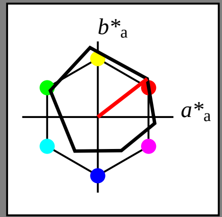
Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 38/360 = 0.105$
*lab*tch and lab*nch*

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

triangle lightness *t*



%Gamut

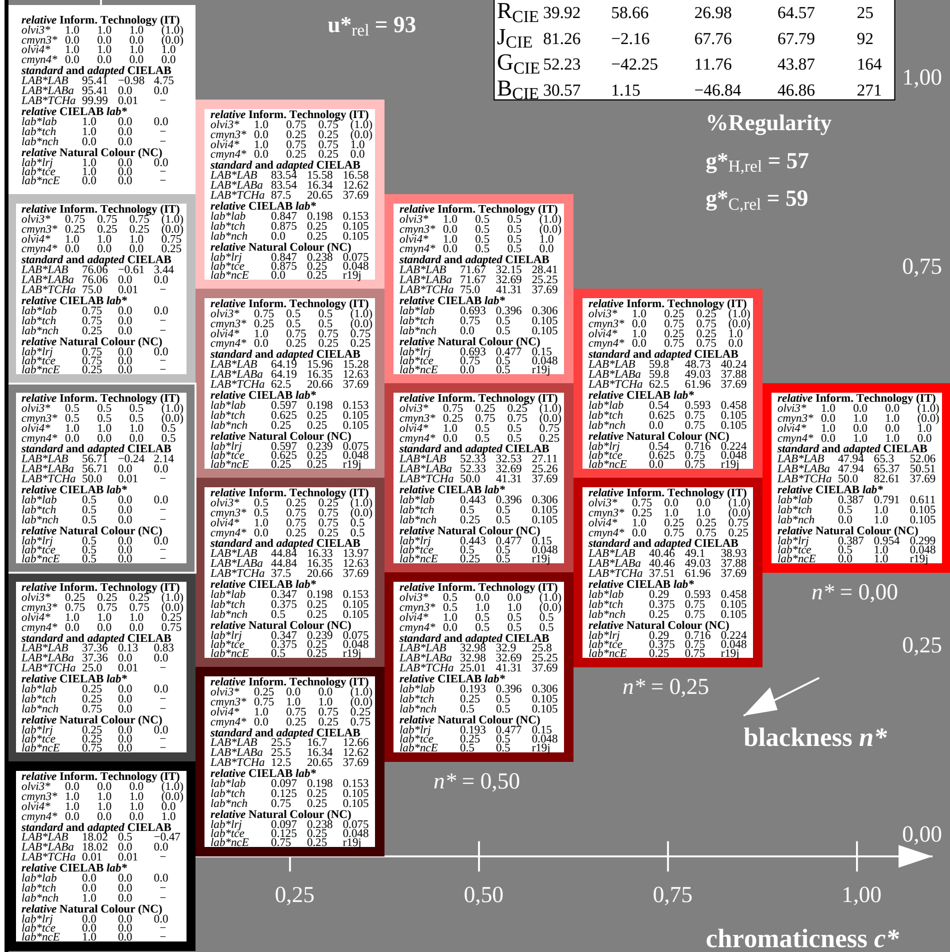
u^*_{rel} = 93

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

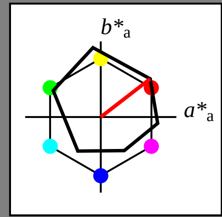
$g^*_{C,rel}$ = 59



Output: Colorimetric 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

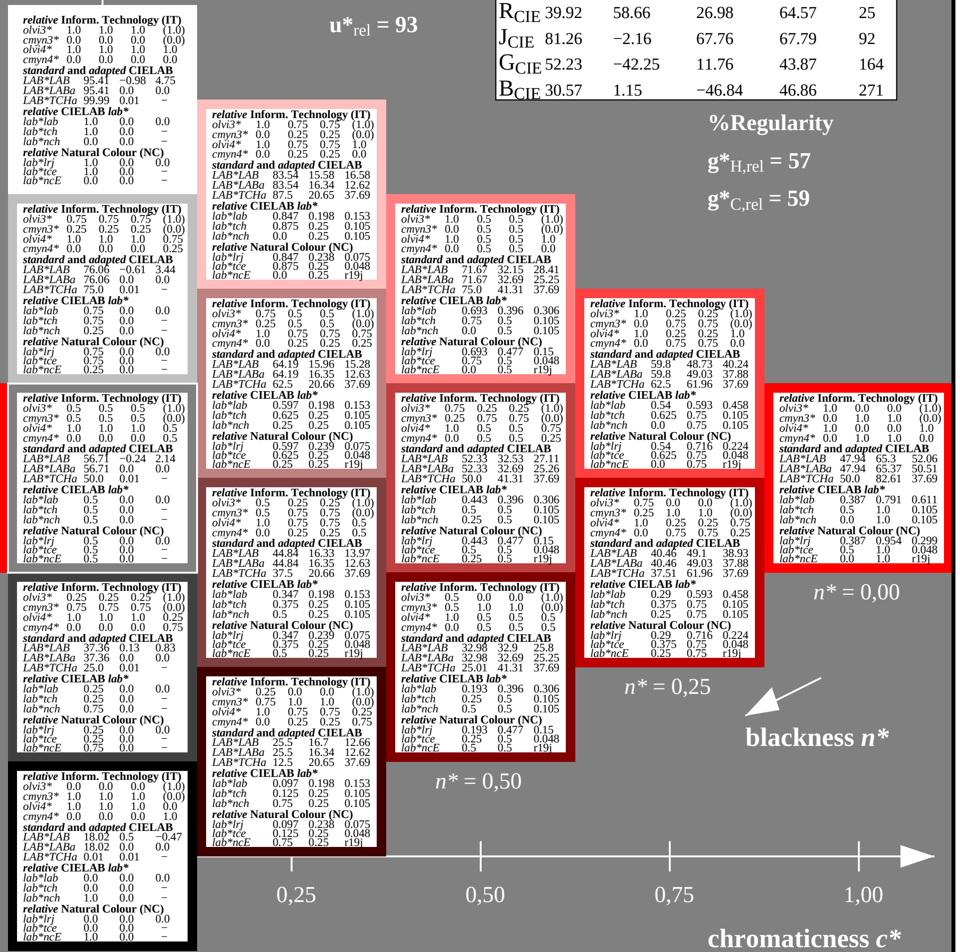
u^*_{rel} = 93

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



NE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

Input: Colorimetric Offset Reflective System ORS18

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

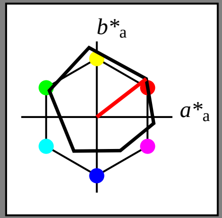
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

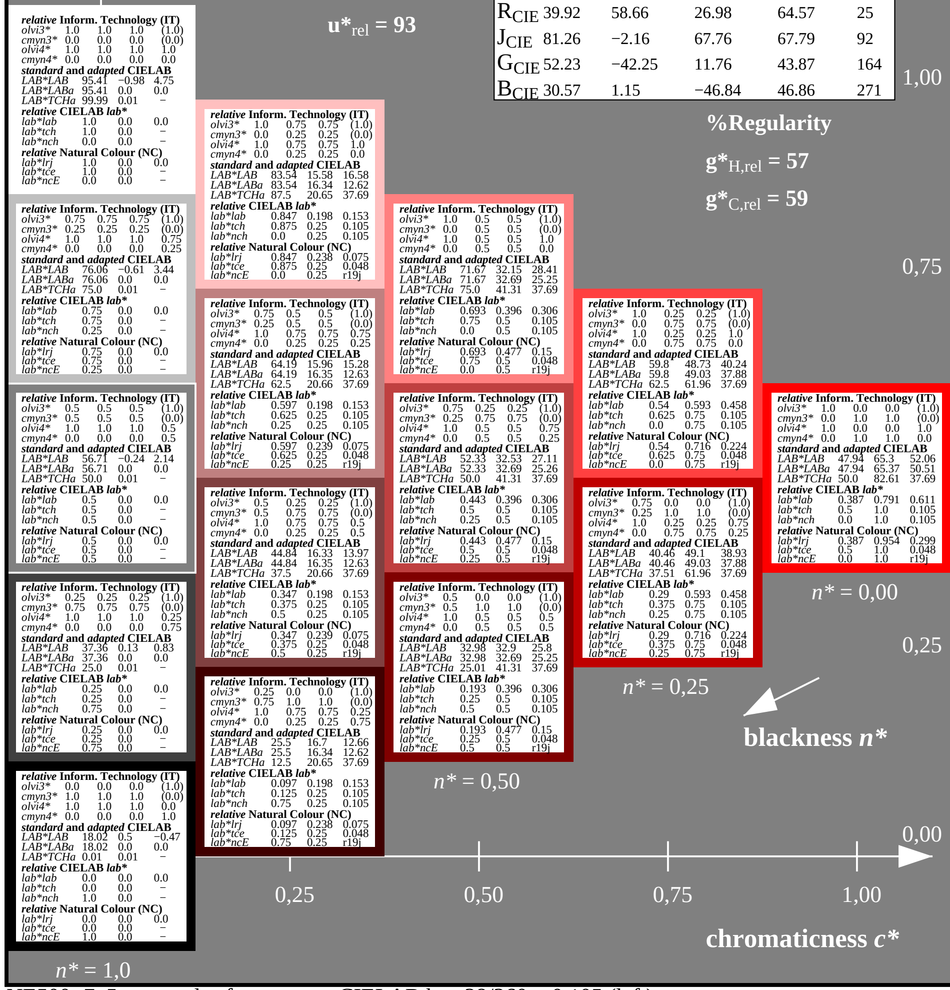
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 40/360 = 0.111$

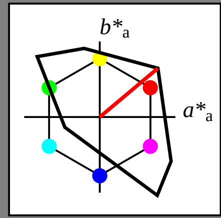
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

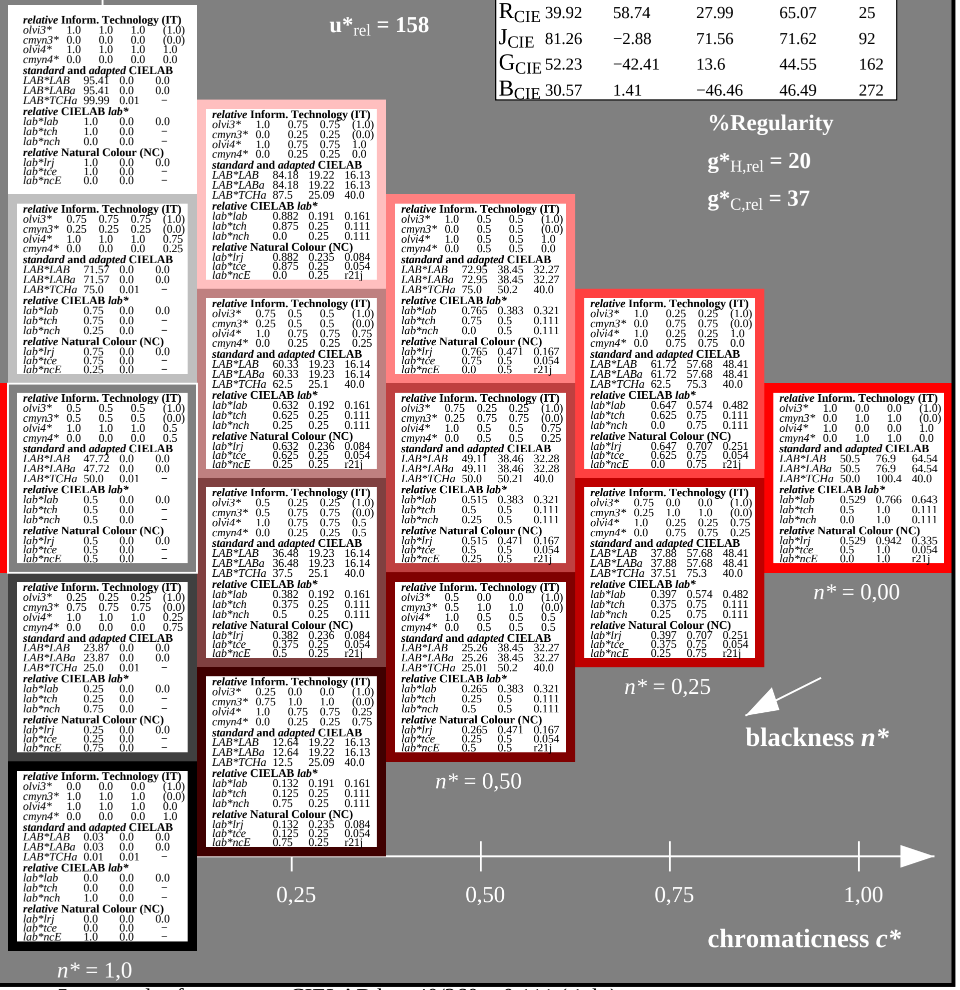
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 38/360 = 0.105$

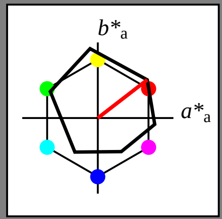
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

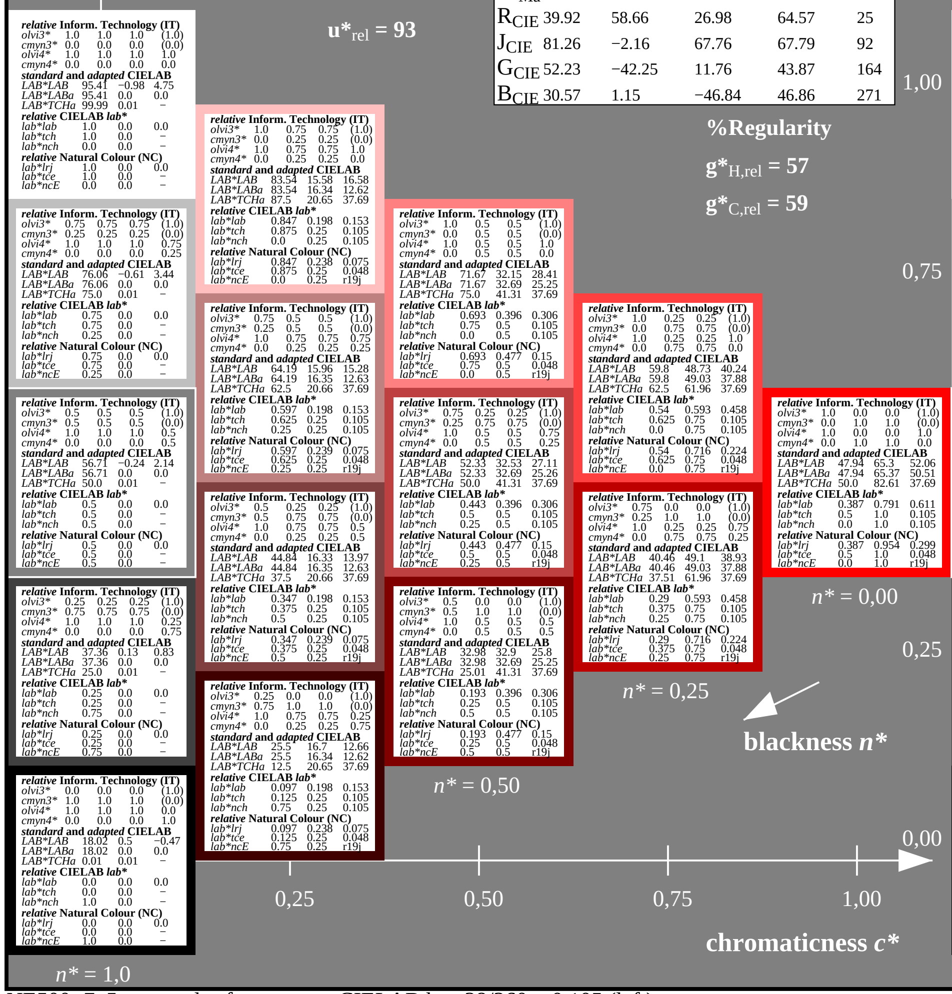
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 37/360 = 0.103$

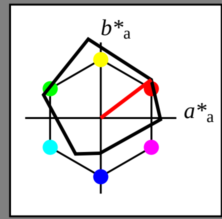
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

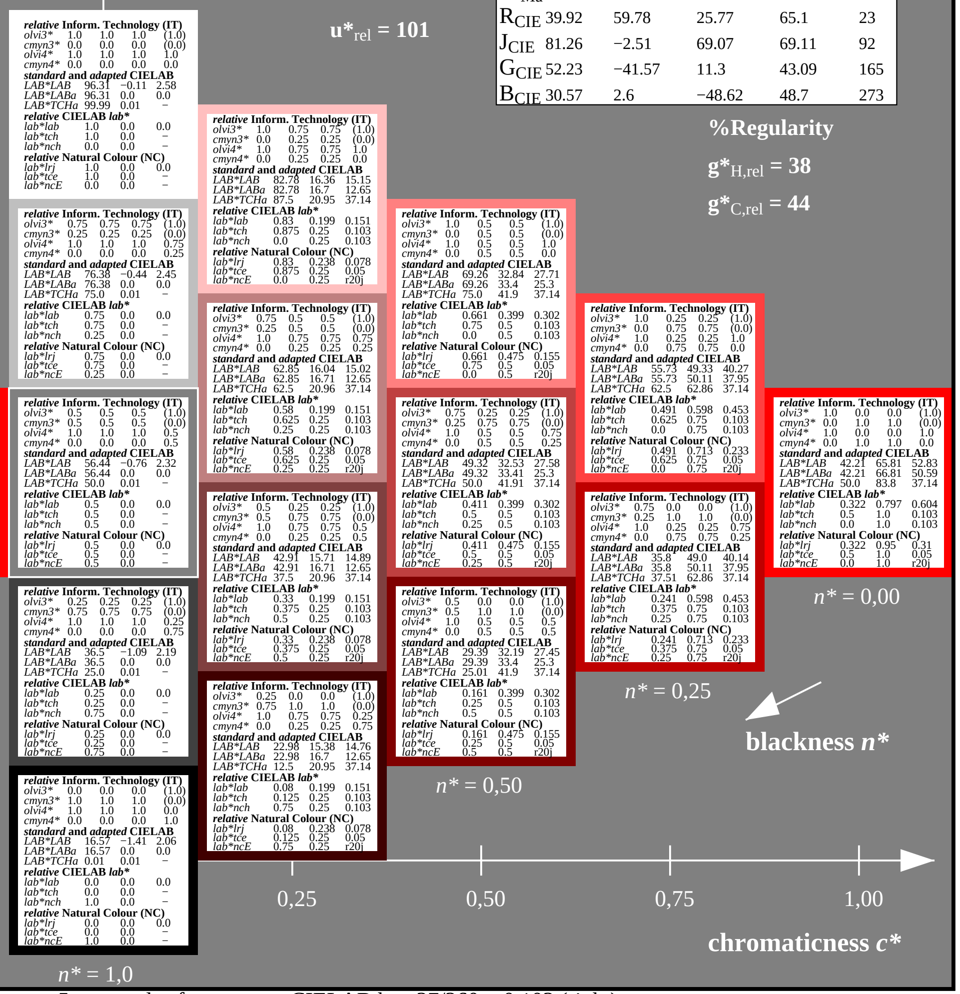
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 38/360 = 0.105$

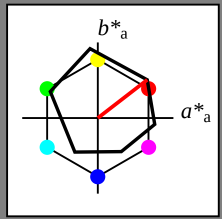
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

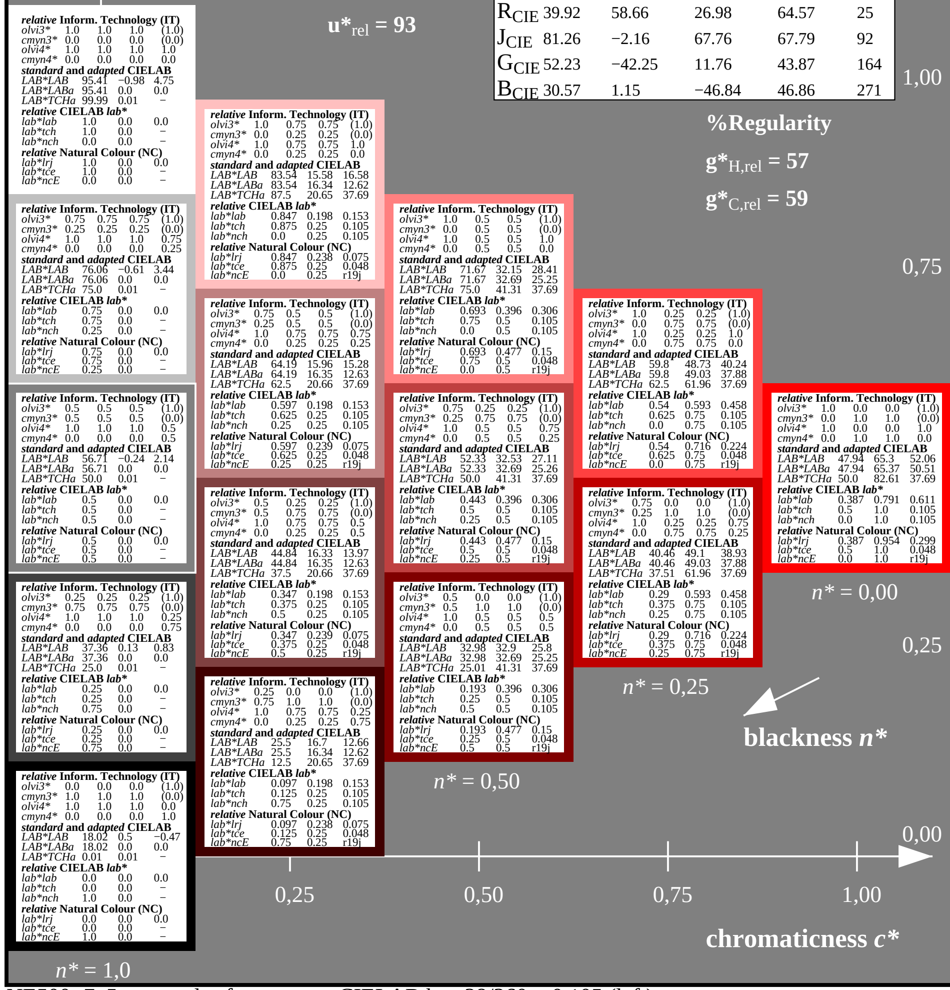
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

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

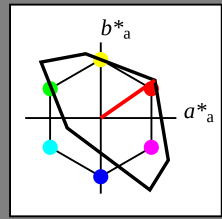
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

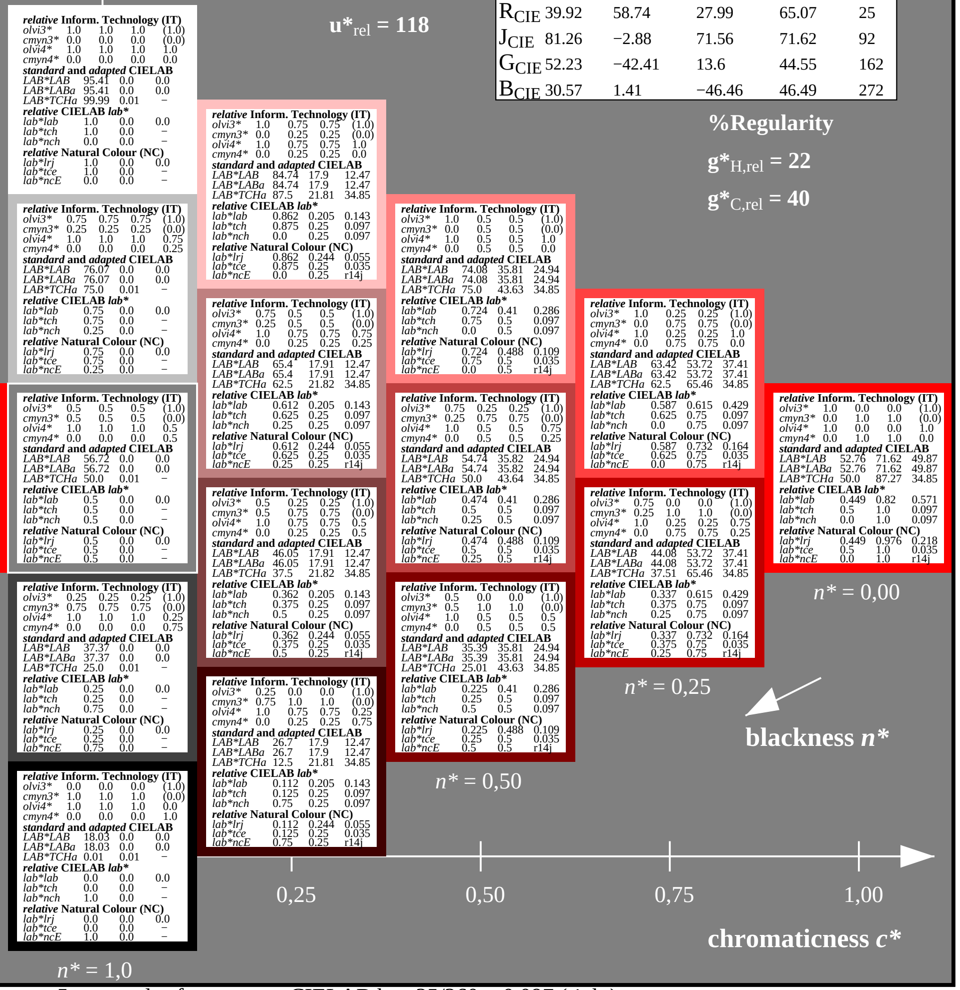
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



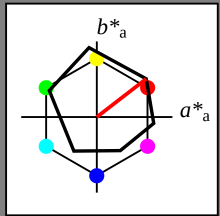
NE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

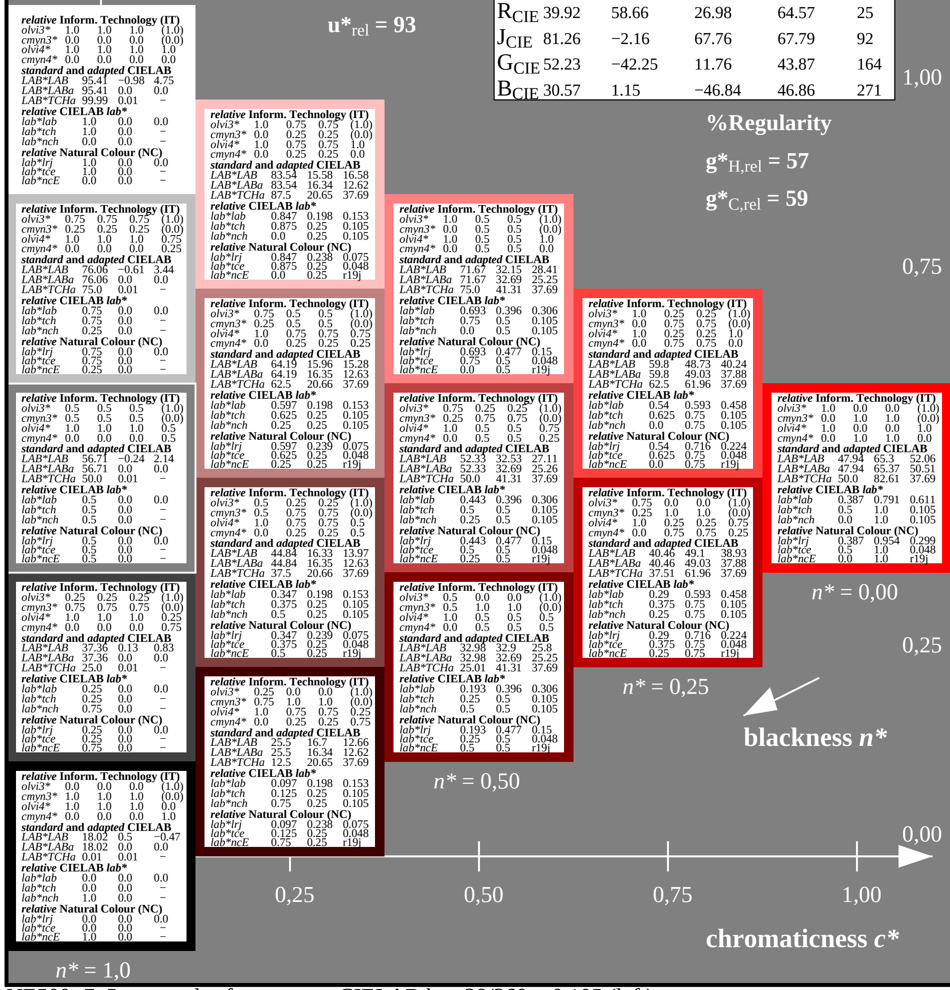
u*rel = 93

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

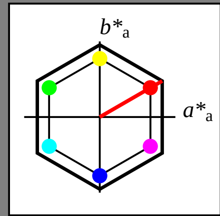
g*C,rel = 59



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

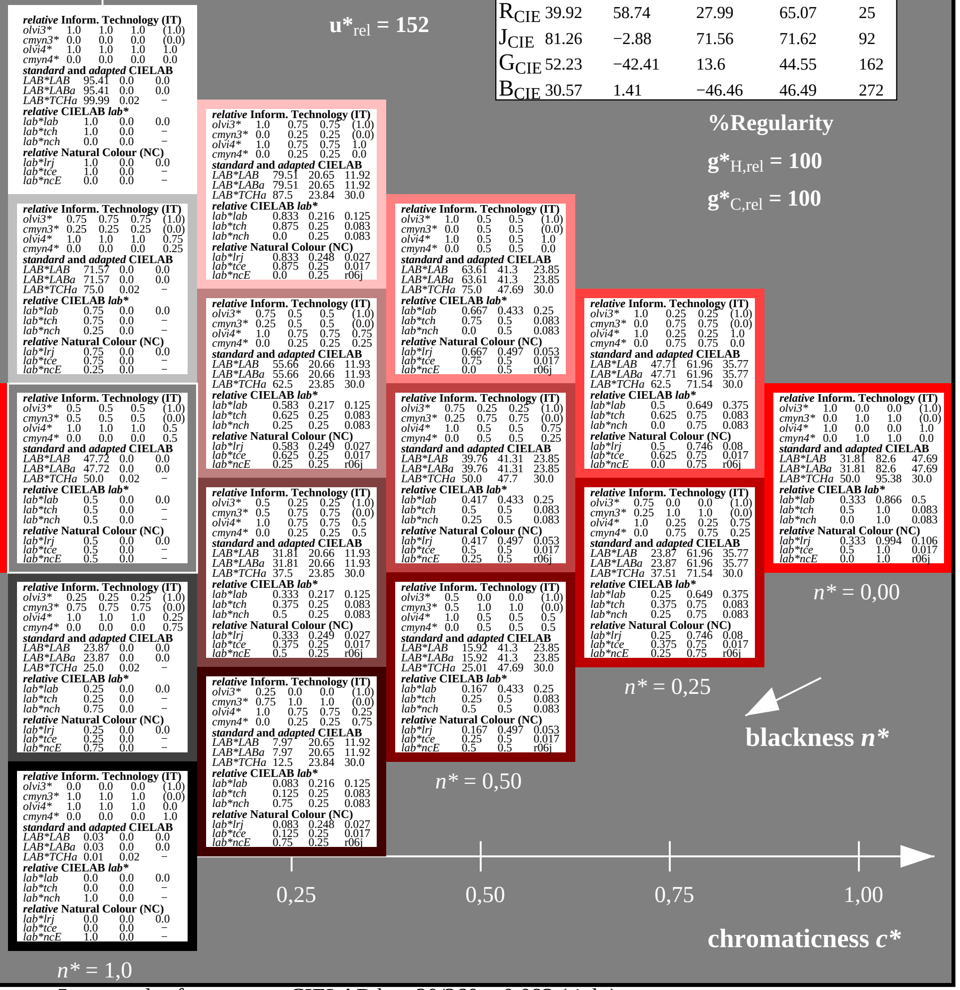
u*rel = 152

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



NE500−7, 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*

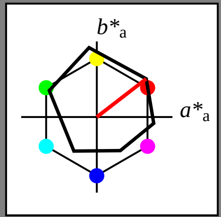
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

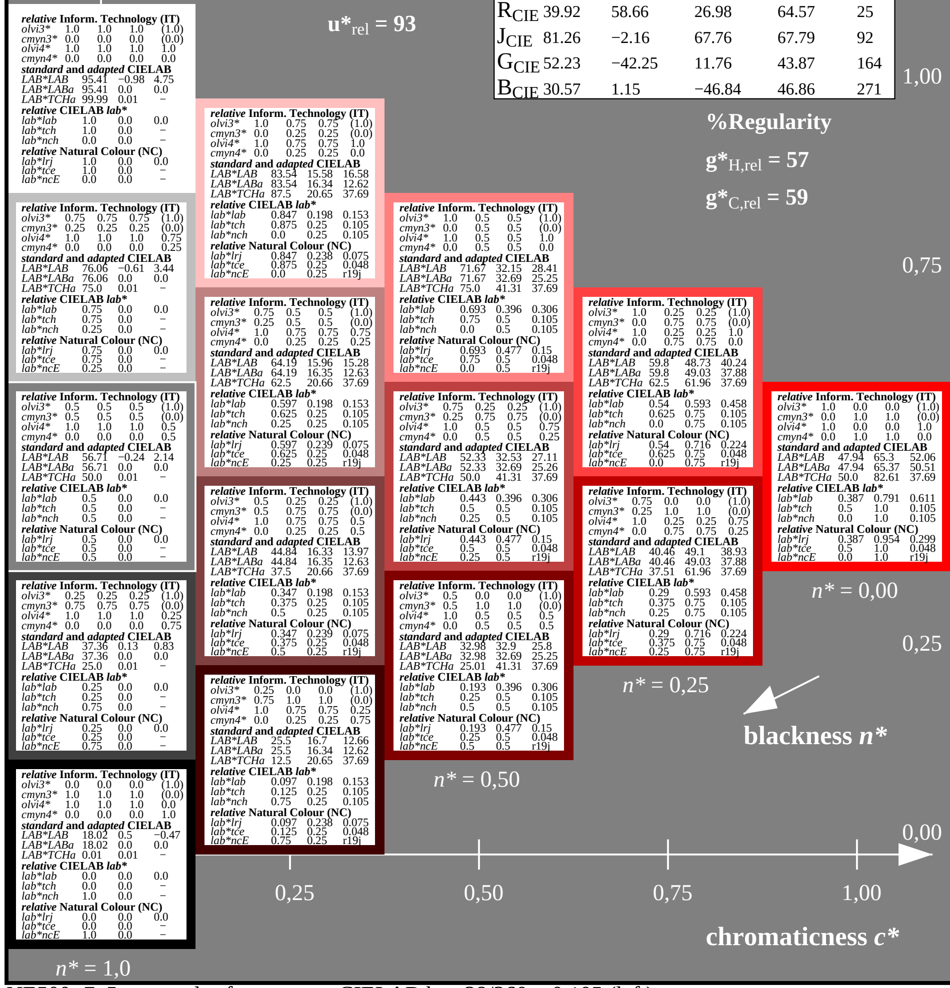
olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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* = *30/360 = 0.083*

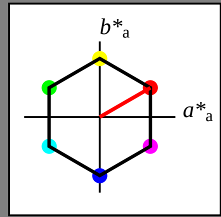
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

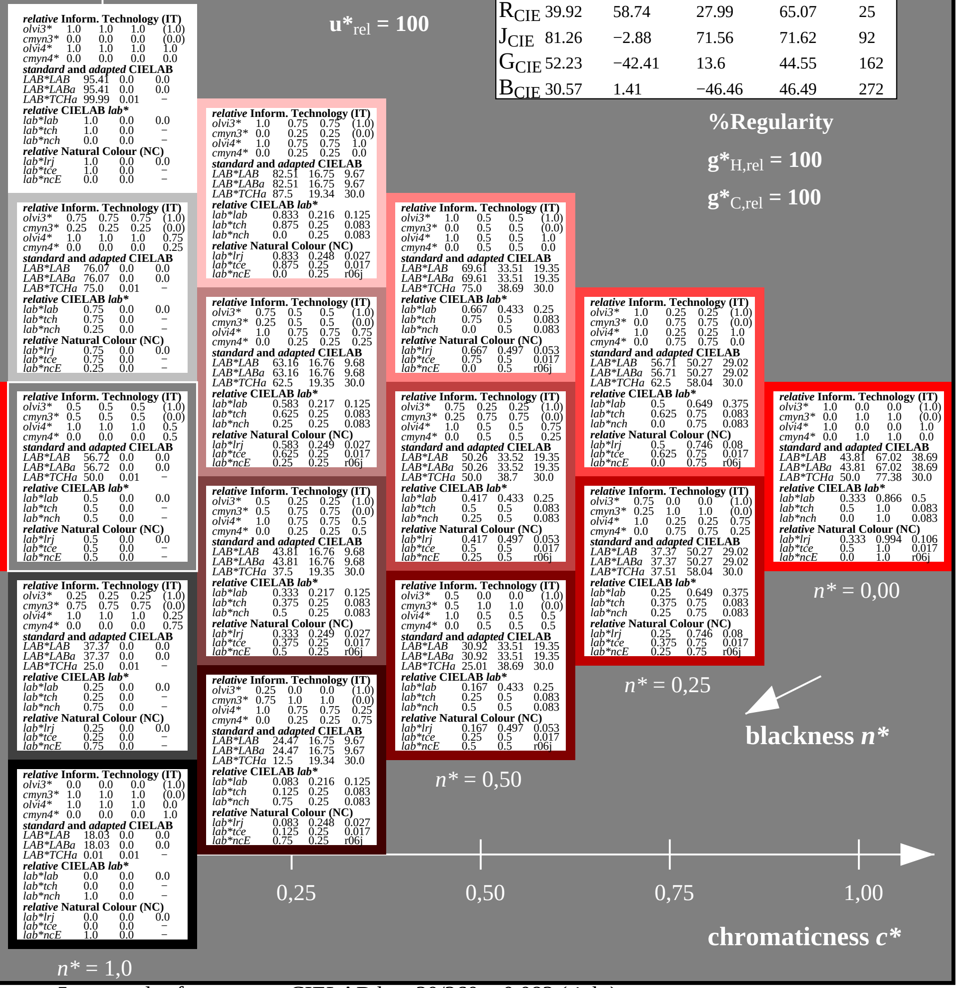
olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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



NE500−7, 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 $h^* = lab^*h = 38/360 = 0.105$

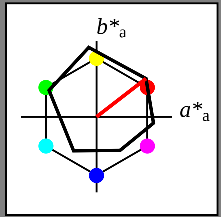
lab*tch and lab*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

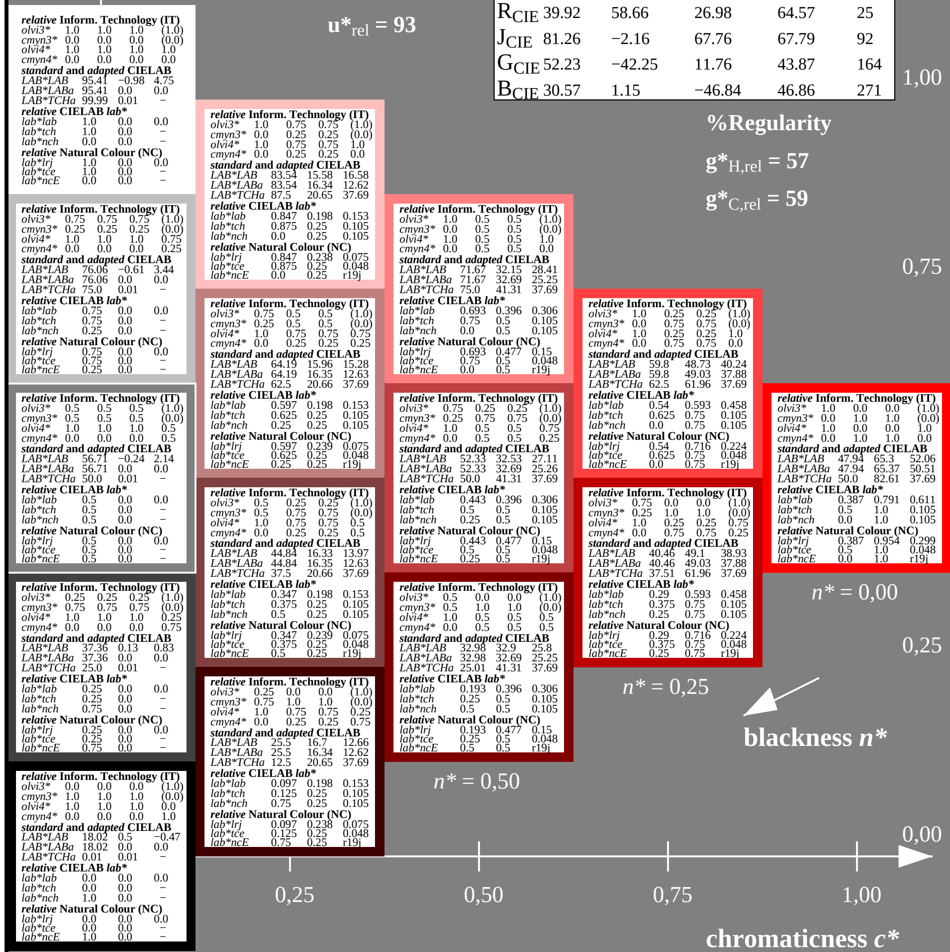
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

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

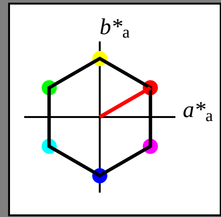
lab*tch and lab*nch

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

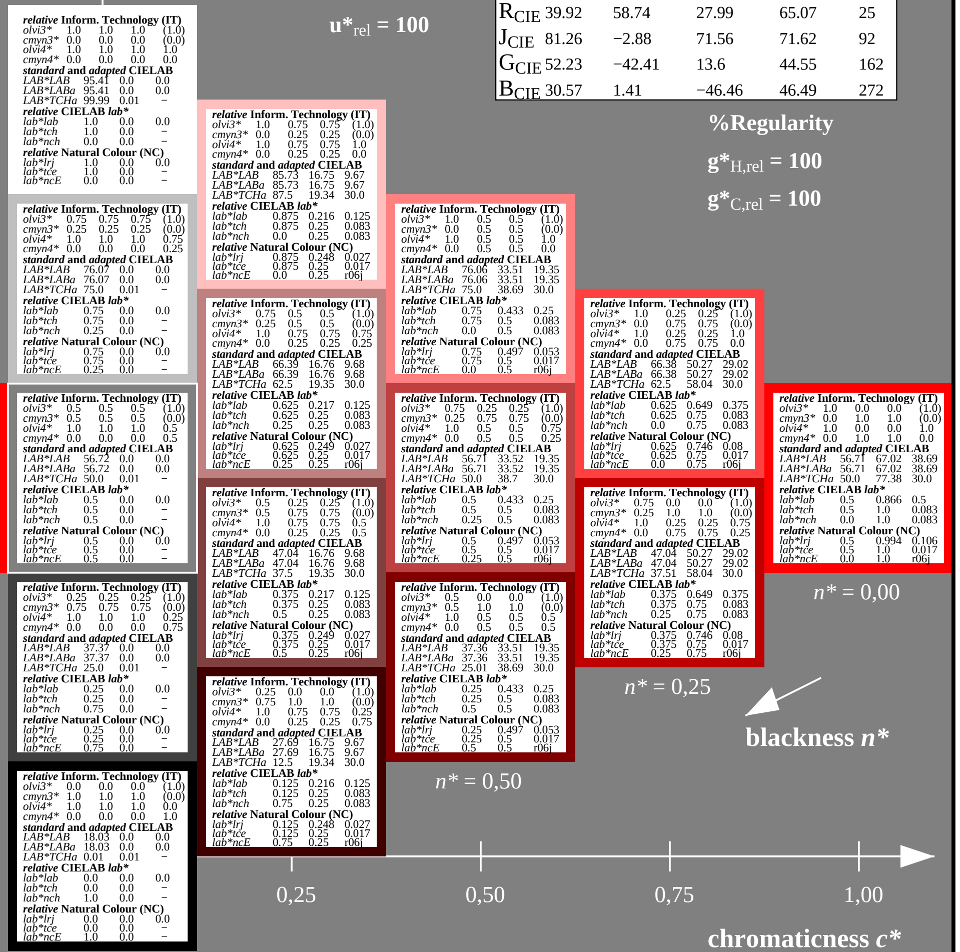
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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*

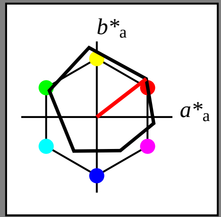
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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

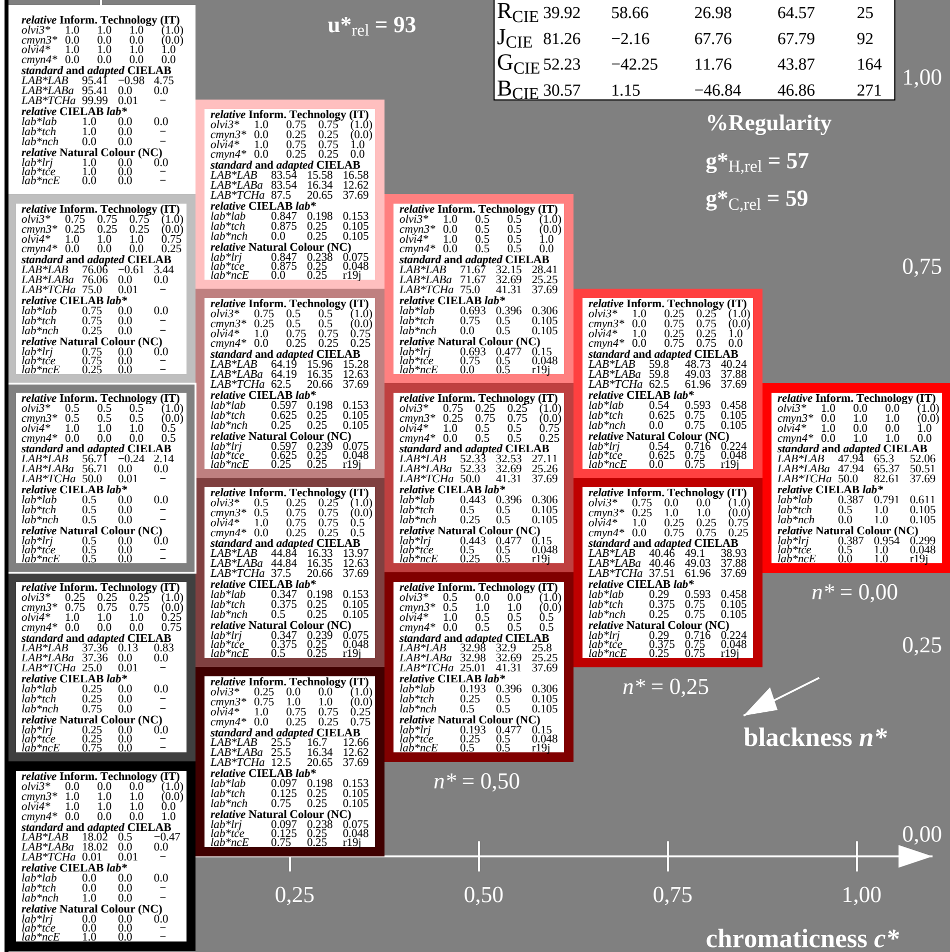
%Gamut

u^*_{rel} = 93

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS70

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

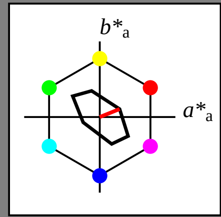
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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

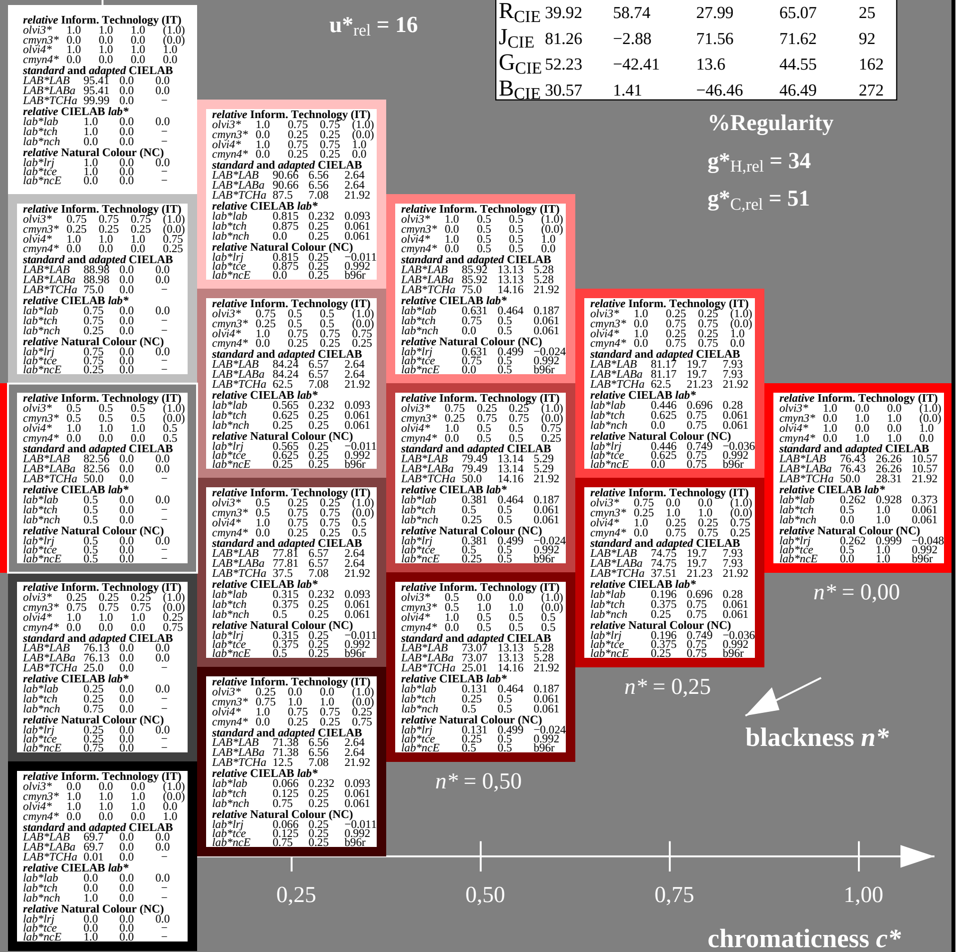
%Gamut

u^*_{rel} = 16

%Regularity

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

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



NE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

Input: Colorimetric Television Luminous System TLS00

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

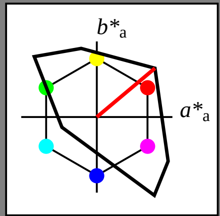
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

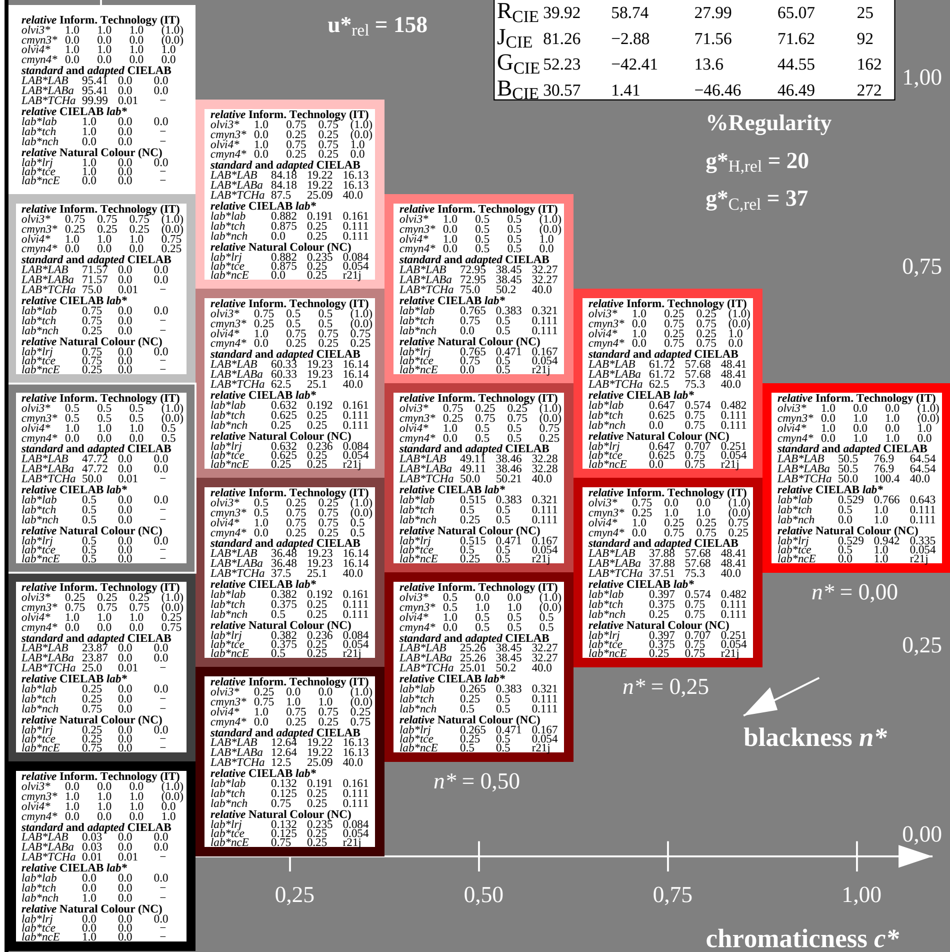
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

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

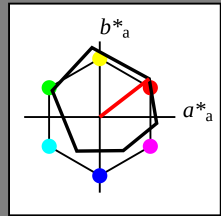
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

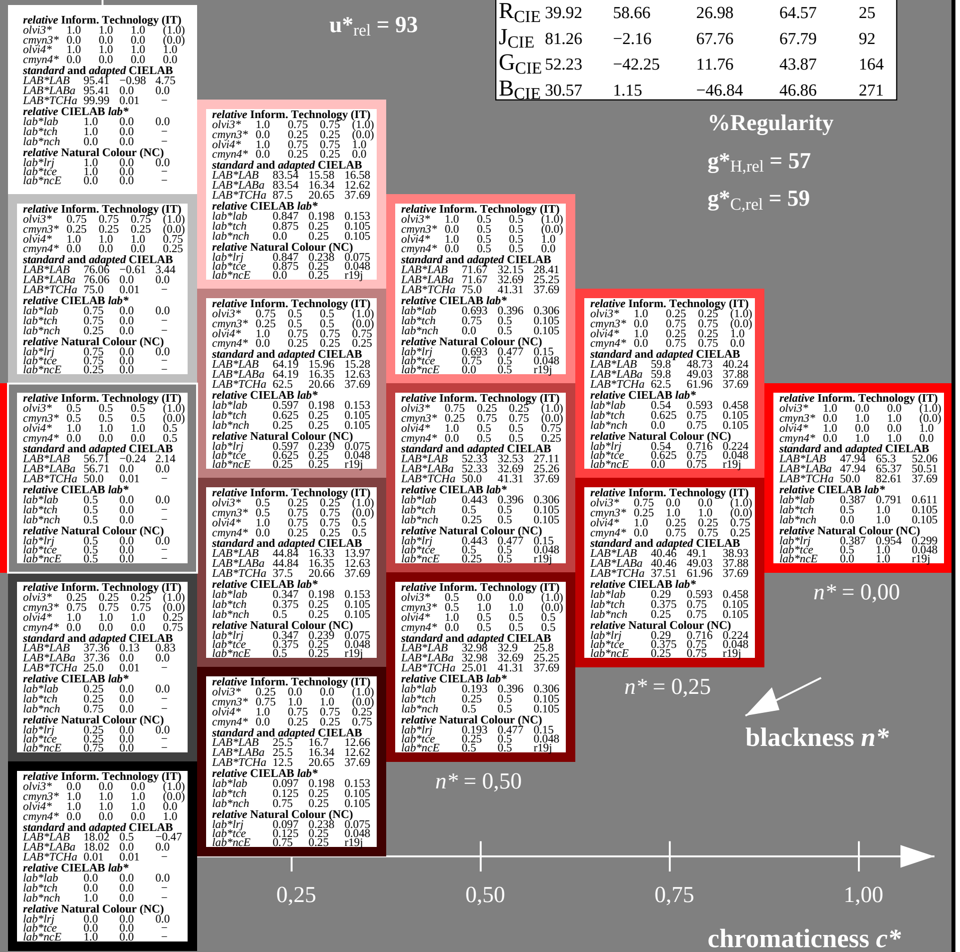
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



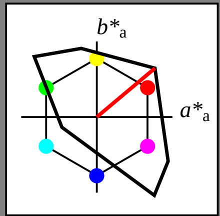
NE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

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

triangle lightness t^*

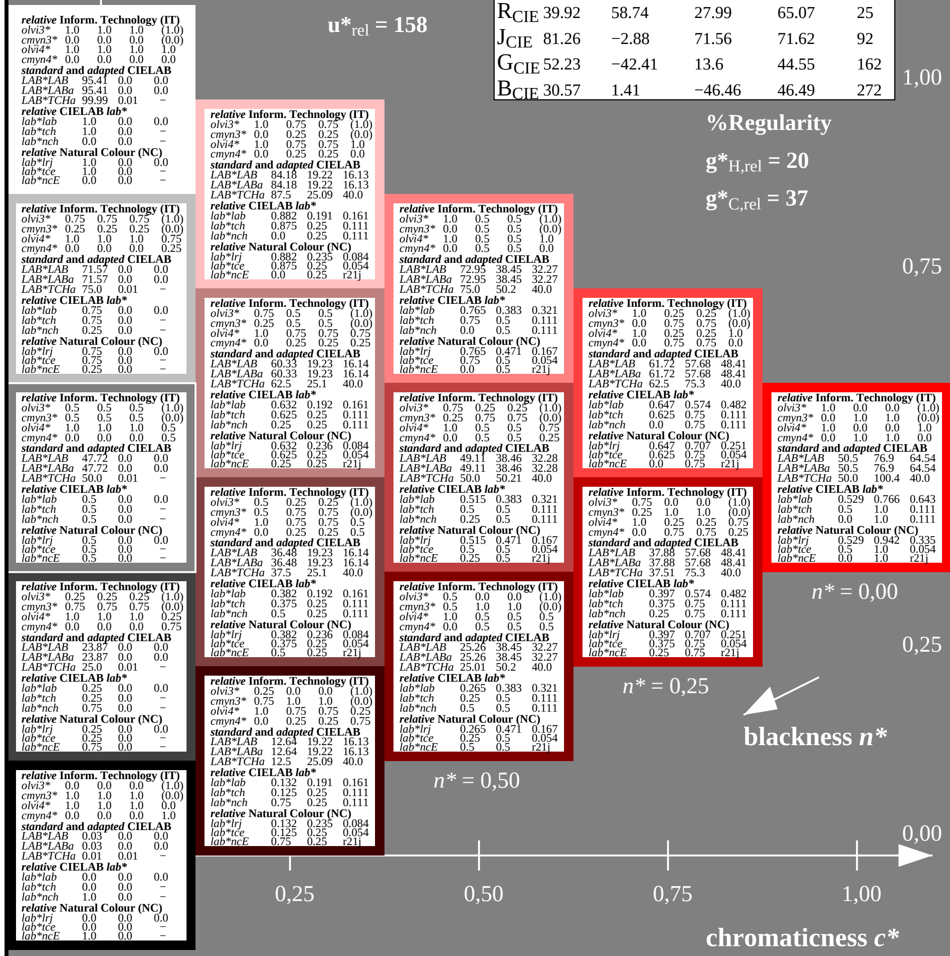


%Gamut
$u^*_{rel} = 158$

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

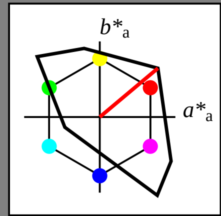
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric Television Luminous System 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^*

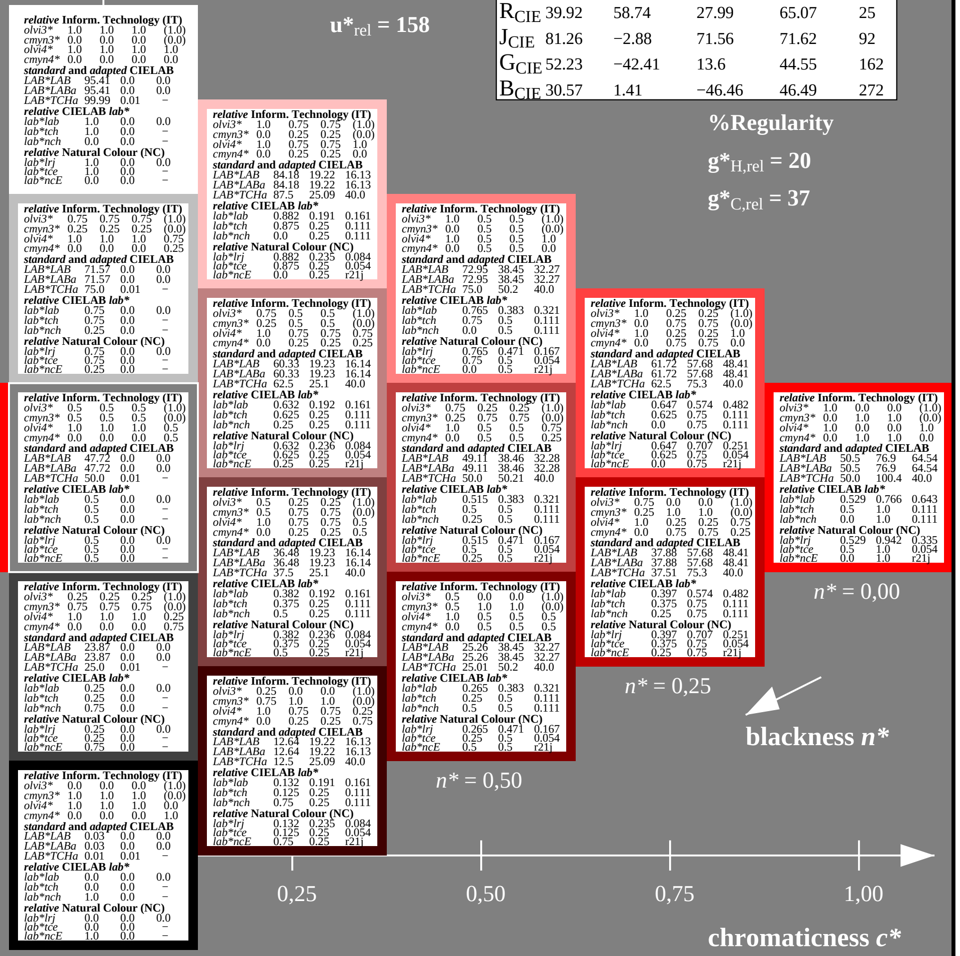


%Gamut
$u^*_{rel} = 158$

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



NE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

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

Input: Colorimetric Television Luminous System TLS00

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

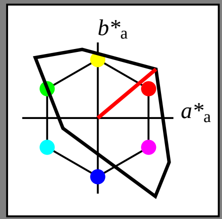
lab*tch and lab*nch

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

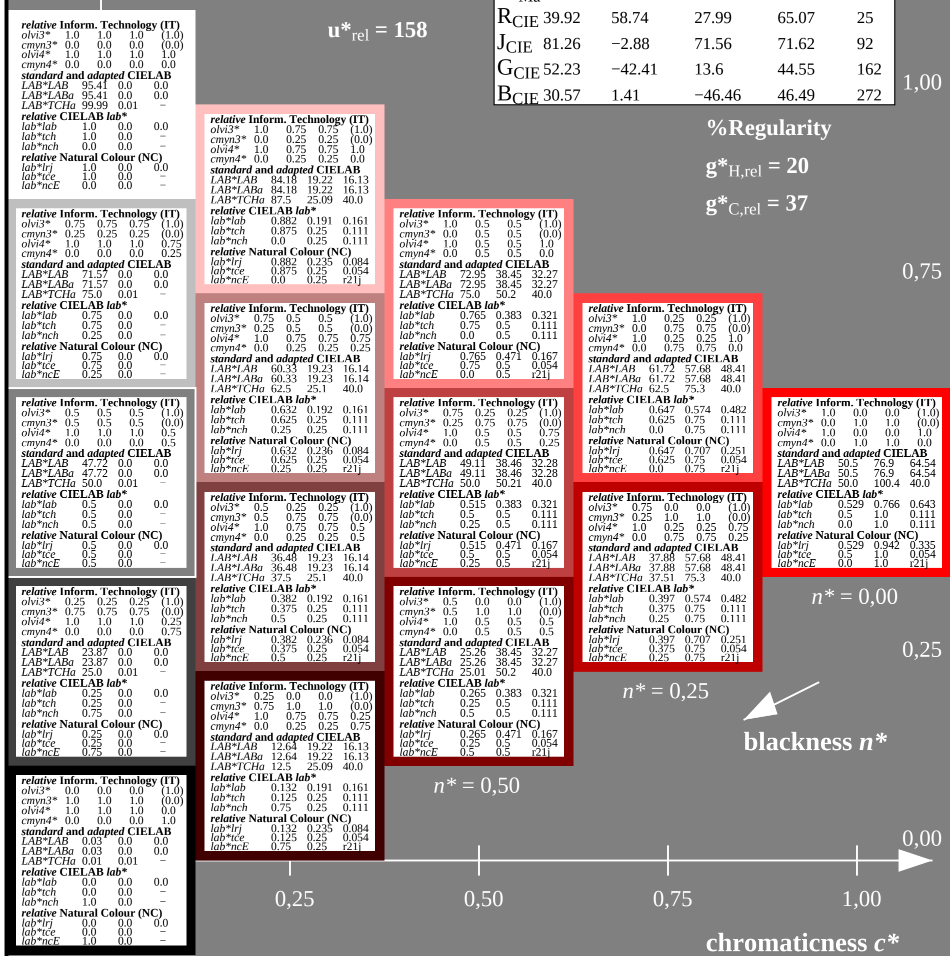
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

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

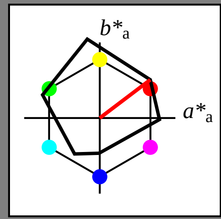
lab*tch and lab*nch

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

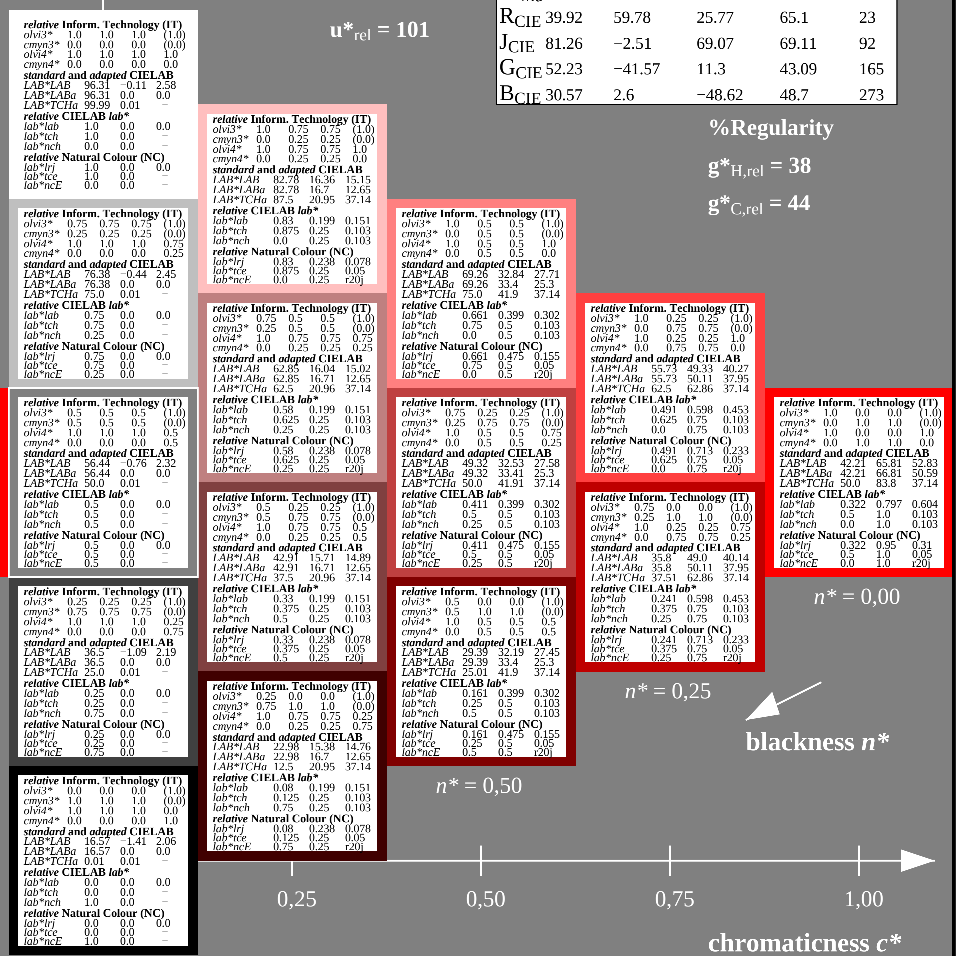
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



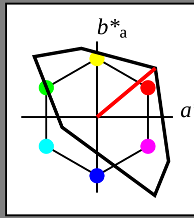
NE500−7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

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

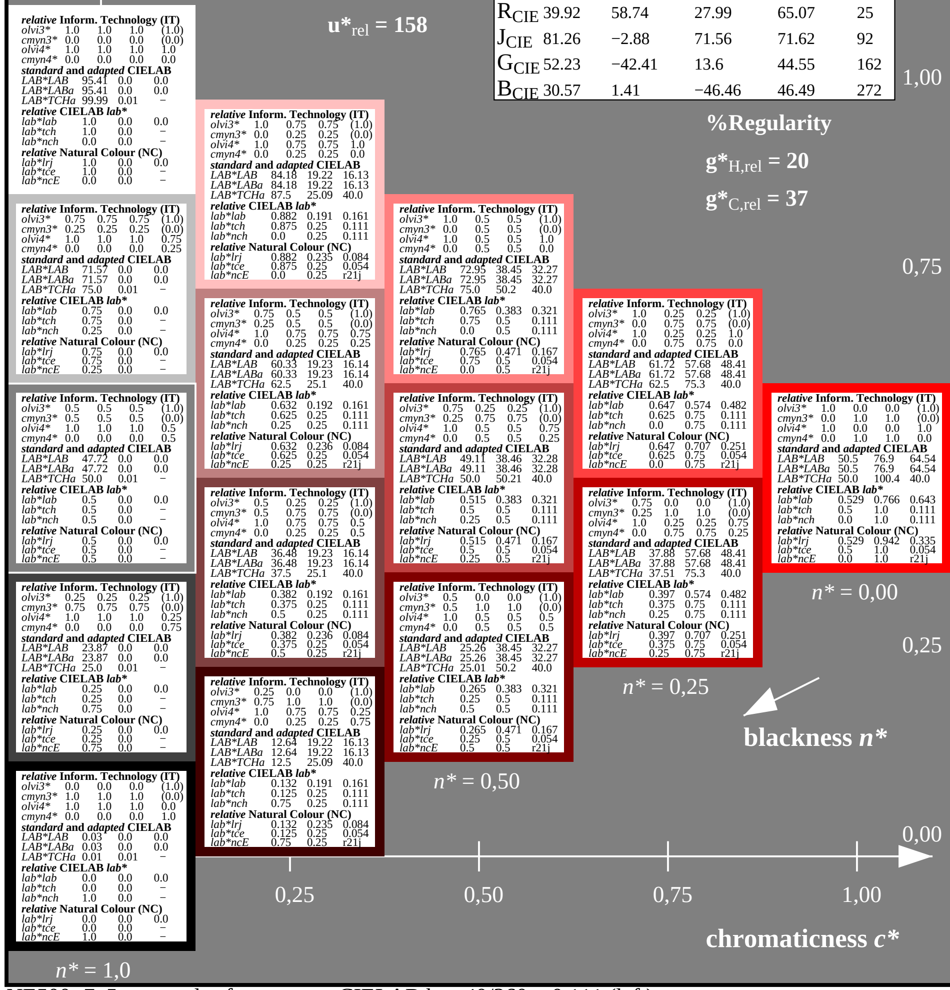
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

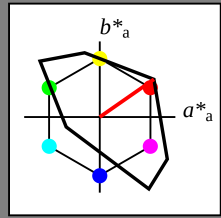
$g^*_{C,rel}$ = 37



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

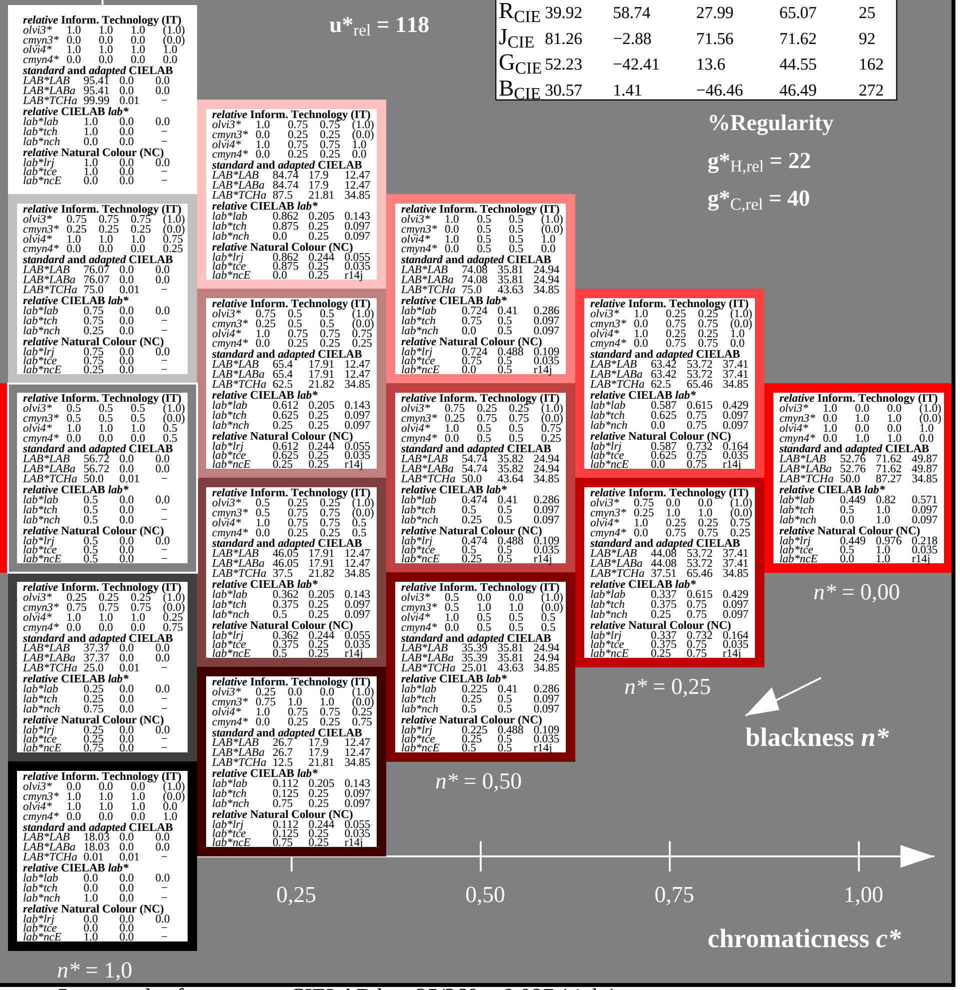
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 40/360 = 0.111$

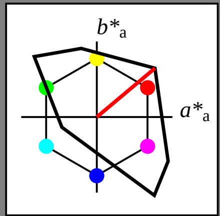
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

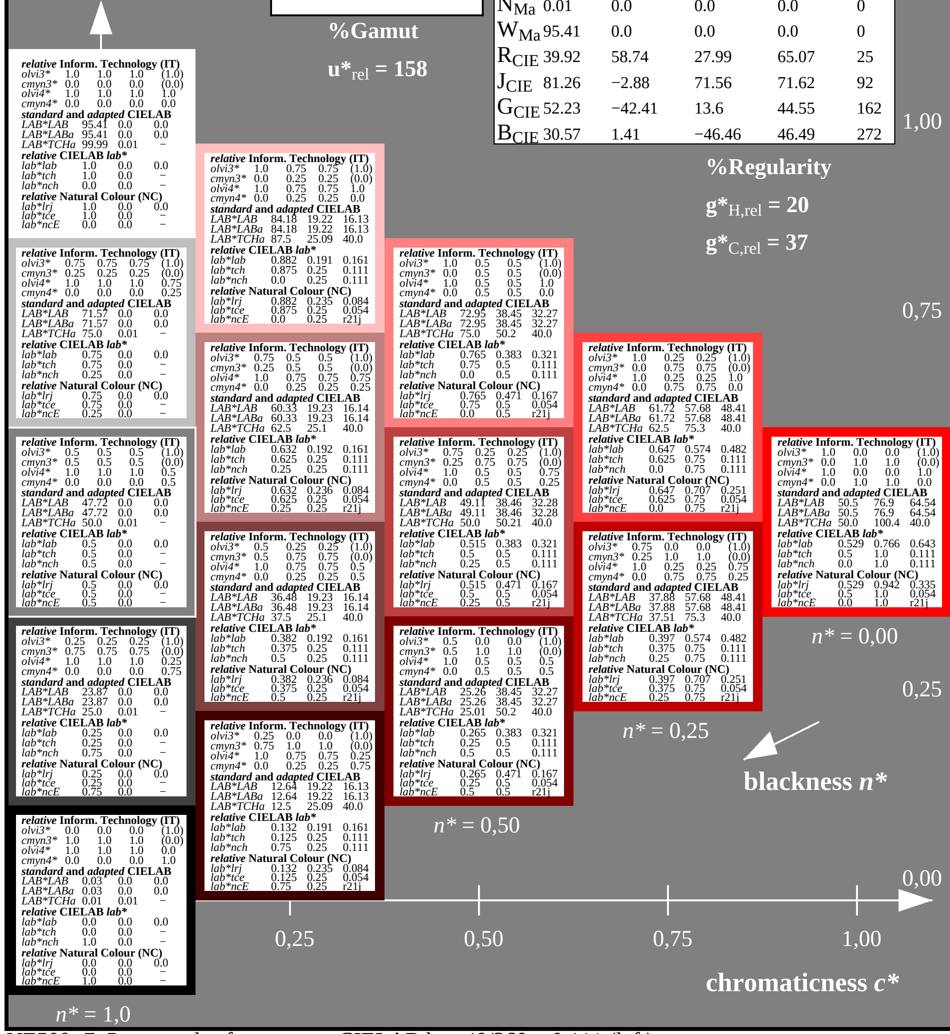
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 30/360 = 0.083$

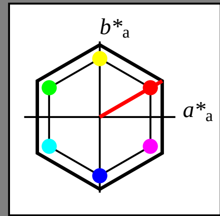
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

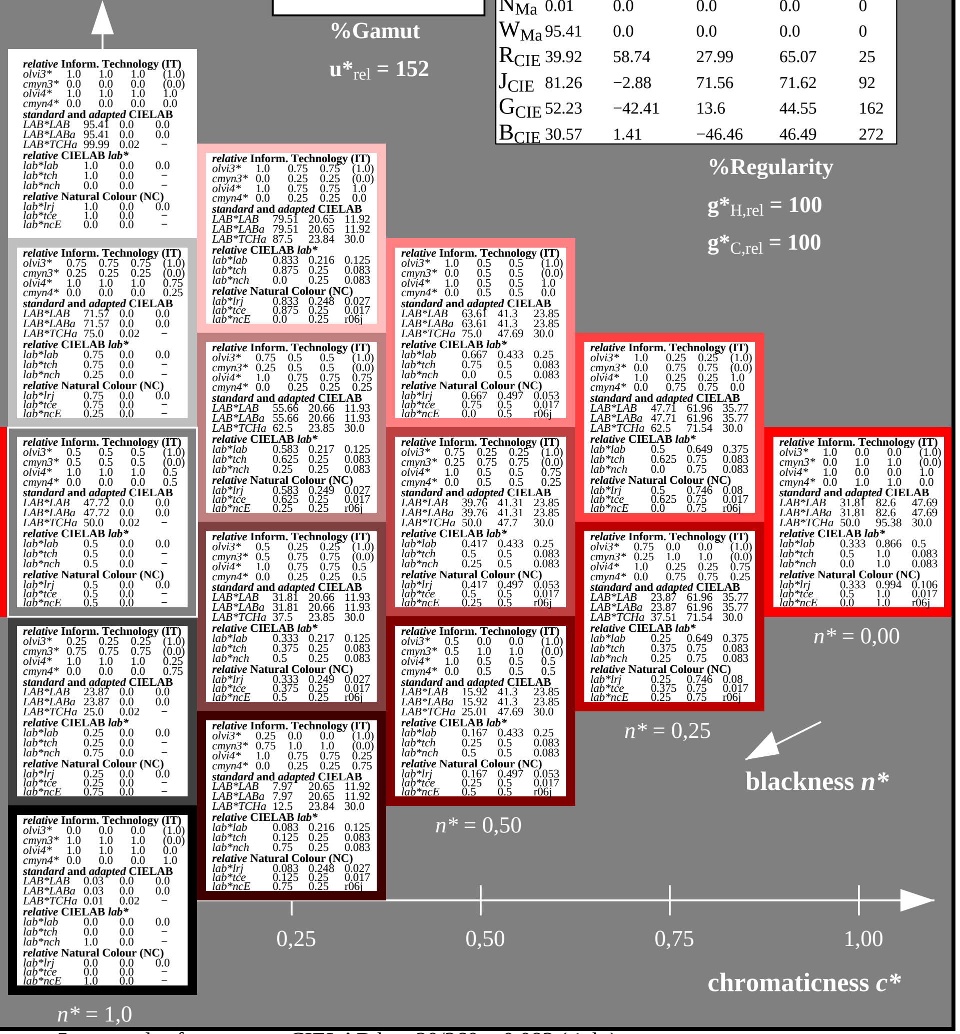
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 40/360 = 0.111$

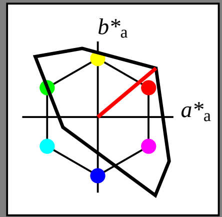
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

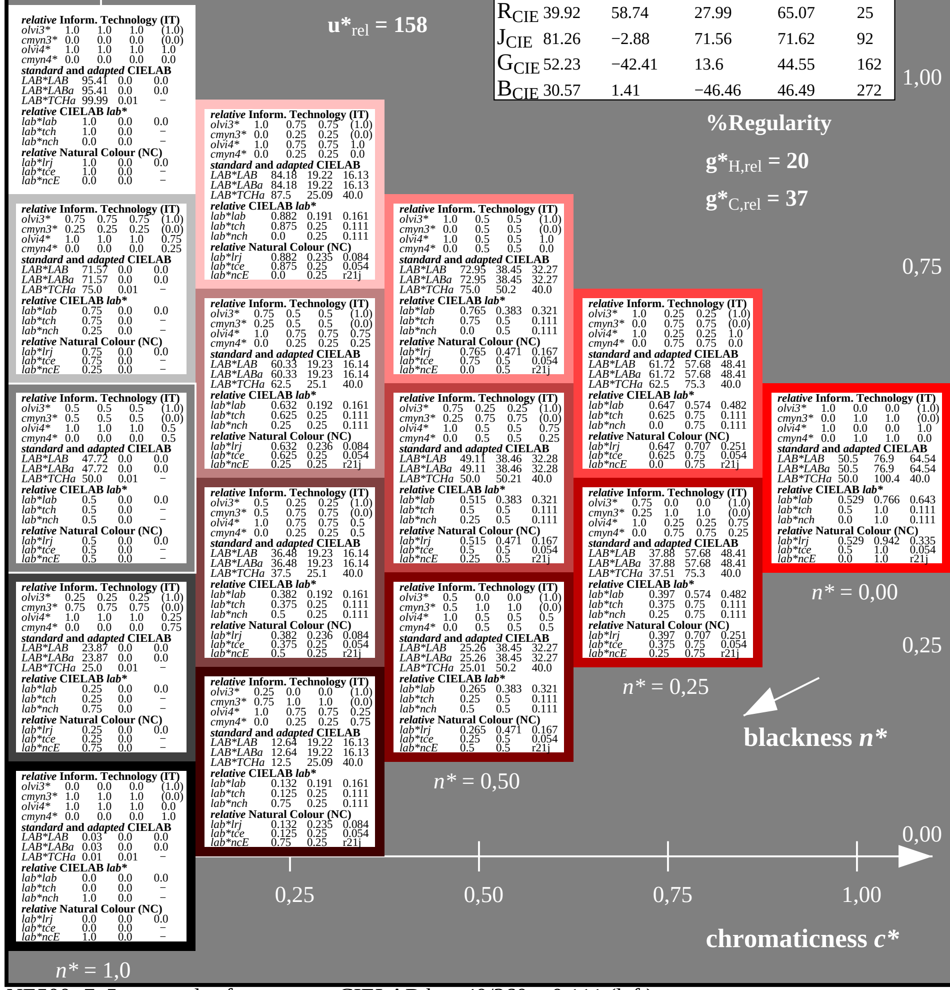
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Reflective System NRS18

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

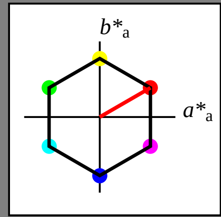
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

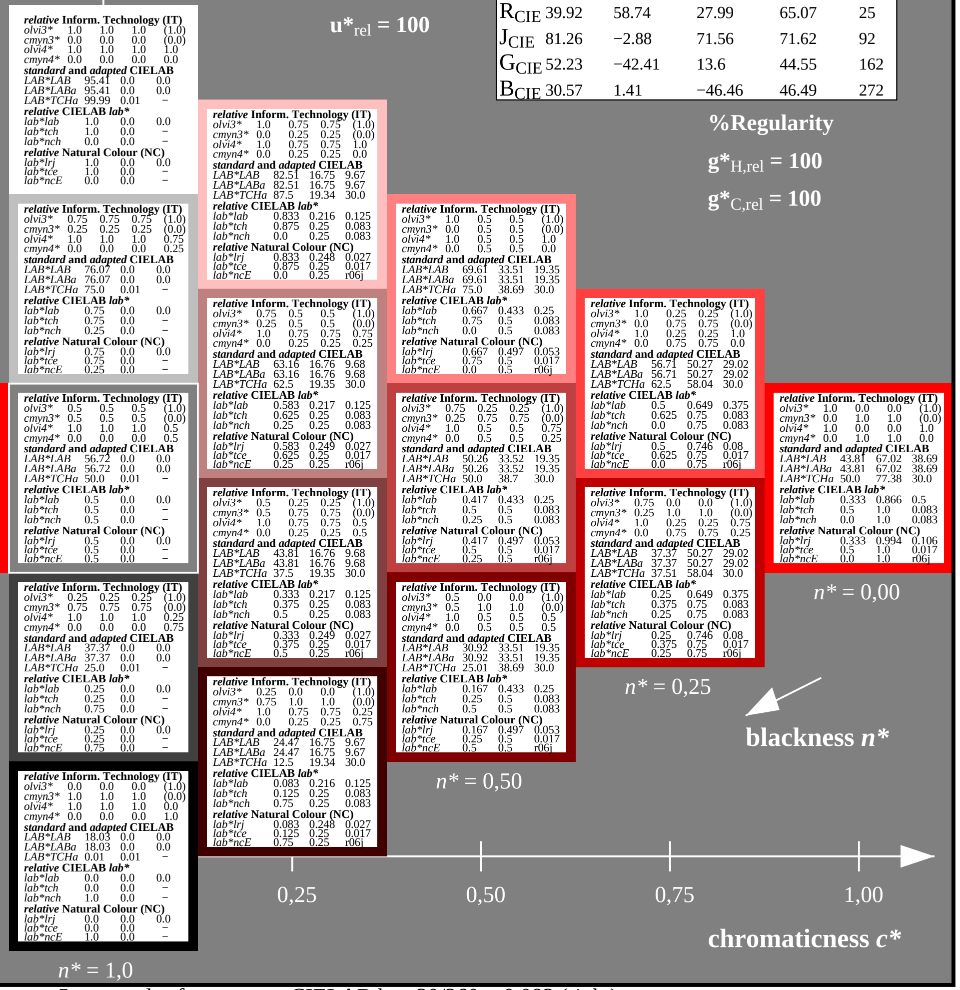
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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*

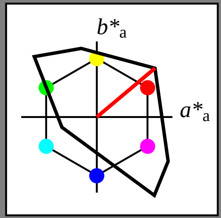
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

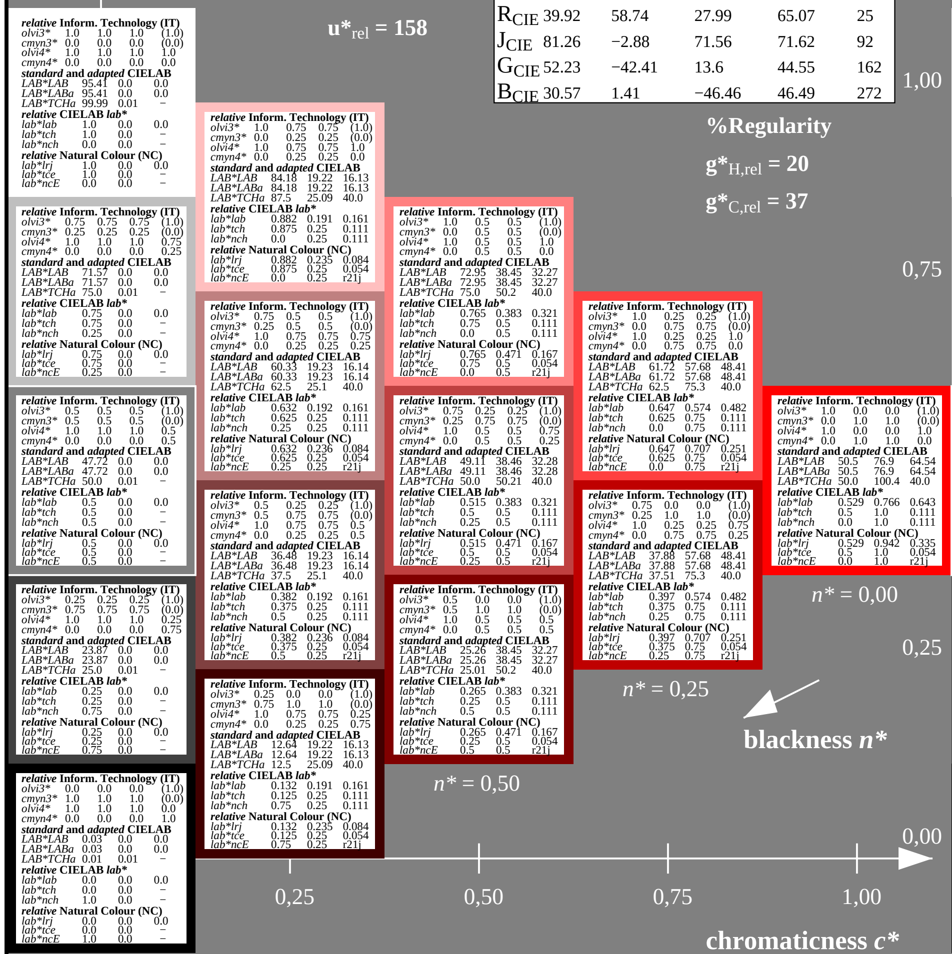
u^*_{rel} = 158

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
TLS00; adapted (a) CIELAB data					
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 = 30/360 = 0.083*

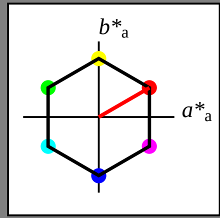
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

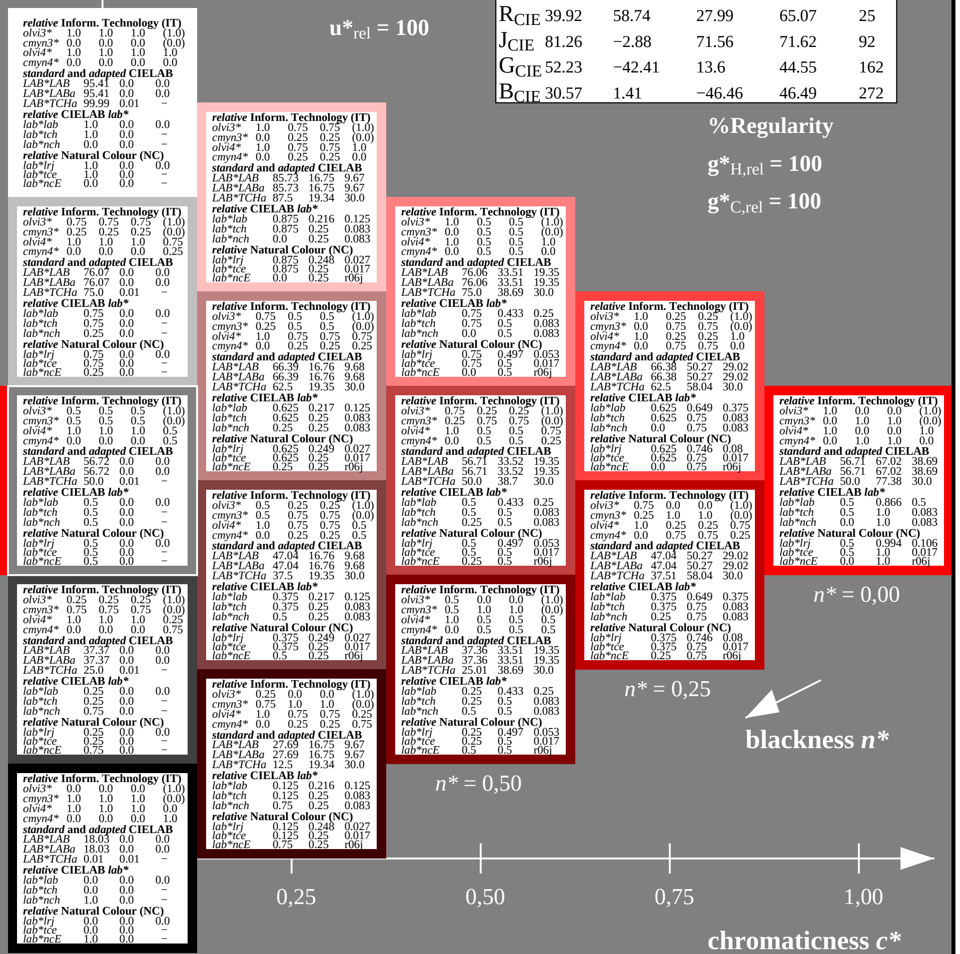
u^*_{rel} = 100

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
SRS18; adapted (a) CIELAB data					
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



NE500−7, 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 $h^* = lab^*h = 40/360 = 0.111$

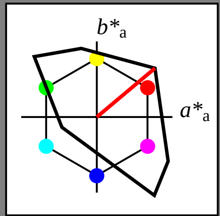
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

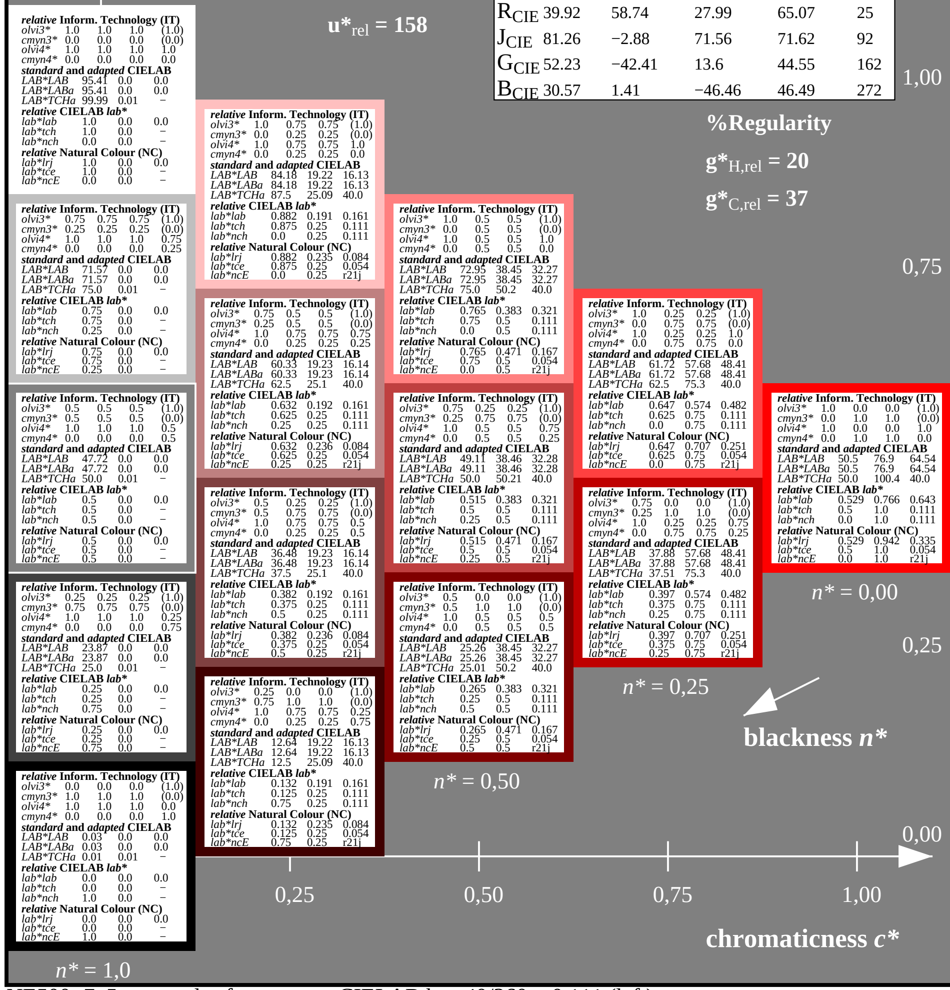
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 22/360 = 0.061$

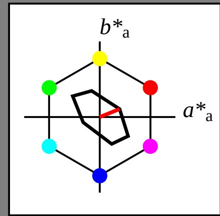
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

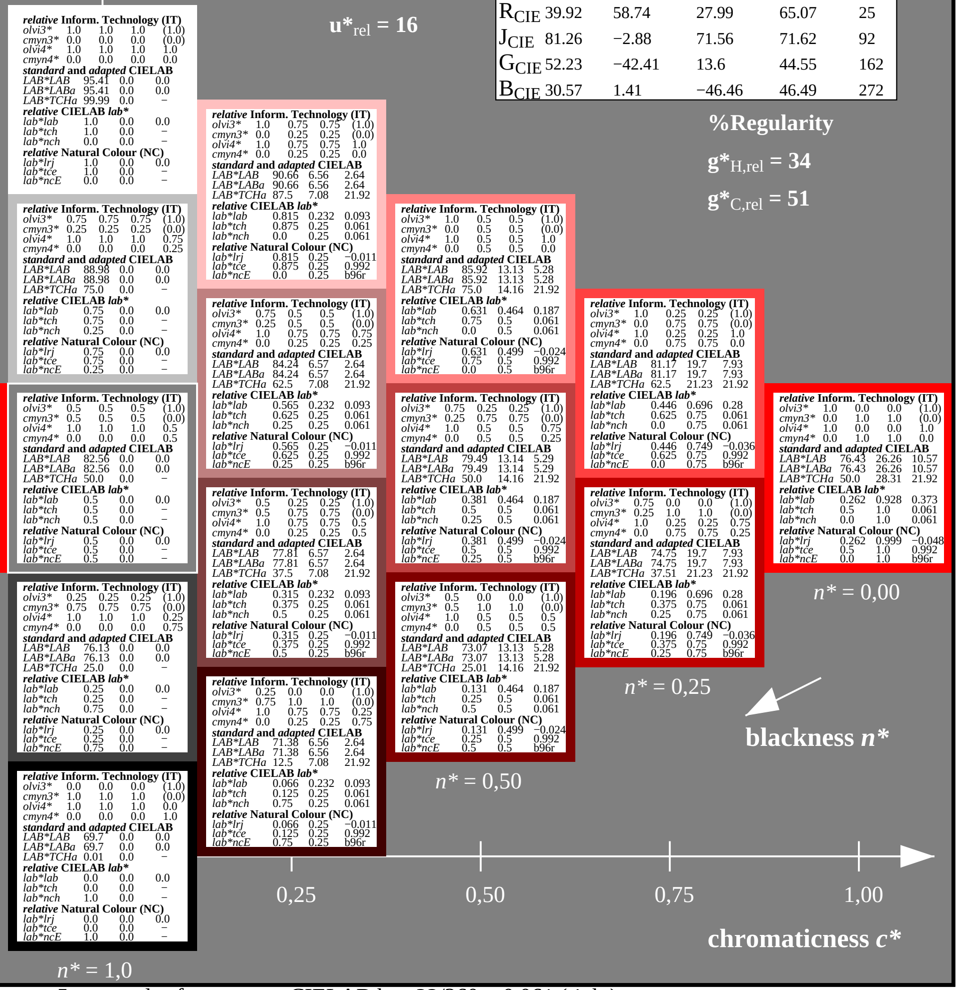
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 37/360 = 0.103$

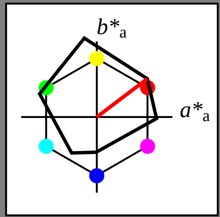
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

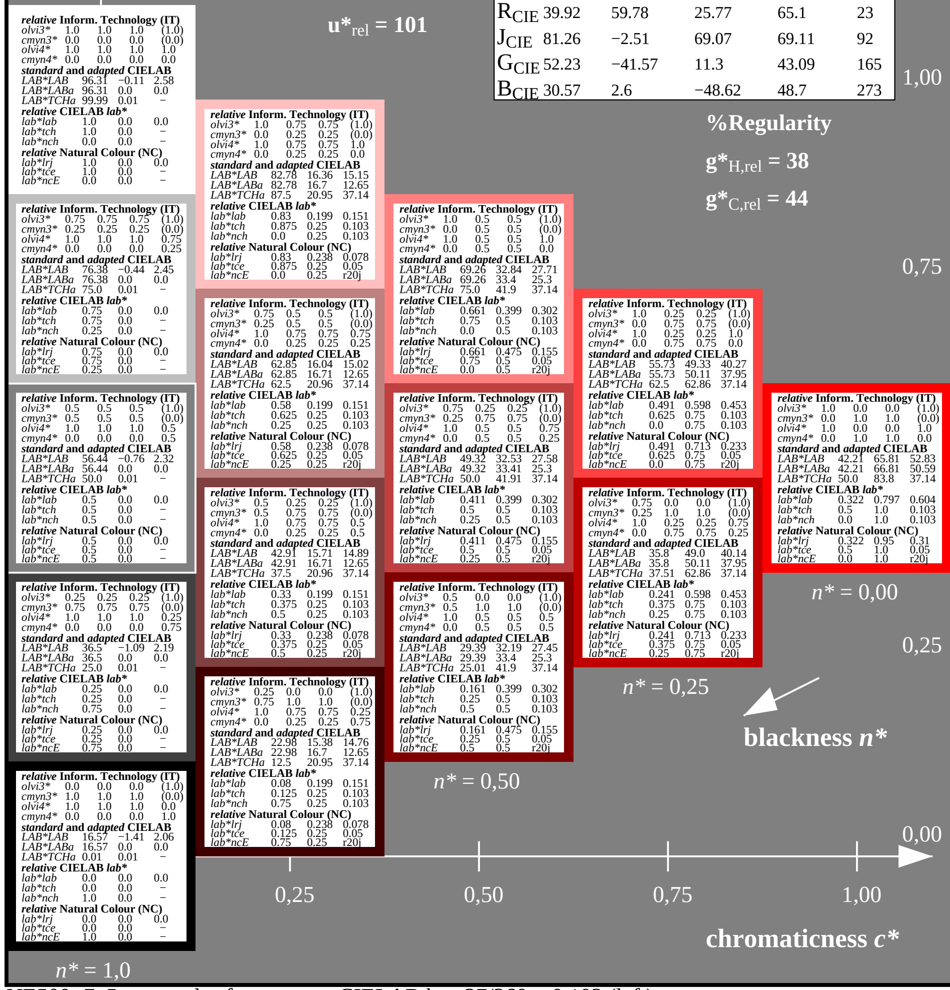
$u^*_{rel} = 101$

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

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

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



Output: Colorimetric Offset Reflective System ORS18

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

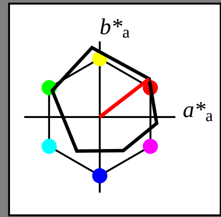
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

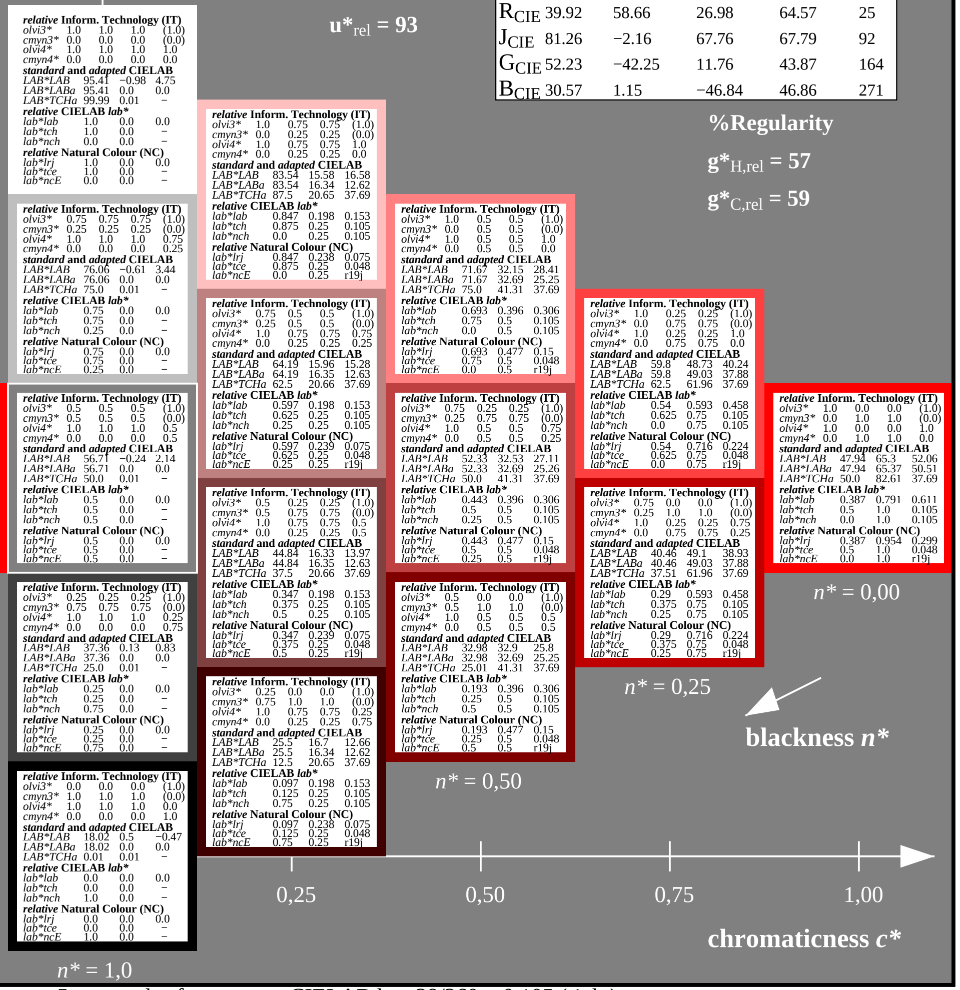
$u^*_{rel} = 93$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

Input: Colorimetric Printer Reflective System DRSXX

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

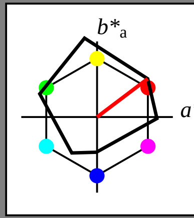
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

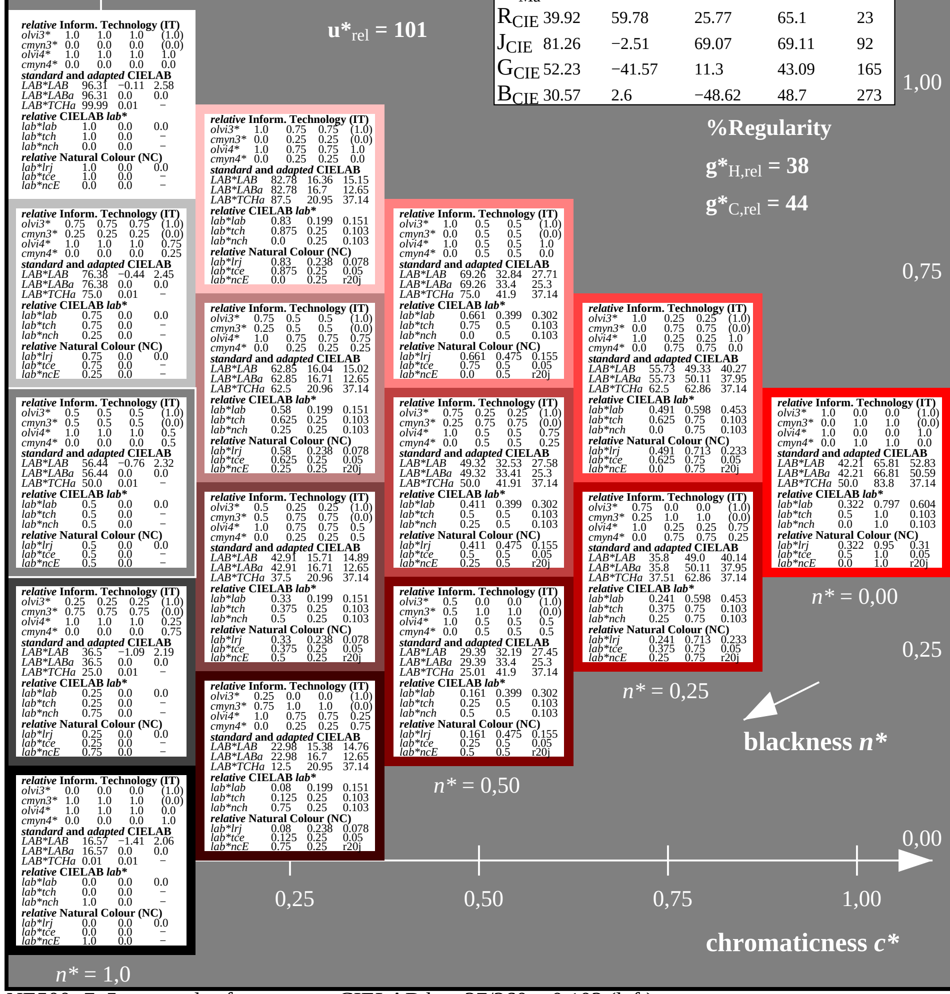
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS00

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

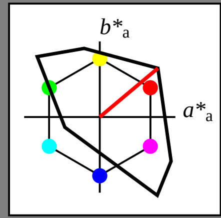
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

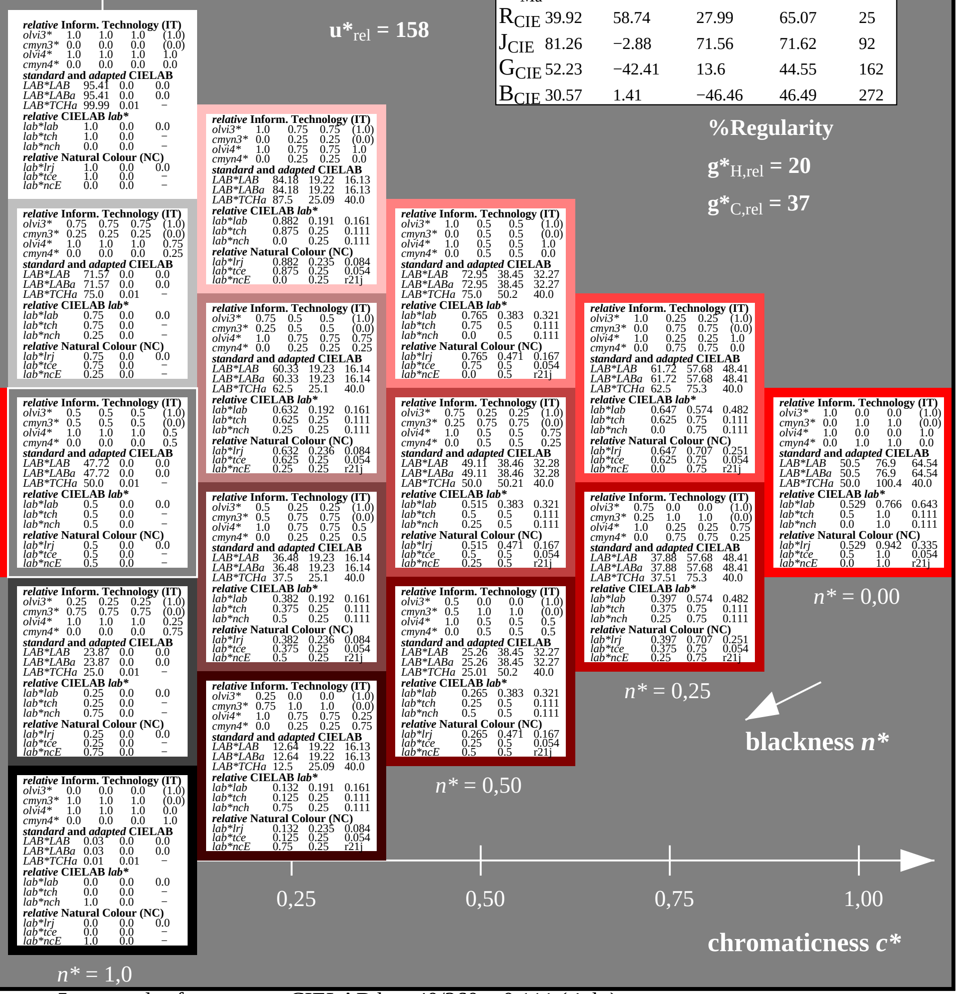
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



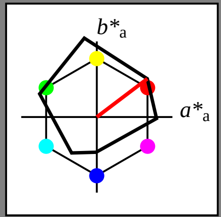
NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

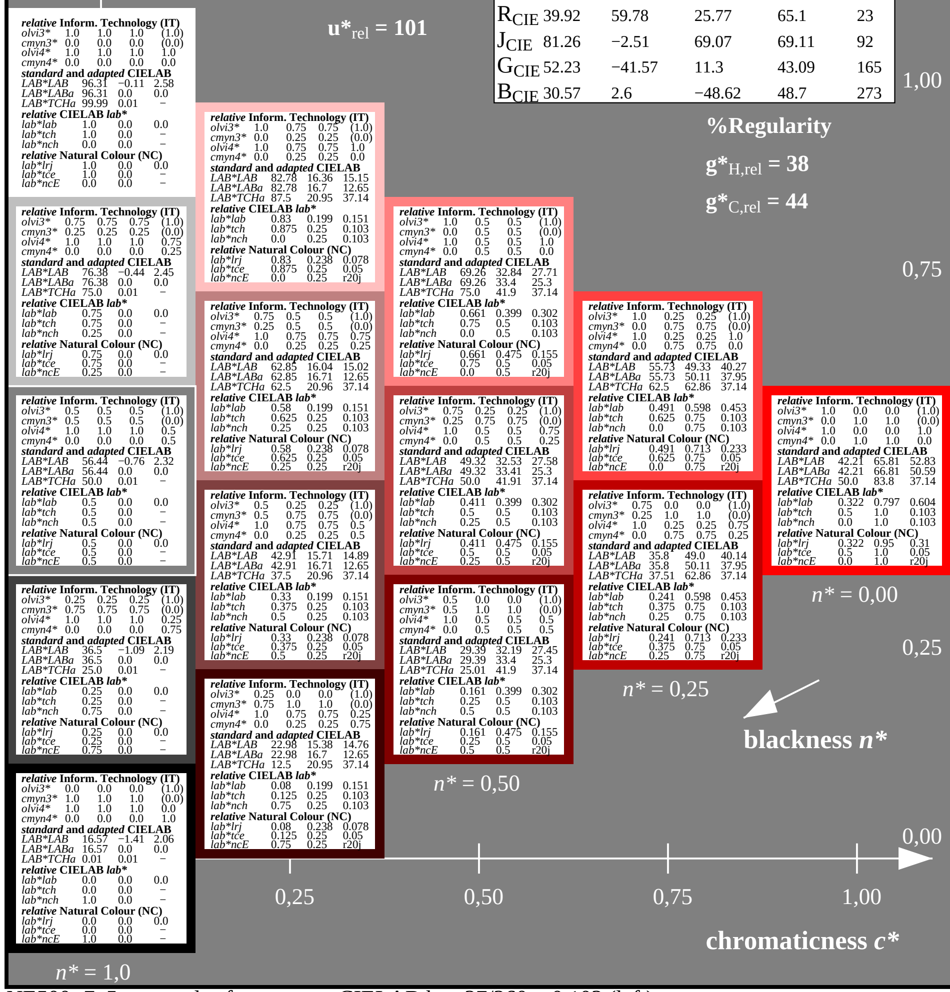
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Regularity

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

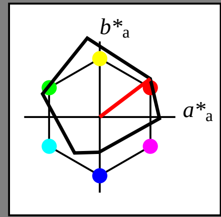
$g^*_{C,rel}$ = 44



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

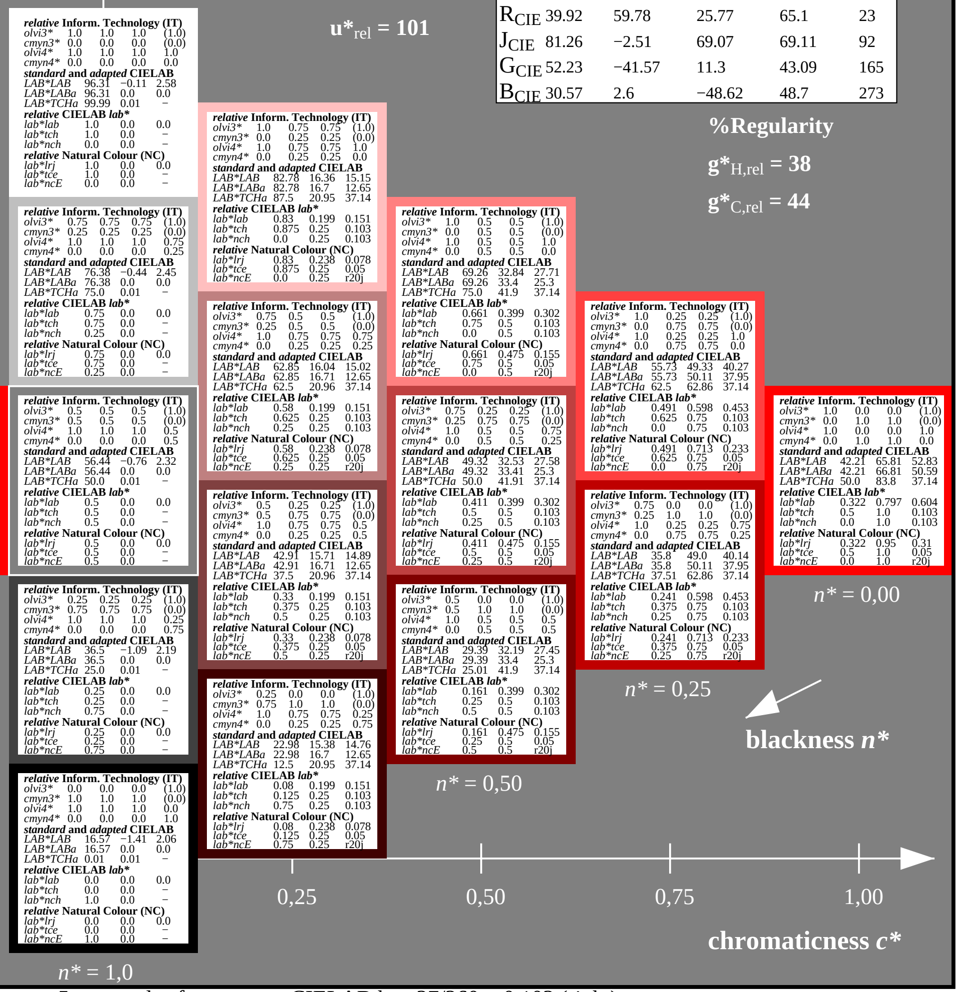
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



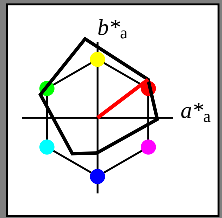
NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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**

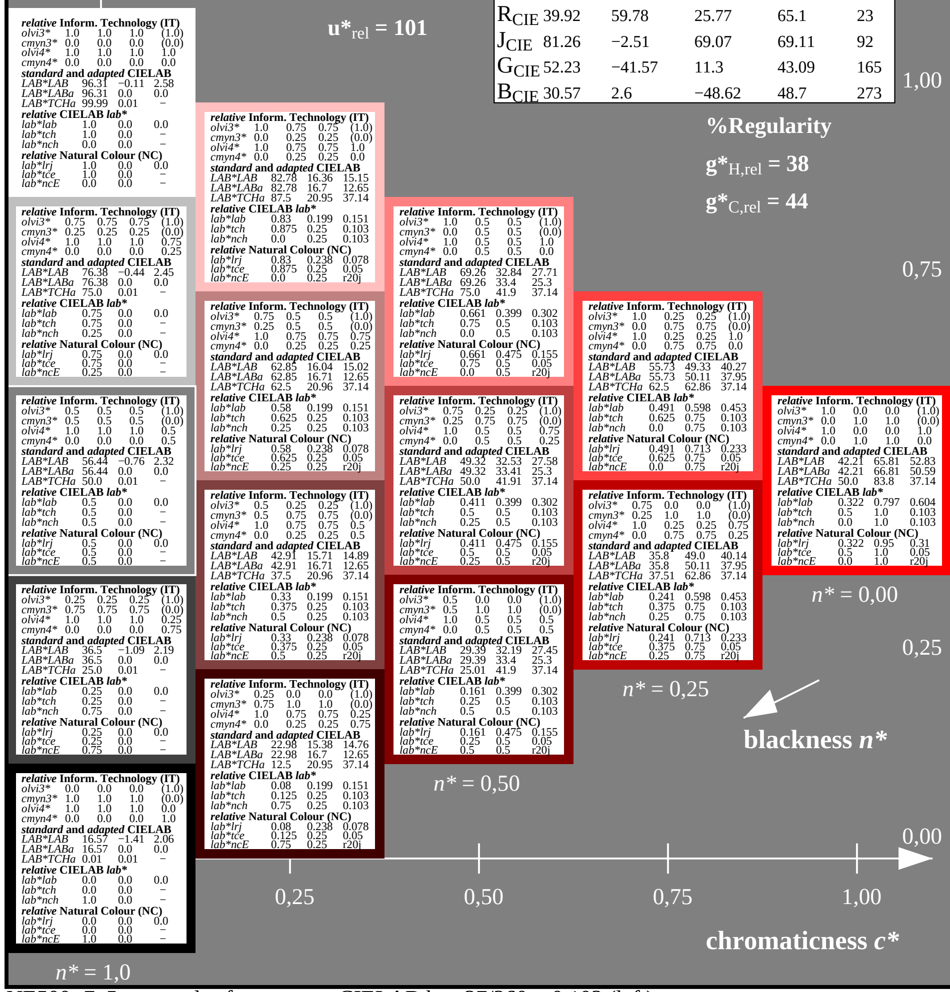


%Gamut
u^*_{rel} = 101

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

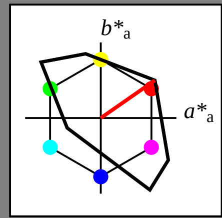
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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**

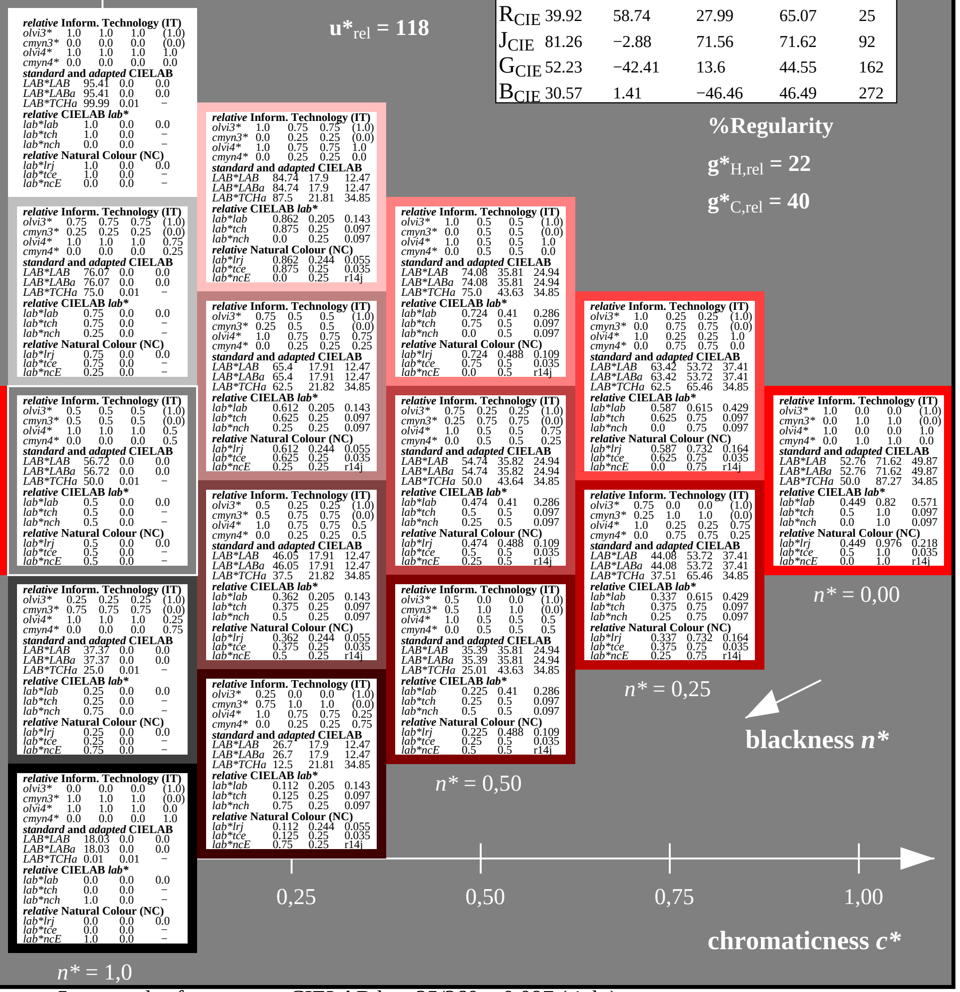


%Gamut
u^*_{rel} = 118

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



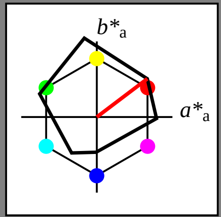
NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

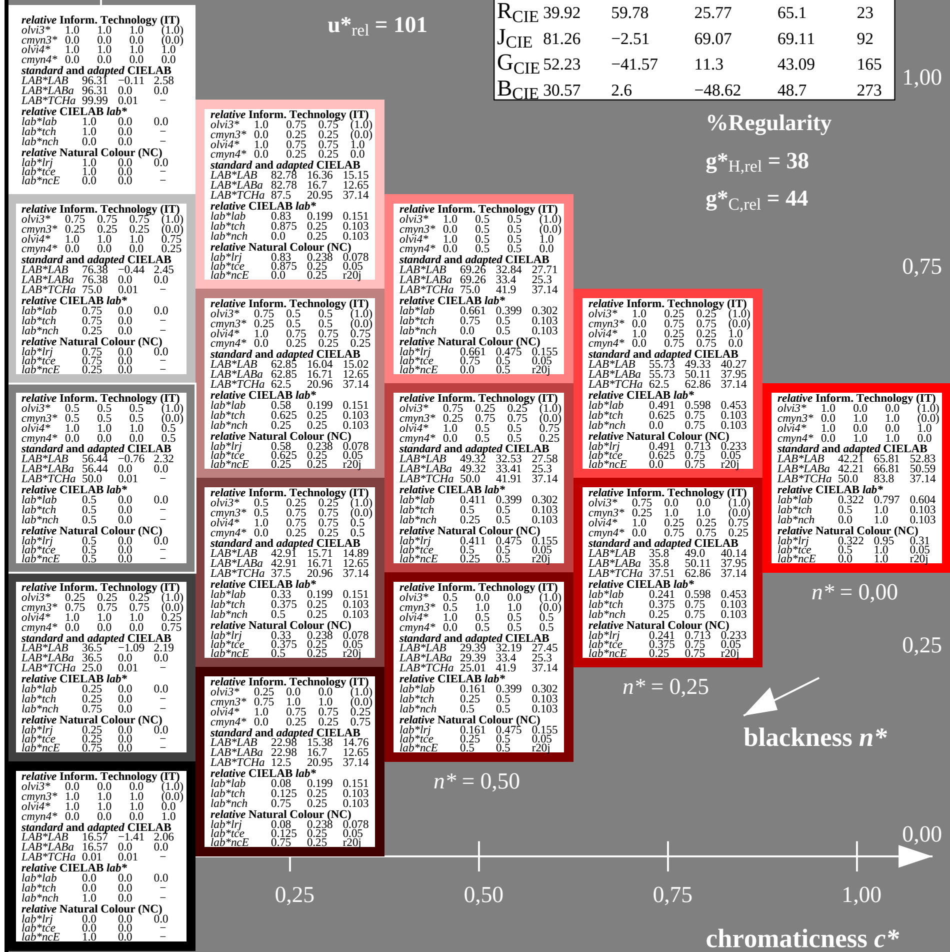
u*rel = 101

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

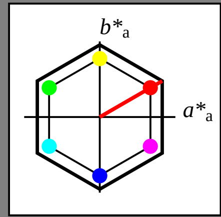
g*C,rel = 44



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

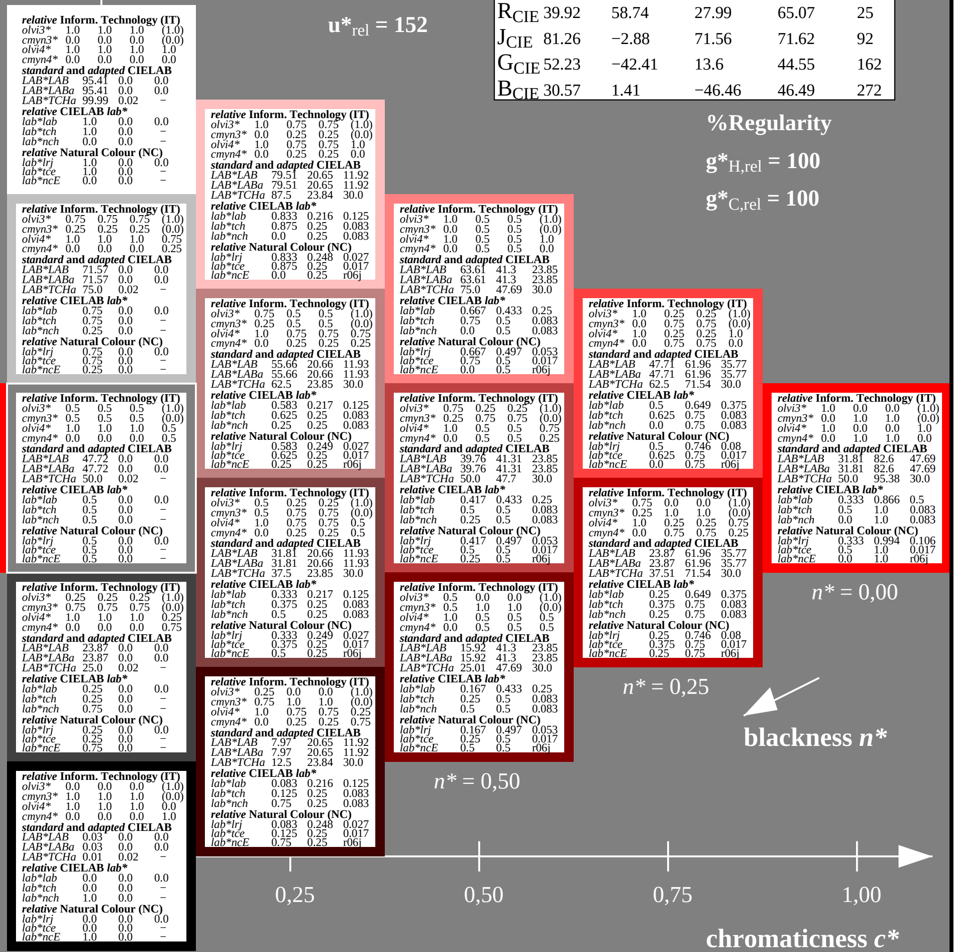
u*rel = 152

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



NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

Input: Colorimetric Printer Reflective System DRSXX

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

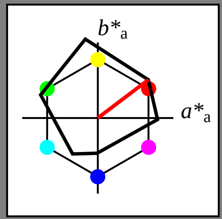
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

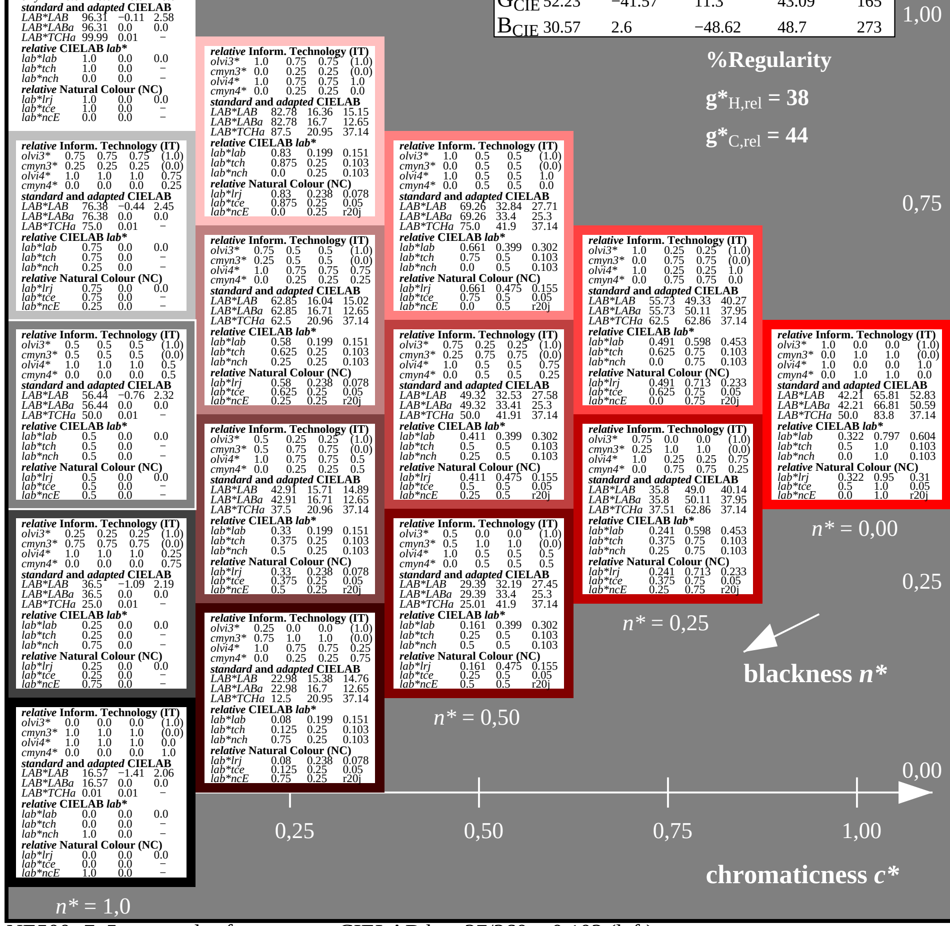
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

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

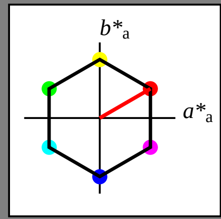
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

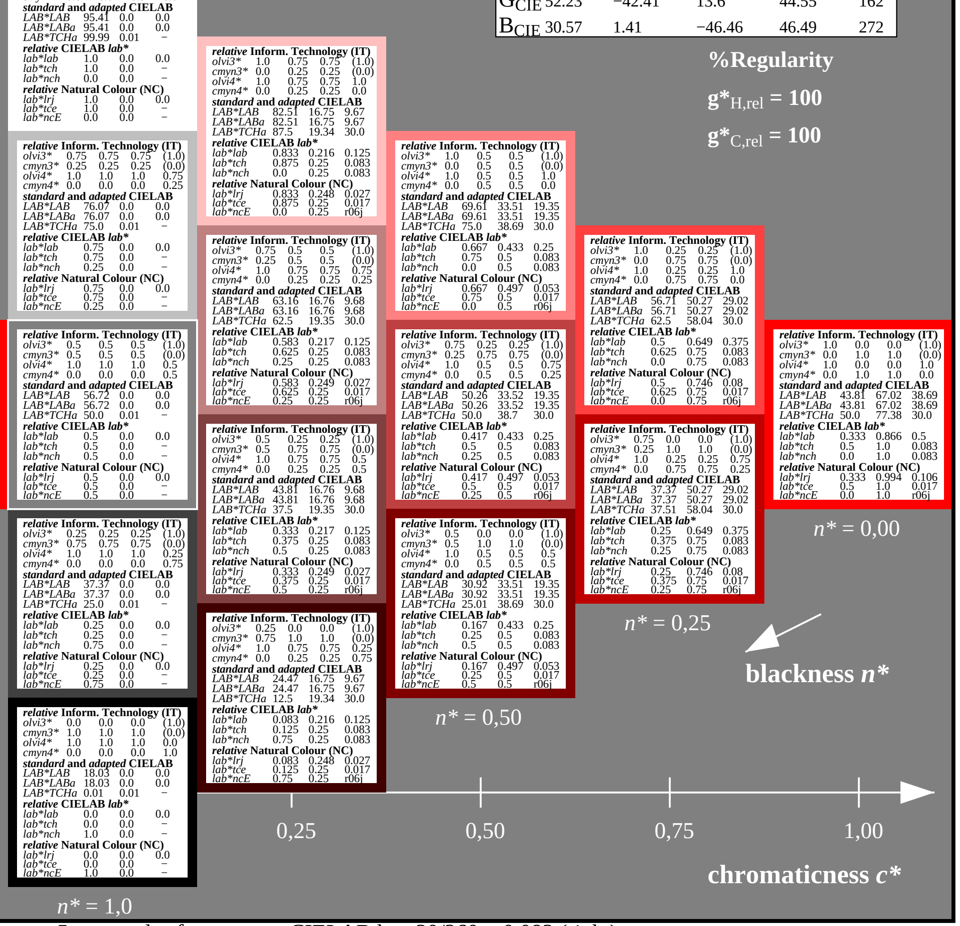
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

Input: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 37/360 = 0.103$

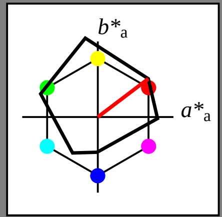
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

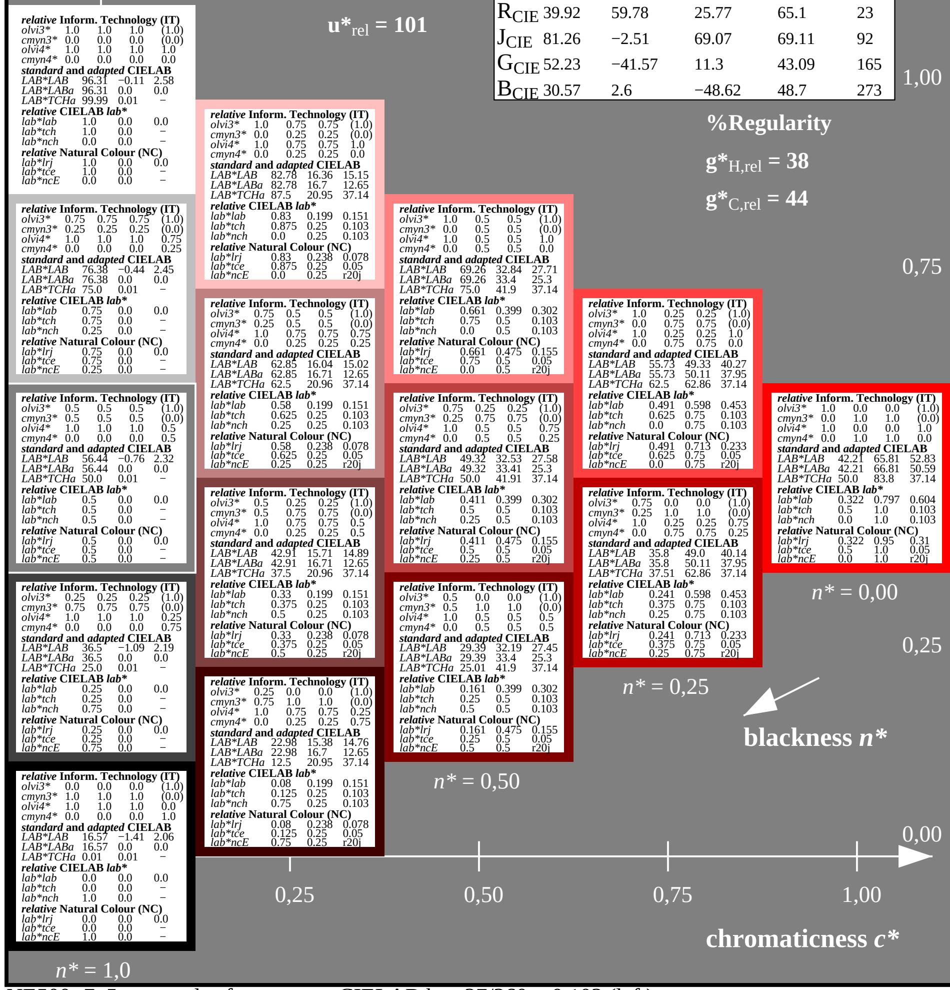
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



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

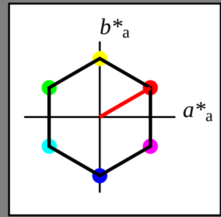
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

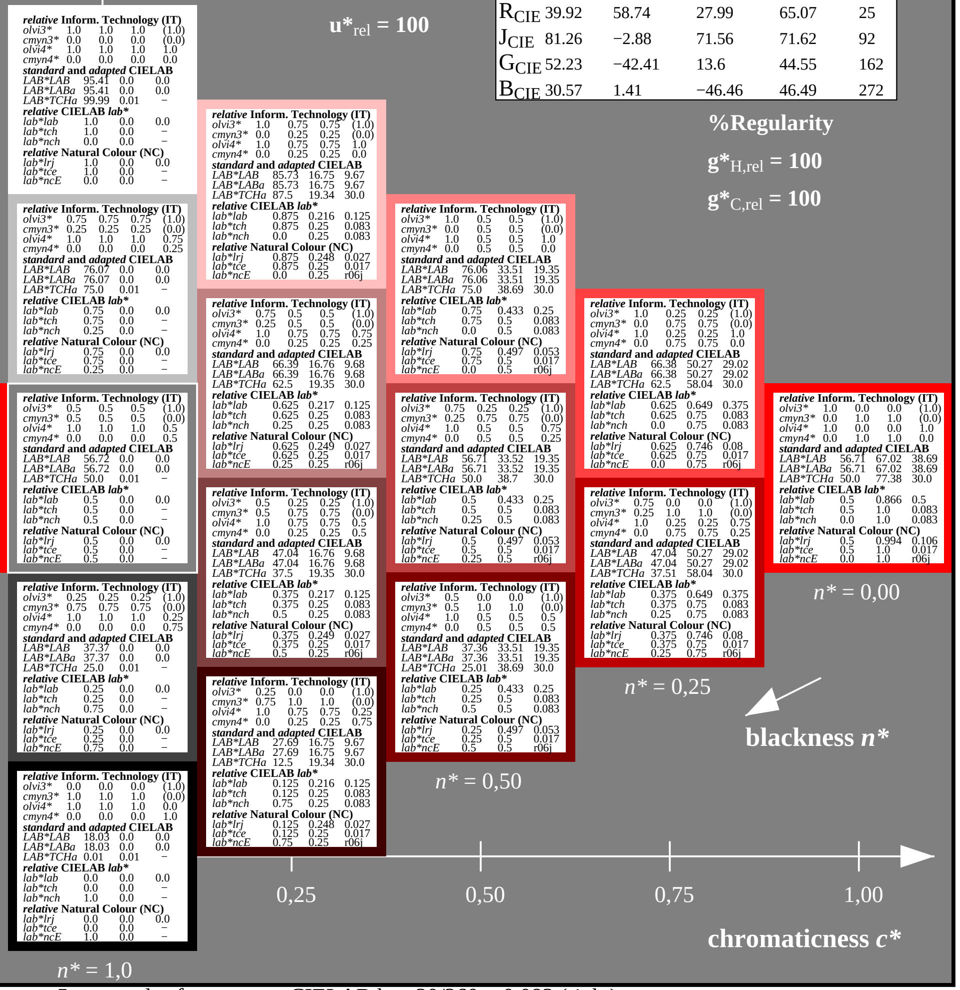
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

Input: Colorimetric Printer Reflective System DRSXX

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

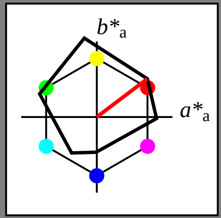
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

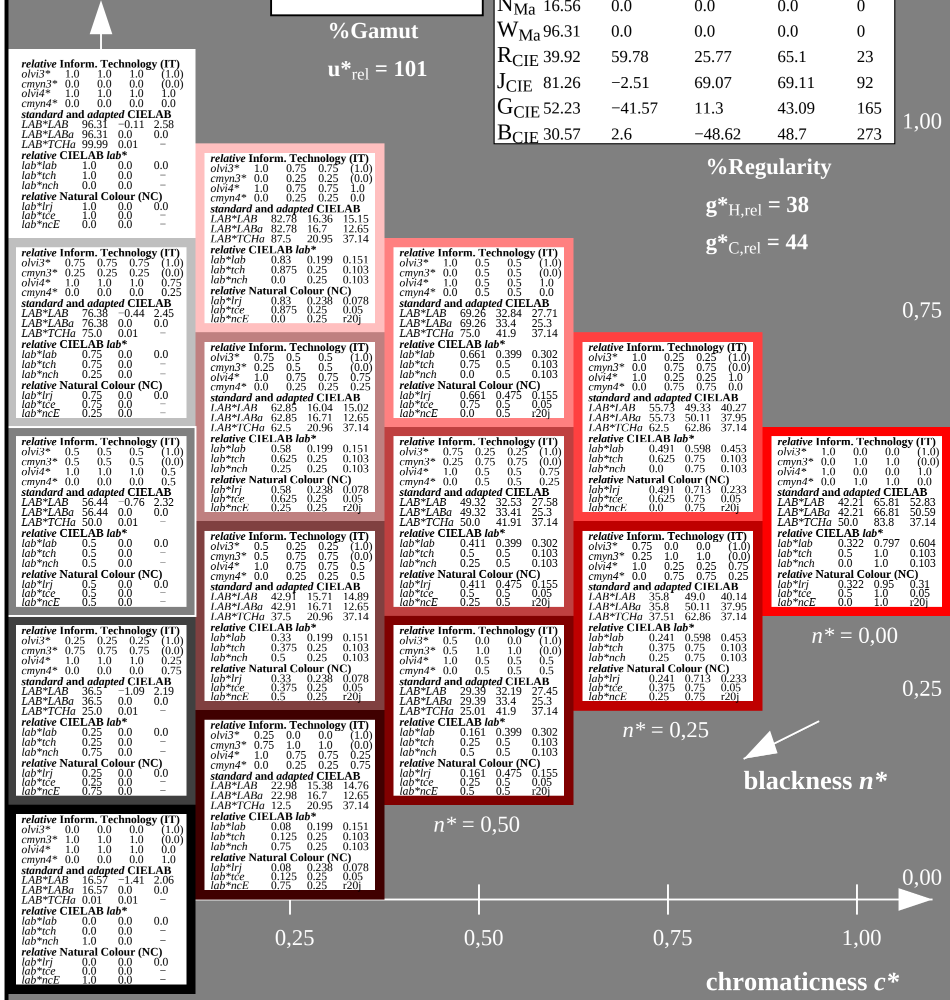
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS70

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

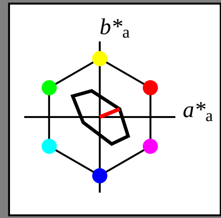
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

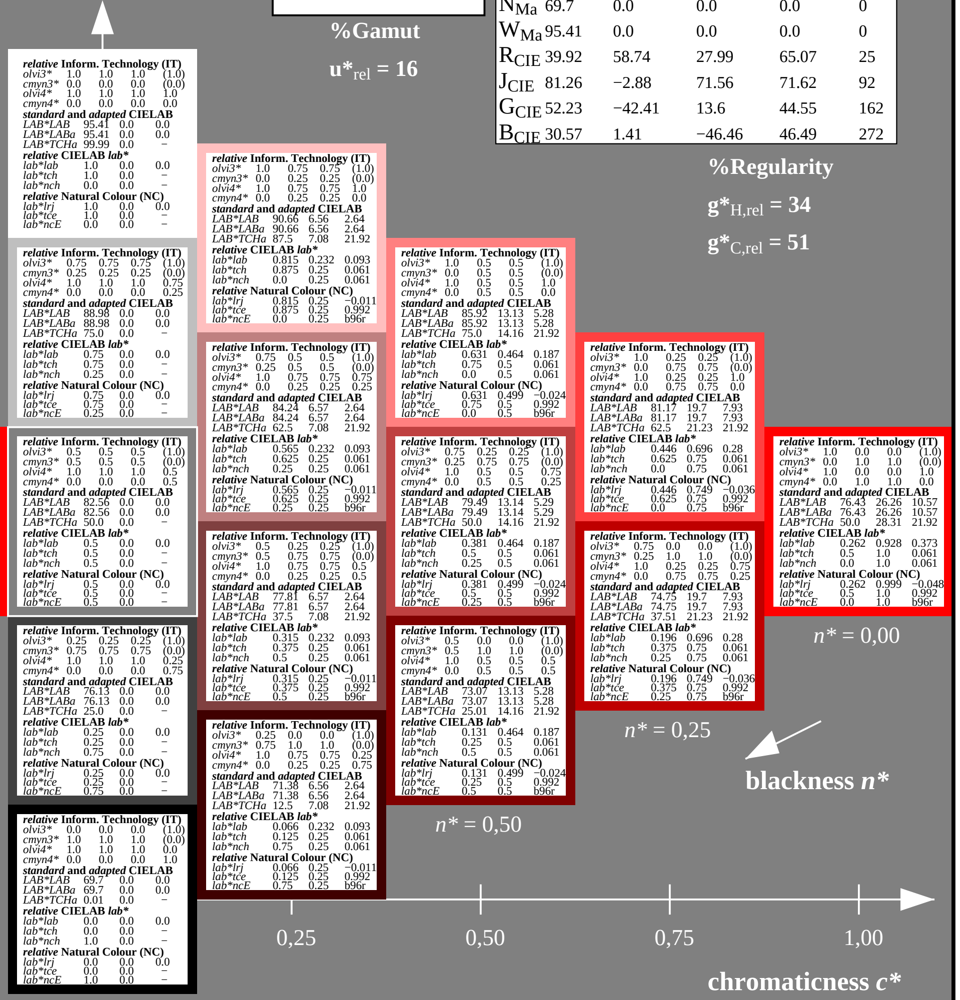
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 37/360 = 0.103 (left)

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

Input: Colorimetric Television Luminous System TLS18

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

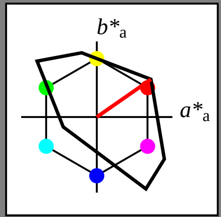
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

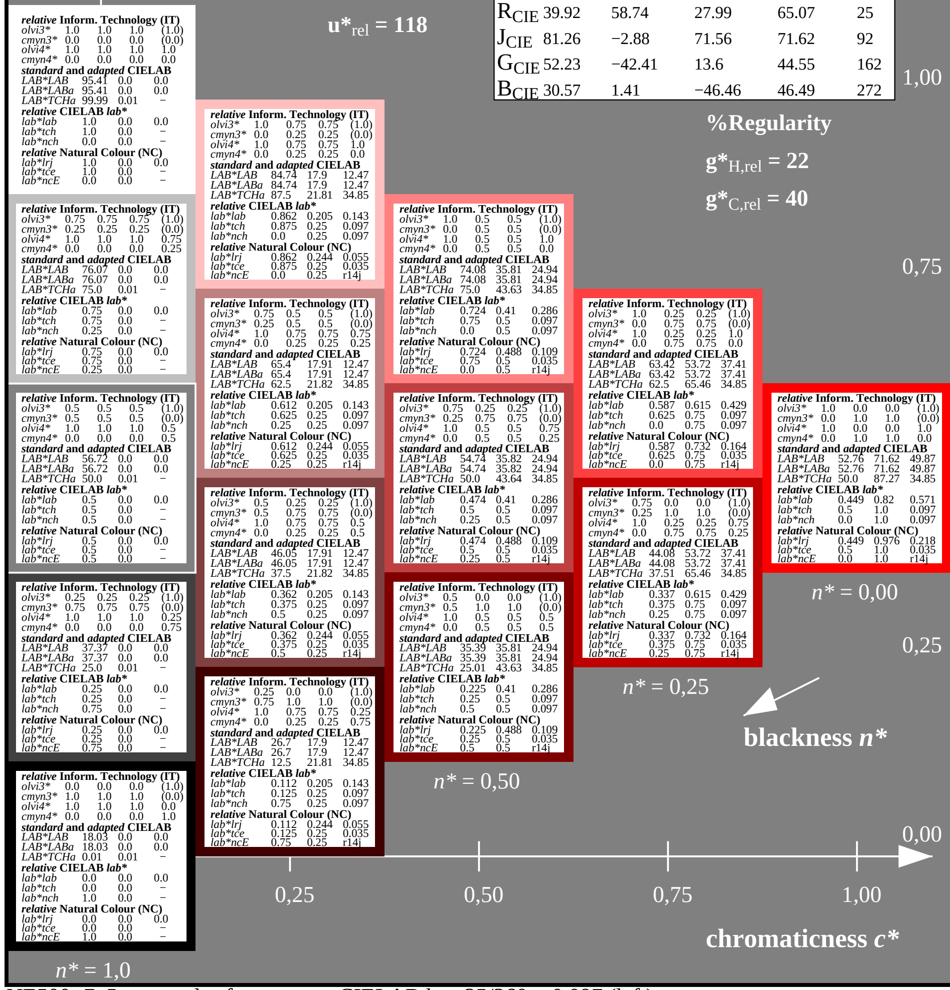


%Gamut

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



Output: Colorimetric Offset Reflective System ORS18

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

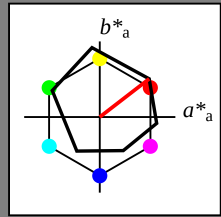
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

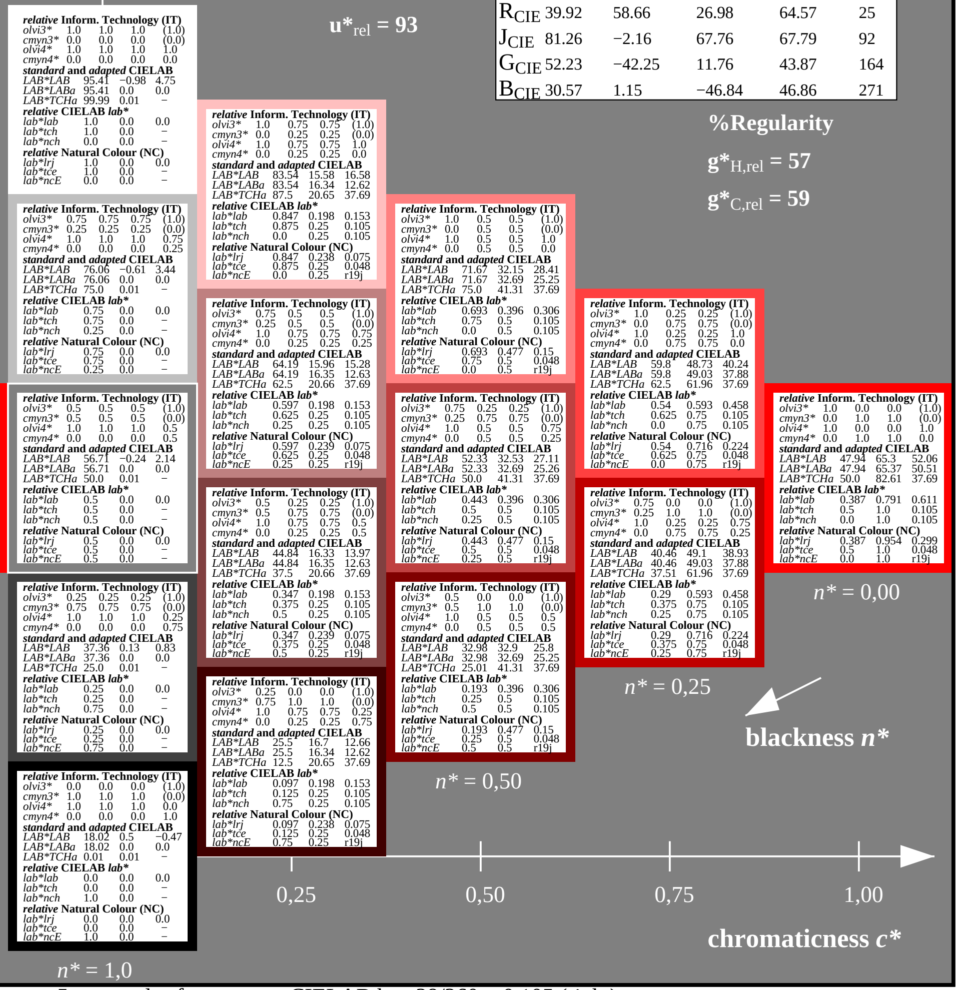


%Gamut

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

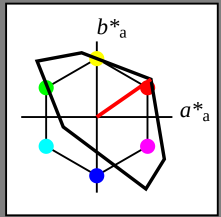


NE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

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

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 –

relative **Inform. Technology (IT)**
olvi3* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.75 0.75 1.0
cmyn4* 0.0 0.25 0.25 0.0
standard and adapted CIELAB
LAB*LAB 84.74 17.9 12.47
LAB*LABa 84.74 17.9 12.47
LAB*TCHa 87.5 21.81 34.85
relative **CIELAB lab***
lab*lab 0.862 0.205 0.143
lab*tch 0.875 0.25 0.097
lab*nch 0.0 0.25 0.097
relative **Natural Colour (NC)**
lab*lrj 0.862 0.244 0.055
lab*tce 0.875 0.25 0.035
lab*ncE 0.0 0.25 r14j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olvi4* 1.0 0.75 0.75 0.75
cmyn4* 0.0 0.25 0.25 0.25
standard and adapted CIELAB
LAB*LAB 65.4 17.91 12.47
LAB*LABa 65.4 17.91 12.47
LAB*TCHa 62.5 21.82 34.85
relative **CIELAB lab***
lab*lab 0.612 0.205 0.143
lab*tch 0.625 0.25 0.097
lab*nch 0.25 0.25 0.097
relative **Natural Colour (NC)**
lab*lrj 0.612 0.244 0.055
lab*tce 0.625 0.25 0.035
lab*ncE 0.25 0.25 r14j

relative **Inform. Technology (IT)**
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 0.5
cmyn4* 0.0 0.25 0.25 0.5
standard and adapted CIELAB
LAB*LAB 46.05 17.91 12.47
LAB*LABa 46.05 17.91 12.47
LAB*TCHa 37.5 21.82 34.85
relative **CIELAB lab***
lab*lab 0.362 0.205 0.143
lab*tch 0.375 0.25 0.097
lab*nch 0.5 0.25 0.097
relative **Natural Colour (NC)**
lab*lrj 0.362 0.244 0.055
lab*tce 0.375 0.25 0.035
lab*ncE 0.5 0.25 r14j

relative **Inform. Technology (IT)**
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 1.0 (0.0)
olvi4* 1.0 0.75 0.75 0.25
cmyn4* 0.0 0.25 0.25 0.75
standard and adapted CIELAB
LAB*LAB 26.7 17.9 12.47
LAB*LABa 26.7 17.9 12.47
LAB*TCHa 12.5 21.81 34.85
relative **CIELAB lab***
lab*lab 0.112 0.205 0.143
lab*tch 0.125 0.25 0.097
lab*nch 0.75 0.25 0.097
relative **Natural Colour (NC)**
lab*lrj 0.112 0.244 0.055
lab*tce 0.125 0.25 0.035
lab*ncE 0.75 0.25 r14j

relative **Inform. Technology (IT)**
olvi3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 1.0
cmyn4* 0.0 0.5 0.5 0.0
standard and adapted CIELAB
LAB*LAB 74.08 35.81 24.94
LAB*LABa 74.08 35.81 24.94
LAB*TCHa 75.0 43.63 34.85
relative **CIELAB lab***
lab*lab 0.724 0.41 0.286
lab*tch 0.75 0.5 0.097
lab*nch 0.0 0.5 0.097
relative **Natural Colour (NC)**
lab*lrj 0.724 0.488 0.109
lab*tce 0.75 0.5 0.035
lab*ncE 0.0 0.5 r14j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 0.75
cmyn4* 0.0 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 54.74 35.82 24.94
LAB*LABa 54.74 35.82 24.94
LAB*TCHa 50.0 43.64 34.85
relative **CIELAB lab***
lab*lab 0.474 0.41 0.286
lab*tch 0.5 0.5 0.097
lab*nch 0.25 0.5 0.097
relative **Natural Colour (NC)**
lab*lrj 0.474 0.488 0.109
lab*tce 0.5 0.5 0.035
lab*ncE 0.25 0.5 r14j

relative **Inform. Technology (IT)**
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 1.0 1.0 (0.0)
olvi4* 1.0 0.5 0.5 0.5
cmyn4* 0.0 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 35.39 35.81 24.94
LAB*LABa 35.39 35.81 24.94
LAB*TCHa 25.01 43.63 34.85
relative **CIELAB lab***
lab*lab 0.225 0.41 0.286
lab*tch 0.25 0.5 0.097
lab*nch 0.5 0.5 0.097
relative **Natural Colour (NC)**
lab*lrj 0.225 0.488 0.109
lab*tce 0.25 0.5 0.035
lab*ncE 0.5 0.5 r14j

relative **Inform. Technology (IT)**
olvi3* 1.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.75 0.75 (0.0)
olvi4* 1.0 0.25 0.25 1.0
cmyn4* 0.0 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 63.42 53.72 37.41
LAB*LABa 63.42 53.72 37.41
LAB*TCHa 62.5 65.46 34.85
relative **CIELAB lab***
lab*lab 0.587 0.615 0.429
lab*tch 0.625 0.75 0.097
lab*nch 0.0 0.75 0.097
relative **Natural Colour (NC)**
lab*lrj 0.587 0.732 0.164
lab*tce 0.625 0.75 0.035
lab*ncE 0.0 0.75 r14j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 1.0 (0.0)
olvi4* 1.0 0.25 0.25 0.75
cmyn4* 0.0 0.75 0.75 0.25
standard and adapted CIELAB
LAB*LAB 44.08 53.72 37.41
LAB*LABa 44.08 53.72 37.41
LAB*TCHa 37.51 65.46 34.85
relative **CIELAB lab***
lab*lab 0.337 0.615 0.429
lab*tch 0.375 0.75 0.097
lab*nch 0.25 0.75 0.097
relative **Natural Colour (NC)**
lab*lrj 0.337 0.732 0.164
lab*tce 0.375 0.75 0.035
lab*ncE 0.25 0.75 r14j

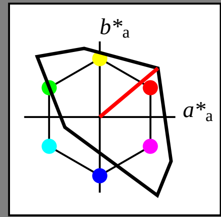
relative **Inform. Technology (IT)**
olvi3* 1.0 0.0 0.0 (1.0)
cmyn3* 0.0 1.0 1.0 (0.0)
olvi4* 1.0 0.0 0.0 1.0
cmyn4* 0.0 1.0 1.0 0.0
standard and adapted CIELAB
LAB*LAB 52.76 71.62 49.87
LAB*LABa 52.76 71.62 49.87
LAB*TCHa 50.0 87.27 34.85
relative **CIELAB lab***
lab*lab 0.449 0.82 0.571
lab*tch 0.5 1.0 0.097
lab*nch 0.0 1.0 0.097
relative **Natural Colour (NC)**
lab*lrj 0.449 0.976 0.218
lab*tce 0.5 1.0 0.035
lab*ncE 0.0 1.0 r14j

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

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 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.75 0.75 1.0
cmyn4* 0.0 0.25 0.25 0.0
standard and adapted CIELAB
LAB*LAB 84.18 19.22 16.13
LAB*LABa 84.18 19.22 16.13
LAB*TCHa 87.5 25.09 40.0
relative **CIELAB lab***
lab*lab 0.882 0.191 0.161
lab*tch 0.875 0.25 0.111
lab*nch 0.0 0.25 0.111
relative **Natural Colour (NC)**
lab*lrj 0.882 0.235 0.084
lab*tce 0.875 0.25 0.054
lab*ncE 0.0 0.25 r21j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olvi4* 1.0 0.75 0.75 0.75
cmyn4* 0.0 0.25 0.25 0.25
standard and adapted CIELAB
LAB*LAB 60.33 19.23 16.14
LAB*LABa 60.33 19.23 16.14
LAB*TCHa 62.5 25.1 40.0
relative **CIELAB lab***
lab*lab 0.632 0.192 0.161
lab*tch 0.625 0.25 0.111
lab*nch 0.25 0.25 0.111
relative **Natural Colour (NC)**
lab*lrj 0.632 0.236 0.084
lab*tce 0.625 0.25 0.054
lab*ncE 0.25 0.25 r21j

relative **Inform. Technology (IT)**
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 0.5
cmyn4* 0.0 0.25 0.25 0.5
standard and adapted CIELAB
LAB*LAB 36.48 19.23 16.14
LAB*LABa 36.48 19.23 16.14
LAB*TCHa 37.5 25.1 40.0
relative **CIELAB lab***
lab*lab 0.382 0.192 0.161
lab*tch 0.375 0.25 0.111
lab*nch 0.5 0.25 0.111
relative **Natural Colour (NC)**
lab*lrj 0.382 0.236 0.084
lab*tce 0.375 0.25 0.054
lab*ncE 0.5 0.25 r21j

relative **Inform. Technology (IT)**
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 1.0 (0.0)
olvi4* 1.0 0.75 0.75 0.25
cmyn4* 0.0 0.25 0.25 0.75
standard and adapted CIELAB
LAB*LAB 12.64 19.22 16.13
LAB*LABa 12.64 19.22 16.13
LAB*TCHa 12.5 25.09 40.0
relative **CIELAB lab***
lab*lab 0.132 0.191 0.161
lab*tch 0.125 0.25 0.111
lab*nch 0.75 0.25 0.111
relative **Natural Colour (NC)**
lab*lrj 0.132 0.235 0.084
lab*tce 0.125 0.25 0.054
lab*ncE 0.75 0.25 r21j

relative **Inform. Technology (IT)**
olvi3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 1.0
cmyn4* 0.0 0.5 0.5 0.0
standard and adapted CIELAB
LAB*LAB 72.95 38.45 32.27
LAB*LABa 72.95 38.45 32.27
LAB*TCHa 75.0 50.2 40.0
relative **CIELAB lab***
lab*lab 0.765 0.383 0.321
lab*tch 0.75 0.5 0.111
lab*nch 0.0 0.5 0.111
relative **Natural Colour (NC)**
lab*lrj 0.765 0.471 0.167
lab*tce 0.75 0.5 0.054
lab*ncE 0.0 0.5 r21j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 0.75
cmyn4* 0.0 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 49.11 38.46 32.28
LAB*LABa 49.11 38.46 32.28
LAB*TCHa 50.0 50.21 40.0
relative **CIELAB lab***
lab*lab 0.515 0.383 0.321
lab*tch 0.5 0.5 0.111
lab*nch 0.25 0.5 0.111
relative **Natural Colour (NC)**
lab*lrj 0.515 0.471 0.167
lab*tce 0.5 0.5 0.054
lab*ncE 0.25 0.5 r21j

relative **Inform. Technology (IT)**
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 1.0 1.0 (0.0)
olvi4* 1.0 0.5 0.5 0.5
cmyn4* 0.0 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 25.26 38.45 32.27
LAB*LABa 25.26 38.45 32.27
LAB*TCHa 25.01 50.2 40.0
relative **CIELAB lab***
lab*lab 0.265 0.383 0.321
lab*tch 0.25 0.5 0.111
lab*nch 0.5 0.5 0.111
relative **Natural Colour (NC)**
lab*lrj 0.265 0.471 0.167
lab*tce 0.25 0.5 0.054
lab*ncE 0.5 0.5 r21j

relative **Inform. Technology (IT)**
olvi3* 1.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.75 0.75 (0.0)
olvi4* 1.0 0.25 0.25 1.0
cmyn4* 0.0 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 61.72 57.68 48.41
LAB*LABa 61.72 57.68 48.41
LAB*TCHa 62.5 75.3 40.0
relative **CIELAB lab***
lab*lab 0.647 0.574 0.482
lab*tch 0.625 0.75 0.111
lab*nch 0.0 0.75 0.111
relative **Natural Colour (NC)**
lab*lrj 0.647 0.707 0.251
lab*tce 0.625 0.75 0.054
lab*ncE 0.0 0.75 r21j

relative **Inform. Technology (IT)**
olvi3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 1.0 (0.0)
olvi4* 1.0 0.25 0.25 0.75
cmyn4* 0.0 0.75 0.75 0.25
standard and adapted CIELAB
LAB*LAB 37.88 57.68 48.41
LAB*LABa 37.88 57.68 48.41
LAB*TCHa 37.51 75.3 40.0
relative **CIELAB lab***
lab*lab 0.397 0.574 0.482
lab*tch 0.375 0.75 0.111
lab*nch 0.25 0.75 0.111
relative **Natural Colour (NC)**
lab*lrj 0.397 0.707 0.251
lab*tce 0.375 0.75 0.054
lab*ncE 0.25 0.75 r21j

relative **Inform. Technology (IT)**
olvi3* 1.0 0.0 0.0 (1.0)
cmyn3* 0.0 1.0 1.0 (0.0)
olvi4* 1.0 0.0 0.0 1.0
cmyn4* 0.0 1.0 1.0 0.0
standard and adapted CIELAB
LAB*LAB 50.5 76.9 64.54
LAB*LABa 50.5 76.9 64.54
LAB*TCHa 50.0 100.4 40.0
relative **CIELAB lab***
lab*lab 0.529 0.766 0.643
lab*tch 0.5 1.0 0.111
lab*nch 0.0 1.0 0.111
relative **Natural Colour (NC)**
lab*lrj 0.529 0.942 0.335
lab*tce 0.5 1.0 0.054
lab*ncE 0.0 1.0 r21j

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0
blackness n^*

0,25 0,50 0,75 1,00
chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)
5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

Input: Colorimetric Television Luminous System TLS18

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

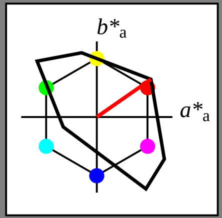
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

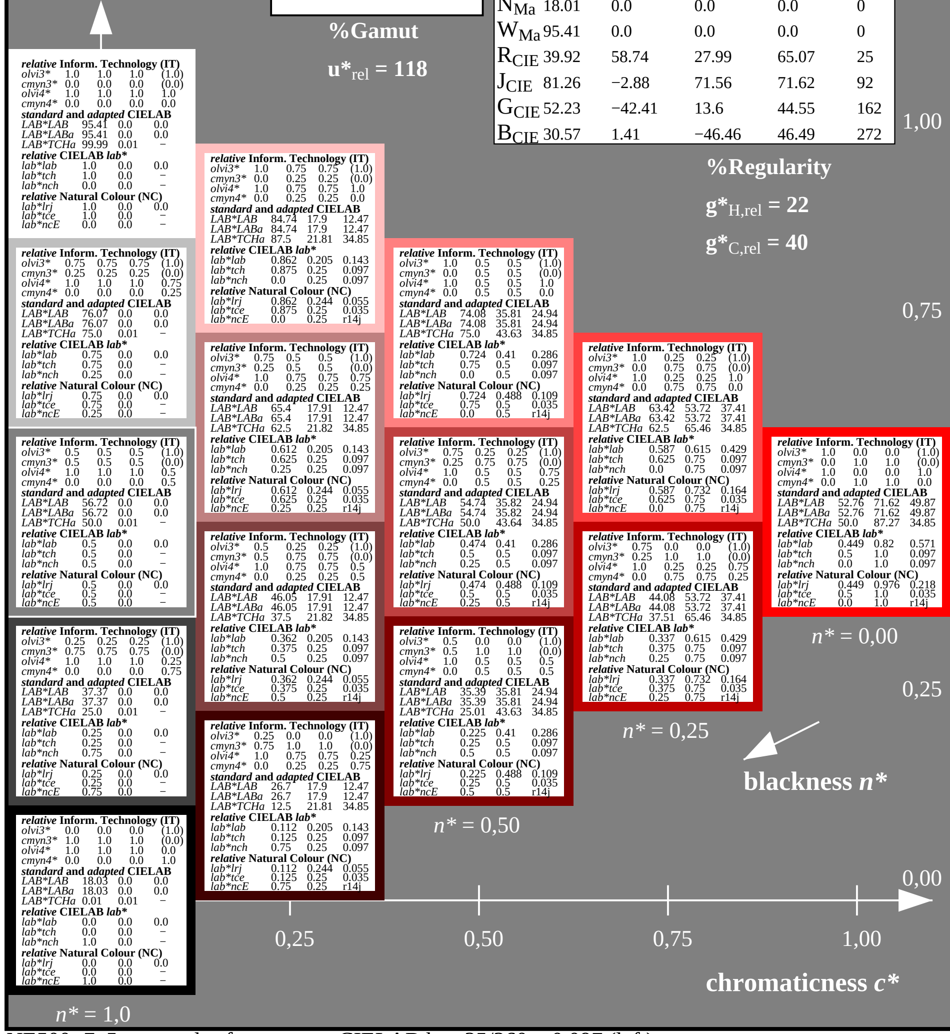


%Gamut

$u^*_{rel} = 118$

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



Output: Colorimetric Printer Reflective System DRSXX

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

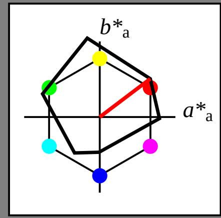
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

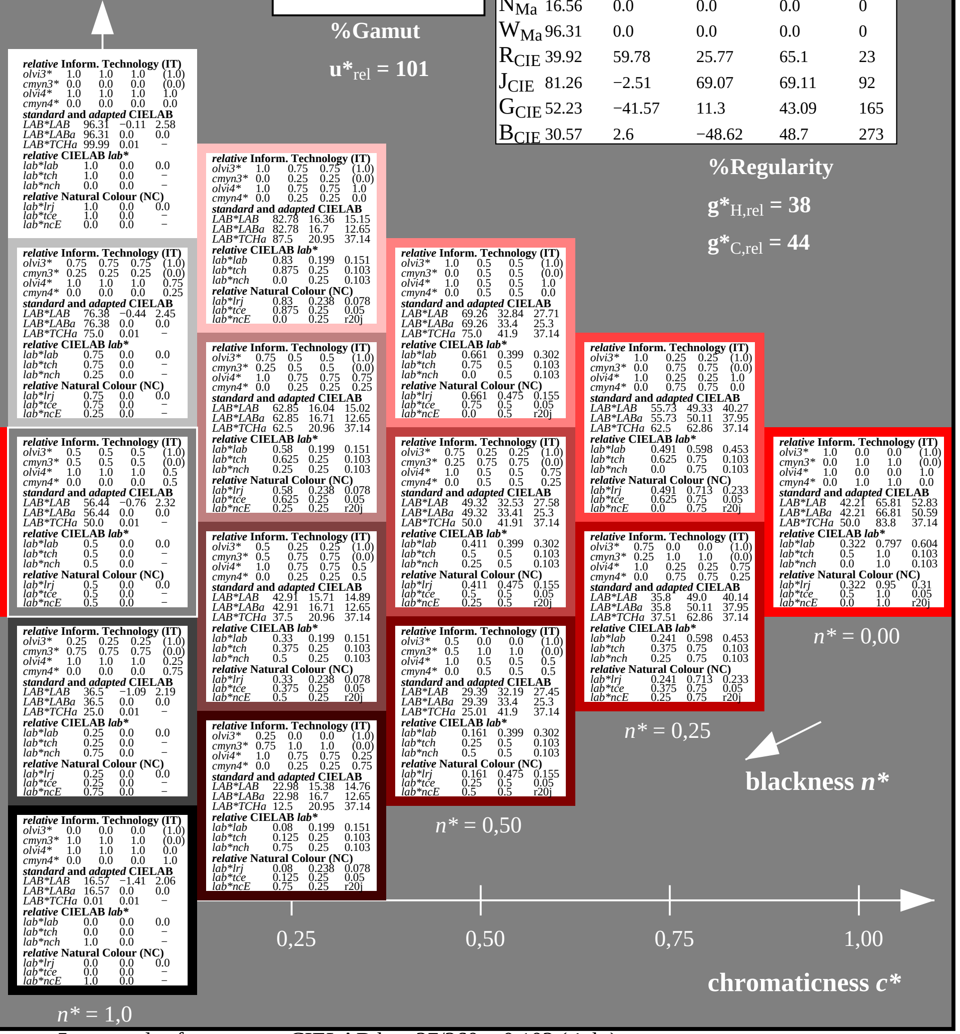


%Gamut

$u^*_{rel} = 101$

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



NE500−7, 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 $h^* = lab^*h = 35/360 = 0.097$

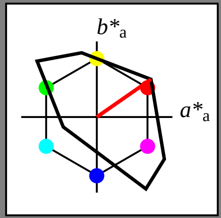
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

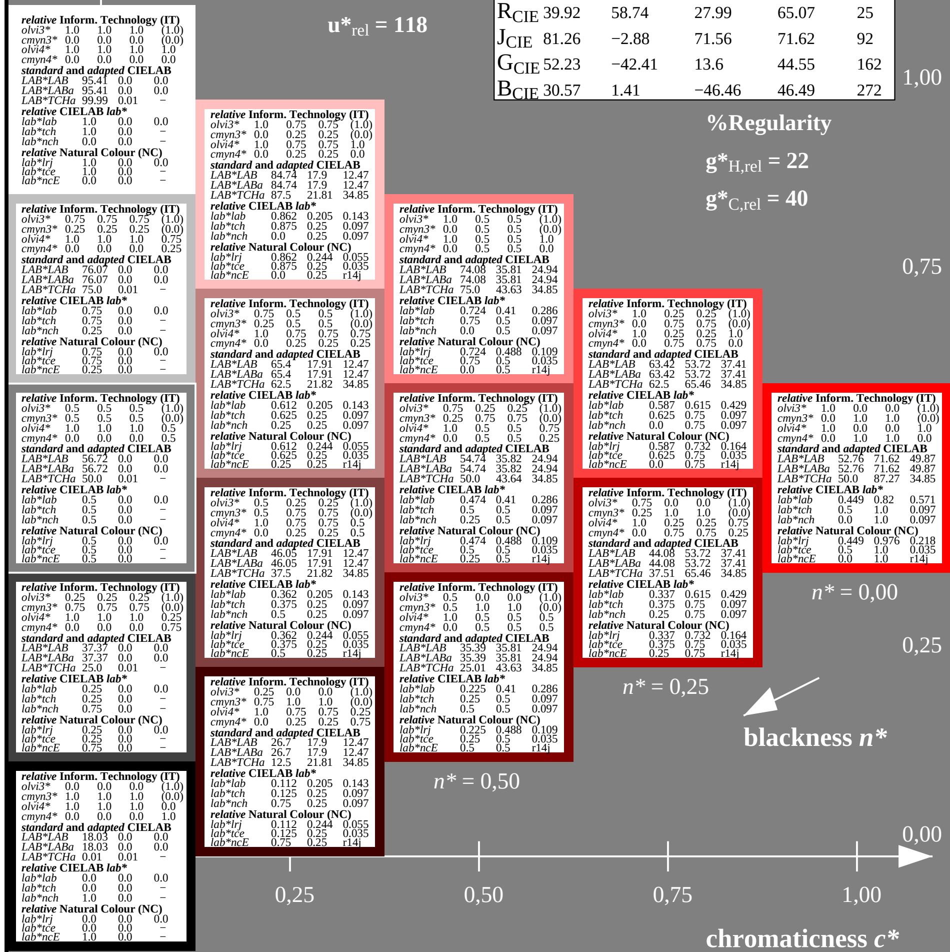
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

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

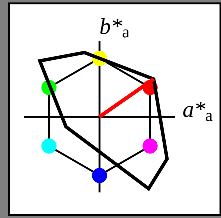
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

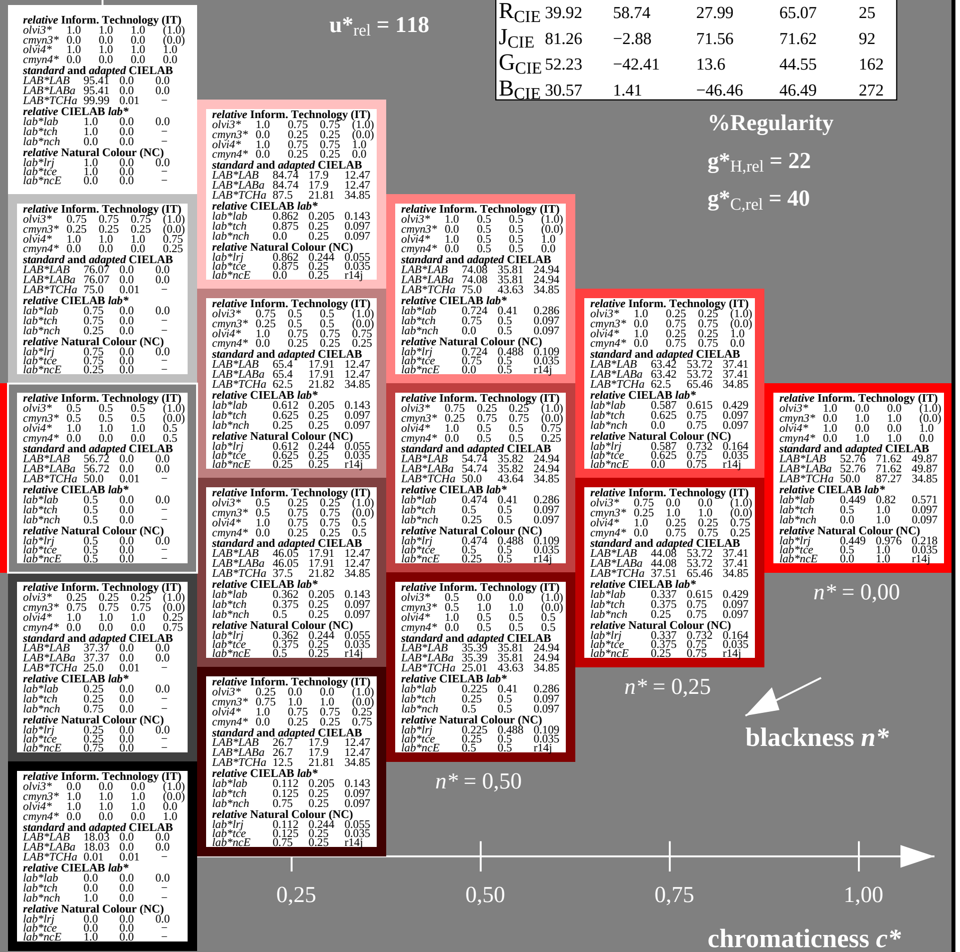
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

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

Input: Colorimetric Television Luminous System TLS18

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

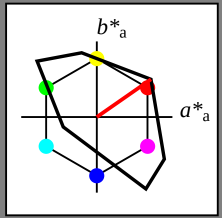
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

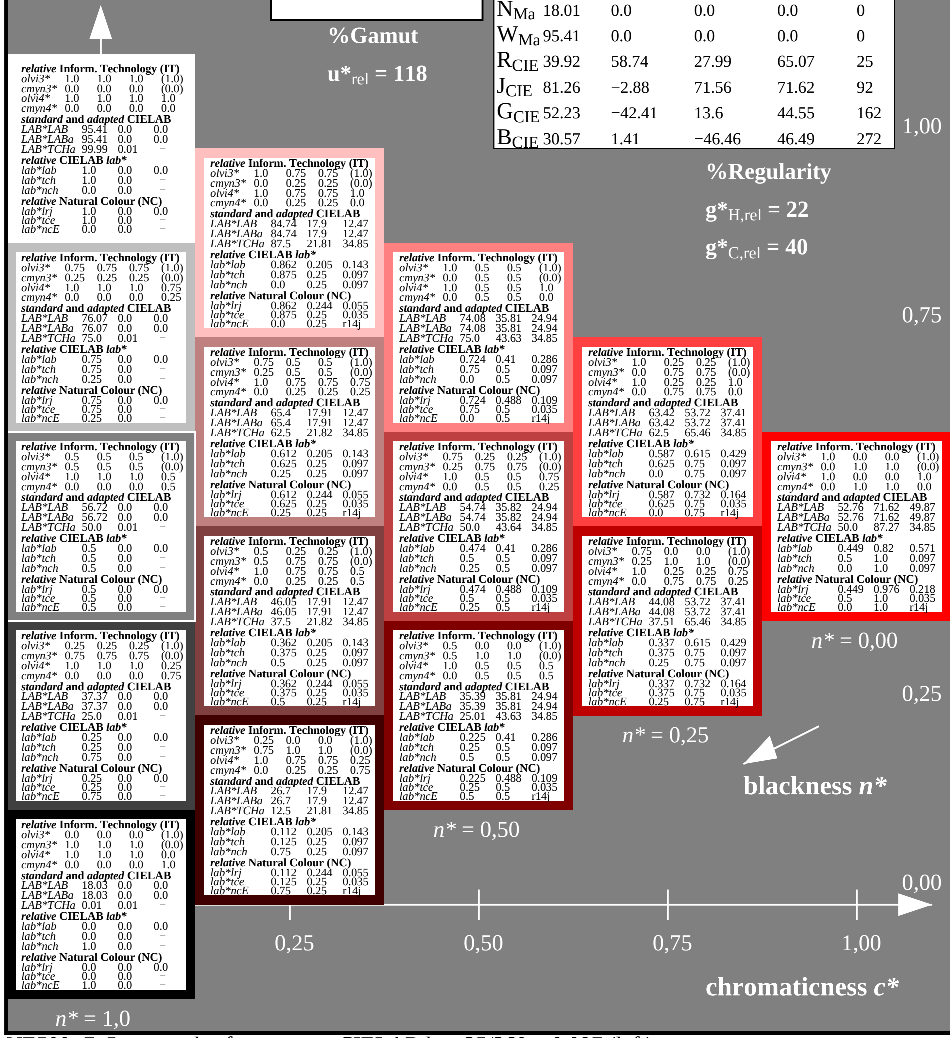
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



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



Output: Colorimetric Natural Luminous System NLS00

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

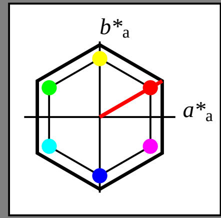
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

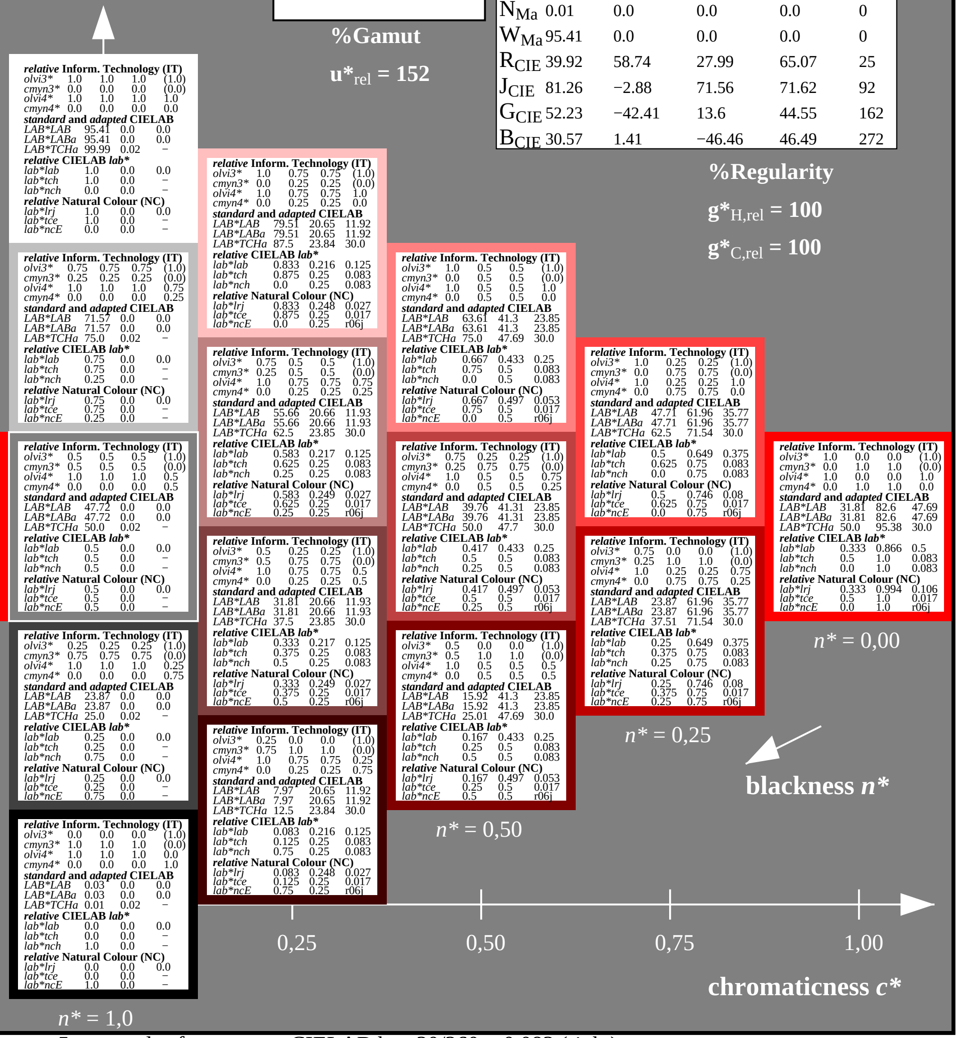
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



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



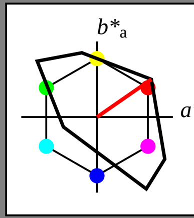
NE500−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

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^*

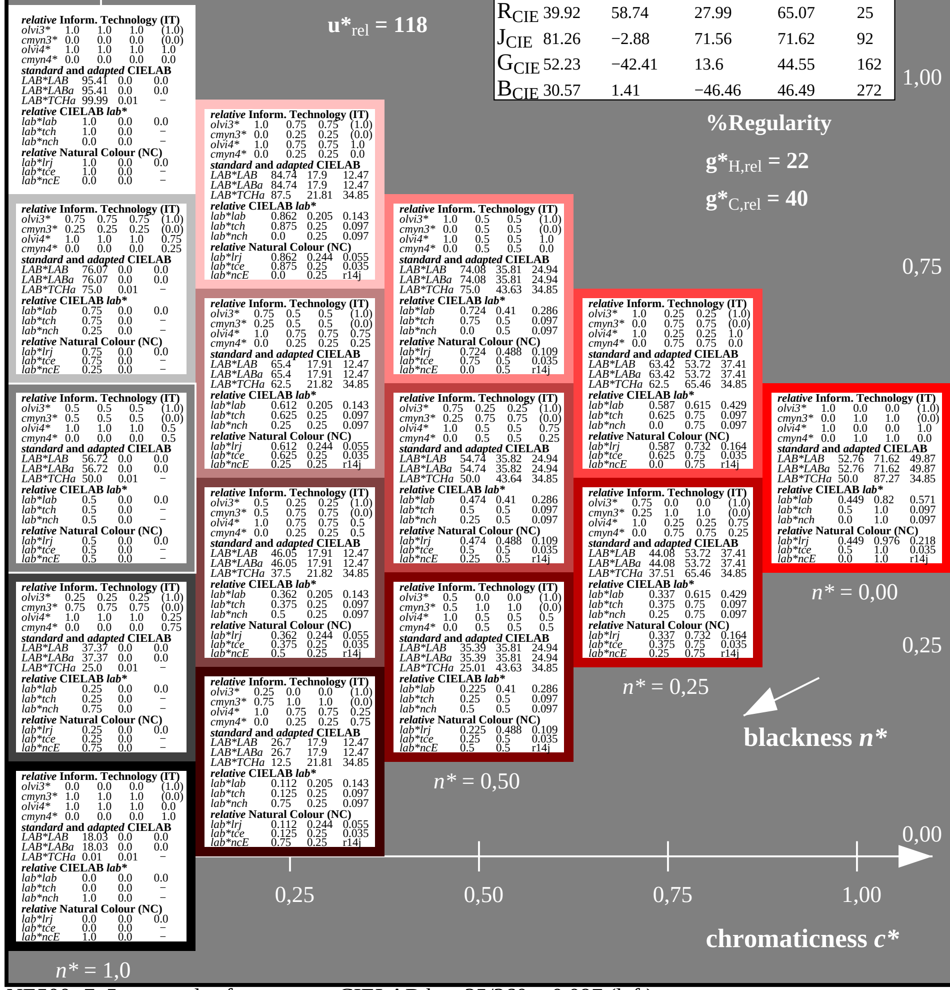


%Gamut
$u^*_{rel} = 118$

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

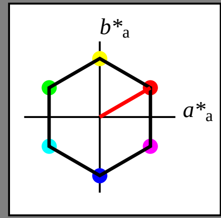
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



Output: Colorimetric 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^*

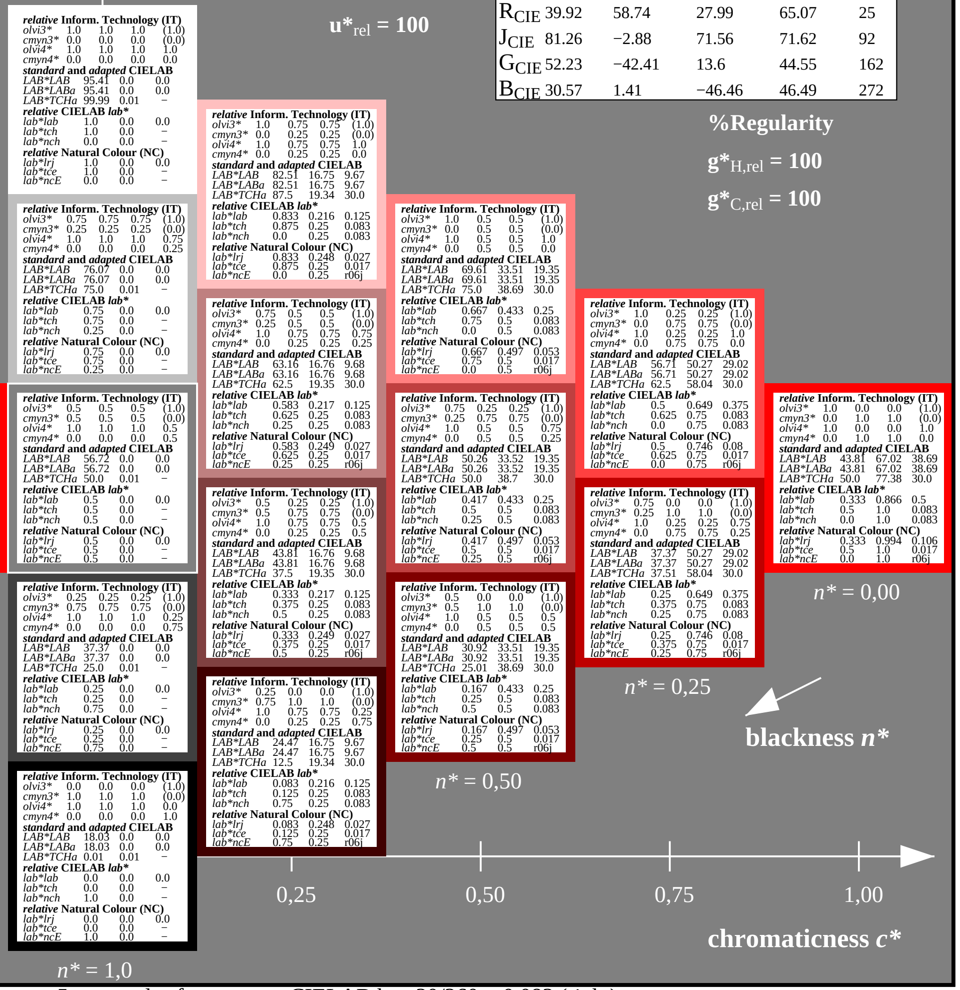


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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 $h^* = lab^*h = 35/360 = 0.097$

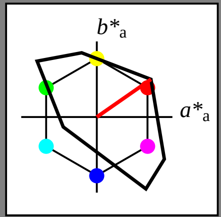
*lab*tch* and *lab*nch*

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

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

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

1,00

0,75

0,25

0,00

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

blackness n^*

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

chromaticness c^*

$n^* = 1,0$

Output: Colorimetric Standard Reflective System SRS18

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

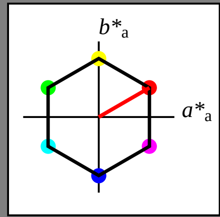
*lab*tch* and *lab*nch*

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

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

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

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

blackness n^*

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

chromaticness c^*

$n^* = 1,0$

NE500−7, 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 $h^* = lab^*h = 35/360 = 0.097$

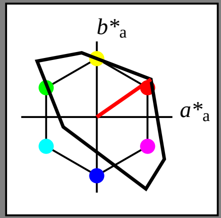
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

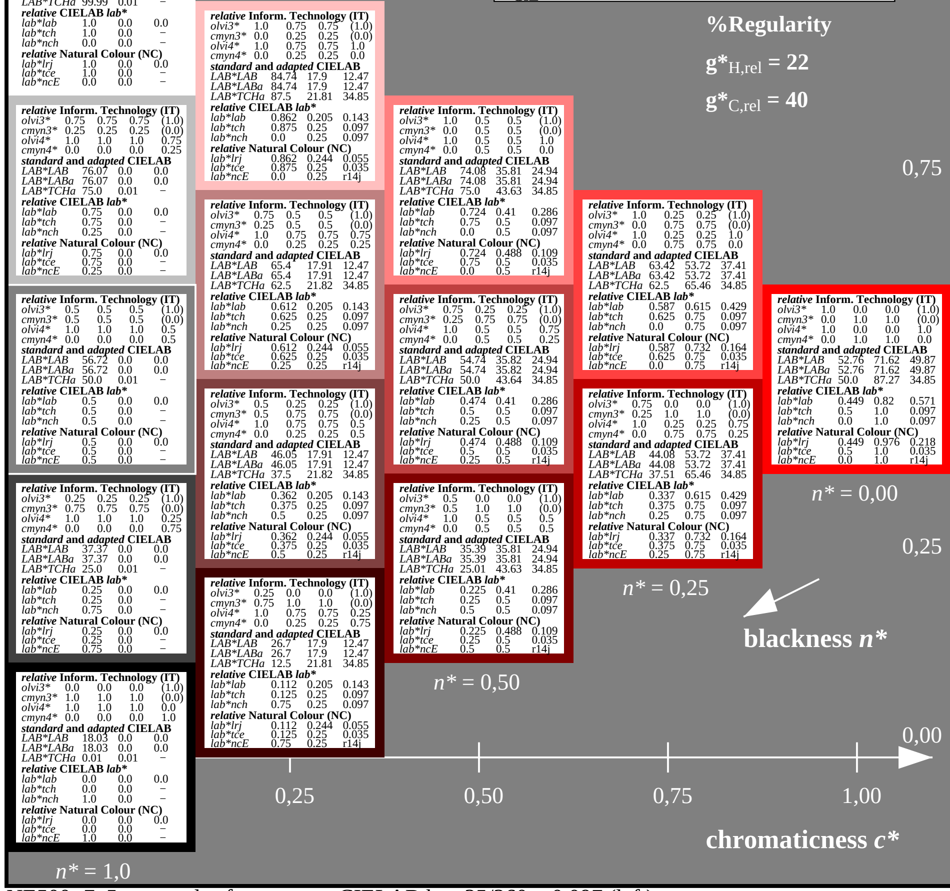
$u^*_{rel} = 118$

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

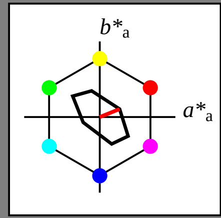
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

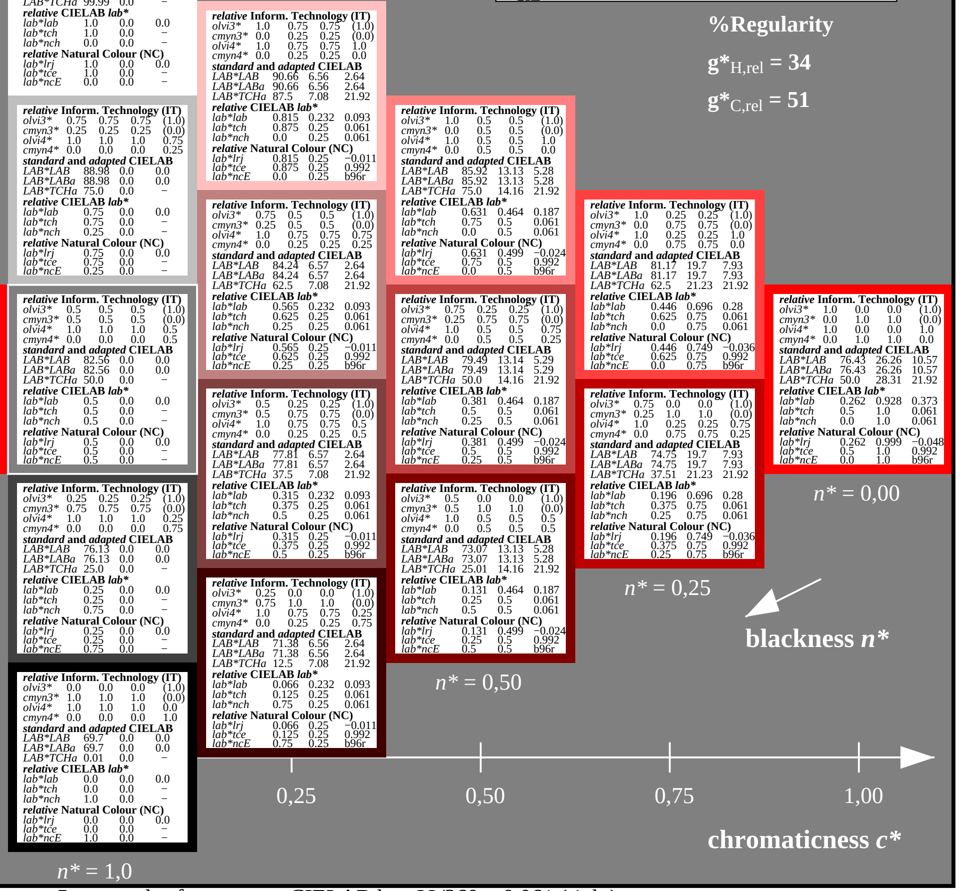
$u^*_{rel} = 16$

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

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

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



NE500−7, 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 $h^* = lab^*h = 30/360 = 0.083$

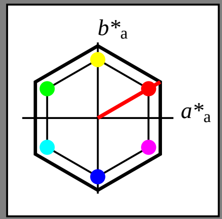
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

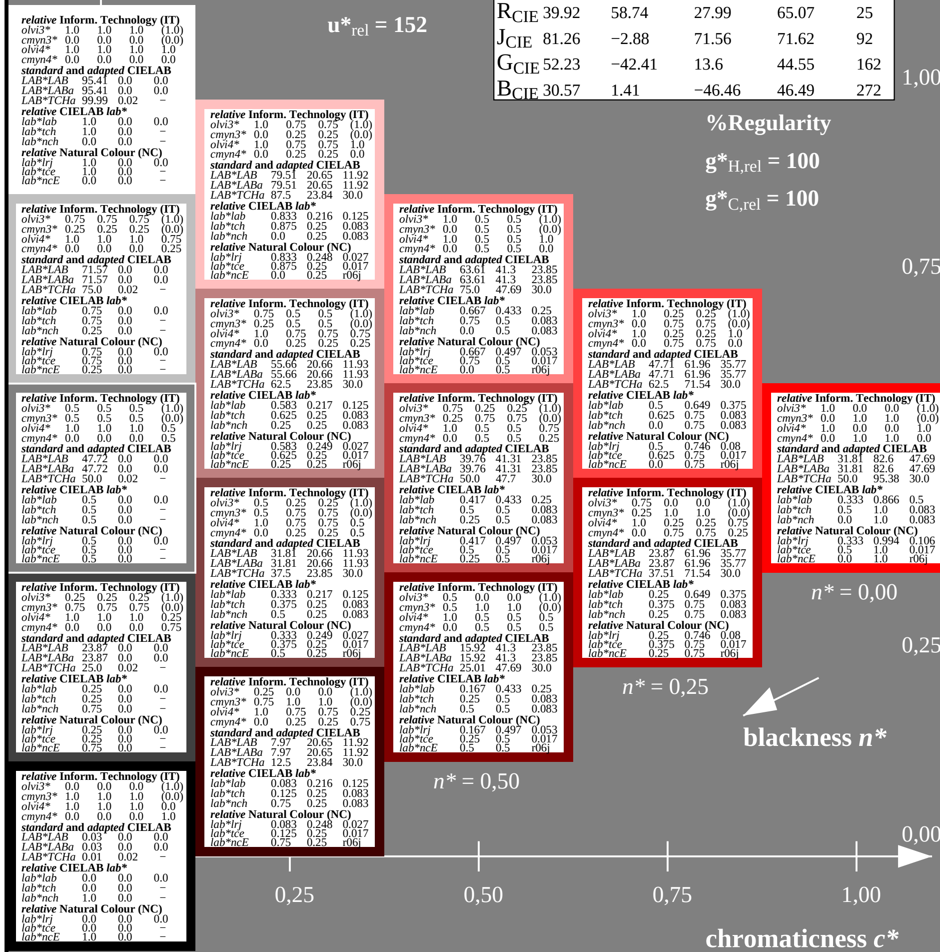
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

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

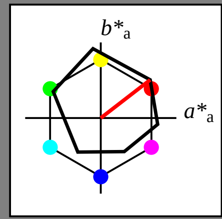
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

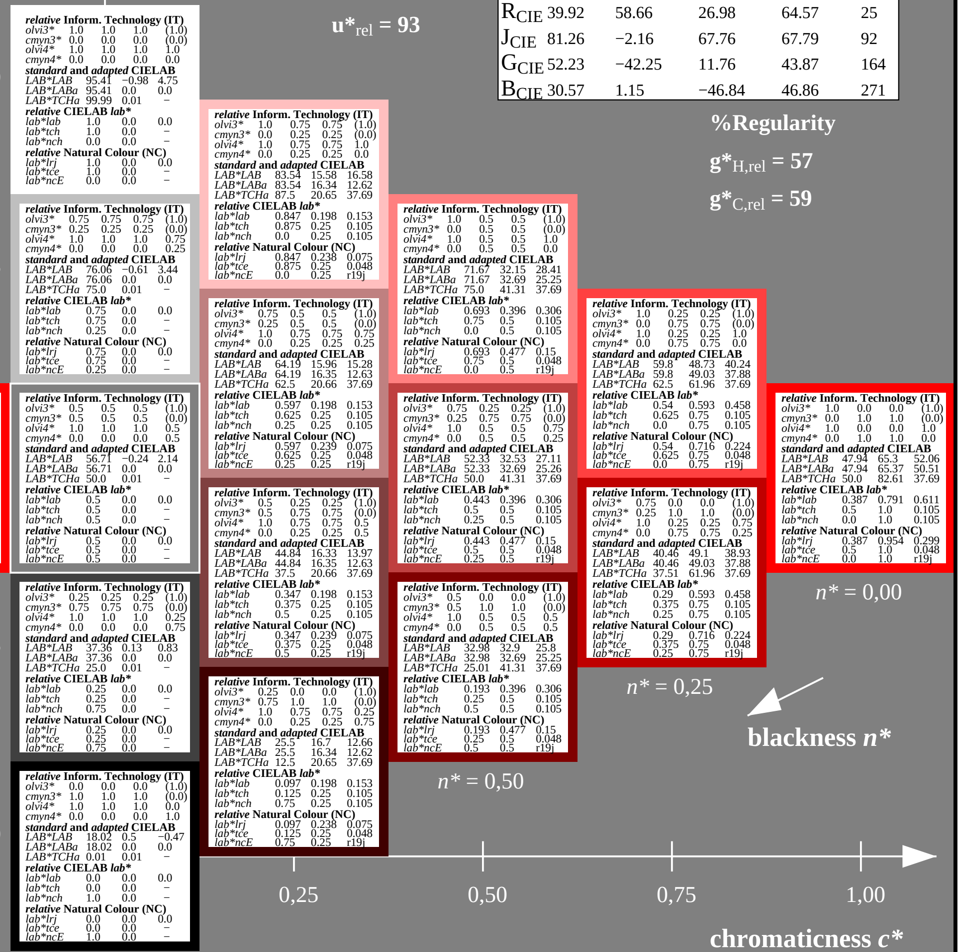
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



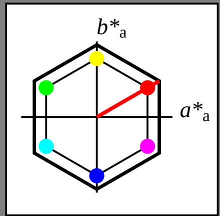
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

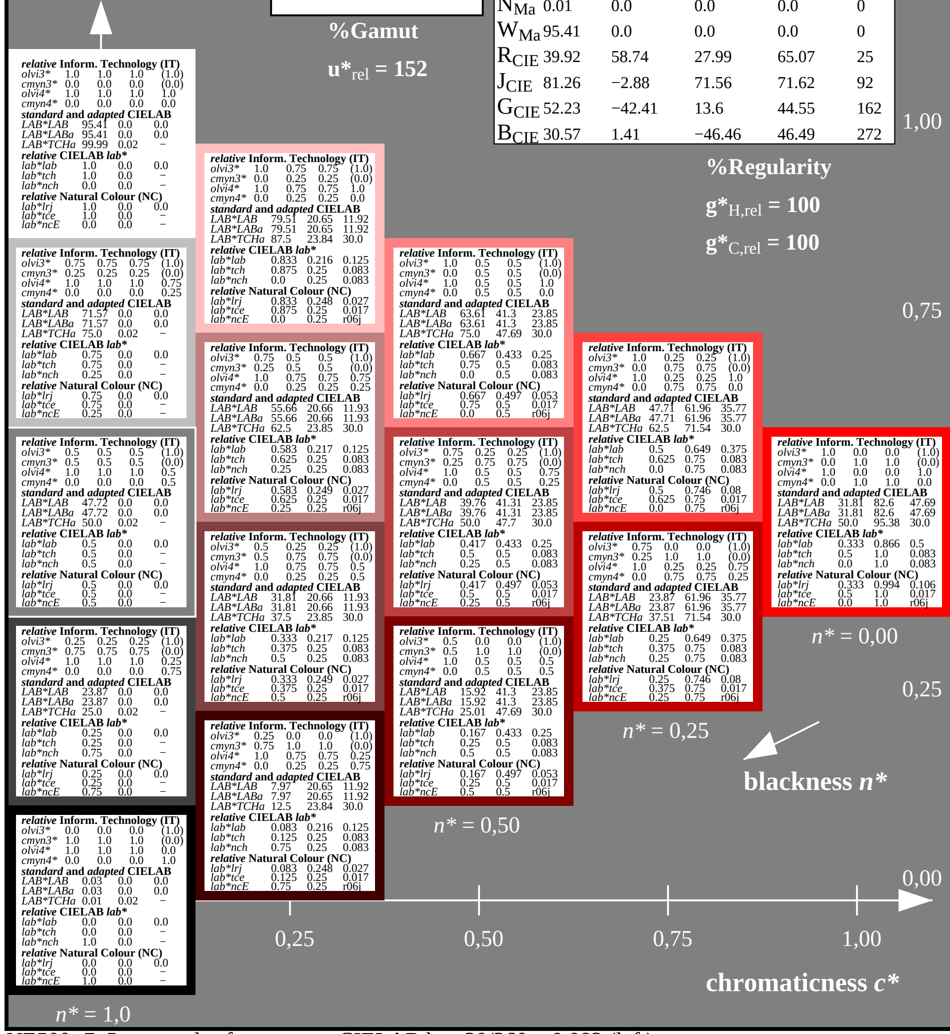
NLS00; adapted (a) CIELAB data

	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

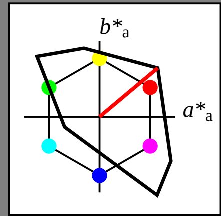
g*C,rel = 100



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

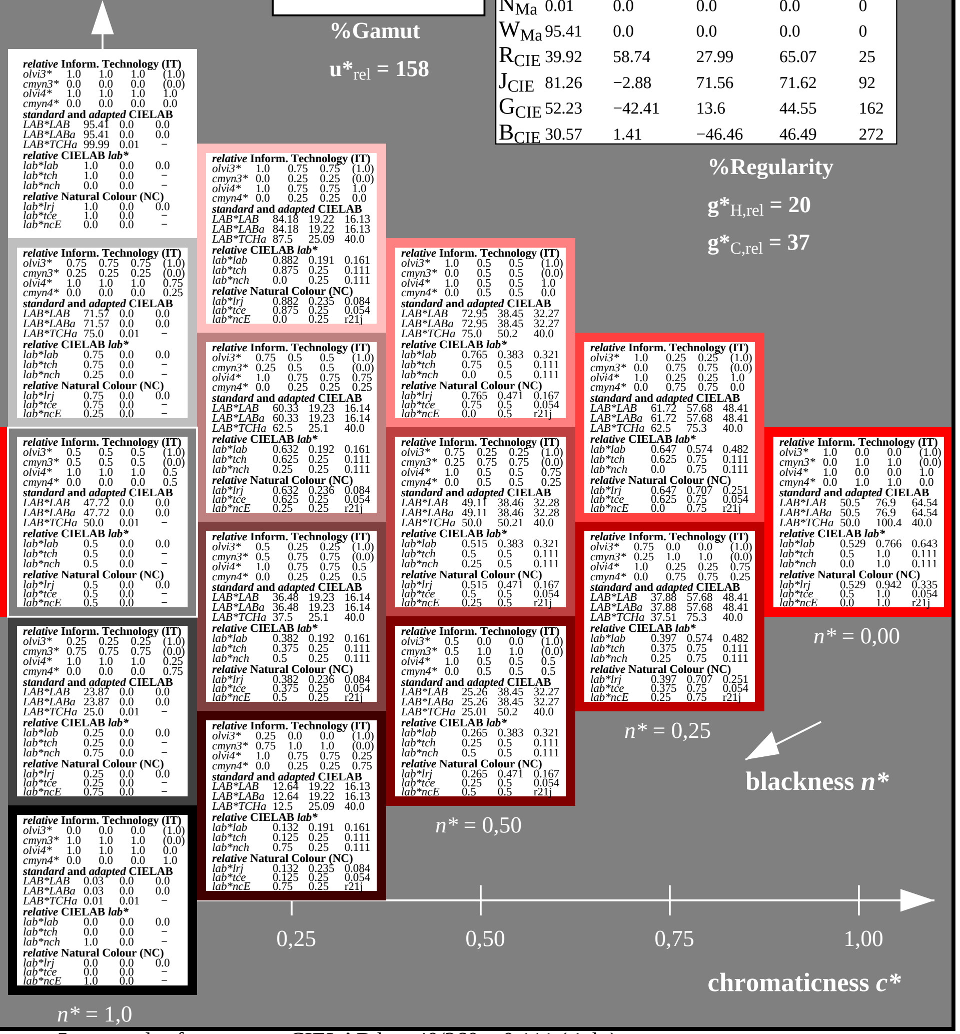
TLS00; adapted (a) CIELAB data

	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



NE500−7, 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 Luminous System NLS00

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

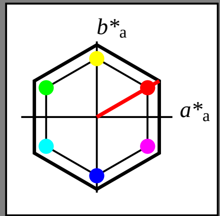
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

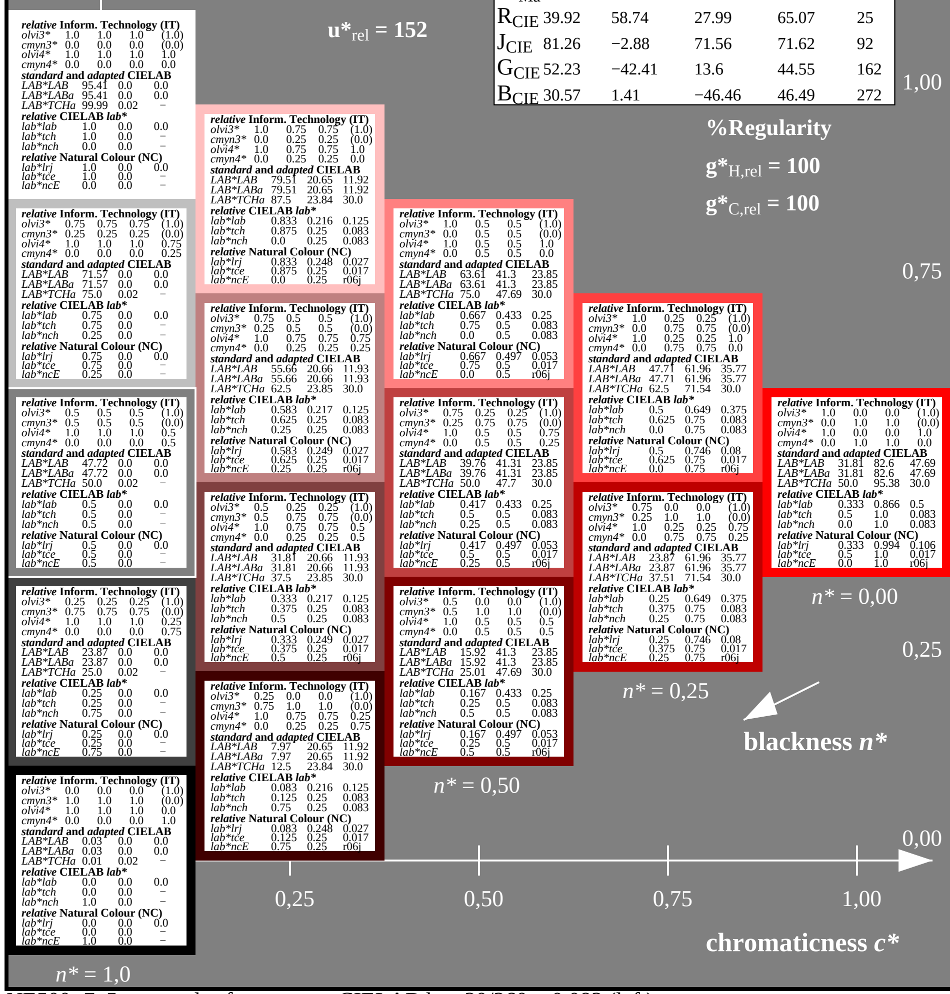
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Printer Reflective System DRSXX

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

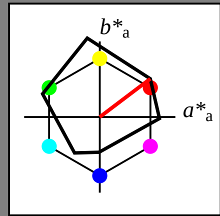
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

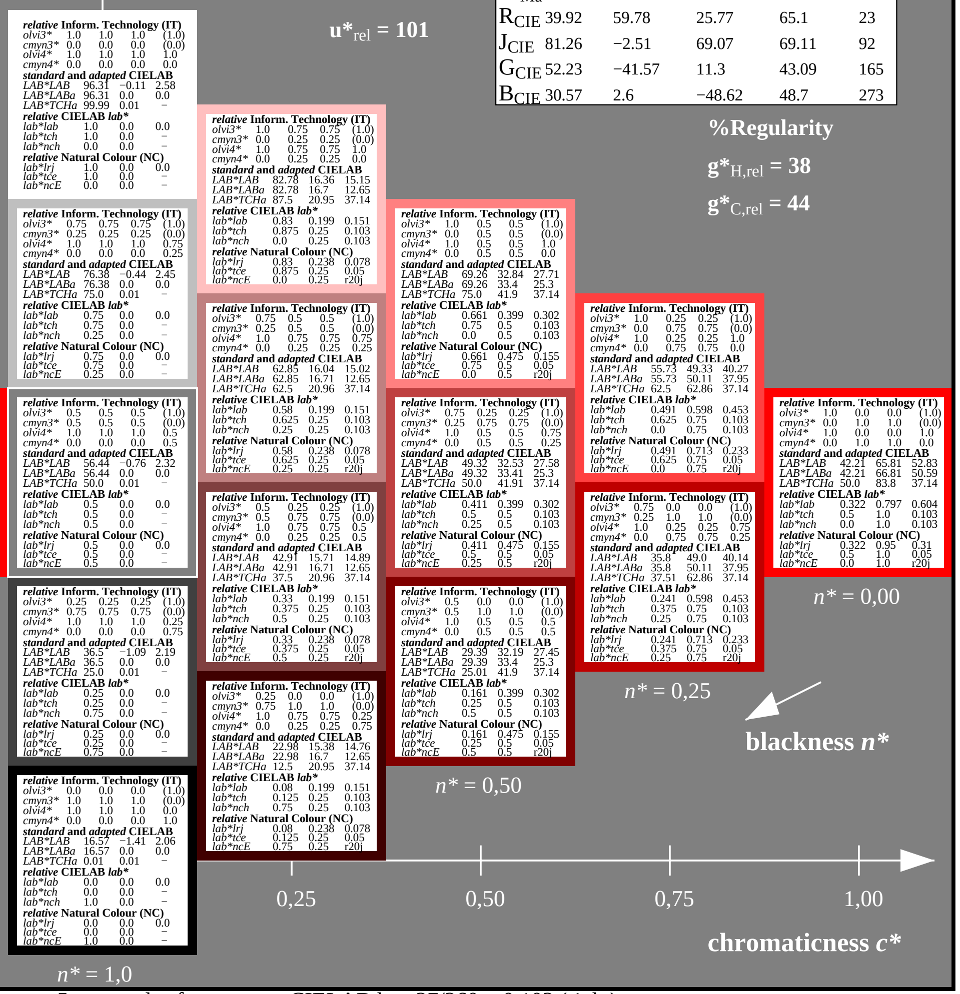
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric Natural Luminous System NLS00

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

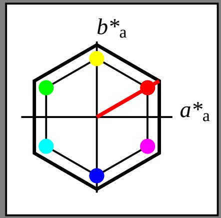
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

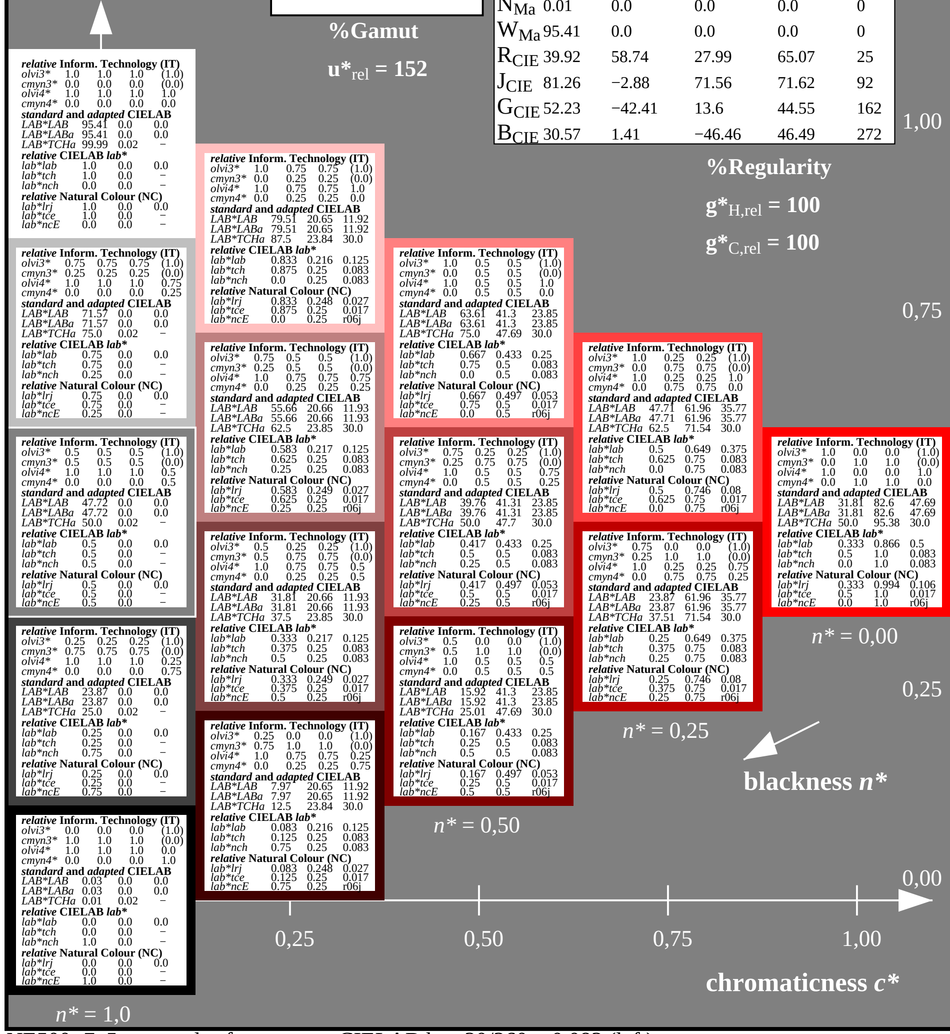
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

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

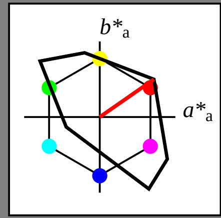
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

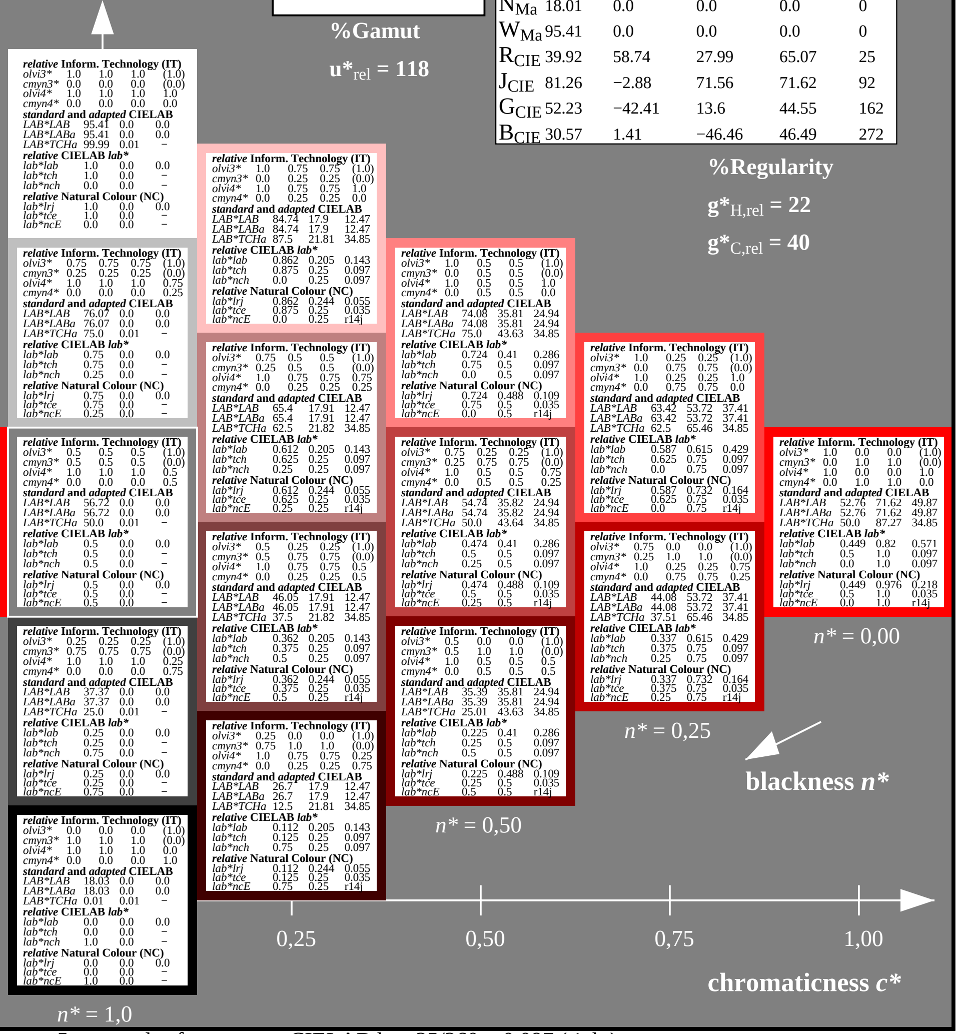
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



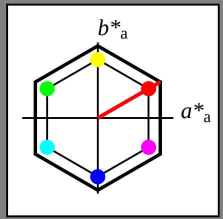
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

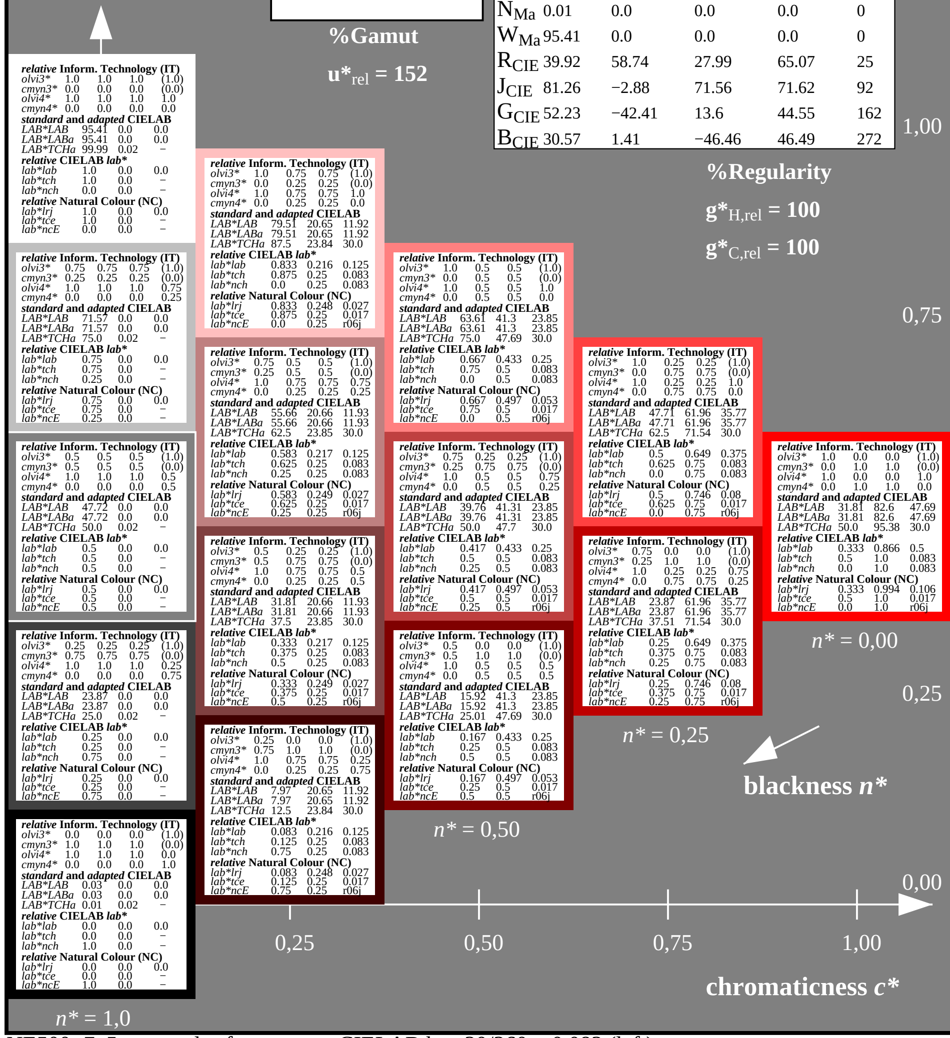
u^*_{rel} = 152

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

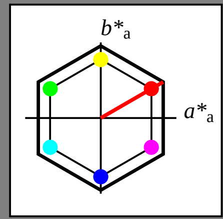
$g^*_{C,rel}$ = 100



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

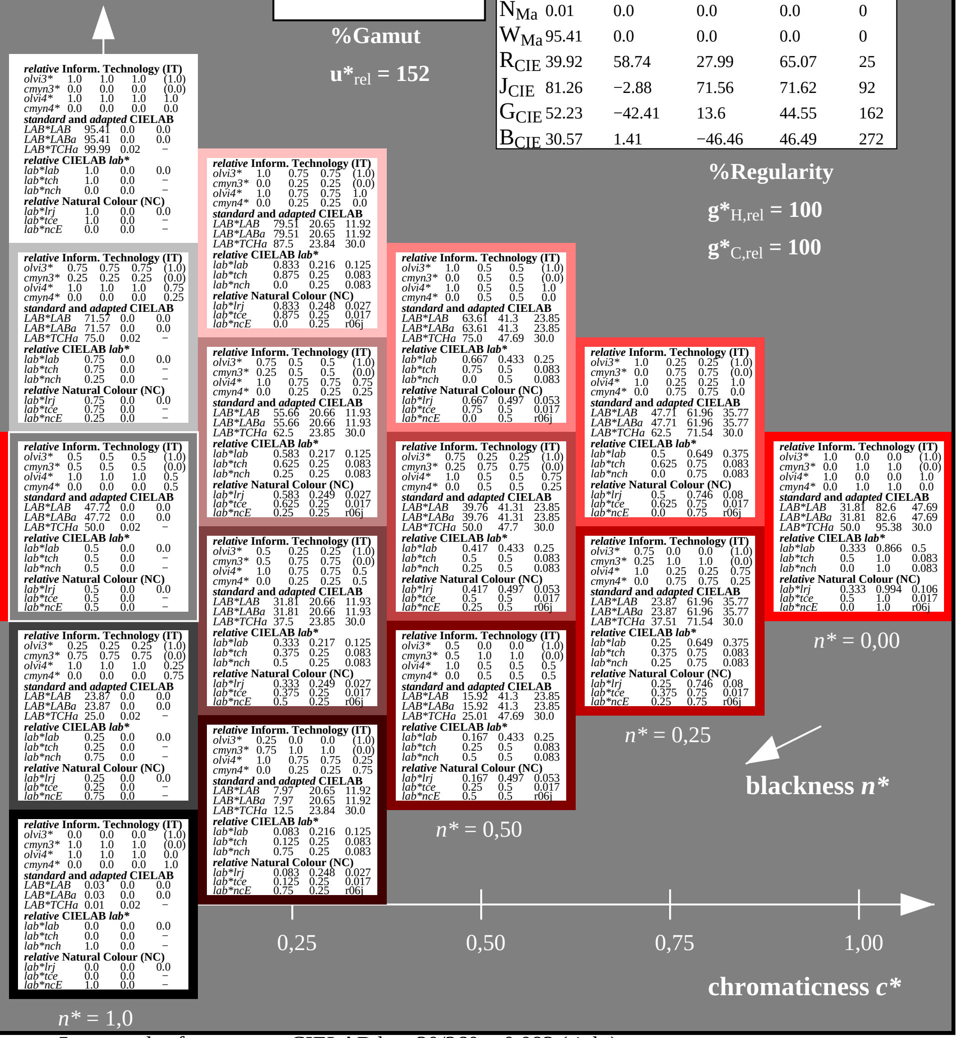
u^*_{rel} = 152

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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*

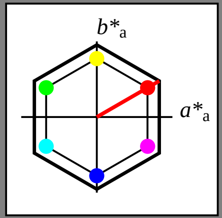
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

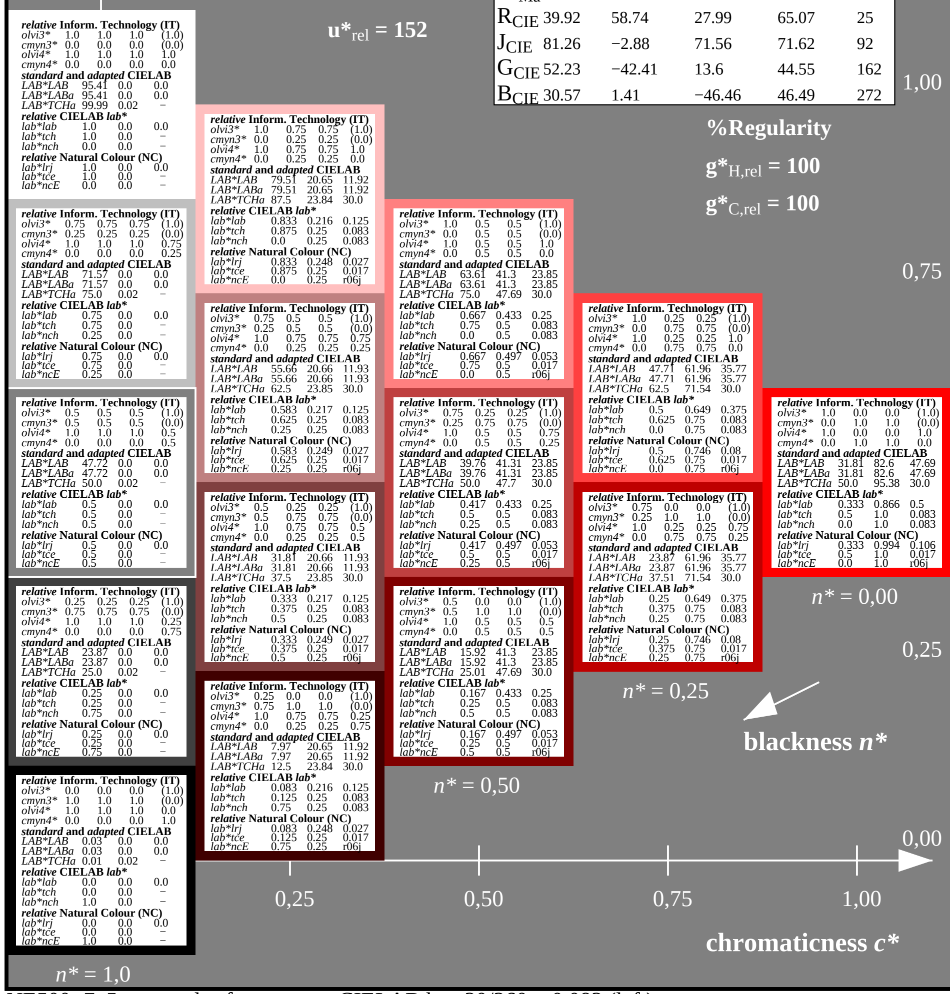
u^*_{rel} = 152

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 Natural Reflective System NRS18

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

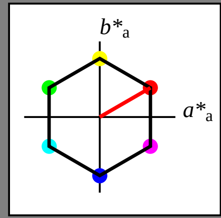
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

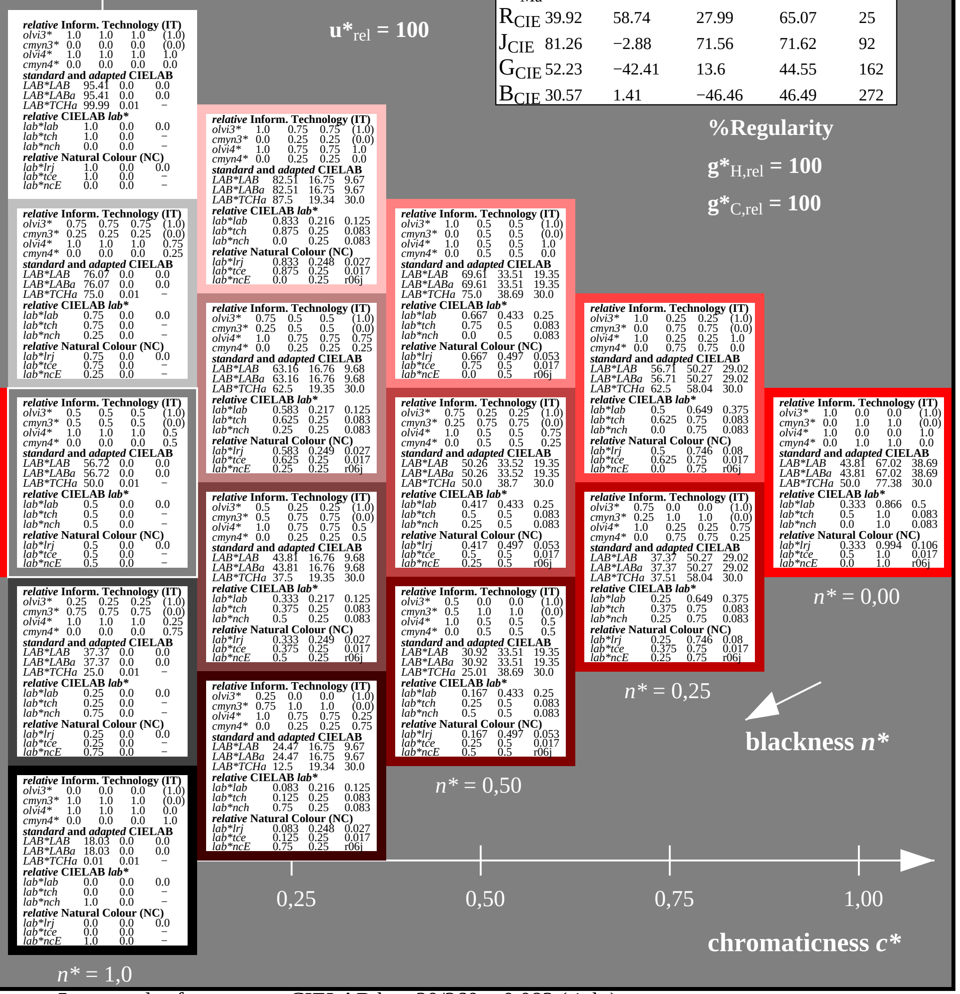
u^*_{rel} = 100

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric Natural Luminous System NLS00

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

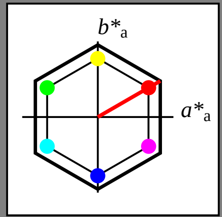
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 32 95 30

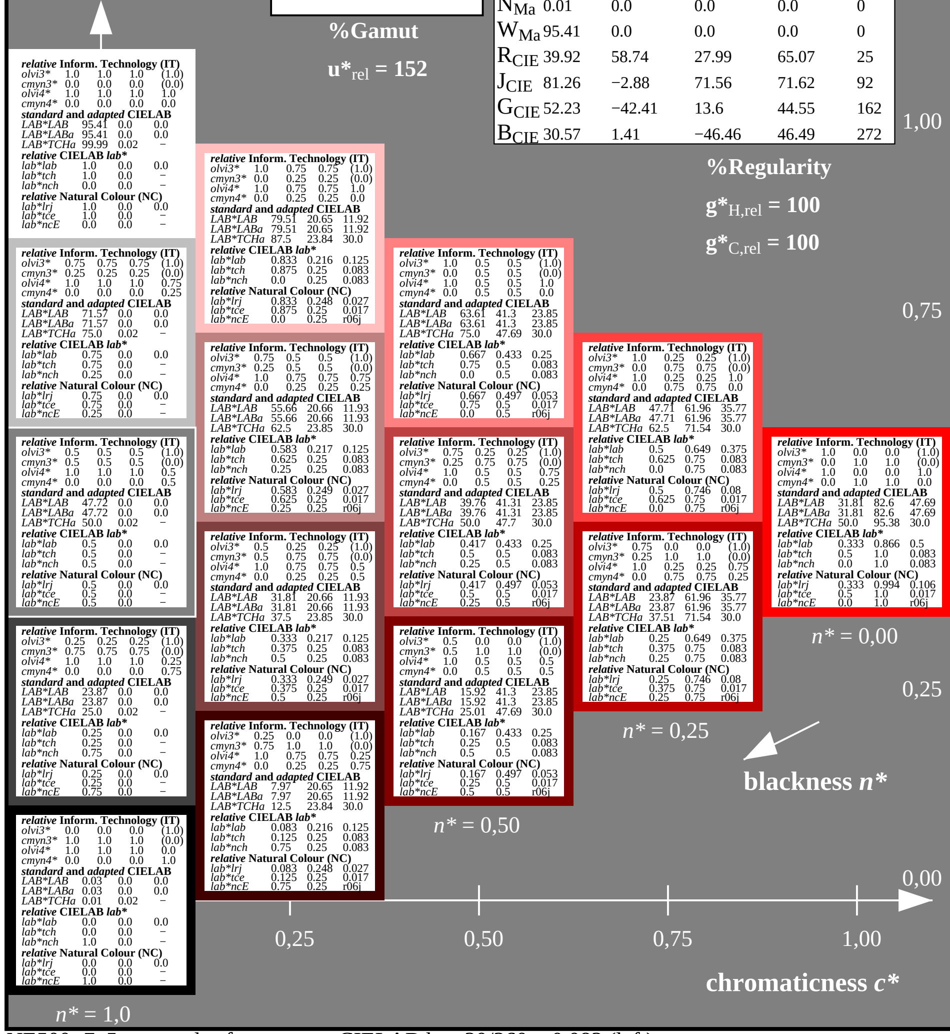
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



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



Output: Colorimetric Standard Reflective System SRS18

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

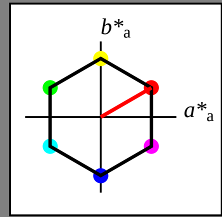
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 57 77 30

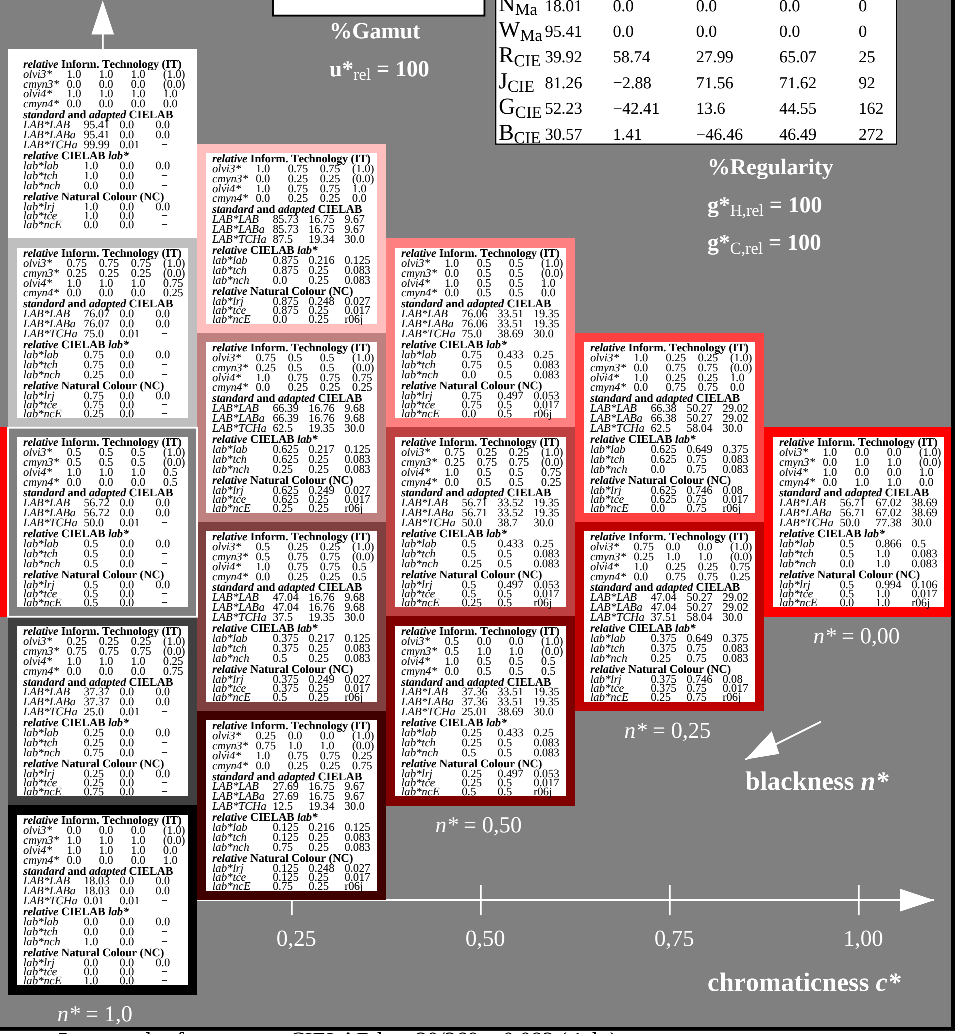
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric Natural Luminous System NLS00

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

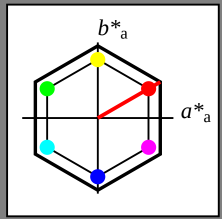
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 32 95 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

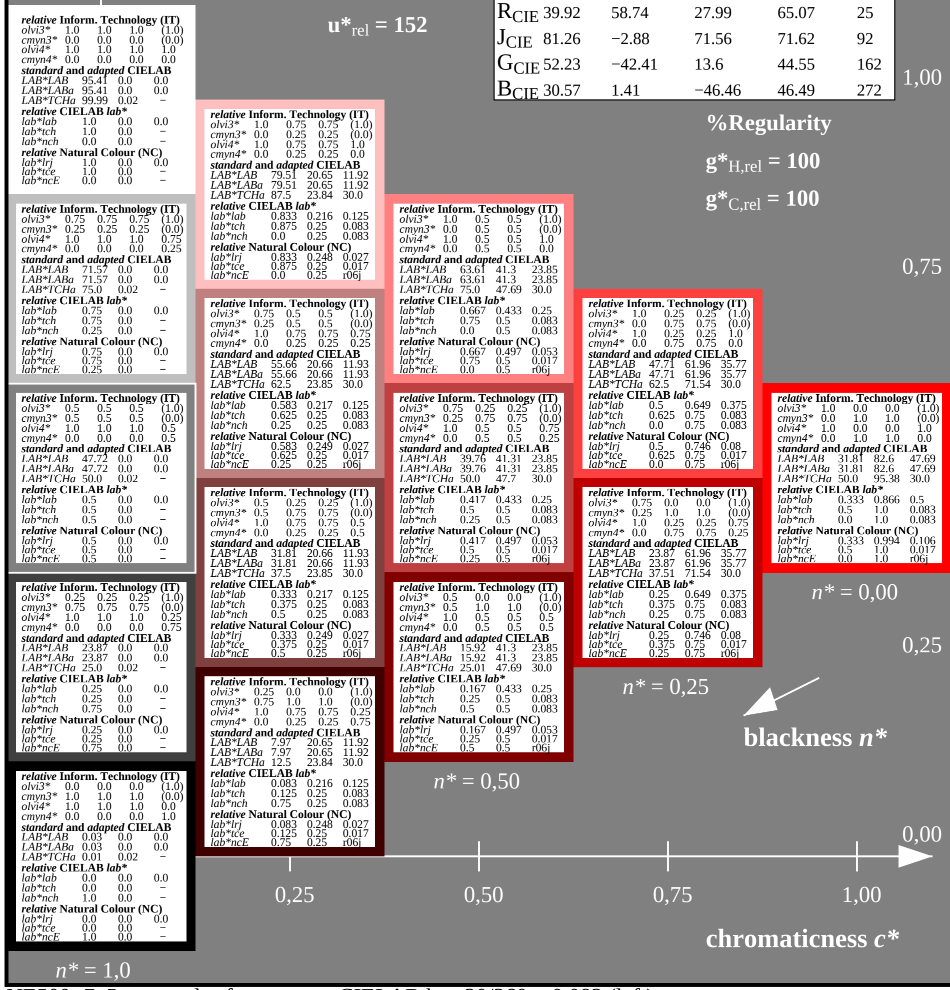
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 22/360 = 0.061$

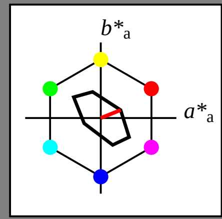
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

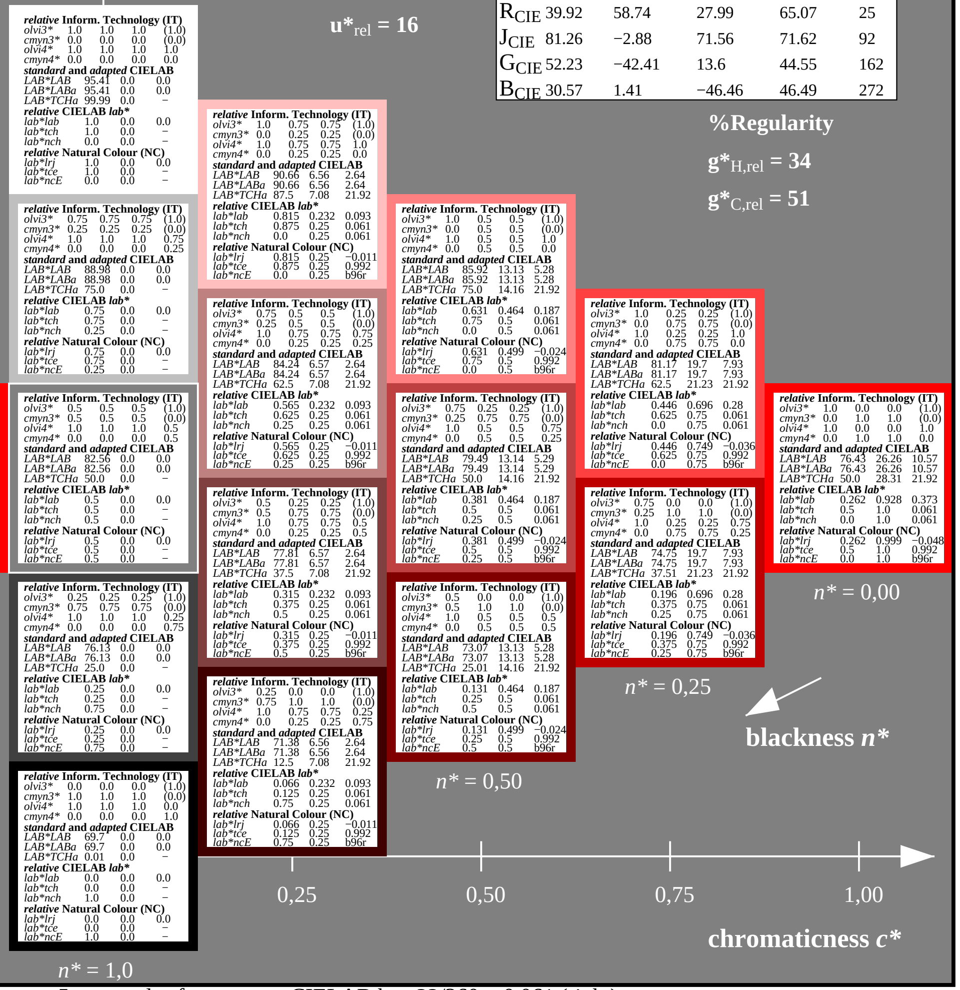
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 30/360 = 0.083$

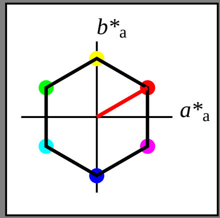
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

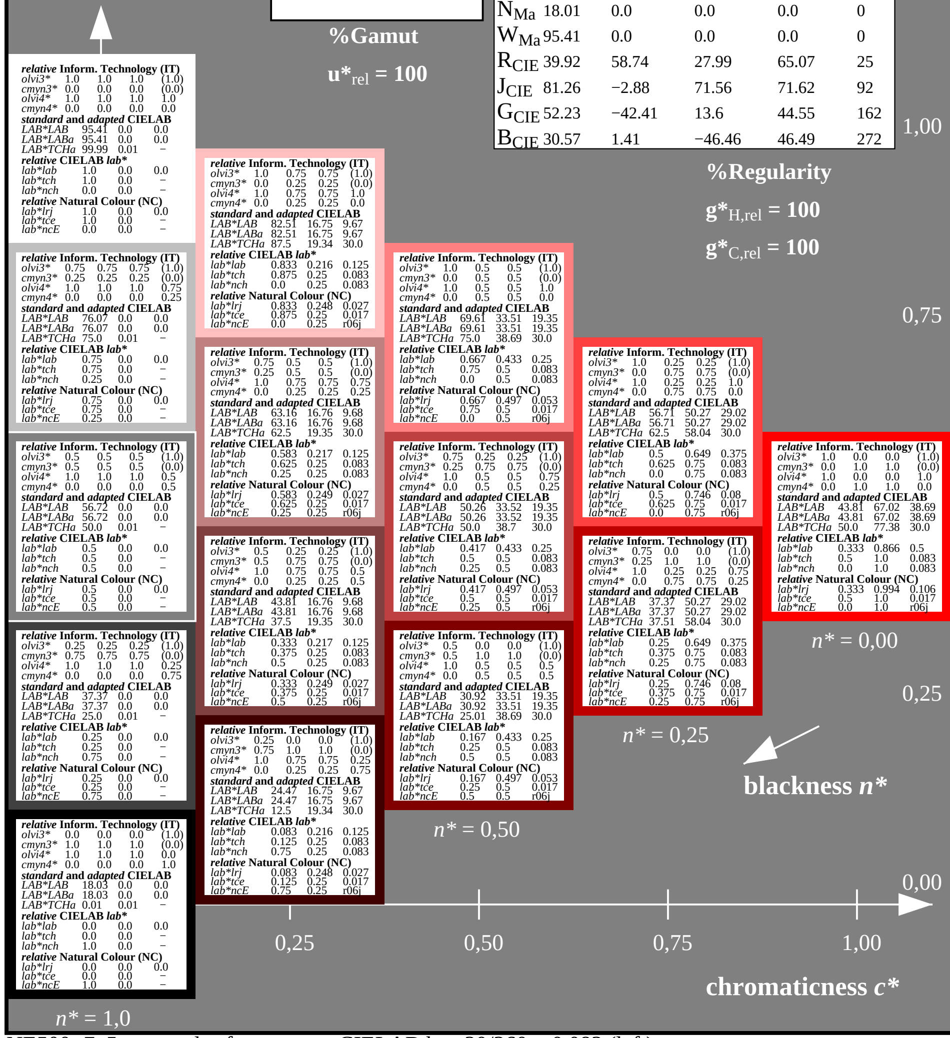
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

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

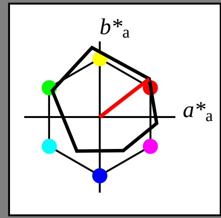
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

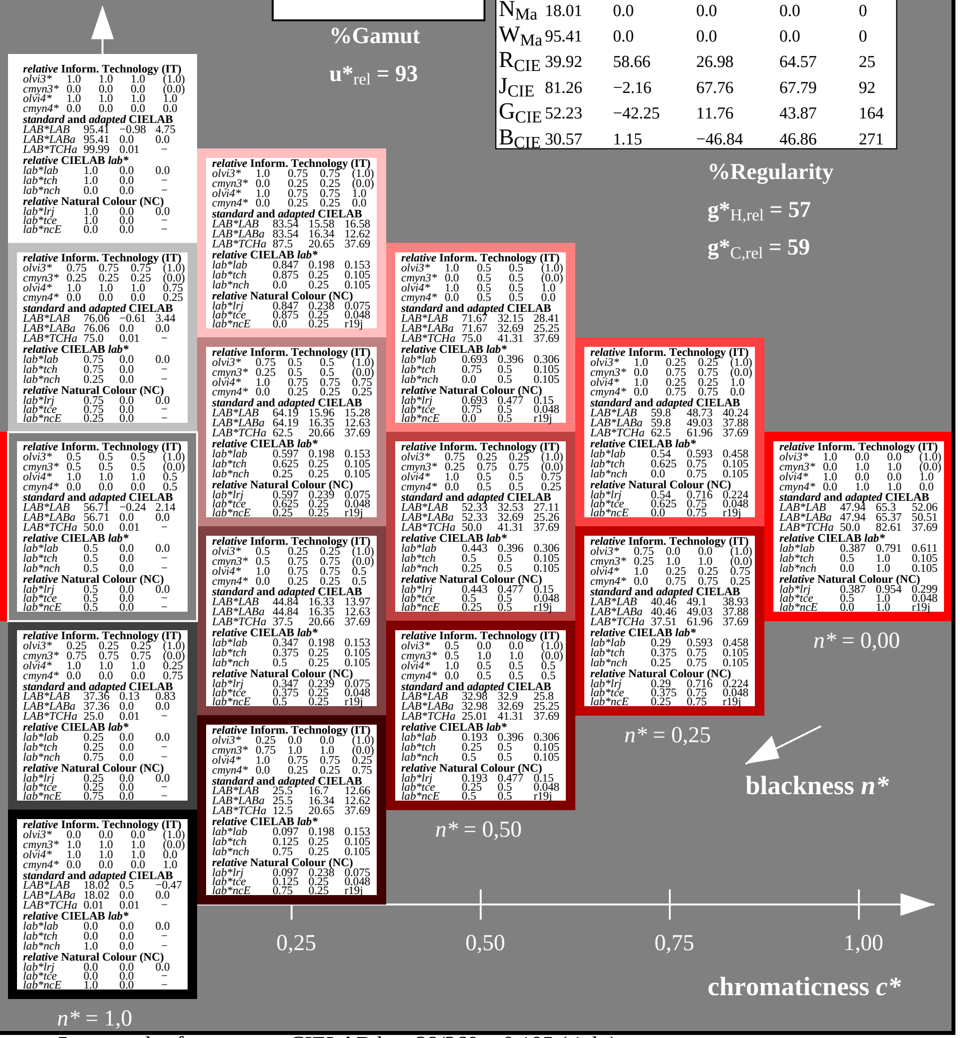
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left) 5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Natural Reflective System NRS18

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

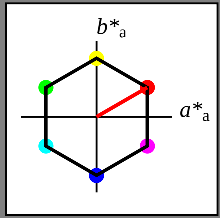
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

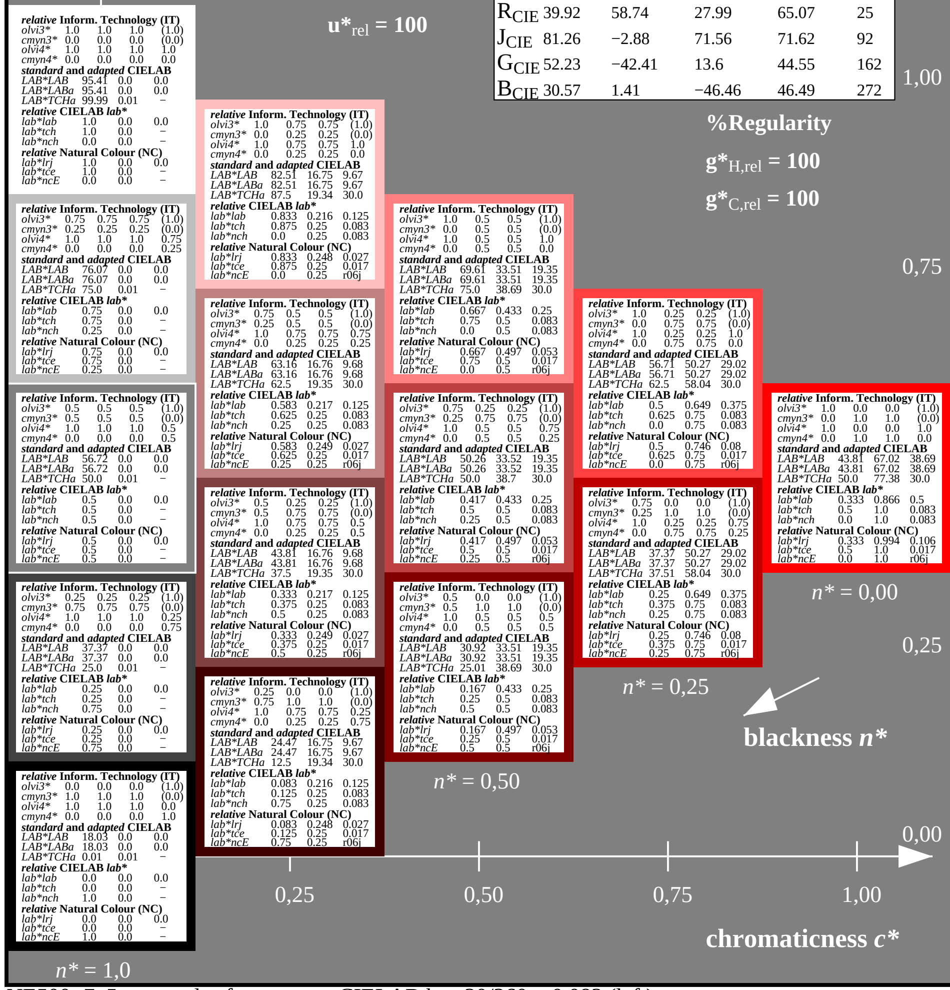
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 40/360 = 0.111$

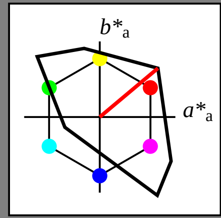
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

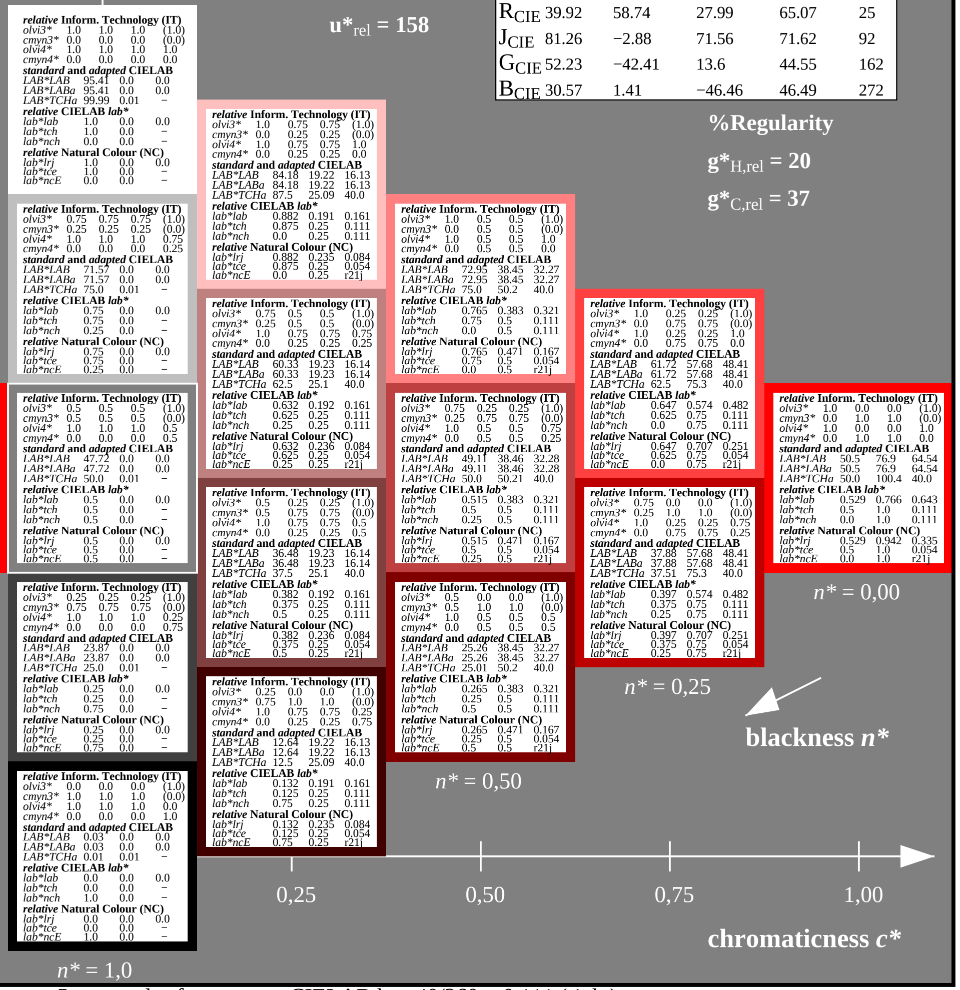
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 30/360 = 0.083$

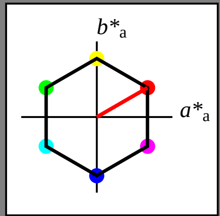
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

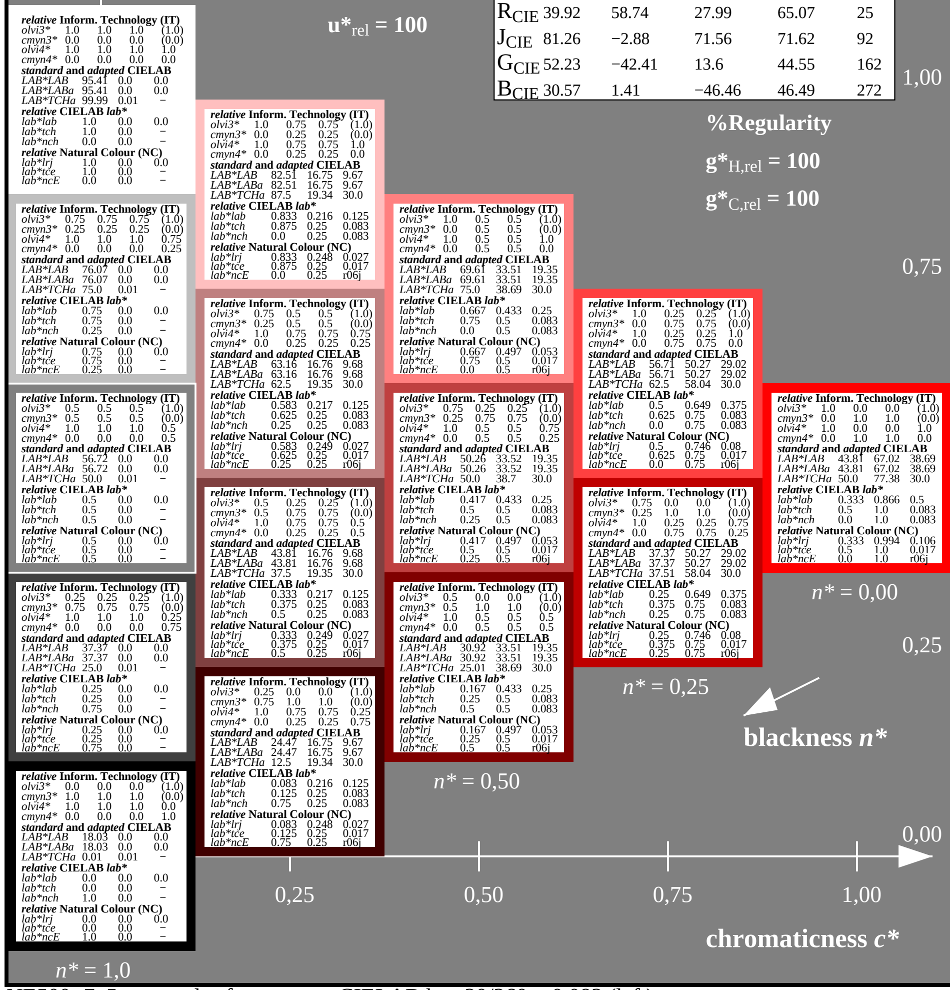


%Gamut

$u^*_{rel} = 100$

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



Output: Colorimetric Printer Reflective System DRSXX

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

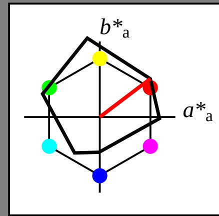
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

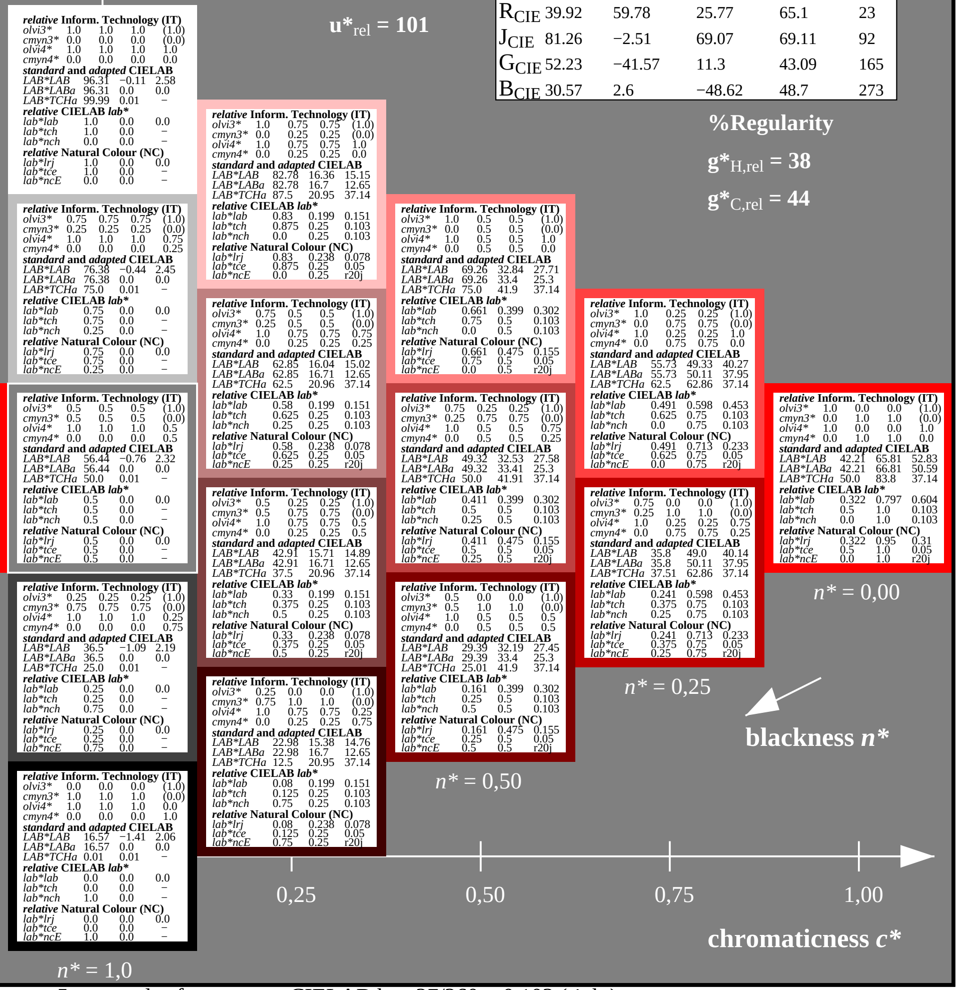


%Gamut

$u^*_{rel} = 101$

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



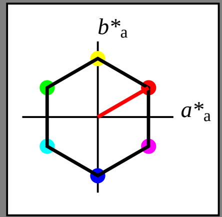
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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**

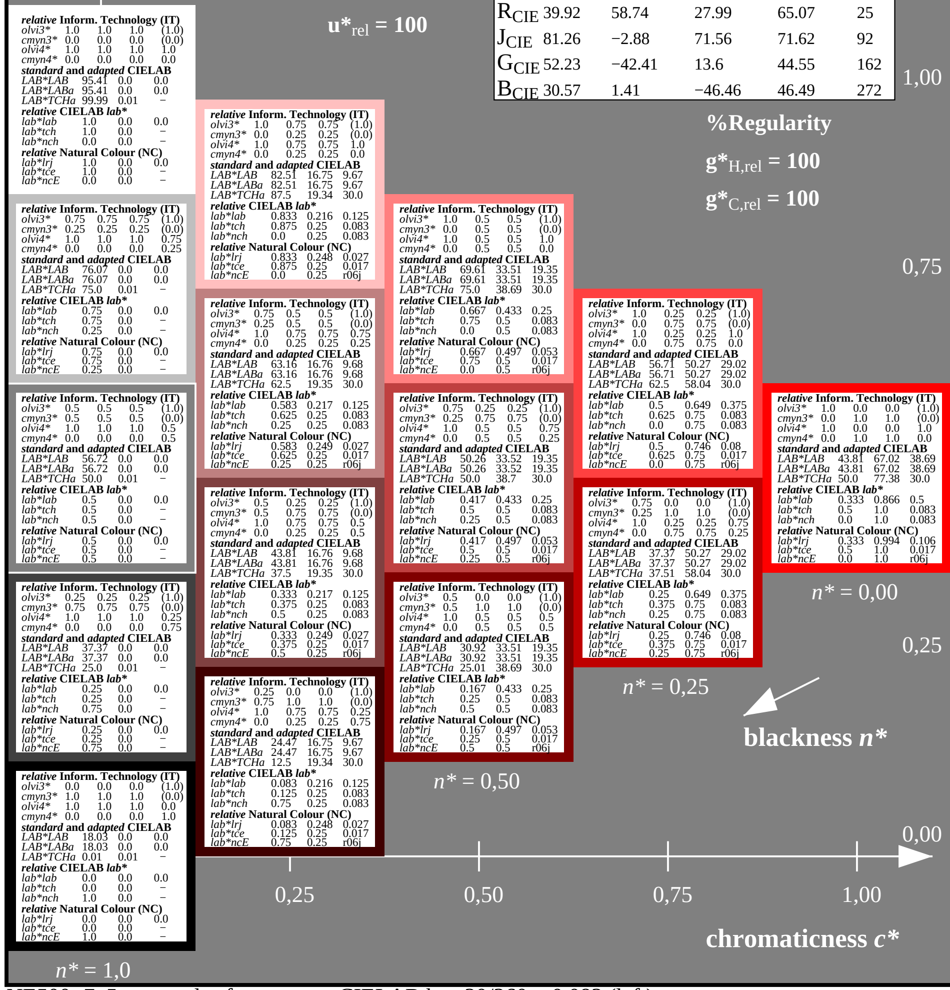


%Gamut
$u^*_{rel} = 100$

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

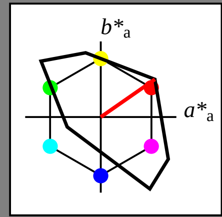
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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**

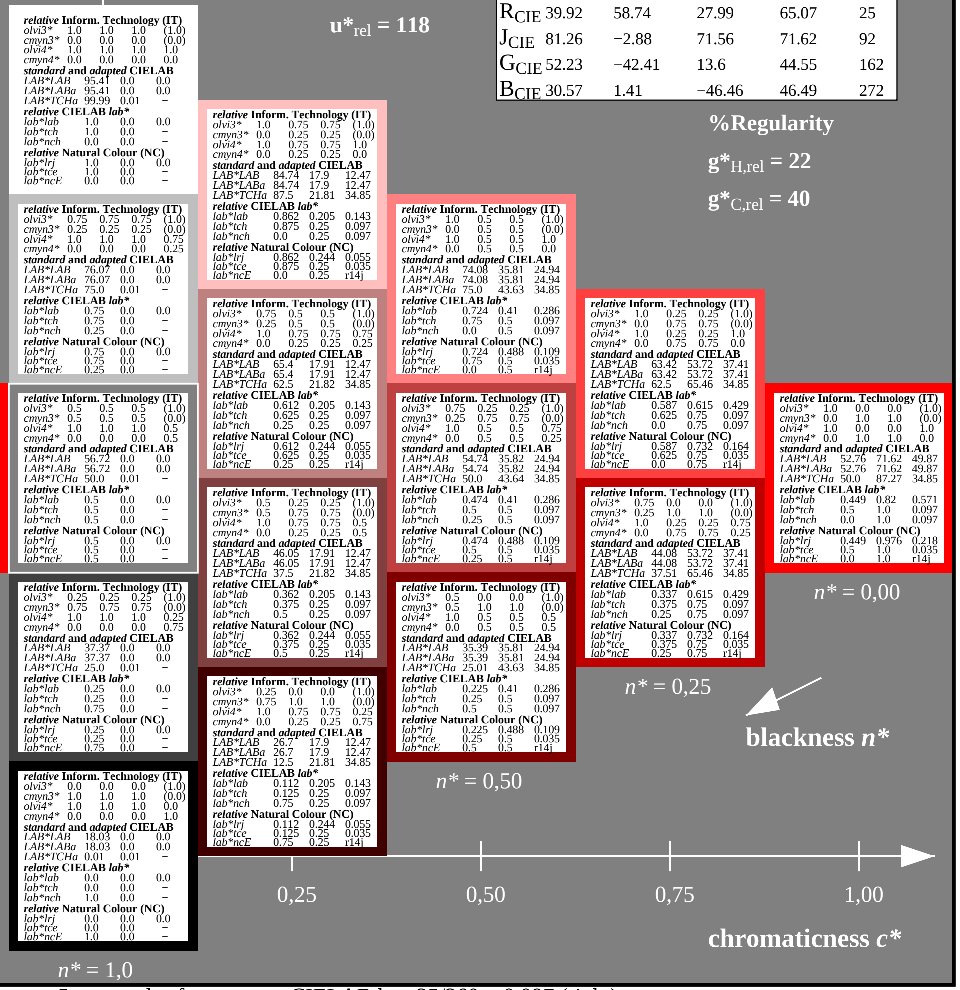


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$

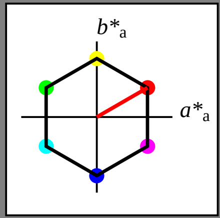


NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)   5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

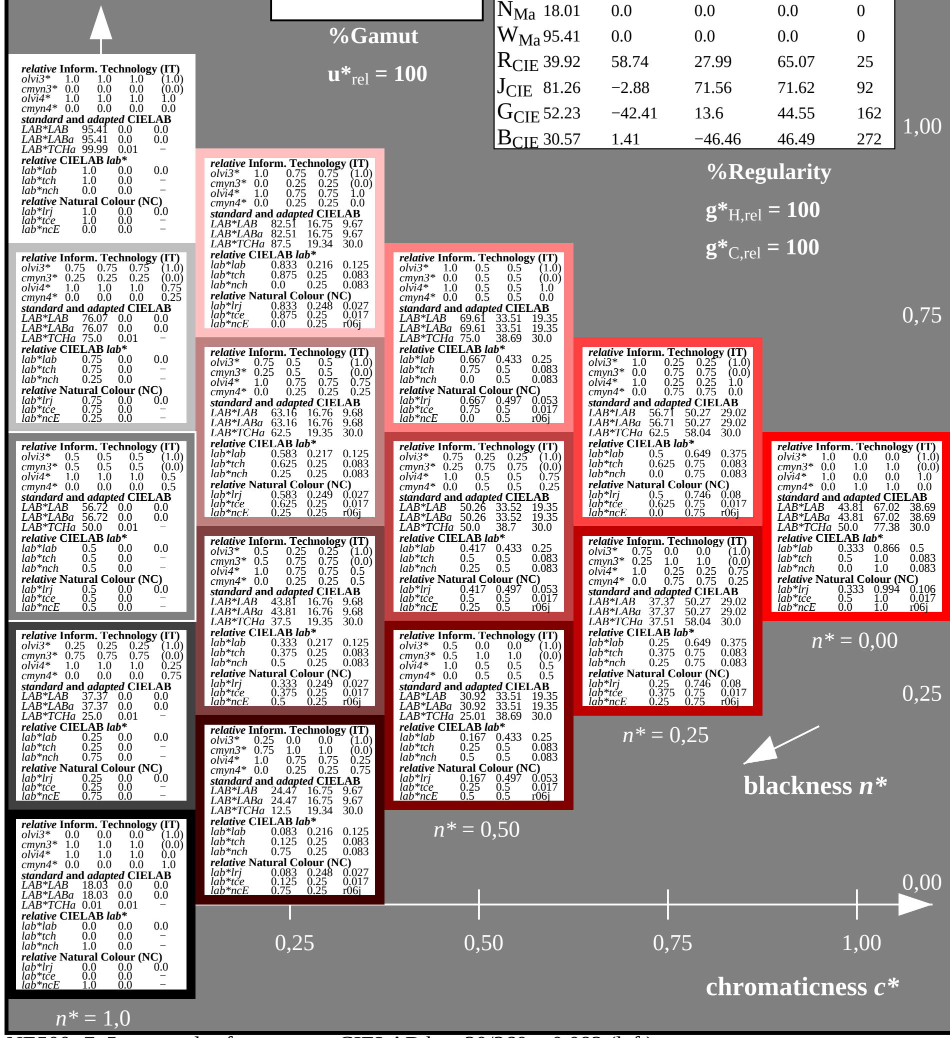
Input: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

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

triangle lightness t^*



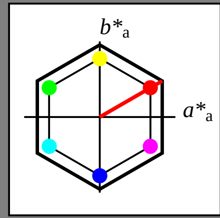
NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	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



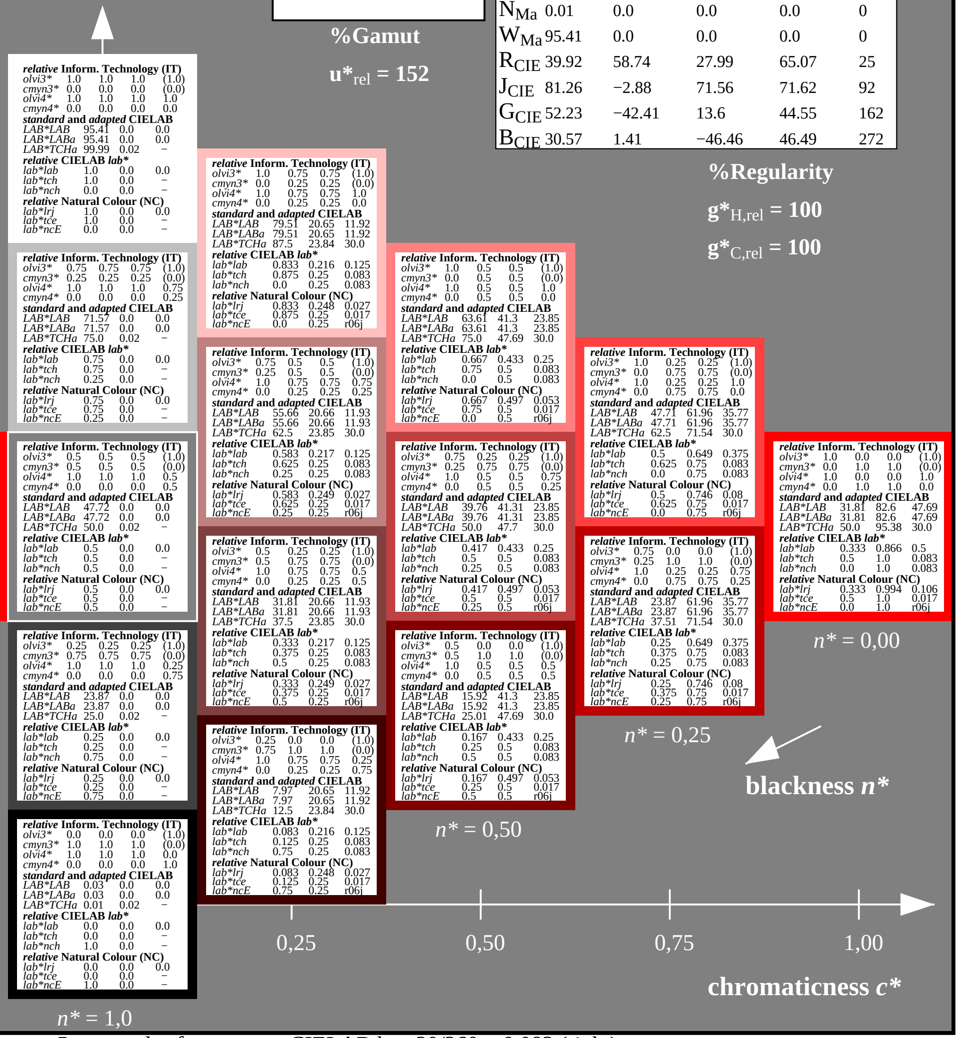
Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 30/360 = 0.083$
lab*tch* and *lab*nch

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

triangle lightness t^*



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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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*

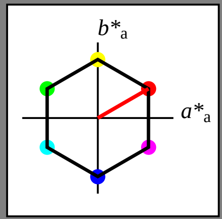
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

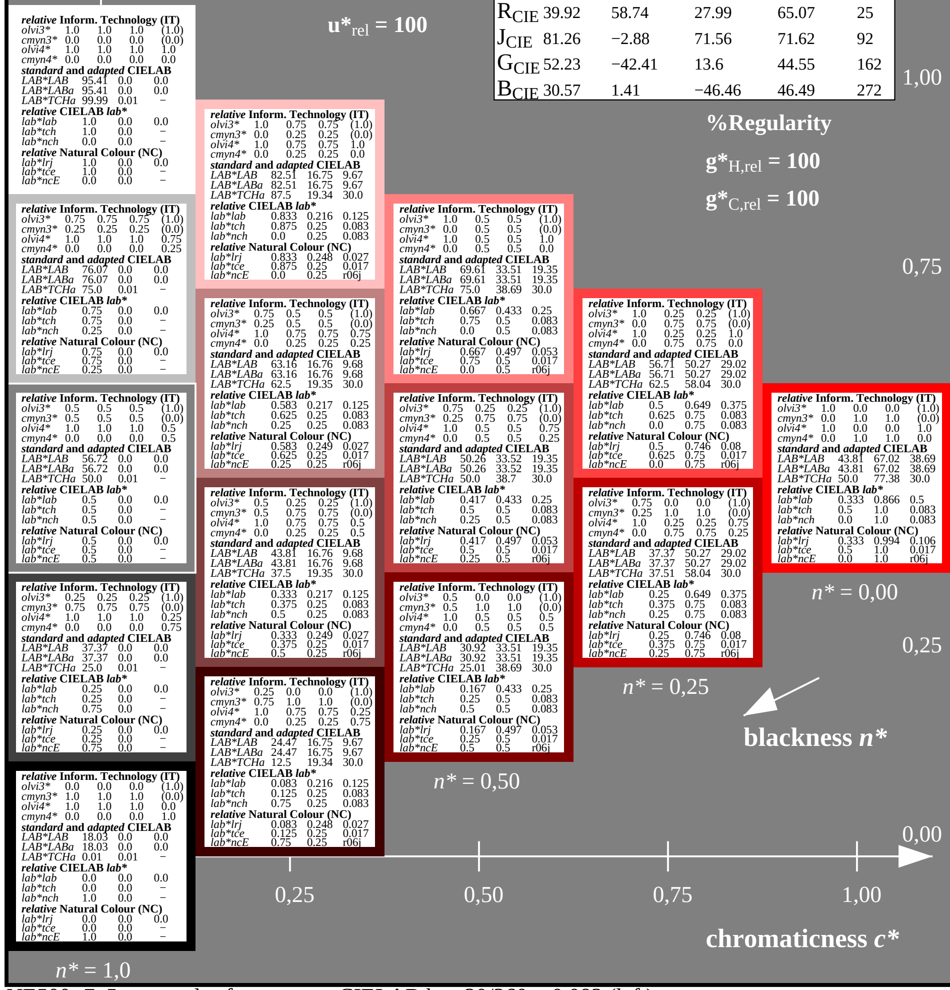
u^*_{rel} = 100

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



Output: Colorimetric Natural Reflective System NRS18

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

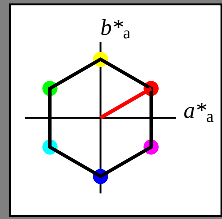
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

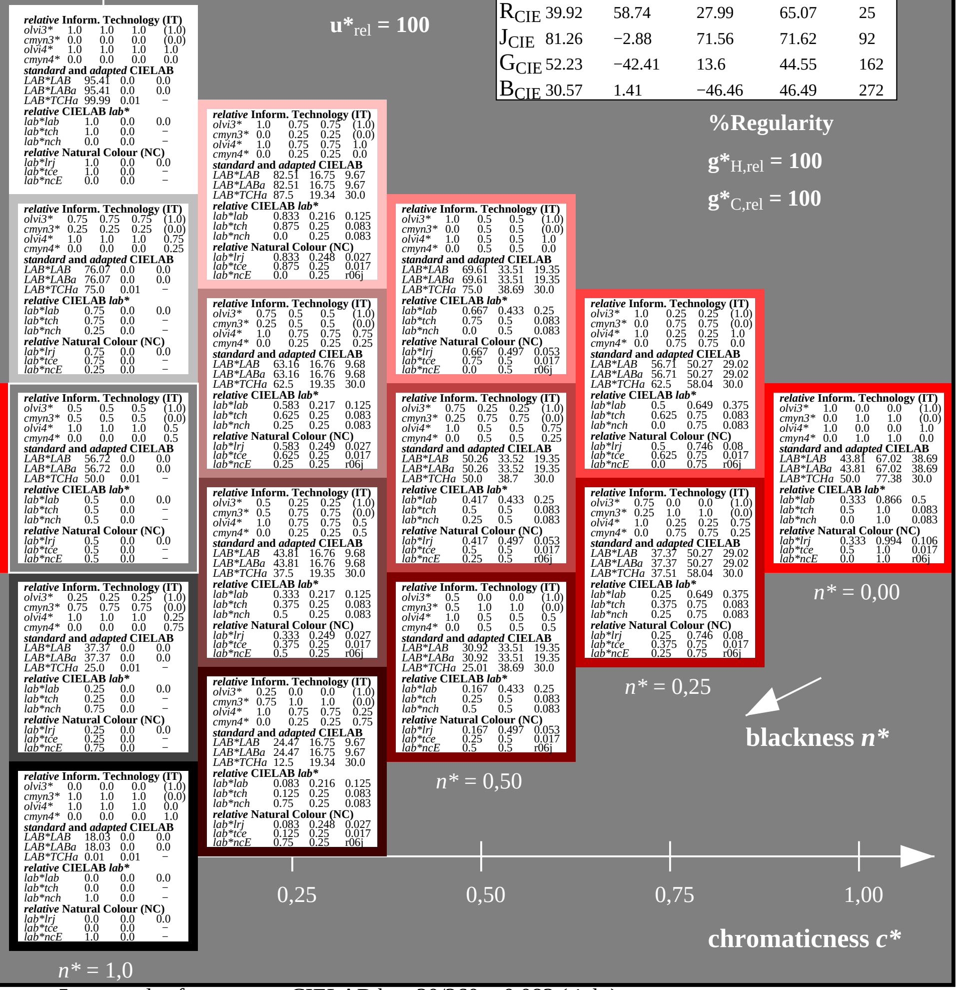
u^*_{rel} = 100

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



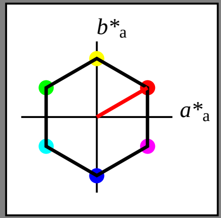
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

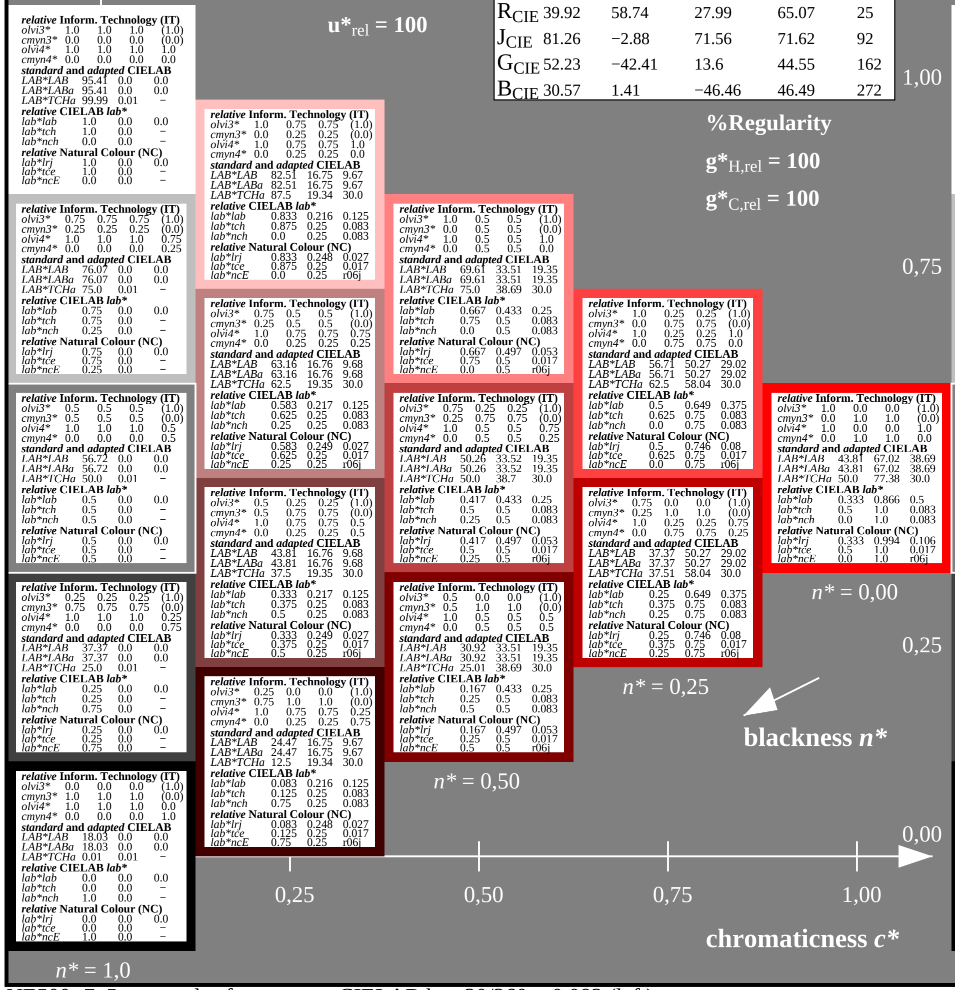
triangle lightness *t*



%Gamut
u^*_{rel} = 100

NRS18; adapted (a) CIELAB data

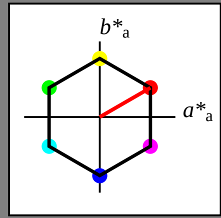
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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

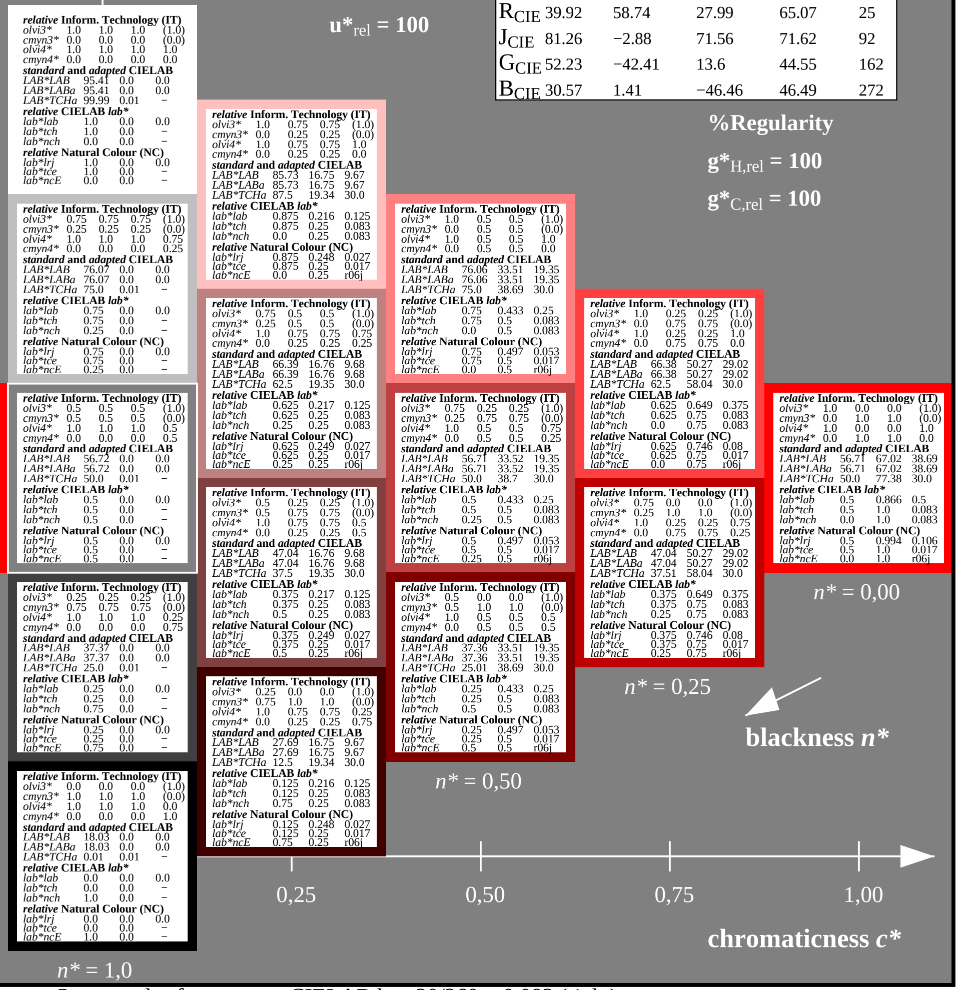
triangle lightness *t*



%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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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*

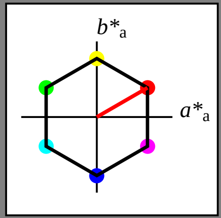
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u*rel = 100

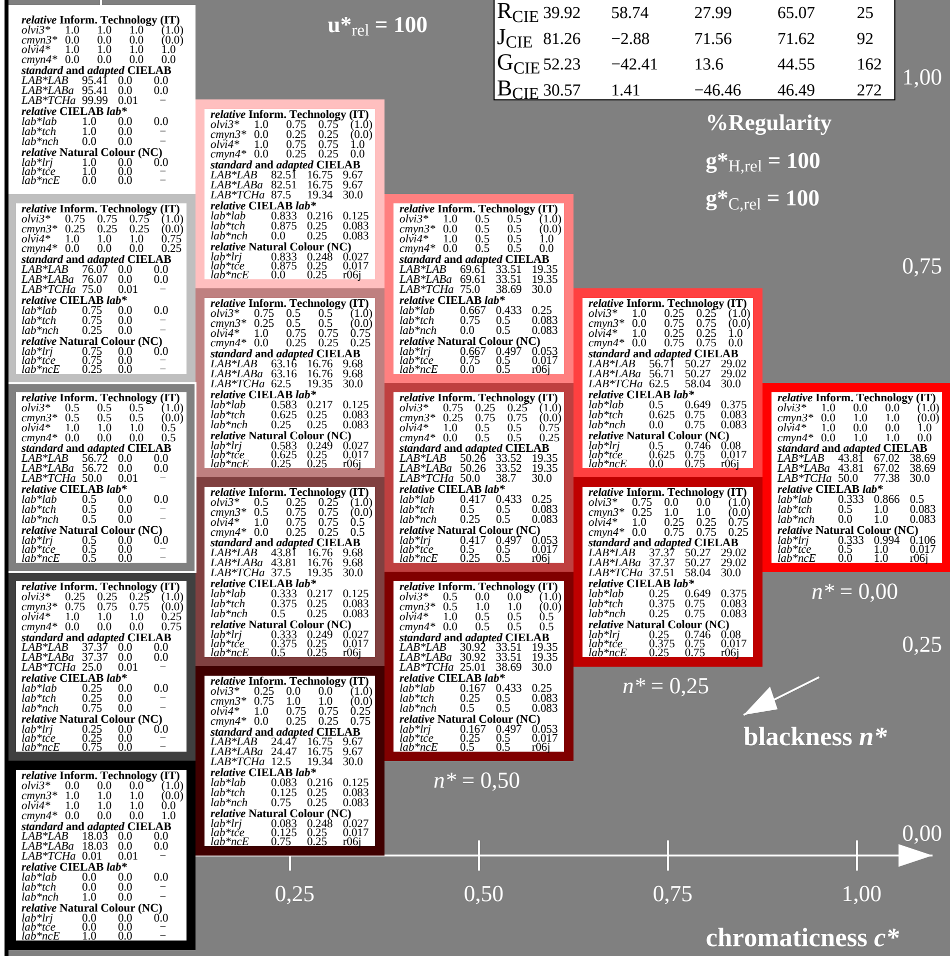
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

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

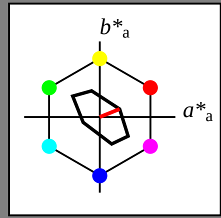
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u*rel = 16

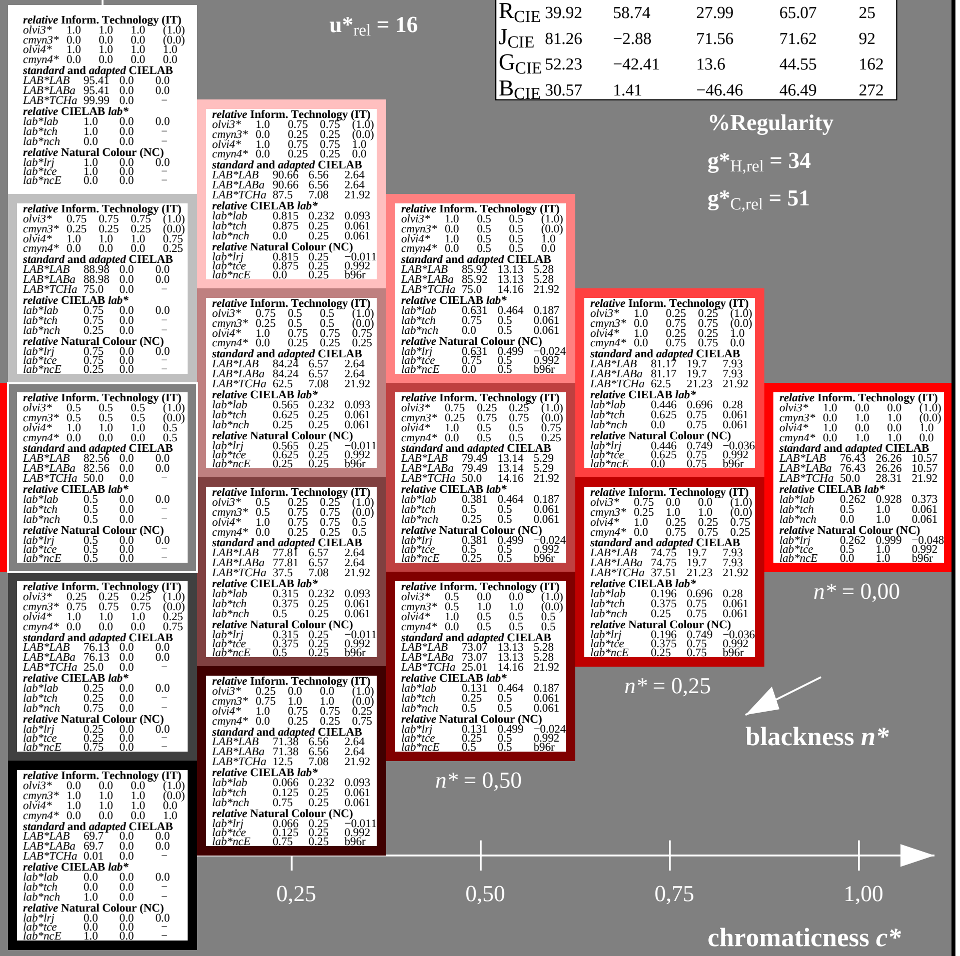
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

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

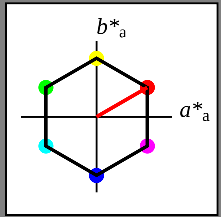
lab*tch and lab*nch

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

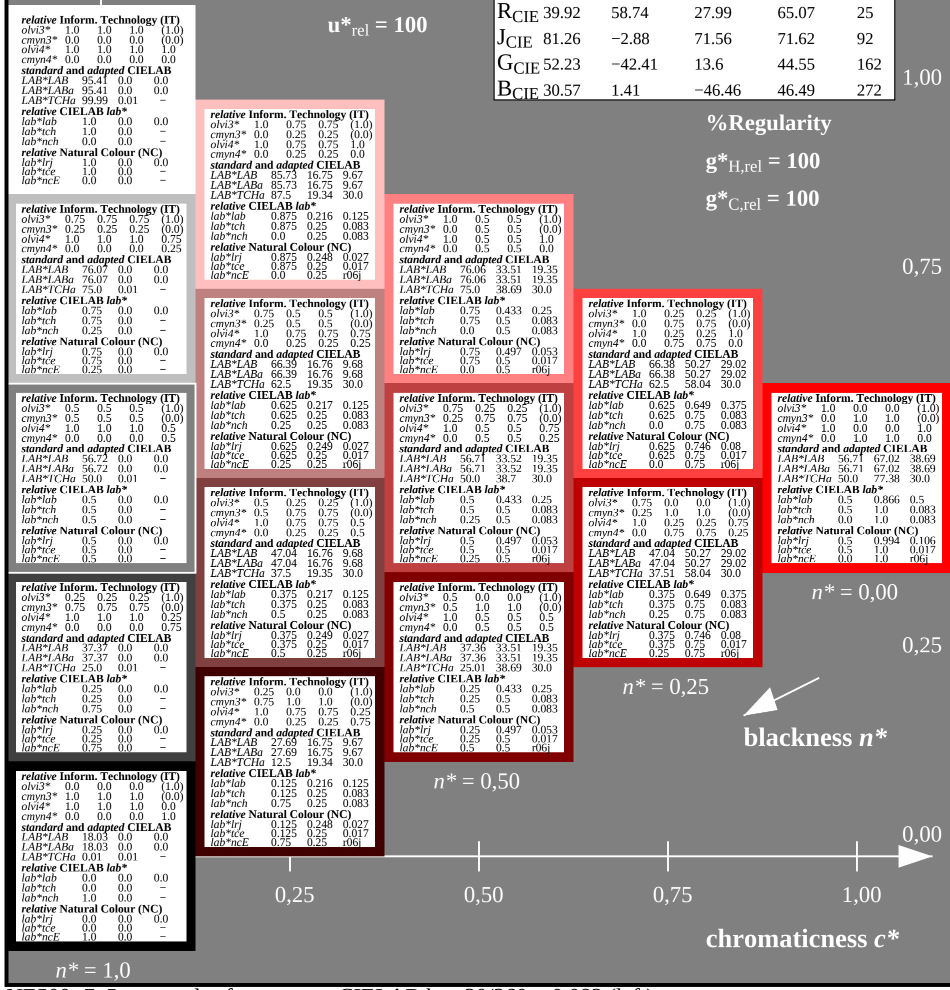
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

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

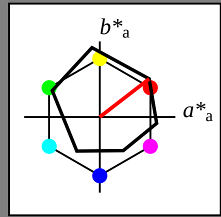
lab*tch and lab*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

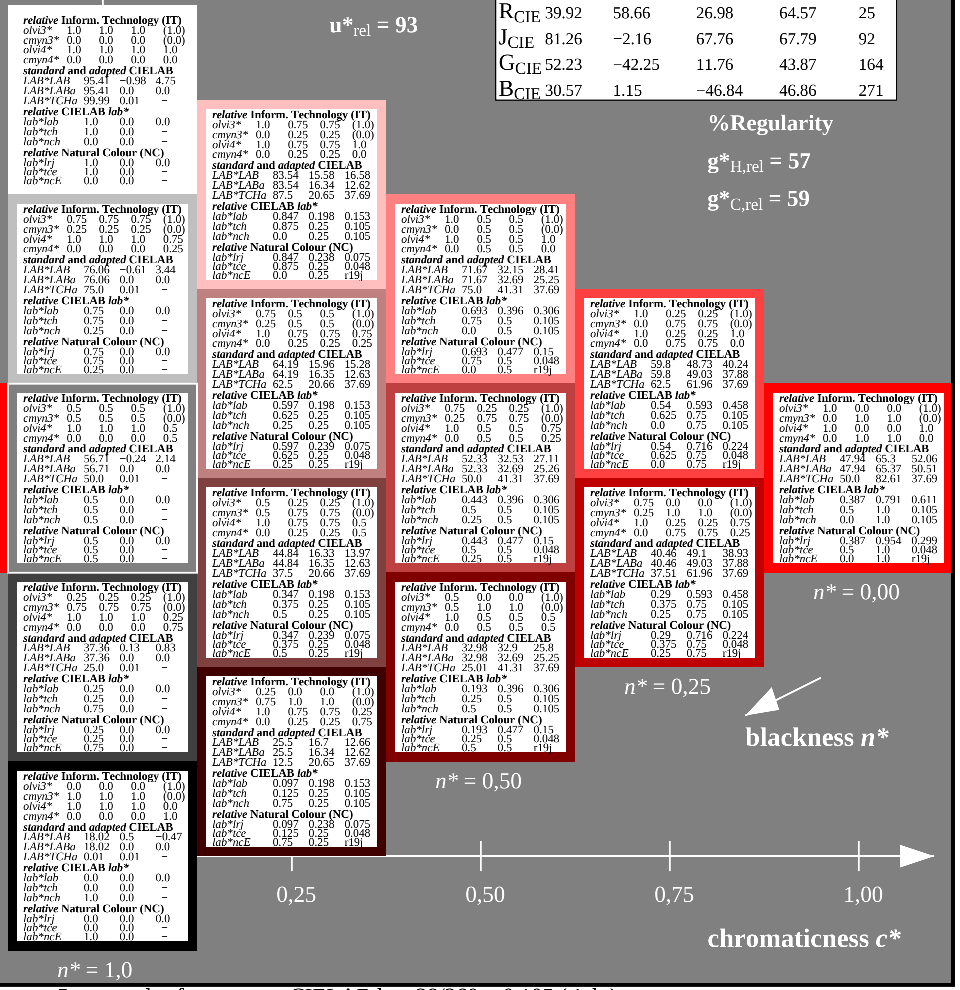
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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*

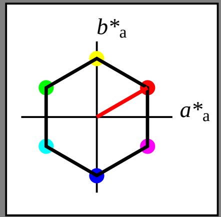
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

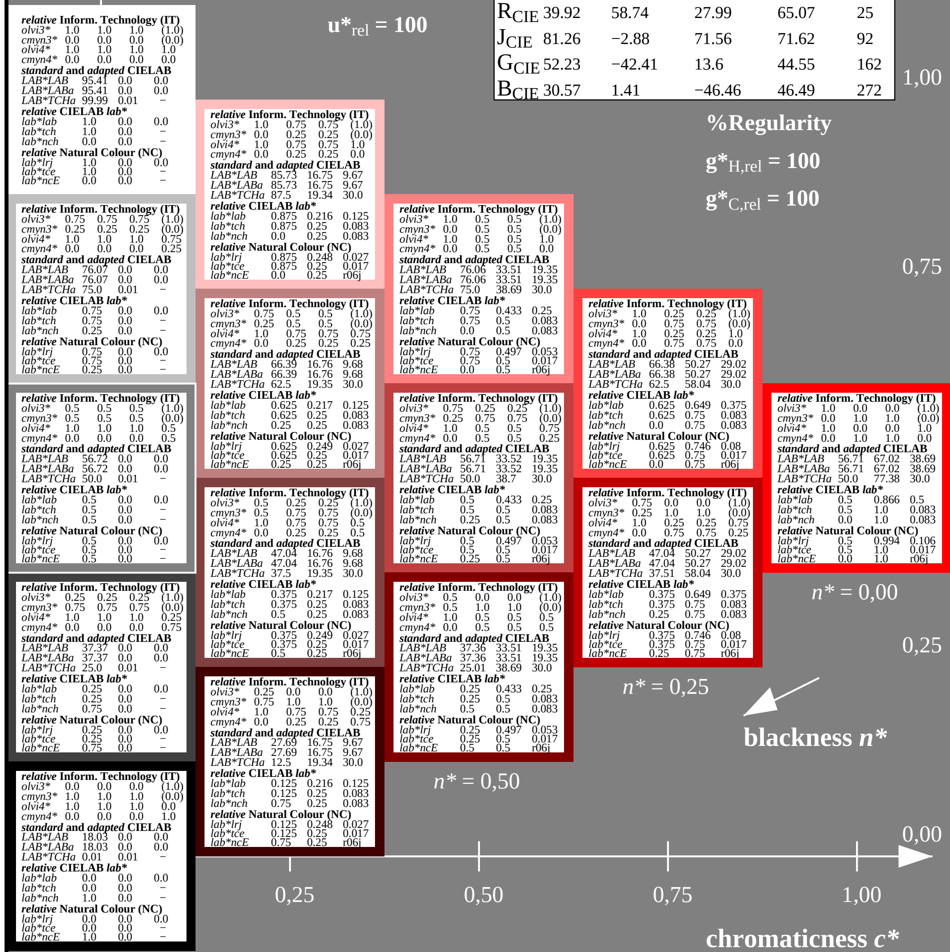
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS00
for hue *h** = *lab*h* = *40/360 = 0.111*

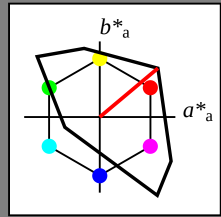
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 158$

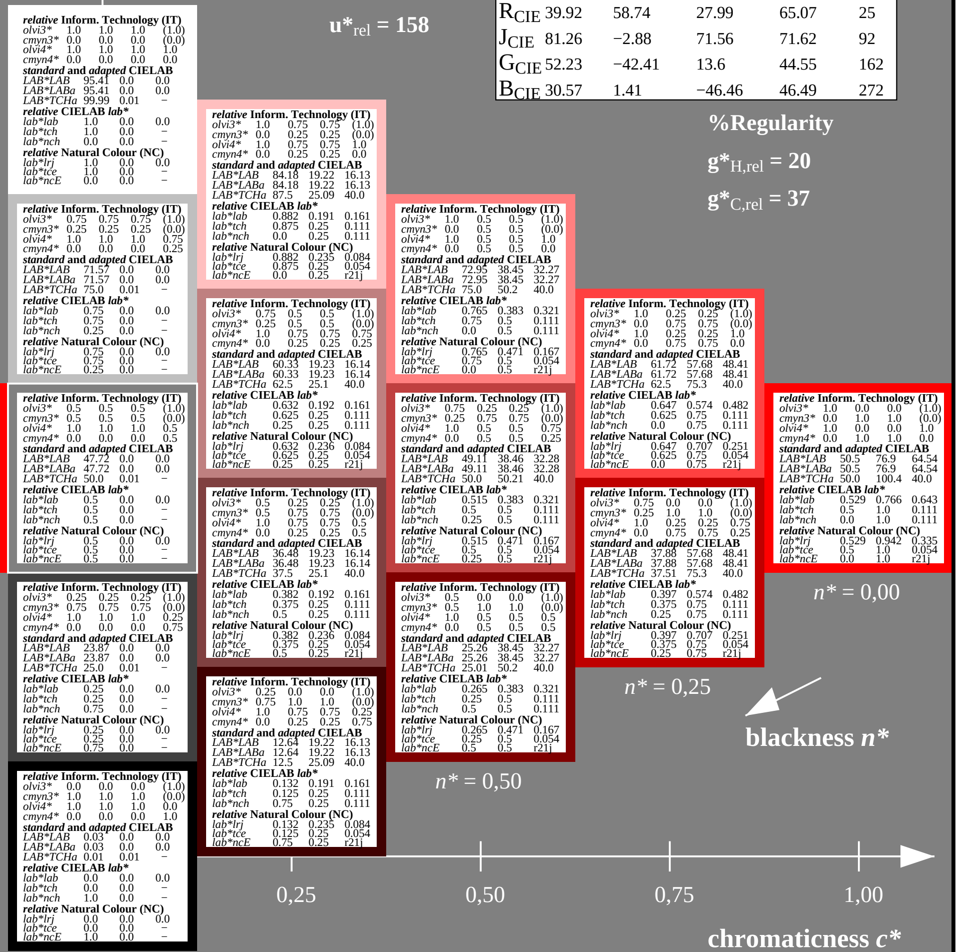
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



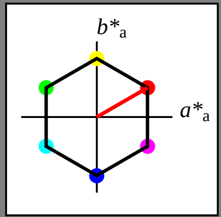
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric 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^*

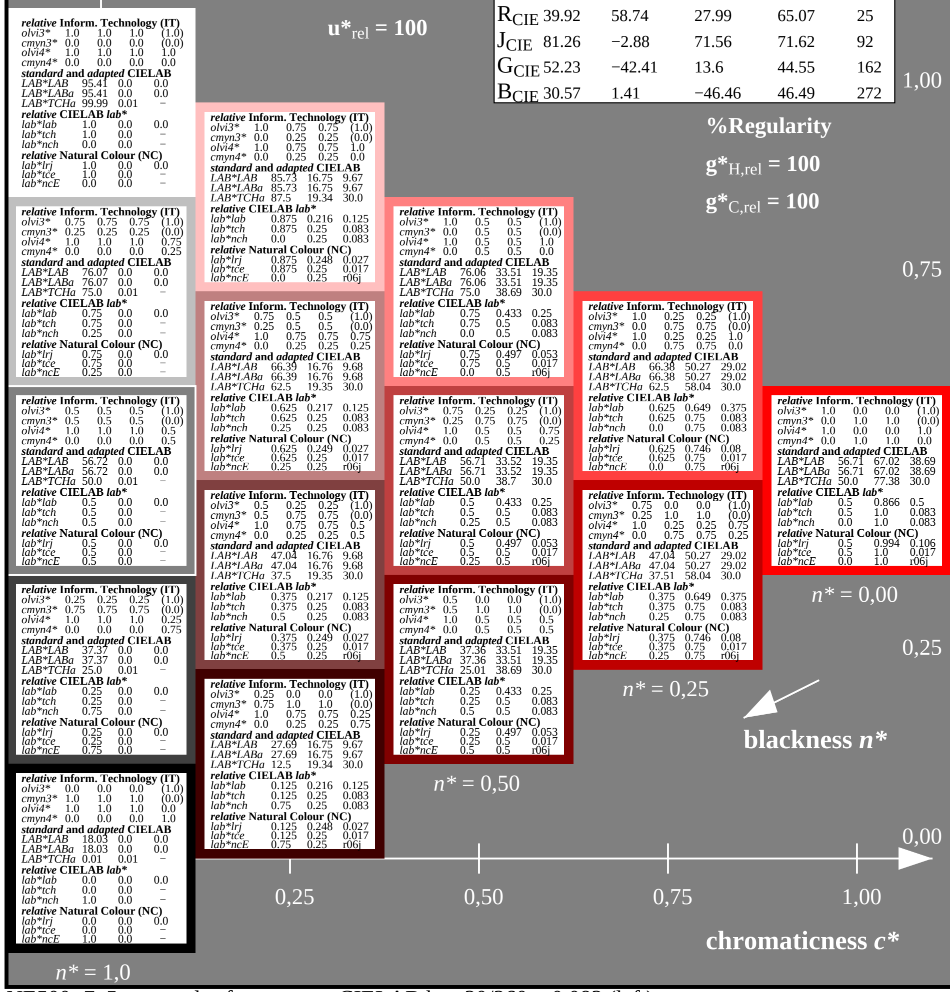


%Gamut
u^*_{rel} = 100

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

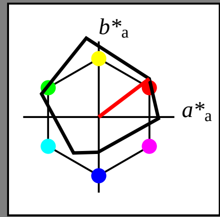
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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^*

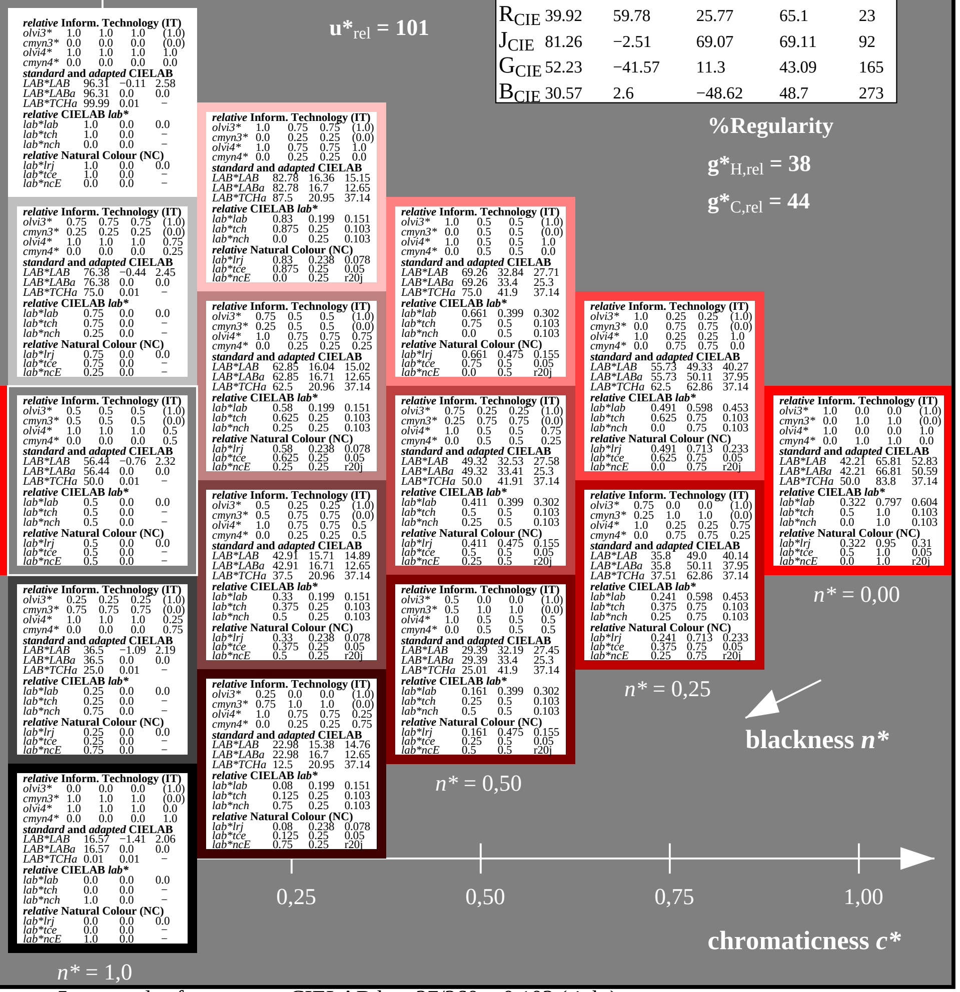


%Gamut
u^*_{rel} = 101

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric Standard Reflective System SRS18

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

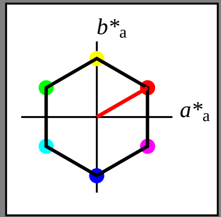
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

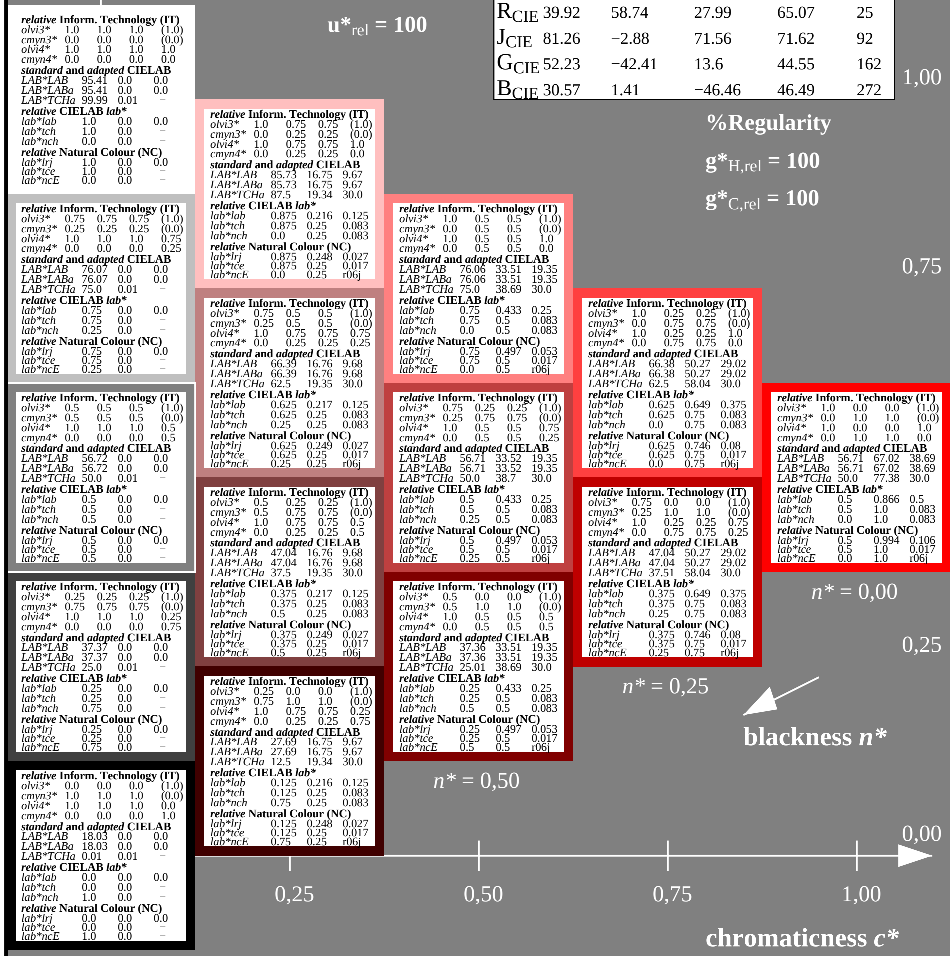
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

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

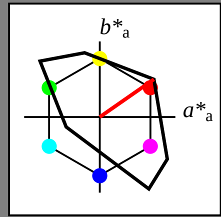
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

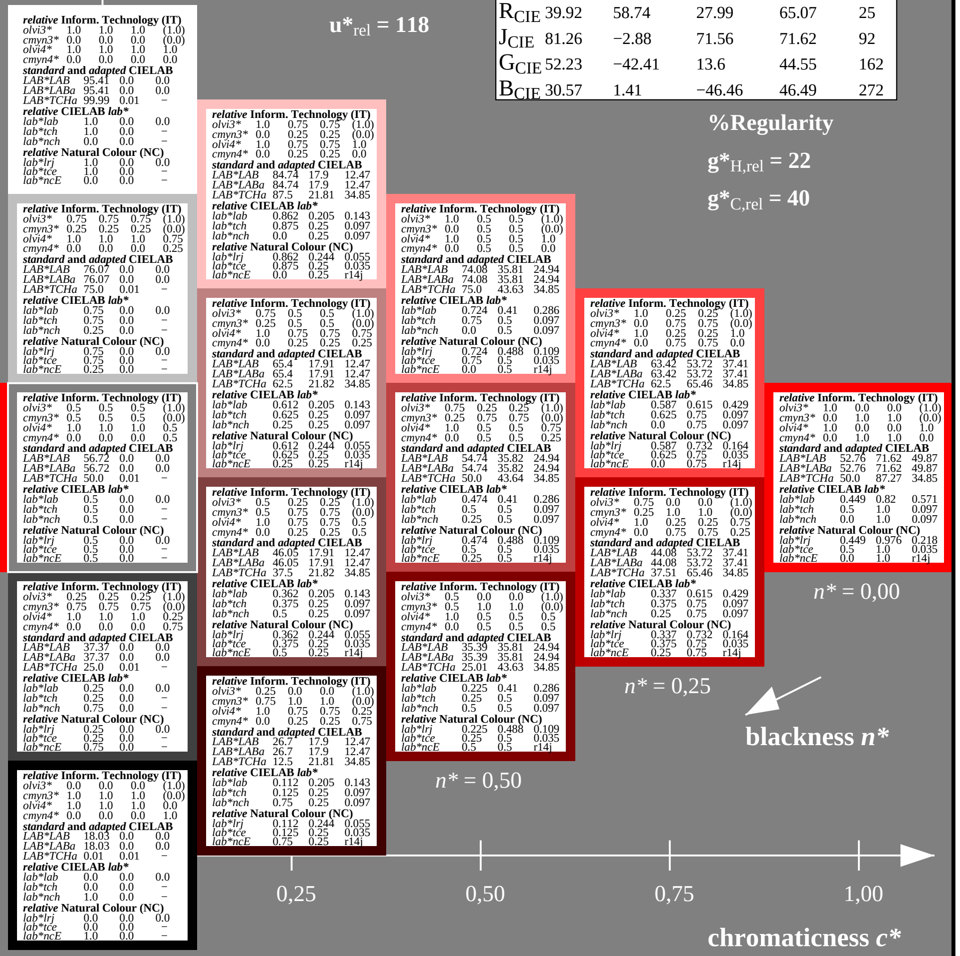
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

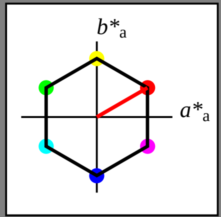
5 step scales for constant CIELAB hue 35/360 = 0.097 (right)

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

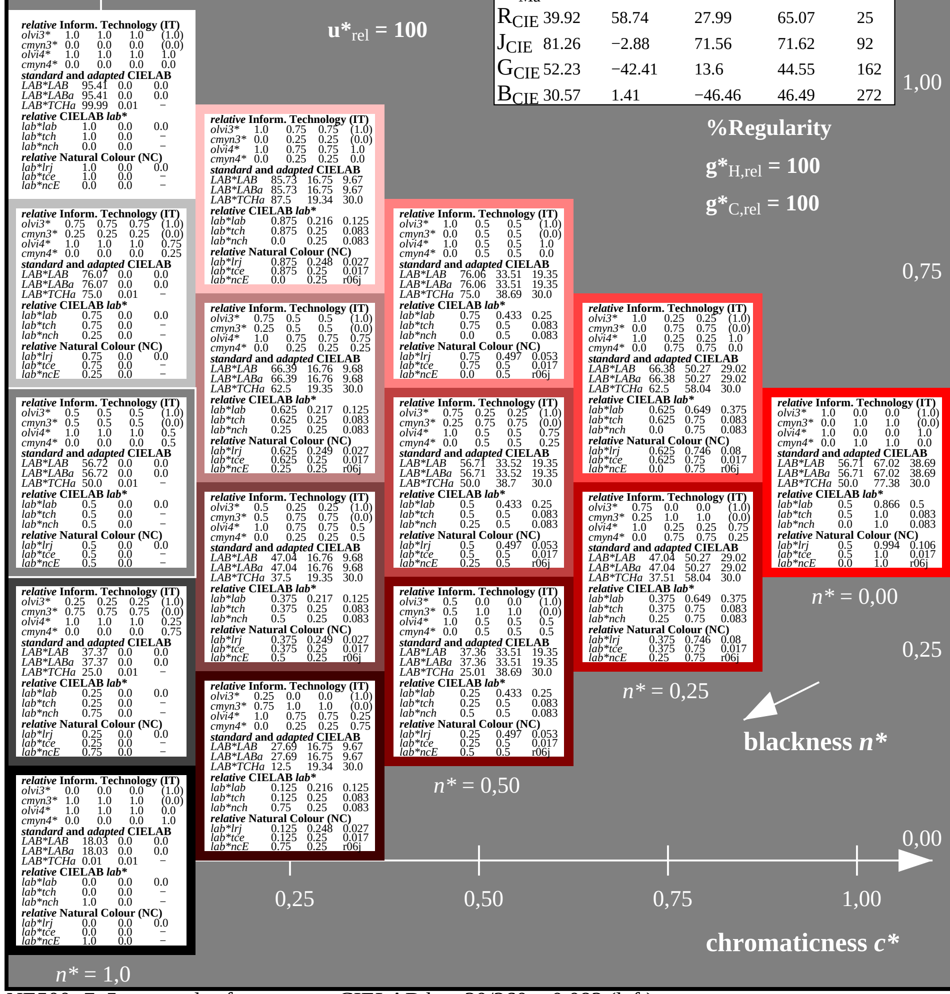
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

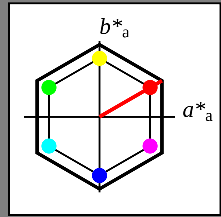


Output: Colorimetric Natural Luminous System NLS00

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

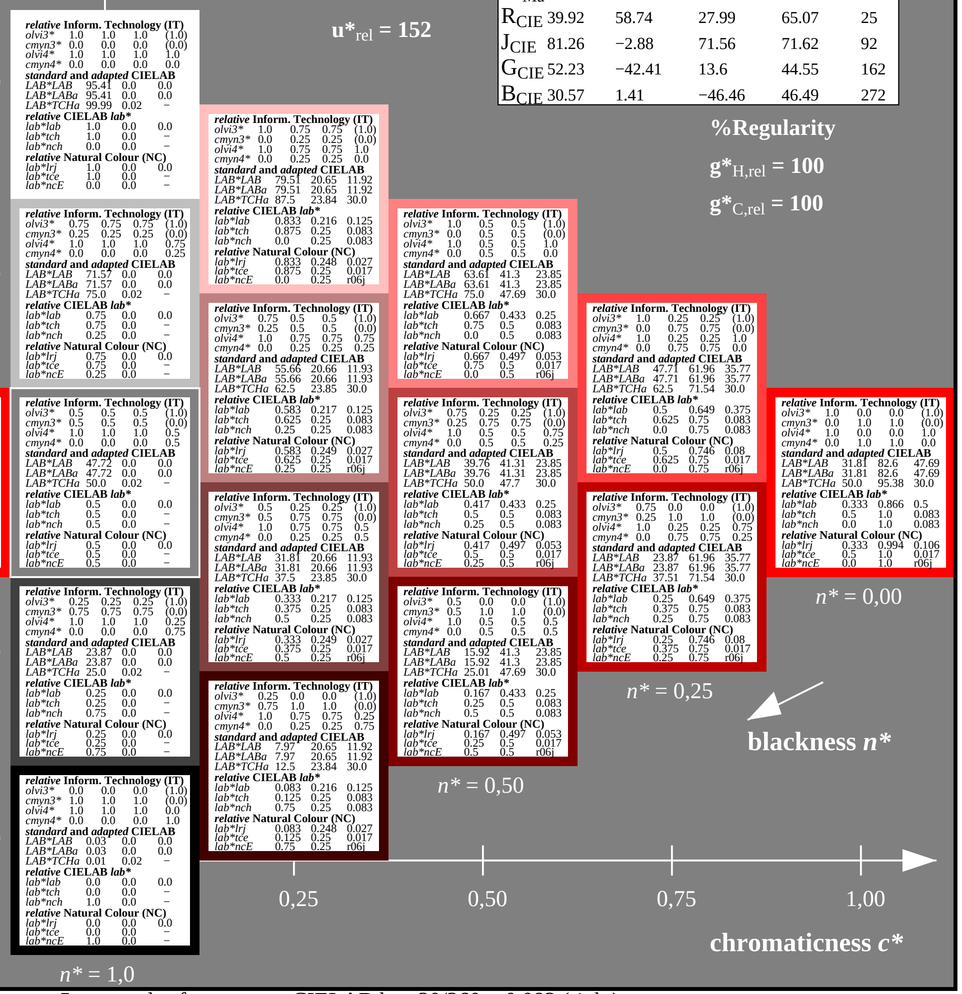
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



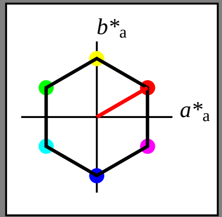
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

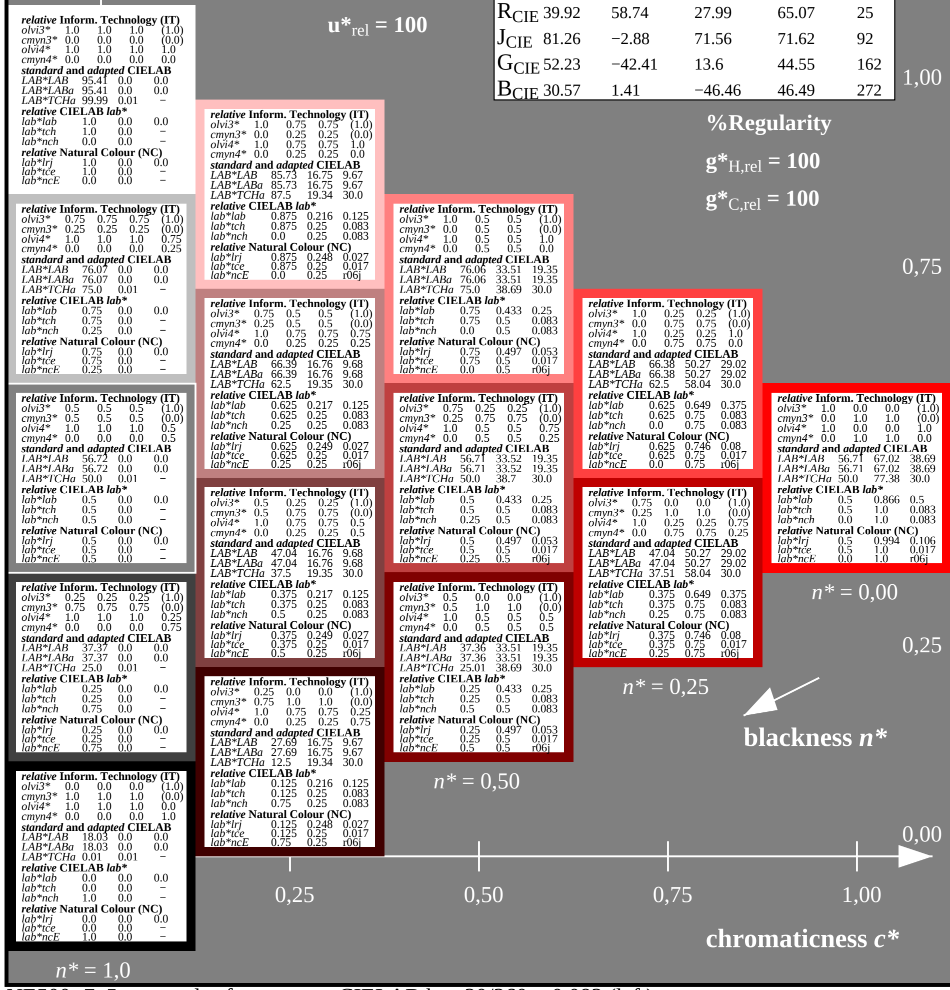
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

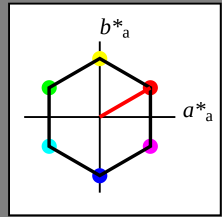
$g^*_{C,rel}$ = 100



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

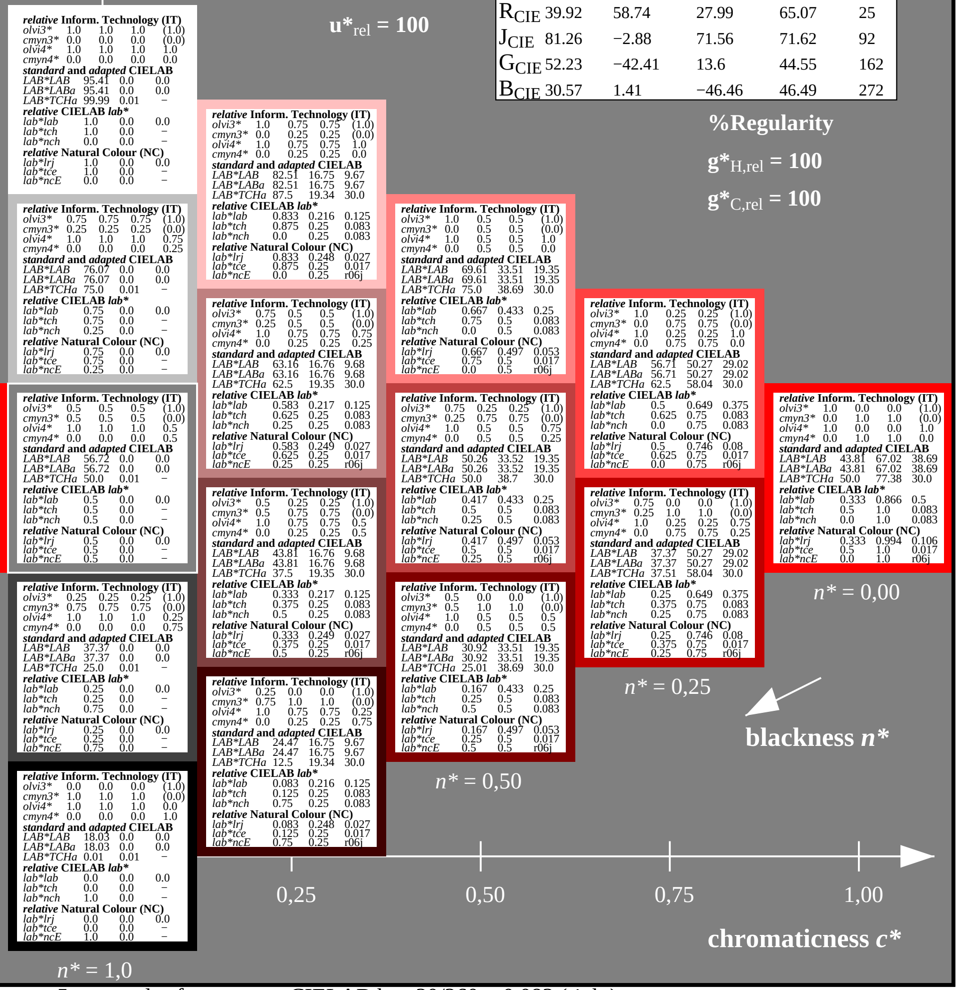
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric Standard Reflective System SRS18

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

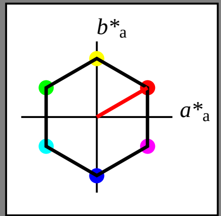
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

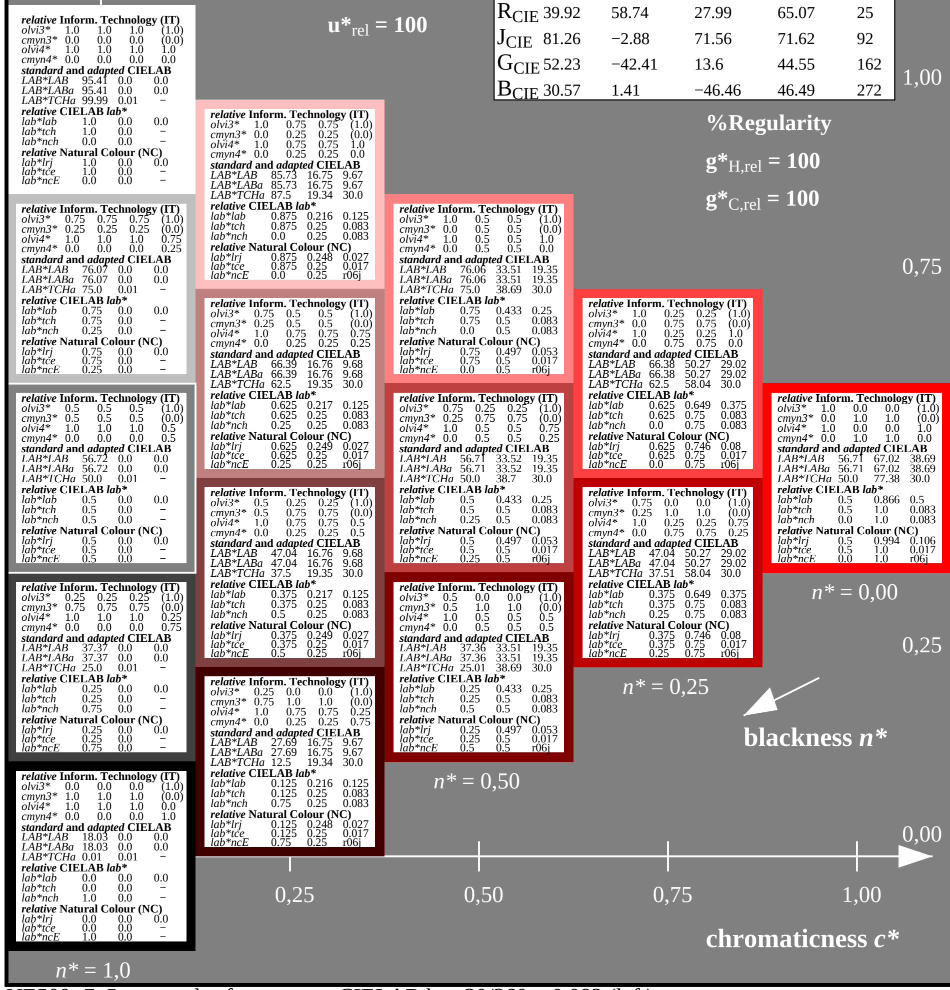
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Standard Reflective System SRS18

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

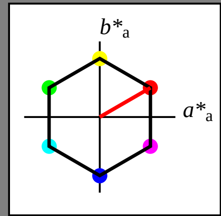
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

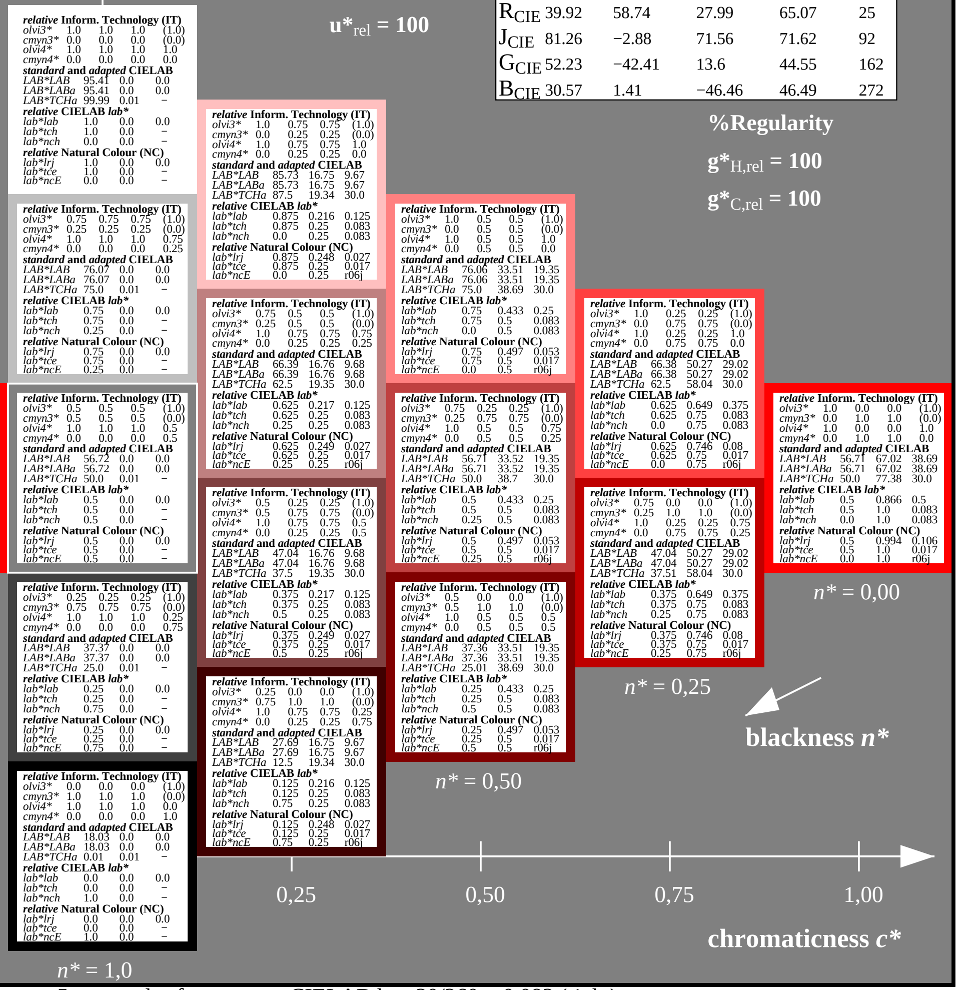
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

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

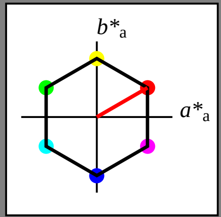
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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

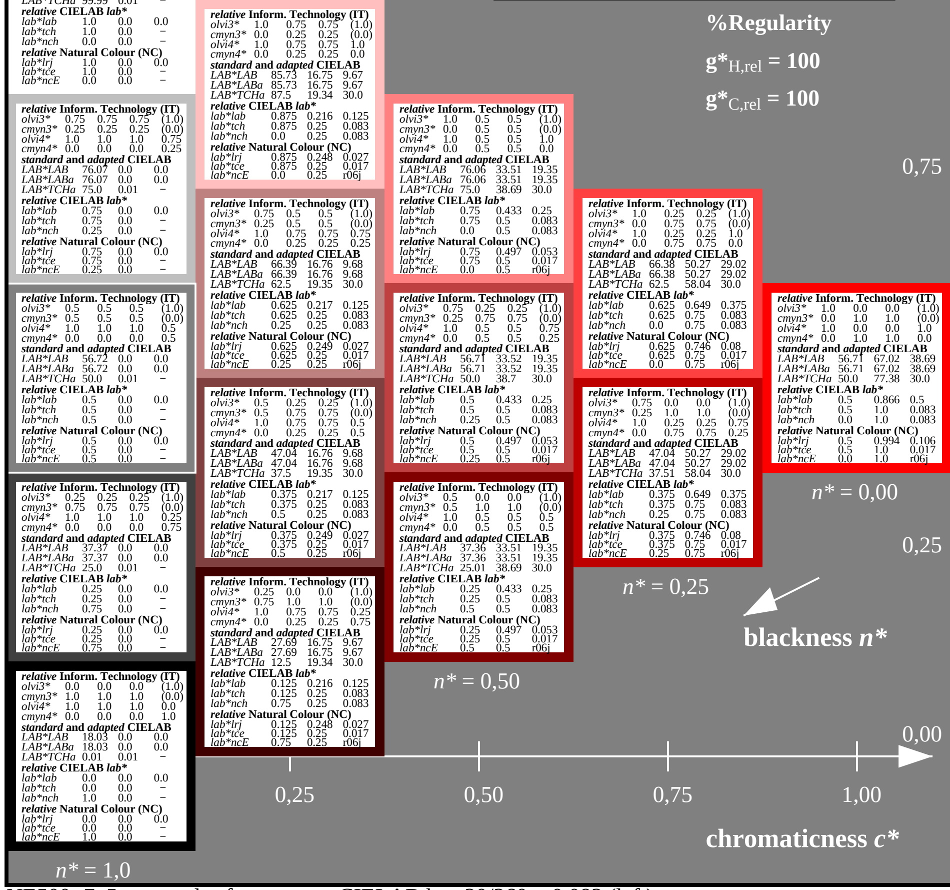
%Gamut

u^*_{rel} = 100

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS70

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

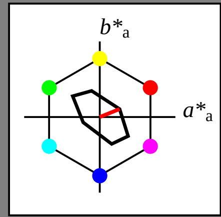
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



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

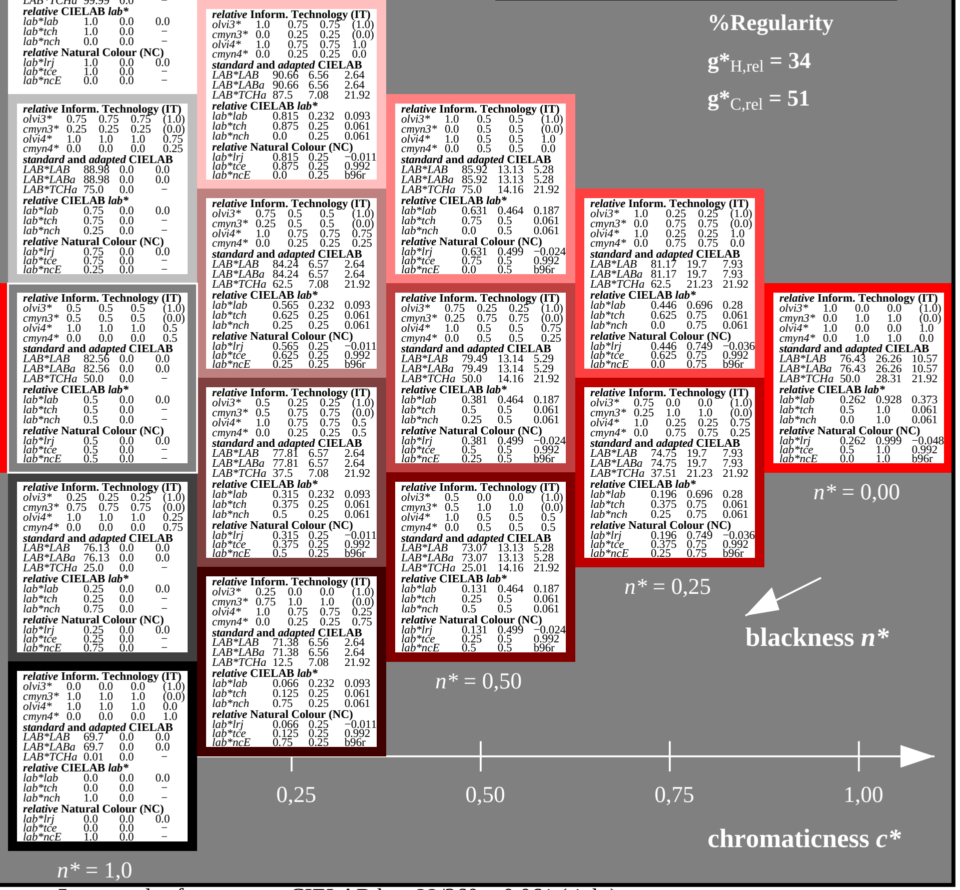
%Gamut

u^*_{rel} = 16

%Regularity

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

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



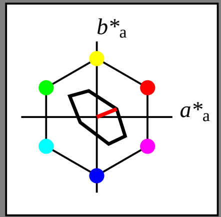
NE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

Input: Colorimetric 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

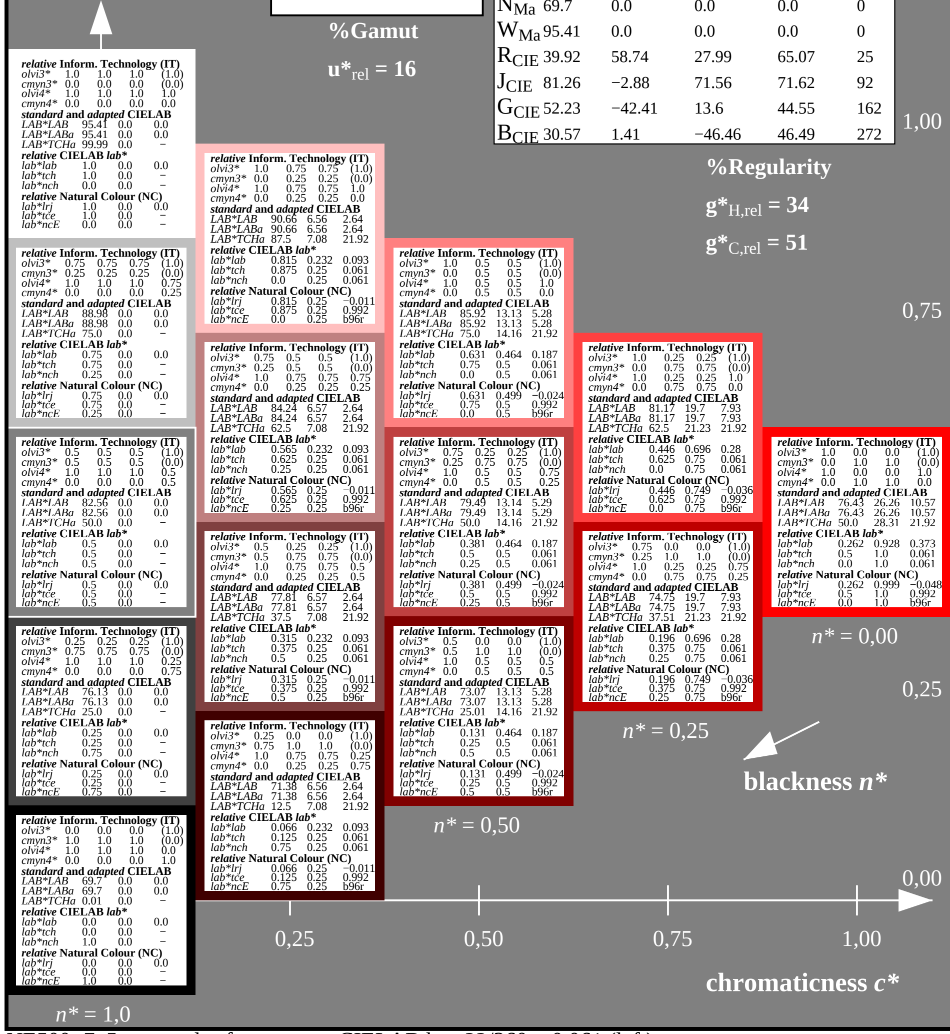
$u^*_{rel} = 16$

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

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

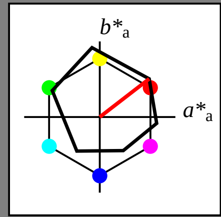
$g^*_{C,rel} = 51$



Output: Colorimetric 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

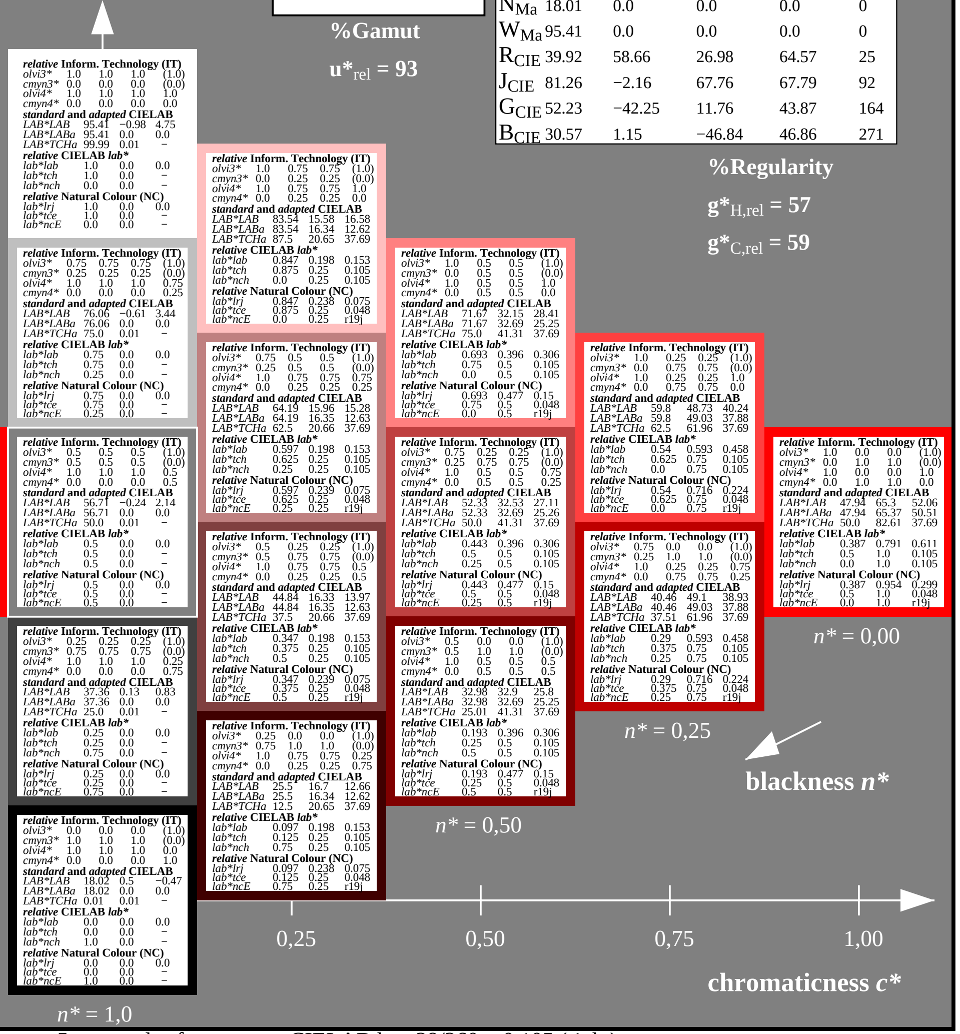
$u^*_{rel} = 93$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 22/360 = 0.061$

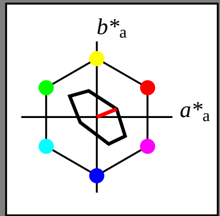
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

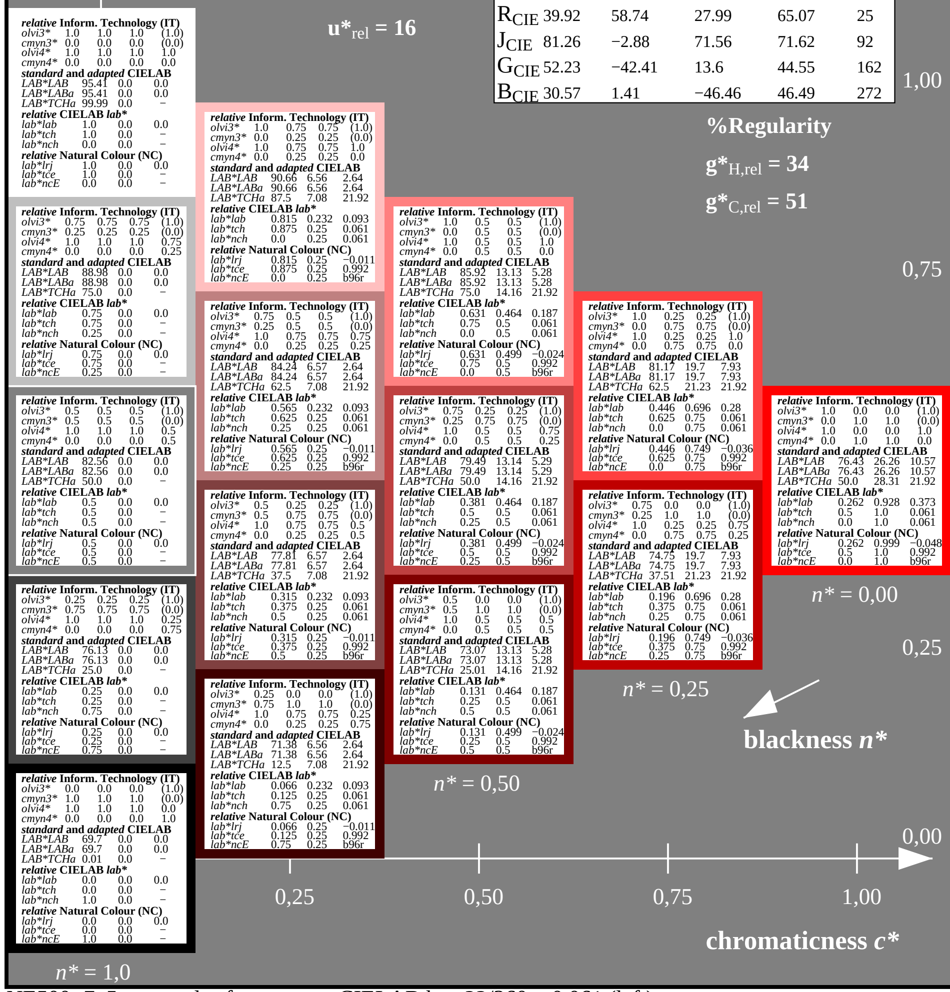
$u^*_{rel} = 16$

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

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

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



Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 40/360 = 0.111$

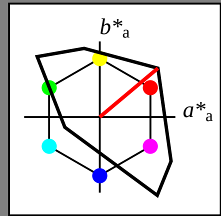
*lab*tch and lab*nch*

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

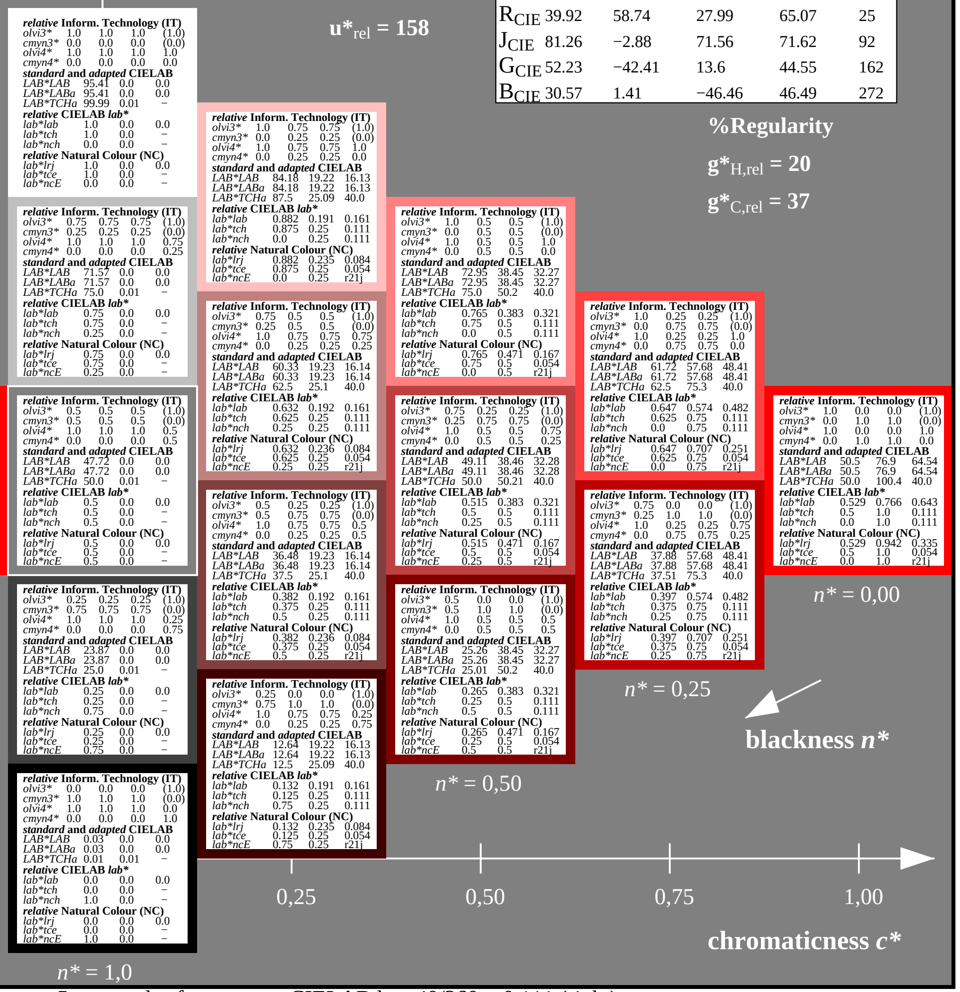
$u^*_{rel} = 158$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

Input: Colorimetric Television Luminous System TLS70

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

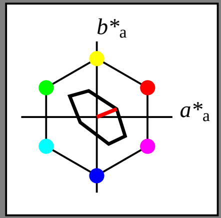
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

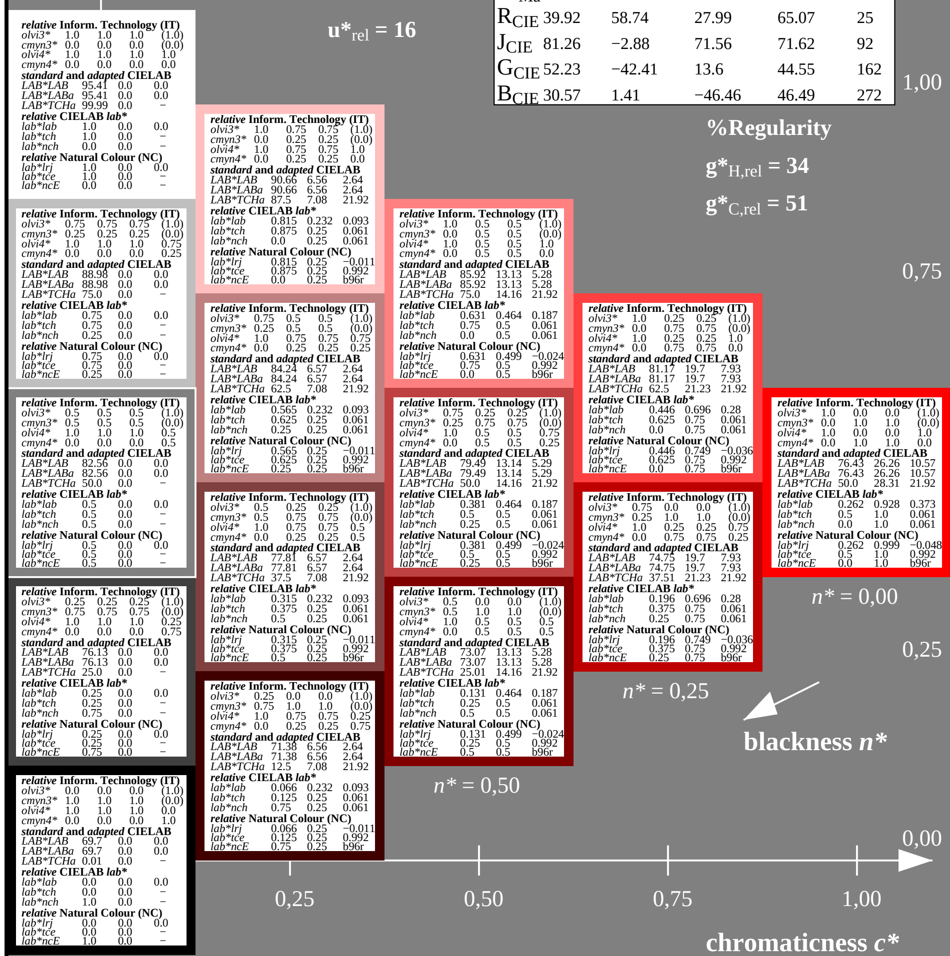
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 37/360 = 0.103$

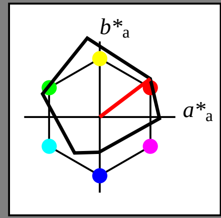
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 42 84 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

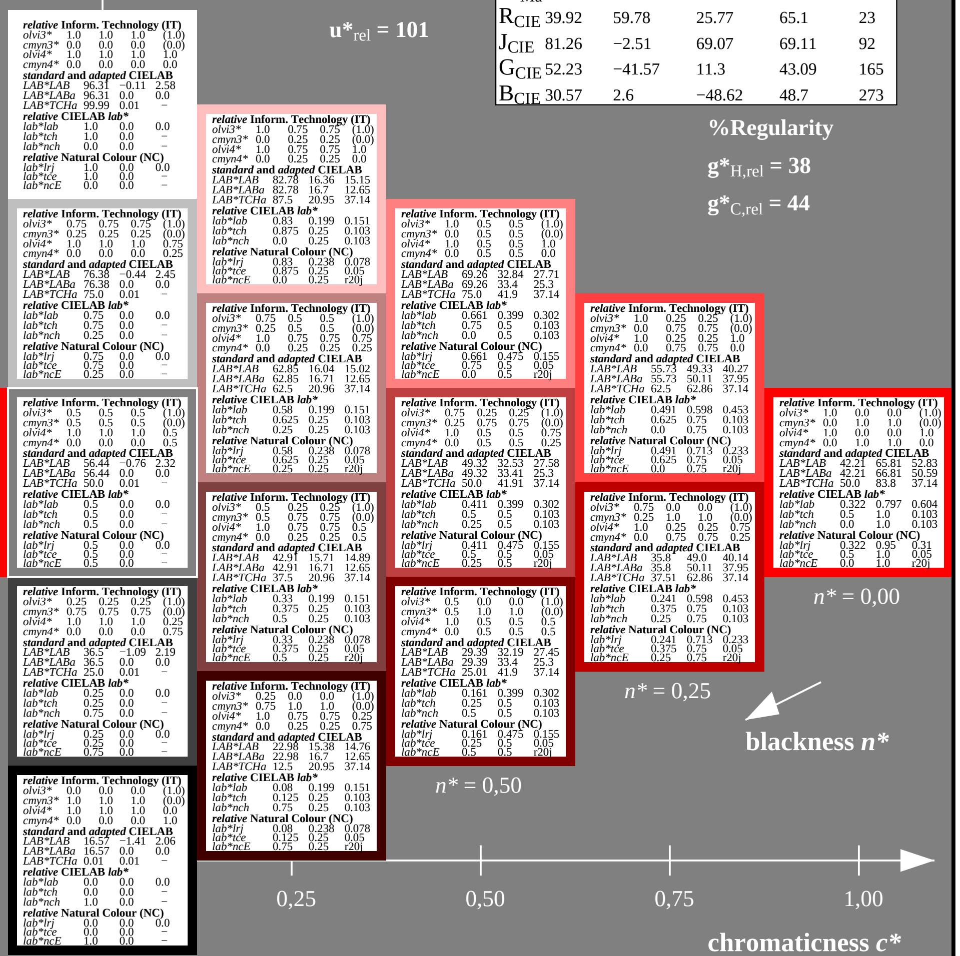
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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

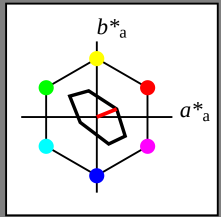
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

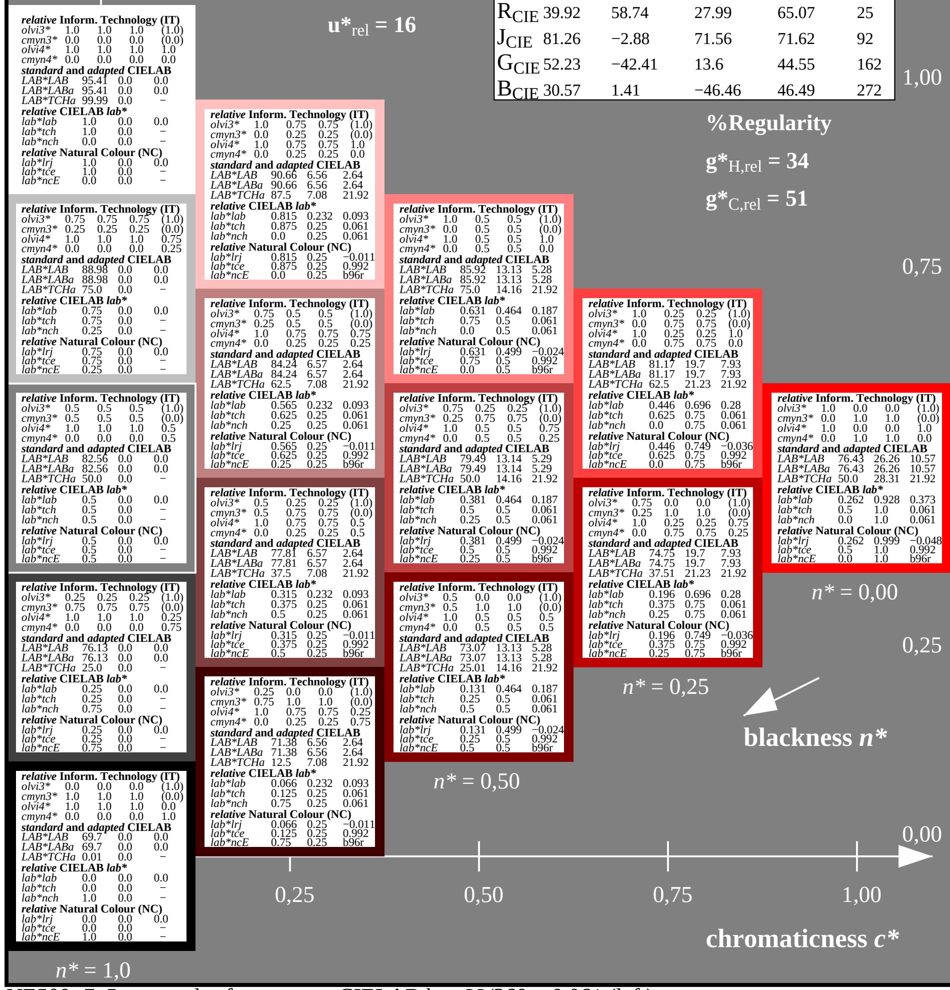
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

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

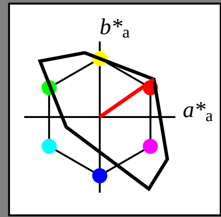
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 118

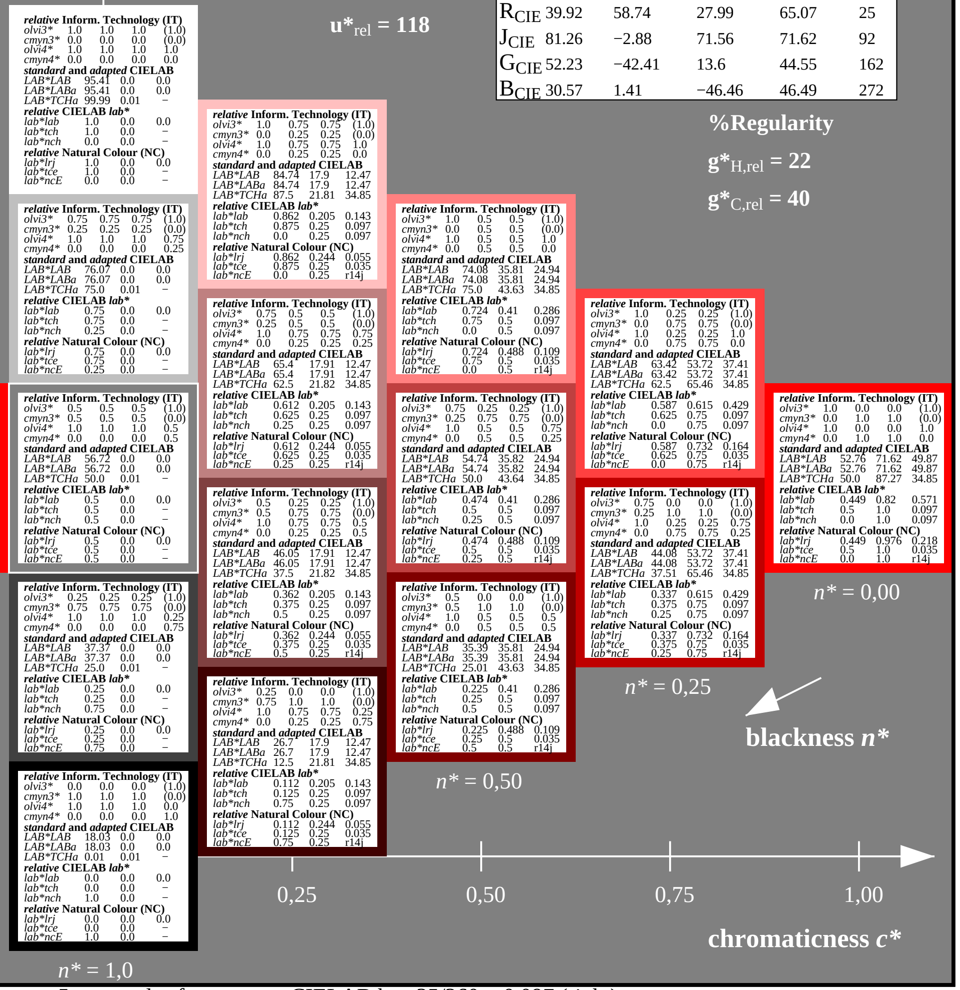
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



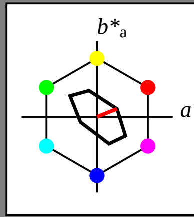
NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

triangle lightness *t**



%Gamut

u^*_{rel} = 16

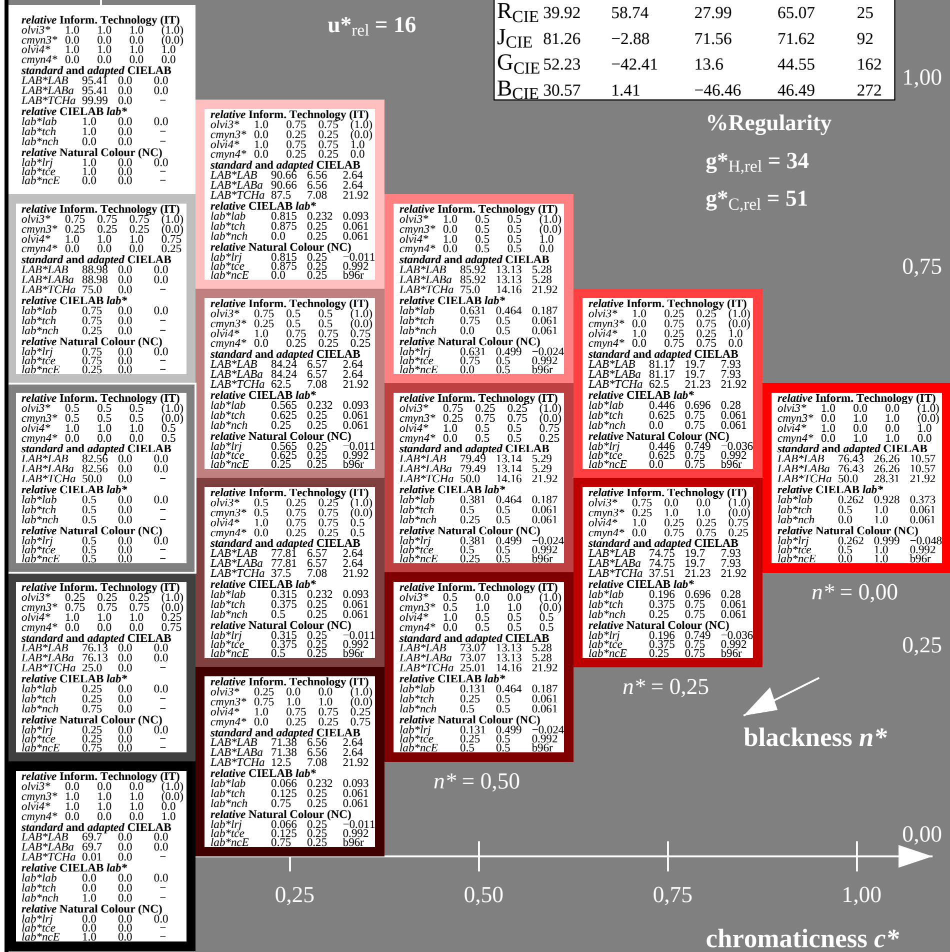
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

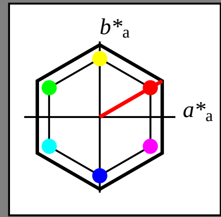
$g^*_{C,rel}$ = 51



Output: Colorimetric Natural Luminous System NLS00
for hue *h** = *lab*h* = *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

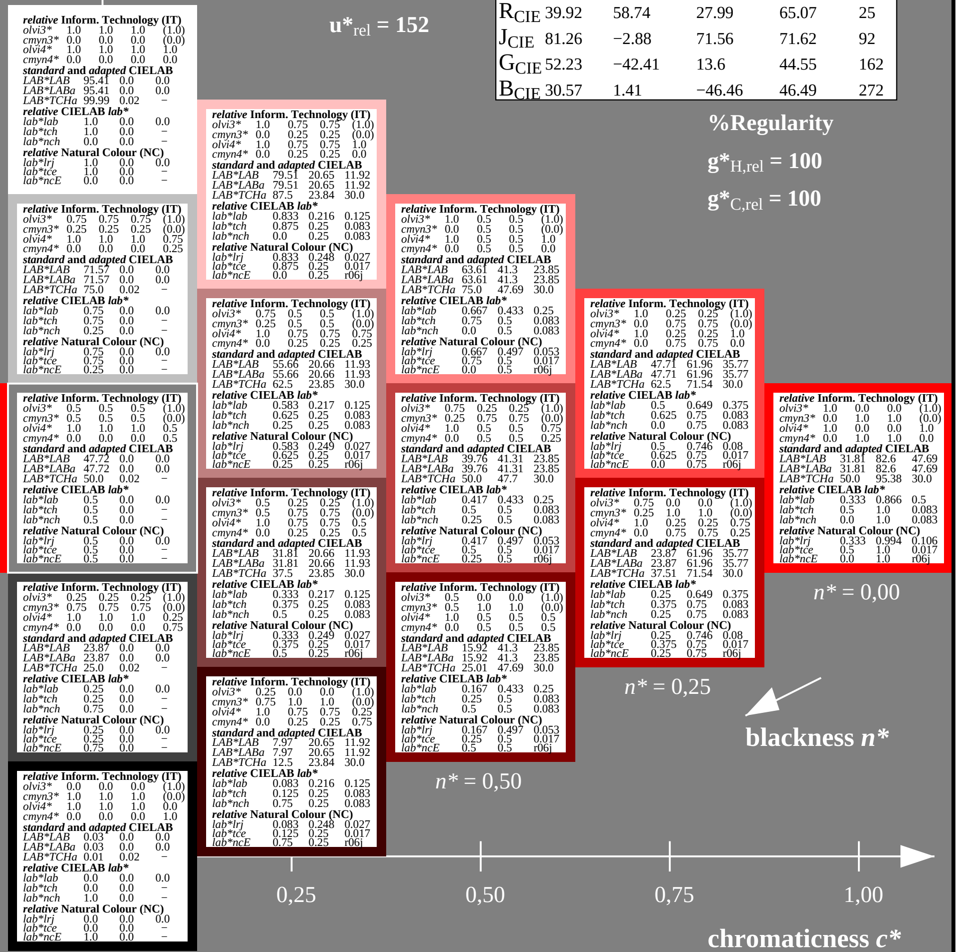
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

Input: Colorimetric Television Luminous System TLS70

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

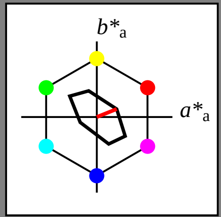
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

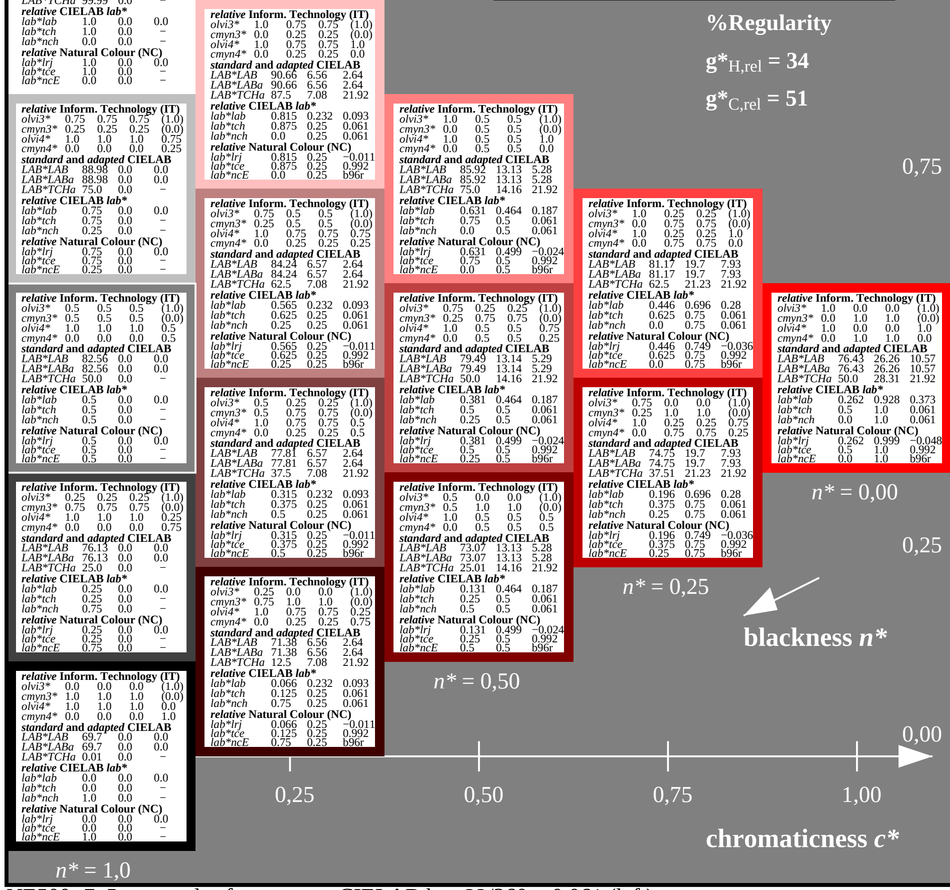
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

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

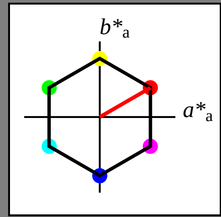
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 44 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

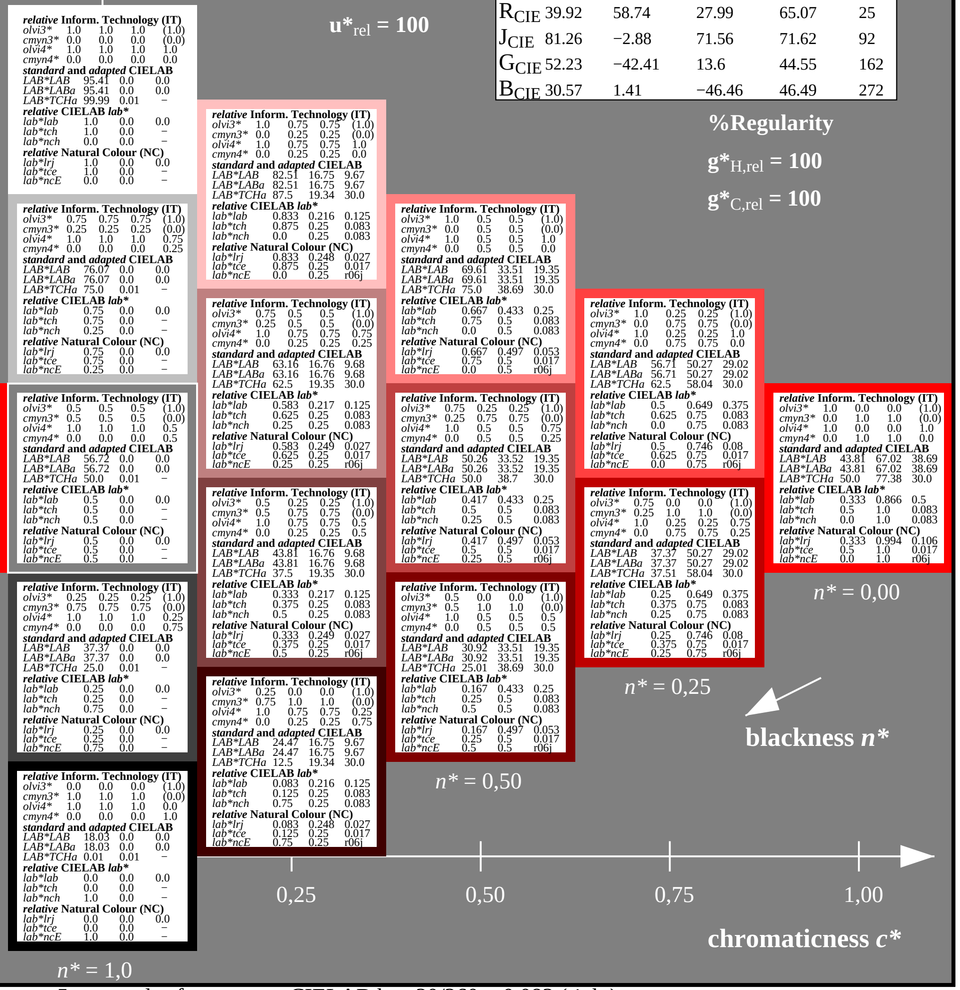
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

Input: Colorimetric Television Luminous System TLS70

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

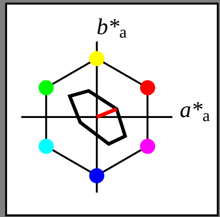
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

