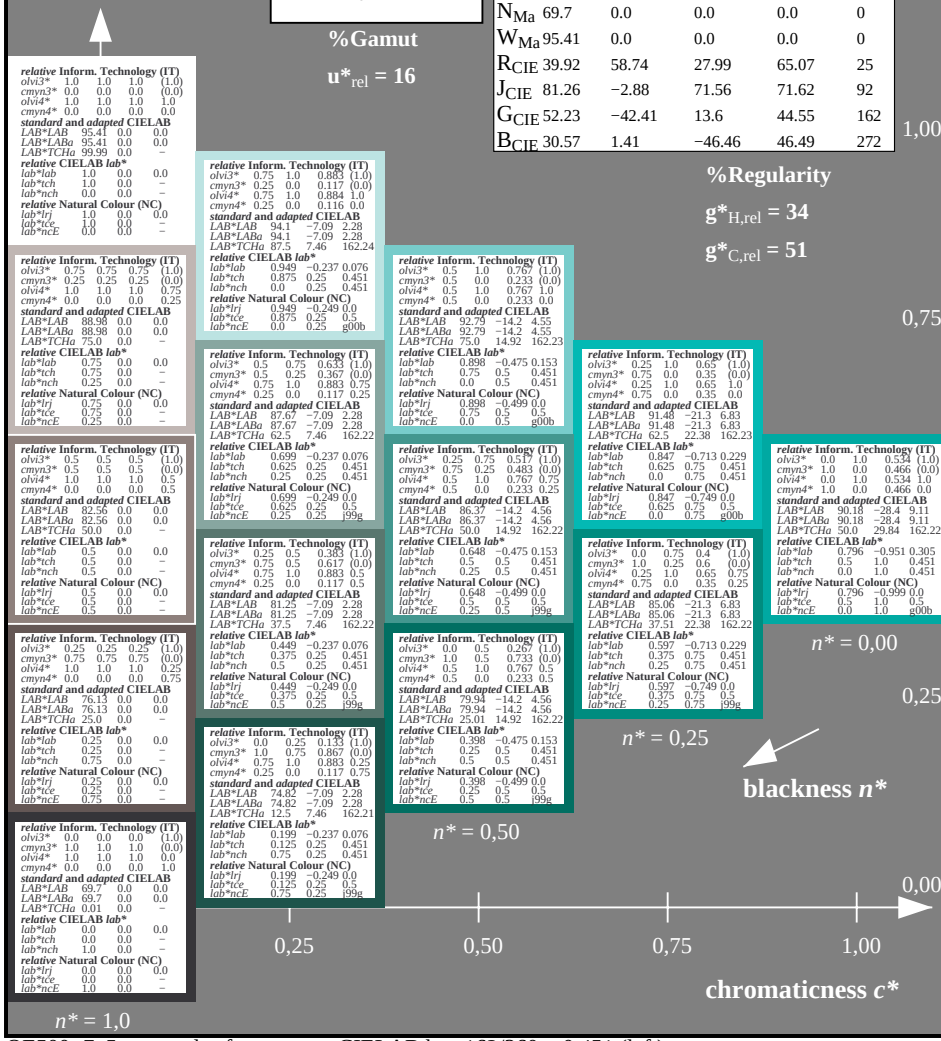
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

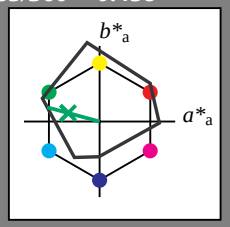
$g^*_{C,rel}$ = 51



Output: Colorimetric Printer Reflective System DRSXX
for hue *h* = lab*h = 165/360 = 0.458*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 49 72 165
olv*Ma: 0.0 1.0 0.15

triangle lightness *t**



%Gamut

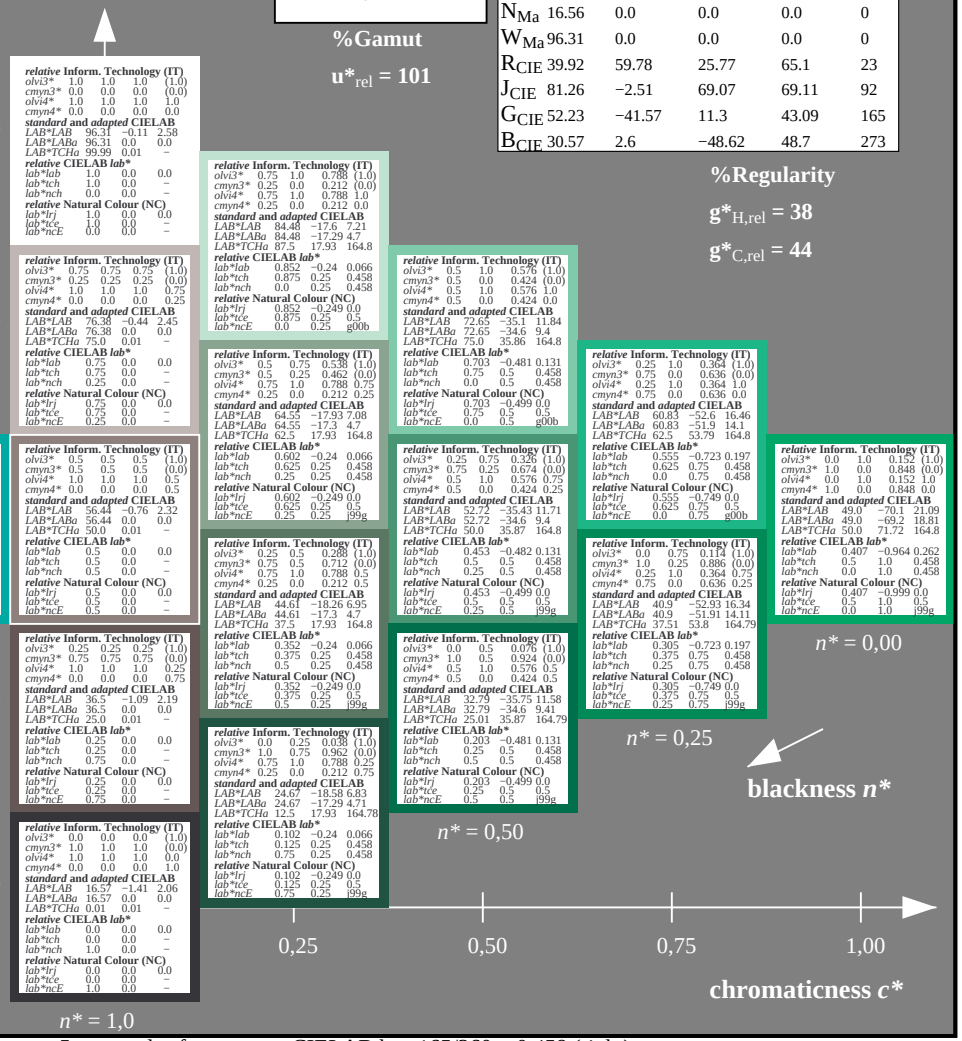
u^*_{rel} = 101

DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



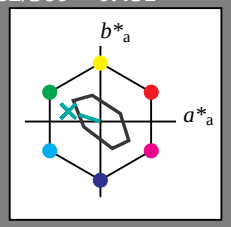
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 165/360 = 0.458 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,75$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

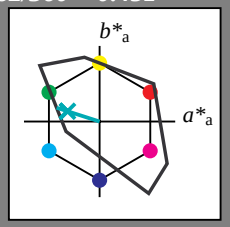
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

$n^* = 1,0$ $n^* = 0,75$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

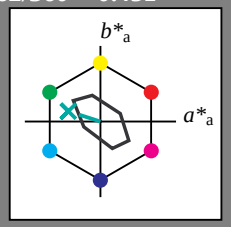
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

u^*_{rel} = 16

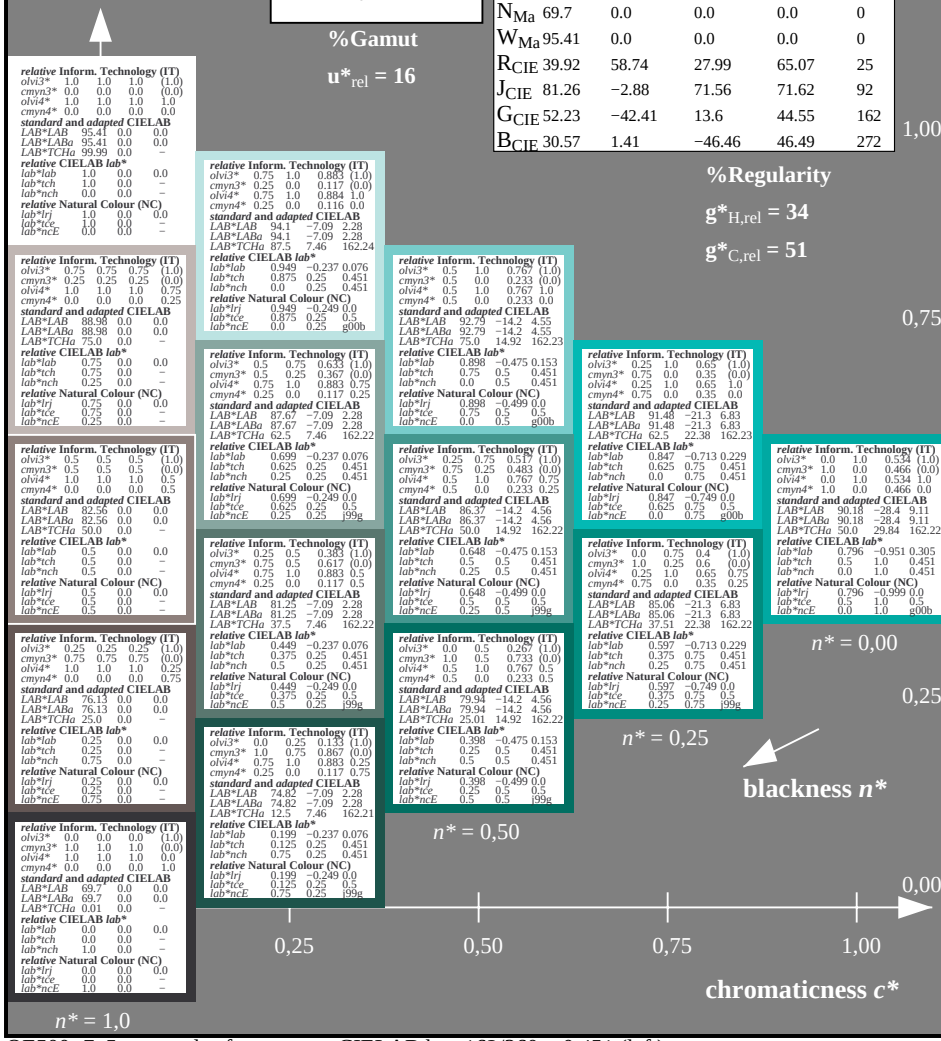
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



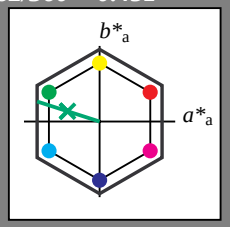
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 39 87 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

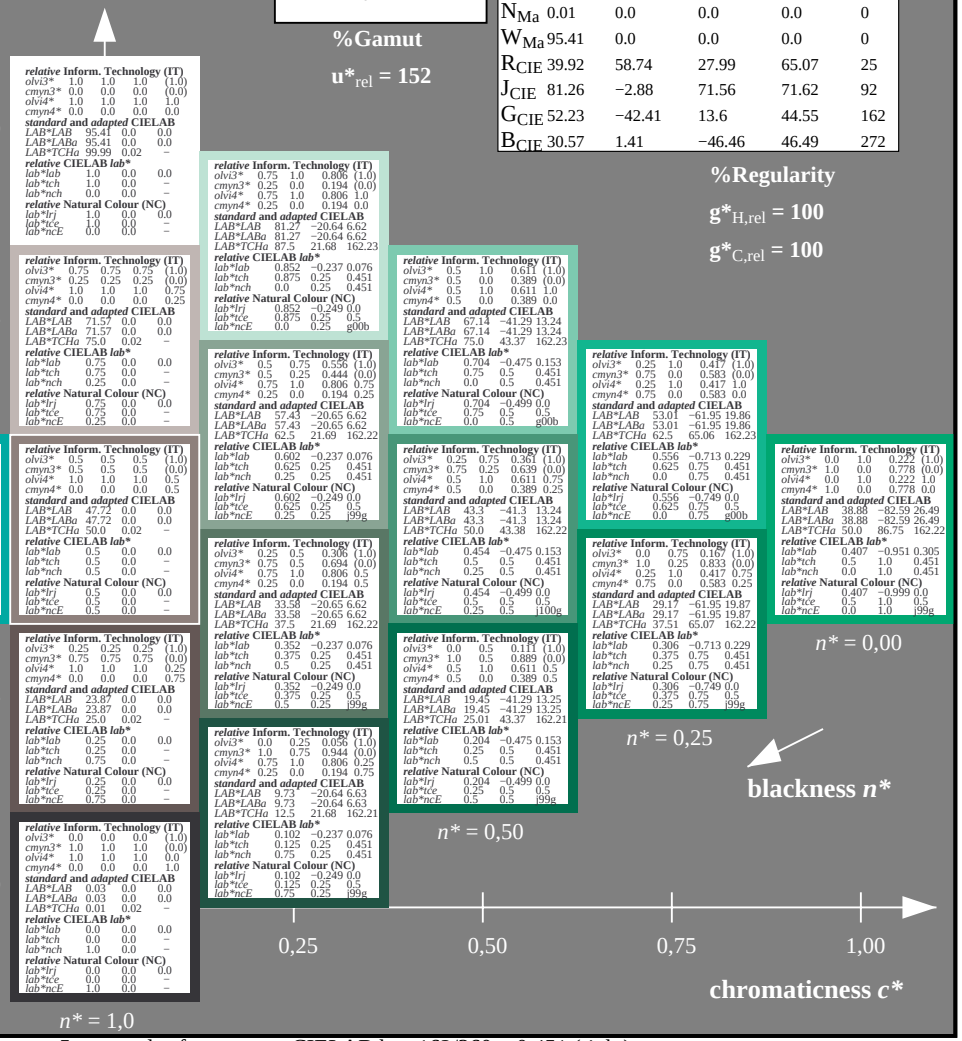
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



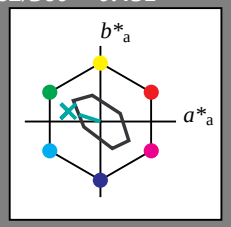
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

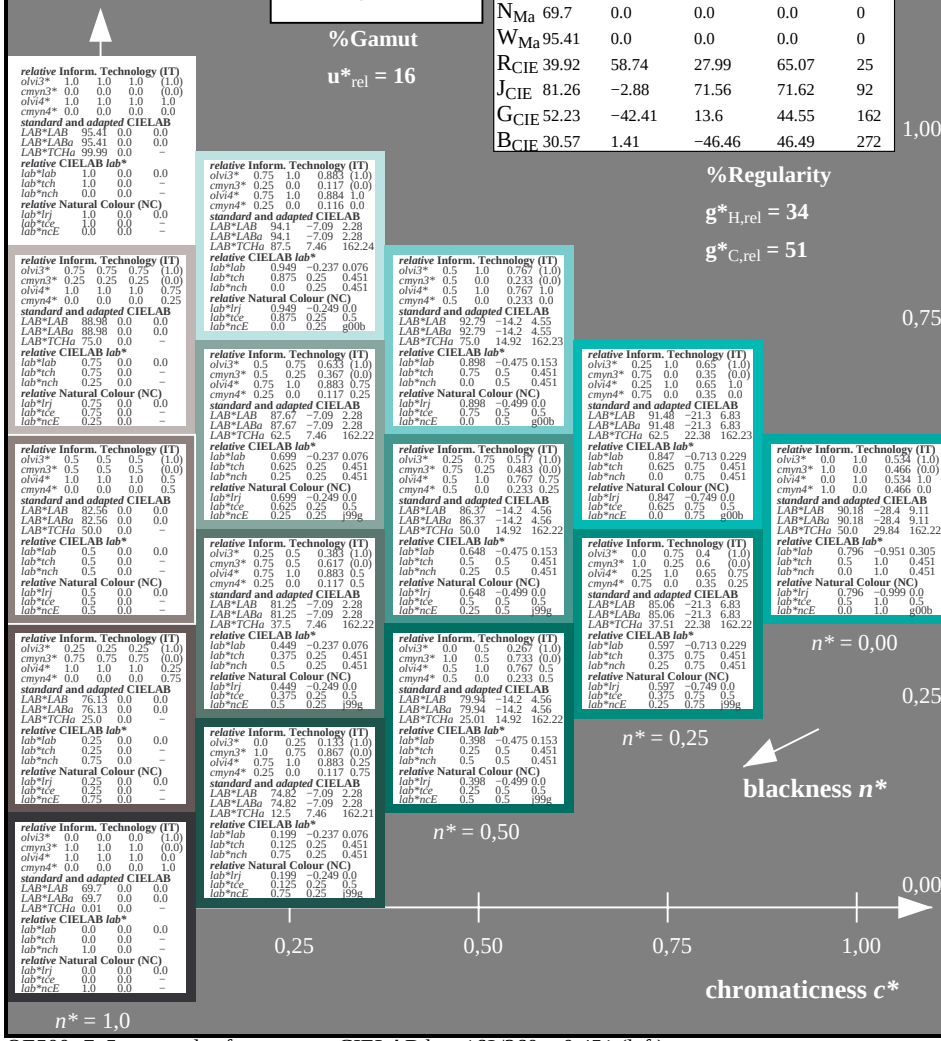
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



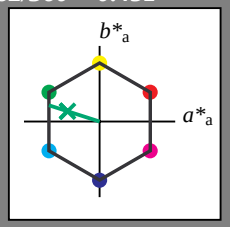
OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 50 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

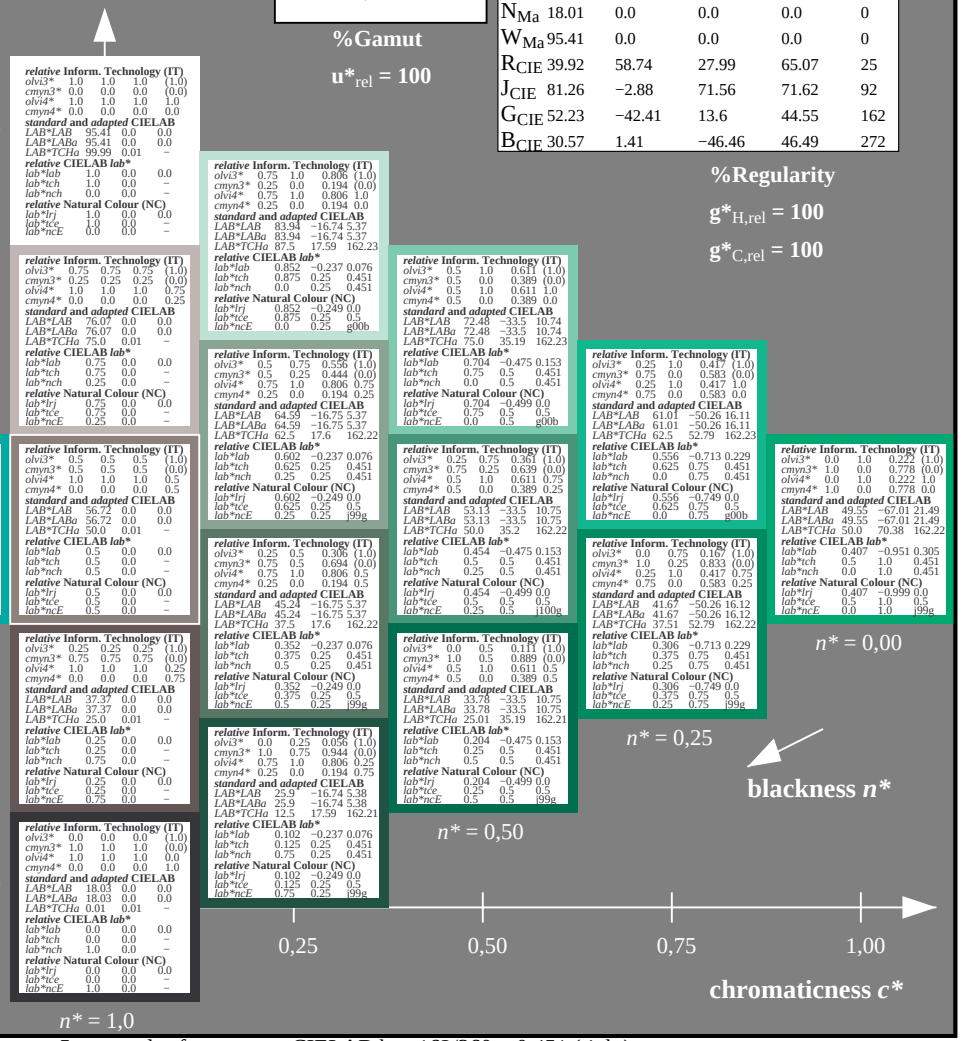
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

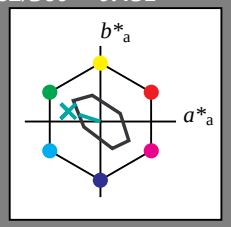
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

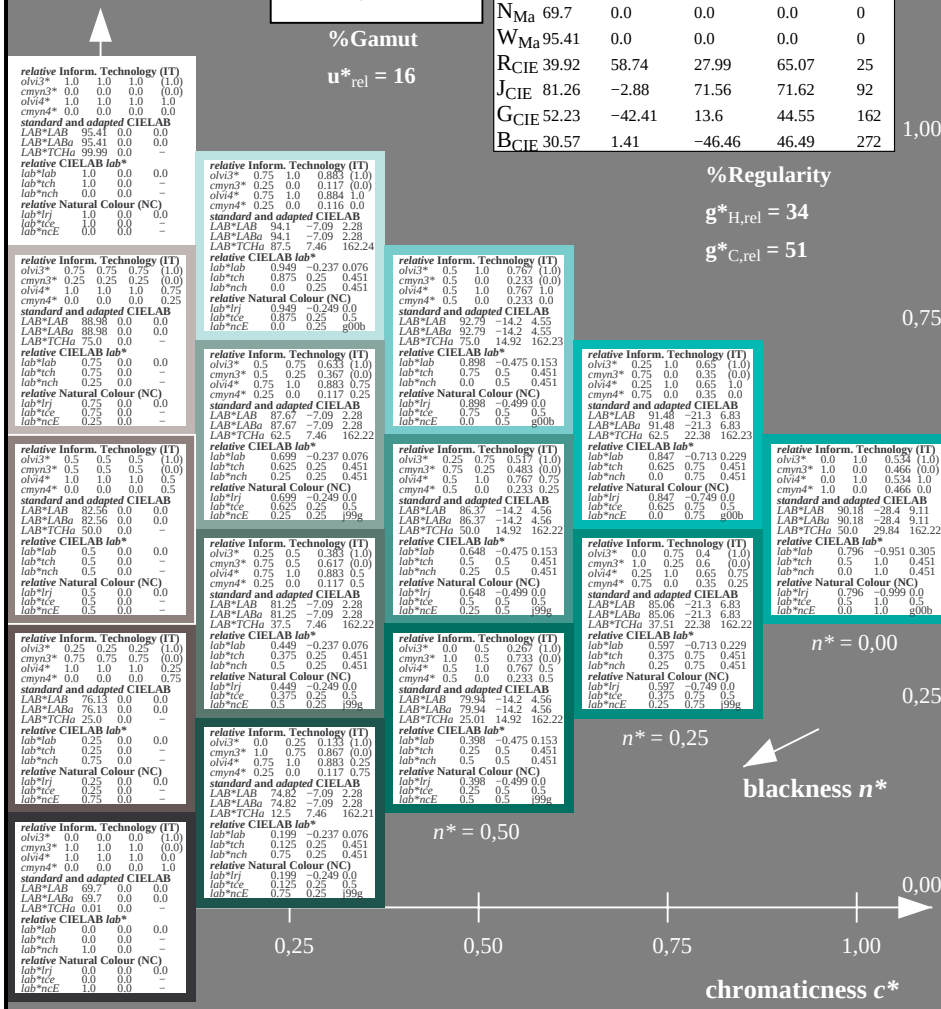
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

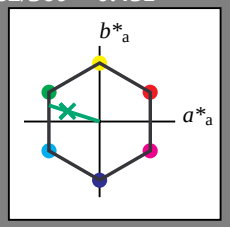
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

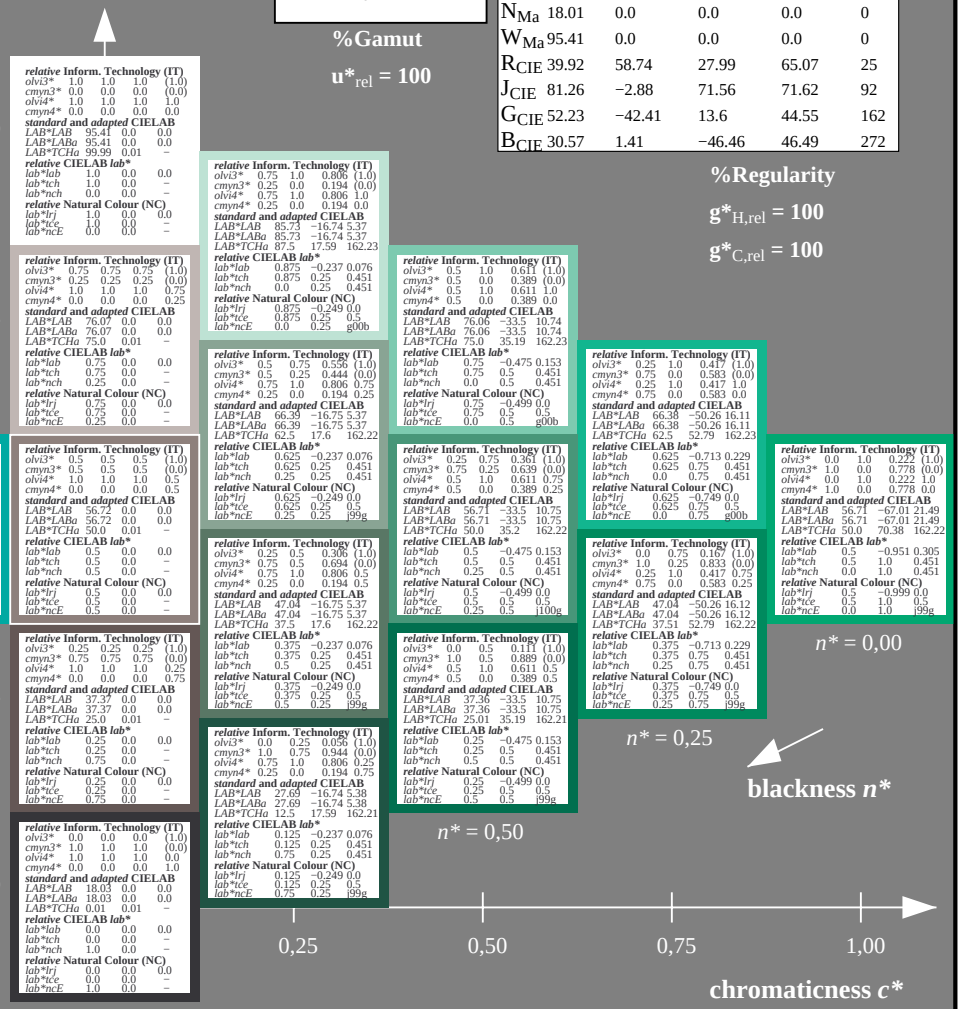
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

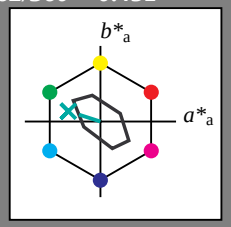


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

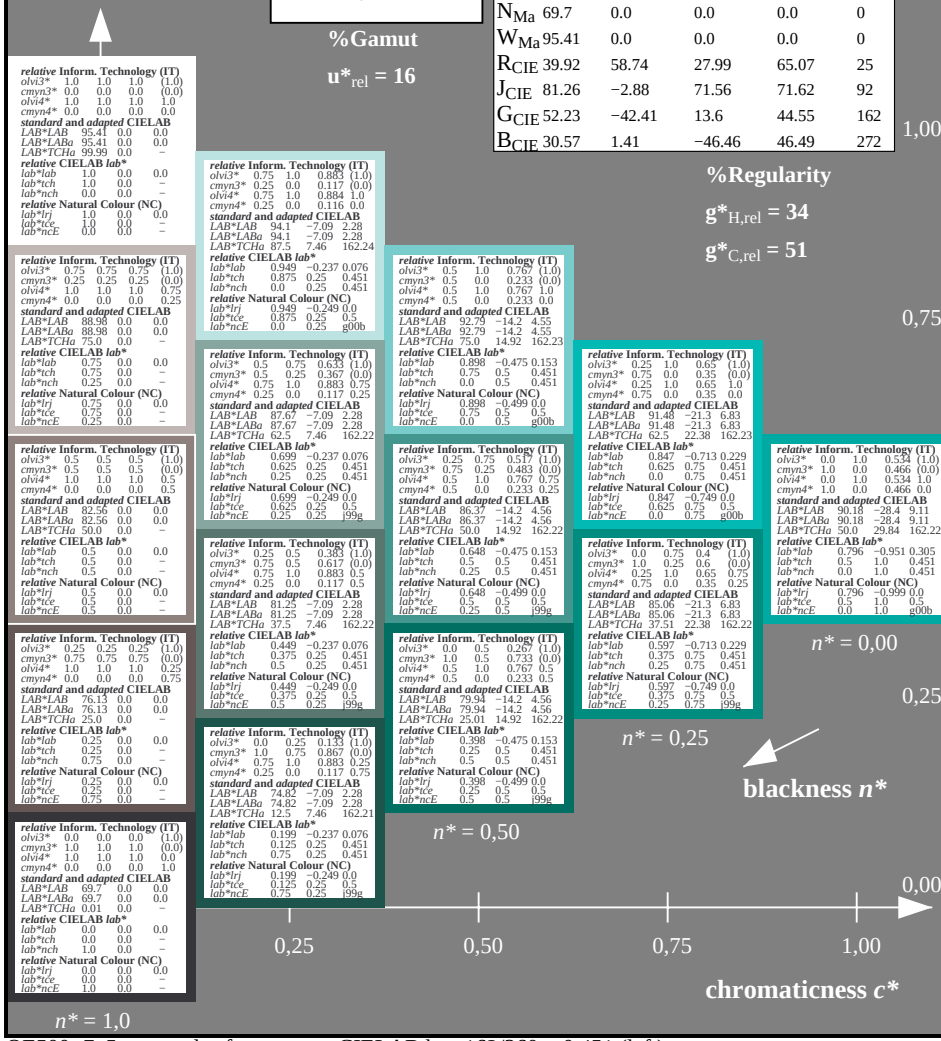
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 34$

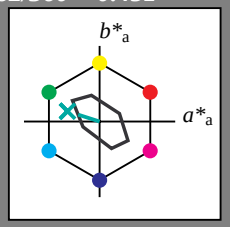


OE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 90 30 162
olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

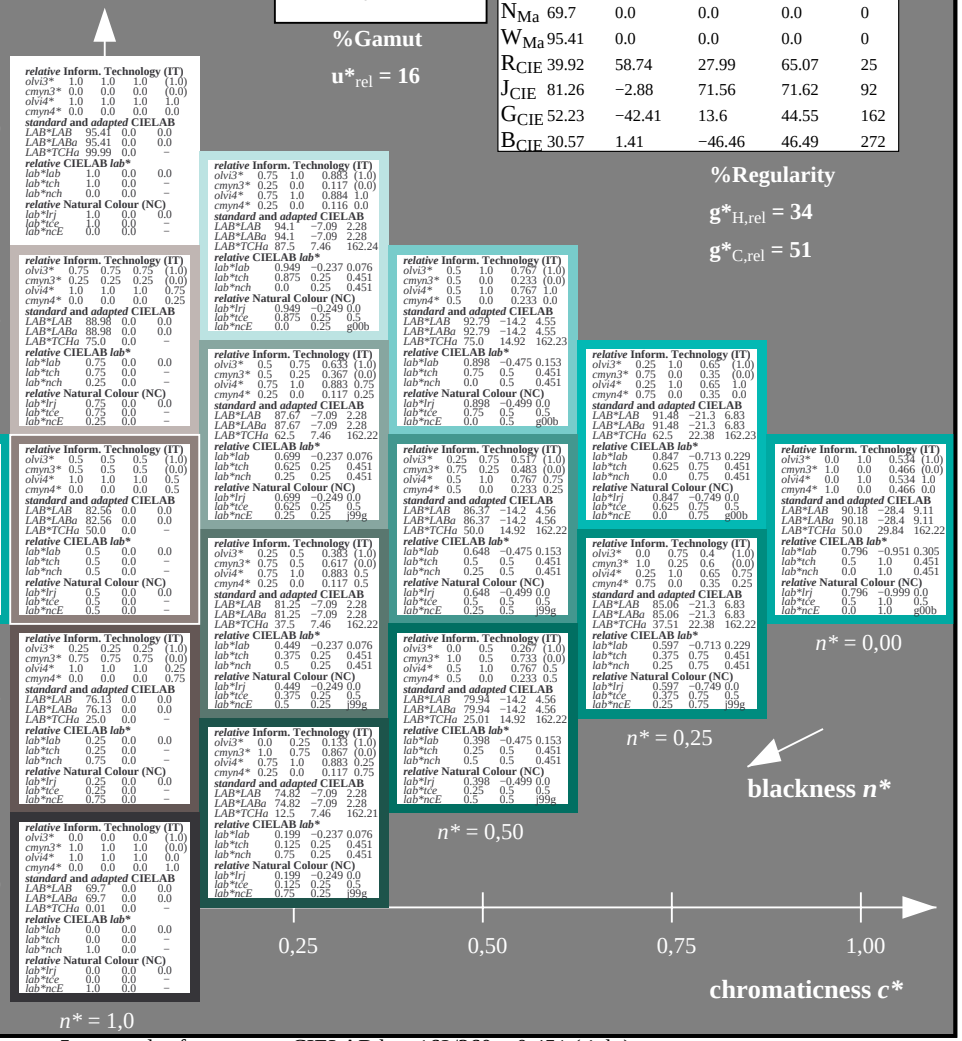
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 34$

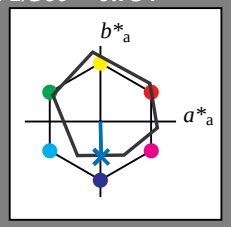


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Offset Reflective System ORS18
for hue *h* = lab*h = 271/360 = 0.754*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

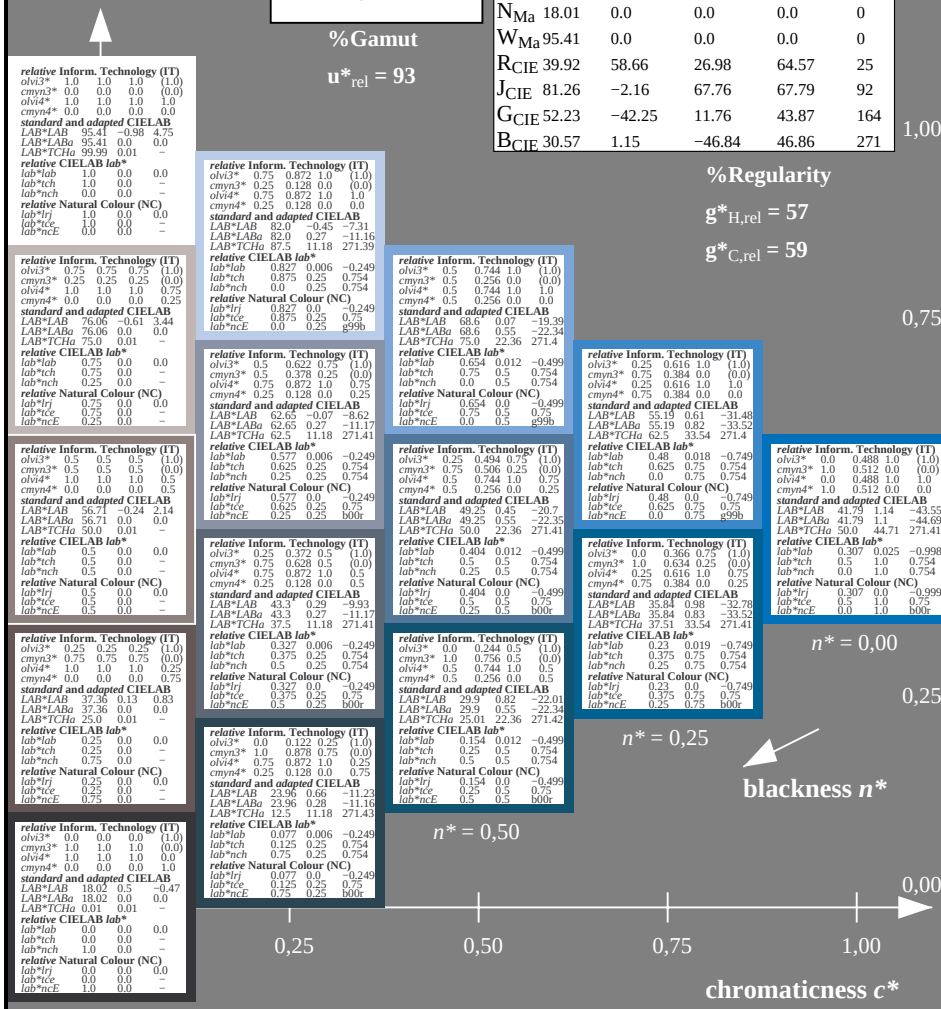
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

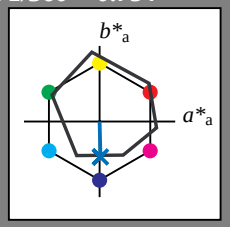


OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Offset Reflective System ORS18
for hue *h* = lab*h = 271/360 = 0.754*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

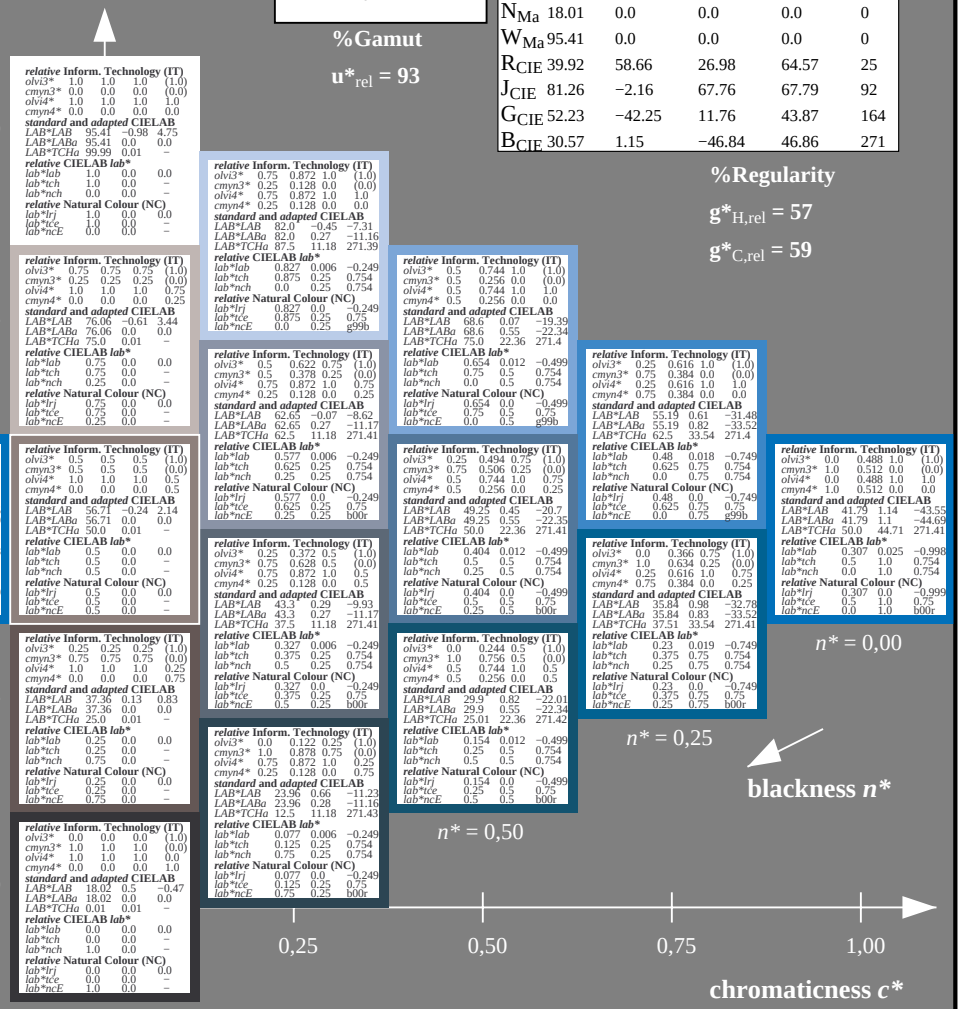
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

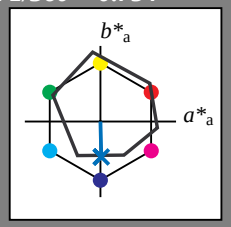


5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

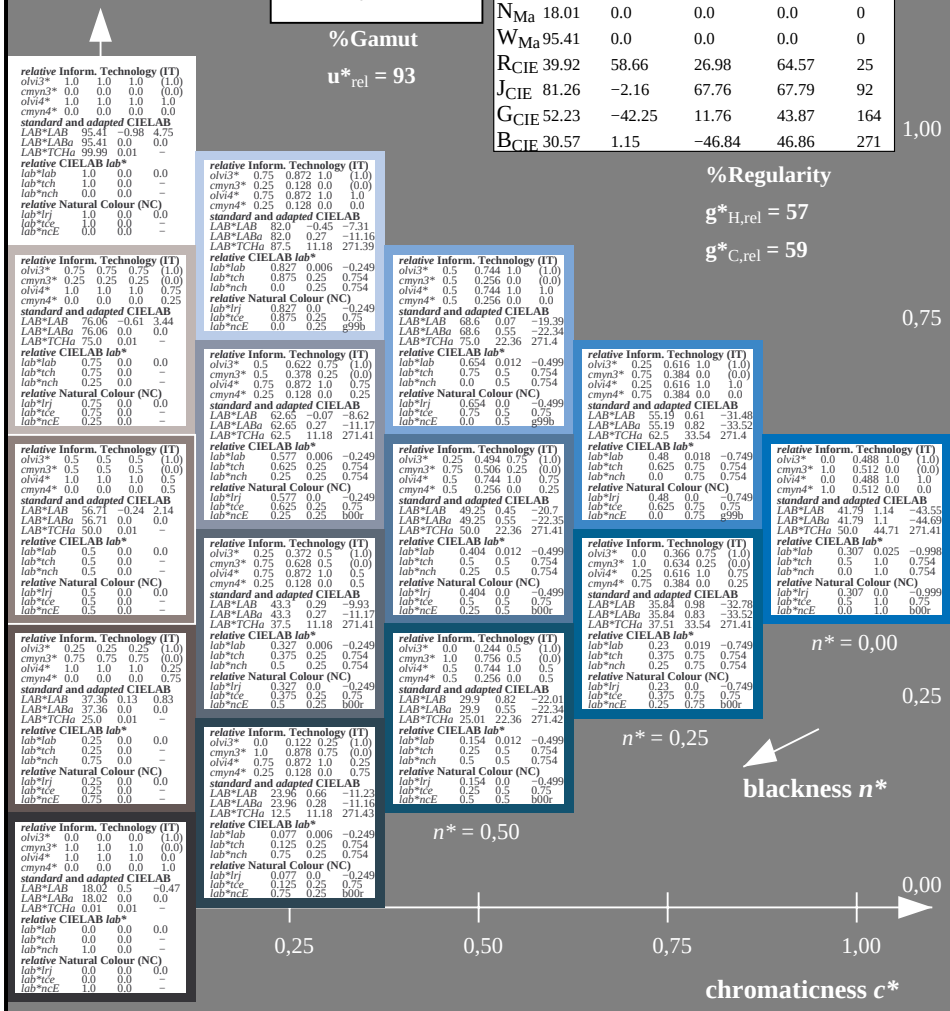
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

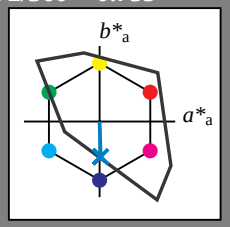


OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 65 49 272
olv*Ma: 0.0 0.61 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

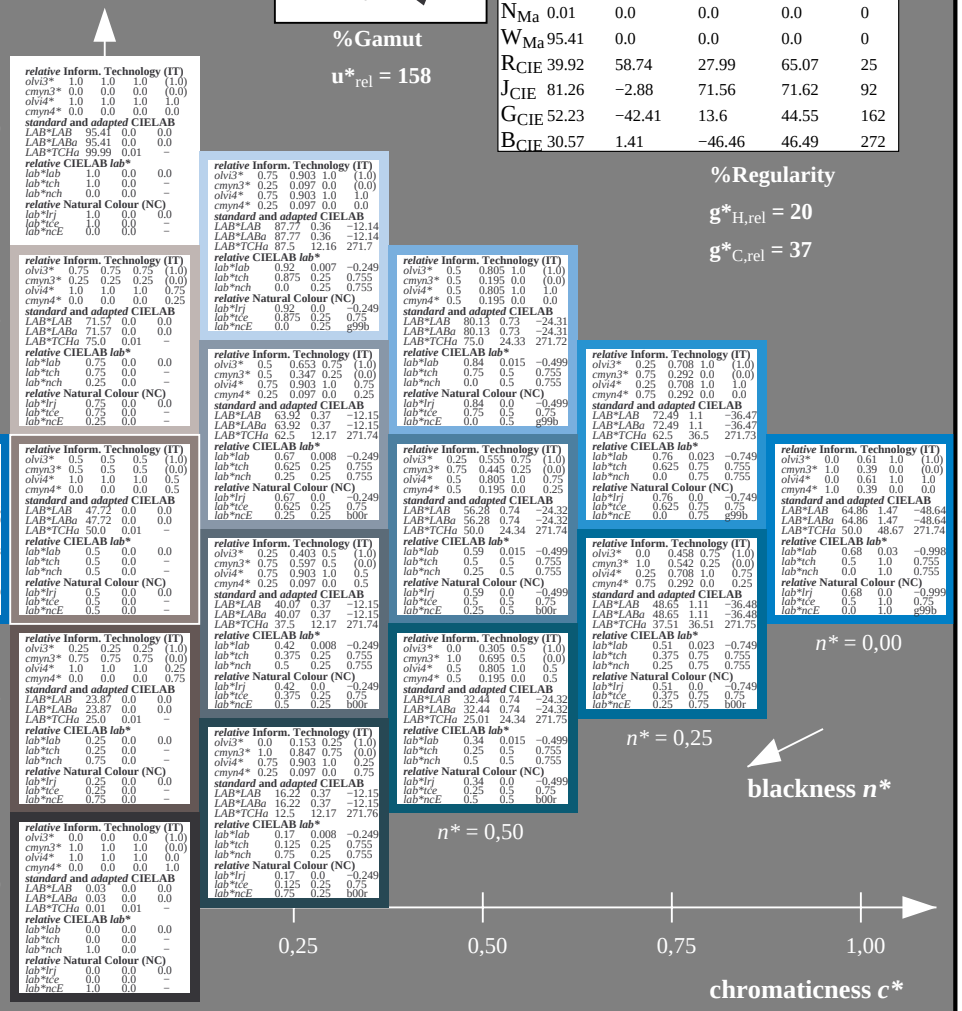
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$

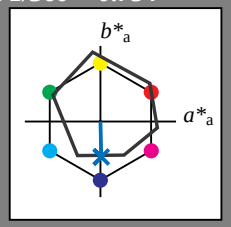
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

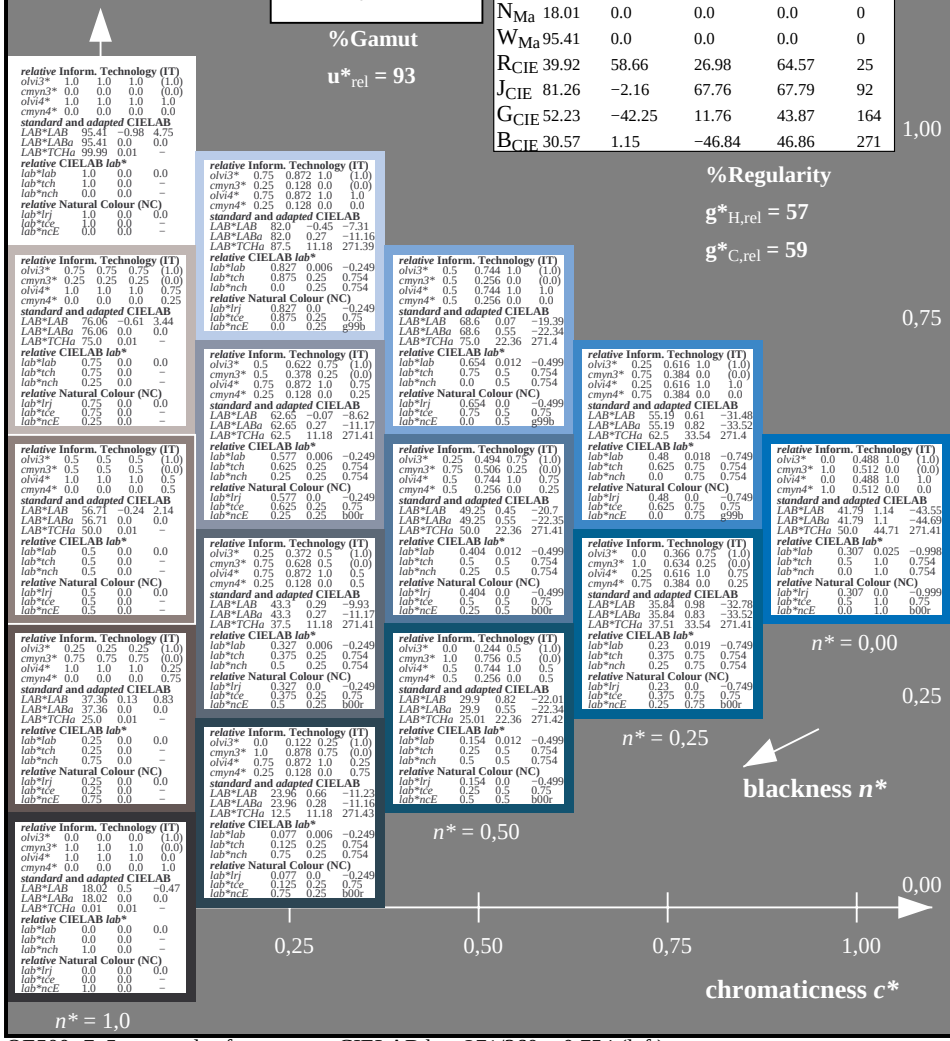
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

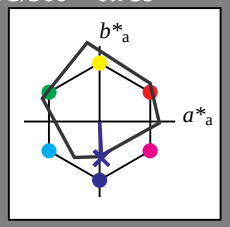
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

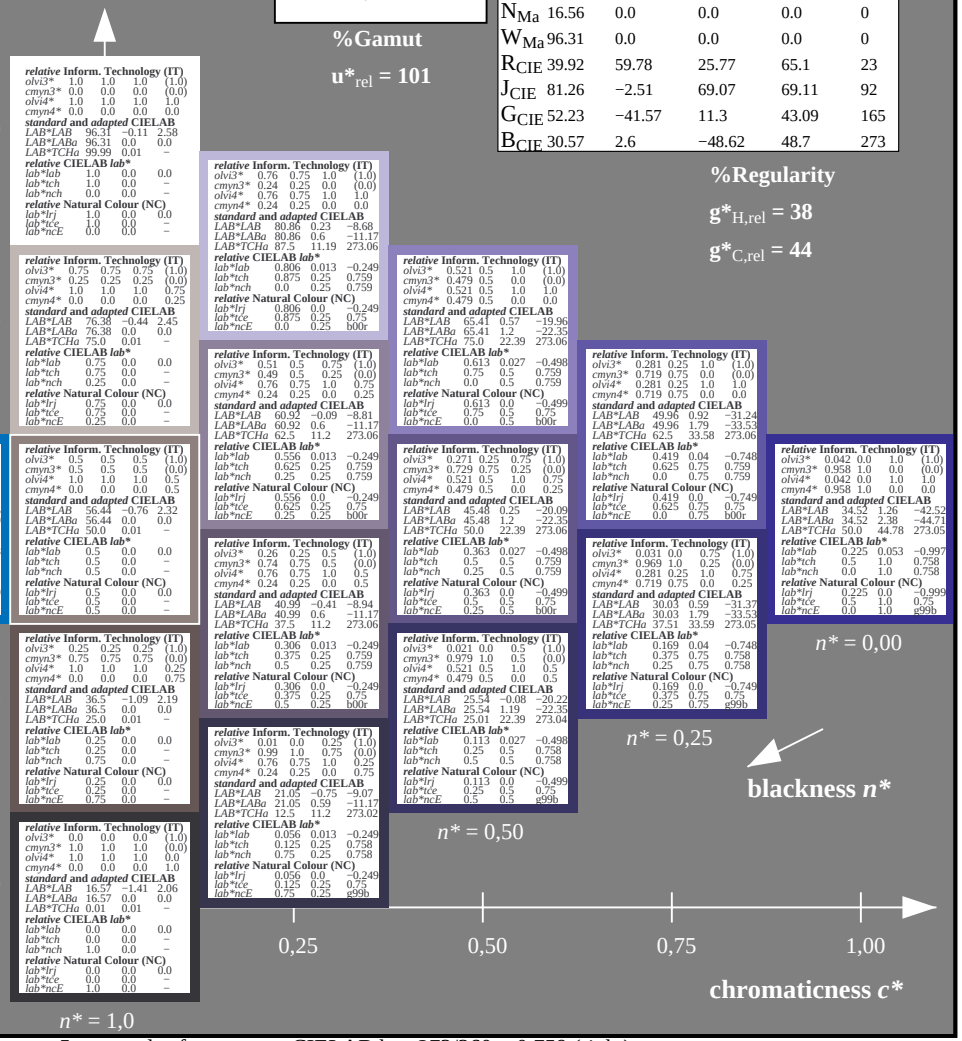
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