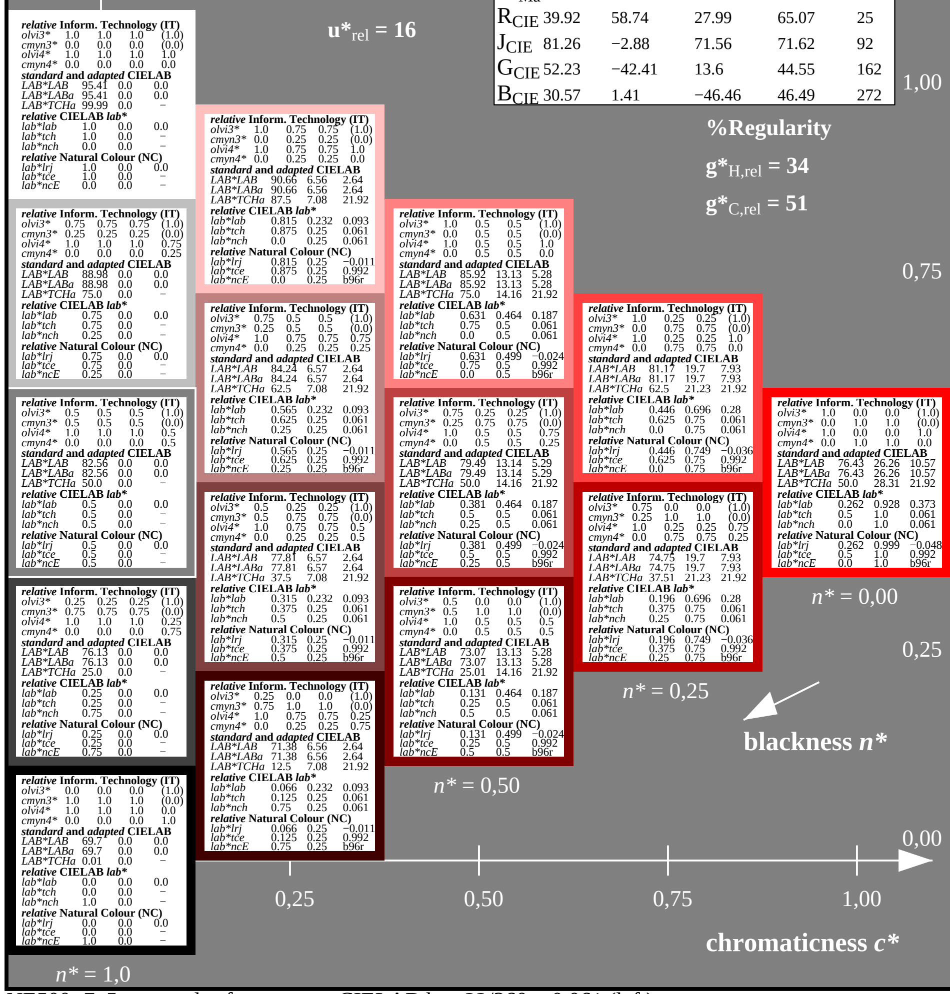
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

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

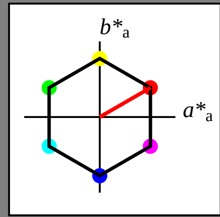
*lab*tch* and *lab*nch*

D65: hue O

LCH*Ma: 57 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

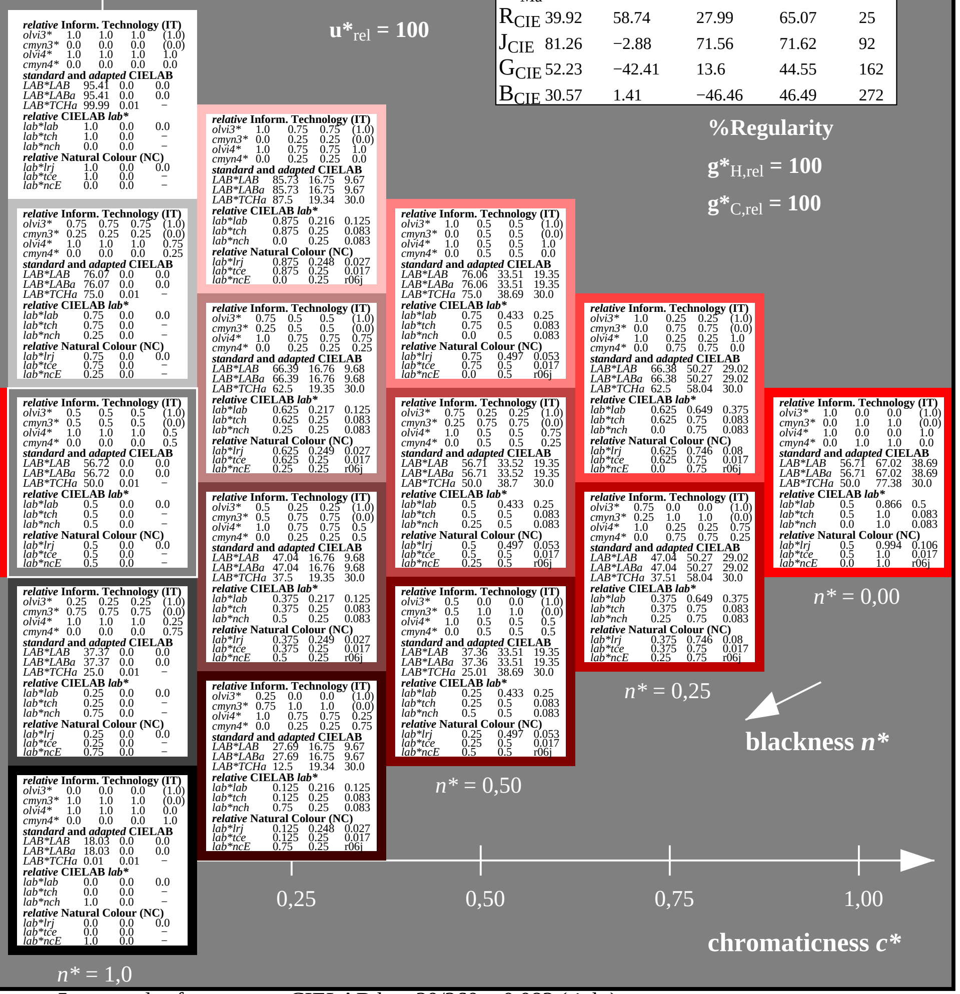
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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**

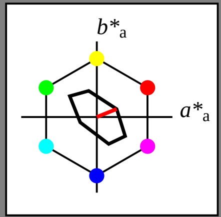
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

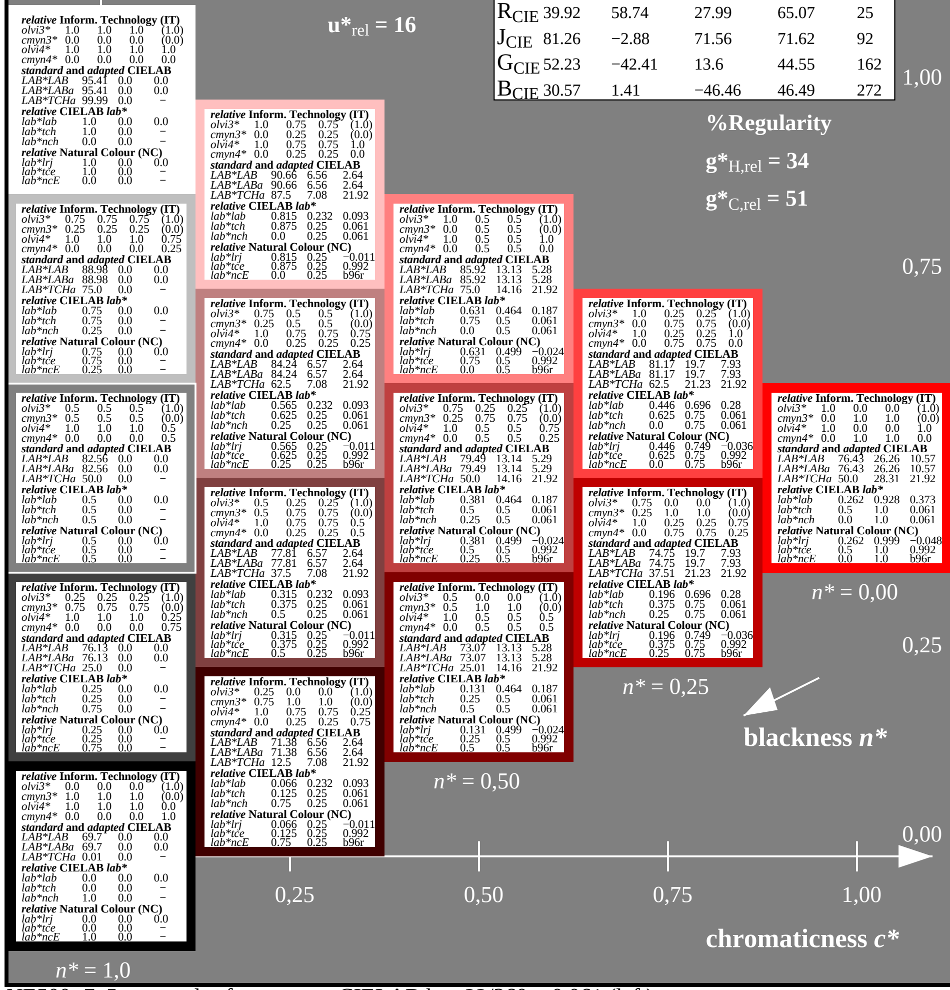
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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**

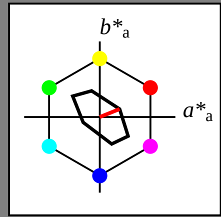
lab*tch* and *lab*nch

D65: hue O

LCH*Ma: 76 28 22

olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

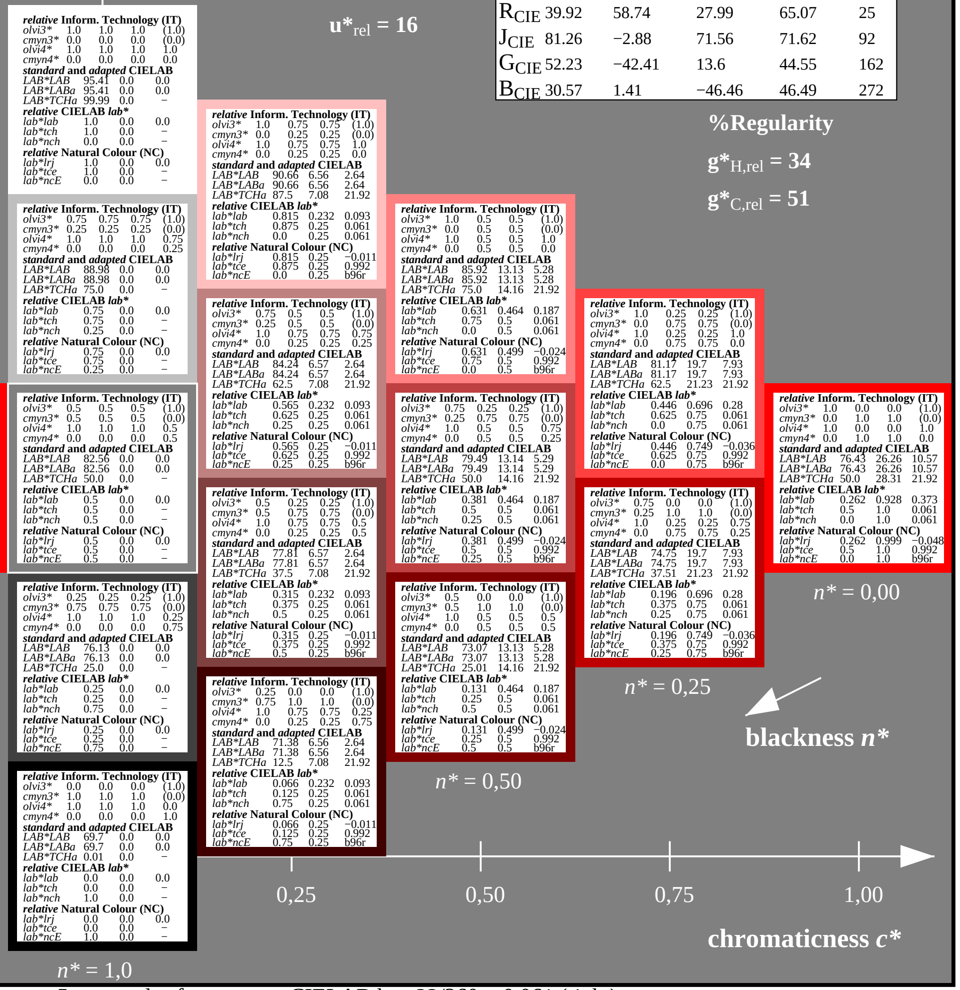
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Offset Reflective System ORS18

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

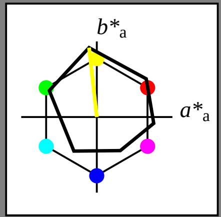
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

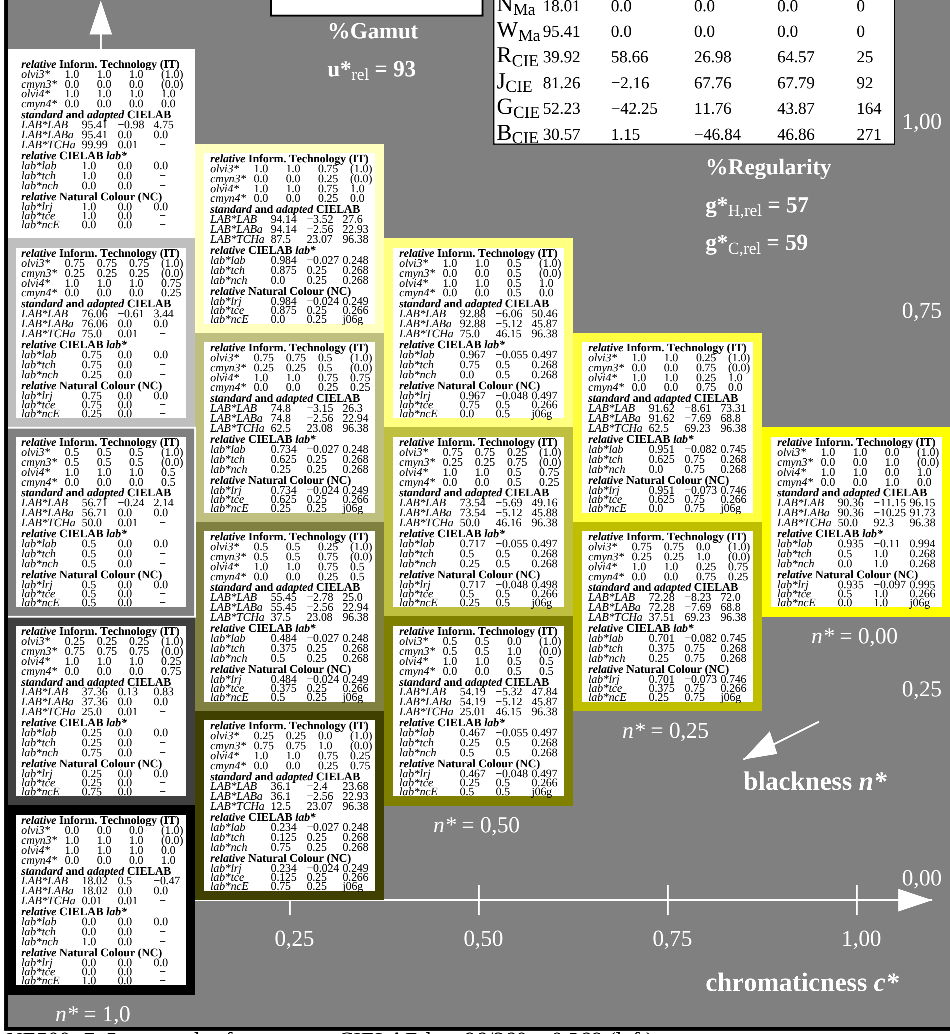
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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 Offset Reflective System ORS18

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

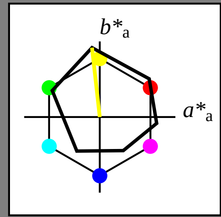
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

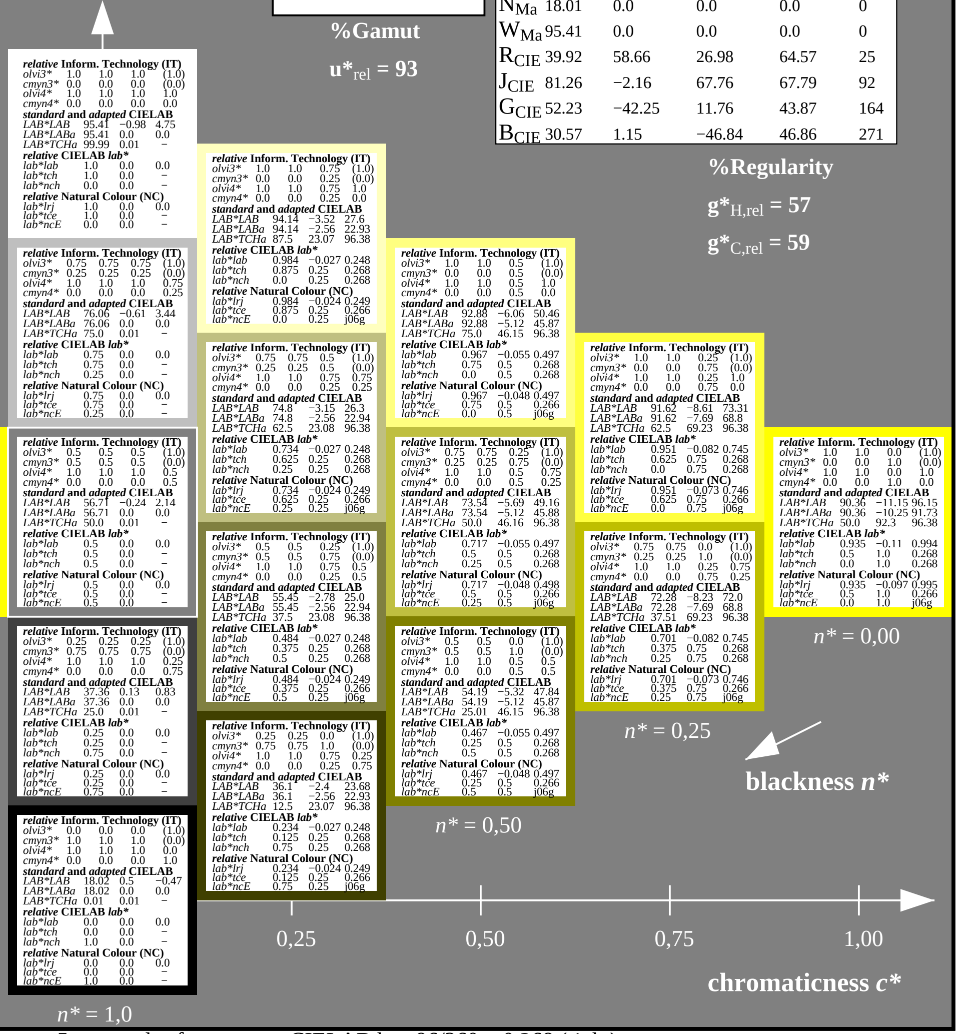
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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



NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

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

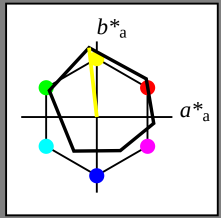
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

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

Step scales, left (ORS18)

$c^* = 0$, $n^* = 0.0$

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	−0.98	4.75	
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	–	

$c^* = 0$, $n^* = 0.25$

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	76.06	−0.61	3.44	
LAB*LABa	76.06	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	–	

$c^* = 0$, $n^* = 0.5$

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	56.71	−0.24	2.14	
LAB*LABa	56.71	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	–	

$c^* = 0$, $n^* = 0.75$

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	37.36	0.13	0.83	
LAB*LABa	37.36	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	–	

$c^* = 0$, $n^* = 1.0$

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	18.02	0.5	−0.47	
LAB*LABa	18.02	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	–	

$c^* = 0.25$, $n^* = 0.0$

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	94.14	−3.52	27.6	
LAB*LABa	94.14	−2.56	22.93	
LAB*TCHa	87.5	23.07	96.38	
relative CIELAB lab*				
lab*lab	0.984	−0.027	0.248	
lab*tch	0.875	0.25	0.268	
lab*nch	0.0	0.25	0.268	
relative Natural Colour (NC)				
lab*lrj	0.984	−0.024	0.249	
lab*tce	0.875	0.25	0.266	
lab*ncE	0.0	0.25	j06g	

$c^* = 0.25$, $n^* = 0.25$

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	74.8	−3.15	26.3	
LAB*LABa	74.8	−2.56	22.94	
LAB*TCHa	62.5	23.08	96.38	
relative CIELAB lab*				
lab*lab	0.734	−0.027	0.248	
lab*tch	0.625	0.25	0.268	
lab*nch	0.25	0.25	0.268	
relative Natural Colour (NC)				
lab*lrj	0.734	−0.024	0.249	
lab*tce	0.625	0.25	0.266	
lab*ncE	0.25	0.25	j06g	

$c^* = 0.25$, $n^* = 0.5$

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	55.45	−2.78	25.0	
LAB*LABa	55.45	−2.56	22.94	
LAB*TCHa	37.5	23.08	96.38	
relative CIELAB lab*				
lab*lab	0.484	−0.027	0.248	
lab*tch	0.375	0.25	0.268	
lab*nch	0.5	0.25	0.268	
relative Natural Colour (NC)				
lab*lrj	0.484	−0.024	0.249	
lab*tce	0.375	0.25	0.266	
lab*ncE	0.5	0.25	j06g	

$c^* = 0.25$, $n^* = 0.75$

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	36.1	−2.4	23.68	
LAB*LABa	36.1	−2.56	22.93	
LAB*TCHa	12.5	23.07	96.38	
relative CIELAB lab*				
lab*lab	0.234	−0.027	0.248	
lab*tch	0.125	0.25	0.268	
lab*nch	0.75	0.25	0.268	
relative Natural Colour (NC)				
lab*lrj	0.234	−0.024	0.249	
lab*tce	0.125	0.25	0.266	
lab*ncE	0.75	0.25	j06g	

$c^* = 0.5$, $n^* = 0.0$

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	92.88	−6.06	50.46	
LAB*LABa	92.88	−5.12	45.87	
LAB*TCHa	75.0	46.15	96.38	
relative CIELAB lab*				
lab*lab	0.967	−0.055	0.497	
lab*tch	0.75	0.5	0.268	
lab*nch	0.0	0.5	0.268	
relative Natural Colour (NC)				
lab*lrj	0.967	−0.048	0.497	
lab*tce	0.75	0.5	0.266	
lab*ncE	0.0	0.5	j06g	

$c^* = 0.5$, $n^* = 0.25$

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	73.54	−5.69	49.16	
LAB*LABa	73.54	−5.12	45.88	
LAB*TCHa	50.0	46.16	96.38	
relative CIELAB lab*				
lab*lab	0.717	−0.055	0.497	
lab*tch	0.5	0.5	0.268	
lab*nch	0.25	0.5	0.268	
relative Natural Colour (NC)				
lab*lrj	0.717	−0.048	0.498	
lab*tce	0.5	0.5	0.266	
lab*ncE	0.25	0.5	j06g	

$c^* = 0.5$, $n^* = 0.5$

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	54.19	−5.32	47.84	
LAB*LABa	54.19	−5.12	45.87	
LAB*TCHa	25.01	46.15	96.38	
relative CIELAB lab*				
lab*lab	0.467	−0.055	0.497	
lab*tch	0.25	0.5	0.268	
lab*nch	0.5	0.5	0.268	
relative Natural Colour (NC)				
lab*lrj	0.467	−0.048	0.497	
lab*tce	0.25	0.5	0.266	
lab*ncE	0.5	0.5	j06g	

$c^* = 0.75$, $n^* = 0.0$

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	91.62	−8.61	73.31	
LAB*LABa	91.62	−7.69	68.8	
LAB*TCHa	62.5	69.23	96.38	
relative CIELAB lab*				
lab*lab	0.951	−0.082	0.745	
lab*tch	0.625	0.75	0.268	
lab*nch	0.0	0.75	0.268	
relative Natural Colour (NC)				
lab*lrj	0.951	−0.073	0.746	
lab*tce	0.625	0.75	0.266	
lab*ncE	0.0	0.75	j06g	

$c^* = 0.75$, $n^* = 0.25$

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	72.28	−8.23	72.0	
LAB*LABa	72.28	−7.69	68.8	
LAB*TCHa	37.51	69.23	96.38	
relative CIELAB lab*				
lab*lab	0.701	−0.082	0.745	
lab*tch	0.375	0.75	0.268	
lab*nch	0.25	0.75	0.268	
relative Natural Colour (NC)				
lab*lrj	0.701	−0.073	0.746	
lab*tce	0.375	0.75	0.266	
lab*ncE	0.25	0.75	j06g	

$c^* = 1.0$, $n^* = 0.0$

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	1.0
cmyn4*	0.0	0.0	1.0	0.0
standard and adapted CIELAB				
LAB*LAB	90.36	−11.15	96.15	
LAB*LABa	90.36	−10.25	91.73	
LAB*TCHa	50.0	92.3	96.38	
relative CIELAB lab*				
lab*lab	0.935	−0.11	0.994	
lab*tch	0.5	1.0	0.268	
lab*nch	0.0	1.0	0.268	
relative Natural Colour (NC)				
lab*lrj	0.935	−0.097	0.995	
lab*tce	0.5	1.0	0.266	
lab*ncE	0.0	1.0	j06g	

$n^* = 0{,}00$

$n^* = 0{,}25$

$n^* = 0{,}50$

$n^* = 1{,}0$

blackness n^*

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

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 103/360 = 0.286$

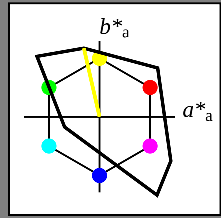
*lab*tch* and *lab*nch*

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

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

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

Step scales, right (TLS00)

$c^* = 0$, $n^* = 0.0$

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	–	

$c^* = 0$, $n^* = 0.25$

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	–	

$c^* = 0$, $n^* = 0.5$

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	–	

$c^* = 0$, $n^* = 0.75$

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	–	

$c^* = 0$, $n^* = 1.0$

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	–	

$c^* = 0.25$, $n^* = 0.0$

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	

$c^* = 0.25$, $n^* = 0.25$

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	

$c^* = 0.25$, $n^* = 0.5$

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	

$c^* = 0.25$, $n^* = 0.75$

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	

$c^* = 0.5$, $n^* = 0.0$

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	

$c^* = 0.5$, $n^* = 0.25$

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	

$c^* = 0.5$, $n^* = 0.5$

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	

$c^* = 0.75$, $n^* = 0.0$

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	

$c^* = 0.75$, $n^* = 0.25$

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	

$c^* = 1.0$, $n^* = 0.0$

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	1.0
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	

$n^* = 0{,}00$

$n^* = 0{,}25$

$n^* = 0{,}50$

$n^* = 1{,}0$

blackness n^*

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

chromaticness c^*

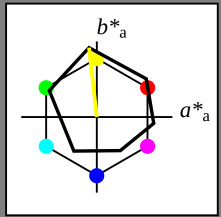
NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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^*

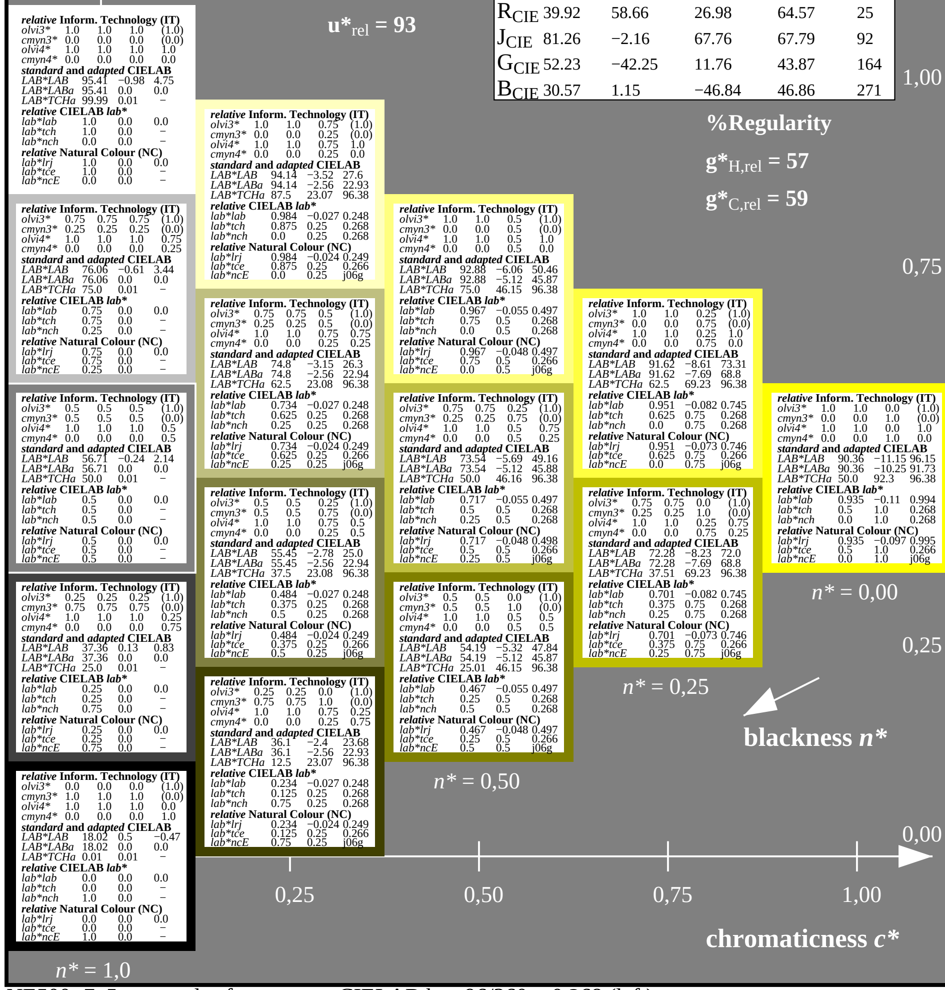


%Gamut
$u^*_{rel} = 93$

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

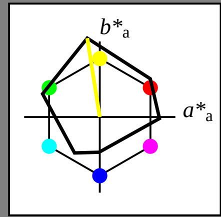
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



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^*

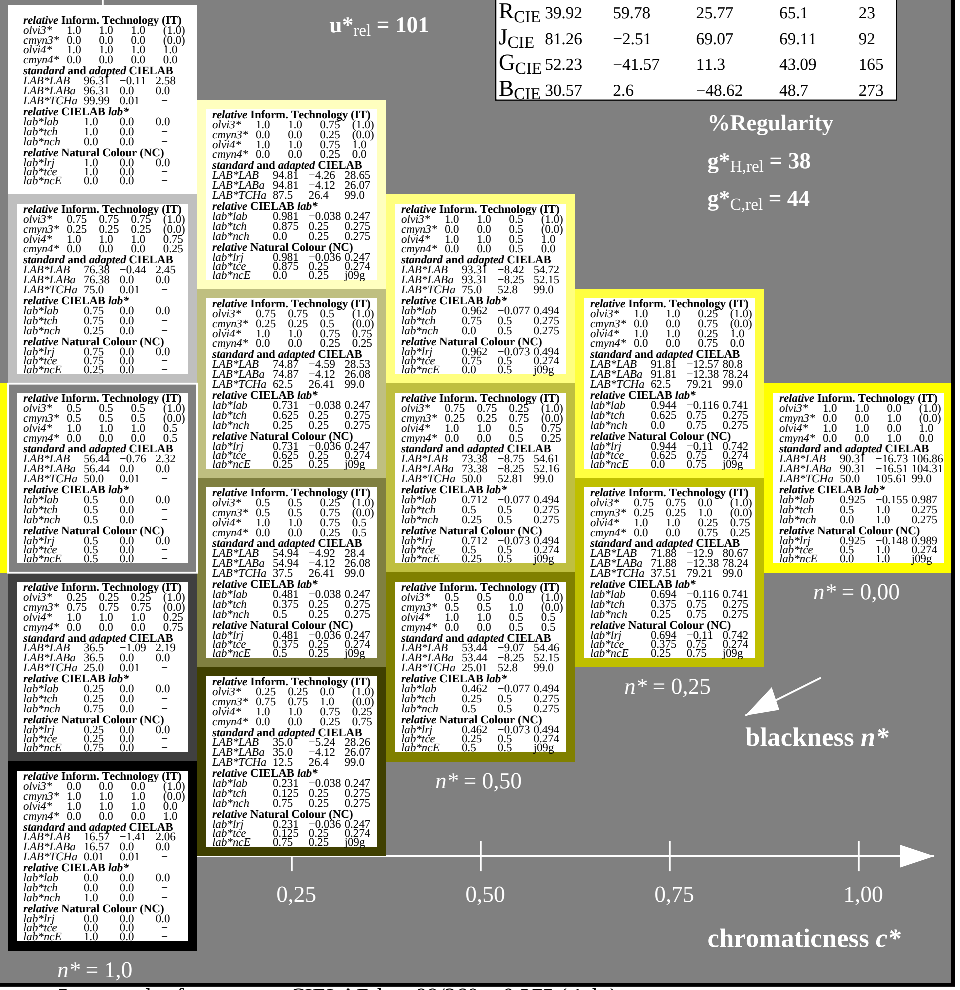


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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 $h^* = lab^*h = 96/360 = 0.268$

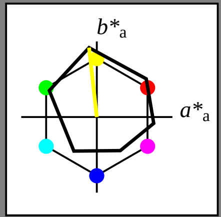
lab*tch* and *lab*nch

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

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

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

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 TLS18

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

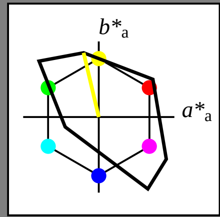
lab*tch* and *lab*nch

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

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

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

$n^* = 0{,}00$

$n^* = 0{,}25$

$n^* = 0{,}50$

$n^* = 1{,}0$

blackness n^*

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

chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left) 5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Offset Reflective System ORS18

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

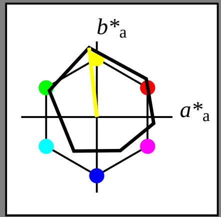
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

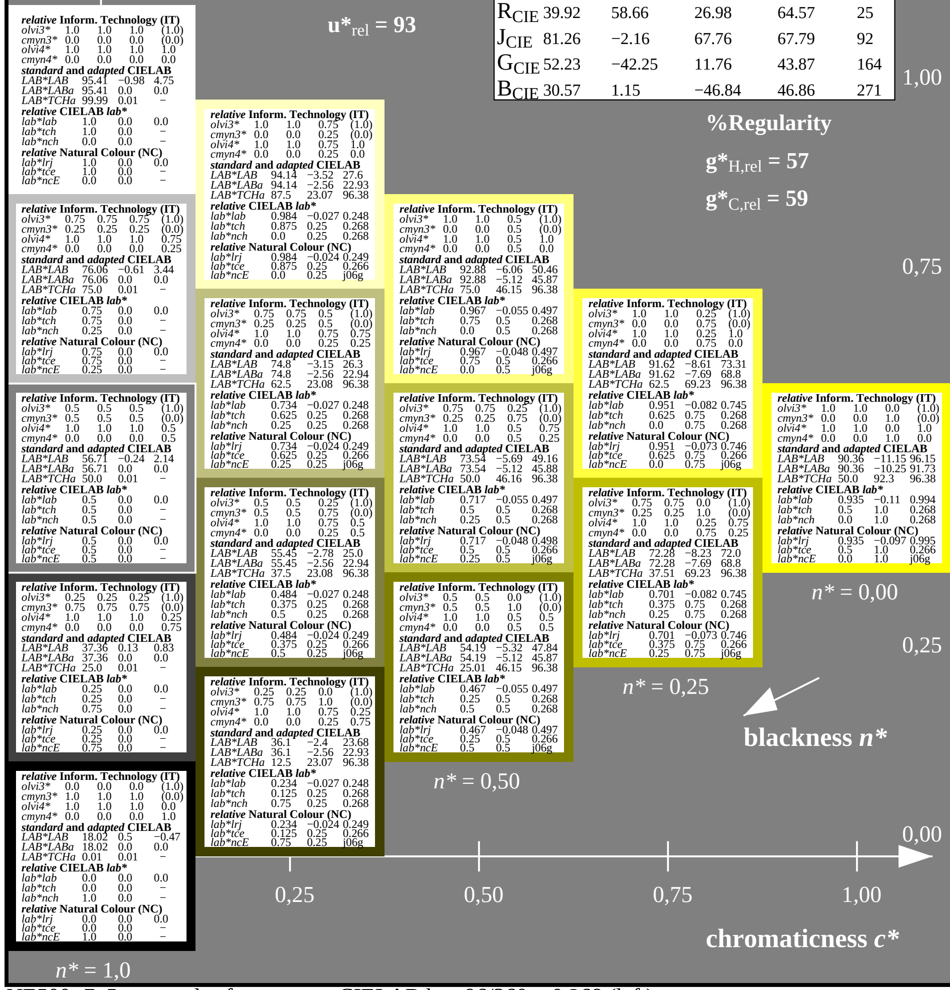
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Natural Luminous System NLS00

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

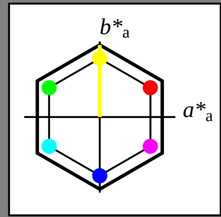
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

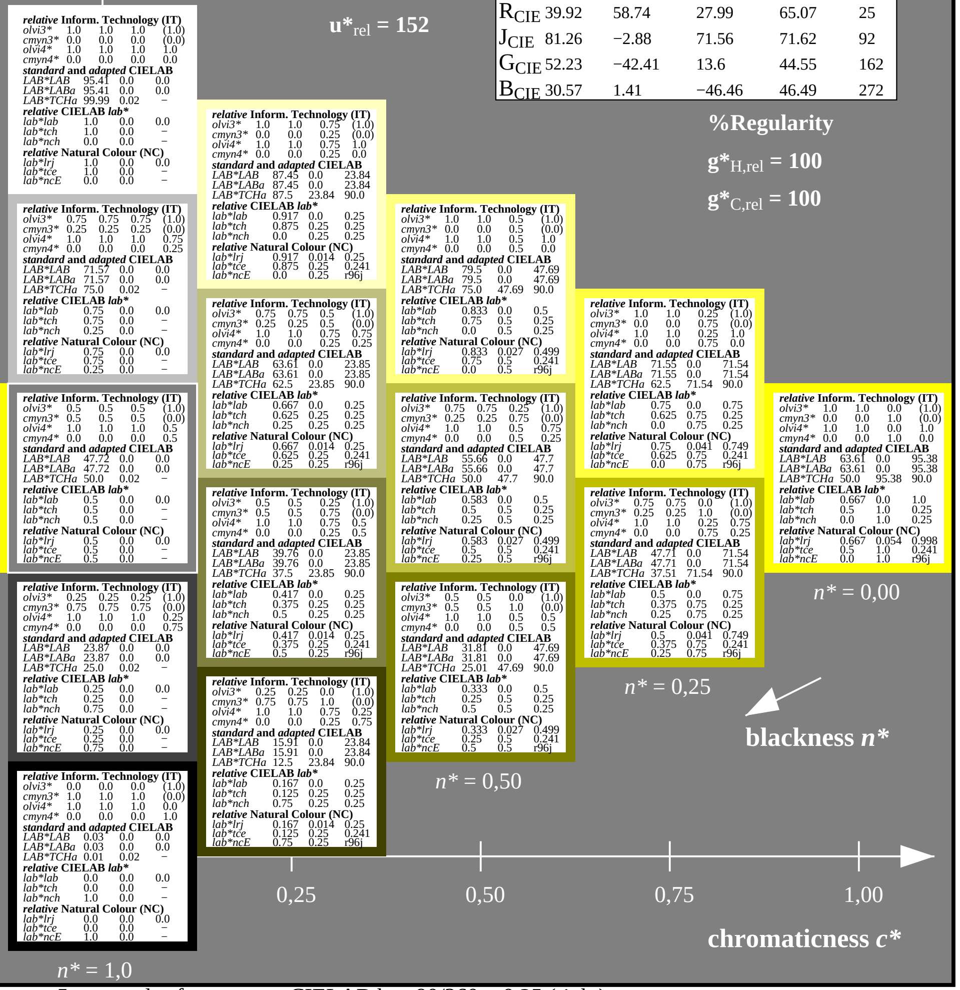
$u^*_{rel} = 152$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

Input: Colorimetric Offset Reflective System ORS18

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

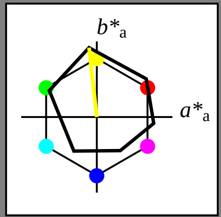
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

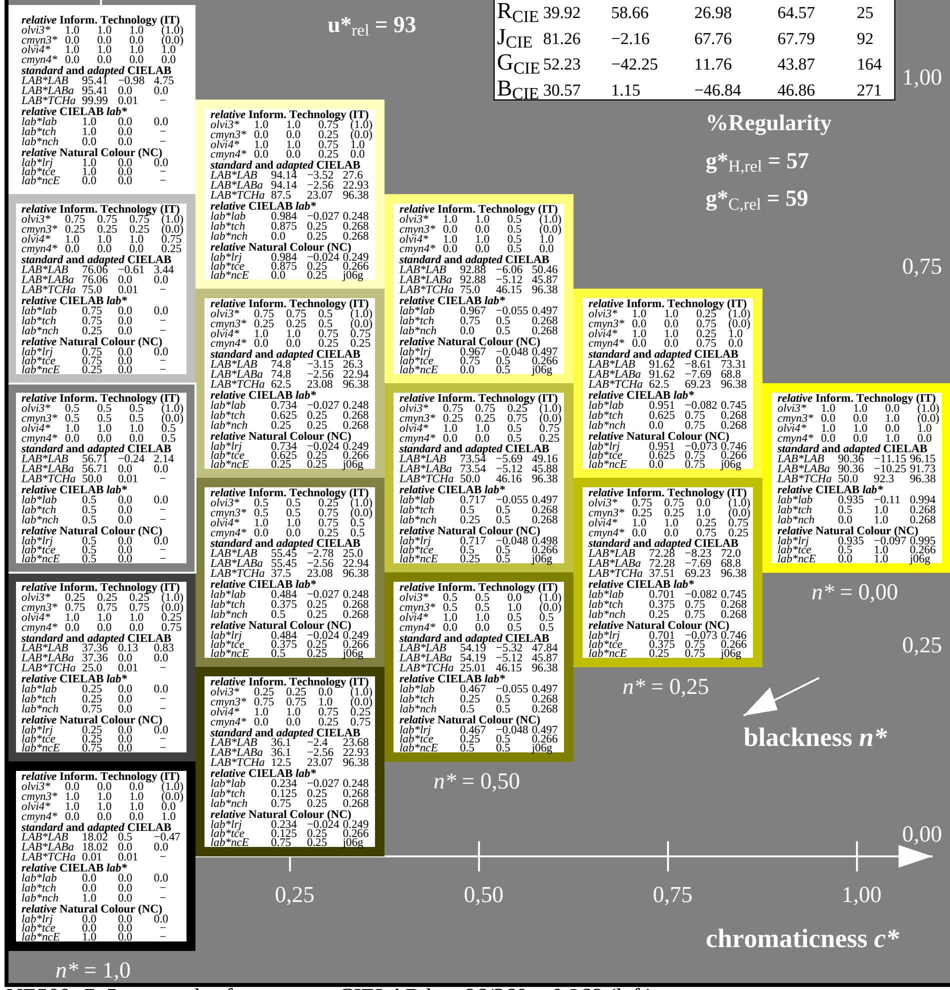
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Natural Reflective System NRS18

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

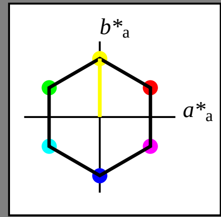
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

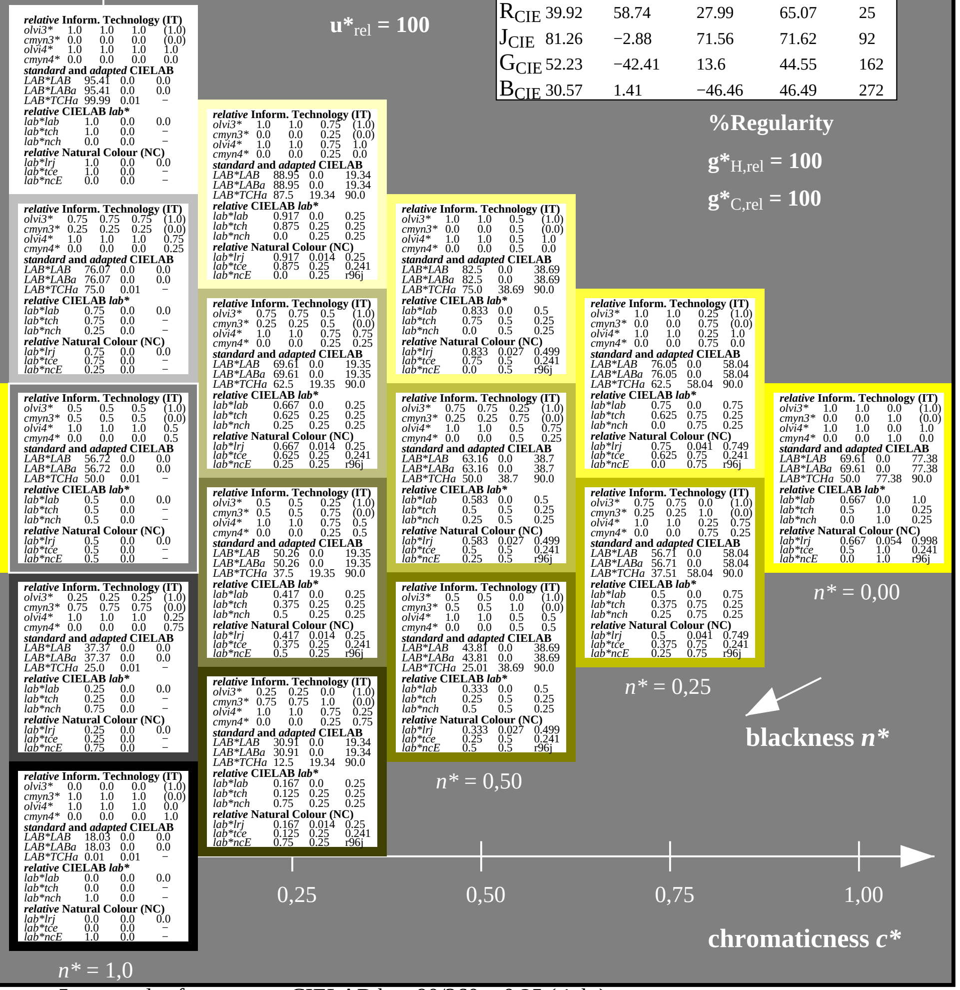
$u^*_{rel} = 100$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

Input: Colorimetric Offset Reflective System ORS18

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

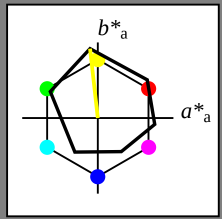
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

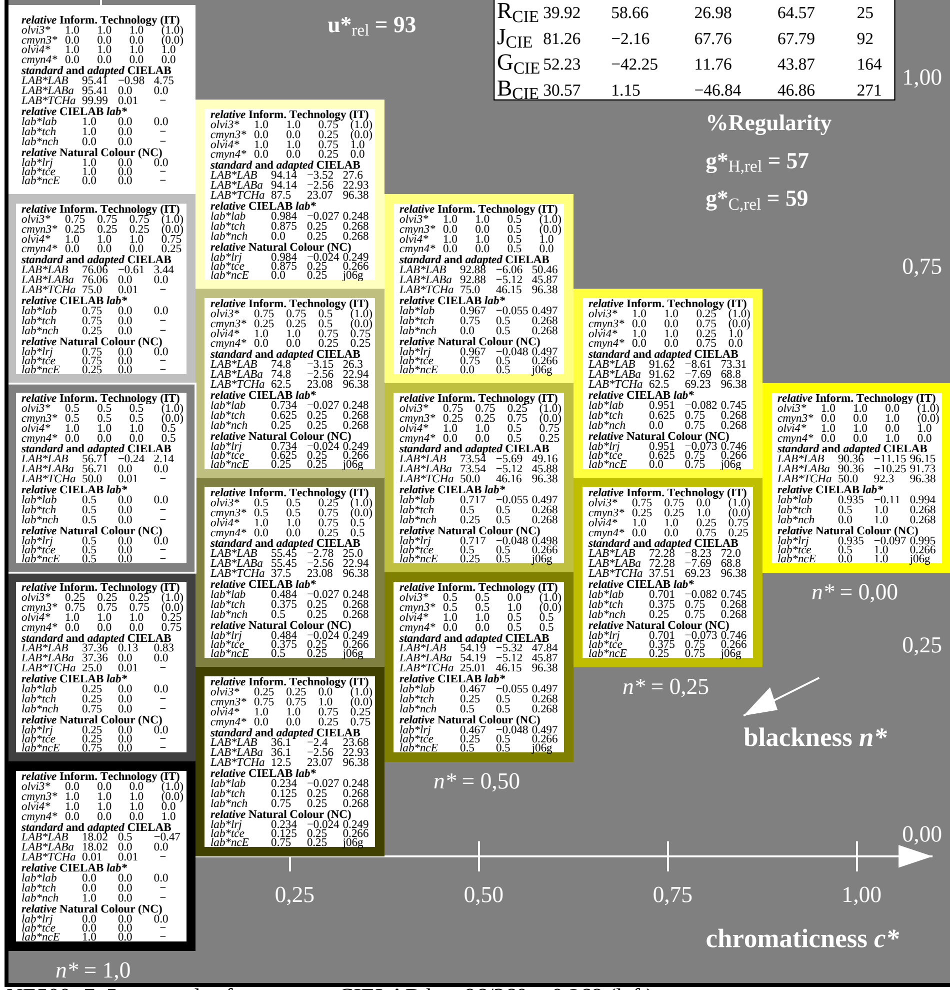
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Standard Reflective System SRS18

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

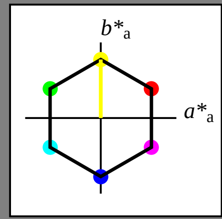
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

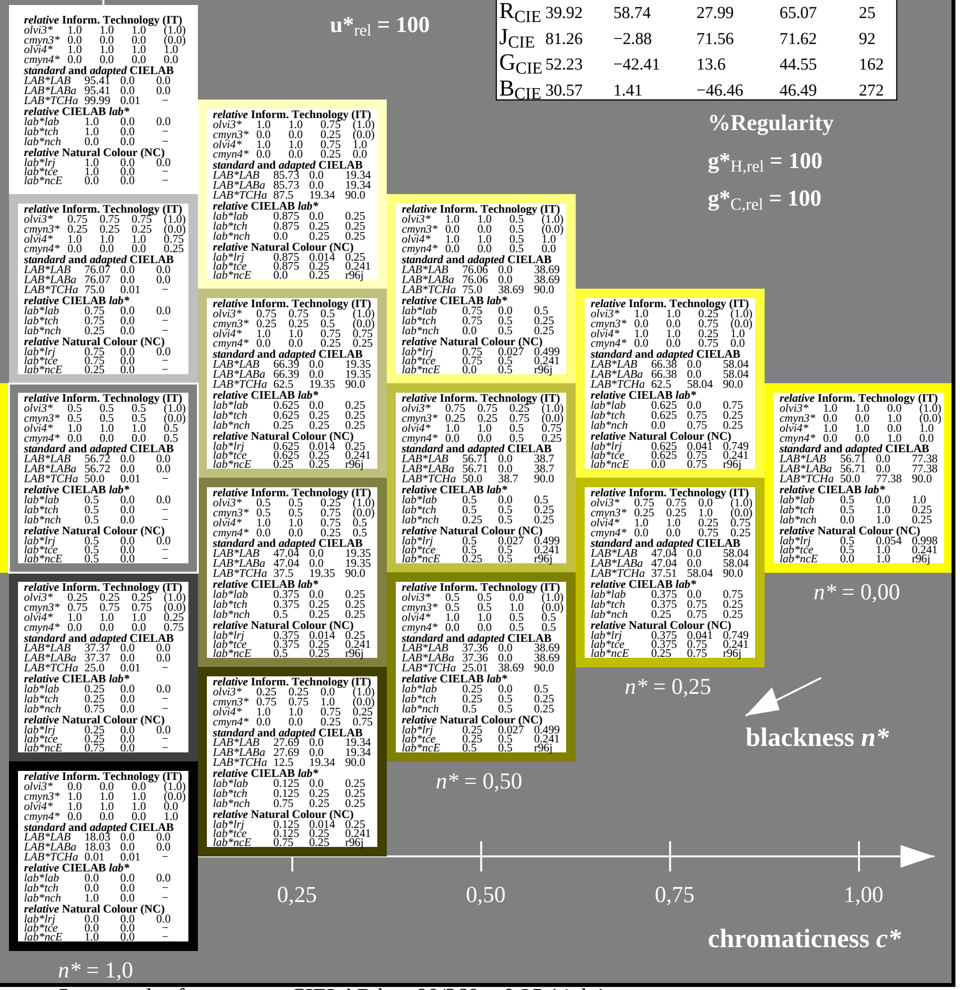
$u^*_{rel} = 100$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

Input: Colorimetric Offset Reflective System ORS18

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

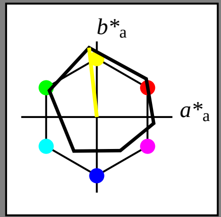
*lab*tch and lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

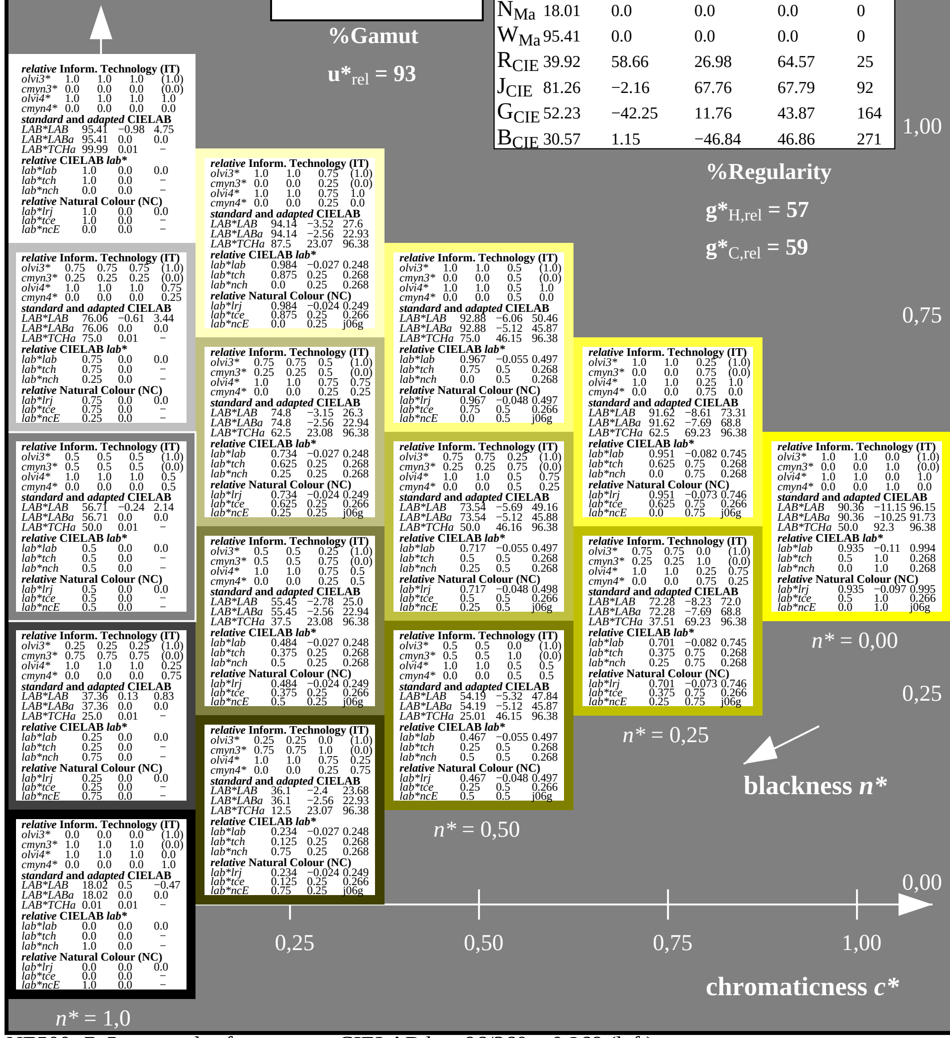
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$

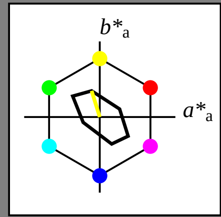
*lab*tch and lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

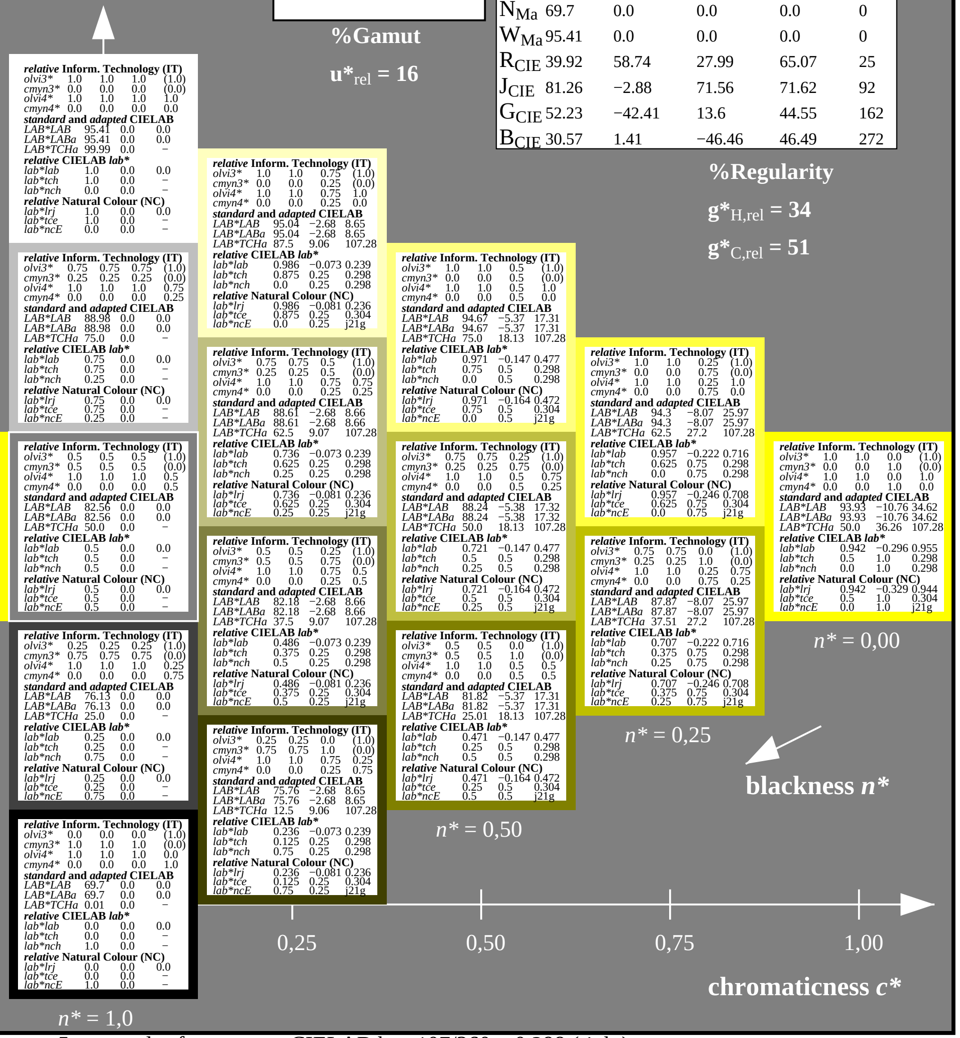
$u^*_{rel} = 16$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

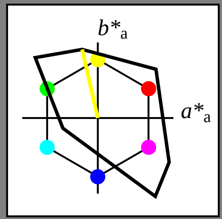
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

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

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 1.0
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

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

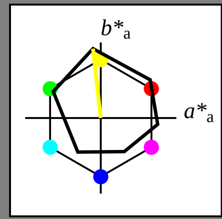
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

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

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 −0.98 4.75
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 76.06 −0.61 3.44
LAB*LABa 76.06 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 56.71 −0.24 2.14
LAB*LABa 56.71 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 37.36 0.13 0.83
LAB*LABa 37.36 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 18.02 0.5 −0.47
LAB*LABa 18.02 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 94.14 −3.52 27.6
LAB*LABa 94.14 −2.56 22.93
LAB*TCHa 87.5 23.07 96.38
relative CIELAB lab*
lab*lab 0.984 −0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*lrj 0.984 −0.024 0.249
lab*tce 0.875 0.25 0.266
lab*ncE 0.0 0.25 j06g

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 74.8 −3.15 26.3
LAB*LABa 74.8 −2.56 22.94
LAB*TCHa 62.5 23.08 96.38
relative CIELAB lab*
lab*lab 0.734 −0.027 0.248
lab*tch 0.625 0.25 0.268
lab*nch 0.25 0.25 0.268
relative Natural Colour (NC)
lab*lrj 0.734 −0.024 0.249
lab*tce 0.625 0.25 0.266
lab*ncE 0.25 0.25 j06g

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 55.45 −2.78 25.0
LAB*LABa 55.45 −2.56 22.94
LAB*TCHa 37.5 23.08 96.38
relative CIELAB lab*
lab*lab 0.484 −0.027 0.248
lab*tch 0.375 0.25 0.268
lab*nch 0.5 0.25 0.268
relative Natural Colour (NC)
lab*lrj 0.484 −0.024 0.249
lab*tce 0.375 0.25 0.266
lab*ncE 0.5 0.25 j06g

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 36.1 −2.4 23.68
LAB*LABa 36.1 −2.56 22.93
LAB*TCHa 12.5 23.07 96.38
relative CIELAB lab*
lab*lab 0.234 −0.027 0.248
lab*tch 0.125 0.25 0.268
lab*nch 0.75 0.25 0.268
relative Natural Colour (NC)
lab*lrj 0.234 −0.024 0.249
lab*tce 0.125 0.25 0.266
lab*ncE 0.75 0.25 j06g

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 92.88 −6.06 50.46
LAB*LABa 92.88 −5.12 45.87
LAB*TCHa 75.0 46.15 96.38
relative CIELAB lab*
lab*lab 0.967 −0.055 0.497
lab*tch 0.75 0.5 0.268
lab*nch 0.0 0.5 0.268
relative Natural Colour (NC)
lab*lrj 0.967 −0.048 0.497
lab*tce 0.75 0.5 0.266
lab*ncE 0.0 0.5 j06g

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 73.54 −5.69 49.16
LAB*LABa 73.54 −5.12 45.88
LAB*TCHa 50.0 46.16 96.38
relative CIELAB lab*
lab*lab 0.717 −0.055 0.497
lab*tch 0.5 0.5 0.268
lab*nch 0.25 0.5 0.268
relative Natural Colour (NC)
lab*lrj 0.717 −0.048 0.498
lab*tce 0.5 0.5 0.266
lab*ncE 0.25 0.5 j06g

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 54.19 −5.32 47.84
LAB*LABa 54.19 −5.12 45.87
LAB*TCHa 25.01 46.15 96.38
relative CIELAB lab*
lab*lab 0.467 −0.055 0.497
lab*tch 0.25 0.5 0.268
lab*nch 0.5 0.5 0.268
relative Natural Colour (NC)
lab*lrj 0.467 −0.048 0.497
lab*tce 0.25 0.5 0.266
lab*ncE 0.5 0.5 j06g

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 91.62 −8.61 73.31
LAB*LABa 91.62 −7.69 68.8
LAB*TCHa 62.5 69.23 96.38
relative CIELAB lab*
lab*lab 0.951 −0.082 0.745
lab*tch 0.625 0.75 0.268
lab*nch 0.0 0.75 0.268
relative Natural Colour (NC)
lab*lrj 0.951 −0.073 0.746
lab*tce 0.625 0.75 0.266
lab*ncE 0.0 0.75 j06g

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 72.28 −8.23 72.0
LAB*LABa 72.28 −7.69 68.8
LAB*TCHa 37.51 69.23 96.38
relative CIELAB lab*
lab*lab 0.701 −0.082 0.745
lab*tch 0.375 0.75 0.268
lab*nch 0.25 0.75 0.268
relative Natural Colour (NC)
lab*lrj 0.701 −0.073 0.746
lab*tce 0.375 0.75 0.266
lab*ncE 0.25 0.75 j06g

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 1.0
cmyn4* 0.0 0.0 1.0 0.0
standard and adapted CIELAB
LAB*LAB 90.36 −11.15 96.15
LAB*LABa 90.36 −10.25 91.73
LAB*TCHa 50.0 92.3 96.38
relative CIELAB lab*
lab*lab 0.935 −0.11 0.994
lab*tch 0.5 1.0 0.268
lab*nch 0.0 1.0 0.268
relative Natural Colour (NC)
lab*lrj 0.935 −0.097 0.995
lab*tce 0.5 1.0 0.266
lab*ncE 0.0 1.0 j06g

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n*

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

chromaticness *c*

NE500−7, 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 $h^* = lab^*h = 103/360 = 0.286$

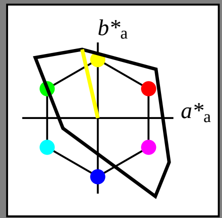
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

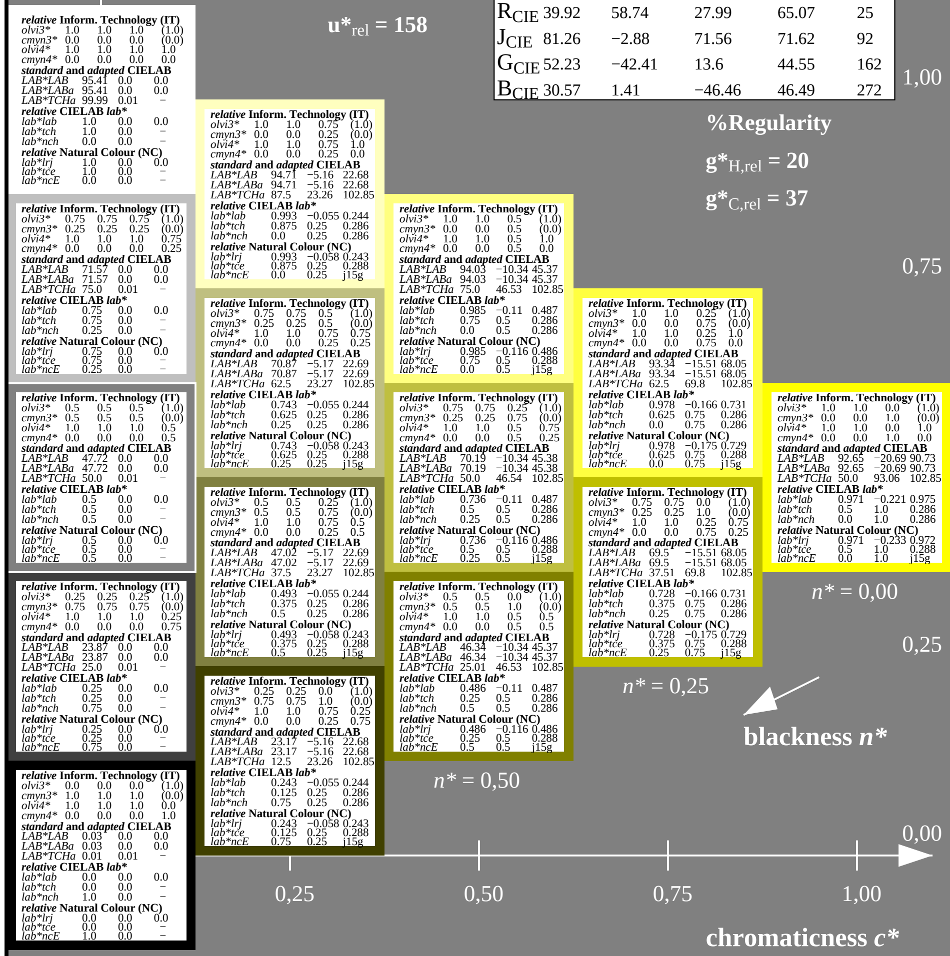
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Television Luminous System TLS00

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

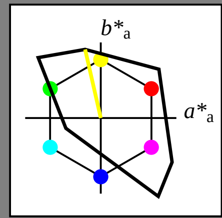
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

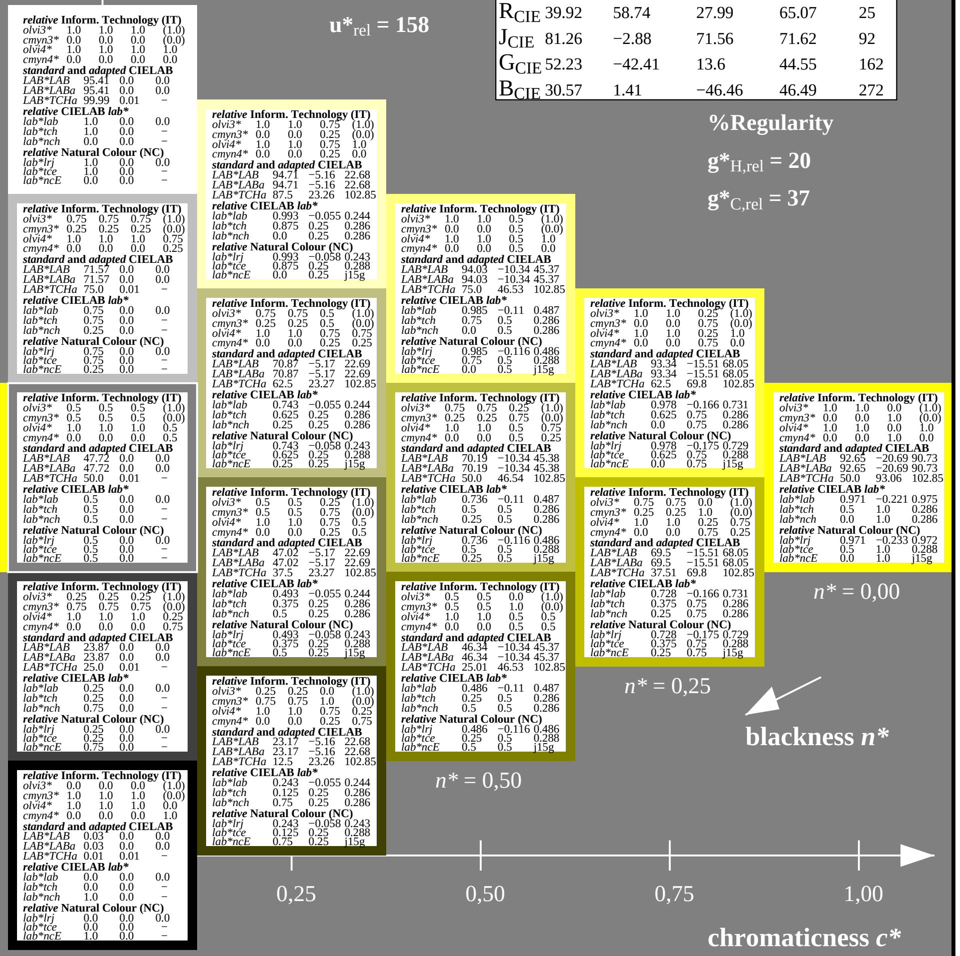
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS00

for hue *h = *lab*h* = 103/360 = 0.286**

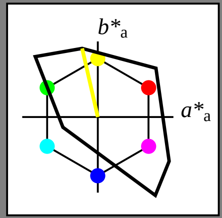
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

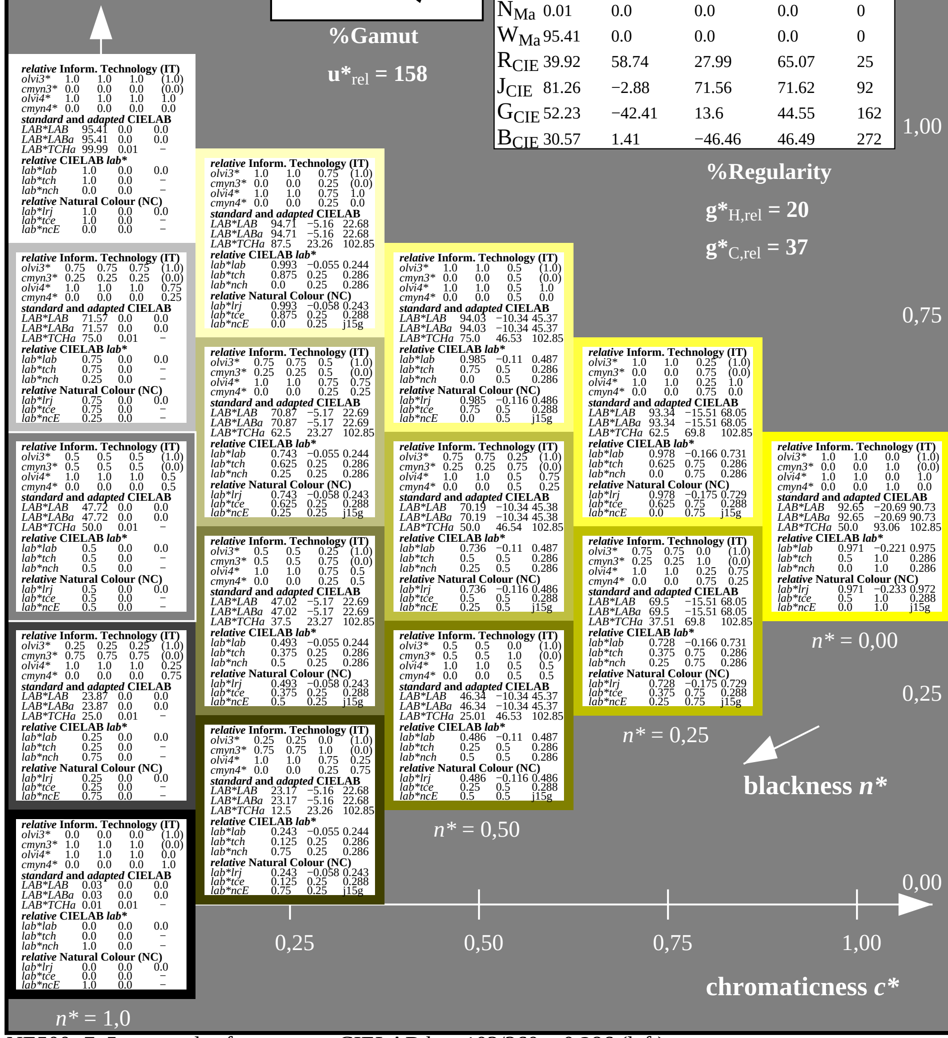
olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h = *lab*h* = 99/360 = 0.275**

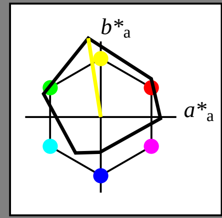
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 90 106 99

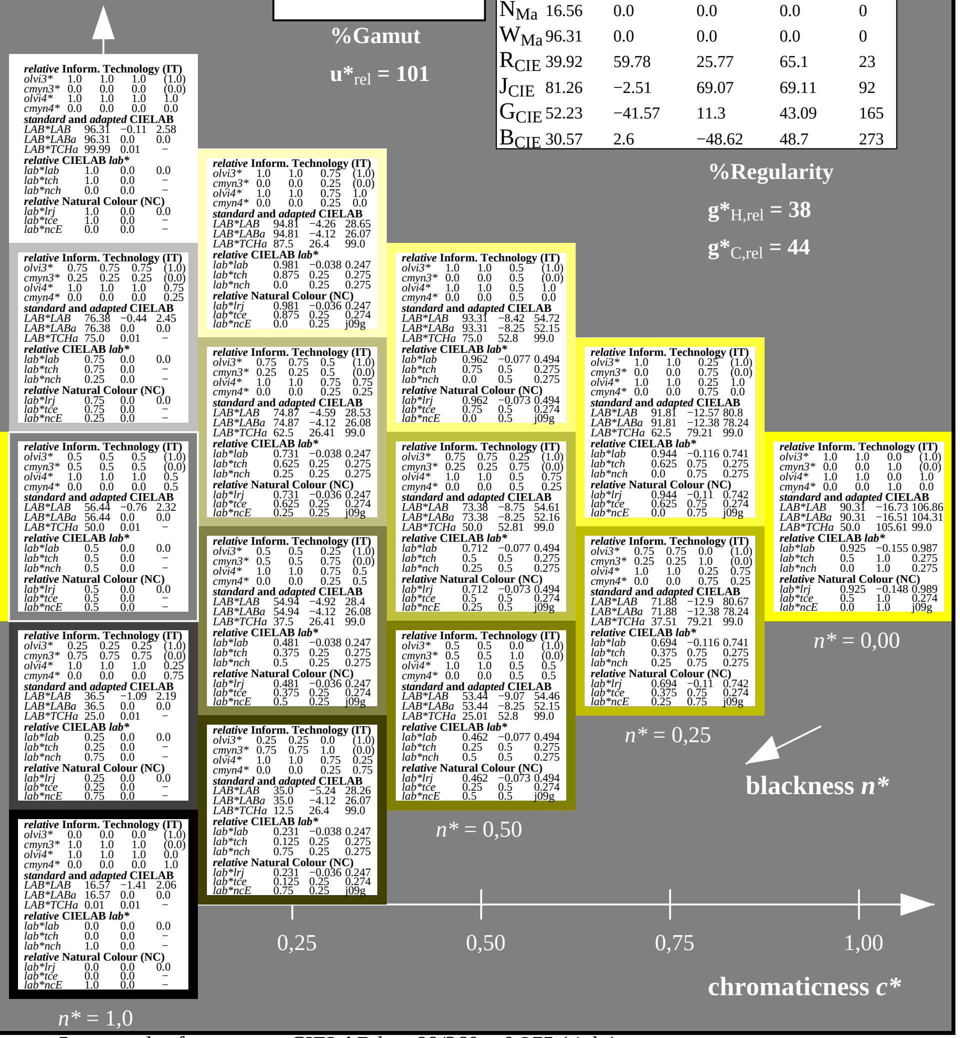
olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



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



NE500−7, 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 $h^* = lab^*h = 103/360 = 0.286$

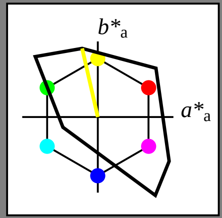
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

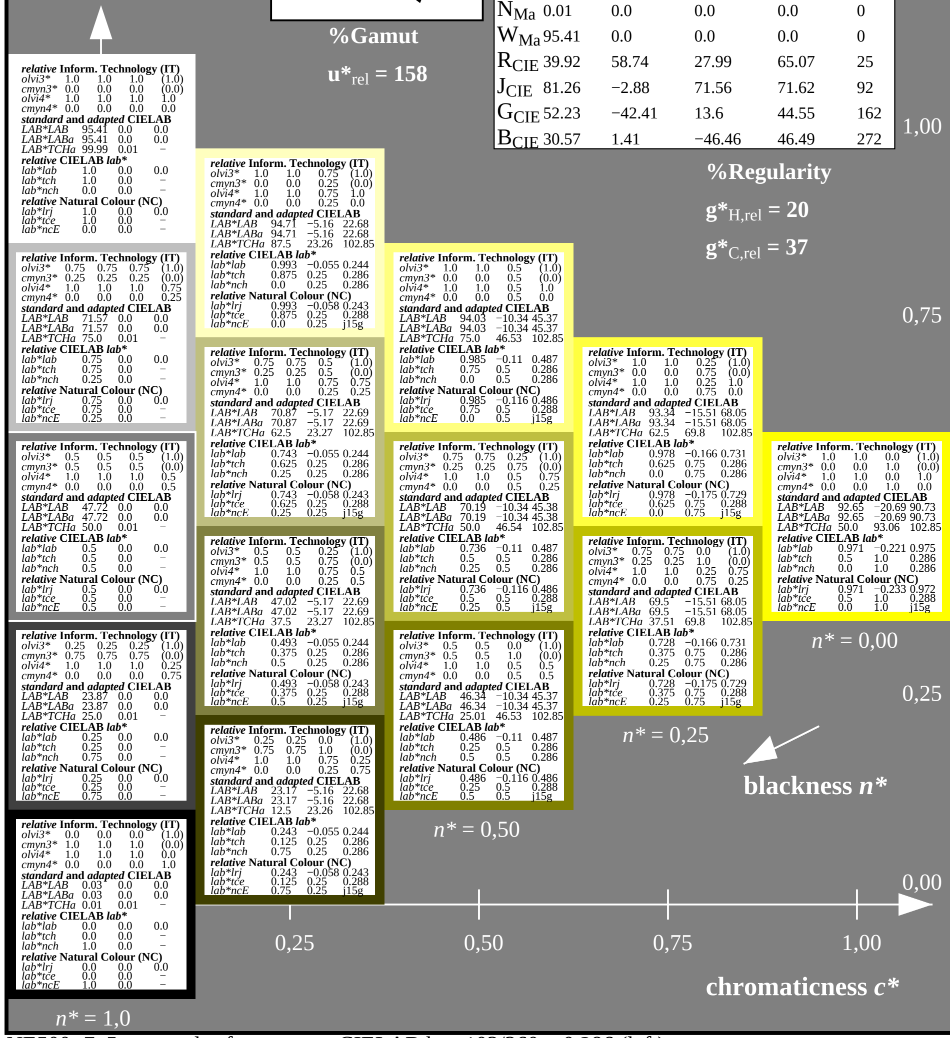
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 103/360 = 0.287$

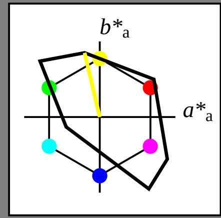
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

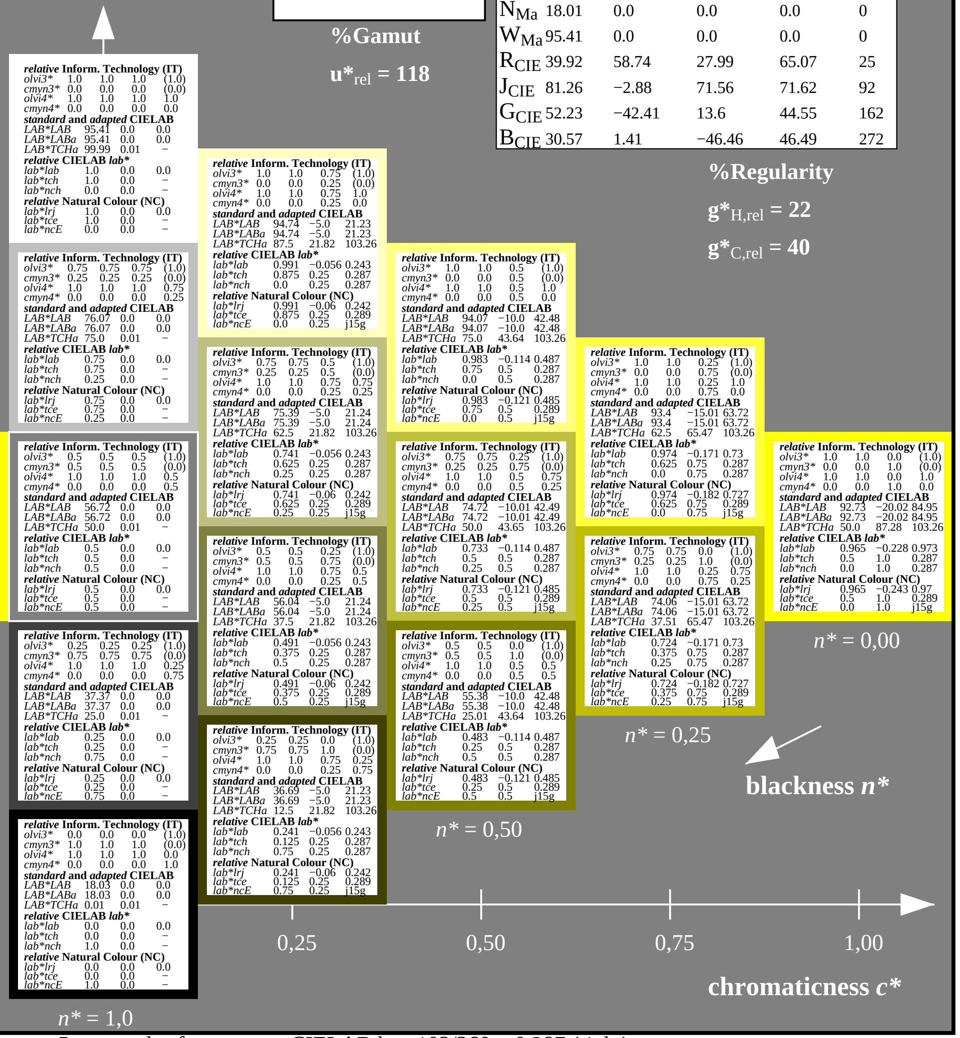
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



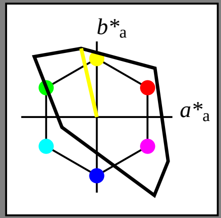
NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

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

triangle lightness t^*

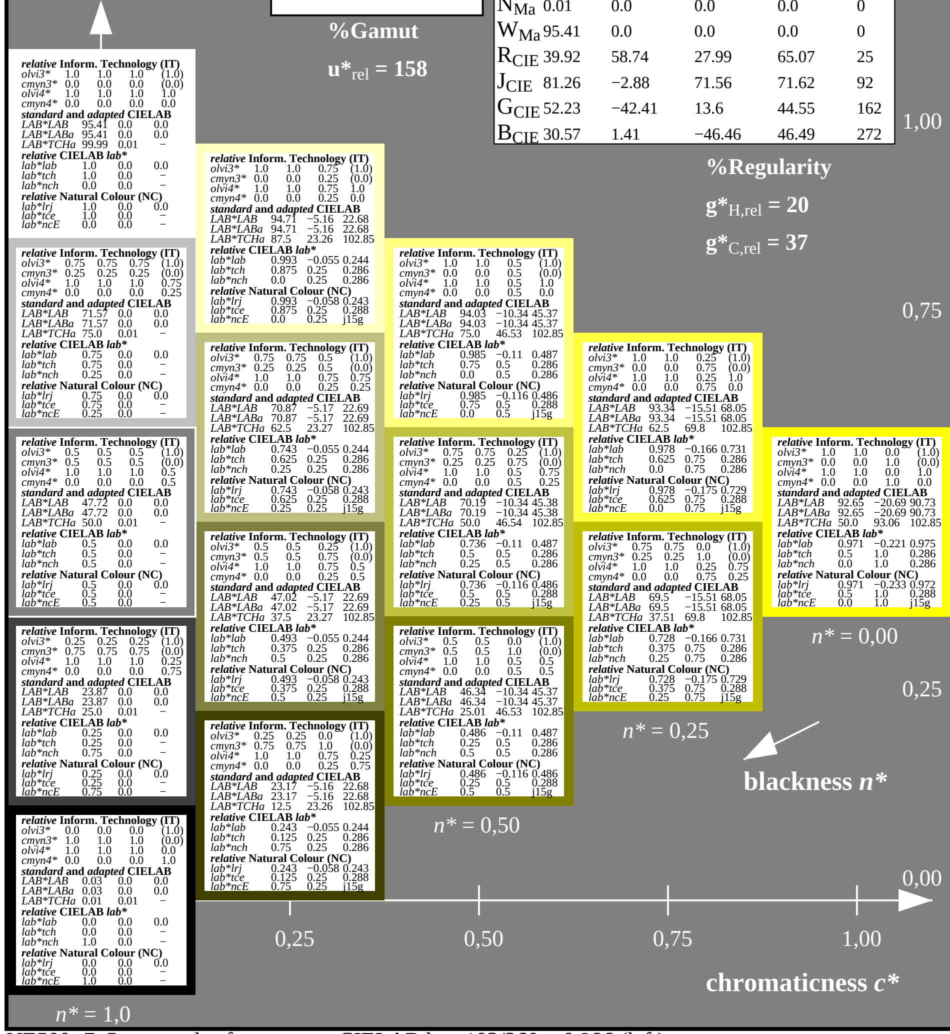


%Gamut
$u^*_{rel} = 158$

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

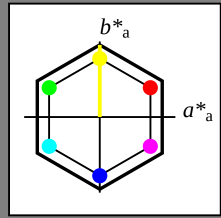
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 90/360 = 0.25$
lab*tch* and *lab*nch

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

triangle lightness t^*

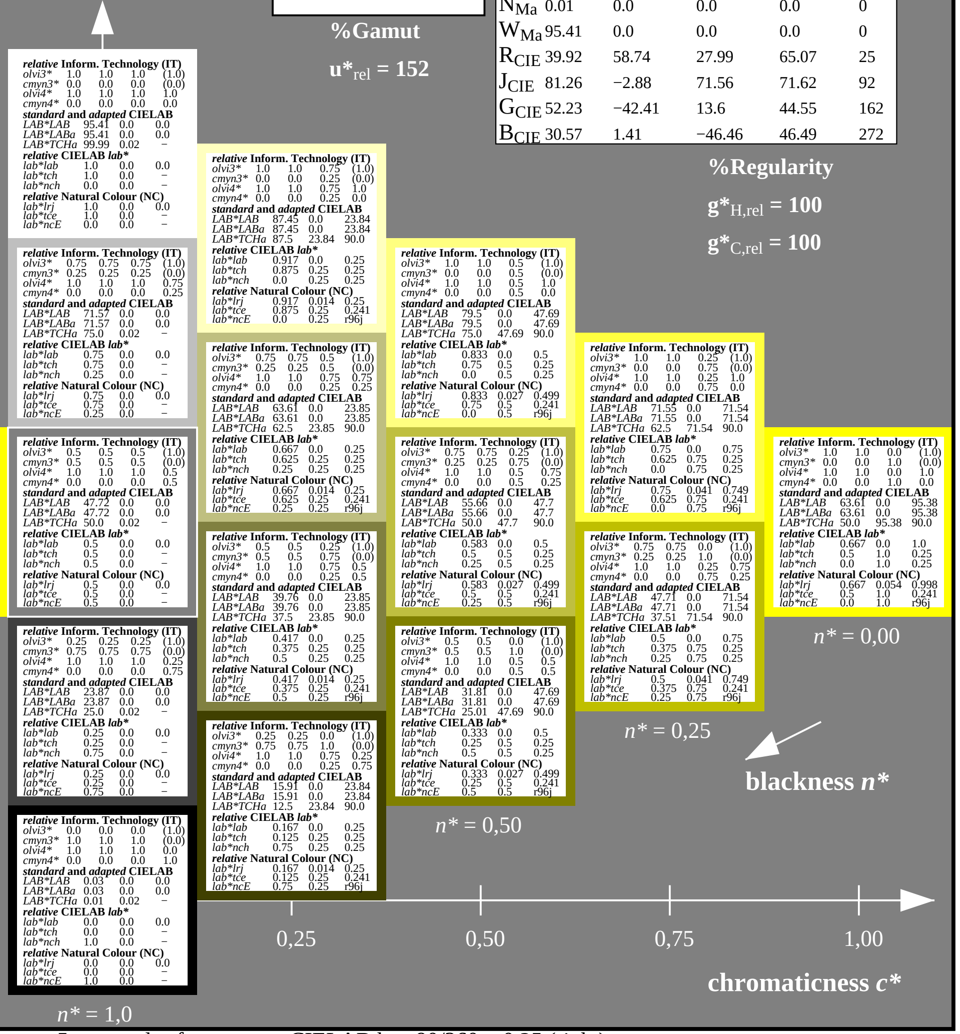


%Gamut
$u^*_{rel} = 152$

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



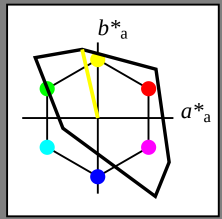
NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

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

triangle lightness *t**

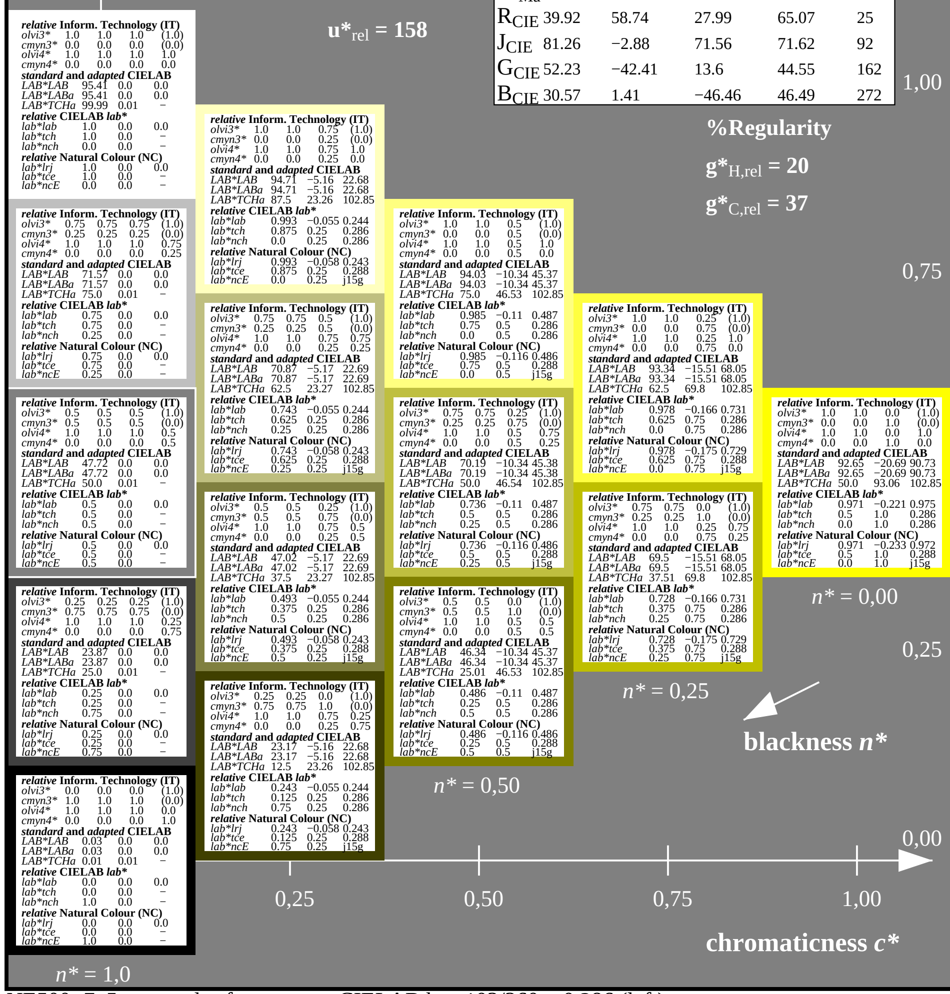


%Gamut
u*rel = 158

TLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	−20.69	90.75	93.08	103
LMa	83.63	−82.75	79.9	115.04	136
CMa	86.88	−46.16	−13.55	48.12	196
VMa	30.39	76.06	−103.59	128.52	306
MMa	57.3	94.35	−58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

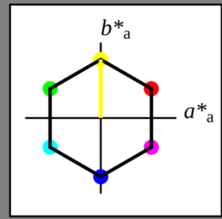
%Regularity
g*H,rel = 20
g*C,rel = 37



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**

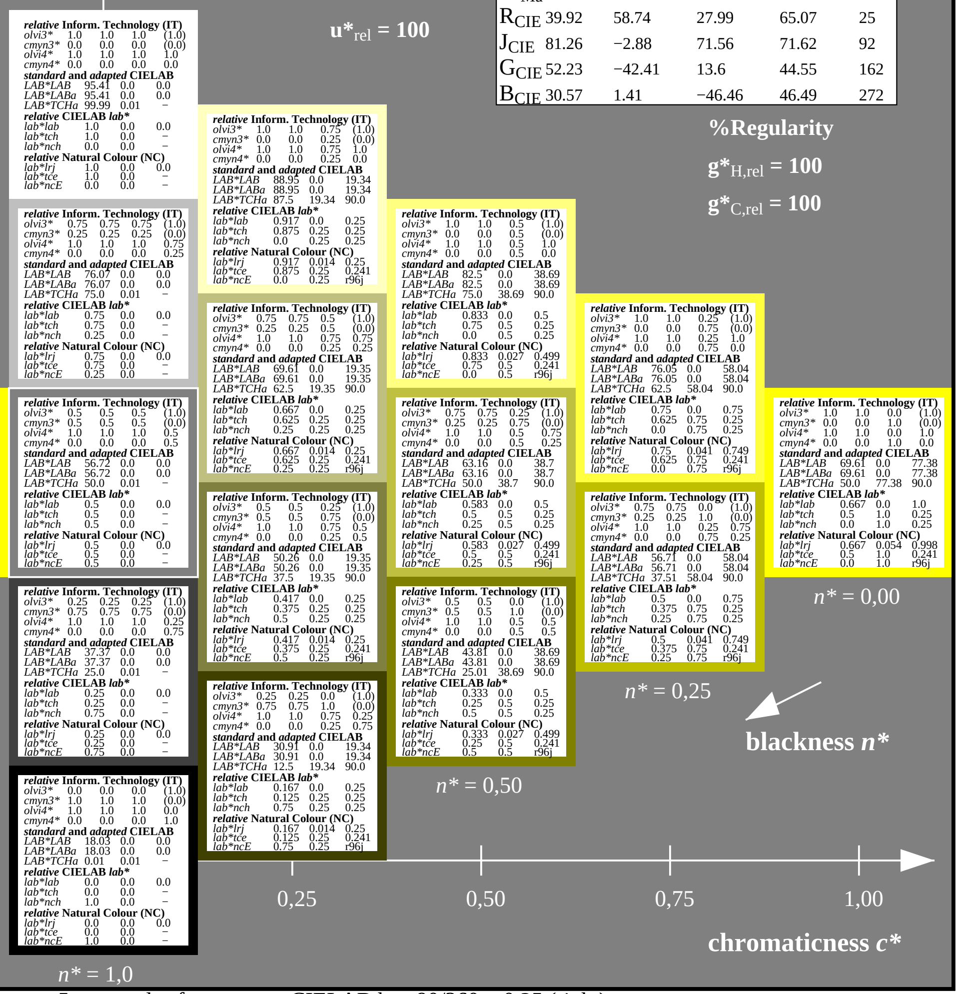


%Gamut
u*rel = 100

NRS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	43.81	67.03	38.7	77.4	30
YMa	69.61	0.0	77.4	77.4	90
LMa	43.81	−67.02	38.7	77.4	150
CMa	69.61	−67.02	−38.69	77.4	210
VMa	43.81	0.0	−77.39	77.4	270
MMa	69.61	67.03	−38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity
g*H,rel = 100
g*C,rel = 100



NE500−7, 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 $h^* = lab^*h = 103/360 = 0.286$

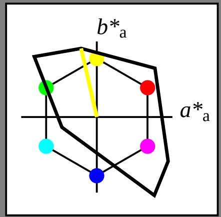
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

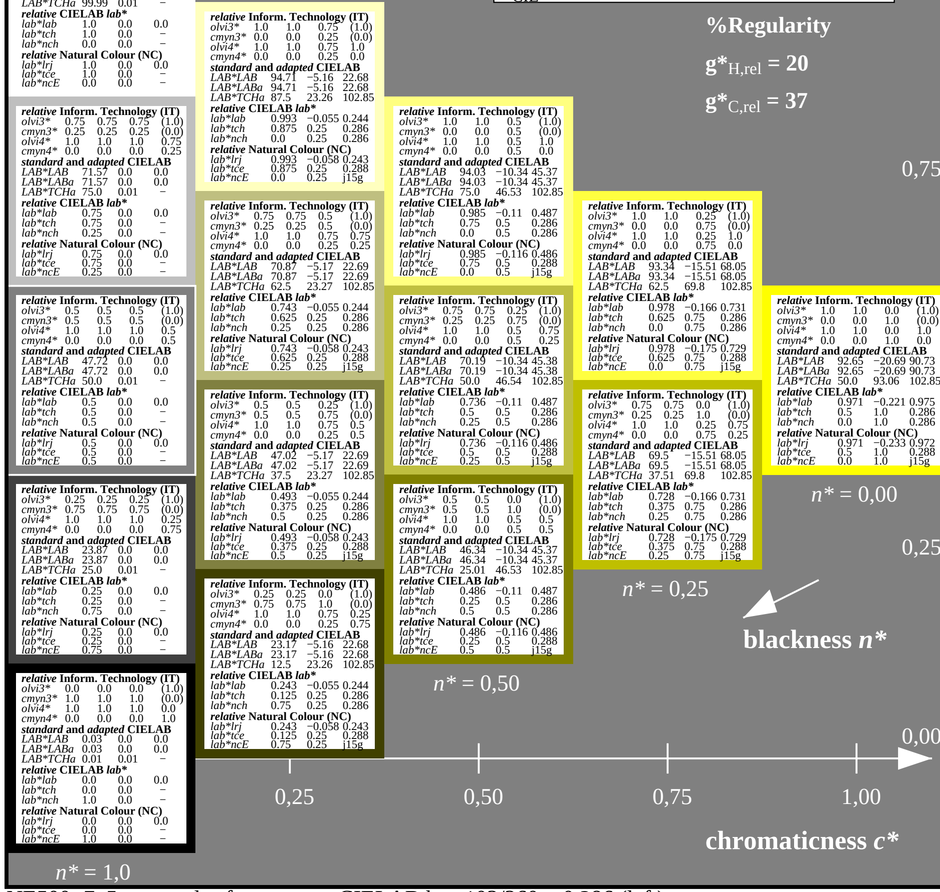
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 90/360 = 0.25$

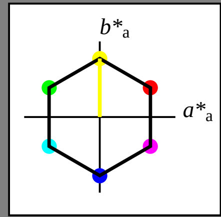
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

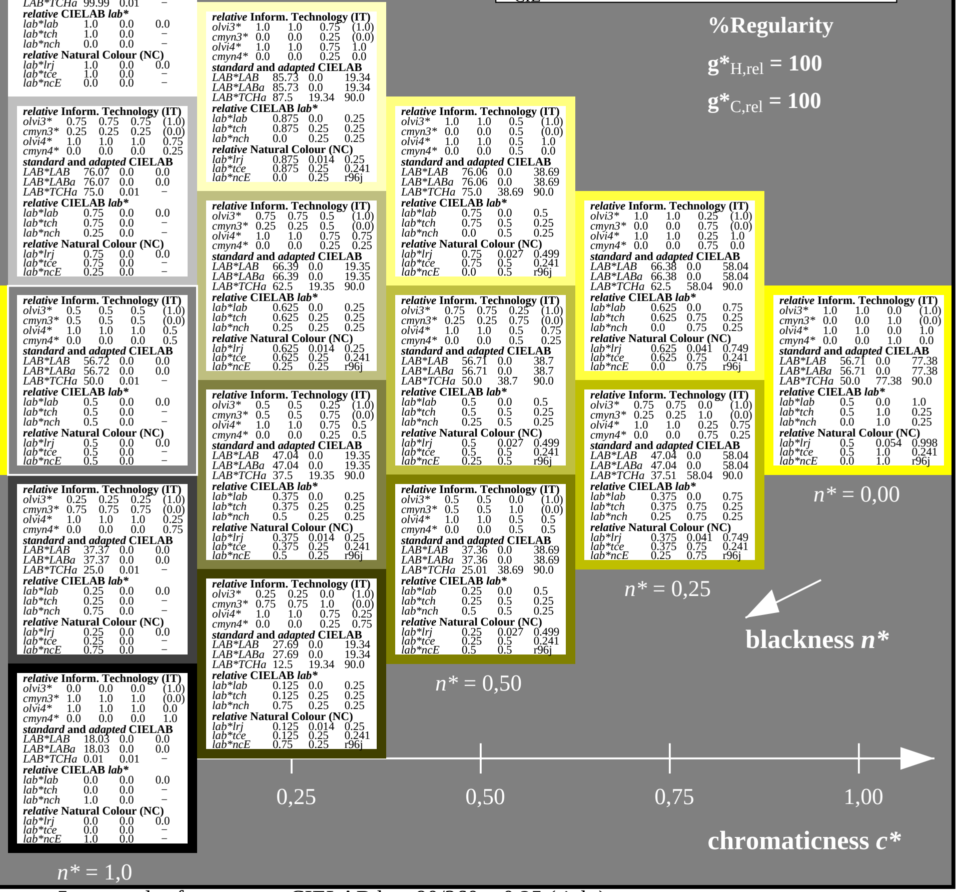
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 103/360 = 0.286$

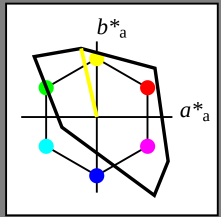
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 158$

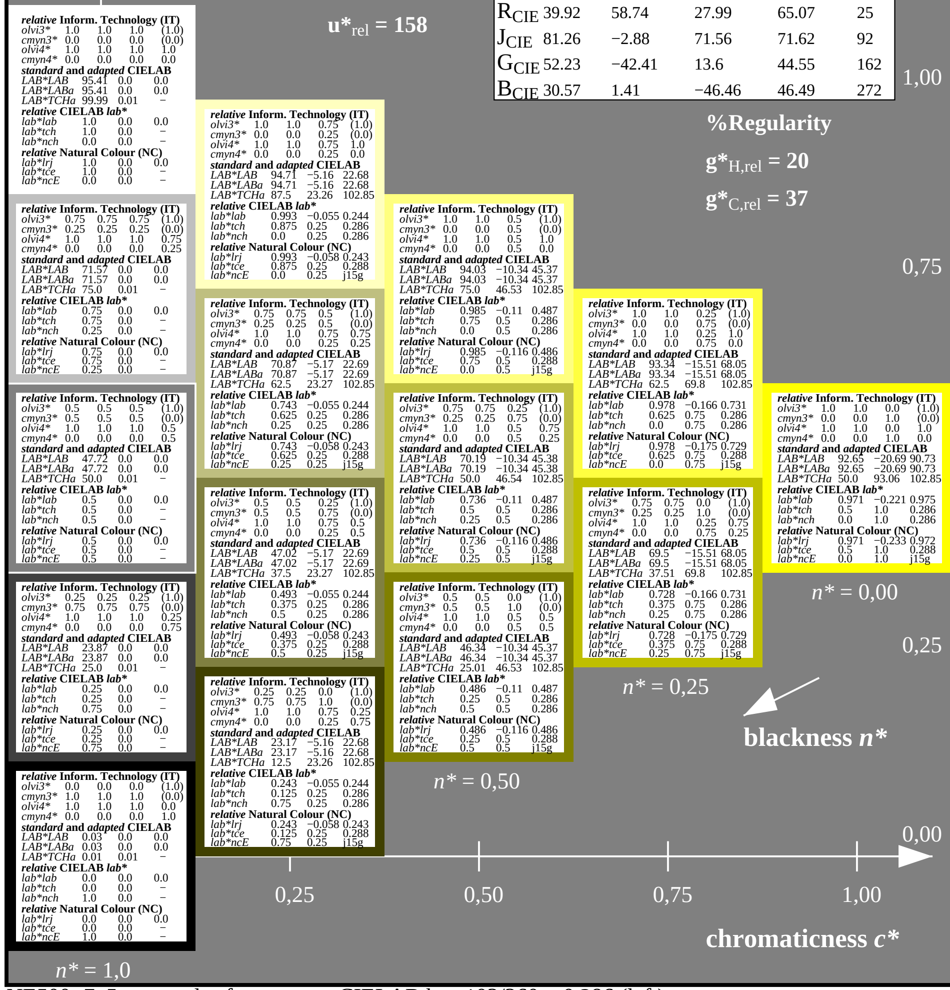
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 107/360 = 0.298$

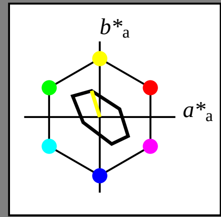
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 16$

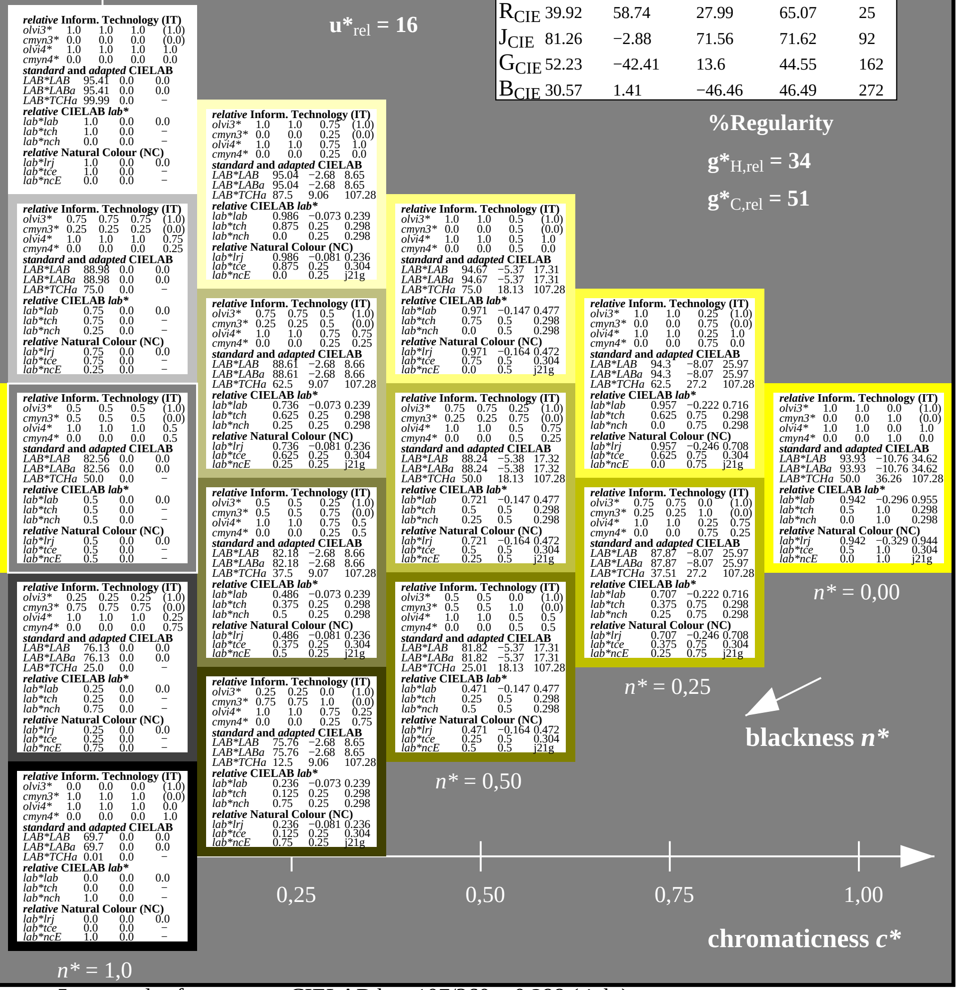
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

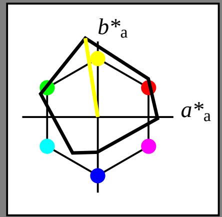


NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

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**

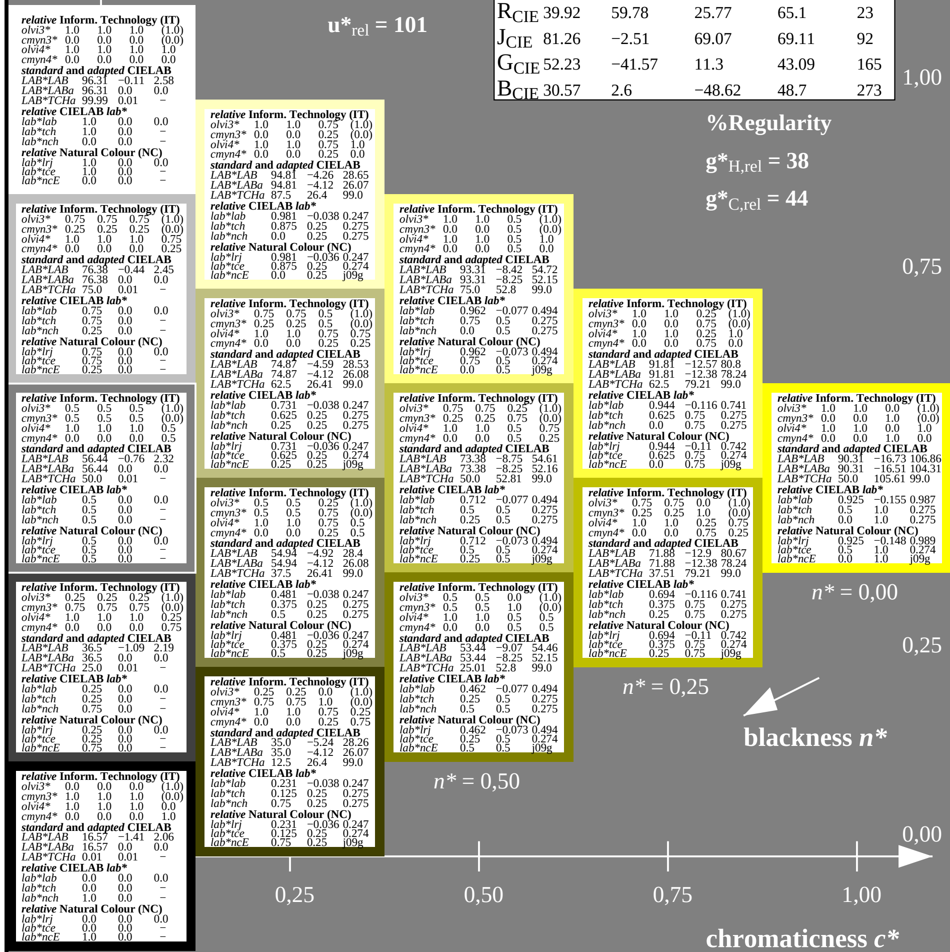


DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

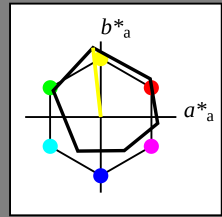
%Gamut
$u^*_{rel} = 101$

%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



Output: Colorimetric 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**

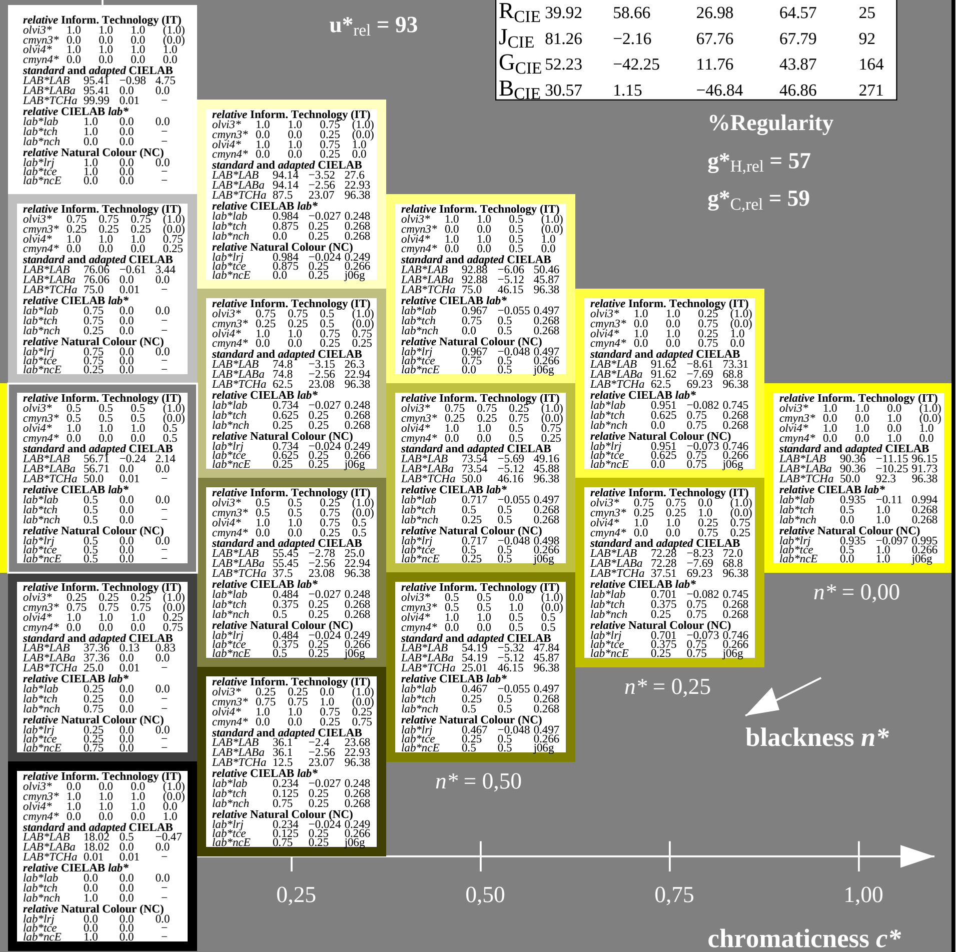


ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



NE500−7, 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 $h^* = lab^*h = 99/360 = 0.275$

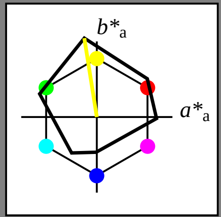
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

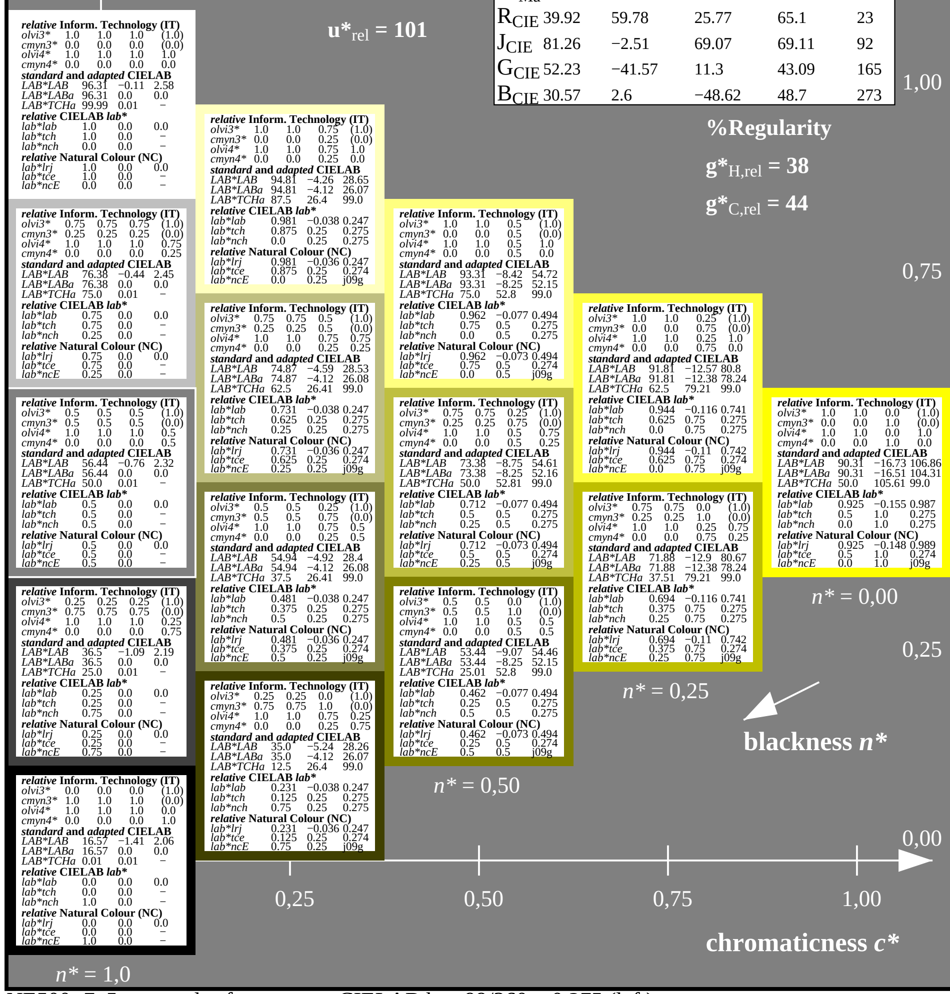
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 103/360 = 0.286$

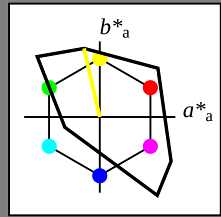
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

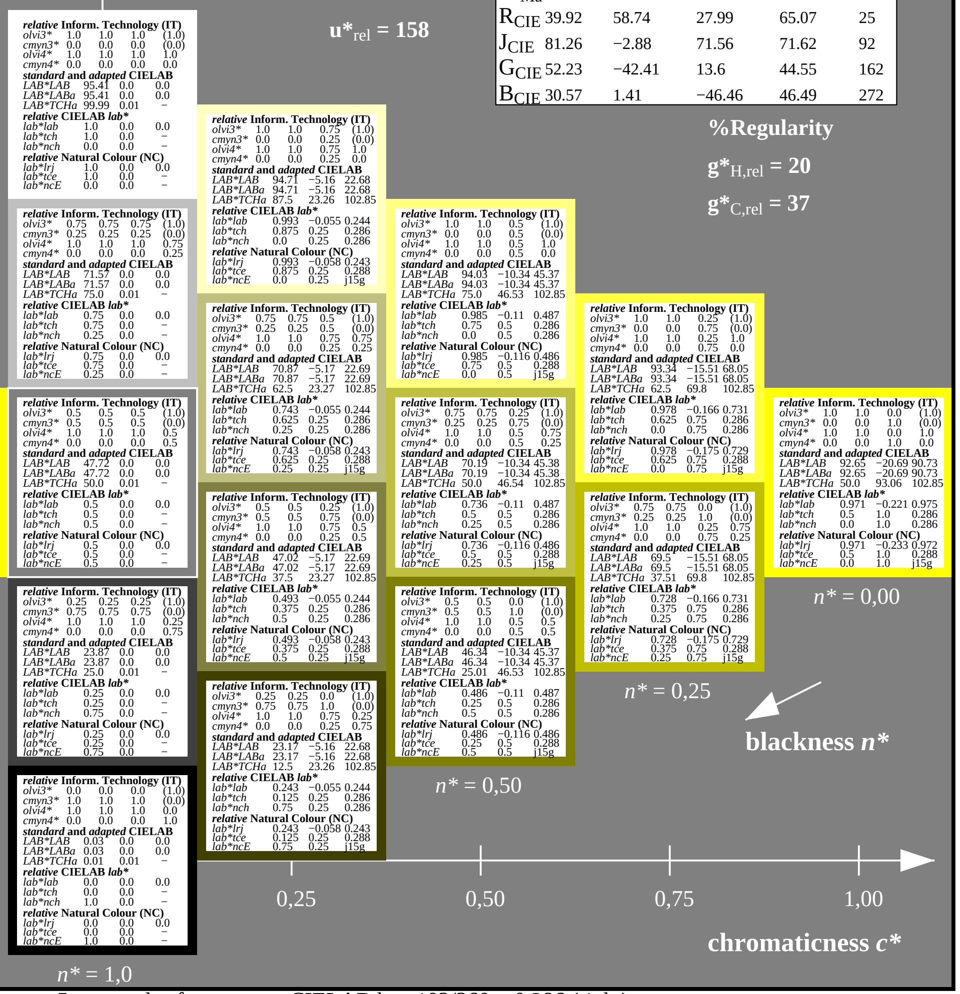
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 99/360 = 0.275$

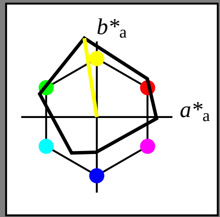
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

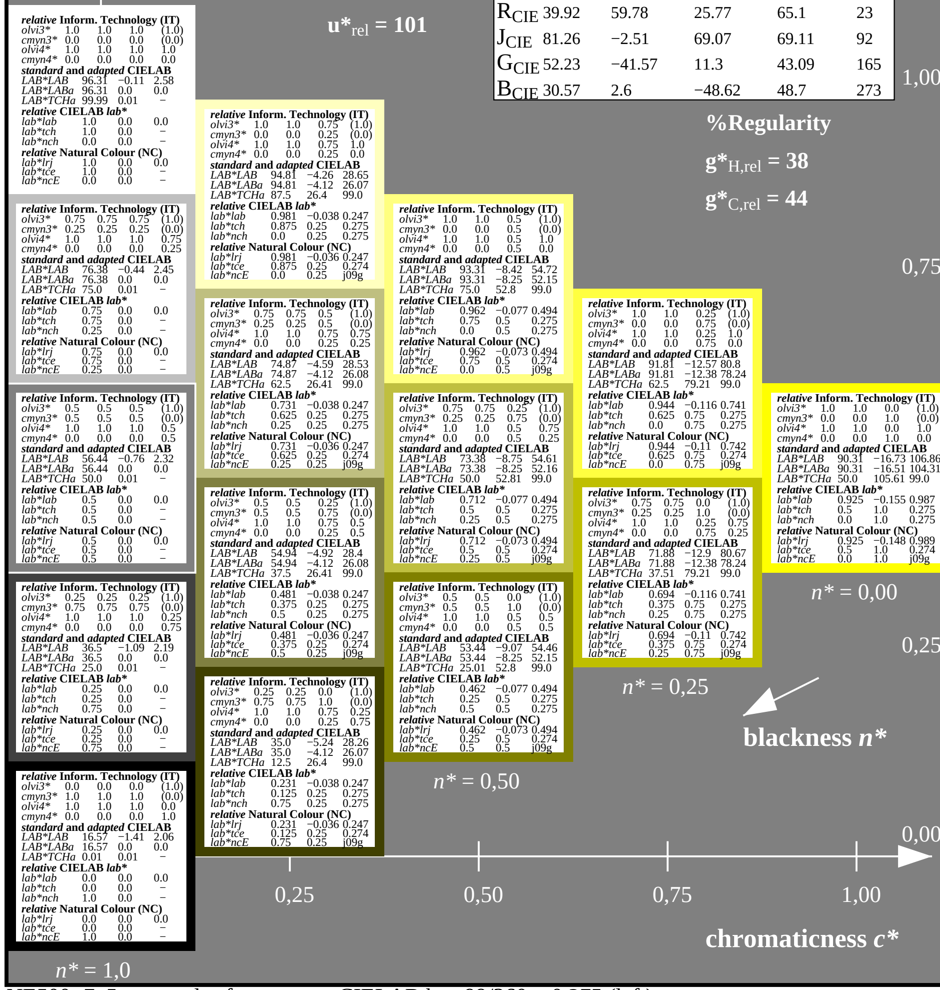
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 99/360 = 0.275$

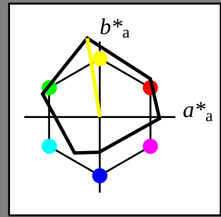
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

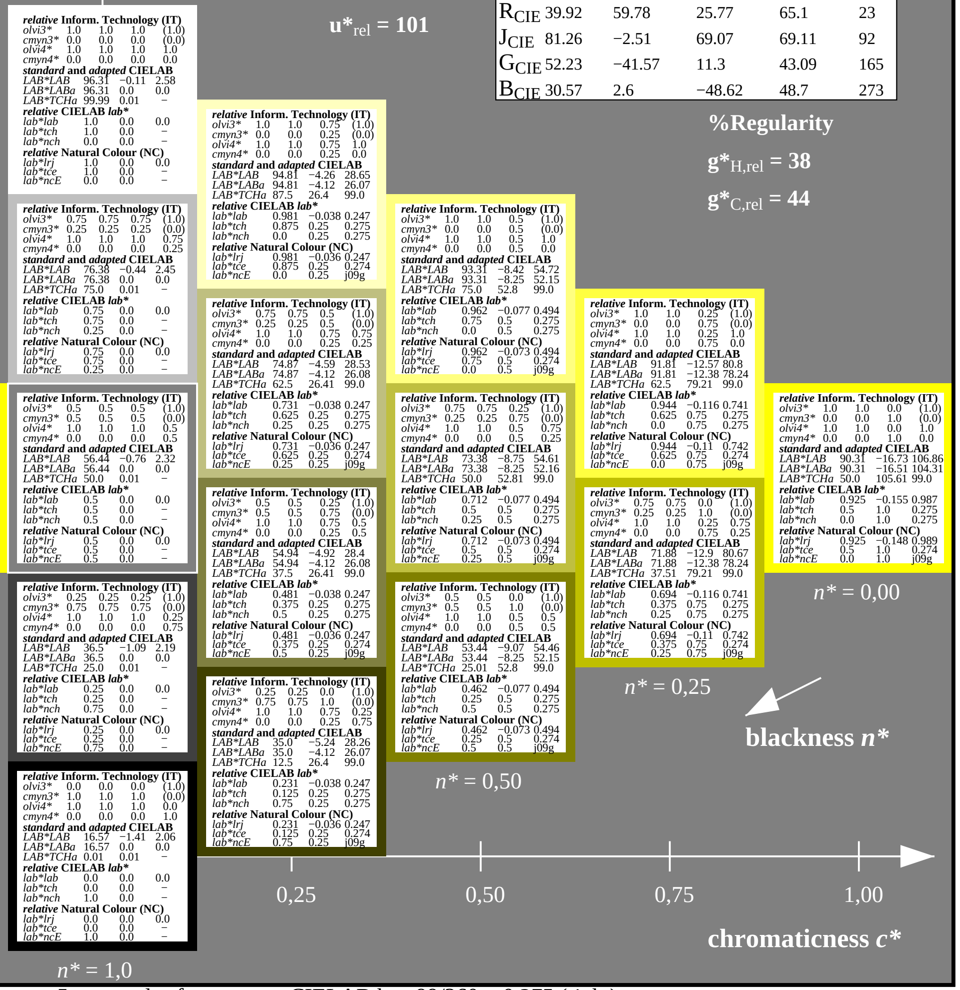
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



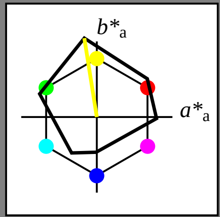
NE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

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

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

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	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	76.38	−0.44	2.45	
LAB*LABa	76.38	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	56.44	−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	0.25	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	0.0	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*	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	94.81	−4.26	28.65	
LAB*LABa	94.81	−4.12	26.07	
LAB*TCHa	87.5	26.4	99.0	
relative CIELAB lab*				
lab*lab	0.981	−0.038	0.247	
lab*tch	0.875	0.25	0.275	
lab*nch	0.0	0.25	0.275	
relative Natural Colour (NC)				
lab*lrj	0.981	−0.036	0.247	
lab*tce	0.875	0.25	0.274	
lab*ncE	0.0	0.25	j09g	

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	74.87	−4.59	28.53	
LAB*LABa	74.87	−4.12	26.08	
LAB*TCHa	62.5	26.41	99.0	
relative CIELAB lab*				
lab*lab	0.731	−0.038	0.247	
lab*tch	0.625	0.25	0.275	
lab*nch	0.25	0.25	0.275	
relative Natural Colour (NC)				
lab*lrj	0.731	−0.036	0.247	
lab*tce	0.625	0.25	0.274	
lab*ncE	0.25	0.25	j09g	

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	54.94	−4.92	28.4	
LAB*LABa	54.94	−4.12	26.08	
LAB*TCHa	37.5	26.41	99.0	
relative CIELAB lab*				
lab*lab	0.481	−0.038	0.247	
lab*tch	0.375	0.25	0.275	
lab*nch	0.5	0.25	0.275	
relative Natural Colour (NC)				
lab*lrj	0.481	−0.036	0.247	
lab*tce	0.375	0.25	0.274	
lab*ncE	0.5	0.25	j09g	

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	35.0	−5.24	28.26	
LAB*LABa	35.0	−4.12	26.07	
LAB*TCHa	12.5	26.4	99.0	
relative CIELAB lab*				
lab*lab	0.231	−0.038	0.247	
lab*tch	0.125	0.25	0.275	
lab*nch	0.75	0.25	0.275	
relative Natural Colour (NC)				
lab*lrj	0.231	−0.036	0.247	
lab*tce	0.125	0.25	0.274	
lab*ncE	0.75	0.25	j09g	

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	93.31	−8.42	54.72	
LAB*LABa	93.31	−8.25	52.15	
LAB*TCHa	75.0	52.8	99.0	
relative CIELAB lab*				
lab*lab	0.962	−0.077	0.494	
lab*tch	0.75	0.5	0.275	
lab*nch	0.0	0.5	0.275	
relative Natural Colour (NC)				
lab*lrj	0.962	−0.073	0.494	
lab*tce	0.75	0.5	0.274	
lab*ncE	0.0	0.5	j09g	

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	73.38	−8.75	54.61	
LAB*LABa	73.38	−8.25	52.16	
LAB*TCHa	50.0	52.81	99.0	
relative CIELAB lab*				
lab*lab	0.712	−0.077	0.494	
lab*tch	0.5	0.5	0.275	
lab*nch	0.25	0.5	0.275	
relative Natural Colour (NC)				
lab*lrj	0.712	−0.073	0.494	
lab*tce	0.5	0.5	0.274	
lab*ncE	0.25	0.5	j09g	

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	53.44	−9.07	54.46	
LAB*LABa	53.44	−8.25	52.15	
LAB*TCHa	25.01	52.8	99.0	
relative CIELAB lab*				
lab*lab	0.462	−0.077	0.494	
lab*tch	0.25	0.5	0.275	
lab*nch	0.5	0.5	0.275	
relative Natural Colour (NC)				
lab*lrj	0.462	−0.073	0.494	
lab*tce	0.25	0.5	0.274	
lab*ncE	0.5	0.5	j09g	

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	91.81	−12.57	80.8	
LAB*LABa	91.81	−12.38	78.24	
LAB*TCHa	62.5	79.21	99.0	
relative CIELAB lab*				
lab*lab	0.944	−0.116	0.741	
lab*tch	0.625	0.75	0.275	
lab*nch	0.0	0.75	0.275	
relative Natural Colour (NC)				
lab*lrj	0.944	−0.11	0.742	
lab*tce	0.625	0.75	0.274	
lab*ncE	0.0	0.75	j09g	

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	71.88	−12.9	80.67	
LAB*LABa	71.88	−12.38	78.24	
LAB*TCHa	37.51	79.21	99.0	
relative CIELAB lab*				
lab*lab	0.694	−0.116	0.741	
lab*tch	0.375	0.75	0.275	
lab*nch	0.25	0.75	0.275	
relative Natural Colour (NC)				
lab*lrj	0.694	−0.11	0.742	
lab*tce	0.375	0.75	0.274	
lab*ncE	0.25	0.75	j09g	

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	1.0
cmyn4*	0.0	0.0	1.0	0.0
standard and adapted CIELAB				
LAB*LAB	90.31	−16.73	106.86	
LAB*LABa	90.31	−16.51	104.31	
LAB*TCHa	50.0	105.61	99.0	
relative CIELAB lab*				
lab*lab	0.925	−0.155	0.987	
lab*tch	0.5	1.0	0.275	
lab*nch	0.0	1.0	0.275	
relative Natural Colour (NC)				
lab*lrj	0.925	−0.148	0.989	
lab*tce	0.5	1.0	0.274	
lab*ncE	0.0	1.0	j09g	

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n*

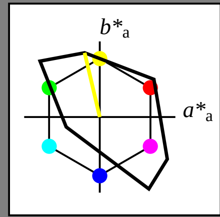
0,25 0,50 0,75 1,00

chromaticness *c*

Output: Colorimetric Television Luminous System 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

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	93.4	−15.01	63.72	
LAB*LABa	93.4	−15.01	63.72	
LAB*TCHa	62.5	65.47	103.26	
relative CIELAB lab*				
lab*lab	0.974	−0.171	0.73	
lab*tch	0.625	0.75	0.287	
lab*nch	0.0	0.75	0.287	
relative Natural Colour (NC)				
lab*lrj	0.974	−0.182	0.727	
lab*tce	0.625	0.75	0.289	
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	74.06	−15.01	63.72	
LAB*LABa	74.06	−15.01	63.72	
LAB*TCHa	37.51	65.47	103.26	
relative CIELAB lab*				
lab*lab	0.724	−0.171	0.73	
lab*tch	0.375	0.75	0.287	
lab*nch	0.25	0.75	0.287	
relative Natural Colour (NC)				
lab*lrj	0.724	−0.182	0.727	
lab*tce	0.375	0.75	0.289	
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	1.0
cmyn4*	0.0	0.0	1.0	0.0
standard and adapted CIELAB				
LAB*LAB	92.73	−20.02	84.95	
LAB*LABa	92.73	−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	

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n*

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

chromaticness *c*

NE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left) 5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Printer Reflective System DRSXX

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

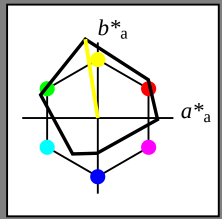
lab*tch and lab*nch

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

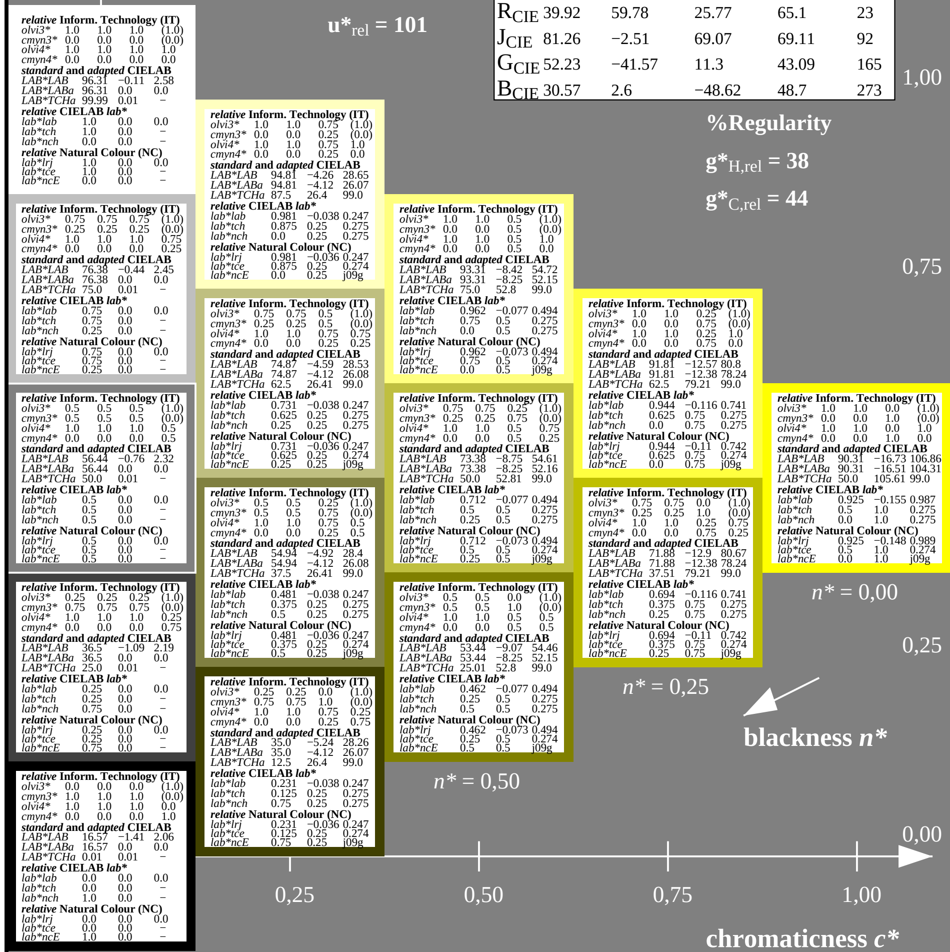
u^*_{rel} = 101

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 $h^* = lab^*h = 90/360 = 0.25$

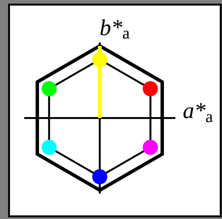
lab*tch and lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

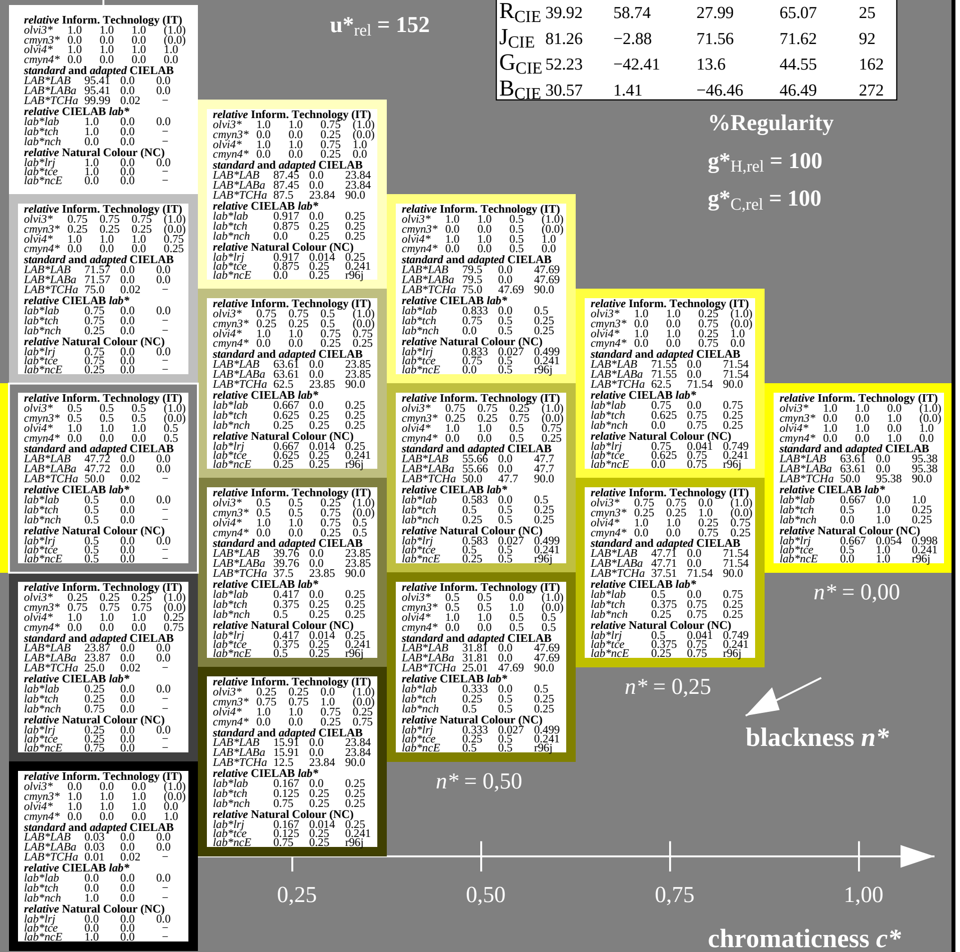
u^*_{rel} = 152

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



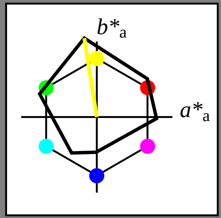
NE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

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

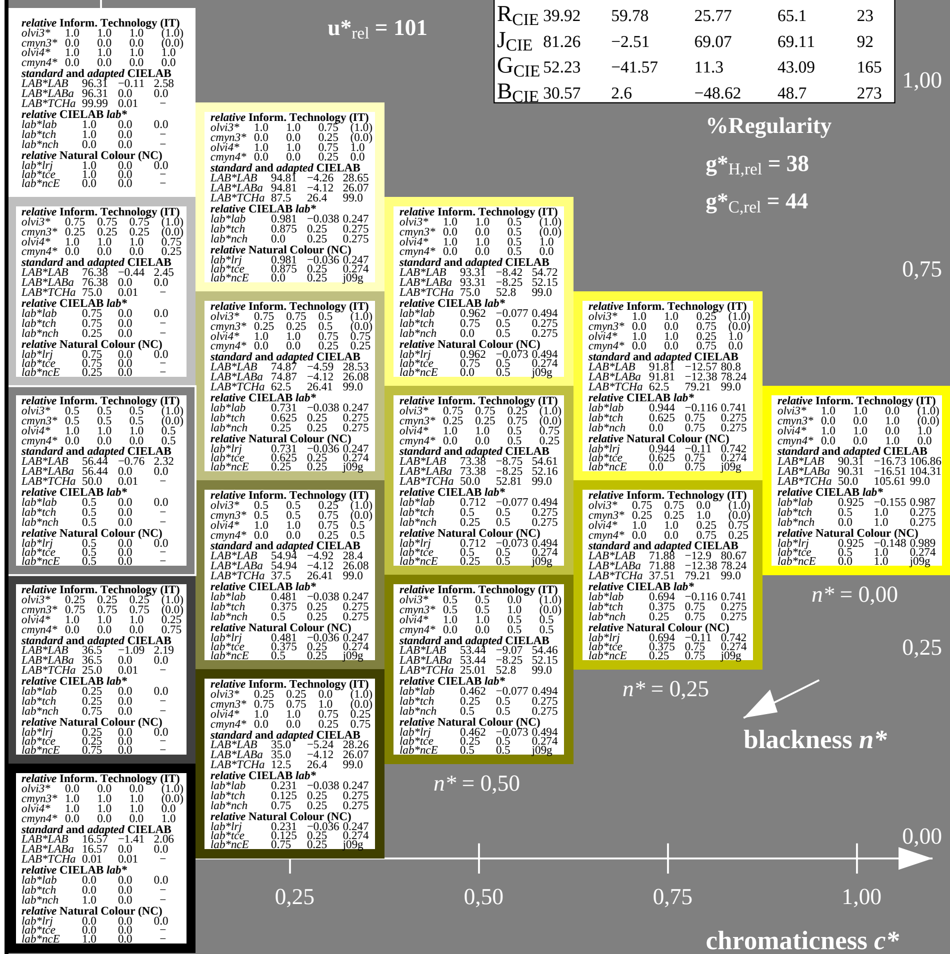
$u^*_{rel} = 101$

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

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

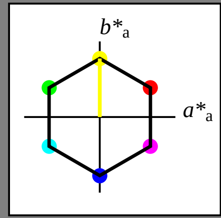
$g^*_{C,rel} = 44$



Output: Colorimetric 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

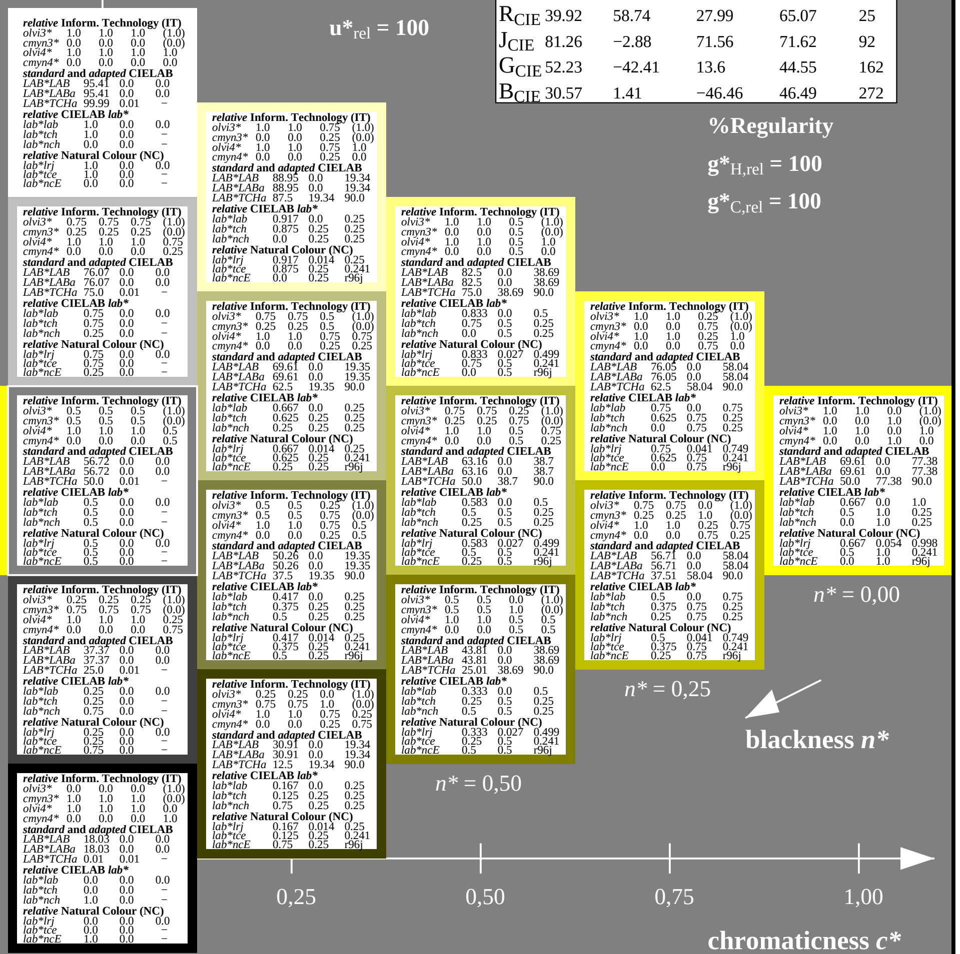
$u^*_{rel} = 100$

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

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

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



NE500−7, 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

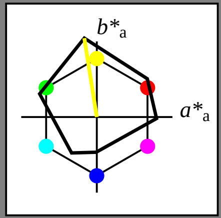
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 101

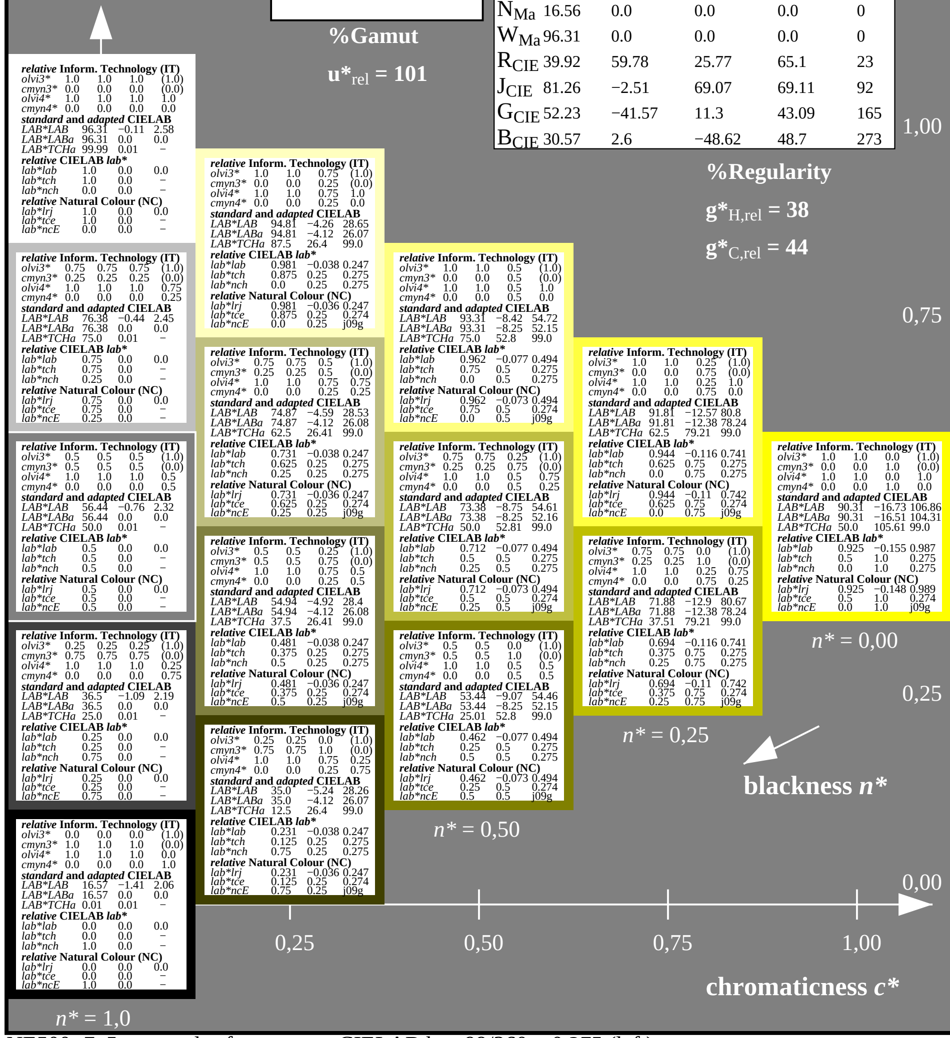
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue *h** = *lab*h* = 90/360 = 0.25

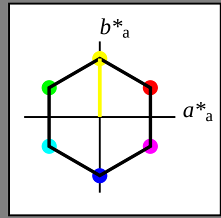
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

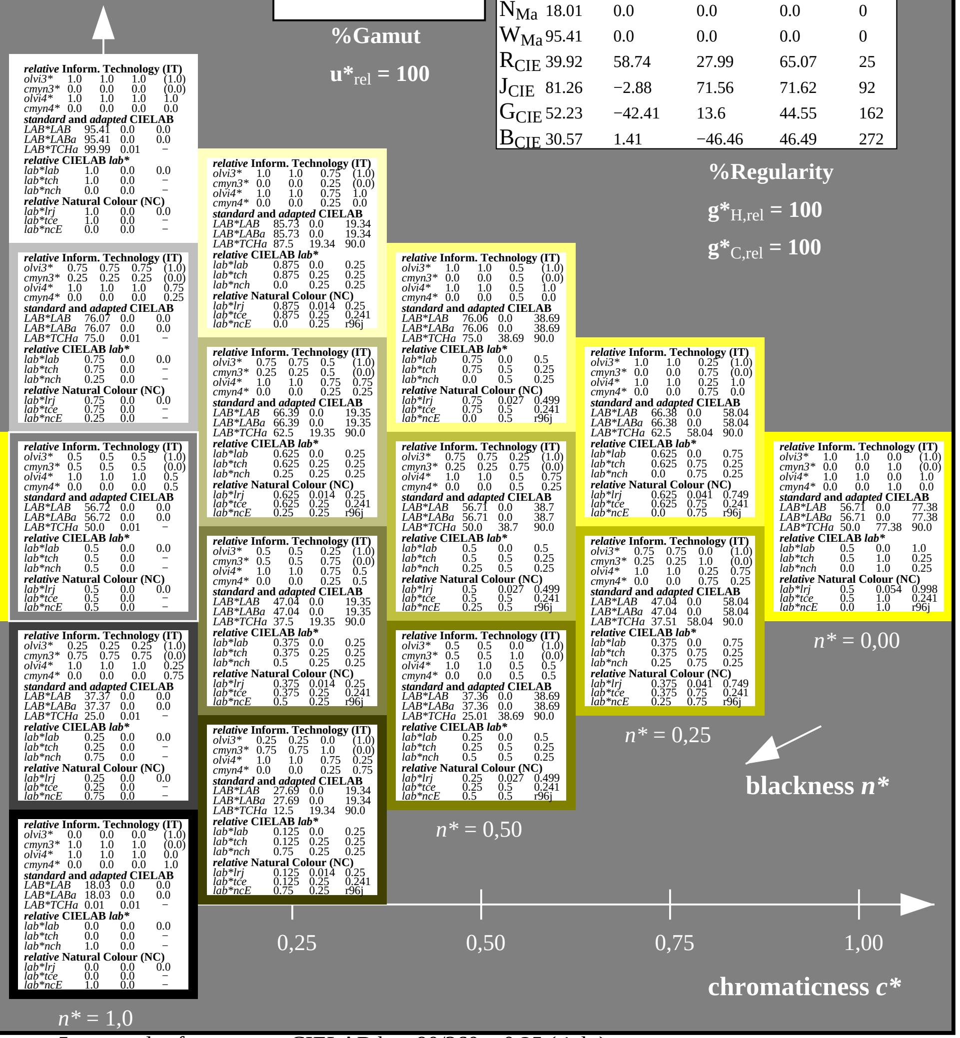
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

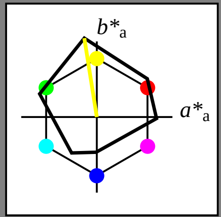
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 101

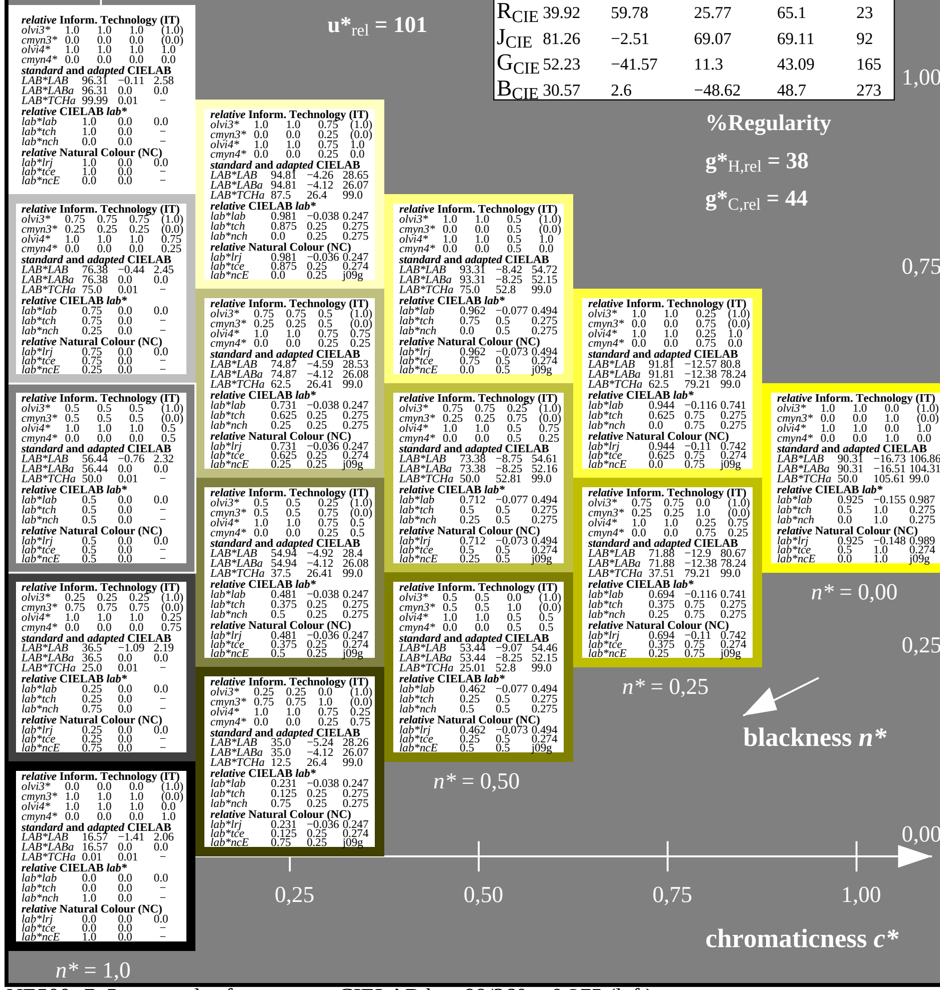
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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*

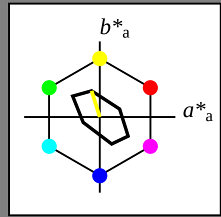
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

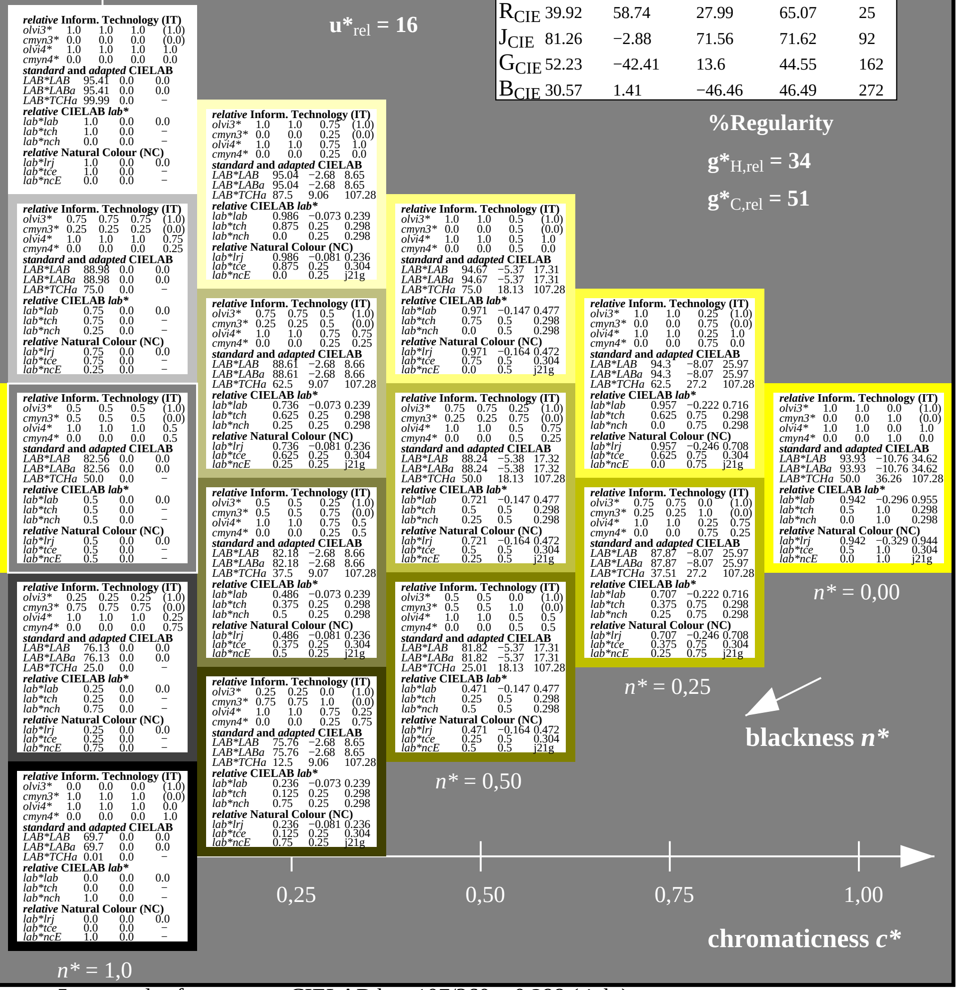
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



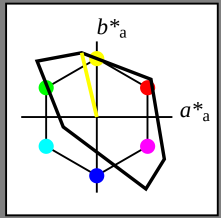
NE500−7, 5 step scales for constant CIELAB hue 99/360 = 0.275 (left)

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

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^*

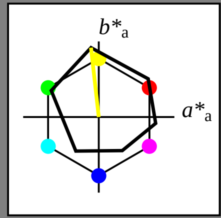
0,25 0,50 0,75 1,00

chromaticness c^*

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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

blackness n^*

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

chromaticness c^*

NE500−7, 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

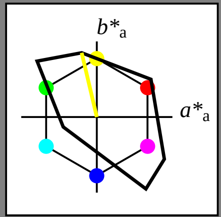
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 118$

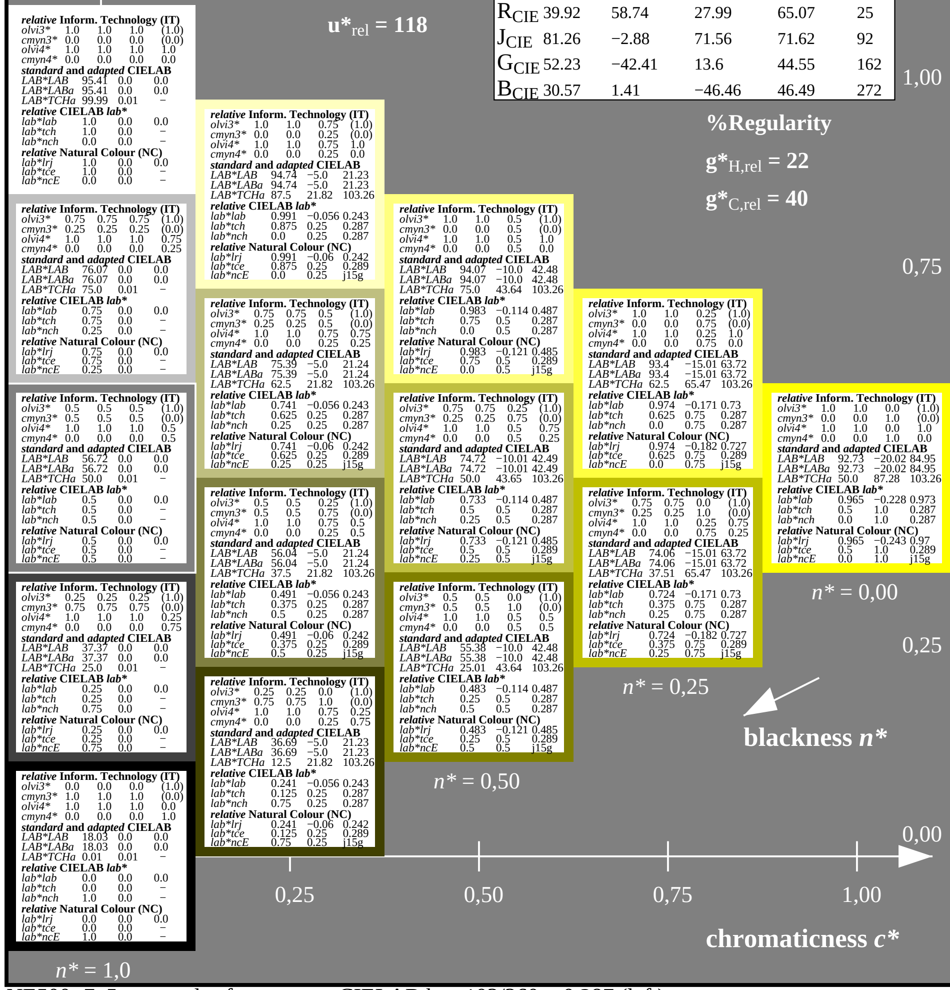
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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* = 103/360 = 0.286

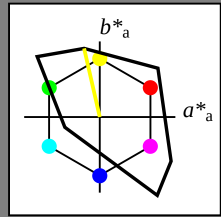
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 158$

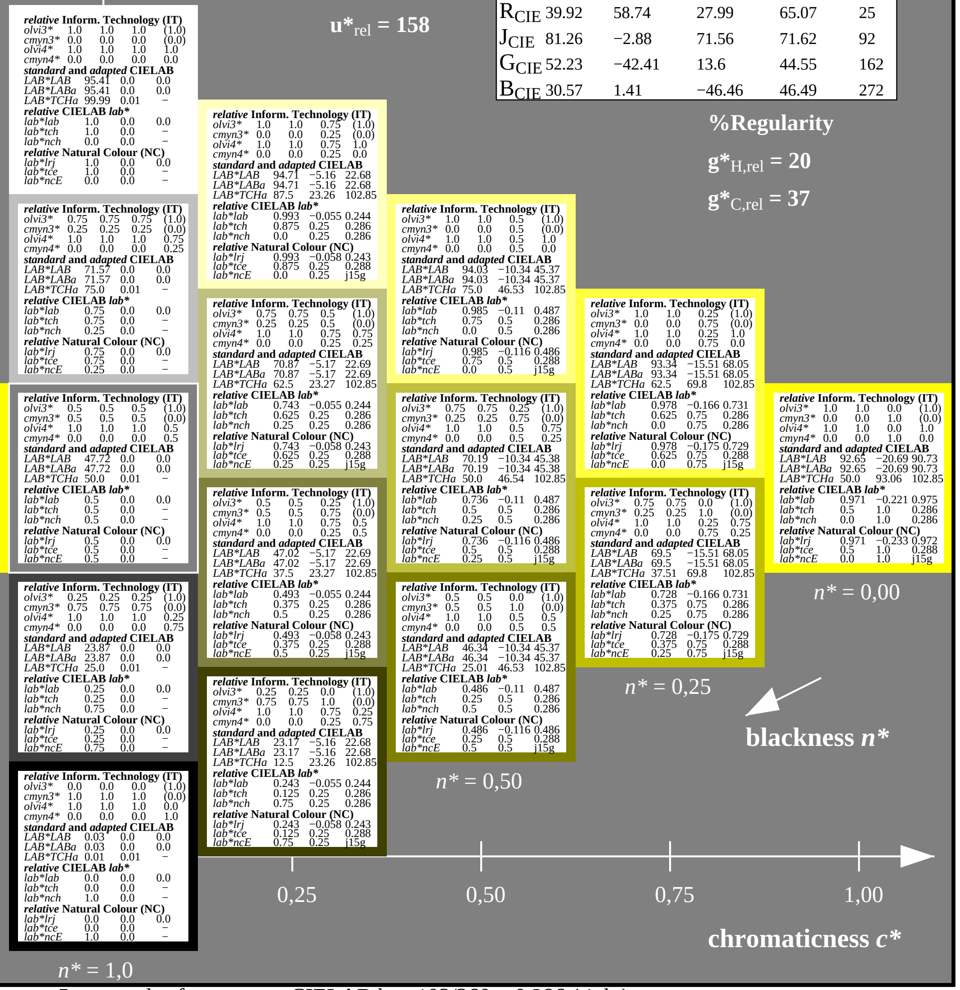
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



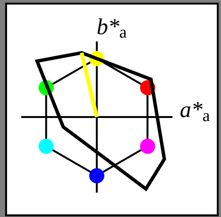
NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

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

triangle lightness t^*

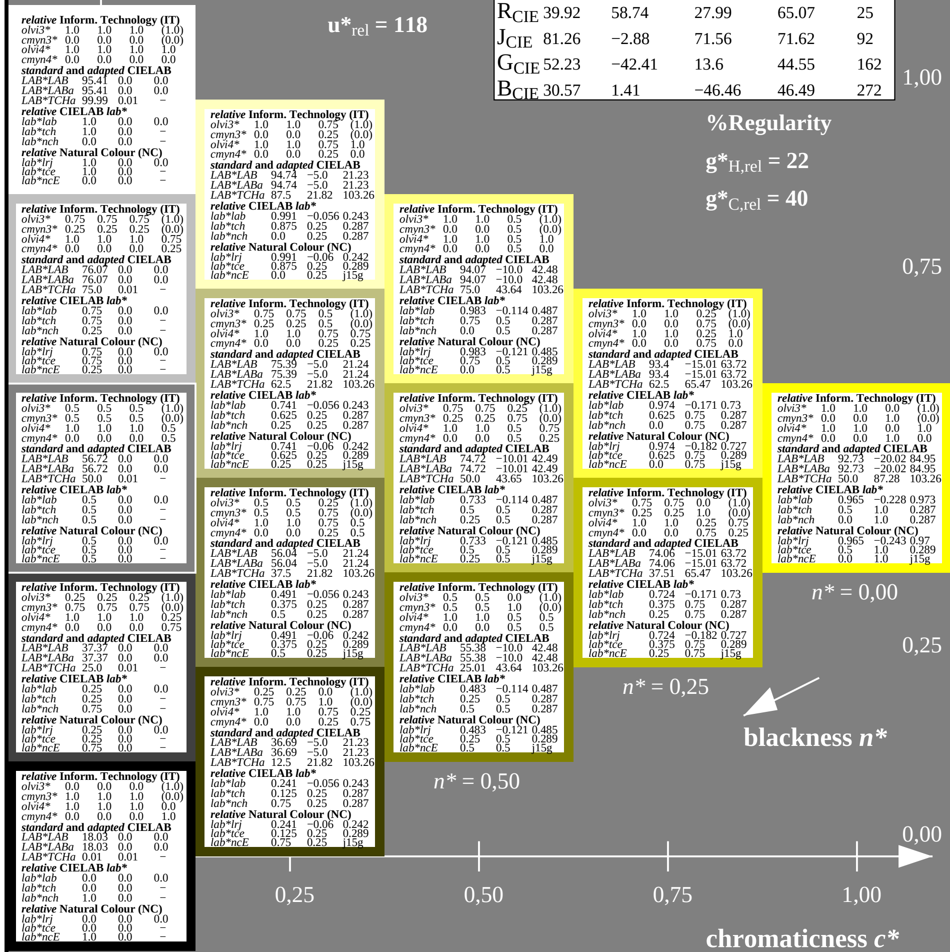


%Gamut
$u^*_{rel} = 118$

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

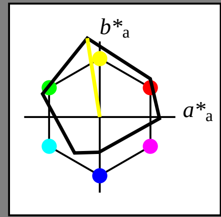
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 99/360 = 0.275$
lab*tch* and *lab*nch

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

triangle lightness t^*

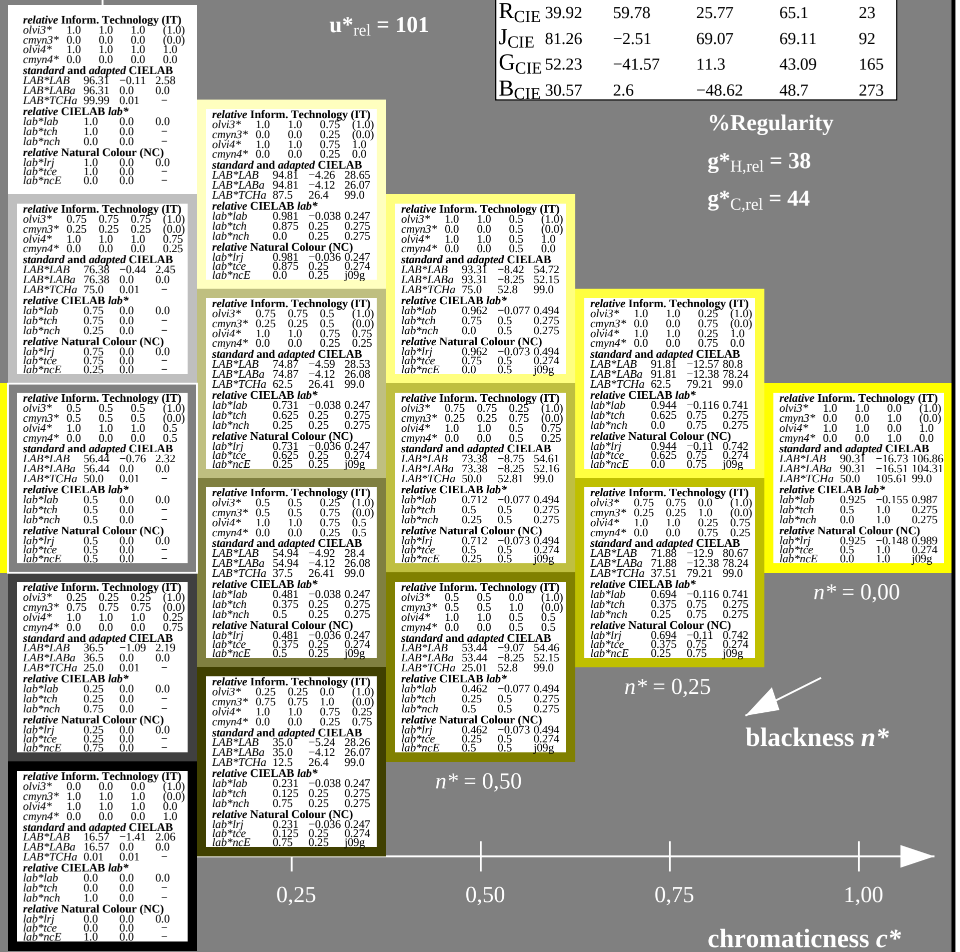


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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 $h^* = lab^*h = 103/360 = 0.287$

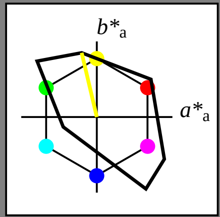
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

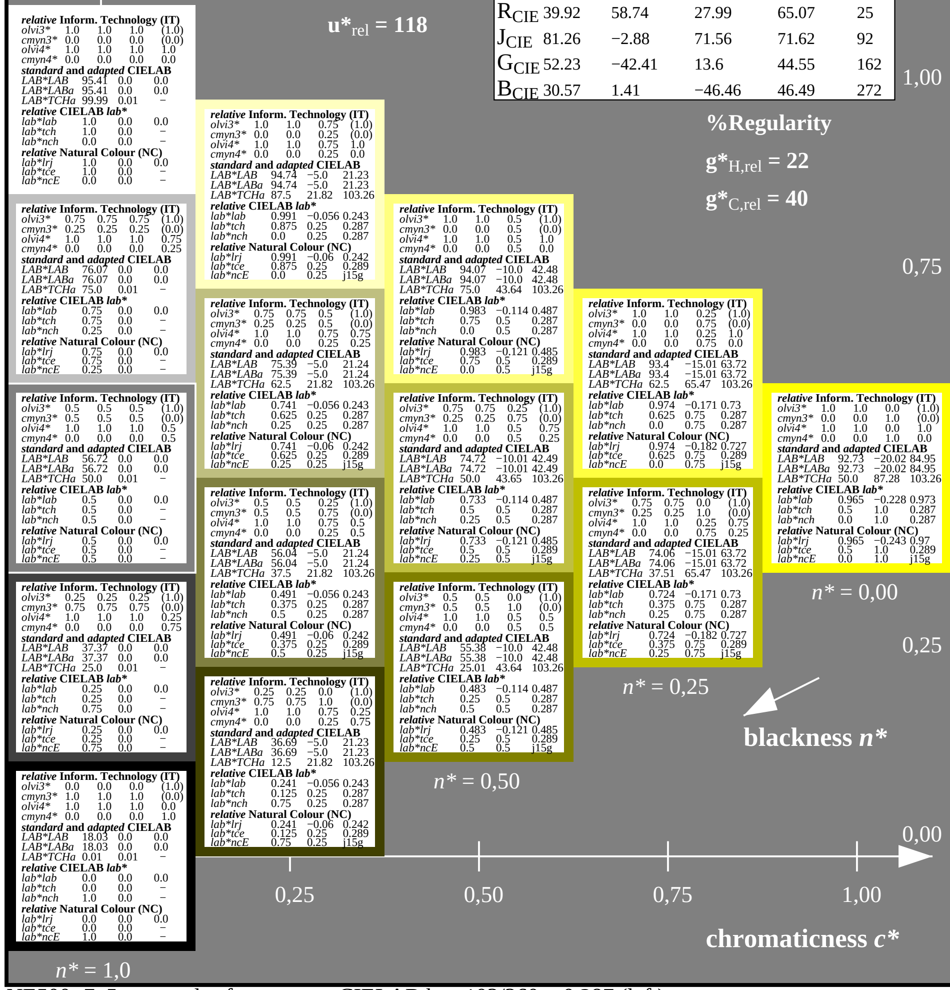
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

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

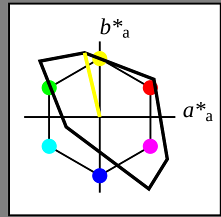
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

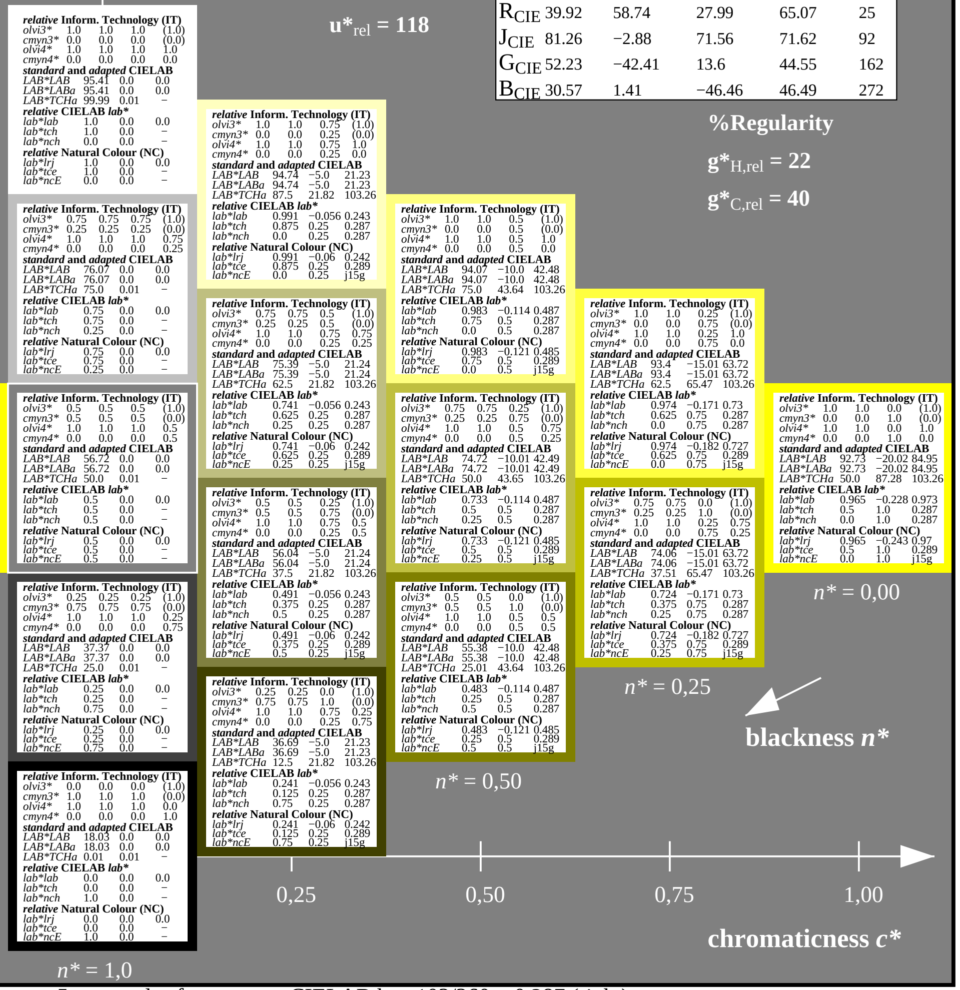
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

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

Input: Colorimetric Television Luminous System TLS18

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

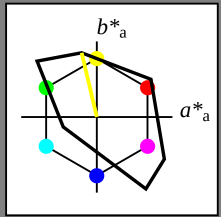
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 118$

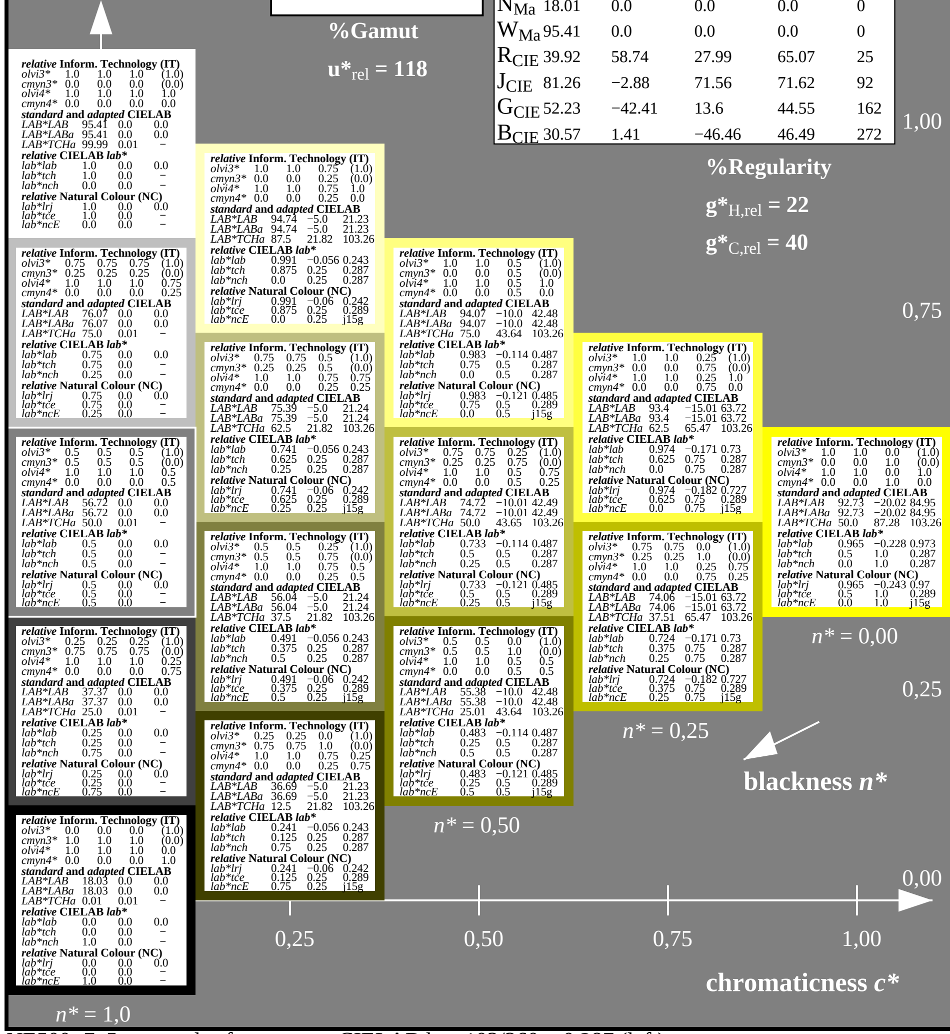
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 90/360 = 0.25$

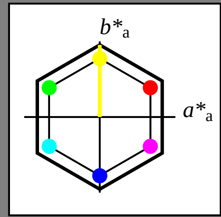
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

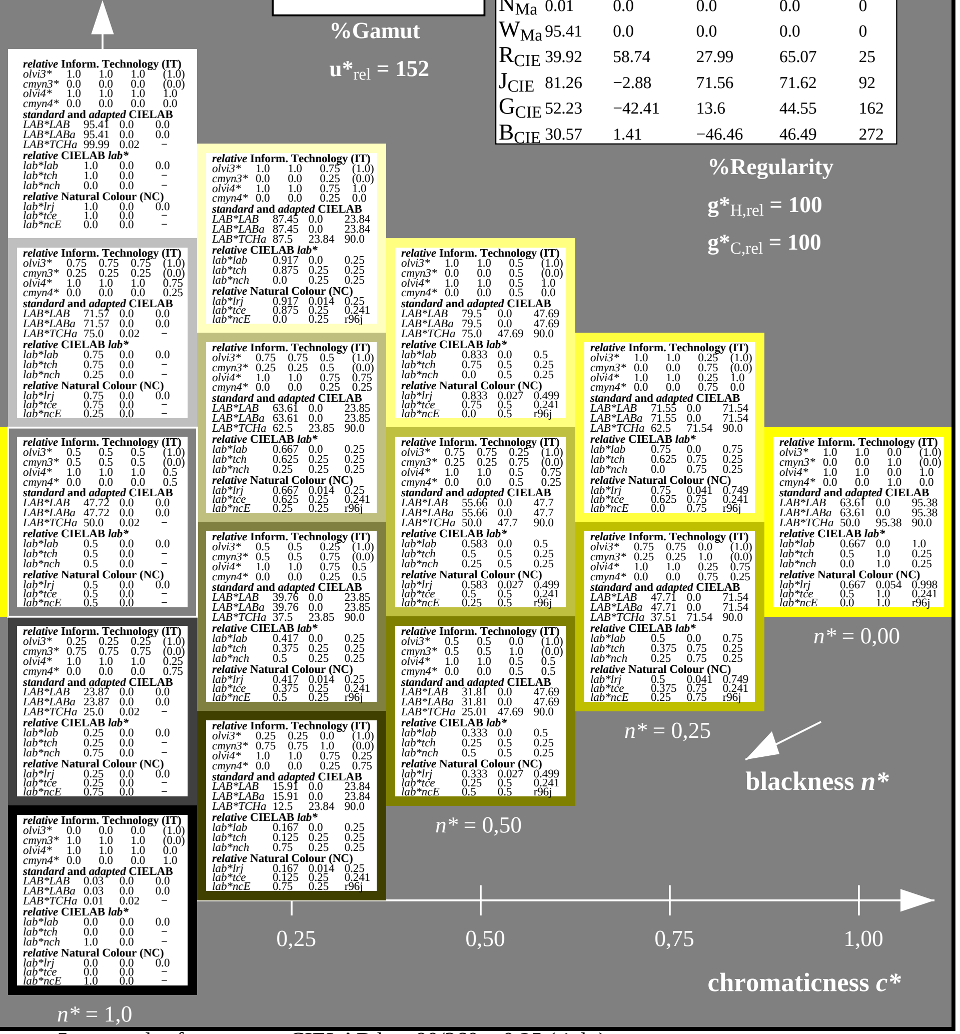
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



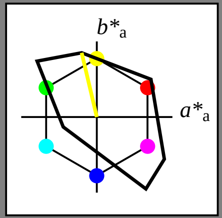
NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

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^*

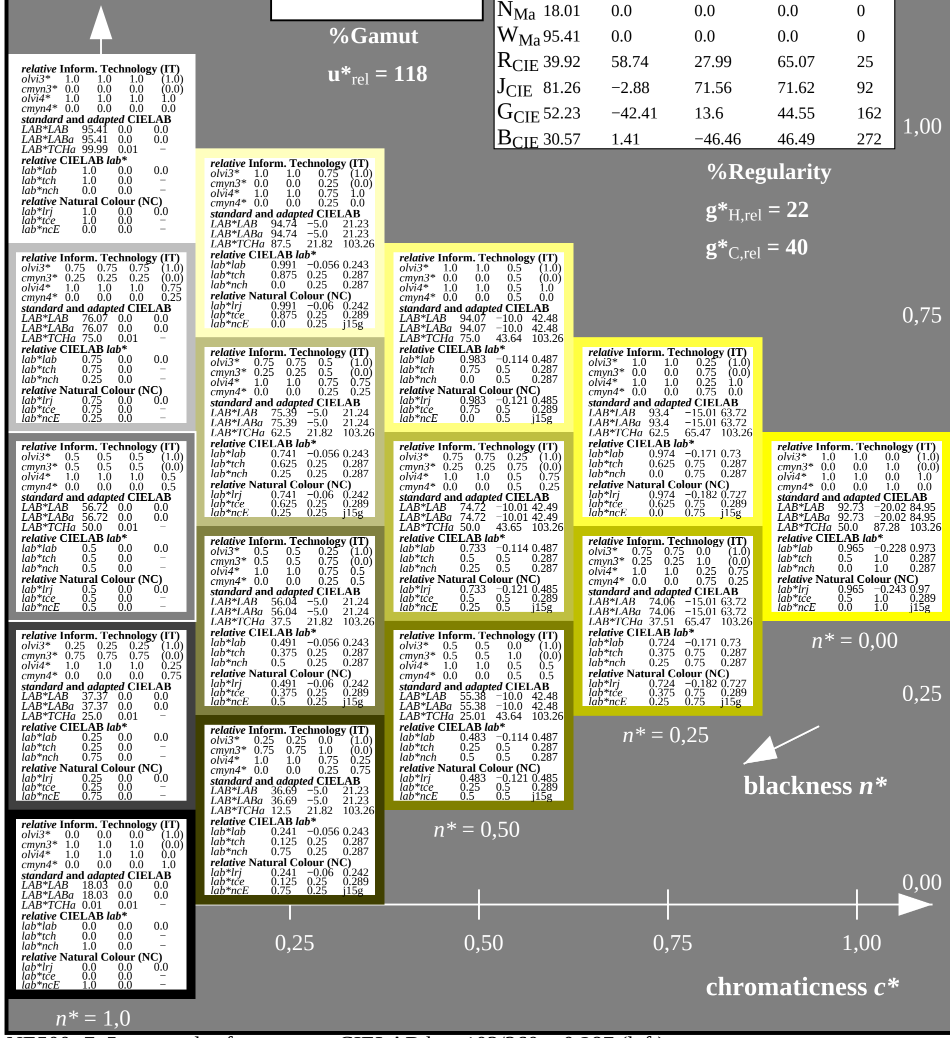


%Gamut
$u^*_{rel} = 118$

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

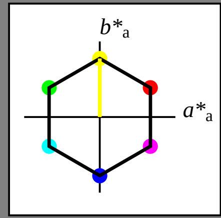
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



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^*

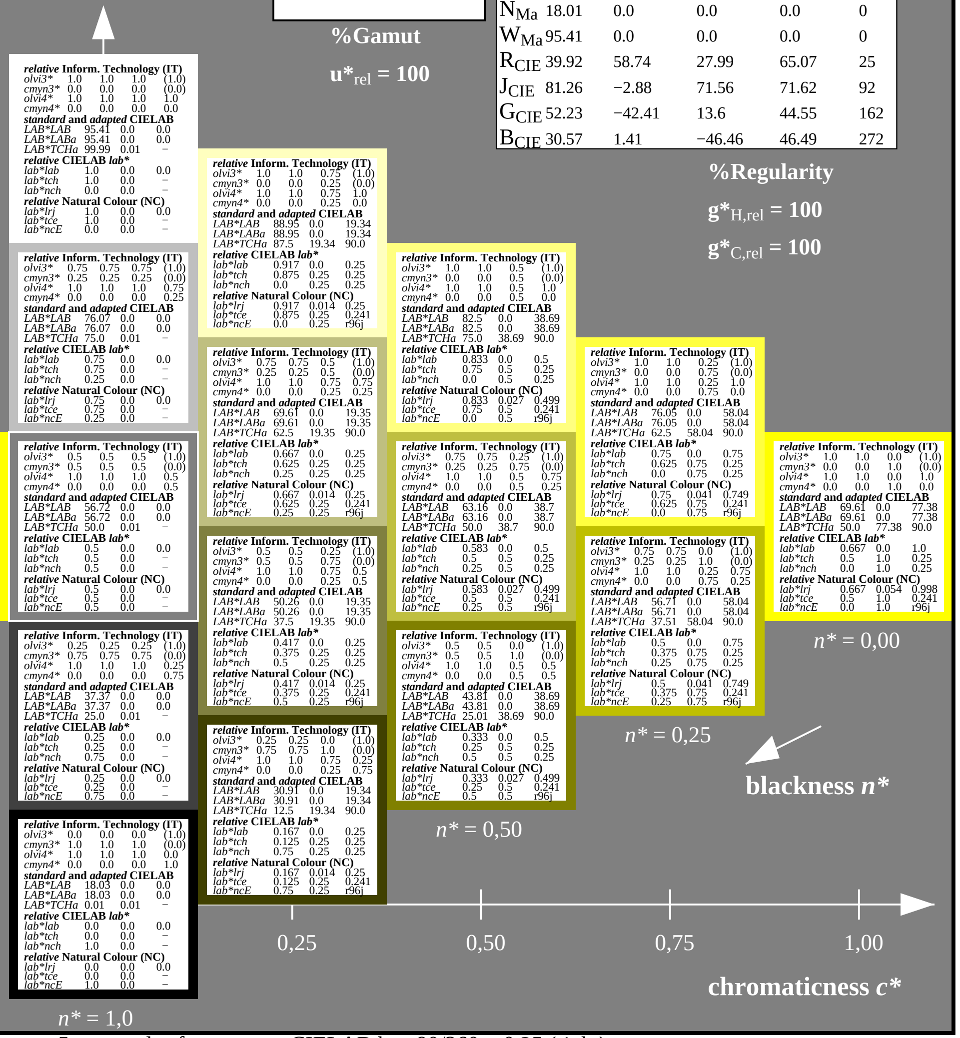


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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 $h^* = lab^*h = 103/360 = 0.287$

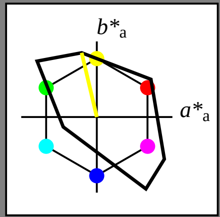
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

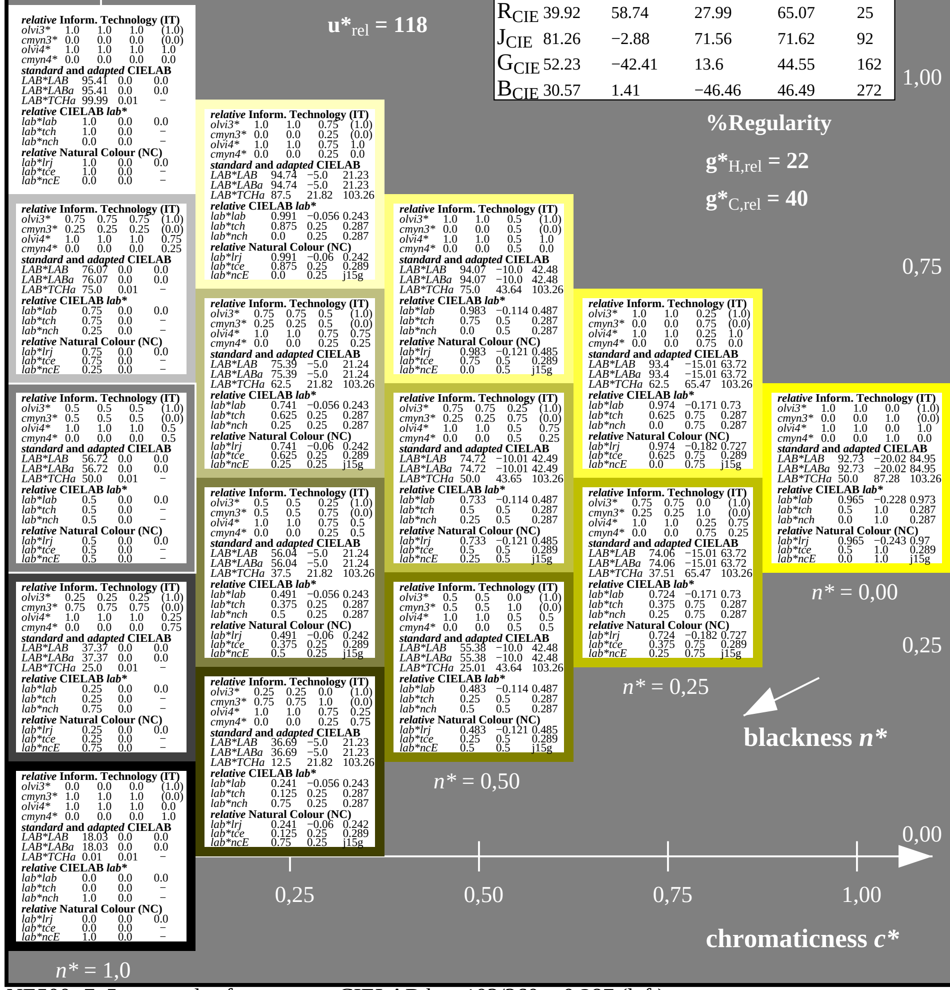


%Gamut

$u^*_{rel} = 118$

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



Output: Colorimetric Standard Reflective System SRS18

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

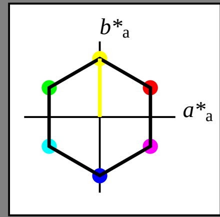
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

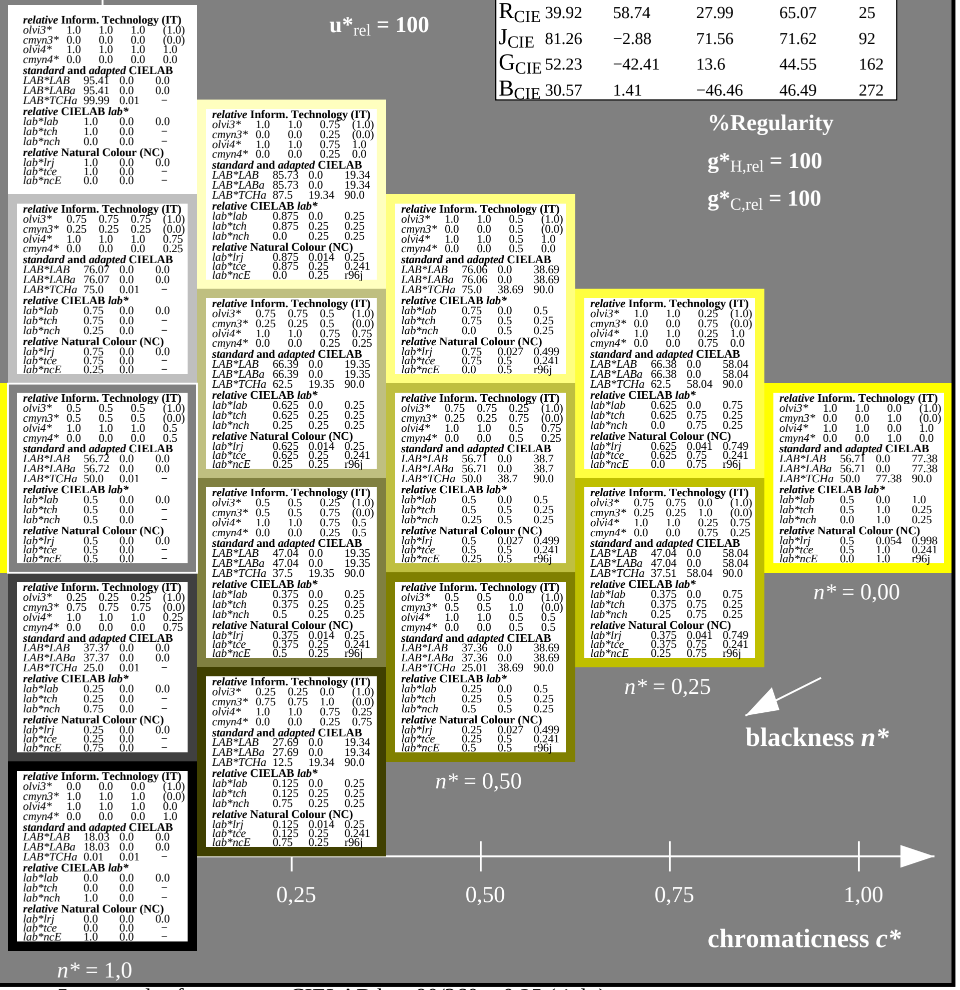


%Gamut

$u^*_{rel} = 100$

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



NE500−7, 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*

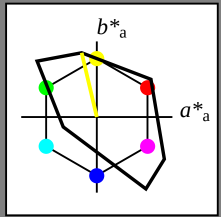
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 118

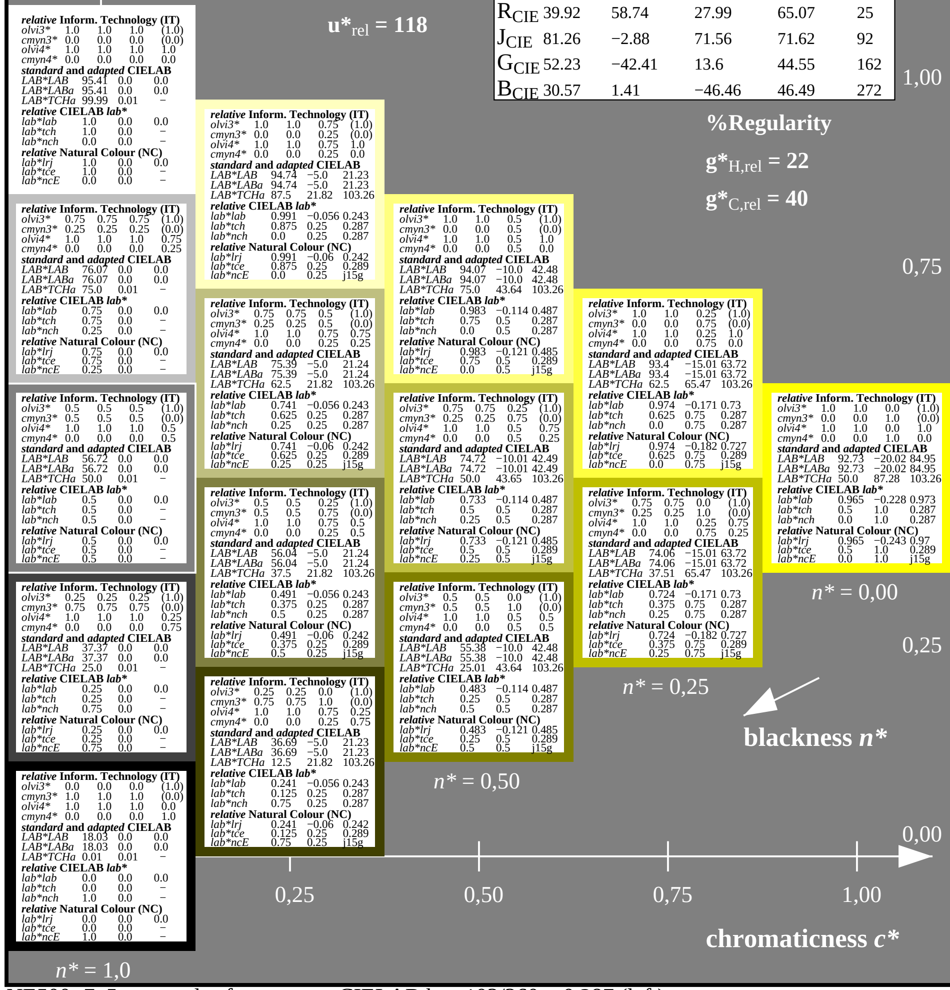
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 107/360 = 0.298*

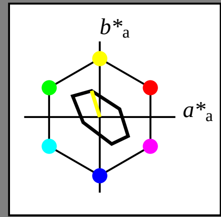
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

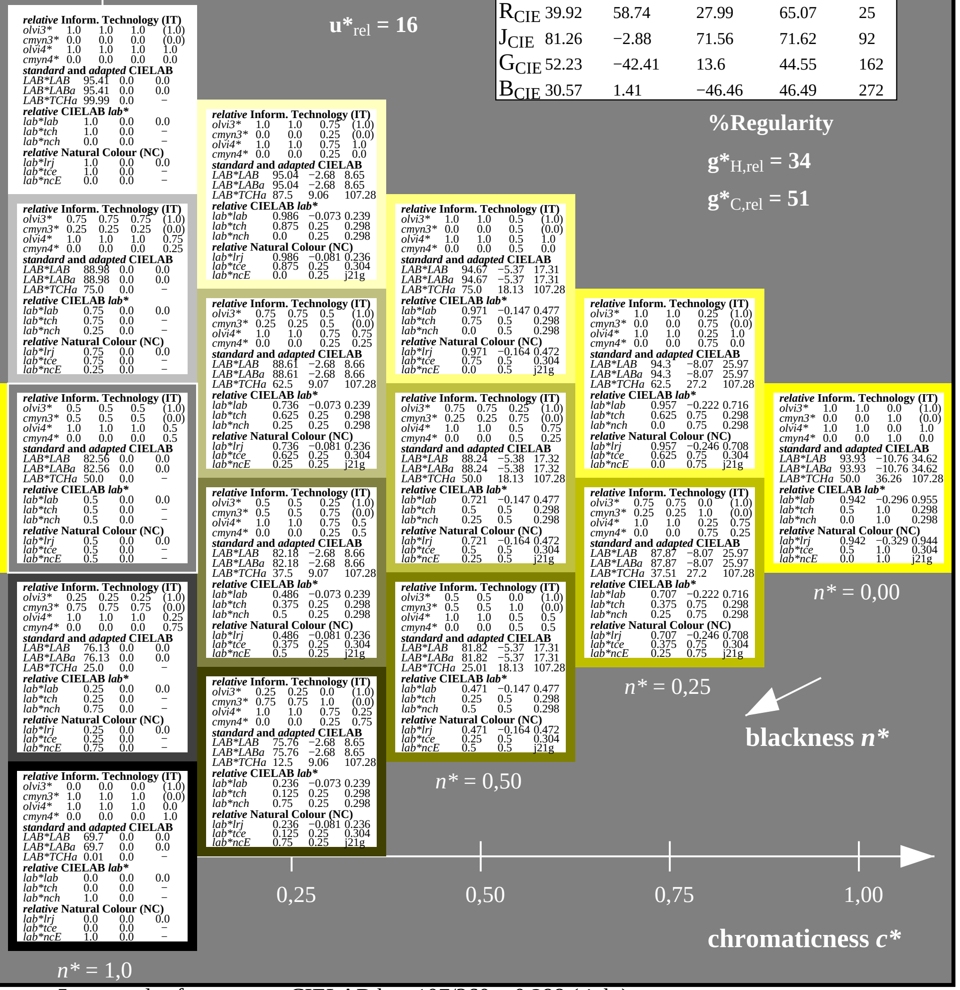
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

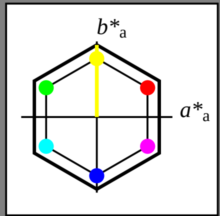


NE500−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

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^*

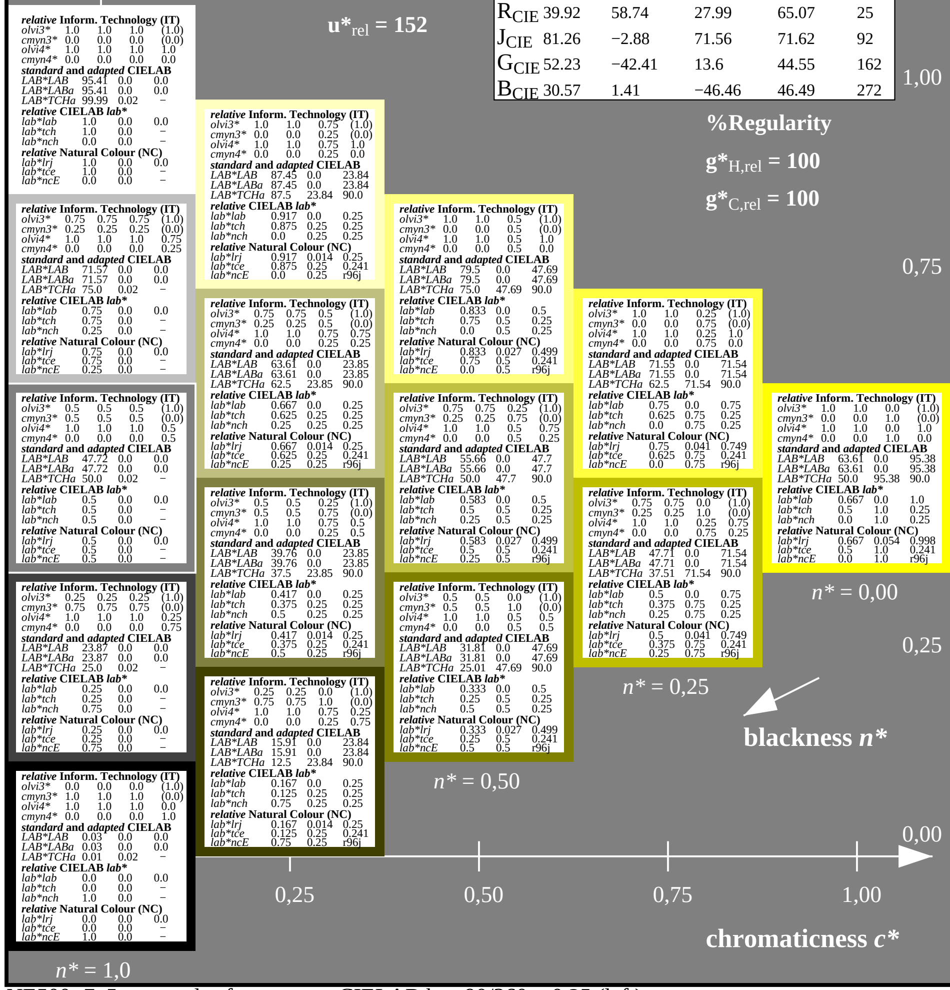


%Gamut
u^*_{rel} = 152

NLS00; adapted (a) CIELAB data

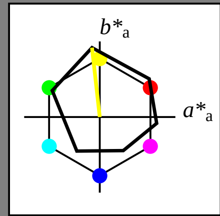
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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^*

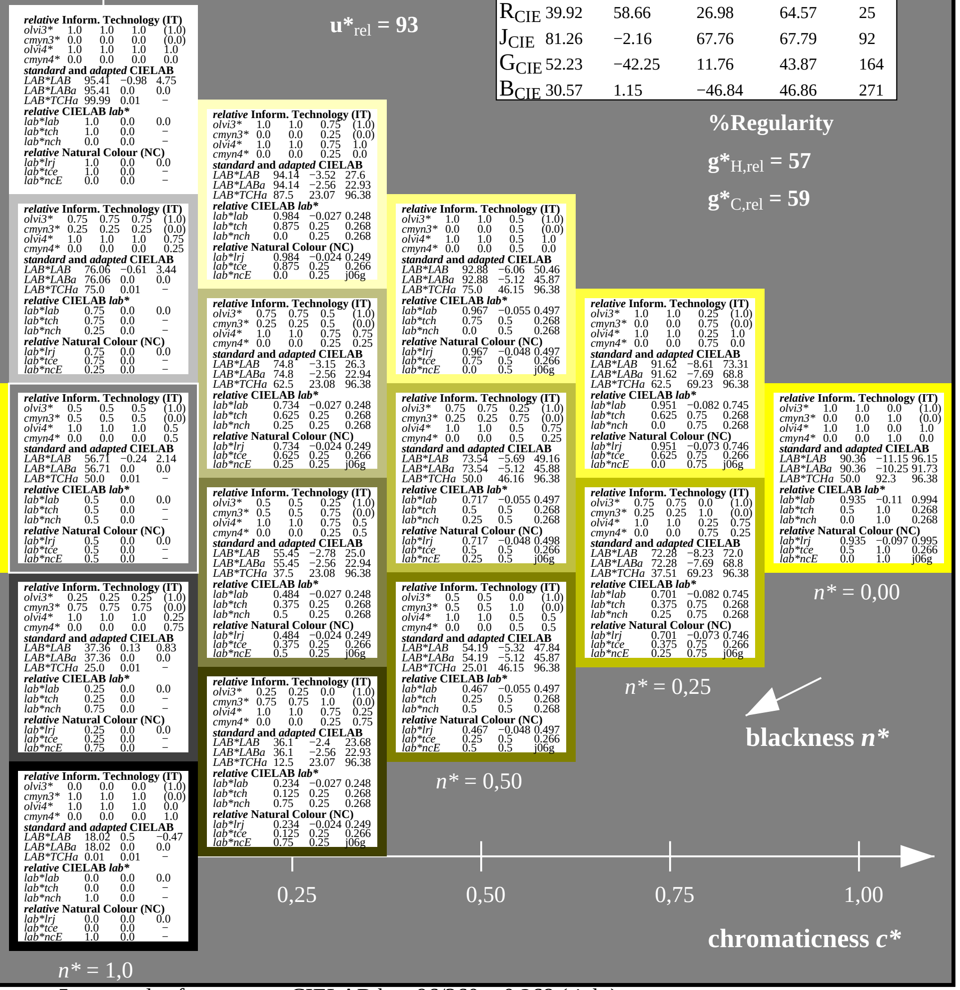


%Gamut
u^*_{rel} = 93

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



NE500−7, 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**

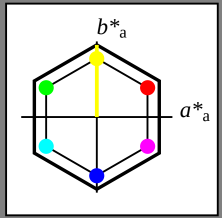
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u*rel = 152

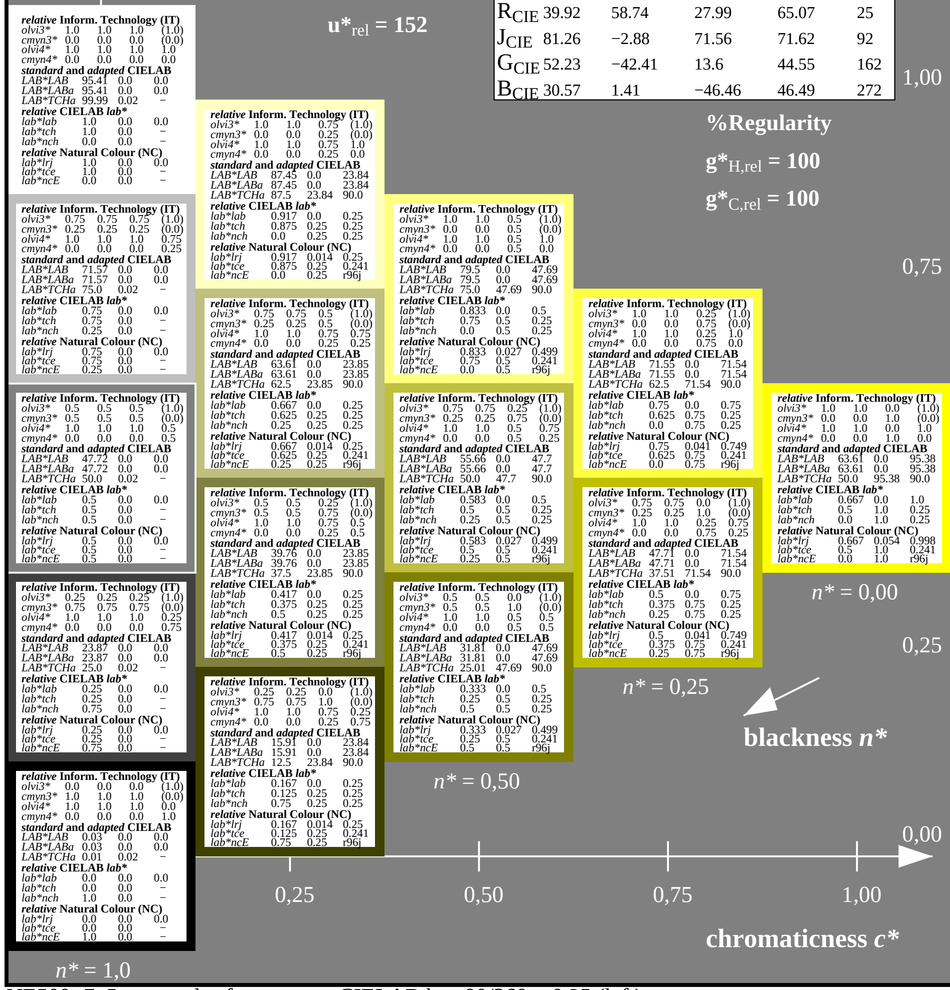
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue *h = *lab*h* = 103/360 = 0.286**

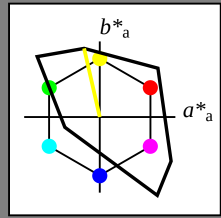
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u*rel = 158

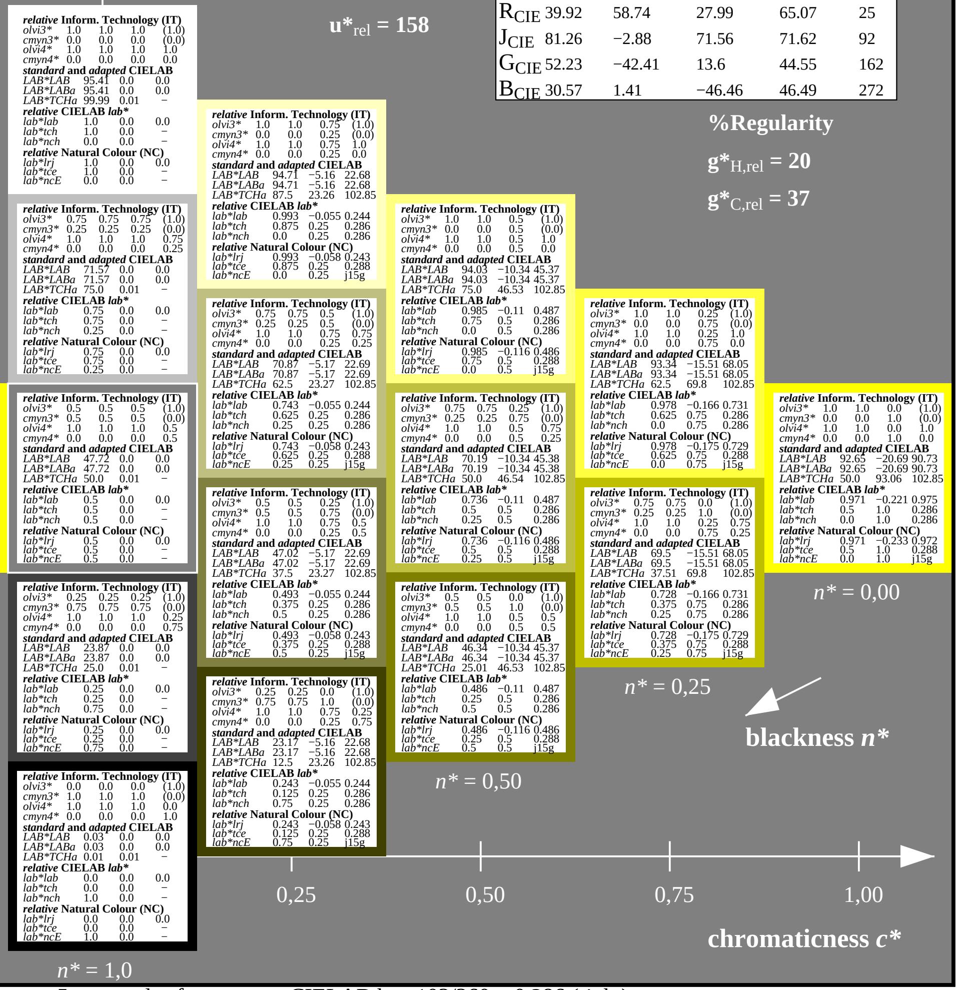
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



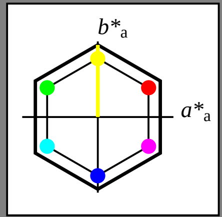
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

Input: Colorimetric Natural 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

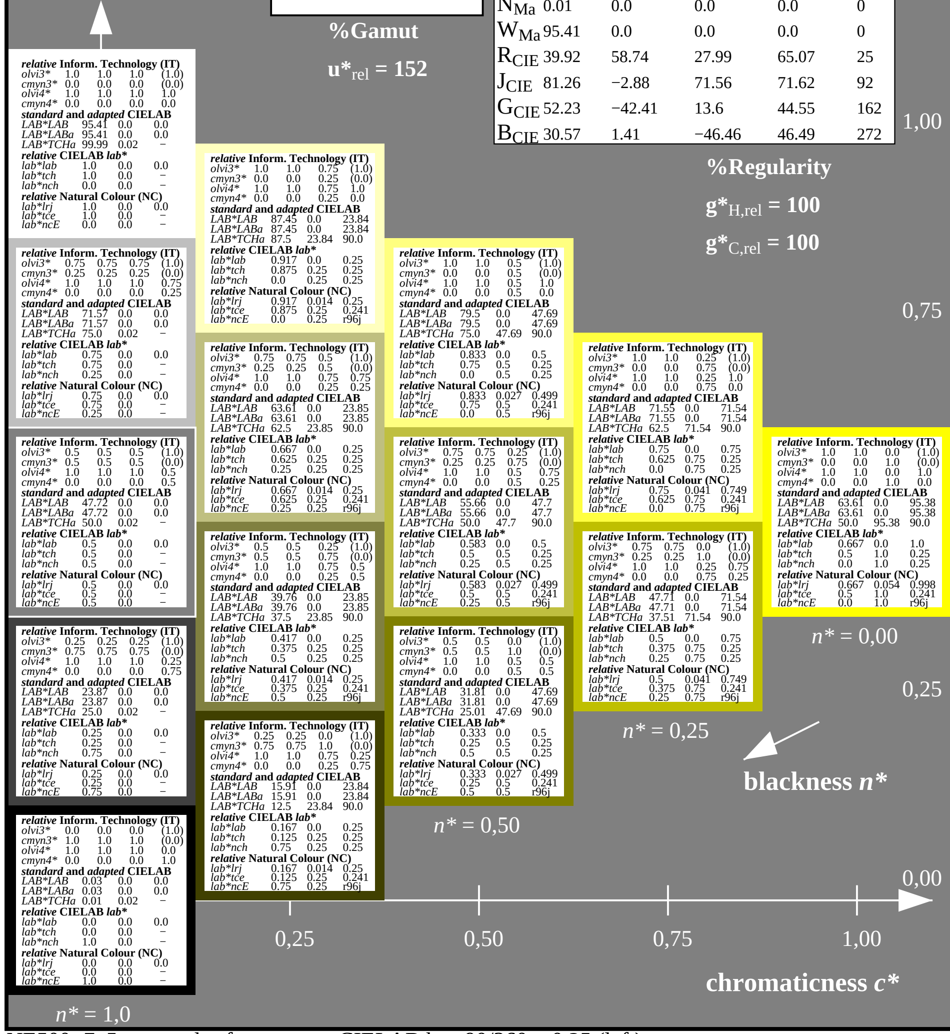
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

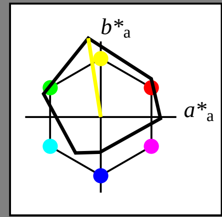
$g^*_{C,rel}$ = 100



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

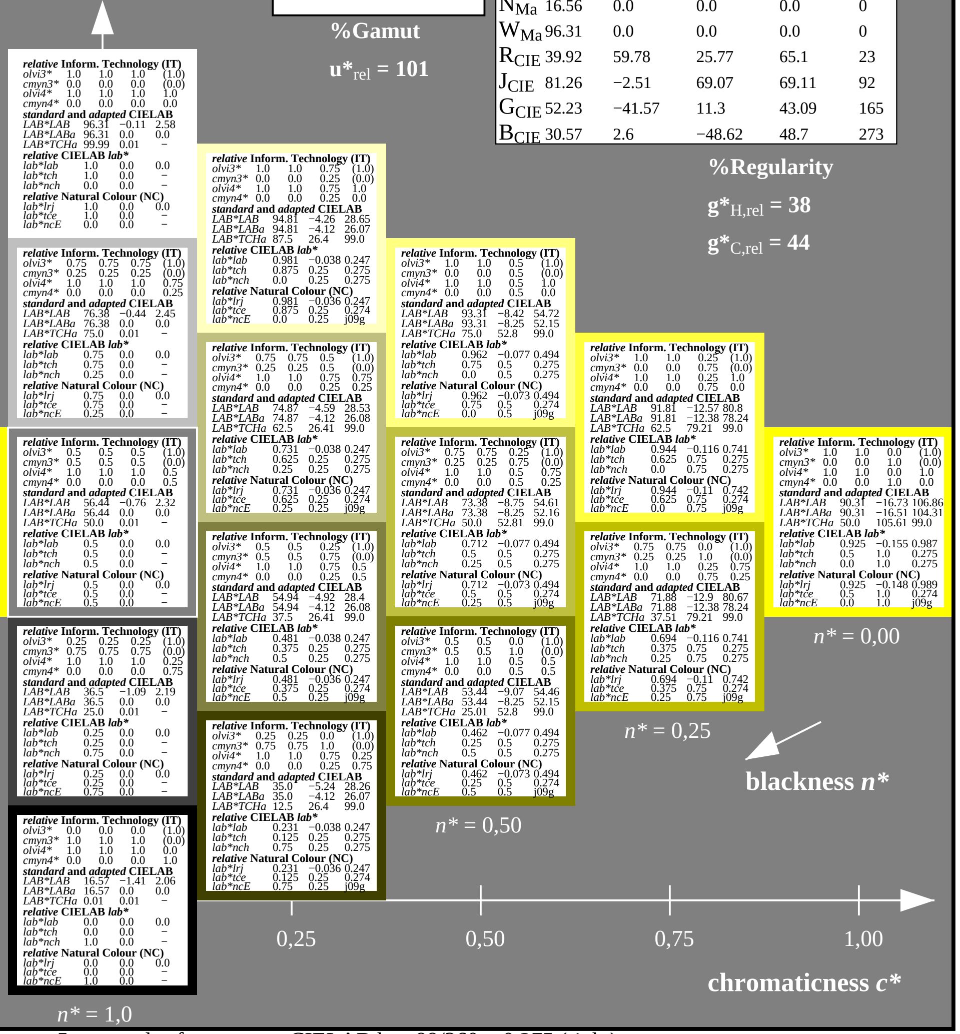
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



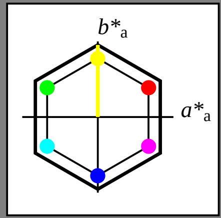
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

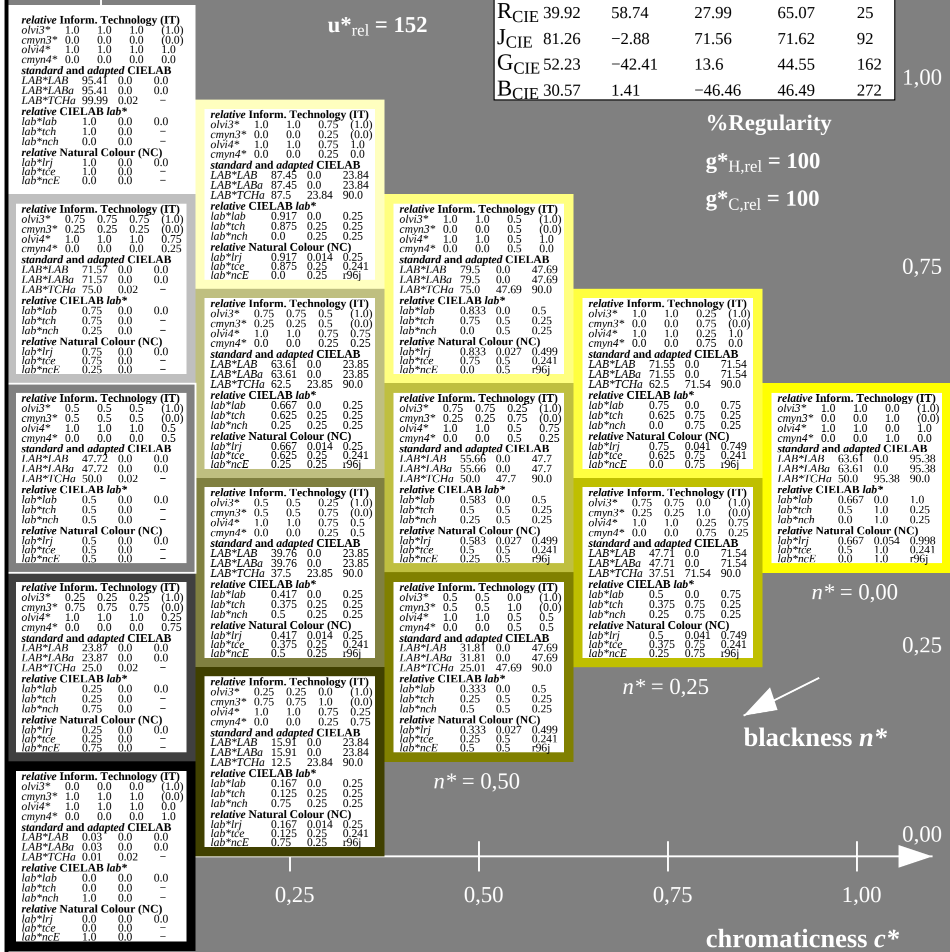
triangle lightness t^*



%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

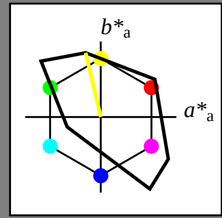
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 103/360 = 0.287$
lab*tch* and *lab*nch

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

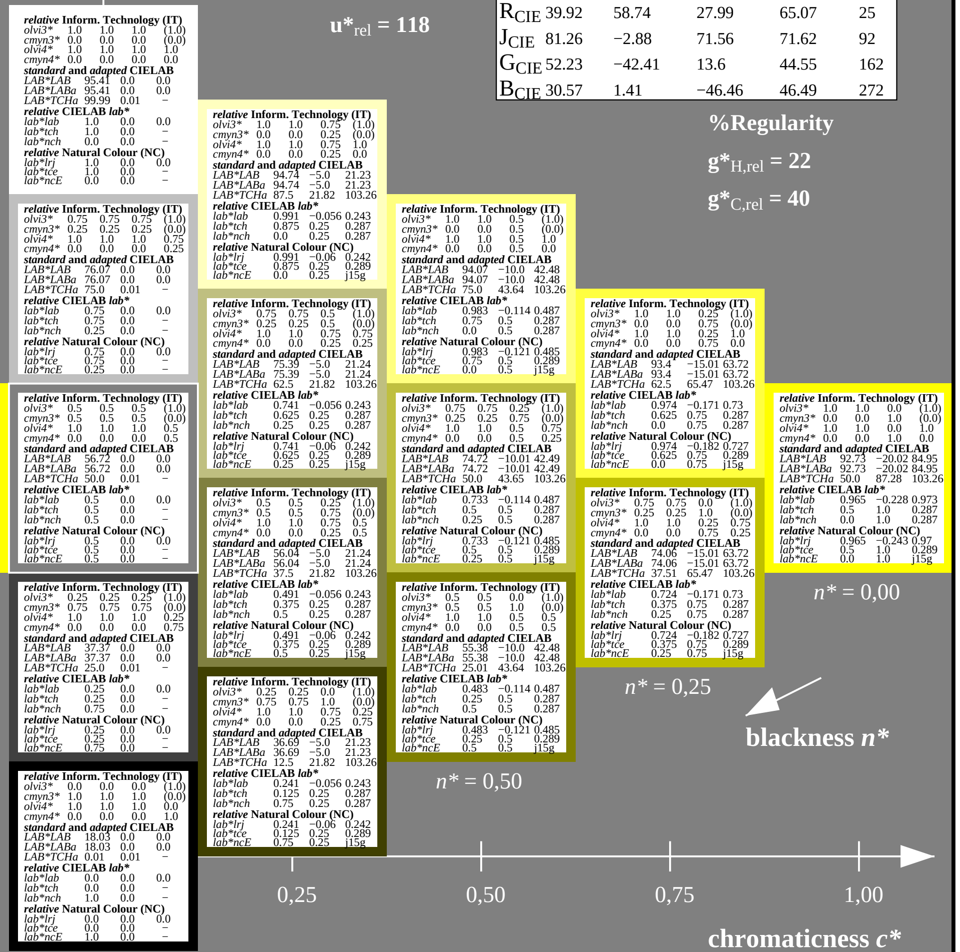
triangle lightness t^*



%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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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**

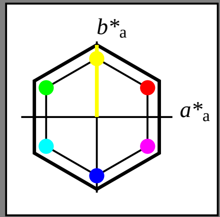
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

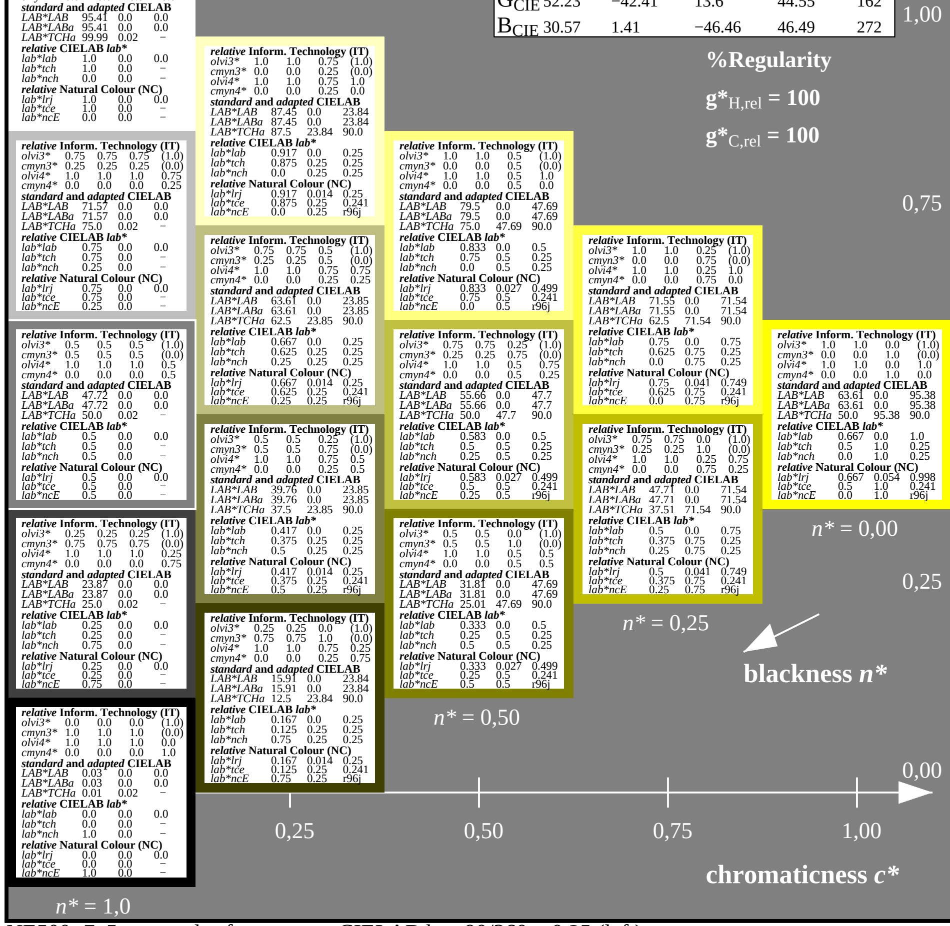
u^*_{rel} = 152

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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 90/360 = 0.25**

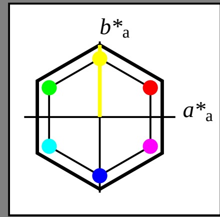
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

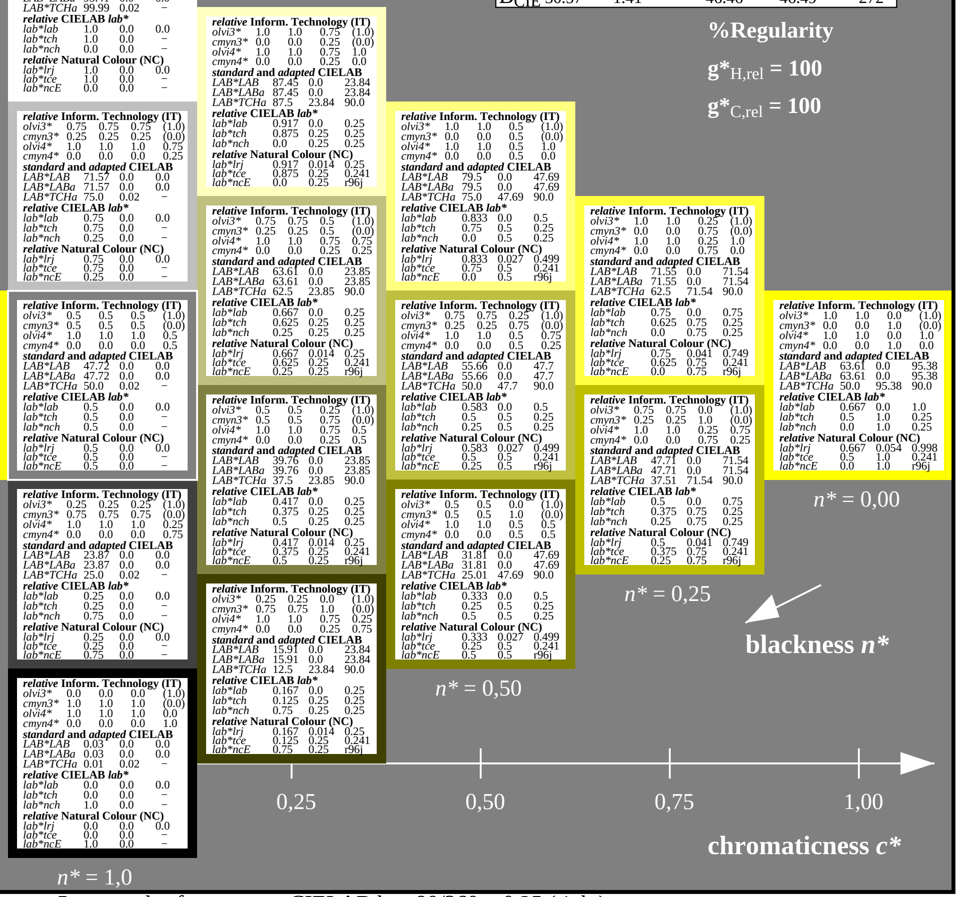
u^*_{rel} = 152

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



NE500−7, 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 Luminous System NLS00

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

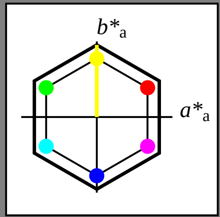
*lab*tch and lab*nch*

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

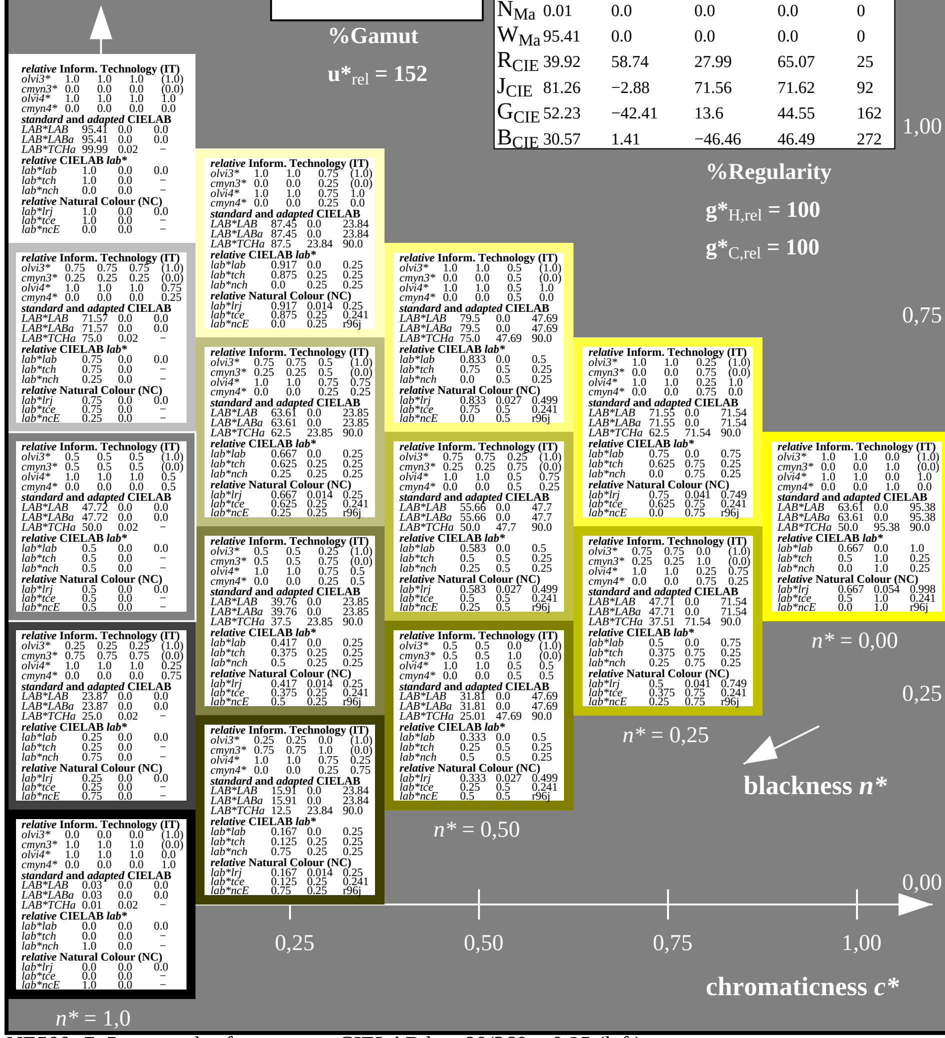
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18

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

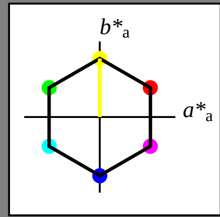
*lab*tch and lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

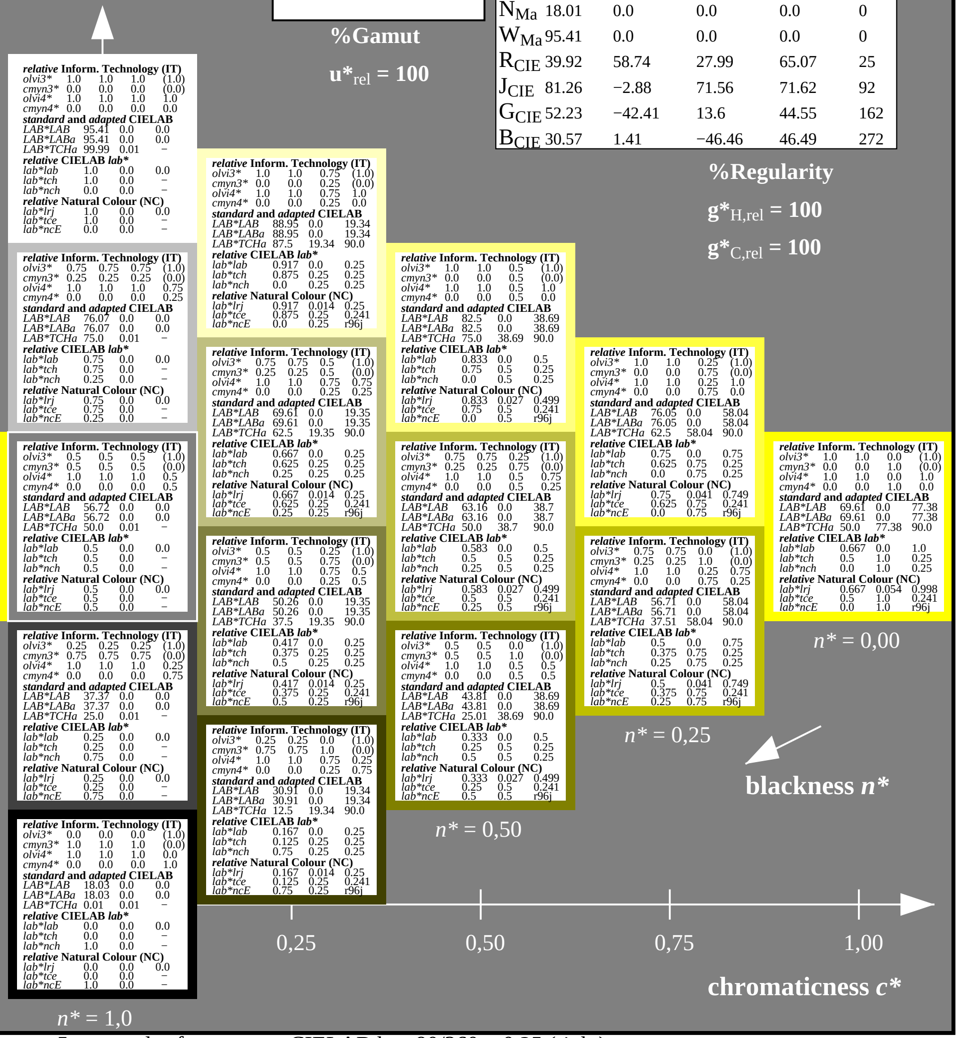
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Luminous System NLS00

for hue *h** = *lab*h* = 90/360 = 0.25

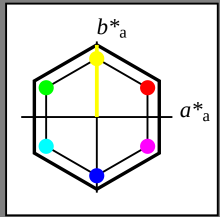
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u*$_{rel}$ = 152

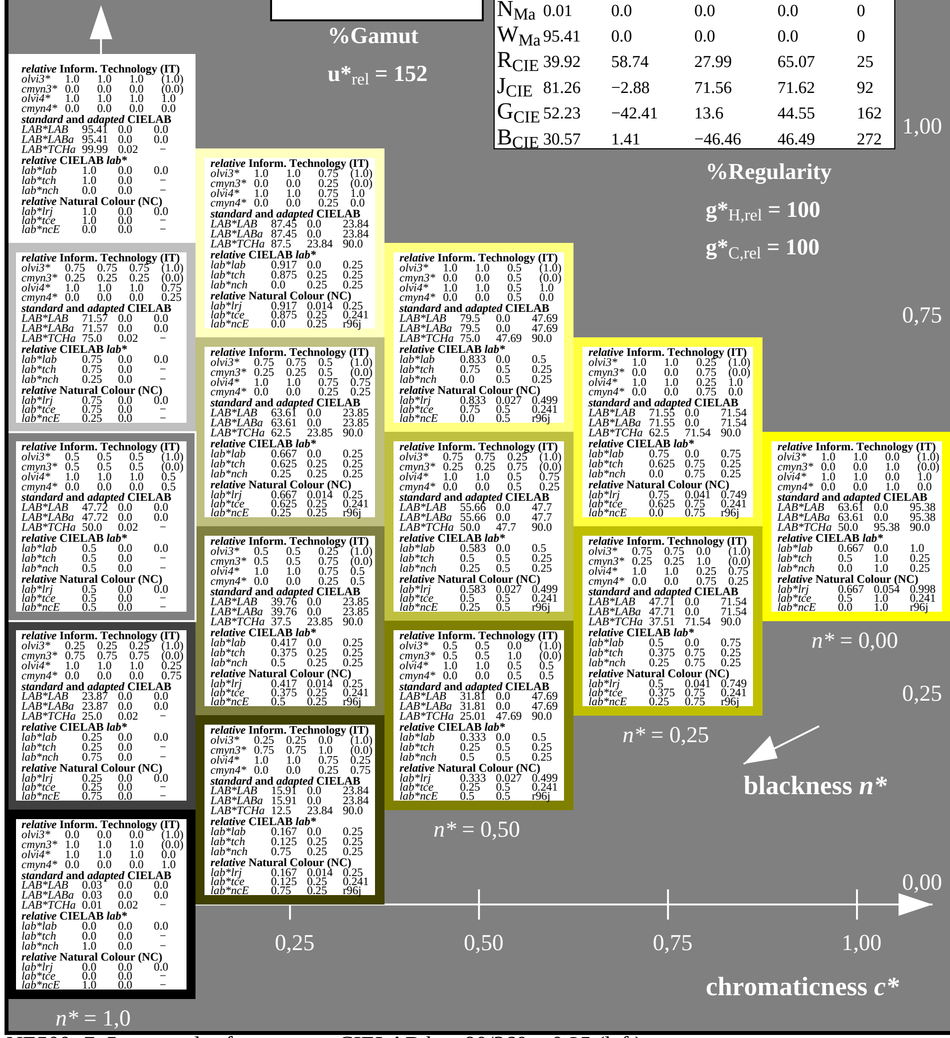
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue *h** = *lab*h* = 90/360 = 0.25

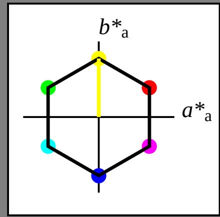
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u*$_{rel}$ = 100

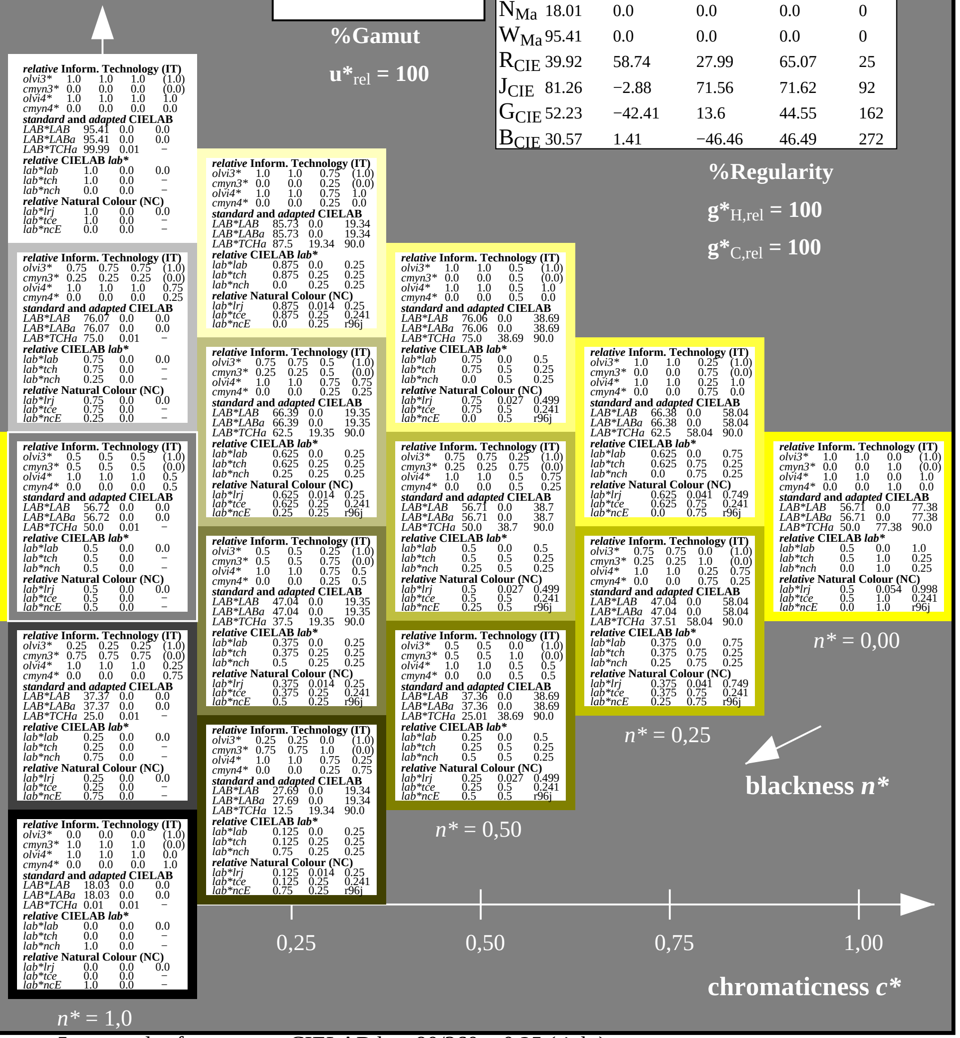
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Luminous System NLS00

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

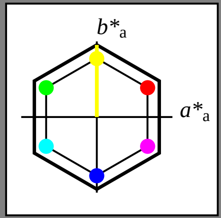
*lab*tch* and *lab*nch*

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

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 0.02 –
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 0.02 –
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 0.02 –
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 0.02 –
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 0.02 –
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 87.45 0.0 23.84; LAB*LABa 87.45 0.0 23.84; LAB*TCHa 87.5 23.84 90.0
relative CIELAB lab*: lab*lab 0.917 0.0 0.25; lab*tch 0.875 0.25 0.25; lab*nch 0.0 0.25 0.25
relative Natural Colour (NC): lab*lrj 0.917 0.014 0.25; lab*tce 0.875 0.25 0.241; lab*ncE 0.0 0.25 r96j

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 63.61 0.0 23.85; LAB*LABa 63.61 0.0 23.85; LAB*TCHa 62.5 23.85 90.0
relative CIELAB lab*: lab*lab 0.667 0.0 0.25; lab*tch 0.625 0.25 0.25; lab*nch 0.25 0.25 0.25
relative Natural Colour (NC): lab*lrj 0.667 0.014 0.25; lab*tce 0.625 0.25 0.241; lab*ncE 0.25 0.25 r96j

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 39.76 0.0 23.85; LAB*LABa 39.76 0.0 23.85; LAB*TCHa 37.5 23.85 90.0
relative CIELAB lab*: lab*lab 0.417 0.0 0.25; lab*tch 0.375 0.25 0.25; lab*nch 0.5 0.25 0.25
relative Natural Colour (NC): lab*lrj 0.417 0.014 0.25; lab*tce 0.375 0.25 0.241; lab*ncE 0.5 0.25 r96j

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 15.91 0.0 23.84; LAB*LABa 15.91 0.0 23.84; LAB*TCHa 12.5 23.84 90.0
relative CIELAB lab*: lab*lab 0.167 0.0 0.25; lab*tch 0.125 0.25 0.25; lab*nch 0.75 0.25 0.25
relative Natural Colour (NC): lab*lrj 0.167 0.014 0.25; lab*tce 0.125 0.25 0.241; lab*ncE 0.75 0.25 r96j

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 79.5 0.0 47.69; LAB*LABa 79.5 0.0 47.69; LAB*TCHa 75.0 47.69 90.0
relative CIELAB lab*: lab*lab 0.833 0.0 0.5; lab*tch 0.75 0.5 0.25; lab*nch 0.0 0.5 0.25
relative Natural Colour (NC): lab*lrj 0.833 0.027 0.499; lab*tce 0.75 0.5 0.241; lab*ncE 0.0 0.5 r96j

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 55.66 0.0 47.7; LAB*LABa 55.66 0.0 47.7; LAB*TCHa 50.0 47.7 90.0
relative CIELAB lab*: lab*lab 0.583 0.0 0.5; lab*tch 0.5 0.5 0.25; lab*nch 0.25 0.5 0.25
relative Natural Colour (NC): lab*lrj 0.583 0.027 0.499; lab*tce 0.5 0.5 0.241; lab*ncE 0.25 0.5 r96j

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 31.81 0.0 47.69; LAB*LABa 31.81 0.0 47.69; LAB*TCHa 25.01 47.69 90.0
relative CIELAB lab*: lab*lab 0.333 0.0 0.5; lab*tch 0.25 0.5 0.25; lab*nch 0.5 0.5 0.25
relative Natural Colour (NC): lab*lrj 0.333 0.027 0.499; lab*tce 0.25 0.5 0.241; lab*ncE 0.5 0.5 r96j

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 71.55 0.0 71.54; LAB*LABa 71.55 0.0 71.54; LAB*TCHa 62.5 71.54 90.0
relative CIELAB lab*: lab*lab 0.75 0.0 0.75; lab*tch 0.625 0.75 0.25; lab*nch 0.0 0.75 0.25
relative Natural Colour (NC): lab*lrj 0.75 0.041 0.749; lab*tce 0.625 0.75 0.241; lab*ncE 0.0 0.75 r96j

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 47.71 0.0 71.54; LAB*LABa 47.71 0.0 71.54; LAB*TCHa 37.51 71.54 90.0
relative CIELAB lab*: lab*lab 0.5 0.0 0.75; lab*tch 0.375 0.75 0.25; lab*nch 0.25 0.75 0.25
relative Natural Colour (NC): lab*lrj 0.5 0.041 0.749; lab*tce 0.375 0.75 0.241; lab*ncE 0.25 0.75 r96j

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 1.0; cmyn4* 0.0 0.0 1.0 0.0
standard and adapted CIELAB: LAB*LAB 63.61 0.0 95.38; LAB*LABa 63.61 0.0 95.38; LAB*TCHa 50.0 95.38 90.0
relative CIELAB lab*: lab*lab 0.667 0.0 1.0; lab*tch 0.5 1.0 0.25; lab*nch 0.0 1.0 0.25
relative Natural Colour (NC): lab*lrj 0.667 0.054 0.998; lab*tce 0.5 1.0 0.241; lab*ncE 0.0 1.0 r96j

n^* = 0,00

n^* = 0,25

n^* = 0,50

blackness n^*

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

chromaticness c^*

n^* = 1,0

Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$

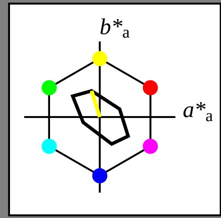
*lab*tch* and *lab*nch*

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

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 0.02 –
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 88.98 0.0 0.0; LAB*LABa 88.98 0.0 0.0; LAB*TCHa 75.0 0.02 –
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 82.56 0.0 0.0; LAB*LABa 82.56 0.0 0.0; LAB*TCHa 50.0 0.02 –
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 76.13 0.0 0.0; LAB*LABa 76.13 0.0 0.0; LAB*TCHa 25.0 0.02 –
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 69.7 0.0 0.0; LAB*LABa 69.7 0.0 0.0; LAB*TCHa 0.01 0.02 –
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 95.04 −2.68 8.65; LAB*LABa 95.04 −2.68 8.65; LAB*TCHa 87.5 9.06 107.28
relative CIELAB lab*: lab*lab 0.986 −0.073 0.239; lab*tch 0.875 0.25 0.298; lab*nch 0.0 0.25 0.298
relative Natural Colour (NC): lab*lrj 0.986 −0.081 0.236; lab*tce 0.875 0.25 0.304; lab*ncE 0.0 0.25 j21g

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 88.61 −2.68 8.66; LAB*LABa 88.61 −2.68 8.66; LAB*TCHa 62.5 9.07 107.28
relative CIELAB lab*: lab*lab 0.736 −0.073 0.239; lab*tch 0.625 0.25 0.298; lab*nch 0.25 0.25 0.298
relative Natural Colour (NC): lab*lrj 0.736 −0.081 0.236; lab*tce 0.625 0.25 0.304; lab*ncE 0.25 0.25 j21g

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 82.18 −2.68 8.66; LAB*LABa 82.18 −2.68 8.66; LAB*TCHa 37.5 9.07 107.28
relative CIELAB lab*: lab*lab 0.486 −0.073 0.239; lab*tch 0.375 0.25 0.298; lab*nch 0.5 0.25 0.298
relative Natural Colour (NC): lab*lrj 0.486 −0.081 0.236; lab*tce 0.375 0.25 0.304; lab*ncE 0.5 0.25 j21g

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 75.76 −2.68 8.65; LAB*LABa 75.76 −2.68 8.65; LAB*TCHa 12.5 9.06 107.28
relative CIELAB lab*: lab*lab 0.236 −0.073 0.239; lab*tch 0.125 0.25 0.298; lab*nch 0.75 0.25 0.298
relative Natural Colour (NC): lab*lrj 0.236 −0.081 0.236; lab*tce 0.125 0.25 0.304; lab*ncE 0.75 0.25 j21g

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 94.67 −5.37 17.31; LAB*LABa 94.67 −5.37 17.31; LAB*TCHa 75.0 18.13 107.28
relative CIELAB lab*: lab*lab 0.971 −0.147 0.477; lab*tch 0.75 0.5 0.298; lab*nch 0.0 0.5 0.298
relative Natural Colour (NC): lab*lrj 0.971 −0.164 0.472; lab*tce 0.75 0.5 0.304; lab*ncE 0.0 0.5 j21g

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 88.24 −5.38 17.32; LAB*LABa 88.24 −5.38 17.32; LAB*TCHa 50.0 18.13 107.28
relative CIELAB lab*: lab*lab 0.721 −0.147 0.477; lab*tch 0.5 0.5 0.298; lab*nch 0.25 0.5 0.298
relative Natural Colour (NC): lab*lrj 0.721 −0.164 0.472; lab*tce 0.5 0.5 0.304; lab*ncE 0.25 0.5 j21g

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 81.82 −5.37 17.31; LAB*LABa 81.82 −5.37 17.31; LAB*TCHa 25.01 18.13 107.28
relative CIELAB lab*: lab*lab 0.471 −0.147 0.477; lab*tch 0.25 0.5 0.298; lab*nch 0.5 0.5 0.298
relative Natural Colour (NC): lab*lrj 0.471 −0.164 0.472; lab*tce 0.25 0.5 0.304; lab*ncE 0.5 0.5 j21g

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 94.3 −8.07 25.97; LAB*LABa 94.3 −8.07 25.97; LAB*TCHa 62.5 27.2 107.28
relative CIELAB lab*: lab*lab 0.957 −0.222 0.716; lab*tch 0.625 0.75 0.298; lab*nch 0.0 0.75 0.298
relative Natural Colour (NC): lab*lrj 0.957 −0.246 0.708; lab*tce 0.625 0.75 0.304; lab*ncE 0.0 0.75 j21g

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 87.87 −8.07 25.97; LAB*LABa 87.87 −8.07 25.97; LAB*TCHa 37.51 27.2 107.28
relative CIELAB lab*: lab*lab 0.707 −0.222 0.716; lab*tch 0.375 0.75 0.298; lab*nch 0.25 0.75 0.298
relative Natural Colour (NC): lab*lrj 0.707 −0.246 0.708; lab*tce 0.375 0.75 0.304; lab*ncE 0.25 0.75 j21g

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 1.0; cmyn4* 0.0 0.0 1.0 0.0
standard and adapted CIELAB: LAB*LAB 93.93 −10.76 34.62; LAB*LABa 93.93 −10.76 34.62; LAB*TCHa 50.0 36.26 107.28
relative CIELAB lab*: lab*lab 0.942 −0.296 0.955; lab*tch 0.5 1.0 0.298; lab*nch 0.0 1.0 0.298
relative Natural Colour (NC): lab*lrj 0.942 −0.329 0.944; lab*tce 0.5 1.0 0.304; lab*ncE 0.0 1.0 j21g

n^* = 0,00

n^* = 0,25

n^* = 0,50

blackness n^*

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

chromaticness c^*

n^* = 1,0

NE500−7, 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 Natural Reflective System NRS18

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

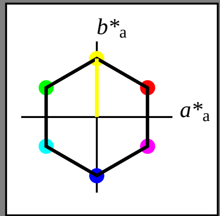
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

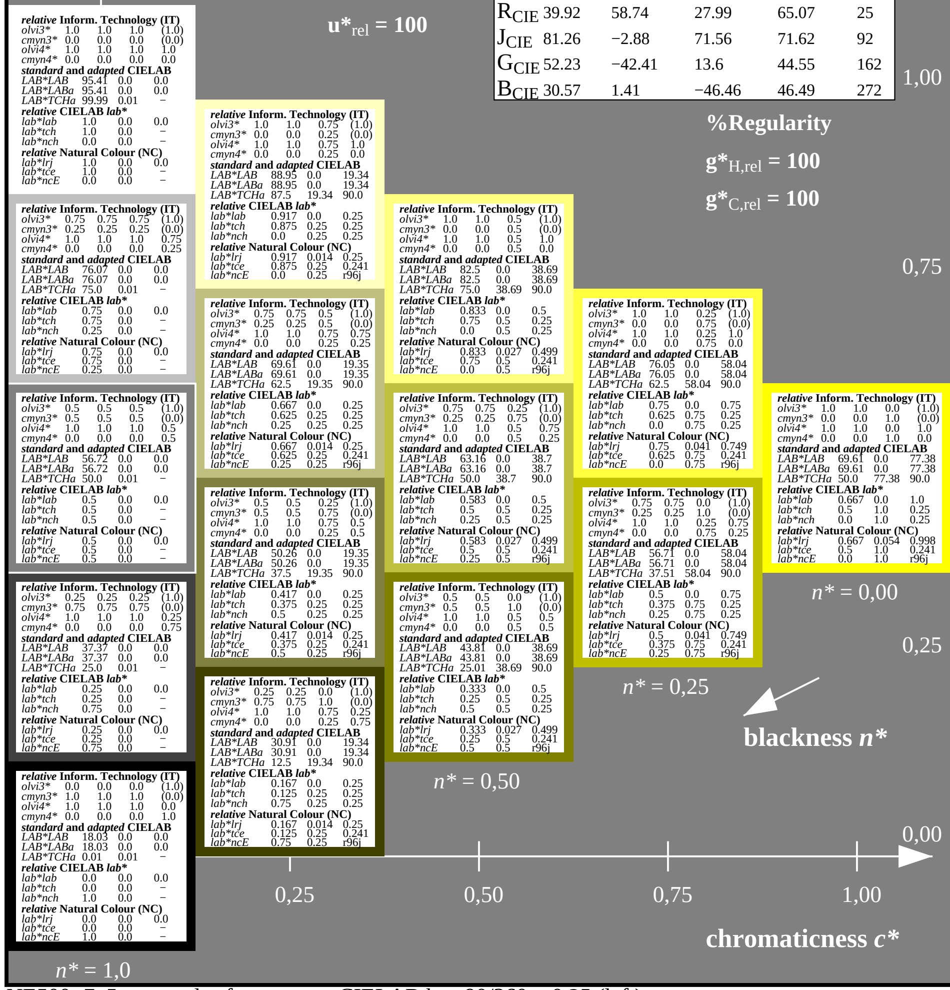
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Offset Reflective System ORS18

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

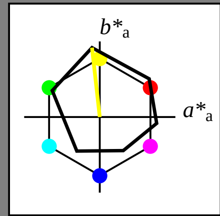
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

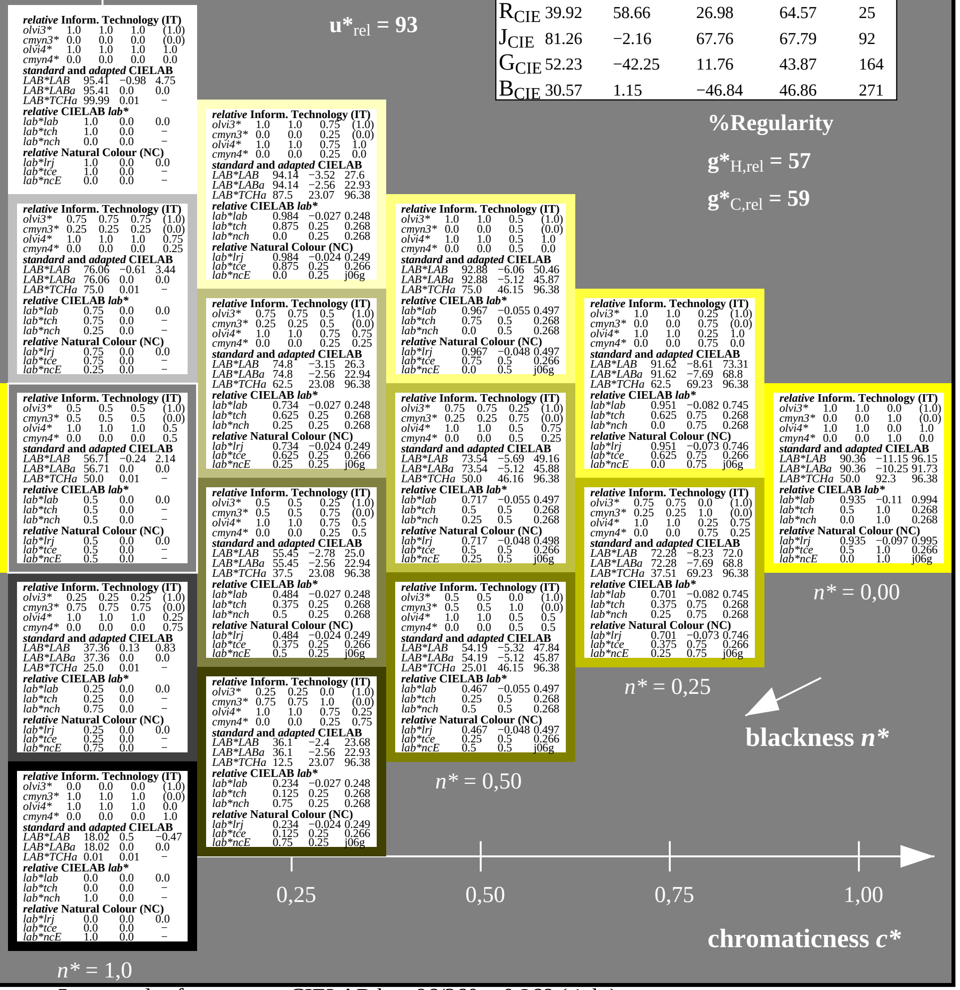
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



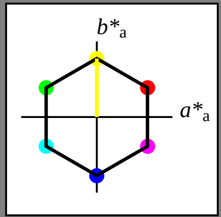
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

Input: Colorimetric Natural 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

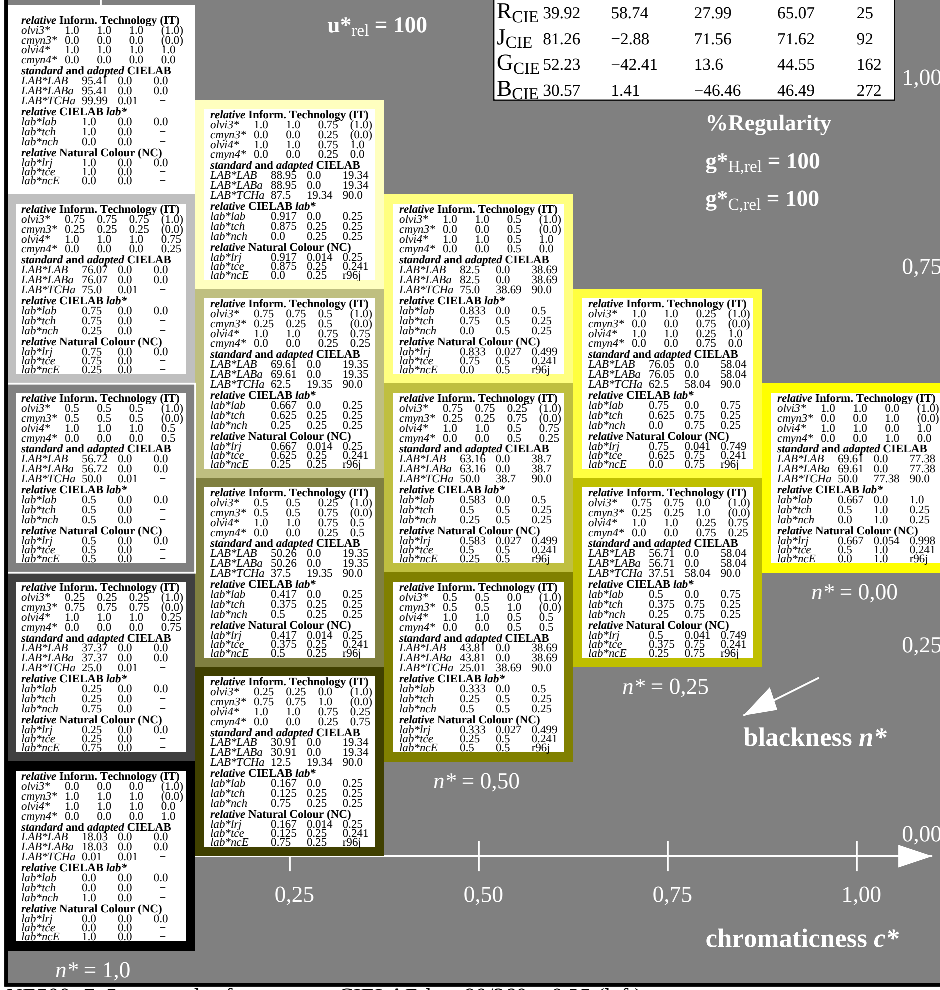
triangle lightness t^*



%Gamut
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

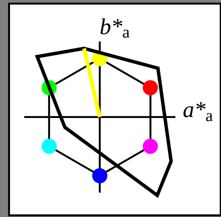
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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

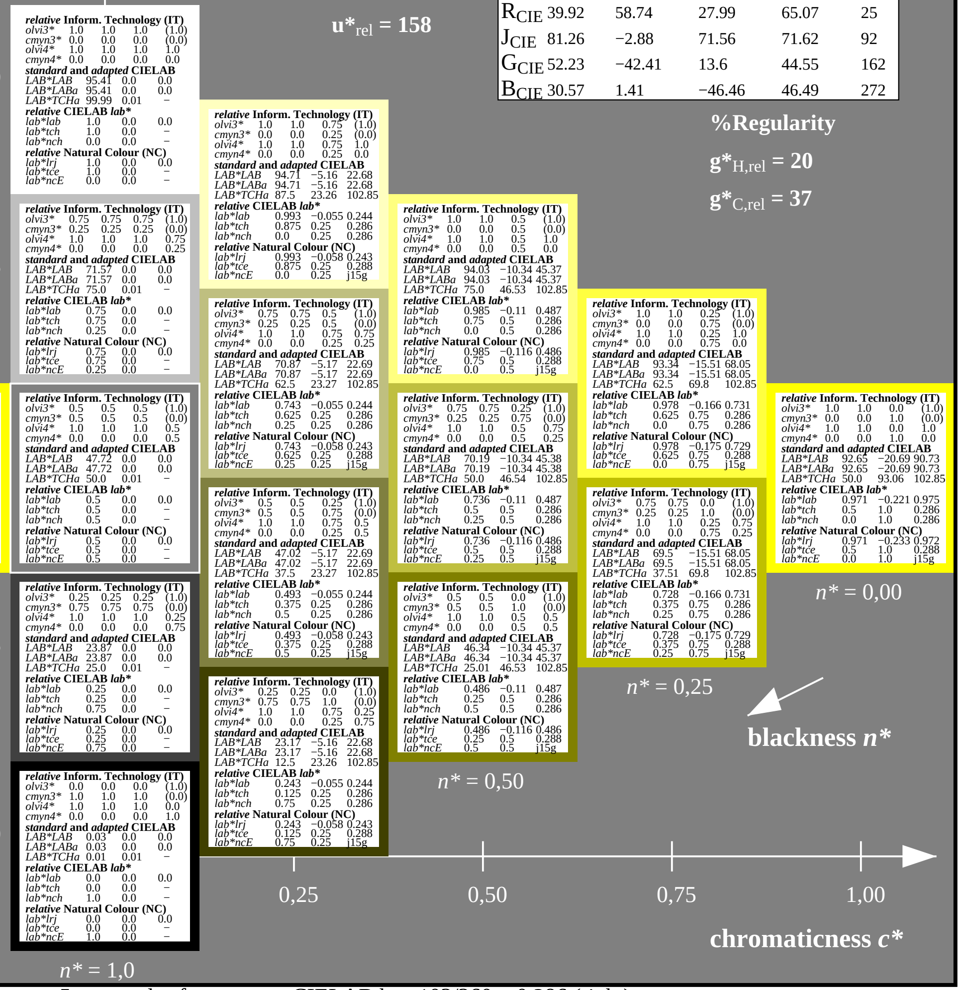
triangle lightness t^*



%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



NE500−7, 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 $h^* = lab^*h = 90/360 = 0.25$

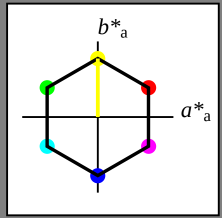
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

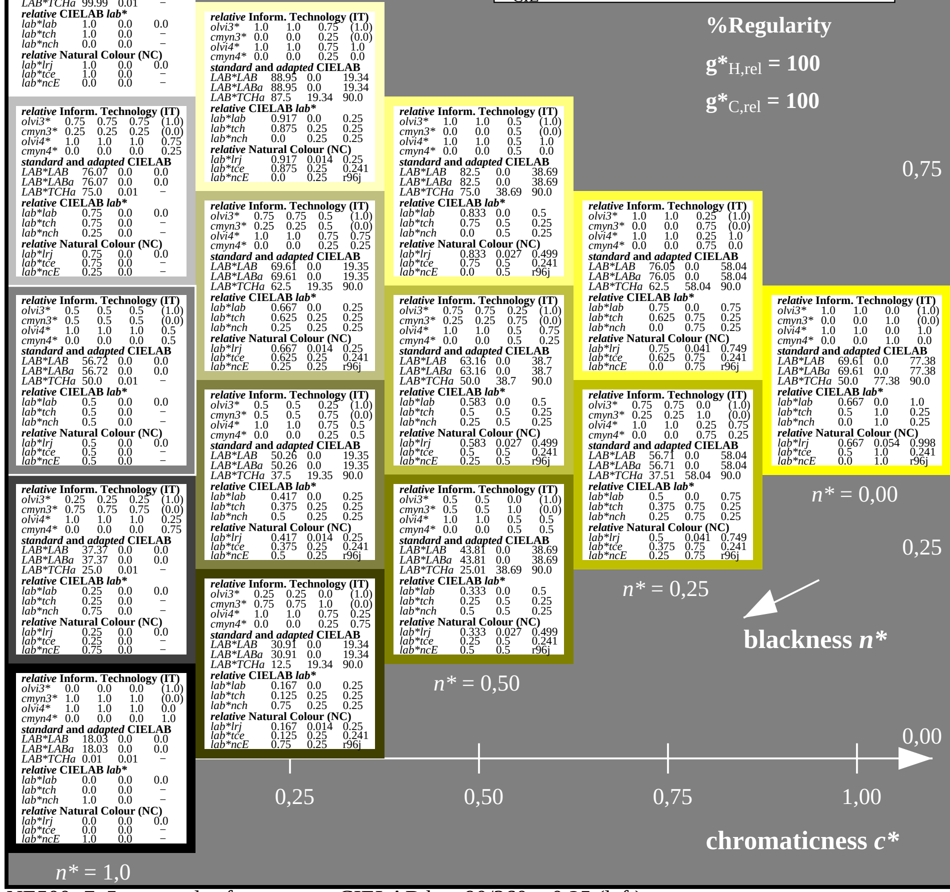
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX

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

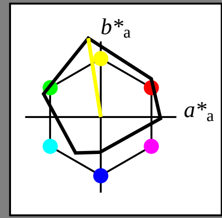
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 106 99

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

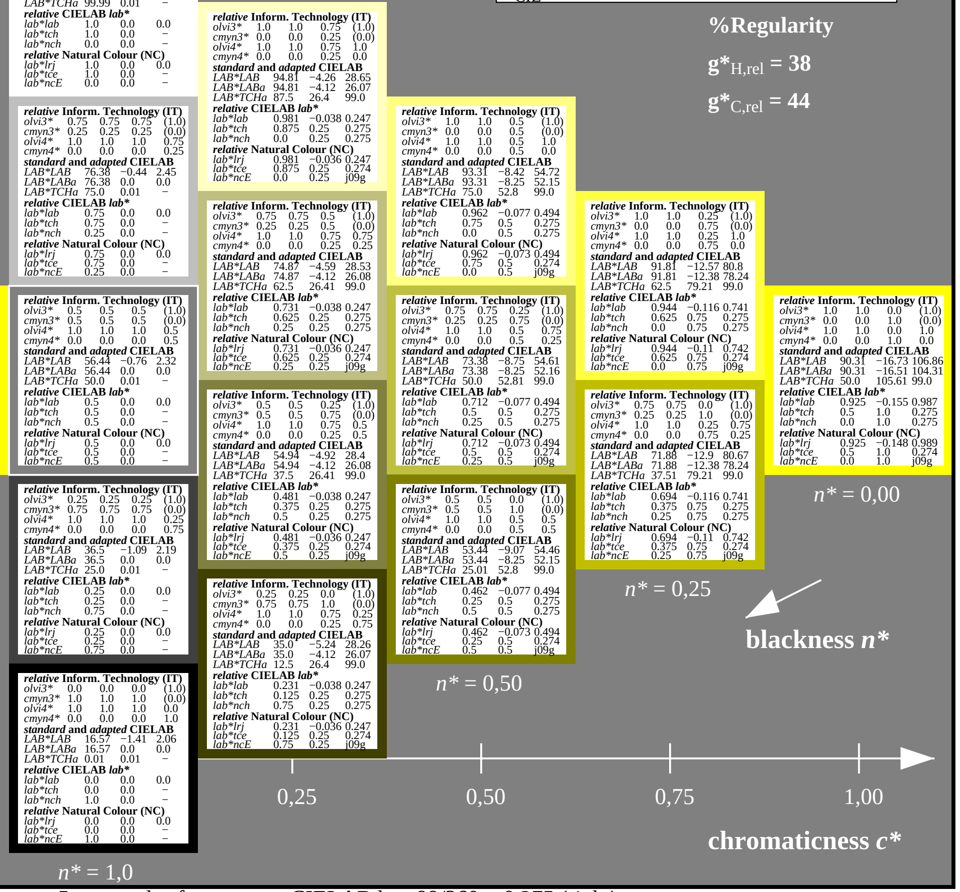
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Reflective System NRS18

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

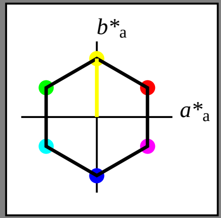
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

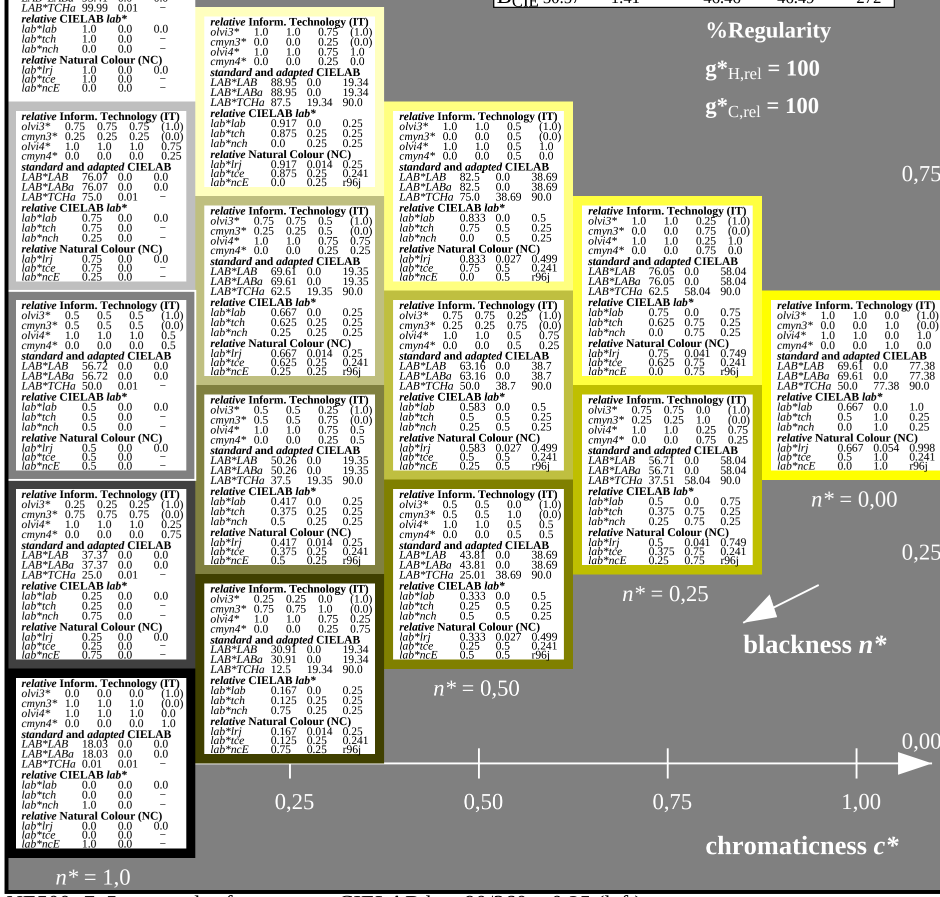
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 103/360 = 0.287$

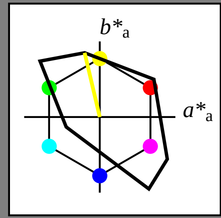
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

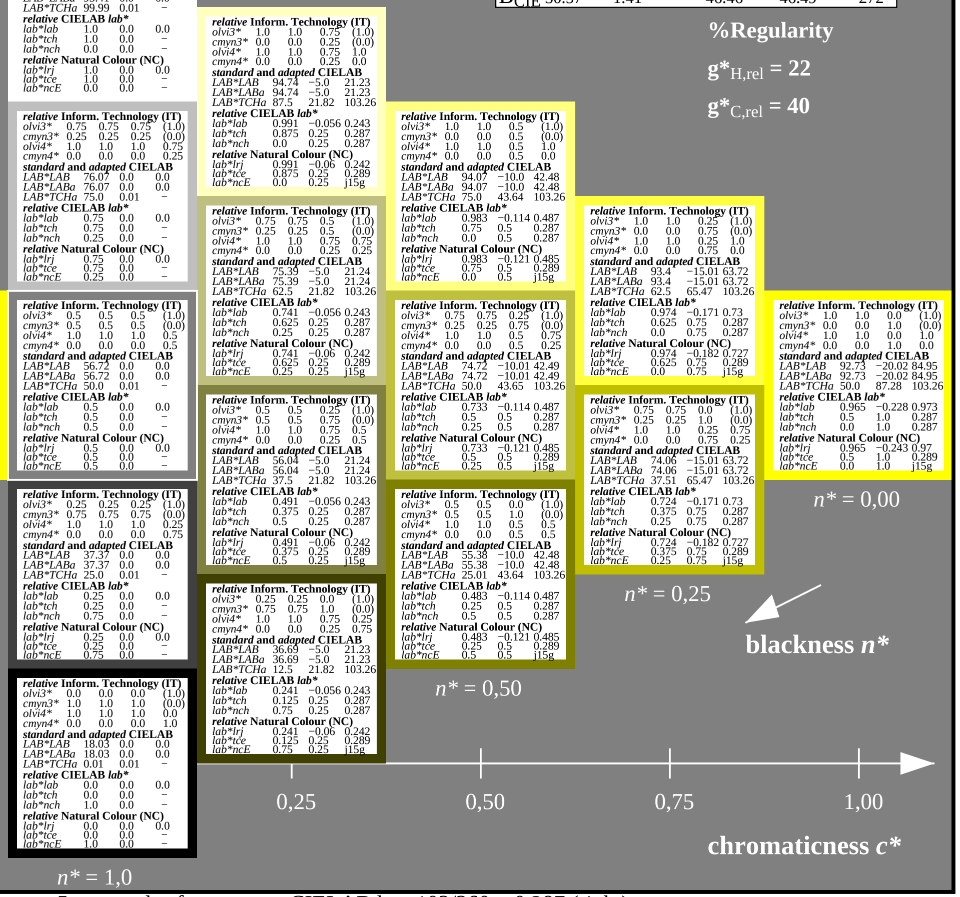
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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**

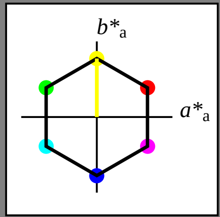
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



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

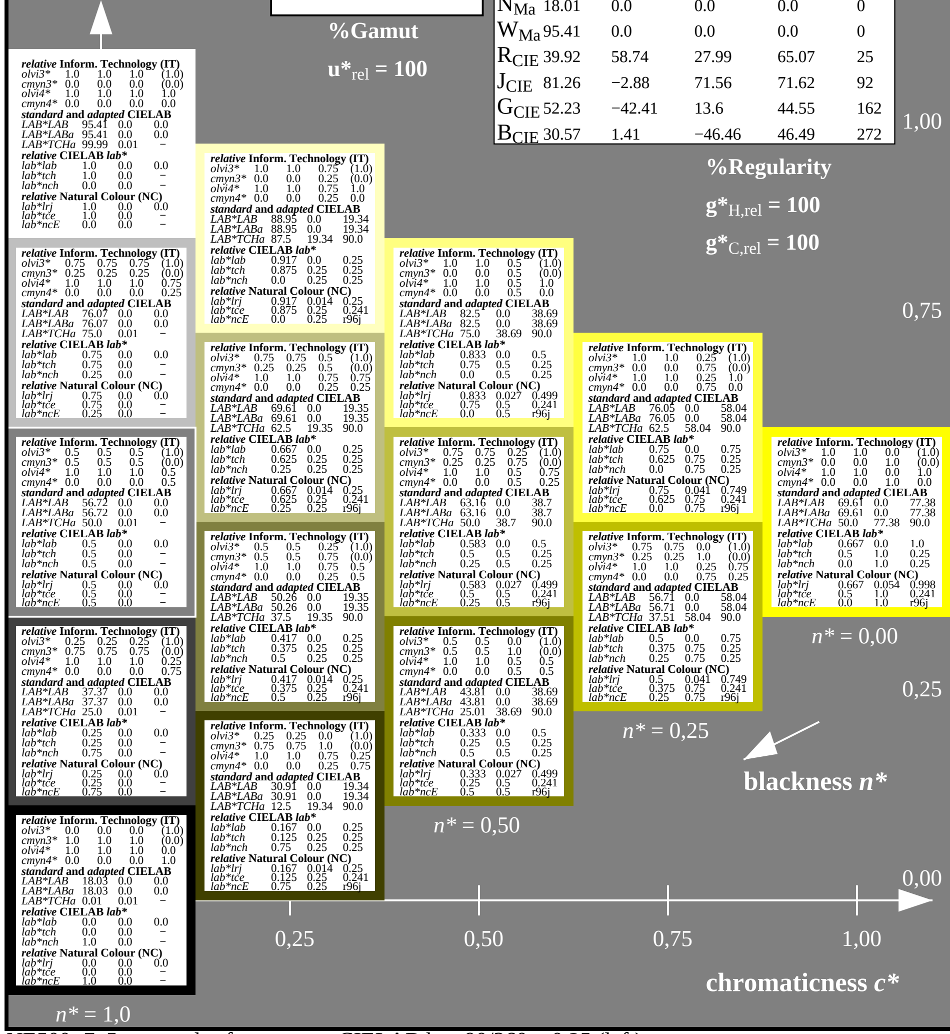
%Gamut

u^*_{rel} = 100

%Regularity

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

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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 90/360 = 0.25**

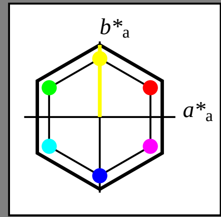
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



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

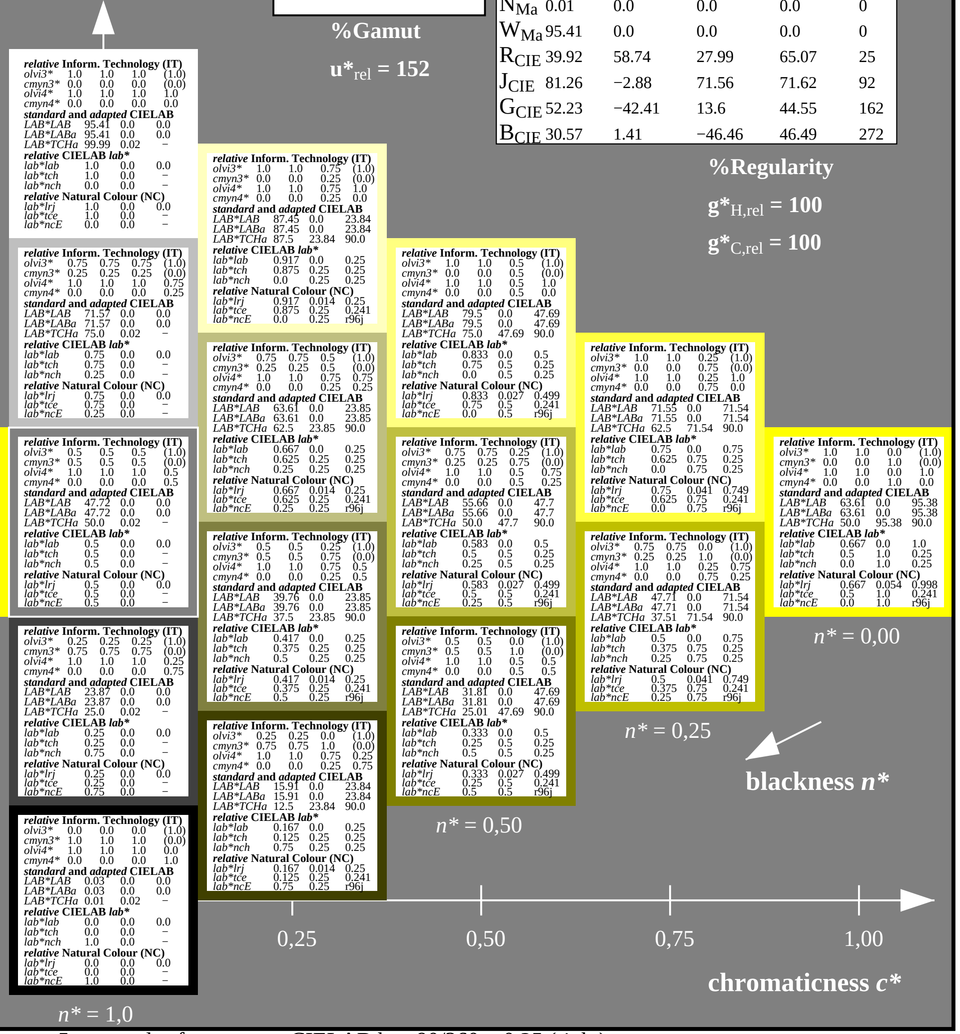
%Gamut

u^*_{rel} = 152

%Regularity

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

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

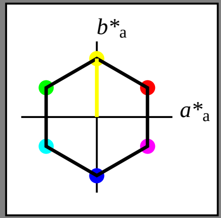


NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

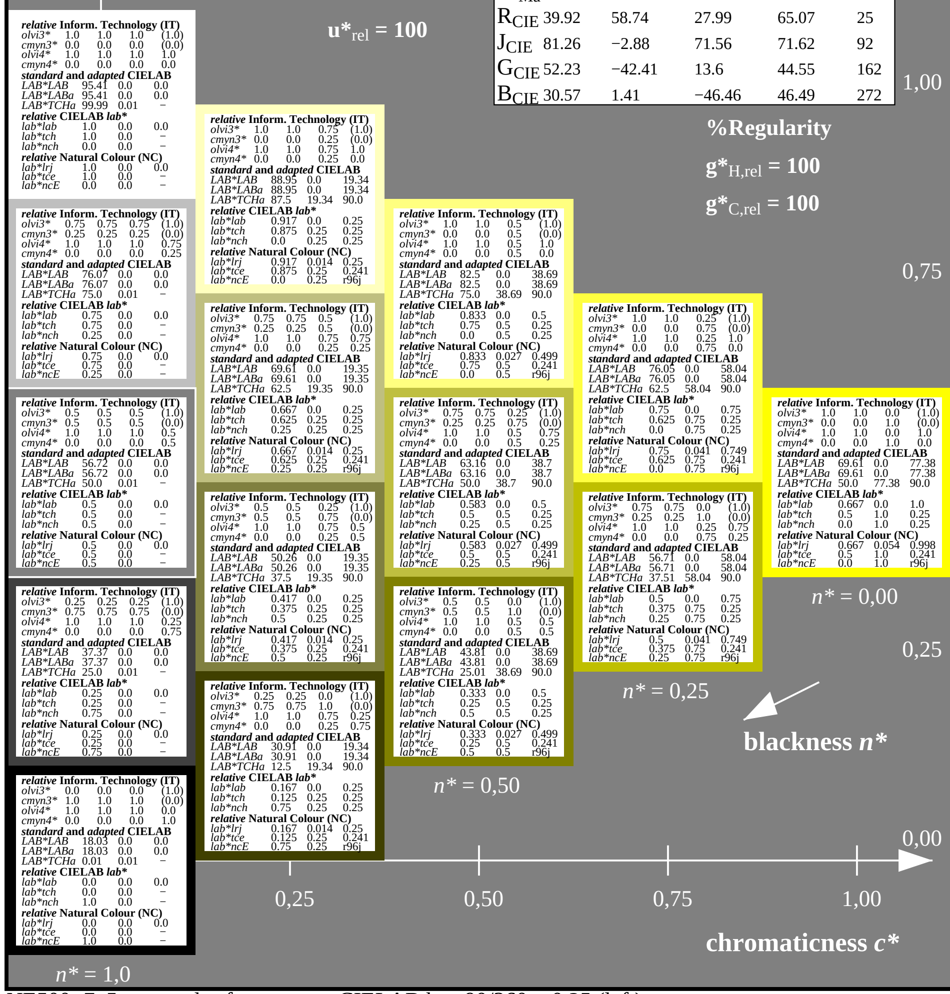
D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0
triangle lightness *t**



%Gamut
$u^*_{rel} = 100$

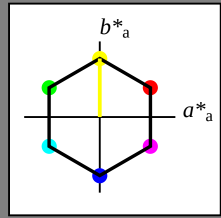
NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric Natural Reflective System NRS18
for hue *h = *lab*h* = 90/360 = 0.25**
lab*tch* and *lab*nch

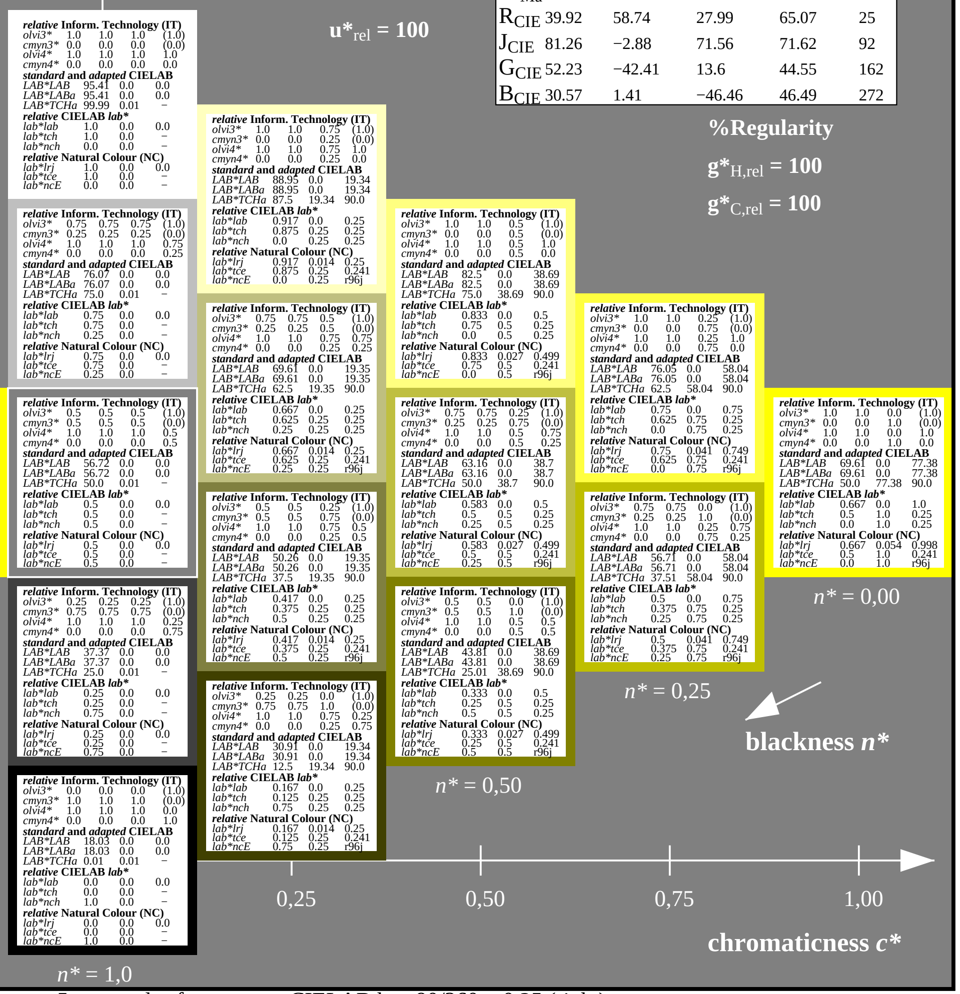
D65: hue Y
LCH*Ma: 70 77 90
olv*Ma: 1.0 1.0 0.0
triangle lightness *t**



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



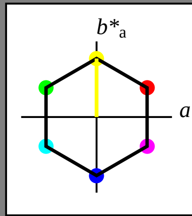
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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**

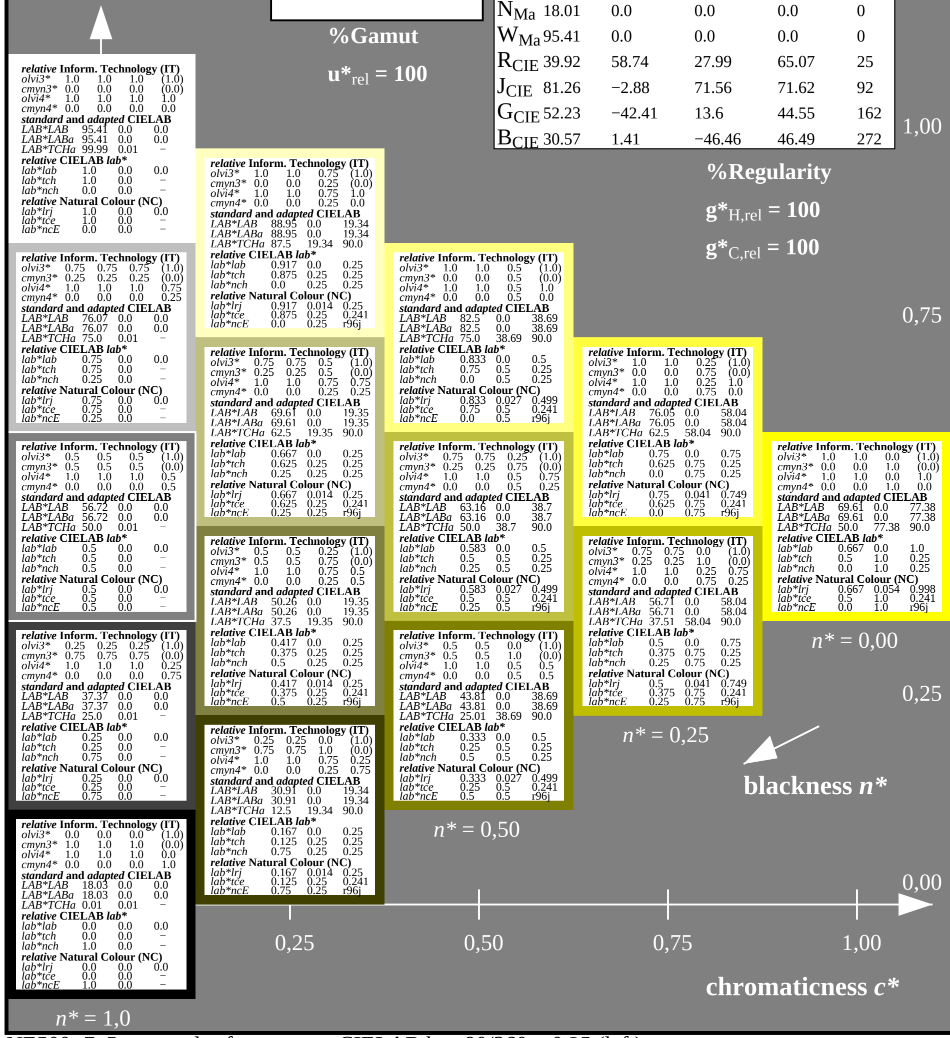


NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$u^*_{rel} = 100$

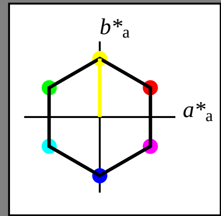
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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**

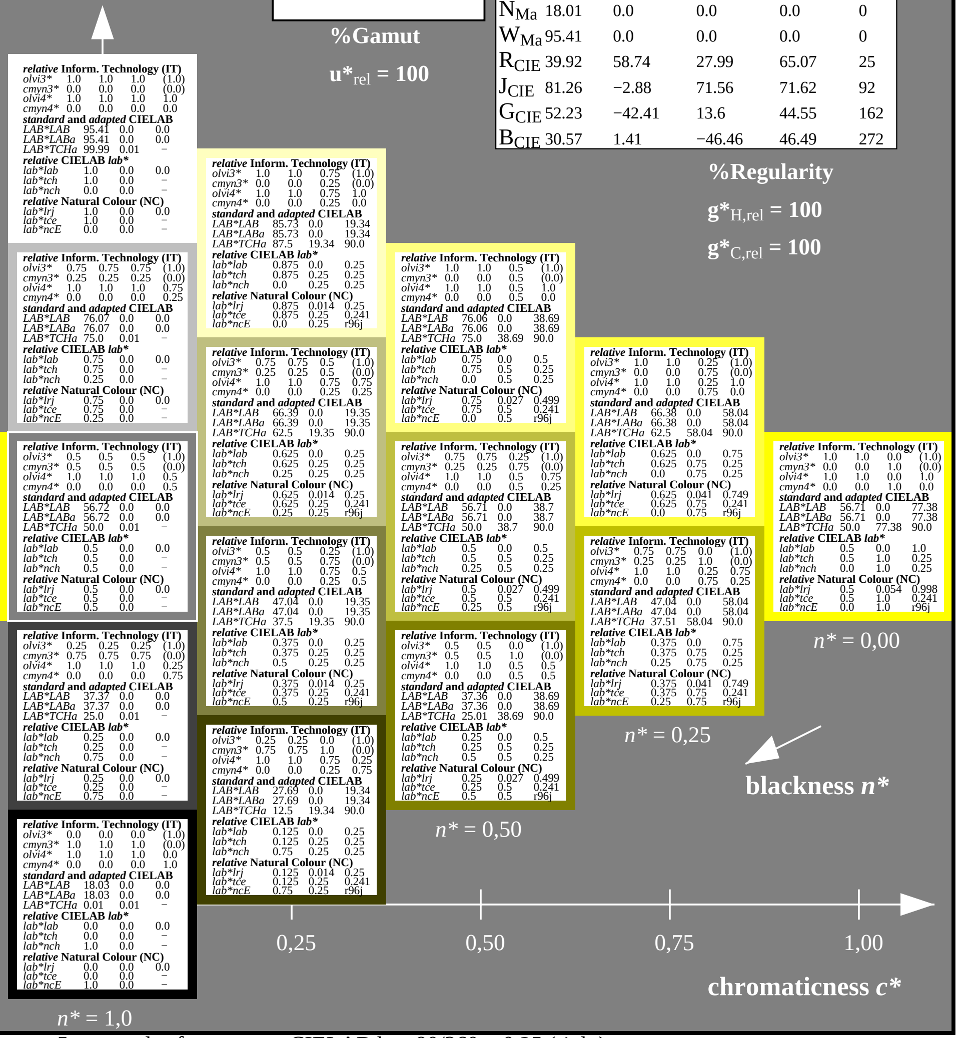


SRS18; adapted (a) CIELAB data

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



NE500−7, 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 $h^* = lab^*h = 90/360 = 0.25$

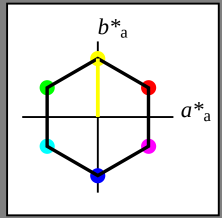
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

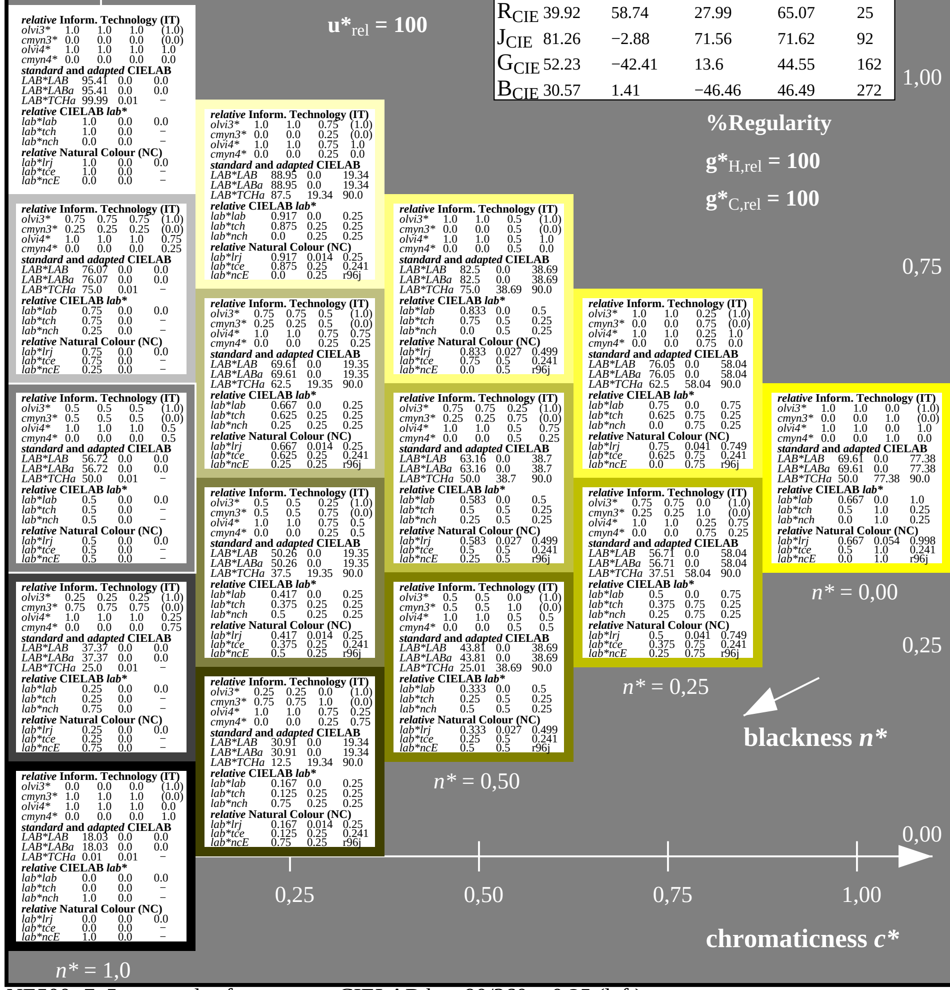
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$

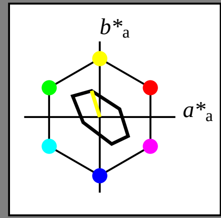
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

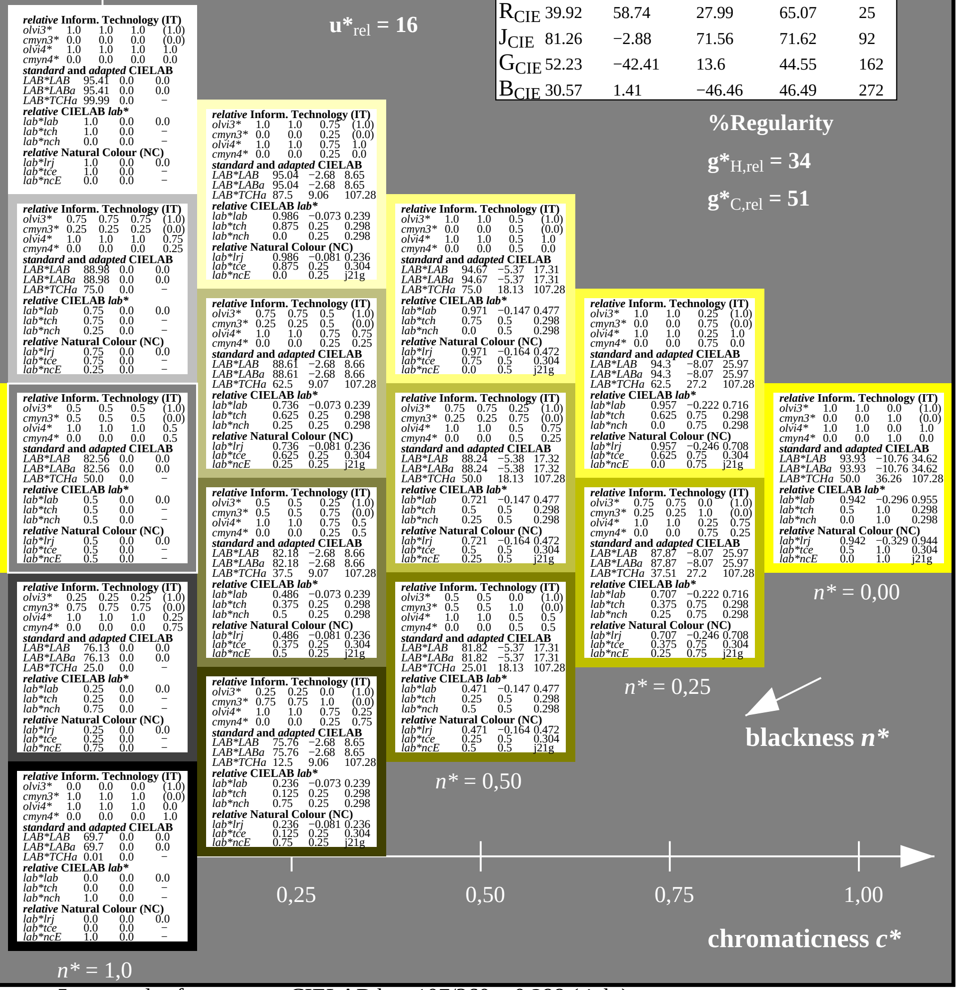
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18
for hue $h^* = lab^*h = 90/360 = 0.25$

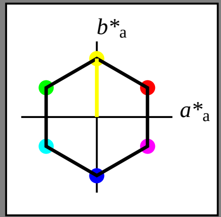
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

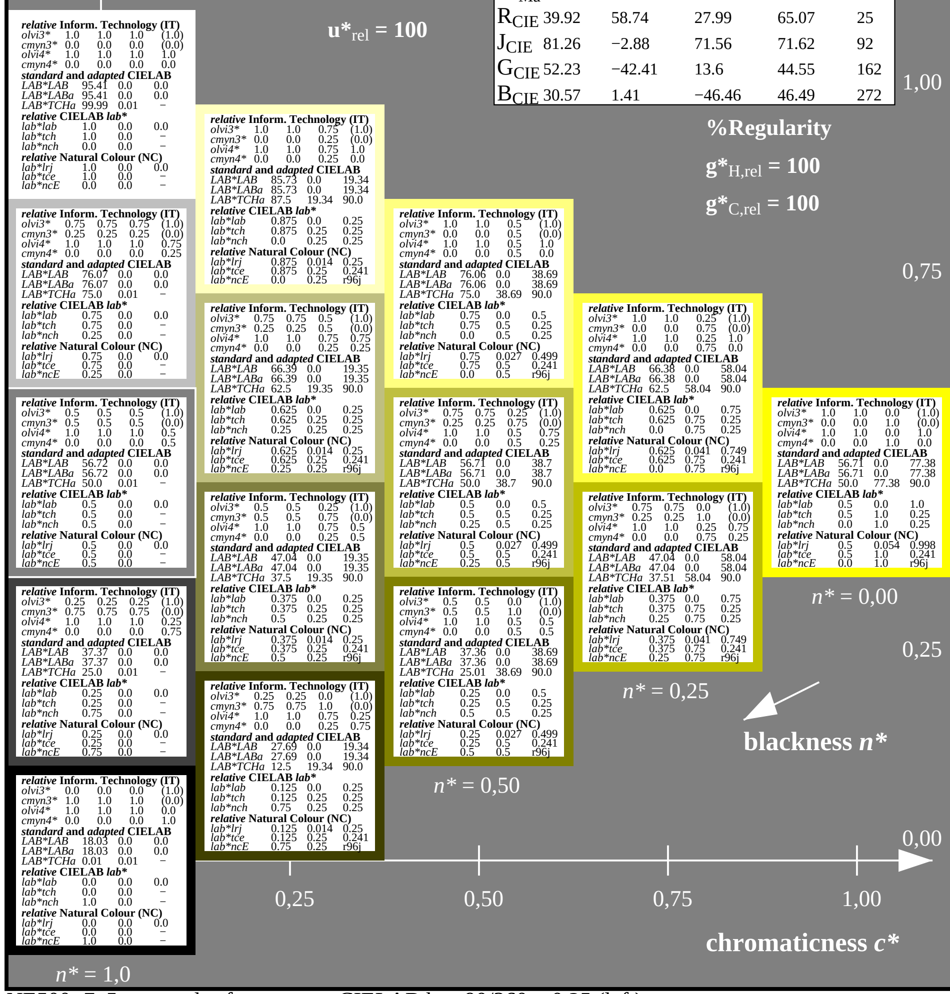
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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



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

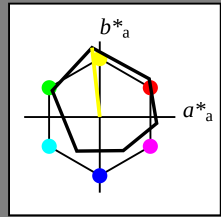
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 90 92 96

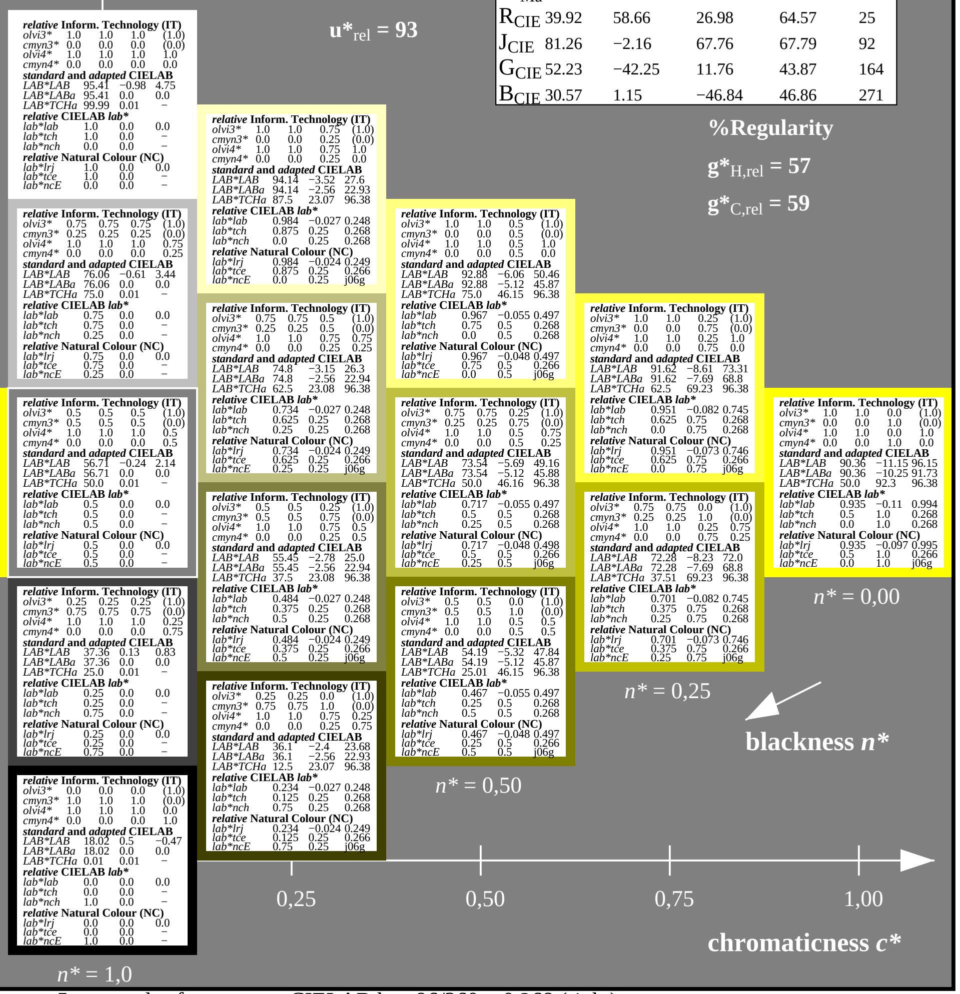
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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



NE500−7, 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 $h^* = lab^*h = 90/360 = 0.25$

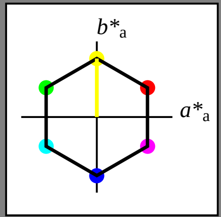
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

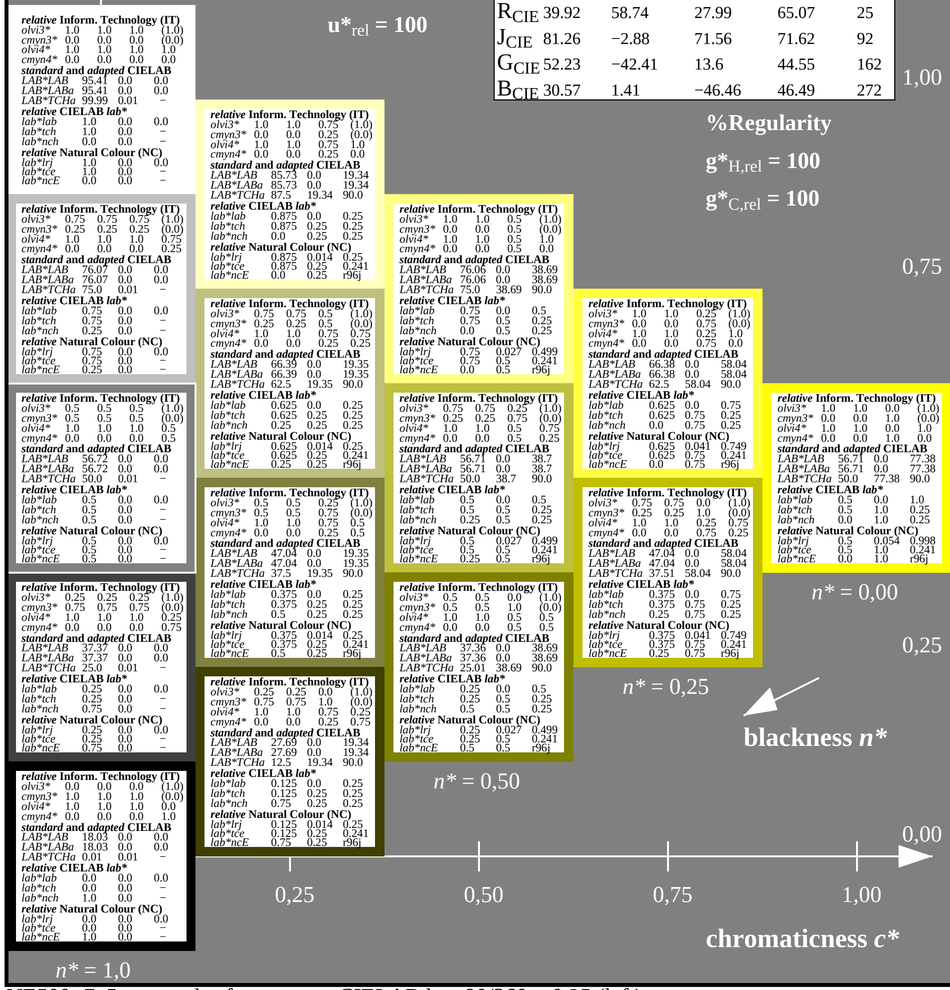
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

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

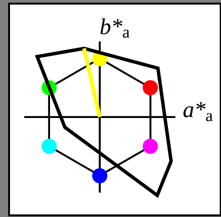
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

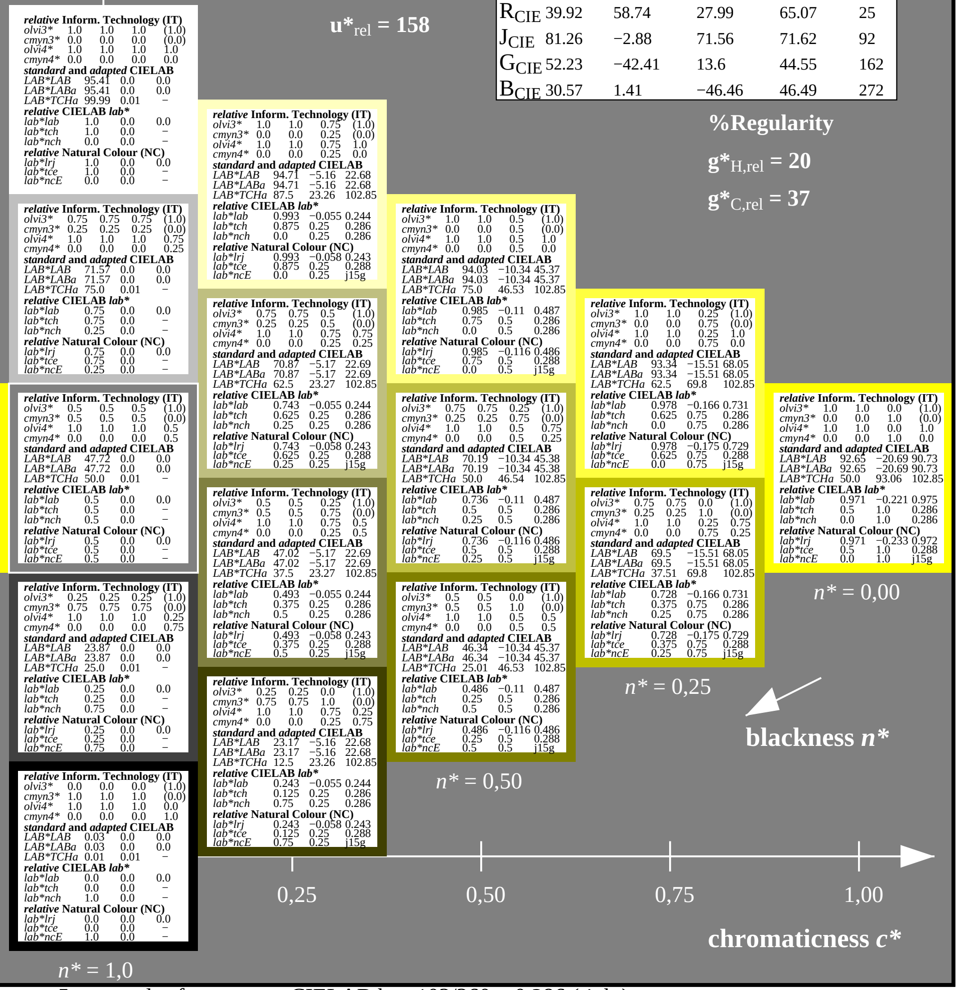
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



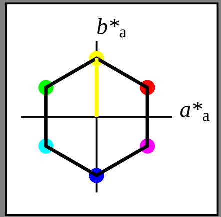
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

Input: Colorimetric 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

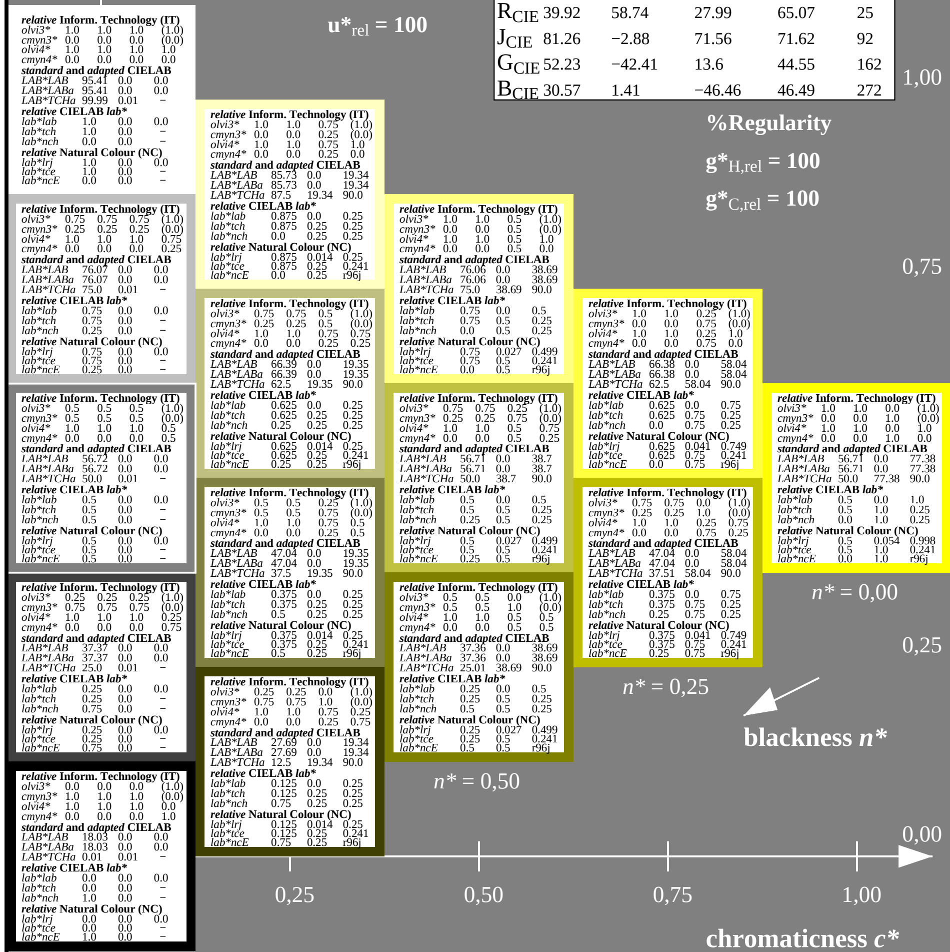
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

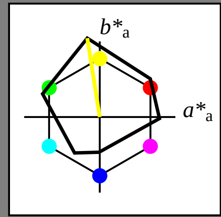
$g^*_{C,rel}$ = 100



Output: Colorimetric 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

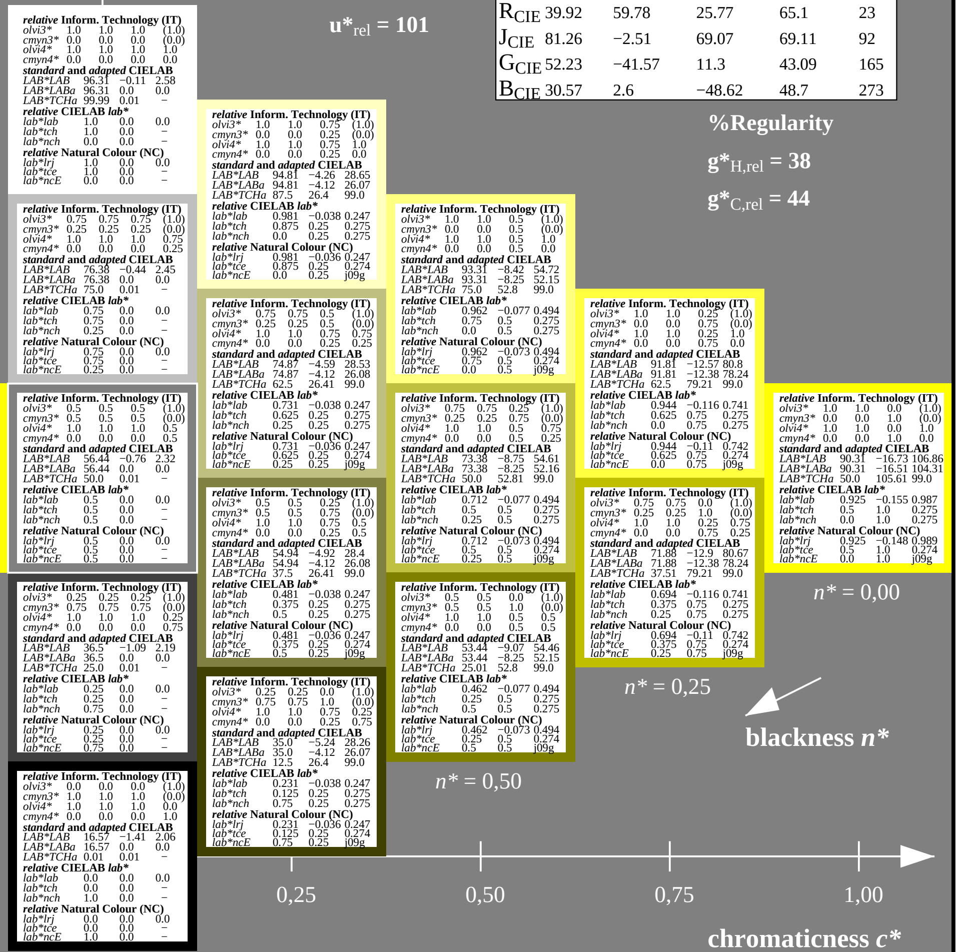
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

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

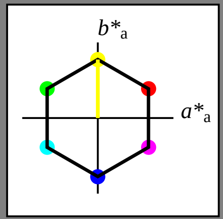
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

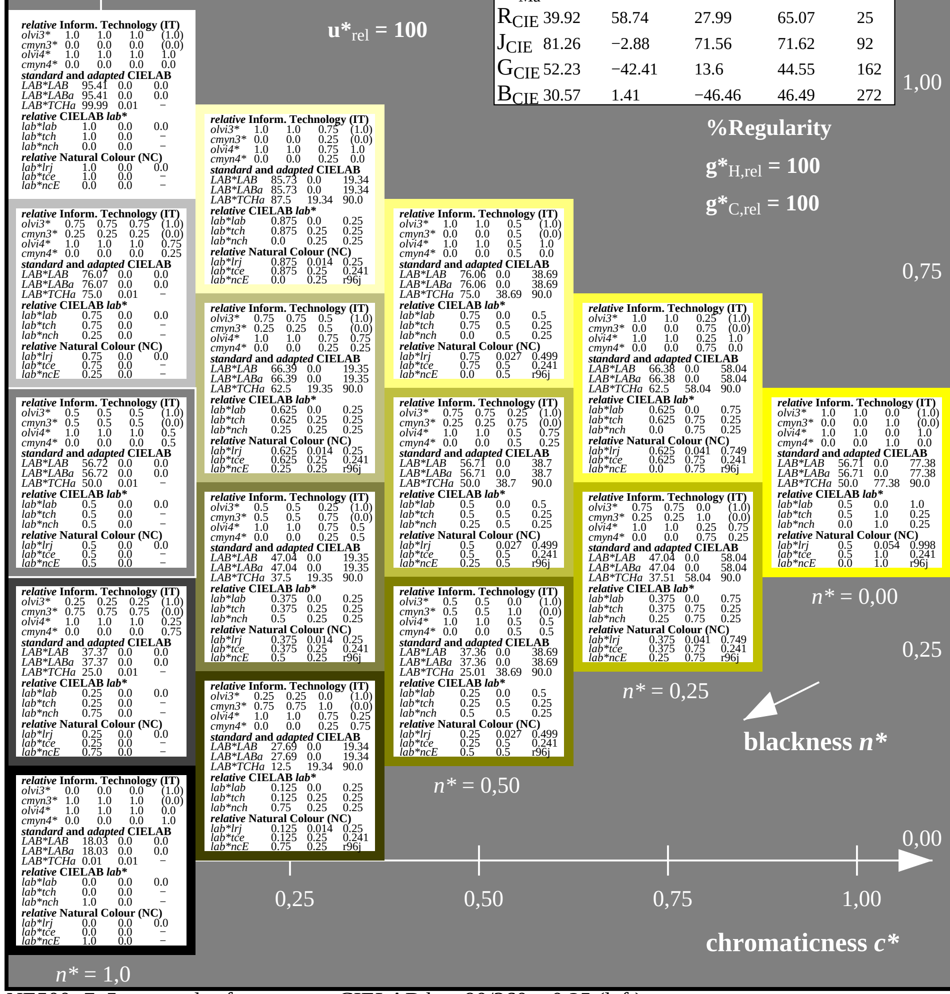
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS18

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

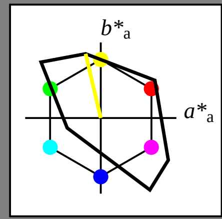
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

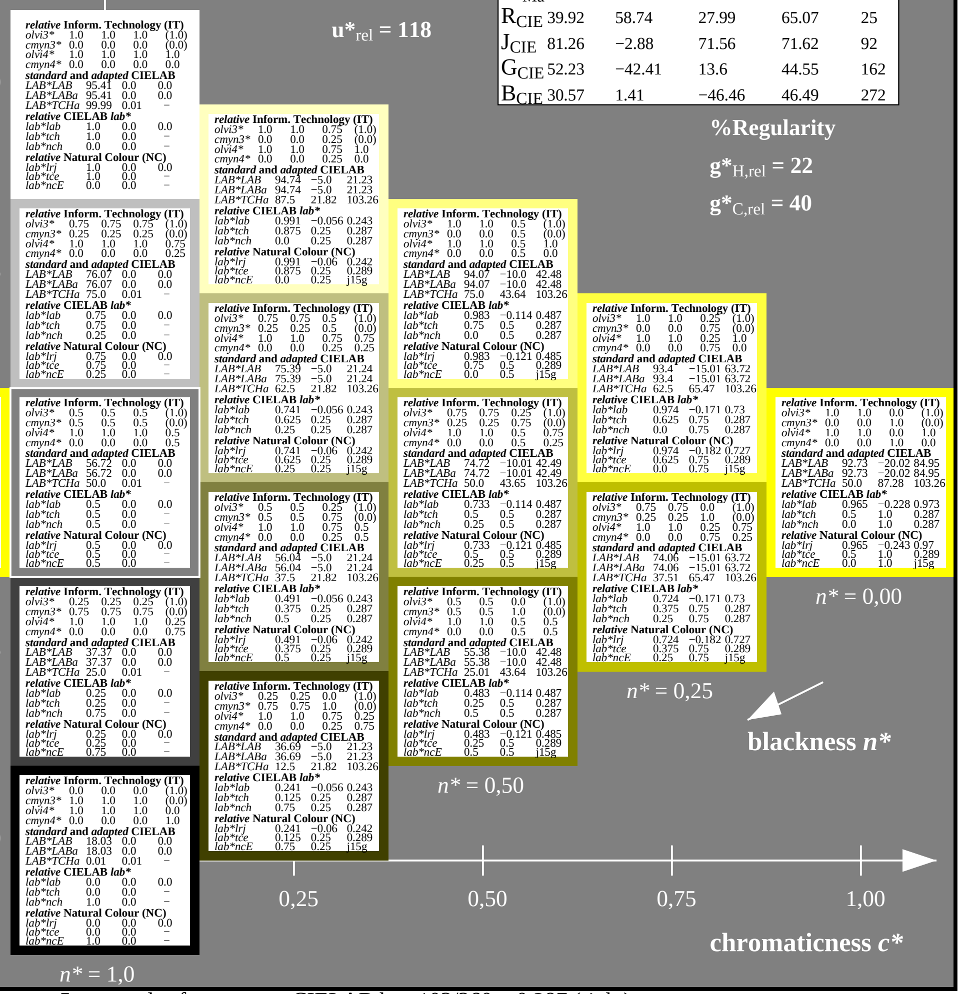
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



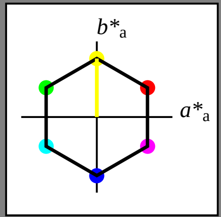
NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

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

Input: Colorimetric 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

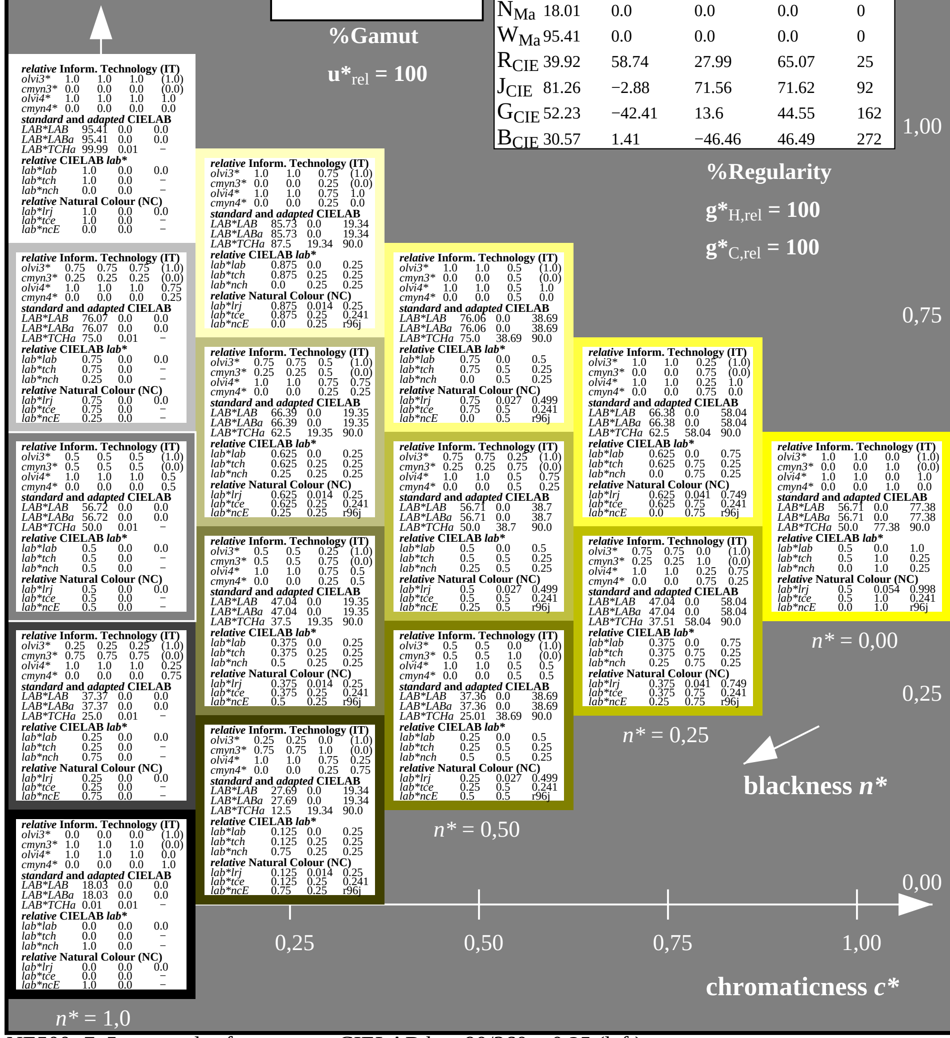
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

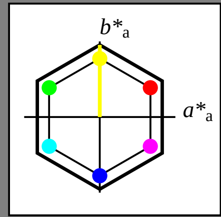
g*C,rel = 100



Output: Colorimetric 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

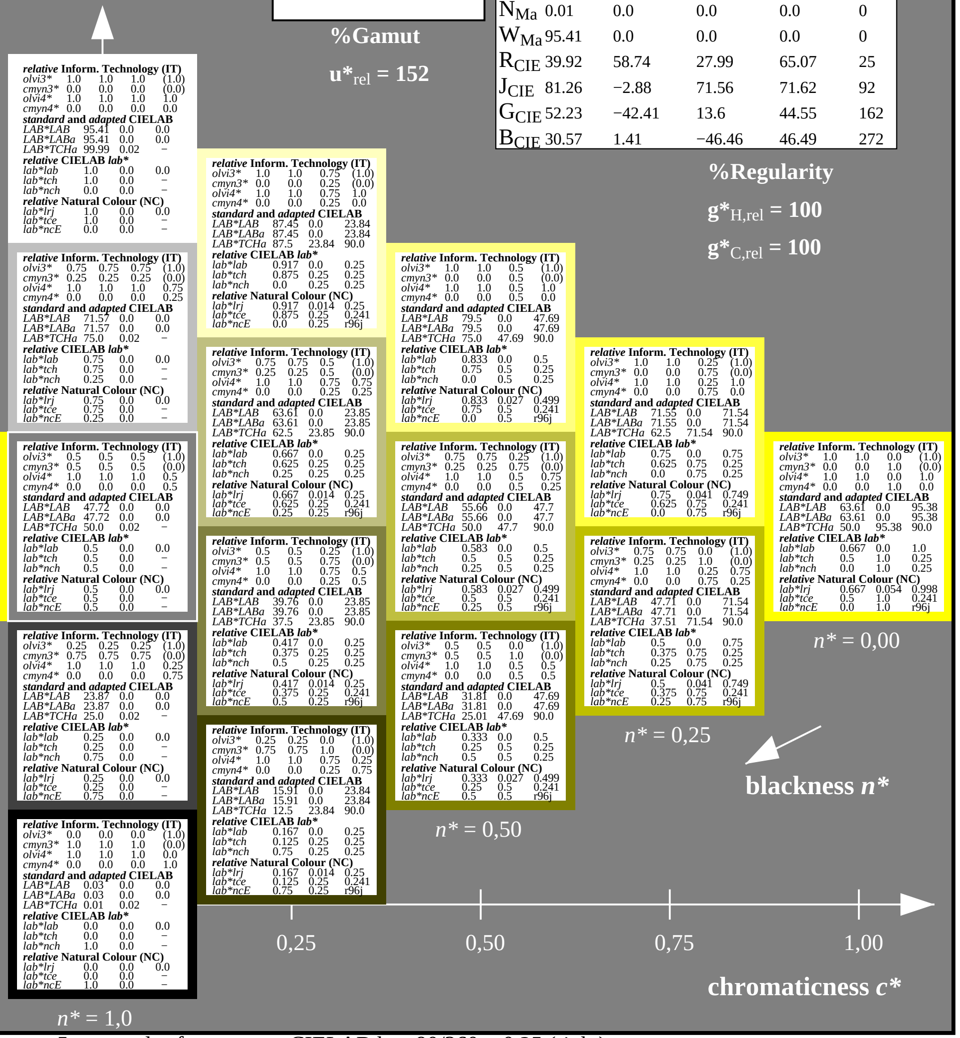
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 90/360 = 0.25$

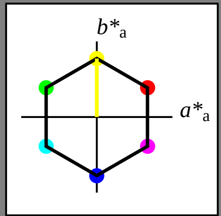
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

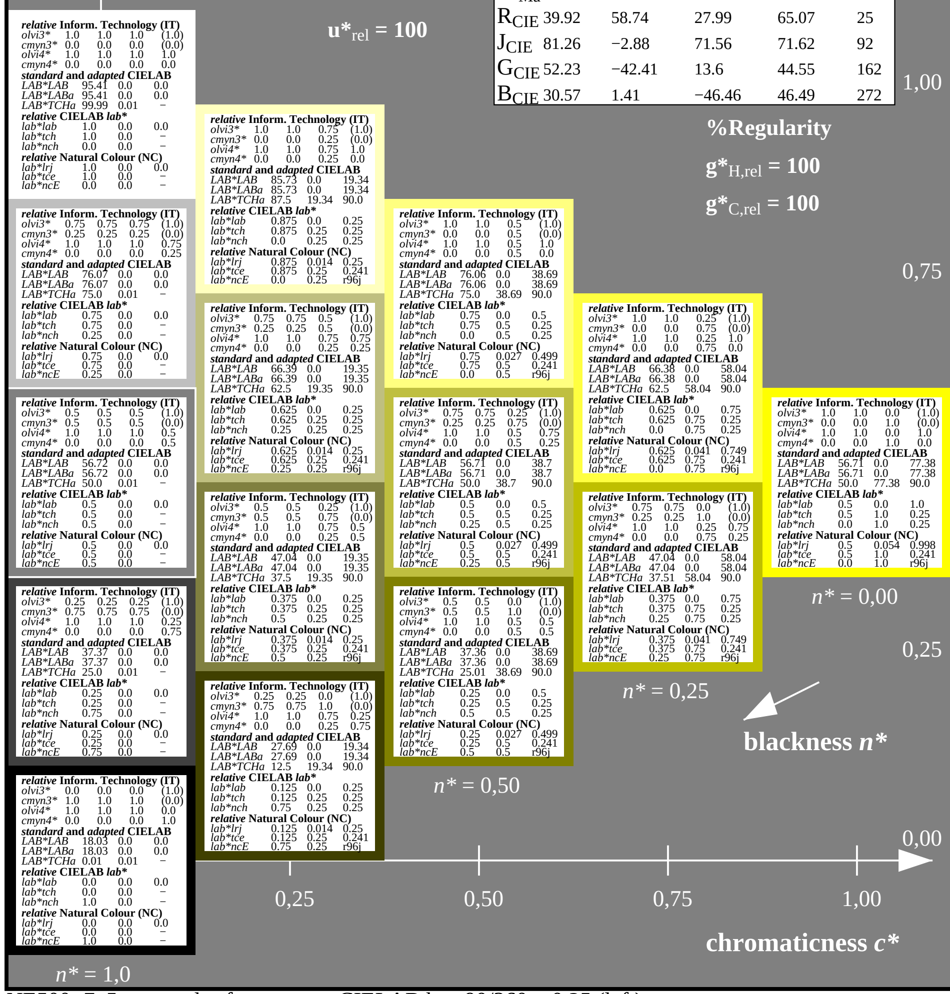
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18

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

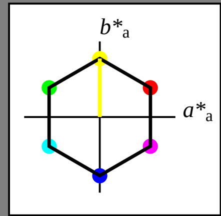
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 70 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

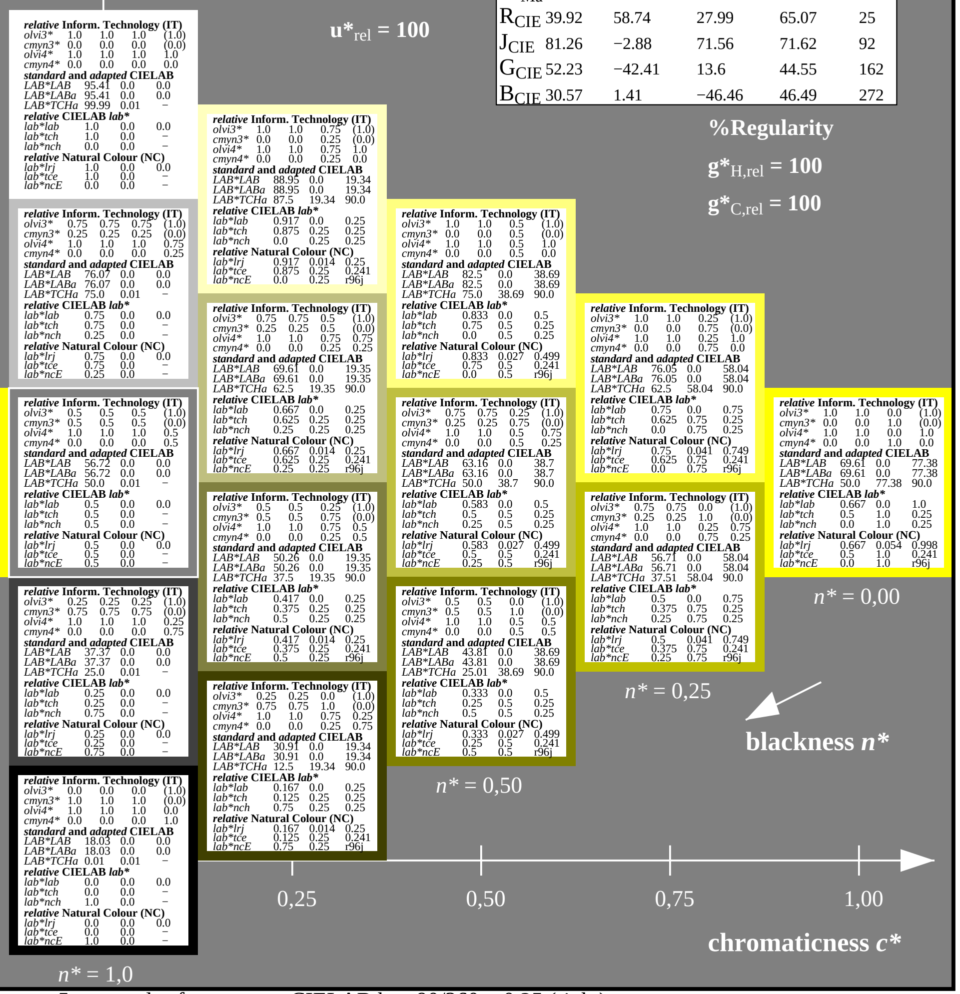
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 90/360 = 0.25$

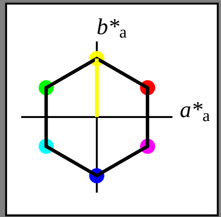
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

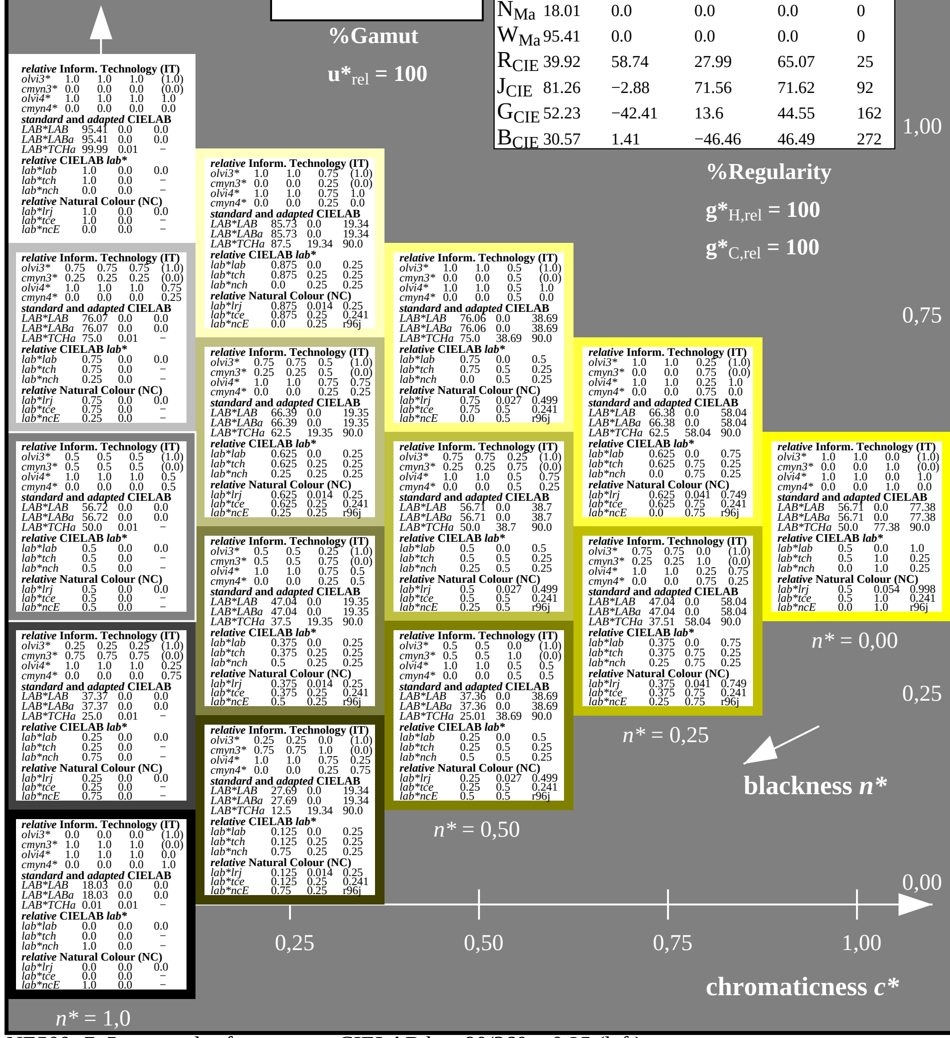
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 90/360 = 0.25 (left)

Output: Colorimetric Standard Reflective System SRS18

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

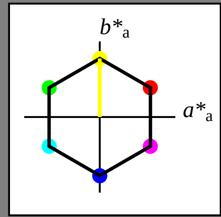
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

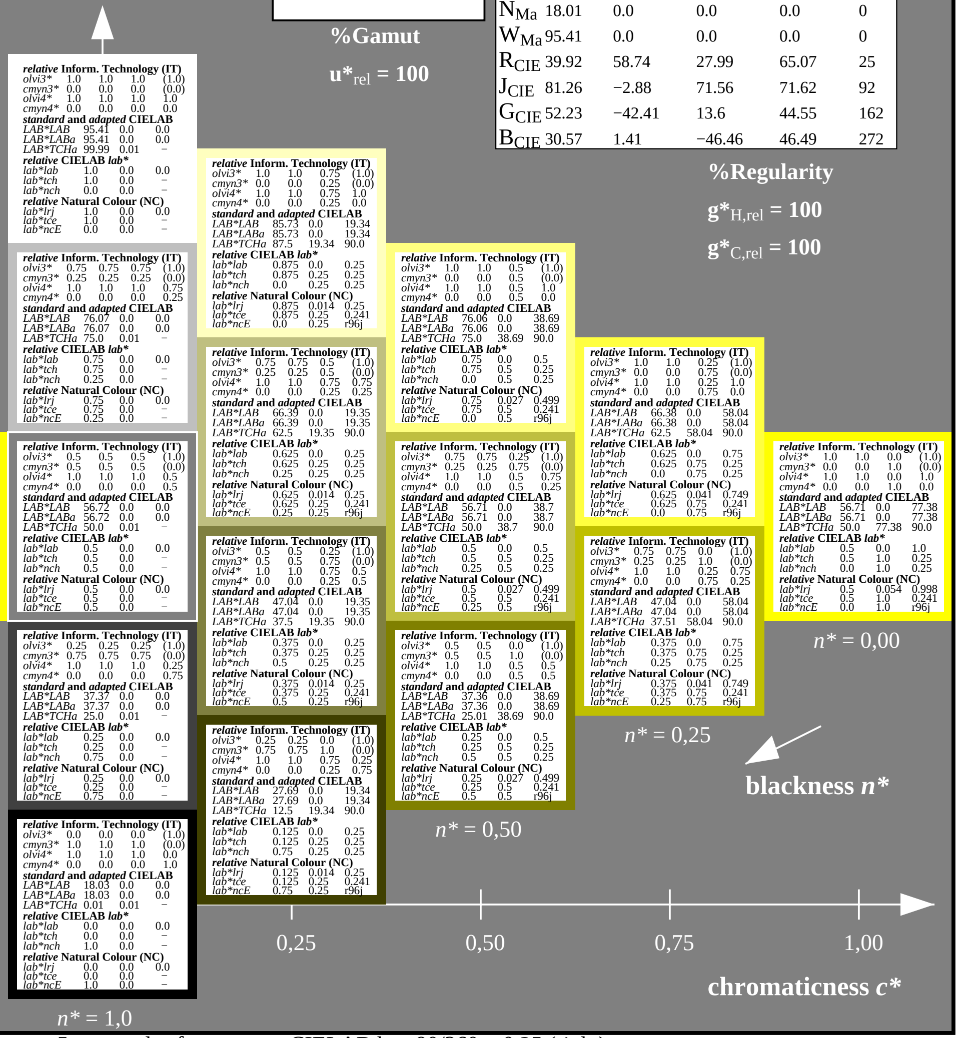
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

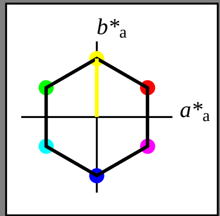


5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

Input: Colorimetric 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

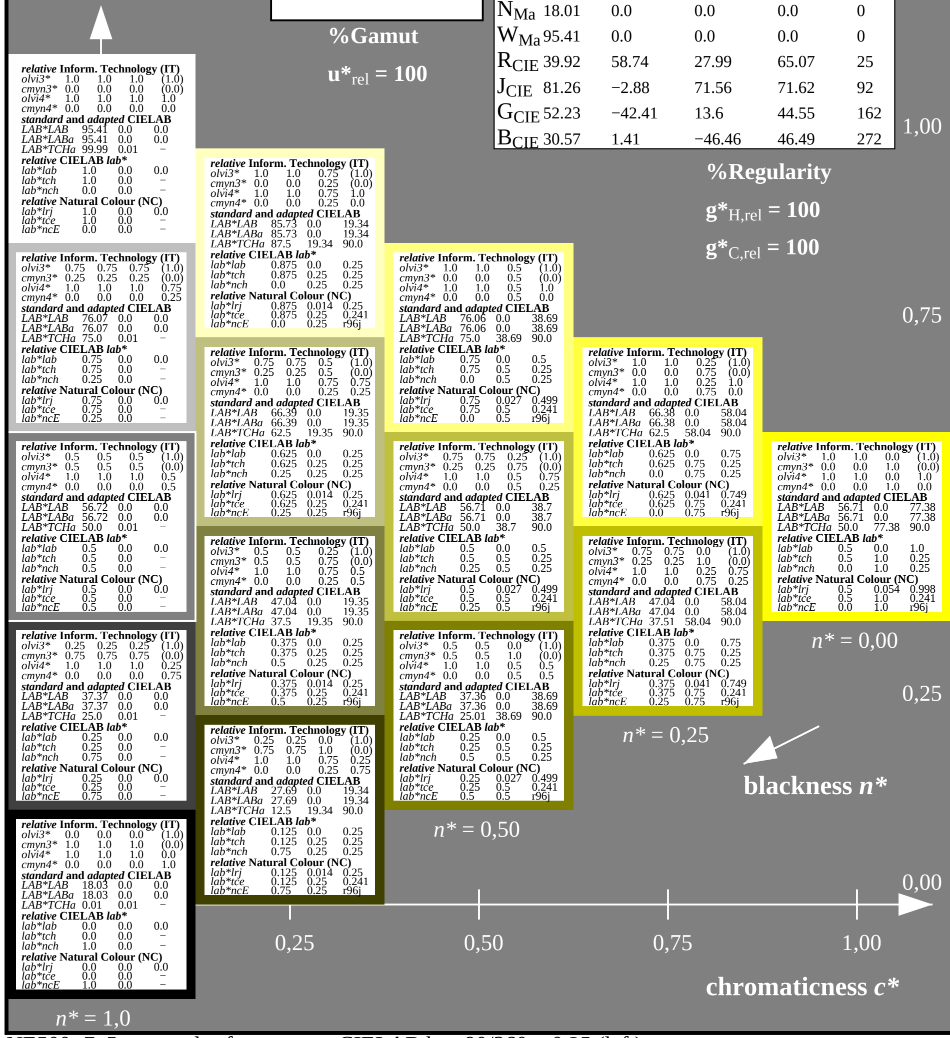
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

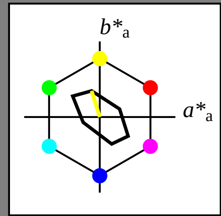
$g^*_{C,rel}$ = 100



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

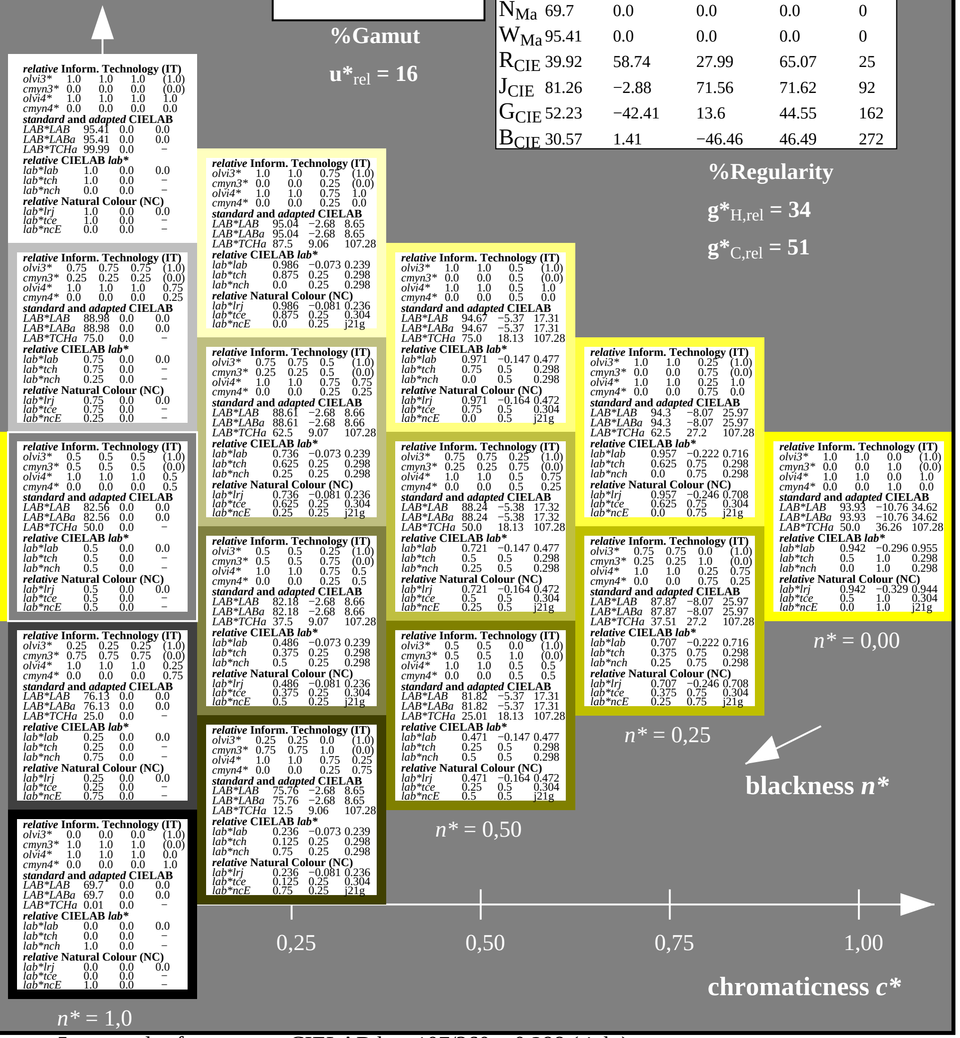
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 107/360 = 0.298$

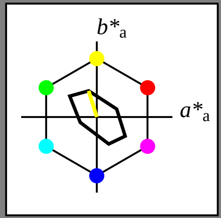
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

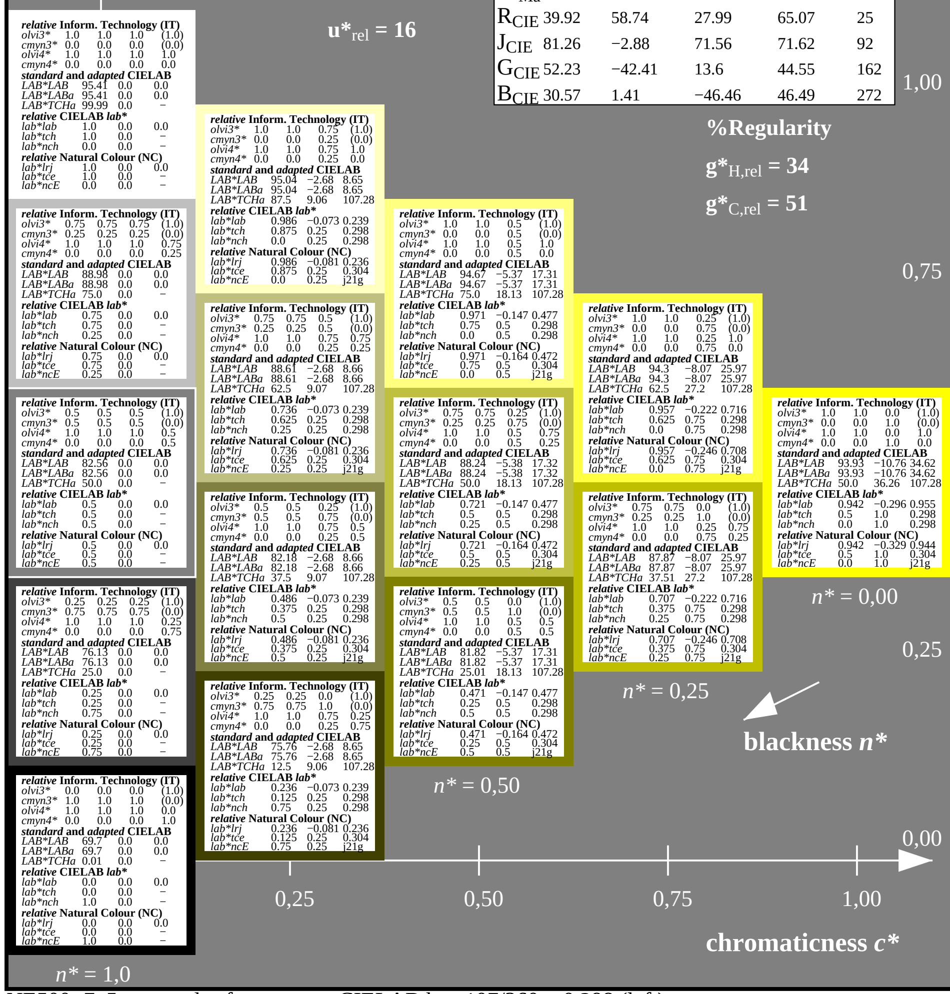
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

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

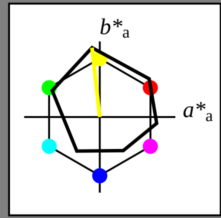
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

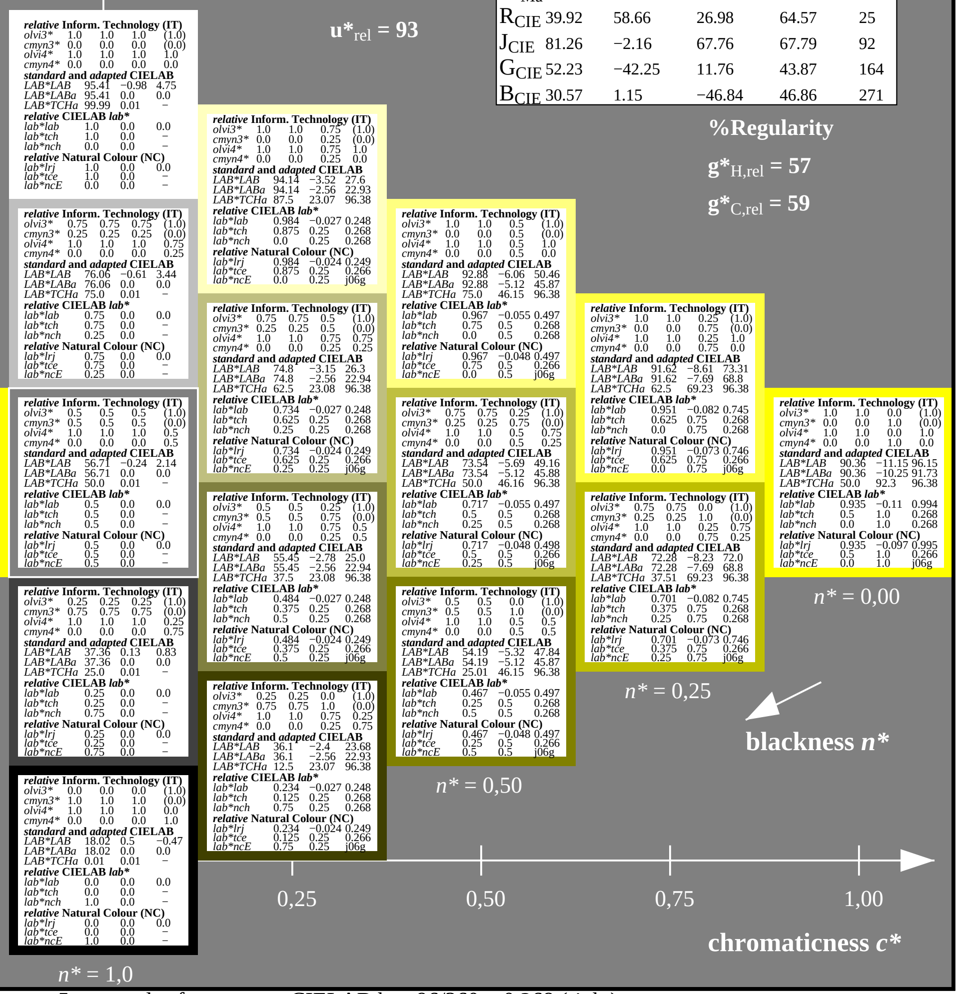
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

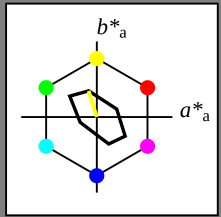


NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

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

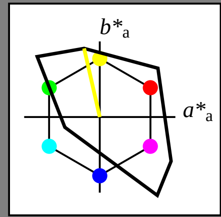
$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00
chromaticness c^*

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 103/360 = 0.286$
*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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00
chromaticness c^*

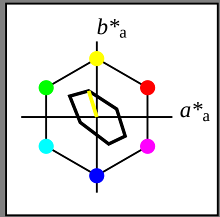
NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

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

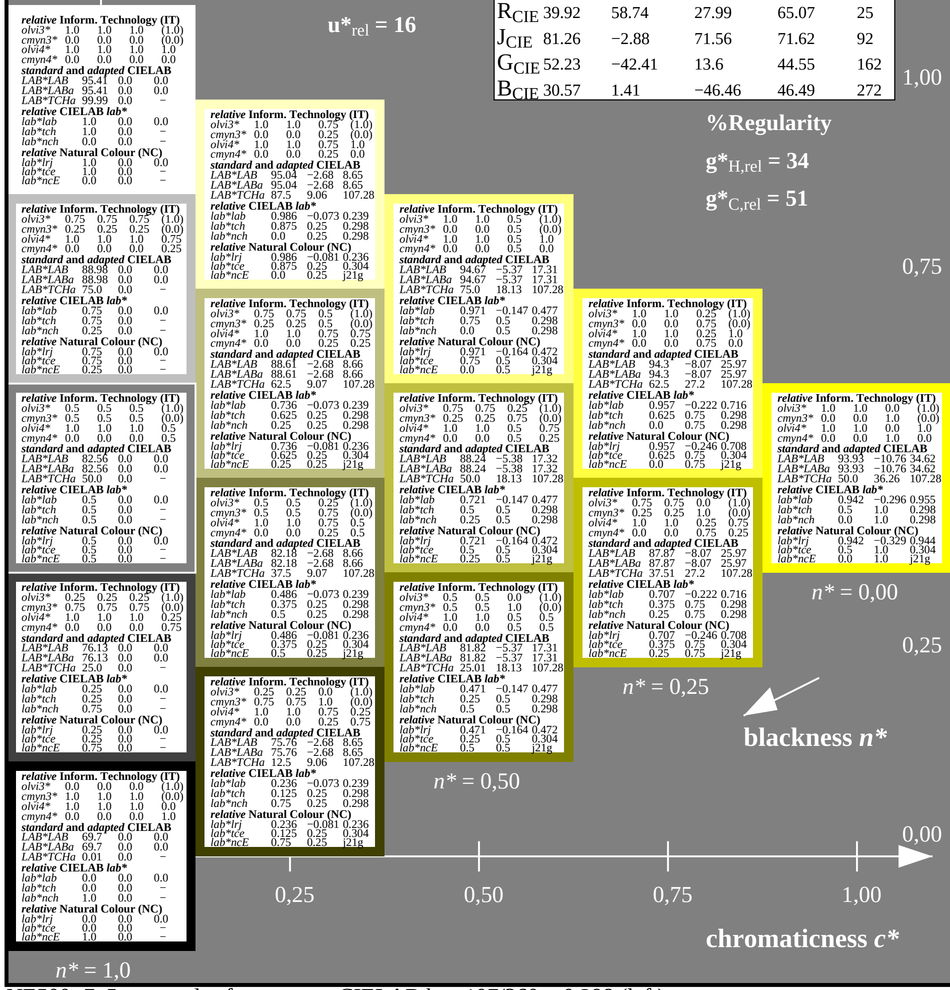
triangle lightness t^*



%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

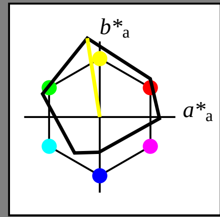
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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

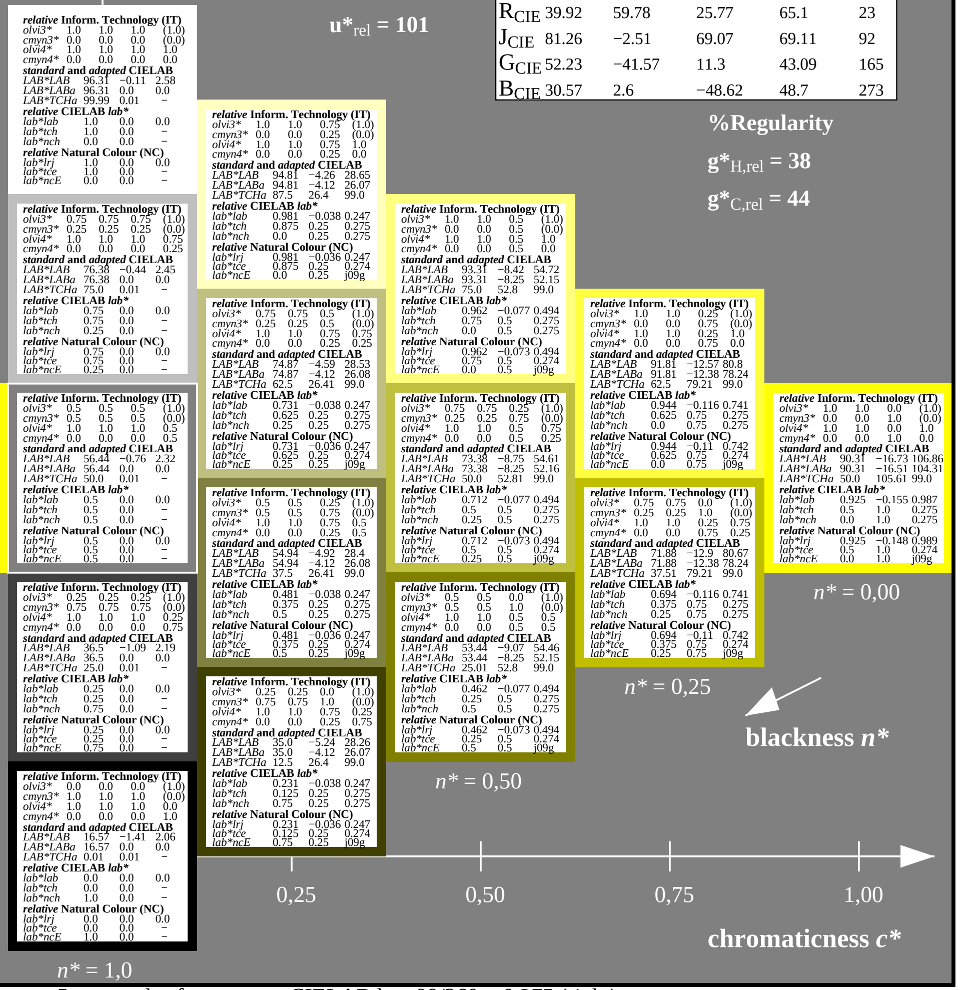
triangle lightness t^*



%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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



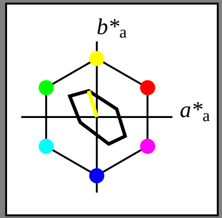
NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

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^*

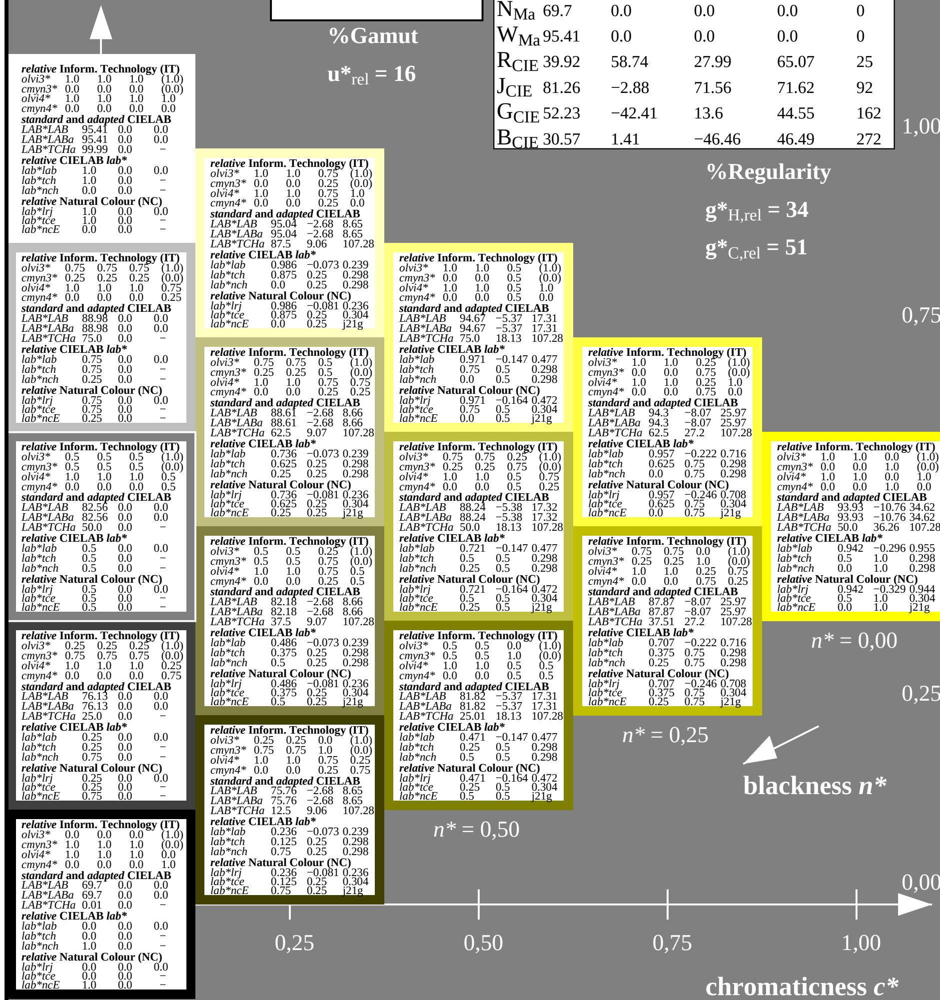


%Gamut
$u^*_{rel} = 16$

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

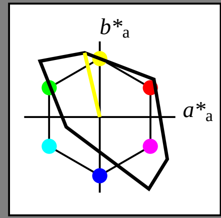
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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^*

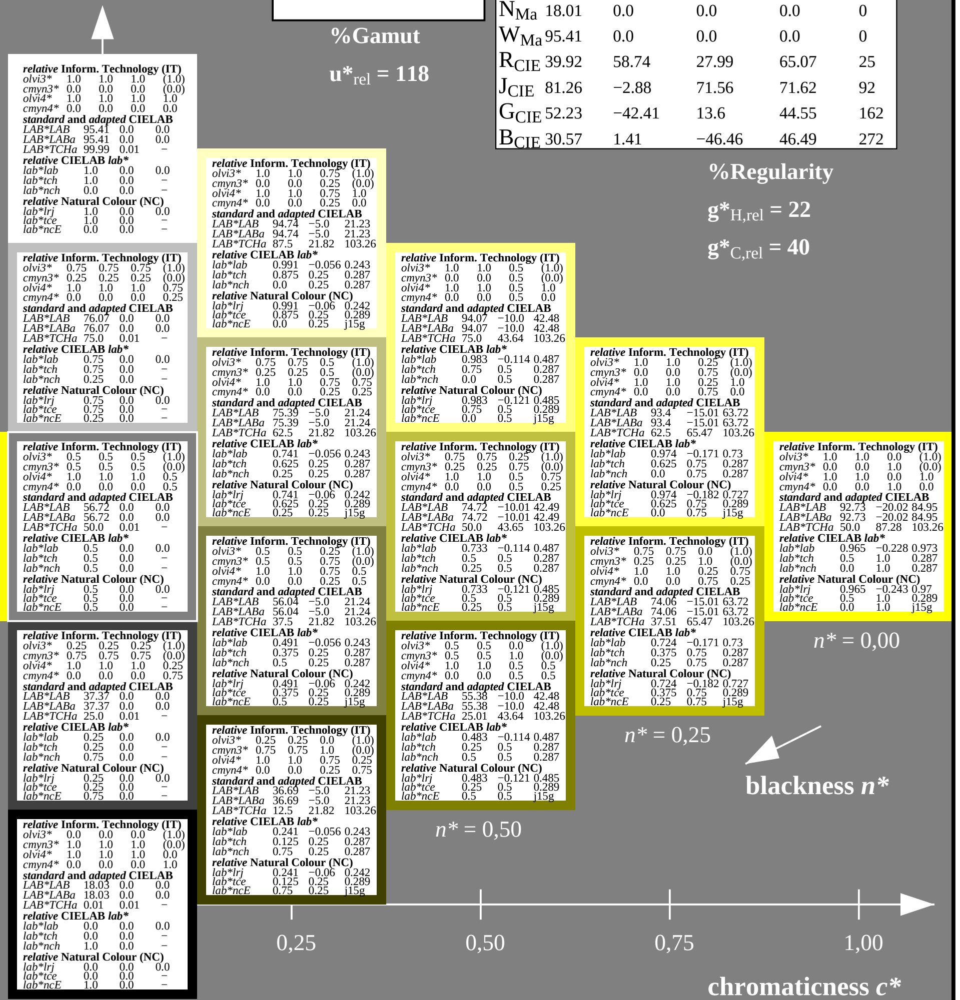


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

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**

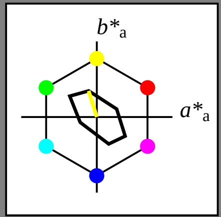
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u*rel = 16

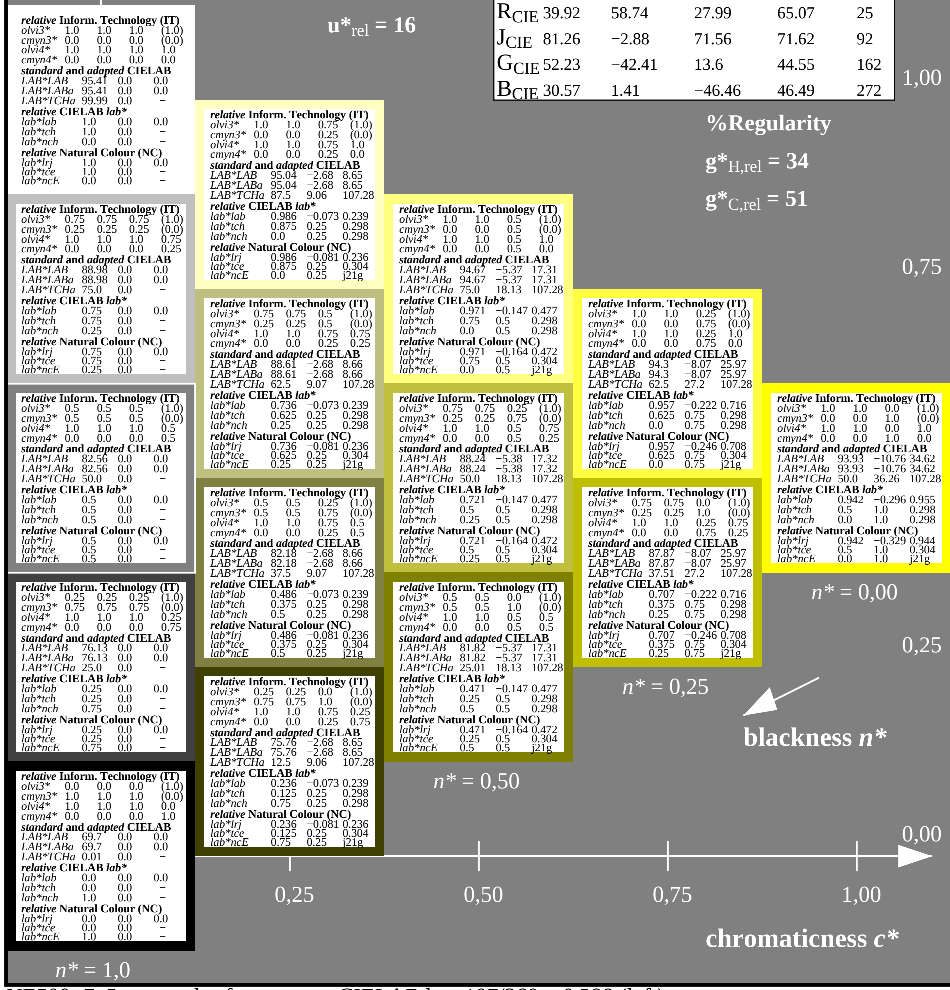
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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* = 90/360 = 0.25**

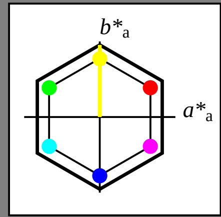
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 64 95 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t*



%Gamut

u*rel = 152

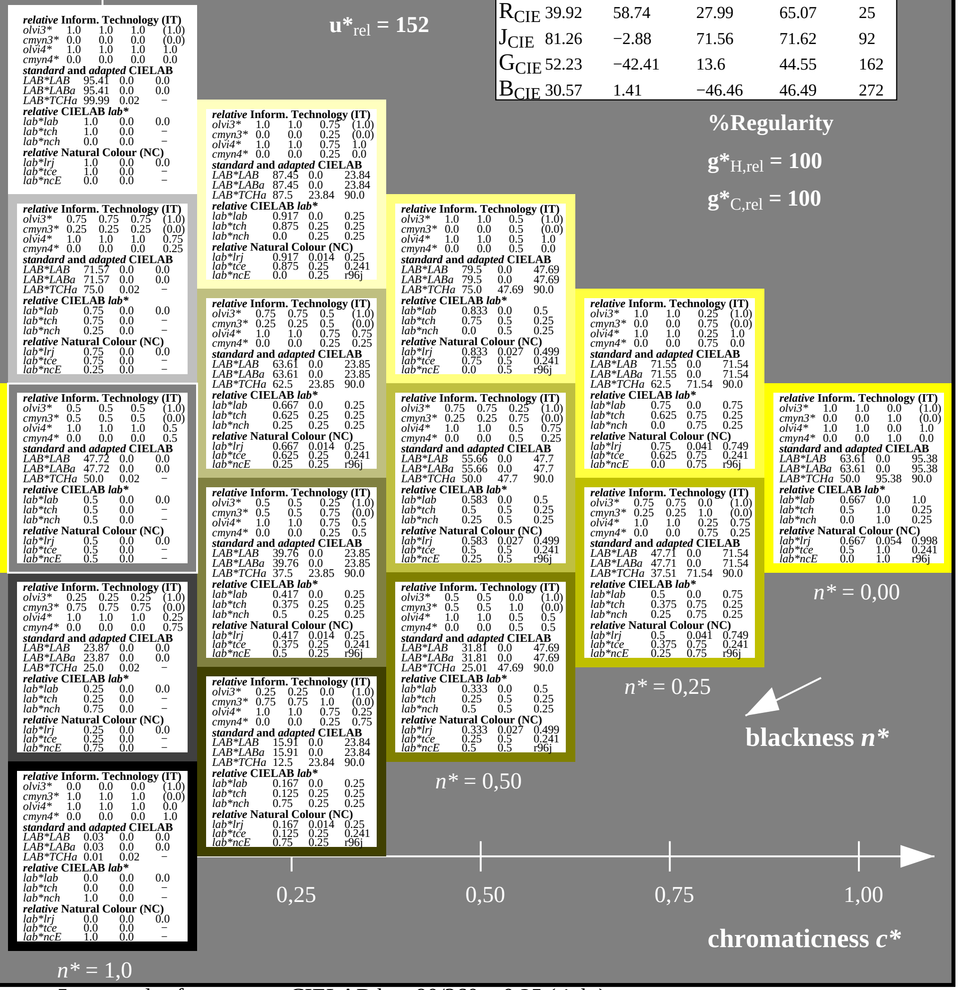
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



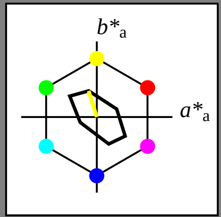
NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

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

triangle lightness *t**

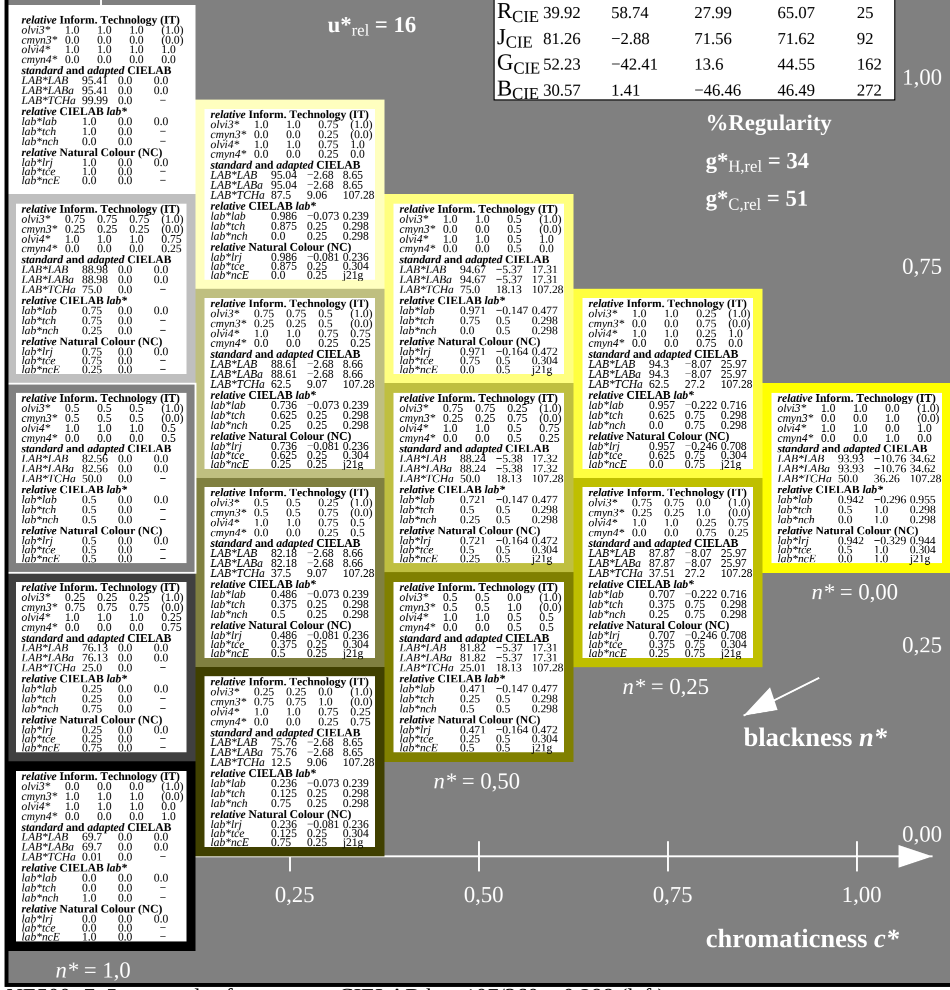


%Gamut
$u^*_{rel} = 16$

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

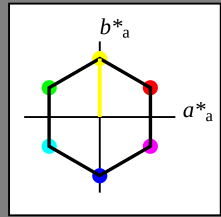
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric Natural Reflective System NRS18
for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

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

triangle lightness *t**

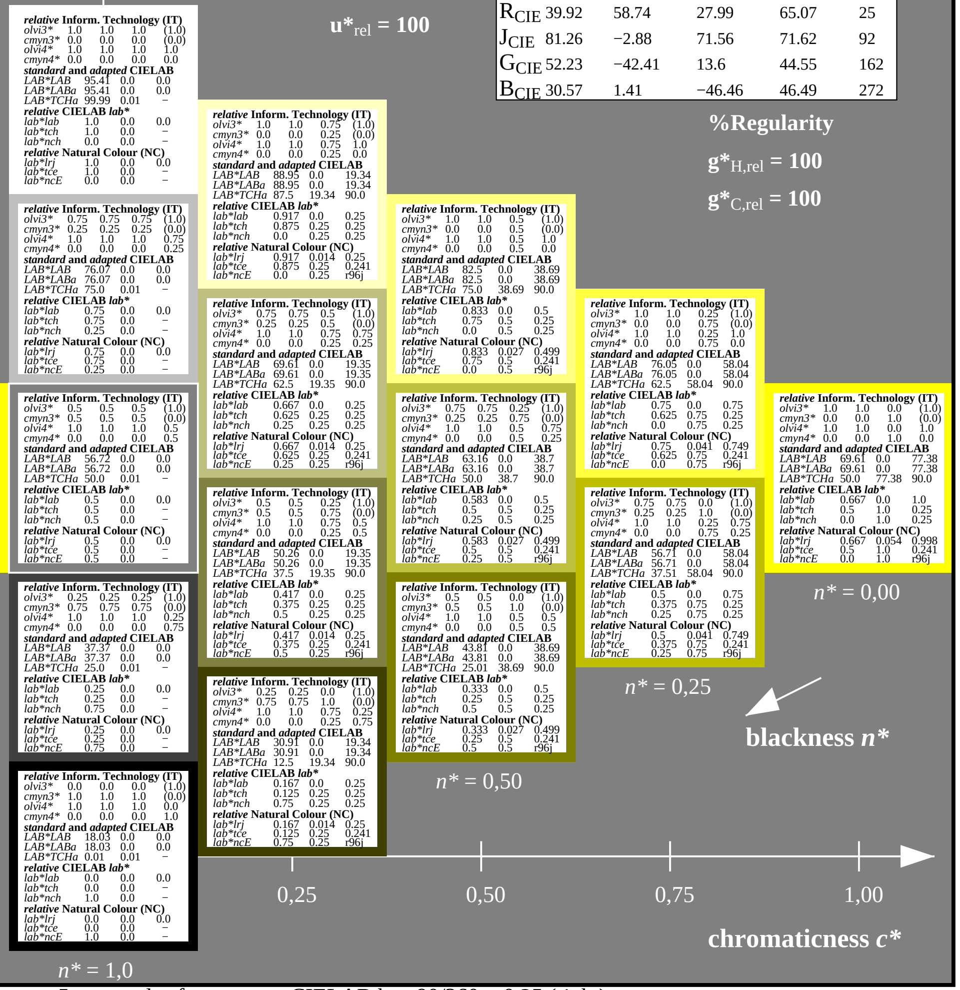


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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

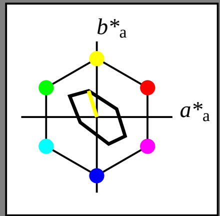
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 16

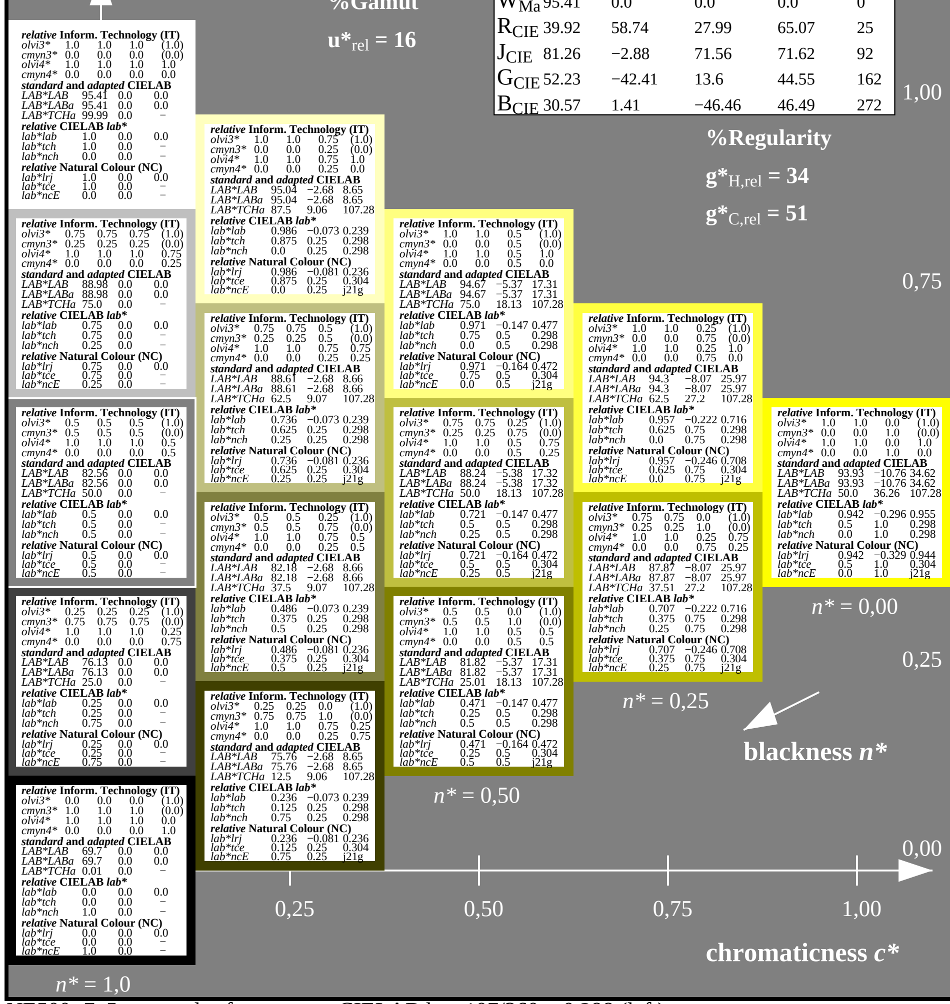
TLS70; adapted (a) CIELAB data

	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* = 90/360 = 0.25

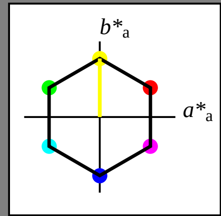
*lab*tch* and *lab*nch*

D65: hue Y

LCH*Ma: 57 77 90

olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

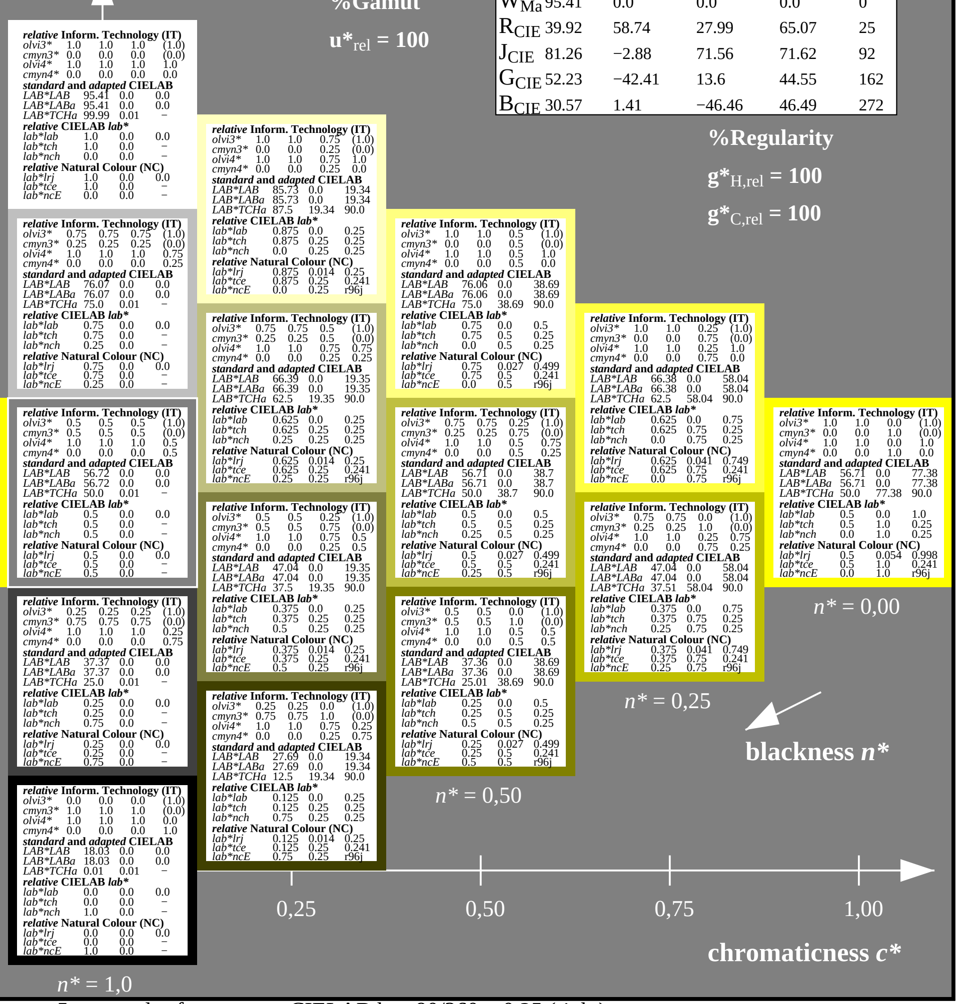
SRS18; adapted (a) CIELAB data

	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

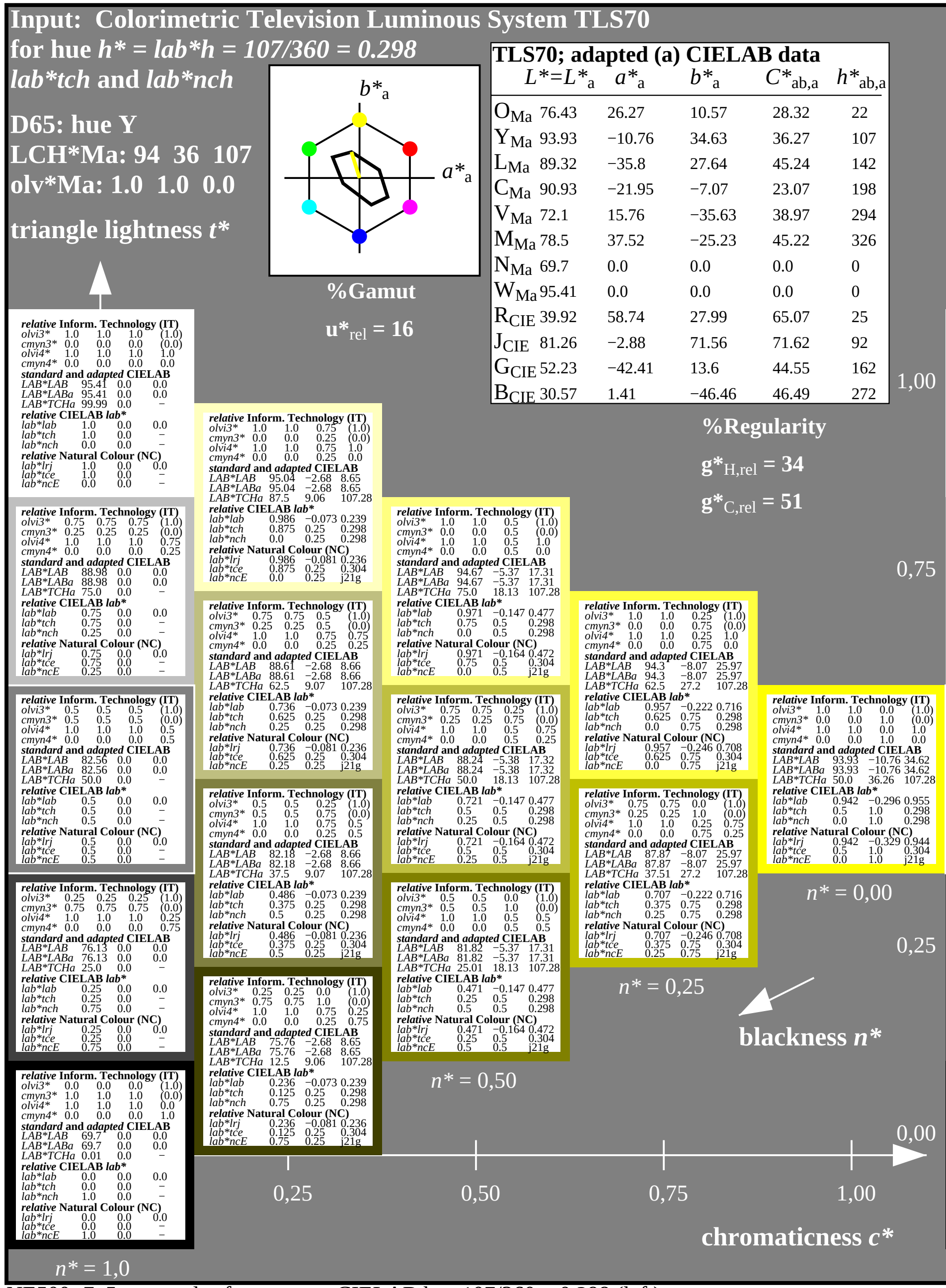
%Regularity

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

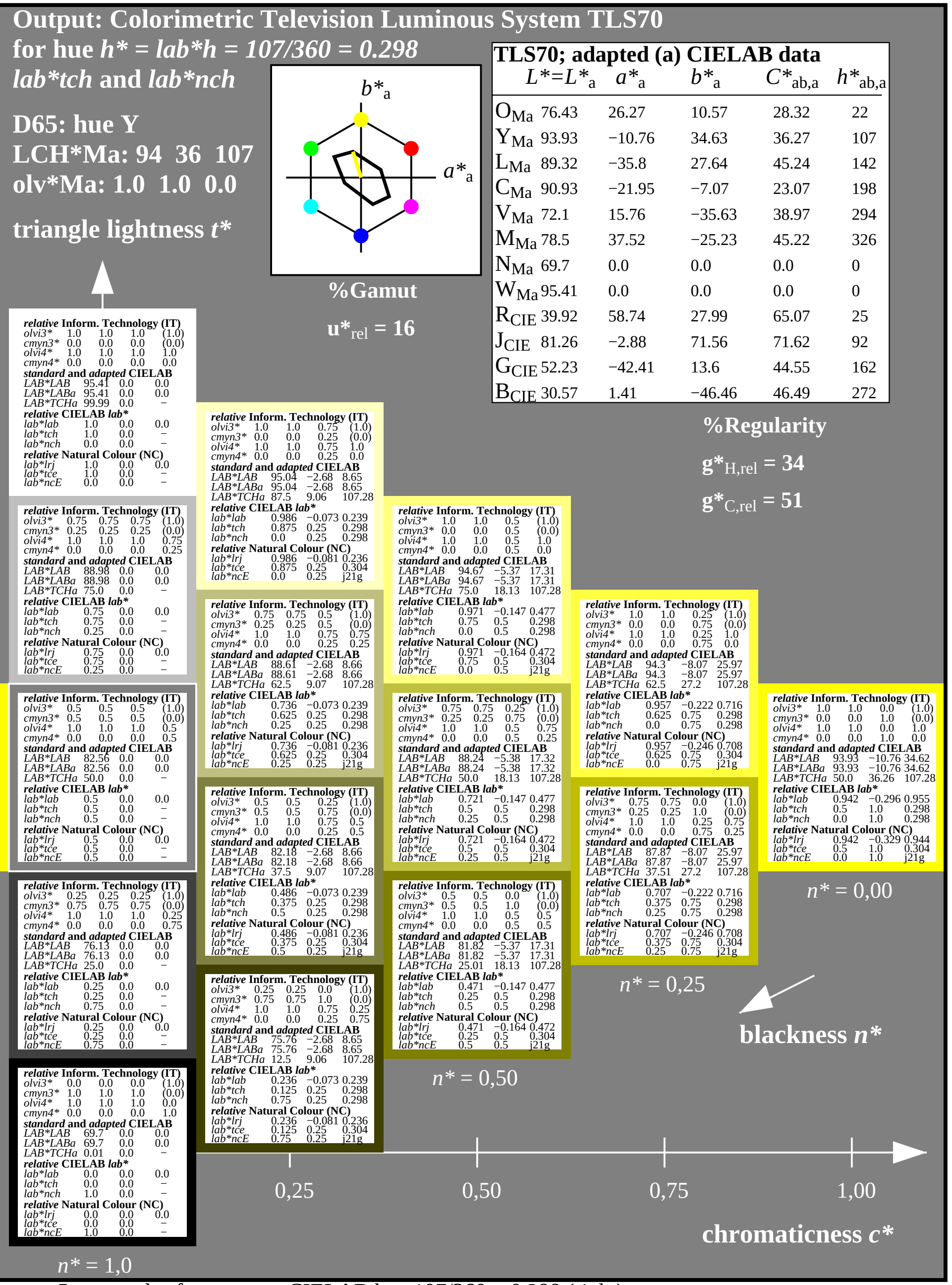
$g^*_{C,rel}$ = 100



NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left) 5 step scales for constant CIELAB hue 90/360 = 0.25 (right)



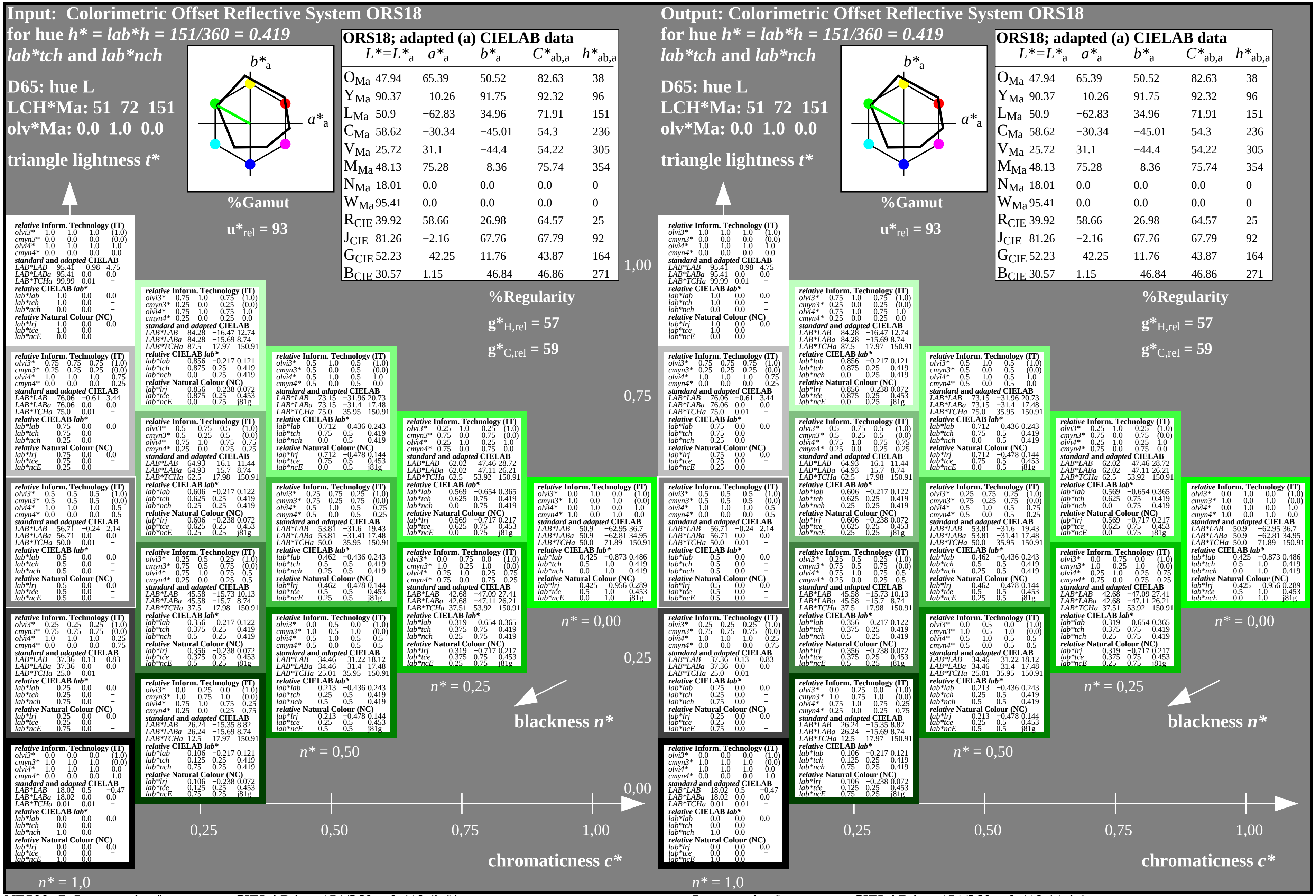
TLS70; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	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



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

NE500−7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

5 step scales for constant CIELAB hue 107/360 = 0.298 (right)



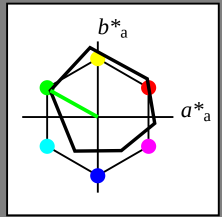
NE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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

triangle lightness *t*

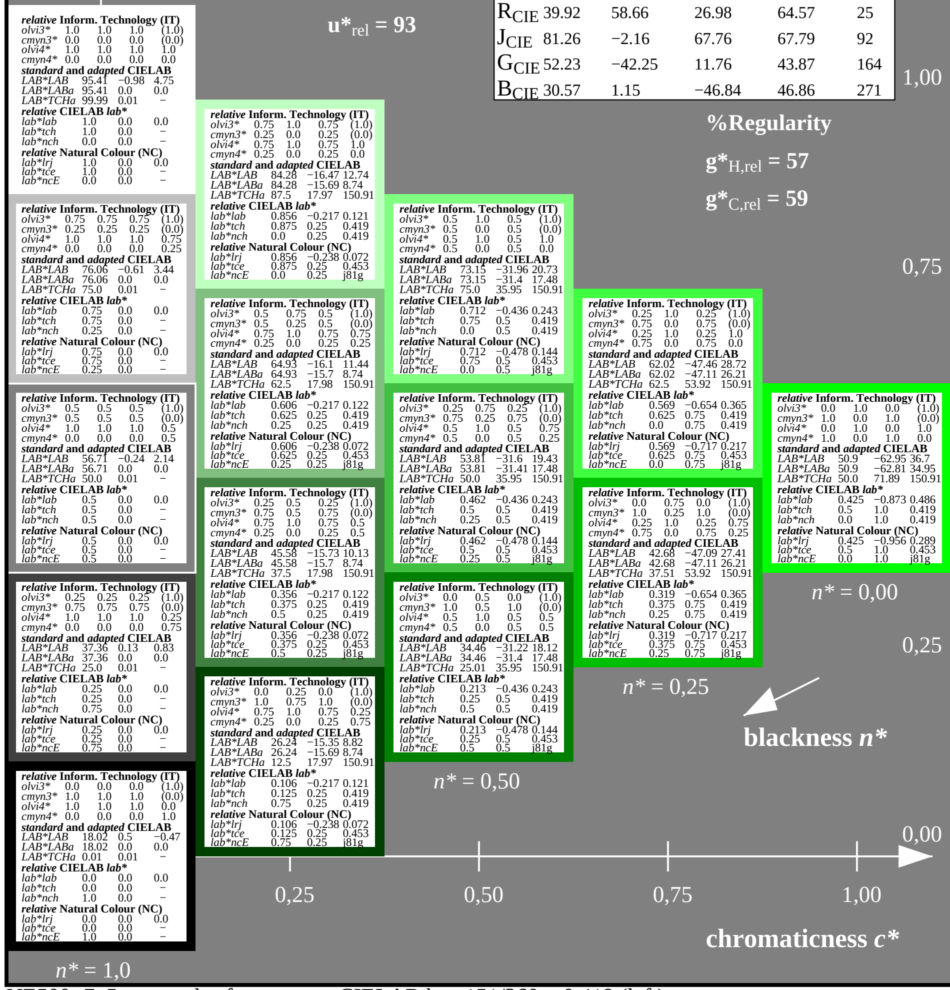


%Gamut
u^*_{rel} = 93

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

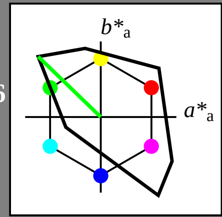
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59



Output: Colorimetric Television Luminous System TLS00
for hue *h = *lab*h* = 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*

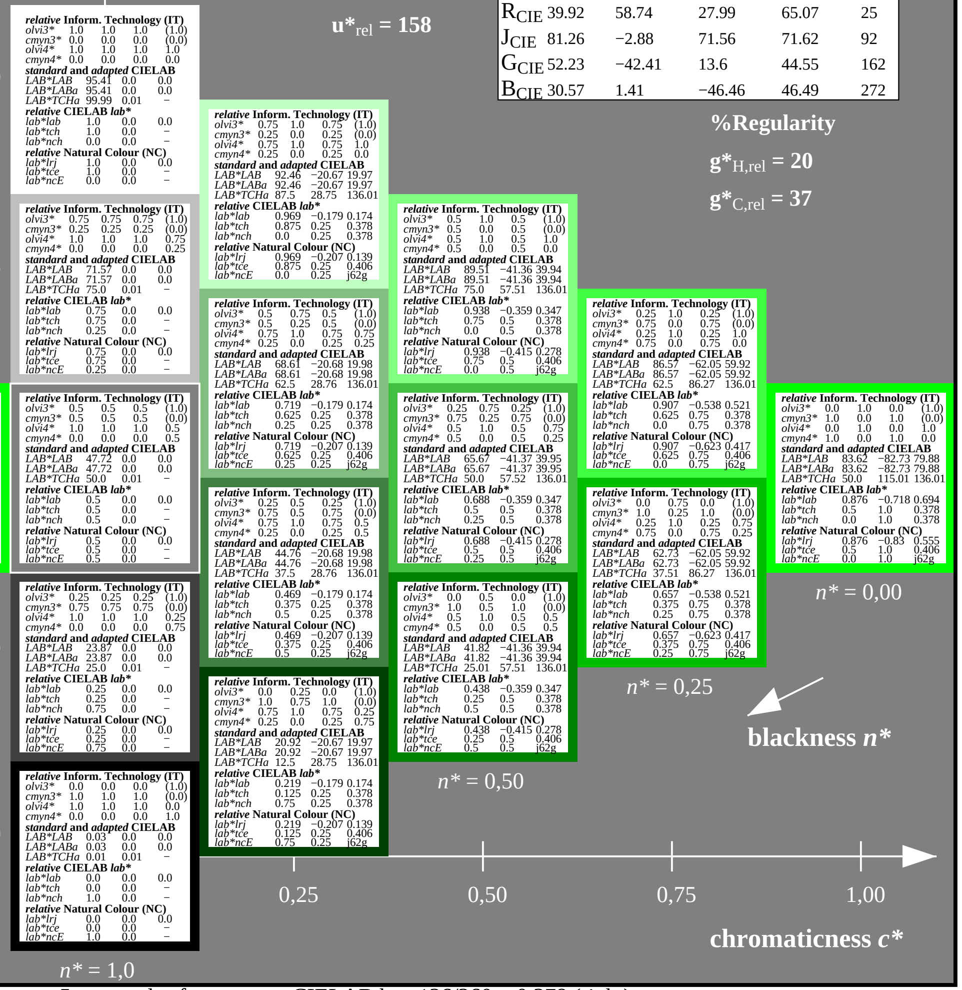


%Gamut
u^*_{rel} = 158

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



NE500−7, 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 $h^* = lab^*h = 151/360 = 0.419$

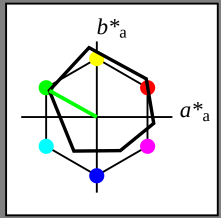
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

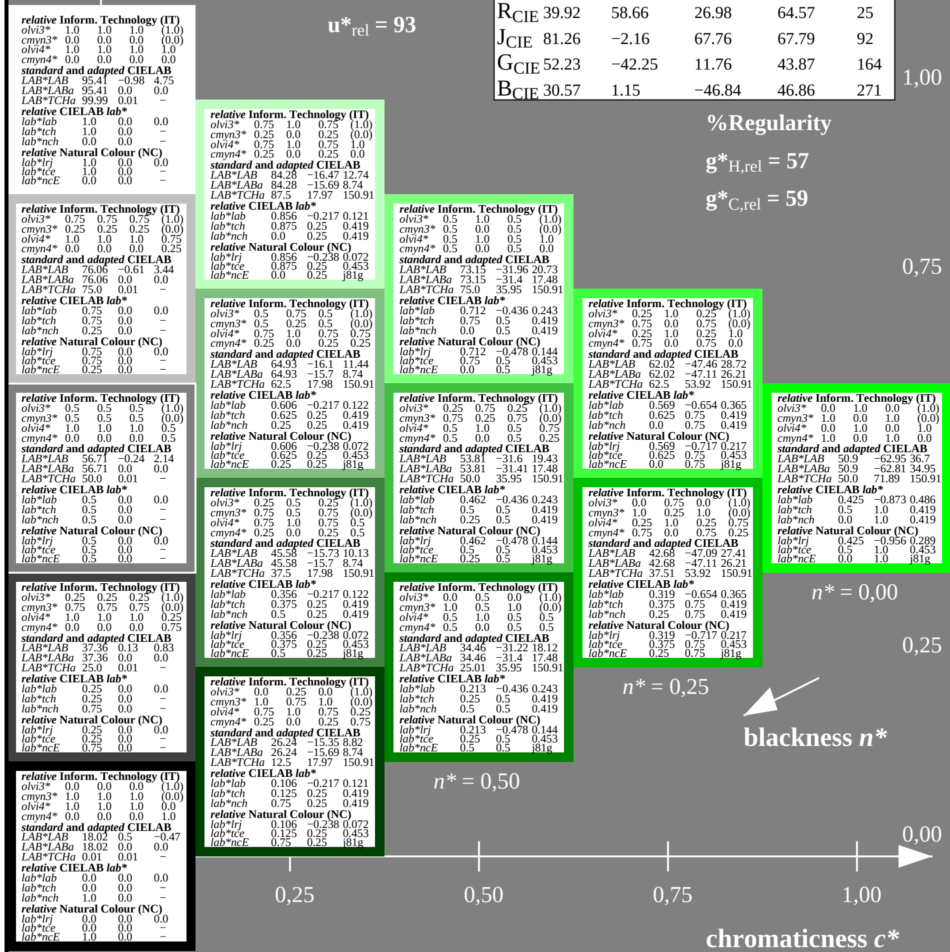
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

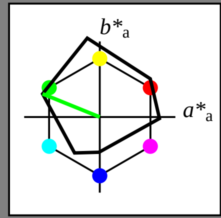
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

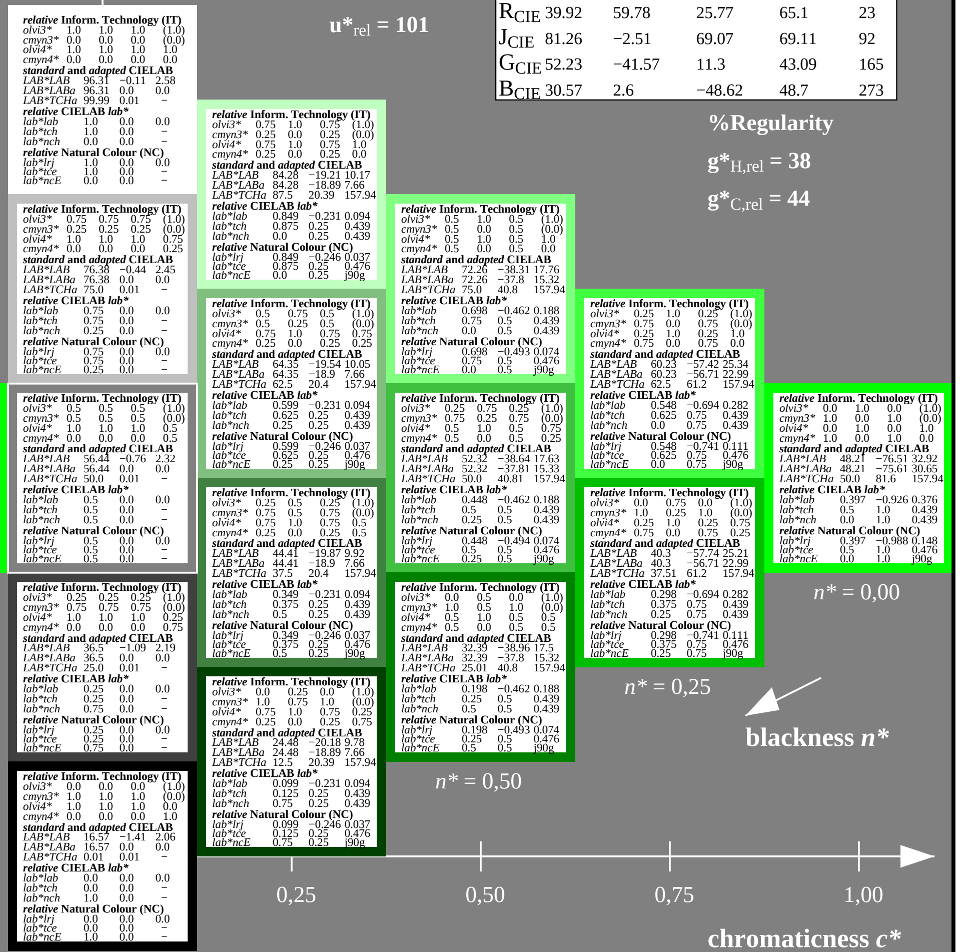
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

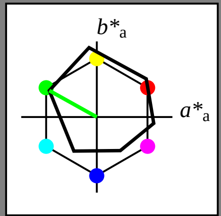
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

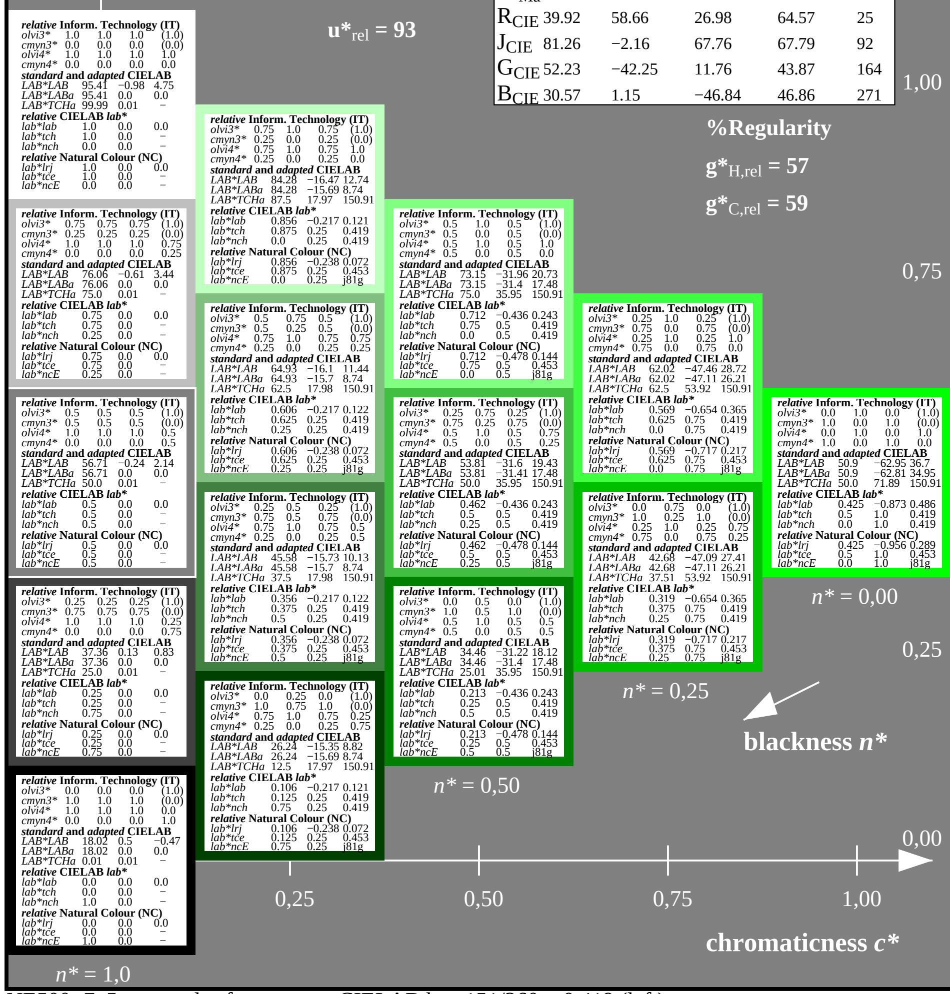
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$

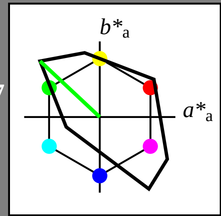
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 118$

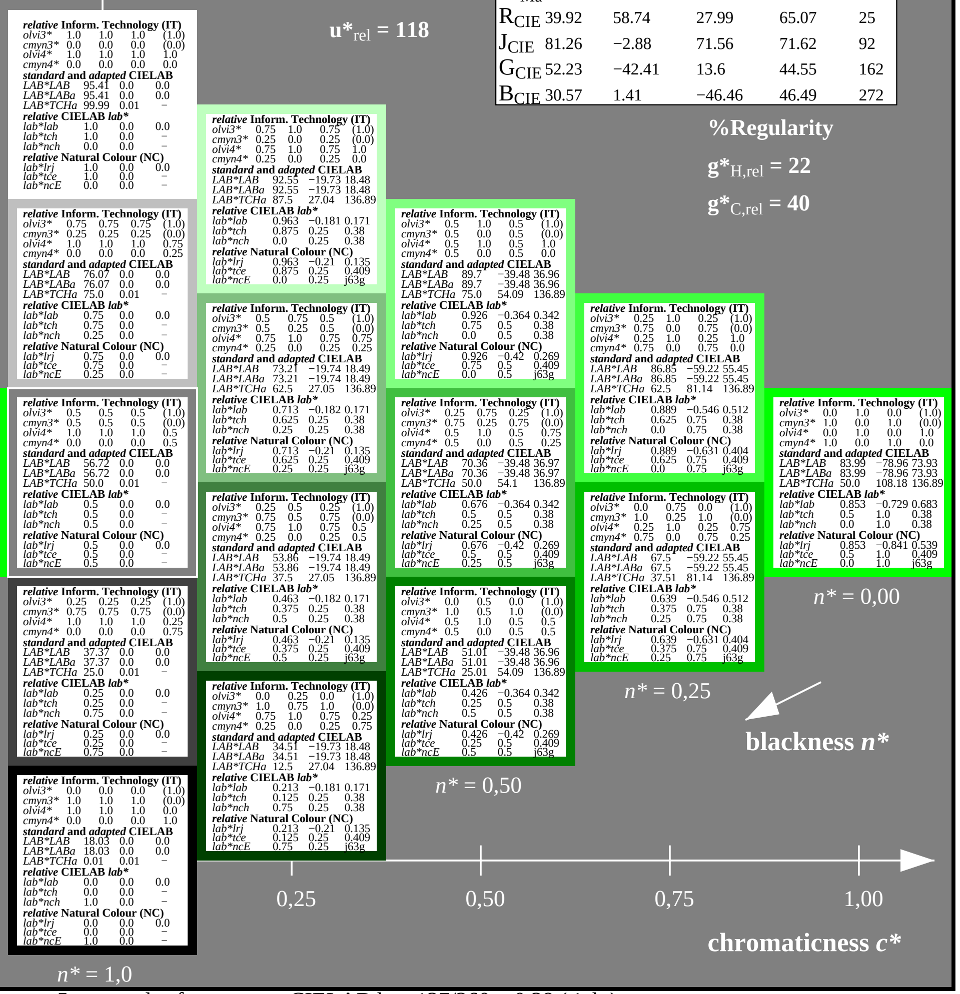
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

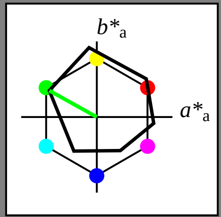
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

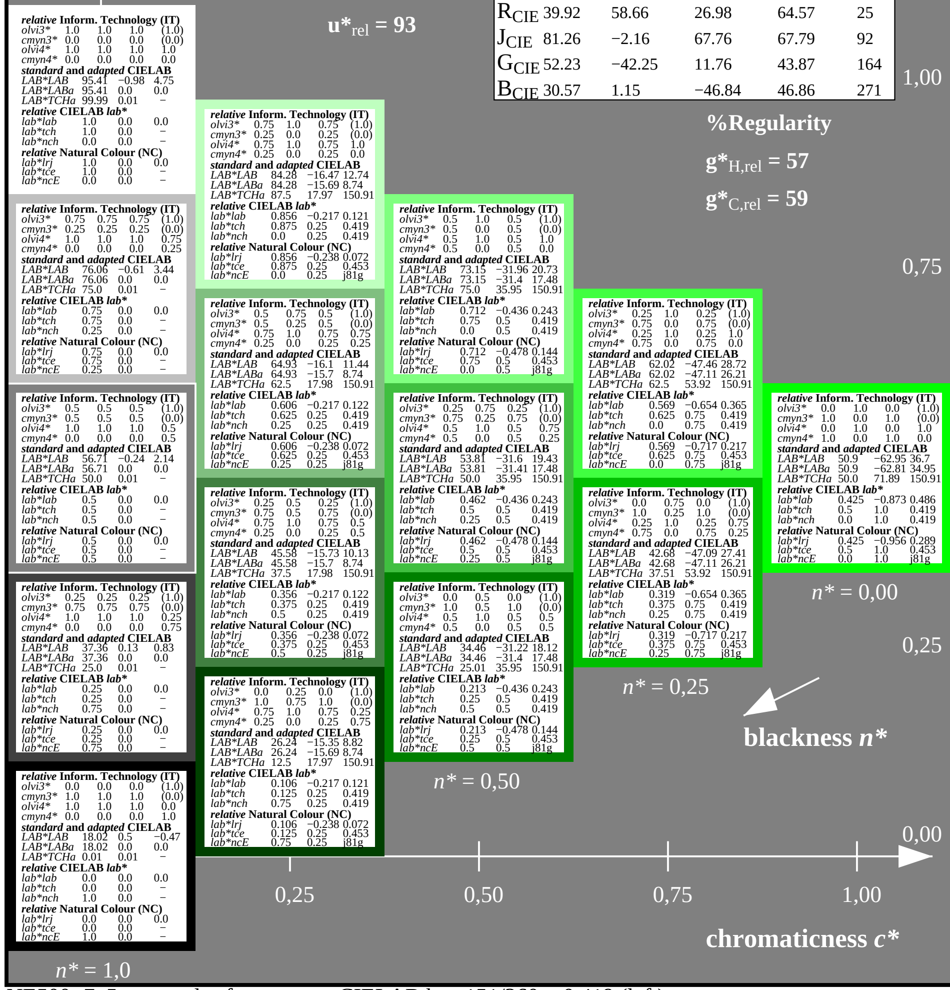
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 150/360 = 0.417$

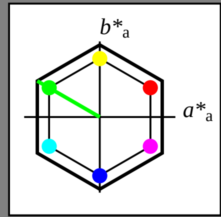
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

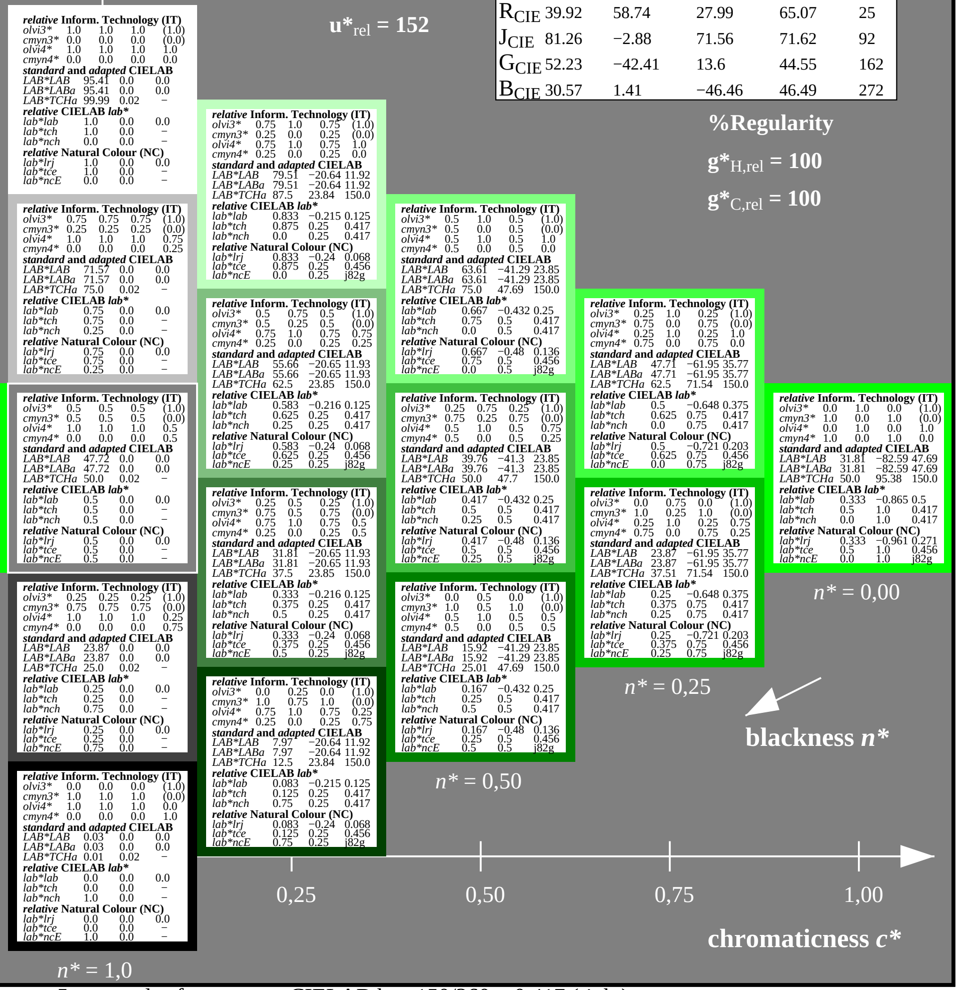
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



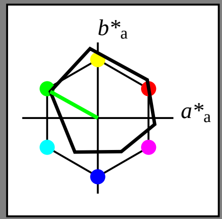
NE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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

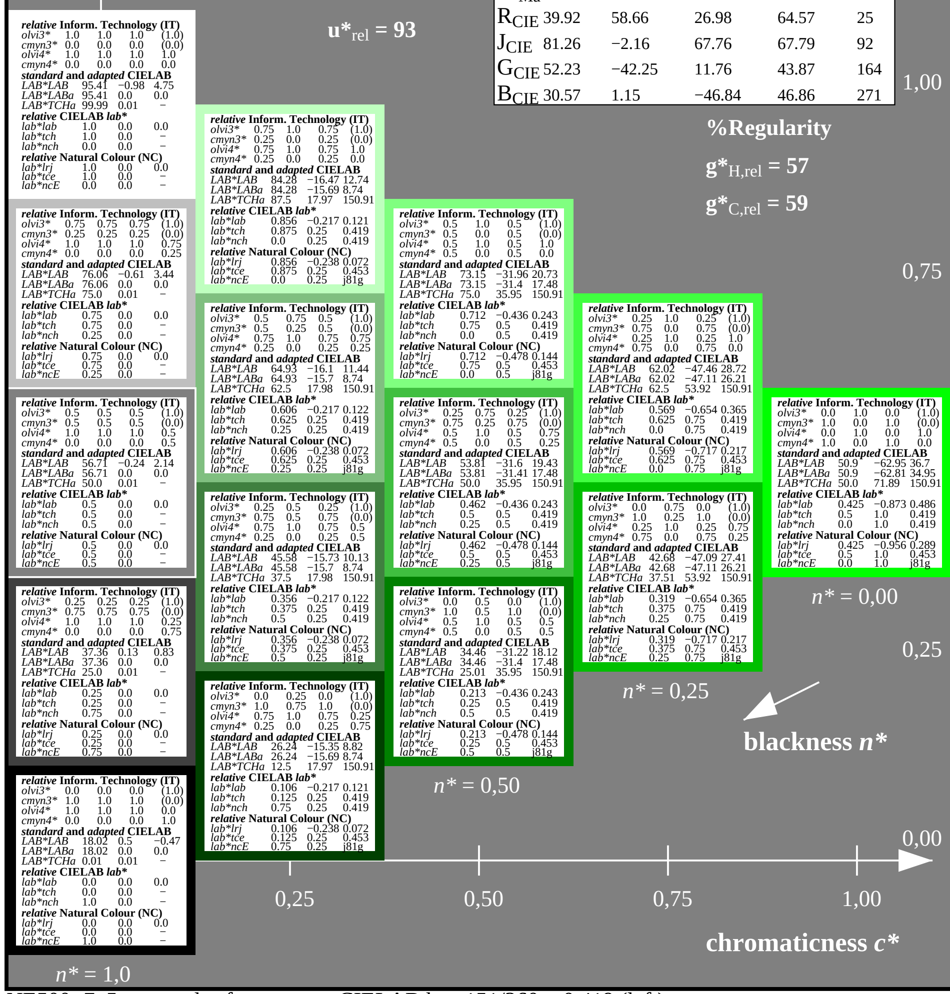
triangle lightness *t*



%Gamut
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

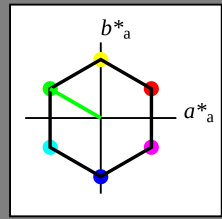
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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



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

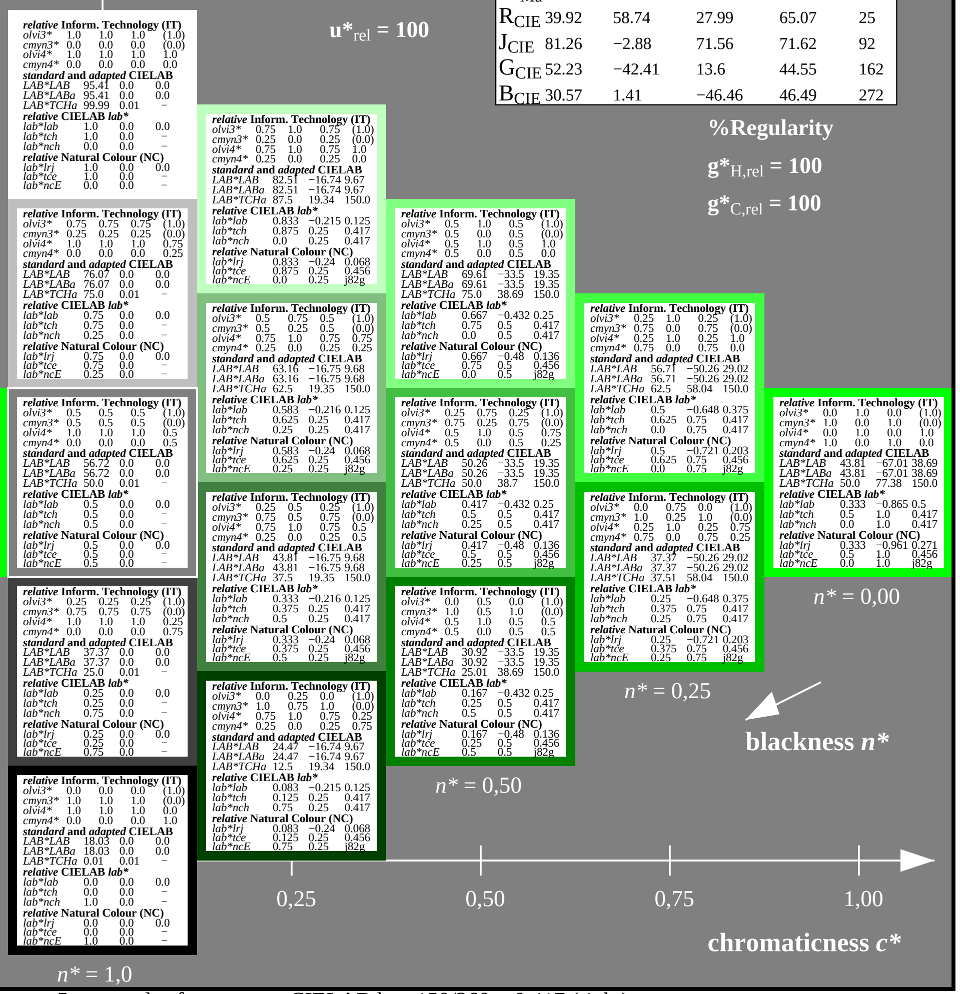
triangle lightness *t*



%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



NE500−7, 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**

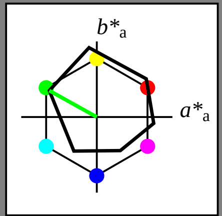
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 93

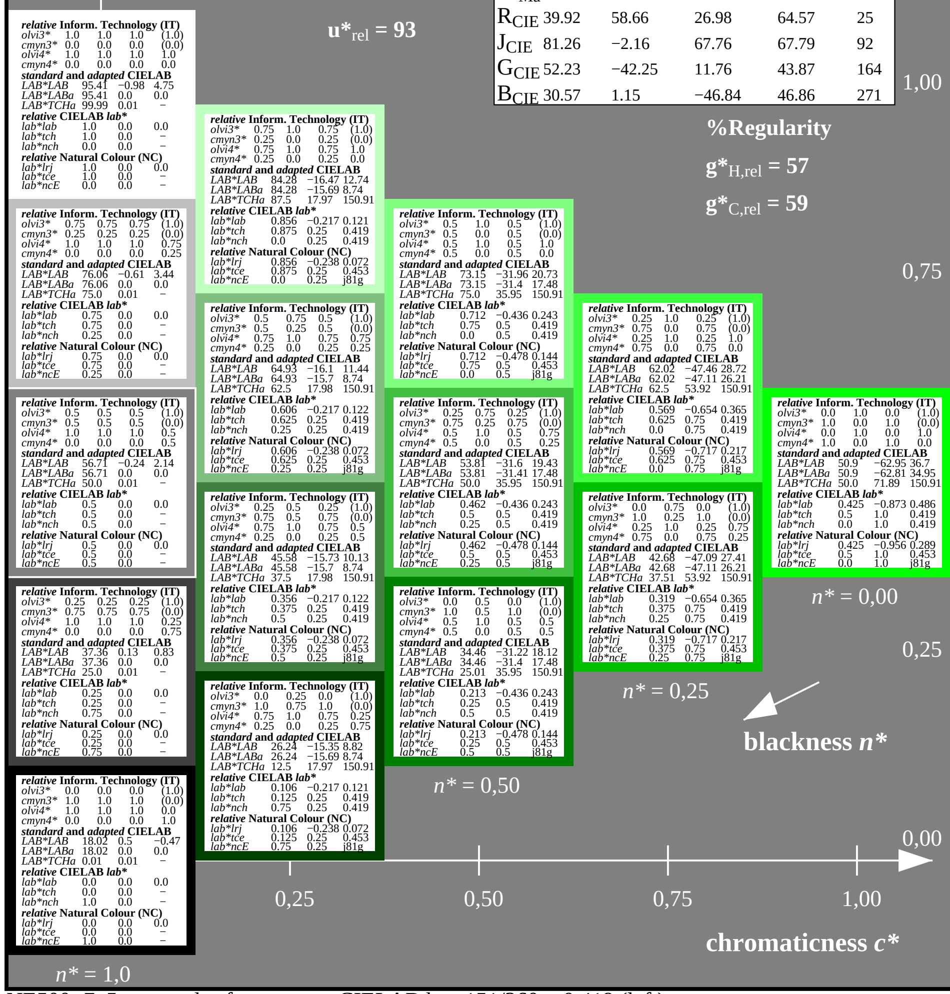
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue *h = *lab*h* = 150/360 = 0.417**

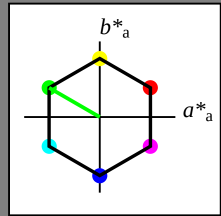
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

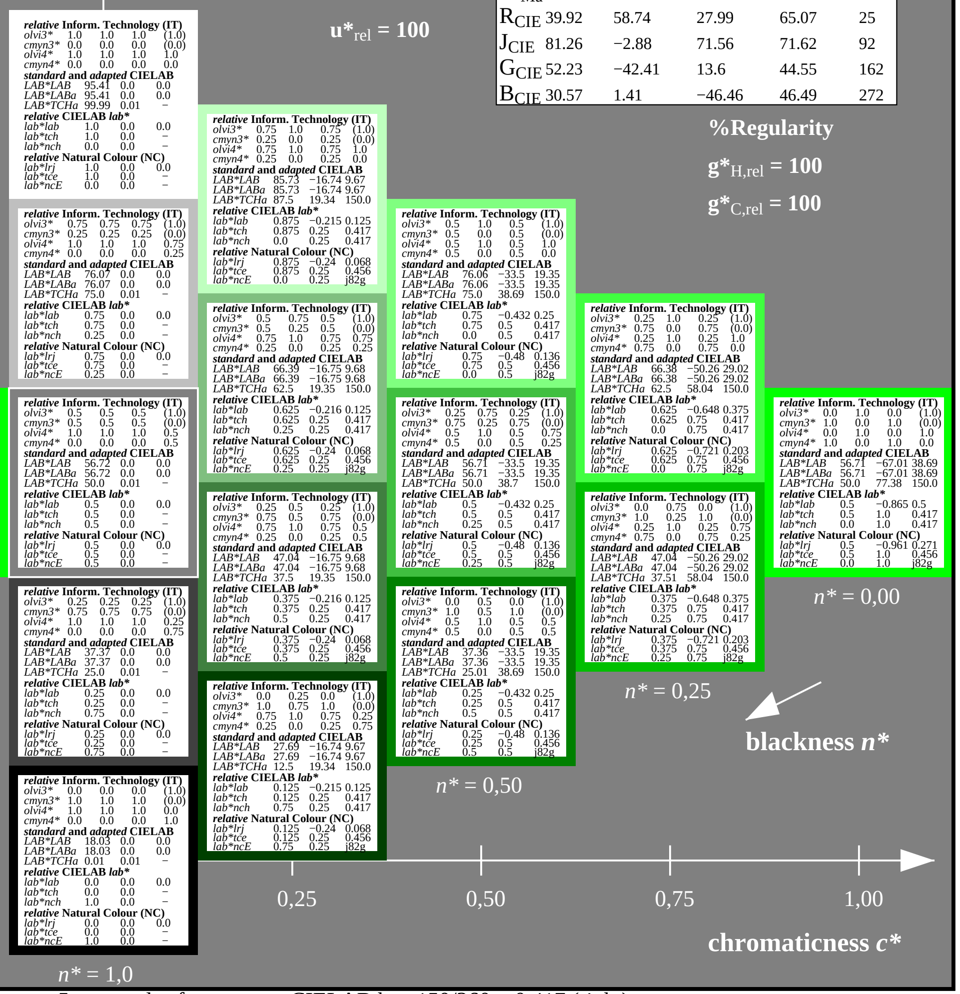
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



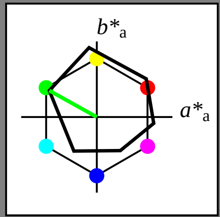
NE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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^*

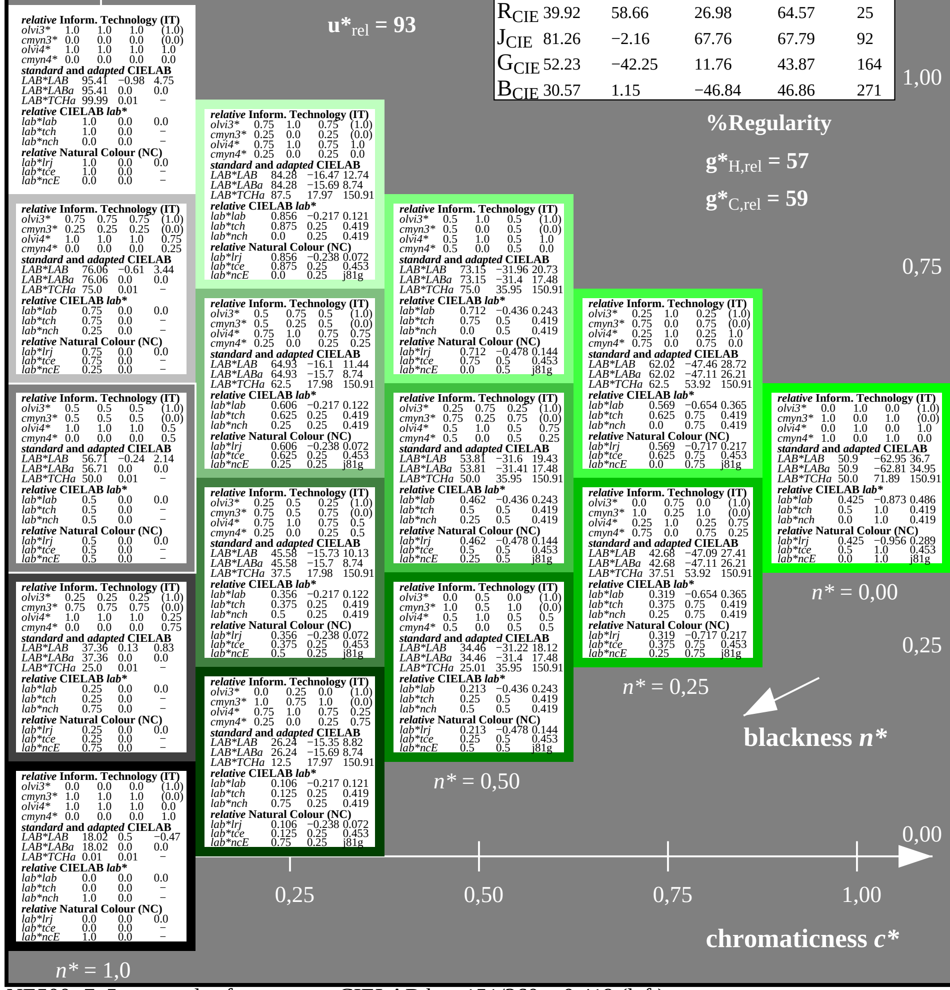


%Gamut
$u^*_{rel} = 93$

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

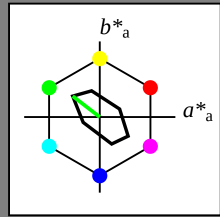
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



Output: Colorimetric 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^*

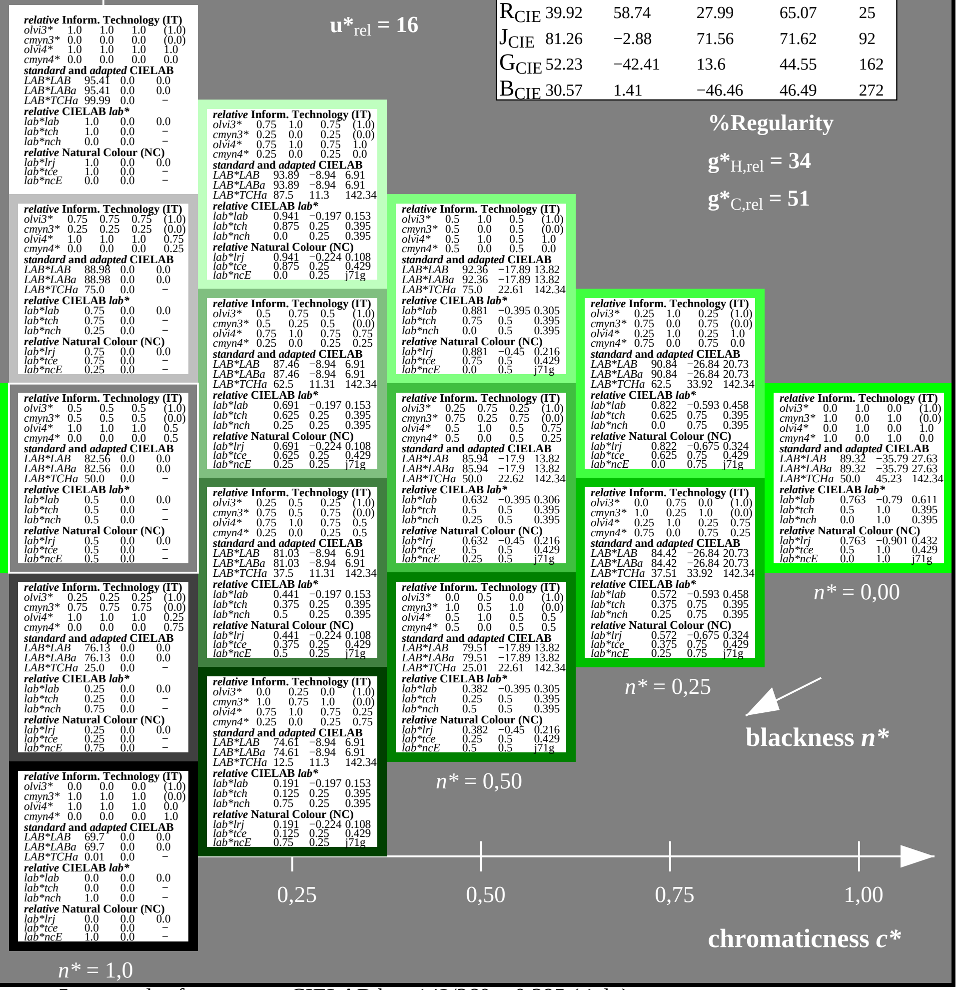


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



NE500−7, 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

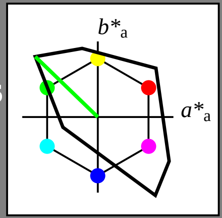
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

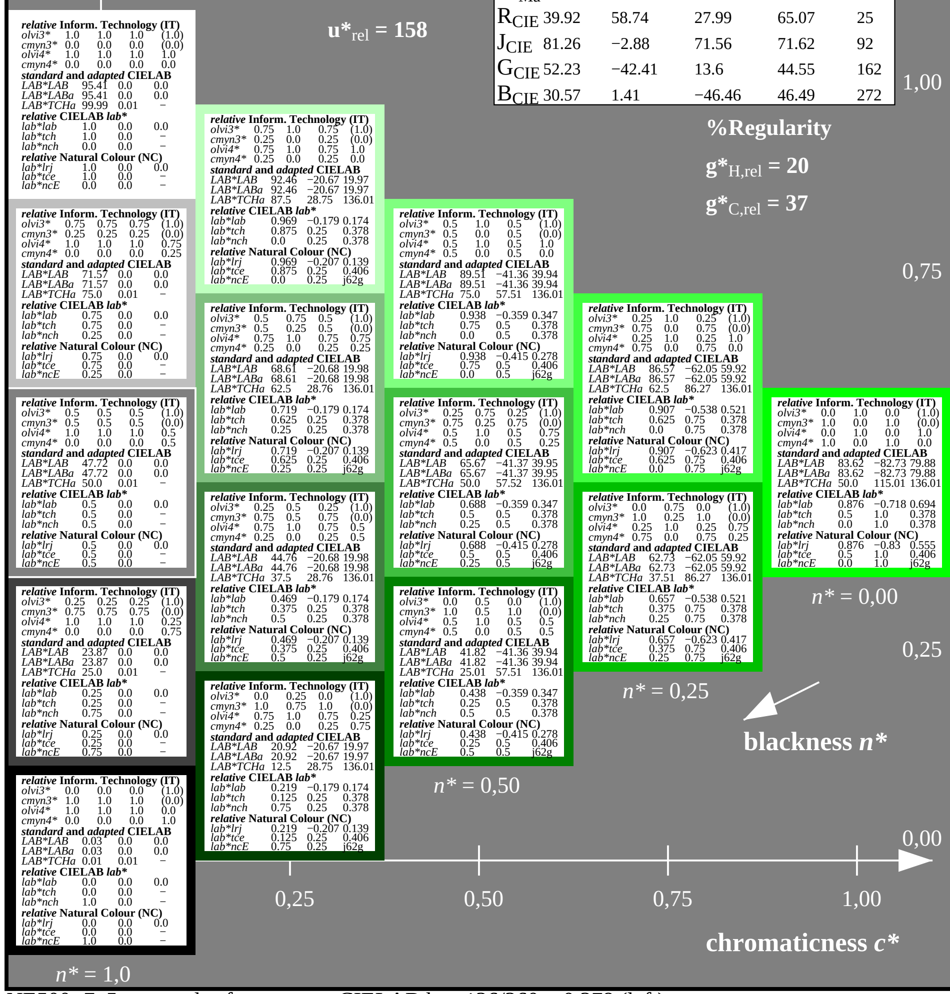
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h$ = 151/360 = 0.419

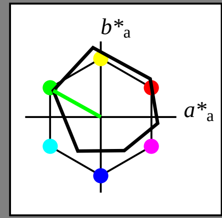
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

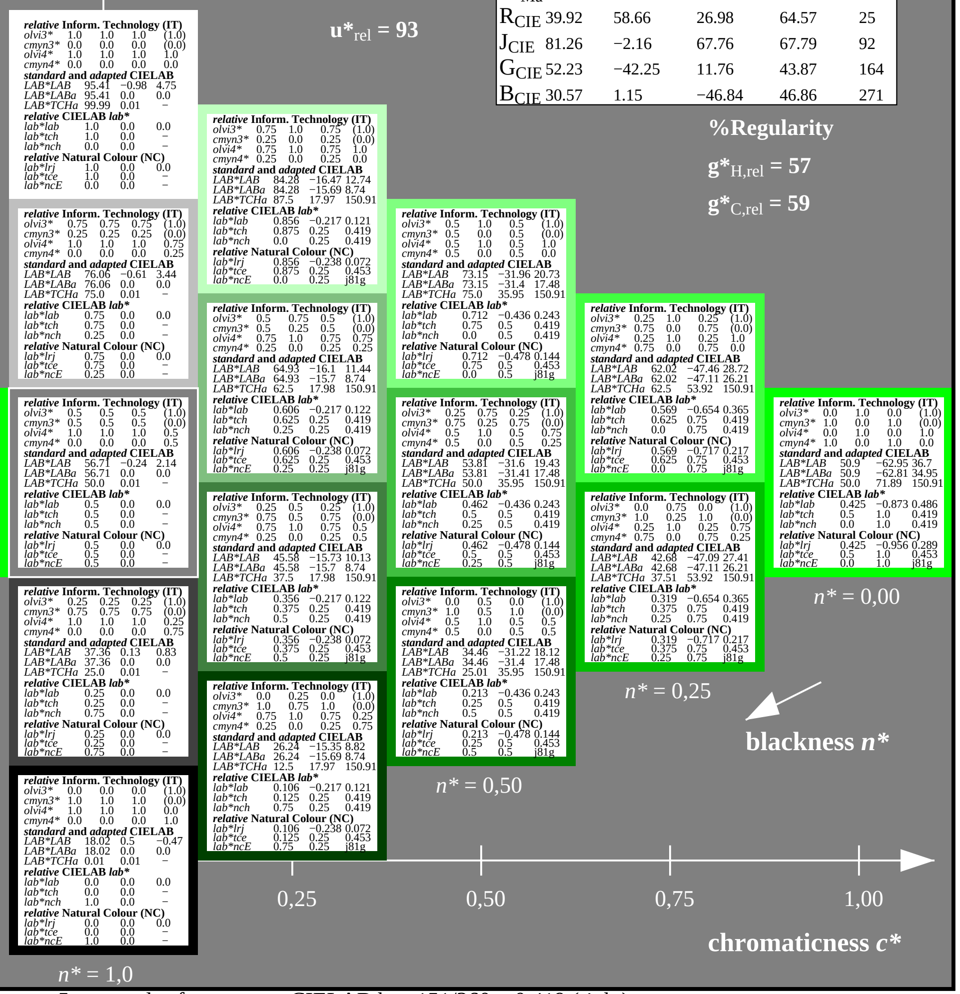
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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**

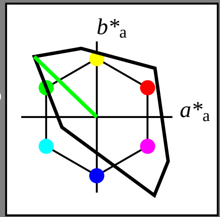
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

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

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* 0.75 0.75 0.75 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* 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 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 0.5 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 44.76 −20.68 19.98
LAB*LABa 44.76 −20.68 19.98
LAB*TCHa 37.5 28.76 136.01
relative CIELAB lab*
lab*lab 0.469 −0.179 0.174
lab*tch 0.375 0.25 0.378
lab*nch 0.5 0.25 0.378
relative Natural Colour (NC)
lab*lrj 0.469 −0.207 0.139
lab*tce 0.375 0.25 0.406
lab*ncE 0.5 0.25 j62g

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* 0.5 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 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 0.5 0.0 (1.0)
cmyn3* 1.0 0.5 1.0 (0.0)
olvi4* 0.5 1.0 0.5 0.5
cmyn4* 0.5 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 41.82 −41.36 39.94
LAB*LABa 41.82 −41.36 39.94
LAB*TCHa 25.01 57.51 136.01
relative CIELAB lab*
lab*lab 0.438 −0.359 0.347
lab*tch 0.25 0.5 0.378
lab*nch 0.5 0.5 0.378
relative Natural Colour (NC)
lab*lrj 0.438 −0.415 0.278
lab*tce 0.25 0.5 0.406
lab*ncE 0.5 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* 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* 0.0 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 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

*n** = 0,00

*n** = 0,25

blackness *n*

*n** = 0,50

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

chromaticness *c*

*n** = 1,0

Output: Colorimetric Television Luminous System TLS00

for hue *h = *lab*h* = 136/360 = 0.378**

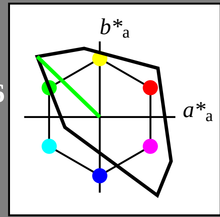
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 158

%Regularity

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

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

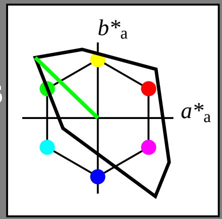
NE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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

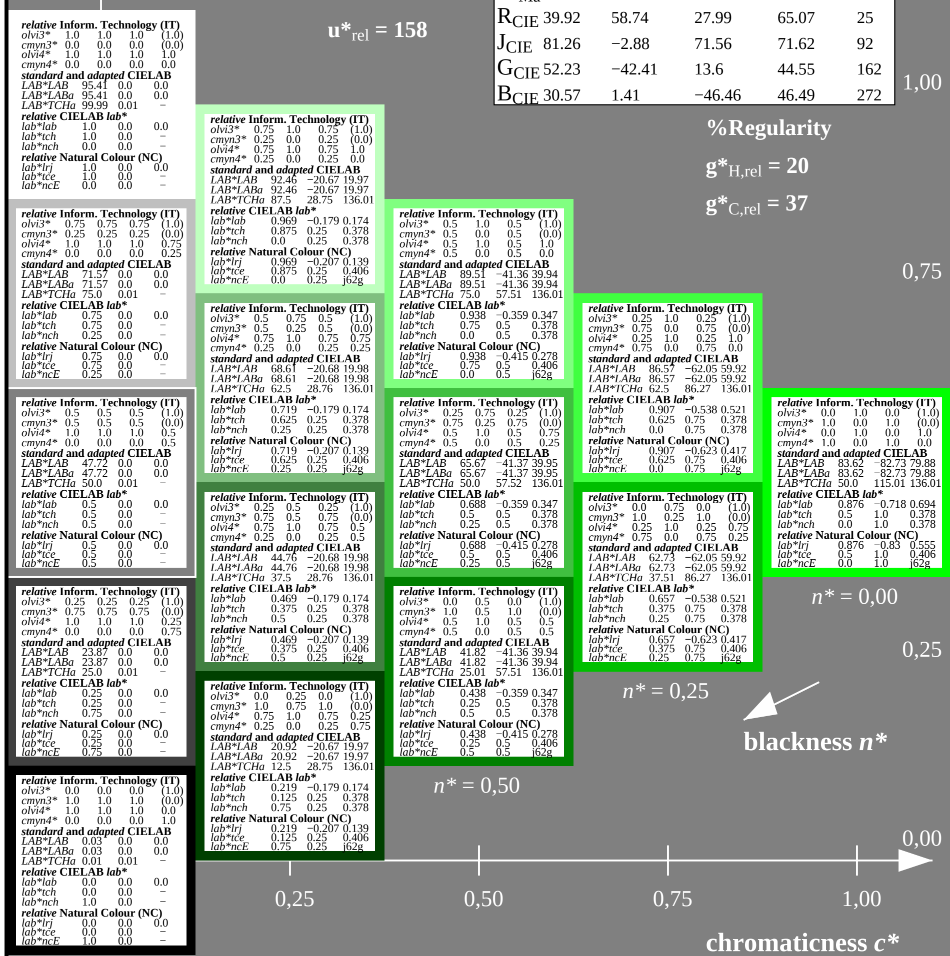
triangle lightness *t**



%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

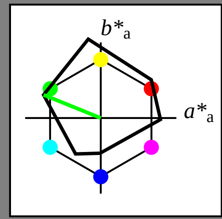
%Regularity
$g^*_{H,rel}$ = 20
$g^*_{C,rel}$ = 37



Output: Colorimetric Printer Reflective System DRSXX
for hue *h* = lab*h* = 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

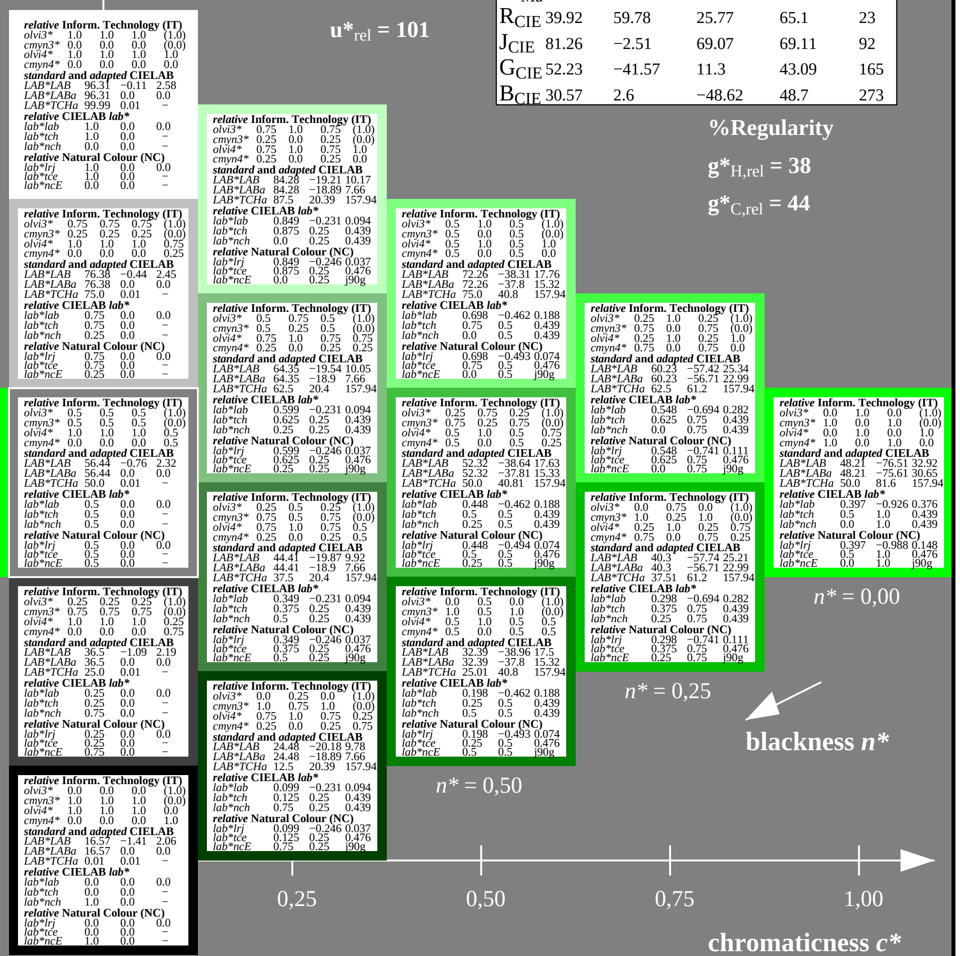
triangle lightness *t**



%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



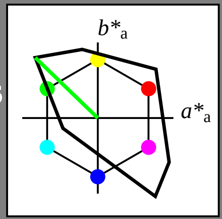
NE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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*

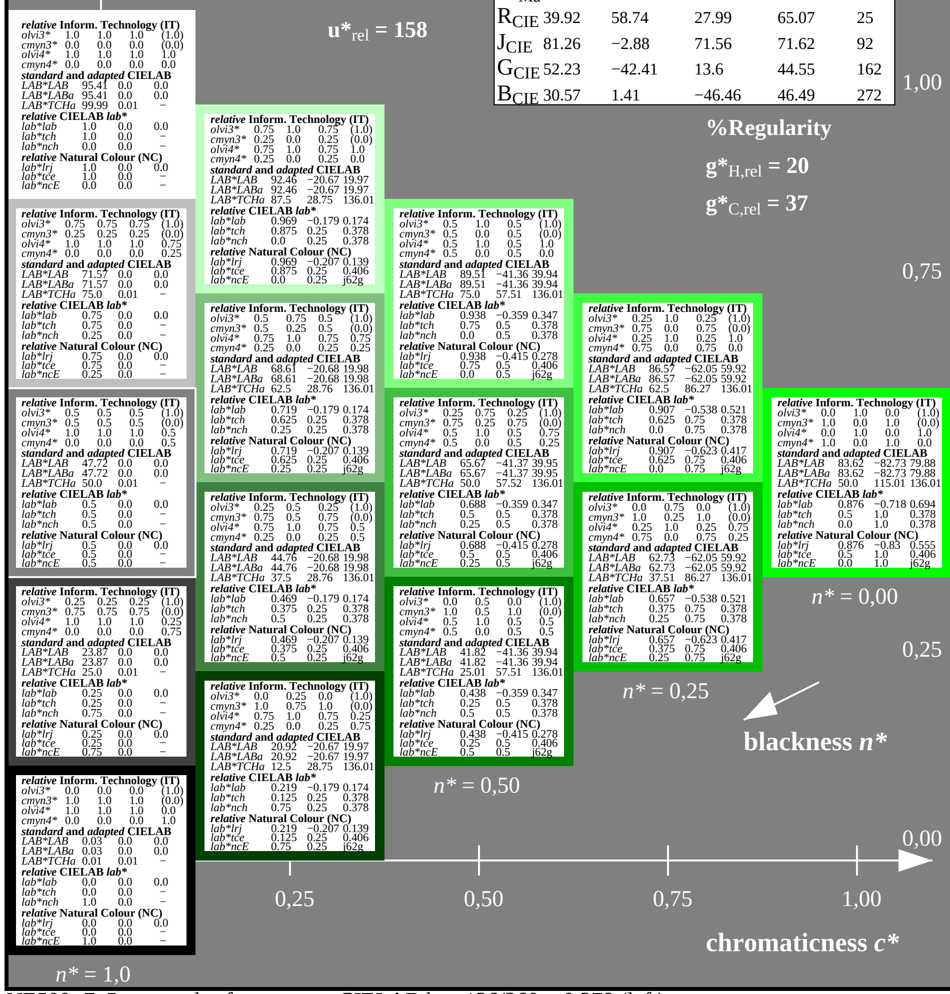


%Gamut
u^*_{rel} = 158

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

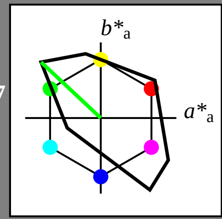
%Regularity
$g^*_{H,rel}$ = 20
$g^*_{C,rel}$ = 37



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*

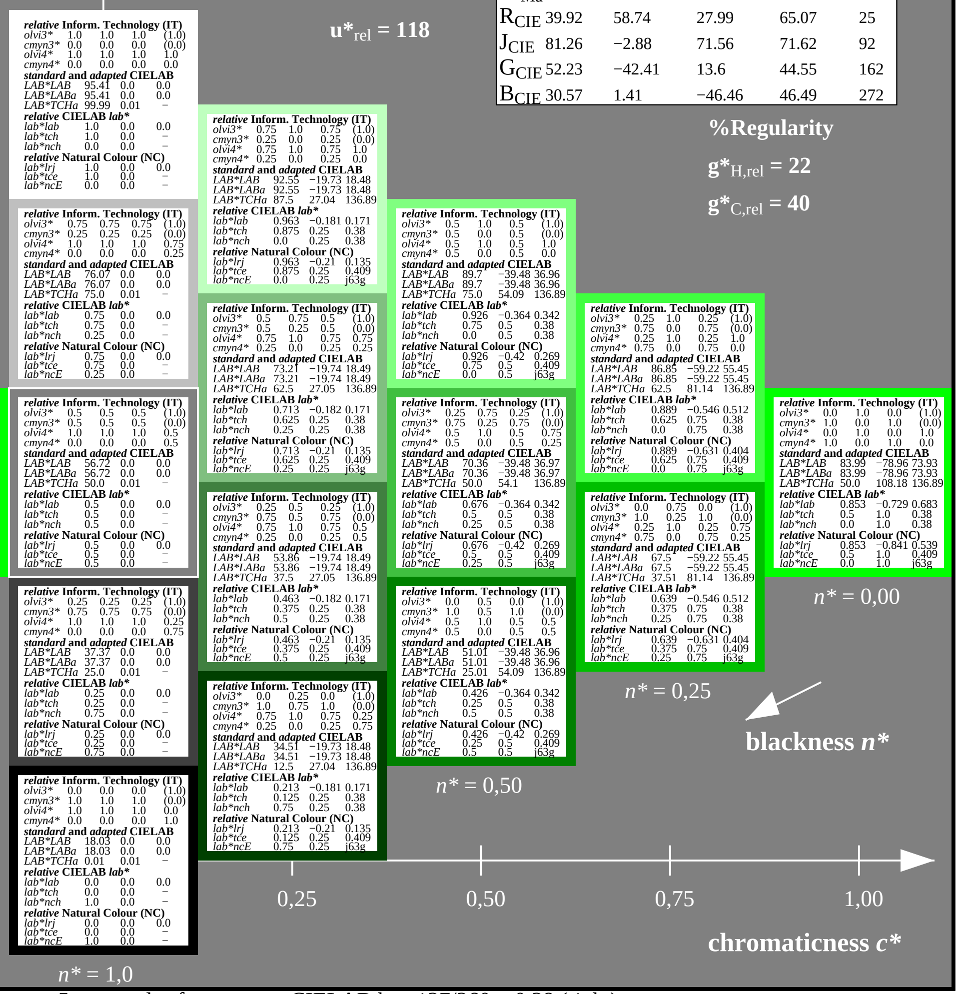


%Gamut
u^*_{rel} = 118

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



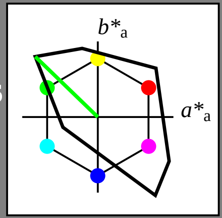
NE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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

triangle lightness *t**

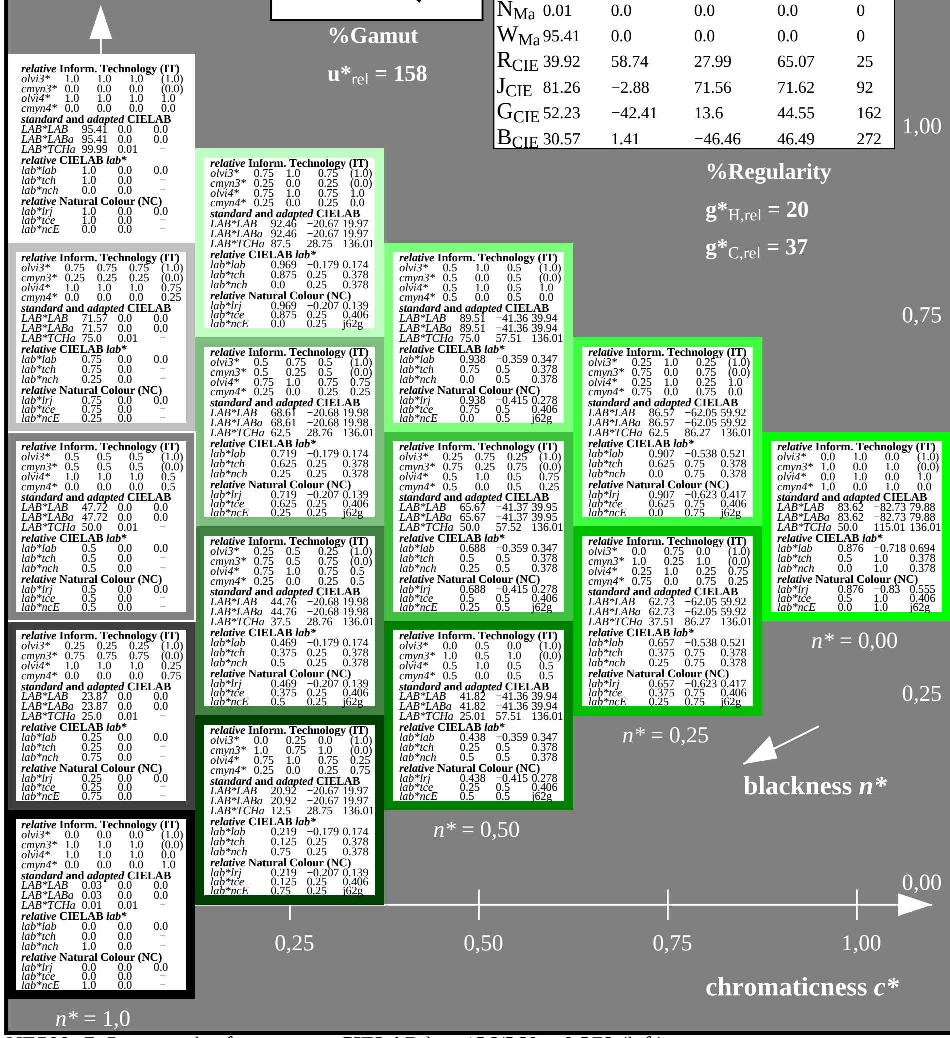


%Gamut
u^*_{rel} = 158

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

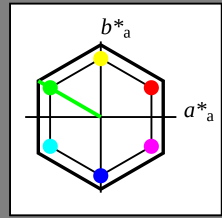
%Regularity
$g^*_{H,rel}$ = 20
$g^*_{C,rel}$ = 37



Output: Colorimetric Natural Luminous System NLS00
for hue *h = *lab*h* = 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**

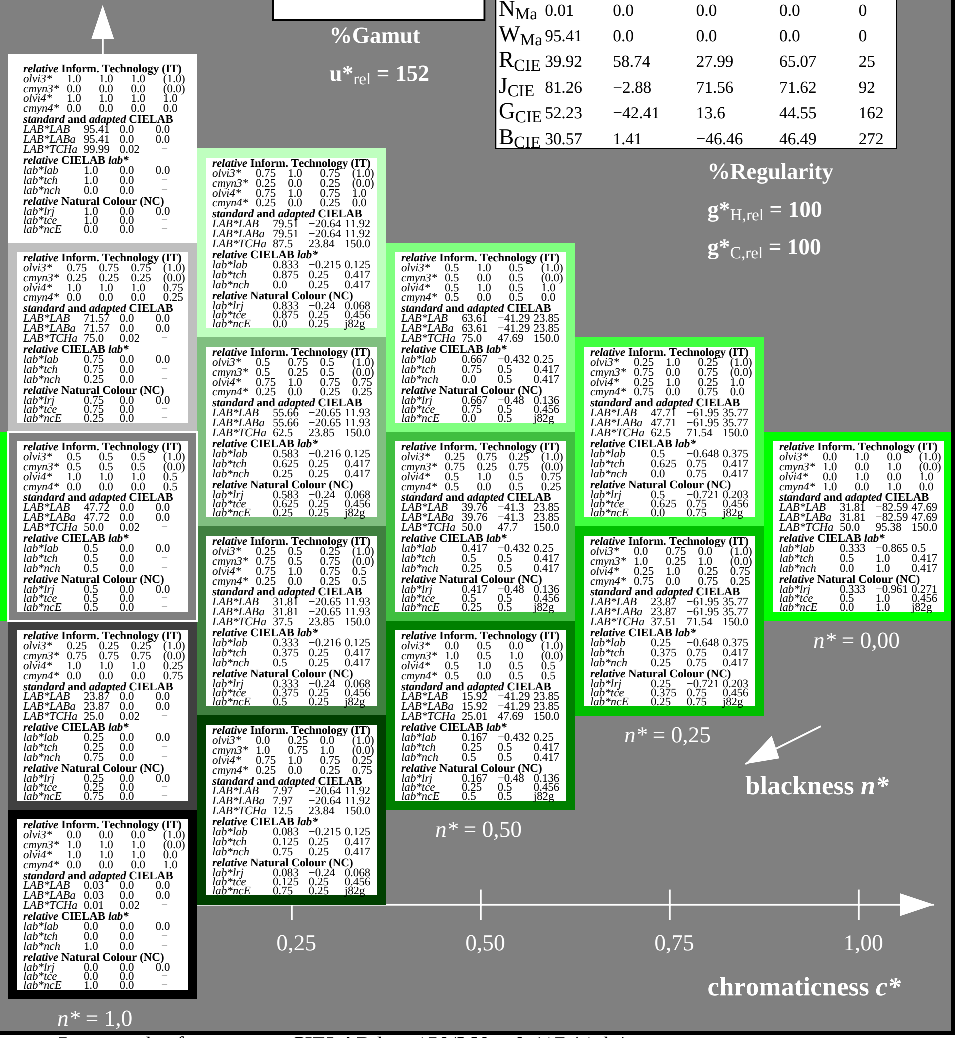


%Gamut
u^*_{rel} = 152

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



NE500−7, 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**

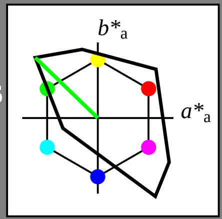
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u*rel = 158

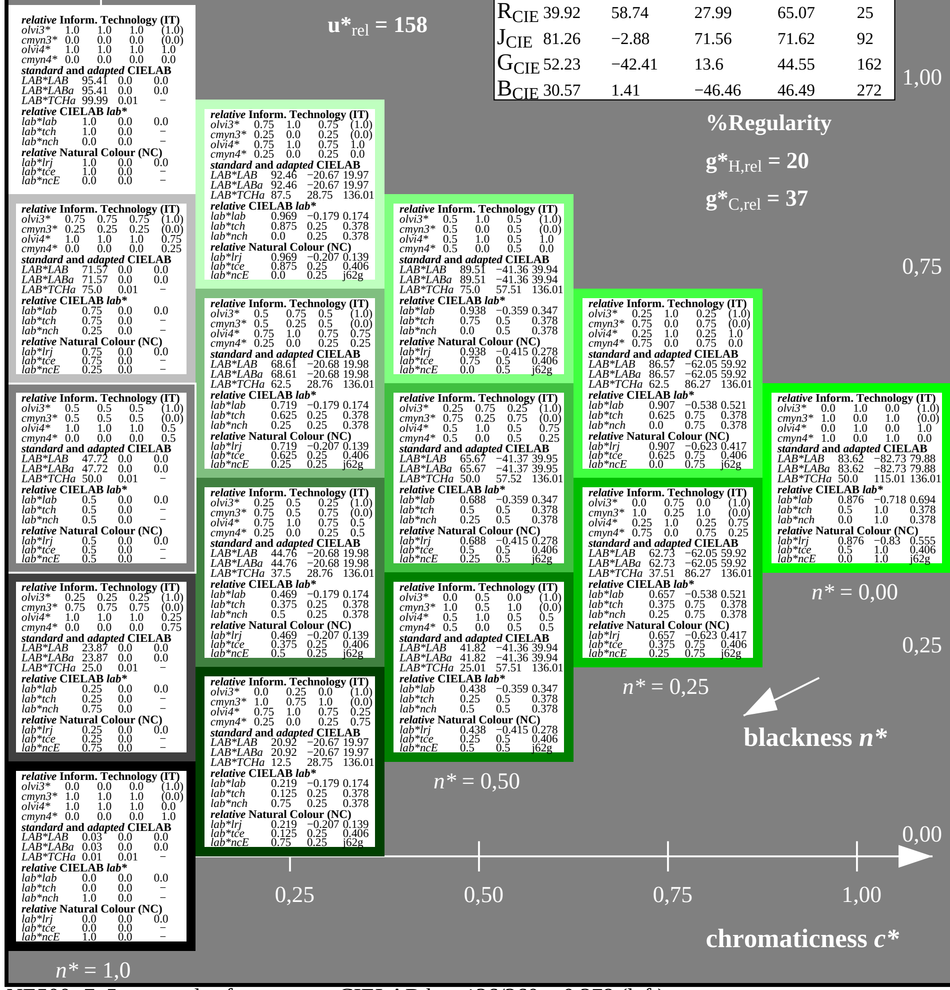
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18

for hue *h = *lab*h* = 150/360 = 0.417**

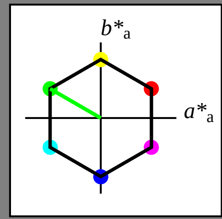
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u*rel = 100

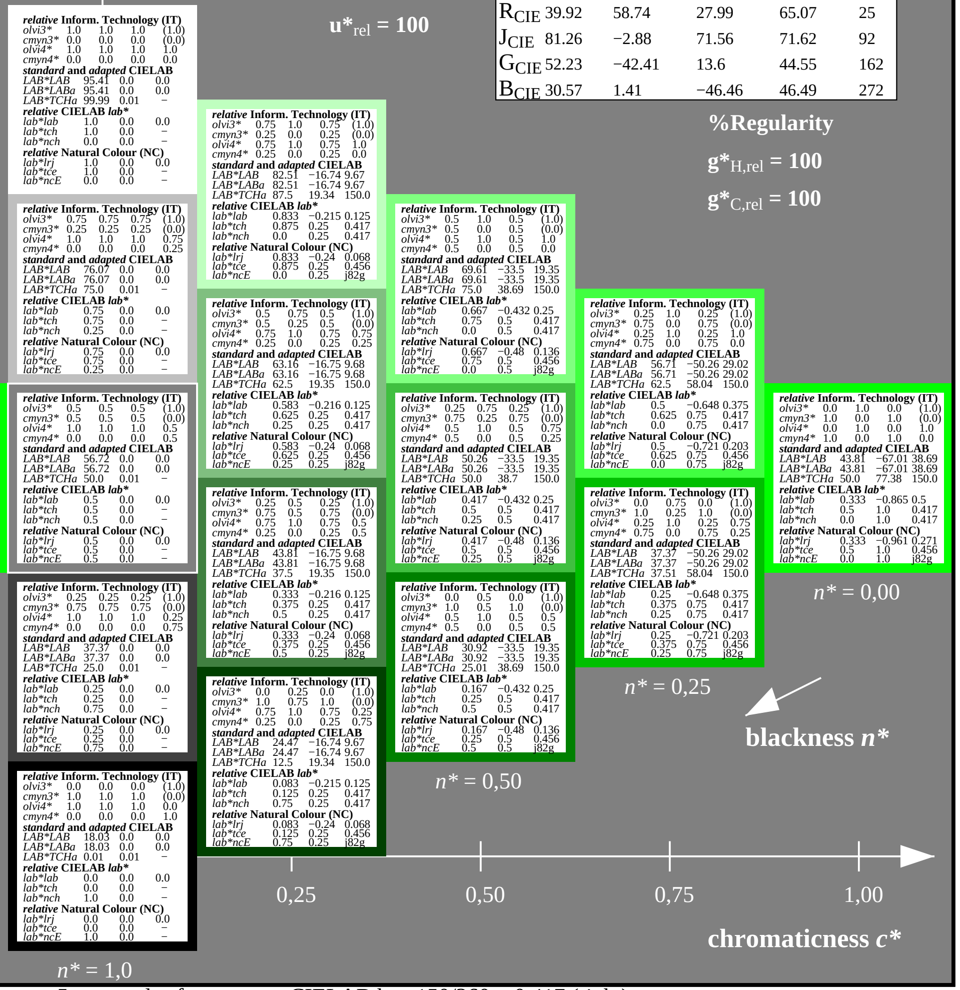
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



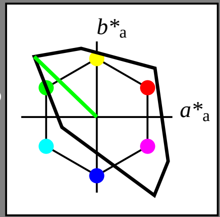
NE500−7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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*

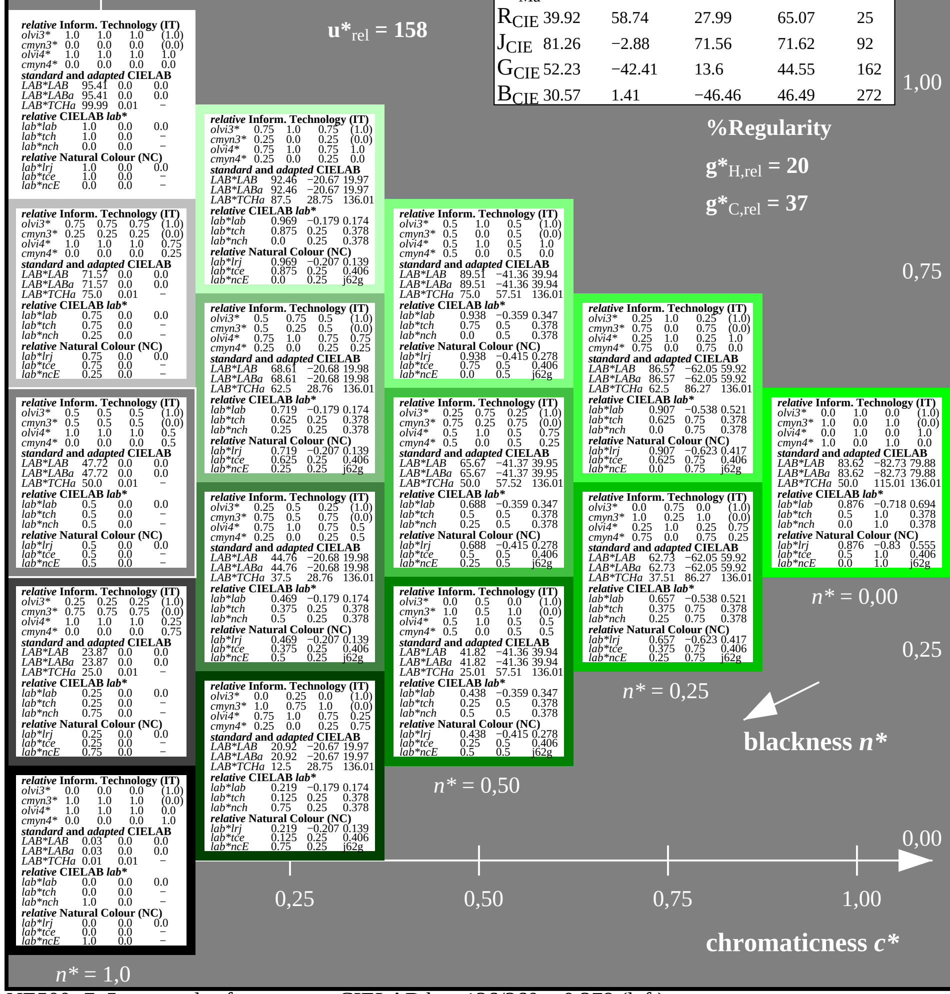


%Gamut
$u^*_{rel} = 158$

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

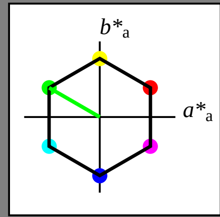
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric 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*

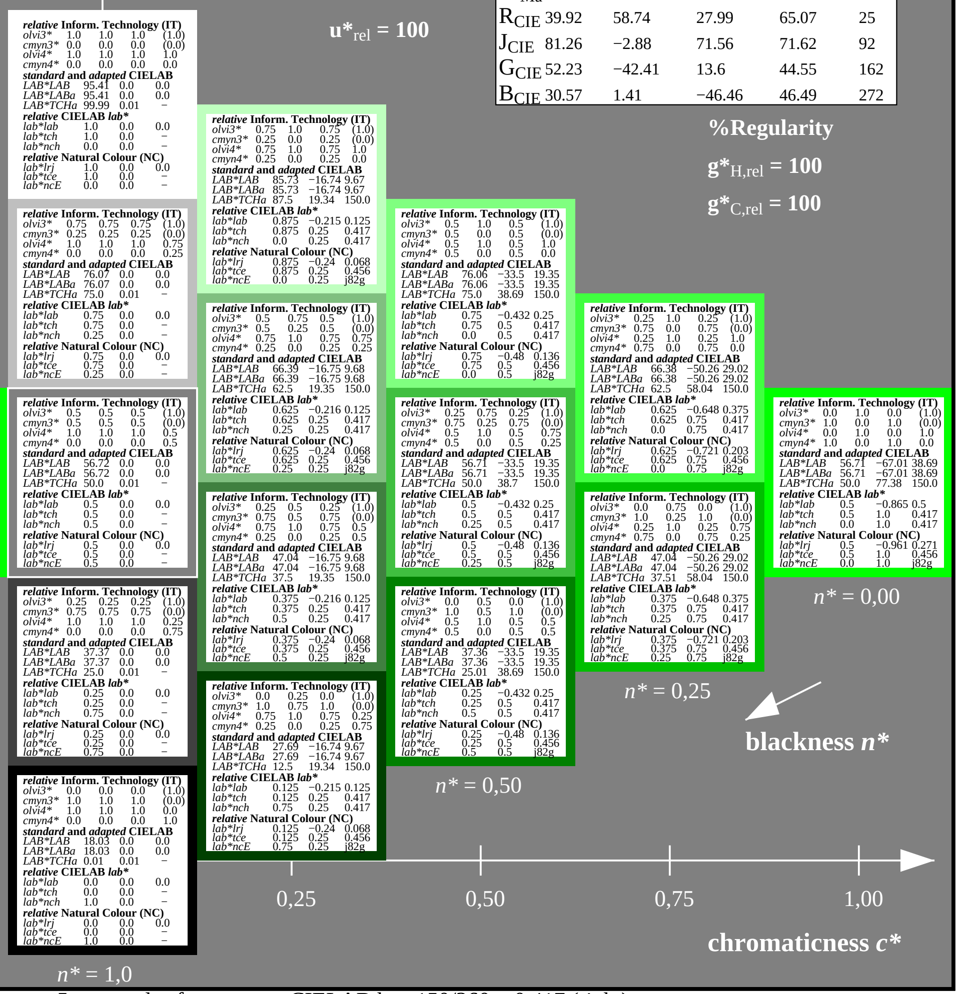


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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

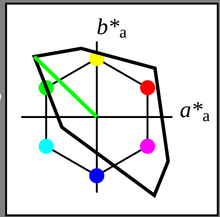
*lab*tch* and *lab*nch*

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

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 TLS70

for hue *h** = *lab*h* = 142/360 = 0.395

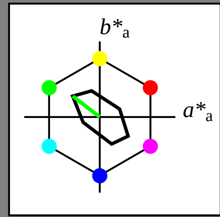
*lab*tch* and *lab*nch*

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

n^* = 0,00

n^* = 0,25

n^* = 0,50

n^* = 1,0

blackness *n**

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

chromaticness *c**

NE500−7, 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 $h^* = lab^*h = 158/360 = 0.439$

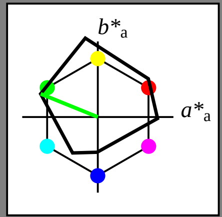
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



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

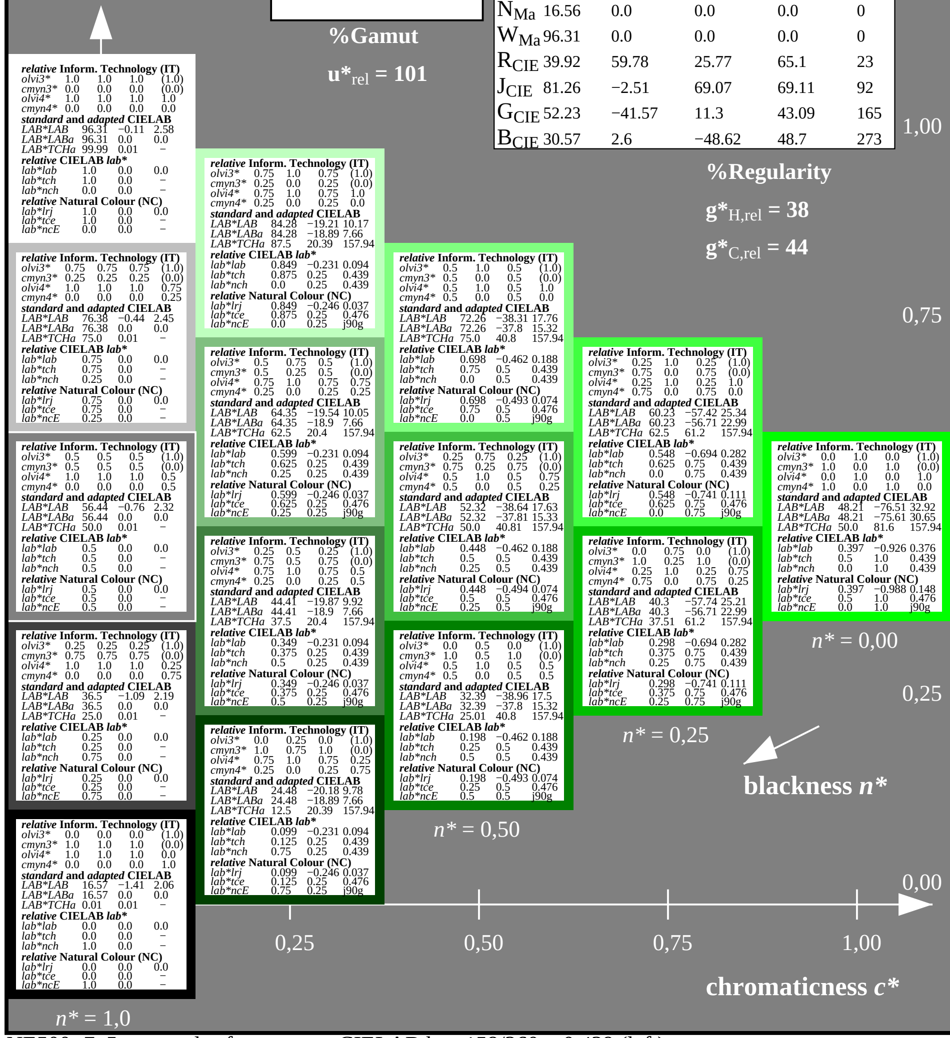
%Gamut

$u^*_{rel} = 101$

%Regularity

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

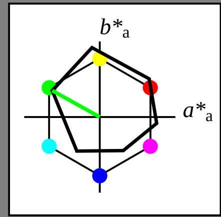
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



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

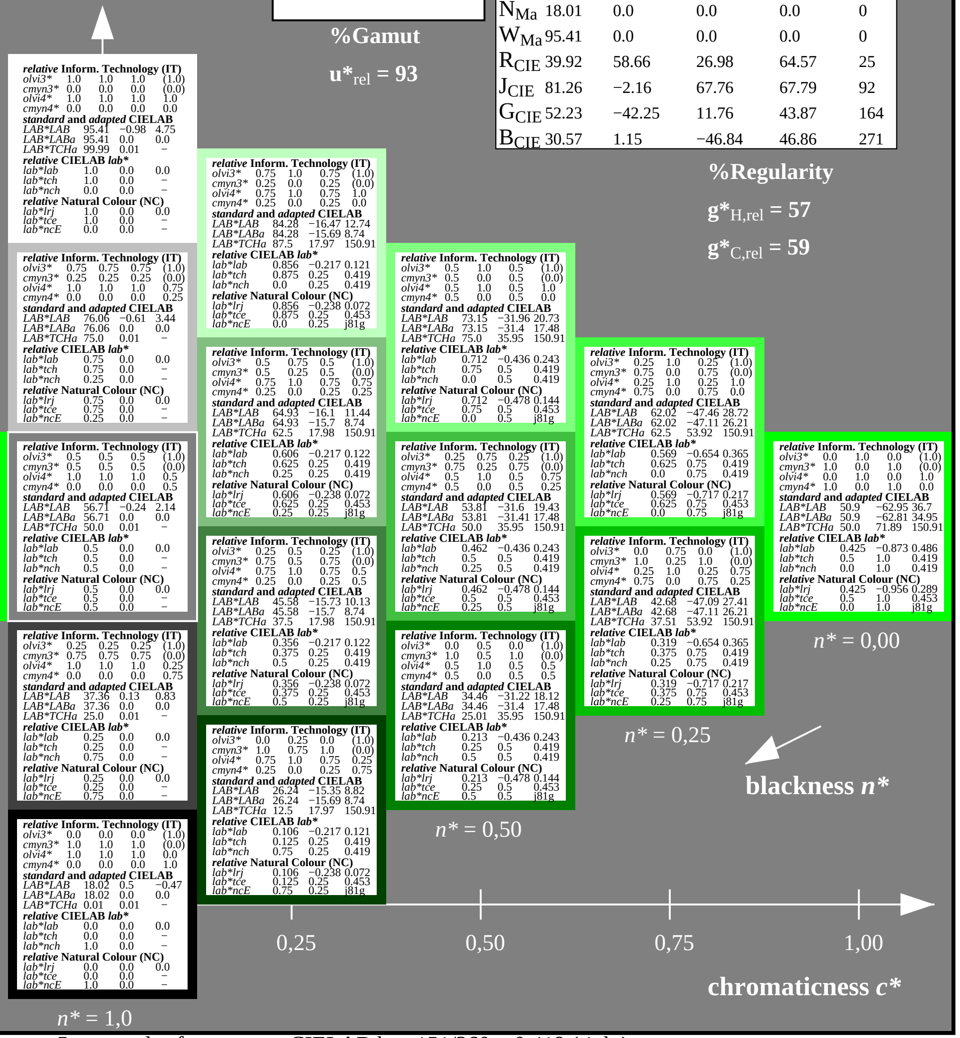
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

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

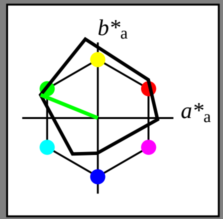
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

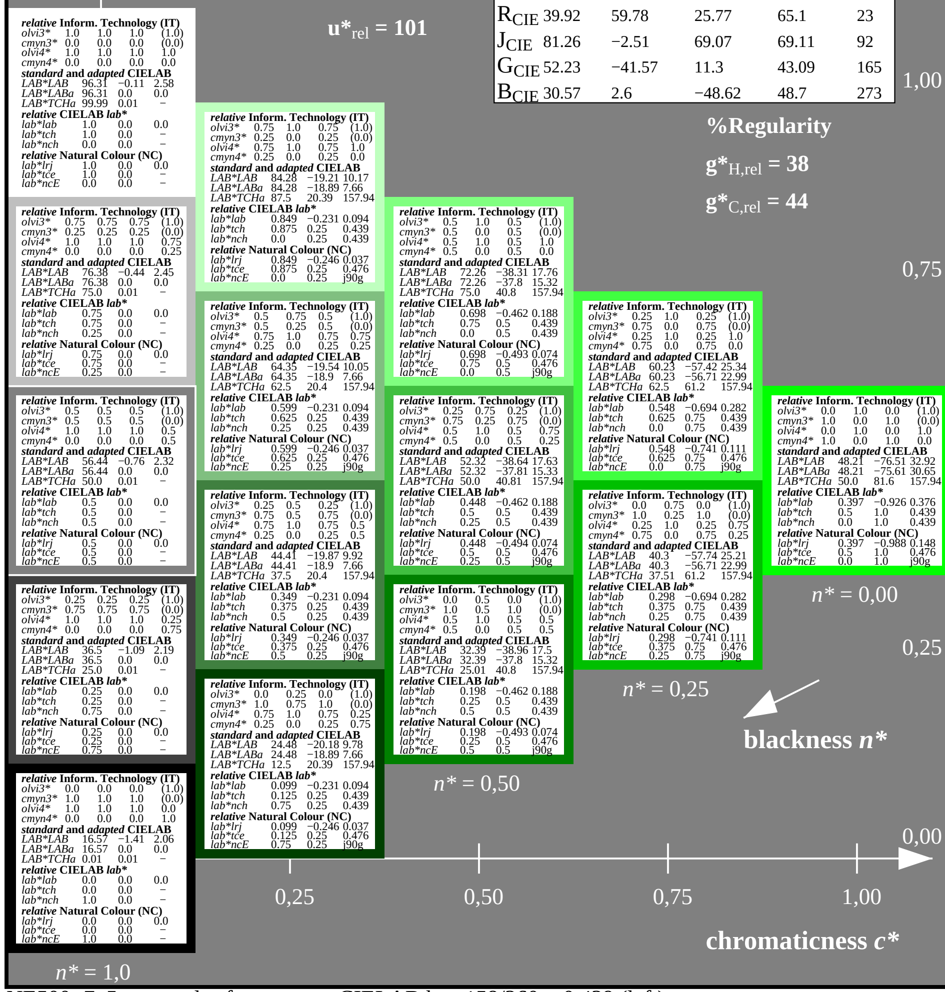
u^*_{rel} = 101

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 $h^* = lab^*h$ = 136/360 = 0.378

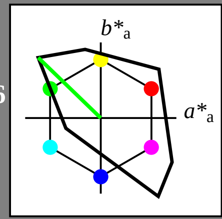
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

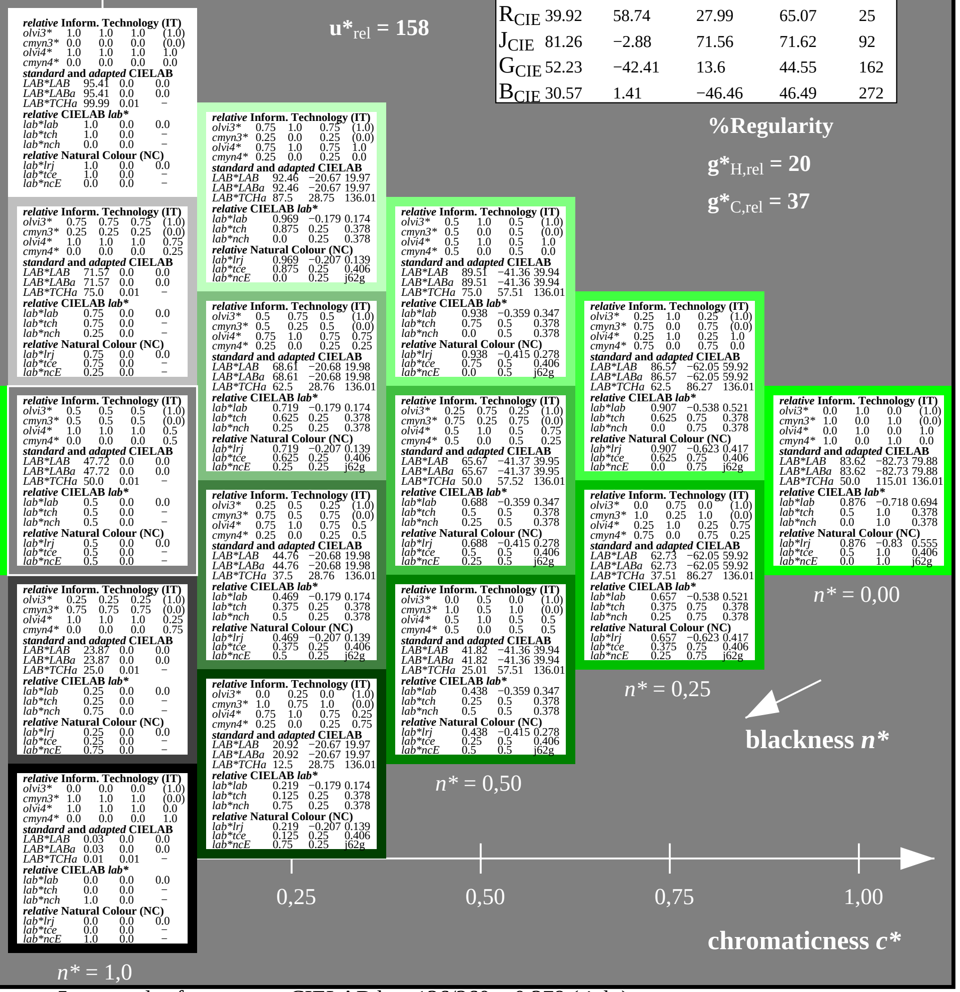
u^*_{rel} = 158

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



NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

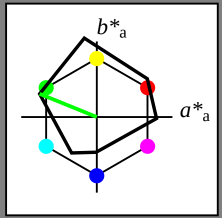
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

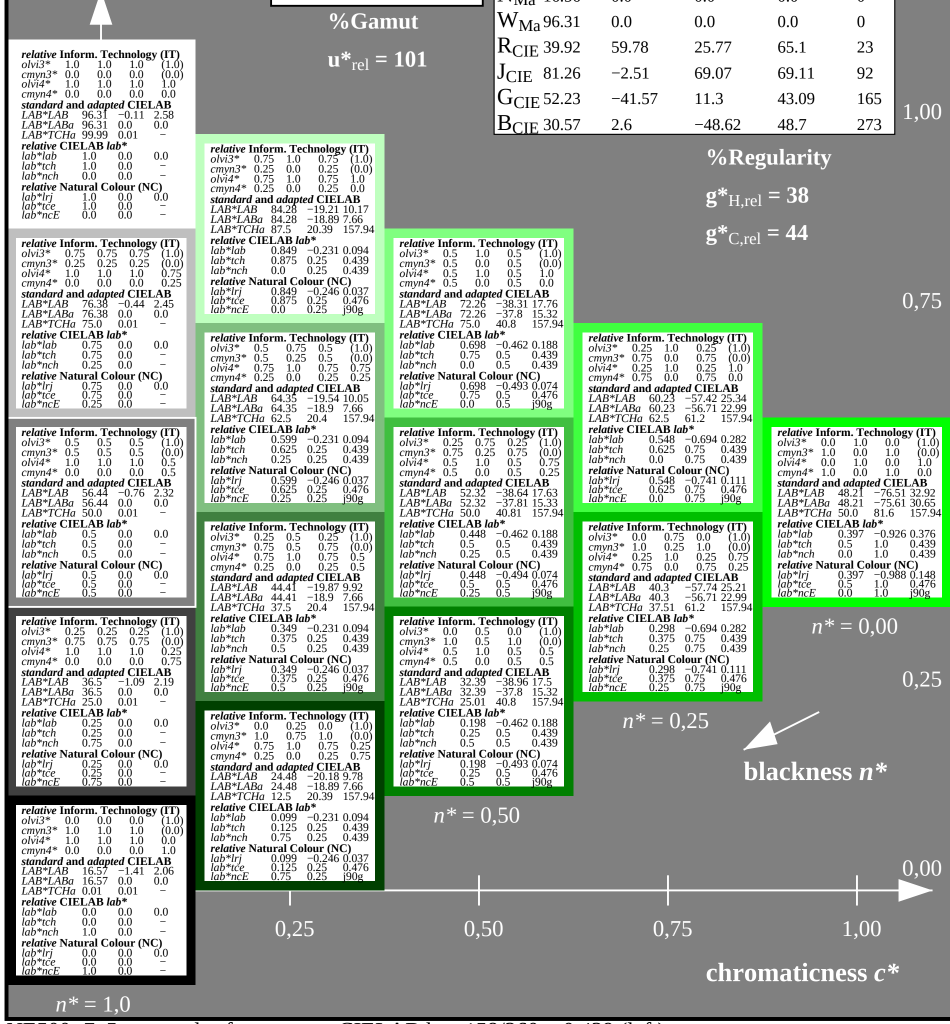
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

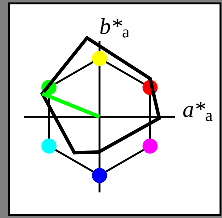
*lab*tch* and *lab*nch*

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

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

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

n* = 0,00

n* = 0,25

n* = 0,50

n* = 1,0

blackness n*

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

chromaticness c*

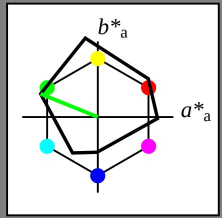
NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

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*

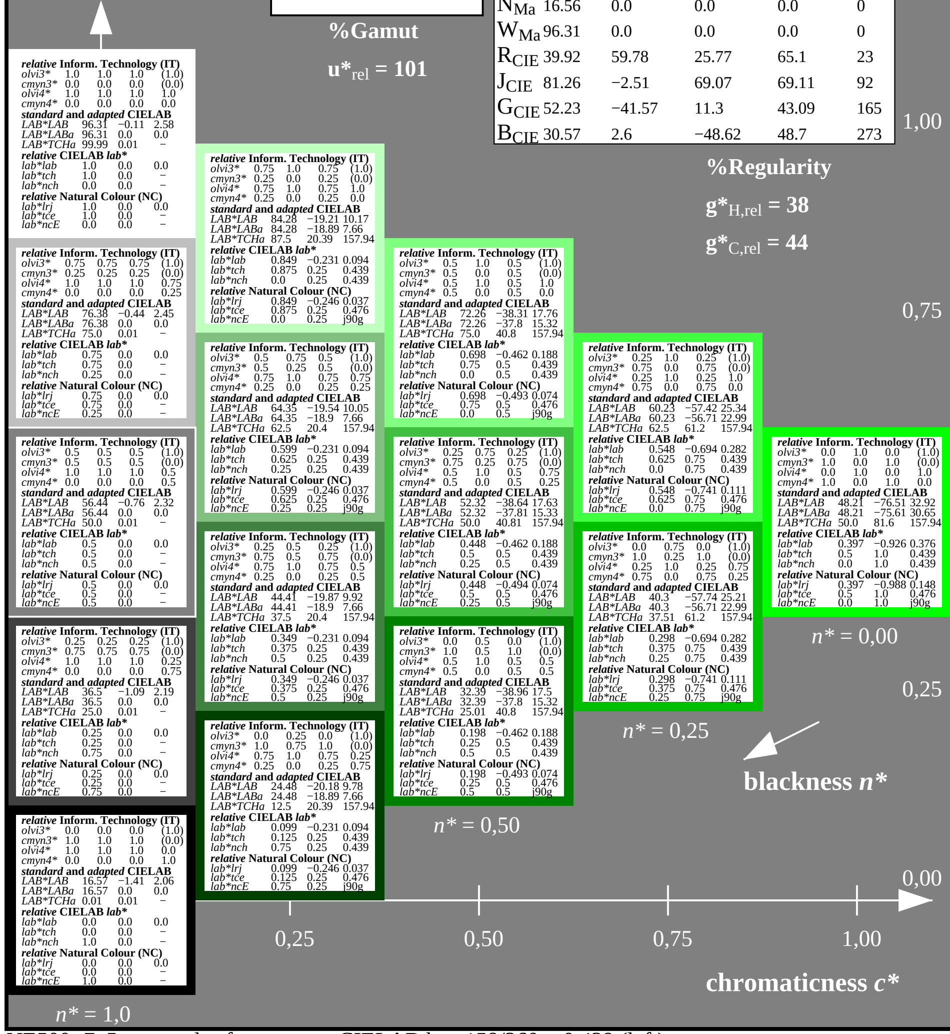


DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$u^*_{rel} = 101$

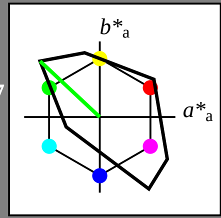
%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



Output: Colorimetric 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*

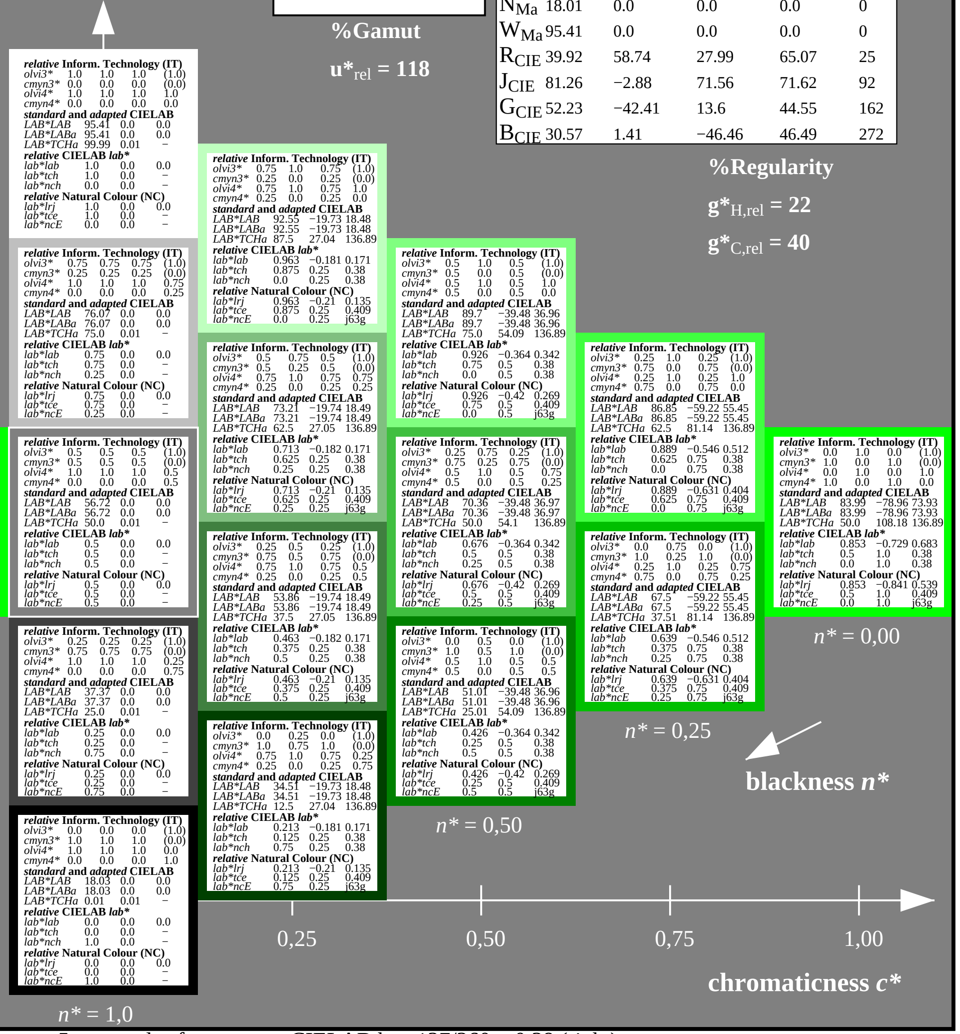


TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



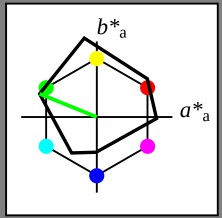
NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

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

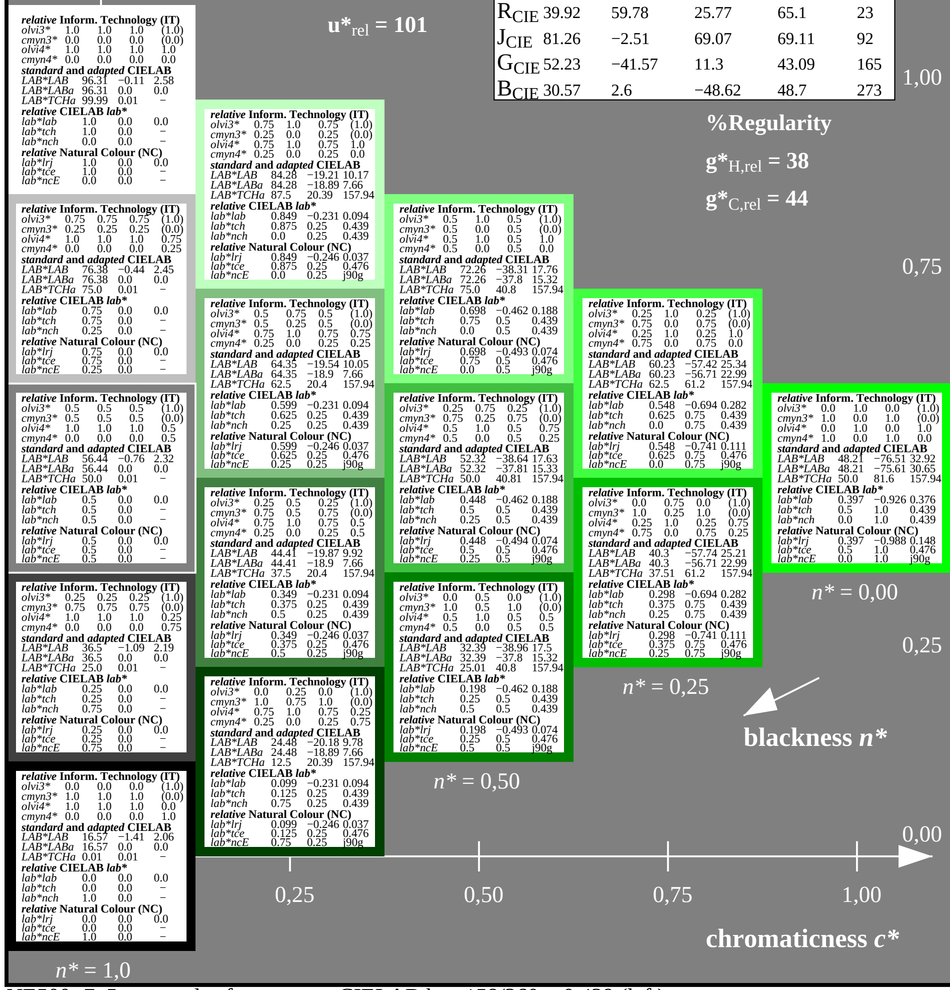
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

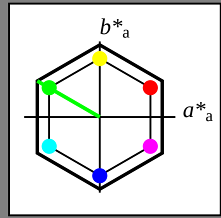
$g^*_{C,rel}$ = 44



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

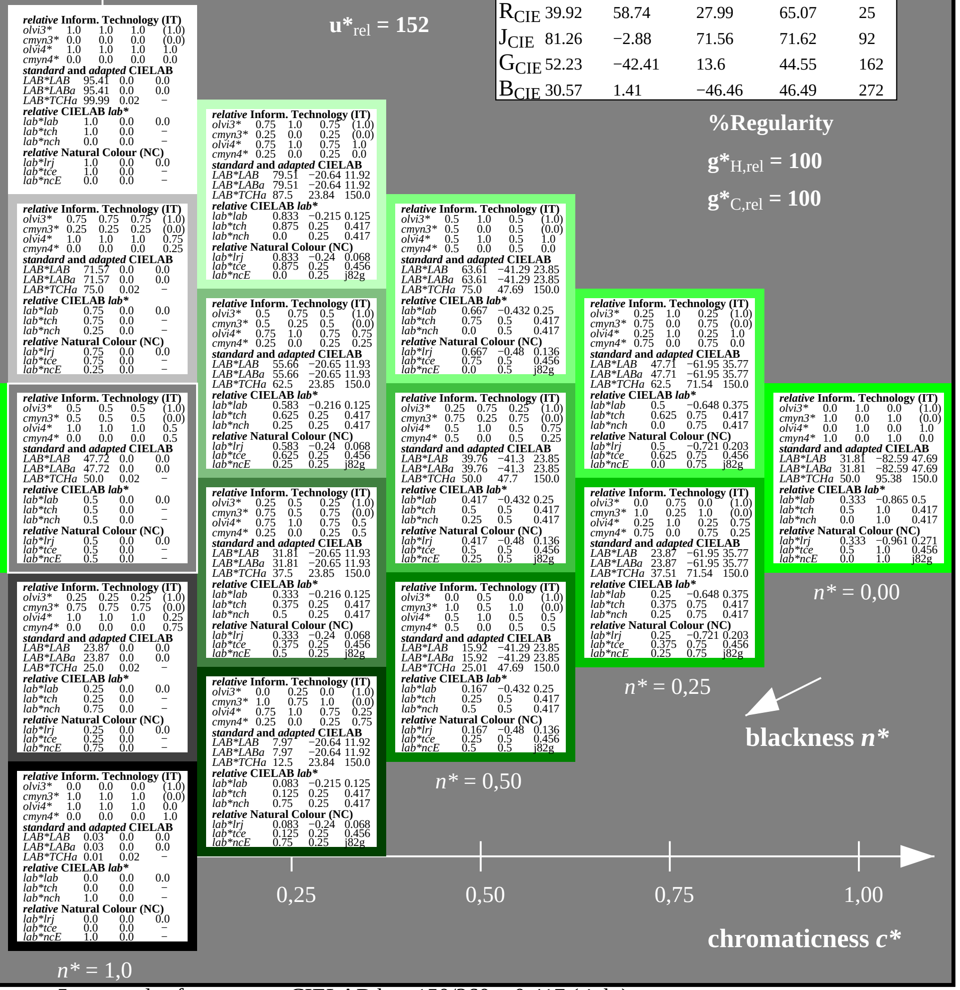
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 158/360 = 0.439$

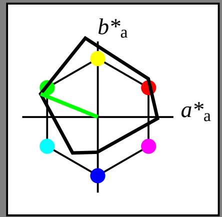
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

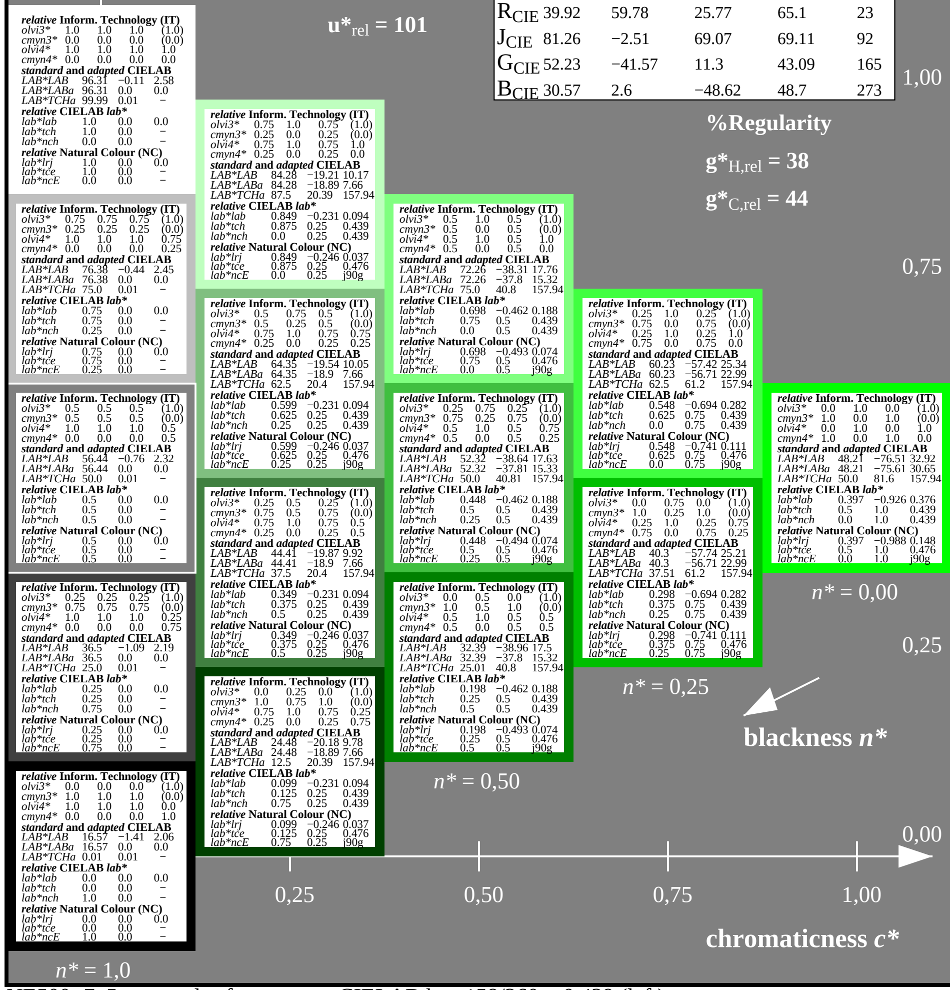
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

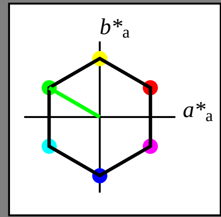
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

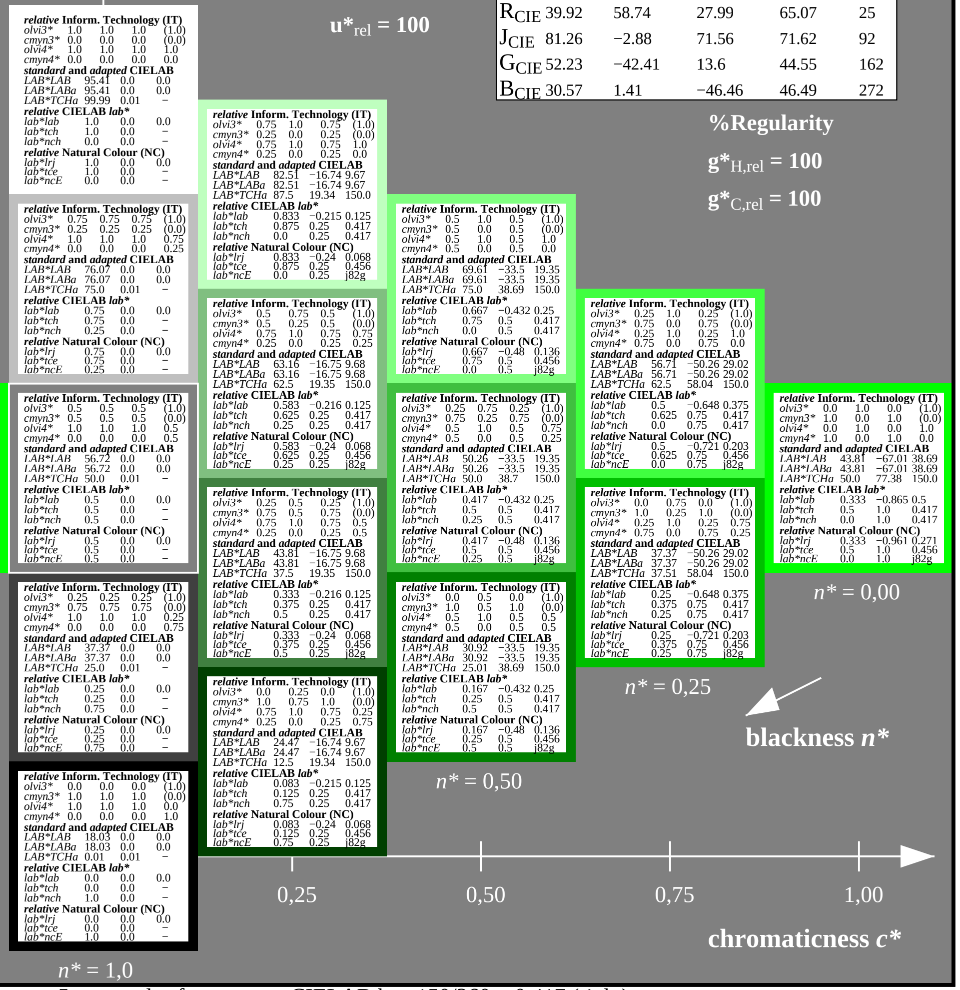
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 158/360 = 0.439$

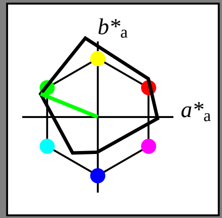
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

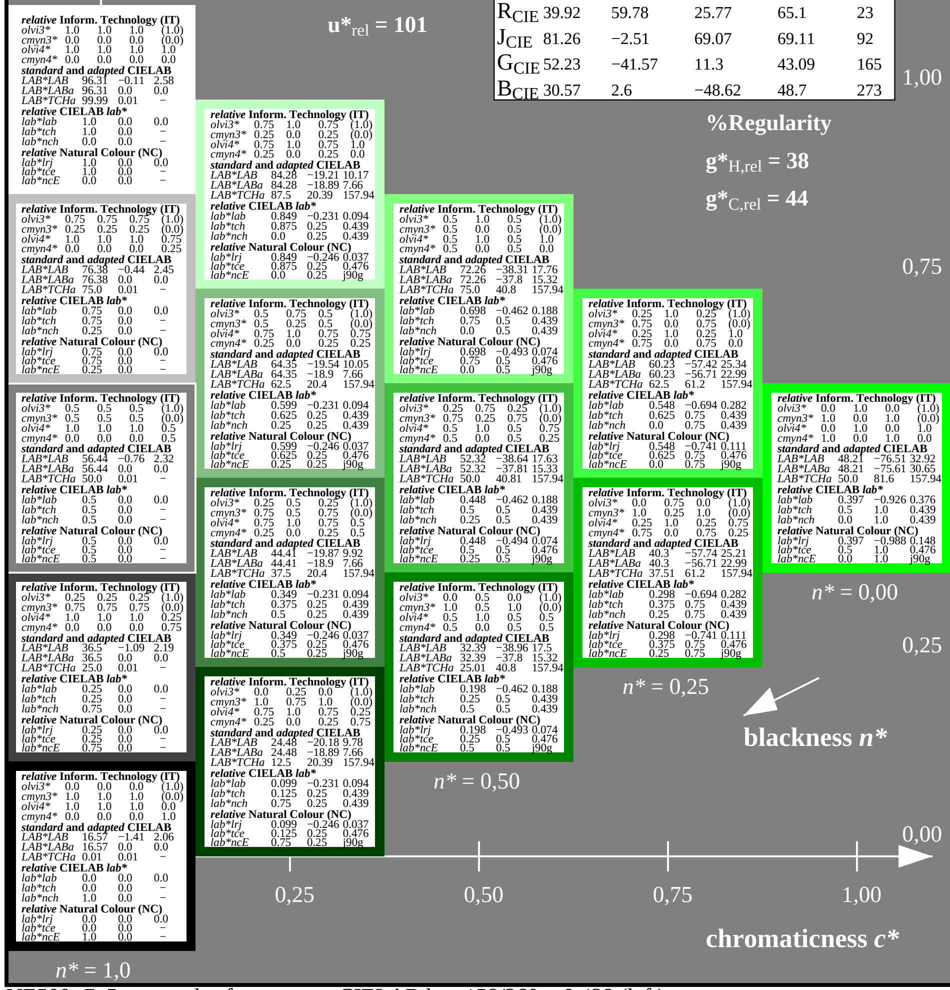
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

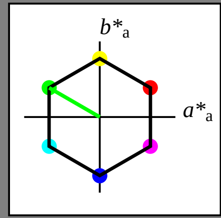
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

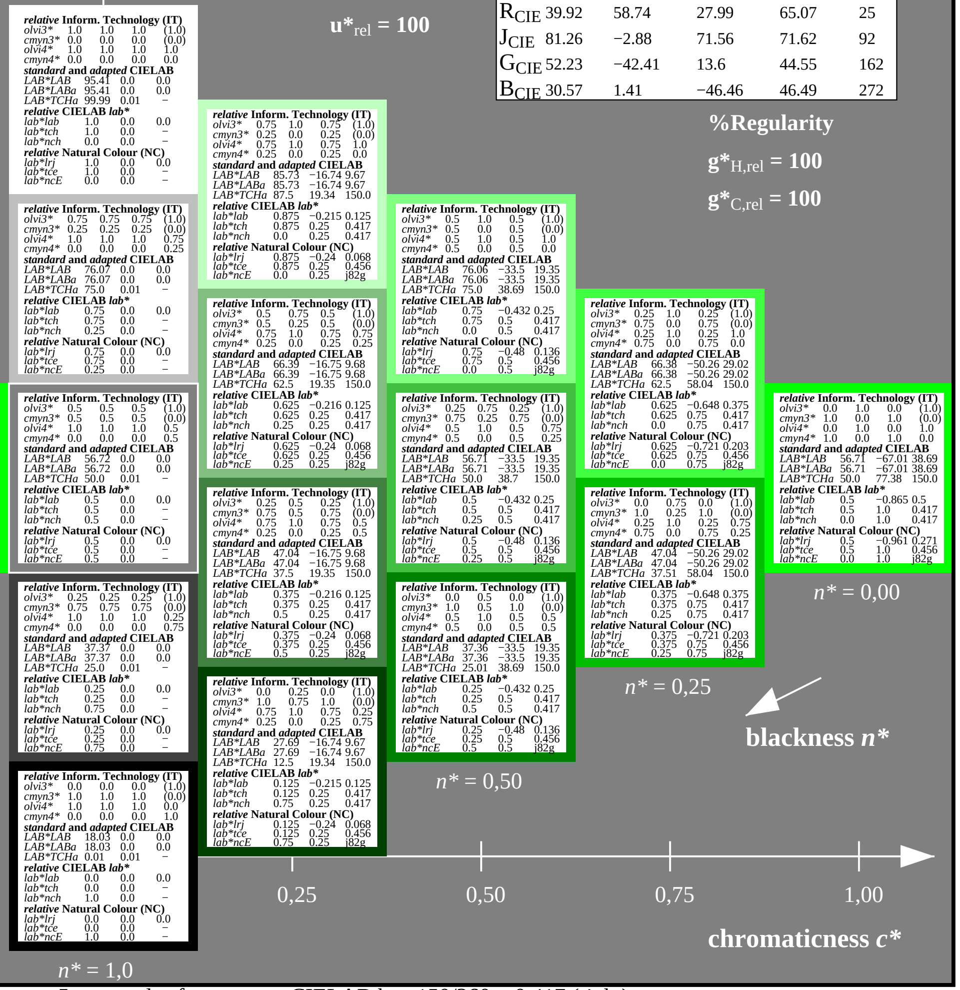
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



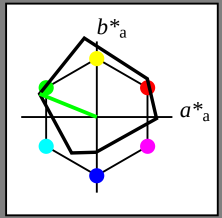
NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

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

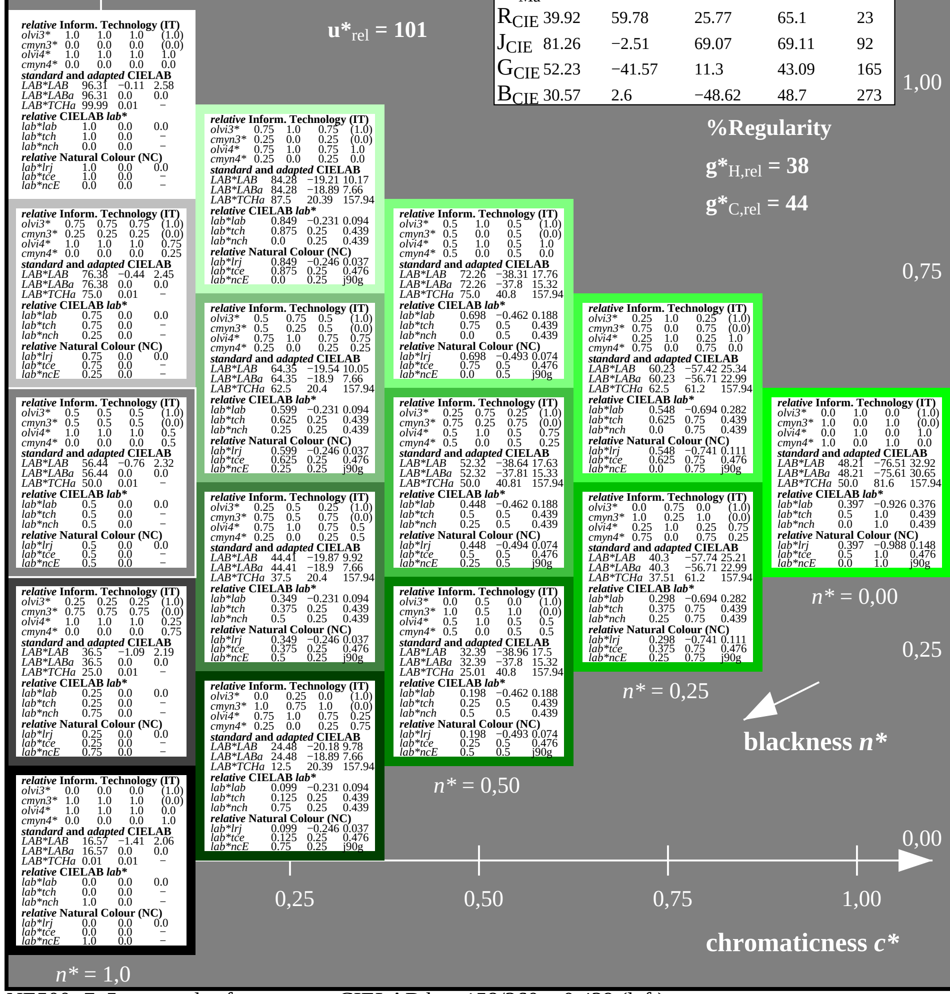
$u^*_{rel} = 101$

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

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

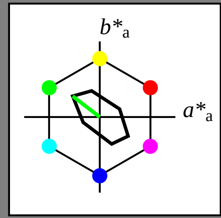
$g^*_{C,rel} = 44$



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

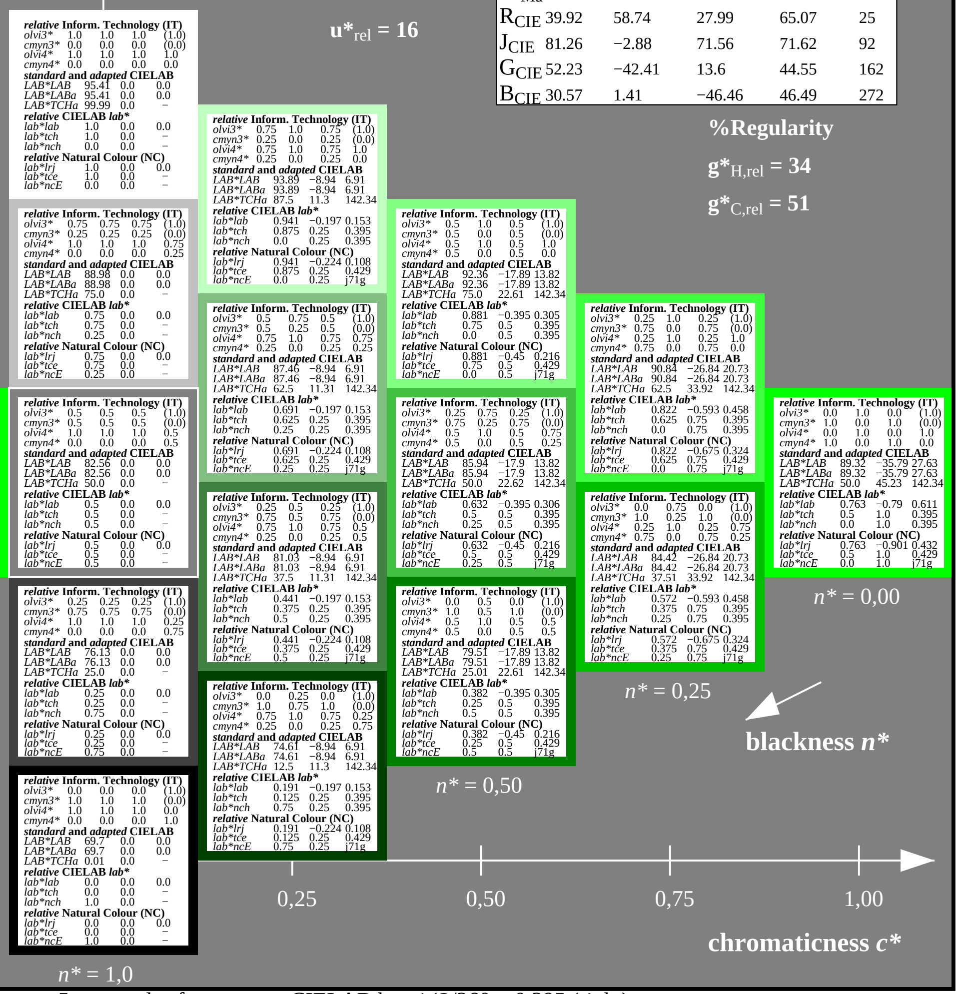
$u^*_{rel} = 16$

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

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

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



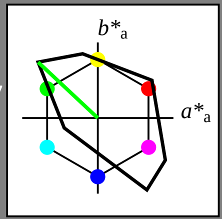
NE500−7, 5 step scales for constant CIELAB hue 158/360 = 0.439 (left)

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

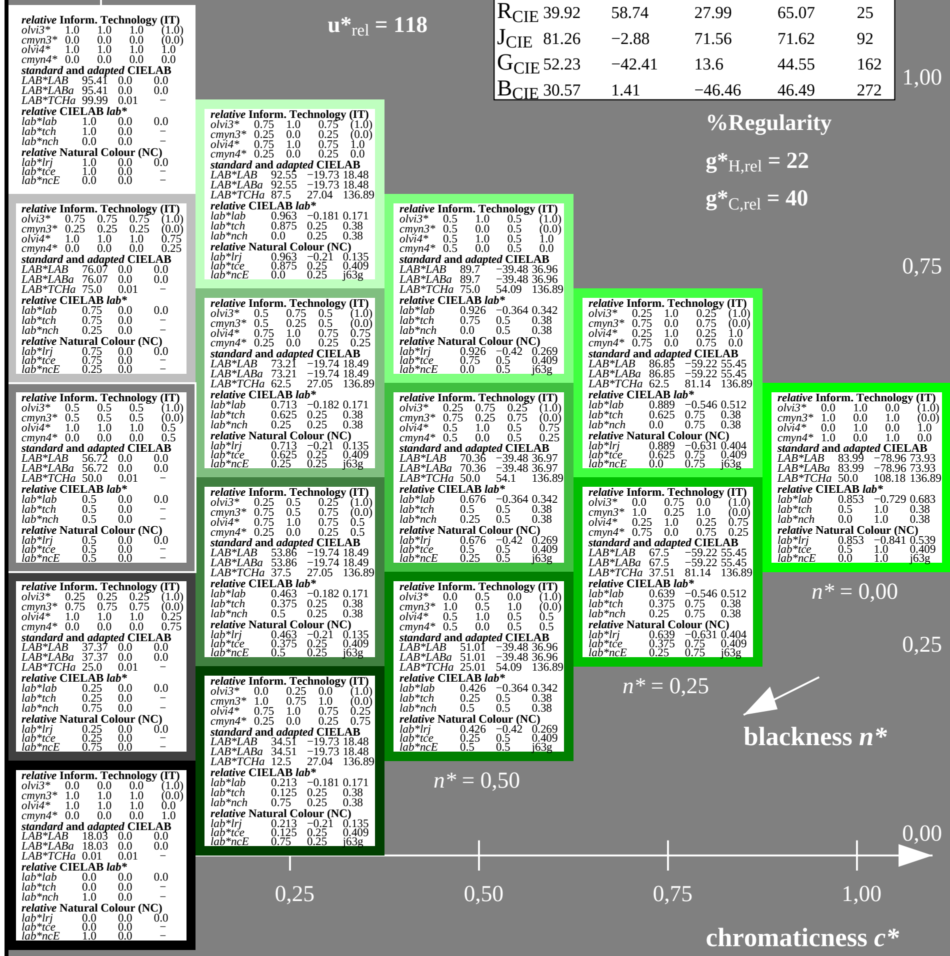
triangle lightness *t**



%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

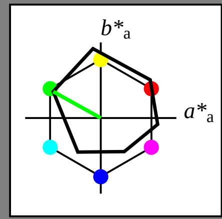
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Offset Reflective System ORS18
for hue *h = *lab*h* = 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

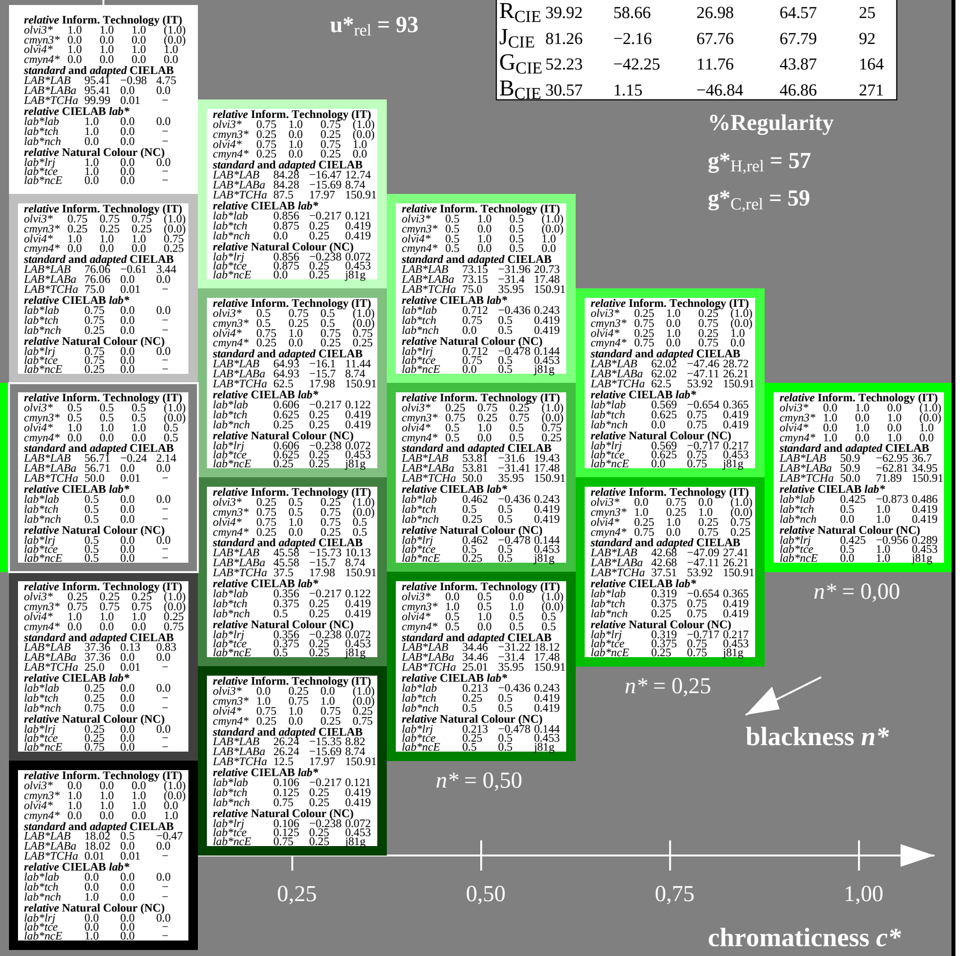
triangle lightness *t**



%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



NE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)
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**

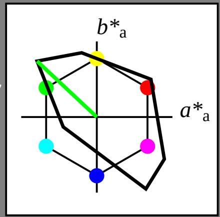
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

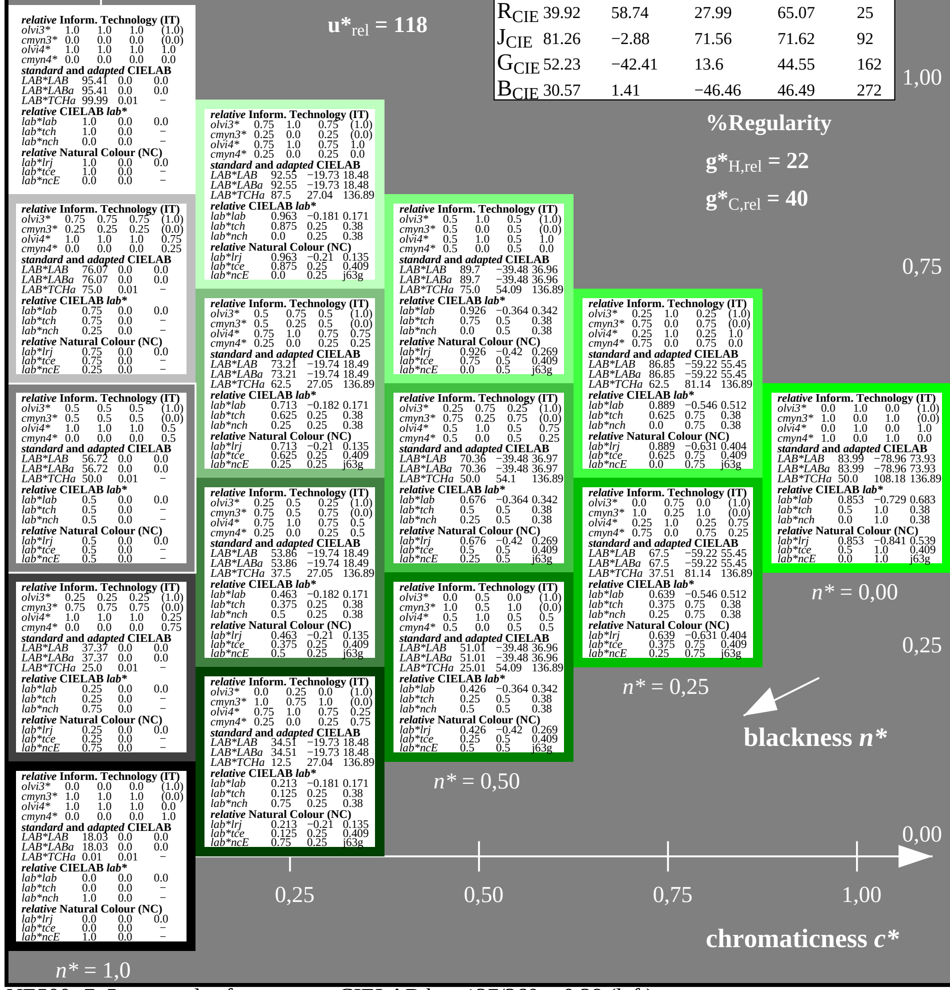
u^*_{rel} = 118

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**

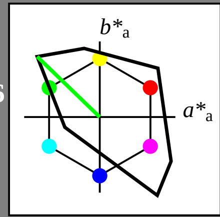
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

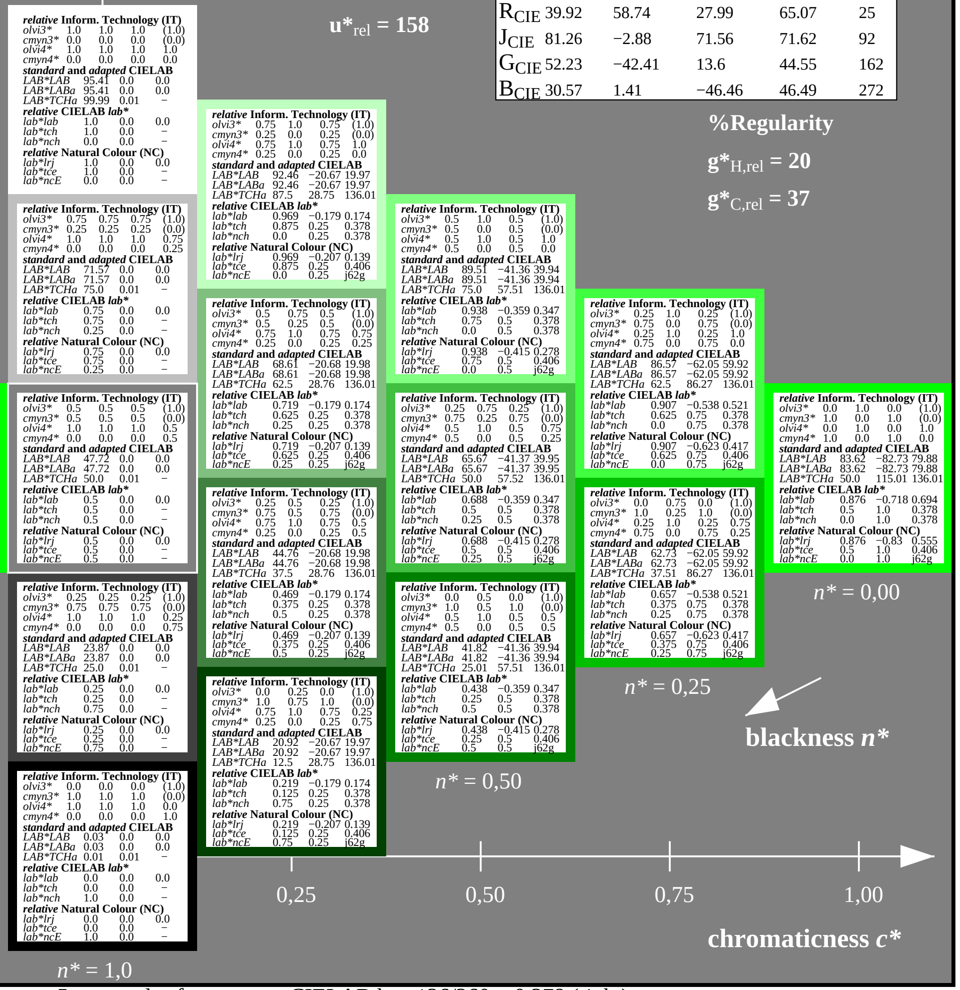
u^*_{rel} = 158

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



NE500−7, 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

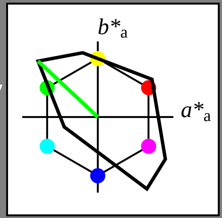
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

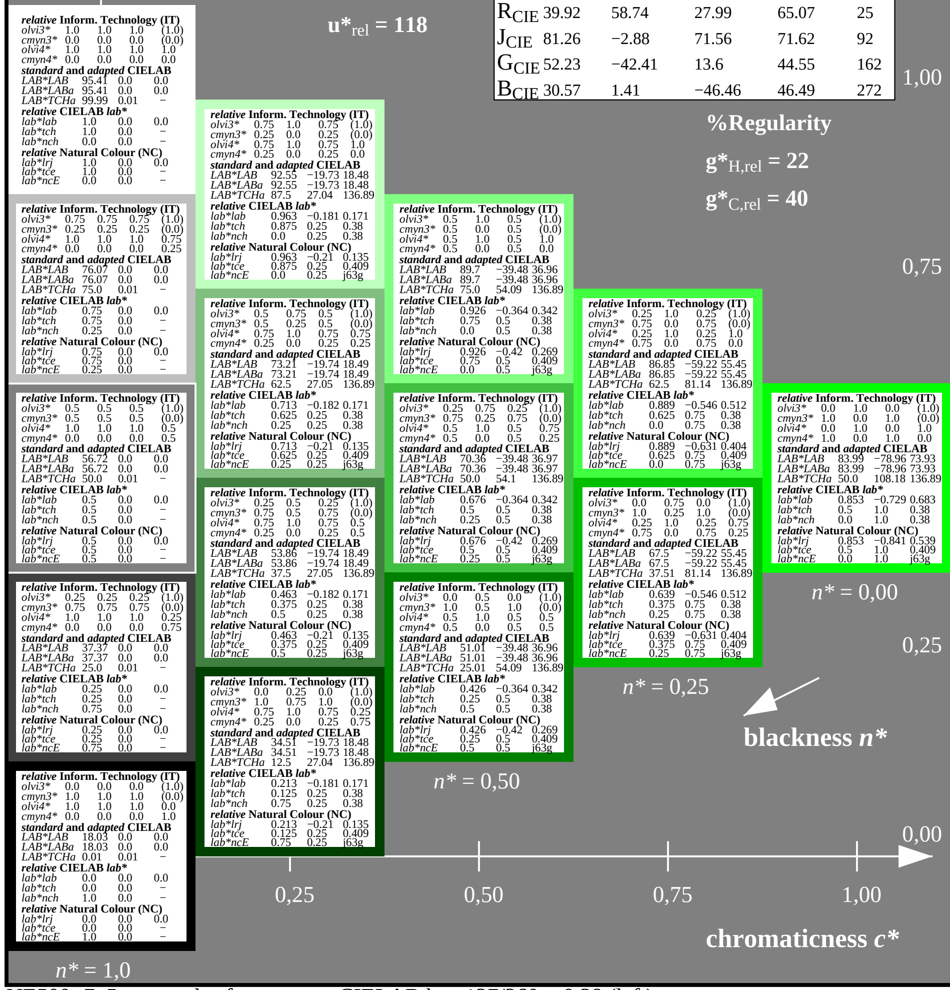
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

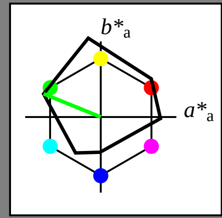
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

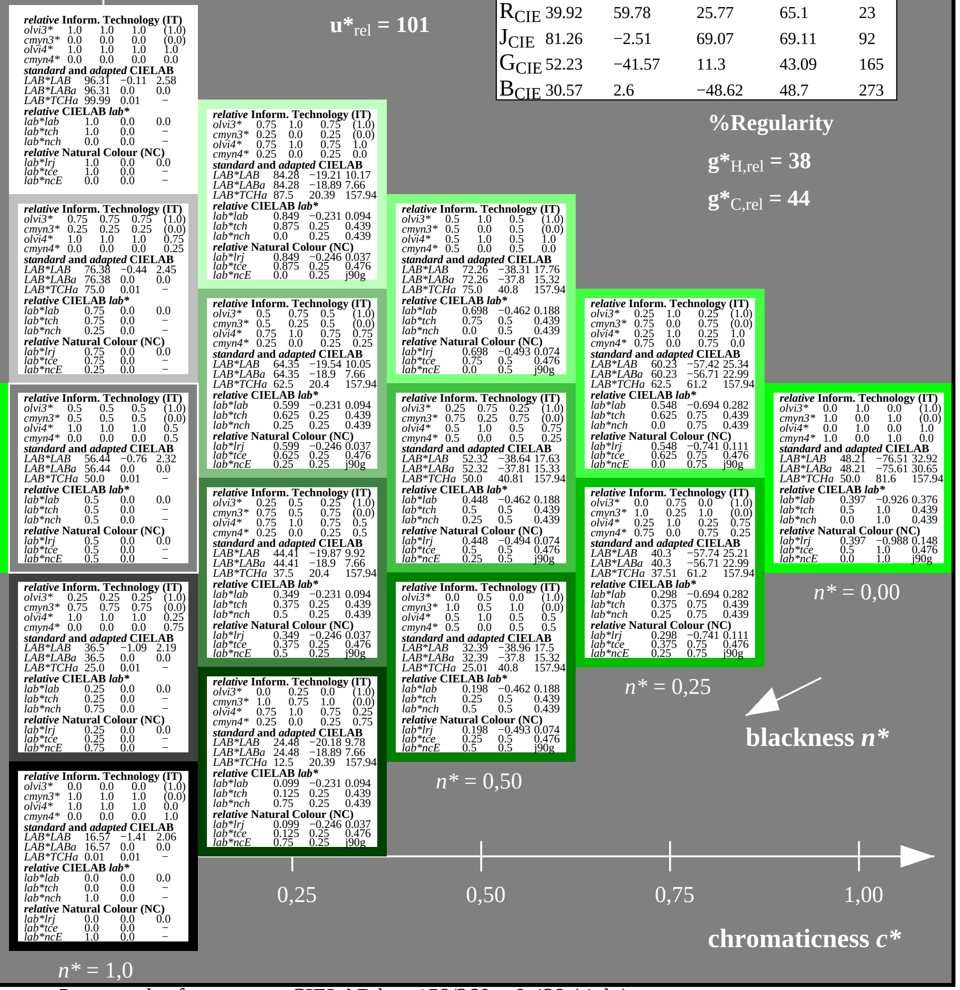
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

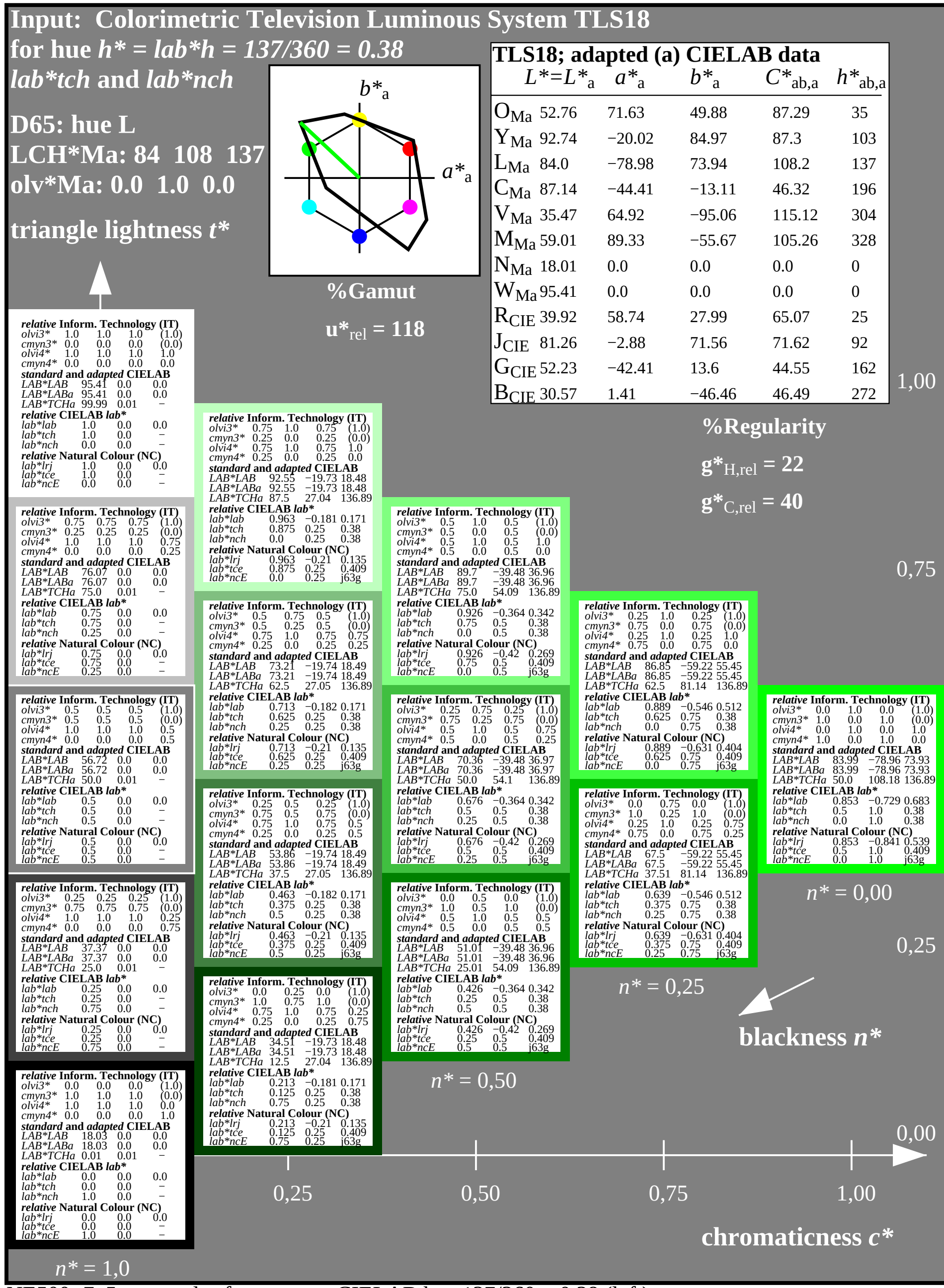
$g^*_{H,rel}$ = 38

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



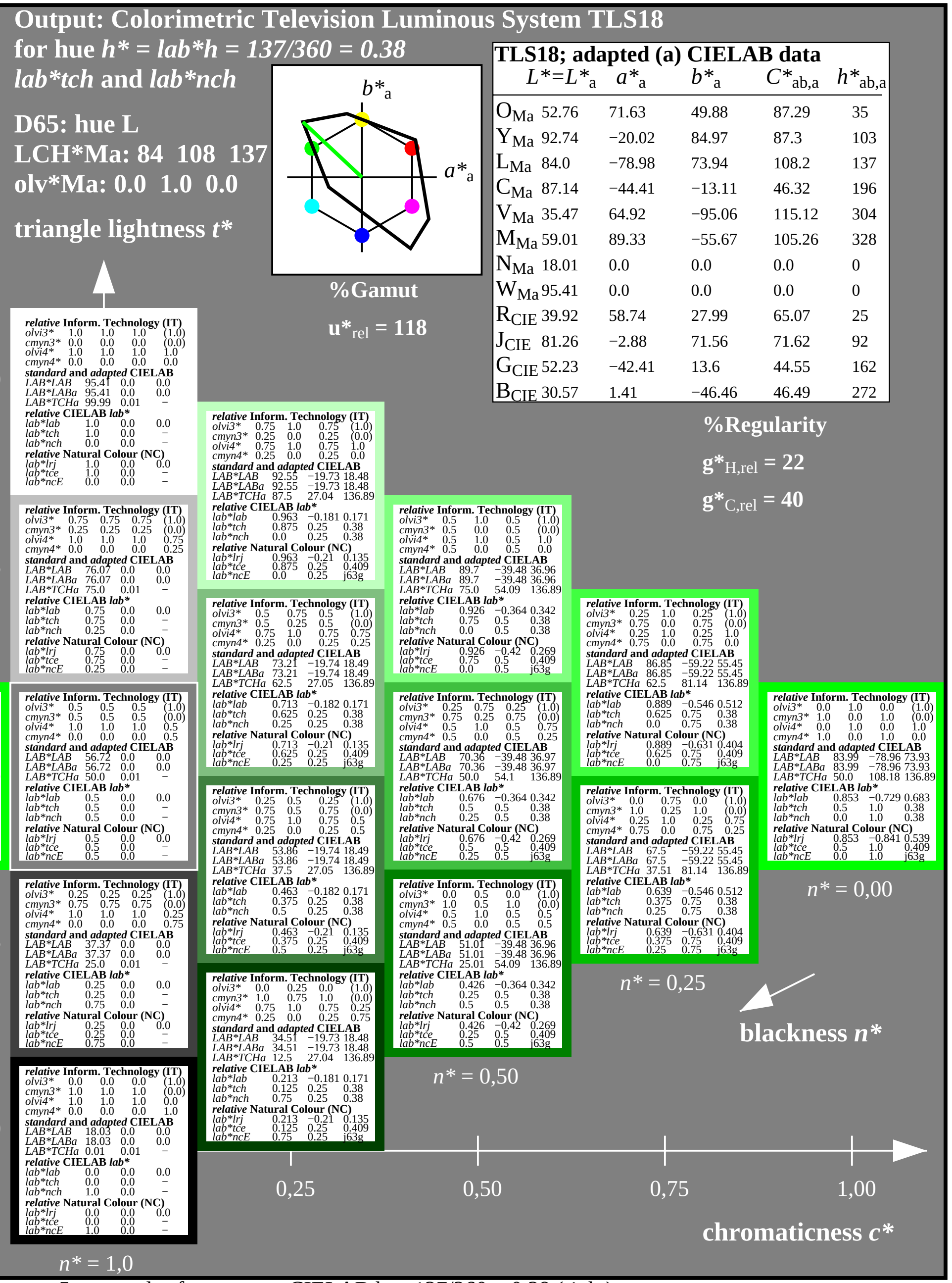
NE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)



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



NE500−7, 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

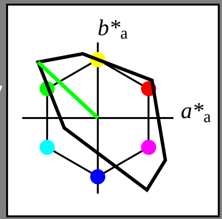
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**

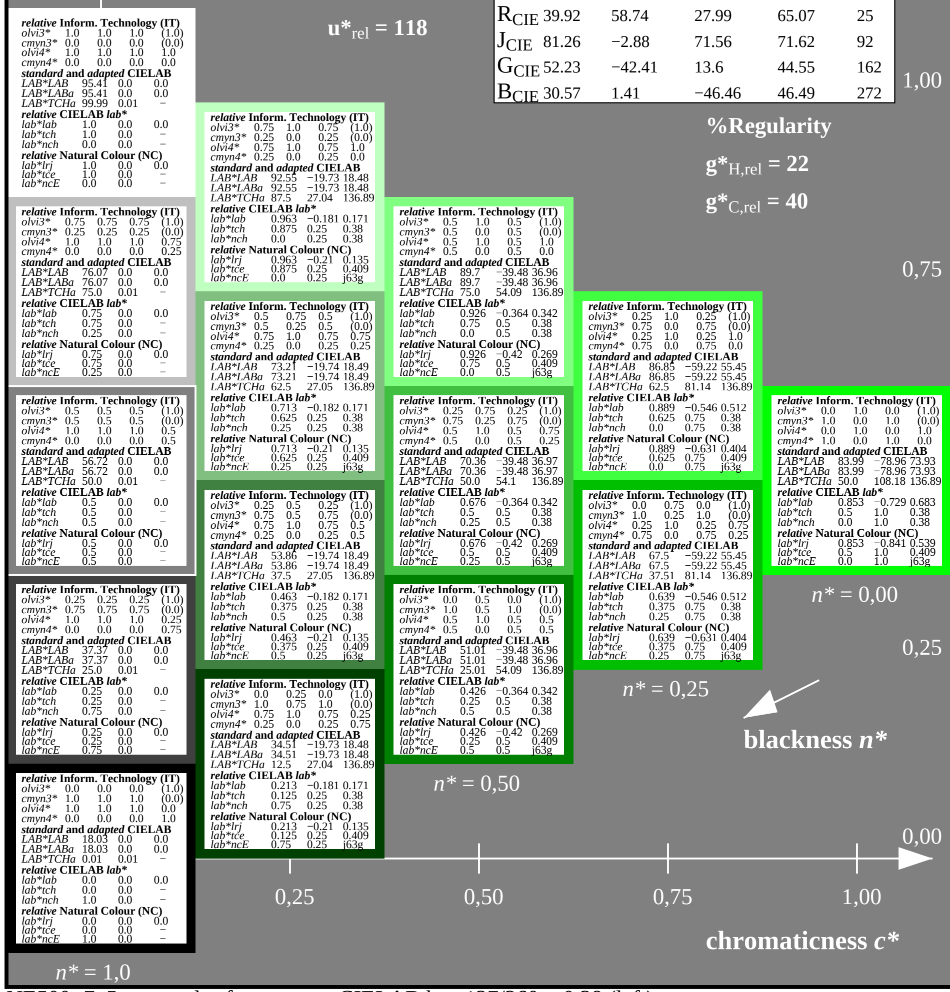


%Gamut

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



Output: Colorimetric Natural Luminous System NLS00

for hue *h** = *lab*h* = 150/360 = 0.417

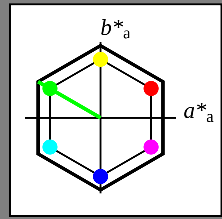
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**

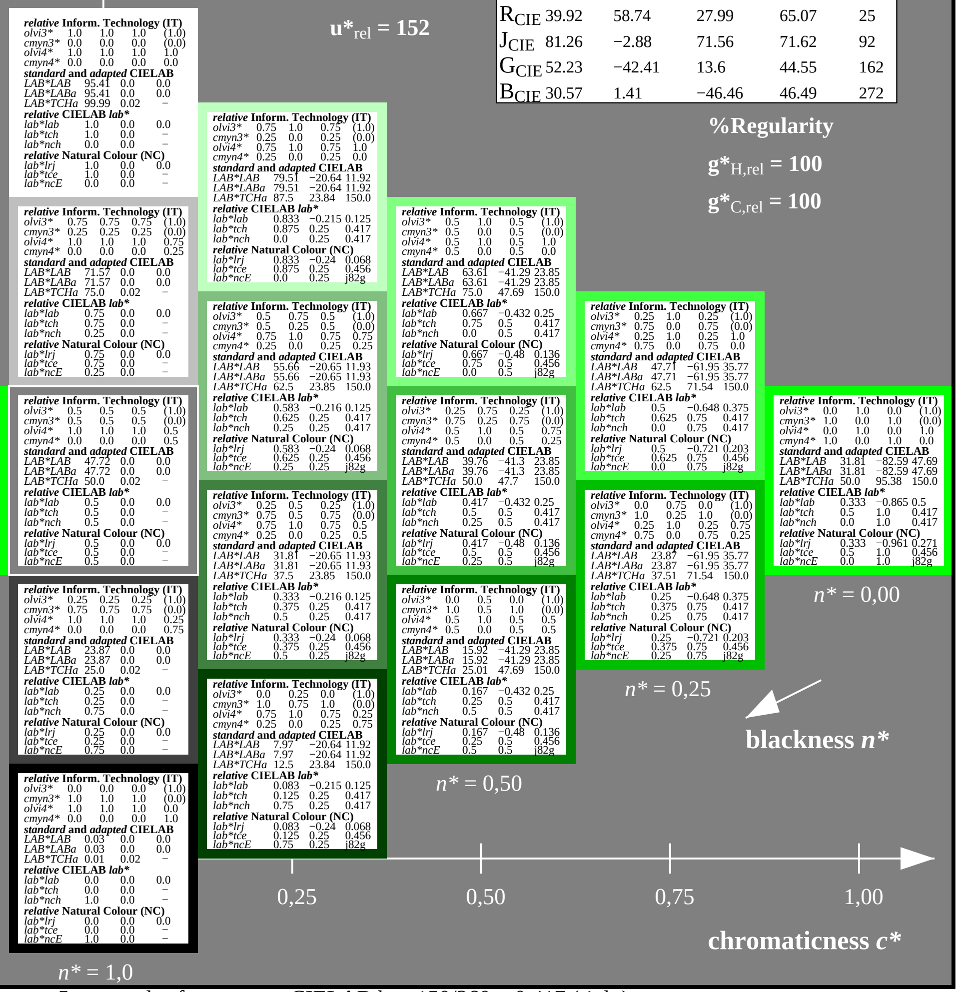


%Gamut

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



NE500−7, 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

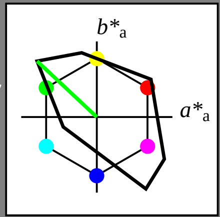
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

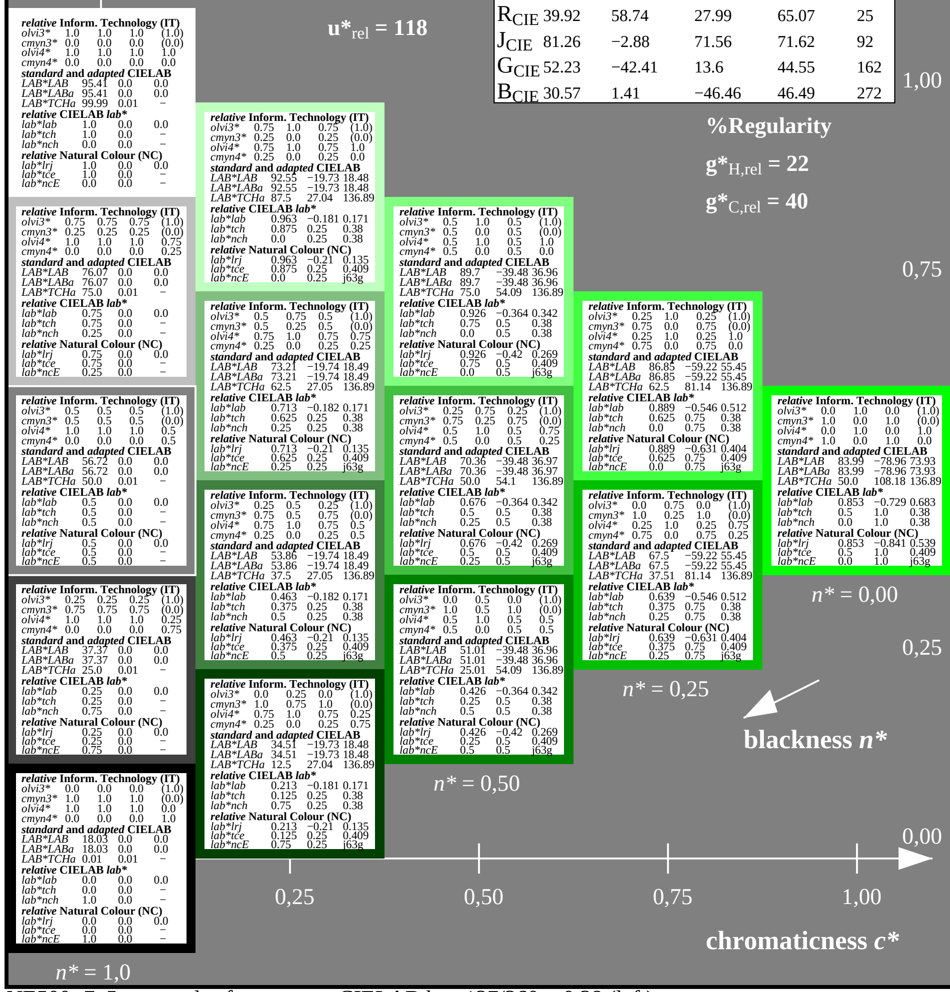
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h$ = 150/360 = 0.417

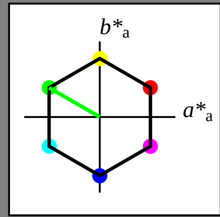
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

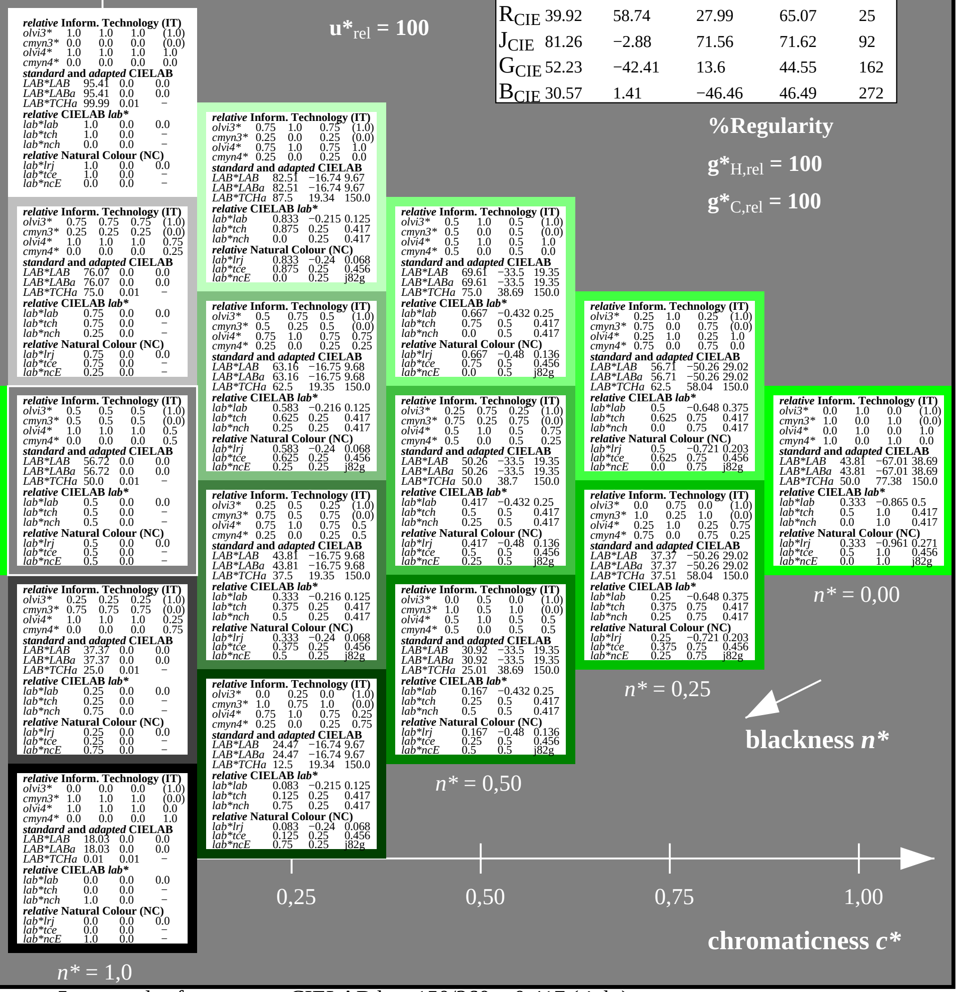
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



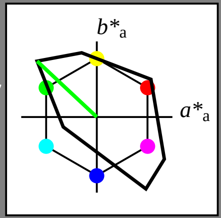
NE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

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*

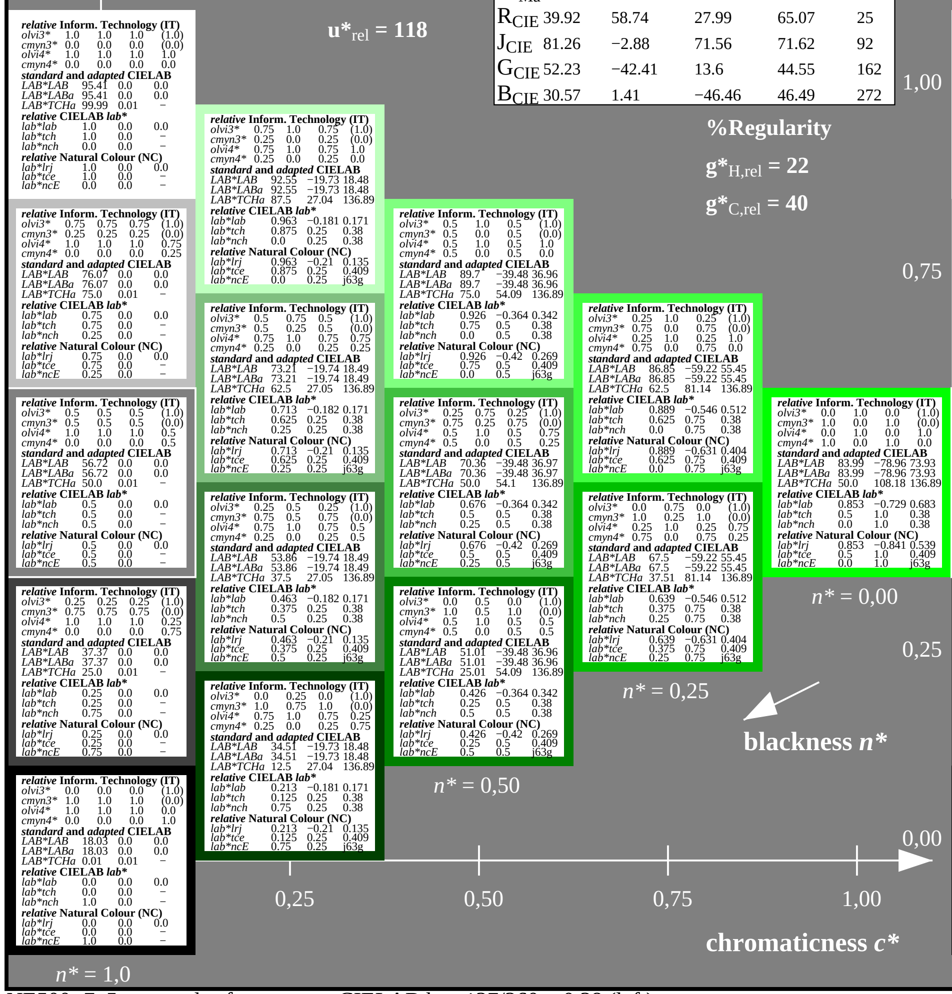


%Gamut
u^*_{rel} = 118

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

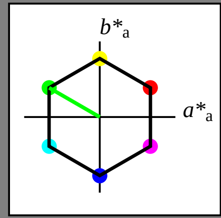
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



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*

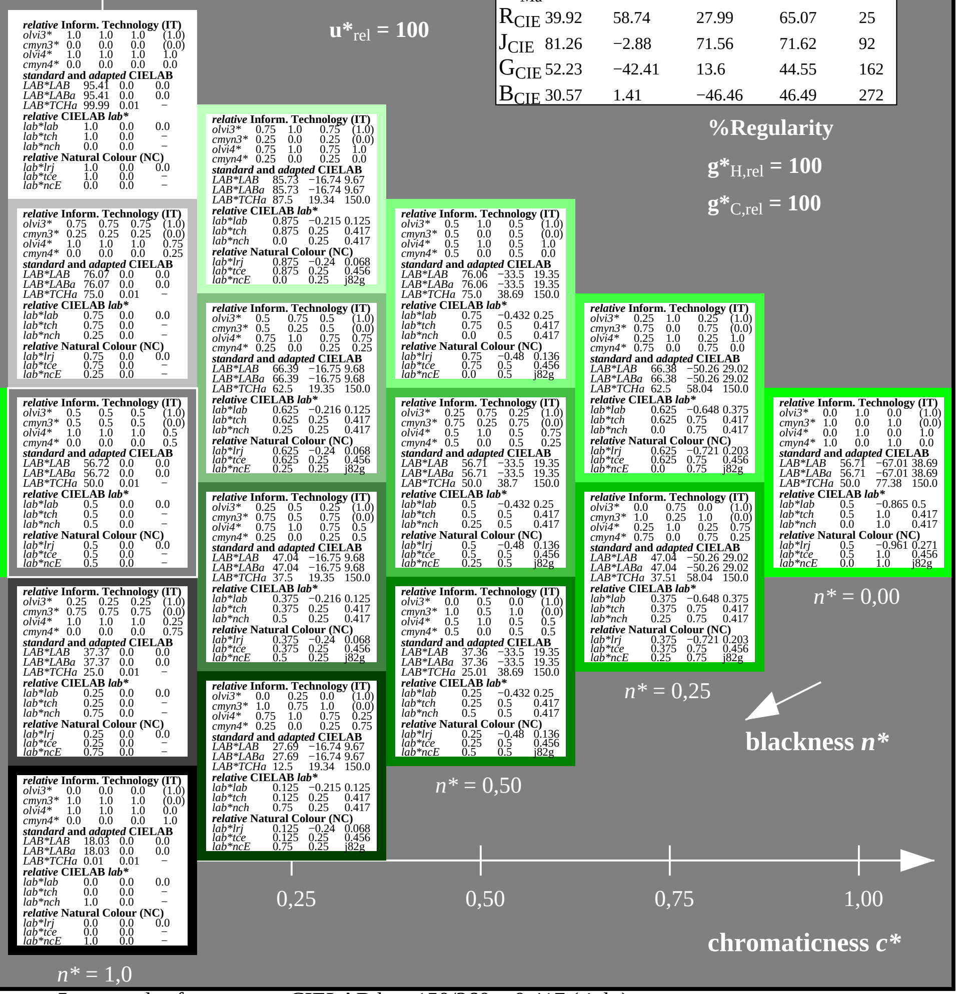


%Gamut
u^*_{rel} = 100

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

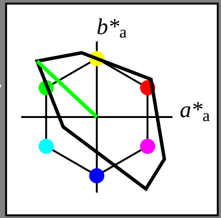


NE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

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^*

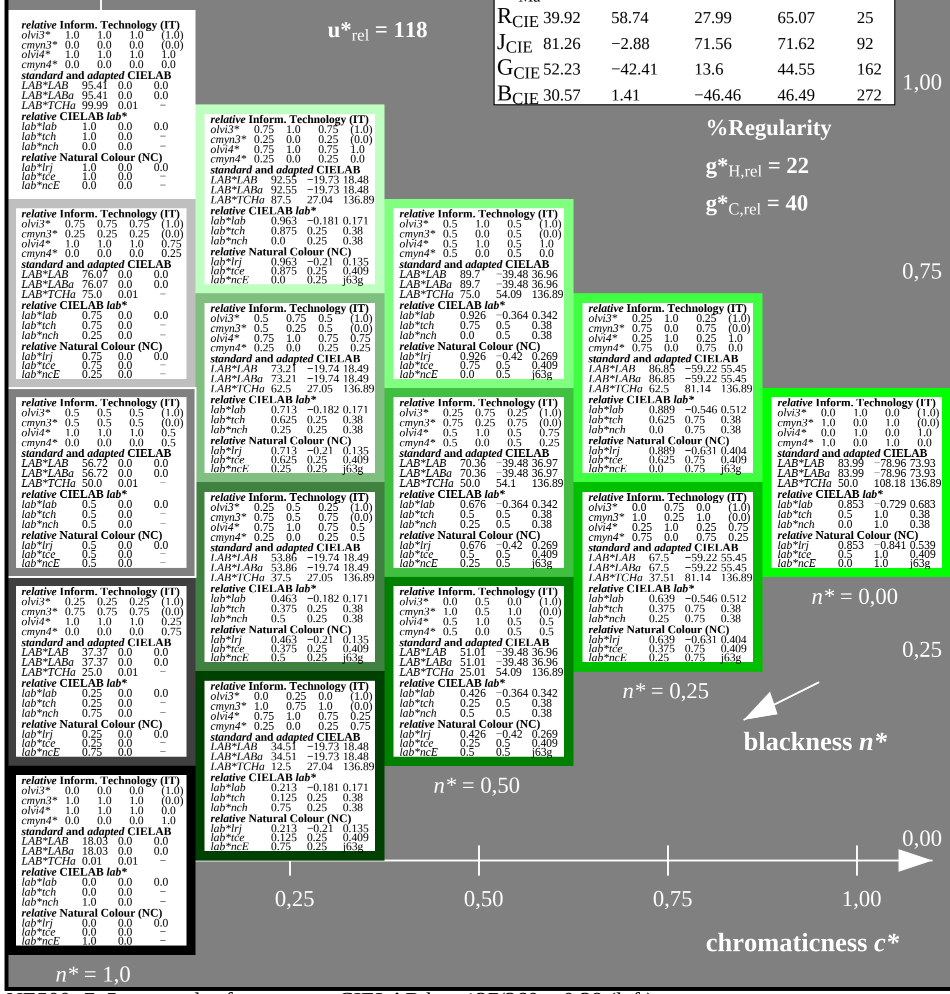


%Gamut
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

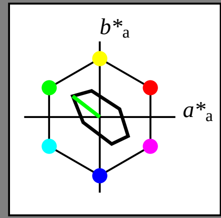
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



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^*

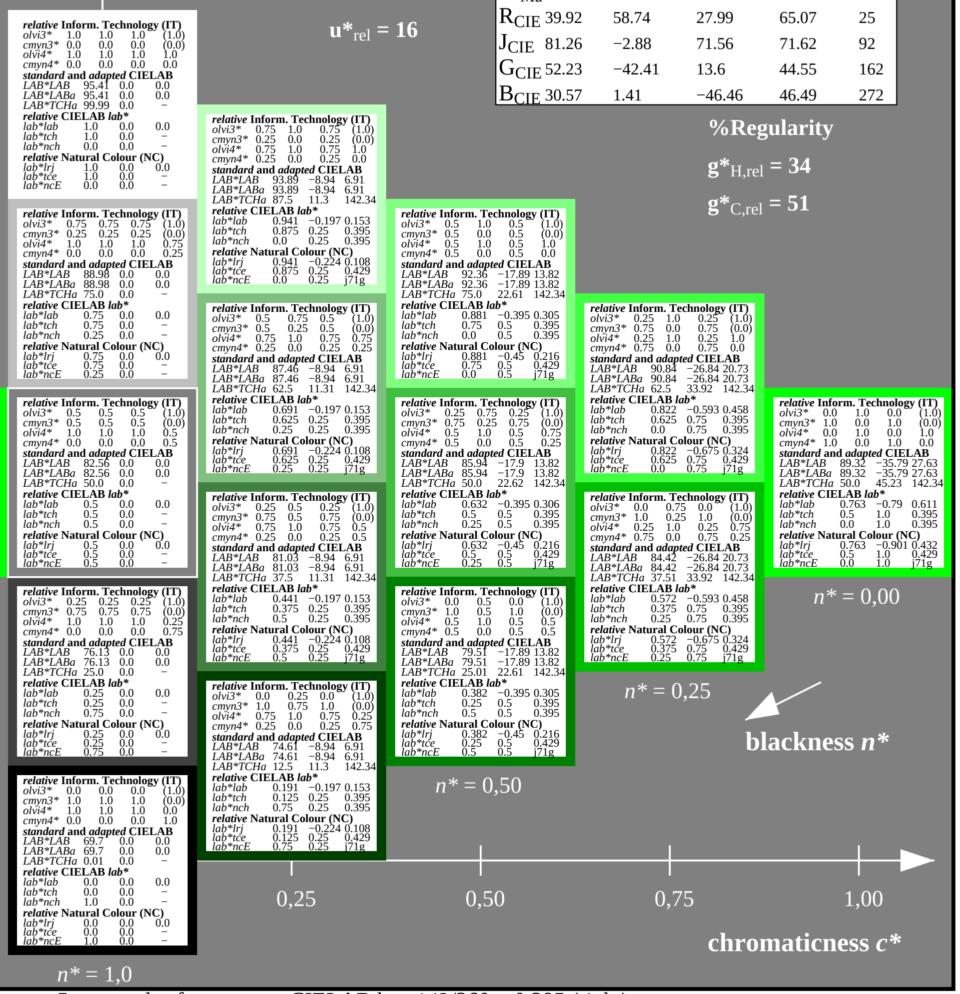


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



NE500−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

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

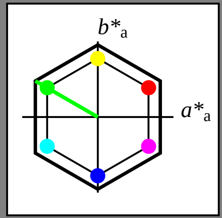
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

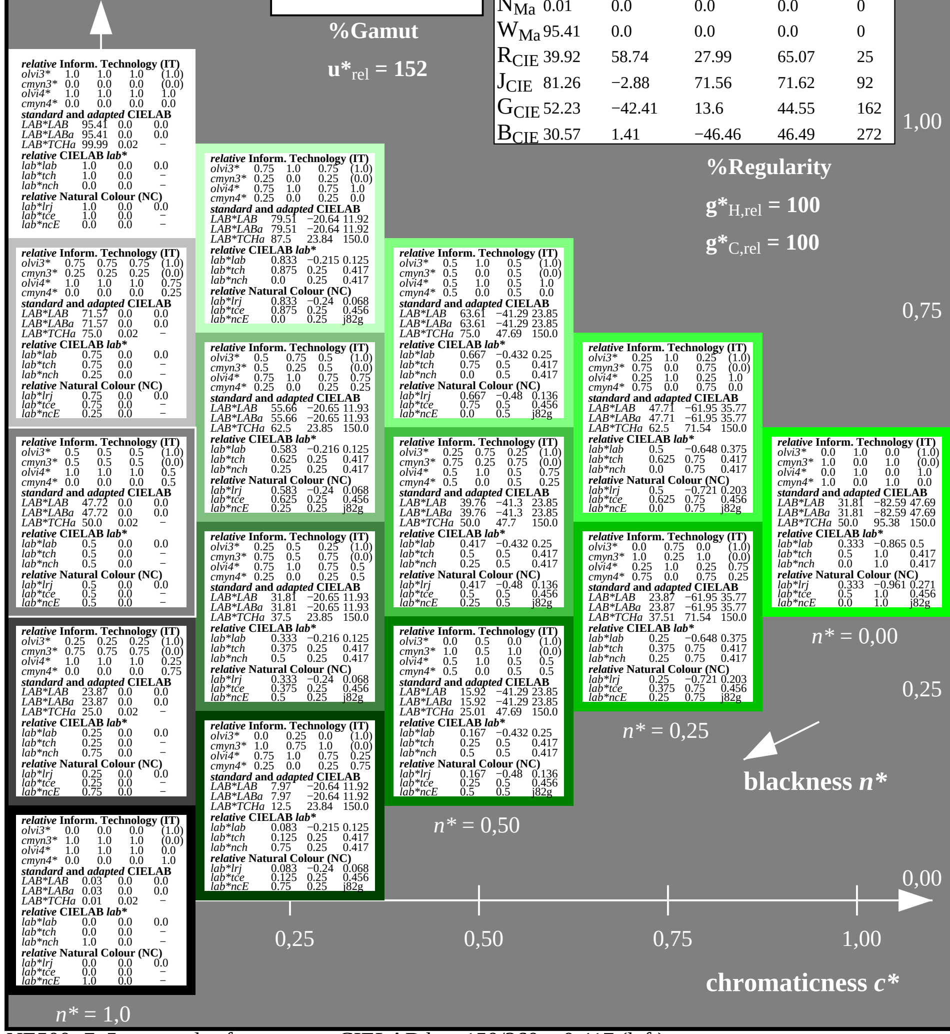
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h$ = 151/360 = 0.419

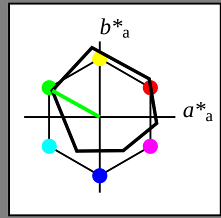
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

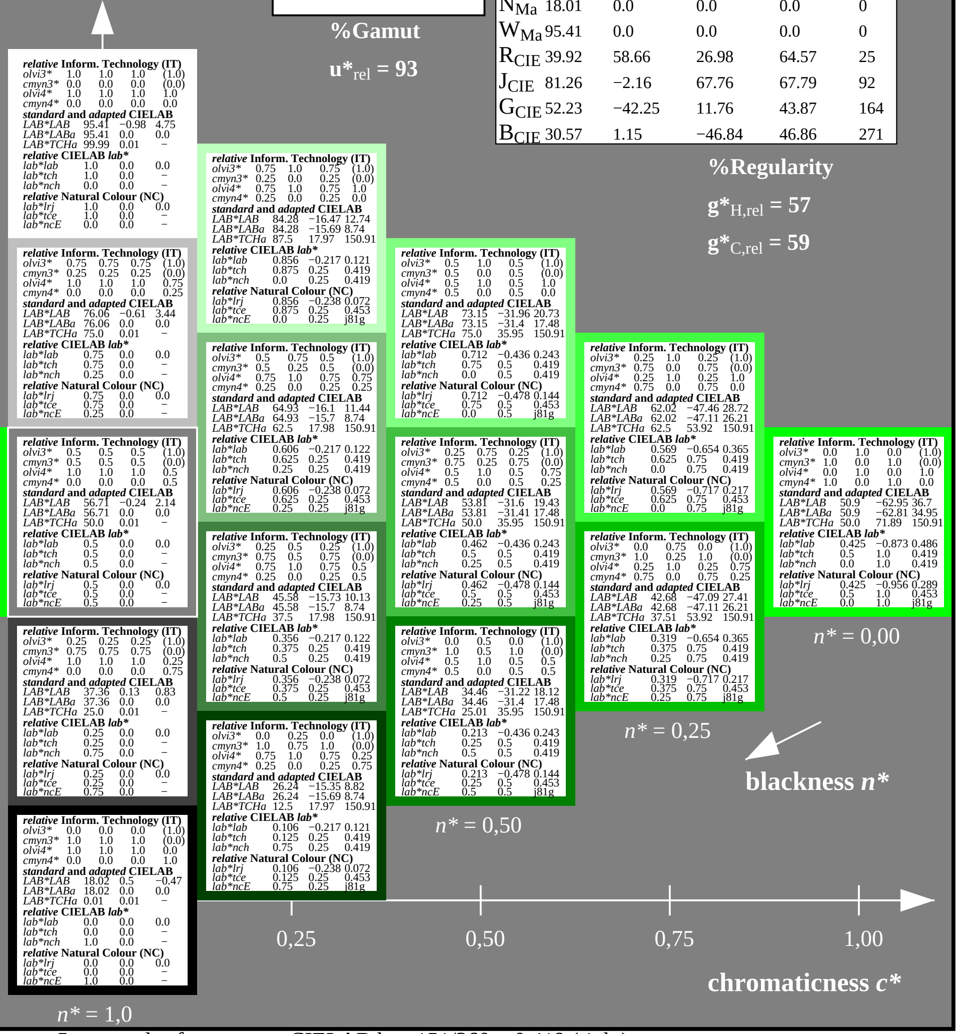
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



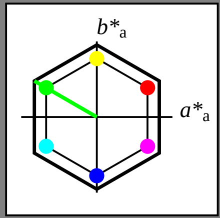
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric 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*

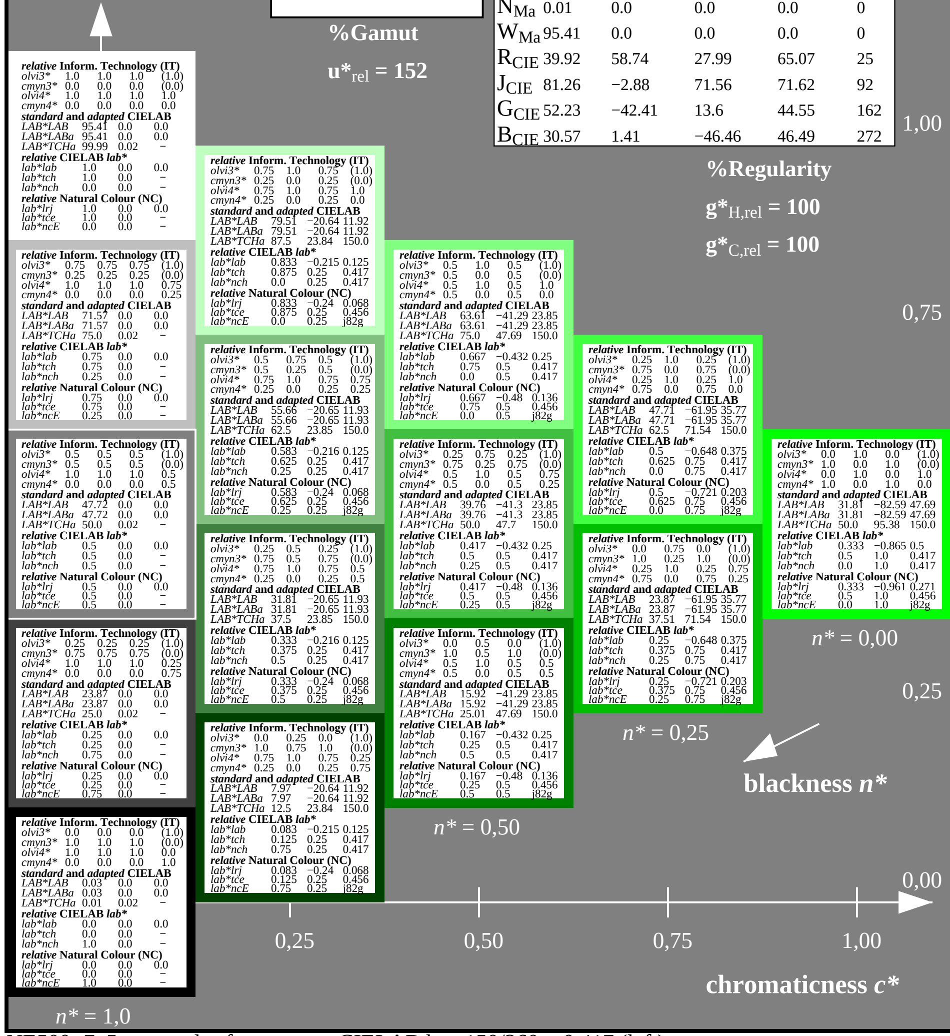


%Gamut
u^*_{rel} = 152

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

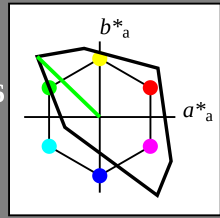
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

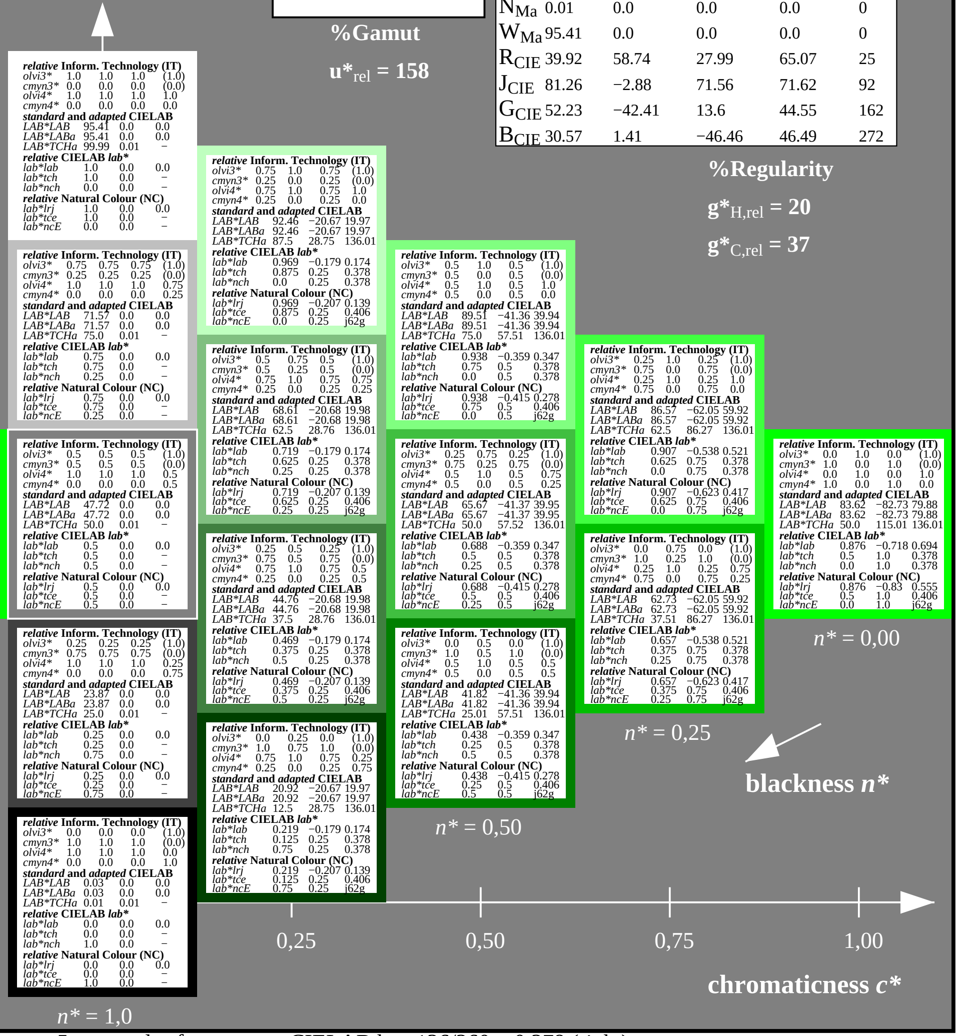


%Gamut
u^*_{rel} = 158

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



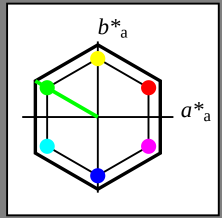
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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^*

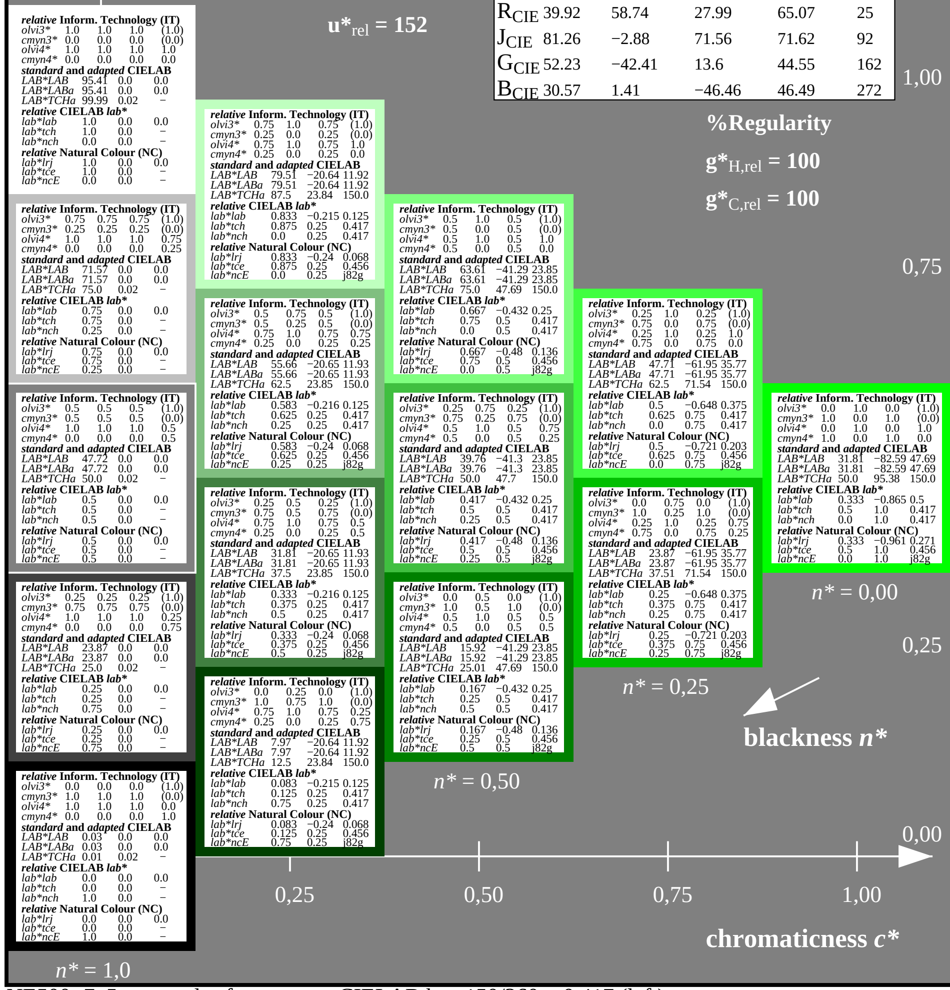


%Gamut
$u^*_{rel} = 152$

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

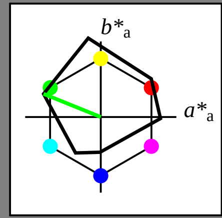
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

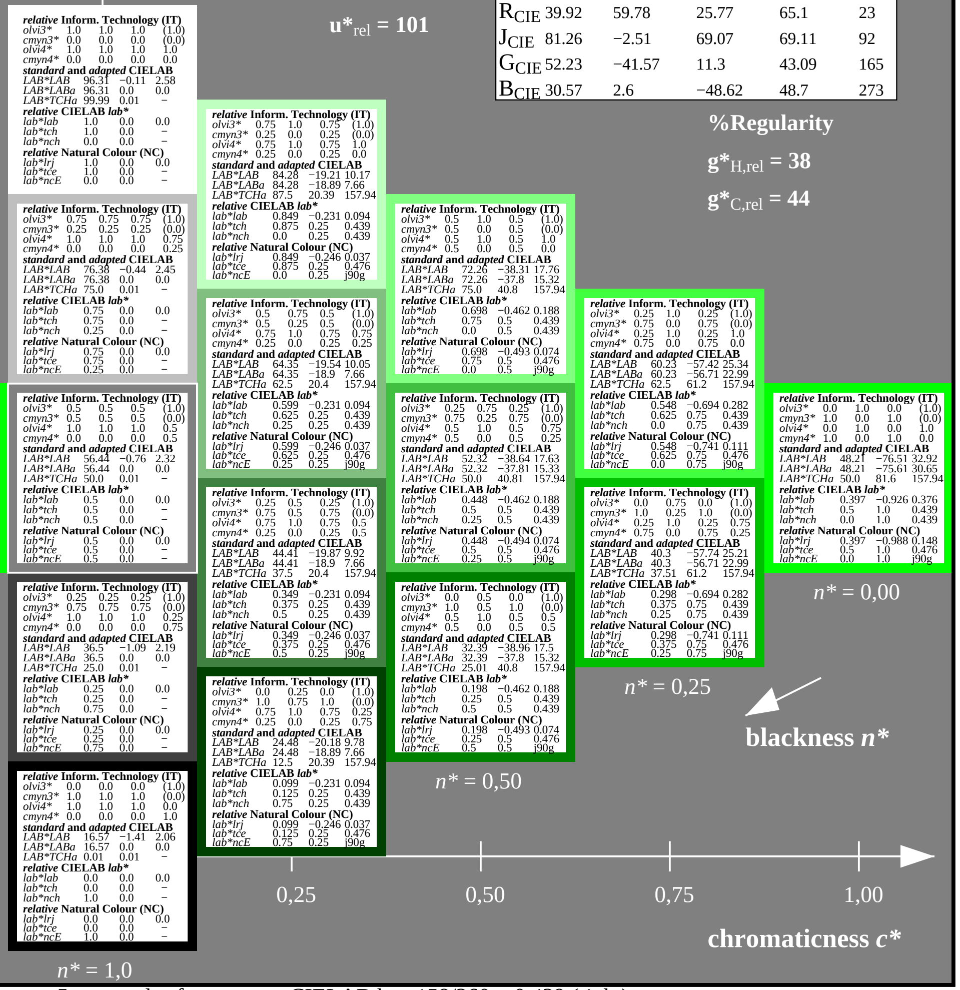


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



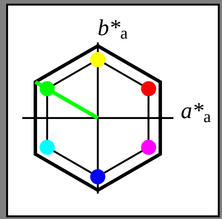
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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**

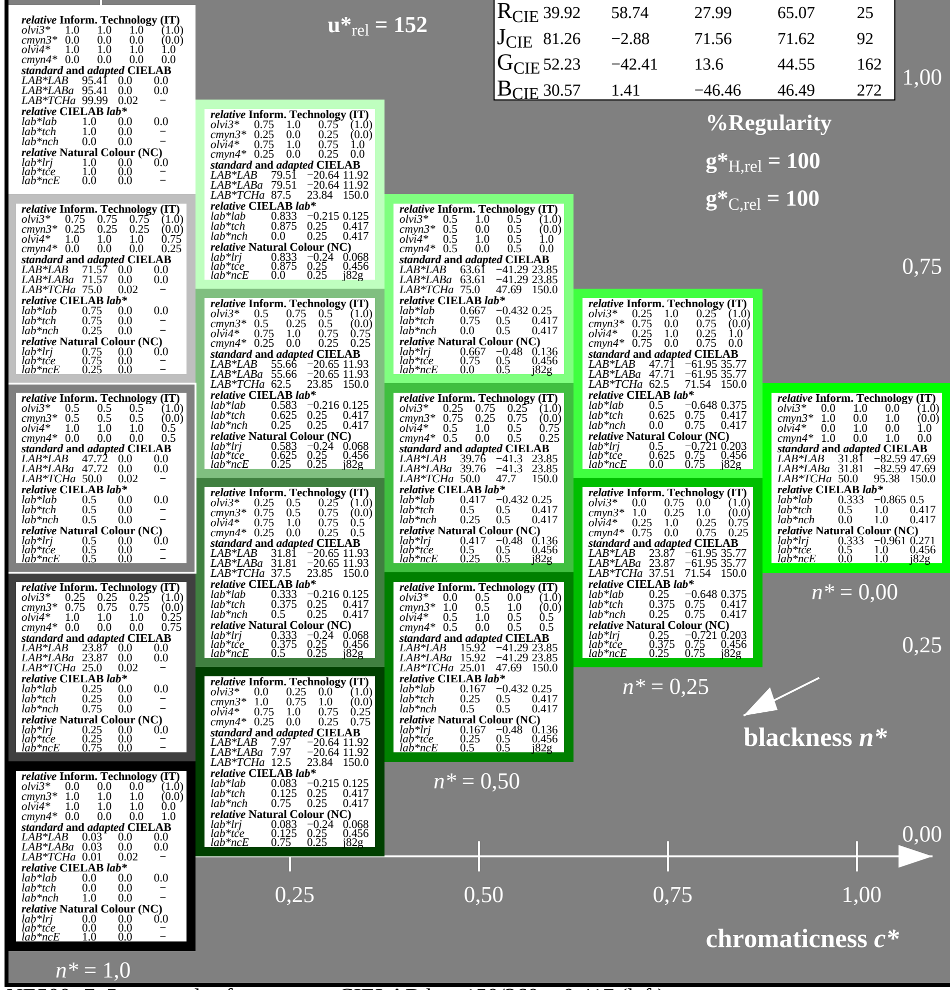


%Gamut
u^*_{rel} = 152

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

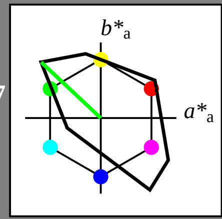
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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**

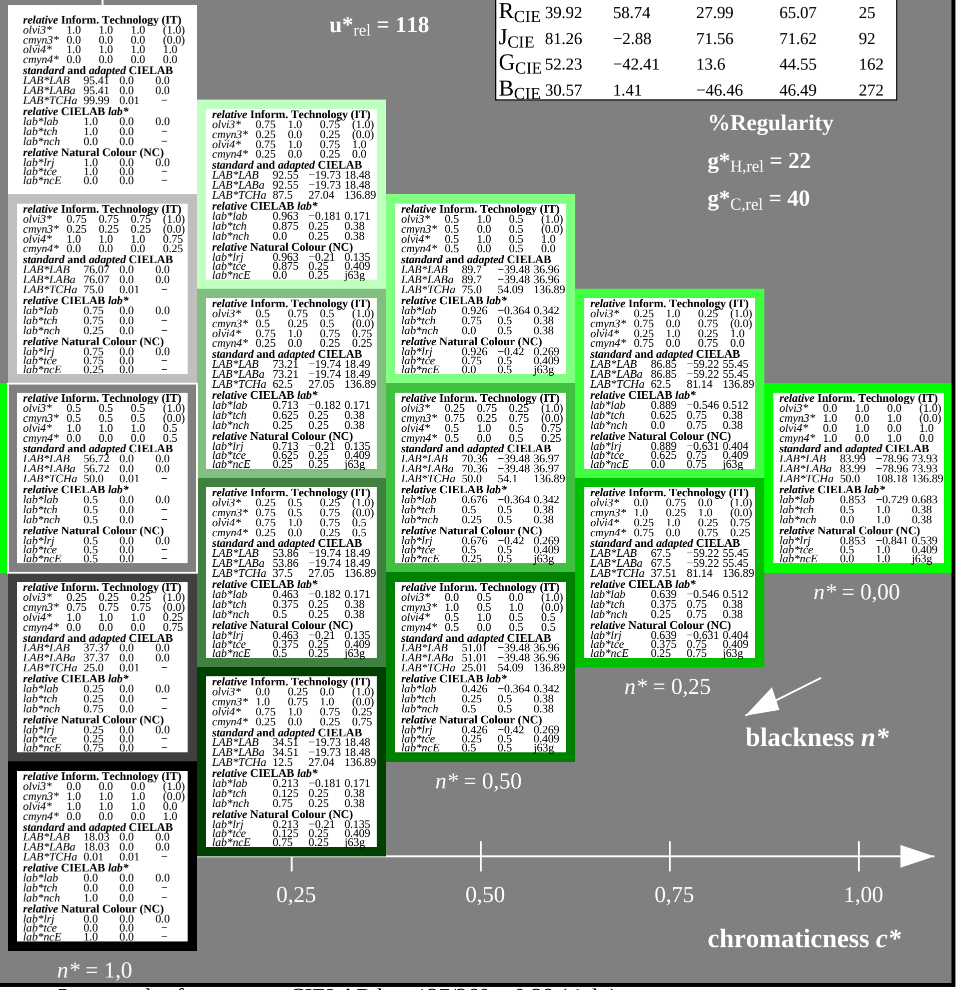


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

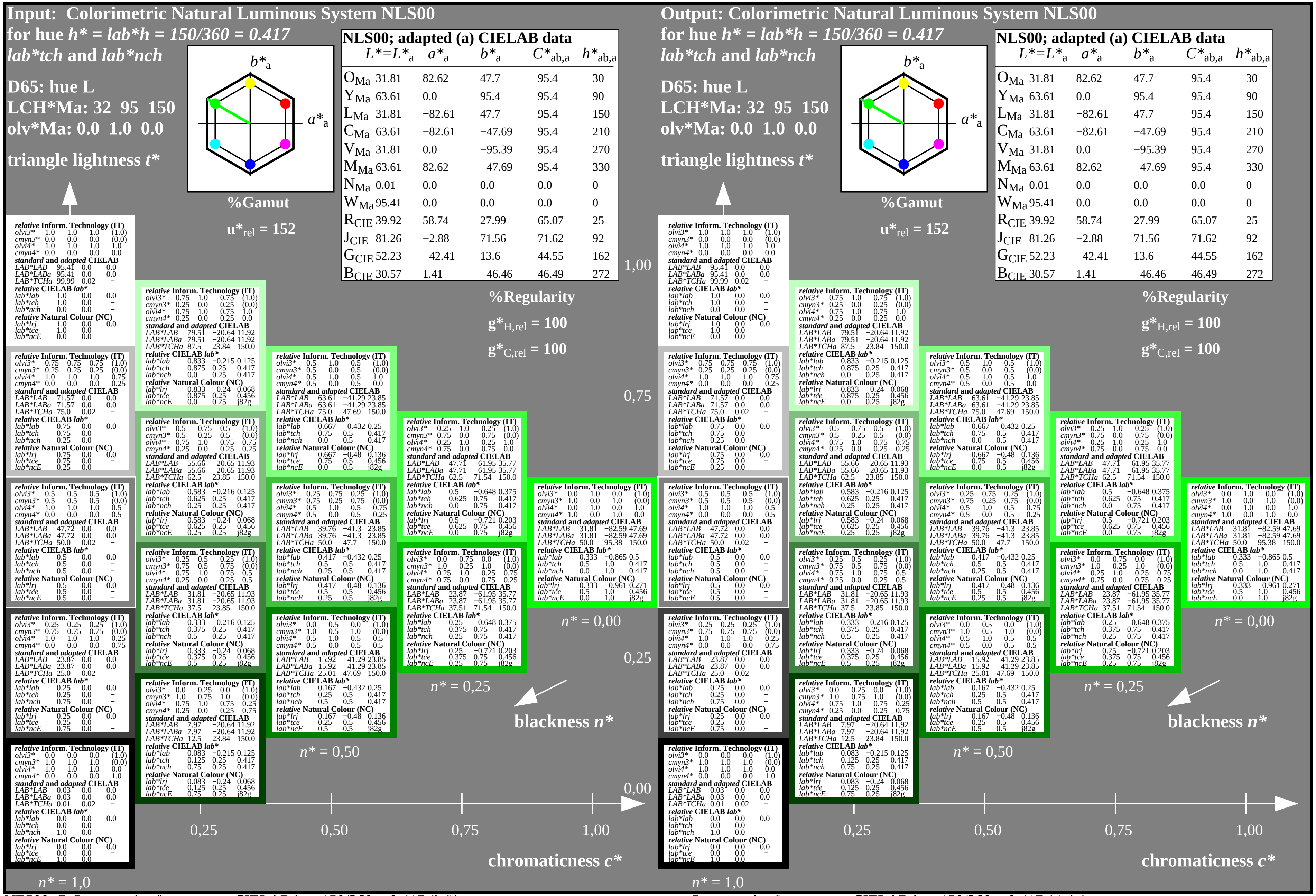
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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



NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 137/360 = 0.38 (right)



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

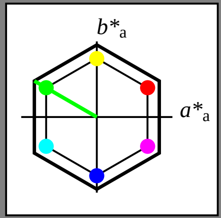
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural 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^*

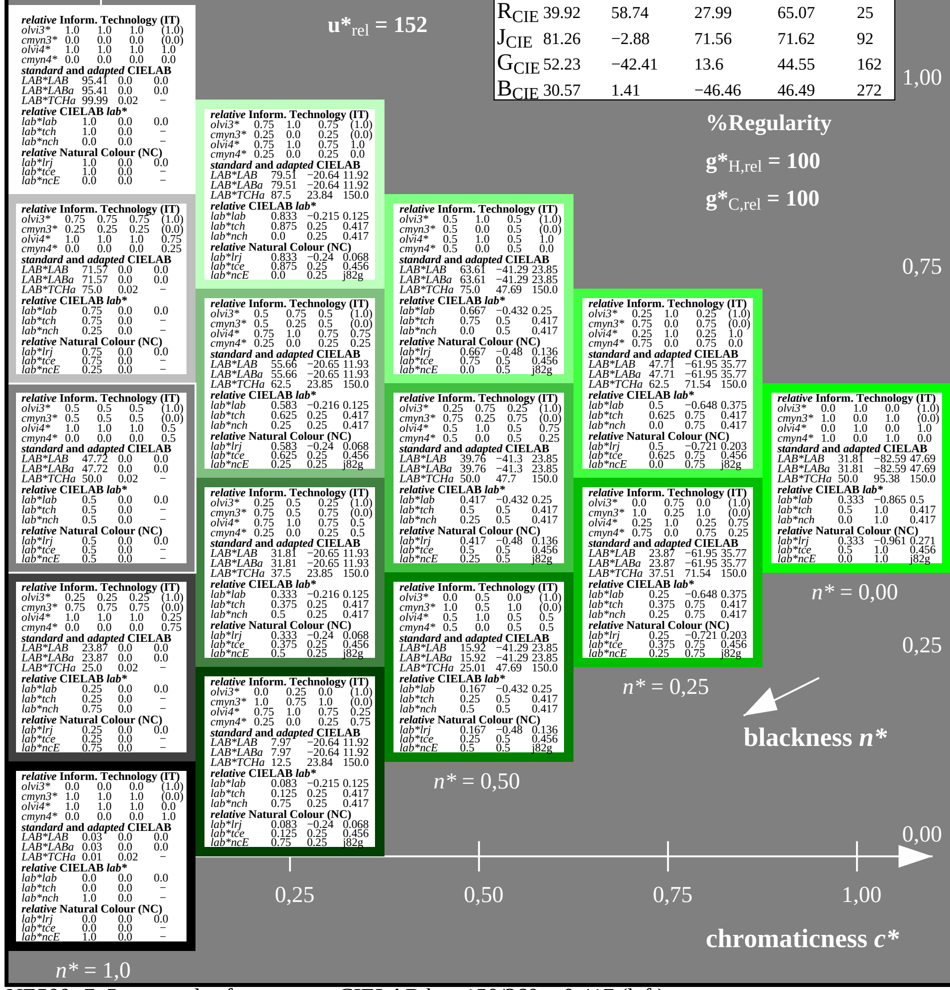


%Gamut
u^*_{rel} = 152

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

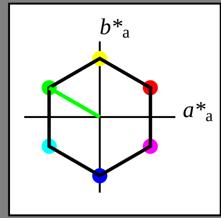
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



Output: Colorimetric 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^*

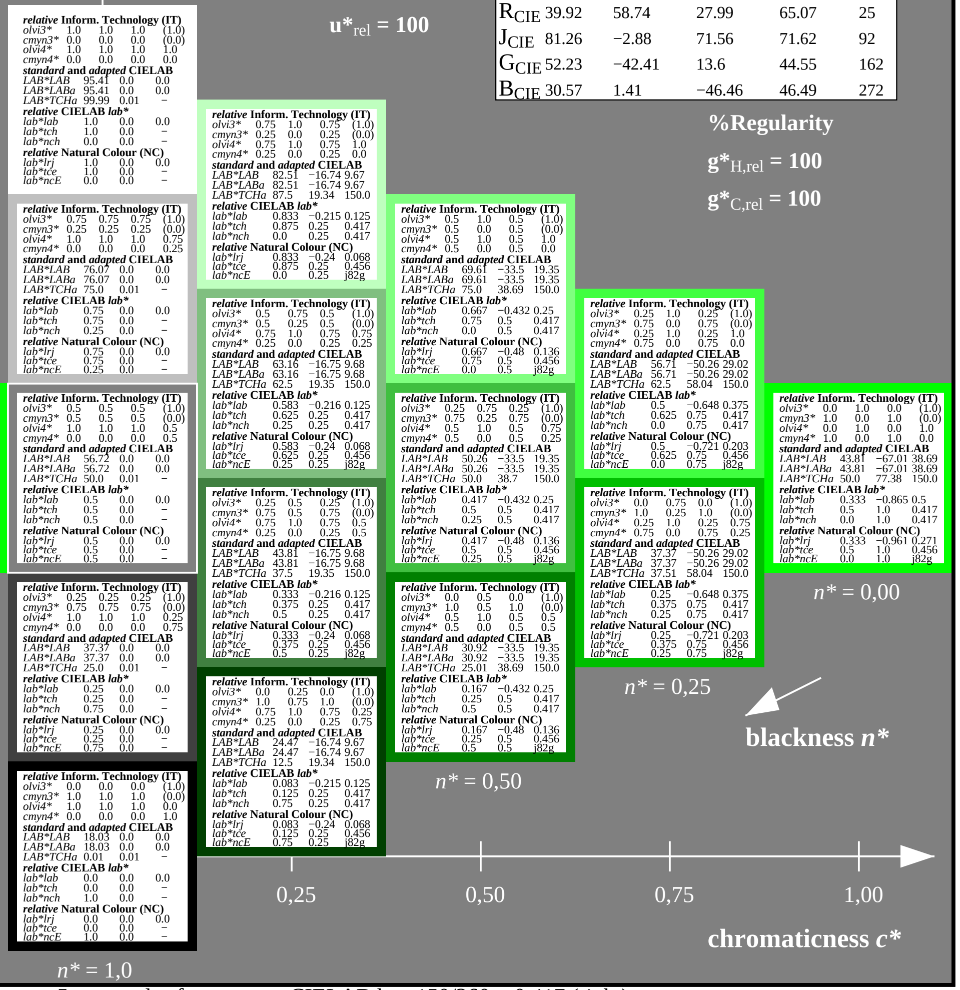


%Gamut
u^*_{rel} = 100

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

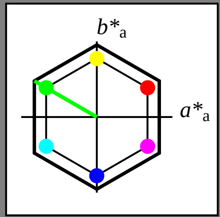


NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

Input: Colorimetric Natural 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**

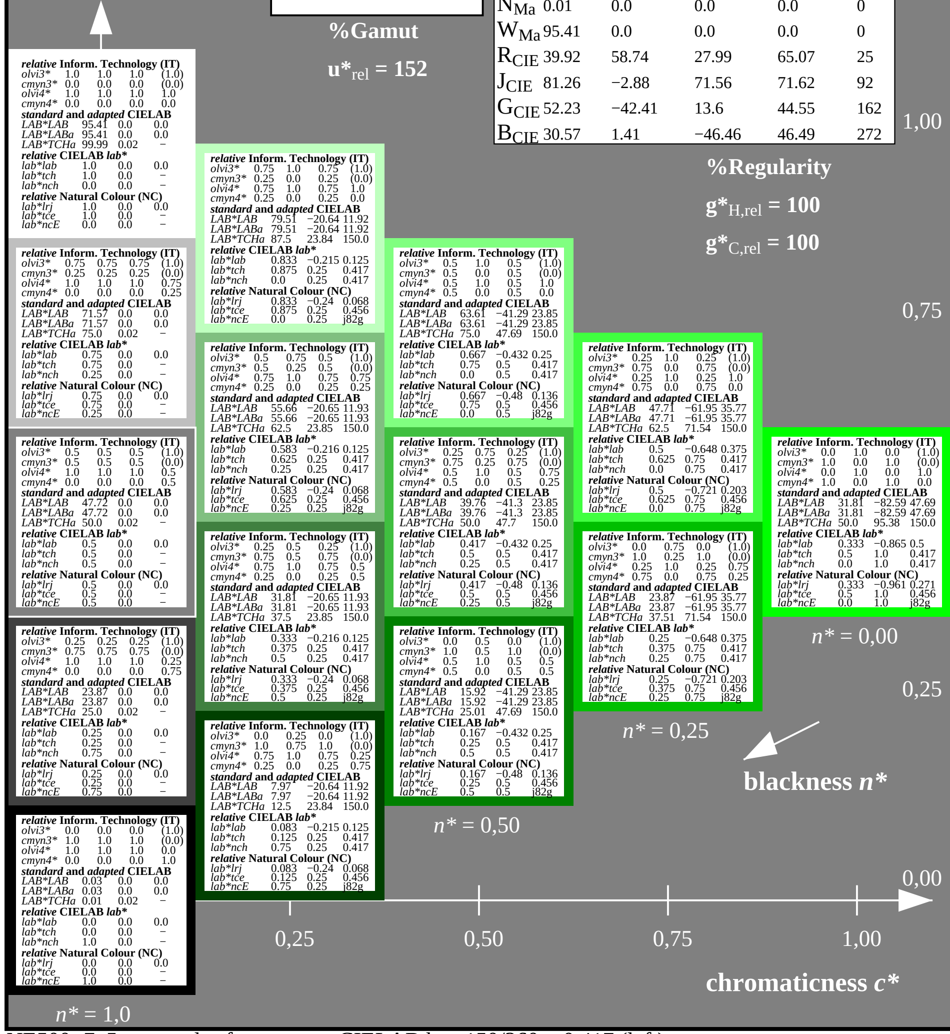


%Gamut
u*rel = 152

NLS00; adapted (a) CIELAB data

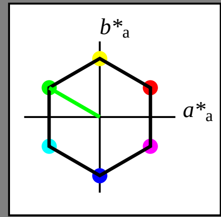
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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 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**

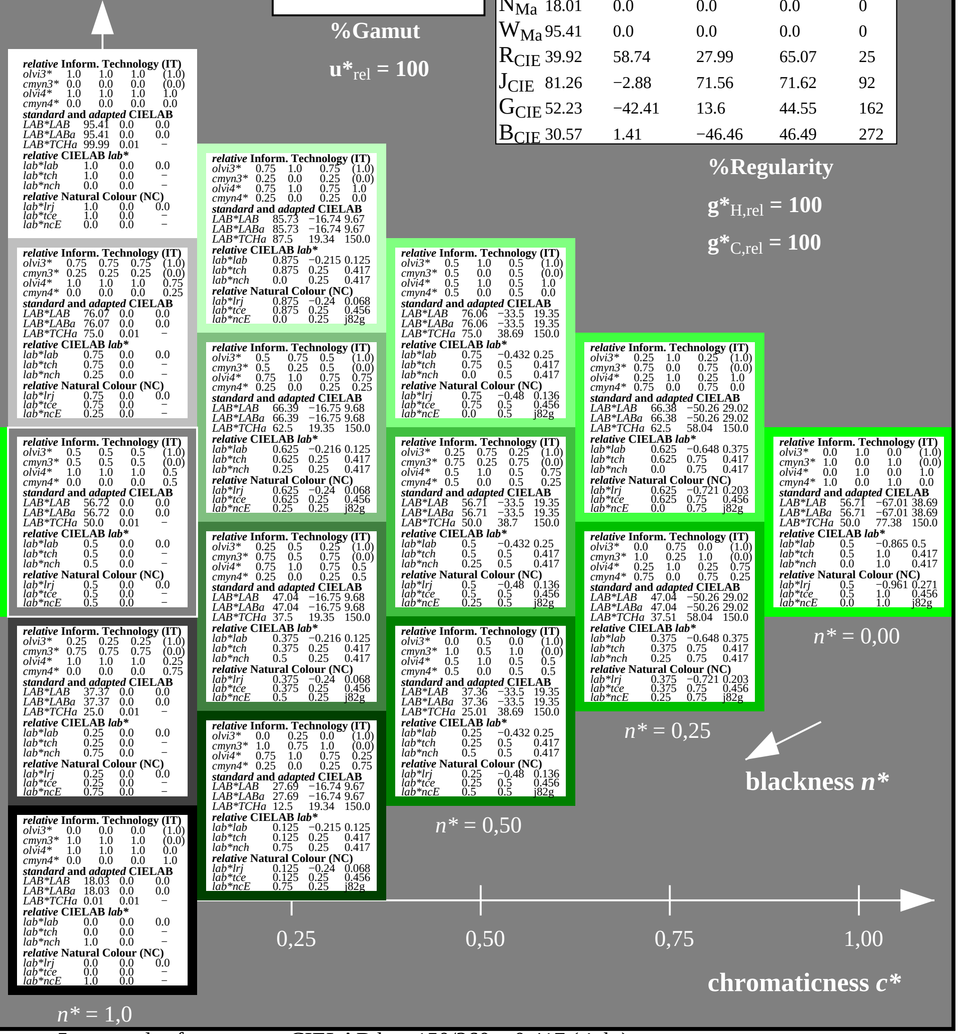


%Gamut
u*rel = 100

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



NE500−7, 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 Luminous System NLS00

for hue *h* = lab*h = 150/360 = 0.417*

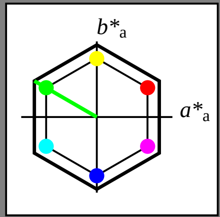
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

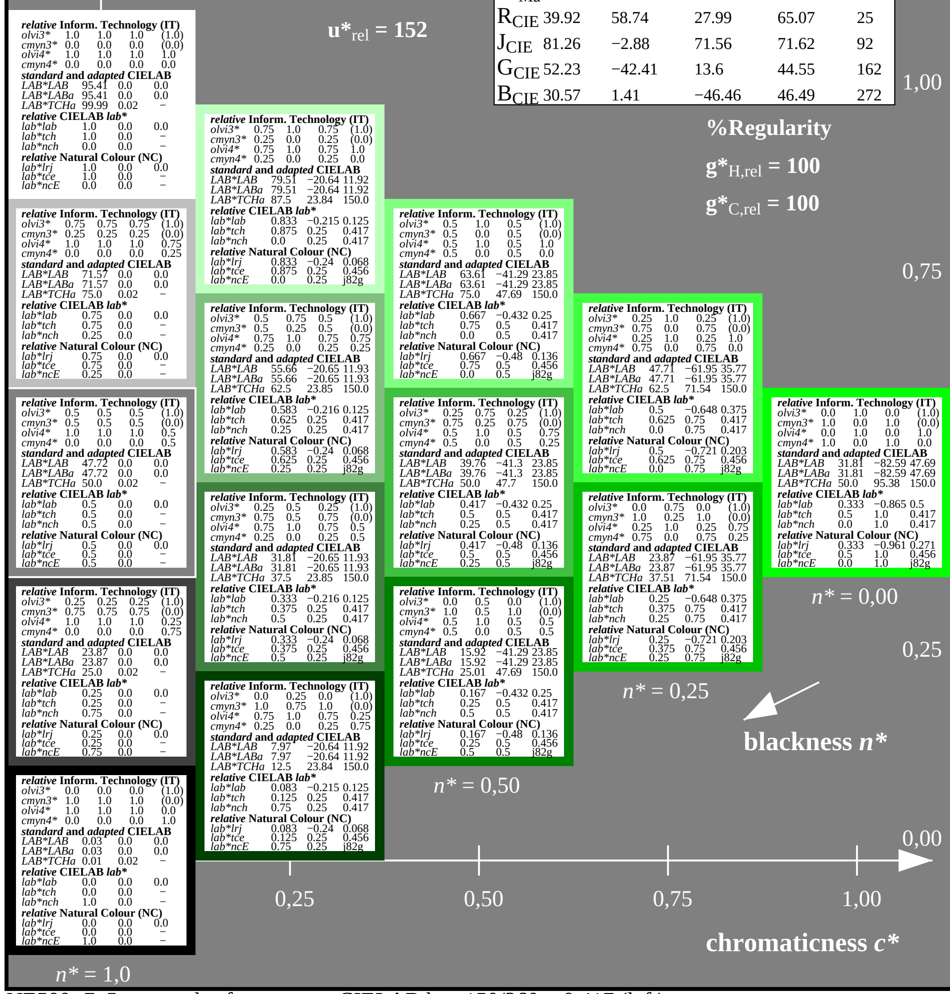
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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*

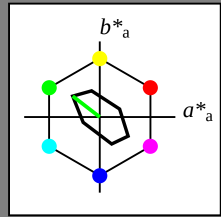
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

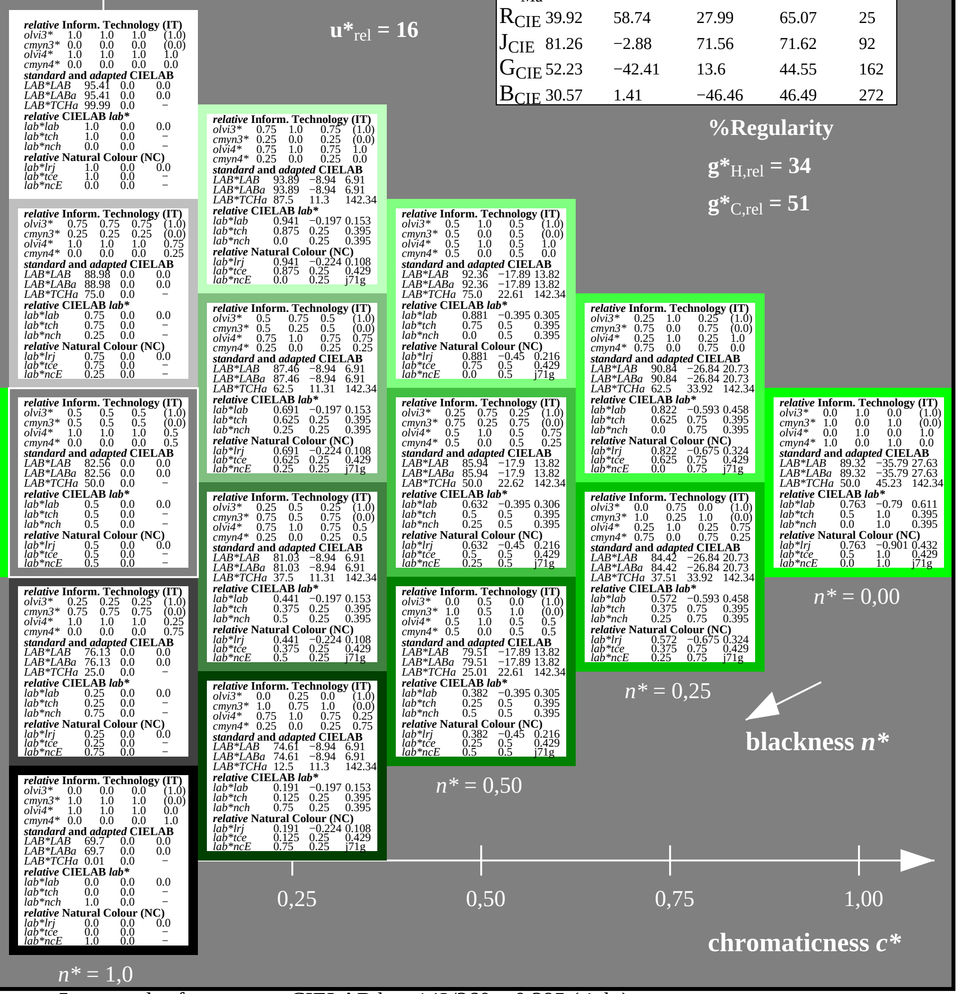
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 150/360 = 0.417$

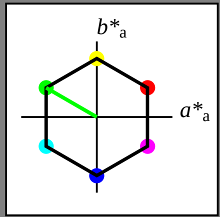
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

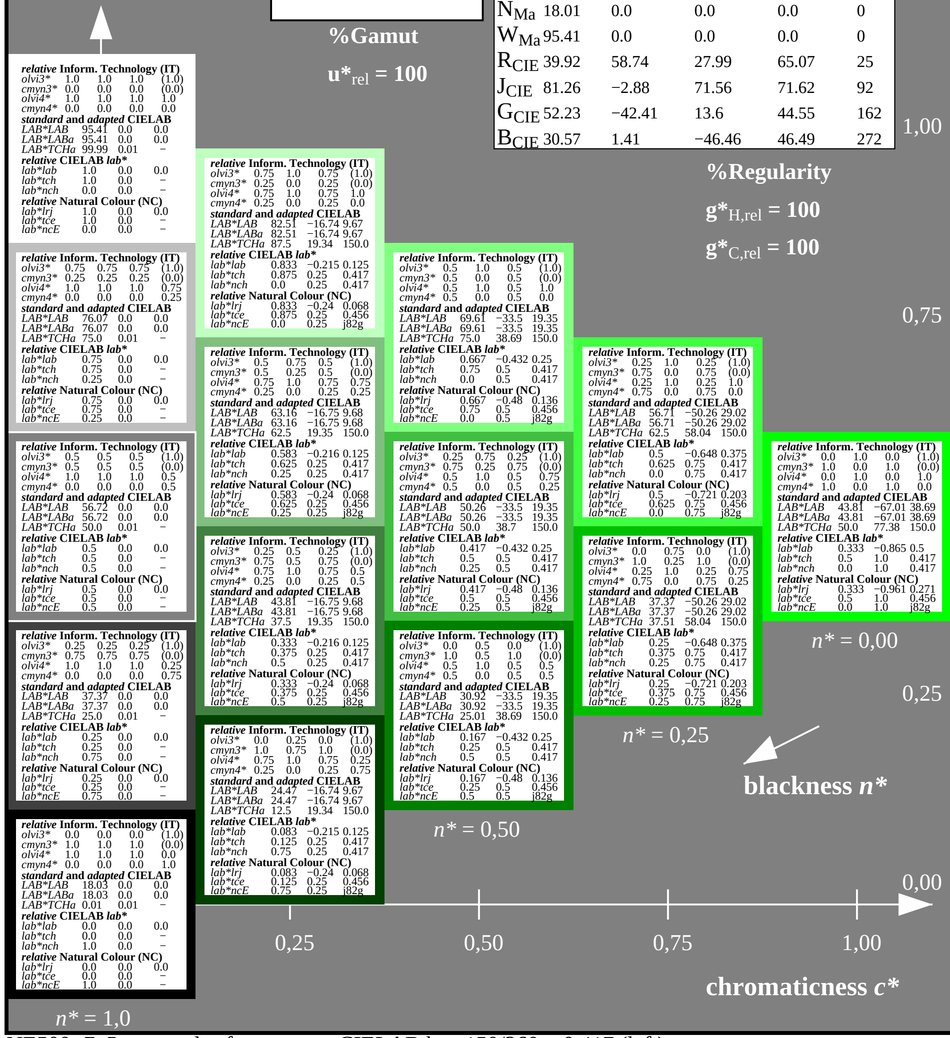
$u^*_{rel} = 100$

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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

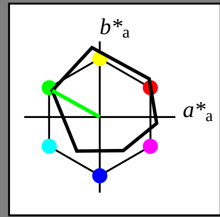
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

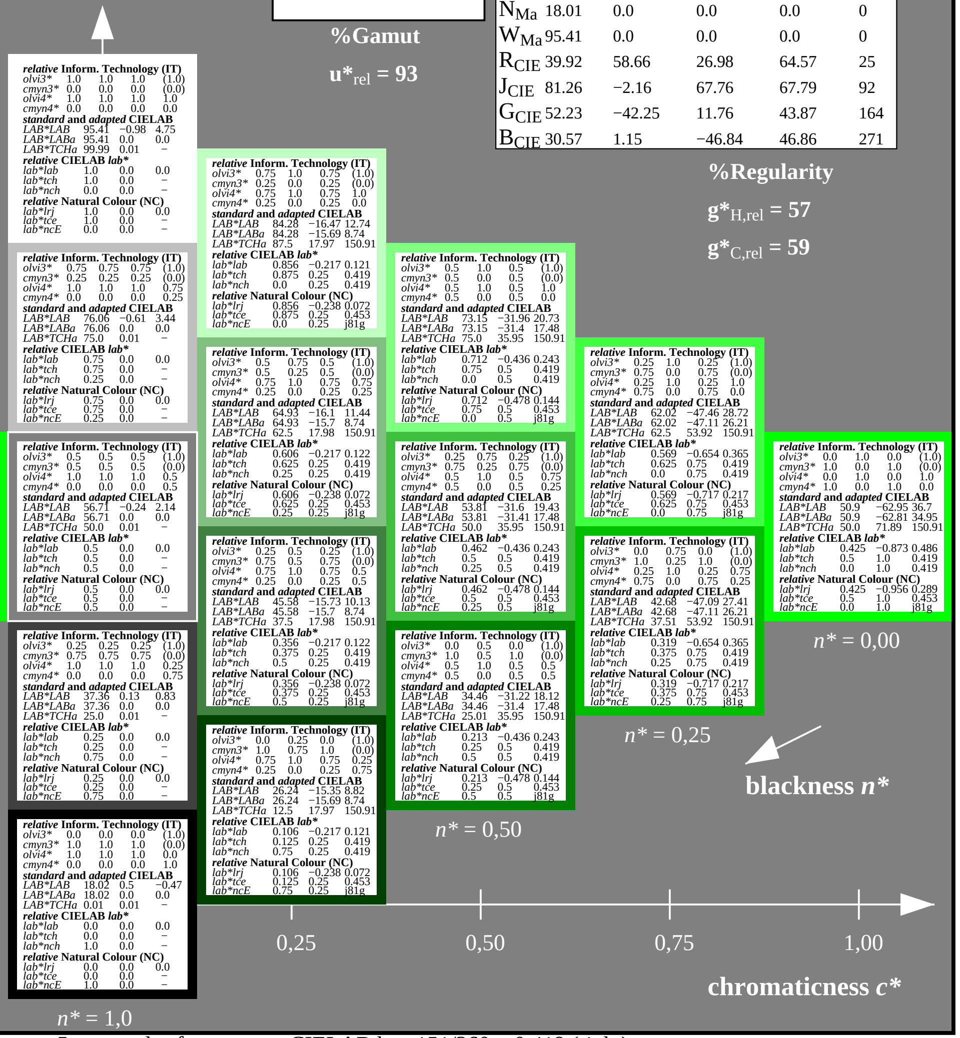
$u^*_{rel} = 93$

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

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

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



NE500−7, 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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

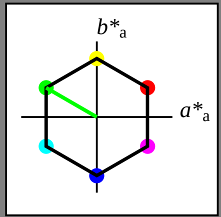
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

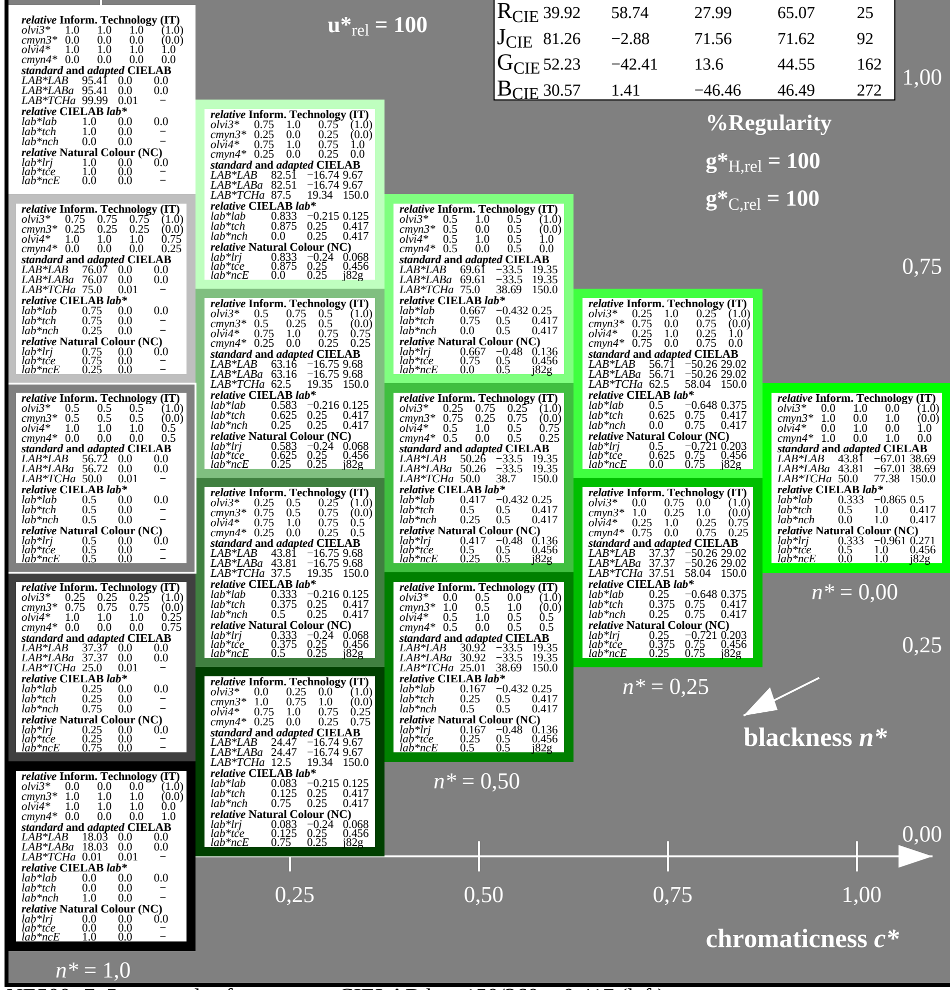
$u^*_{rel} = 100$

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 $h^* = lab^*h = 136/360 = 0.378$

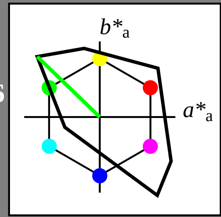
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

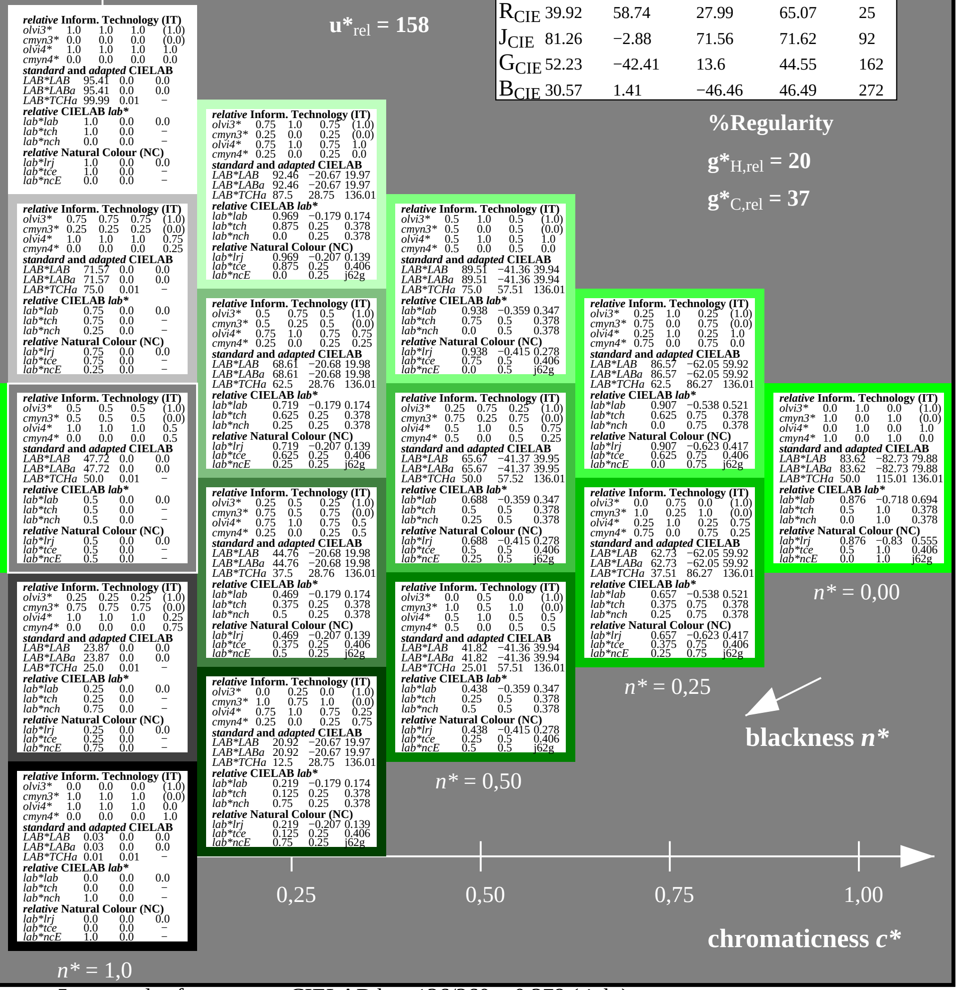
$u^*_{rel} = 158$

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

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

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



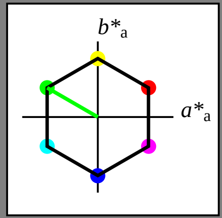
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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*

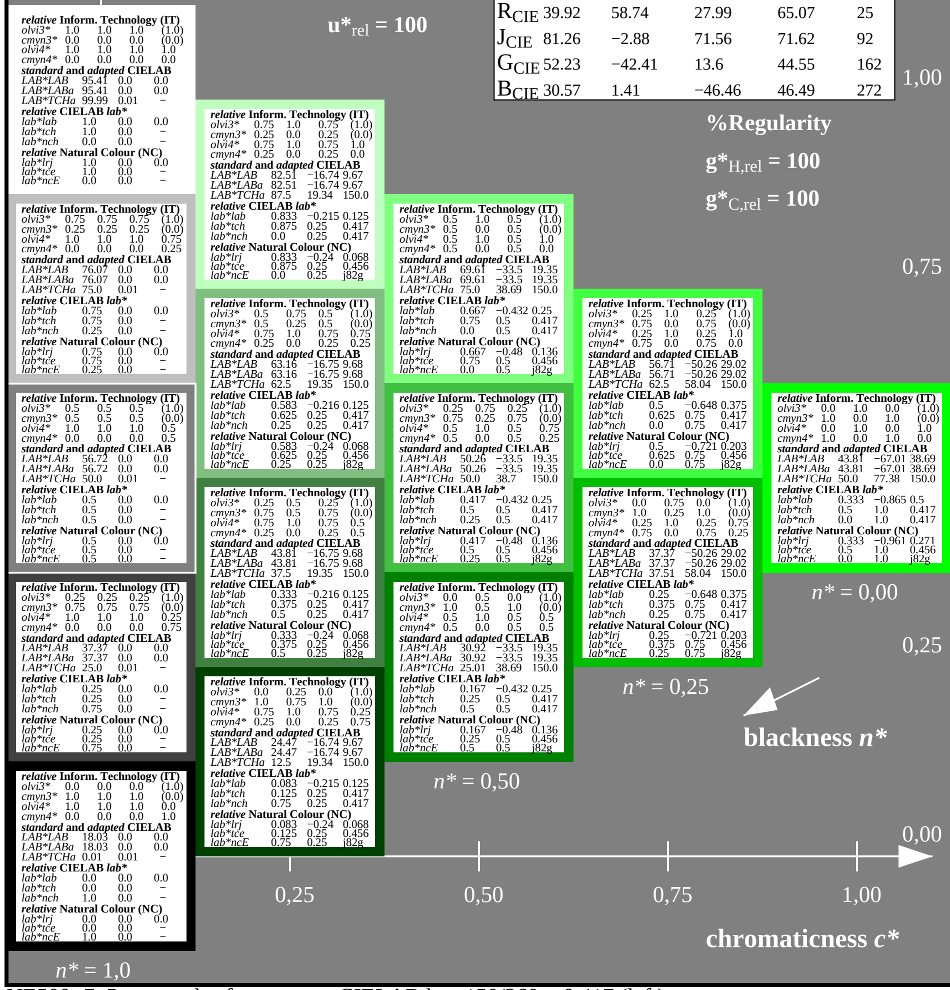


%Gamut
u^*_{rel} = 100

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

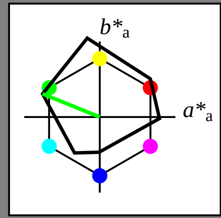
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

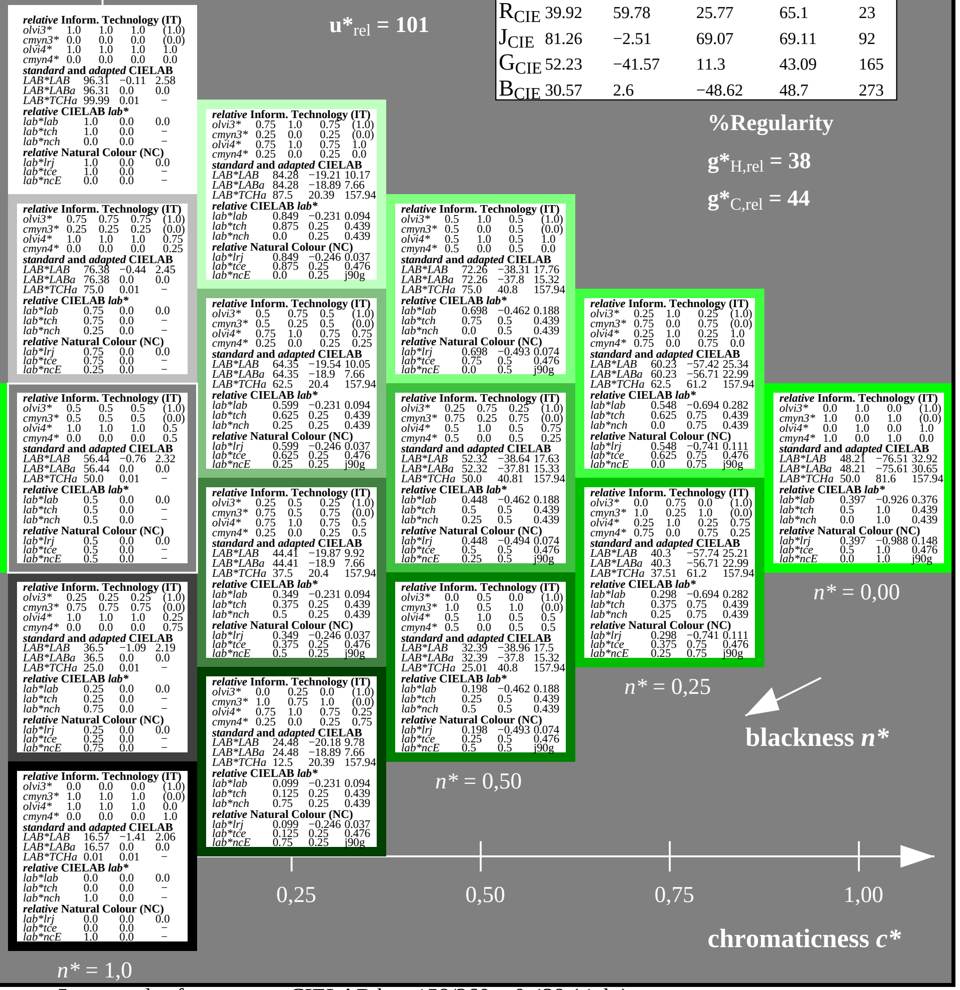


%Gamut
u^*_{rel} = 101

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



NE500−7, 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 Reflective System NRS18

for hue *h** = *lab*h* = 150/360 = 0.417

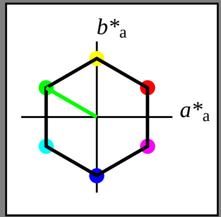
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

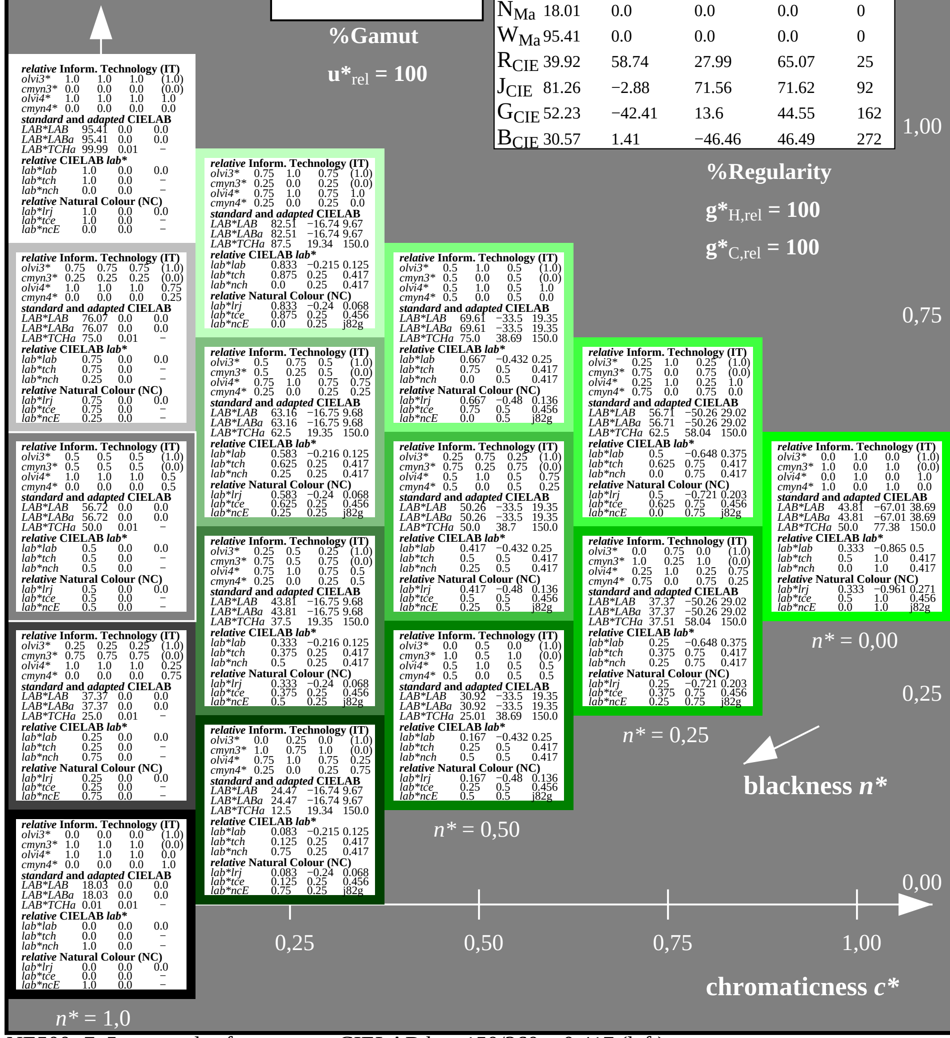
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

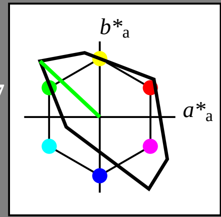
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 118

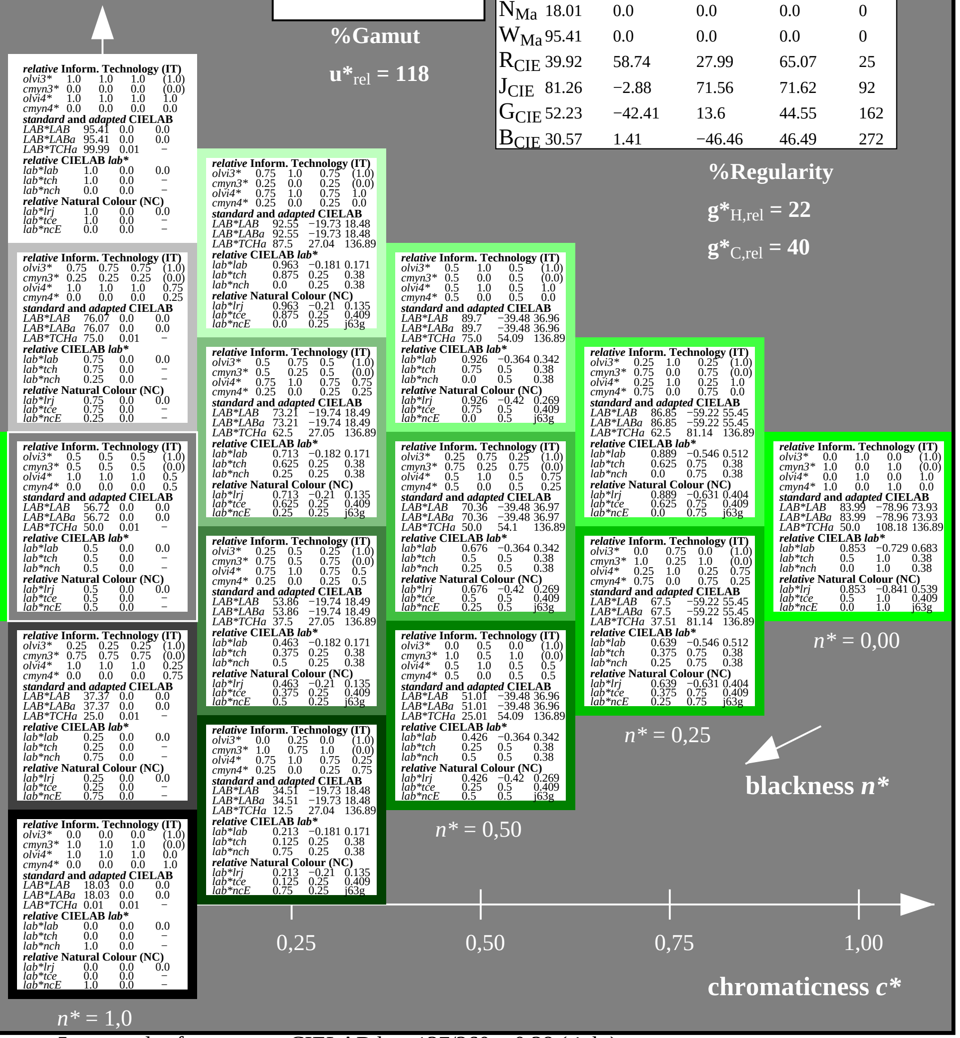
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 150/360 = 0.417$

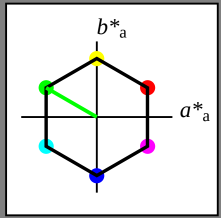
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 44 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

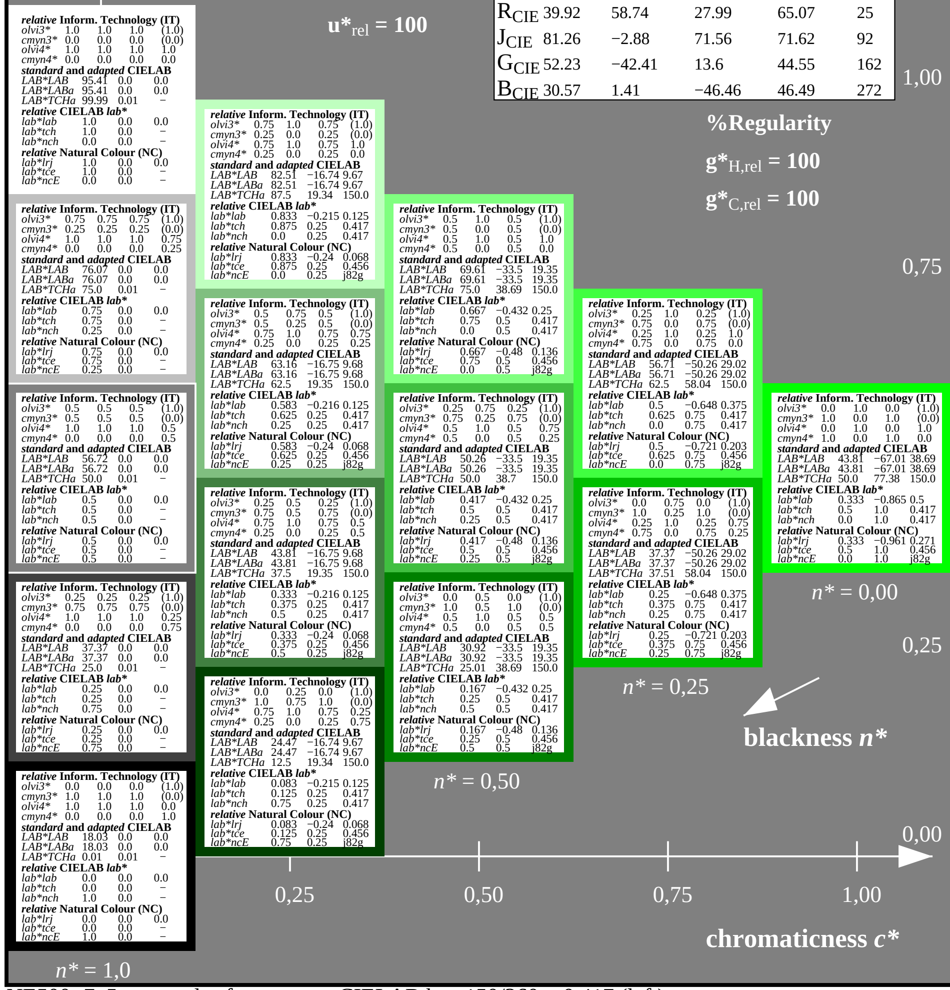
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 150/360 = 0.417$

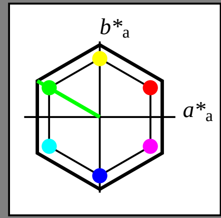
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

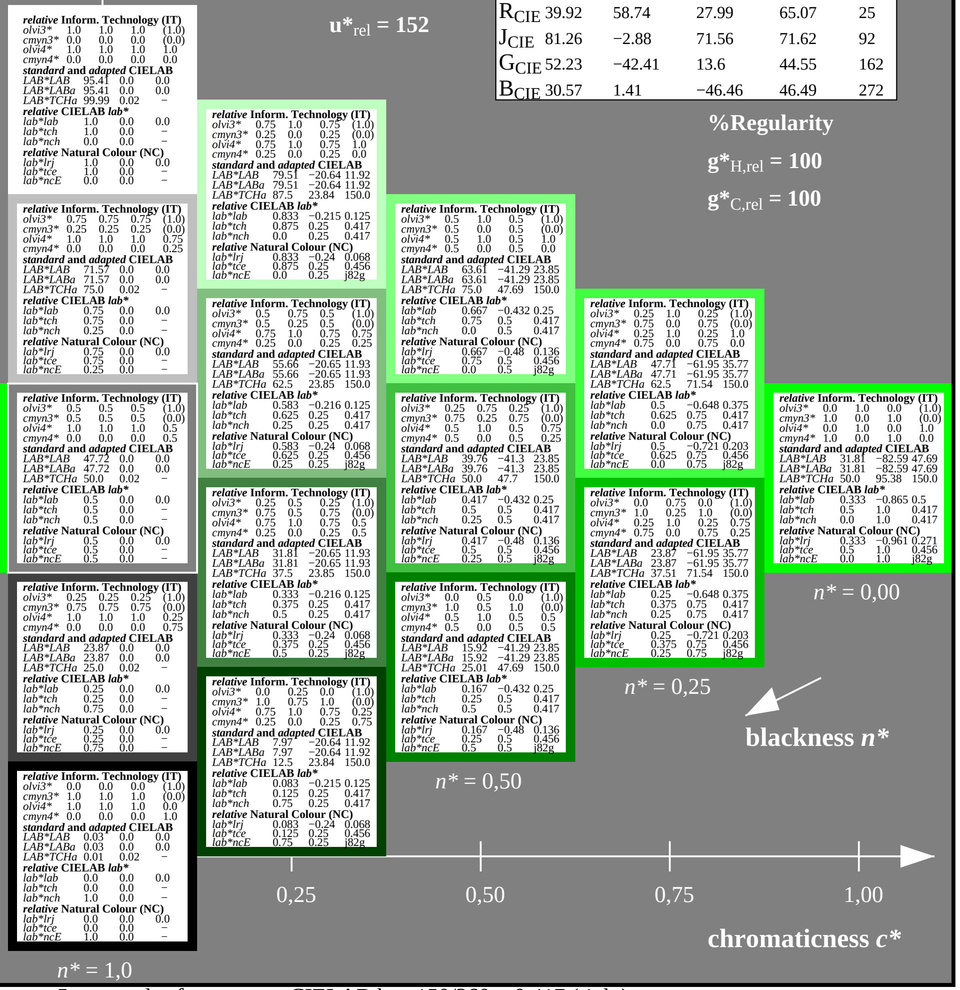
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



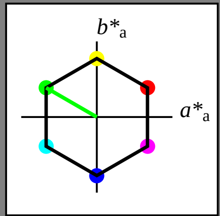
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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^*

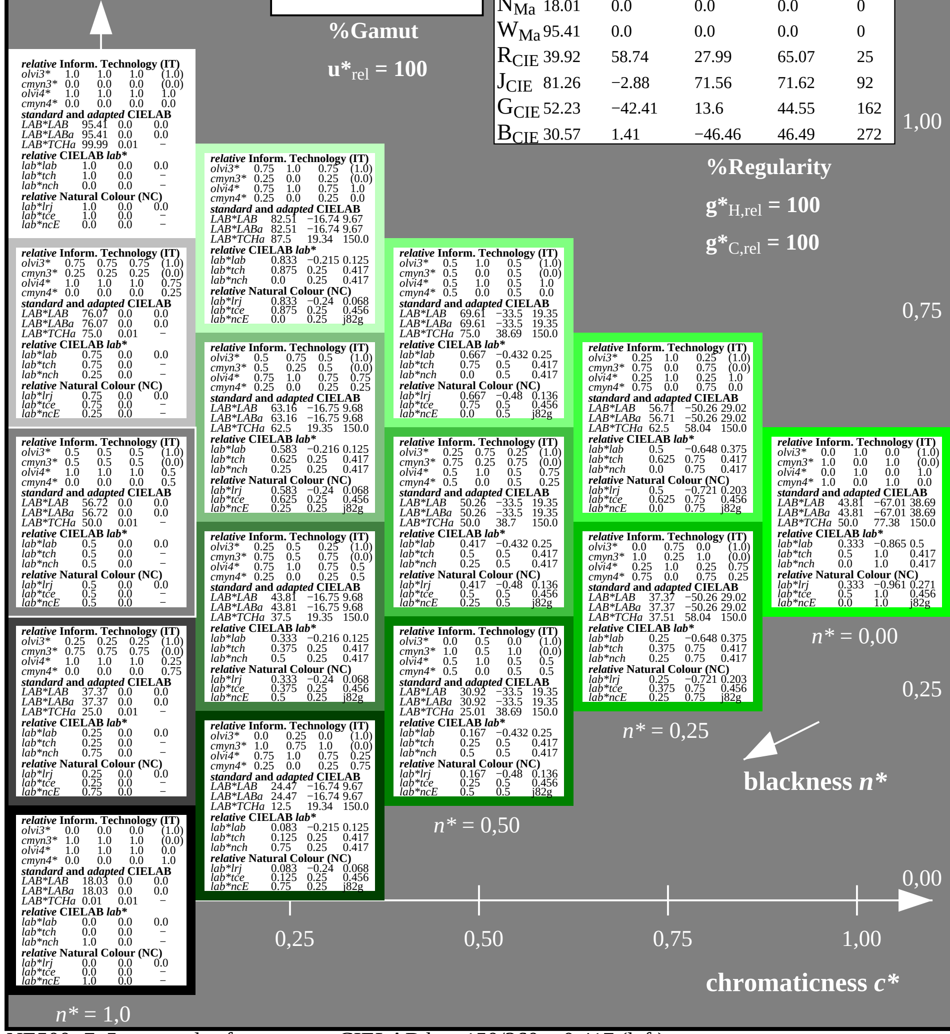


%Gamut
$u^*_{rel} = 100$

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

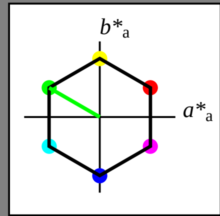
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric 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^*

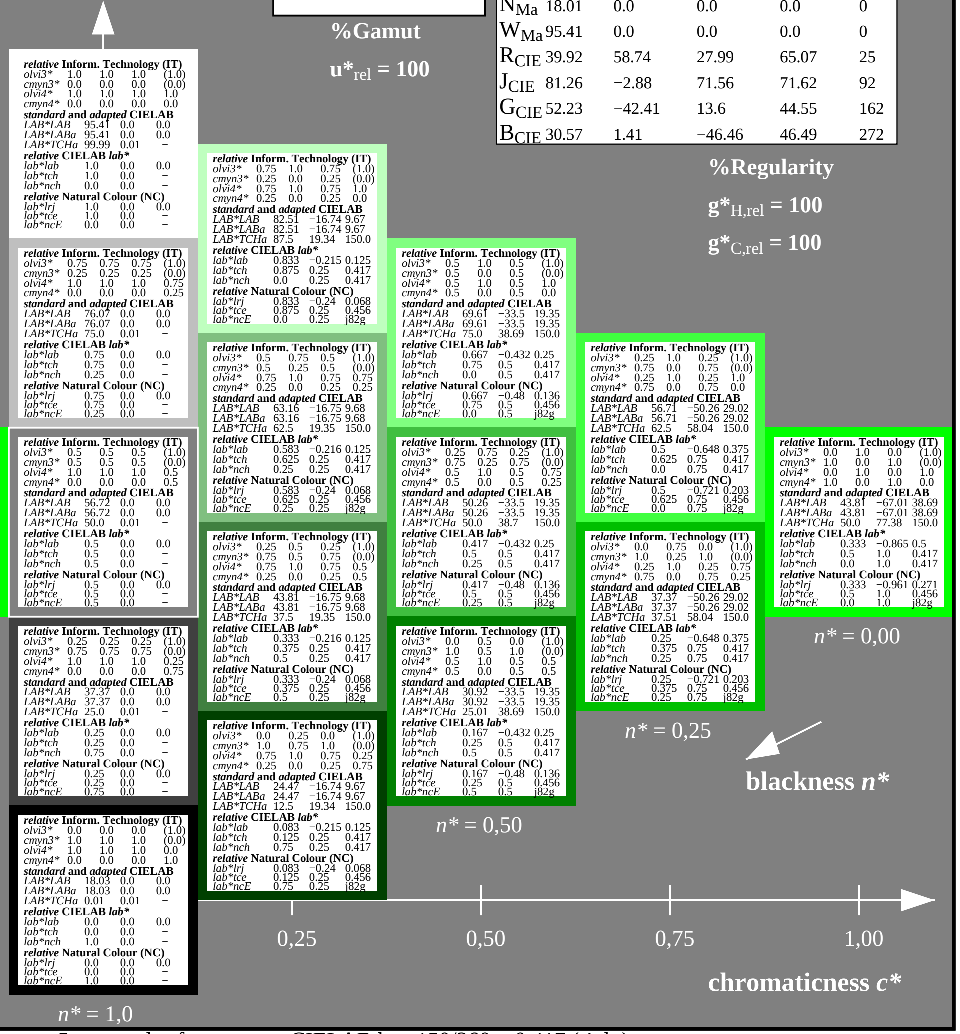


%Gamut
$u^*_{rel} = 100$

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



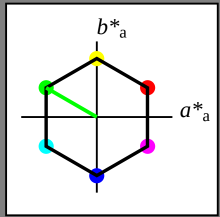
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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

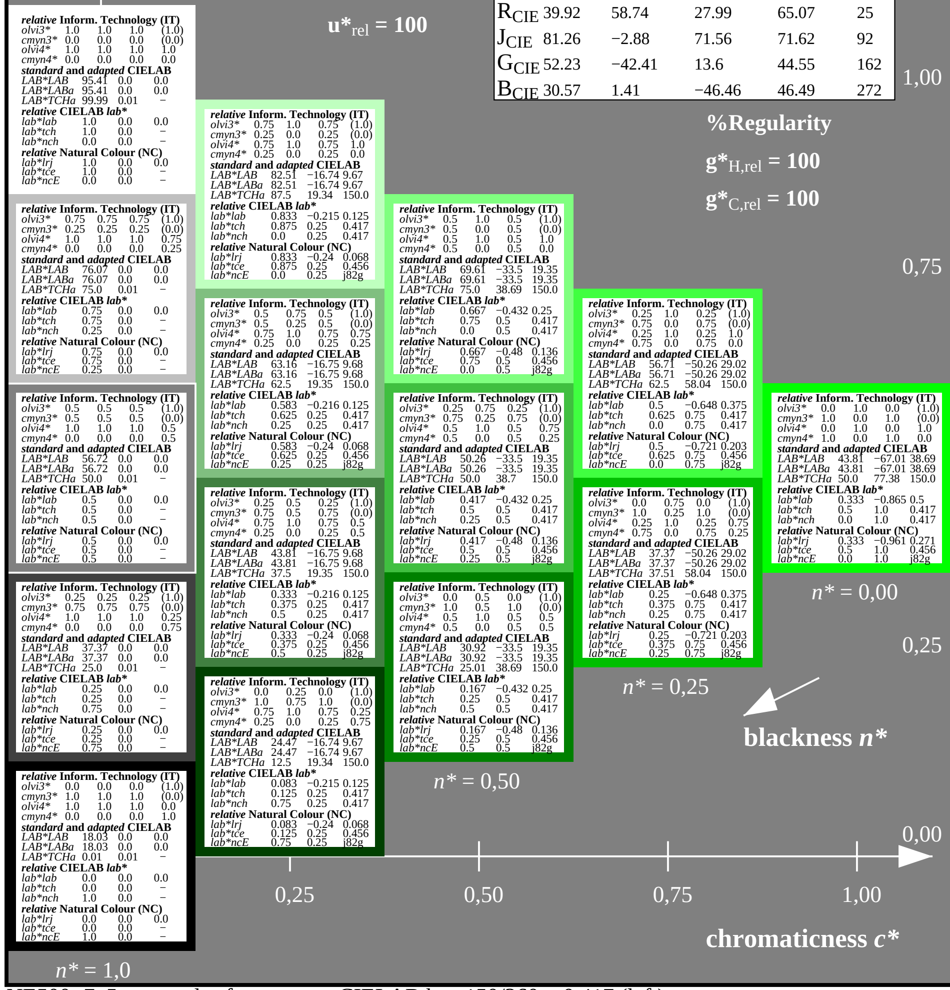
D65: hue L
LCH*Ma: 44 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



NRS18; adapted (a) CIELAB data

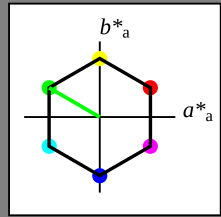
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



Output: Colorimetric Standard Reflective System SRS18
for hue *h = *lab*h* = 150/360 = 0.417**
lab*tch* and *lab*nch

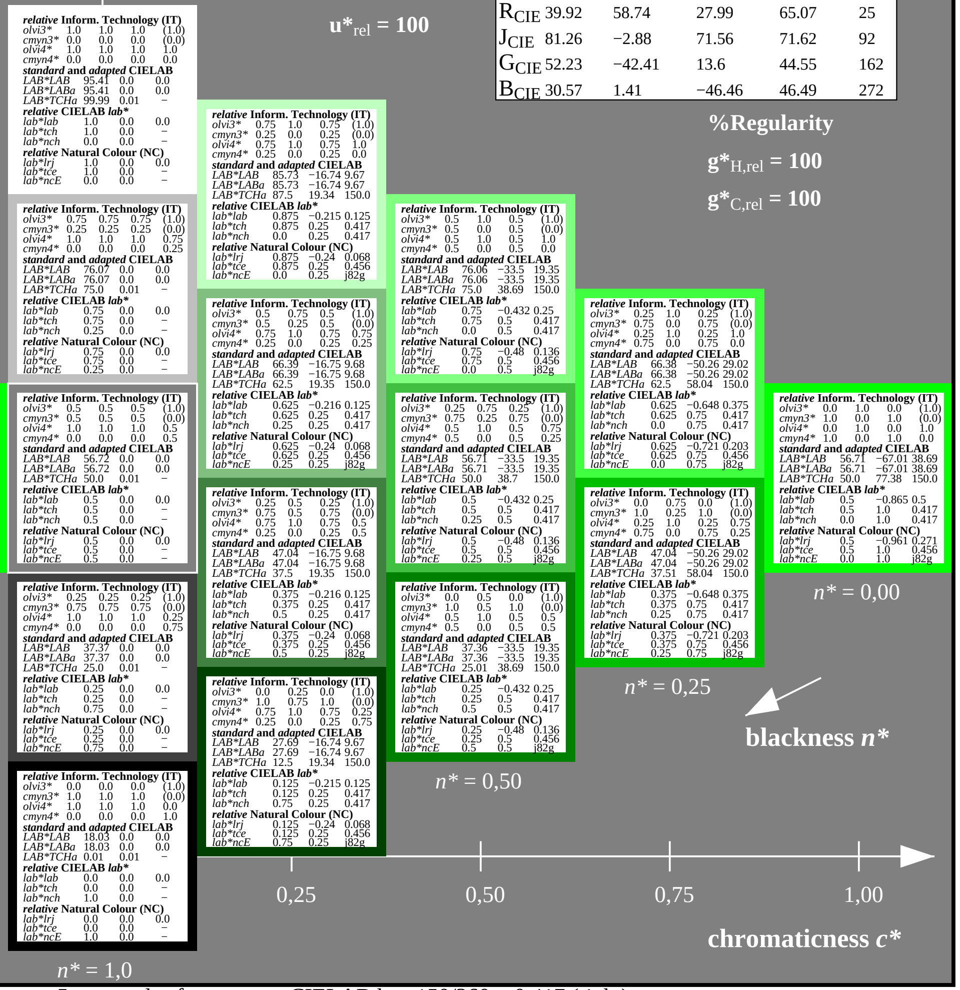
D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



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



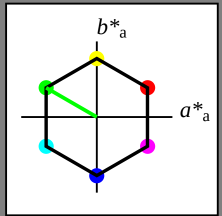
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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^*

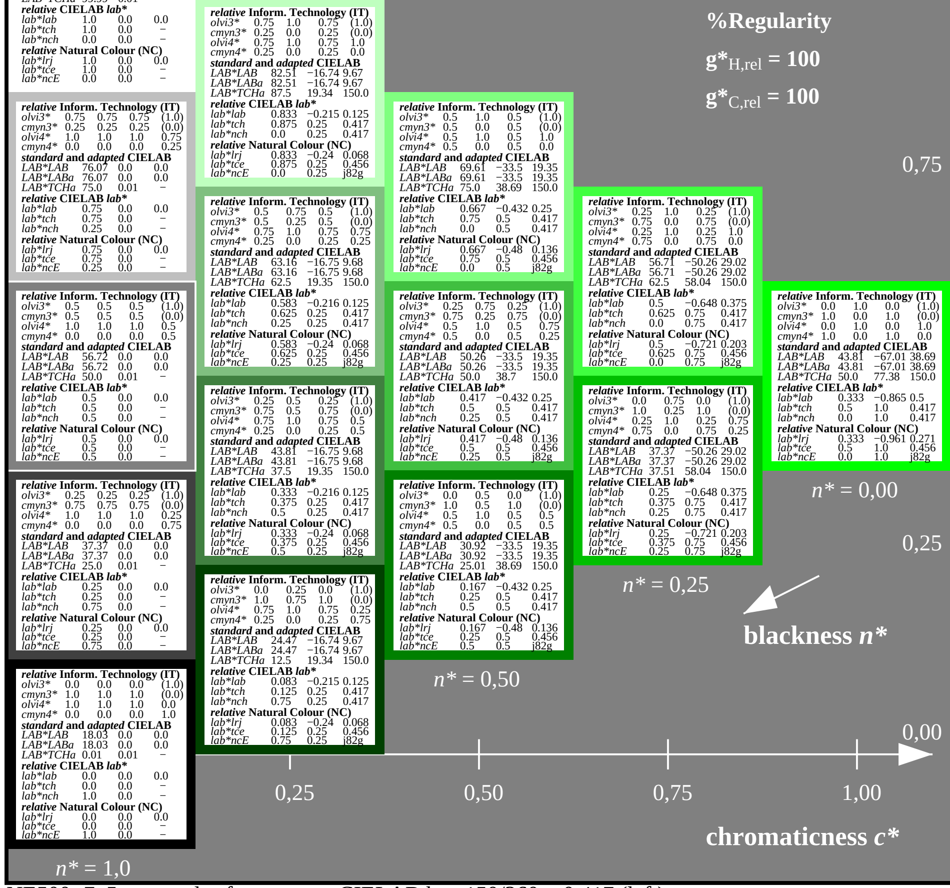


%Gamut
$u^*_{rel} = 100$

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

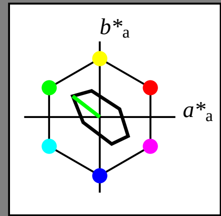
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric 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^*

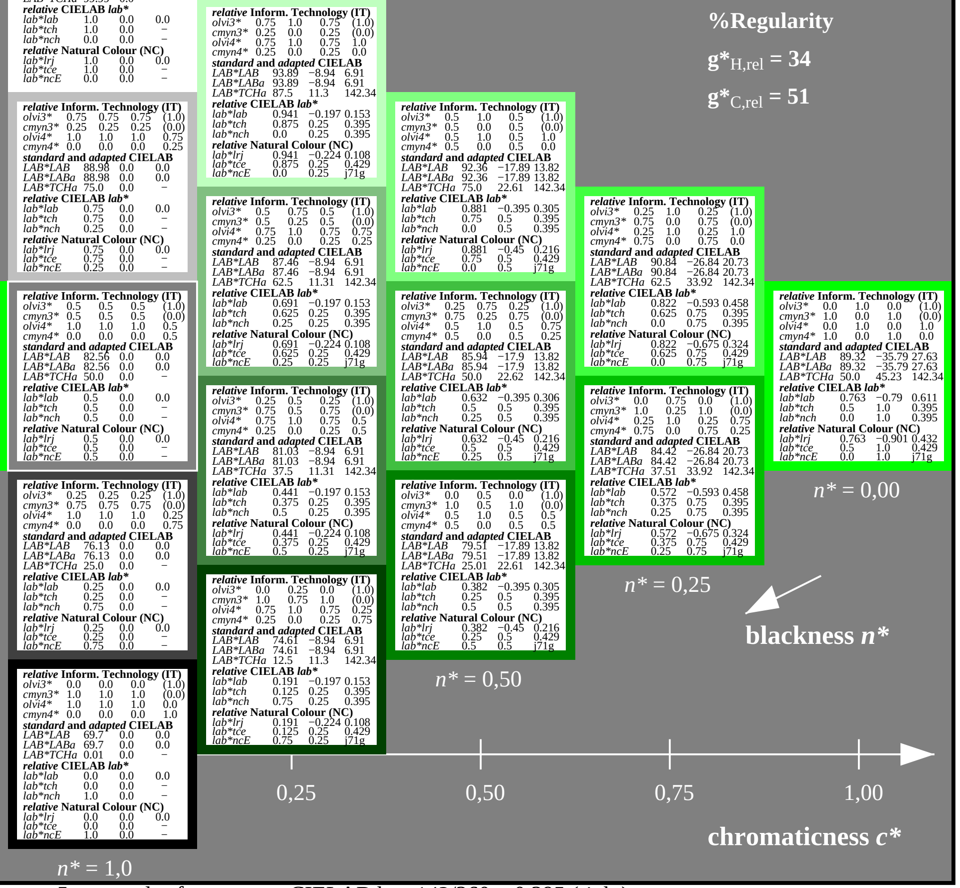


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



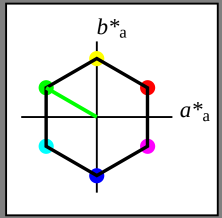
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric 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^*

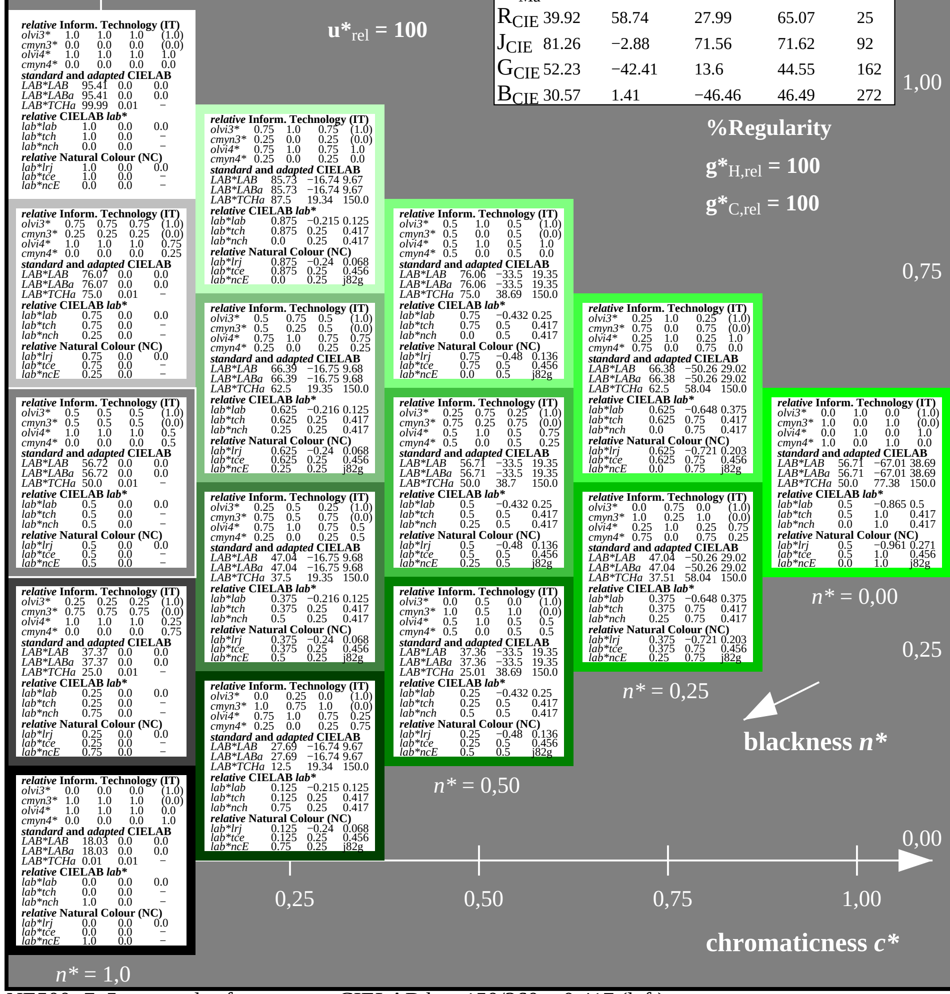


%Gamut
$u^*_{rel} = 100$

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

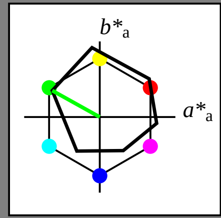
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

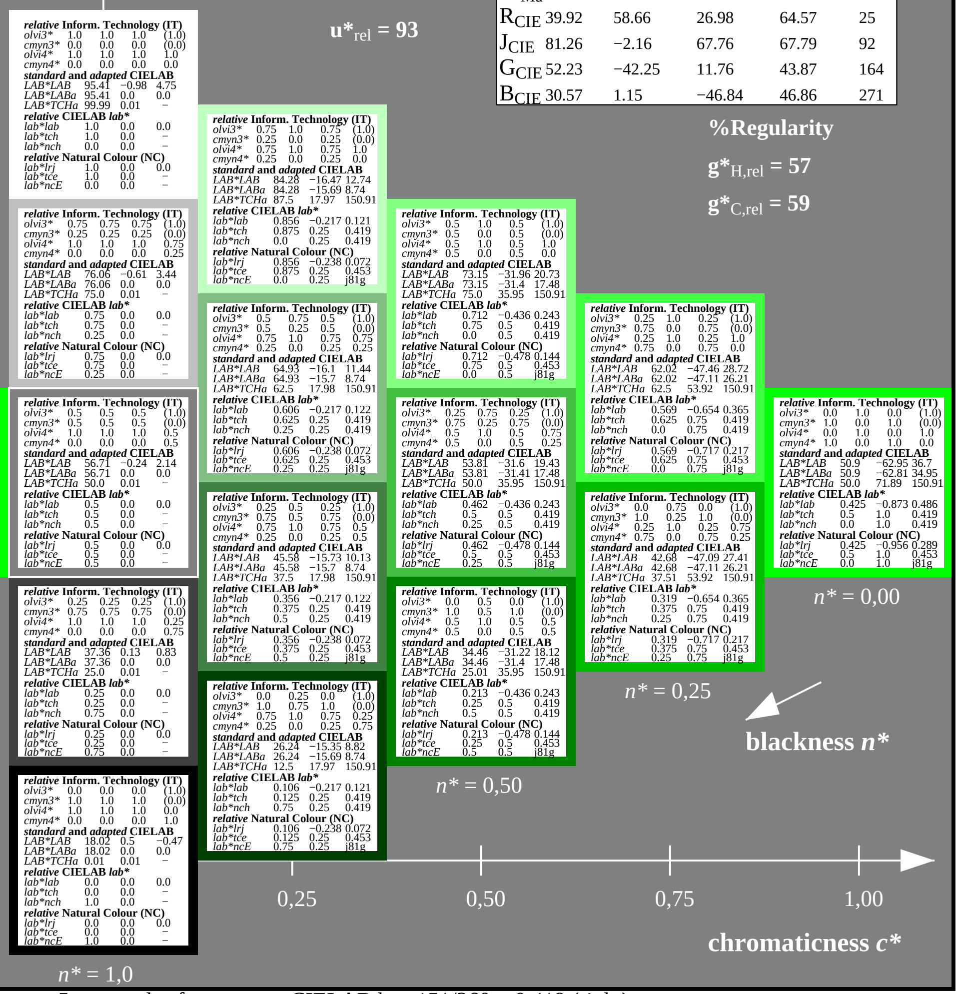


%Gamut
$u^*_{rel} = 93$

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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$

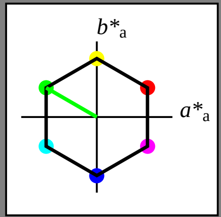


NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)   5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

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^*

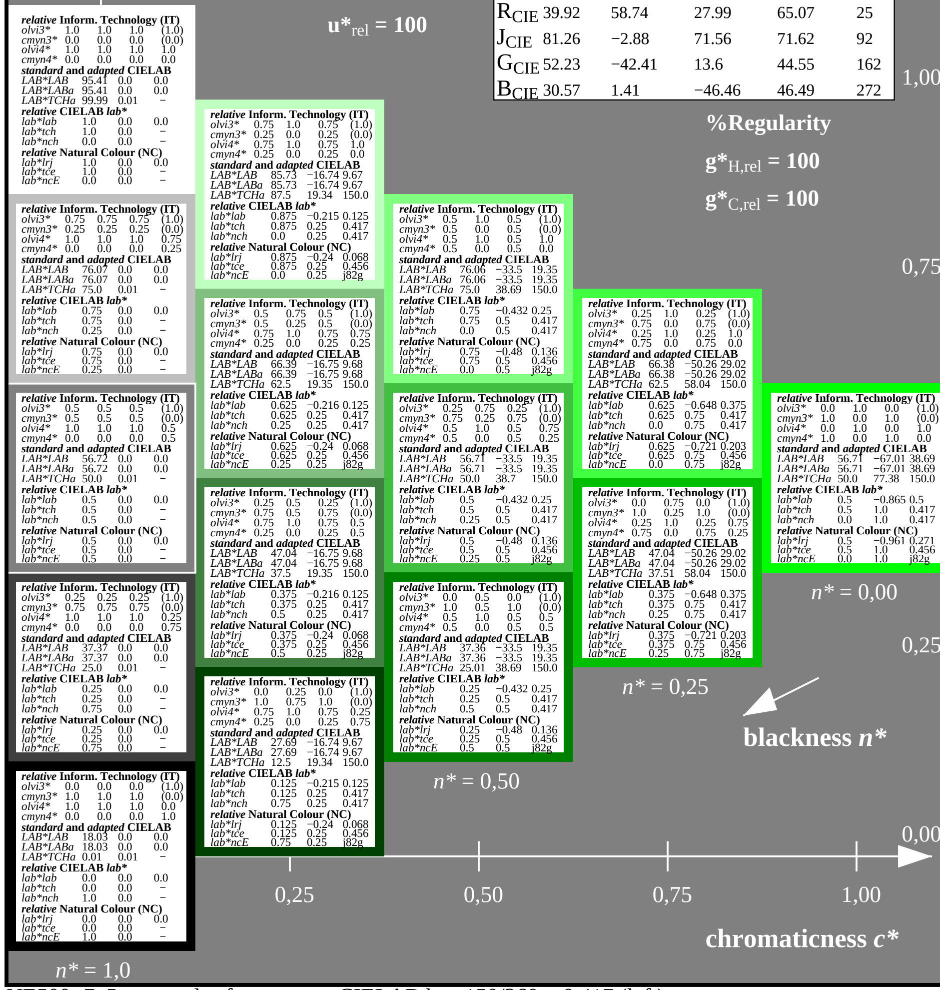


%Gamut
$u^*_{rel} = 100$

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

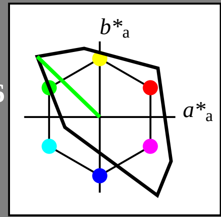
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

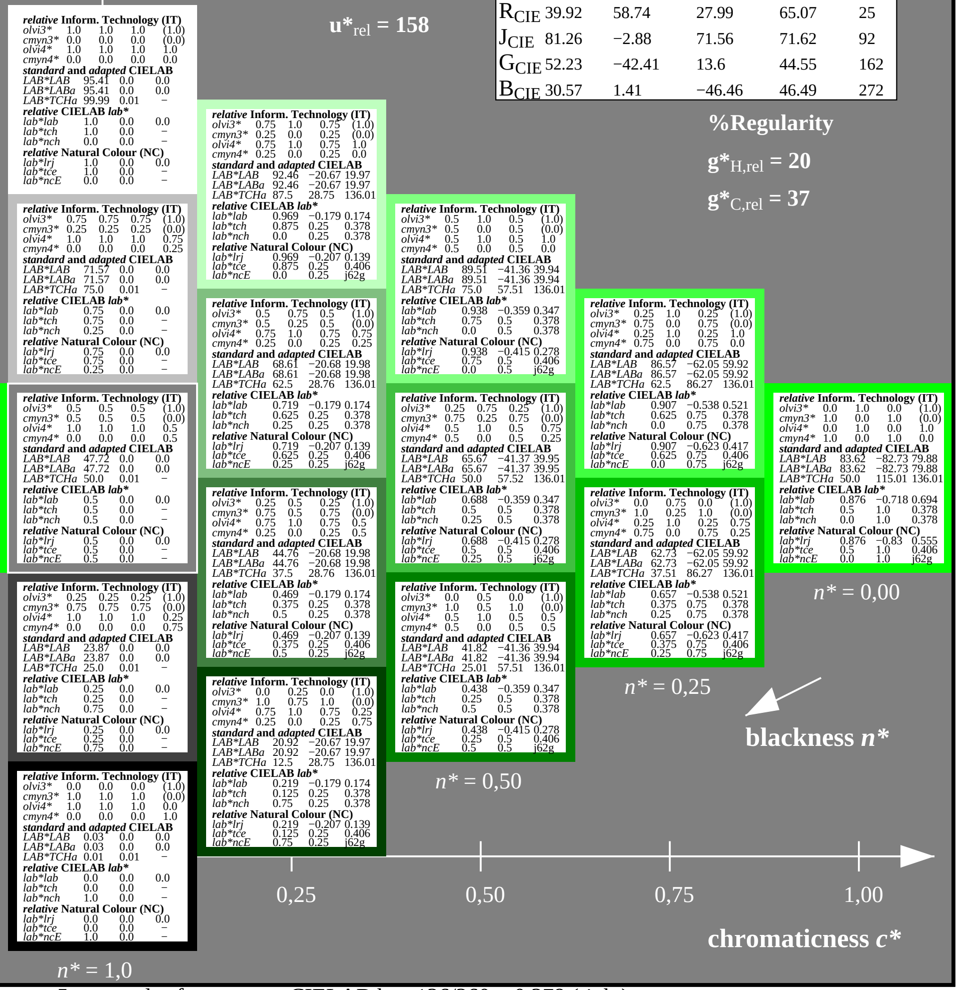


%Gamut
$u^*_{rel} = 158$

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

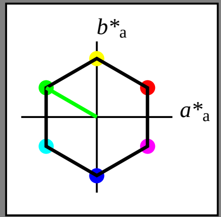
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

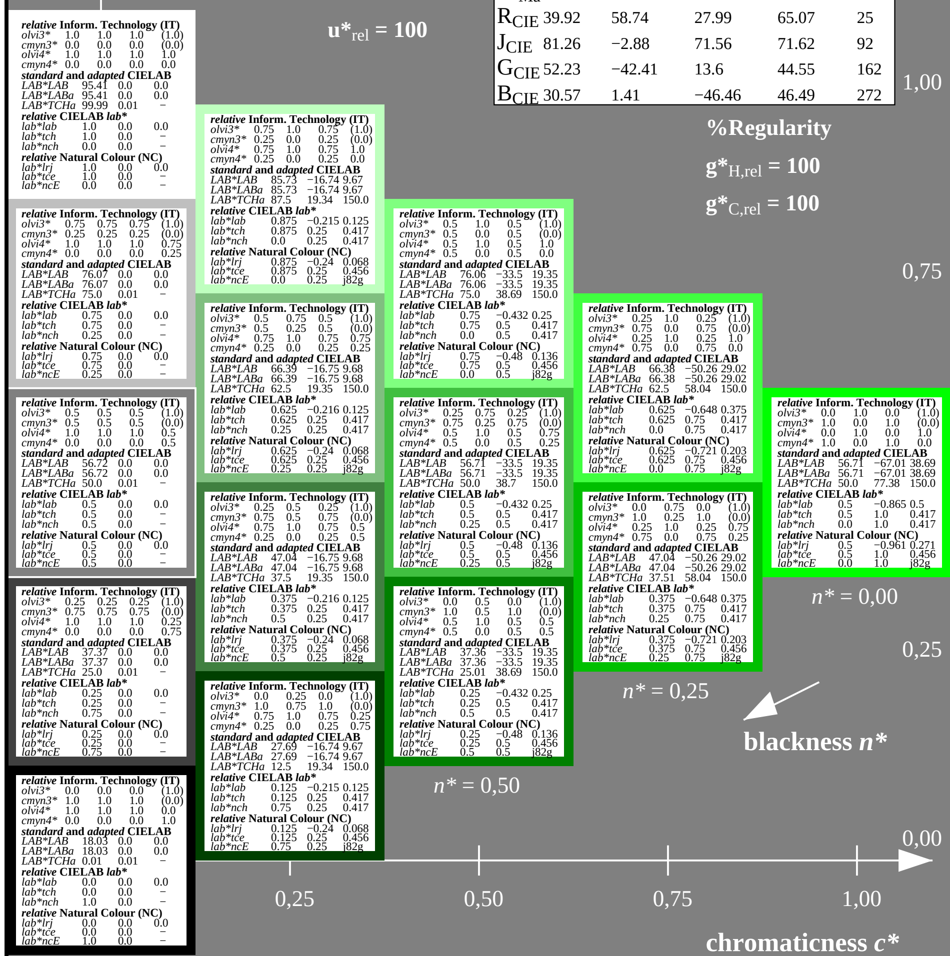
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 158/360 = 0.439$

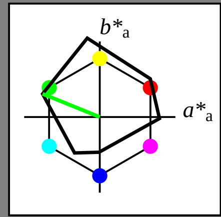
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 48 82 158

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

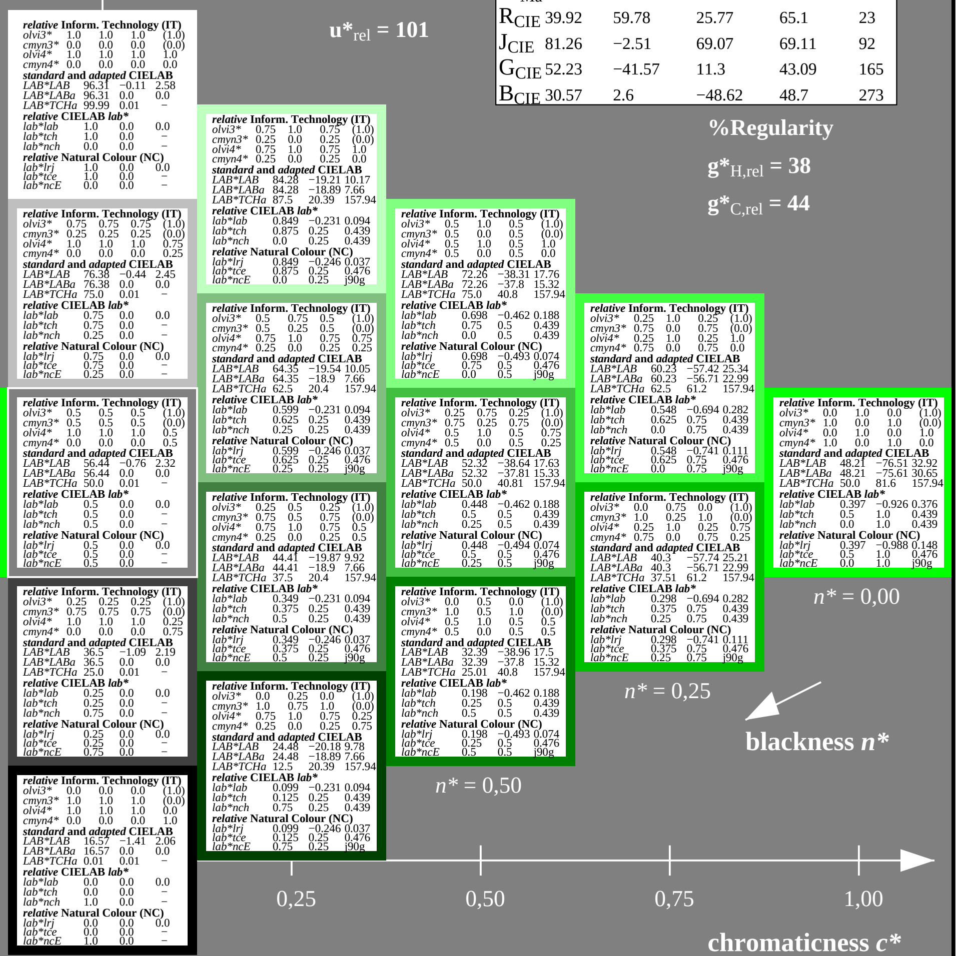
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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**

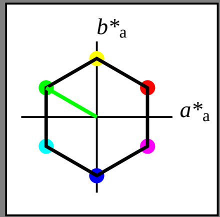
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

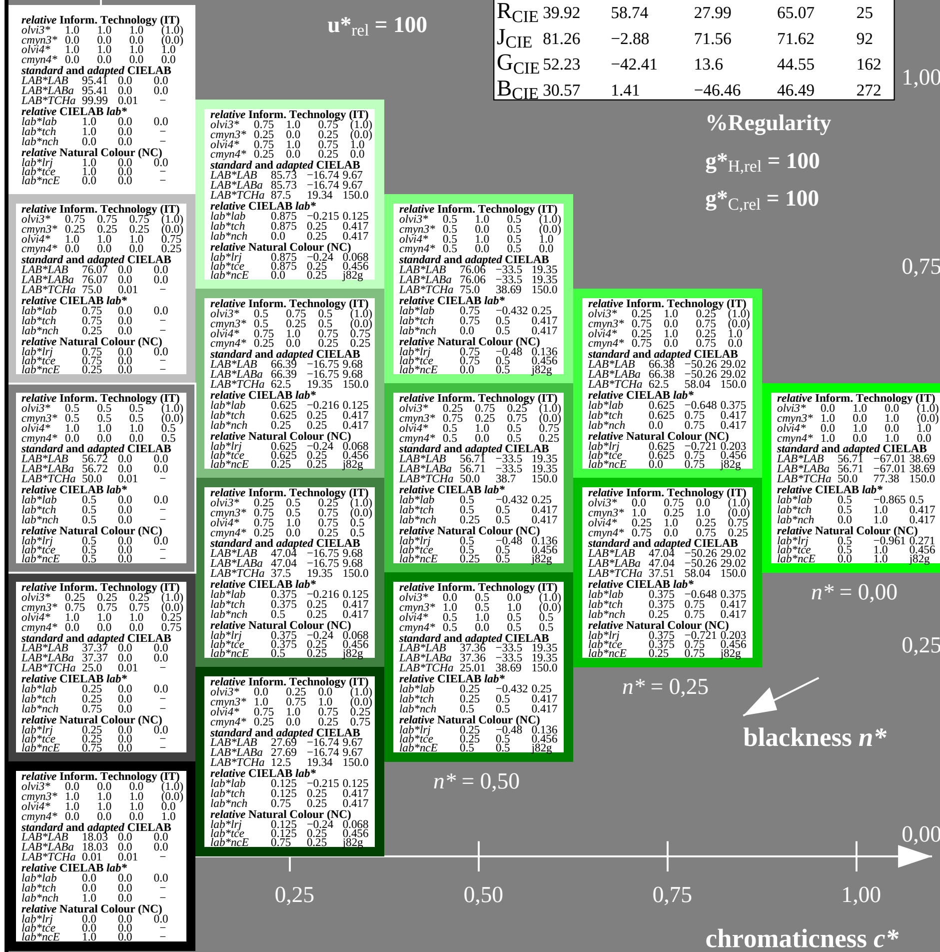
u^*_{rel} = 100

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* = 137/360 = 0.38**

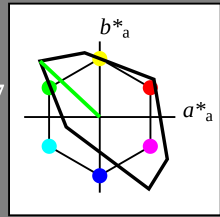
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

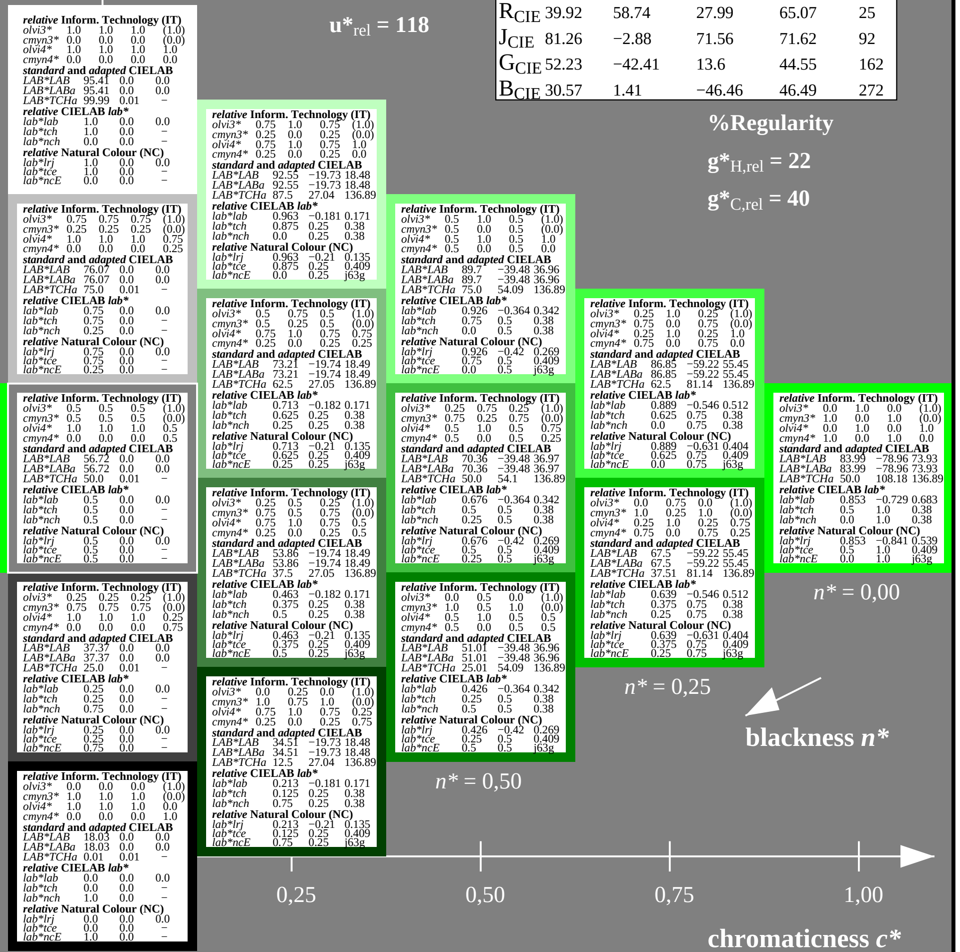
u^*_{rel} = 118

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



NE500−7, 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

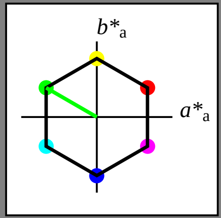
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

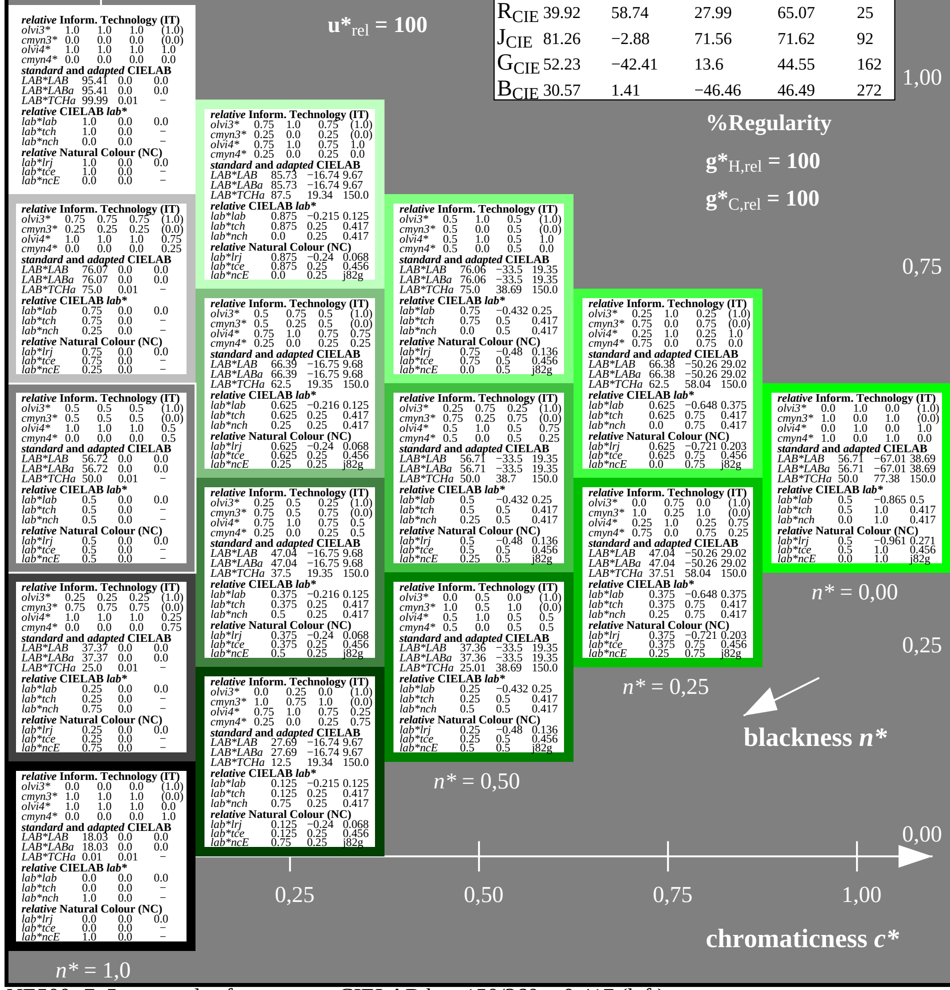
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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

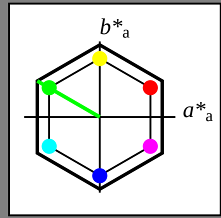
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

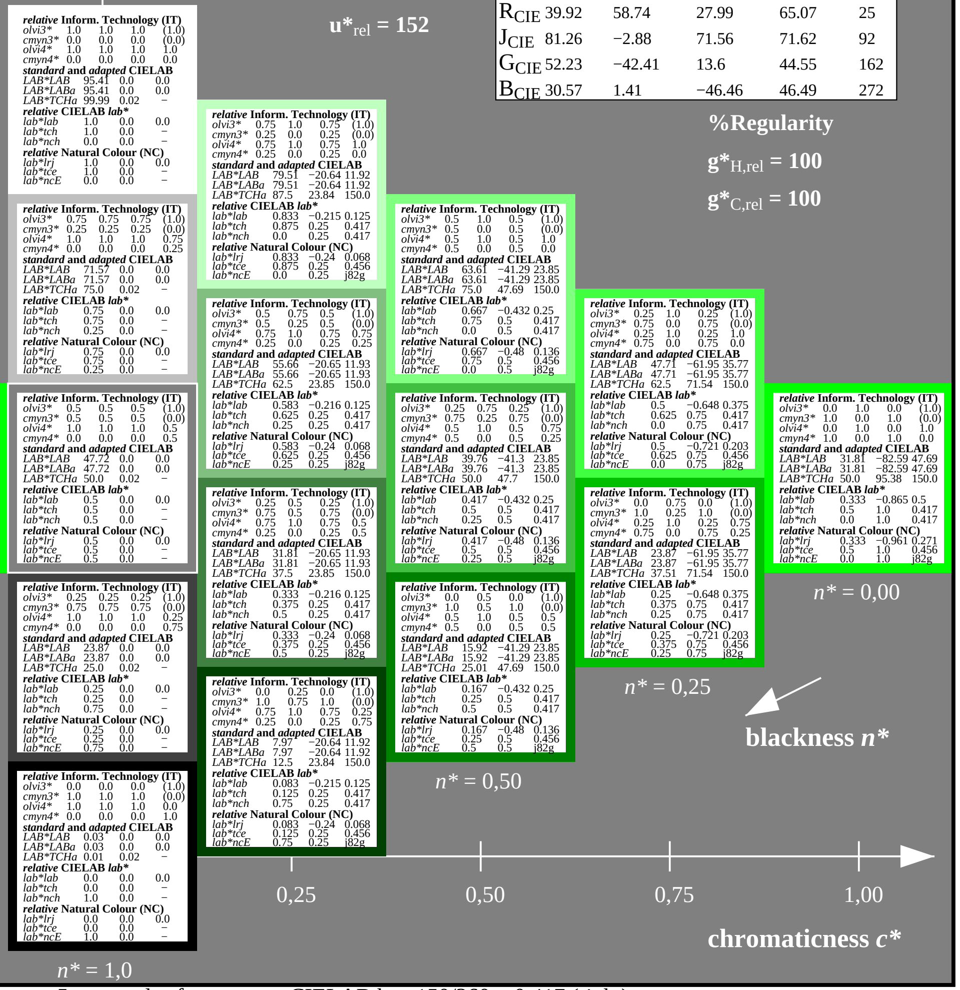
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

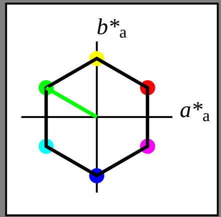


5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

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*

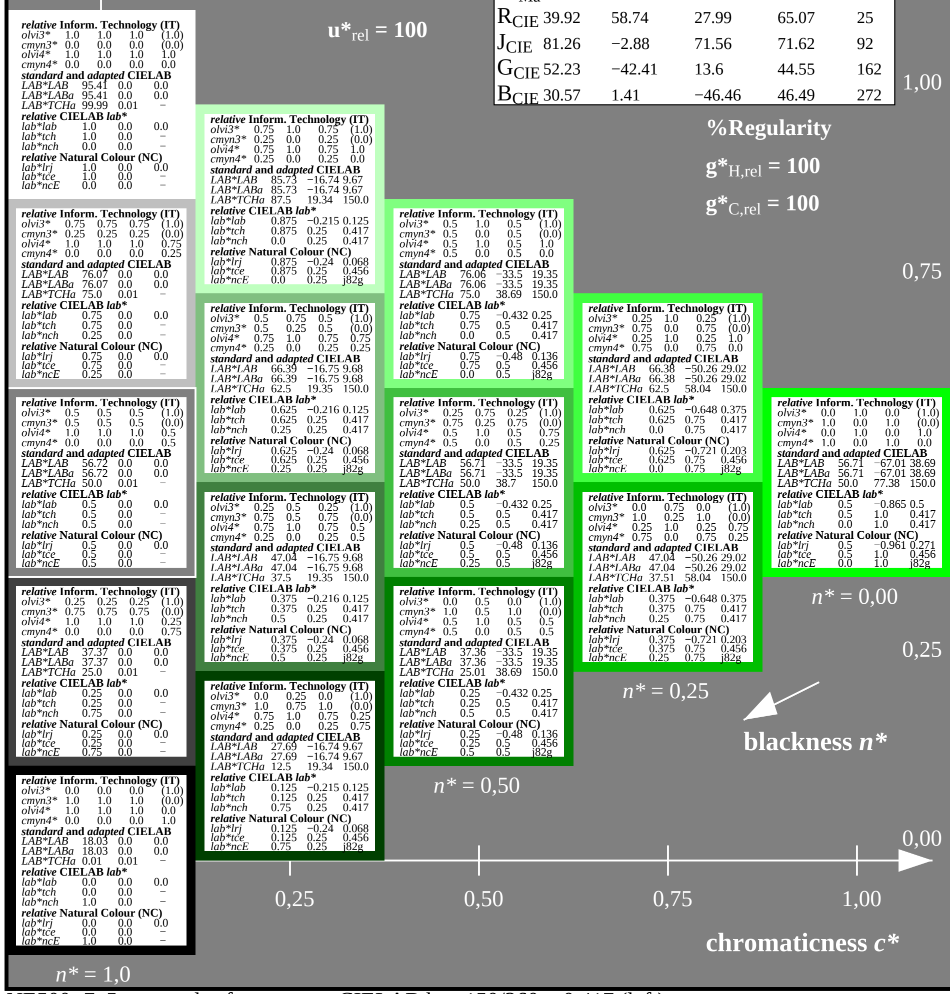


%Gamut
u^*_{rel} = 100

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

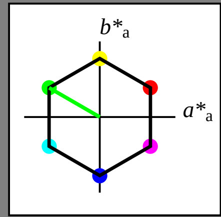
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

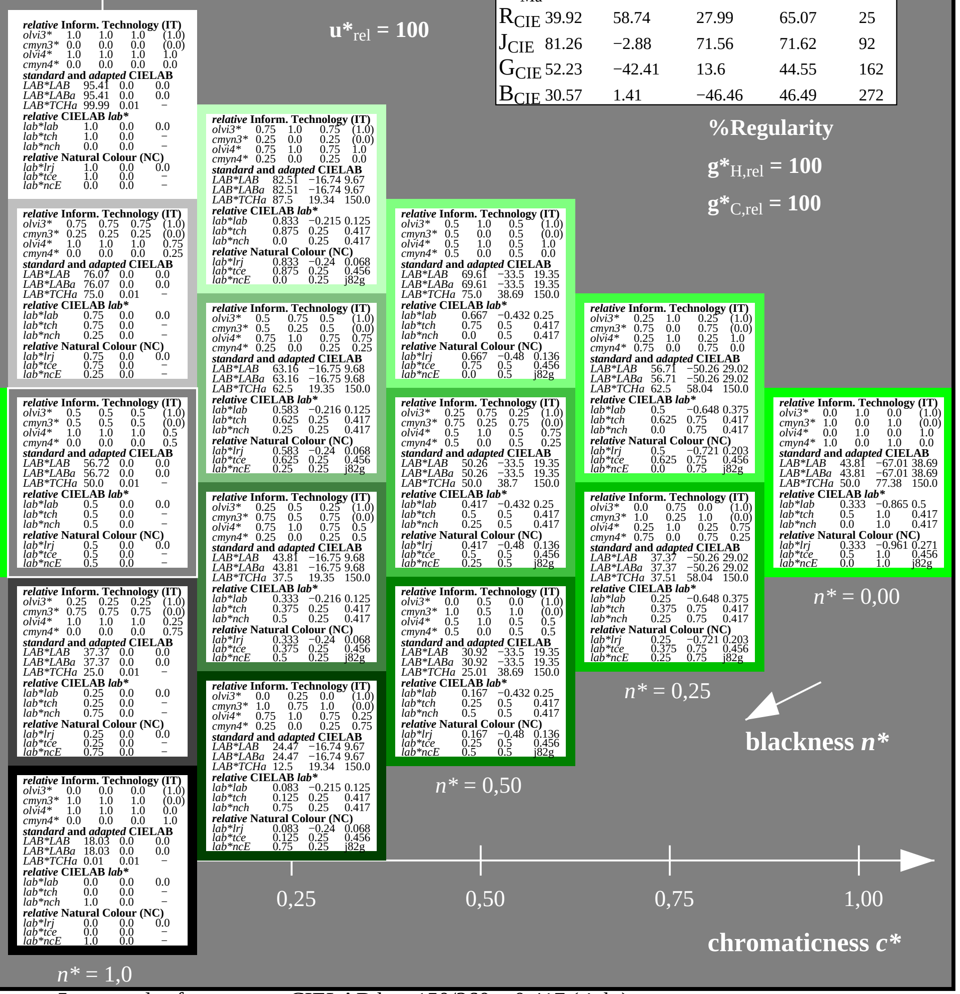


%Gamut
u^*_{rel} = 100

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



NE500−7, 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 $h^* = lab^*h = 150/360 = 0.417$

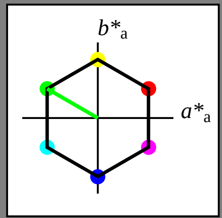
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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

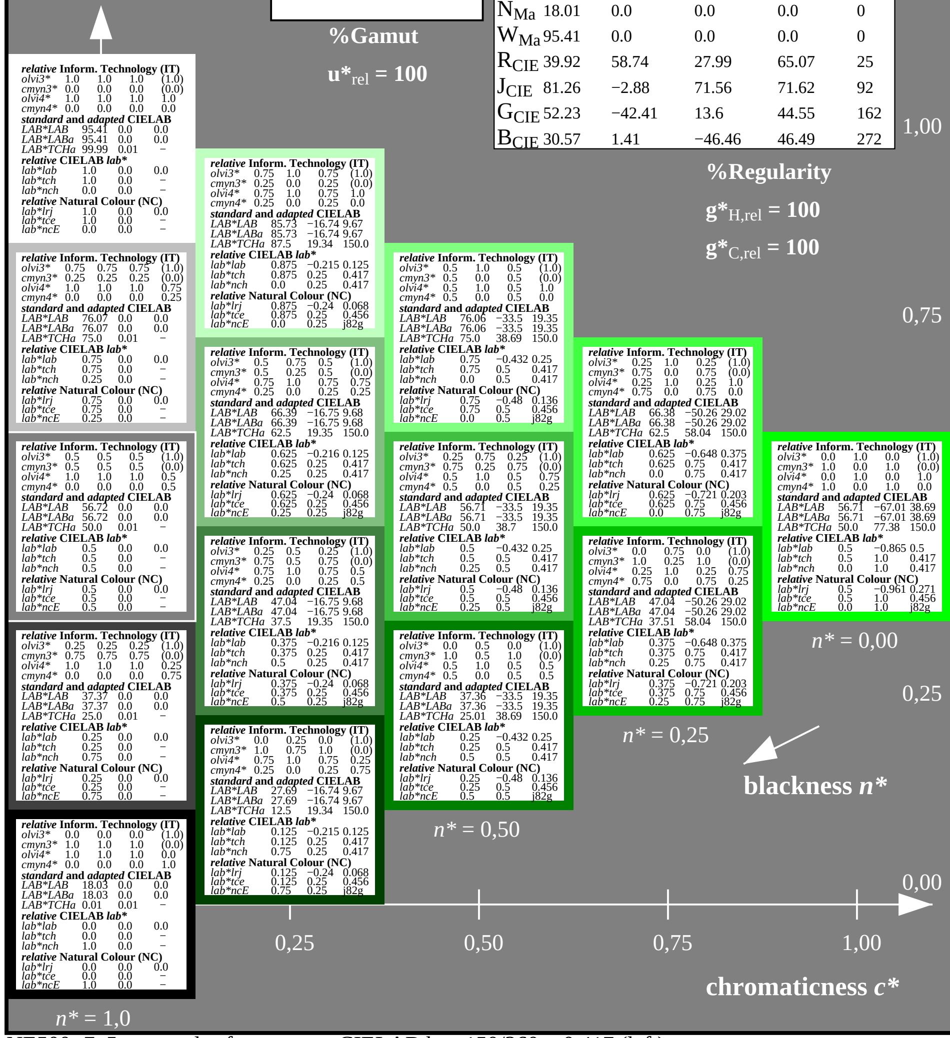
%Gamut

$u^*_{rel} = 100$

%Regularity

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$

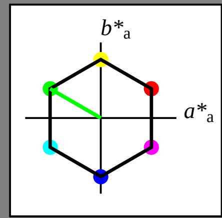
lab*tch* and *lab*nch

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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

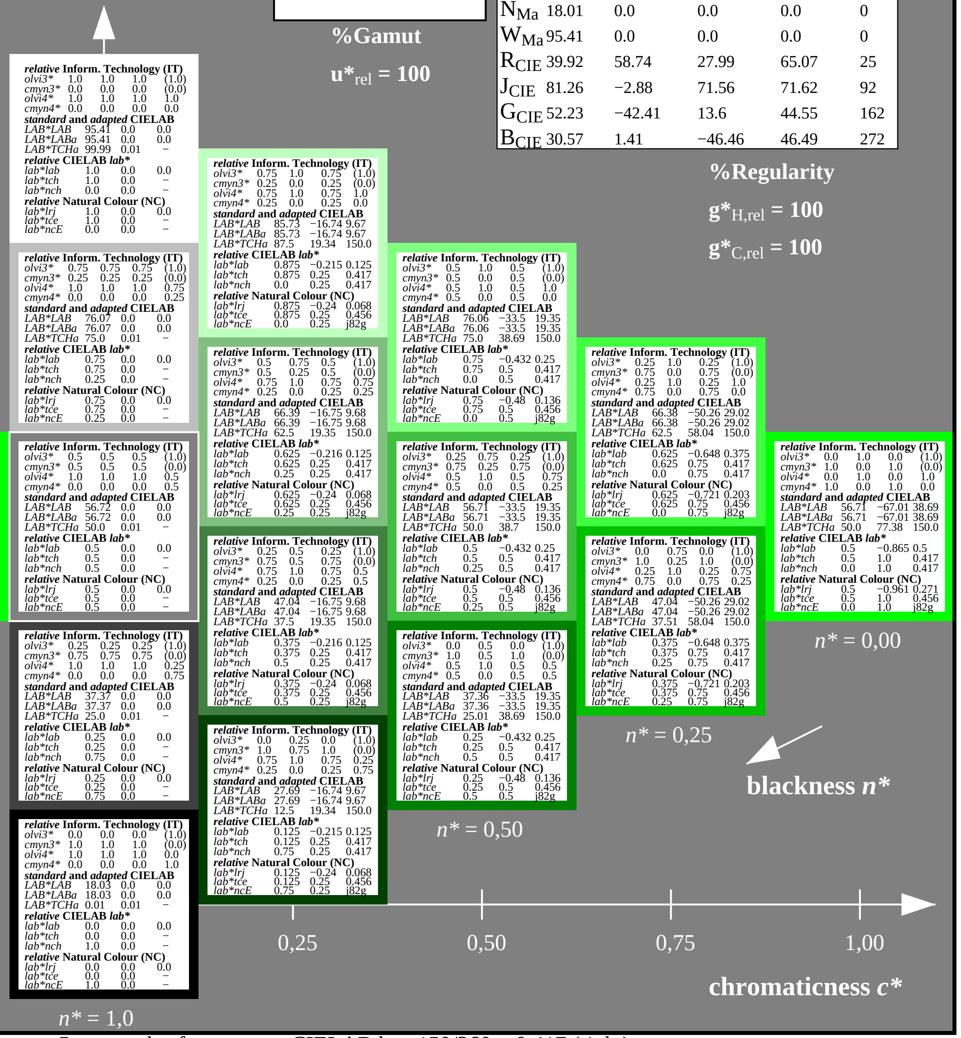
%Gamut

$u^*_{rel} = 100$

%Regularity

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

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



NE500−7, 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 $h^* = lab^*h = 150/360 = 0.417$

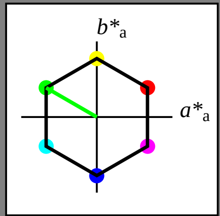
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 57 77 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

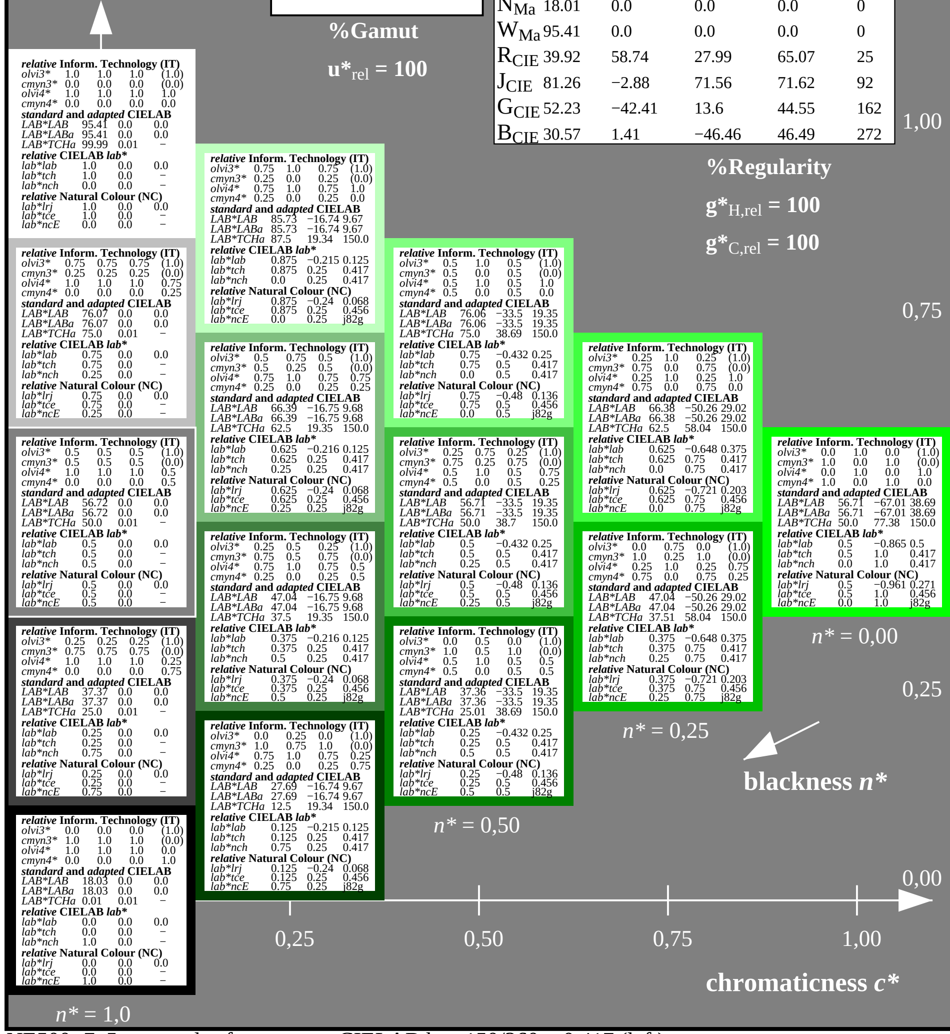
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 142/360 = 0.395$

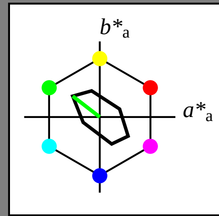
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

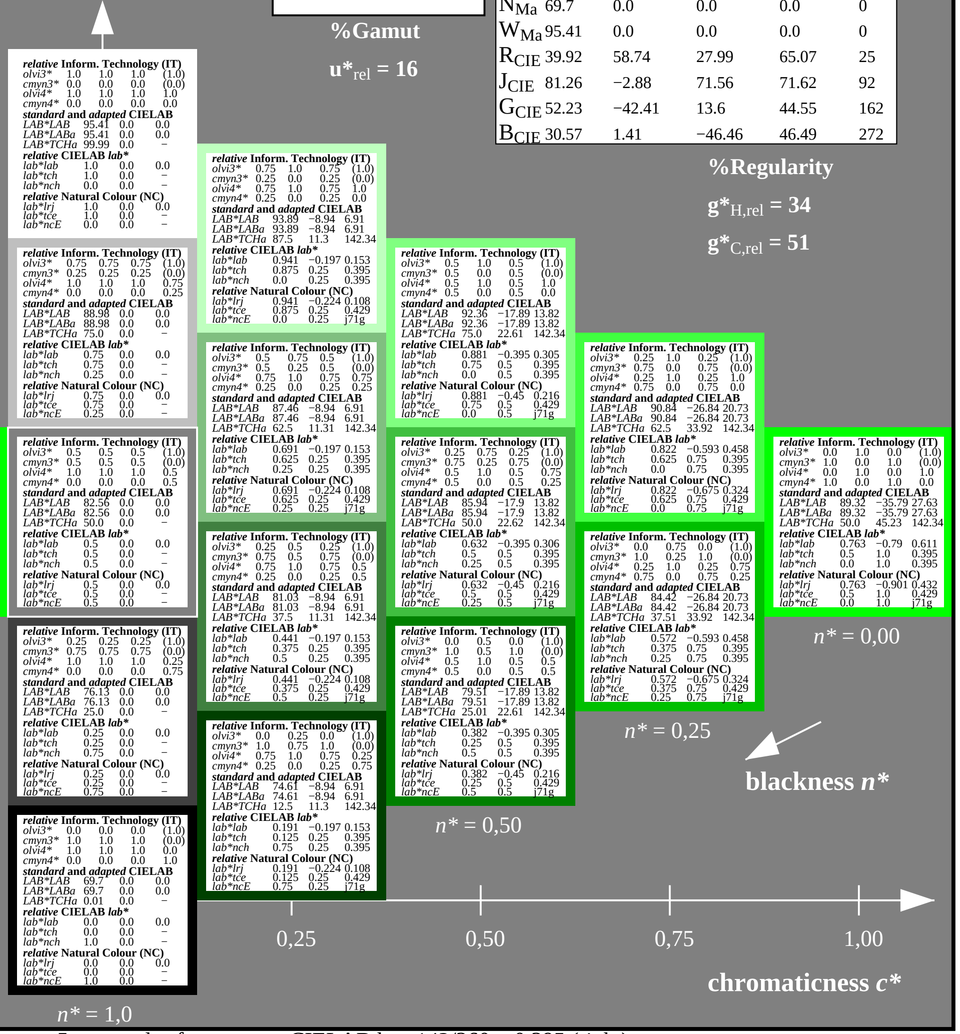
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



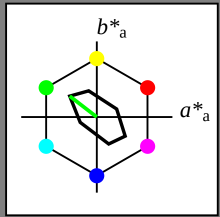
NE500−7, 5 step scales for constant CIELAB hue 150/360 = 0.417 (left)

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

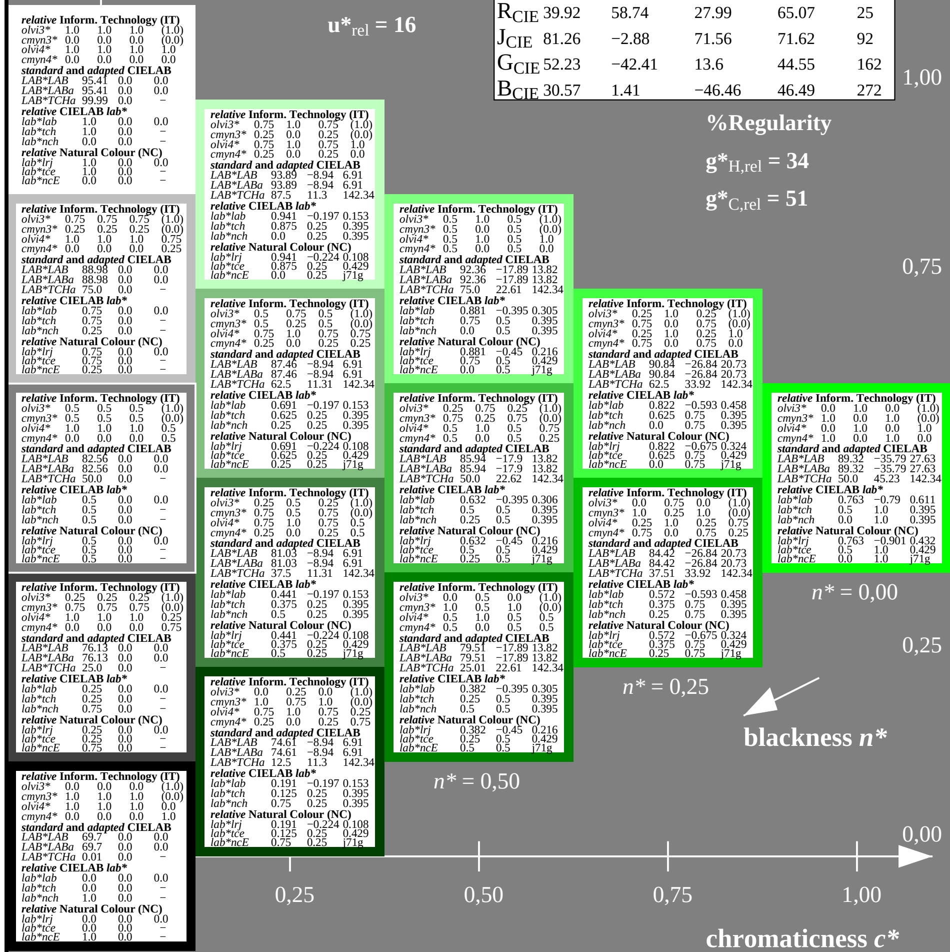
triangle lightness *t**



%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

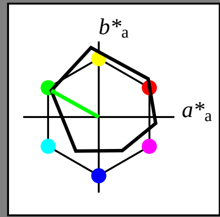
%Regularity
g*H,rel = 34
g*C,rel = 51



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

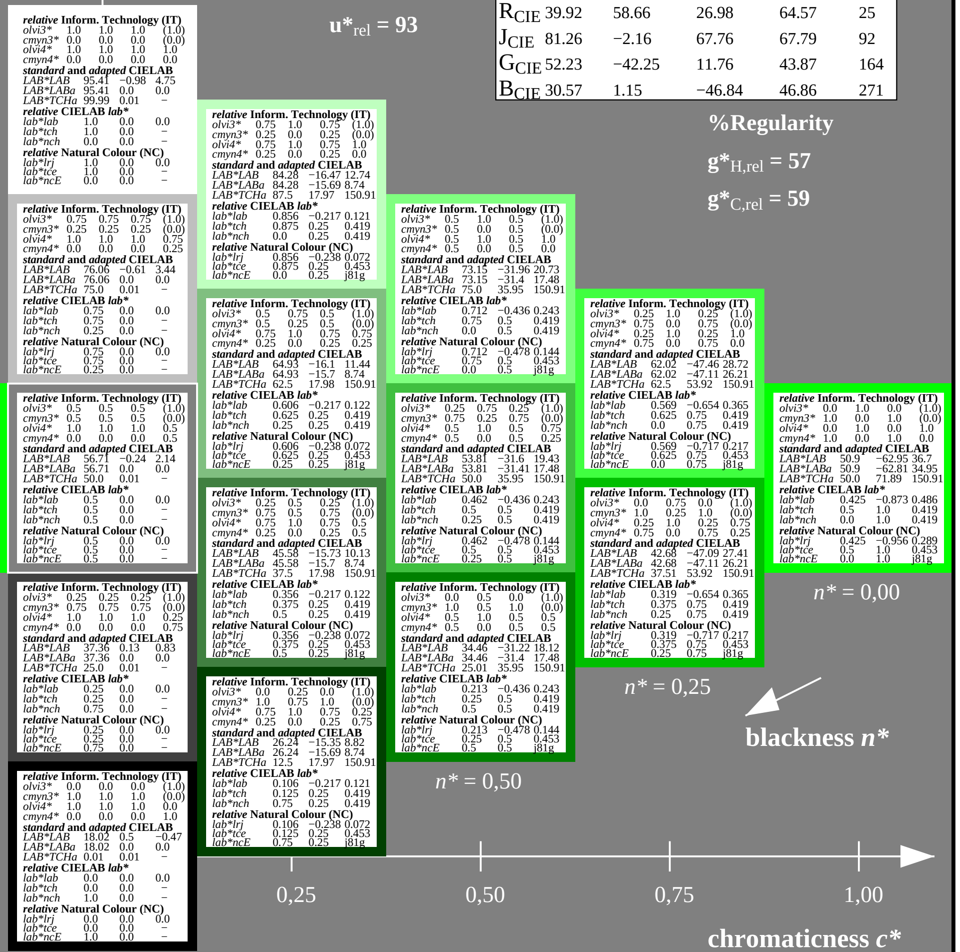
triangle lightness *t**



%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

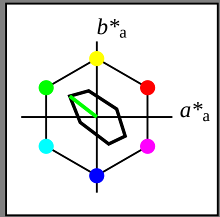


NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left) 5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

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

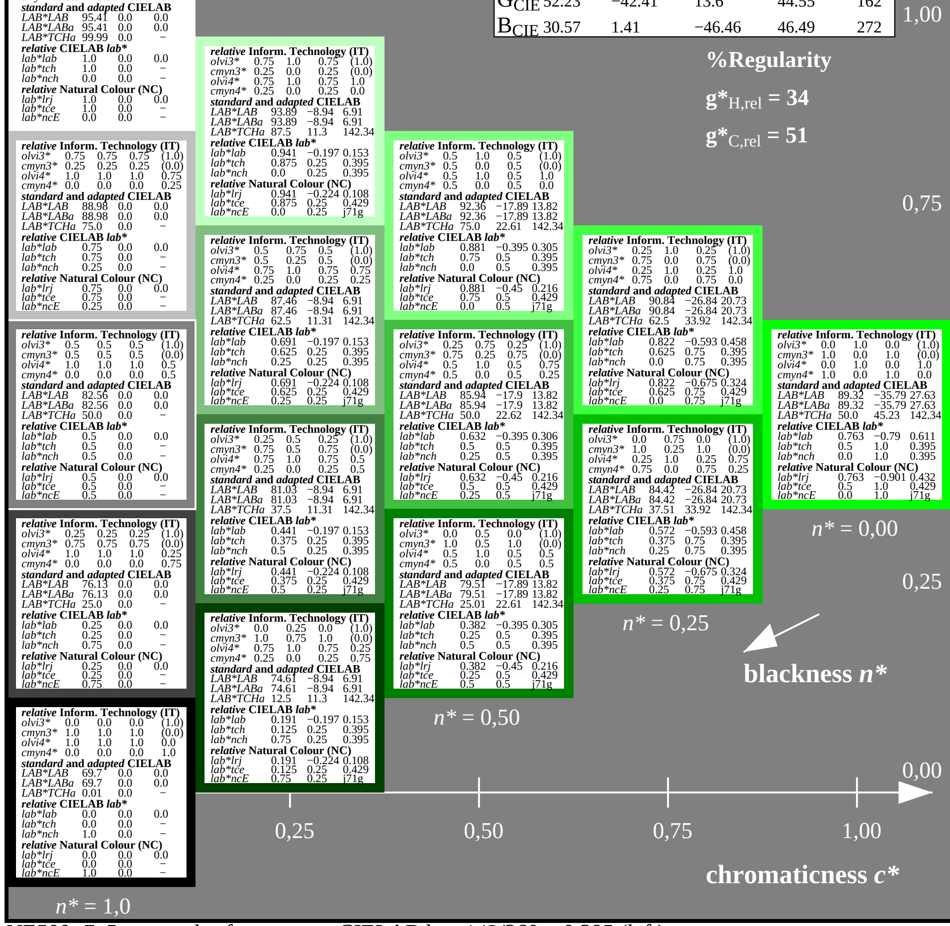
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

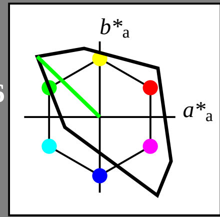
g*C,rel = 51



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

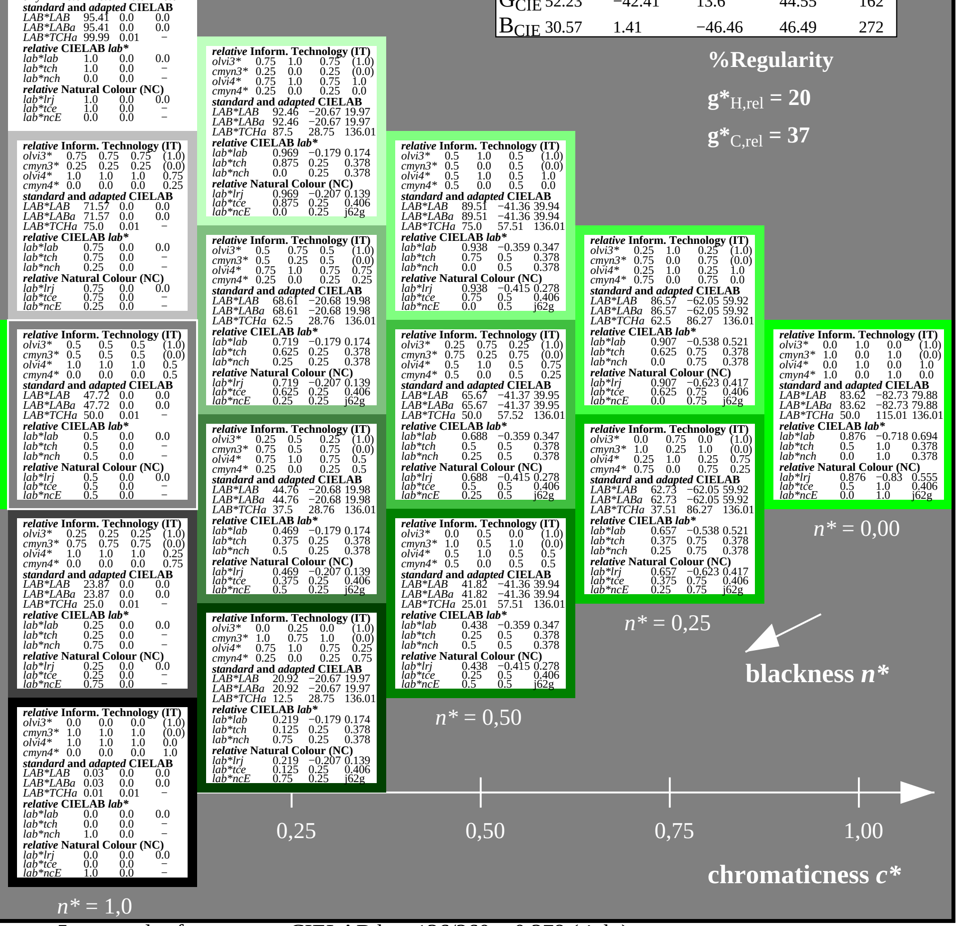
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



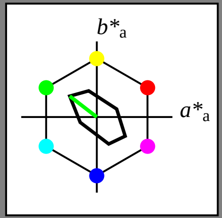
NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

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^*

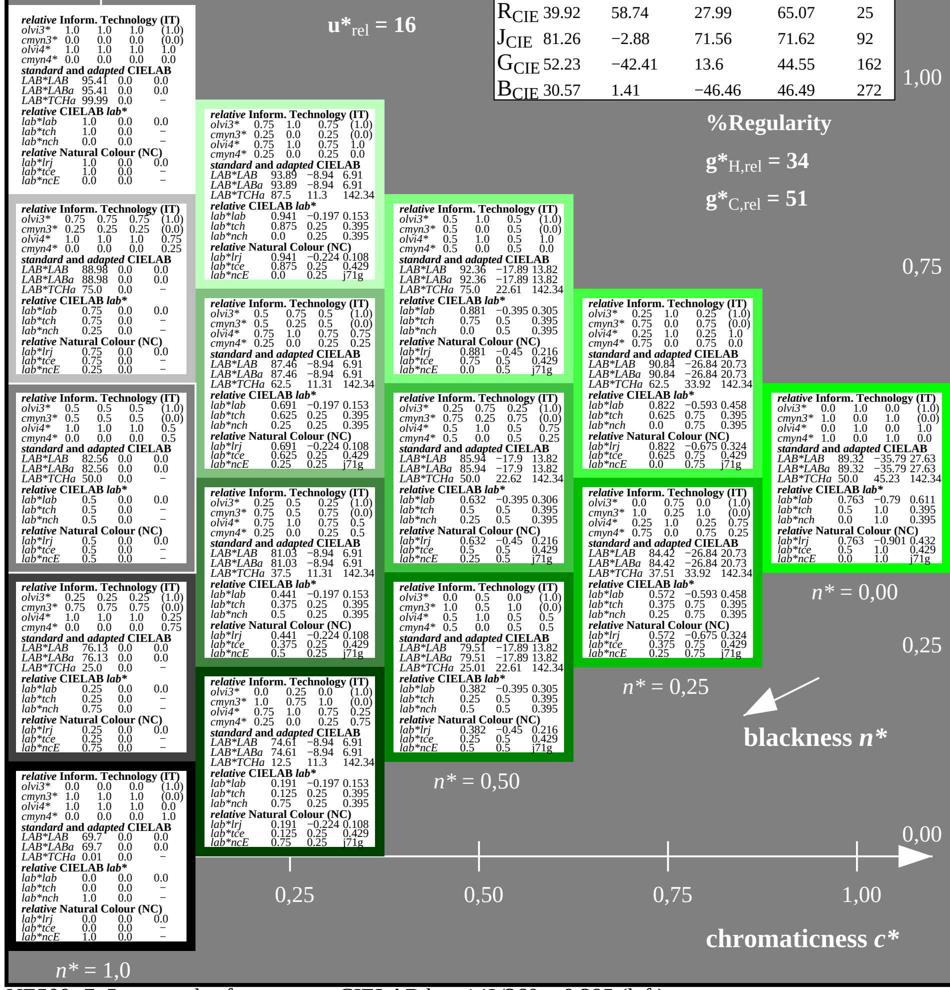


%Gamut
u^*_{rel} = 16

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

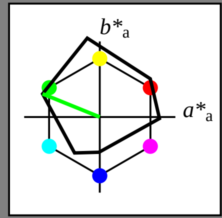
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



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^*

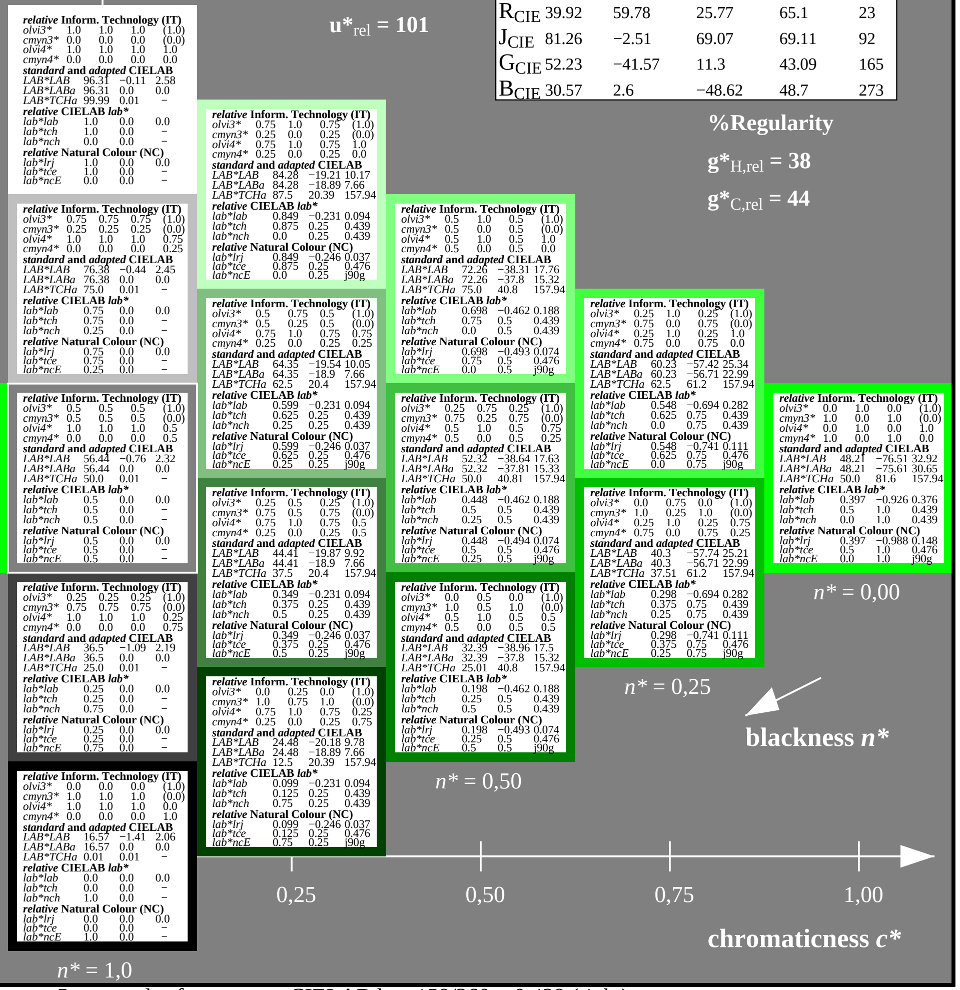


%Gamut
u^*_{rel} = 101

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



NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

5 step scales for constant CIELAB hue 158/360 = 0.439 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$

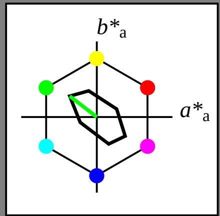
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

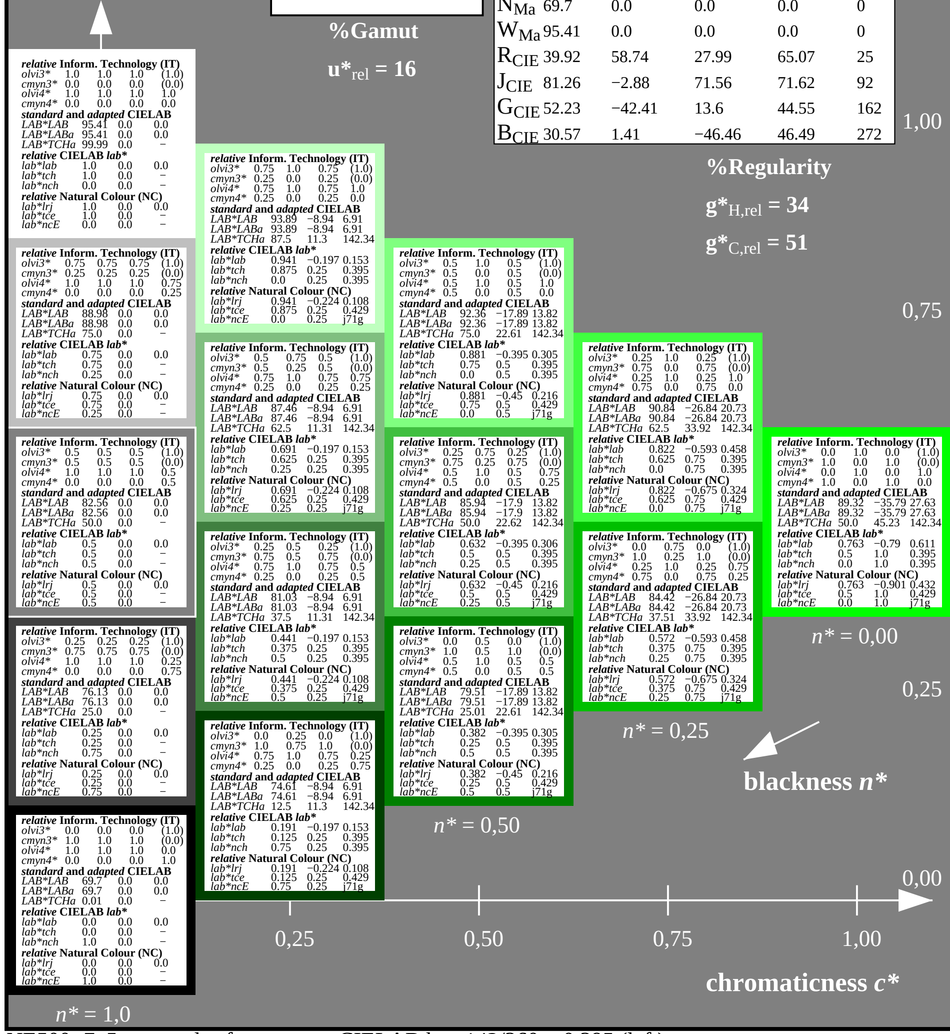
$u^*_{rel} = 16$

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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$

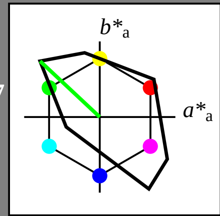
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

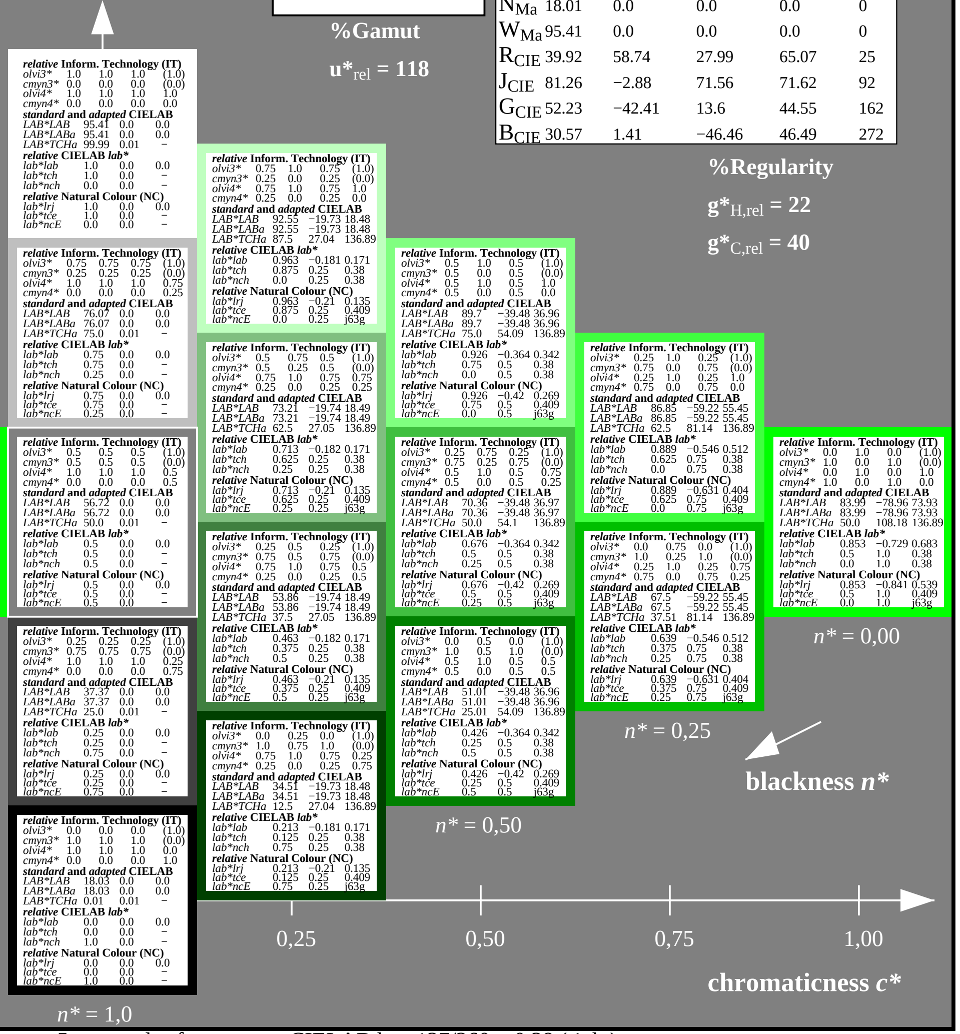
$u^*_{rel} = 118$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 142/360 = 0.395$

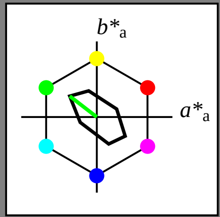
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 89 45 142

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*

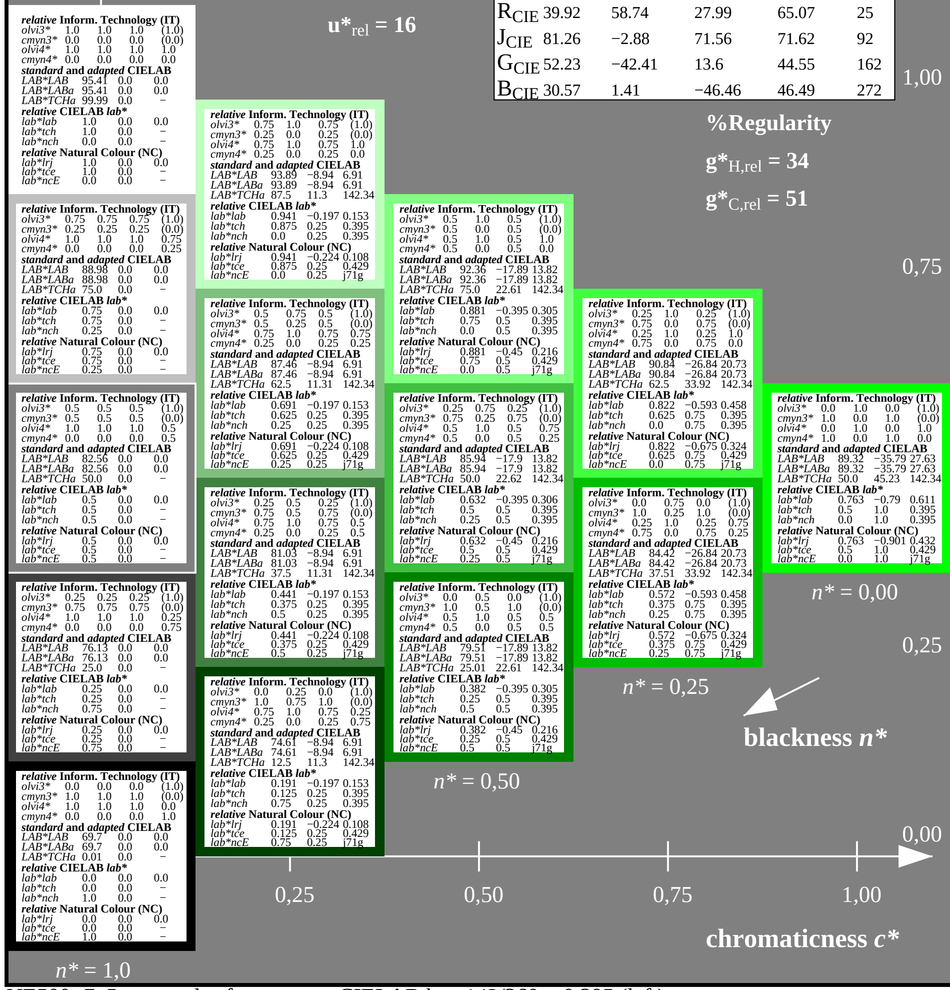


%Gamut

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 150/360 = 0.417$

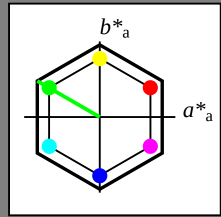
*lab*tch* and *lab*nch*

D65: hue L

LCH*Ma: 32 95 150

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*

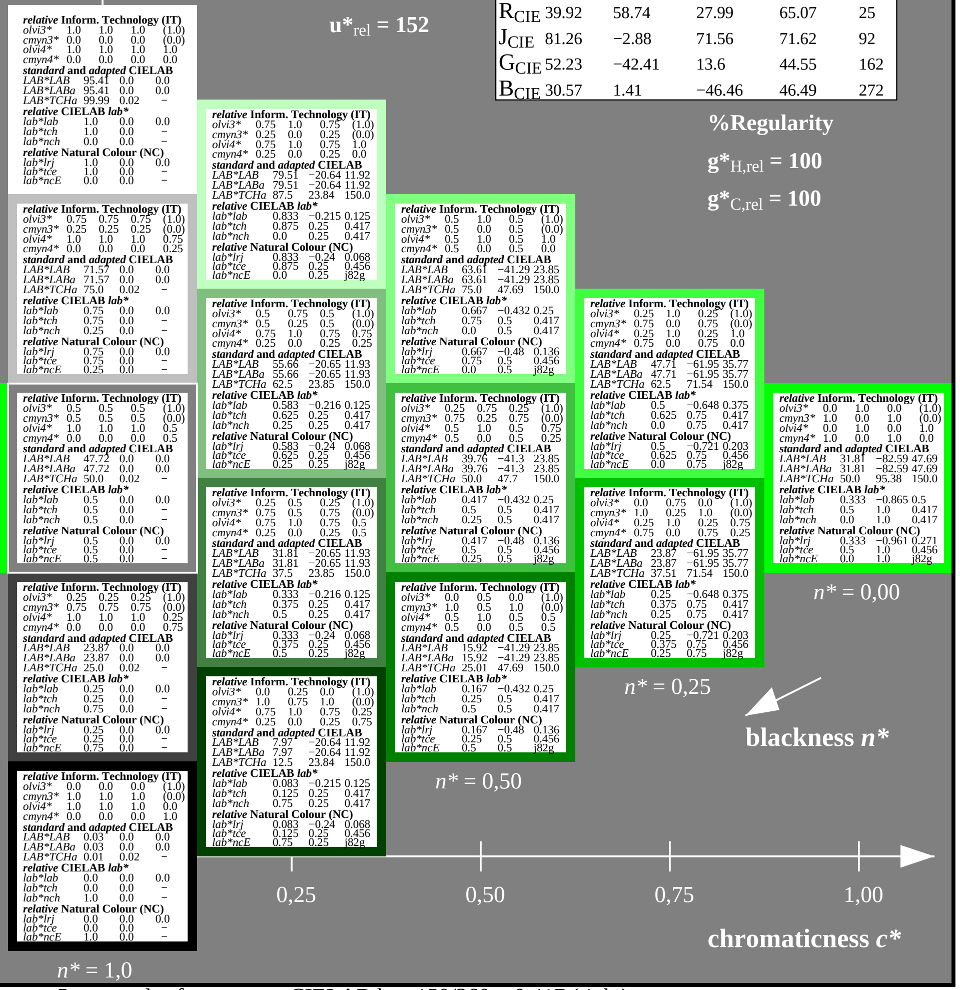


%Gamut

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

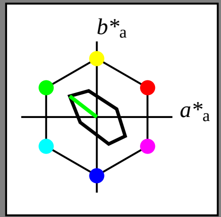


NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

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**

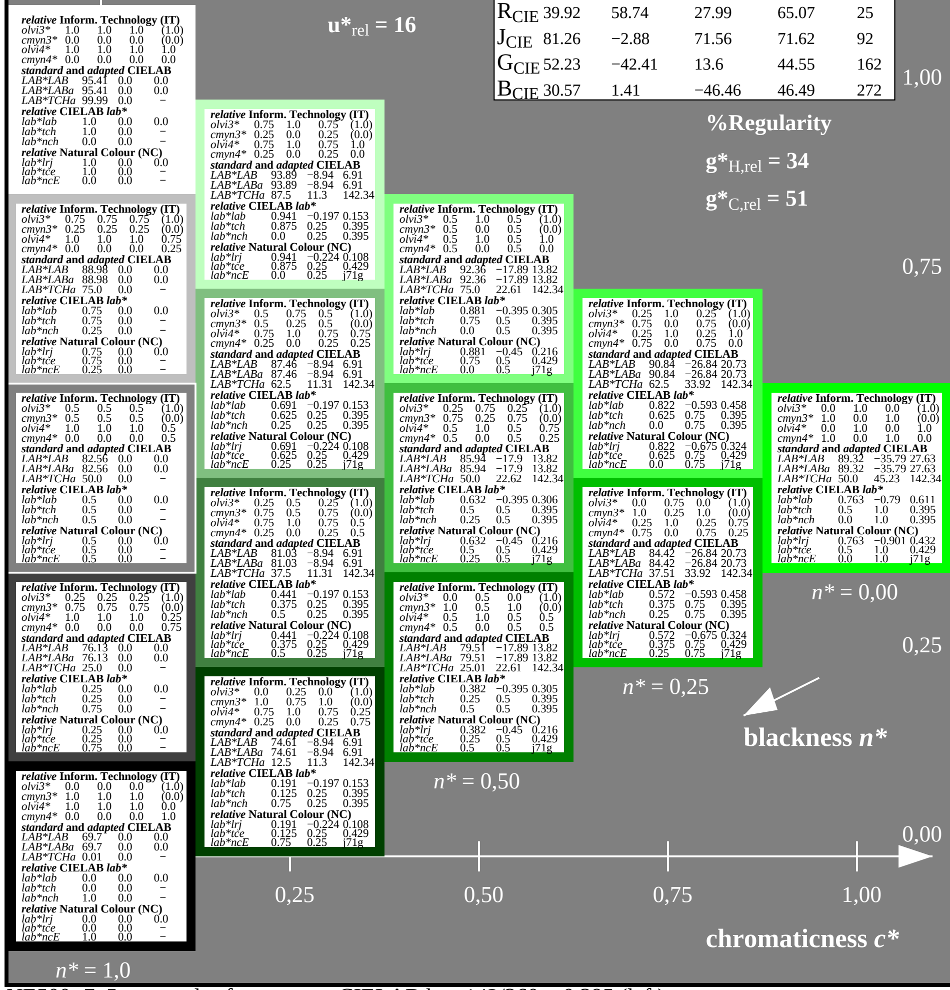


%Gamut
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

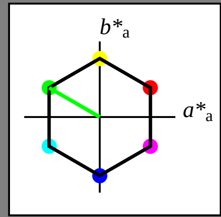
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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**