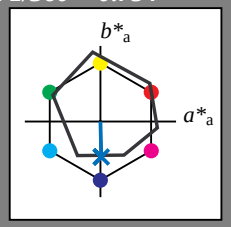


5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

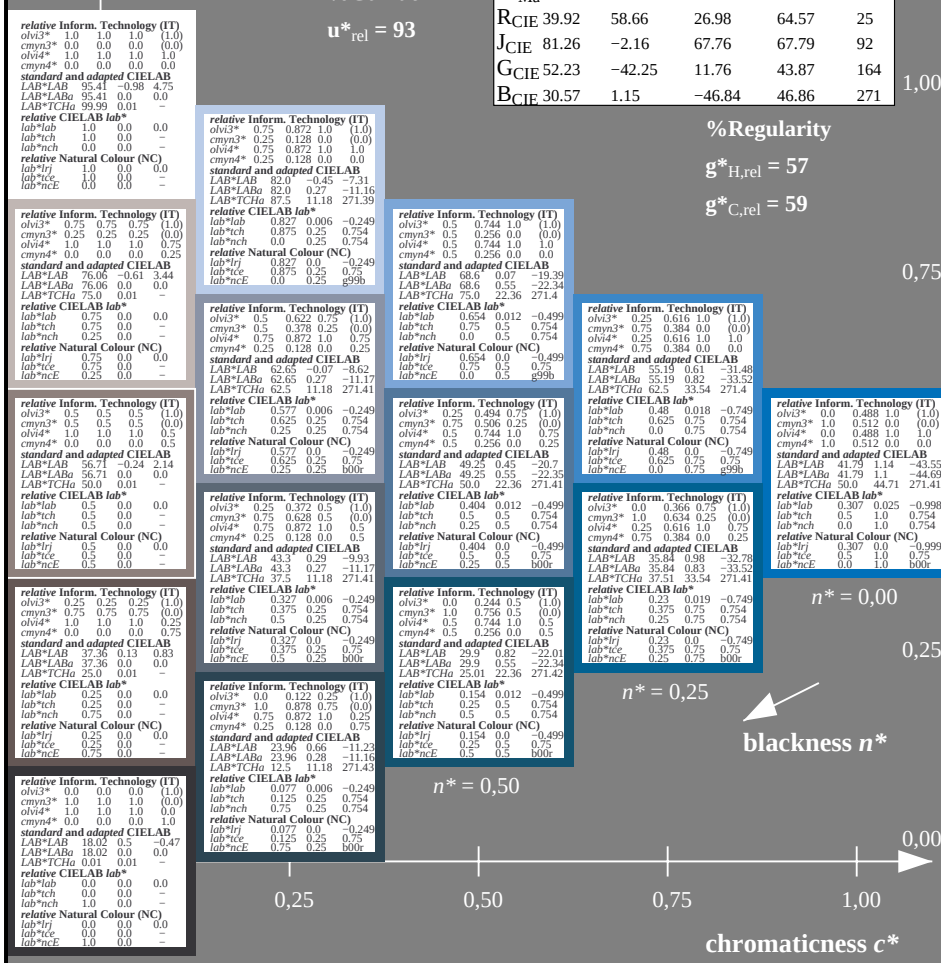
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

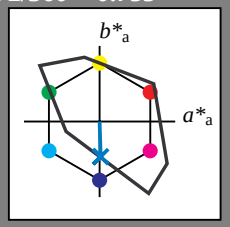


OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

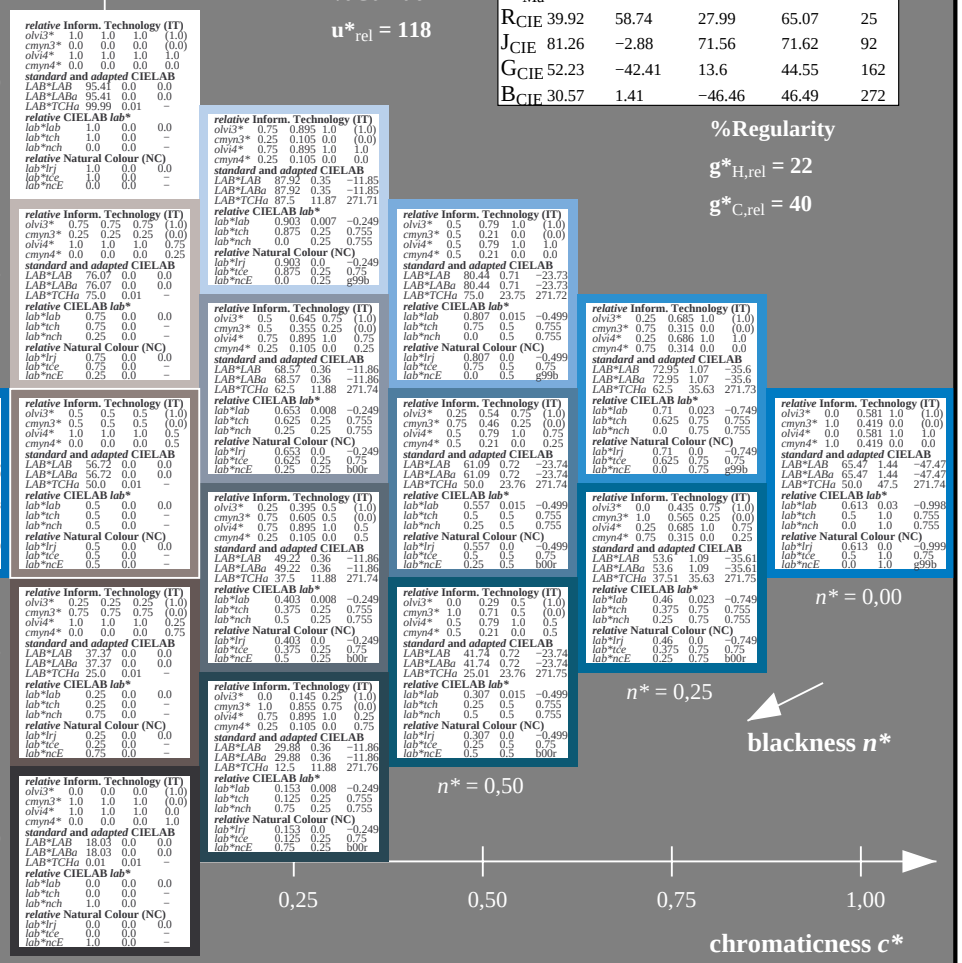
%Gamut

u^*_{rel} = 118

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



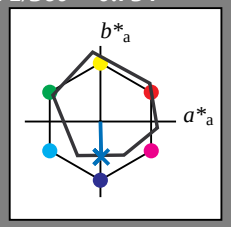
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

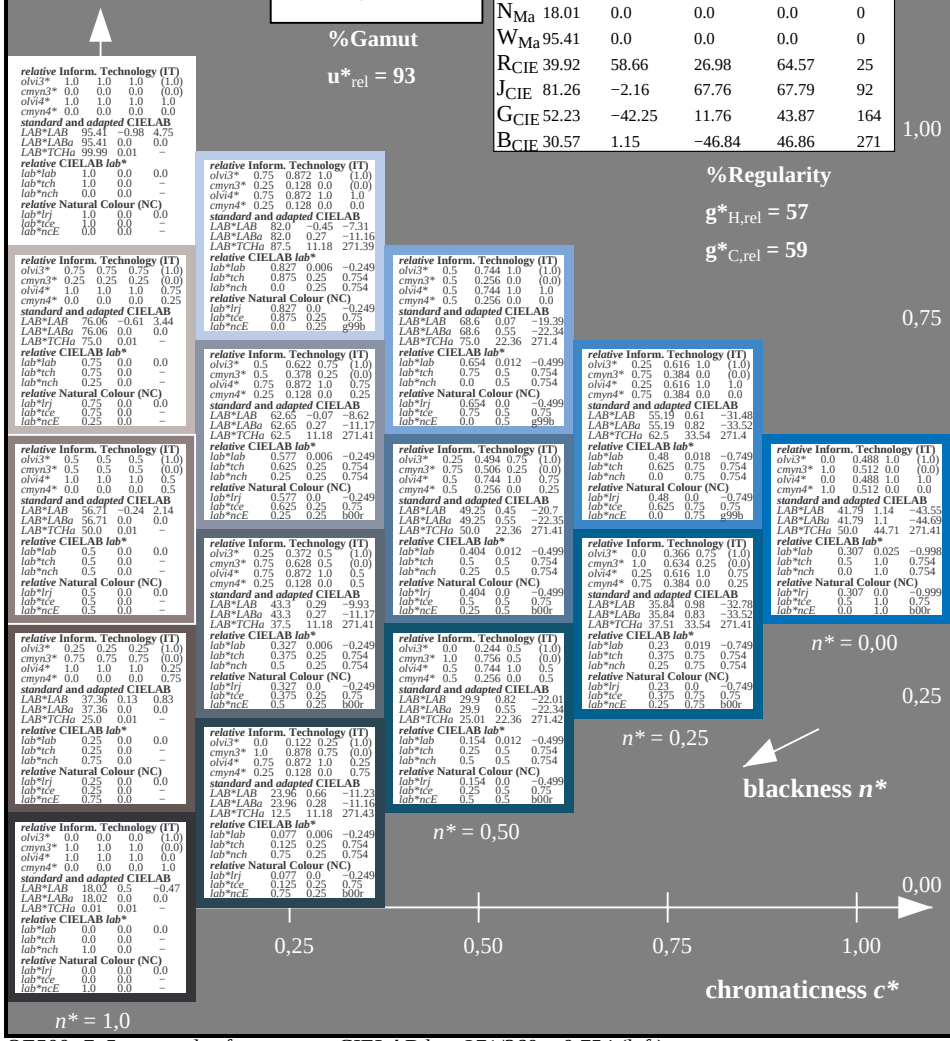
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

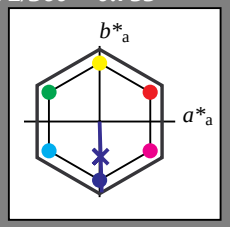


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

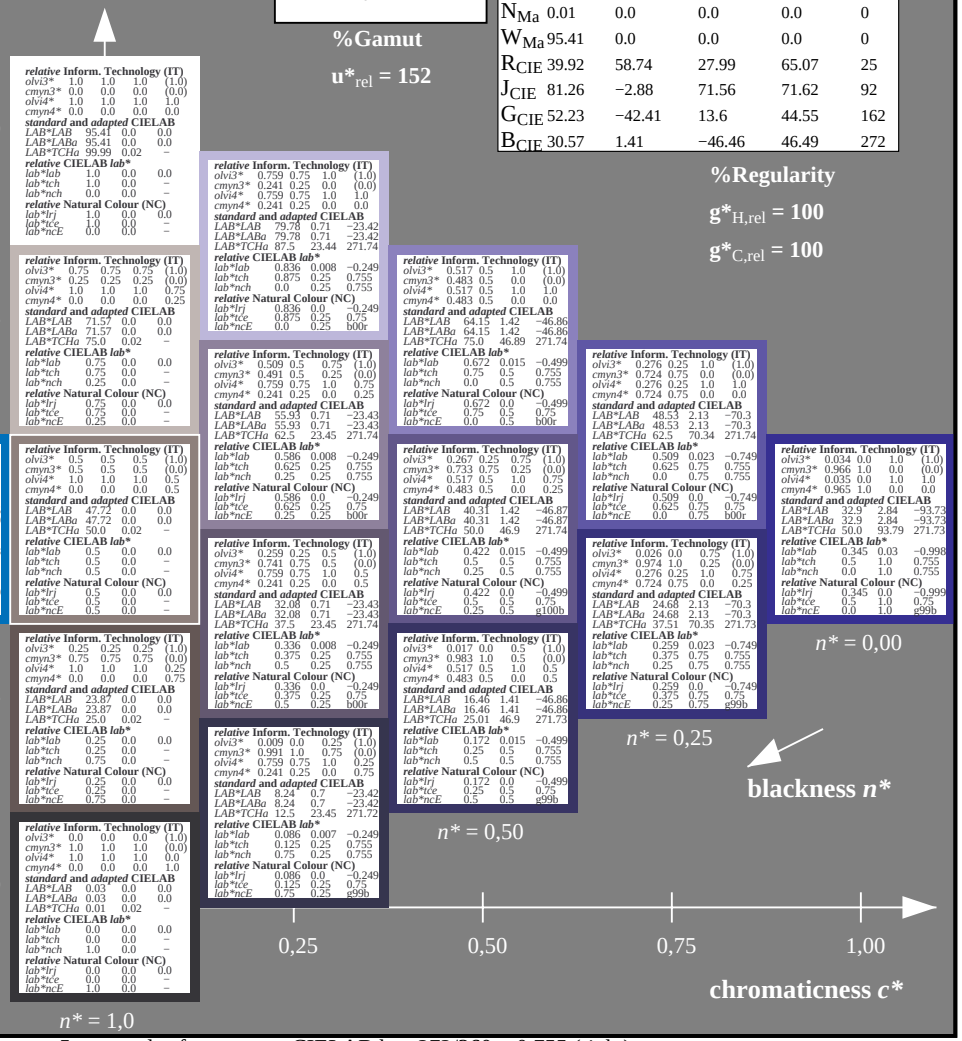
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



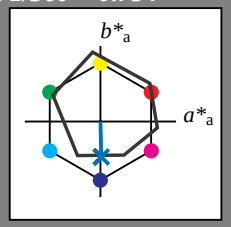
OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

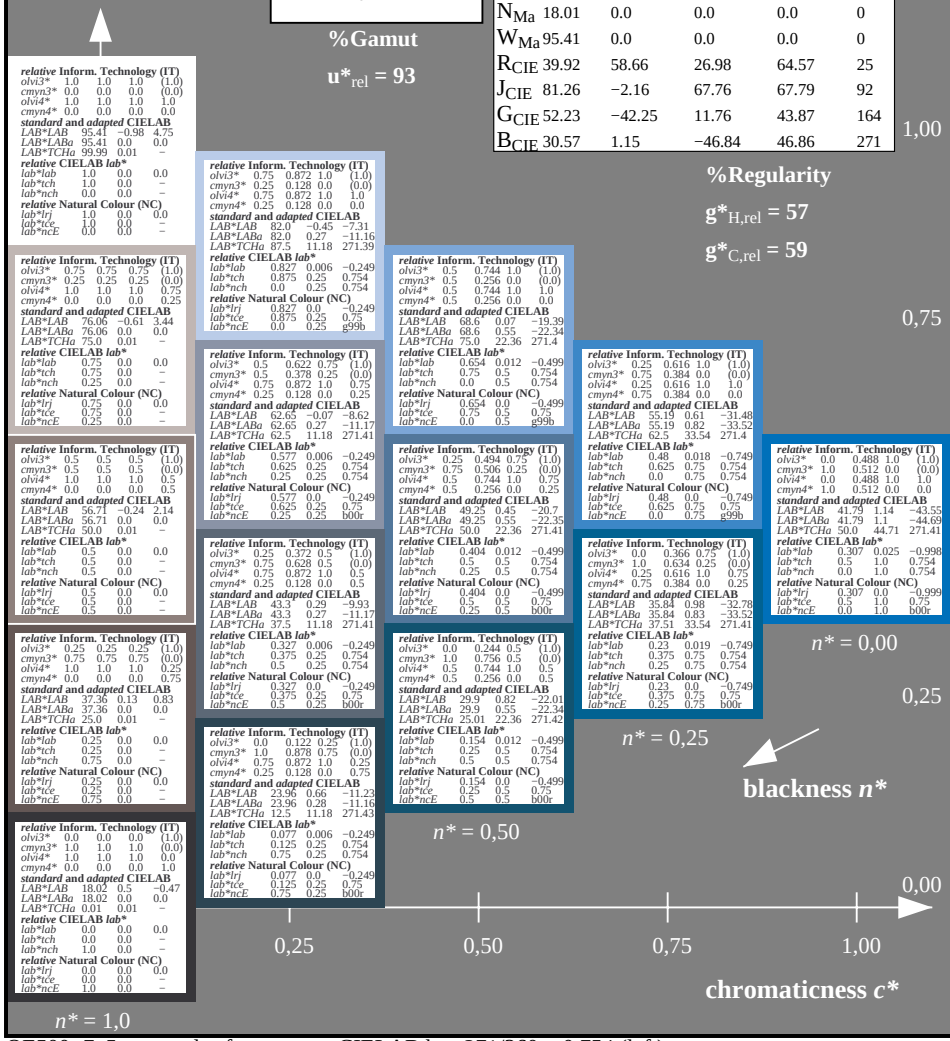
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

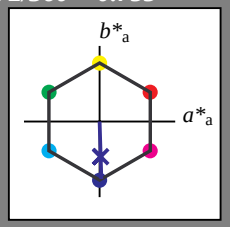
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

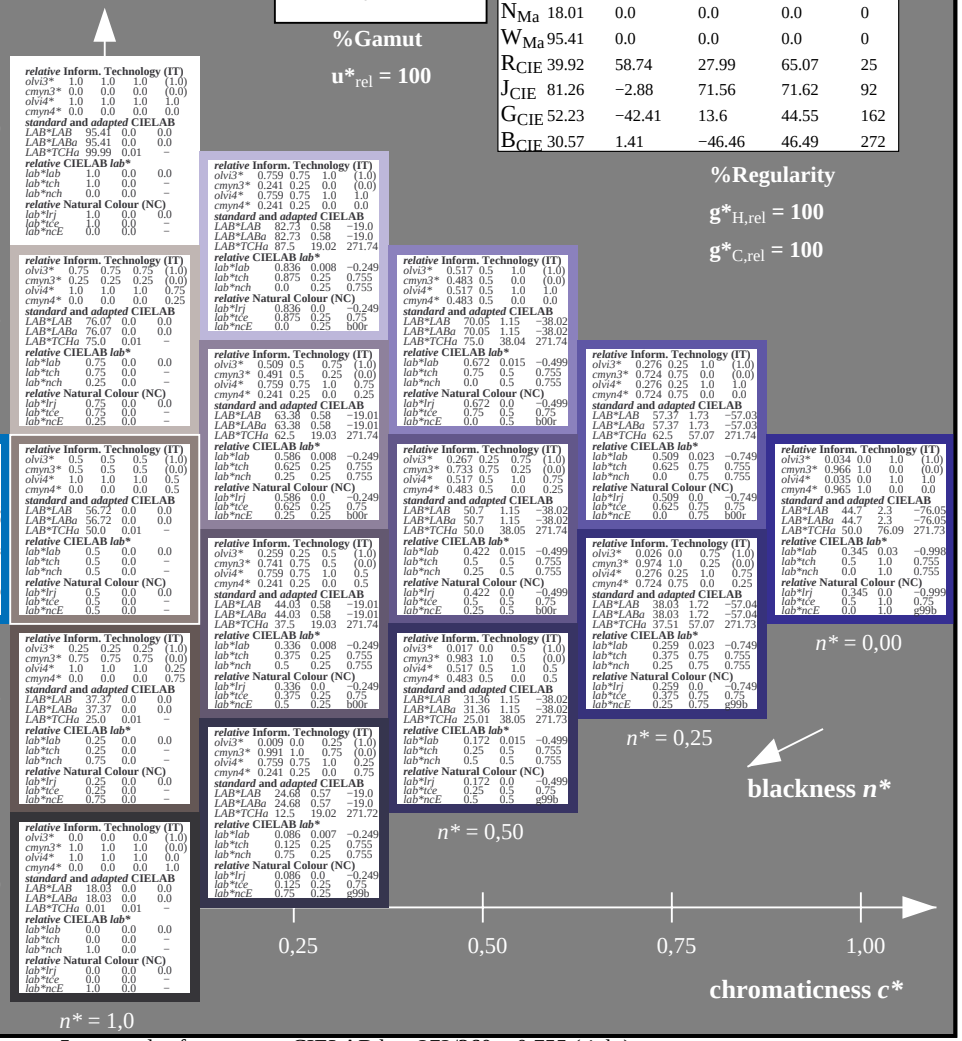
%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

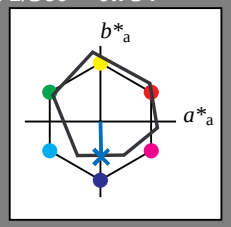
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 271/360 = 0.754*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

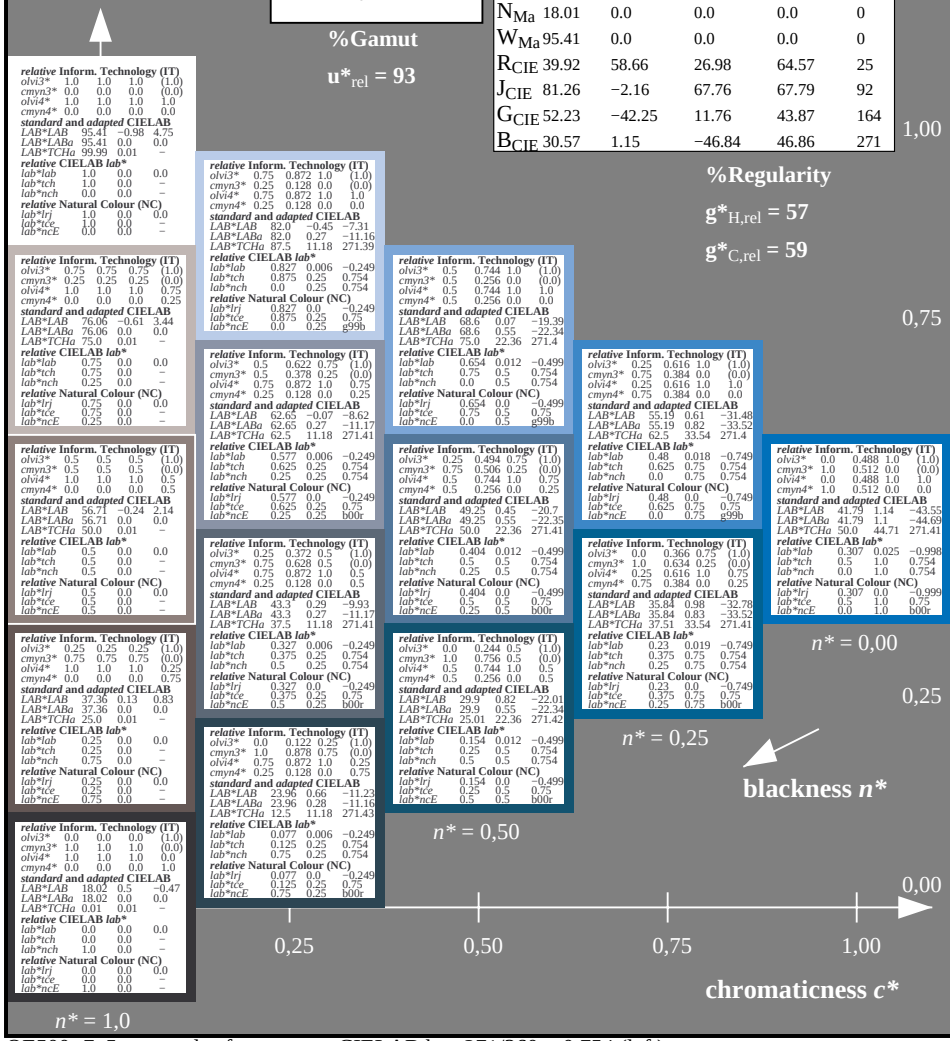
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



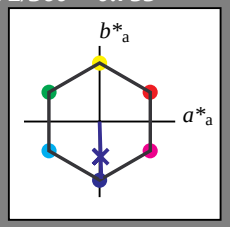
OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue *h* = lab*h = 272/360 = 0.755*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

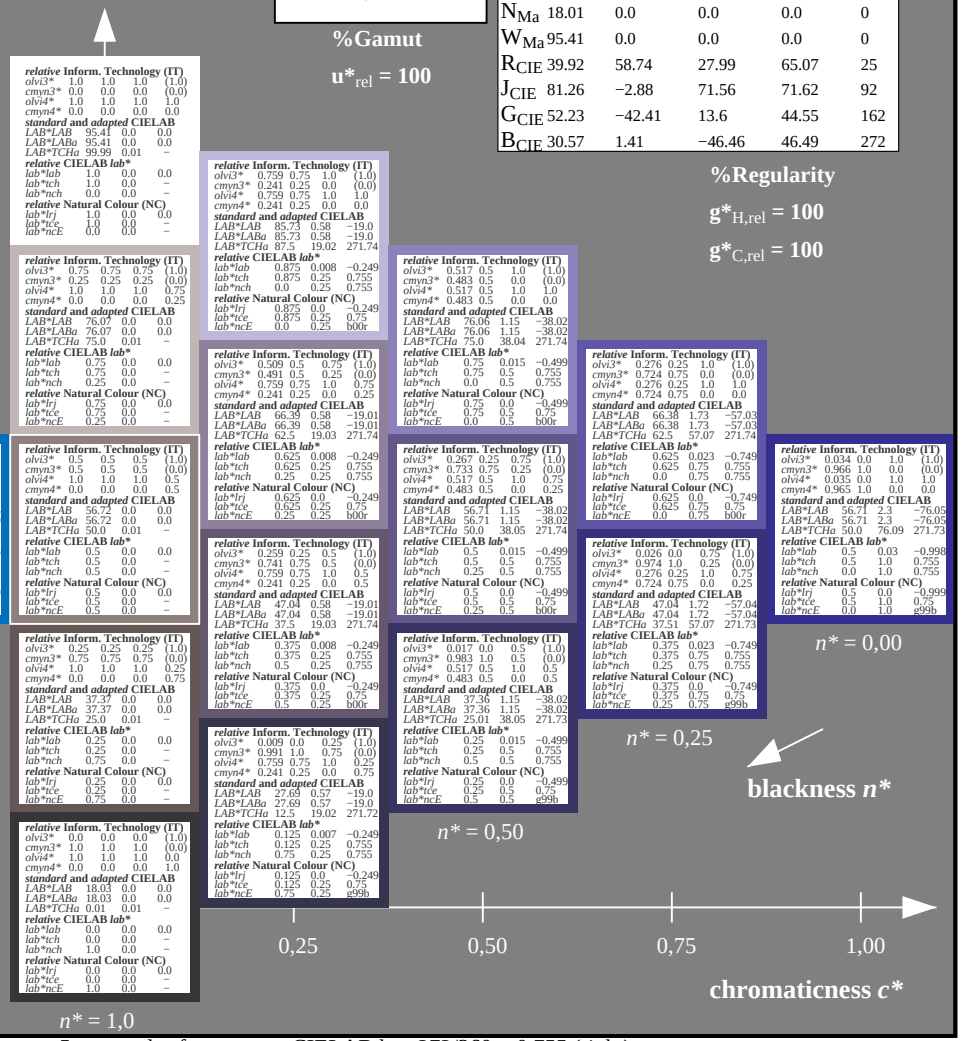
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

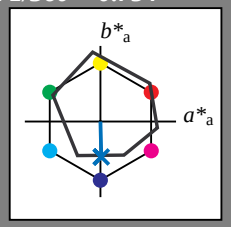


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 93

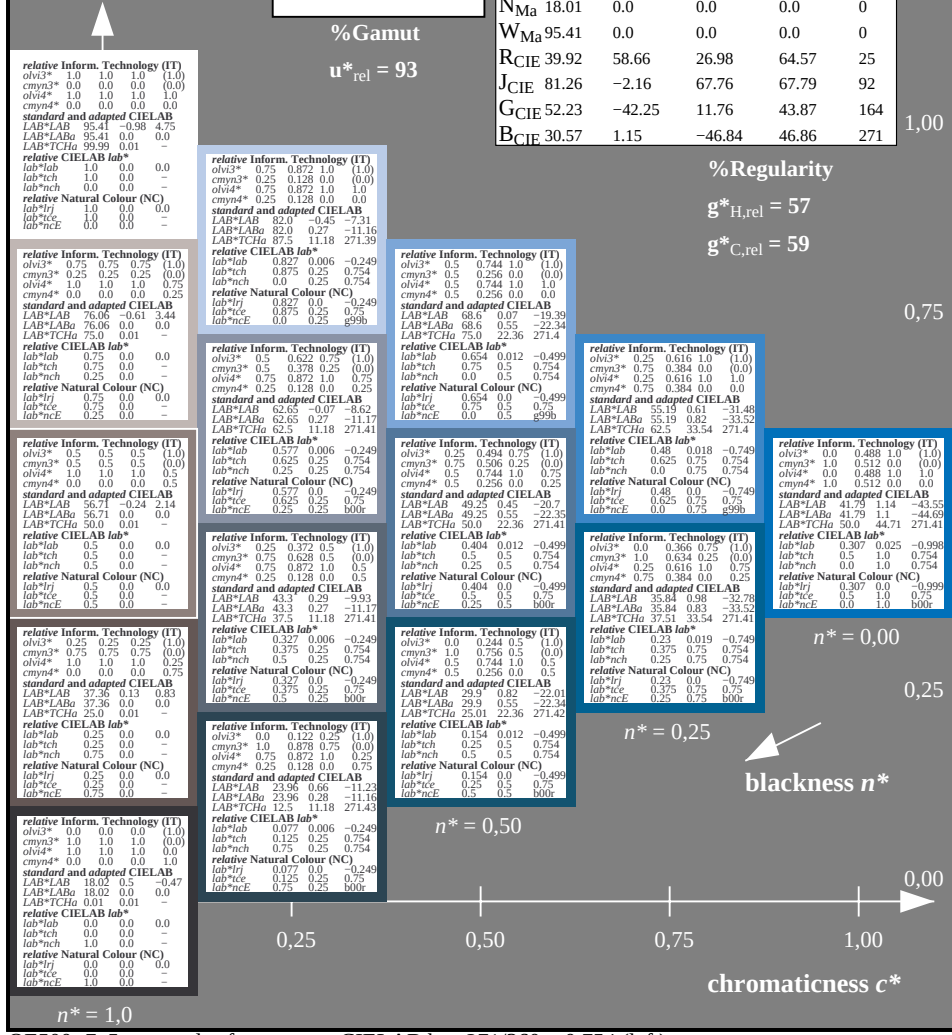
%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

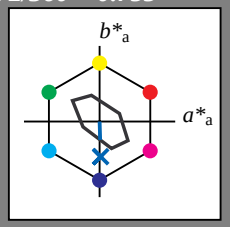


OE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 16

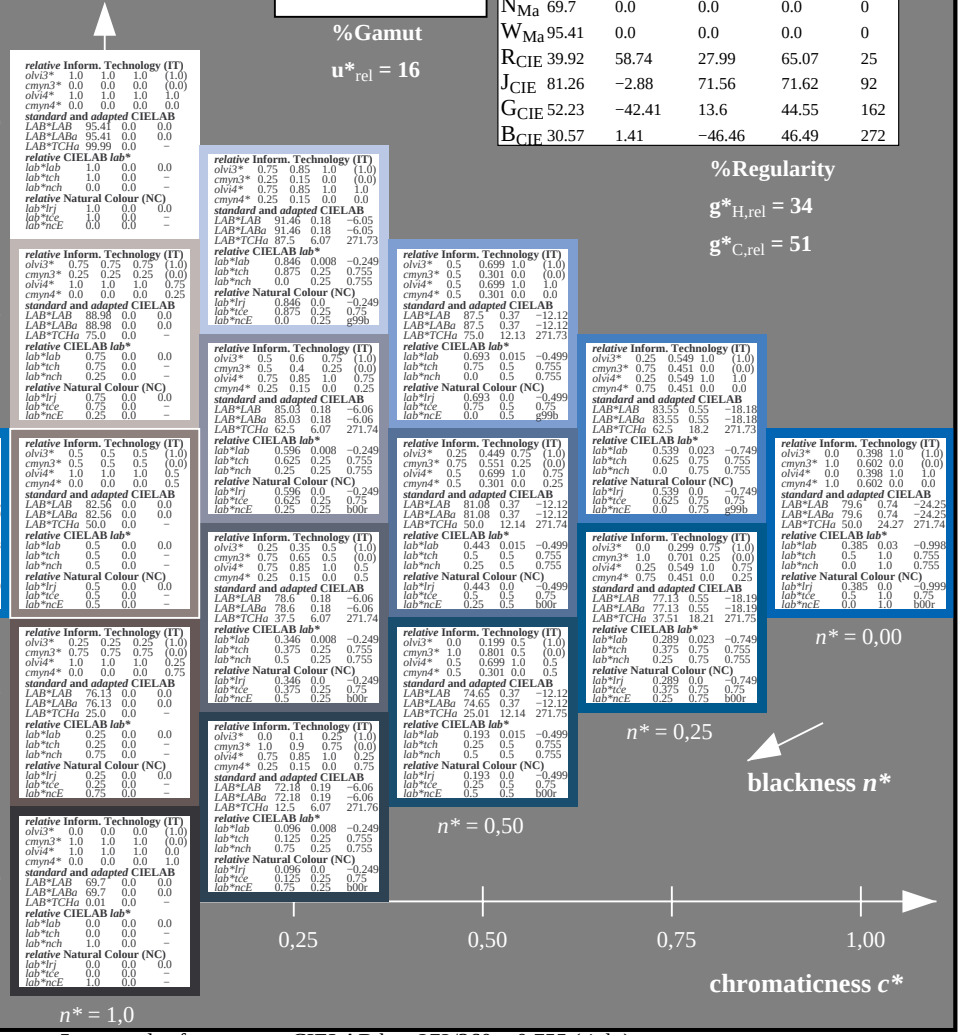
%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

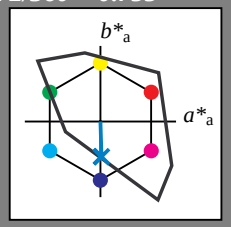
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

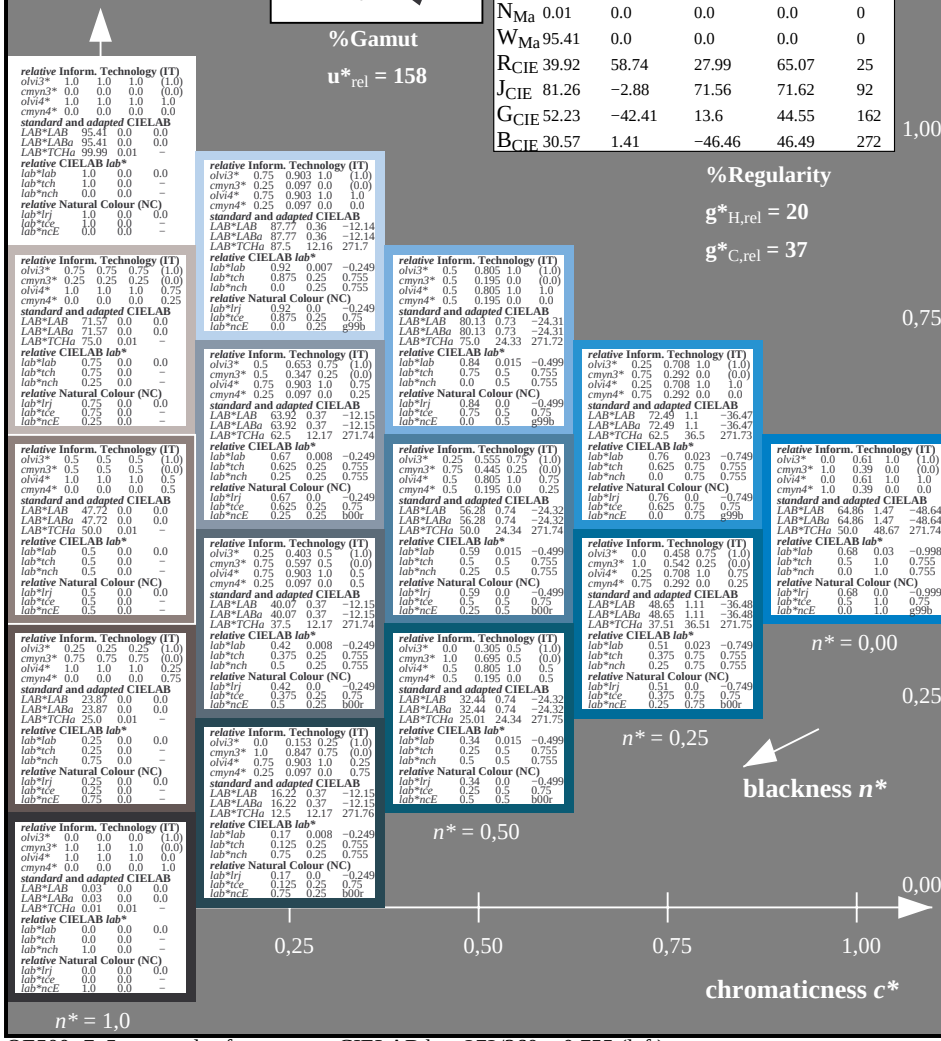
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

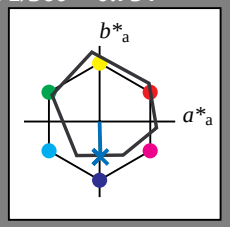
for hue $h^* = lab^*h = 271/360 = 0.754$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

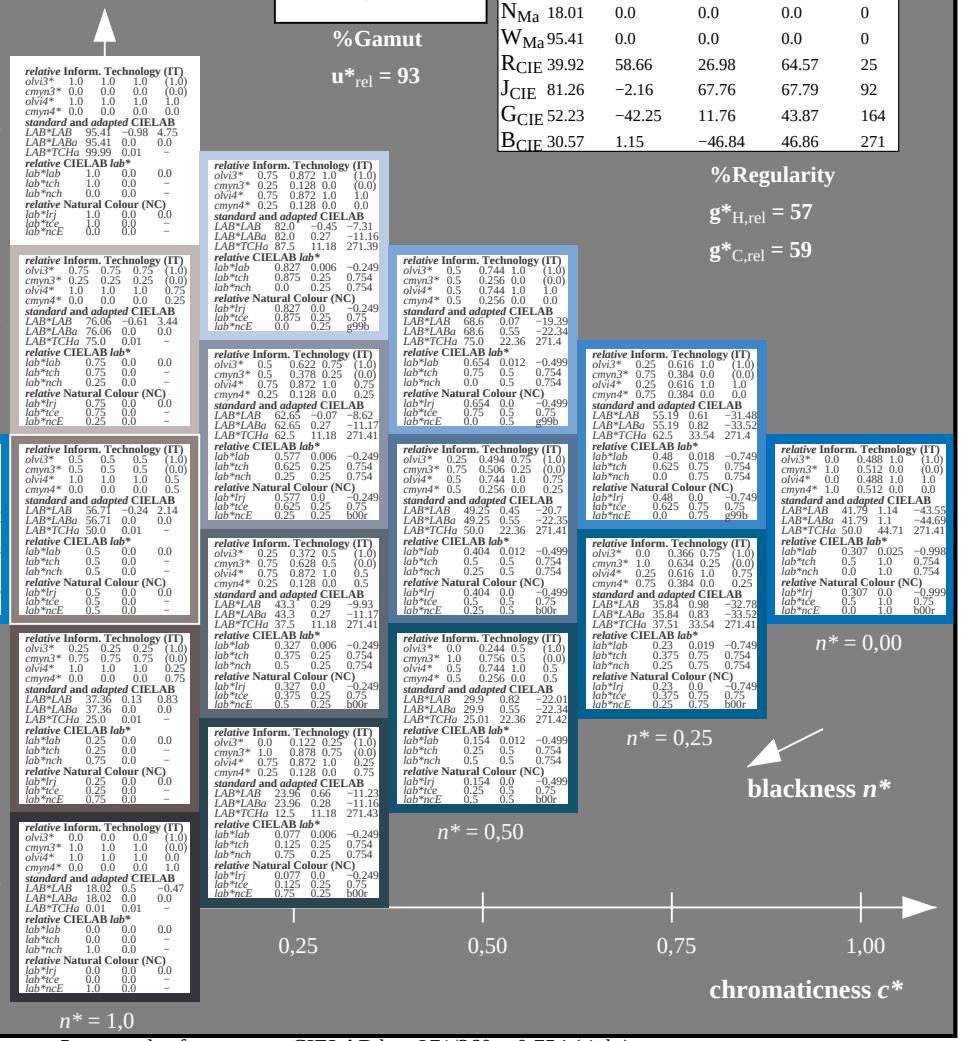
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

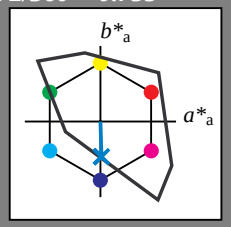


5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 49 272
olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

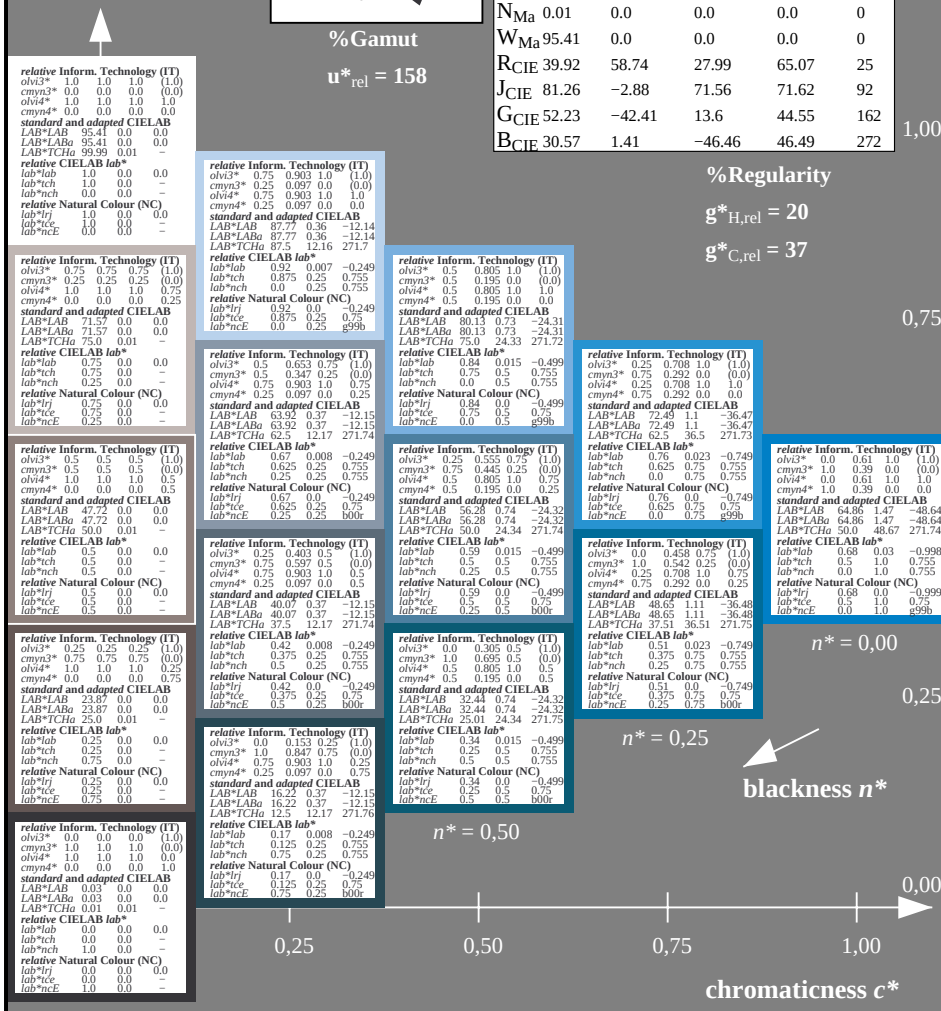
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37

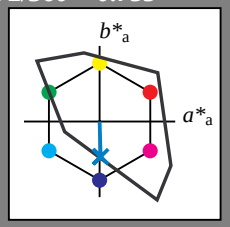


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 49 272
olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

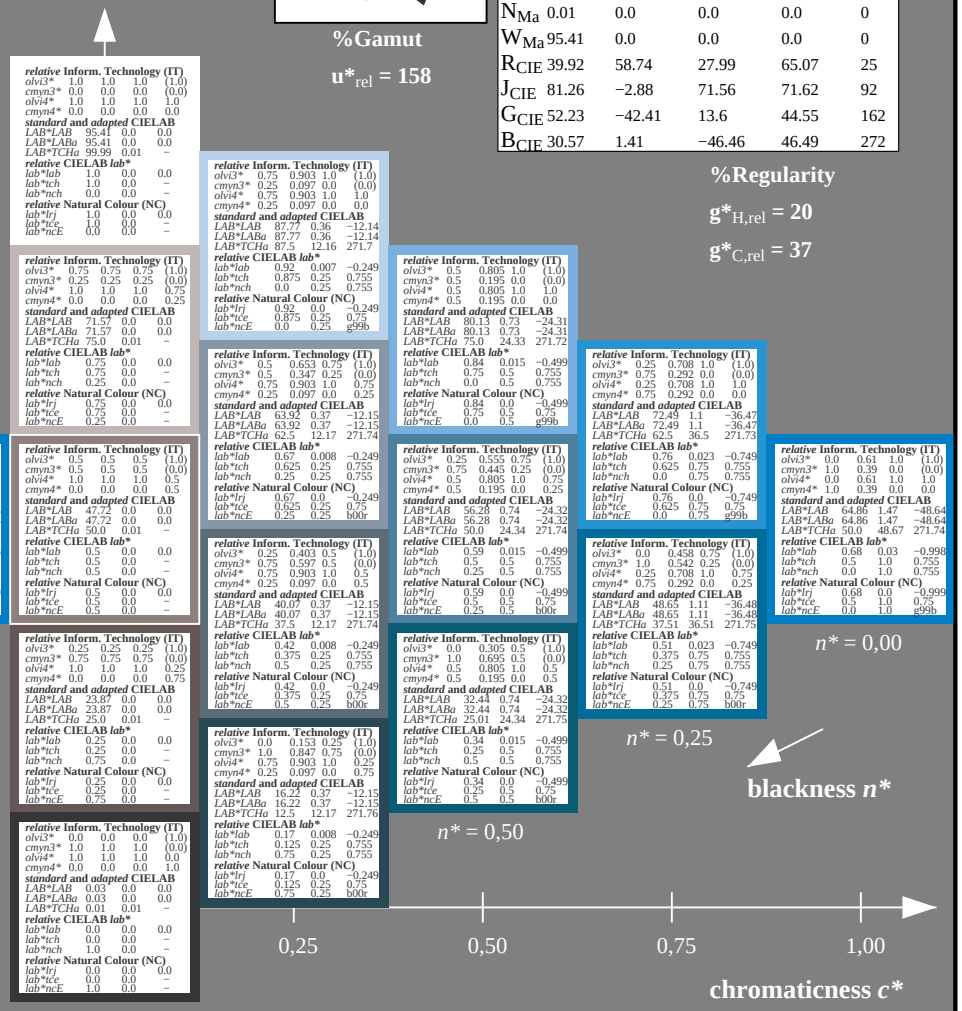
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

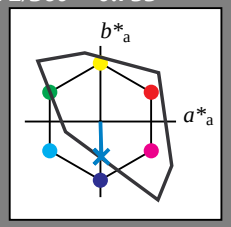
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

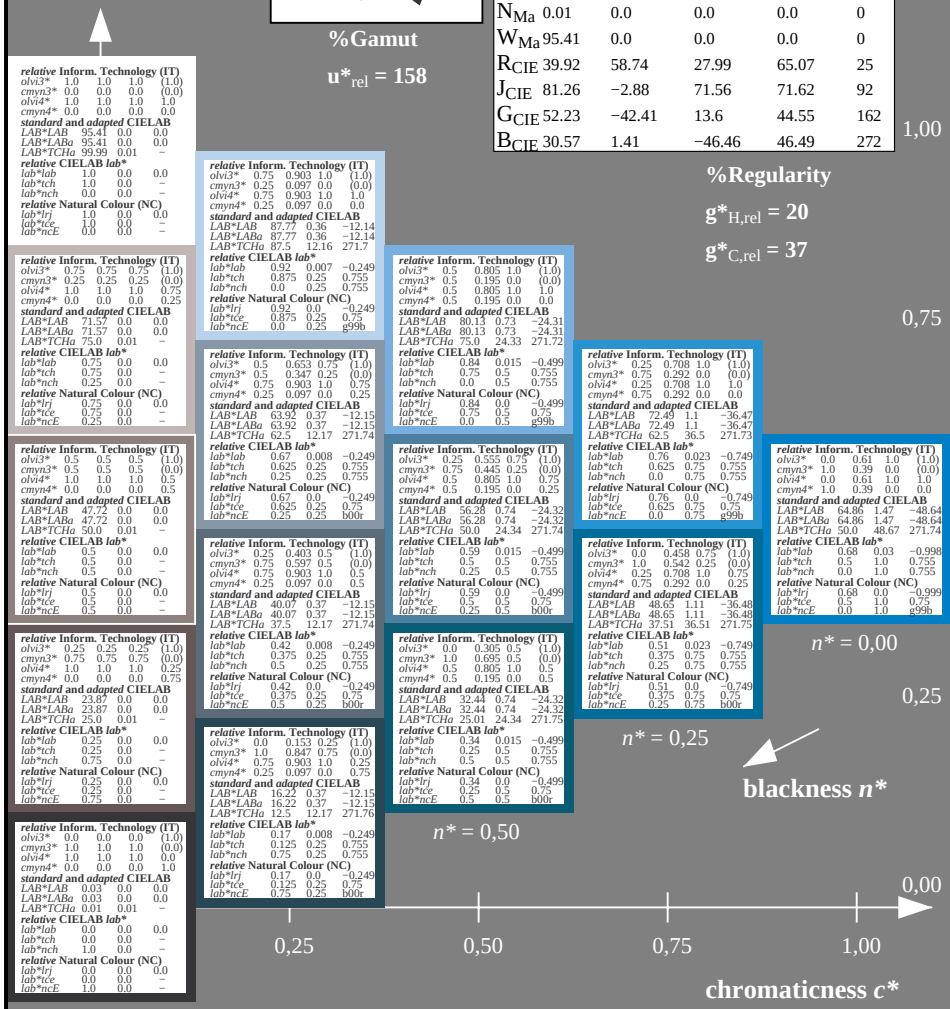
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

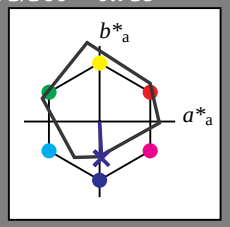
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