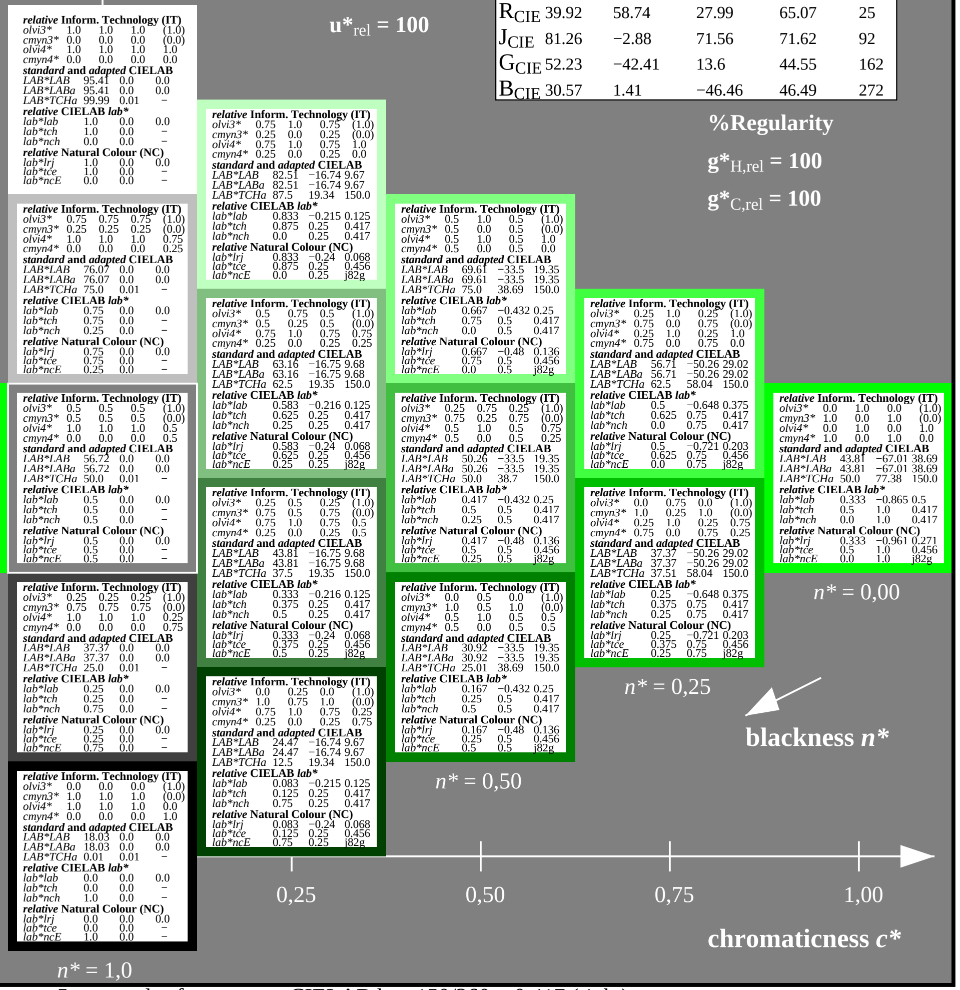


%Gamut
$u^*_{rel} = 100$

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

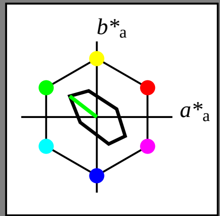


NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left) 5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

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

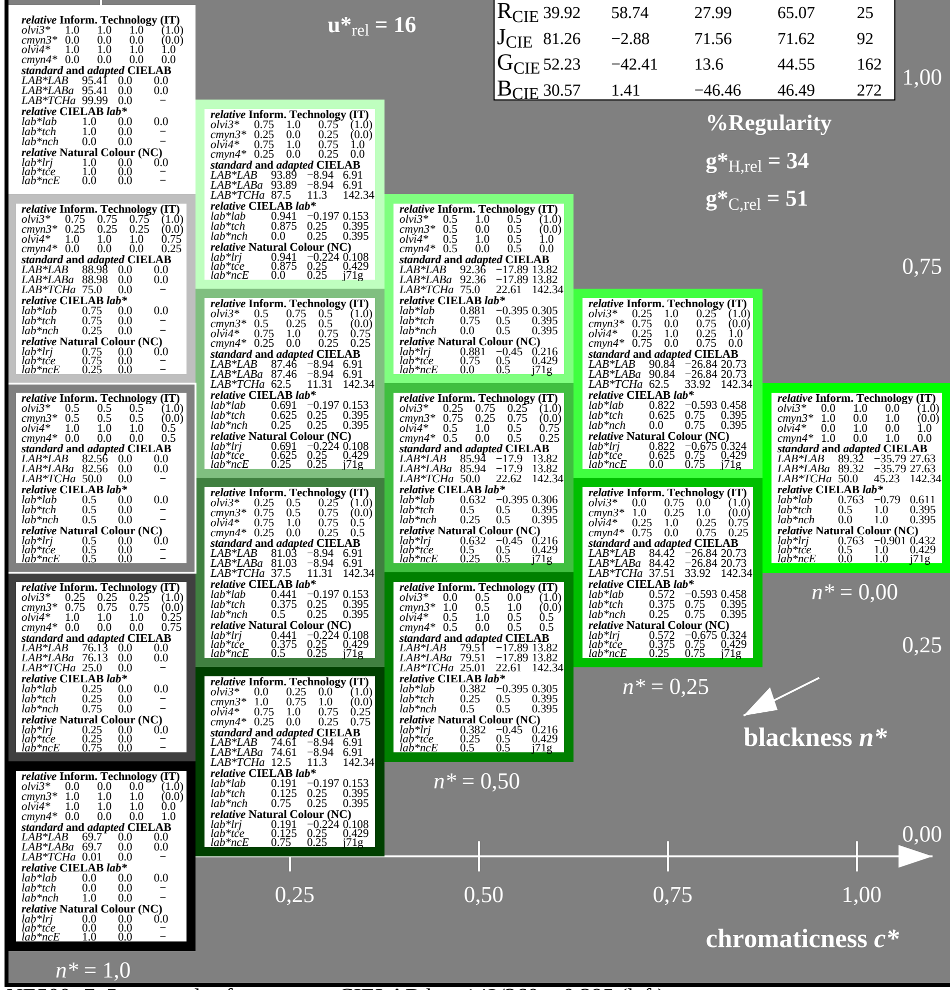
triangle lightness *t*



%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

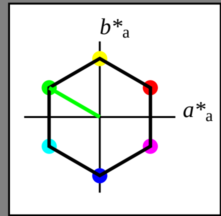
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



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

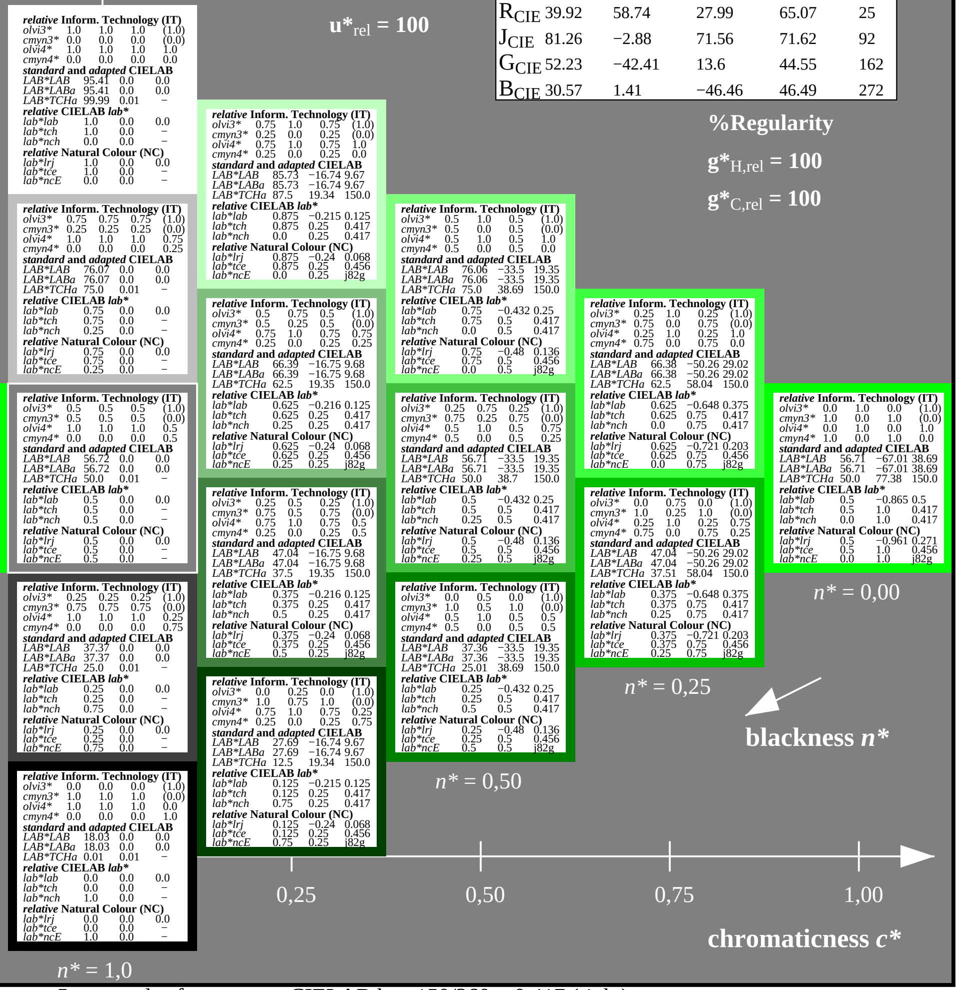
triangle lightness *t*



%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

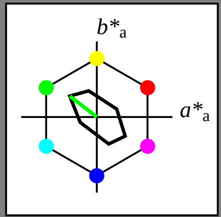


NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left) 5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

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

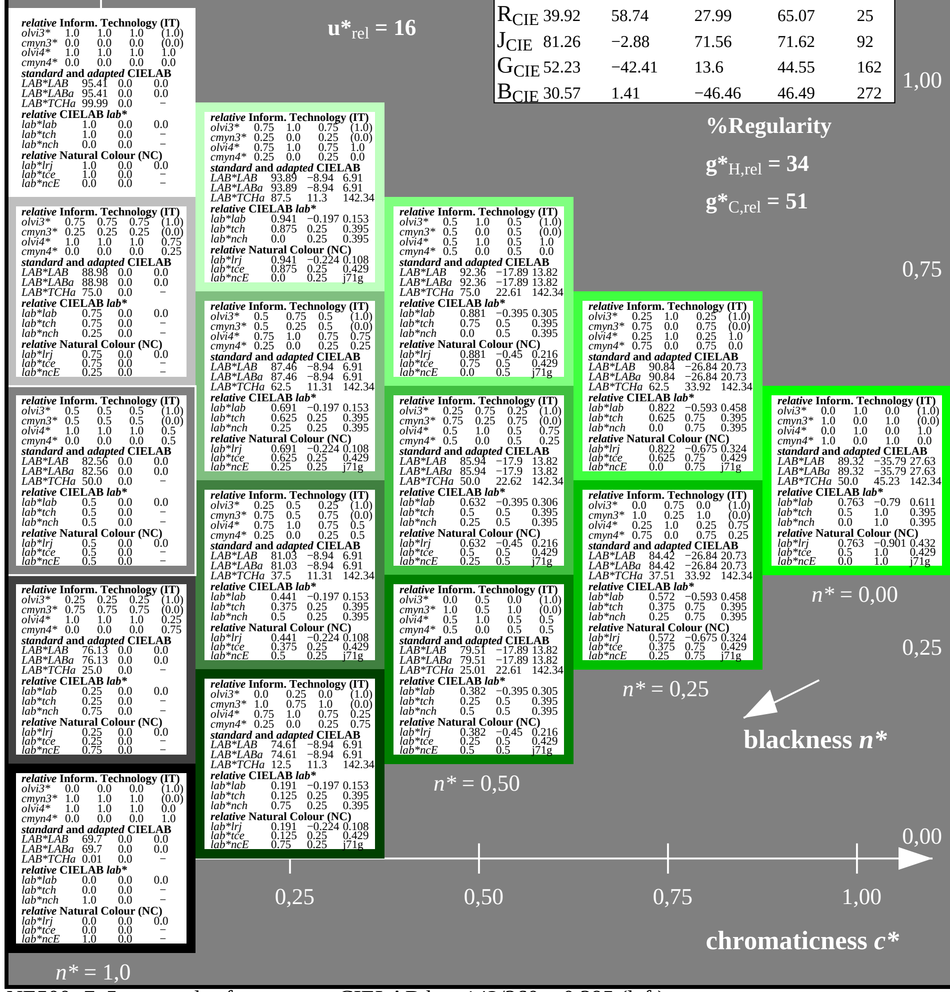
triangle lightness t^*



%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

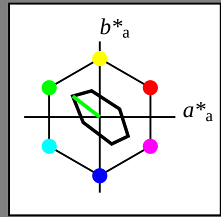
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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

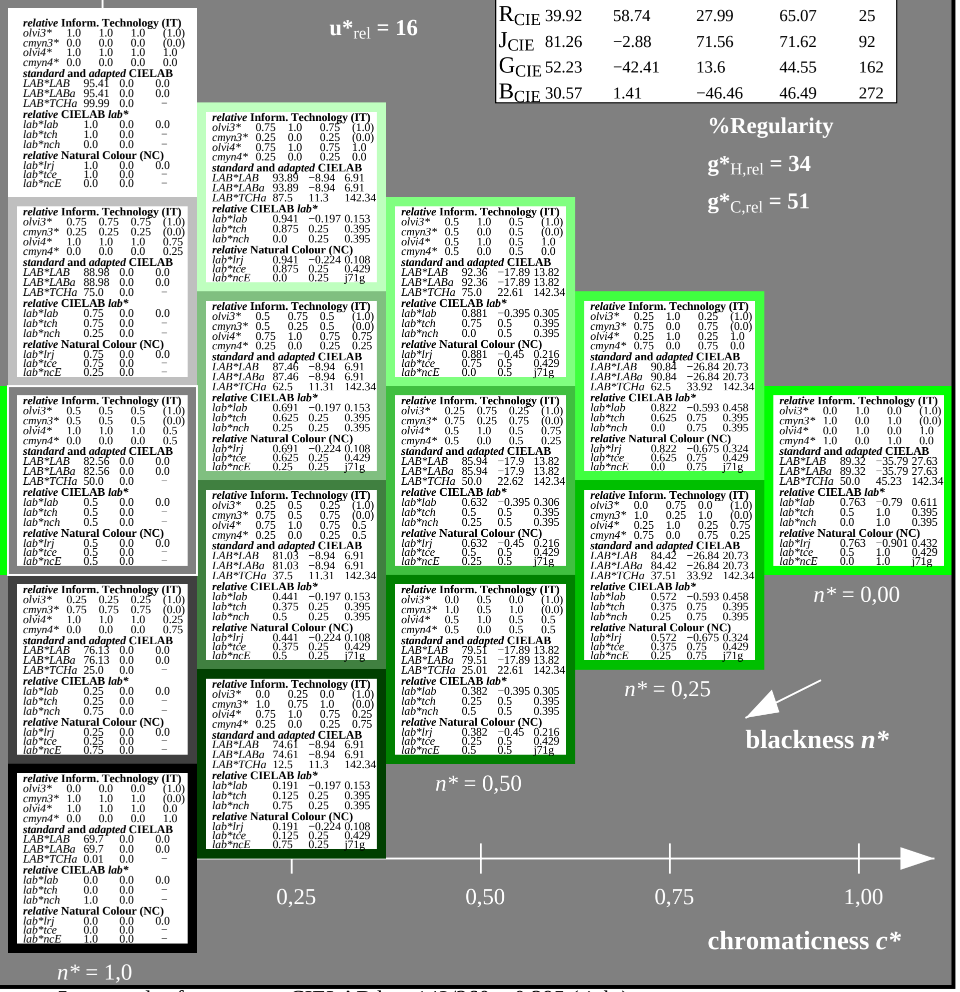
triangle lightness t^*



%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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



NE500−7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

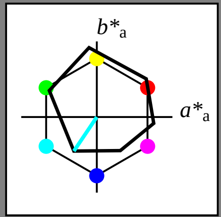
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

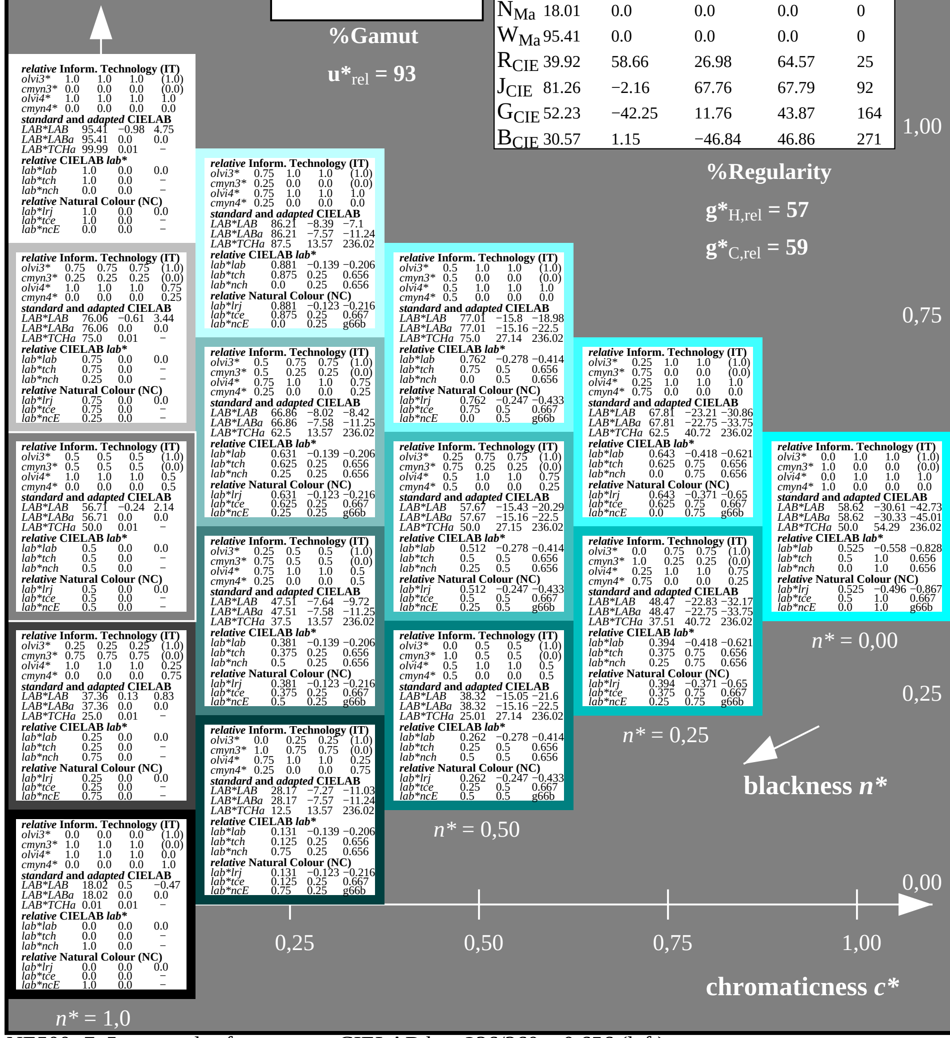
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

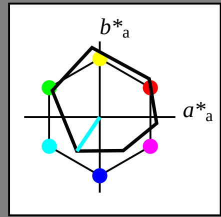
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

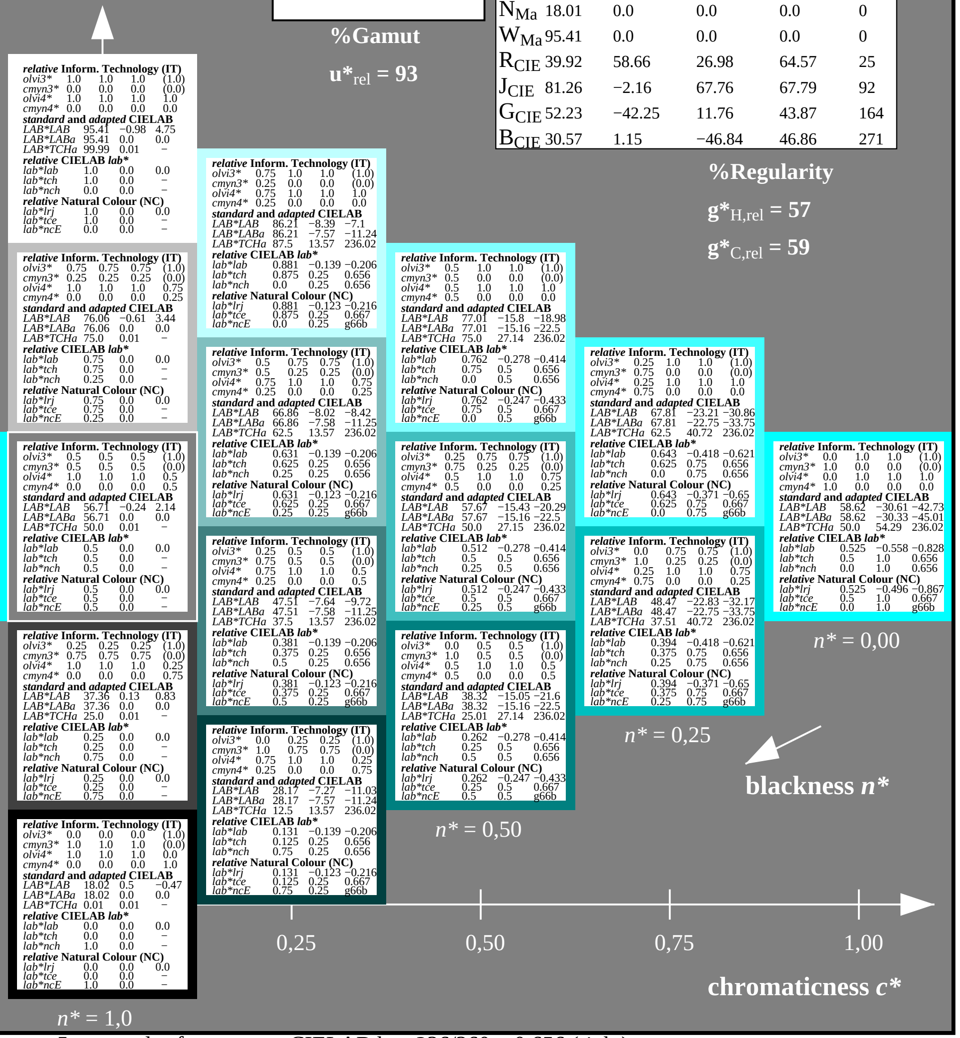
$u^*_{rel} = 93$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

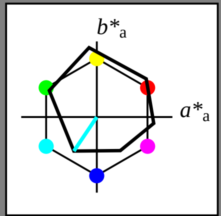
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

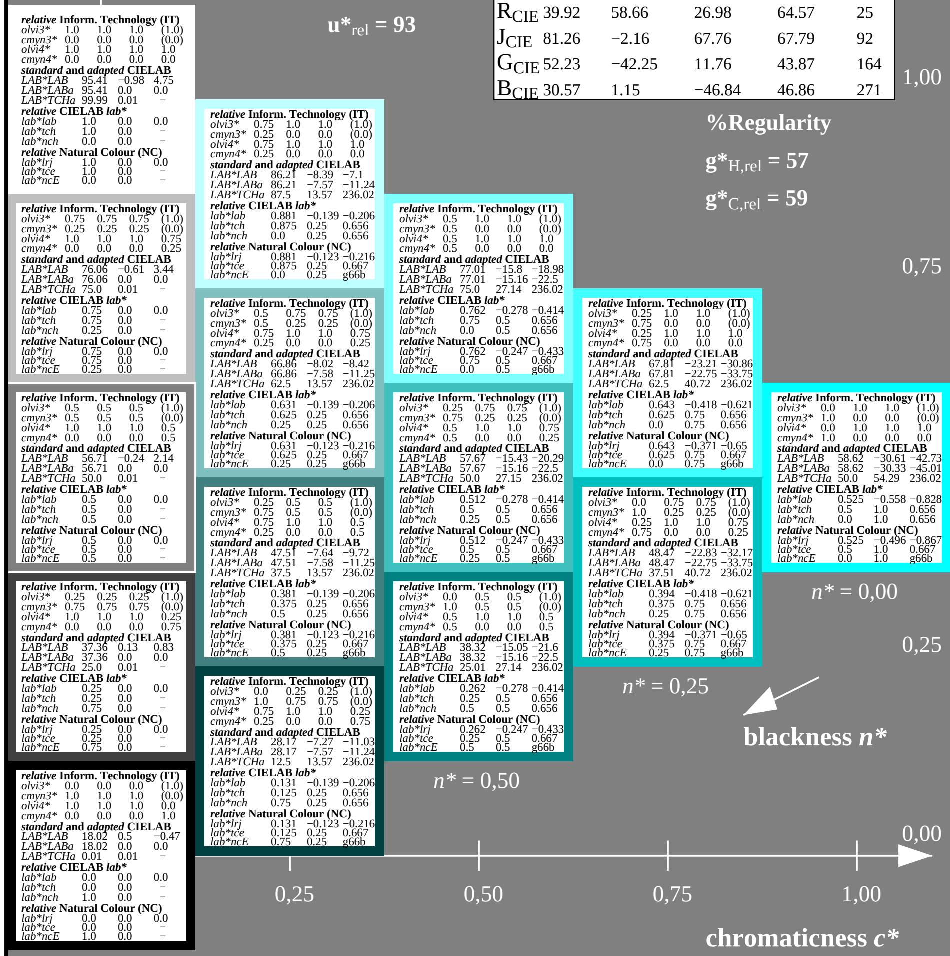
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

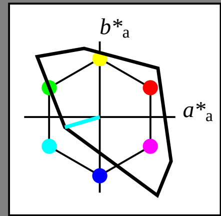
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

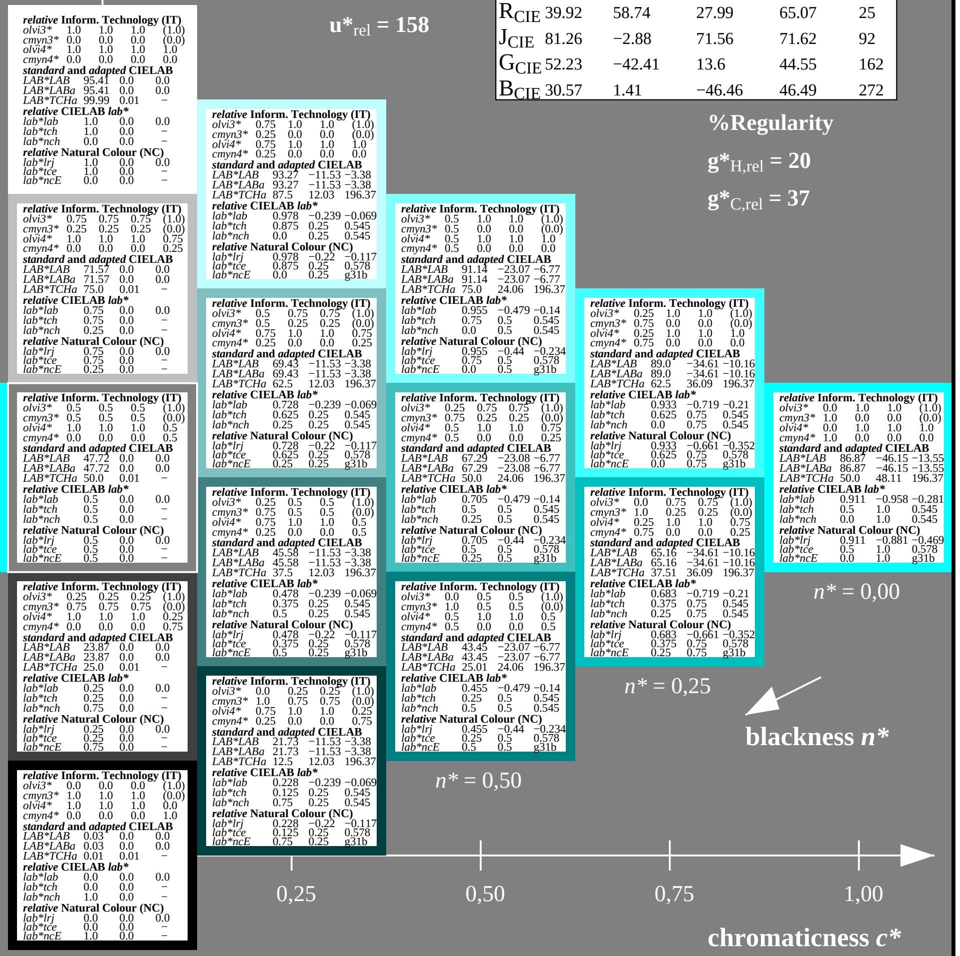
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

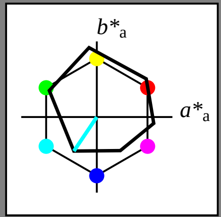
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

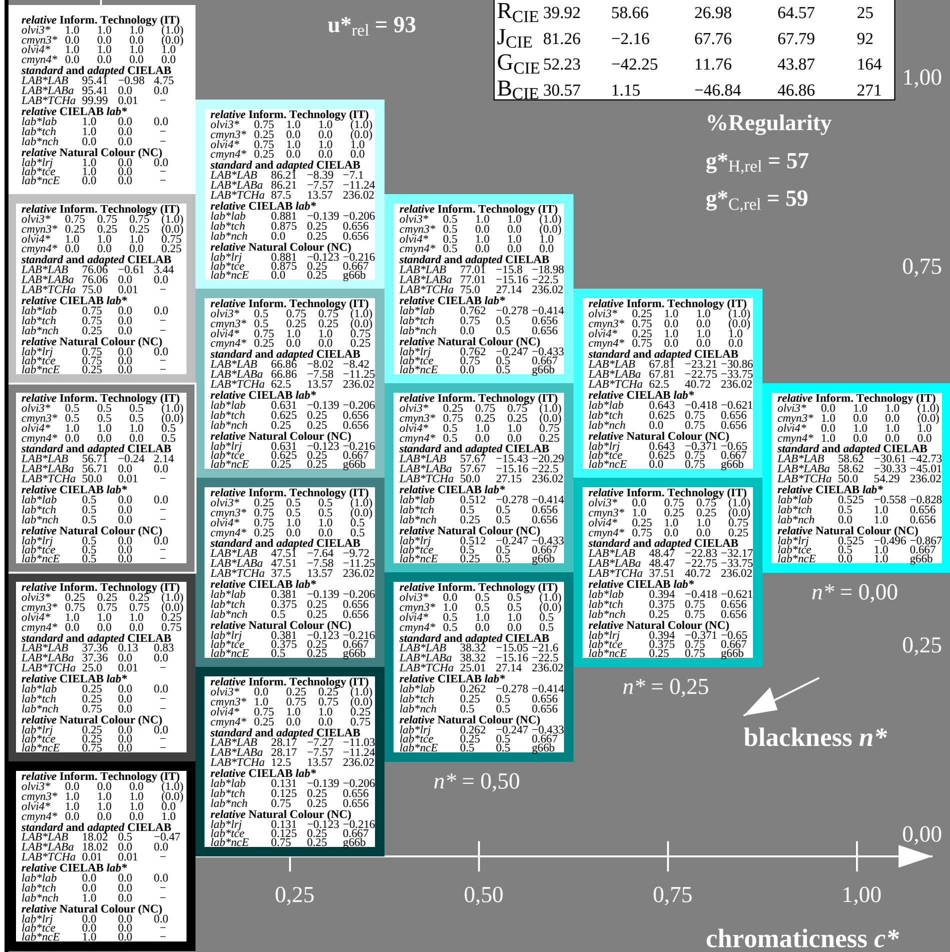
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 235/360 = 0.653$

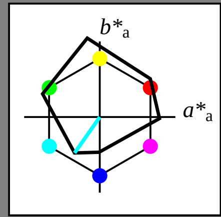
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

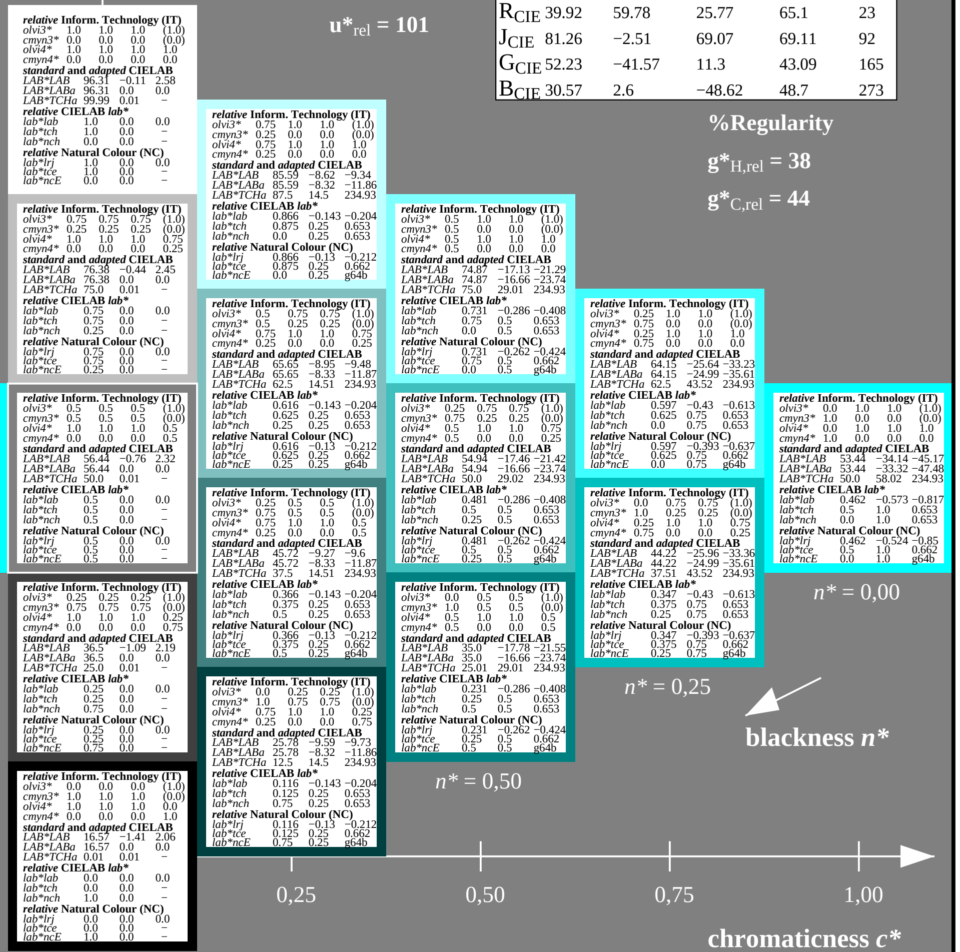
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

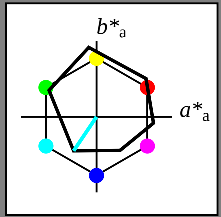


NE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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
triangle lightness t^*

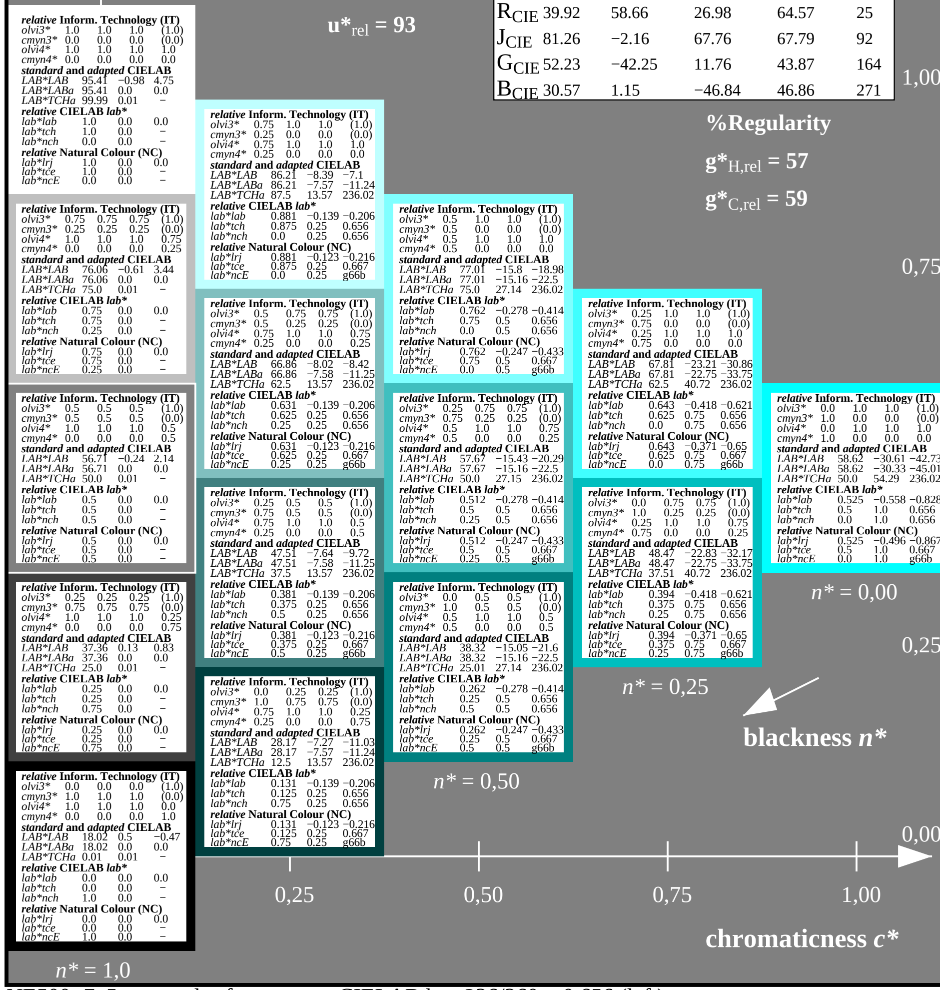


%Gamut
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

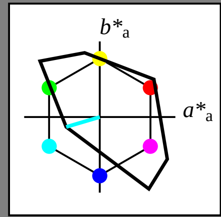
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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 $h^* = lab^*h = 196/360 = 0.546$
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0
triangle lightness t^*

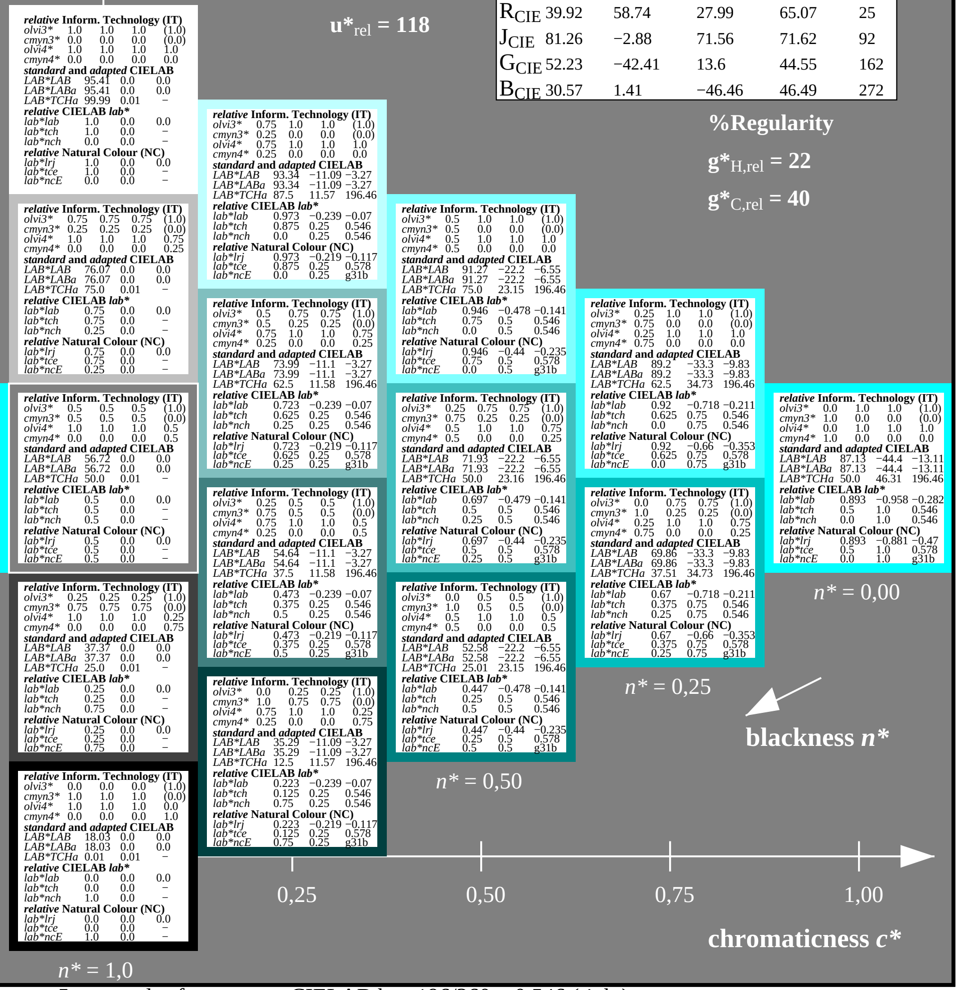


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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*

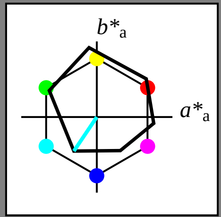
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u*_{rel}$ = 93

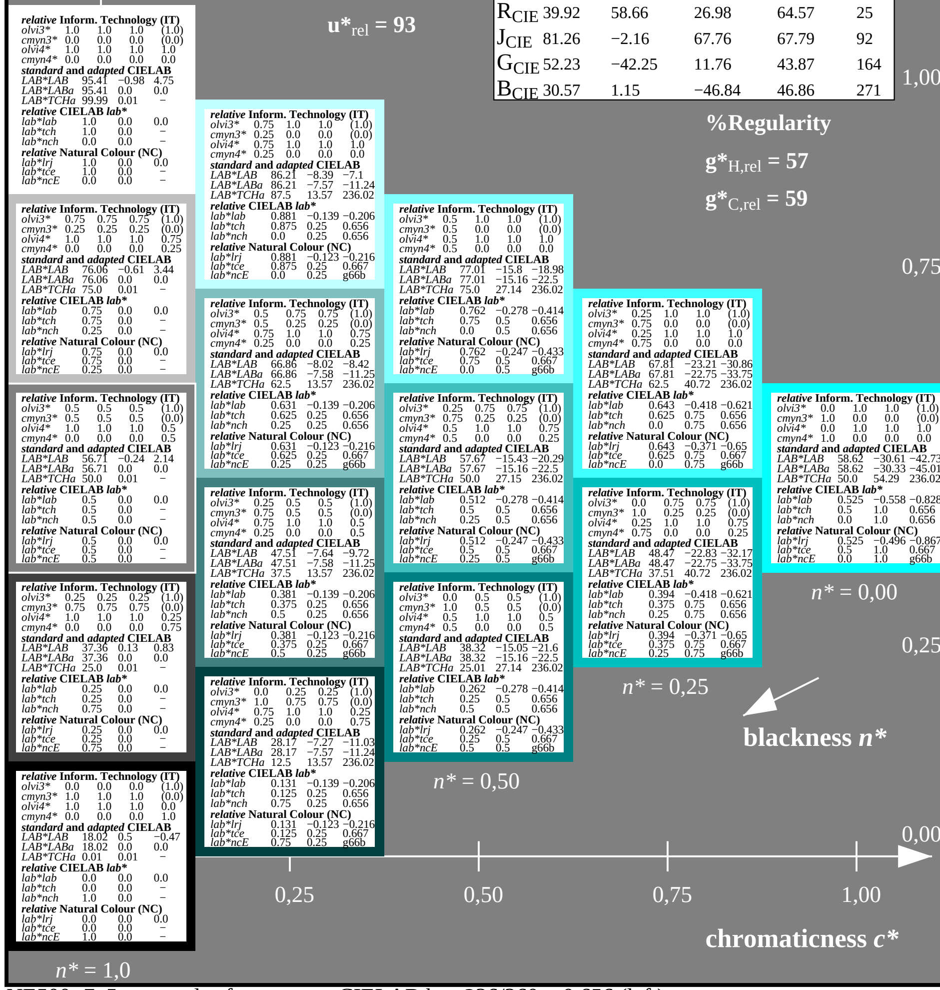
ORS18; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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* = *210/360* = *0.583*

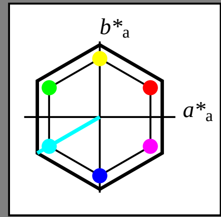
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u*_{rel}$ = 152

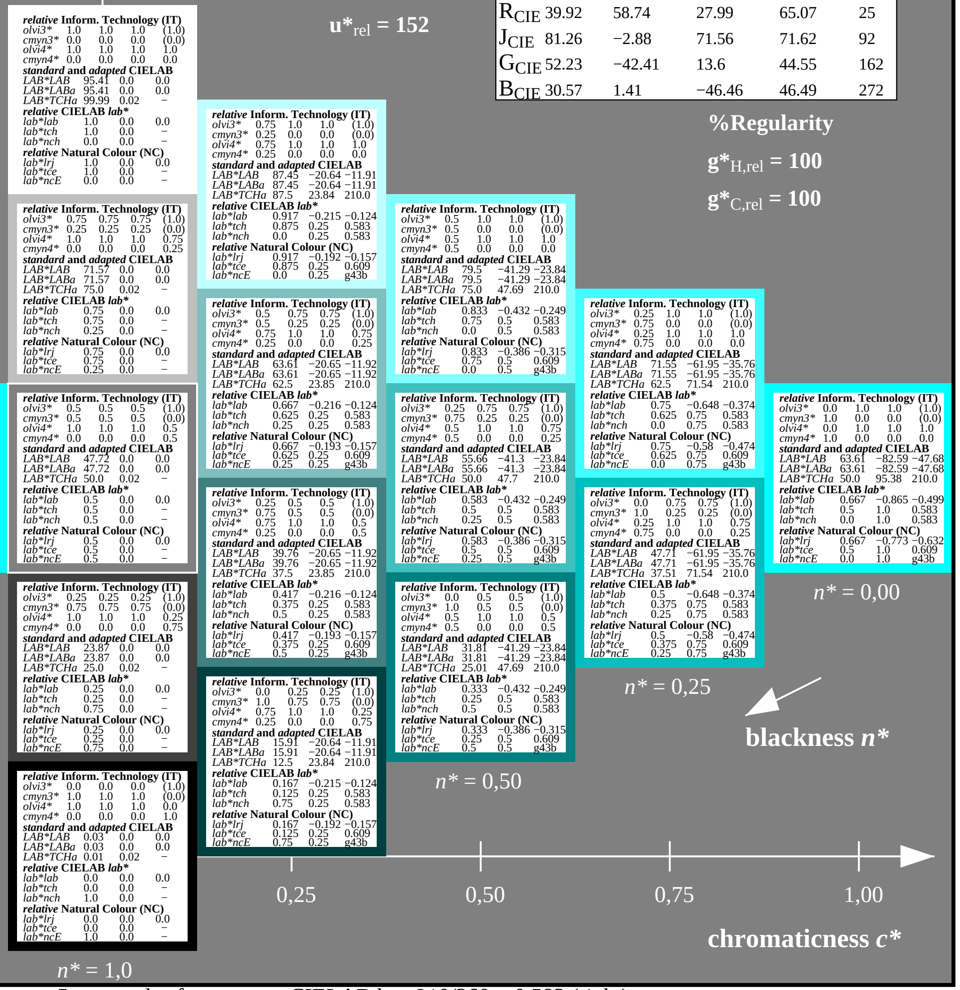
NLS00; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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



NE500−7, 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 $h^* = lab^*h = 236/360 = 0.656$

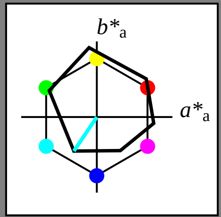
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

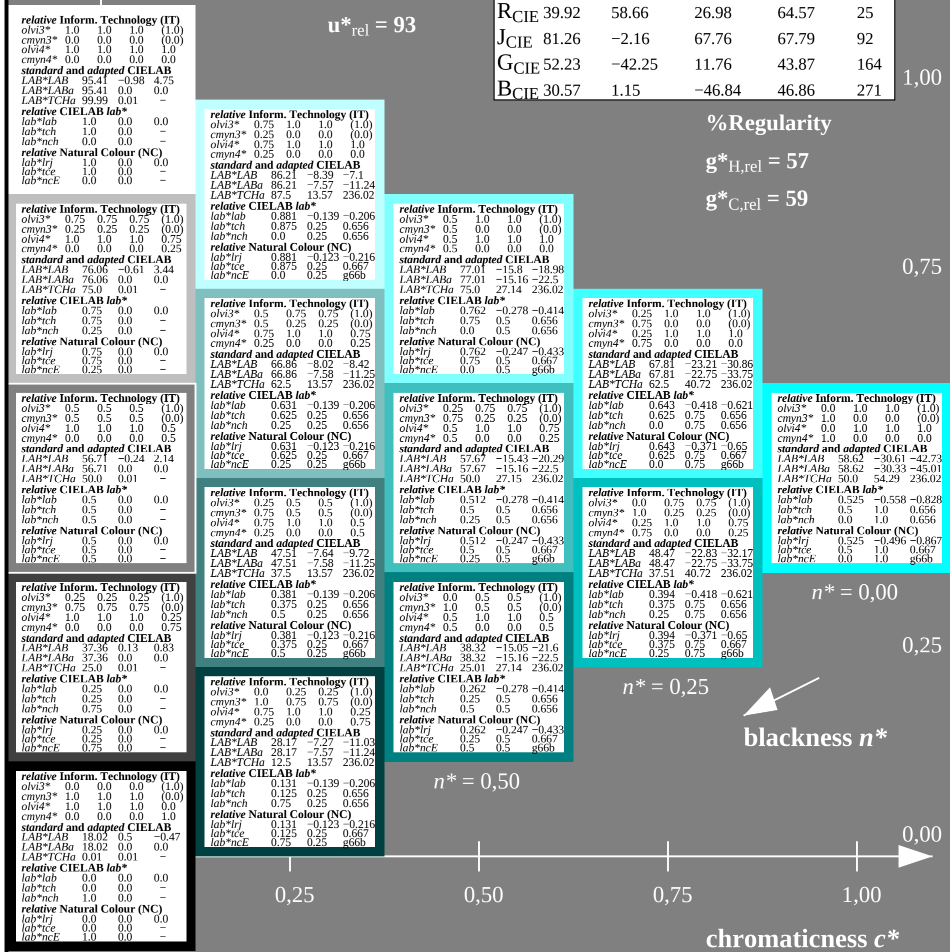
u^*_{rel} = 93

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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

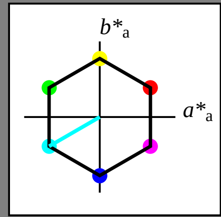
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

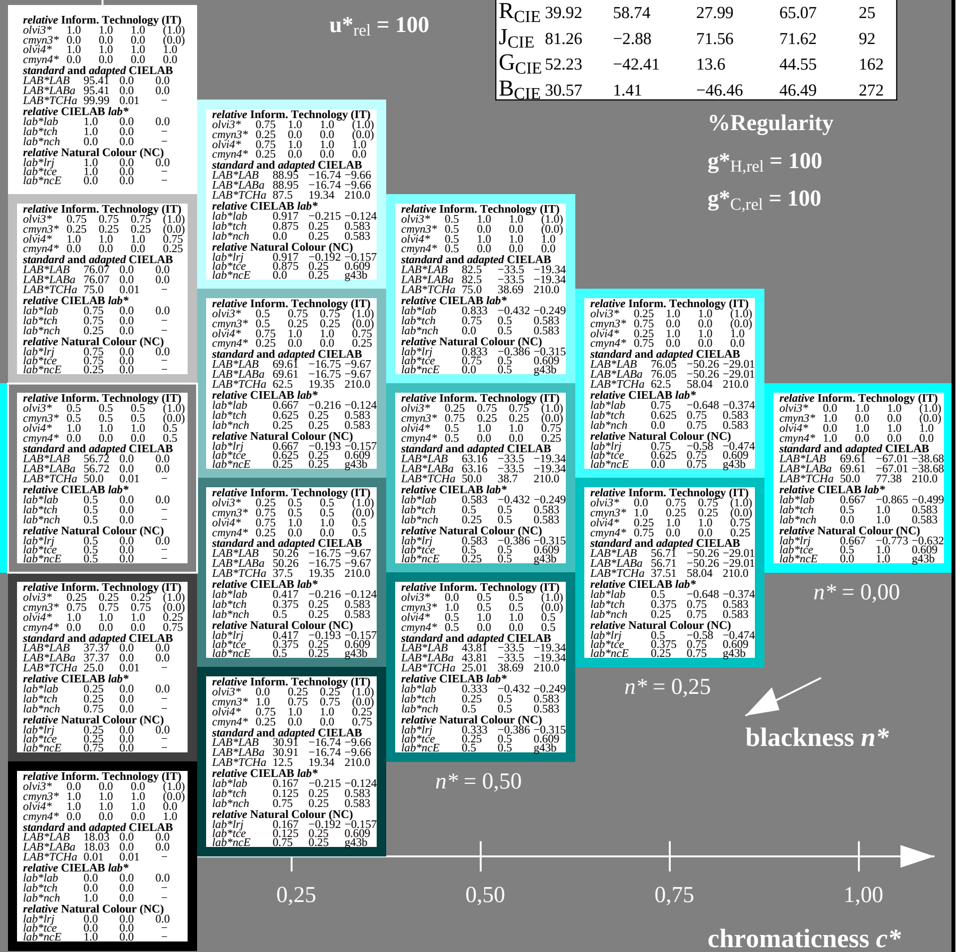
u^*_{rel} = 100

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



NE500−7, 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

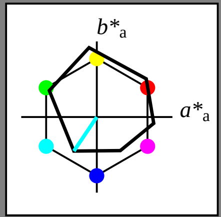
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness *t*



%Gamut

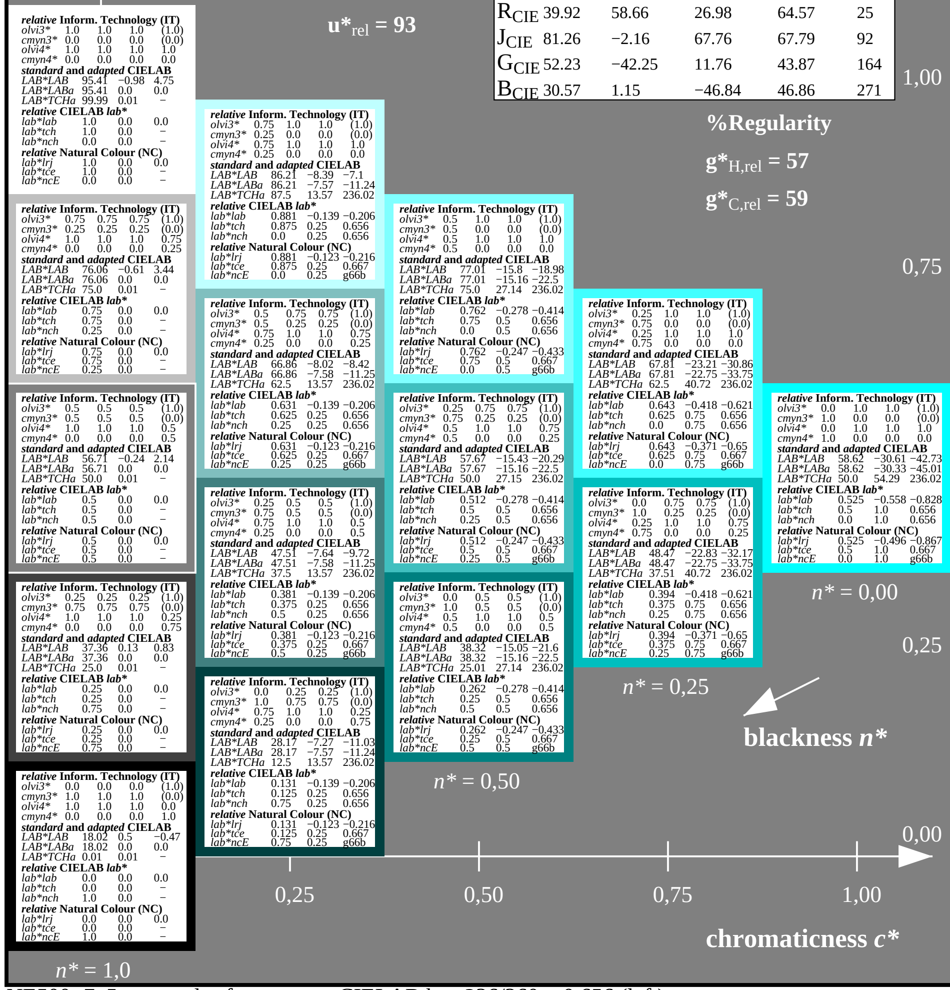
u^*_{rel} = 93

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

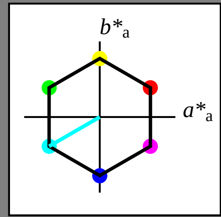
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t*



%Gamut

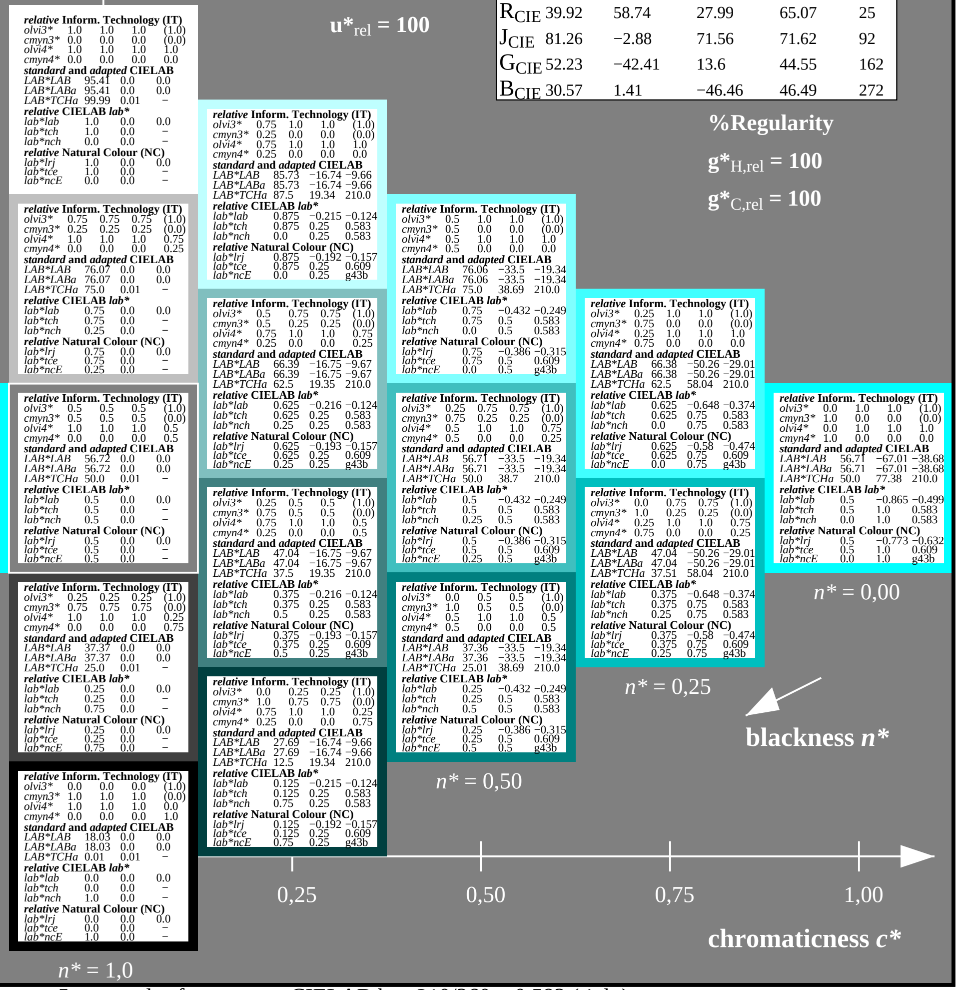
u^*_{rel} = 100

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

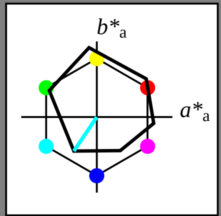


NE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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^*

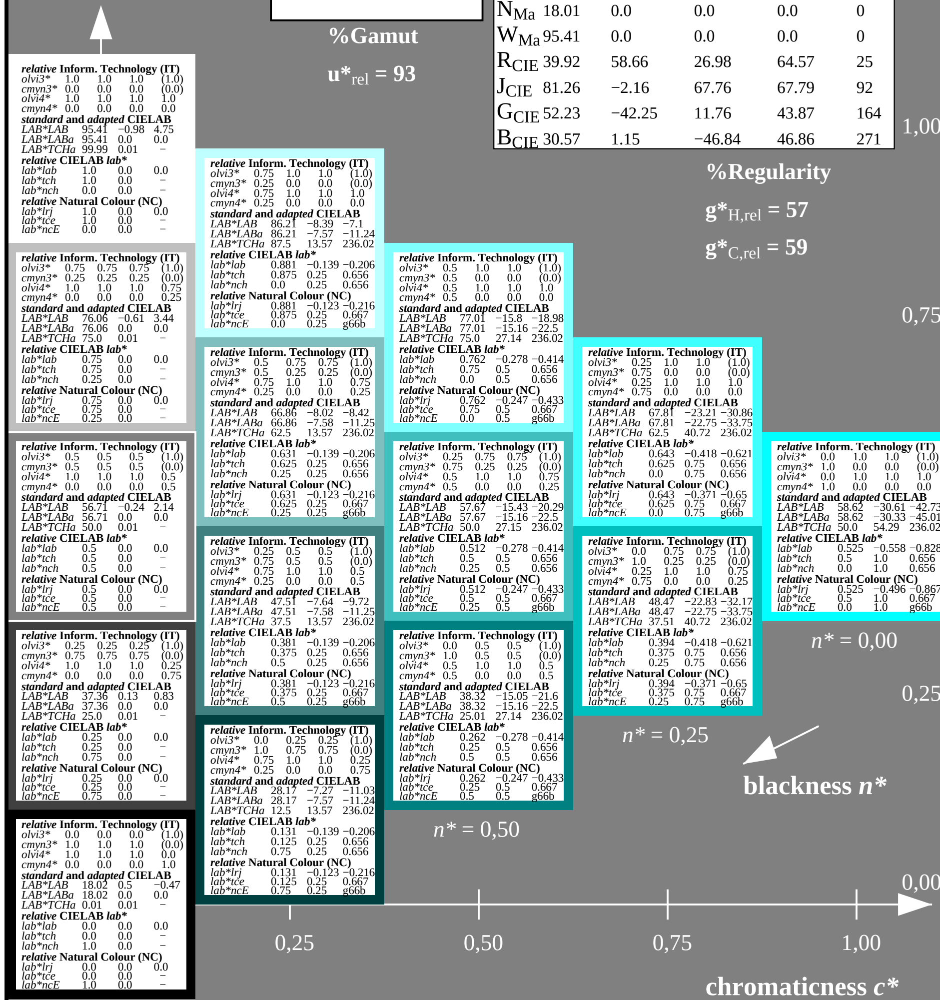


%Gamut
$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

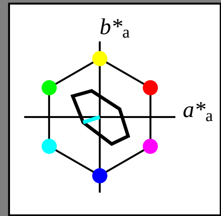
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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 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^*

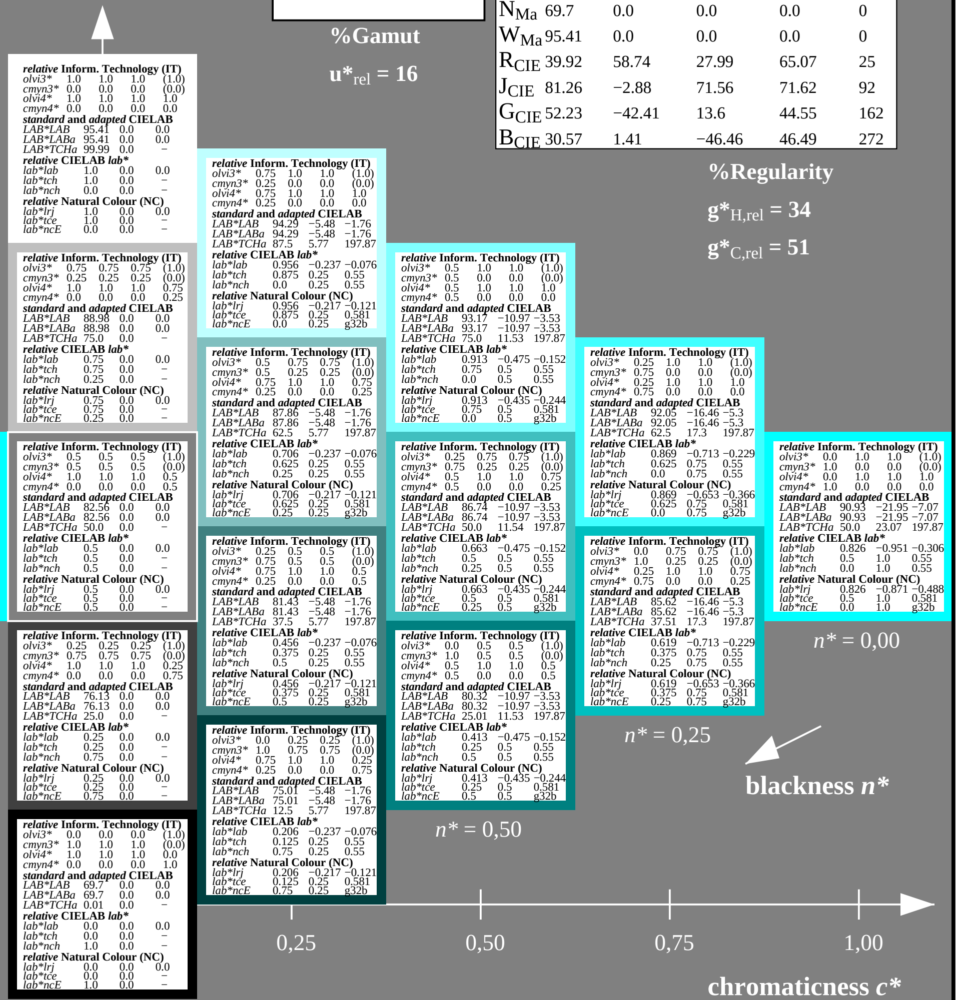


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

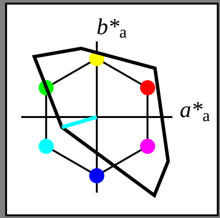


NE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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
triangle lightness *t**

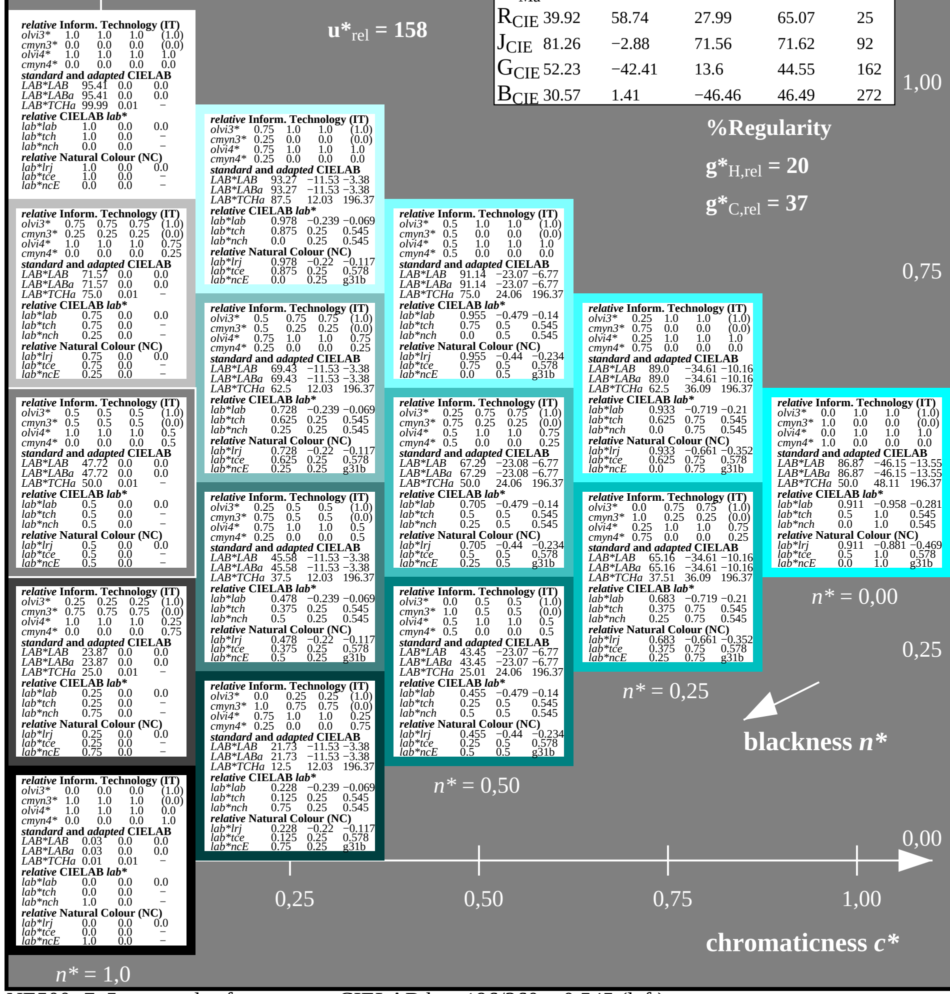


%Gamut
u^*_{rel} = 158

TLS00; adapted (a) CIELAB data

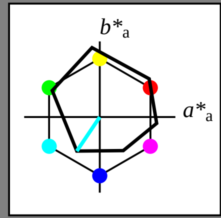
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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* = 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**

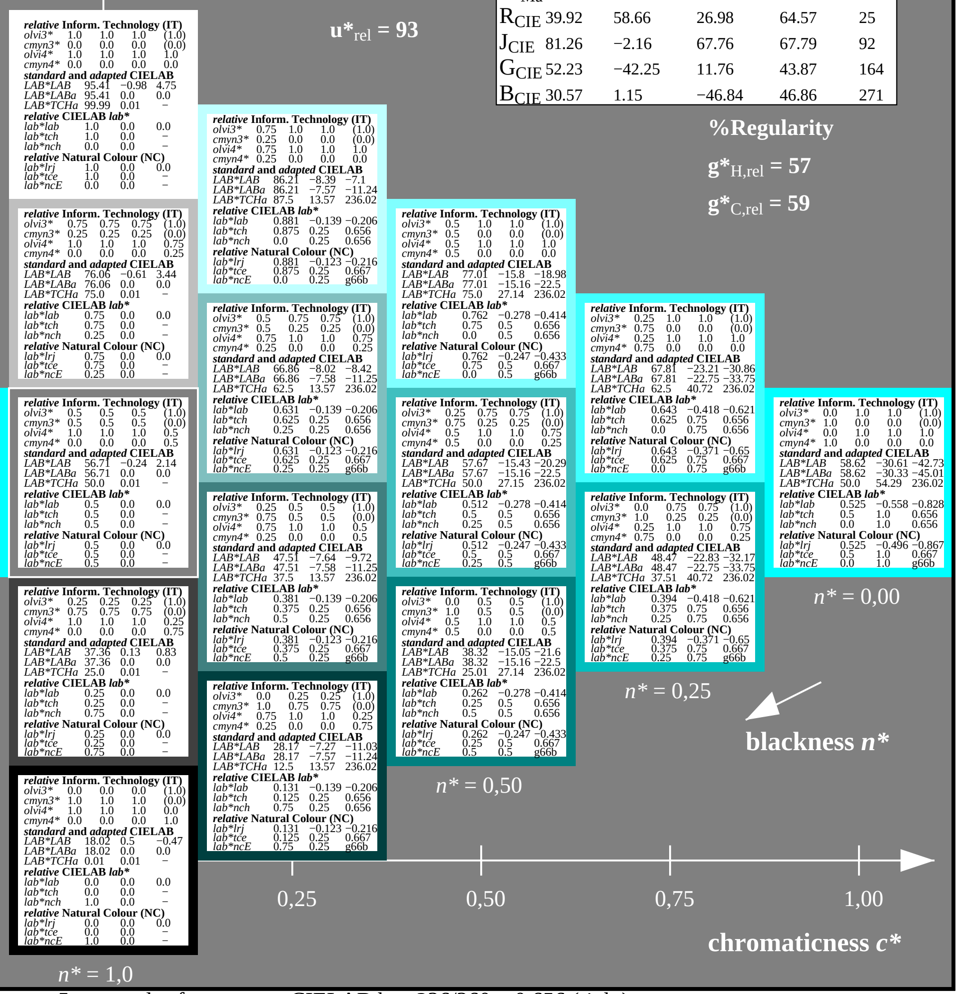


%Gamut
u^*_{rel} = 93

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



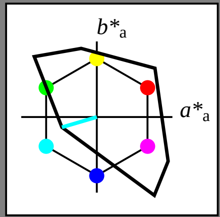
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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

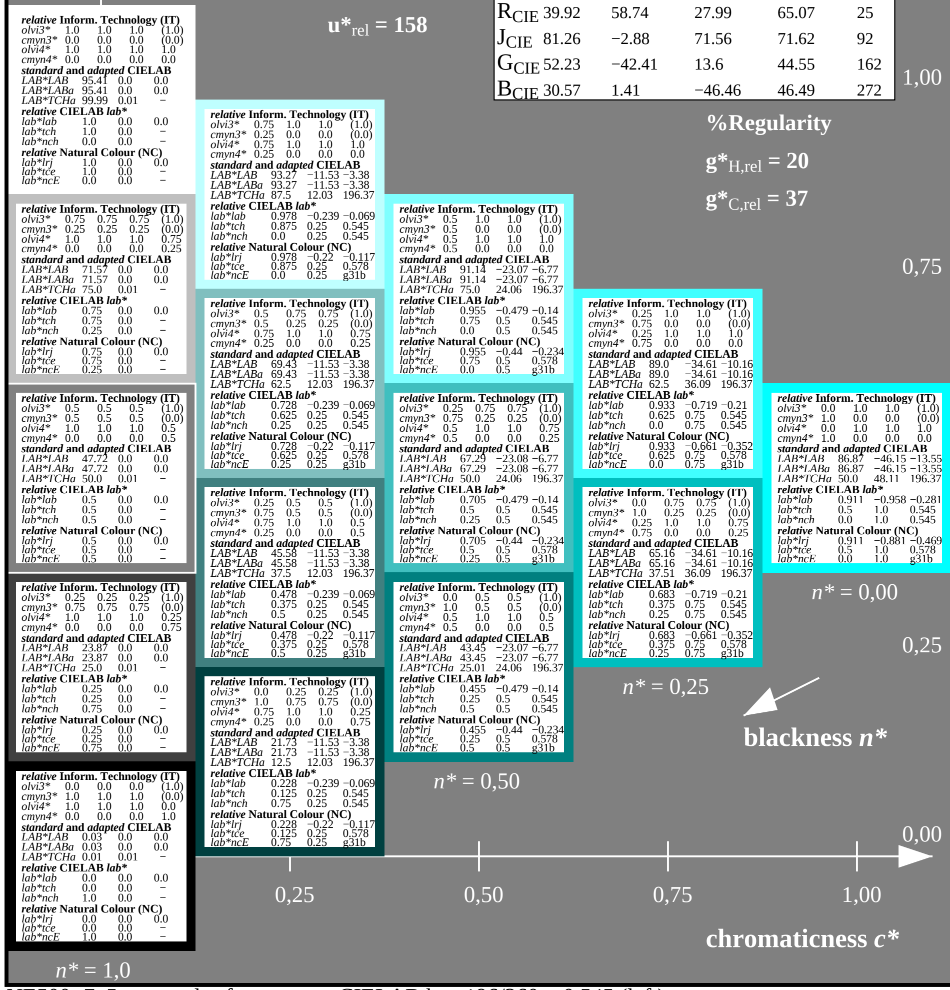
u*rel = 158

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

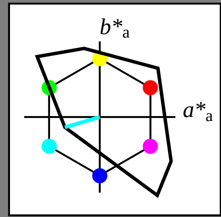


NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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

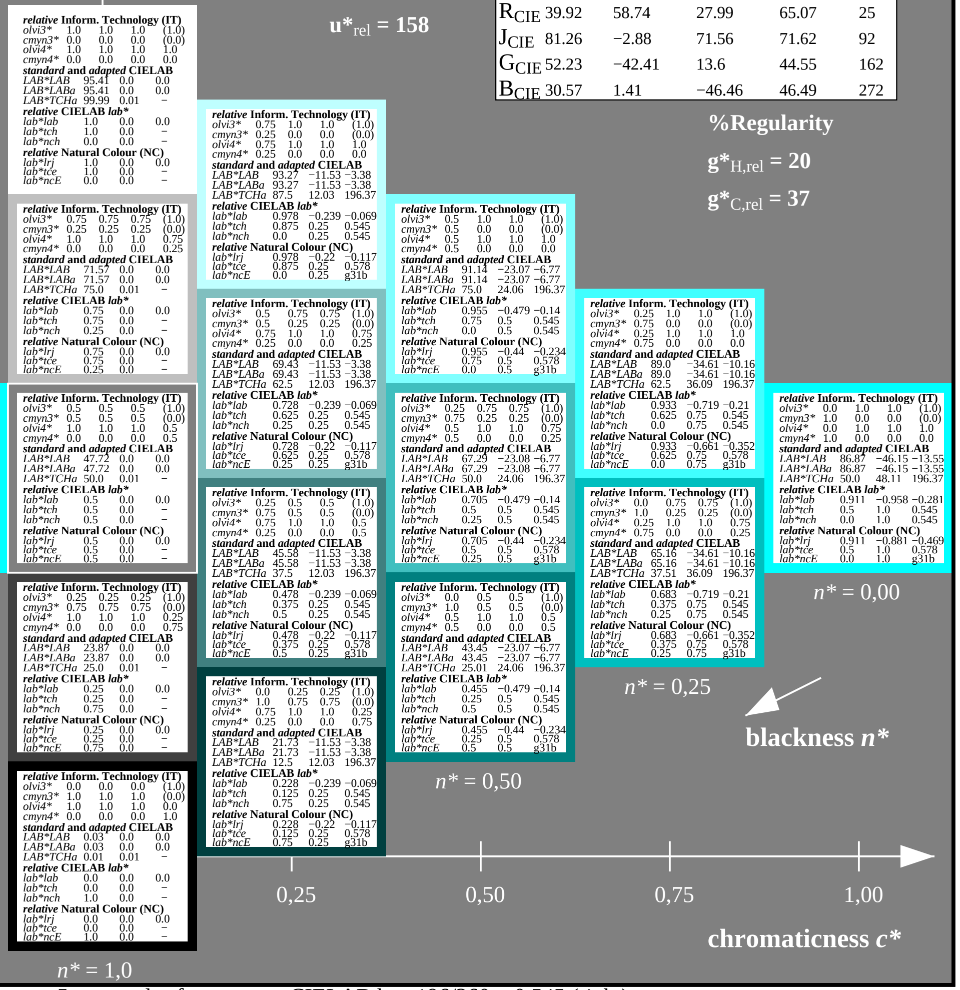
u*rel = 158

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

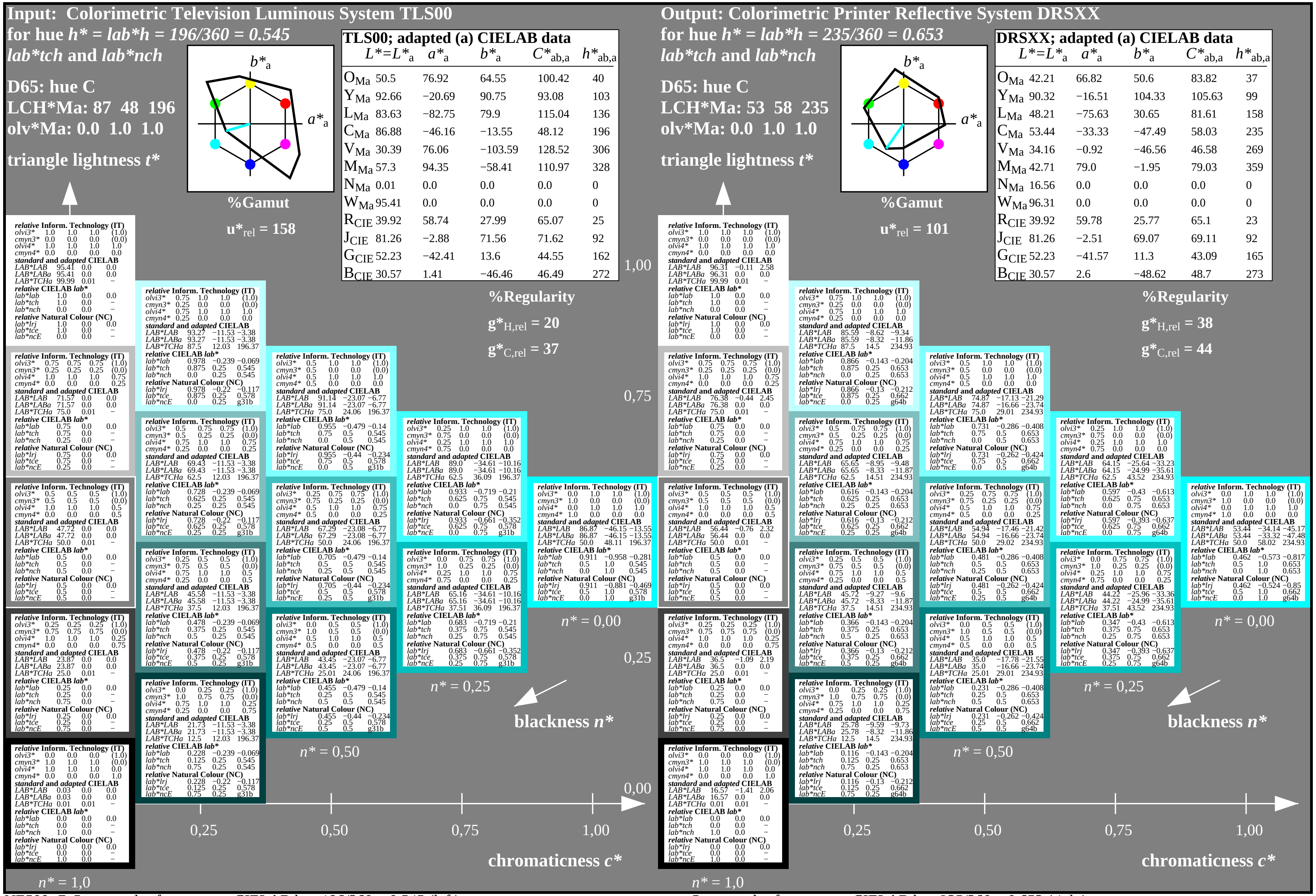
%Regularity

g*H,rel = 20

g*C,rel = 37



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)



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

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

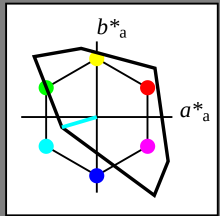
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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^*

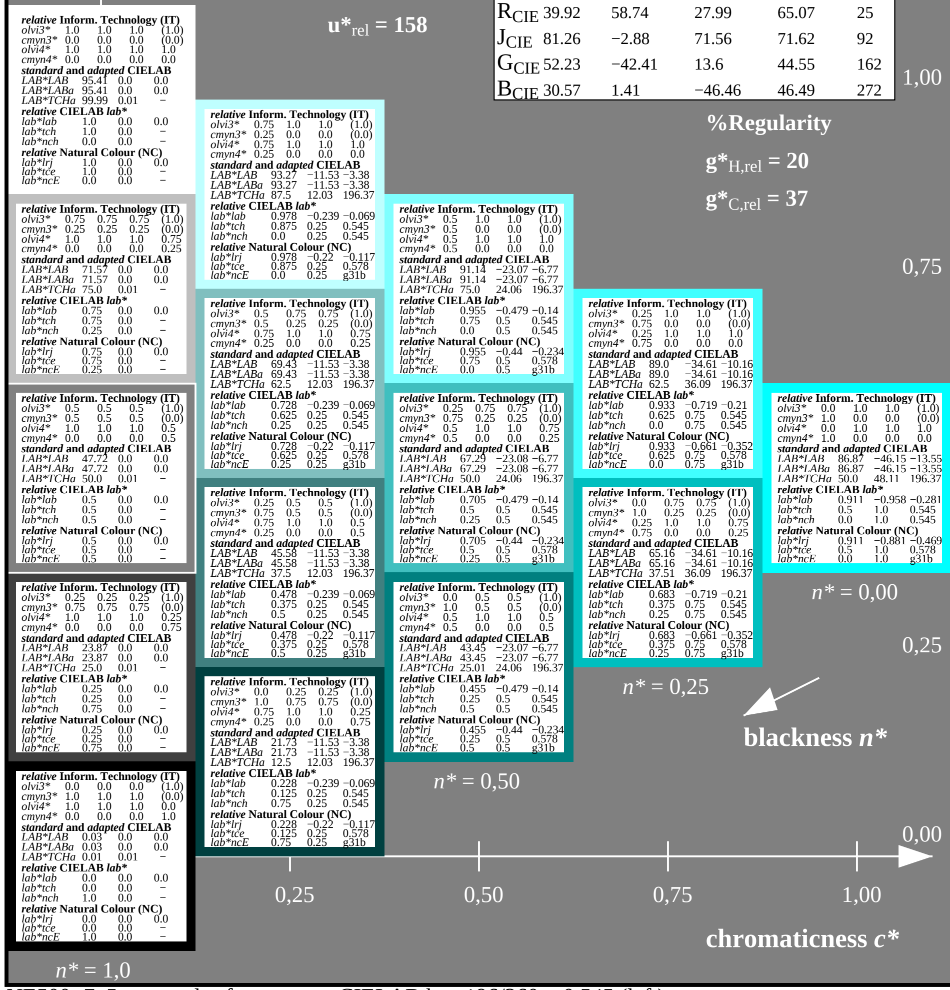


%Gamut
u^*_{rel} = 158

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

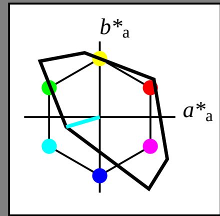
%Regularity
$g^*_{H,rel}$ = 20
$g^*_{C,rel}$ = 37



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^*

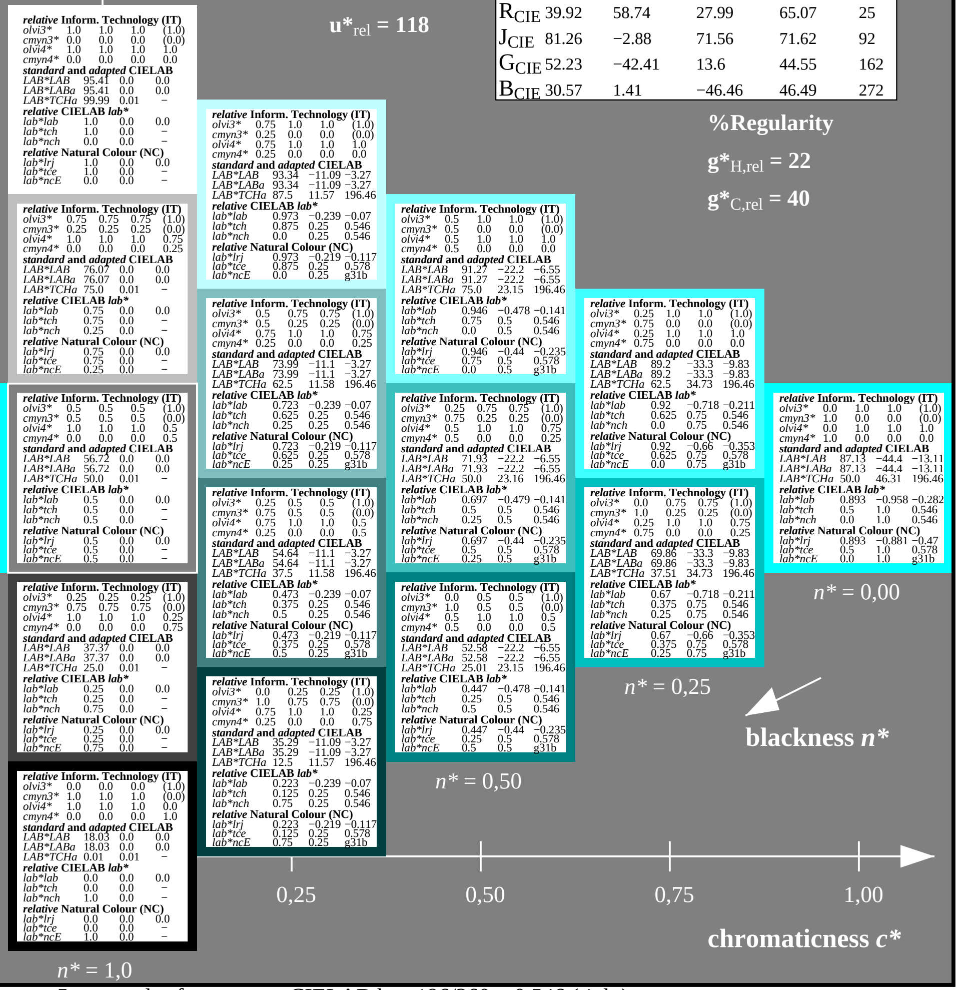


%Gamut
u^*_{rel} = 118

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

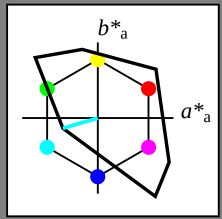


NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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*

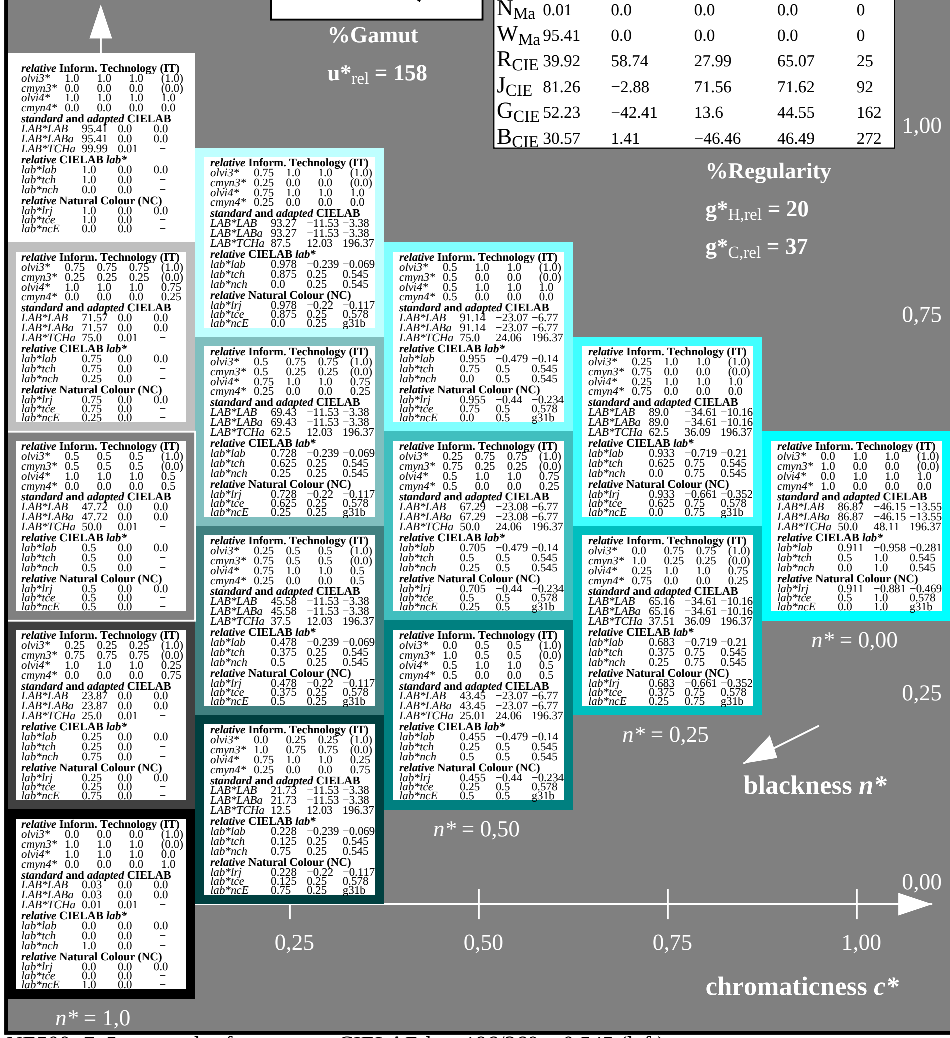
D65: hue C
LCH*Ma: 87 48 196
olv*Ma: 0.0 1.0 1.0
triangle lightness *t*



%Gamut
u^*_{rel} = 158

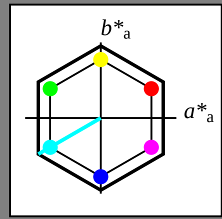
TLS00; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	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*

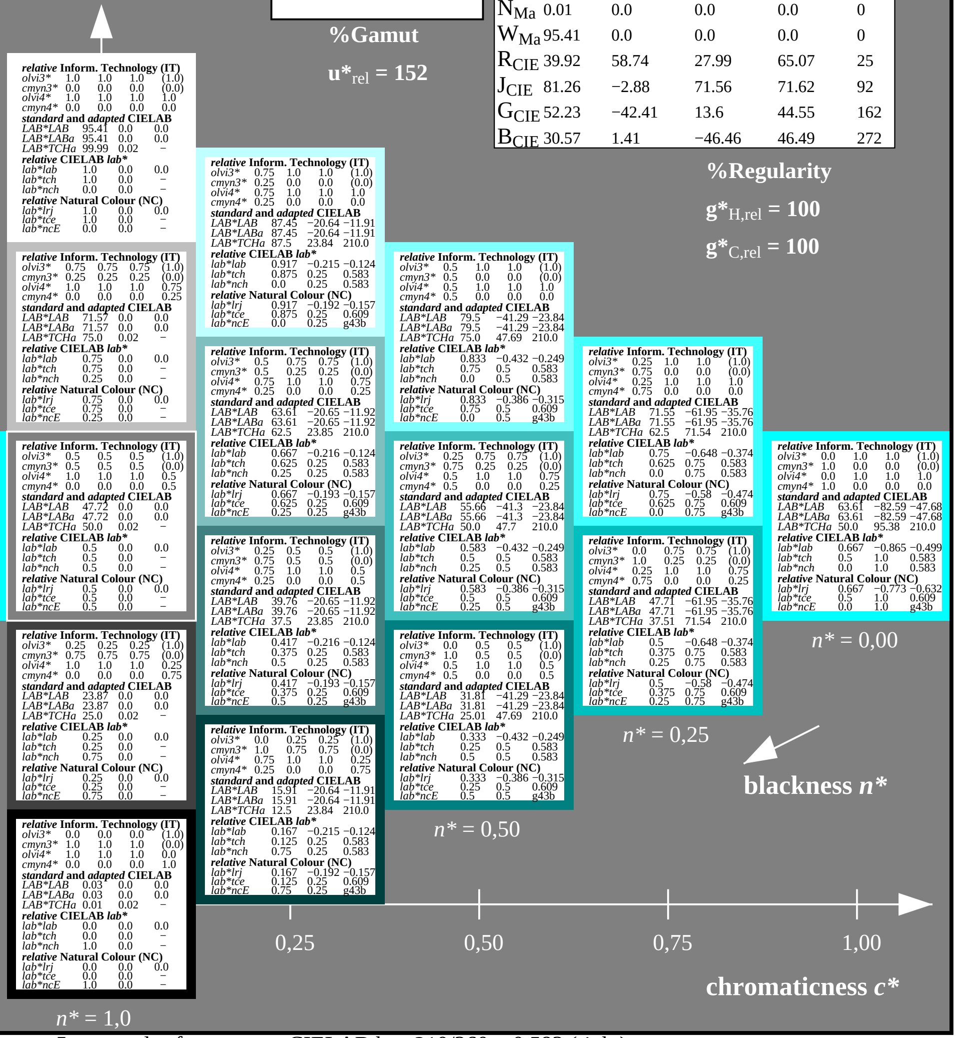
D65: hue C
LCH*Ma: 64 95 210
olv*Ma: 0.0 1.0 1.0
triangle lightness *t*



%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

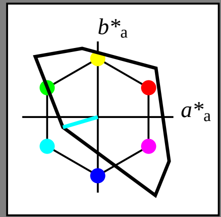


NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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**

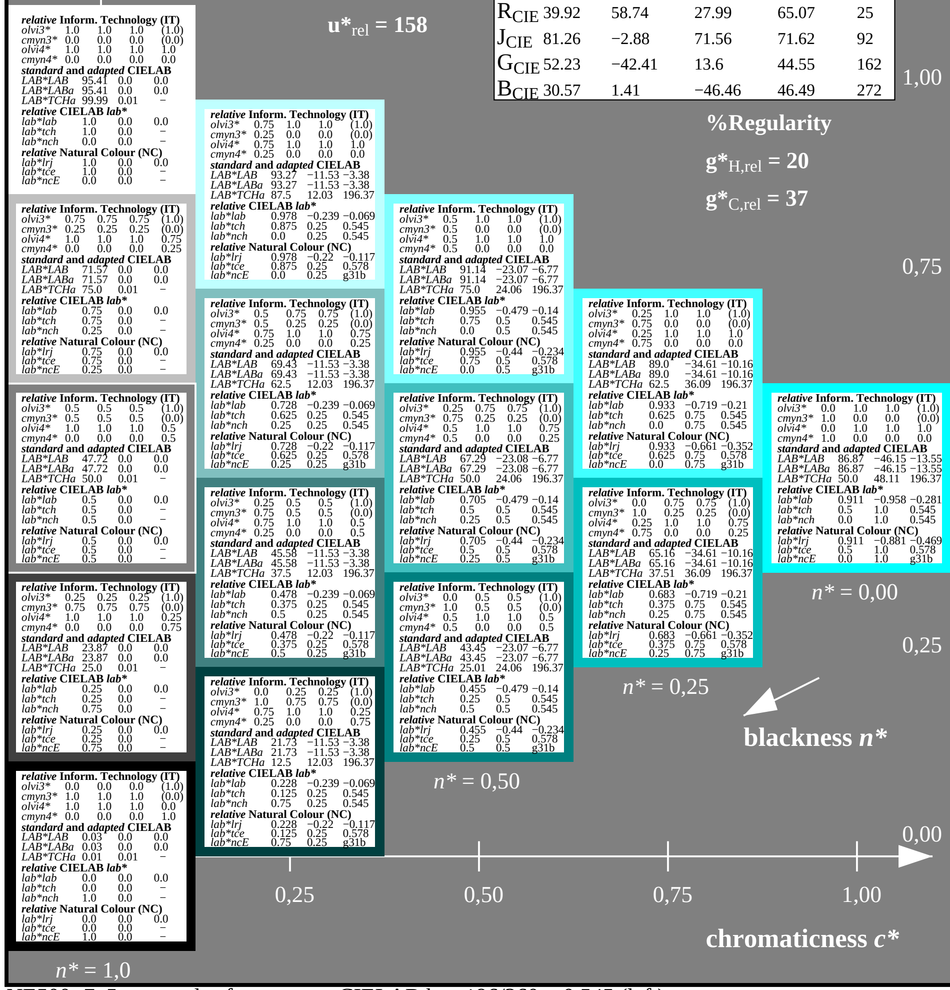


%Gamut
u*rel = 158

TLS00; adapted (a) CIELAB data

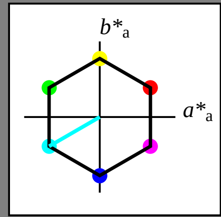
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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



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**

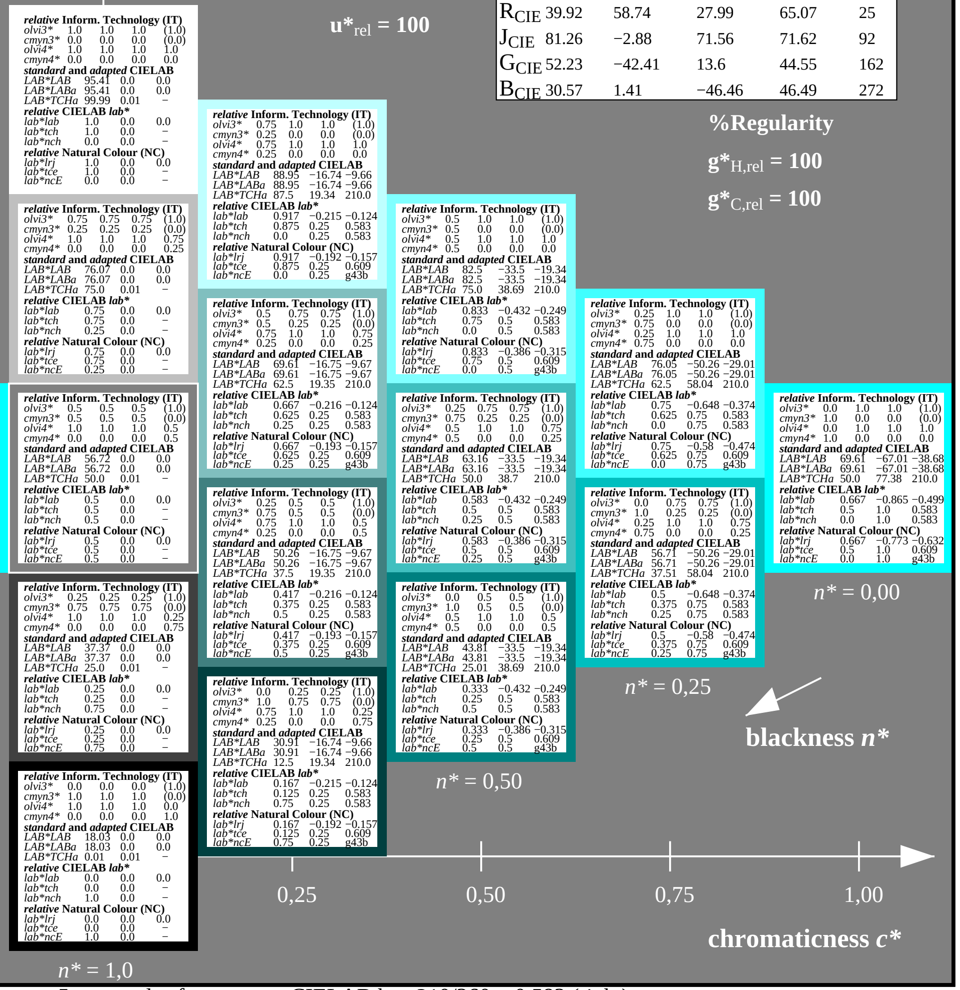


%Gamut
u*rel = 100

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



NE500−7, 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**

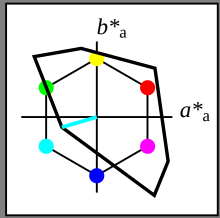
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

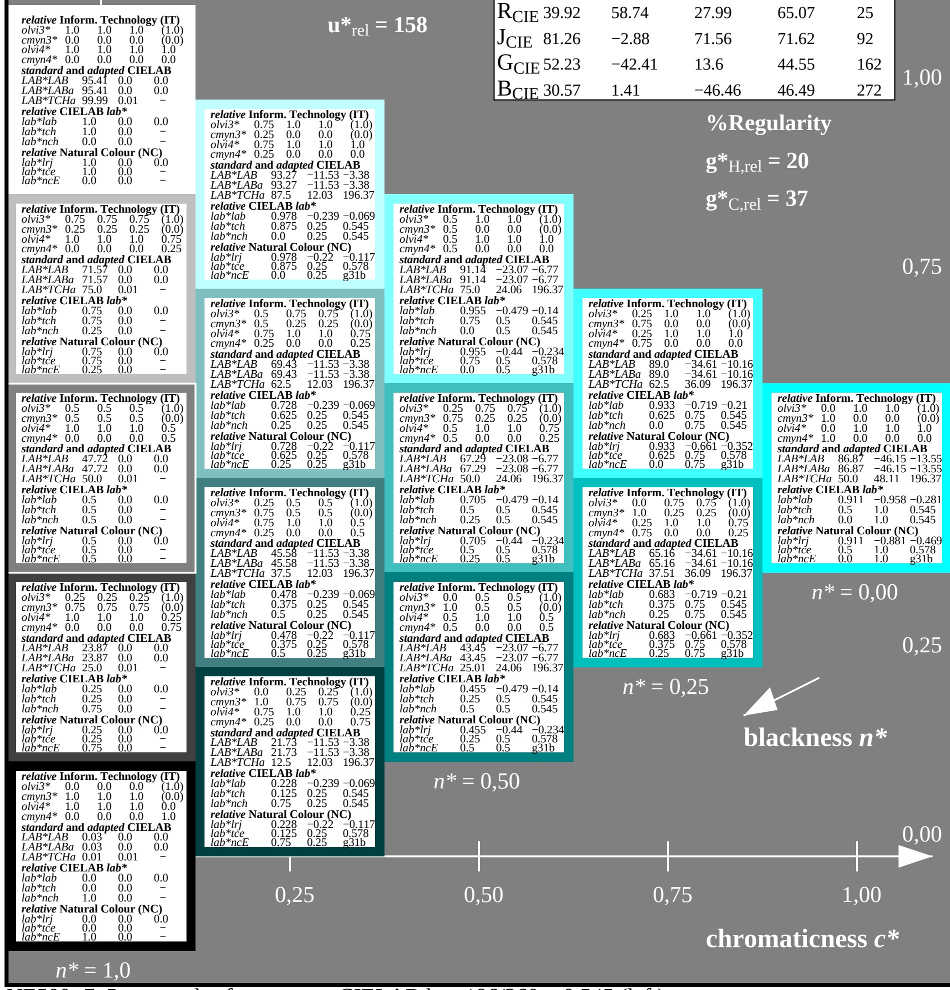
triangle lightness *t**



%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



Output: Colorimetric Standard Reflective System SRS18

for hue *h = *lab*h* = 210/360 = 0.583**

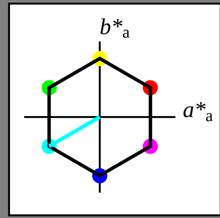
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

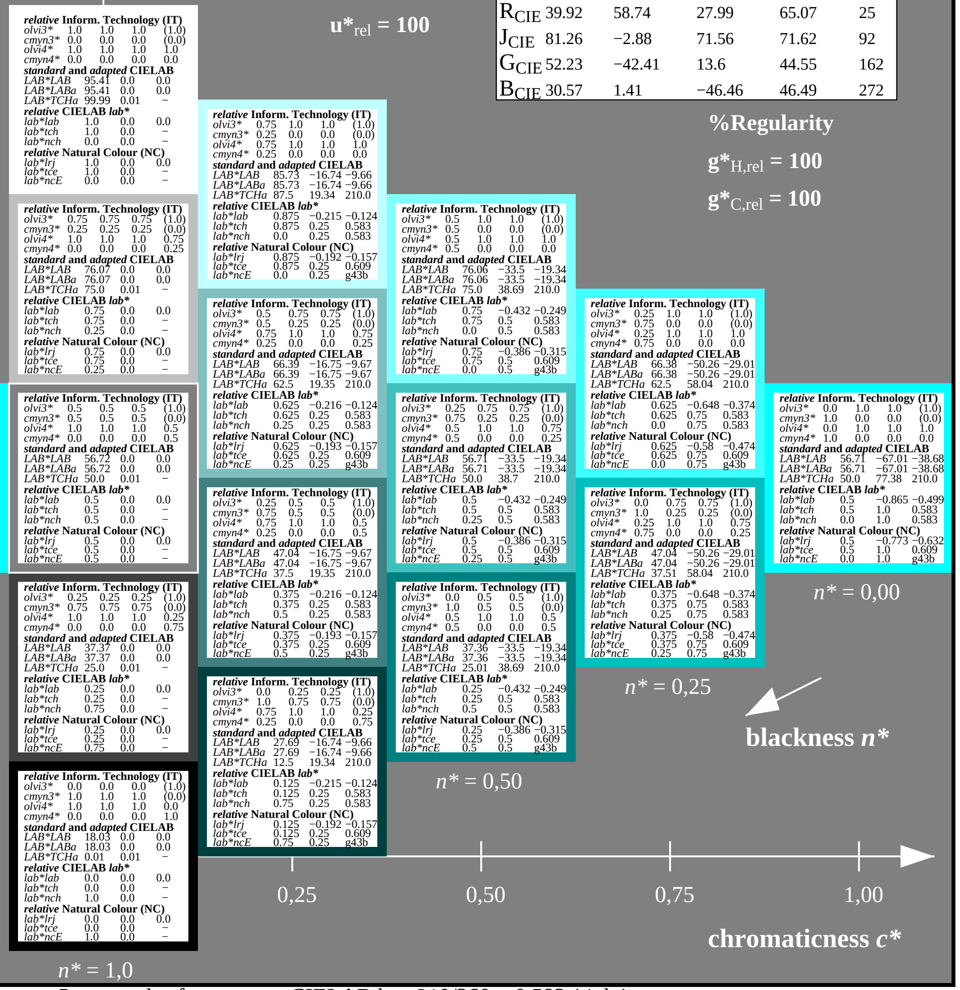
triangle lightness *t**



%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



NE500−7, 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*

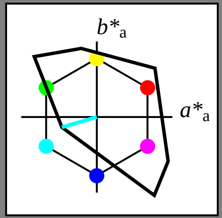
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 158$

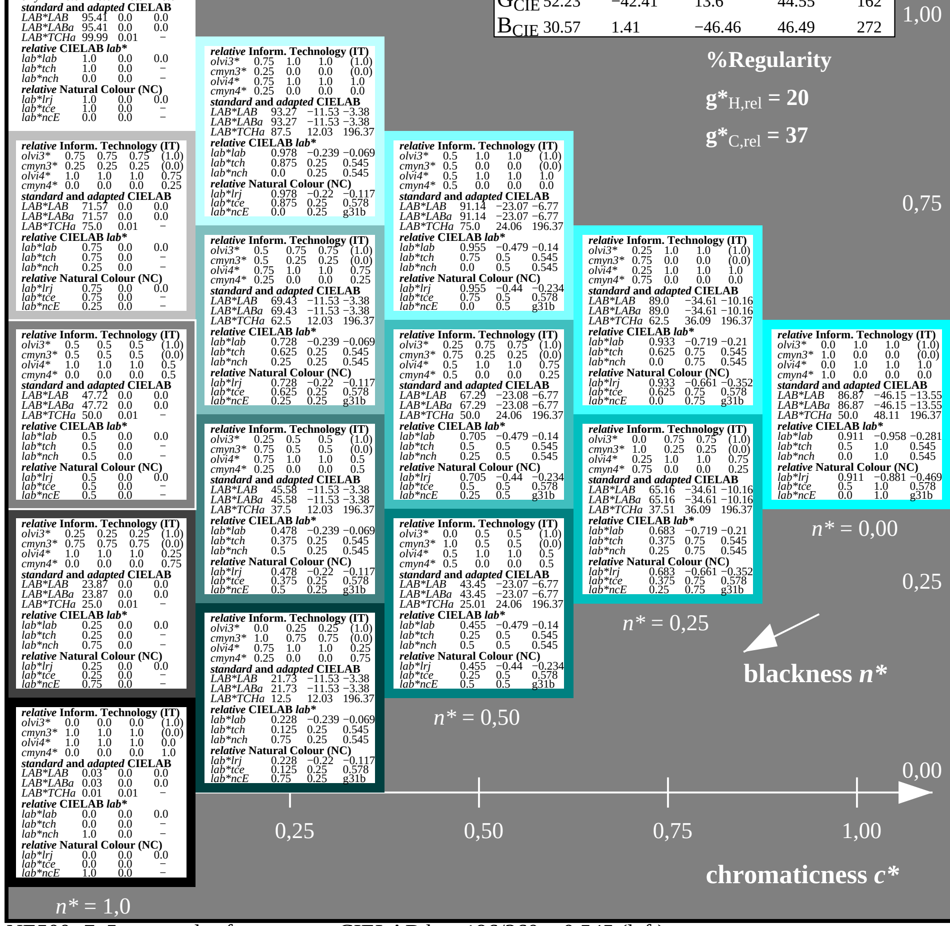
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 198/360 = 0.55*

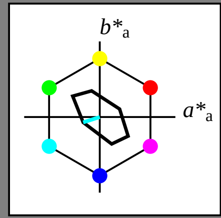
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 16$

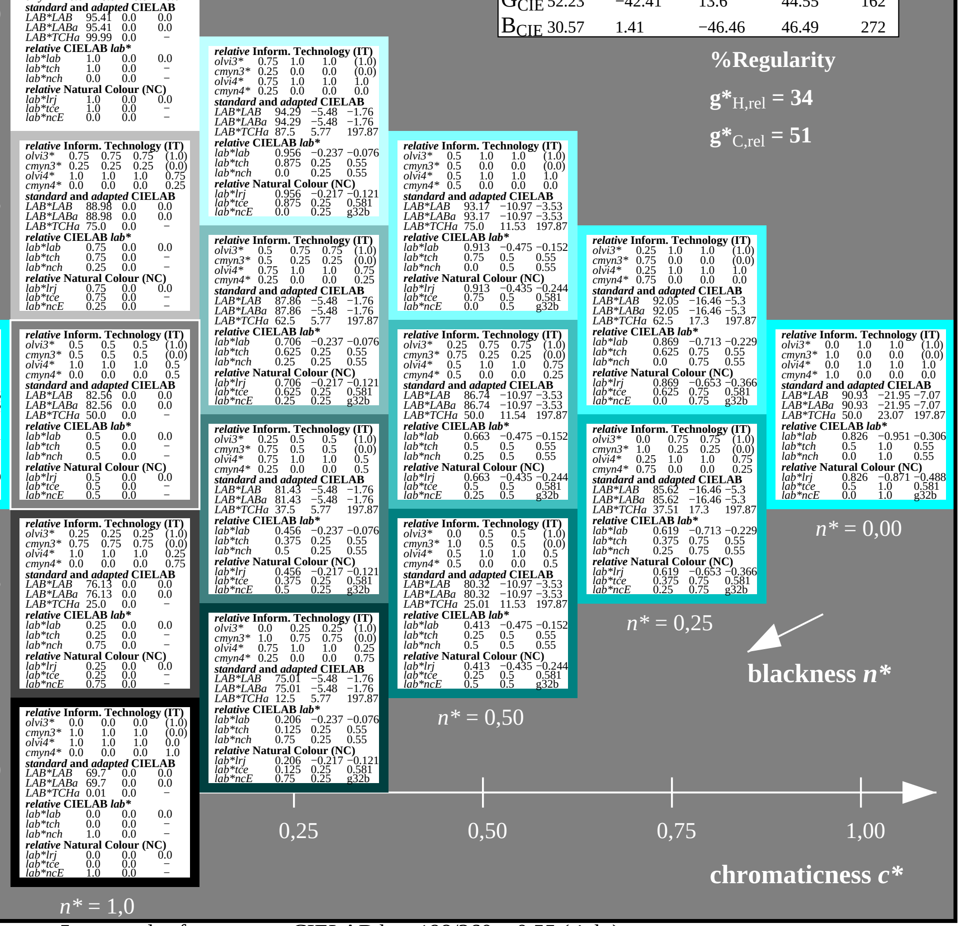
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



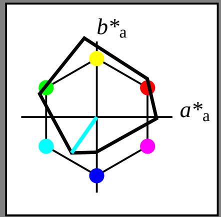
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

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

$u^*_{rel} = 101$

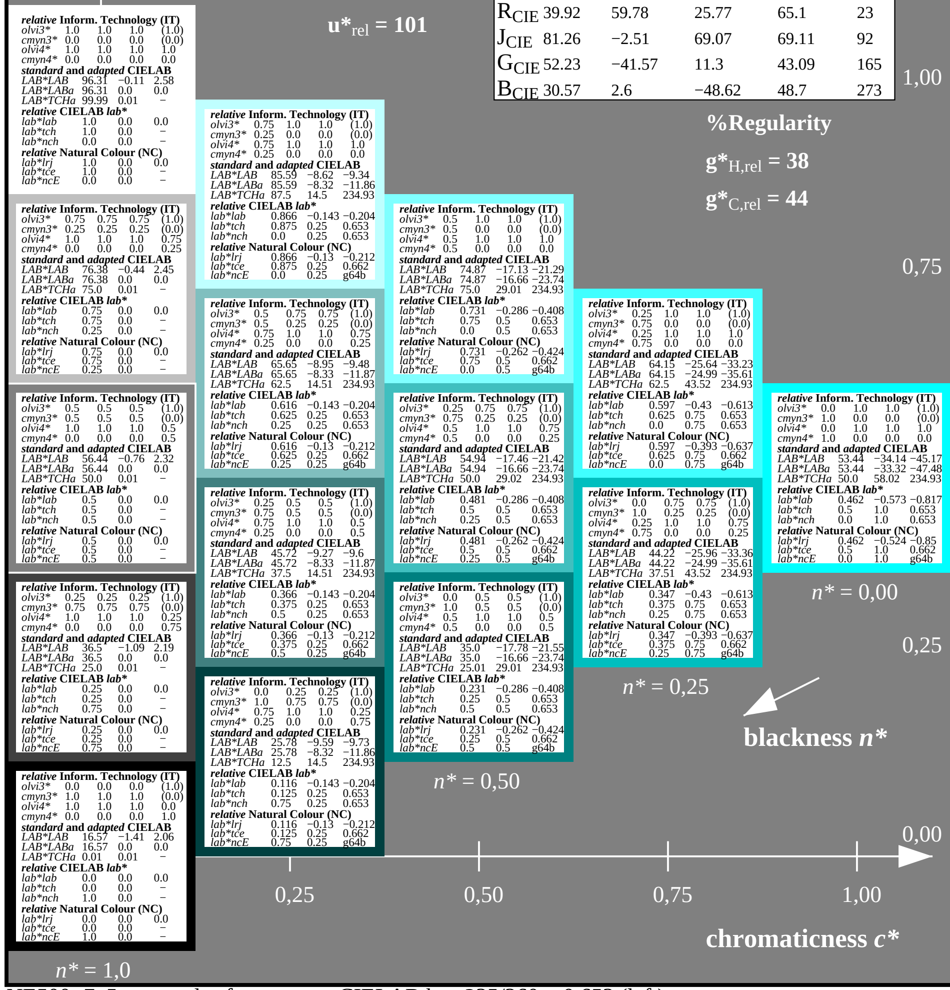
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

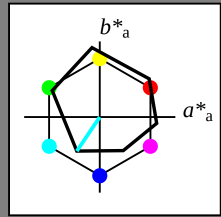
$g^*_{C,rel} = 44$



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

$u^*_{rel} = 93$

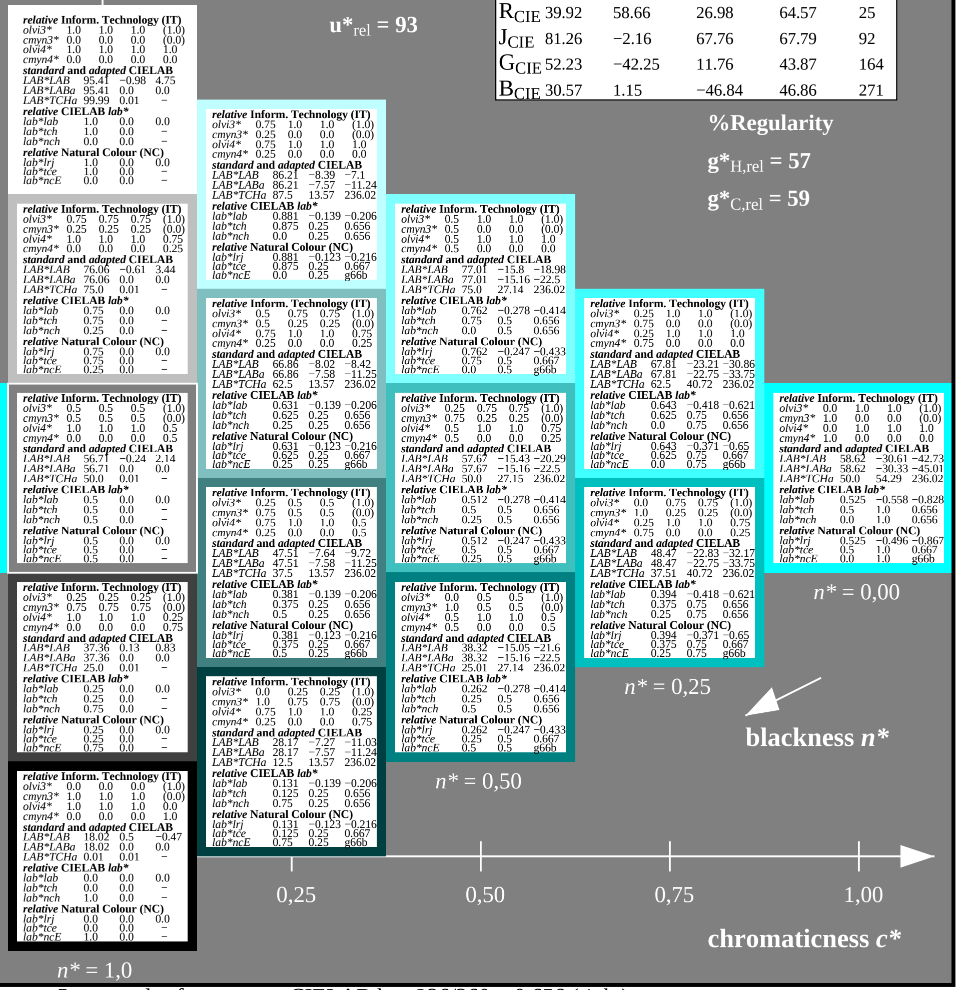
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

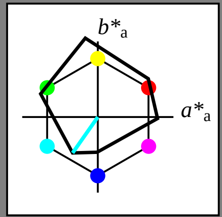
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

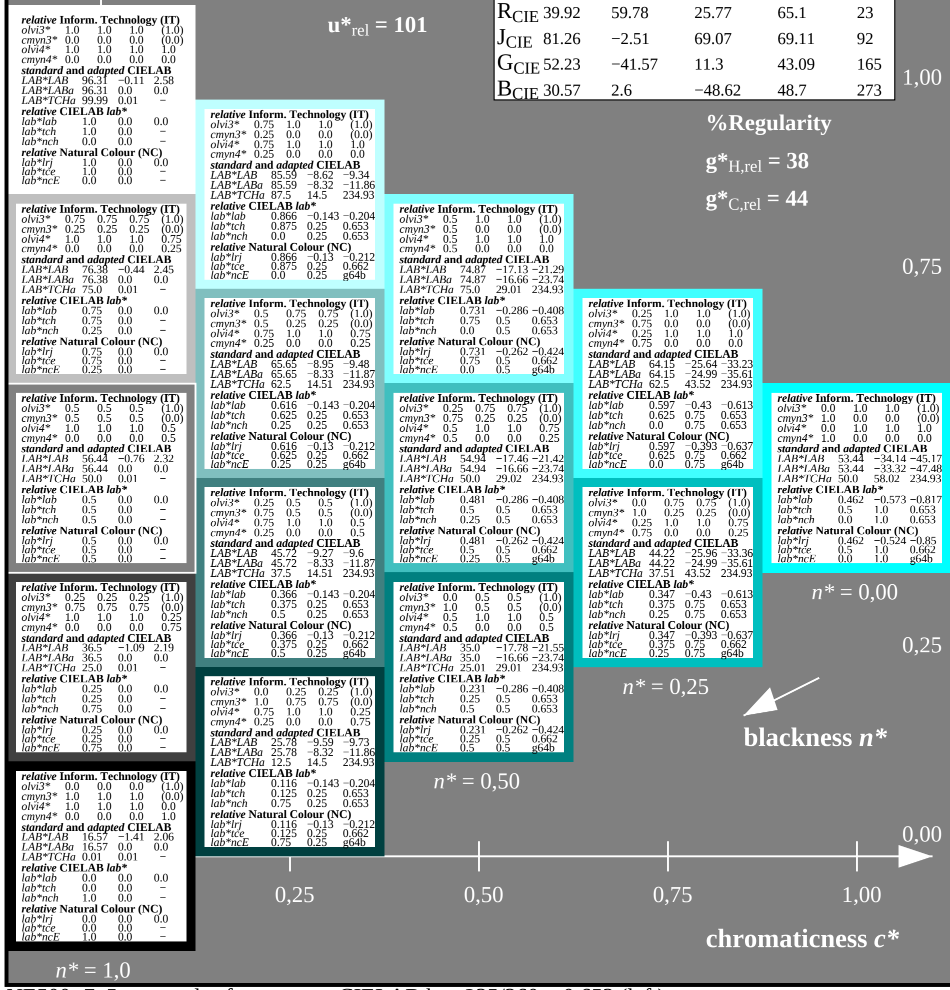
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

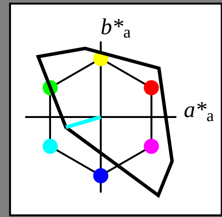
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

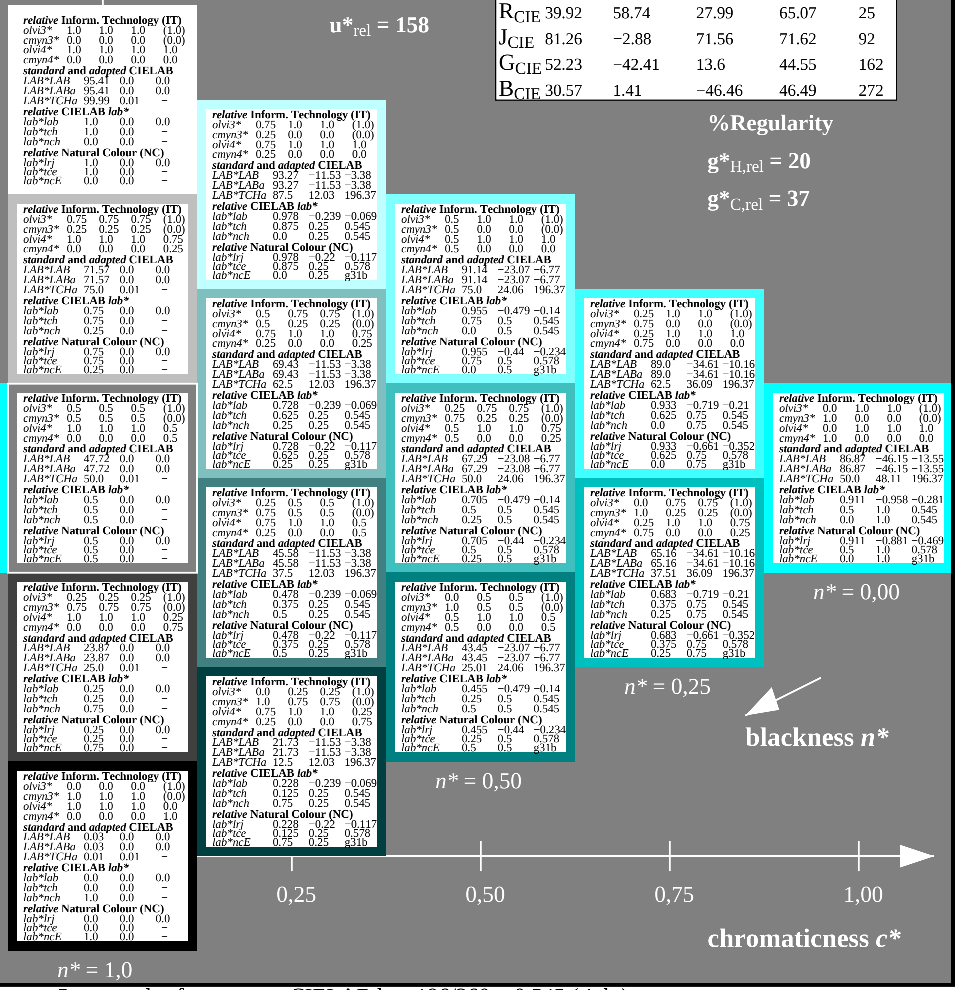
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

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

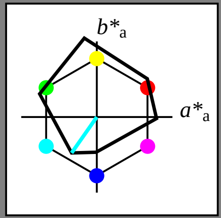
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

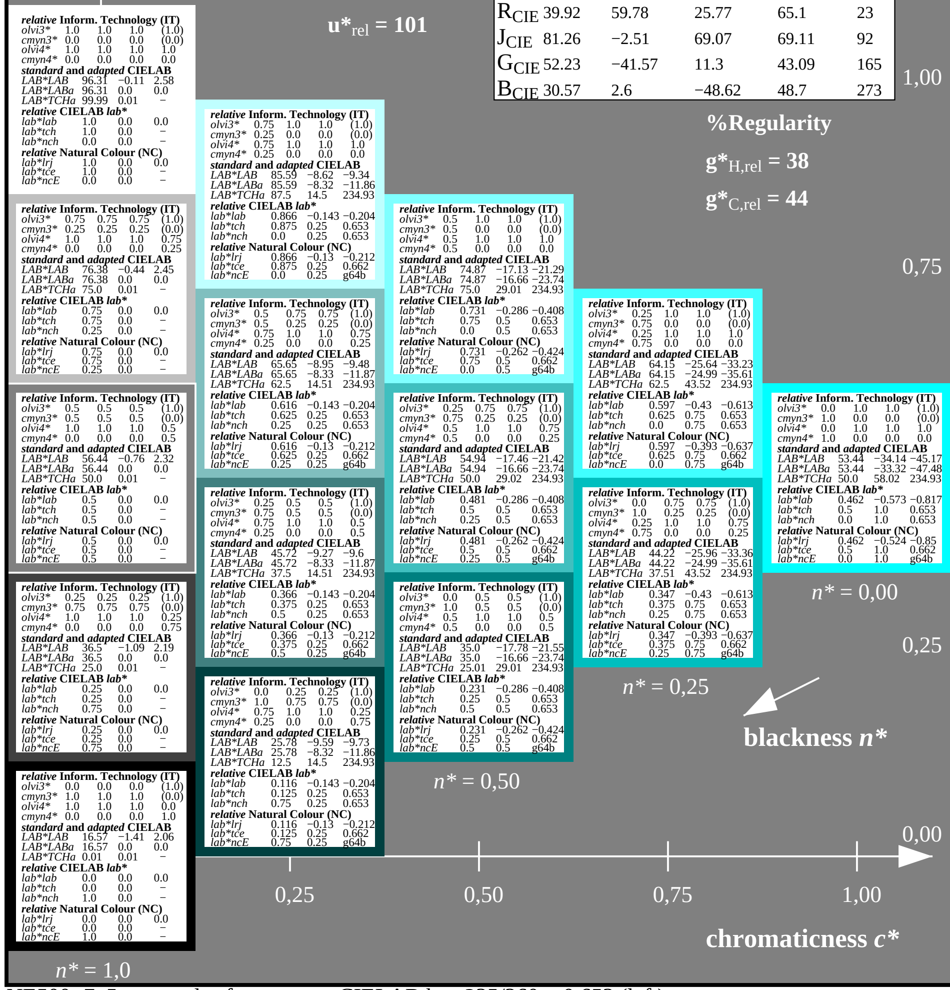
u^*_{rel} = 101

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 Printer Reflective System DRSXX

for hue *h* = lab*h* = 235/360 = 0.653

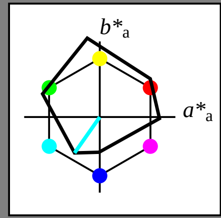
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

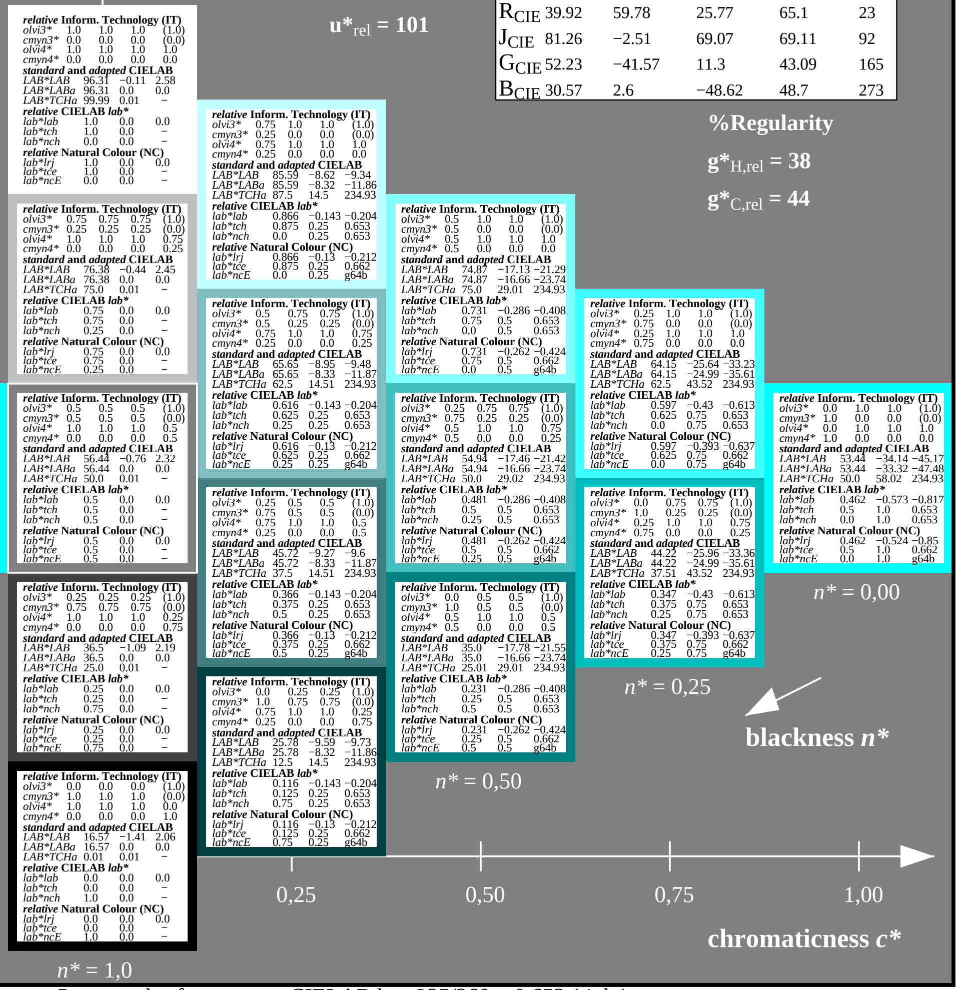
u^*_{rel} = 101

(DRSXX; adapted (a) CIELAB data — same table as above)

%Regularity

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

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



NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

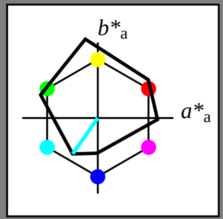
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

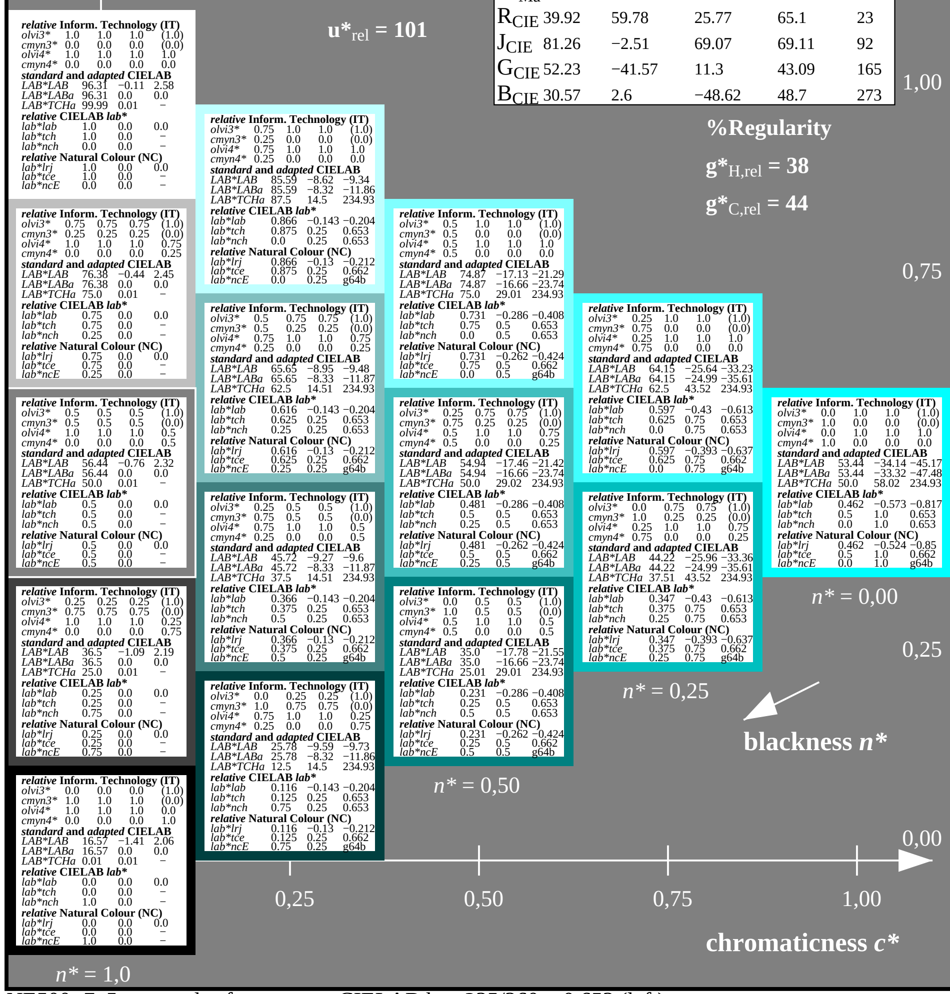
u^*_{rel} = 101

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 $h^* = lab^*h = 196/360 = 0.546$

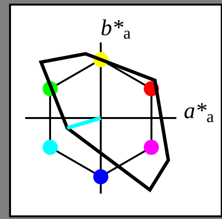
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

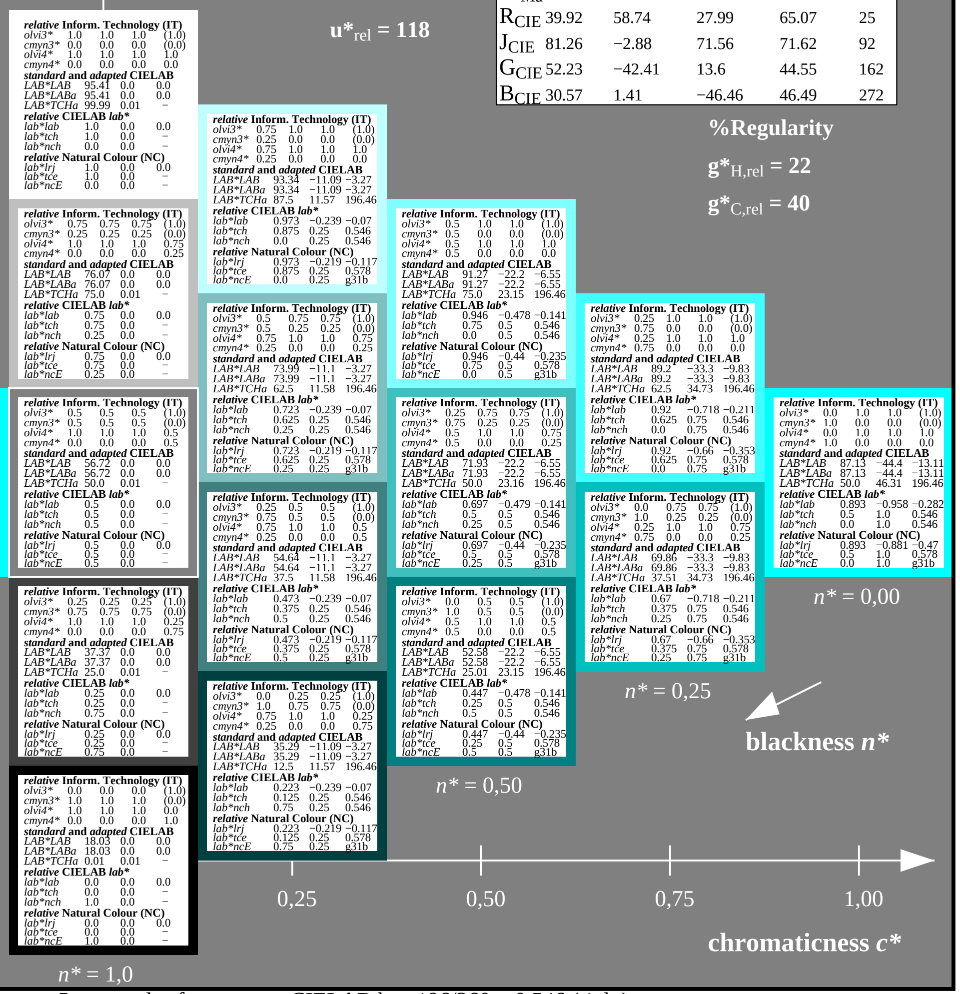
u^*_{rel} = 118

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



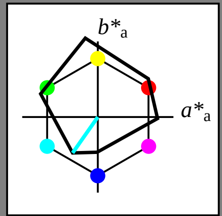
NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

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

$u^*_{rel} = 101$

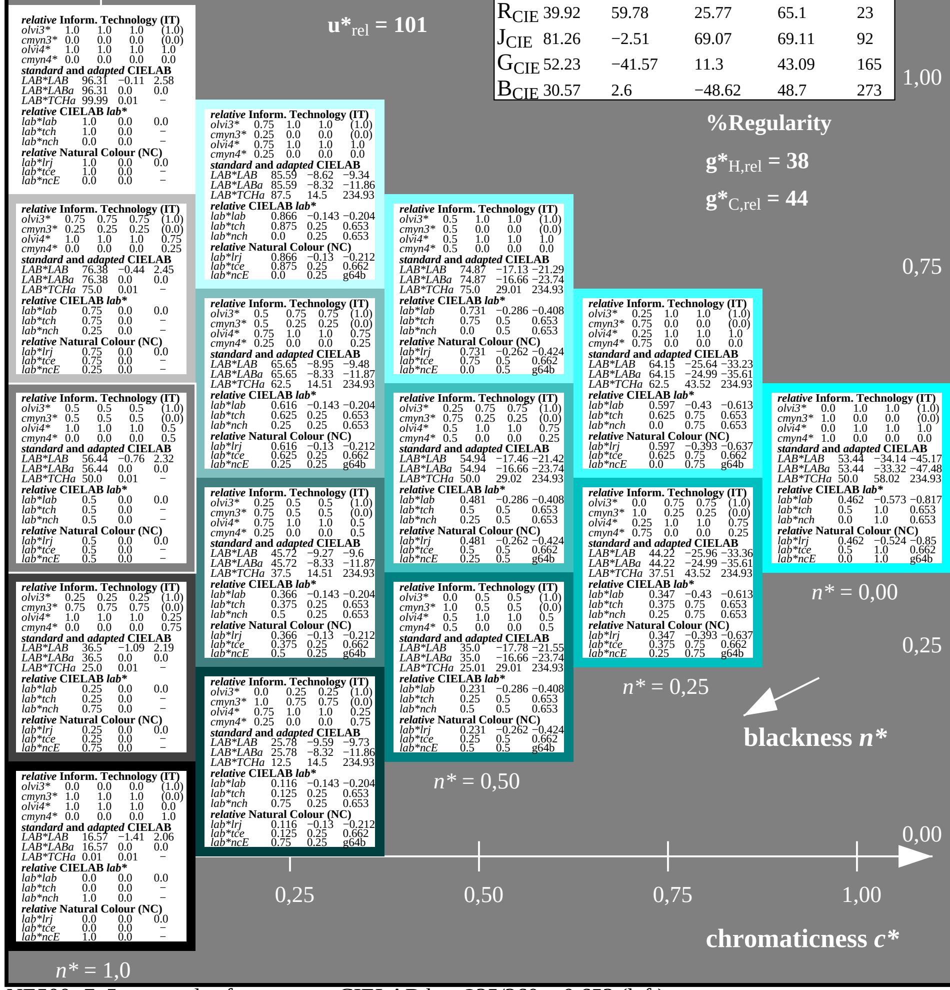
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

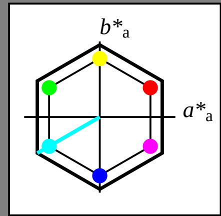
$g^*_{C,rel} = 44$



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

$u^*_{rel} = 152$

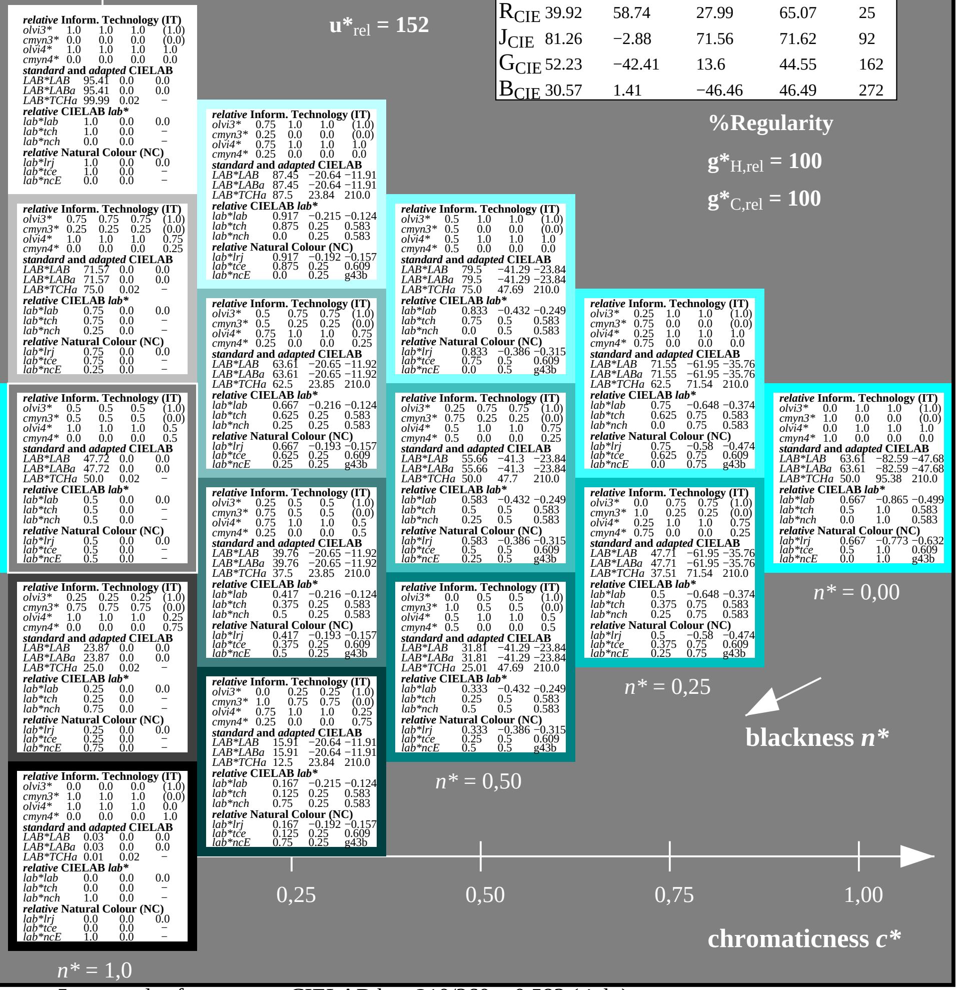
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

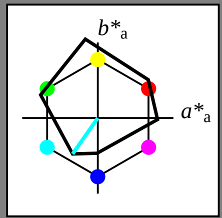


NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

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^*

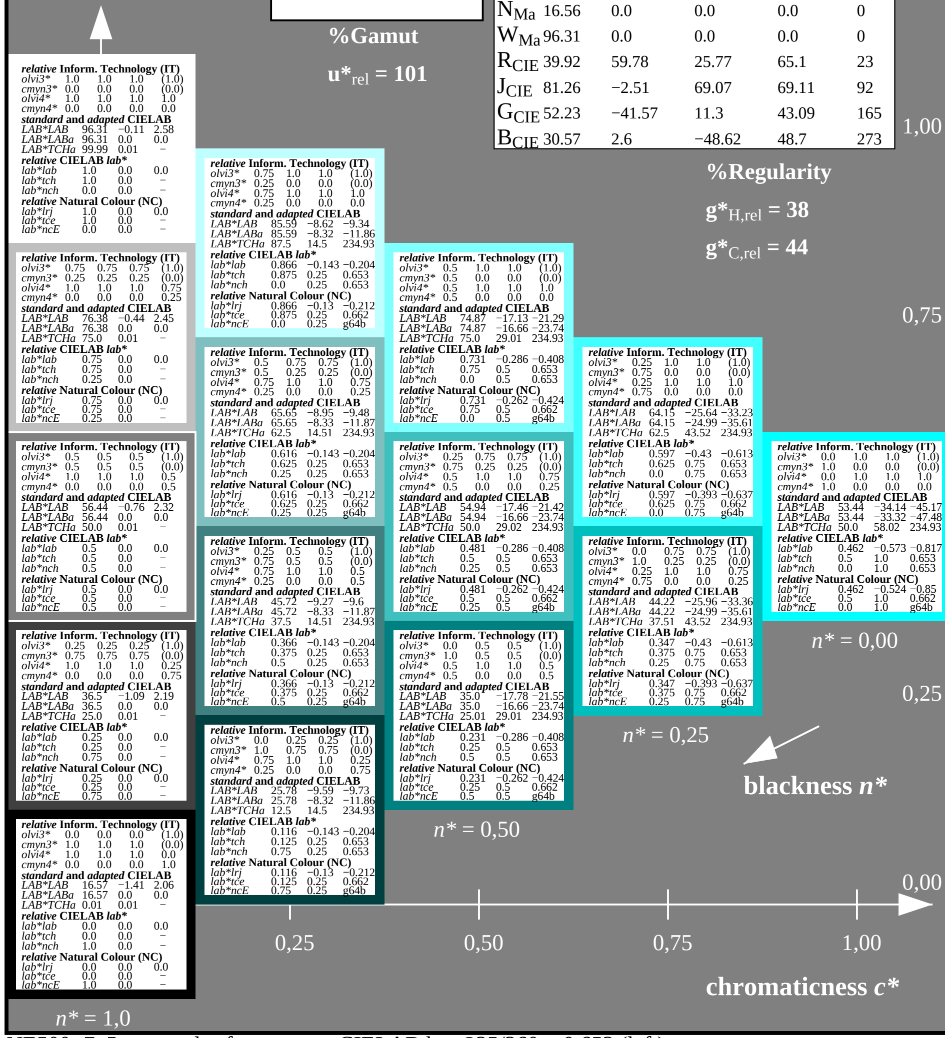


%Gamut
$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

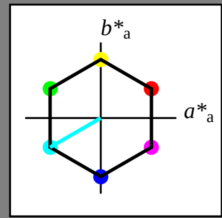
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



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^*

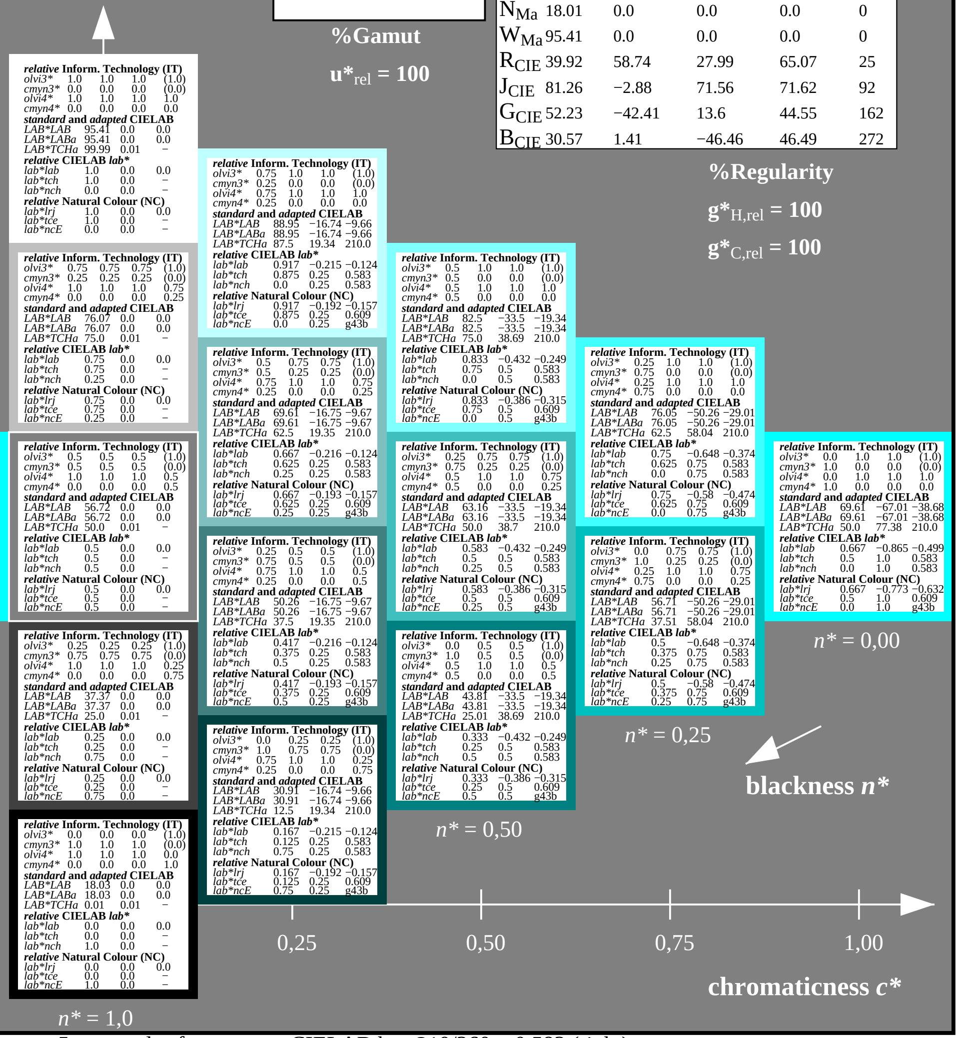


%Gamut
$u^*_{rel} = 100$

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

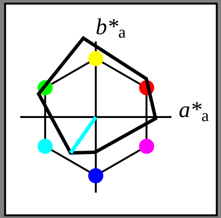


NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left) 5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

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^*

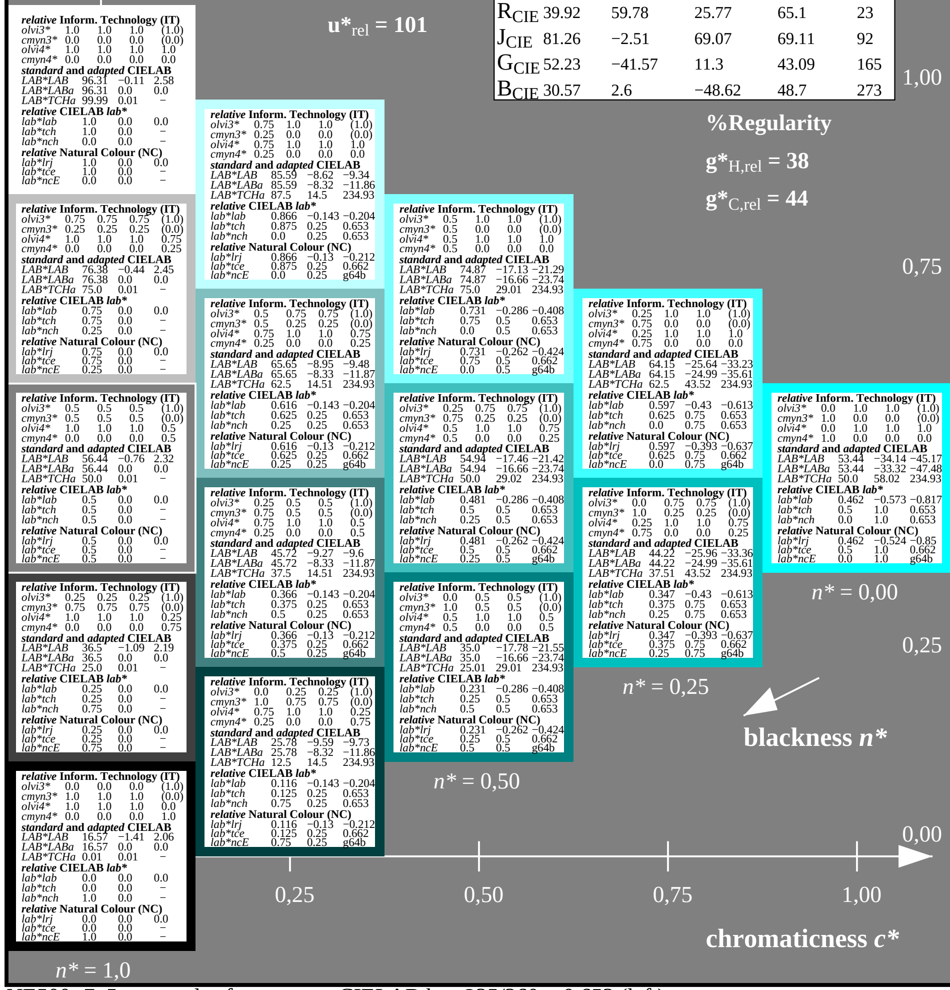


%Gamut
u^*_{rel} = 101

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

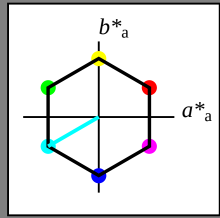
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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^*

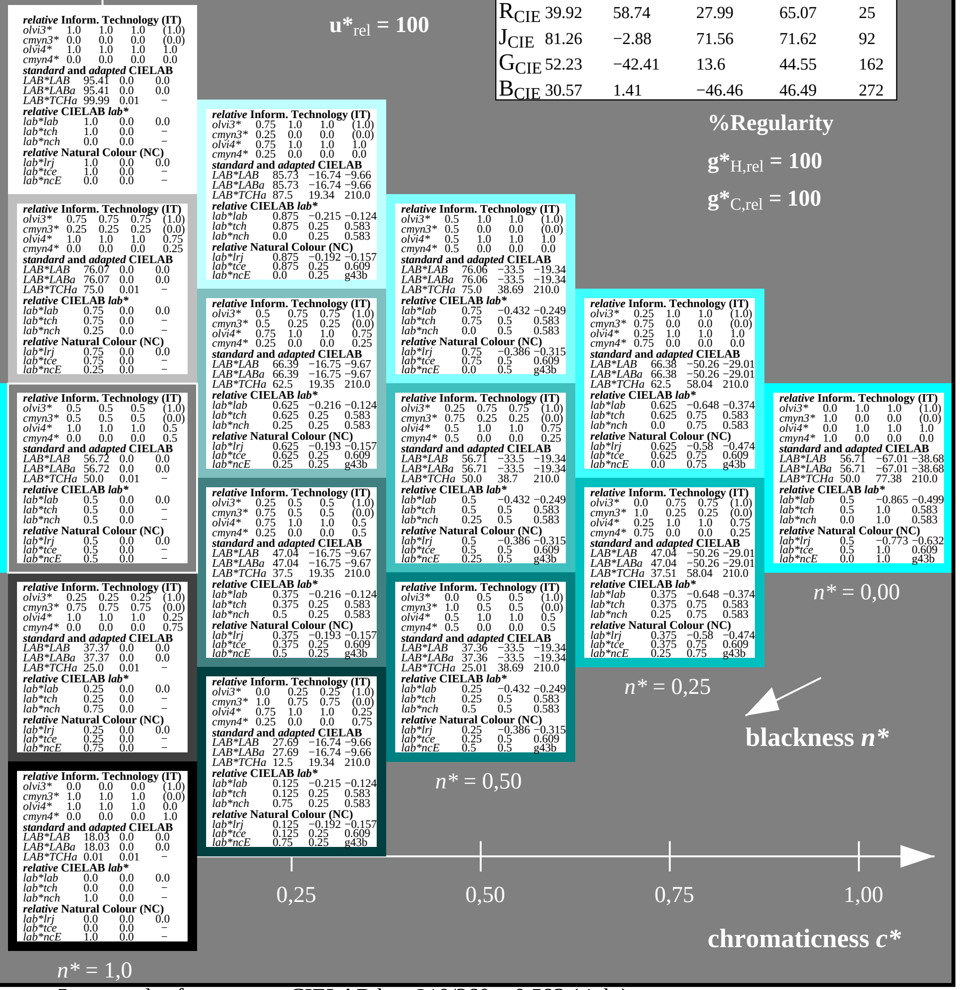


%Gamut
u^*_{rel} = 100

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

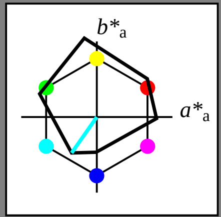


NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)   5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

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

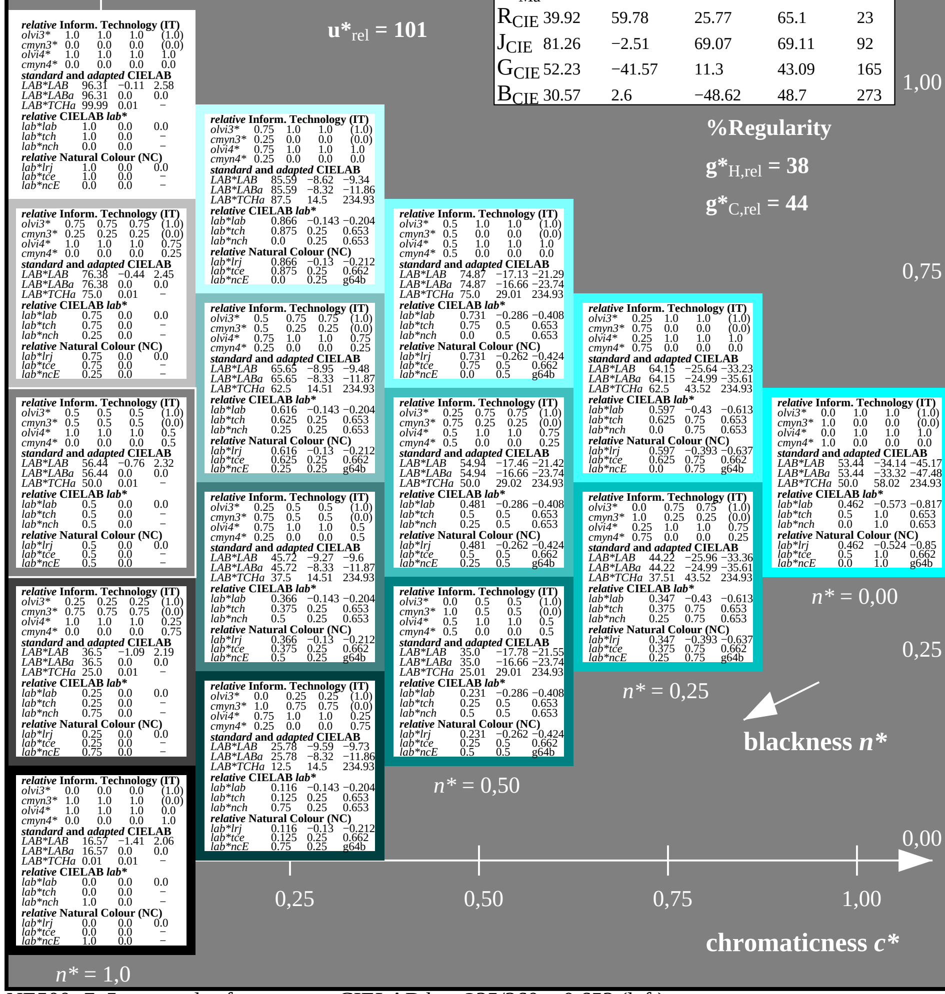
u^*_{rel} = 101

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

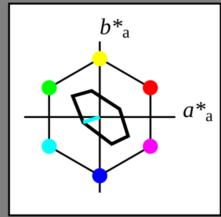
$g^*_{C,rel}$ = 44



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

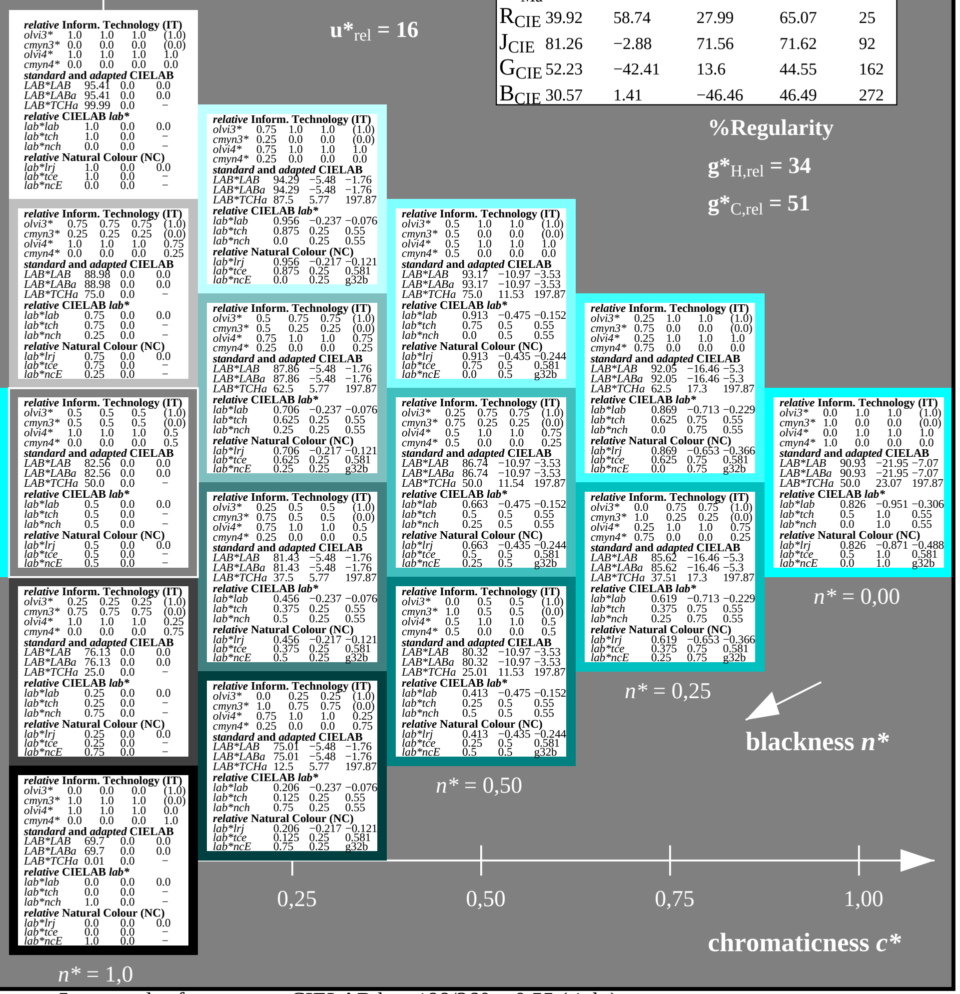
u^*_{rel} = 16

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



NE500−7, 5 step scales for constant CIELAB hue 235/360 = 0.653 (left)

5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

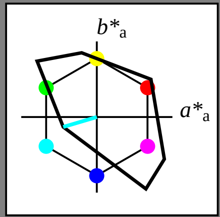
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 118$

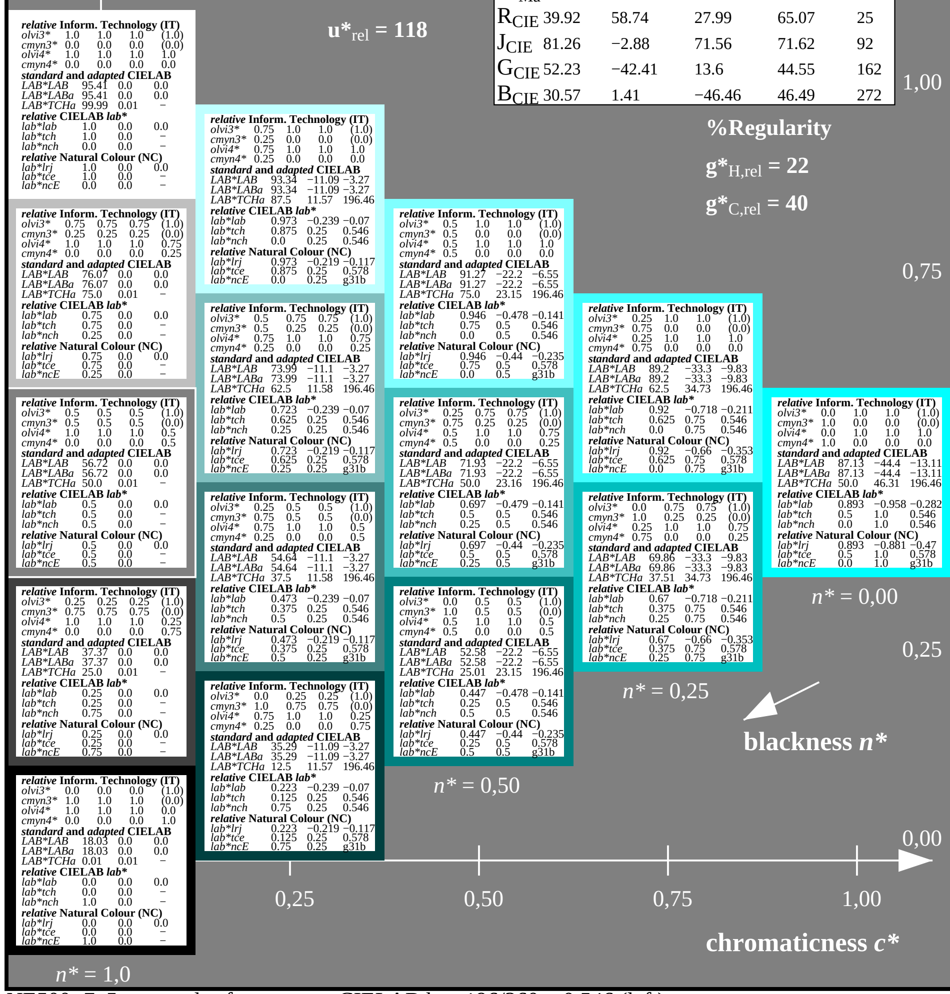
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

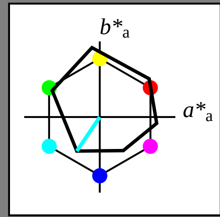
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 93$

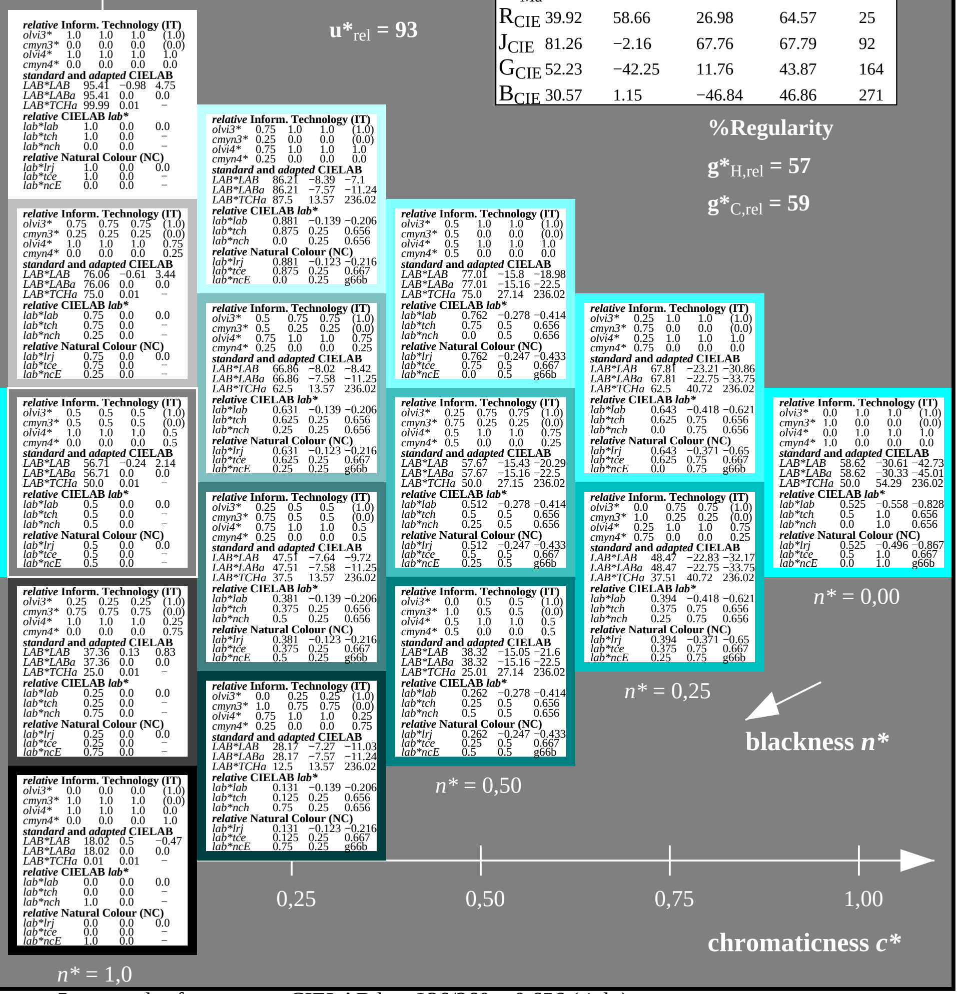
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



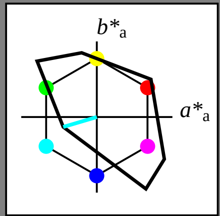
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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

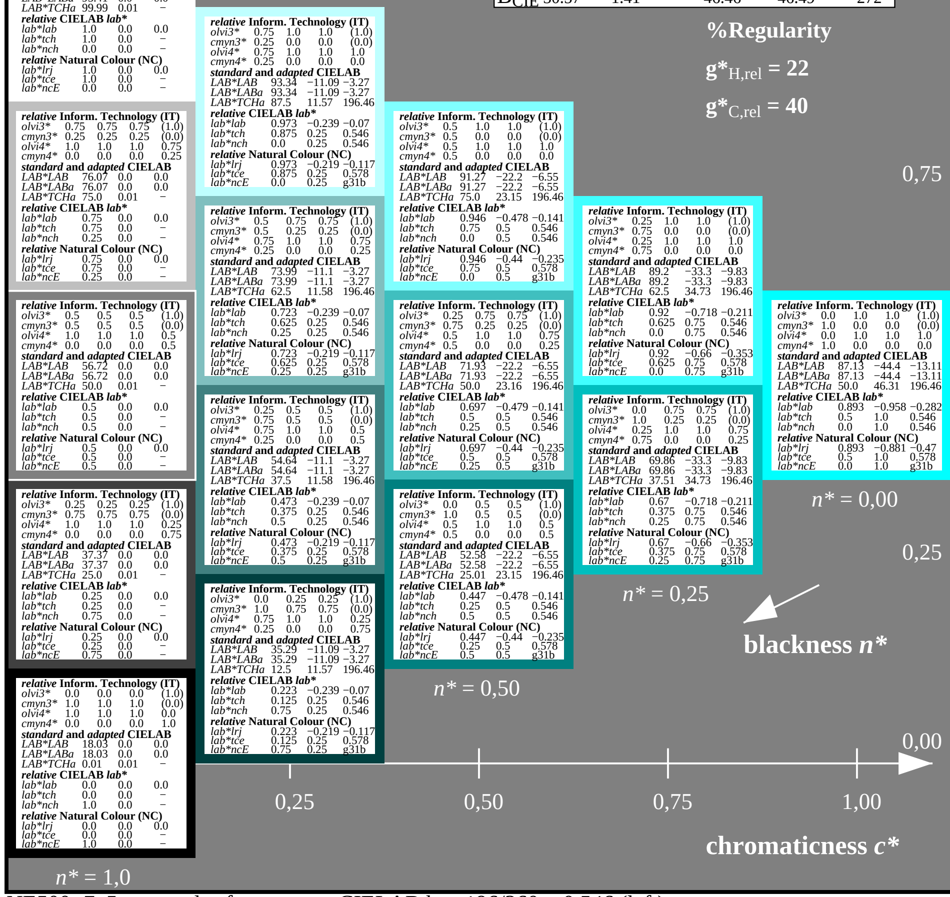
triangle lightness *t**



%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

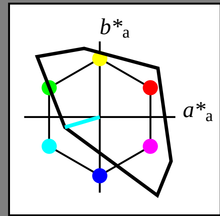
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



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

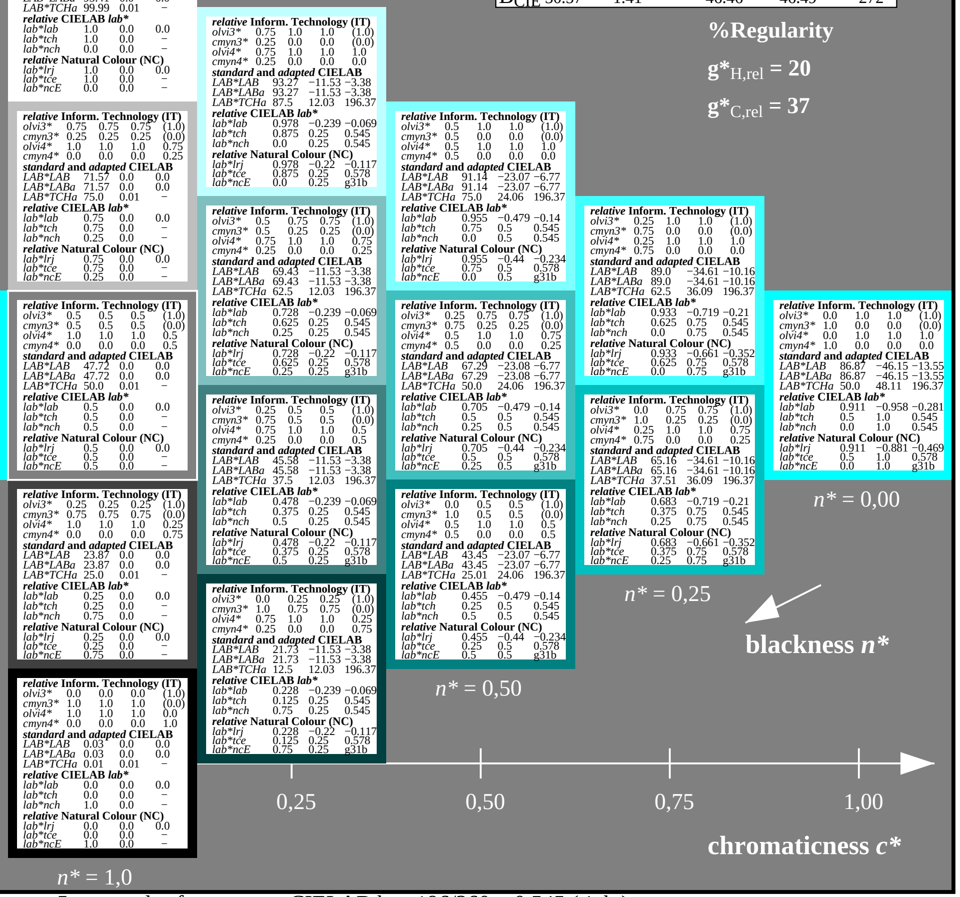
triangle lightness *t**



%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



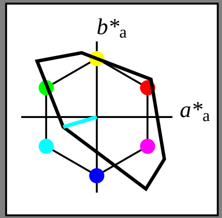
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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**

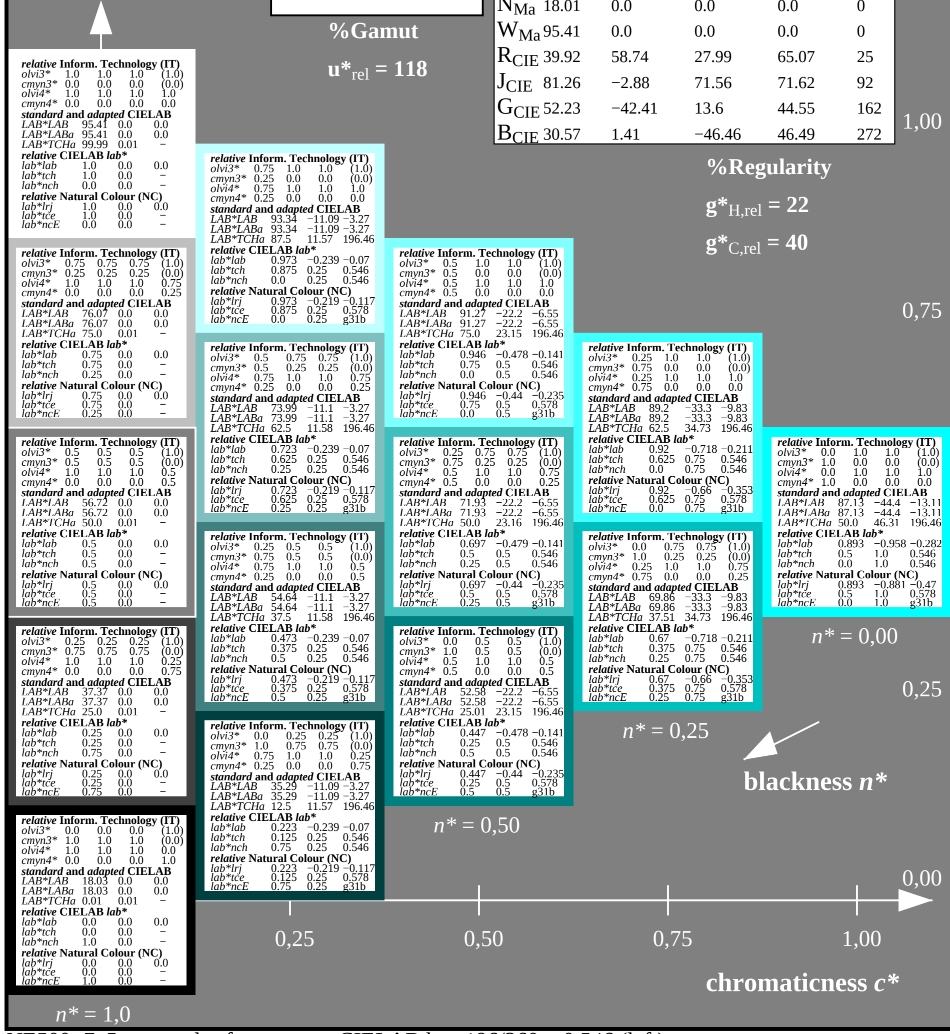


%Gamut
u^*_{rel} = 118

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

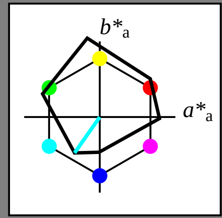
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



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**

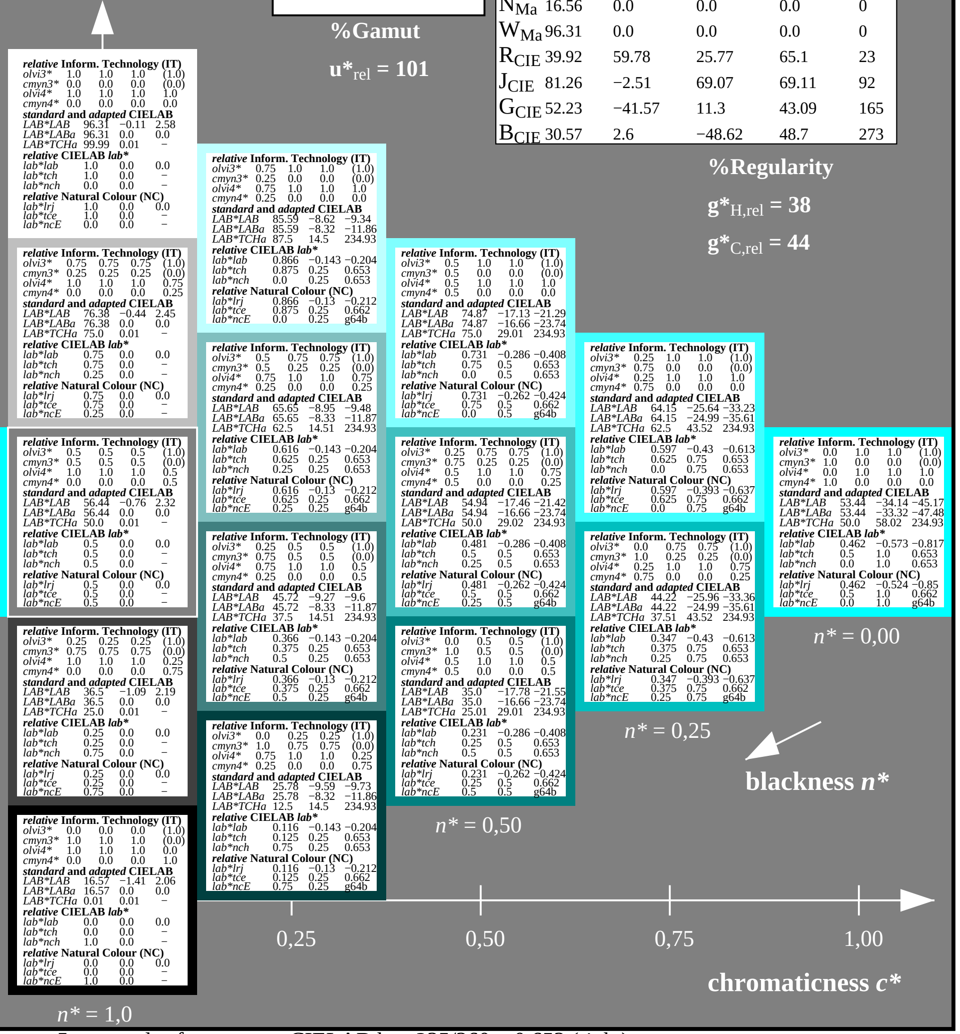


%Gamut
u^*_{rel} = 101

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



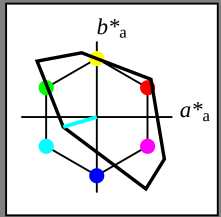
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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

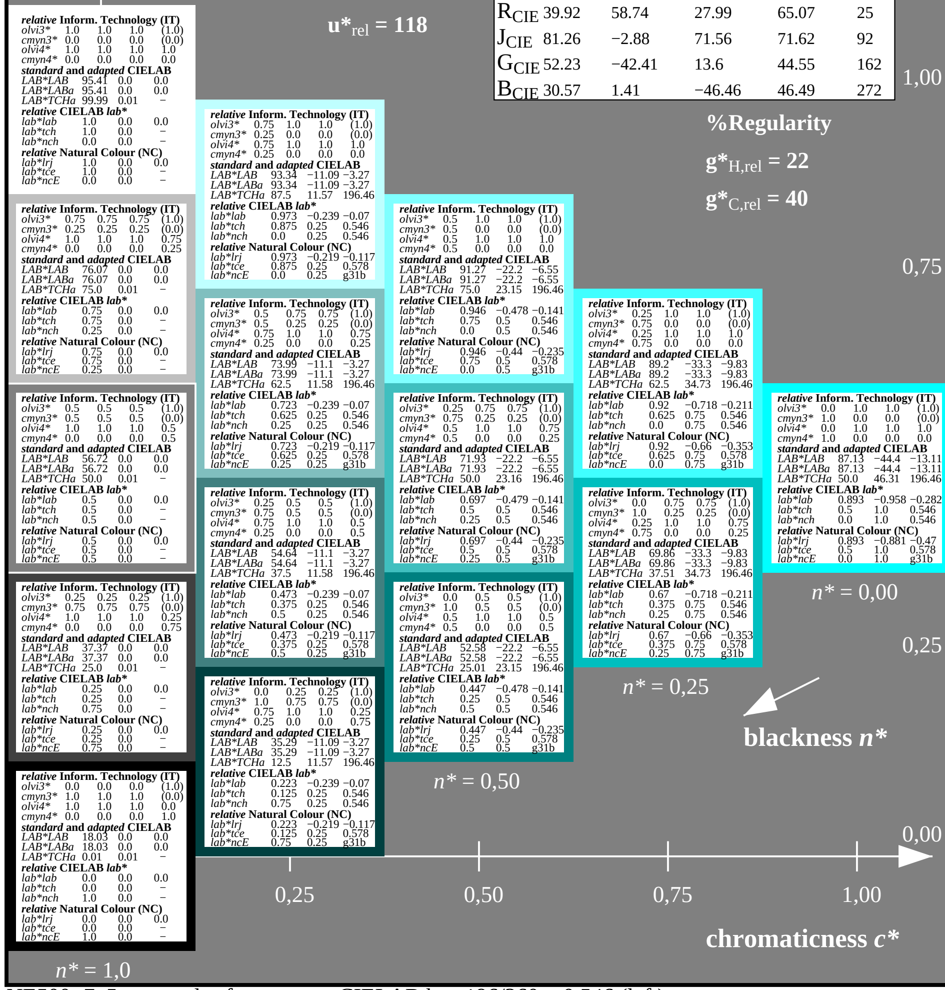
triangle lightness t^*



%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

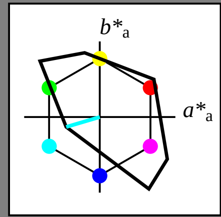
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



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

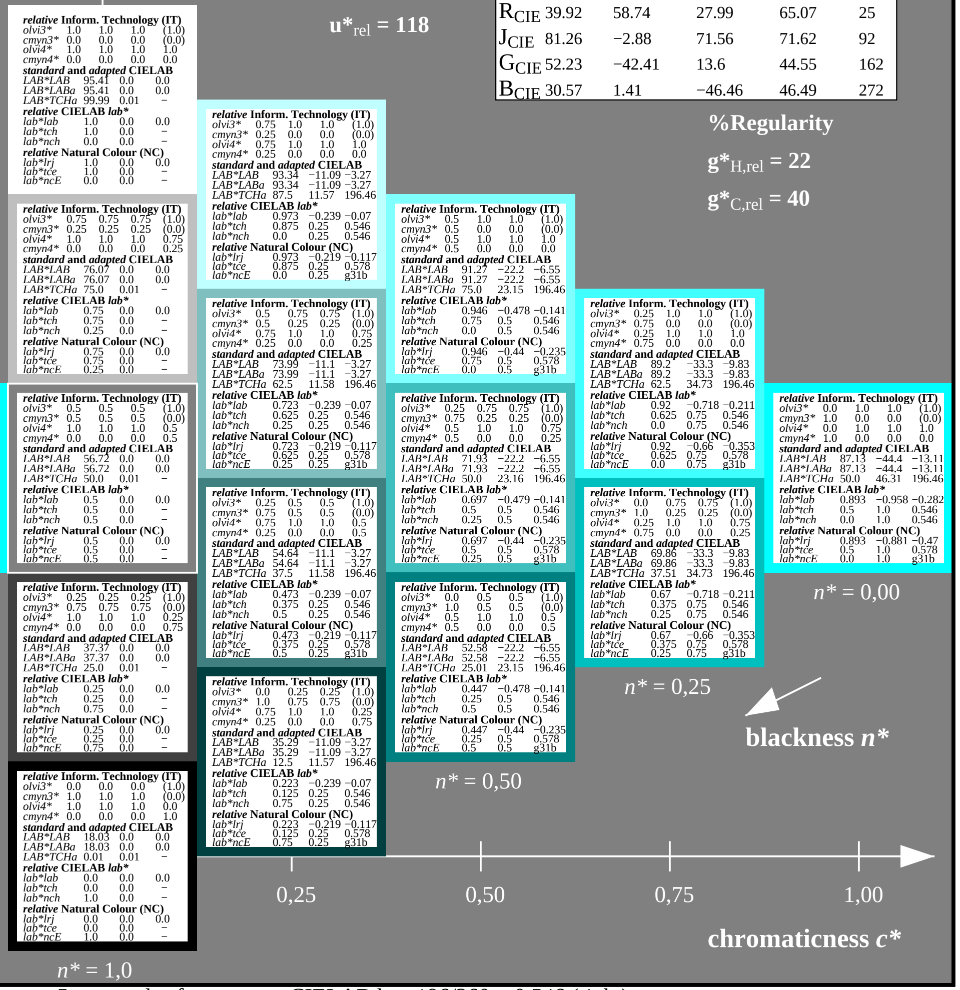
triangle lightness t^*



%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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

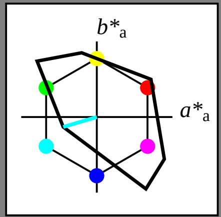
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

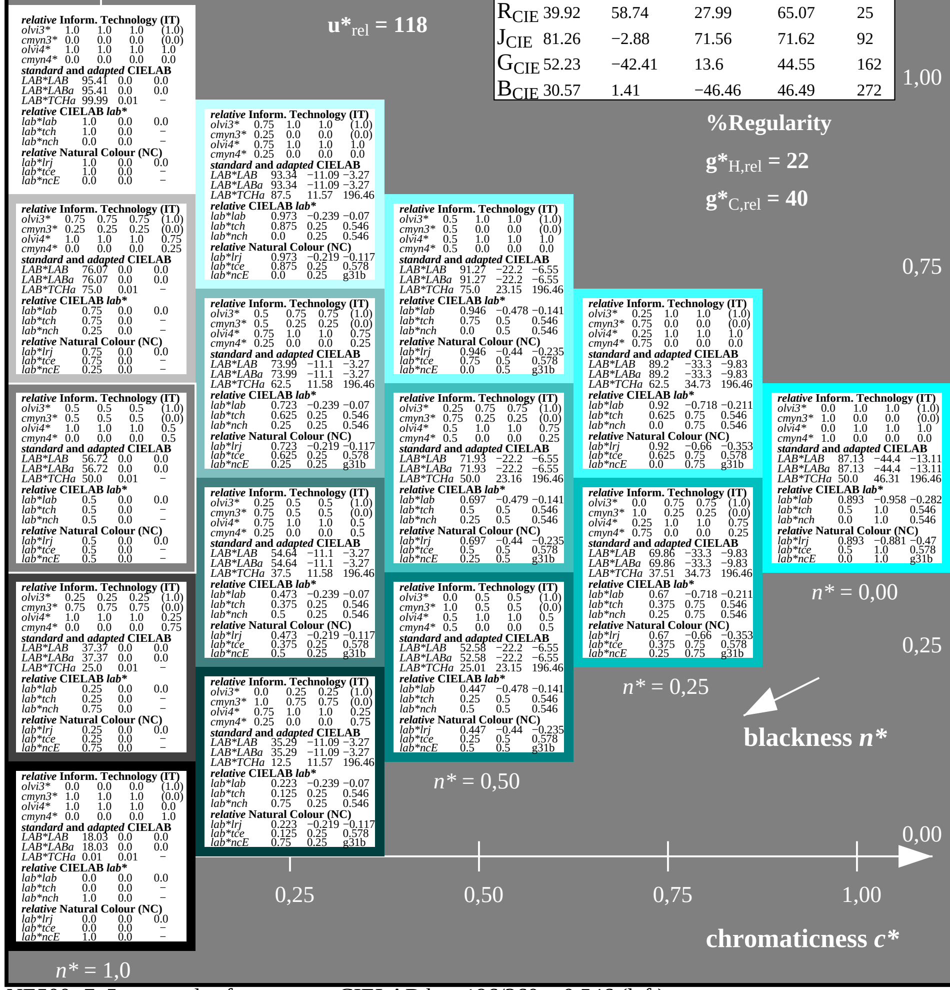
$u^*_{rel} = 118$

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

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

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

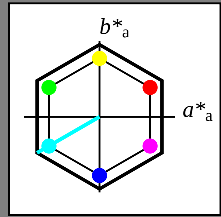
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

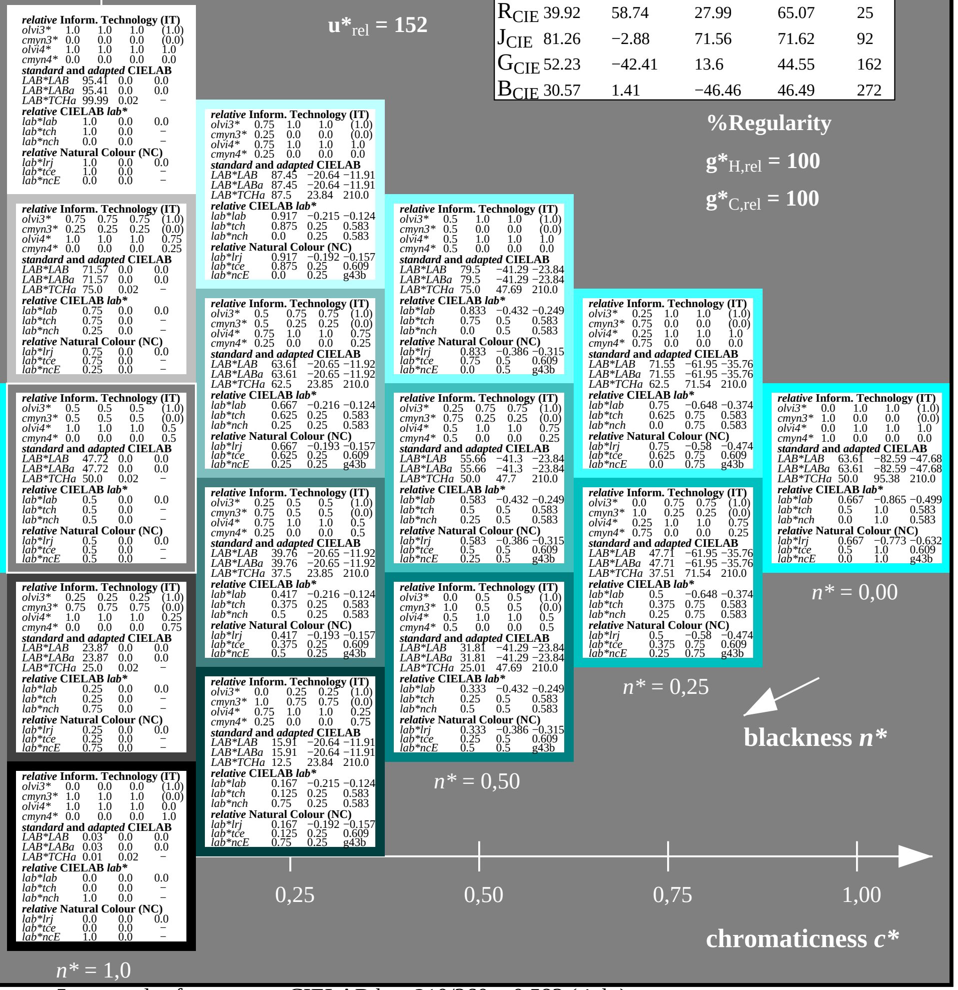
$u^*_{rel} = 152$

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

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

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



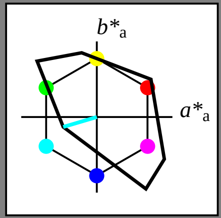
NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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^*

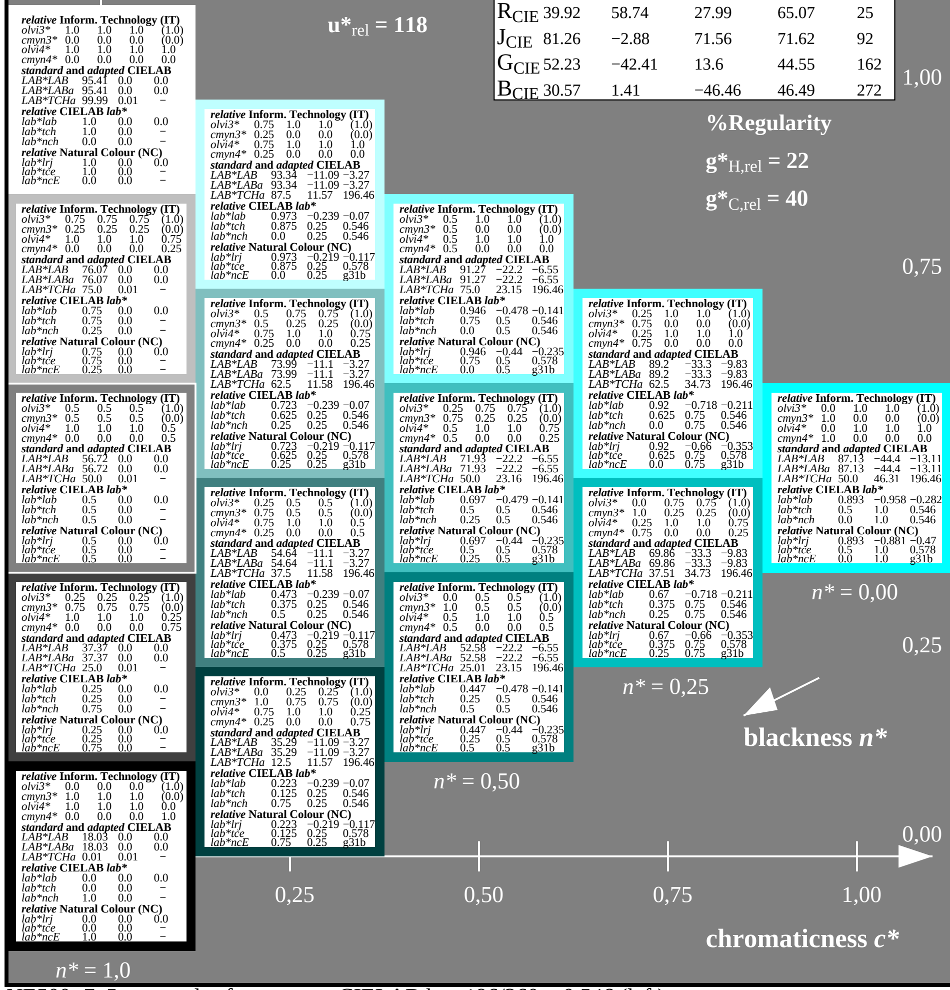


%Gamut
u^*_{rel} = 118

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

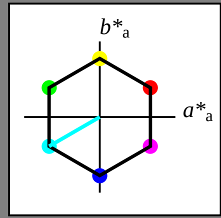
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric 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^*

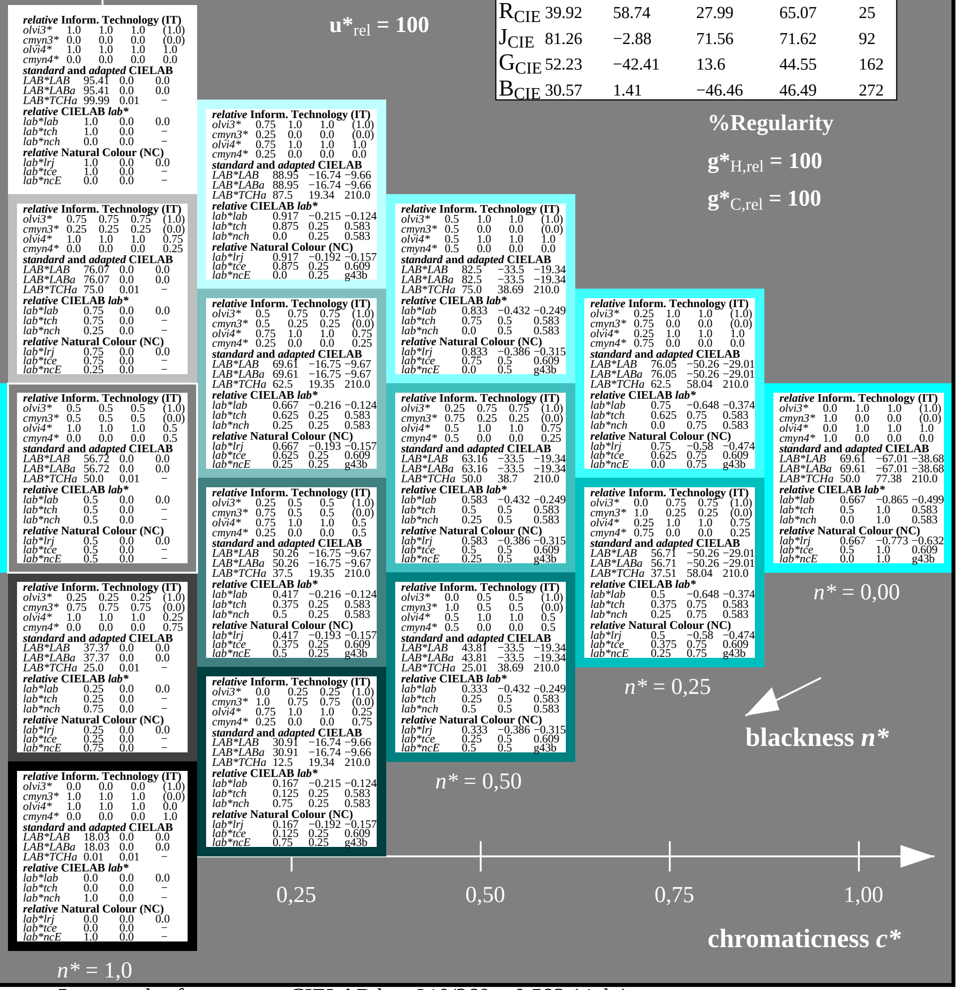


%Gamut
u^*_{rel} = 100

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



NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

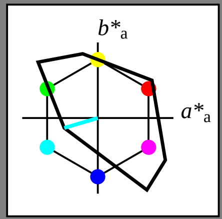
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

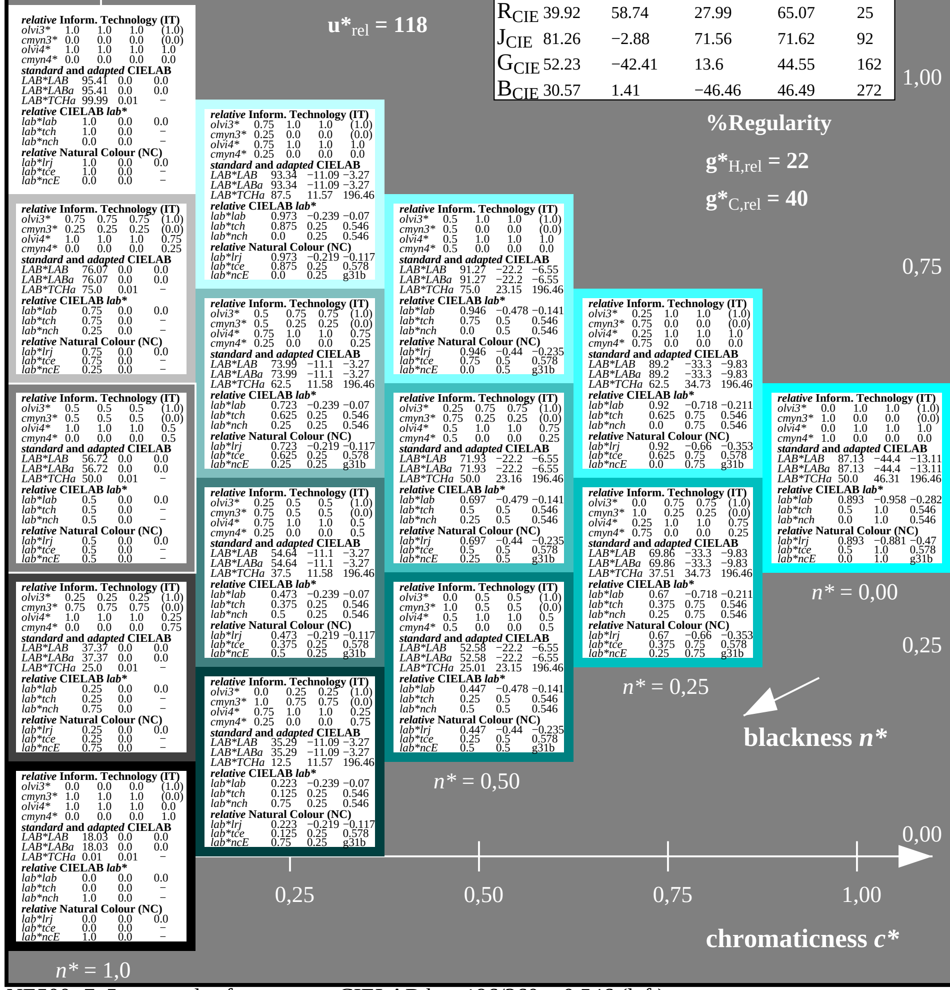
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

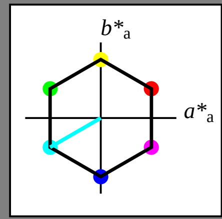
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

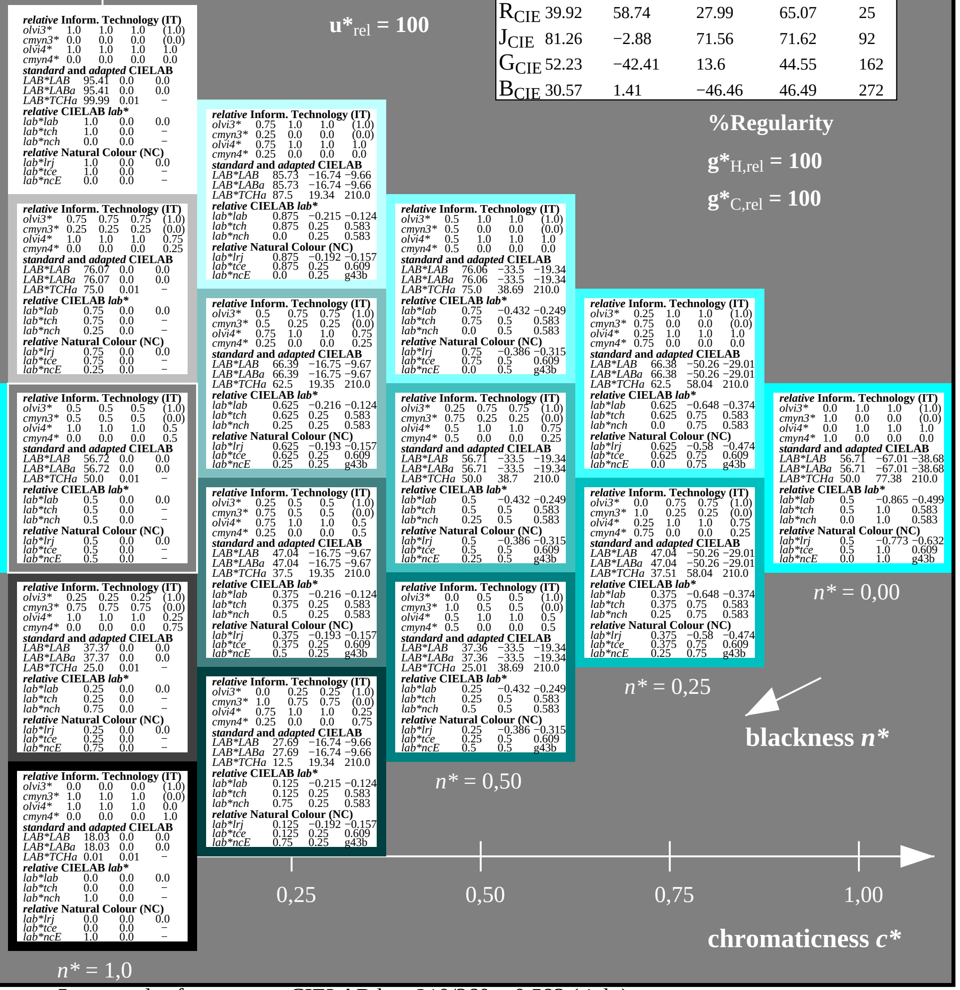
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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

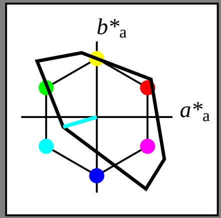
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

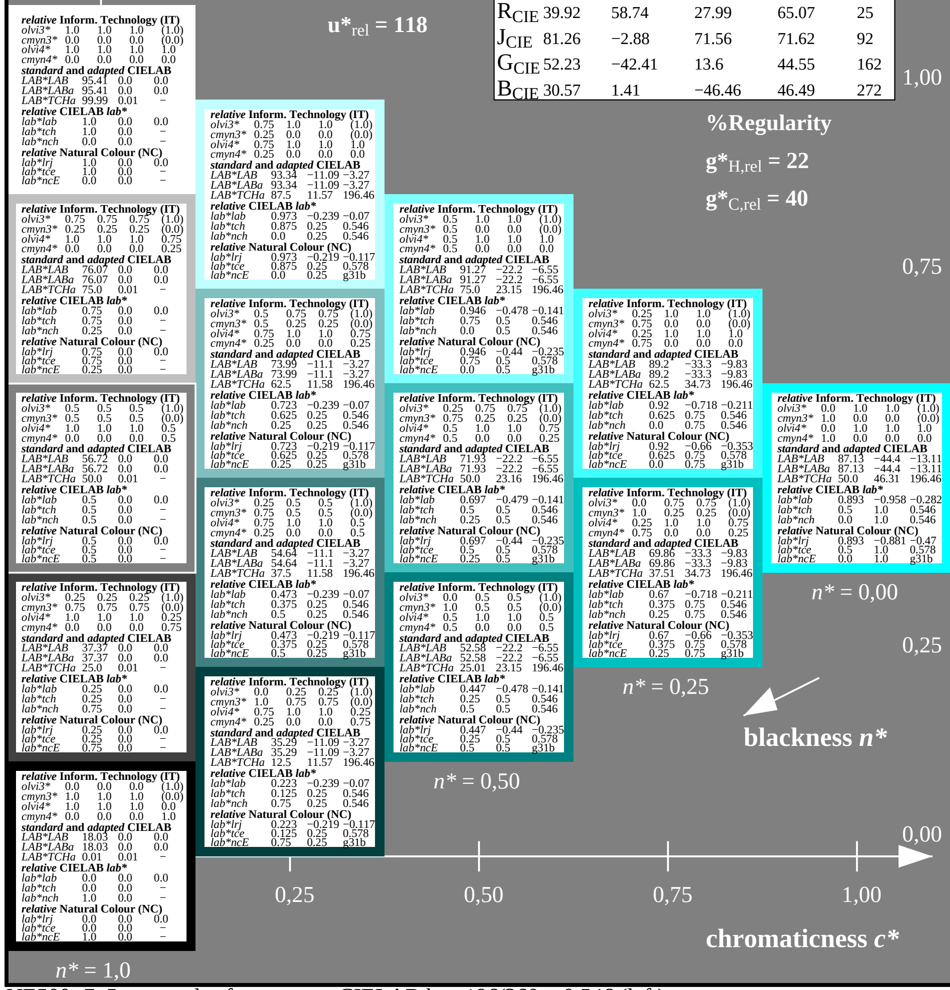
u*rel = 118

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

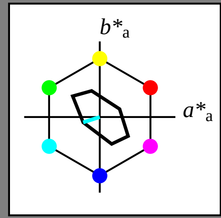
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

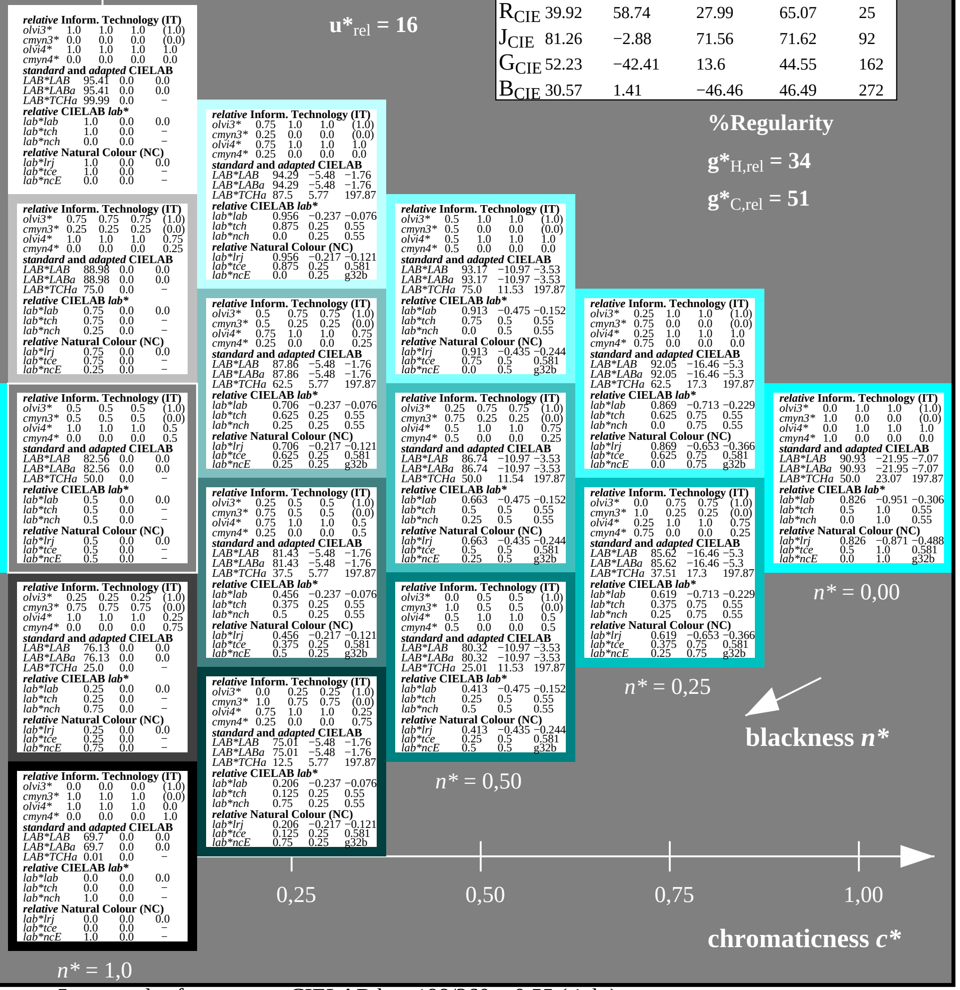
u*rel = 16

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



NE500−7, 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 $h^* = lab^*h = 210/360 = 0.583$

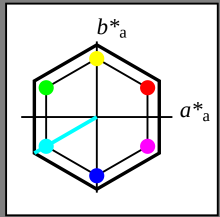
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

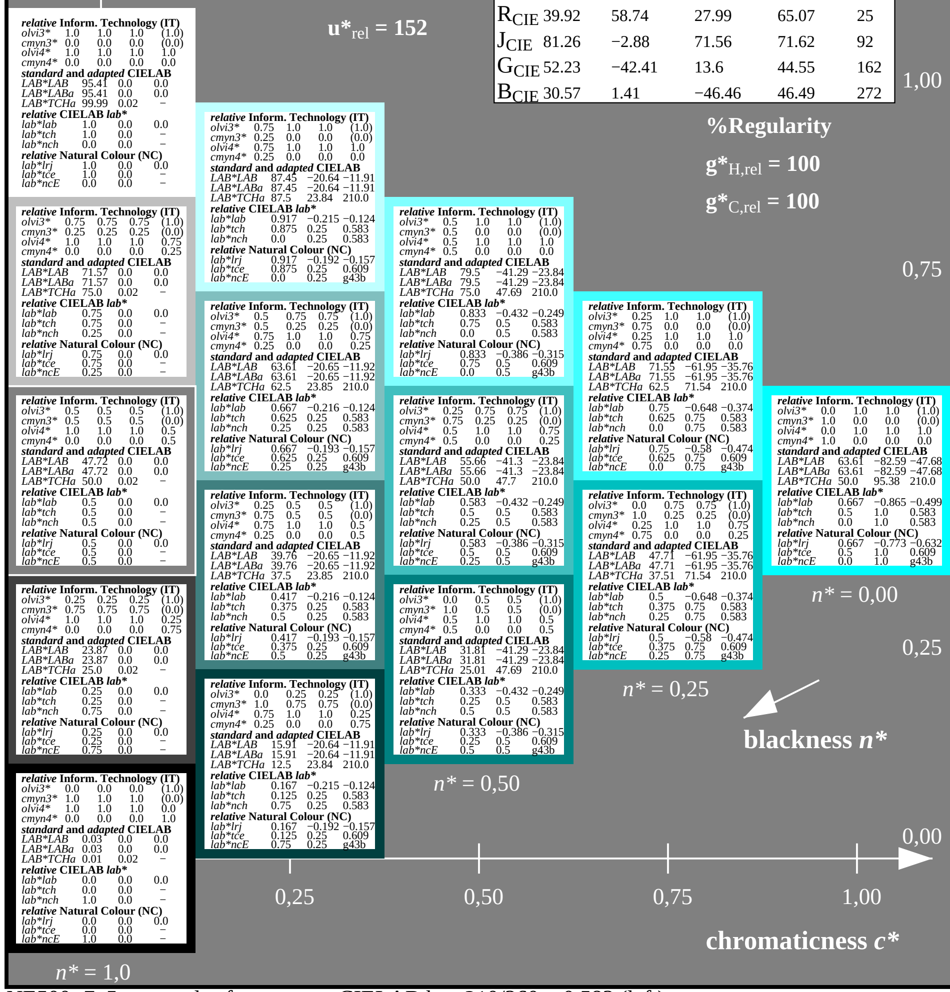
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

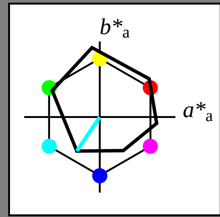
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

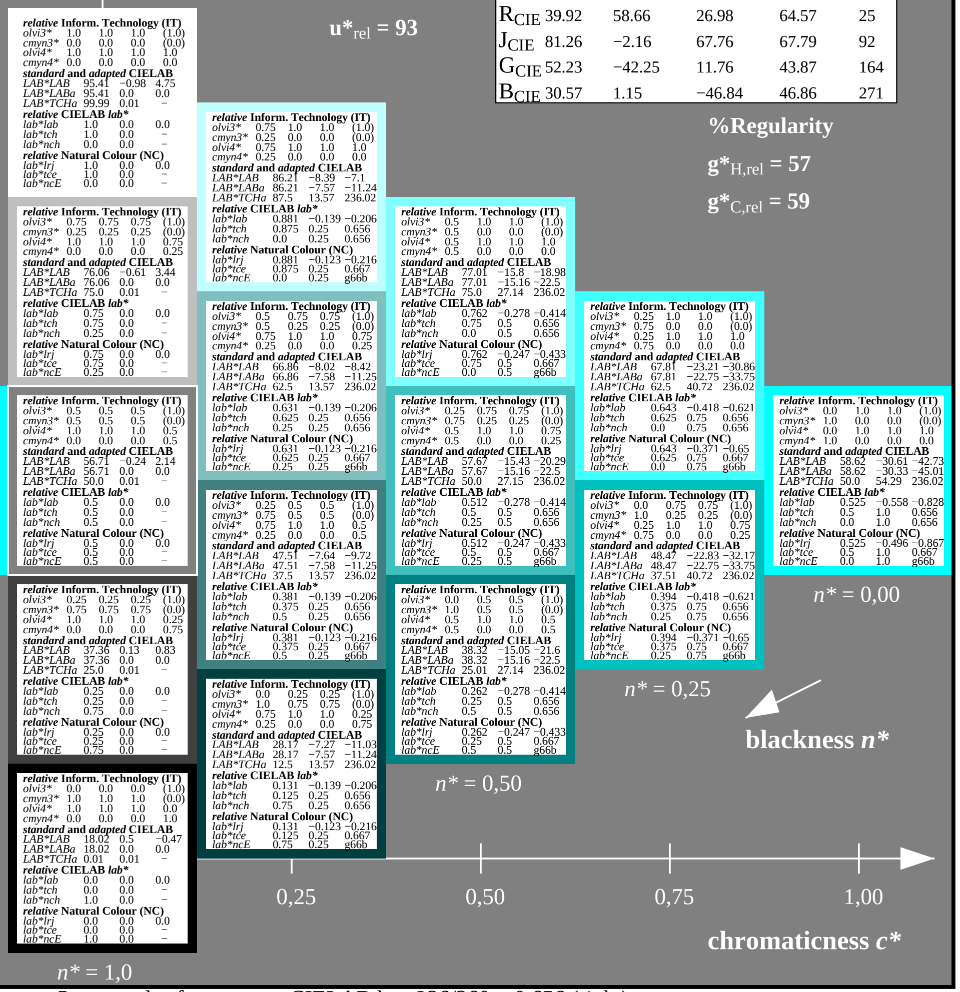
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



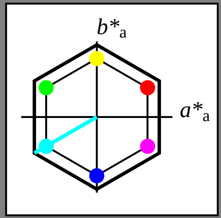
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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

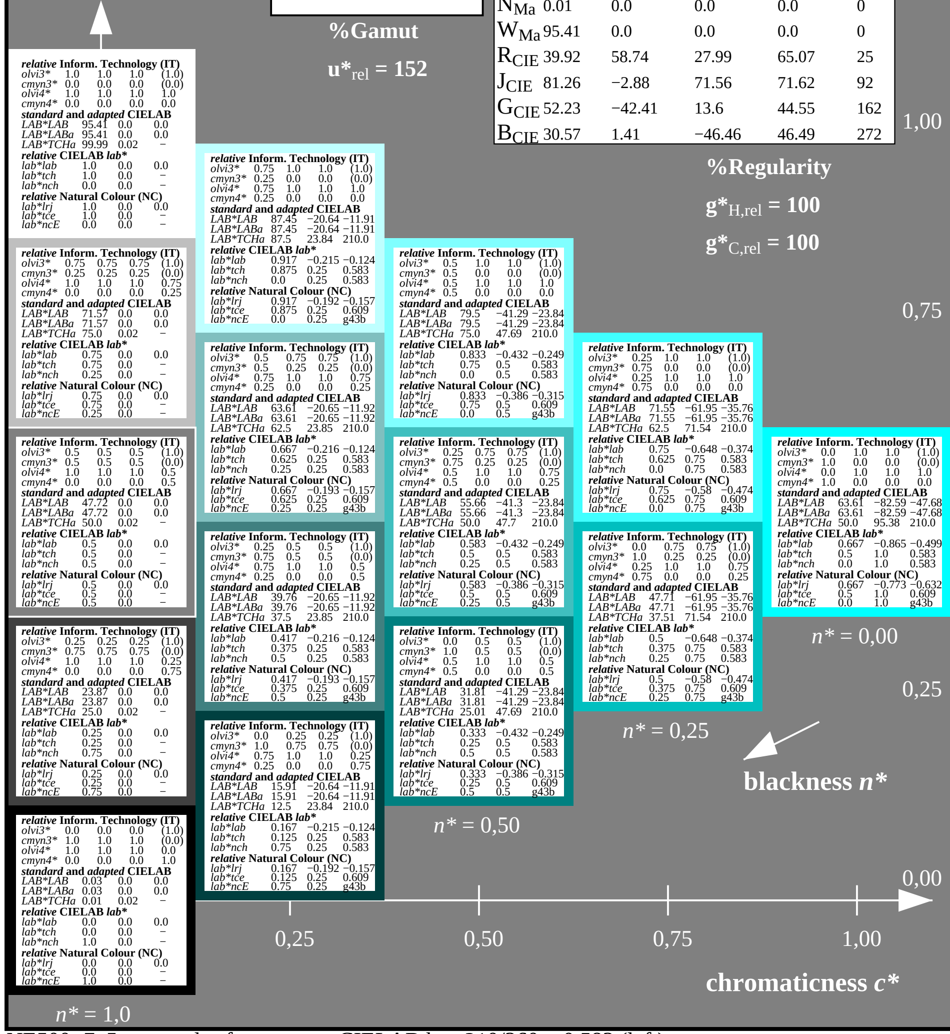
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

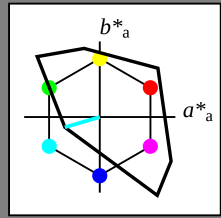
$g^*_{C,rel}$ = 100



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

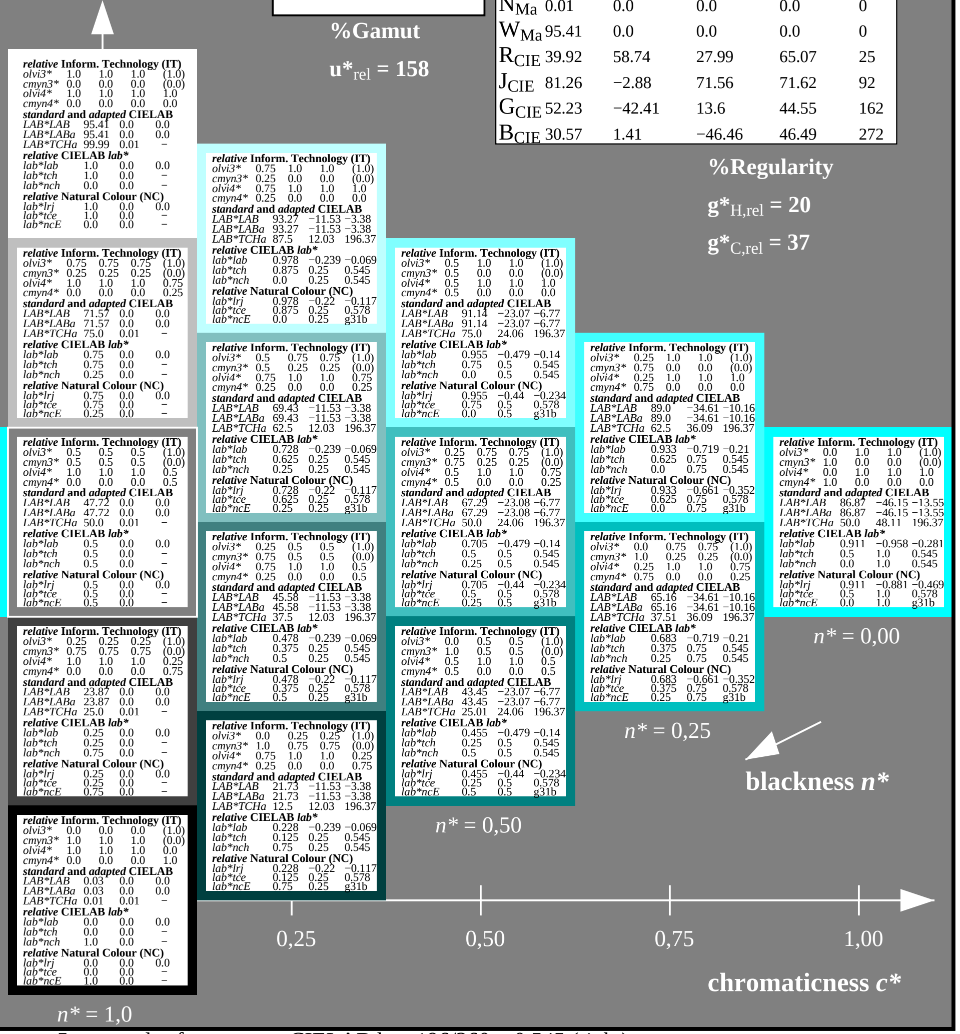
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

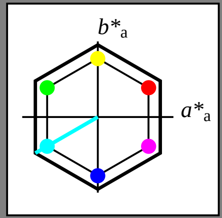
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

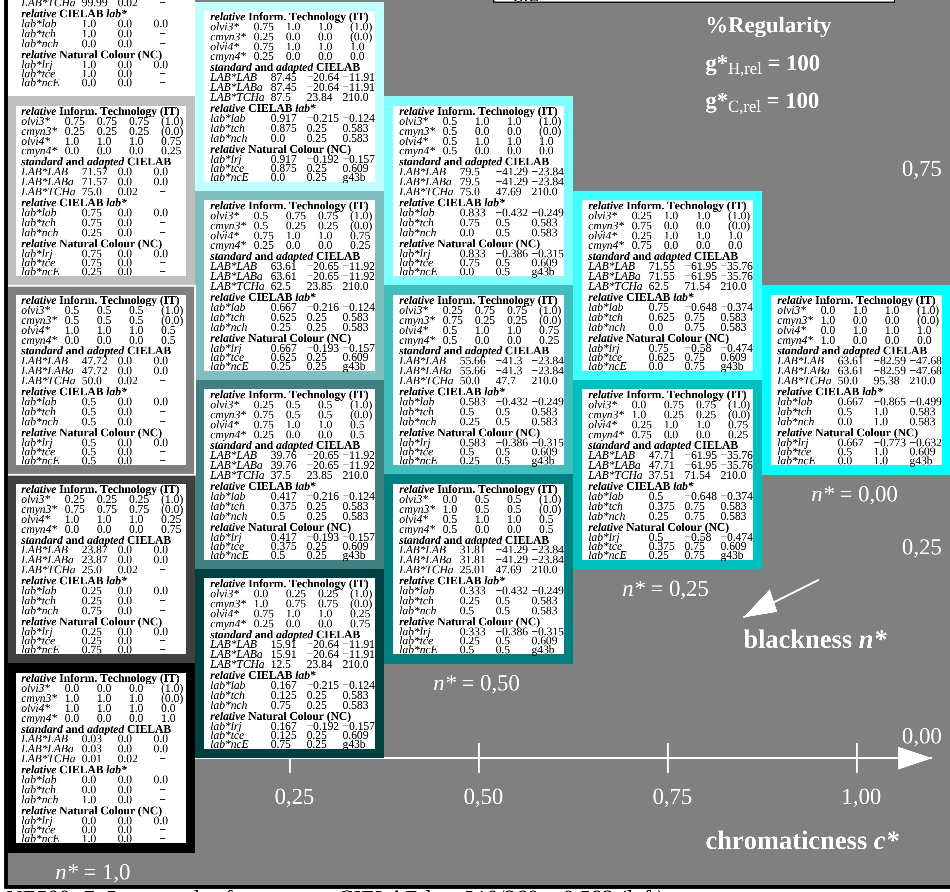
$u^*_{rel} = 152$

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 $h^* = lab^*h = 235/360 = 0.653$

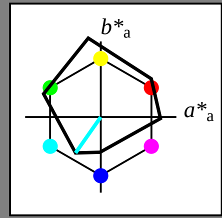
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

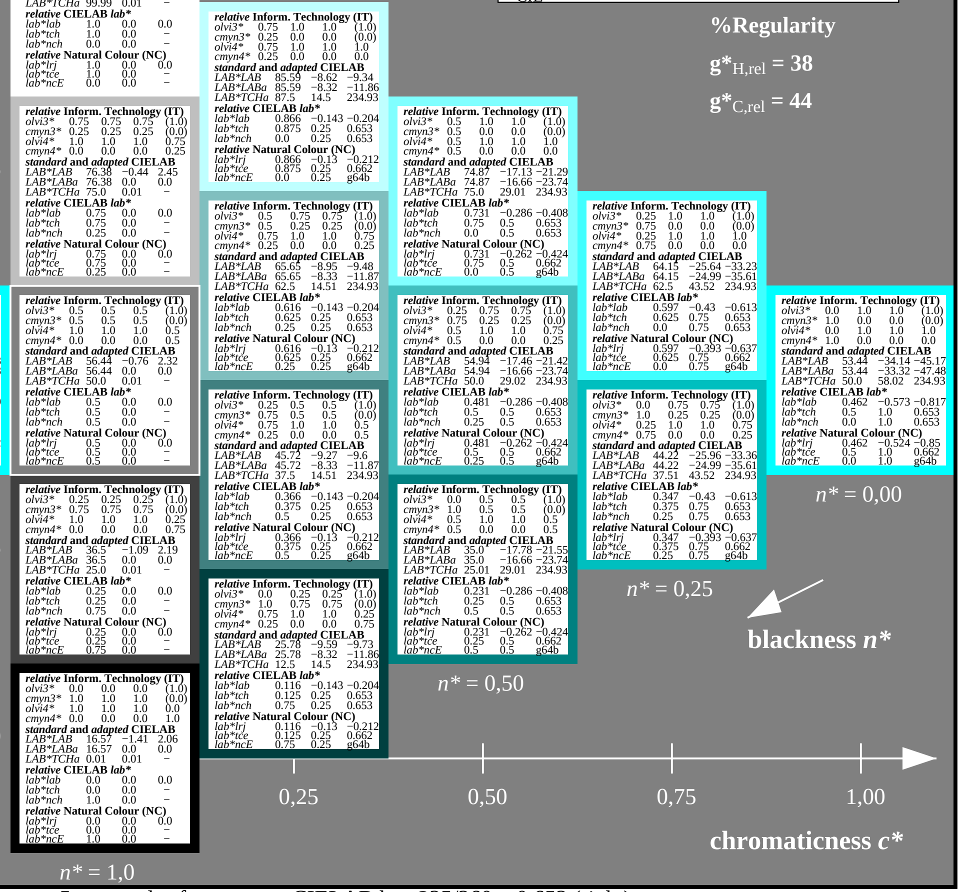
$u^*_{rel} = 101$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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**

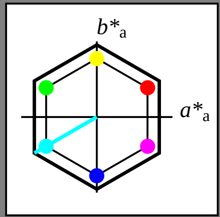
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

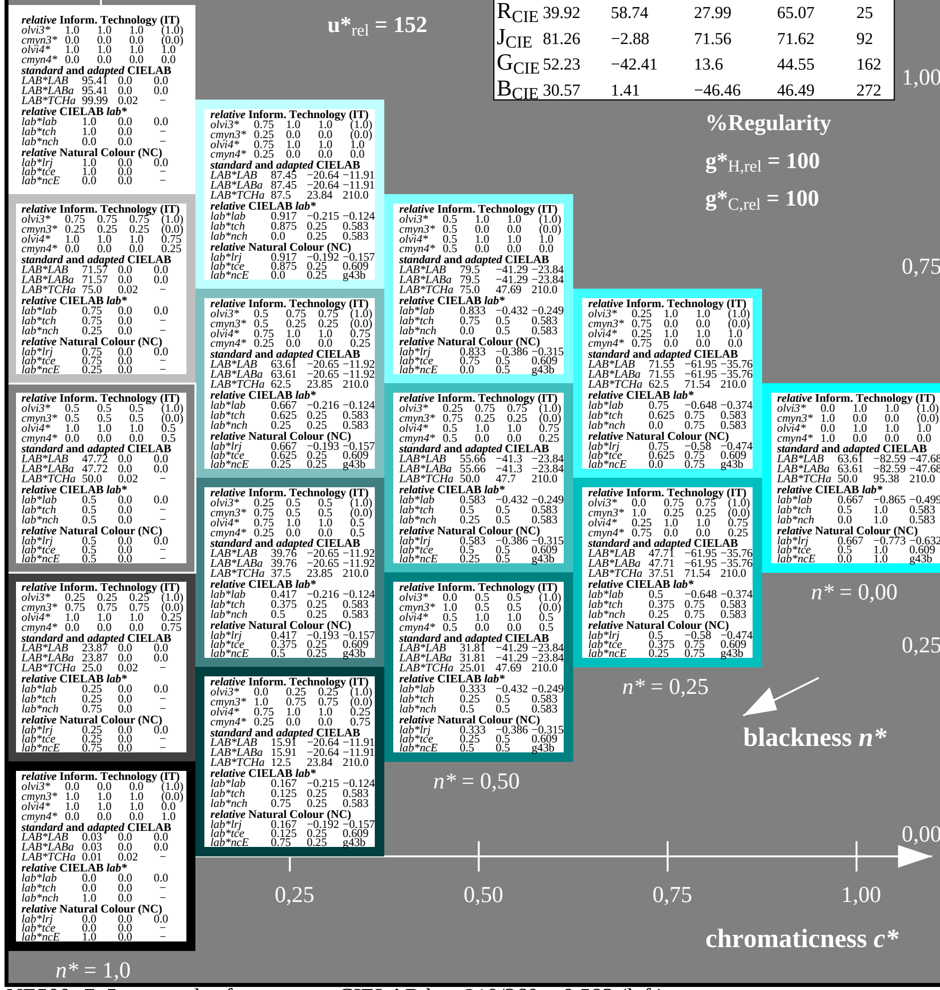
triangle lightness *t**



%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



Output: Colorimetric Television Luminous System TLS18

for hue *h = *lab*h* = 196/360 = 0.546**

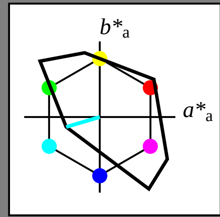
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

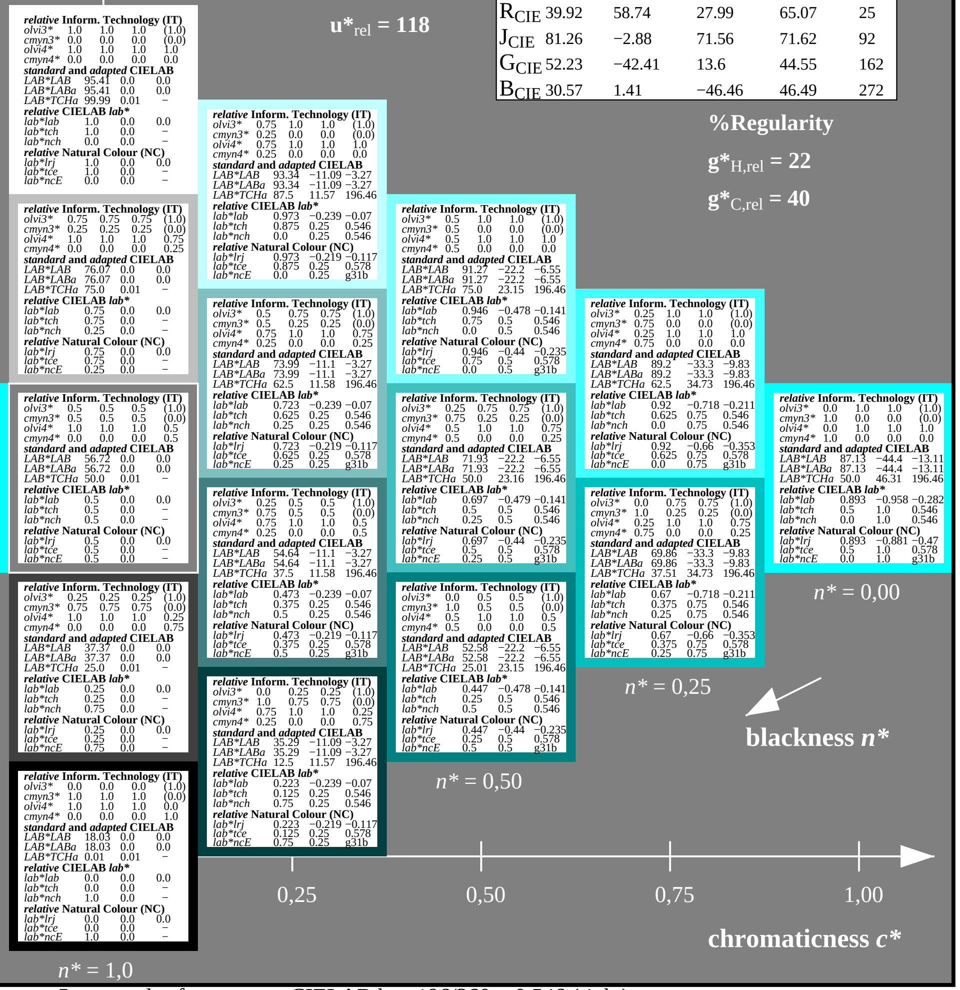
triangle lightness *t**



%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



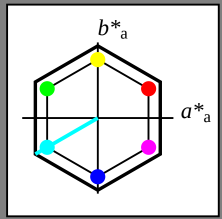
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric 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

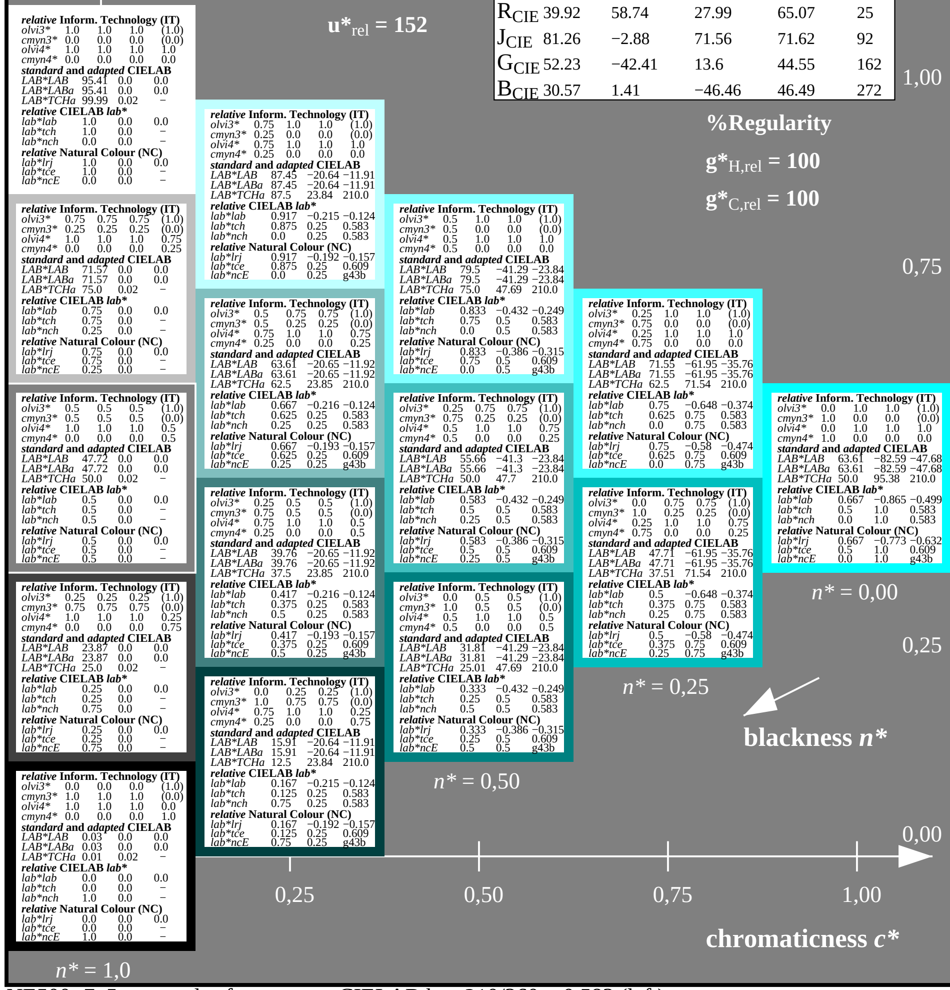
u*rel = 152

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

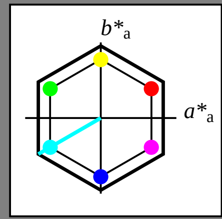
g*C,rel = 100



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

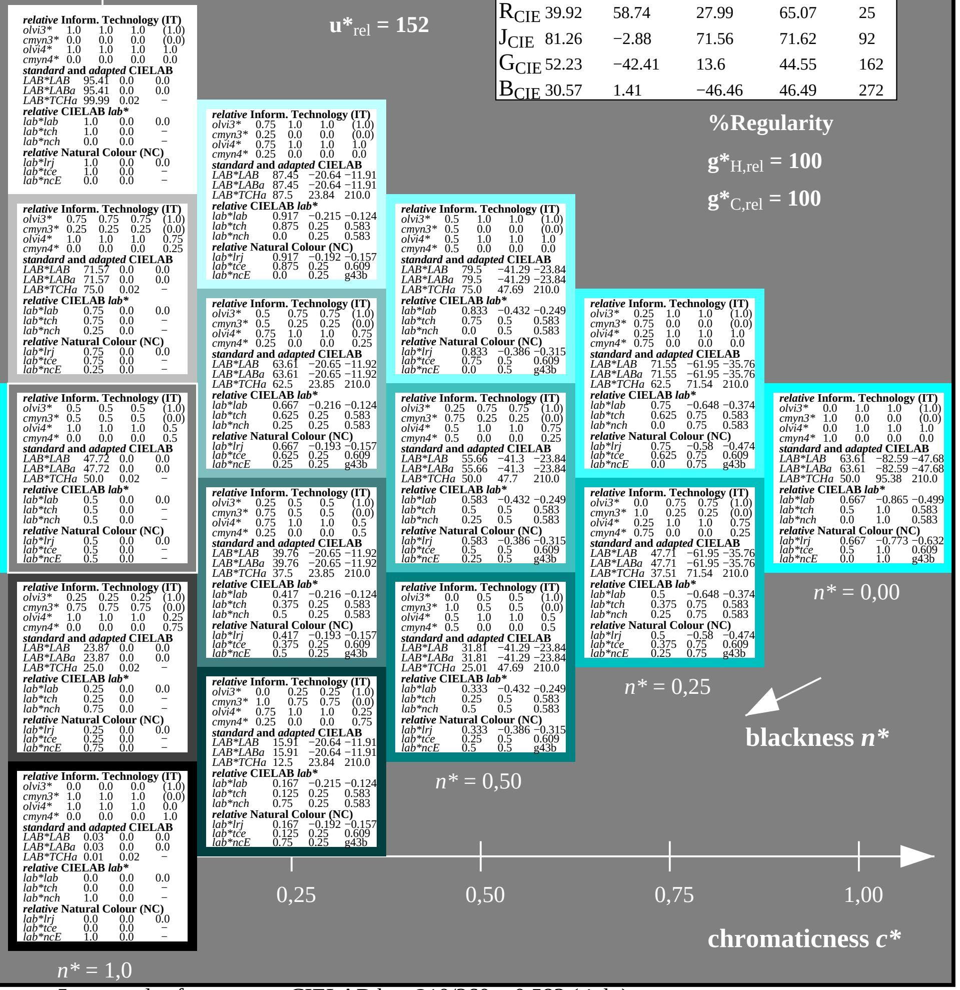
u*rel = 152

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

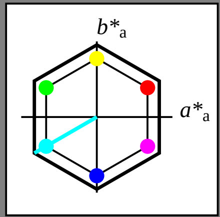
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

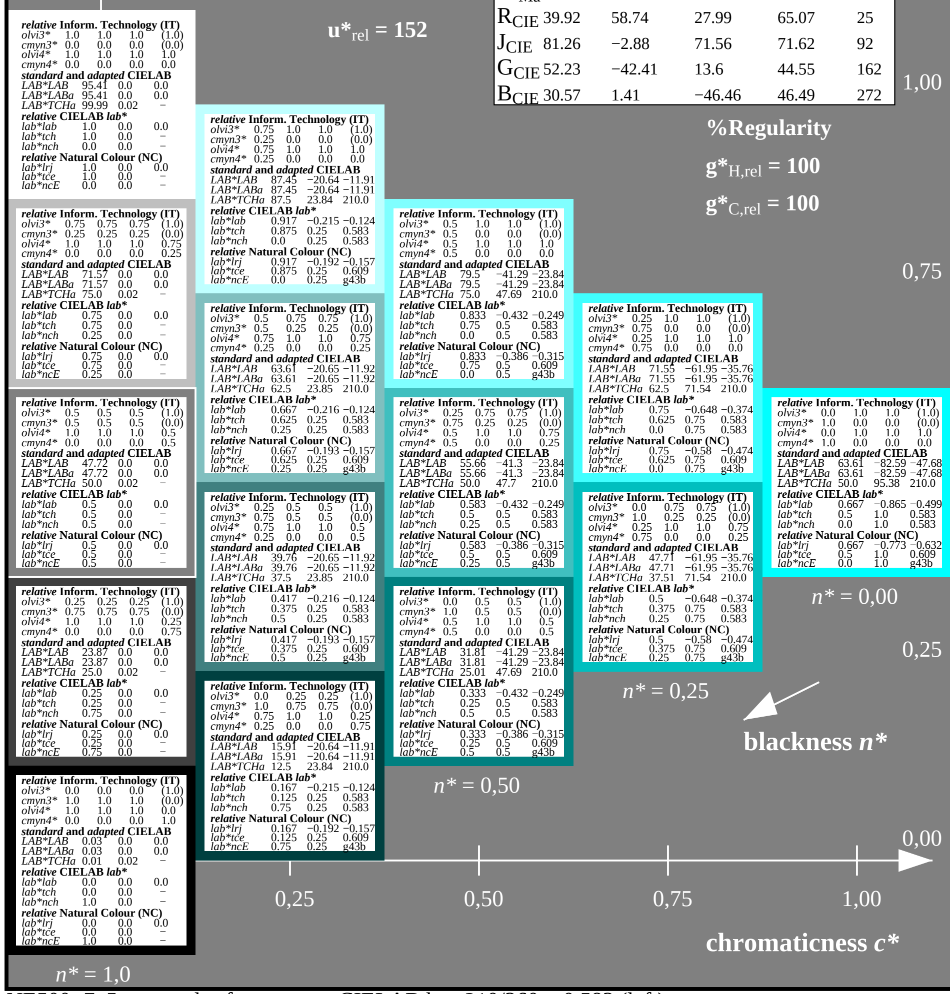
$u^*_{rel} = 152$

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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

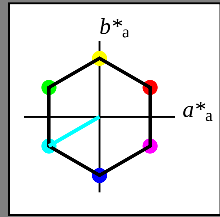
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

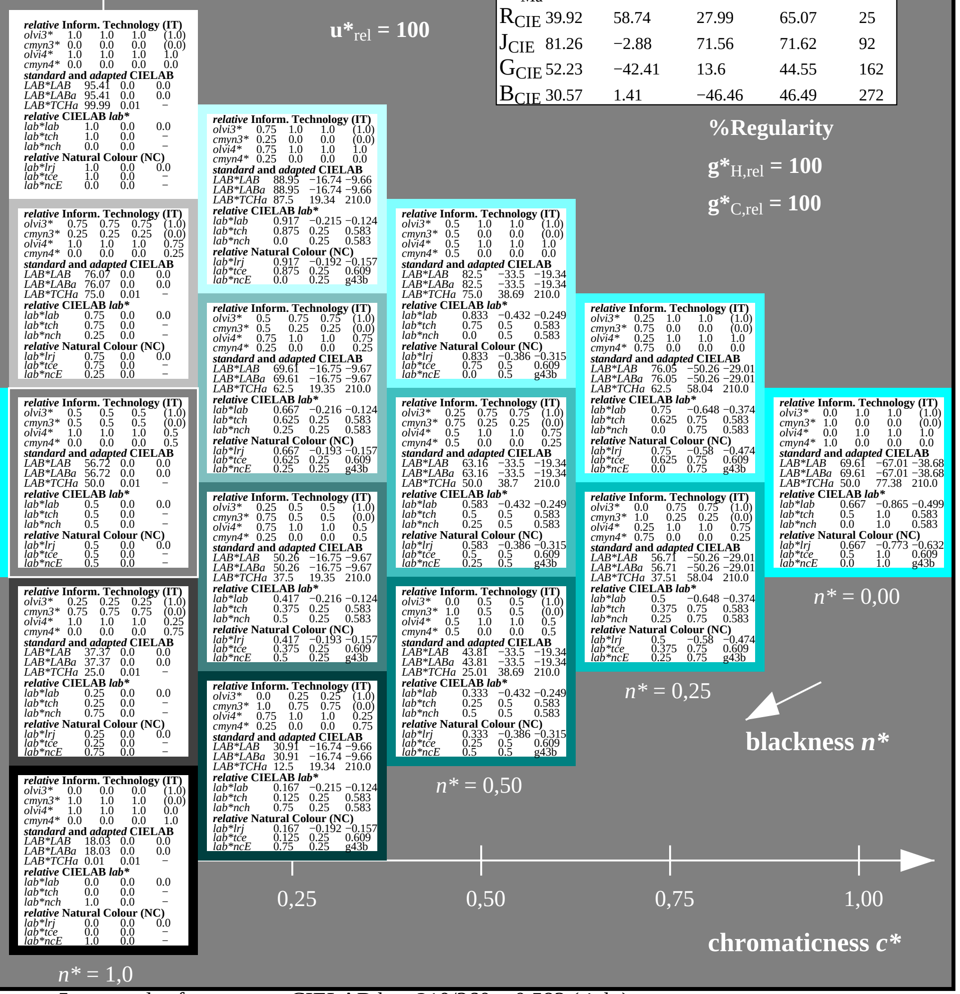
$u^*_{rel} = 100$

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

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

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



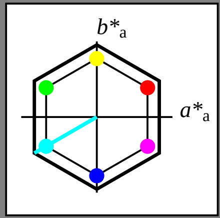
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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

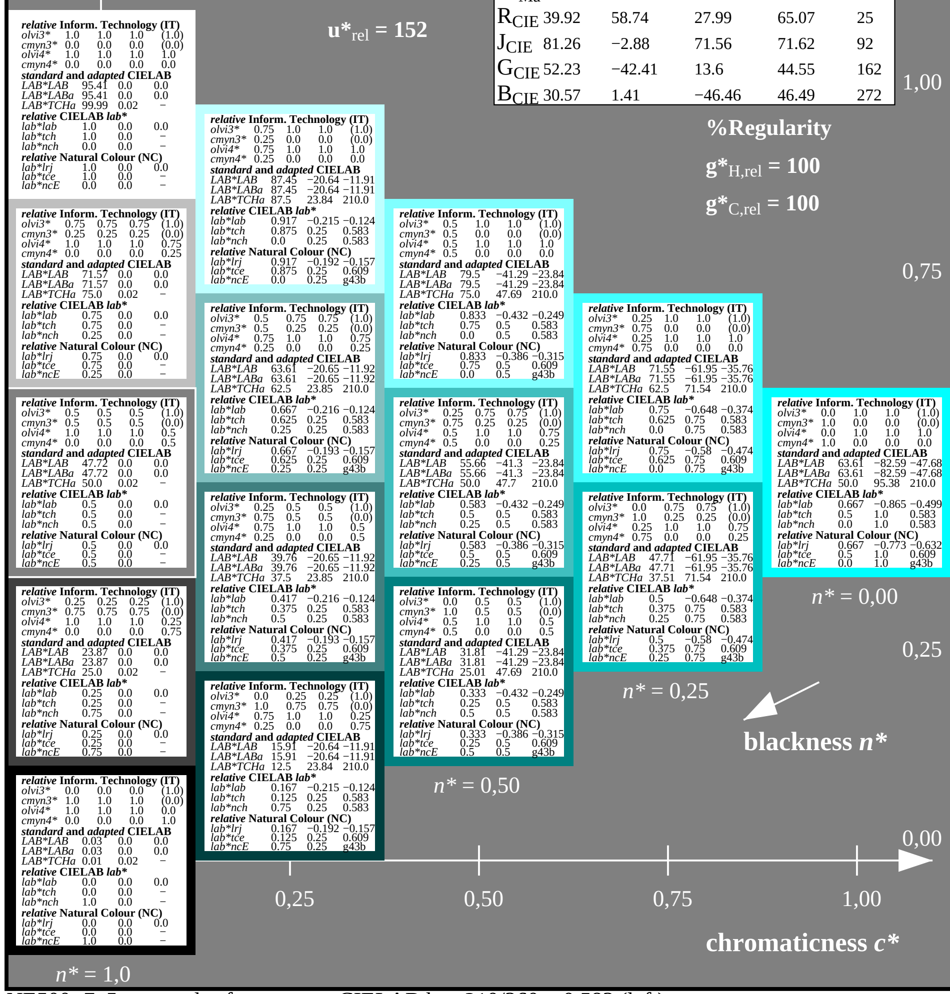
u^*_{rel} = 152

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

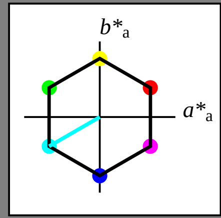
$g^*_{C,rel}$ = 100



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

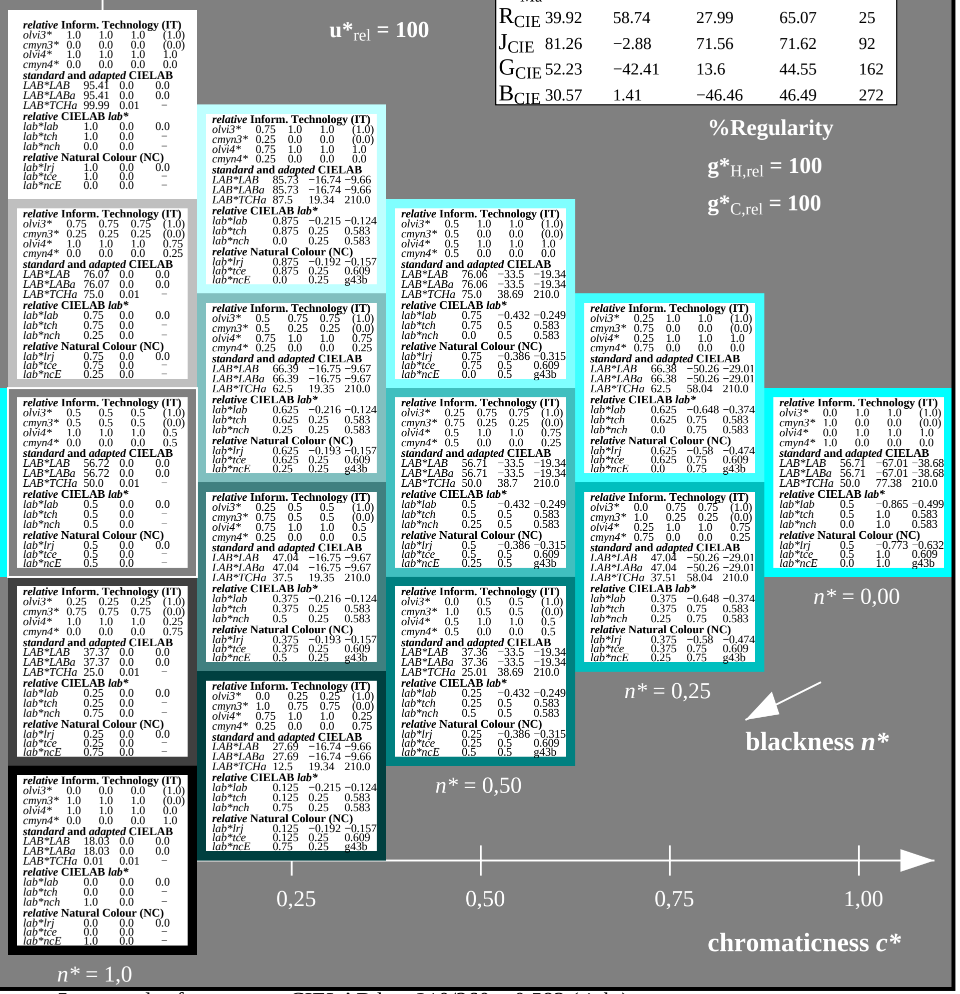
u^*_{rel} = 100

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

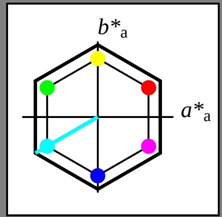
*lab*tch and lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

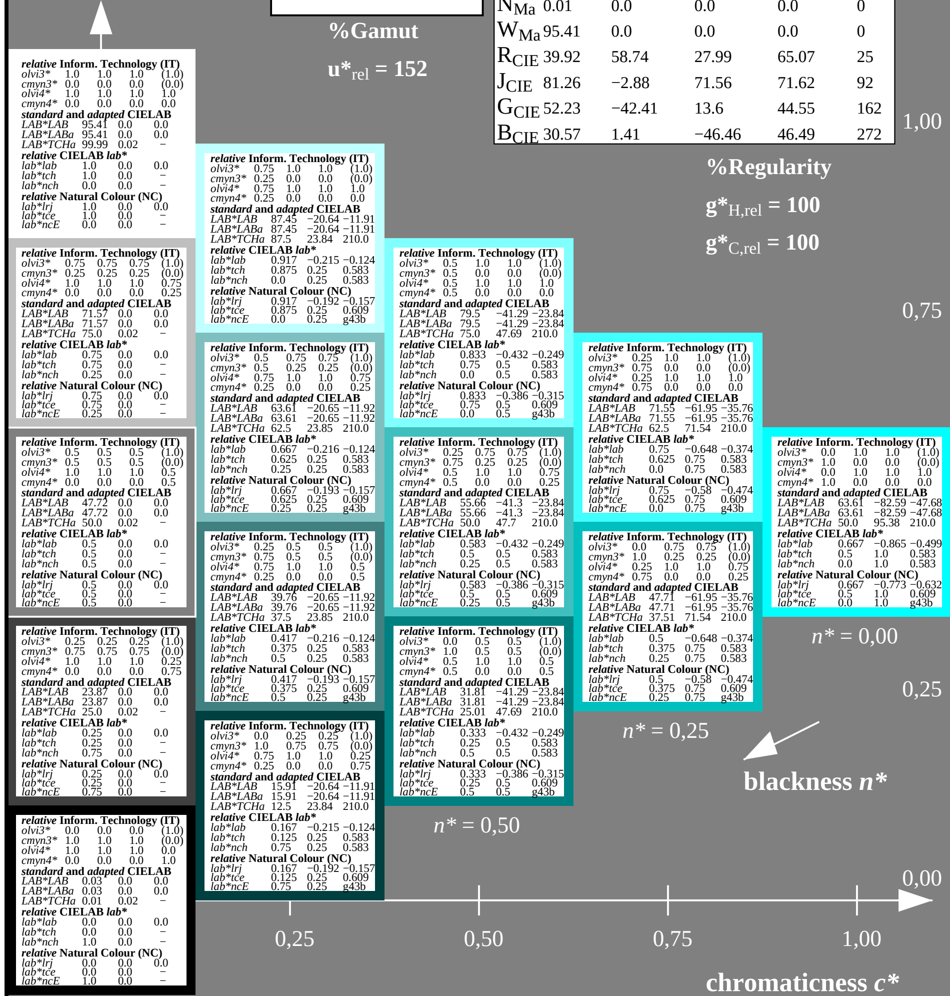
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

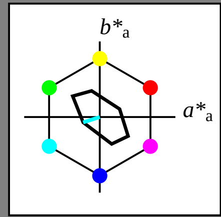
*lab*tch and lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

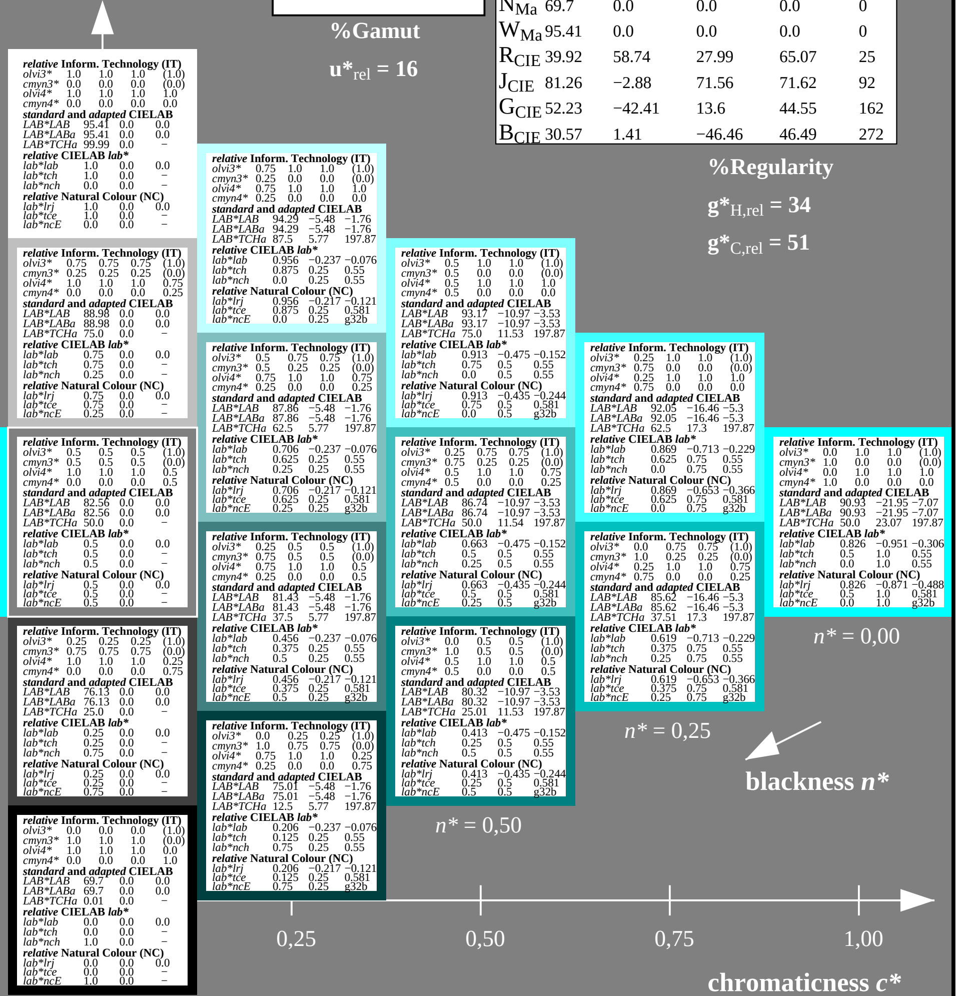
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



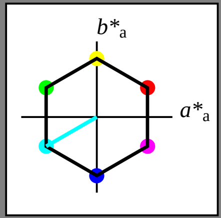
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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^*

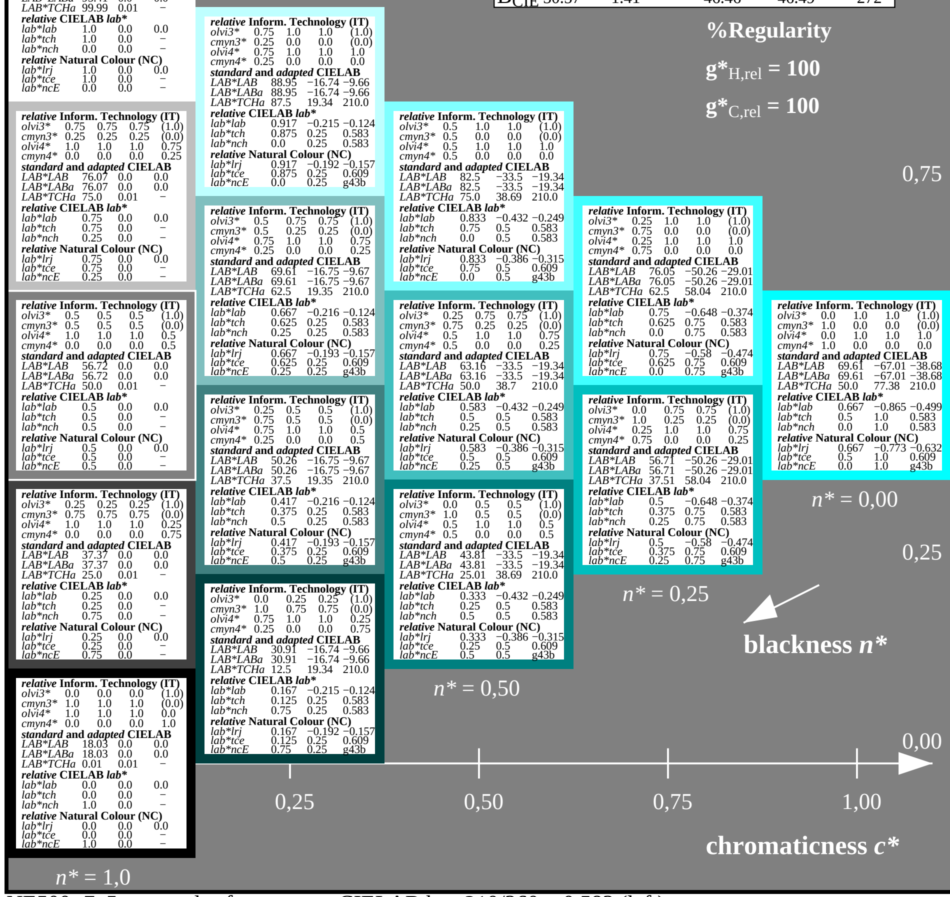


%Gamut
$u^*_{rel} = 100$

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

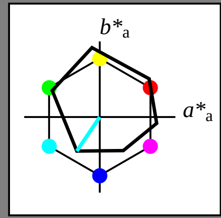
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

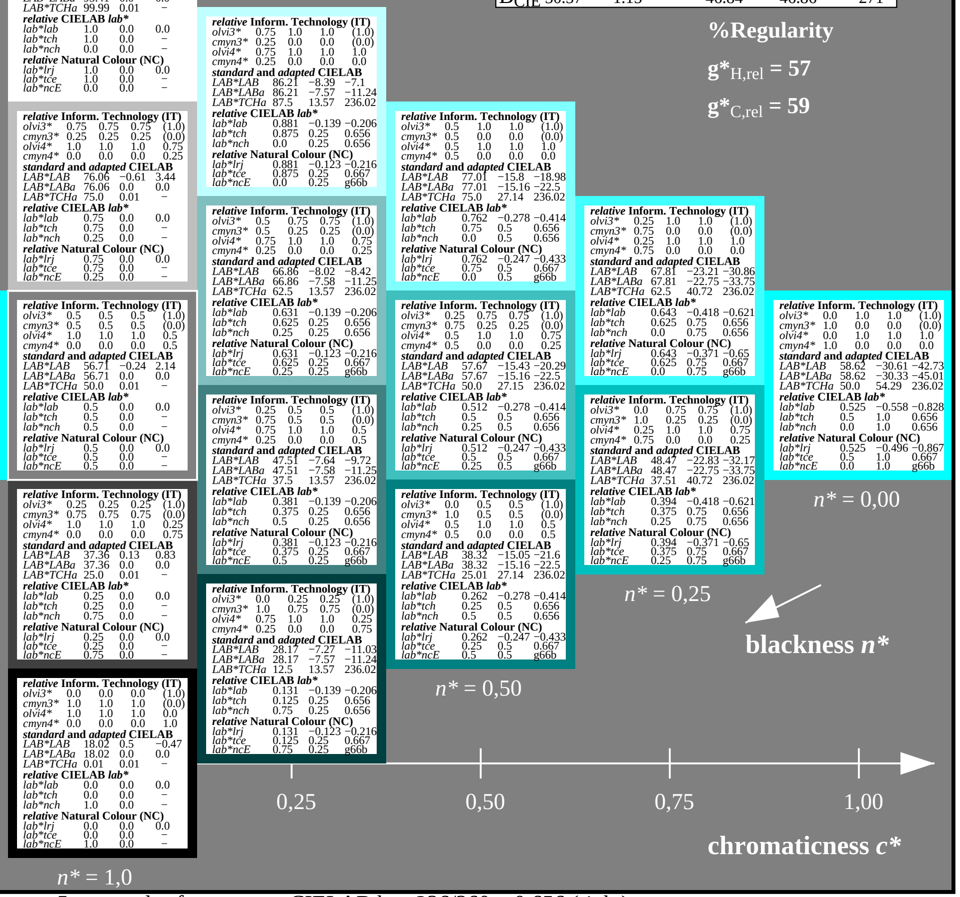


%Gamut
$u^*_{rel} = 93$

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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



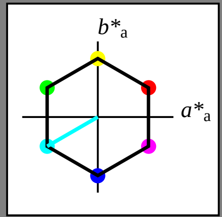
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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

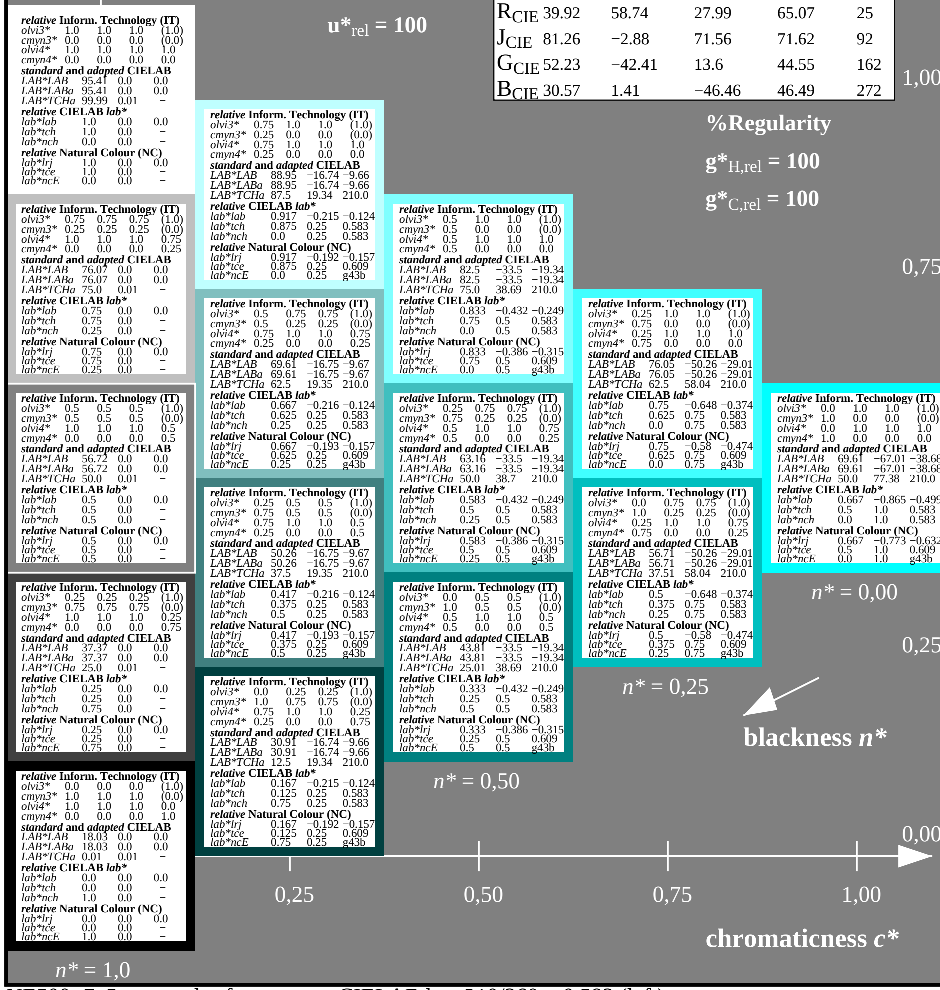
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

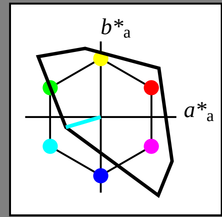
$g^*_{C,rel}$ = 100



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

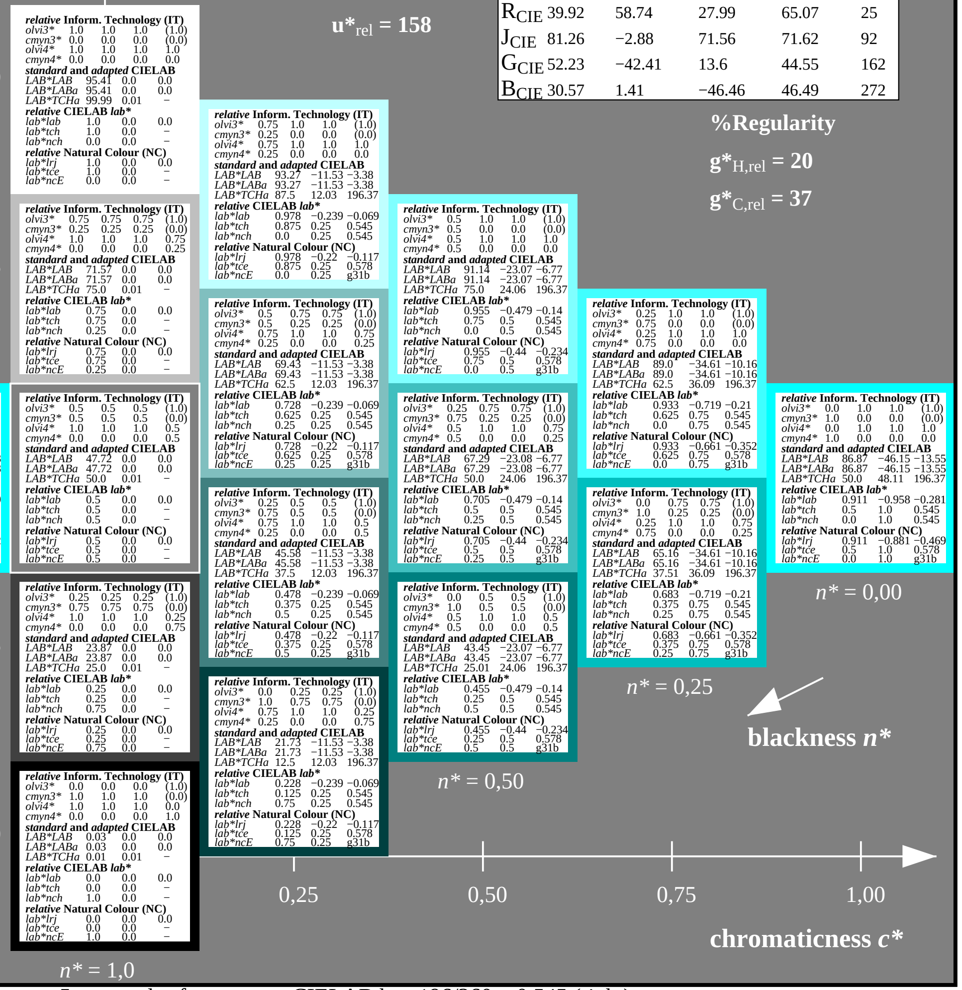
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

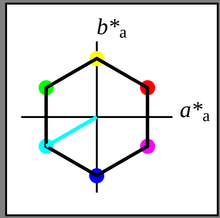
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

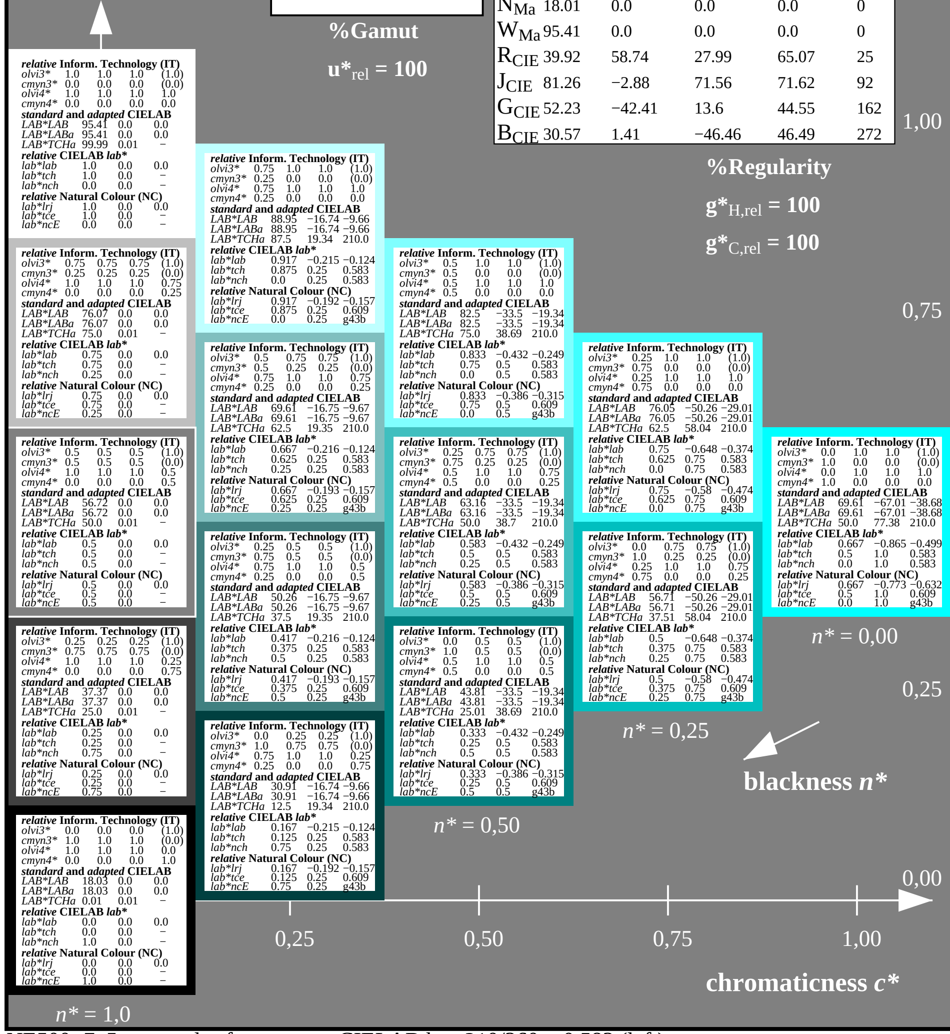
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 235/360 = 0.653$

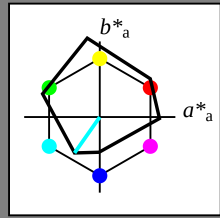
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

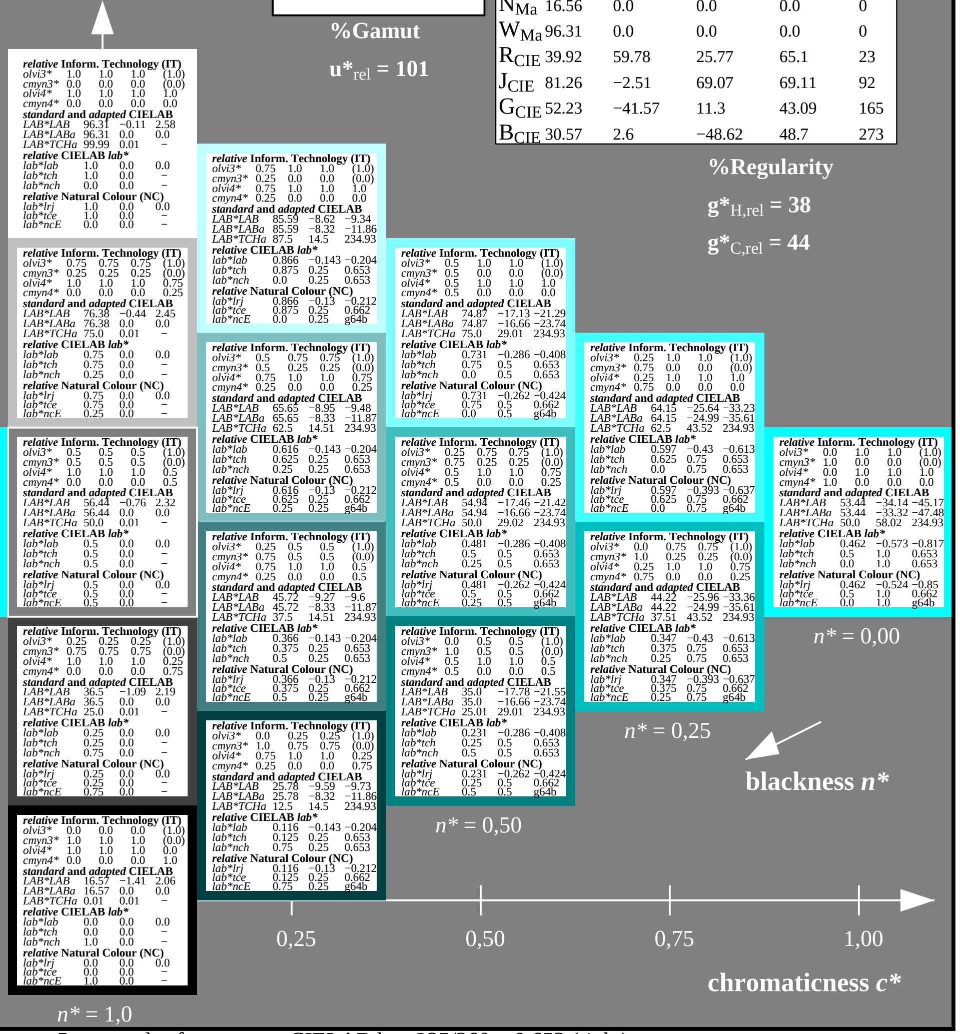
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 235/360 = 0.653 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

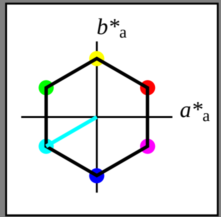
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

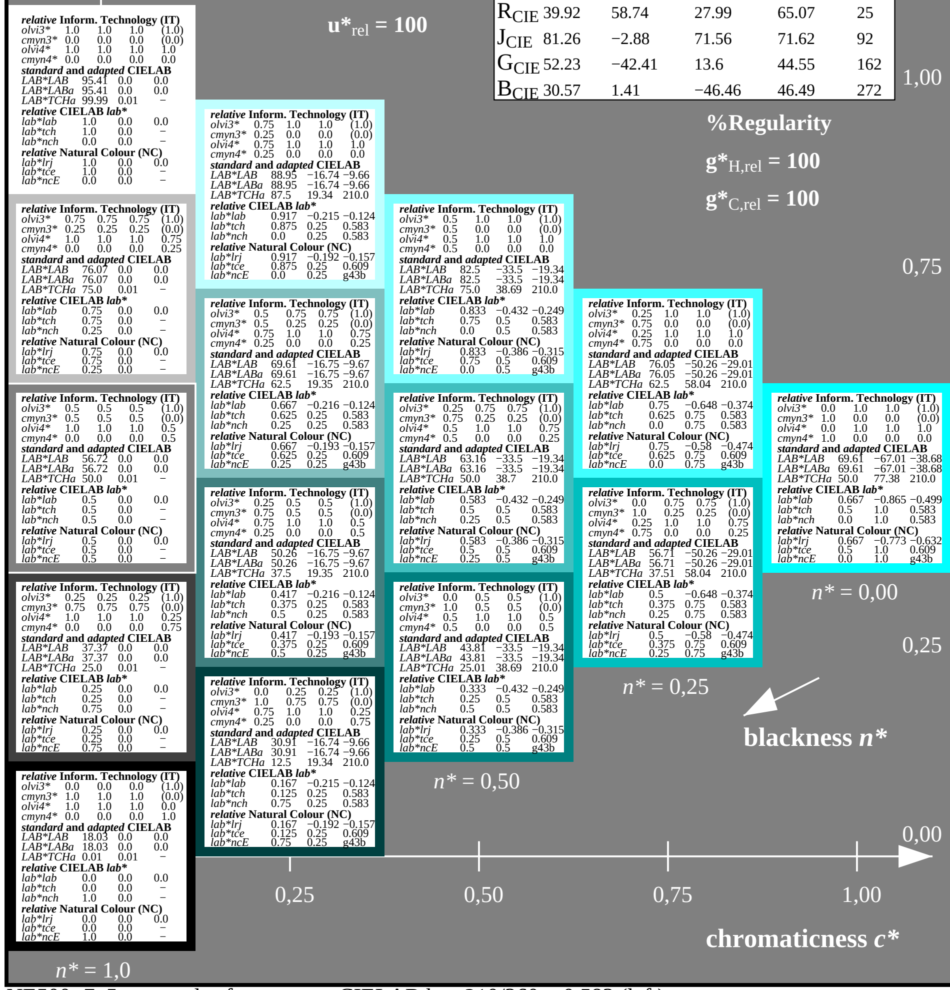
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

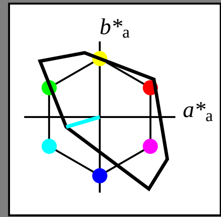
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

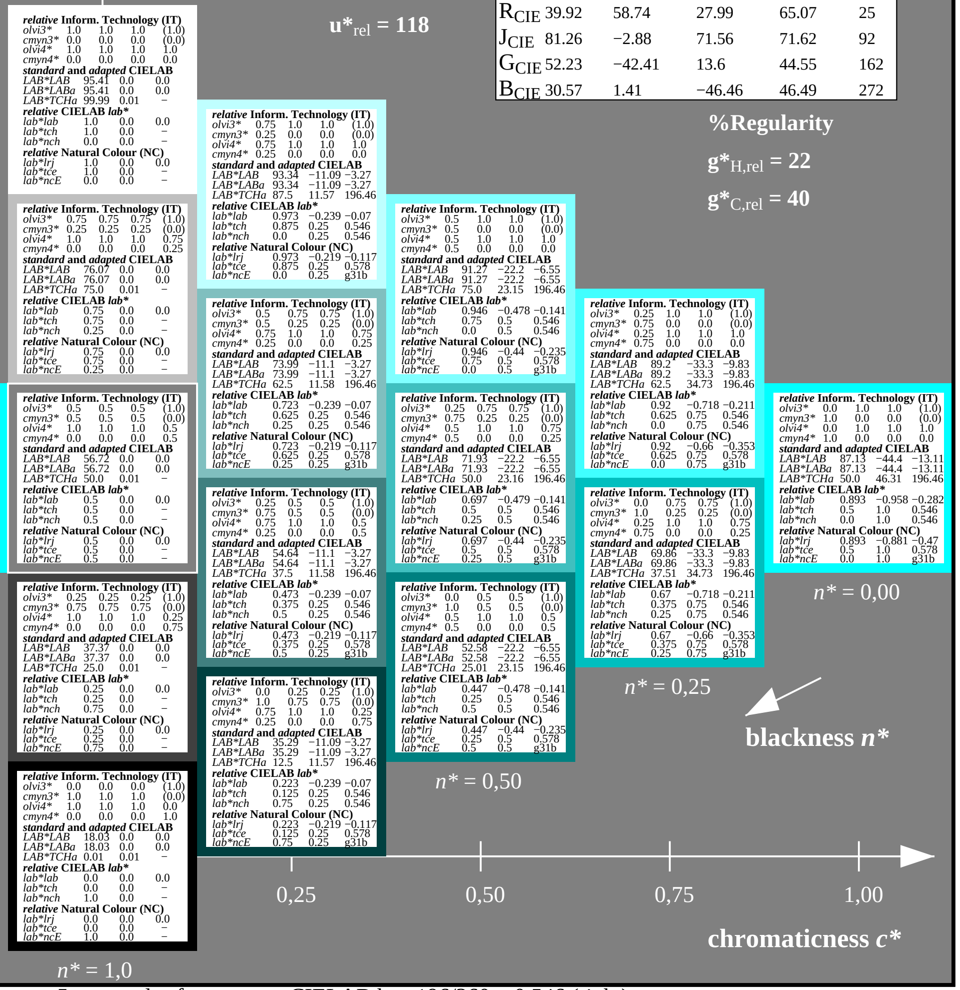
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

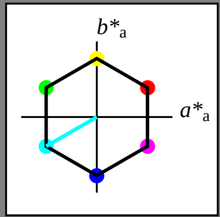
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

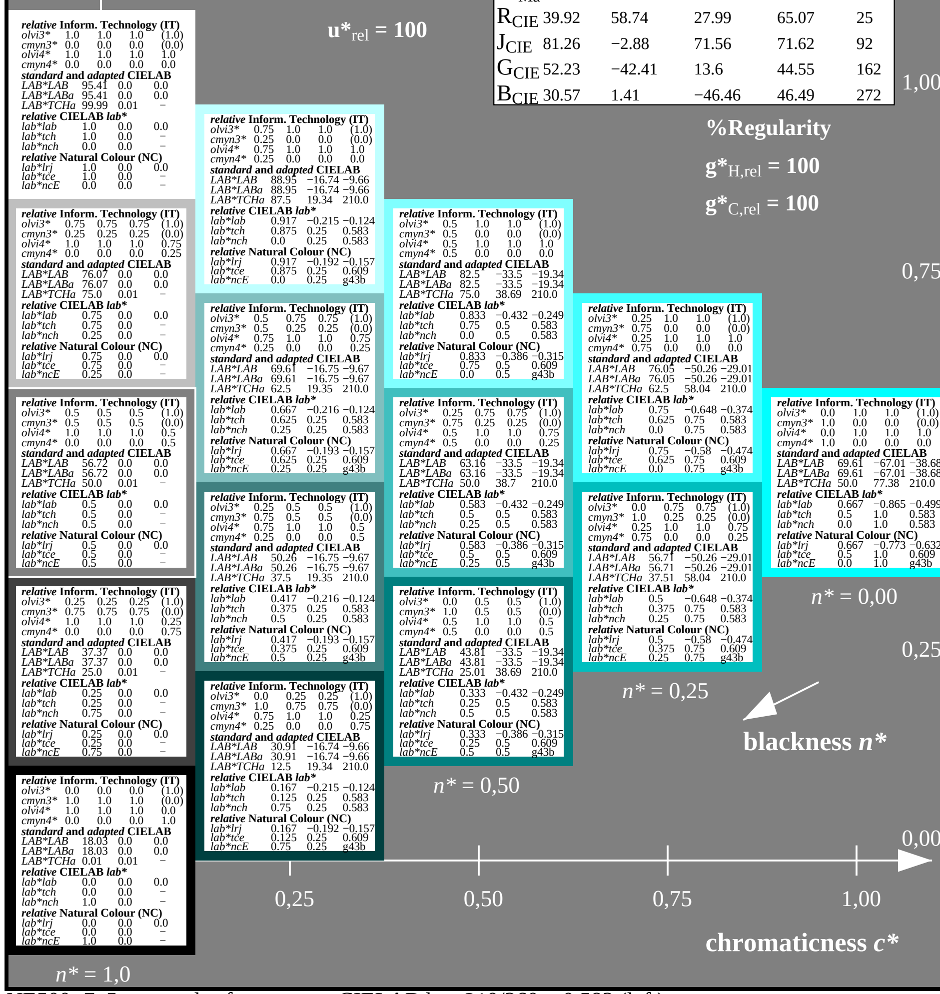
$u^*_{rel} = 100$

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

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

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 210/360 = 0.583$

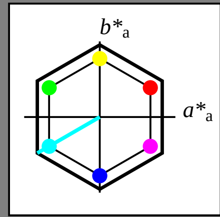
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

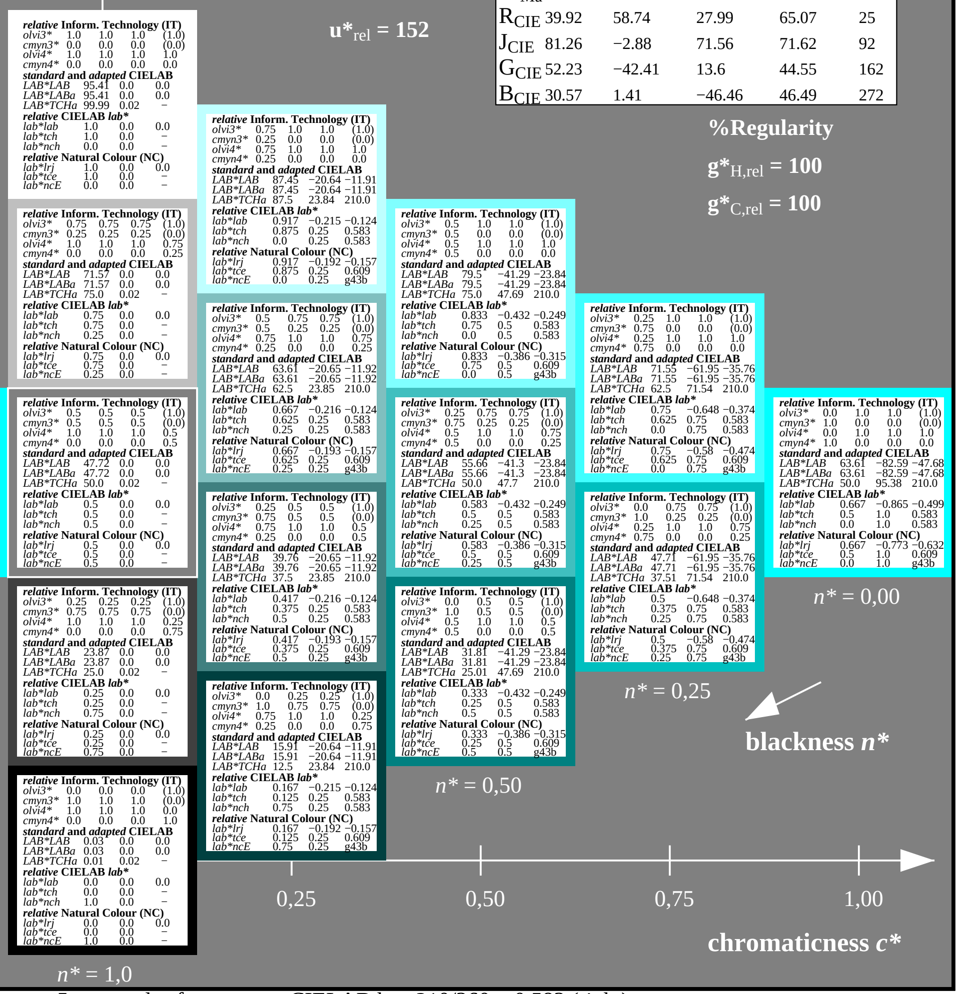
$u^*_{rel} = 152$

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

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

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



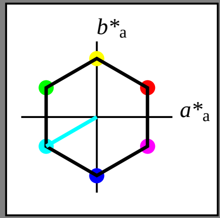
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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*

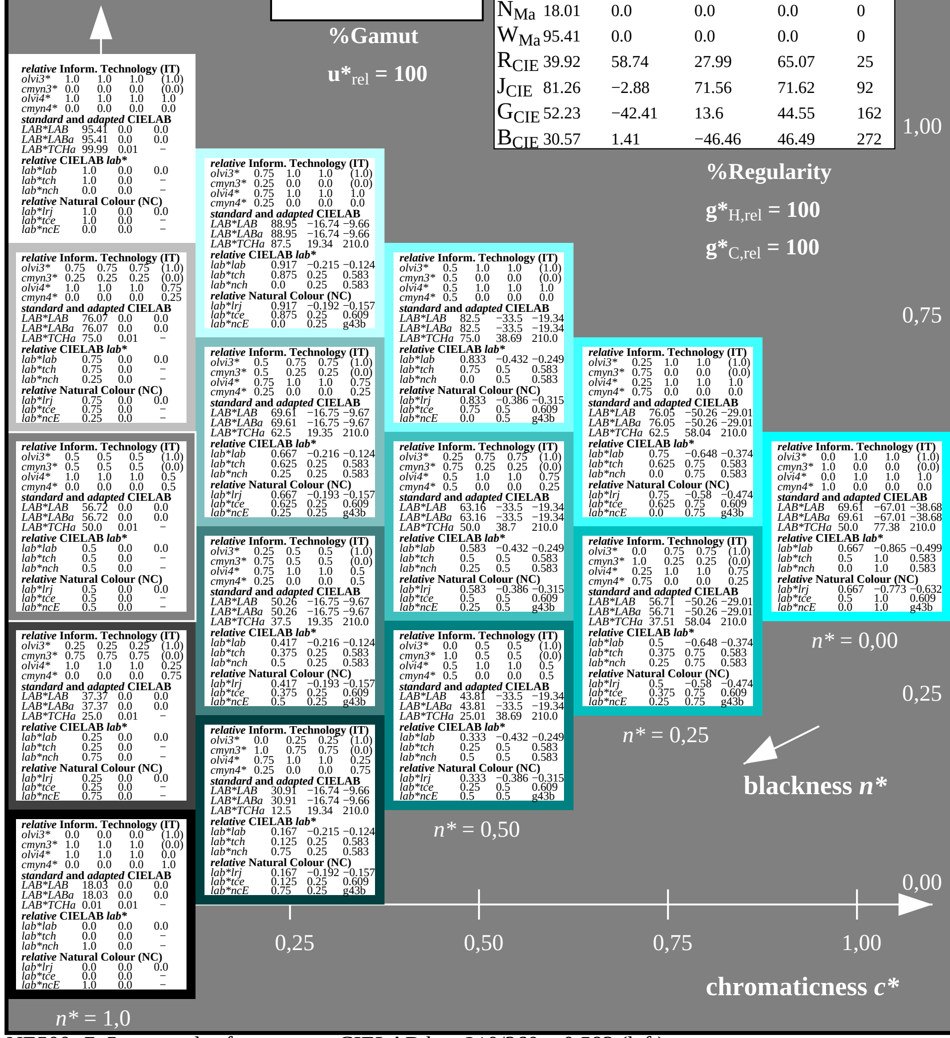


%Gamut
$u^*_{rel} = 100$

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

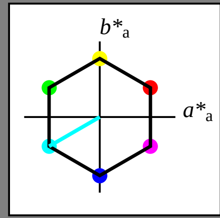
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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*

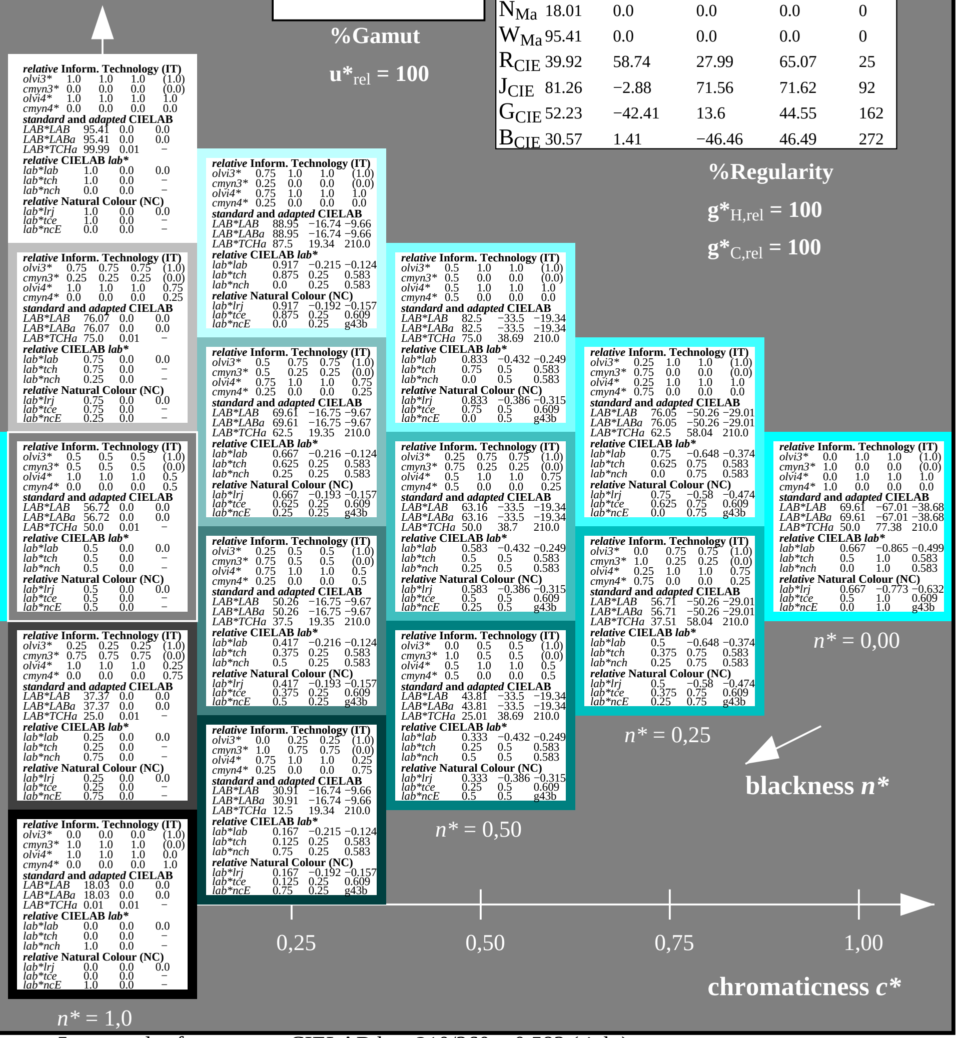


%Gamut
$u^*_{rel} = 100$

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



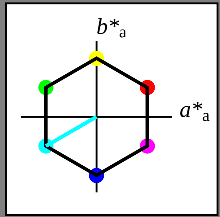
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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**

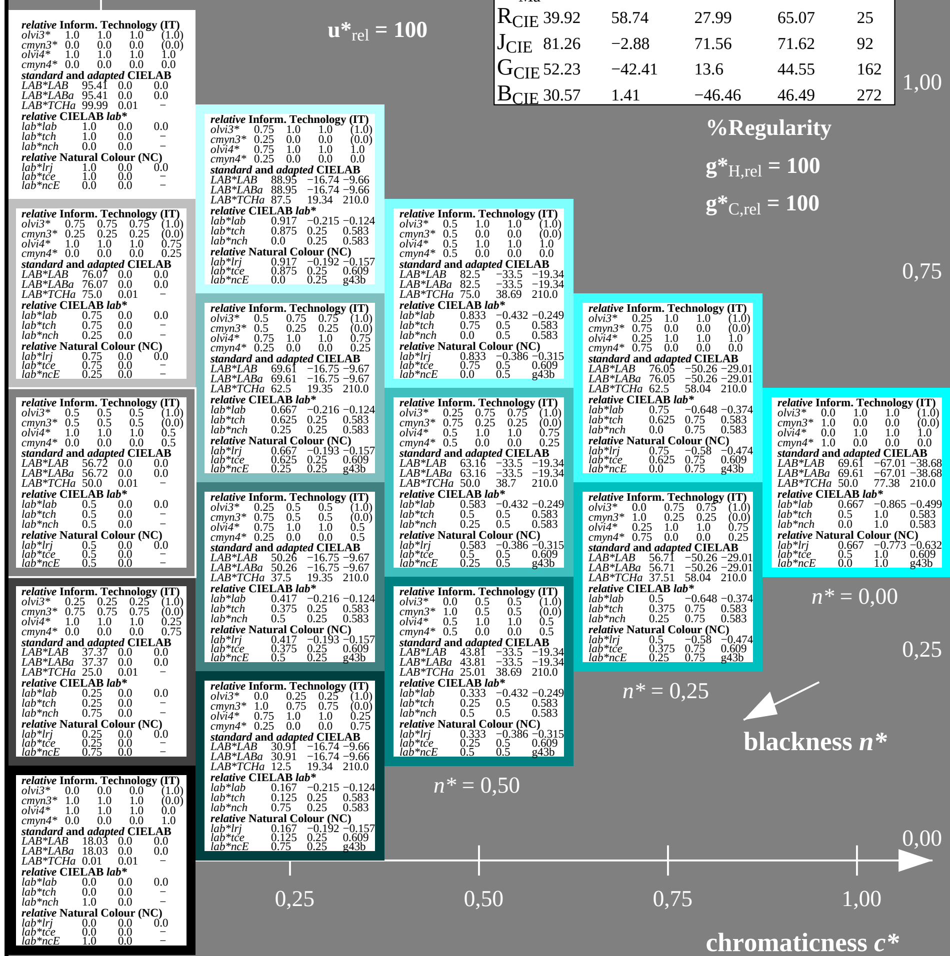


%Gamut
u^*_{rel} = 100

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

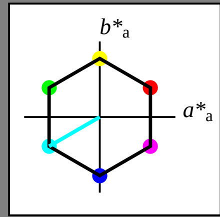
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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**

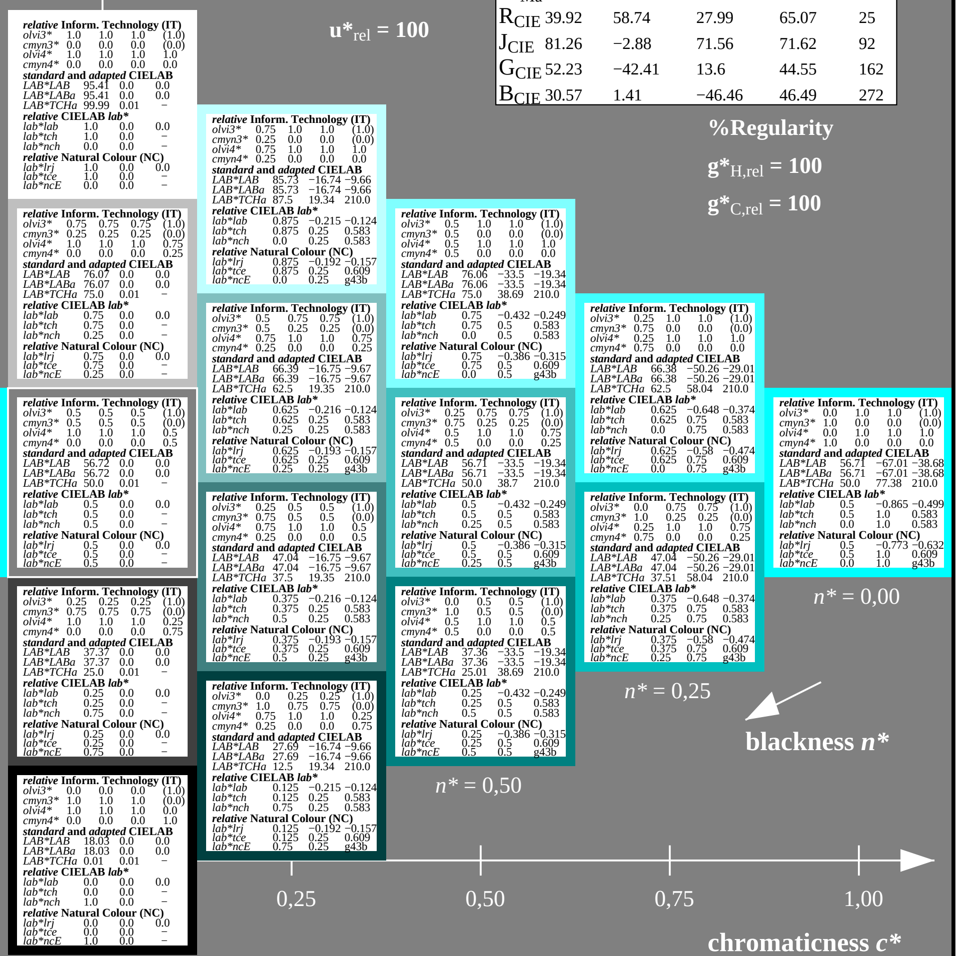


%Gamut
u^*_{rel} = 100

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



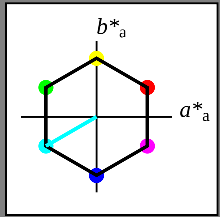
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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

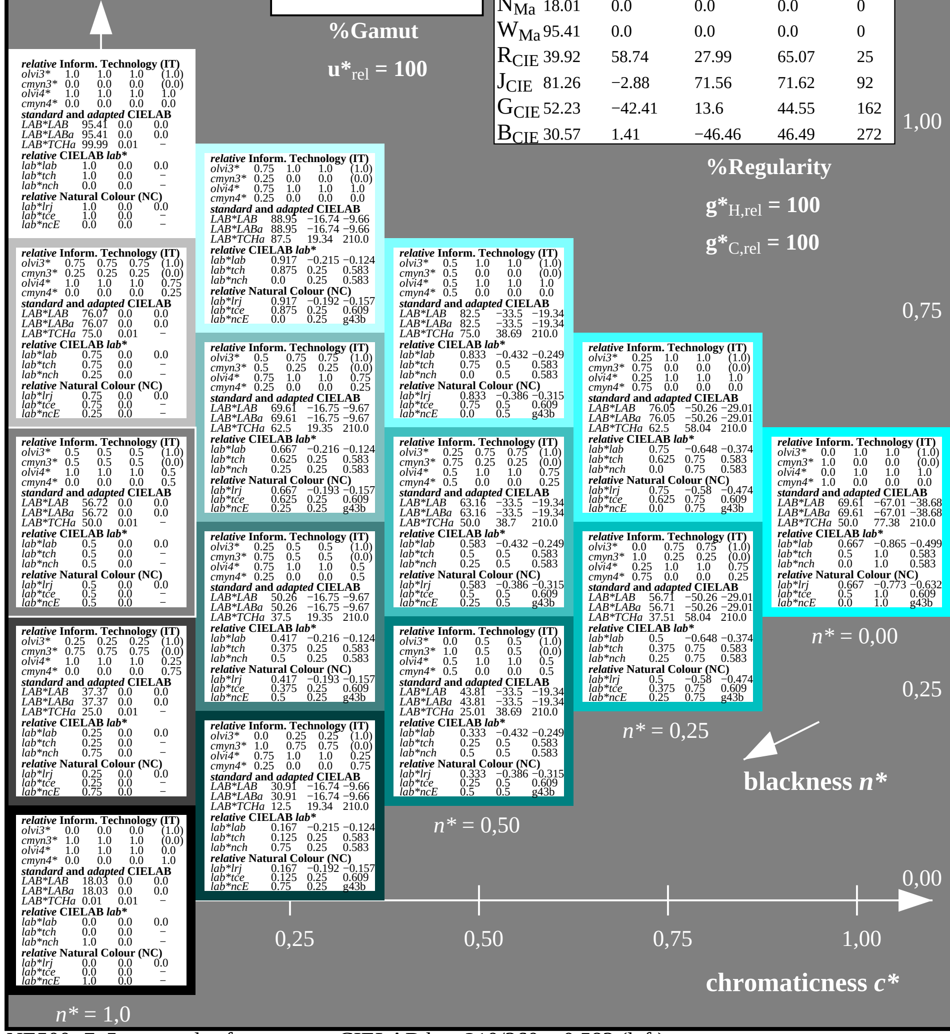
u^*_{rel} = 100

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

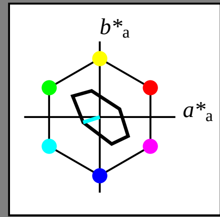
$g^*_{C,rel}$ = 100



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

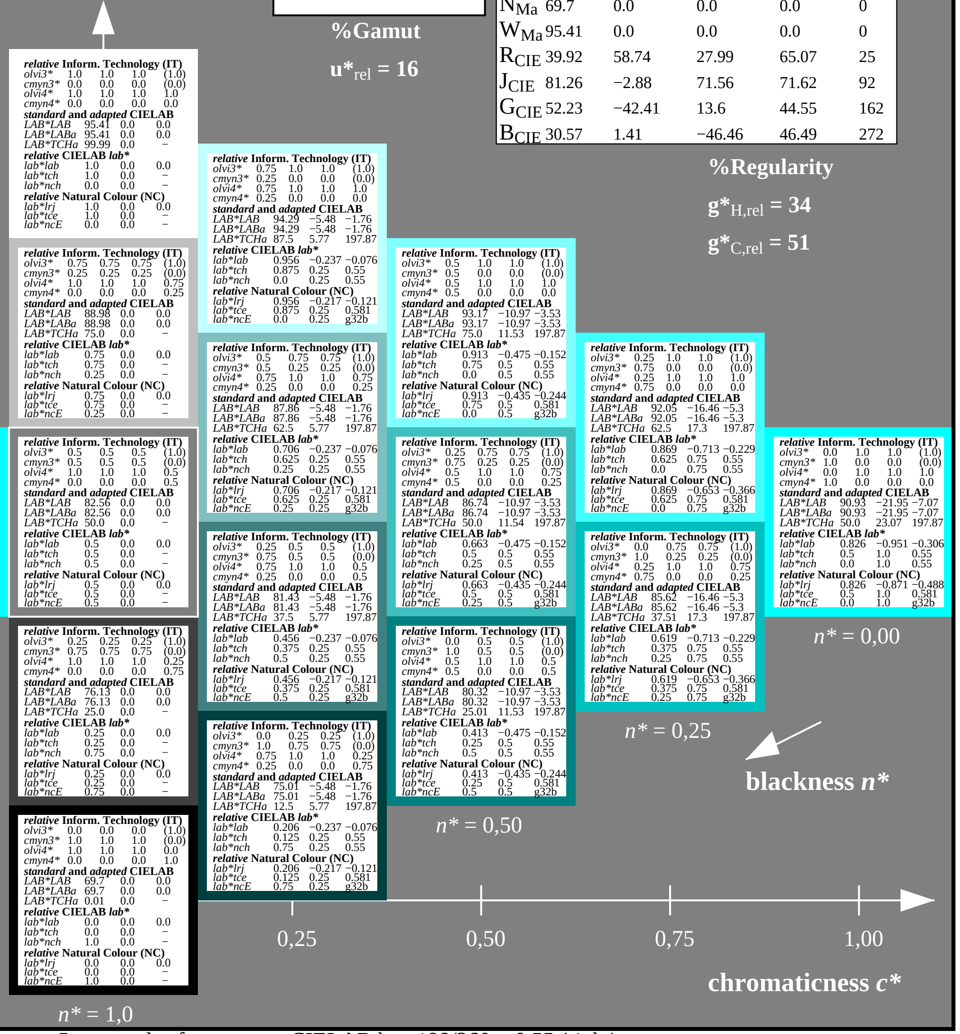
u^*_{rel} = 16

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

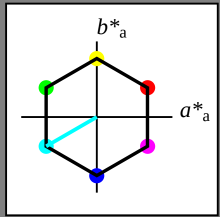


NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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*

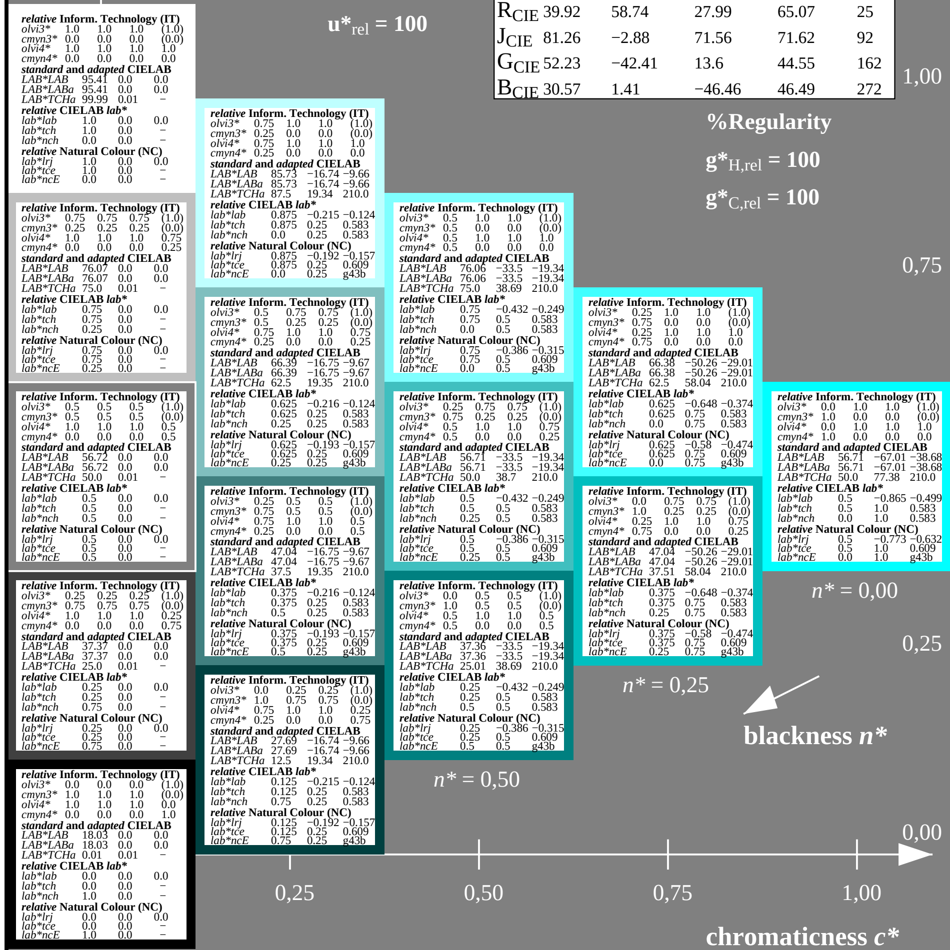
D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0
triangle lightness *t*



%Gamut
$u^*_{rel} = 100$

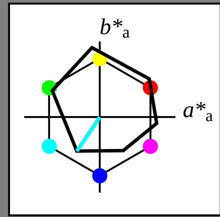
SRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 236/360 = 0.656$
*lab*tch* and *lab*nch*

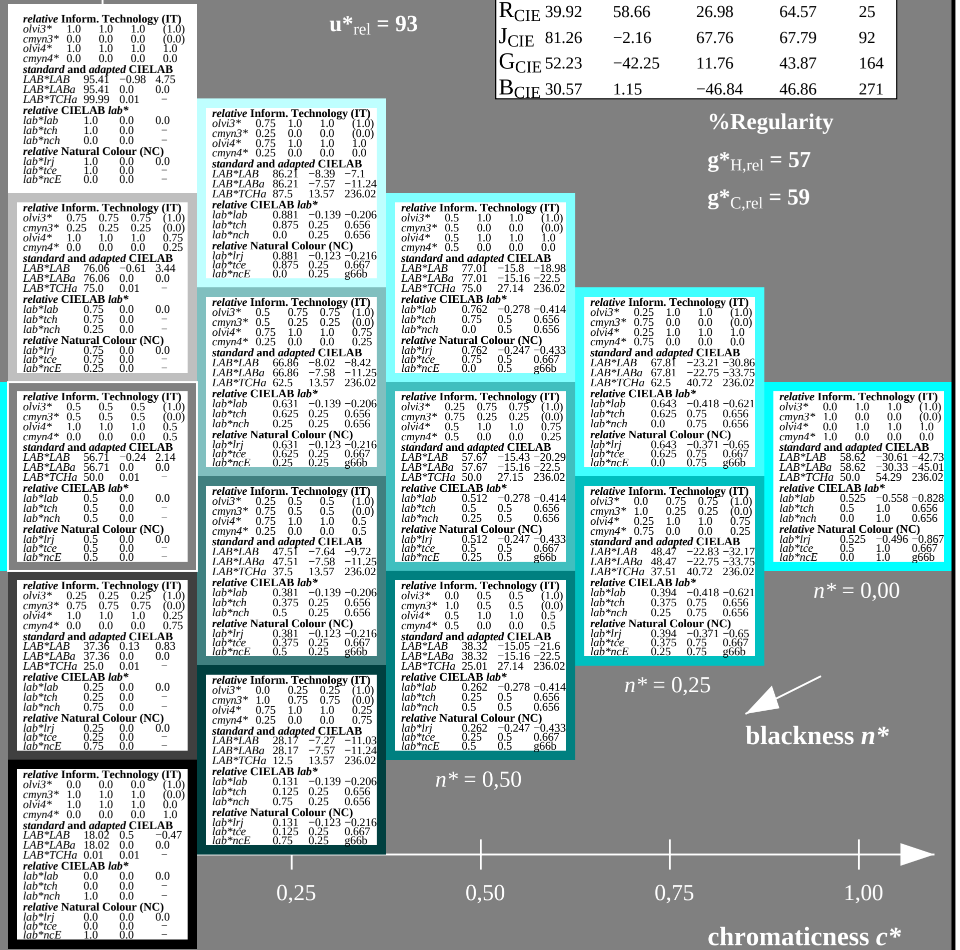
D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0
triangle lightness *t*



%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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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*

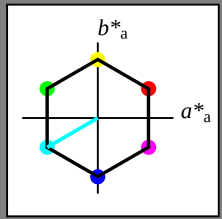
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u*rel = 100

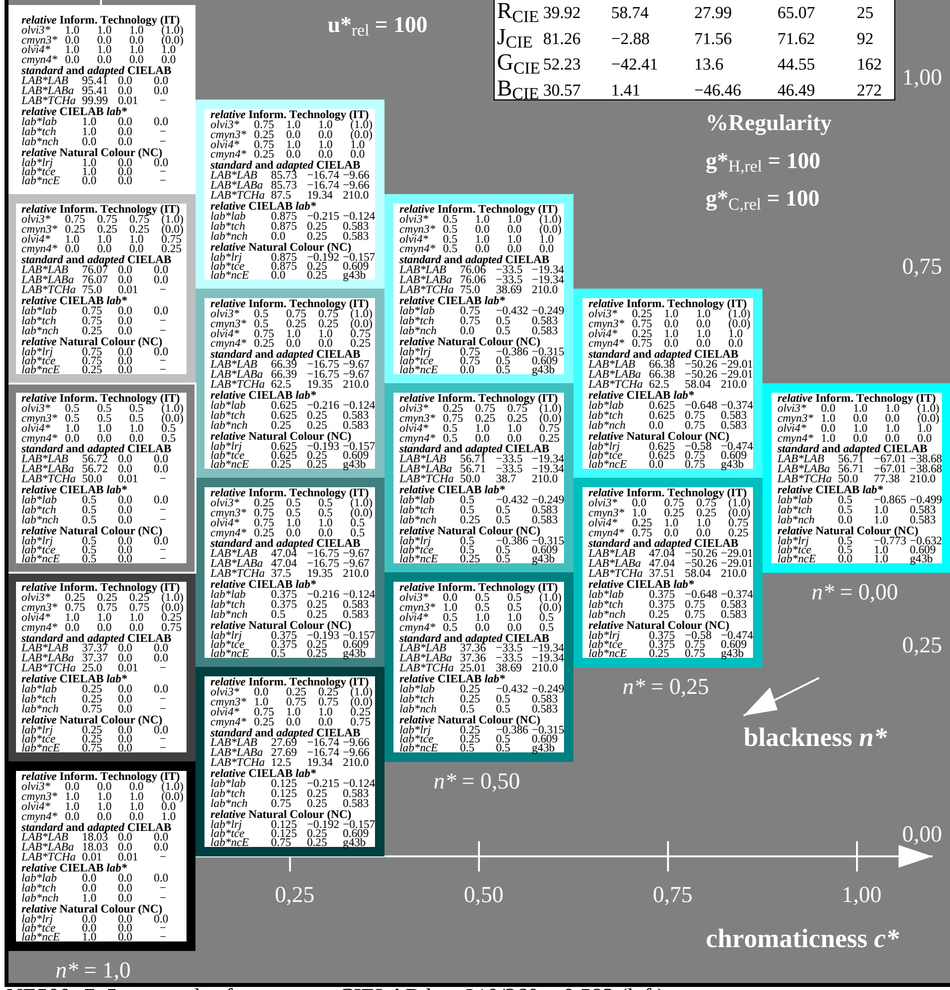
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue *h* = lab*h = 196/360 = 0.545*

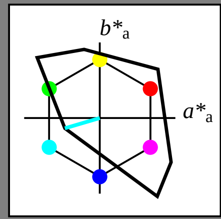
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u*rel = 158

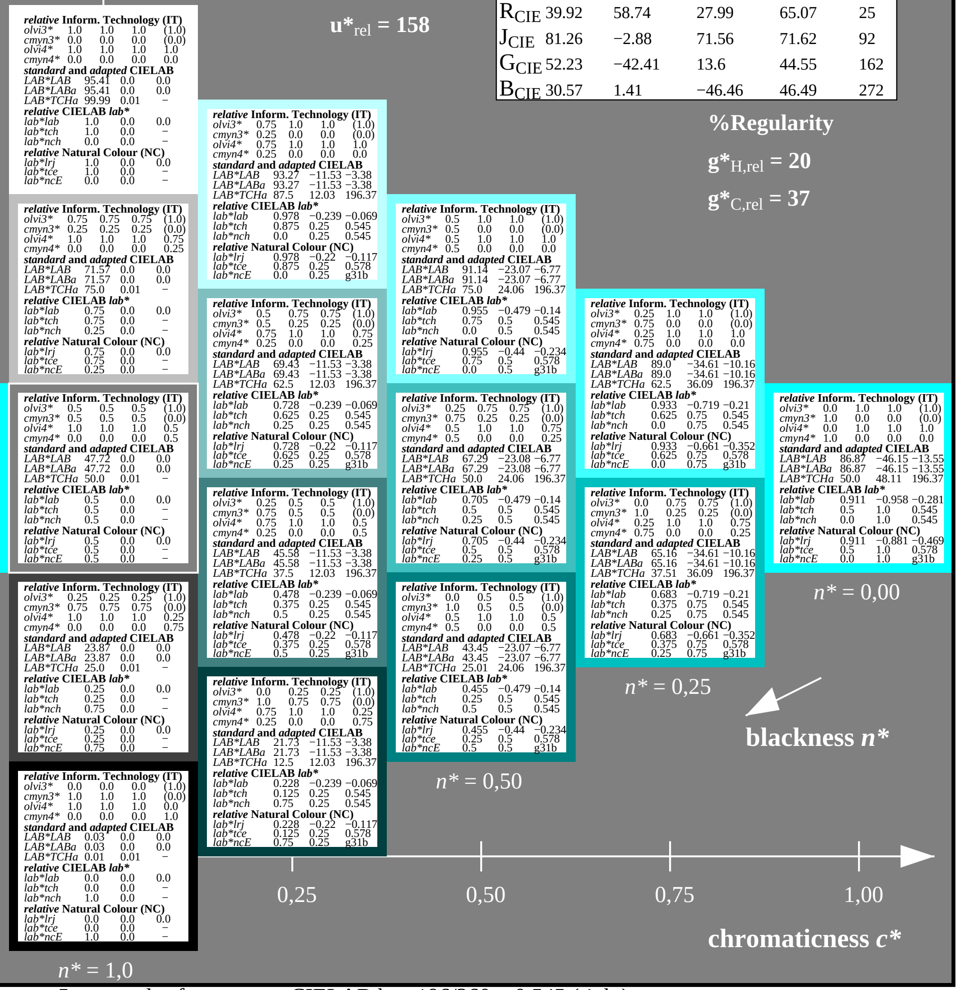
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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*

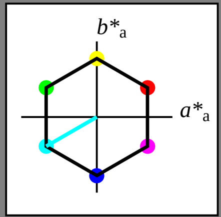
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

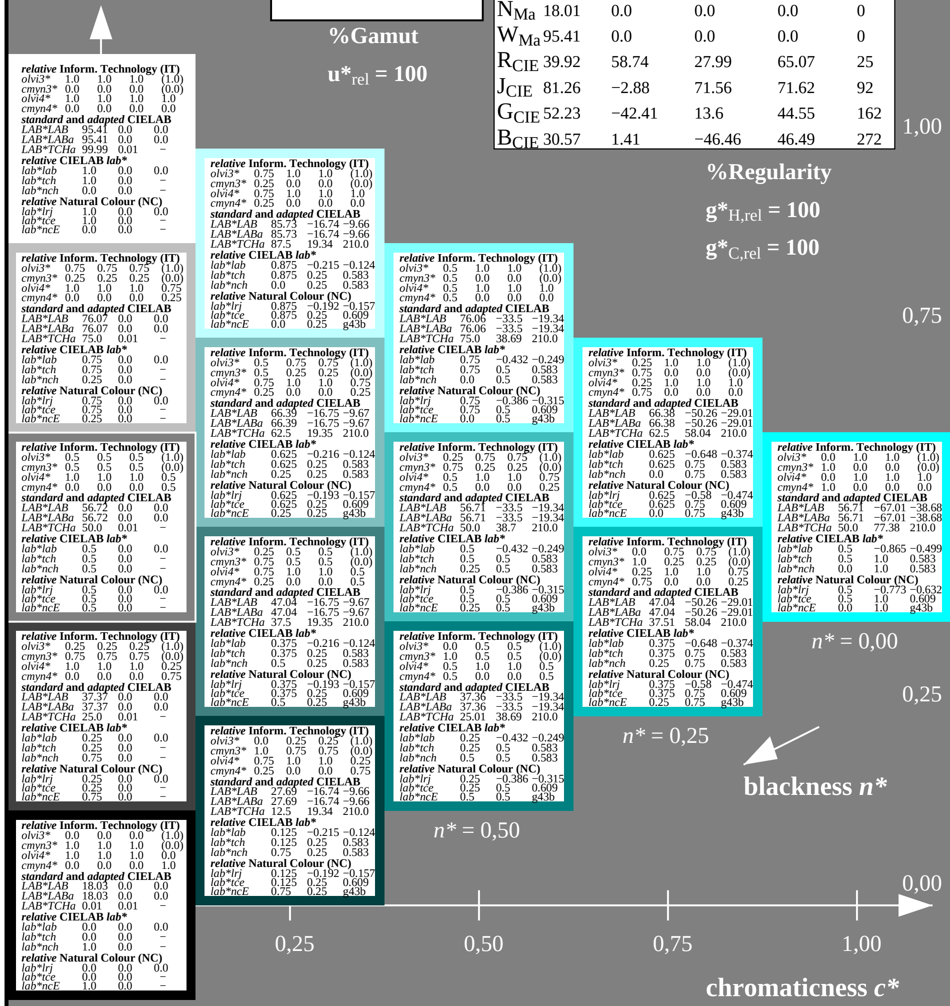
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 235/360 = 0.653*

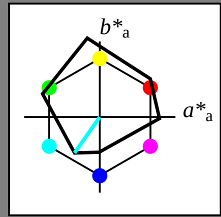
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

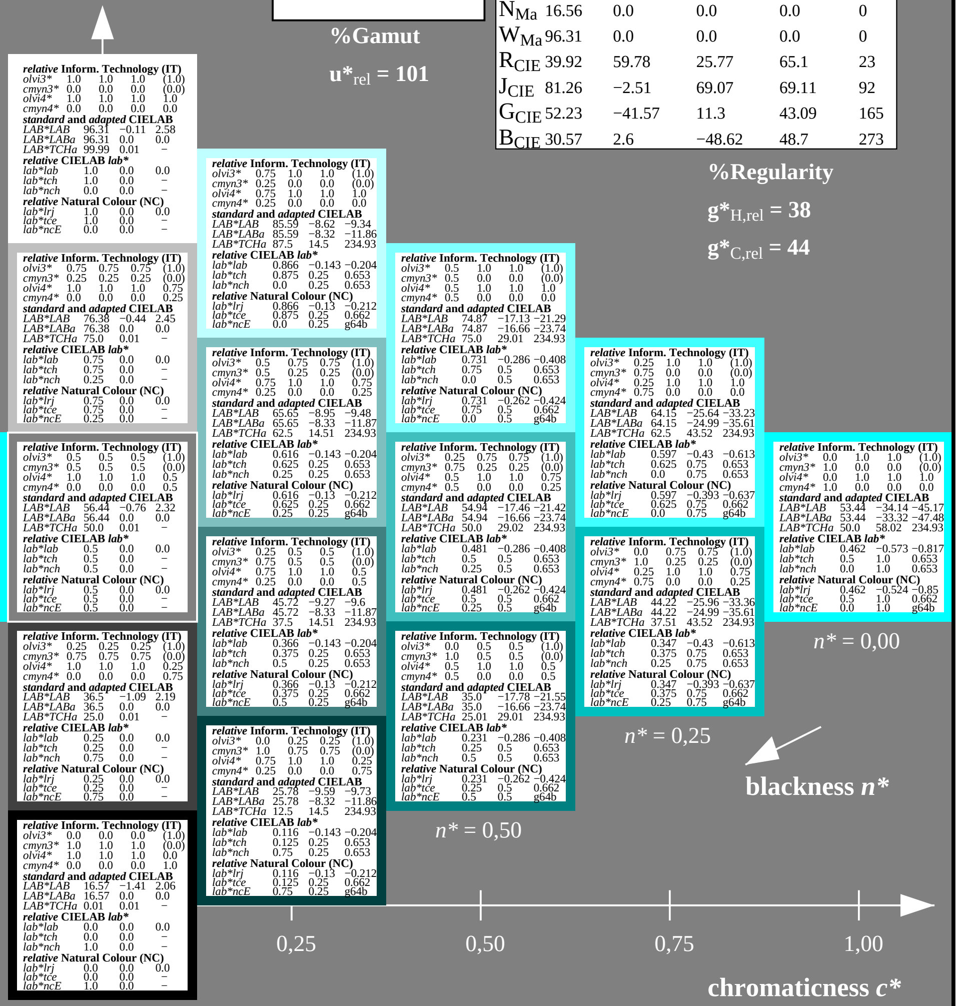
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

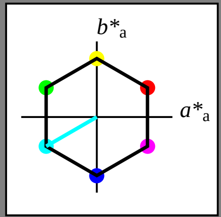


NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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^*

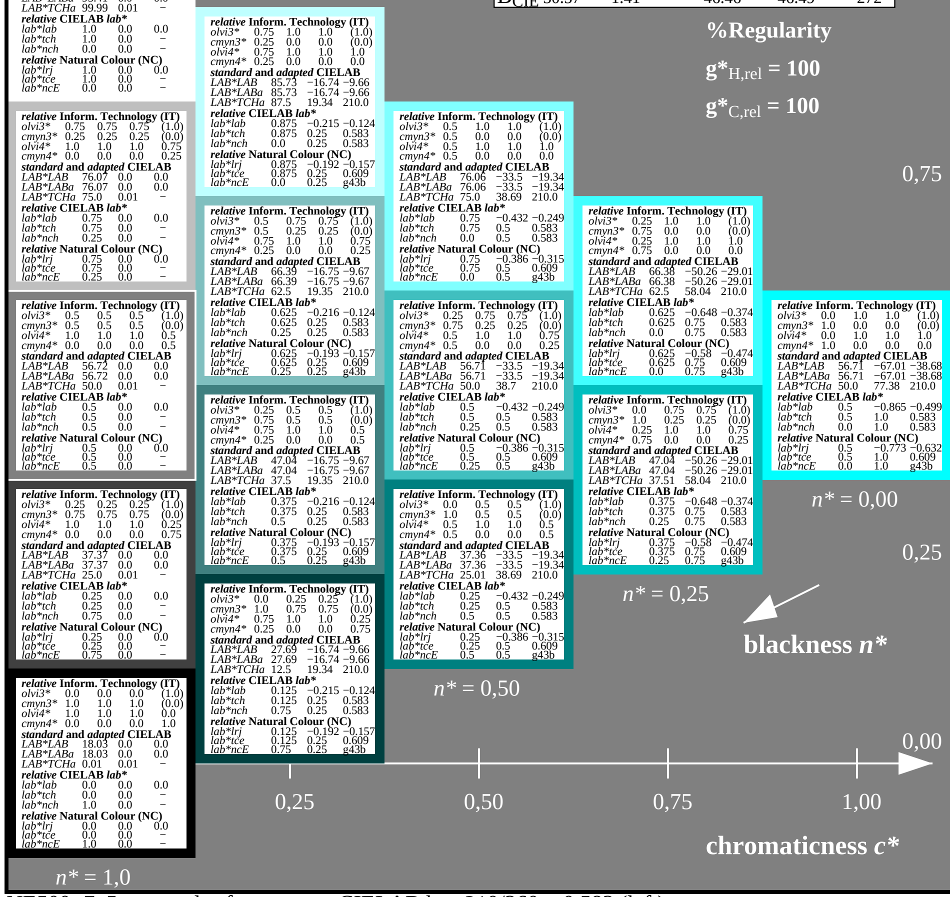


%Gamut
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

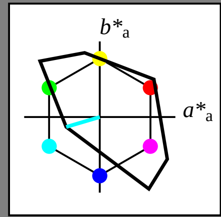
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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^*

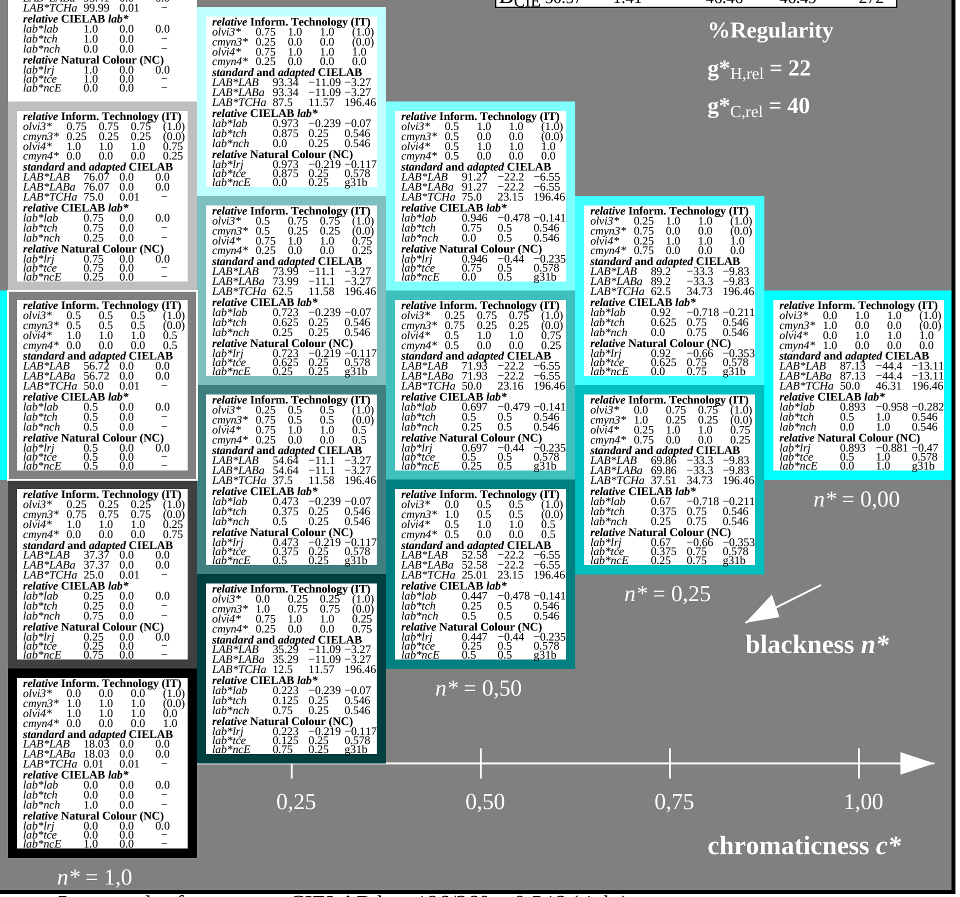


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



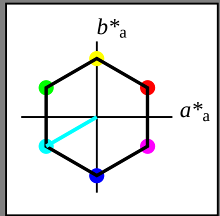
NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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*

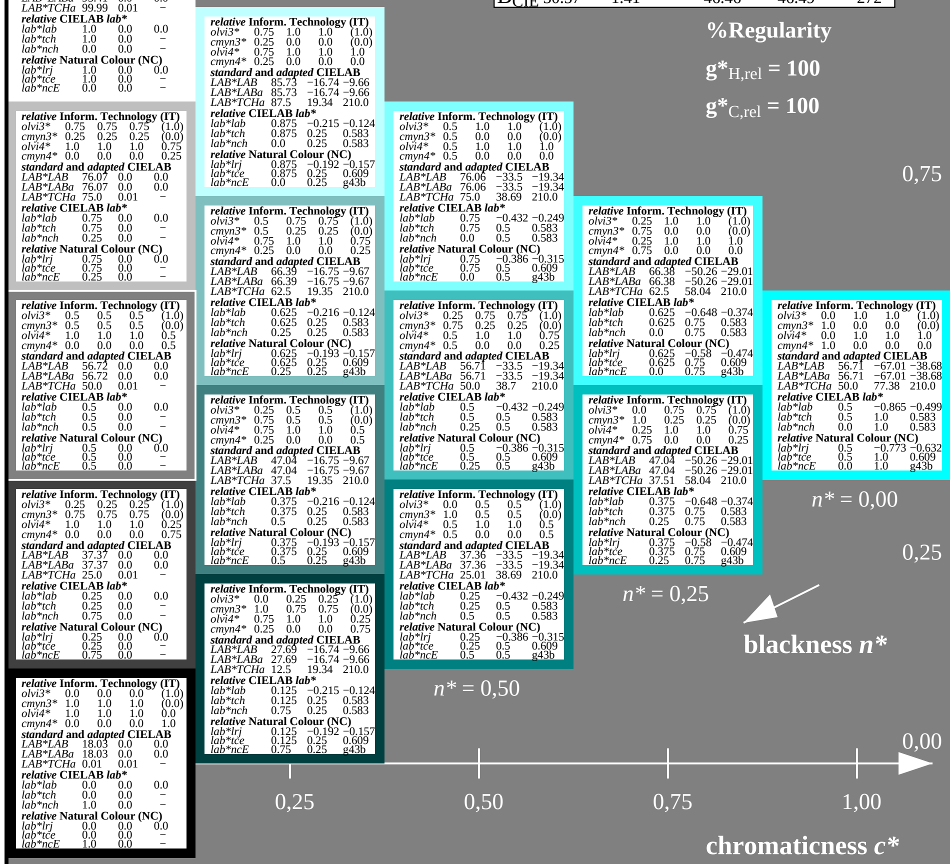


%Gamut
u^*_{rel} = 100

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

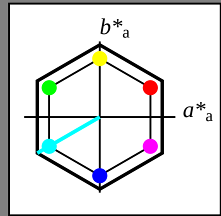
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

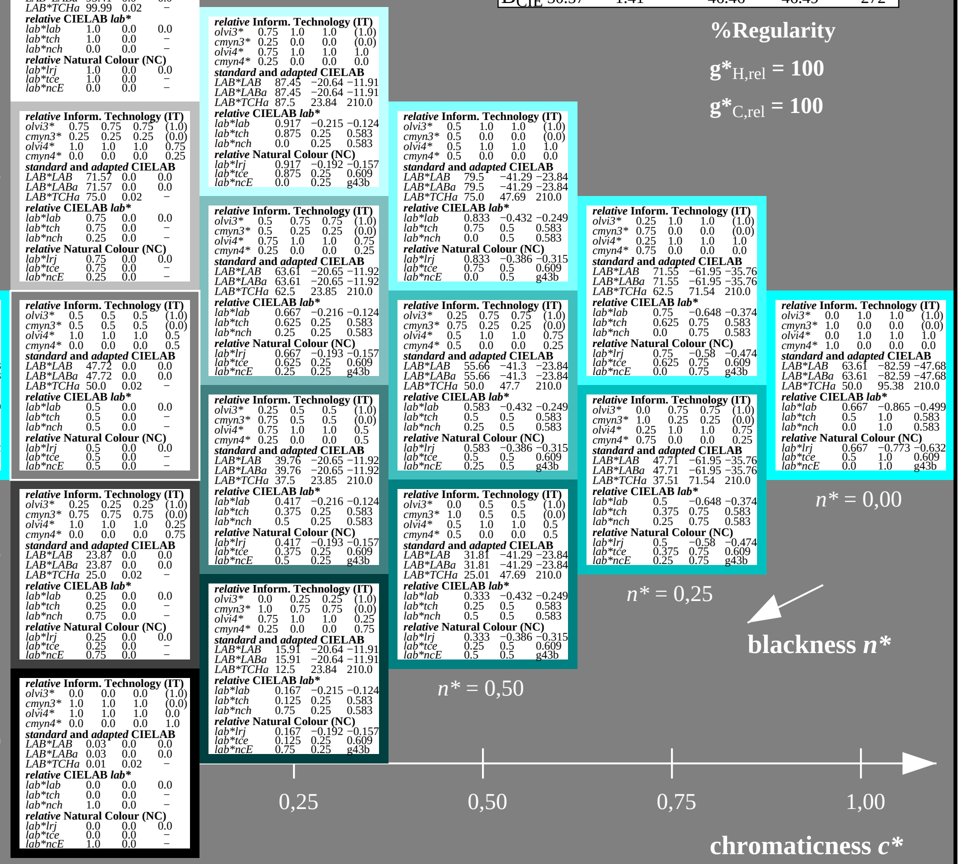


%Gamut
u^*_{rel} = 152

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

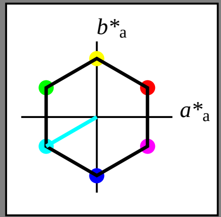
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

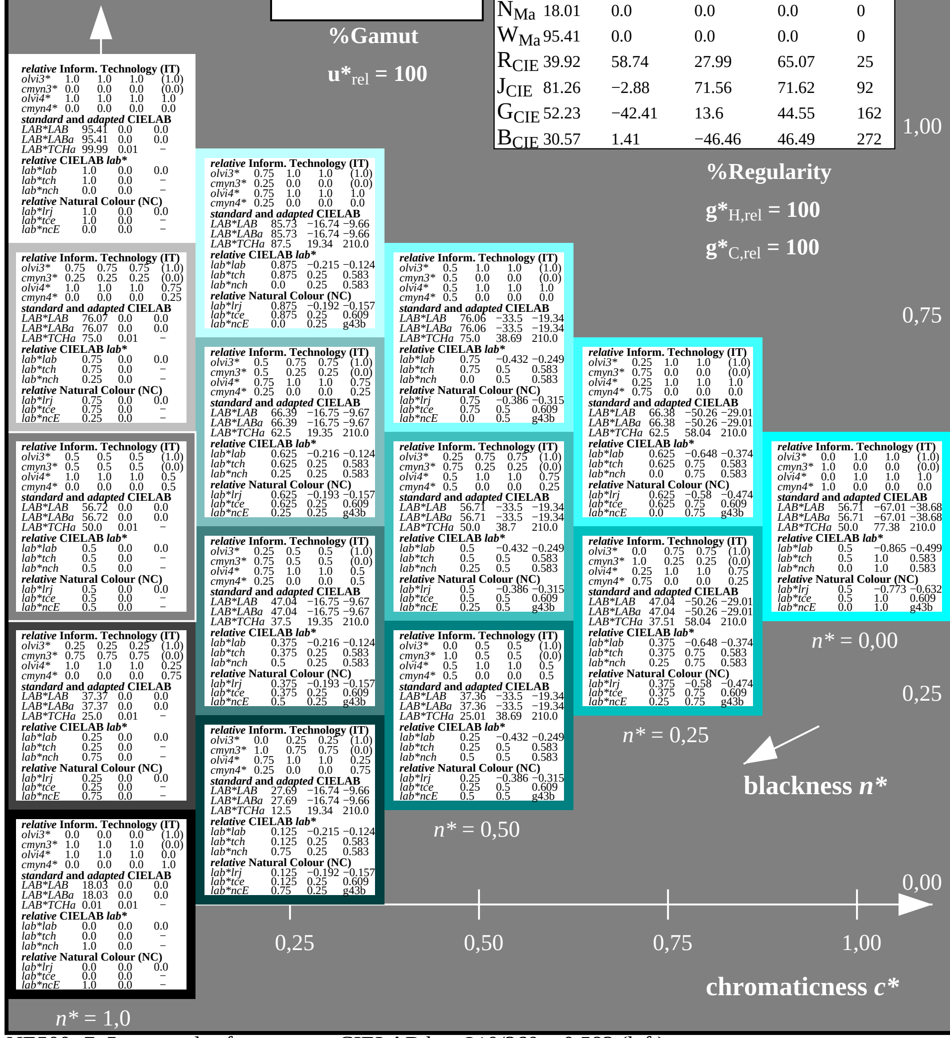
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

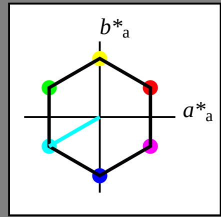
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 70 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

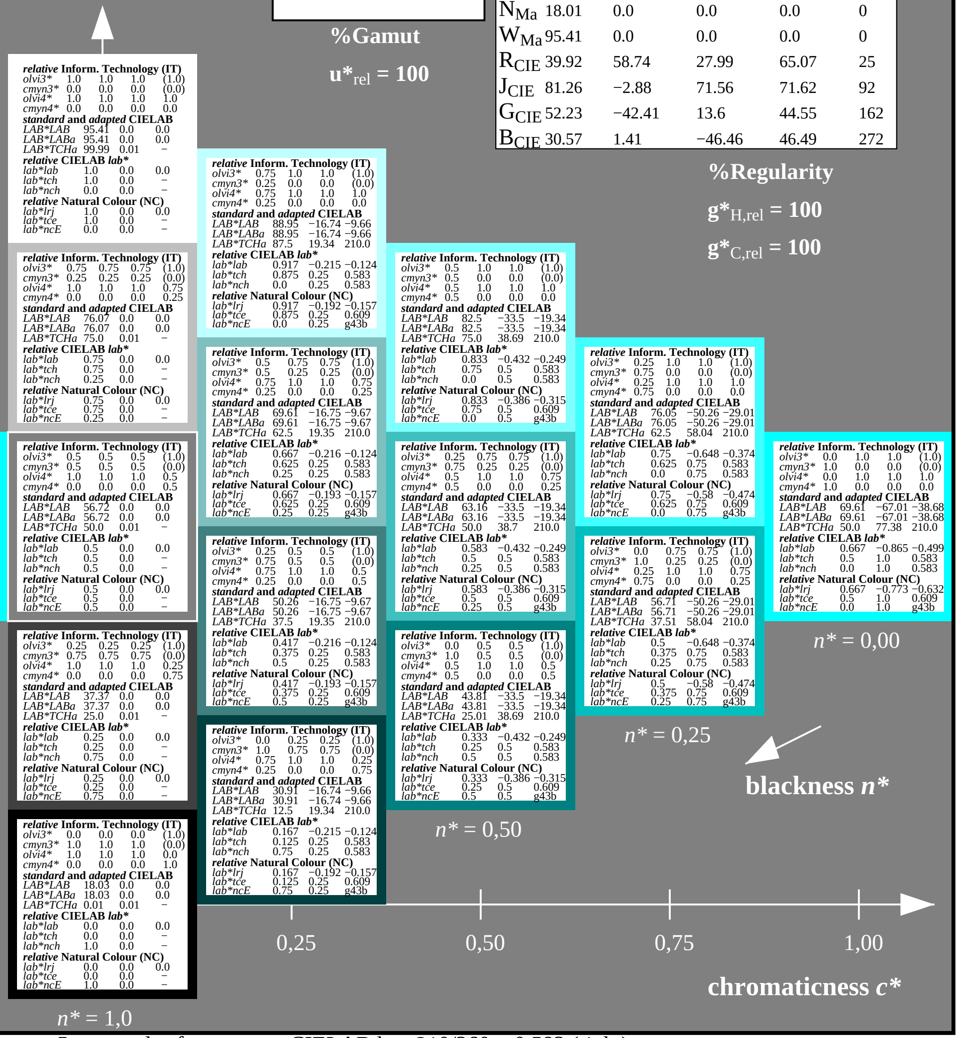
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

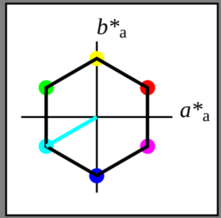
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

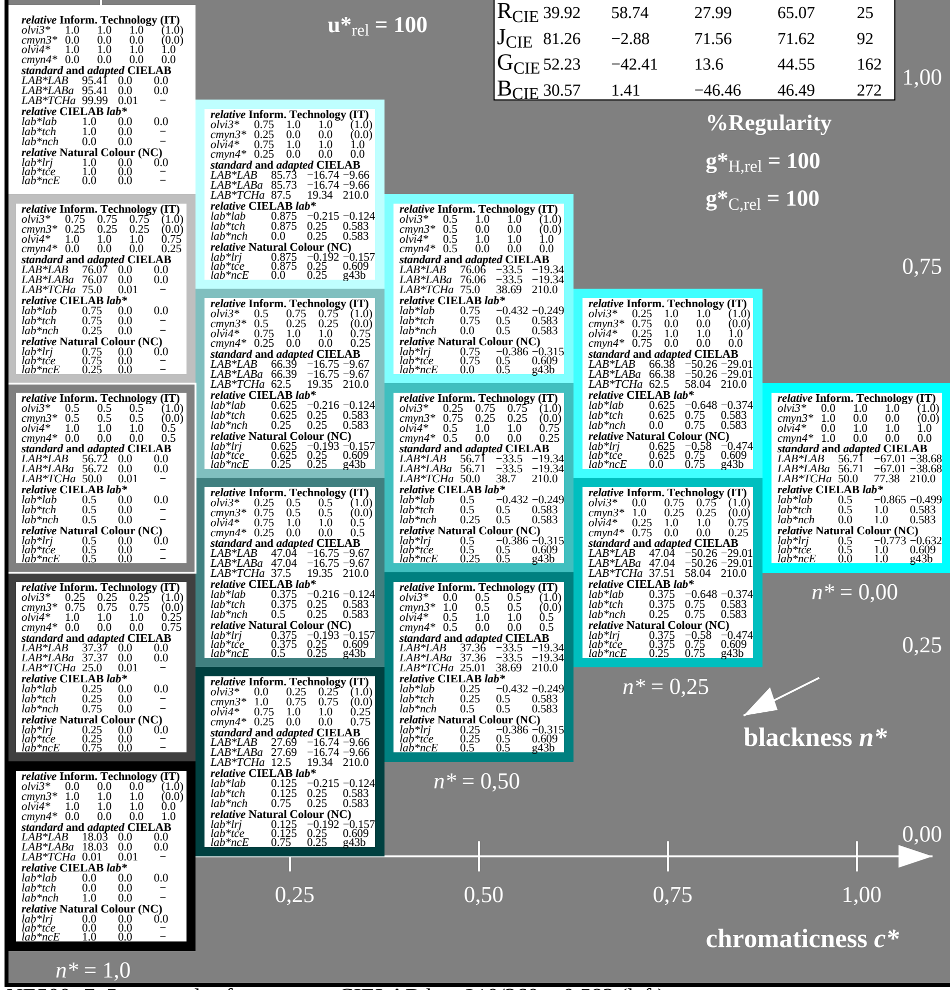
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$

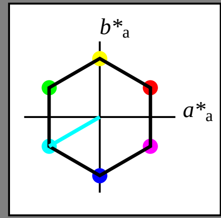
lab*tch* and *lab*nch

D65: hue C

LCH*Ma: 57 77 210

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

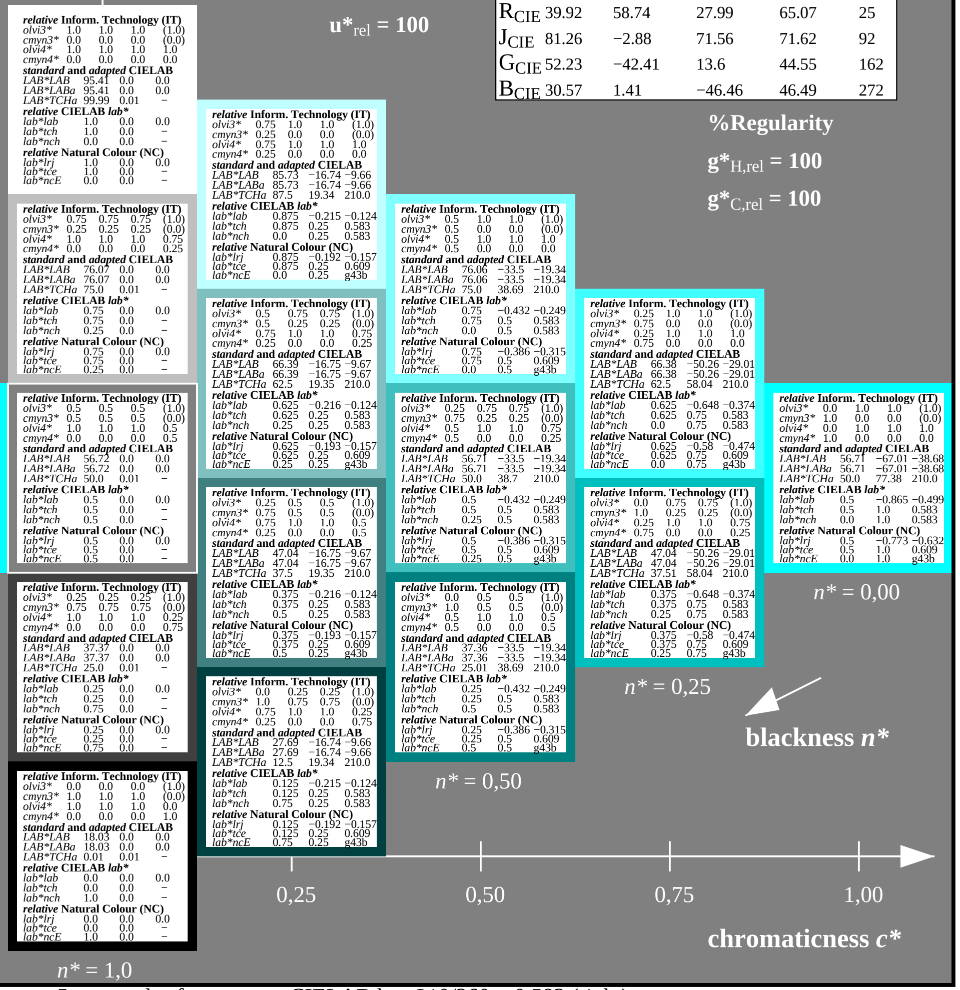
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

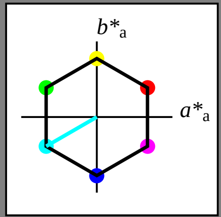


NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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**

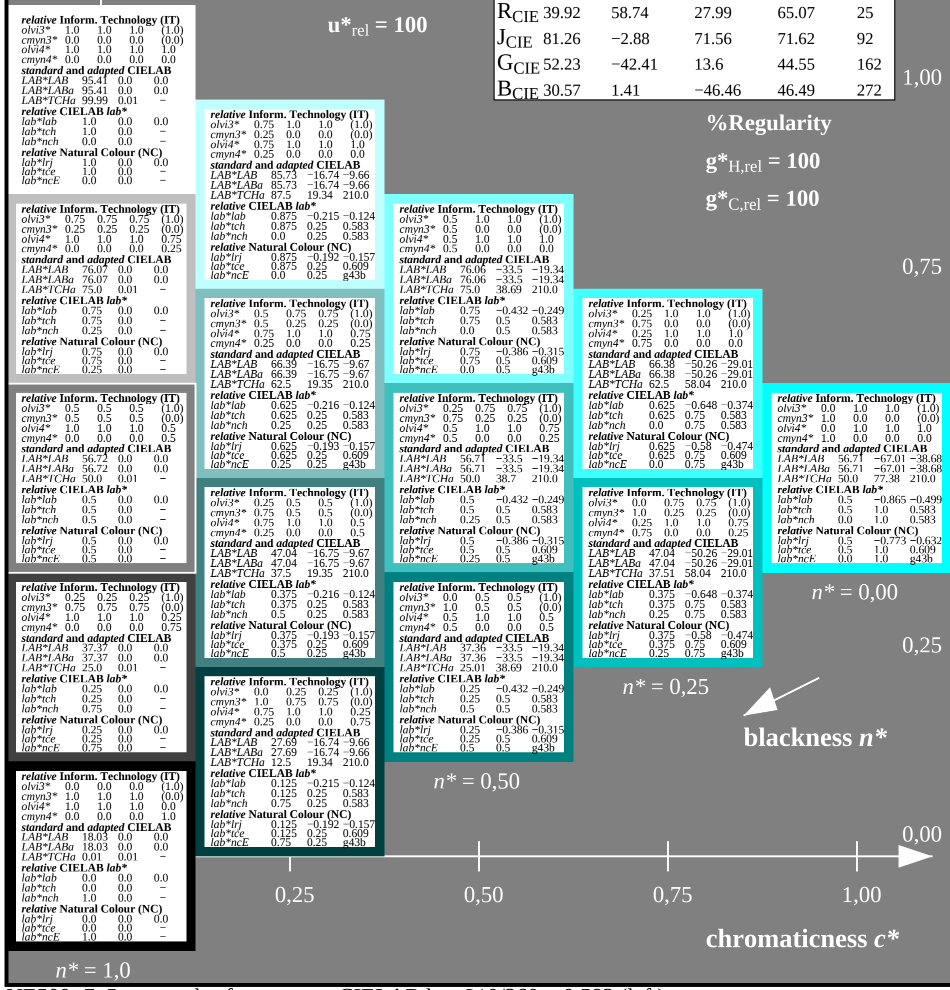


%Gamut
u^*_{rel} = 100

SRS18; adapted (a) CIELAB data

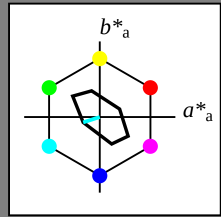
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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**

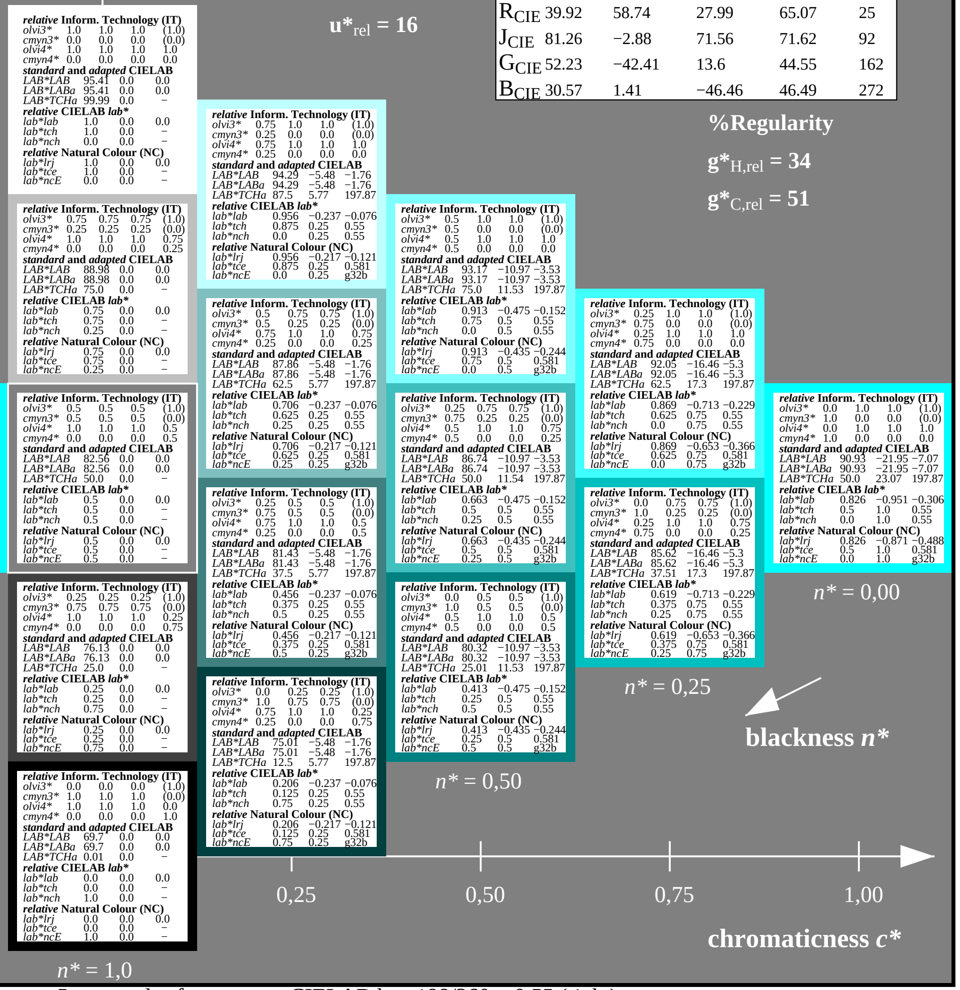


%Gamut
u^*_{rel} = 16

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



NE500−7, 5 step scales for constant CIELAB hue 210/360 = 0.583 (left)

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

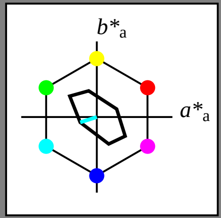
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

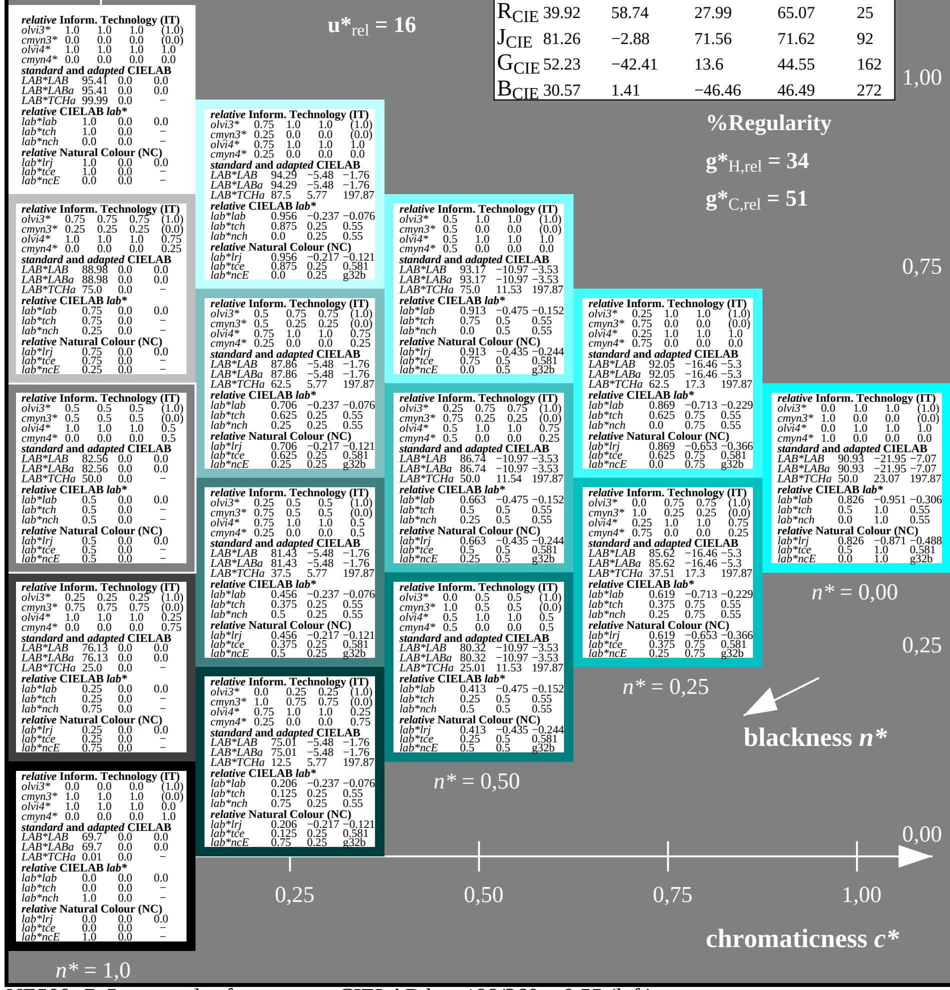
u^*_{rel} = 16

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

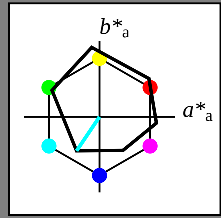
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

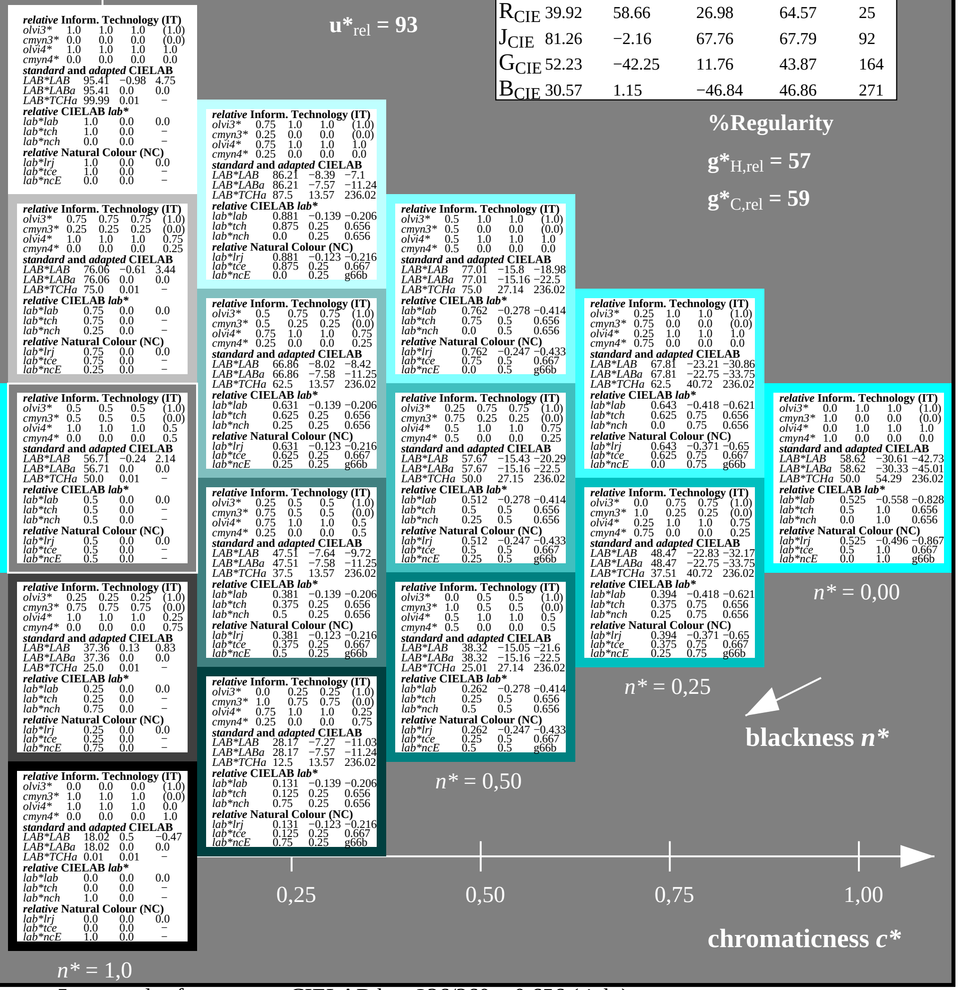
u^*_{rel} = 93

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



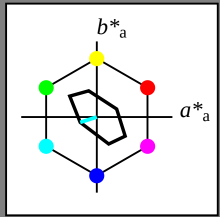
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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

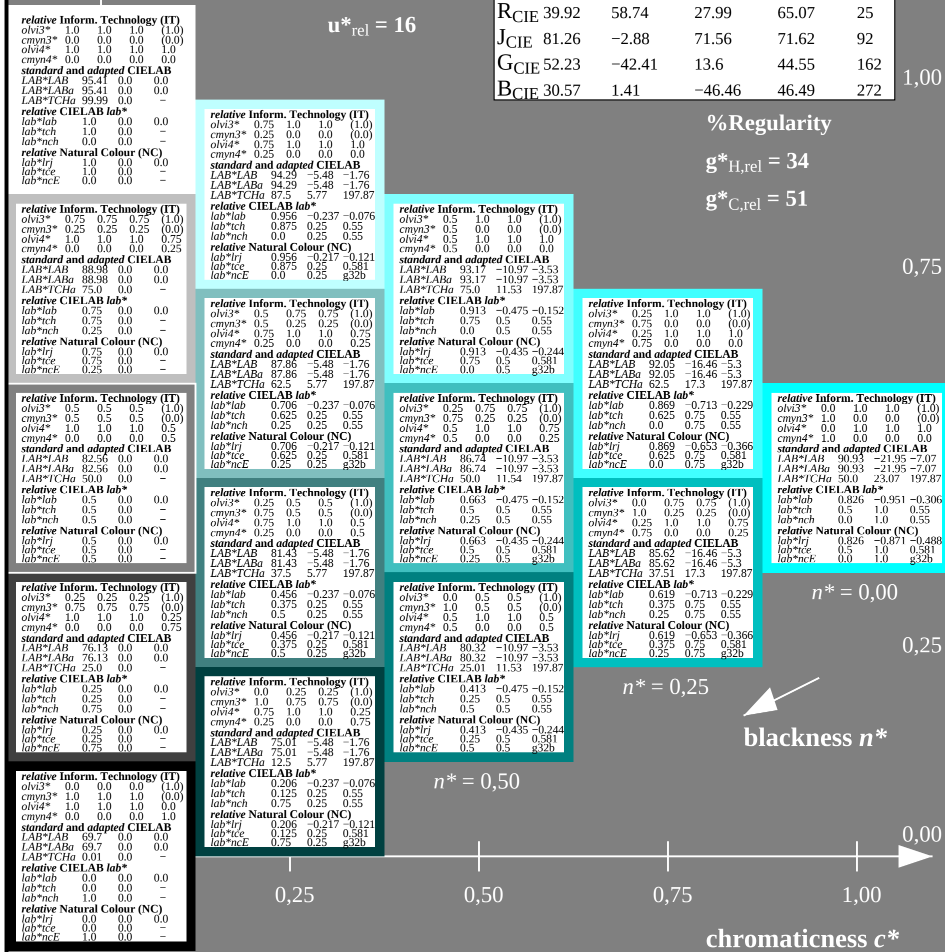
triangle lightness t^*



%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

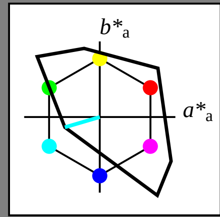
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



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

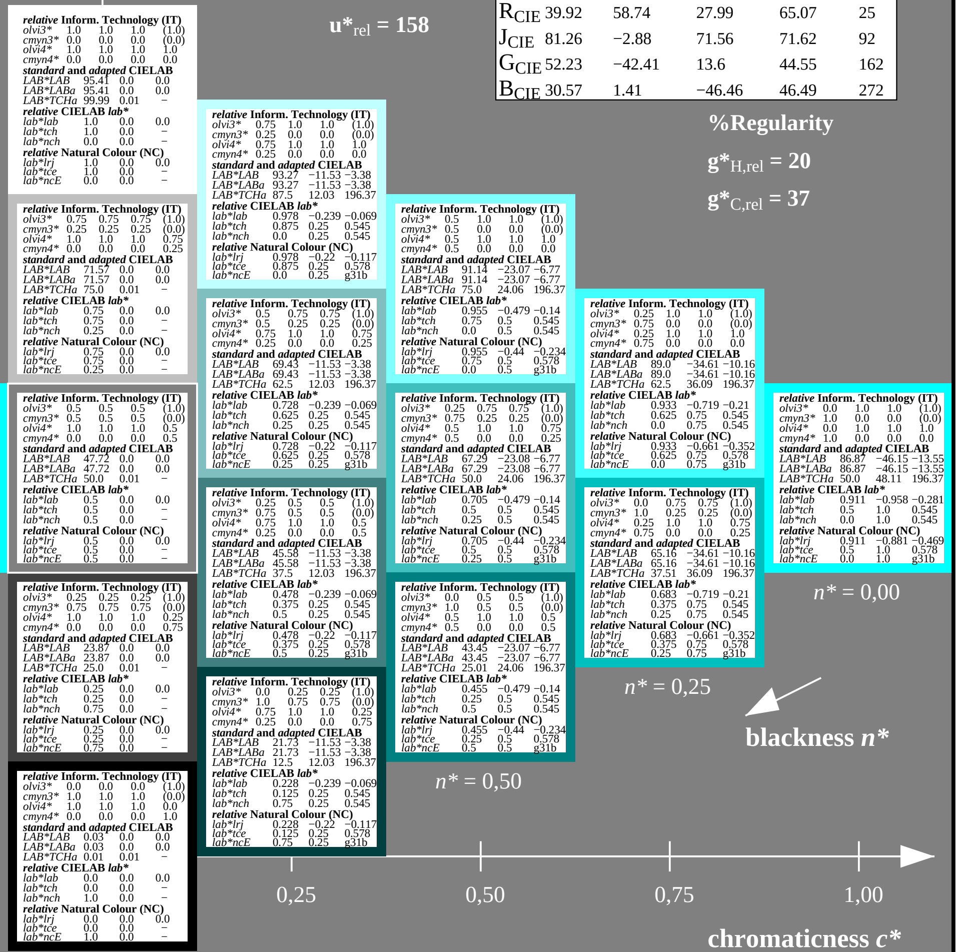
triangle lightness t^*



%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



NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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*

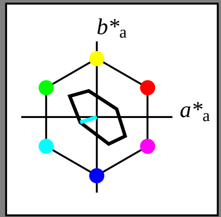
*lab*tch and lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u*rel = 16

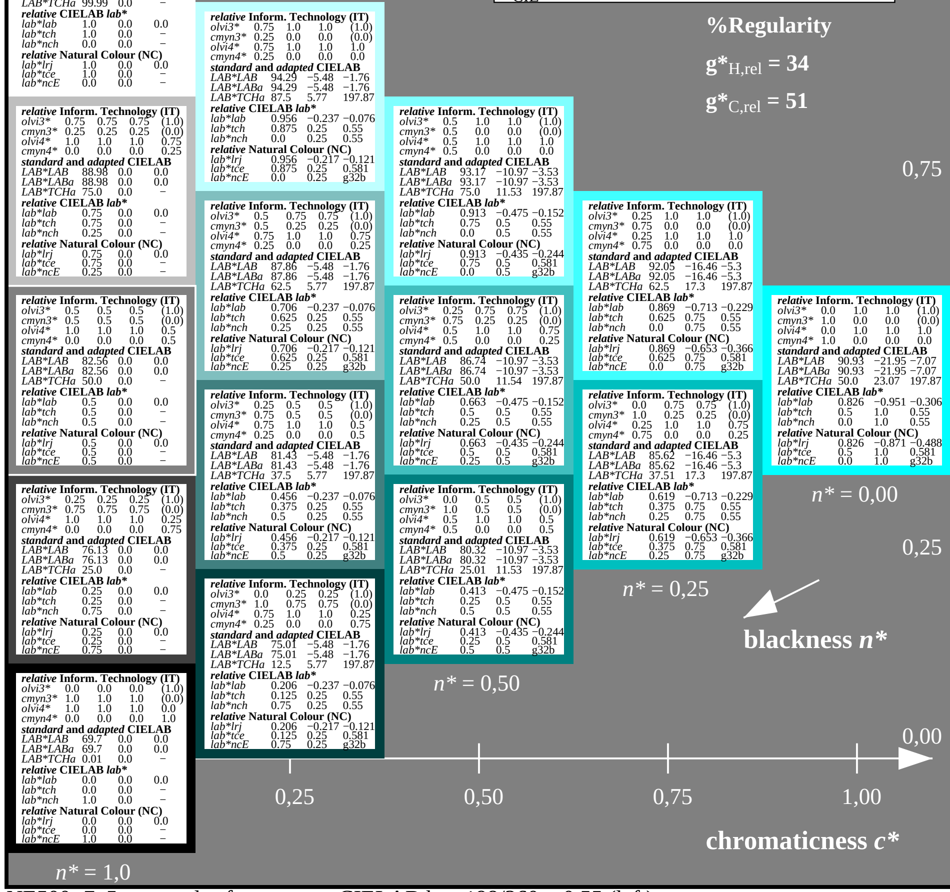
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 235/360 = 0.653*

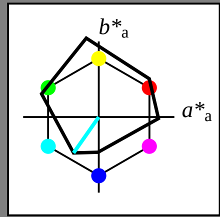
*lab*tch and lab*nch*

D65: hue C

LCH*Ma: 53 58 235

olv*Ma: 0.0 1.0 1.0

triangle lightness *t**



%Gamut

u*rel = 101

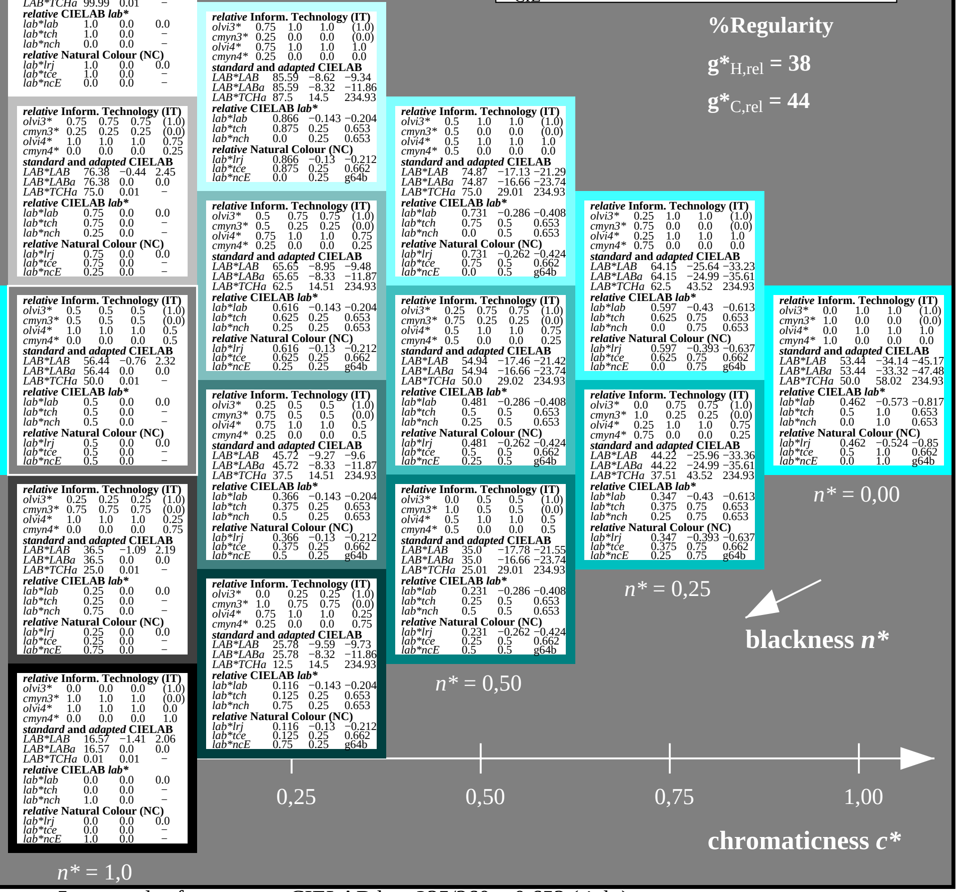
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



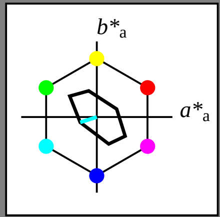
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

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

$n^* = 0,00$
$n^* = 0,25$
$n^* = 0,50$
$n^* = 1,0$

blackness n^*

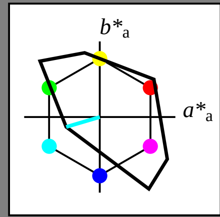
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System 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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$

$n^* = 0,00$
$n^* = 0,25$
$n^* = 0,50$
$n^* = 1,0$

blackness n^*

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

chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

5 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS70
for hue $h^* = lab^*h = 198/360 = 0.55$

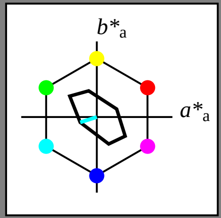
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

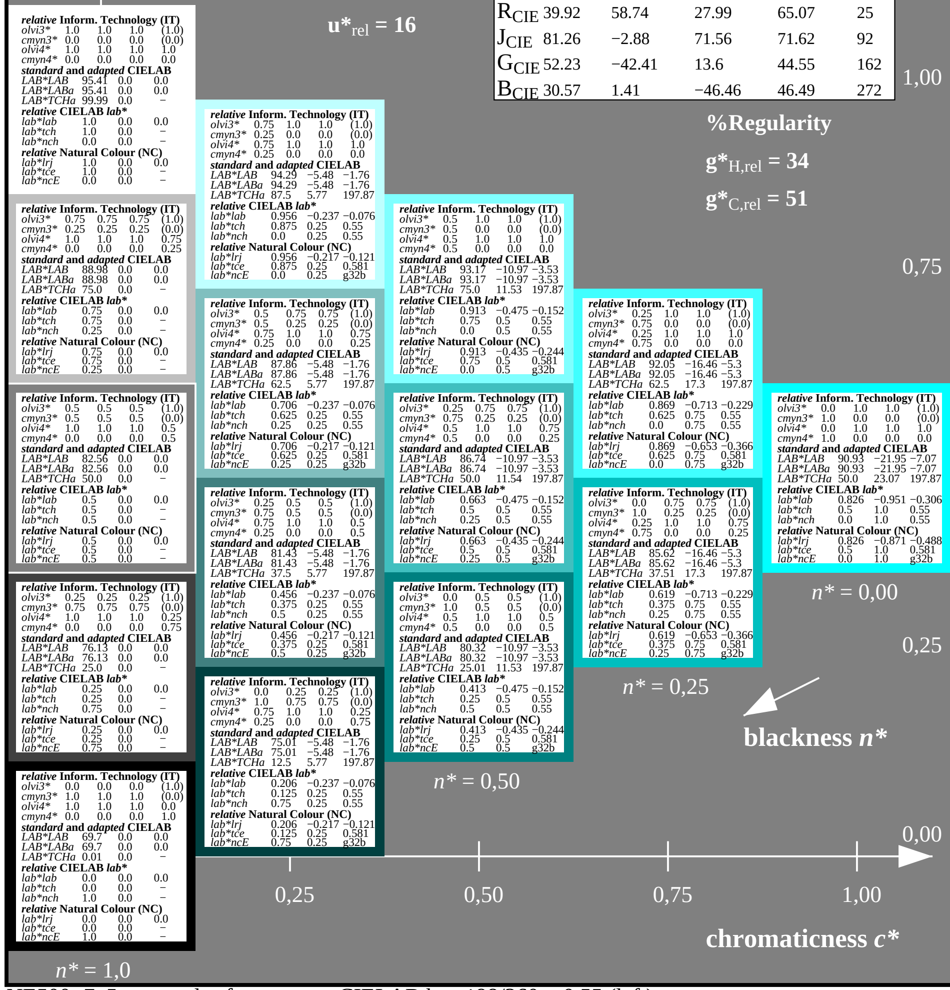
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 210/360 = 0.583$

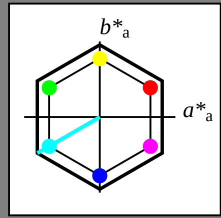
*lab*tch* and *lab*nch*

D65: hue C

LCH*Ma: 64 95 210

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

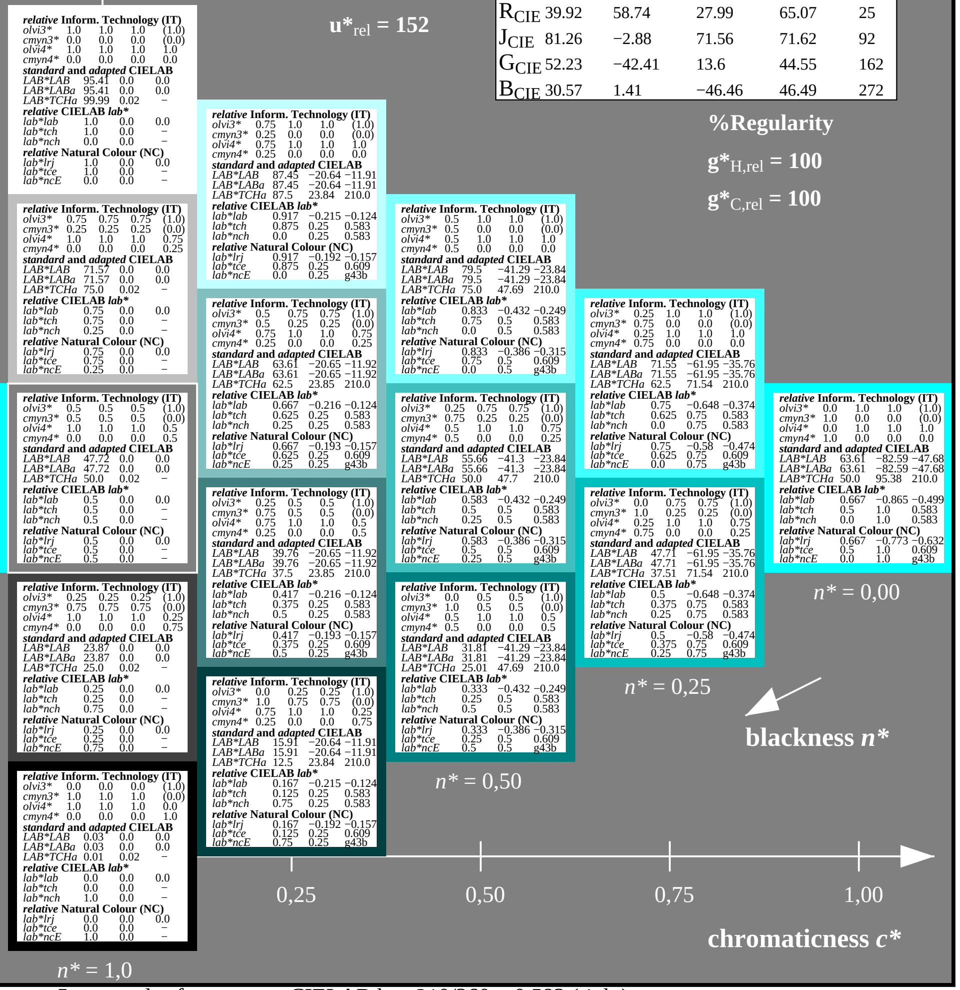
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



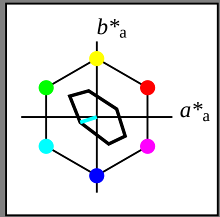
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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

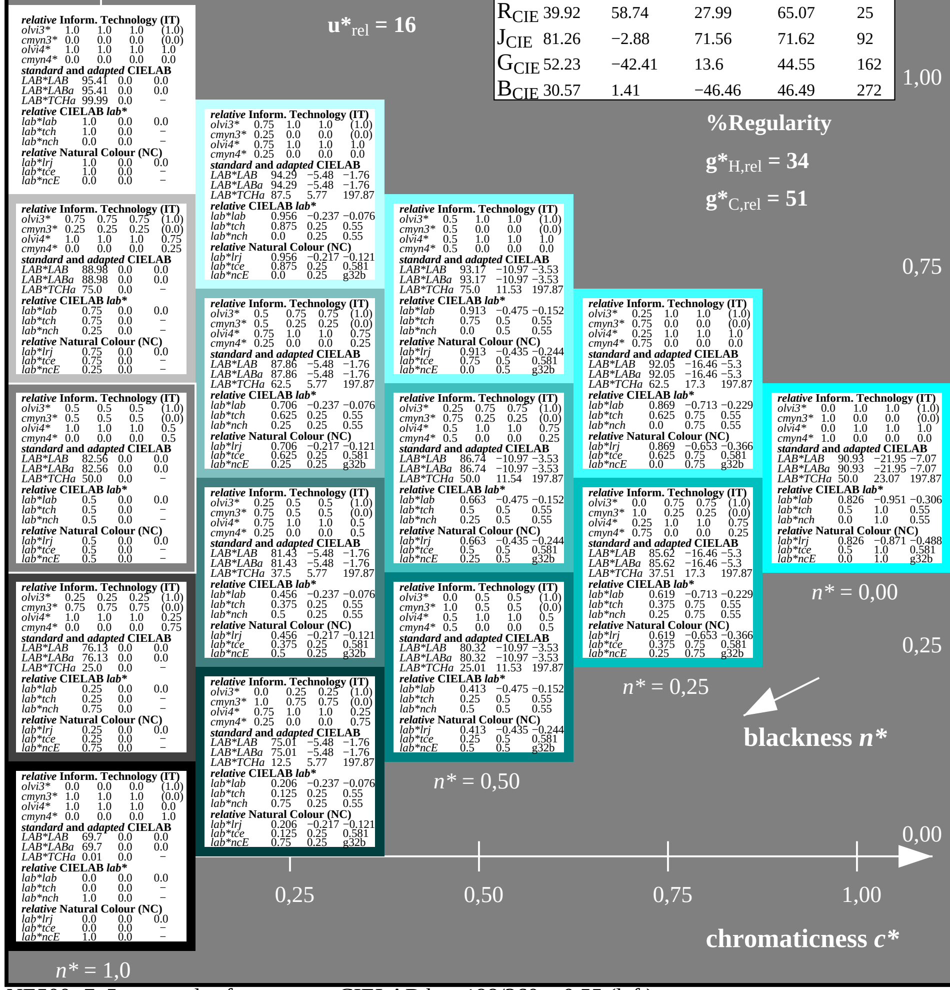
triangle lightness *t**



%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

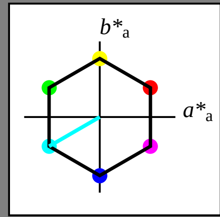
%Regularity
g*H,rel = 34
g*C,rel = 51



Output: Colorimetric 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

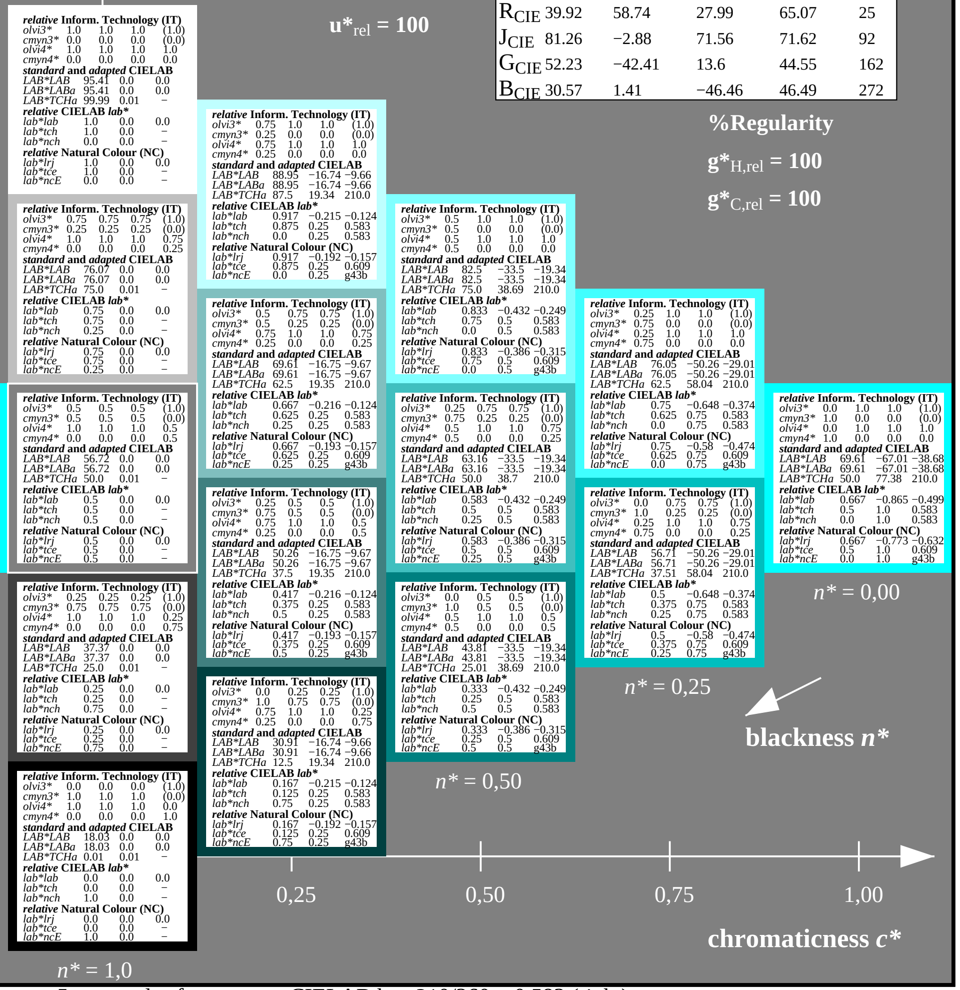
triangle lightness *t**



%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



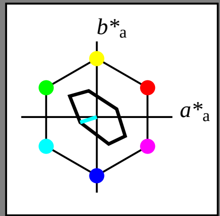
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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*

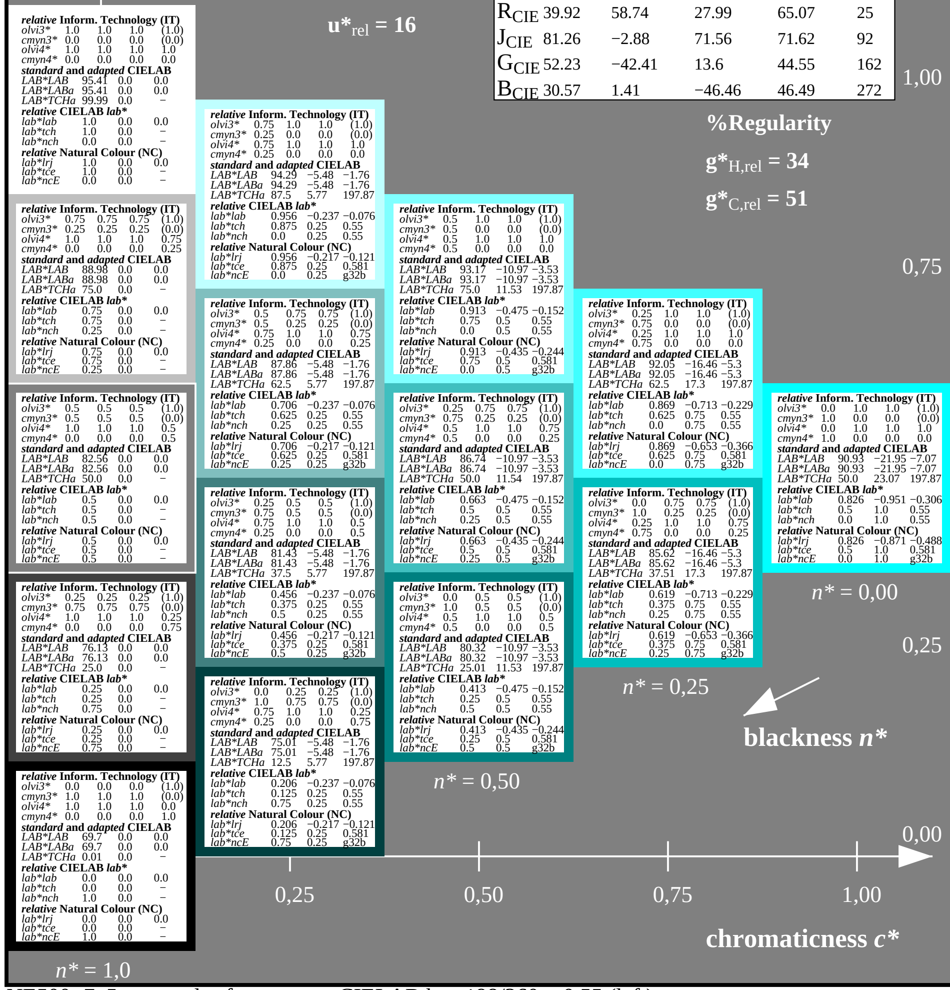


%Gamut
u^*_{rel} = 16

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

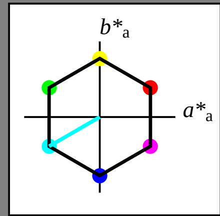
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



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*

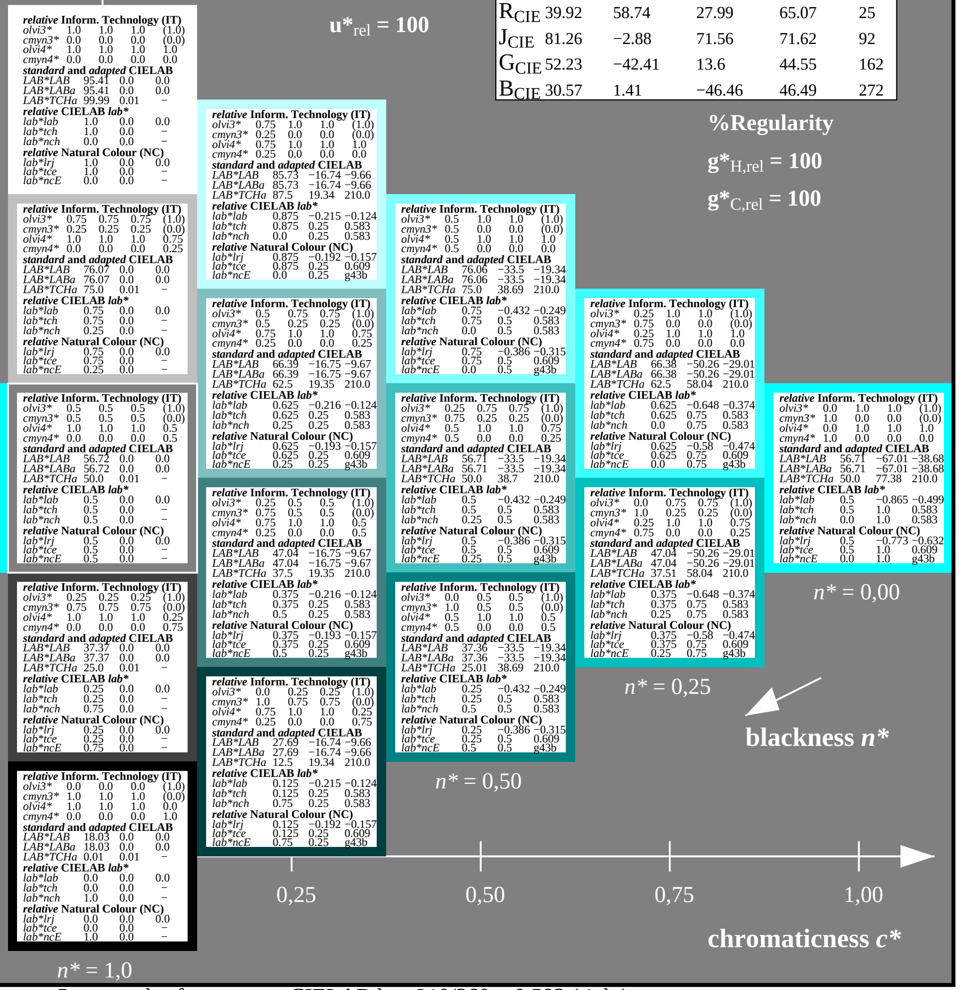


%Gamut
u^*_{rel} = 100

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



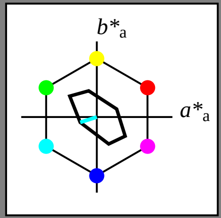
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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**

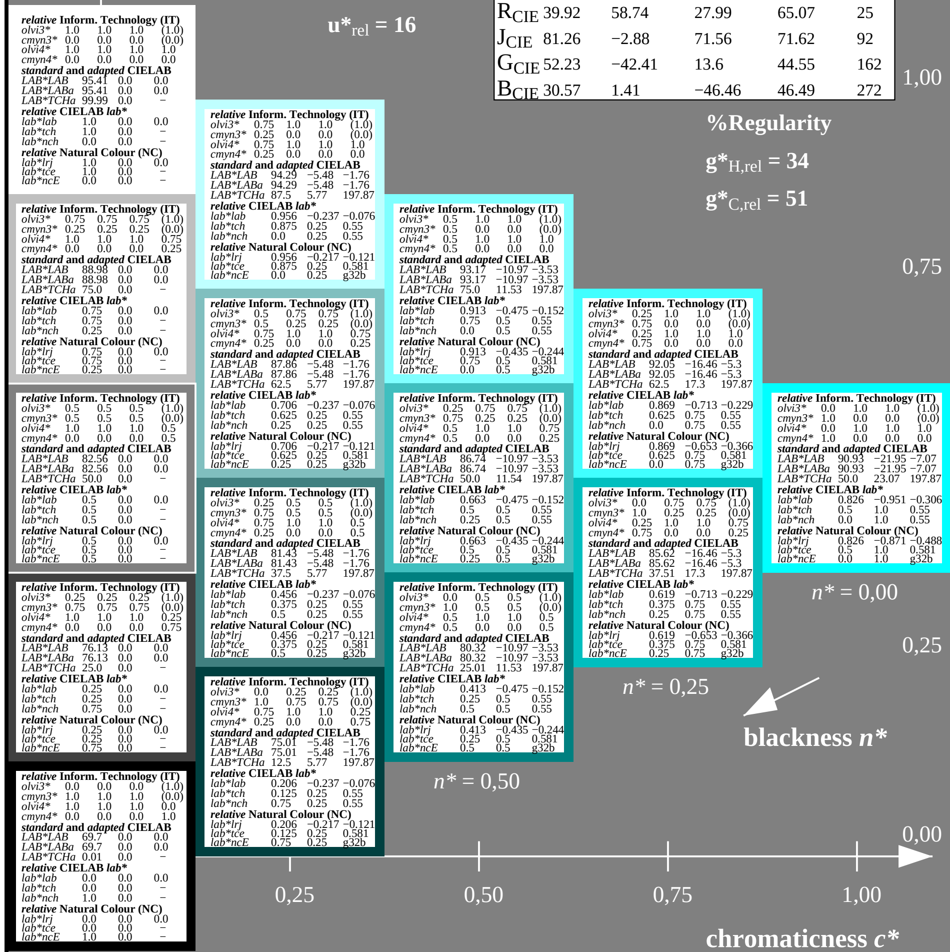


%Gamut
$u^*_{rel} = 16$

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

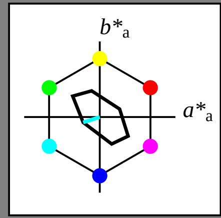
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric 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**

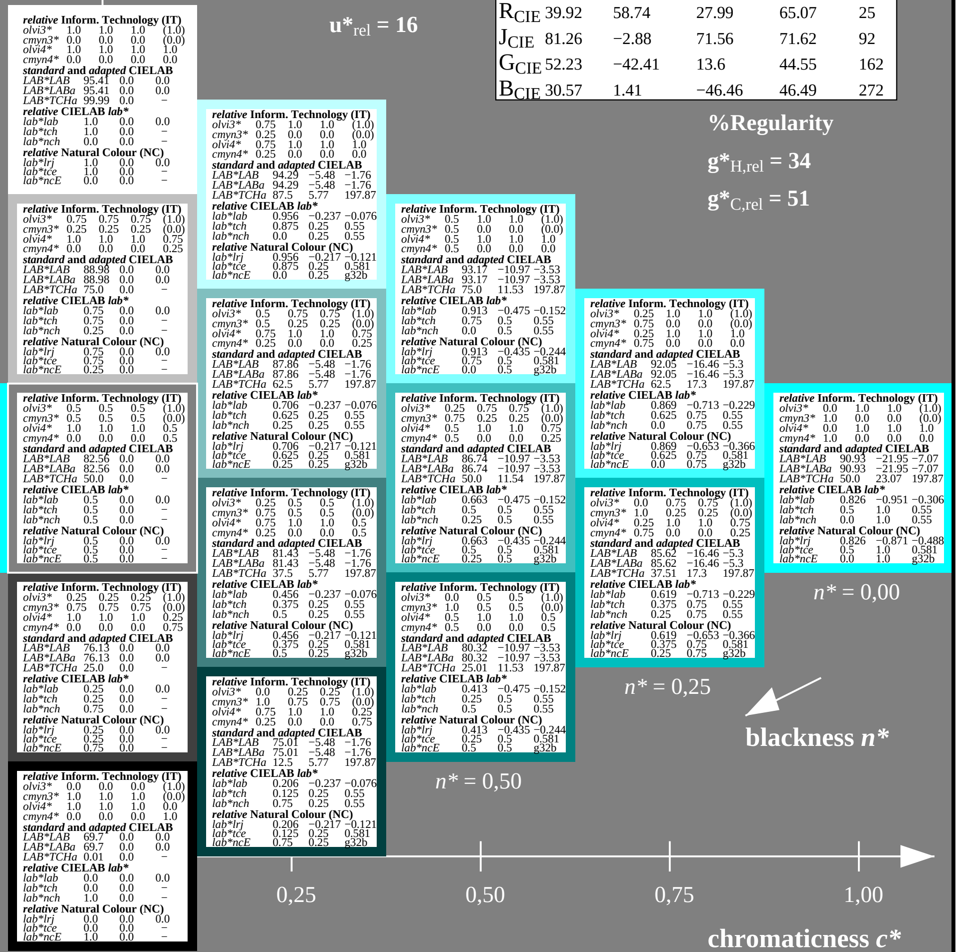


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



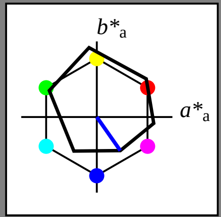
NE500−7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

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

$u^*_{rel} = 93$

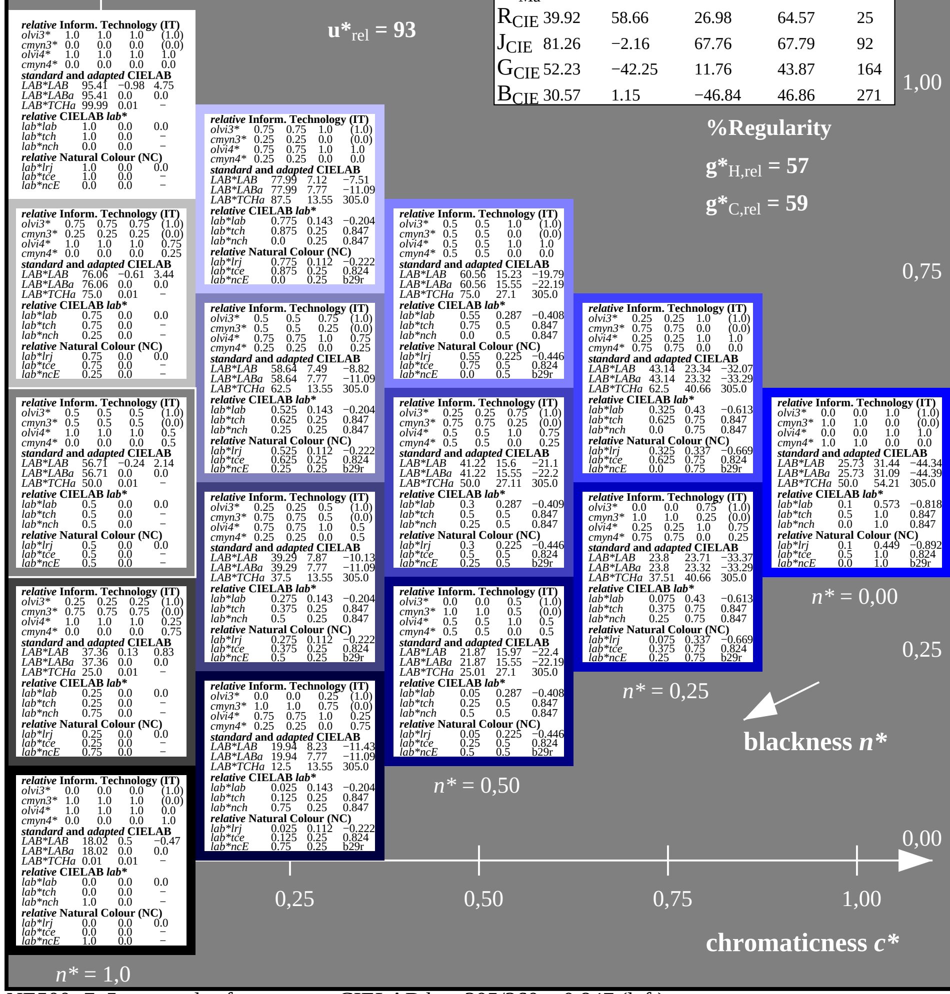
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

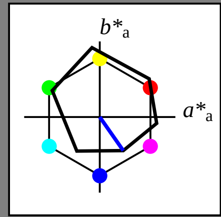
$g^*_{C,rel} = 59$



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

$u^*_{rel} = 93$

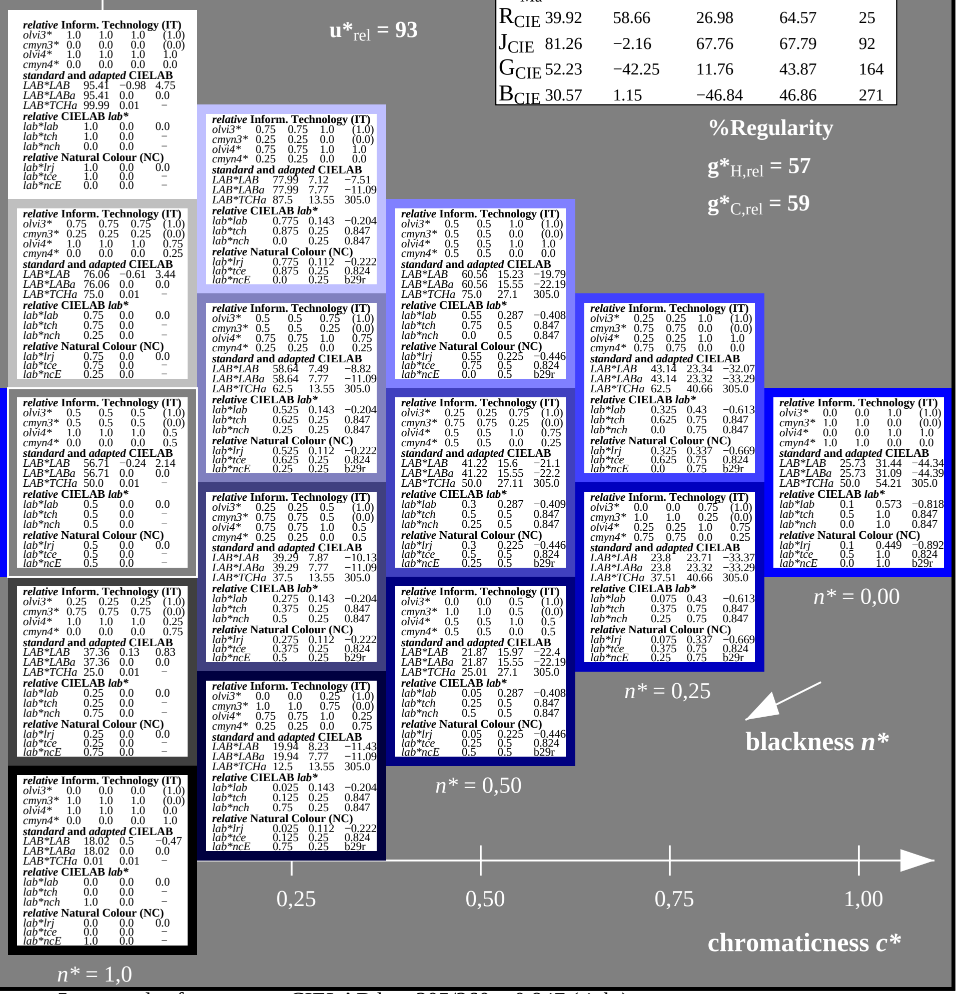
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



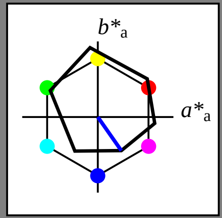
NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

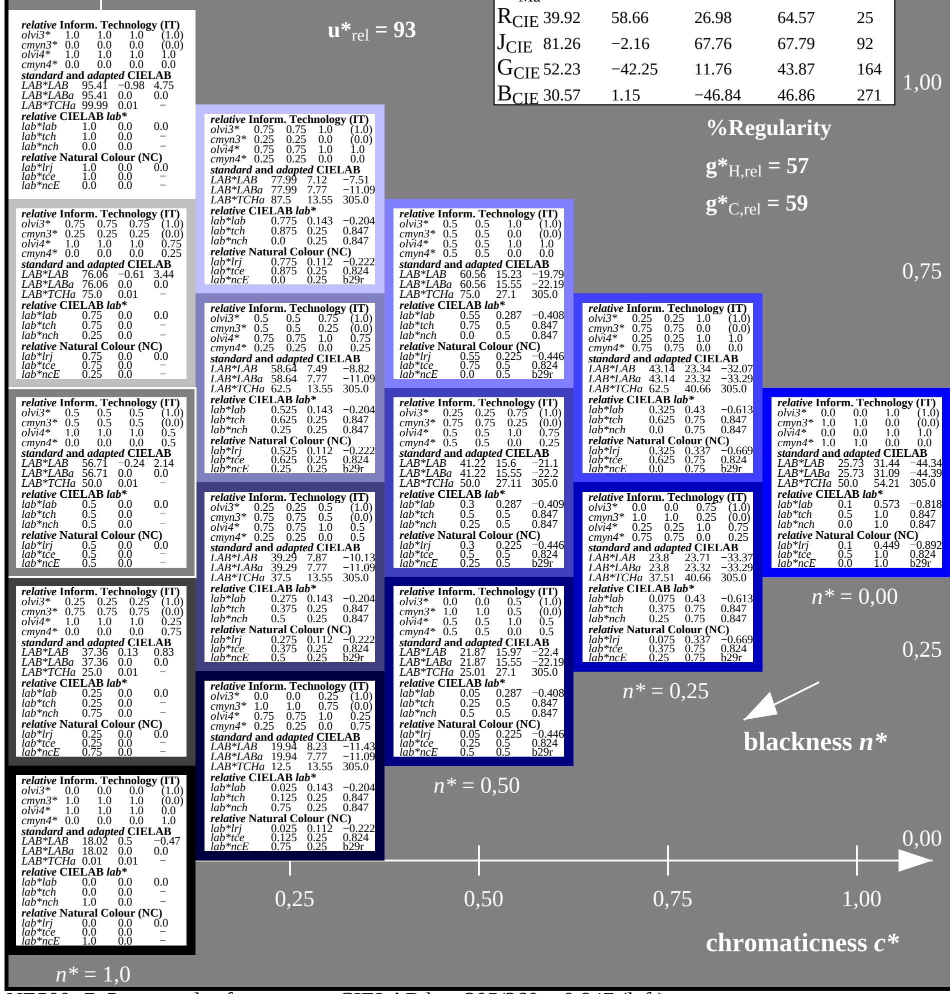
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

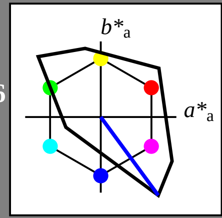
$g^*_{C,rel}$ = 59



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

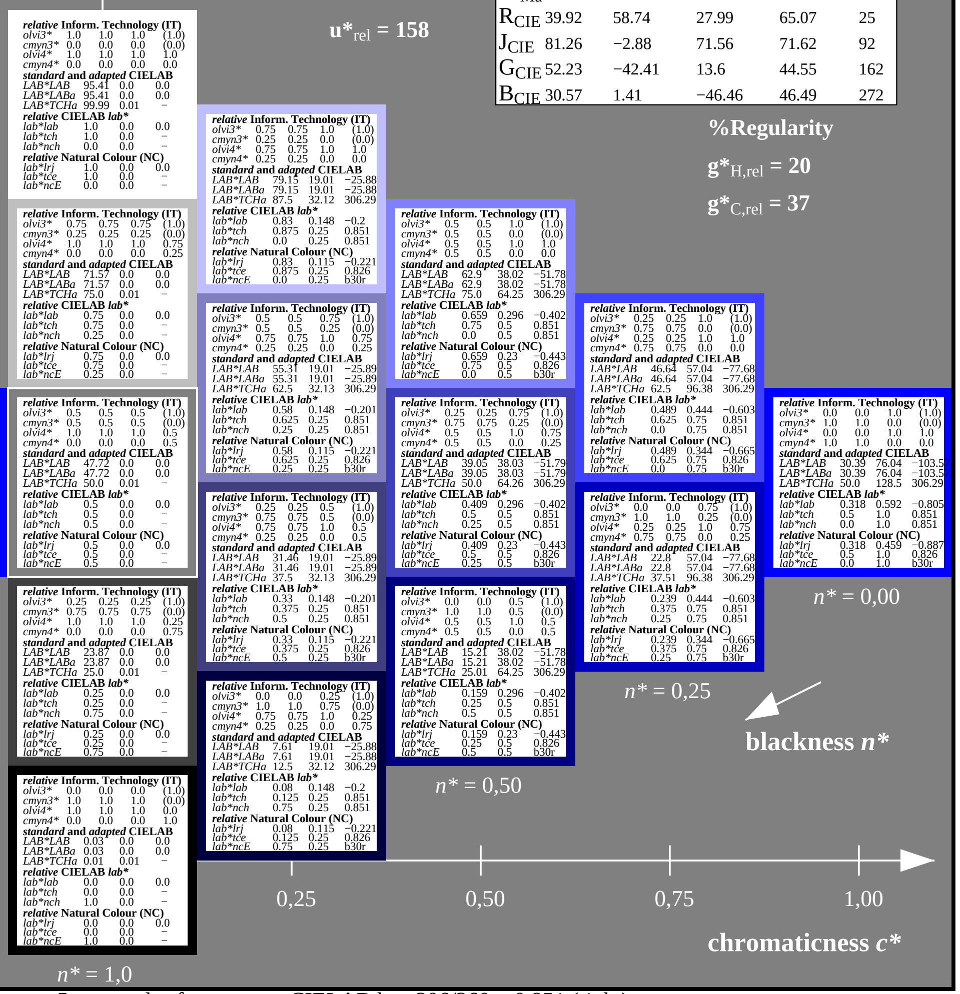
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 305/360 = 0.847$

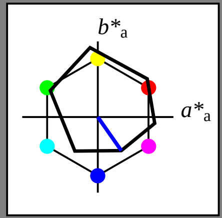
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

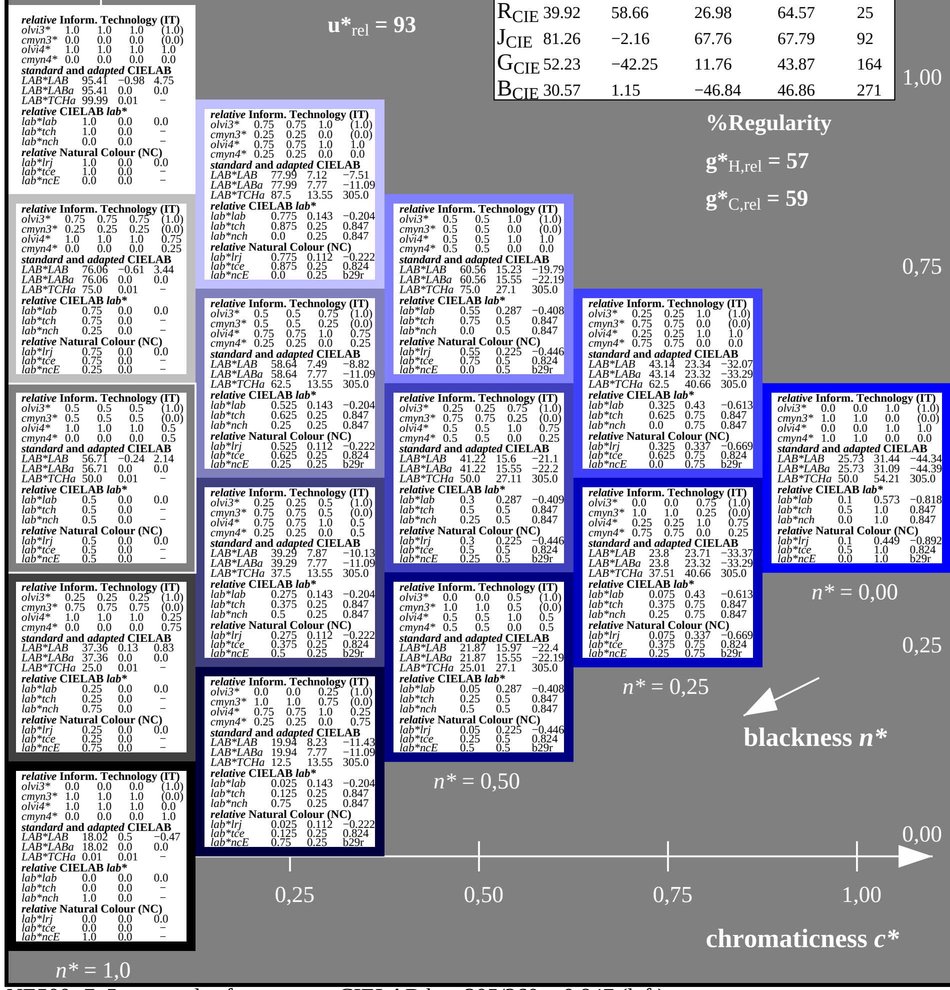
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$

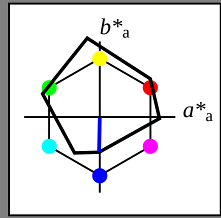
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

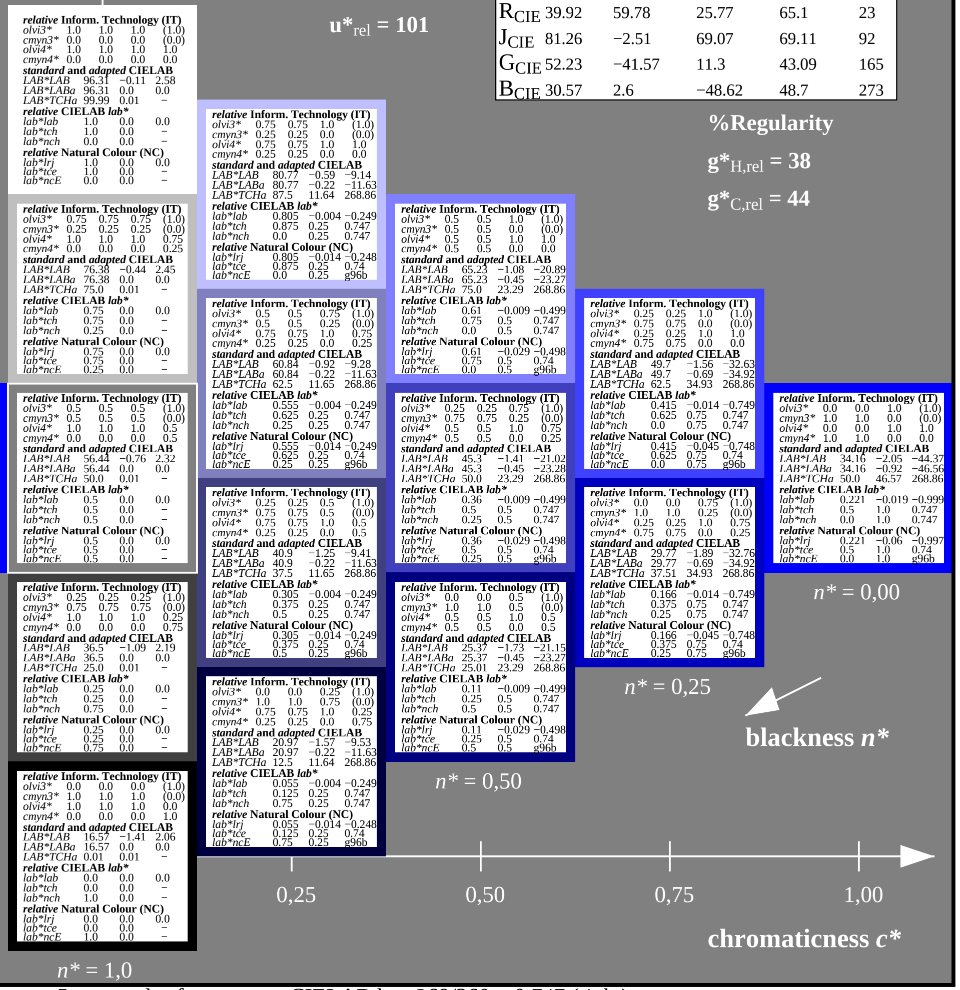
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



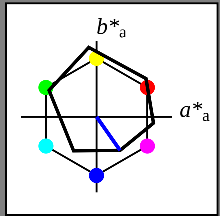
NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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^*

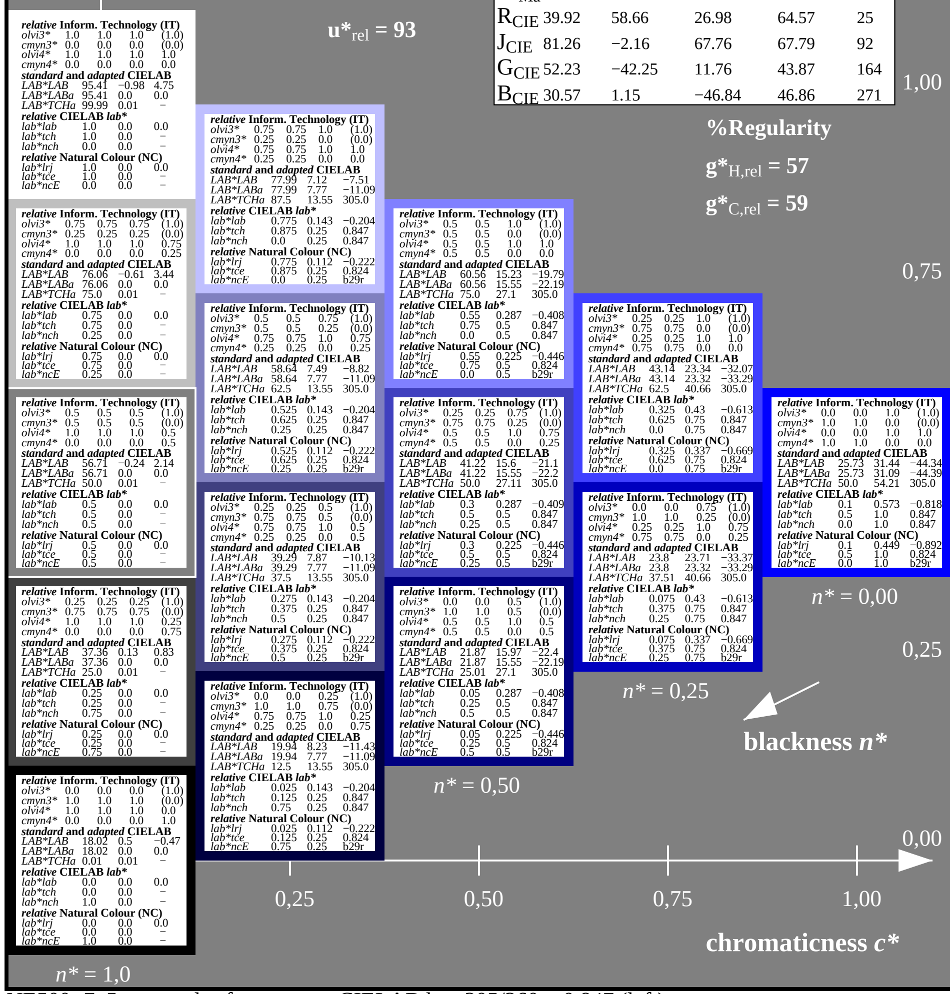


ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$u^*_{rel} = 93$

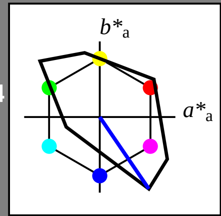
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System 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^*

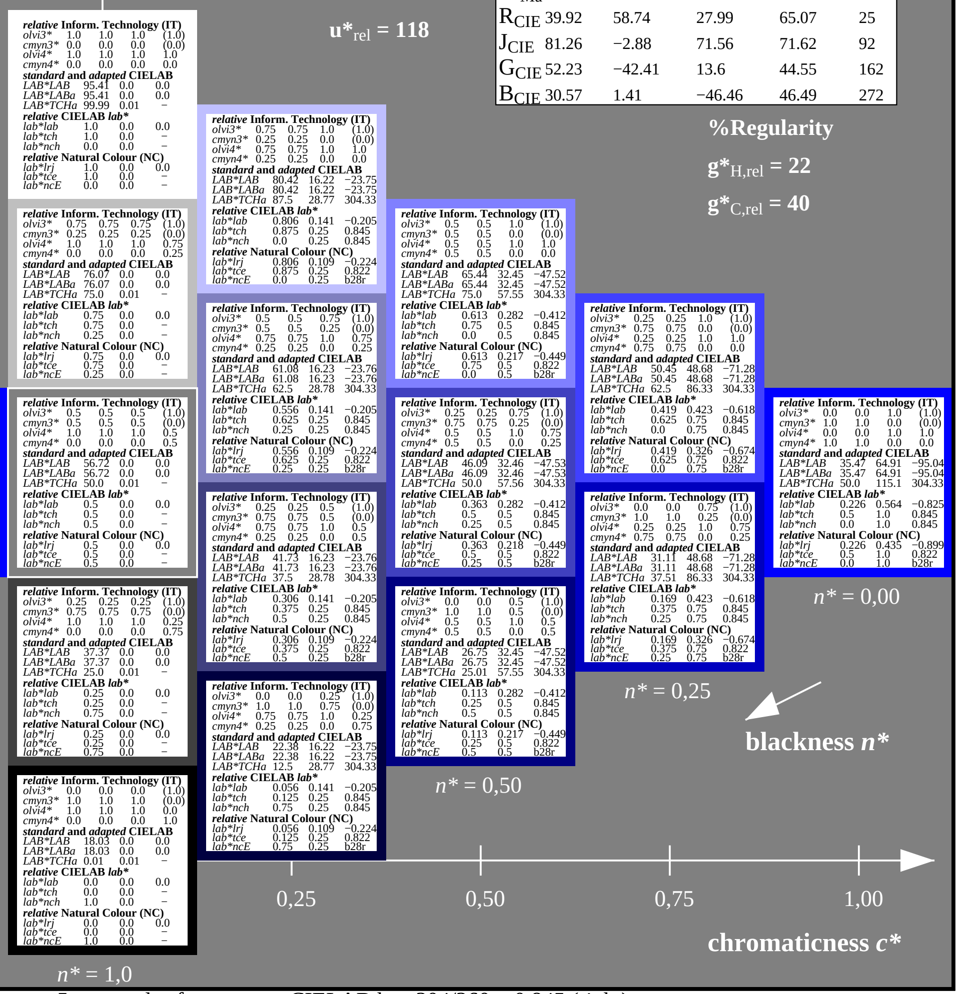


TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



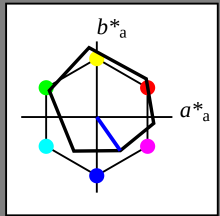
NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

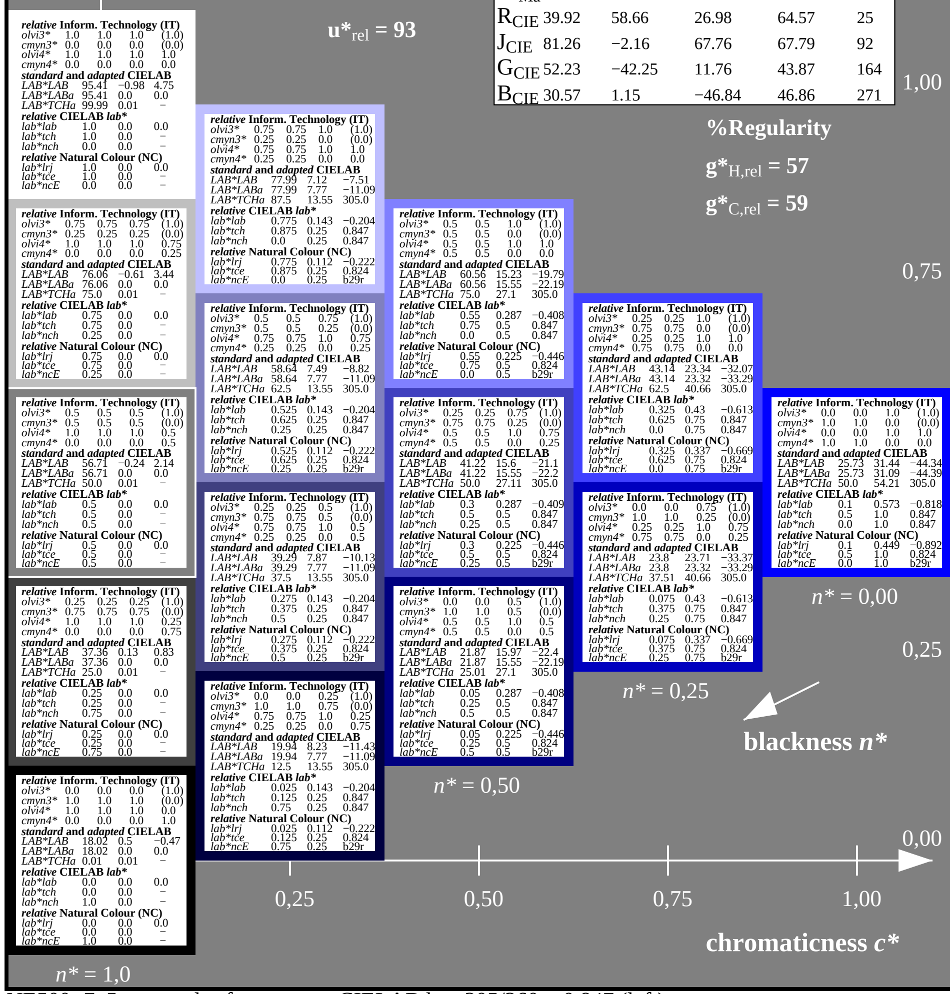
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

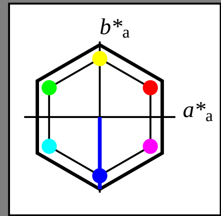
$g^*_{C,rel}$ = 59



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

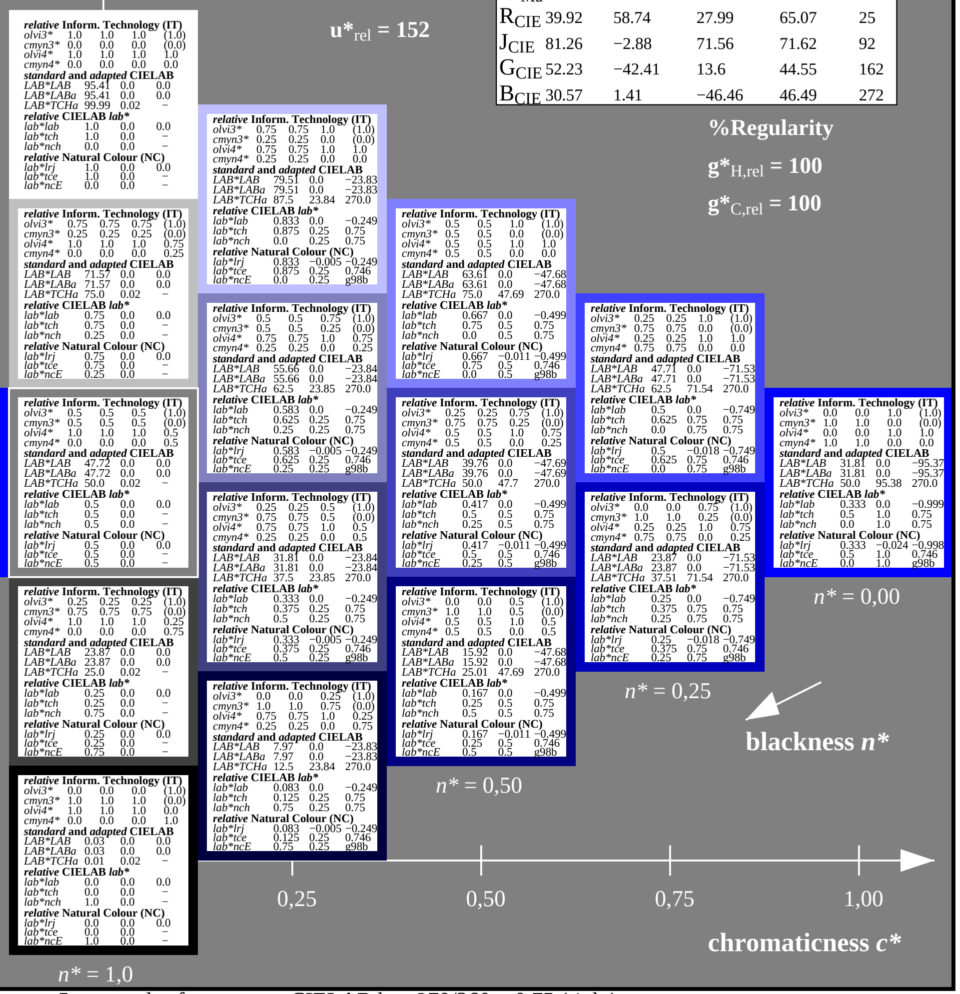
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



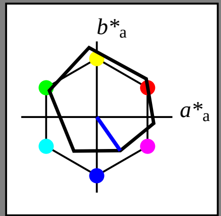
NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

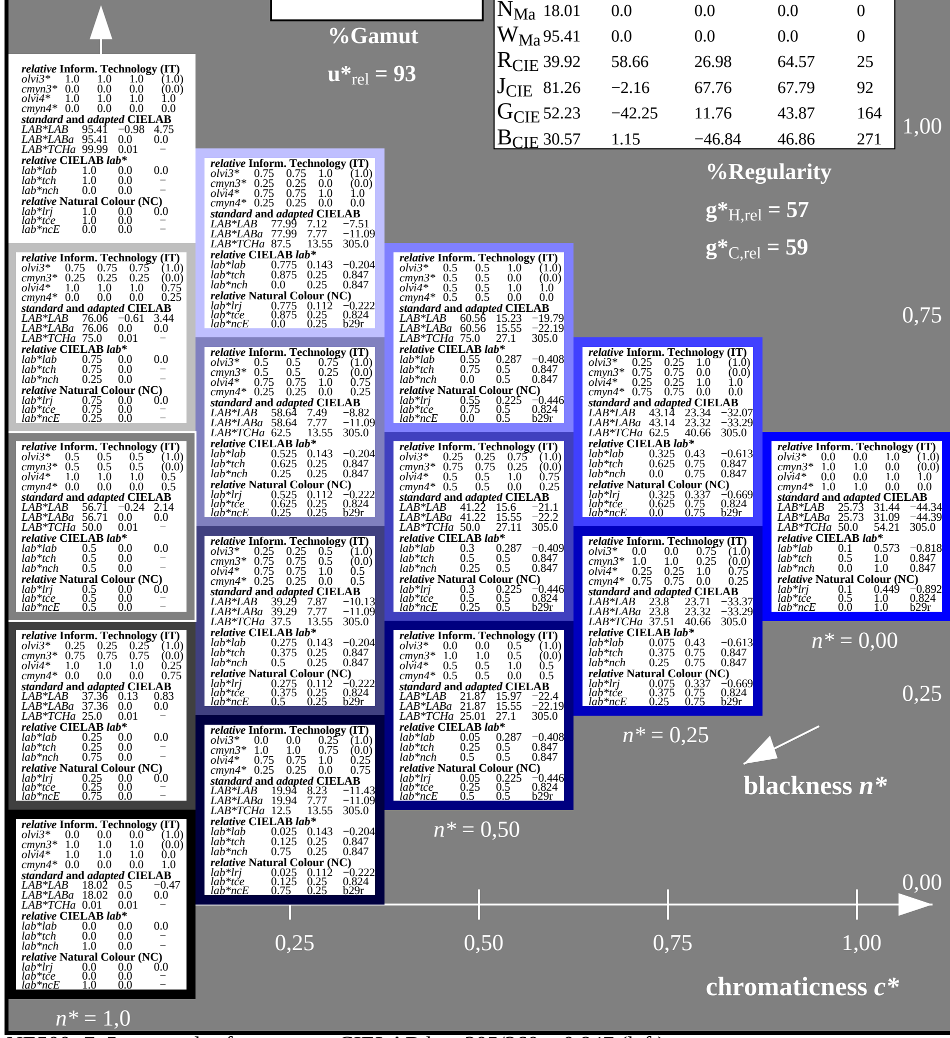
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

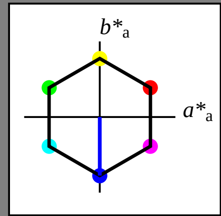
$g^*_{C,rel}$ = 59



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

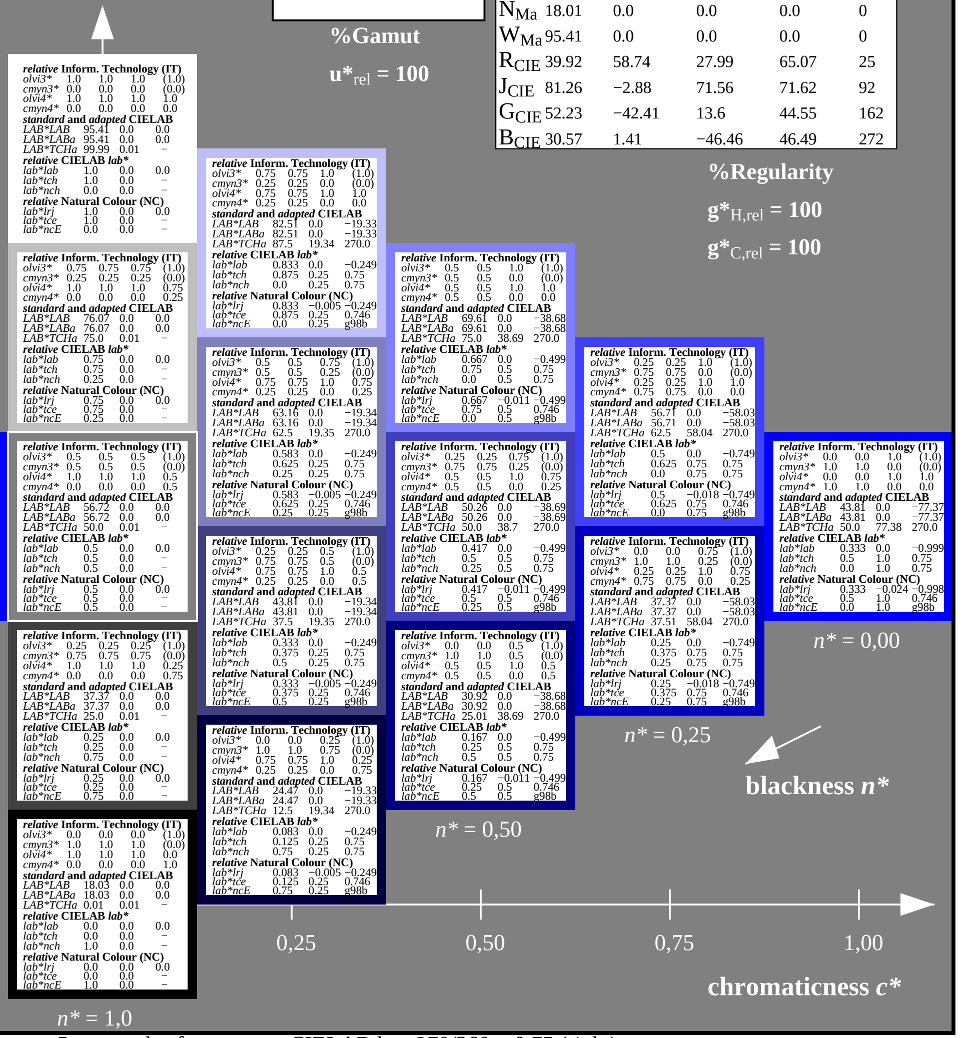
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 305/360 = 0.847$

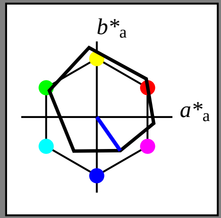
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

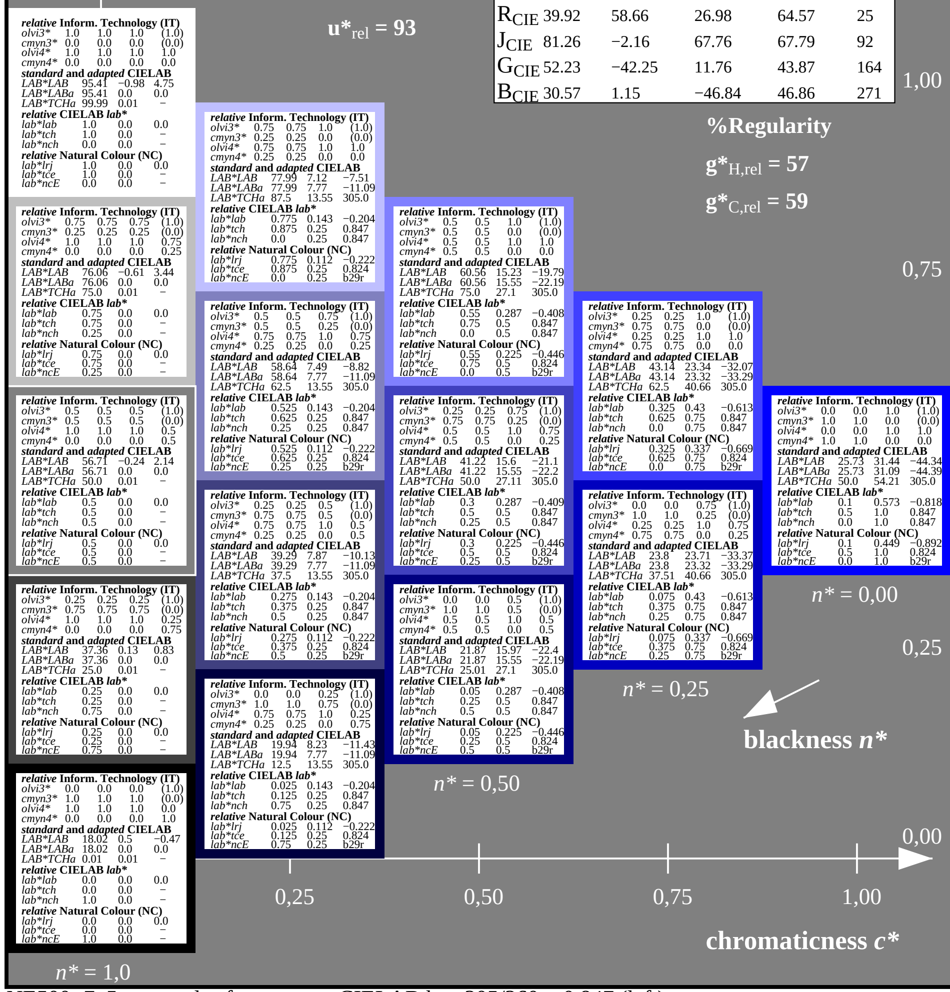
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

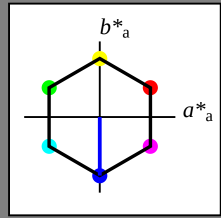
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

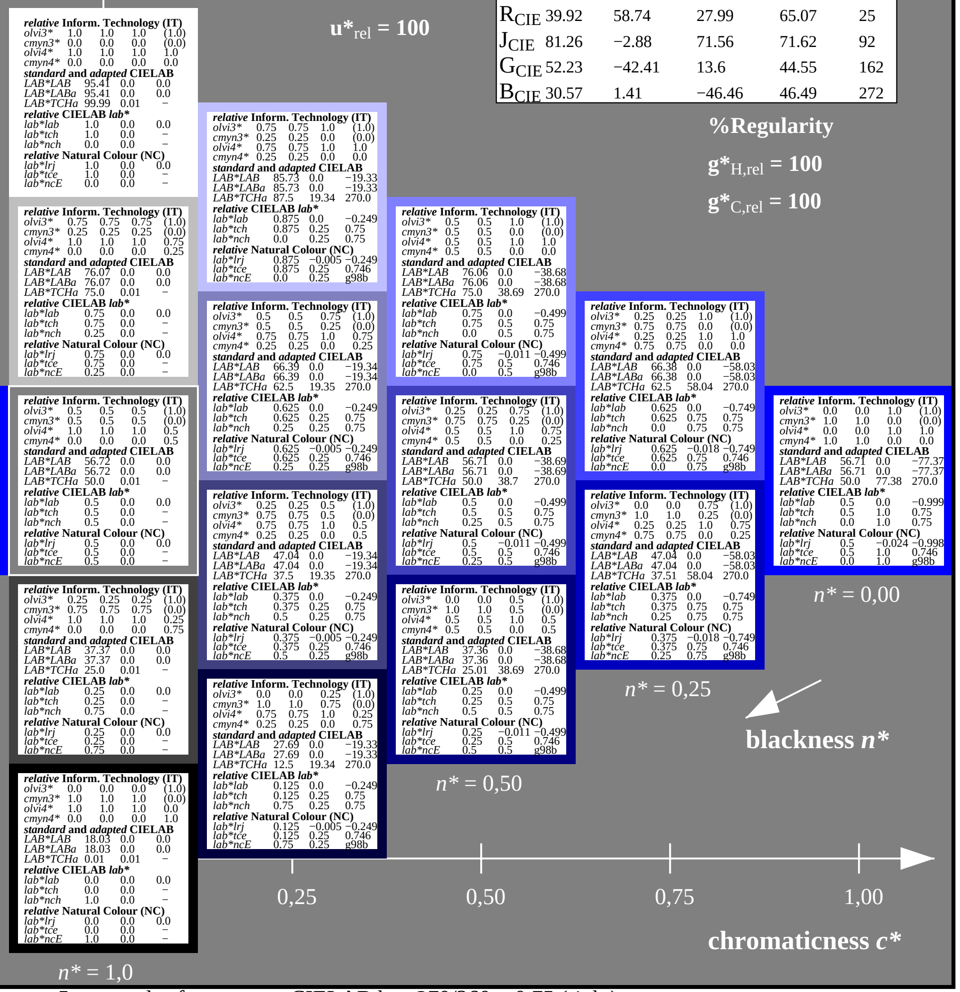
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



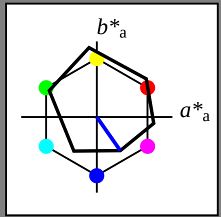
NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

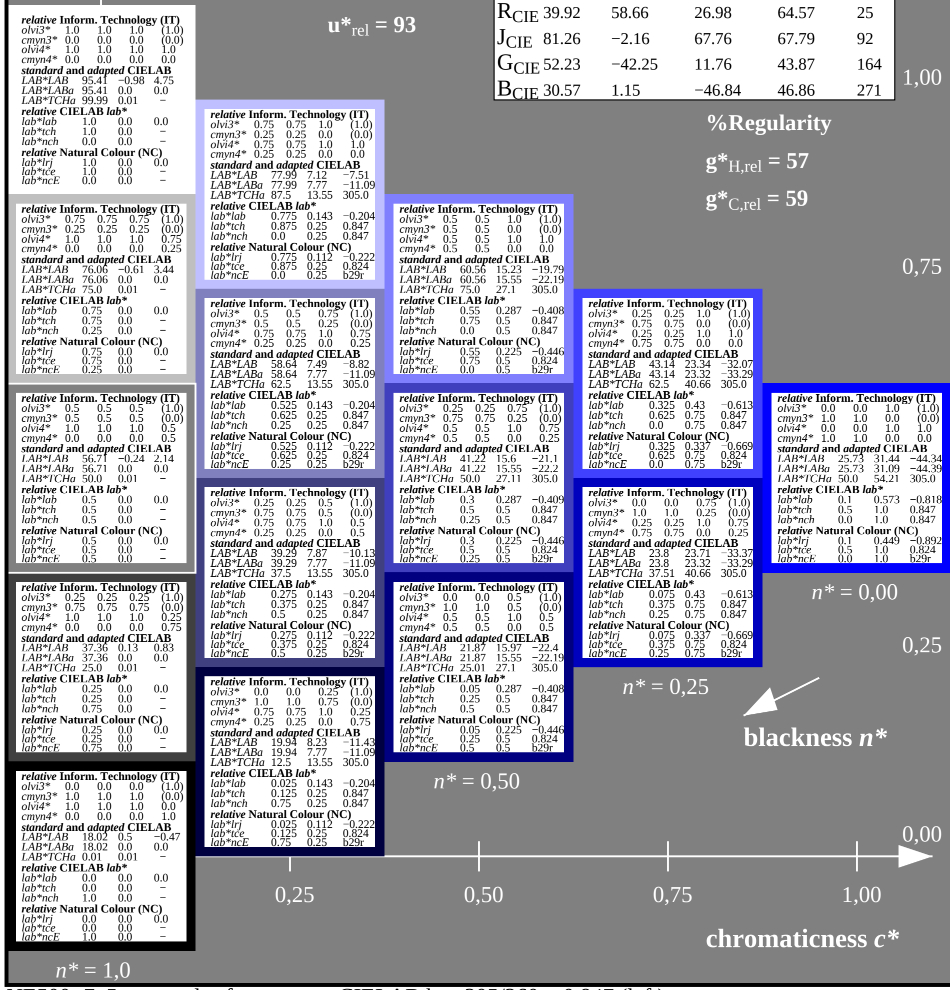
u^*_{rel} = 93

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

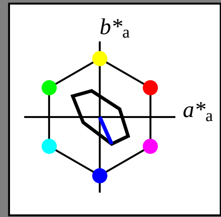
$g^*_{C,rel}$ = 59



Output: Colorimetric 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

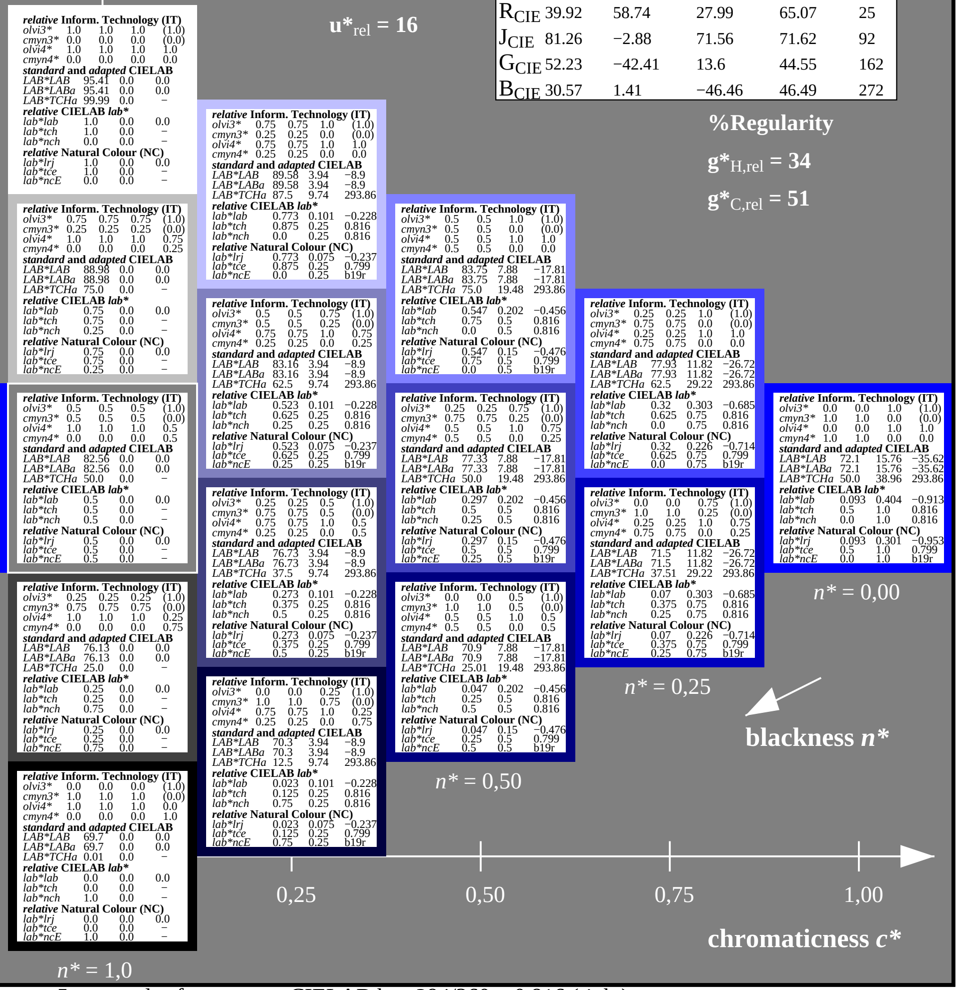
u^*_{rel} = 16

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



NE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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*

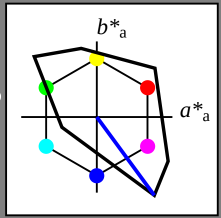
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

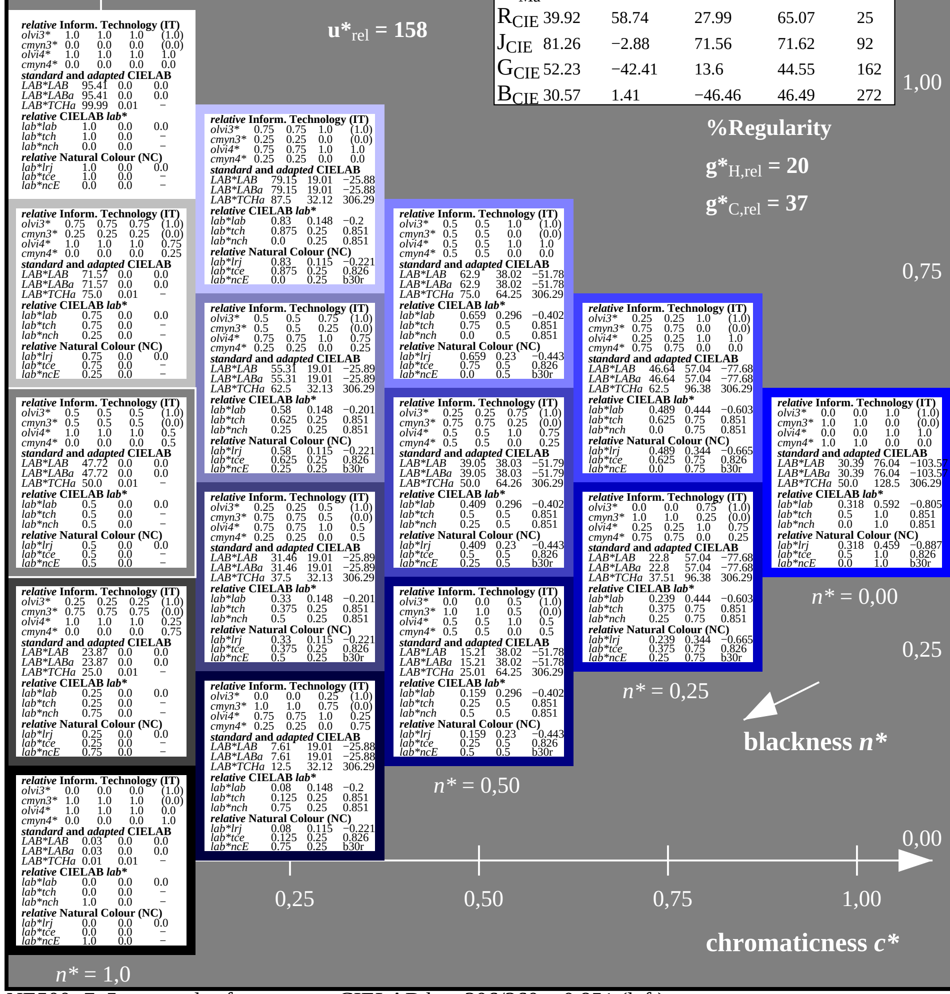
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 305/360 = 0.847*

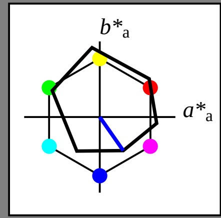
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

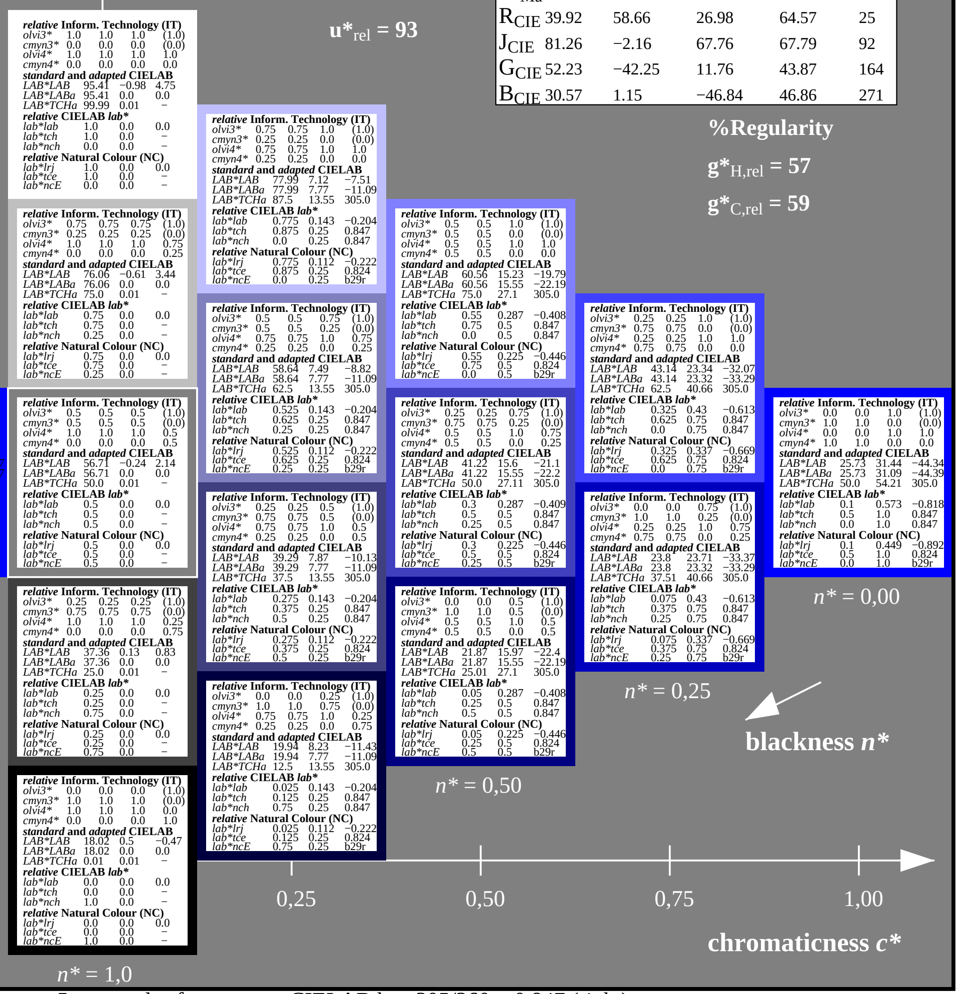
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



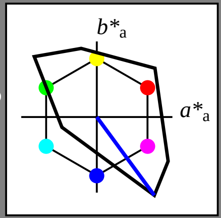
NE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

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

triangle lightness *t*

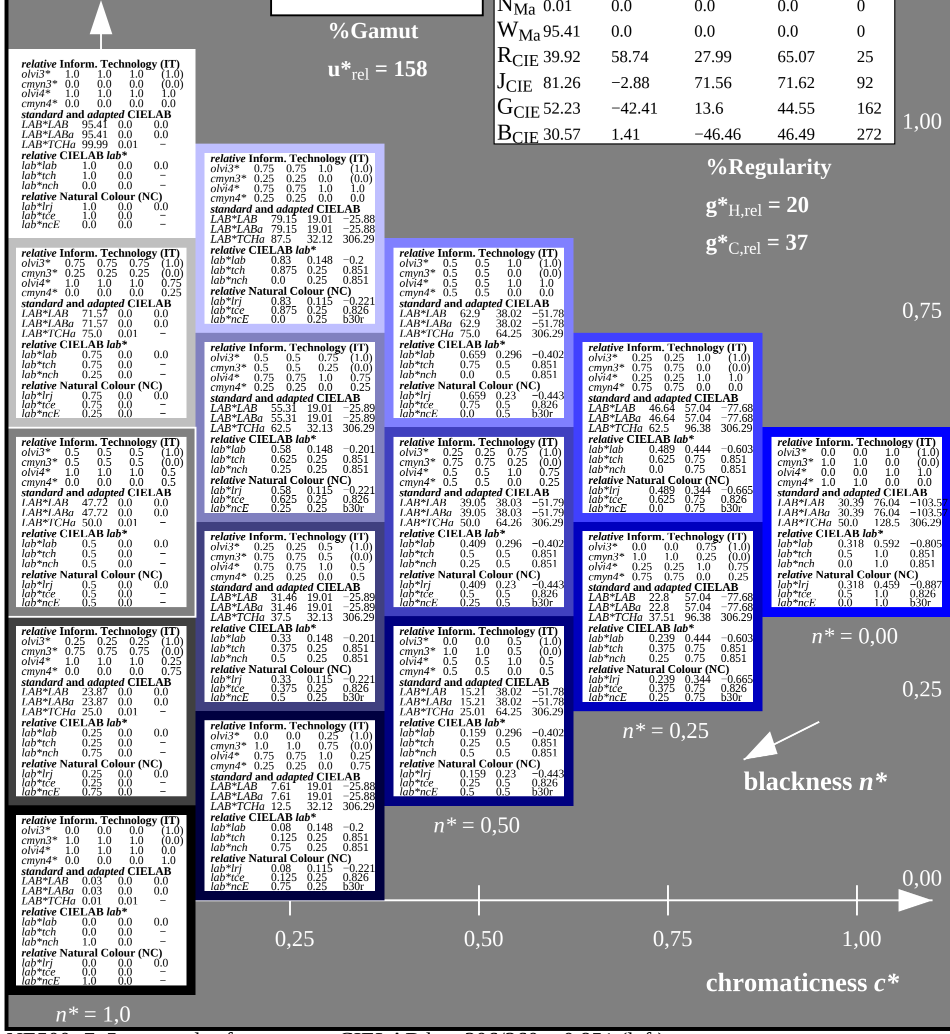


%Gamut
u^*_{rel} = 158

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

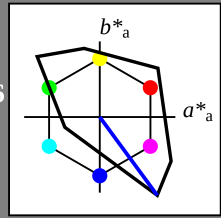
%Regularity
$g^*_{H,rel}$ = 20
$g^*_{C,rel}$ = 37



Output: Colorimetric Television Luminous System 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*

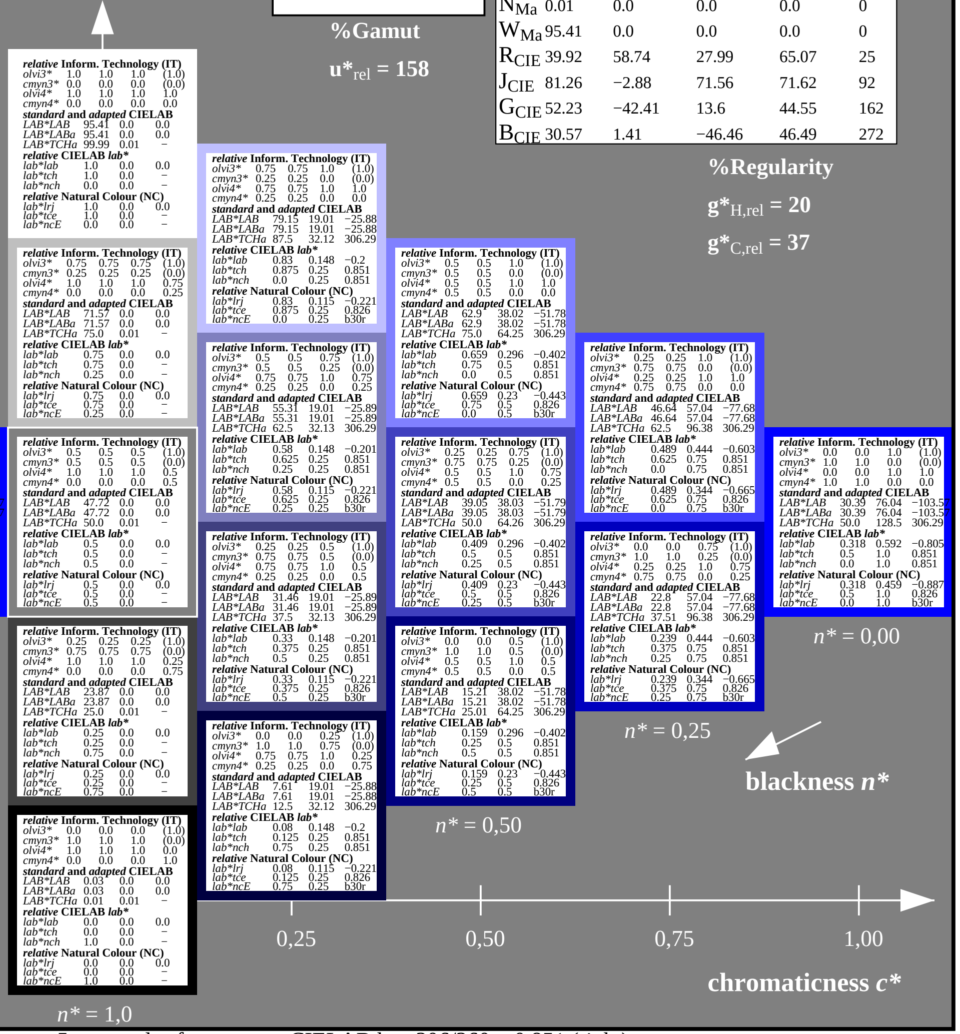


%Gamut
u^*_{rel} = 158

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



NE500−7, 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^*

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$

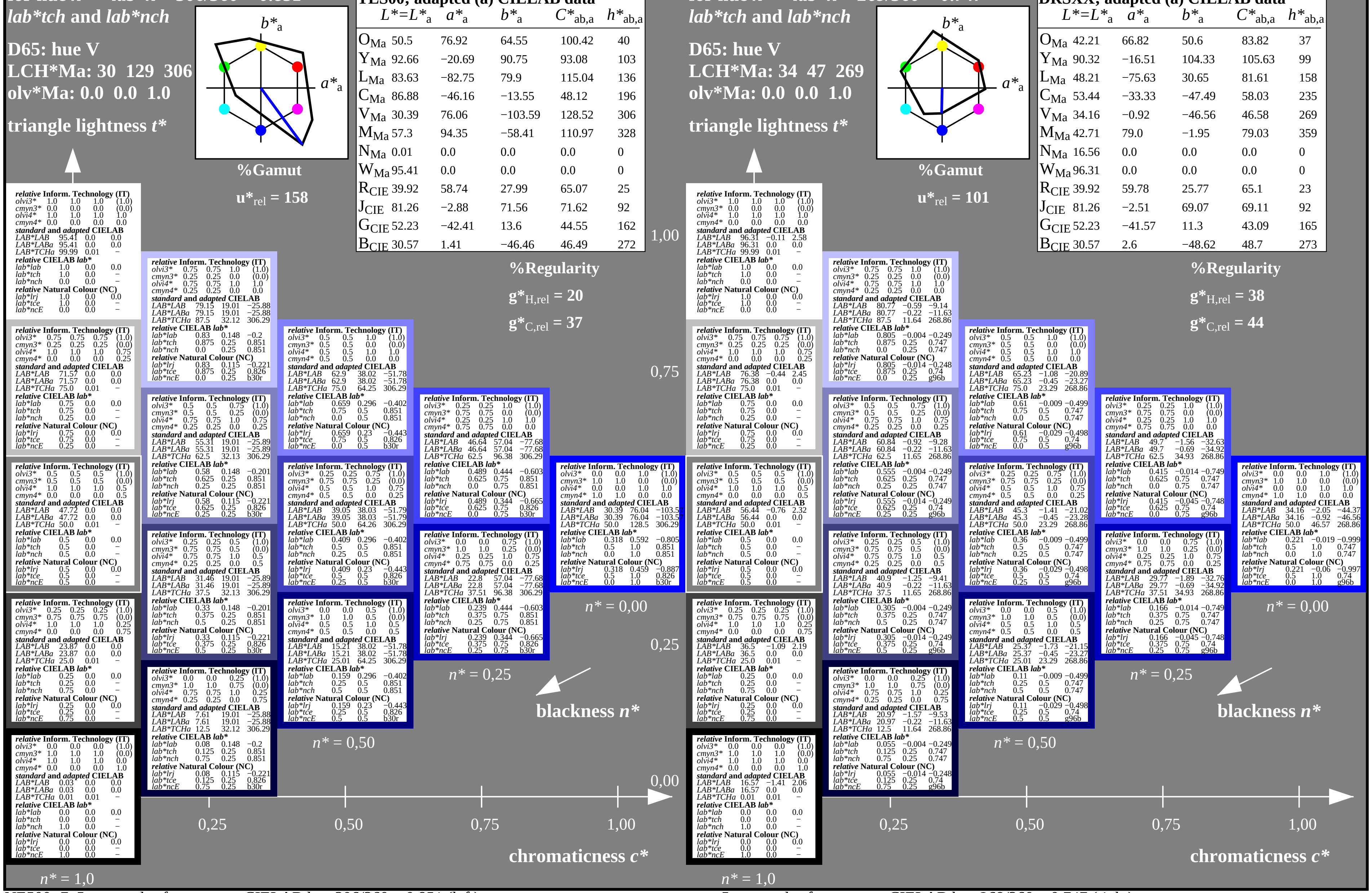
Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 269/360 = 0.747$
lab^*tch and lab^*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0
triangle lightness t^*

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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**

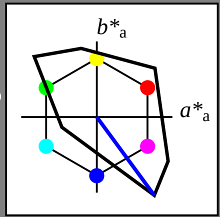
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

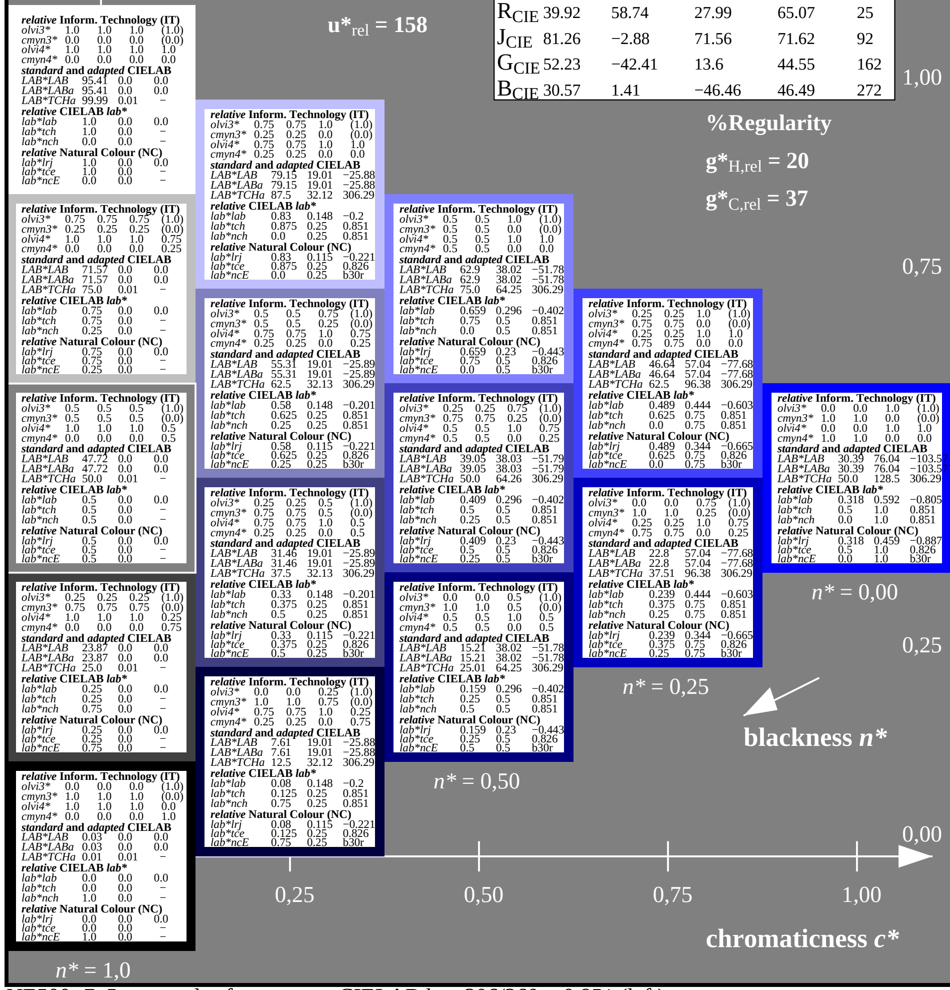
u^*_{rel} = 158

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* = 304/360 = 0.845**

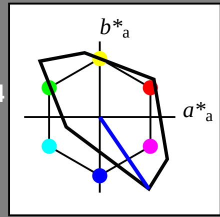
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

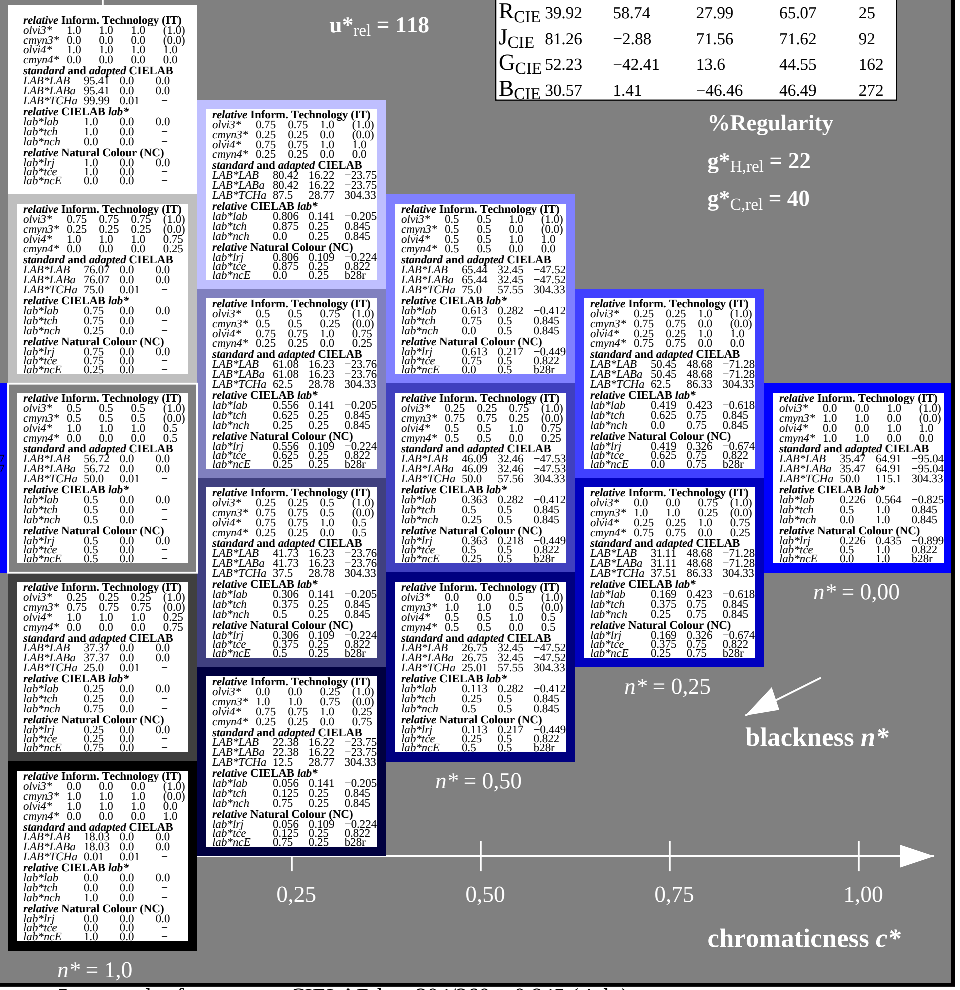
u^*_{rel} = 118

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



NE500−7, 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 $h^* = lab^*h = 306/360 = 0.851$

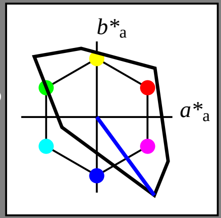
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

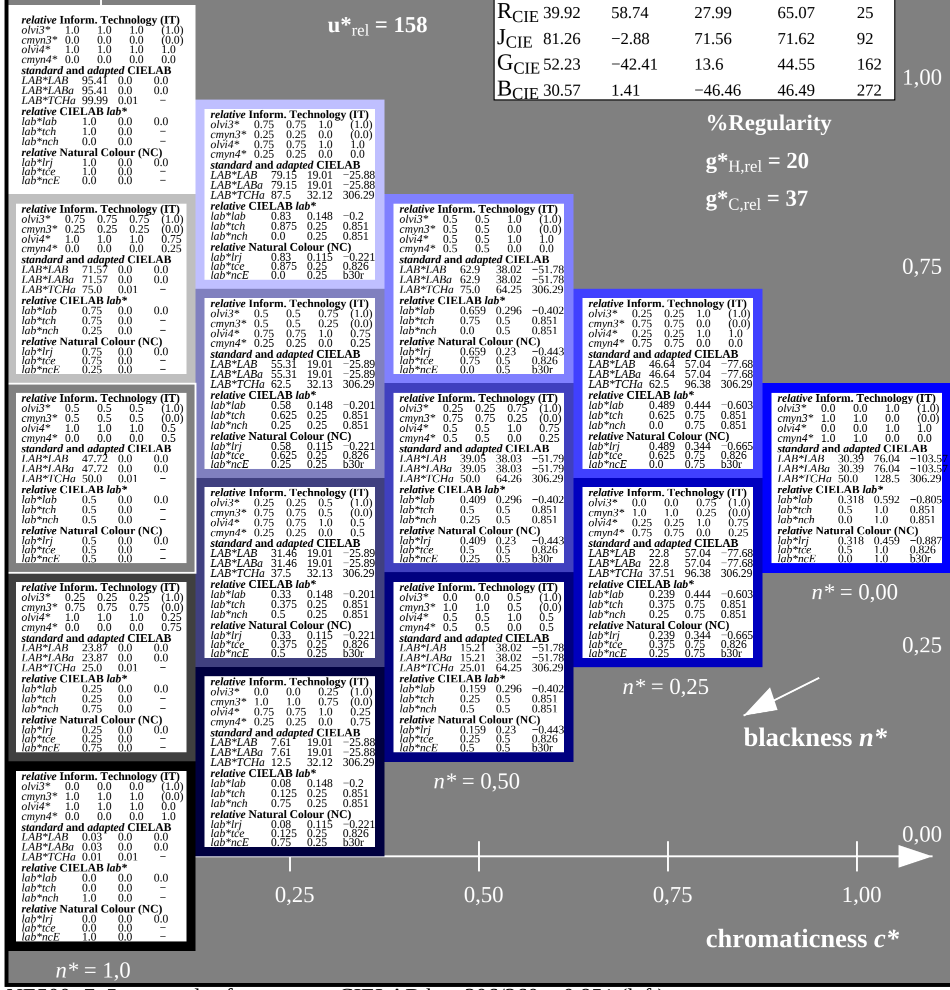
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 270/360 = 0.75$

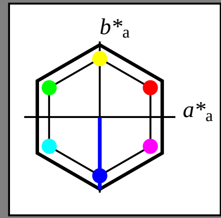
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

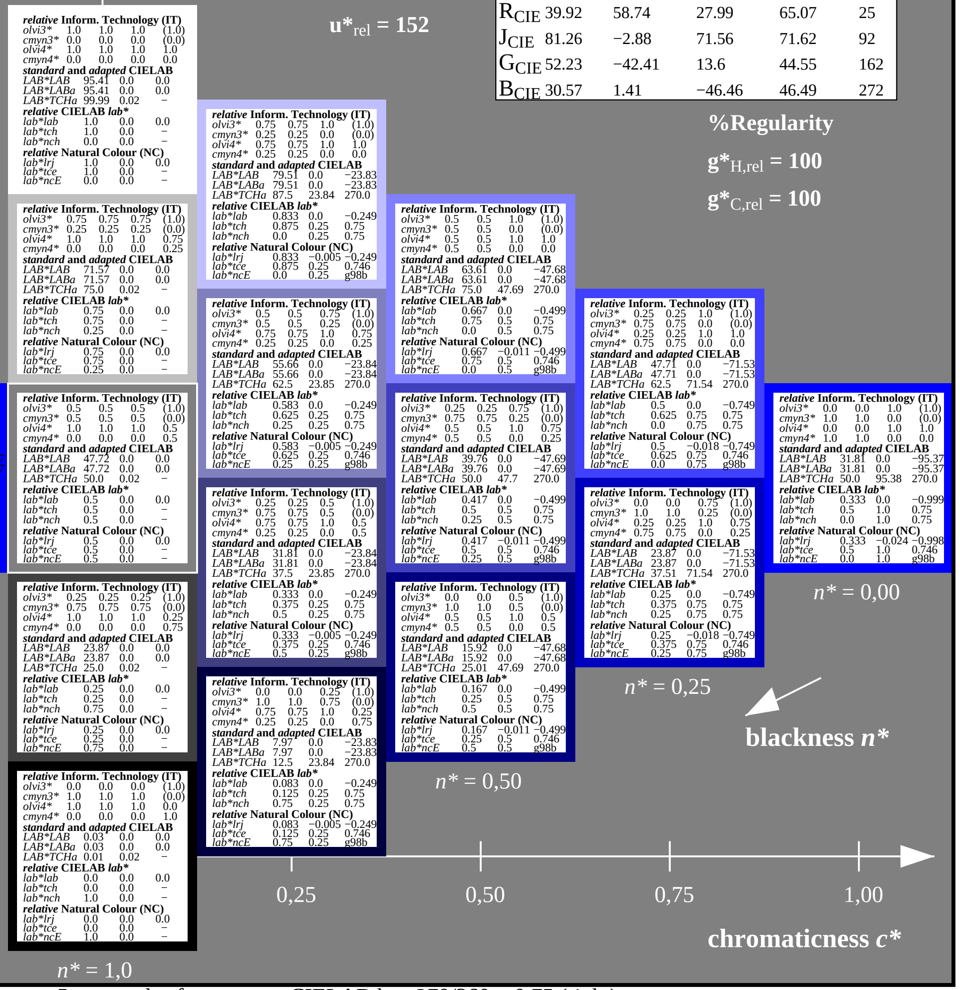
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



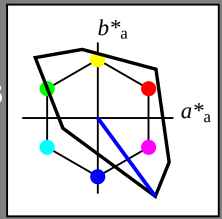
NE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

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^*

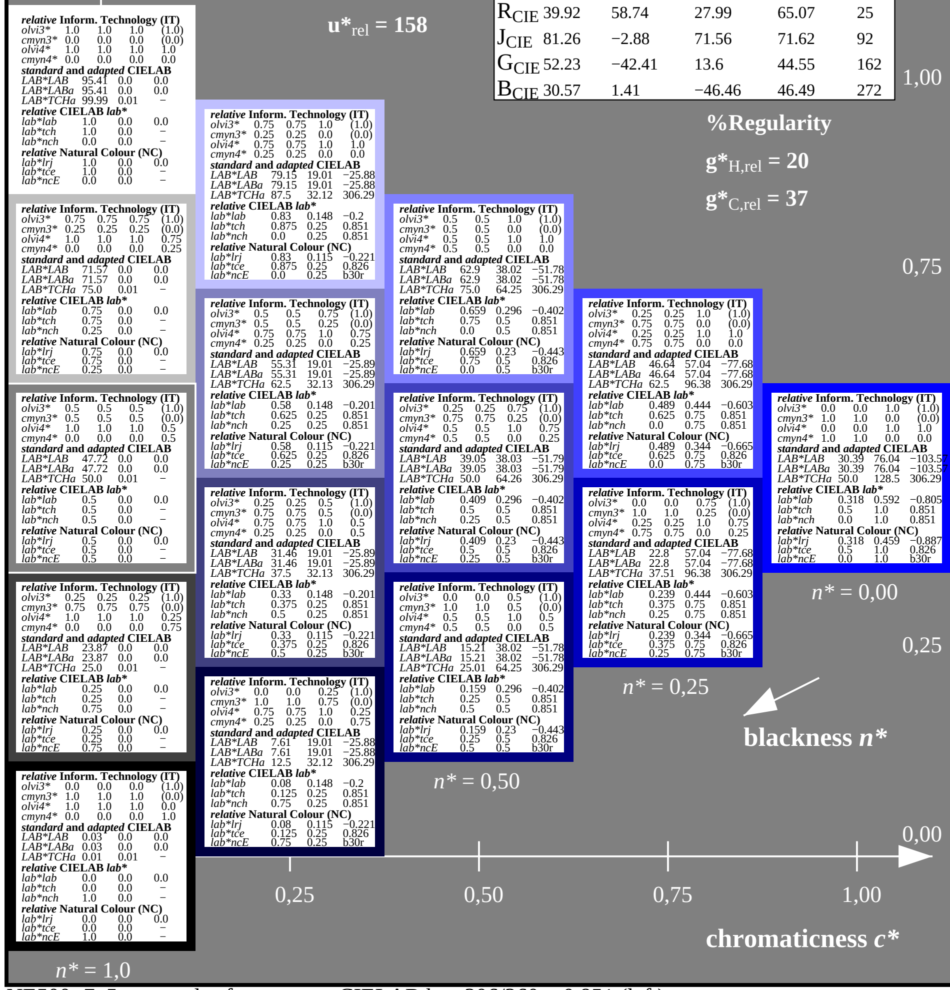


%Gamut
$u^*_{rel} = 158$

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

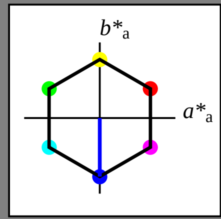
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric 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^*

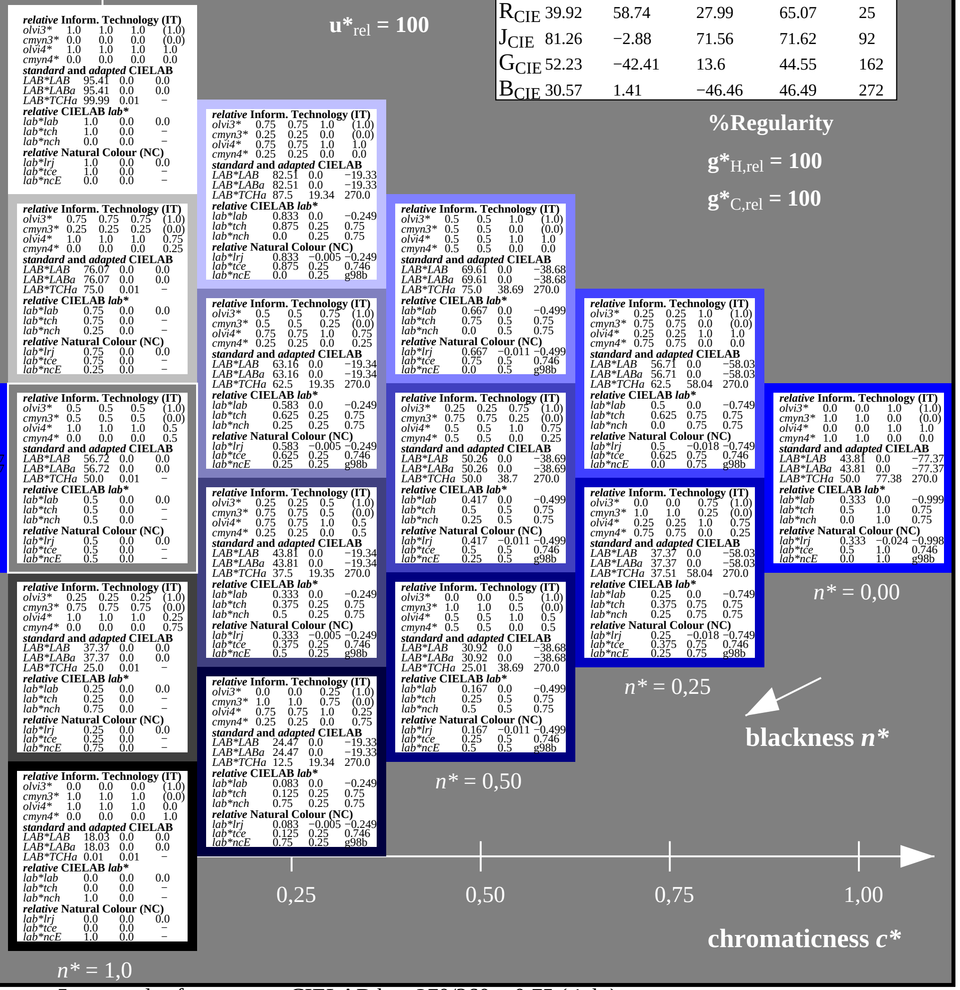


%Gamut
$u^*_{rel} = 100$

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



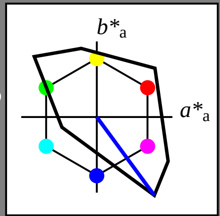
NE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

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^*

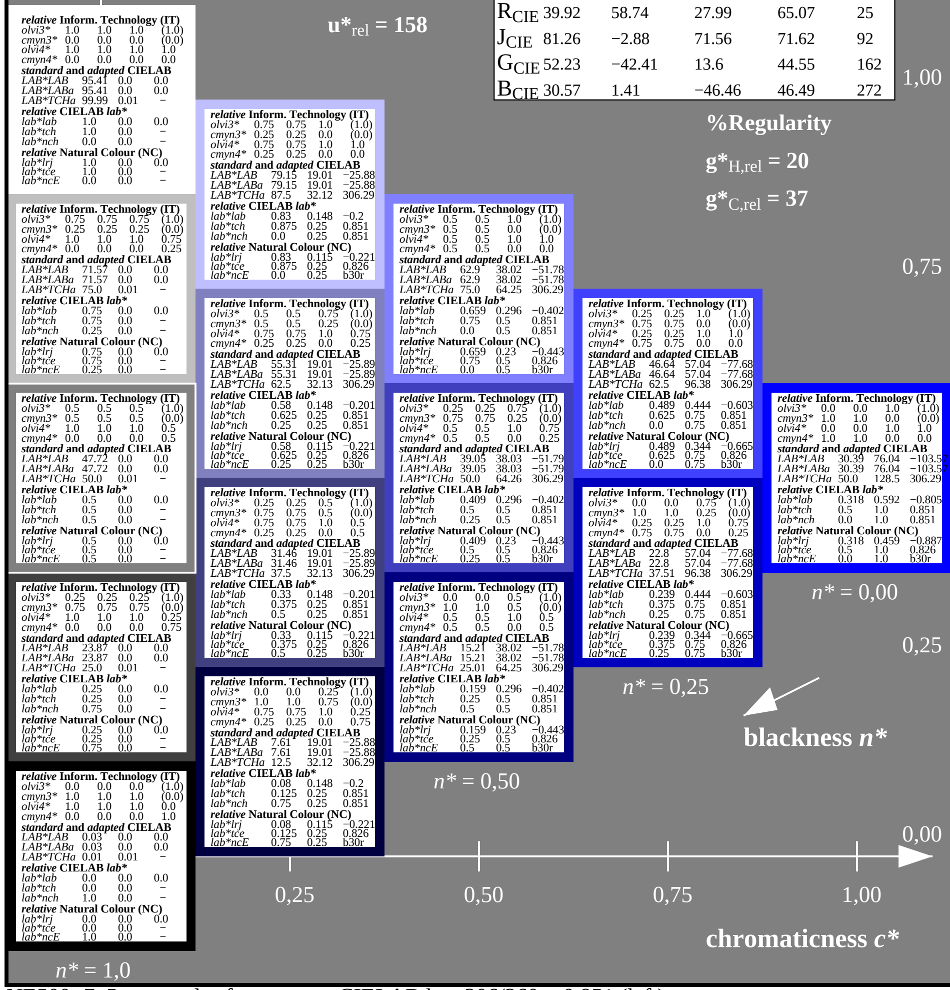


%Gamut
$u^*_{rel} = 158$

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

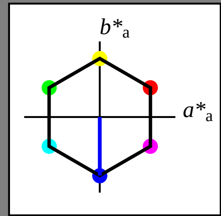
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric 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^*

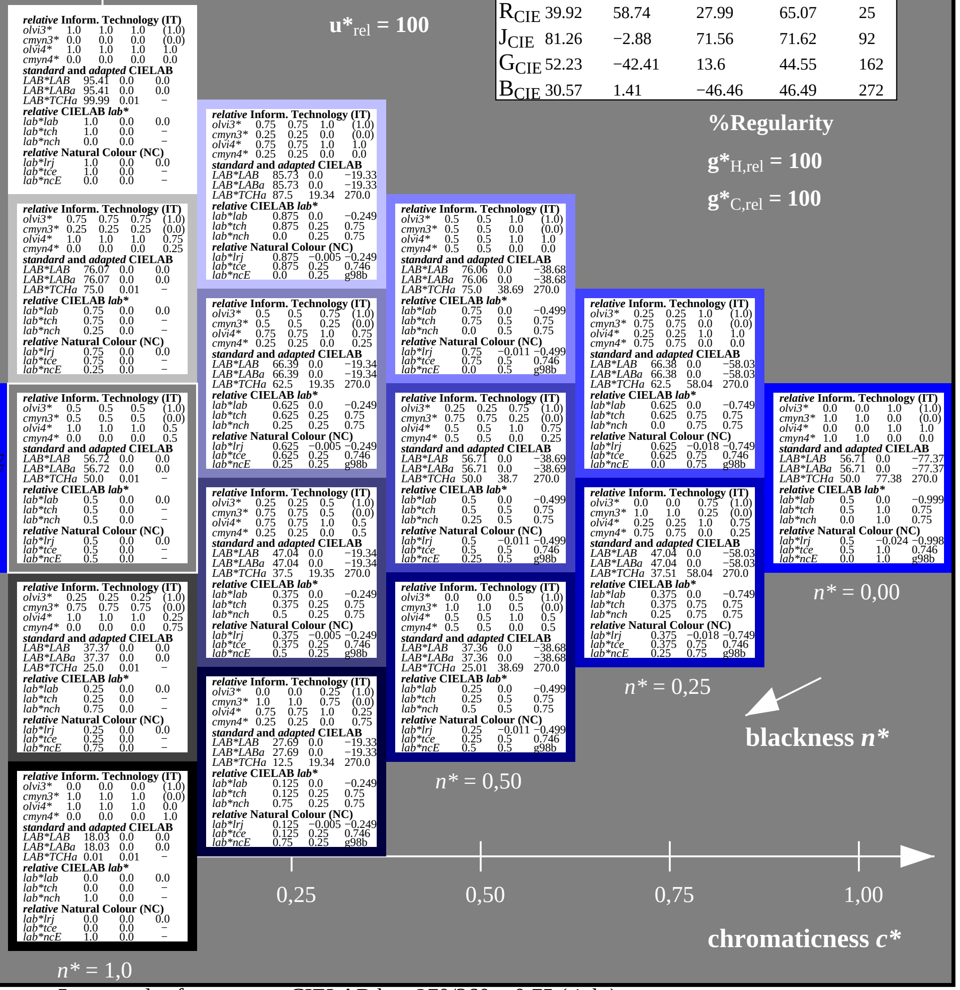


%Gamut
$u^*_{rel} = 100$

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

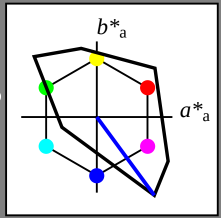


NE500−7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)
5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

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

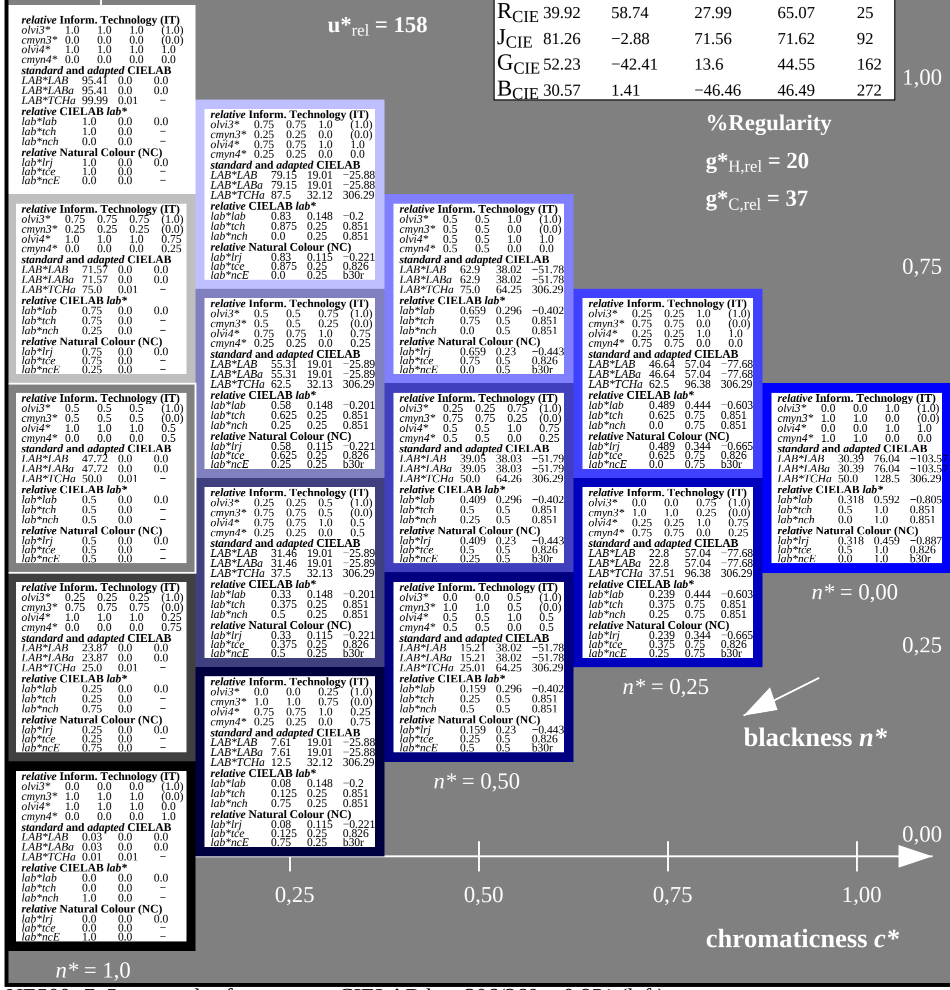
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

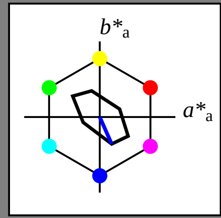
g*C,rel = 37



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

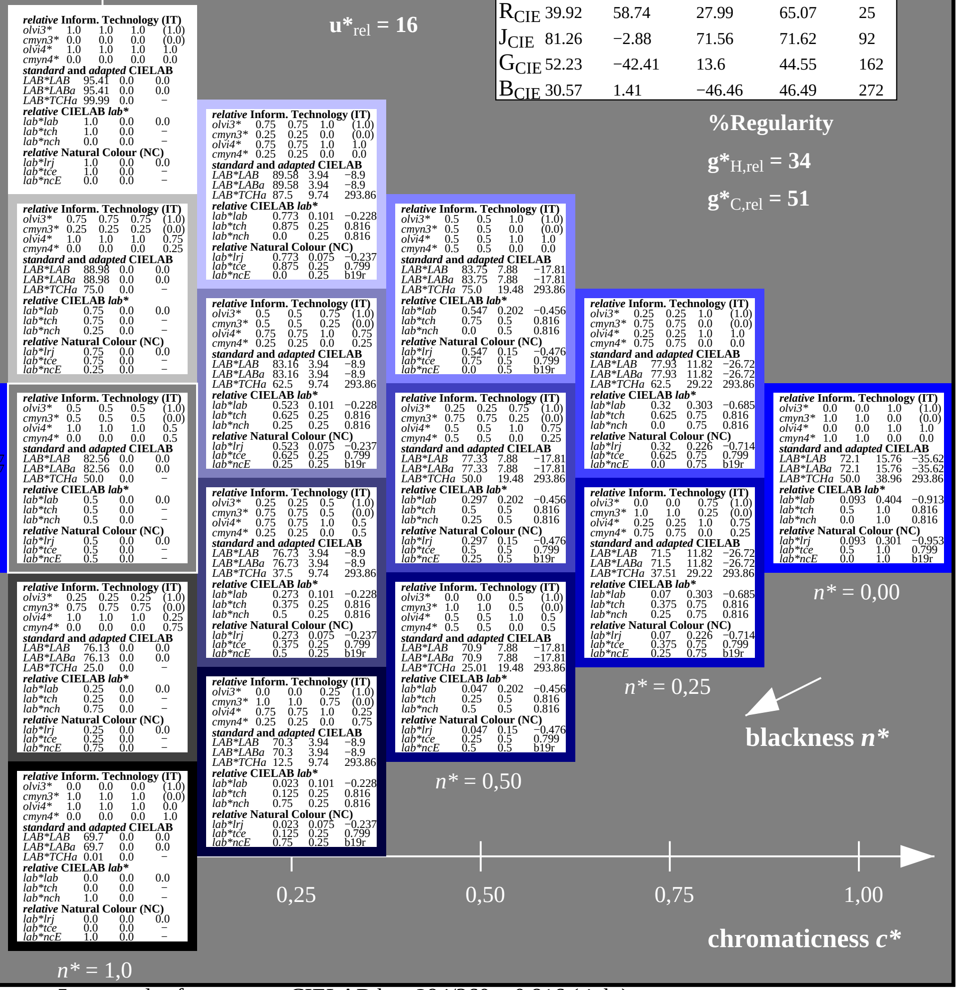
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

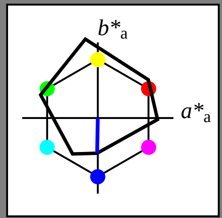
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

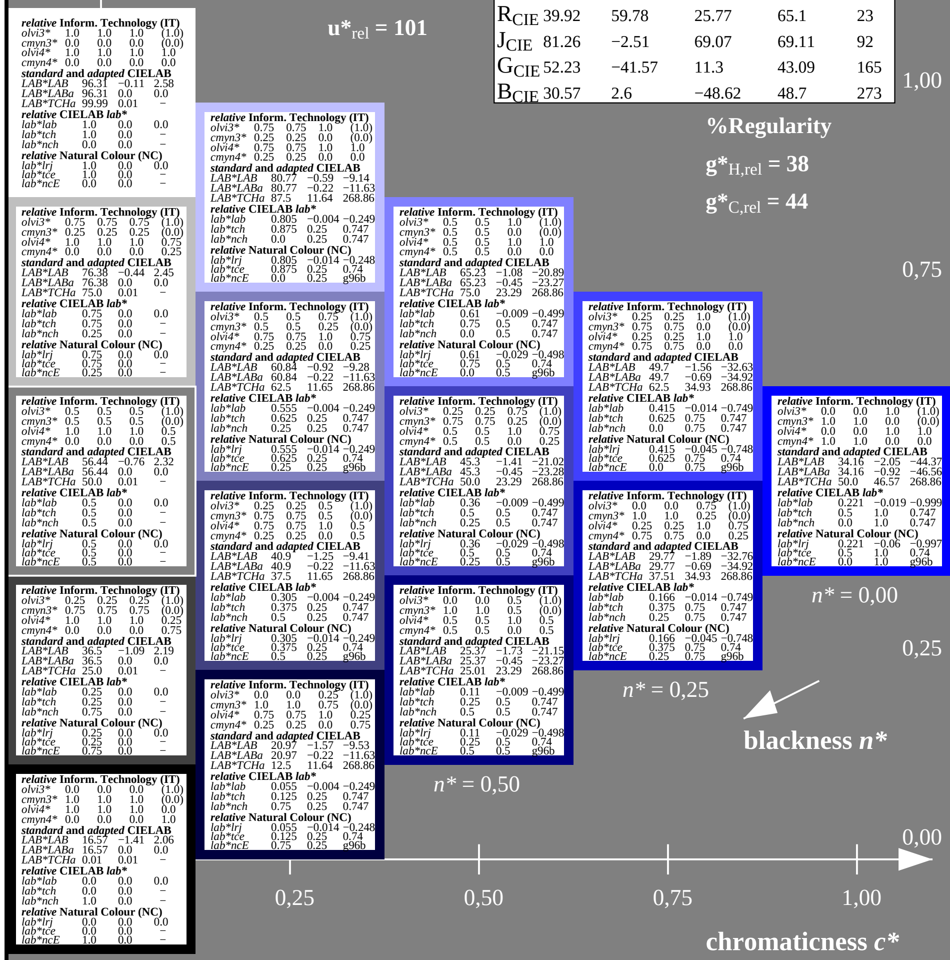
u*rel = 101

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



Output: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 305/360 = 0.847*

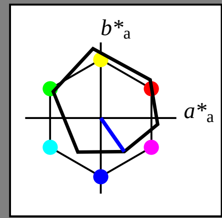
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

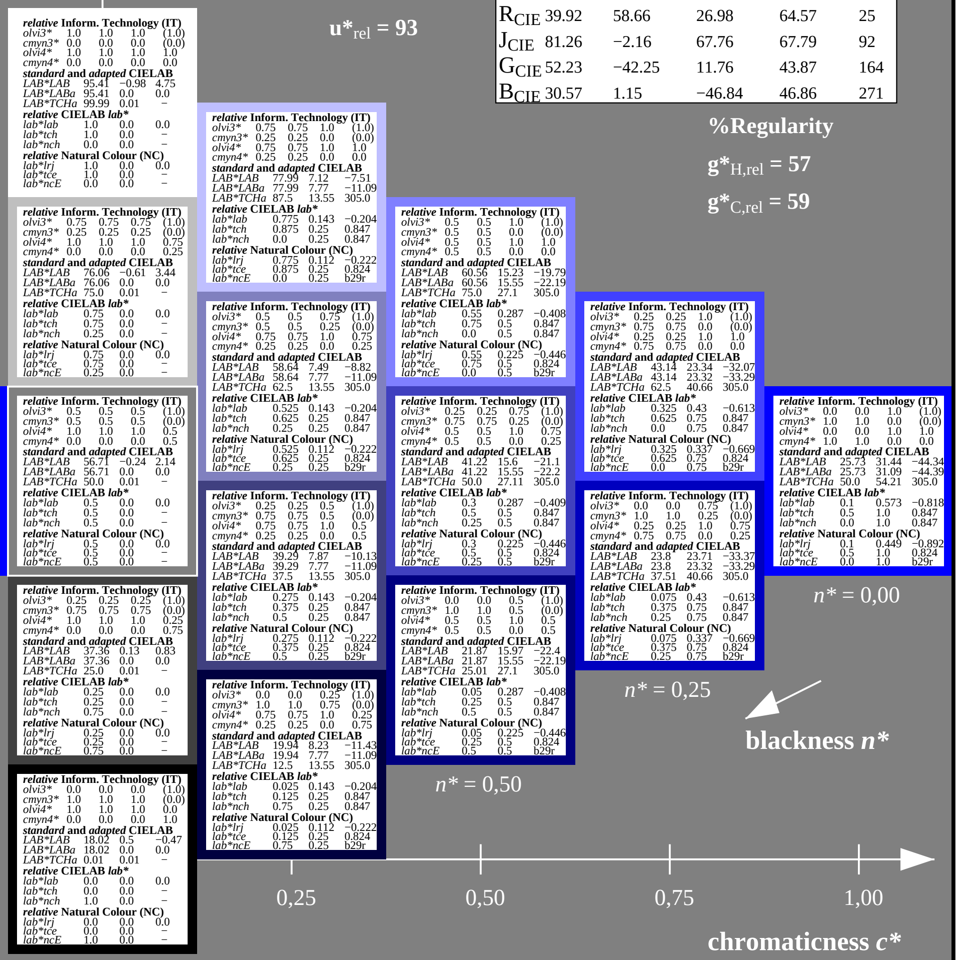
u*rel = 93

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



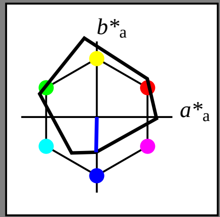
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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

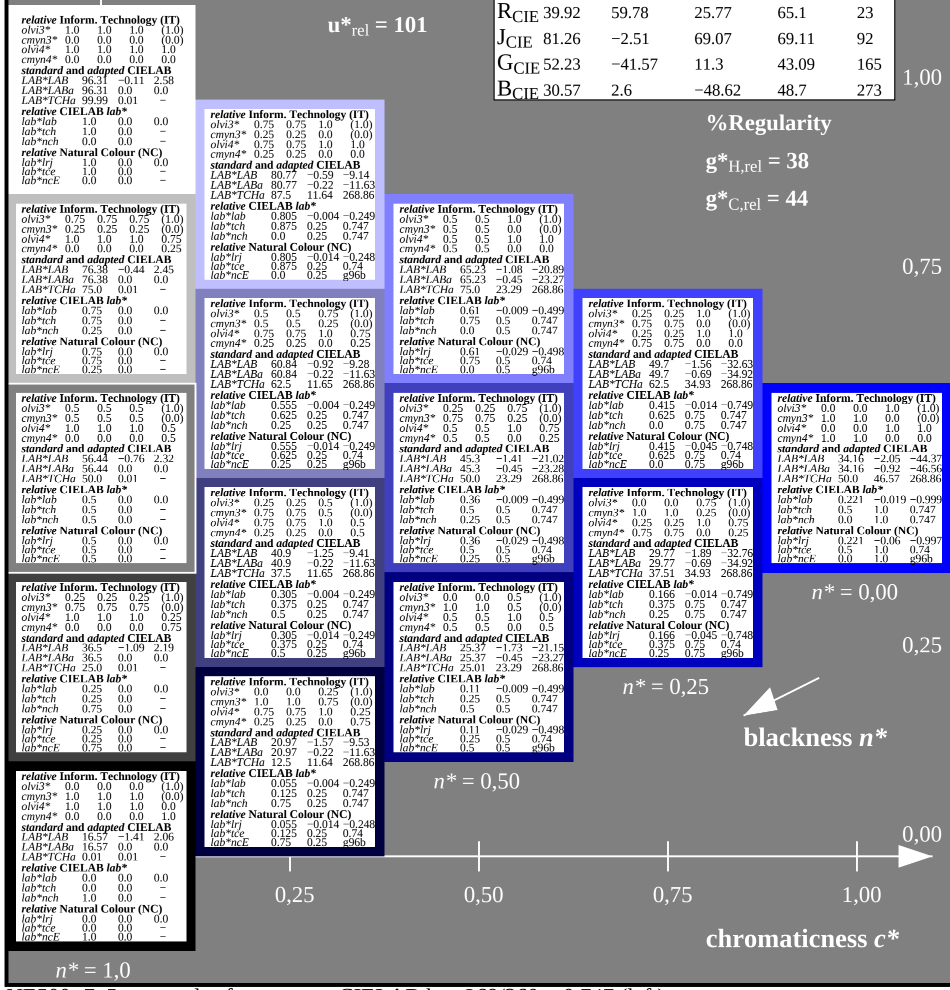
u^*_{rel} = 101

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

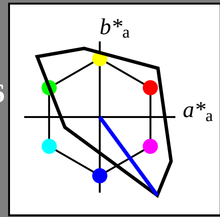
$g^*_{C,rel}$ = 44



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

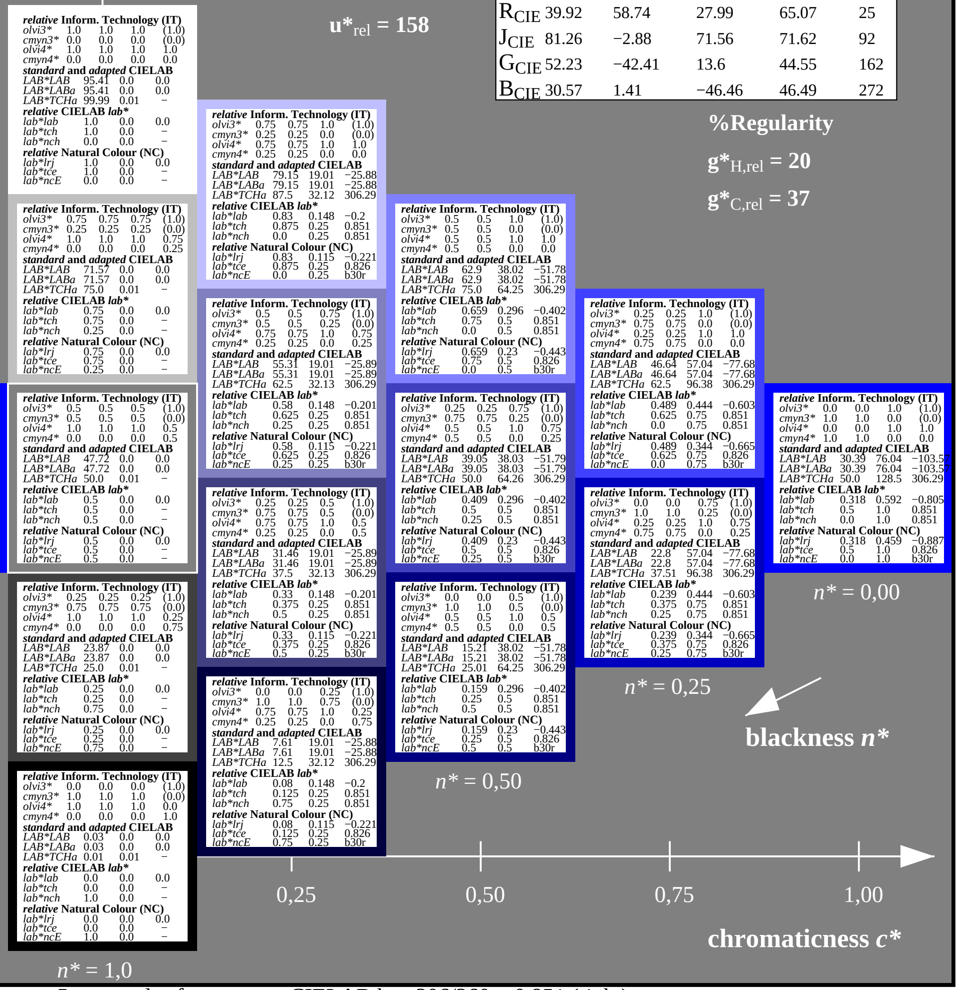
u^*_{rel} = 158

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



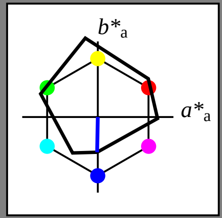
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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

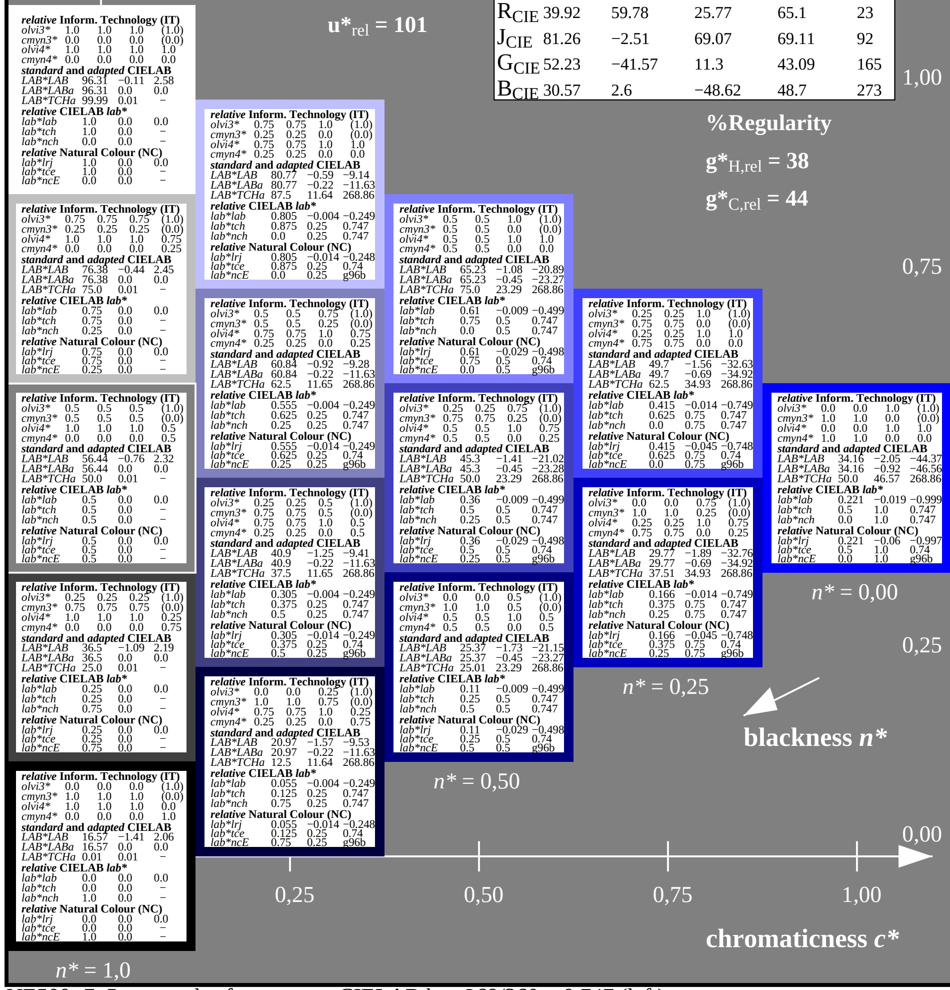
u^*_{rel} = 101

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

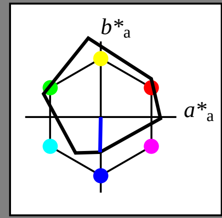
$g^*_{C,rel}$ = 44



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

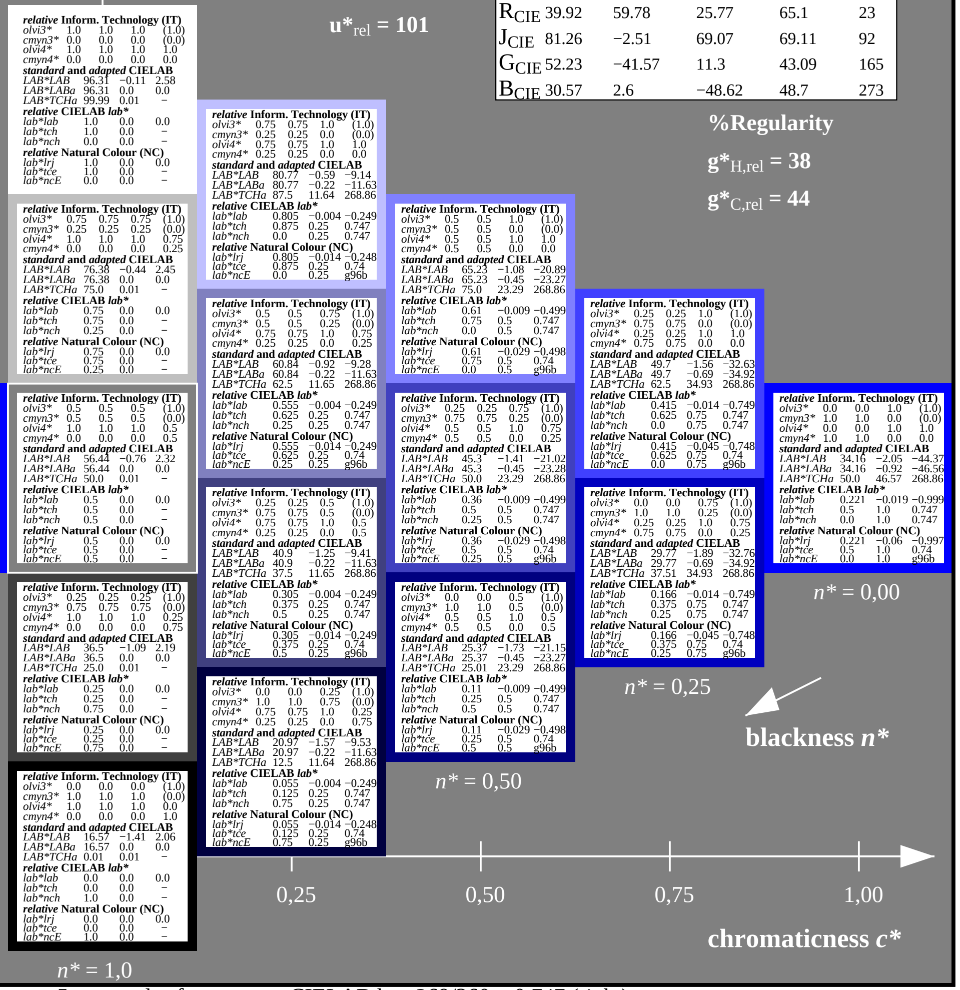
u^*_{rel} = 101

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



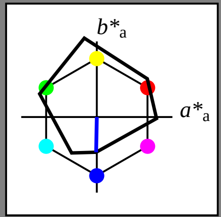
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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^*

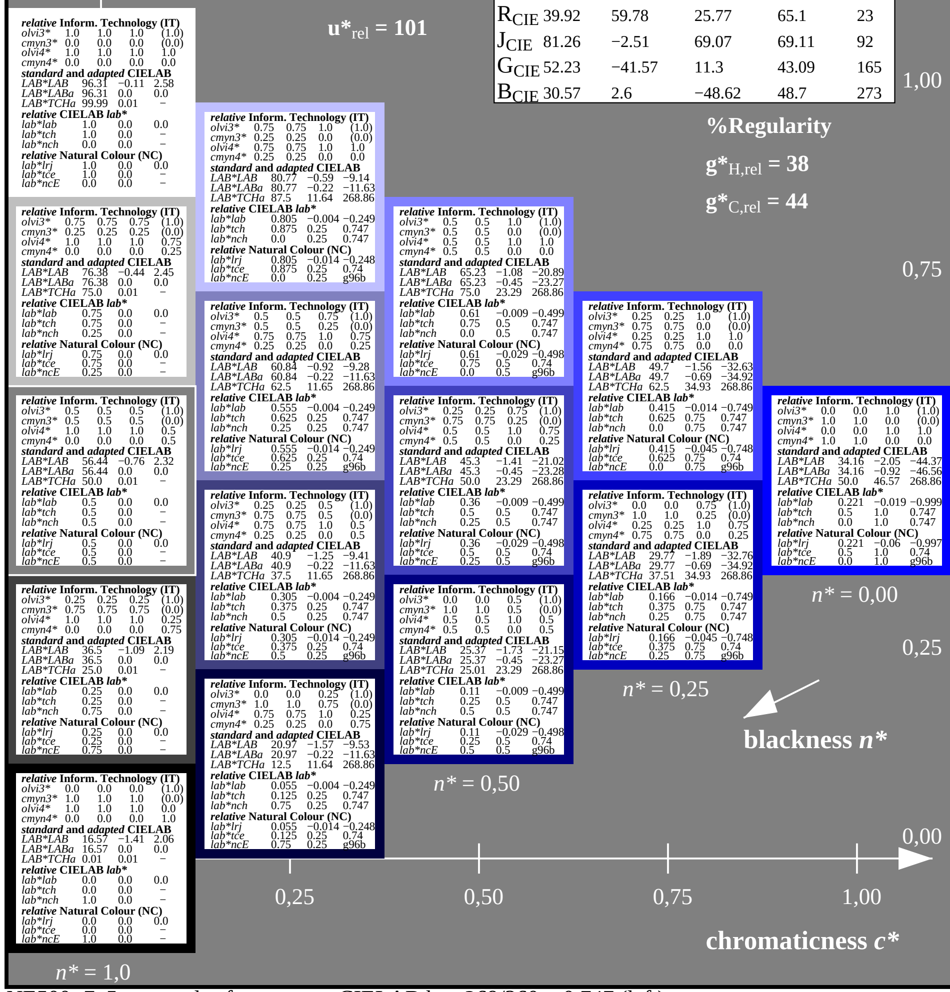


%Gamut
u^*_{rel} = 101

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

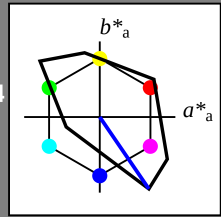
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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^*

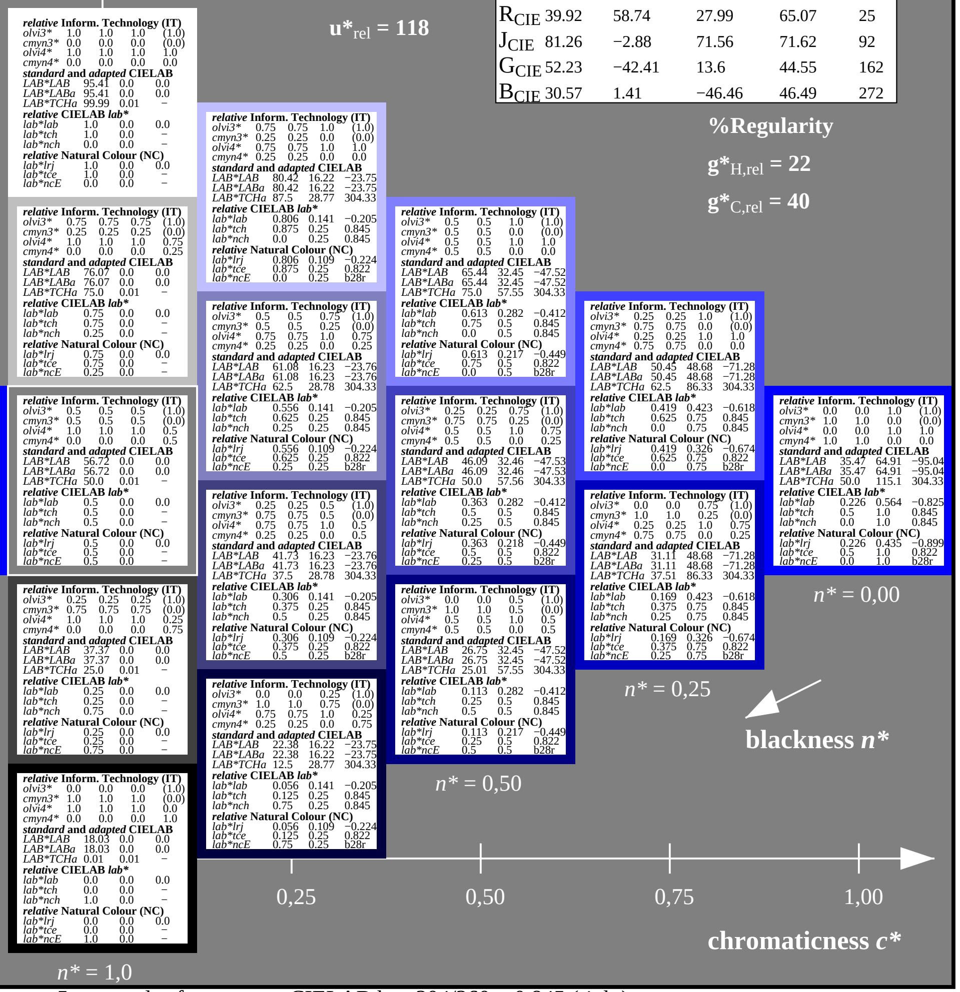


%Gamut
u^*_{rel} = 118

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



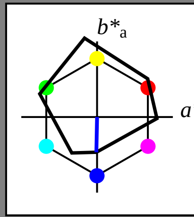
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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

triangle lightness t^*



%Gamut

u^*_{rel} = 101

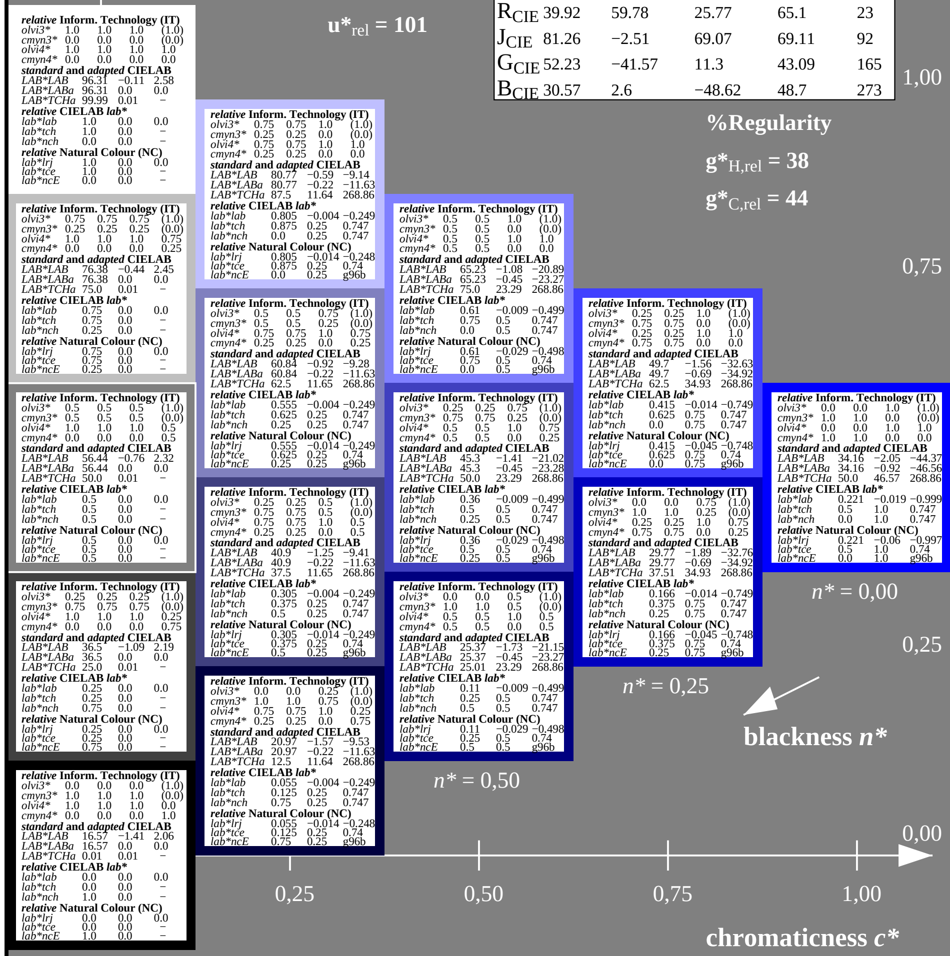
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

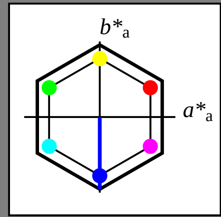
$g^*_{C,rel}$ = 44



Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 270/360 = 0.75$
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

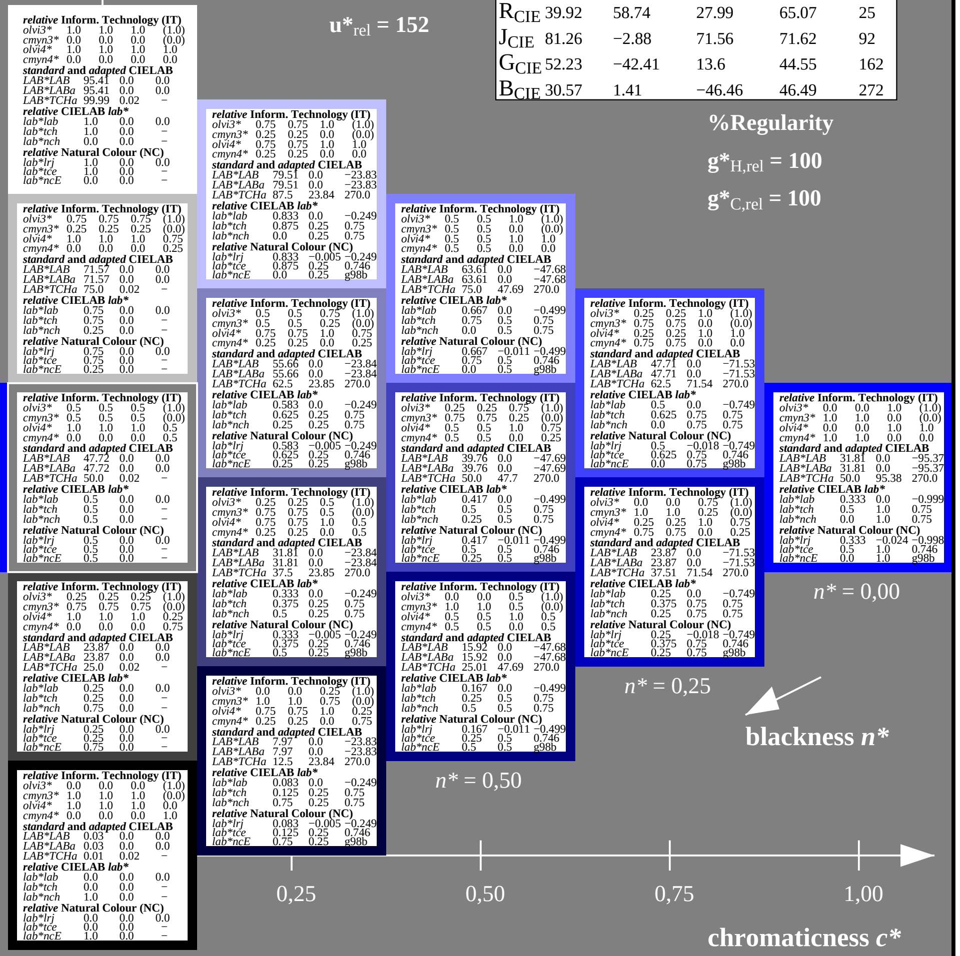
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 269/360 = 0.747$

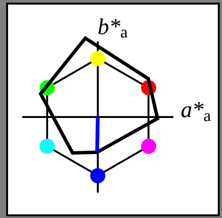
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

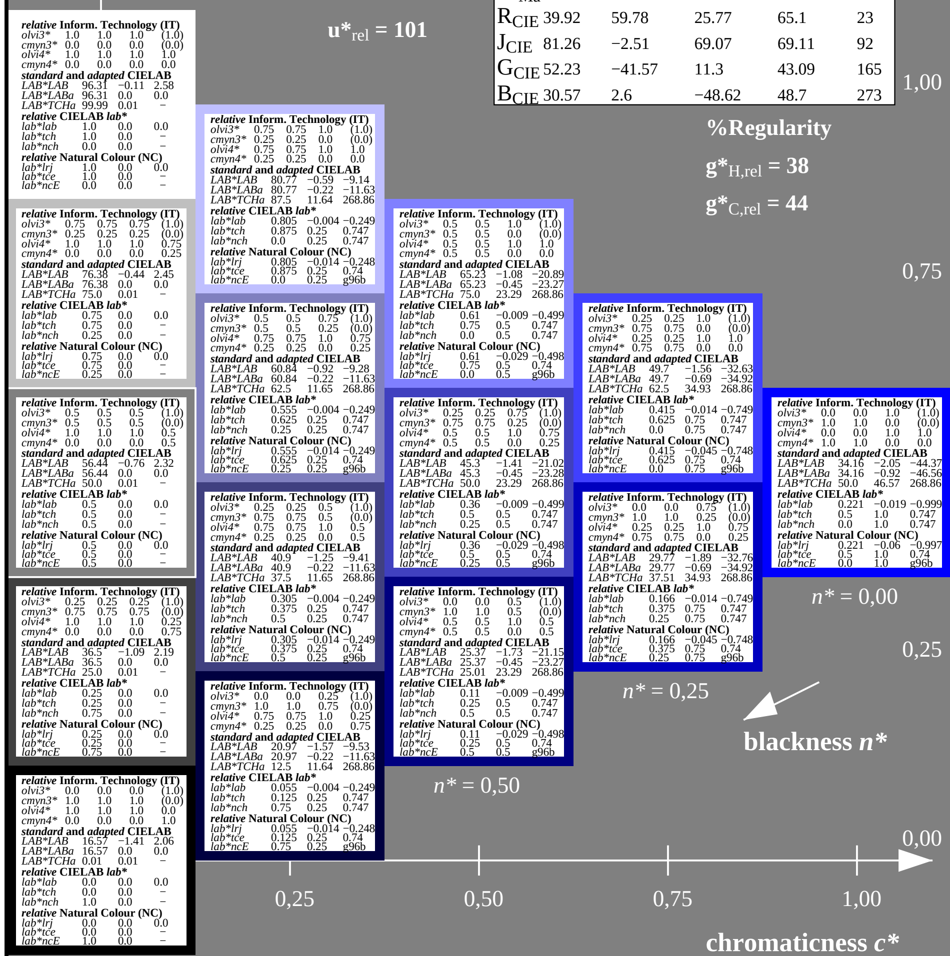
$u^*_{rel} = 101$

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 Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

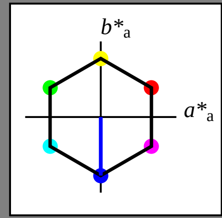
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

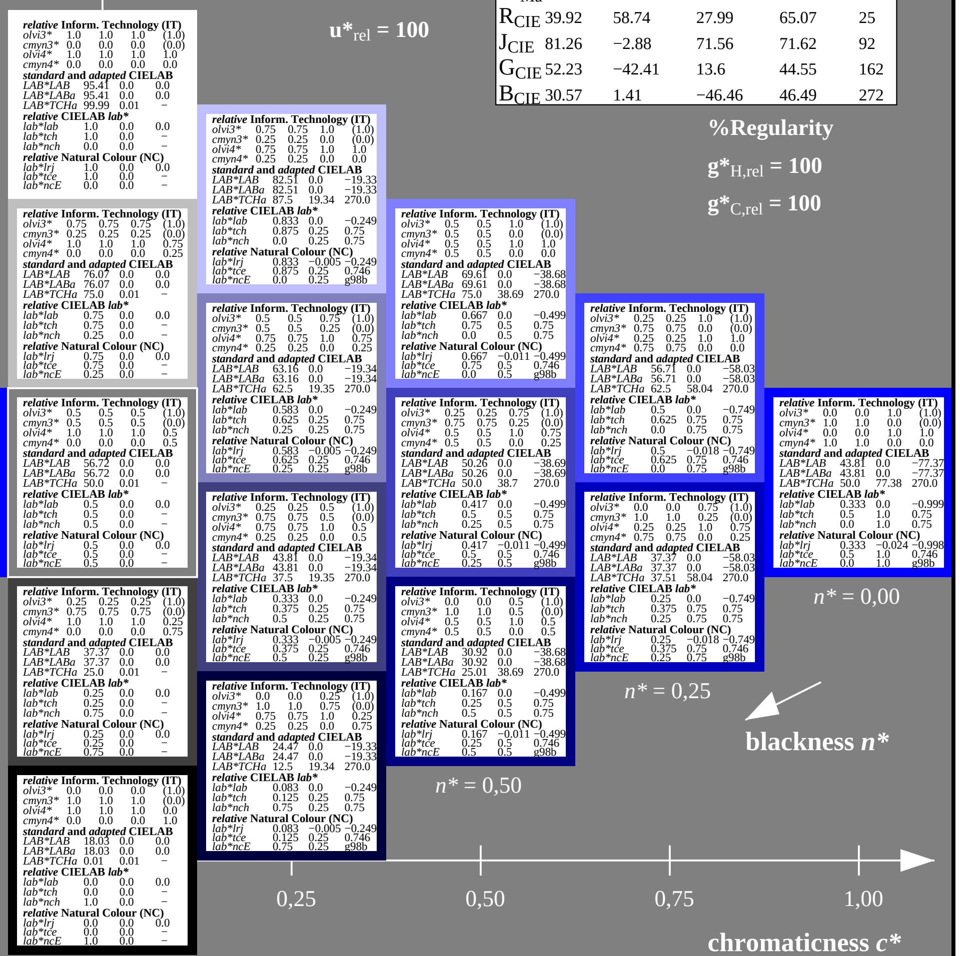
$u^*_{rel} = 100$

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

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

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



NE500−7, 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 $h^* = lab^*h = 269/360 = 0.747$

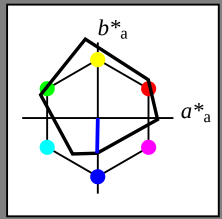
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

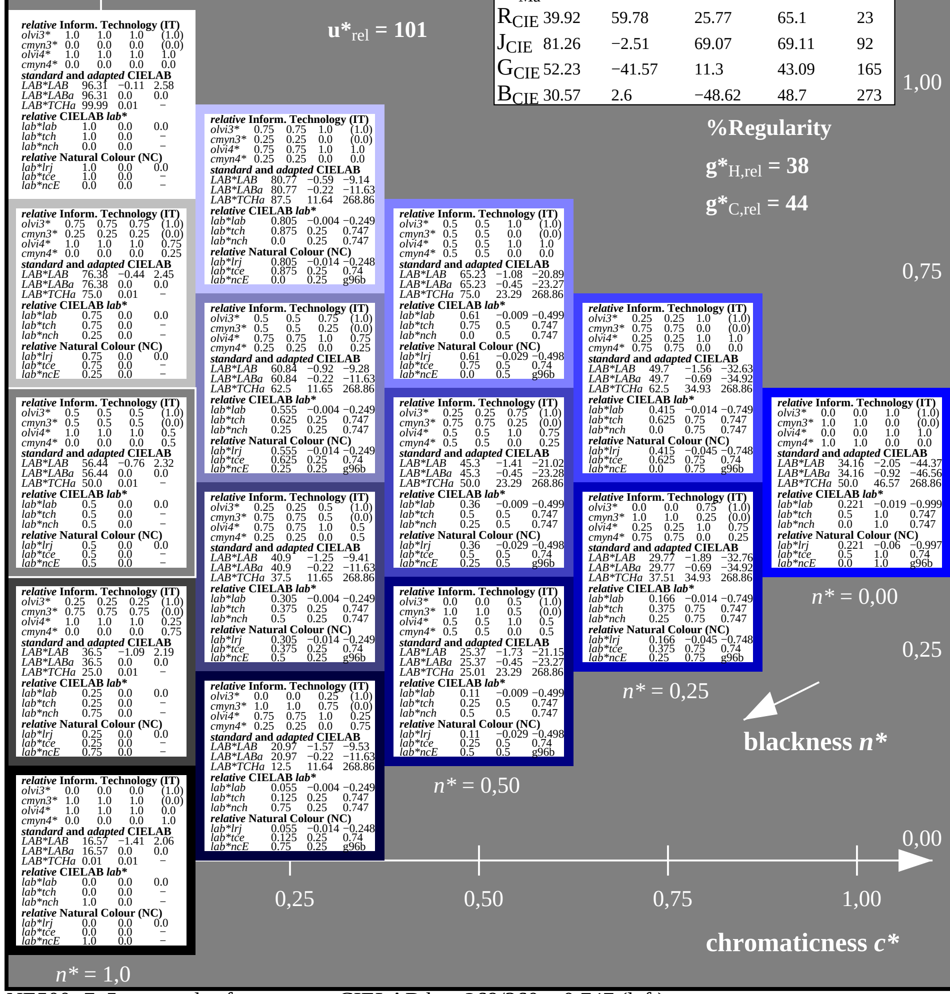
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 270/360 = 0.75$

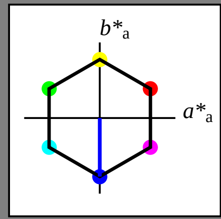
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

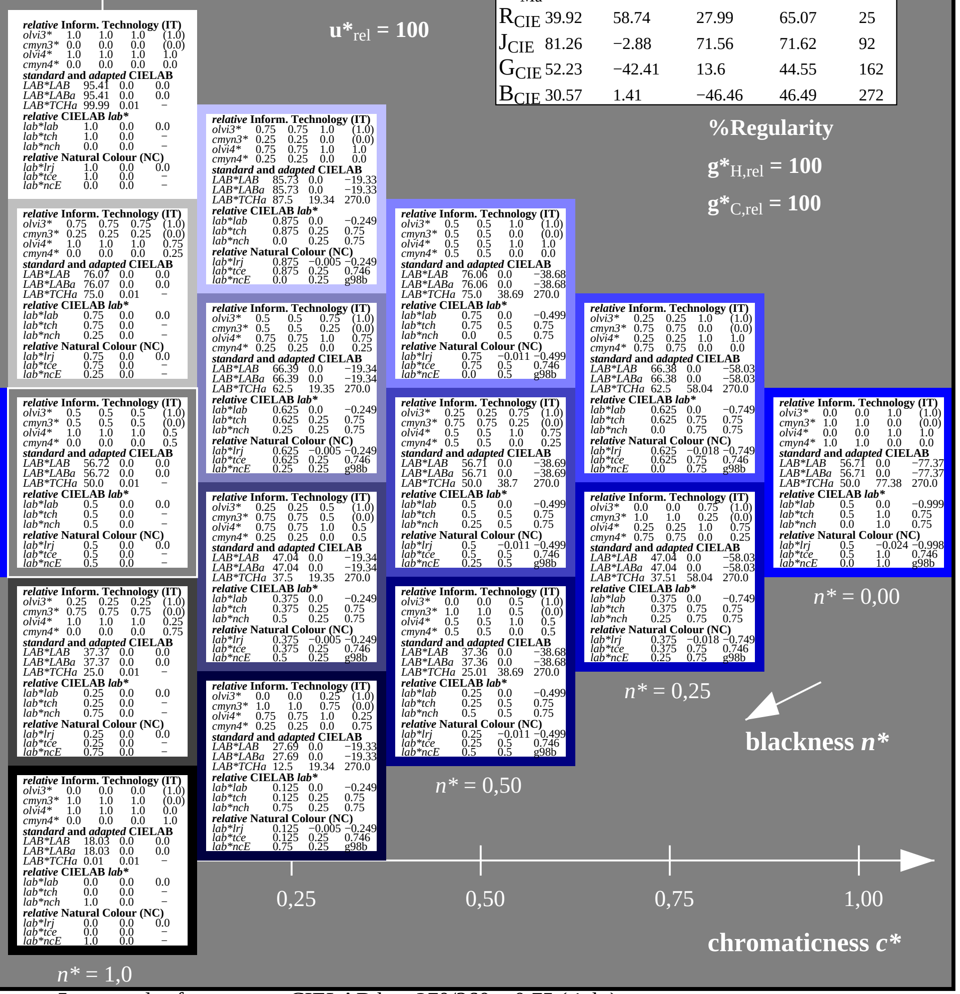
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



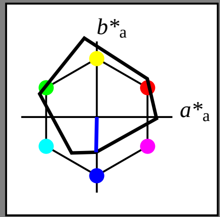
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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

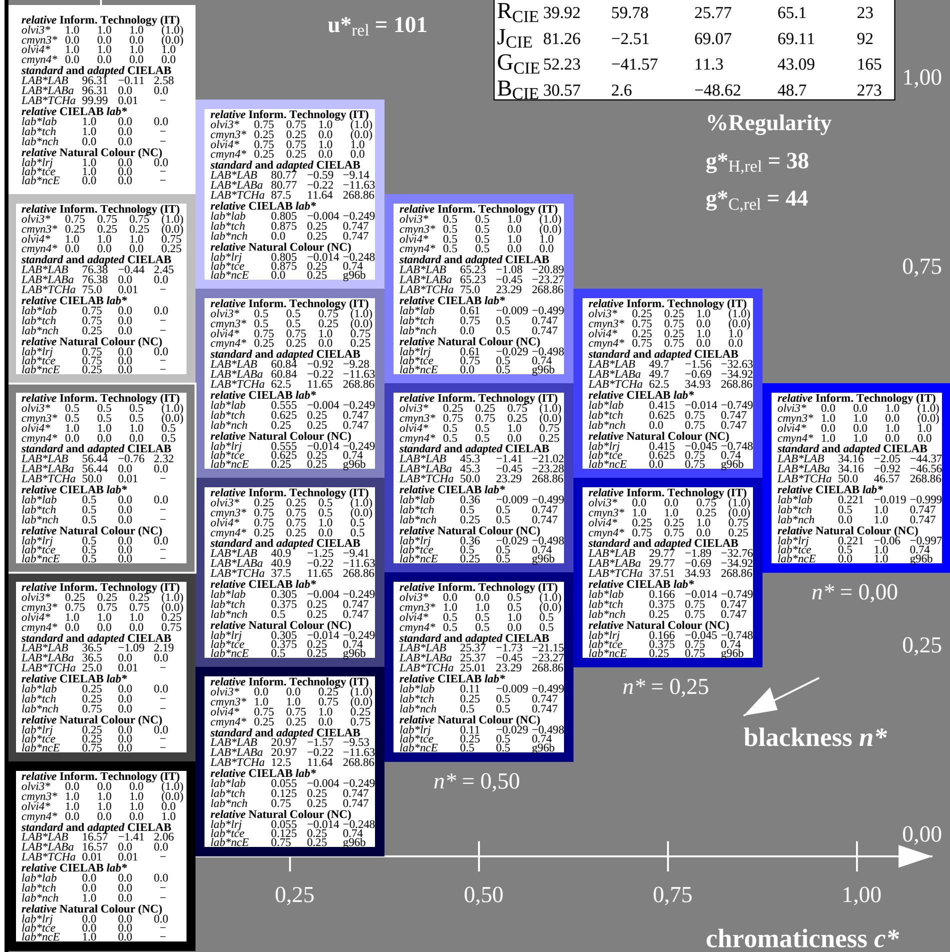
triangle lightness *t**



%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

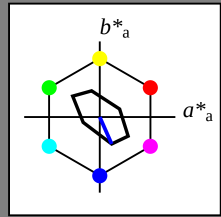
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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

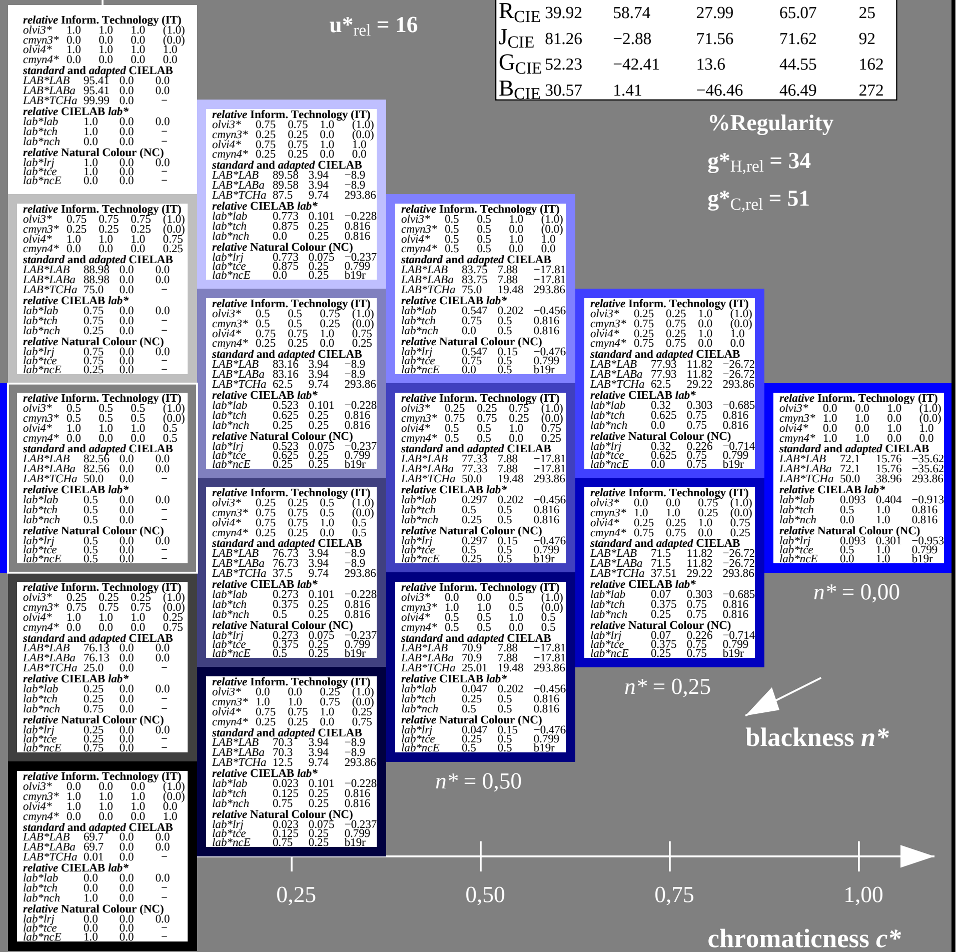
triangle lightness *t**



%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



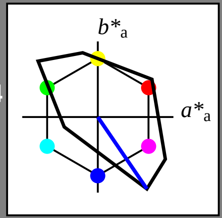
NE500−7, 5 step scales for constant CIELAB hue 269/360 = 0.747 (left)

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

$u^*_{rel} = 118$

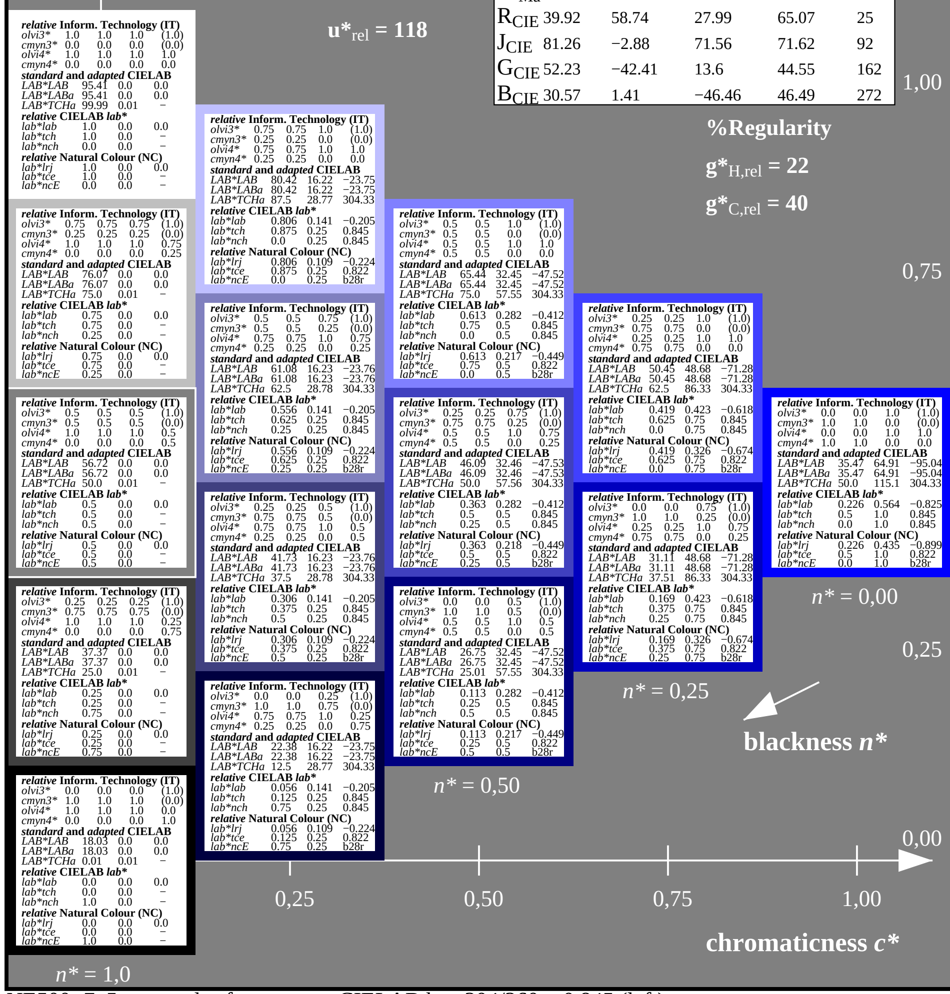
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

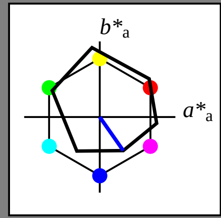
$g^*_{C,rel} = 40$



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

$u^*_{rel} = 93$

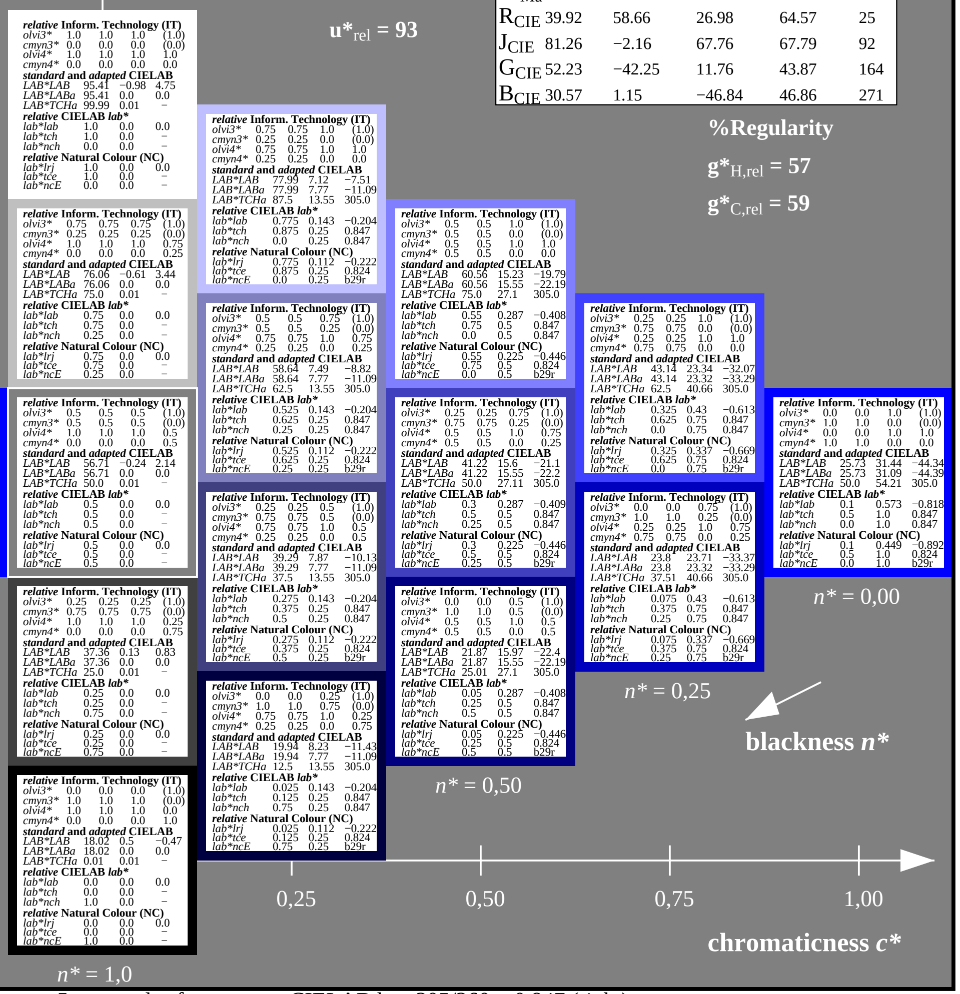
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$

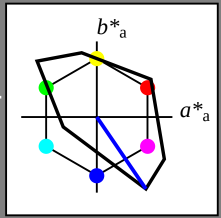
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

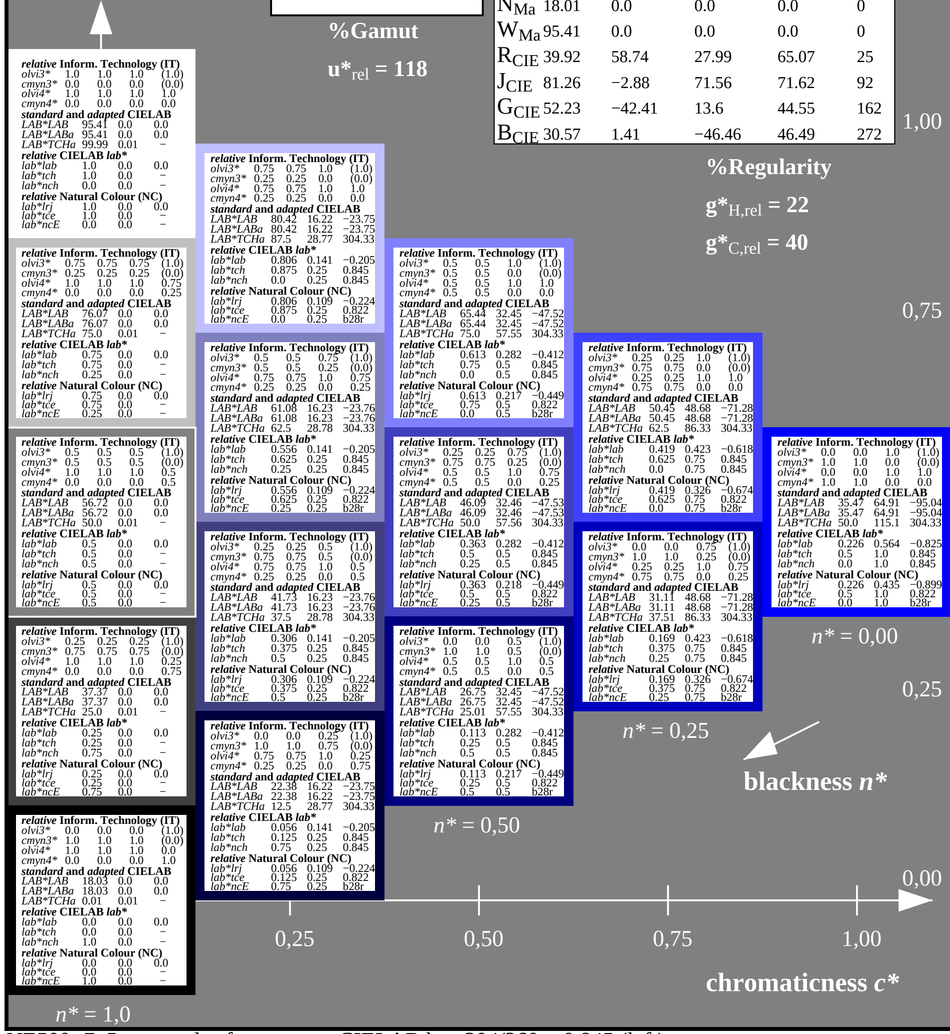
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 306/360 = 0.851$

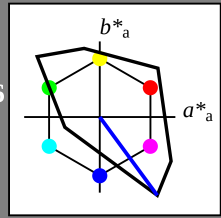
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

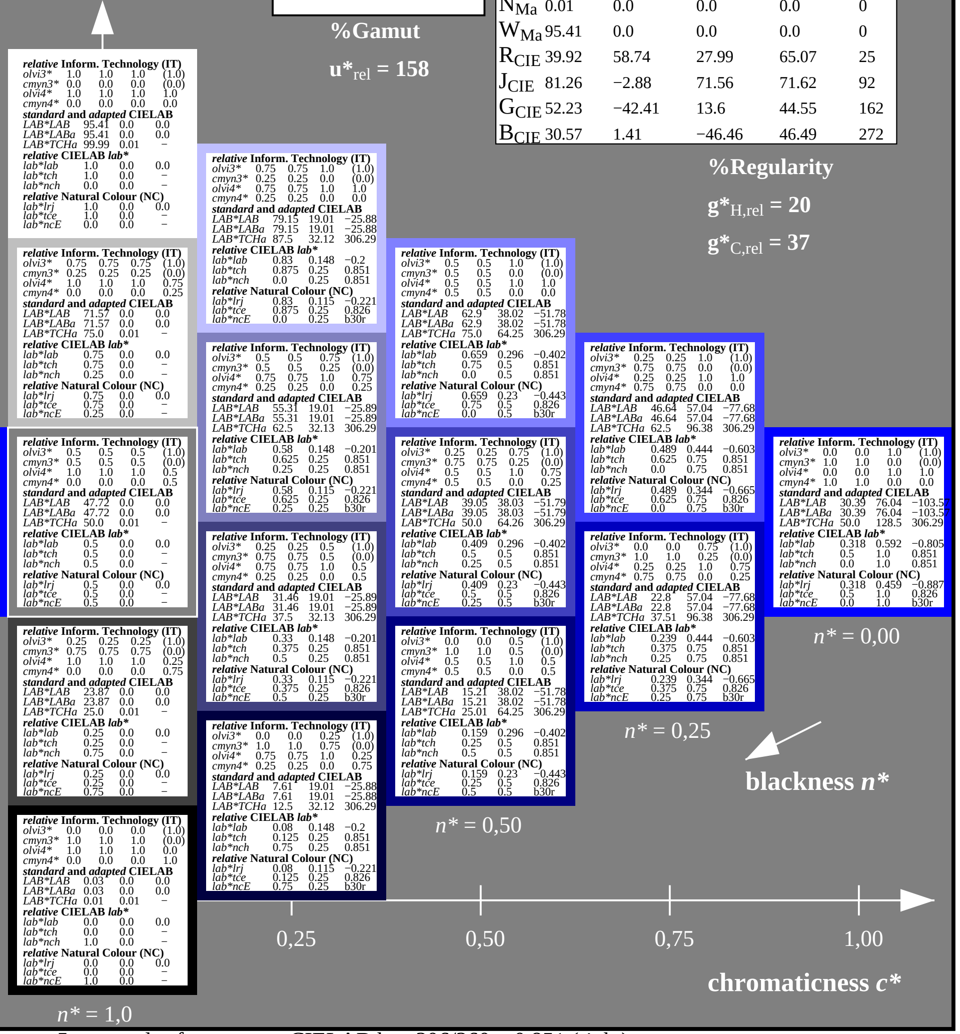
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



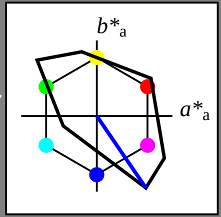
NE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

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

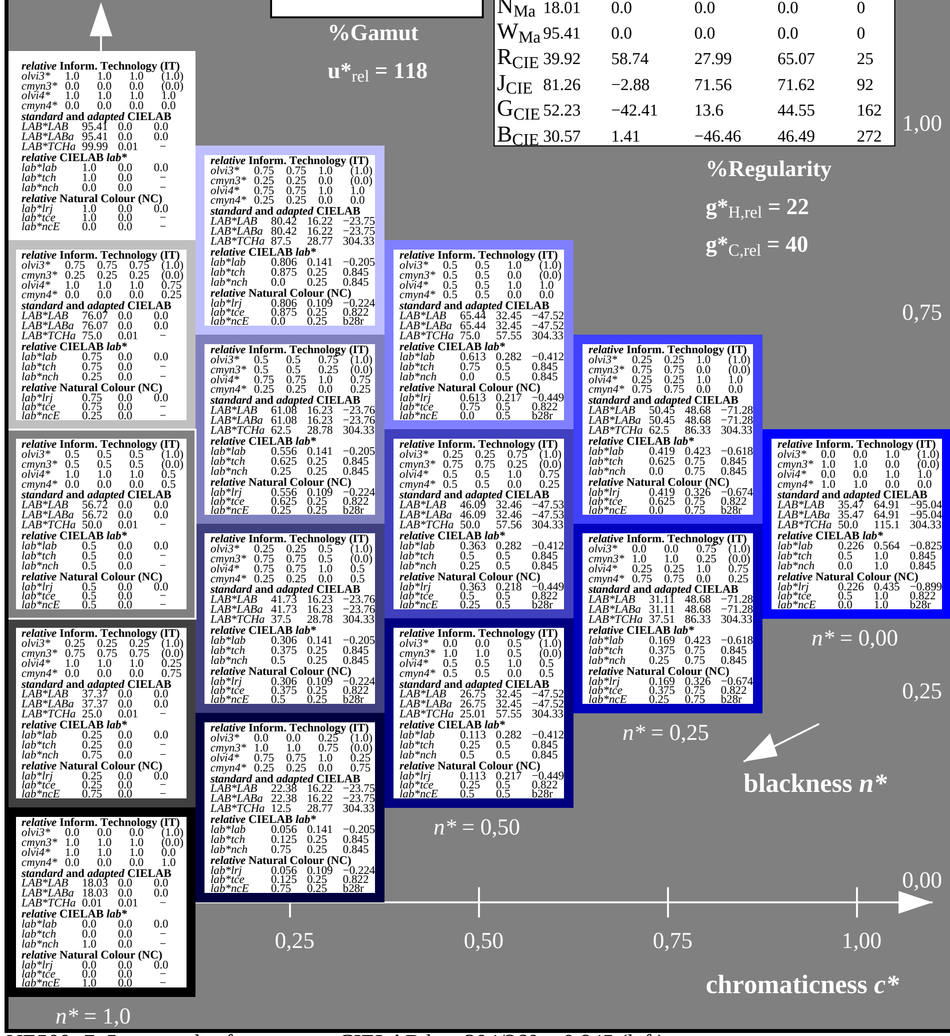
triangle lightness *t**



%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

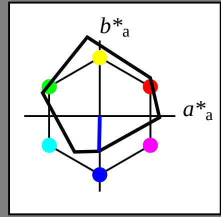
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



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

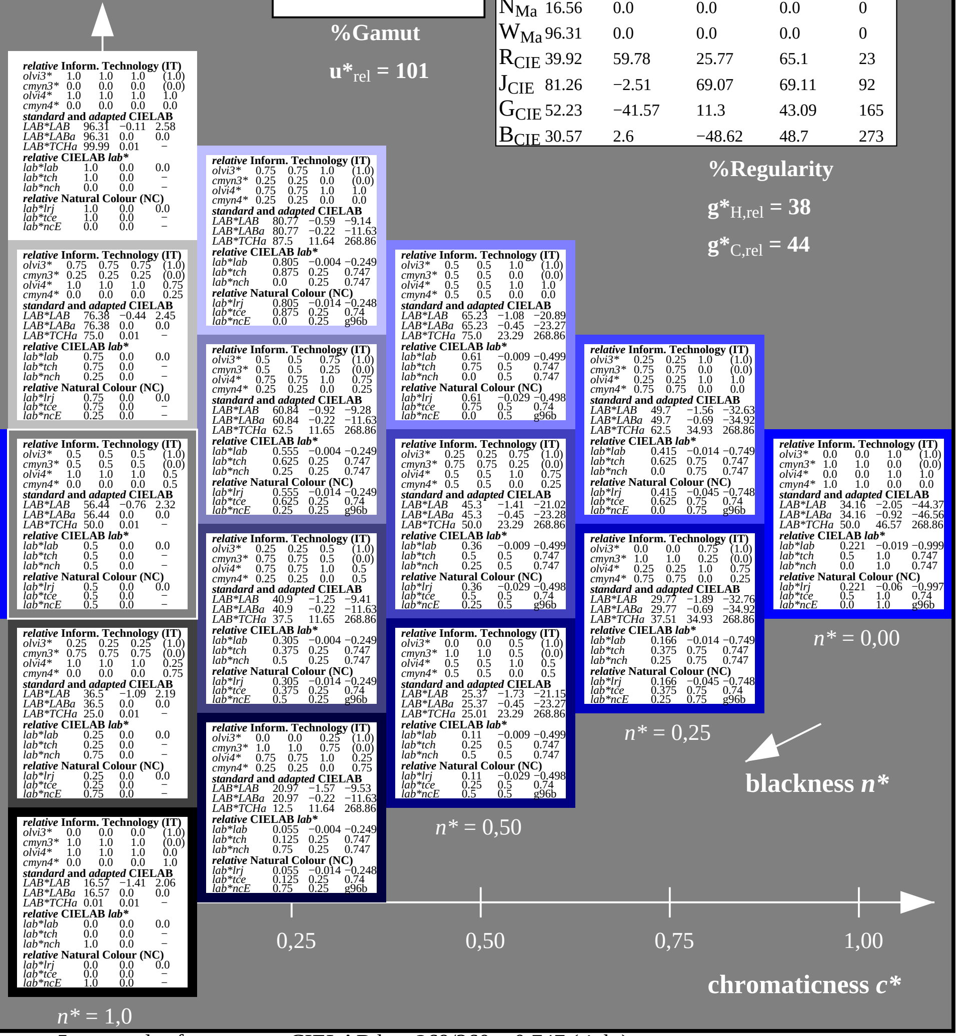
triangle lightness *t**



%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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



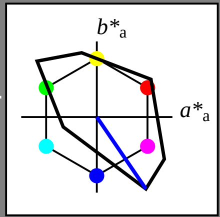
NE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

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

***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	0.75	1.0	(1.0)
*cmyn3**	0.25	0.25	0.0	(0.0)
*olvi4**	0.75	0.75	1.0	1.0
*cmyn4**	0.25	0.25	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	80.42	16.22	−23.75	
*LAB*LABa*	80.42	16.22	−23.75	
*LAB*TCHa*	87.5	28.77	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.806	0.141	−0.205	
*lab*tch*	0.875	0.25	0.845	
*lab*nch*	0.0	0.25	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.806	0.109	−0.224	
*lab*tce*	0.875	0.25	0.822	
*lab*ncE*	0.0	0.25	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.5	0.5	0.75	(1.0)
*cmyn3**	0.5	0.5	0.25	(0.0)
*olvi4**	0.75	0.75	1.0	0.75
*cmyn4**	0.25	0.25	0.0	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	61.08	16.23	−23.76	
*LAB*LABa*	61.08	16.23	−23.76	
*LAB*TCHa*	62.5	28.78	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.556	0.141	−0.205	
*lab*tch*	0.625	0.25	0.845	
*lab*nch*	0.25	0.25	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.556	0.109	−0.224	
*lab*tce*	0.625	0.25	0.822	
*lab*ncE*	0.25	0.25	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.25	0.25	0.5	(1.0)
*cmyn3**	0.75	0.75	0.5	(0.0)
*olvi4**	0.75	0.75	1.0	0.5
*cmyn4**	0.25	0.25	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	41.73	16.23	−23.76	
*LAB*LABa*	41.73	16.23	−23.76	
*LAB*TCHa*	37.5	28.78	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.306	0.141	−0.205	
*lab*tch*	0.375	0.25	0.845	
*lab*nch*	0.5	0.25	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.306	0.109	−0.224	
*lab*tce*	0.375	0.25	0.822	
*lab*ncE*	0.5	0.25	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	0.0	0.25	(1.0)
*cmyn3**	1.0	1.0	0.75	(0.0)
*olvi4**	0.75	0.75	1.0	0.25
*cmyn4**	0.25	0.25	0.0	0.75
***standard* and *adapted* CIELAB**				
*LAB*LAB*	22.38	16.22	−23.75	
*LAB*LABa*	22.38	16.22	−23.75	
*LAB*TCHa*	12.5	28.77	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.056	0.141	−0.205	
*lab*tch*	0.125	0.25	0.845	
*lab*nch*	0.75	0.25	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.056	0.109	−0.224	
*lab*tce*	0.125	0.25	0.822	
*lab*ncE*	0.75	0.25	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.5	0.5	1.0	(1.0)
*cmyn3**	0.5	0.5	0.0	(0.0)
*olvi4**	0.5	0.5	1.0	1.0
*cmyn4**	0.5	0.5	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	65.44	32.45	−47.52	
*LAB*LABa*	65.44	32.45	−47.52	
*LAB*TCHa*	75.0	57.55	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.613	0.282	−0.412	
*lab*tch*	0.75	0.5	0.845	
*lab*nch*	0.0	0.5	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.613	0.217	−0.449	
*lab*tce*	0.75	0.5	0.822	
*lab*ncE*	0.0	0.5	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.25	0.25	0.75	(1.0)
*cmyn3**	0.75	0.75	0.25	(0.0)
*olvi4**	0.5	0.5	1.0	0.75
*cmyn4**	0.5	0.5	0.0	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	46.09	32.46	−47.53	
*LAB*LABa*	46.09	32.46	−47.53	
*LAB*TCHa*	50.0	57.56	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.363	0.282	−0.412	
*lab*tch*	0.5	0.5	0.845	
*lab*nch*	0.25	0.5	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.363	0.218	−0.449	
*lab*tce*	0.5	0.5	0.822	
*lab*ncE*	0.25	0.5	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	0.0	0.5	(1.0)
*cmyn3**	1.0	1.0	0.5	(0.0)
*olvi4**	0.5	0.5	1.0	0.5
*cmyn4**	0.5	0.5	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	26.75	32.45	−47.52	
*LAB*LABa*	26.75	32.45	−47.52	
*LAB*TCHa*	25.01	57.55	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.113	0.282	−0.412	
*lab*tch*	0.25	0.5	0.845	
*lab*nch*	0.5	0.5	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.113	0.217	−0.449	
*lab*tce*	0.25	0.5	0.822	
*lab*ncE*	0.5	0.5	b28r	

*n** = 0,50

***relative* Inform. Technology (IT)**				
*olvi3**	0.25	0.25	1.0	(1.0)
*cmyn3**	0.75	0.75	0.0	(0.0)
*olvi4**	0.25	0.25	1.0	1.0
*cmyn4**	0.75	0.75	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	50.45	48.68	−71.28	
*LAB*LABa*	50.45	48.68	−71.28	
*LAB*TCHa*	62.5	86.33	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.419	0.423	−0.618	
*lab*tch*	0.625	0.75	0.845	
*lab*nch*	0.0	0.75	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.419	0.326	−0.674	
*lab*tce*	0.625	0.75	0.822	
*lab*ncE*	0.0	0.75	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	0.0	0.75	(1.0)
*cmyn3**	1.0	1.0	0.25	(0.0)
*olvi4**	0.25	0.25	1.0	0.75
*cmyn4**	0.75	0.75	0.0	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	31.11	48.68	−71.28	
*LAB*LABa*	31.11	48.68	−71.28	
*LAB*TCHa*	37.51	86.33	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.169	0.423	−0.618	
*lab*tch*	0.375	0.75	0.845	
*lab*nch*	0.25	0.75	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.169	0.326	−0.674	
*lab*tce*	0.375	0.75	0.822	
*lab*ncE*	0.25	0.75	b28r	

*n** = 0,25

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	0.0	1.0	(1.0)
*cmyn3**	1.0	1.0	0.0	(0.0)
*olvi4**	0.0	0.0	1.0	1.0
*cmyn4**	1.0	1.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	35.47	64.91	−95.04	
*LAB*LABa*	35.47	64.91	−95.04	
*LAB*TCHa*	50.0	115.1	304.33	
relative* CIELAB *lab*				
*lab*lab*	0.226	0.564	−0.825	
*lab*tch*	0.5	1.0	0.845	
*lab*nch*	0.0	1.0	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.226	0.435	−0.899	
*lab*tce*	0.5	1.0	0.822	
*lab*ncE*	0.0	1.0	b28r	

*n** = 0,00

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

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

blackness *n**

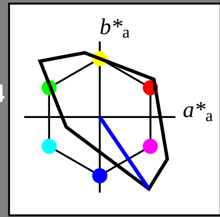
chromaticness *c**

NE500−7, 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

*n** = 1,0

*n** = 0,50

*n** = 0,25

*n** = 0,00

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

blackness *n**

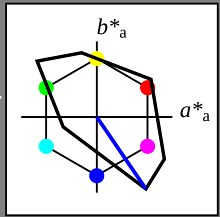
chromaticness *c**

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

triangle lightness t^*



%Gamut

u^*_{rel} = 118

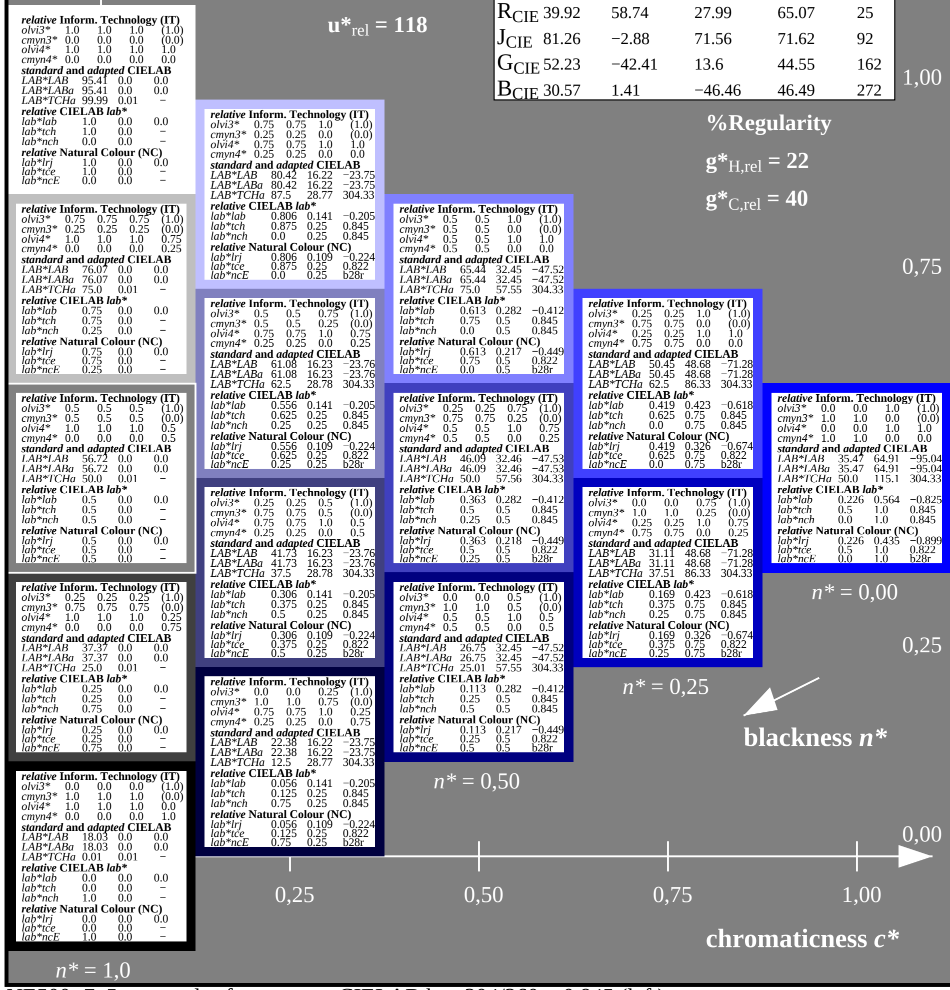
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

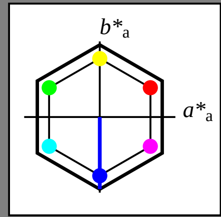
$g^*_{C,rel}$ = 40



Output: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 270/360 = 0.75$
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

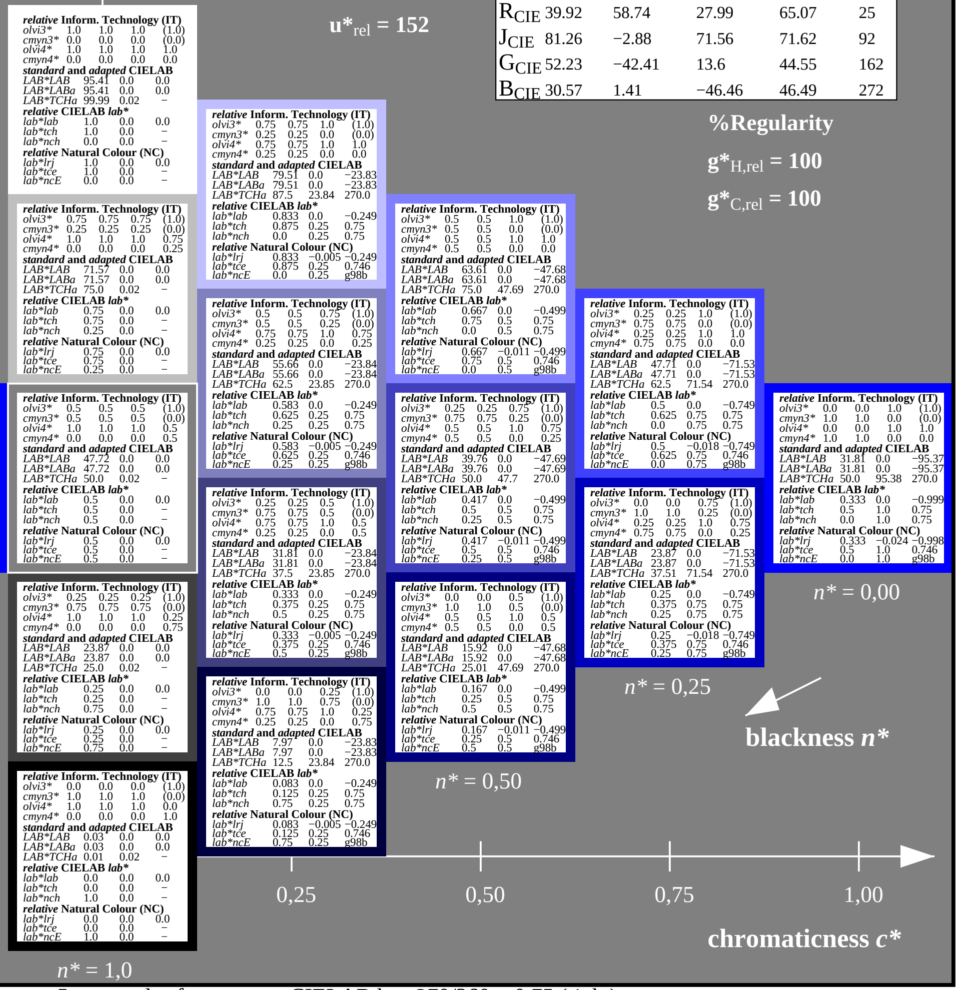
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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

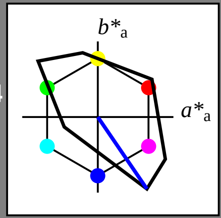
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

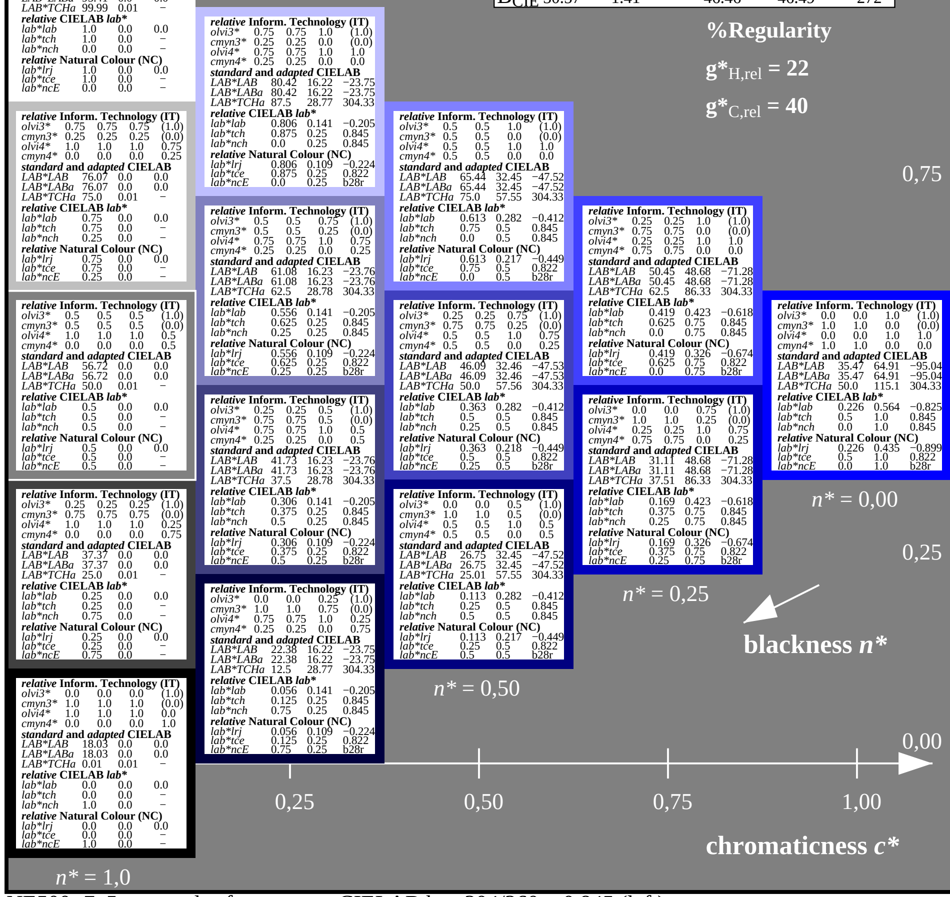
u^*_{rel} = 118

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



Output: Colorimetric Natural Reflective System NRS18

for hue *h** = *lab*h* = 270/360 = 0.75

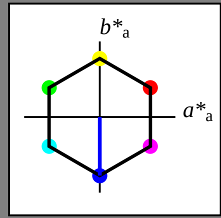
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

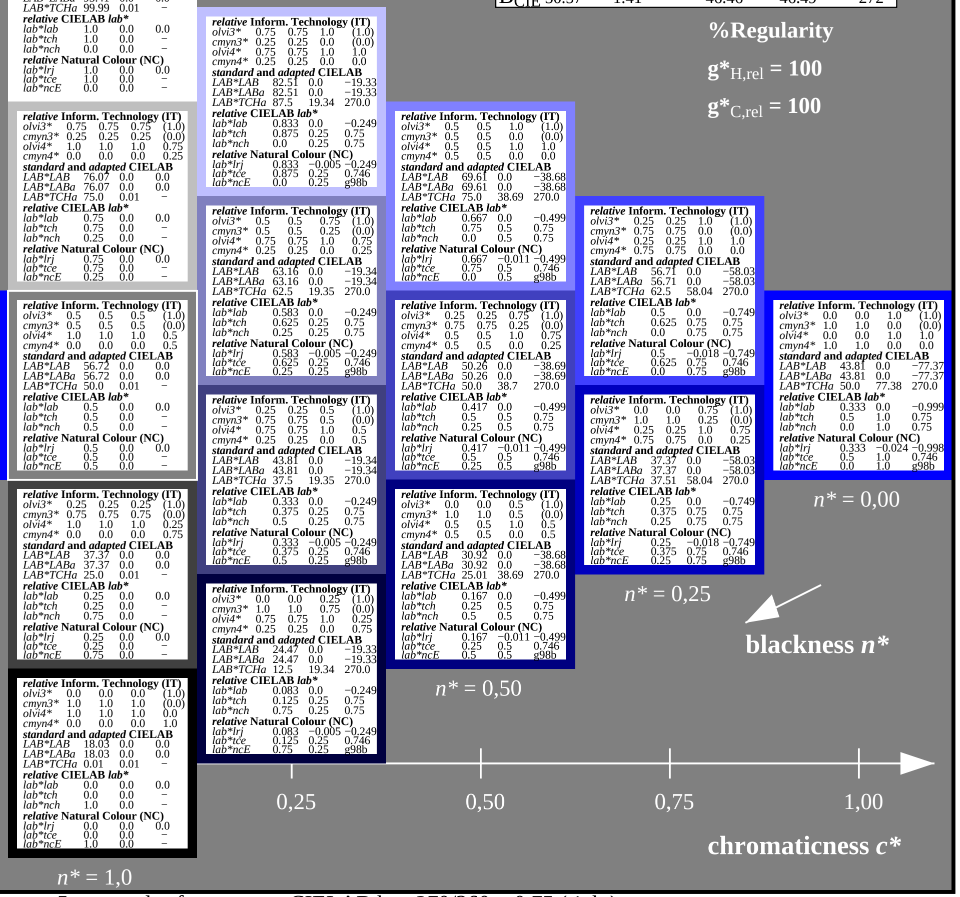
u^*_{rel} = 100

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



NE500−7, 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 $h^* = lab^*h = 304/360 = 0.845$

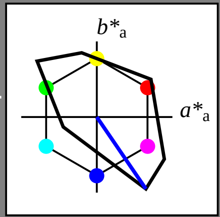
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 118$

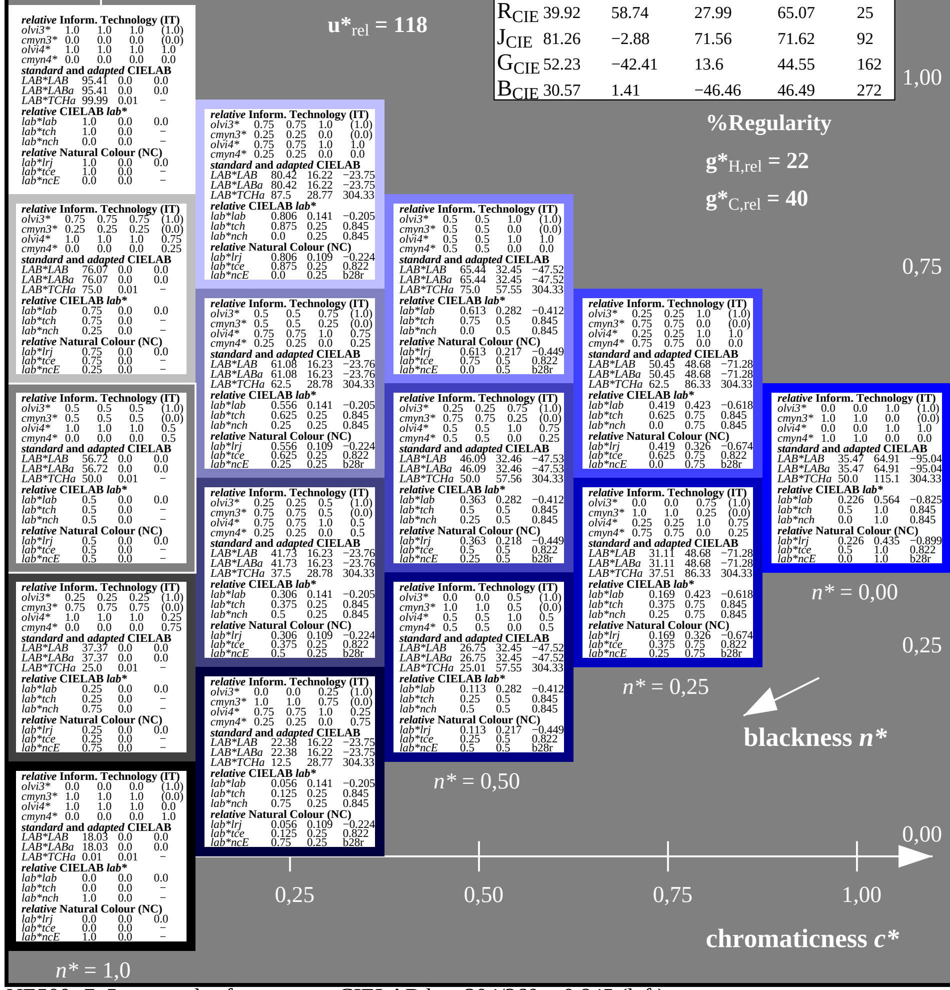
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

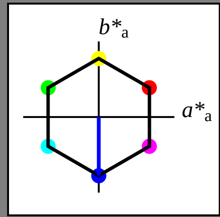
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

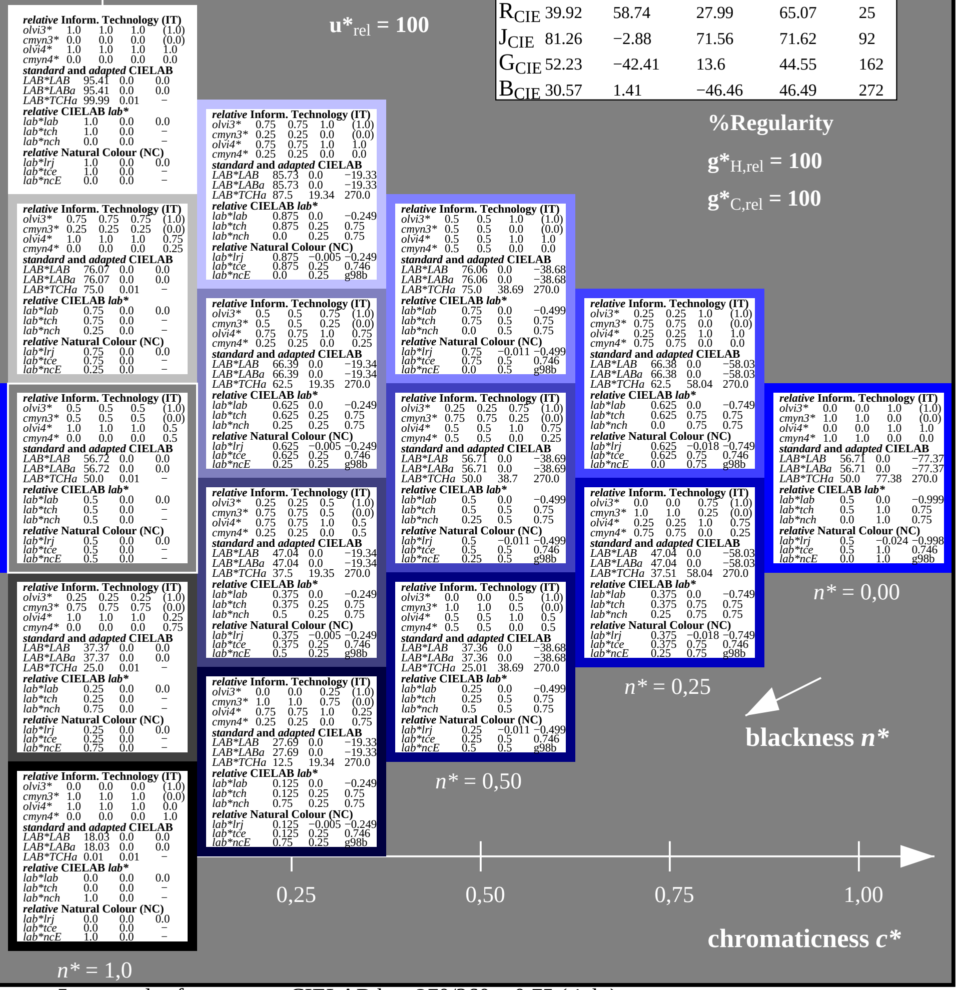
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



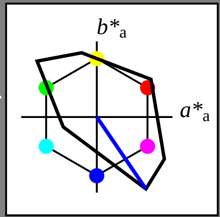
NE500−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

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

$u^*_{rel} = 118$

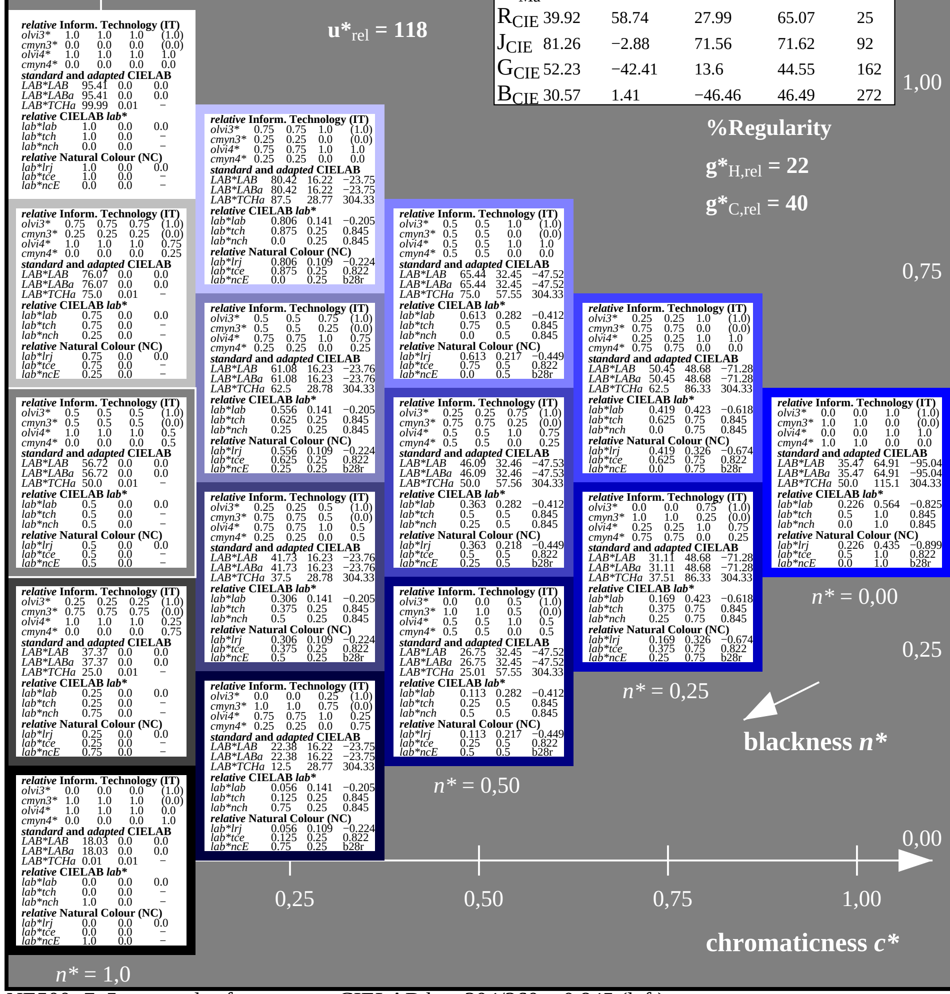
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

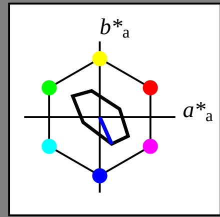
$g^*_{C,rel} = 40$



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

$u^*_{rel} = 16$

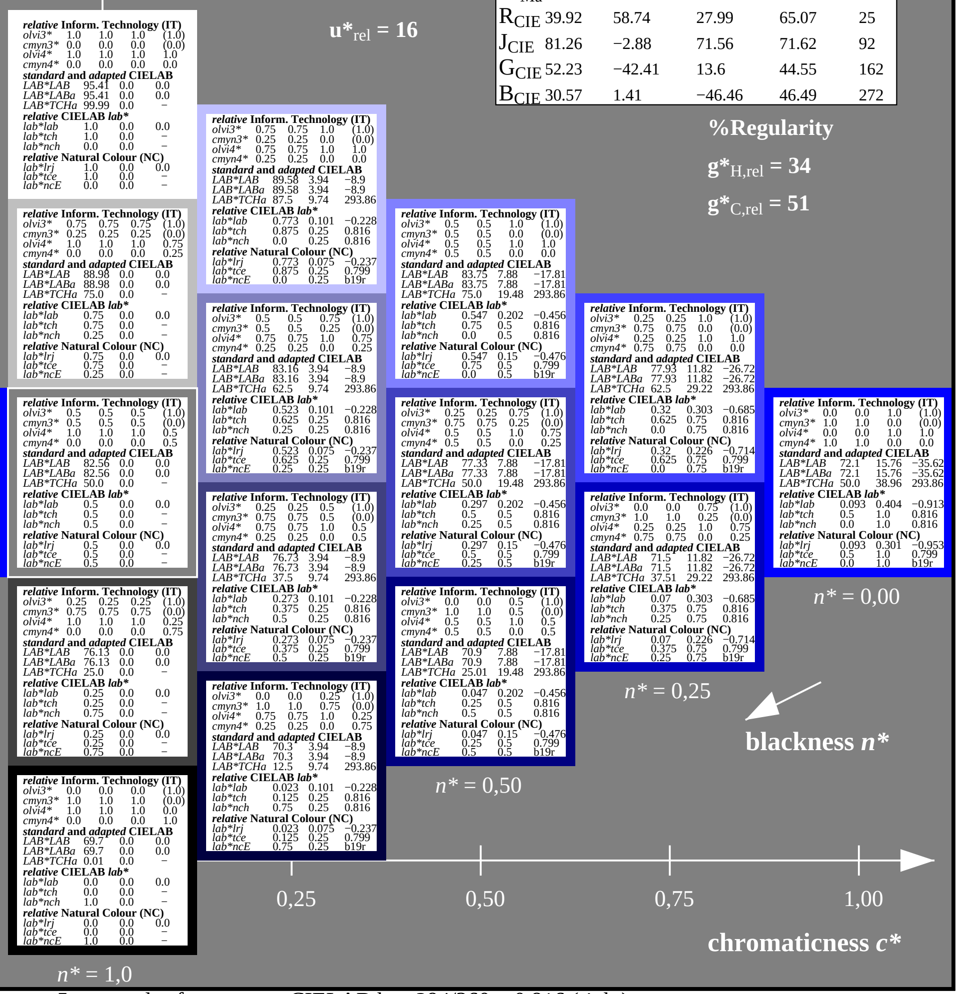
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 270/360 = 0.75$

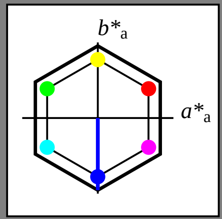
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

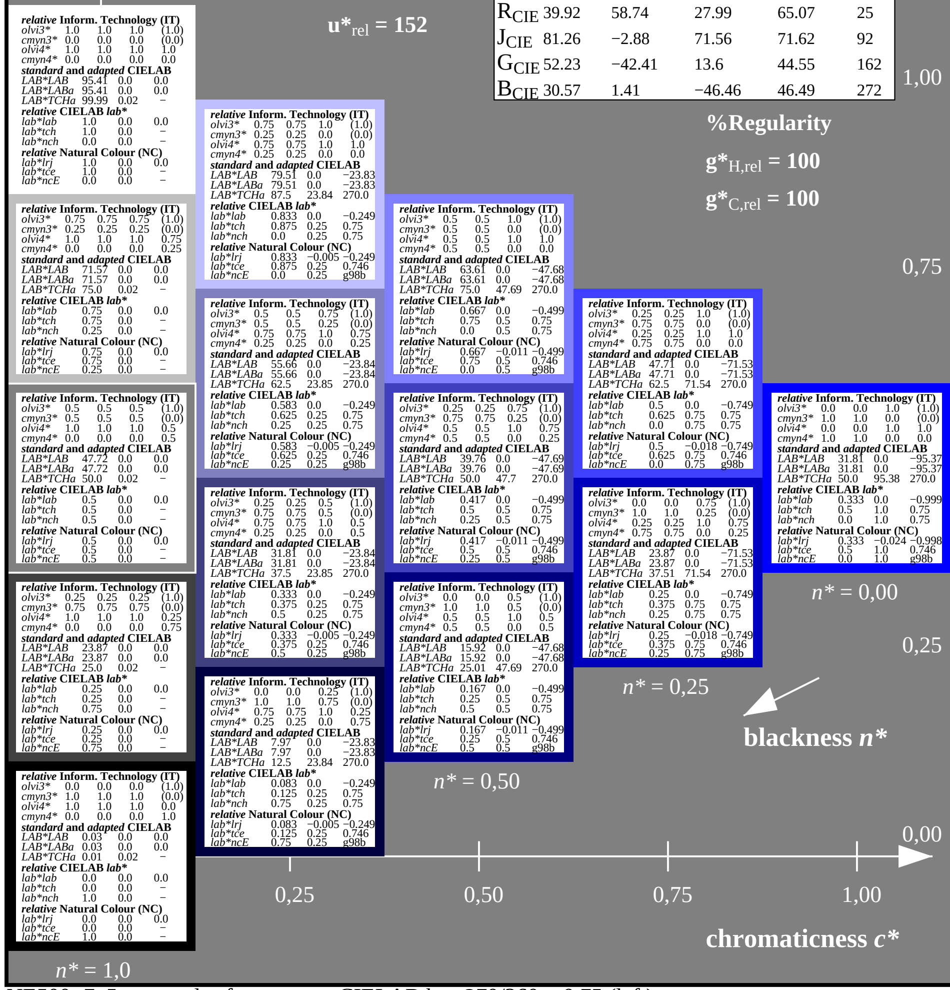
$u^*_{rel} = 152$

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 $h^* = lab^*h = 305/360 = 0.847$

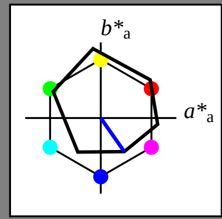
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

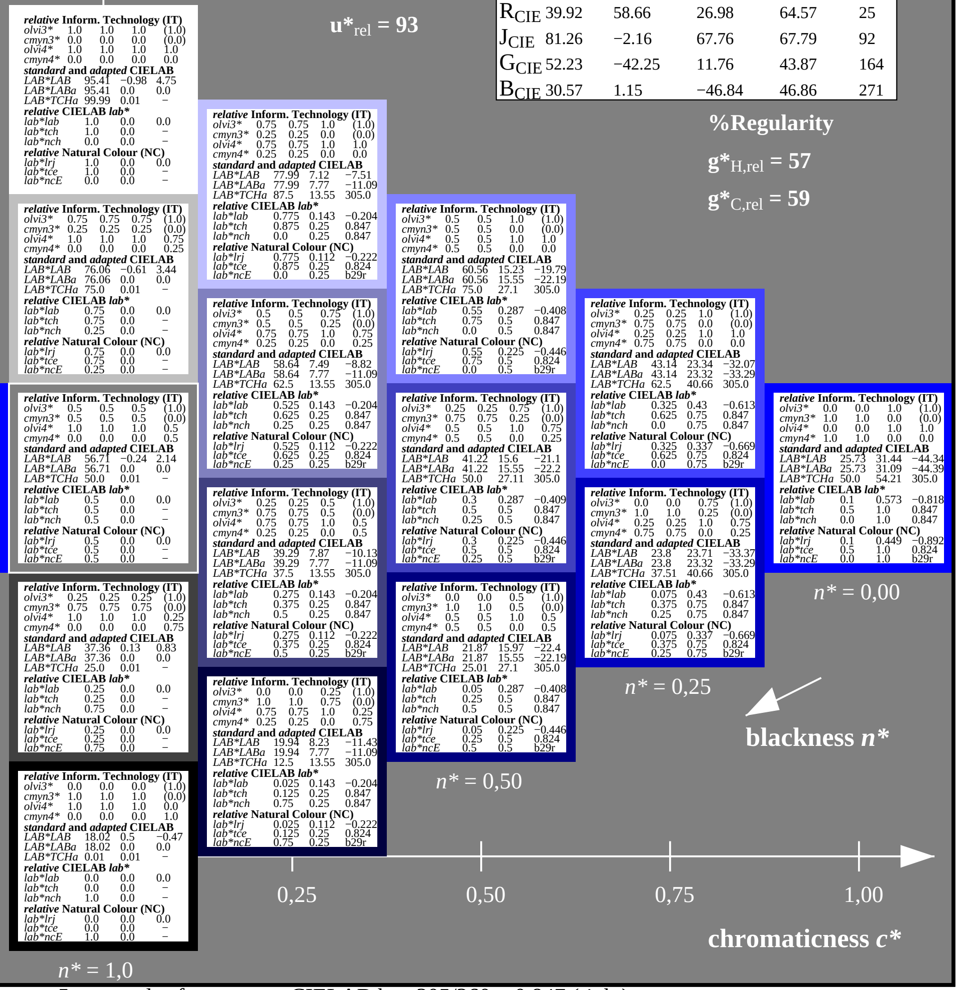
$u^*_{rel} = 93$

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

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

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



NE500−7, 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**

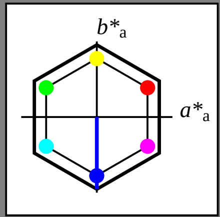
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

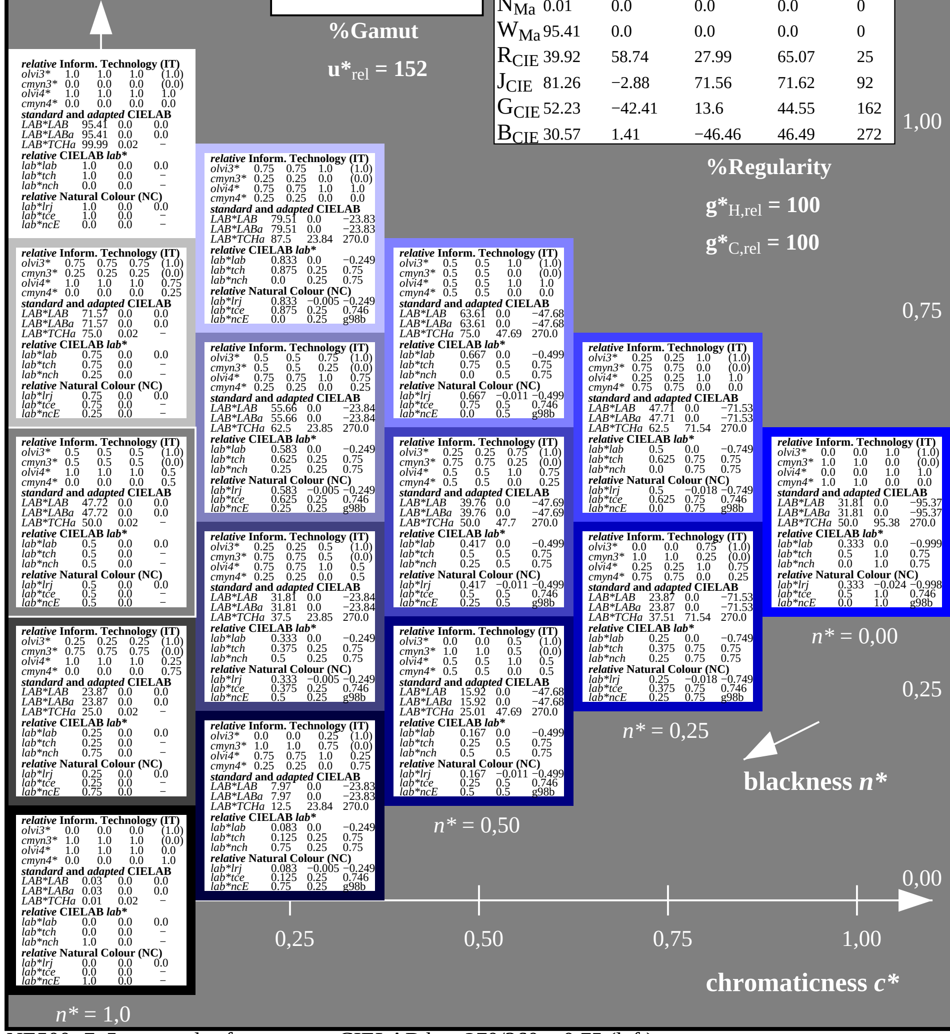
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue *h = *lab*h* = 306/360 = 0.851**

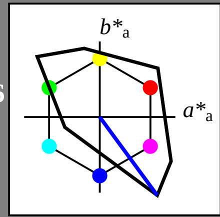
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 158

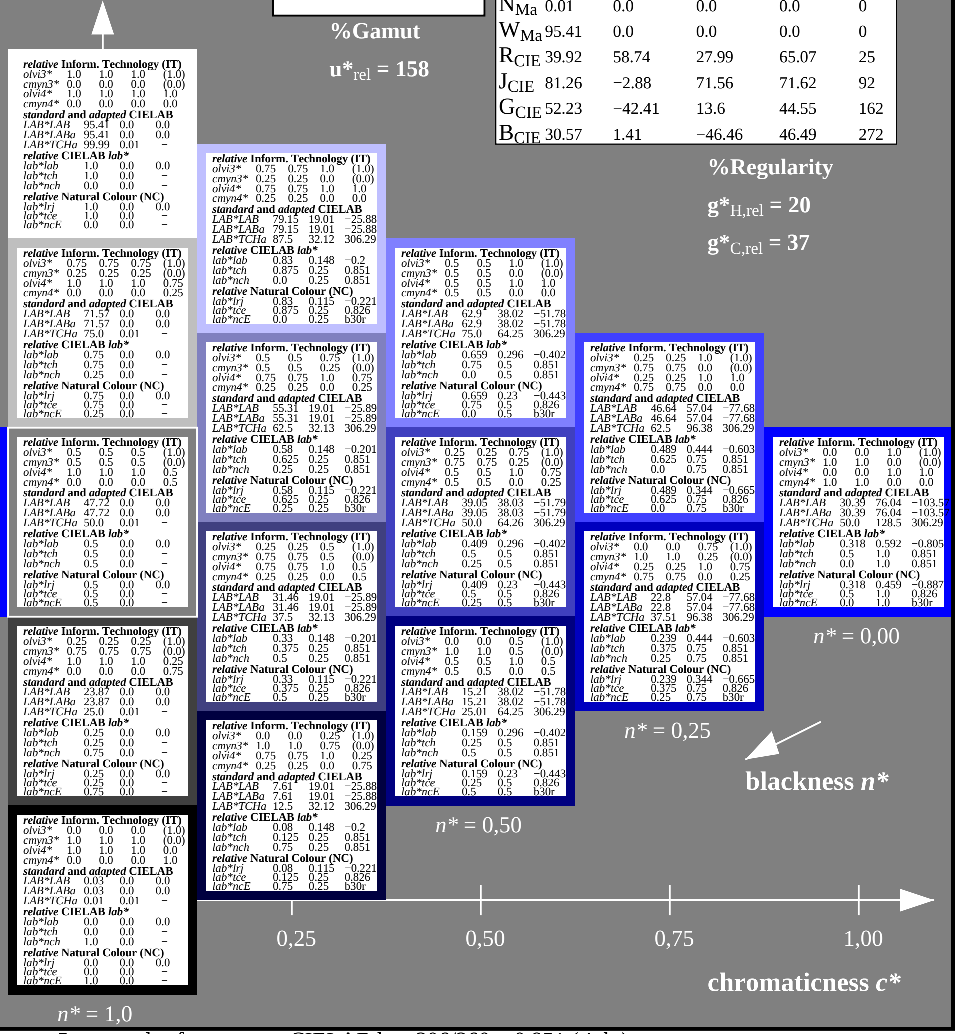
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$

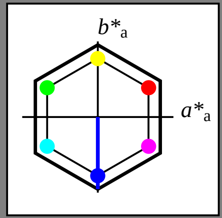
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

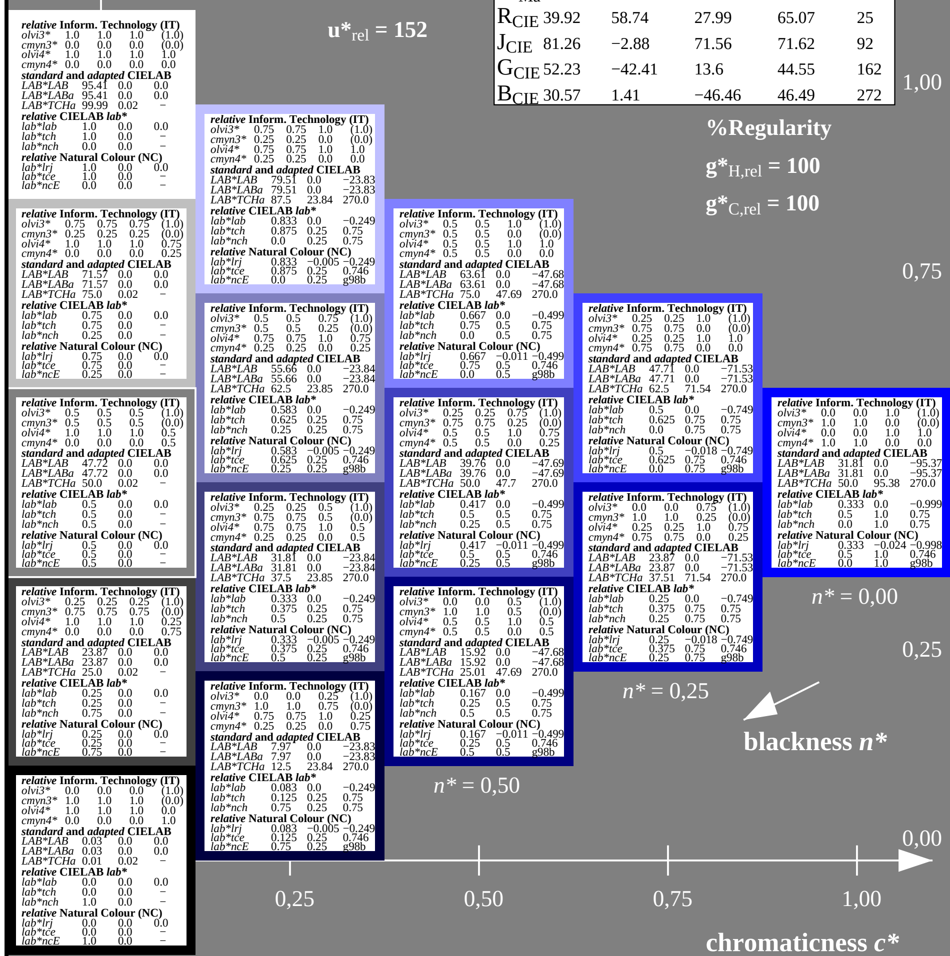
$u^*_{rel} = 152$

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 $h^* = lab^*h = 269/360 = 0.747$

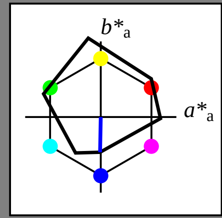
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

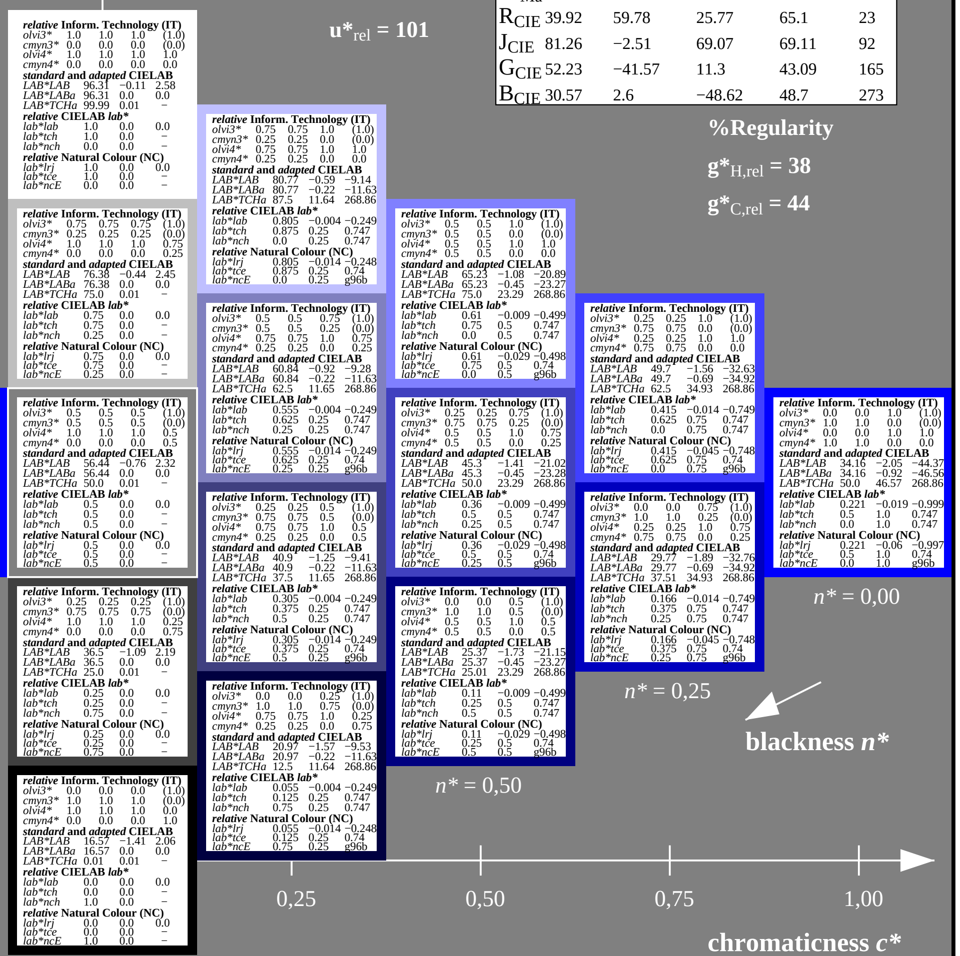
$u^*_{rel} = 101$

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

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

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



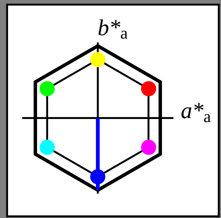
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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**



%Gamut

u*rel = 152

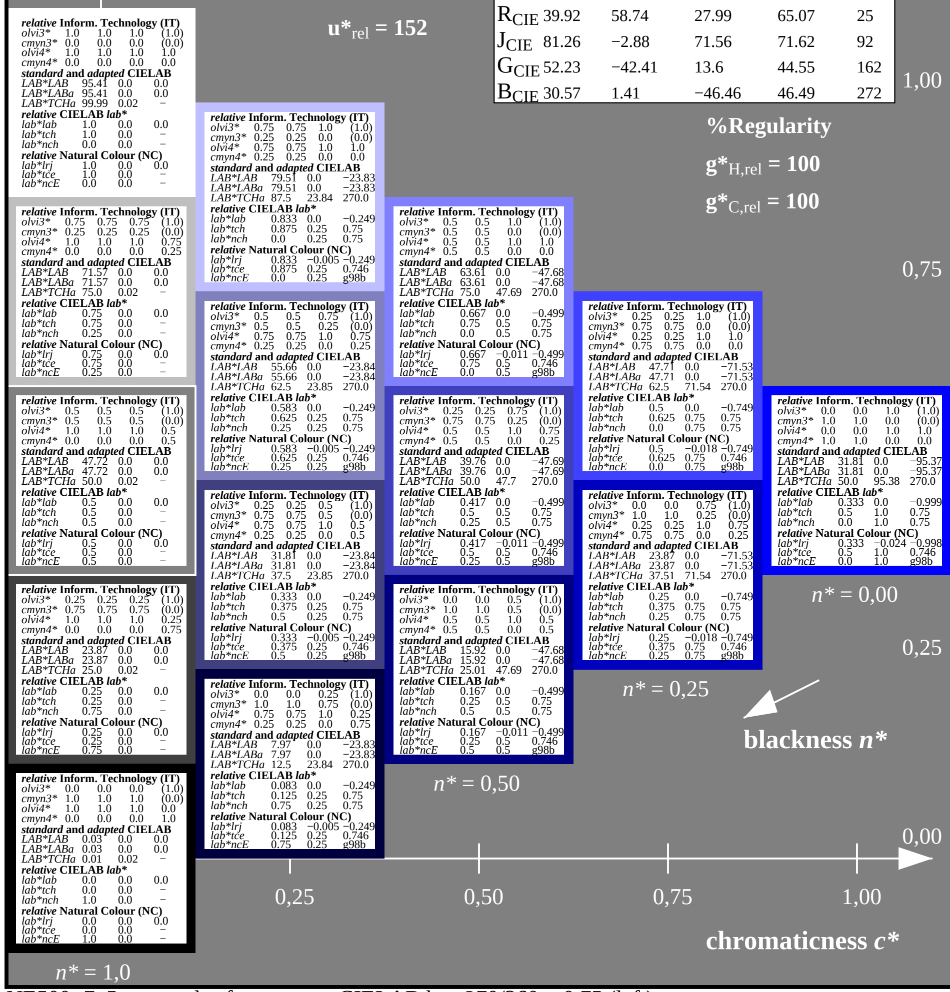
NLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	31.81	82.62	47.7	95.4	30
YMa	63.61	0.0	95.4	95.4	90
LMa	31.81	−82.61	47.7	95.4	150
CMa	63.61	−82.61	−47.69	95.4	210
VMa	31.81	0.0	−95.39	95.4	270
MMa	63.61	82.62	−47.69	95.4	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 100

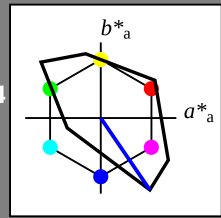
g*C,rel = 100



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 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

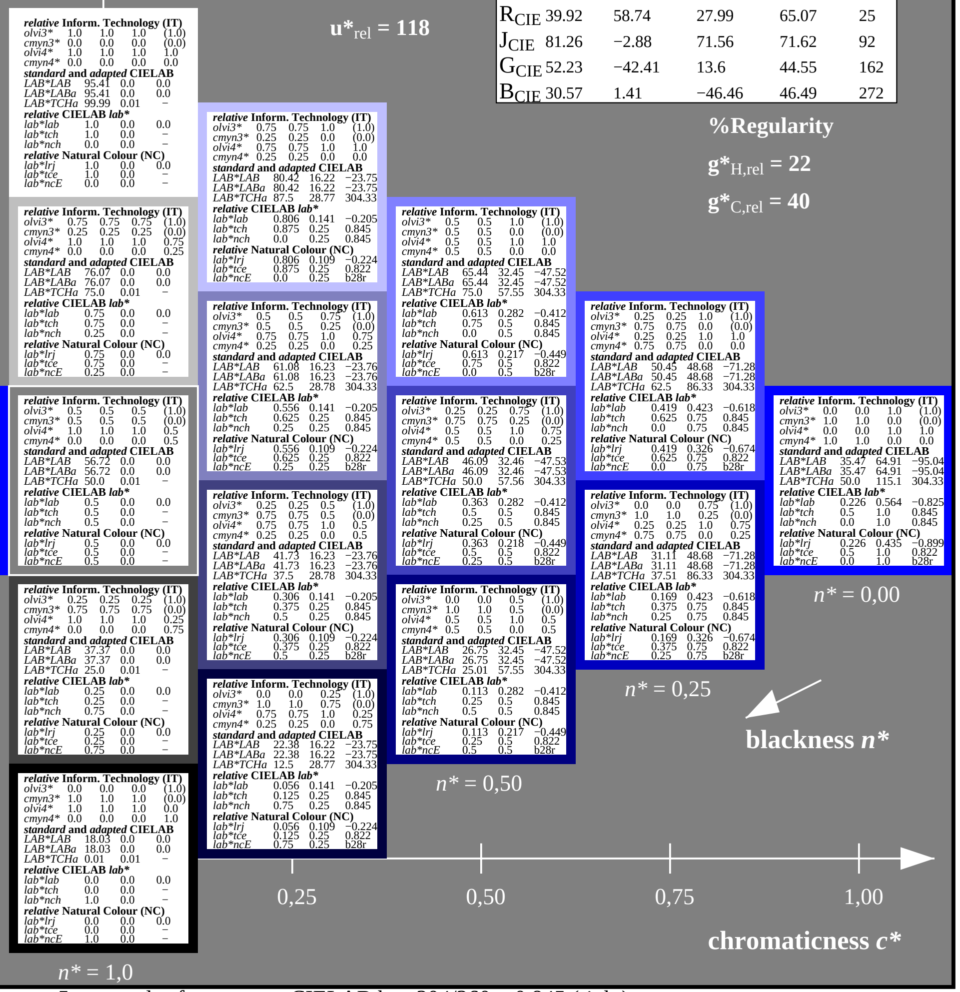
TLS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	−20.02	84.97	87.3	103
LMa	84.0	−78.98	73.94	108.2	137
CMa	87.14	−44.41	−13.11	46.32	196
VMa	35.47	64.92	−95.06	115.12	304
MMa	59.01	89.33	−55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 22

g*C,rel = 40



NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$

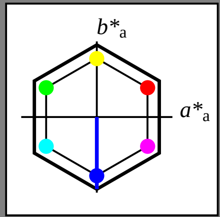
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 32 95 270

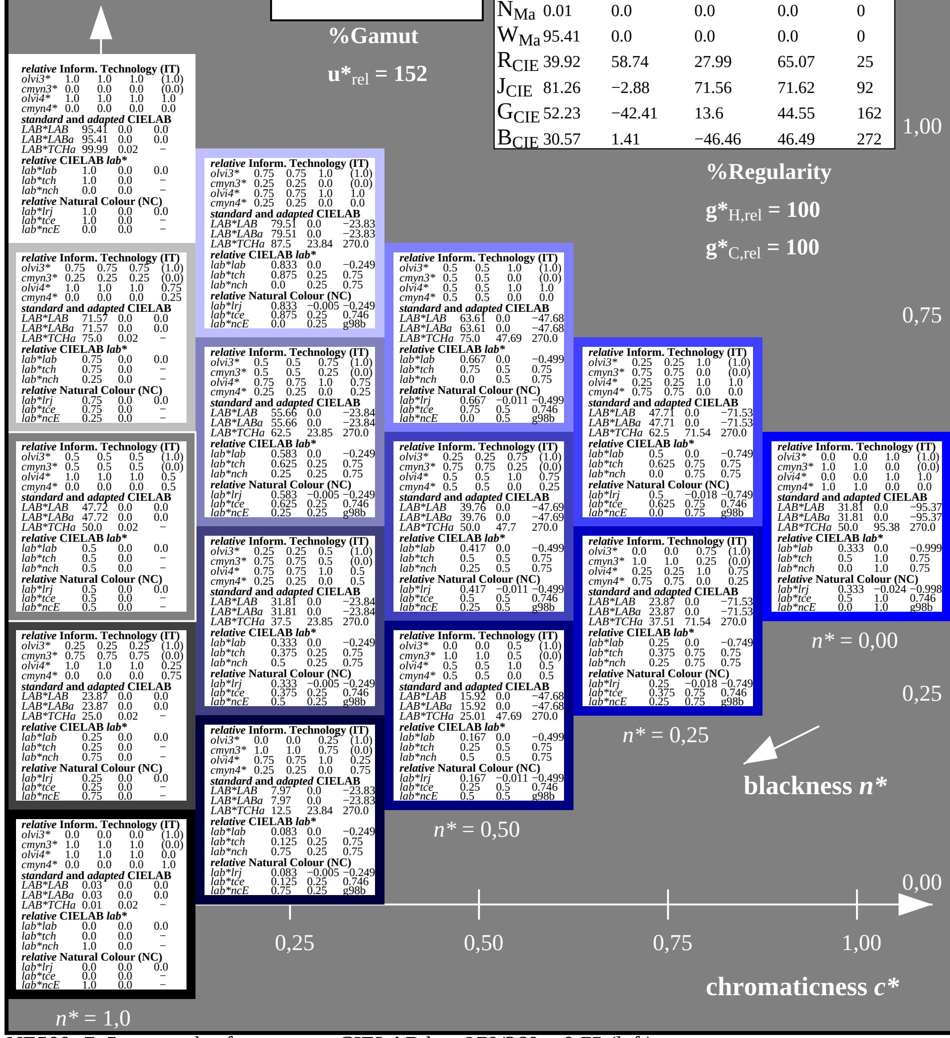
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 270/360 = 0.75$

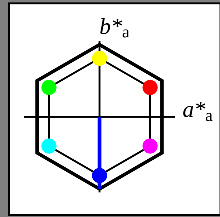
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 32 95 270

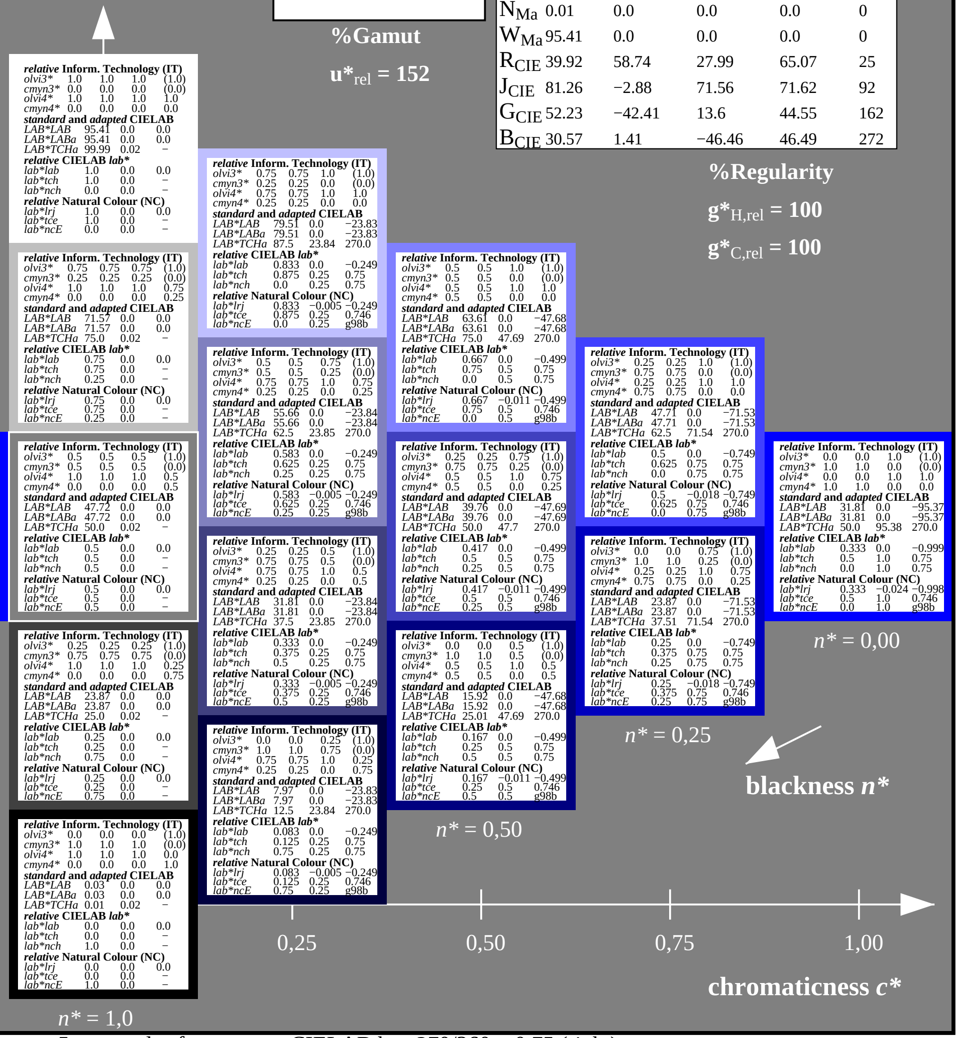
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



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



NE500−7, 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

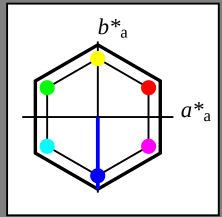
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

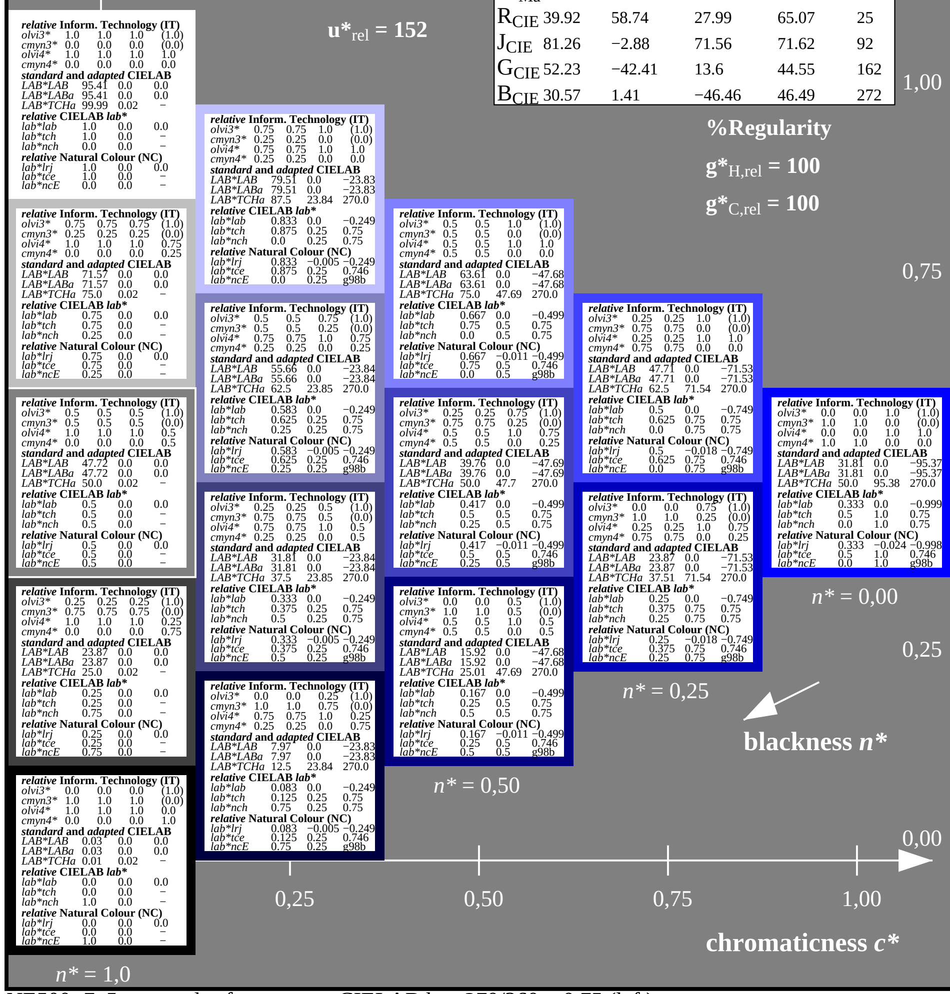
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue *h** = *lab*h* = 270/360 = 0.75

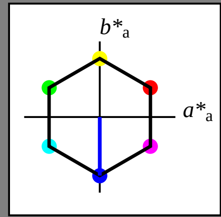
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

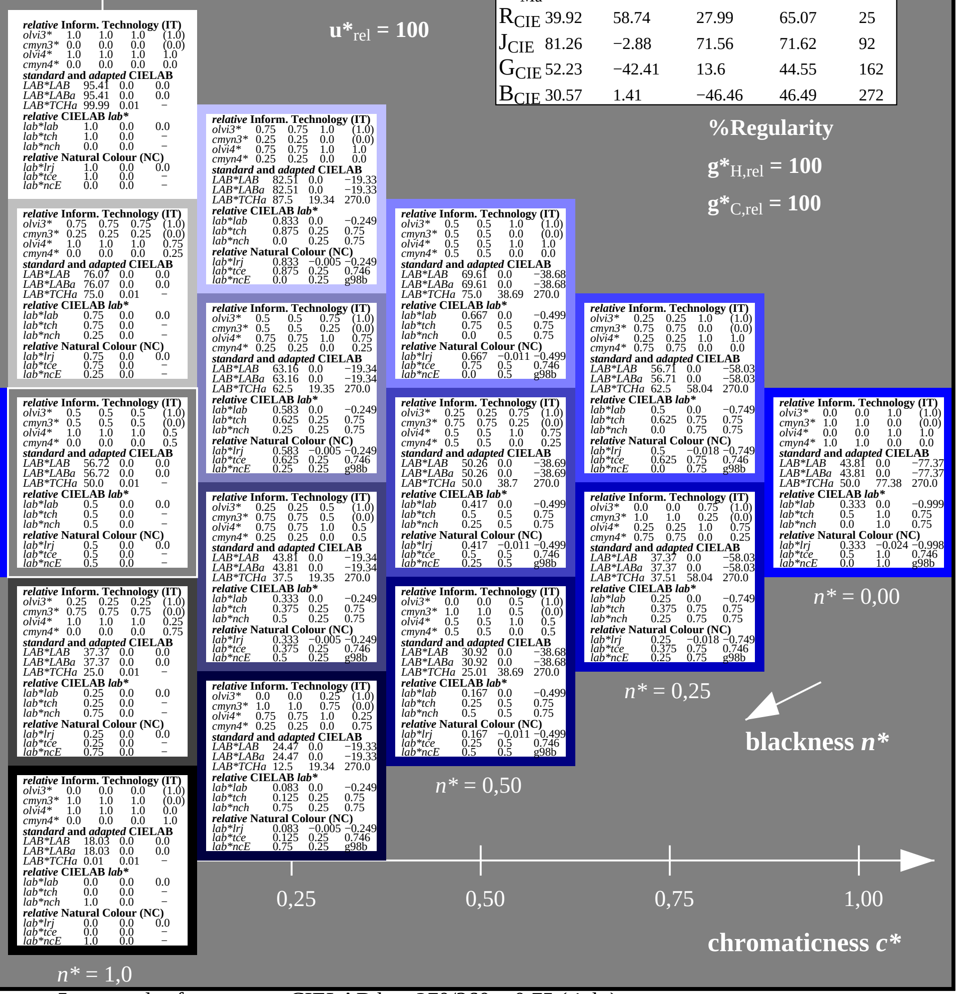
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



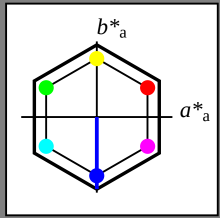
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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^*

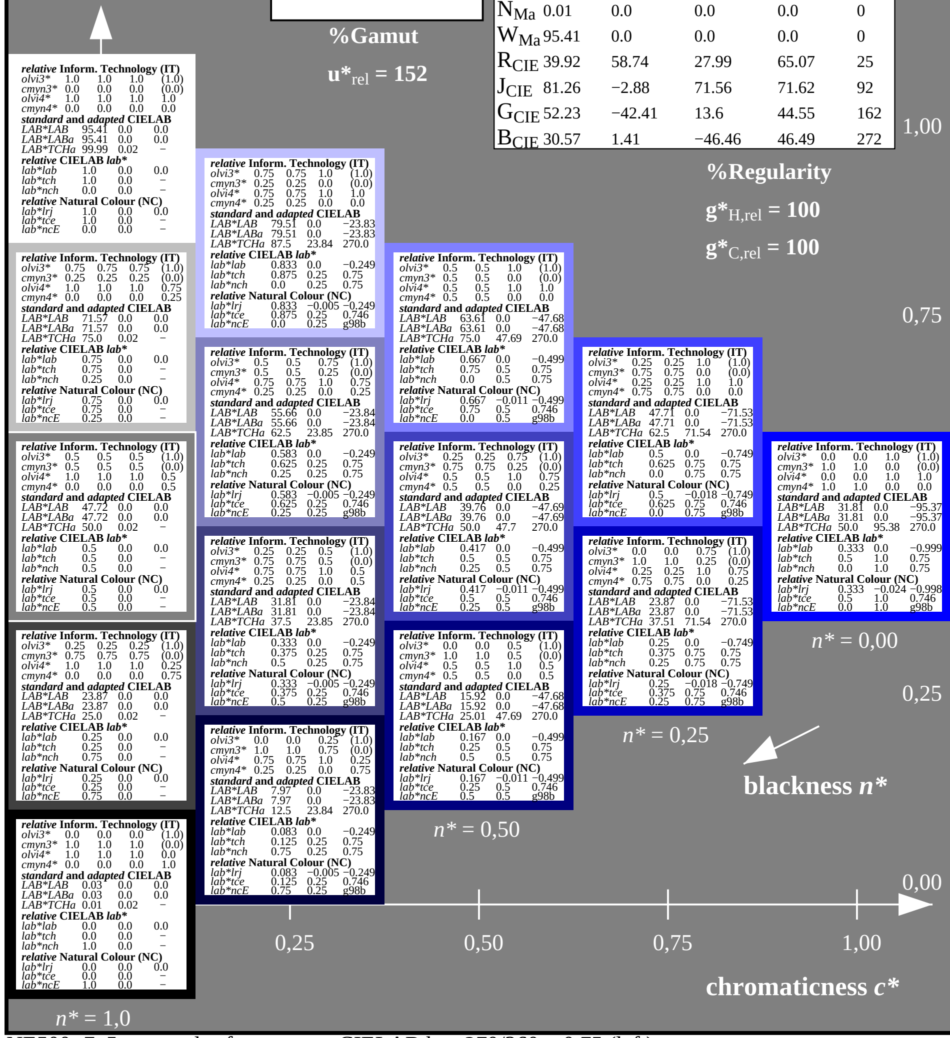


%Gamut
u^*_{rel} = 152

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

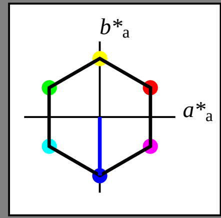
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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^*

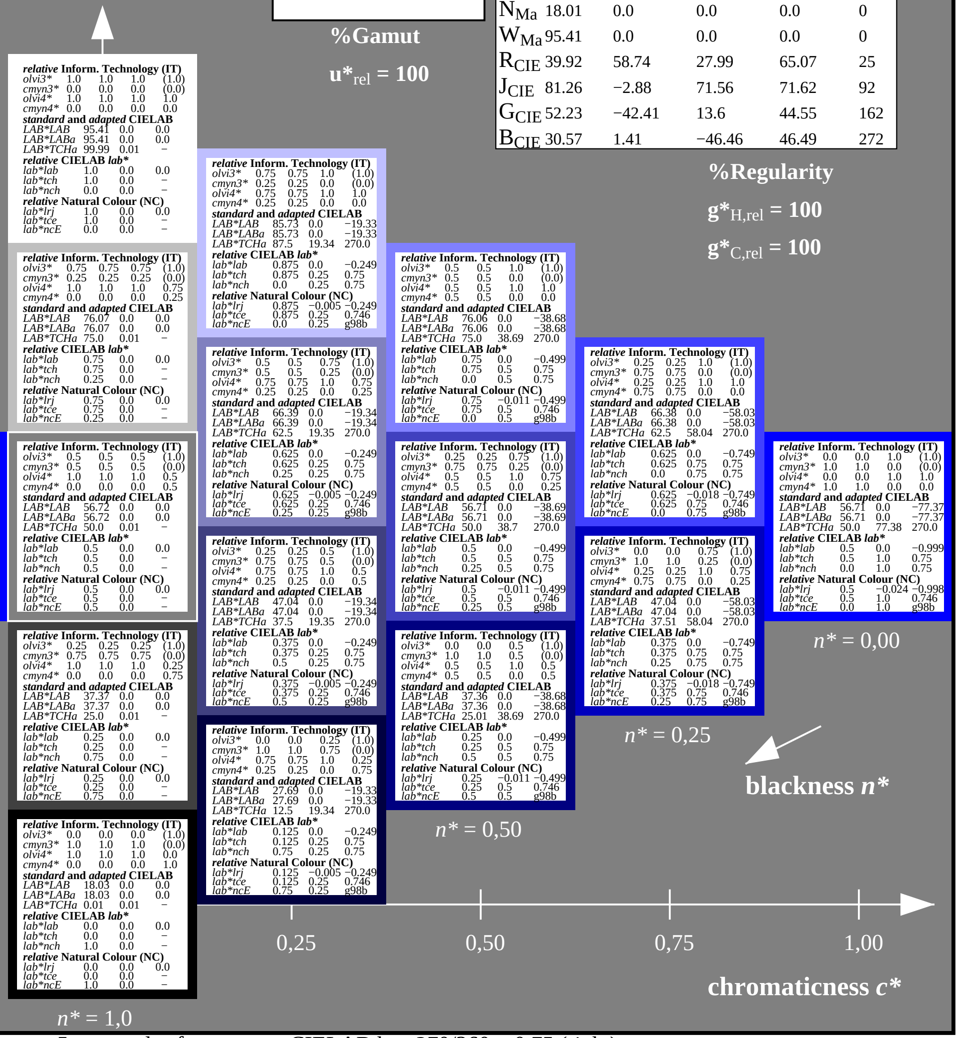


%Gamut
u^*_{rel} = 100

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



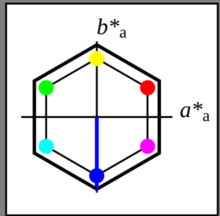
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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

$u^*_{rel} = 152$

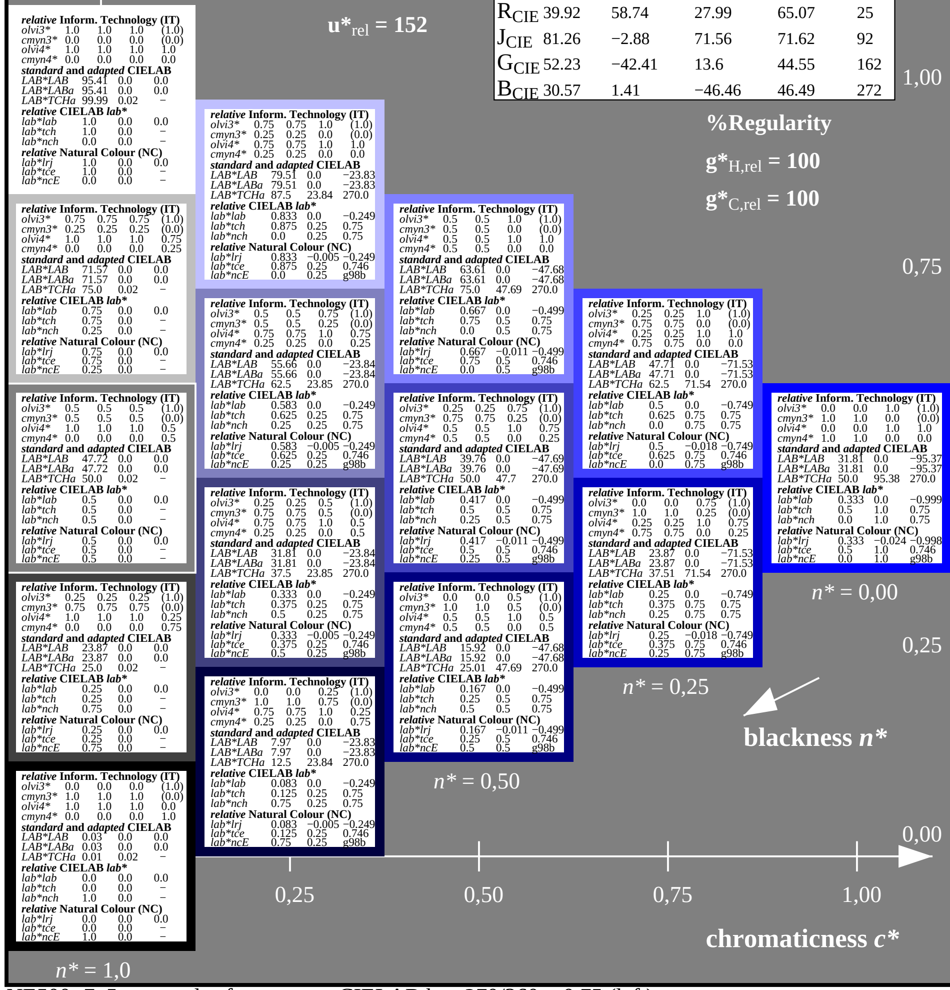
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

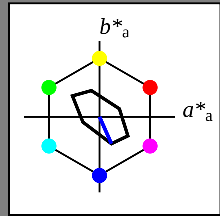
$g^*_{C,rel} = 100$



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

$u^*_{rel} = 16$

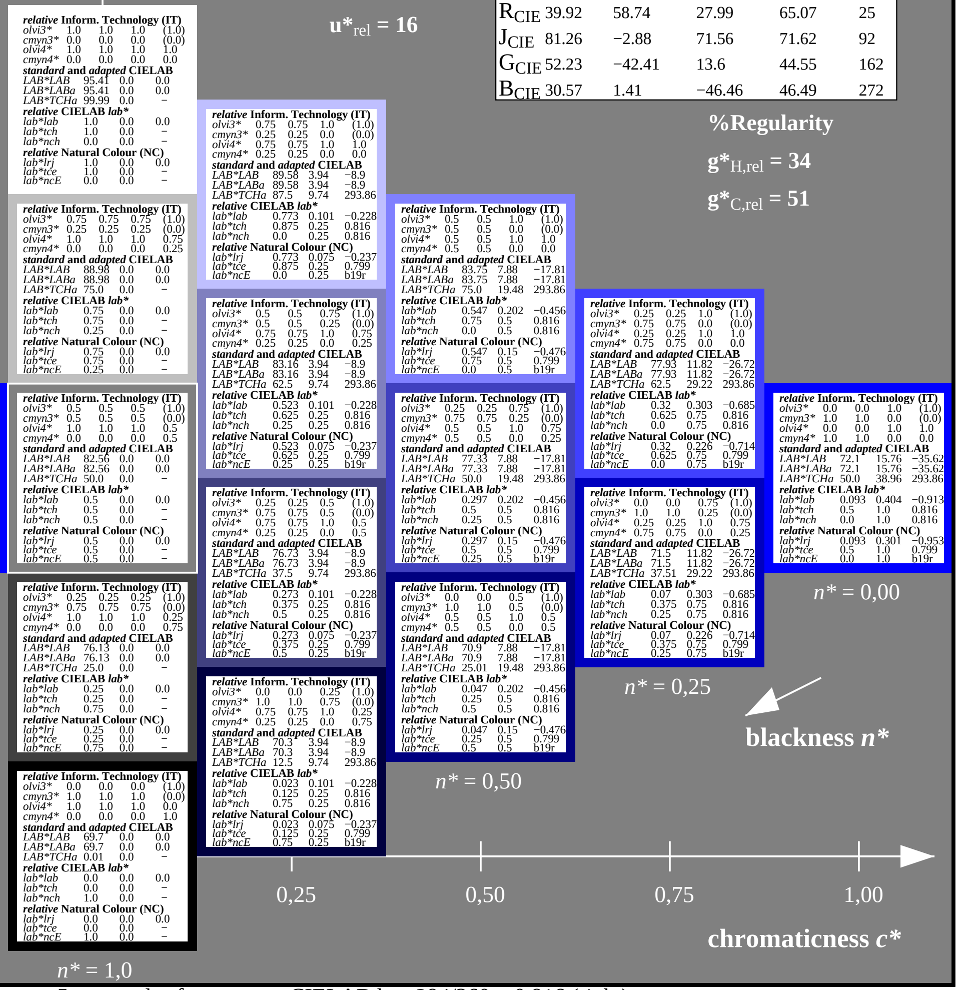
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

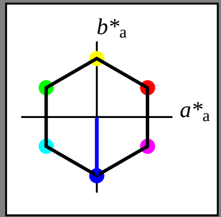


NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left) 5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

Input: Colorimetric 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

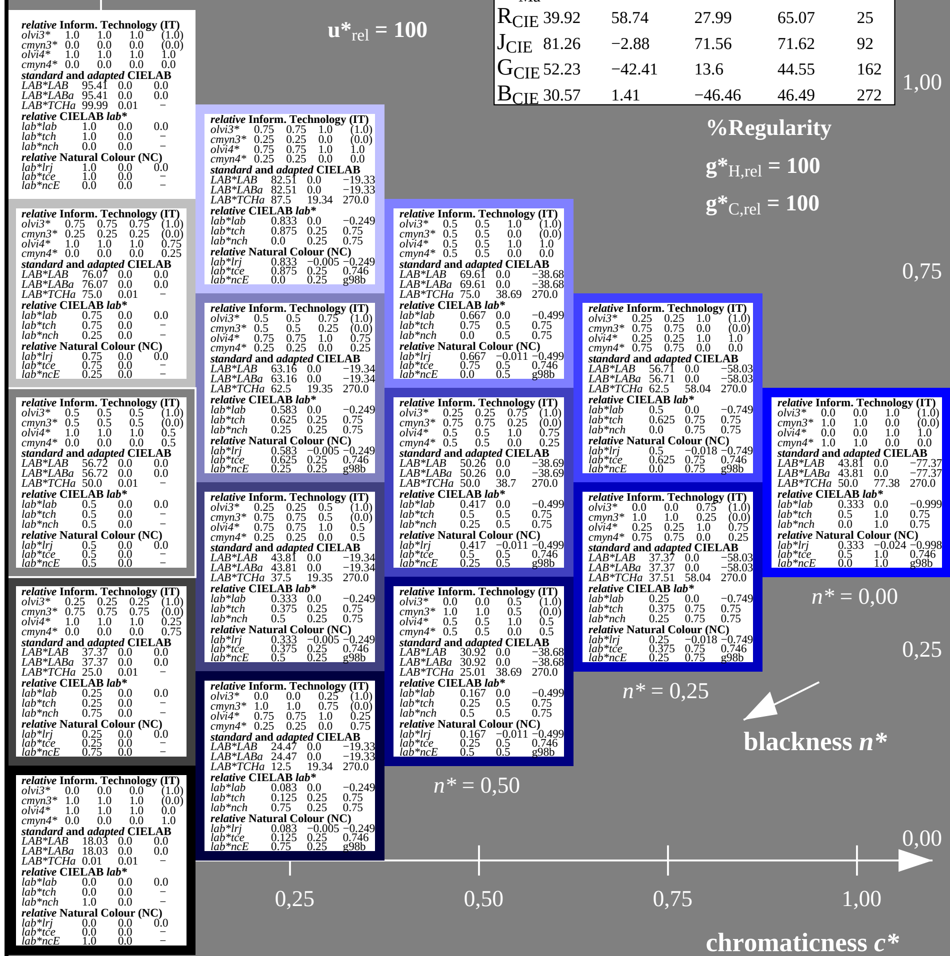
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

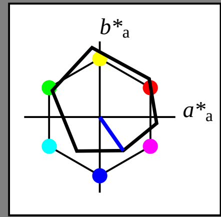
g*C,rel = 100



Output: Colorimetric 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

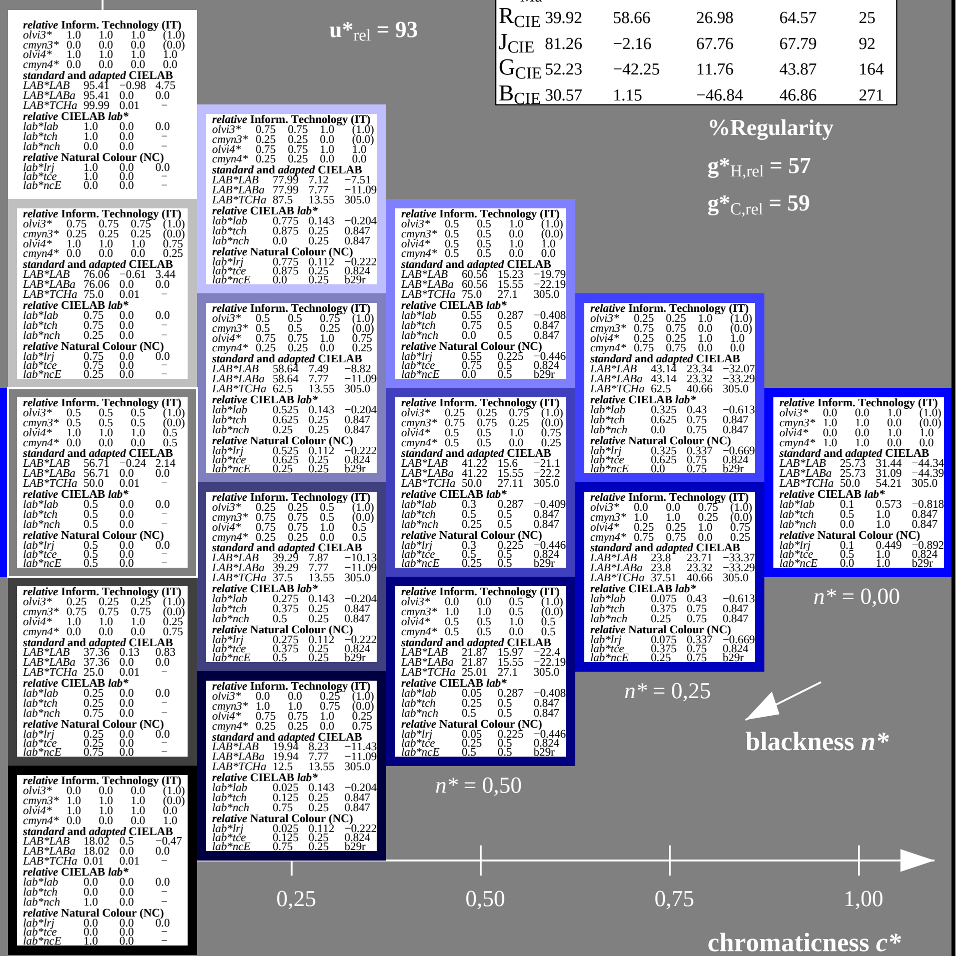
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Reflective System NRS18

for hue *h = *lab*h* = 270/360 = 0.75**

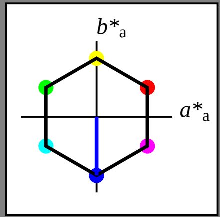
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

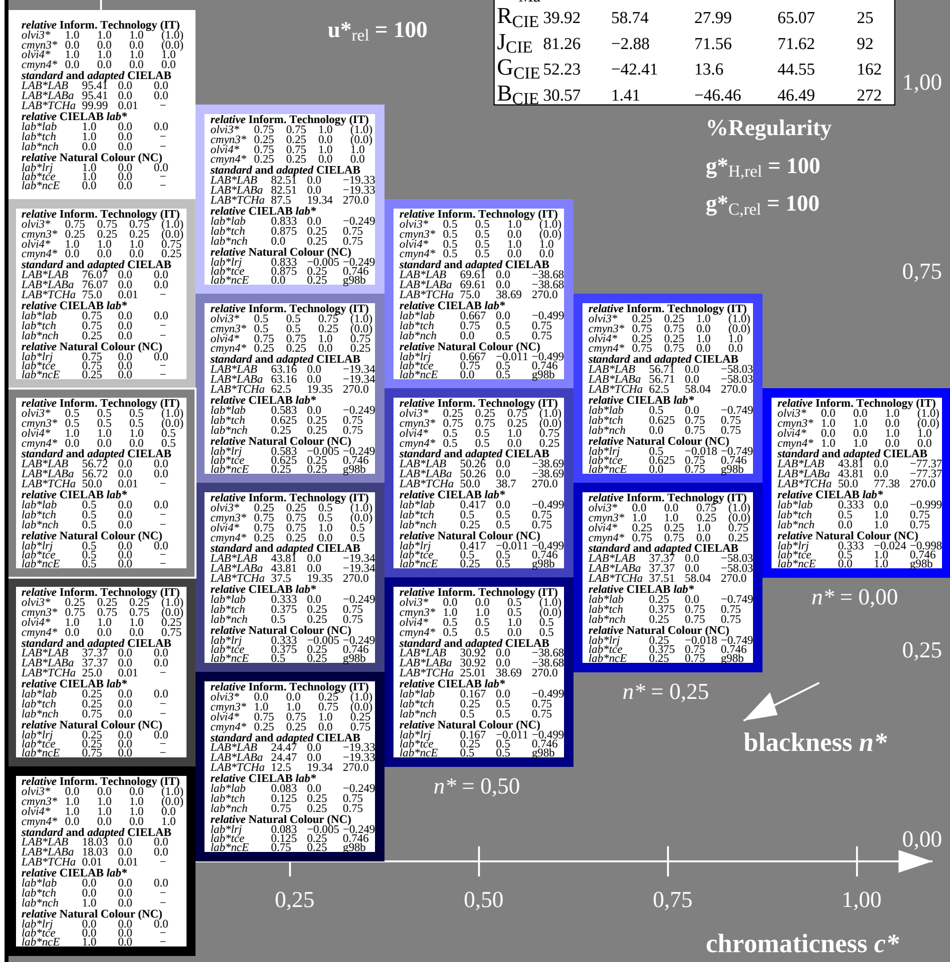
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS00

for hue *h = *lab*h* = 306/360 = 0.851**

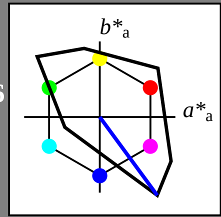
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 158

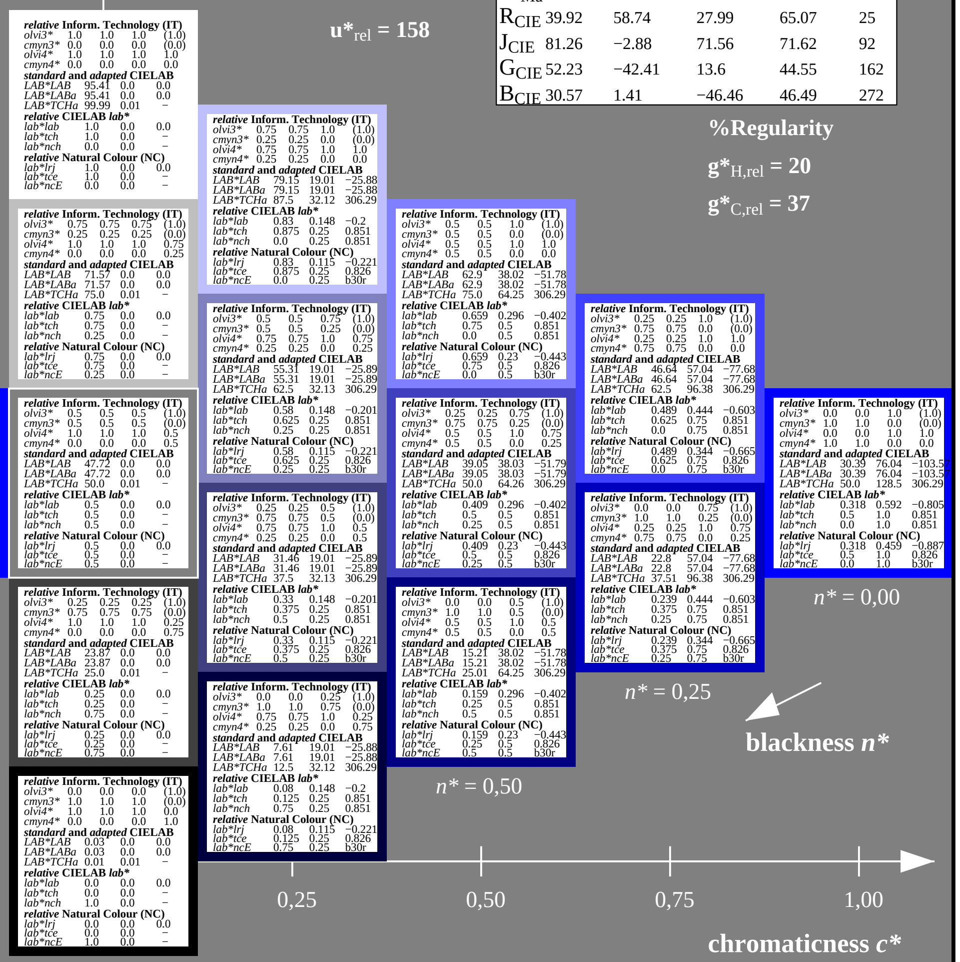
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



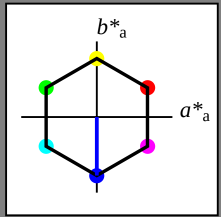
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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^*

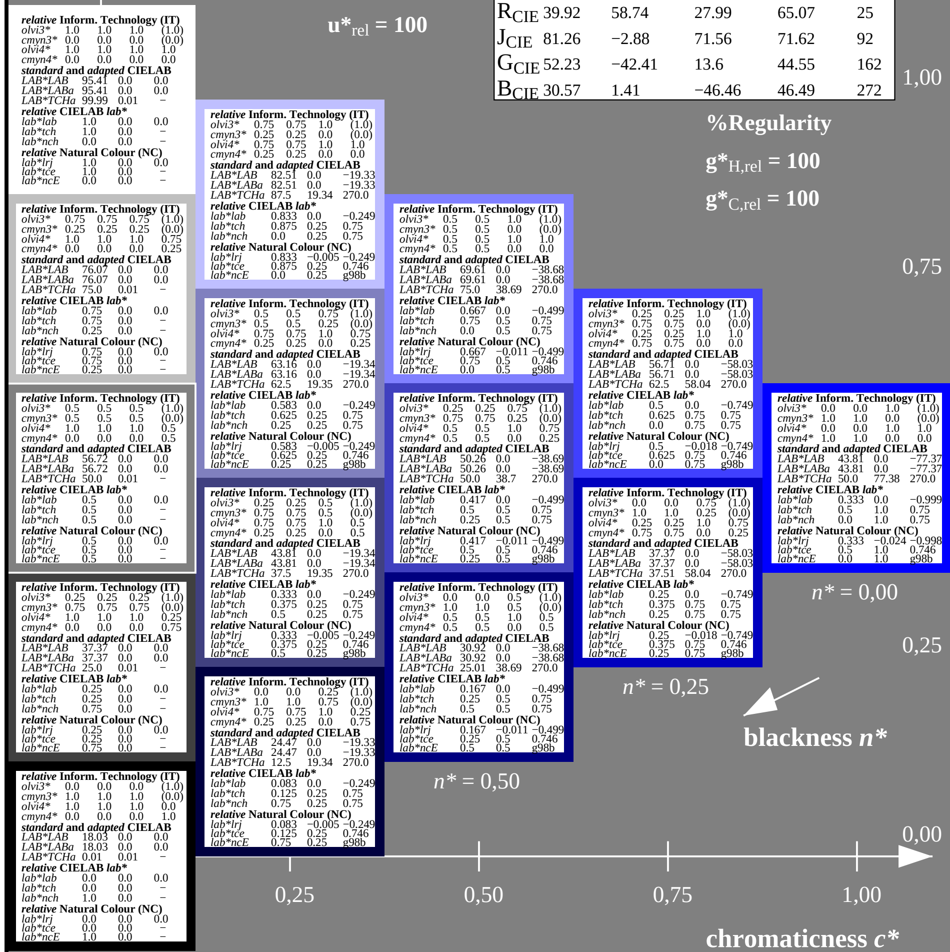


%Gamut
$u^*_{rel} = 100$

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

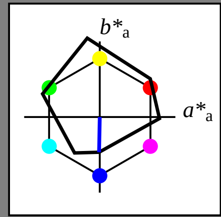
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

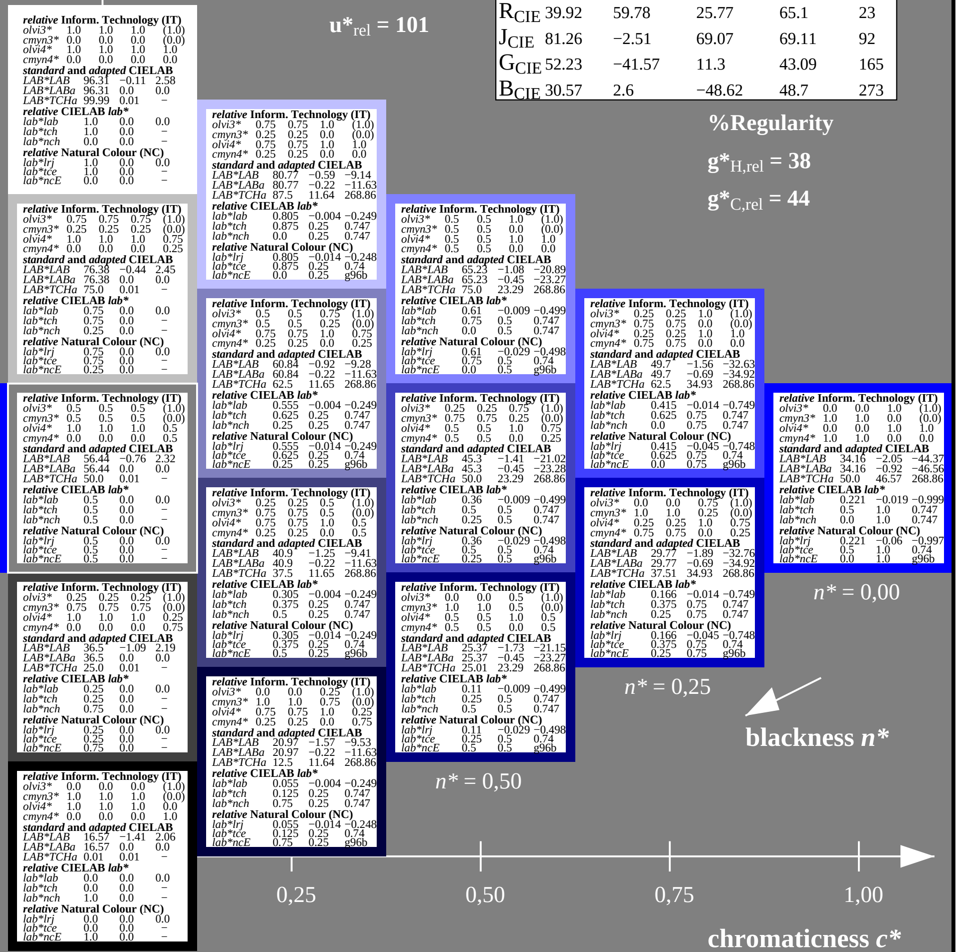


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



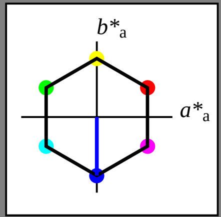
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric Natural 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

$u^*_{rel} = 100$

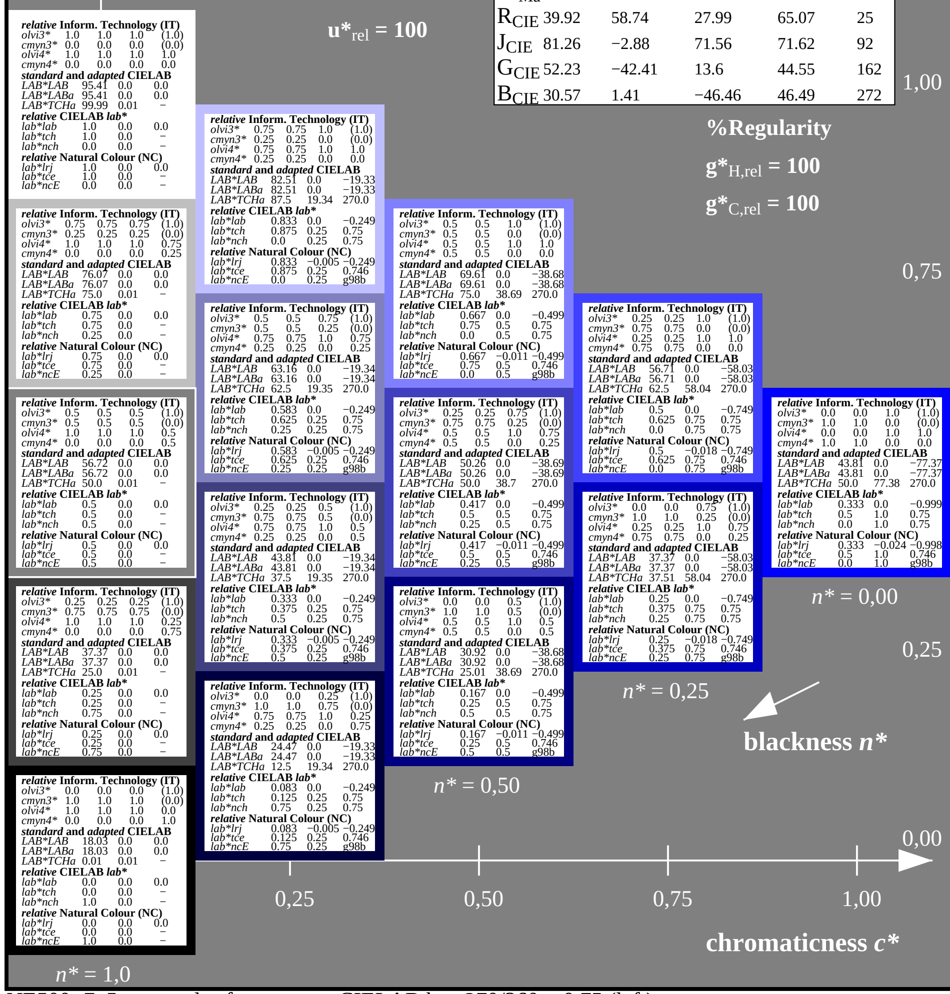
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

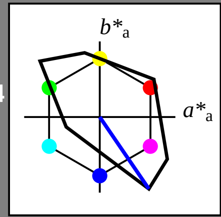
$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System 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

$u^*_{rel} = 118$

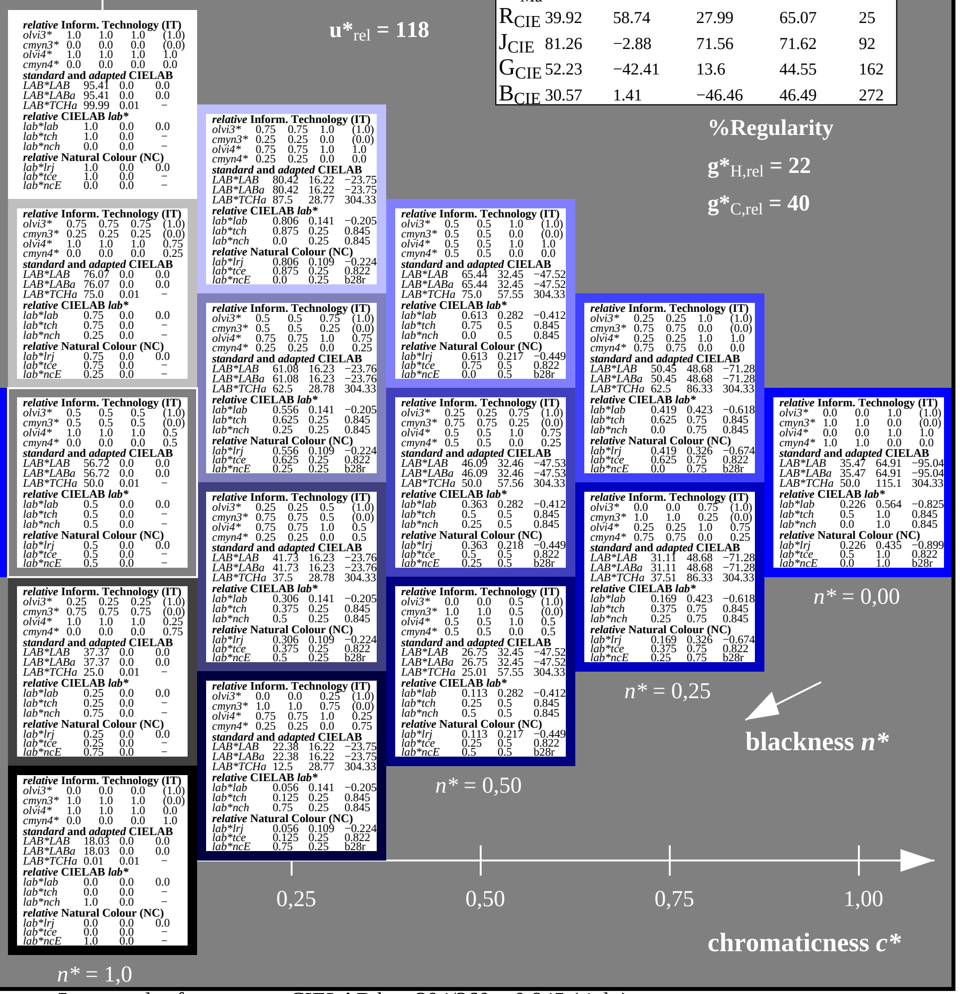
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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**

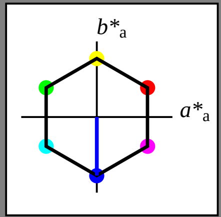
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

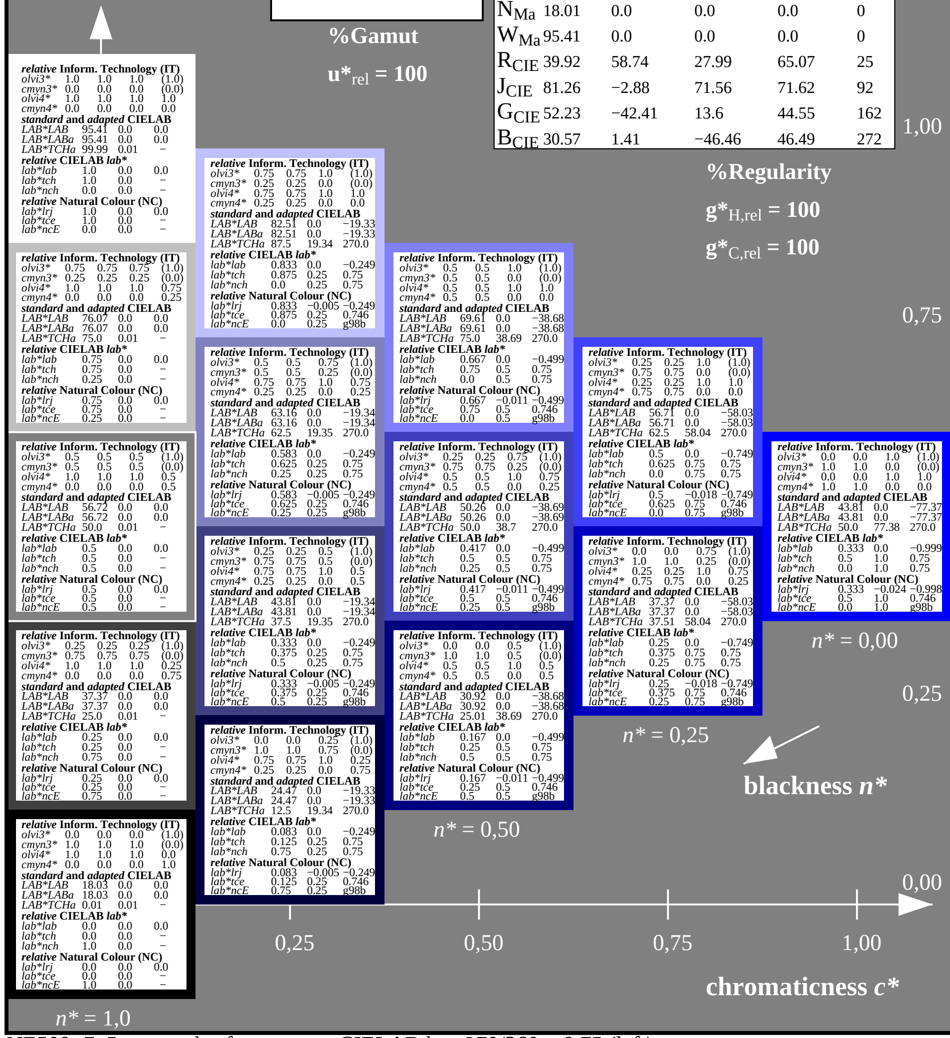
u*rel = 100

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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 270/360 = 0.75**

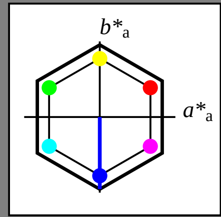
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

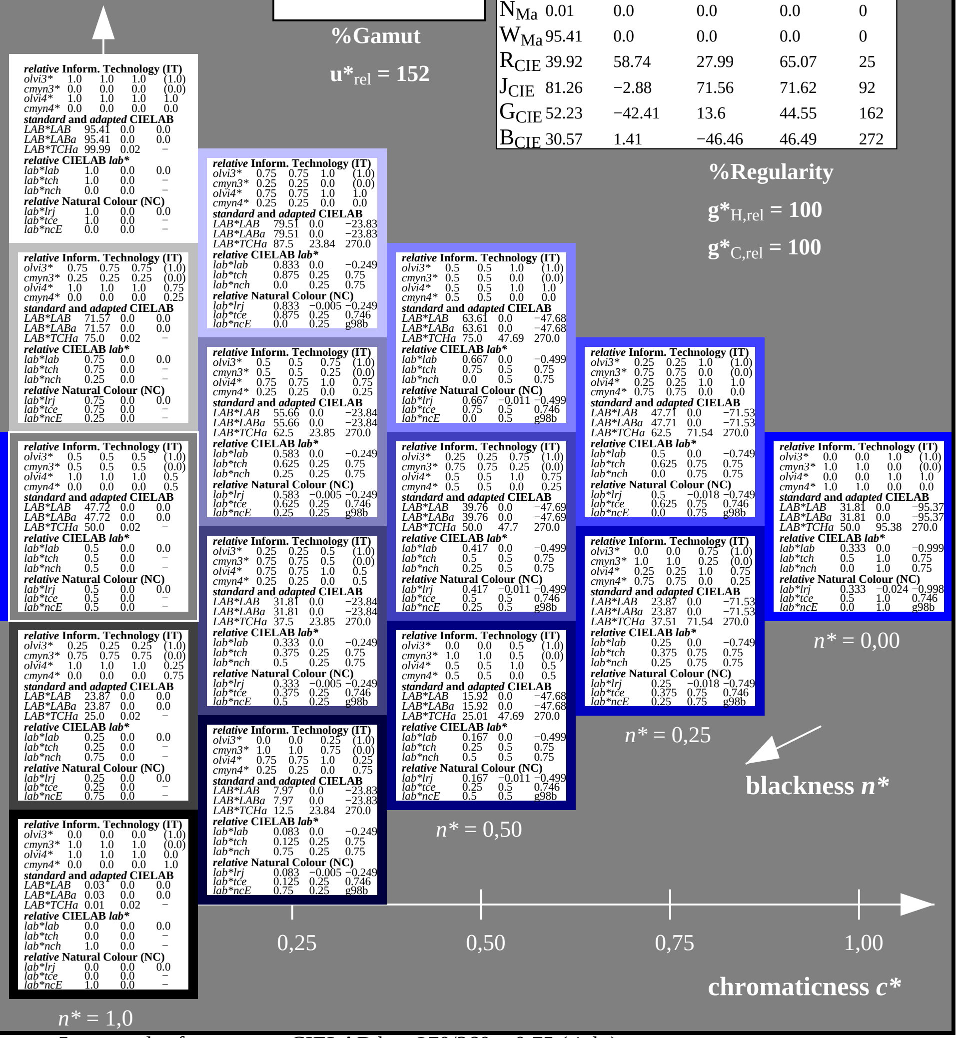
u*rel = 152

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



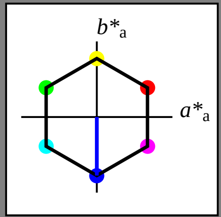
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

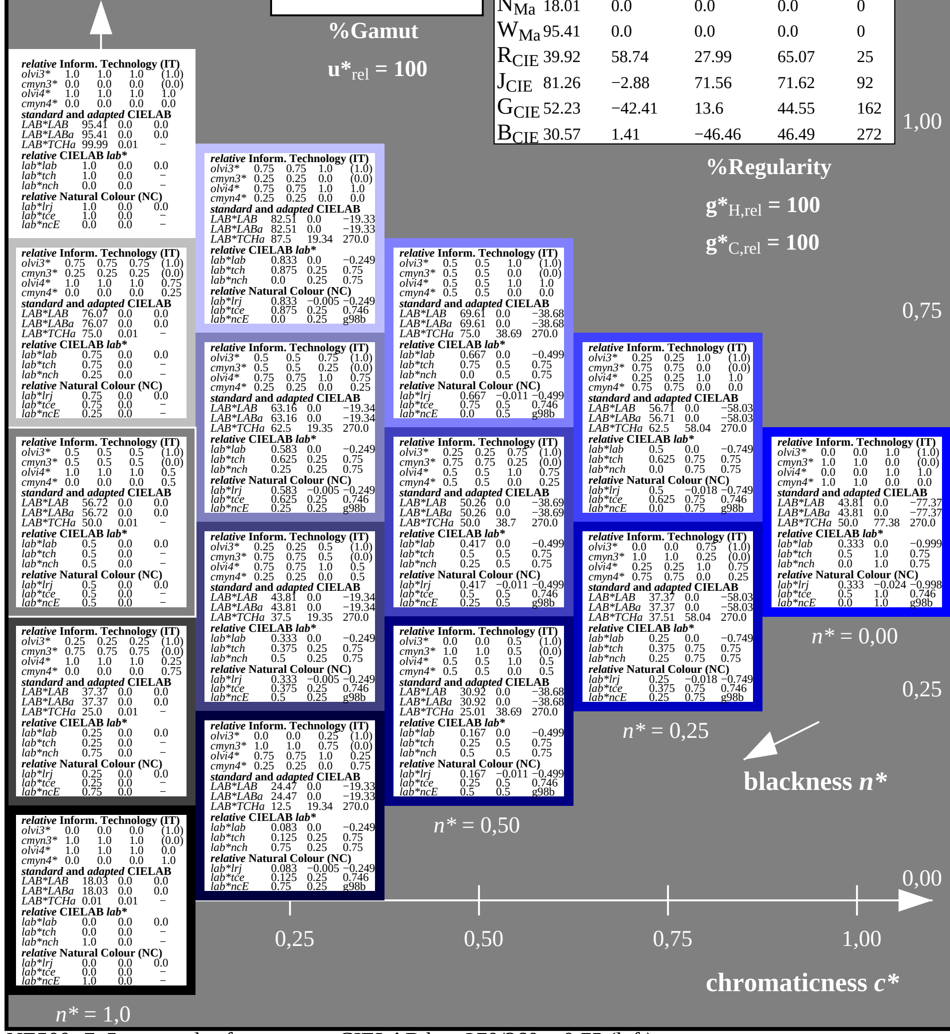
Input: Colorimetric Natural Reflective System NRS18
for hue *h = *lab*h* = 270/360 = 0.75**
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



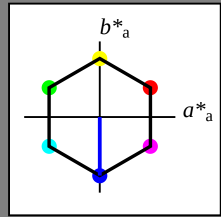
NRS18; adapted (a) CIELAB data				
$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma} 43.81	67.03	38.7	77.4	30
Y_{Ma} 69.61	0.0	77.4	77.4	90
L_{Ma} 43.81	−67.02	38.7	77.4	150
C_{Ma} 69.61	−67.02	−38.69	77.4	210
V_{Ma} 43.81	0.0	−77.39	77.4	270
M_{Ma} 69.61	67.03	−38.69	77.4	330
N_{Ma} 18.01	0.0	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



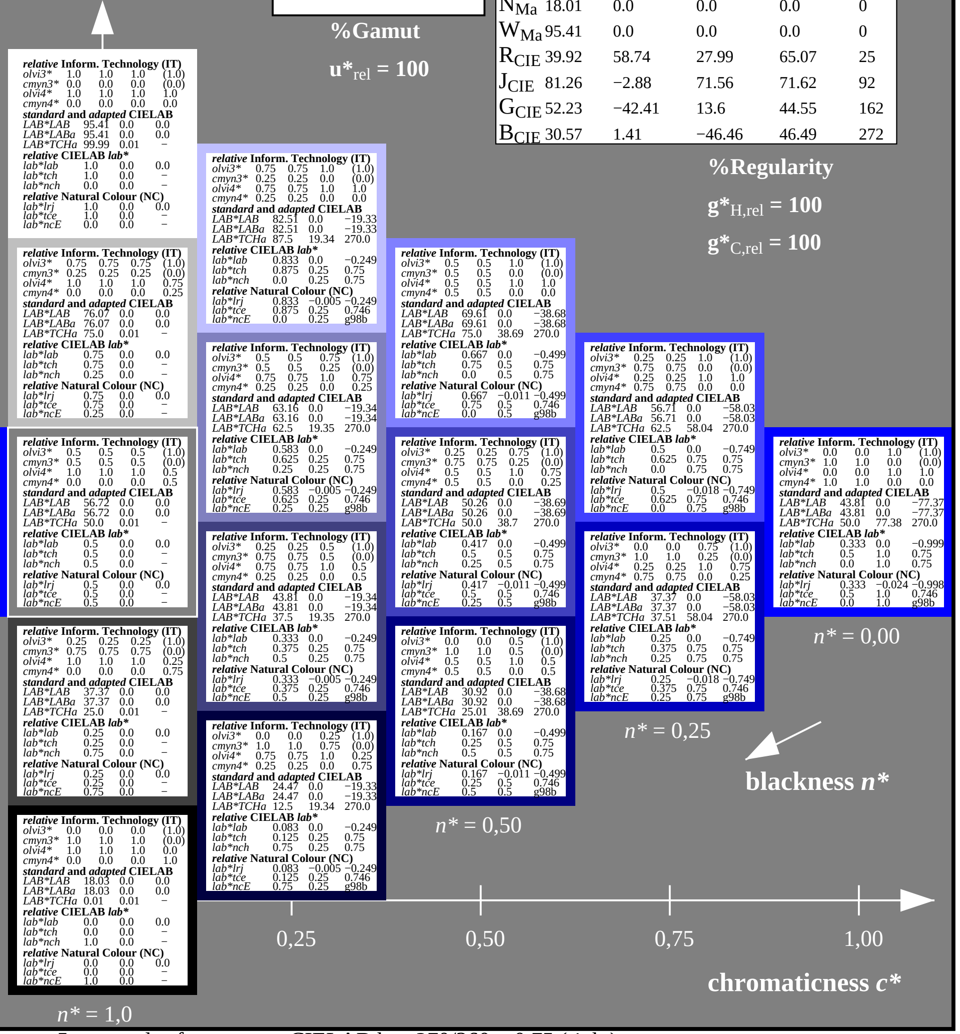
Output: Colorimetric Natural Reflective System NRS18
for hue *h = *lab*h* = 270/360 = 0.75**
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 44 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

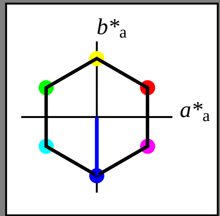
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

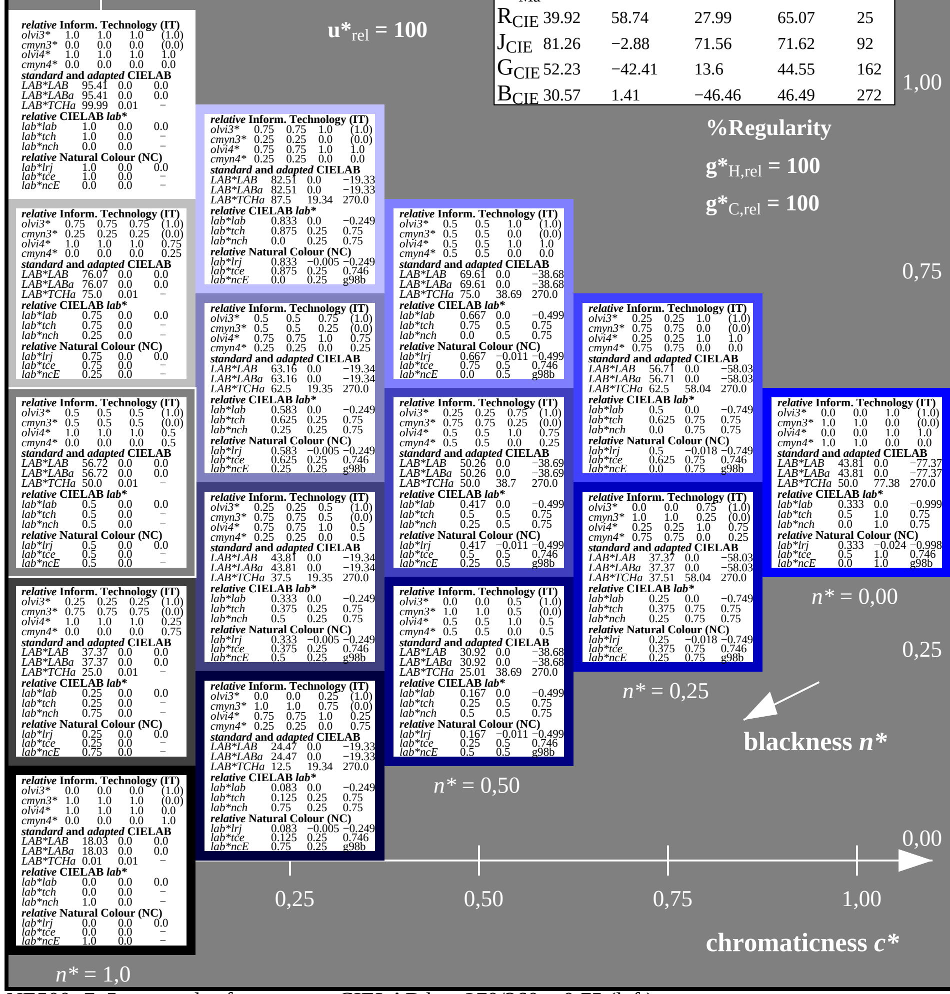
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

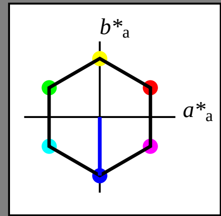
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

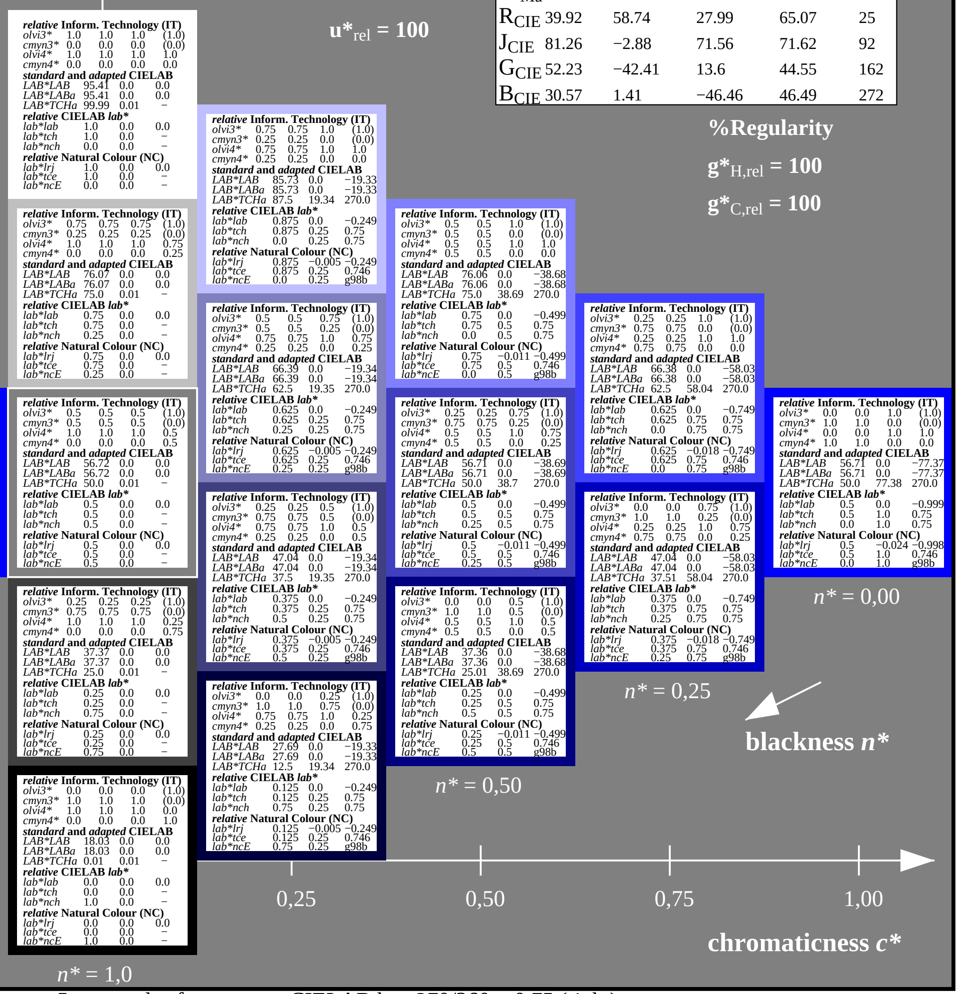
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Reflective System NRS18

for hue *h = *lab*h* = 270/360 = 0.75**

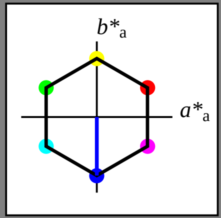
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 44 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

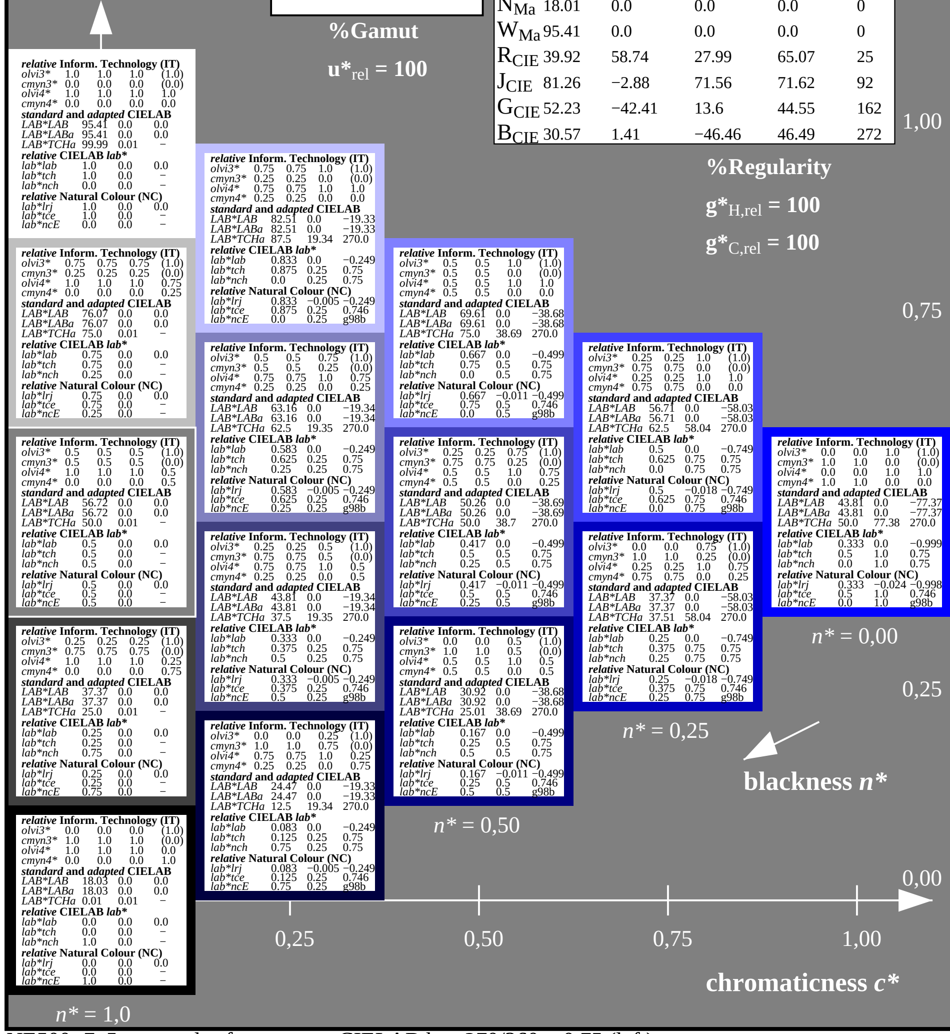
u*rel = 100

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**

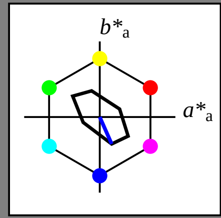
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness *t**



%Gamut

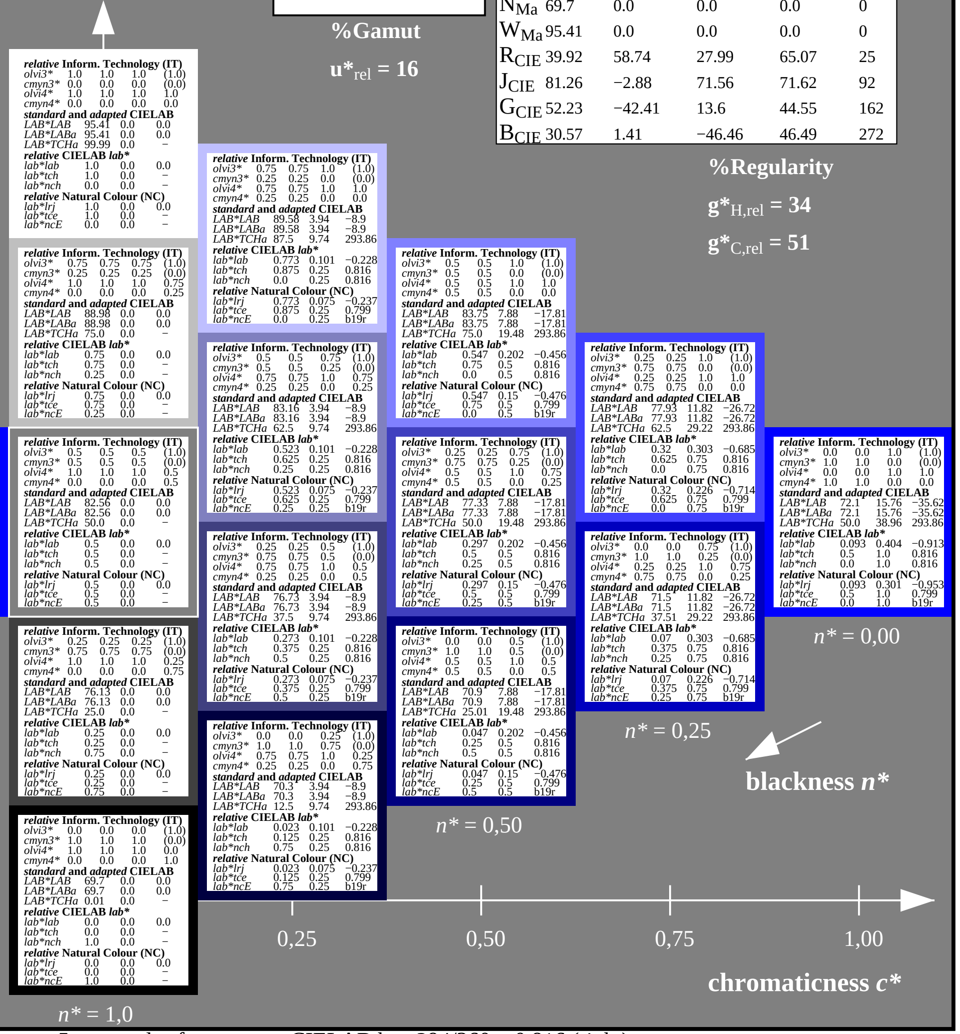
u*rel = 16

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



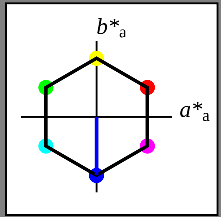
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

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

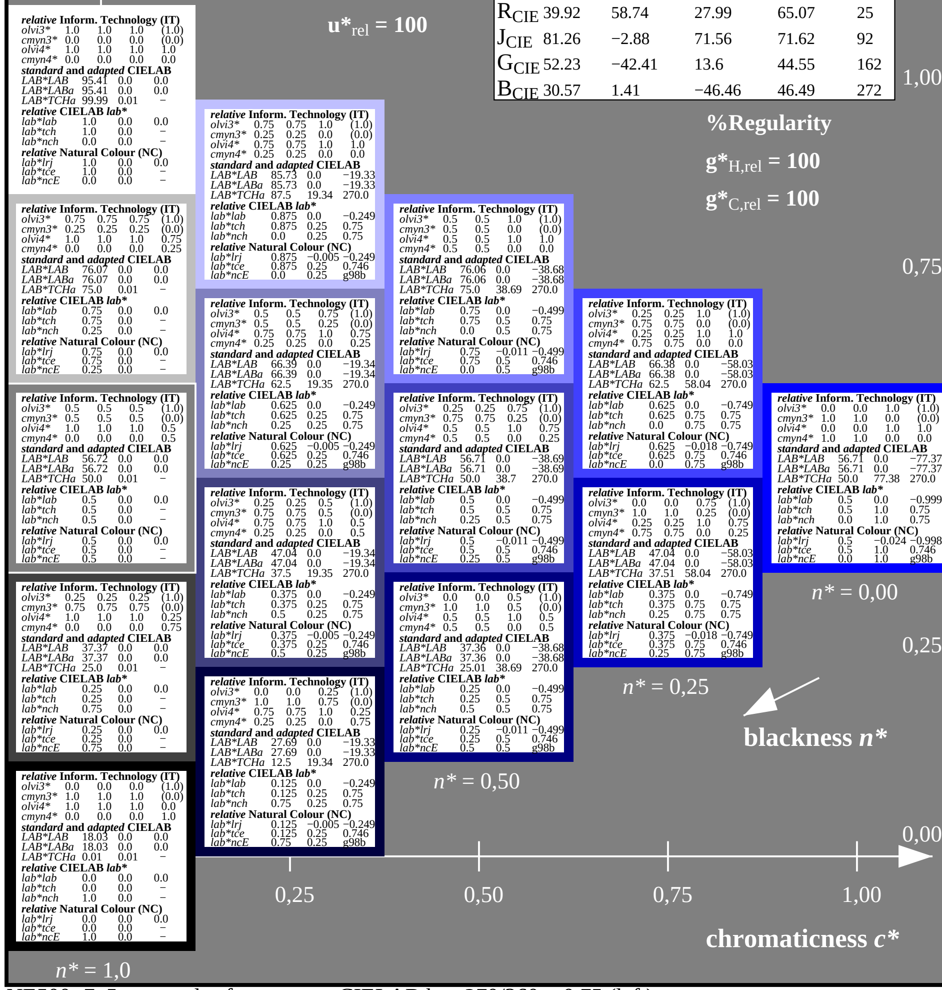
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

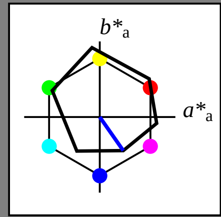
$g^*_{C,rel}$ = 100



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

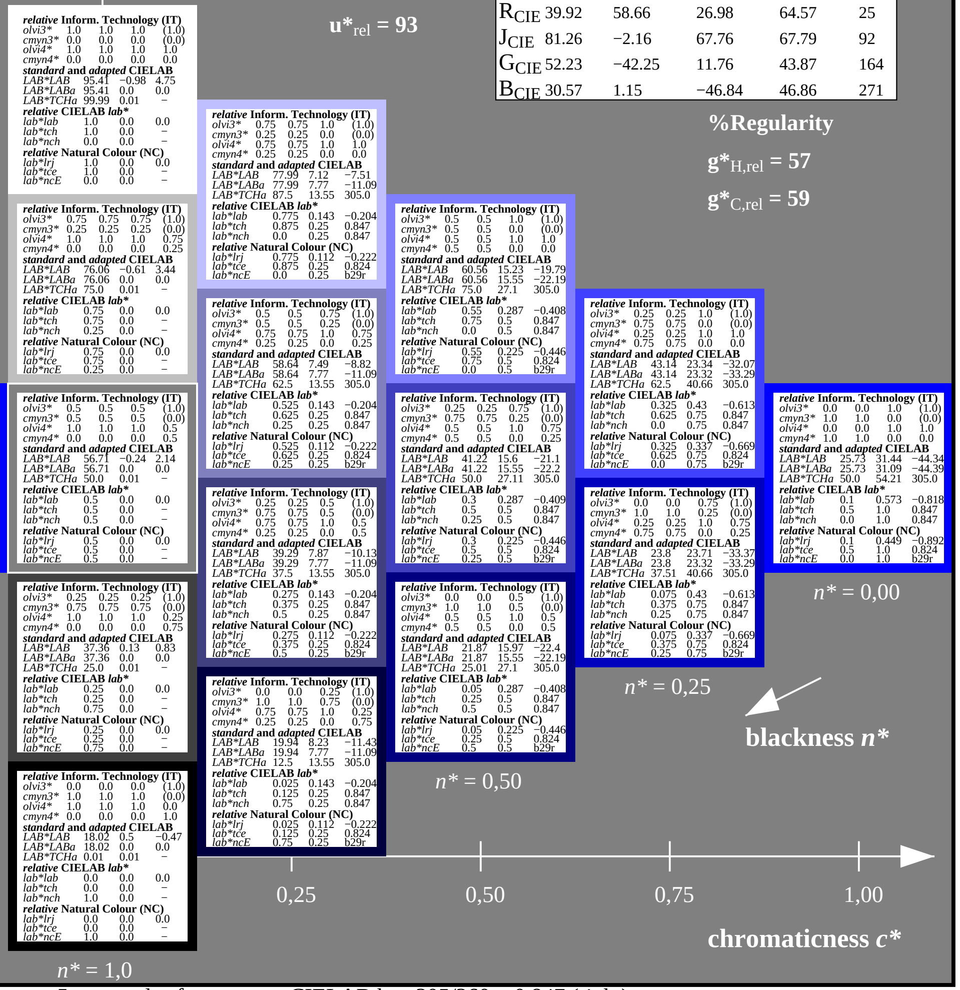
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

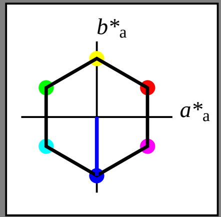
*lab*tch and lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

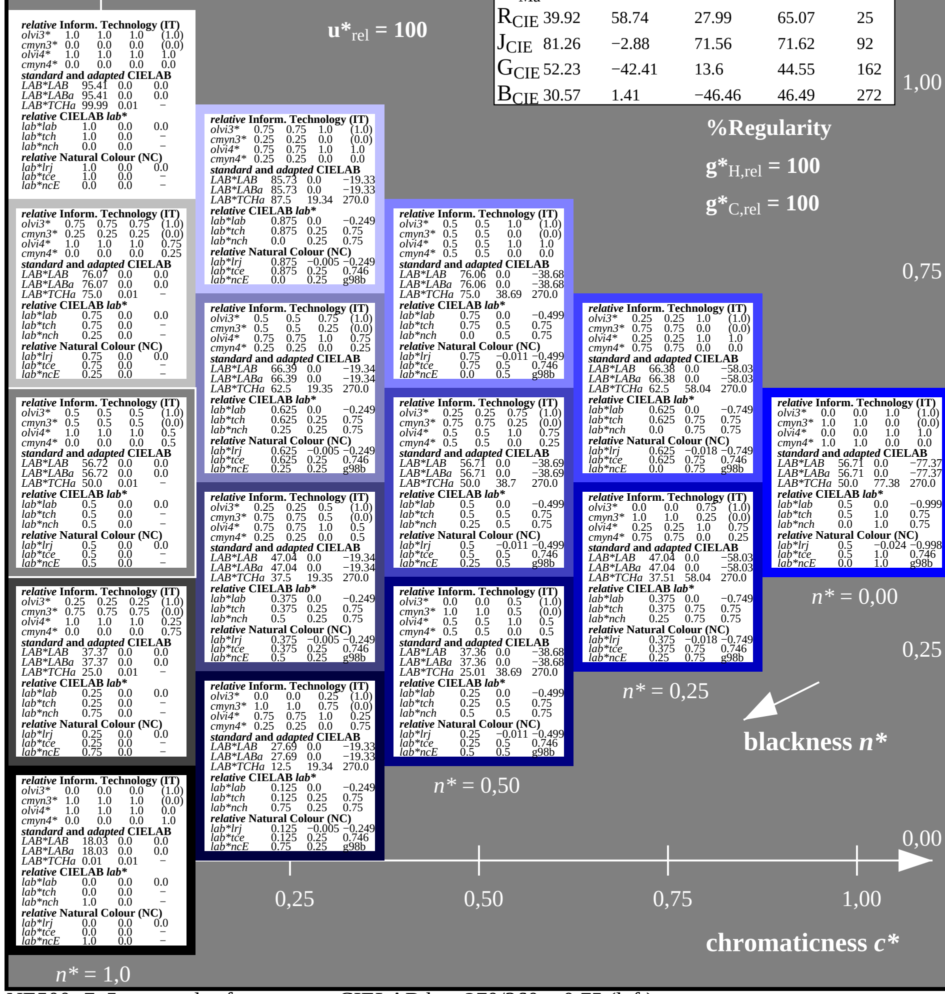
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

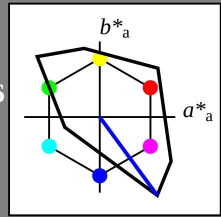
*lab*tch and lab*nch*

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

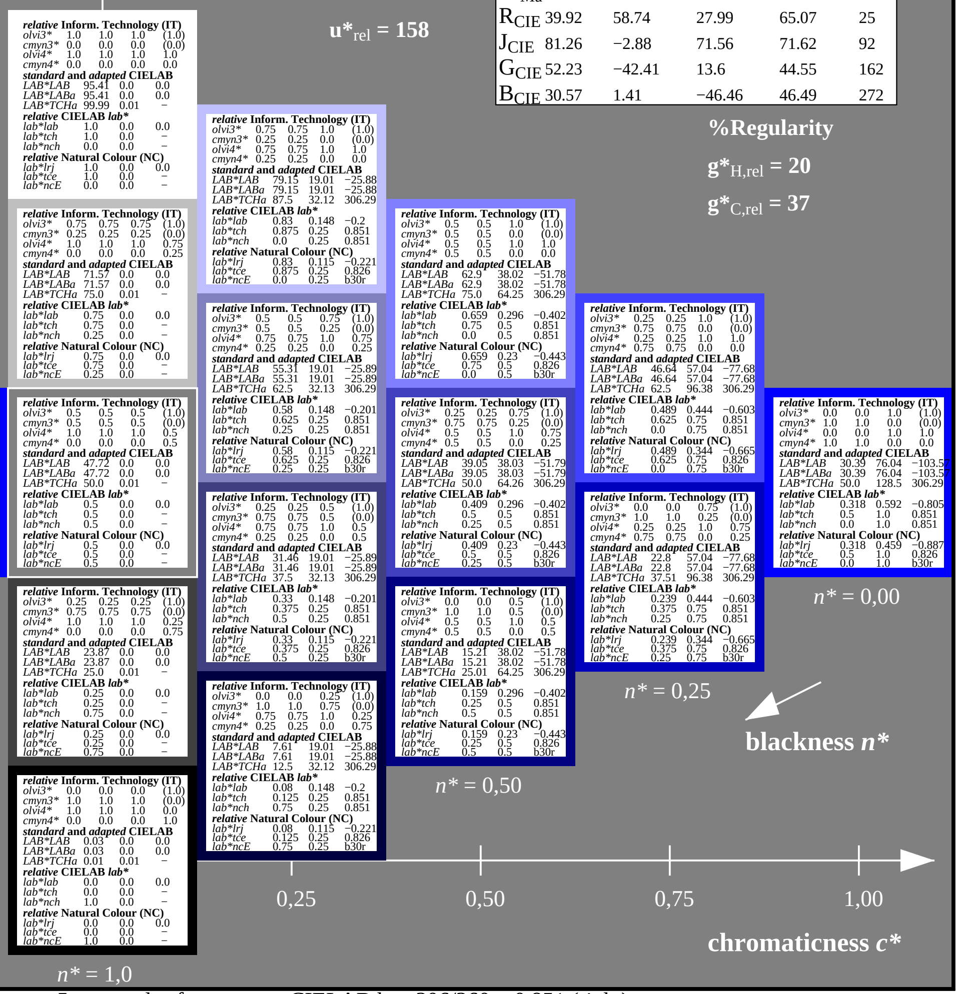
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

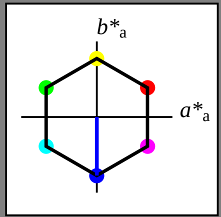
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

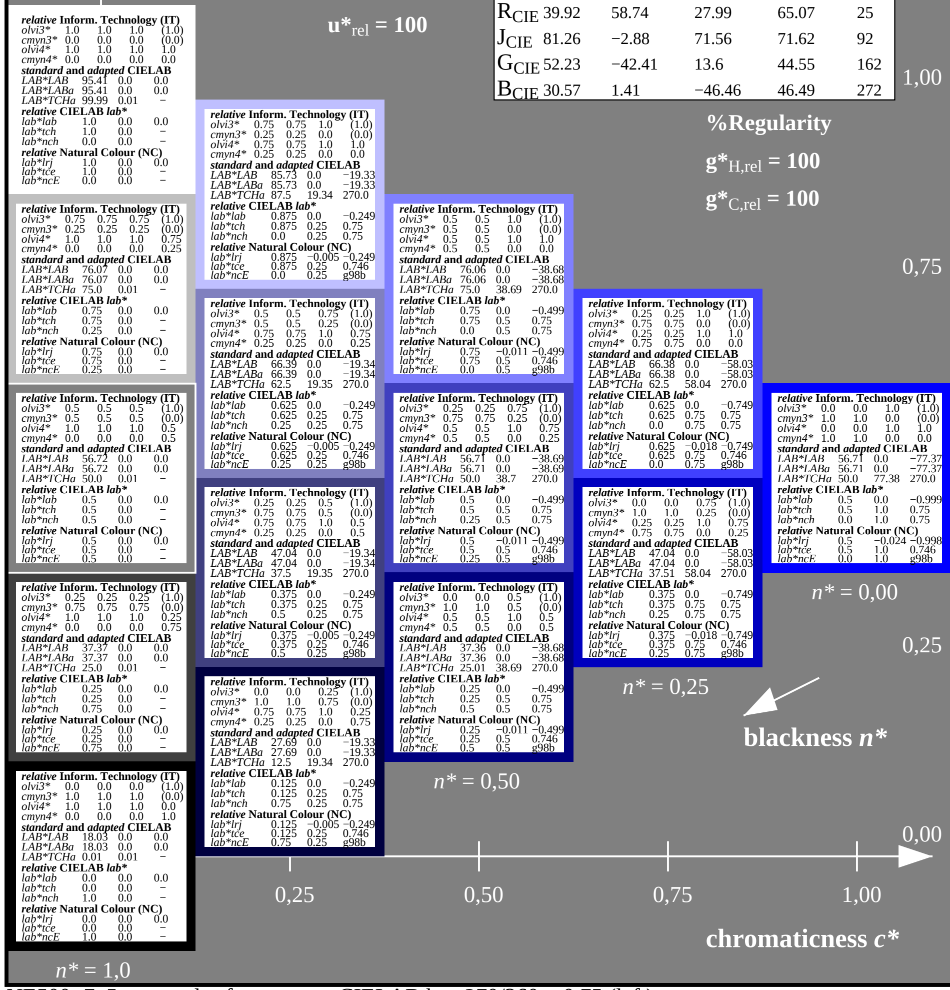
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 269/360 = 0.747$

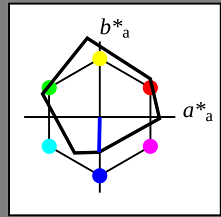
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 34 47 269

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 101

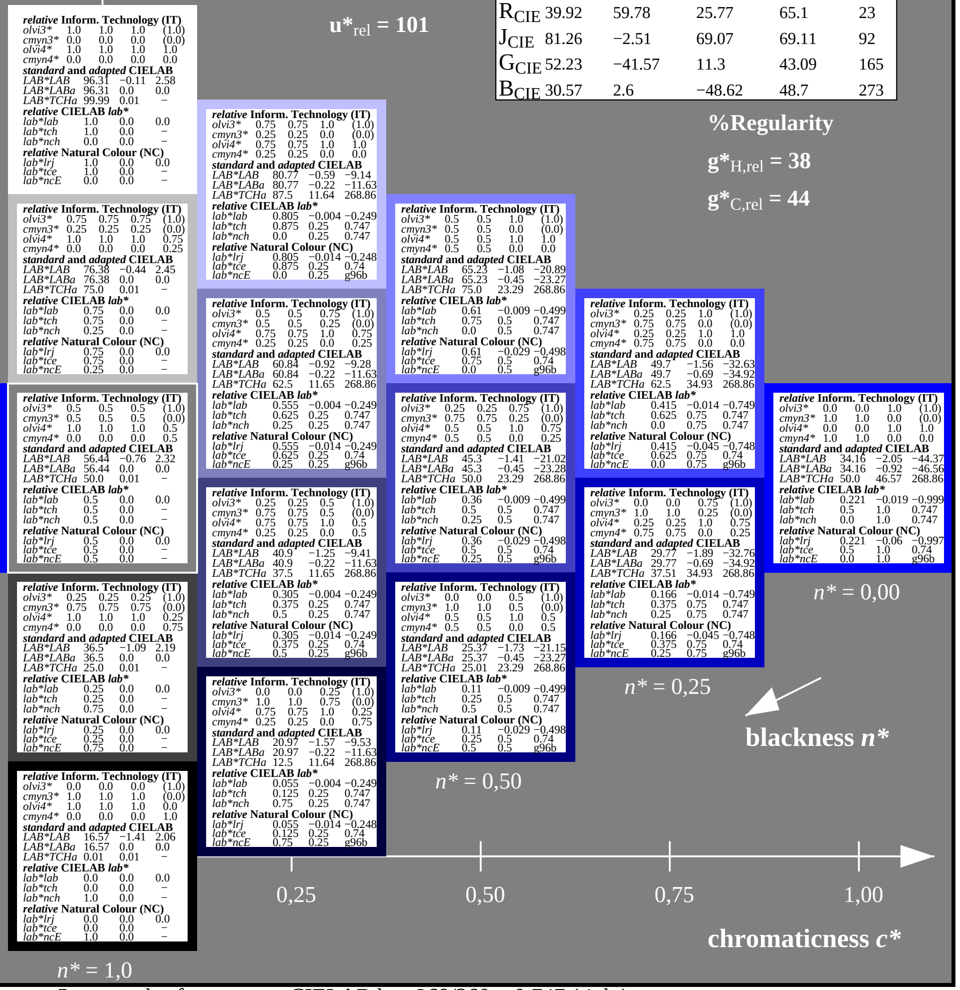
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

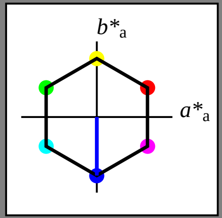


NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 269/360 = 0.747 (right)

Input: Colorimetric 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^*

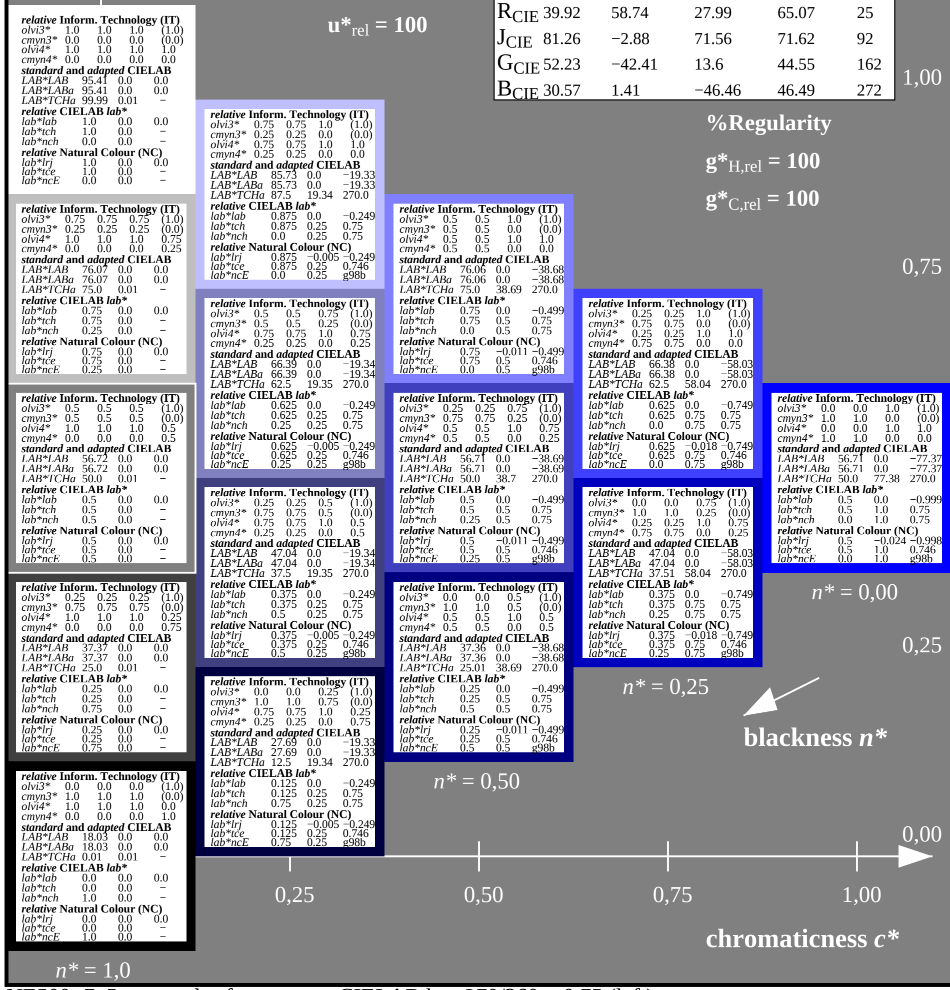


%Gamut
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

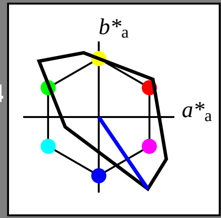
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

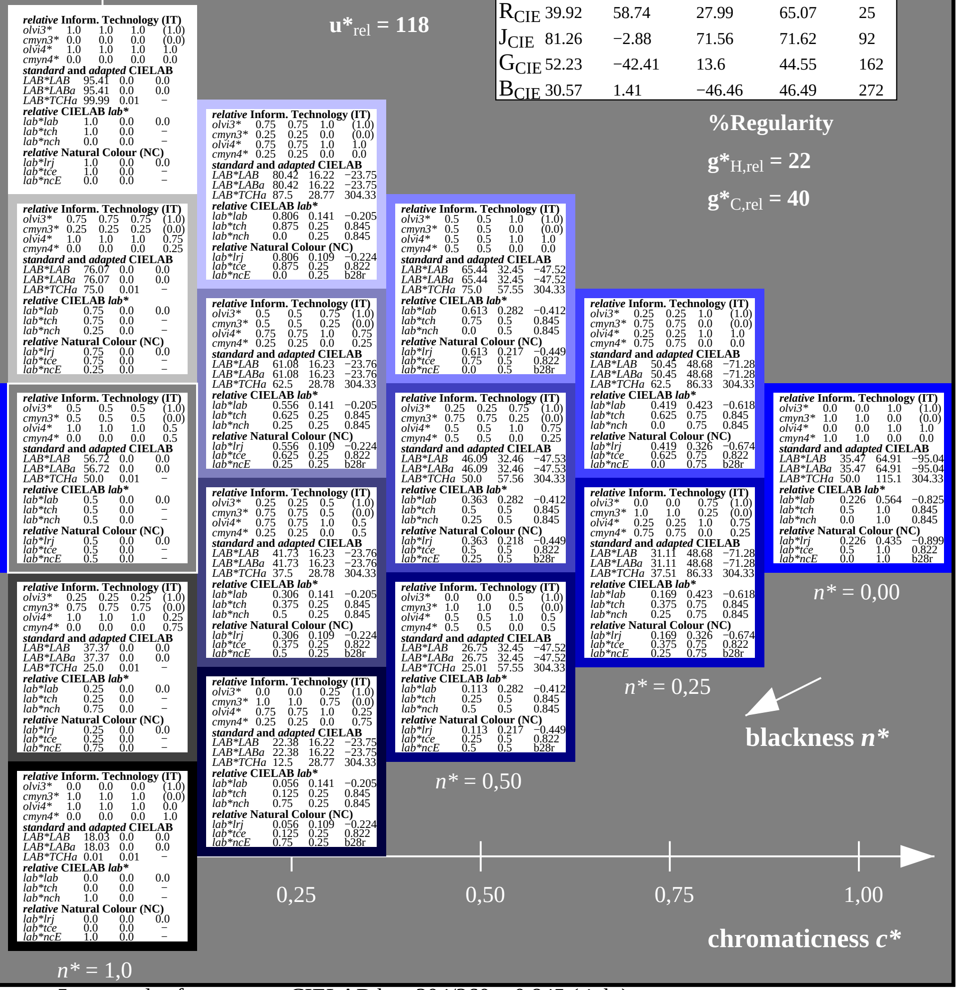


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$

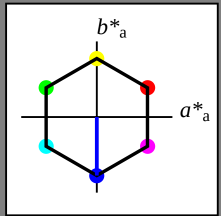


NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)
5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

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

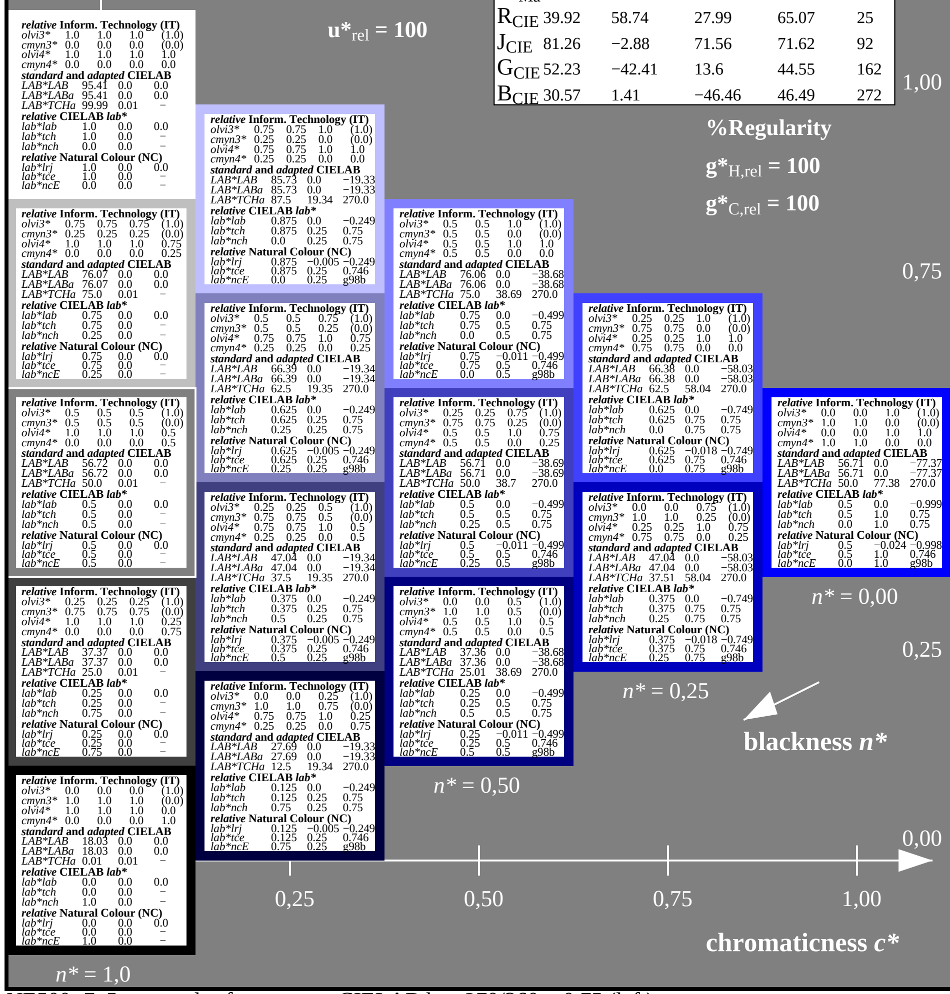
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

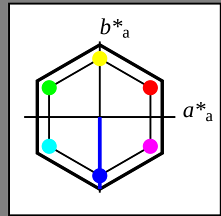
$g^*_{C,rel}$ = 100



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

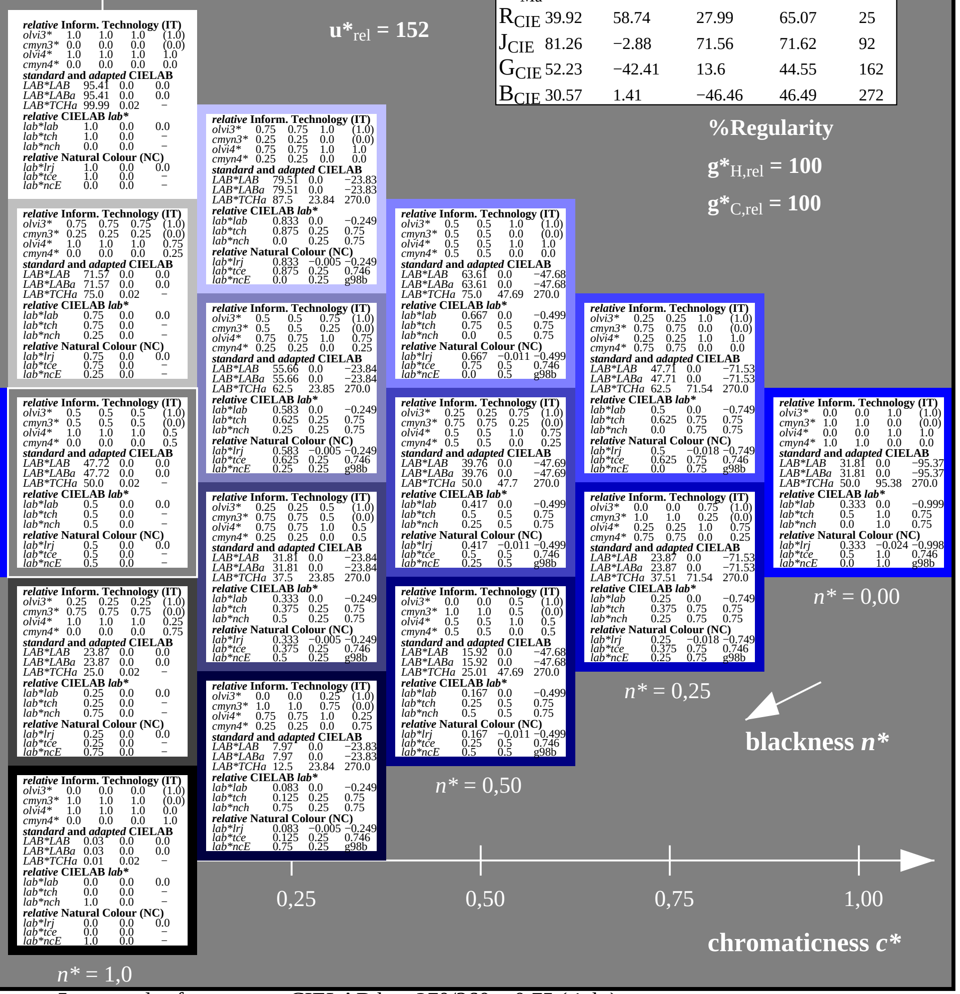
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



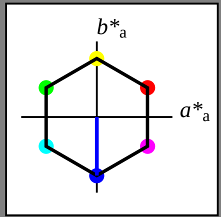
NE500−7, 5 step scales for constant CIELAB hue 270/360 = 0.75 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

Input: Colorimetric 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

$u^*_{rel} = 100$

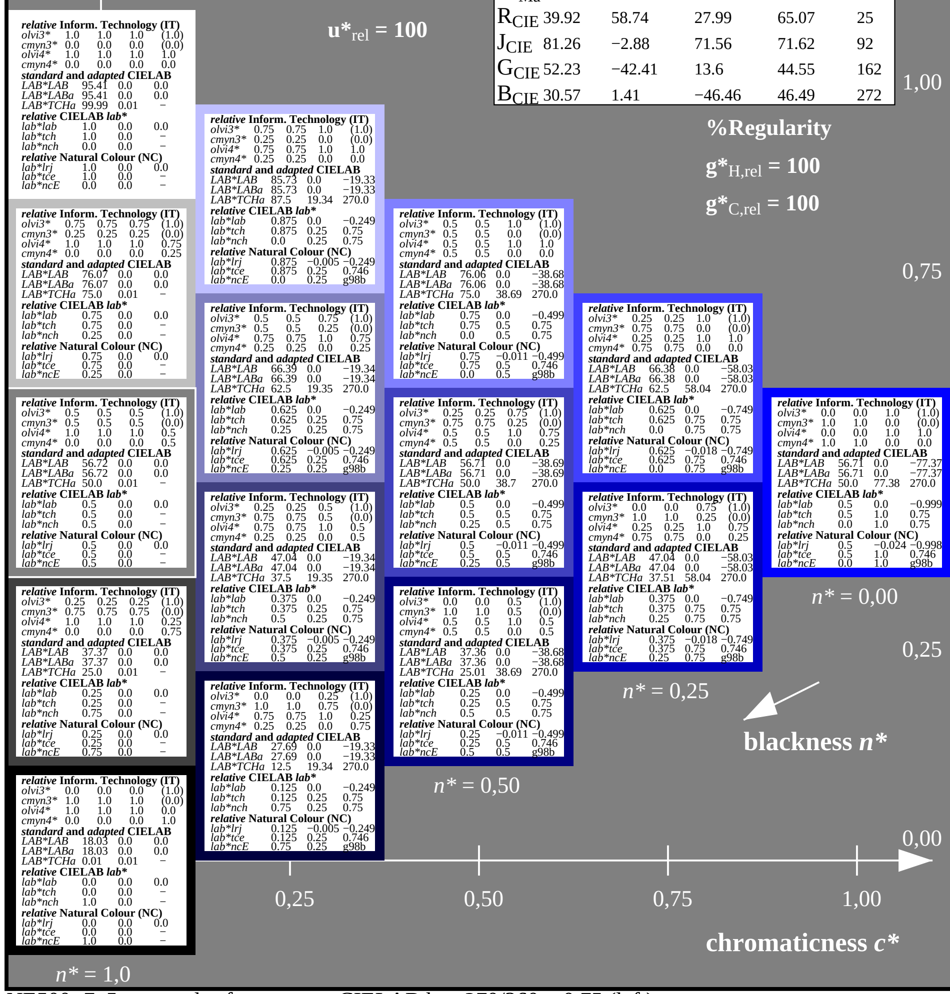
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

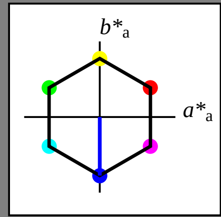
$g^*_{C,rel} = 100$



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

$u^*_{rel} = 100$

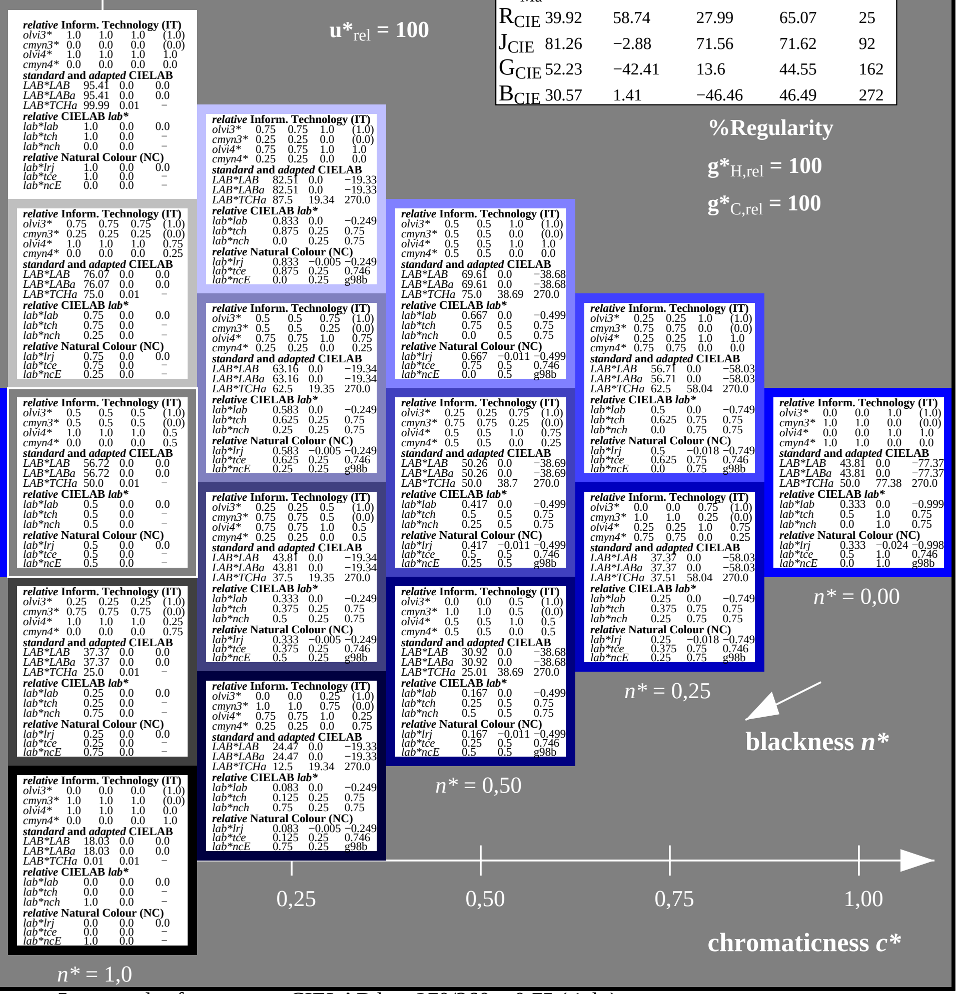
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

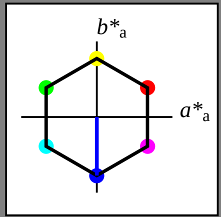
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

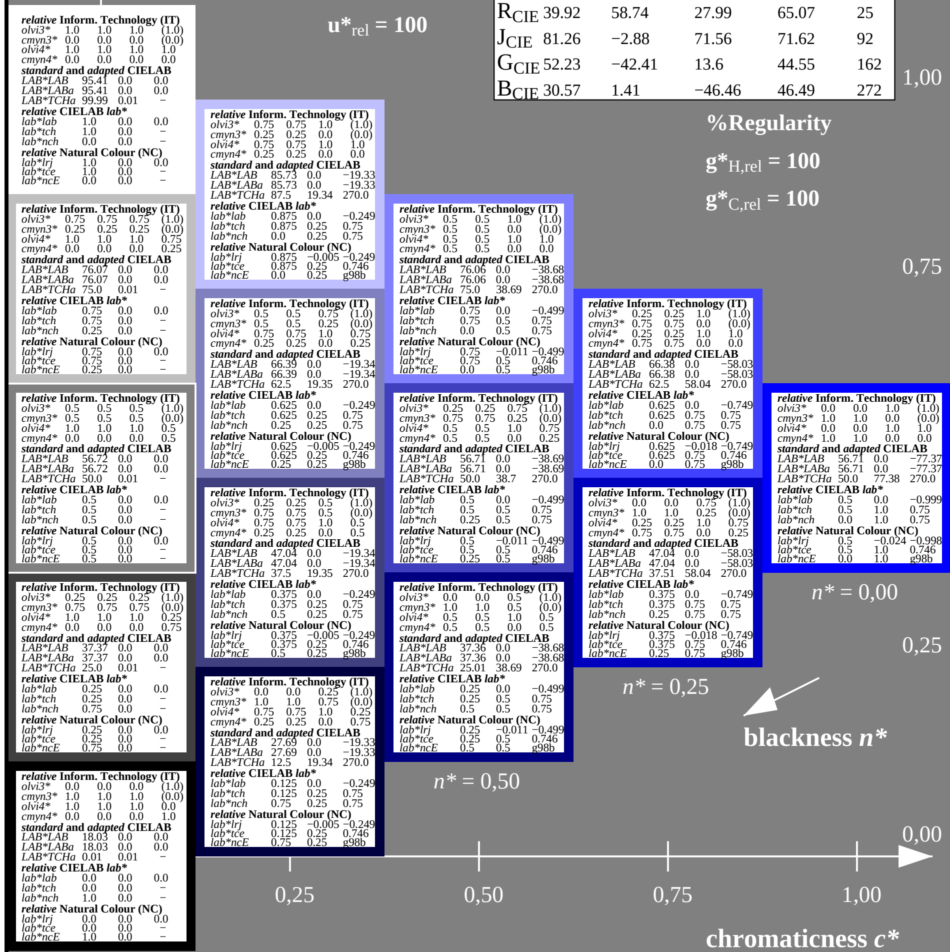
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$

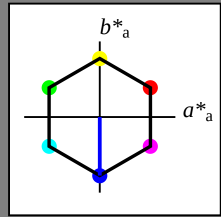
lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

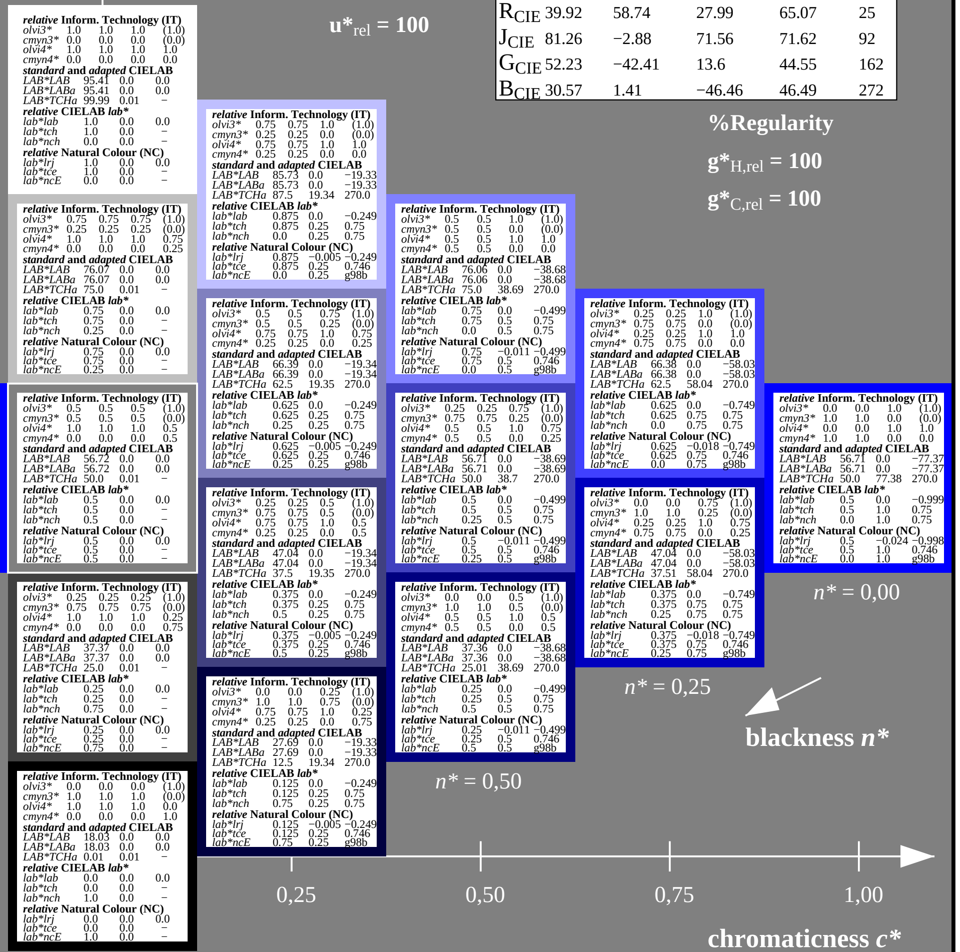
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Standard Reflective System SRS18

for hue *h** = *lab*h* = 270/360 = 0.75

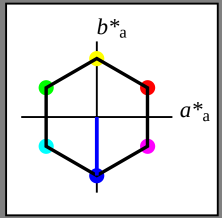
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

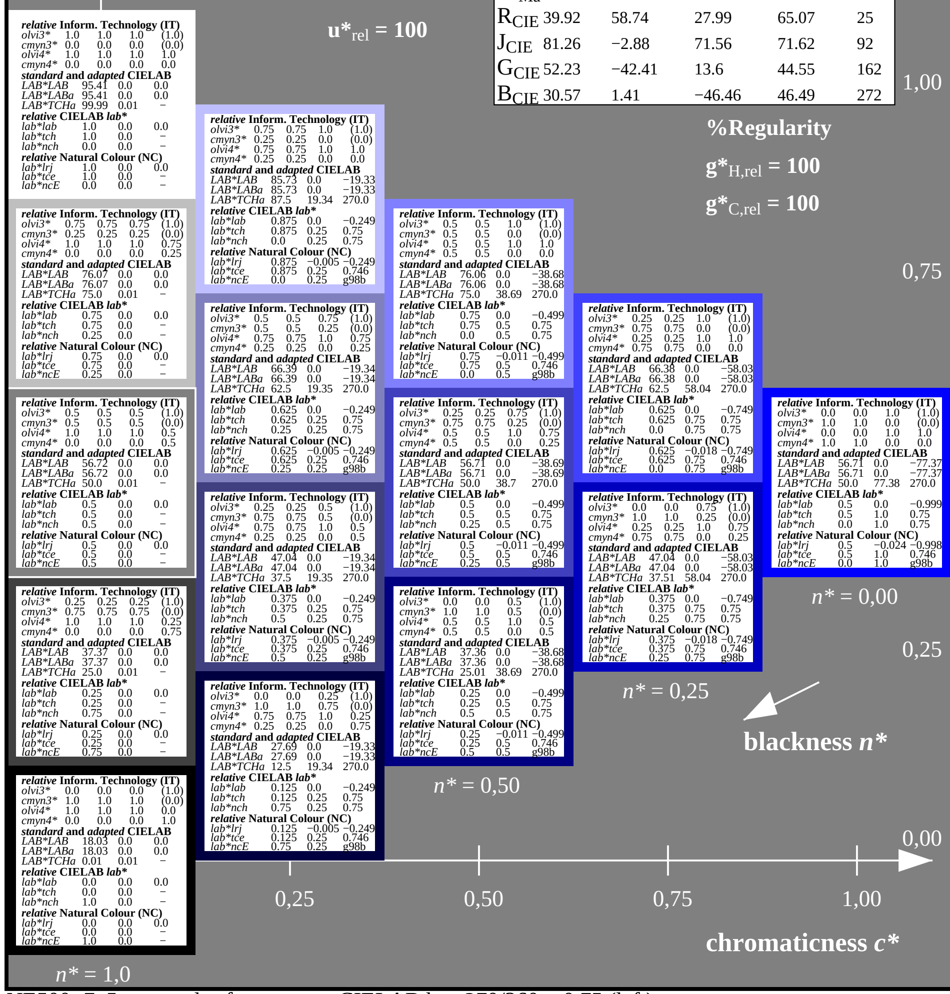
u^*_{rel} = 100

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



Output: Colorimetric Television Luminous System TLS70

for hue *h** = *lab*h* = 294/360 = 0.816

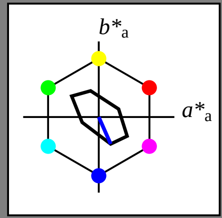
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

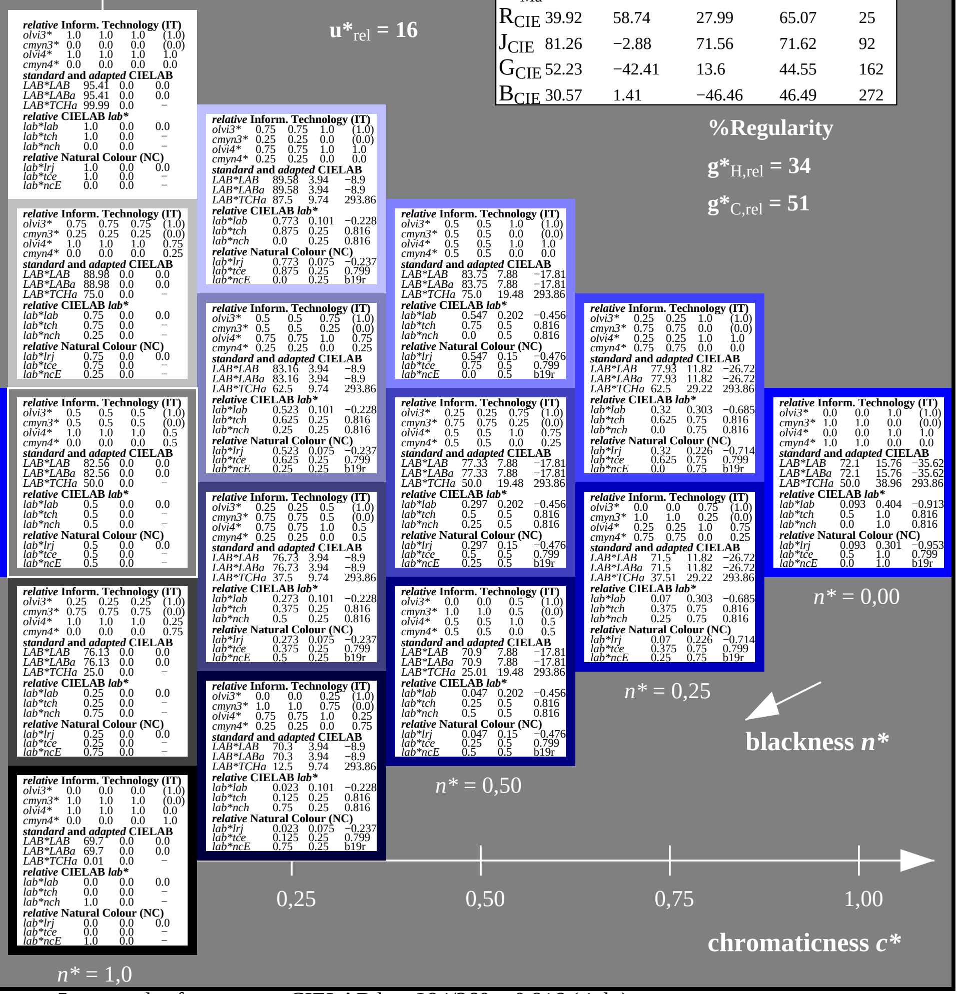
u^*_{rel} = 16

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



NE500−7, 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 Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$

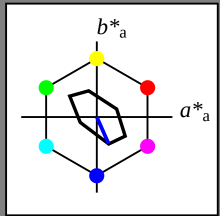
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

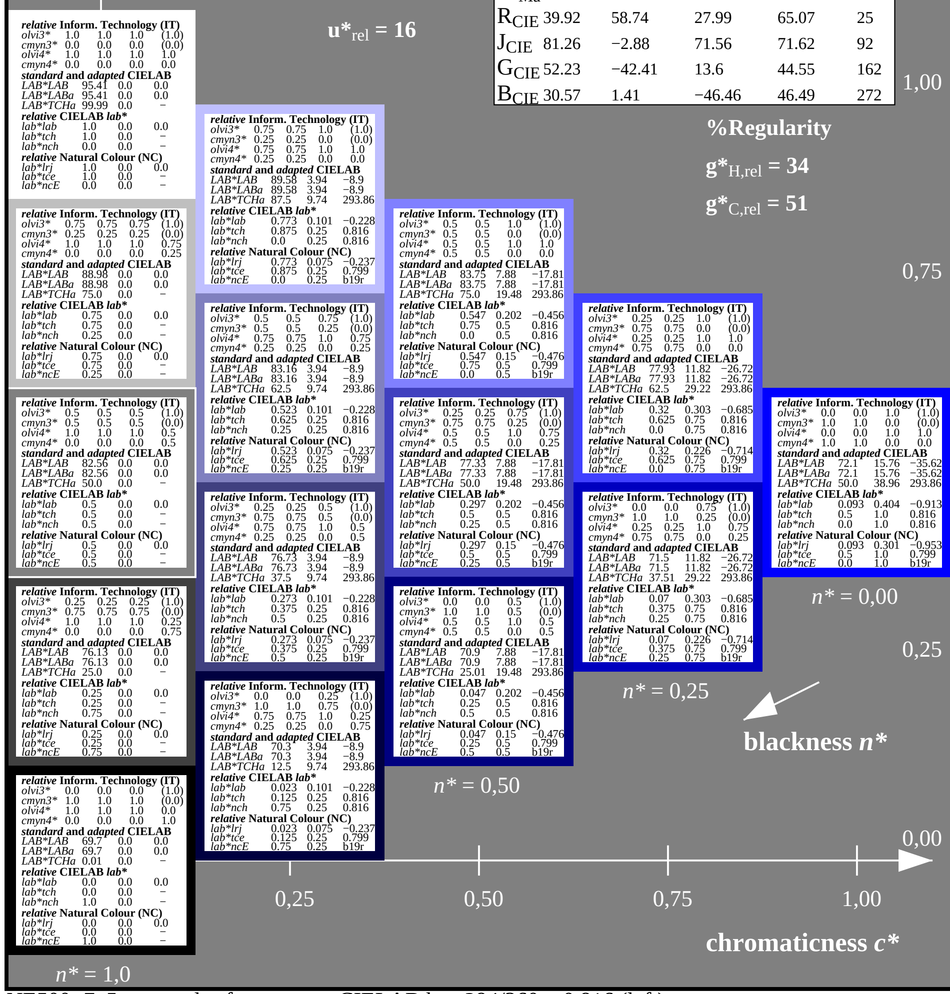
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$

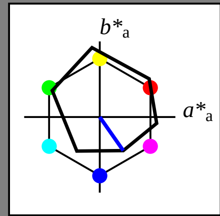
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

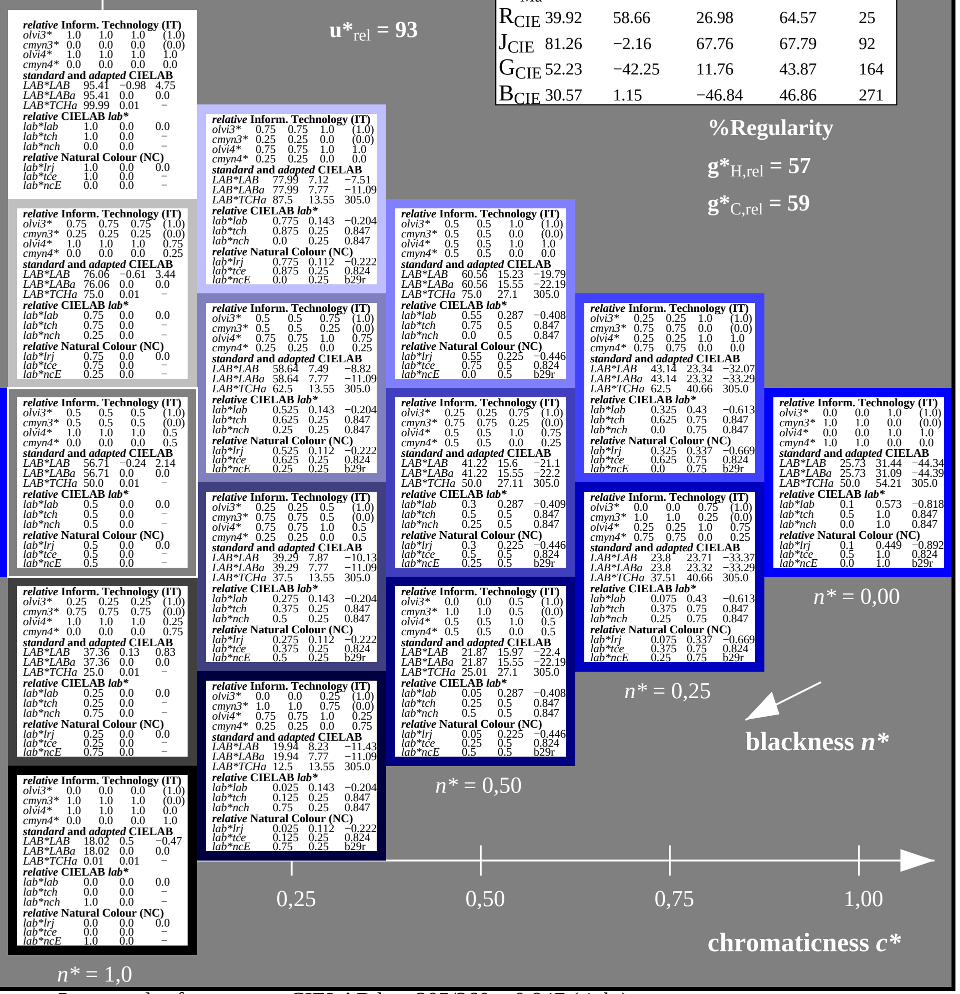
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left) 5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$

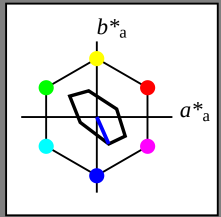
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

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 Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

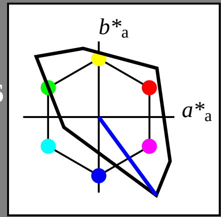
*lab*tch* and *lab*nch*

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

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

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

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

blackness n^*

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

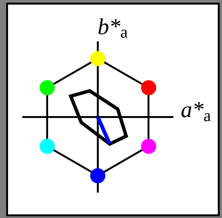
chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left) 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

triangle lightness $t*$

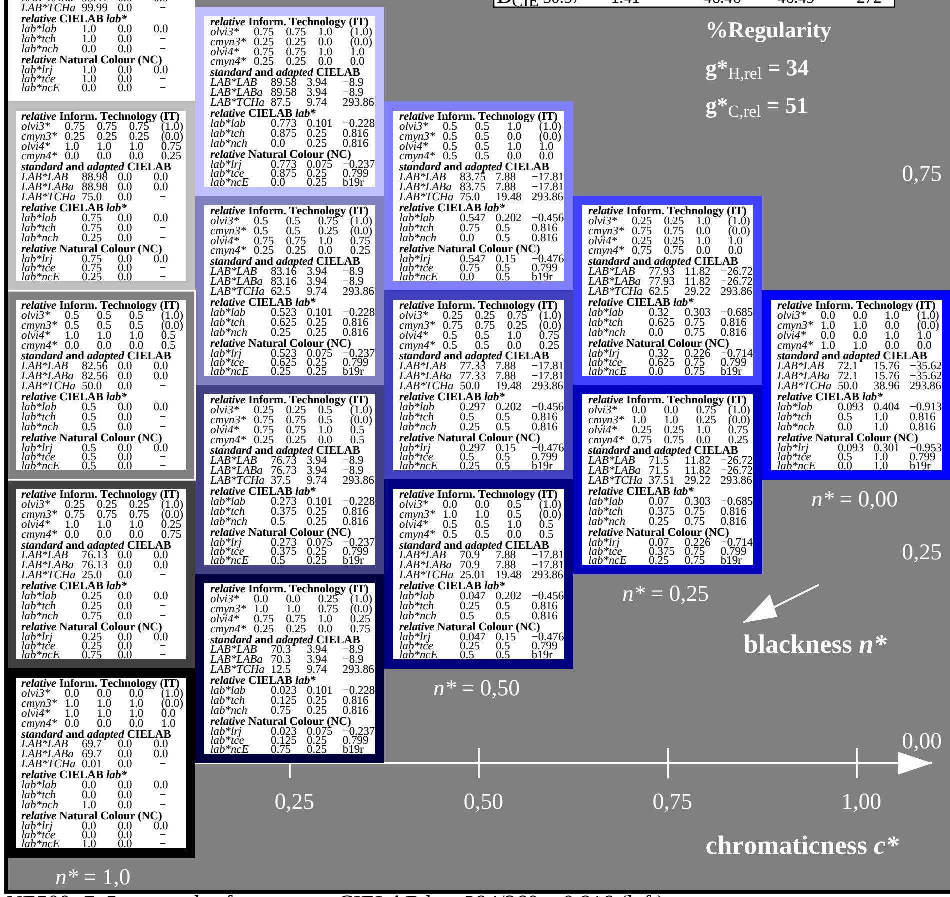


%Gamut
$u*_{rel} = 16$

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

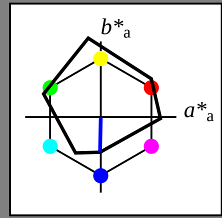
%Regularity
$g*_{H,rel} = 34$
$g*_{C,rel} = 51$



Output: Colorimetric Printer Reflective System DRSXX
for hue $h* = lab*h = 269/360 = 0.747$
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 34 47 269
olv*Ma: 0.0 0.0 1.0

triangle lightness $t*$

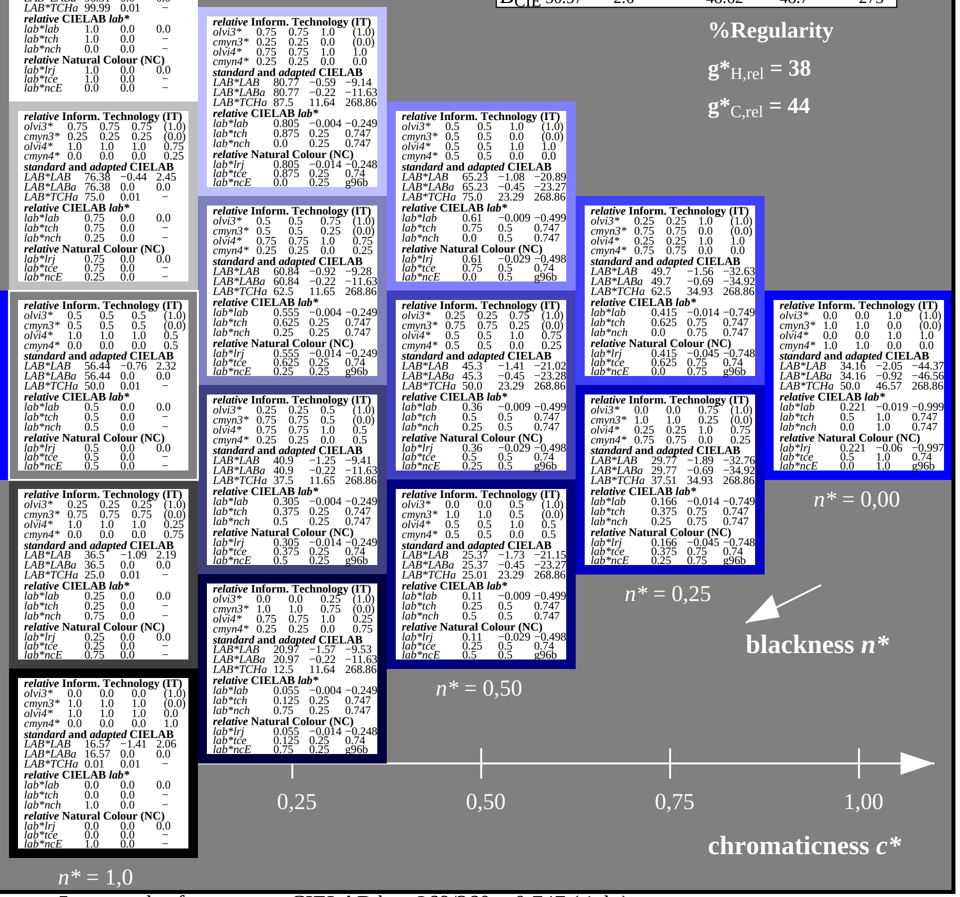


%Gamut
$u*_{rel} = 101$

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
$g*_{H,rel} = 38$
$g*_{C,rel} = 44$



NE500−7, 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 $h^* = lab^*h = 294/360 = 0.816$

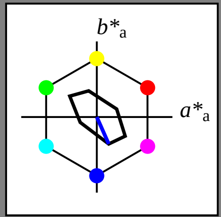
lab*tch and lab*nch

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

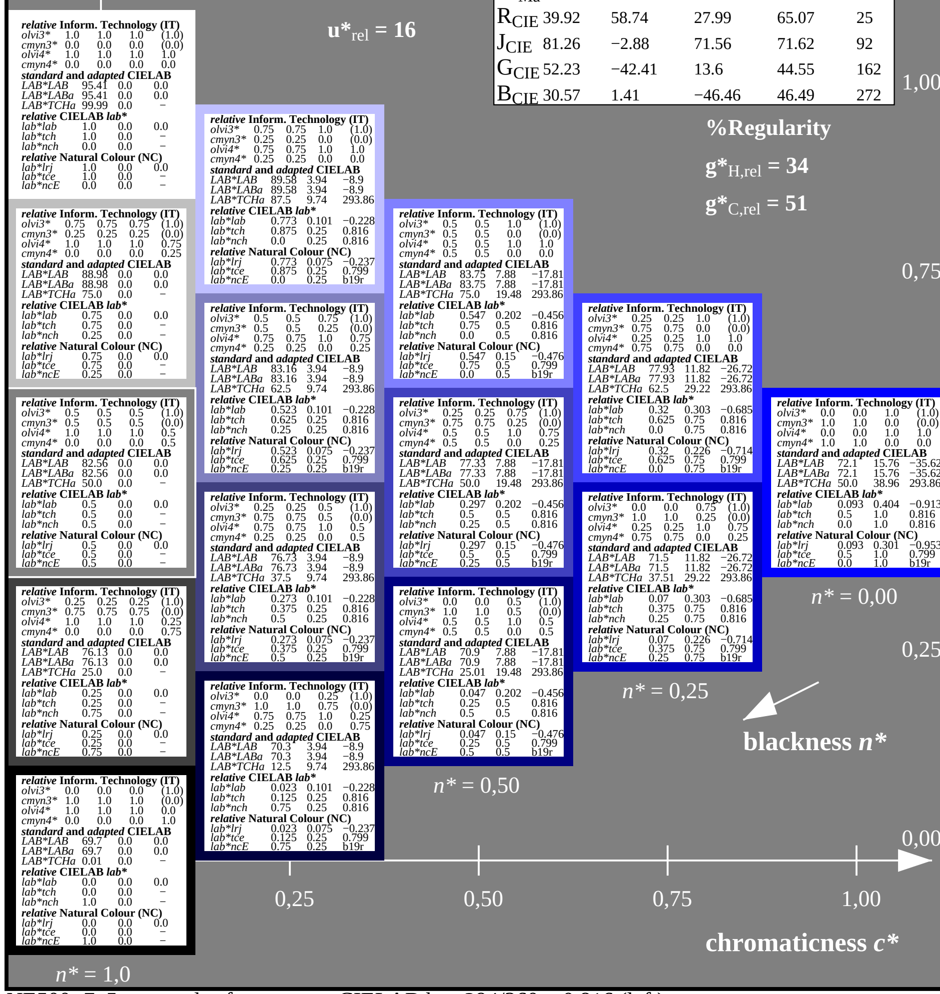
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 304/360 = 0.845$

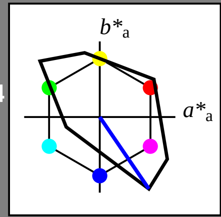
lab*tch and lab*nch

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

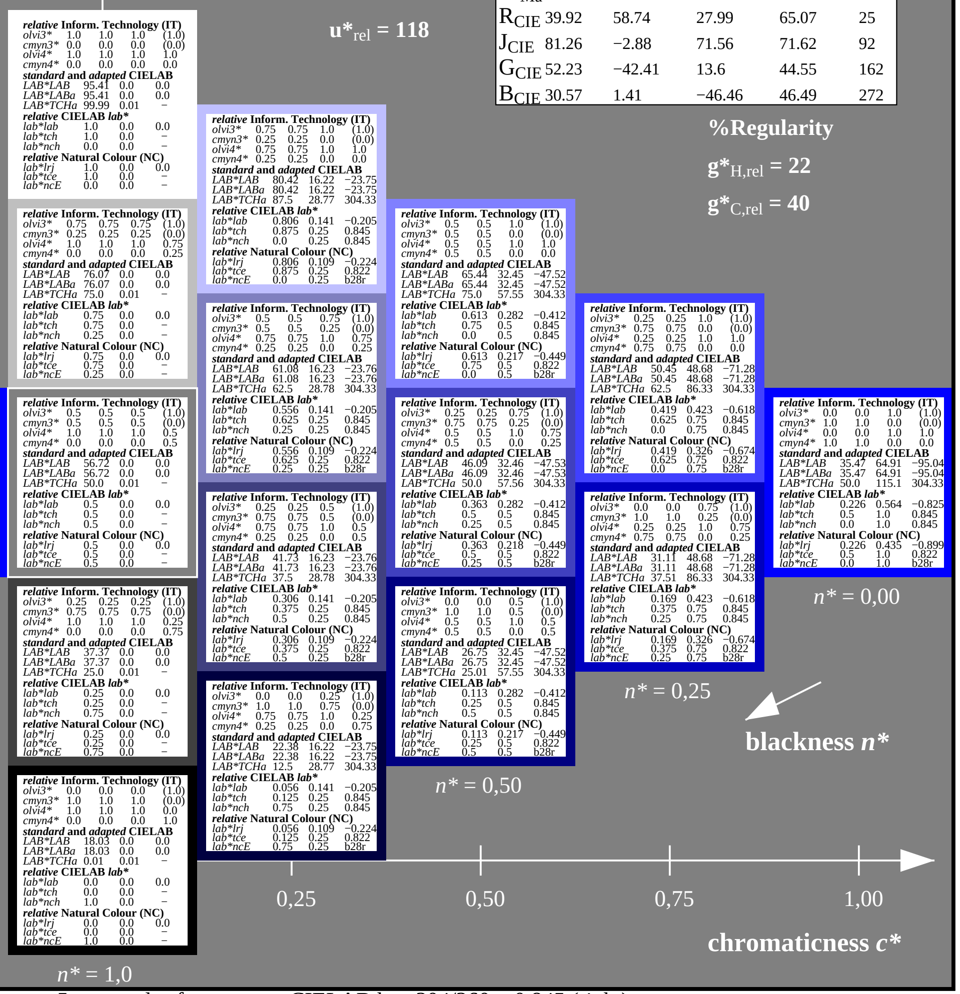
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$