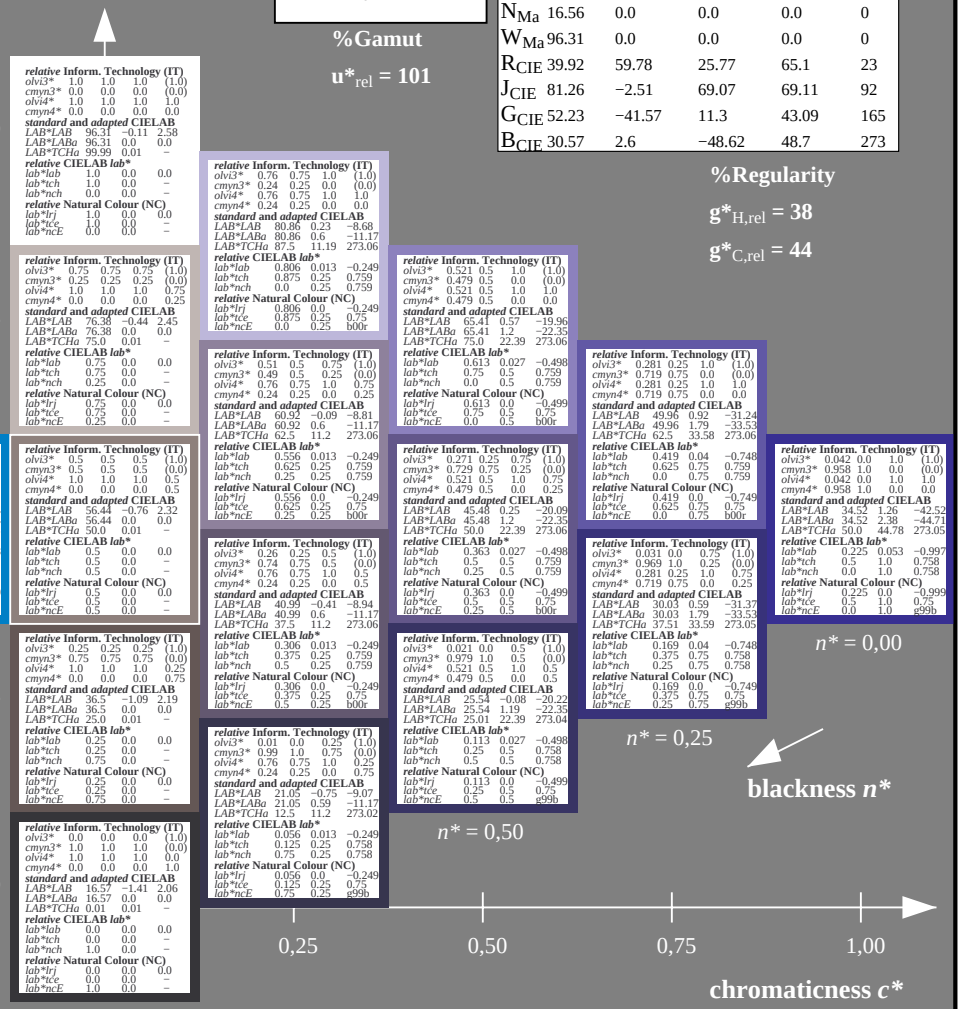
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

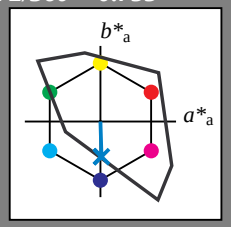
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

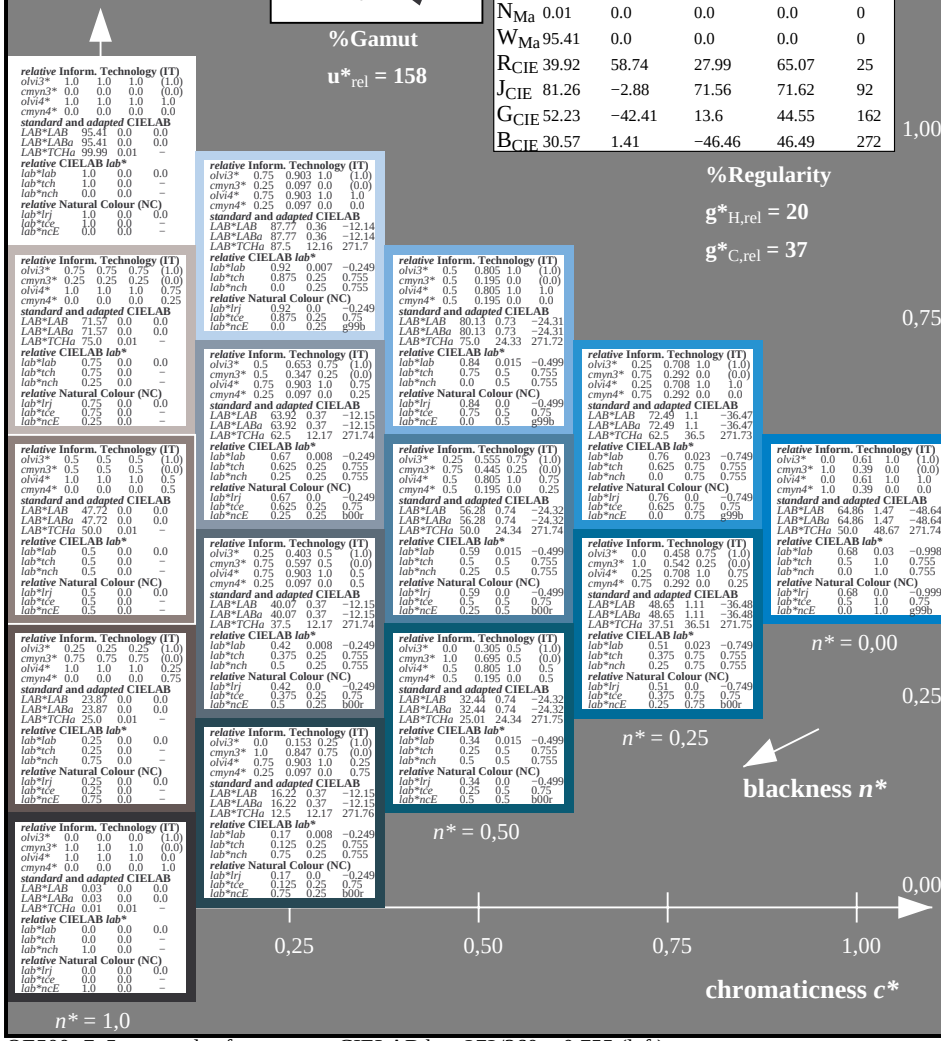
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

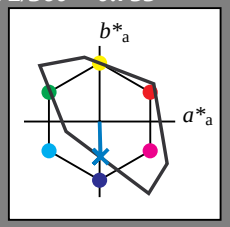
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

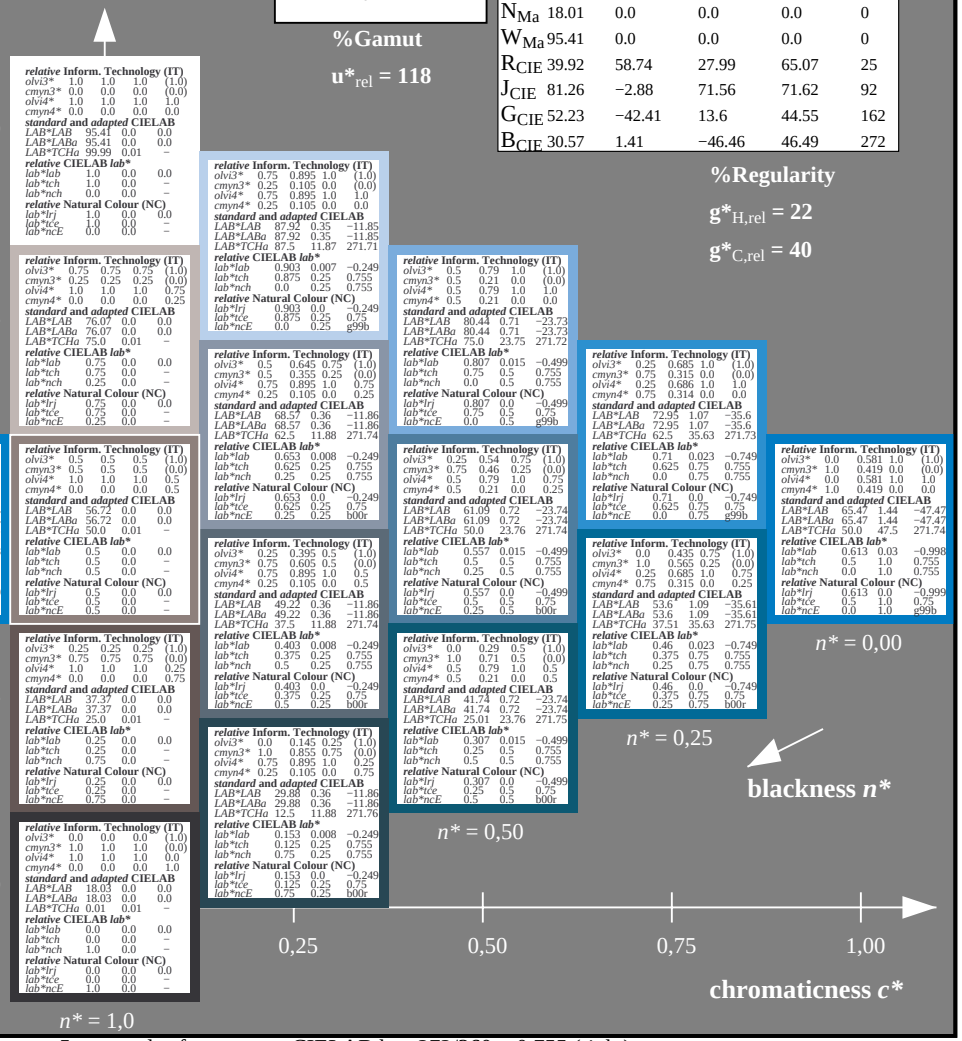
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

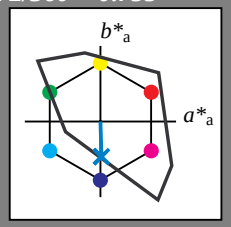
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 158

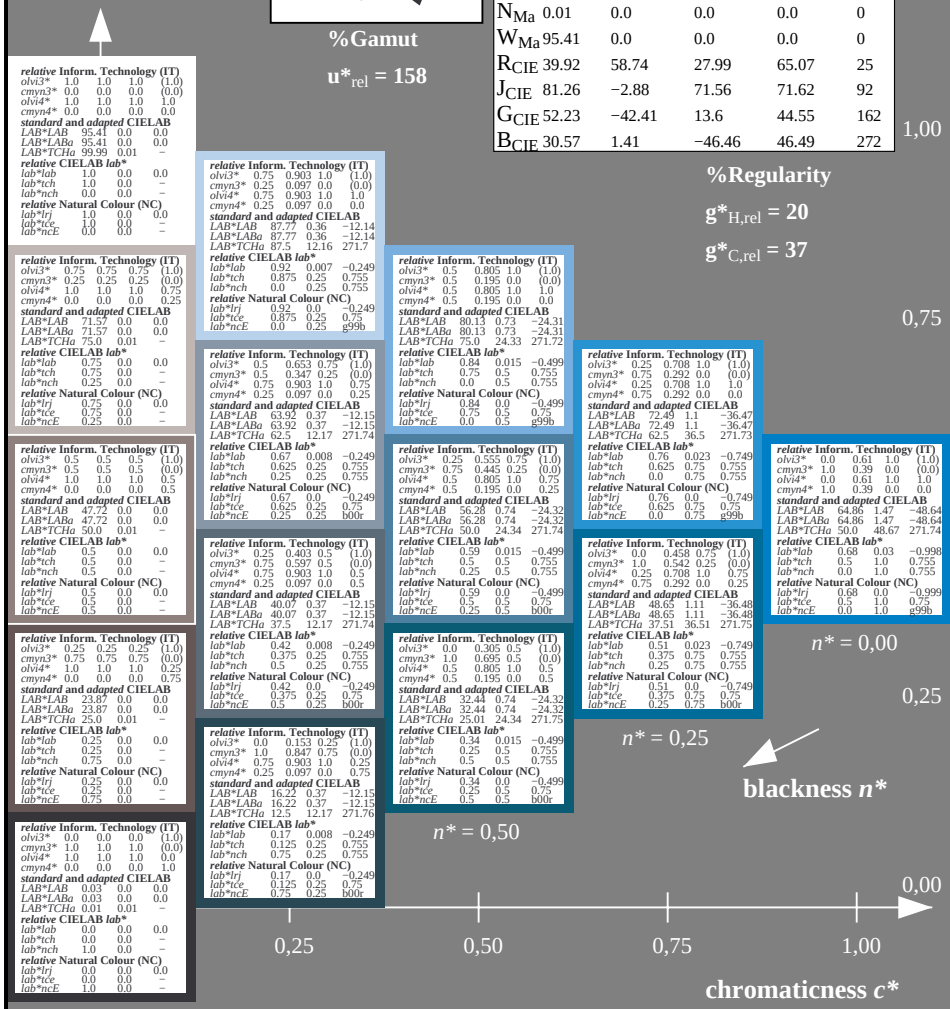
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



Output: Colorimetric Natural Luminous System NLS00

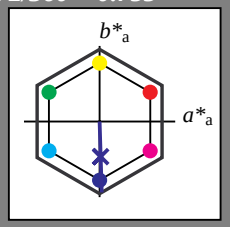
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 152

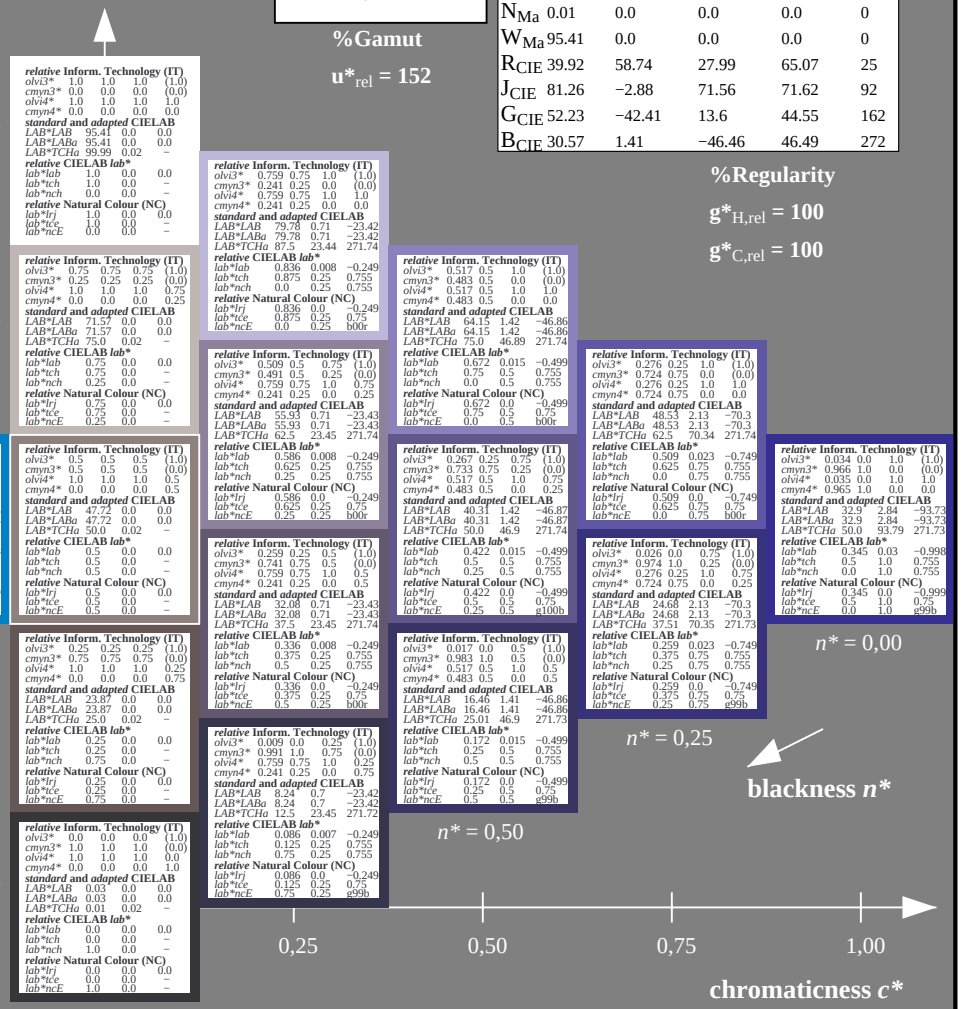
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

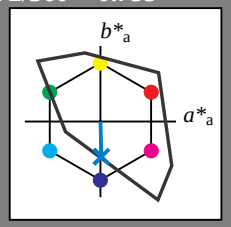
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

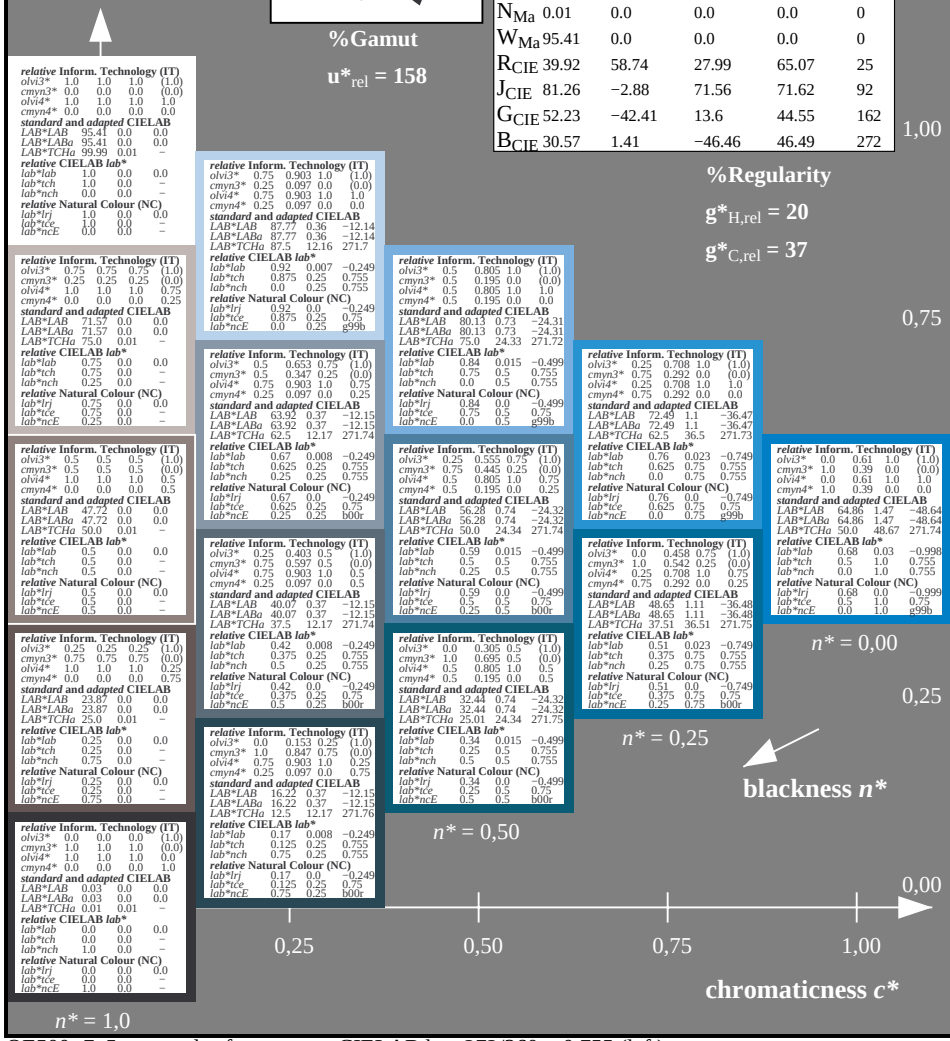
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

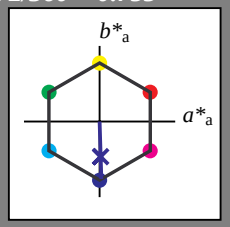
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

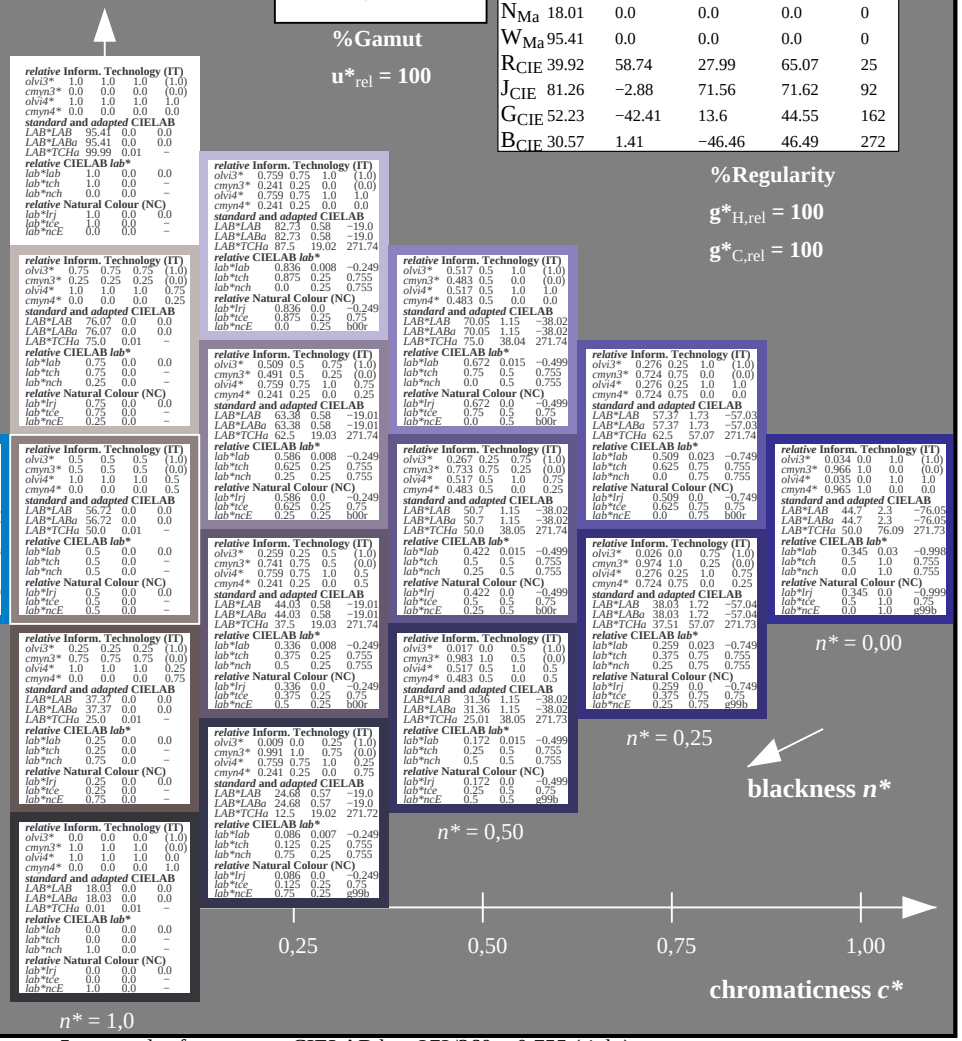
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

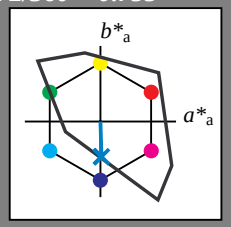
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 158

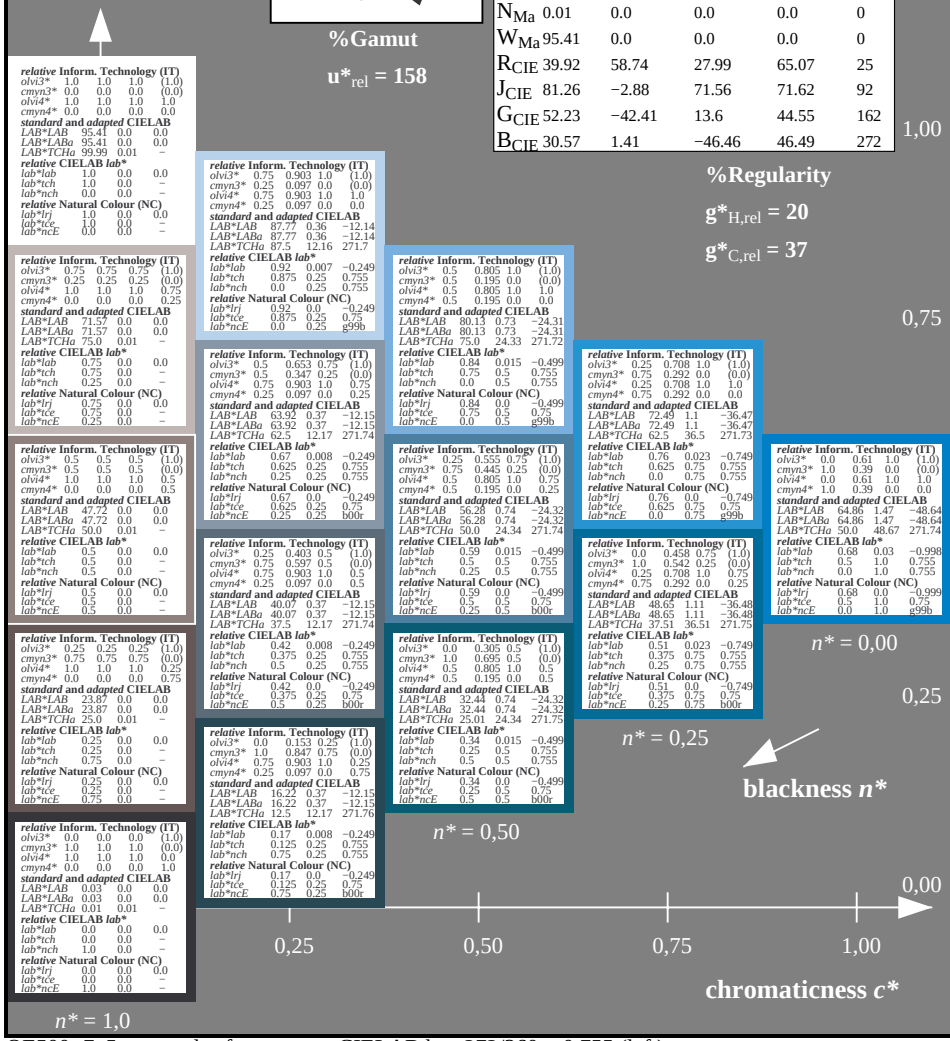
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18

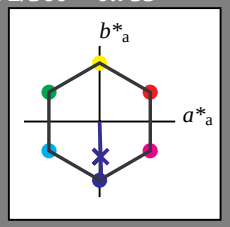
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 100

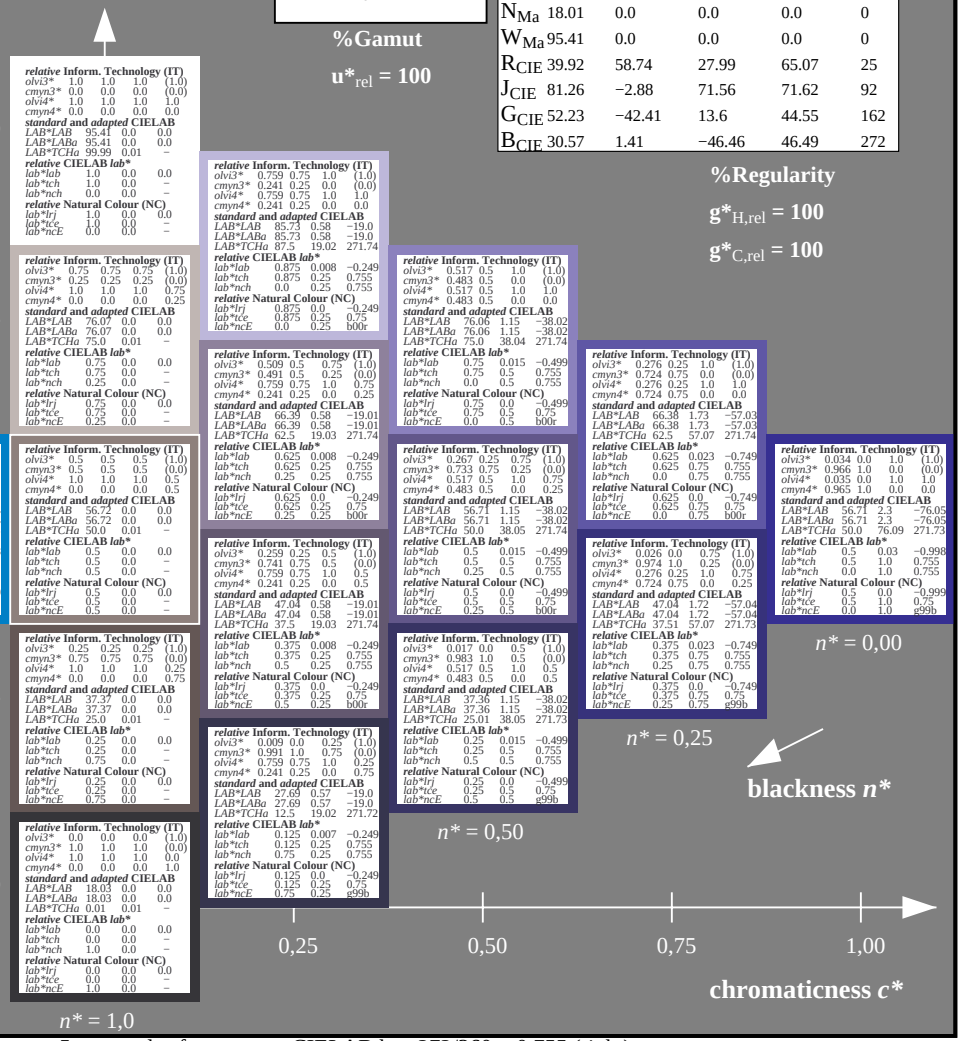
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS00

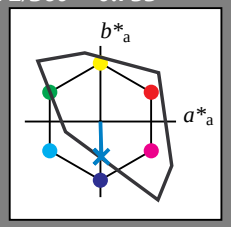
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

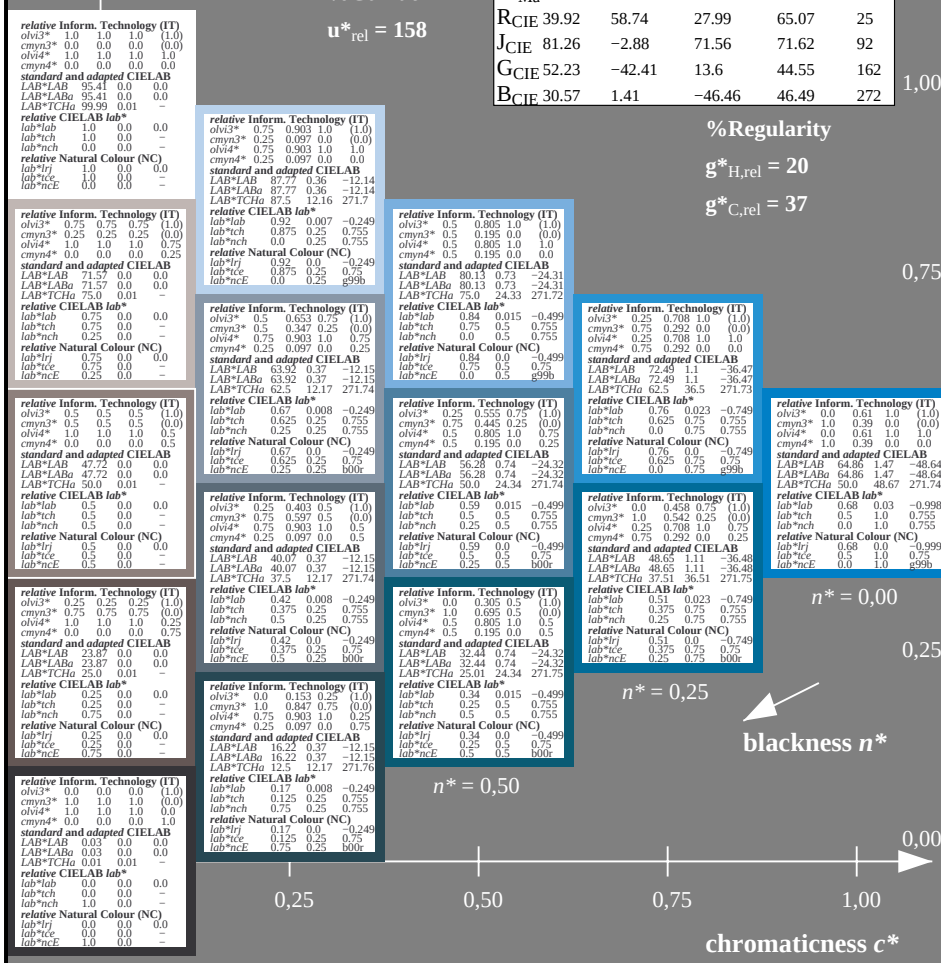
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70

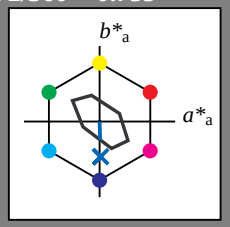
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

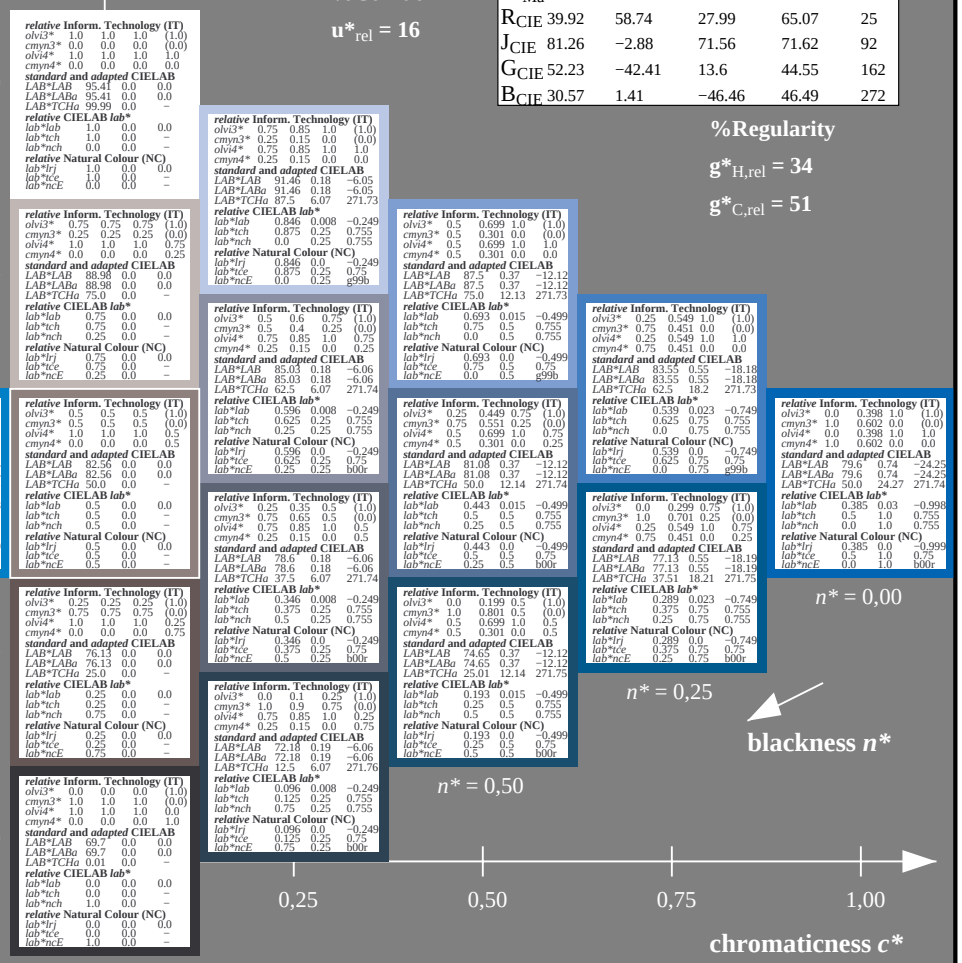
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

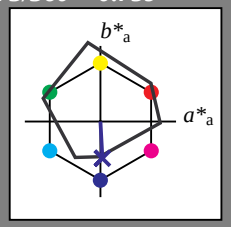


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

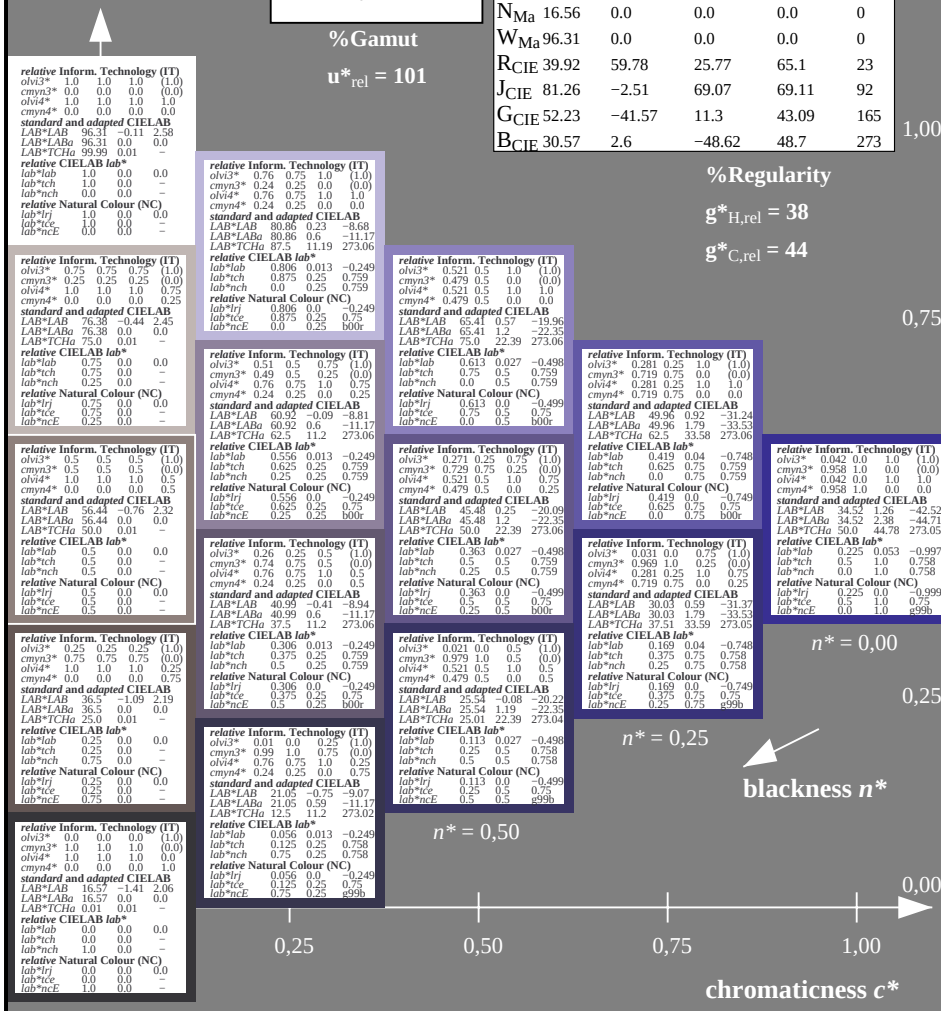
%Gamut

u^*_{rel} = 101

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

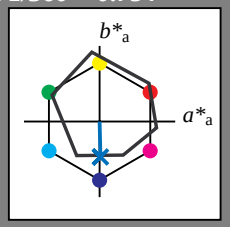


OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

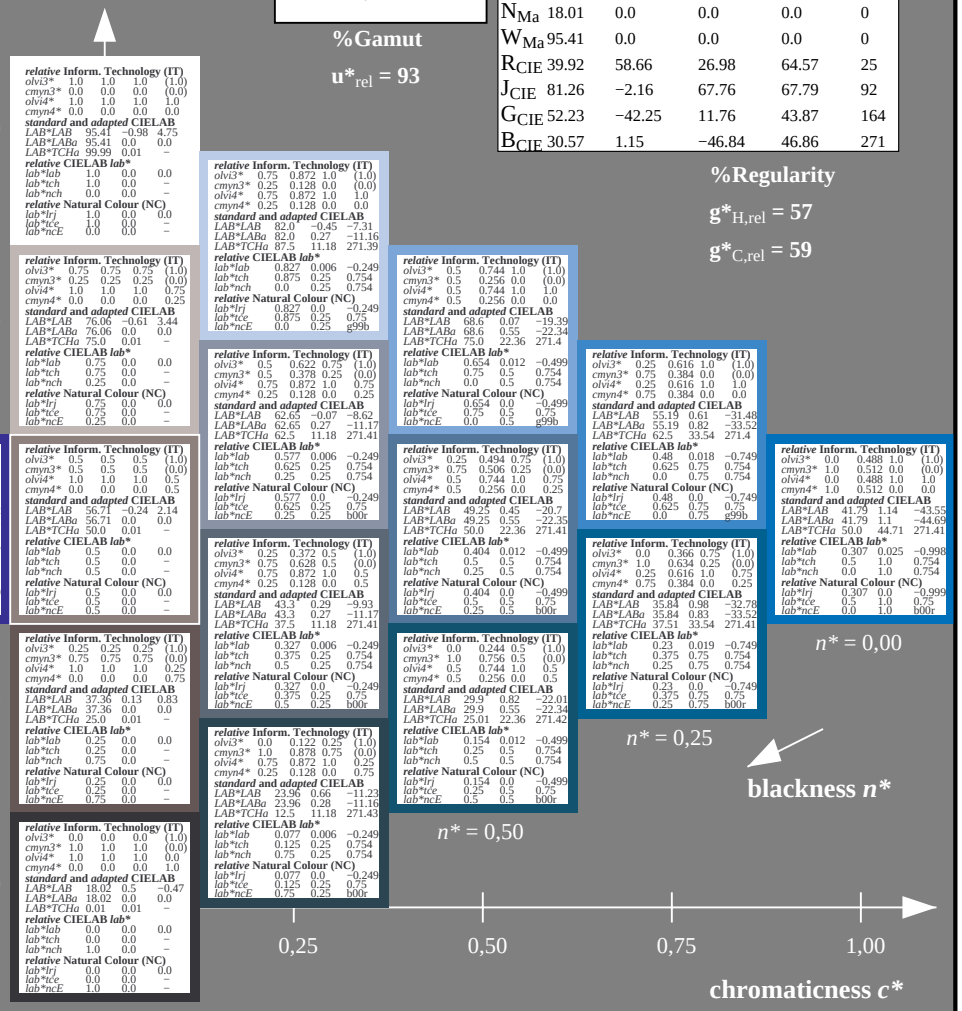
%Gamut

u^*_{rel} = 93

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



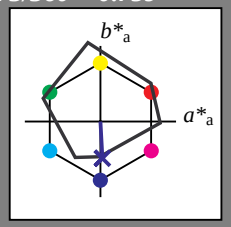
5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

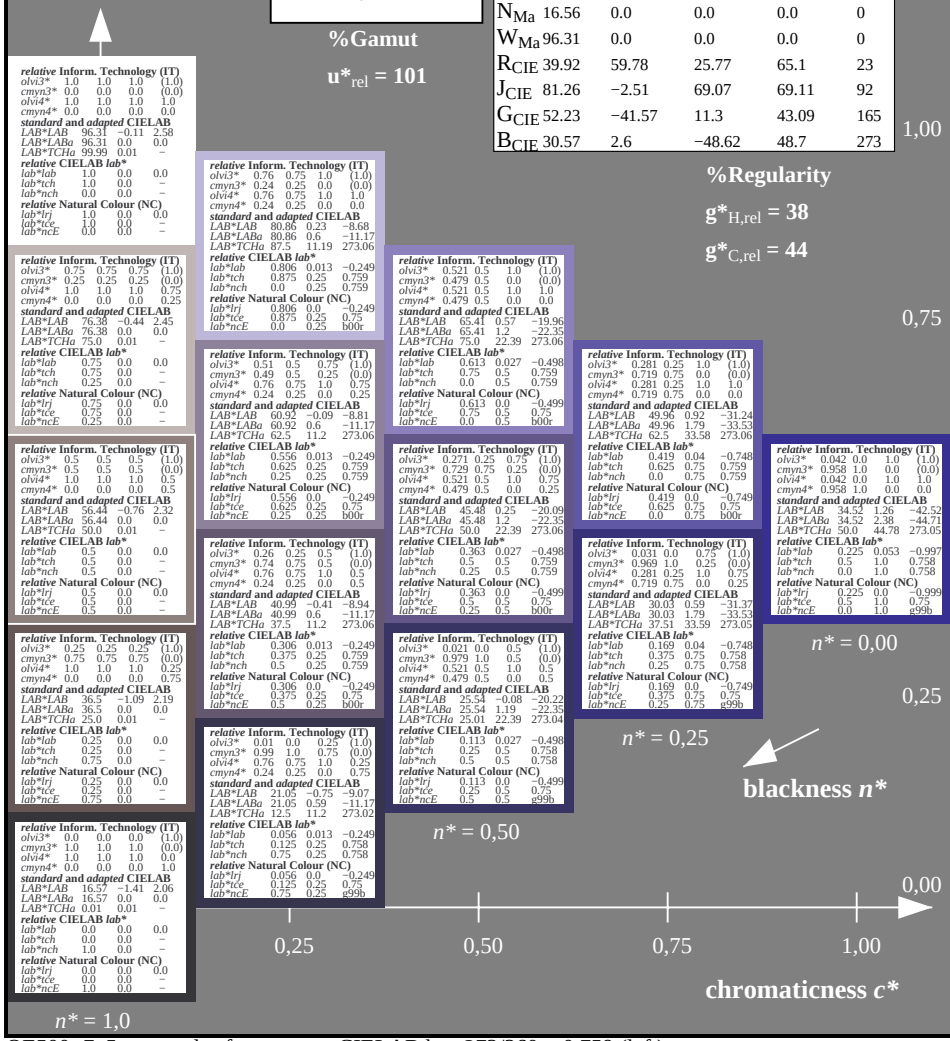
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



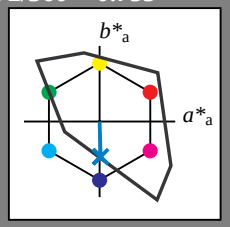
OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 65 49 272
olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

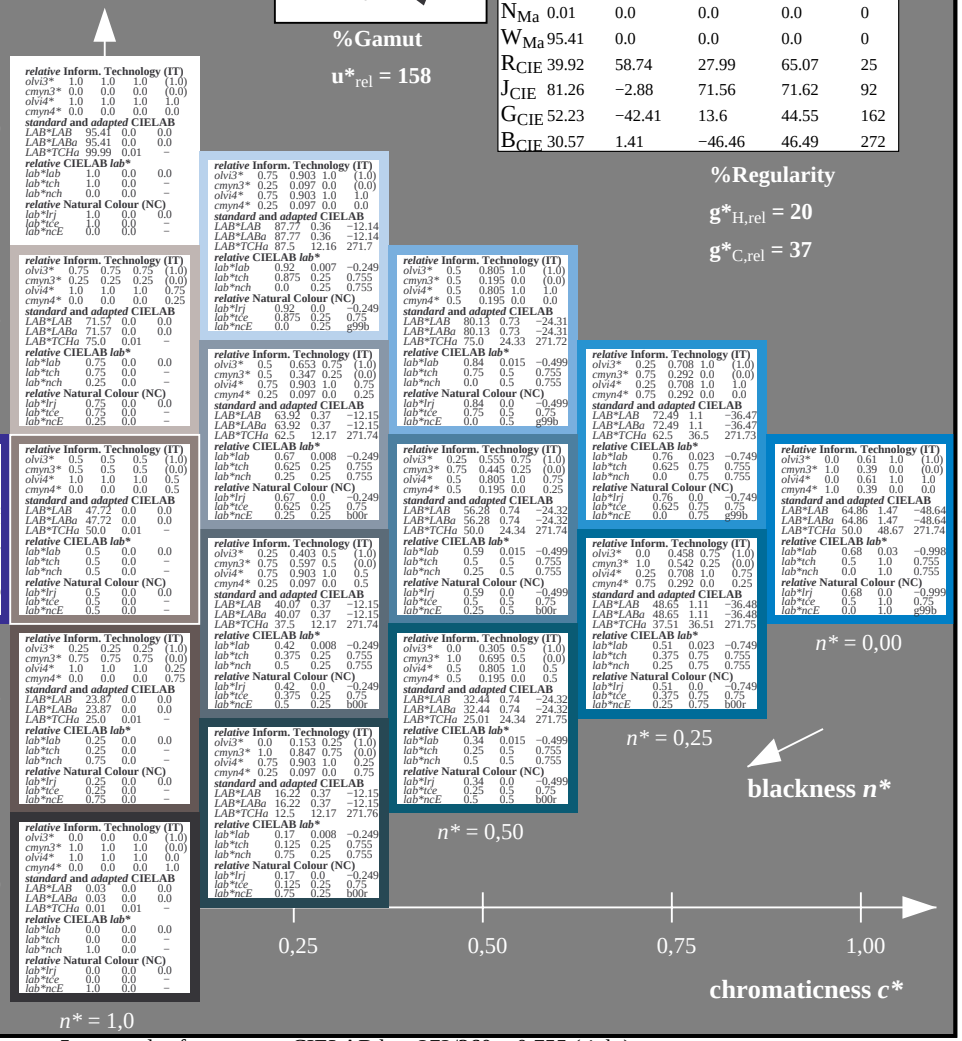
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

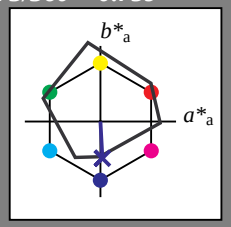


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

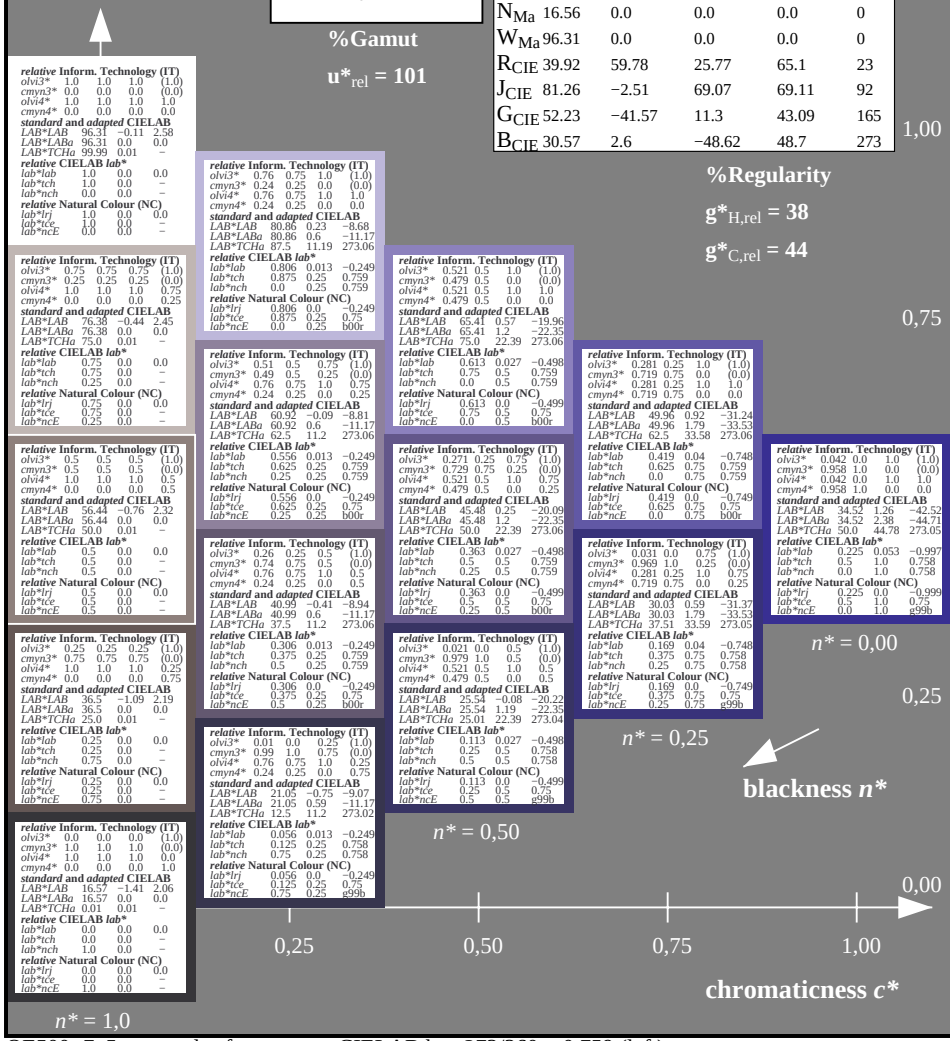
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