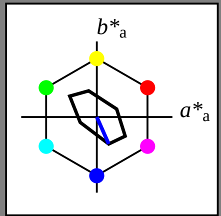
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

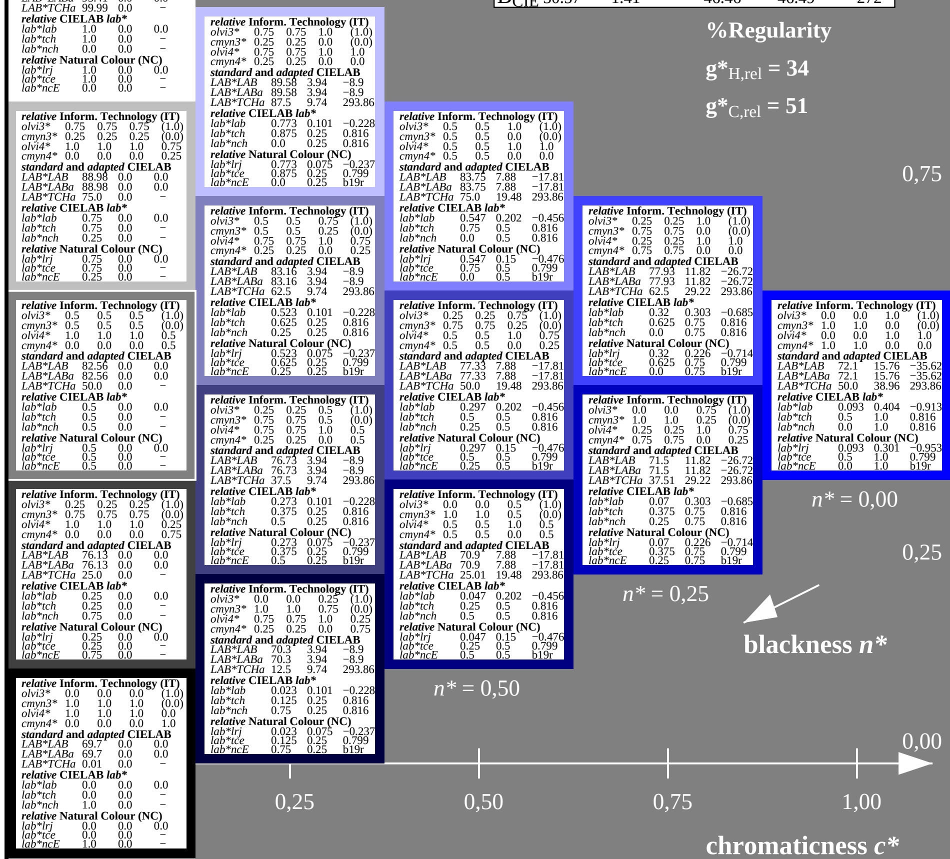
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 270/360 = 0.75$

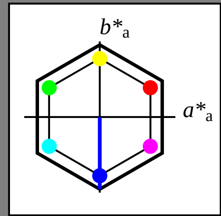
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 32 95 270

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

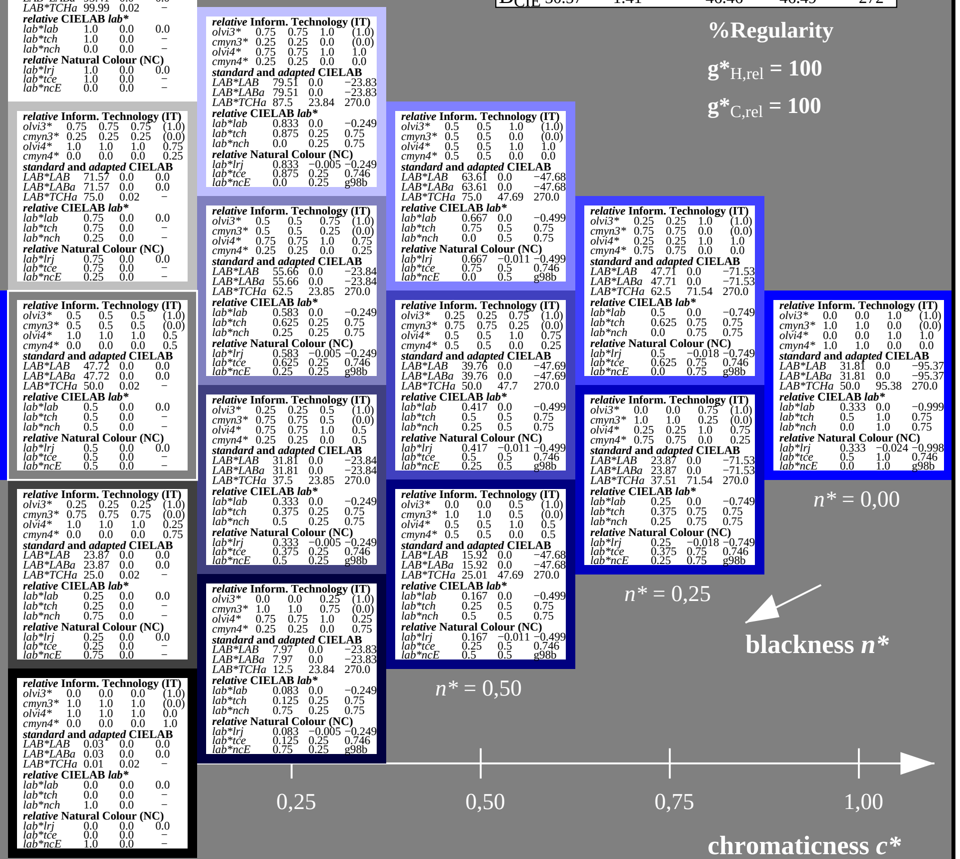
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



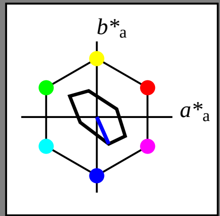
NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

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^*

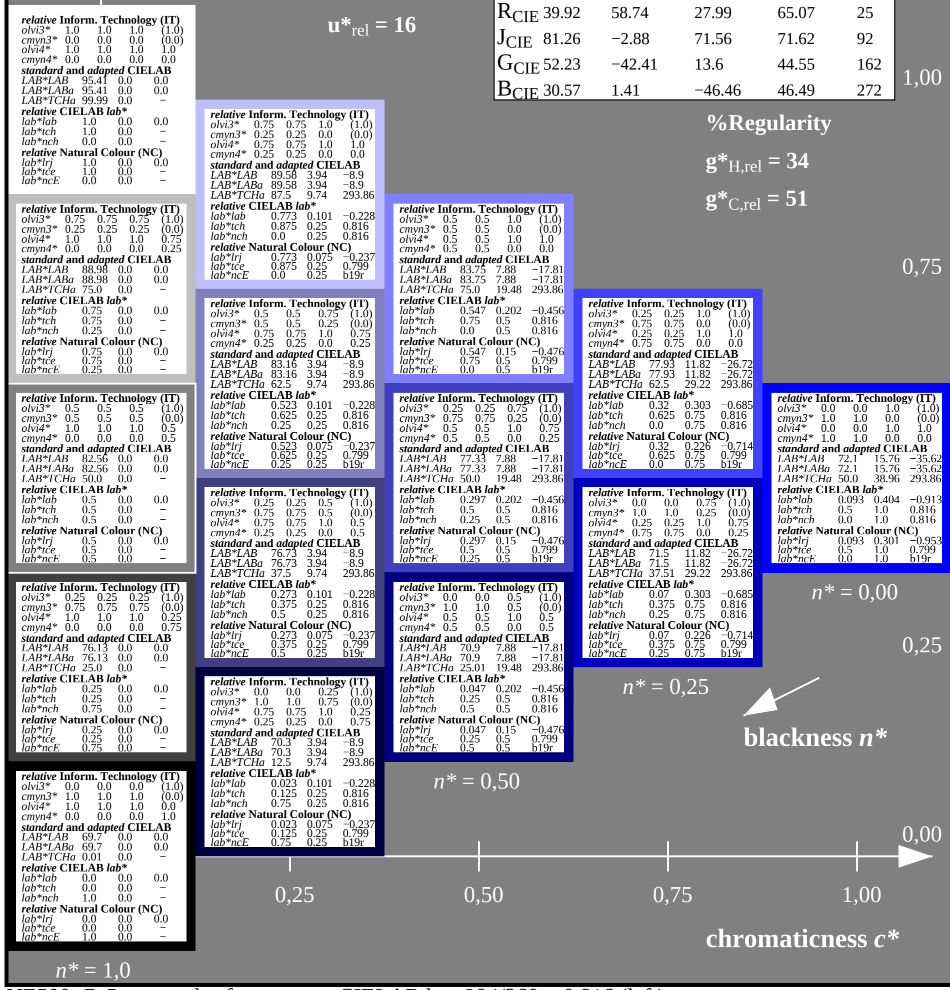


%Gamut
$u^*_{rel} = 16$

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

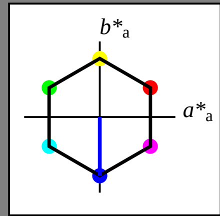
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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^*

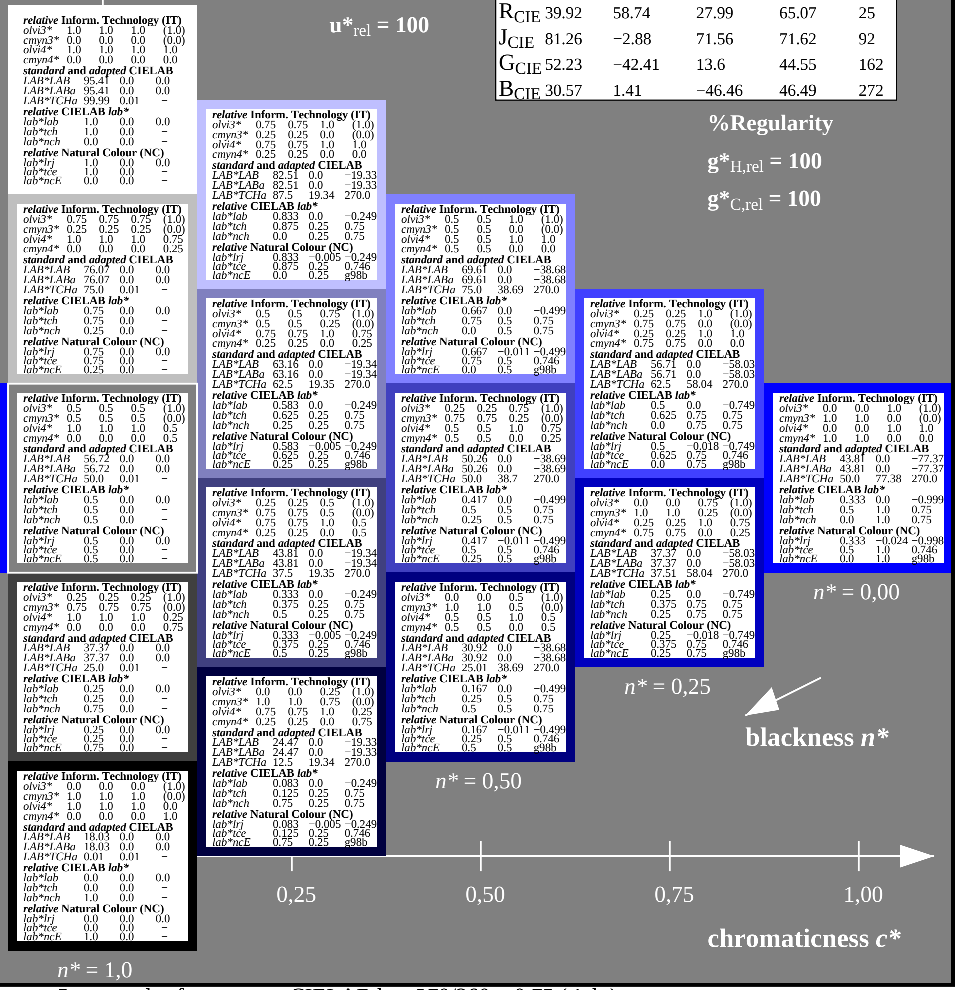


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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

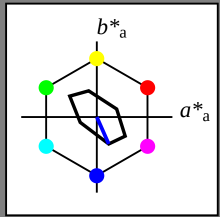
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

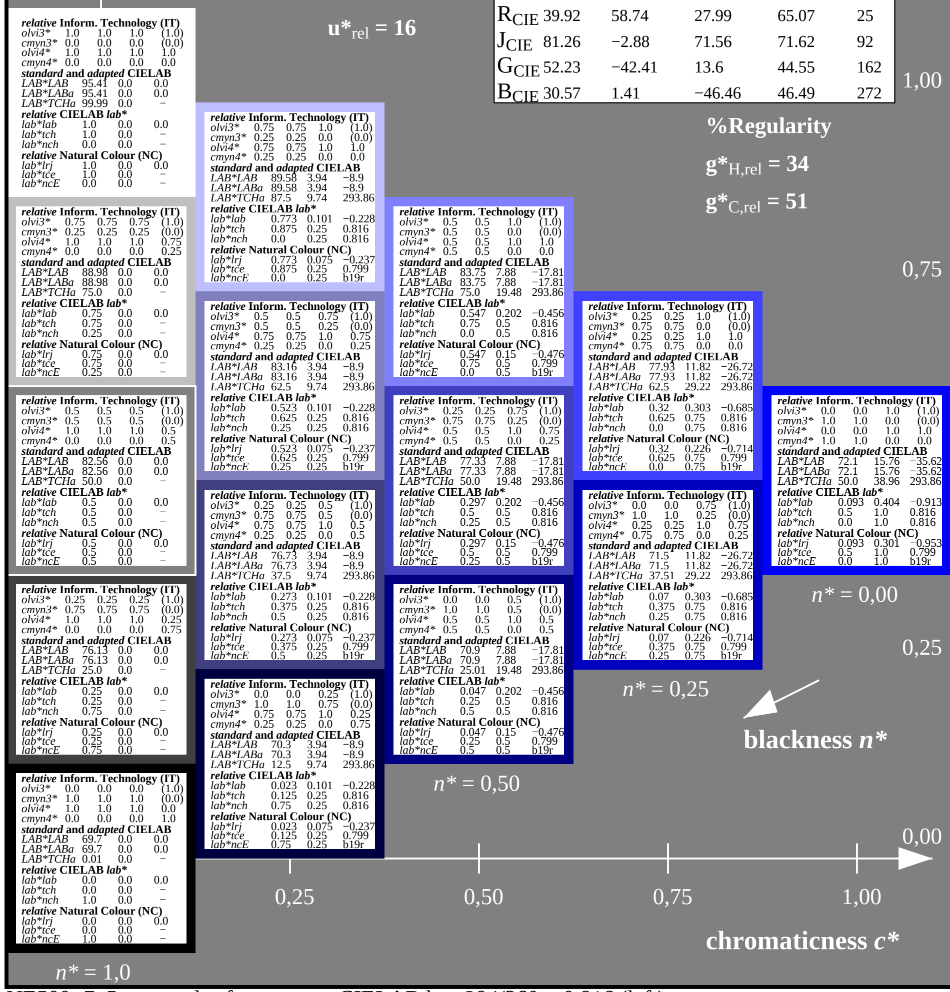
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Standard Reflective System SRS18

for hue *h** = *lab*h* = 270/360 = 0.75

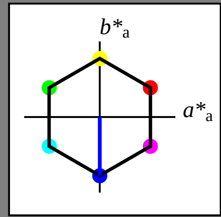
*lab*tch* and *lab*nch*

D65: hue V

LCH*Ma: 57 77 270

olv*Ma: 0.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

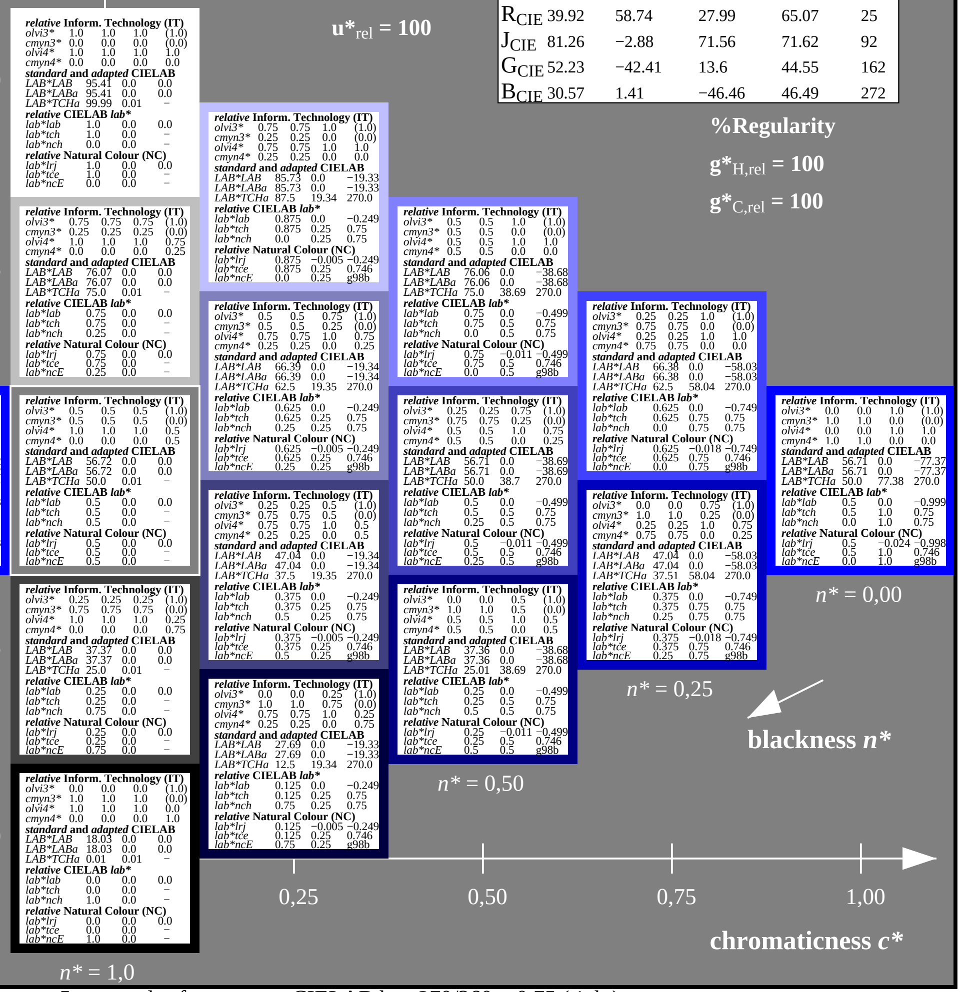
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



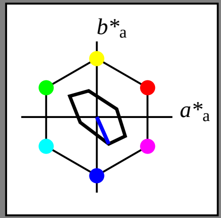
NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

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**

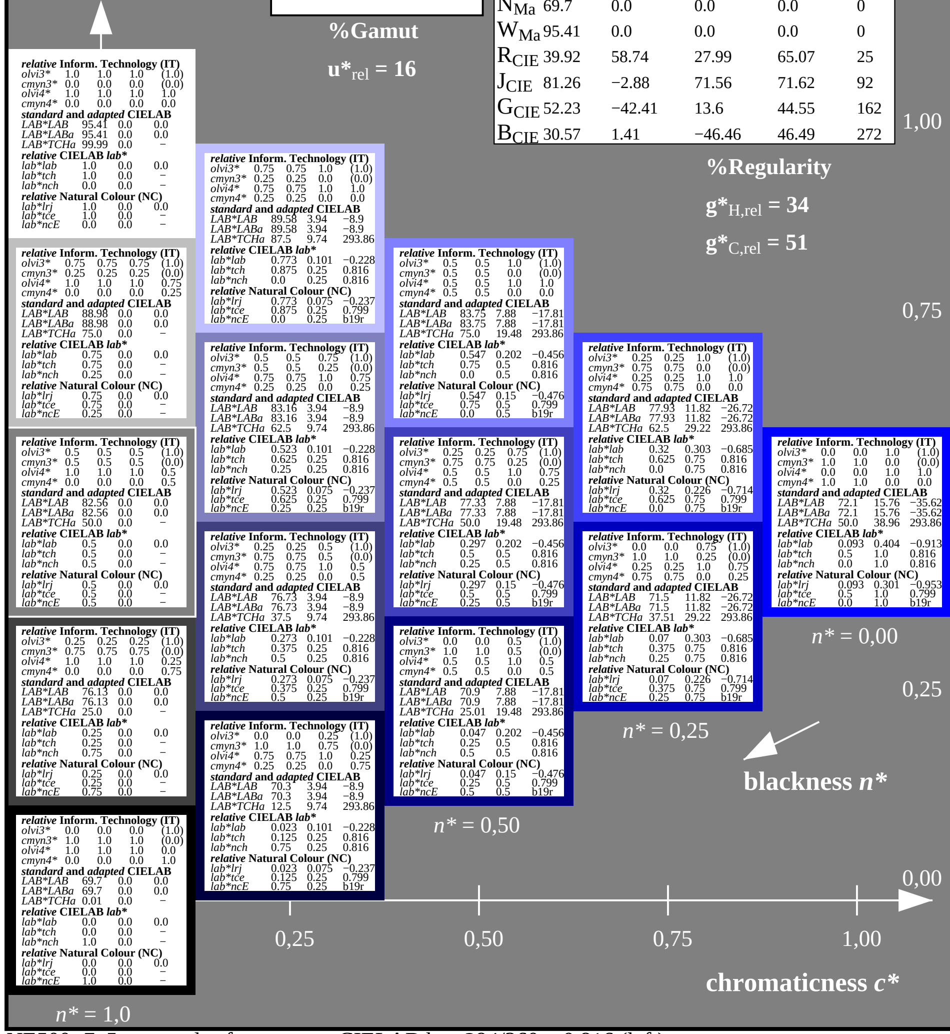


%Gamut
$u^*_{rel} = 16$

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

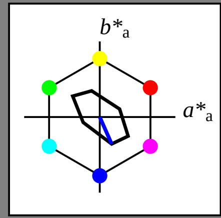
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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**

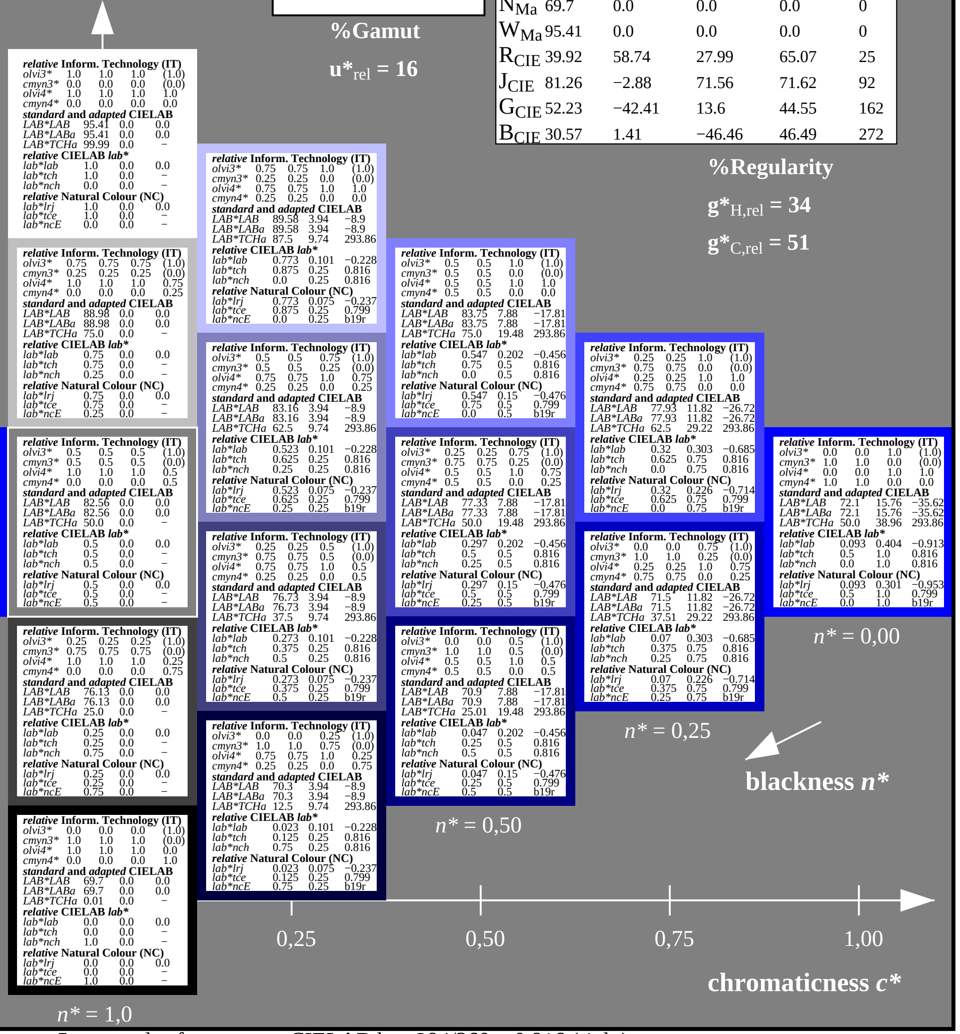


%Gamut
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

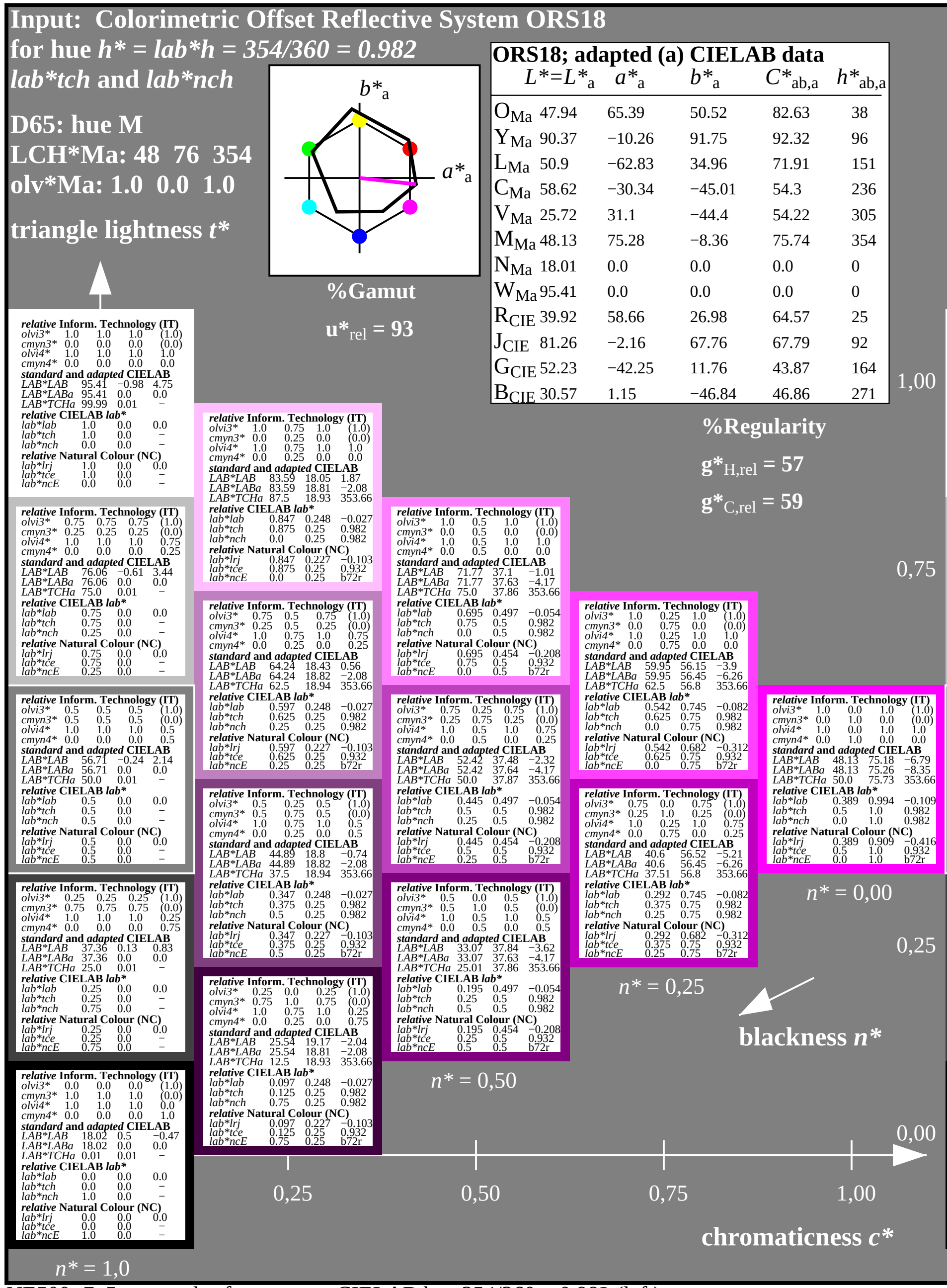
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

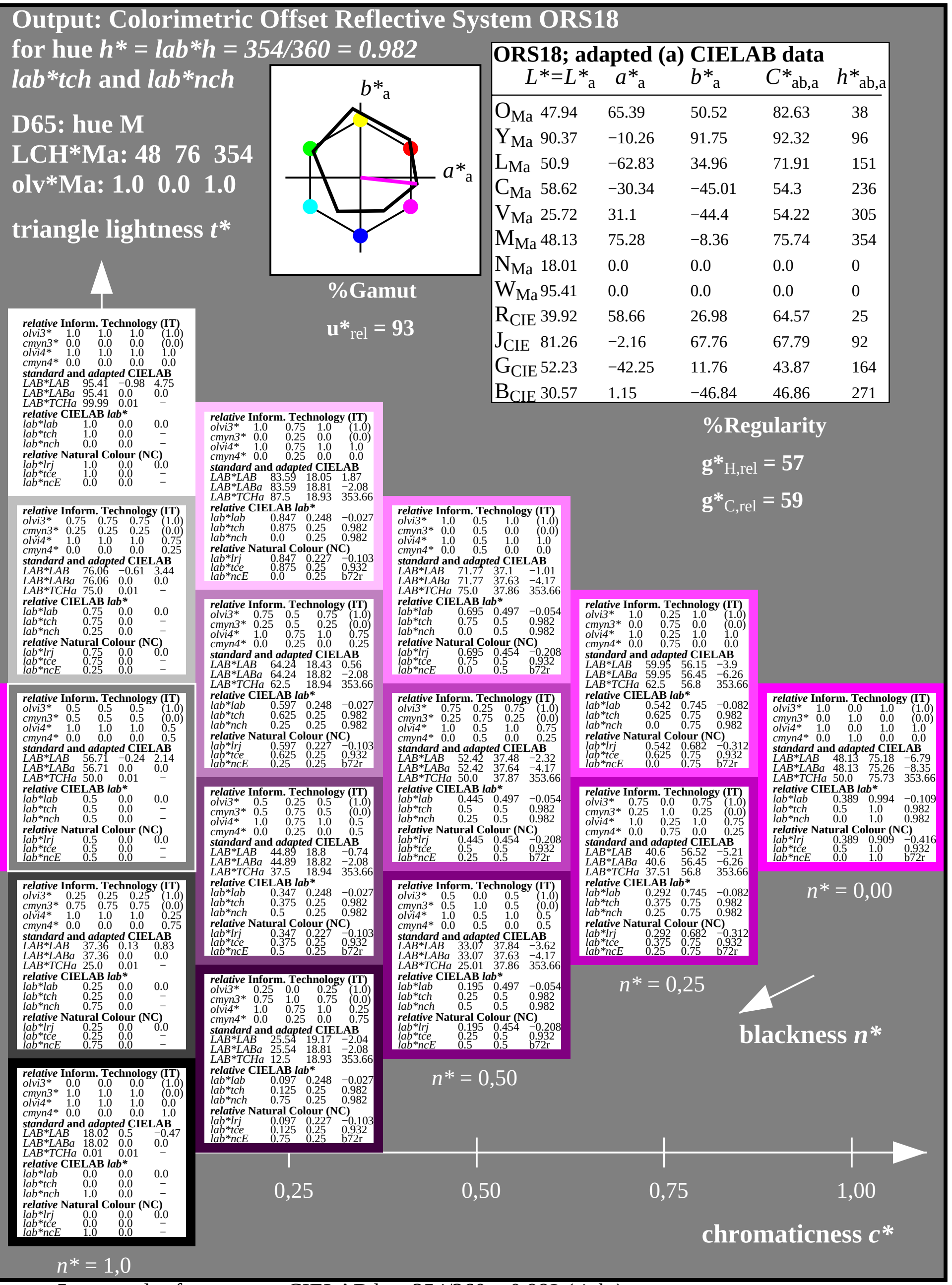


NE500−7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

5 step scales for constant CIELAB hue 294/360 = 0.816 (right)



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



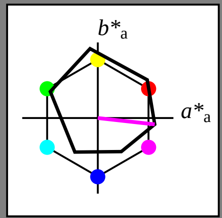
ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	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

NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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

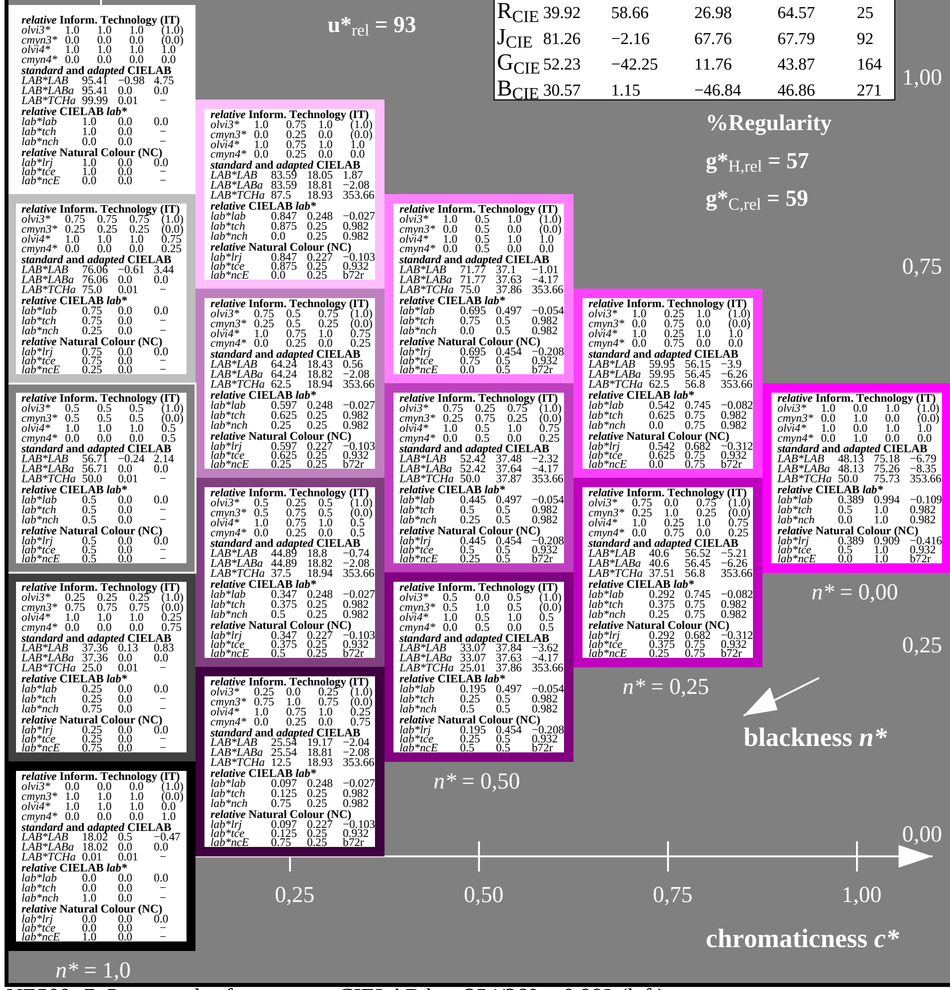
D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%Gamut
$u^*_{rel} = 93$

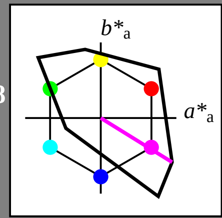
ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 328/360 = 0.912$
lab*tch* and *lab*nch

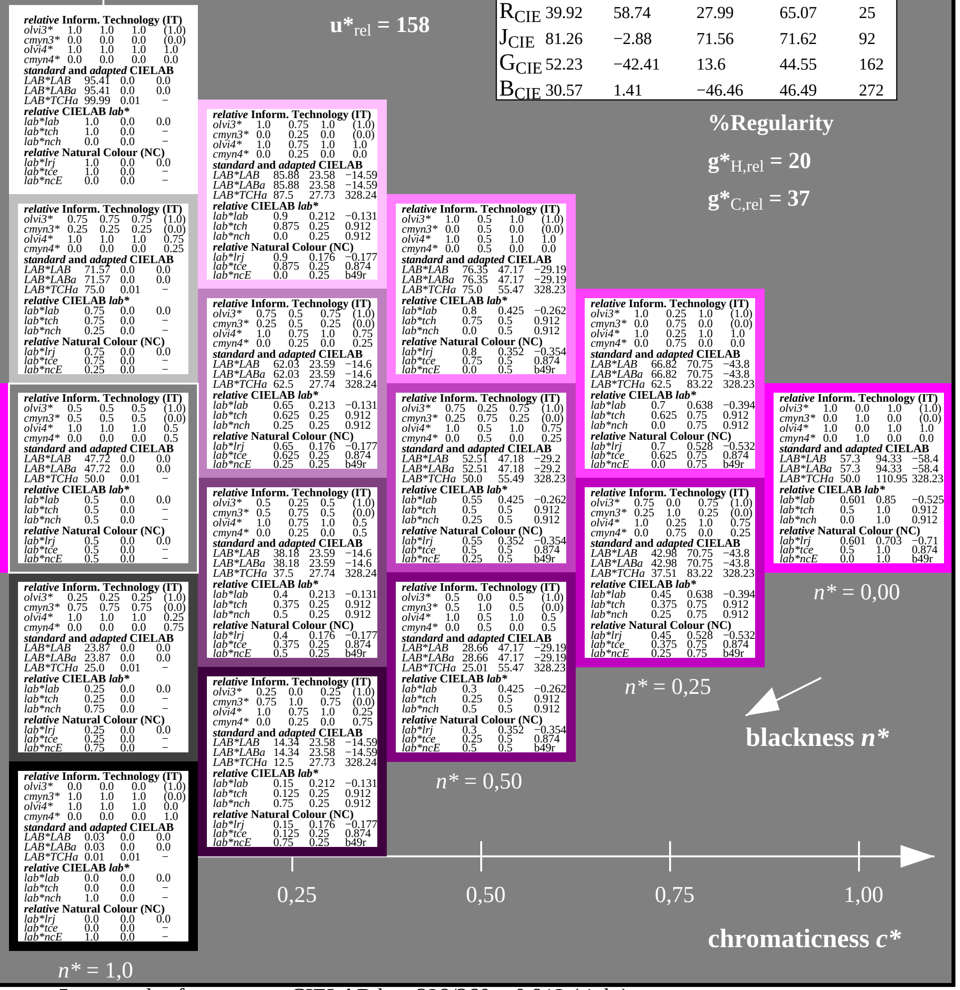
D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

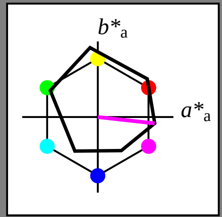
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

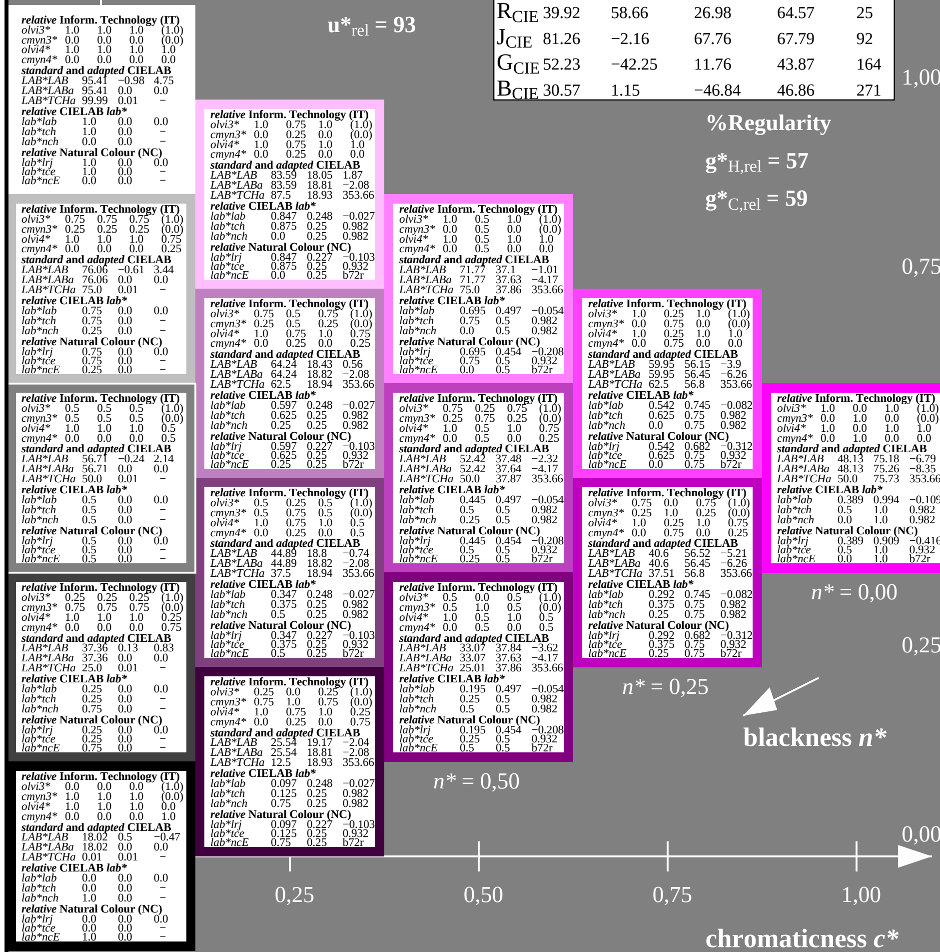
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

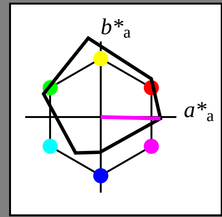
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

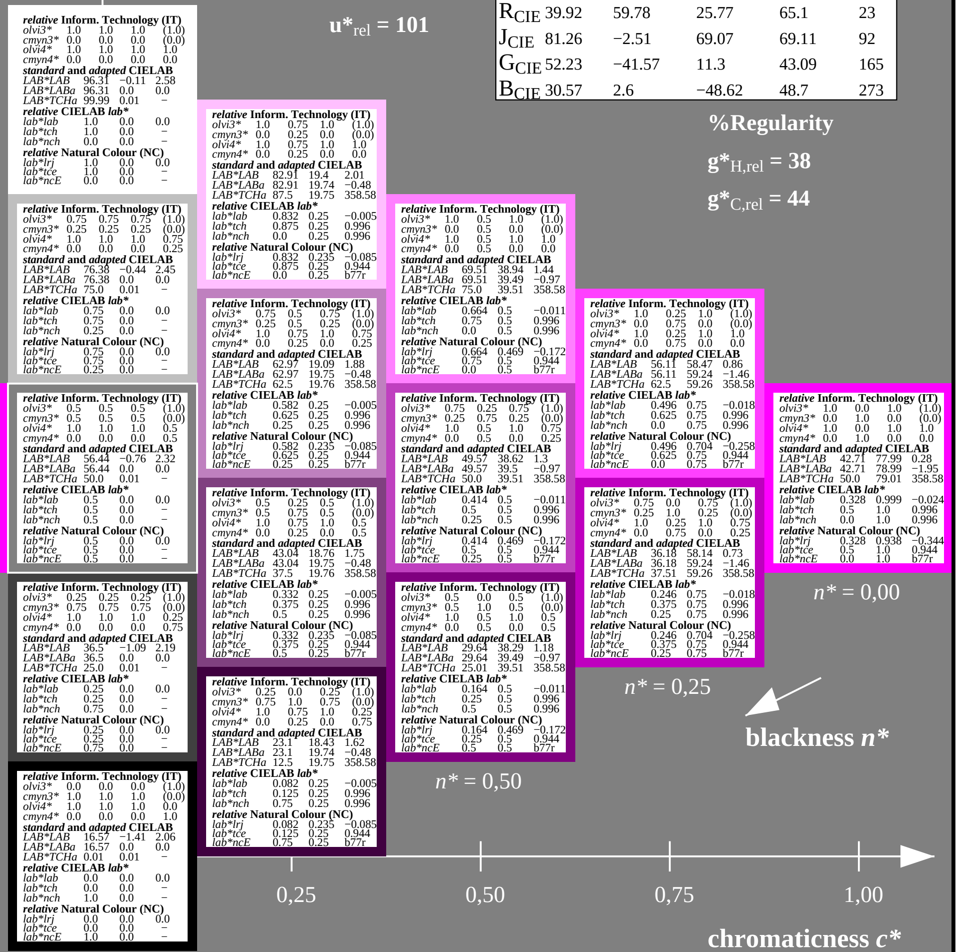
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



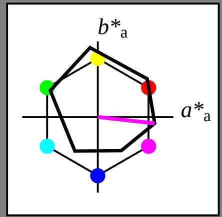
NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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*

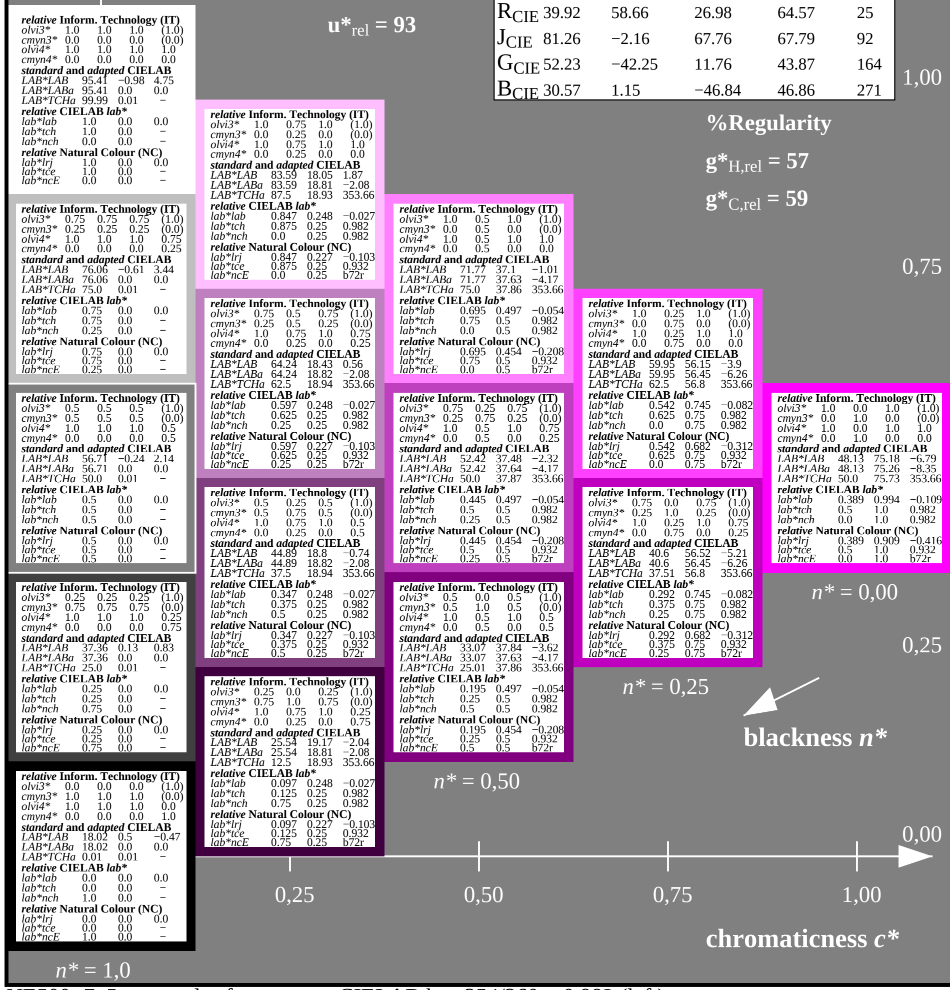


%Gamut
$u^*_{rel} = 93$

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

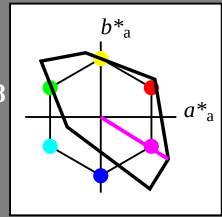
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



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*

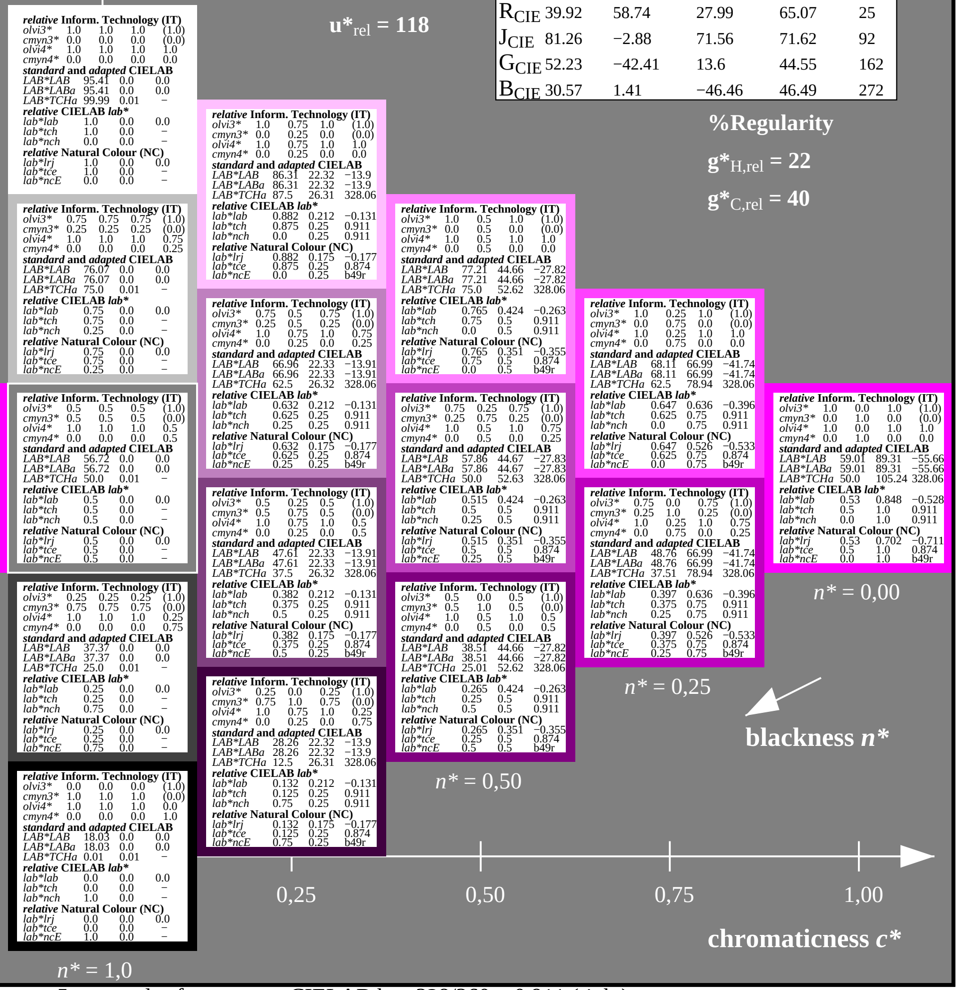


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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**

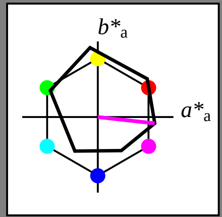
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 93

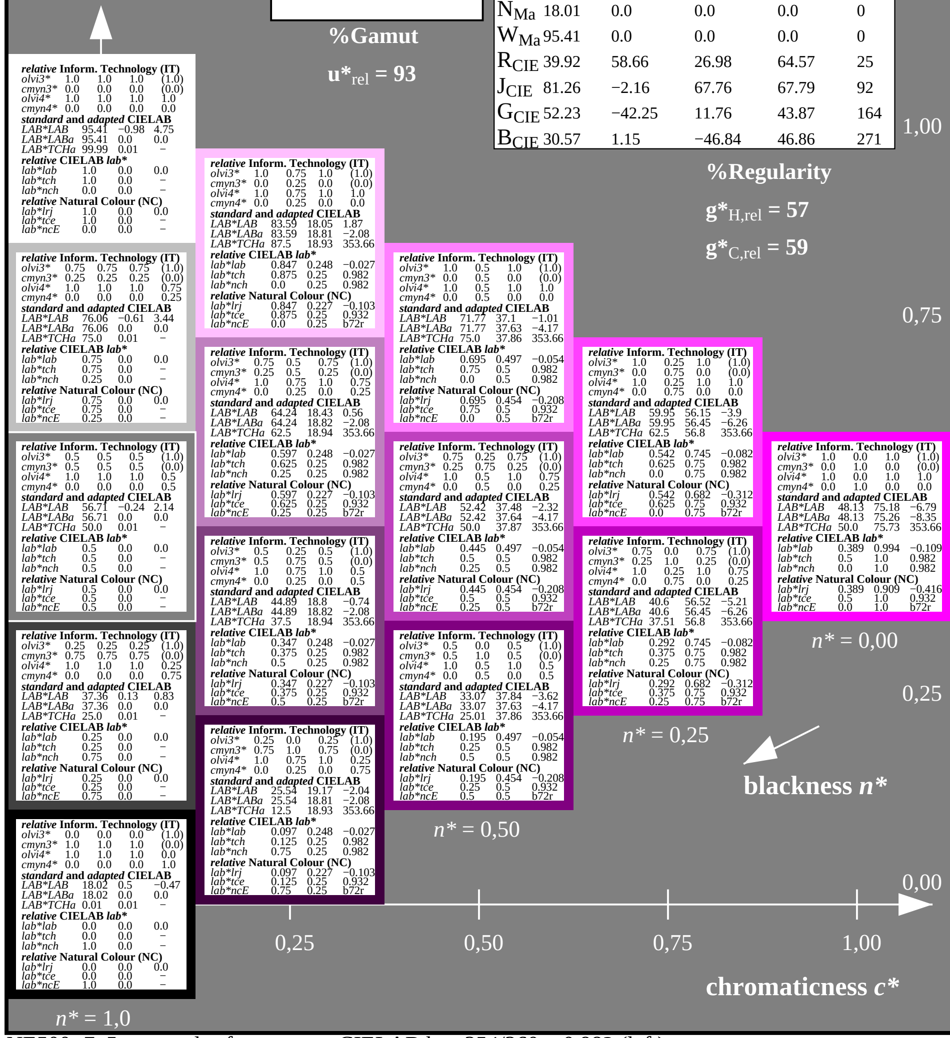
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 330/360 = 0.917**

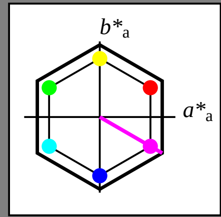
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

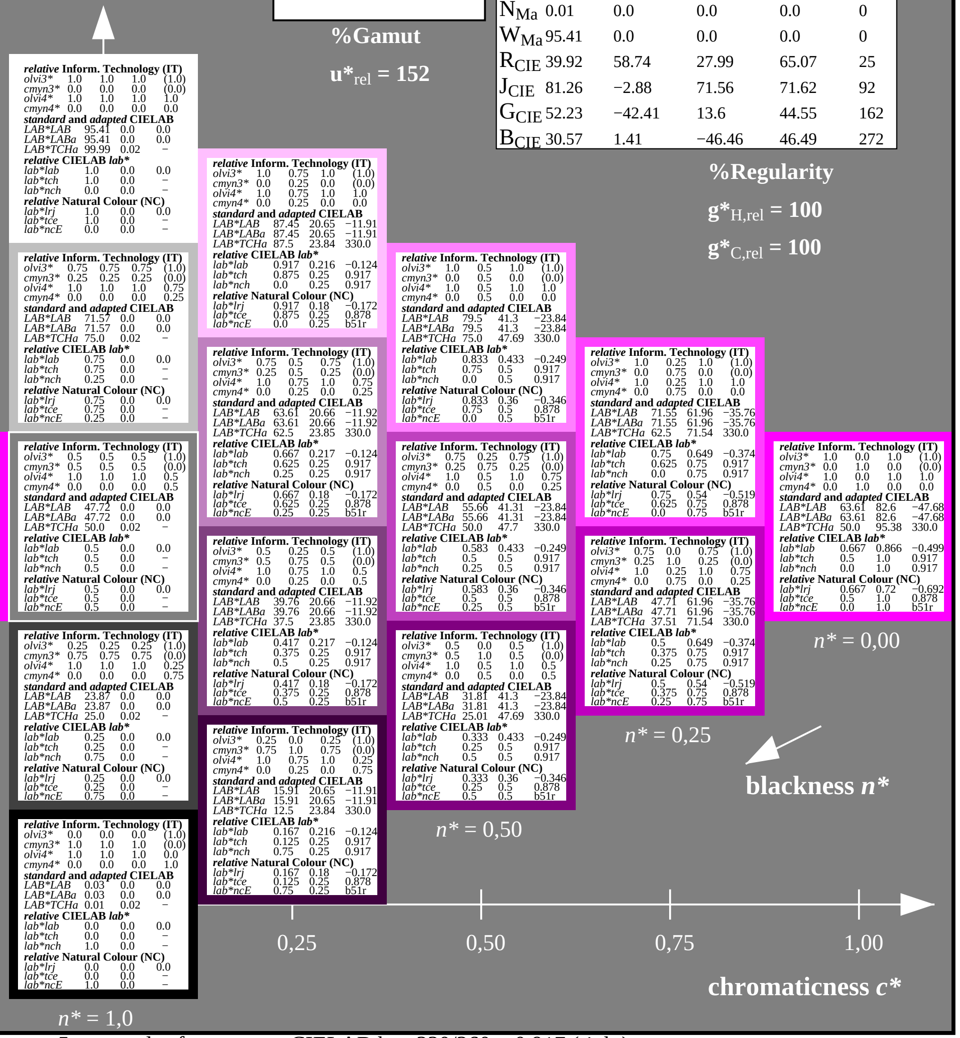
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

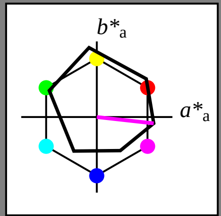
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

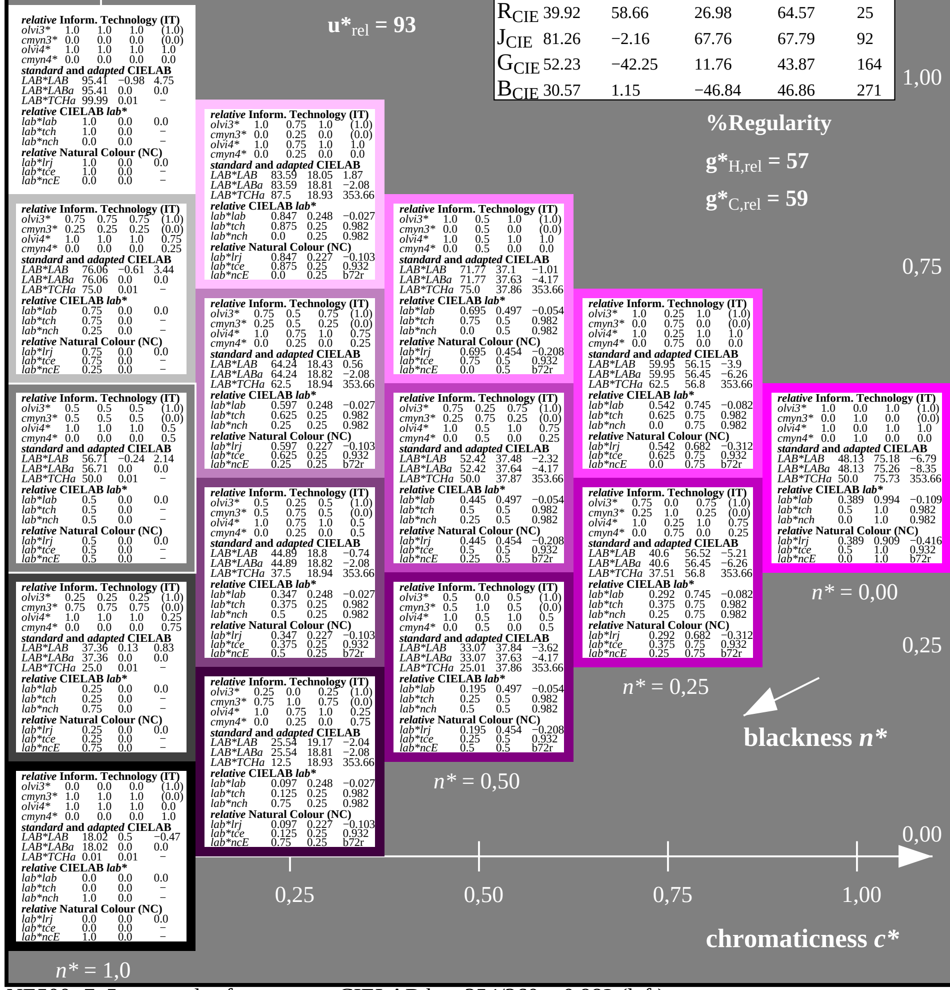
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue *h** = *lab*h* = *330/360* = *0.917*

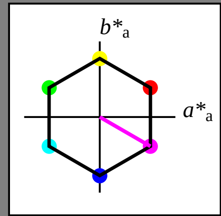
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

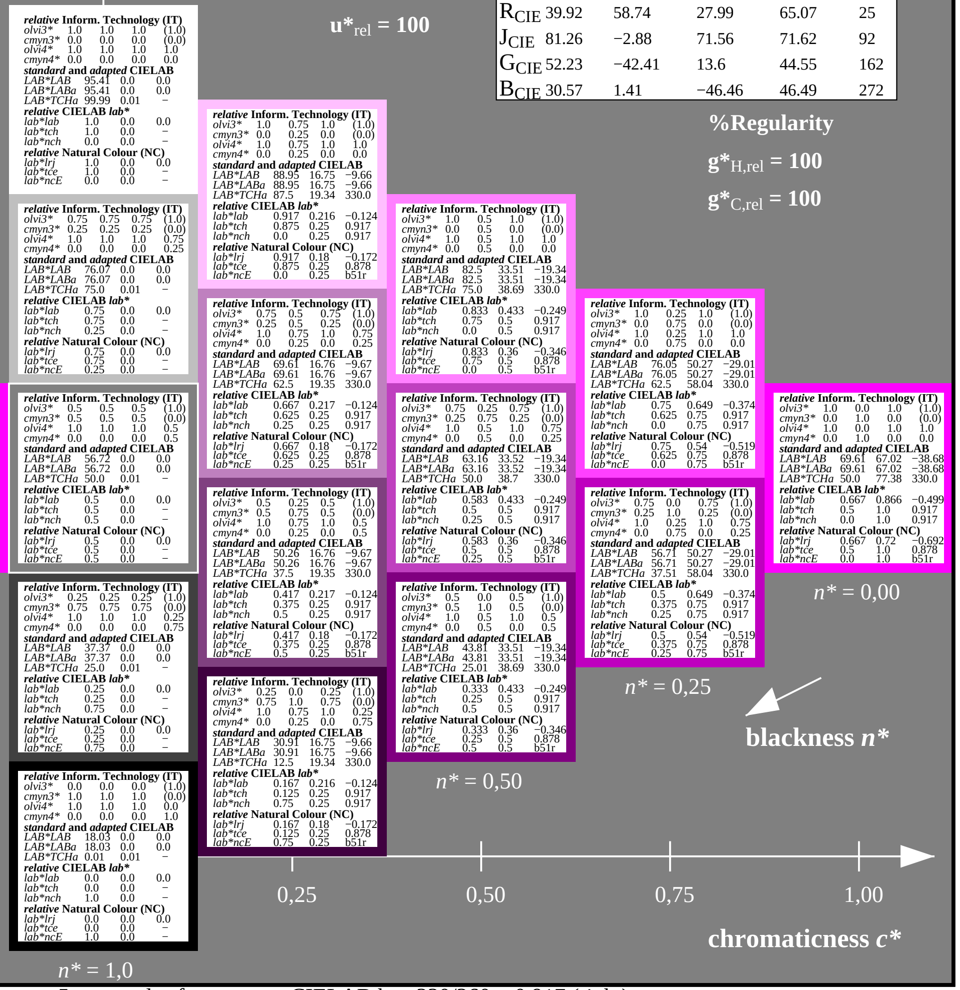
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



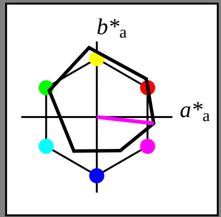
NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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

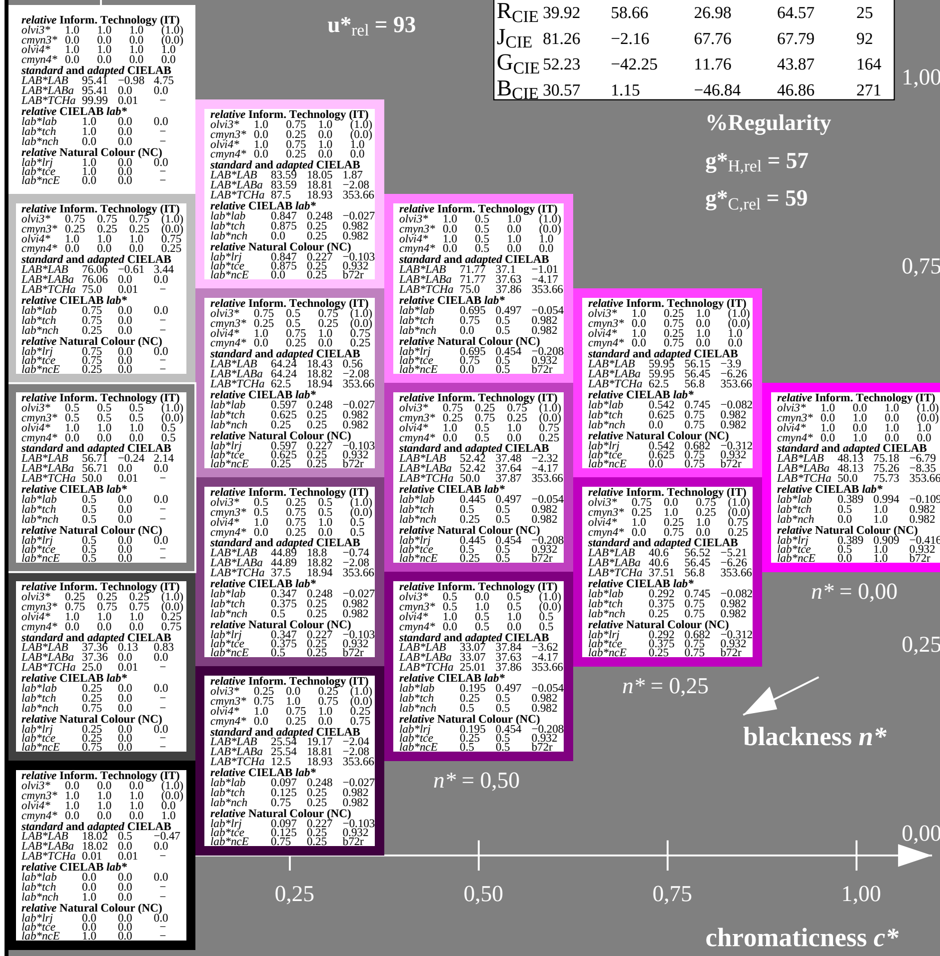
triangle lightness *t**



%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

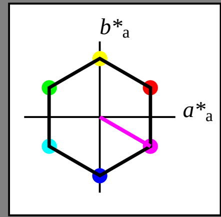
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59



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

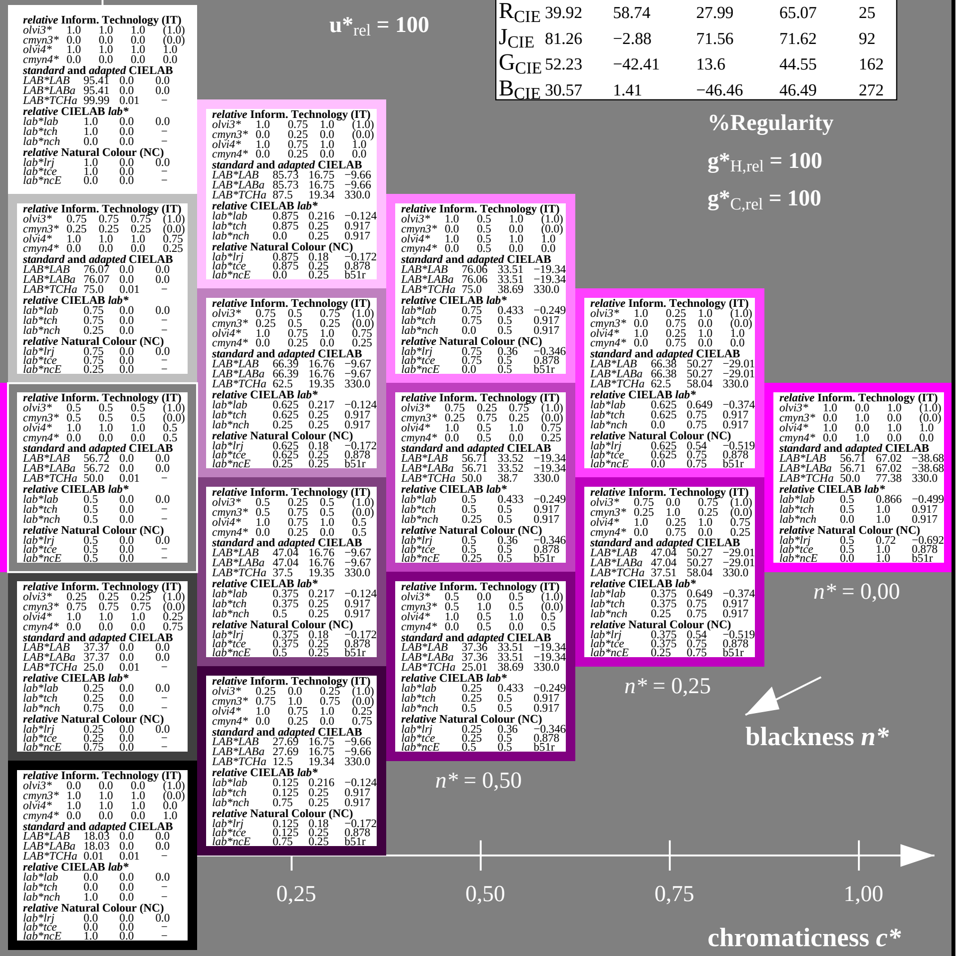
triangle lightness *t**



%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

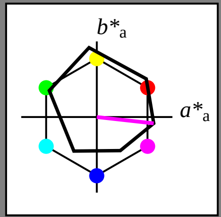


NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left) 5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

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

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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

blackness n^*

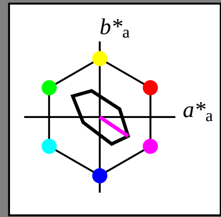
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System 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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

blackness n^*

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

chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h* = lab*h = 328/360 = 0.912$

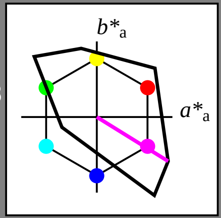
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 158

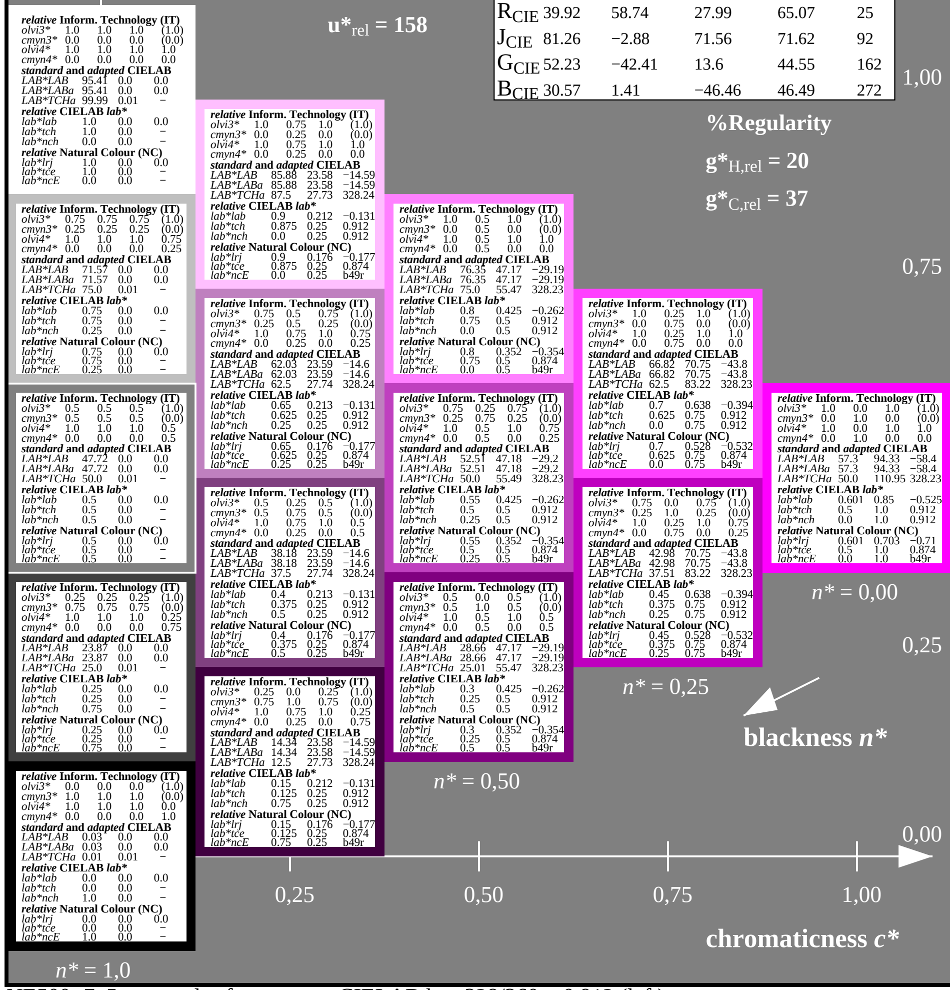
TLS00; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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 $h* = lab*h = 354/360 = 0.982$

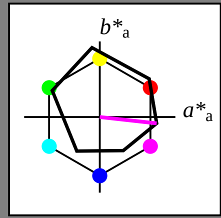
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 93

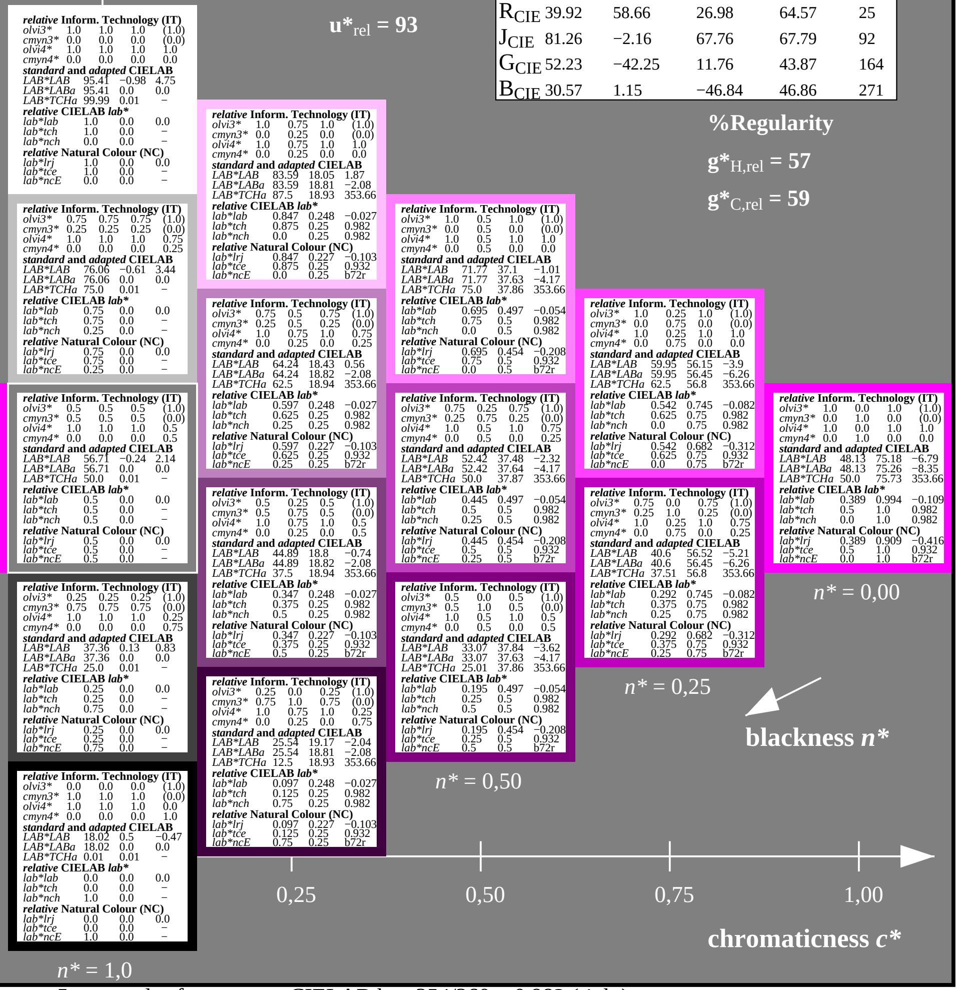
ORS18; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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

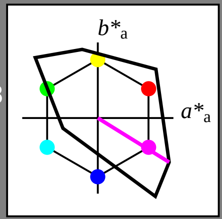


NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

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^*

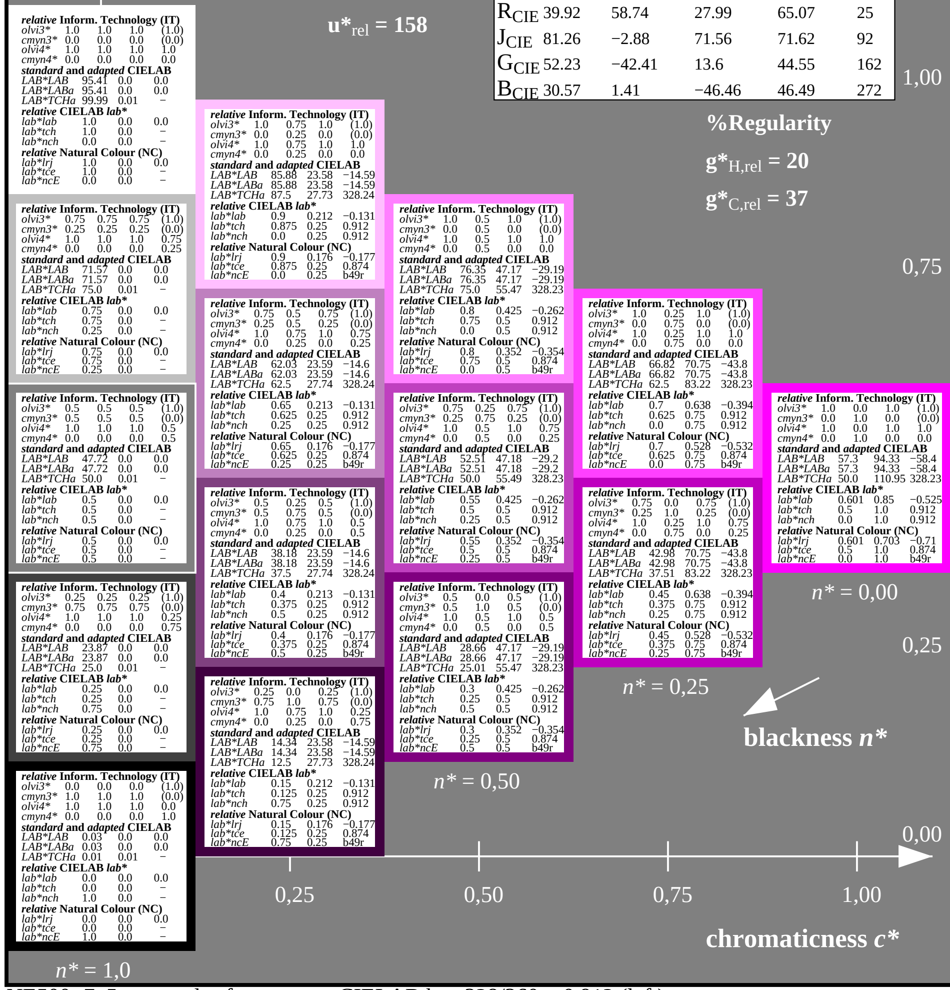


%Gamut
$u^*_{rel} = 158$

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

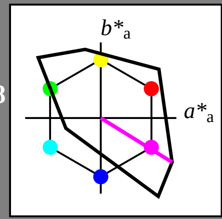
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



NE500−7, 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^*

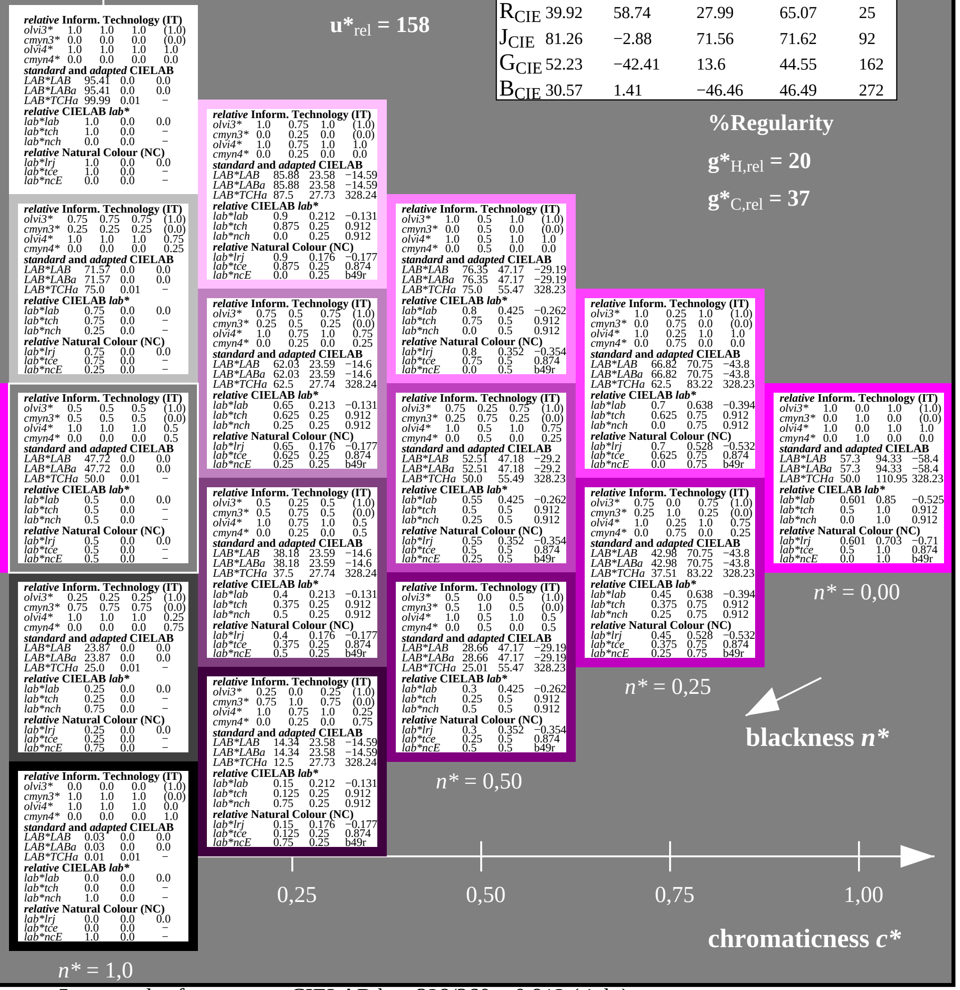


%Gamut
$u^*_{rel} = 158$

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

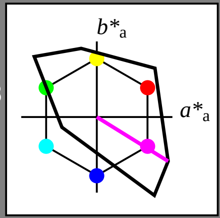
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 158$

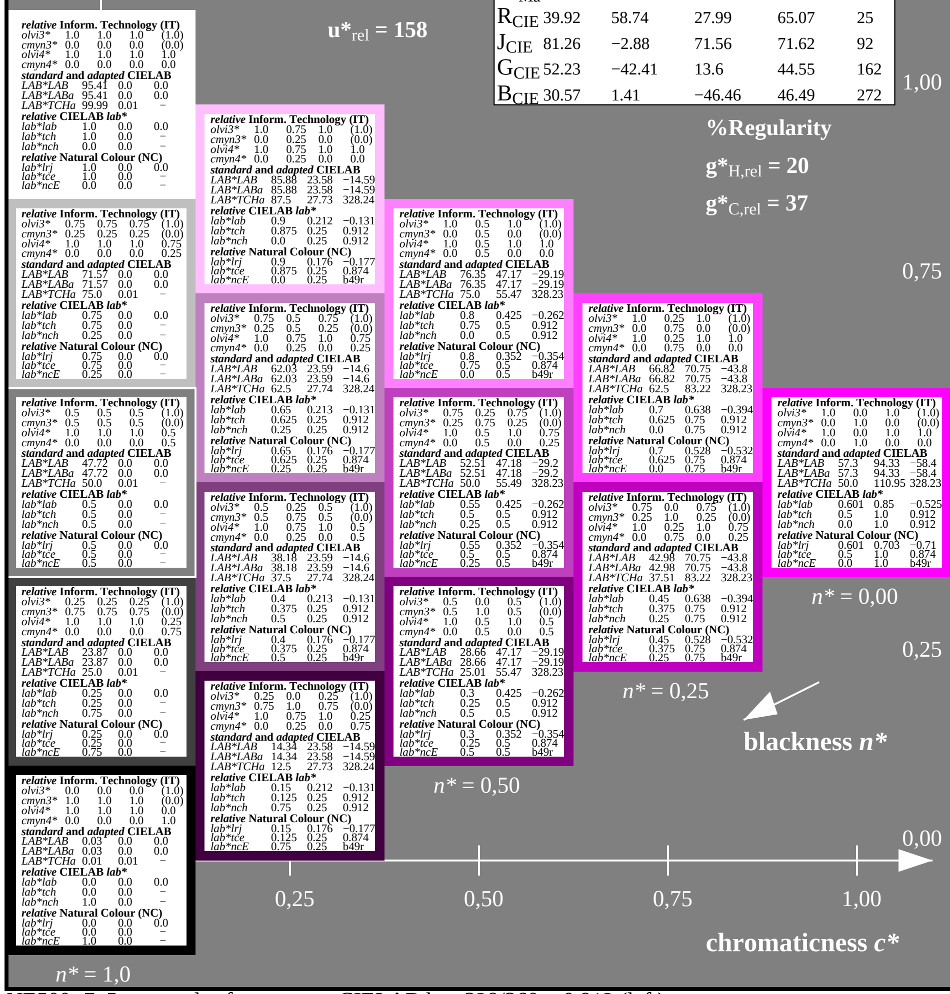
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

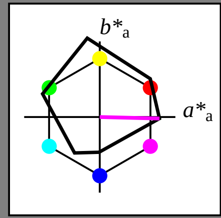
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

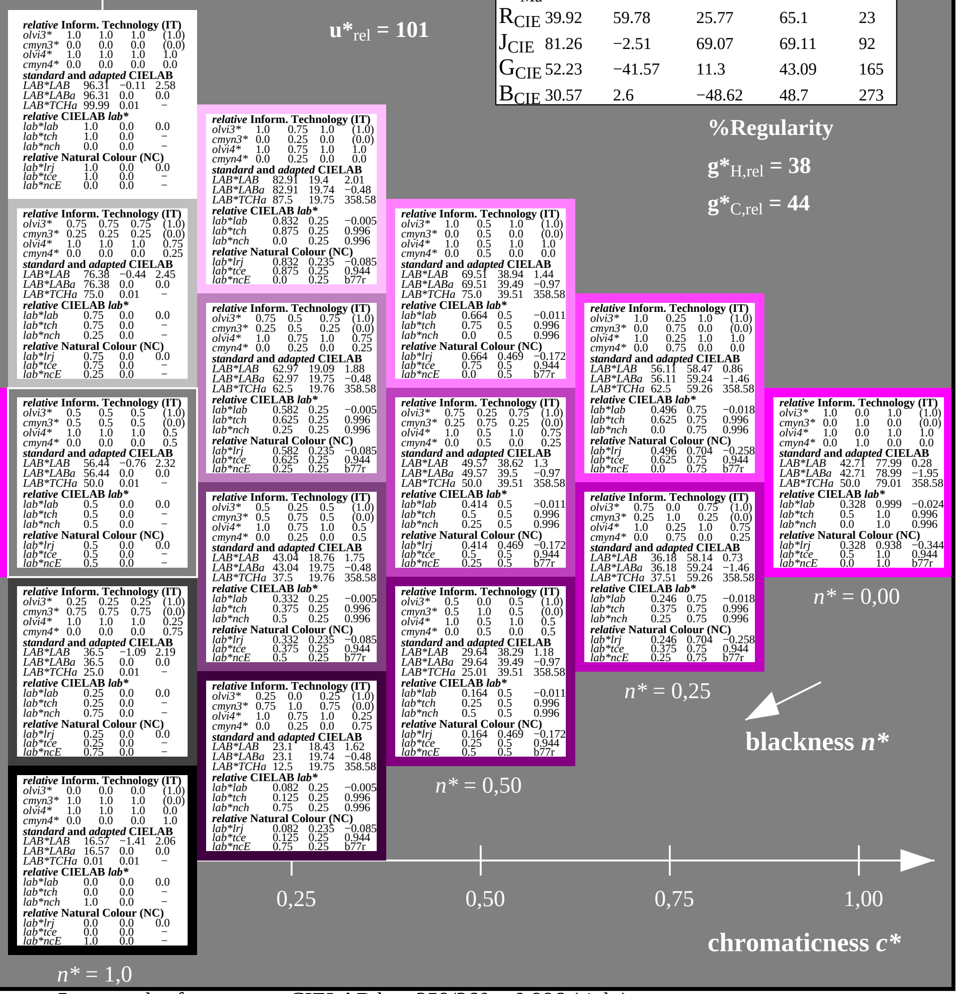
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

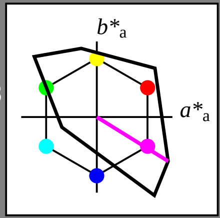
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

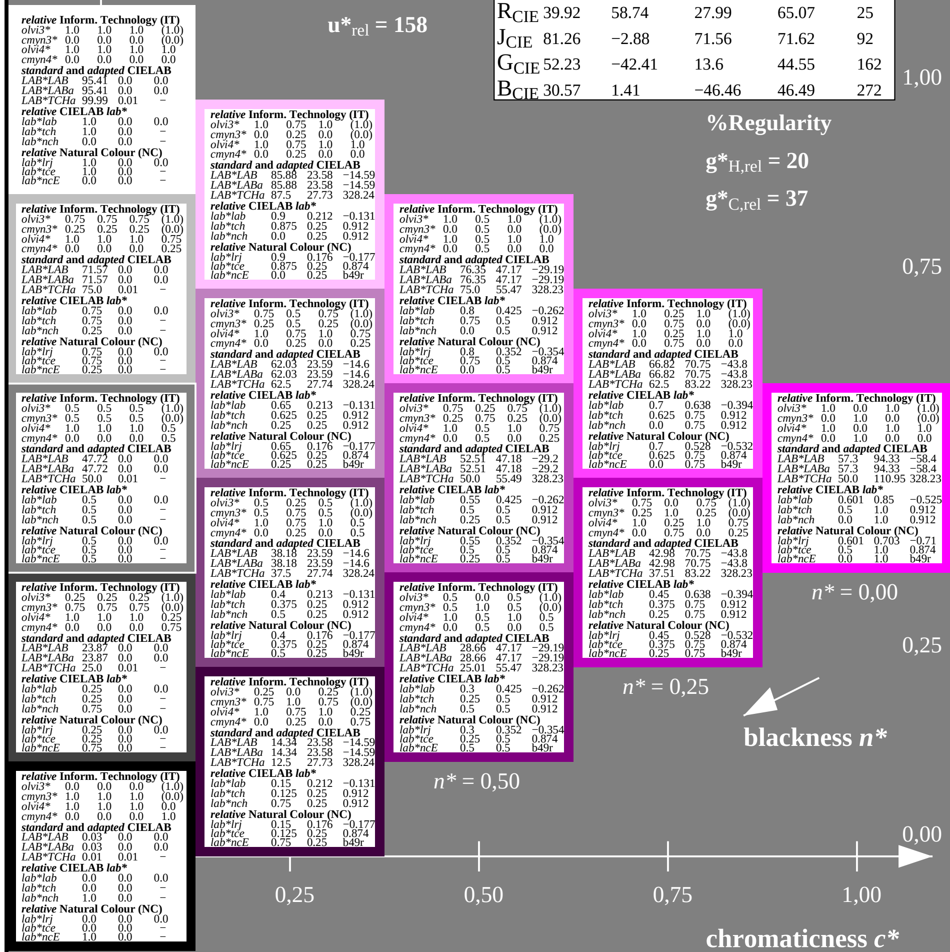
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

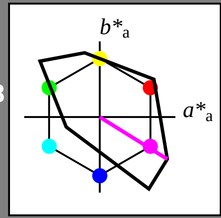
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

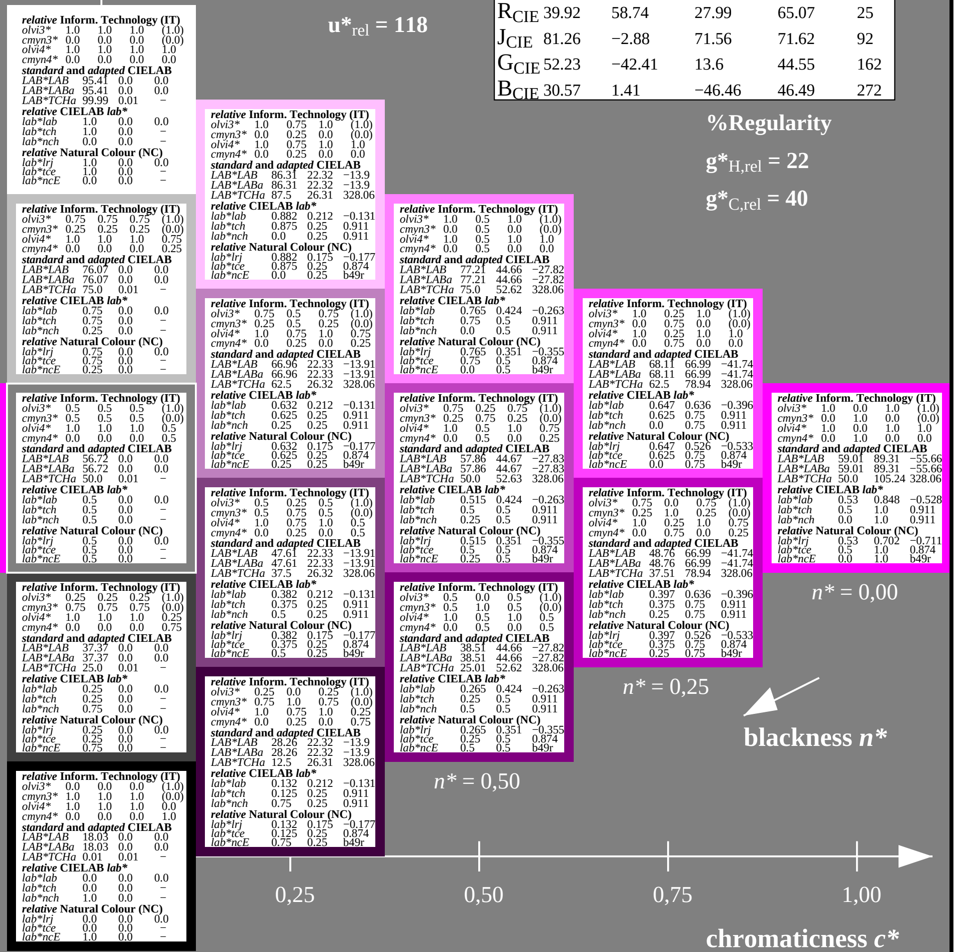
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

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**

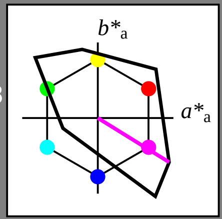
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

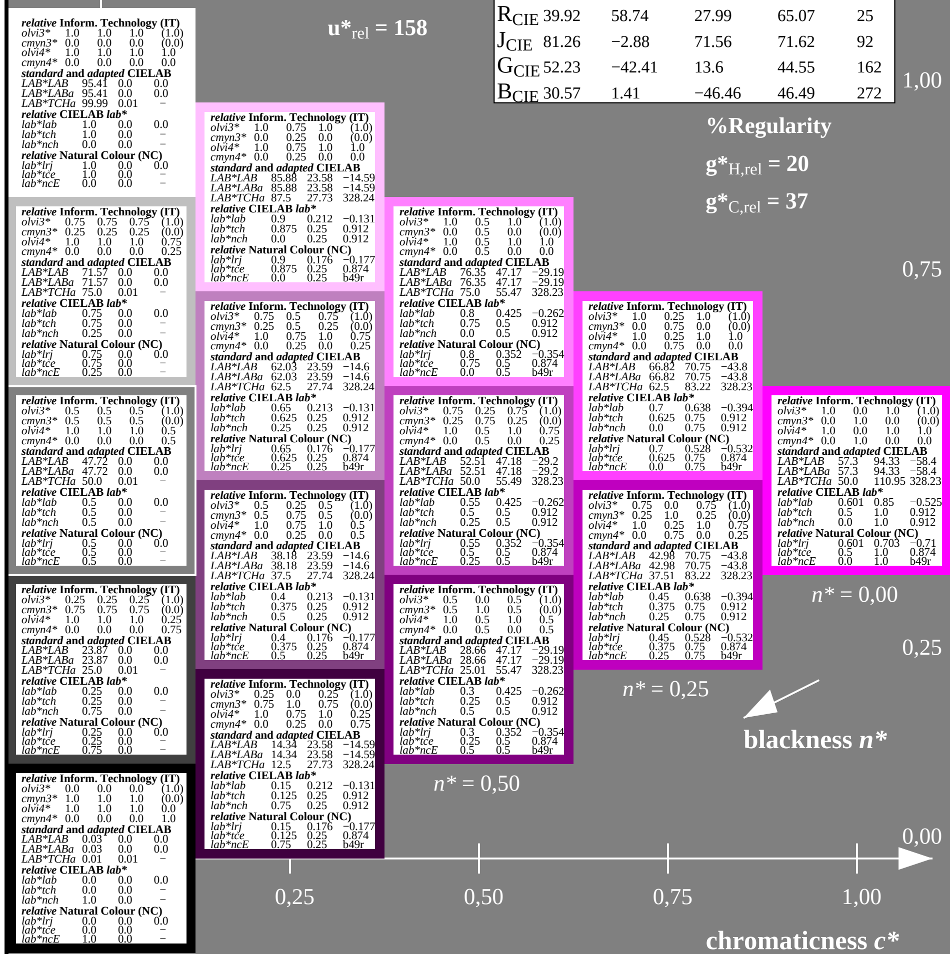
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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* = 330/360 = 0.917**

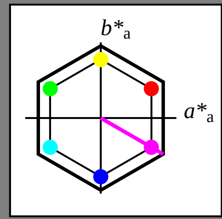
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

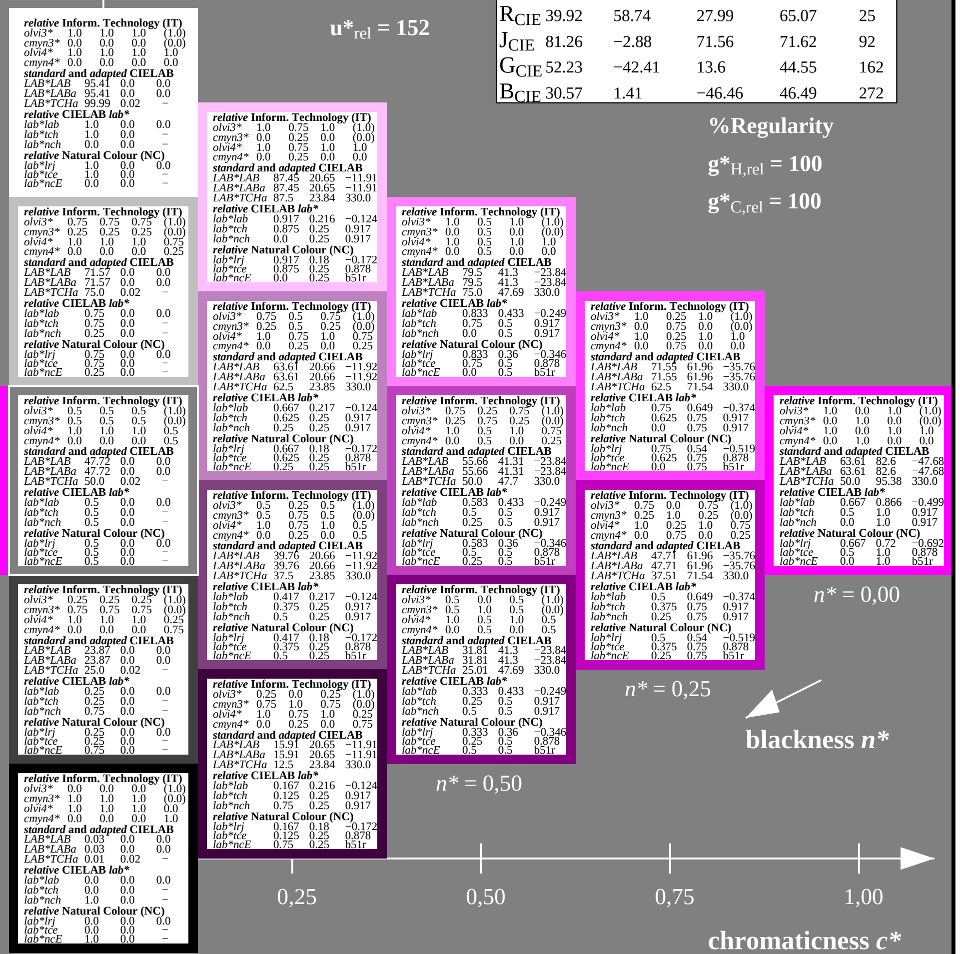
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



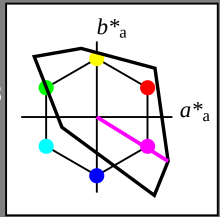
NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

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

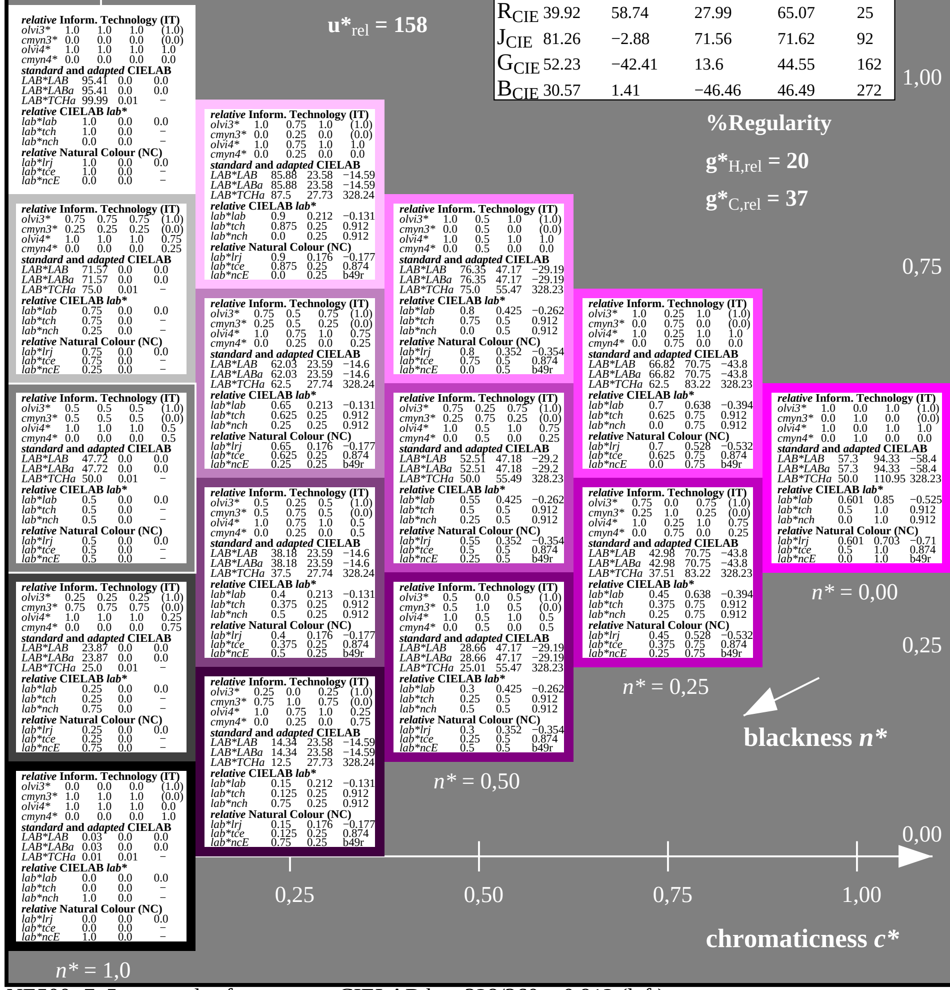
TLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	−20.69	90.75	93.08	103
LMa	83.63	−82.75	79.9	115.04	136
CMa	86.88	−46.16	−13.55	48.12	196
VMa	30.39	76.06	−103.59	128.52	306
MMa	57.3	94.35	−58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 20

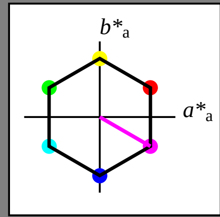
g*C,rel = 37



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

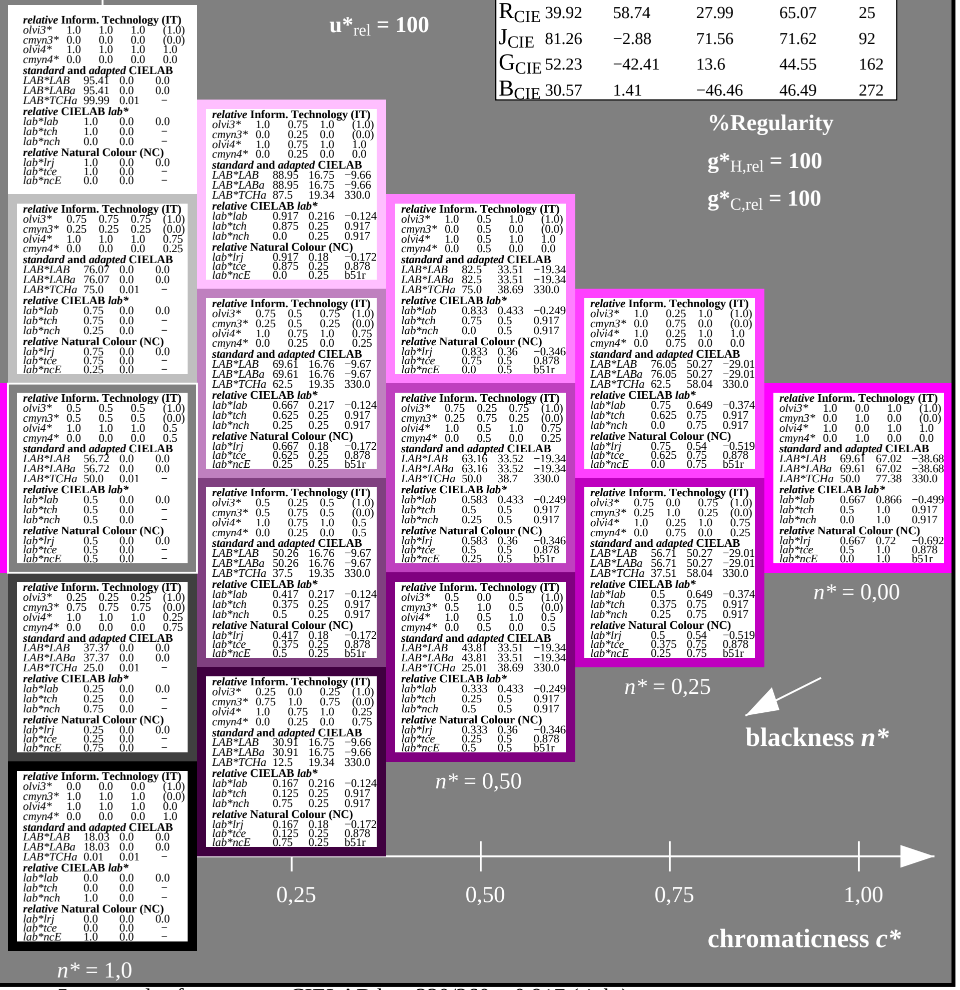
NRS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	43.81	67.03	38.7	77.4	30
YMa	69.61	0.0	77.4	77.4	90
LMa	43.81	−67.02	38.7	77.4	150
CMa	69.61	−67.02	−38.69	77.4	210
VMa	43.81	0.0	−77.39	77.4	270
MMa	69.61	67.03	−38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 100

g*C,rel = 100



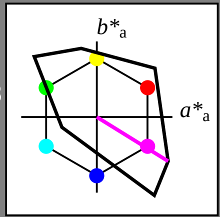
NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

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

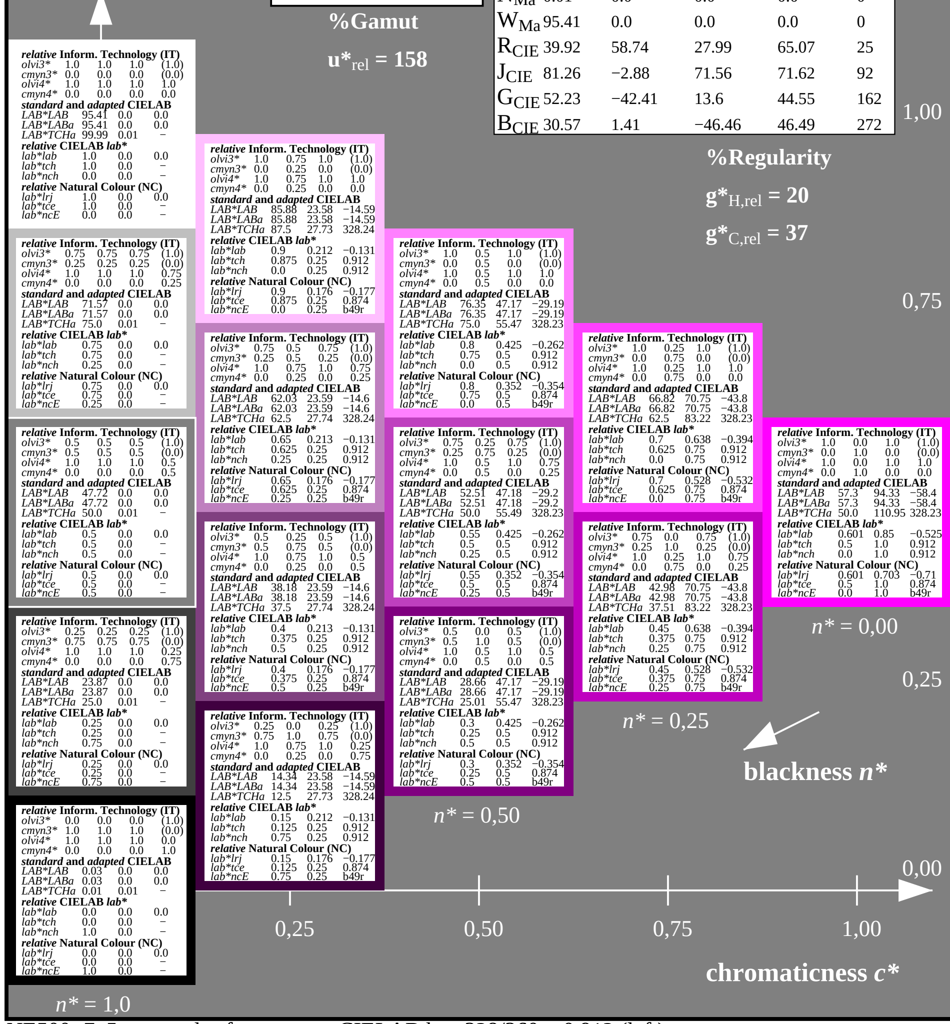
D65: hue M
LCH*Ma: 57 111 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

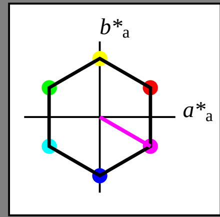
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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



Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h$ = 330/360 = 0.917
lab*tch* and *lab*nch

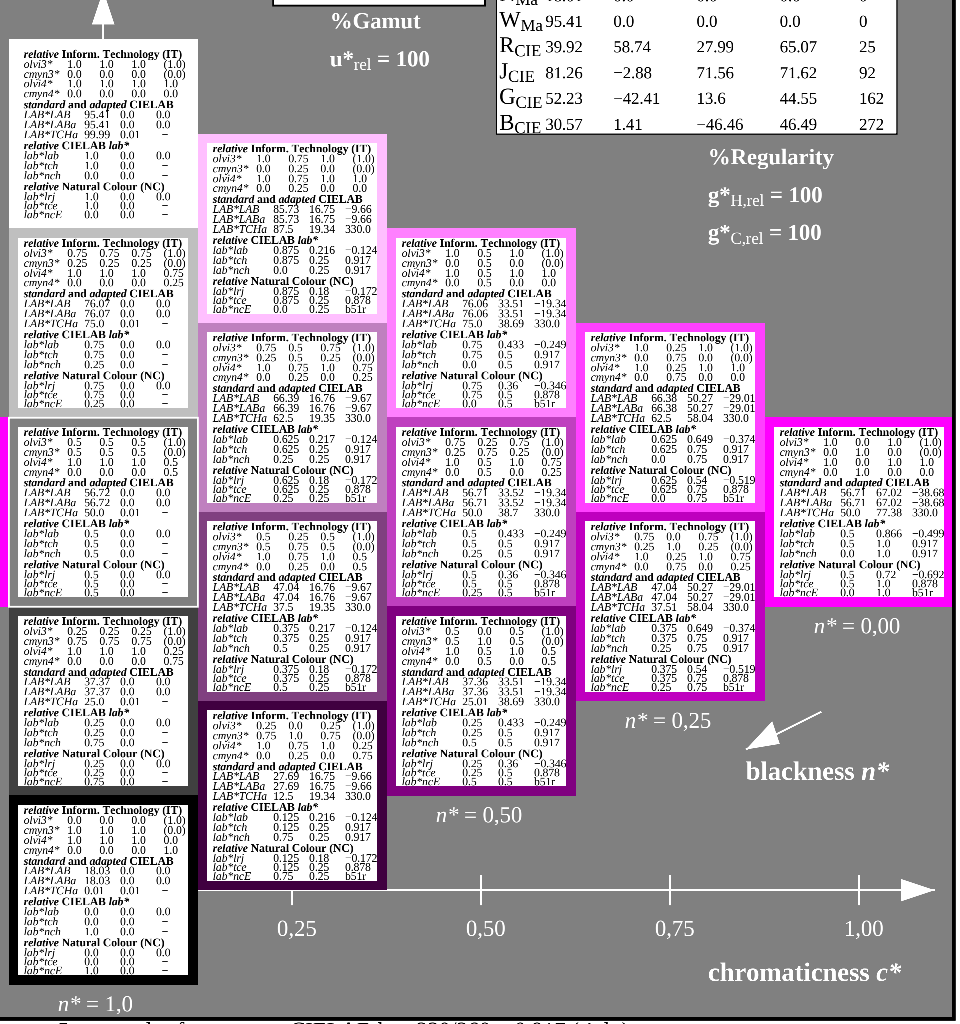
D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



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



NE500−7, 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*

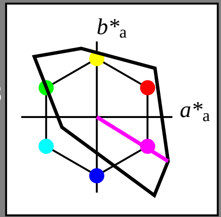
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 158

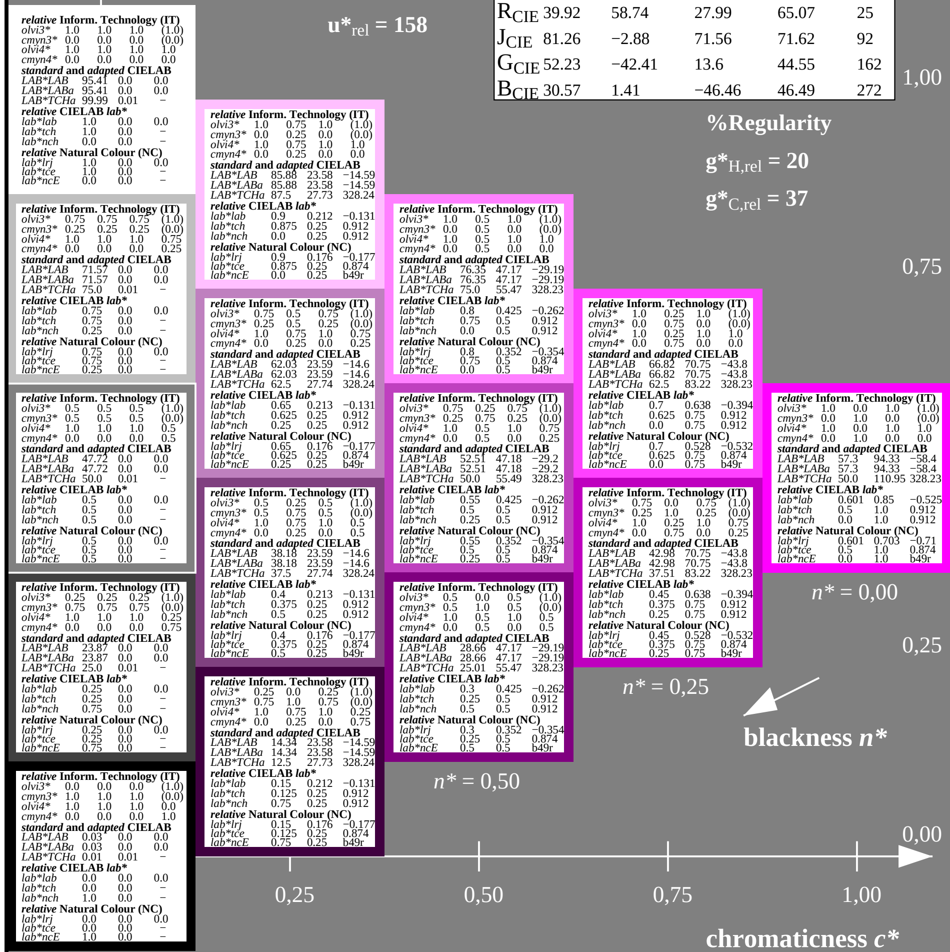
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h = 326/360 = 0.906*

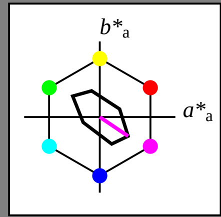
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

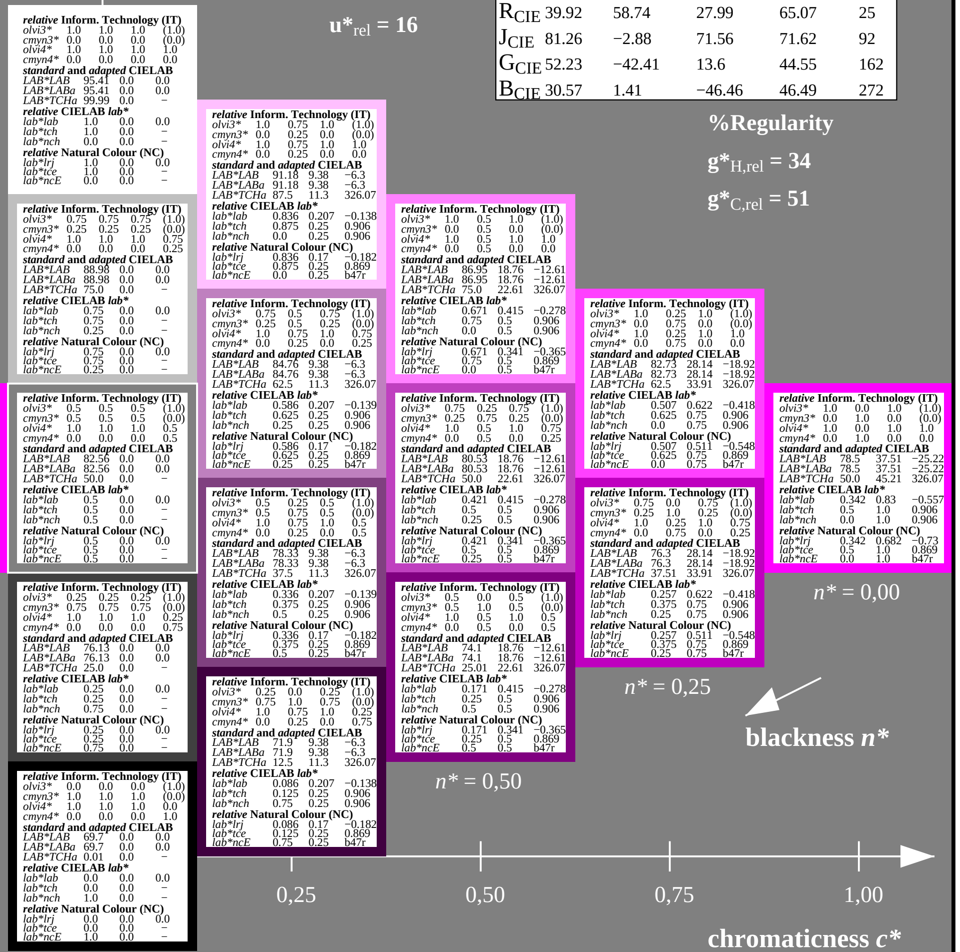
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



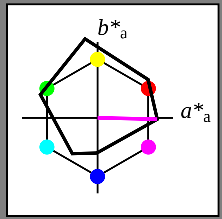
NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

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

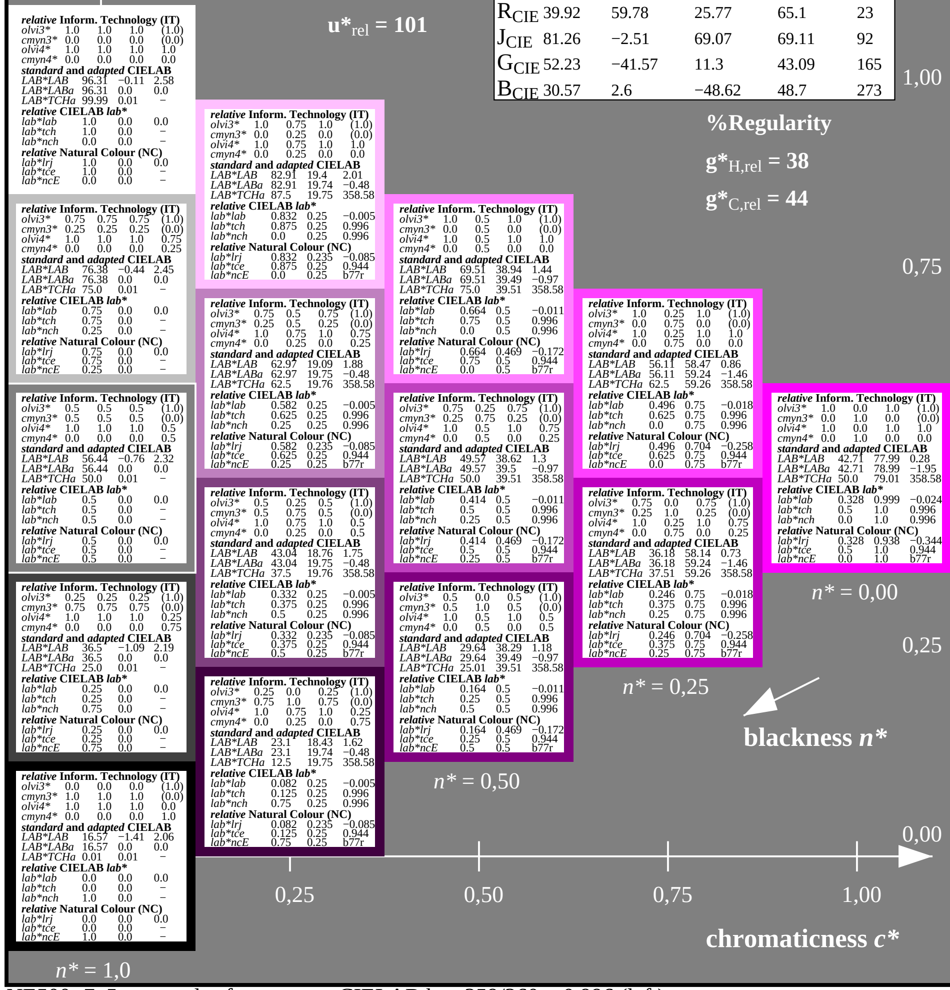
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

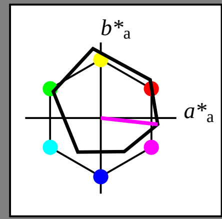
$g^*_{C,rel}$ = 44



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

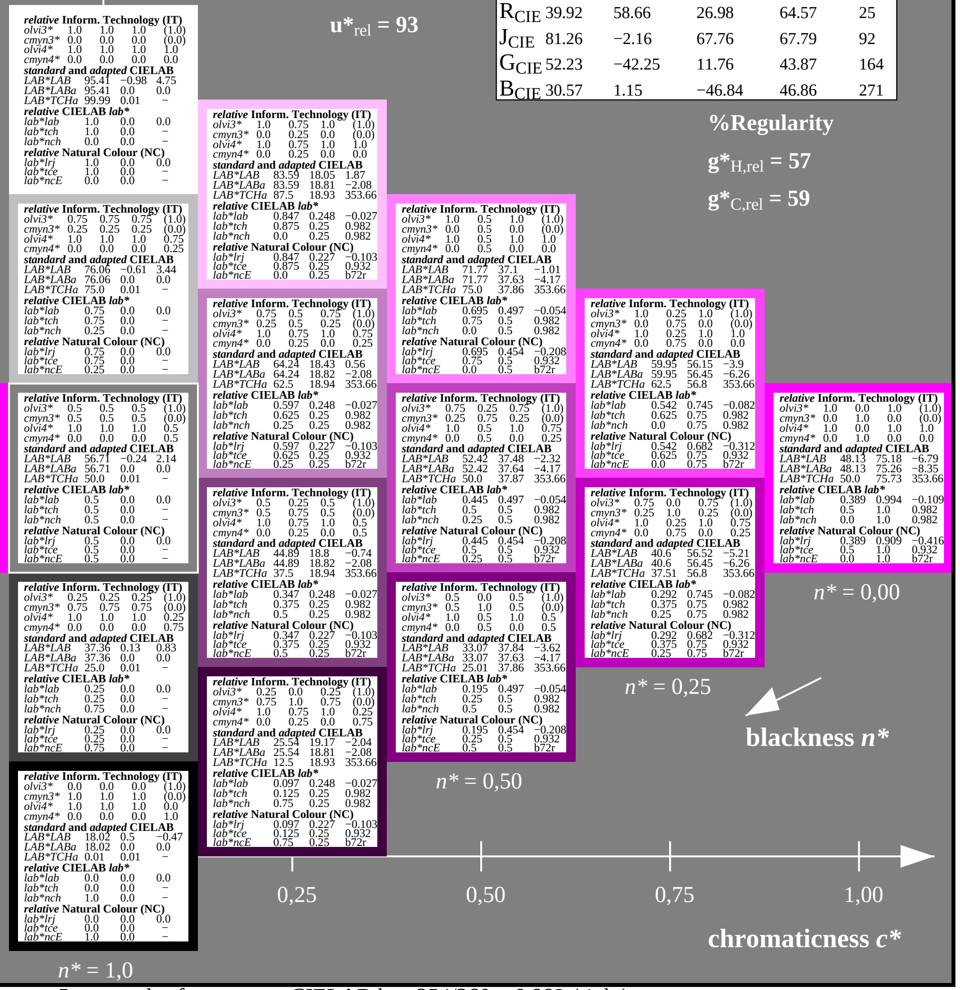
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



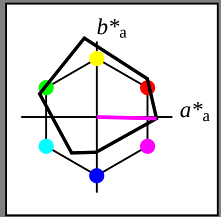
NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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

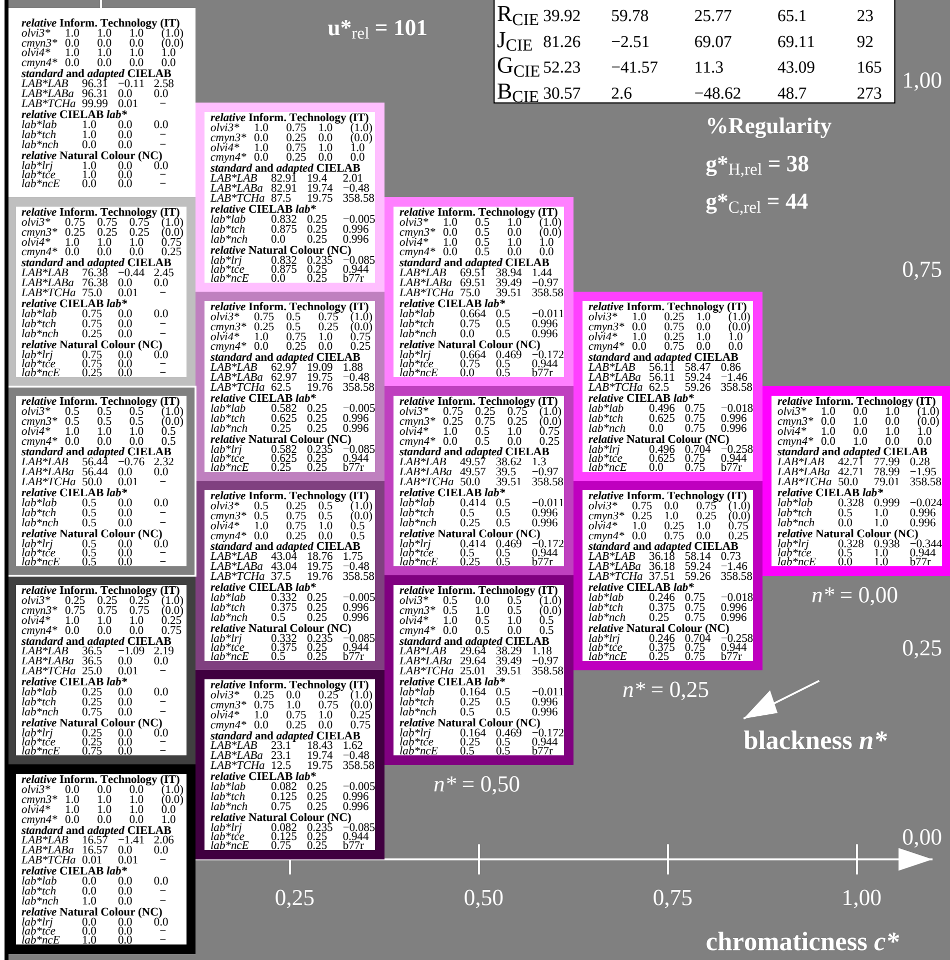
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

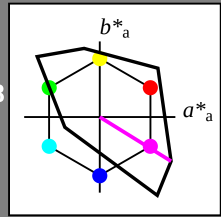
$g^*_{C,rel}$ = 44



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

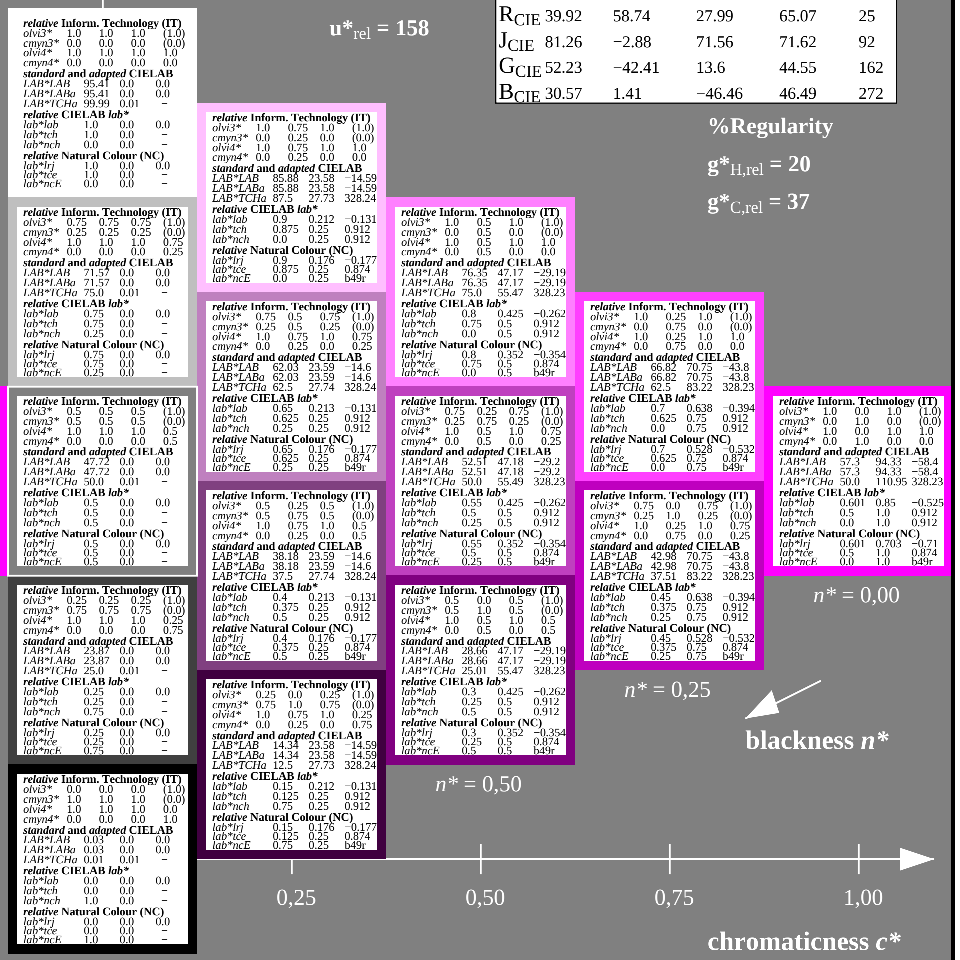
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



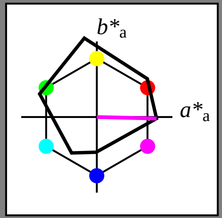
NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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

$u^*_{rel} = 101$

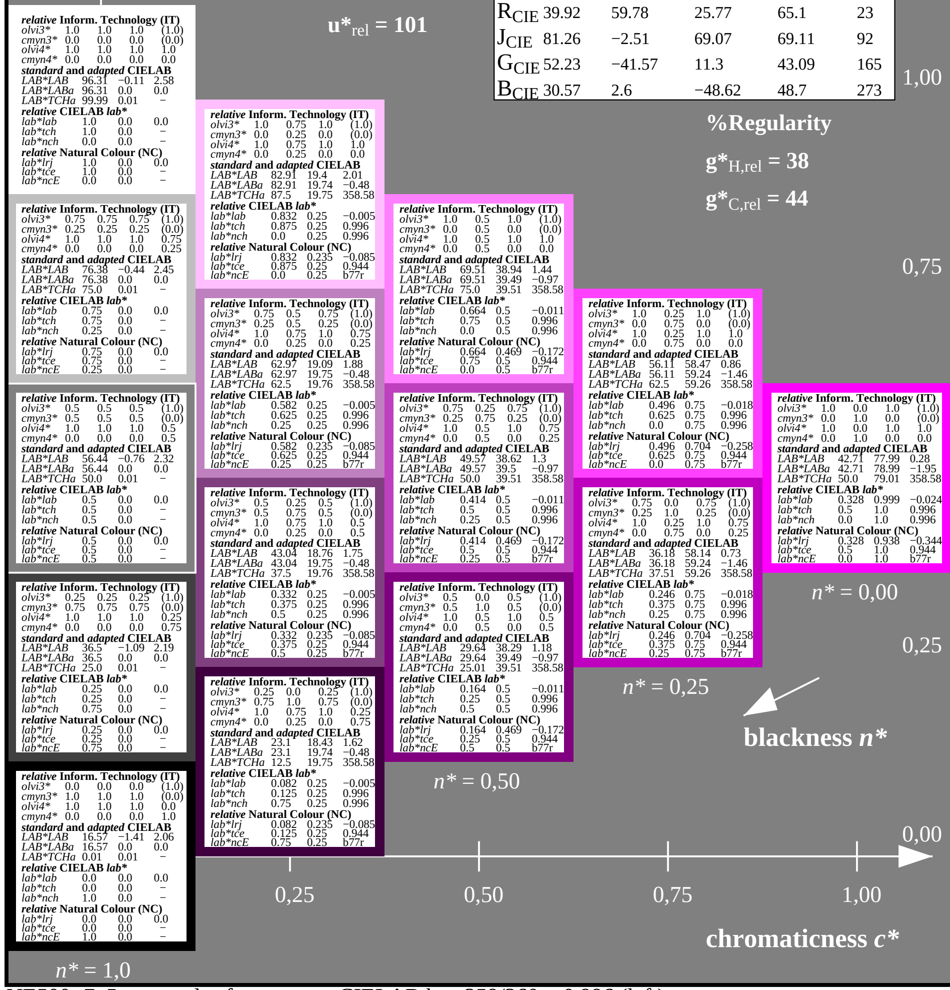
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

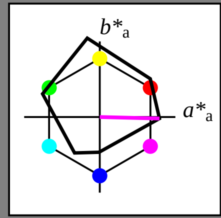


NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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

$u^*_{rel} = 101$

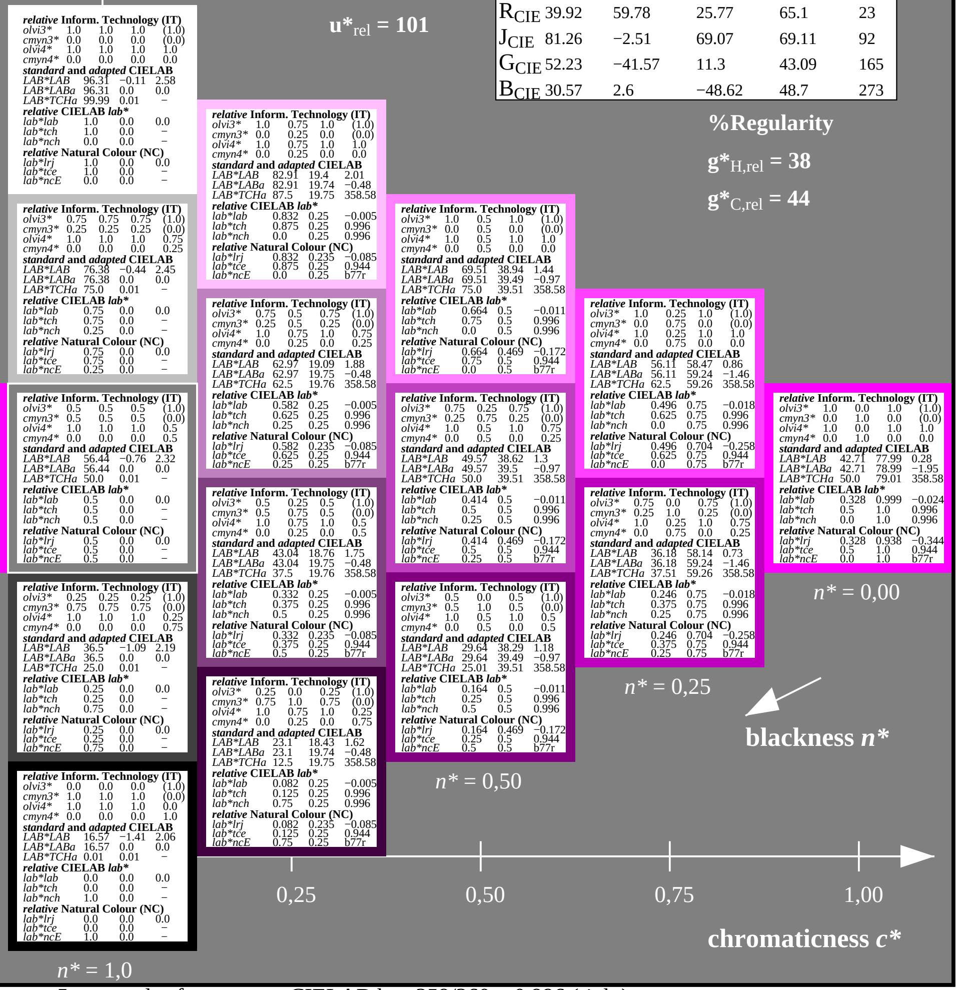
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

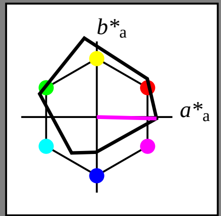


5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

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^*

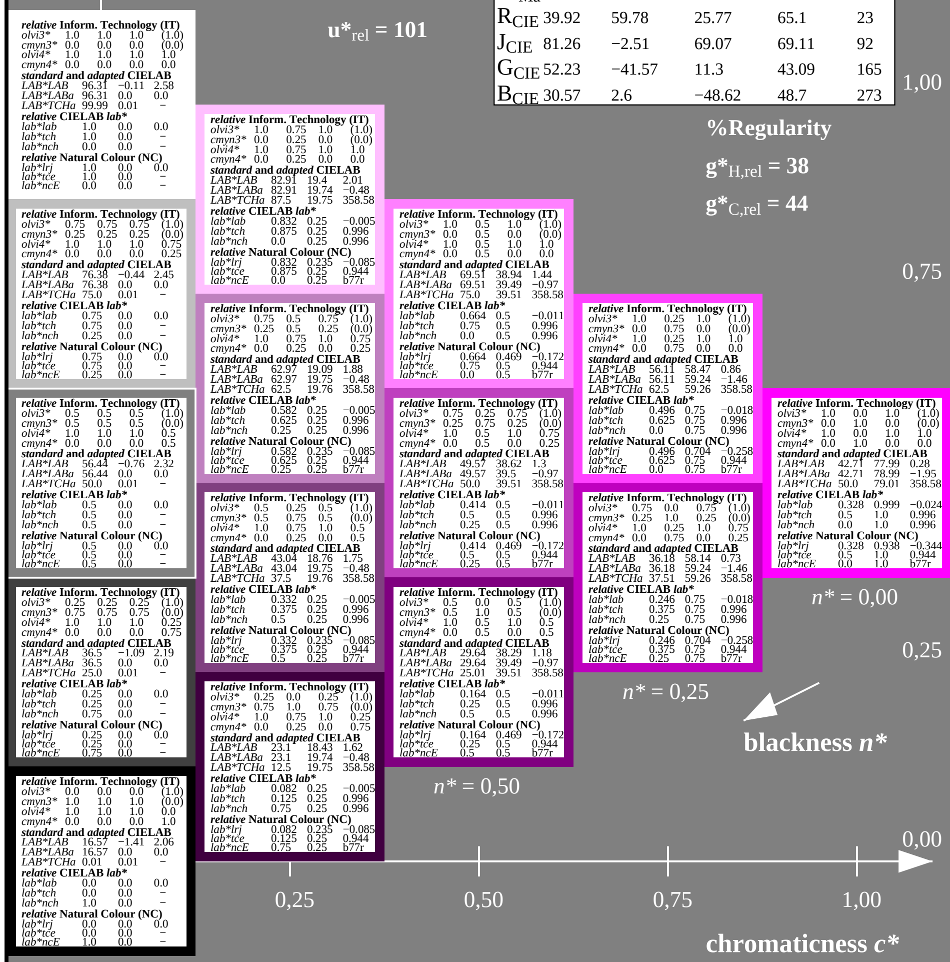


%Gamut
u^*_{rel} = 101

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

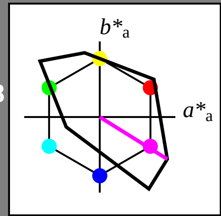
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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^*

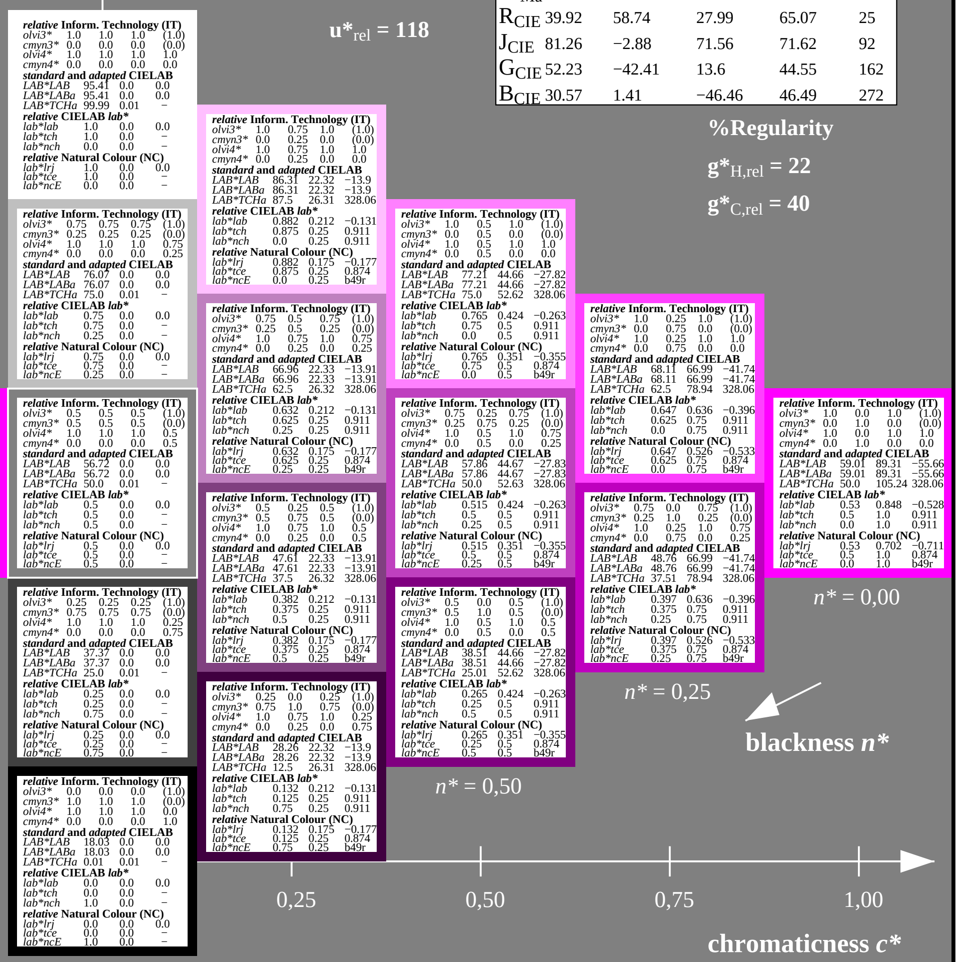


%Gamut
u^*_{rel} = 118

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



NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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**

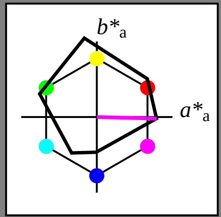
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 101

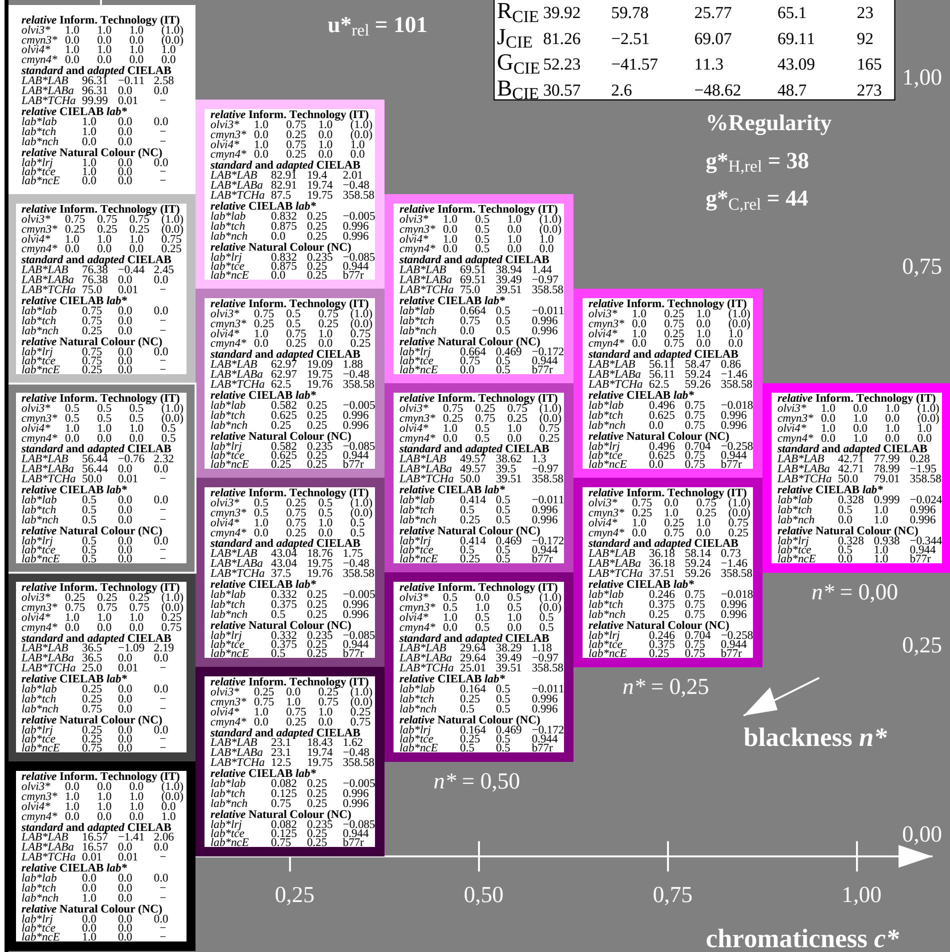
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 330/360 = 0.917**

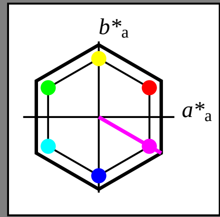
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

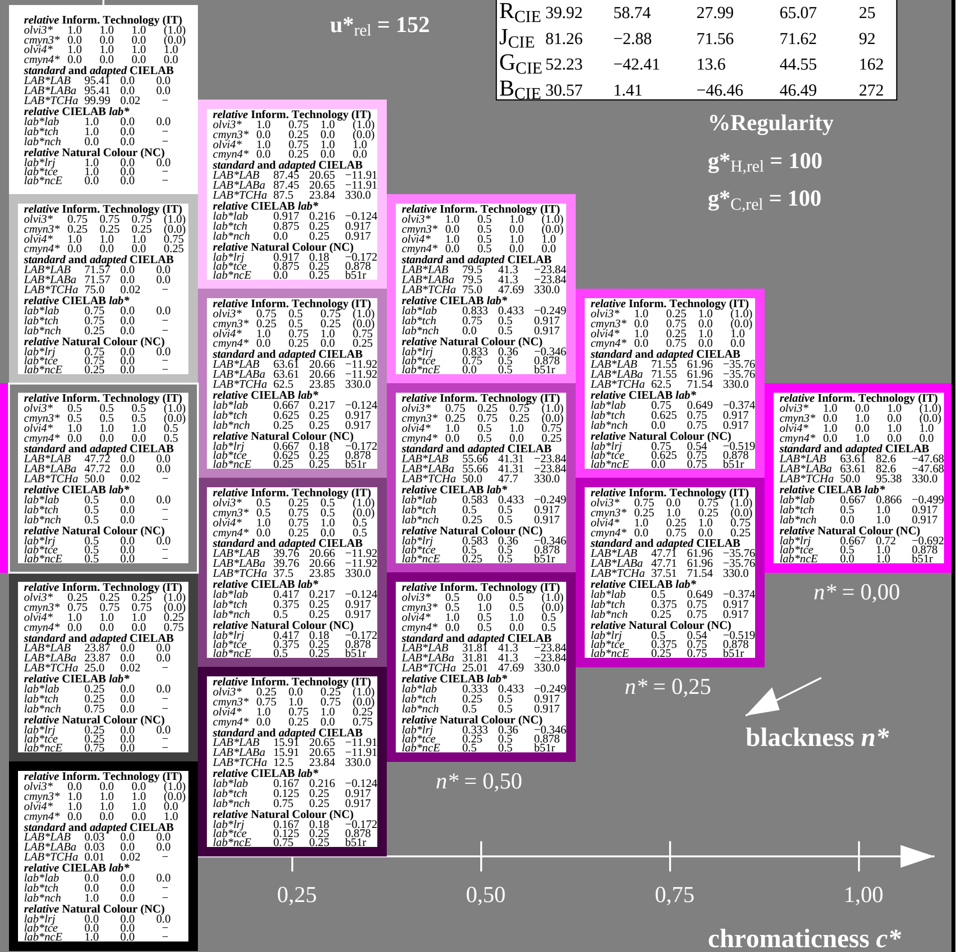
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

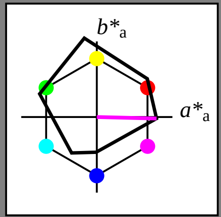


NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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^*

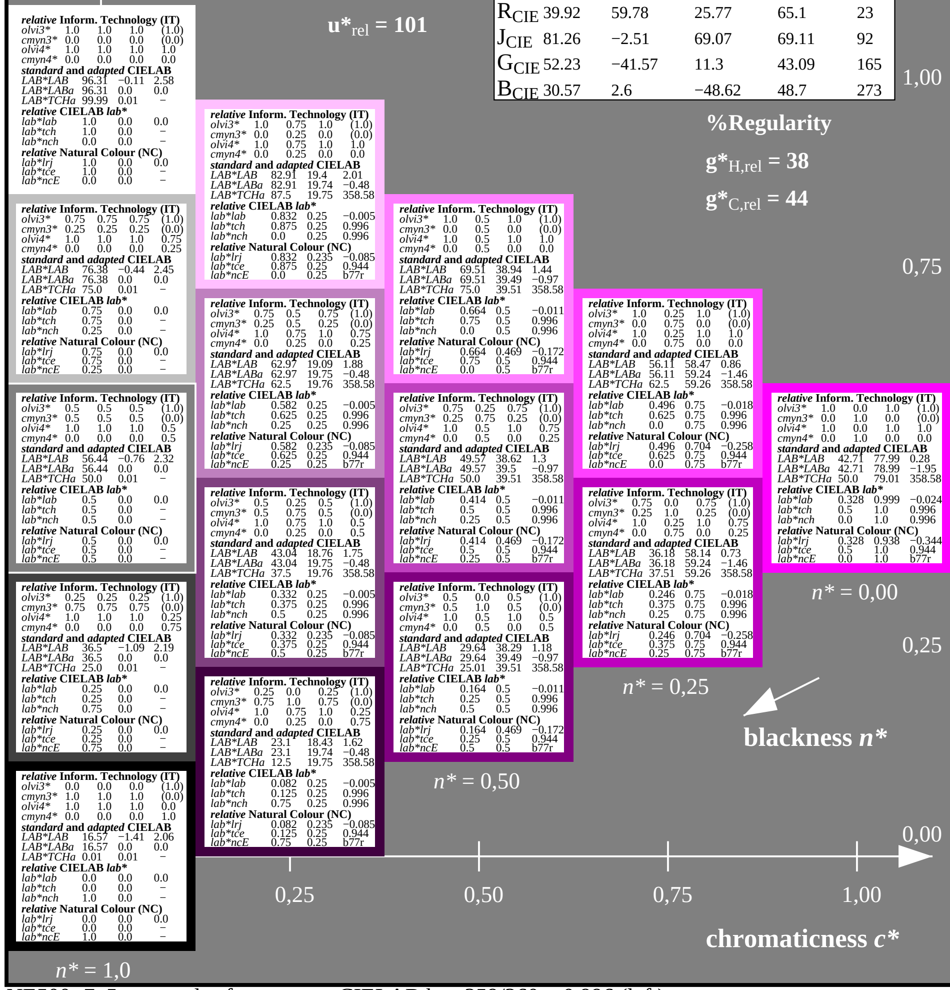


%Gamut
$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

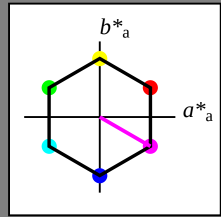
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



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^*

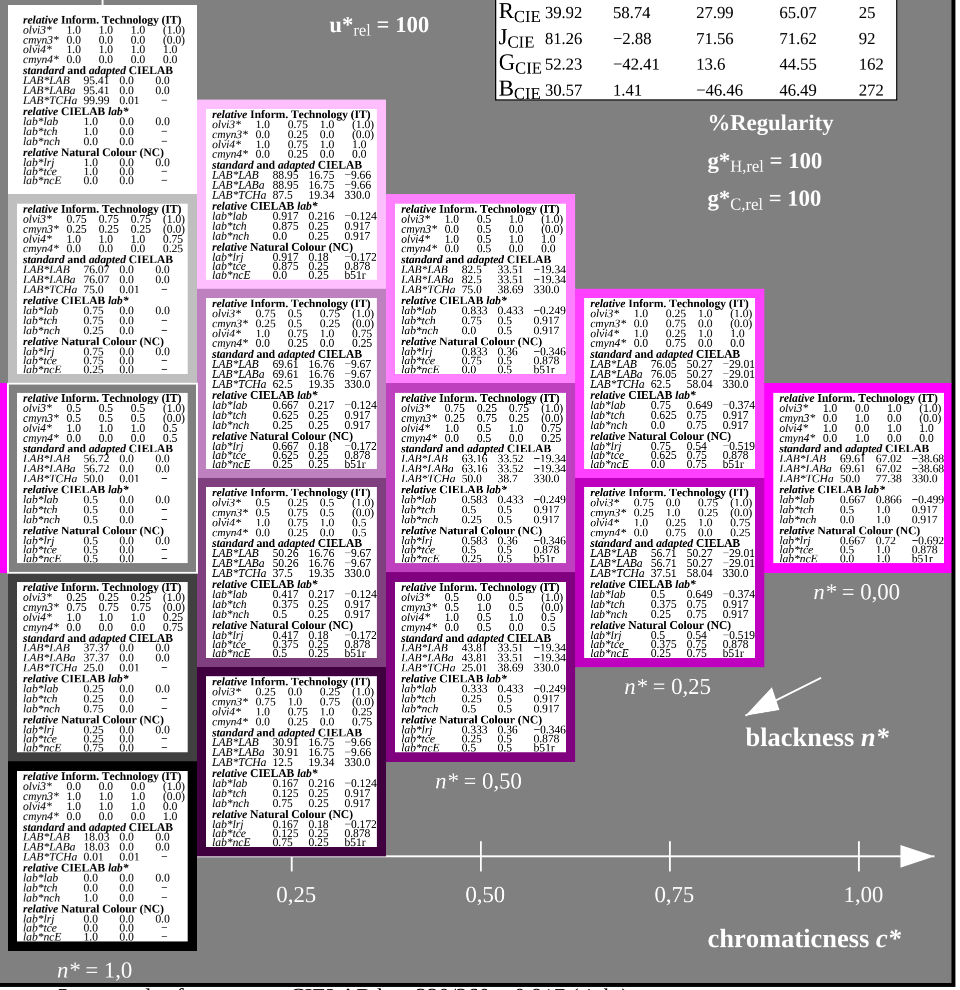


%Gamut
$u^*_{rel} = 100$

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



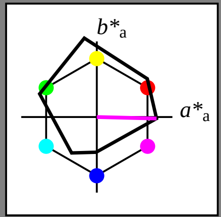
NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

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

$u^*_{rel} = 101$

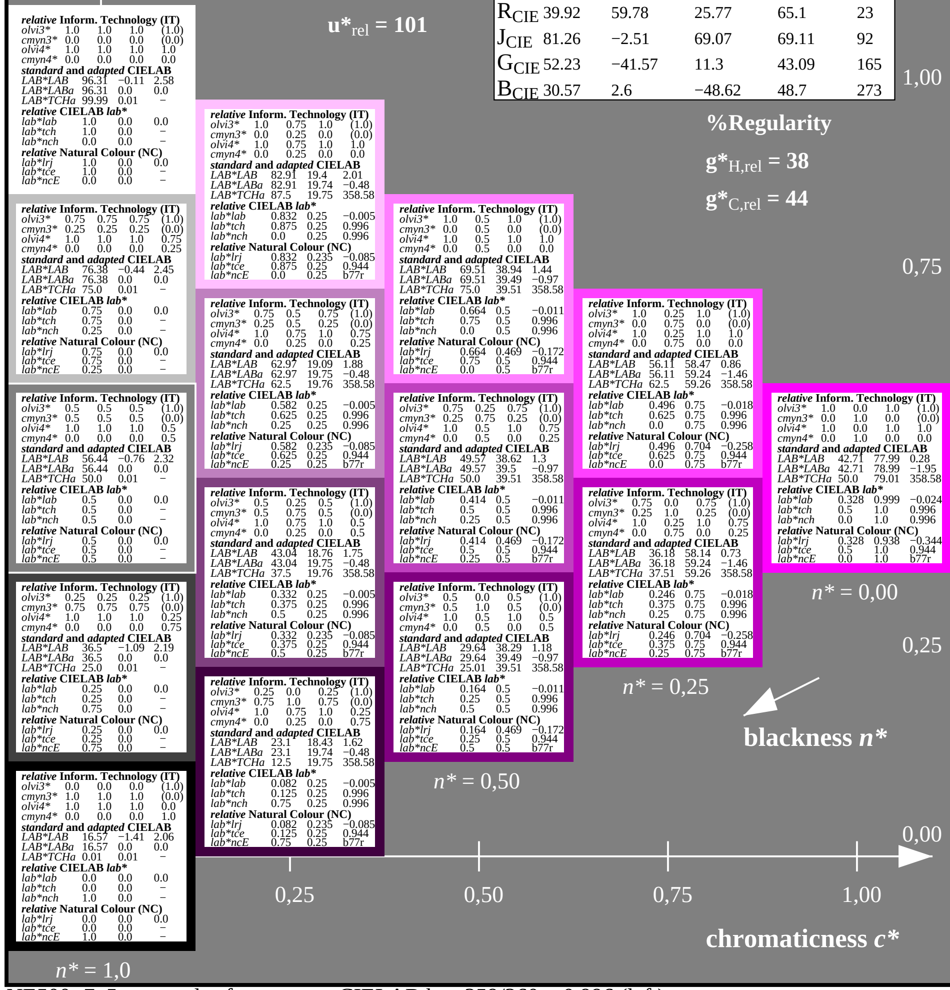
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

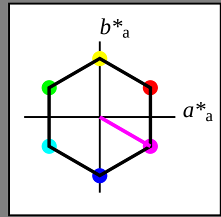
$g^*_{C,rel} = 44$



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

$u^*_{rel} = 100$

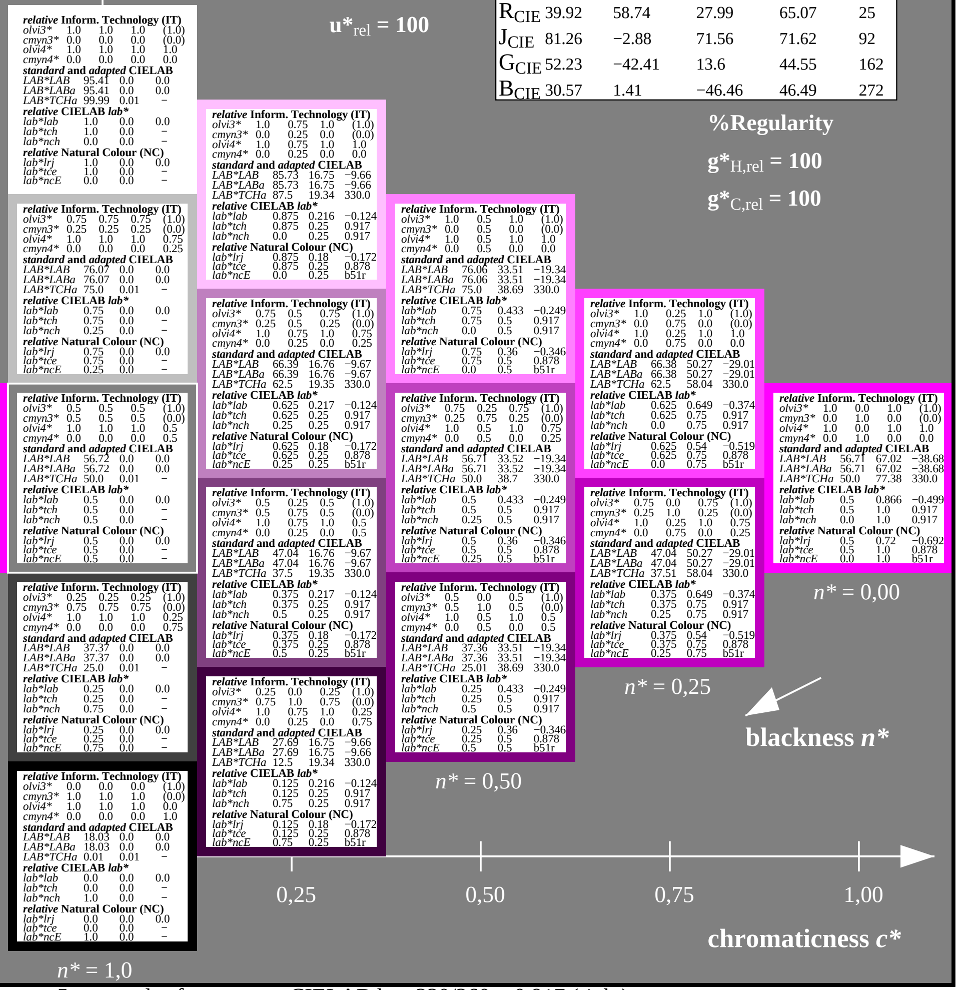
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

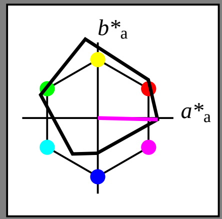
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

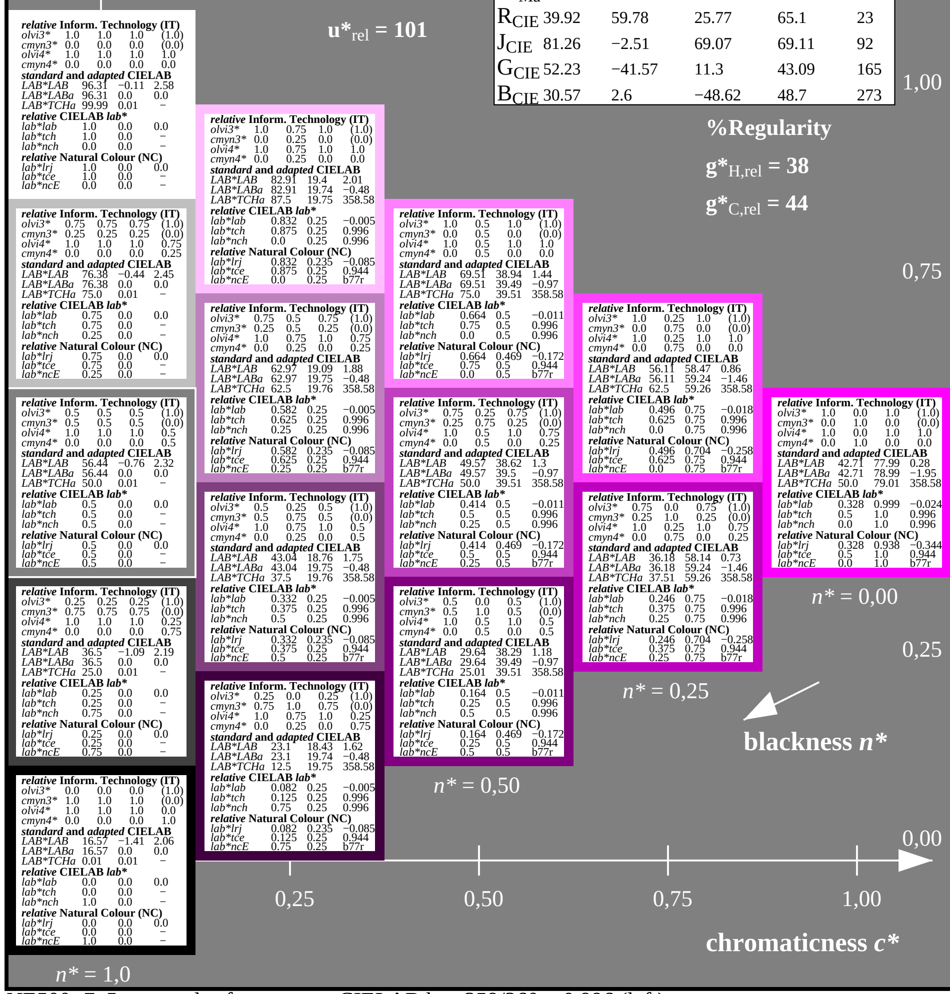
$u^*_{rel} = 101$

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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$

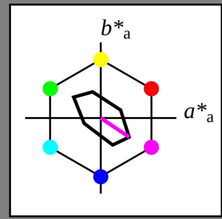
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

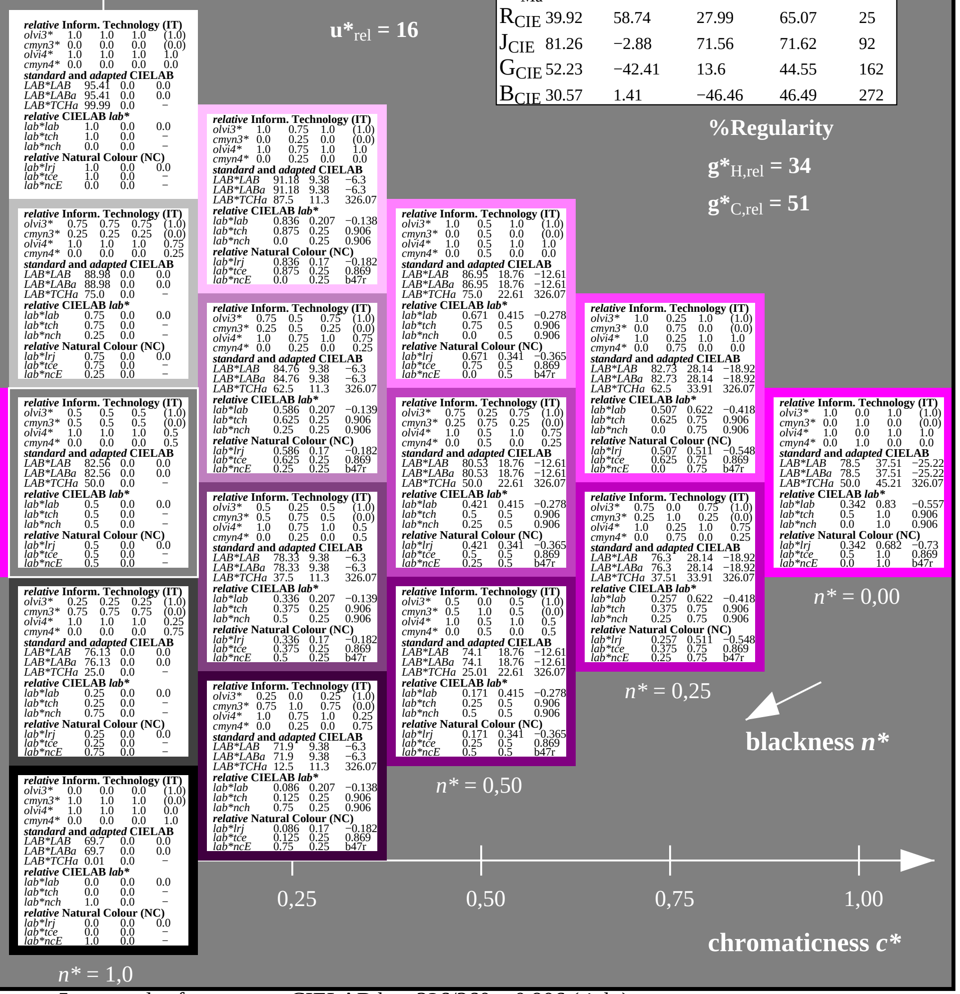
$u^*_{rel} = 16$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 359/360 = 0.996 (left)

5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

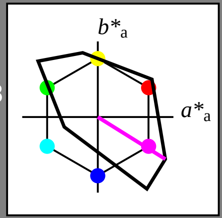
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

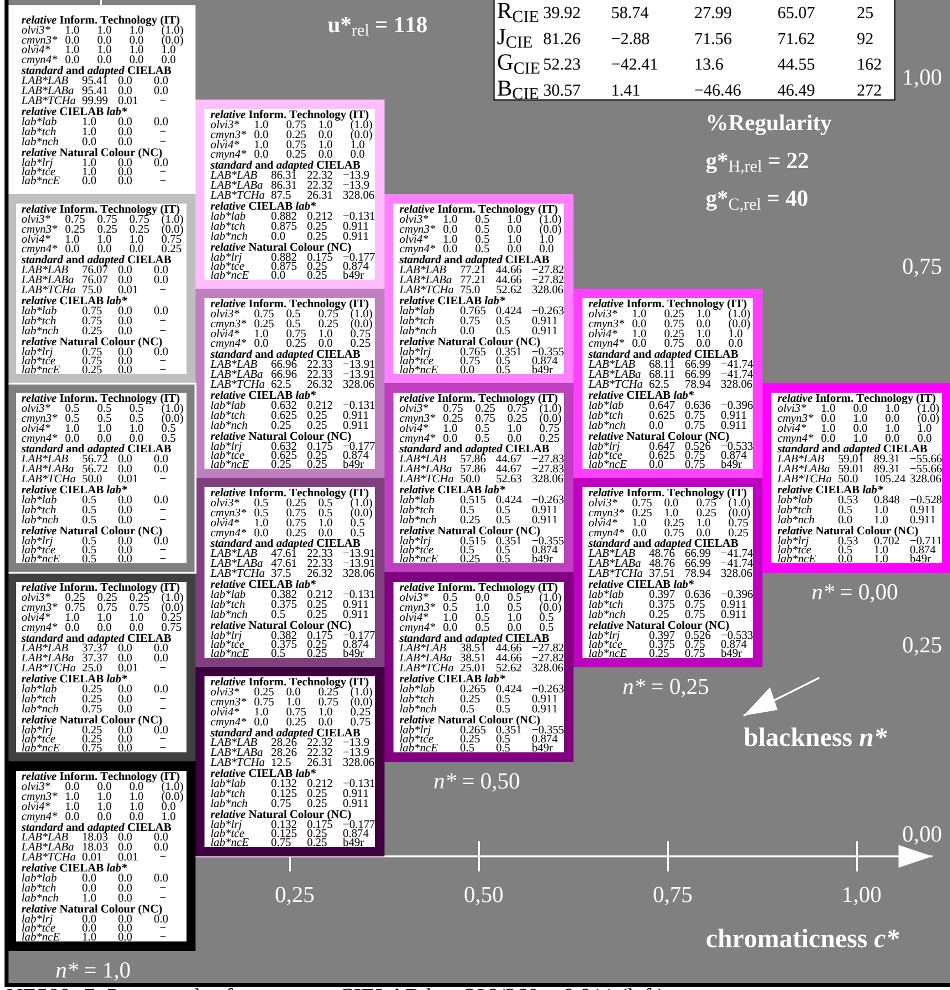
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 354/360 = 0.982$

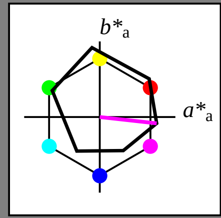
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

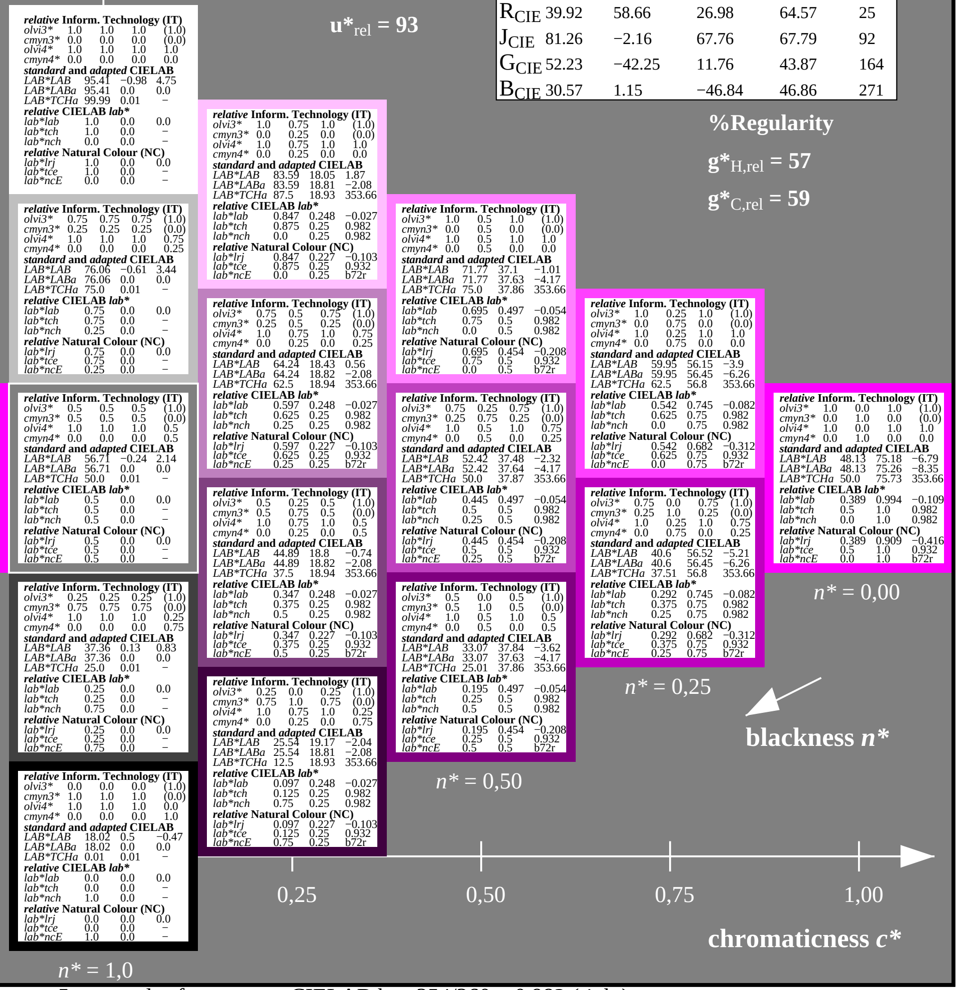
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



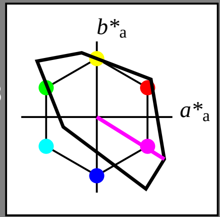
NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

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

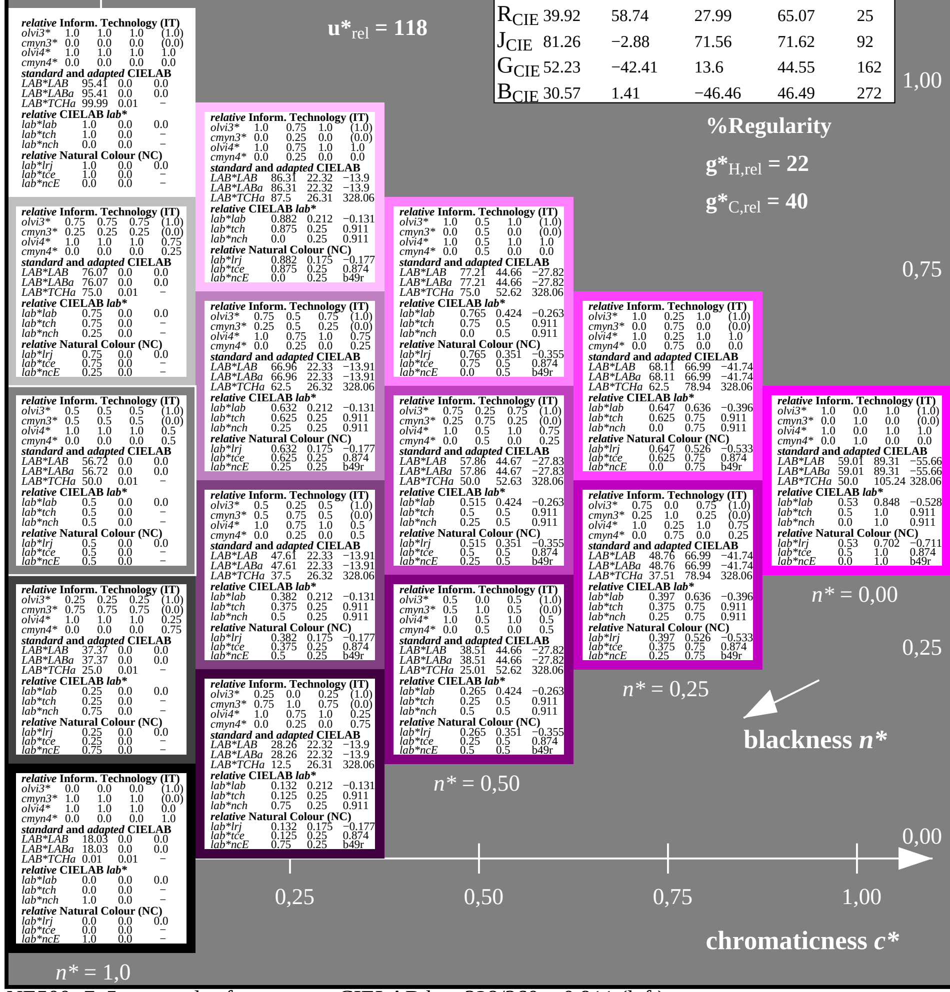
triangle lightness *t**



%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

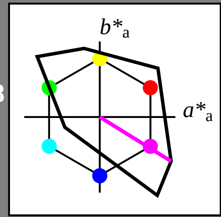
%Regularity
g*H,rel = 22
g*C,rel = 40



Output: Colorimetric Television Luminous System TLS00
for hue *h = *lab*h* = 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

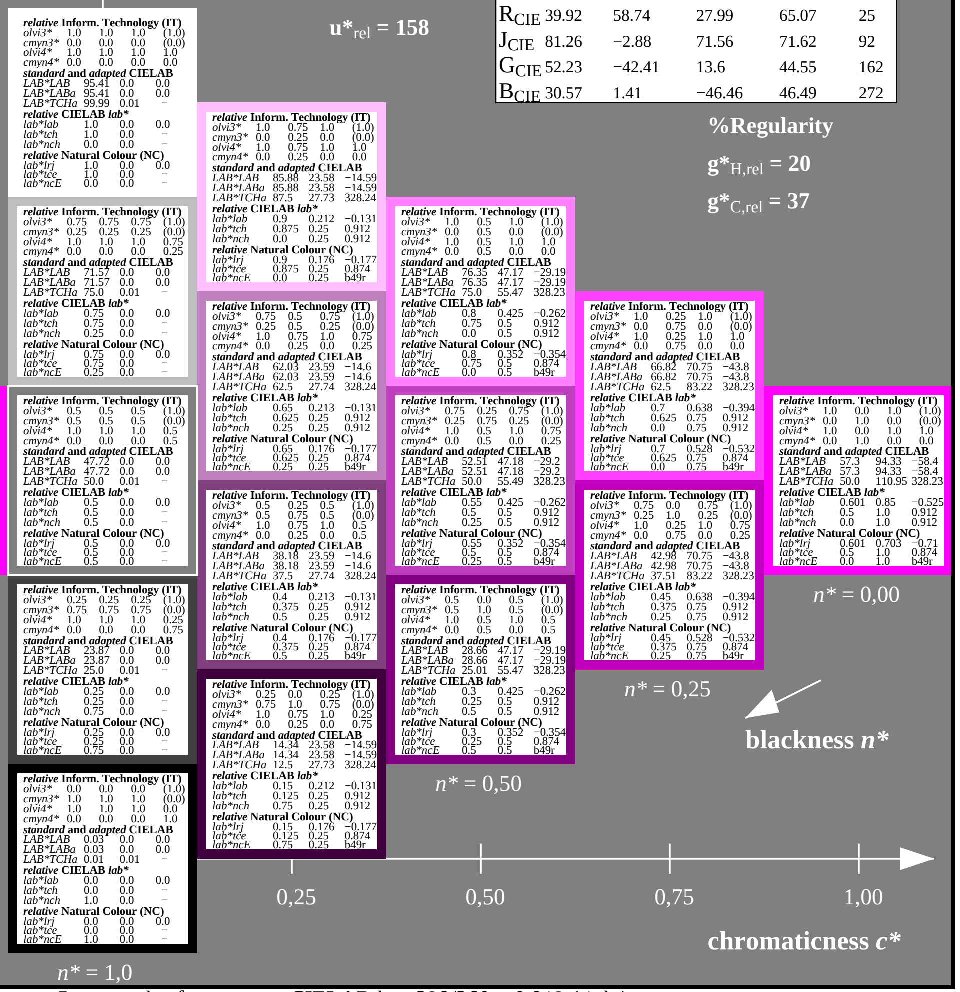
triangle lightness *t**



%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



NE500−7, 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 $h^* = lab^*h = 328/360 = 0.911$

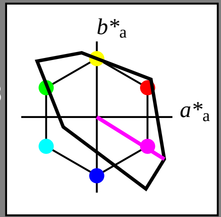
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

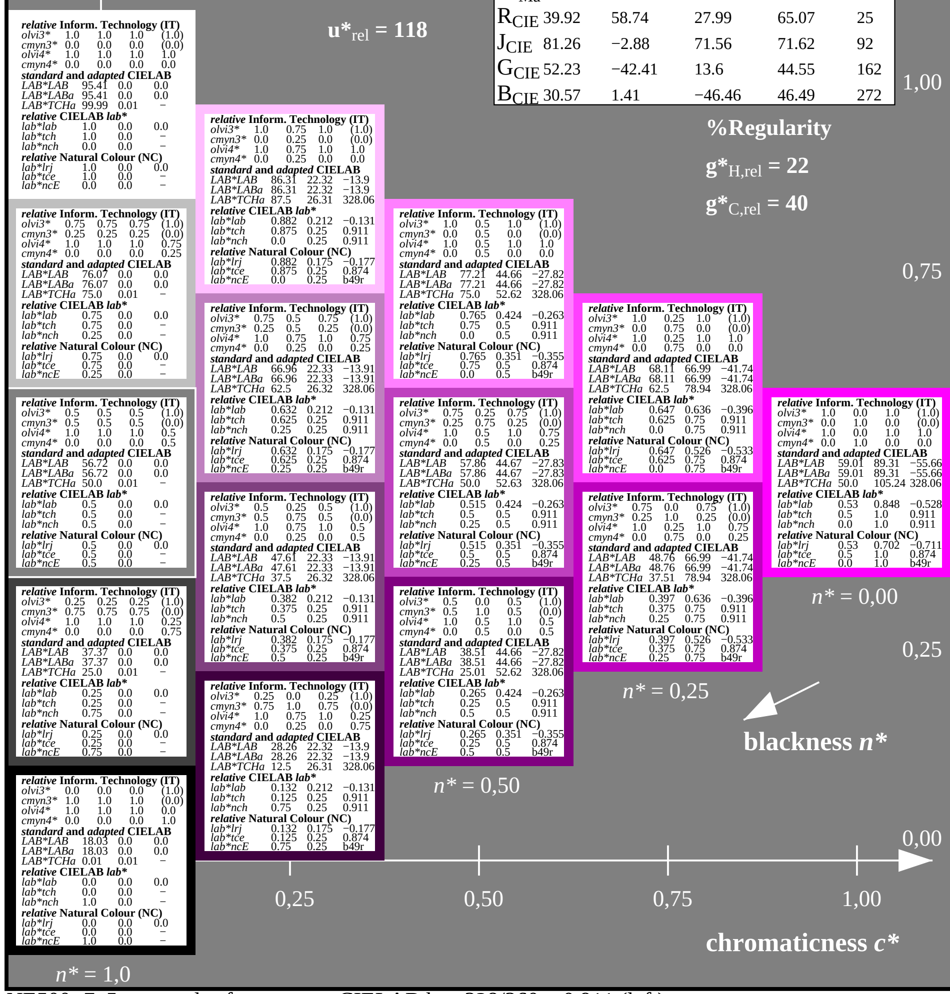
$u^*_{rel} = 118$

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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 359/360 = 0.996$

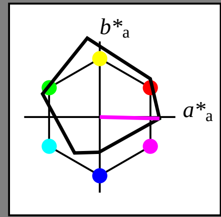
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

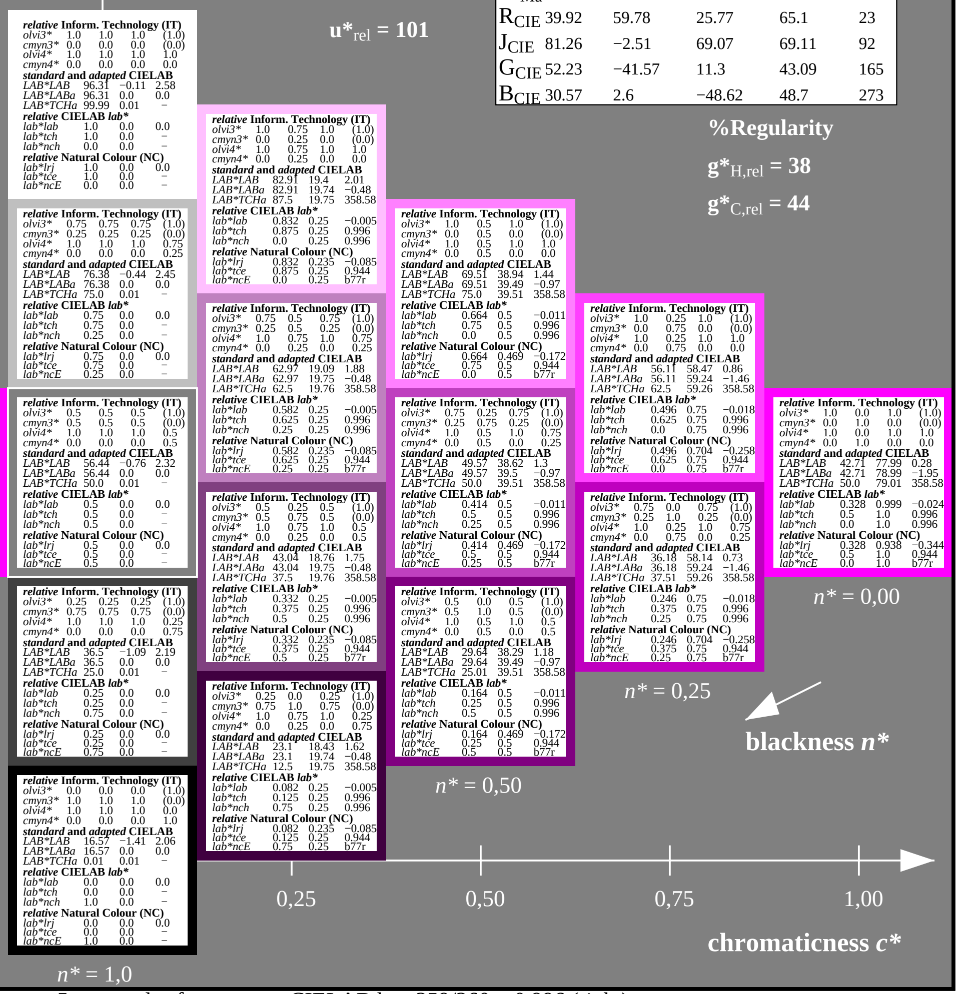
$u^*_{rel} = 101$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

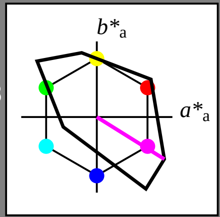
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

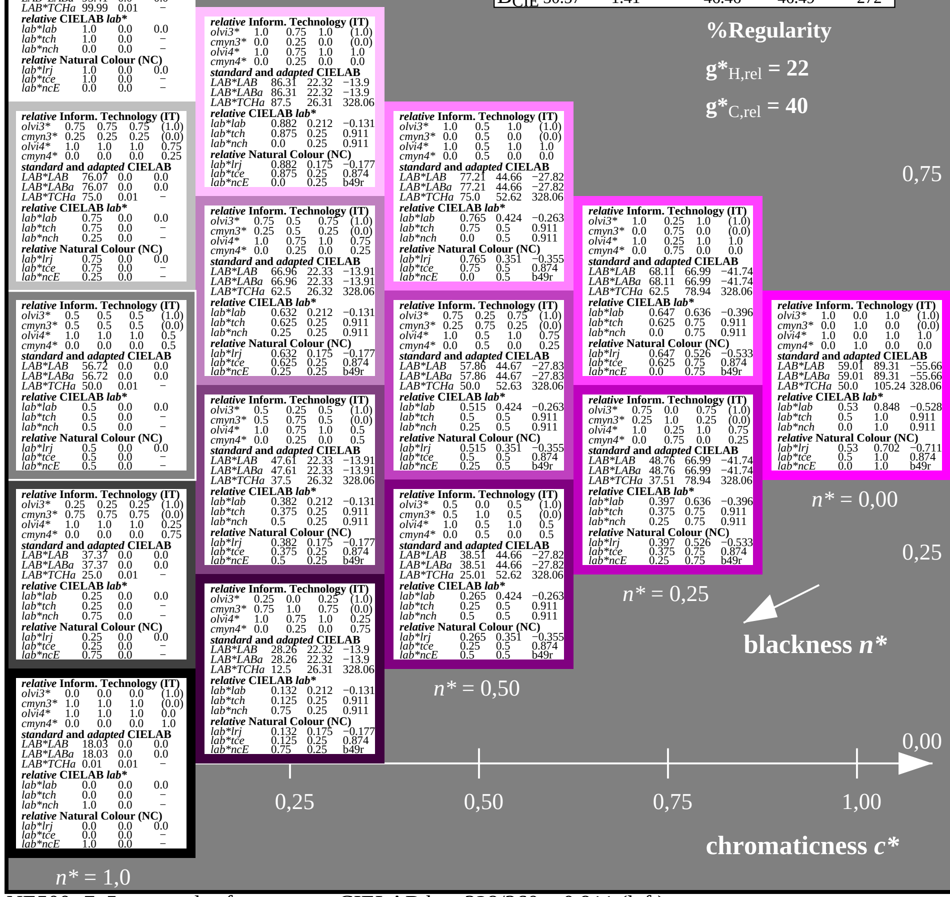
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

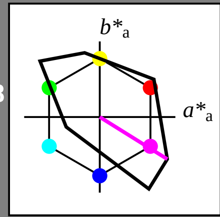
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

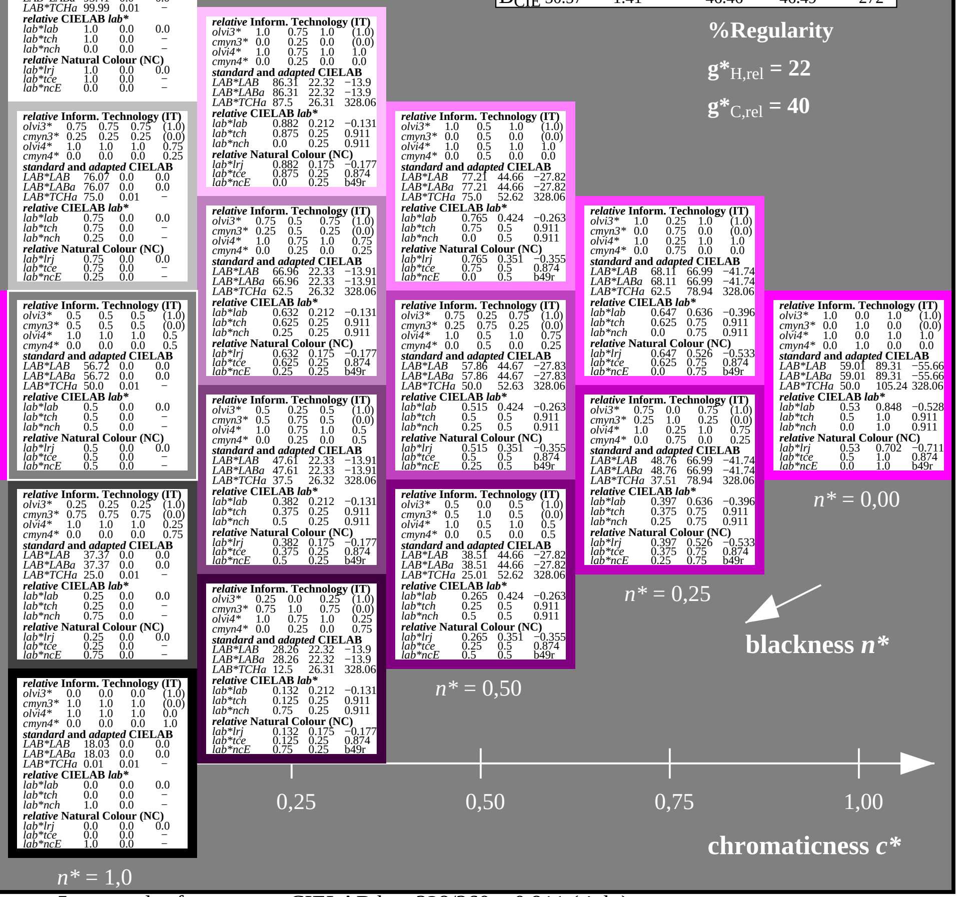
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

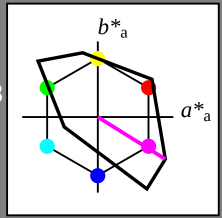
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

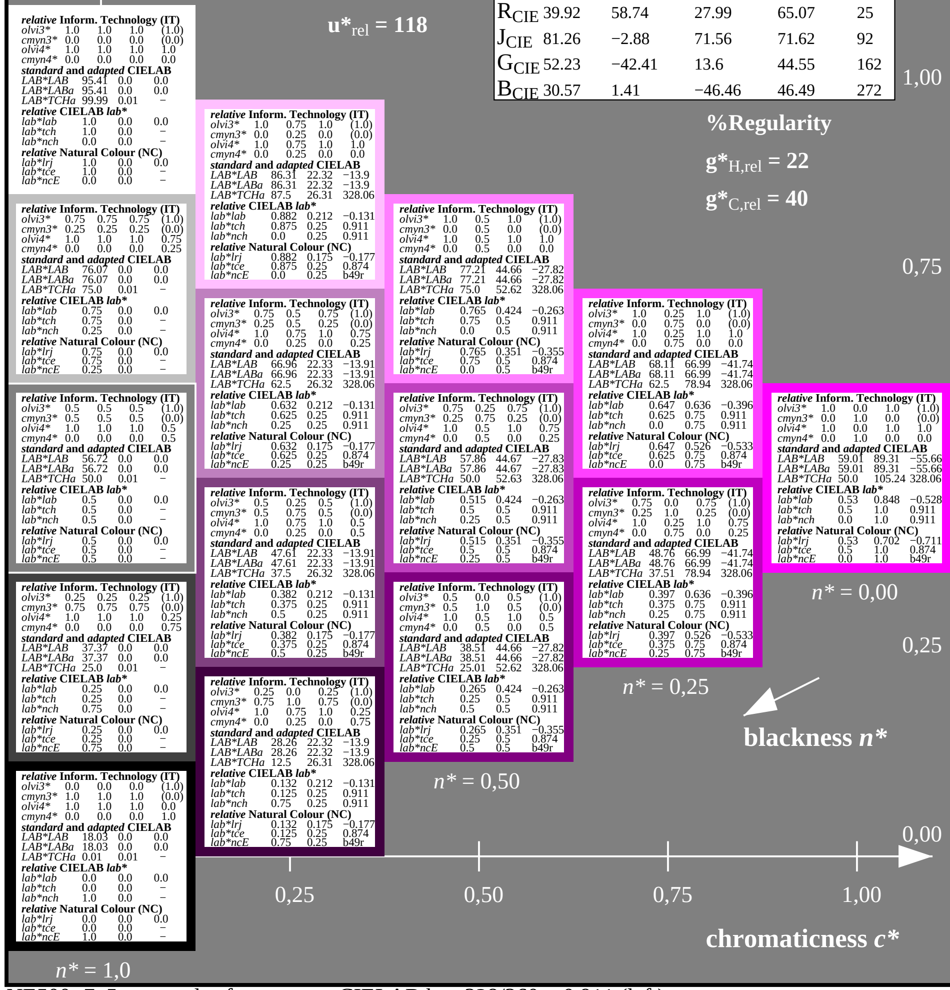
u^*_{rel} = 118

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 $h^* = lab^*h = 330/360 = 0.917$

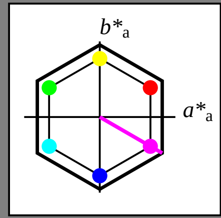
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

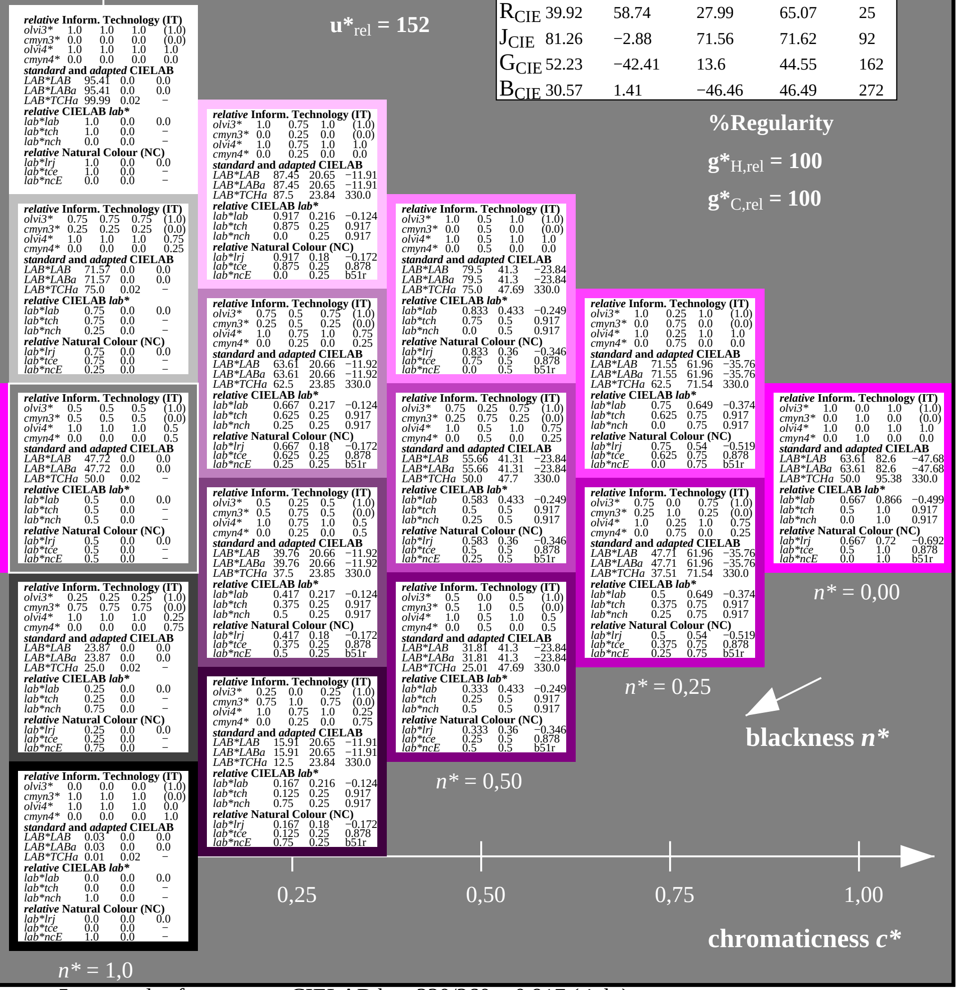
u^*_{rel} = 152

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



NE500−7, 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 $h^* = lab^*h = 328/360 = 0.911$

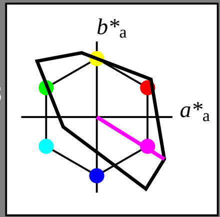
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

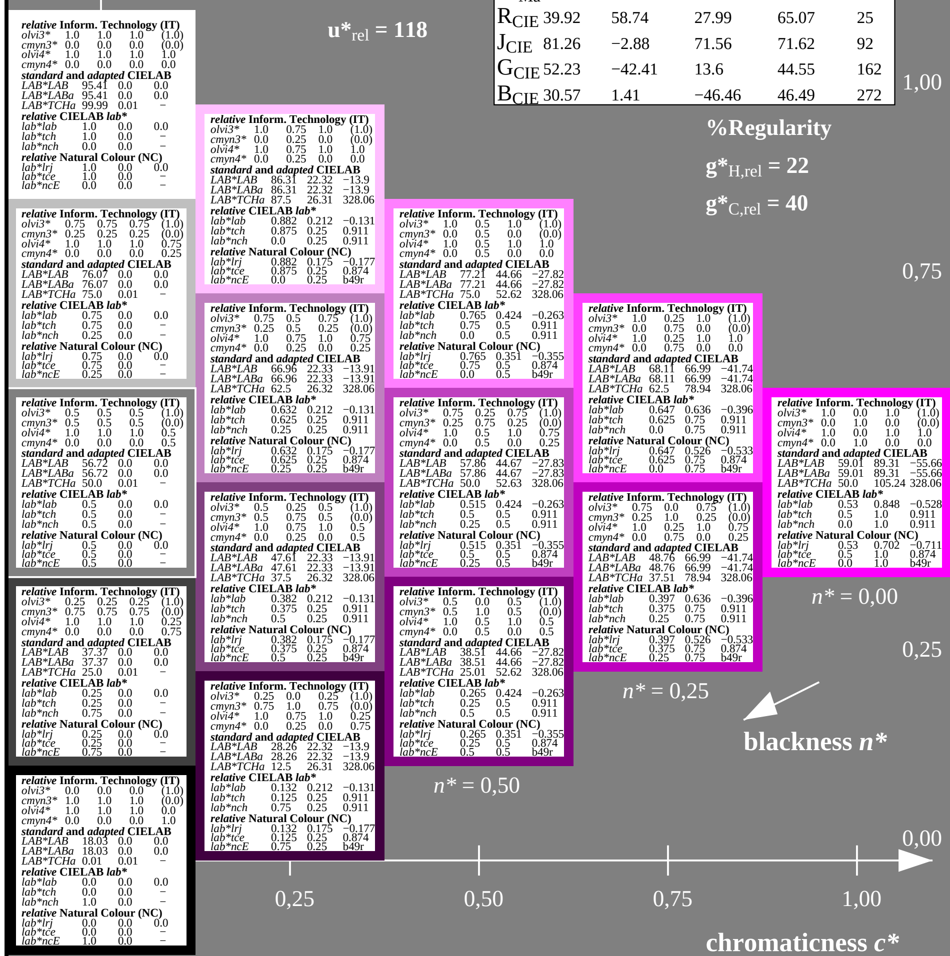
$u^*_{rel} = 118$

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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

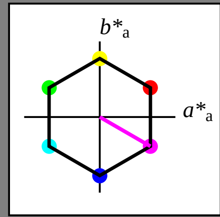
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

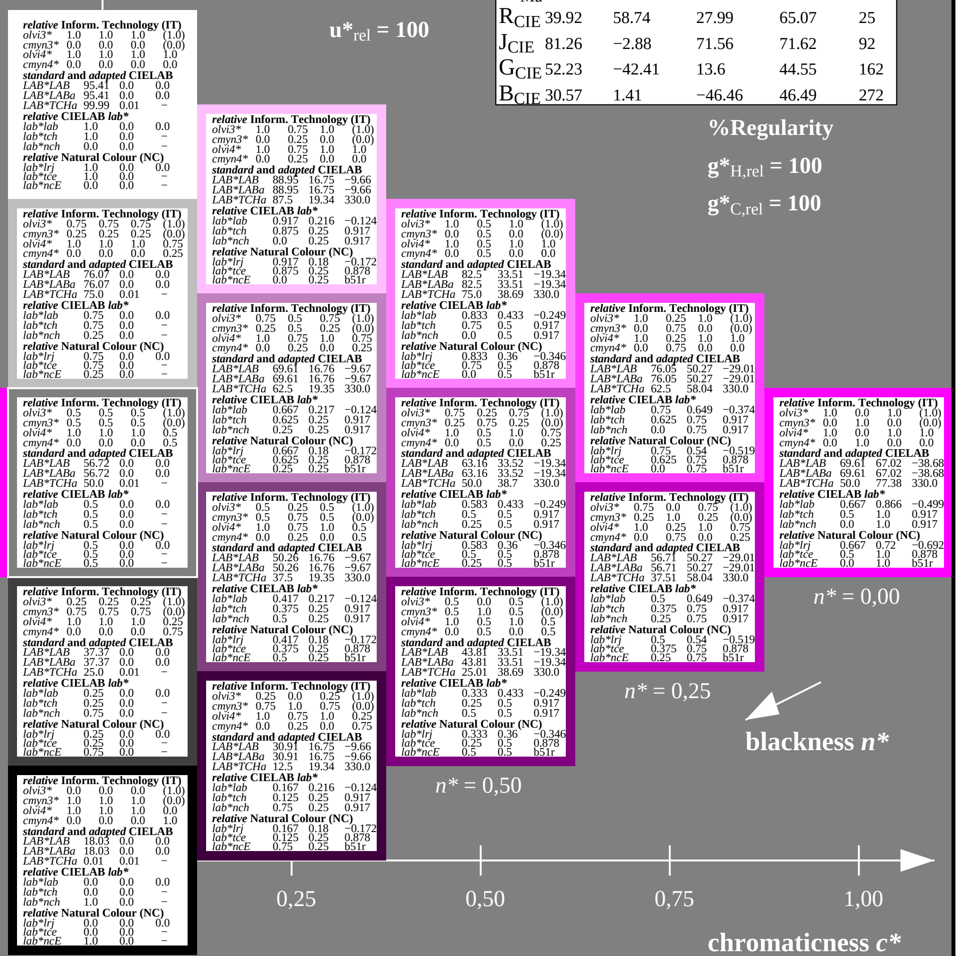
$u^*_{rel} = 100$

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

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

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



NE500−7, 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 $h^* = lab^*h = 328/360 = 0.911$

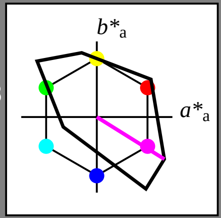
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

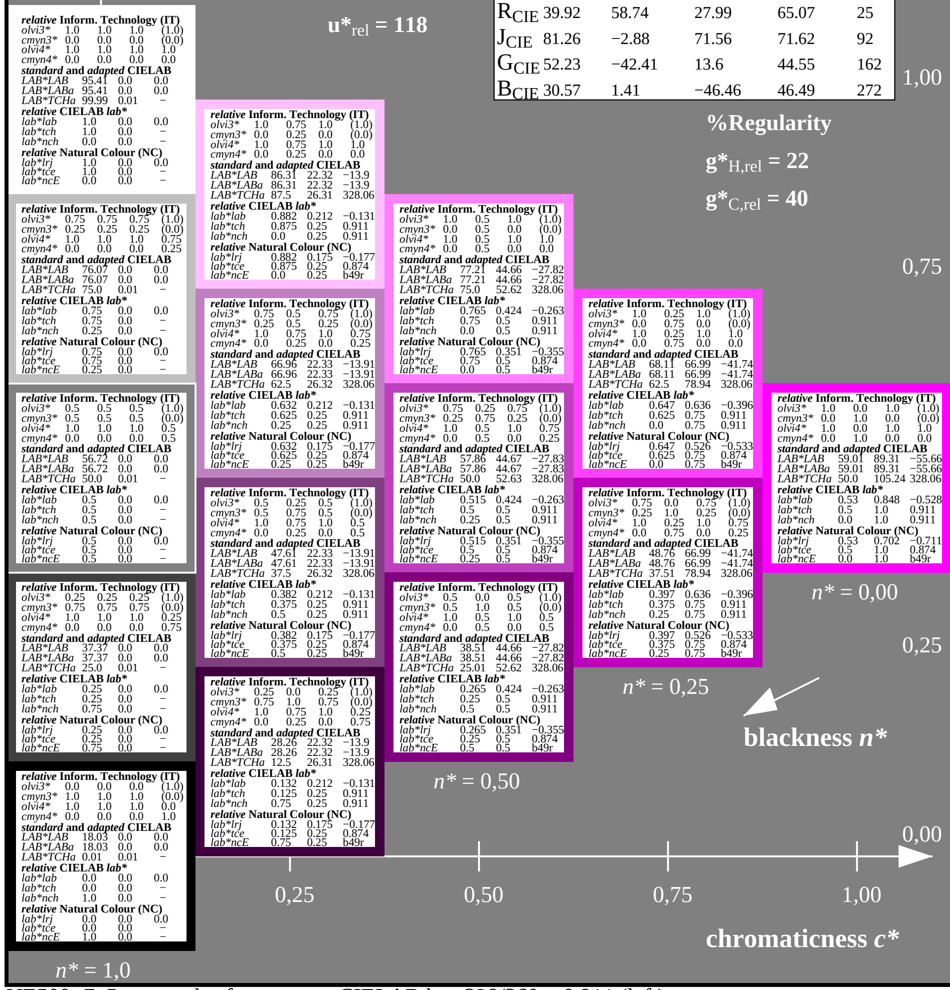
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 330/360 = 0.917$

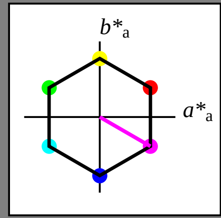
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

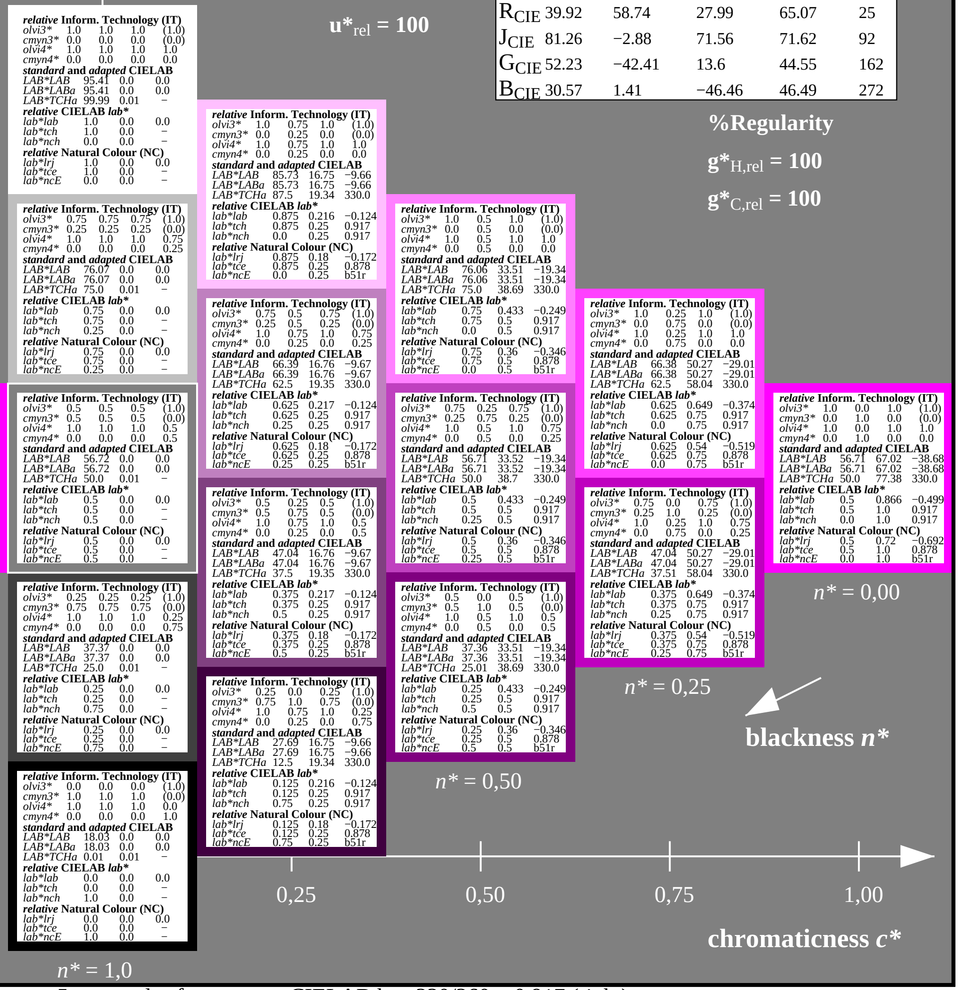
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



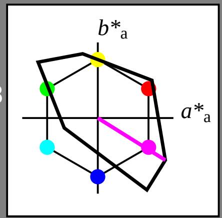
NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

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

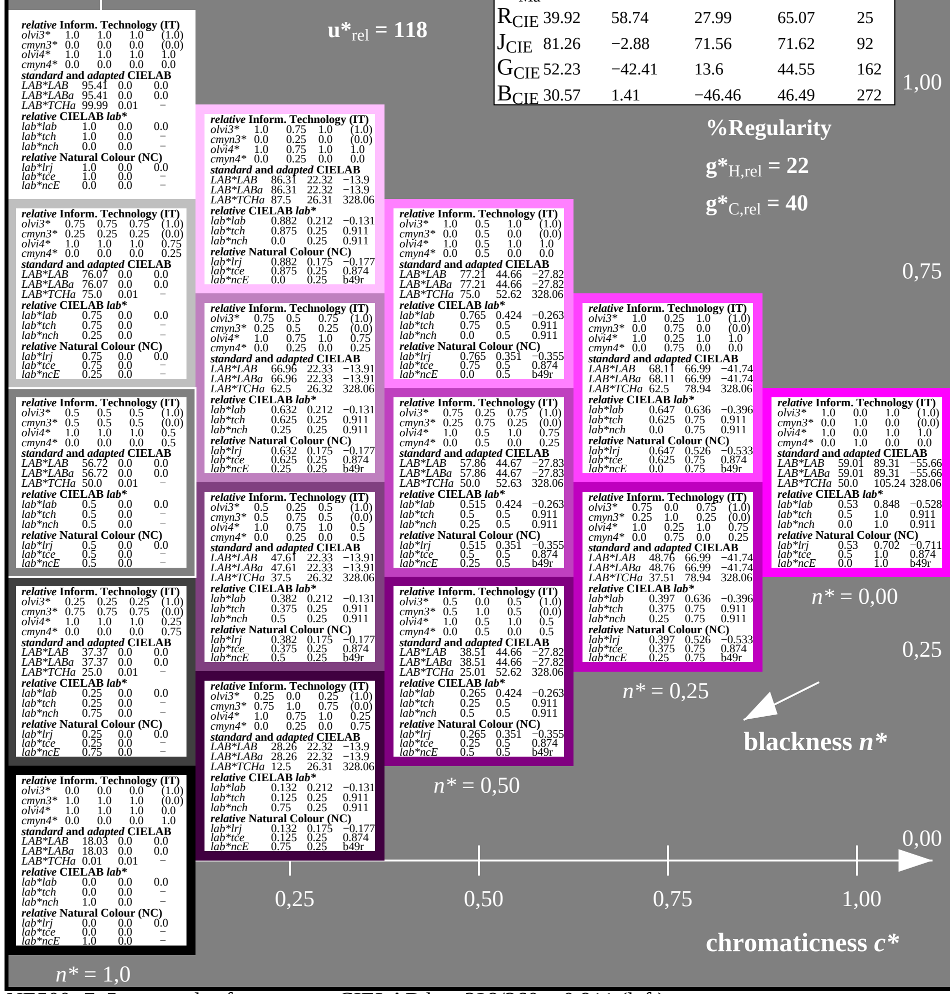
$u^*_{rel} = 118$

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

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

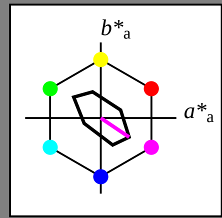
$g^*_{C,rel} = 40$



Output: Colorimetric 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

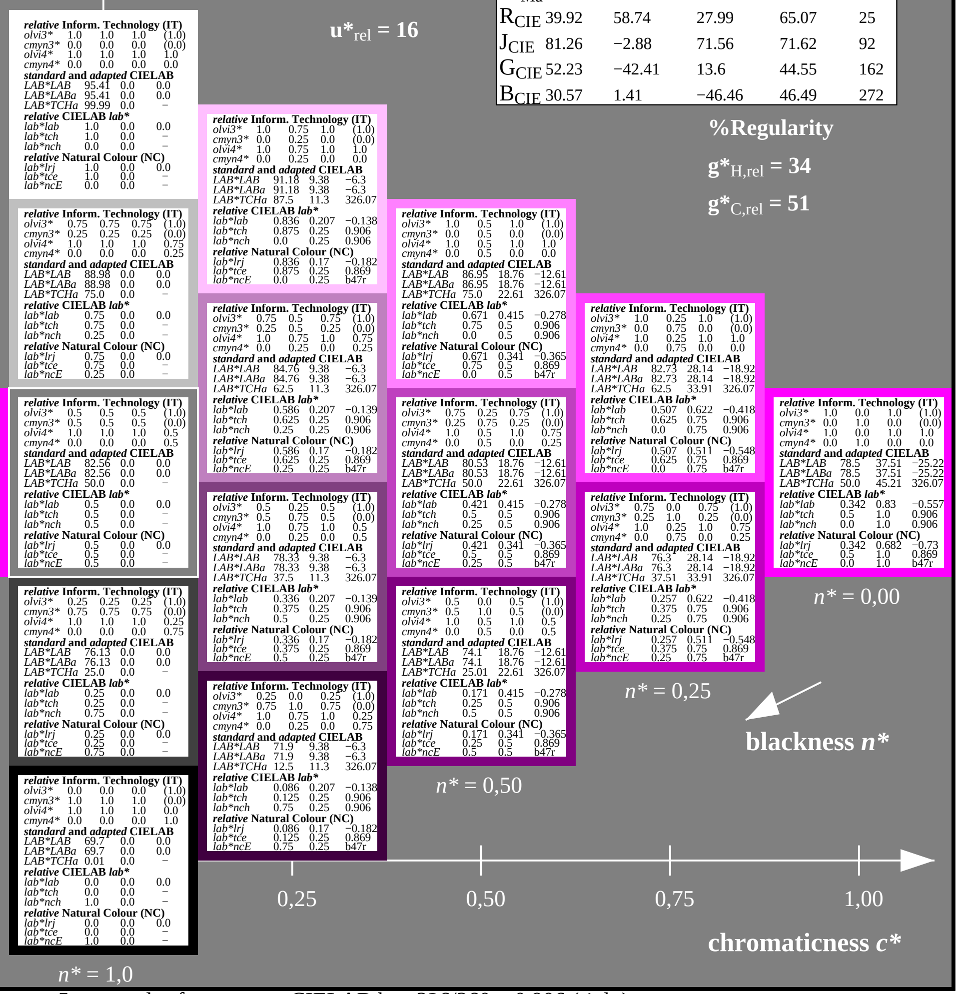
$u^*_{rel} = 16$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

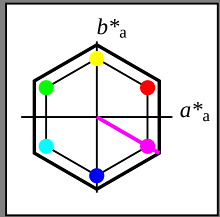
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

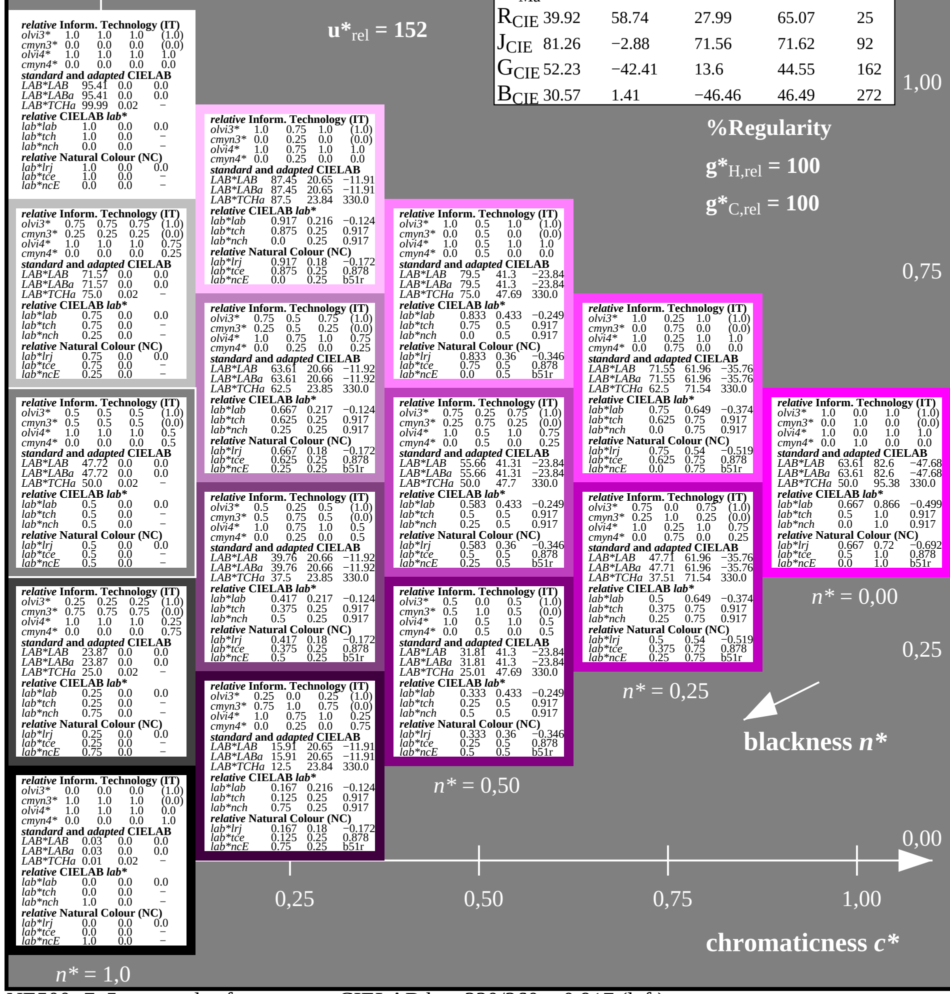
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 354/360 = 0.982$

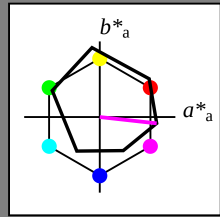
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

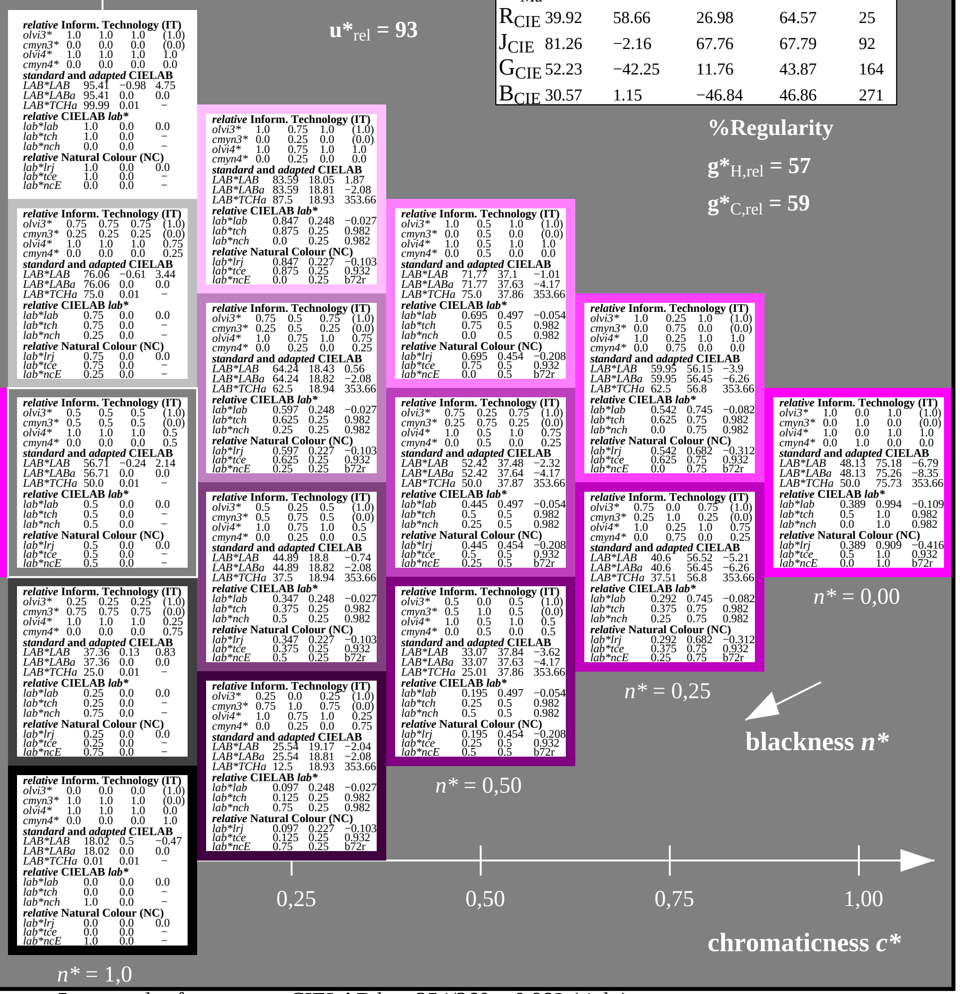
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

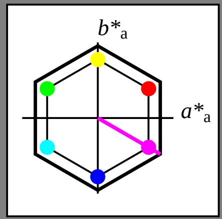
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

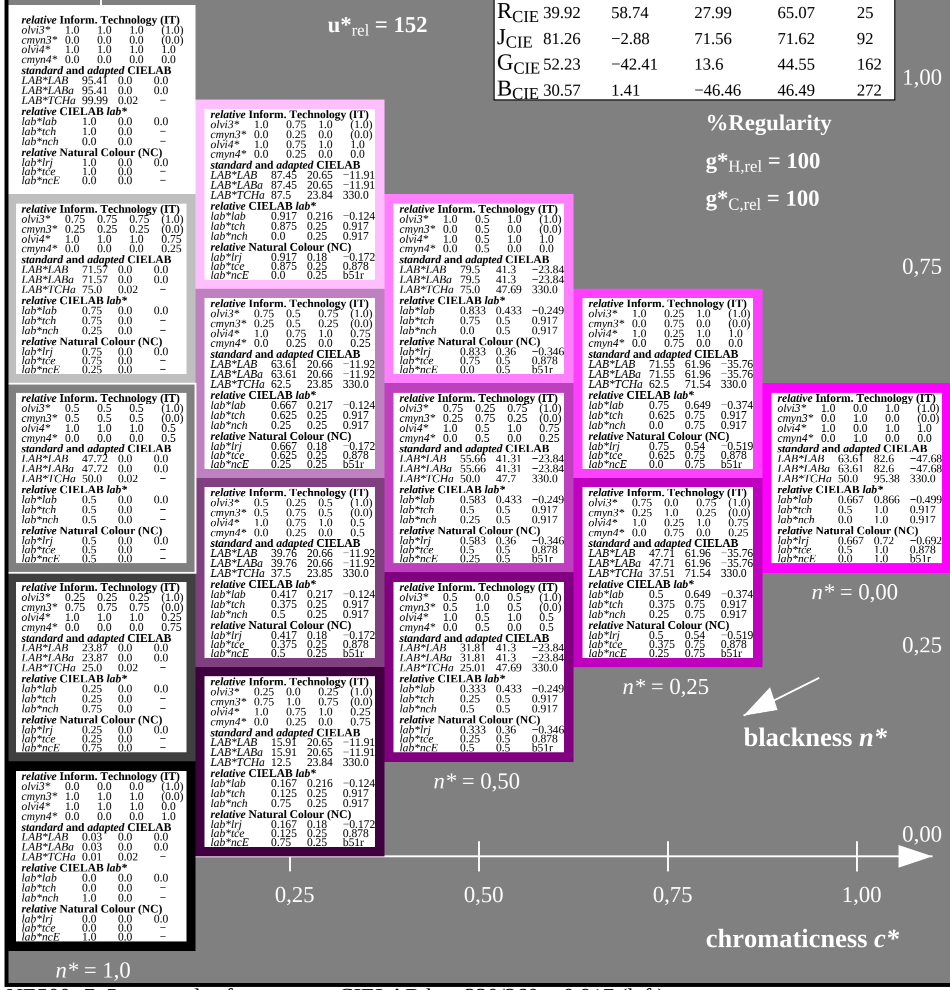
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

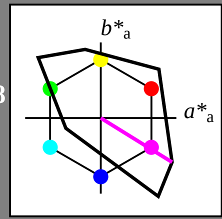
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

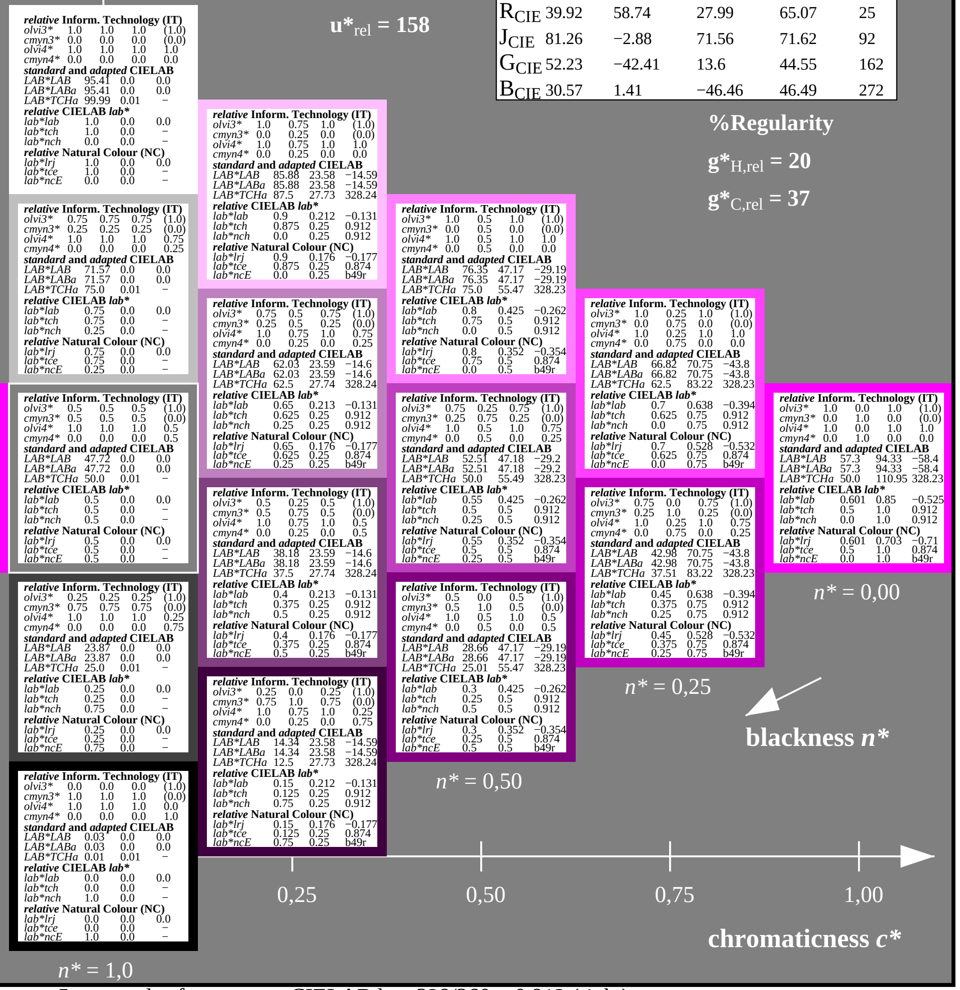
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



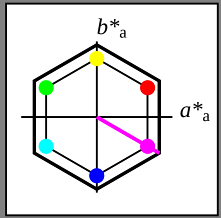
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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^*

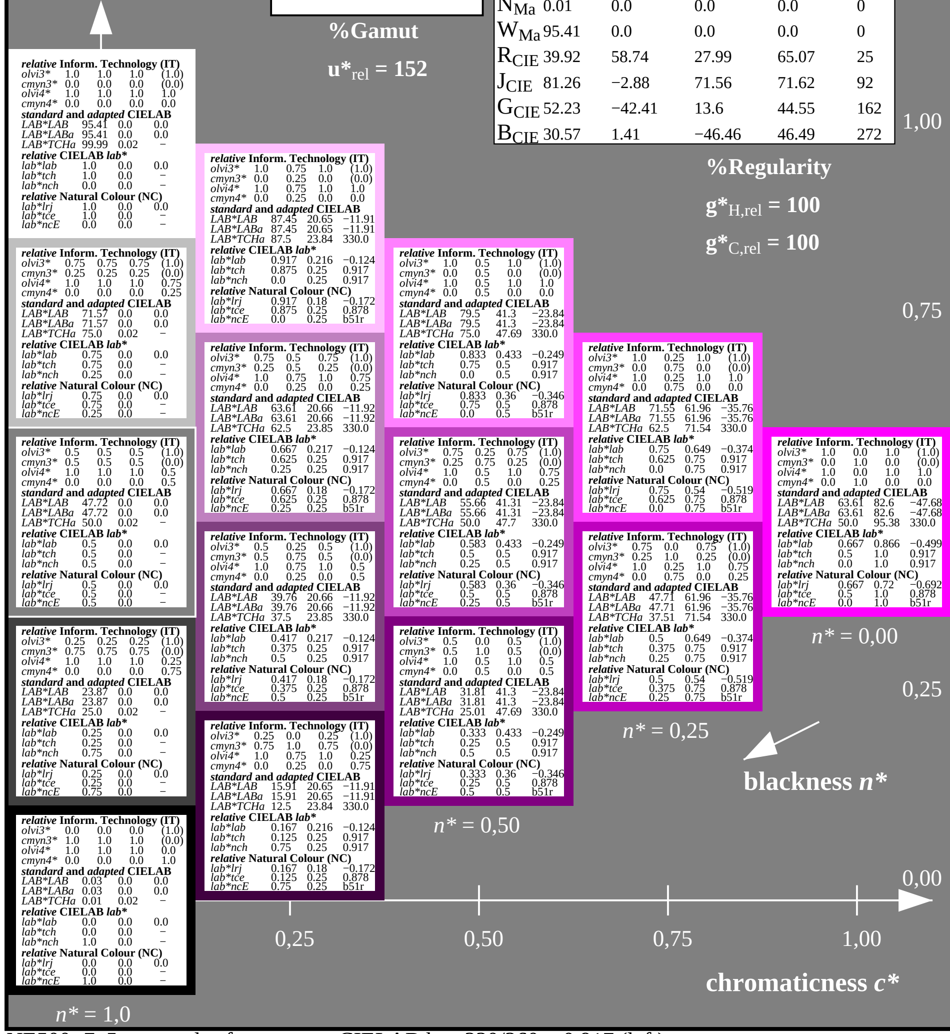


%Gamut
$u^*_{rel} = 152$

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

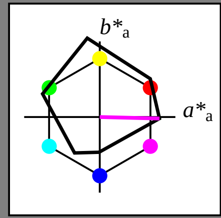
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

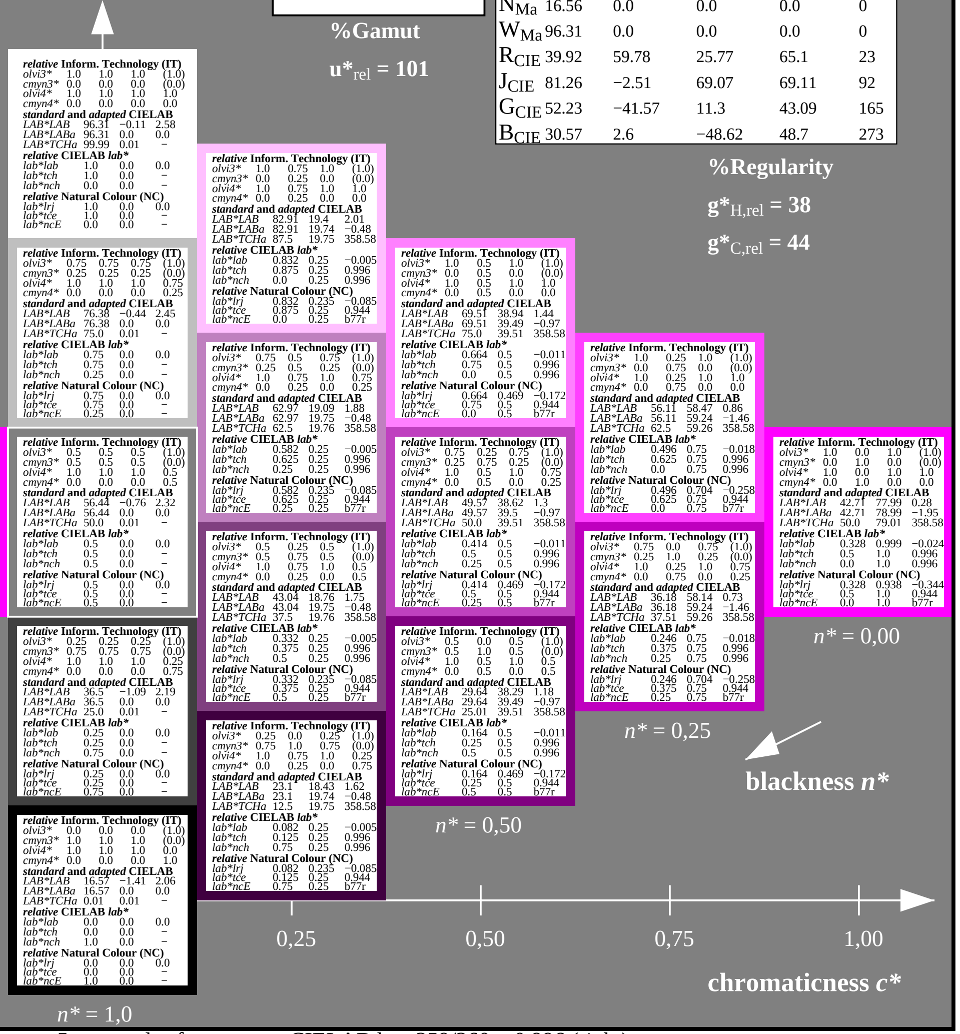


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$

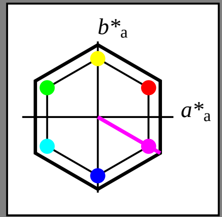


NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)
5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

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*

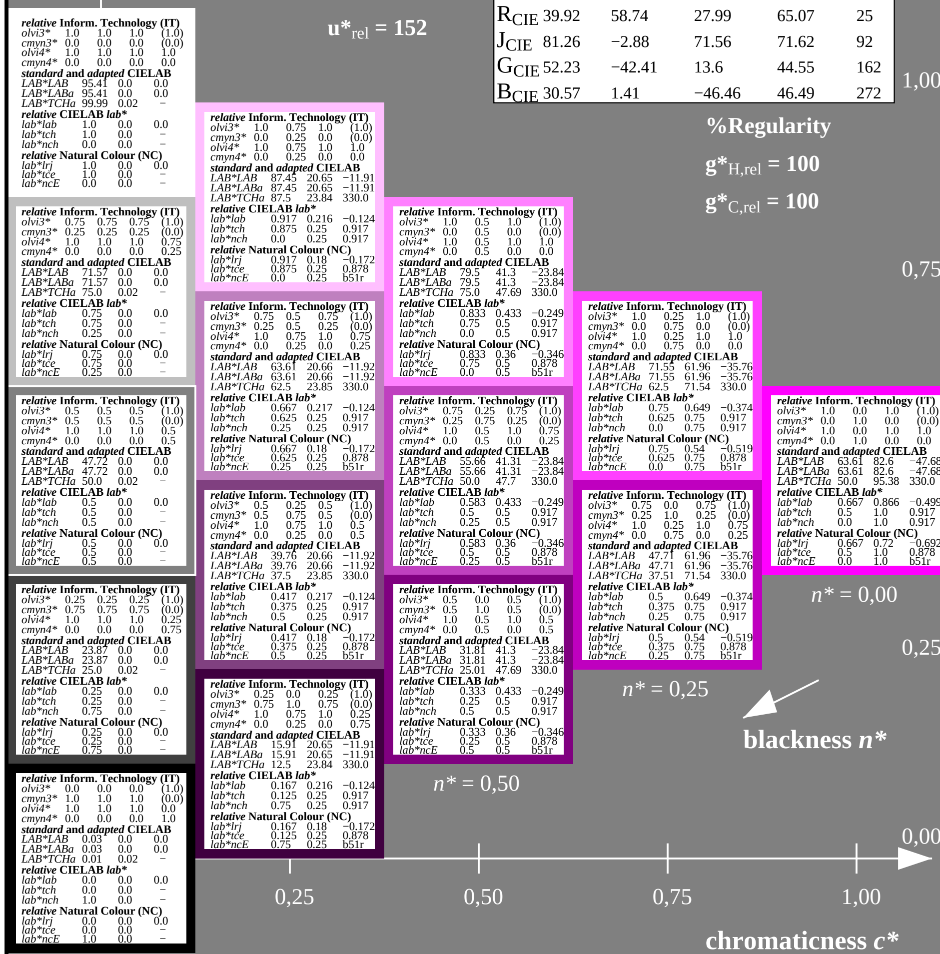


%Gamut
u^*_{rel} = 152

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

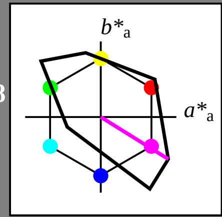
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

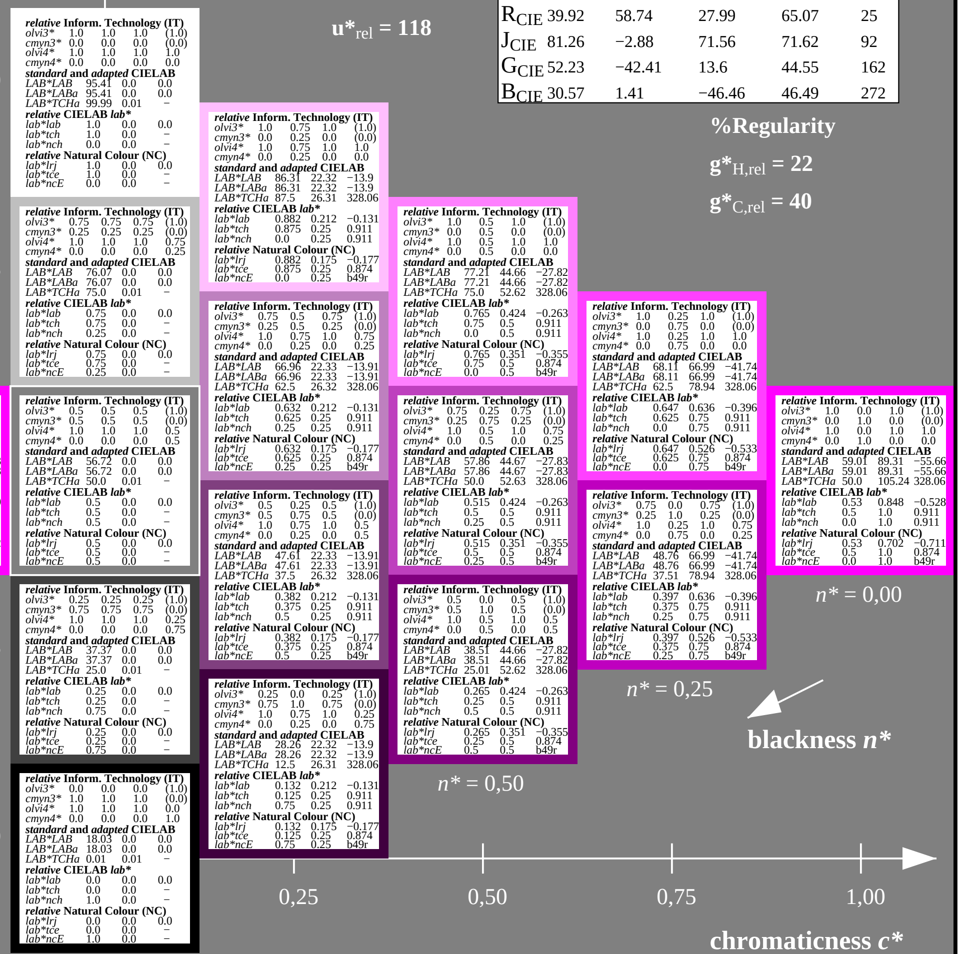


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

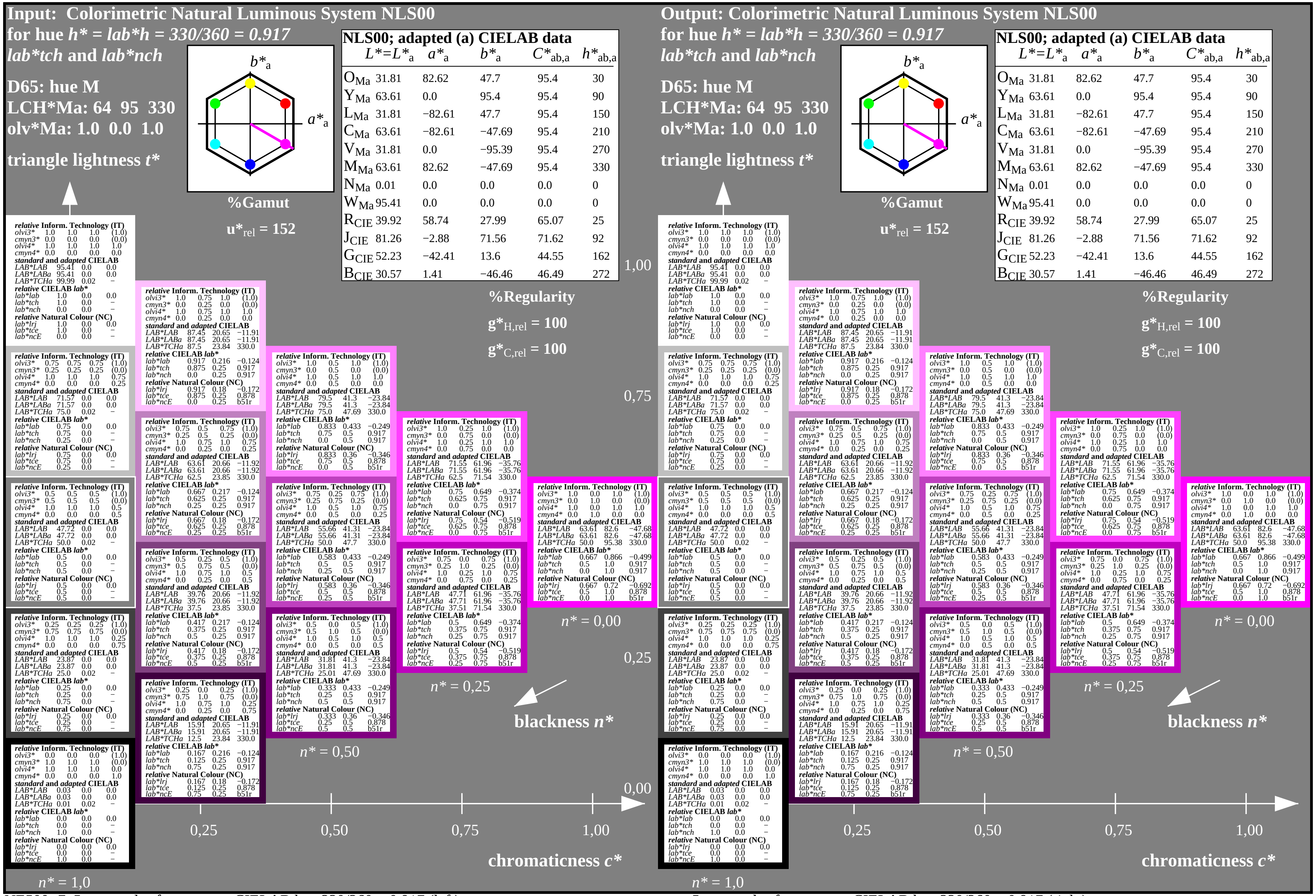
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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



NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

5 step scales for constant CIELAB hue 328/360 = 0.911 (right)



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

NE500−7, 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 Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

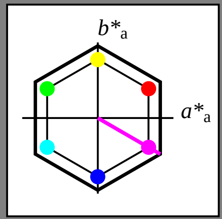
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

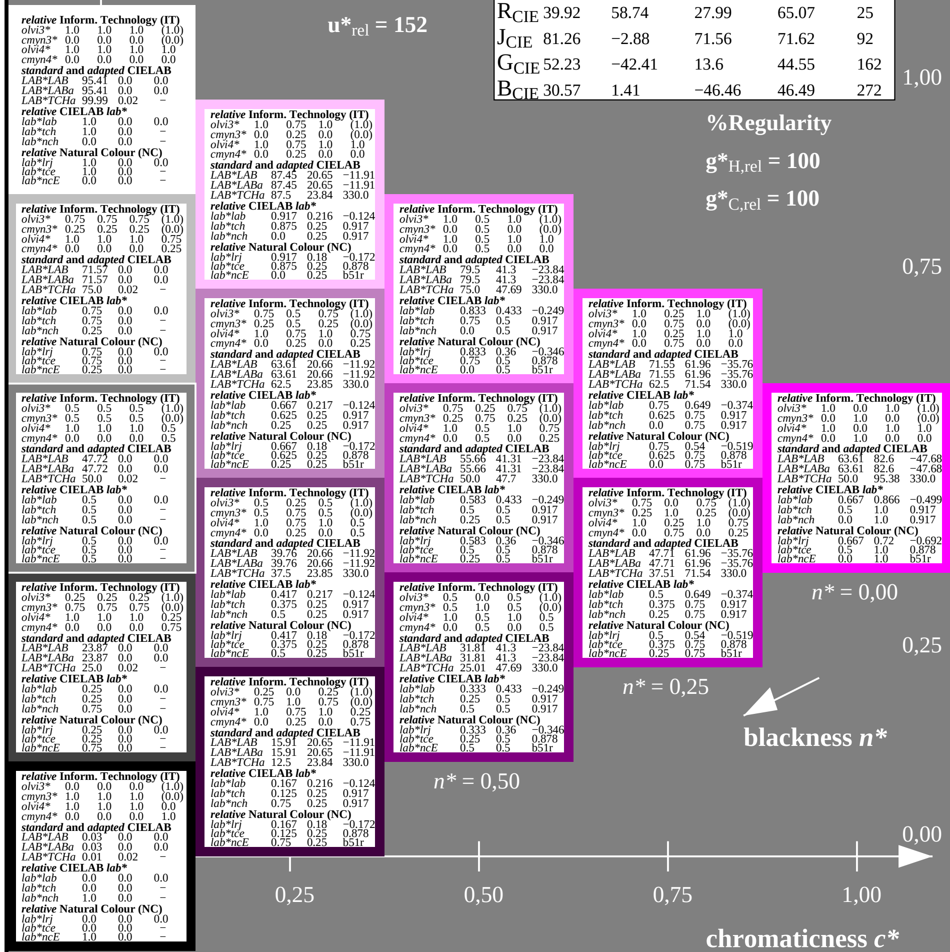
$u^*_{rel} = 152$

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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

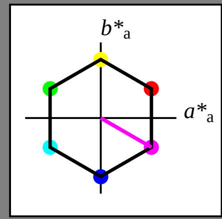
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

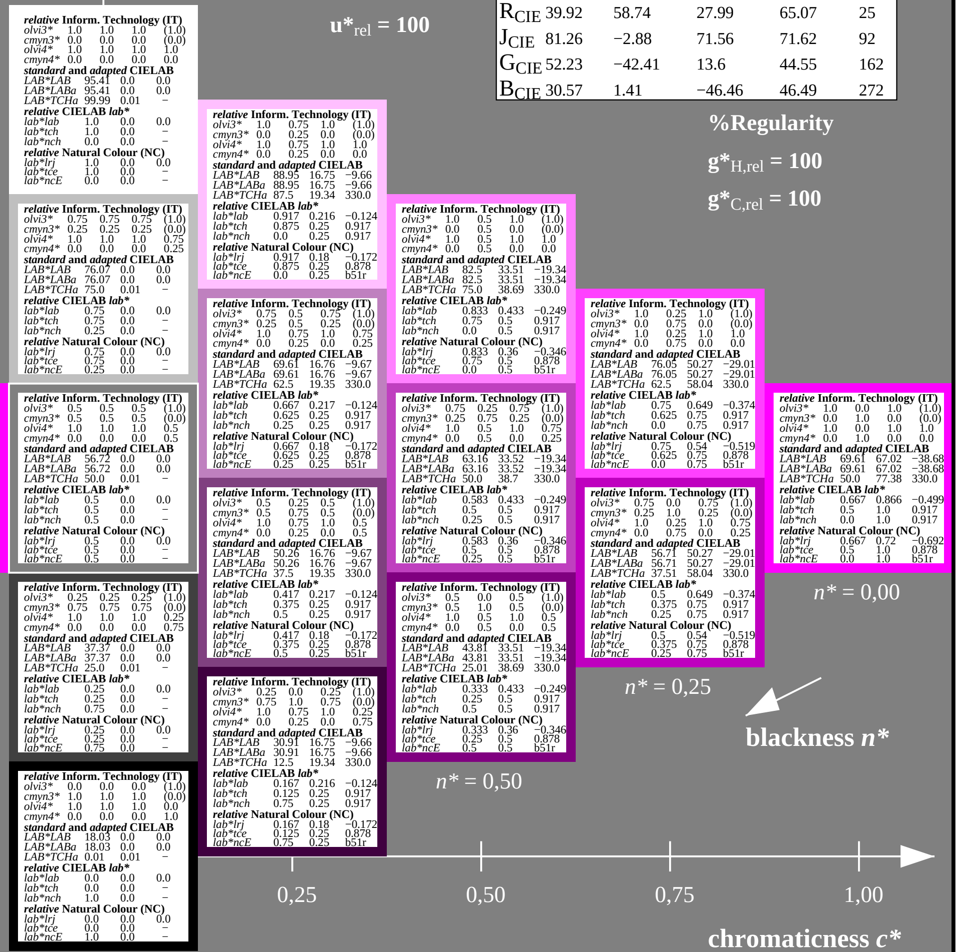
$u^*_{rel} = 100$

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

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

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



NE500−7, 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 Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

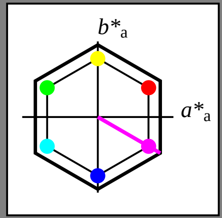
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

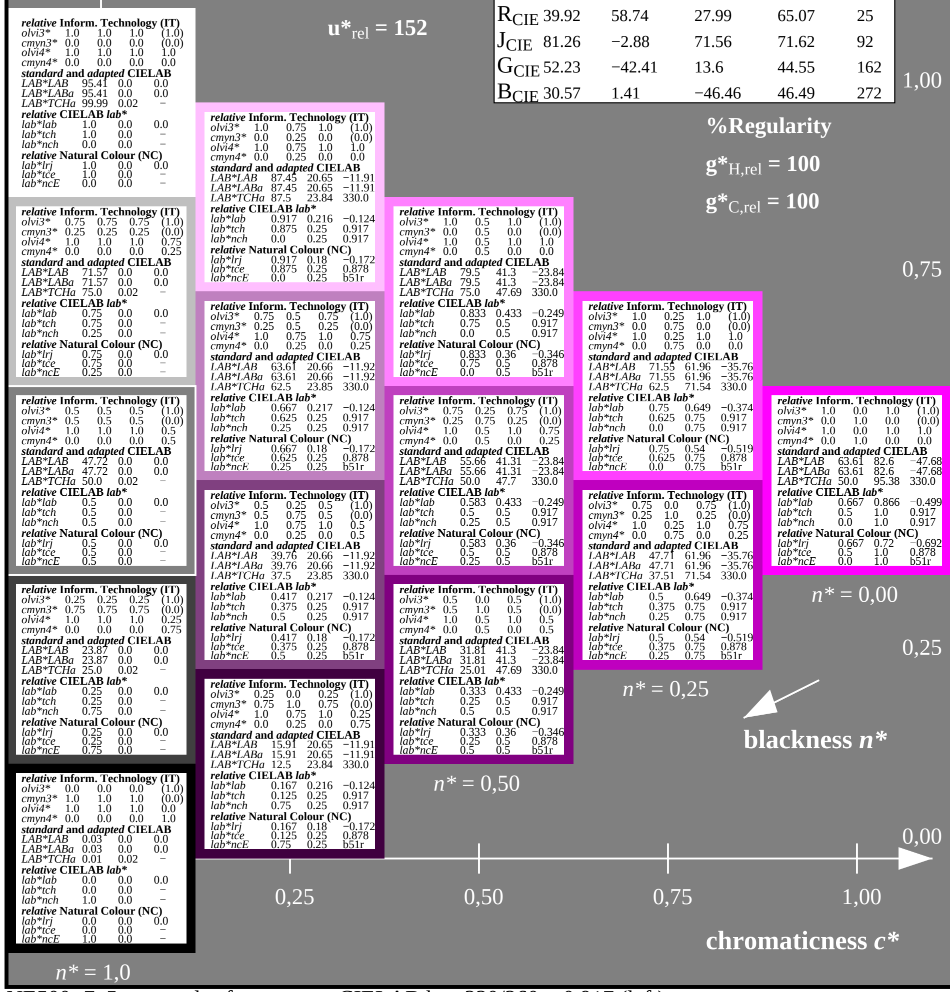
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

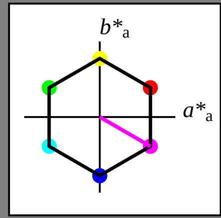
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

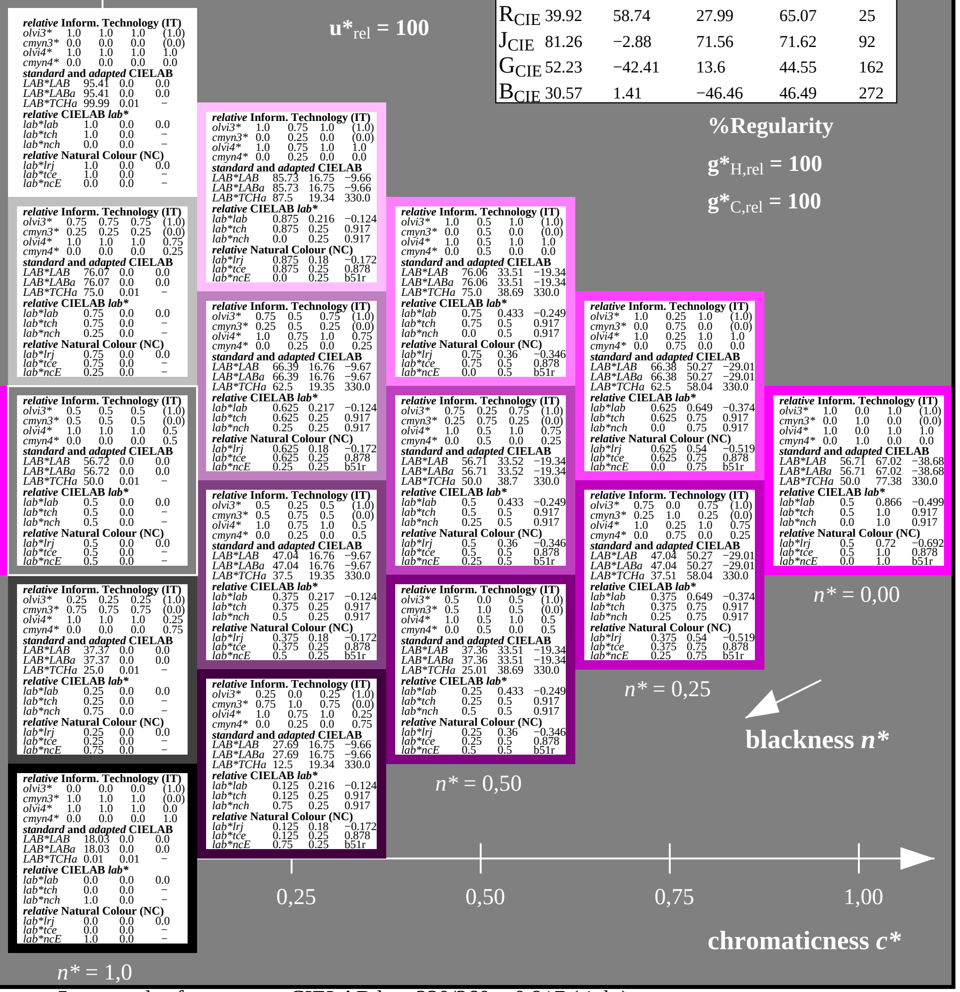
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



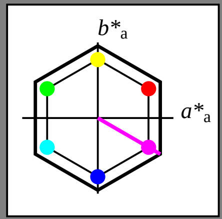
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric Natural Luminous System NLS00
for hue *h = *lab*h* = 330/360 = 0.917**
lab*tch* and *lab*nch

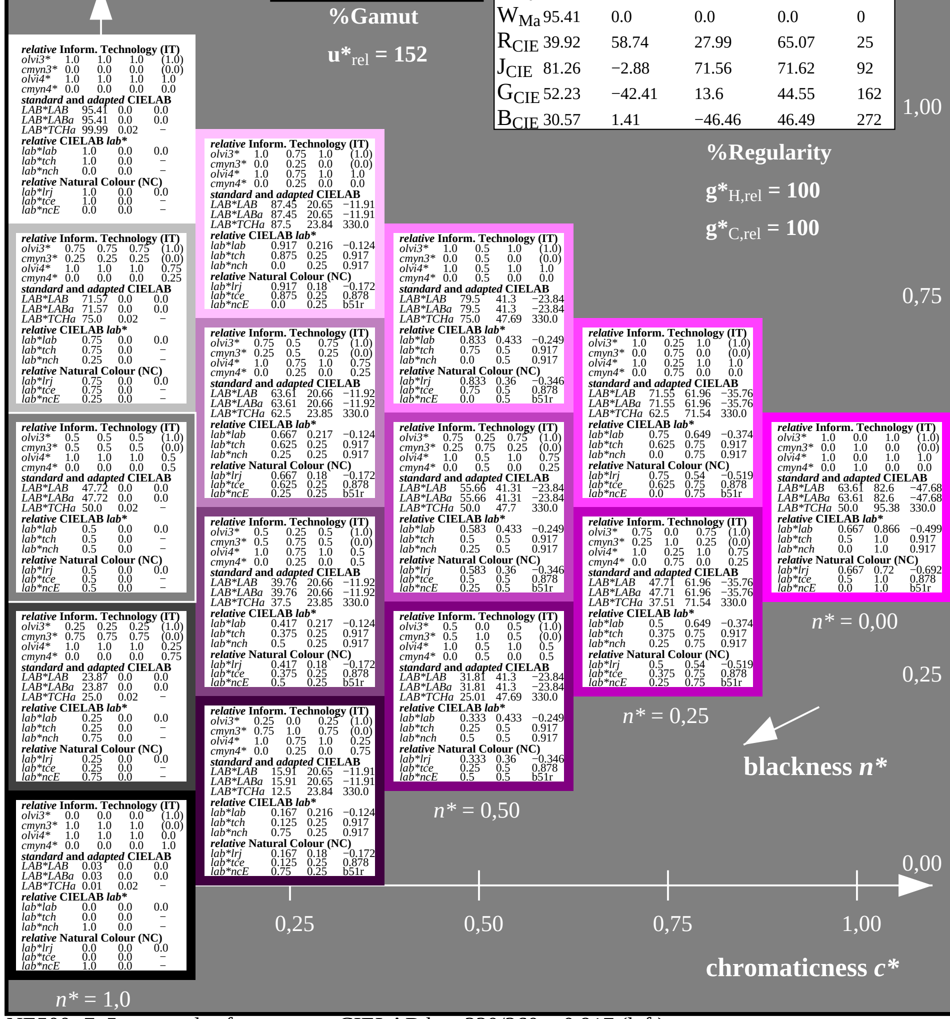
D65: hue M
LCH*Ma: 64 95 330
olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



NLS00; adapted (a) CIELAB data

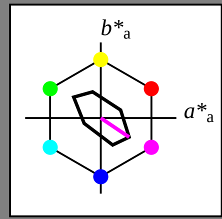
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	31.81	82.62	47.7	95.4	30
Y_{Ma}	63.61	0.0	95.4	95.4	90
L_{Ma}	31.81	−82.61	47.7	95.4	150
C_{Ma}	63.61	−82.61	−47.69	95.4	210
V_{Ma}	31.81	0.0	−95.39	95.4	270
M_{Ma}	63.61	82.62	−47.69	95.4	330
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



Output: Colorimetric Television Luminous System TLS70
for hue *h = *lab*h* = 326/360 = 0.906**
lab*tch* and *lab*nch

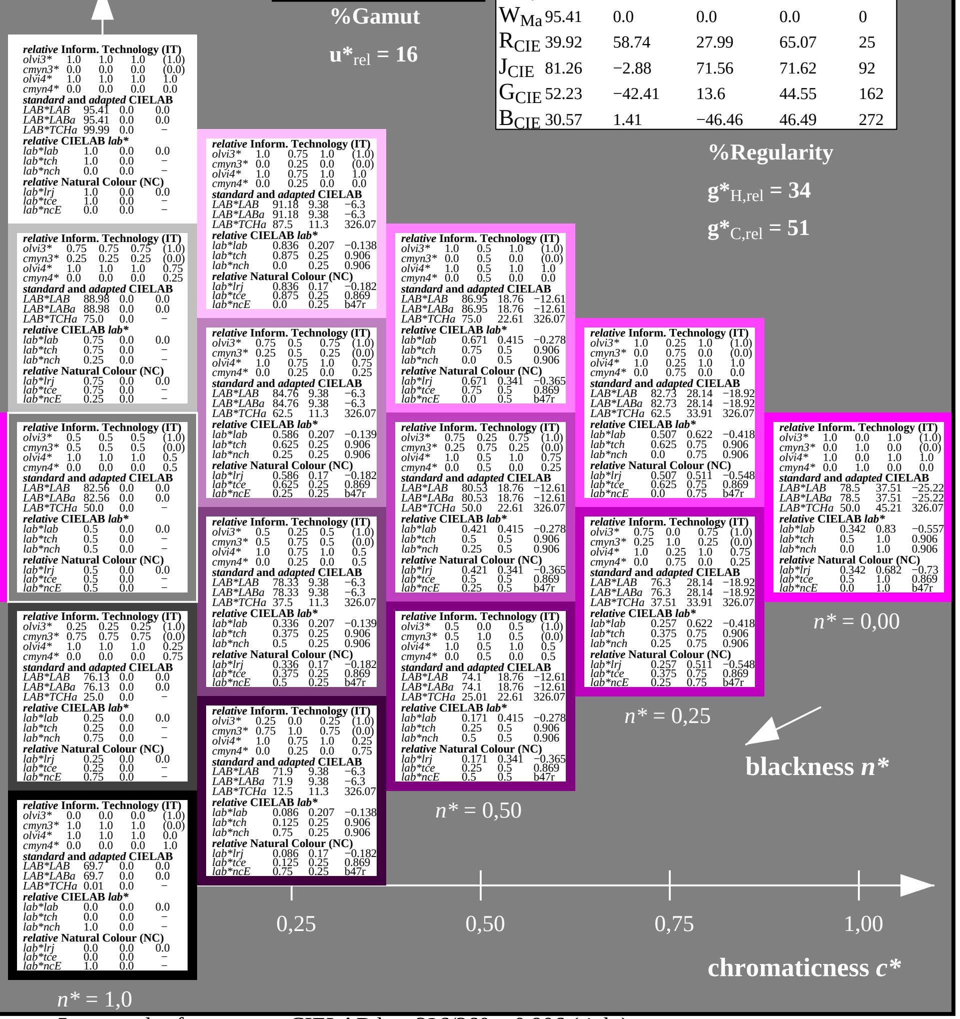
D65: hue M
LCH*Ma: 79 45 326
olv*Ma: 1.0 0.0 1.0

triangle lightness *t*



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



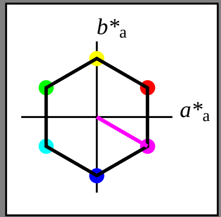
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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^*

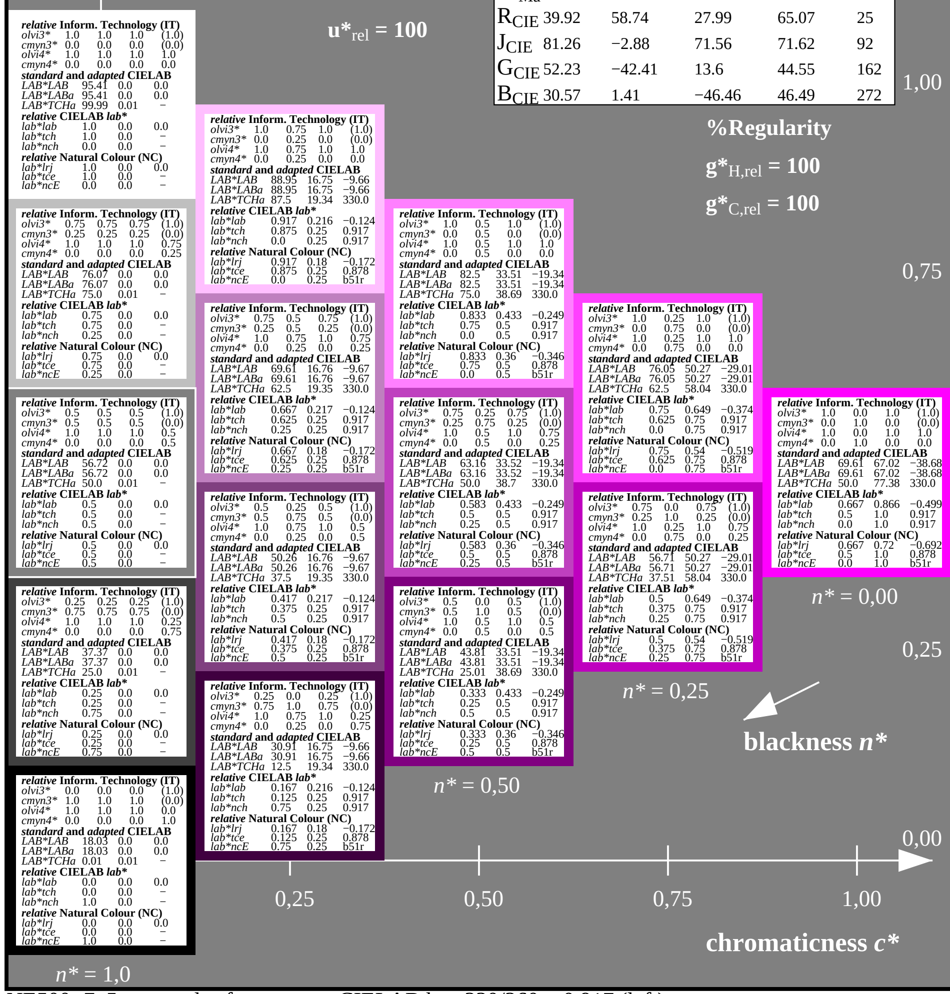


%Gamut
$u^*_{rel} = 100$

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

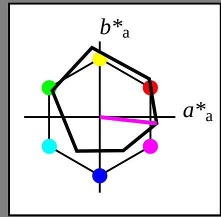
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

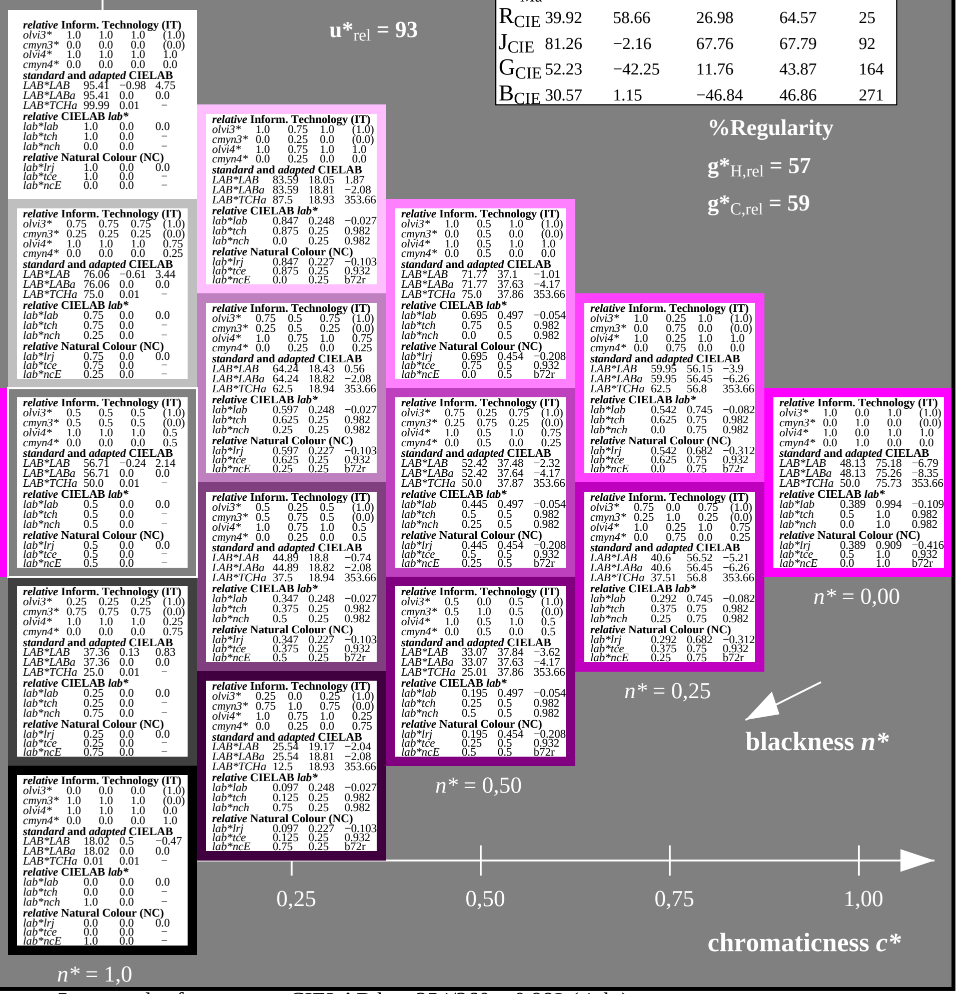


%Gamut
$u^*_{rel} = 93$

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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



NE500−7, 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**

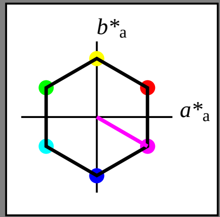
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

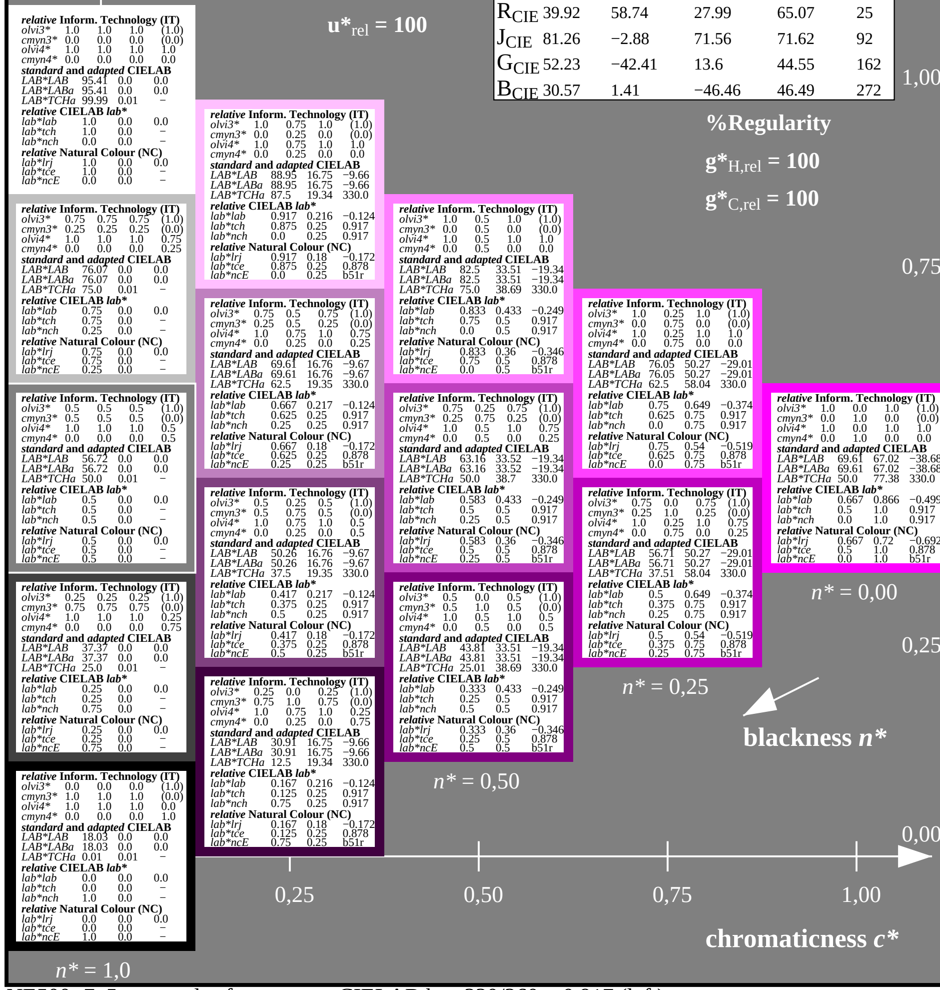
u^*_{rel} = 100

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



Output: Colorimetric Television Luminous System TLS00

for hue *h = *lab*h* = 328/360 = 0.912**

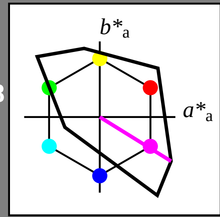
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

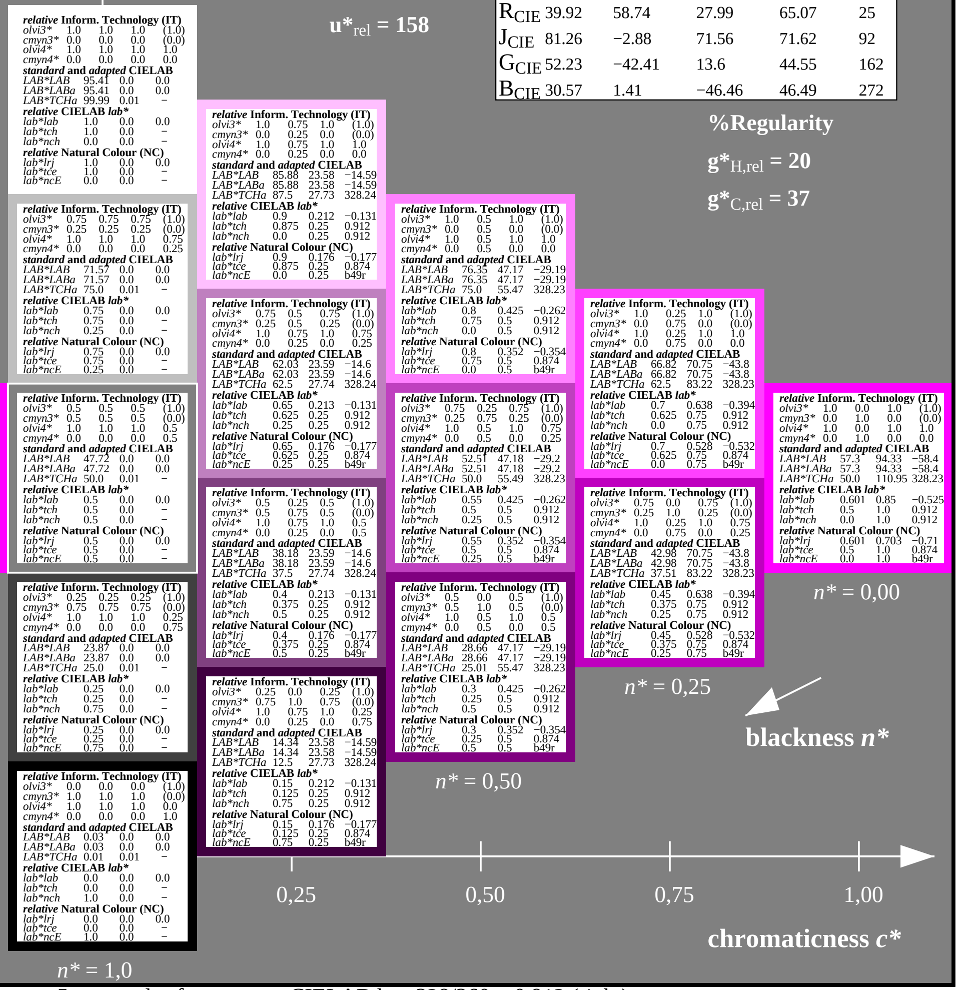
u^*_{rel} = 158

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

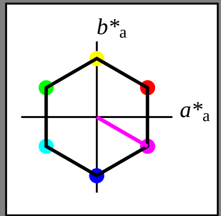


NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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

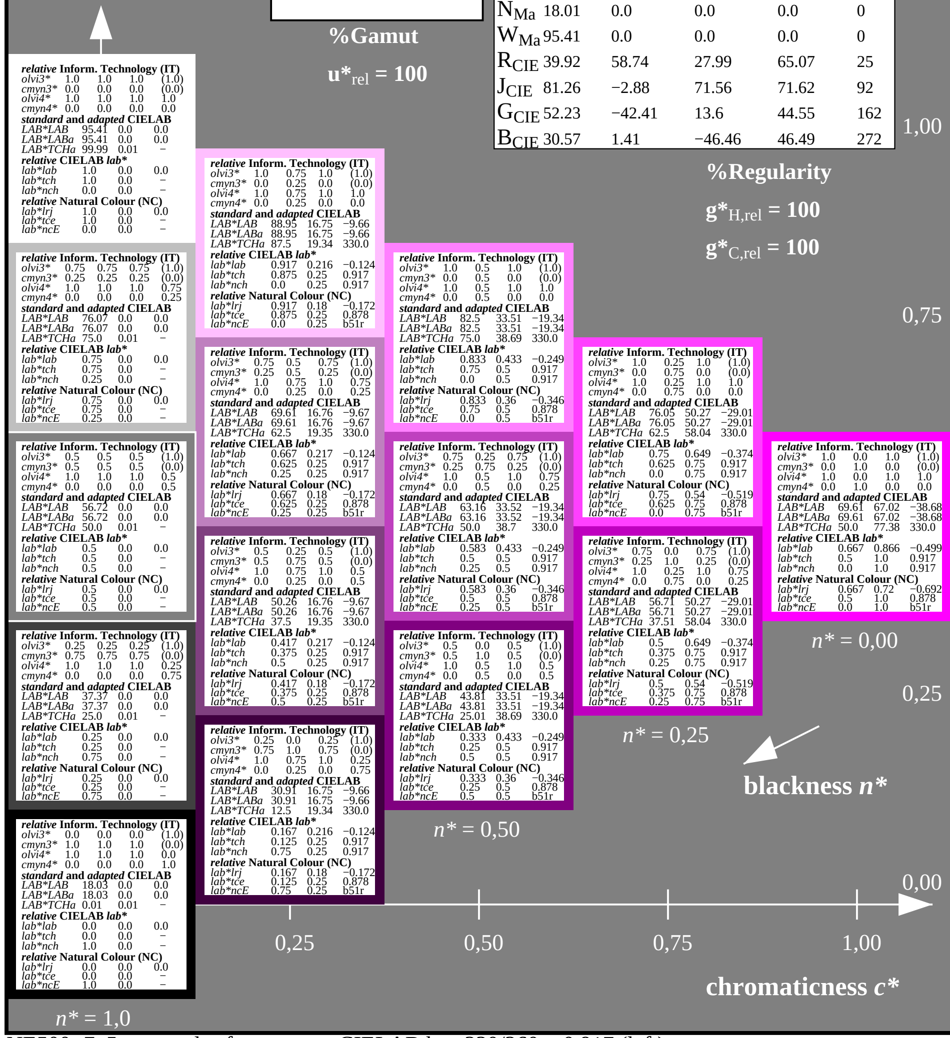
D65: hue M
LCH*Ma: 70 77 330
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%Gamut
$u^*_{rel} = 100$

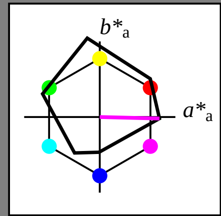
NRS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 359/360 = 0.996$
lab*tch* and *lab*nch

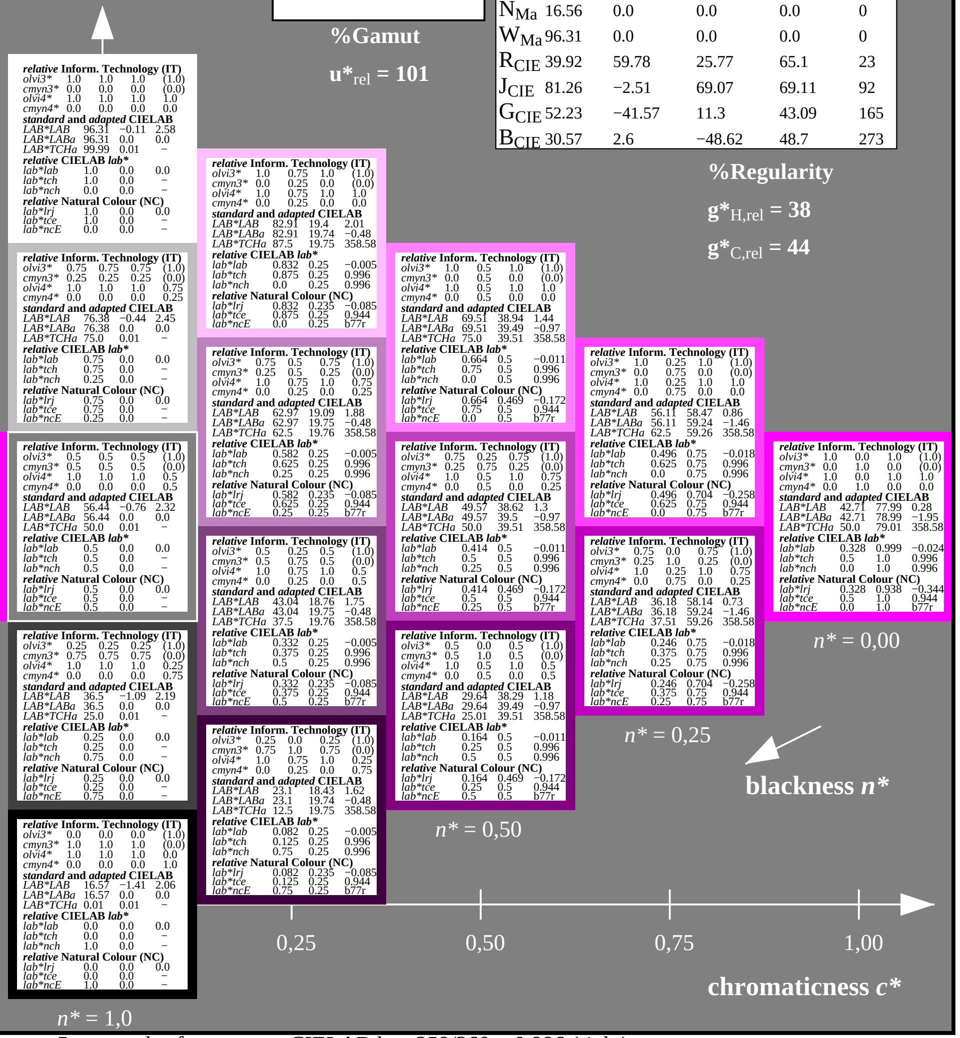
D65: hue M
LCH*Ma: 43 79 359
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$

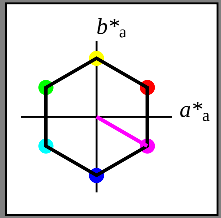


NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left) 5 step scales for constant CIELAB hue 359/360 = 0.996 (right)

Input: Colorimetric Natural 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^*

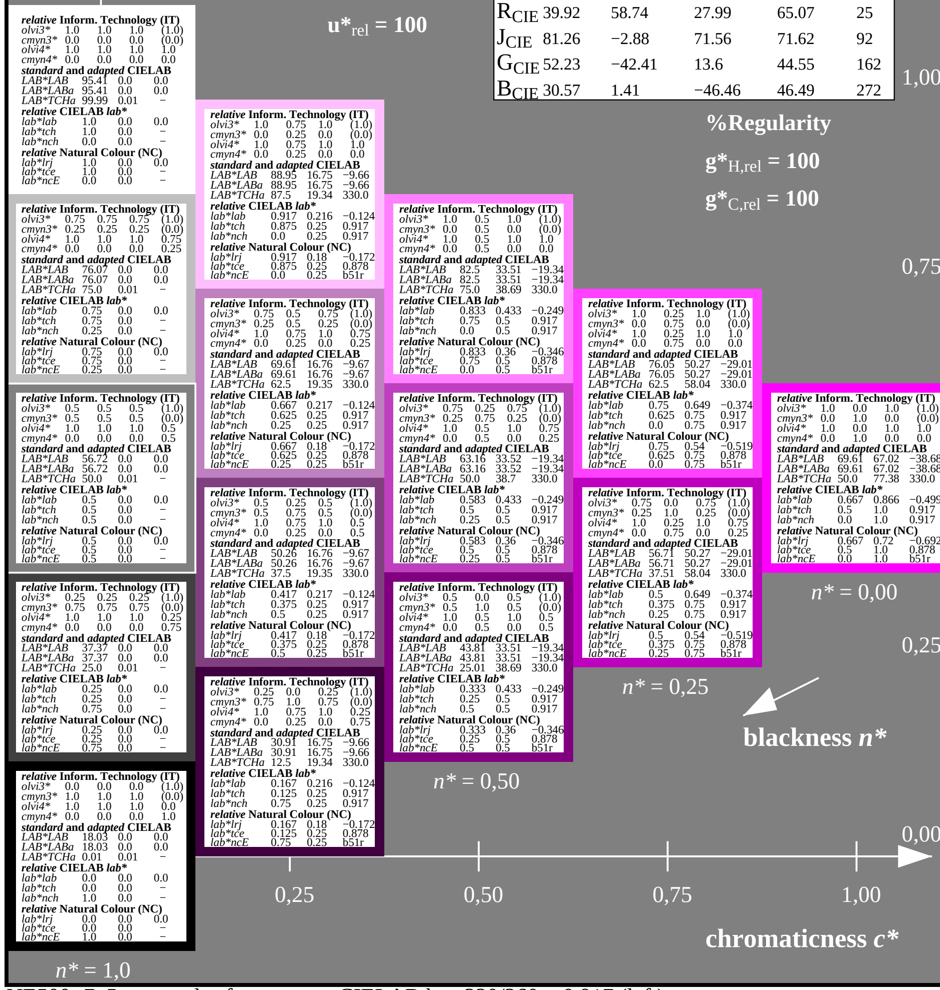


%Gamut
$u^*_{rel} = 100$

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

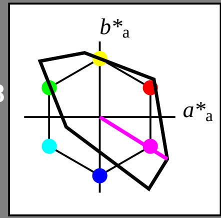
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric 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^*

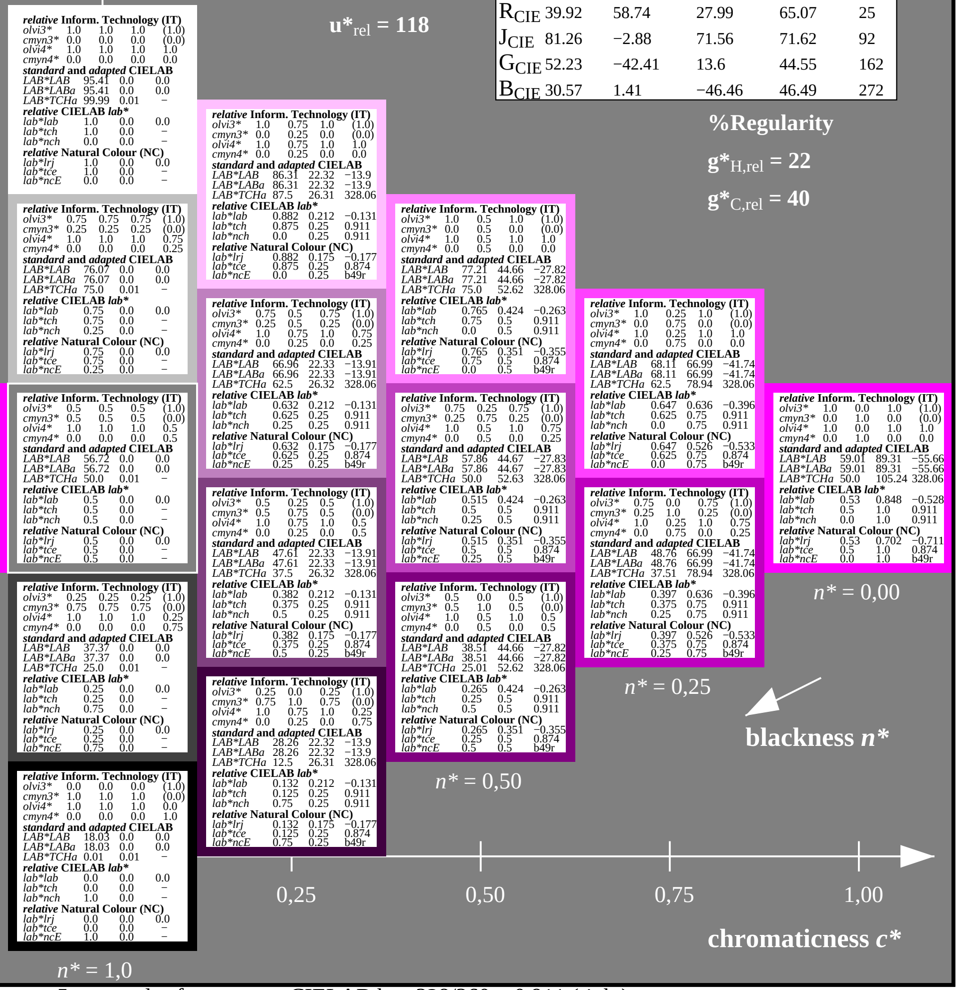


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

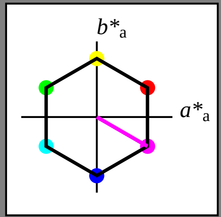
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

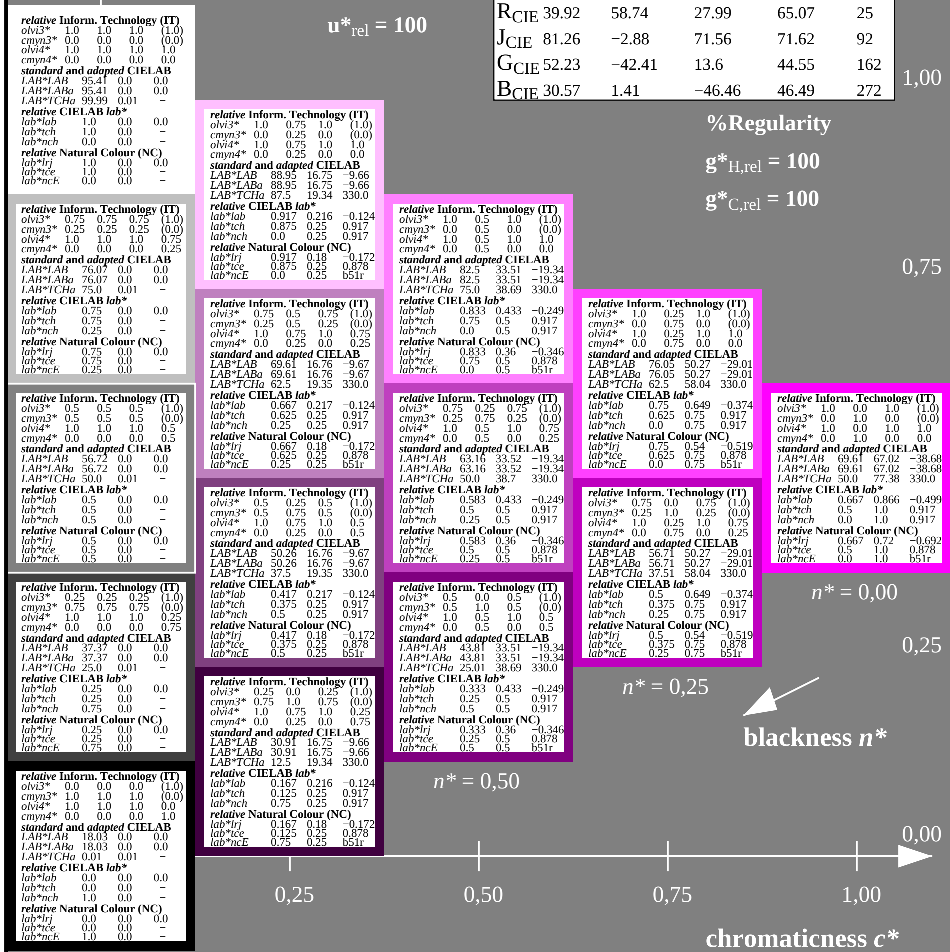
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 330/360 = 0.917$

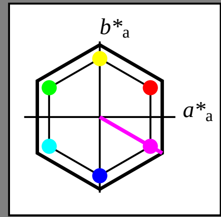
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

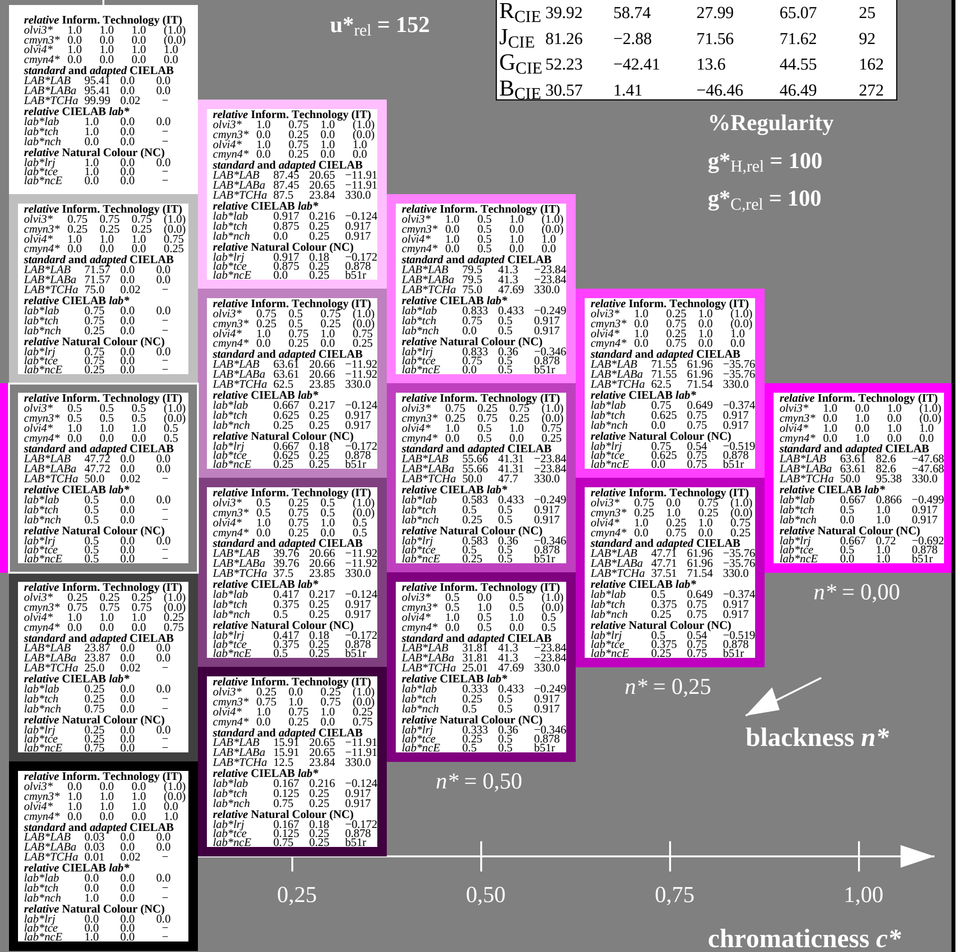
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



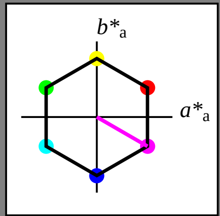
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric 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^*

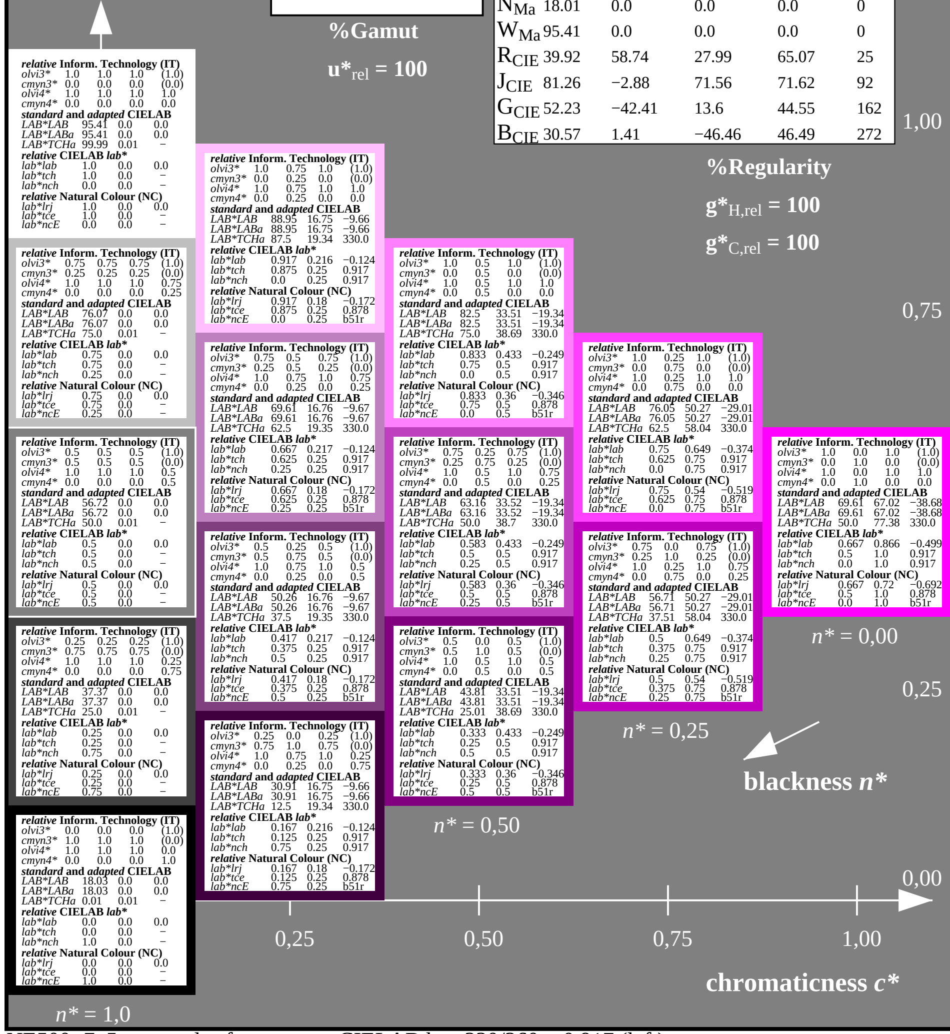


%Gamut
$u^*_{rel} = 100$

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

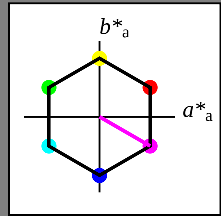
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



Output: Colorimetric 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^*

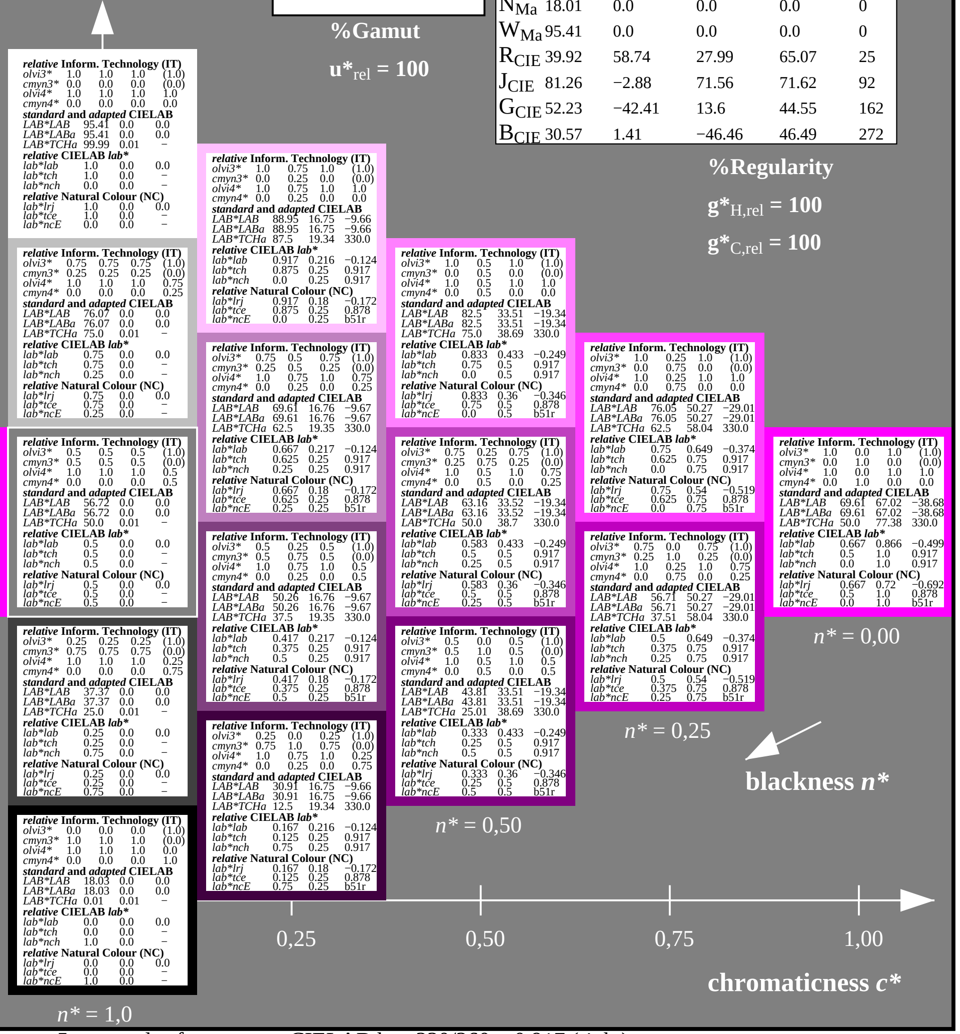


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

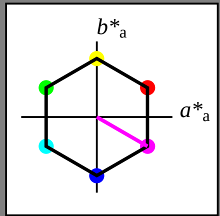
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

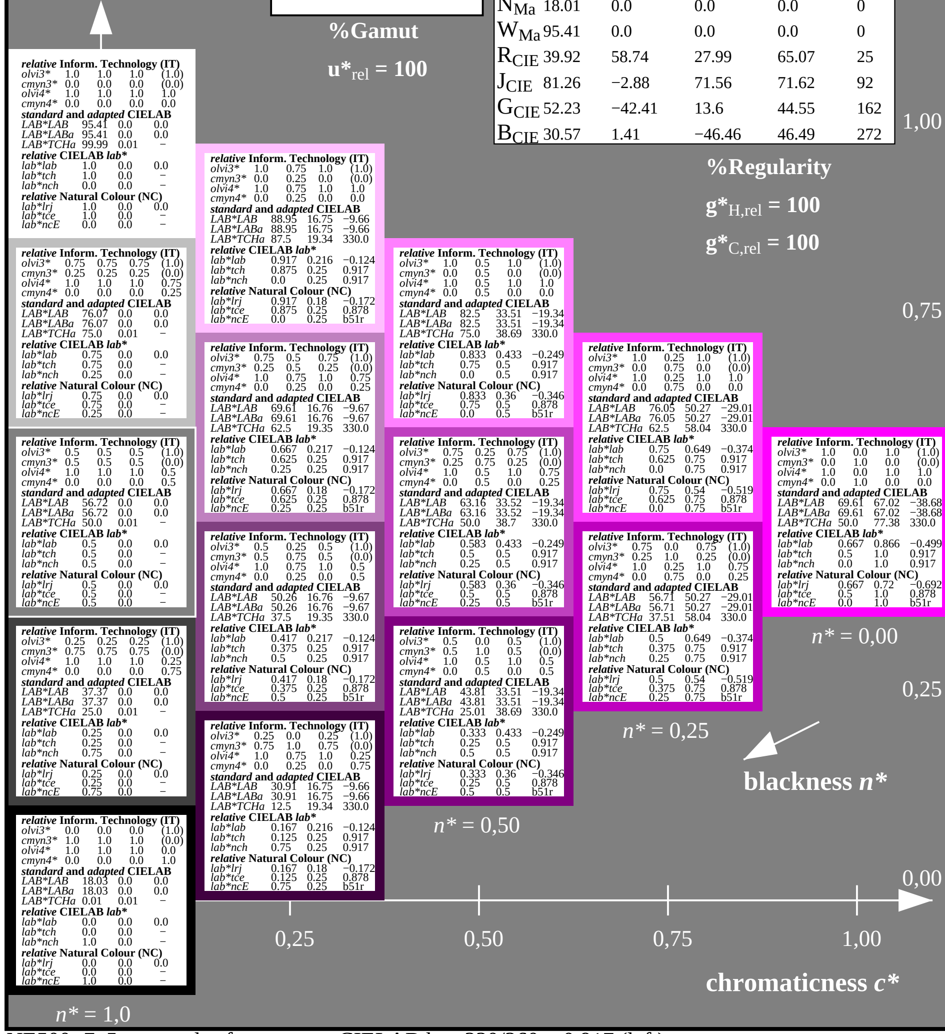
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

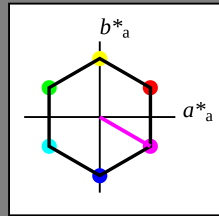
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

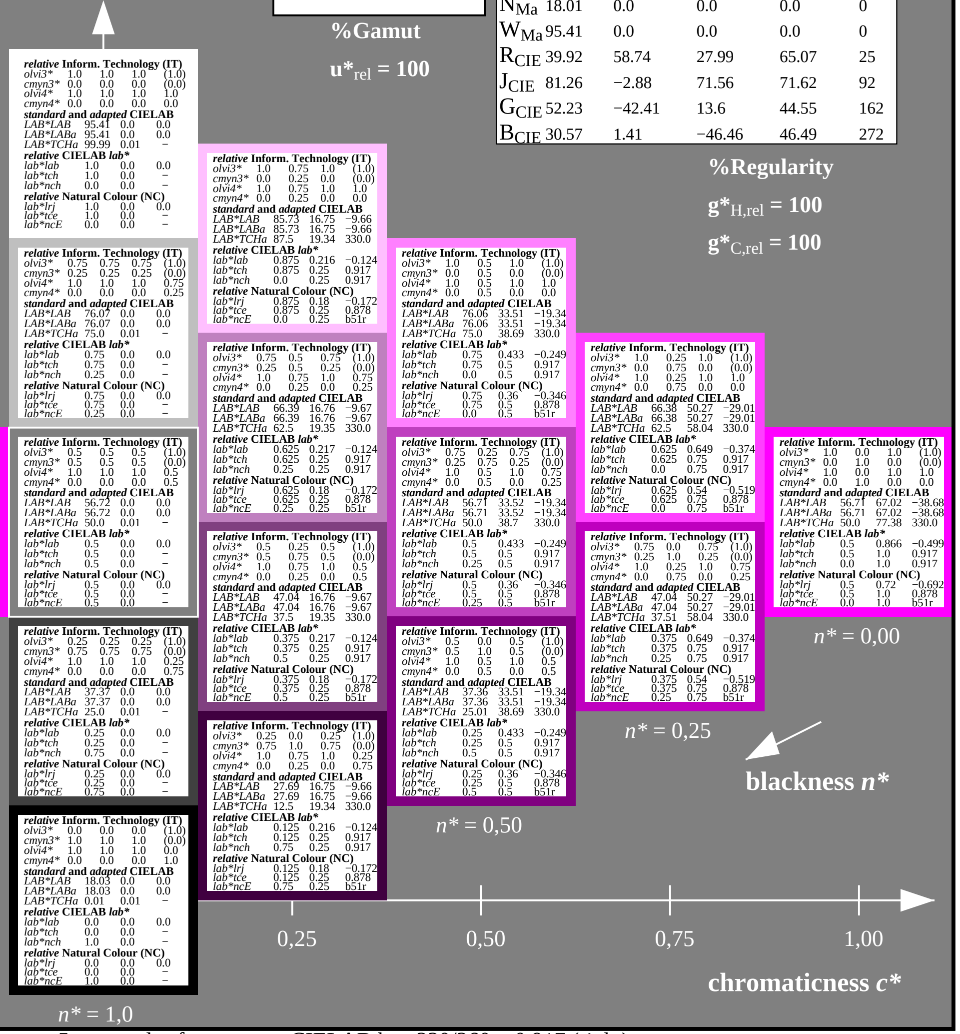
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

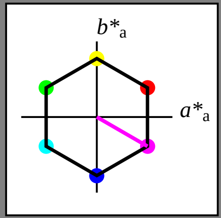
$g^*_{C,rel} = 100$



5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

Input: Colorimetric 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^*

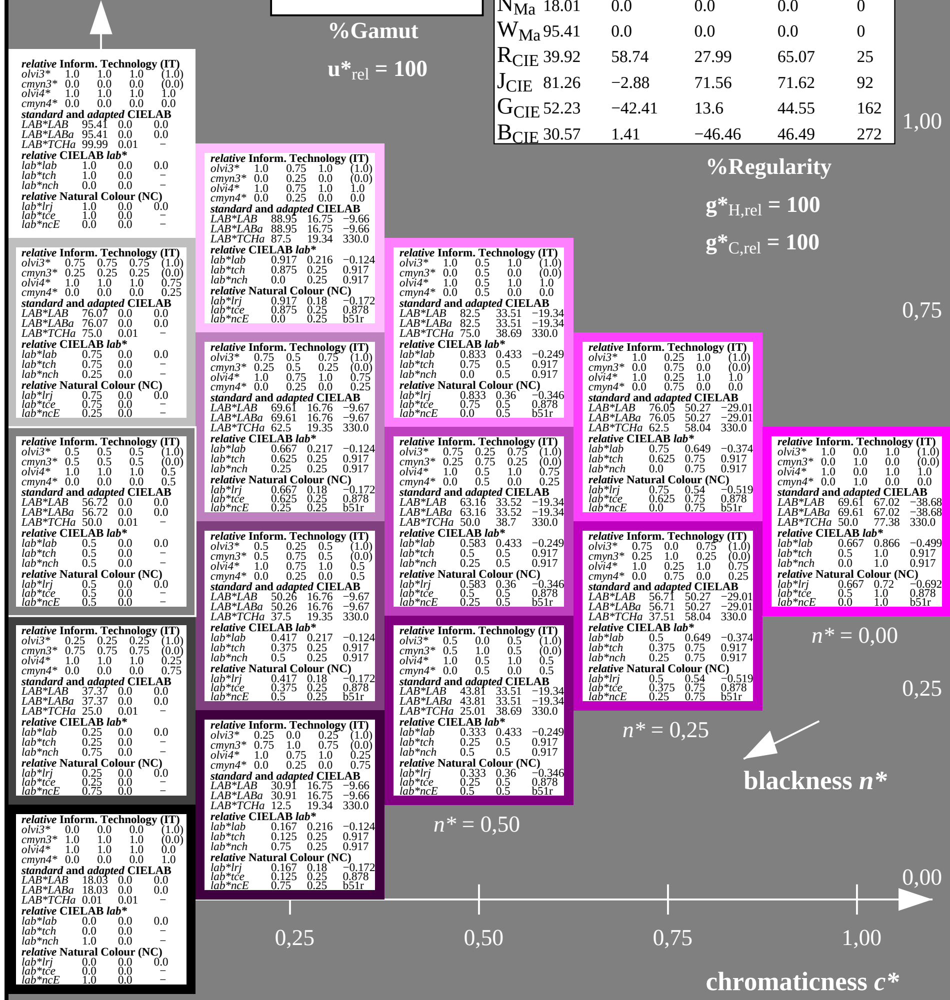


%Gamut
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

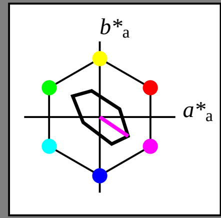
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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 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^*

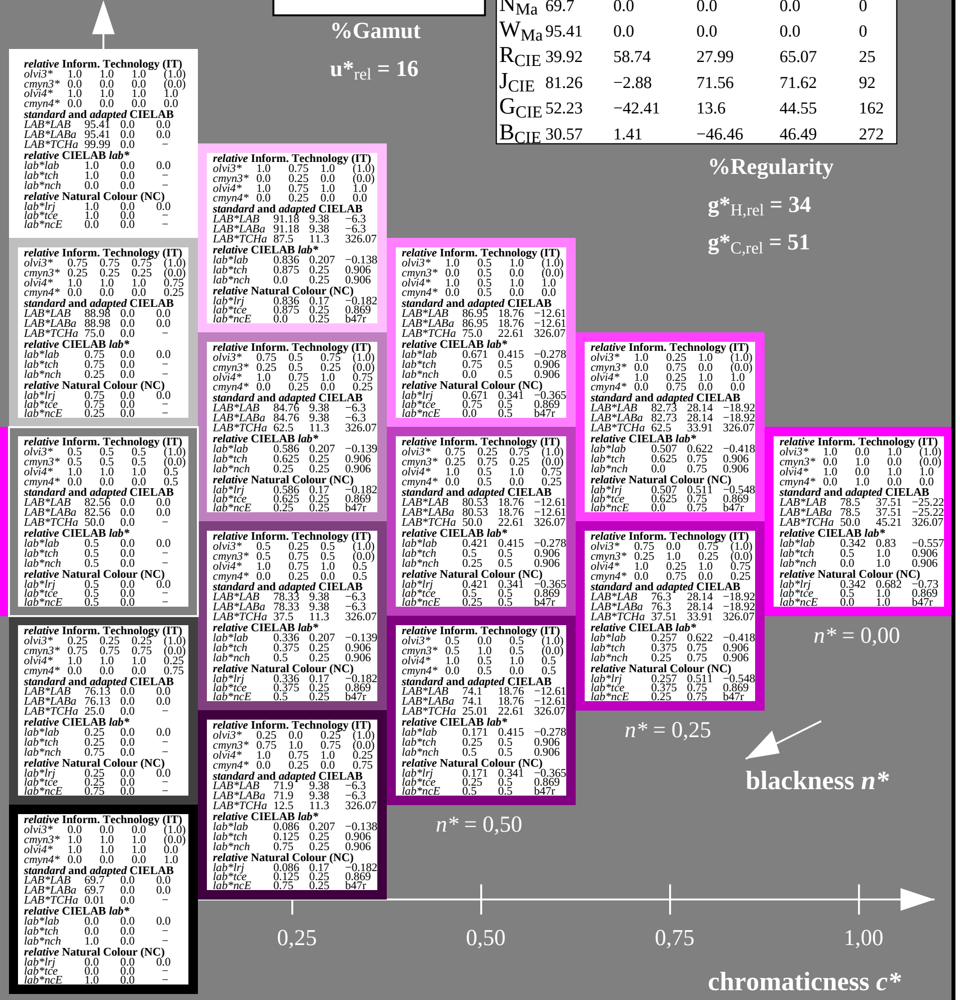


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



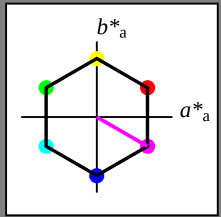
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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^*

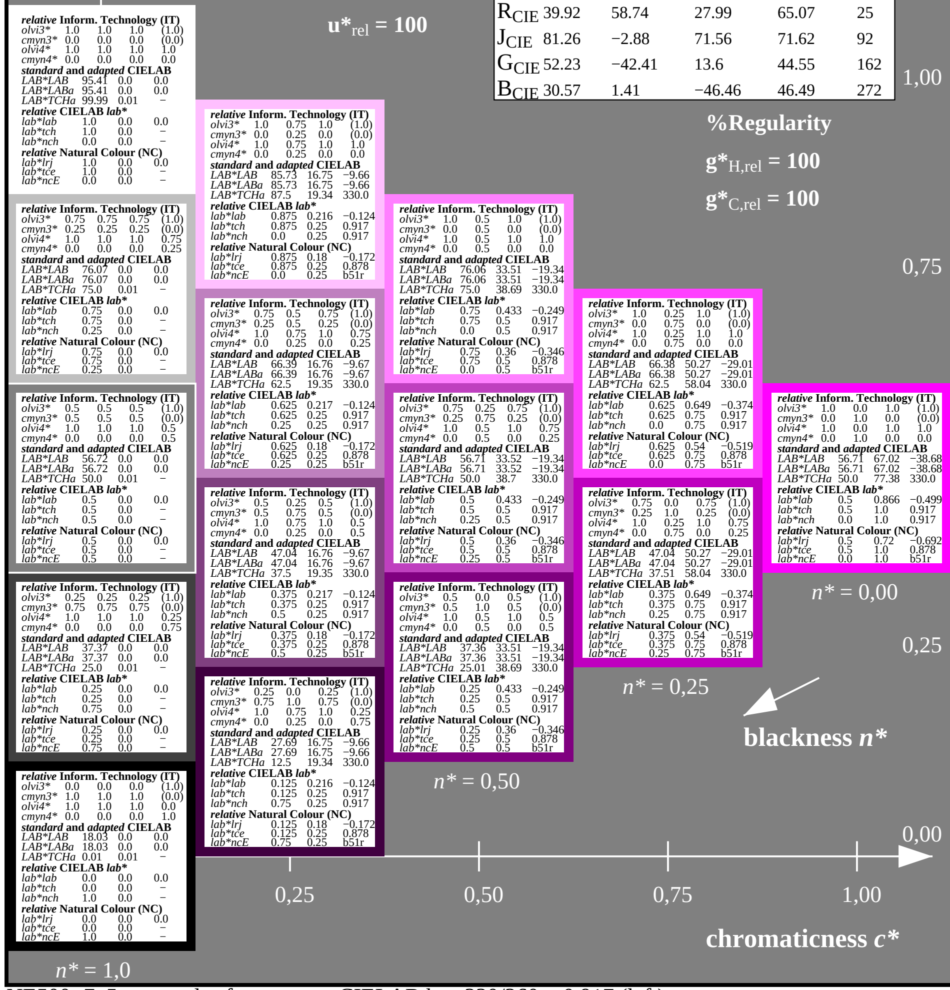


%Gamut
$u^*_{rel} = 100$

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

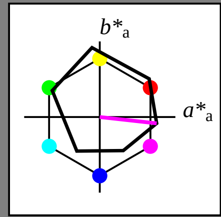
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

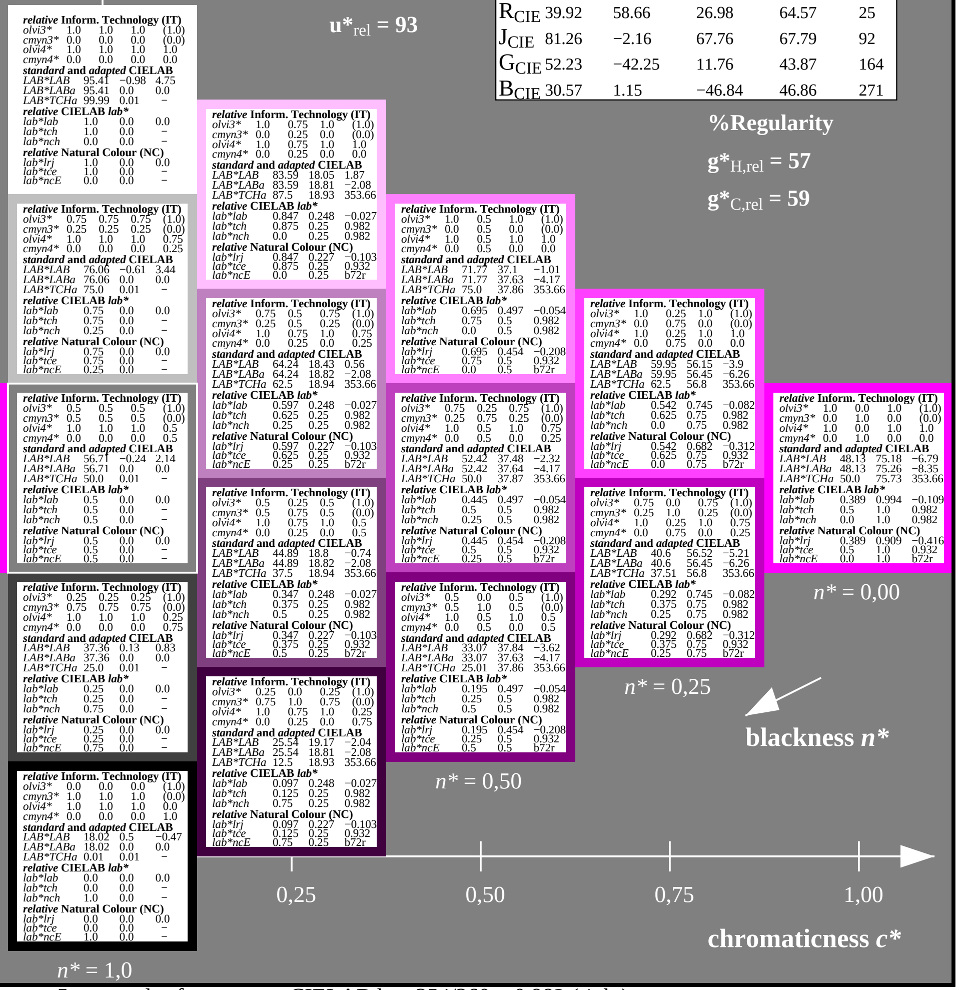


%Gamut
$u^*_{rel} = 93$

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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



NE500−7, 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 Standard Reflective System SRS18

for hue *h** = *lab*h* = 330/360 = 0.917

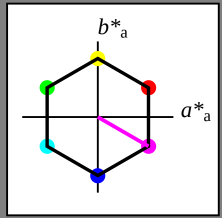
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

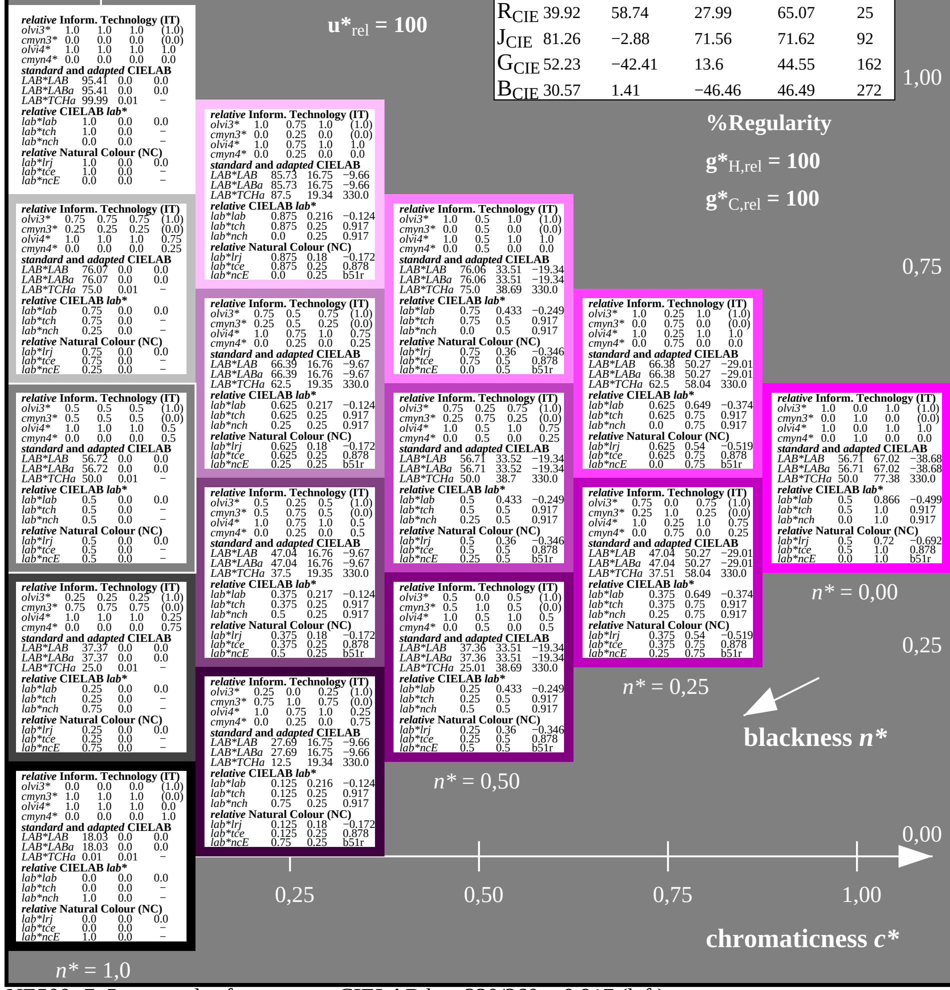
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS00

for hue *h** = *lab*h* = 328/360 = 0.912

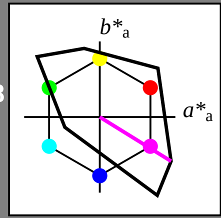
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 158

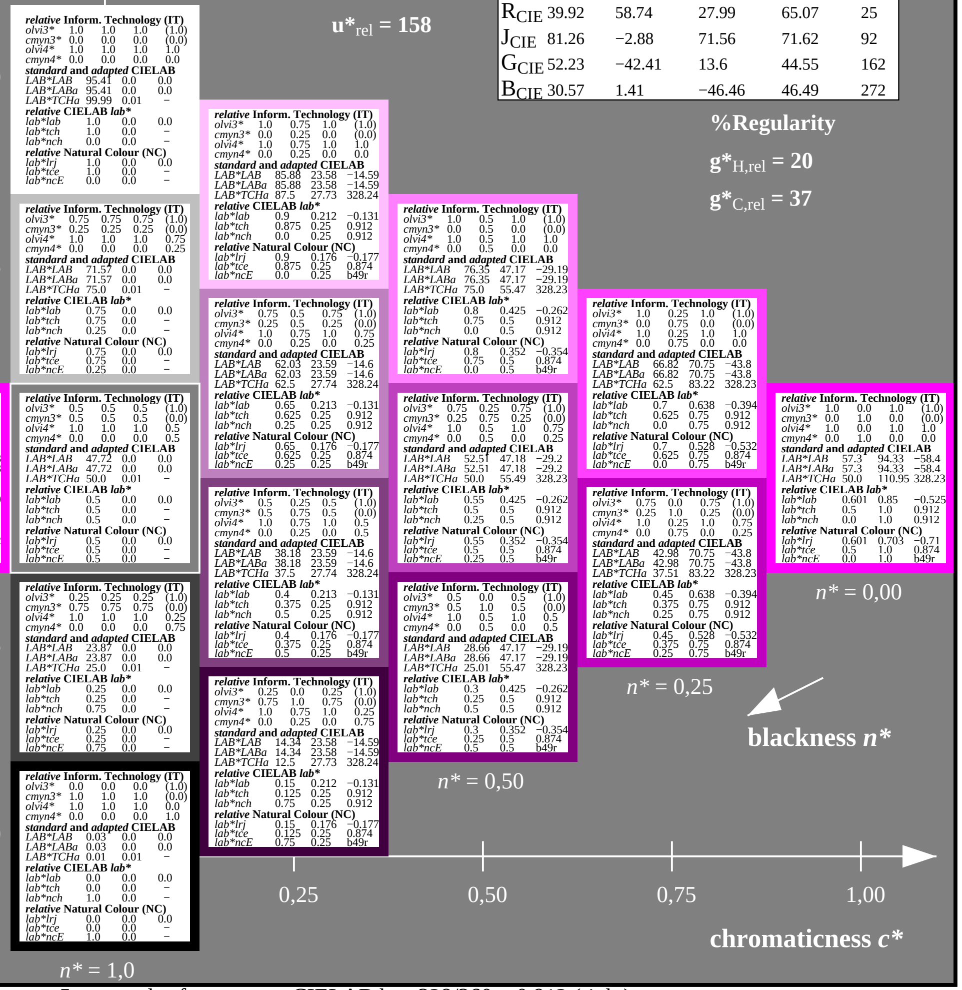
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



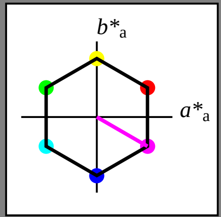
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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^*

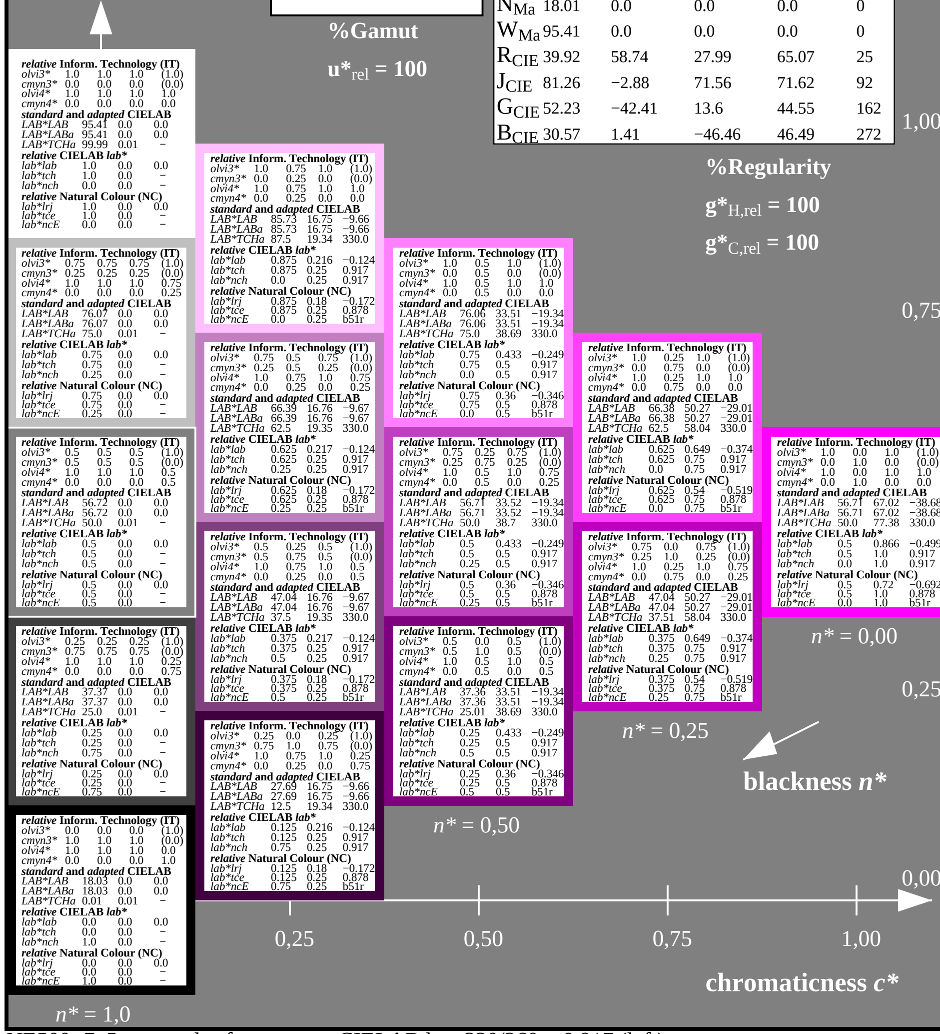


%Gamut
$u^*_{rel} = 100$

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

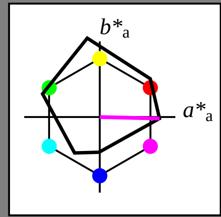
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

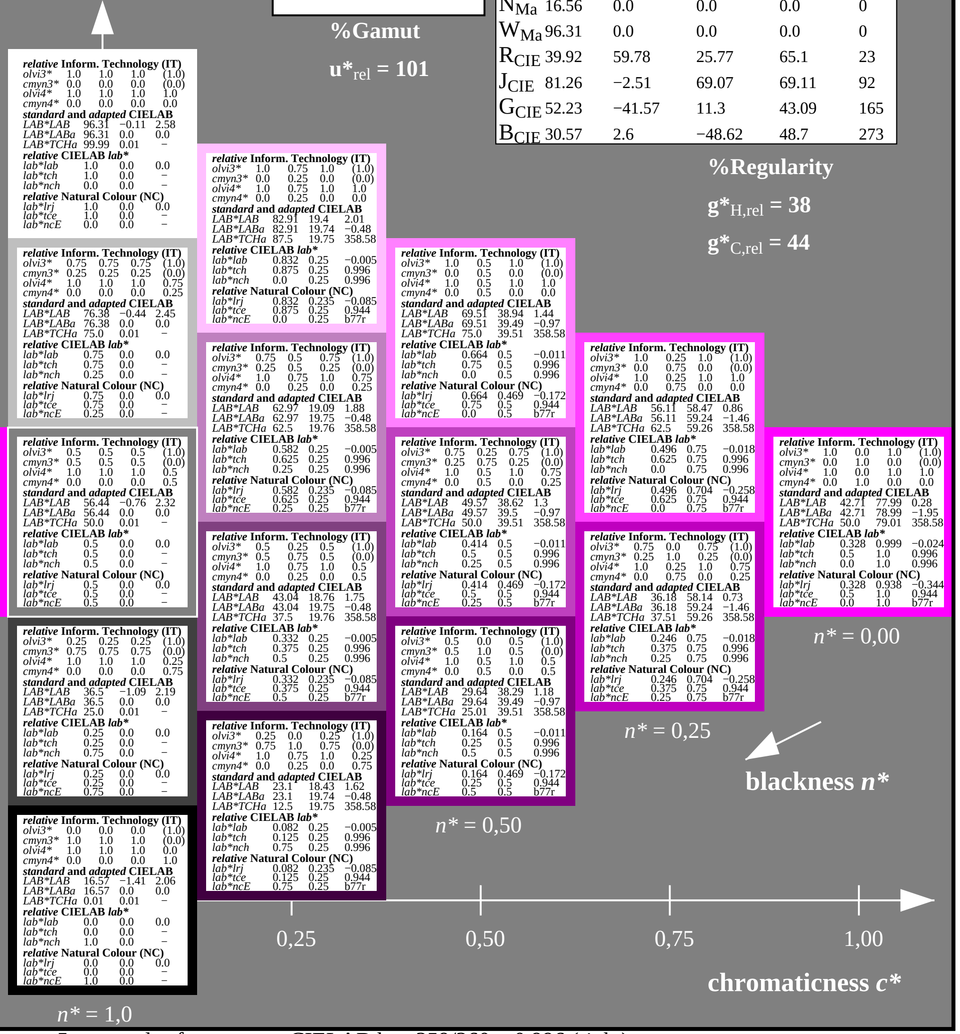


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

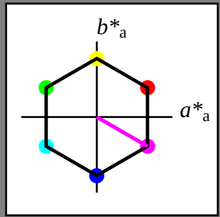
*lab*tch* and *lab*nch*

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^*

Column $c^* = 0$:

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	–	

Column $c^* = 0{,}25$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.75	1.0	(1.0)
cmyn3*	0.0	0.25	0.0	(0.0)
olvi4*	1.0	0.75	1.0	1.0
cmyn4*	0.0	0.25	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	85.73	16.75	−9.66	
LAB*LABa	85.73	16.75	−9.66	
LAB*TCHa	87.5	19.34	330.0	
relative CIELAB lab*				
lab*lab	0.875	0.216	−0.124	
lab*tch	0.875	0.25	0.917	
lab*nch	0.0	0.25	0.917	
relative Natural Colour (NC)				
lab*lrj	0.875	0.18	−0.172	
lab*tce	0.875	0.25	0.878	
lab*ncE	0.0	0.25	b51r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.5	0.75	(1.0)
cmyn3*	0.25	0.5	0.25	(0.0)
olvi4*	1.0	0.75	1.0	0.75
cmyn4*	0.0	0.25	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	66.39	16.76	−9.67	
LAB*LABa	66.39	16.76	−9.67	
LAB*TCHa	62.5	19.35	330.0	
relative CIELAB lab*				
lab*lab	0.625	0.217	−0.124	
lab*tch	0.625	0.25	0.917	
lab*nch	0.25	0.25	0.917	
relative Natural Colour (NC)				
lab*lrj	0.625	0.18	−0.172	
lab*tce	0.625	0.25	0.878	
lab*ncE	0.25	0.25	b51r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.25	0.5	(1.0)
cmyn3*	0.5	0.75	0.5	(0.0)
olvi4*	1.0	0.75	1.0	0.5
cmyn4*	0.0	0.25	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	47.04	16.76	−9.67	
LAB*LABa	47.04	16.76	−9.67	
LAB*TCHa	37.5	19.35	330.0	
relative CIELAB lab*				
lab*lab	0.375	0.217	−0.124	
lab*tch	0.375	0.25	0.917	
lab*nch	0.5	0.25	0.917	
relative Natural Colour (NC)				
lab*lrj	0.375	0.18	−0.172	
lab*tce	0.375	0.25	0.878	
lab*ncE	0.5	0.25	b51r	

relative Inform. Technology (IT)				
olvi3*	0.25	0.0	0.25	(1.0)
cmyn3*	0.75	1.0	0.75	(0.0)
olvi4*	1.0	0.75	1.0	0.25
cmyn4*	0.0	0.25	0.0	0.75
standard and adapted CIELAB				
LAB*LAB	27.69	16.75	−9.66	
LAB*LABa	27.69	16.75	−9.66	
LAB*TCHa	12.5	19.34	330.0	
relative CIELAB lab*				
lab*lab	0.125	0.216	−0.124	
lab*tch	0.125	0.25	0.917	
lab*nch	0.75	0.25	0.917	
relative Natural Colour (NC)				
lab*lrj	0.125	0.18	−0.172	
lab*tce	0.125	0.25	0.878	
lab*ncE	0.75	0.25	b51r	

Column $c^* = 0{,}50$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	76.06	33.51	−19.34	
LAB*LABa	76.06	33.51	−19.34	
LAB*TCHa	75.0	38.69	330.0	
relative CIELAB lab*				
lab*lab	0.75	0.433	−0.249	
lab*tch	0.75	0.5	0.917	
lab*nch	0.0	0.5	0.917	
relative Natural Colour (NC)				
lab*lrj	0.75	0.36	−0.346	
lab*tce	0.75	0.5	0.878	
lab*ncE	0.0	0.5	b51r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.25	0.75	(1.0)
cmyn3*	0.25	0.75	0.25	(0.0)
olvi4*	1.0	0.5	1.0	0.75
cmyn4*	0.0	0.5	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	56.71	33.52	−19.34	
LAB*LABa	56.71	33.52	−19.34	
LAB*TCHa	50.0	38.7	330.0	
relative CIELAB lab*				
lab*lab	0.5	0.433	−0.249	
lab*tch	0.5	0.5	0.917	
lab*nch	0.25	0.5	0.917	
relative Natural Colour (NC)				
lab*lrj	0.5	0.36	−0.346	
lab*tce	0.5	0.5	0.878	
lab*ncE	0.25	0.5	b51r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	37.36	33.51	−19.34	
LAB*LABa	37.36	33.51	−19.34	
LAB*TCHa	25.01	38.69	330.0	
relative CIELAB lab*				
lab*lab	0.25	0.433	−0.249	
lab*tch	0.25	0.5	0.917	
lab*nch	0.5	0.5	0.917	
relative Natural Colour (NC)				
lab*lrj	0.25	0.36	−0.346	
lab*tce	0.25	0.5	0.878	
lab*ncE	0.5	0.5	b51r	

Column $c^* = 0{,}75$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.25	1.0	(1.0)
cmyn3*	0.0	0.75	0.0	(0.0)
olvi4*	1.0	0.25	1.0	1.0
cmyn4*	0.0	0.75	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	66.38	50.27	−29.01	
LAB*LABa	66.38	50.27	−29.01	
LAB*TCHa	62.5	58.04	330.0	
relative CIELAB lab*				
lab*lab	0.625	0.649	−0.374	
lab*tch	0.625	0.75	0.917	
lab*nch	0.0	0.75	0.917	
relative Natural Colour (NC)				
lab*lrj	0.625	0.54	−0.519	
lab*tce	0.625	0.75	0.878	
lab*ncE	0.0	0.75	b51r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.0	0.75	(1.0)
cmyn3*	0.25	1.0	0.25	(0.0)
olvi4*	1.0	0.25	1.0	0.75
cmyn4*	0.0	0.75	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	47.04	50.27	−29.01	
LAB*LABa	47.04	50.27	−29.01	
LAB*TCHa	37.51	58.04	330.0	
relative CIELAB lab*				
lab*lab	0.375	0.649	−0.374	
lab*tch	0.375	0.75	0.917	
lab*nch	0.25	0.75	0.917	
relative Natural Colour (NC)				
lab*lrj	0.375	0.54	−0.519	
lab*tce	0.375	0.75	0.878	
lab*ncE	0.25	0.75	b51r	

Column $c^* = 1{,}00$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	56.71	67.02	−38.68	
LAB*LABa	56.71	67.02	−38.68	
LAB*TCHa	50.0	77.38	330.0	
relative CIELAB lab*				
lab*lab	0.5	0.866	−0.499	
lab*tch	0.5	1.0	0.917	
lab*nch	0.0	1.0	0.917	
relative Natural Colour (NC)				
lab*lrj	0.5	0.72	−0.692	
lab*tce	0.5	1.0	0.878	
lab*ncE	0.0	1.0	b51r	

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

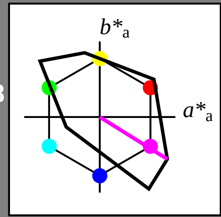
*lab*tch* and *lab*nch*

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

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

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

$n^* = 0{,}00$ $n^* = 0{,}25$ $n^* = 0{,}50$ $n^* = 1{,}0$

blackness n^*

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

chromaticness c^*

Column $c^* = 0$:

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	–	

Column $c^* = 0{,}25$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.75	1.0	(1.0)
cmyn3*	0.0	0.25	0.0	(0.0)
olvi4*	1.0	0.75	1.0	1.0
cmyn4*	0.0	0.25	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	86.31	22.32	−13.9	
LAB*LABa	86.31	22.32	−13.9	
LAB*TCHa	87.5	26.31	328.06	
relative CIELAB lab*				
lab*lab	0.882	0.212	−0.131	
lab*tch	0.875	0.25	0.911	
lab*nch	0.0	0.25	0.911	
relative Natural Colour (NC)				
lab*lrj	0.882	0.175	−0.177	
lab*tce	0.875	0.25	0.874	
lab*ncE	0.0	0.25	b49r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.5	0.75	(1.0)
cmyn3*	0.25	0.5	0.25	(0.0)
olvi4*	1.0	0.75	1.0	0.75
cmyn4*	0.0	0.25	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	66.96	22.33	−13.91	
LAB*LABa	66.96	22.33	−13.91	
LAB*TCHa	62.5	26.32	328.06	
relative CIELAB lab*				
lab*lab	0.632	0.212	−0.131	
lab*tch	0.625	0.25	0.911	
lab*nch	0.25	0.25	0.911	
relative Natural Colour (NC)				
lab*lrj	0.632	0.175	−0.177	
lab*tce	0.625	0.25	0.874	
lab*ncE	0.25	0.25	b49r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.25	0.5	(1.0)
cmyn3*	0.5	0.75	0.5	(0.0)
olvi4*	1.0	0.75	1.0	0.5
cmyn4*	0.0	0.25	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	47.61	22.33	−13.91	
LAB*LABa	47.61	22.33	−13.91	
LAB*TCHa	37.5	26.32	328.06	
relative CIELAB lab*				
lab*lab	0.382	0.212	−0.131	
lab*tch	0.375	0.25	0.911	
lab*nch	0.5	0.25	0.911	
relative Natural Colour (NC)				
lab*lrj	0.382	0.175	−0.177	
lab*tce	0.375	0.25	0.874	
lab*ncE	0.5	0.25	b49r	

relative Inform. Technology (IT)				
olvi3*	0.25	0.0	0.25	(1.0)
cmyn3*	0.75	1.0	0.75	(0.0)
olvi4*	1.0	0.75	1.0	0.25
cmyn4*	0.0	0.25	0.0	0.75
standard and adapted CIELAB				
LAB*LAB	28.26	22.32	−13.9	
LAB*LABa	28.26	22.32	−13.9	
LAB*TCHa	12.5	26.31	328.06	
relative CIELAB lab*				
lab*lab	0.132	0.212	−0.131	
lab*tch	0.125	0.25	0.911	
lab*nch	0.75	0.25	0.911	
relative Natural Colour (NC)				
lab*lrj	0.132	0.175	−0.177	
lab*tce	0.125	0.25	0.874	
lab*ncE	0.75	0.25	b49r	

Column $c^* = 0{,}50$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	77.21	44.66	−27.82	
LAB*LABa	77.21	44.66	−27.82	
LAB*TCHa	75.0	52.62	328.06	
relative CIELAB lab*				
lab*lab	0.765	0.424	−0.263	
lab*tch	0.75	0.5	0.911	
lab*nch	0.0	0.5	0.911	
relative Natural Colour (NC)				
lab*lrj	0.765	0.351	−0.355	
lab*tce	0.75	0.5	0.874	
lab*ncE	0.0	0.5	b49r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.25	0.75	(1.0)
cmyn3*	0.25	0.75	0.25	(0.0)
olvi4*	1.0	0.5	1.0	0.75
cmyn4*	0.0	0.5	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	57.86	44.67	−27.83	
LAB*LABa	57.86	44.67	−27.83	
LAB*TCHa	50.0	52.63	328.06	
relative CIELAB lab*				
lab*lab	0.515	0.424	−0.263	
lab*tch	0.5	0.5	0.911	
lab*nch	0.25	0.5	0.911	
relative Natural Colour (NC)				
lab*lrj	0.515	0.351	−0.355	
lab*tce	0.5	0.5	0.874	
lab*ncE	0.25	0.5	b49r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	38.51	44.66	−27.82	
LAB*LABa	38.51	44.66	−27.82	
LAB*TCHa	25.01	52.62	328.06	
relative CIELAB lab*				
lab*lab	0.265	0.424	−0.263	
lab*tch	0.25	0.5	0.911	
lab*nch	0.5	0.5	0.911	
relative Natural Colour (NC)				
lab*lrj	0.265	0.351	−0.355	
lab*tce	0.25	0.5	0.874	
lab*ncE	0.5	0.5	b49r	

Column $c^* = 0{,}75$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.25	1.0	(1.0)
cmyn3*	0.0	0.75	0.0	(0.0)
olvi4*	1.0	0.25	1.0	1.0
cmyn4*	0.0	0.75	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	68.11	66.99	−41.74	
LAB*LABa	68.11	66.99	−41.74	
LAB*TCHa	62.5	78.94	328.06	
relative CIELAB lab*				
lab*lab	0.647	0.636	−0.396	
lab*tch	0.625	0.75	0.911	
lab*nch	0.0	0.75	0.911	
relative Natural Colour (NC)				
lab*lrj	0.647	0.526	−0.533	
lab*tce	0.625	0.75	0.874	
lab*ncE	0.0	0.75	b49r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.0	0.75	(1.0)
cmyn3*	0.25	1.0	0.25	(0.0)
olvi4*	1.0	0.25	1.0	0.75
cmyn4*	0.0	0.75	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	48.76	66.99	−41.74	
LAB*LABa	48.76	66.99	−41.74	
LAB*TCHa	37.51	78.94	328.06	
relative CIELAB lab*				
lab*lab	0.397	0.636	−0.396	
lab*tch	0.375	0.75	0.911	
lab*nch	0.25	0.75	0.911	
relative Natural Colour (NC)				
lab*lrj	0.397	0.526	−0.533	
lab*tce	0.375	0.75	0.874	
lab*ncE	0.25	0.75	b49r	

Column $c^* = 1{,}00$:

relative Inform. Technology (IT)				
olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	59.01	89.31	−55.66	
LAB*LABa	59.01	89.31	−55.66	
LAB*TCHa	50.0	105.24	328.06	
relative CIELAB lab*				
lab*lab	0.53	0.848	−0.528	
lab*tch	0.5	1.0	0.911	
lab*nch	0.0	1.0	0.911	
relative Natural Colour (NC)				
lab*lrj	0.53	0.702	−0.711	
lab*tce	0.5	1.0	0.874	
lab*ncE	0.0	1.0	b49r	

NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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**

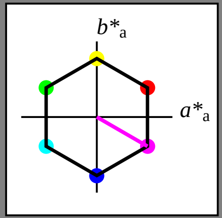
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

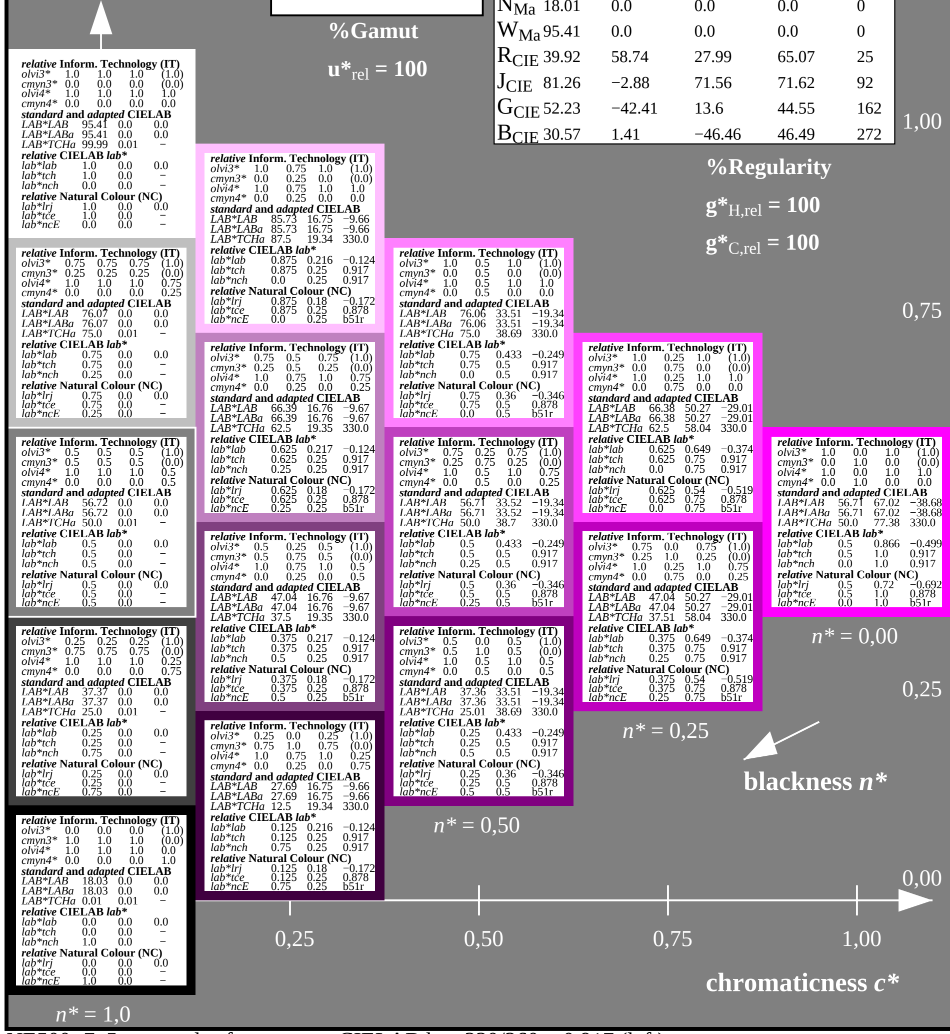
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h = *lab*h* = 330/360 = 0.917**

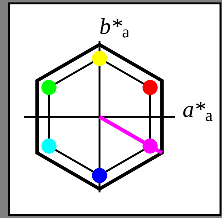
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 64 95 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

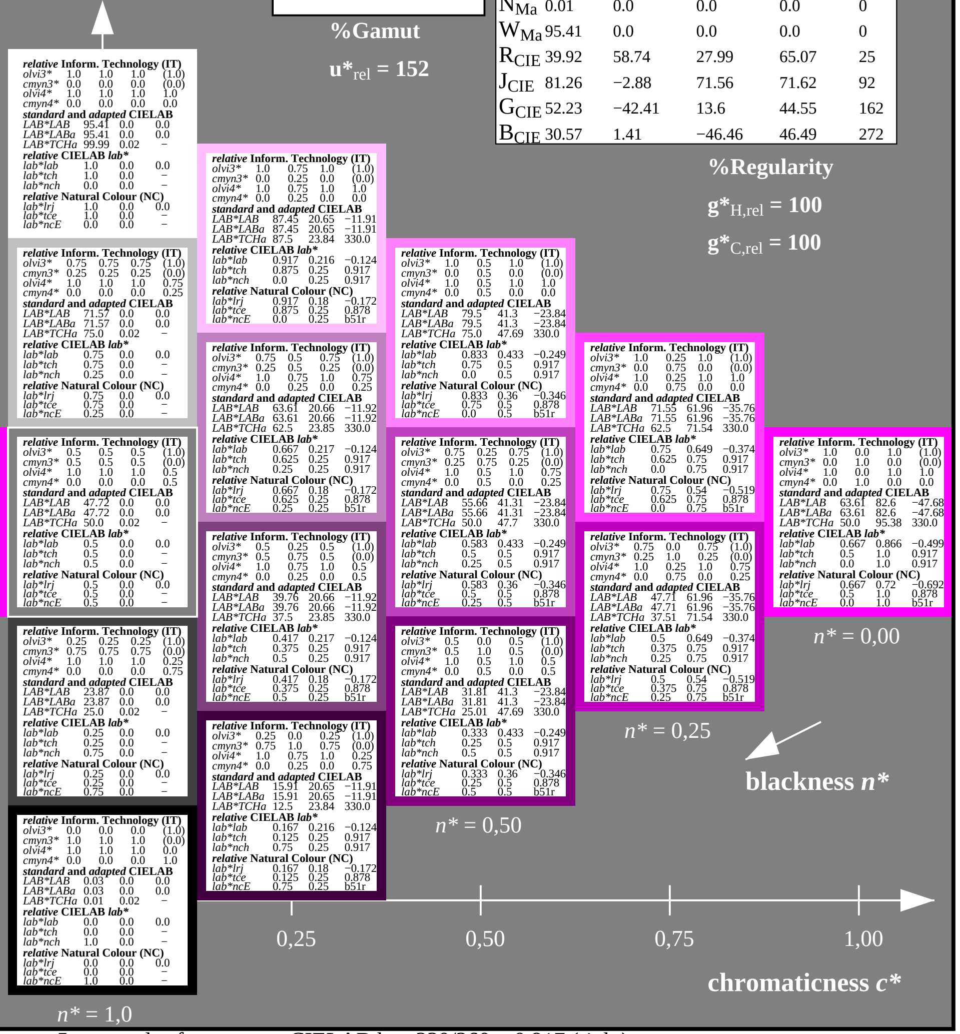
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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**

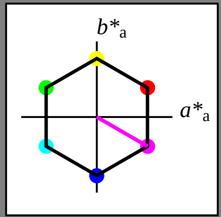
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 100

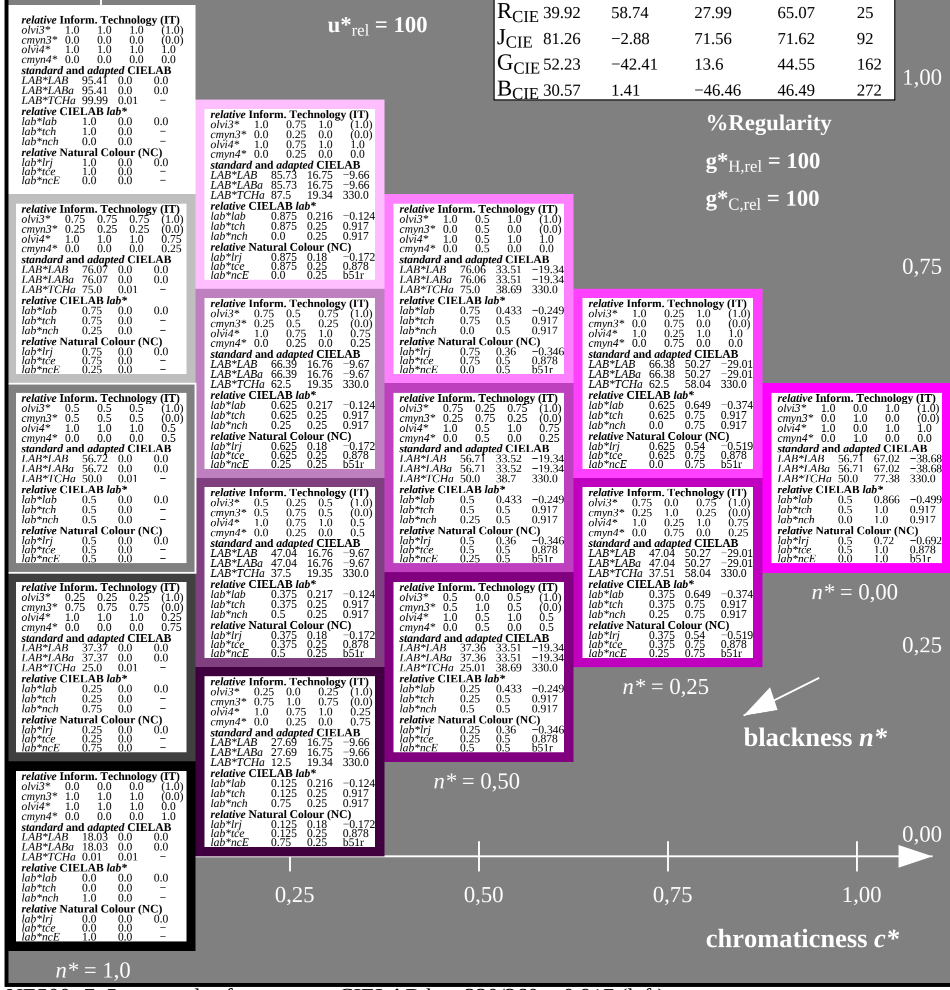
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue *h = *lab*h* = 330/360 = 0.917**

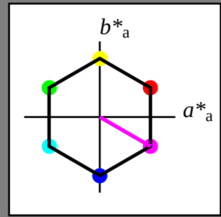
lab*tch* and *lab*nch

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 100

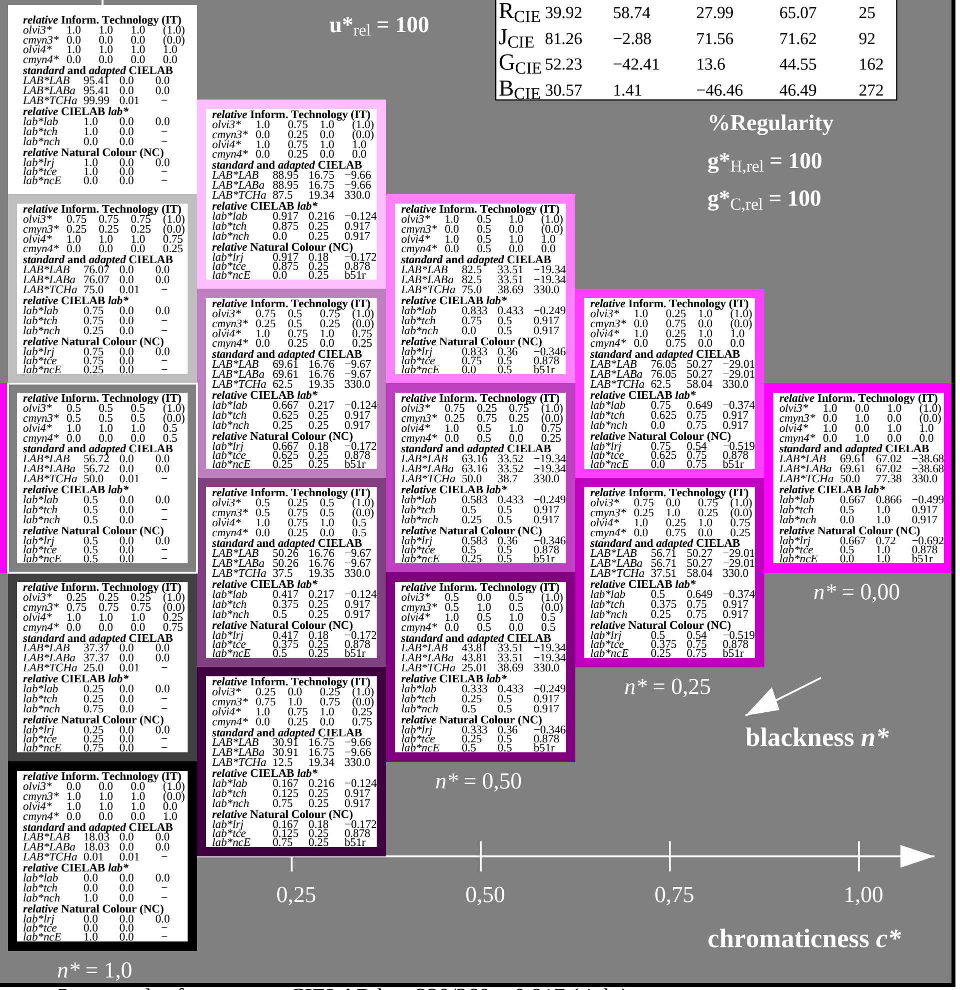
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



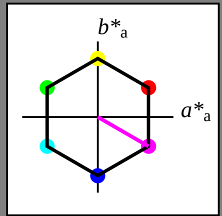
NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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

$u^*_{rel} = 100$

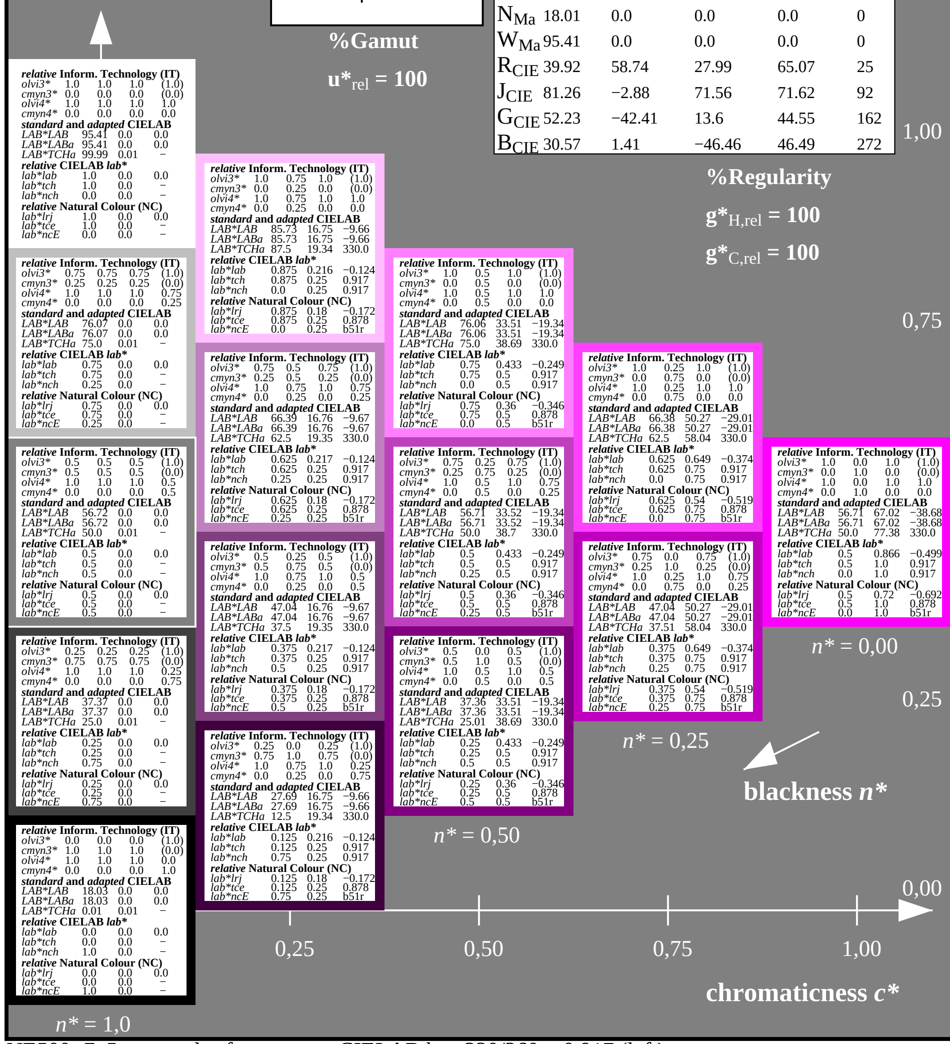
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

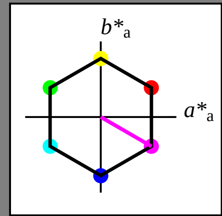


NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left)

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

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

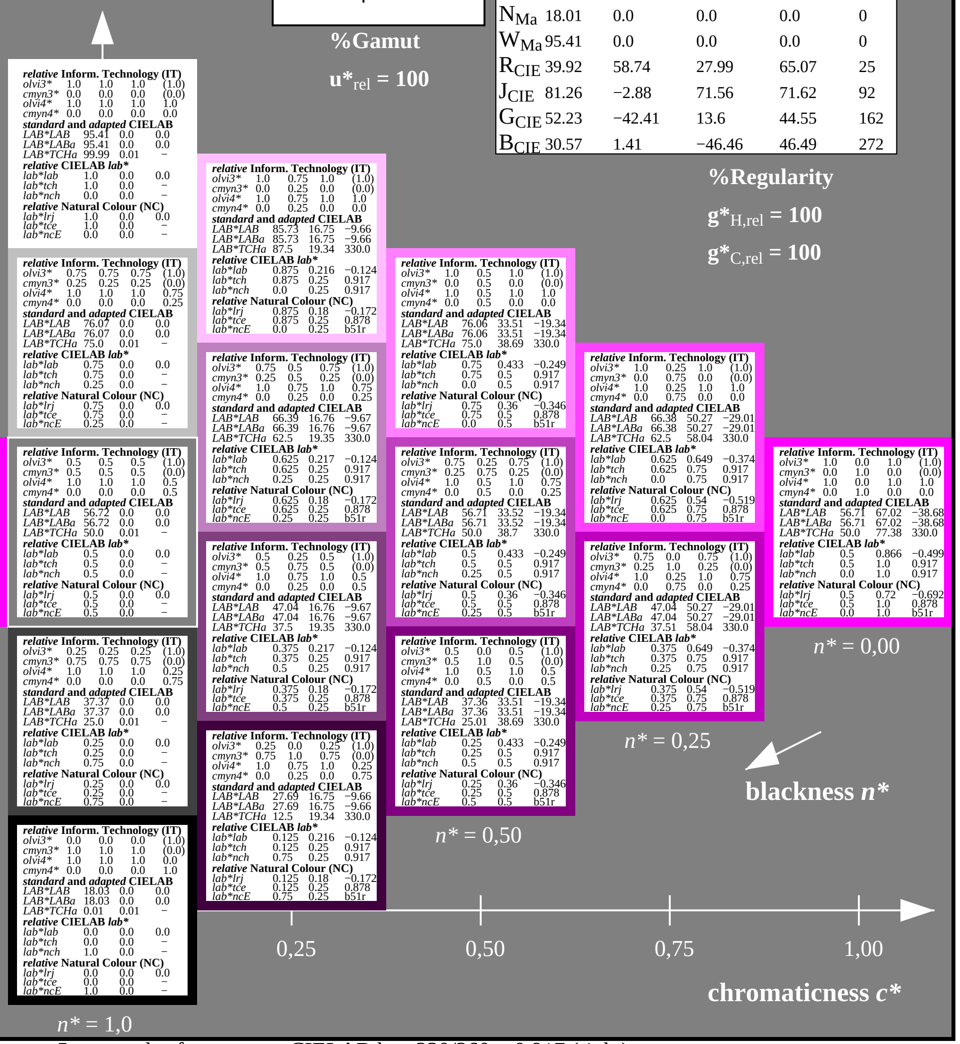
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 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

$u^*_{rel} = 100$

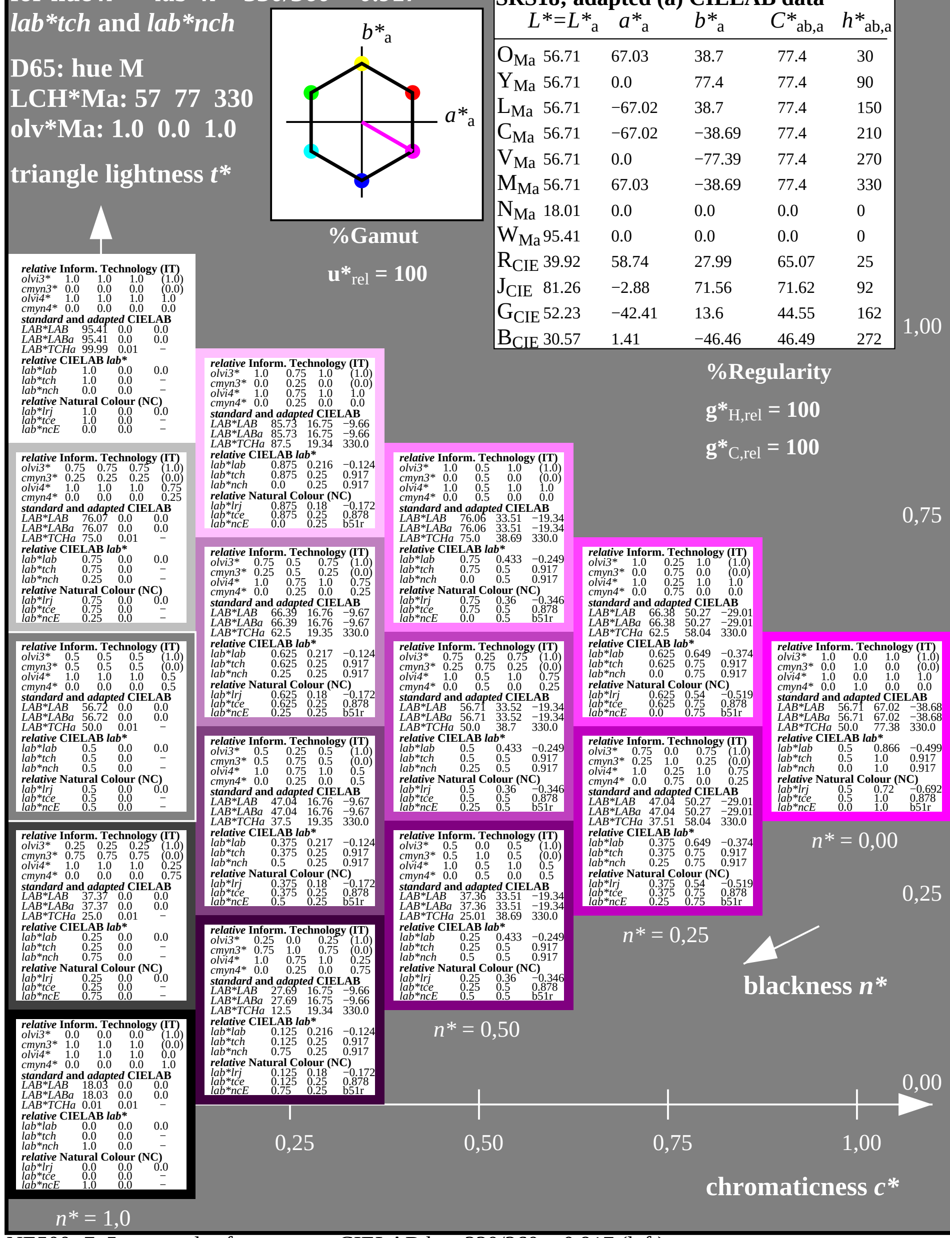
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 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

$u^*_{rel} = 16$

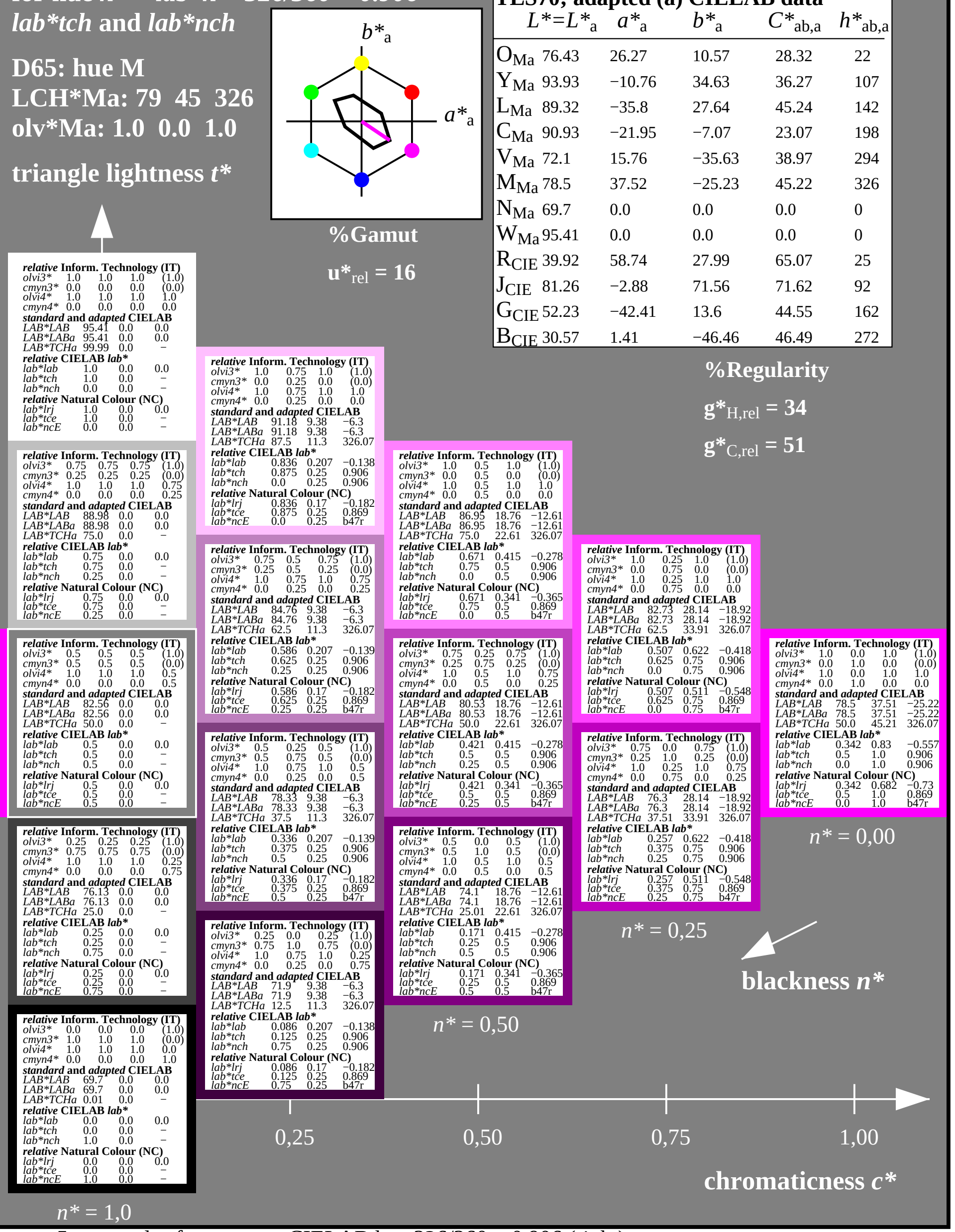
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

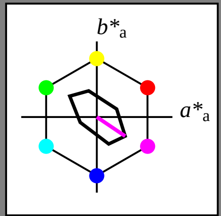


NE500−7, 5 step scales for constant CIELAB hue 330/360 = 0.917 (left) 5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

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**

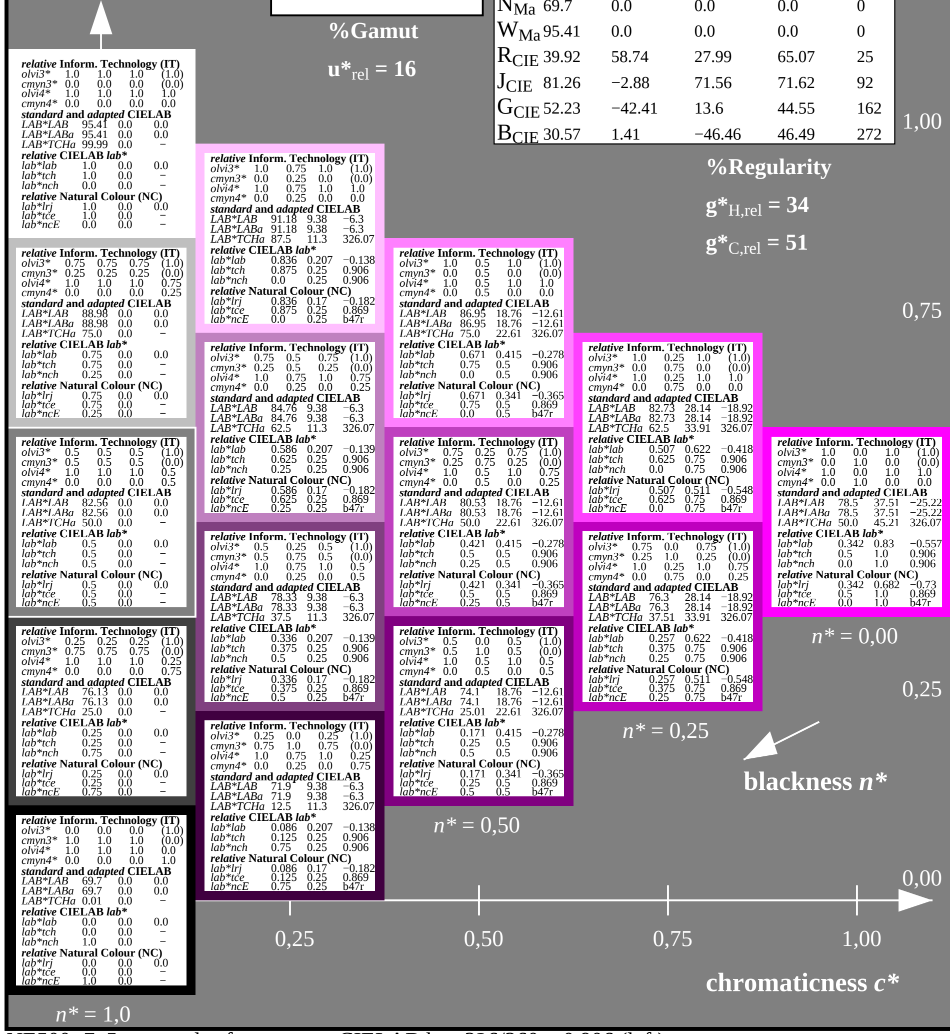


%Gamut
$u*_{rel}$ = 16

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

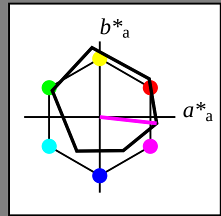
%Regularity
$g*_{H,rel}$ = 34
$g*_{C,rel}$ = 51



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**

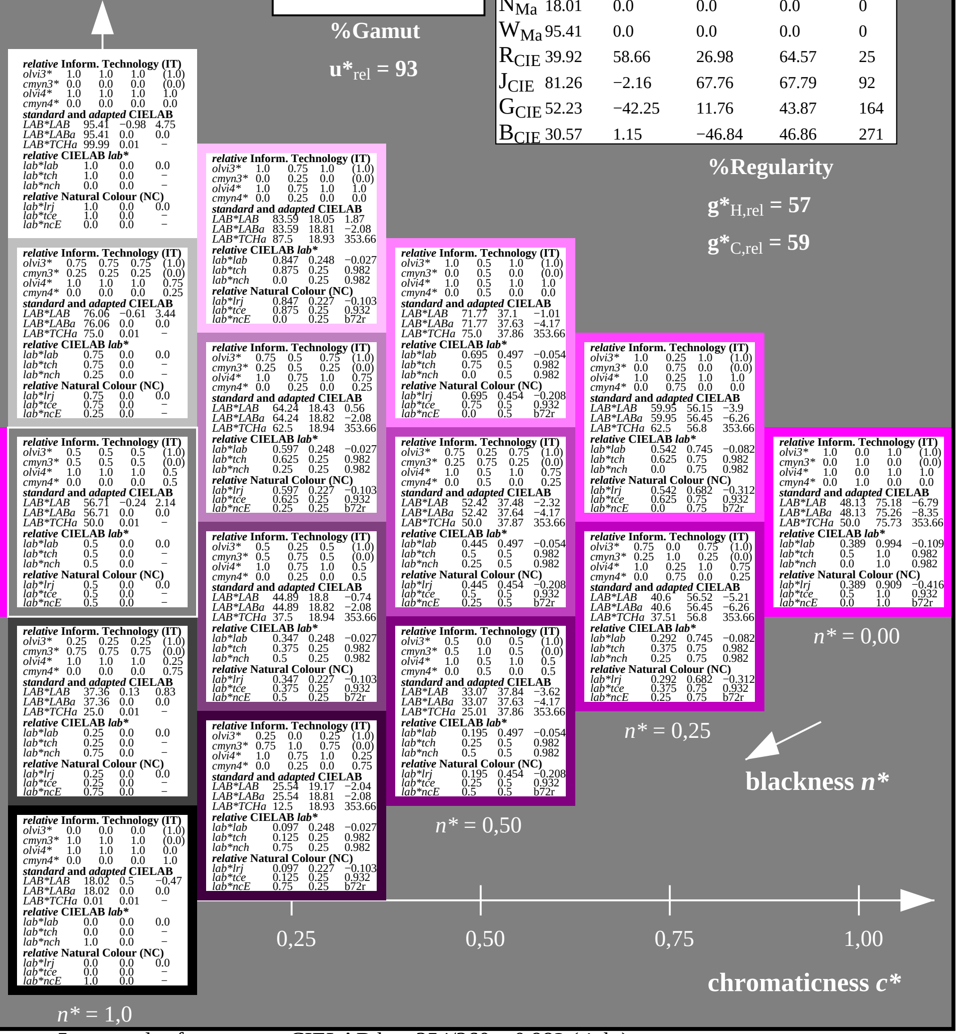


%Gamut
$u*_{rel}$ = 93

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



NE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 326/360 = 0.906$

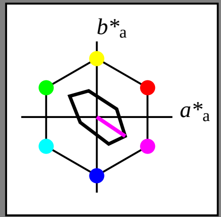
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

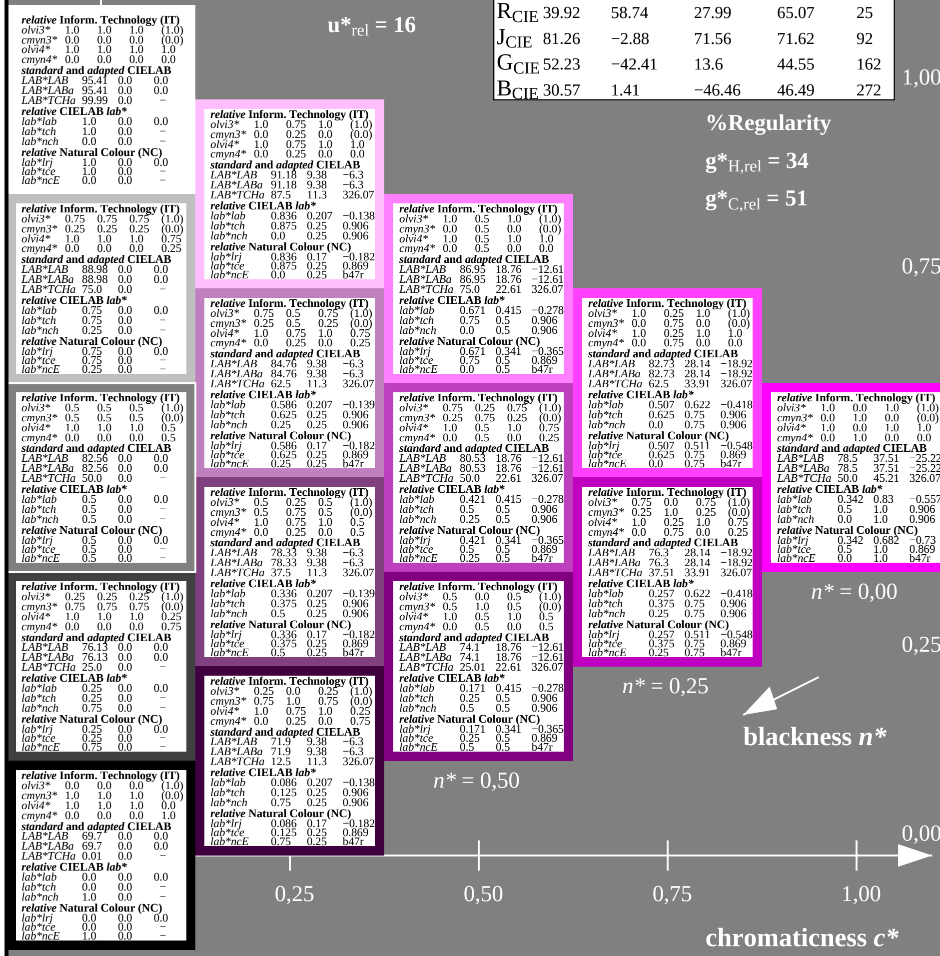
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 328/360 = 0.912$

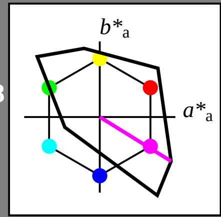
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