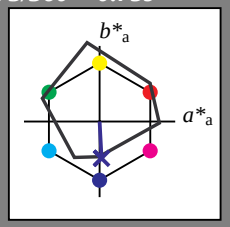


OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

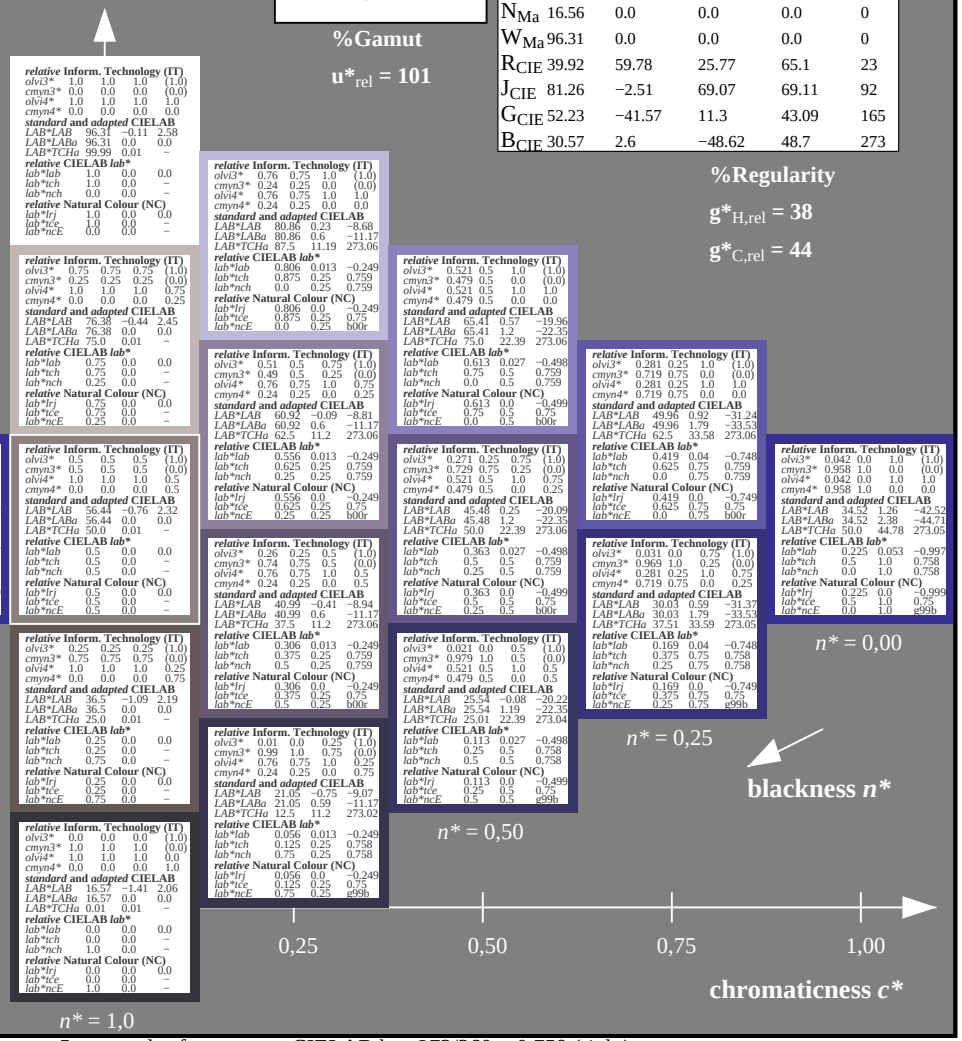
%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

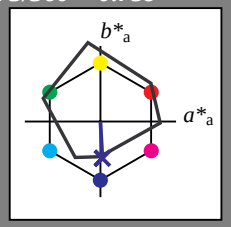


5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

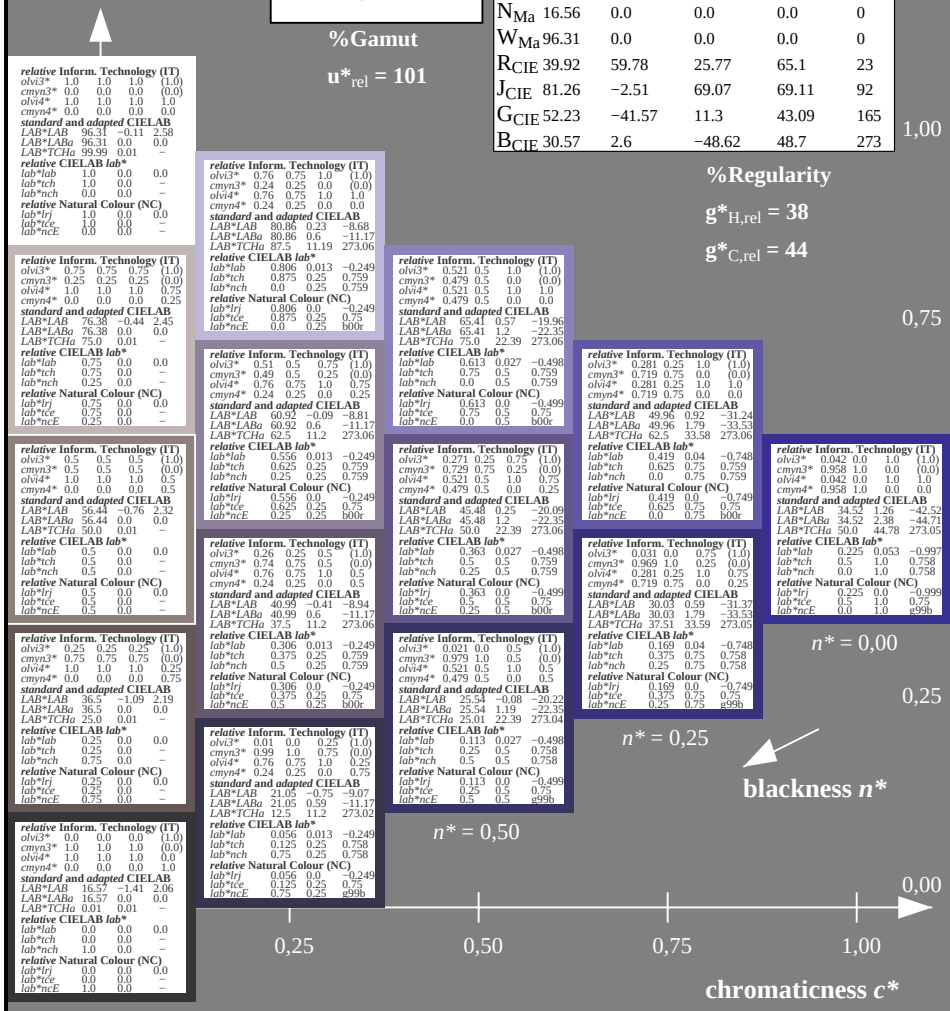
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

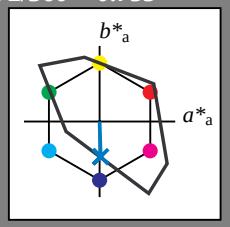


OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

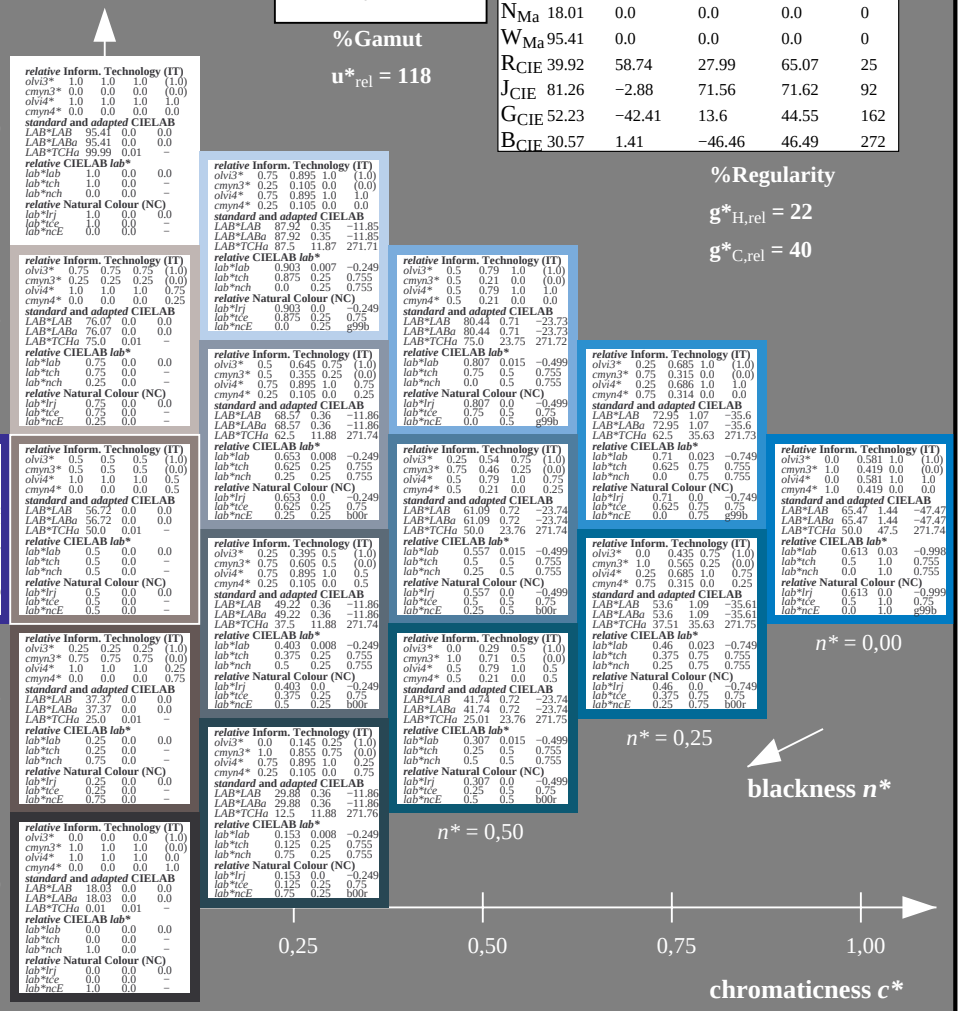
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

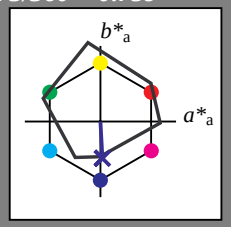


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 101

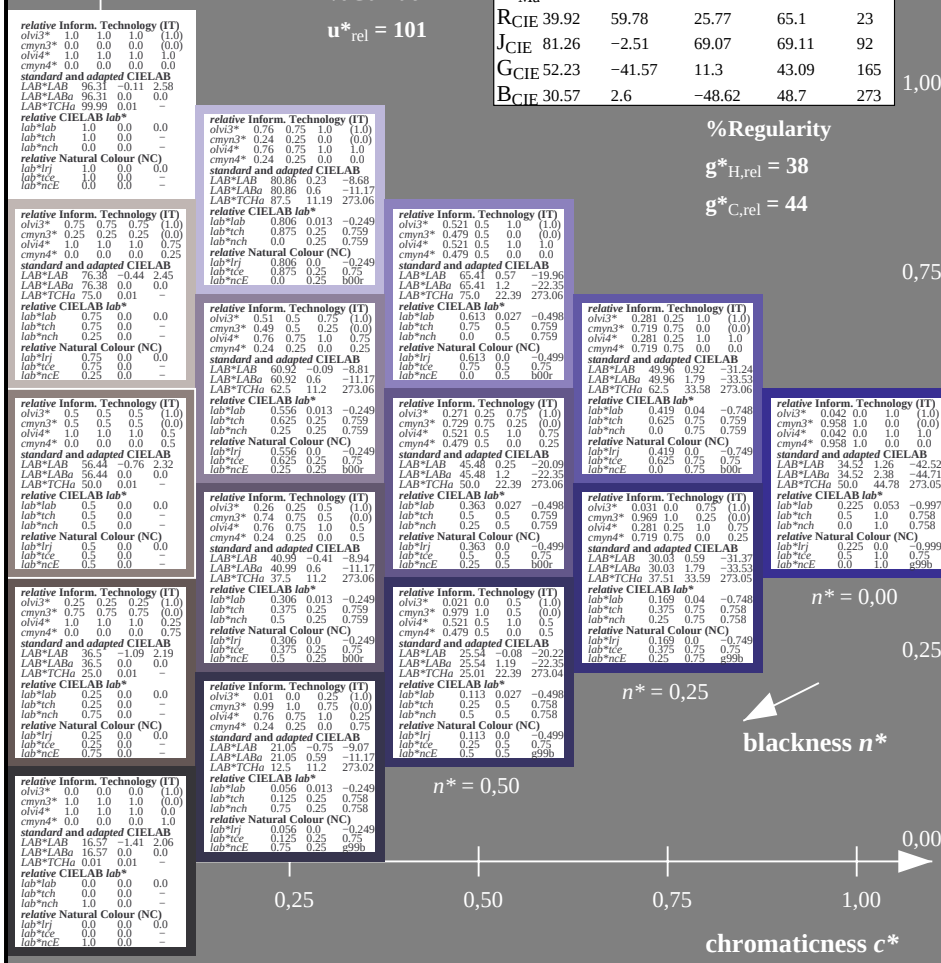
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44

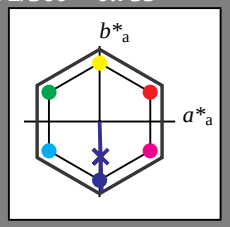


OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

u^*_{rel} = 152

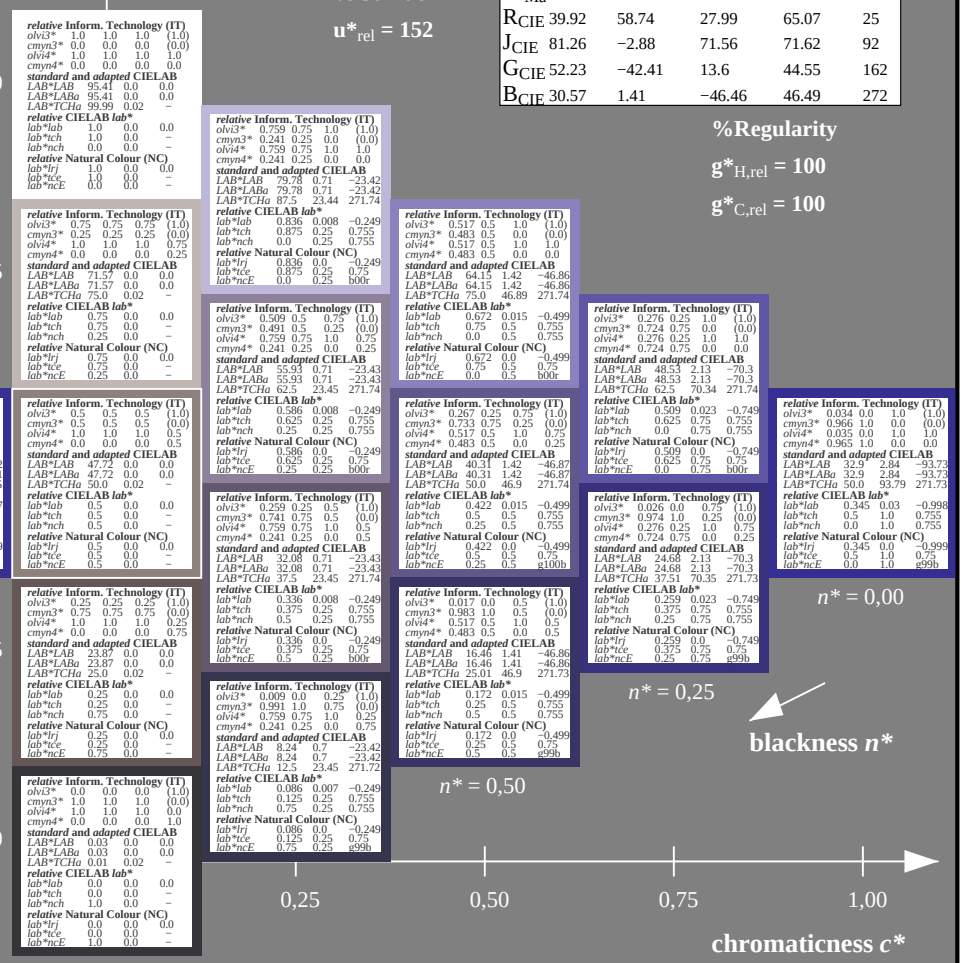
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

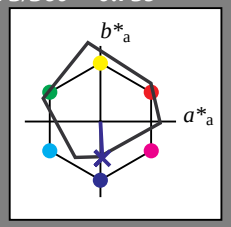
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

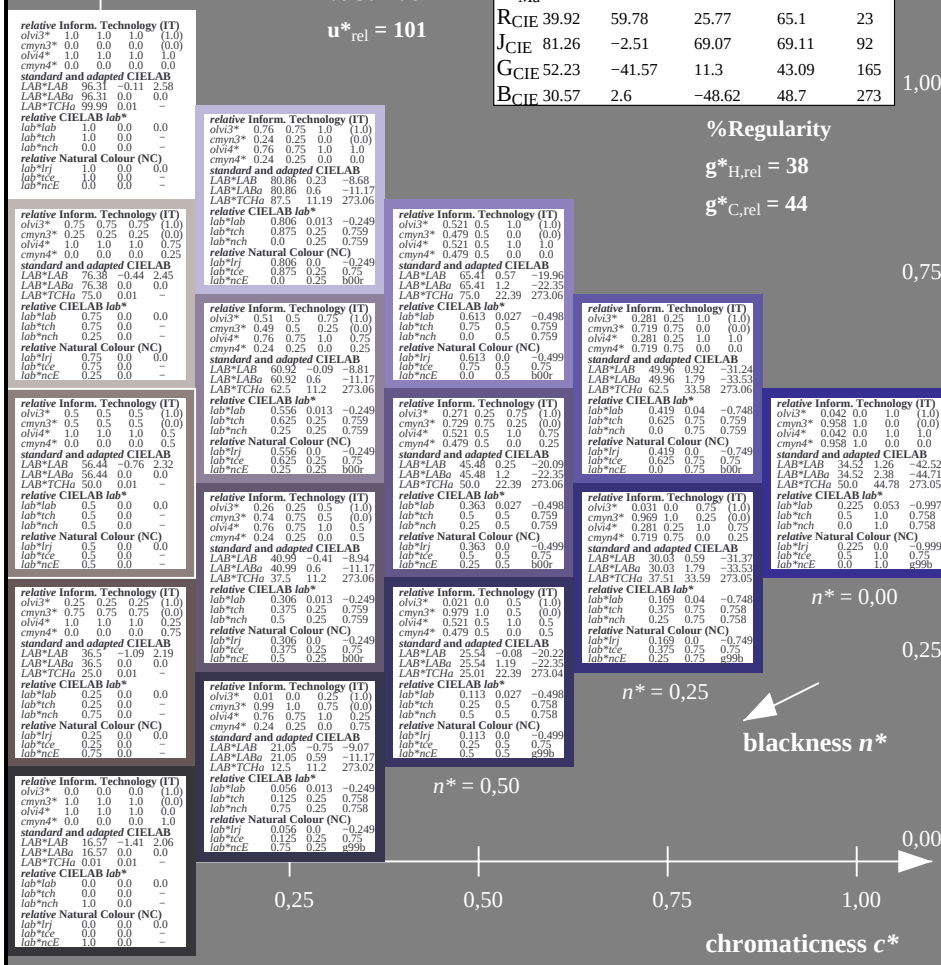
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel}$ = 38

$g^*_{C,rel}$ = 44



OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

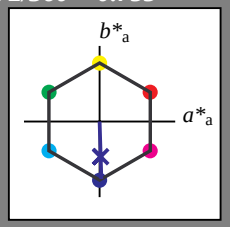
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

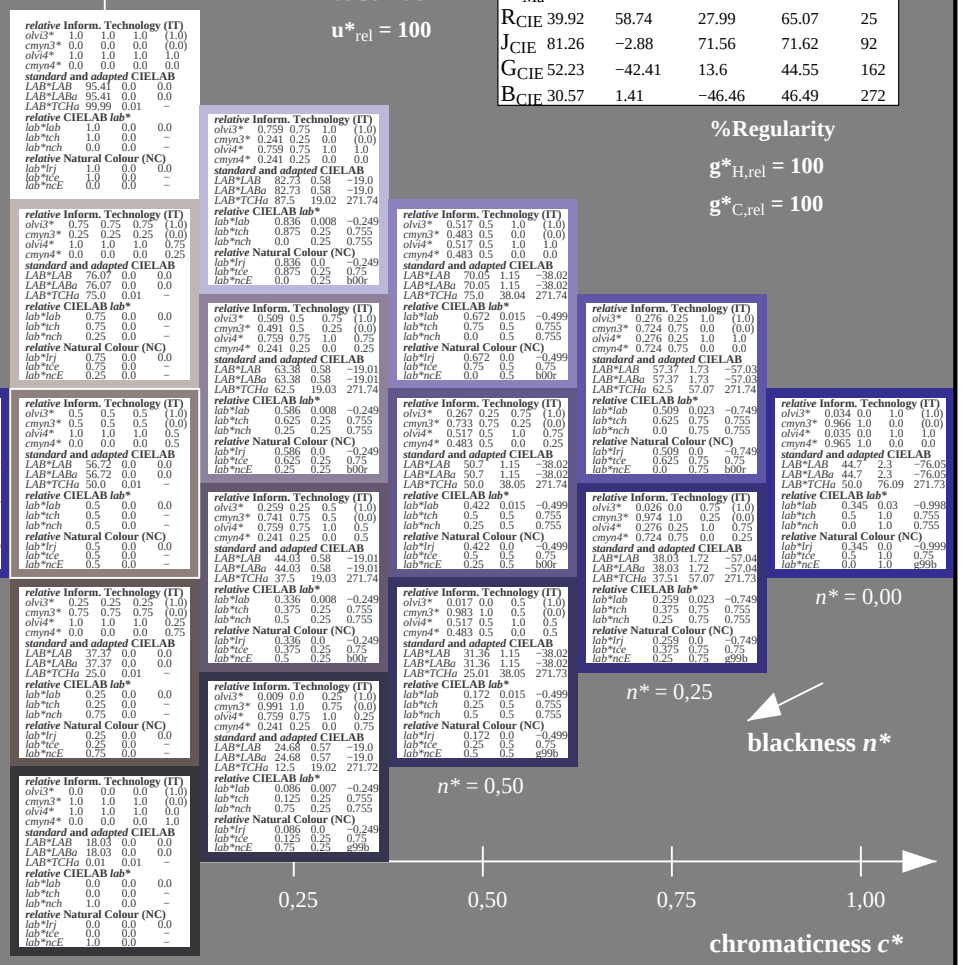
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

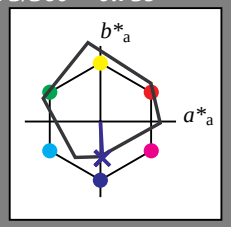


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

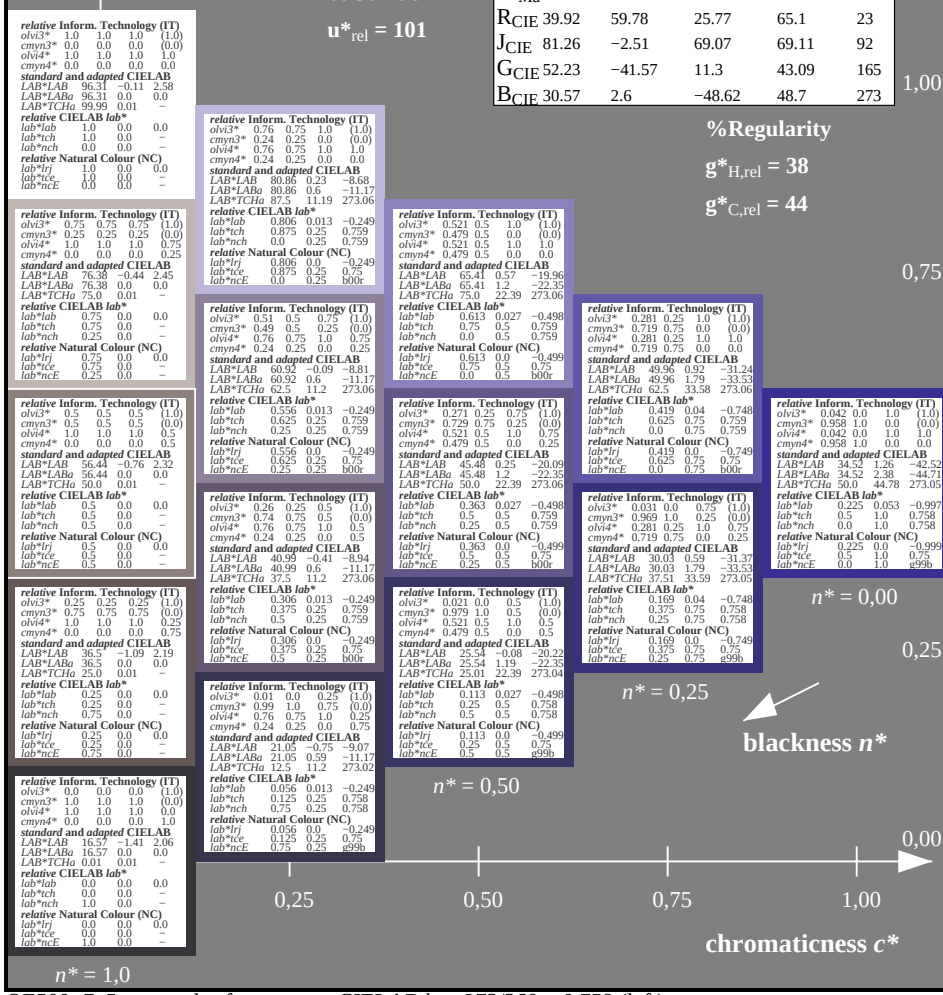
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

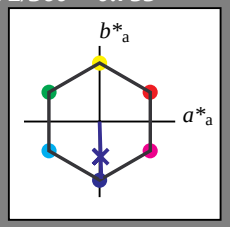


OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

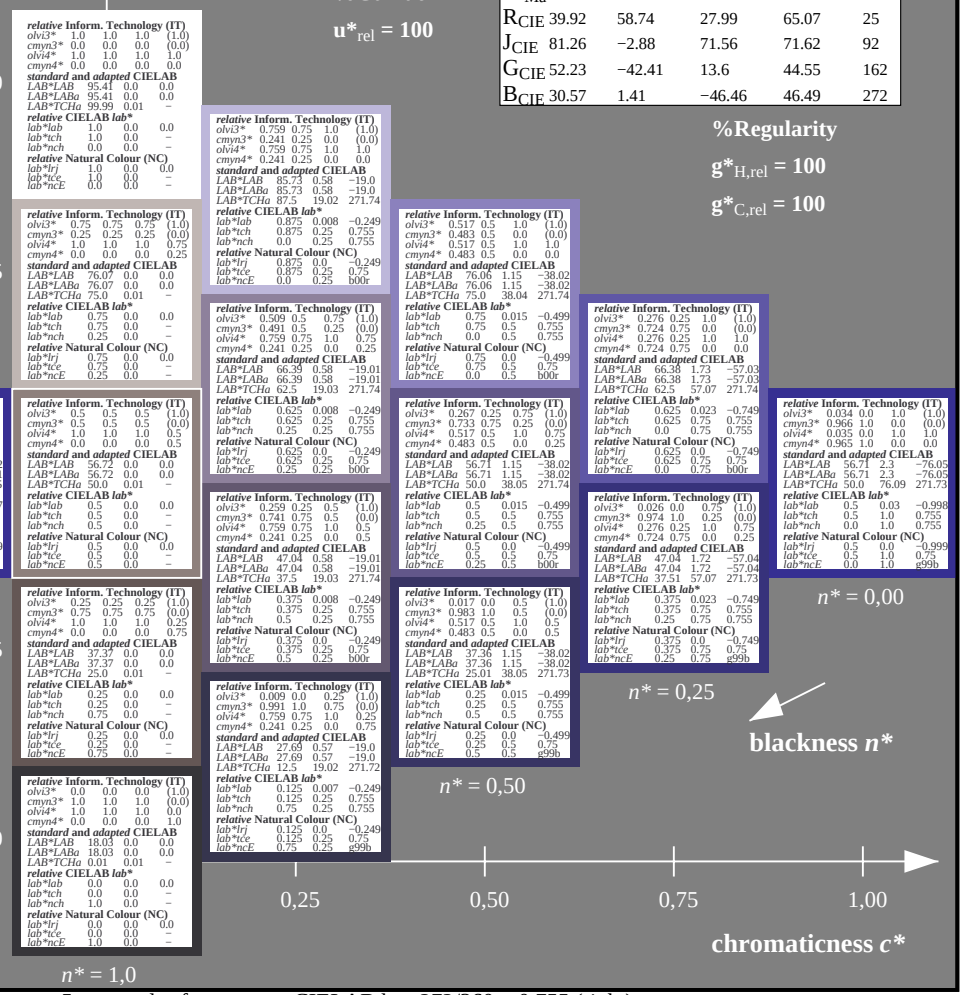
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



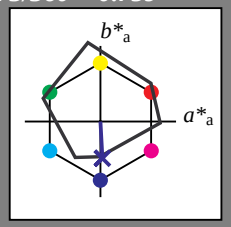
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

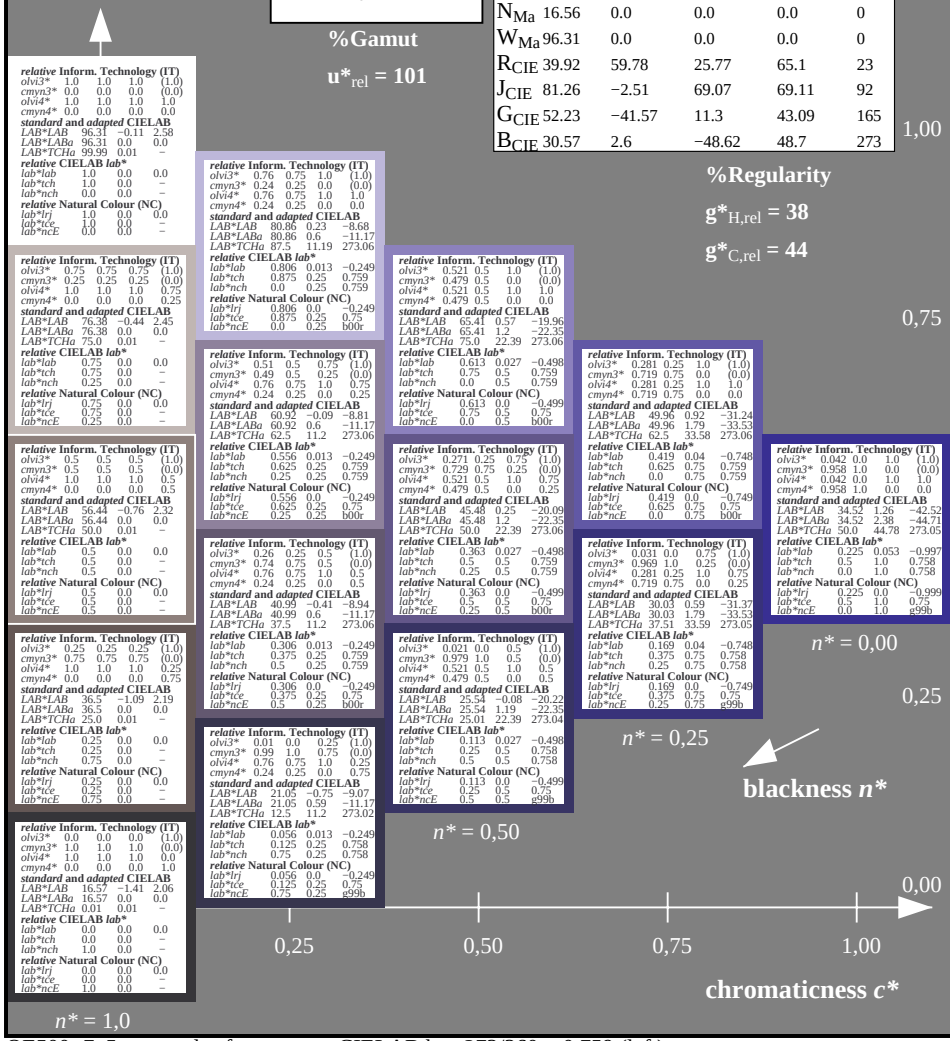
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



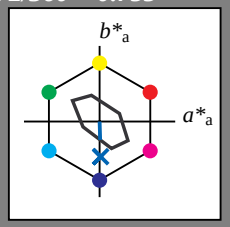
OE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

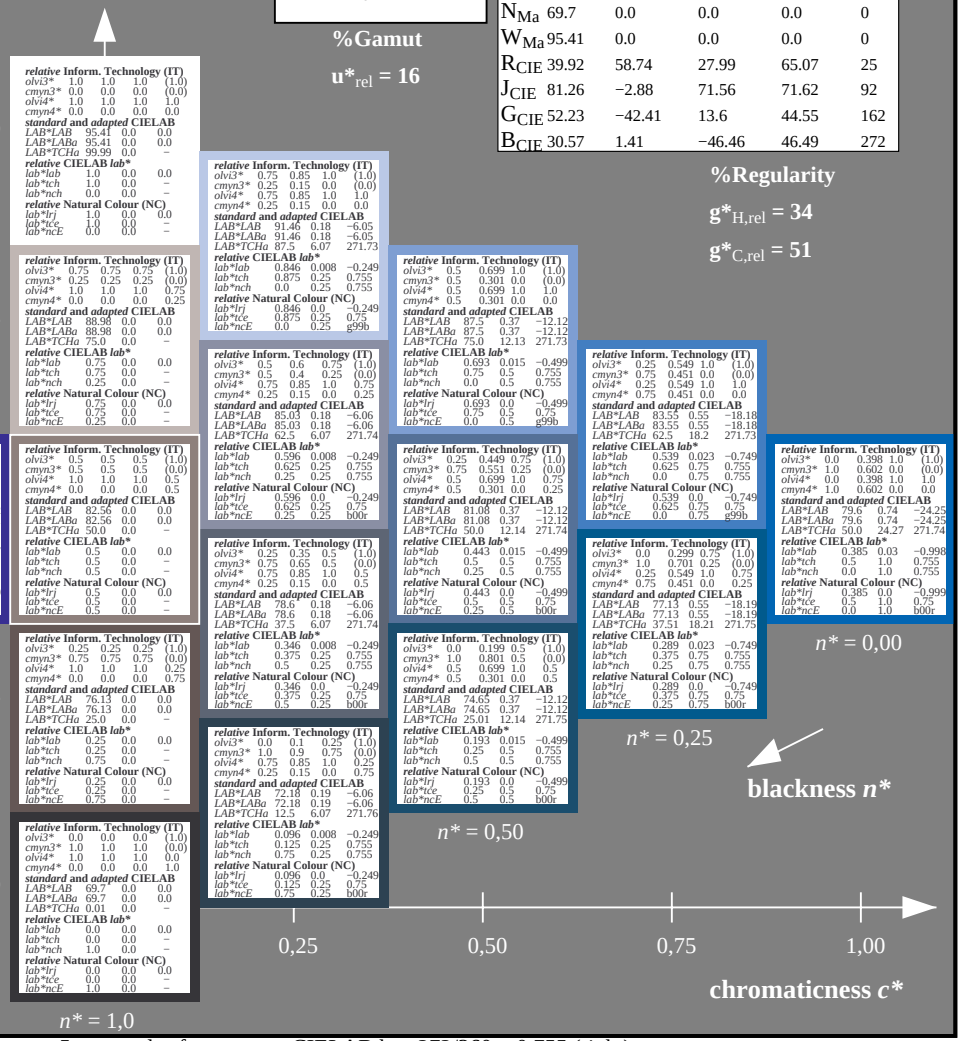
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



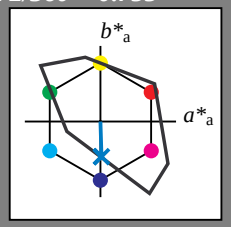
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

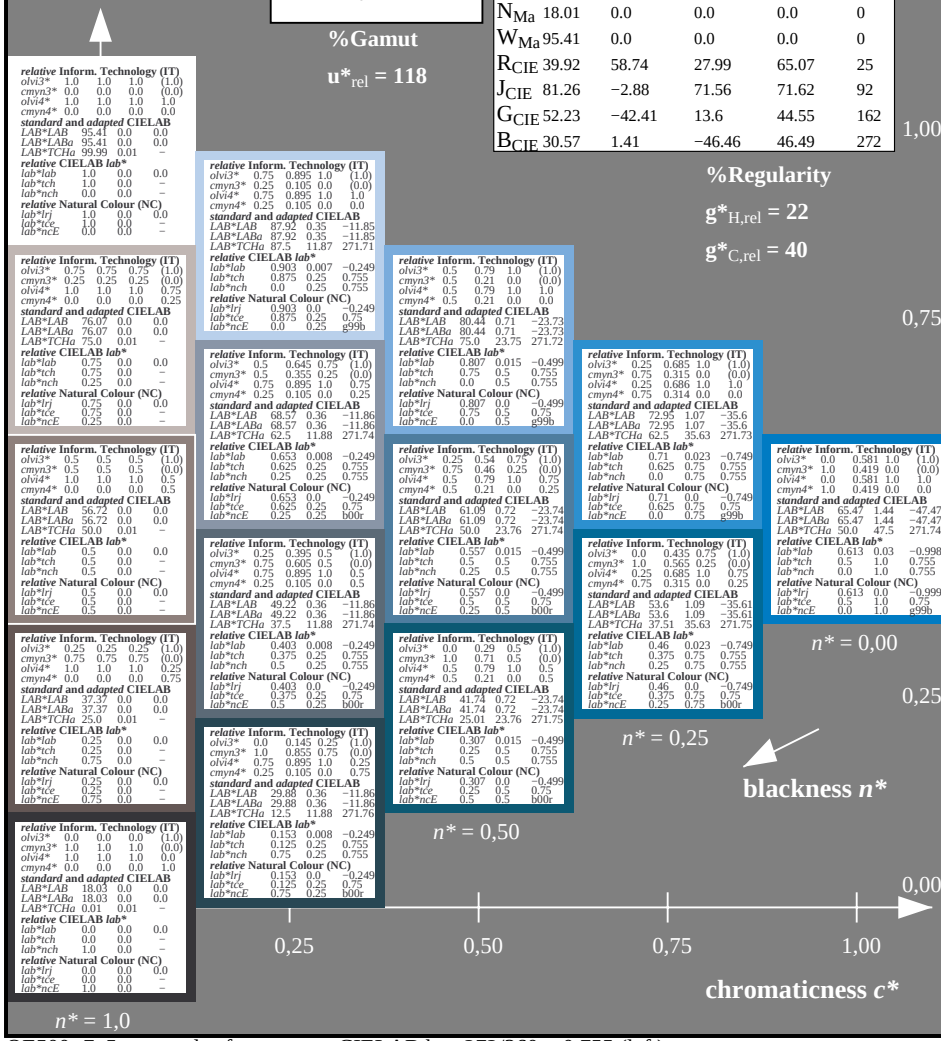
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



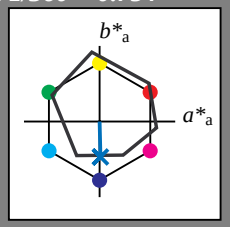
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

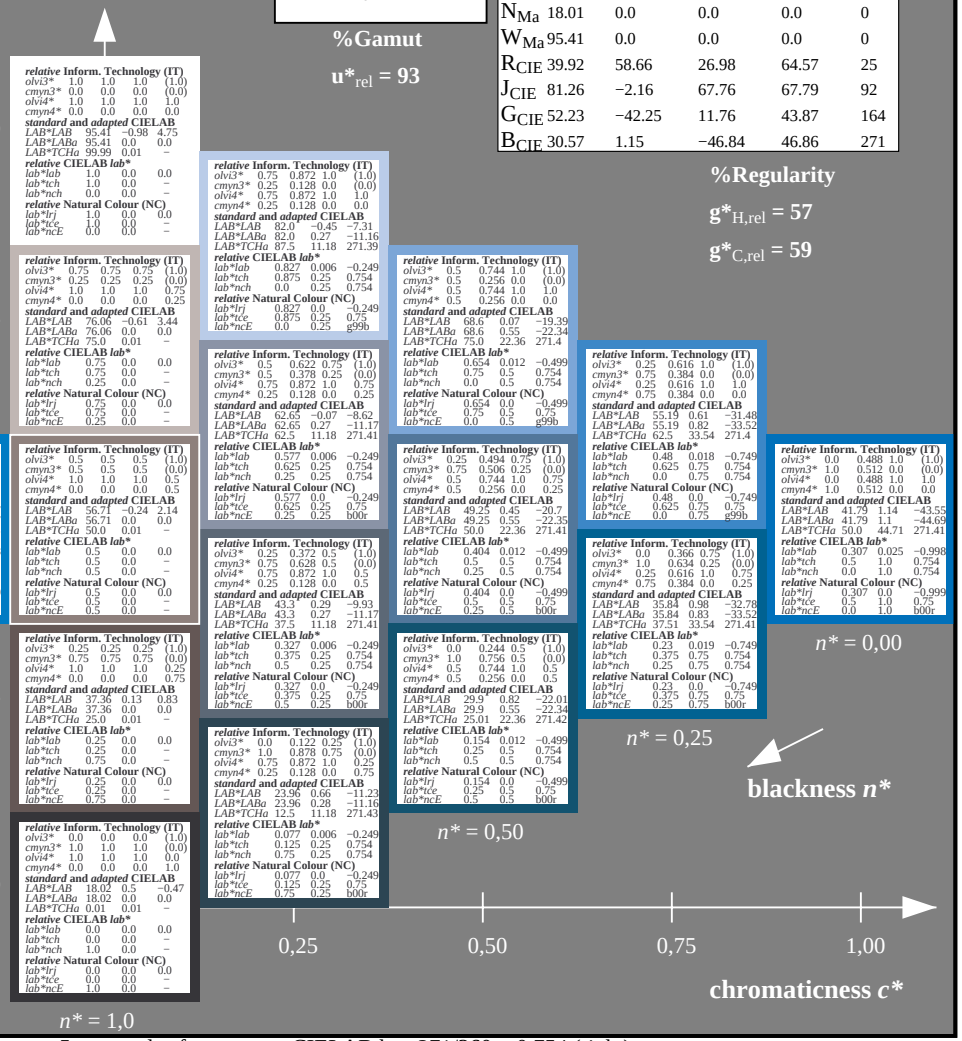
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel}$ = 57

$g^*_{C,rel}$ = 59



5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

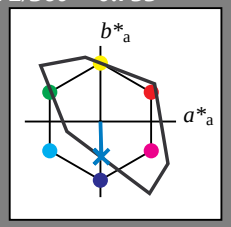
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

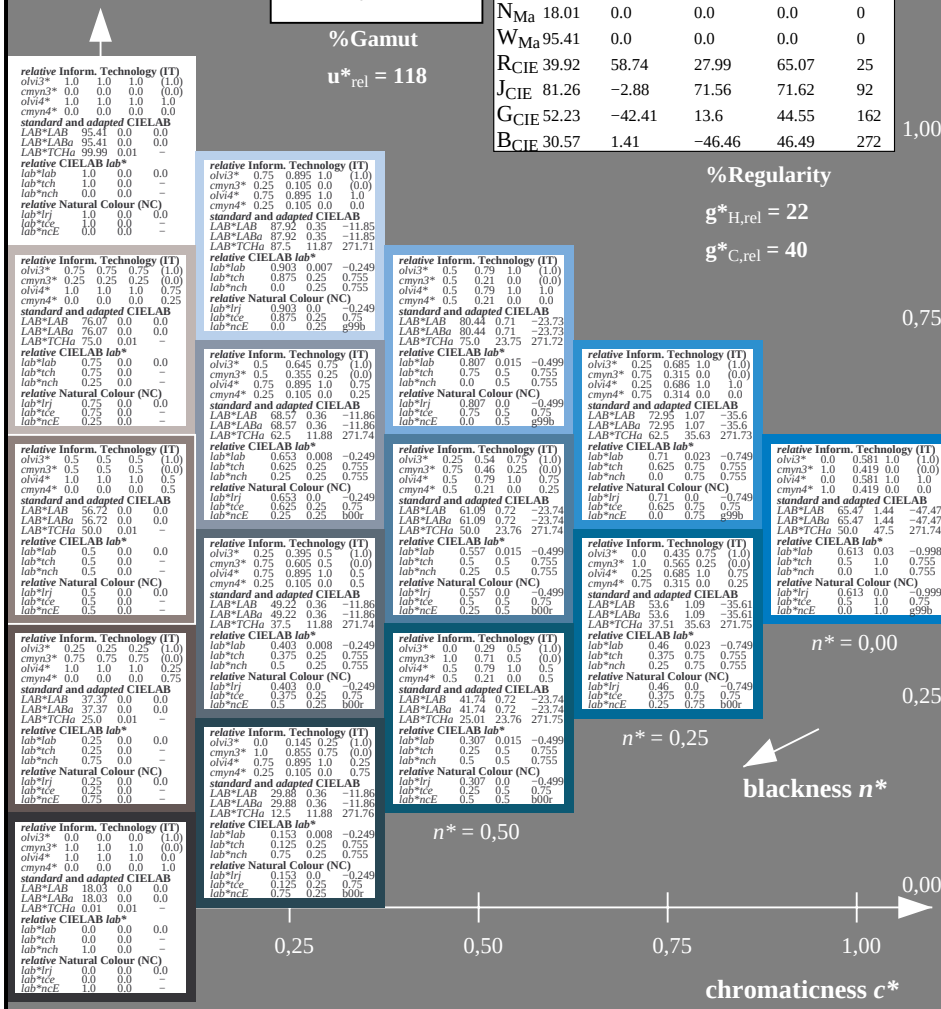
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

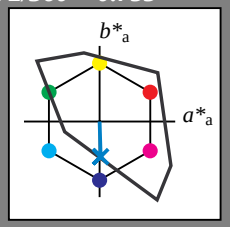
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

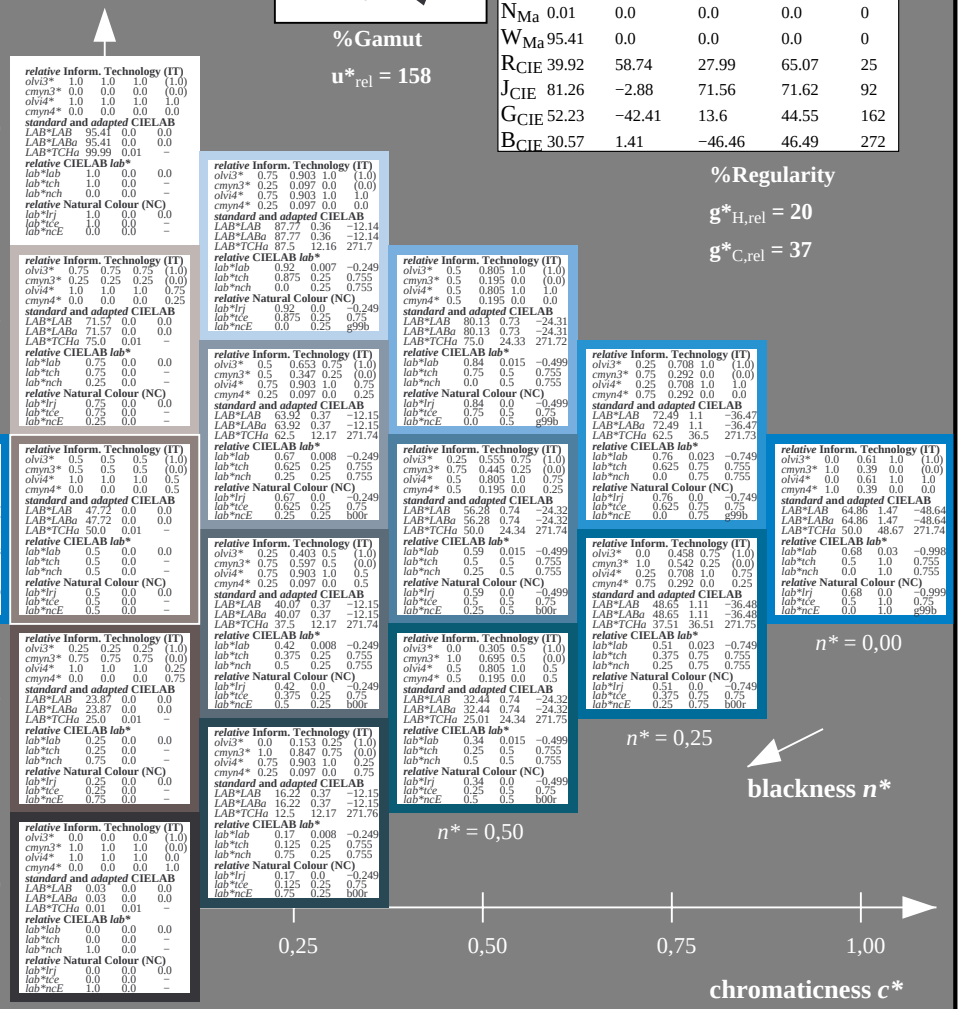
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 20

$g^*_{C,rel}$ = 37



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

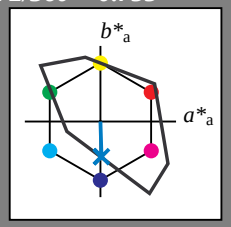
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

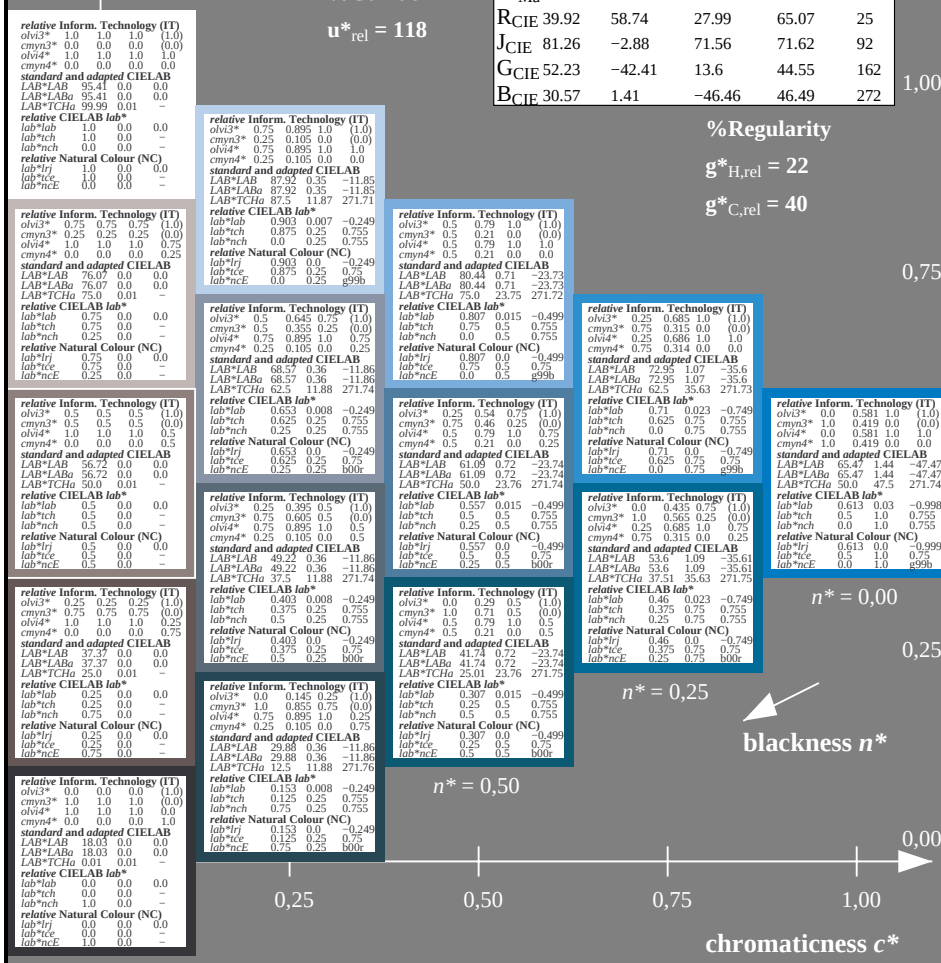
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Printer Reflective System DRSXX

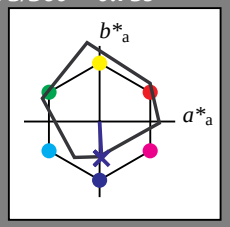
for hue $h^* = lab^*h = 273/360 = 0.759$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

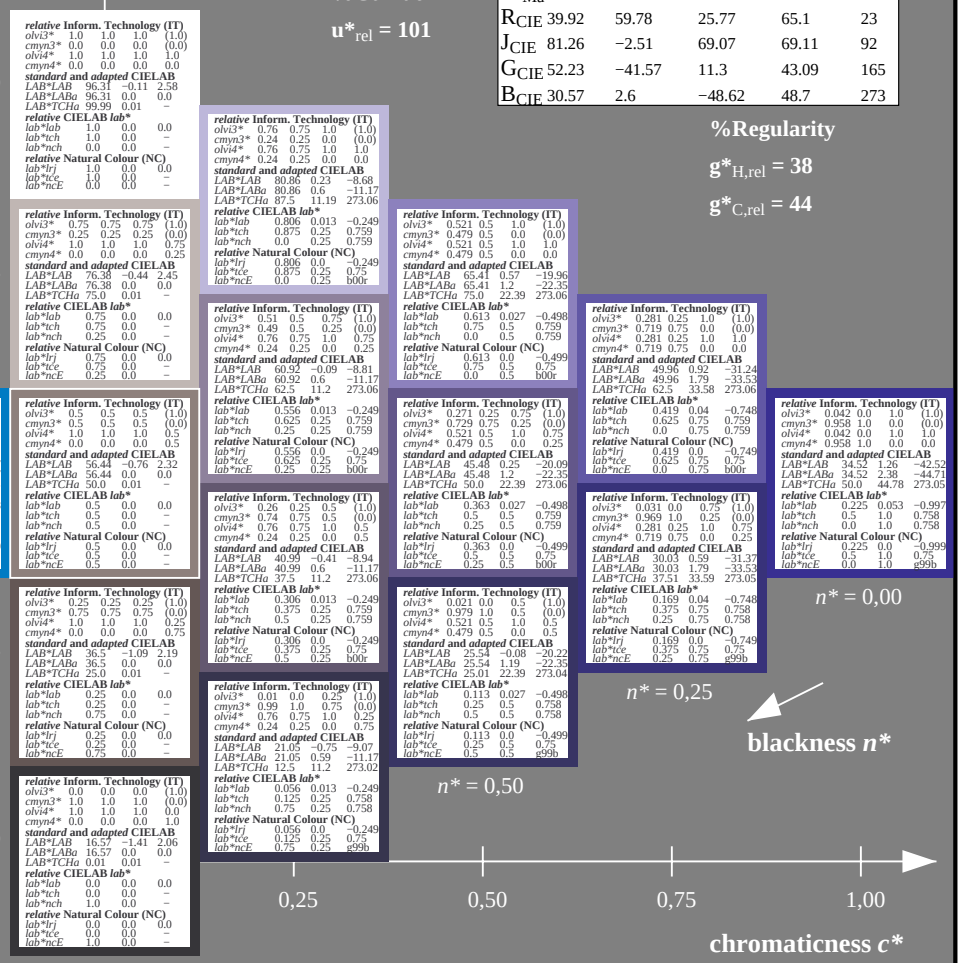
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

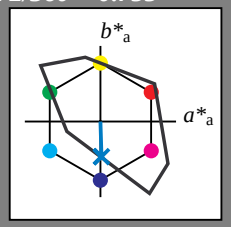


5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Television Luminous System TLS18
for hue *h* = lab*h = 272/360 = 0.755*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n**

0,25 0,50 0,75 1,00

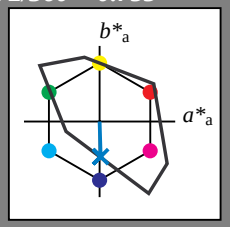
chromaticness *c**

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS18
for hue *h* = lab*h = 272/360 = 0.755*
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

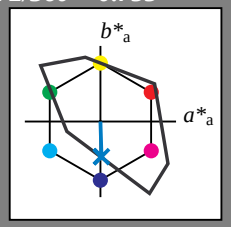
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

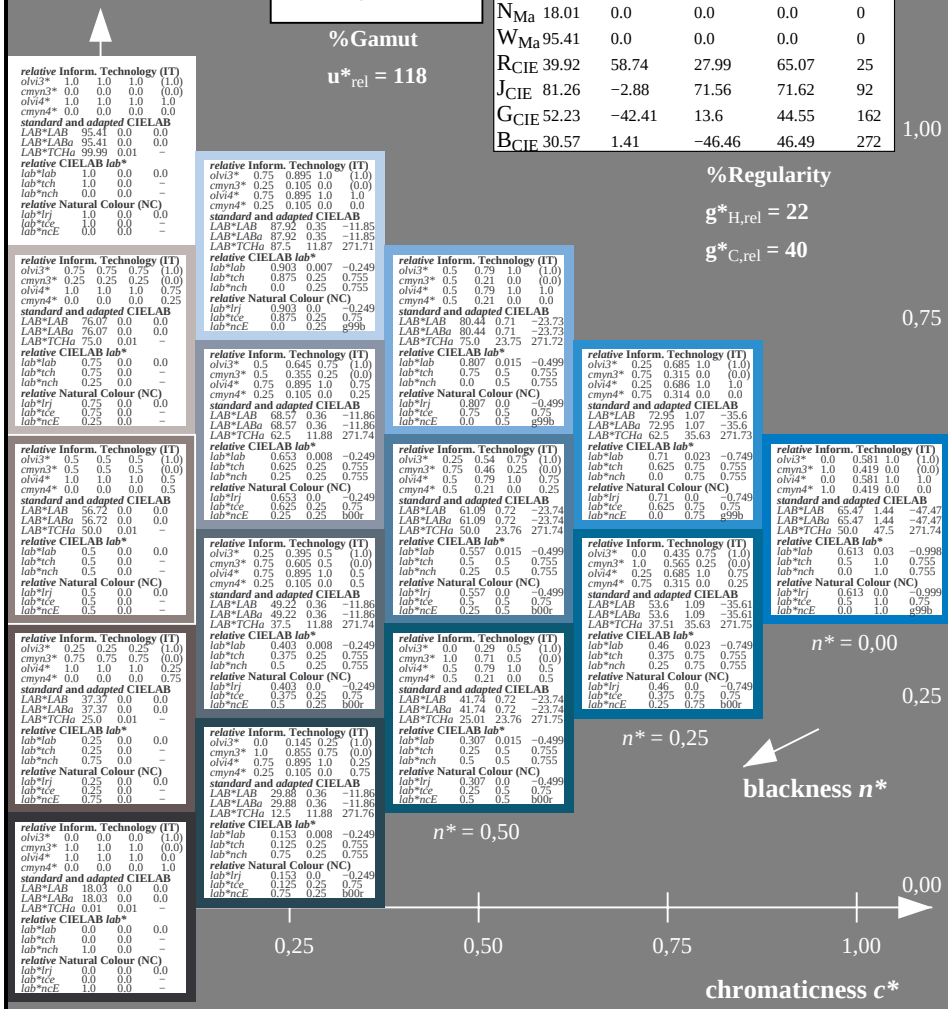
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

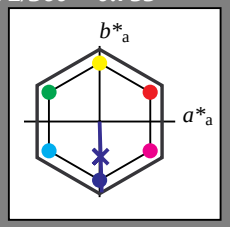
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

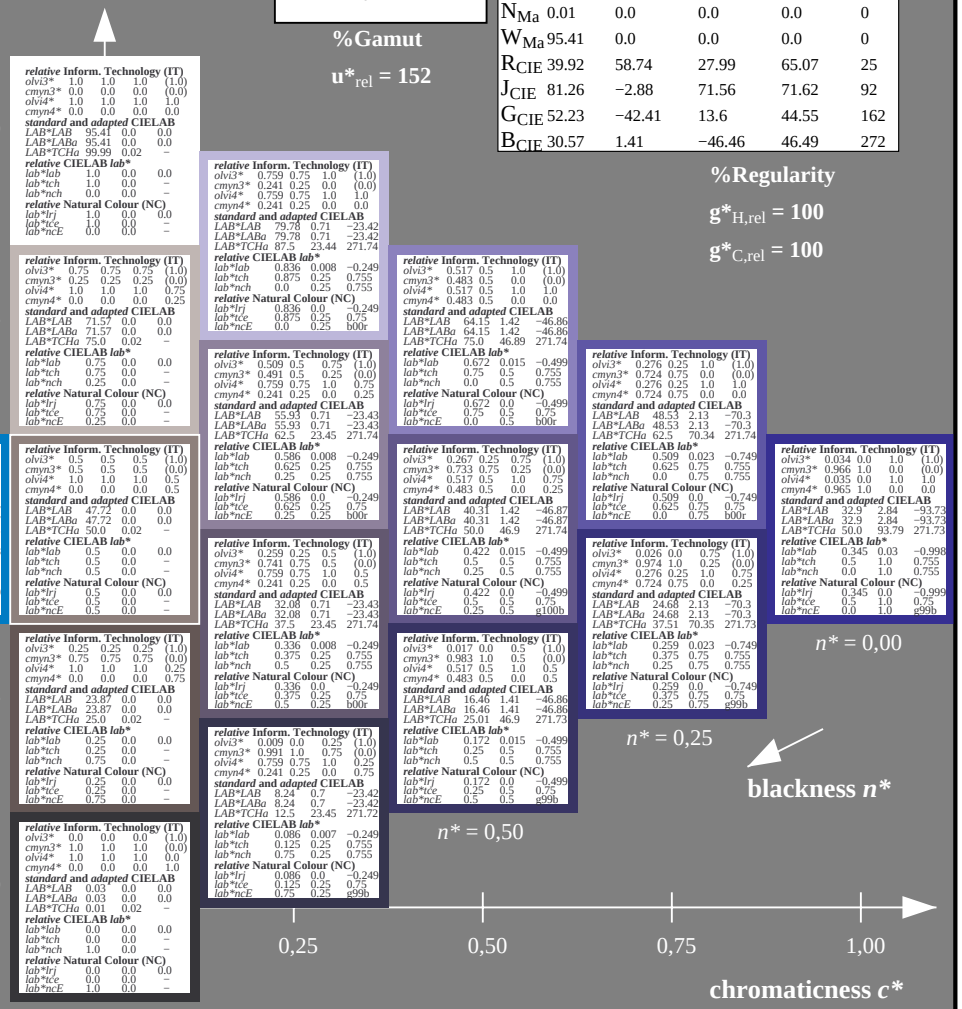
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

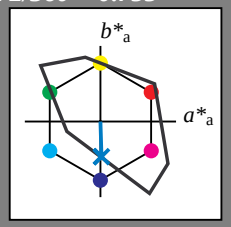
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

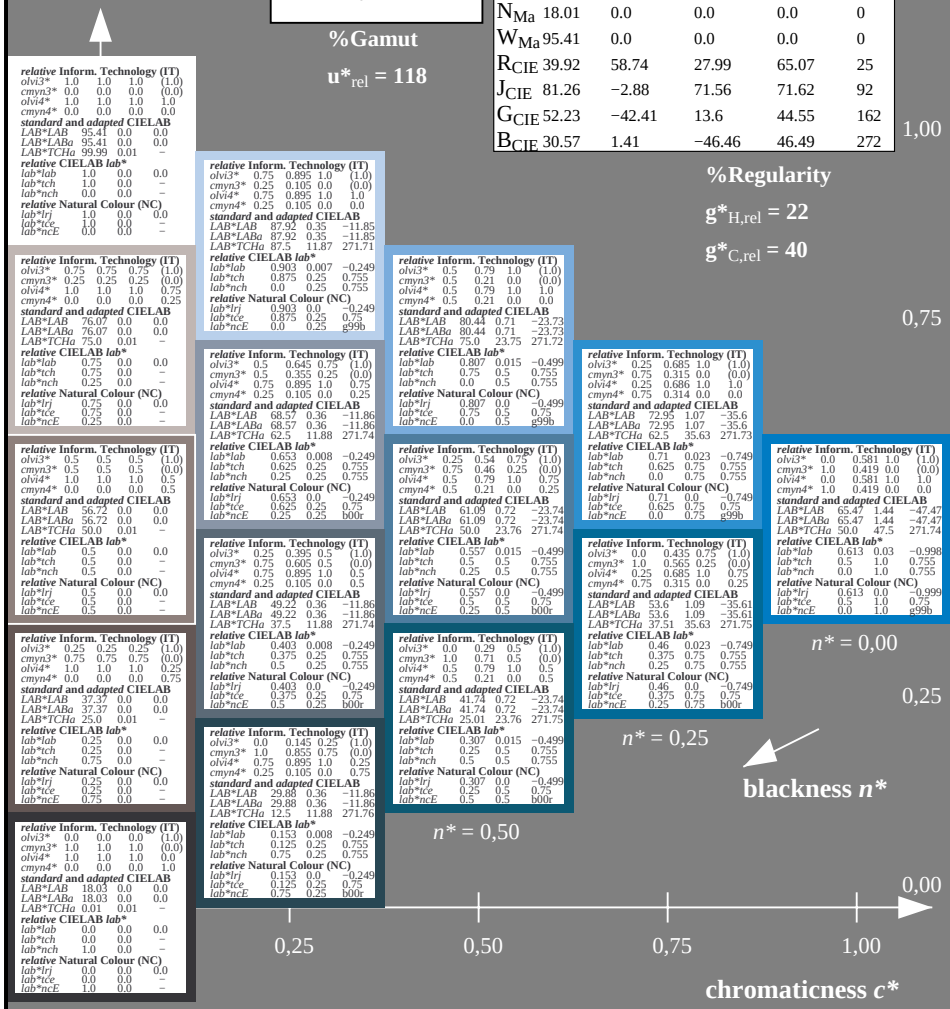
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18

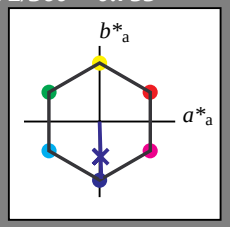
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

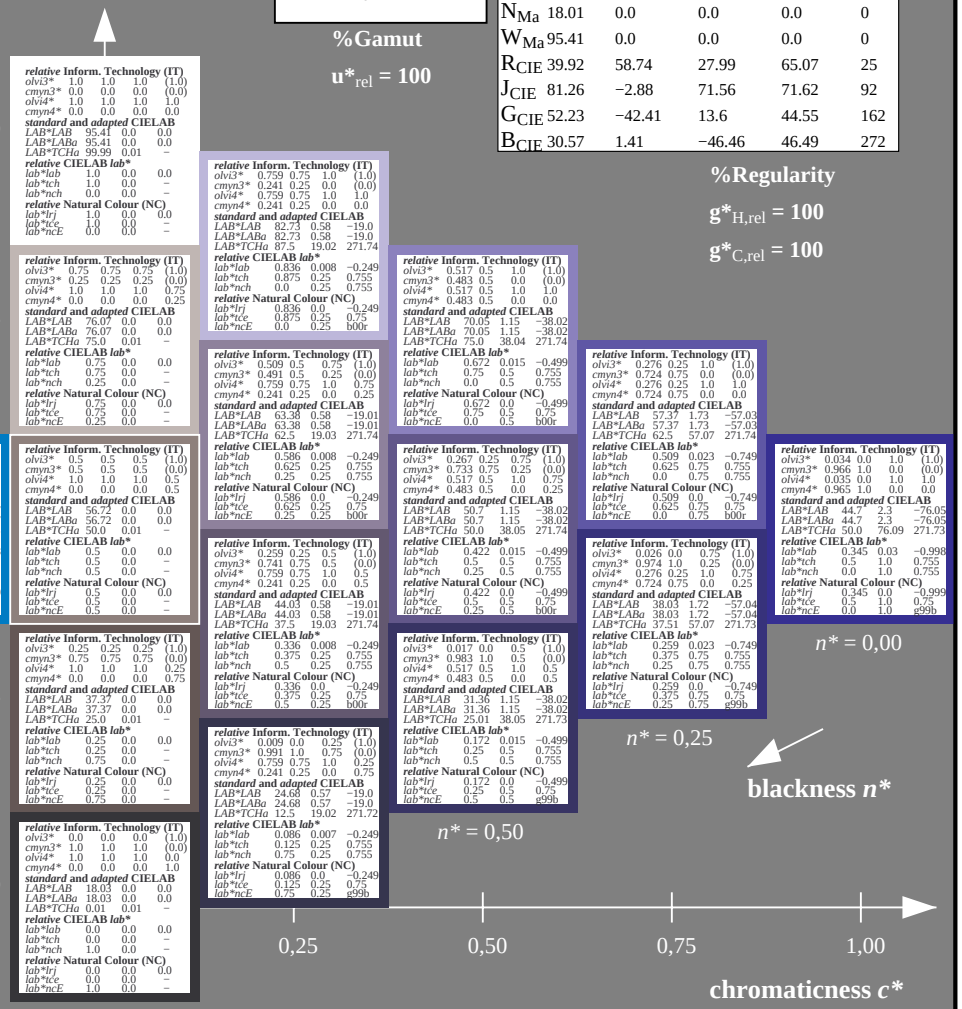
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

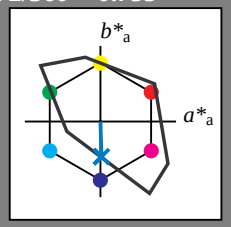
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

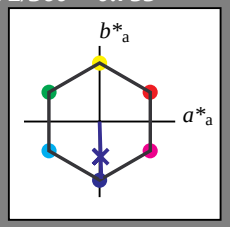
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

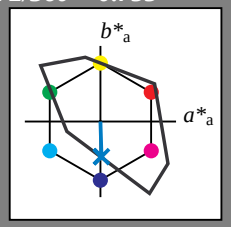
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

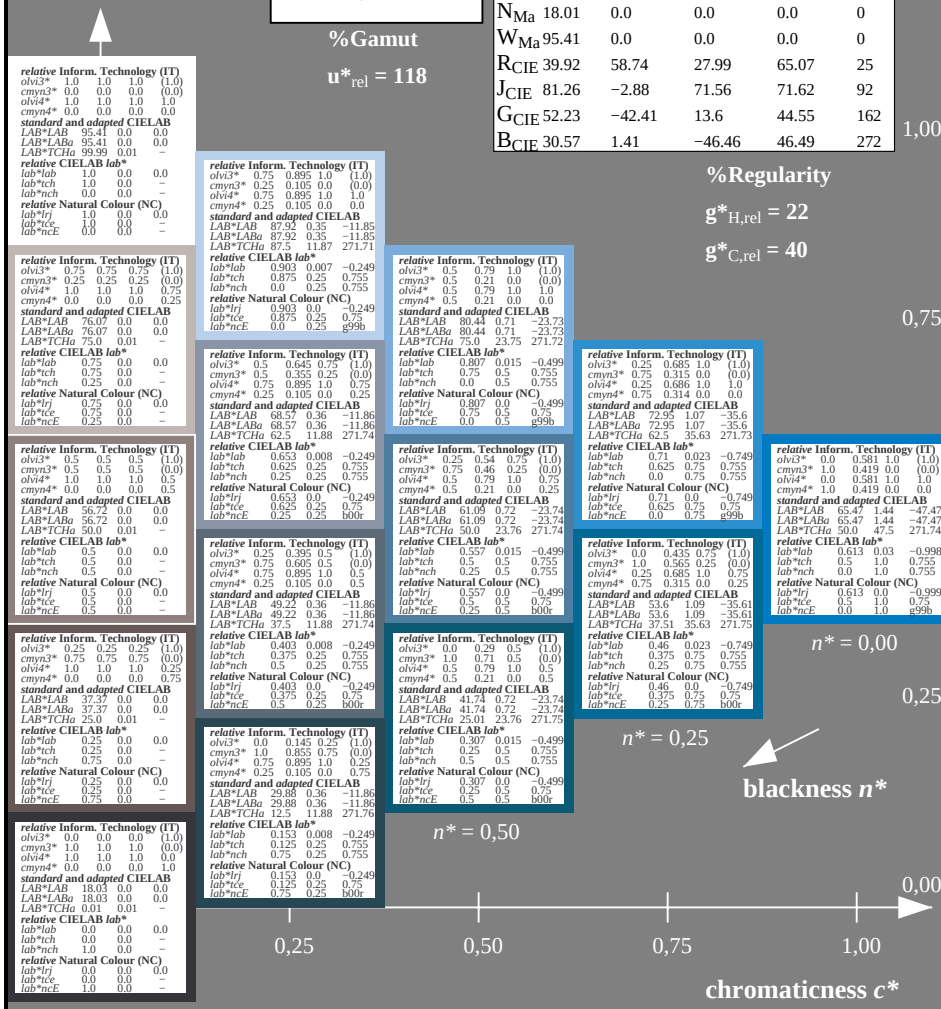
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



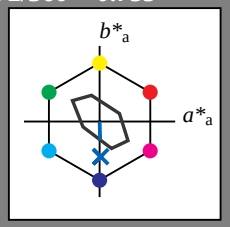
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

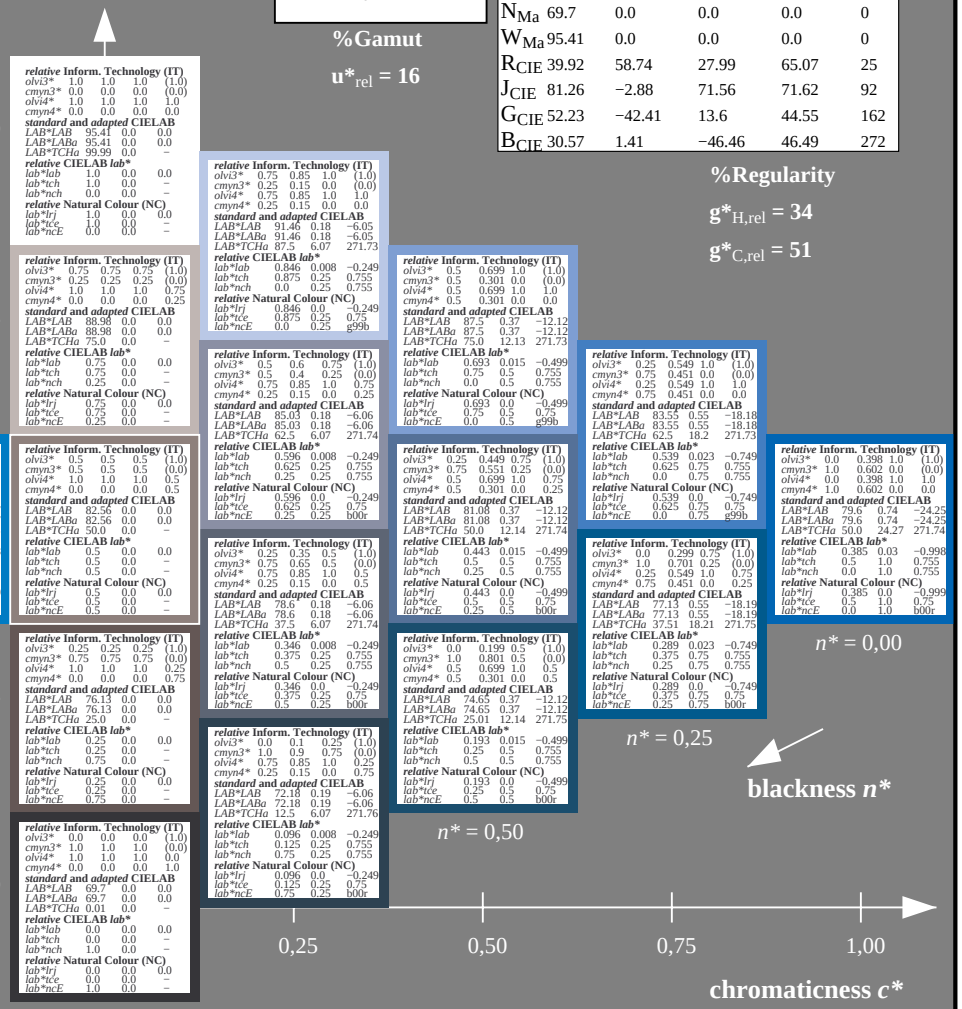
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

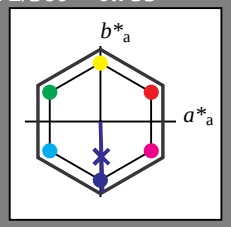
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

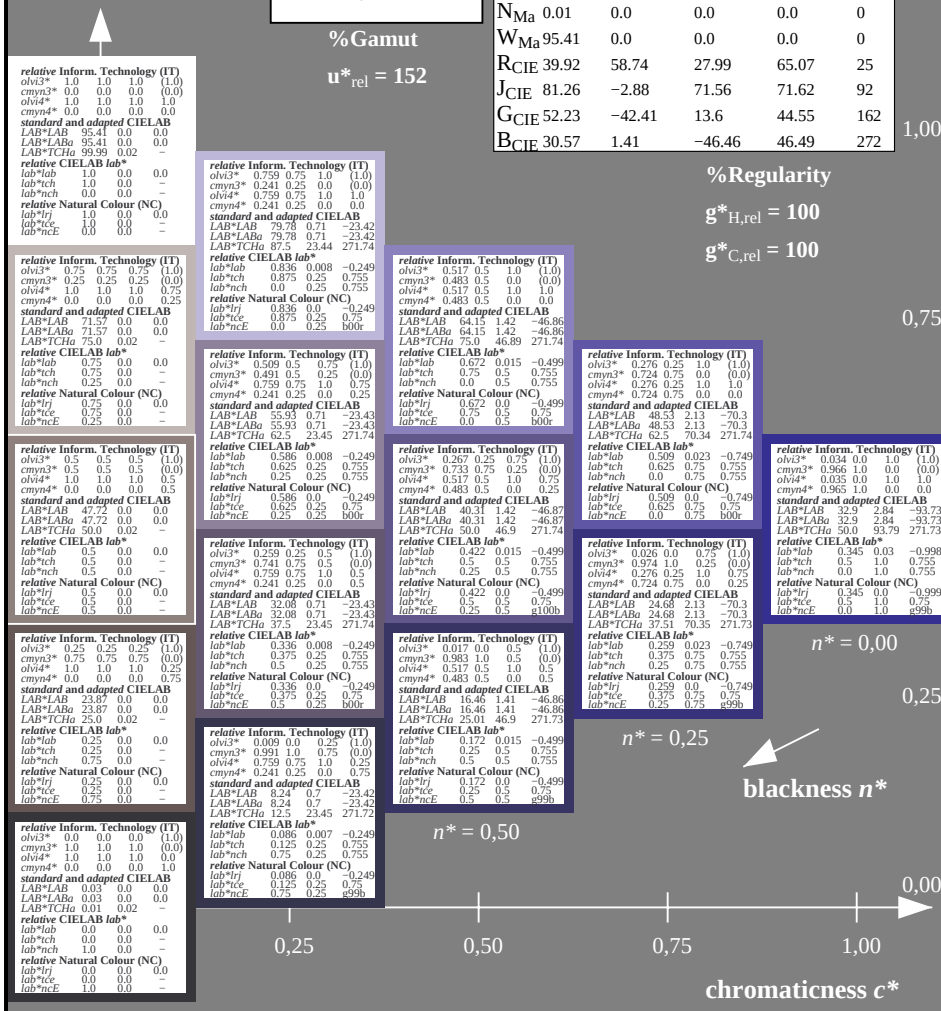
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$

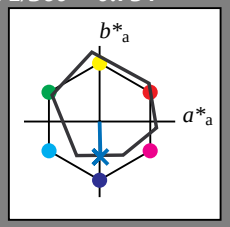
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

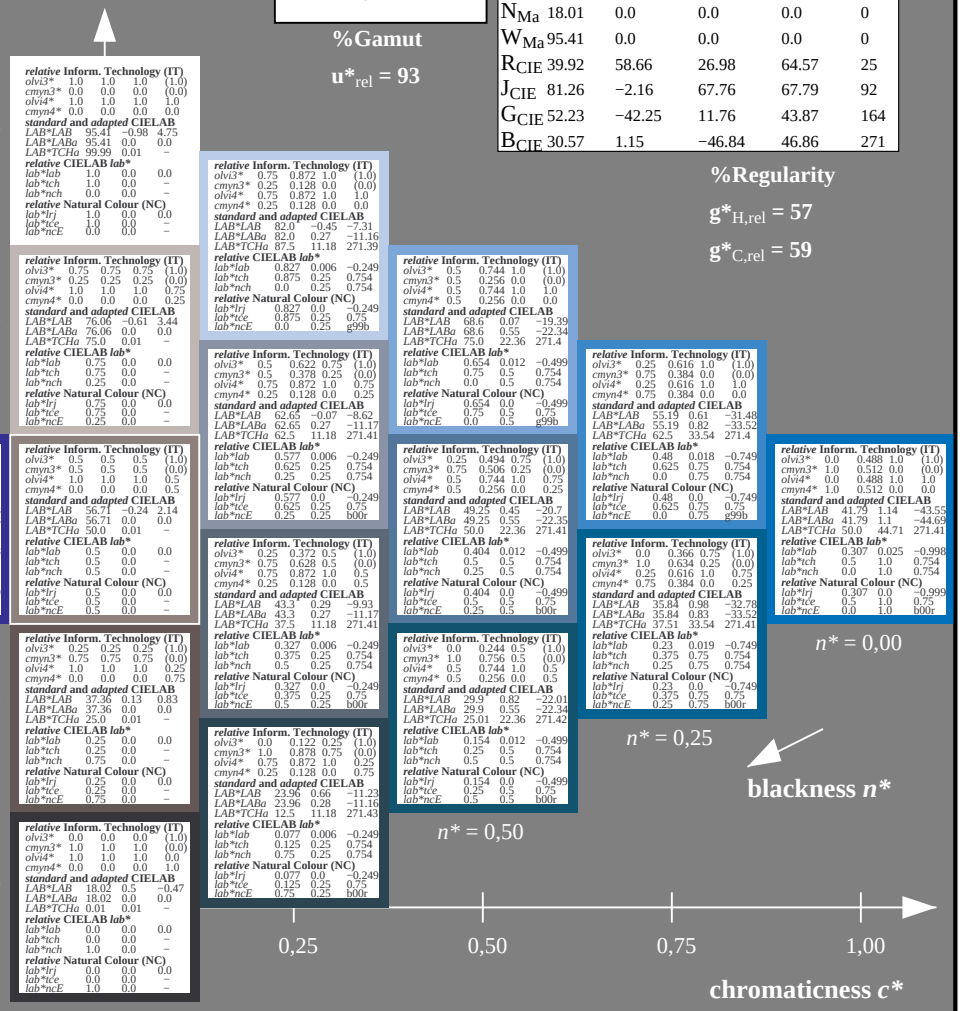
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

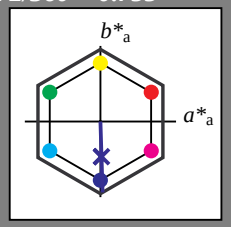
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

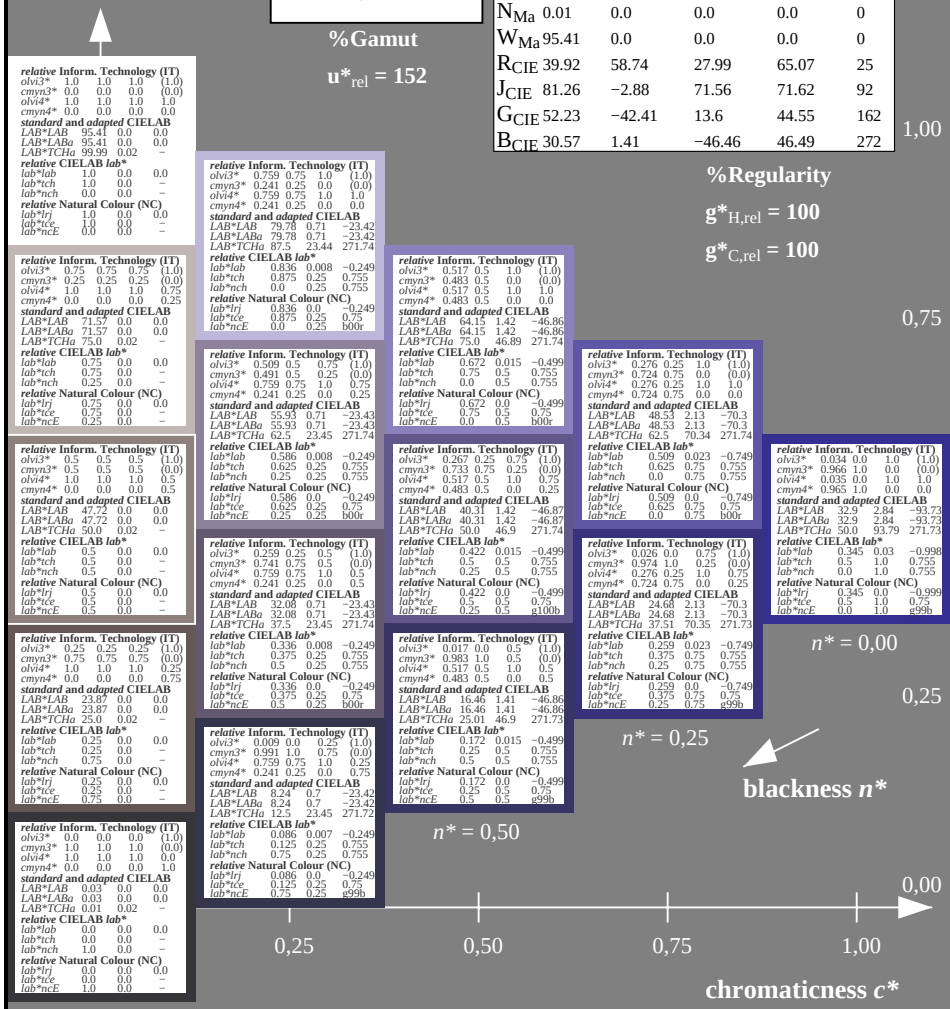
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

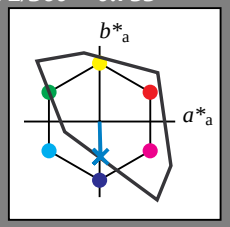
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

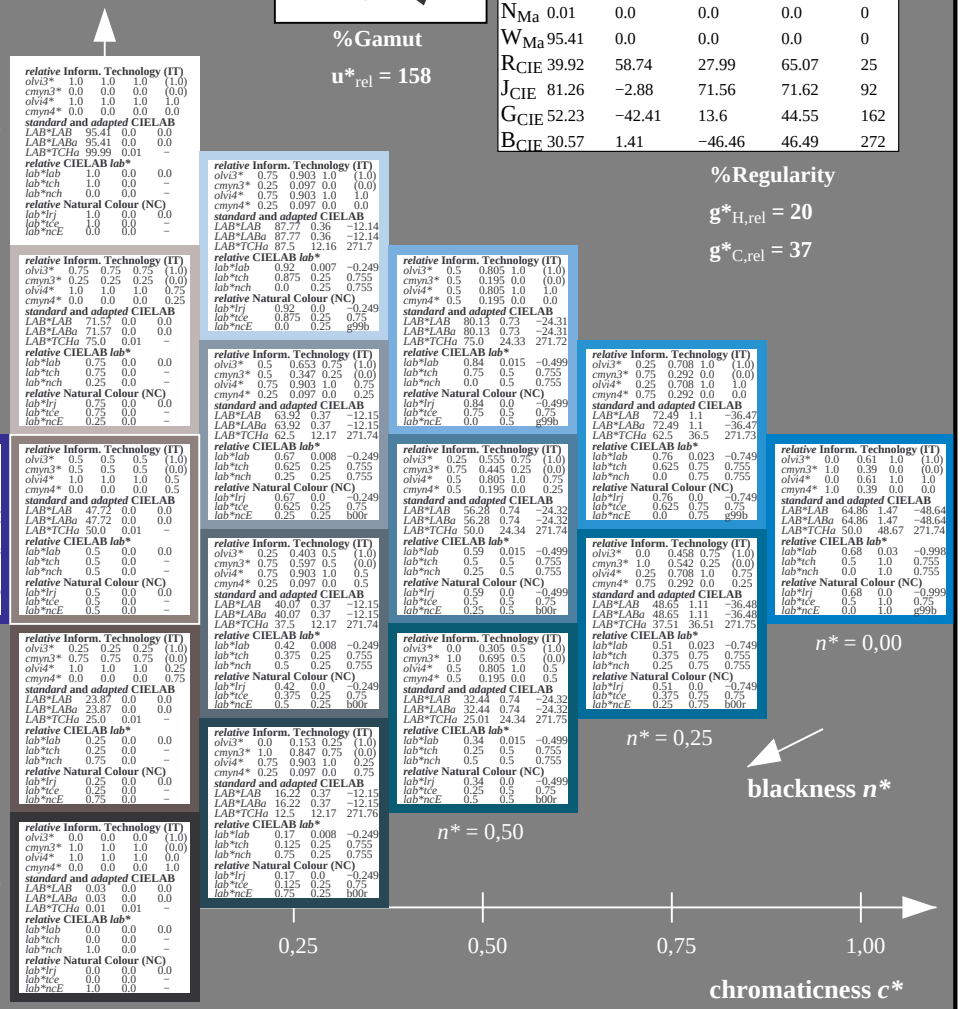
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

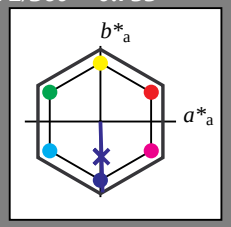
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

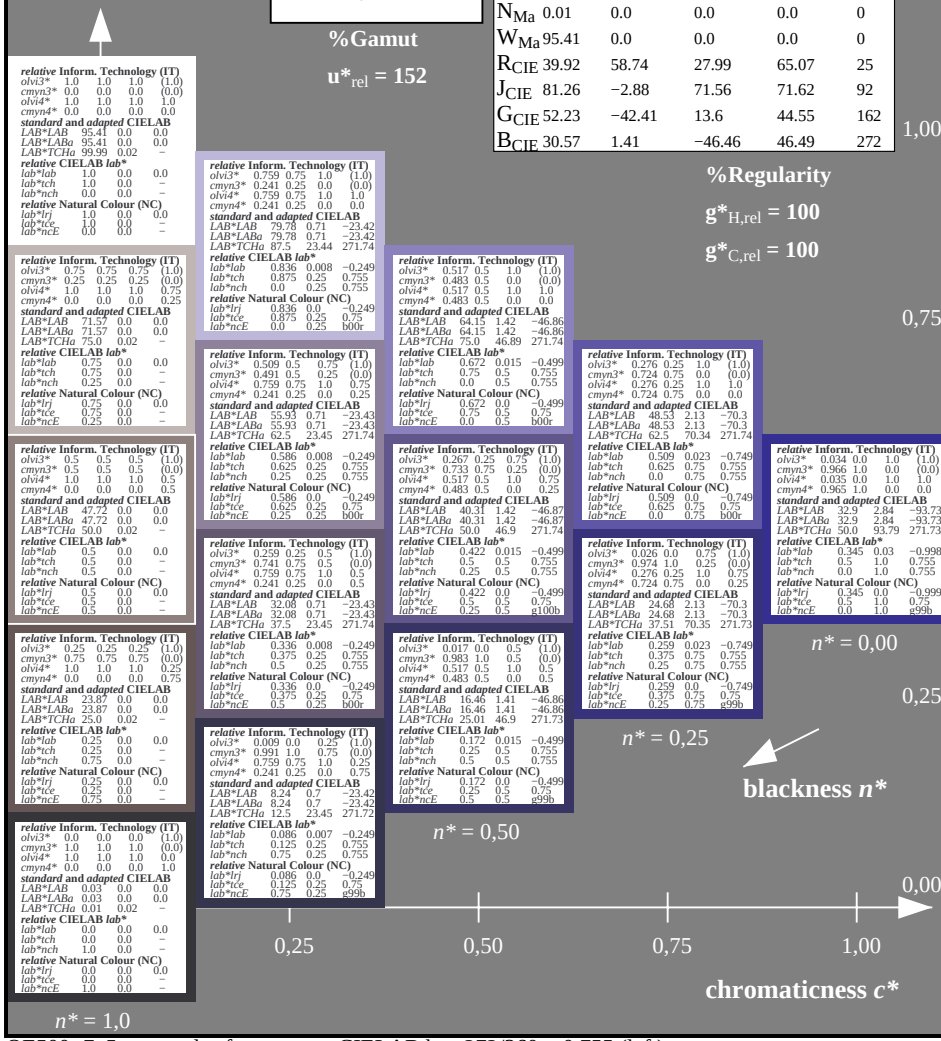
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

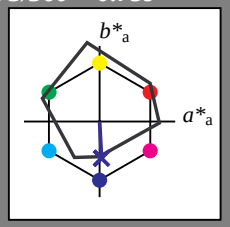
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

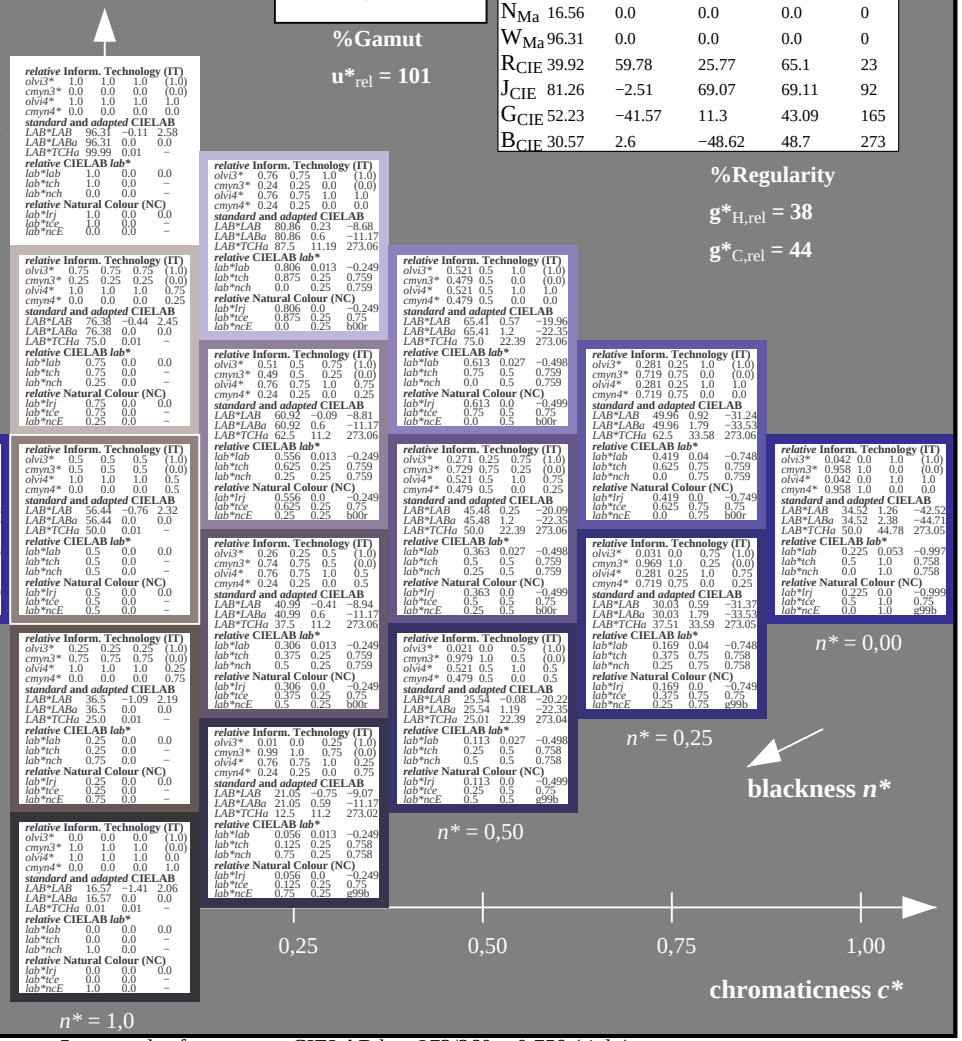
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

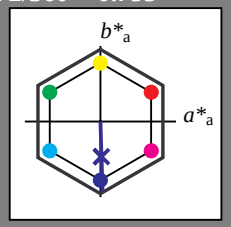
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

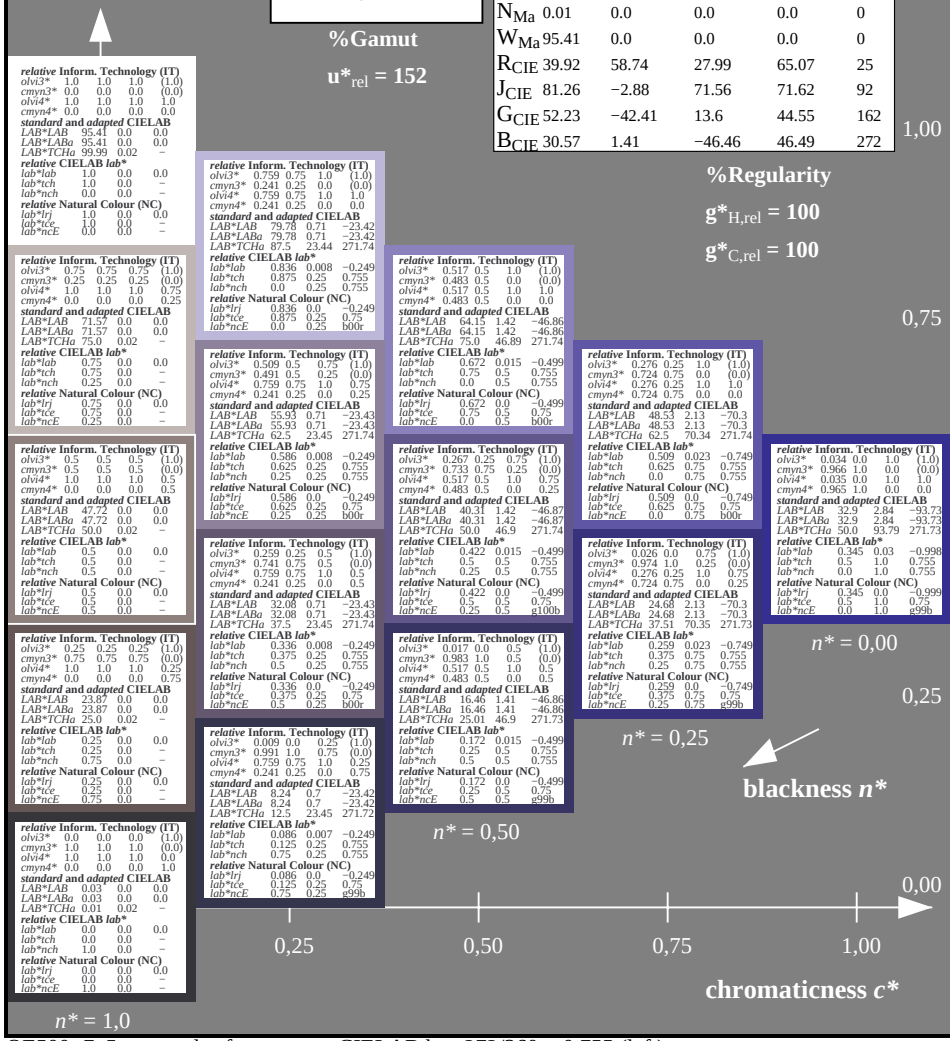
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

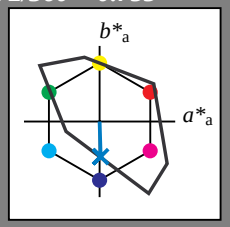
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

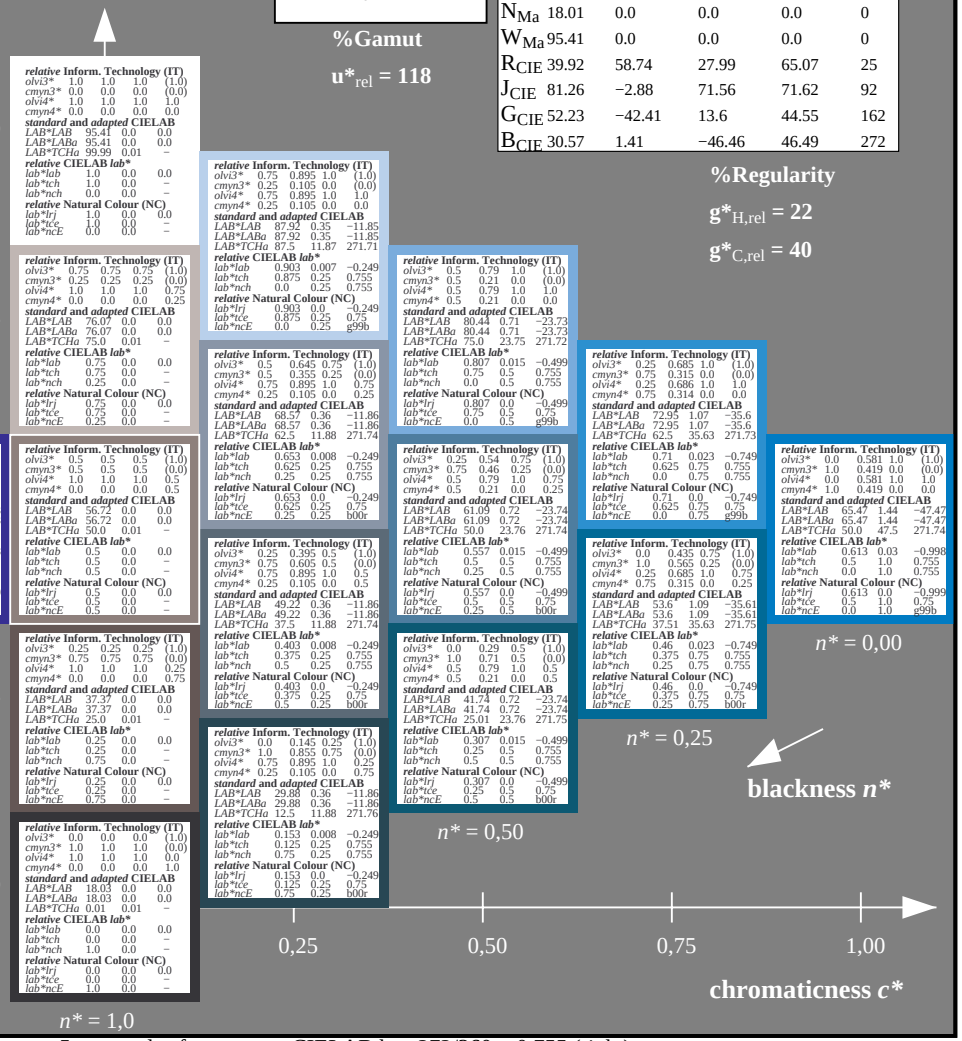
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



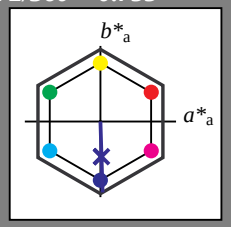
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

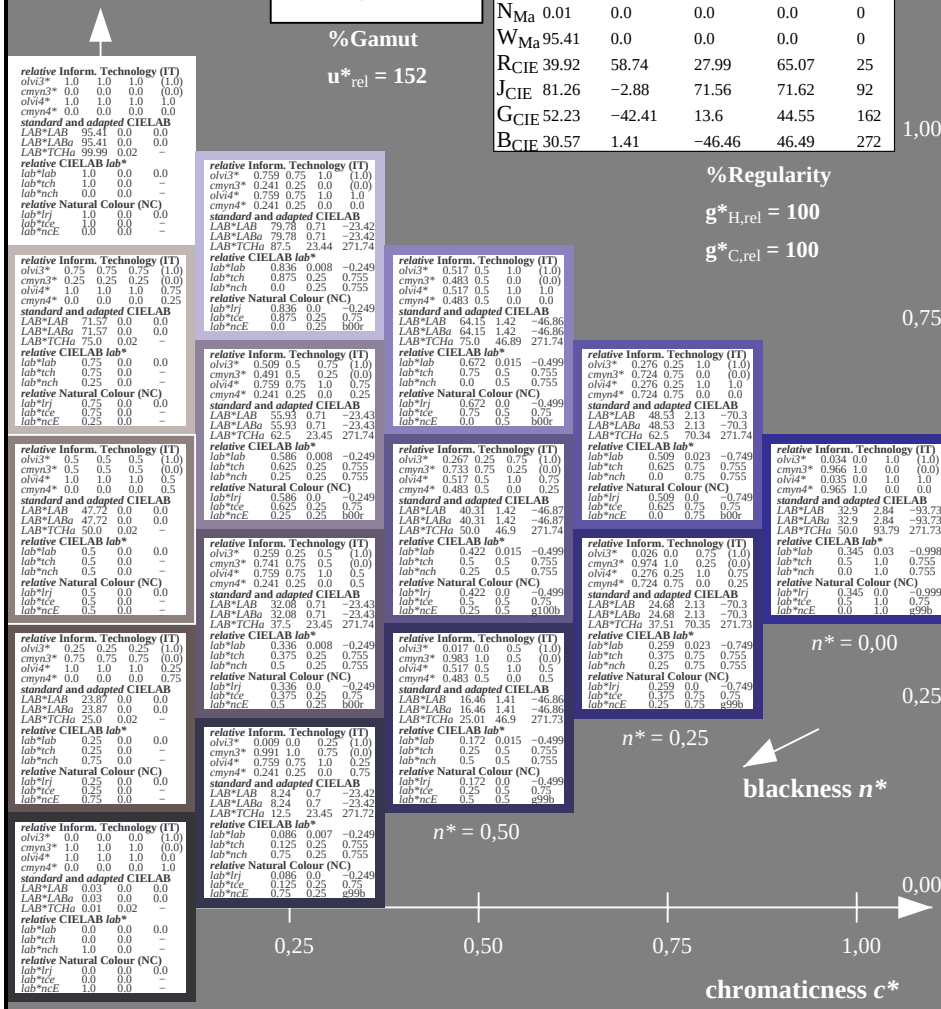
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