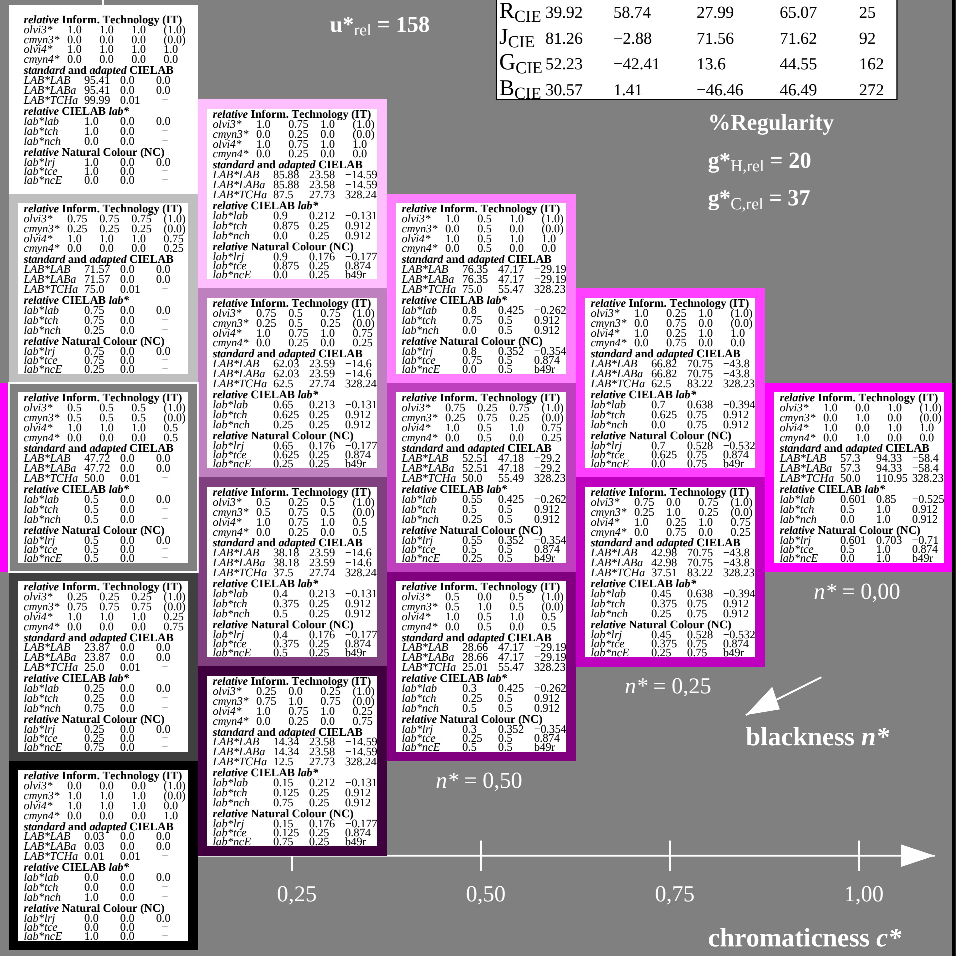
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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*

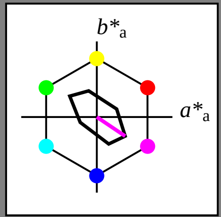
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 16

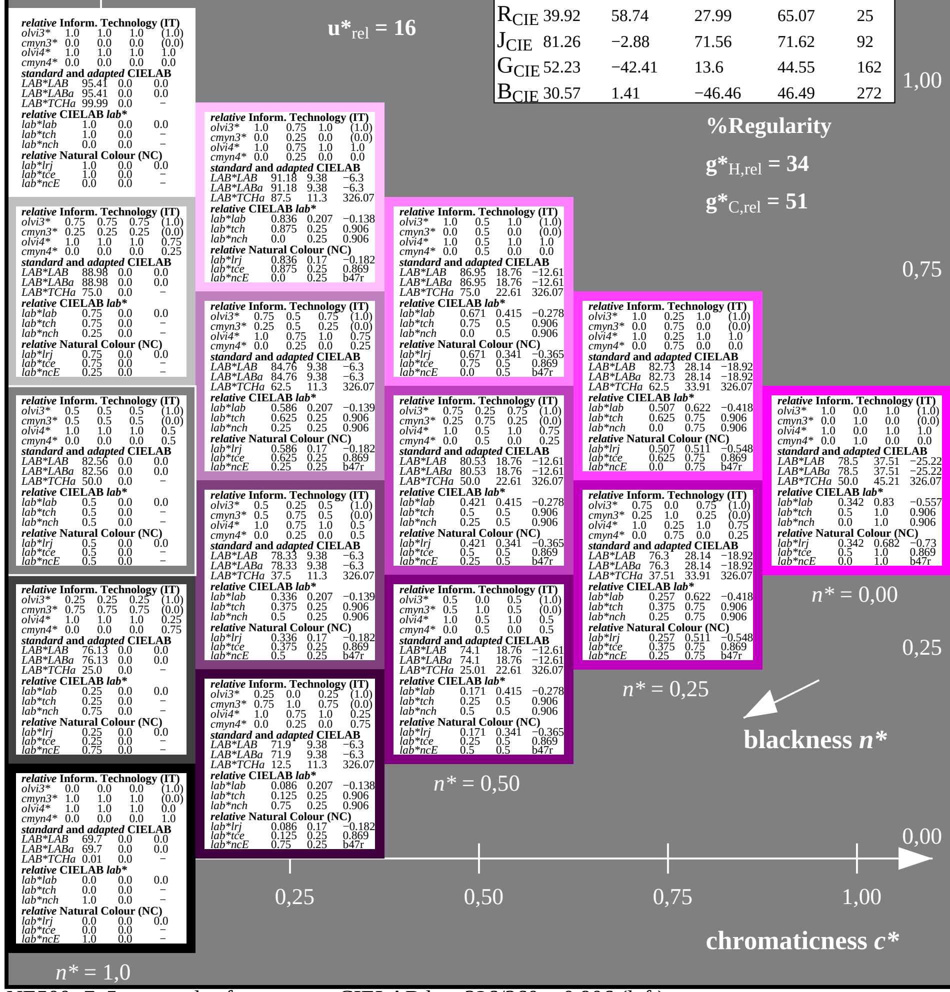
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h** = *lab*h* = *359/360 = 0.996*

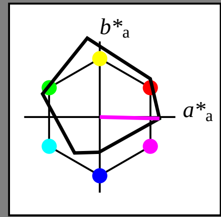
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 43 79 359

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 101

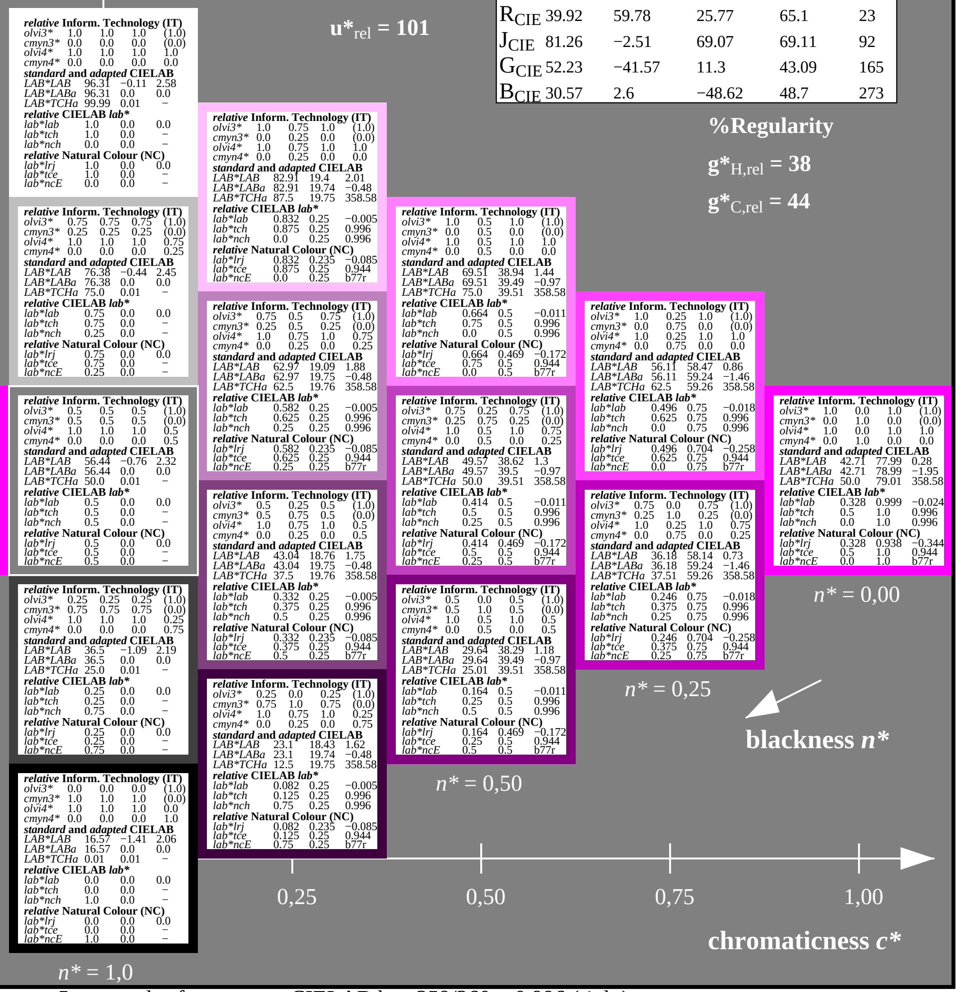
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



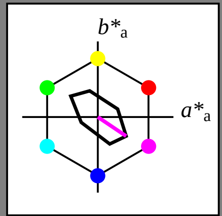
NE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

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^*

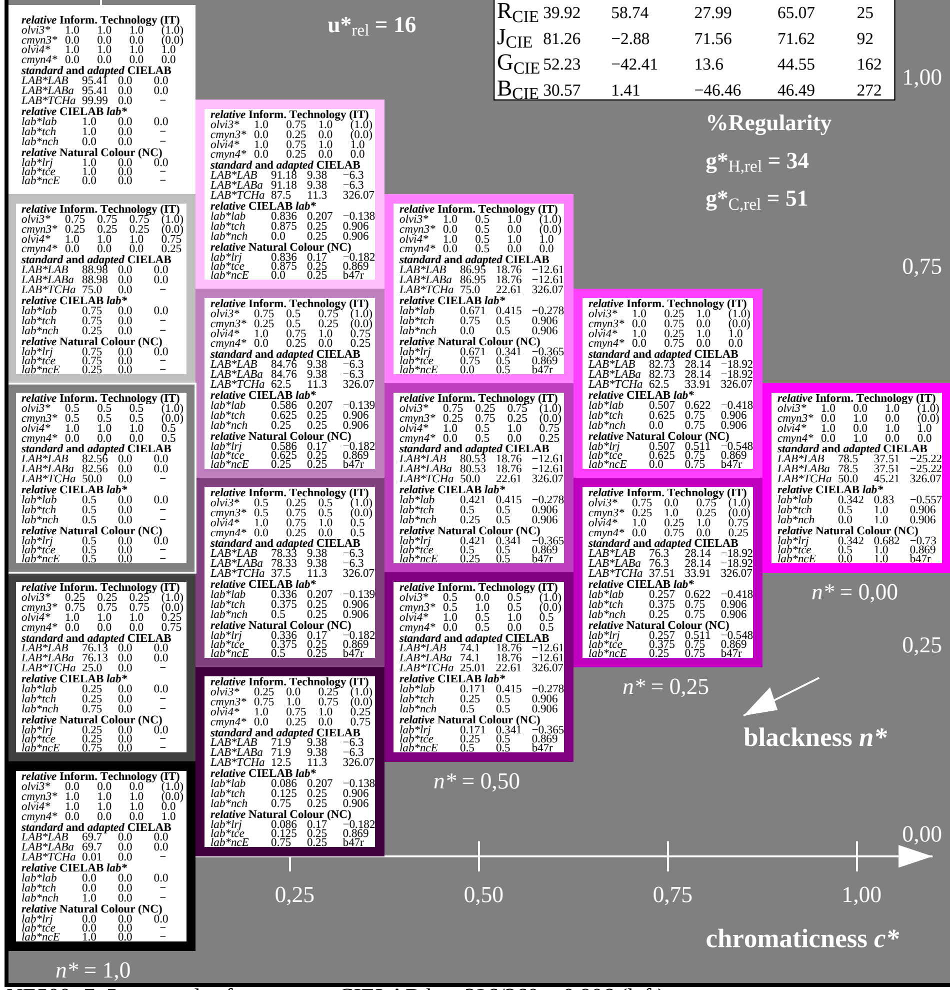


%Gamut
$u^*_{rel} = 16$

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

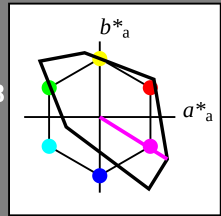
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



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^*

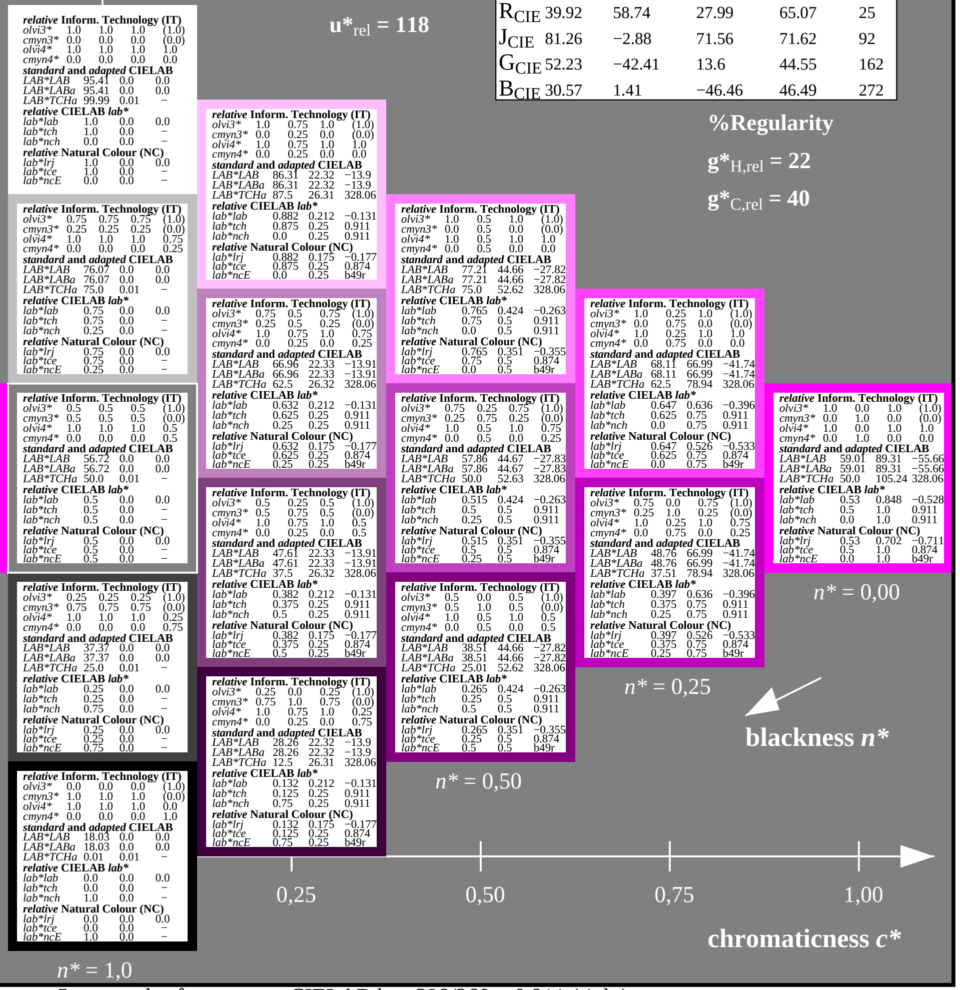


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



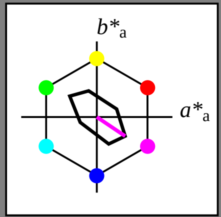
NE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

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

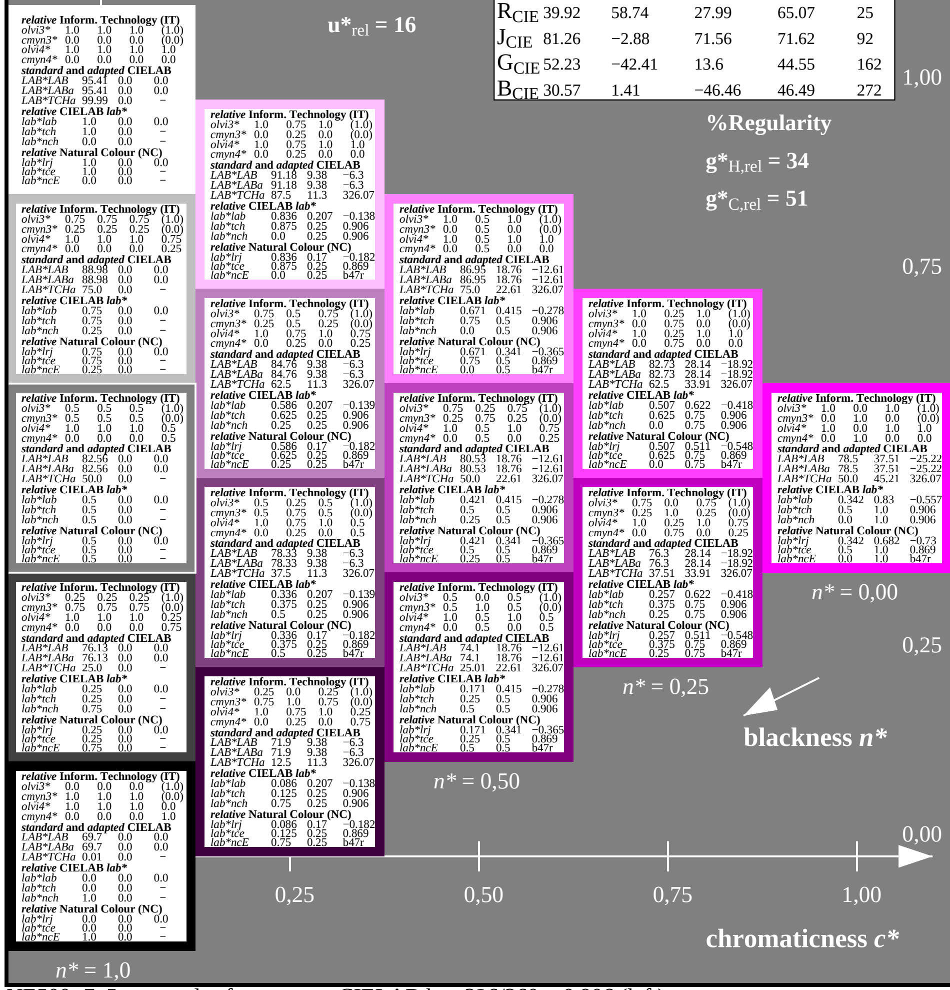
triangle lightness t^*



%Gamut
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

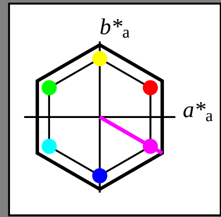
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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



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

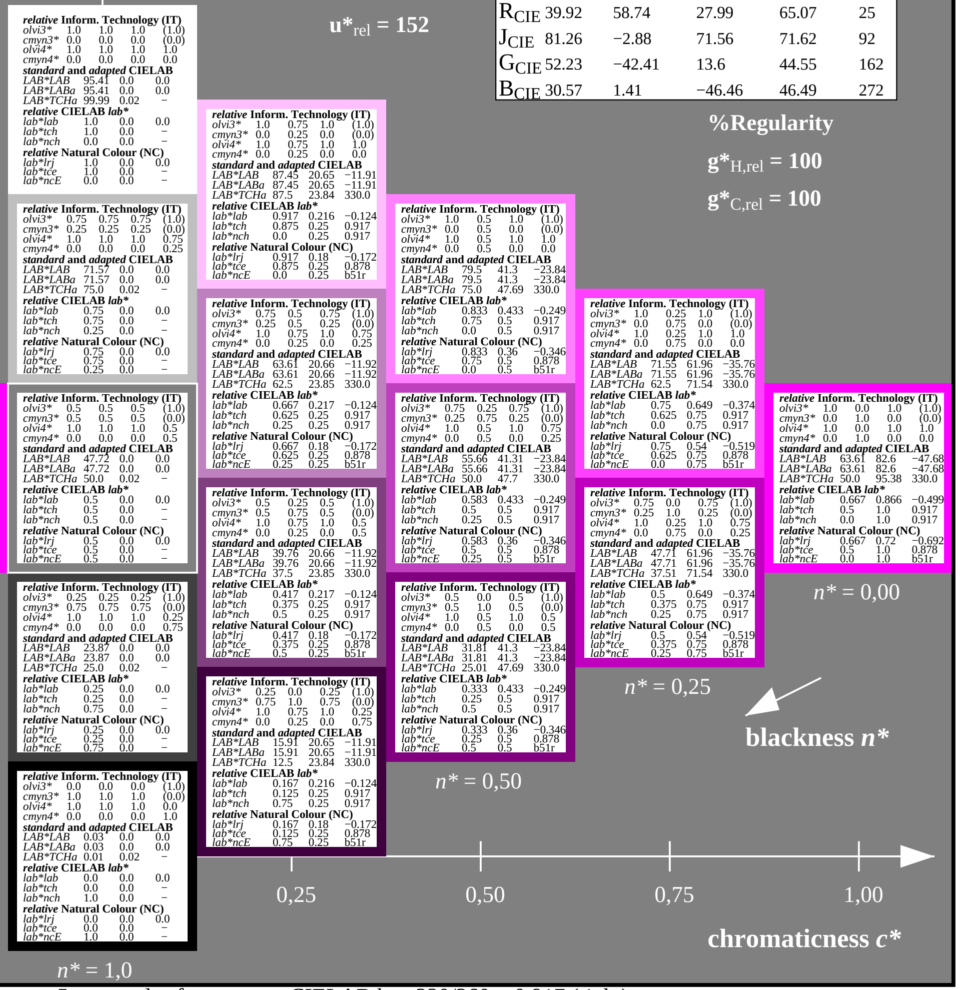
triangle lightness t^*



%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



NE500−7, 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 $h^* = lab^*h = 326/360 = 0.906$

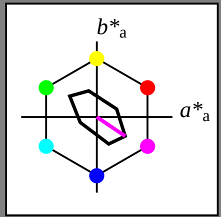
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

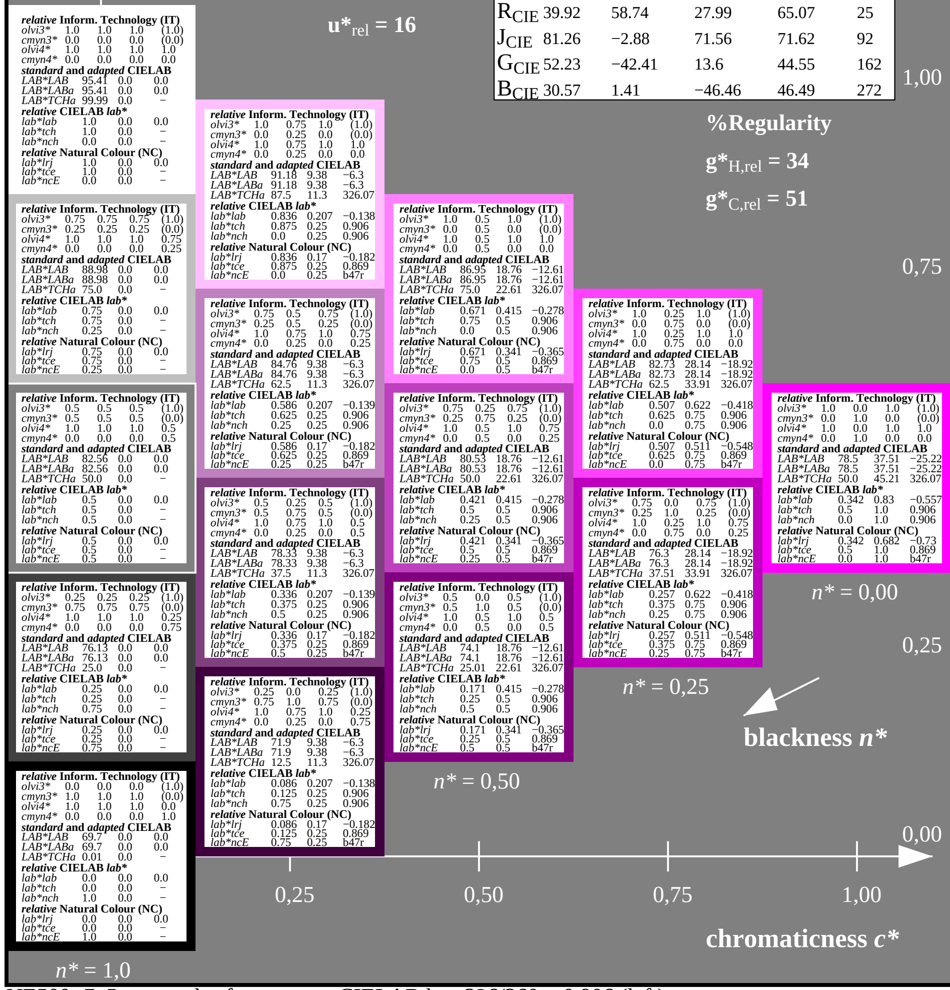
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 330/360 = 0.917$

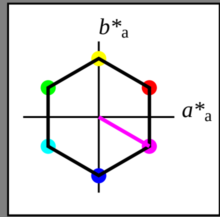
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 70 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

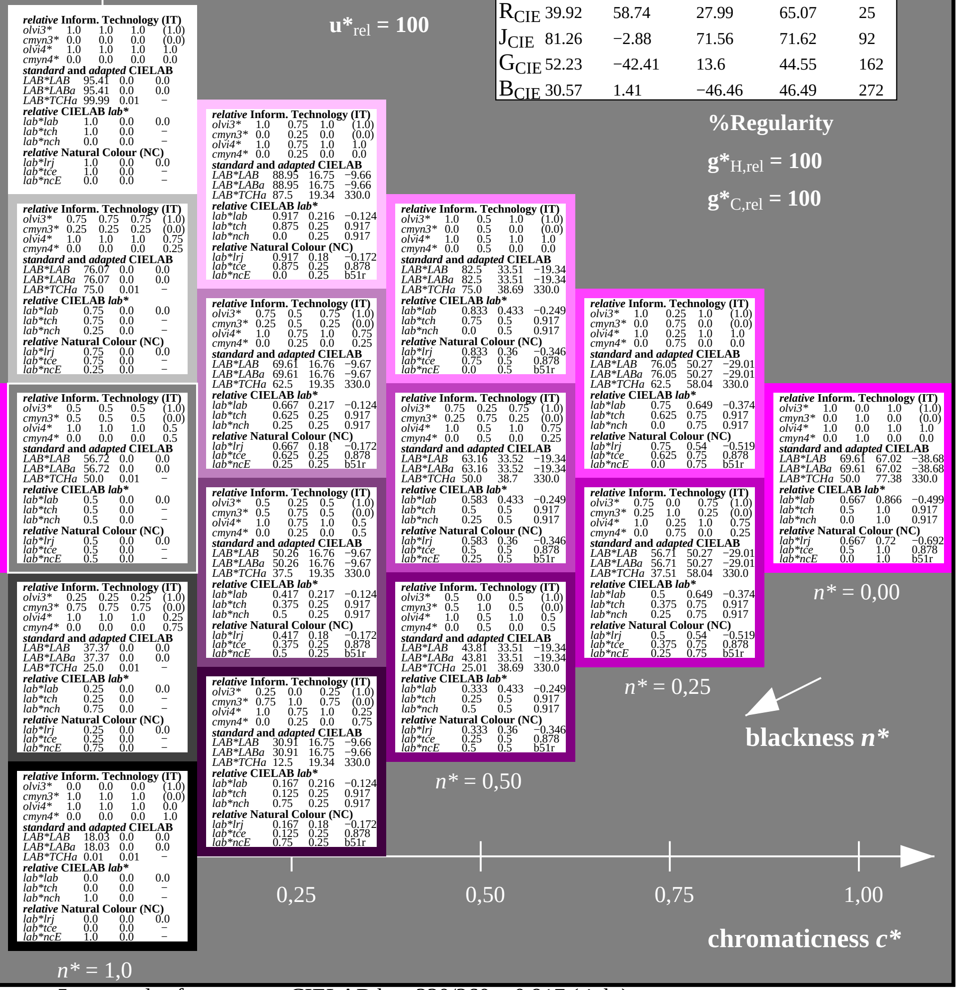
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 326/360 = 0.906$

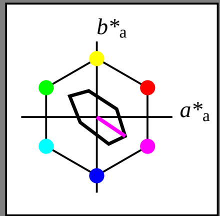
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 79 45 326

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 16$

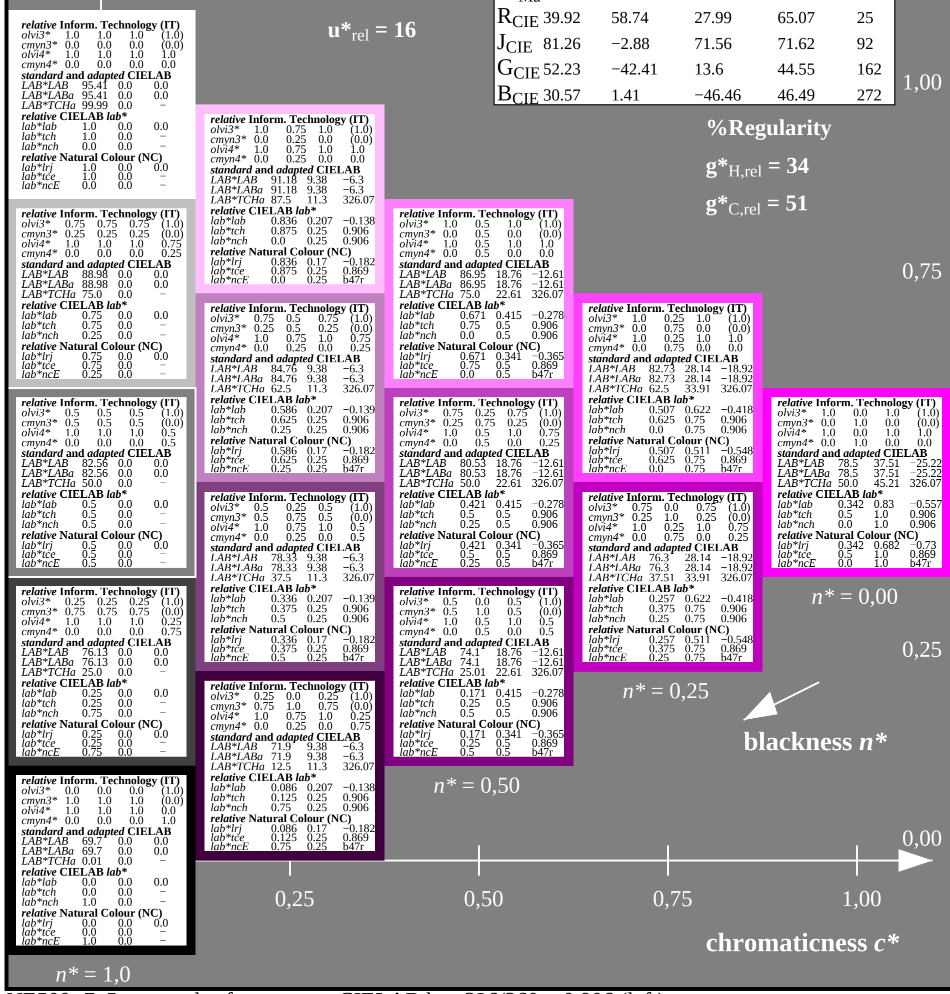
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$

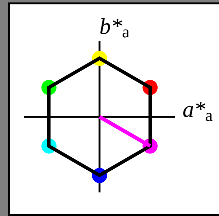
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 57 77 330

olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

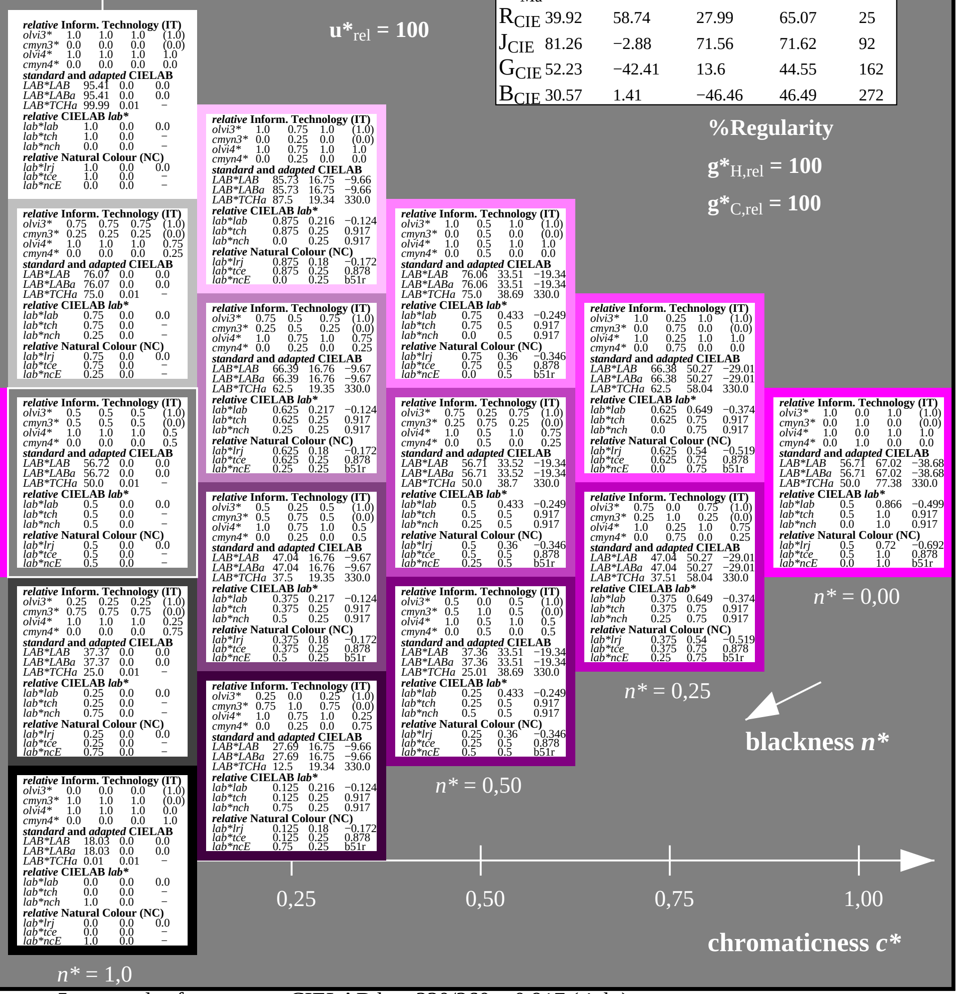
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



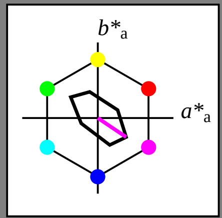
NE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

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*

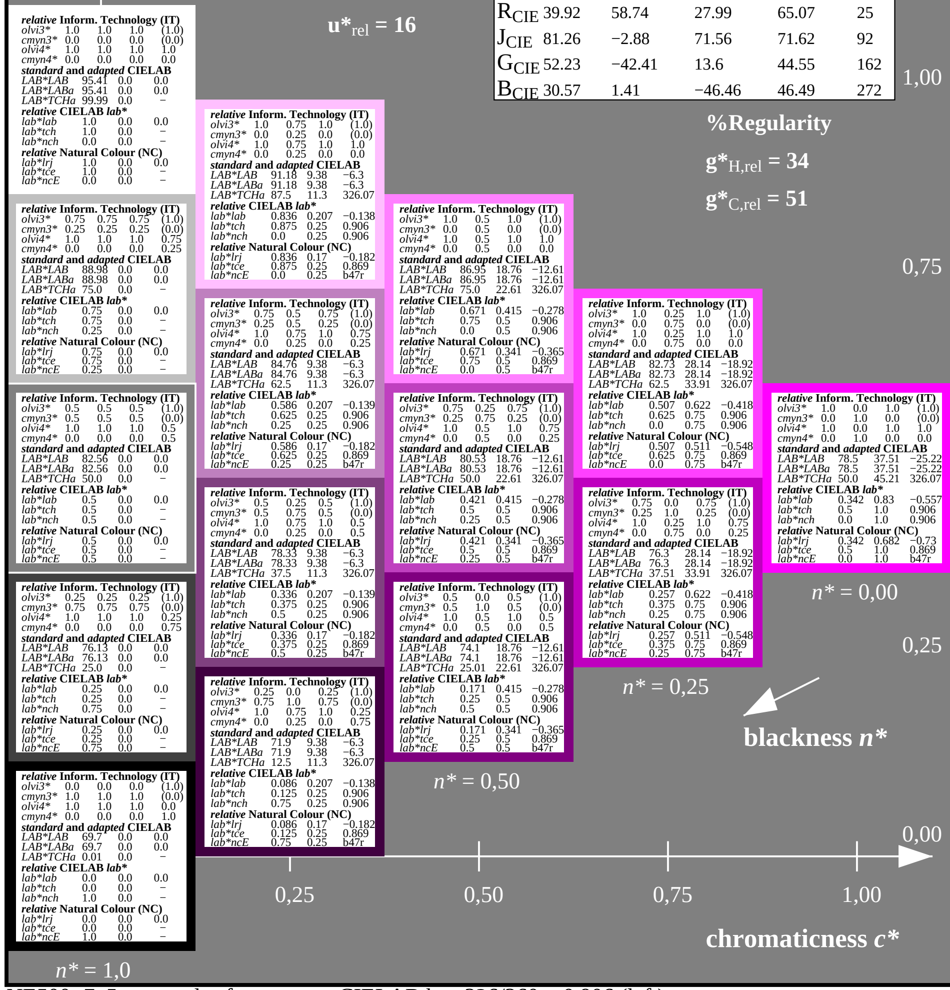


%Gamut
u^*_{rel} = 16

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

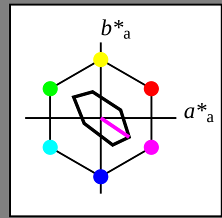
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



Output: Colorimetric 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*

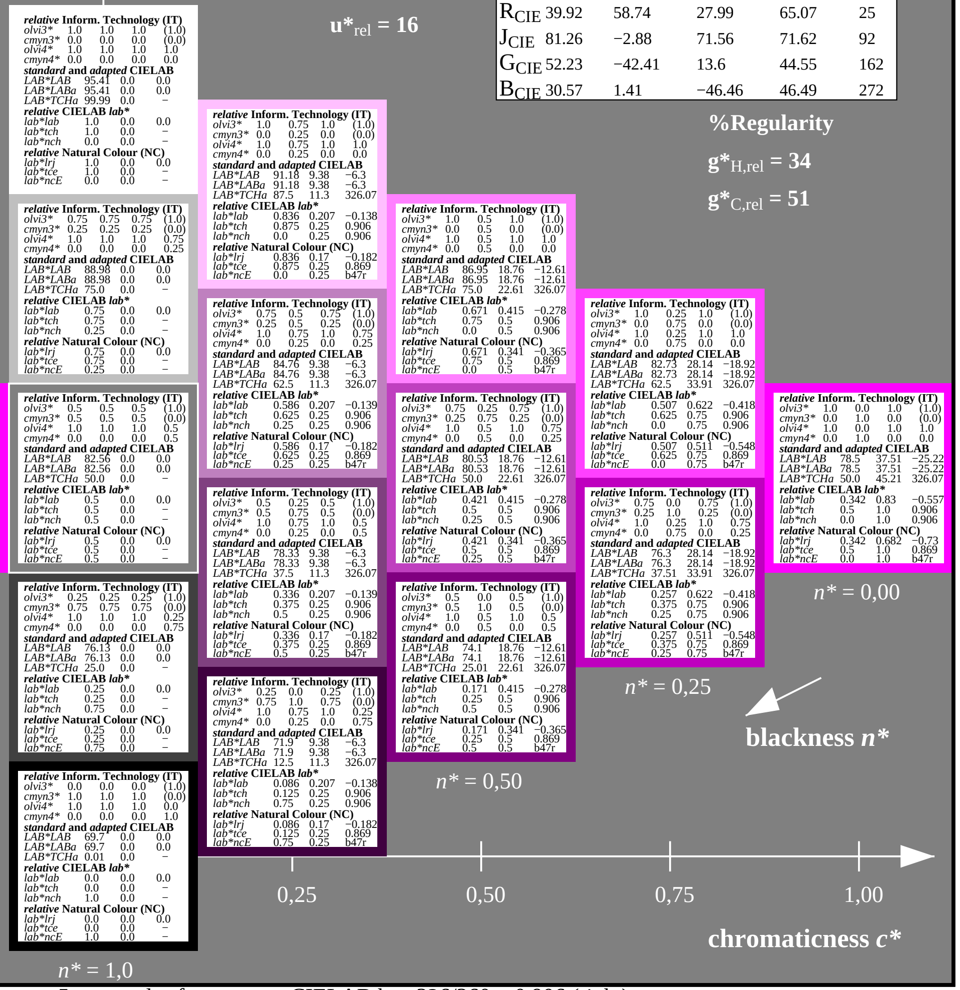


%Gamut
u^*_{rel} = 16

TLS70; adapted (a) CIELAB data

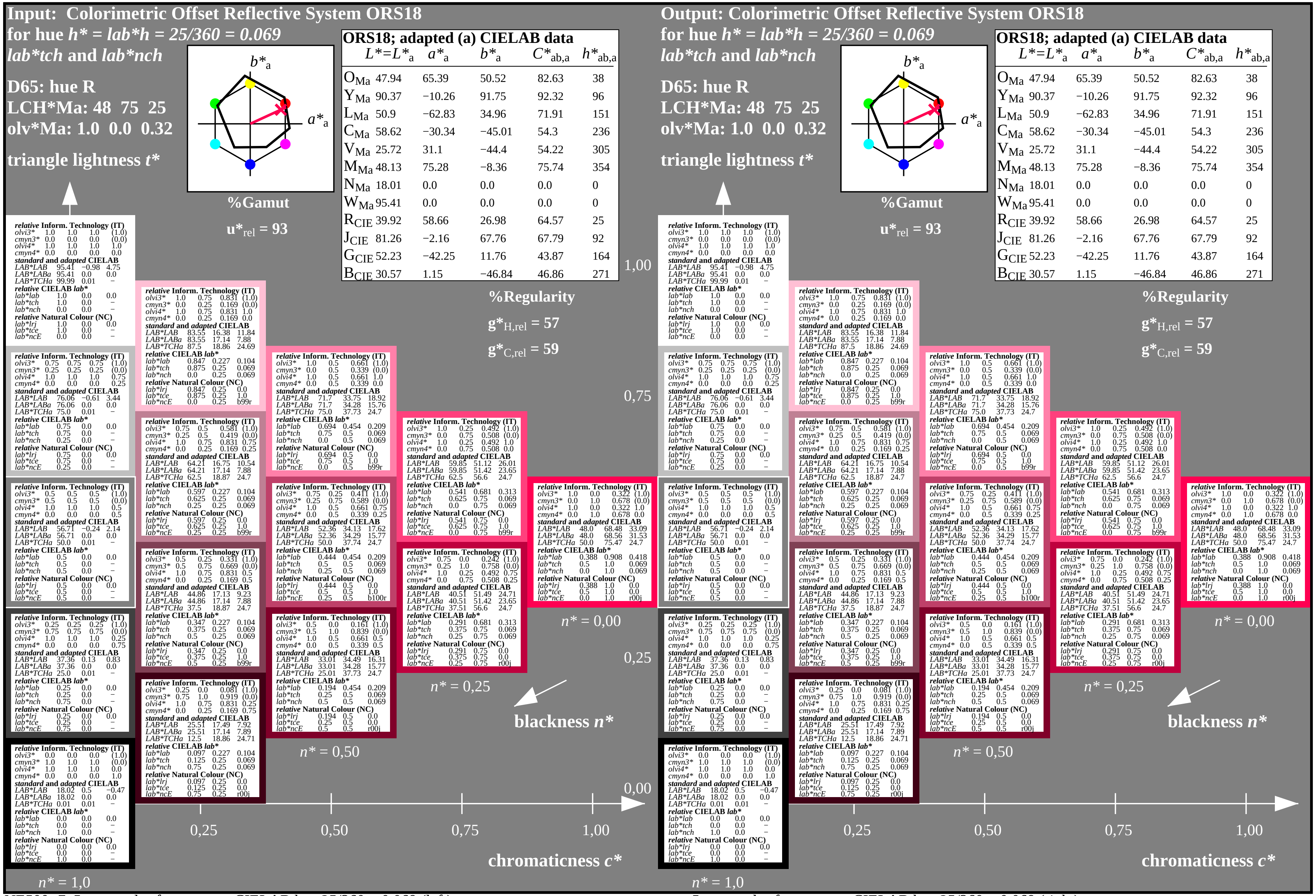
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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



NE500−7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

5 step scales for constant CIELAB hue 326/360 = 0.906 (right)



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

NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

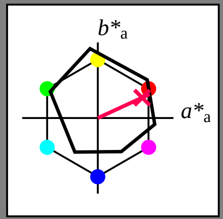
lab*tch and lab*nch

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

u^*_{rel} = 93

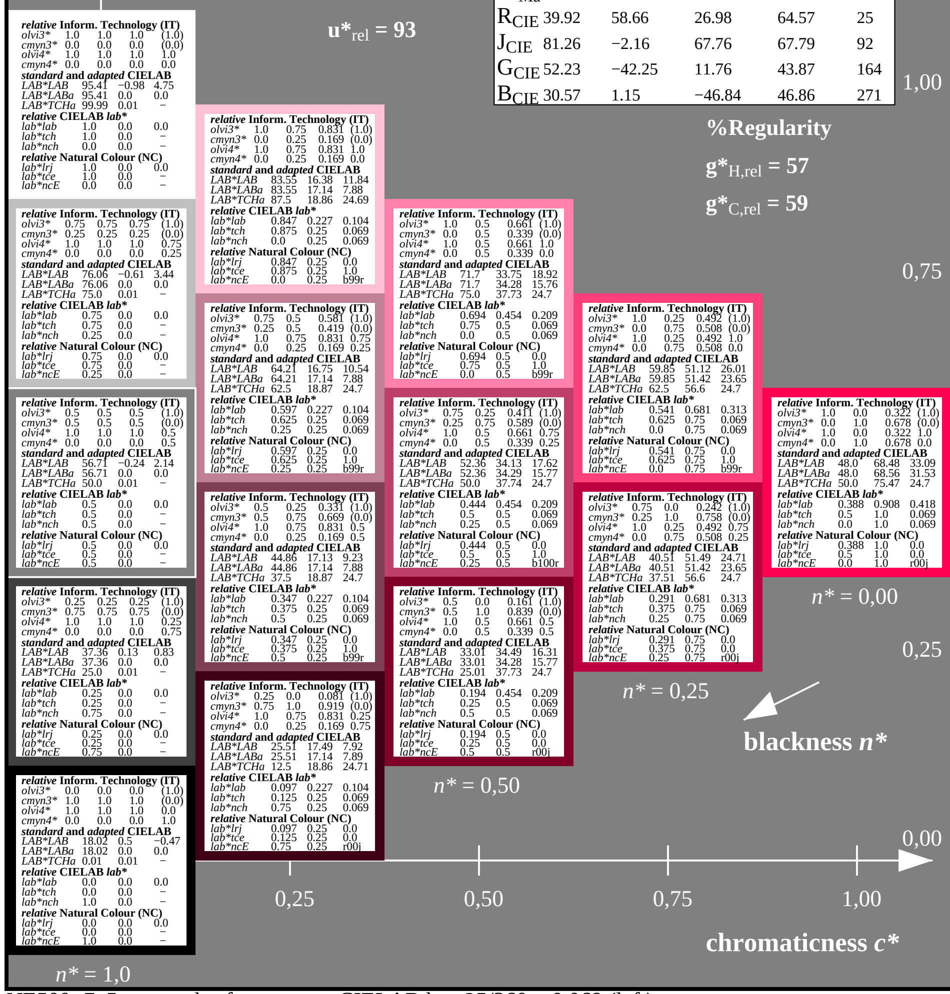
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

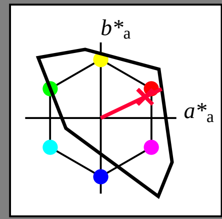
lab*tch and lab*nch

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

u^*_{rel} = 158

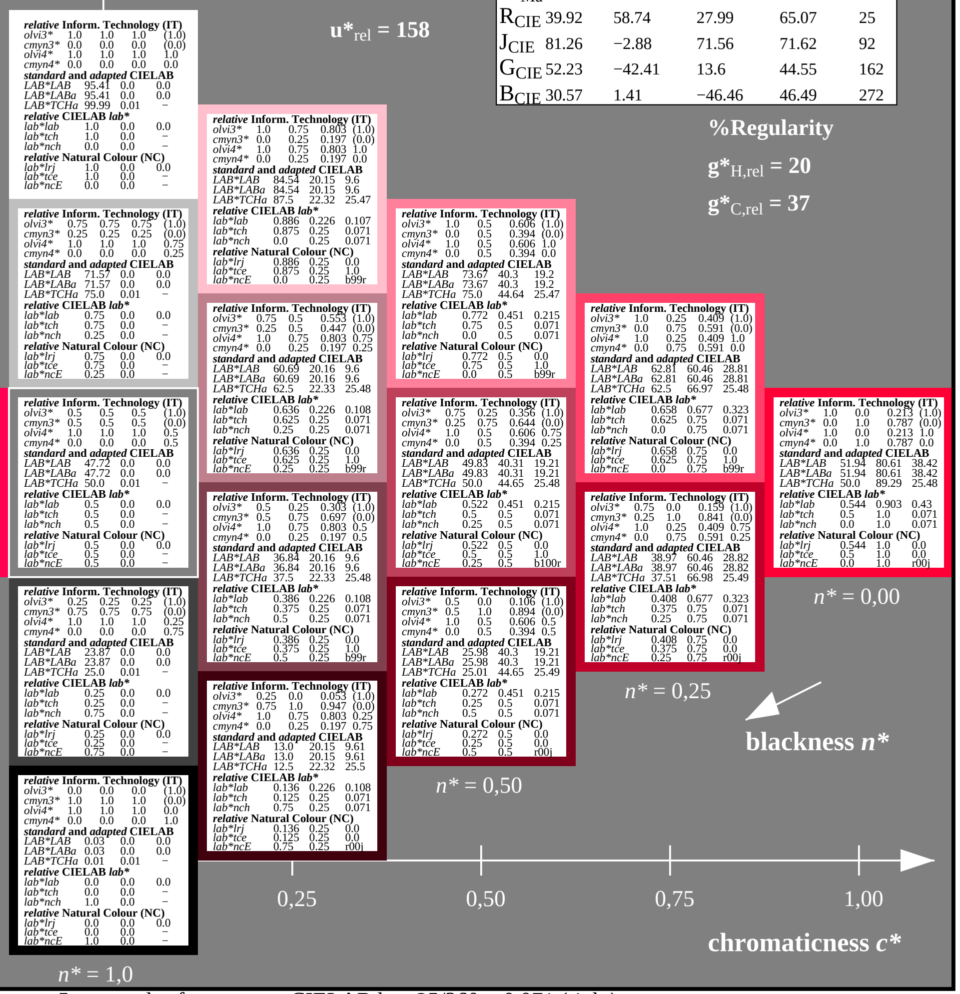
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

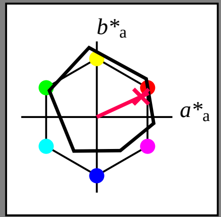
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

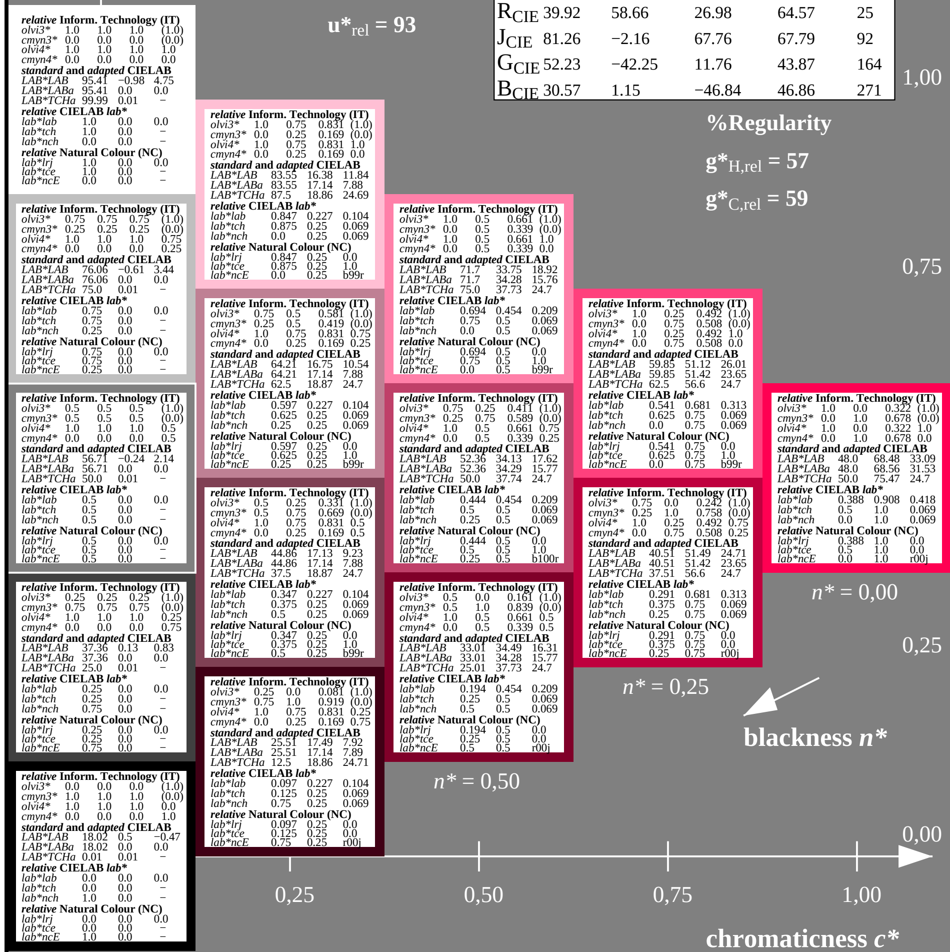
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 23/360 = 0.065$

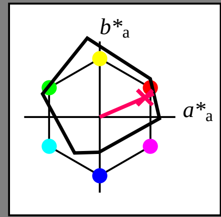
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

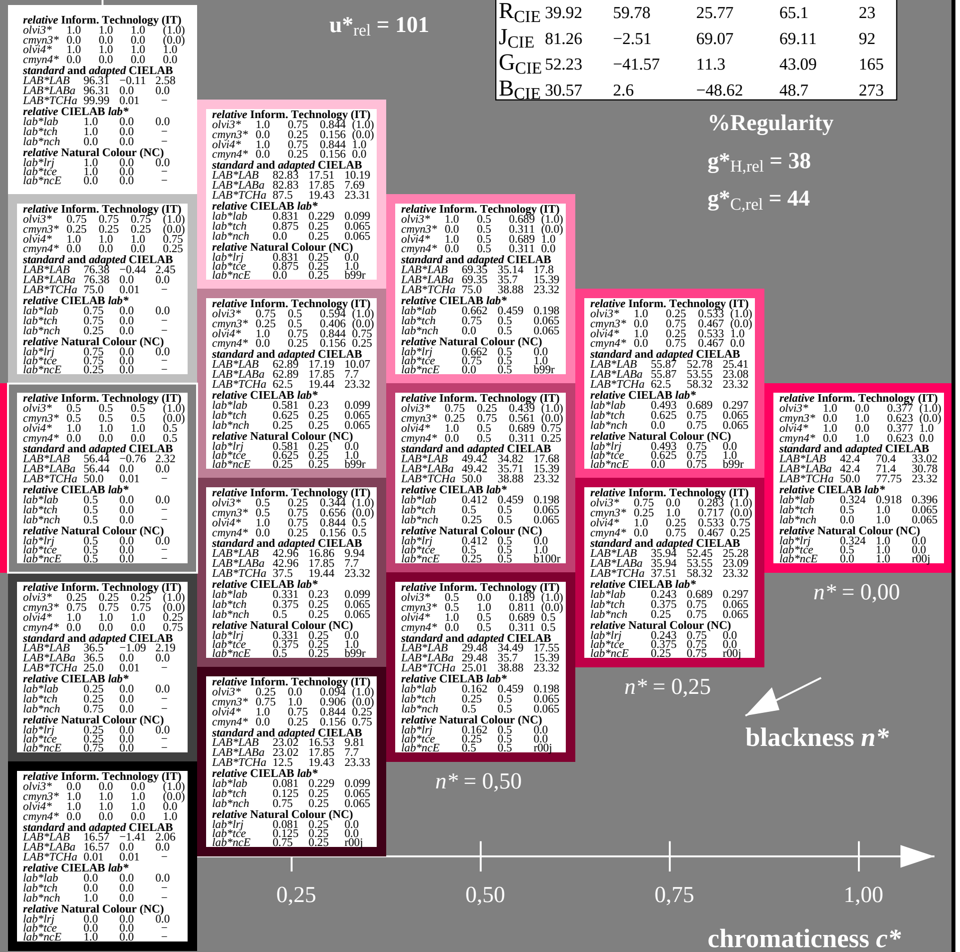
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.069$

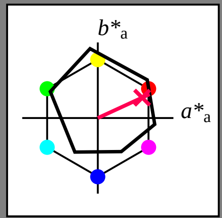
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness *t**



%Gamut

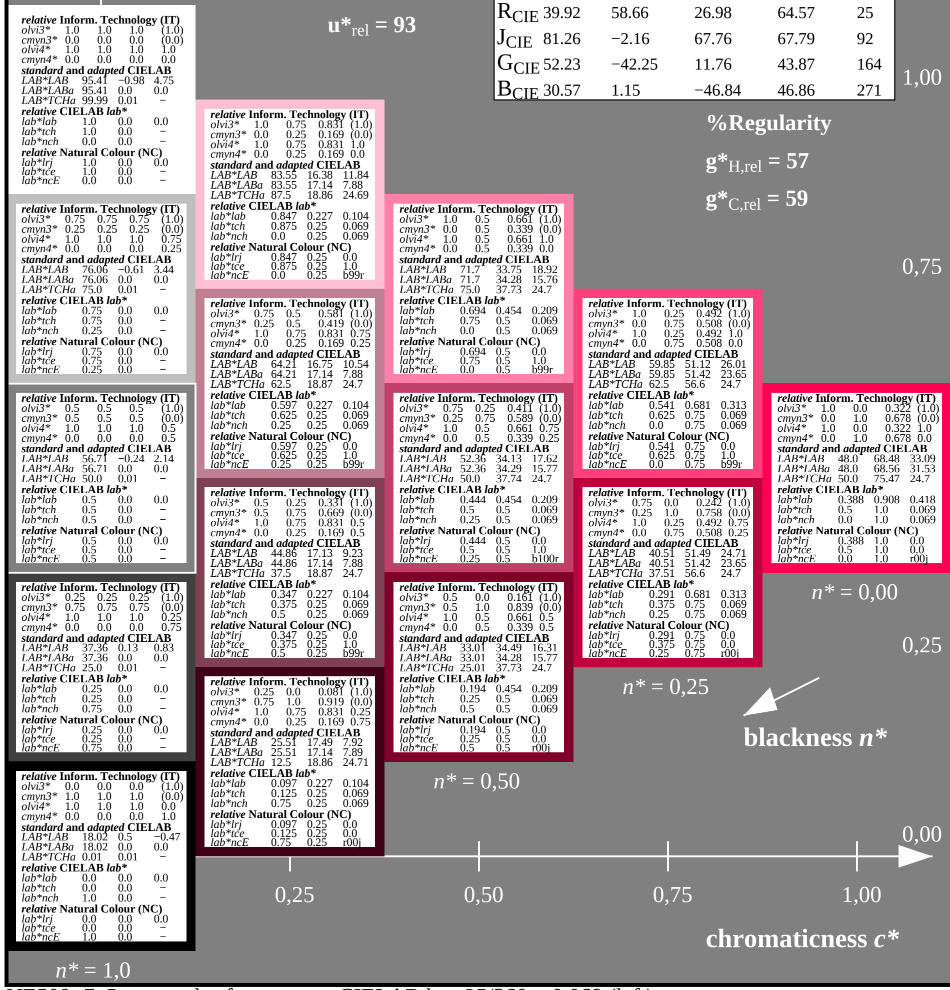
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 25/360 = 0.071$

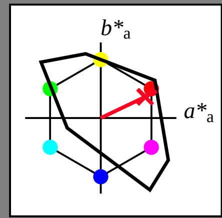
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t**



%Gamut

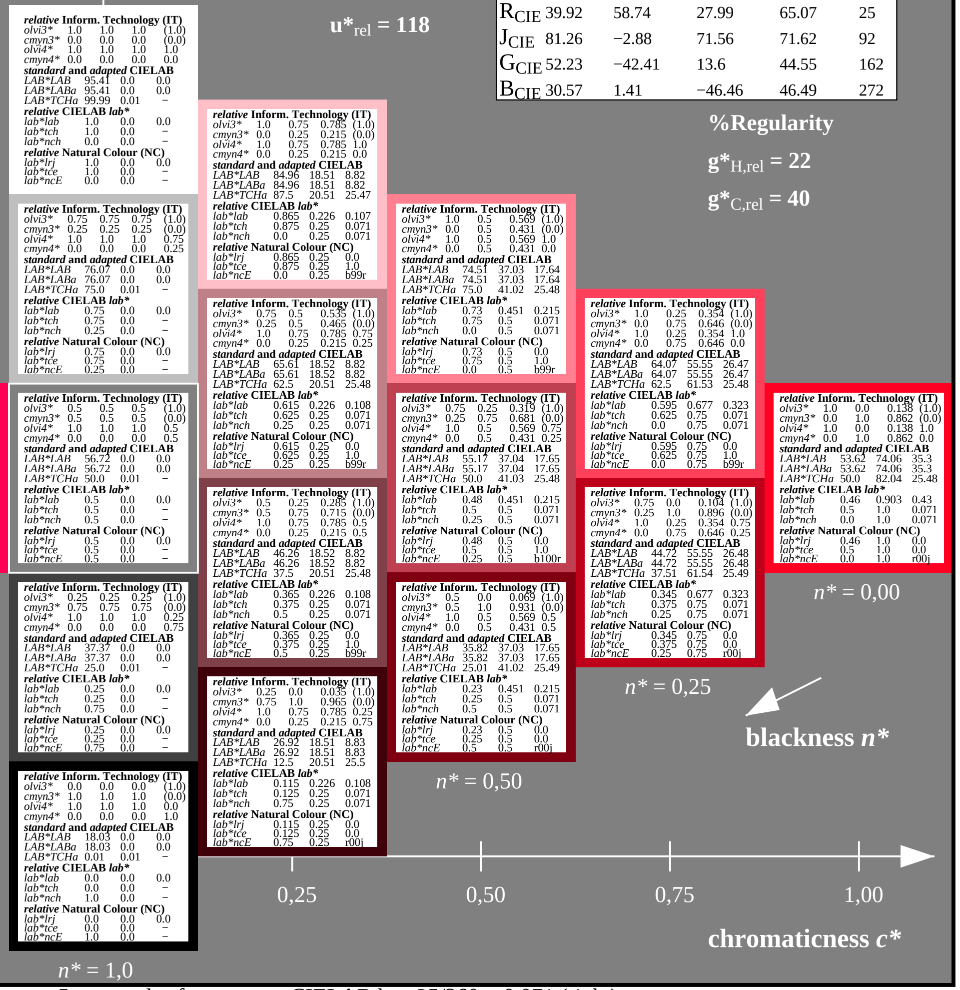
$u^*_{rel} = 118$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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*

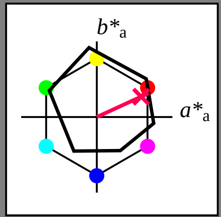
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness *t*



%Gamut

u^*_{rel} = 93

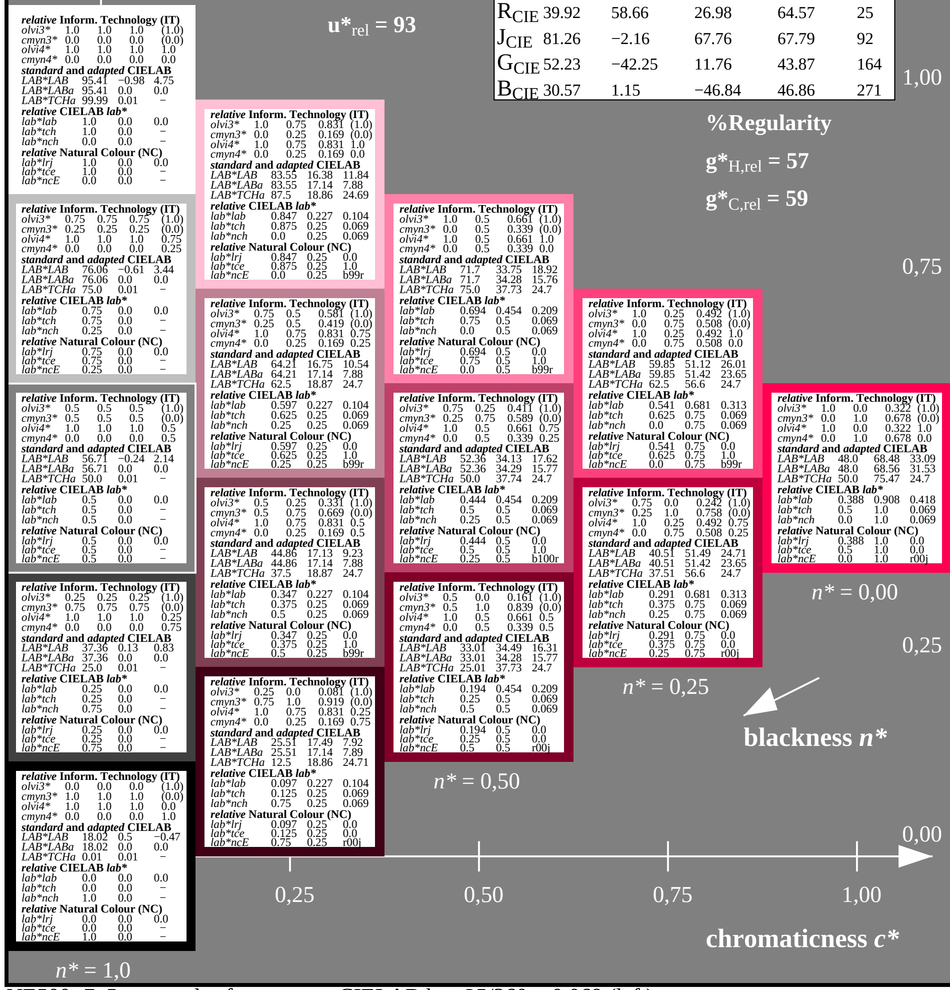
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Luminous System NLS00

for hue *h* = lab*h = 25/360 = 0.071*

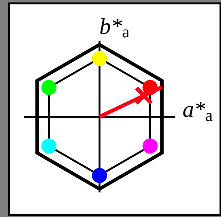
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t*



%Gamut

u^*_{rel} = 152

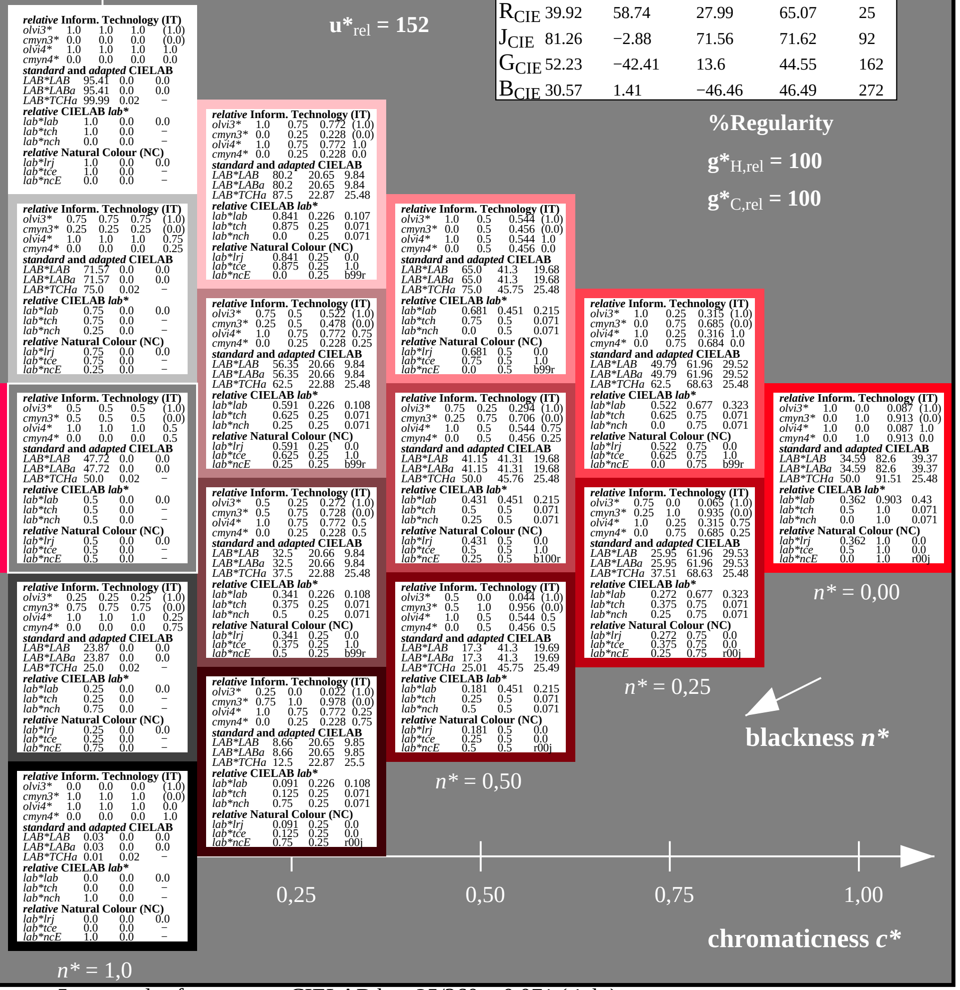
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

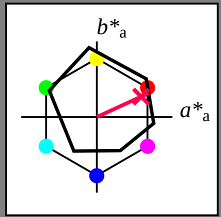
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness *t*



%Gamut

u*rel = 93

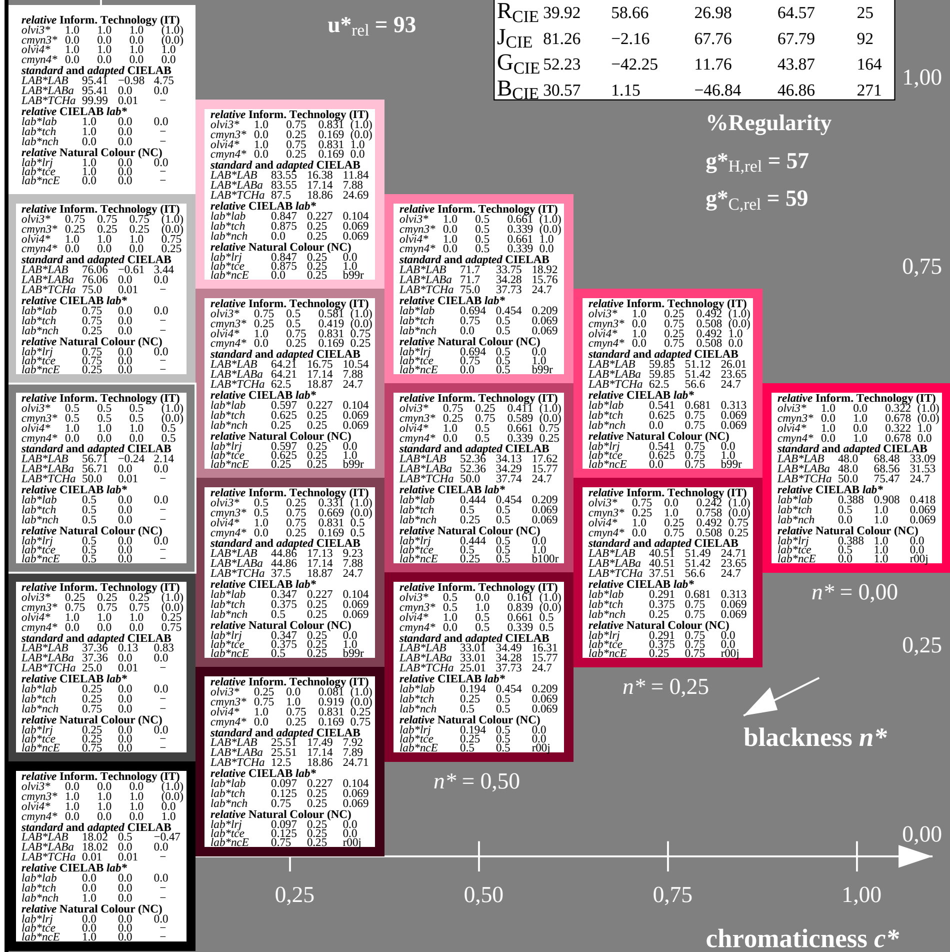
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18

for hue *h** = *lab*h* = 25/360 = 0.071

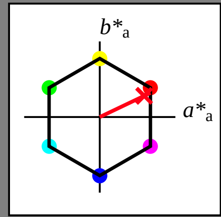
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t*



%Gamut

u*rel = 100

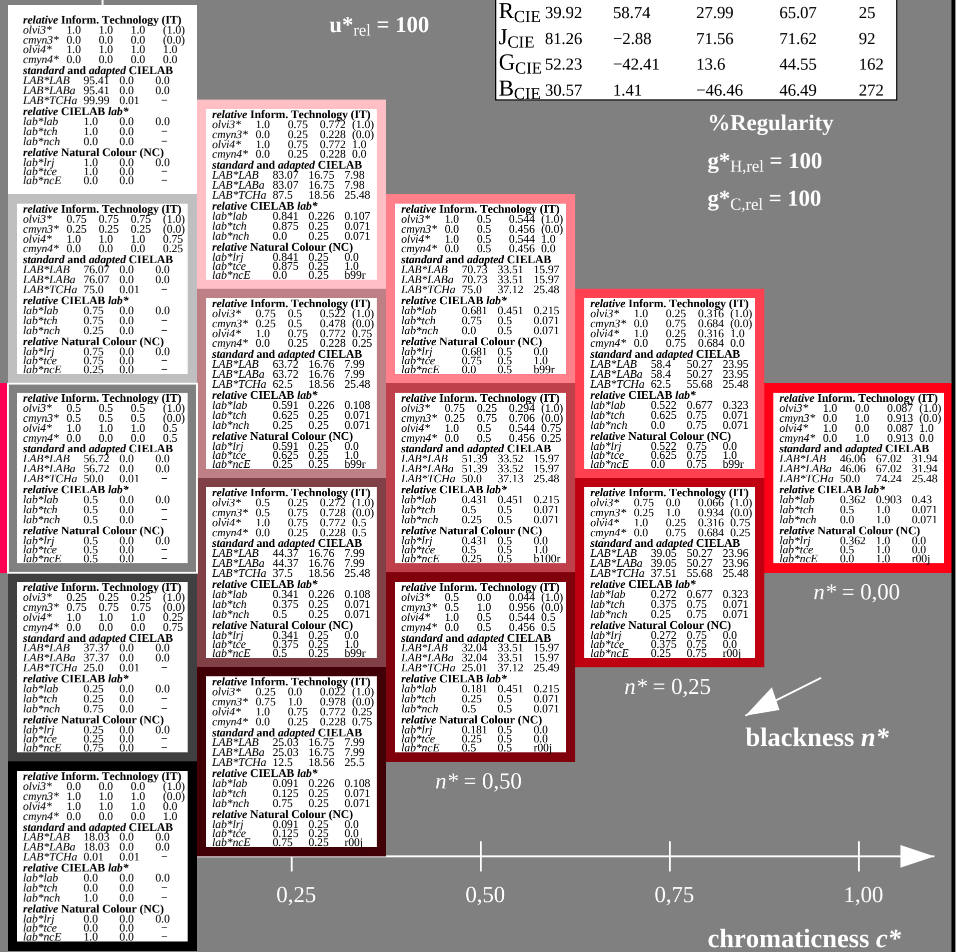
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

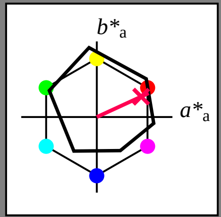
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

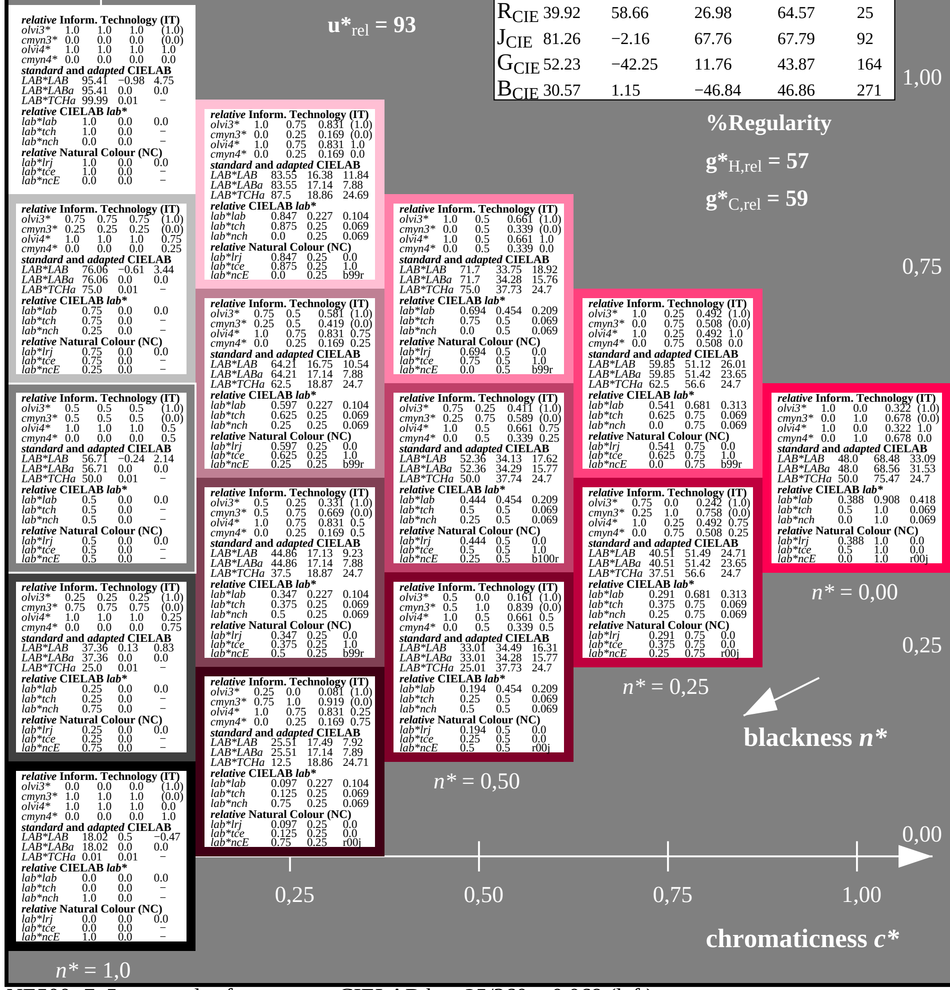
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

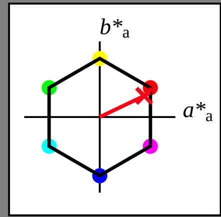
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

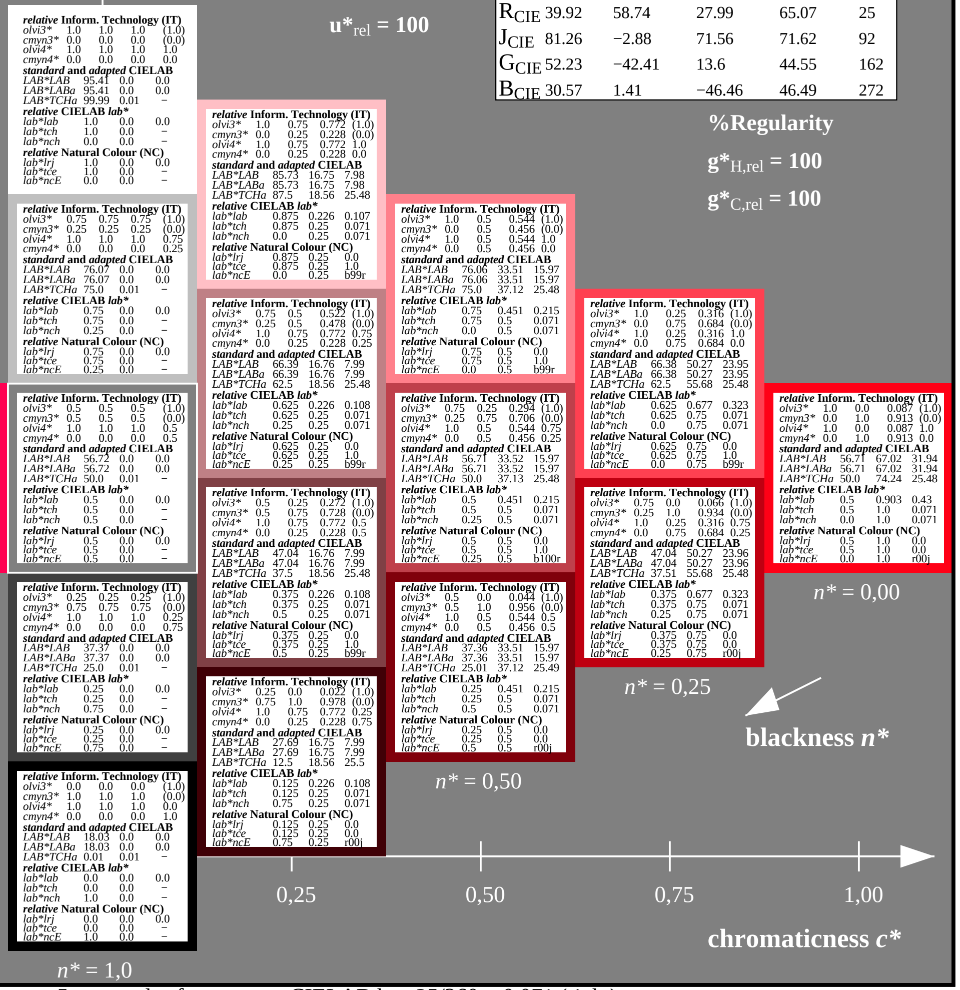
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



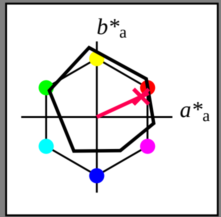
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

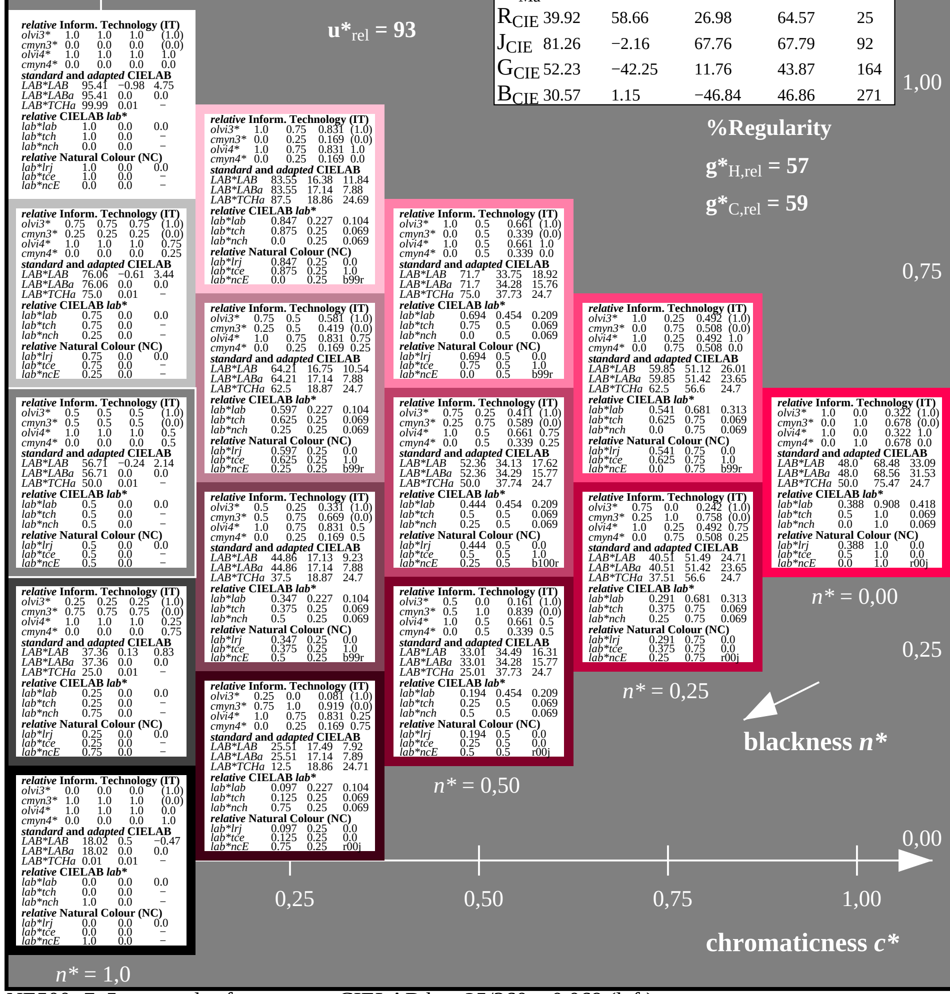
u*rel = 93

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

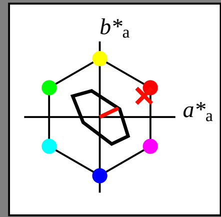
g*C,rel = 59



Output: Colorimetric 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

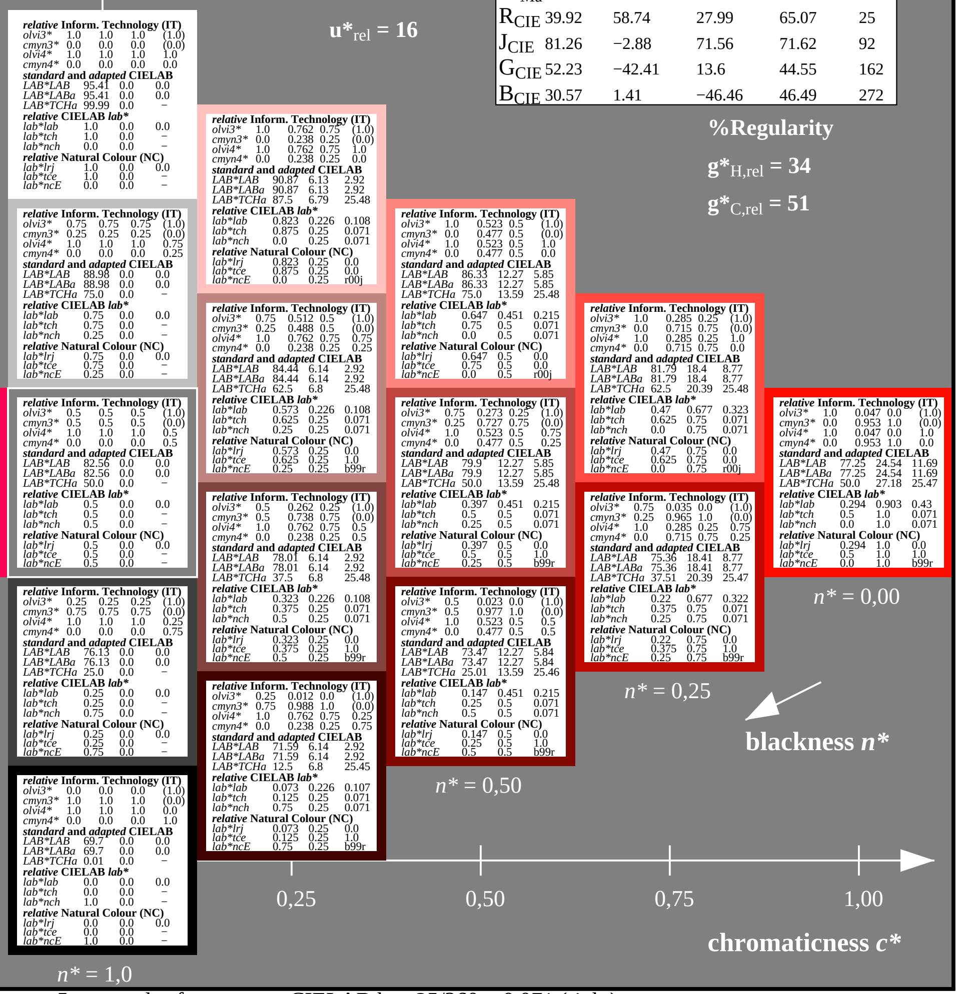
u*rel = 16

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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (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*

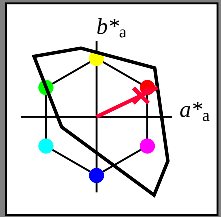
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness *t**



%Gamut

u^*_{rel} = 158

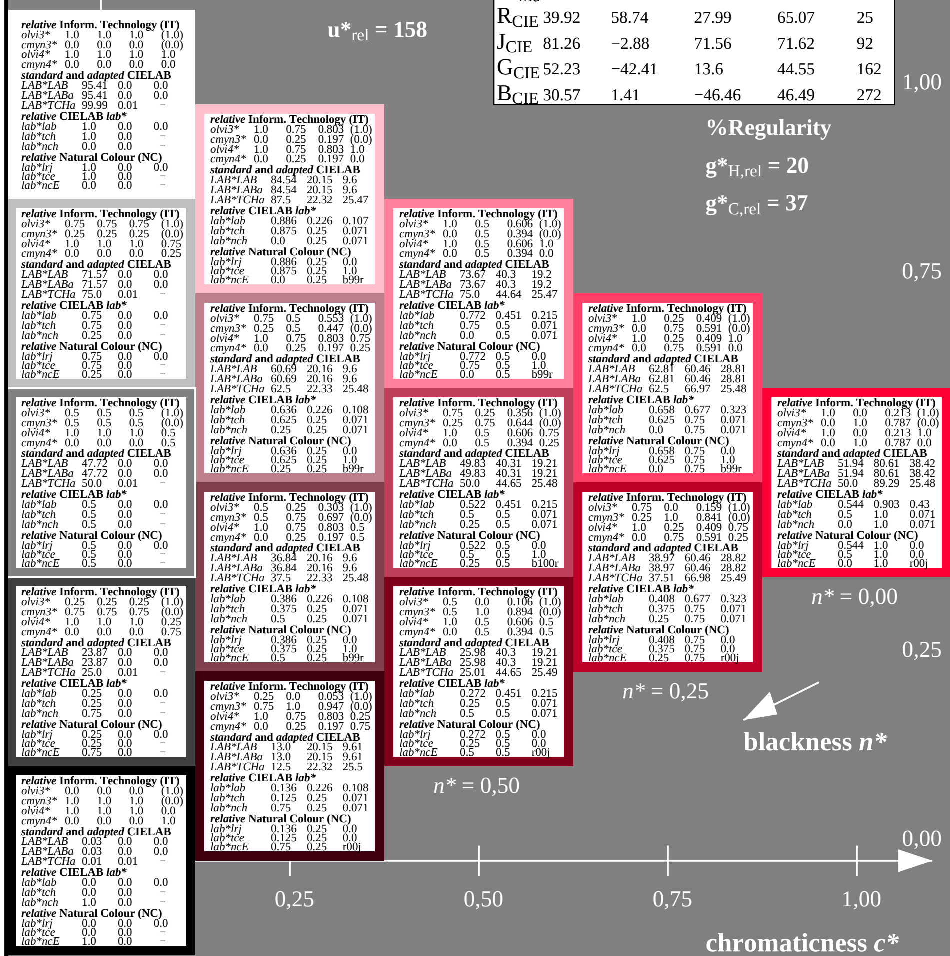
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h = 25/360 = 0.069*

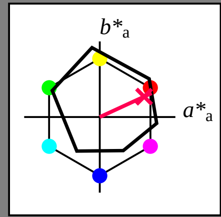
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness *t**



%Gamut

u^*_{rel} = 93

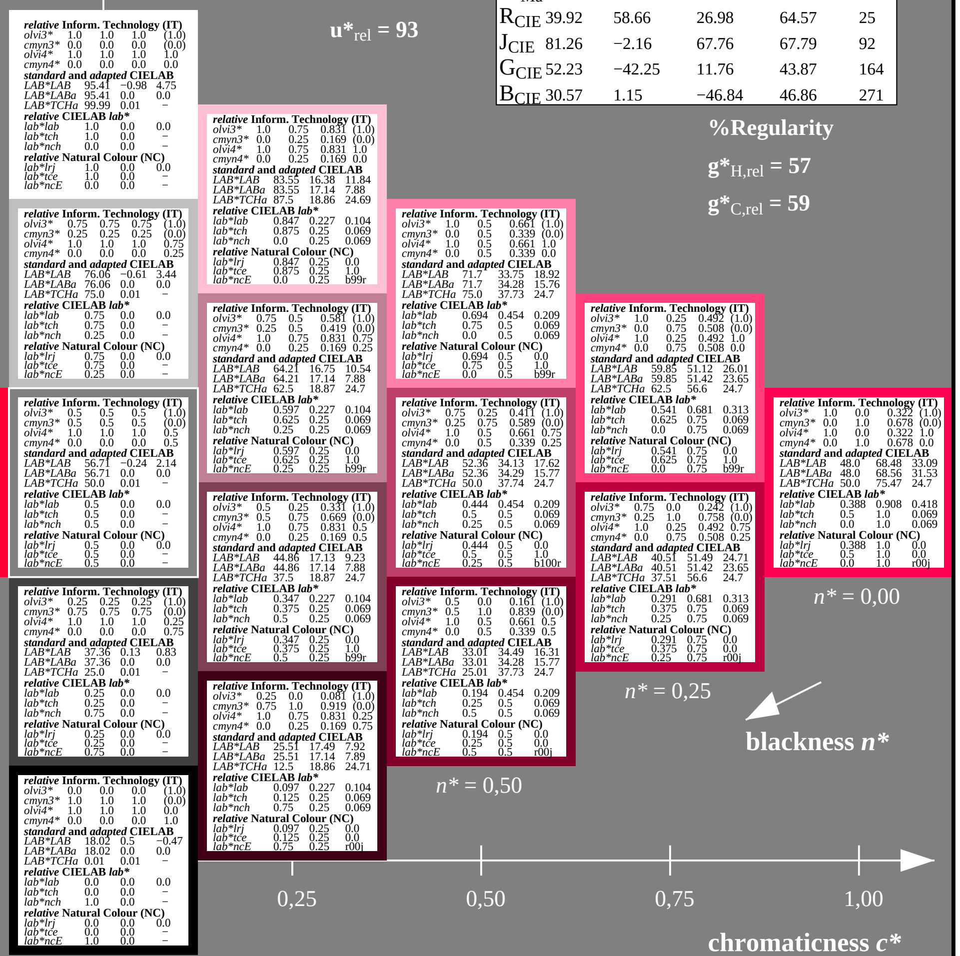
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



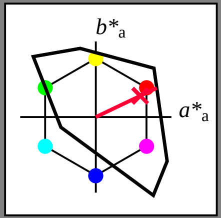
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

***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	0.75	0.803	(1.0)
*cmyn3**	0.0	0.25	0.197	(0.0)
*olvi4**	1.0	0.75	0.803	1.0
*cmyn4**	0.0	0.25	0.197	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	84.54	20.15	9.6	
*LAB*LABa*	84.54	20.15	9.6	
*LAB*TCHa*	87.5	22.32	25.47	
relative* CIELAB *lab*				
*lab*lab*	0.886	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*	0.886	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	0.5	0.553	(1.0)
*cmyn3**	0.25	0.5	0.447	(0.0)
*olvi4**	1.0	0.75	0.803	0.75
*cmyn4**	0.0	0.25	0.197	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	60.69	20.16	9.6	
*LAB*LABa*	60.69	20.16	9.6	
*LAB*TCHa*	62.5	22.33	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.636	0.226	0.108	
*lab*tch*	0.625	0.25	0.071	
*lab*nch*	0.25	0.25	0.071	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.636	0.25	0.0	
*lab*tce*	0.625	0.25	1.0	
*lab*ncE*	0.25	0.25	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.5	0.25	0.303	(1.0)
*cmyn3**	0.5	0.75	0.697	(0.0)
*olvi4**	1.0	0.75	0.803	0.5
*cmyn4**	0.0	0.25	0.197	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	36.84	20.16	9.6	
*LAB*LABa*	36.84	20.16	9.6	
*LAB*TCHa*	37.5	22.33	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.386	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*	0.386	0.25	0.0	
*lab*tce*	0.375	0.25	1.0	
*lab*ncE*	0.5	0.25	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.25	0.0	0.053	(1.0)
*cmyn3**	0.75	1.0	0.947	(0.0)
*olvi4**	1.0	0.75	0.803	0.25
*cmyn4**	0.0	0.25	0.197	0.75
***standard* and *adapted* CIELAB**				
*LAB*LAB*	13.0	20.15	9.61	
*LAB*LABa*	13.0	20.15	9.61	
*LAB*TCHa*	12.5	22.32	25.5	
relative* CIELAB *lab*				
*lab*lab*	0.136	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*	0.136	0.25	0.0	
*lab*tce*	0.125	0.25	0.0	
*lab*ncE*	0.75	0.25	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.5	0.606	(1.0)
*cmyn3**	0.0	0.5	0.394	(0.0)
*olvi4**	1.0	0.5	0.606	1.0
*cmyn4**	0.0	0.5	0.394	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	73.67	40.3	19.2	
*LAB*LABa*	73.67	40.3	19.2	
*LAB*TCHa*	75.0	44.64	25.47	
relative* CIELAB *lab*				
*lab*lab*	0.772	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*	0.772	0.5	0.0	
*lab*tce*	0.75	0.5	1.0	
*lab*ncE*	0.0	0.5	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.75	0.25	0.356	(1.0)
*cmyn3**	0.25	0.75	0.644	(0.0)
*olvi4**	1.0	0.5	0.606	0.75
*cmyn4**	0.0	0.5	0.394	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	49.83	40.31	19.21	
*LAB*LABa*	49.83	40.31	19.21	
*LAB*TCHa*	50.0	44.65	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.522	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*	0.522	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	0.106	(1.0)
*cmyn3**	0.5	1.0	0.894	(0.0)
*olvi4**	1.0	0.5	0.606	0.5
*cmyn4**	0.0	0.5	0.394	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	25.98	40.3	19.21	
*LAB*LABa*	25.98	40.3	19.21	
*LAB*TCHa*	25.01	44.65	25.49	
relative* CIELAB *lab*				
*lab*lab*	0.272	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*	0.272	0.5	0.0	
*lab*tce*	0.25	0.5	0.0	
*lab*ncE*	0.5	0.5	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.25	0.409	(1.0)
*cmyn3**	0.0	0.75	0.591	(0.0)
*olvi4**	1.0	0.25	0.409	1.0
*cmyn4**	0.0	0.75	0.591	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	62.81	60.46	28.81	
*LAB*LABa*	62.81	60.46	28.81	
*LAB*TCHa*	62.5	66.97	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.658	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*	0.658	0.75	0.0	
*lab*tce*	0.625	0.75	1.0	
*lab*ncE*	0.0	0.75	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.75	0.0	0.159	(1.0)
*cmyn3**	0.25	1.0	0.841	(0.0)
*olvi4**	1.0	0.25	0.409	0.75
*cmyn4**	0.0	0.75	0.591	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	38.97	60.46	28.82	
*LAB*LABa*	38.97	60.46	28.82	
*LAB*TCHa*	37.51	66.98	25.49	
relative* CIELAB *lab*				
*lab*lab*	0.408	0.677	0.323	
*lab*tch*	0.375	0.75	0.071	
*lab*nch*	0.25	0.75	0.071	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.408	0.75	0.0	
*lab*tce*	0.375	0.75	0.0	
*lab*ncE*	0.25	0.75	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.0	0.213	(1.0)
*cmyn3**	0.0	1.0	0.787	(0.0)
*olvi4**	1.0	0.0	0.213	1.0
*cmyn4**	0.0	1.0	0.787	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	51.94	80.61	38.42	
*LAB*LABa*	51.94	80.61	38.42	
*LAB*TCHa*	50.0	89.29	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.544	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*	0.544	1.0	0.0	
*lab*tce*	0.5	1.0	0.0	
*lab*ncE*	0.0	1.0	r00j	

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

blackness *n**

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

chromaticness *c**

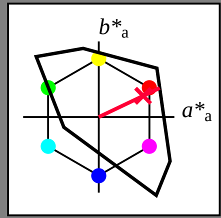
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

***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	0.75	0.803	(1.0)
*cmyn3**	0.0	0.25	0.197	(0.0)
*olvi4**	1.0	0.75	0.803	1.0
*cmyn4**	0.0	0.25	0.197	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	84.54	20.15	9.6	
*LAB*LABa*	84.54	20.15	9.6	
*LAB*TCHa*	87.5	22.32	25.47	
relative* CIELAB *lab*				
*lab*lab*	0.886	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*	0.886	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	0.5	0.553	(1.0)
*cmyn3**	0.25	0.5	0.447	(0.0)
*olvi4**	1.0	0.75	0.803	0.75
*cmyn4**	0.0	0.25	0.197	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	60.69	20.16	9.6	
*LAB*LABa*	60.69	20.16	9.6	
*LAB*TCHa*	62.5	22.33	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.636	0.226	0.108	
*lab*tch*	0.625	0.25	0.071	
*lab*nch*	0.25	0.25	0.071	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.636	0.25	0.0	
*lab*tce*	0.625	0.25	1.0	
*lab*ncE*	0.25	0.25	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.5	0.25	0.303	(1.0)
*cmyn3**	0.5	0.75	0.697	(0.0)
*olvi4**	1.0	0.75	0.803	0.5
*cmyn4**	0.0	0.25	0.197	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	36.84	20.16	9.6	
*LAB*LABa*	36.84	20.16	9.6	
*LAB*TCHa*	37.5	22.33	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.386	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*	0.386	0.25	0.0	
*lab*tce*	0.375	0.25	1.0	
*lab*ncE*	0.5	0.25	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.25	0.0	0.053	(1.0)
*cmyn3**	0.75	1.0	0.947	(0.0)
*olvi4**	1.0	0.75	0.803	0.25
*cmyn4**	0.0	0.25	0.197	0.75
***standard* and *adapted* CIELAB**				
*LAB*LAB*	13.0	20.15	9.61	
*LAB*LABa*	13.0	20.15	9.61	
*LAB*TCHa*	12.5	22.32	25.5	
relative* CIELAB *lab*				
*lab*lab*	0.136	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*	0.136	0.25	0.0	
*lab*tce*	0.125	0.25	0.0	
*lab*ncE*	0.75	0.25	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.5	0.606	(1.0)
*cmyn3**	0.0	0.5	0.394	(0.0)
*olvi4**	1.0	0.5	0.606	1.0
*cmyn4**	0.0	0.5	0.394	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	73.67	40.3	19.2	
*LAB*LABa*	73.67	40.3	19.2	
*LAB*TCHa*	75.0	44.64	25.47	
relative* CIELAB *lab*				
*lab*lab*	0.772	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*	0.772	0.5	0.0	
*lab*tce*	0.75	0.5	1.0	
*lab*ncE*	0.0	0.5	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.75	0.25	0.356	(1.0)
*cmyn3**	0.25	0.75	0.644	(0.0)
*olvi4**	1.0	0.5	0.606	0.75
*cmyn4**	0.0	0.5	0.394	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	49.83	40.31	19.21	
*LAB*LABa*	49.83	40.31	19.21	
*LAB*TCHa*	50.0	44.65	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.522	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*	0.522	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	0.106	(1.0)
*cmyn3**	0.5	1.0	0.894	(0.0)
*olvi4**	1.0	0.5	0.606	0.5
*cmyn4**	0.0	0.5	0.394	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	25.98	40.3	19.21	
*LAB*LABa*	25.98	40.3	19.21	
*LAB*TCHa*	25.01	44.65	25.49	
relative* CIELAB *lab*				
*lab*lab*	0.272	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*	0.272	0.5	0.0	
*lab*tce*	0.25	0.5	0.0	
*lab*ncE*	0.5	0.5	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.25	0.409	(1.0)
*cmyn3**	0.0	0.75	0.591	(0.0)
*olvi4**	1.0	0.25	0.409	1.0
*cmyn4**	0.0	0.75	0.591	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	62.81	60.46	28.81	
*LAB*LABa*	62.81	60.46	28.81	
*LAB*TCHa*	62.5	66.97	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.658	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*	0.658	0.75	0.0	
*lab*tce*	0.625	0.75	1.0	
*lab*ncE*	0.0	0.75	b99r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.75	0.0	0.159	(1.0)
*cmyn3**	0.25	1.0	0.841	(0.0)
*olvi4**	1.0	0.25	0.409	0.75
*cmyn4**	0.0	0.75	0.591	0.25
***standard* and *adapted* CIELAB**				
*LAB*LAB*	38.97	60.46	28.82	
*LAB*LABa*	38.97	60.46	28.82	
*LAB*TCHa*	37.51	66.98	25.49	
relative* CIELAB *lab*				
*lab*lab*	0.408	0.677	0.323	
*lab*tch*	0.375	0.75	0.071	
*lab*nch*	0.25	0.75	0.071	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.408	0.75	0.0	
*lab*tce*	0.375	0.75	0.0	
*lab*ncE*	0.25	0.75	r00j	

***relative* Inform. Technology (IT)**				
*olvi3**	1.0	0.0	0.213	(1.0)
*cmyn3**	0.0	1.0	0.787	(0.0)
*olvi4**	1.0	0.0	0.213	1.0
*cmyn4**	0.0	1.0	0.787	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	51.94	80.61	38.42	
*LAB*LABa*	51.94	80.61	38.42	
*LAB*TCHa*	50.0	89.29	25.48	
relative* CIELAB *lab*				
*lab*lab*	0.544	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*	0.544	1.0	0.0	
*lab*tce*	0.5	1.0	0.0	
*lab*ncE*	0.0	1.0	r00j	

*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**

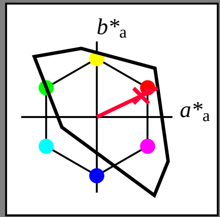
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness *t*



%Gamut

u^*_{rel} = 158

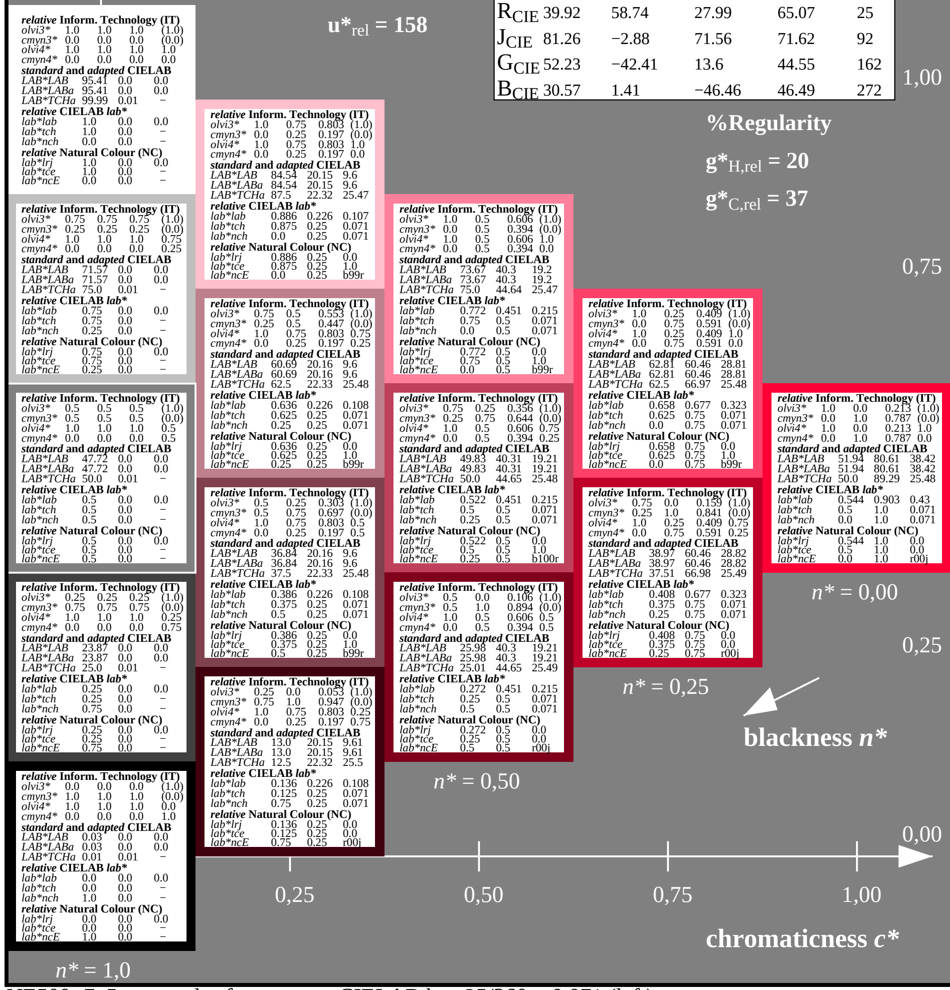
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h = *lab*h* = 23/360 = 0.065**

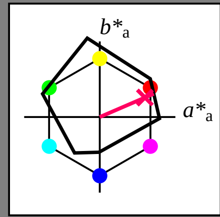
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness *t*



%Gamut

u^*_{rel} = 101

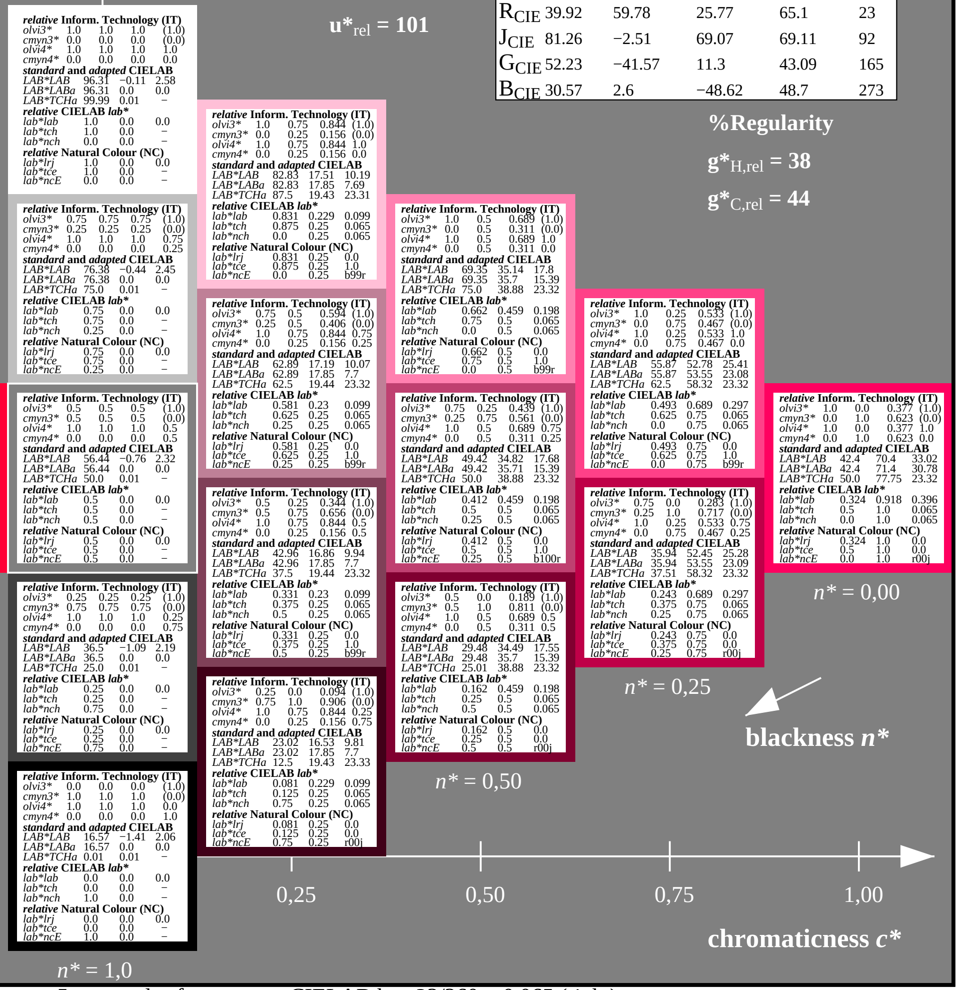
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

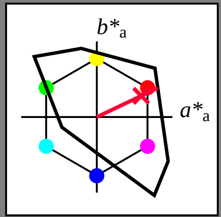
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

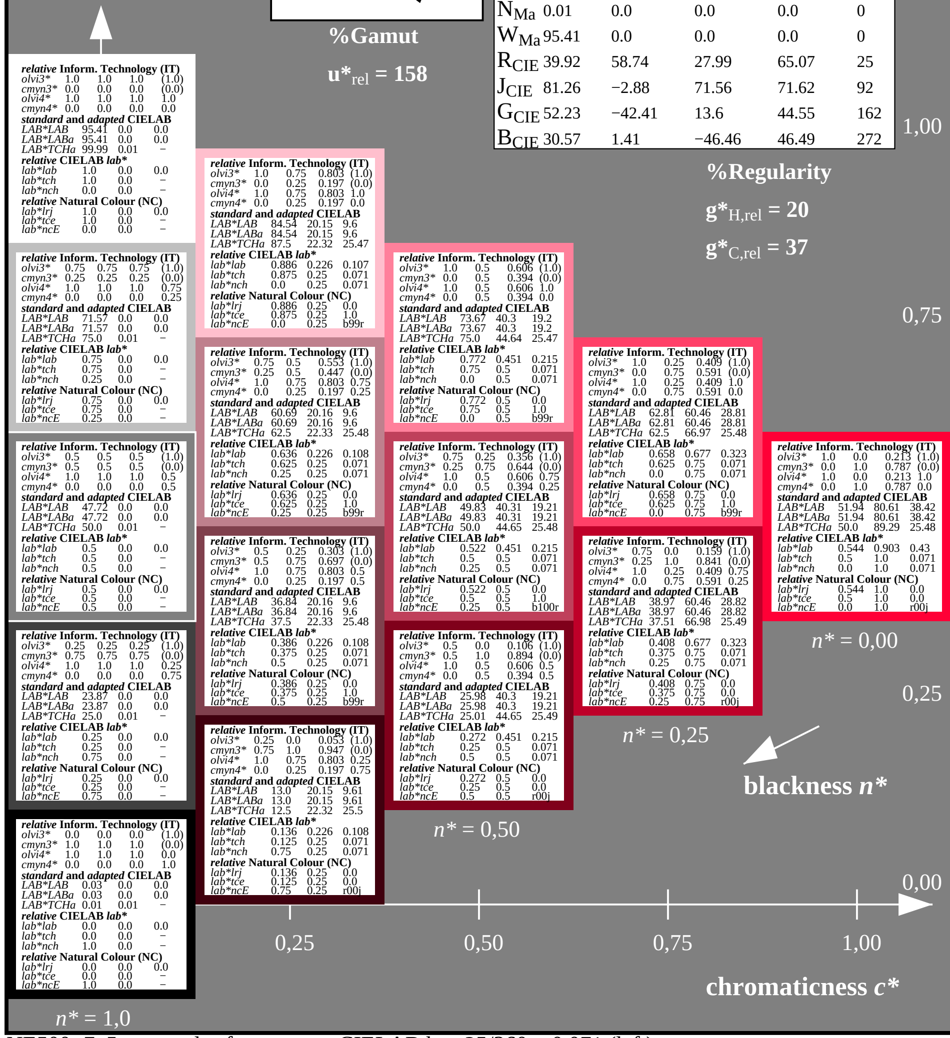
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

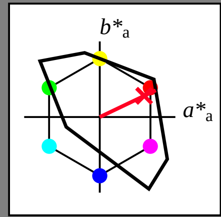
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

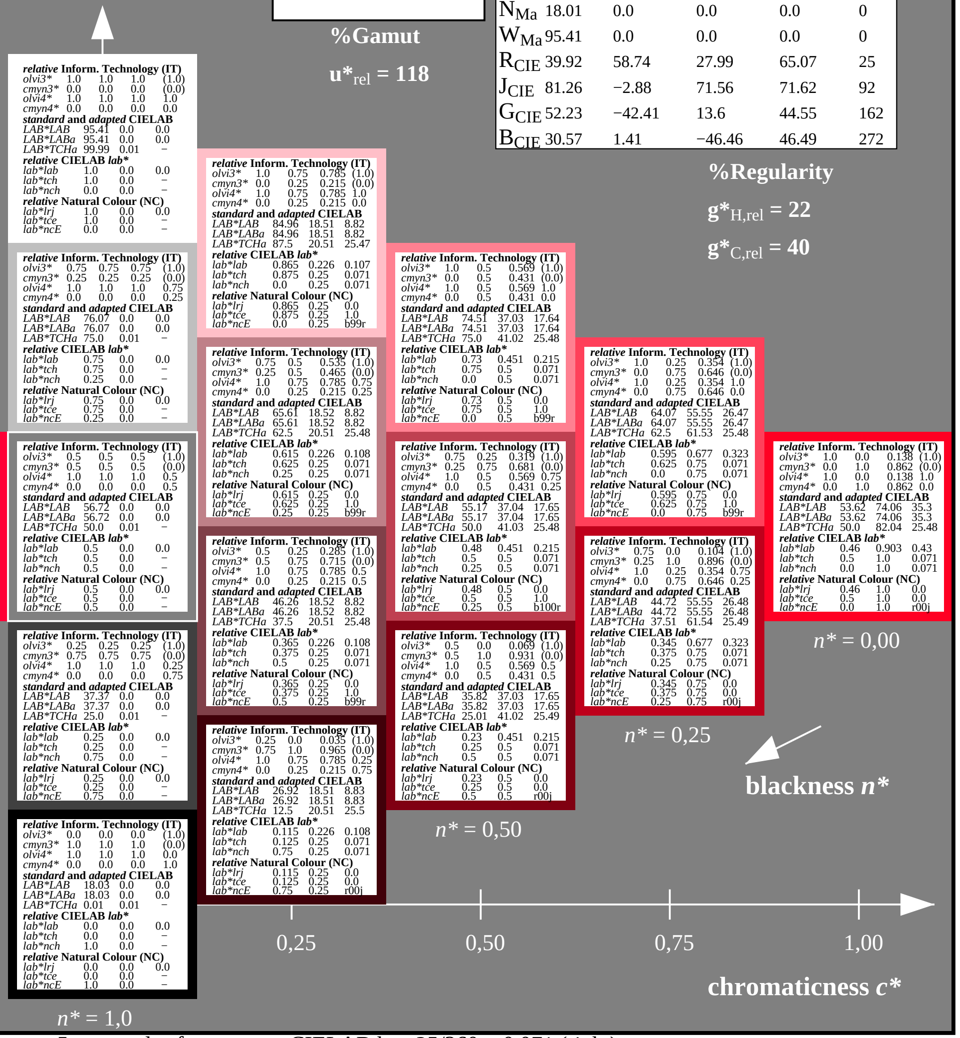
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

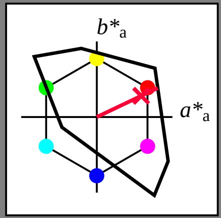
$g^*_{C,rel} = 40$



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
triangle lightness t^*

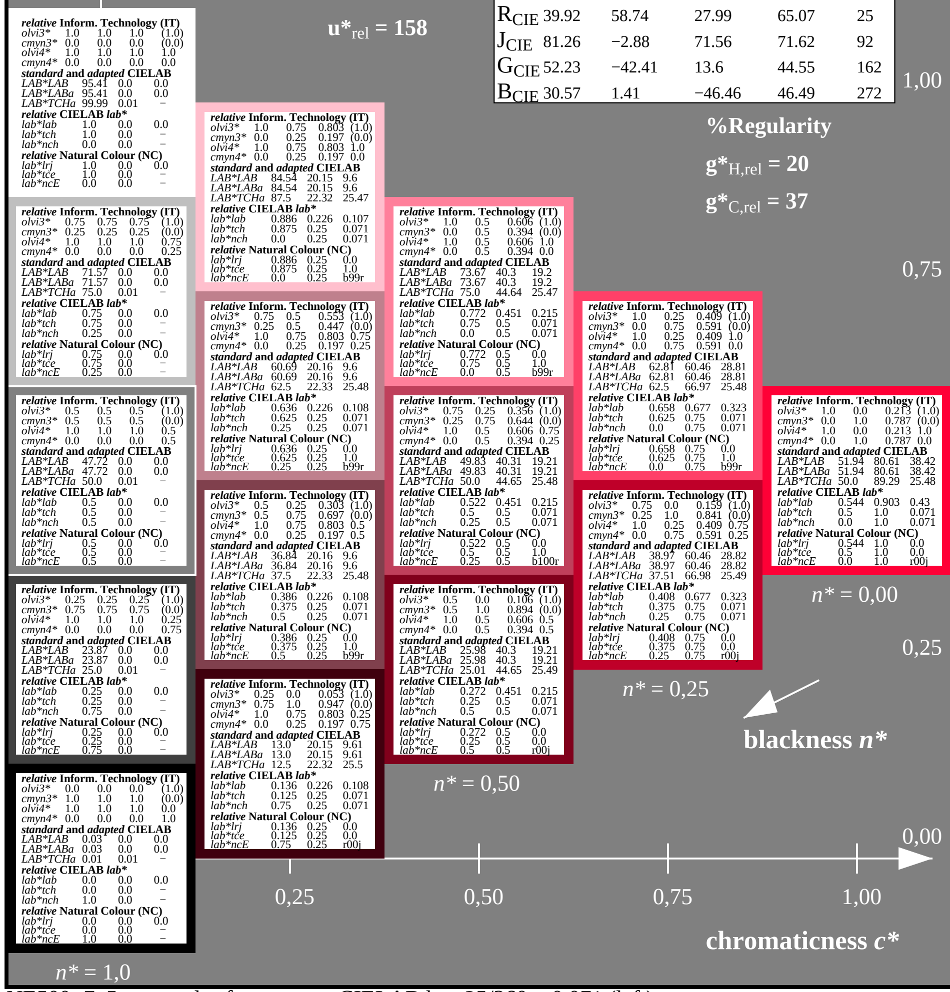


%Gamut
$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

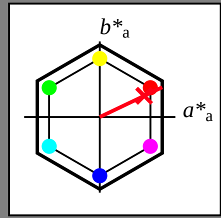
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	50.5	76.92	64.55	100.42	40
Y_{Ma}	92.66	−20.69	90.75	93.08	103
L_{Ma}	83.63	−82.75	79.9	115.04	136
C_{Ma}	86.88	−46.16	−13.55	48.12	196
V_{Ma}	30.39	76.06	−103.59	128.52	306
M_{Ma}	57.3	94.35	−58.41	110.97	328
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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 $h^* = lab^*h = 25/360 = 0.071$
*lab*tch and lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09
triangle lightness t^*

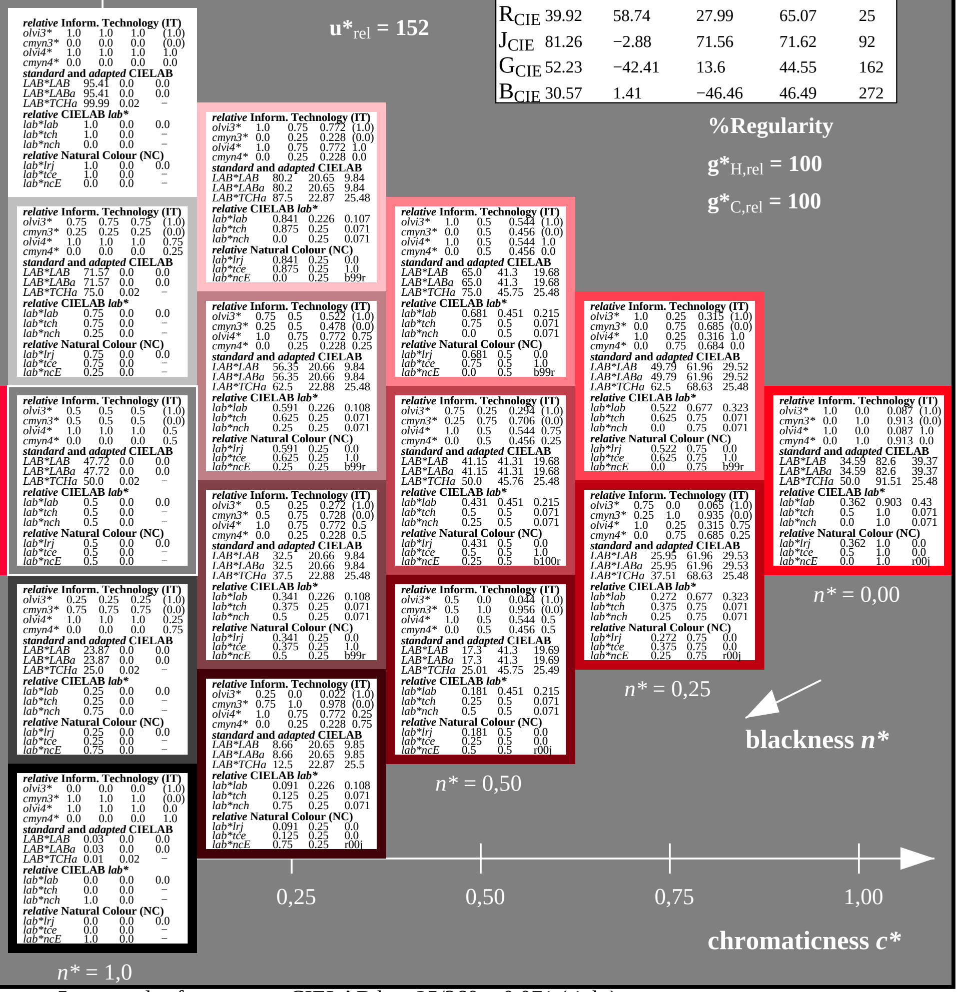


%Gamut
$u^*_{rel} = 152$

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



NE500−7, 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**

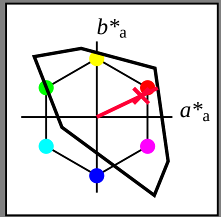
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness *t**



%Gamut

u*rel = 158

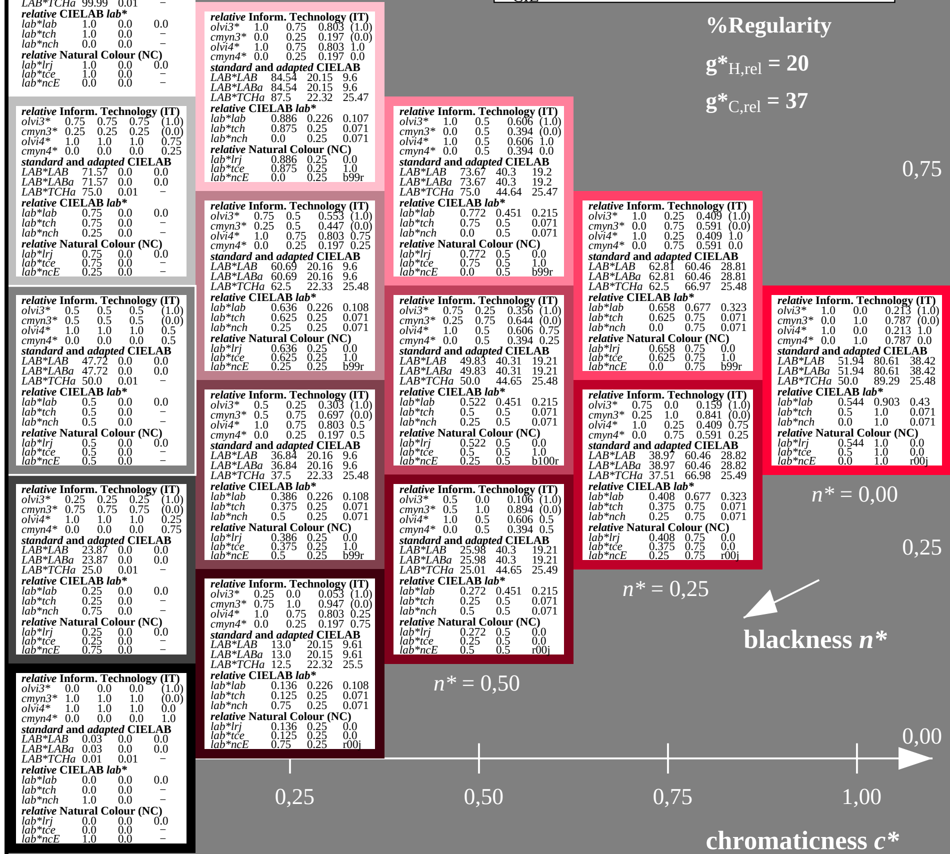
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue *h = *lab*h* = 25/360 = 0.071**

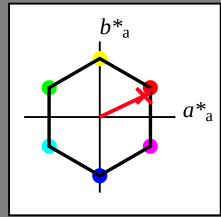
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

u*rel = 100

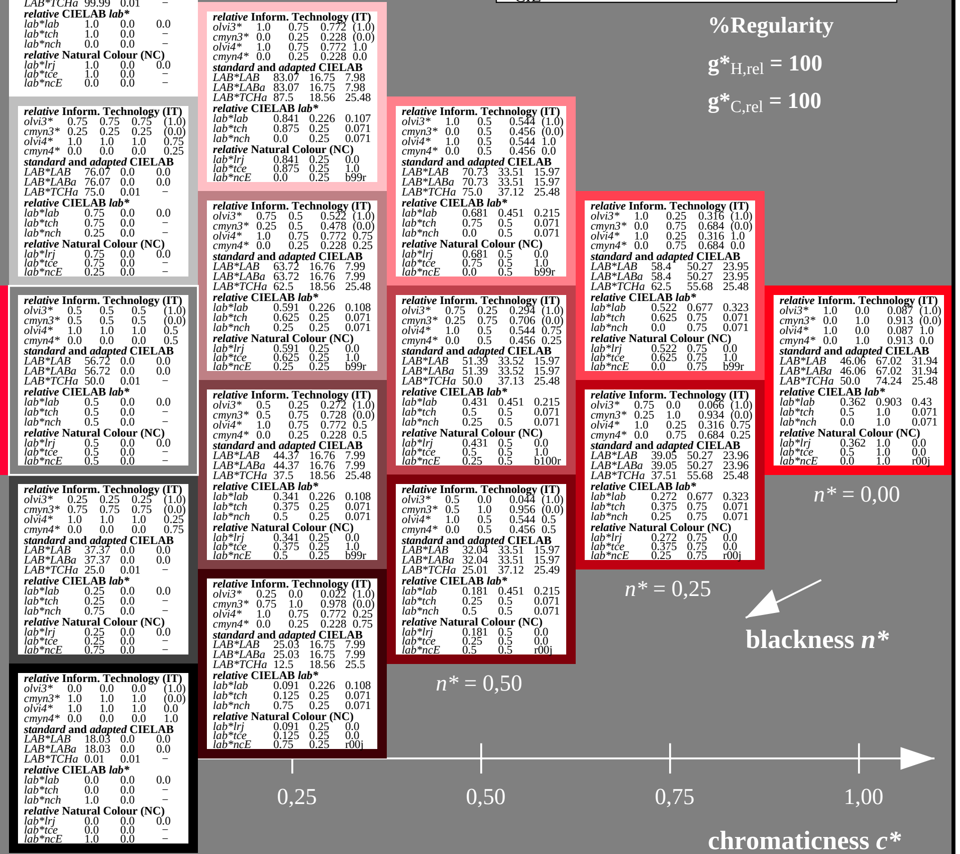
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



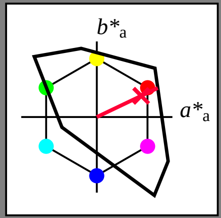
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

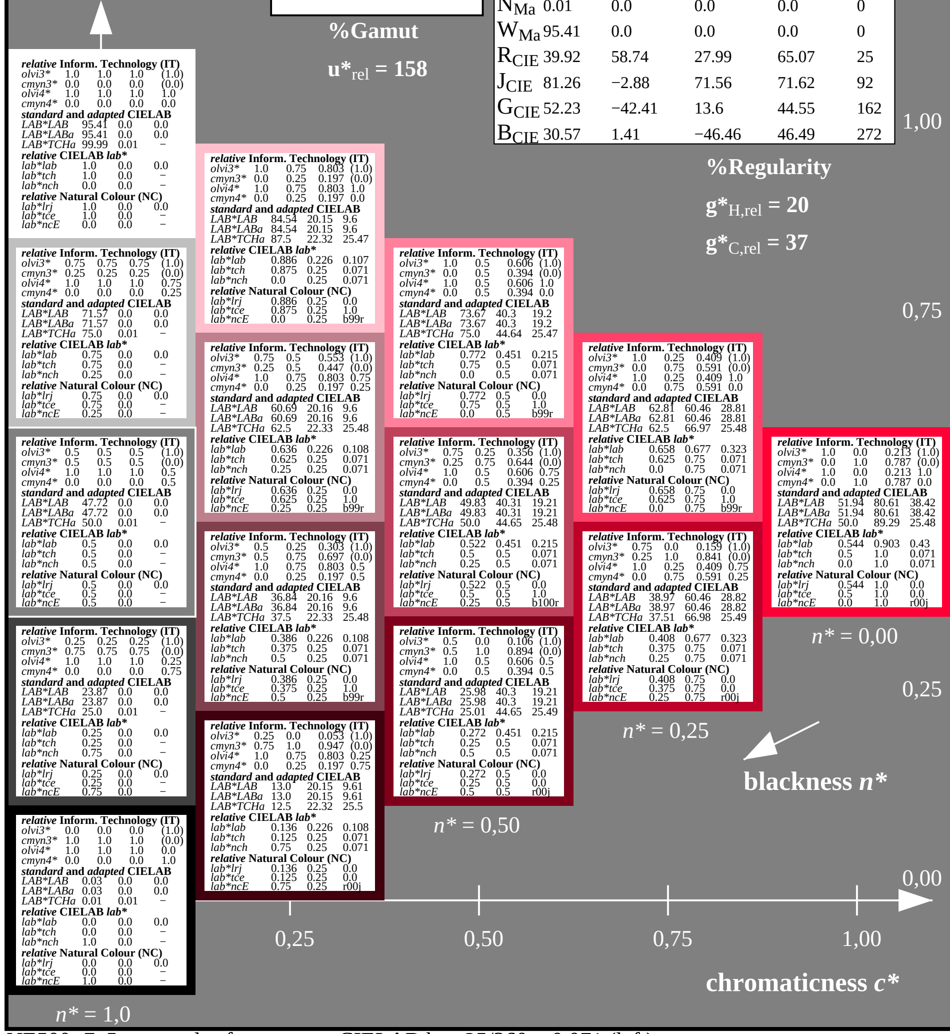
u^*_{rel} = 158

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

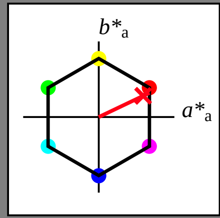
$g^*_{C,rel}$ = 37



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

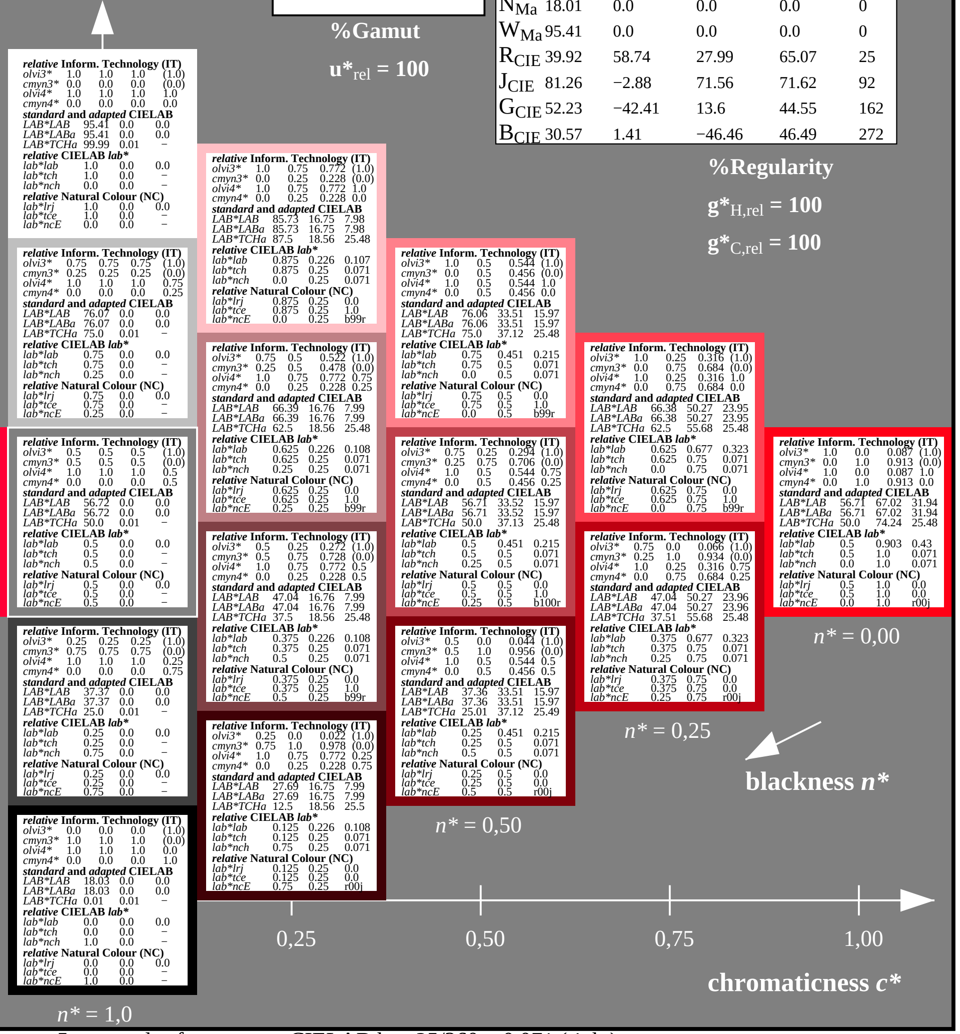
u^*_{rel} = 100

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



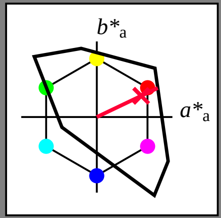
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

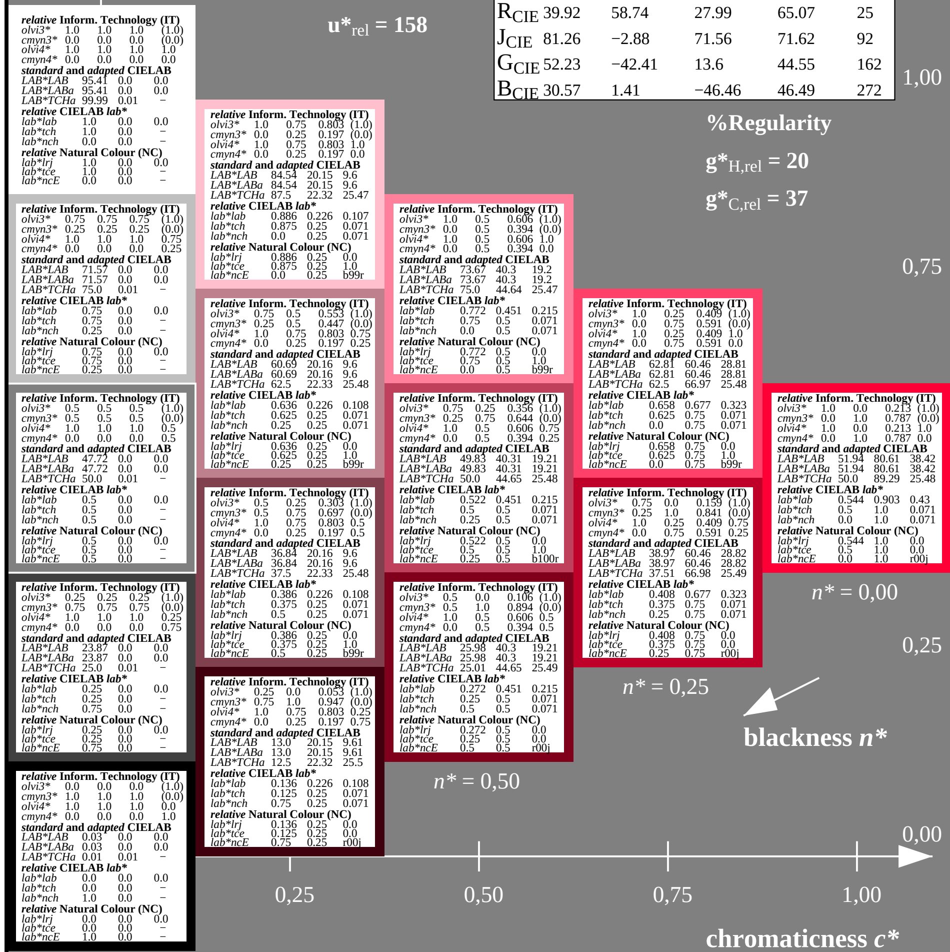
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

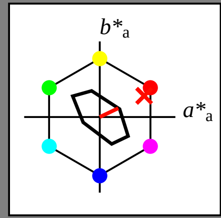
$g^*_{C,rel}$ = 37



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

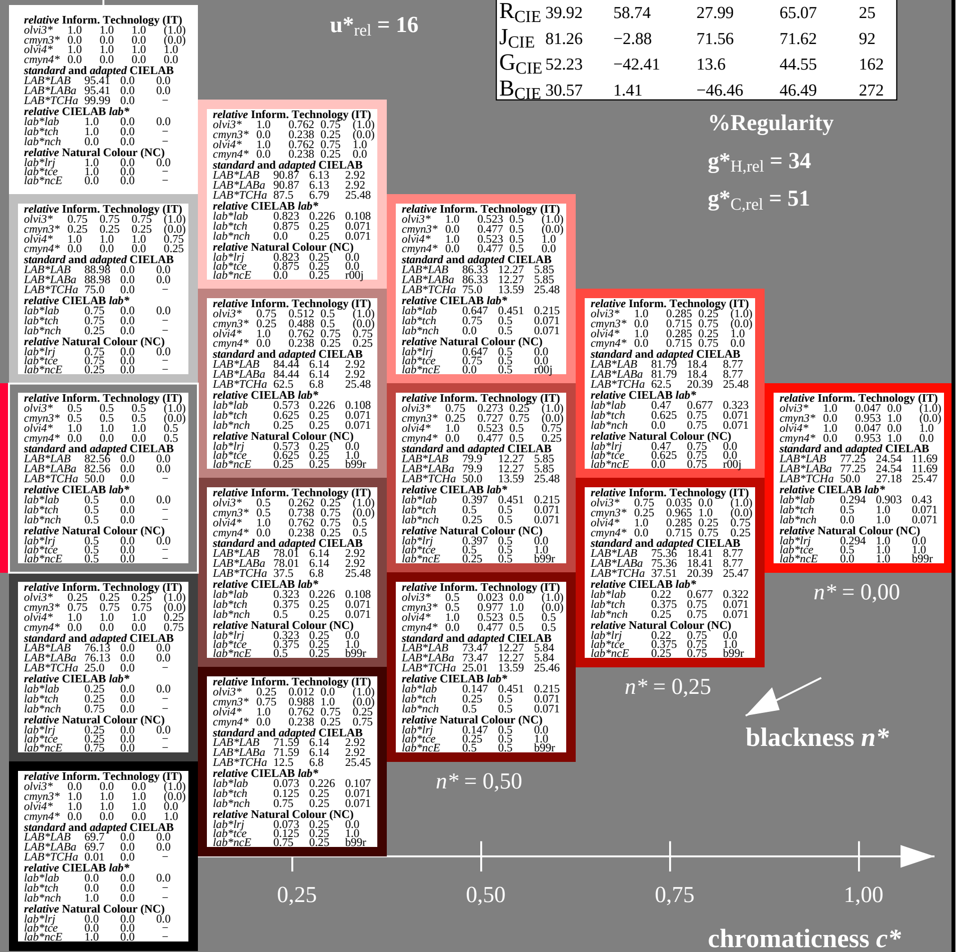
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Printer Reflective System DRSXX
for hue $h^* = lab^*h = 23/360 = 0.065$

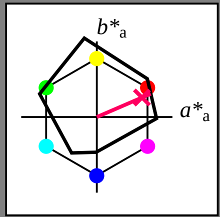
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

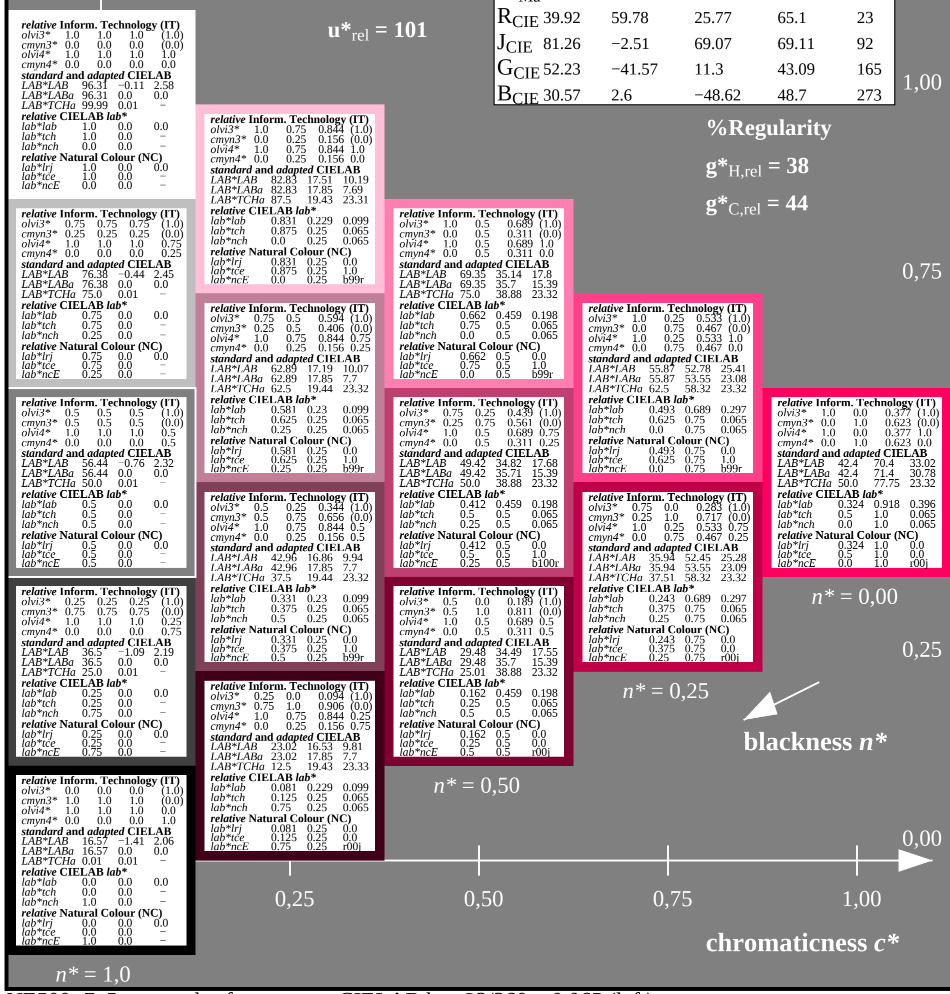
$u^*_{rel} = 101$

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 Offset Reflective System ORS18
for hue $h^* = lab^*h = 25/360 = 0.069$

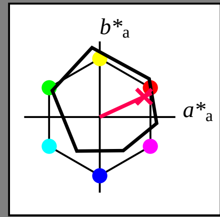
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

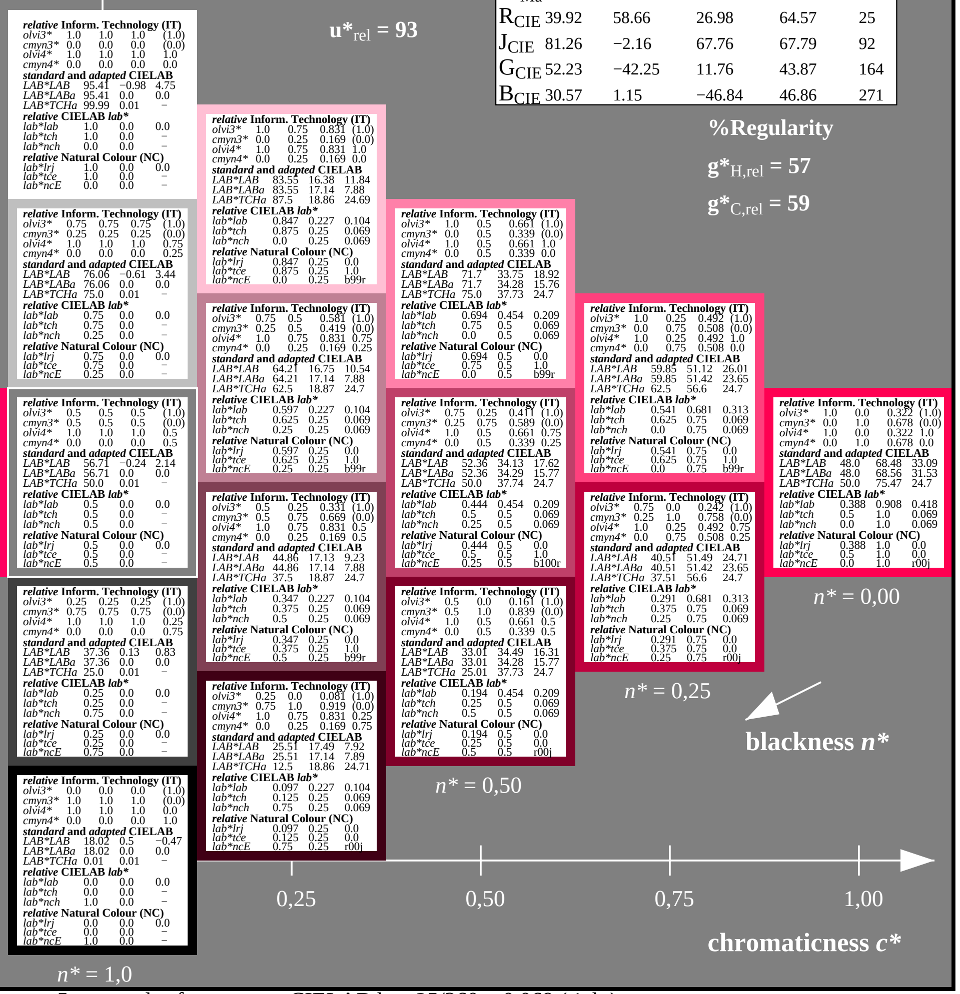
$u^*_{rel} = 93$

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

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

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



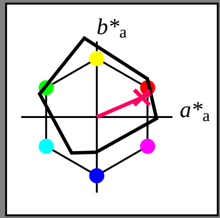
NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

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**

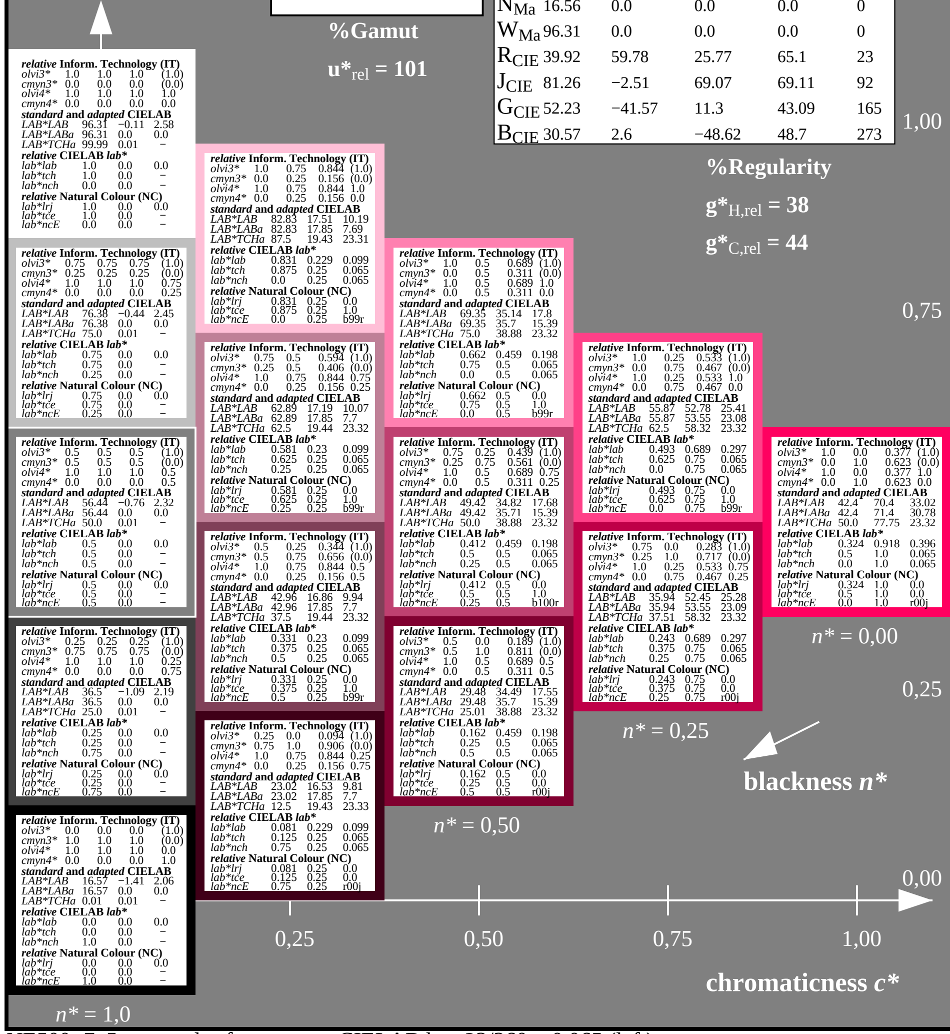


%Gamut
u^*_{rel} = 101

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

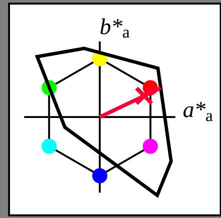
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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**

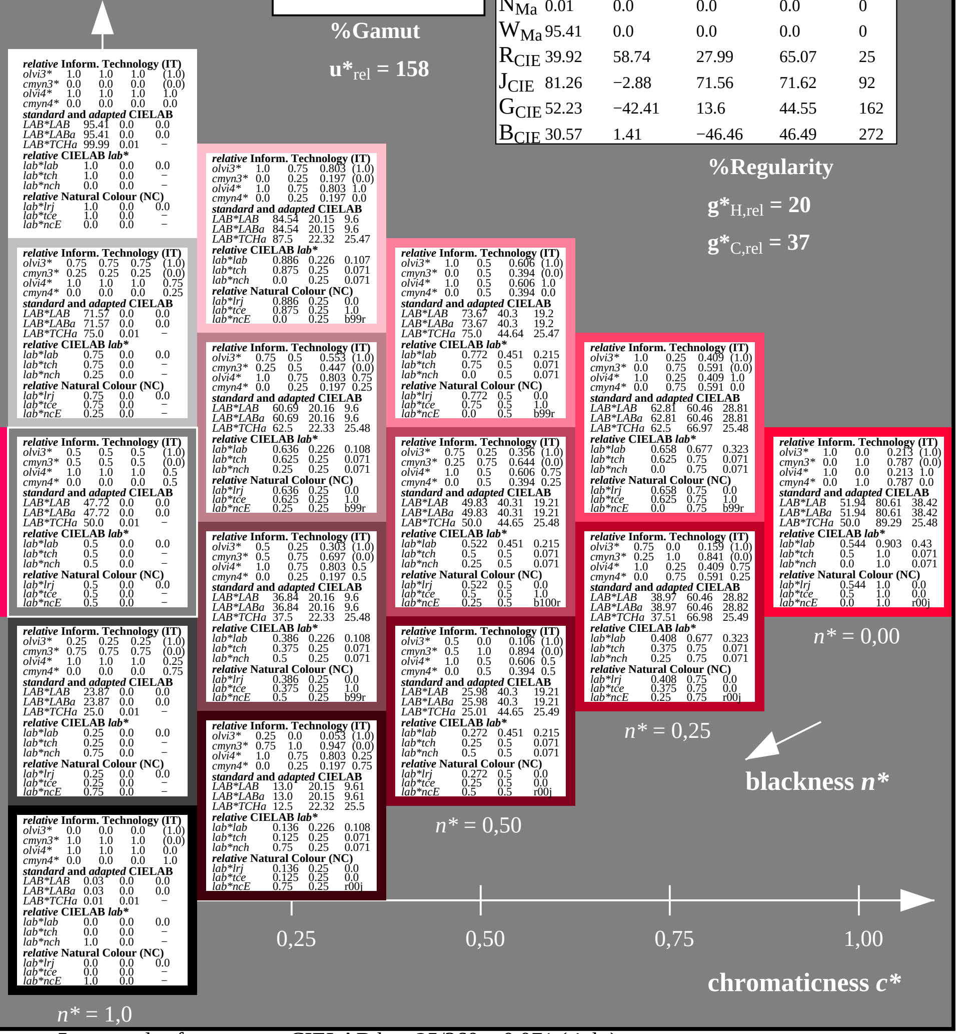


%Gamut
u^*_{rel} = 158

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



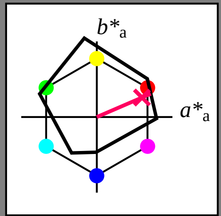
NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

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

$u^*_{rel} = 101$

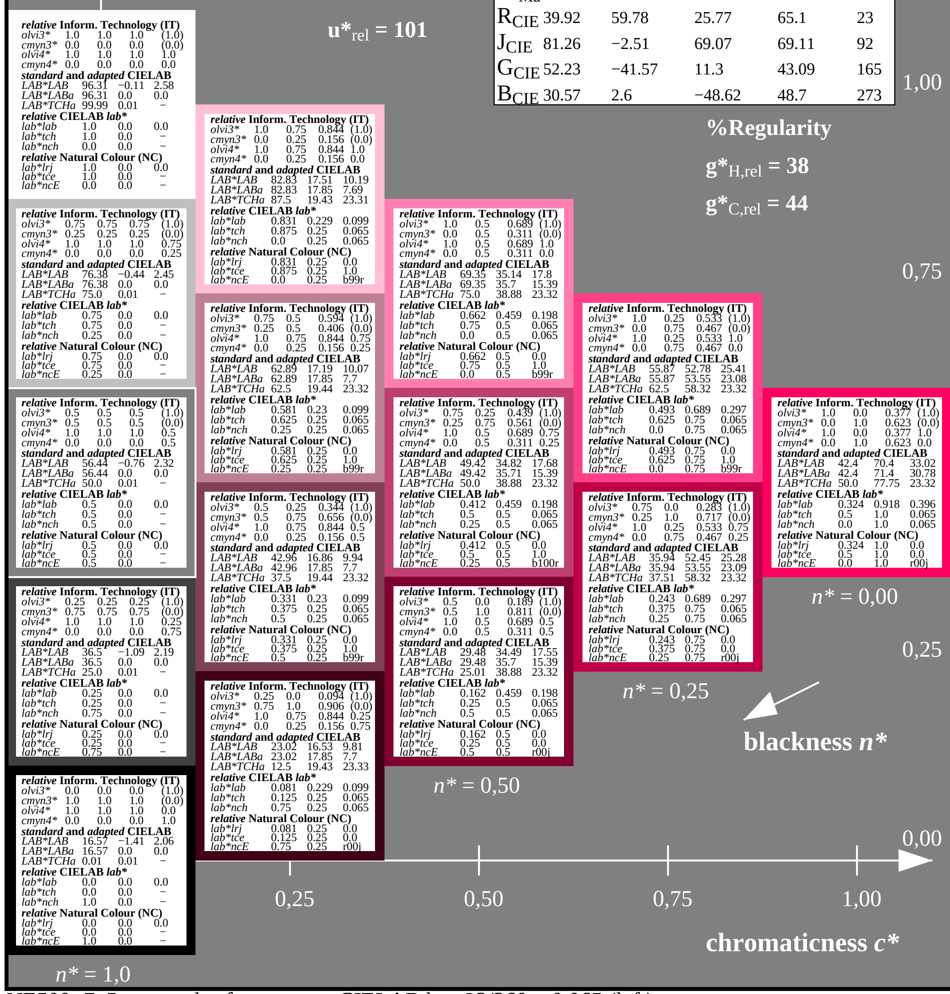
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

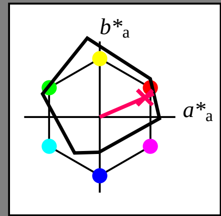
$g^*_{C,rel} = 44$



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

$u^*_{rel} = 101$

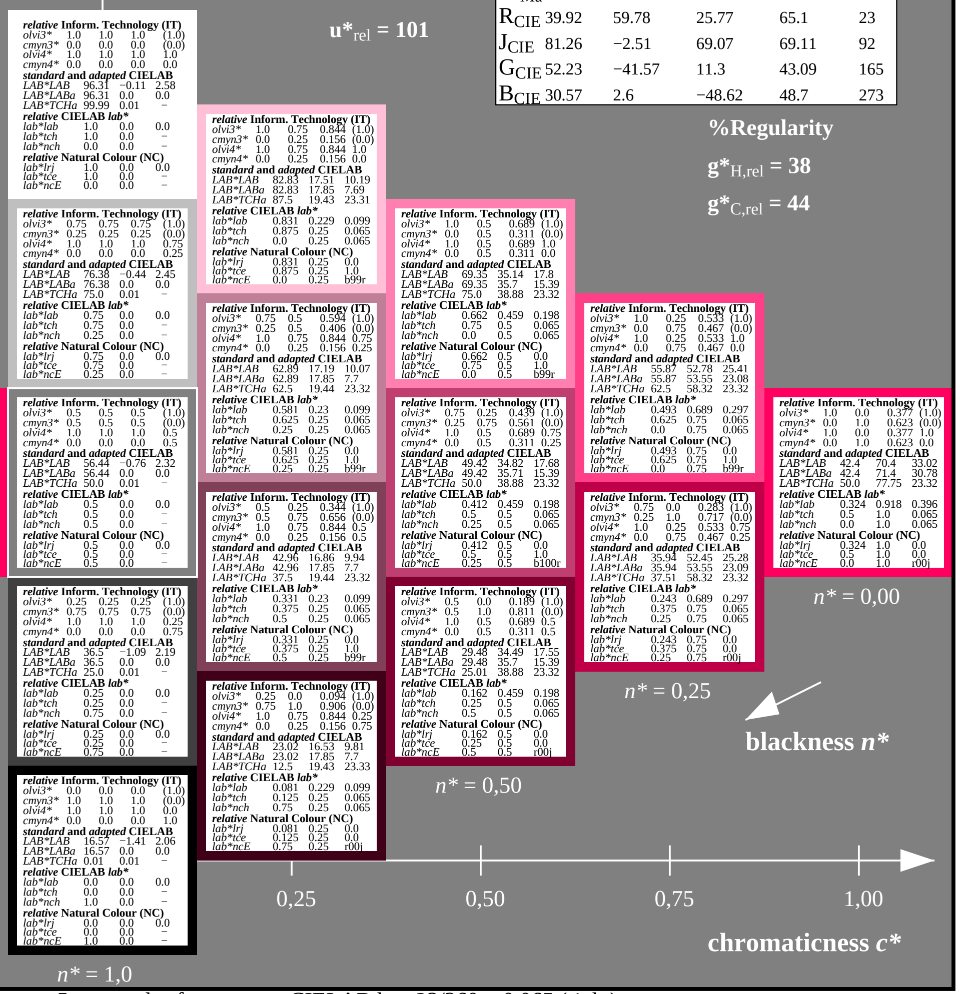
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$

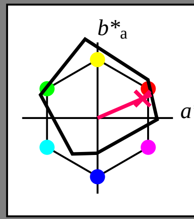
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

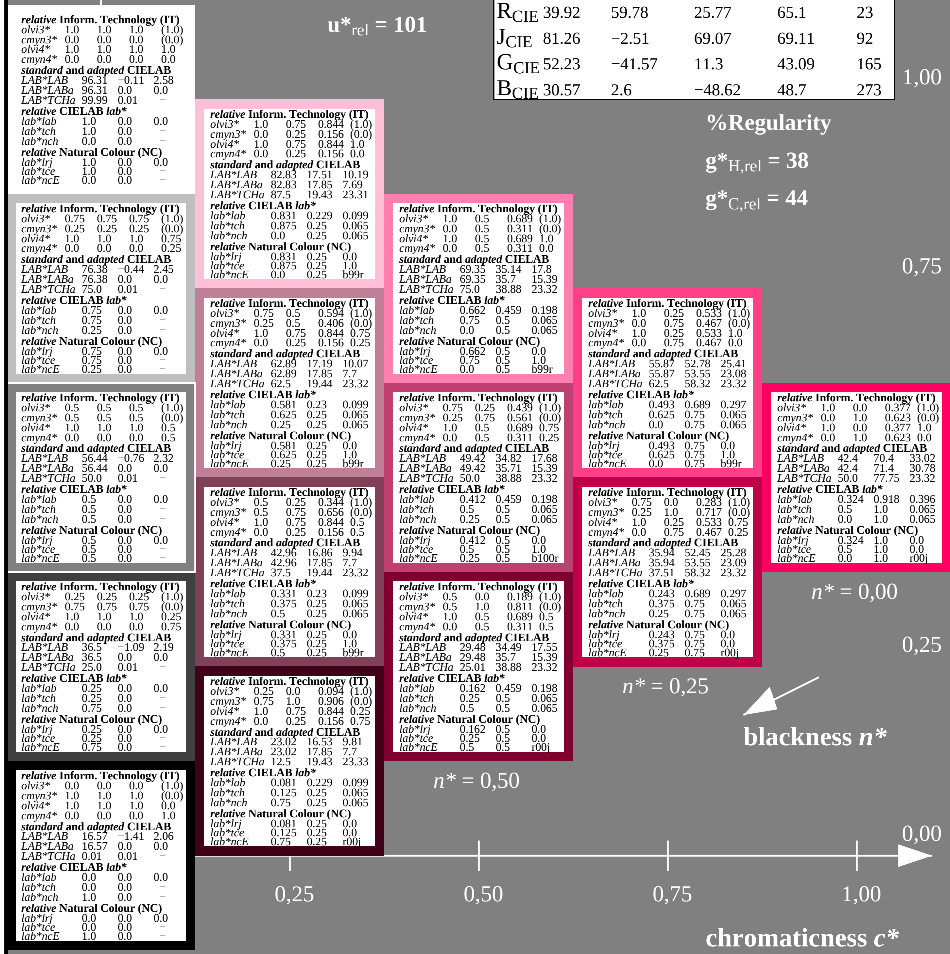
$u^*_{rel} = 101$

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 $h^* = lab^*h = 25/360 = 0.071$

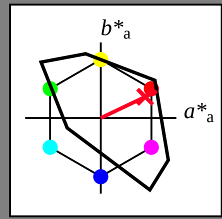
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

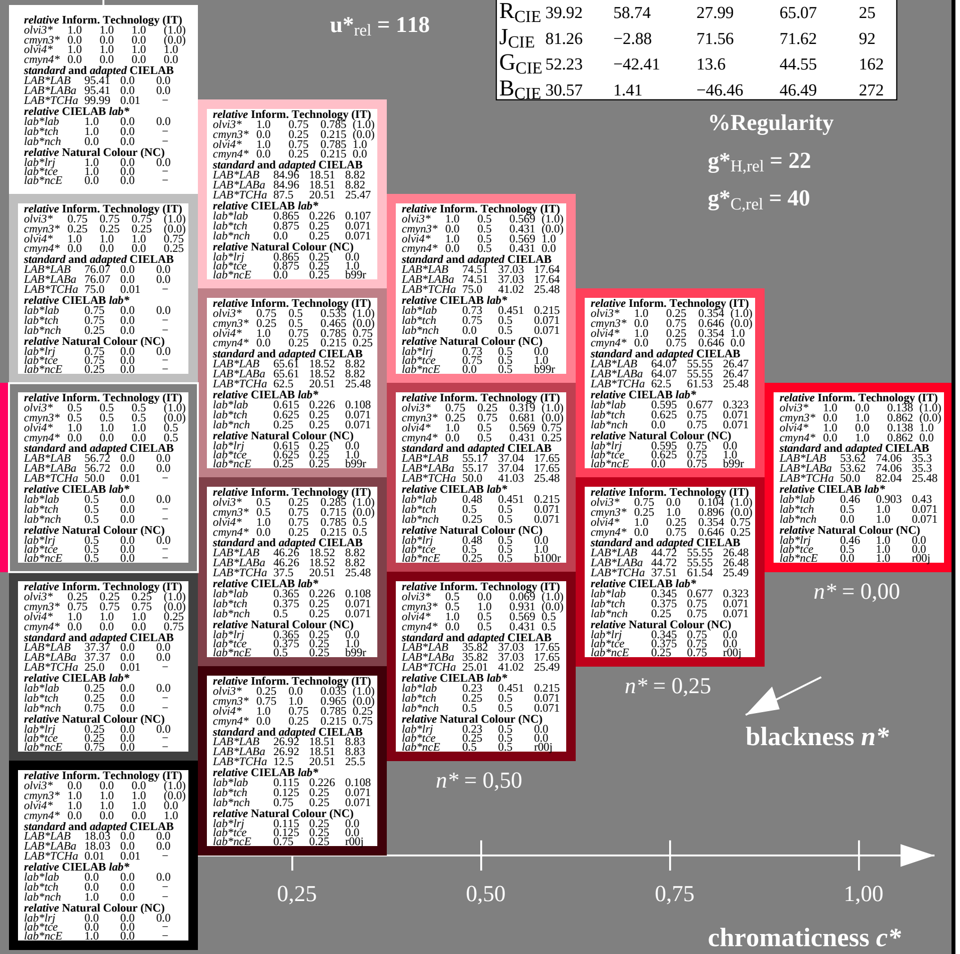
$u^*_{rel} = 118$

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

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

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



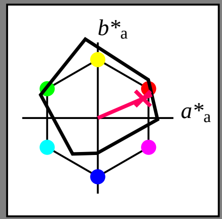
NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

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

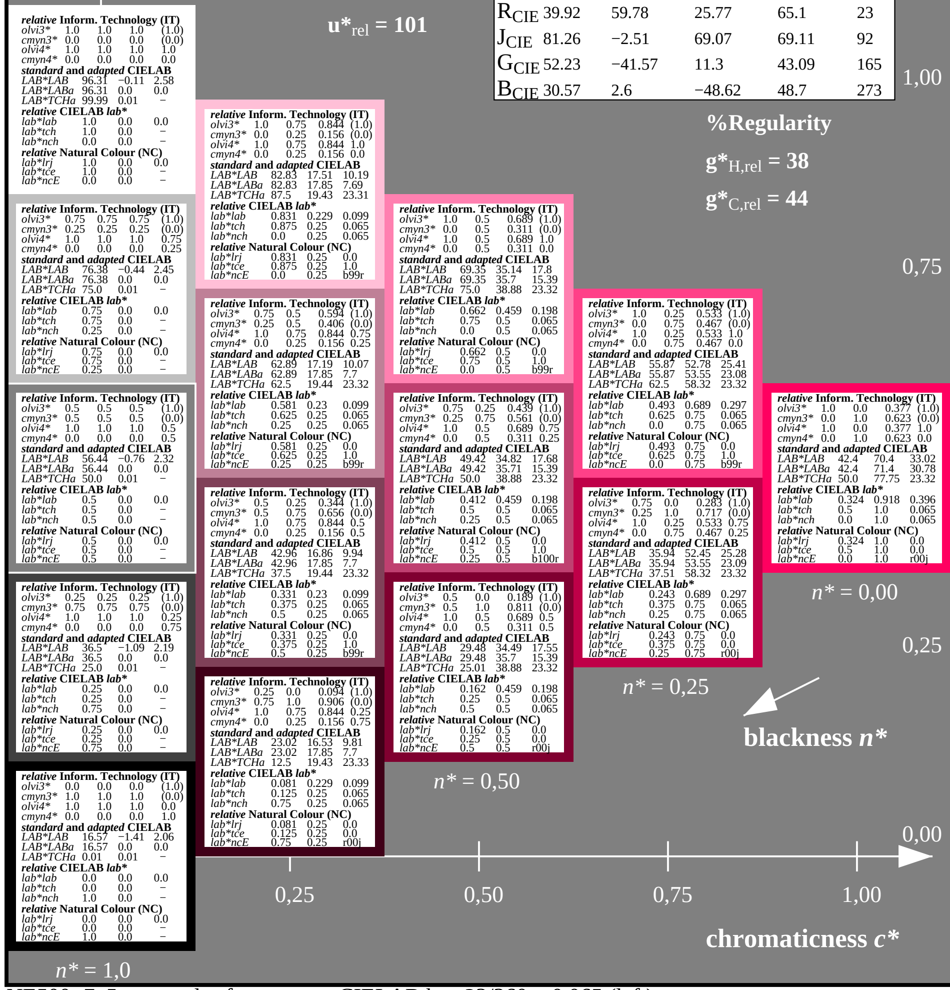
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

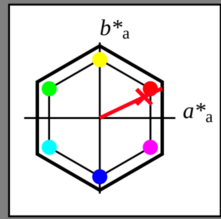
$g^*_{C,rel}$ = 44



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

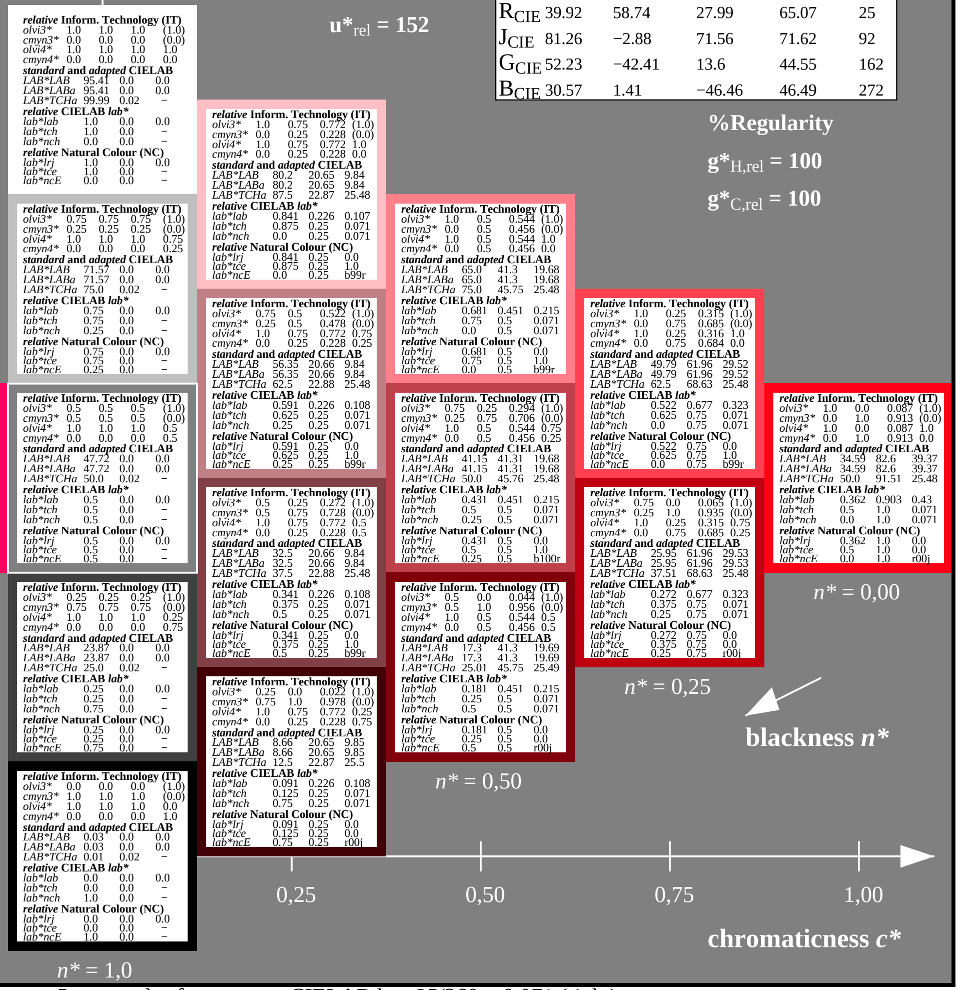
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 23/360 = 0.065$

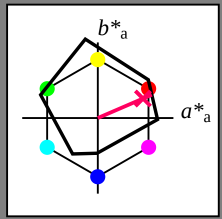
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

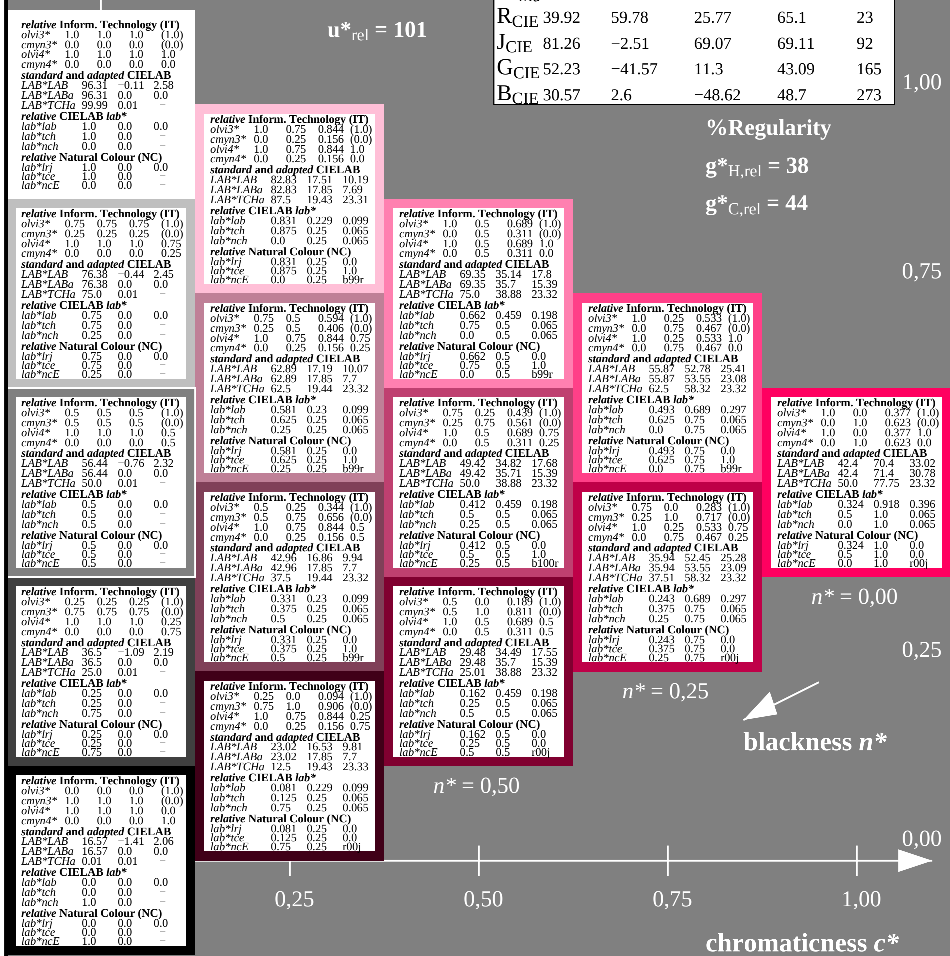
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

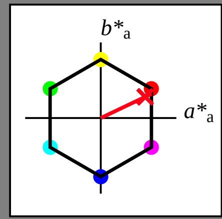
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

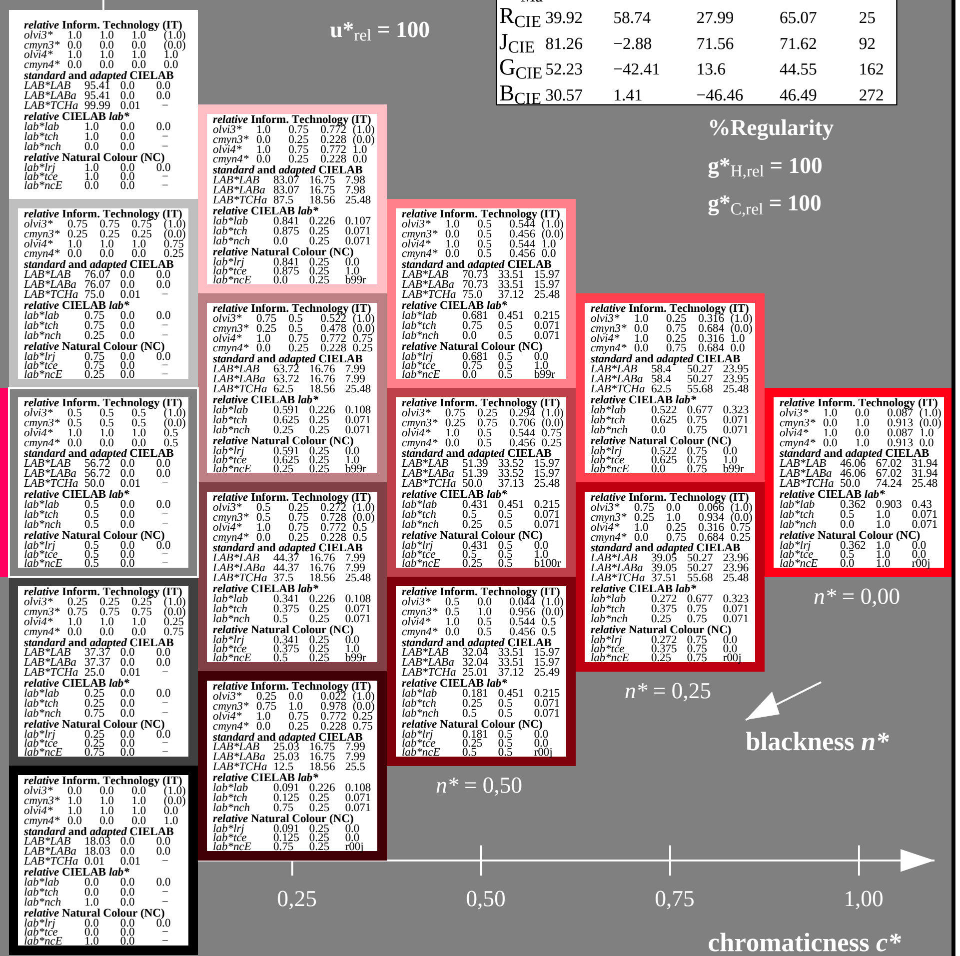
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



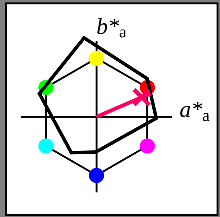
NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

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^*

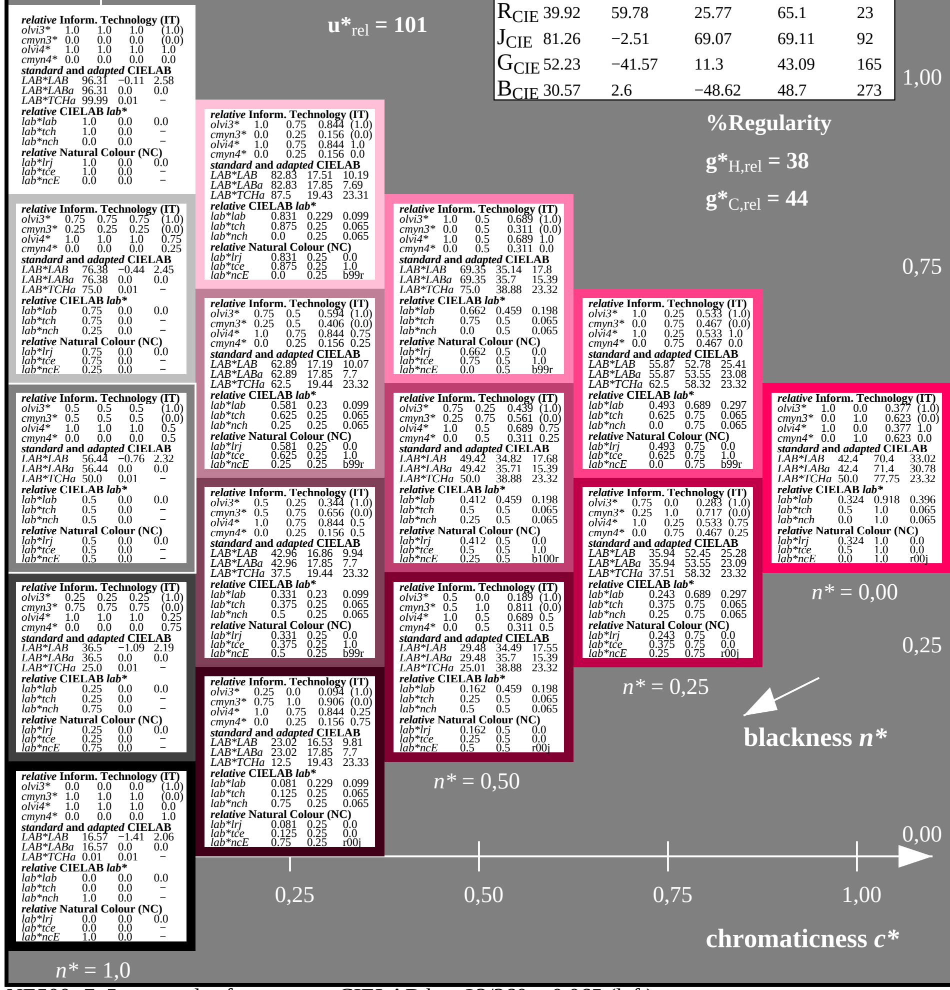


%Gamut
$u^*_{rel} = 101$

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

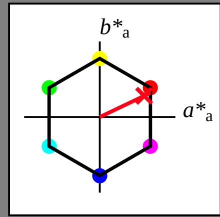
%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



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^*

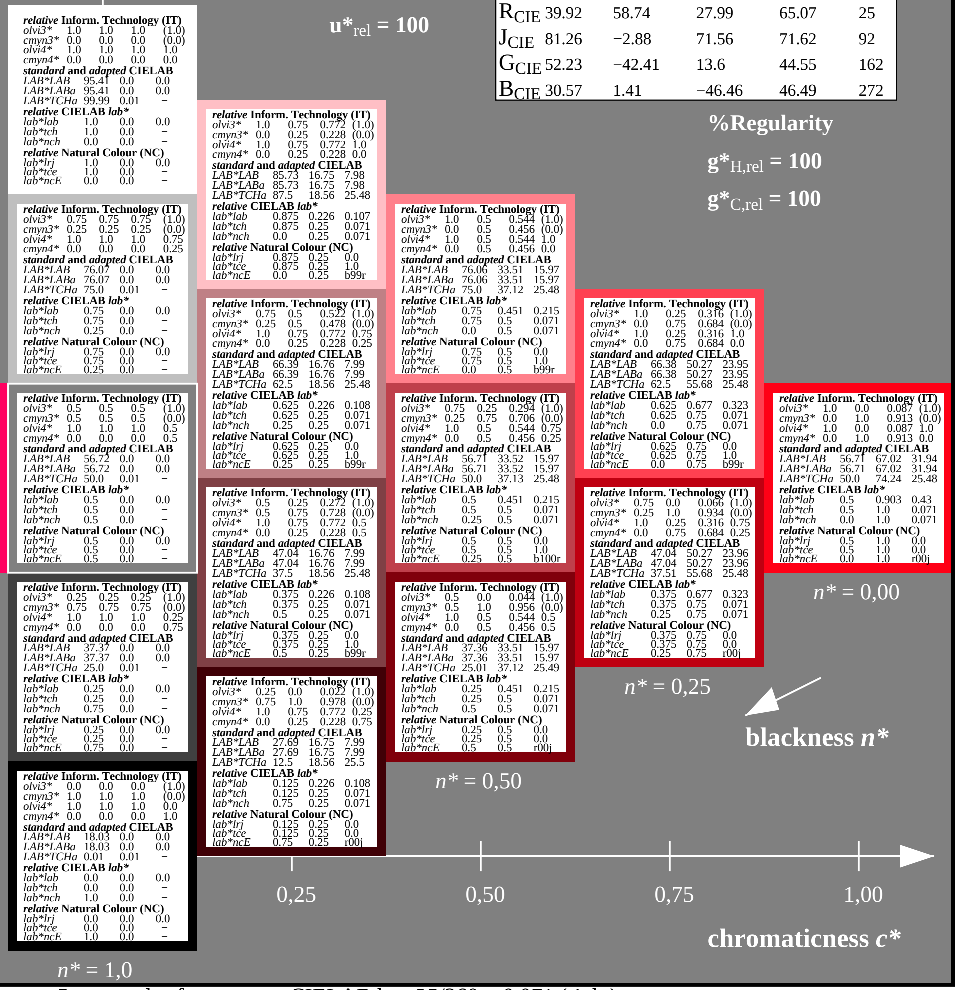


%Gamut
$u^*_{rel} = 100$

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



NE500−7, 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**

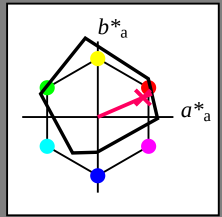
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness *t**



%Gamut

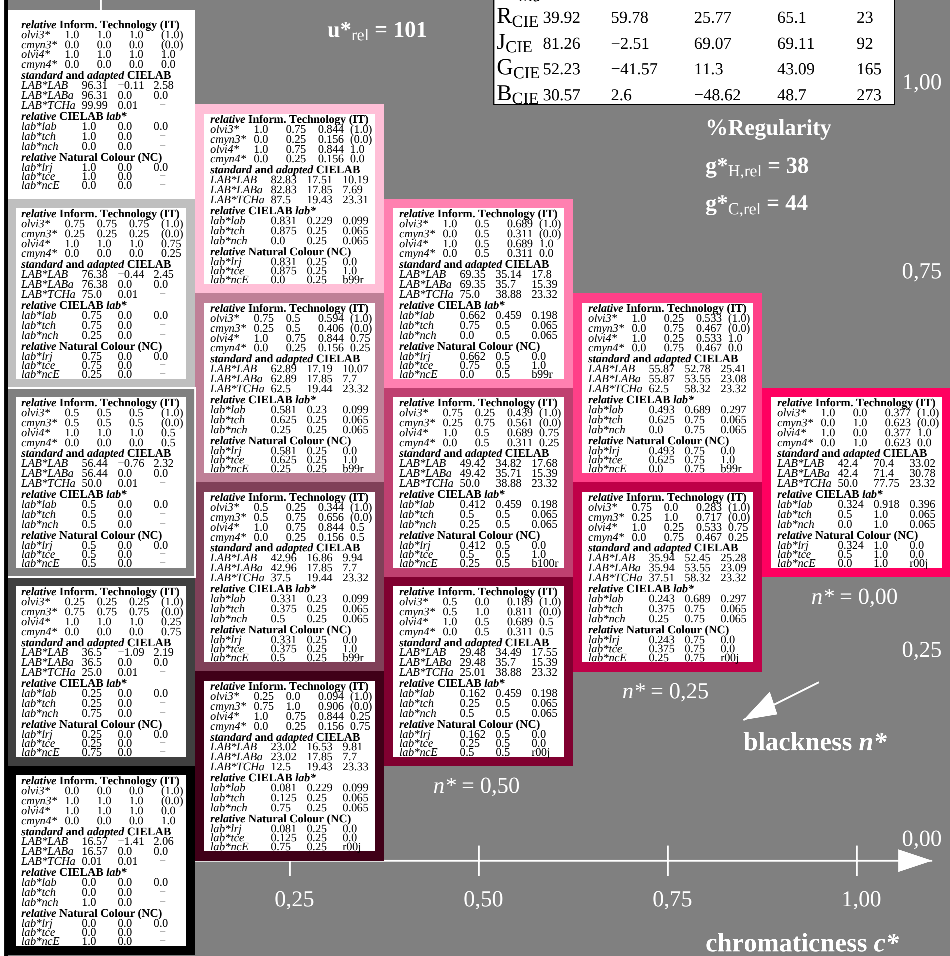
u^*_{rel} = 101

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



Output: Colorimetric Television Luminous System TLS70

for hue *h = *lab*h* = 25/360 = 0.071**

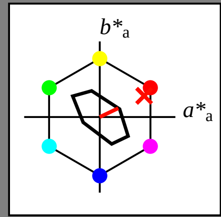
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness *t**



%Gamut

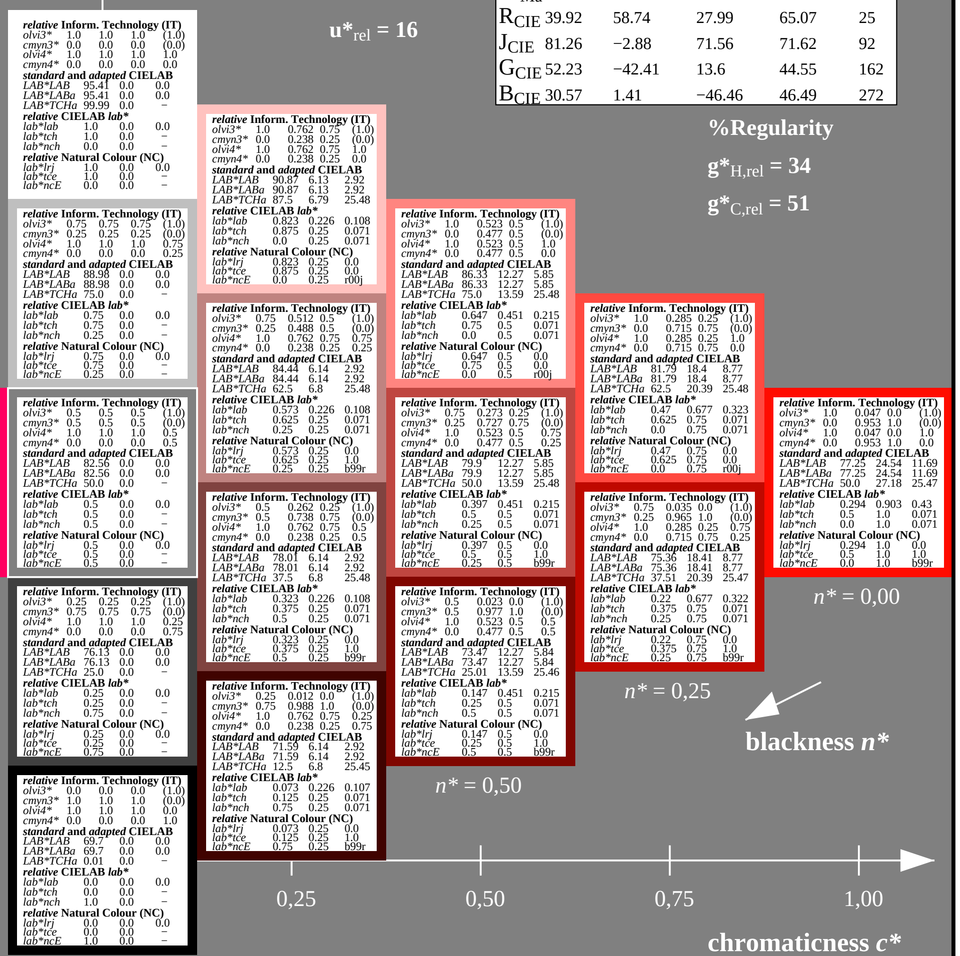
u^*_{rel} = 16

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

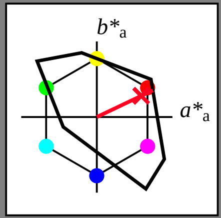


NE500−7, 5 step scales for constant CIELAB hue 23/360 = 0.065 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric 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*

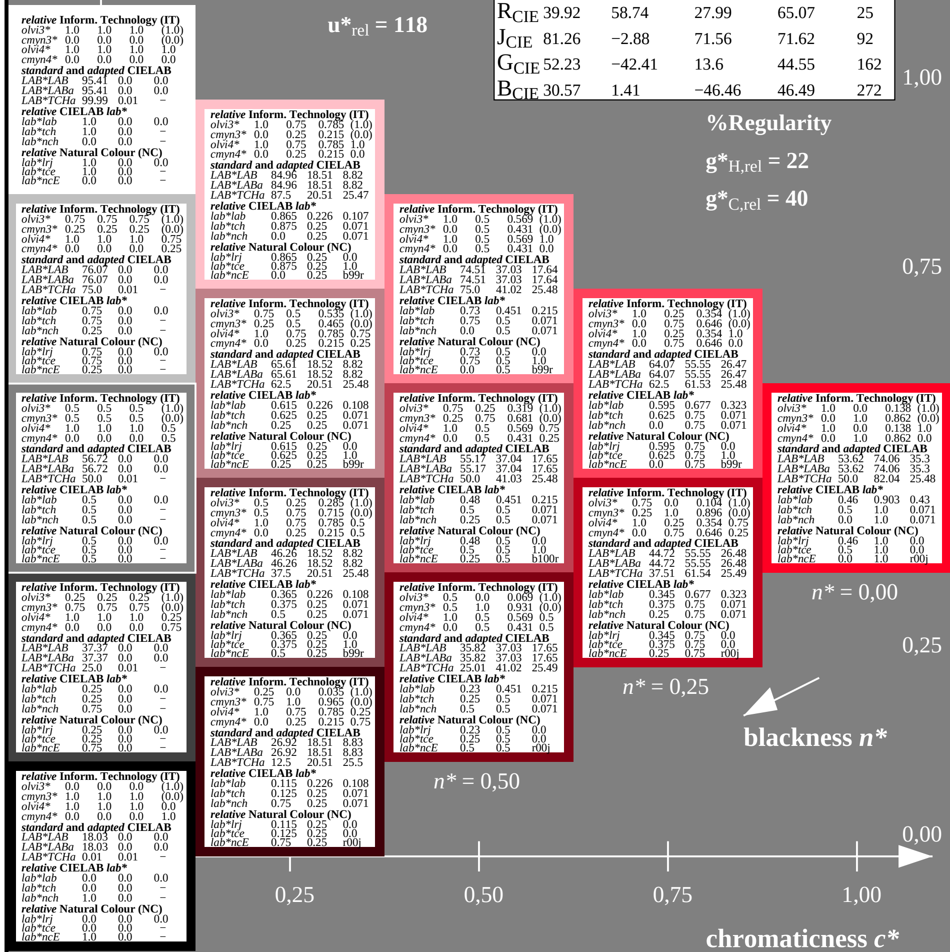


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

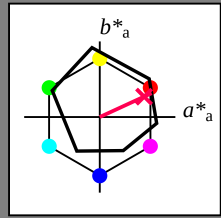
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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 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*

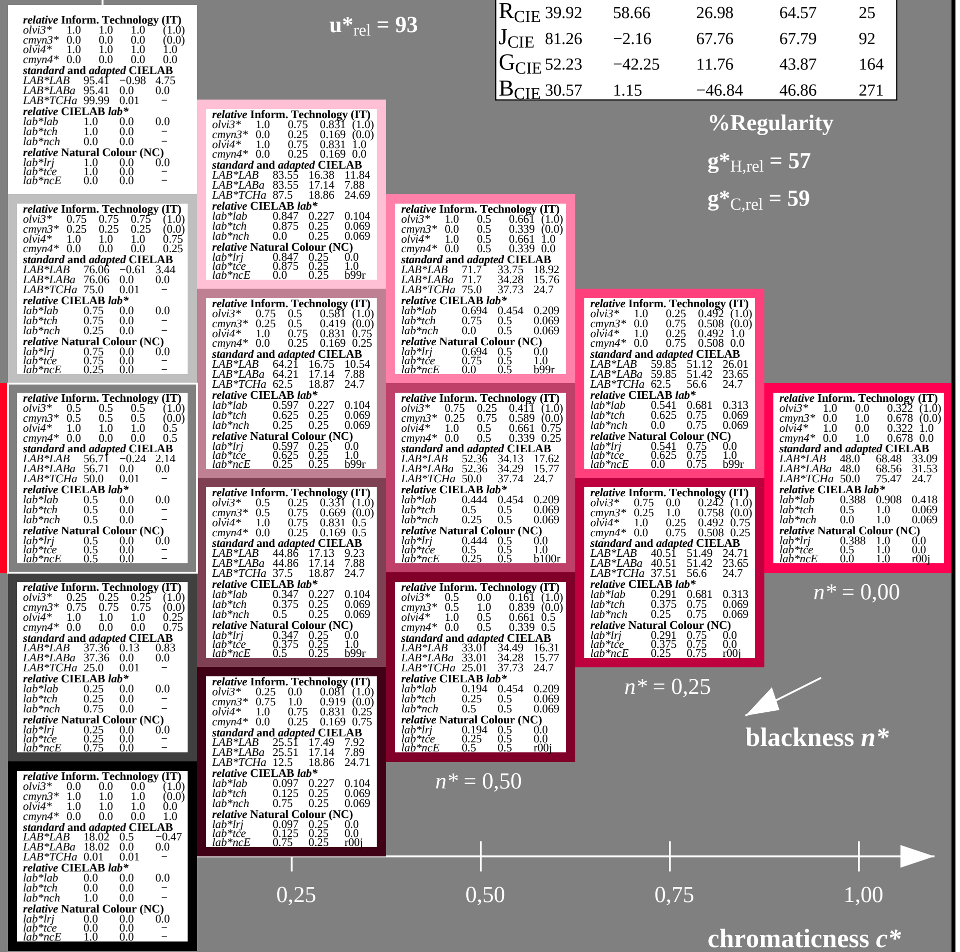


%Gamut
u^*_{rel} = 93

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



NE500−7, 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**

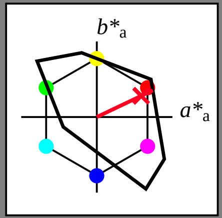
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t*



%Gamut

u^*_{rel} = 118

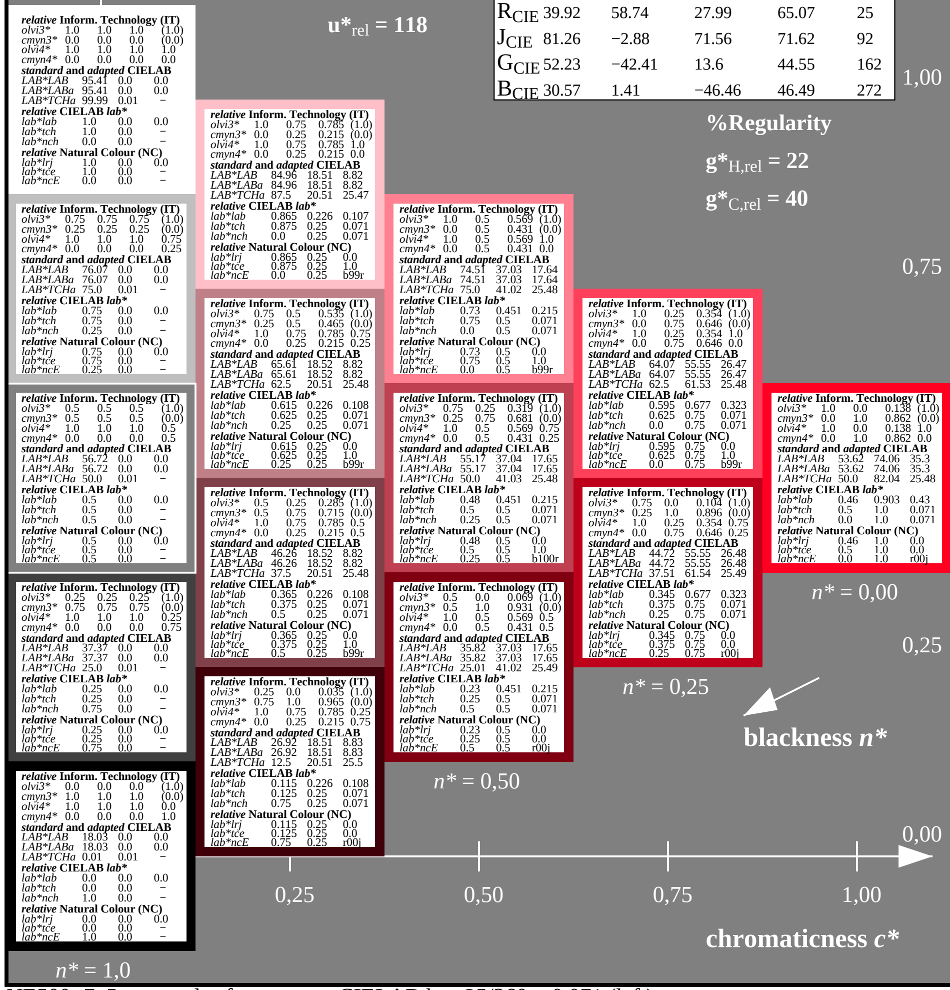
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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**

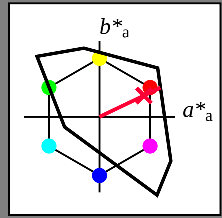
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness *t*



%Gamut

u^*_{rel} = 158

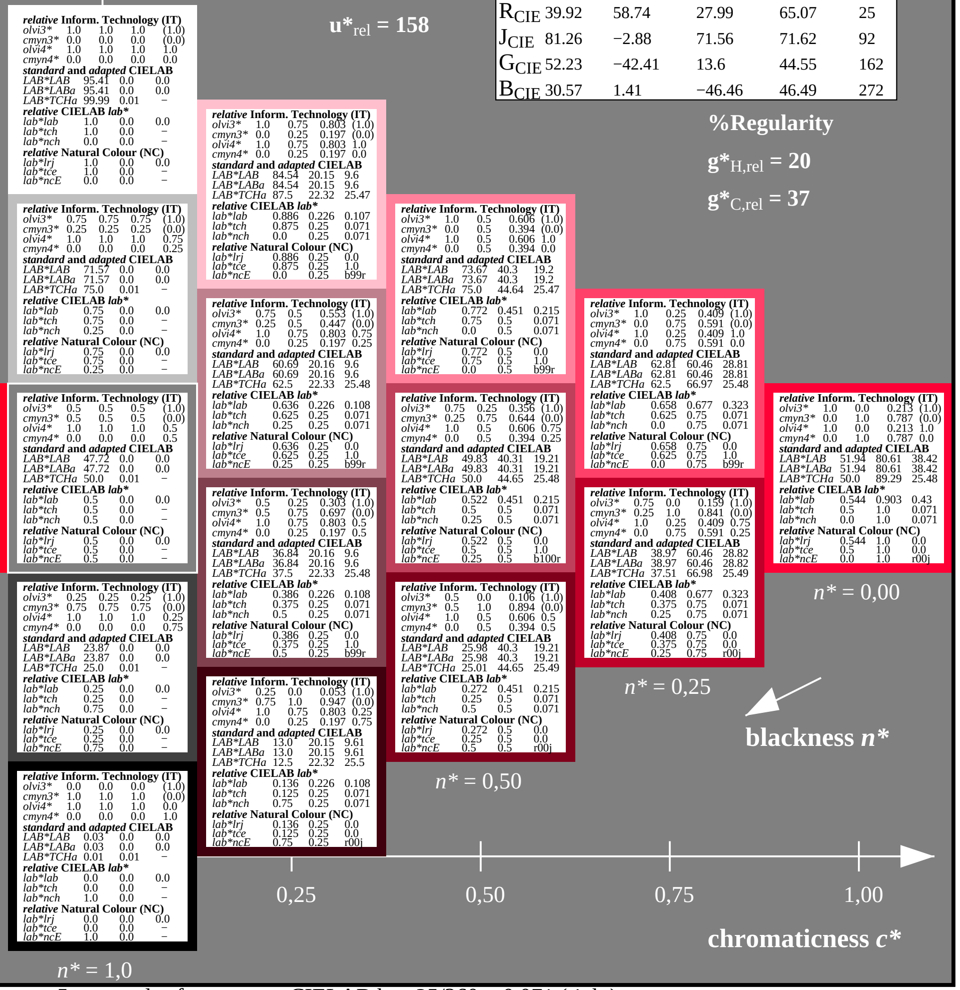
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

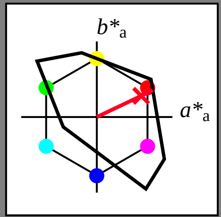
lab*tch and lab*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

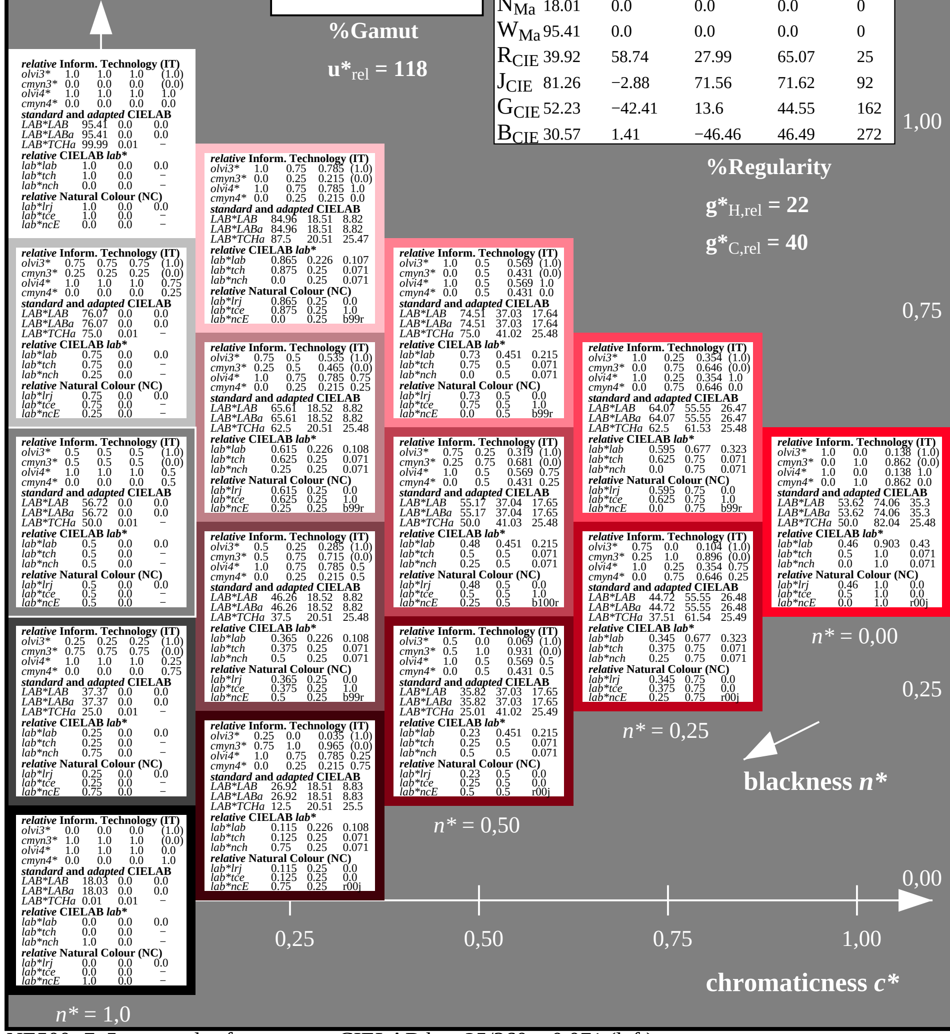
u^*_{rel} = 118

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 $h^* = lab^*h = 23/360 = 0.065$

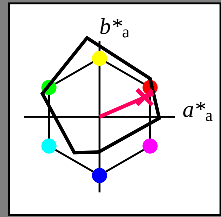
lab*tch and lab*nch

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

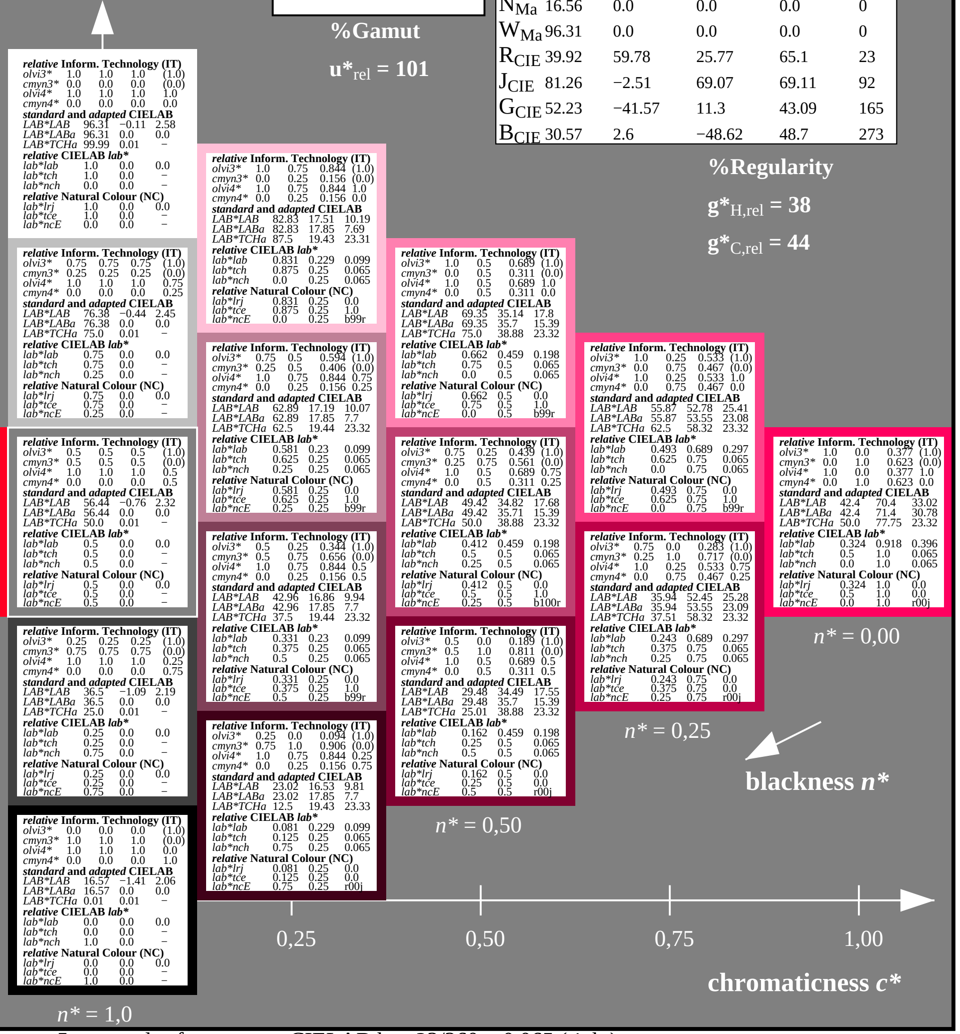
u^*_{rel} = 101

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



NE500−7, 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**

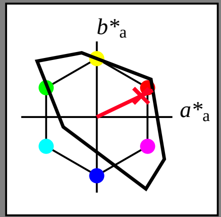
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t*



%Gamut

u^*_{rel} = 118

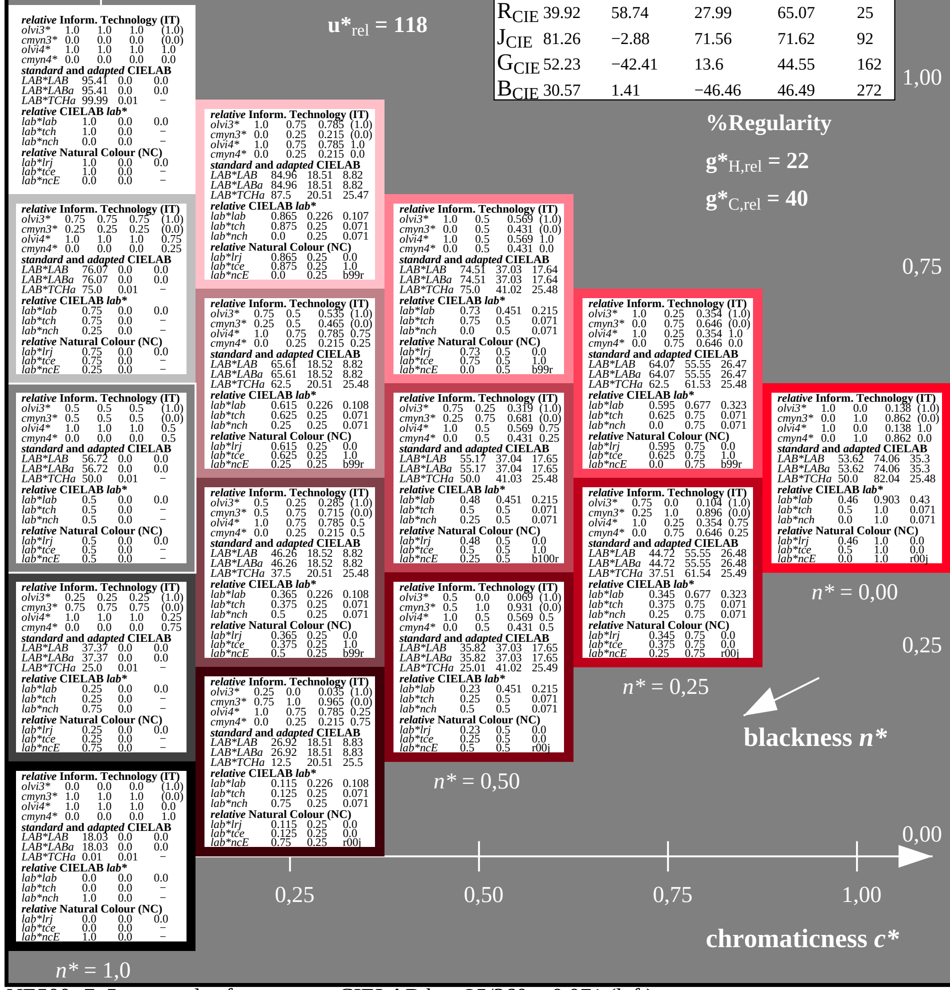
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

for hue *h = *lab*h* = 25/360 = 0.071**

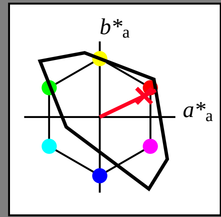
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t*



%Gamut

u^*_{rel} = 118

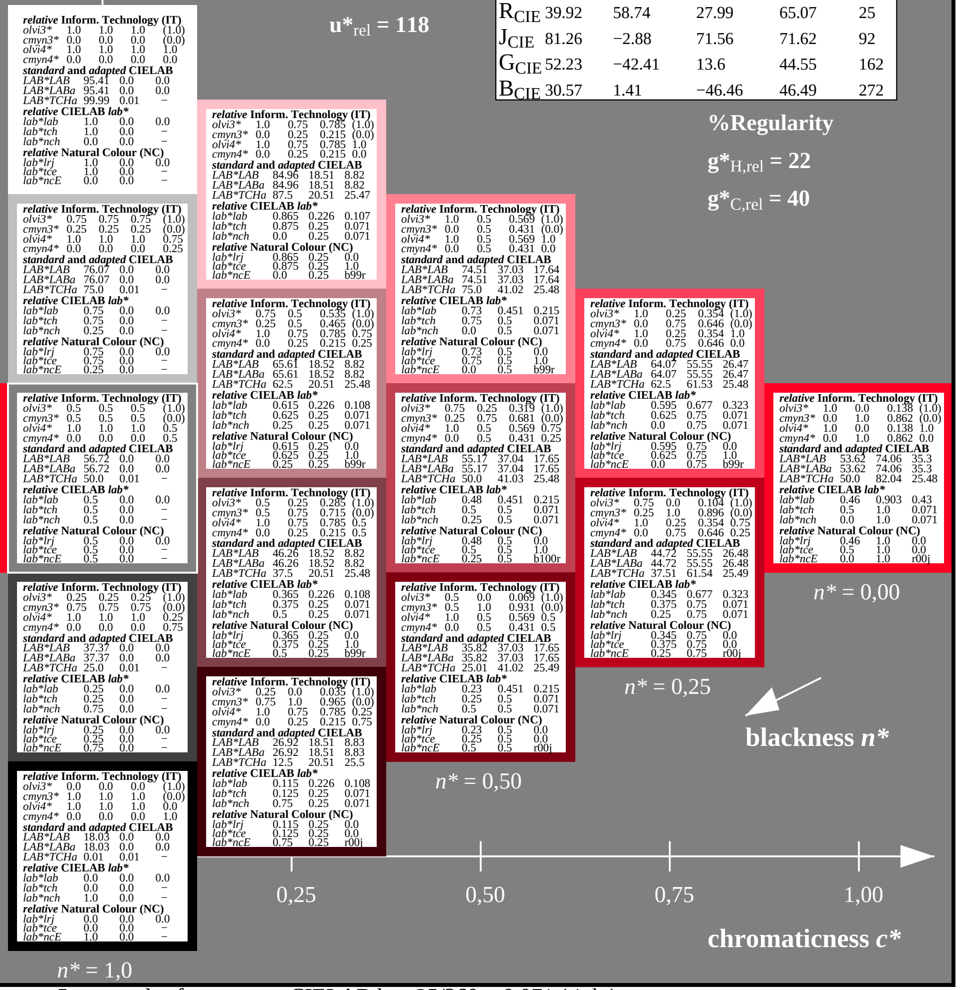
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

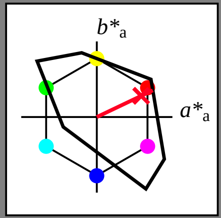
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t**



%Gamut

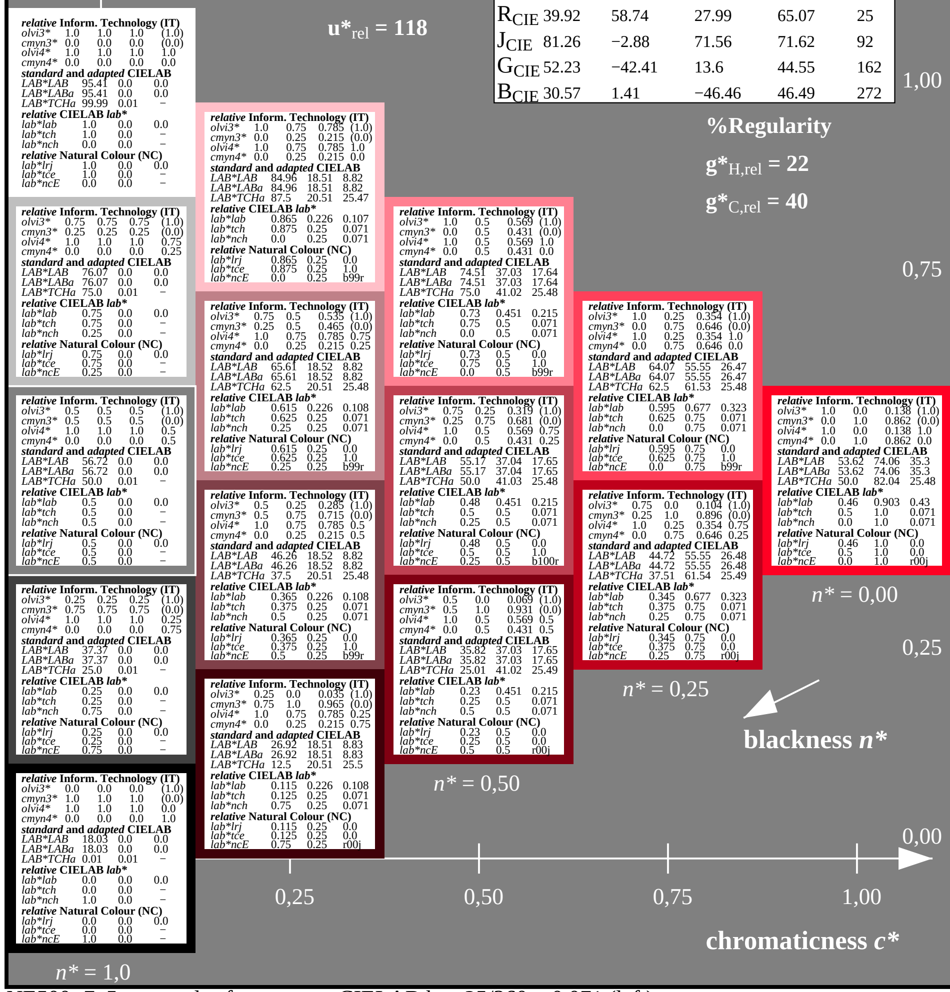
u^*_{rel} = 118

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 Natural Luminous System NLS00

for hue *h* = lab*h = 25/360 = 0.071*

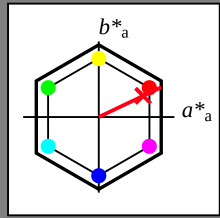
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

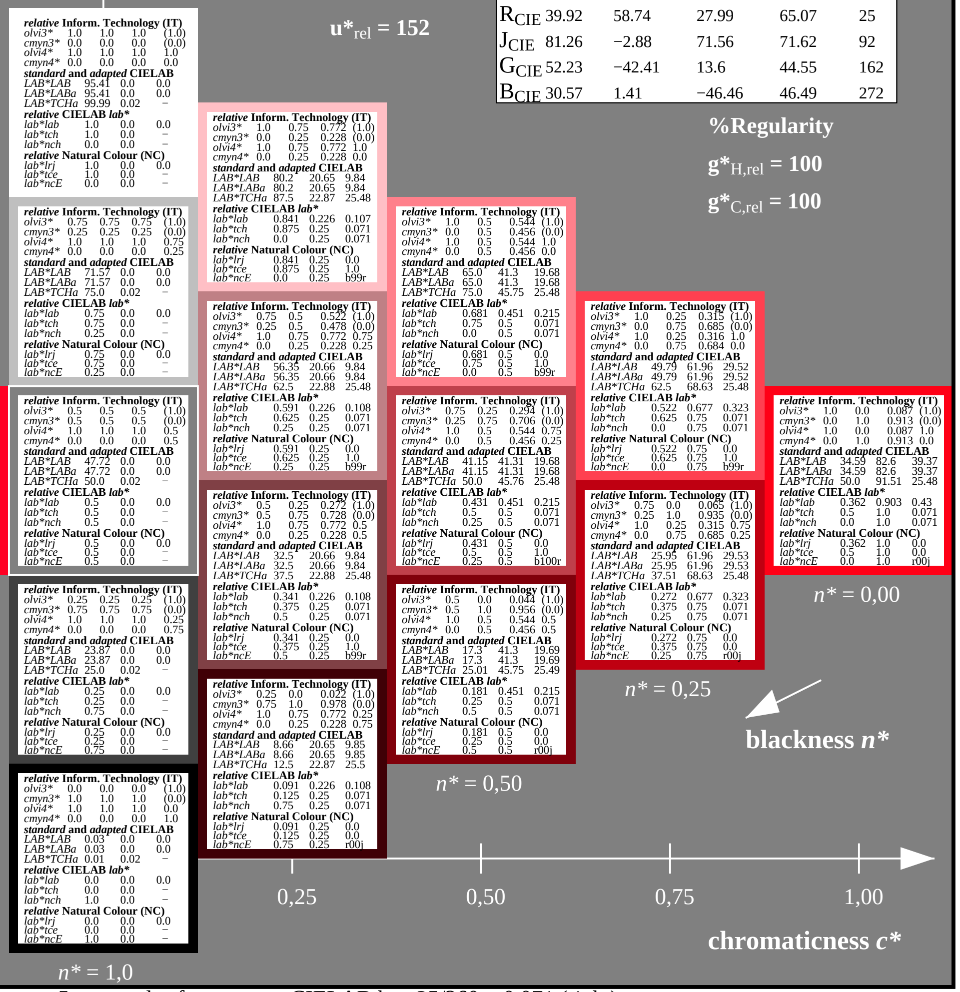
u^*_{rel} = 152

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

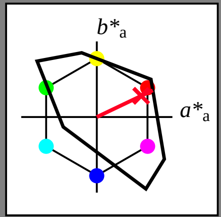


NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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*

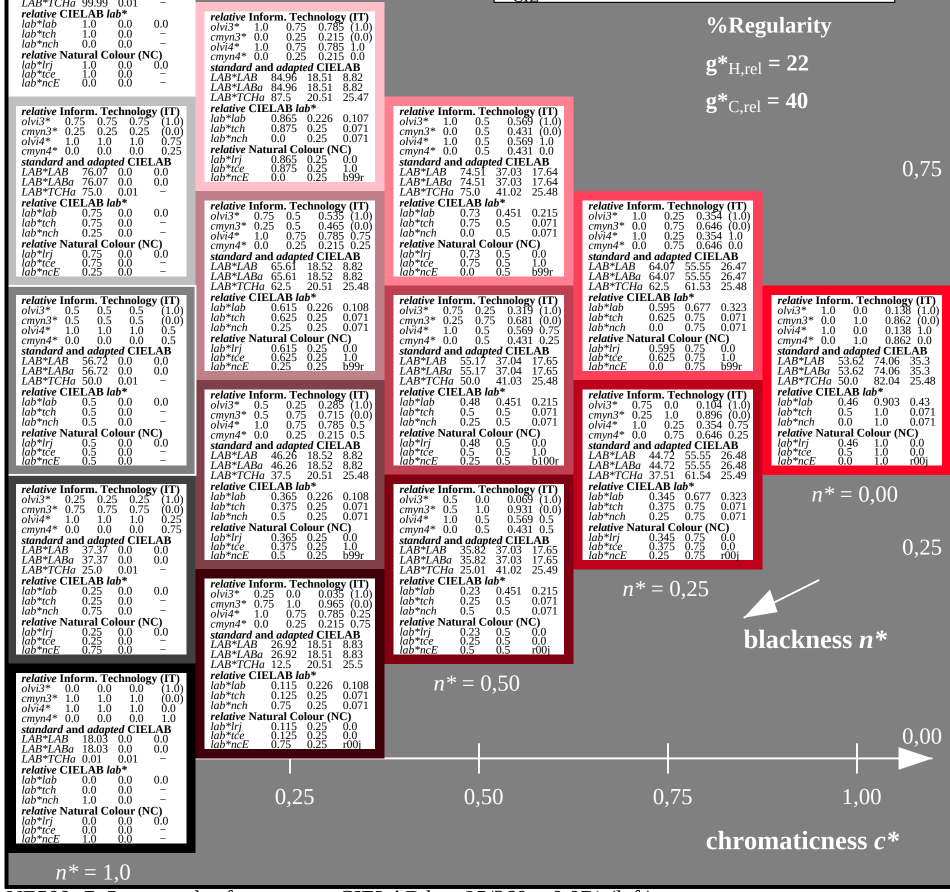


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

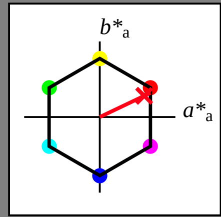
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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 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*

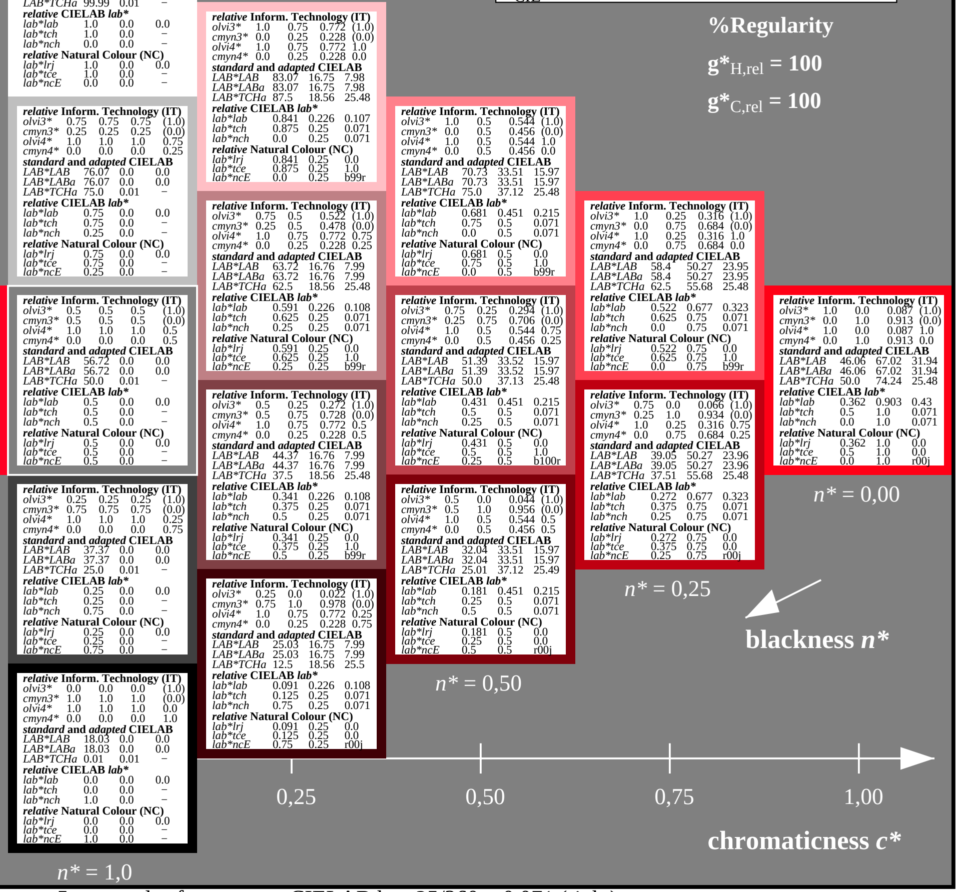


%Gamut
u^*_{rel} = 100

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



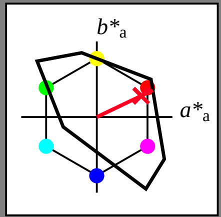
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

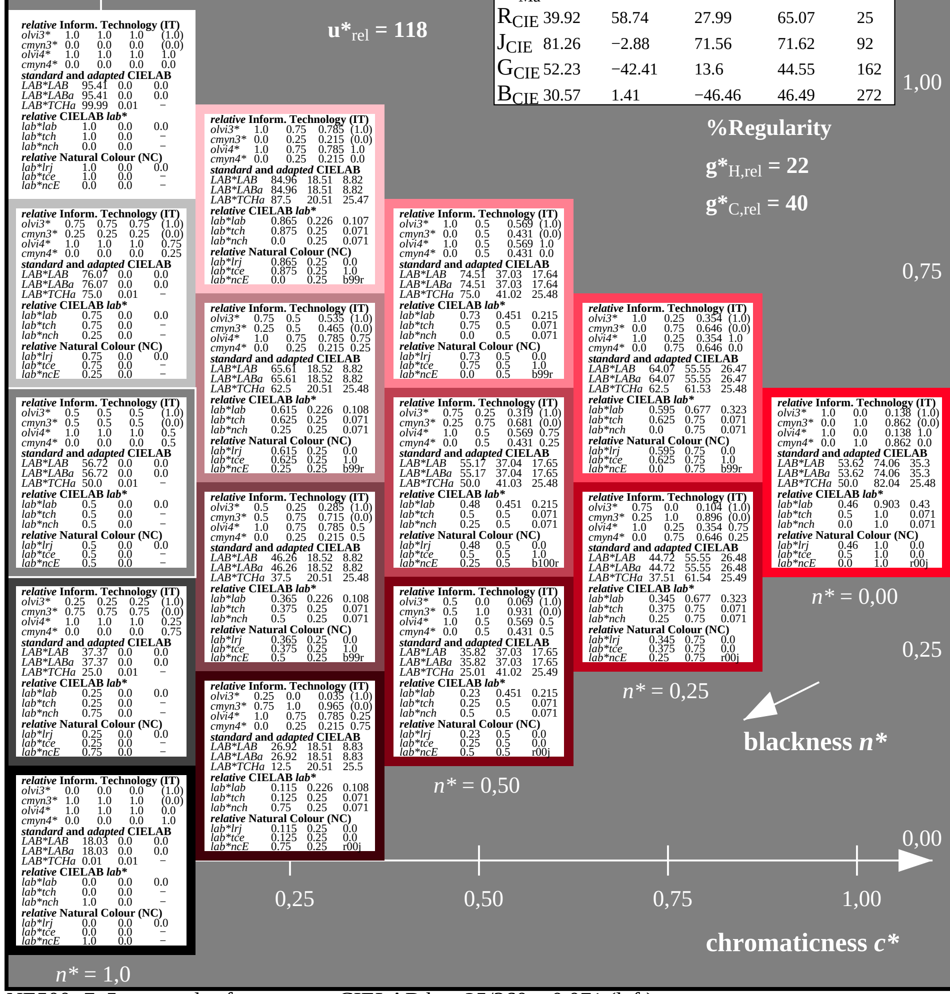
u^*_{rel} = 118

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

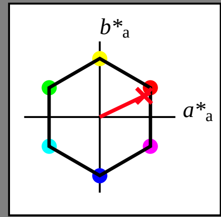
$g^*_{C,rel}$ = 40



Output: Colorimetric 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

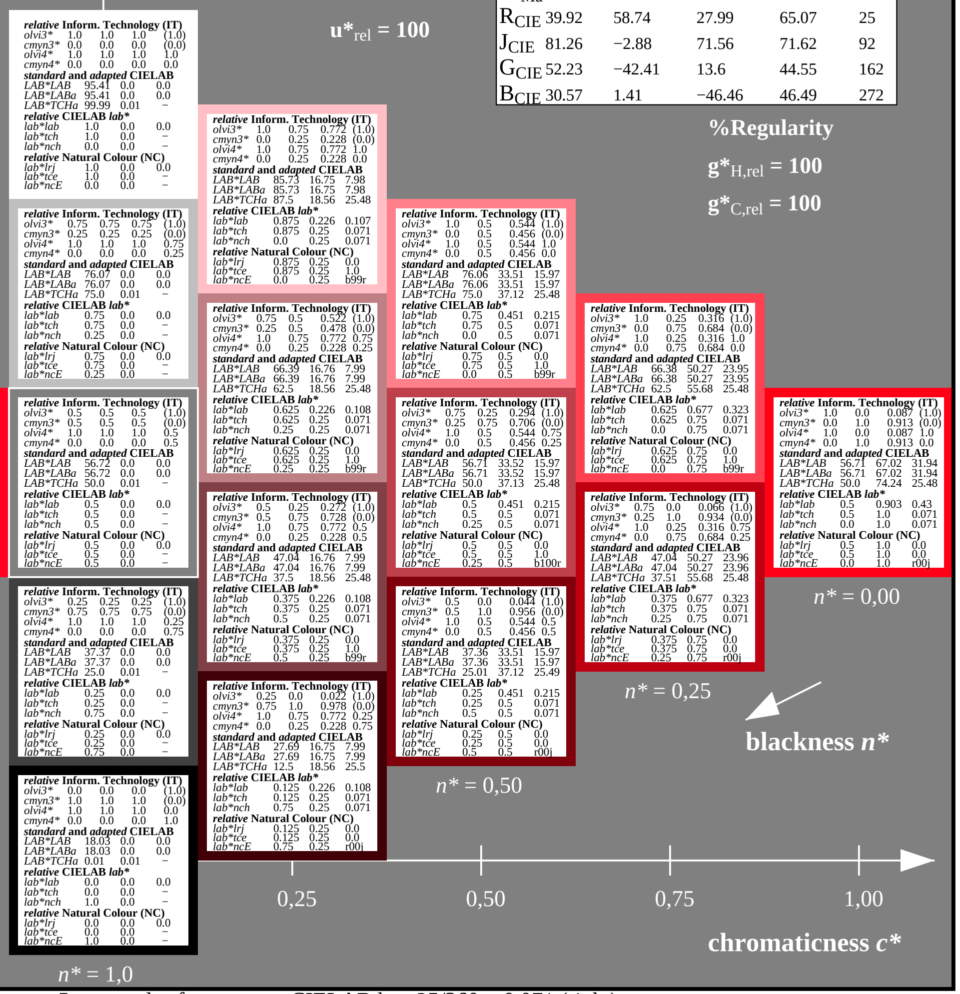
u^*_{rel} = 100

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

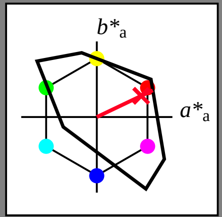
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

u^*_{rel} = 118

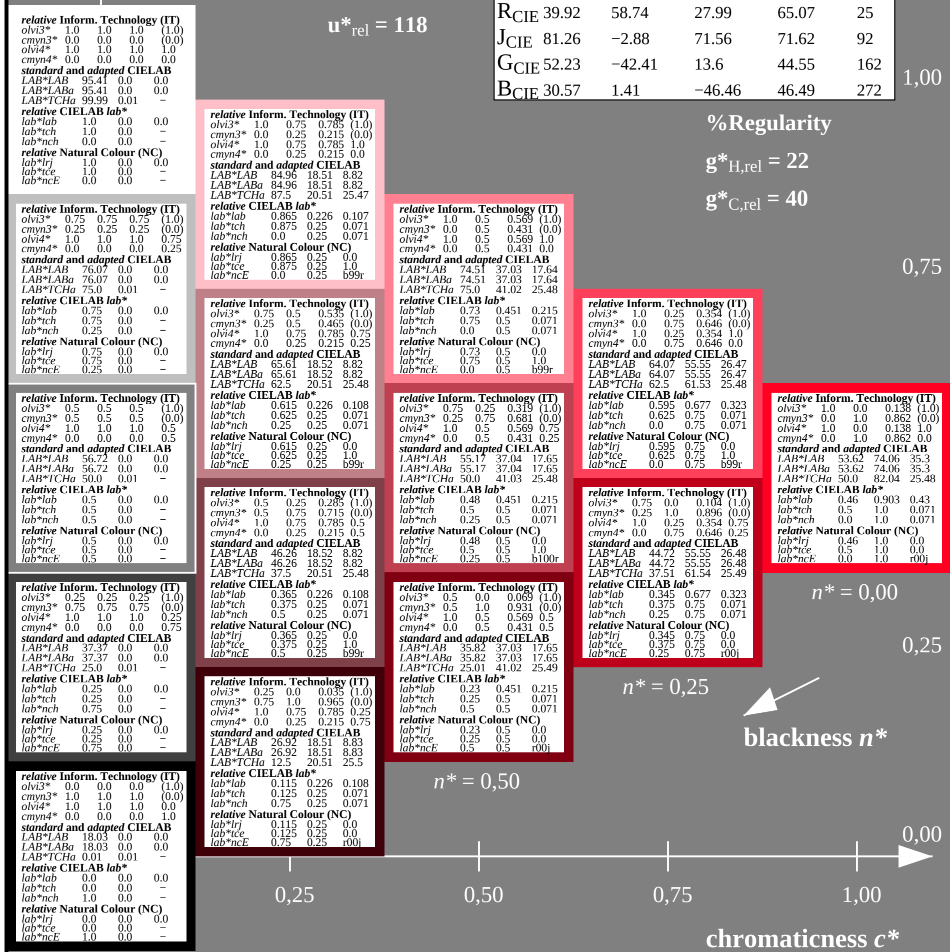
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 25/360 = 0.071$

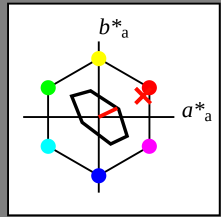
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

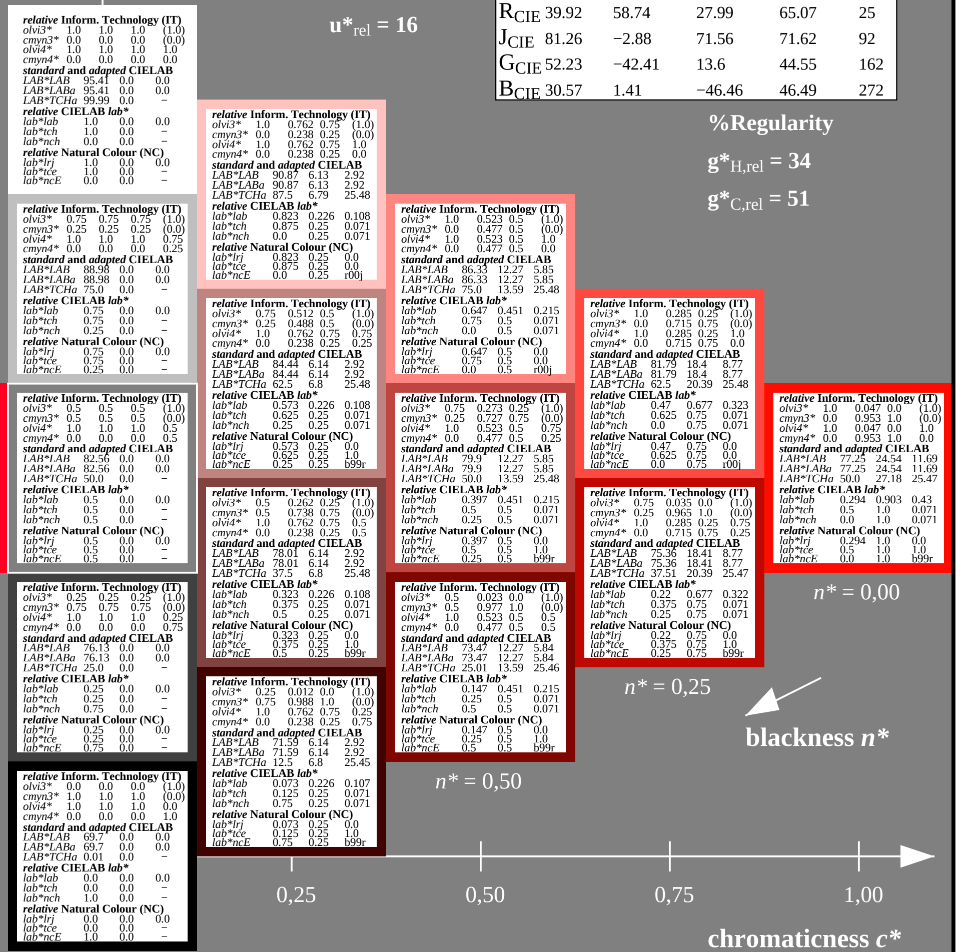
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



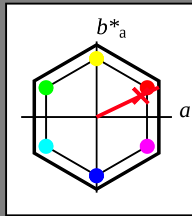
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

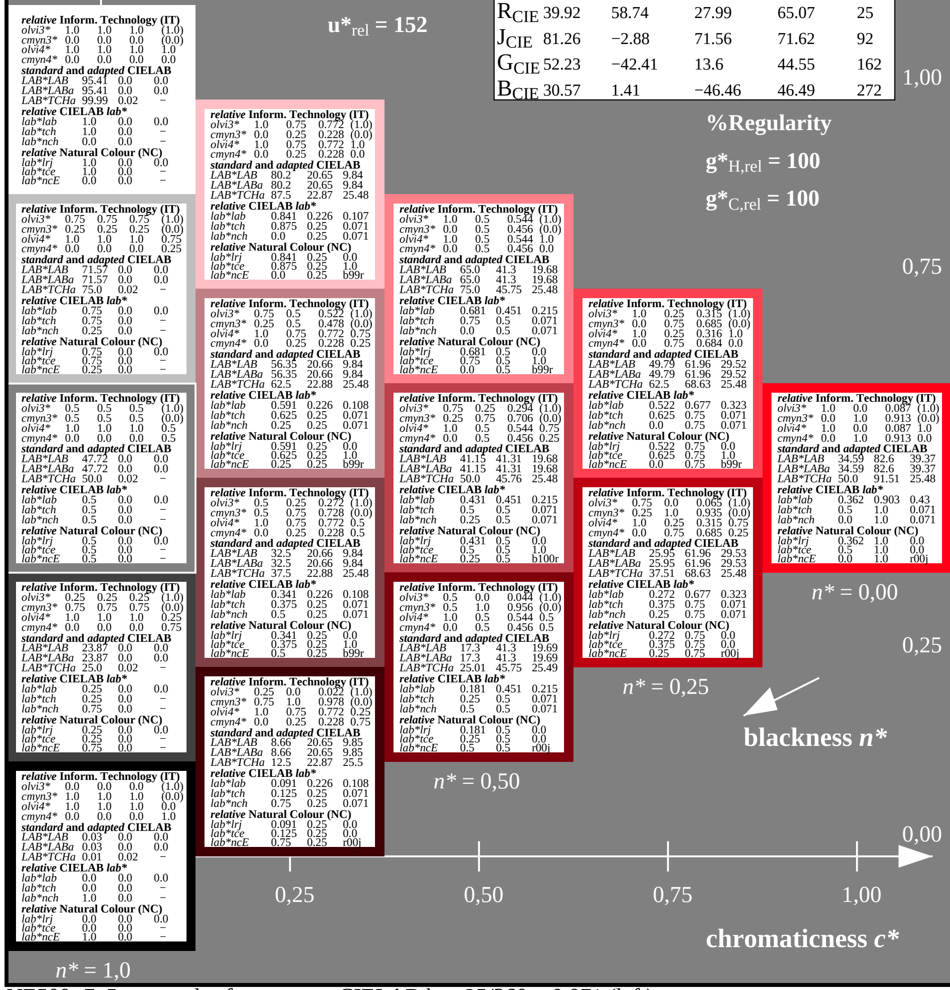
u^*_{rel} = 152

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

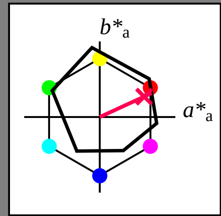
$g^*_{C,rel}$ = 100



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

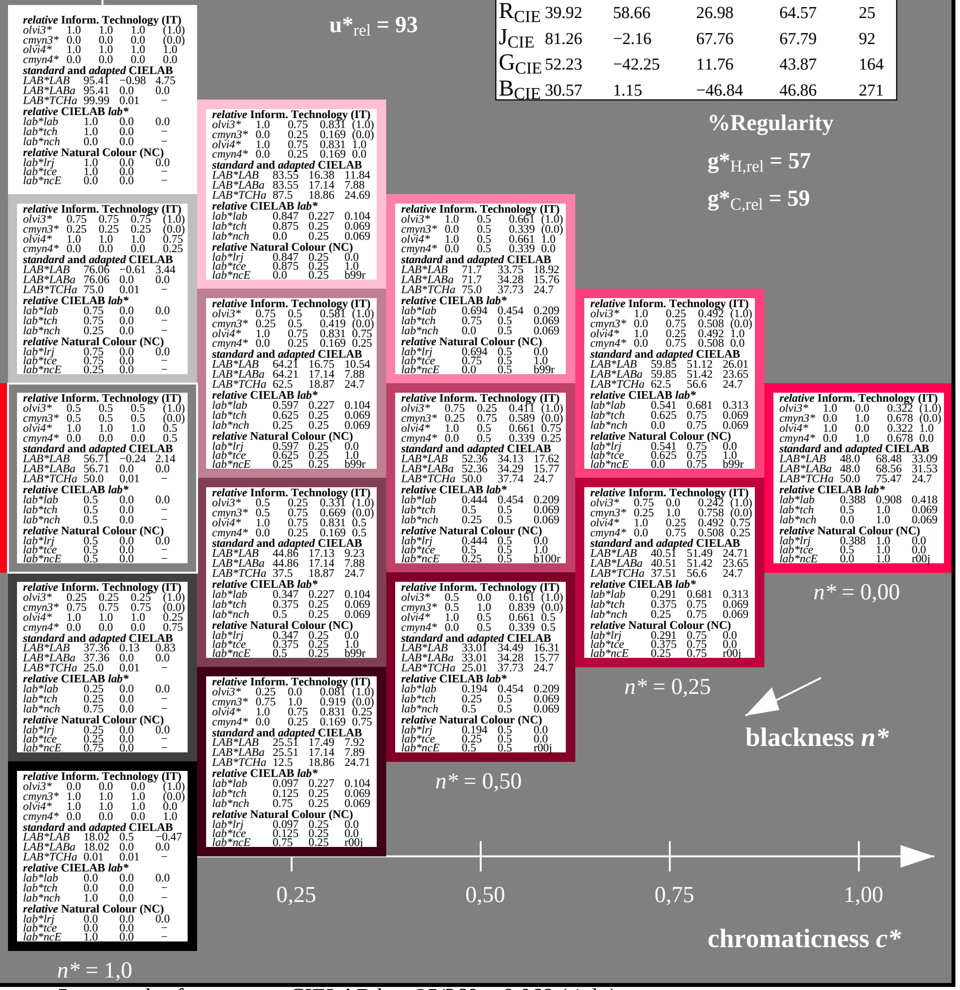
u^*_{rel} = 93

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



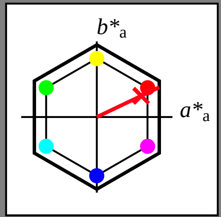
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric 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

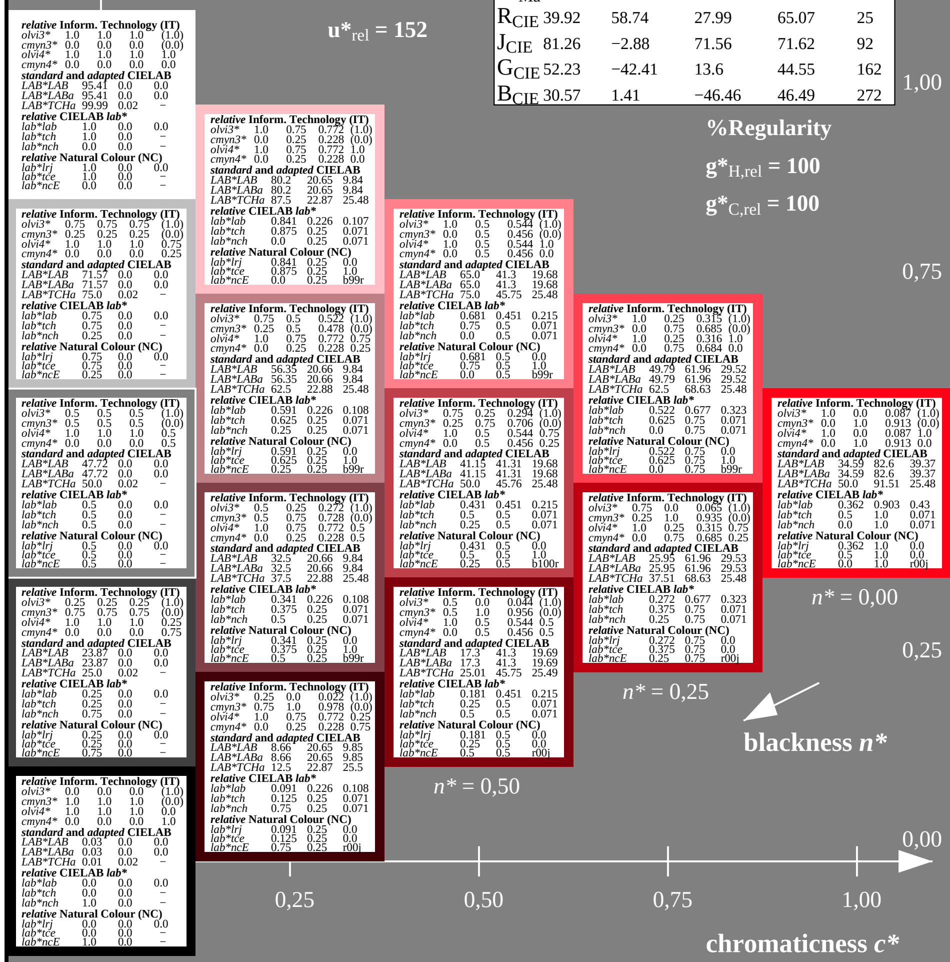
u^*_{rel} = 152

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

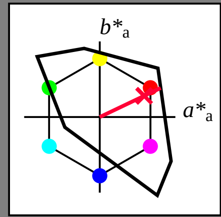
$g^*_{C,rel}$ = 100



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

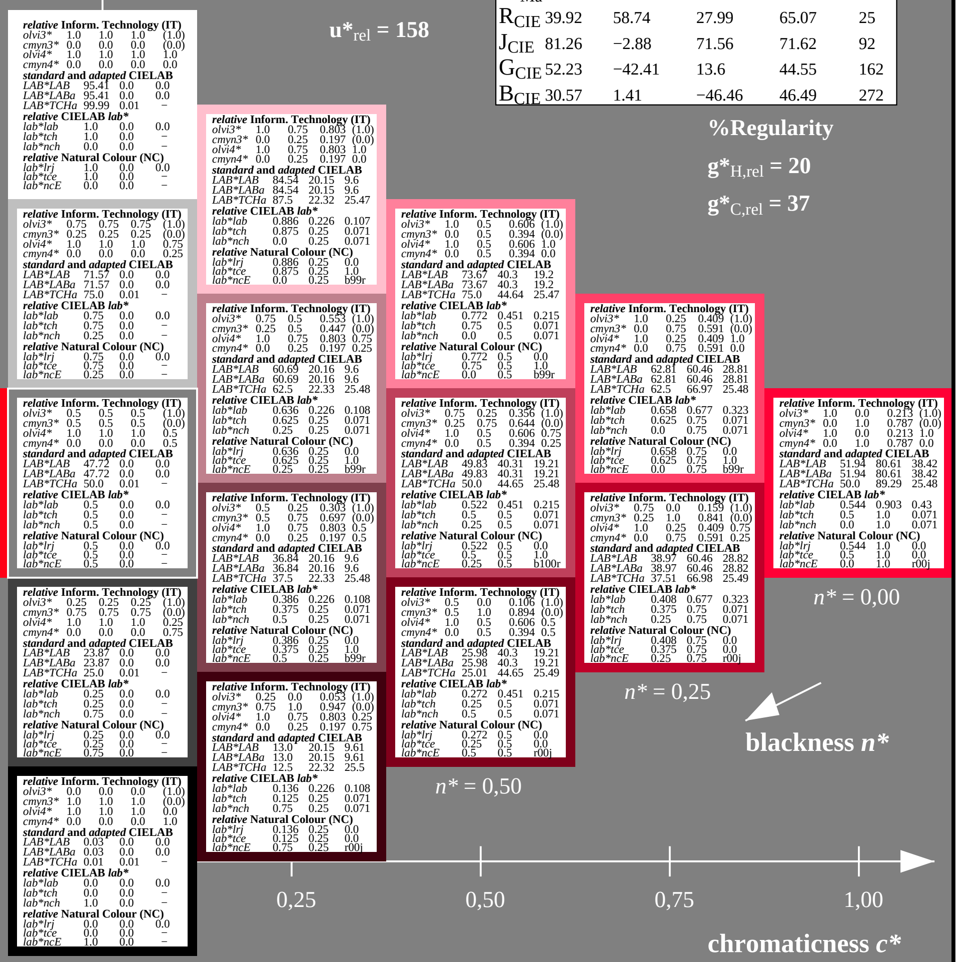
u^*_{rel} = 158

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



NE500−7, 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*

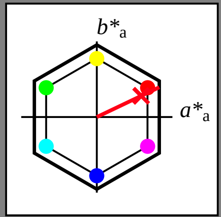
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

u^*_{rel} = 152

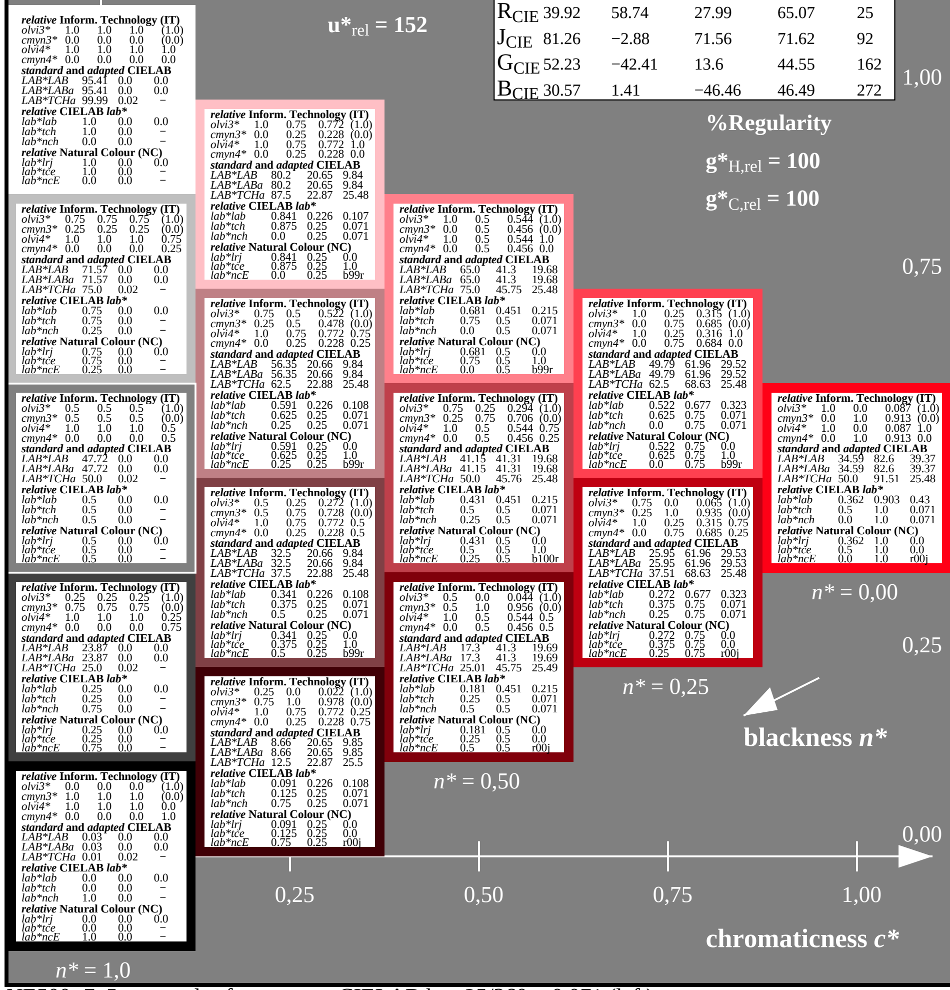
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h* = lab*h = 23/360 = 0.065*

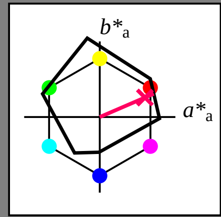
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness *t**



%Gamut

u^*_{rel} = 101

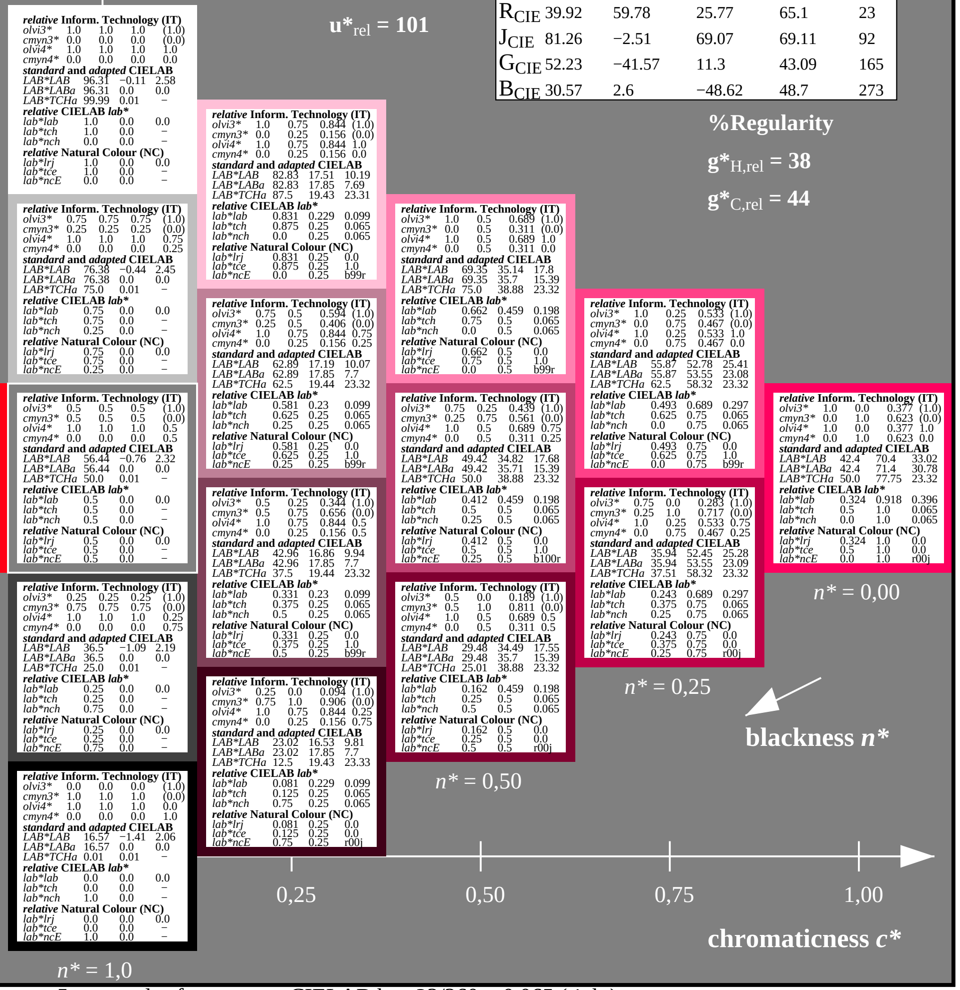
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Natural Luminous System NLS00

for hue $h^* = lab^*h = 25/360 = 0.071$

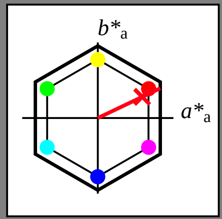
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

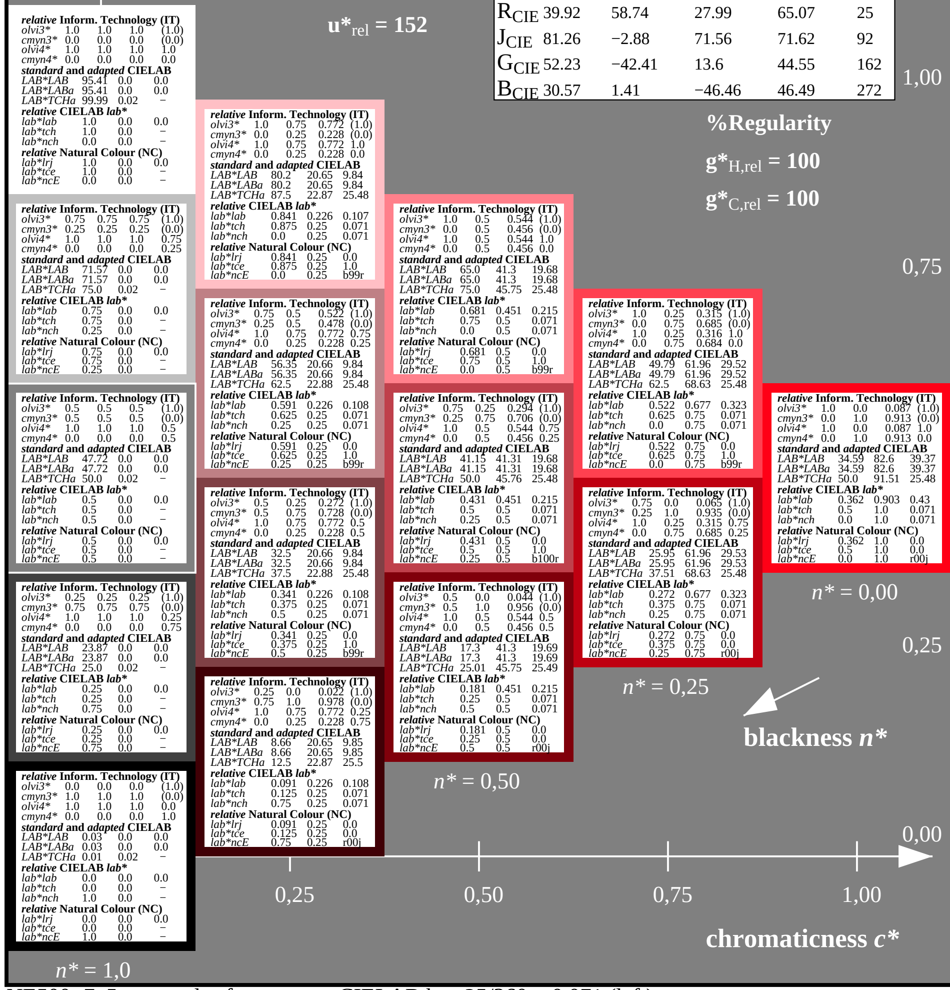
$u^*_{rel} = 152$

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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$

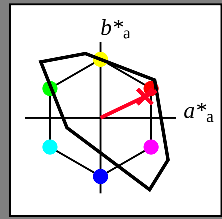
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

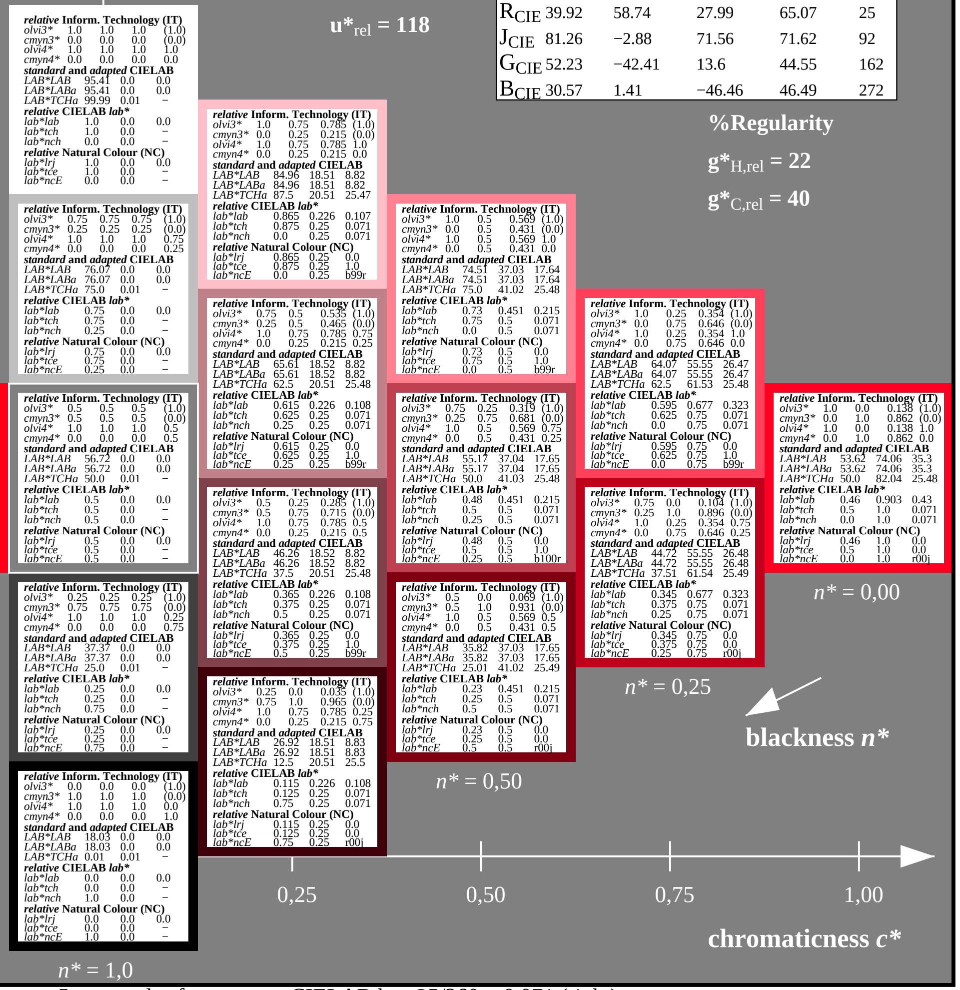
$u^*_{rel} = 118$

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

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

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



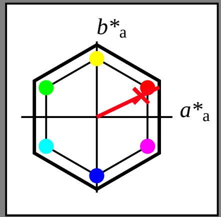
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

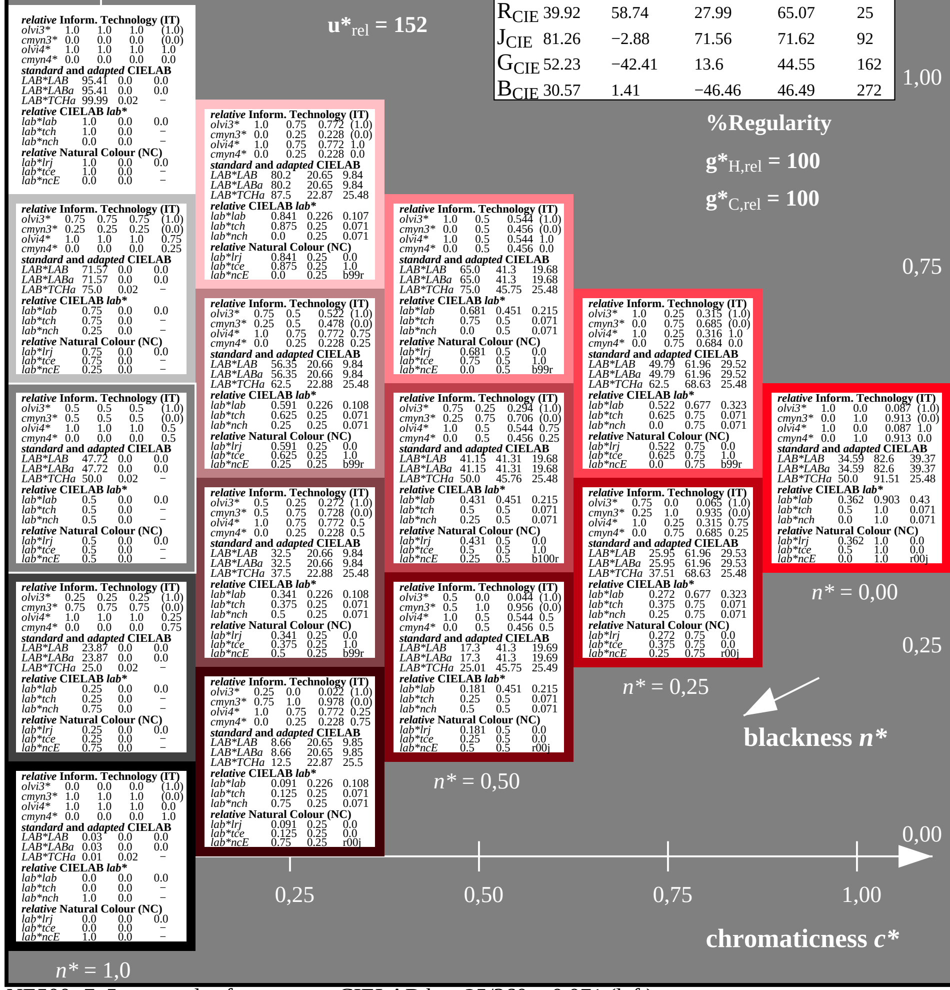
$u^*_{rel} = 152$

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
NLS00; adapted (a) CIELAB data					
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

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

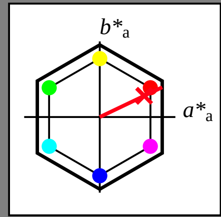
$g^*_{C,rel} = 100$



Output: Colorimetric 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

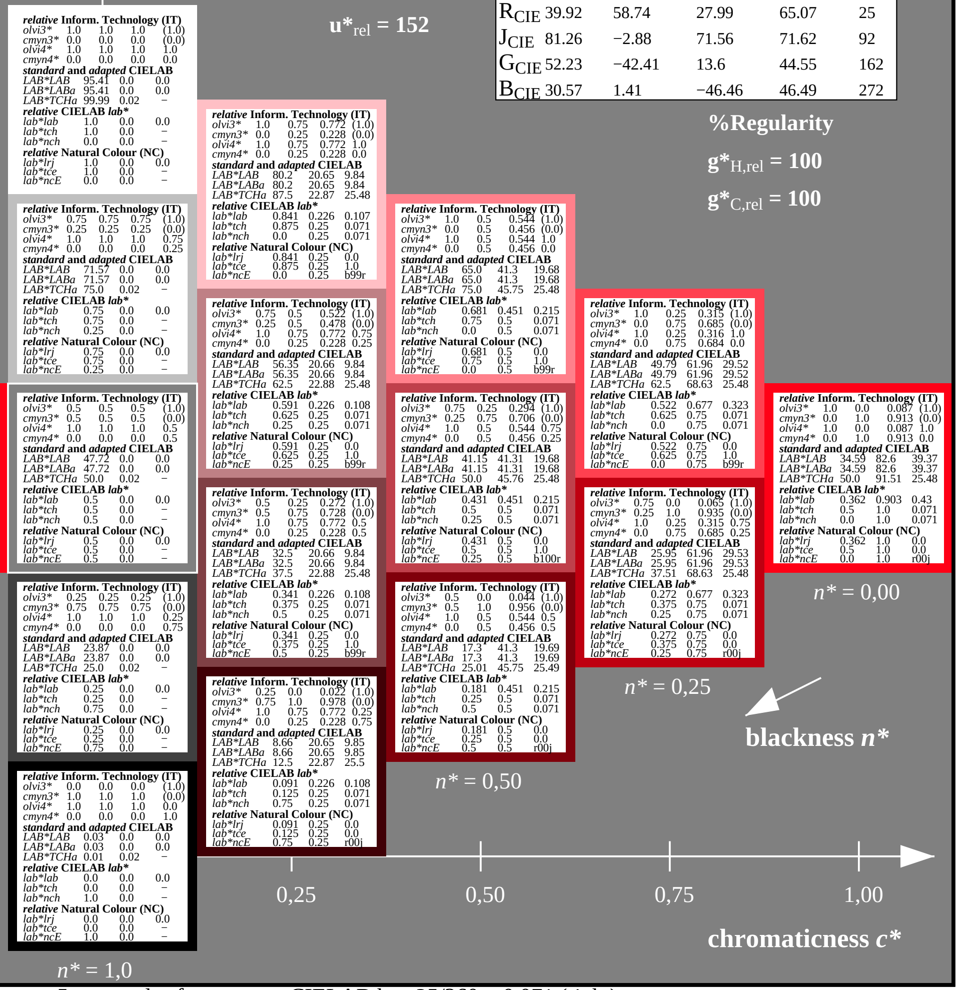
$u^*_{rel} = 152$

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
NLS00; adapted (a) CIELAB data					
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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

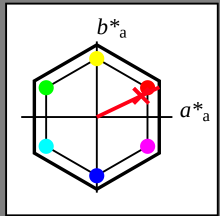
*lab*tch and lab*nch*

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

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

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

1,00 0,75 0,50 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 $h^* = lab^*h = 25/360 = 0.071$

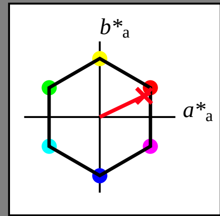
*lab*tch and lab*nch*

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

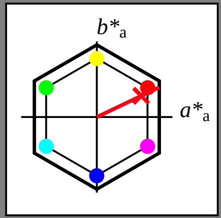
chromaticness c^*

NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

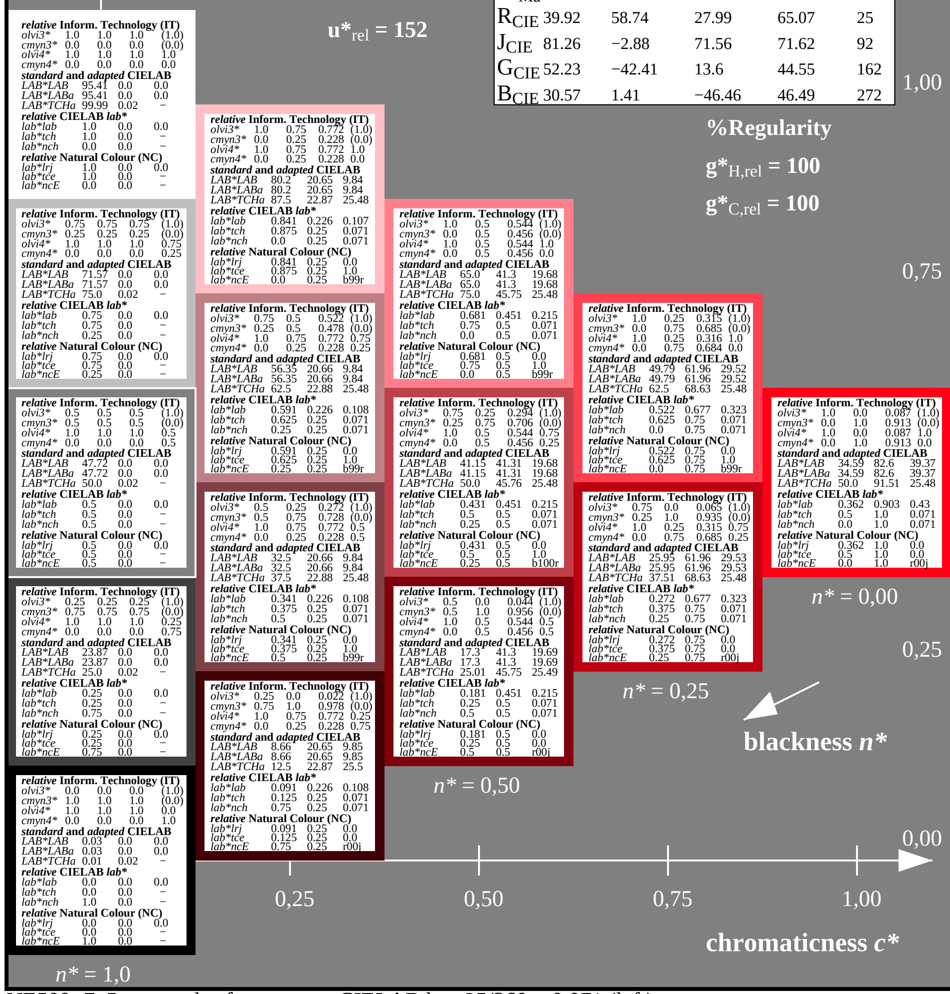
Input: Colorimetric Natural Luminous System NLS00
for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch and lab*nch*

D65: hue R
LCH*Ma: 35 92 25
olv*Ma: 1.0 0.0 0.09
triangle lightness t^*



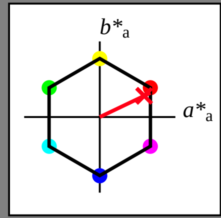
%Gamut
$u^*_{rel} = 152$

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



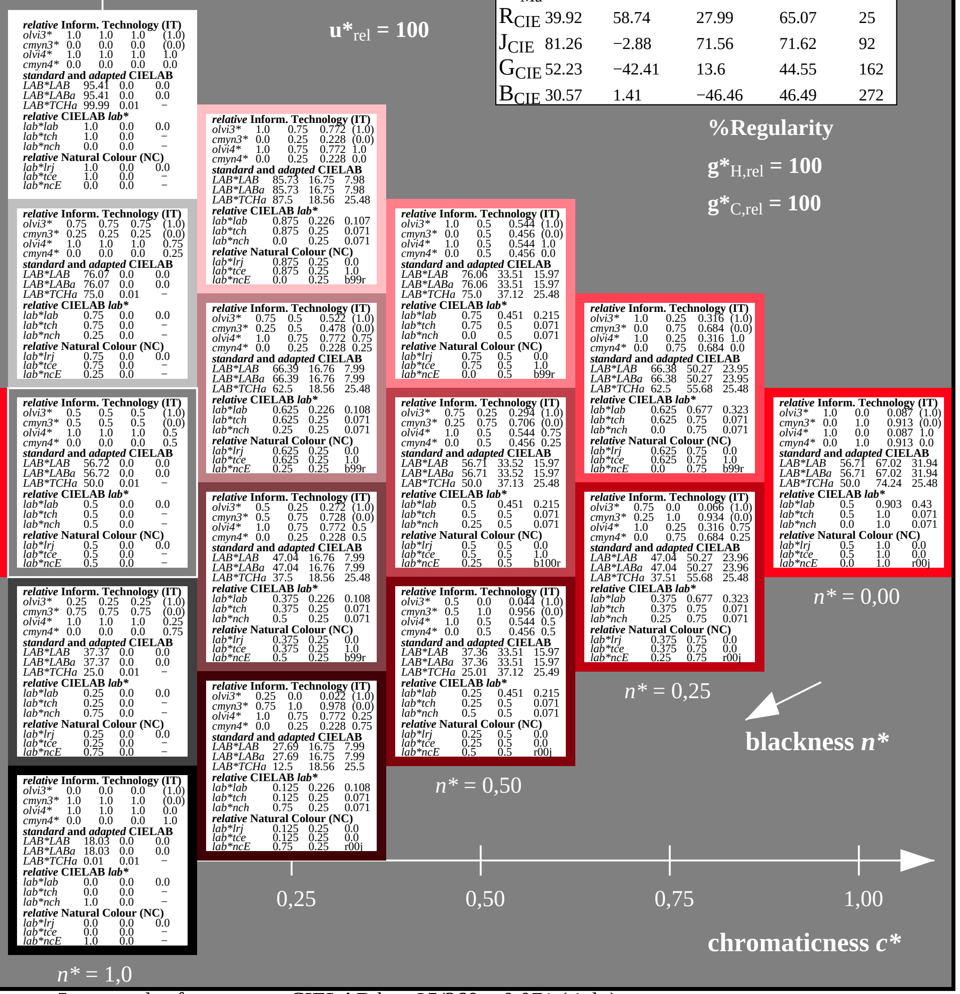
Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch and lab*nch*

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



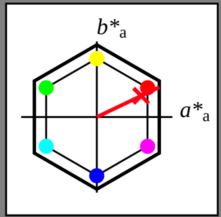
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

$u^*_{rel} = 152$

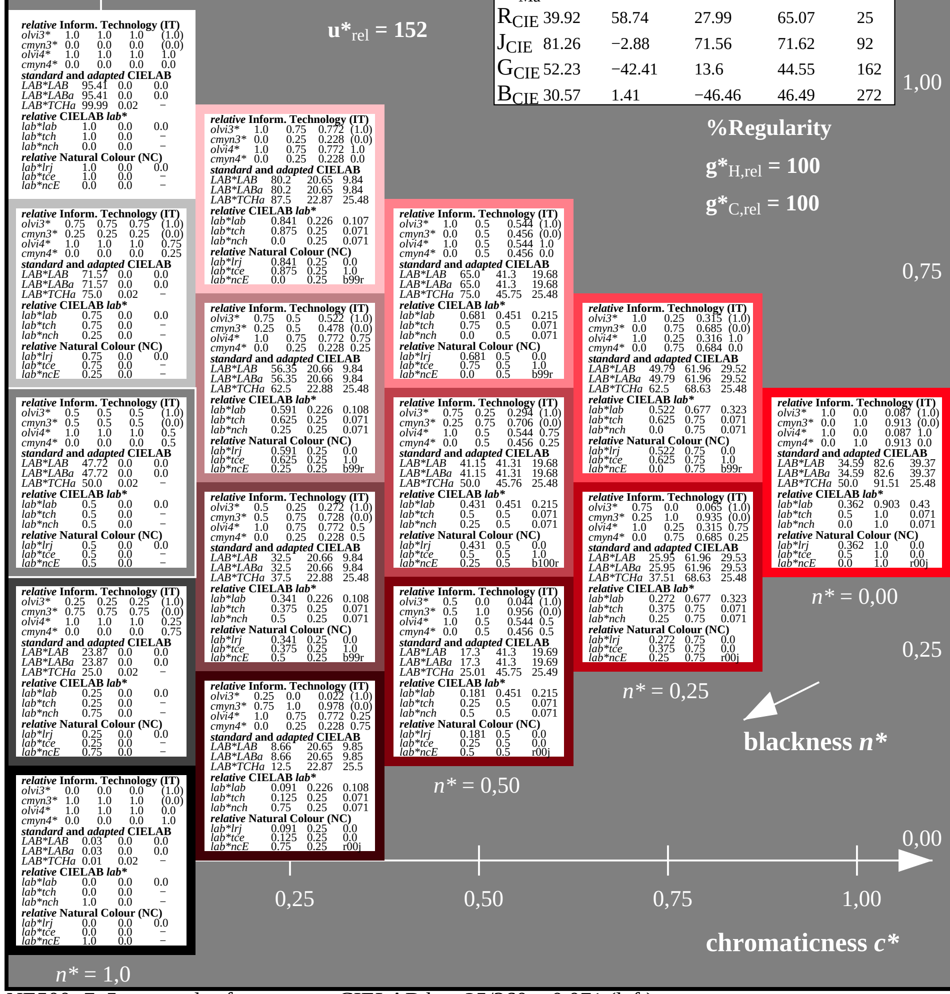
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

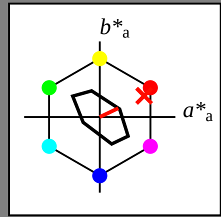
$g^*_{C,rel} = 100$



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

$u^*_{rel} = 16$

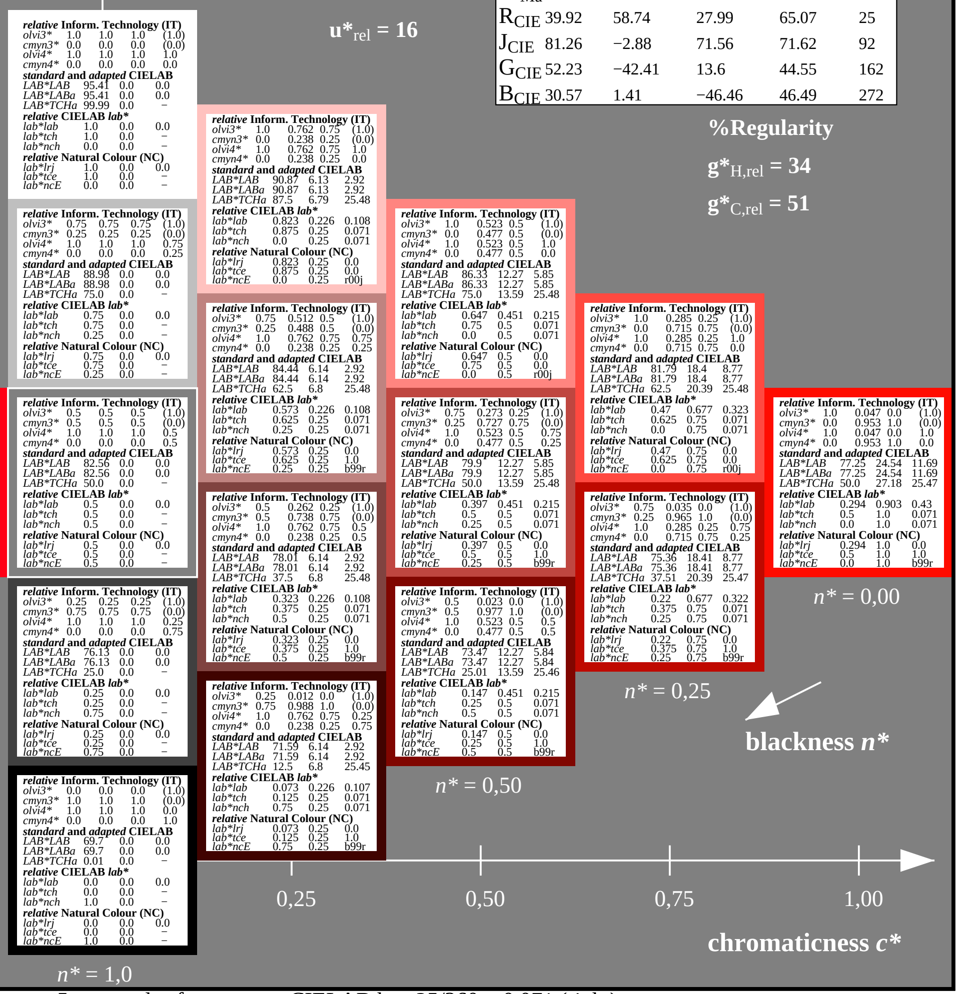
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

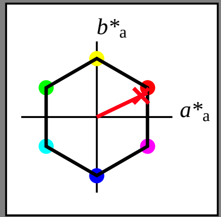


NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural 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*	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	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	0.5	0.522	(1.0)
cmyn3*	0.25	0.5	0.478	(0.0)
olvi4*	1.0	0.75	0.772	0.75
cmyn4*	0.0	0.25	0.228	0.25
standard and adapted CIELAB				
LAB*LAB	63.72	16.76	7.99	
LAB*LABa	63.72	16.76	7.99	
LAB*TCHa	62.5	18.56	25.48	
relative CIELAB lab*				
lab*lab	0.591	0.226	0.108	
lab*tch	0.625	0.25	0.071	
lab*nch	0.25	0.25	0.071	
relative Natural Colour (NC)				
lab*lrj	0.591	0.25	0.0	
lab*tce	0.625	0.25	1.0	
lab*ncE	0.25	0.25	b99r	

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*	0.25	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	25.48	
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	1.0	
lab*ncE	0.75	0.25	r00j	

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*	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	1.0	
lab*ncE	0.5	0.5	r00j	

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*	0.75	0.0	0.066	(1.0)
cmyn3*	0.25	1.0	0.934	(0.0)
olvi4*	1.0	0.25	0.316	0.75
cmyn4*	0.0	0.75	0.684	0.25
standard and adapted CIELAB				
LAB*LAB	39.05	50.27	23.96	
LAB*LABa	39.05	50.27	23.96	
LAB*TCHa	37.51	55.68	25.48	
relative CIELAB lab*				
lab*lab	0.272	0.677	0.323	
lab*tch	0.375	0.75	0.071	
lab*nch	0.25	0.75	0.071	
relative Natural Colour (NC)				
lab*lrj	0.272	0.75	0.0	
lab*tce	0.375	0.75	1.0	
lab*ncE	0.25	0.75	r00j	

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	1.0	
lab*ncE	0.0	1.0	r00j	

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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

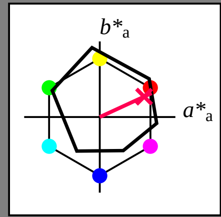
blackness n^*

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

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 25/360 = 0.069$
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

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	−0.98	4.75	
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	76.06	−0.61	3.44	
LAB*LABa	76.06	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	56.71	−0.24	2.14	
LAB*LABa	56.71	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	37.36	0.13	0.83	
LAB*LABa	37.36	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	18.02	0.5	−0.47	
LAB*LABa	18.02	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	0.75	0.831	(1.0)
cmyn3*	0.0	0.25	0.169	(0.0)
olvi4*	1.0	0.75	0.831	1.0
cmyn4*	0.0	0.25	0.169	0.0
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LABa	83.55	17.14	7.88	
LAB*TCHa	87.5	18.86	24.69	
relative CIELAB lab*				
lab*lab	0.847	0.227	0.104	
lab*tch	0.875	0.25	0.069	
lab*nch	0.0	0.25	0.069	
relative Natural Colour (NC)				
lab*lrj	0.847	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	0.5	0.581	(1.0)
cmyn3*	0.25	0.5	0.419	(0.0)
olvi4*	1.0	0.75	0.831	0.75
cmyn4*	0.0	0.25	0.169	0.25
standard and adapted CIELAB				
LAB*LAB	64.21	16.75	10.54	
LAB*LABa	64.21	17.14	7.88	
LAB*TCHa	62.5	18.87	24.7	
relative CIELAB lab*				
lab*lab	0.597	0.227	0.104	
lab*tch	0.625	0.25	0.069	
lab*nch	0.25	0.25	0.069	
relative Natural Colour (NC)				
lab*lrj	0.597	0.25	0.0	
lab*tce	0.625	0.25	1.0	
lab*ncE	0.25	0.25	b99r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.25	0.331	(1.0)
cmyn3*	0.5	0.75	0.669	(0.0)
olvi4*	1.0	0.75	0.831	0.5
cmyn4*	0.0	0.25	0.169	0.5
standard and adapted CIELAB				
LAB*LAB	44.86	17.13	9.23	
LAB*LABa	44.86	17.14	7.88	
LAB*TCHa	37.5	18.87	24.7	
relative CIELAB lab*				
lab*lab	0.347	0.227	0.104	
lab*tch	0.375	0.25	0.069	
lab*nch	0.5	0.25	0.069	
relative Natural Colour (NC)				
lab*lrj	0.347	0.25	0.0	
lab*tce	0.375	0.25	1.0	
lab*ncE	0.5	0.25	b99r	

relative Inform. Technology (IT)				
olvi3*	0.25	0.0	0.081	(1.0)
cmyn3*	0.75	1.0	0.919	(0.0)
olvi4*	1.0	0.75	0.831	0.25
cmyn4*	0.0	0.25	0.169	0.75
standard and adapted CIELAB				
LAB*LAB	25.51	17.49	7.92	
LAB*LABa	25.51	17.14	7.89	
LAB*TCHa	12.5	18.86	24.71	
relative CIELAB lab*				
lab*lab	0.097	0.227	0.104	
lab*tch	0.125	0.25	0.069	
lab*nch	0.75	0.25	0.069	
relative Natural Colour (NC)				
lab*lrj	0.097	0.25	0.0	
lab*tce	0.125	0.25	1.0	
lab*ncE	0.75	0.25	r00j	

relative Inform. Technology (IT)				
olvi3*	1.0	0.5	0.661	(1.0)
cmyn3*	0.0	0.5	0.339	(0.0)
olvi4*	1.0	0.5	0.661	1.0
cmyn4*	0.0	0.5	0.339	0.0
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LABa	71.7	34.28	15.76	
LAB*TCHa	75.0	37.73	24.7	
relative CIELAB lab*				
lab*lab	0.694	0.454	0.209	
lab*tch	0.75	0.5	0.069	
lab*nch	0.0	0.5	0.069	
relative Natural Colour (NC)				
lab*lrj	0.694	0.5	0.0	
lab*tce	0.75	0.5	1.0	
lab*ncE	0.0	0.5	b99r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.25	0.411	(1.0)
cmyn3*	0.25	0.75	0.589	(0.0)
olvi4*	1.0	0.5	0.661	0.75
cmyn4*	0.0	0.5	0.339	0.25
standard and adapted CIELAB				
LAB*LAB	52.36	34.13	17.62	
LAB*LABa	52.36	34.29	15.77	
LAB*TCHa	50.0	37.74	24.7	
relative CIELAB lab*				
lab*lab	0.444	0.454	0.209	
lab*tch	0.5	0.5	0.069	
lab*nch	0.25	0.5	0.069	
relative Natural Colour (NC)				
lab*lrj	0.444	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	0.161	(1.0)
cmyn3*	0.5	1.0	0.839	(0.0)
olvi4*	1.0	0.5	0.661	0.5
cmyn4*	0.0	0.5	0.339	0.5
standard and adapted CIELAB				
LAB*LAB	33.01	34.49	16.31	
LAB*LABa	33.01	34.28	15.77	
LAB*TCHa	25.01	37.73	24.7	
relative CIELAB lab*				
lab*lab	0.194	0.454	0.209	
lab*tch	0.25	0.5	0.069	
lab*nch	0.5	0.5	0.069	
relative Natural Colour (NC)				
lab*lrj	0.194	0.5	0.0	
lab*tce	0.25	0.5	1.0	
lab*ncE	0.5	0.5	r00j	

relative Inform. Technology (IT)				
olvi3*	1.0	0.25	0.492	(1.0)
cmyn3*	0.0	0.75	0.508	(0.0)
olvi4*	1.0	0.25	0.492	1.0
cmyn4*	0.0	0.75	0.508	0.0
standard and adapted CIELAB				
LAB*LAB	59.85	51.12	26.01	
LAB*LABa	59.85	51.42	23.65	
LAB*TCHa	62.5	56.6	24.7	
relative CIELAB lab*				
lab*lab	0.541	0.681	0.313	
lab*tch	0.625	0.75	0.069	
lab*nch	0.0	0.75	0.069	
relative Natural Colour (NC)				
lab*lrj	0.541	0.75	0.0	
lab*tce	0.625	0.75	1.0	
lab*ncE	0.0	0.75	b99r	

relative Inform. Technology (IT)				
olvi3*	0.75	0.0	0.242	(1.0)
cmyn3*	0.25	1.0	0.758	(0.0)
olvi4*	1.0	0.25	0.492	0.75
cmyn4*	0.0	0.75	0.508	0.25
standard and adapted CIELAB				
LAB*LAB	40.51	51.49	24.71	
LAB*LABa	40.51	51.42	23.65	
LAB*TCHa	37.51	56.6	24.7	
relative CIELAB lab*				
lab*lab	0.291	0.681	0.313	
lab*tch	0.375	0.75	0.069	
lab*nch	0.25	0.75	0.069	
relative Natural Colour (NC)				
lab*lrj	0.291	0.75	0.0	
lab*tce	0.375	0.75	1.0	
lab*ncE	0.25	0.75	r00j	

relative Inform. Technology (IT)				
olvi3*	1.0	0.0	0.322	(1.0)
cmyn3*	0.0	1.0	0.678	(0.0)
olvi4*	1.0	0.0	0.322	1.0
cmyn4*	0.0	1.0	0.678	0.0
standard and adapted CIELAB				
LAB*LAB	48.0	68.48	33.09	
LAB*LABa	48.0	68.56	31.53	
LAB*TCHa	50.0	75.47	24.7	
relative CIELAB lab*				
lab*lab	0.388	0.908	0.418	
lab*tch	0.5	1.0	0.069	
lab*nch	0.0	1.0	0.069	
relative Natural Colour (NC)				
lab*lrj	0.388	1.0	0.0	
lab*tce	0.5	1.0	1.0	
lab*ncE	0.0	1.0	r00j	

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

blackness n^*

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

chromaticness c^*

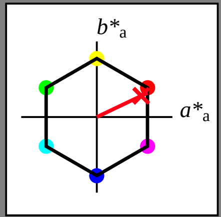
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric 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

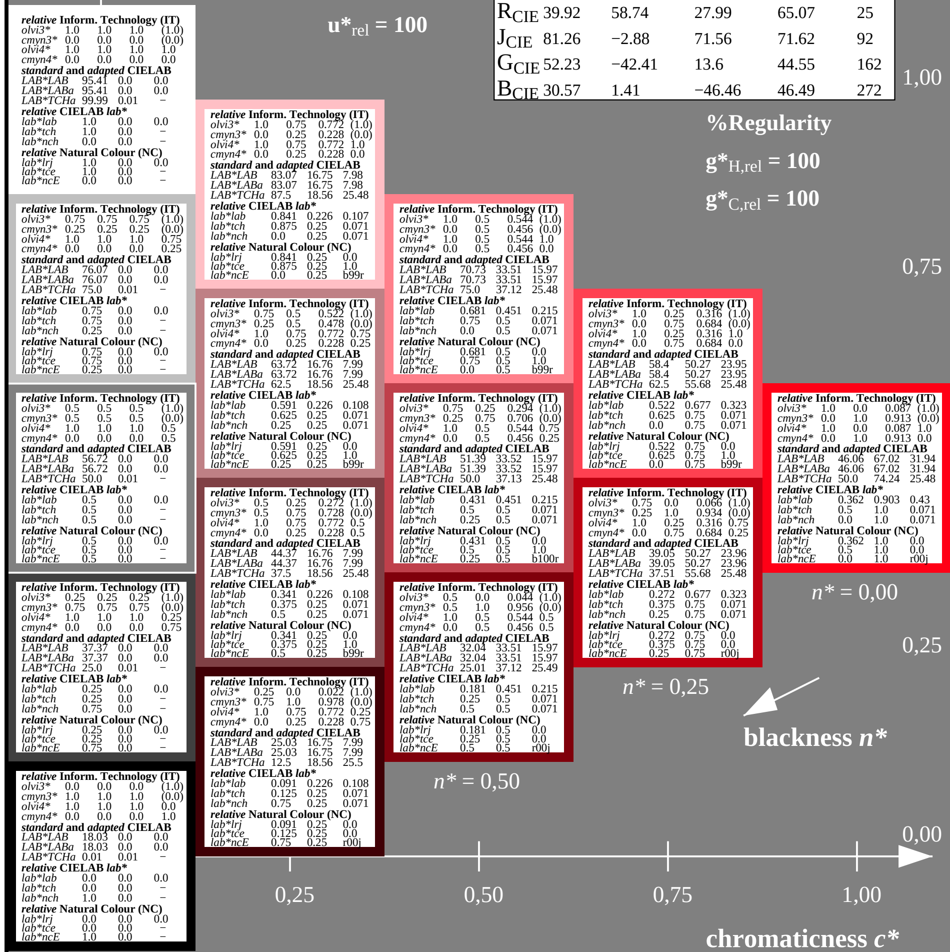
u^*_{rel} = 100

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

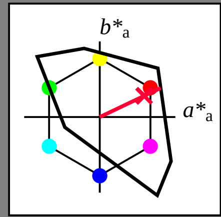
$g^*_{C,rel}$ = 100



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

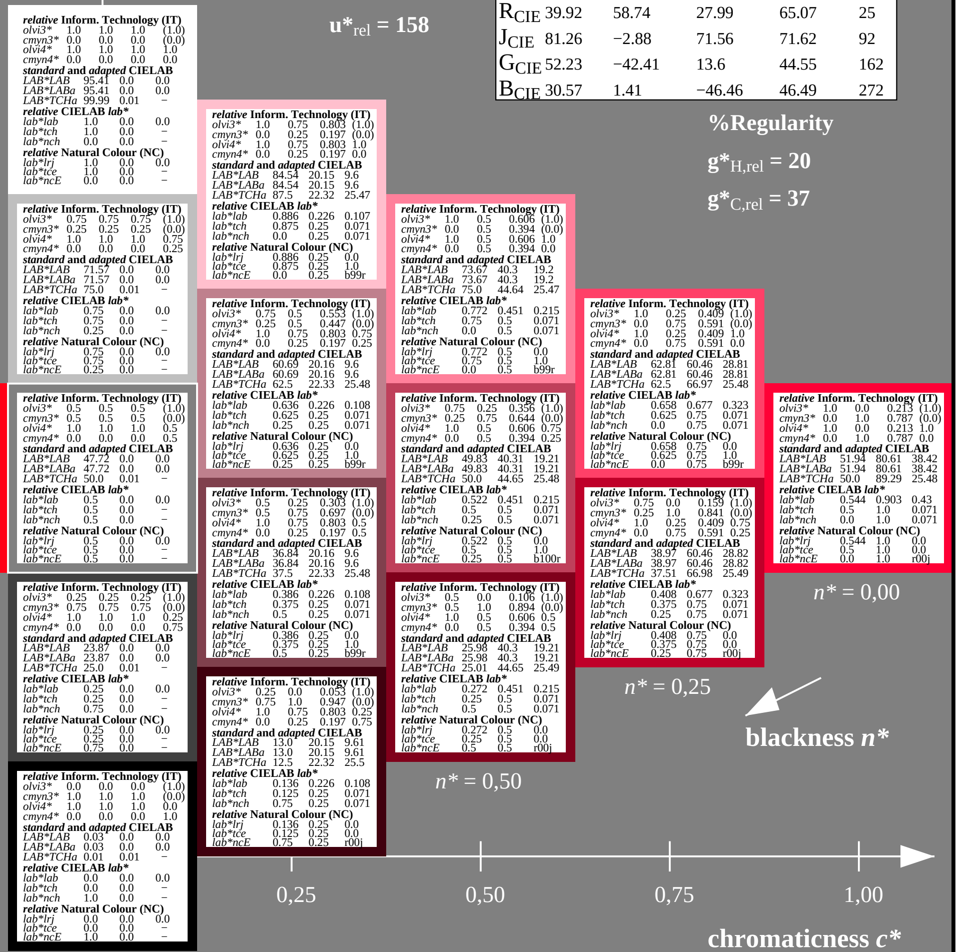
u^*_{rel} = 158

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



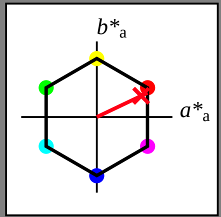
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural 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

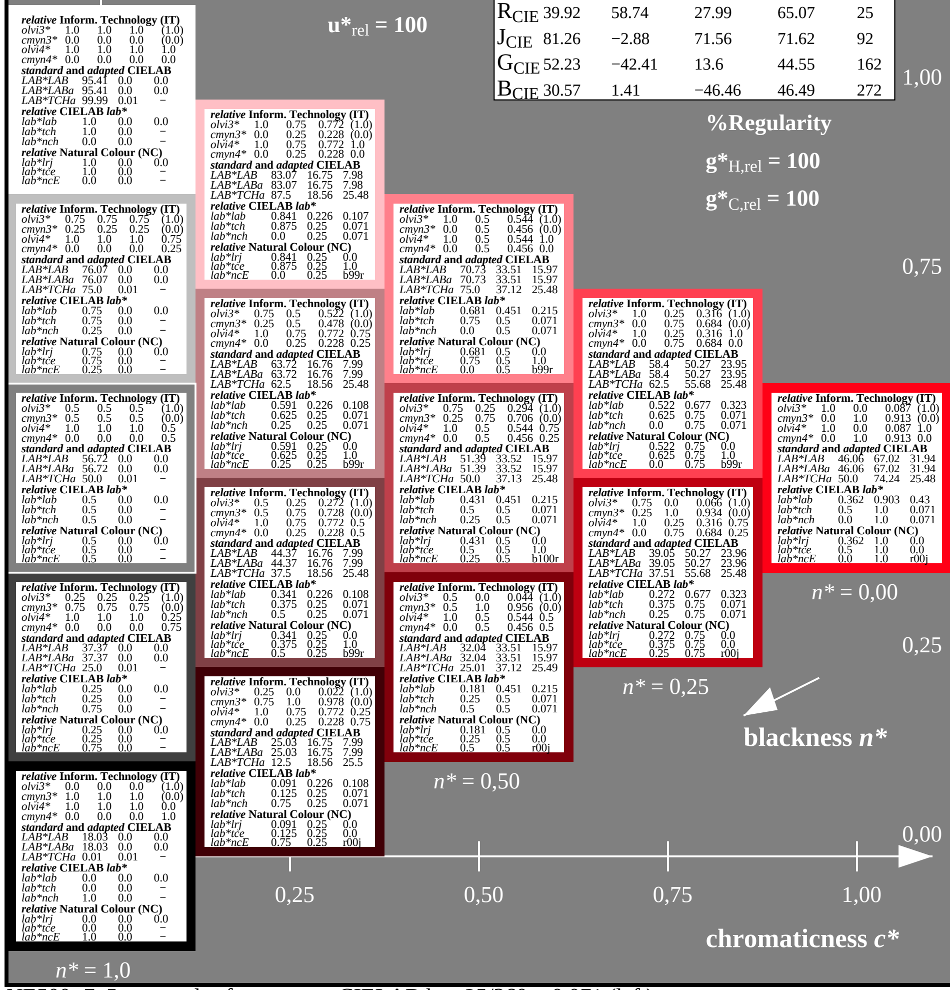
u*rel = 100

NRS18; adapted (a) CIELAB data				
L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa 43.81	67.03	38.7	77.4	30
YMa 69.61	0.0	77.4	77.4	90
LMa 43.81	−67.02	38.7	77.4	150
CMa 69.61	−67.02	−38.69	77.4	210
VMa 43.81	0.0	−77.39	77.4	270
MMa 69.61	67.03	−38.69	77.4	330
NMa 18.01	0.0	0.0	0.0	0
WMa 95.41	0.0	0.0	0.0	0
RCIE 39.92	58.74	27.99	65.07	25
JCIE 81.26	−2.88	71.56	71.62	92
GCIE 52.23	−42.41	13.6	44.55	162
BCIE 30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 100

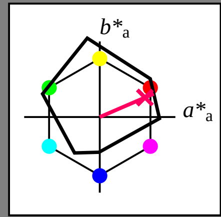
g*C,rel = 100



Output: Colorimetric Printer Reflective System DRSXX
for hue *h = *lab*h* = 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

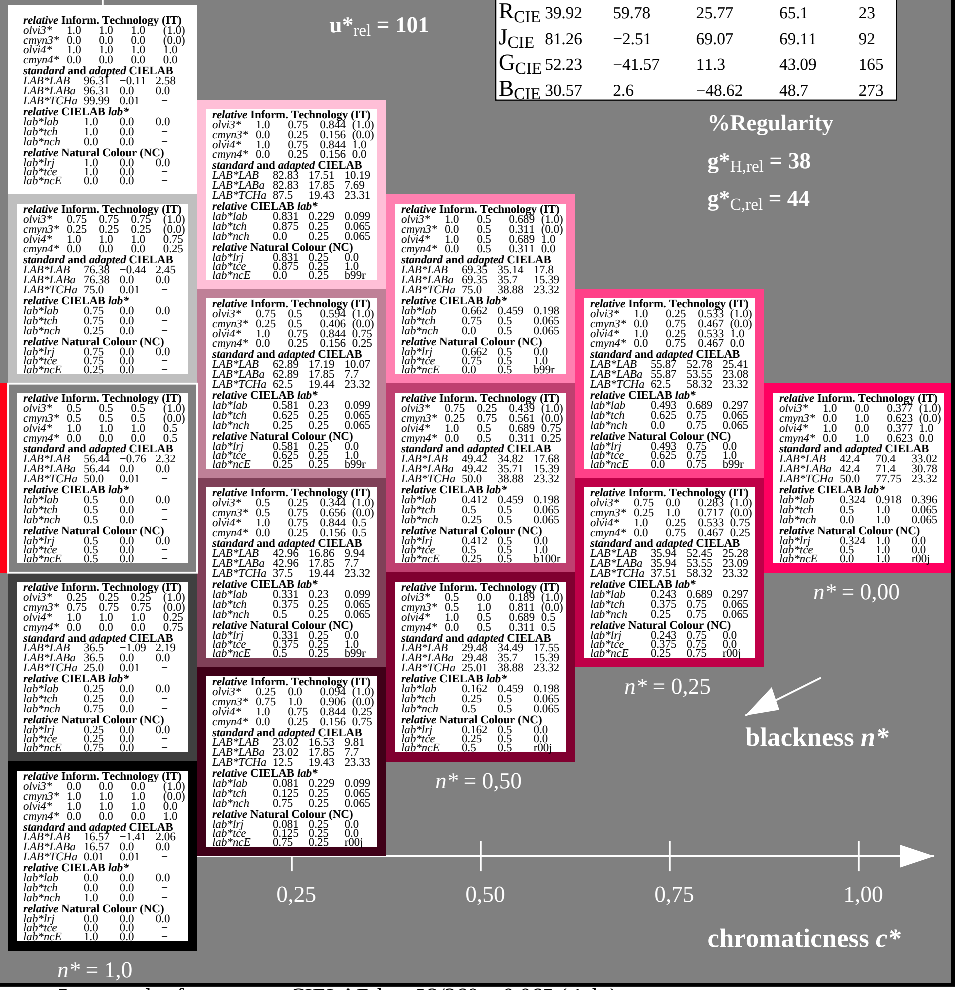
u*rel = 101

DRSXX; adapted (a) CIELAB data				
L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa 42.21	66.82	50.6	83.82	37
YMa 90.32	−16.51	104.33	105.63	99
LMa 48.21	−75.63	30.65	81.61	158
CMa 53.44	−33.33	−47.49	58.03	235
VMa 34.16	−0.92	−46.56	46.58	269
MMa 42.71	79.0	−1.95	79.03	359
NMa 16.56	0.0	0.0	0.0	0
WMa 96.31	0.0	0.0	0.0	0
RCIE 39.92	59.78	25.77	65.1	23
JCIE 81.26	−2.51	69.07	69.11	92
GCIE 52.23	−41.57	11.3	43.09	165
BCIE 30.57	2.6	−48.62	48.7	273

%Regularity

g*H,rel = 38

g*C,rel = 44



NE500−7, 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 Natural Reflective System NRS18

for hue *h* = lab*h = 25/360 = 0.071*

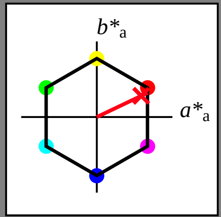
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

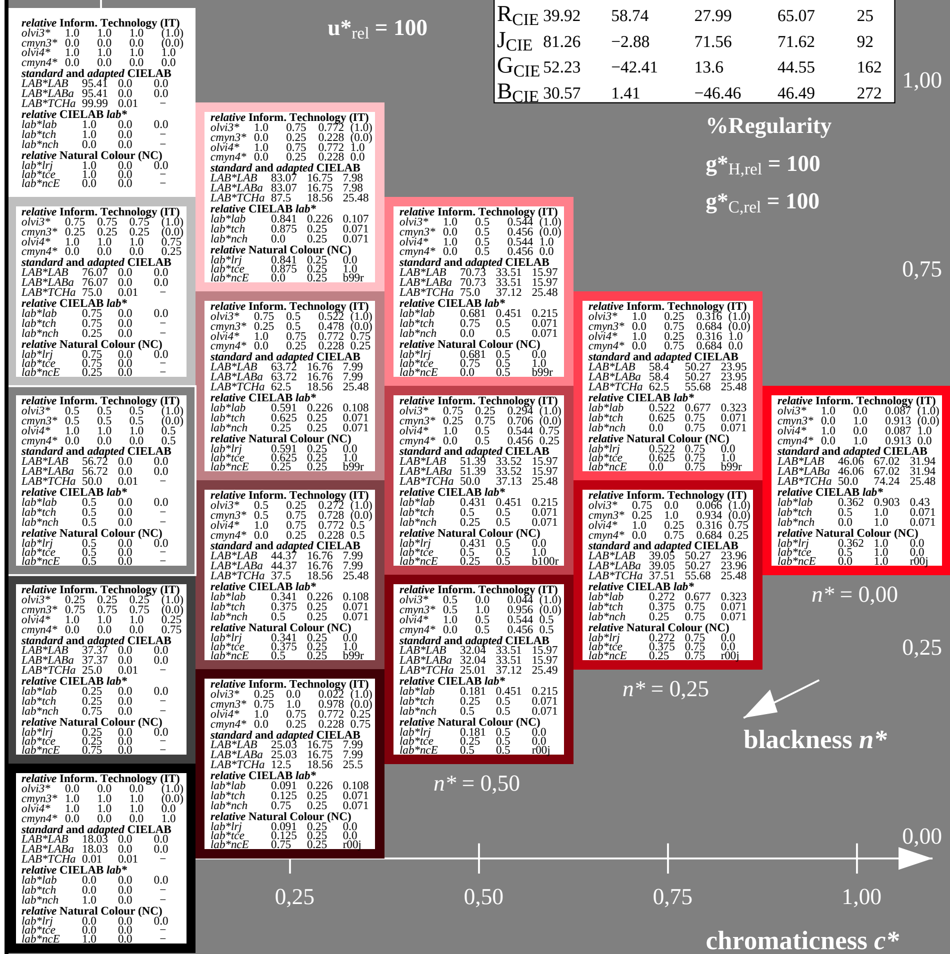
u^*_{rel} = 100

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



Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 25/360 = 0.071*

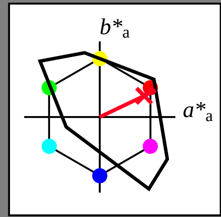
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness *t**



%Gamut

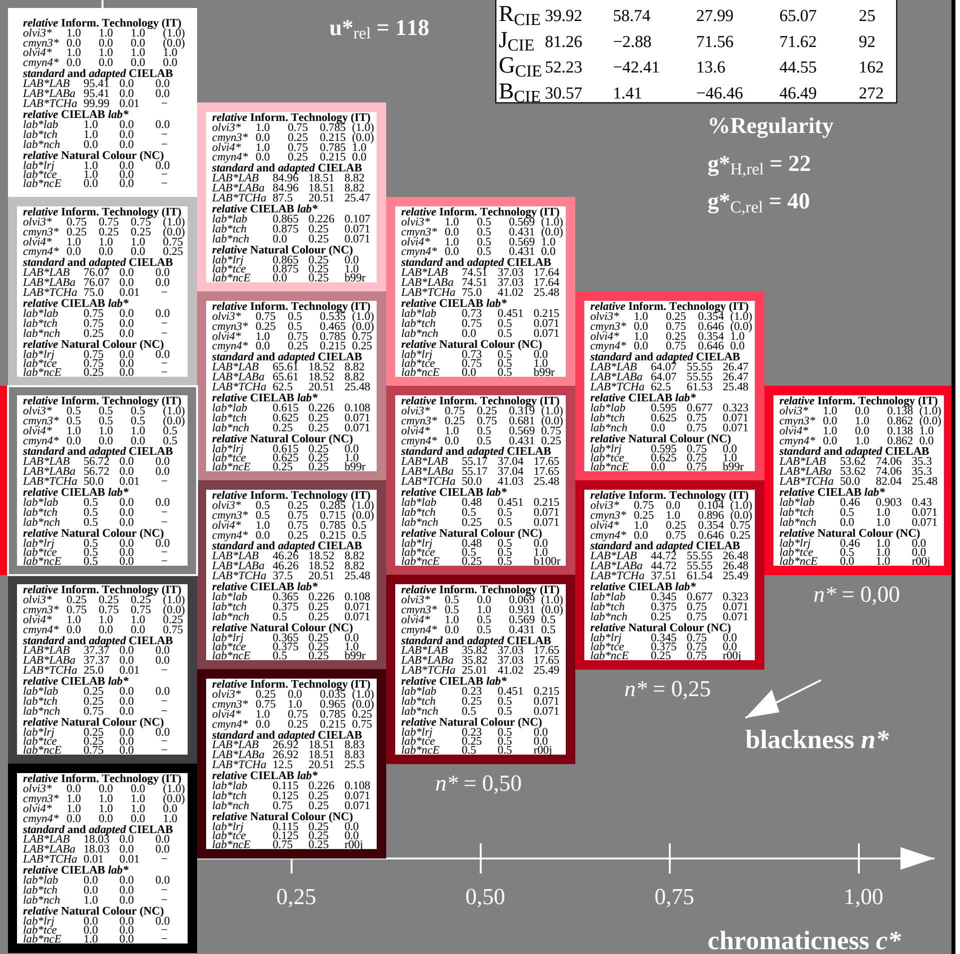
u^*_{rel} = 118

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



NE500−7, 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 Reflective System NRS18

for hue $h* = lab*h = 25/360 = 0.071$

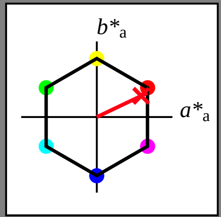
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness $t*$



%Gamut

$u*_{rel}$ = 100

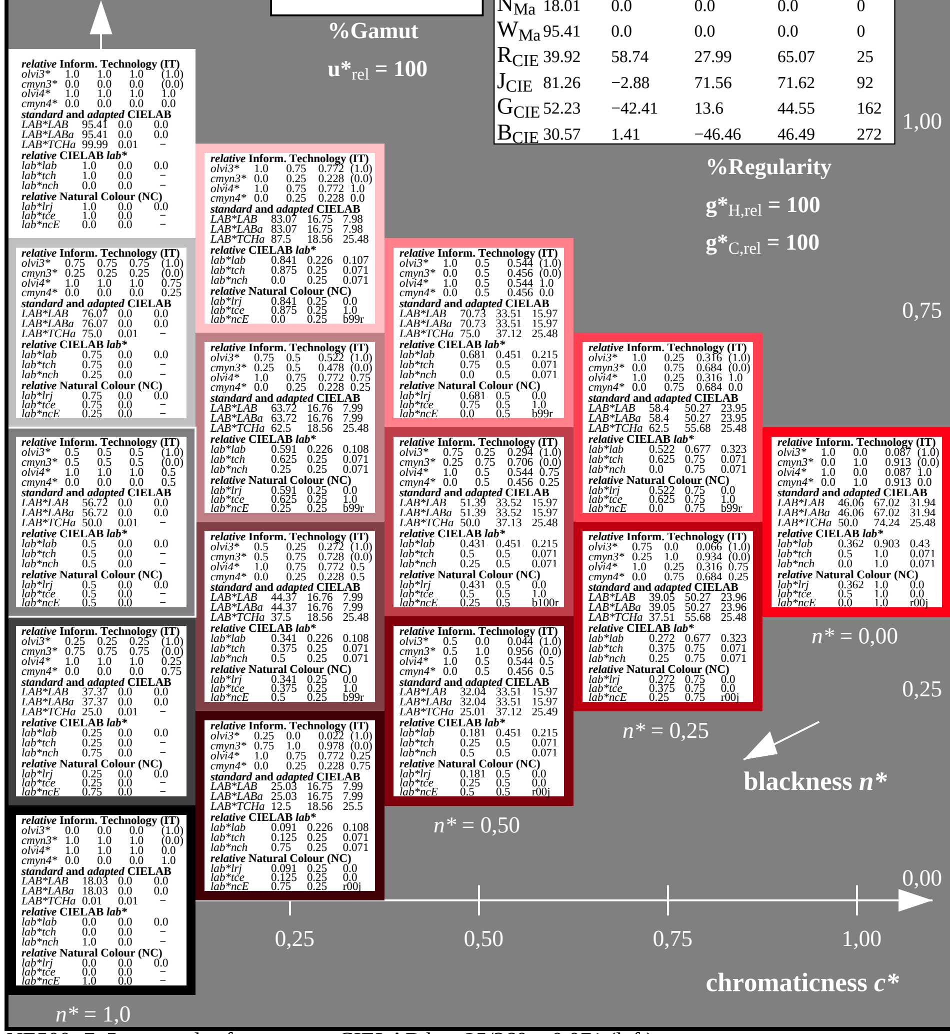
NRS18; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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



Output: Colorimetric Natural Luminous System NLS00

for hue $h* = lab*h = 25/360 = 0.071$

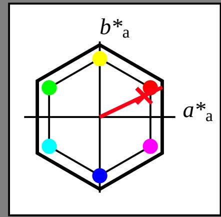
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness $t*$



%Gamut

$u*_{rel}$ = 152

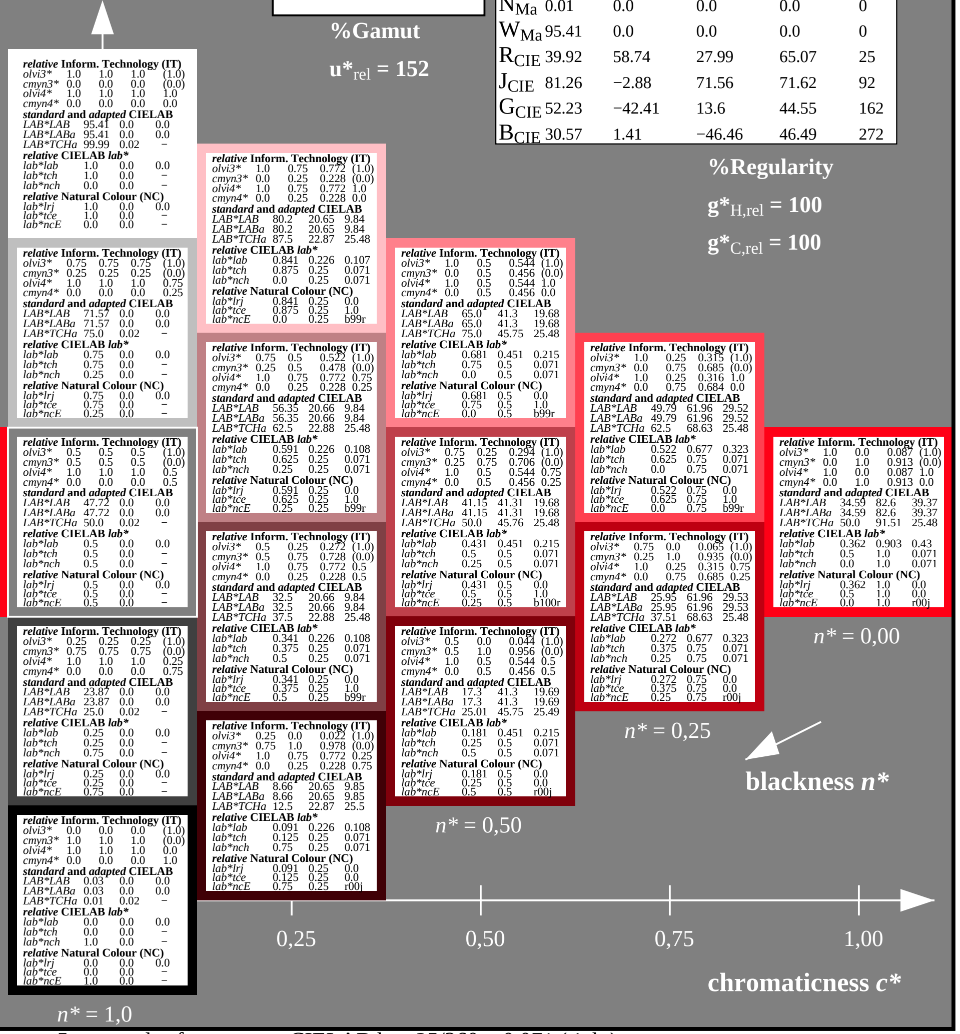
NLS00; adapted (a) CIELAB data

	$L*=L*_a$	$a*_a$	$b*_a$	$C*_{ab,a}$	$h*_{ab,a}$
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



NE500−7, 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 Reflective System NRS18

for hue *h* = lab*h = 25/360 = 0.071*

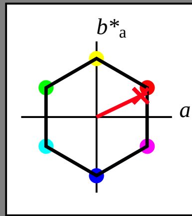
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

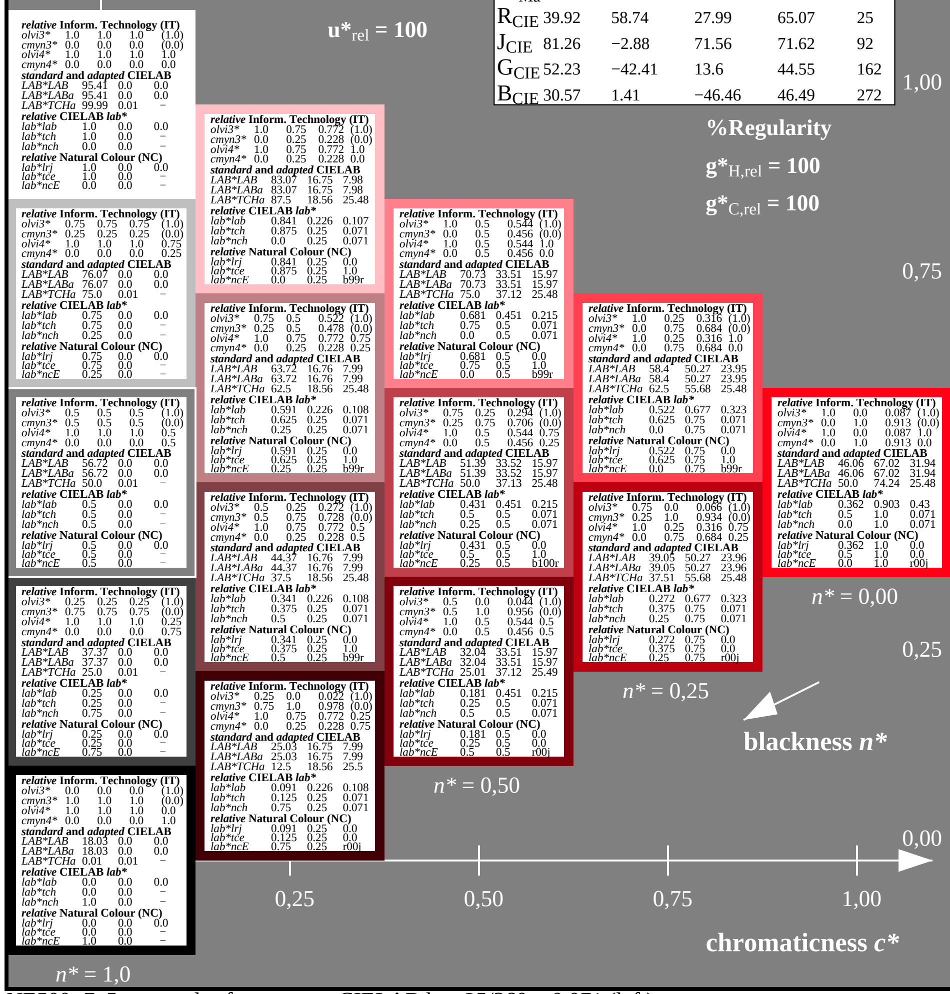
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue *h* = lab*h = 25/360 = 0.071*

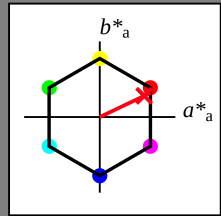
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

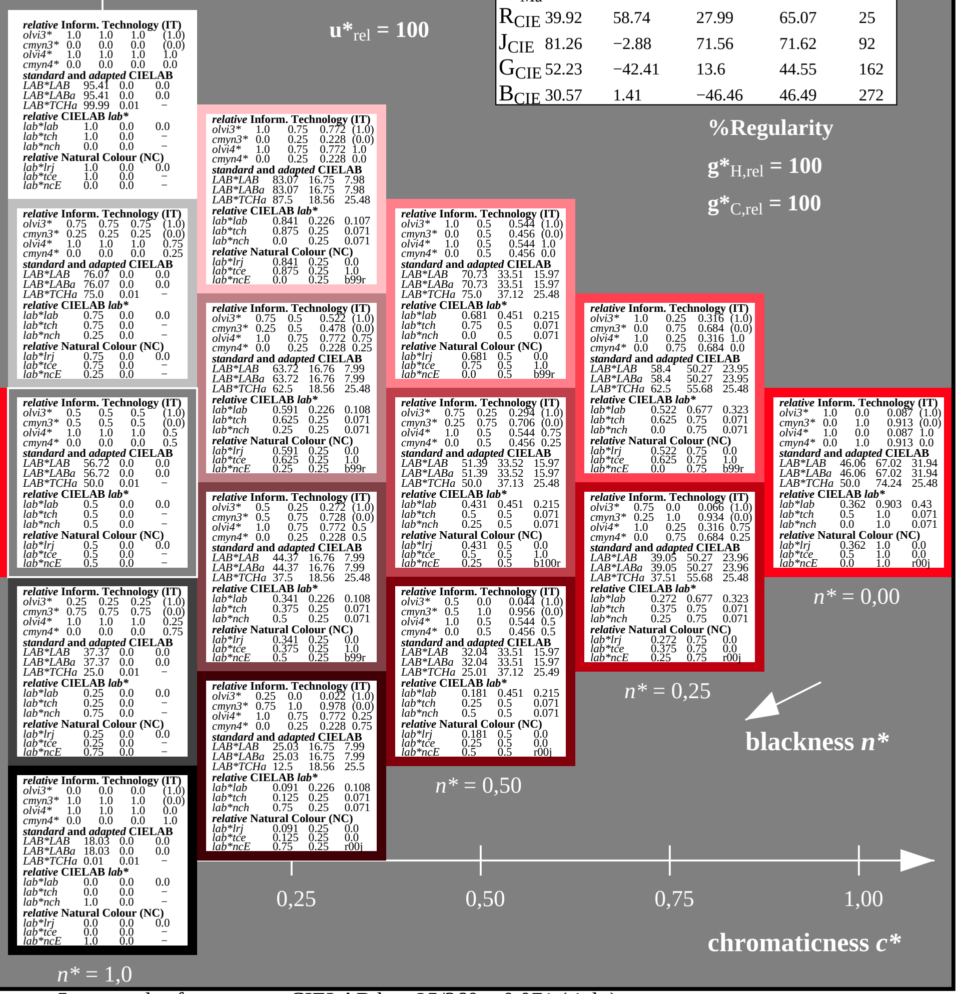
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

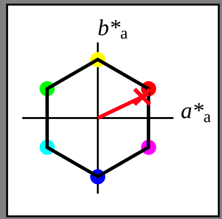
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

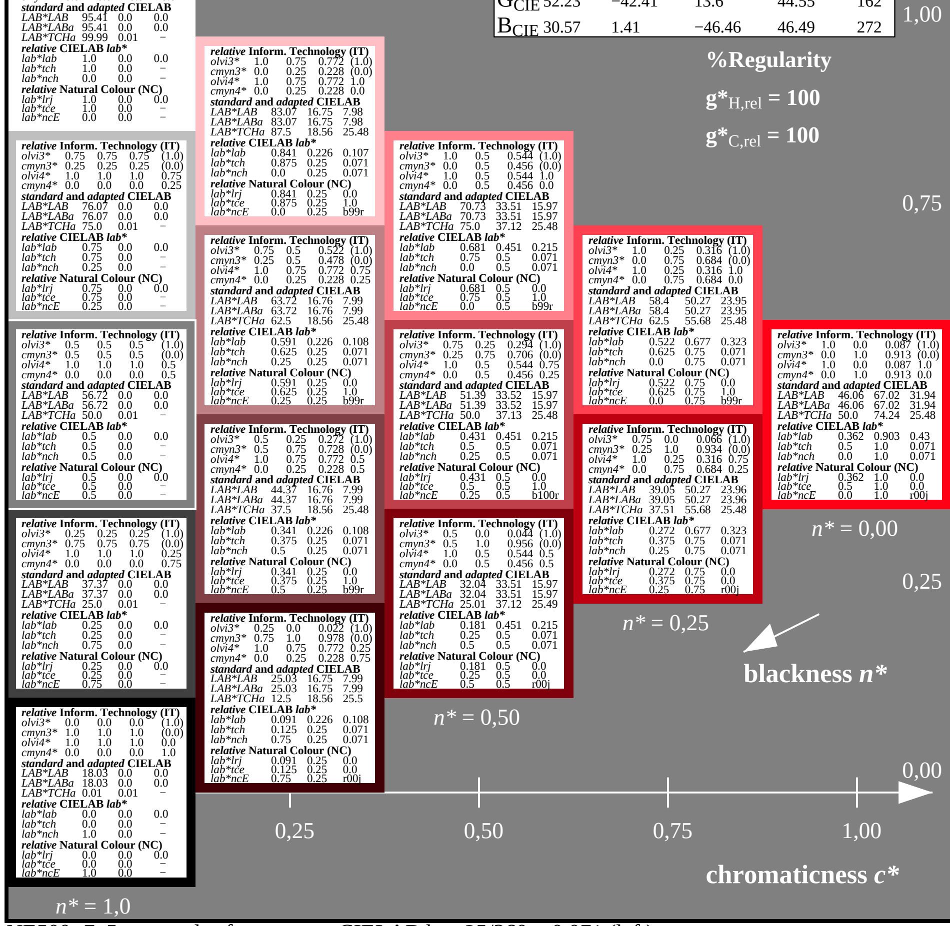
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

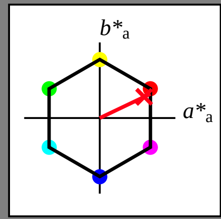
lab*tch* and *lab*nch

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

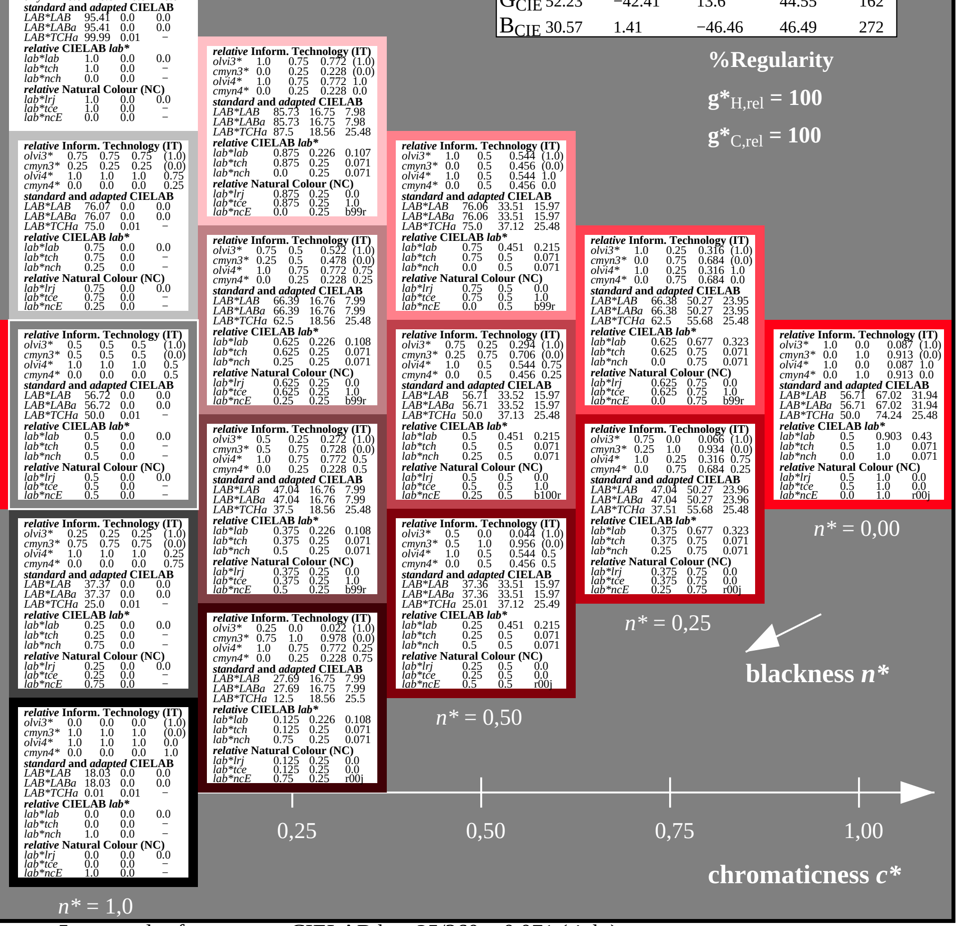
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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

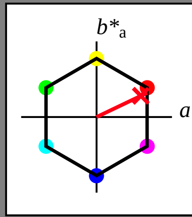


NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric Natural 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^*

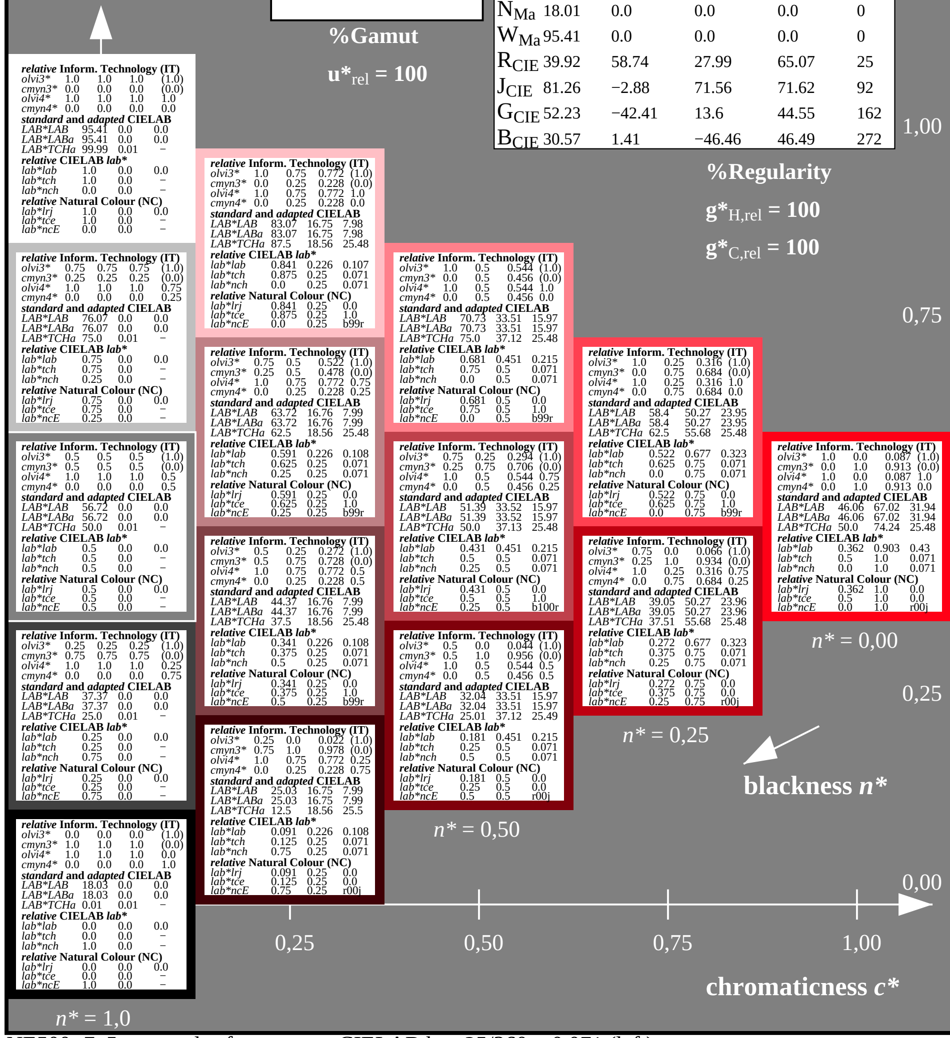


%Gamut
$u^*_{rel} = 100$

NRS18; adapted (a) CIELAB data

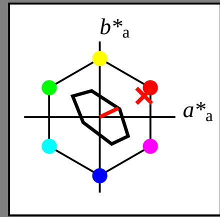
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

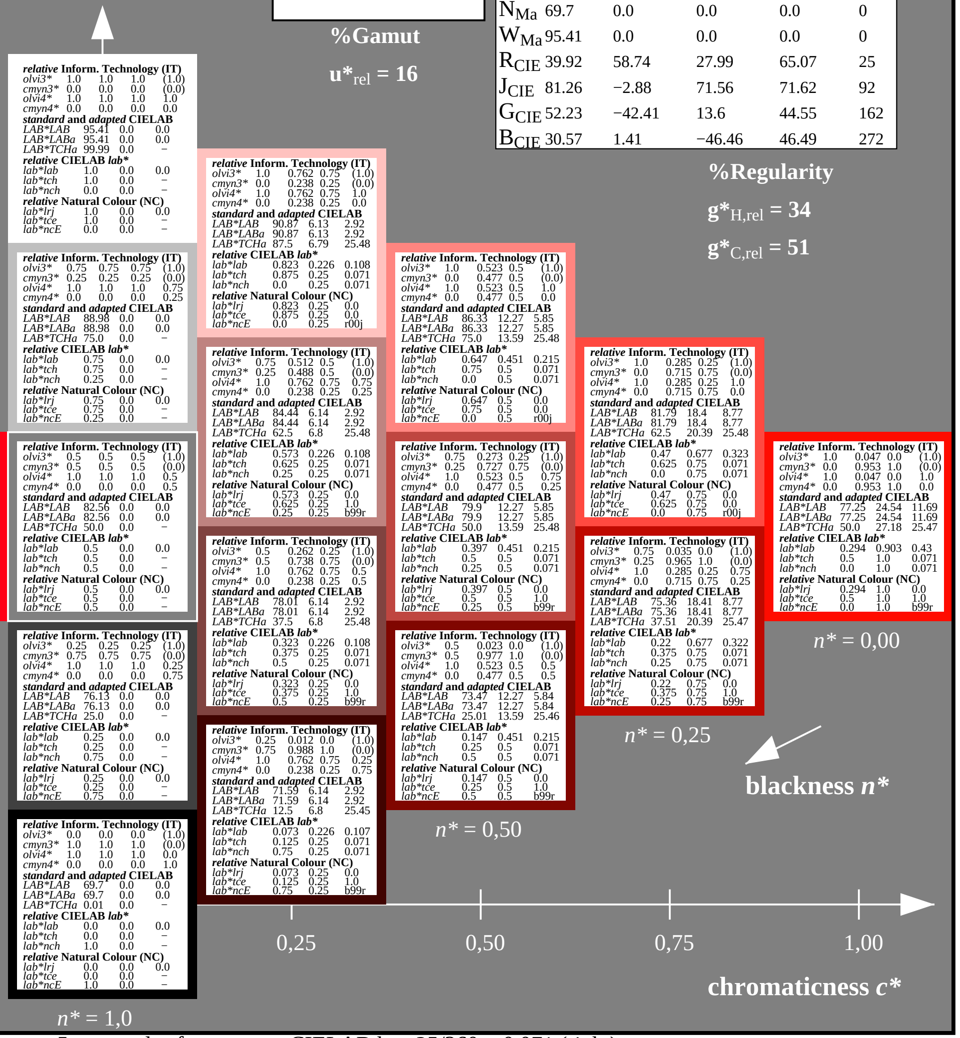


%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

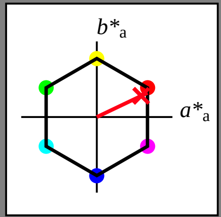
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

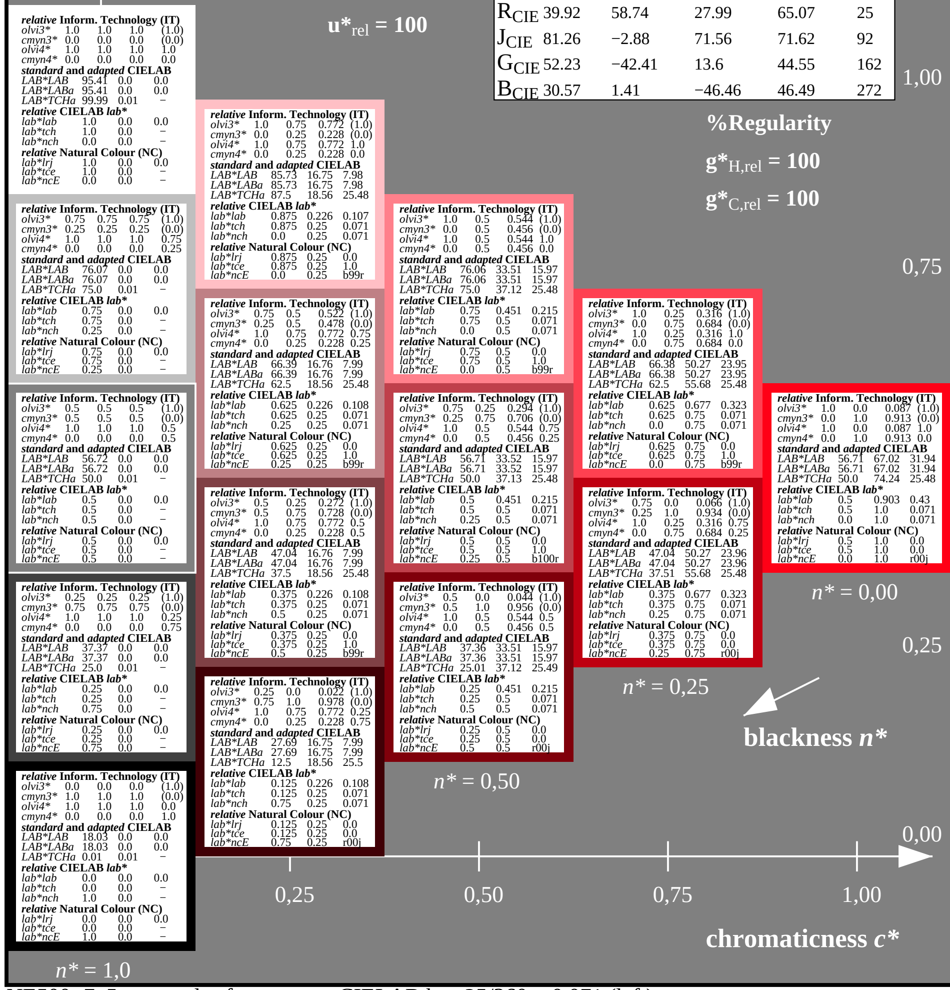
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

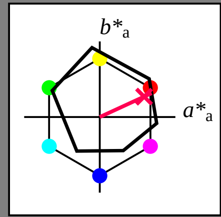
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

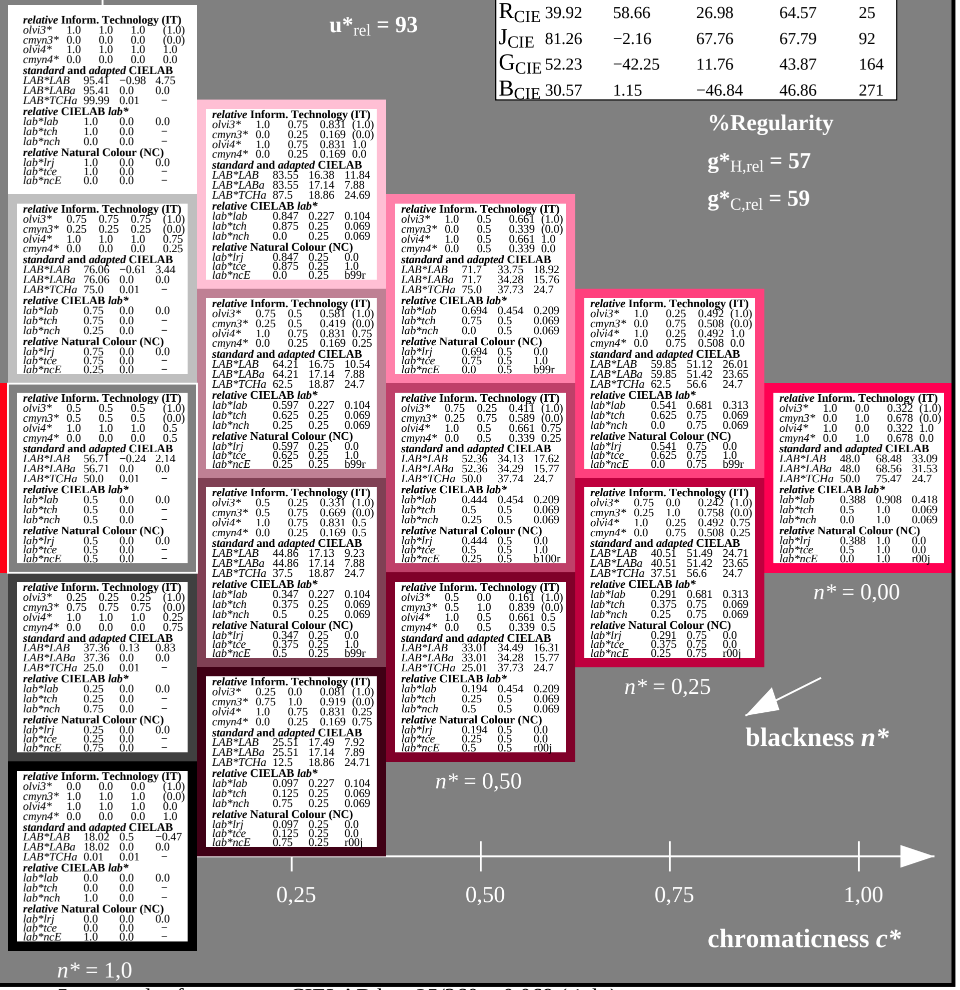
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



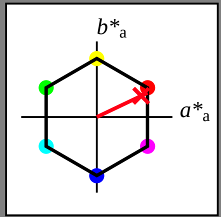
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric 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

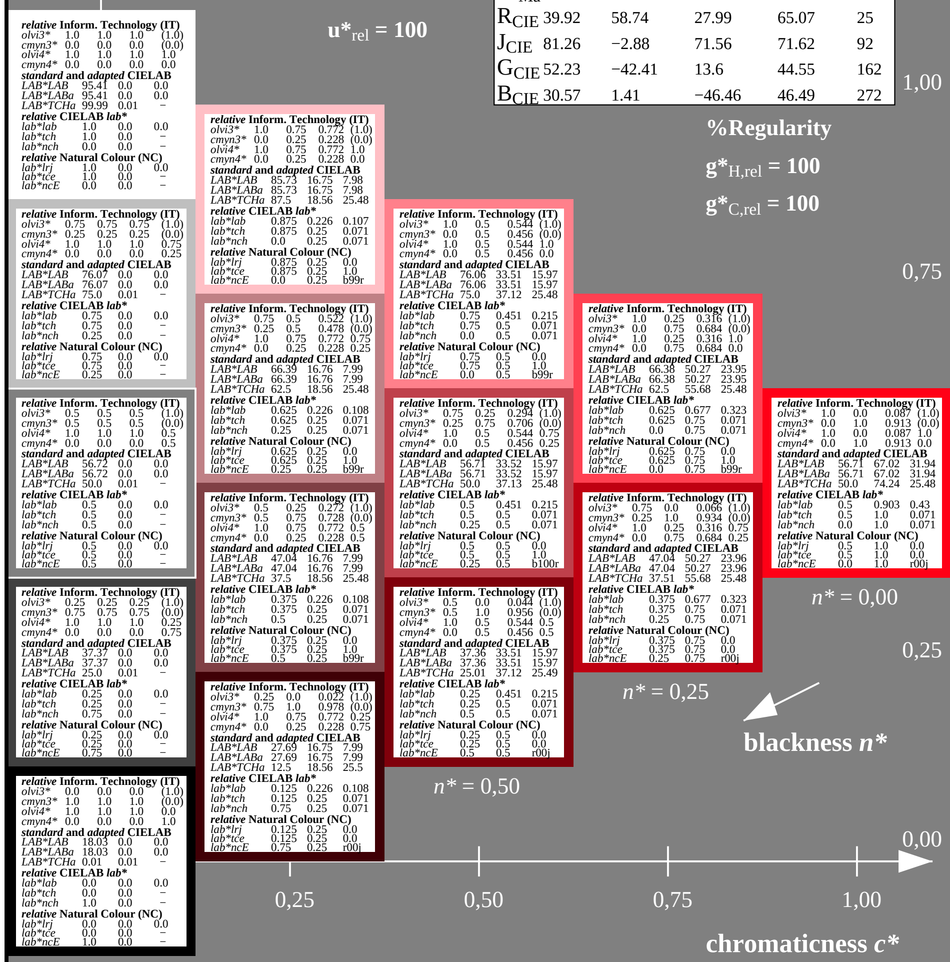
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

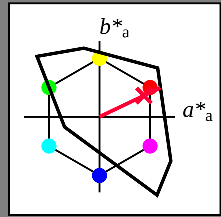
$g^*_{C,rel}$ = 100



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

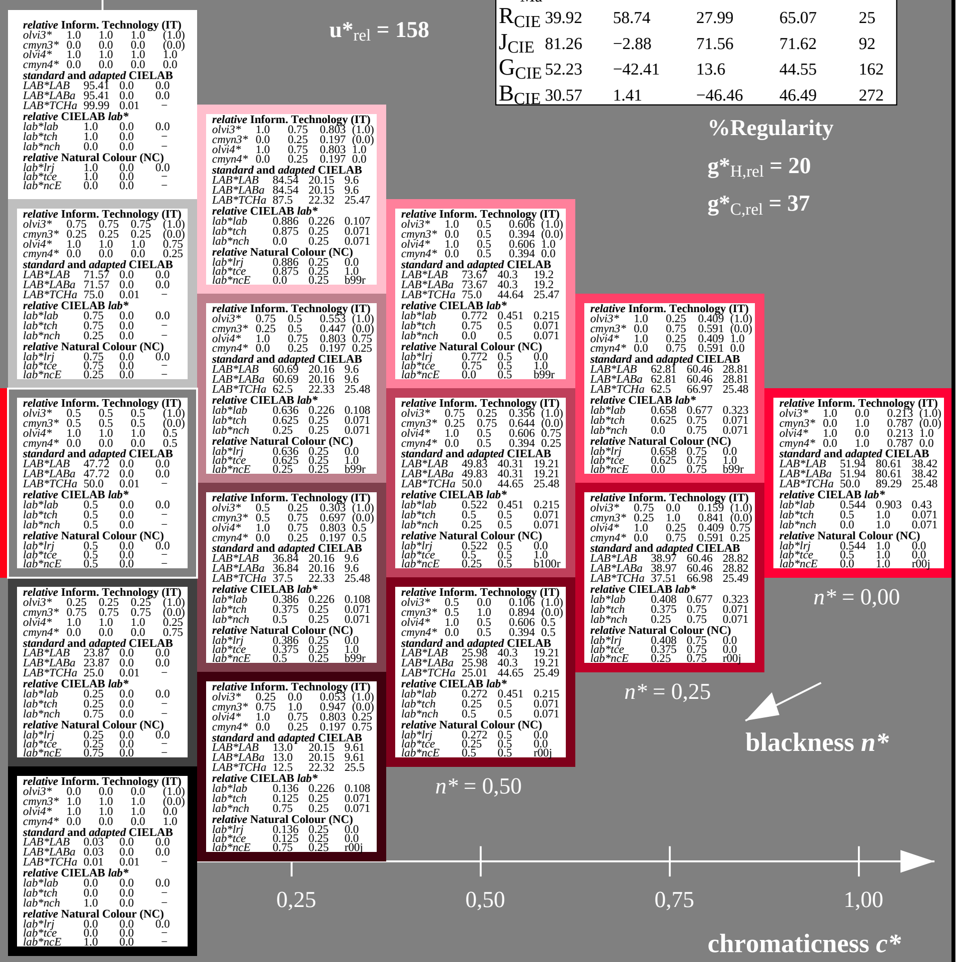
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

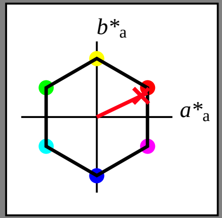
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

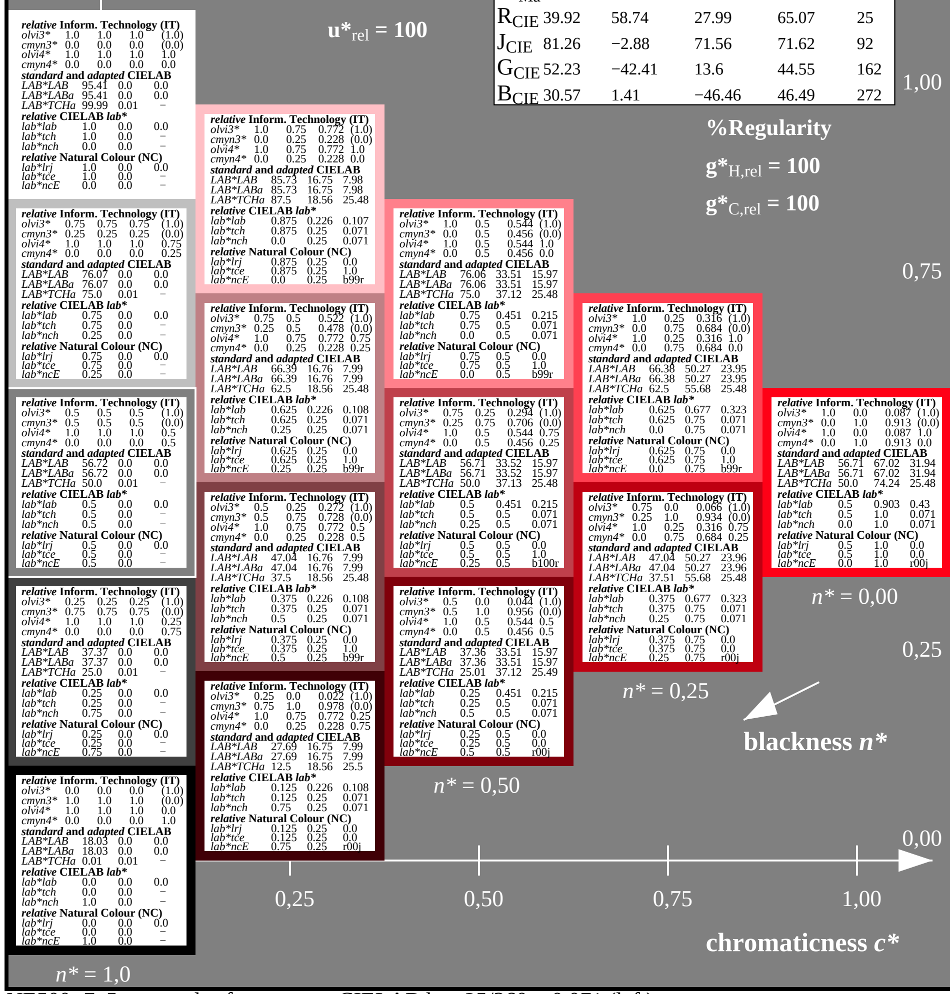
$u^*_{rel} = 100$

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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 23/360 = 0.065$

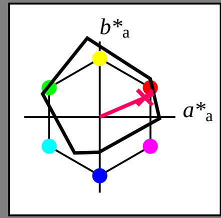
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 42 78 23

olv*Ma: 1.0 0.0 0.38

triangle lightness t^*



%Gamut

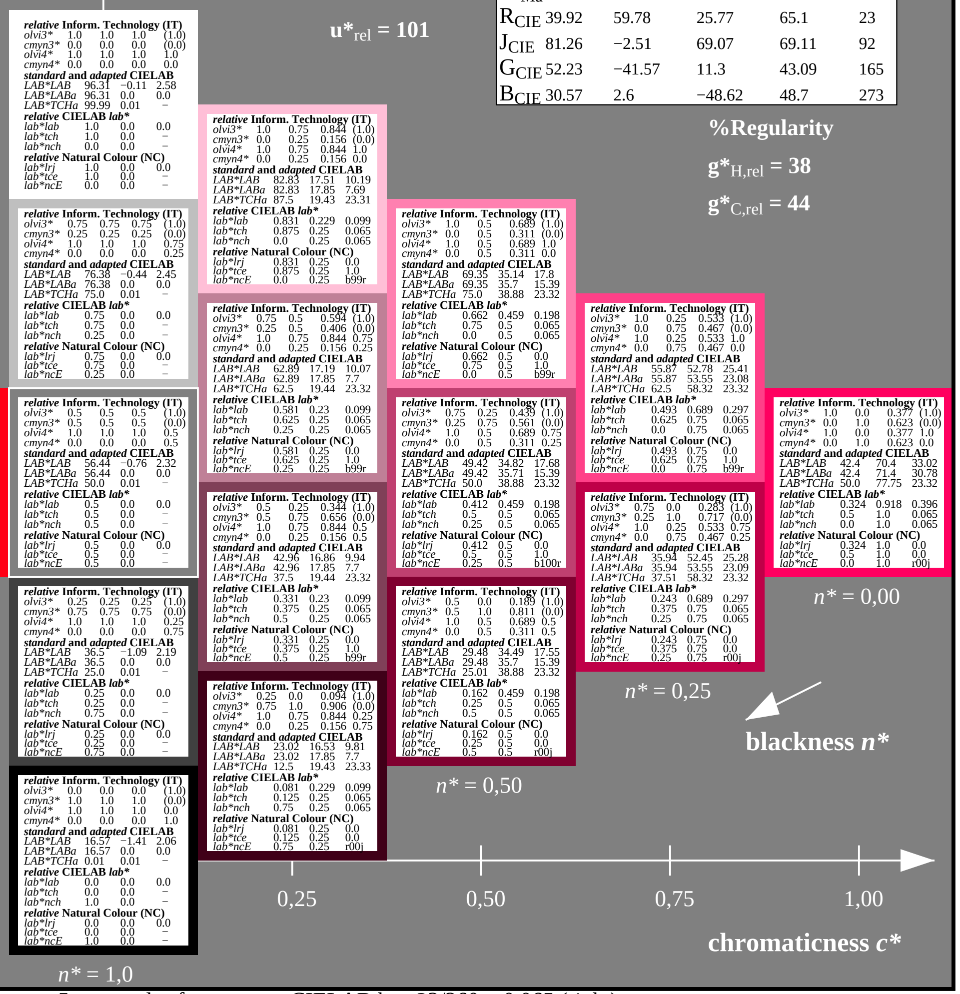
$u^*_{rel} = 101$

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

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

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



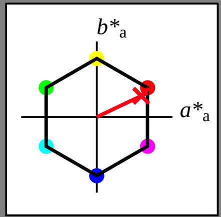
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 23/360 = 0.065 (right)

Input: Colorimetric 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

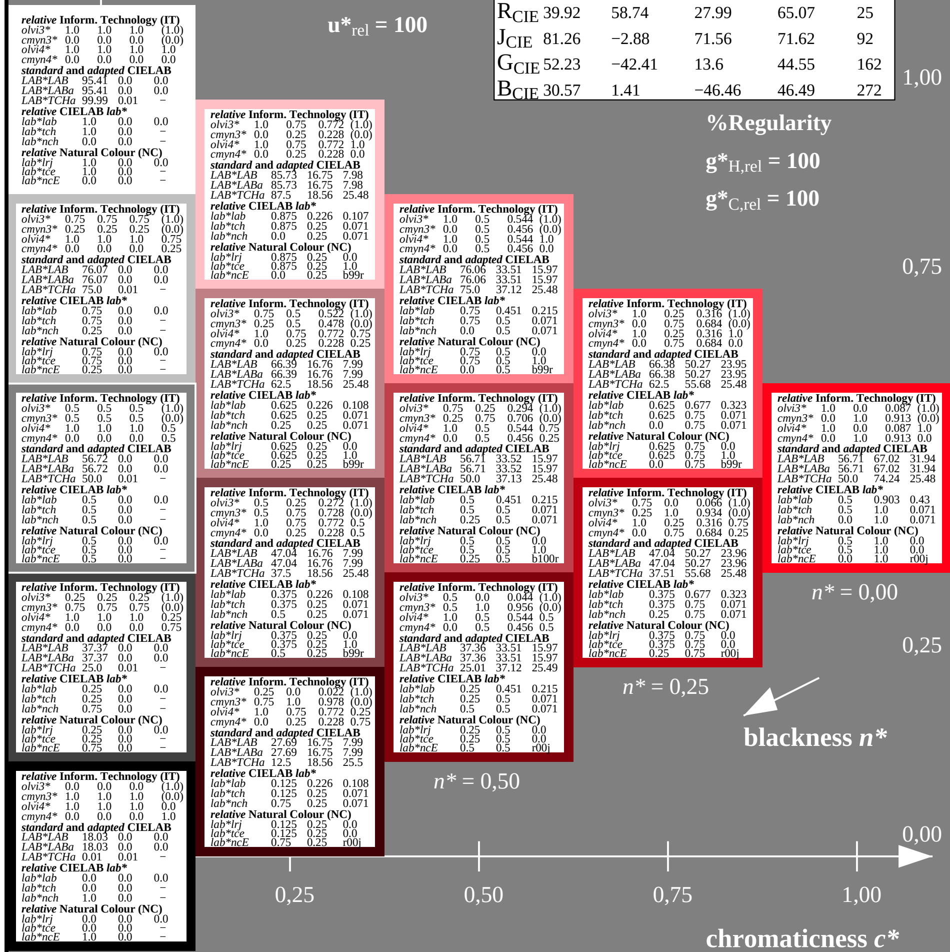
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

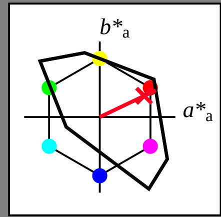
g*C,rel = 100



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

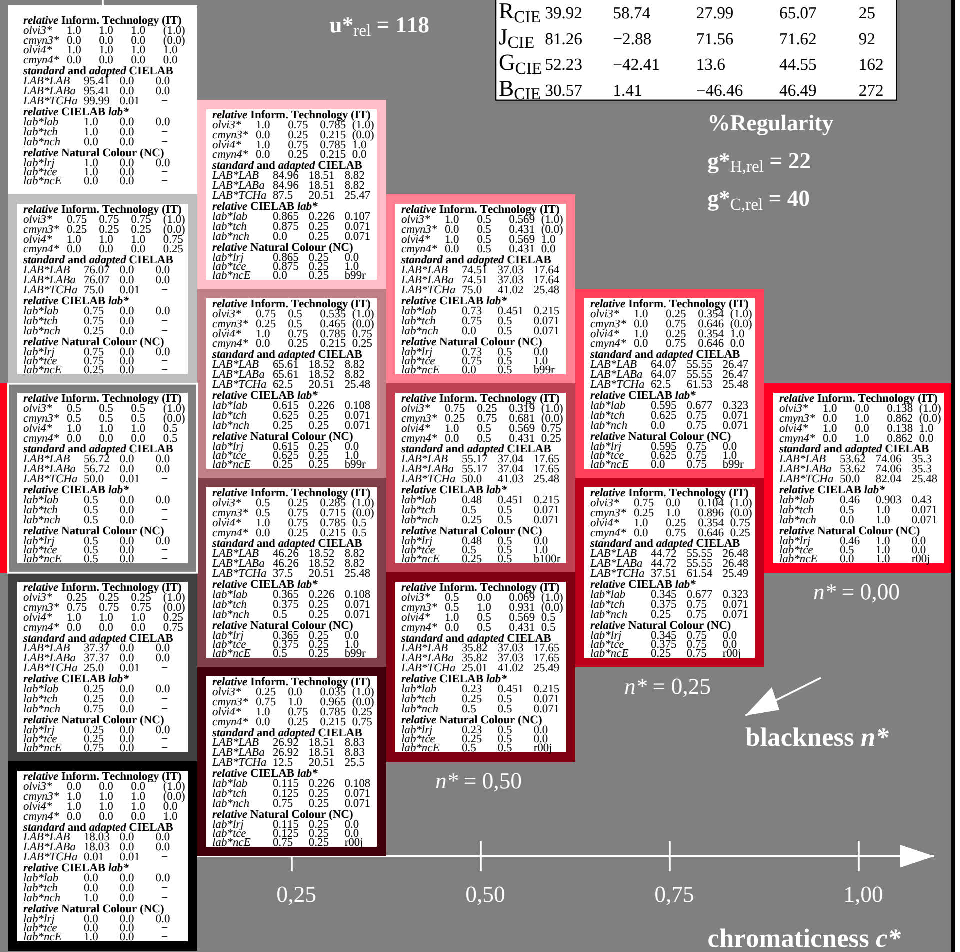
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



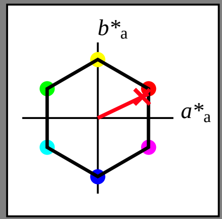
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric 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

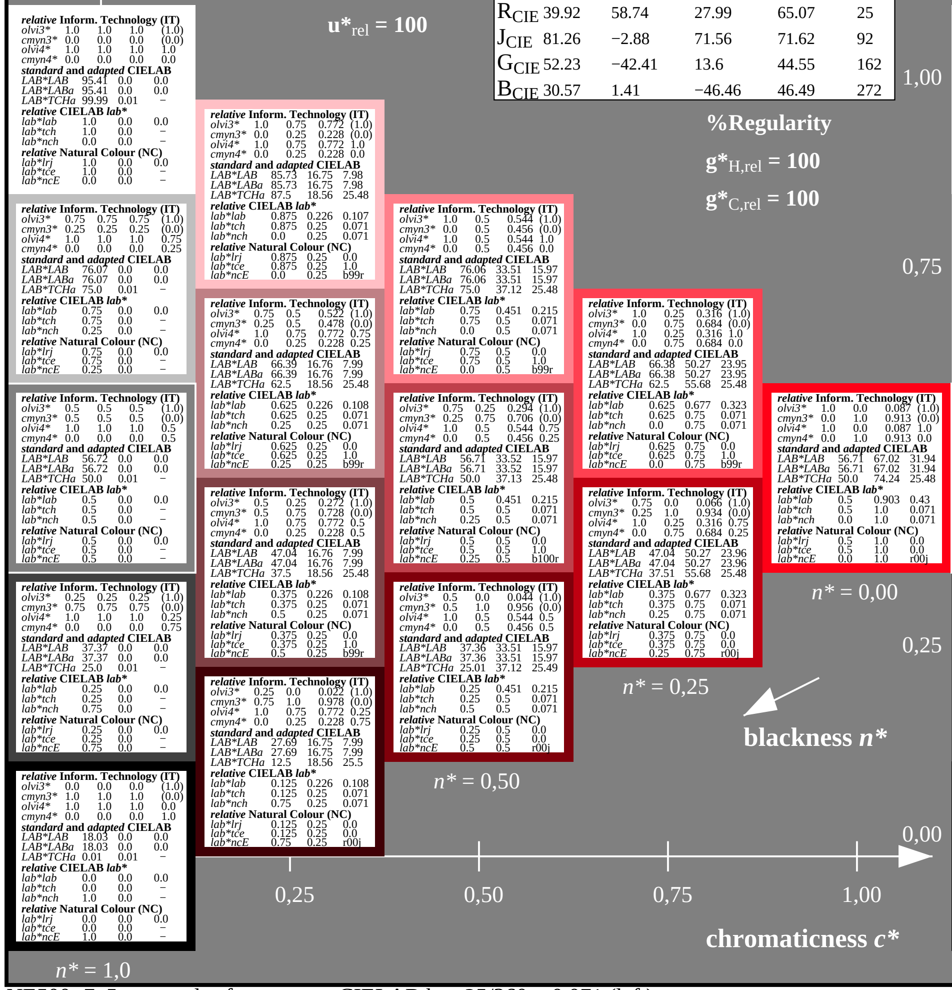
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

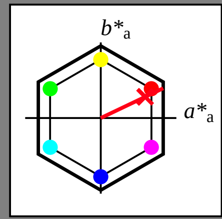
$g^*_{C,rel}$ = 100



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

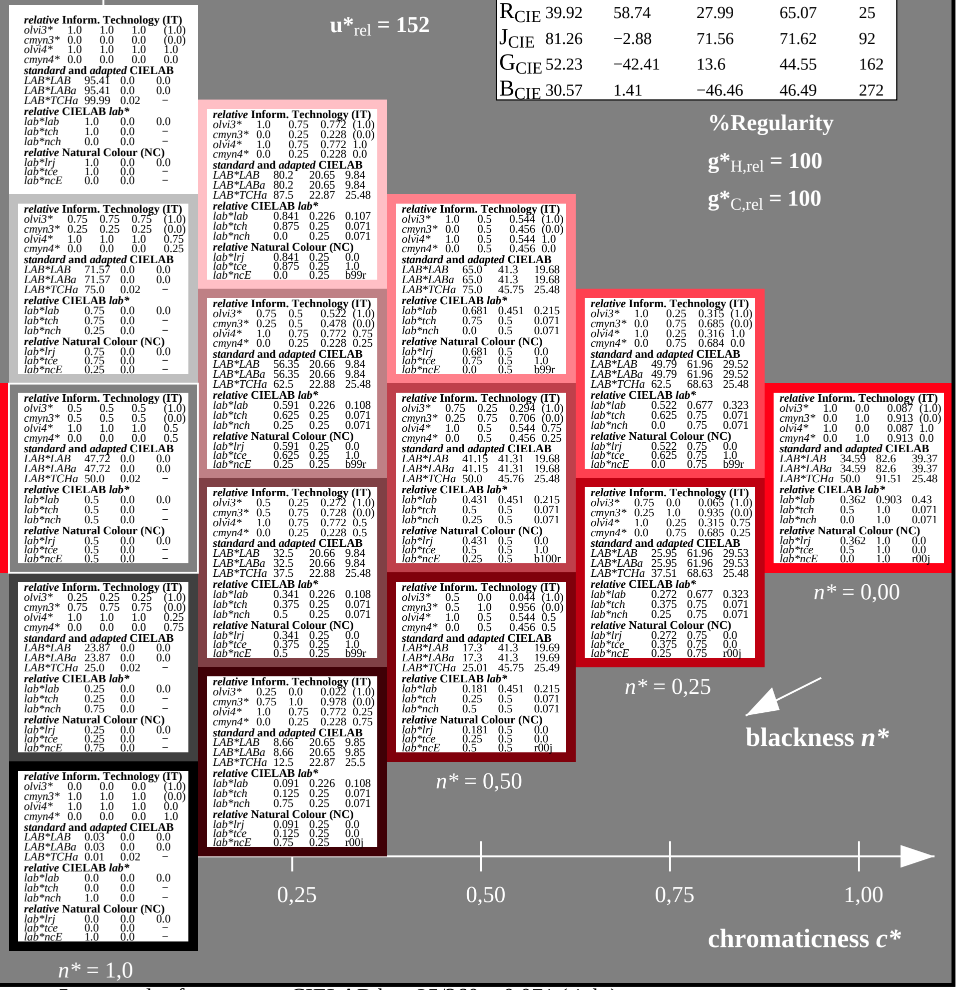
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

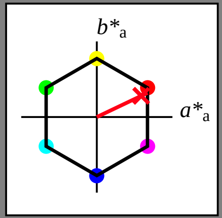
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

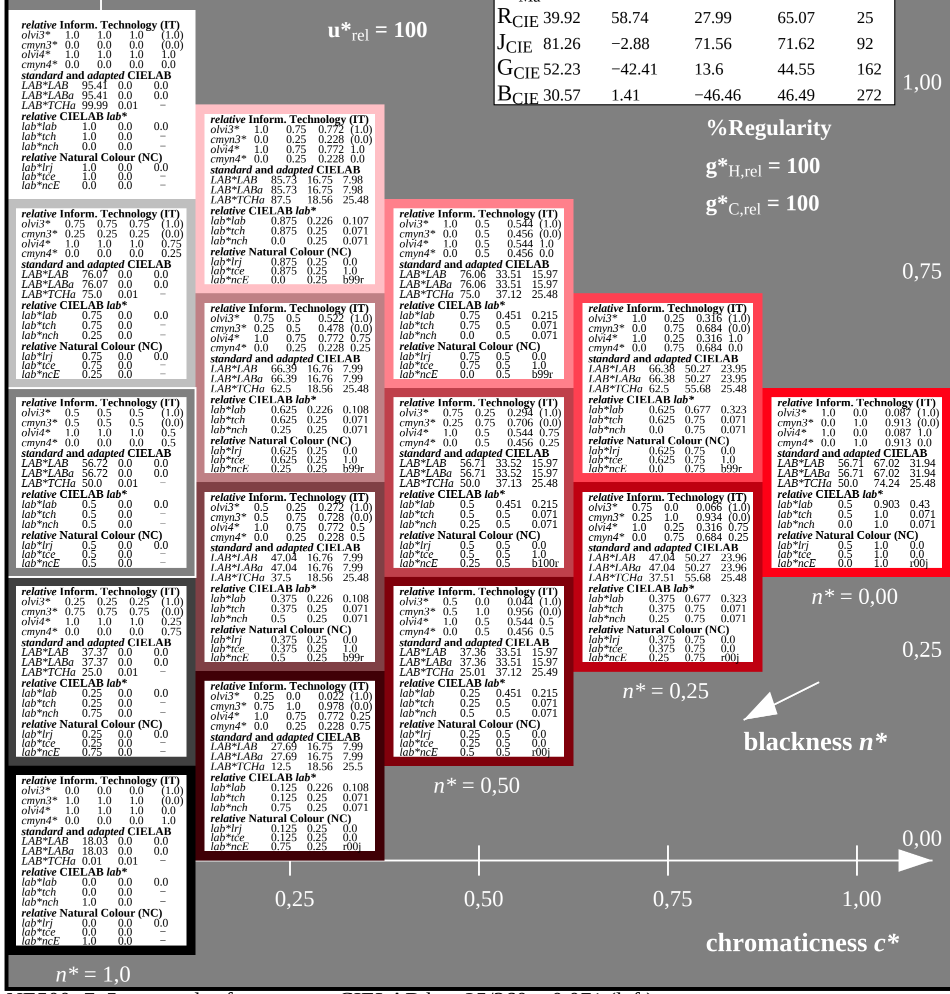
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

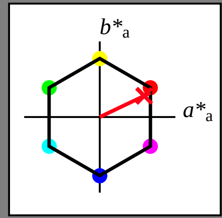
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

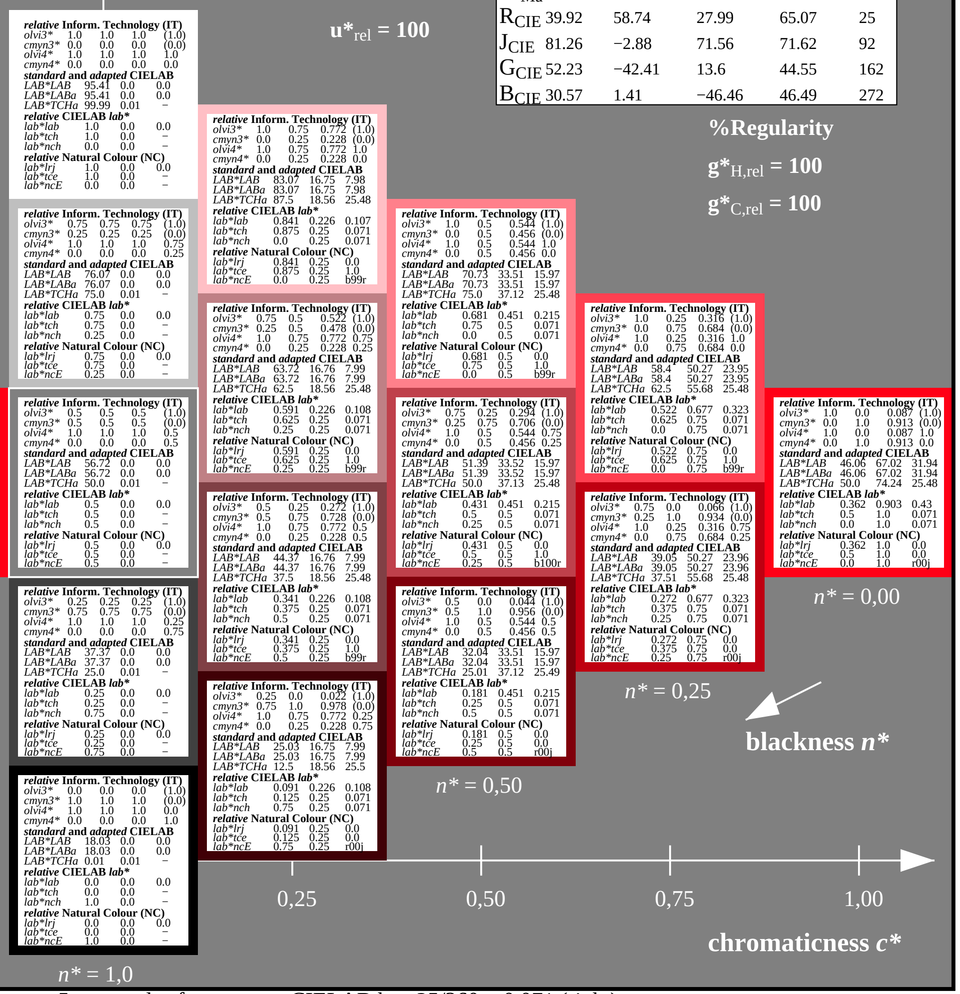
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



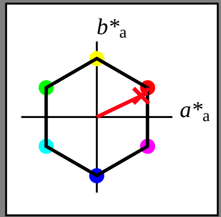
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

Input: Colorimetric 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

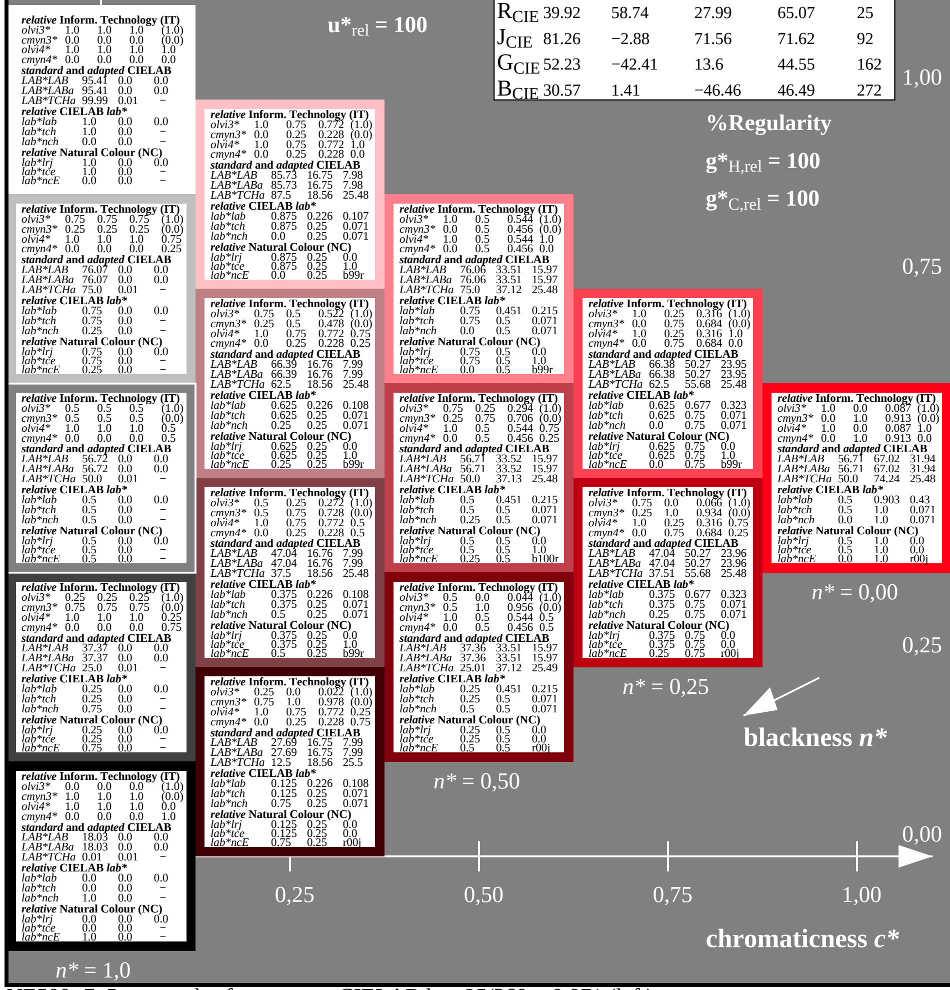
u^*_{rel} = 100

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

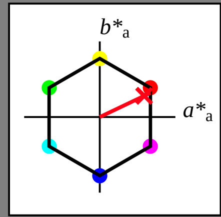
$g^*_{C,rel}$ = 100



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

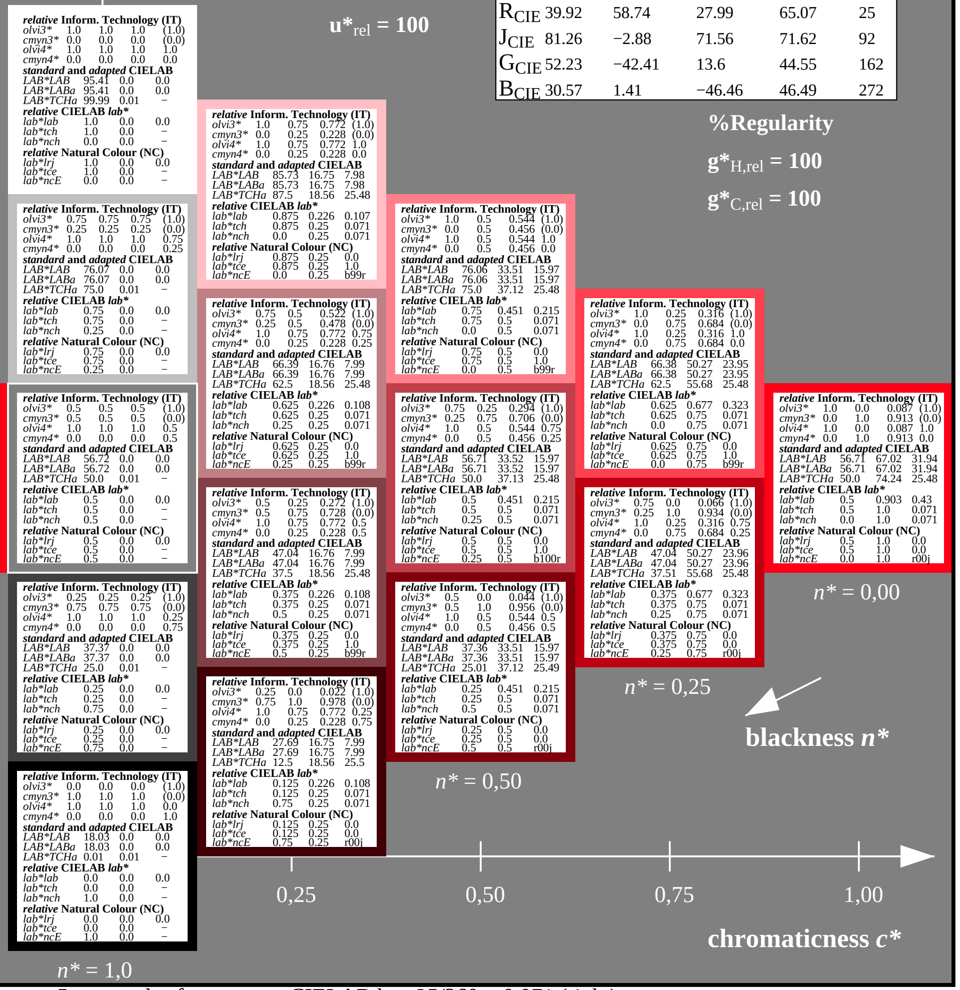
u^*_{rel} = 100

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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 25/360 = 0.071$

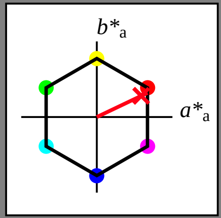
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness *t**



%Gamut

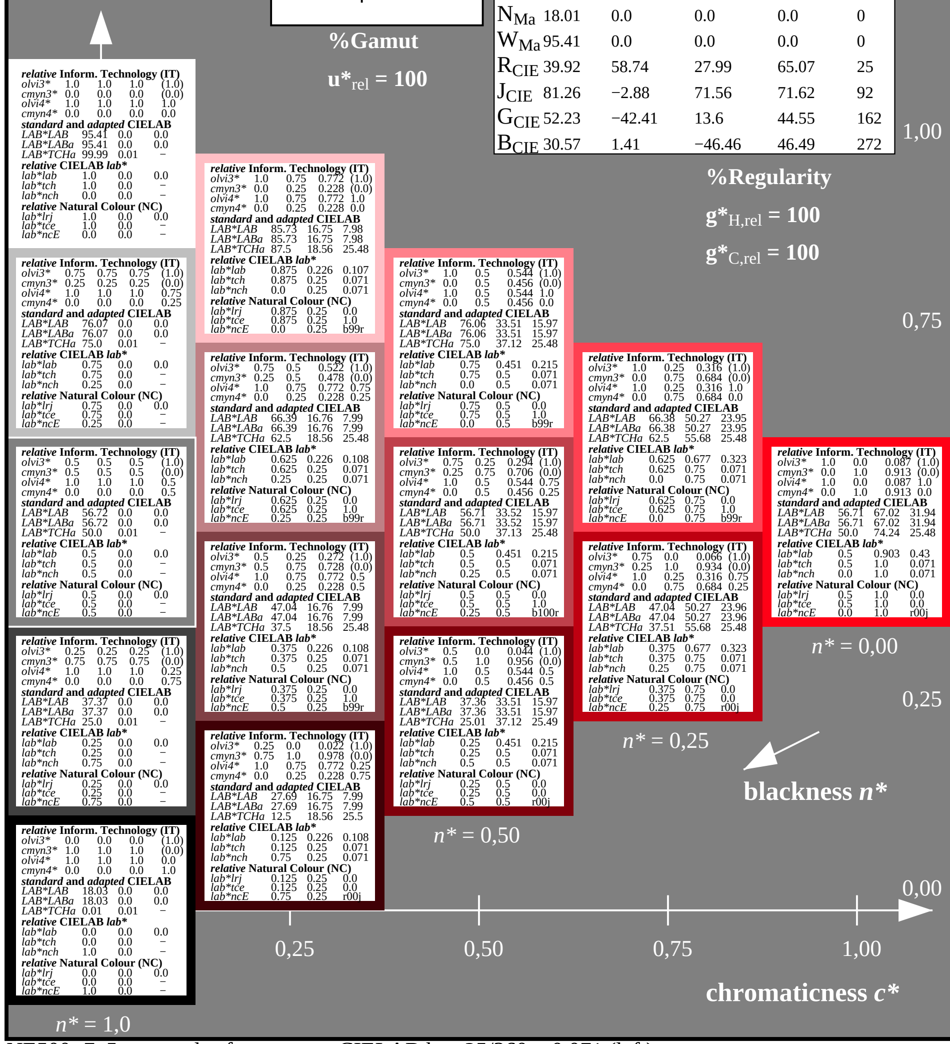
$u^*_{rel} = 100$

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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 25/360 = 0.071$

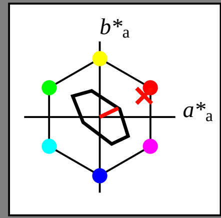
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness *t**