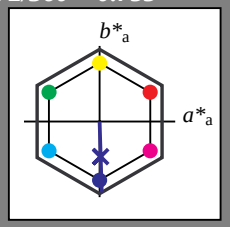


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

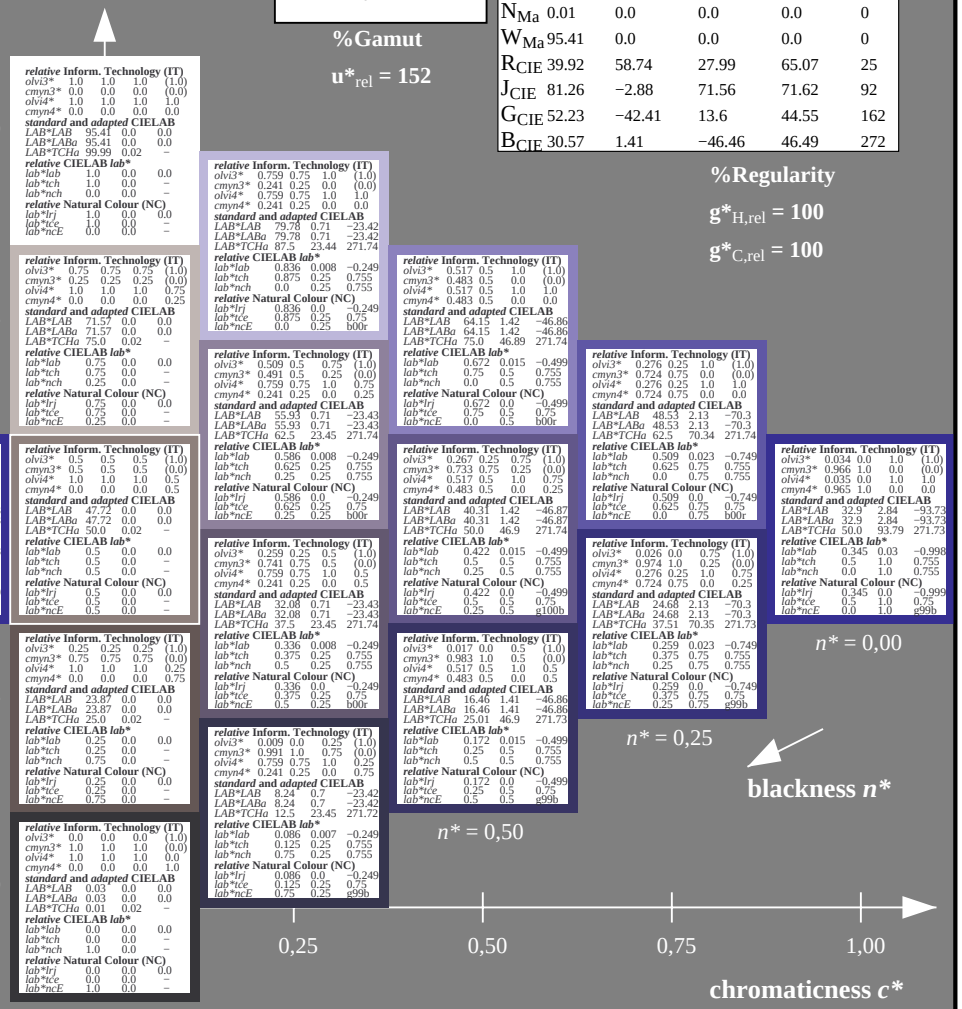
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



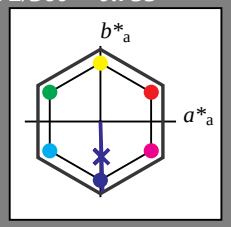
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

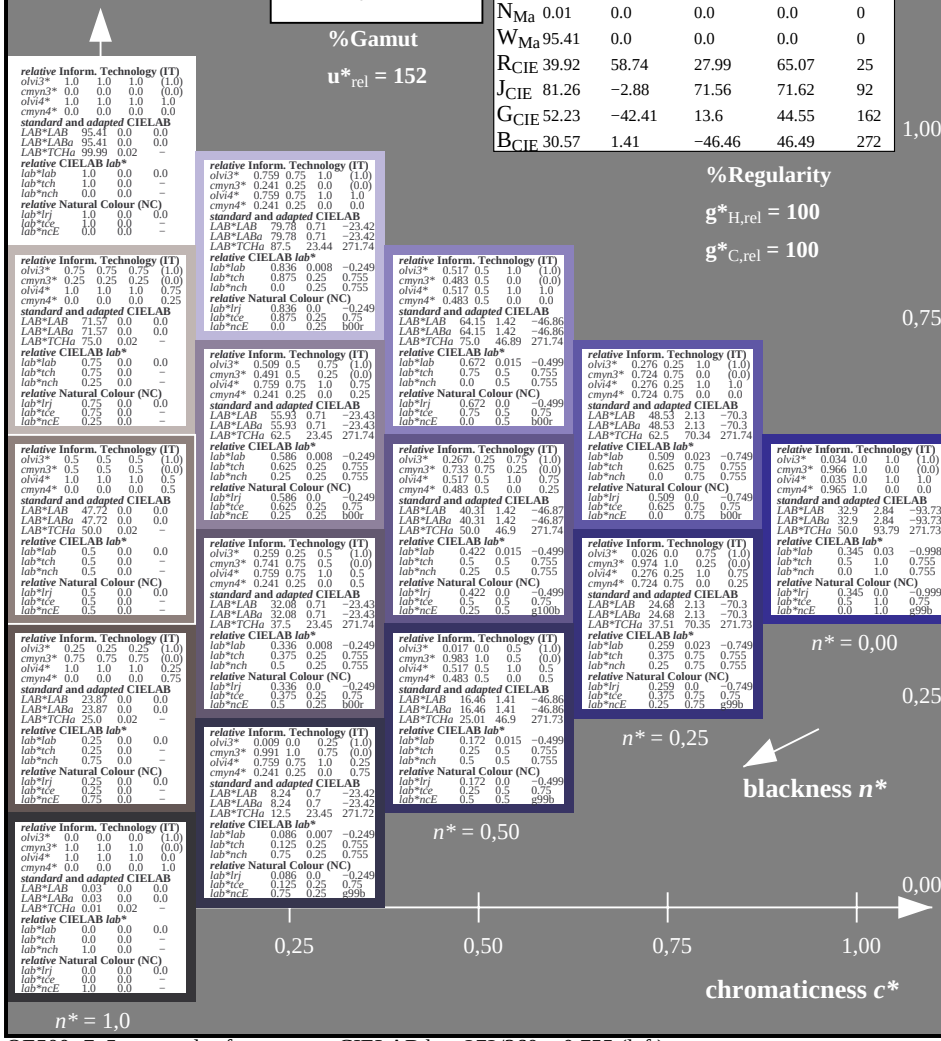
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



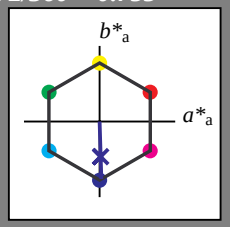
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

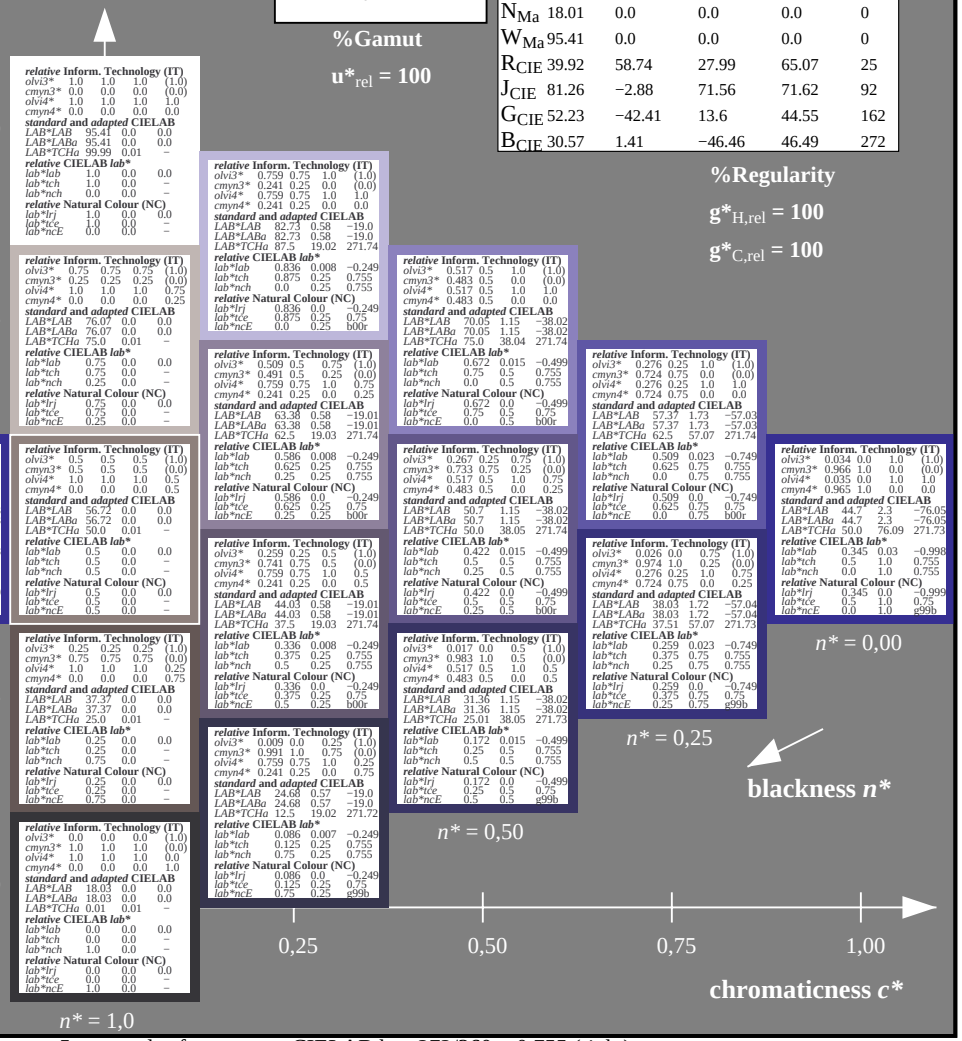
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

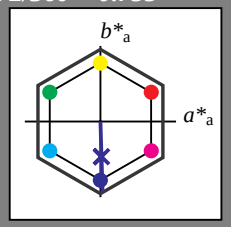
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

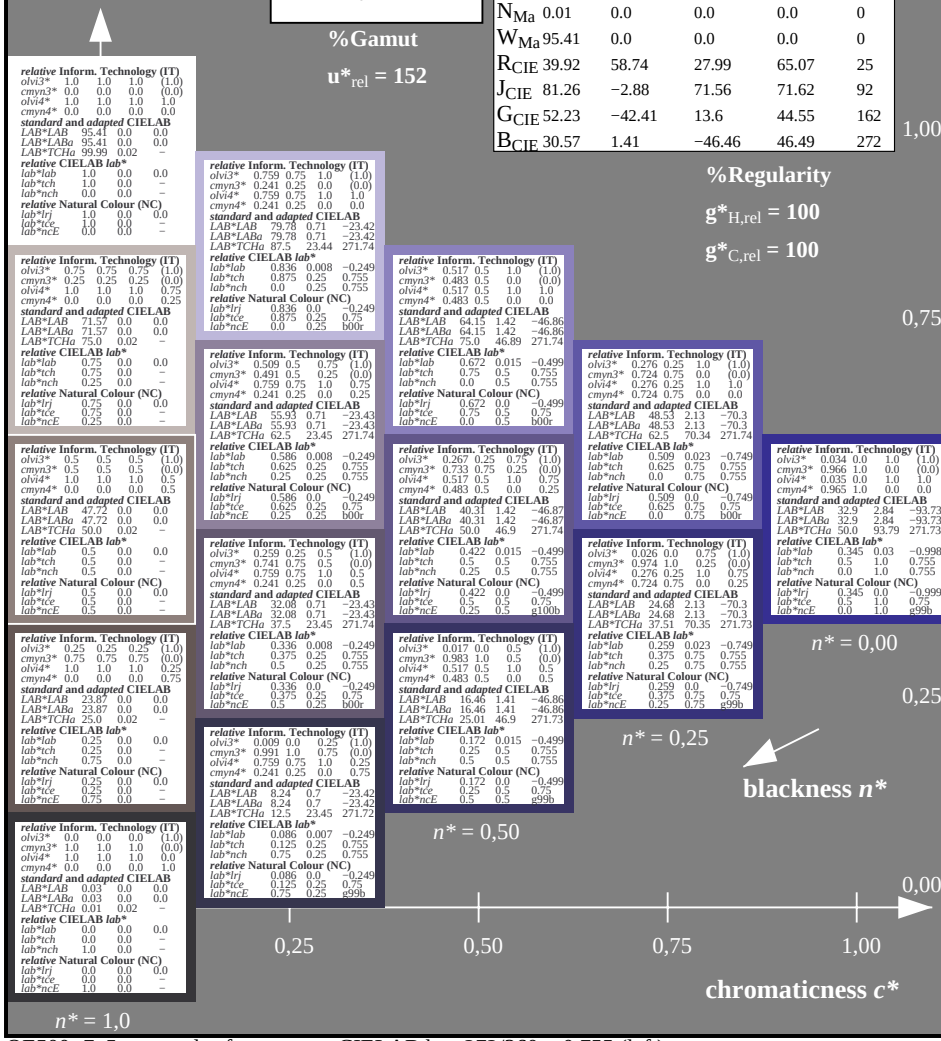
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

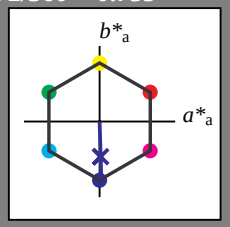
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

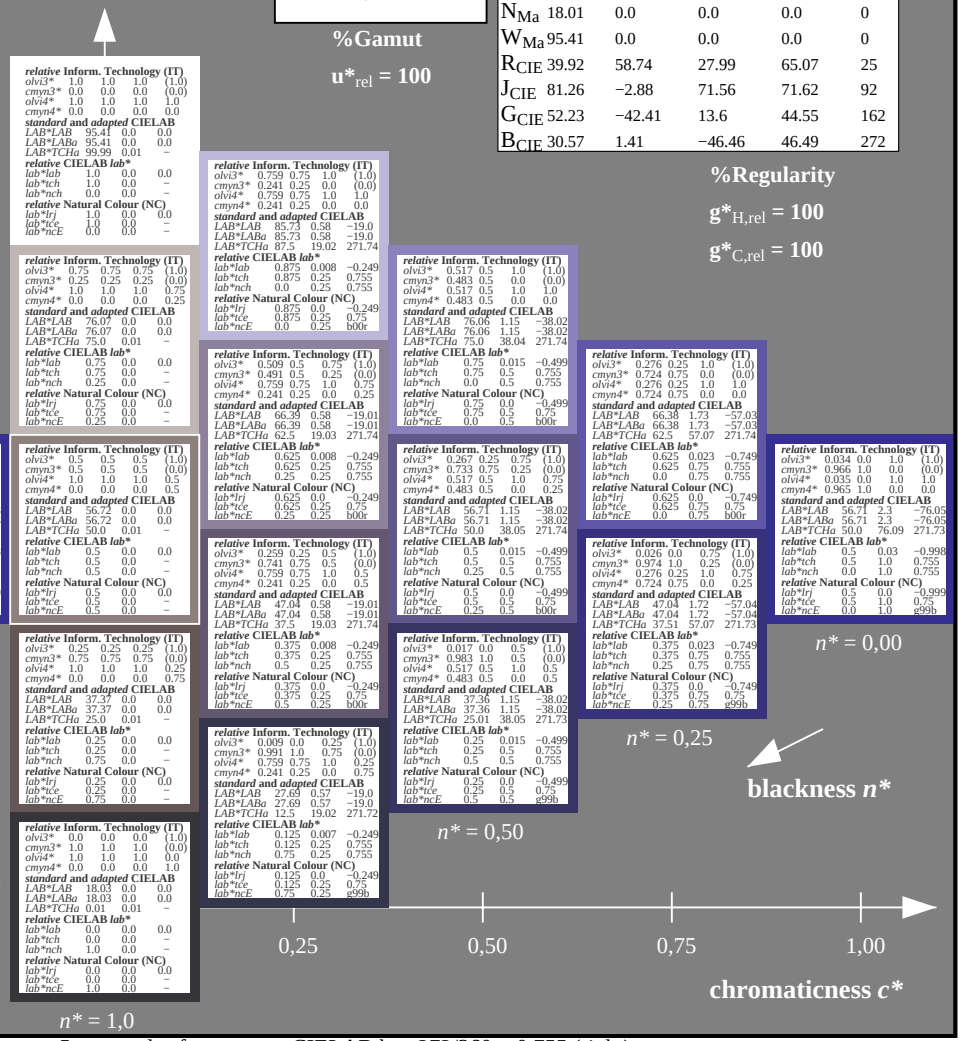
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

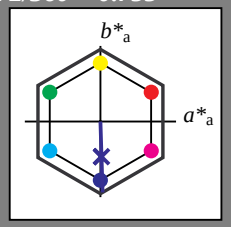
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

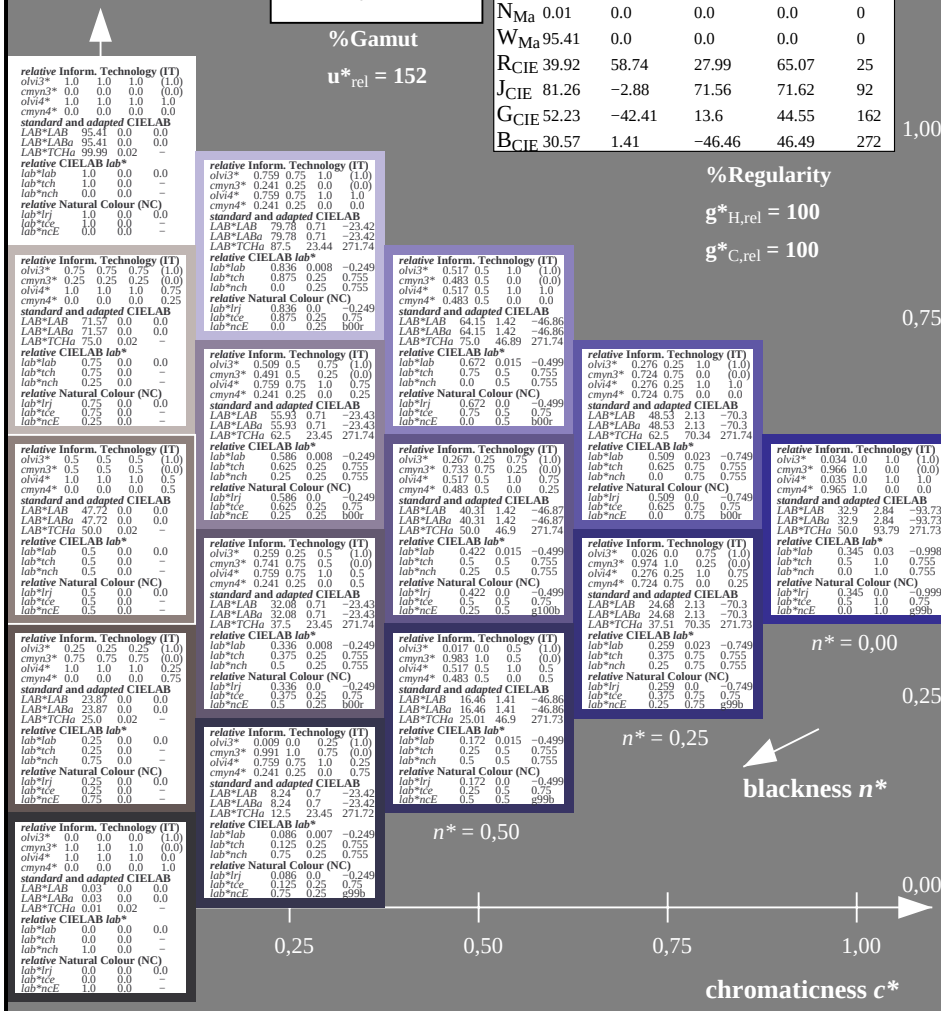
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

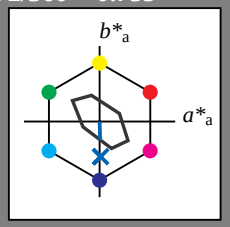
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

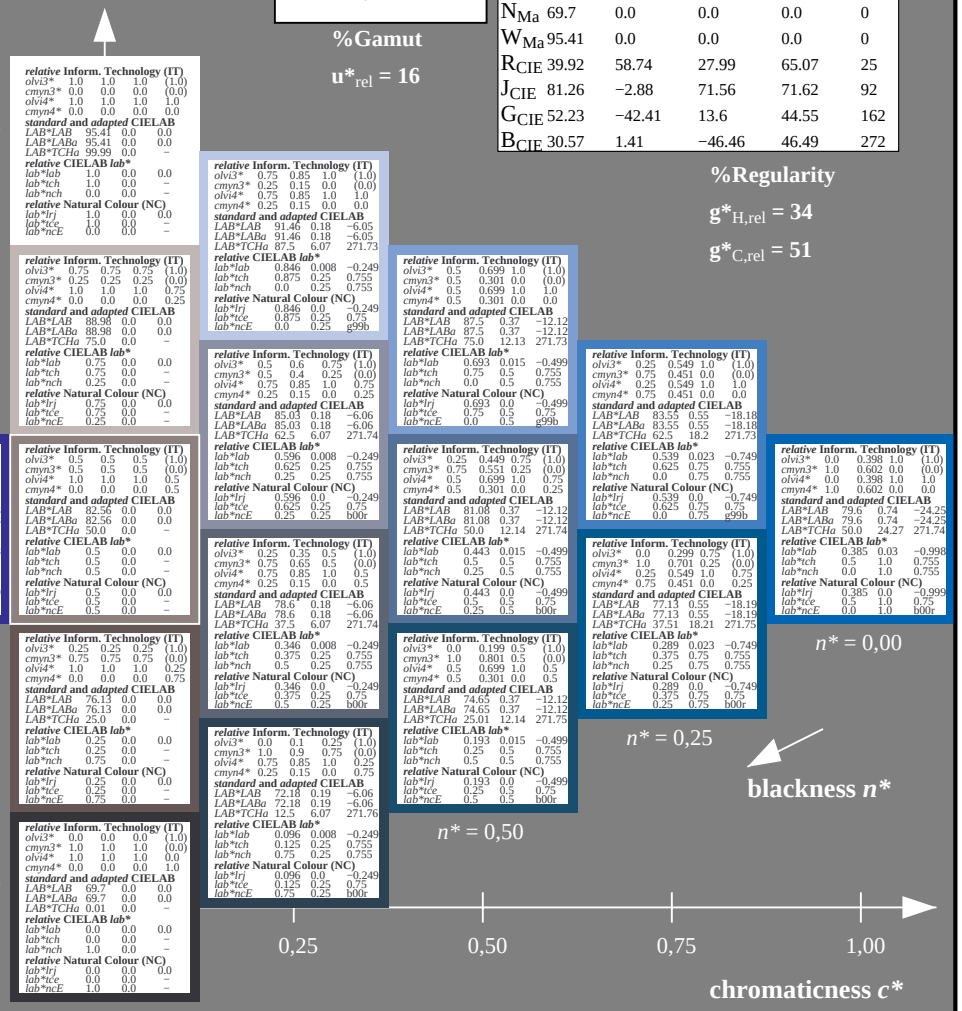
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



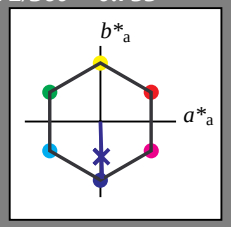
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

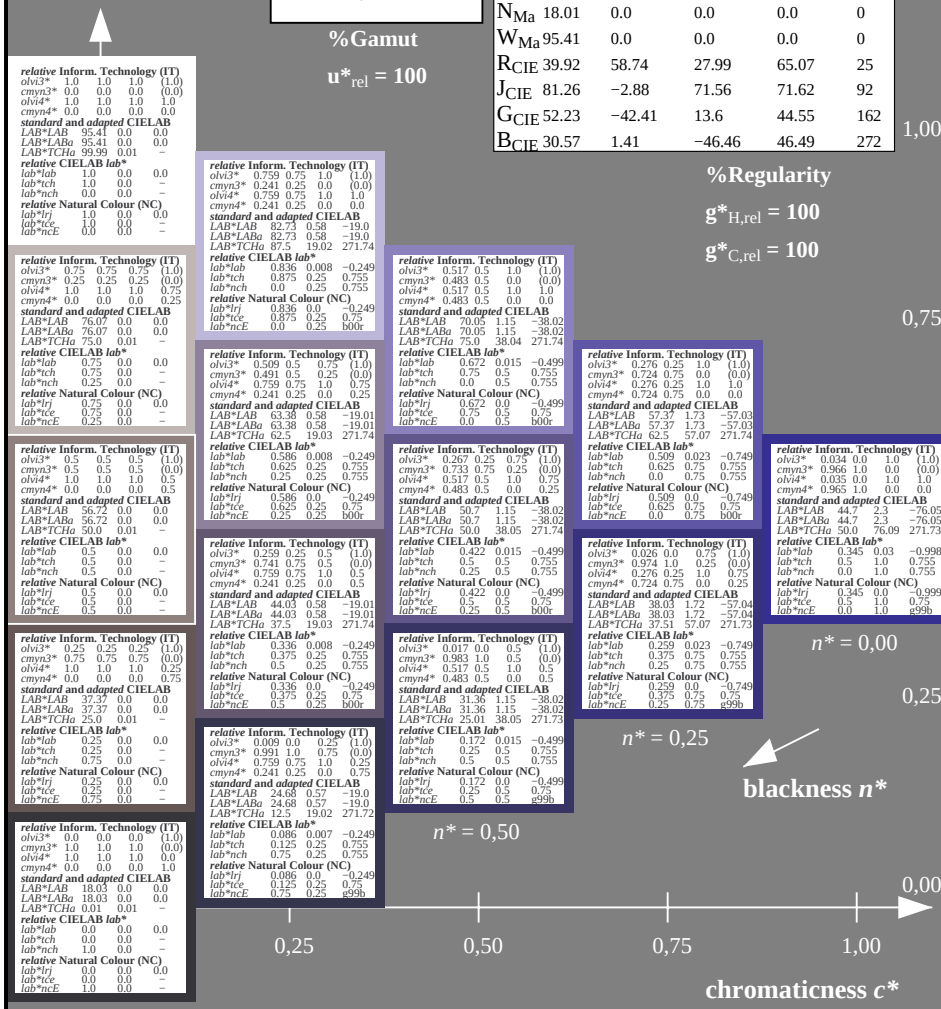
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



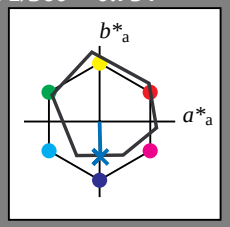
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

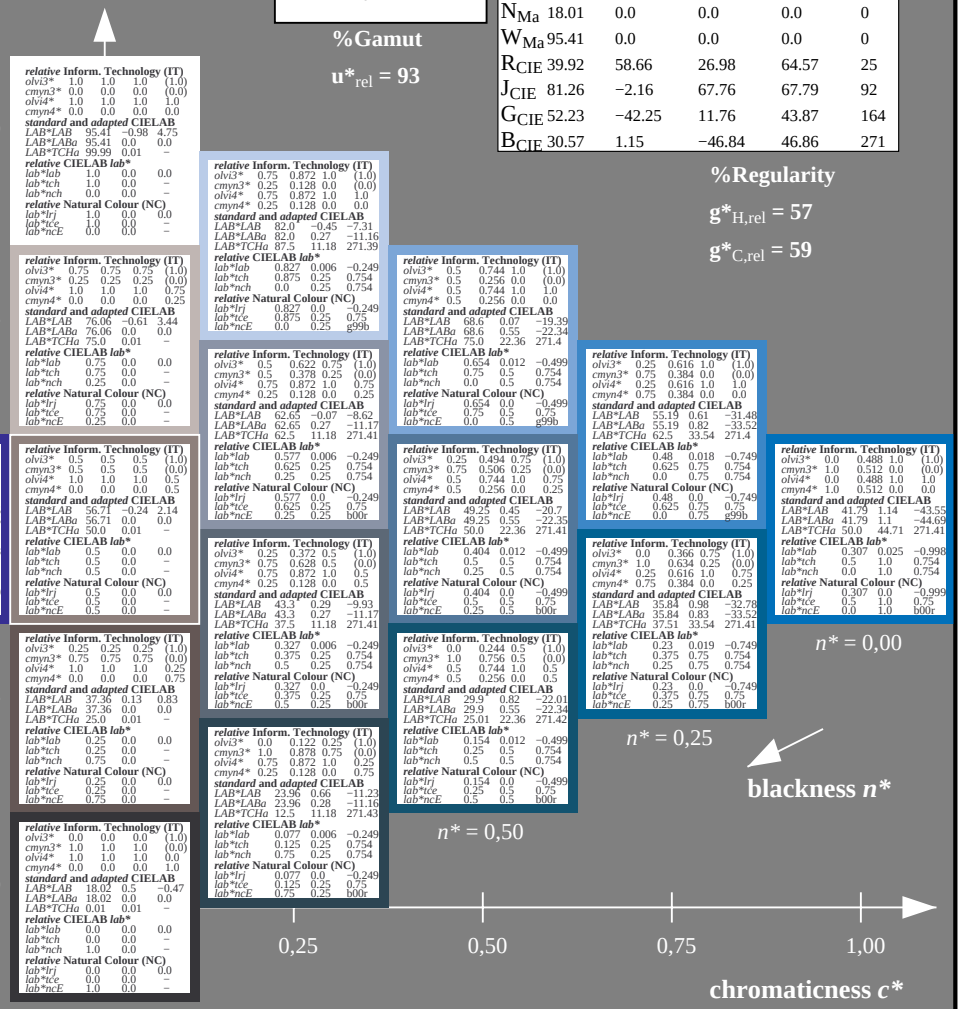
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

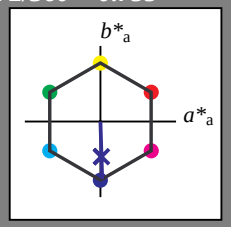
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

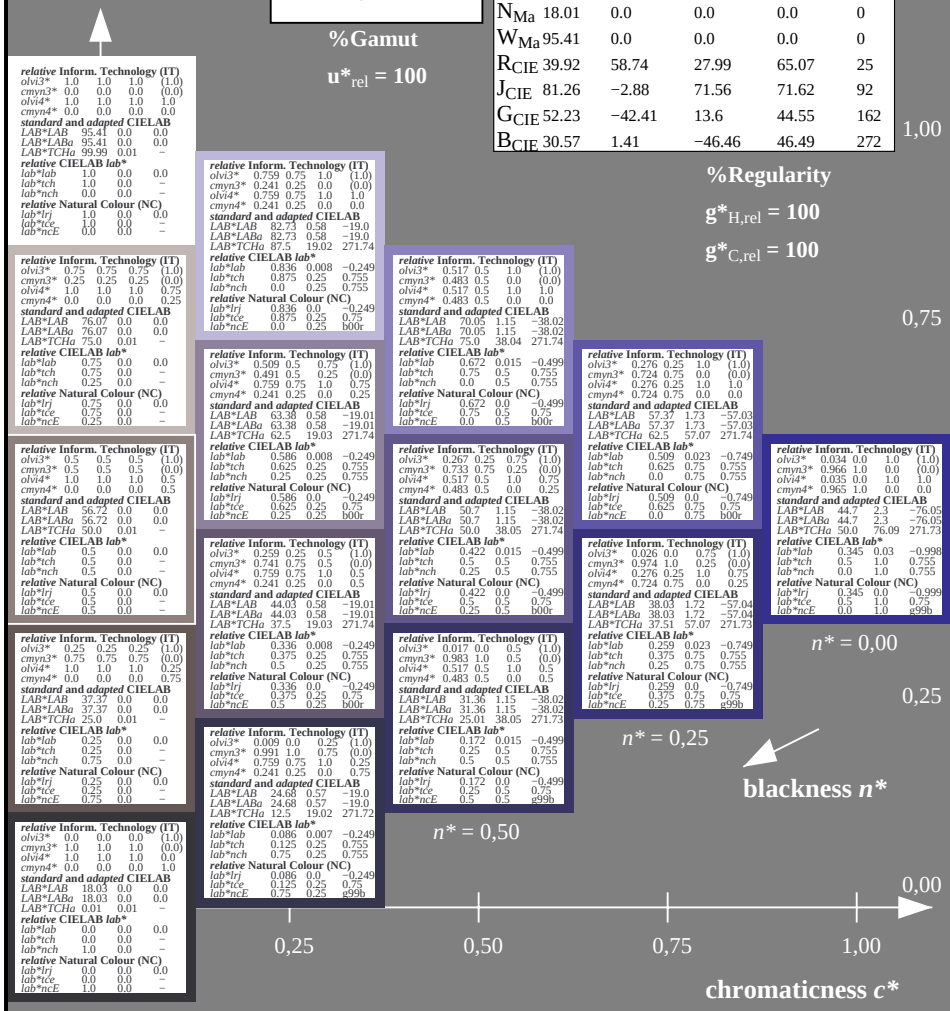
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

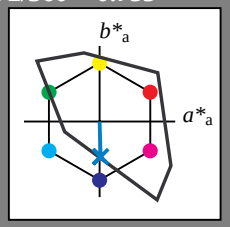
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

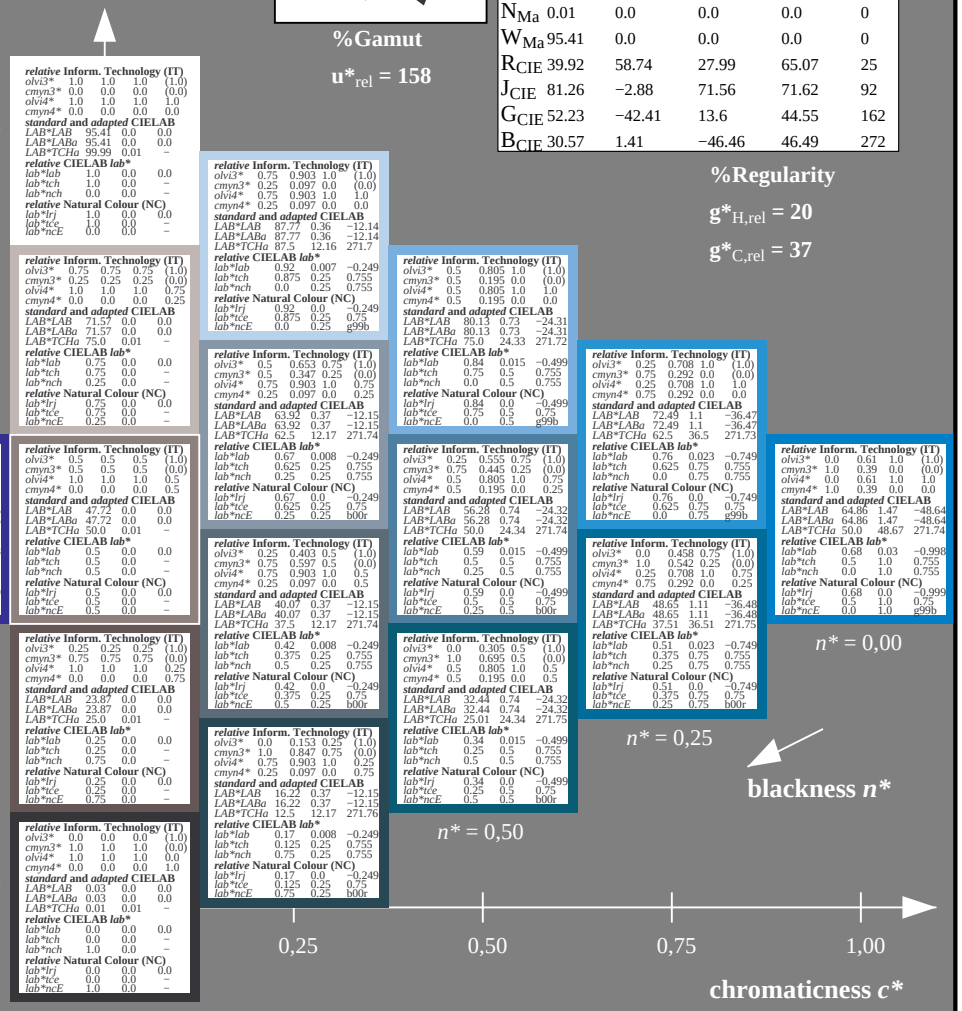
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

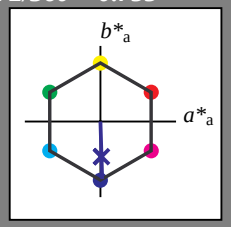
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

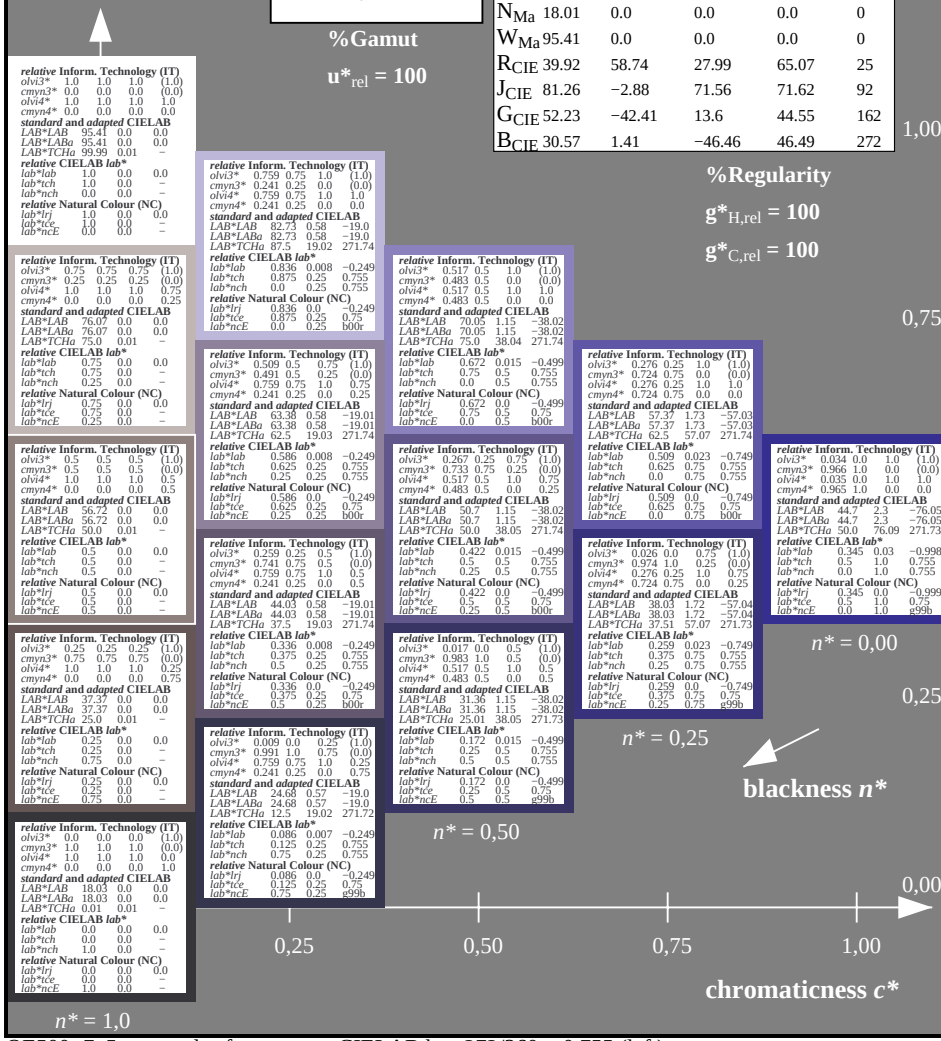
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

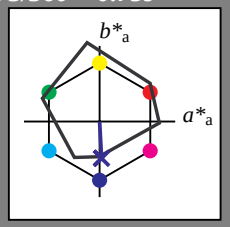
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

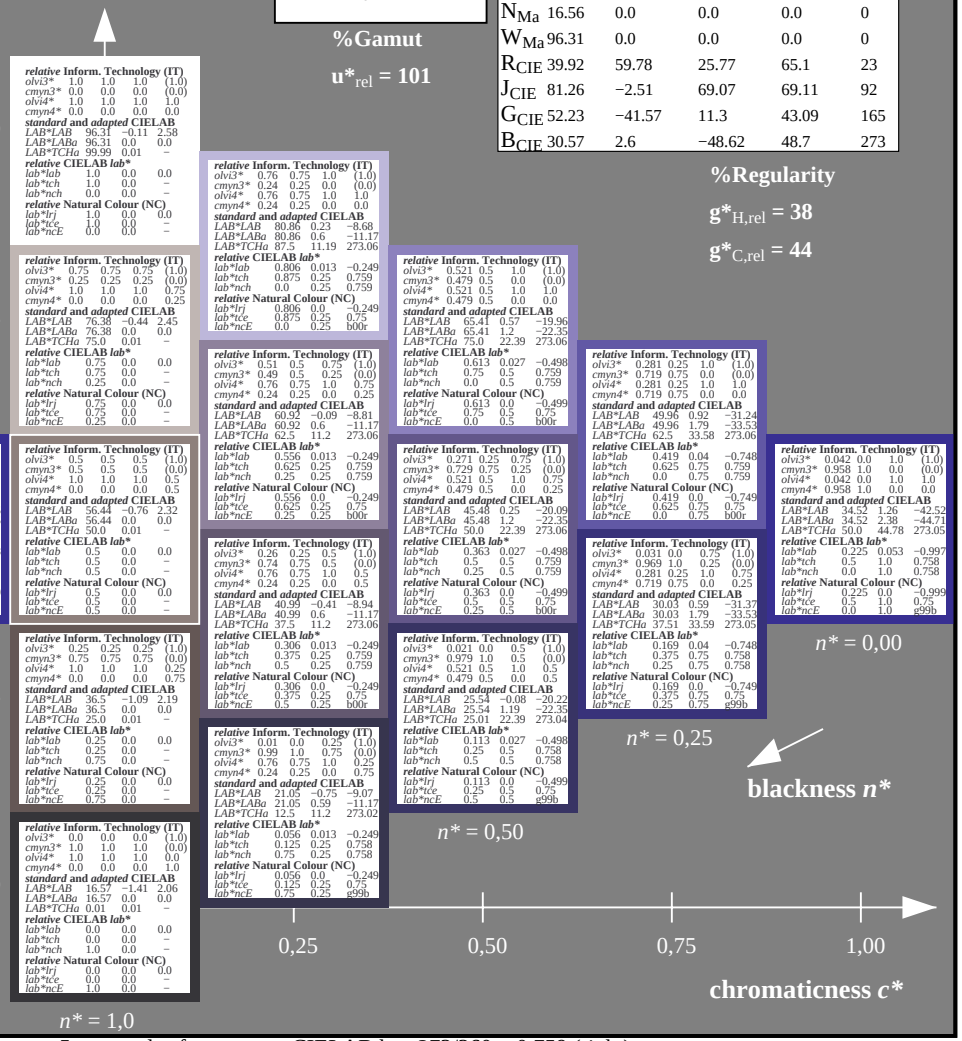
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

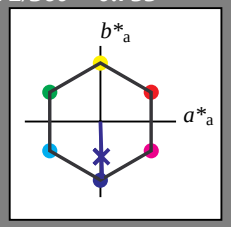
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

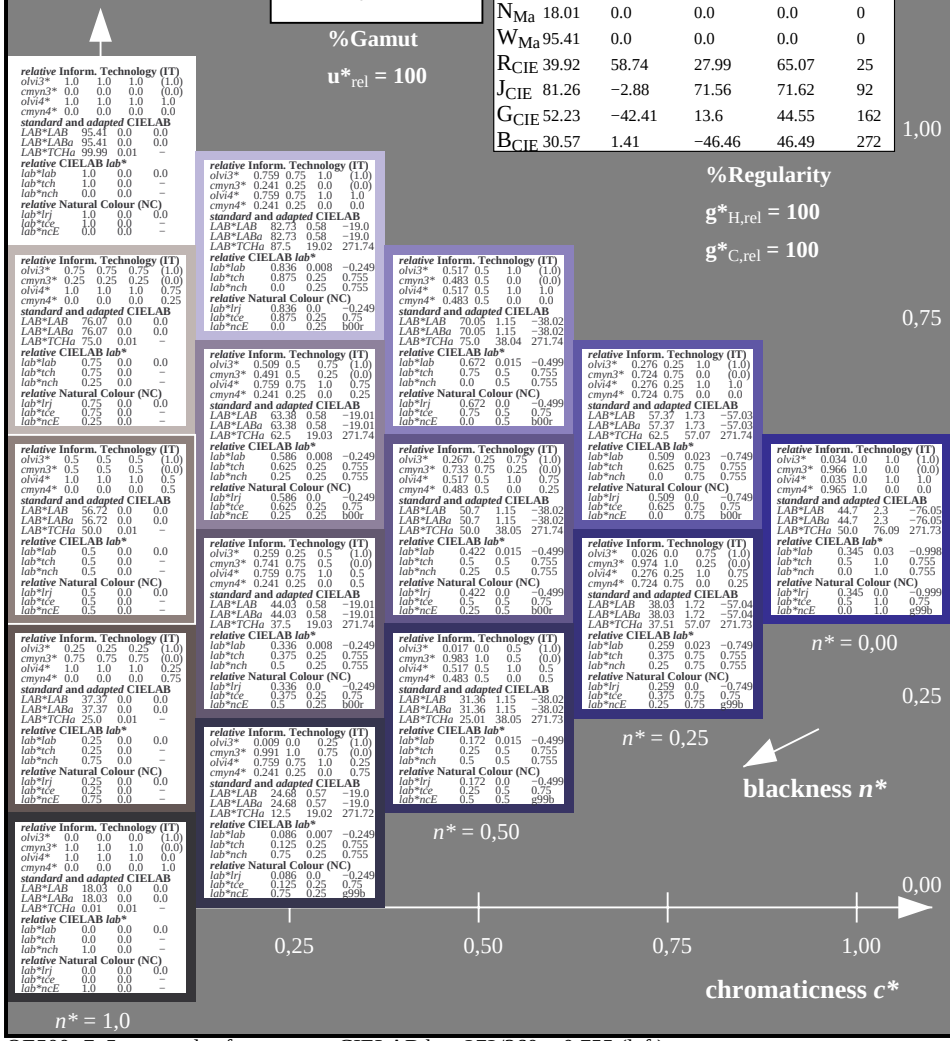
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

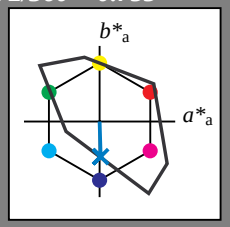
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

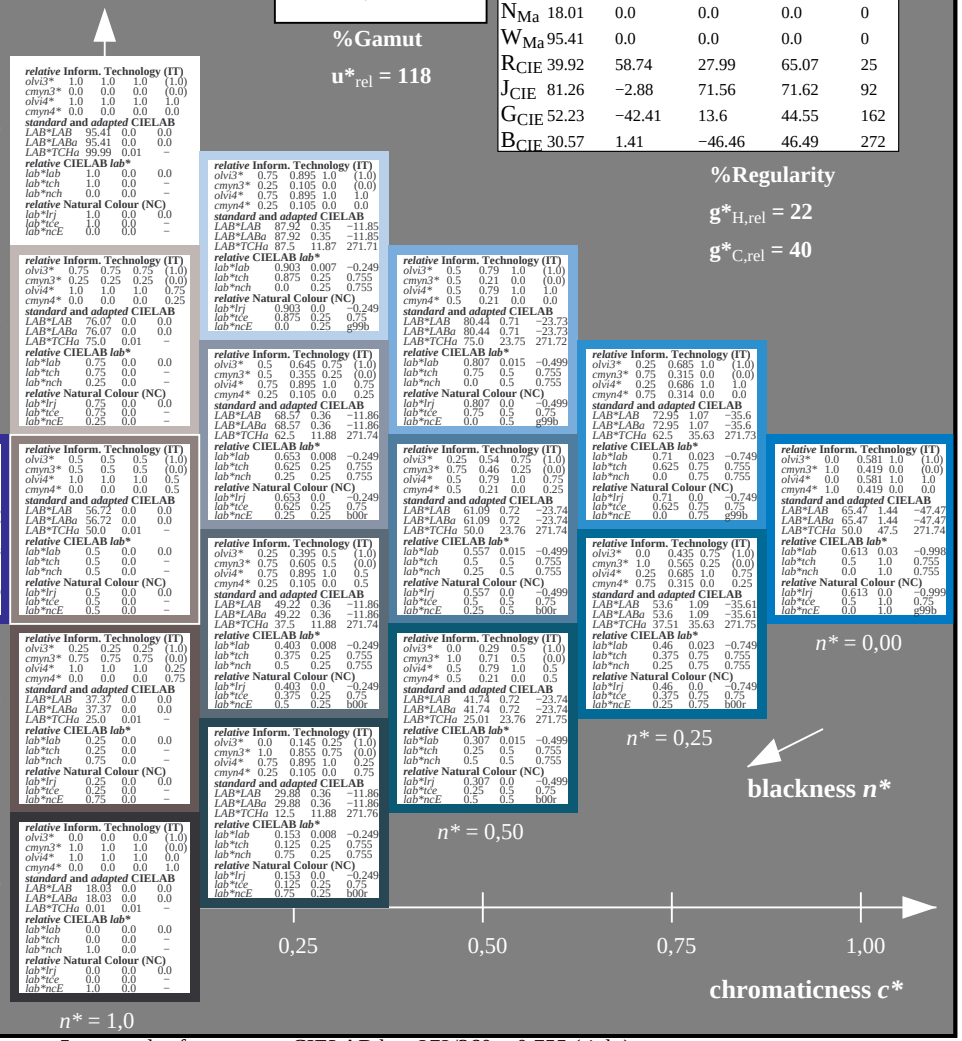
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

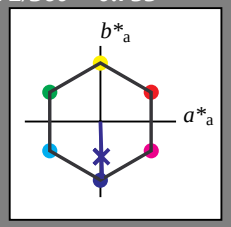
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

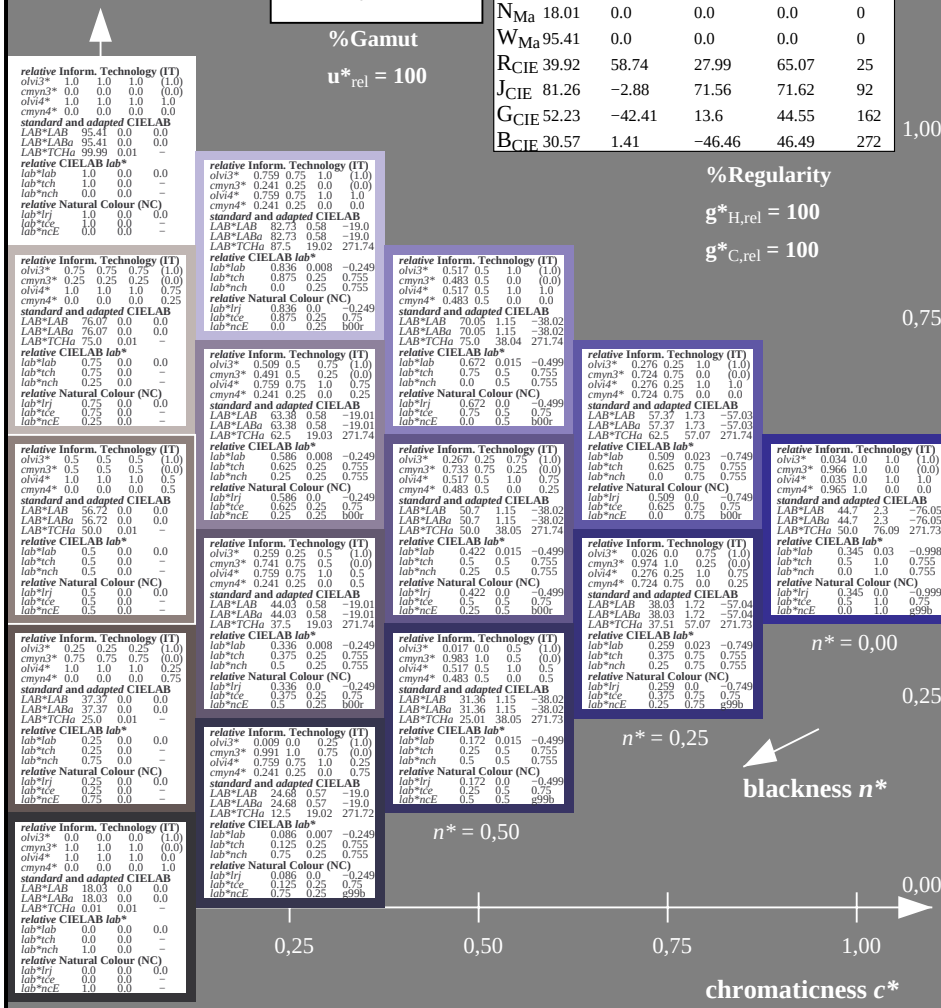
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

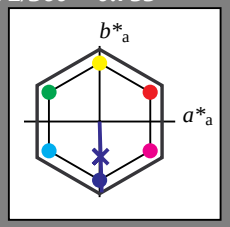
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

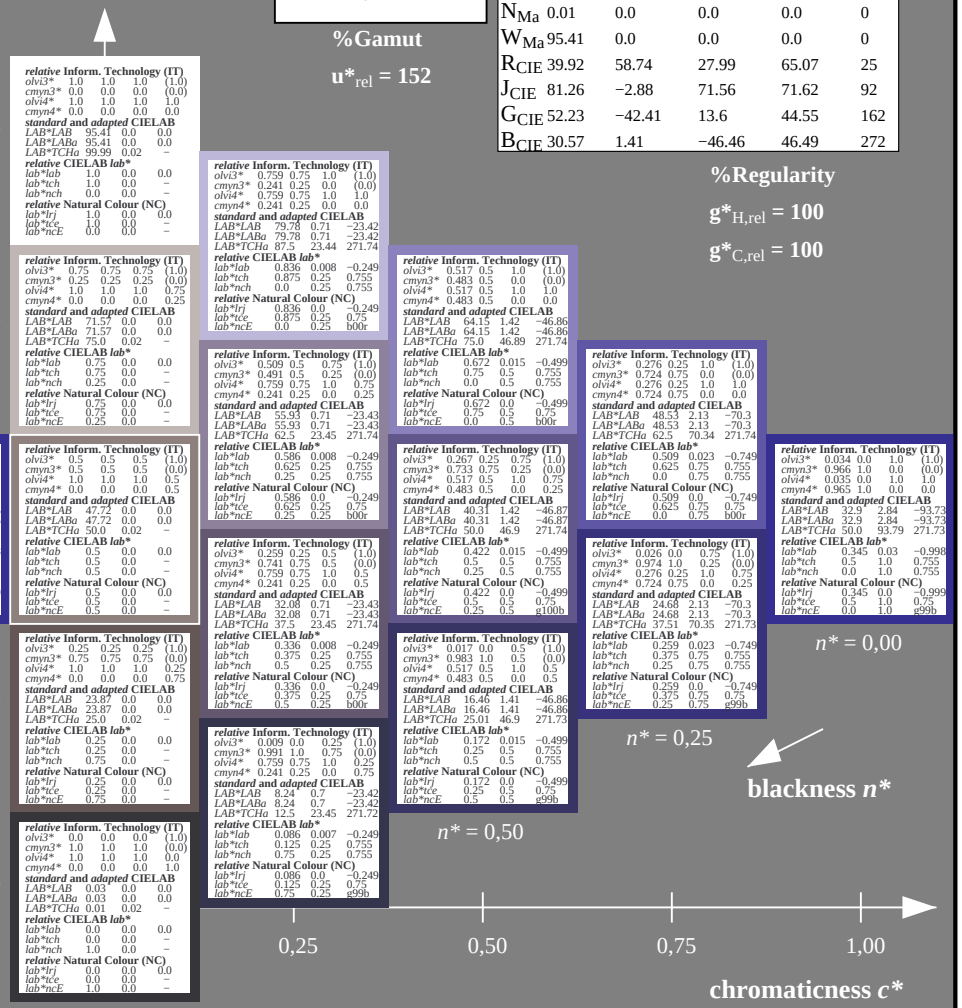
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

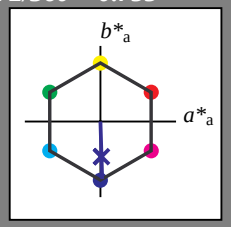


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

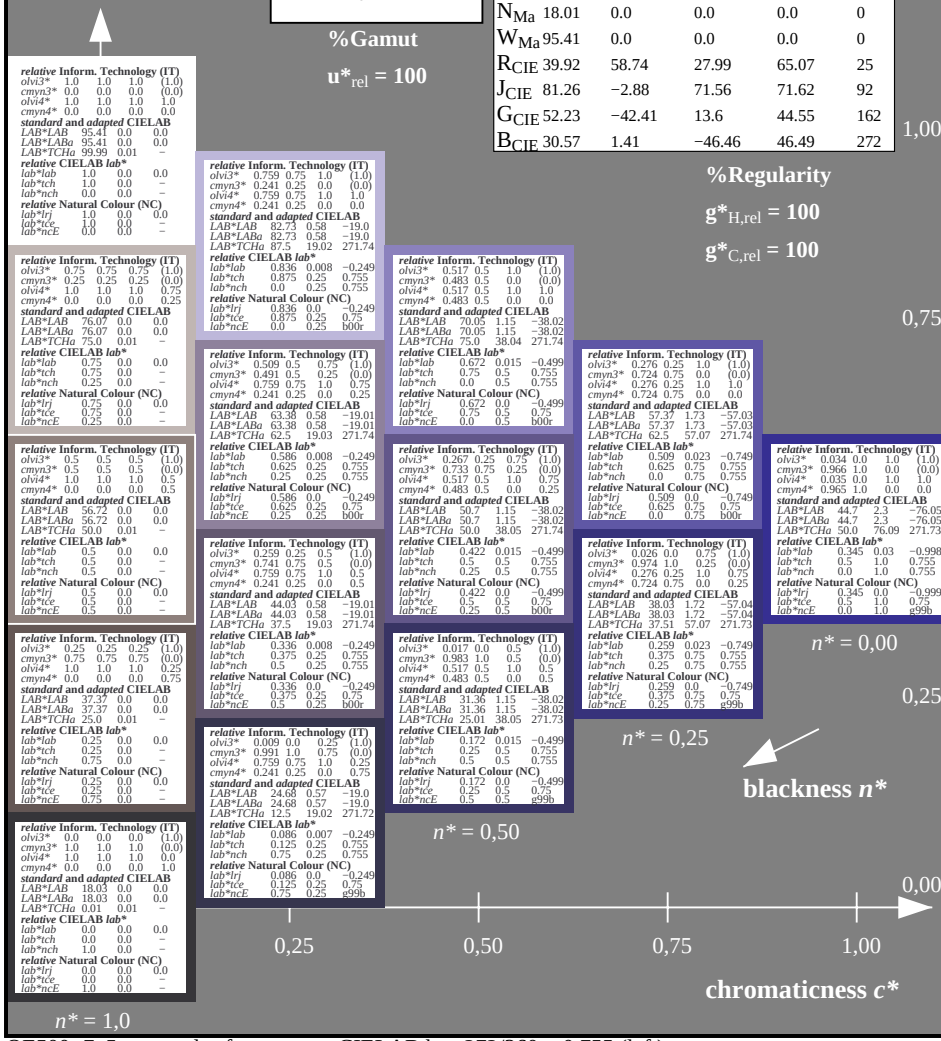
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

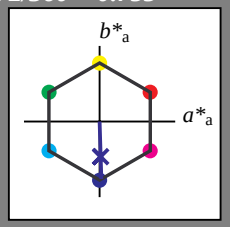


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

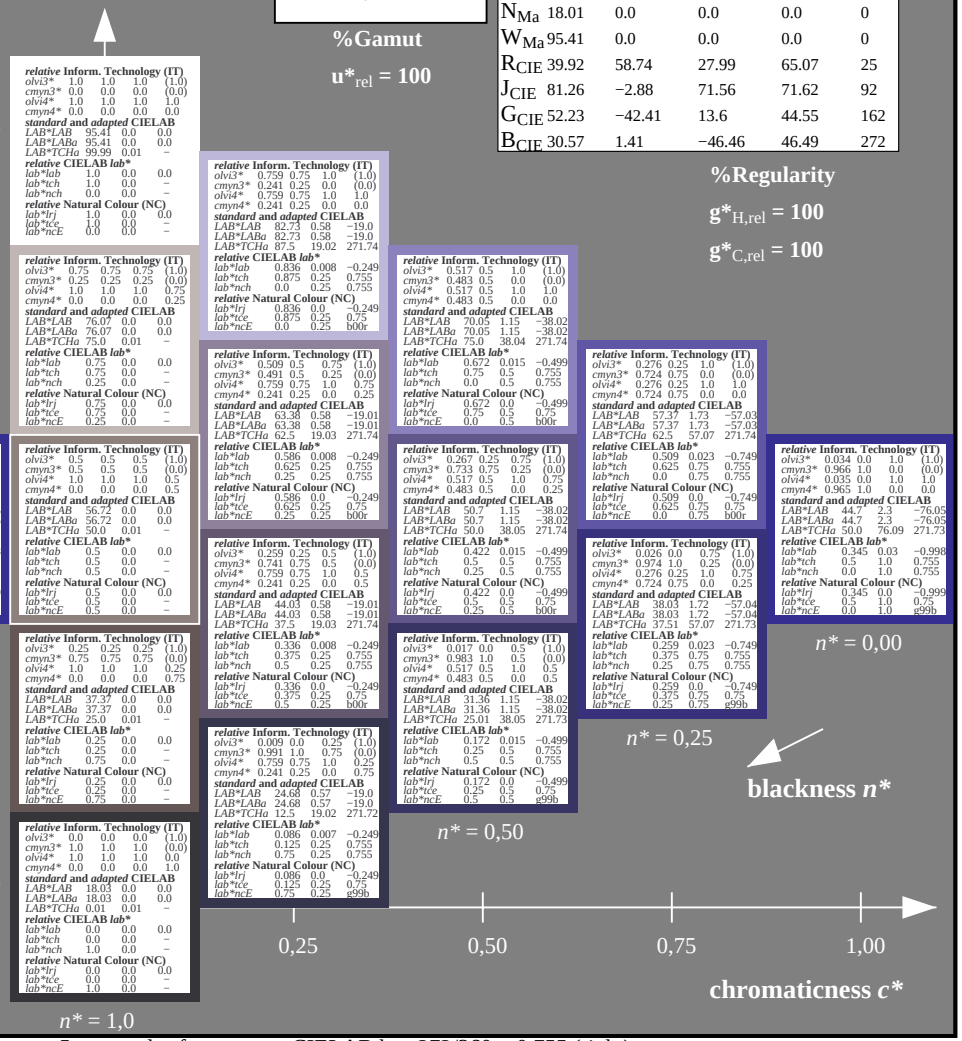
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

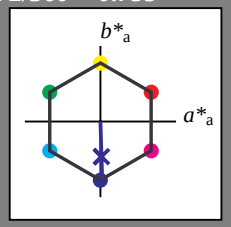
$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0



NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

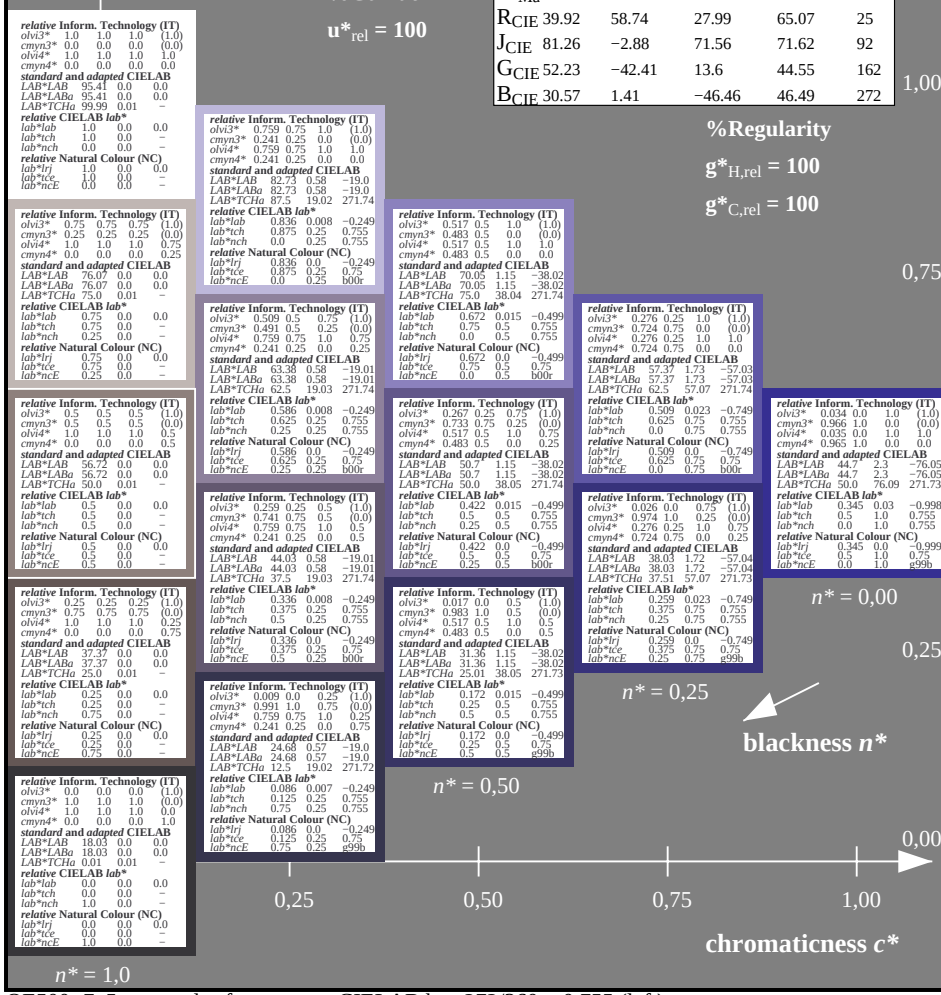
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

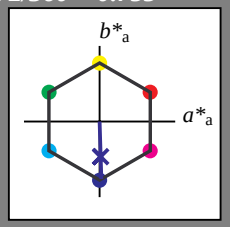
$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

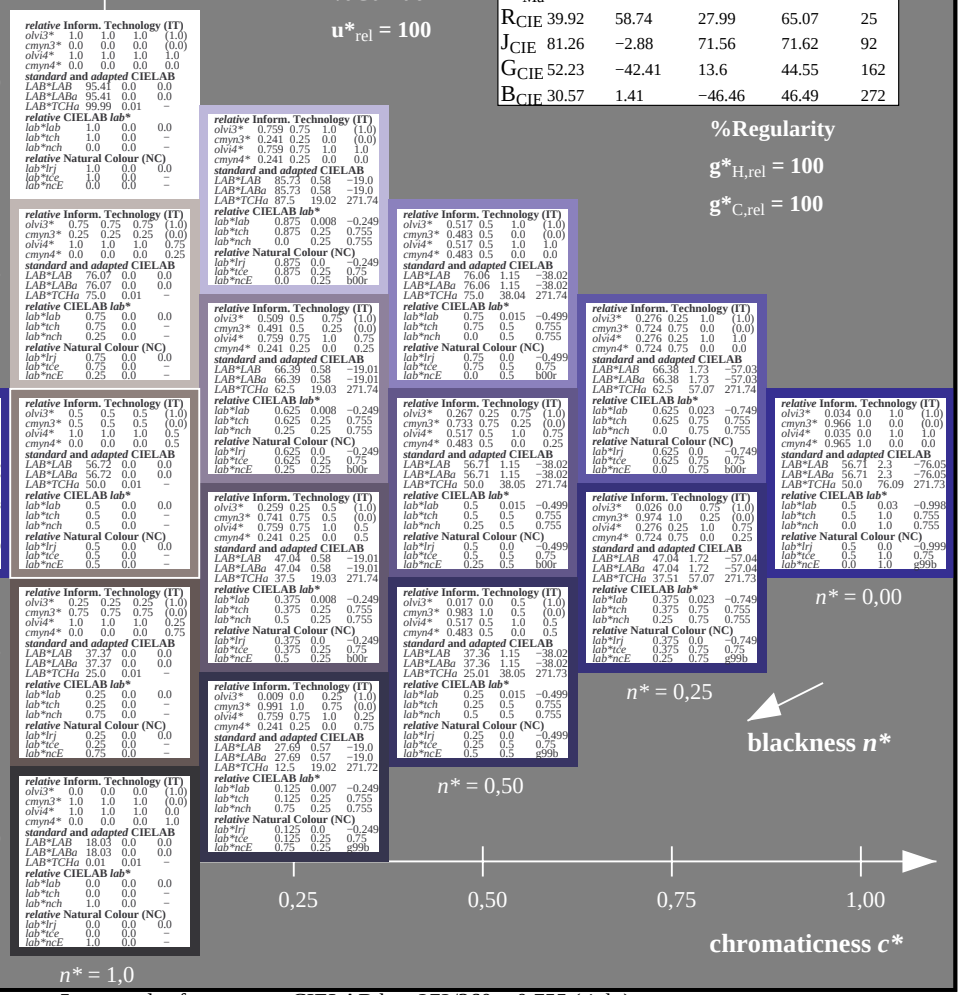
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

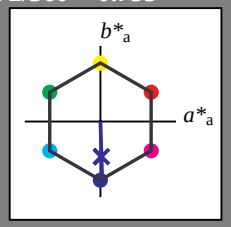
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

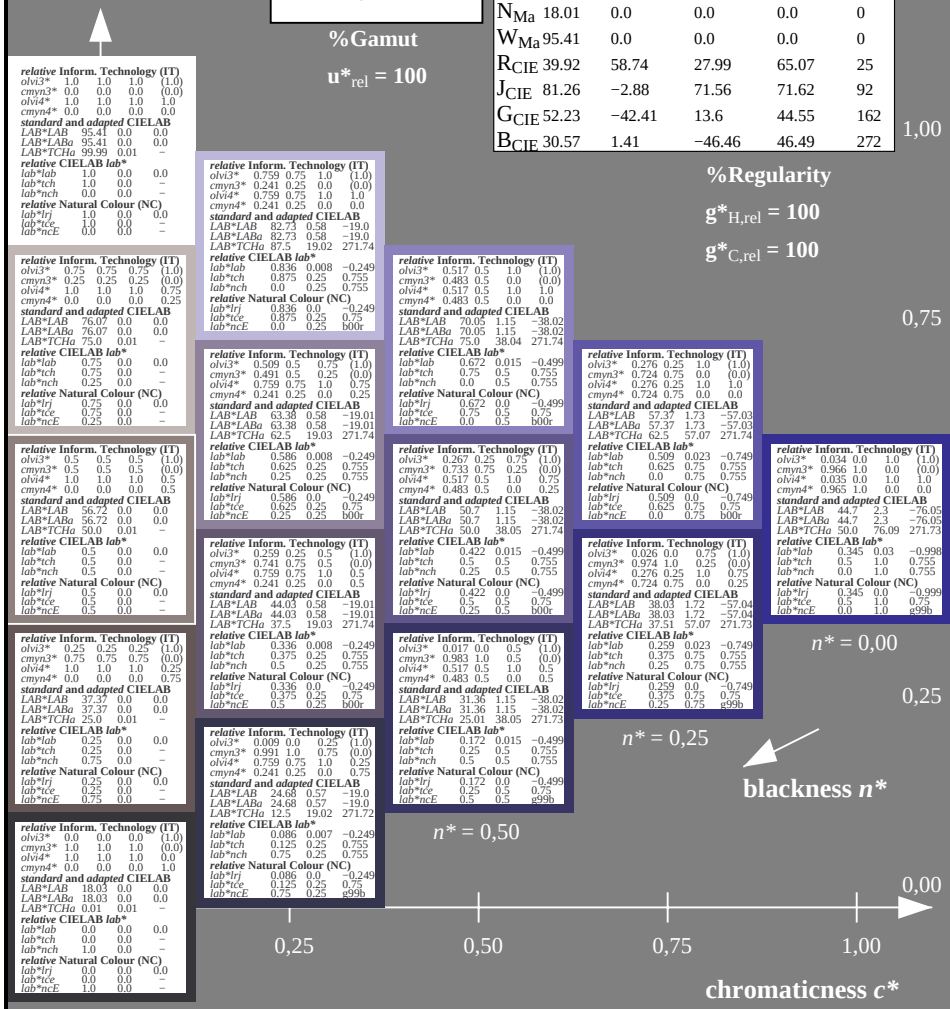
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

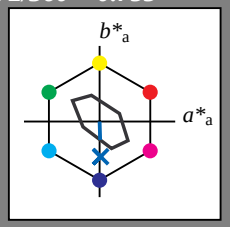
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

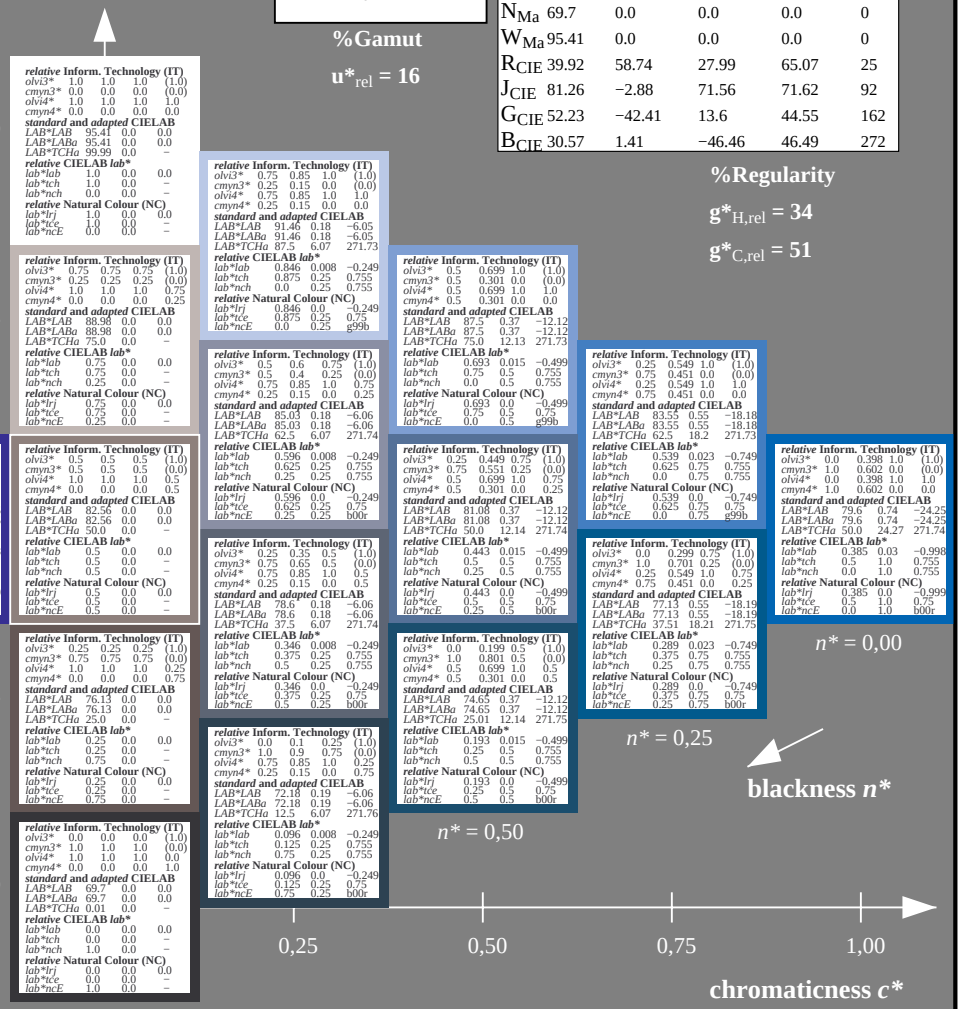
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



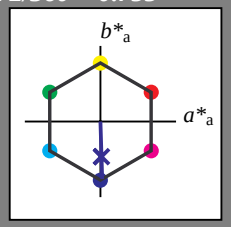
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

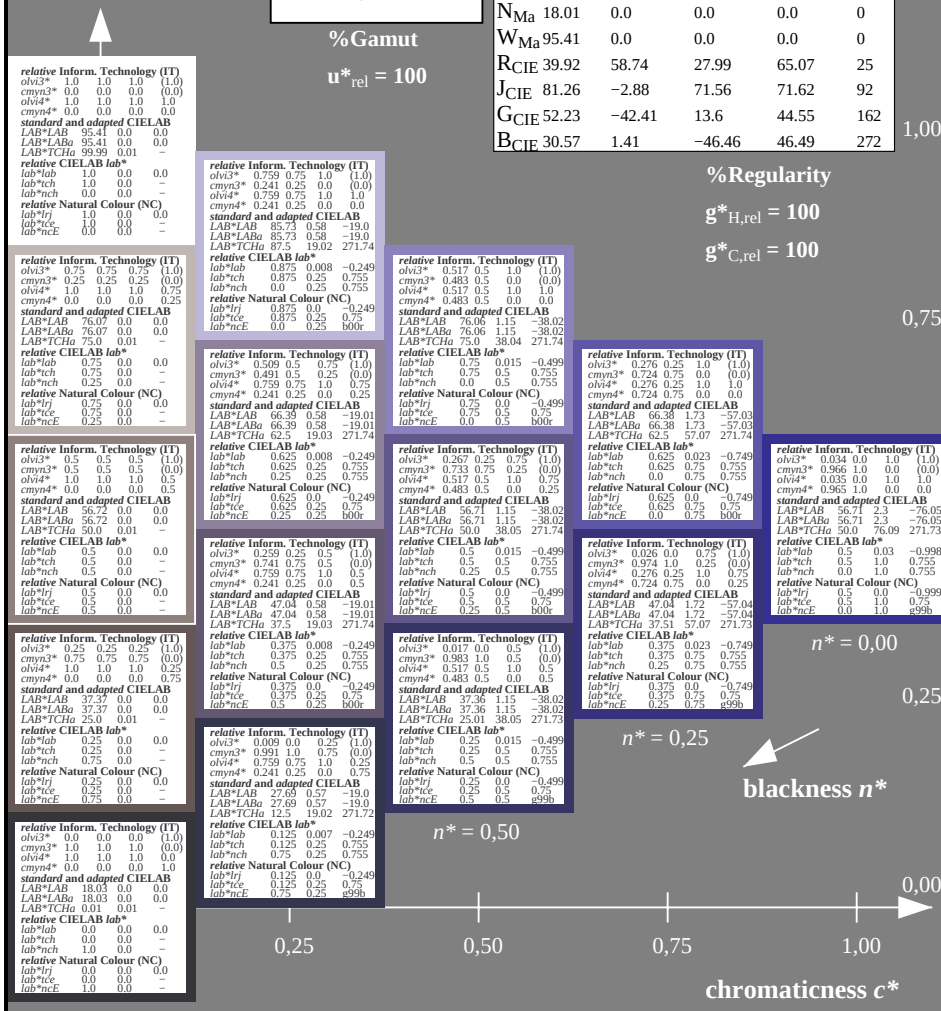
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



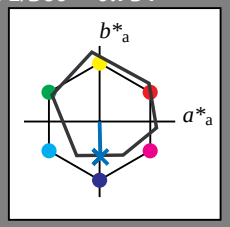
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

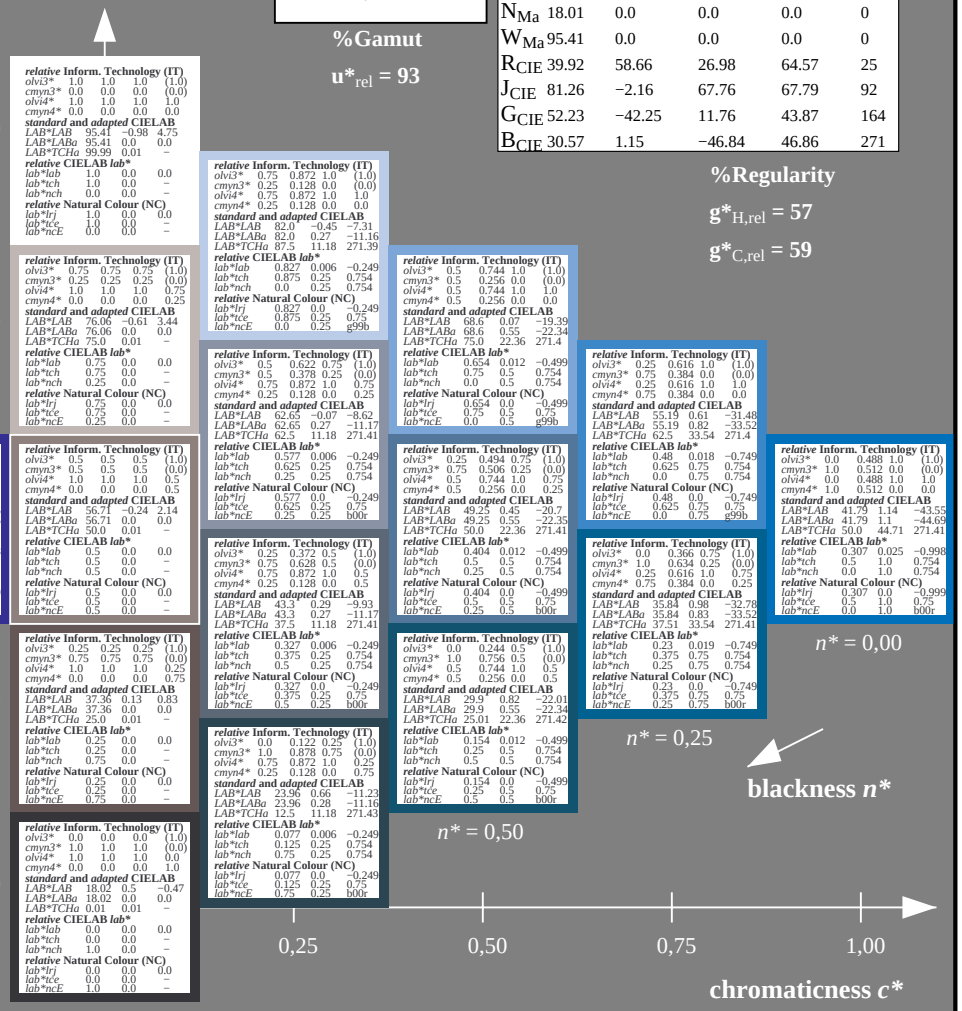
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

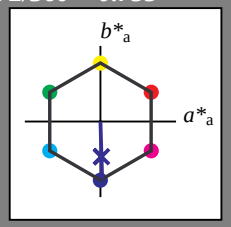
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

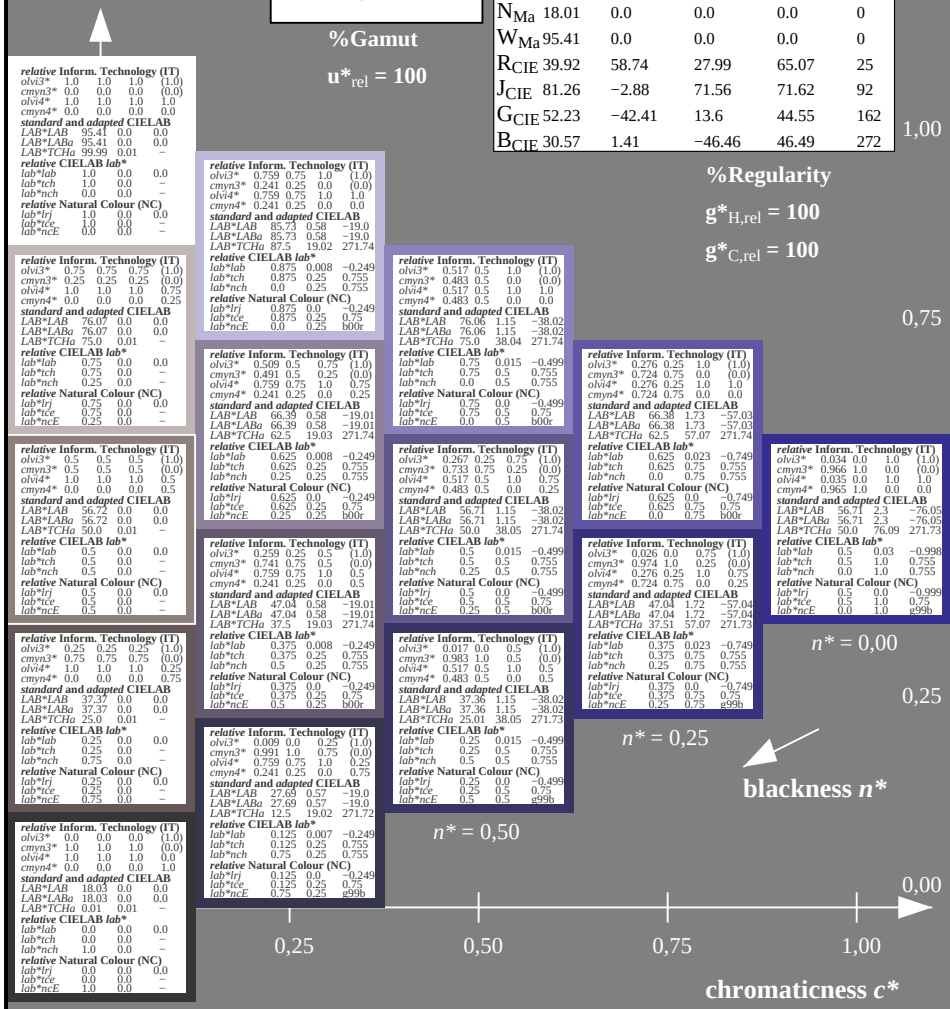
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

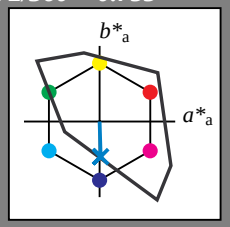
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

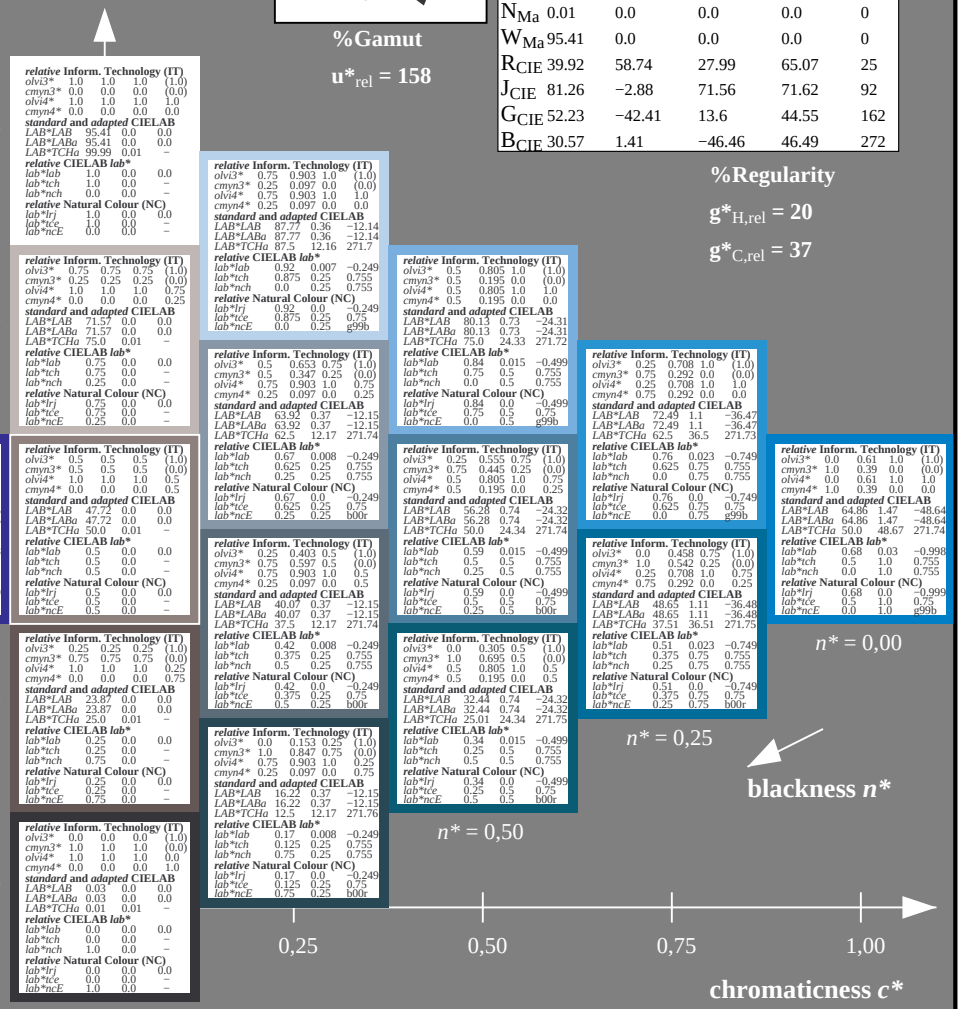
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

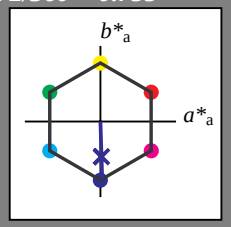
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

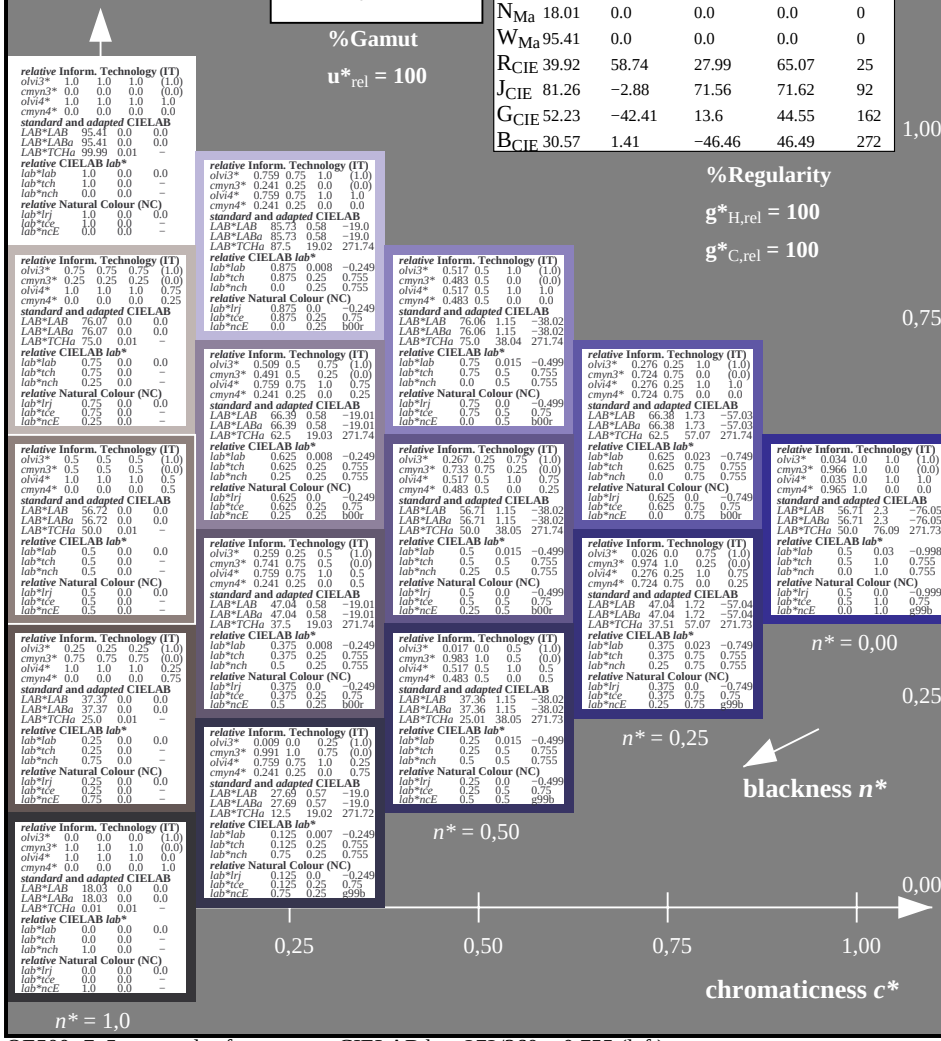
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

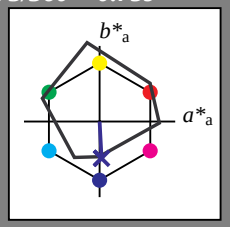
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

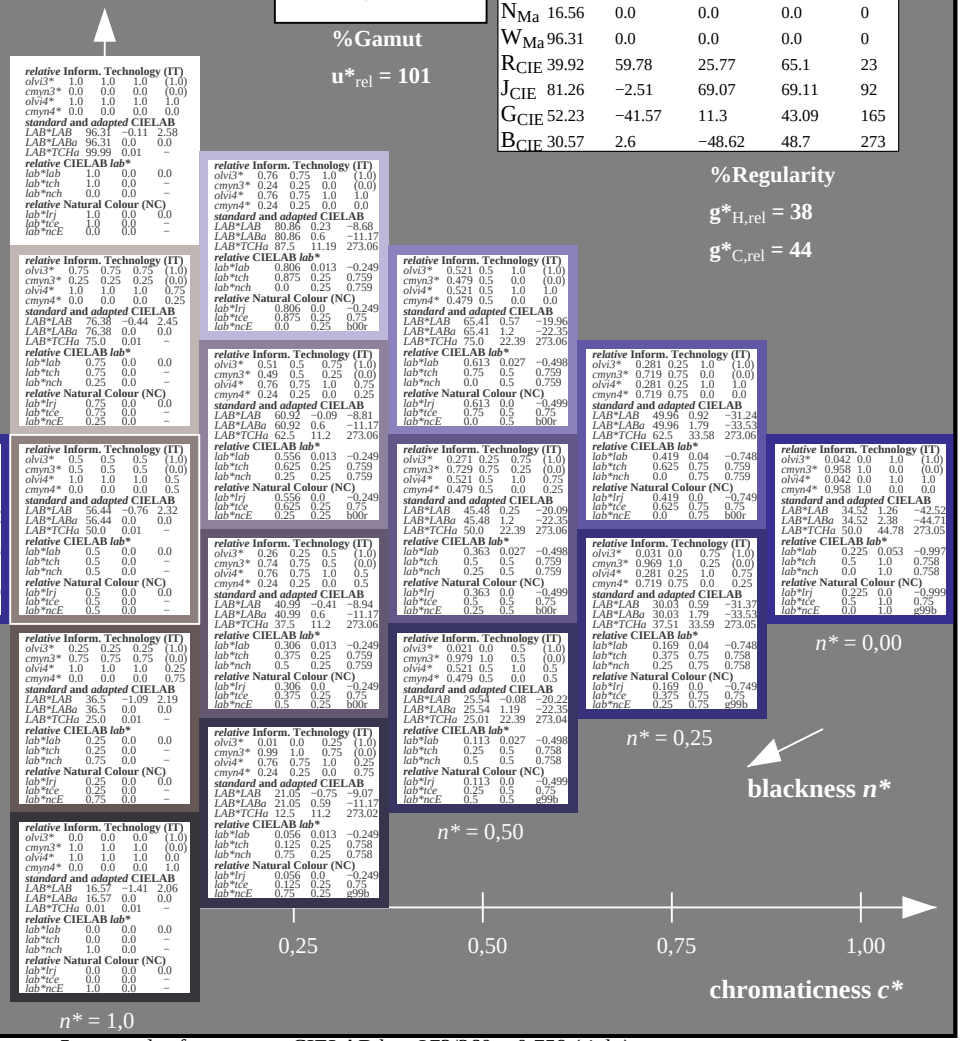
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

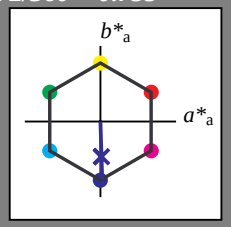
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

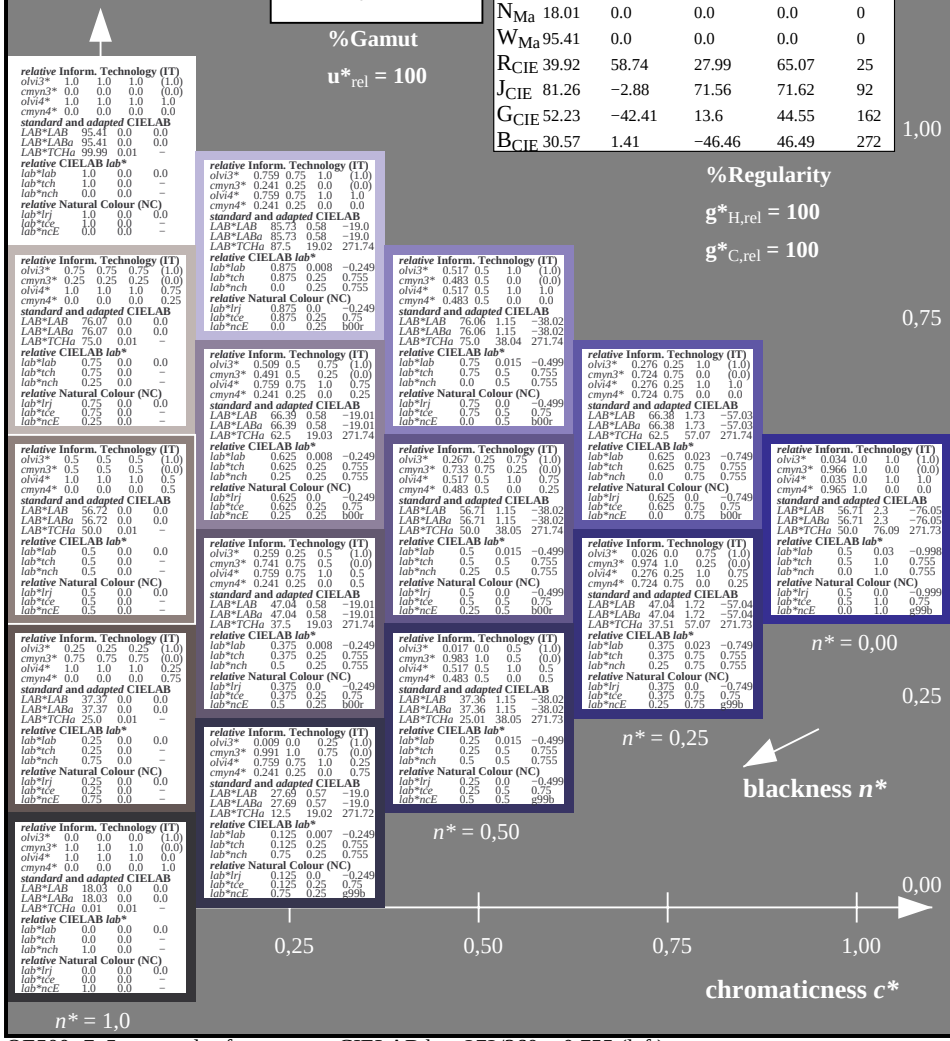
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

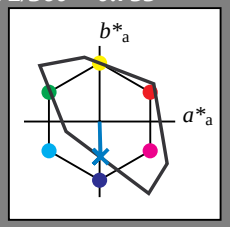
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

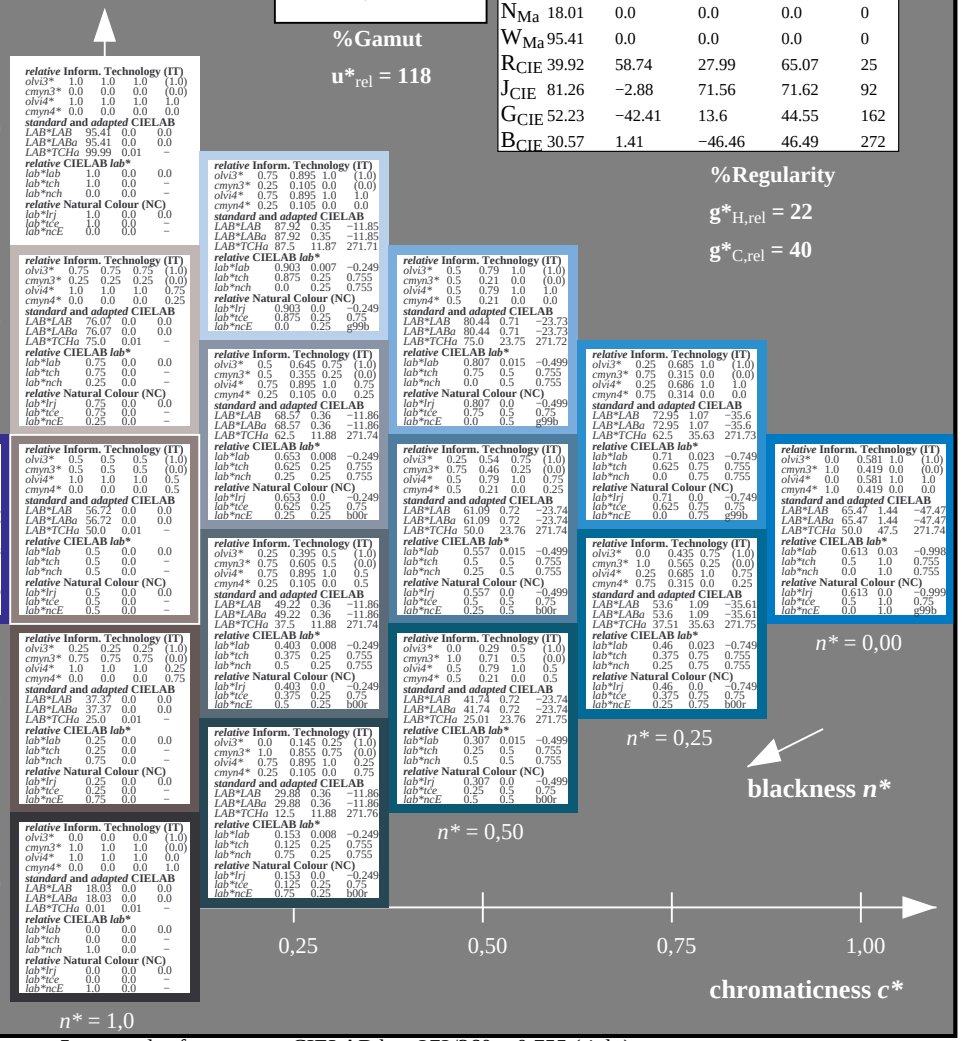
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



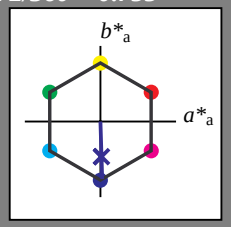
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

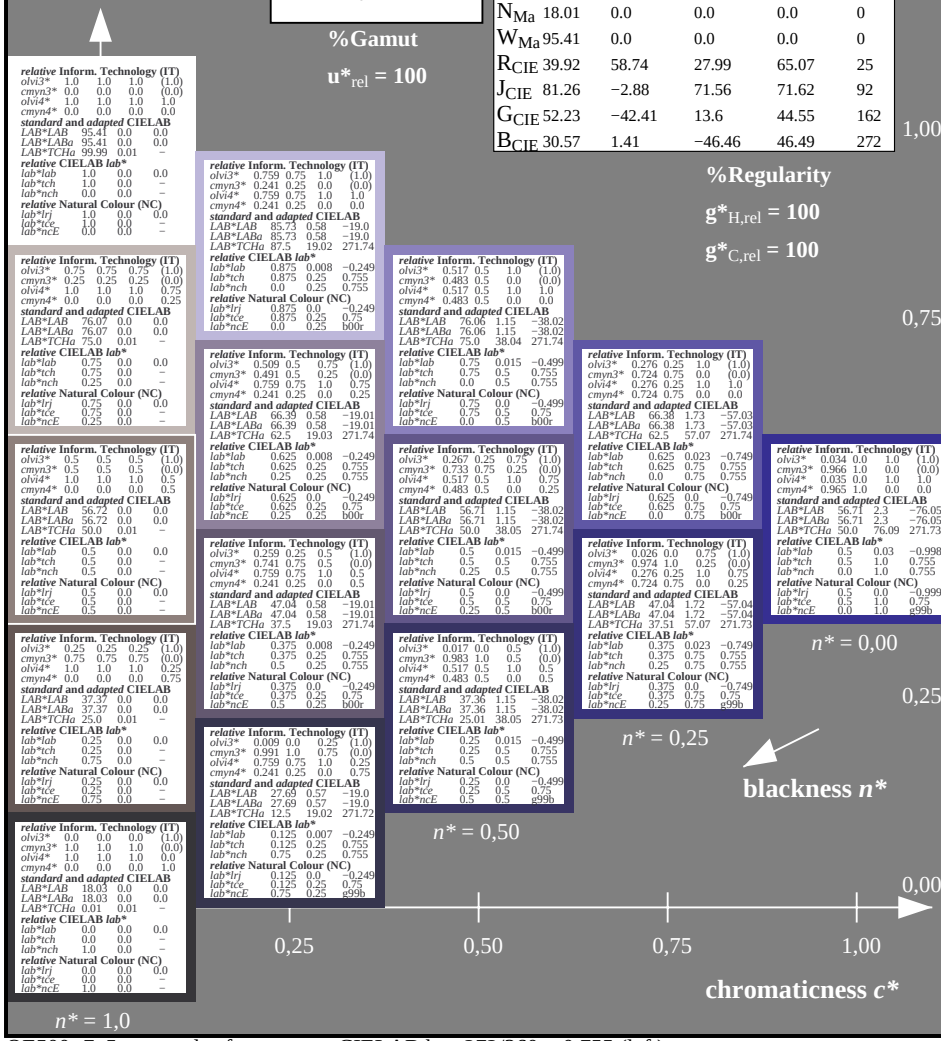
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

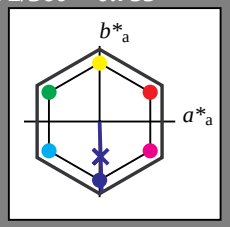


Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

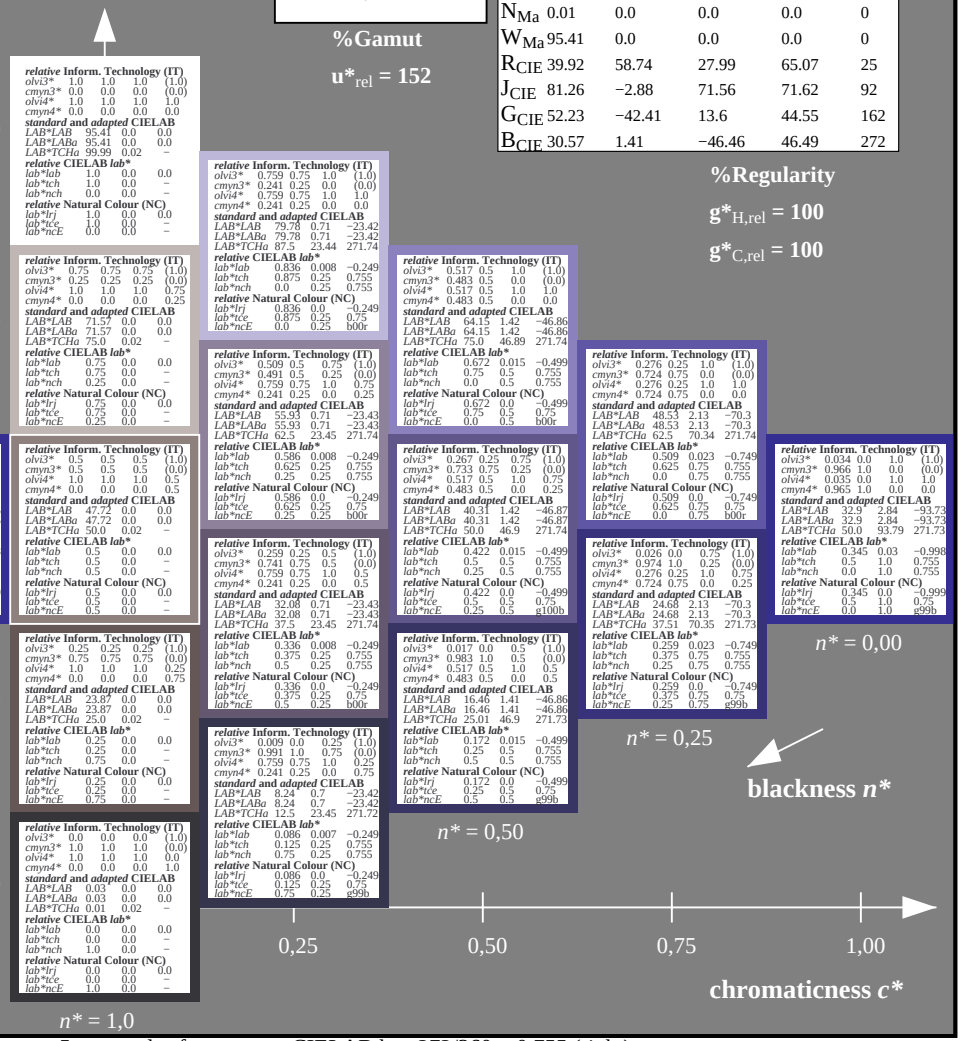
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

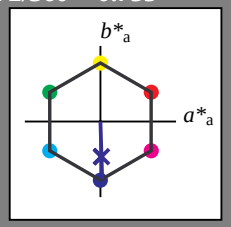
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

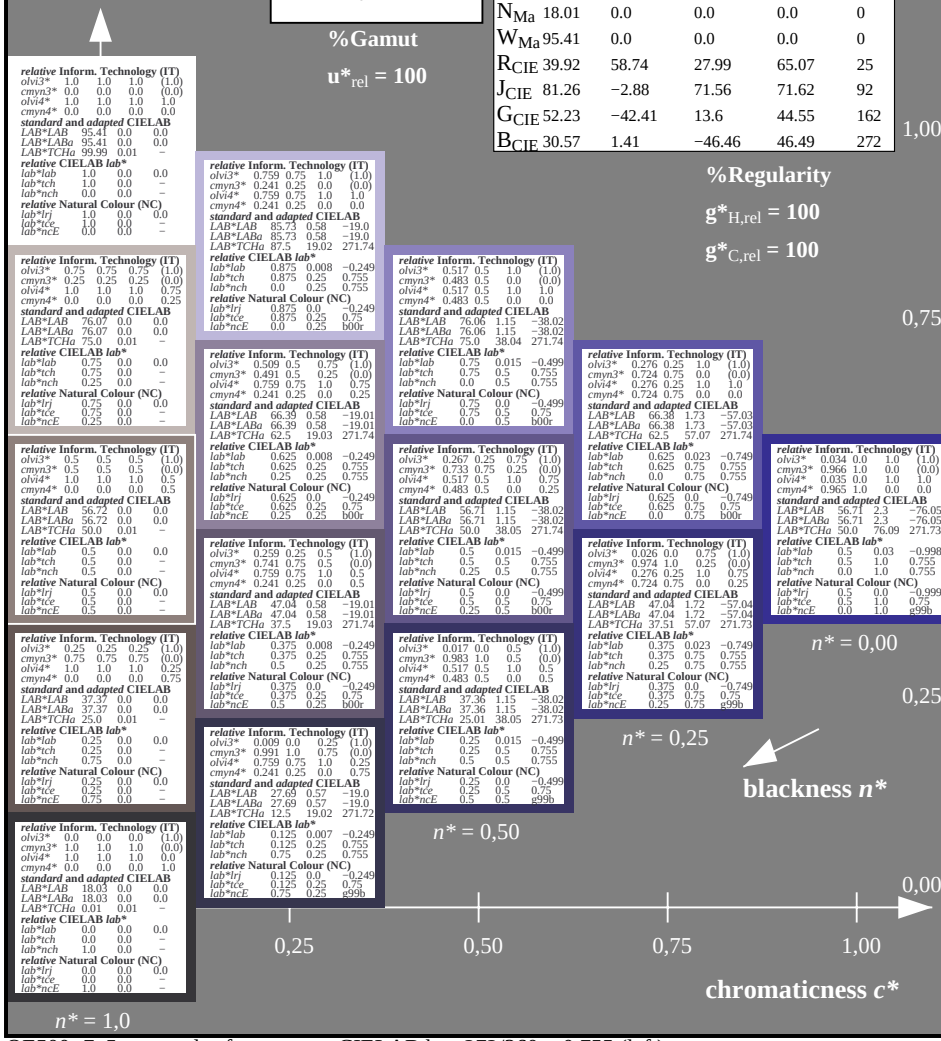
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



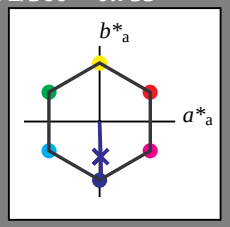
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

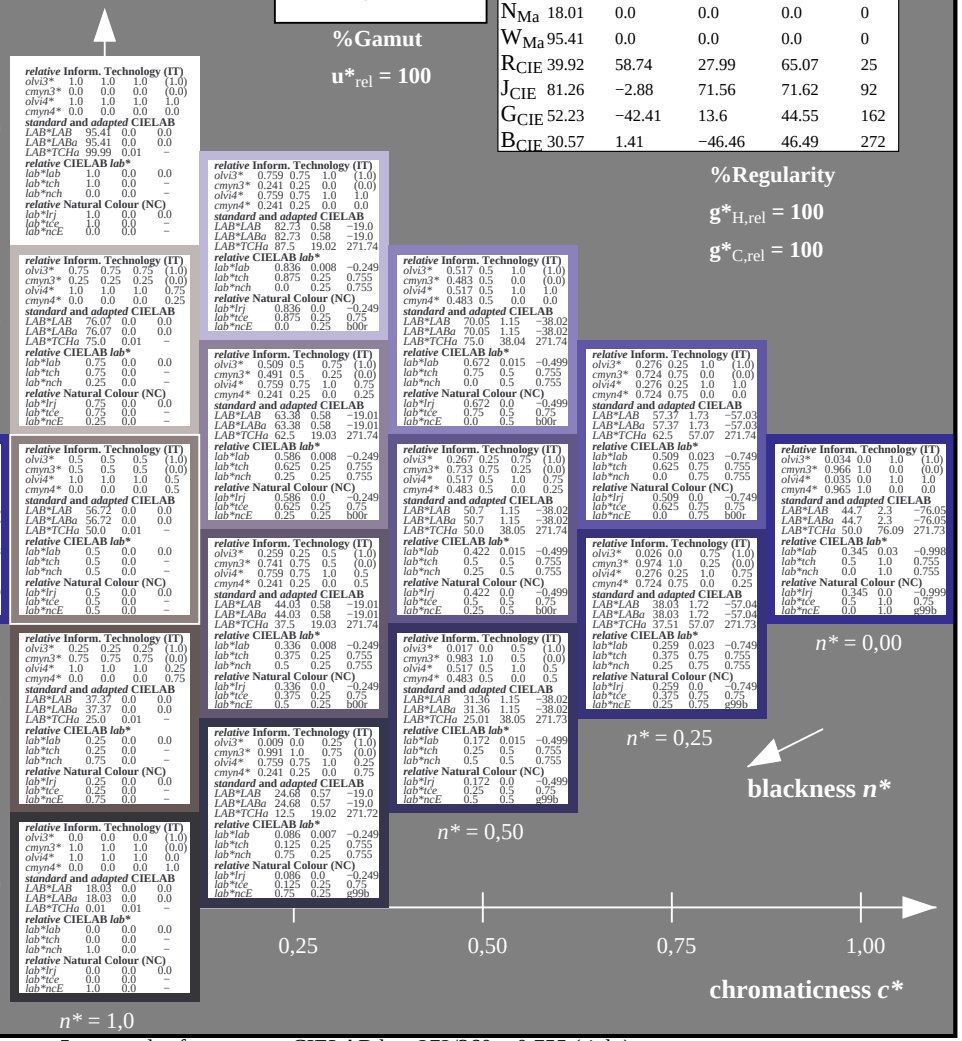
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

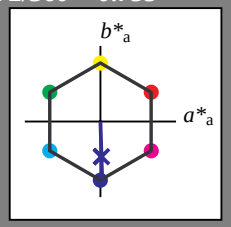


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

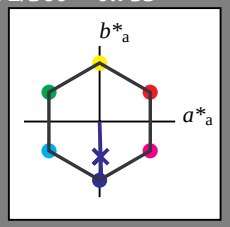
chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

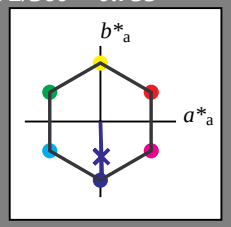
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

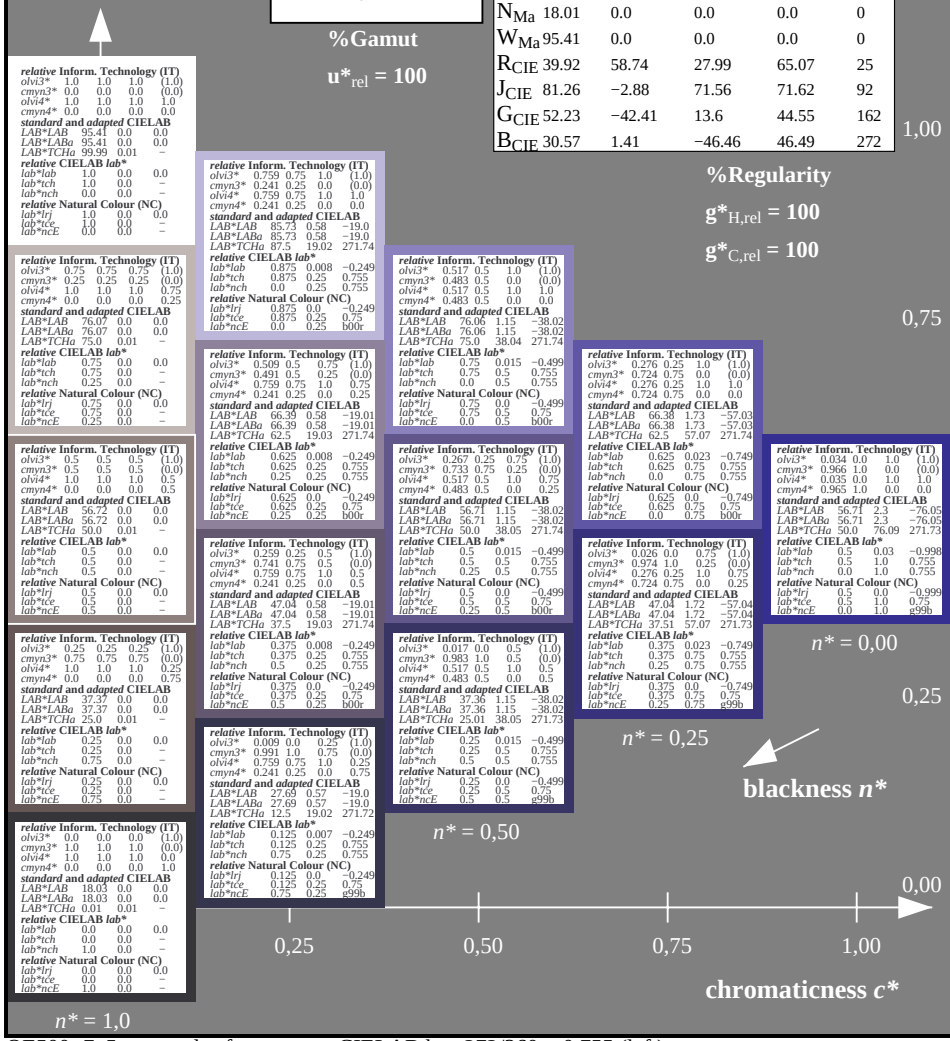
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



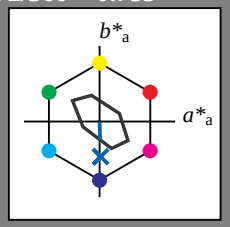
OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

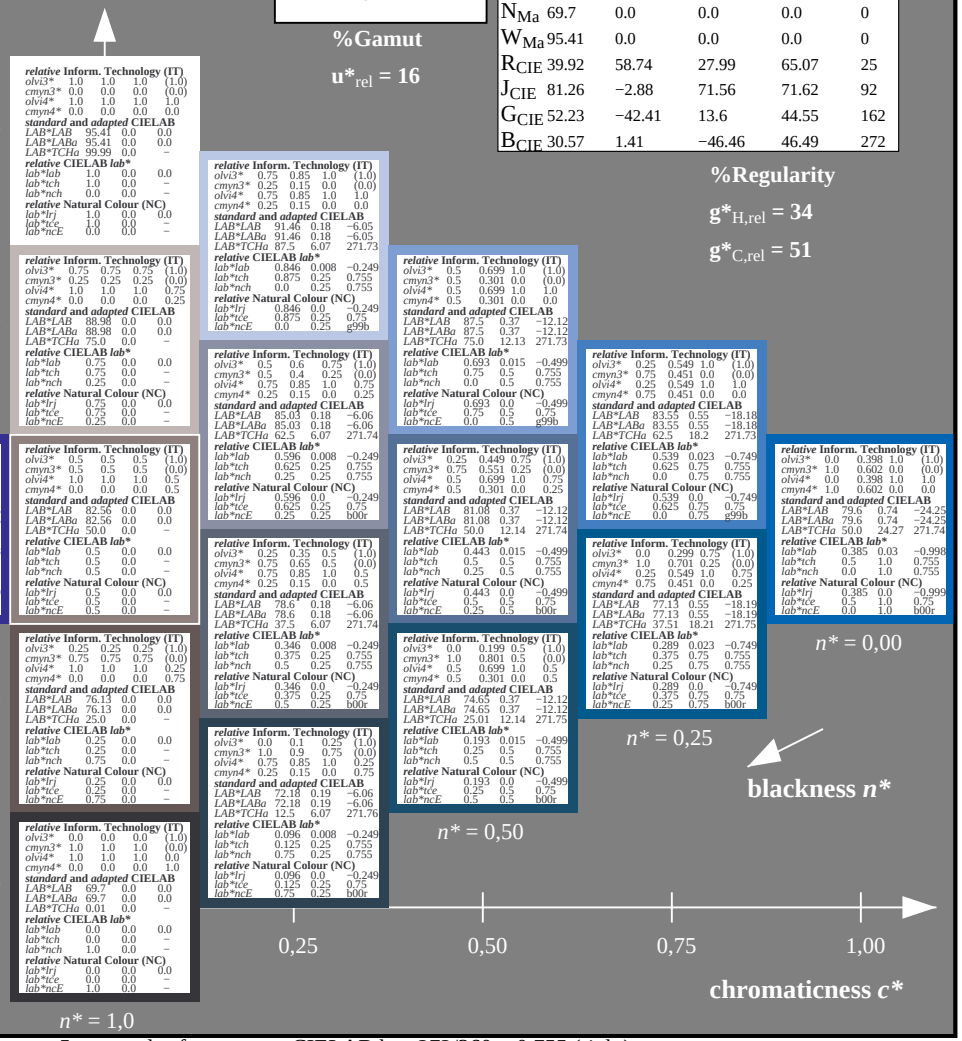
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70

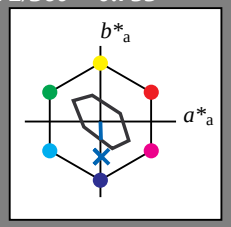
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

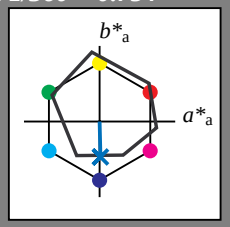
for hue $h^* = lab^*h = 271/360 = 0.754$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	−2.16	67.76	67.79	92
G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

triangle lightness t^*

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 1,0$ $n^* = 0,50$ $n^* = 0,25$ $n^* = 0,00$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric Television Luminous System TLS70

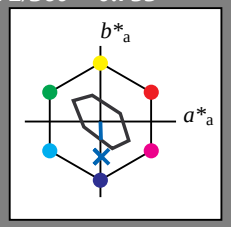
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

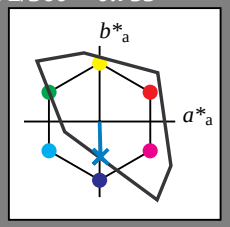
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70

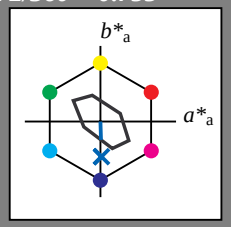
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Printer Reflective System DRSXX

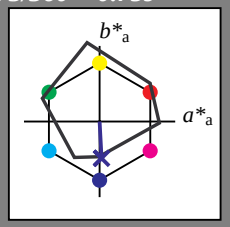
for hue $h^* = lab^*h = 273/360 = 0.759$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0



DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	0.0	0.0	0.0	0
R_{CIE}	39.92	59.78	25.77	65.1	23
J_{CIE}	81.26	−2.51	69.07	69.11	92
G_{CIE}	52.23	−41.57	11.3	43.09	165
B_{CIE}	30.57	2.6	−48.62	48.7	273

triangle lightness t^*

%Gamut

$u^*_{rel} = 101$

%Regularity

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Television Luminous System TLS70

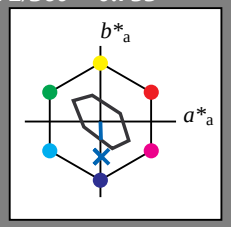
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 16$

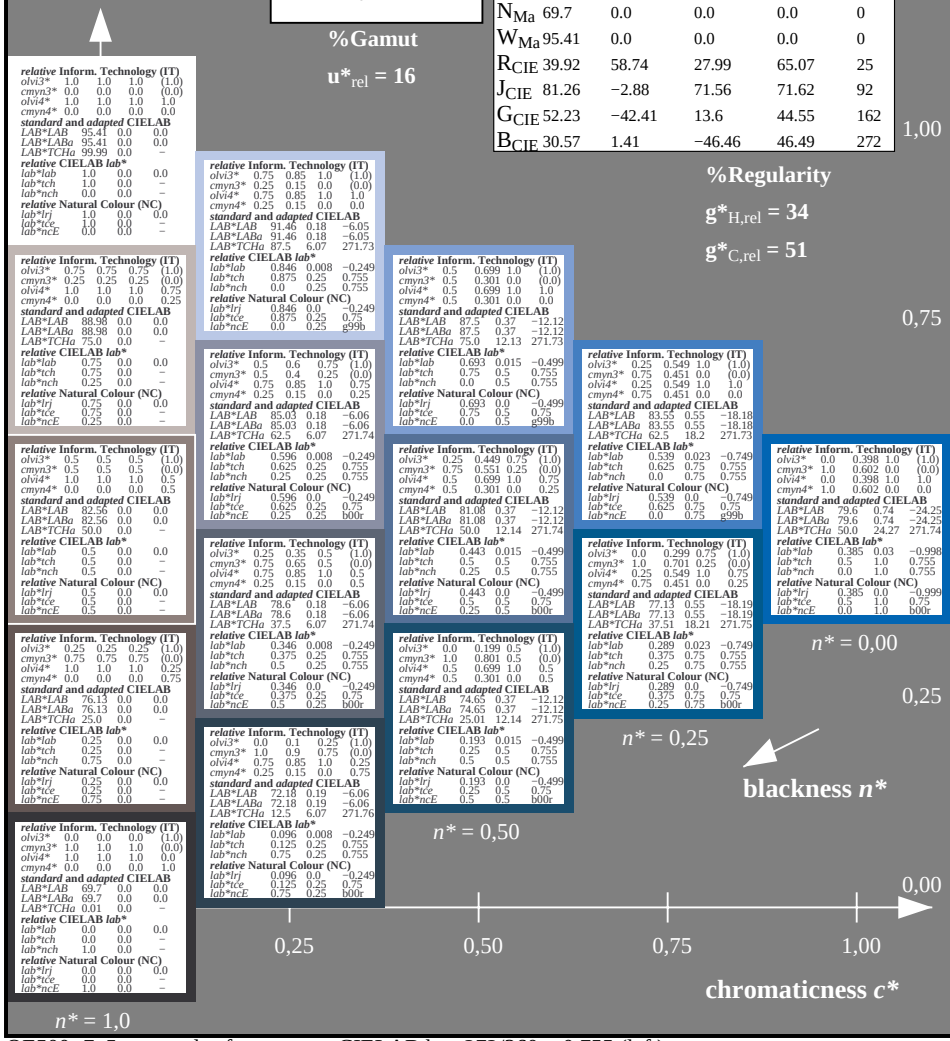
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS18

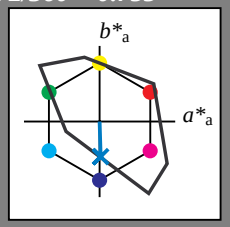
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



triangle lightness t^*

%Gamut

$u^*_{rel} = 118$

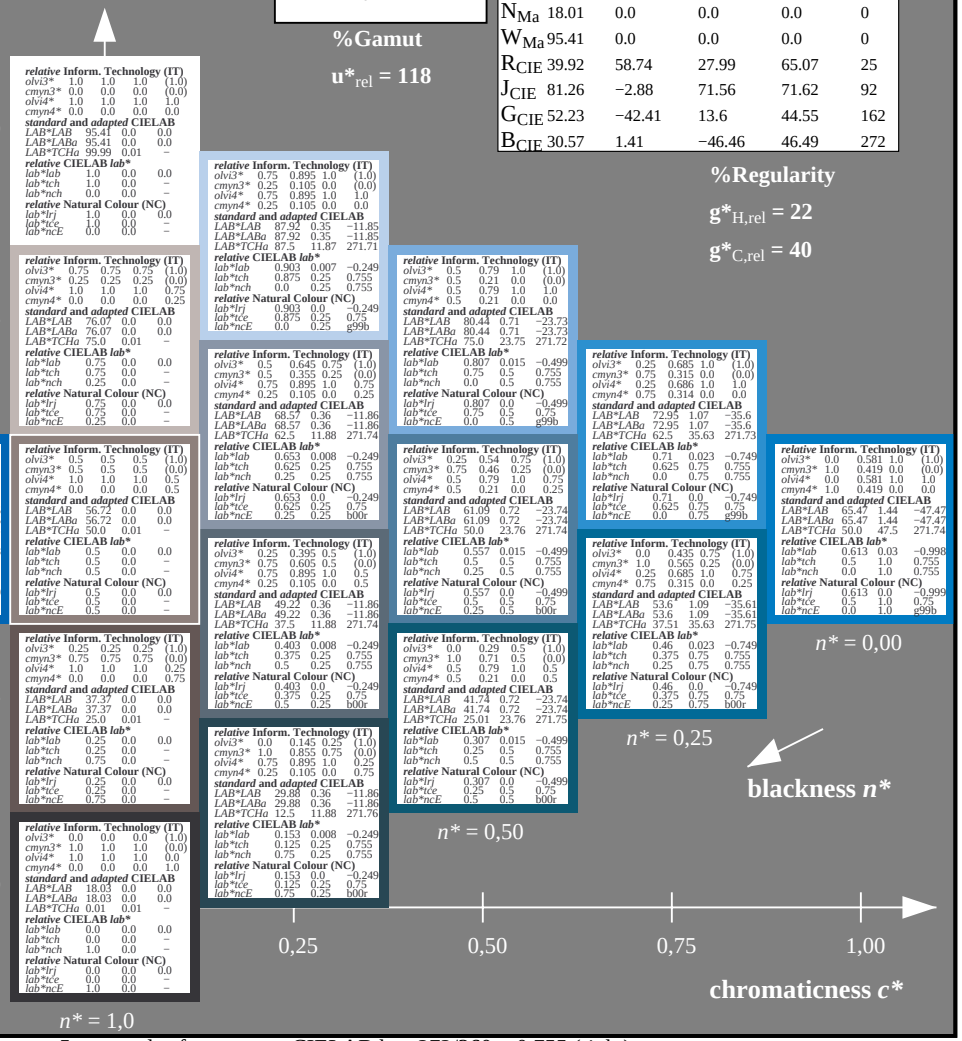
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

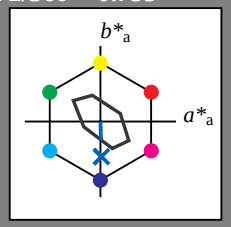


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

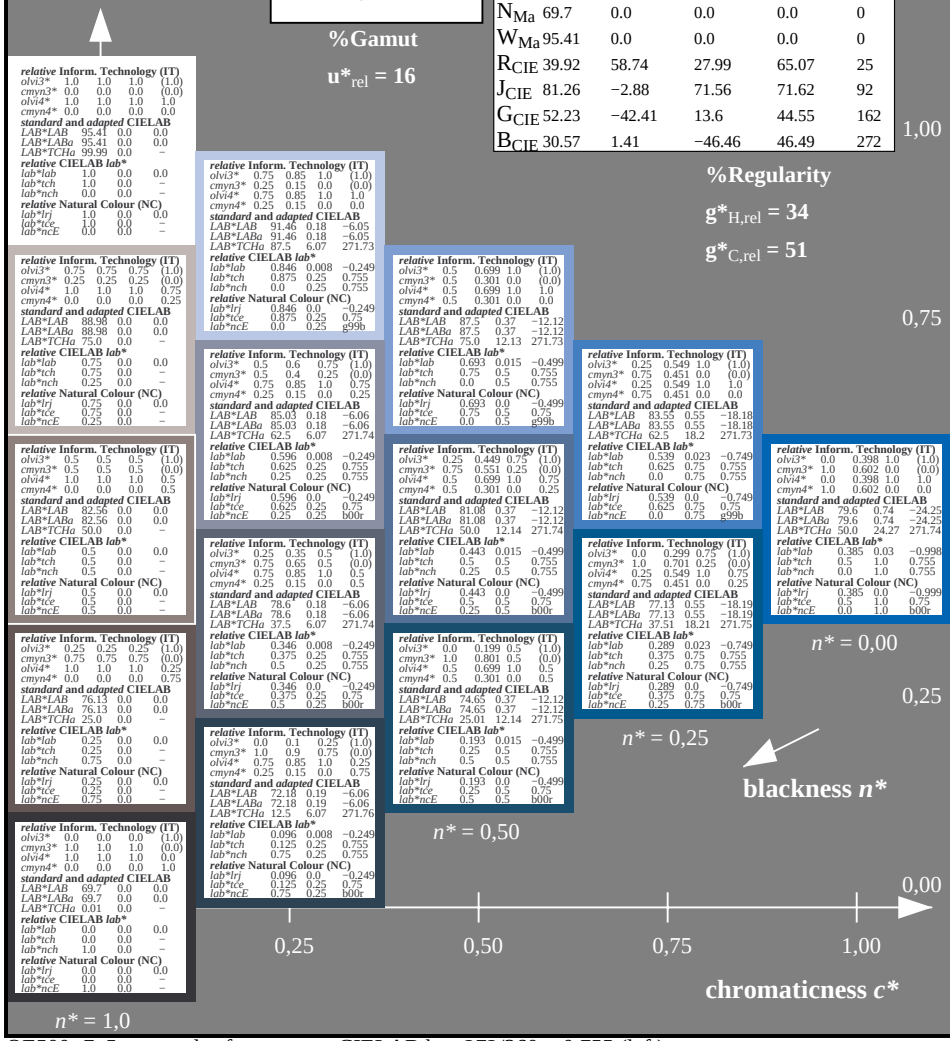
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

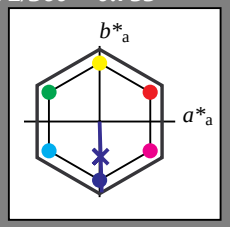


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 33 94 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

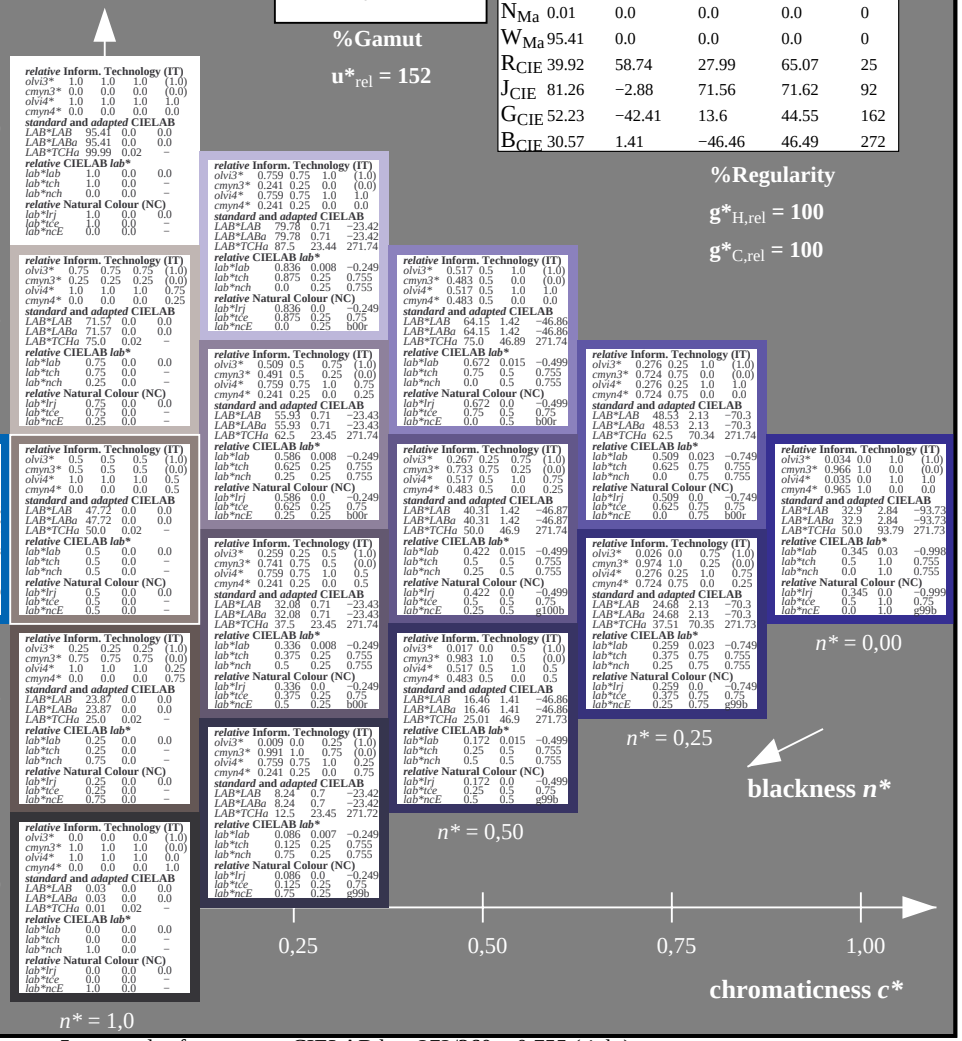
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100

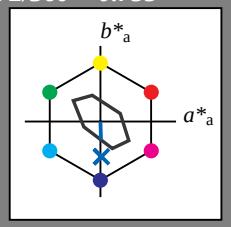


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0



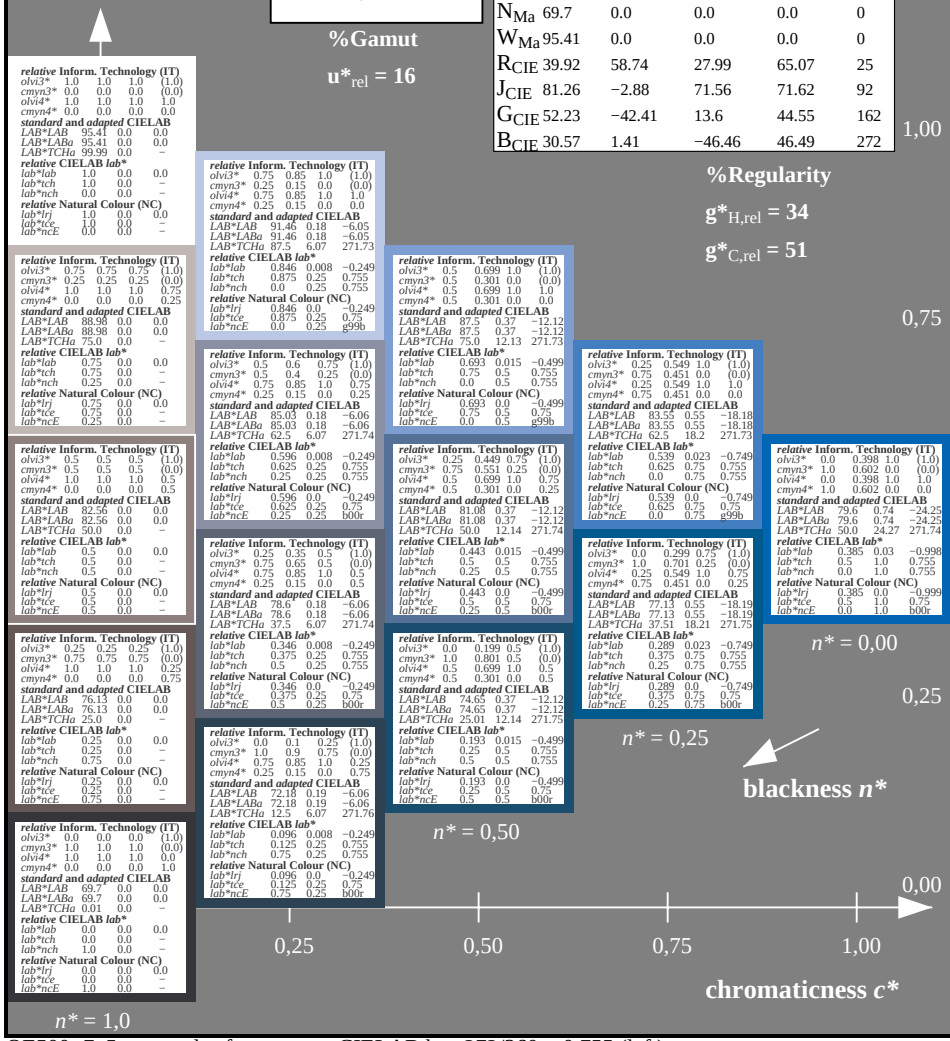
triangle lightness t^*

%Gamut
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

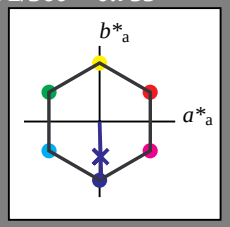


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 45 76 272
olv*Ma: 0.03 0.0 1.0



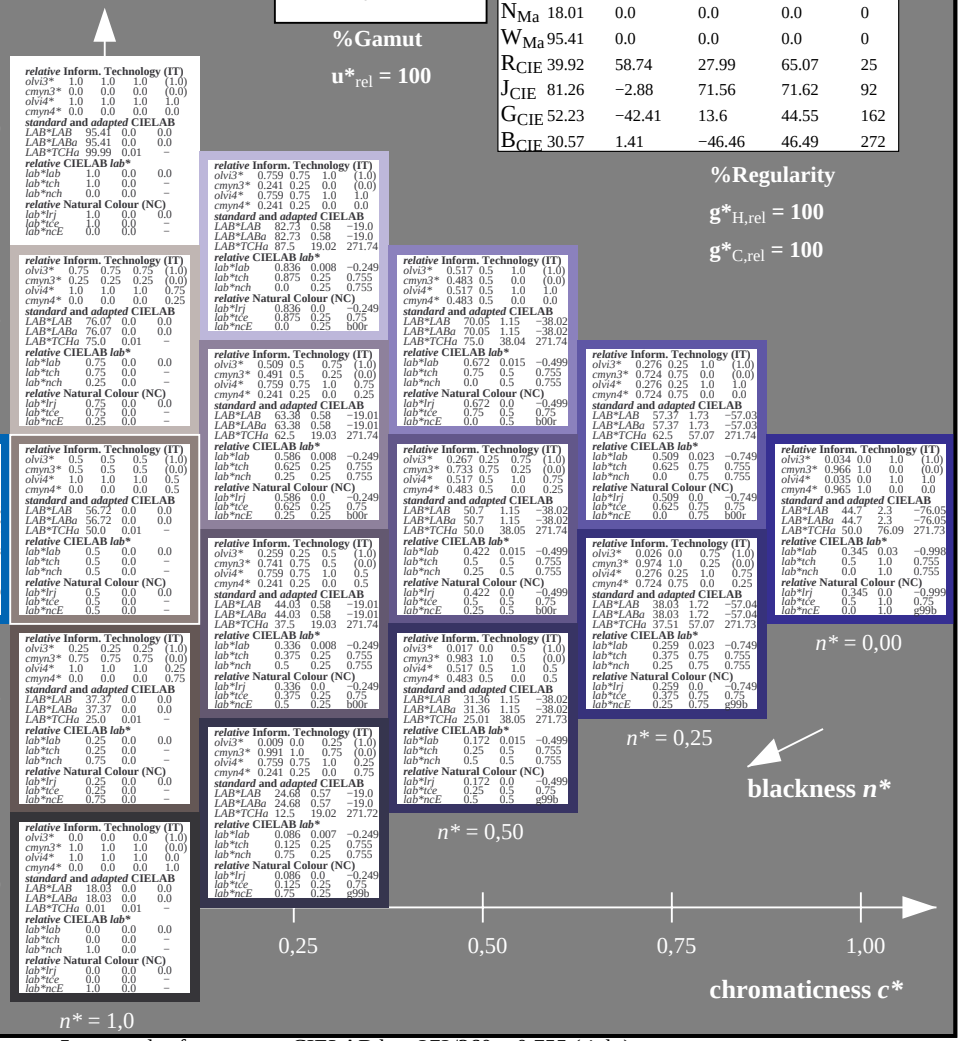
triangle lightness t^*

%Gamut
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70

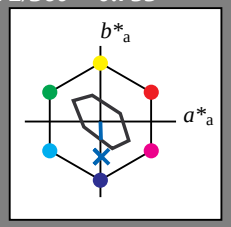
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

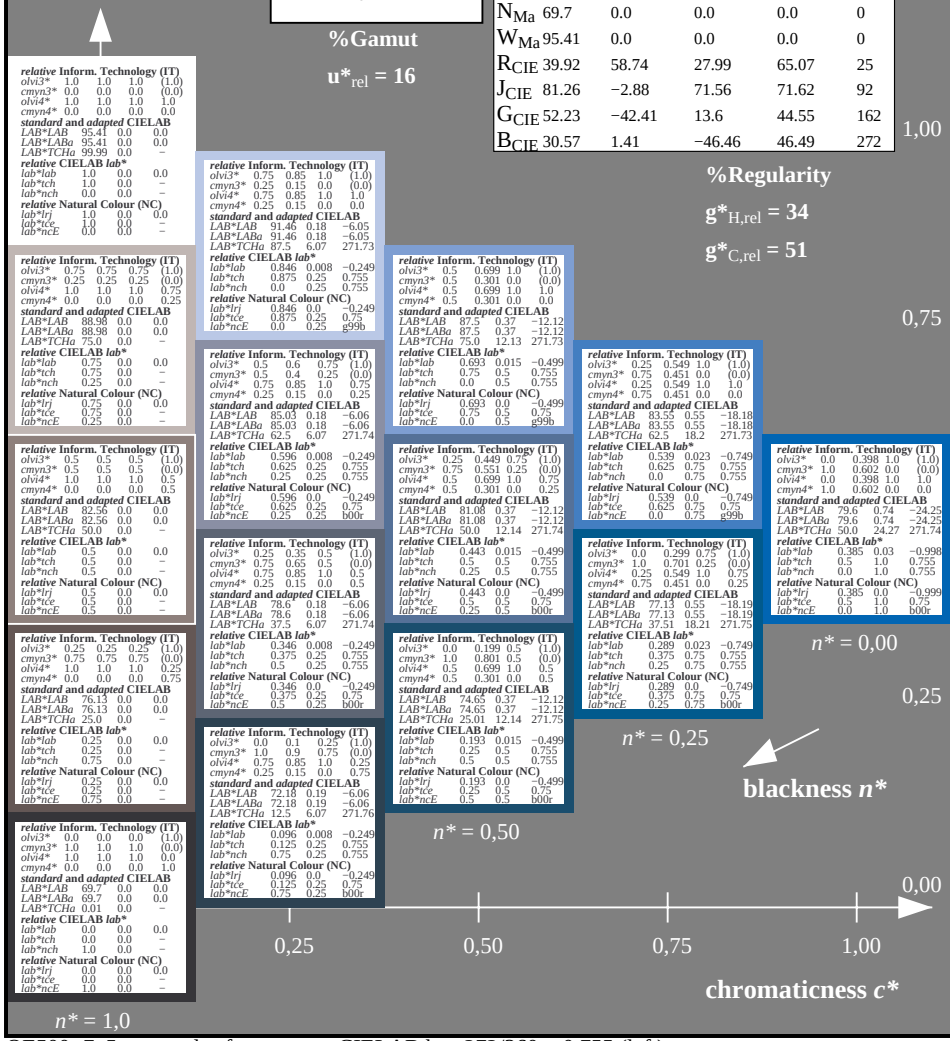
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18

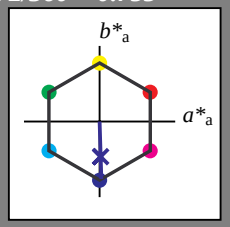
for hue $h^* = lab^*h = 272/360 = 0.755$

*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

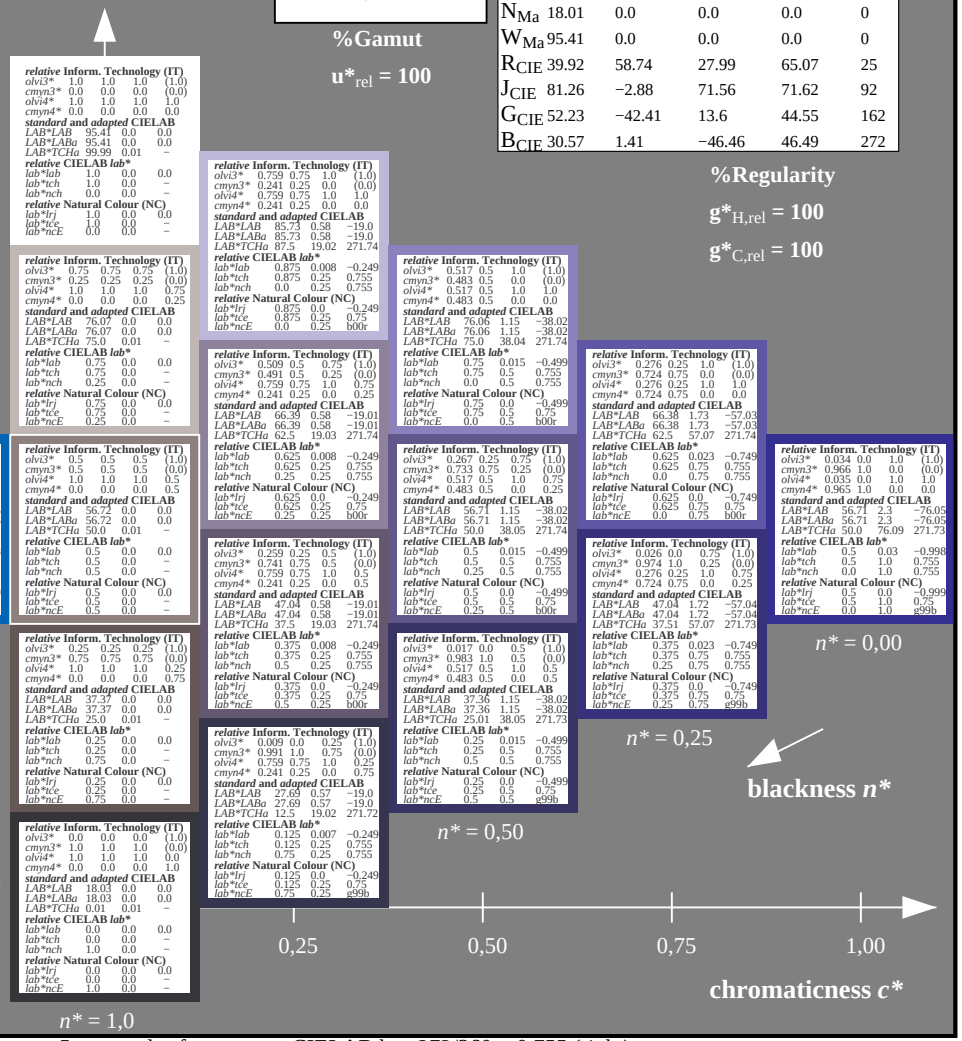
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

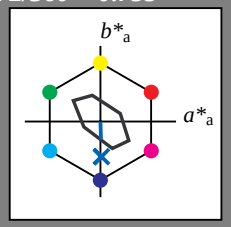


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

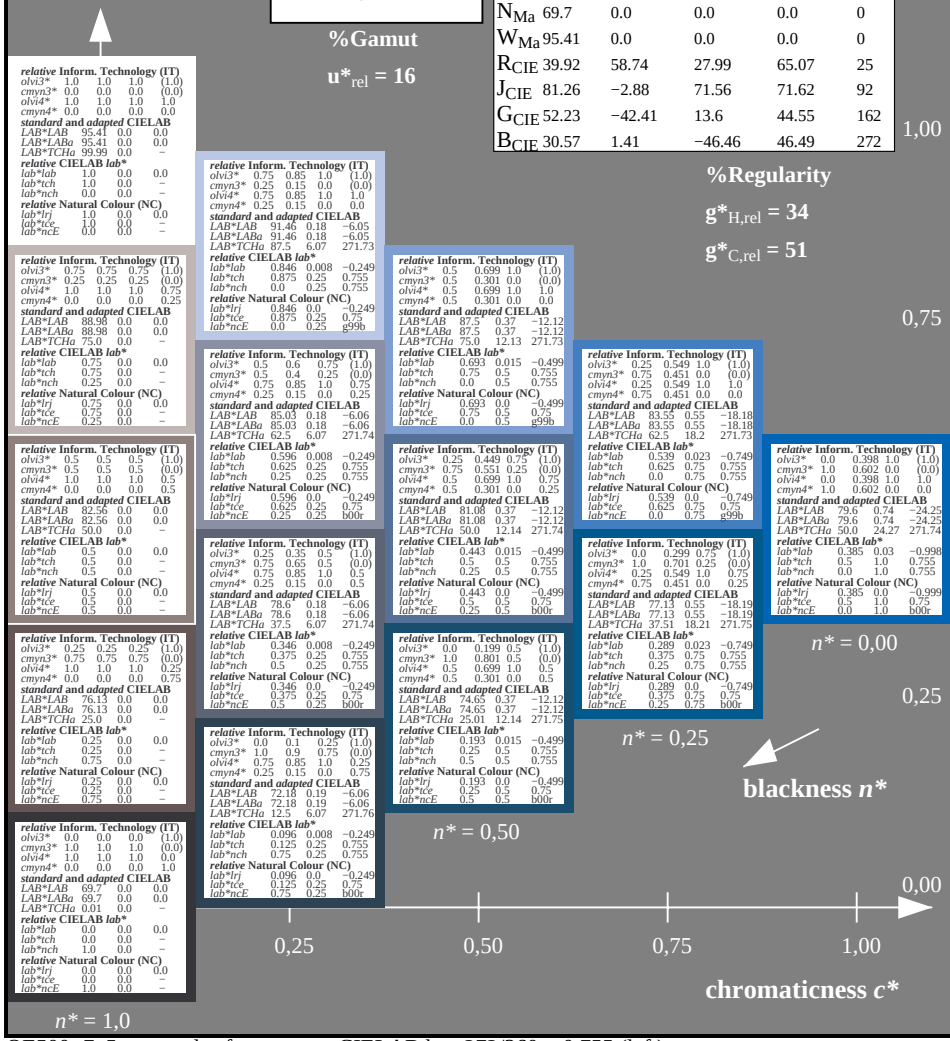
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51

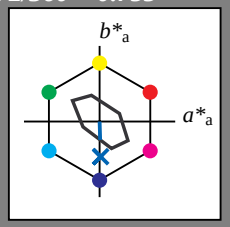


OE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

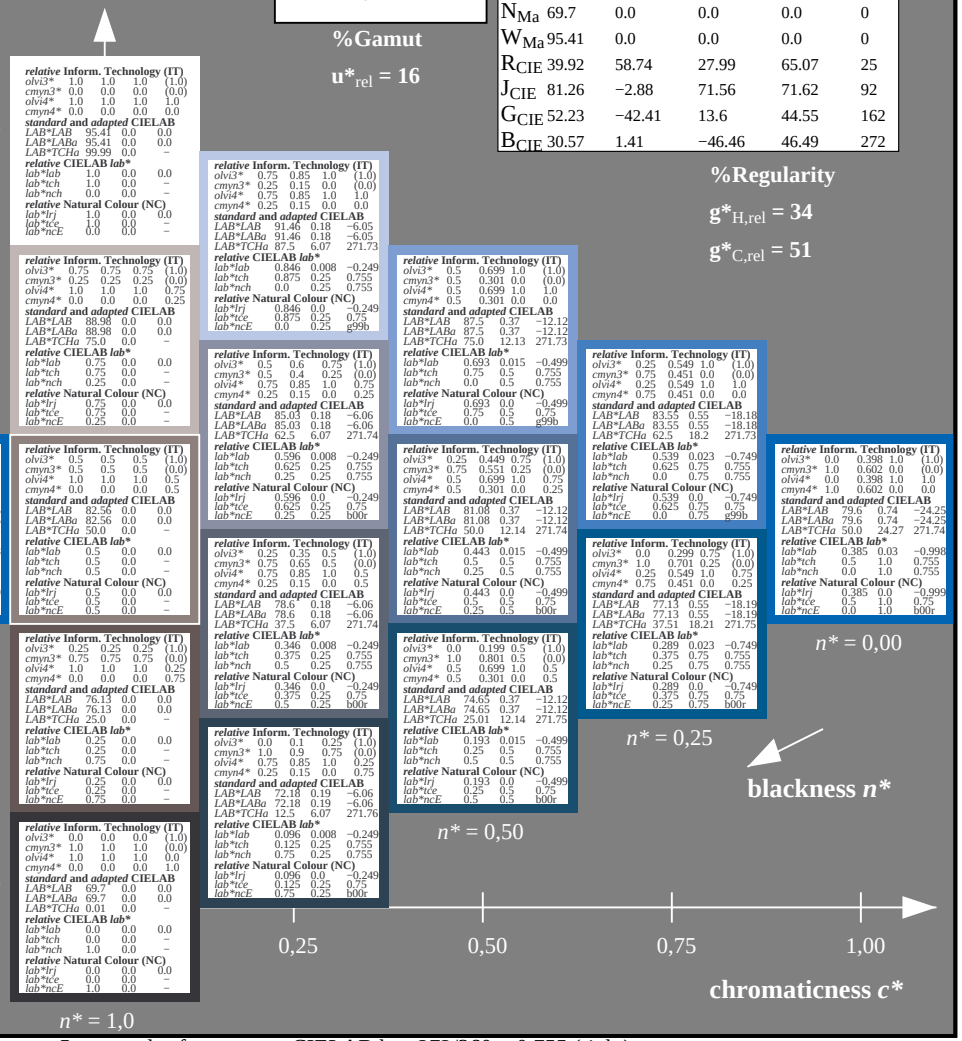
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 34

$g^*_{C,rel}$ = 51



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)