%Gamut

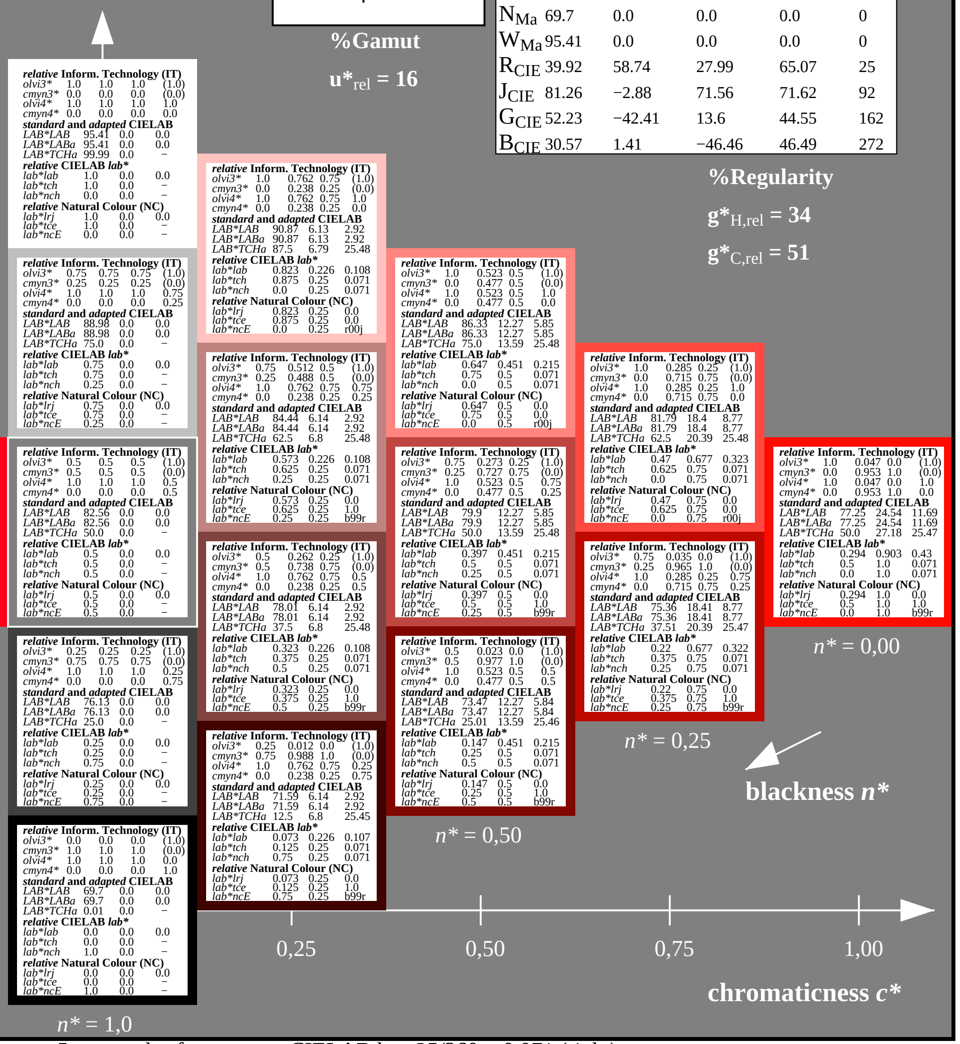
$u^*_{rel} = 16$

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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

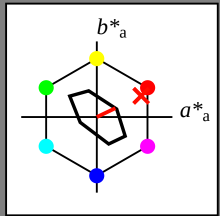
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

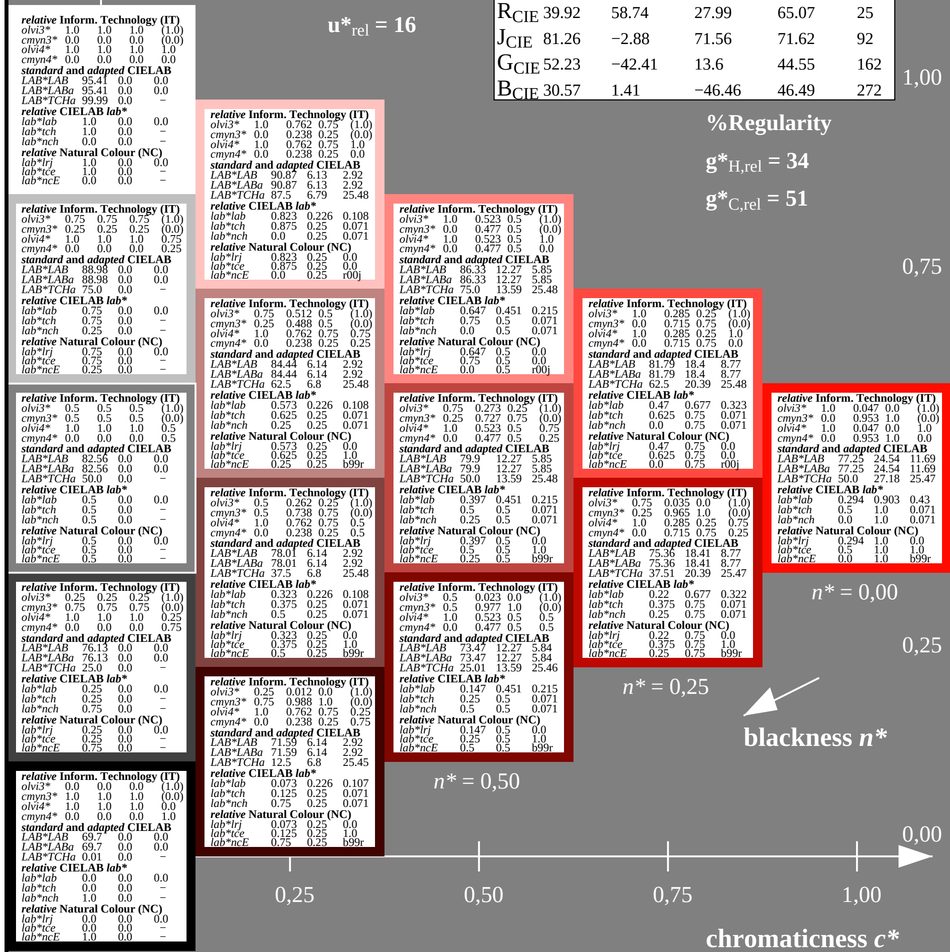
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

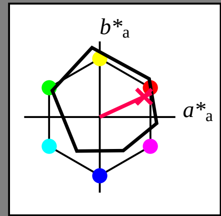
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

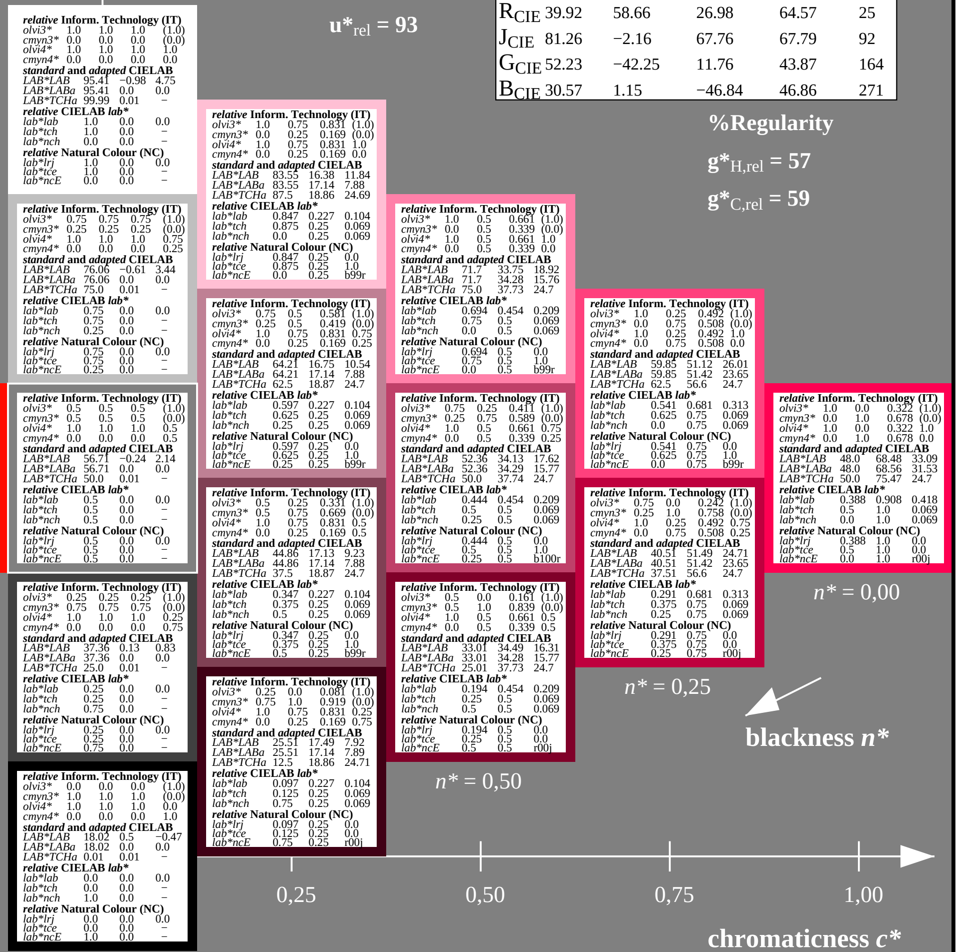
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 TLS70

for hue *h* = lab*h = 25/360 = 0.071*

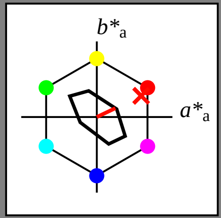
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

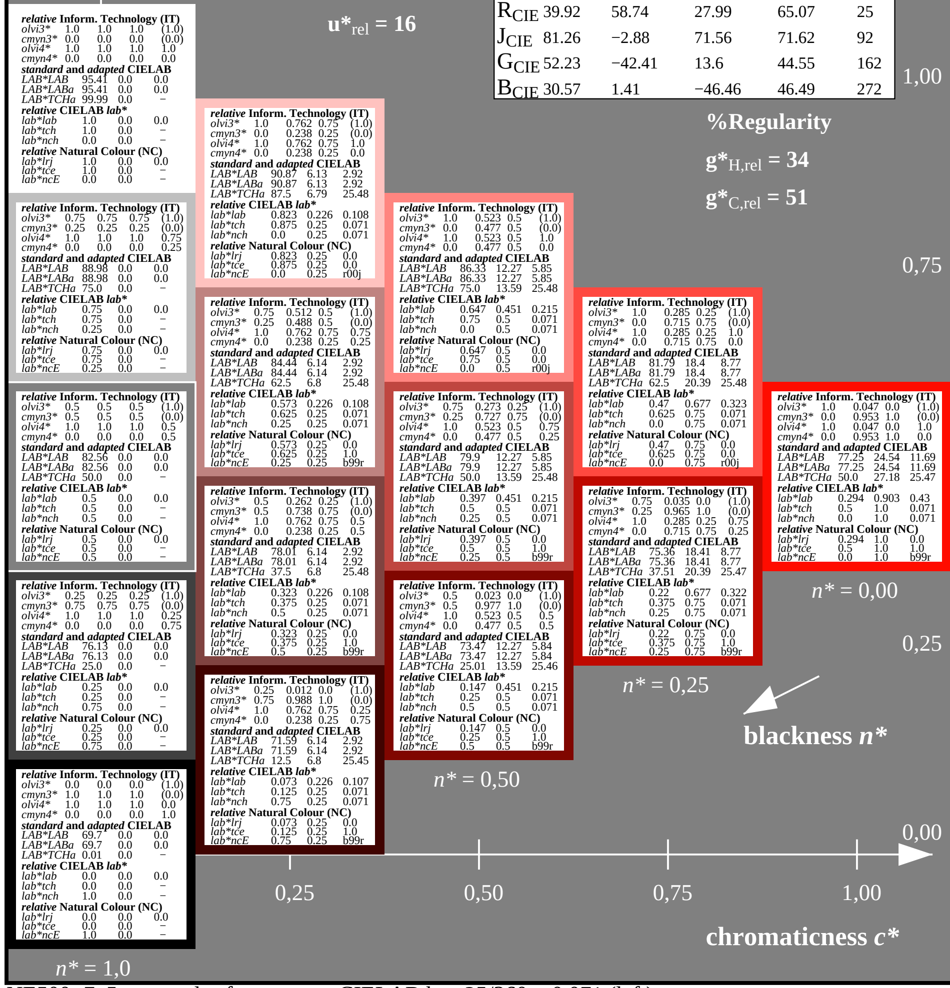
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS00

for hue *h* = lab*h = 25/360 = 0.071*

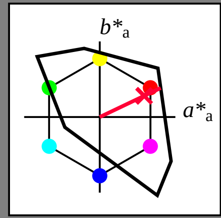
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness *t*



%Gamut

u^*_{rel} = 158

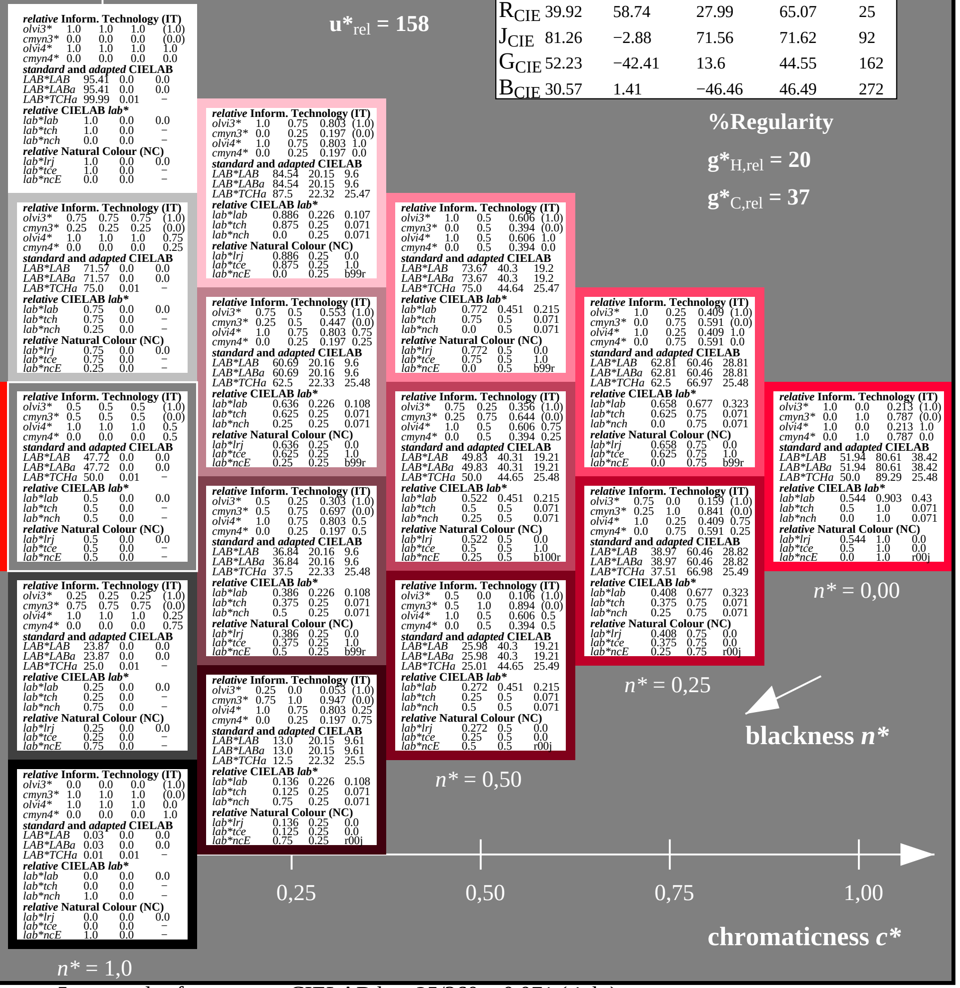
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

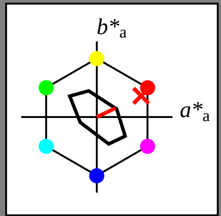


NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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^*

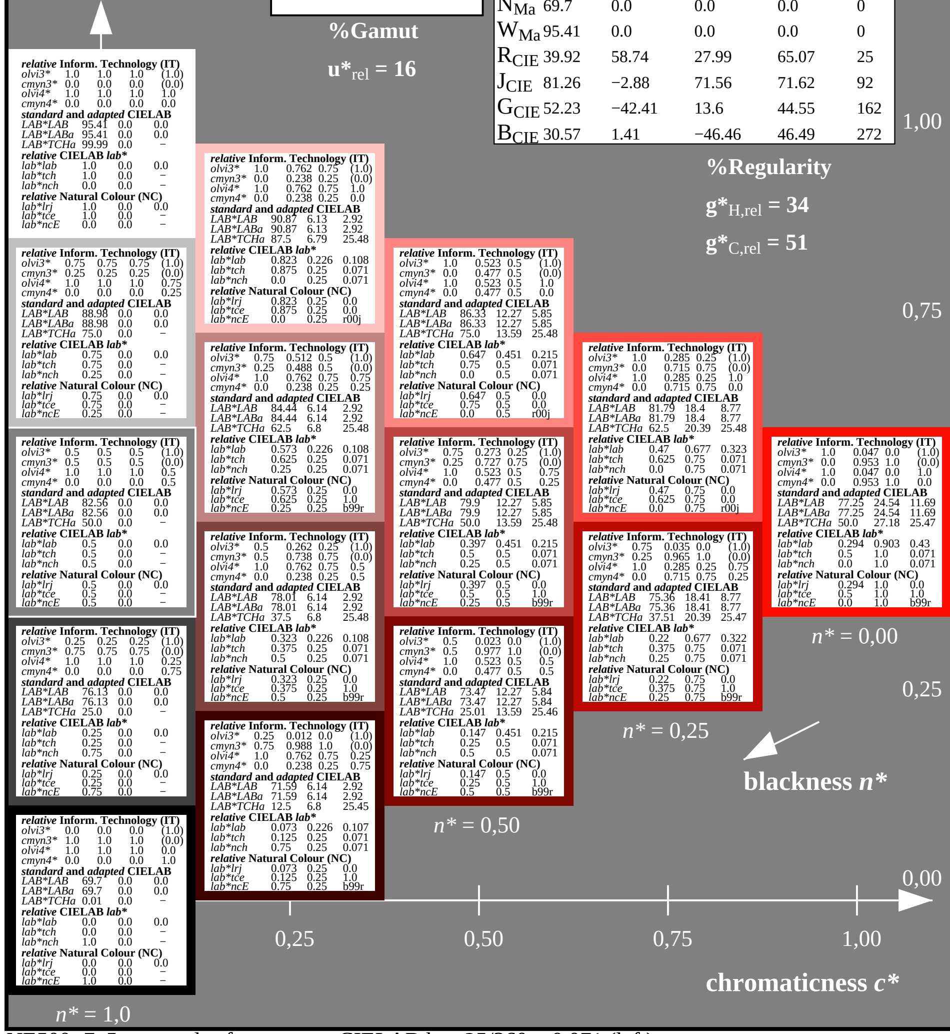


%Gamut
$u^*_{rel} = 16$

TLS70; adapted (a) CIELAB data

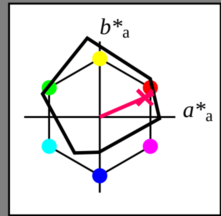
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	76.43	26.27	10.57	28.32	22
Y_{Ma}	93.93	−10.76	34.63	36.27	107
L_{Ma}	89.32	−35.8	27.64	45.24	142
C_{Ma}	90.93	−21.95	−7.07	23.07	198
V_{Ma}	72.1	15.76	−35.63	38.97	294
M_{Ma}	78.5	37.52	−25.23	45.22	326
N_{Ma}	69.7	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	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 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^*

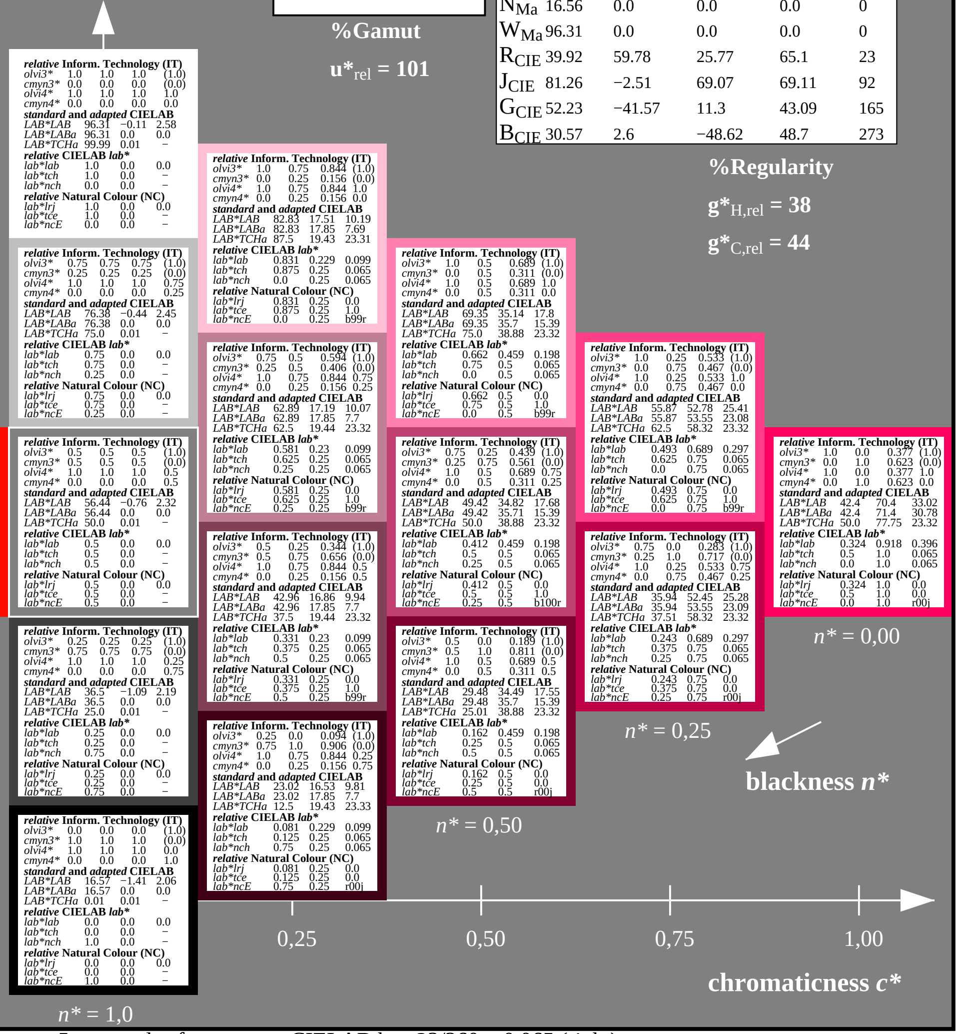


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

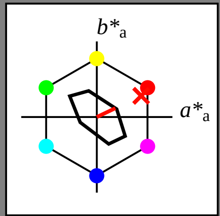
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

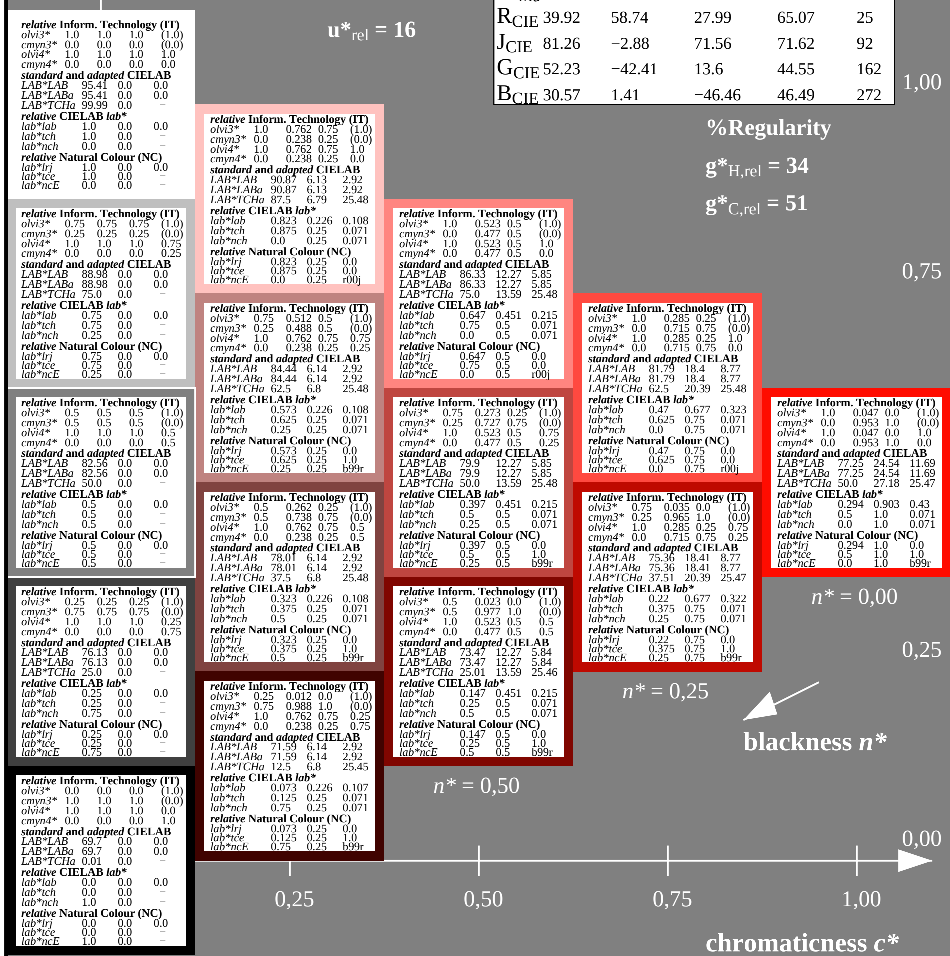
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 25/360 = 0.071$

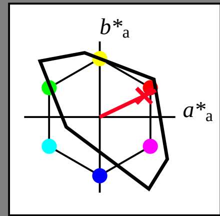
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

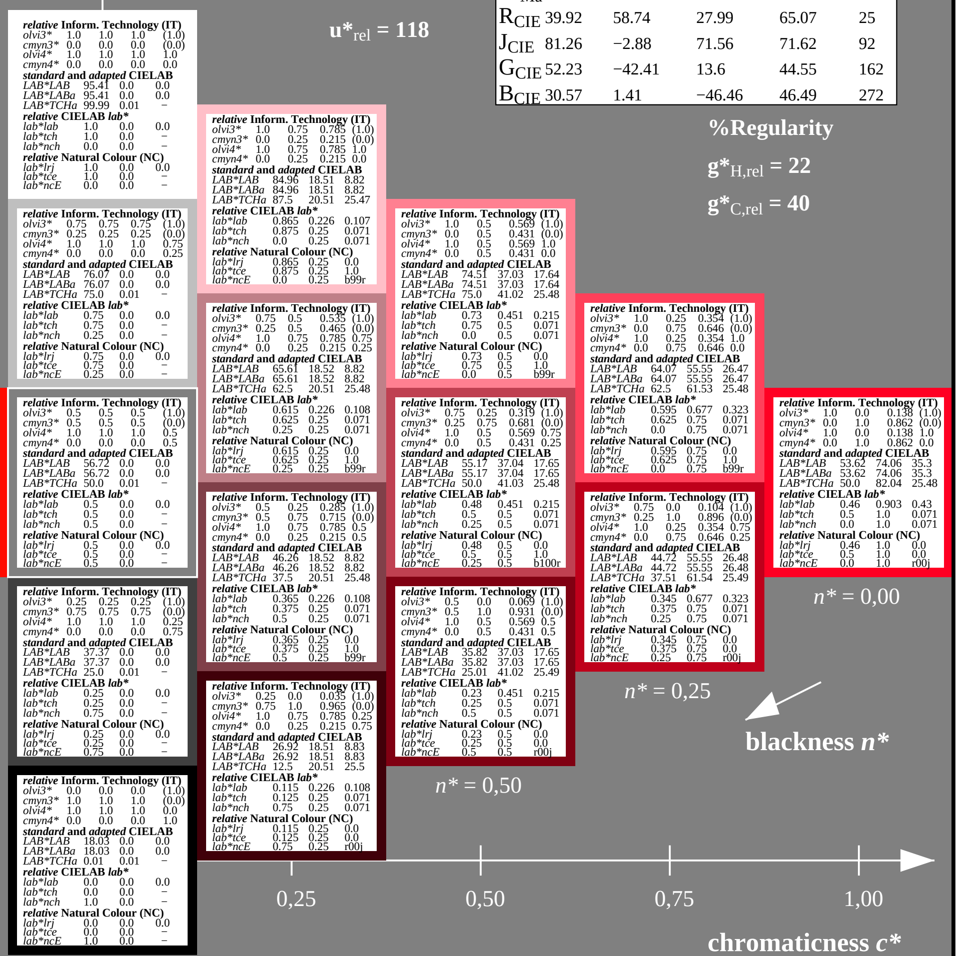
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

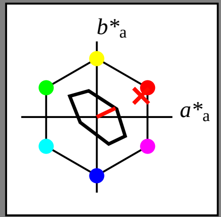
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

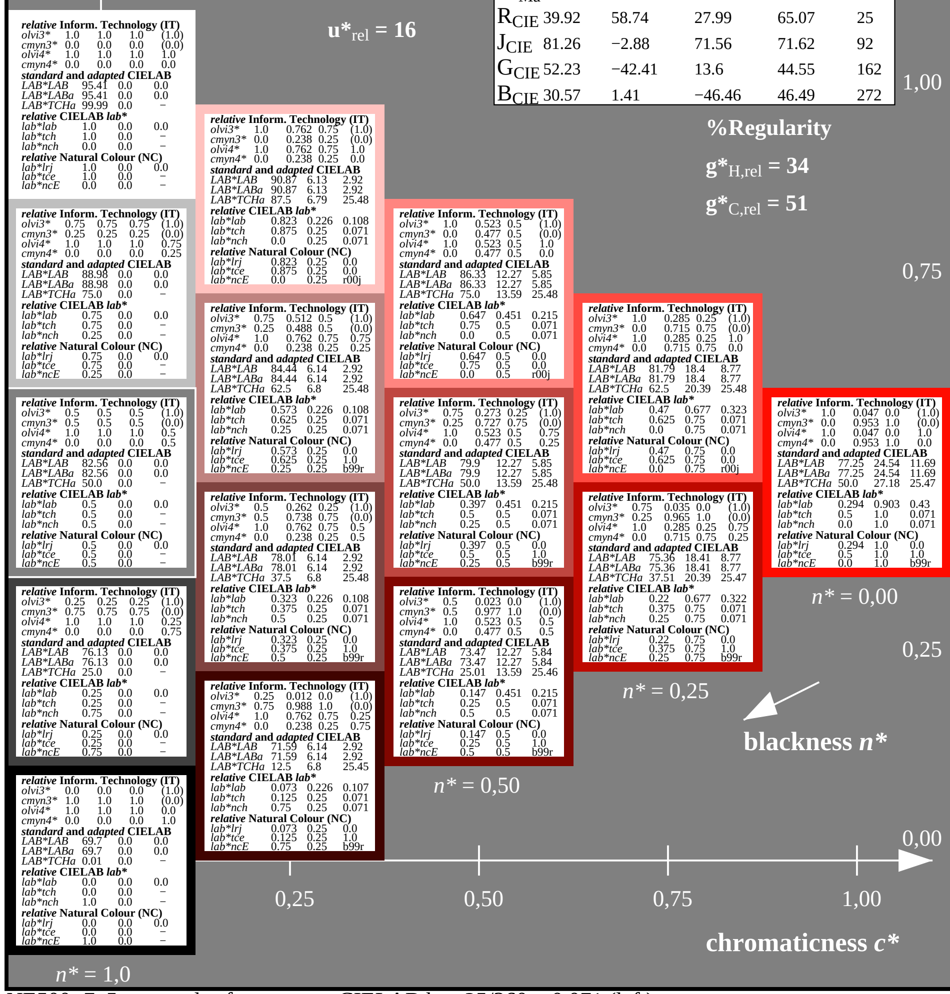
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 25/360 = 0.071$

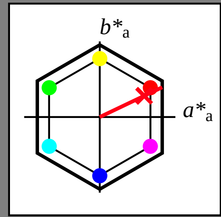
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 35 92 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

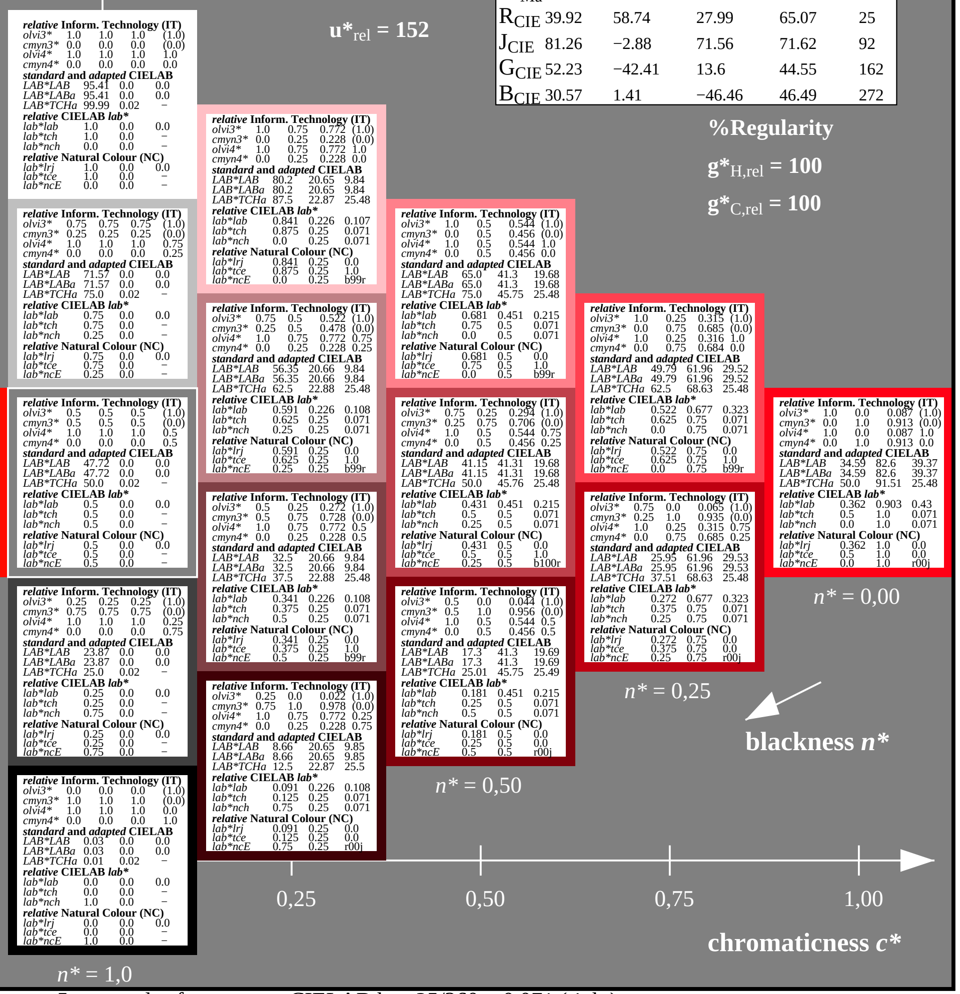
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

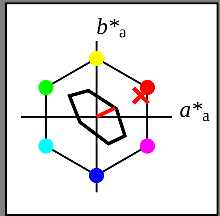
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

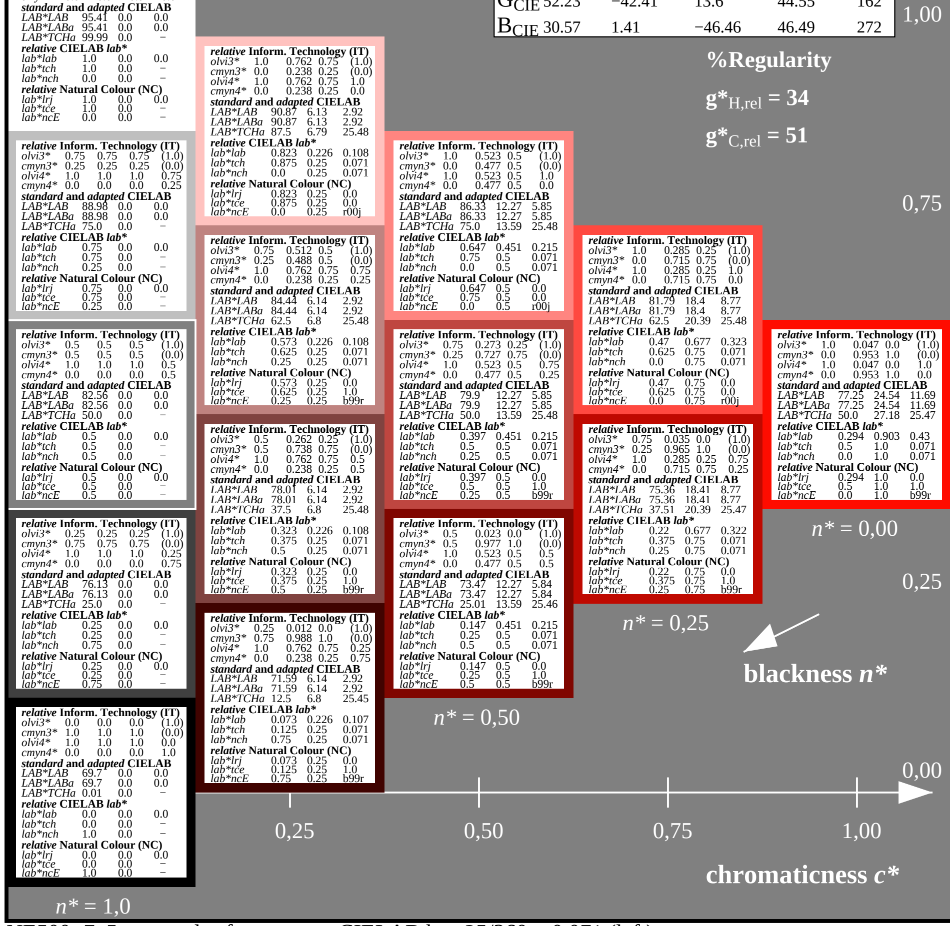
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 25/360 = 0.071$

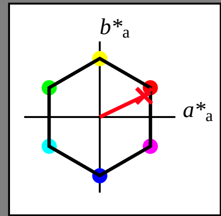
*lab*tch and lab*nch*

D65: hue R

LCH*Ma: 46 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

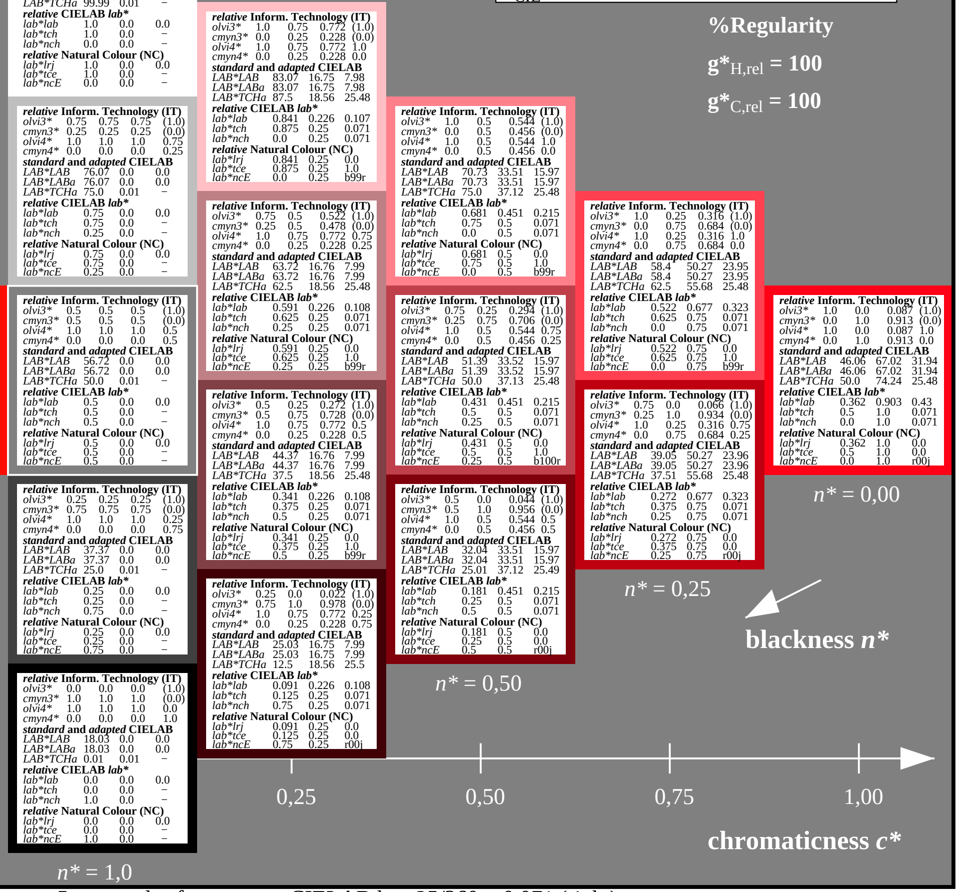
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 25/360 = 0.071$

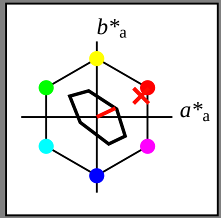
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



%Gamut

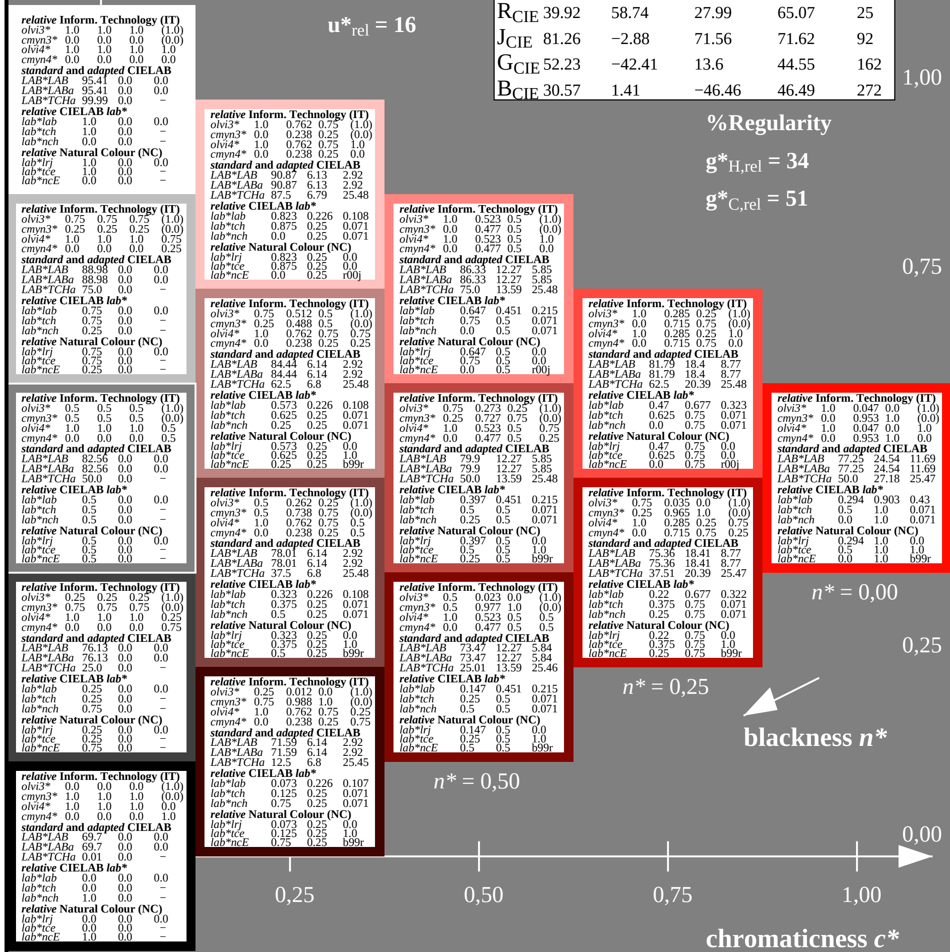
u^*_{rel} = 16

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 $h^* = lab^*h = 25/360 = 0.071$

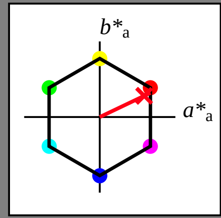
*lab*tch* and *lab*nch*

D65: hue R

LCH*Ma: 57 74 25

olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



%Gamut

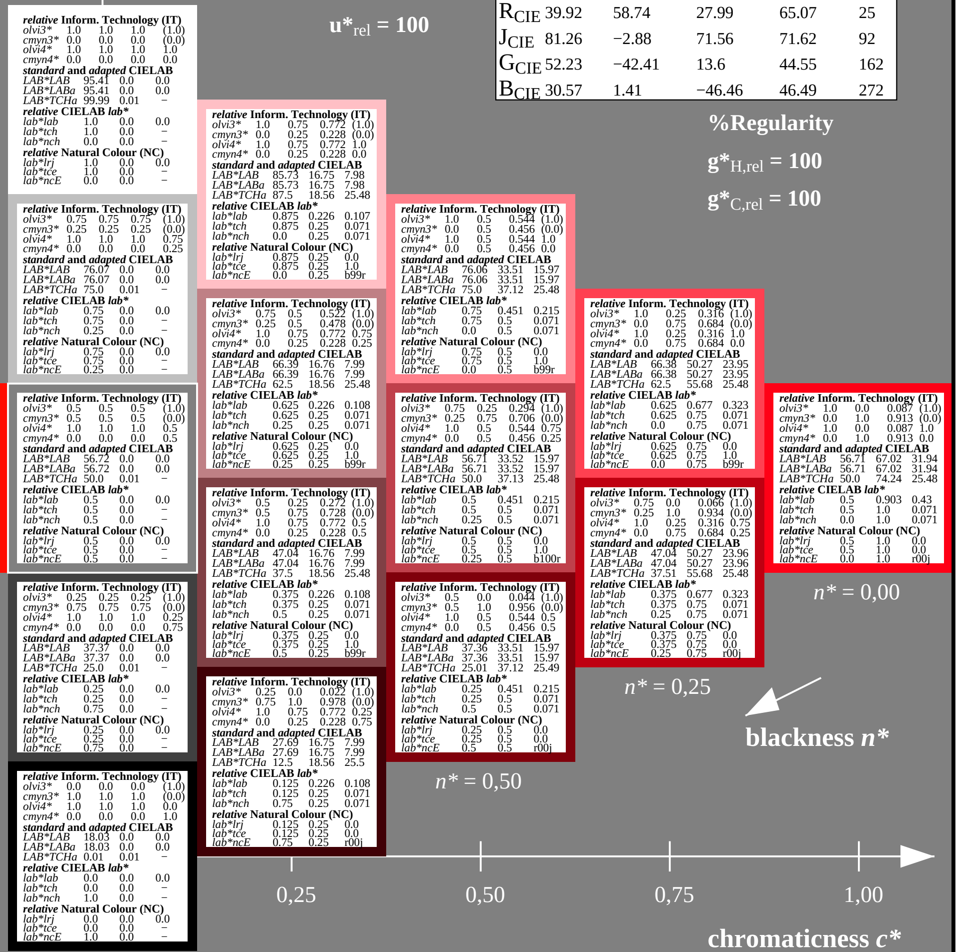
u^*_{rel} = 100

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



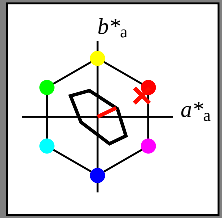
NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

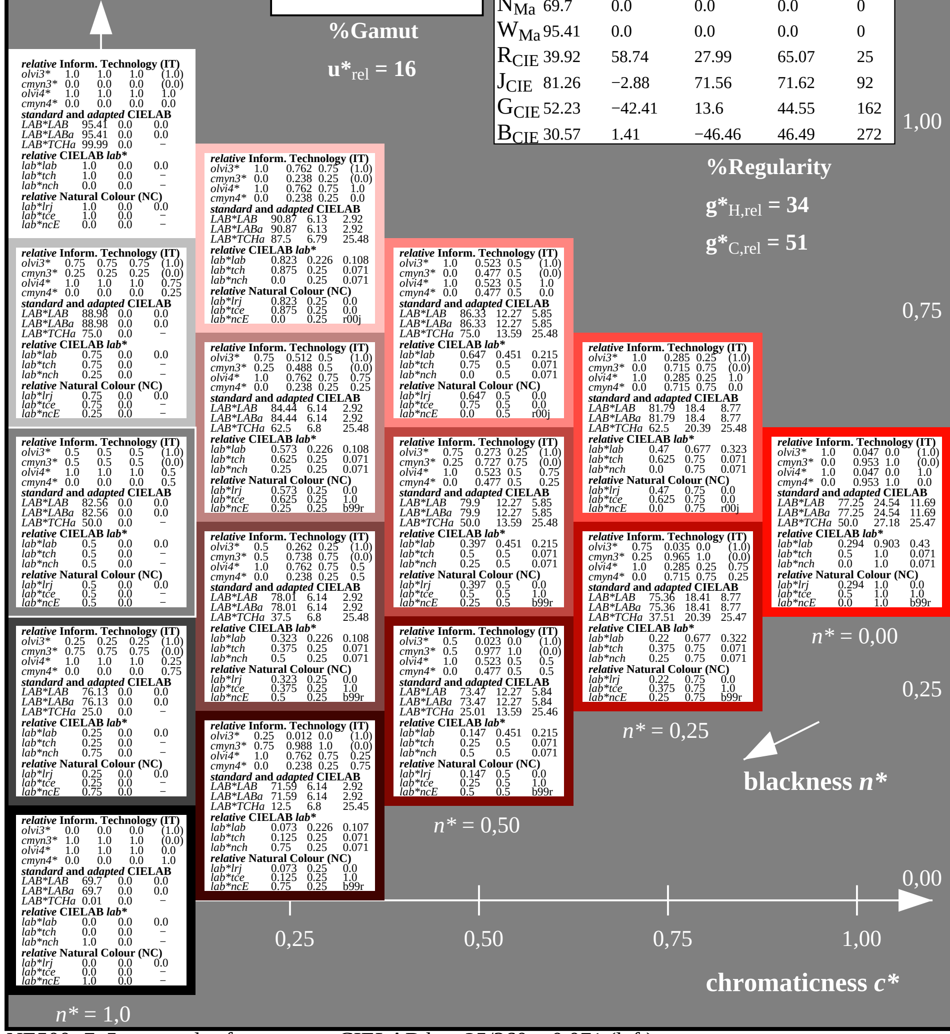
u^*_{rel} = 16

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

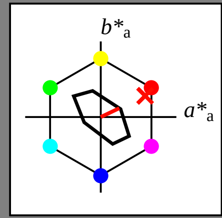


NE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

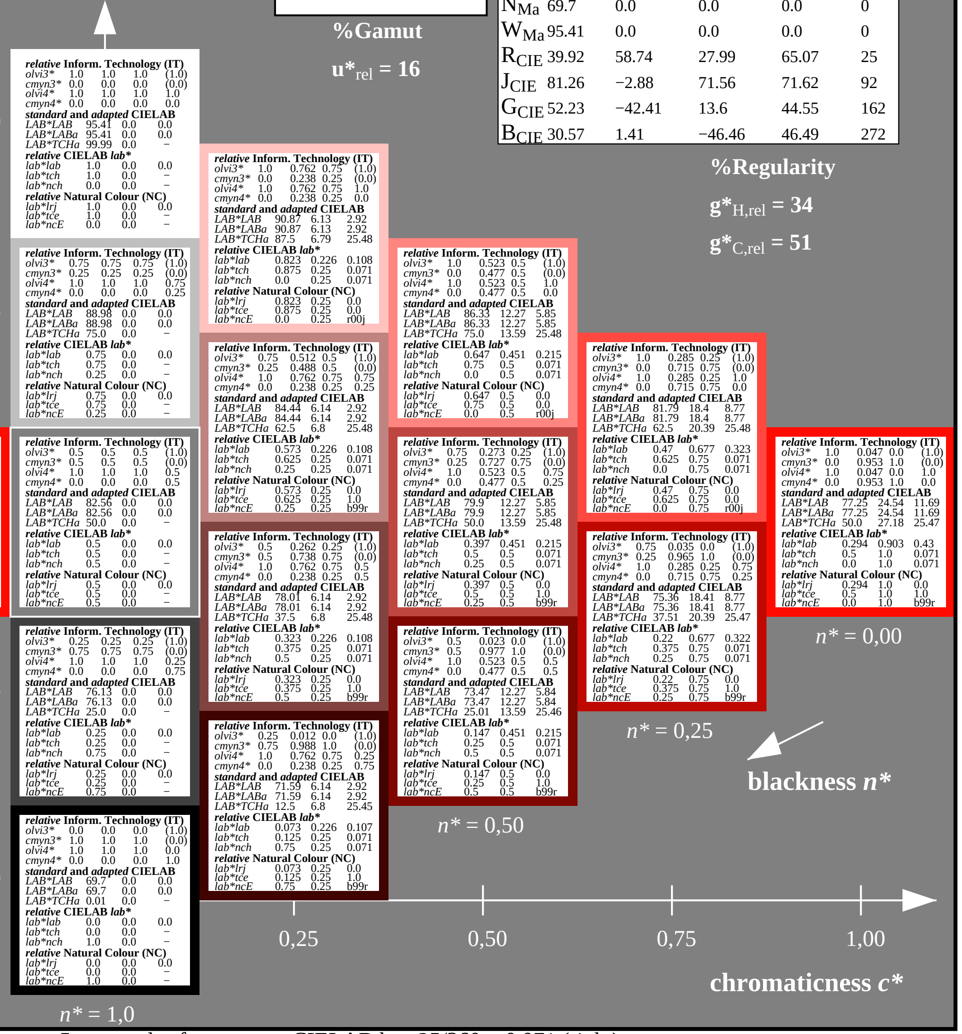
u^*_{rel} = 16

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

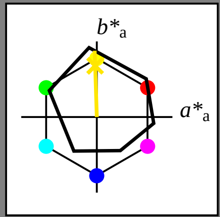


5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

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

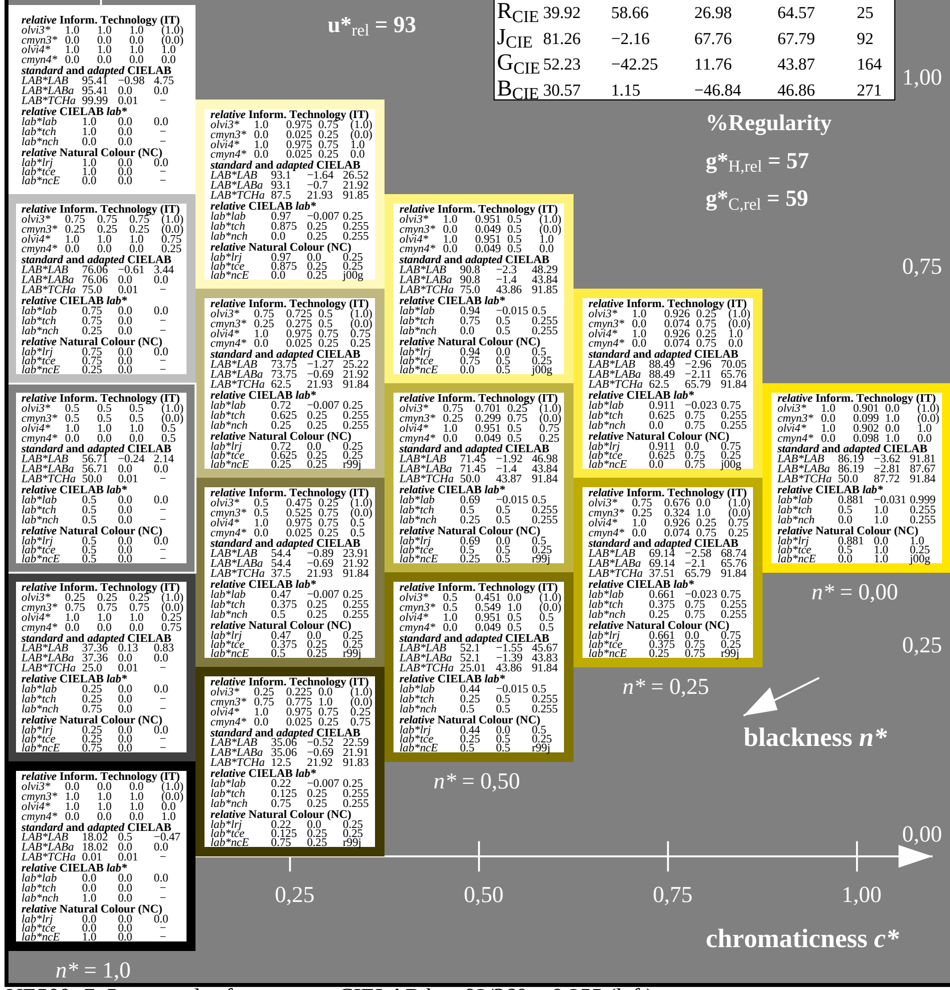
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

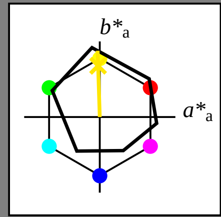
g*C,rel = 59



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

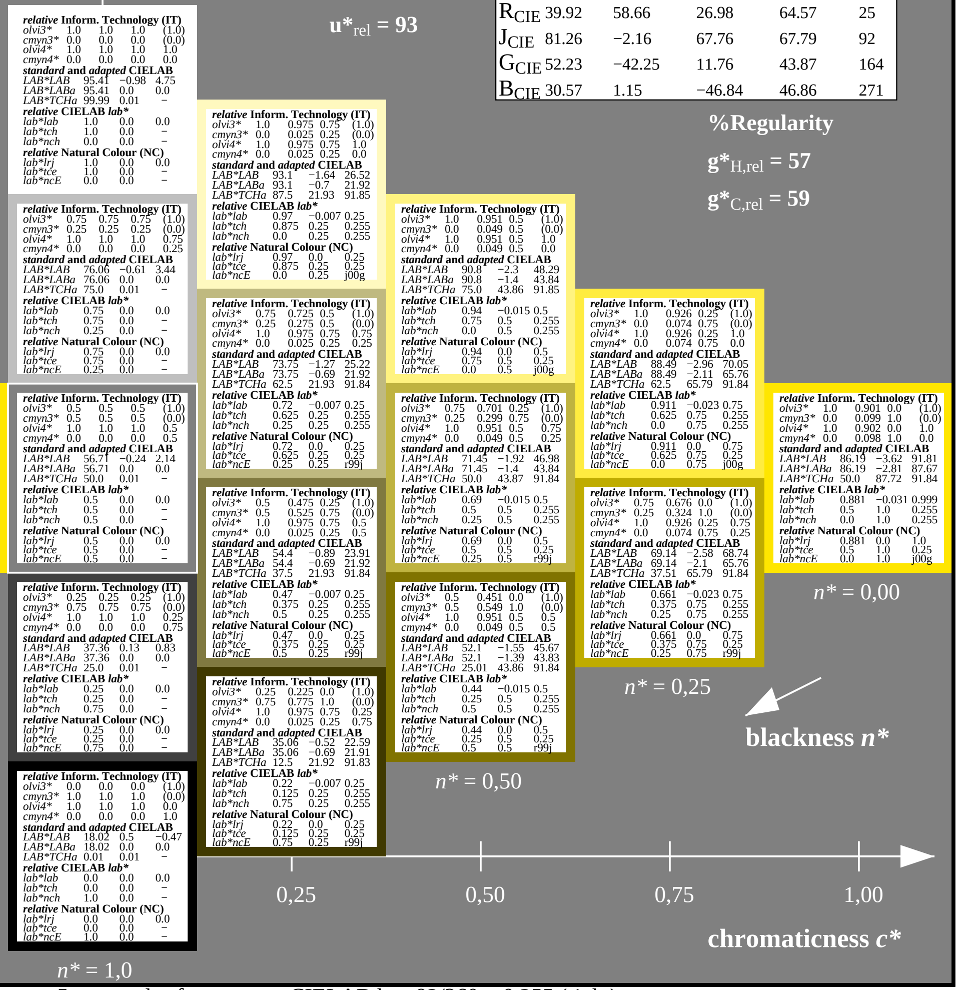
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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**

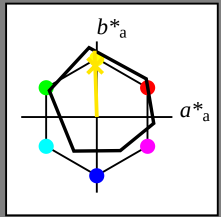
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness *t*



%Gamut

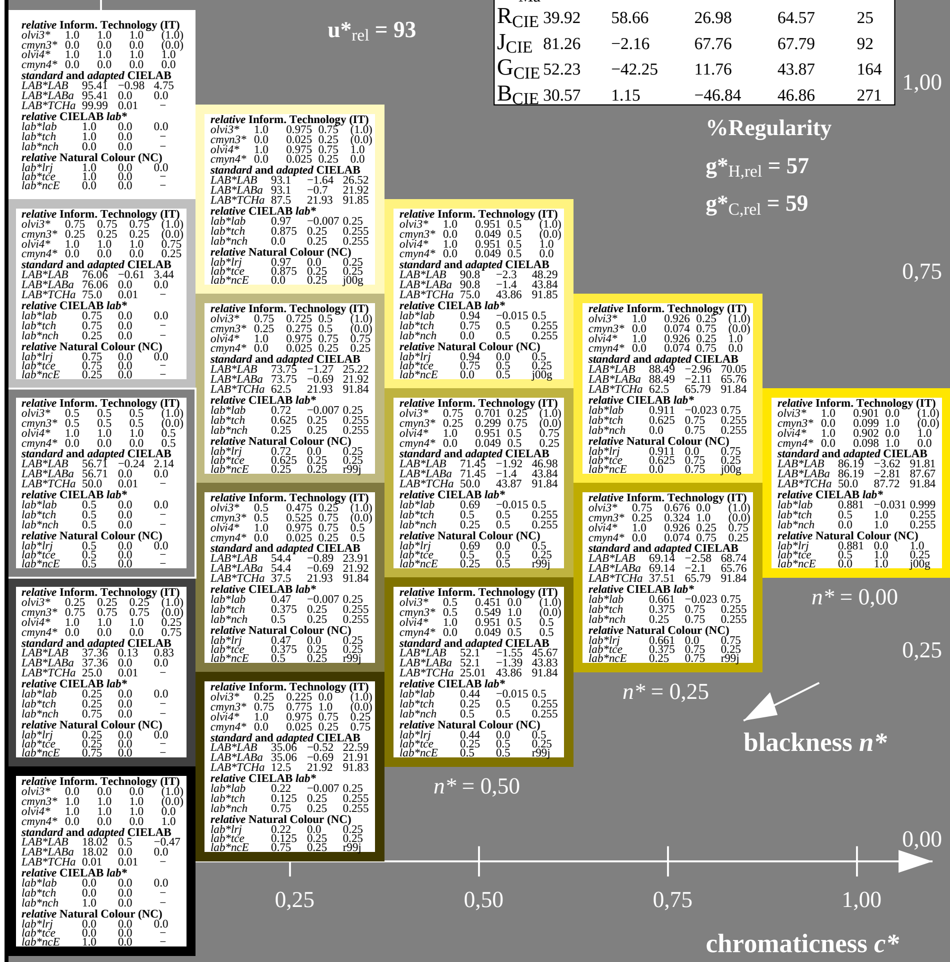
u^*_{rel} = 93

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



Output: Colorimetric Television Luminous System TLS00

for hue *h = *lab*h* = 92/360 = 0.256**

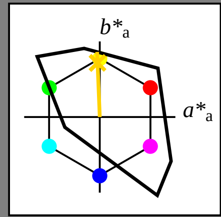
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t*



%Gamut

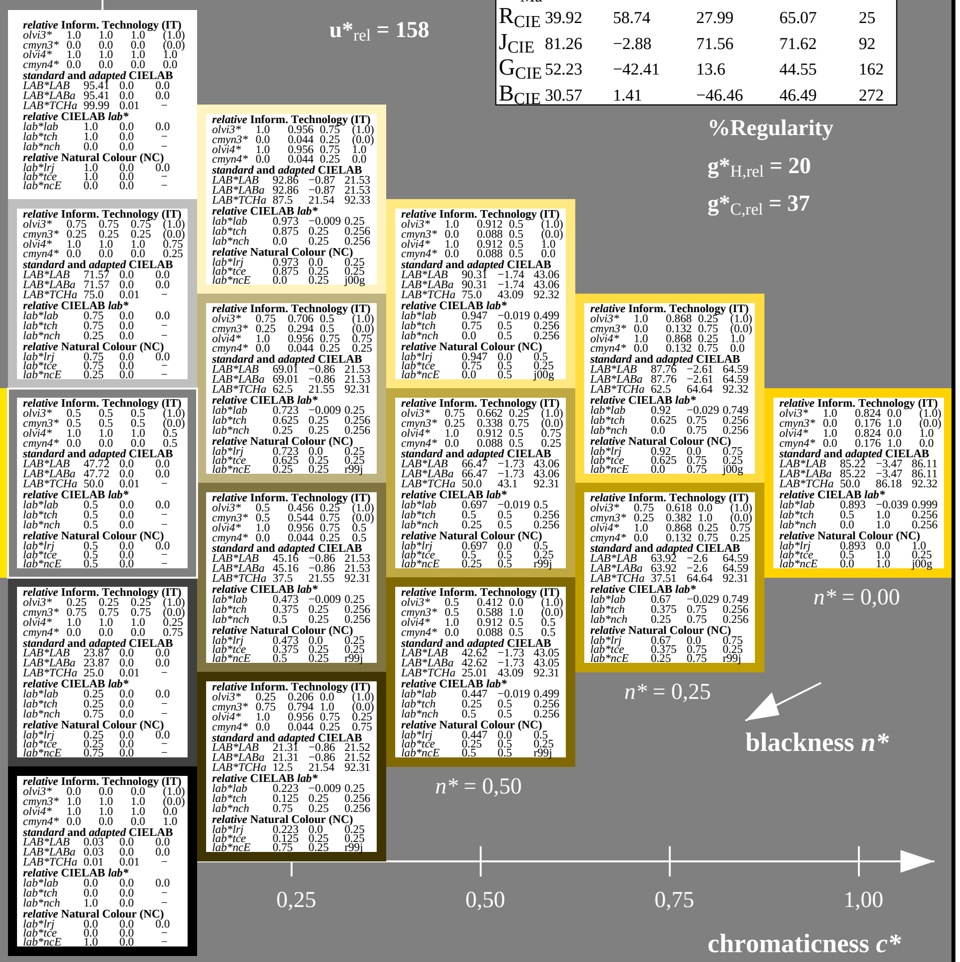
u^*_{rel} = 158

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



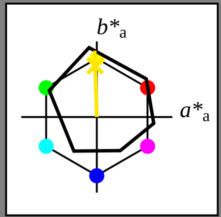
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

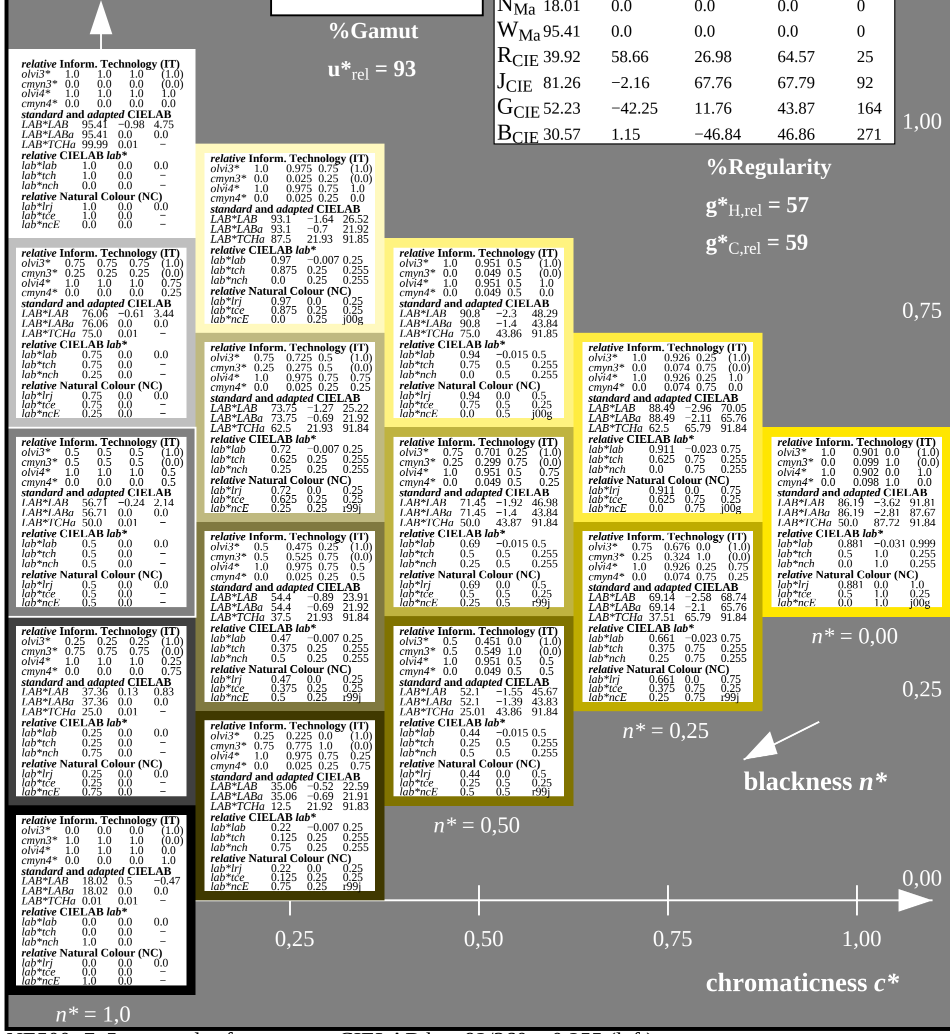
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

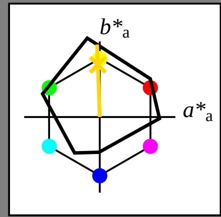
$g^*_{C,rel}$ = 59



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

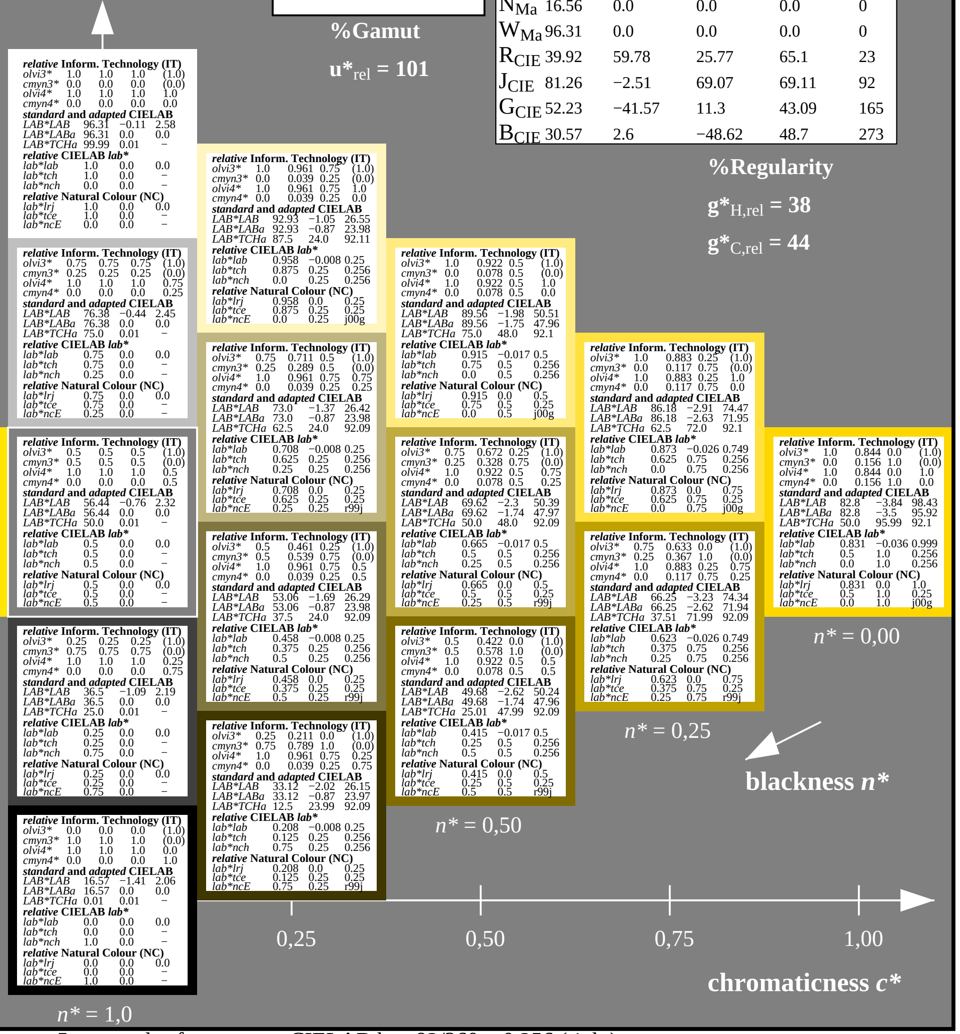
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

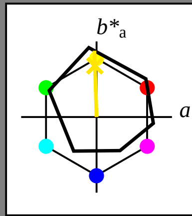
lab*tch* and *lab*nch

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

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

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

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 TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

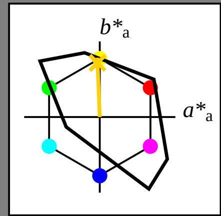
lab*tch* and *lab*nch

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^*

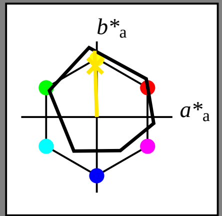
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

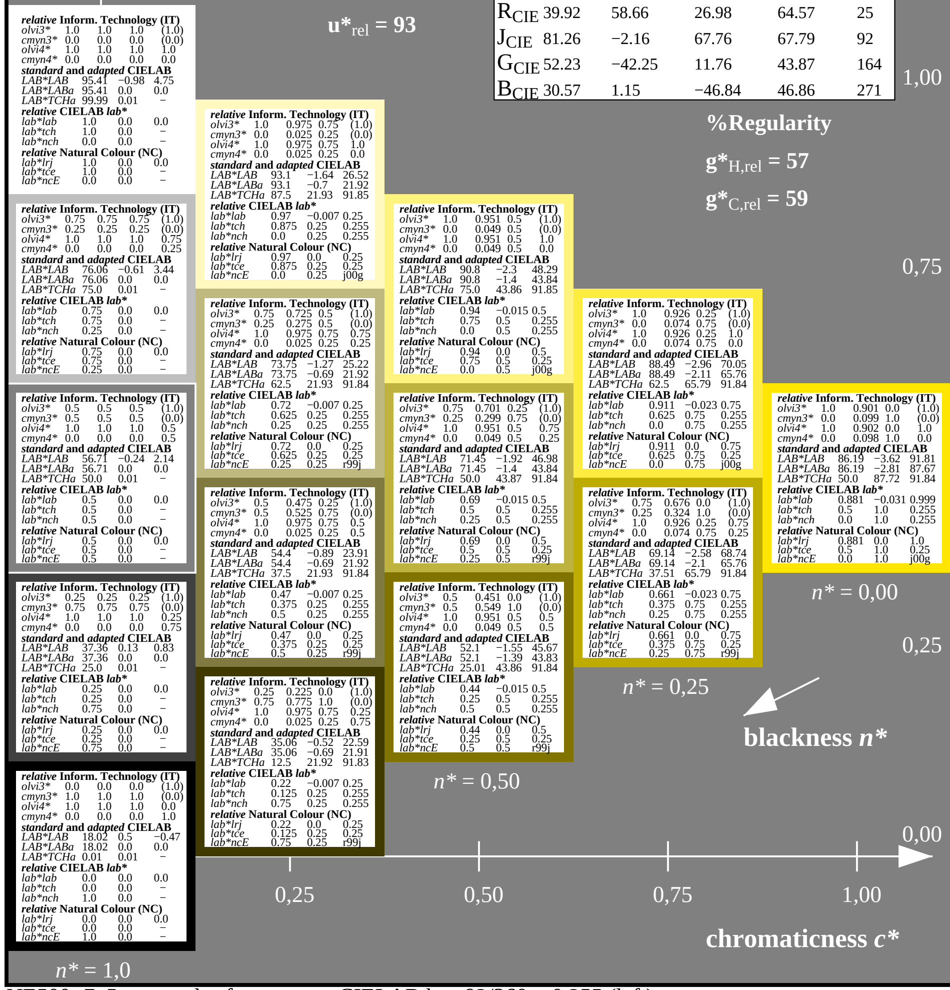
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

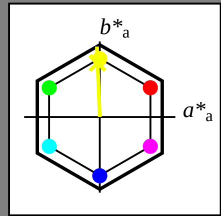
$g^*_{C,rel}$ = 59



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

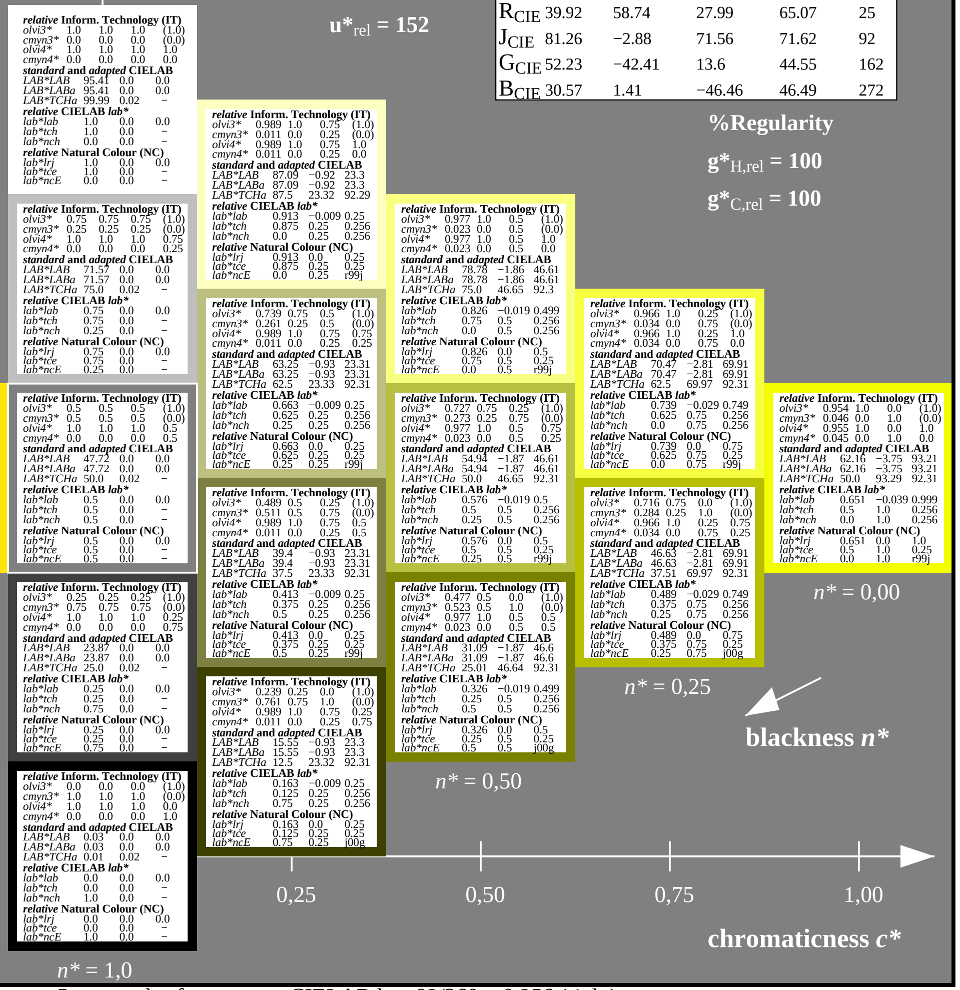
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

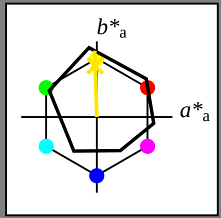
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

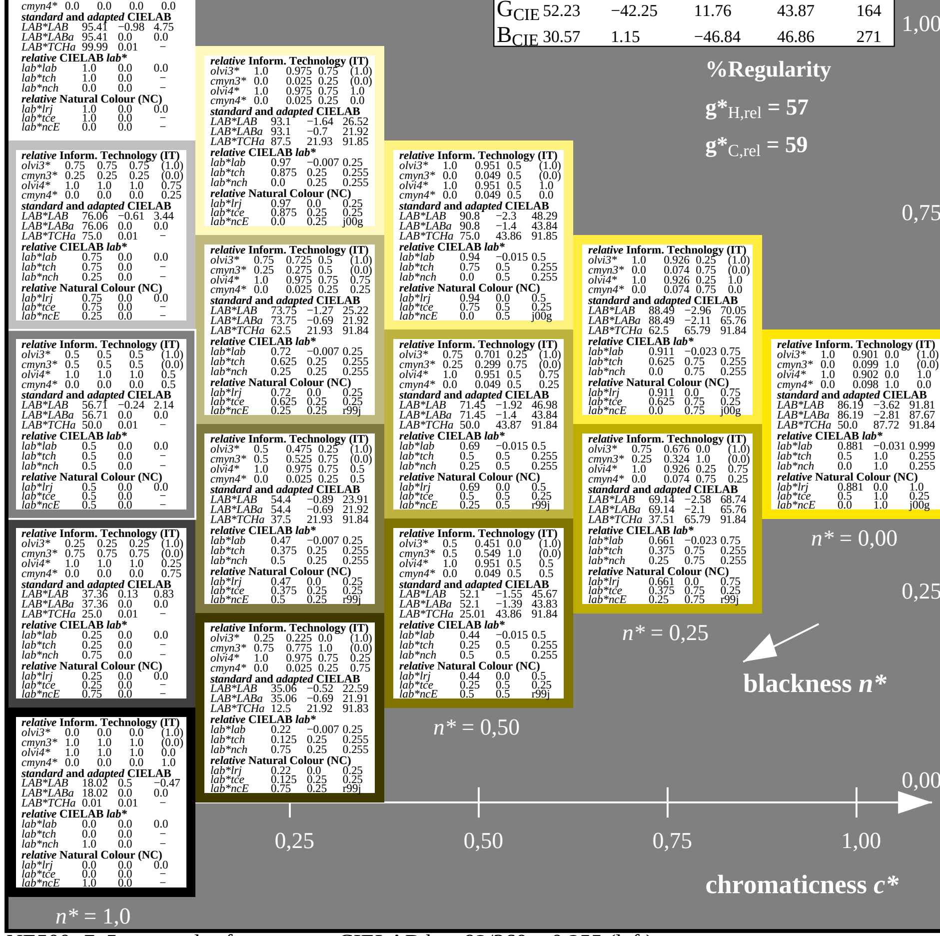
$u^*_{rel} = 93$

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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

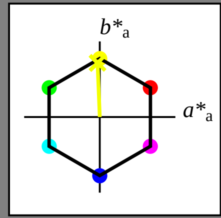
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

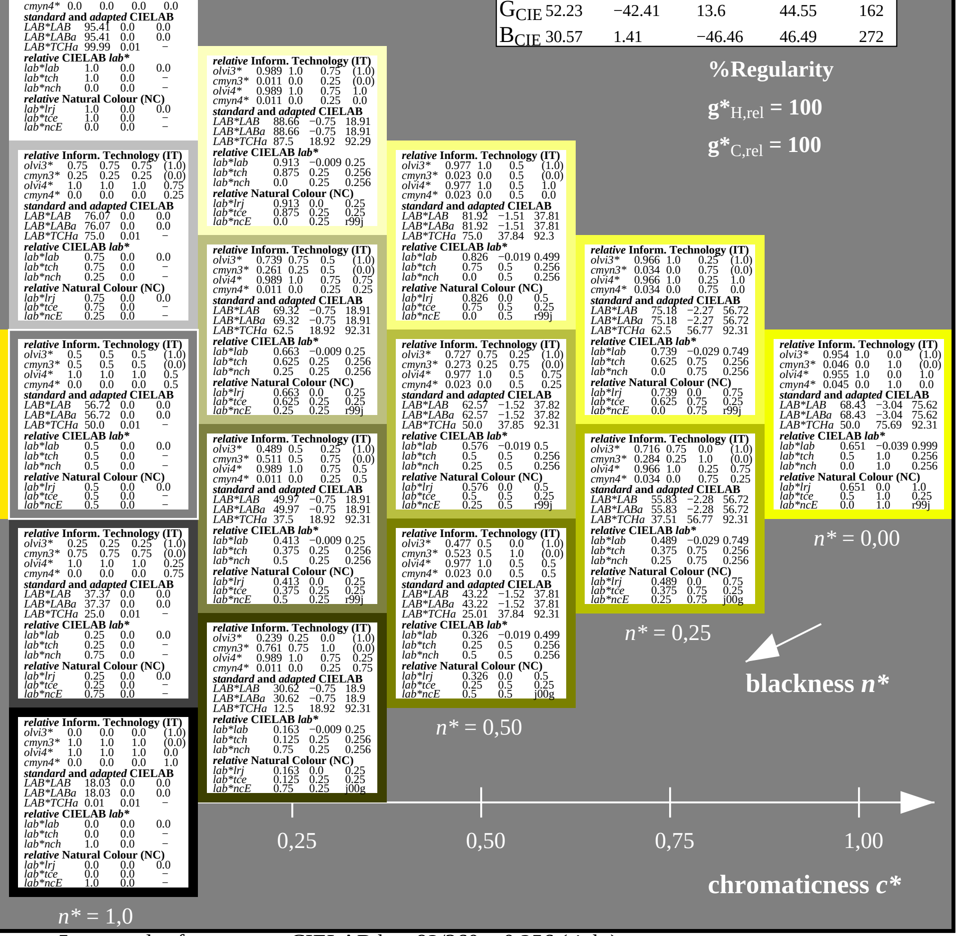
$u^*_{rel} = 100$

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

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

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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

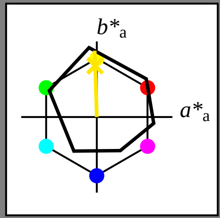
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

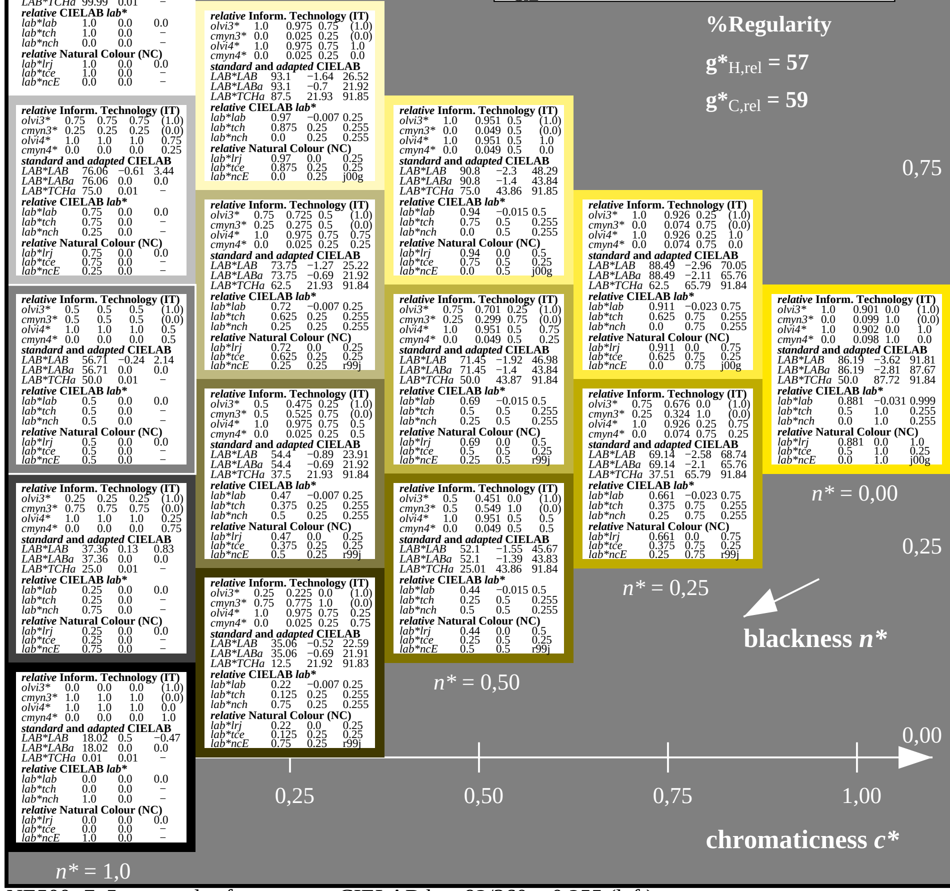
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

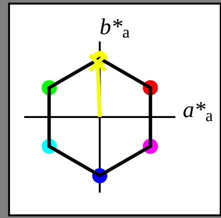
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

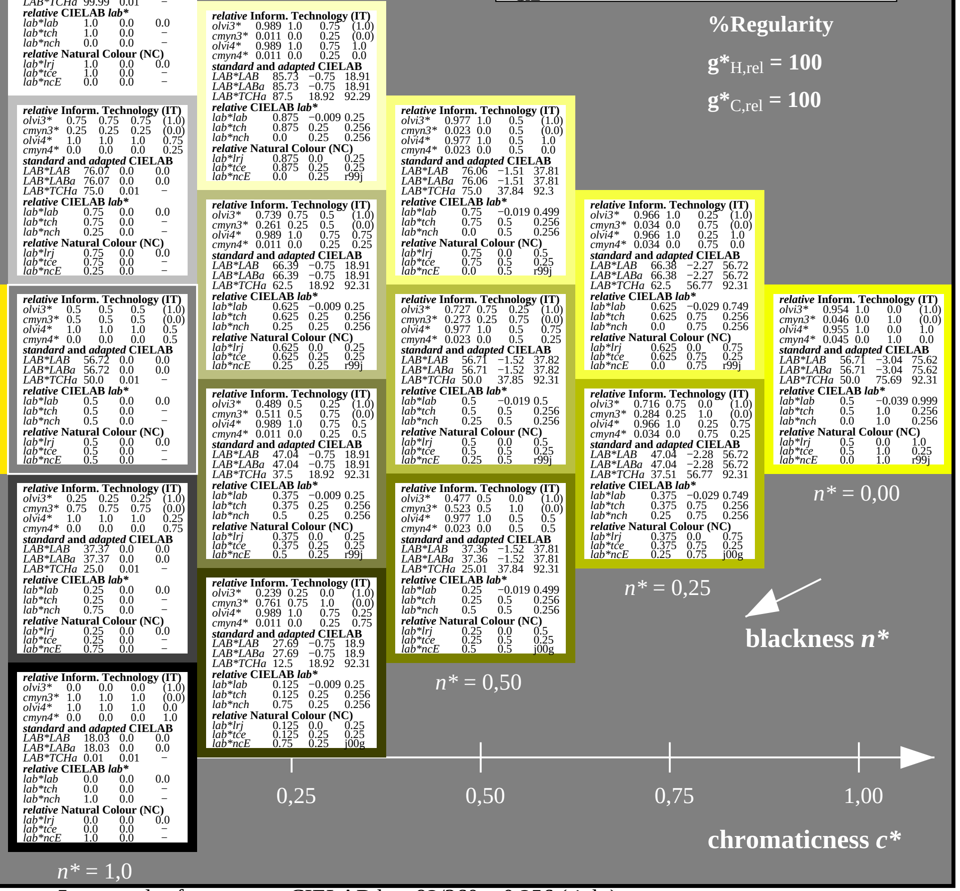
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

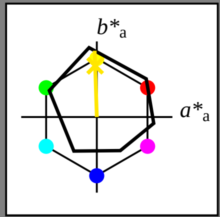
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

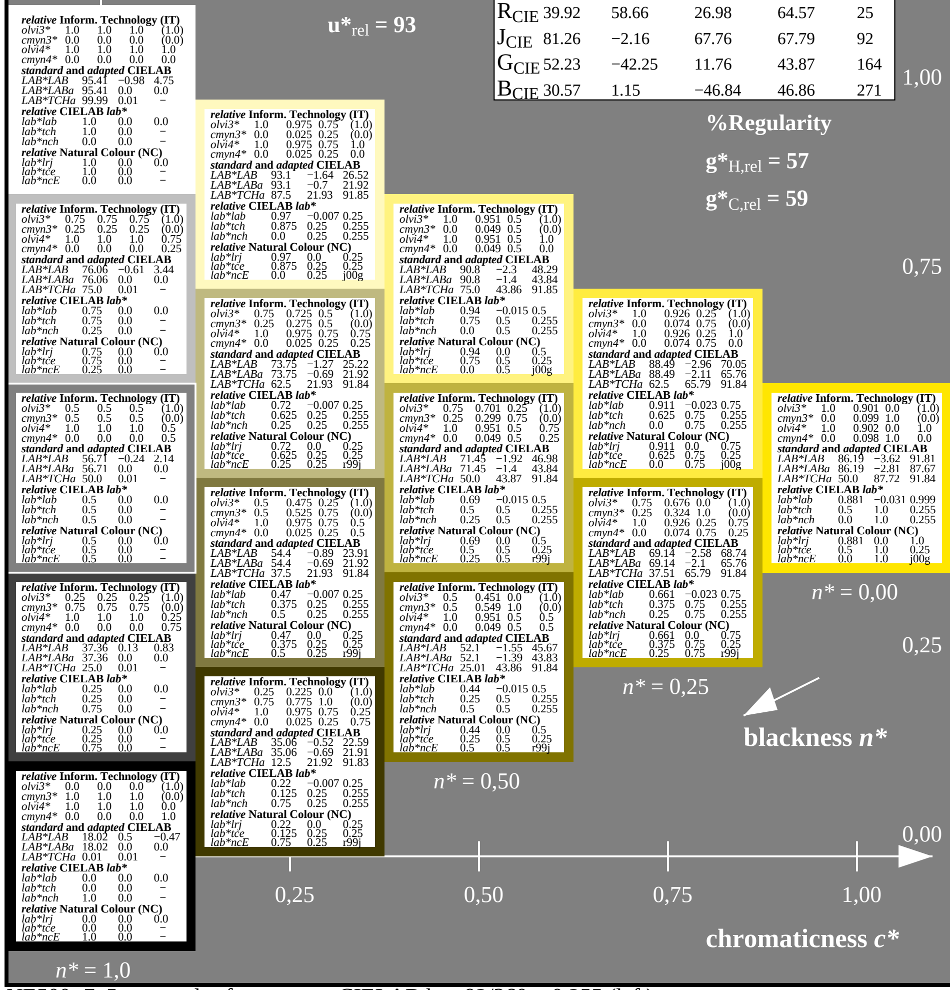
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

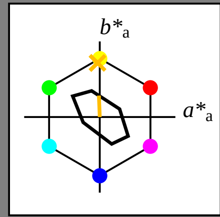
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

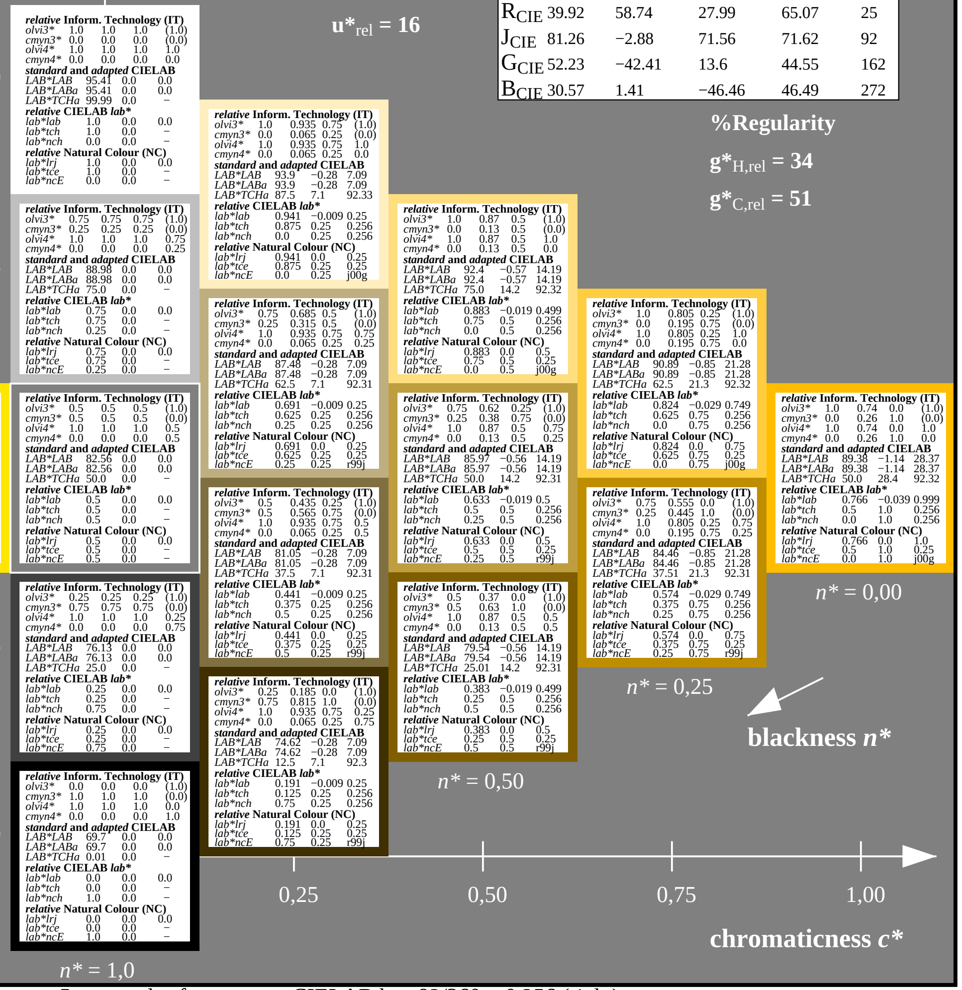
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



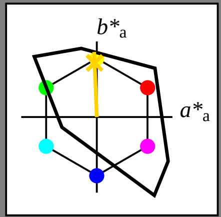
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

$u^*_{rel} = 158$

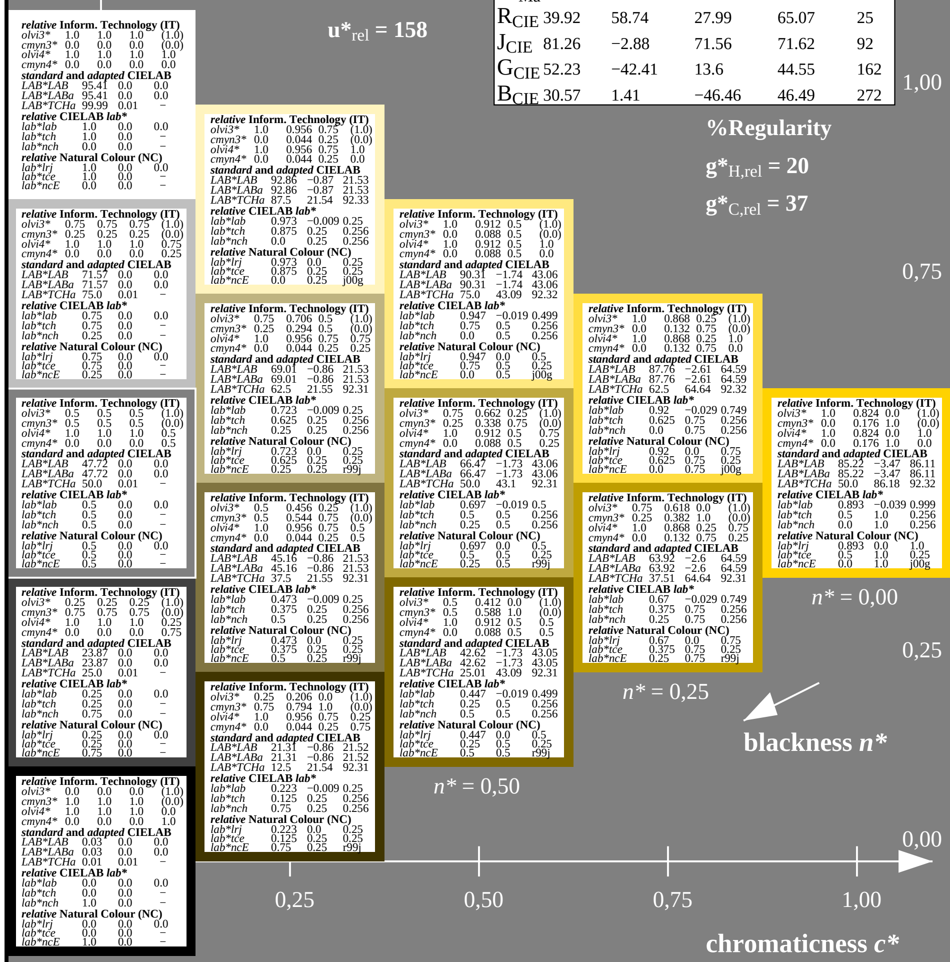
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

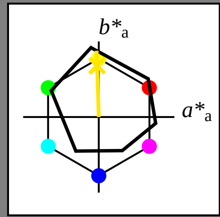
$g^*_{C,rel} = 37$



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

$u^*_{rel} = 93$

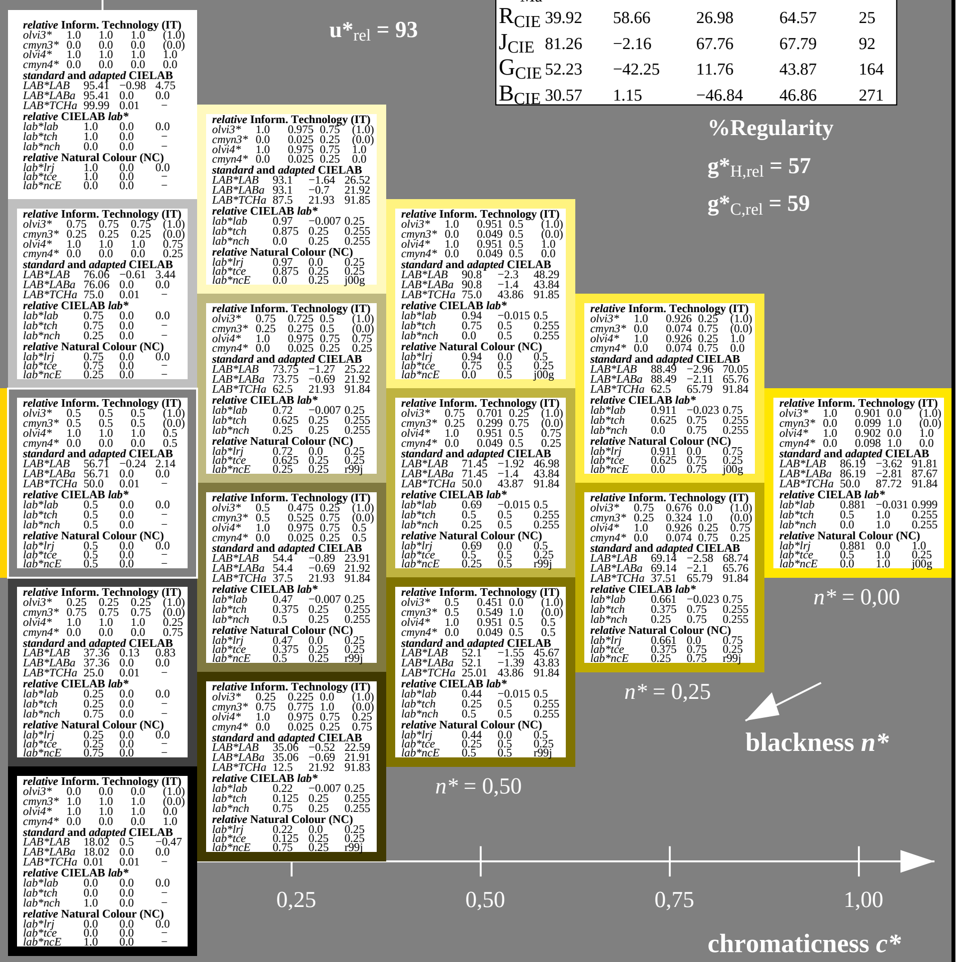
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



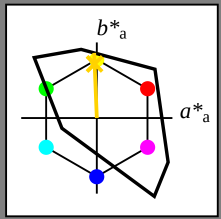
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric 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

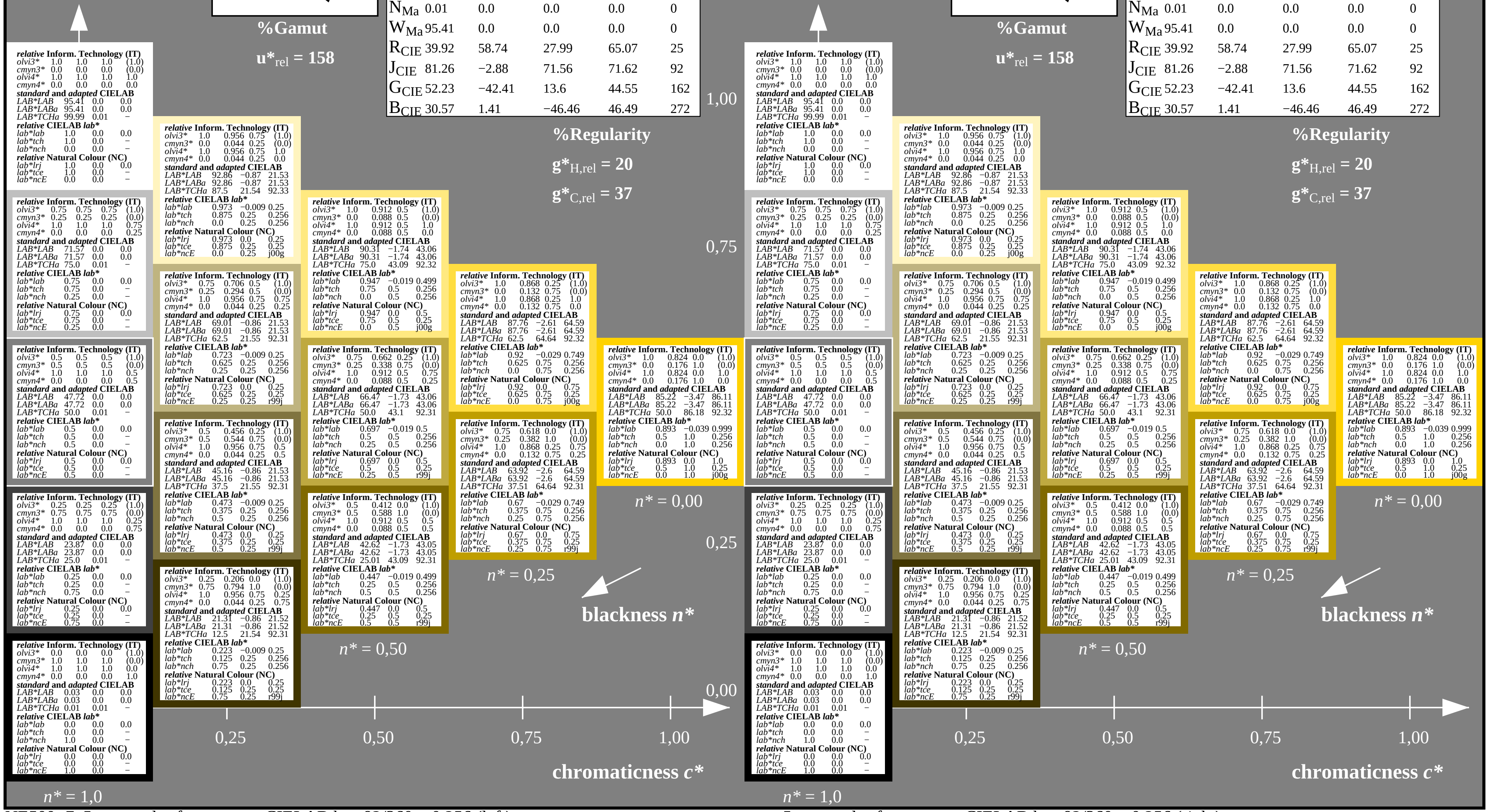
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

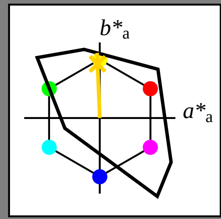
$g^*_{C,rel}$ = 37



Output: Colorimetric Television Luminous System 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

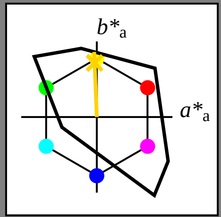
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

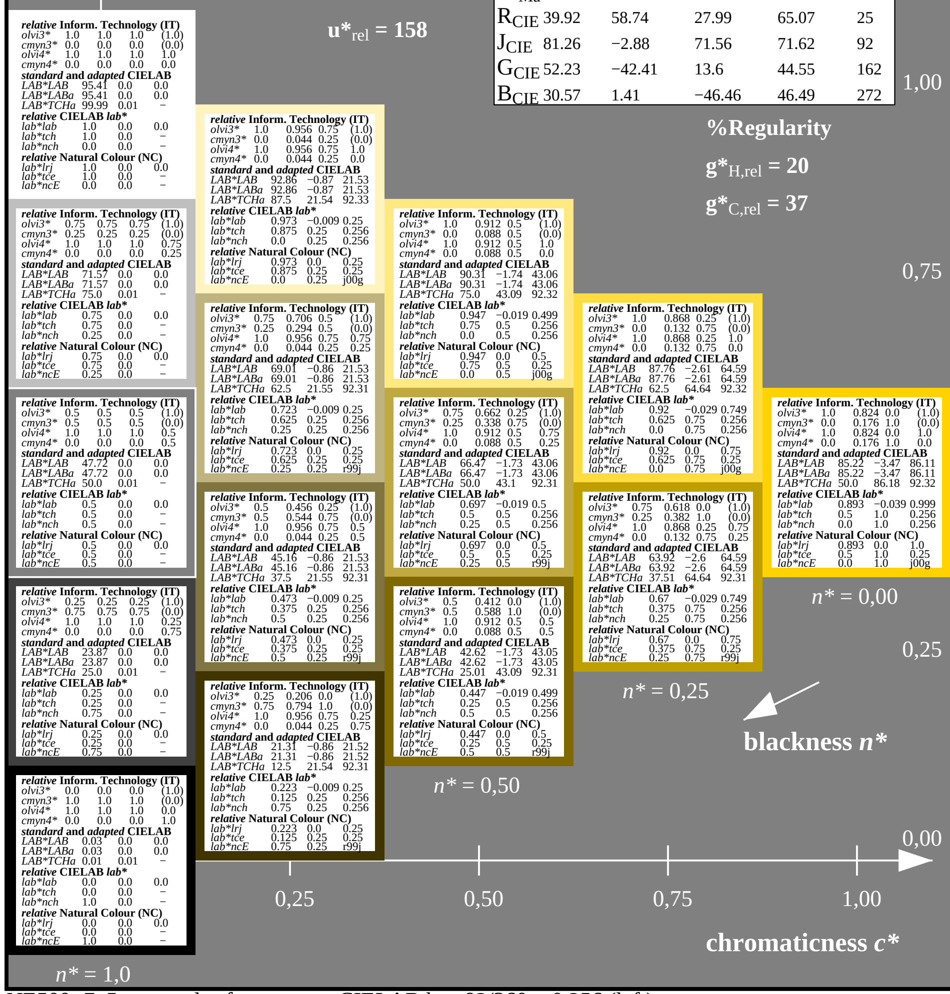
u^*_{rel} = 158

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

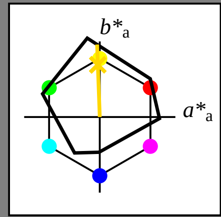
$g^*_{C,rel}$ = 37



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

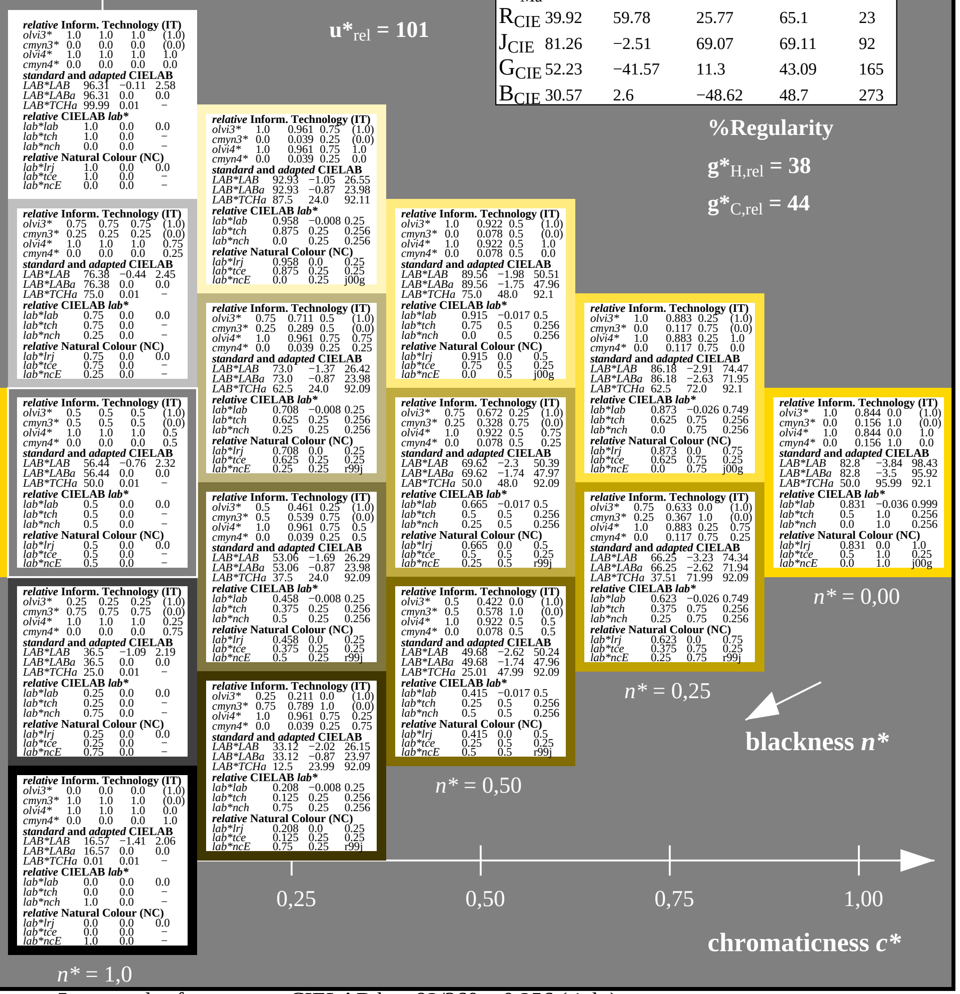
u^*_{rel} = 101

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



NE500−7, 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**

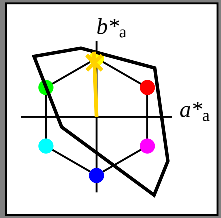
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 158

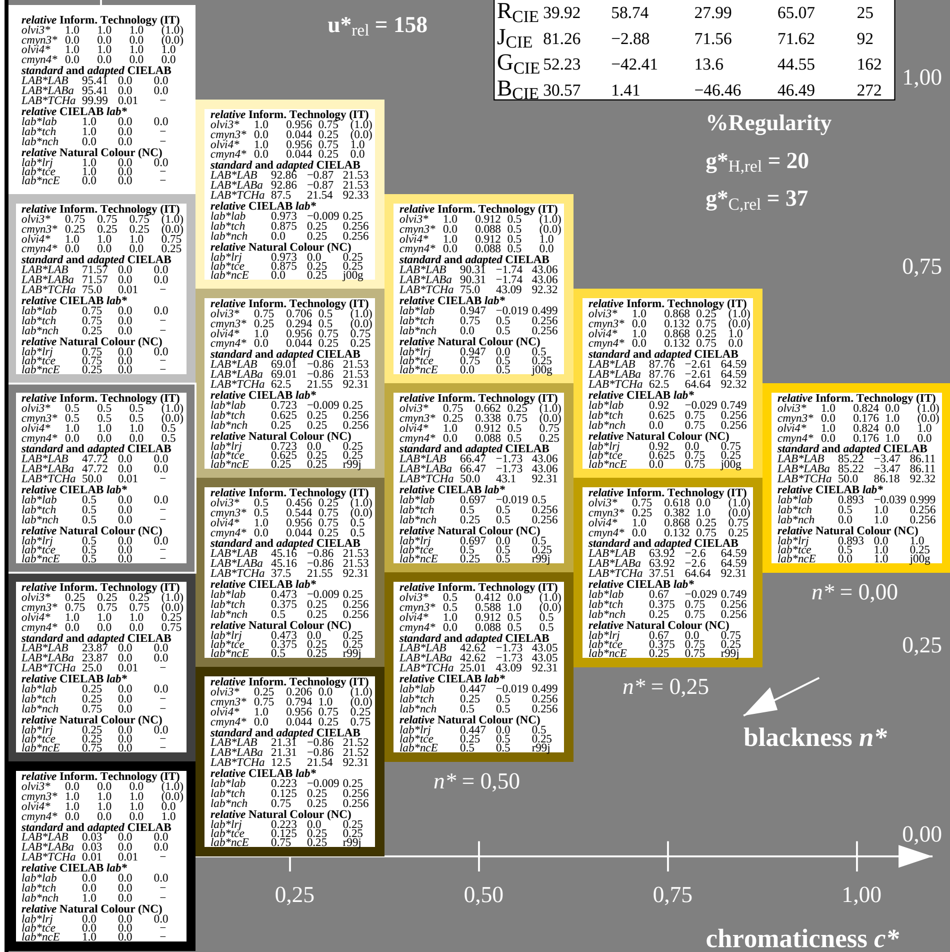
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

for hue *h = *lab*h* = 92/360 = 0.256**

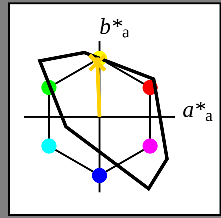
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 118

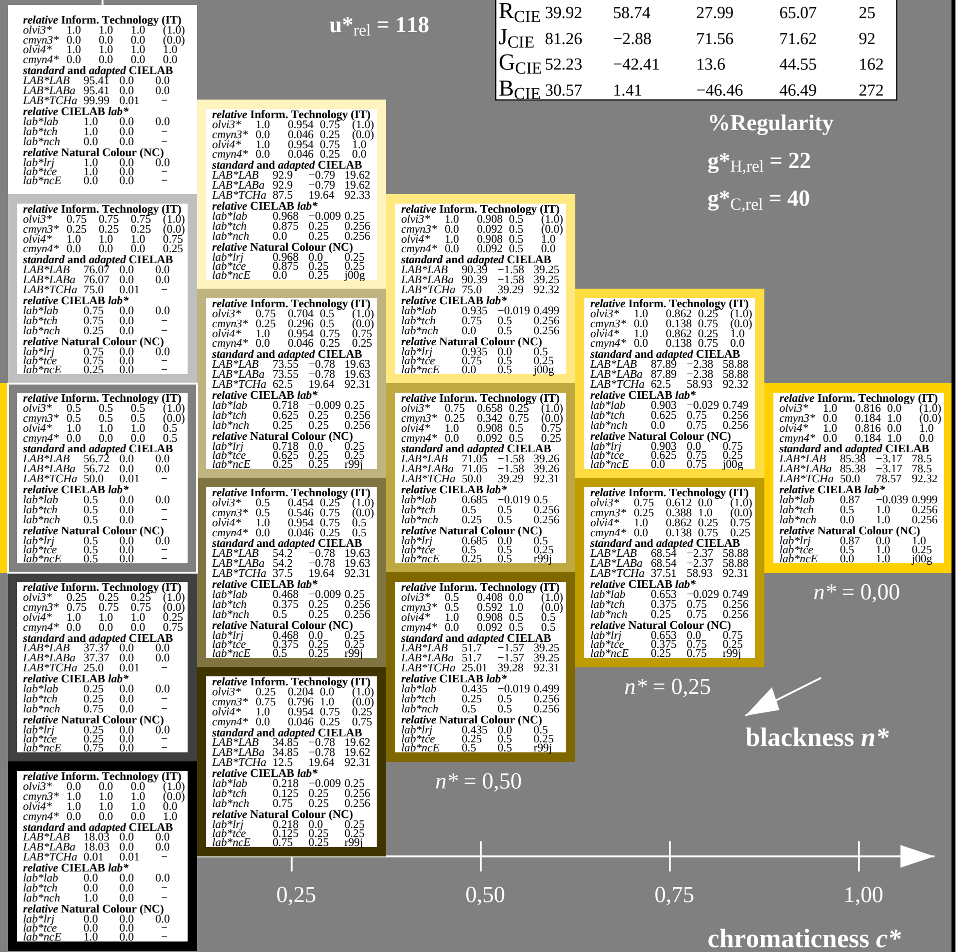
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



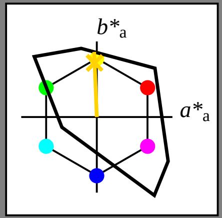
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

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

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

blackness n^*

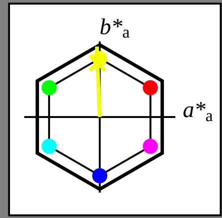
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Natural 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

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

blackness n^*

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

chromaticness c^*

NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

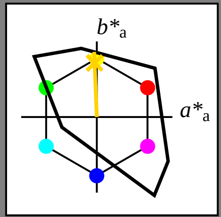
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 158$

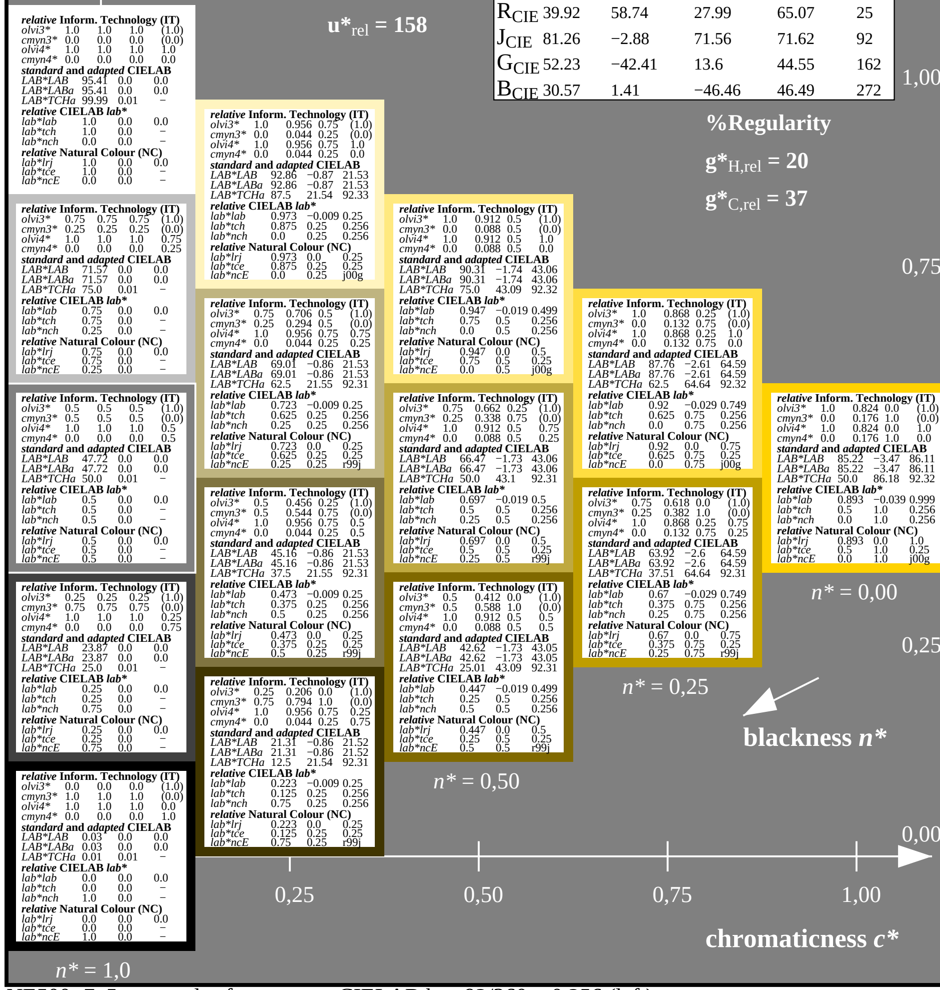
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

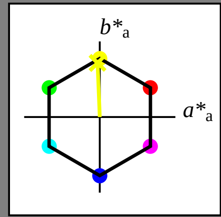
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 100$

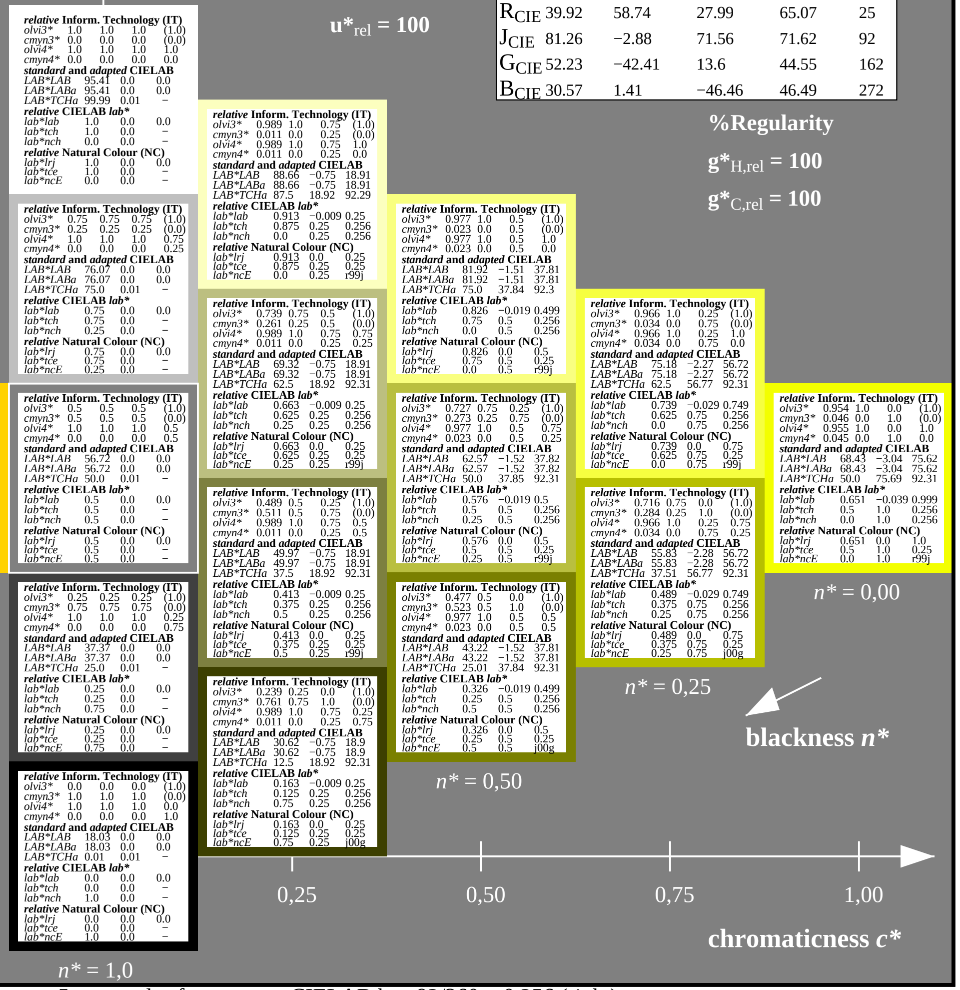
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

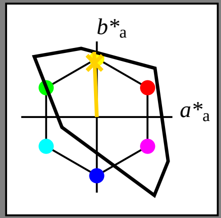
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

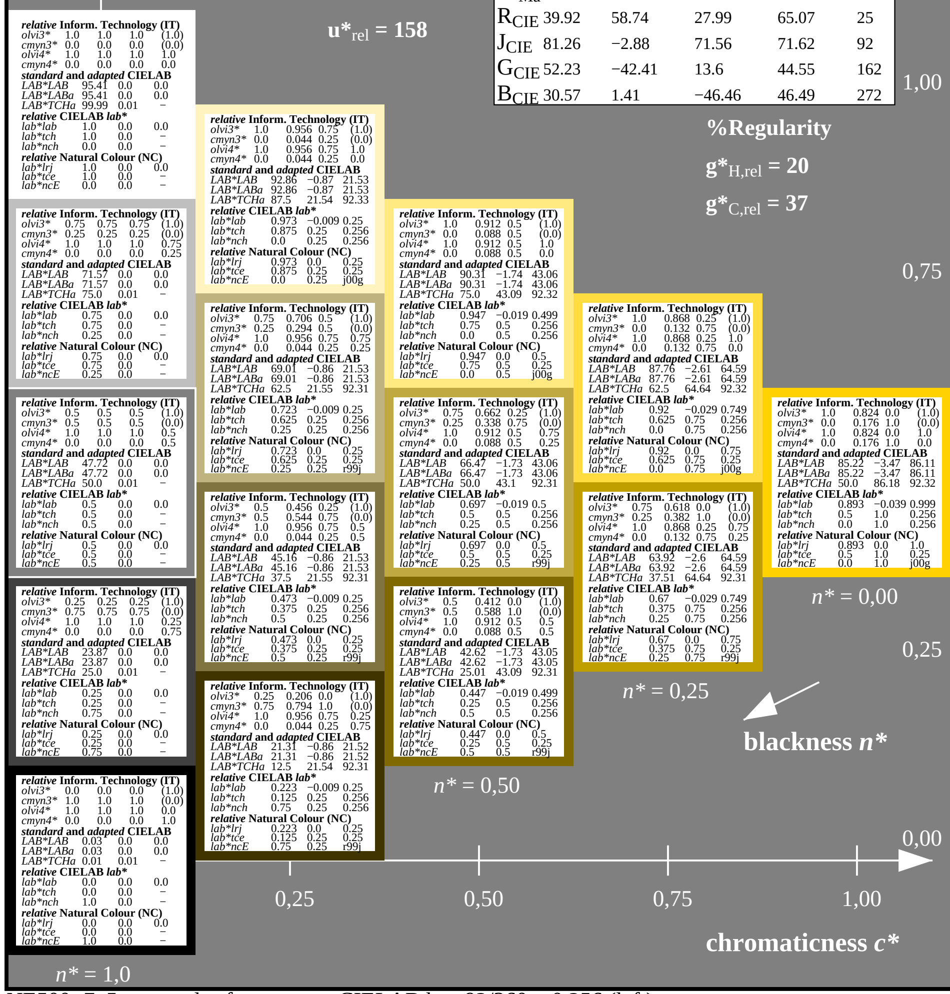
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

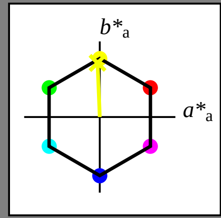
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

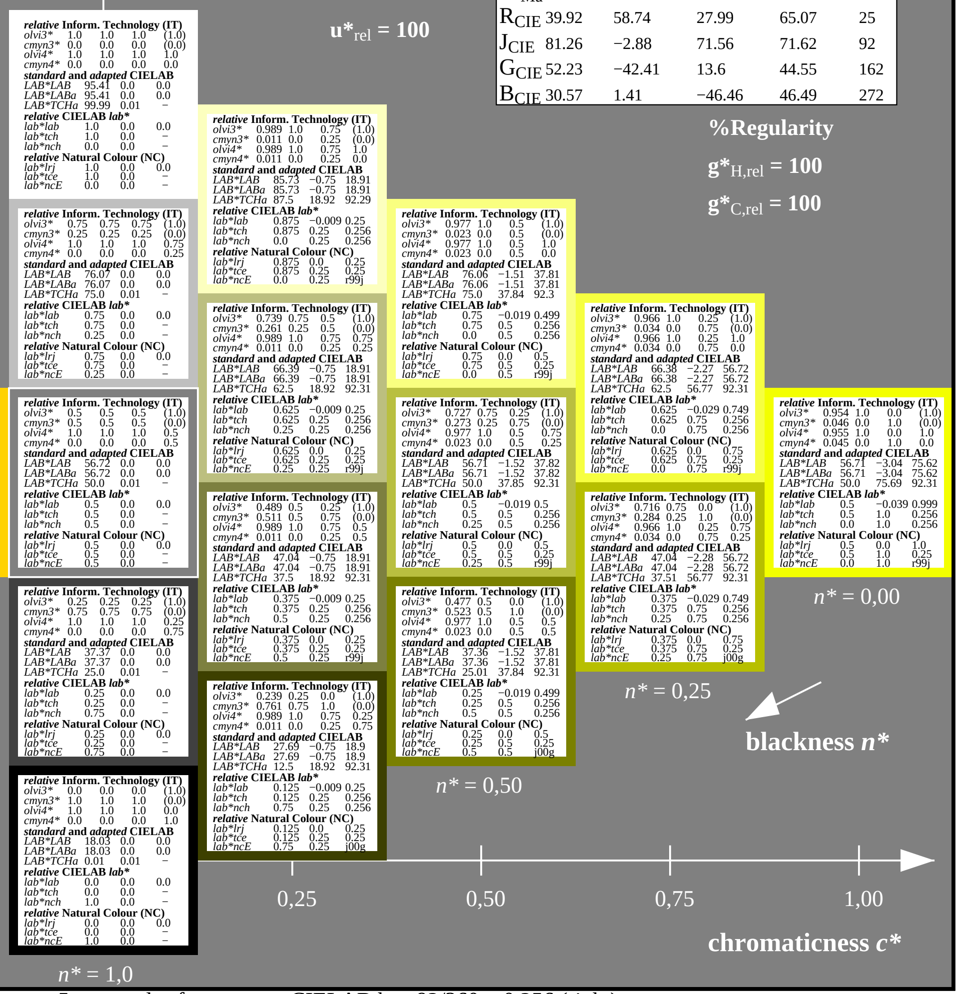
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

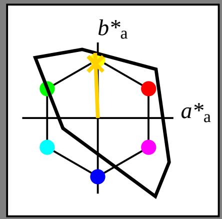


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

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

triangle lightness *t**



%Gamut

u*rel = 158

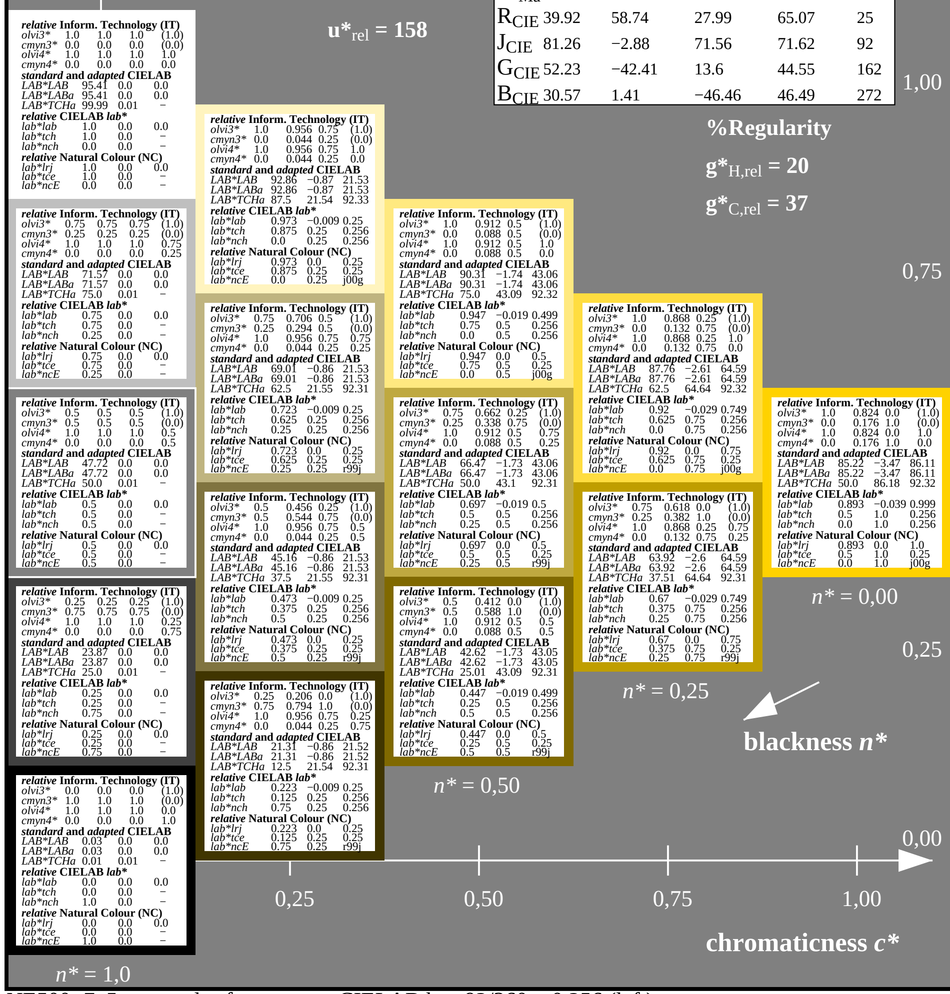
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

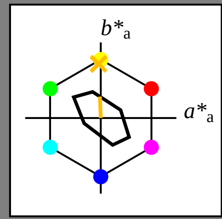


NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

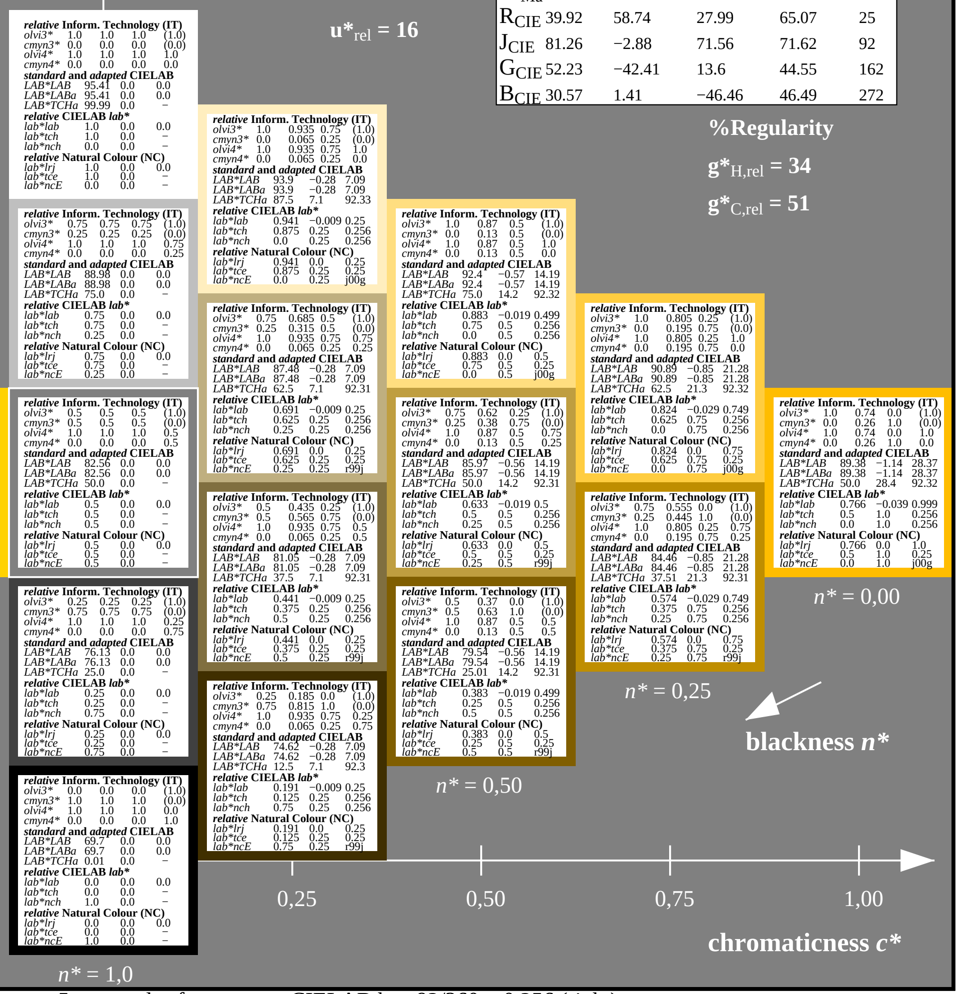
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

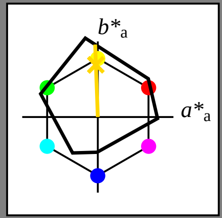


5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric 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

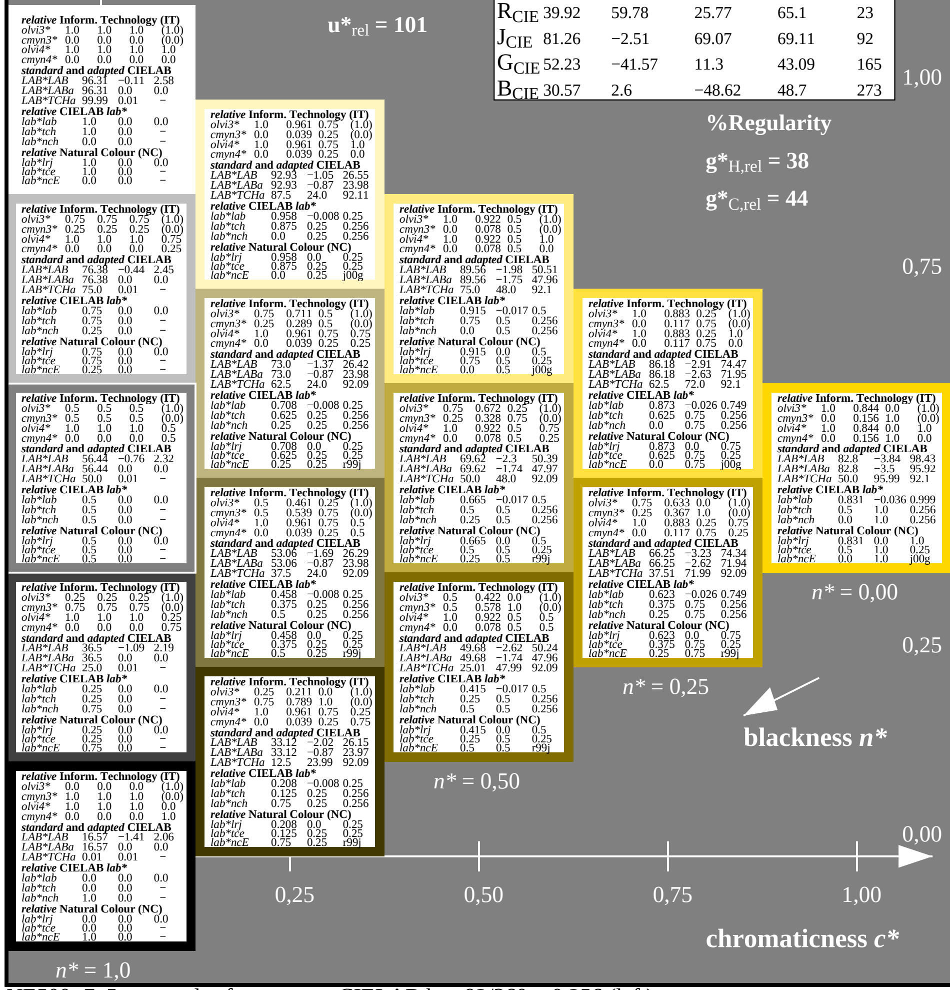
u*rel = 101

DRSXX; adapted (a) CIELAB data				
L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa 42.21	66.82	50.6	83.82	37
YMa 90.32	−16.51	104.33	105.63	99
LMa 48.21	−75.63	30.65	81.61	158
CMa 53.44	−33.33	−47.49	58.03	235
VMa 34.16	−0.92	−46.56	46.58	269
MMa 42.71	79.0	−1.95	79.03	359
NMa 16.56	0.0	0.0	0.0	0
WMa 96.31	0.0	0.0	0.0	0
RCIE 39.92	59.78	25.77	65.1	23
JCIE 81.26	−2.51	69.07	69.11	92
GCIE 52.23	−41.57	11.3	43.09	165
BCIE 30.57	2.6	−48.62	48.7	273

%Regularity

g*H,rel = 38

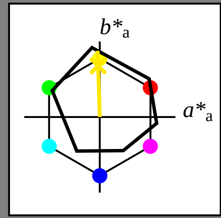
g*C,rel = 44



Output: Colorimetric Offset Reflective System ORS18
for hue *h = *lab*h* = 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

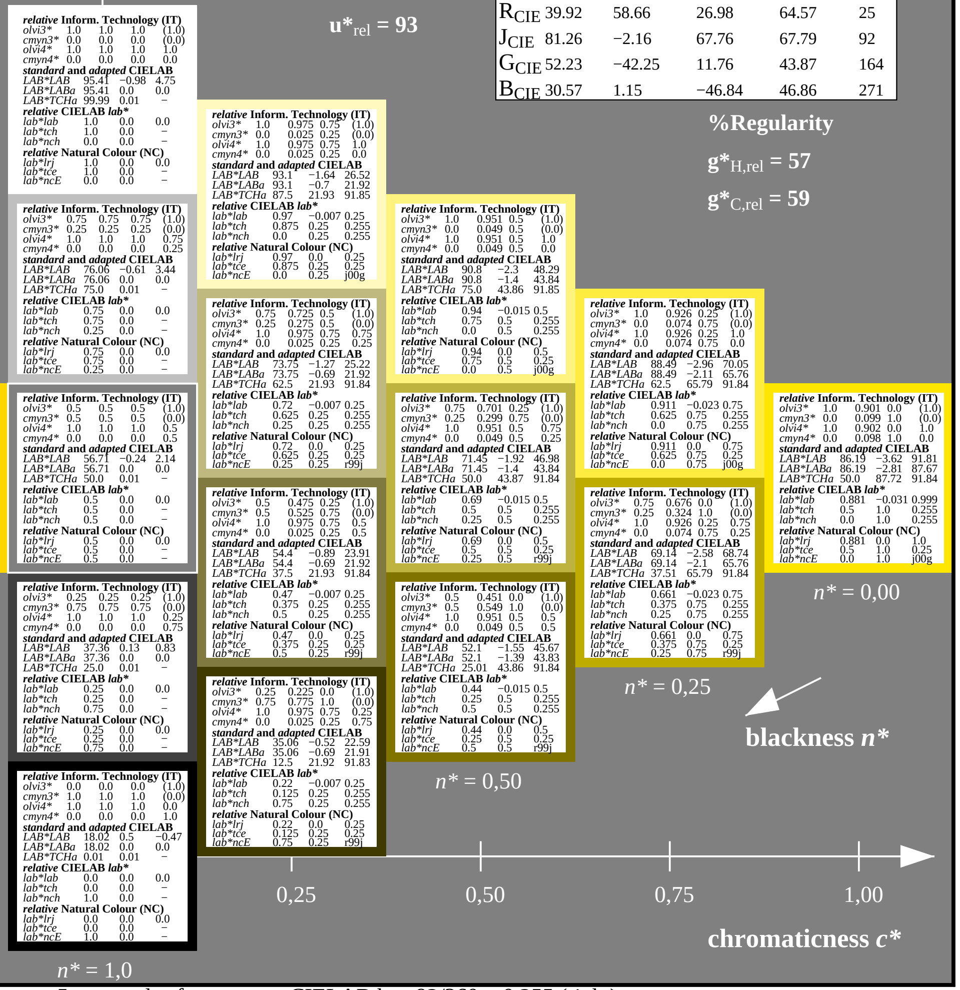
u*rel = 93

ORS18; adapted (a) CIELAB data				
L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa 47.94	65.39	50.52	82.63	38
YMa 90.37	−10.26	91.75	92.32	96
LMa 50.9	−62.83	34.96	71.91	151
CMa 58.62	−30.34	−45.01	54.3	236
VMa 25.72	31.1	−44.4	54.22	305
MMa 48.13	75.28	−8.36	75.74	354
NMa 18.01	0.0	0.0	0.0	0
WMa 95.41	0.0	0.0	0.0	0
RCIE 39.92	58.66	26.98	64.57	25
JCIE 81.26	−2.16	67.76	67.79	92
GCIE 52.23	−42.25	11.76	43.87	164
BCIE 30.57	1.15	−46.84	46.86	271

%Regularity

g*H,rel = 57

g*C,rel = 59



NE500−7, 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 Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

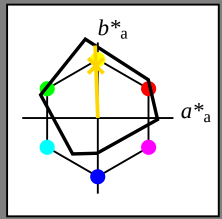
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

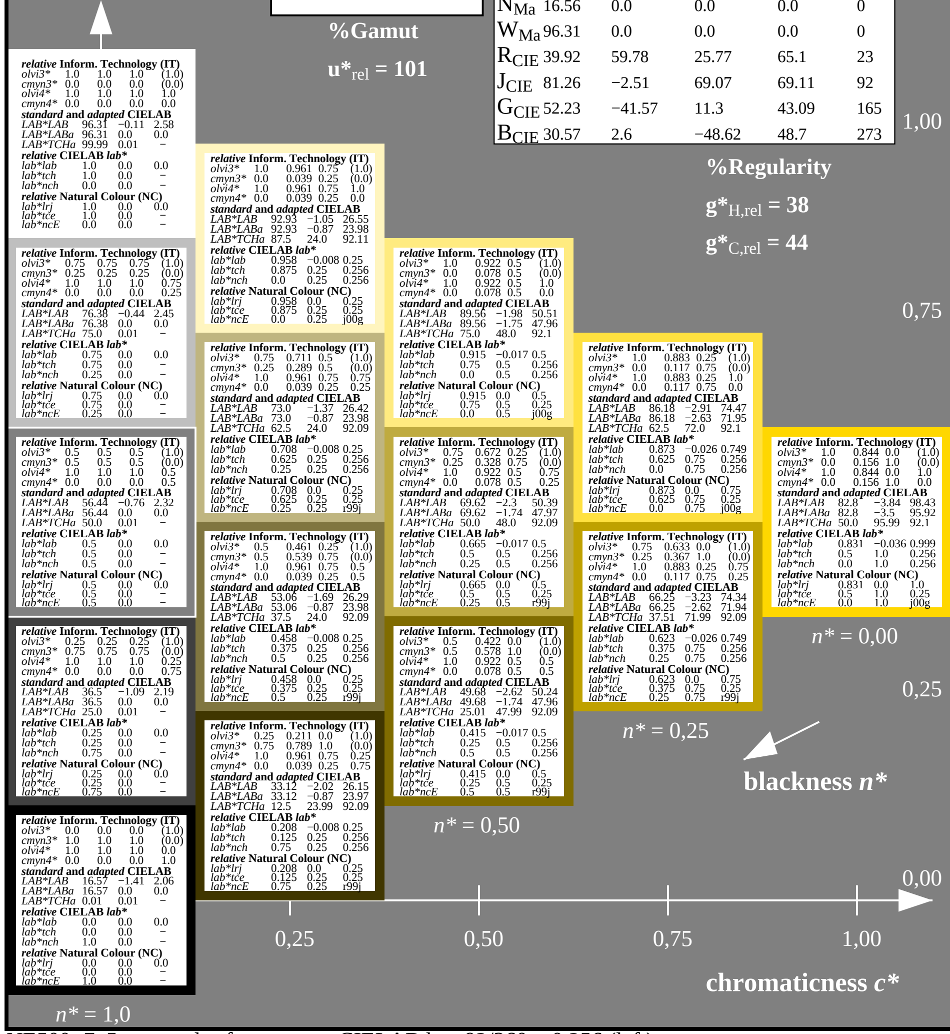
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

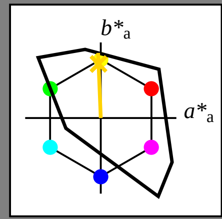
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

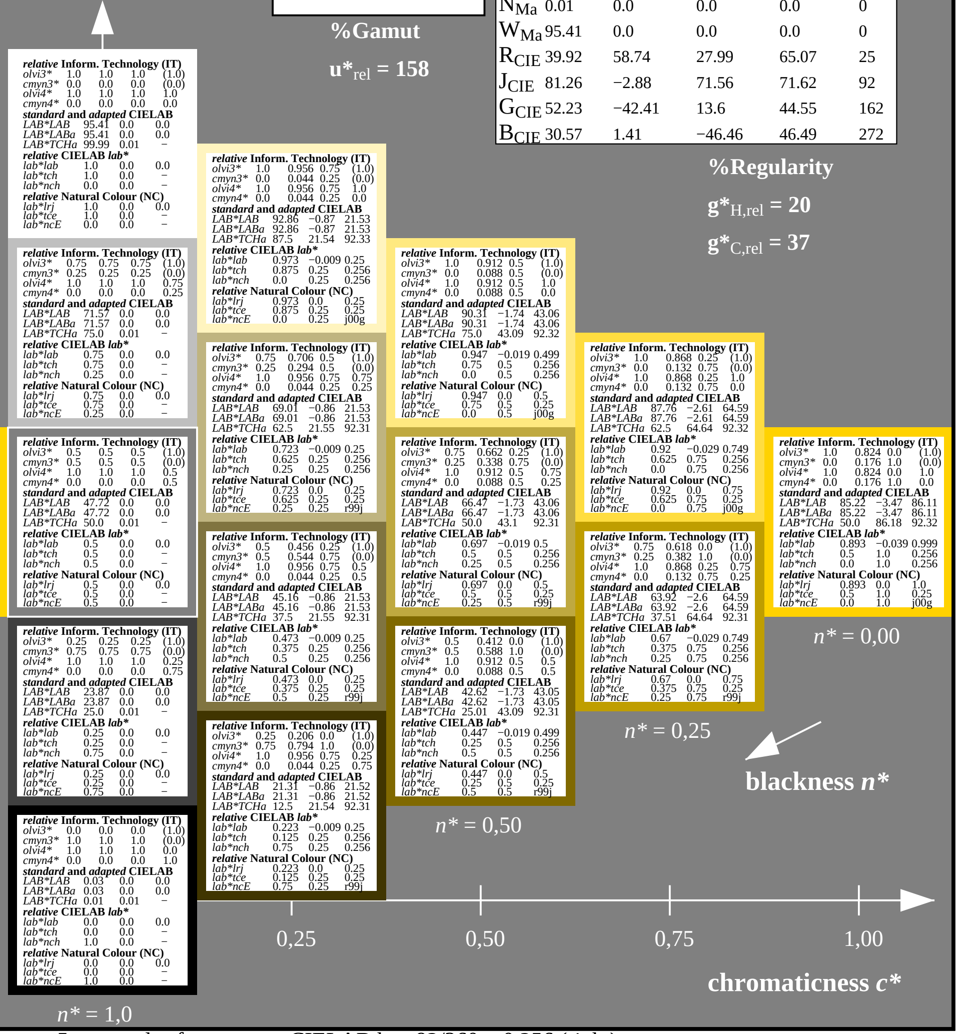
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

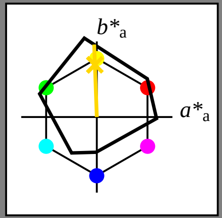
lab*tch and lab*nch

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

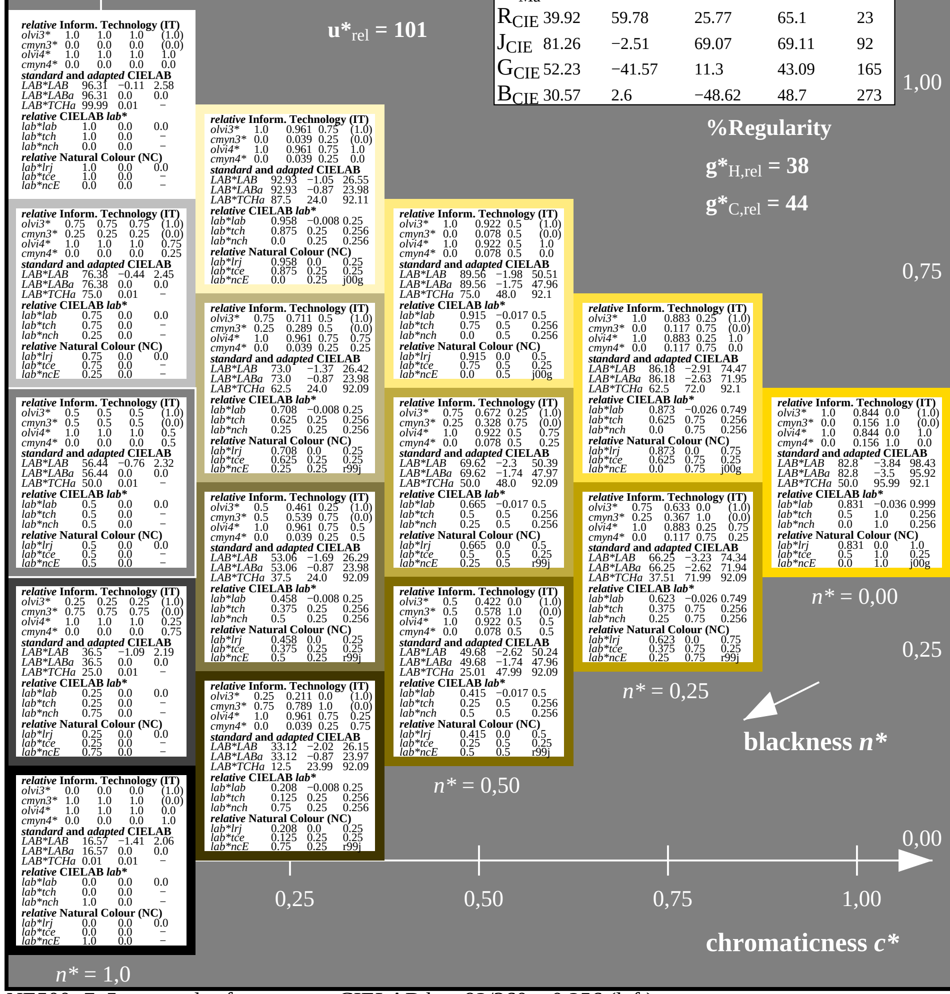
u^*_{rel} = 101

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

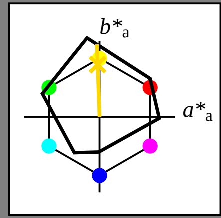
lab*tch and lab*nch

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

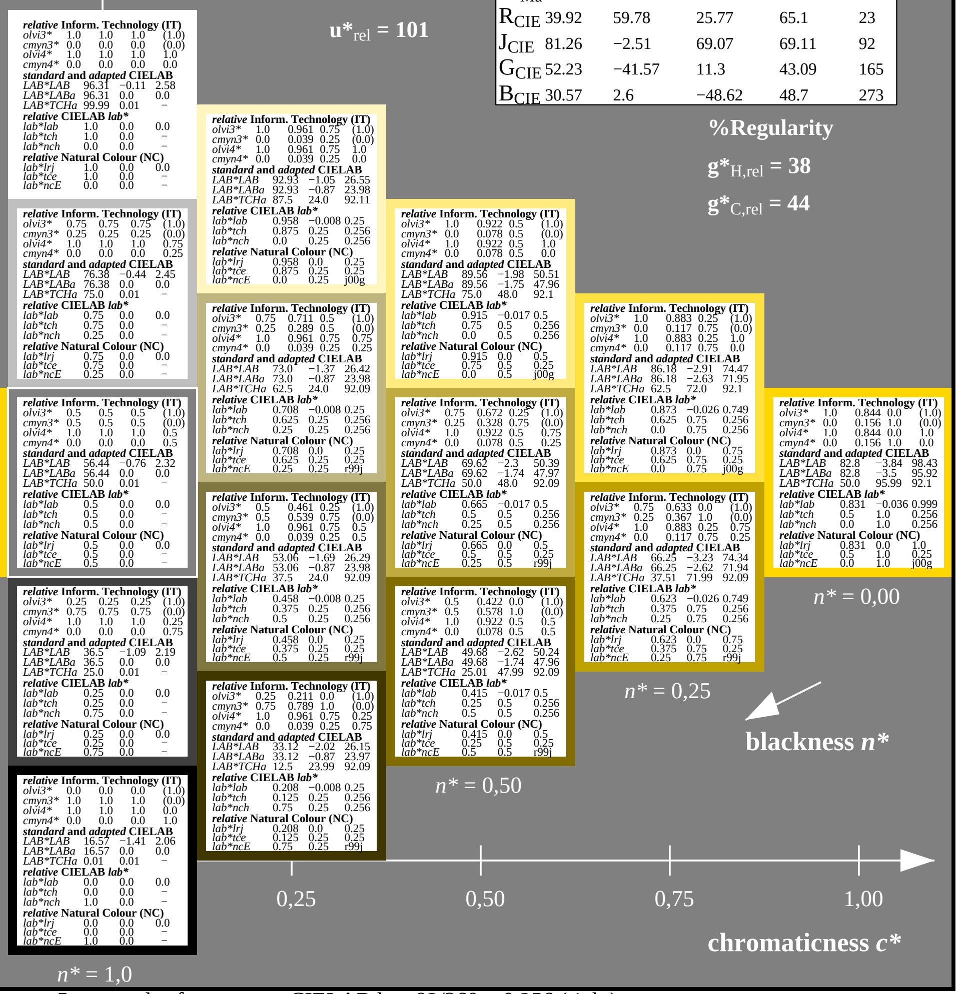
u^*_{rel} = 101

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



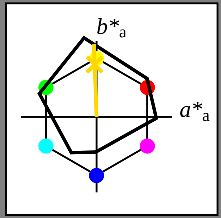
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

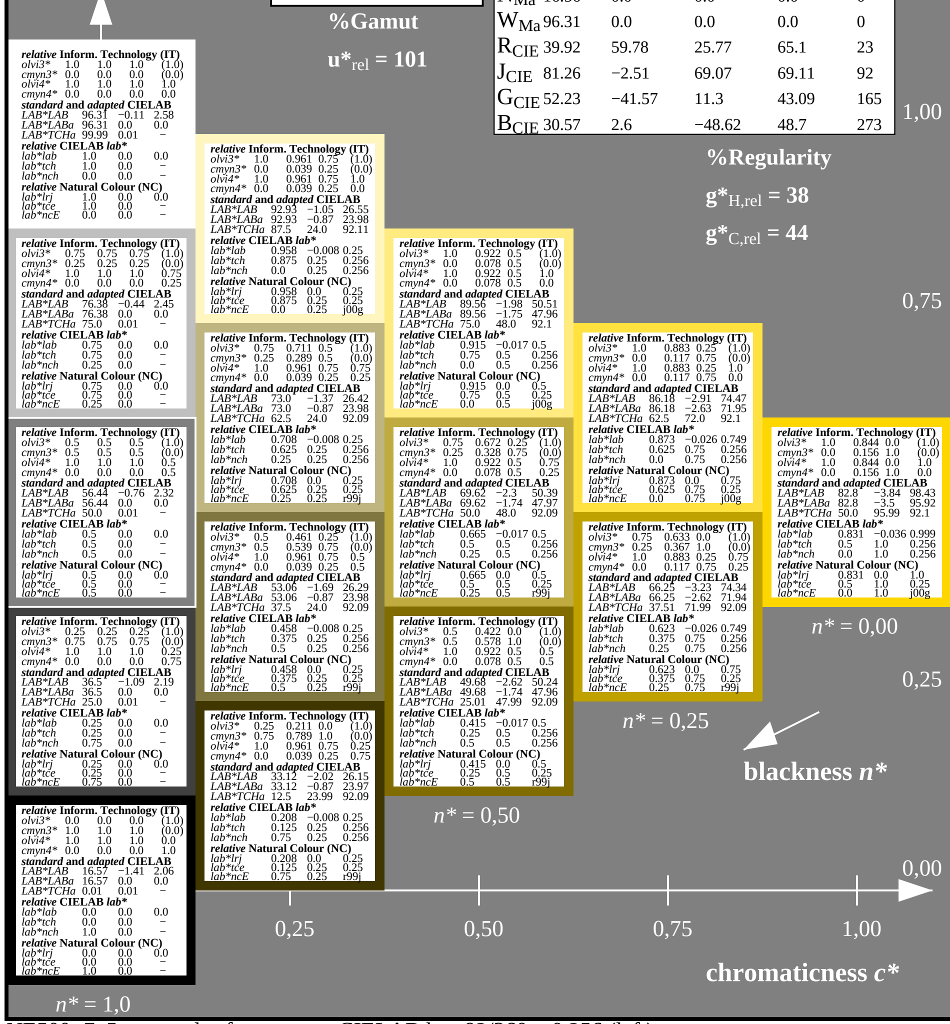
Input: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 83 96 92
olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



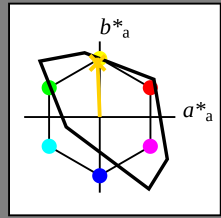
DRSXX; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	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



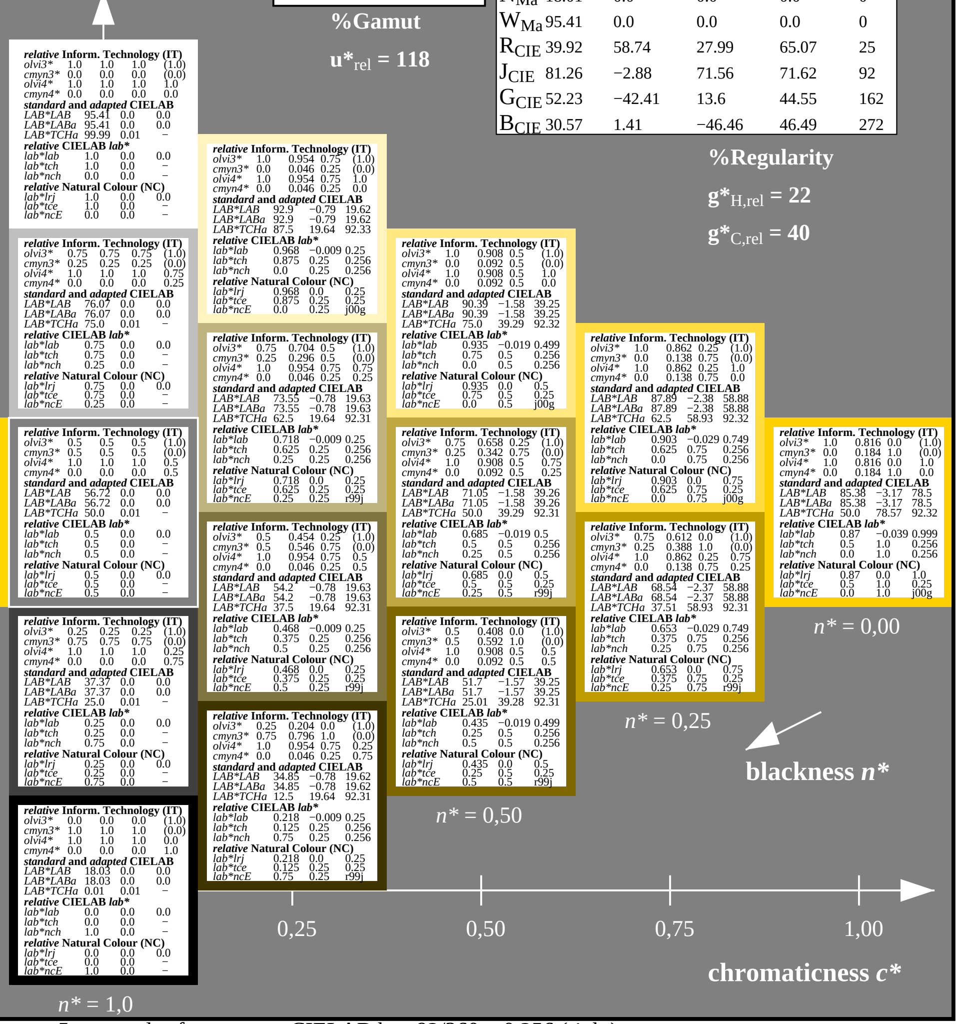
Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



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



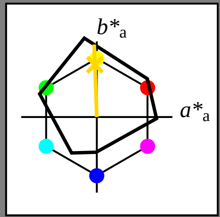
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

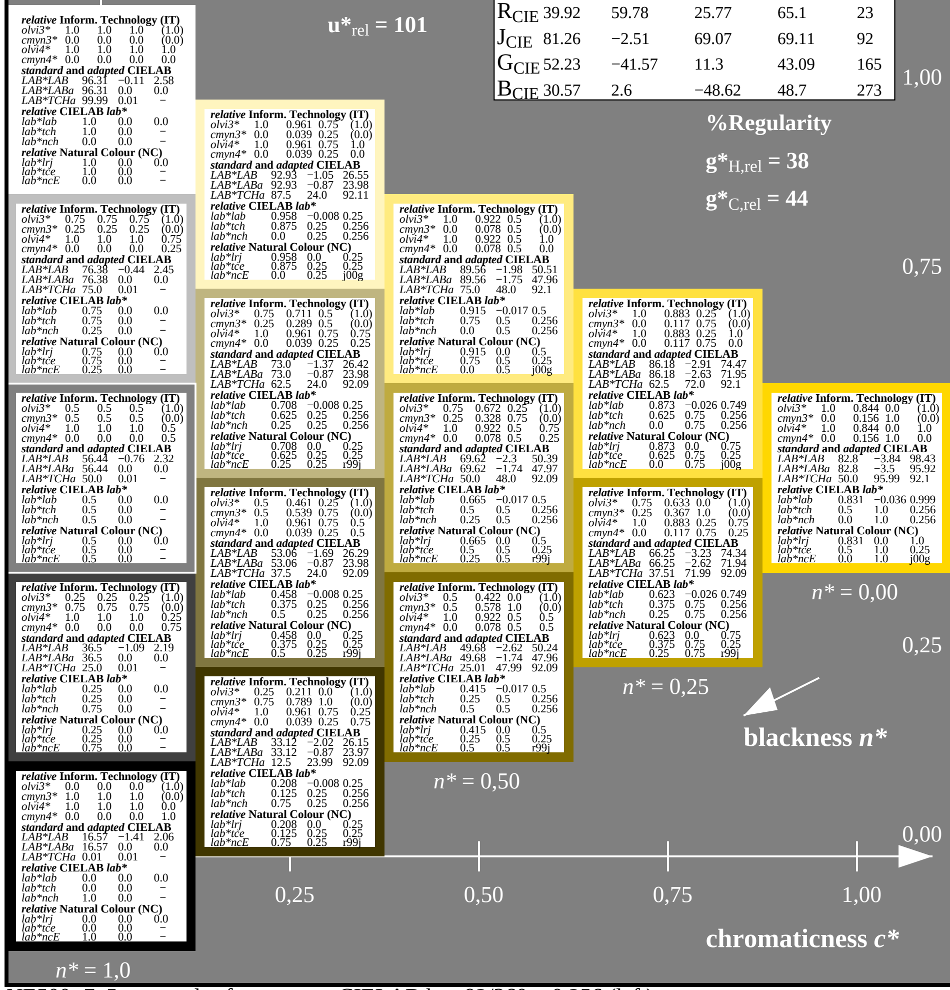
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

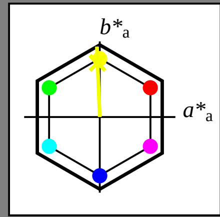
$g^*_{C,rel}$ = 44



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

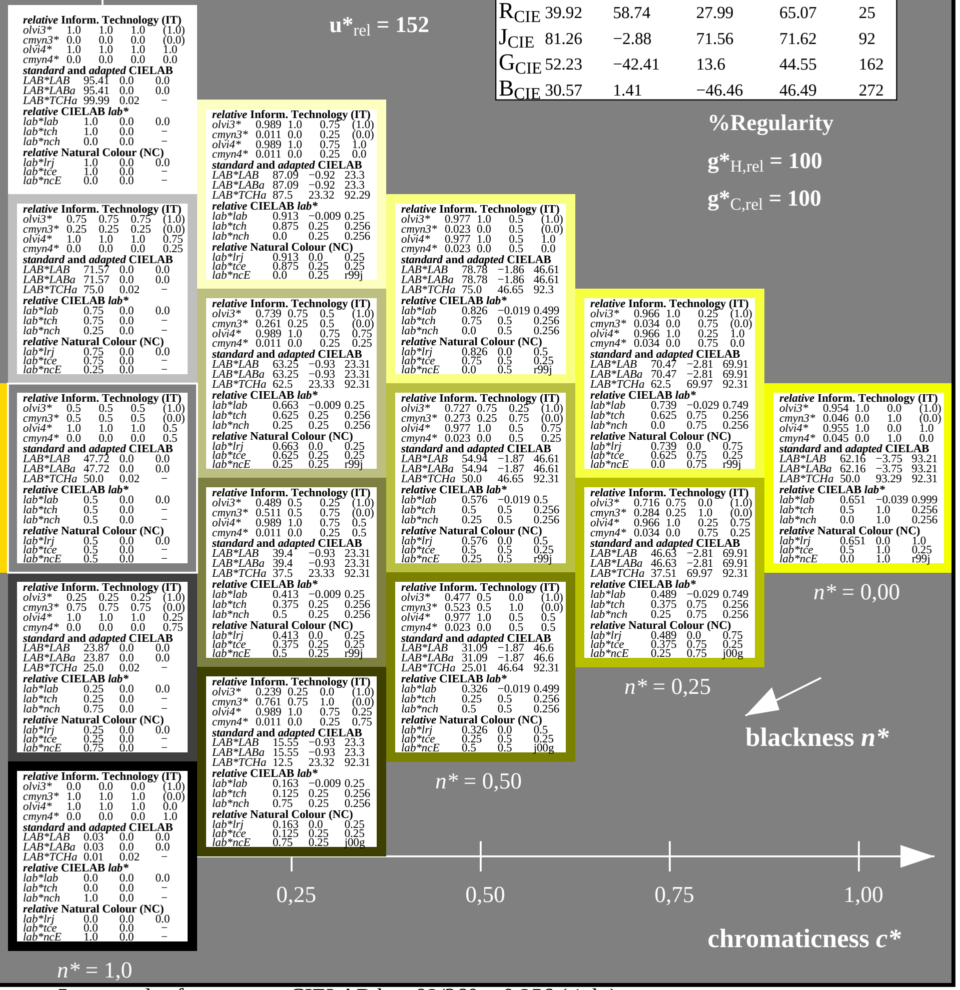
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



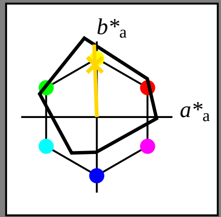
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

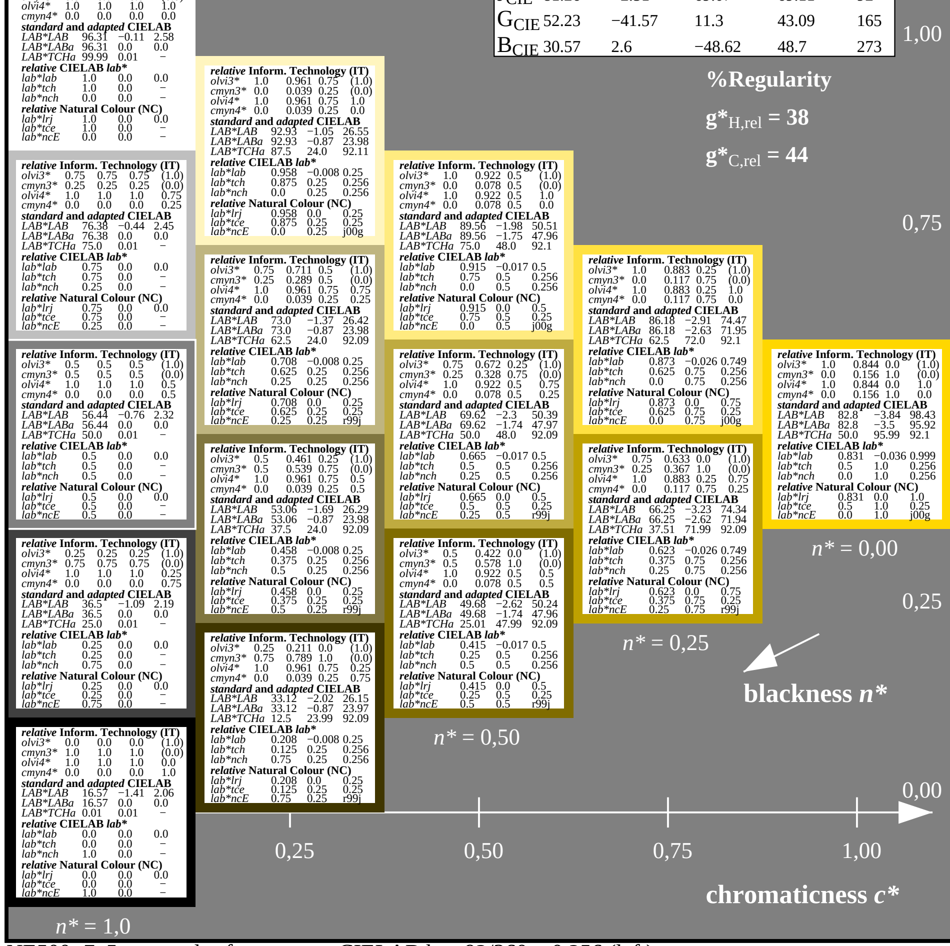
u^*_{rel} = 101

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

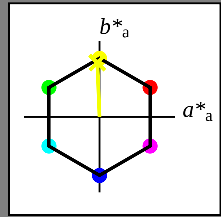
$g^*_{C,rel}$ = 44



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

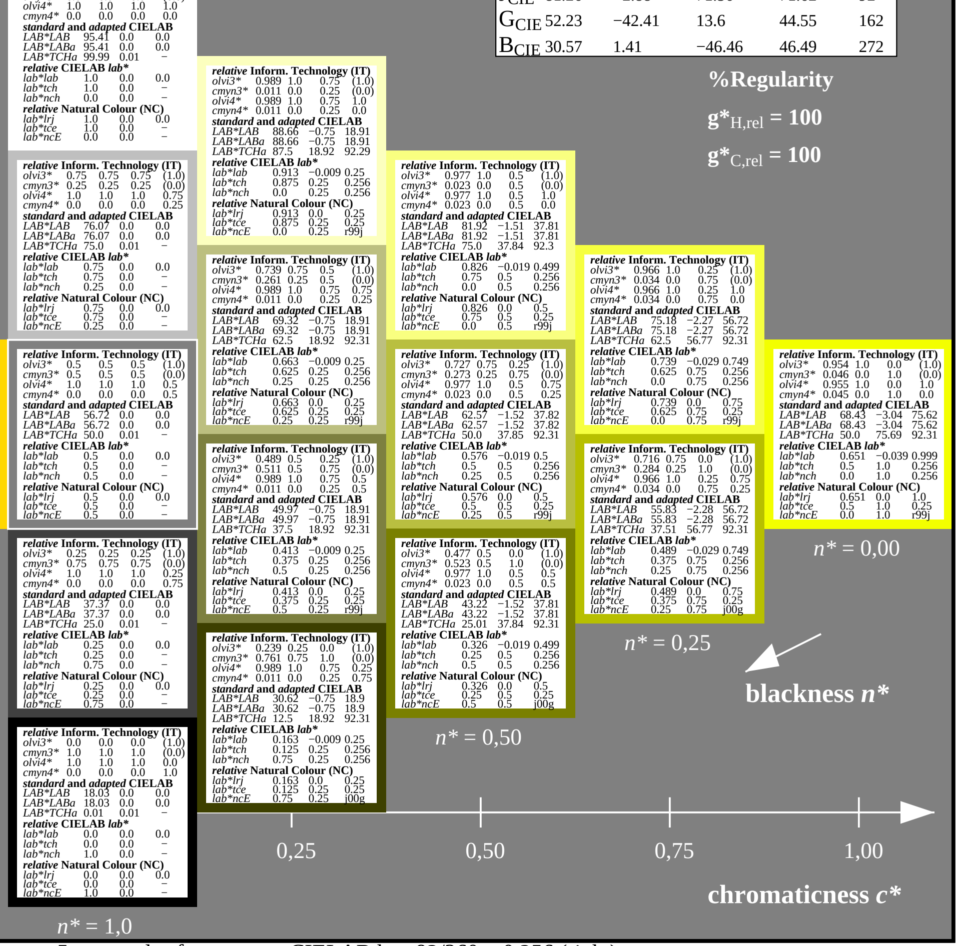
u^*_{rel} = 100

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



NE500−7, 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

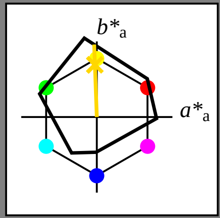
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness *t*



%Gamut

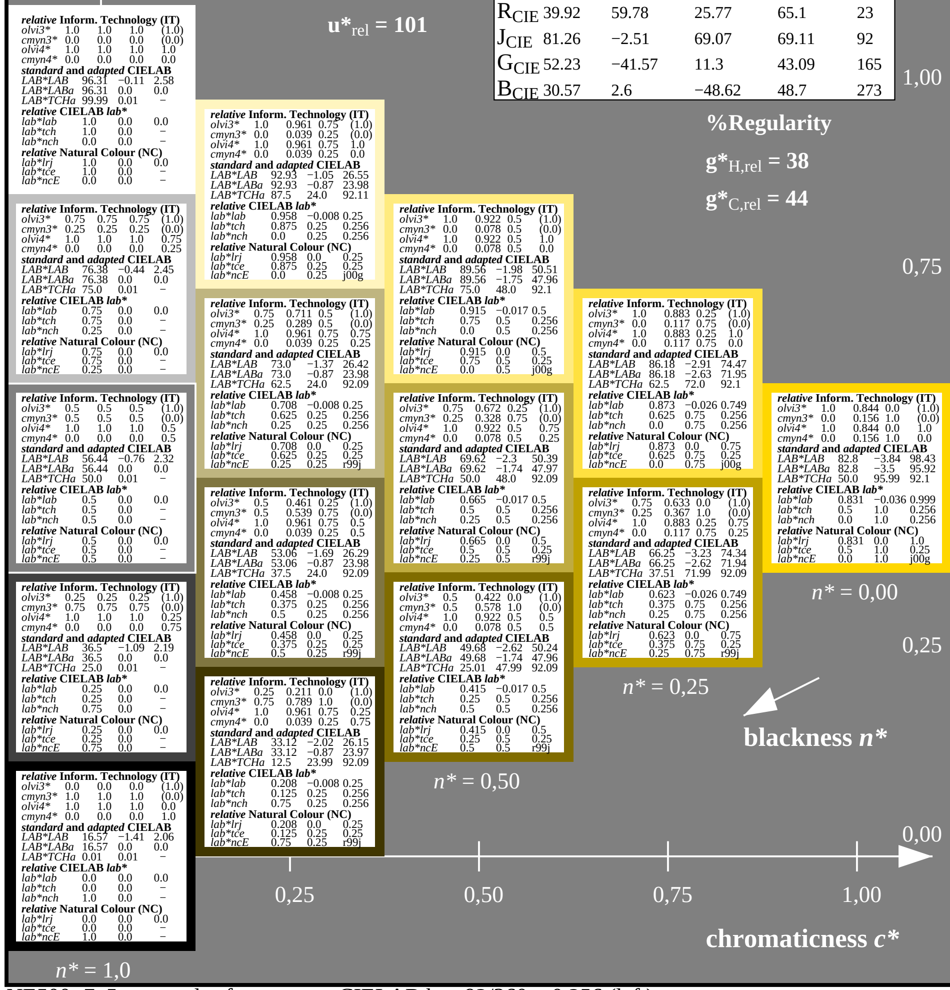
u*rel = 101

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



Output: Colorimetric Standard Reflective System SRS18

for hue *h** = *lab*h* = 92/360 = 0.256

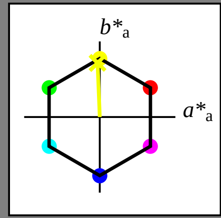
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t*



%Gamut

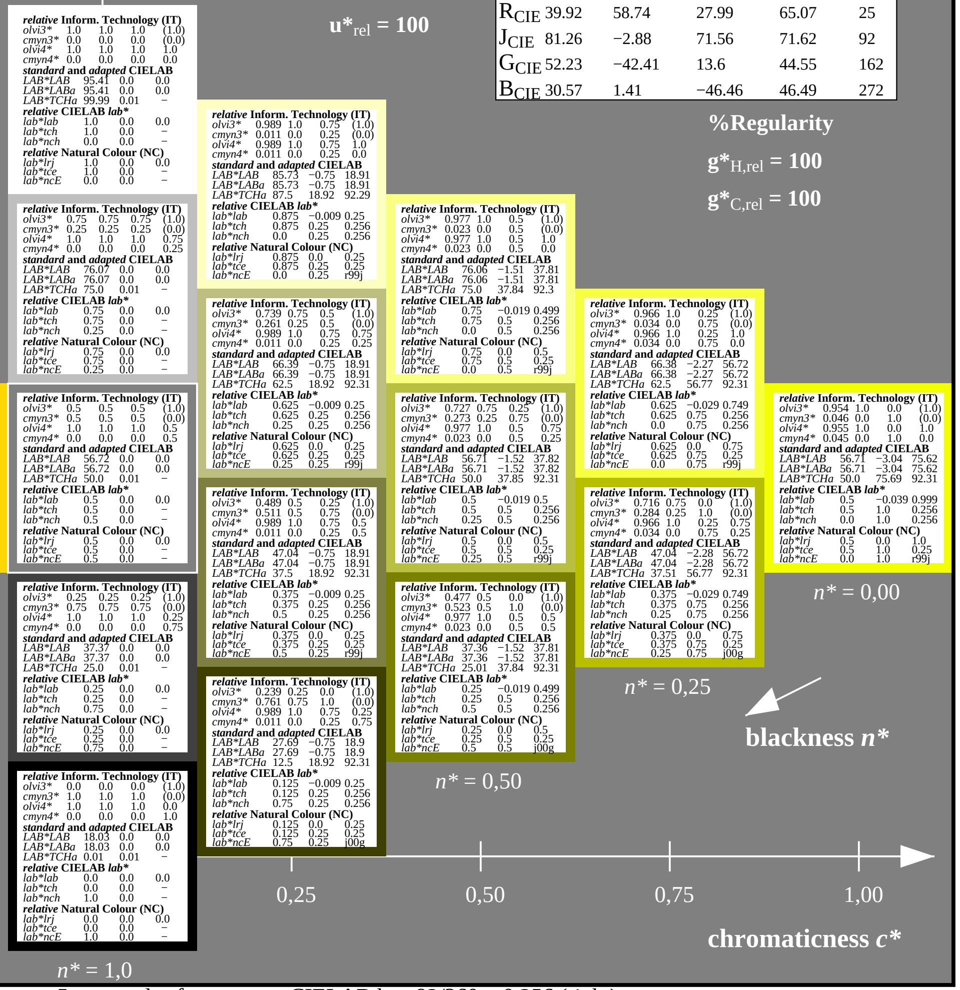
u*rel = 100

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

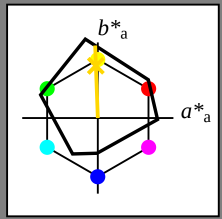
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness *t**



%Gamut

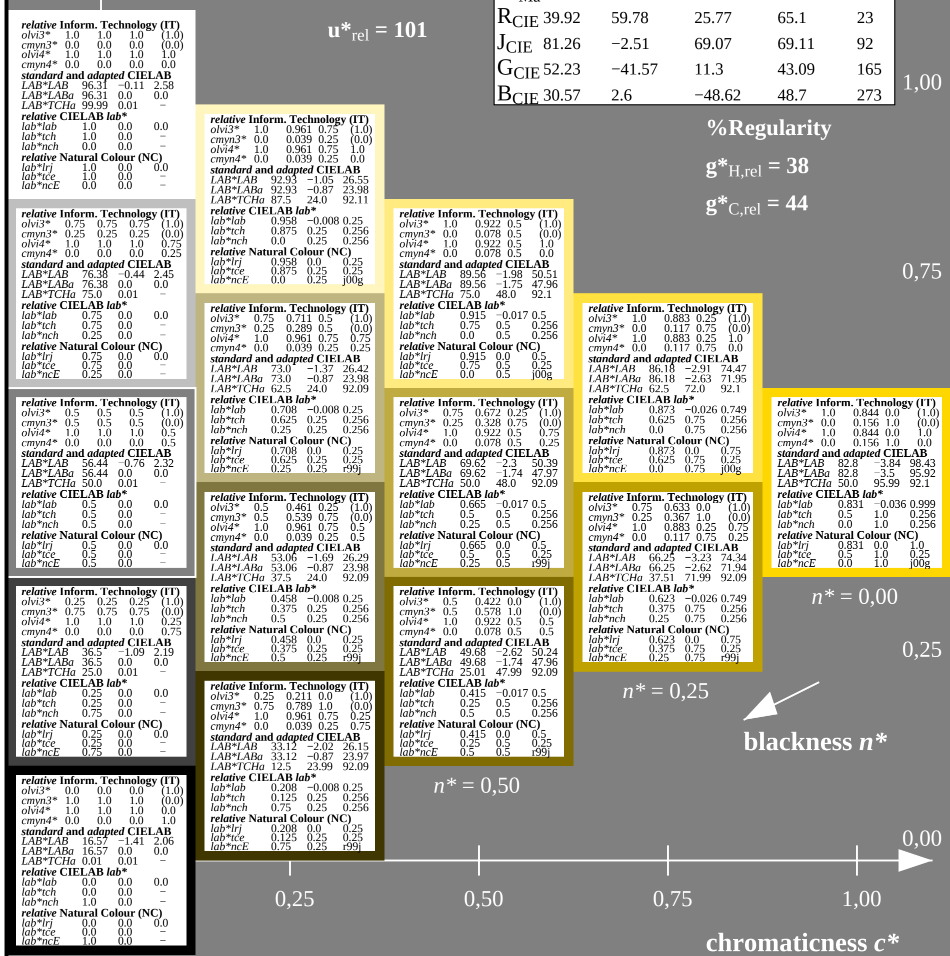
u*rel = 101

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

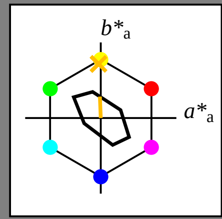
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness *t**



%Gamut

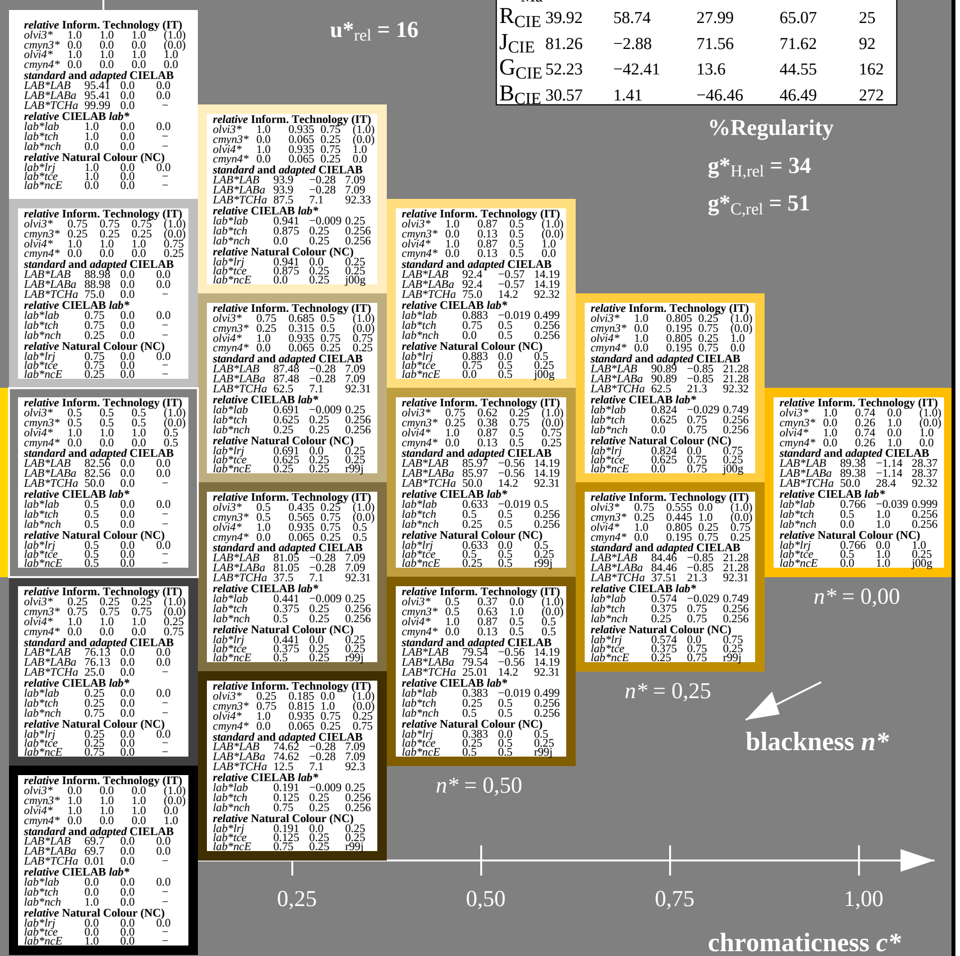
u*rel = 16

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

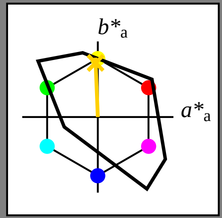
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

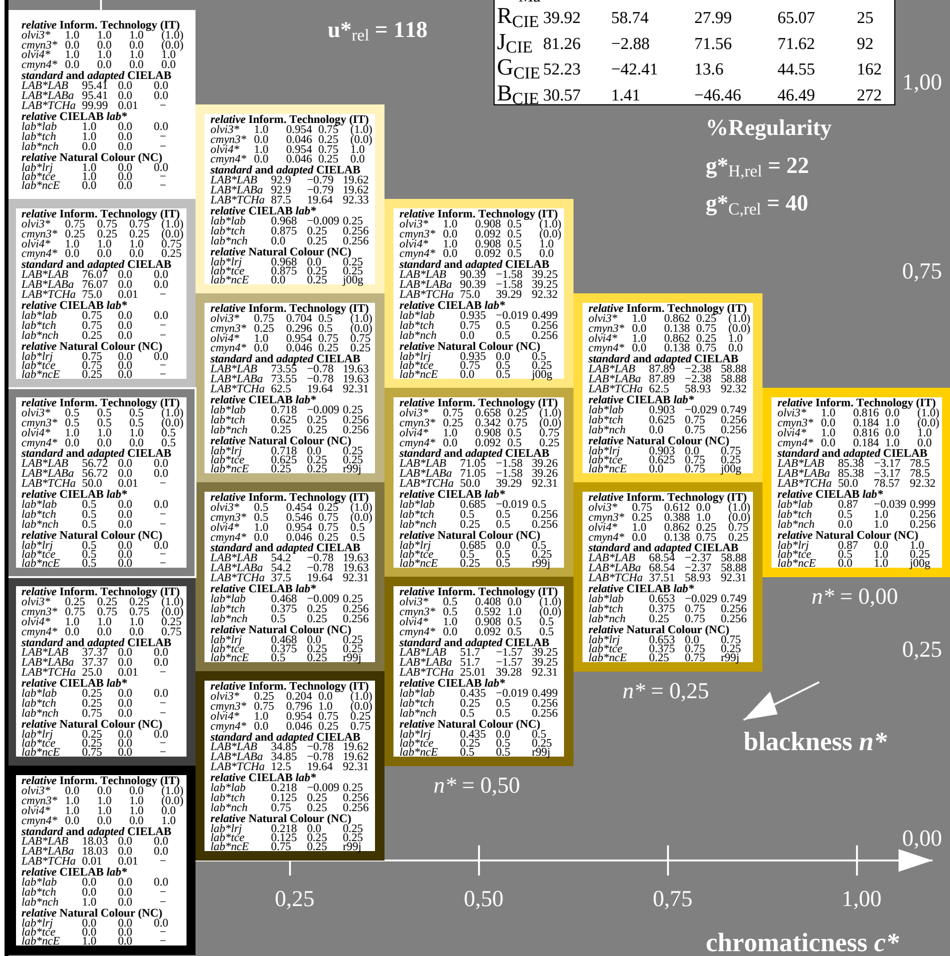
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

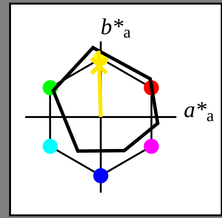
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

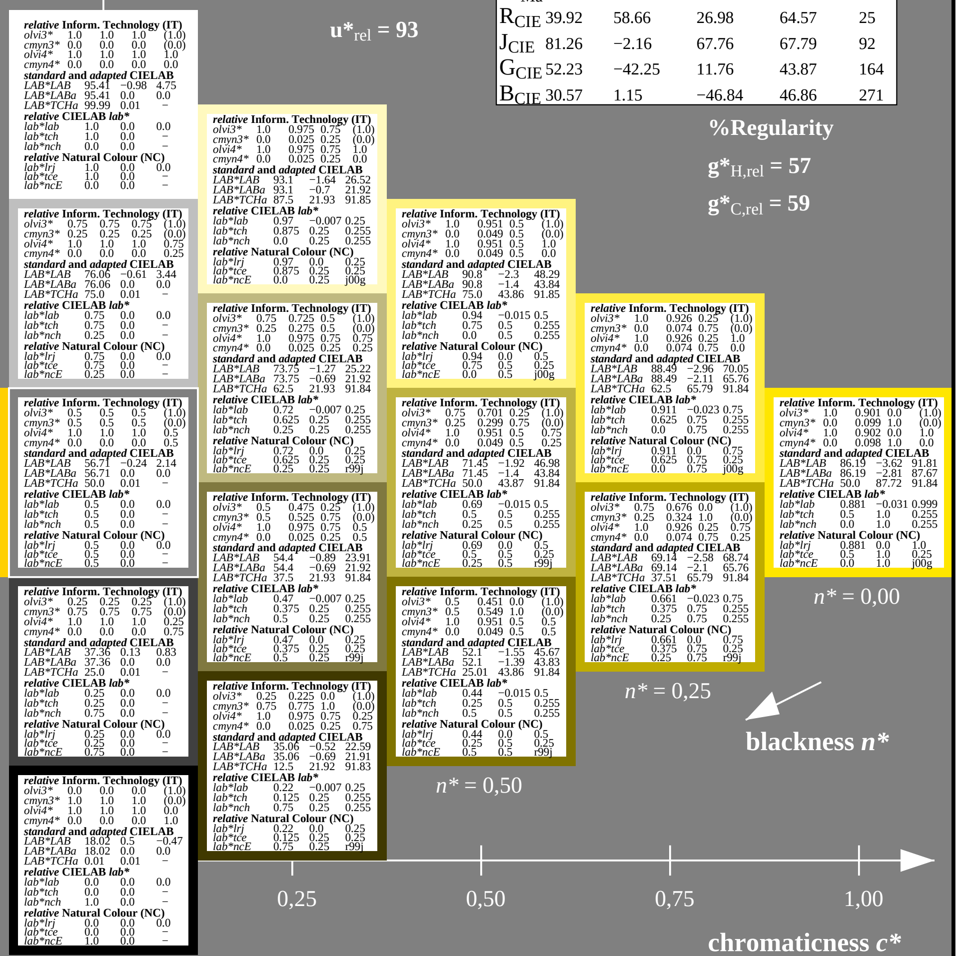
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



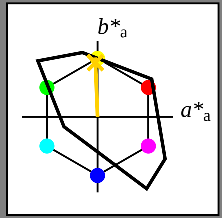
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric 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

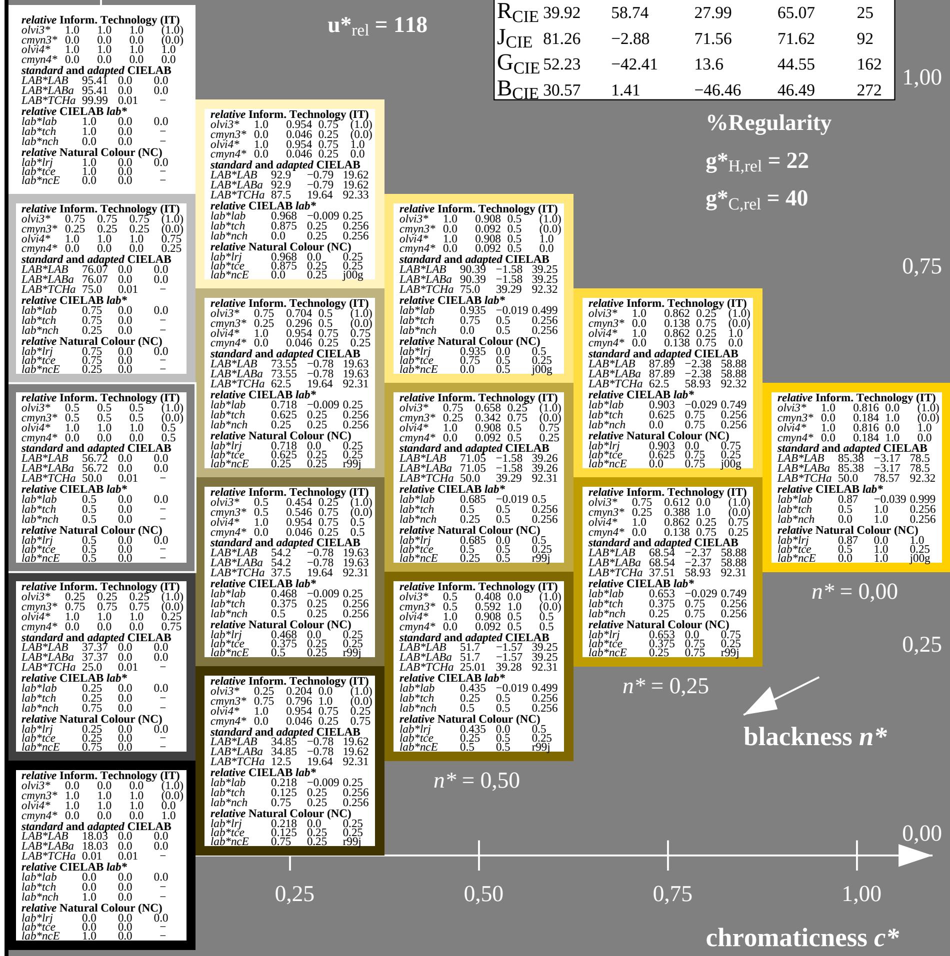
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

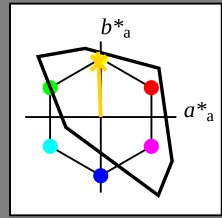
$g^*_{C,rel}$ = 40



Output: Colorimetric 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

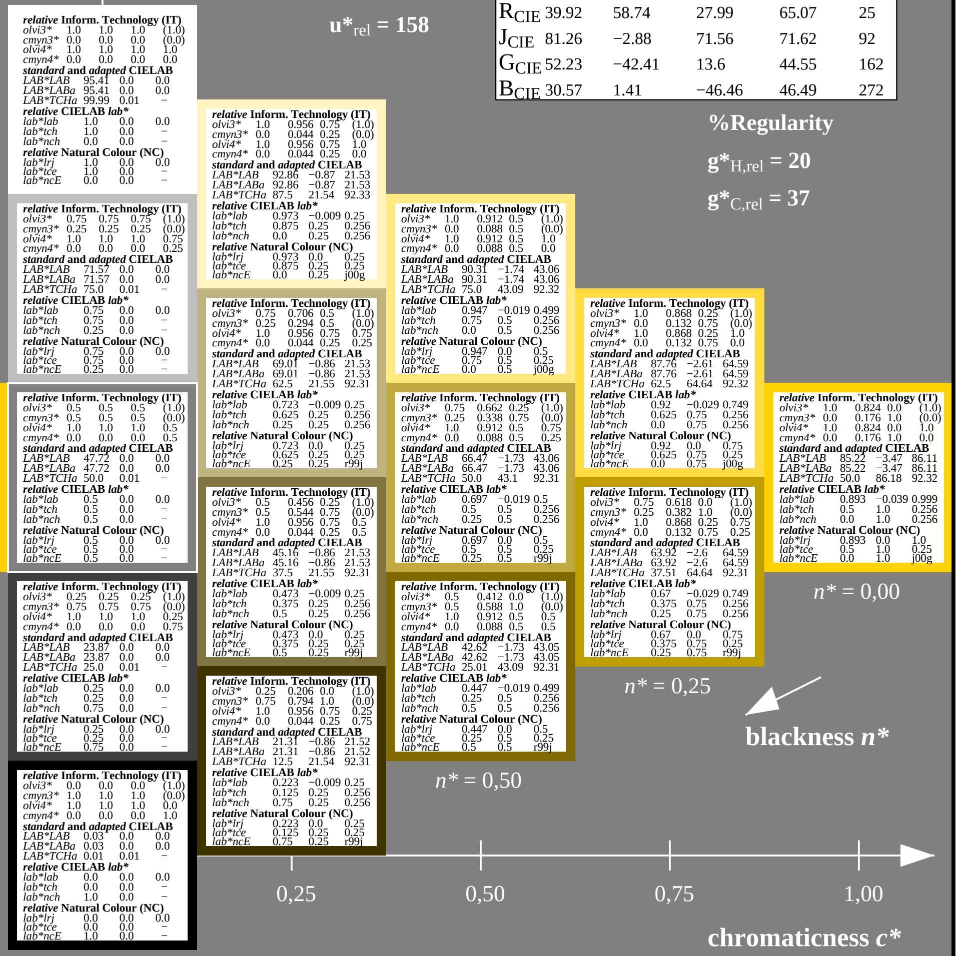
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

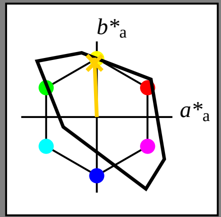
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 118$

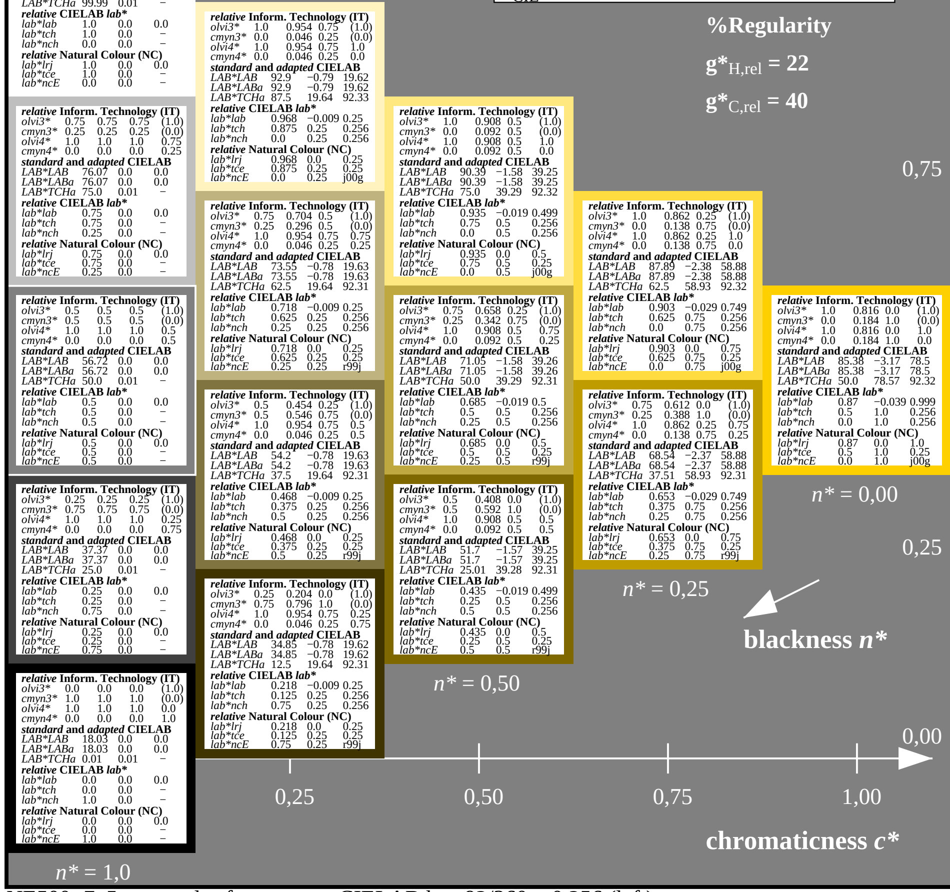
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

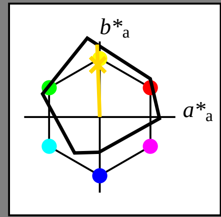
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 101$

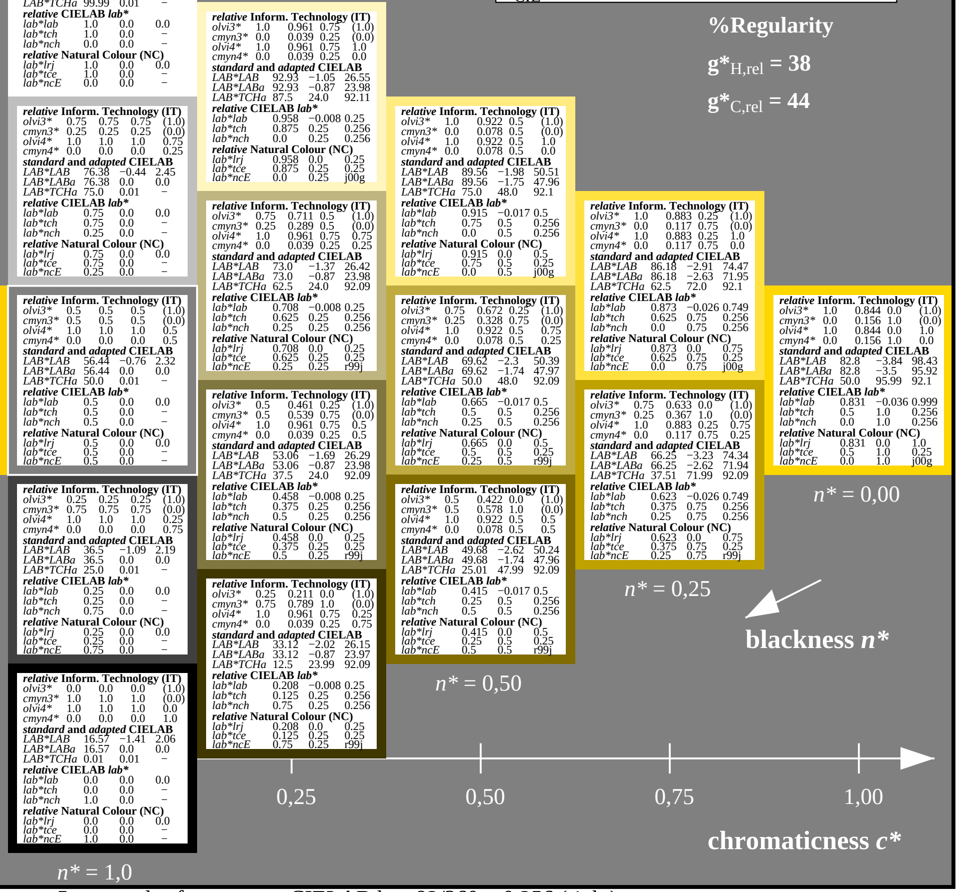
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

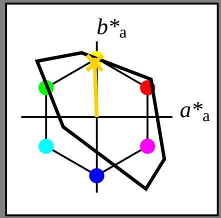
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

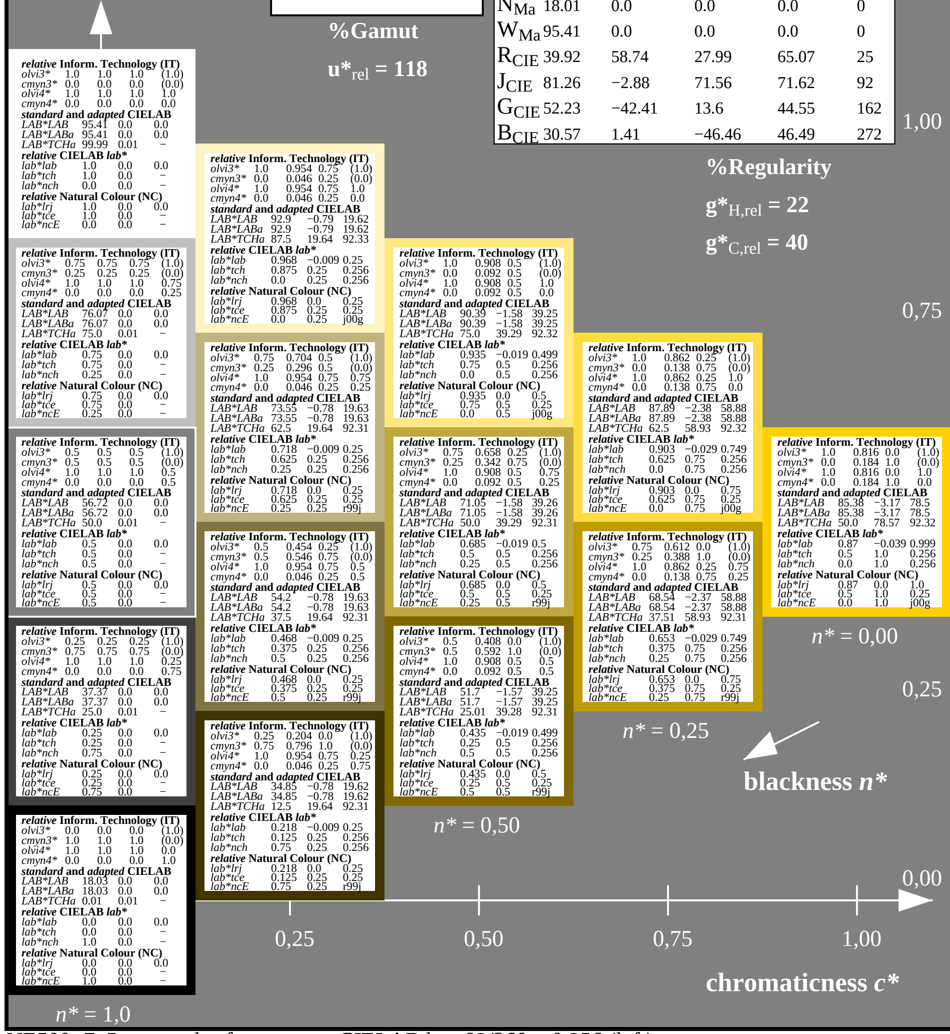
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

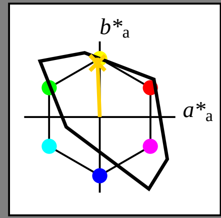
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

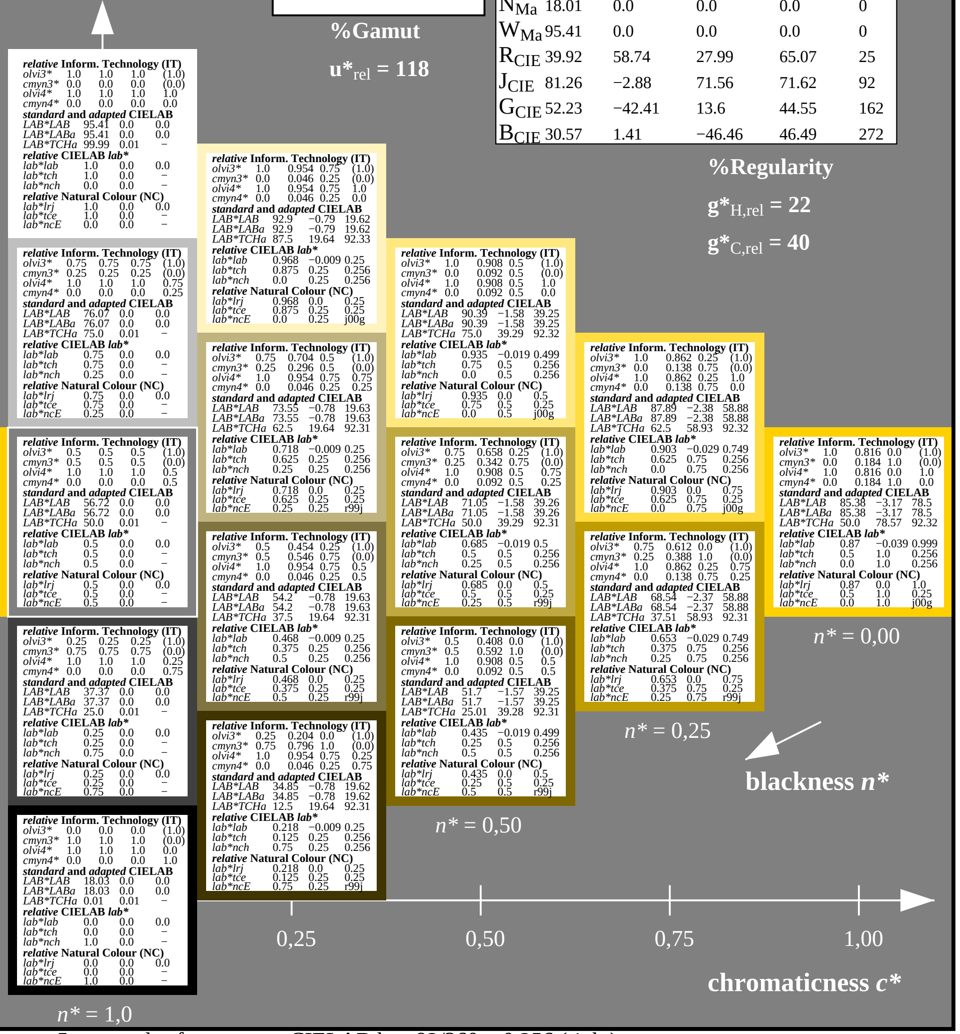
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

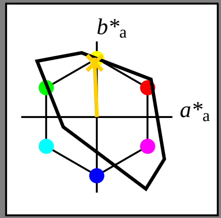
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

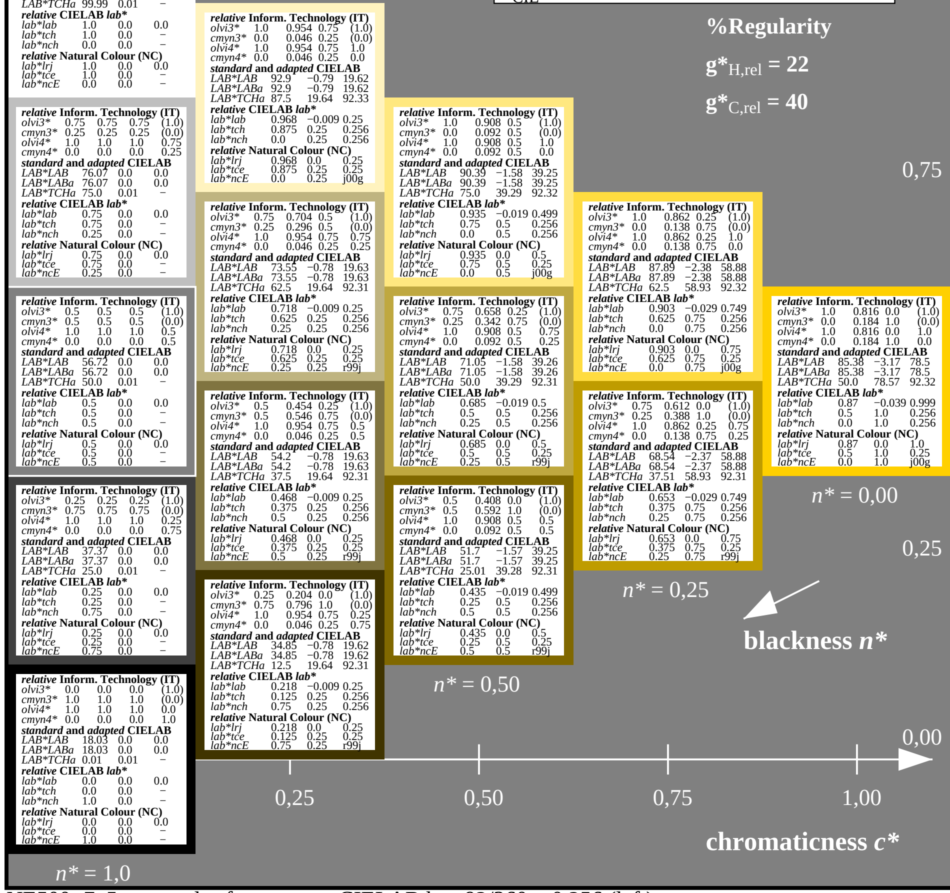
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

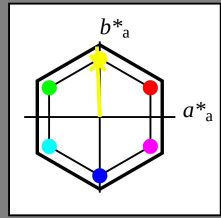
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

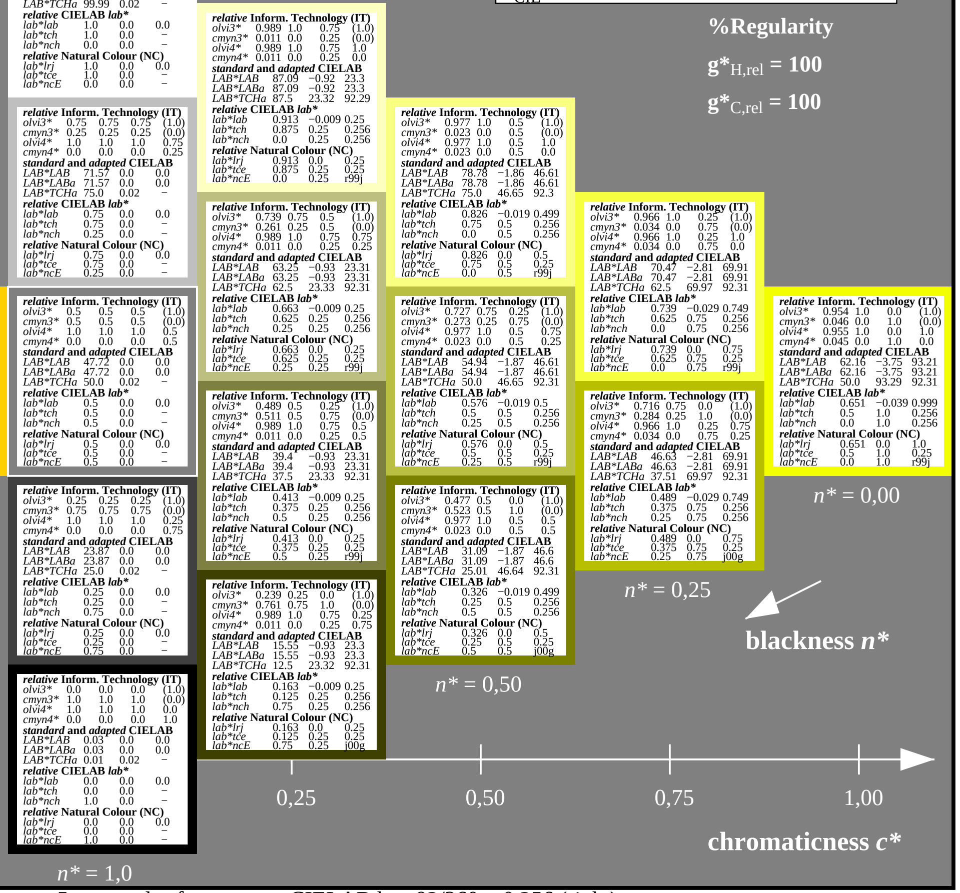
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

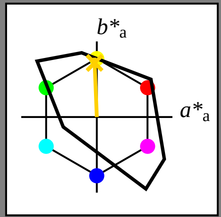
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

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

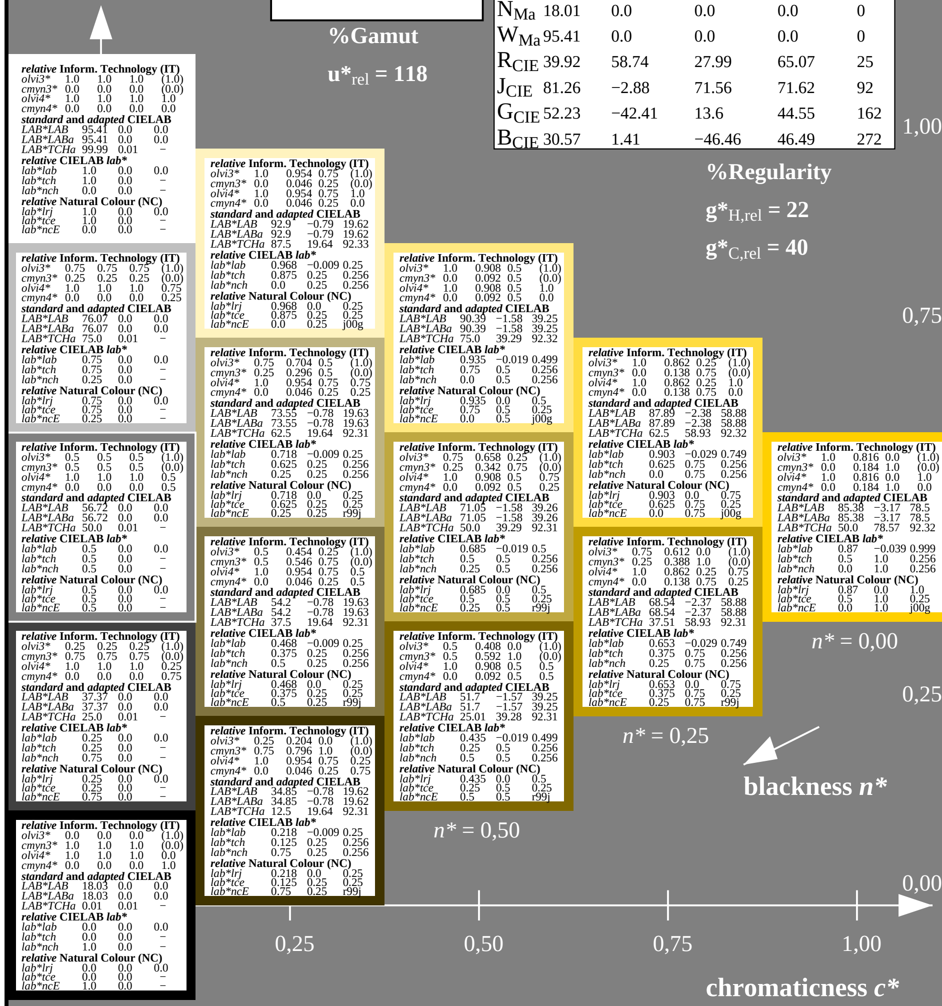
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

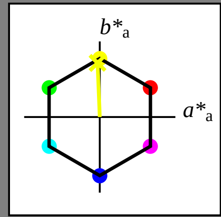


Output: Colorimetric Natural Reflective System NRS18

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

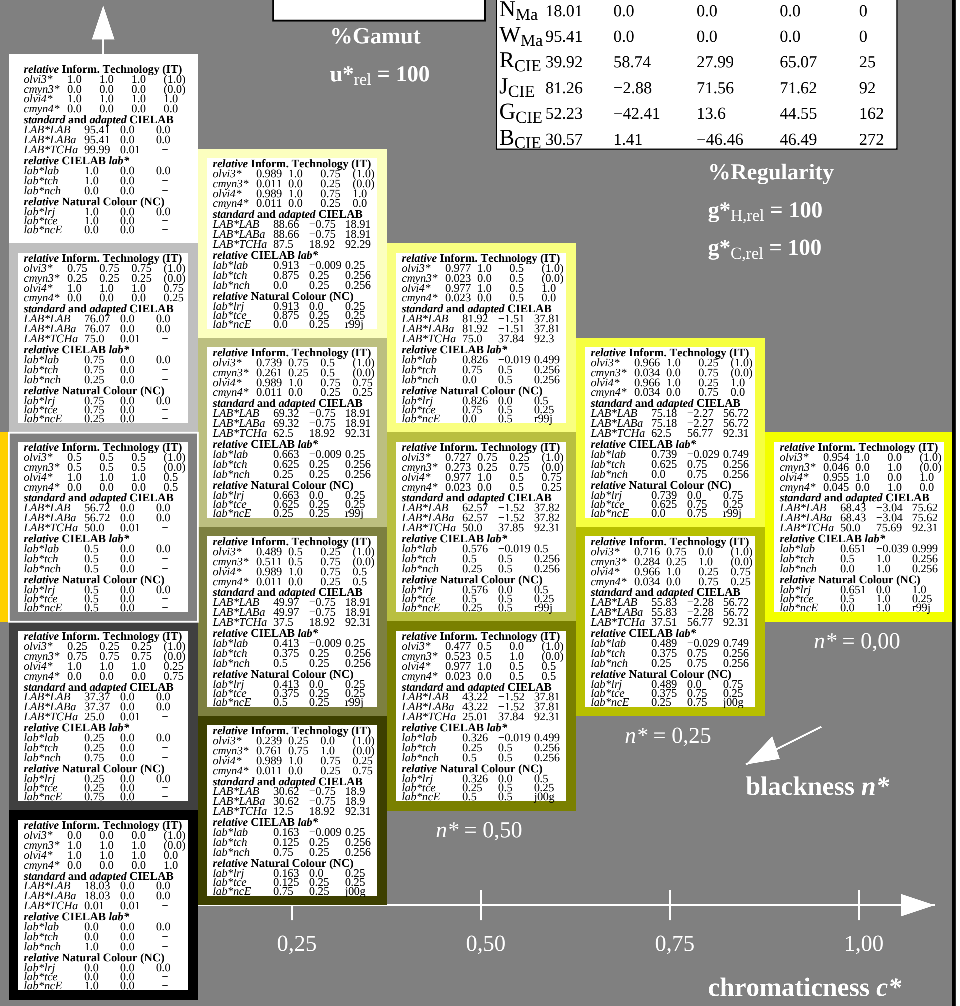
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

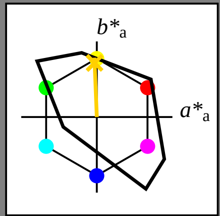
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

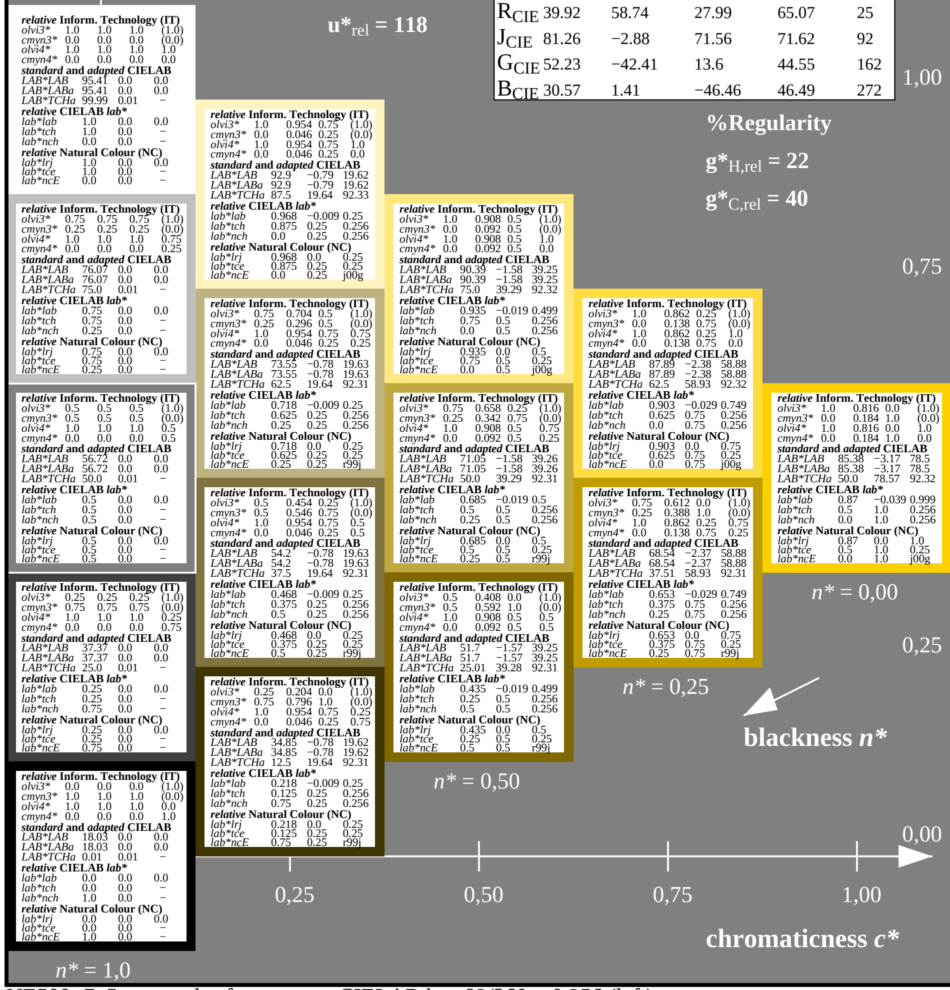
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

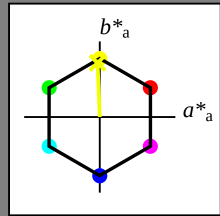
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

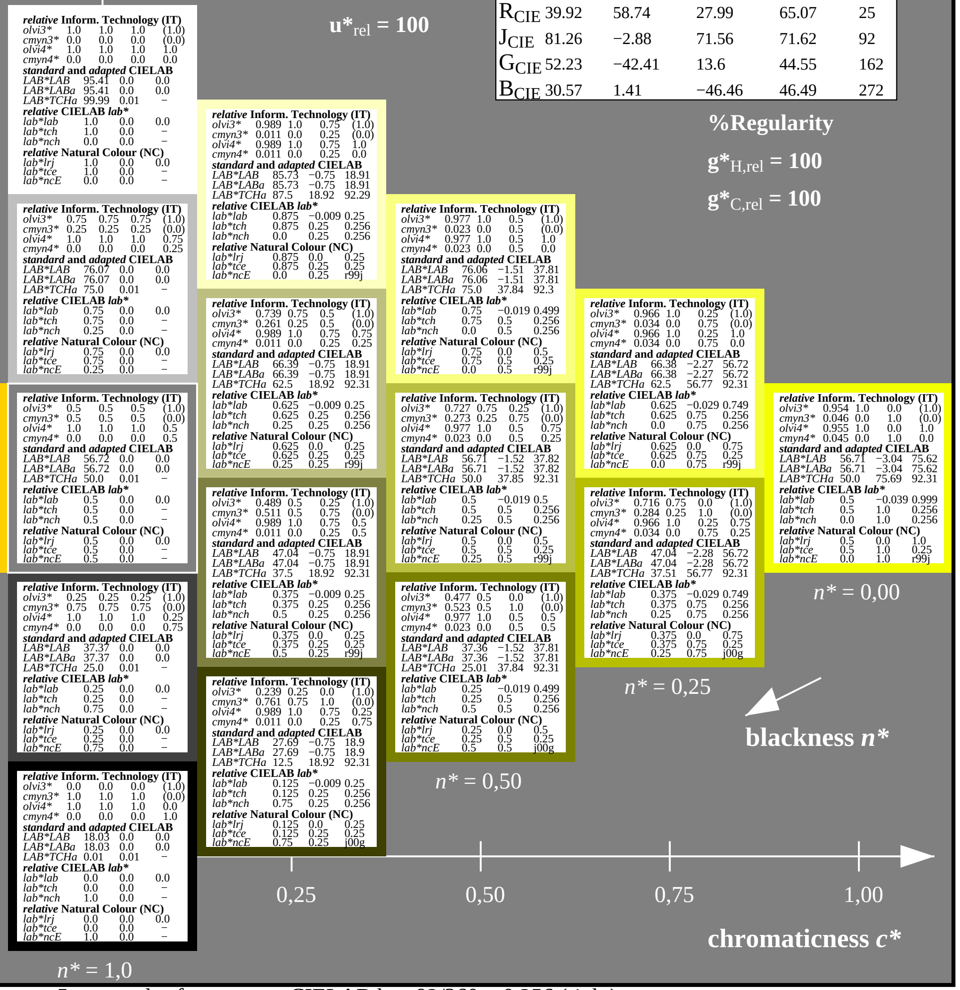
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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

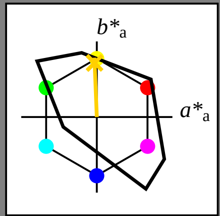
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness *t**



%Gamut

u*rel = 118

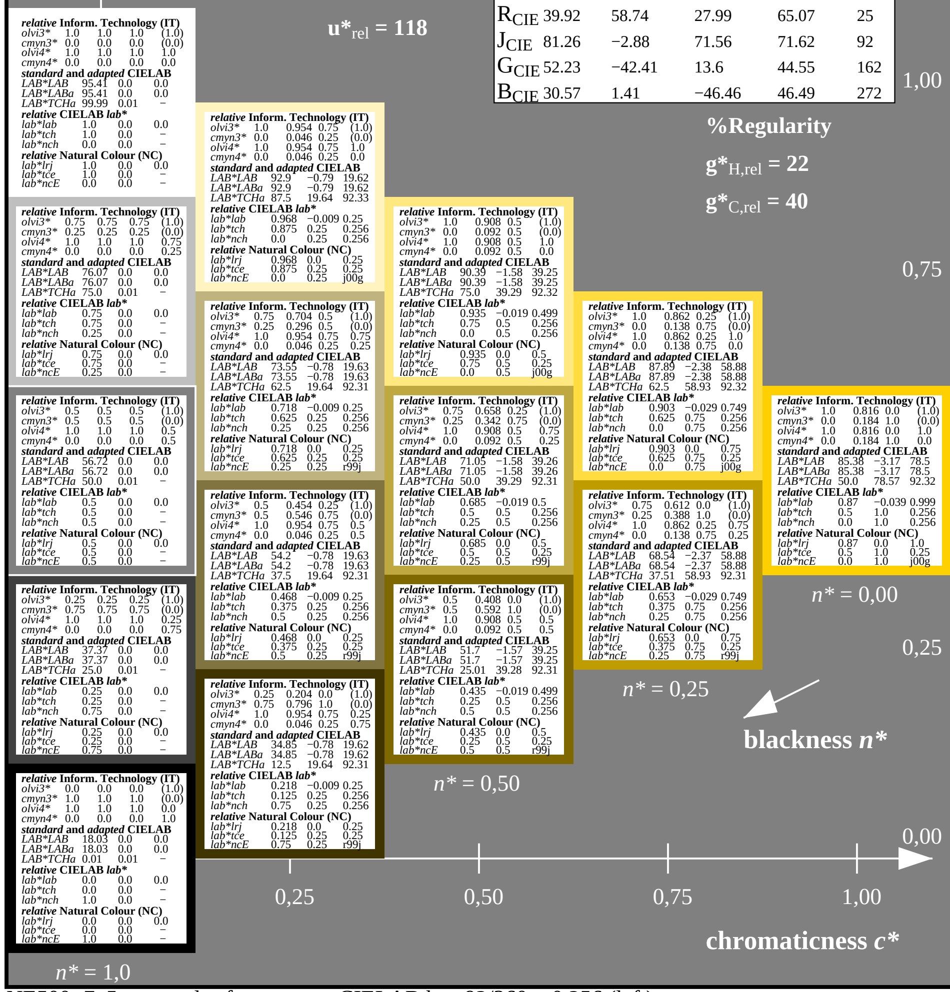
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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

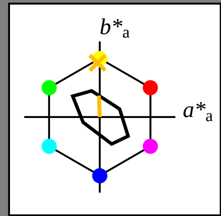
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness *t**



%Gamut

u*rel = 16

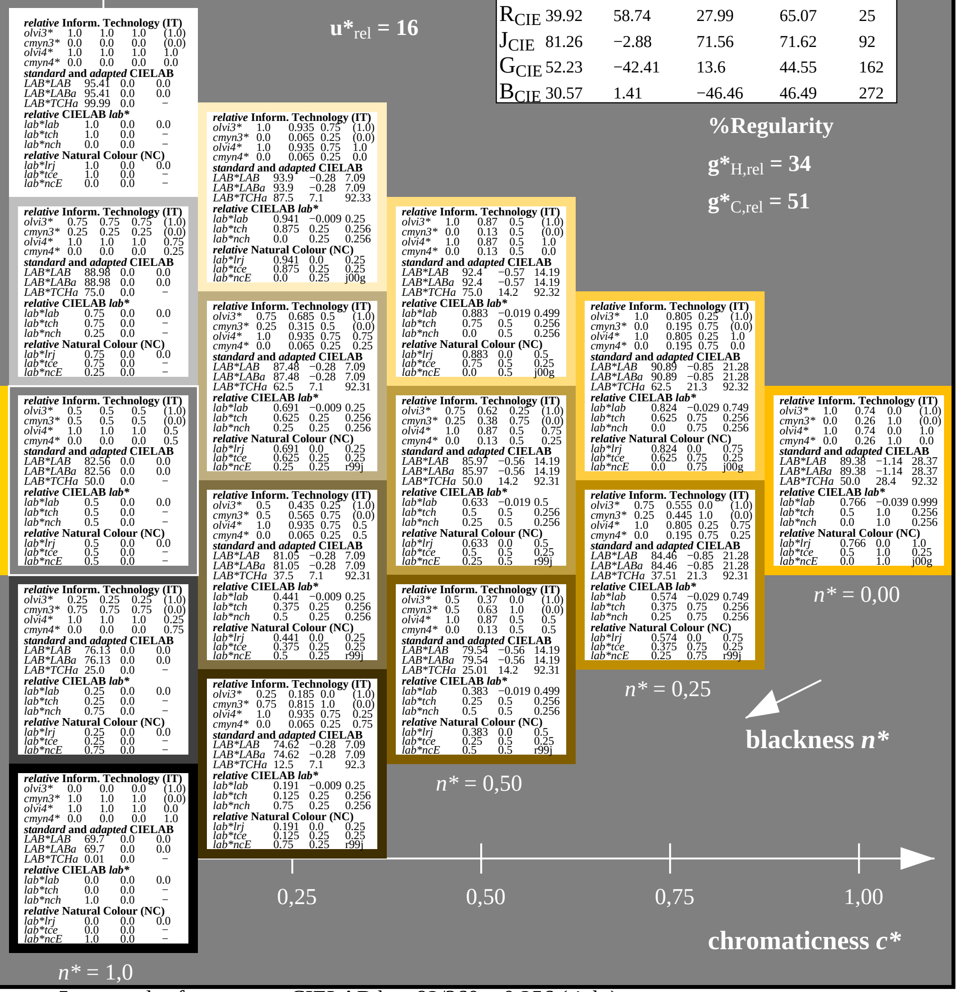
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

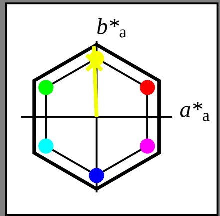
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

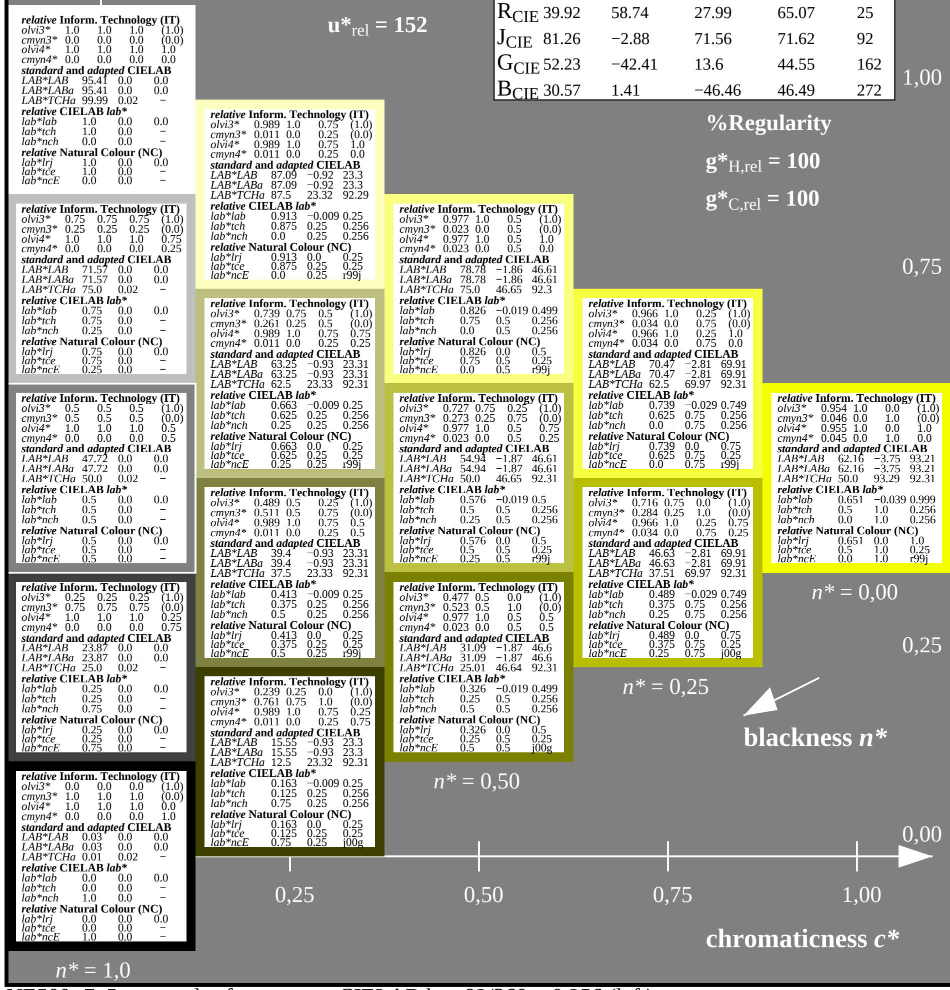
u^*_{rel} = 152

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* = 92/360 = 0.255

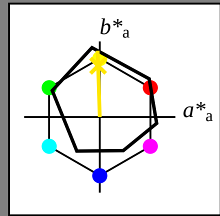
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness *t**



%Gamut

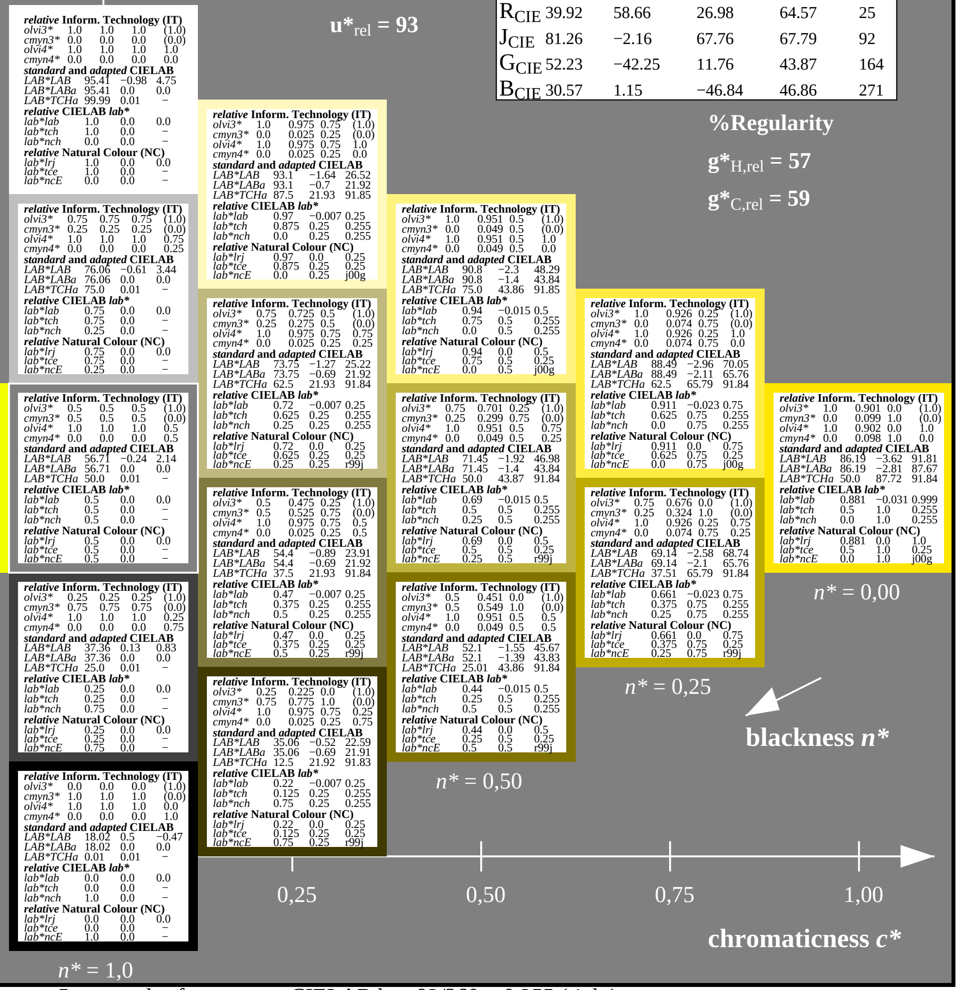
u^*_{rel} = 93

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



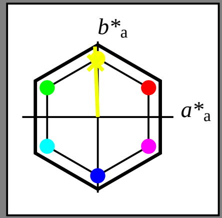
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

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

$n^* = 0,00$
$n^* = 0,25$
$n^* = 0,50$
$n^* = 1,0$

blackness n^*

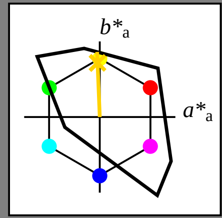
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 92/360 = 0.256$
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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$

$n^* = 0,00$
$n^* = 0,25$
$n^* = 0,50$
$n^* = 1,0$

blackness n^*

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

chromaticness c^*

NE500−7, 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 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

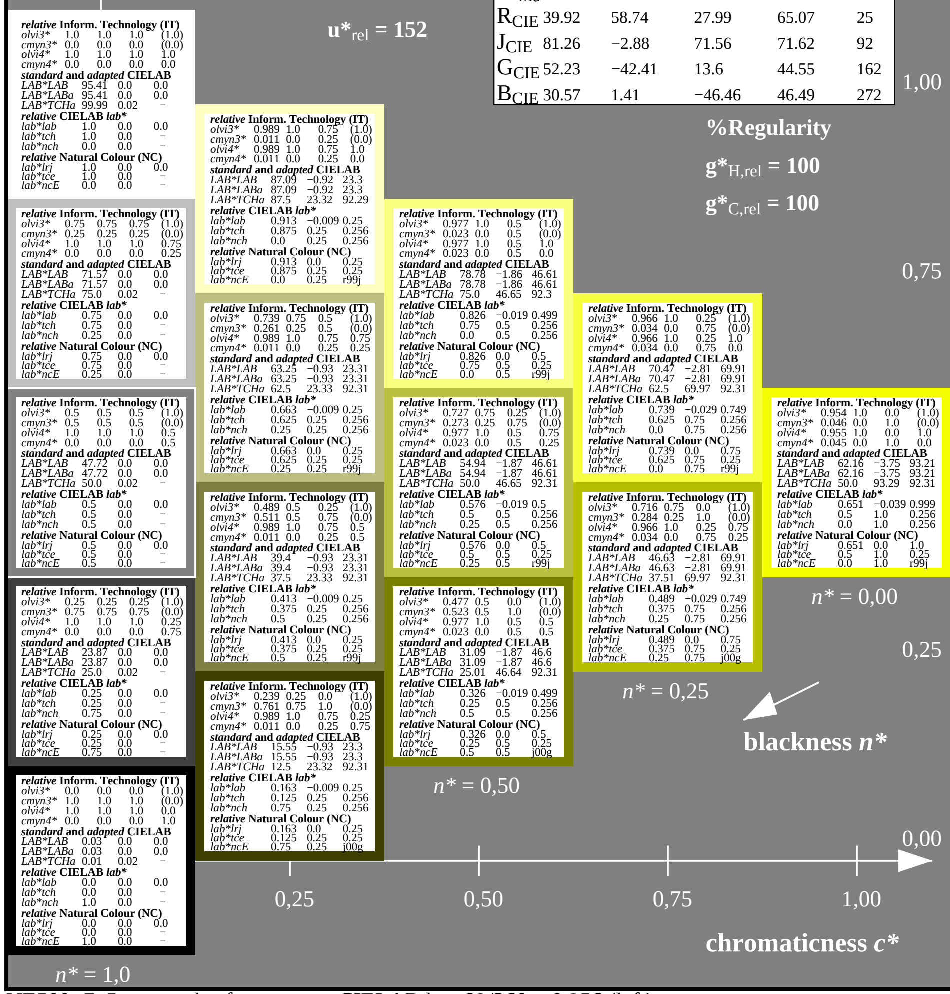
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



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

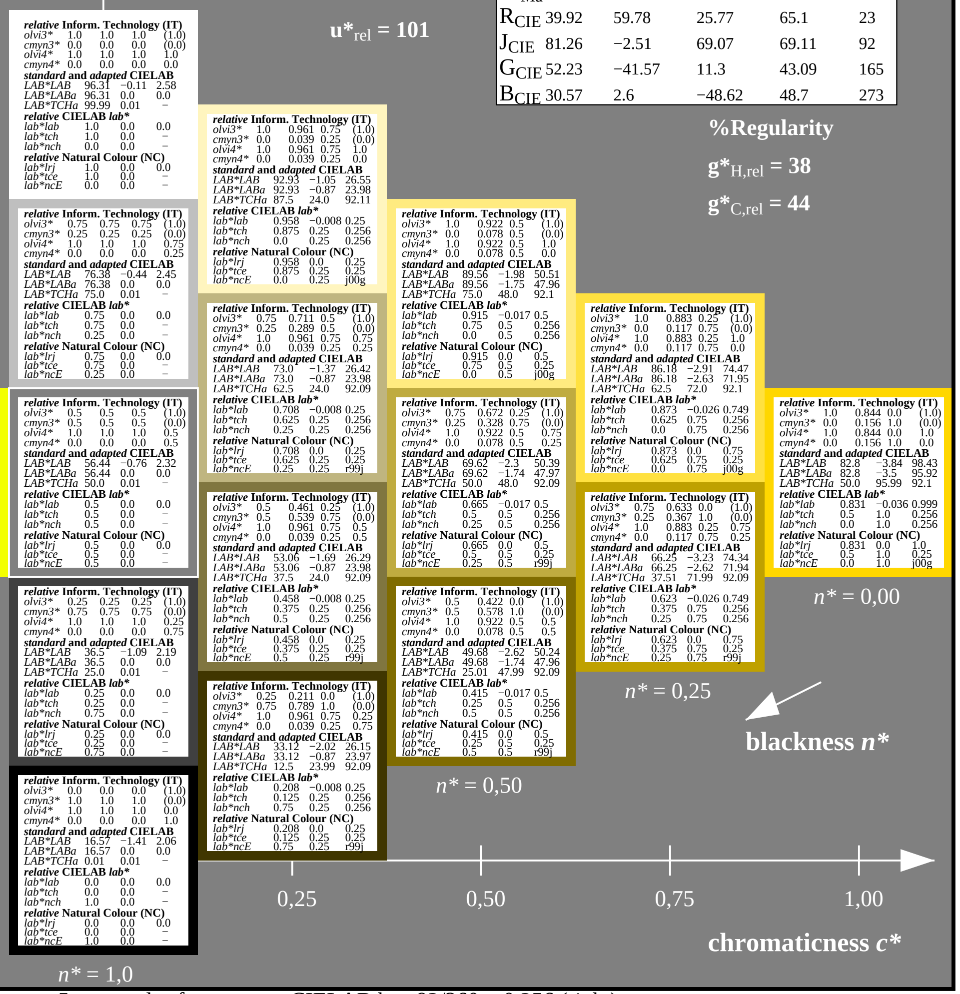
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



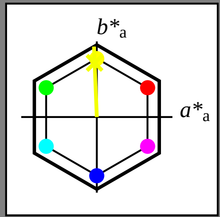
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural 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^*

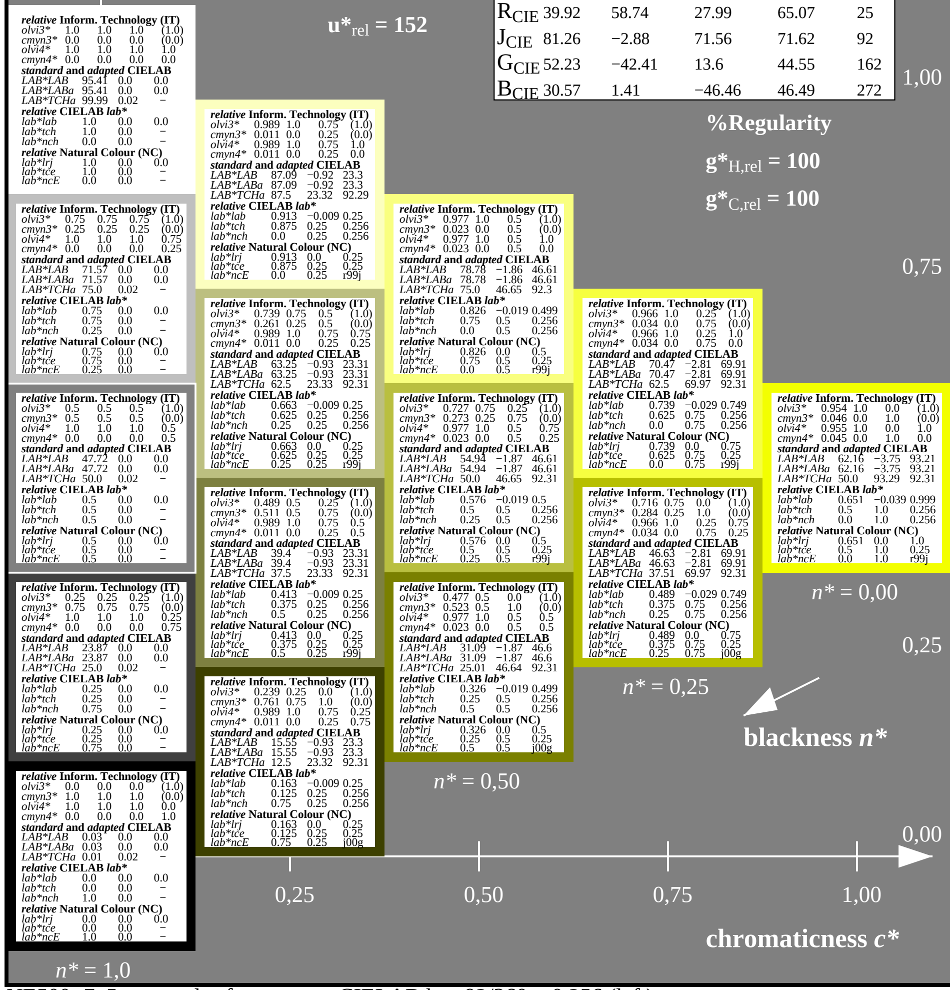


%Gamut
$u^*_{rel} = 152$

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

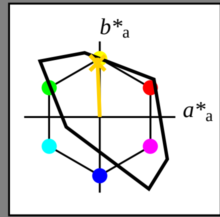
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

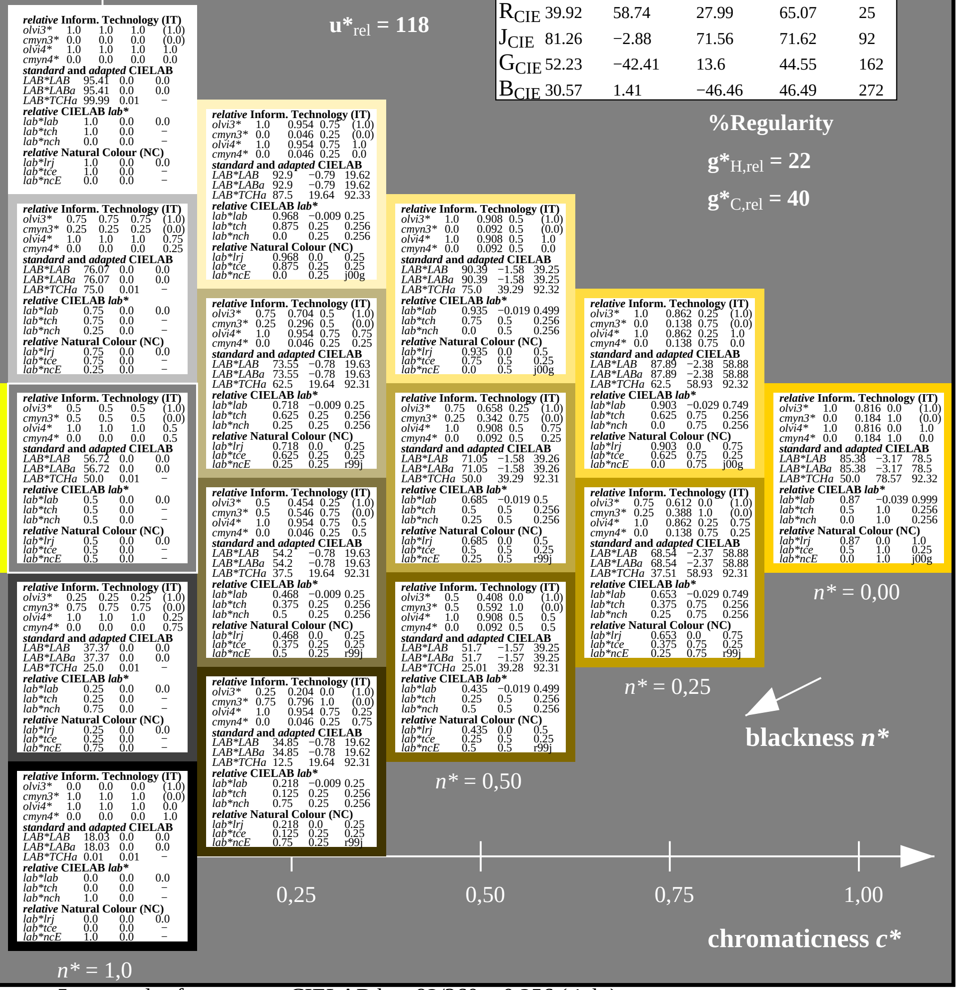


%Gamut
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

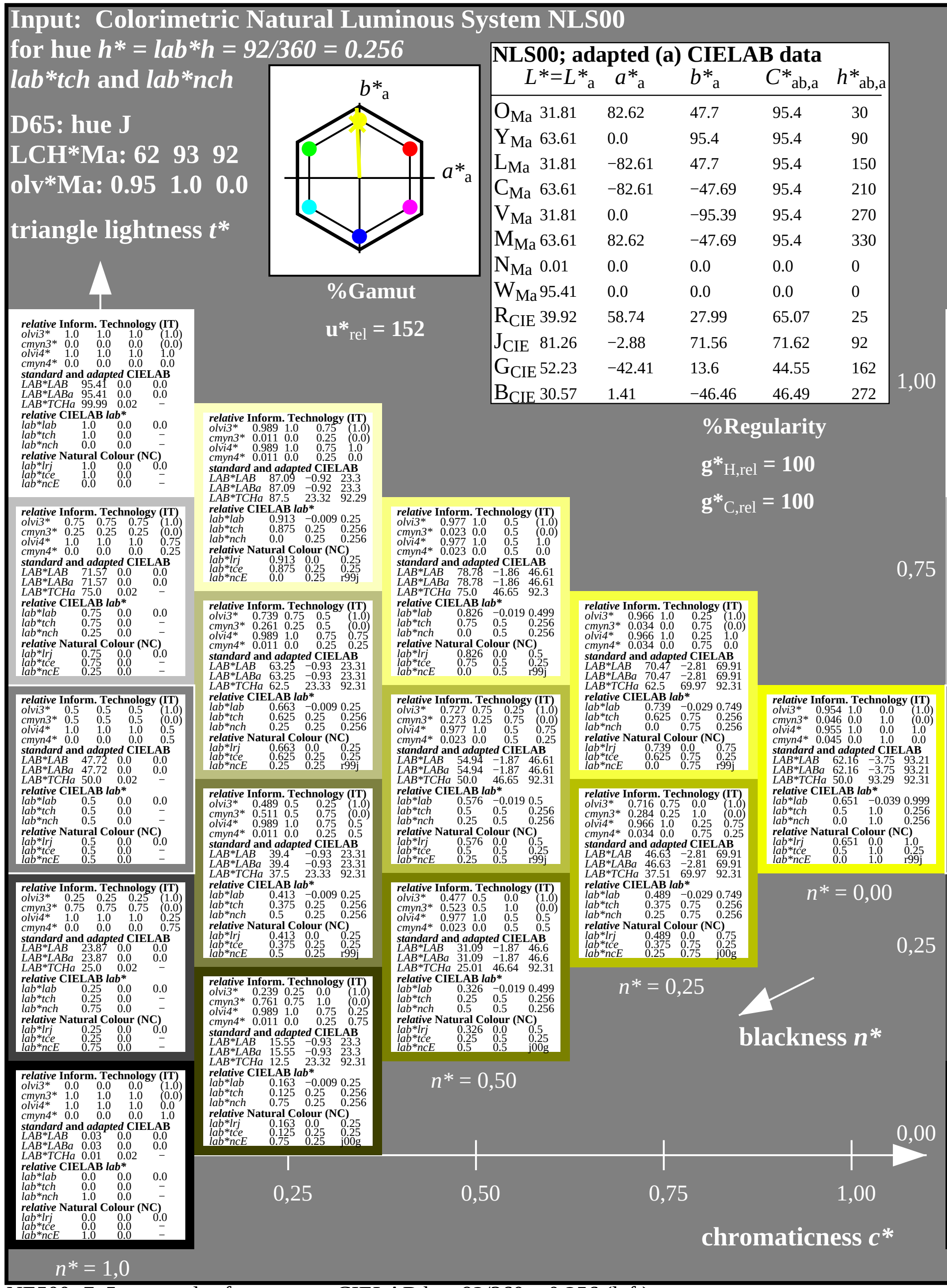
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

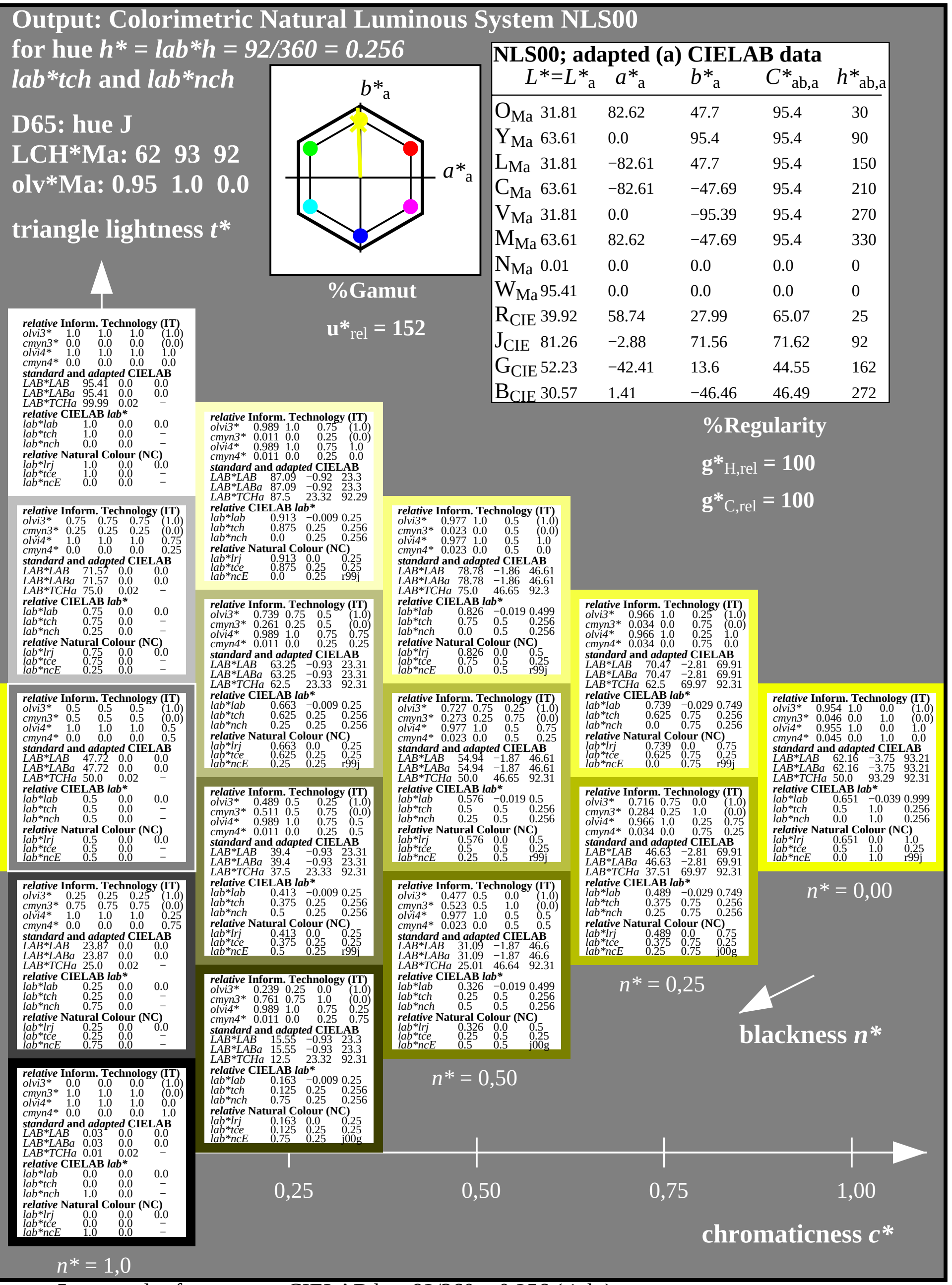
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)



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

NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)



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

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

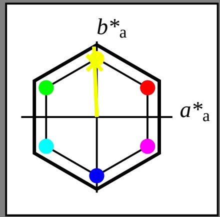
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

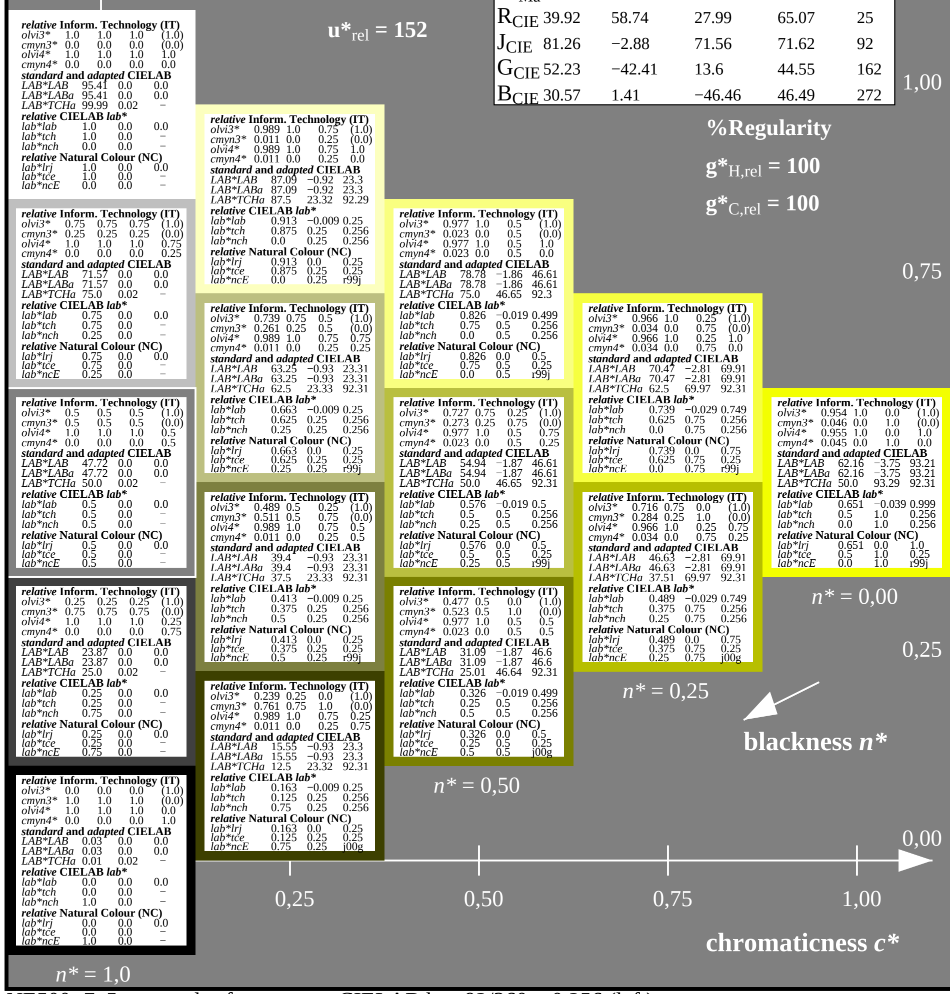
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

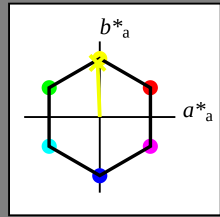
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

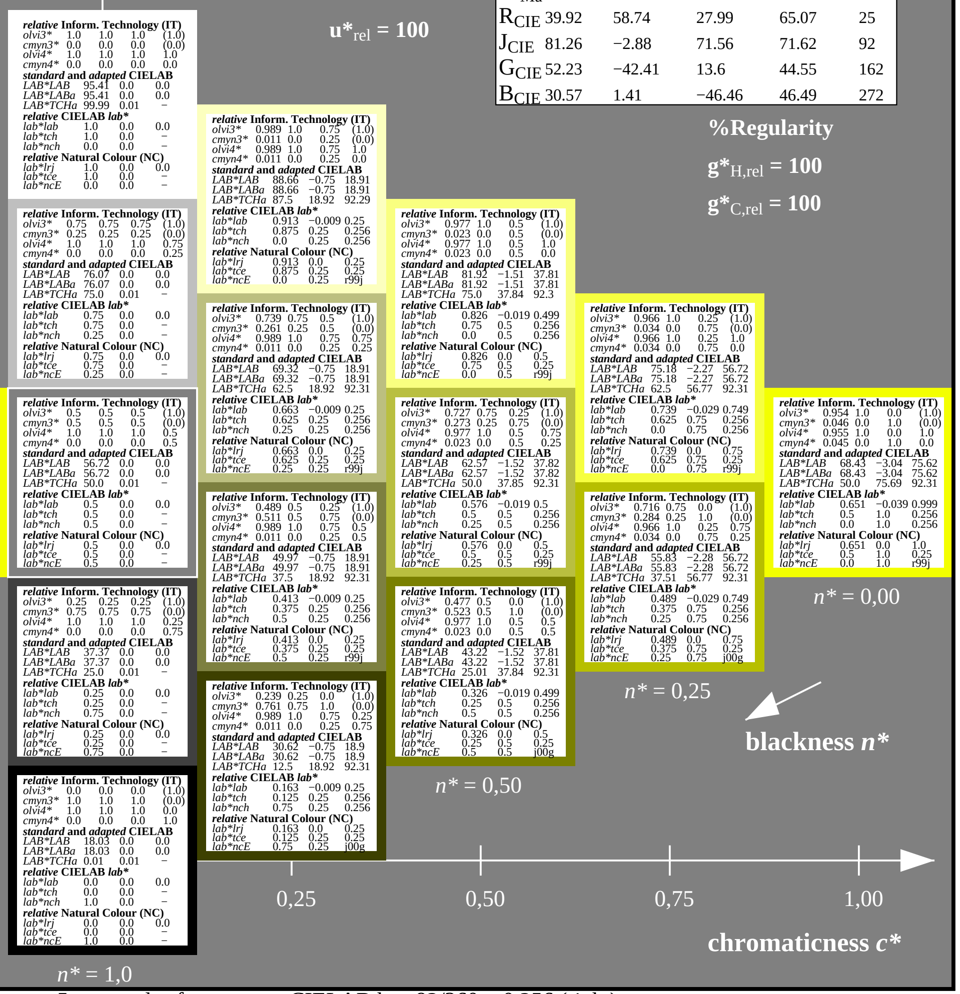
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Luminous System NLS00

for hue *h = *lab*h* = 92/360 = 0.256**

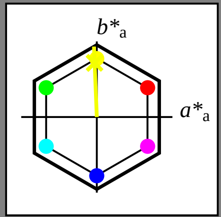
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

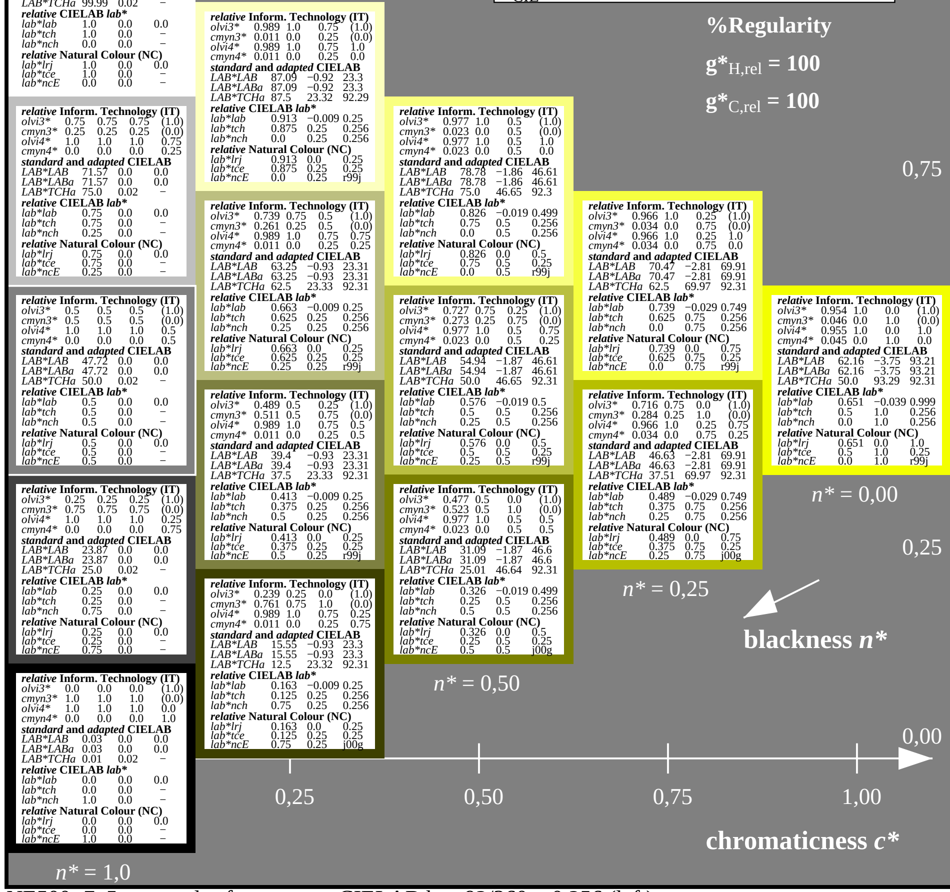
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Standard Reflective System SRS18

for hue *h = *lab*h* = 92/360 = 0.256**

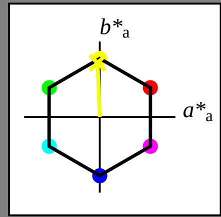
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

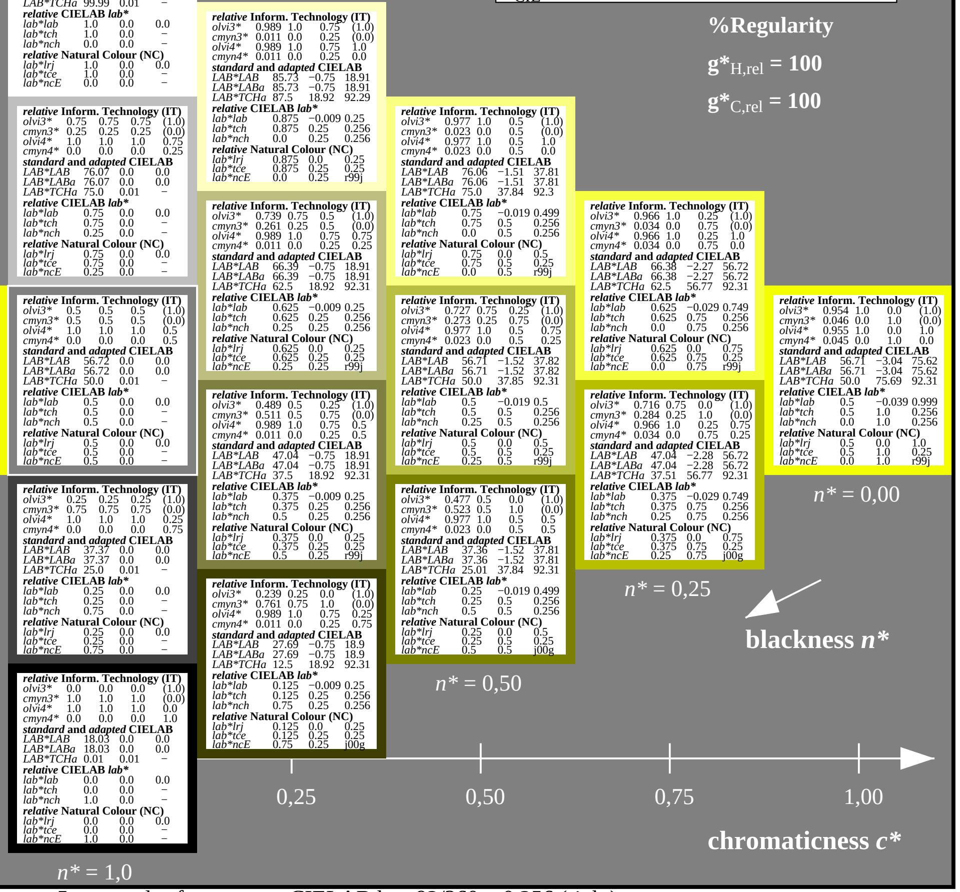
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



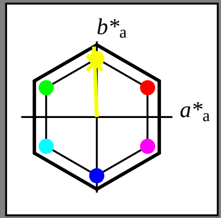
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric Natural 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

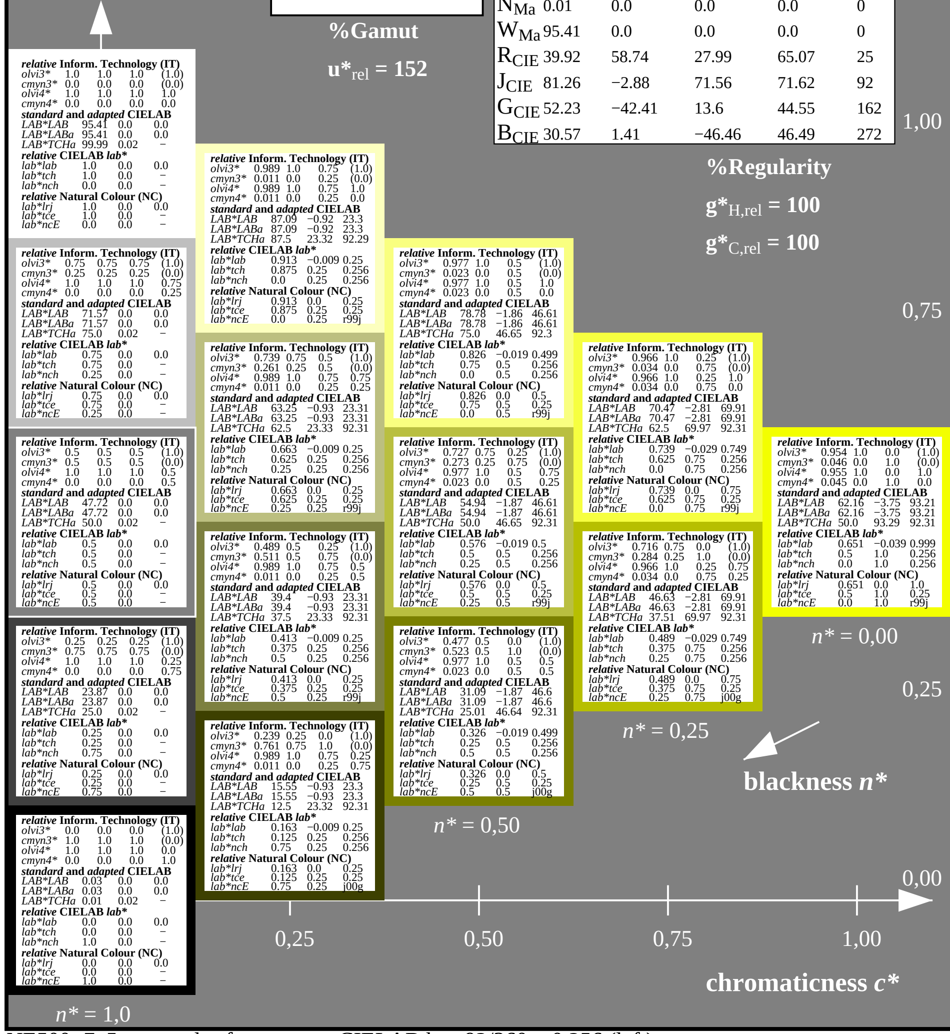
u^*_{rel} = 152

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

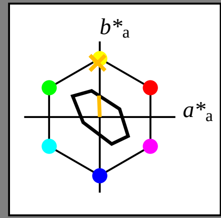
$g^*_{C,rel}$ = 100



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

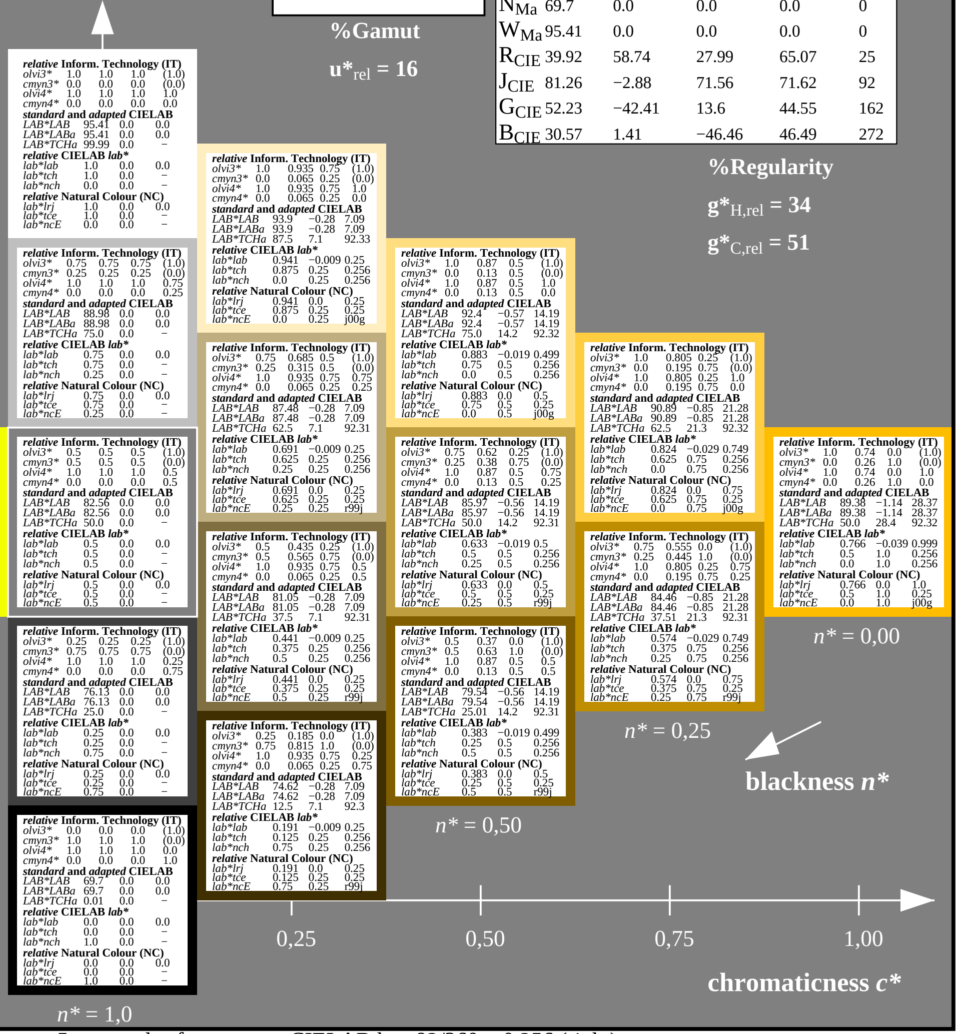
u^*_{rel} = 16

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

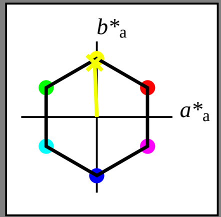
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

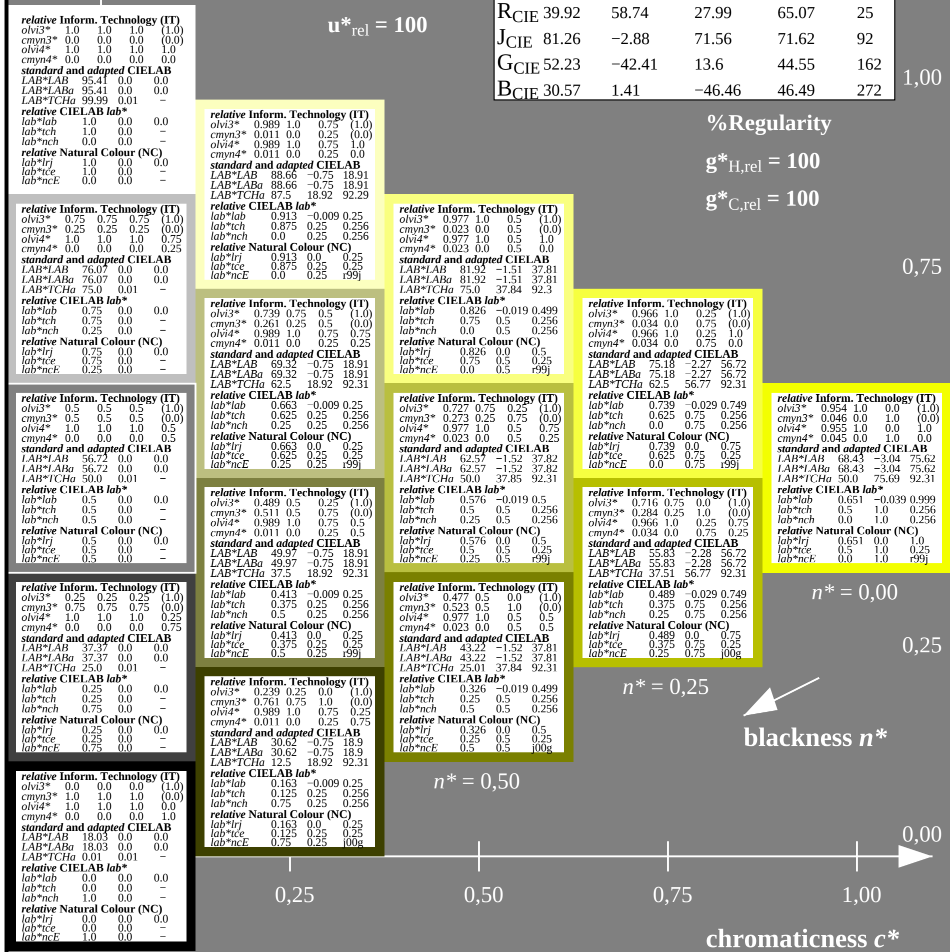
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

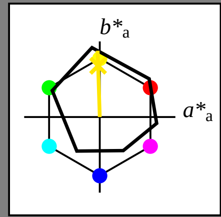
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

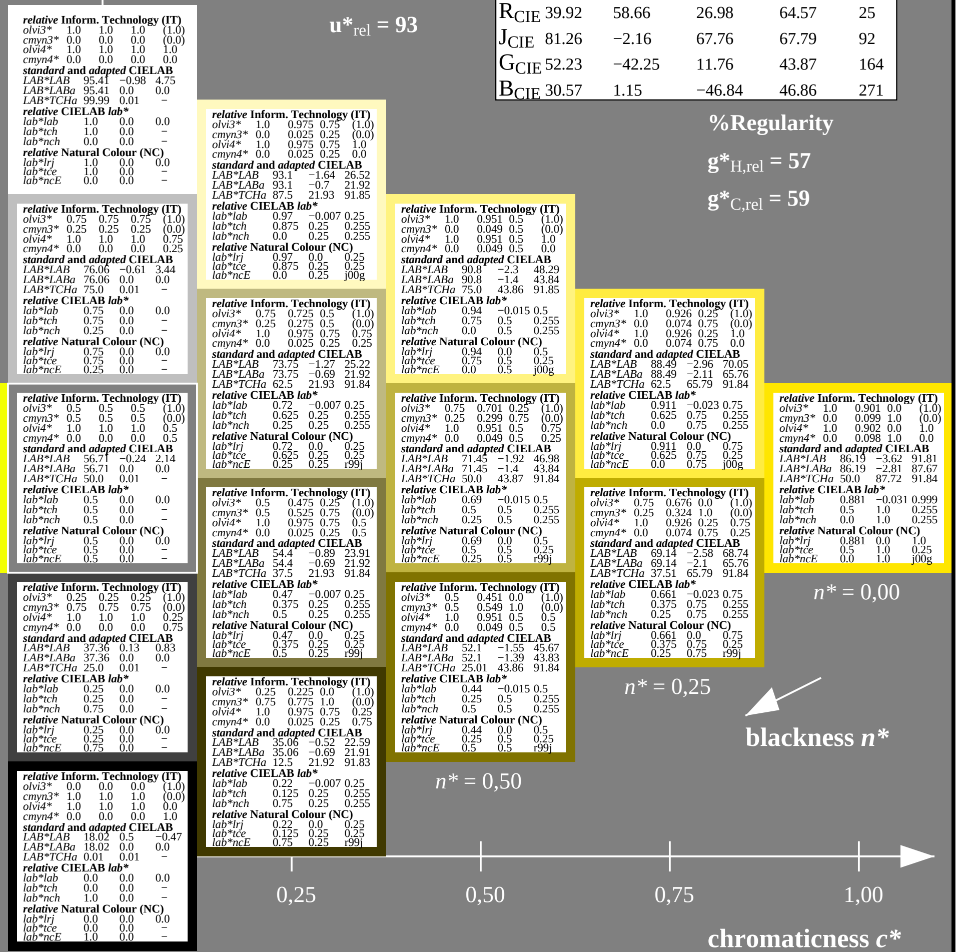
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

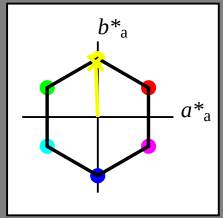
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

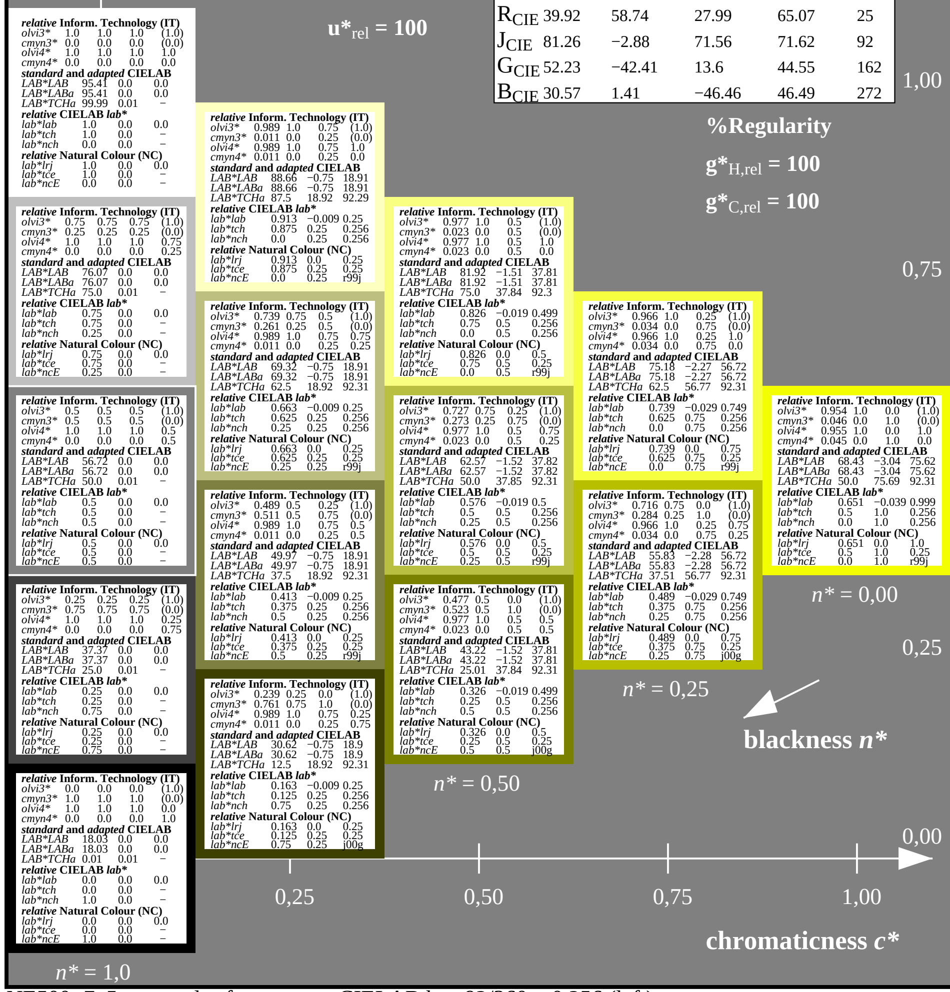
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$

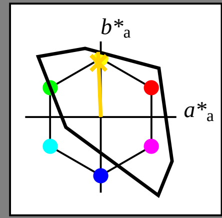
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

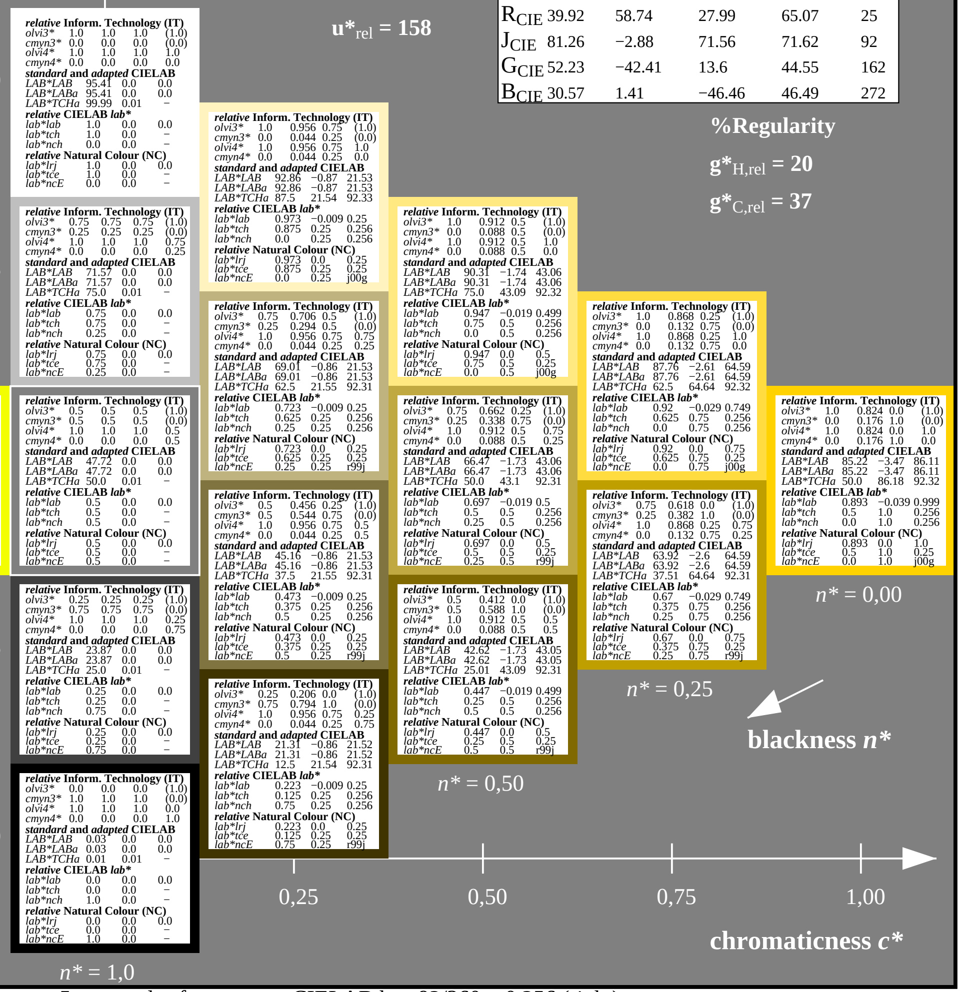
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

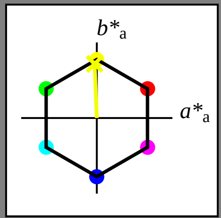
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

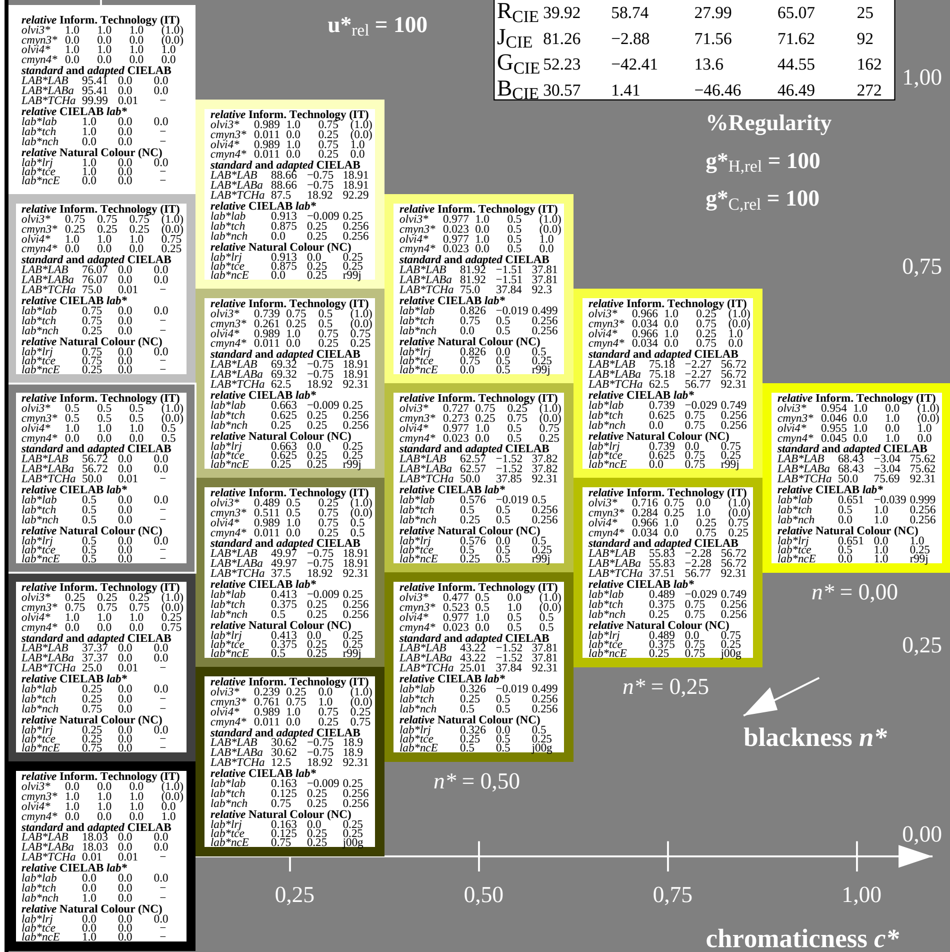
$u^*_{rel} = 100$

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

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

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 92/360 = 0.256$

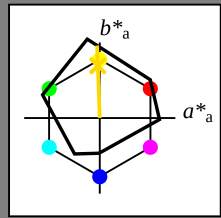
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness t^*



%Gamut

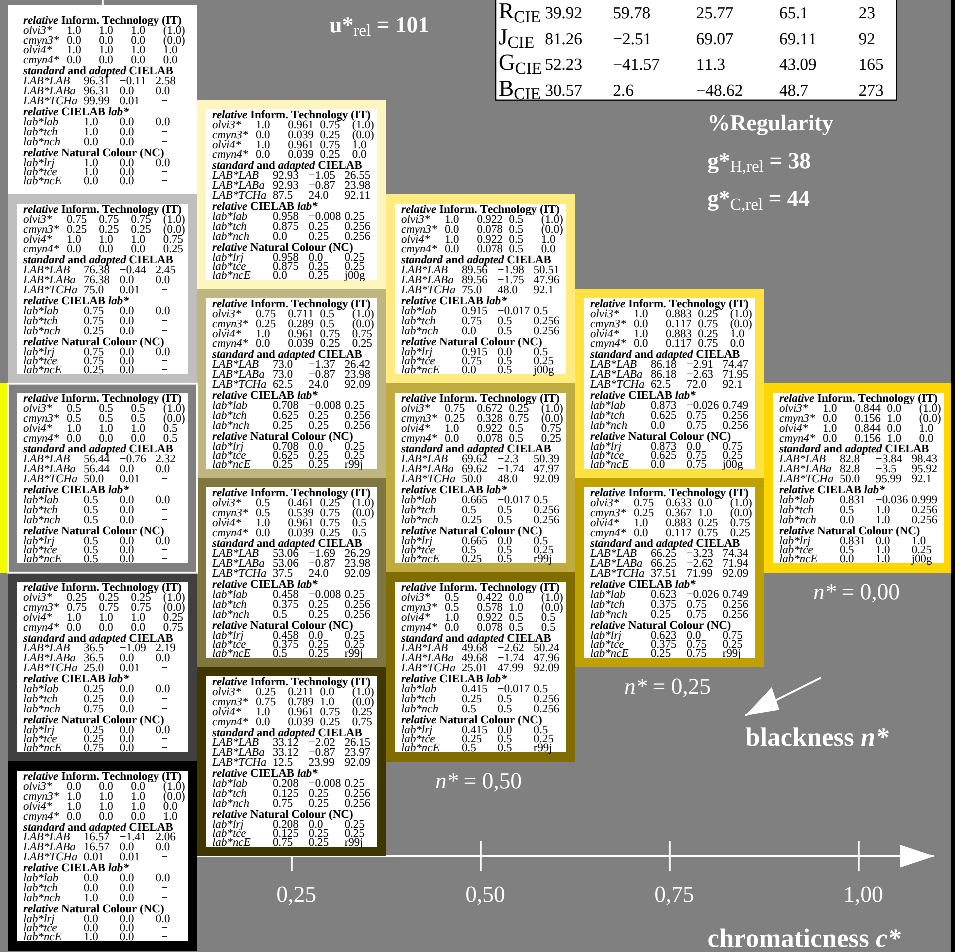
$u^*_{rel} = 101$

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

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

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

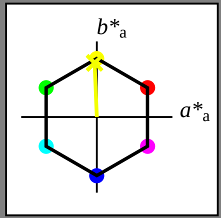
lab*tch and lab*nch

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

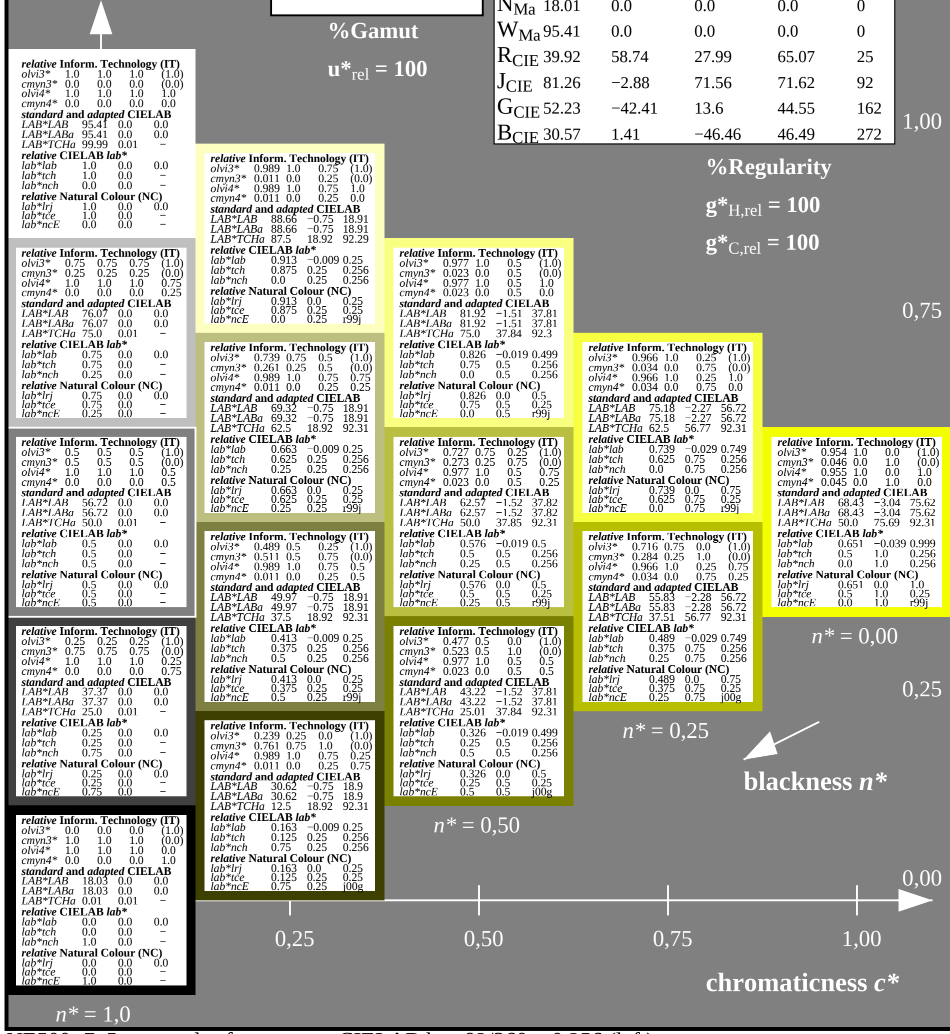
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$

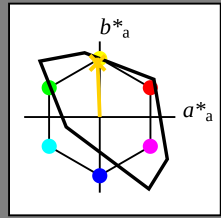
lab*tch and lab*nch

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

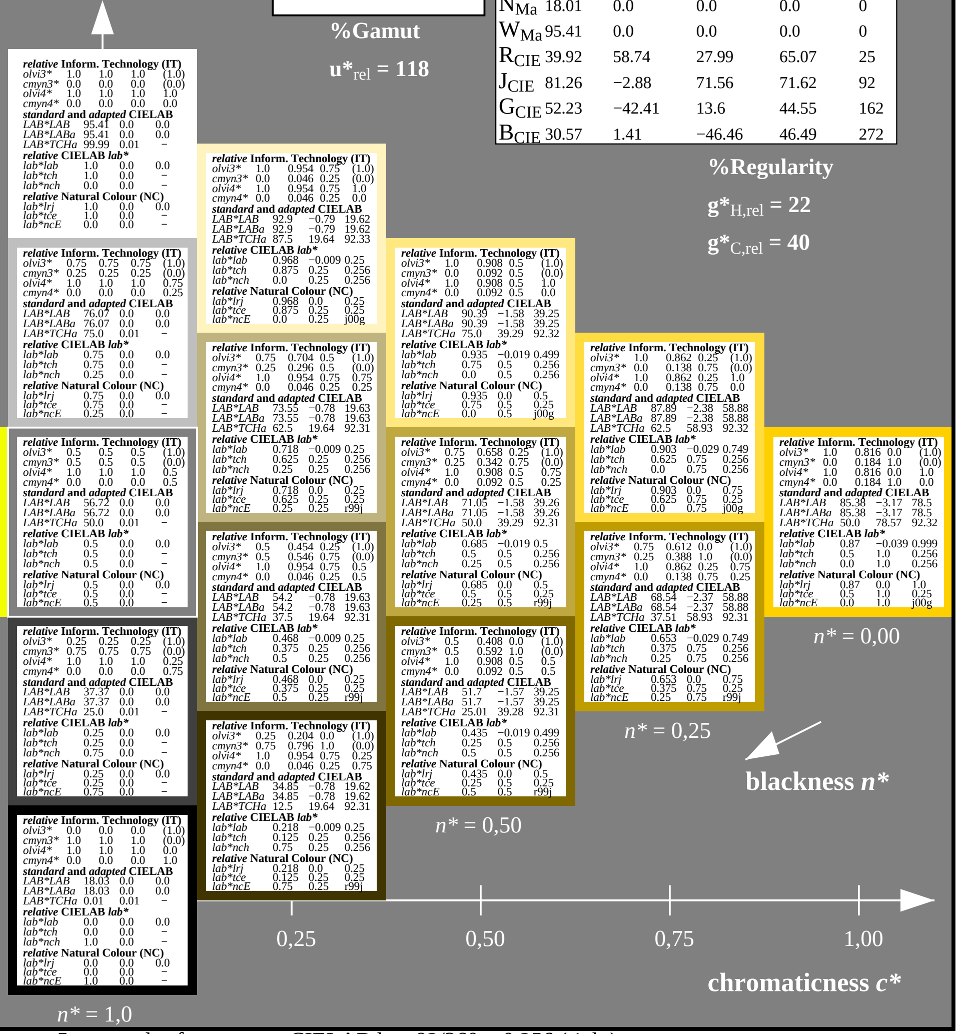
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



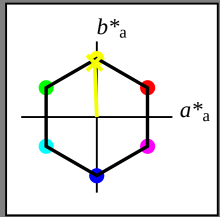
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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**

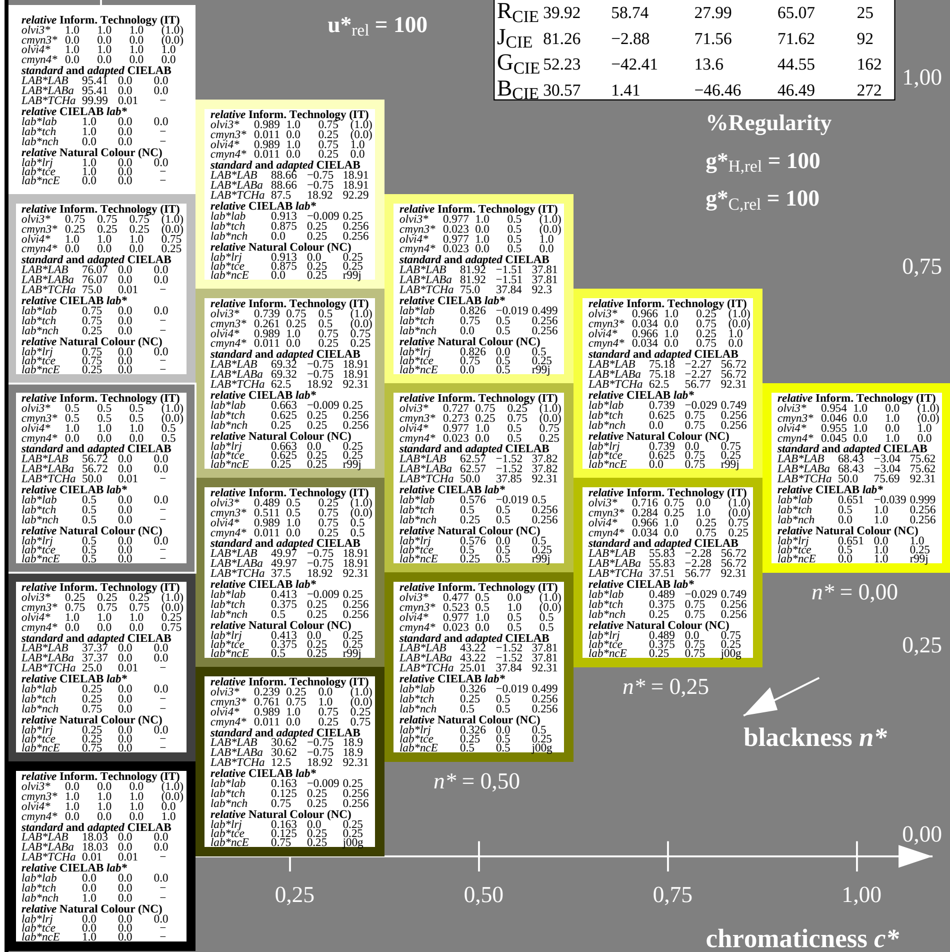


%Gamut
u*rel = 100

NRS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	43.81	67.03	38.7	77.4	30
YMa	69.61	0.0	77.4	77.4	90
LMa	43.81	−67.02	38.7	77.4	150
CMa	69.61	−67.02	−38.69	77.4	210
VMa	43.81	0.0	−77.39	77.4	270
MMa	69.61	67.03	−38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

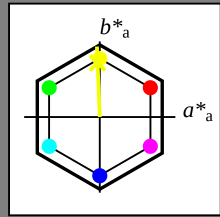
%Regularity
g*H,rel = 100
g*C,rel = 100



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**

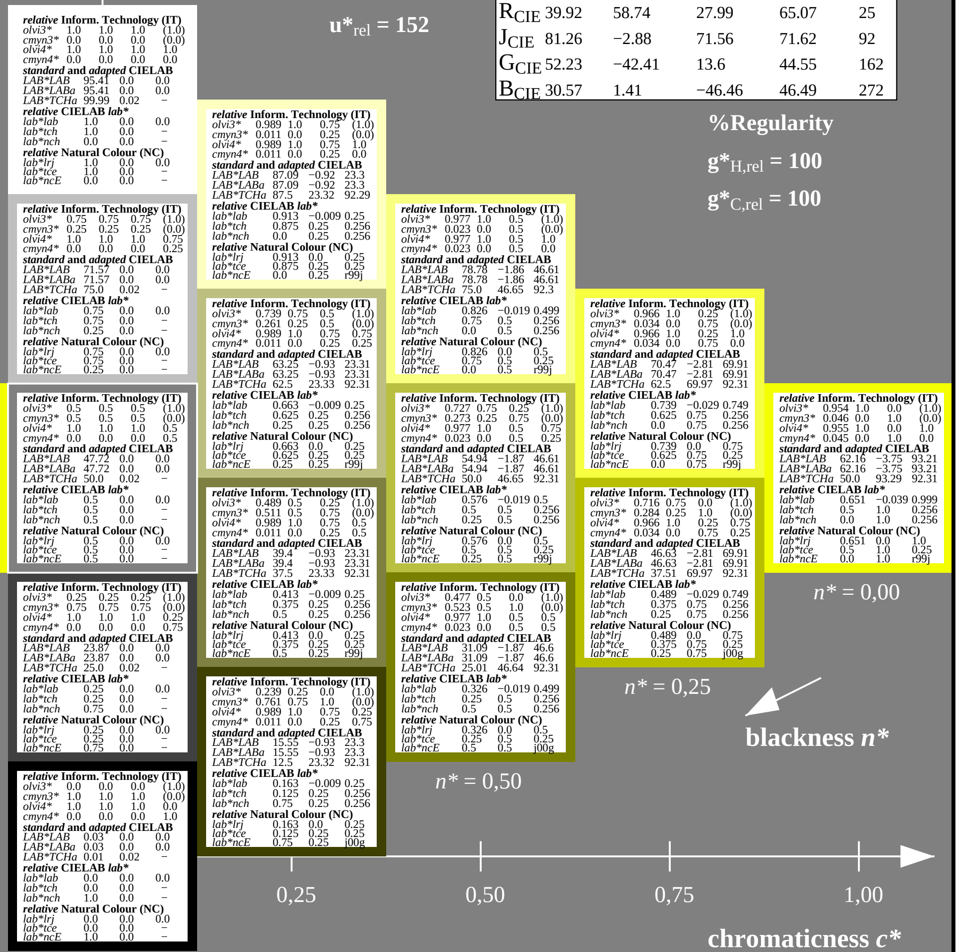


%Gamut
u*rel = 152

NLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	31.81	82.62	47.7	95.4	30
YMa	63.61	0.0	95.4	95.4	90
LMa	31.81	−82.61	47.7	95.4	150
CMa	63.61	−82.61	−47.69	95.4	210
VMa	31.81	0.0	−95.39	95.4	270
MMa	63.61	82.62	−47.69	95.4	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity
g*H,rel = 100
g*C,rel = 100



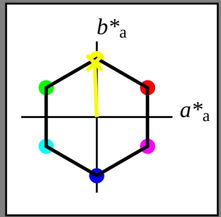
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

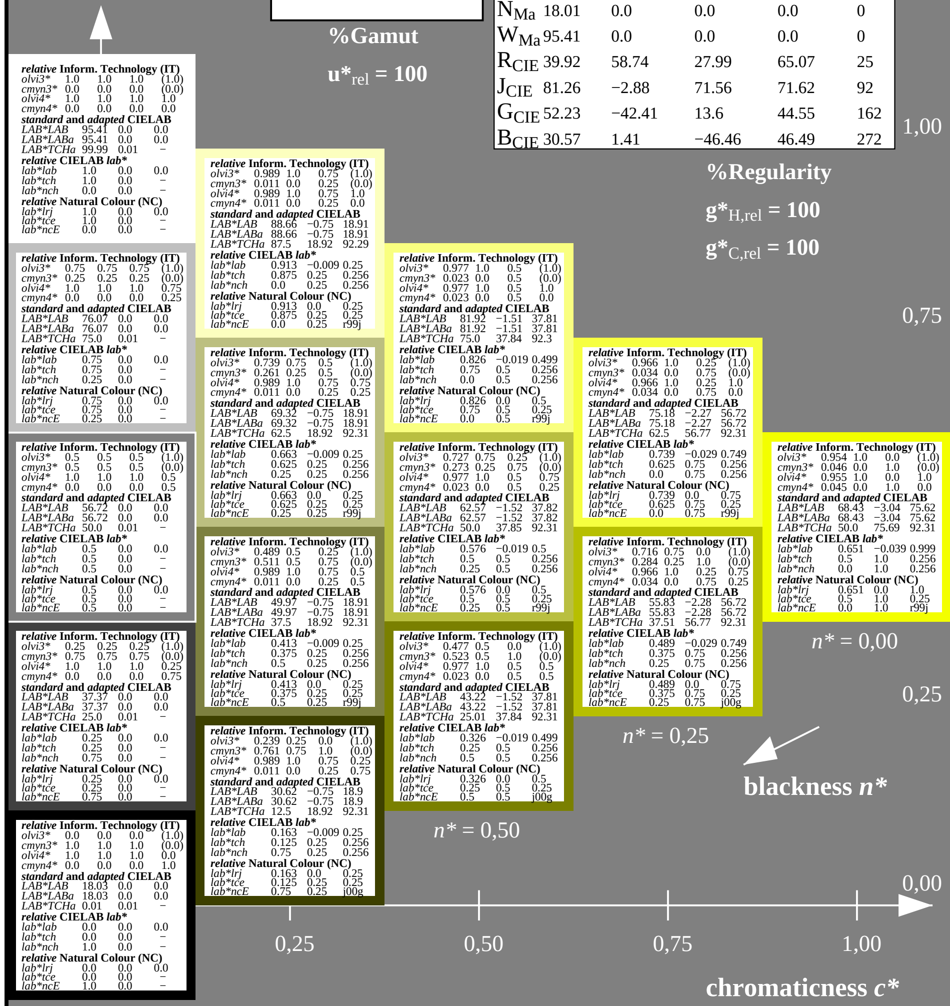
triangle lightness *t*



%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

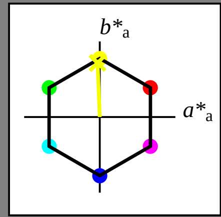
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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

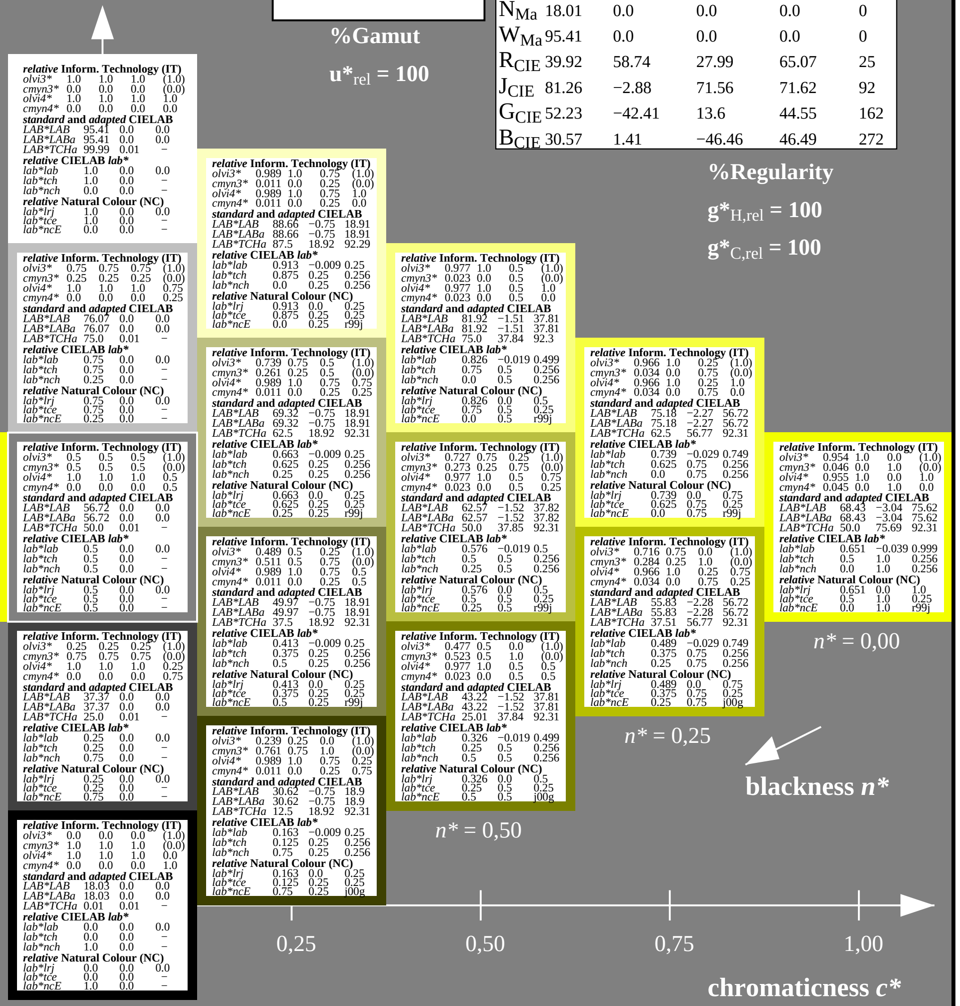
triangle lightness *t*



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



NE500−7, 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**

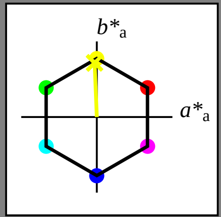
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

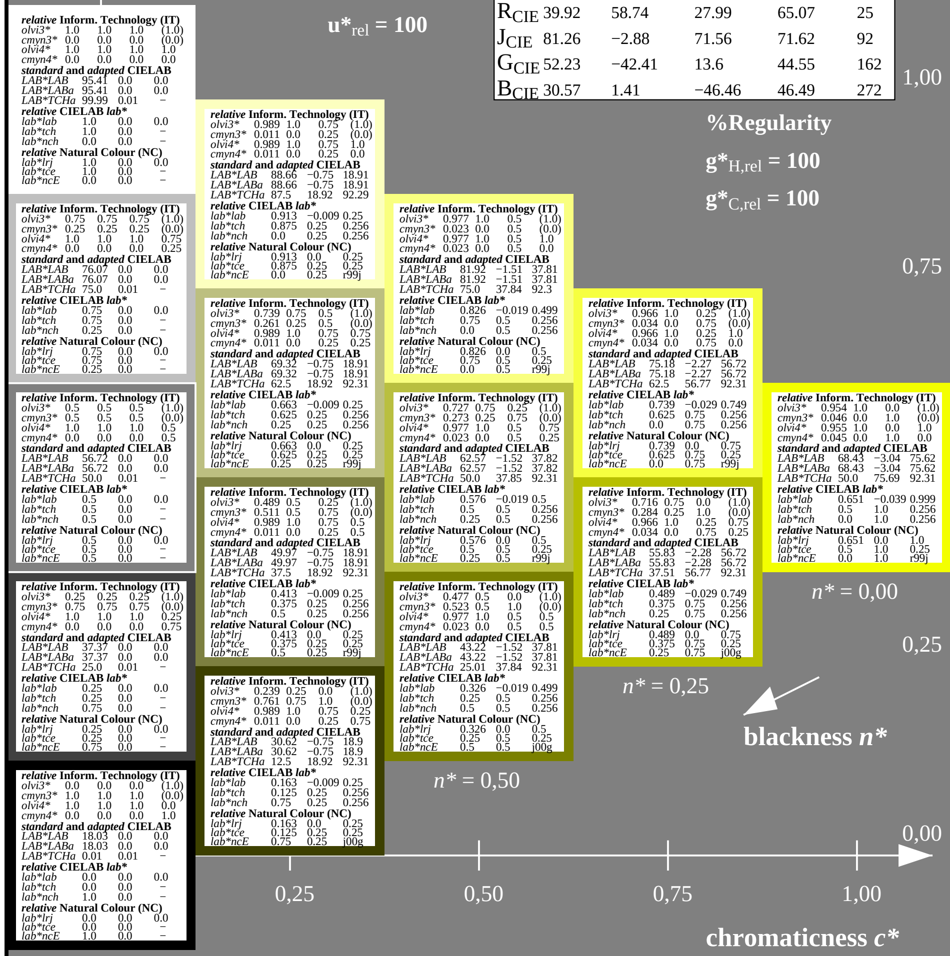
u^*_{rel} = 100

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



Output: Colorimetric Standard Reflective System SRS18

for hue *h = *lab*h* = 92/360 = 0.256**

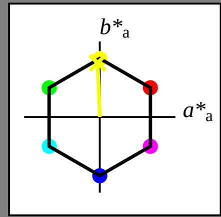
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

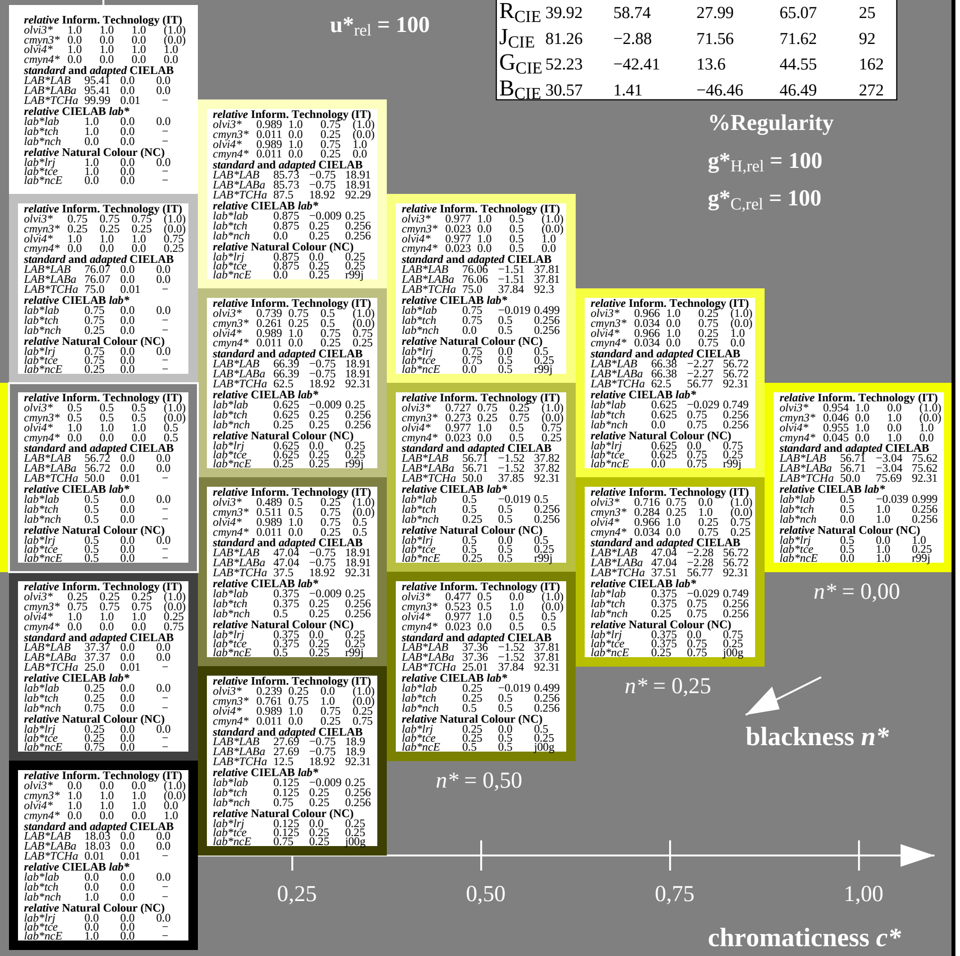
u^*_{rel} = 100

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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

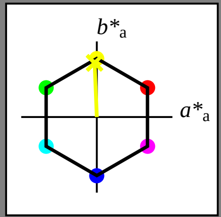
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

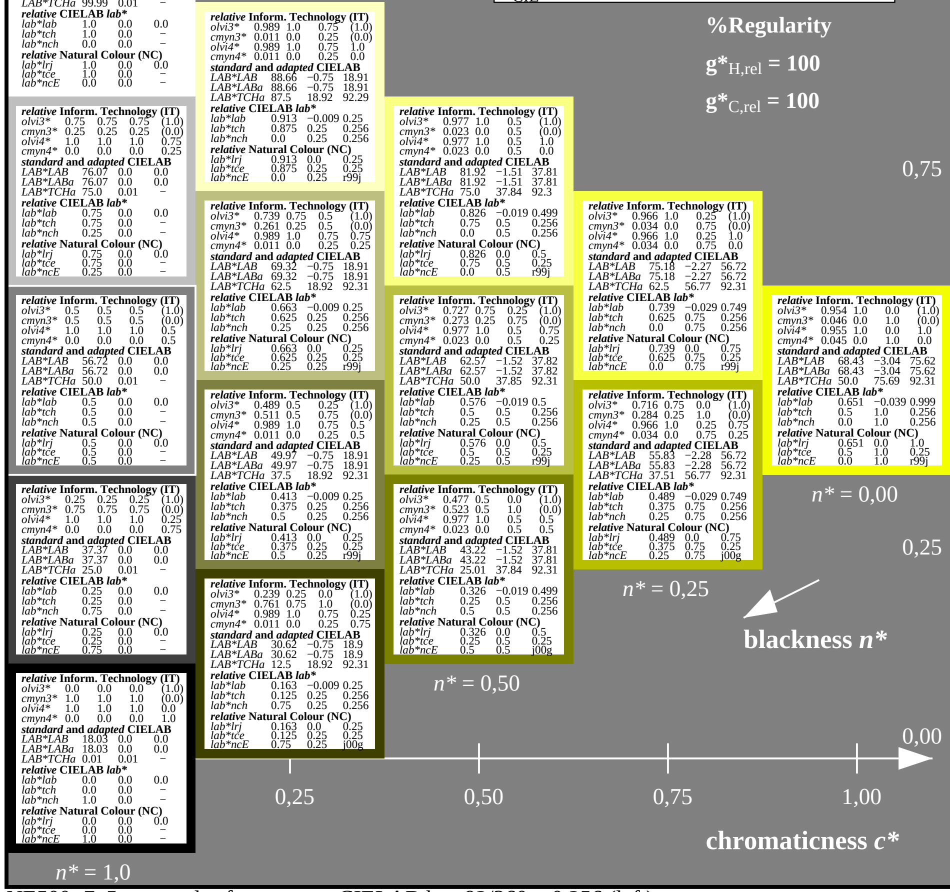
u^*_{rel} = 100

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 92/360 = 0.256$

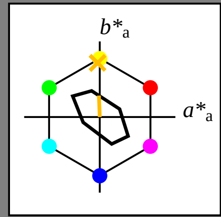
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

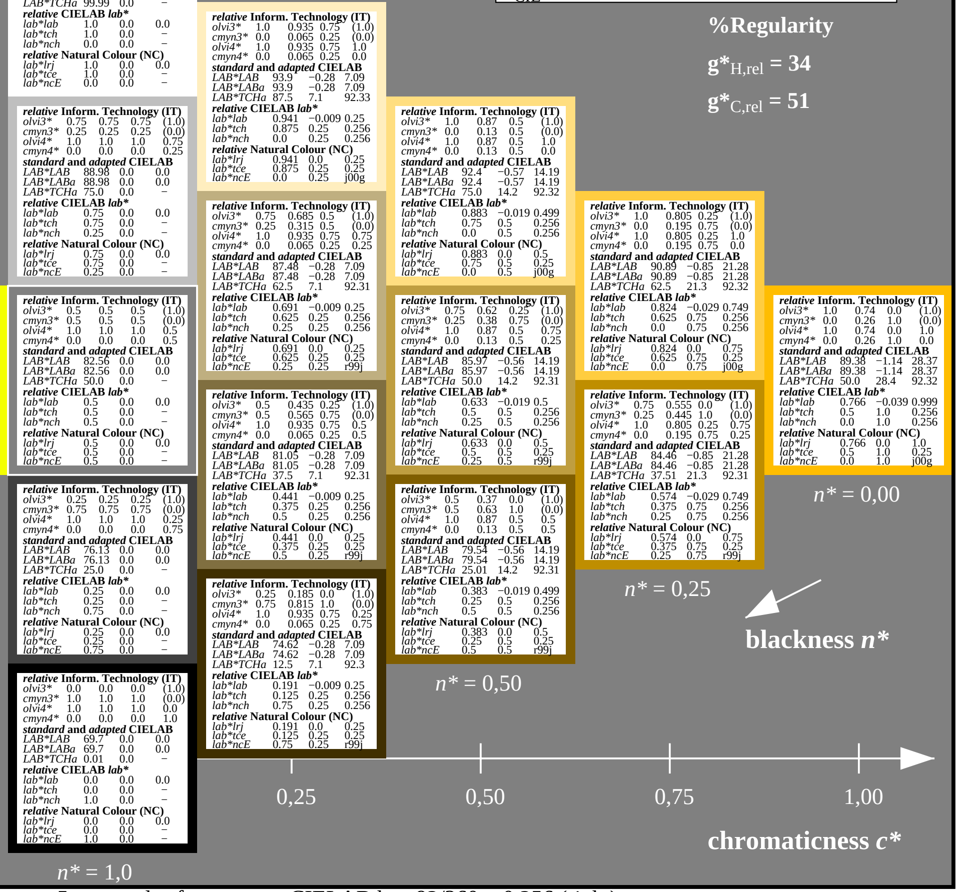
u^*_{rel} = 16

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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

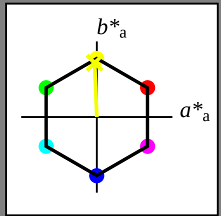
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

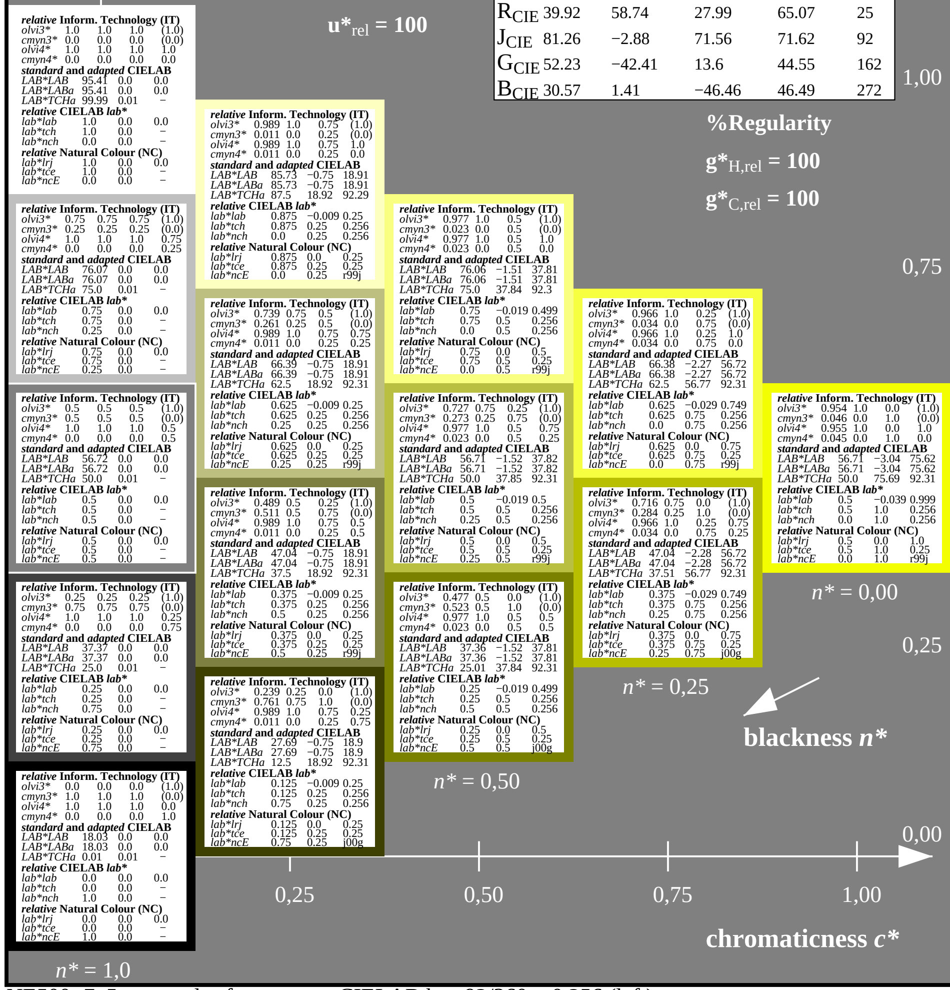
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

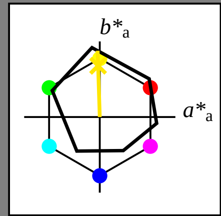
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

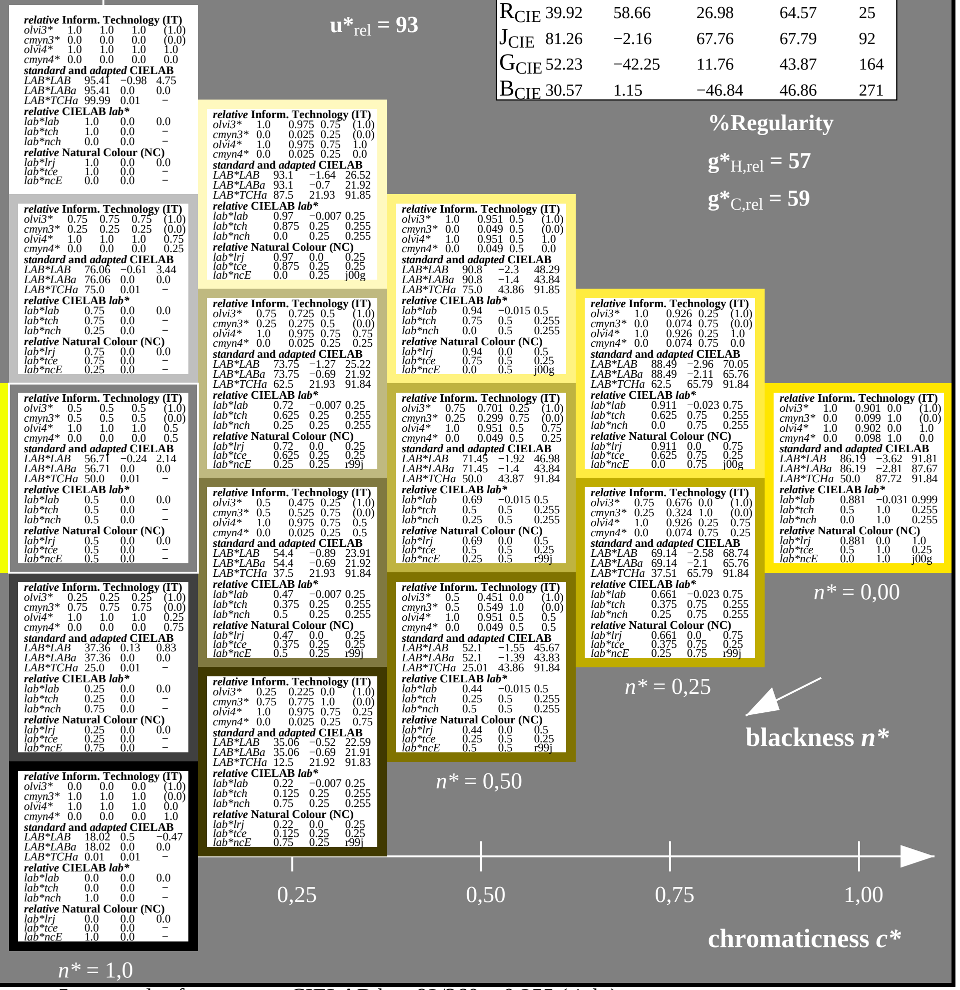
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



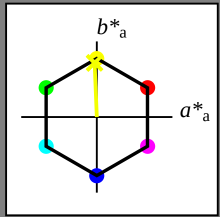
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric 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

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

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

blackness n^*

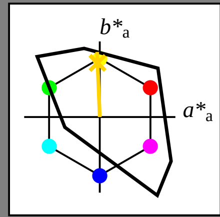
0,25 0,50 0,75 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 92/360 = 0.256$
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

n^* = 0,00 n^* = 0,25 n^* = 0,50 n^* = 1,0

blackness n^*

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

chromaticness c^*

NE500−7, 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 Standard Reflective System SRS18

for hue *h = *lab*h* = 92/360 = 0.256**

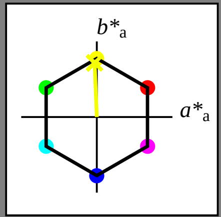
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

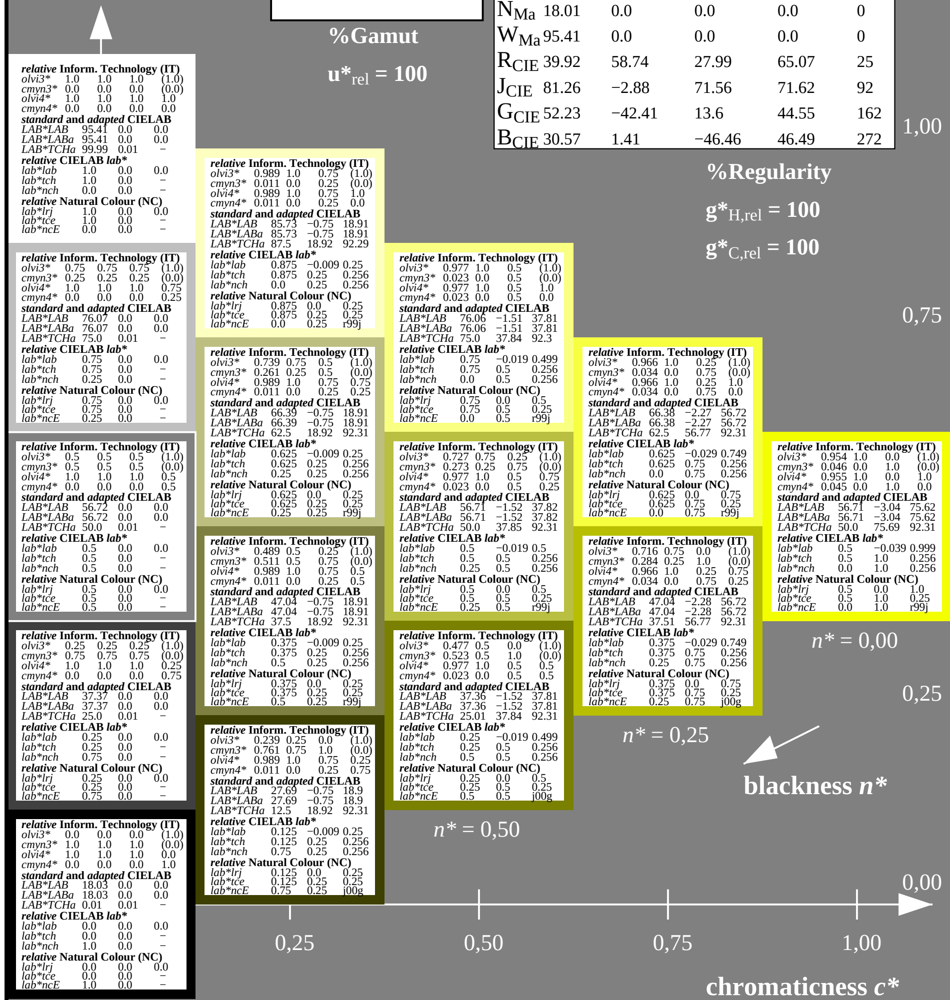
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h = *lab*h* = 92/360 = 0.256**

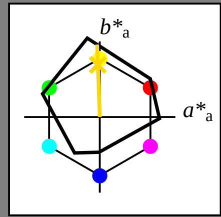
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 83 96 92

olv*Ma: 1.0 0.84 0.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

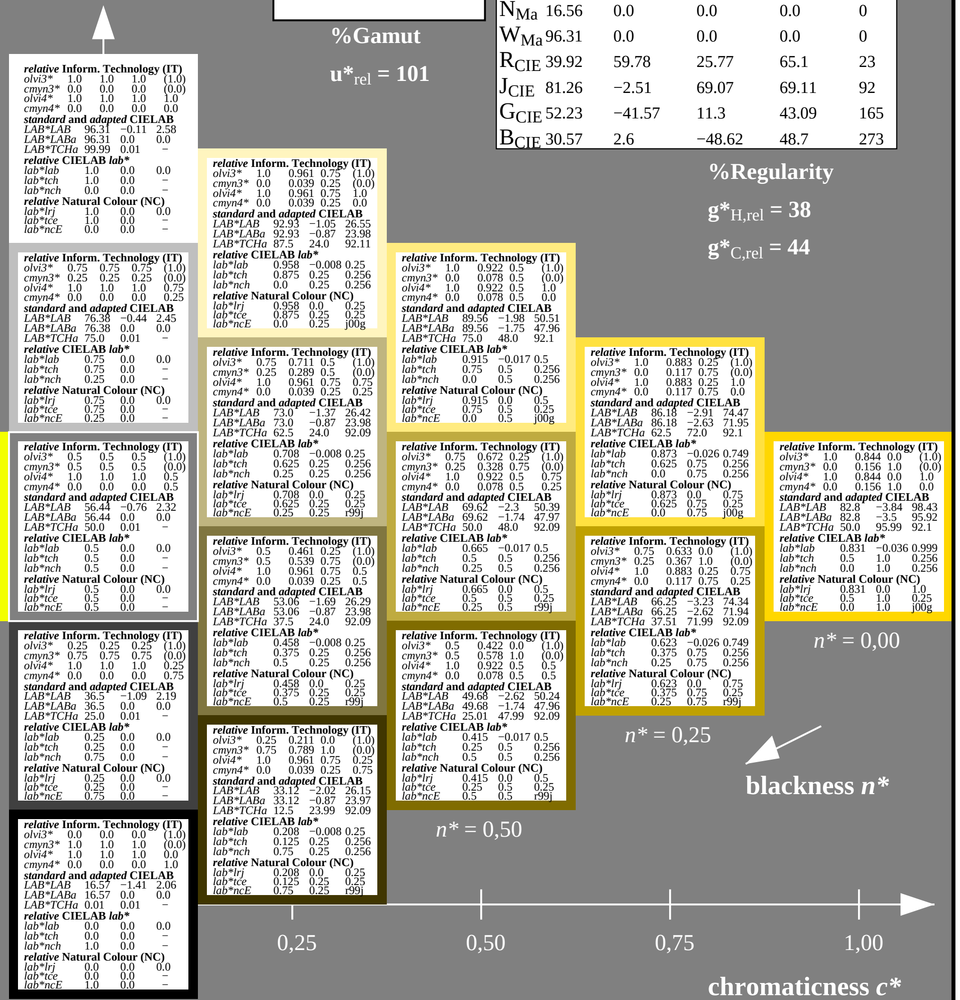
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



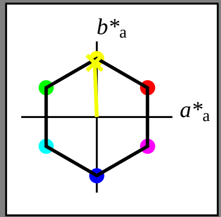
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric 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

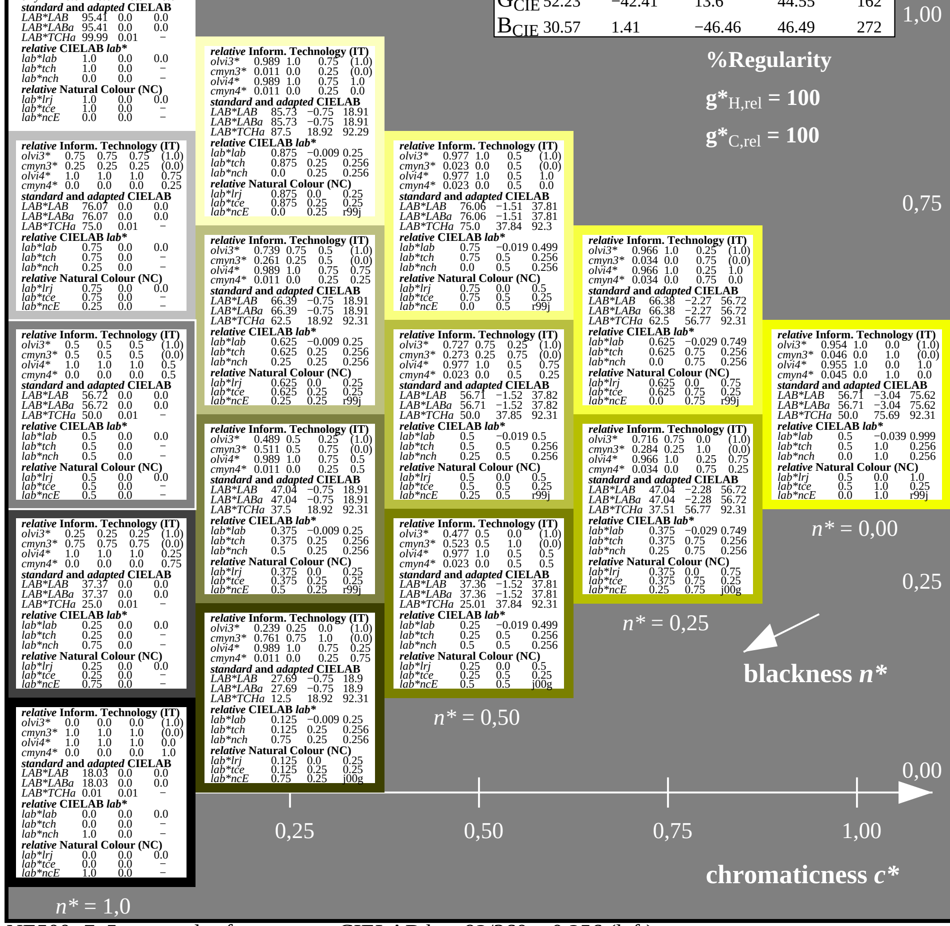
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

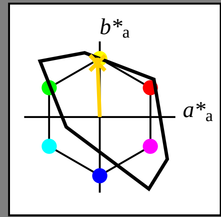
g*C,rel = 100



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

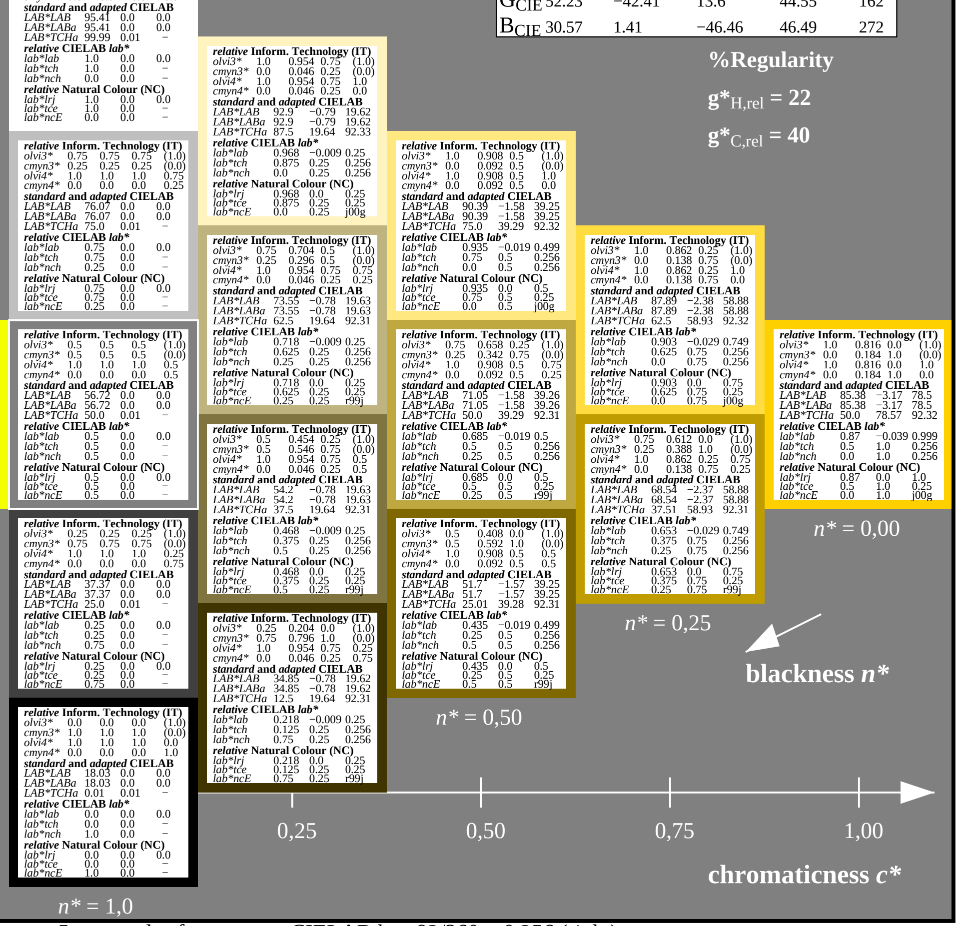
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

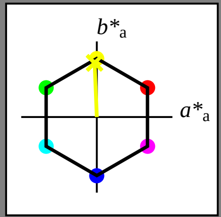


NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric 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^*

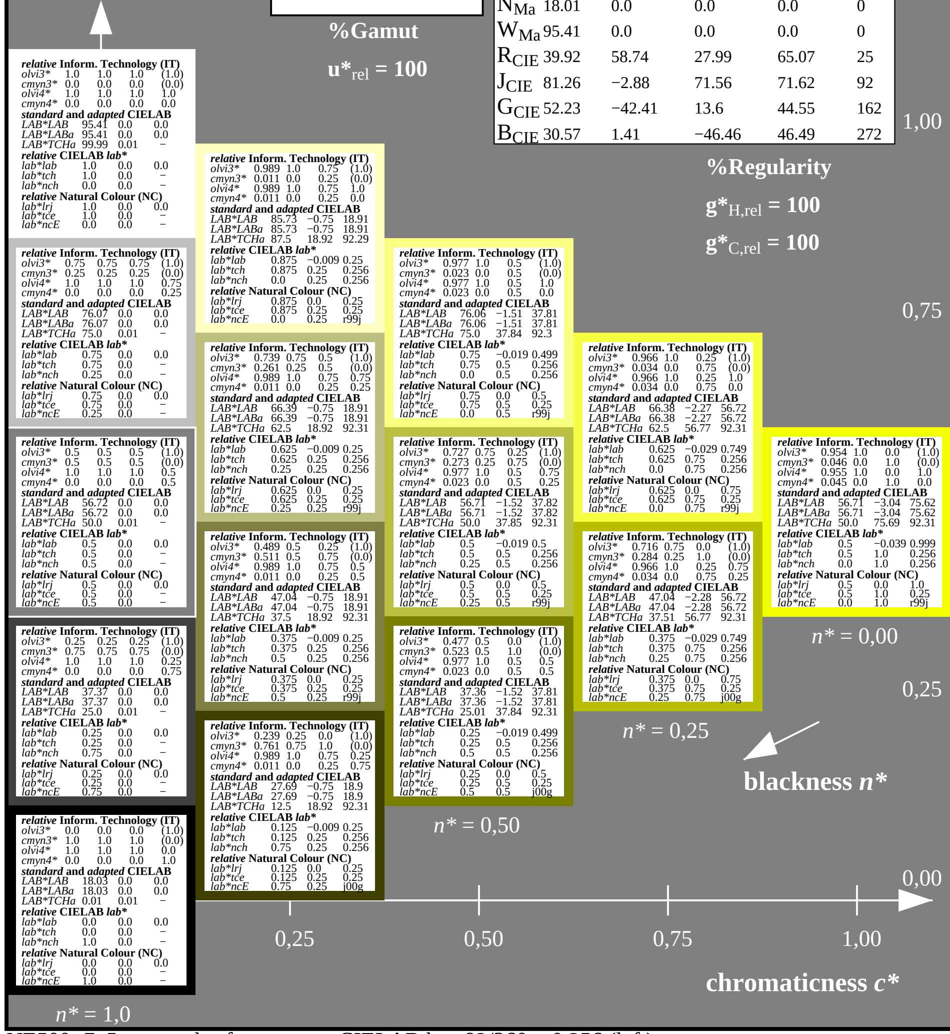


%Gamut
$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

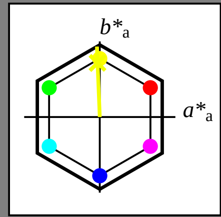
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

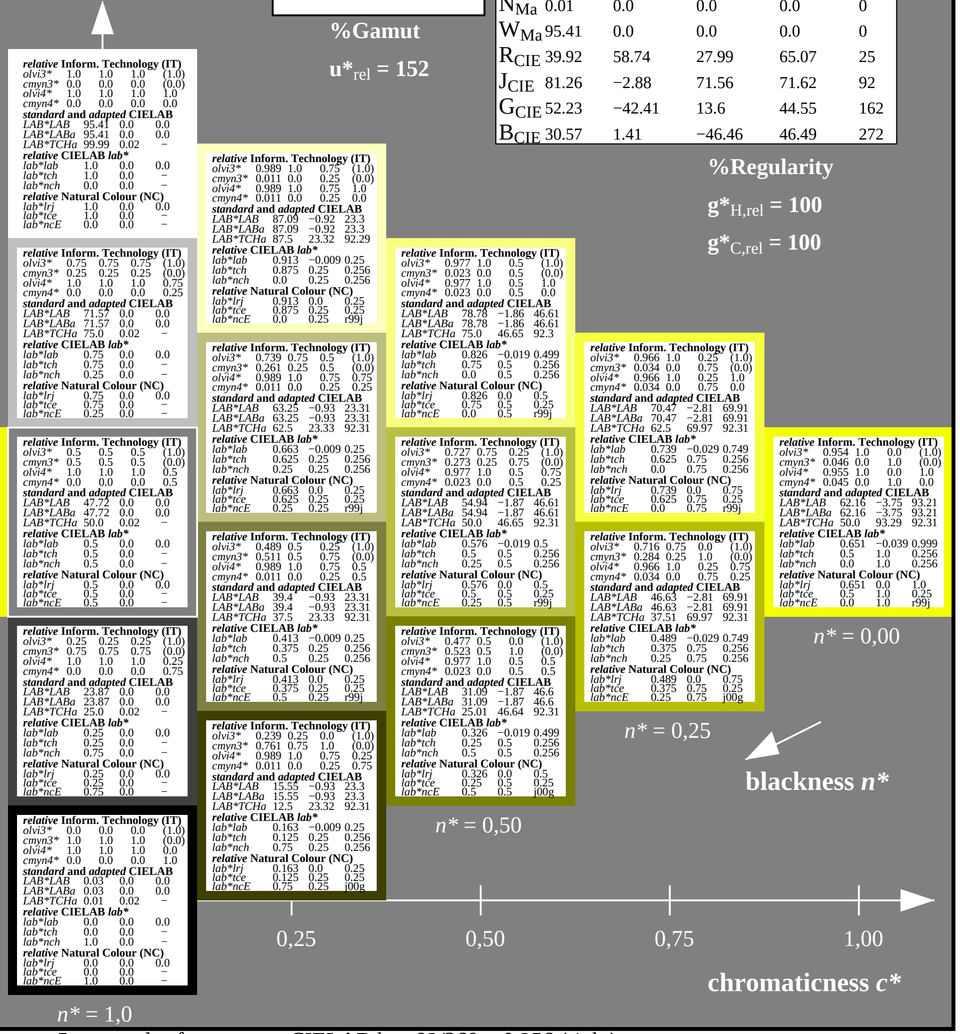


%Gamut
$u^*_{rel} = 152$

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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

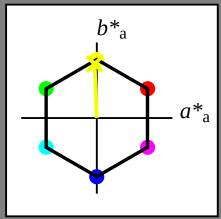
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 57 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

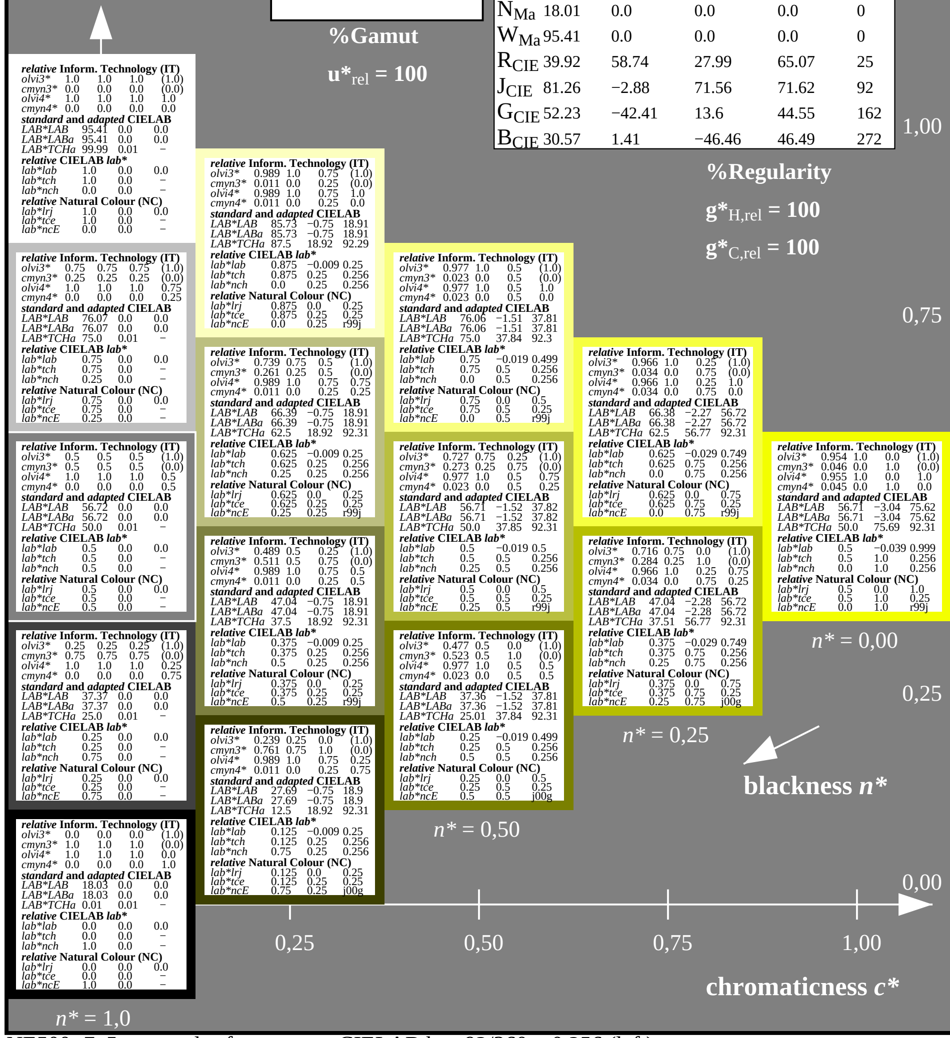
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

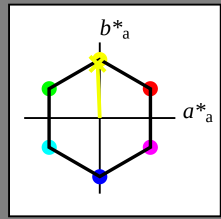
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

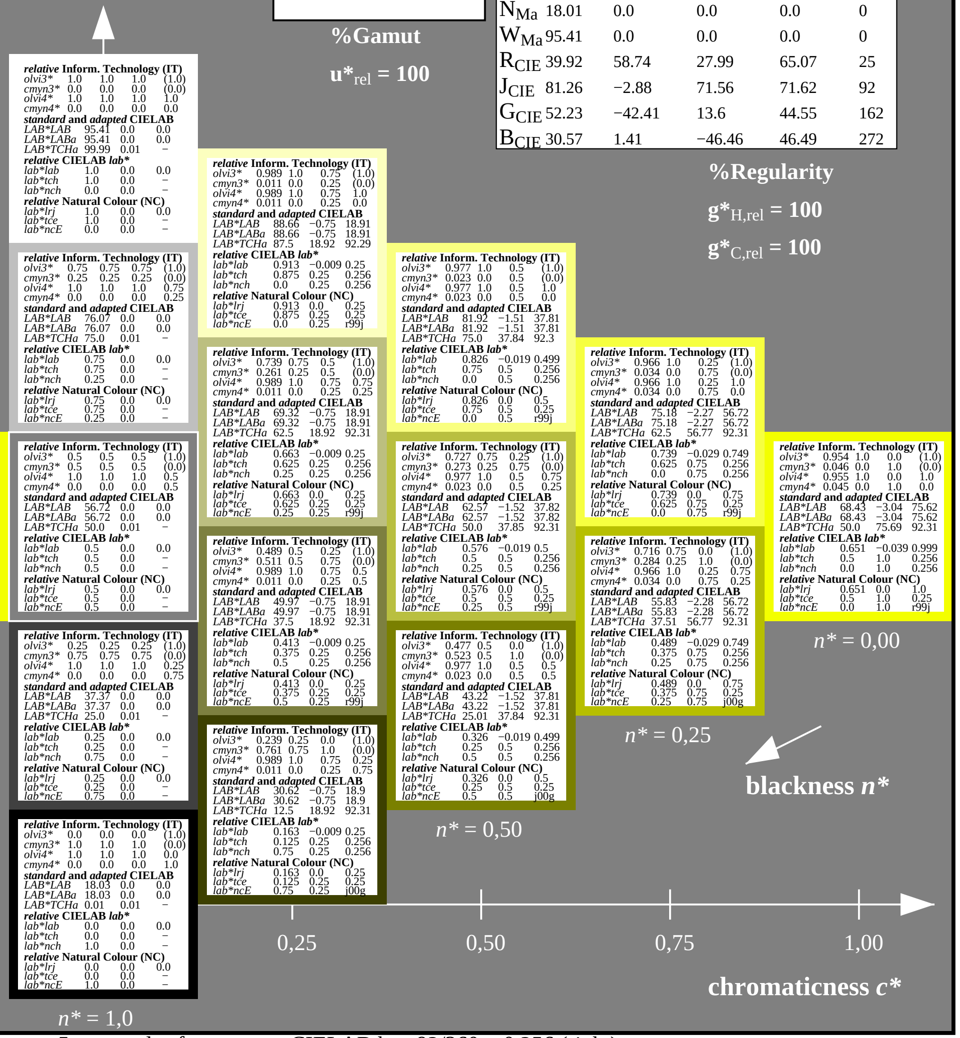
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



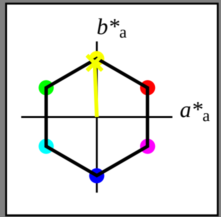
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric 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

$u^*_{rel} = 100$

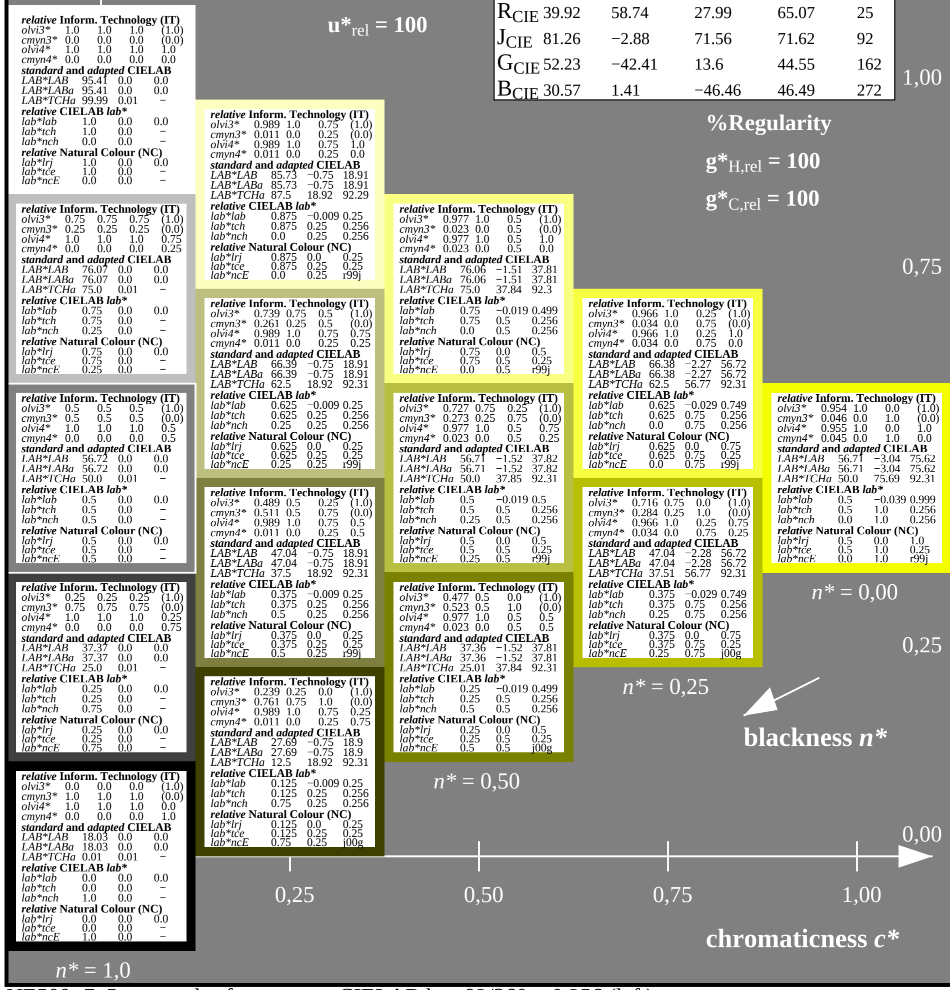
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

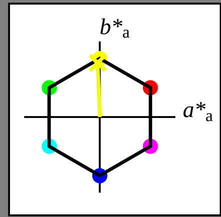
$g^*_{C,rel} = 100$



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

$u^*_{rel} = 100$

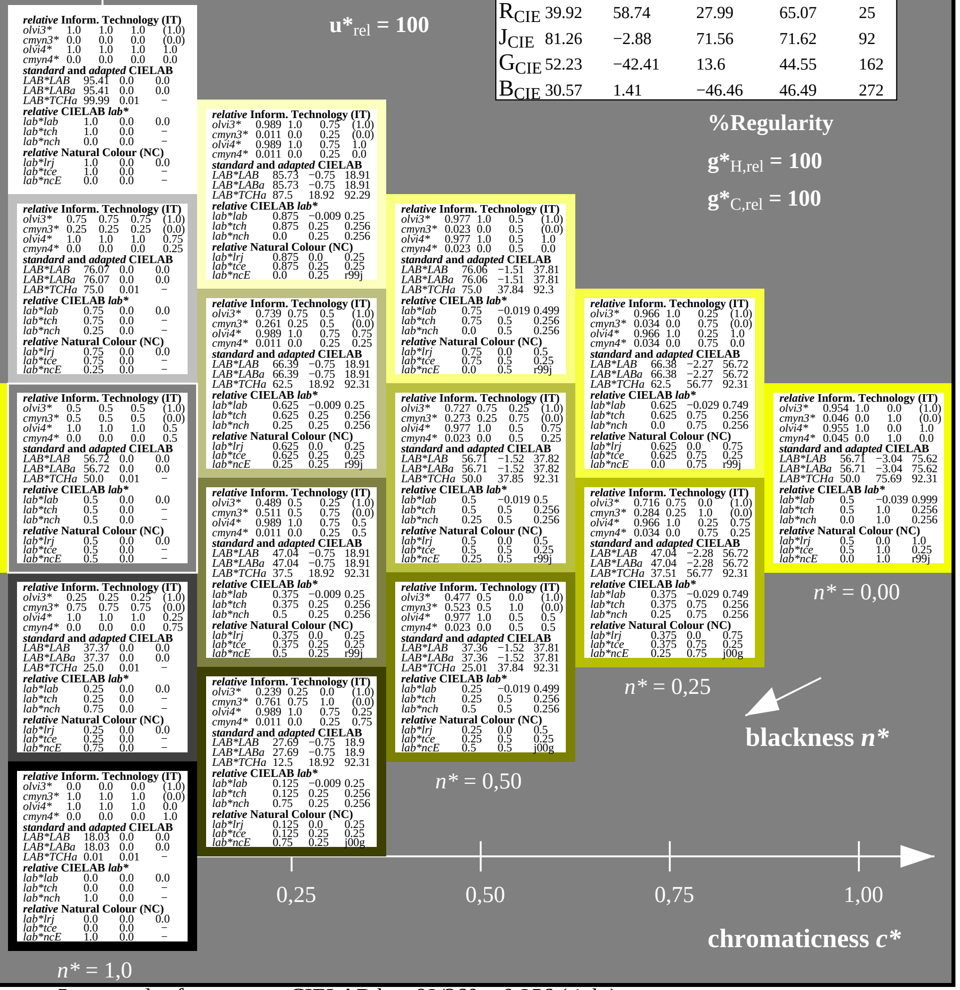
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



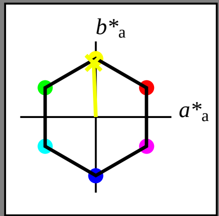
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

Input: Colorimetric 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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$

Left chart ($c^* = 0$, $n^* = 0$ … 1)

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	–	

Left chart ($c^* = 0.25$)

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	85.73	−0.75	18.91	
LAB*LABa	85.73	−0.75	18.91	
LAB*TCHa	87.5	18.92	92.29	
relative CIELAB lab*				
lab*lab	0.875	−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	0.875	0.0	0.25	
lab*tce	0.875	0.25	0.25	
lab*ncE	0.0	0.25	r99j	

relative Inform. Technology (IT)				
olvi3*	0.739	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	66.39	−0.75	18.91	
LAB*LABa	66.39	−0.75	18.91	
LAB*TCHa	62.5	18.92	92.31	
relative CIELAB lab*				
lab*lab	0.625	−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	0.625	0.0	0.25	
lab*tce	0.625	0.25	0.25	
lab*ncE	0.25	0.25	r99j	

relative Inform. Technology (IT)				
olvi3*	0.489	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	47.04	−0.75	18.91	
LAB*LABa	47.04	−0.75	18.91	
LAB*TCHa	37.5	18.92	92.31	
relative CIELAB lab*				
lab*lab	0.375	−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	0.375	0.0	0.25	
lab*tce	0.375	0.25	0.25	
lab*ncE	0.5	0.25	r99j	

relative Inform. Technology (IT)				
olvi3*	0.239	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	27.69	−0.75	18.9	
LAB*LABa	27.69	−0.75	18.9	
LAB*TCHa	12.5	18.92	92.31	
relative CIELAB lab*				
lab*lab	0.125	−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	0.125	0.0	0.25	
lab*tce	0.125	0.25	0.25	
lab*ncE	0.75	0.25	j00g	

Left chart ($c^* = 0.50$)

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	76.06	−1.51	37.81	
LAB*LABa	76.06	−1.51	37.81	
LAB*TCHa	75.0	37.84	92.3	
relative CIELAB lab*				
lab*lab	0.75	−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	0.75	0.0	0.5	
lab*tce	0.75	0.5	0.25	
lab*ncE	0.0	0.5	r99j	

relative Inform. Technology (IT)				
olvi3*	0.727	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	56.71	−1.52	37.82	
LAB*LABa	56.71	−1.52	37.82	
LAB*TCHa	50.0	37.85	92.31	
relative CIELAB lab*				
lab*lab	0.5	−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	0.5	0.0	0.5	
lab*tce	0.5	0.5	0.25	
lab*ncE	0.25	0.5	r99j	

relative Inform. Technology (IT)				
olvi3*	0.477	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	37.36	−1.52	37.81	
LAB*LABa	37.36	−1.52	37.81	
LAB*TCHa	25.01	37.84	92.31	
relative CIELAB lab*				
lab*lab	0.25	−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	0.25	0.0	0.5	
lab*tce	0.25	0.5	0.25	
lab*ncE	0.5	0.5	j00g	

Left chart ($c^* = 0.75$)

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	66.38	−2.27	56.72	
LAB*LABa	66.38	−2.27	56.72	
LAB*TCHa	62.5	56.77	92.31	
relative CIELAB lab*				
lab*lab	0.625	−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	0.625	0.0	0.75	
lab*tce	0.625	0.75	0.25	
lab*ncE	0.0	0.75	r99j	

relative Inform. Technology (IT)				
olvi3*	0.716	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	47.04	−2.28	56.72	
LAB*LABa	47.04	−2.28	56.72	
LAB*TCHa	37.51	56.77	92.31	
relative CIELAB lab*				
lab*lab	0.375	−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	0.375	0.0	0.75	
lab*tce	0.375	0.75	0.25	
lab*ncE	0.25	0.75	j00g	

Left chart ($c^* = 1.00$)

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	56.71	−3.04	75.62	
LAB*LABa	56.71	−3.04	75.62	
LAB*TCHa	50.0	75.69	92.31	
relative CIELAB lab*				
lab*lab	0.5	−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	0.5	0.0	1.0	
lab*tce	0.5	1.0	0.25	
lab*ncE	0.0	1.0	r99j	

1,00 · 0,75 · 0,25 · 0,00

$n^* = 0,00$ · $n^* = 0,25$ · $n^* = 0,50$ · $n^* = 1,0$

blackness n^*

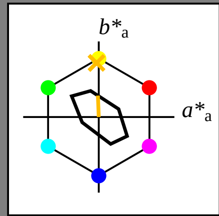
0,25 · 0,50 · 0,75 · 1,00

chromaticness c^*

Output: Colorimetric Television Luminous System 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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$

Right chart ($c^* = 0$, $n^* = 0$ … 1)

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	88.98	0.0	0.0	
LAB*LABa	88.98	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	82.56	0.0	0.0	
LAB*LABa	82.56	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	76.13	0.0	0.0	
LAB*LABa	76.13	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	69.7	0.0	0.0	
LAB*LABa	69.7	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	–	

Right chart ($c^* = 0.25$)

relative Inform. Technology (IT)				
olvi3*	1.0	0.935	0.75	(1.0)
cmyn3*	0.0	0.065	0.25	(0.0)
olvi4*	1.0	0.935	0.75	1.0
cmyn4*	0.0	0.065	0.25	0.0
standard and adapted CIELAB				
LAB*LAB	93.9	−0.28	7.09	
LAB*LABa	93.9	−0.28	7.09	
LAB*TCHa	87.5	7.1	92.33	
relative CIELAB lab*				
lab*lab	0.941	−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	0.941	0.0	0.25	
lab*tce	0.875	0.25	0.25	
lab*ncE	0.0	0.25	j00g	

relative Inform. Technology (IT)				
olvi3*	0.75	0.685	0.5	(1.0)
cmyn3*	0.25	0.315	0.5	(0.0)
olvi4*	1.0	0.935	0.75	0.75
cmyn4*	0.0	0.065	0.25	0.25
standard and adapted CIELAB				
LAB*LAB	87.48	−0.28	7.09	
LAB*LABa	87.48	−0.28	7.09	
LAB*TCHa	62.5	7.1	92.31	
relative CIELAB lab*				
lab*lab	0.691	−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	0.691	0.0	0.25	
lab*tce	0.625	0.25	0.25	
lab*ncE	0.25	0.25	r99j	

relative Inform. Technology (IT)				
olvi3*	0.5	0.435	0.25	(1.0)
cmyn3*	0.5	0.565	0.75	(0.0)
olvi4*	1.0	0.935	0.75	0.5
cmyn4*	0.0	0.065	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	81.05	−0.28	7.09	
LAB*LABa	81.05	−0.28	7.09	
LAB*TCHa	37.5	7.1	92.31	
relative CIELAB lab*				
lab*lab	0.441	−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	0.441	0.0	0.25	
lab*tce	0.375	0.25	0.25	
lab*ncE	0.5	0.25	r99j	

relative Inform. Technology (IT)				
olvi3*	0.25	0.185	0.0	(1.0)
cmyn3*	0.75	0.815	1.0	(0.0)
olvi4*	1.0	0.935	0.75	0.25
cmyn4*	0.0	0.065	0.25	0.75
standard and adapted CIELAB				
LAB*LAB	74.62	−0.28	7.09	
LAB*LABa	74.62	−0.28	7.09	
LAB*TCHa	12.5	7.1	92.3	
relative CIELAB lab*				
lab*lab	0.191	−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	0.191	0.0	0.25	
lab*tce	0.125	0.25	0.25	
lab*ncE	0.75	0.25	r99j	

Right chart ($c^* = 0.50$)

relative Inform. Technology (IT)				
olvi3*	1.0	0.87	0.5	(1.0)
cmyn3*	0.0	0.13	0.5	(0.0)
olvi4*	1.0	0.87	0.5	1.0
cmyn4*	0.0	0.13	0.5	0.0
standard and adapted CIELAB				
LAB*LAB	92.4	−0.57	14.19	
LAB*LABa	92.4	−0.57	14.19	
LAB*TCHa	75.0	14.2	92.32	
relative CIELAB lab*				
lab*lab	0.883	−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	0.883	0.0	0.5	
lab*tce	0.75	0.5	0.25	
lab*ncE	0.0	0.5	j00g	

relative Inform. Technology (IT)				
olvi3*	0.75	0.62	0.25	(1.0)
cmyn3*	0.25	0.38	0.75	(0.0)
olvi4*	1.0	0.87	0.5	0.75
cmyn4*	0.0	0.13	0.5	0.25
standard and adapted CIELAB				
LAB*LAB	85.97	−0.56	14.19	
LAB*LABa	85.97	−0.56	14.19	
LAB*TCHa	50.0	14.2	92.31	
relative CIELAB lab*				
lab*lab	0.633	−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	0.633	0.0	0.5	
lab*tce	0.5	0.5	0.25	
lab*ncE	0.25	0.5	r99j	

relative Inform. Technology (IT)				
olvi3*	0.5	0.37	0.0	(1.0)
cmyn3*	0.5	0.63	1.0	(0.0)
olvi4*	1.0	0.87	0.5	0.5
cmyn4*	0.0	0.13	0.5	0.5
standard and adapted CIELAB				
LAB*LAB	79.54	−0.56	14.19	
LAB*LABa	79.54	−0.56	14.19	
LAB*TCHa	25.01	14.2	92.31	
relative CIELAB lab*				
lab*lab	0.383	−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	0.383	0.0	0.5	
lab*tce	0.25	0.5	0.25	
lab*ncE	0.5	0.5	r99j	

Right chart ($c^* = 0.75$)

relative Inform. Technology (IT)				
olvi3*	1.0	0.805	0.25	(1.0)
cmyn3*	0.0	0.195	0.75	(0.0)
olvi4*	1.0	0.805	0.25	1.0
cmyn4*	0.0	0.195	0.75	0.0
standard and adapted CIELAB				
LAB*LAB	90.89	−0.85	21.28	
LAB*LABa	90.89	−0.85	21.28	
LAB*TCHa	62.5	21.3	92.32	
relative CIELAB lab*				
lab*lab	0.824	−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	0.824	0.0	0.75	
lab*tce	0.625	0.75	0.25	
lab*ncE	0.0	0.75	j00g	

relative Inform. Technology (IT)				
olvi3*	0.75	0.555	0.0	(1.0)
cmyn3*	0.25	0.445	1.0	(0.0)
olvi4*	1.0	0.805	0.25	0.75
cmyn4*	0.0	0.195	0.75	0.25
standard and adapted CIELAB				
LAB*LAB	84.46	−0.85	21.28	
LAB*LABa	84.46	−0.85	21.28	
LAB*TCHa	37.51	21.3	92.31	
relative CIELAB lab*				
lab*lab	0.574	−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	0.574	0.0	0.75	
lab*tce	0.375	0.75	0.25	
lab*ncE	0.25	0.75	r99j	

Right chart ($c^* = 1.00$)

relative Inform. Technology (IT)				
olvi3*	1.0	0.74	0.0	(1.0)
cmyn3*	0.0	0.26	1.0	(0.0)
olvi4*	1.0	0.74	0.0	1.0
cmyn4*	0.0	0.26	1.0	0.0
standard and adapted CIELAB				
LAB*LAB	89.38	−1.14	28.37	
LAB*LABa	89.38	−1.14	28.37	
LAB*TCHa	50.0	28.4	92.32	
relative CIELAB lab*				
lab*lab	0.766	−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	0.766	0.0	1.0	
lab*tce	0.5	1.0	0.25	
lab*ncE	0.0	1.0	j00g	

$n^* = 0,00$ · $n^* = 0,25$ · $n^* = 0,50$ · $n^* = 1,0$

blackness n^*

0,25 · 0,50 · 0,75 · 1,00

chromaticness c^*

NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

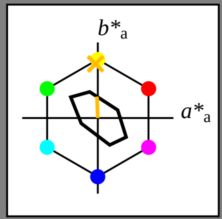
lab^*tch and lab^*nch

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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

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 $h^* = lab^*h = 92/360 = 0.255$

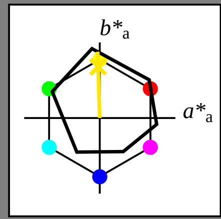
lab^*tch and lab^*nch

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$

blackness n^*

0,25 0,50 0,75 1,00

chromaticness c^*

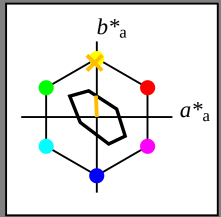
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

Input: Colorimetric 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

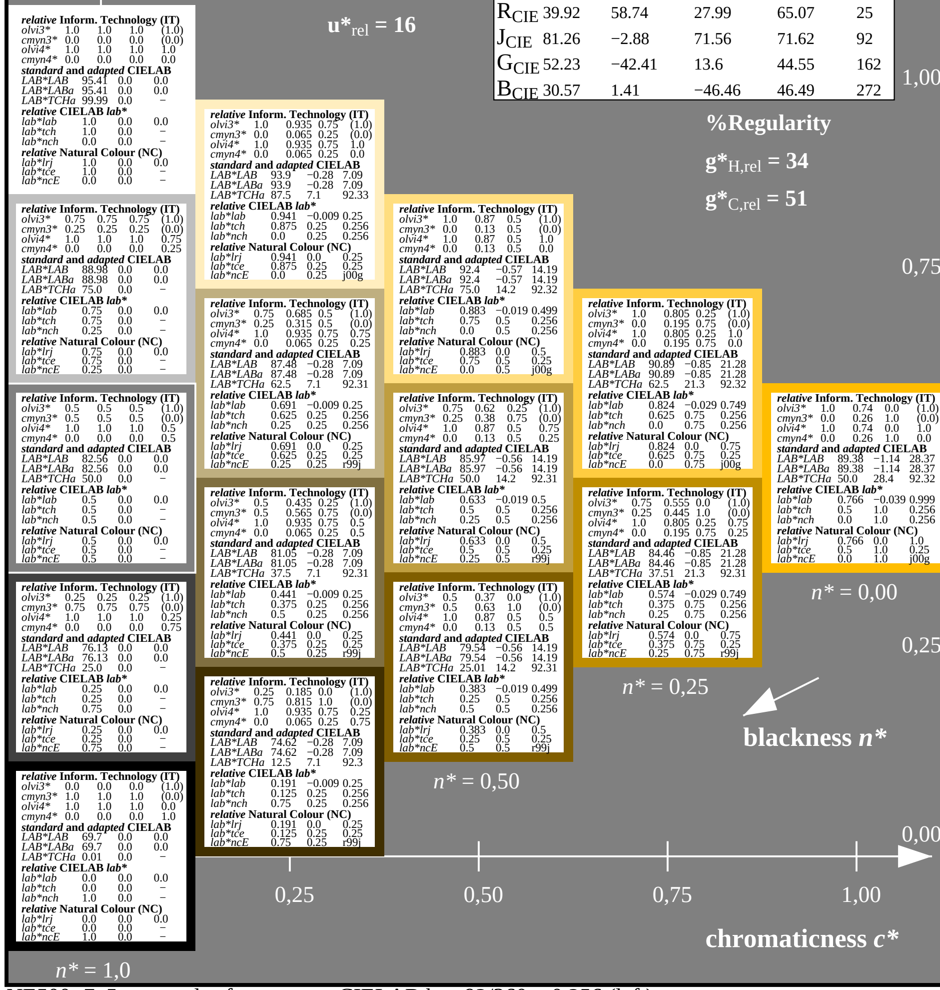
triangle lightness t^*



%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

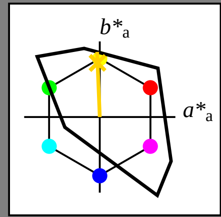
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric 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

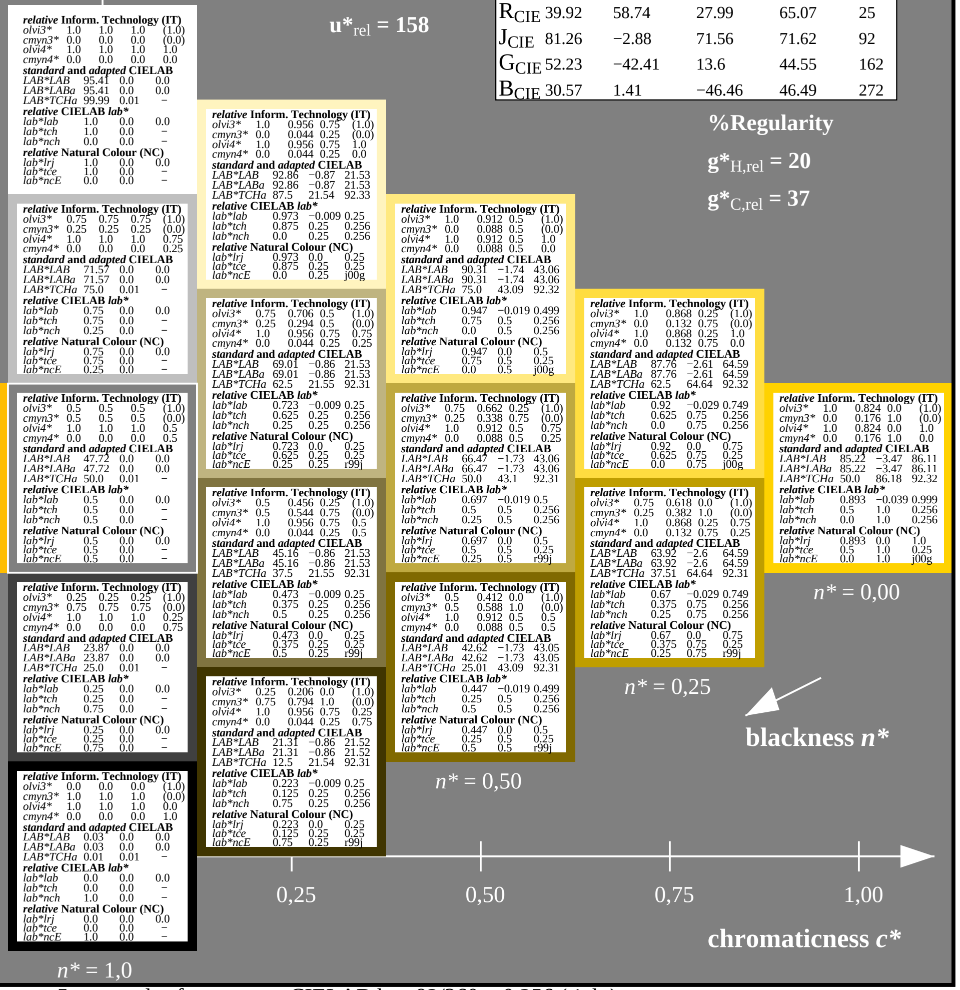
triangle lightness t^*



%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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



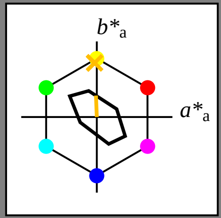
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

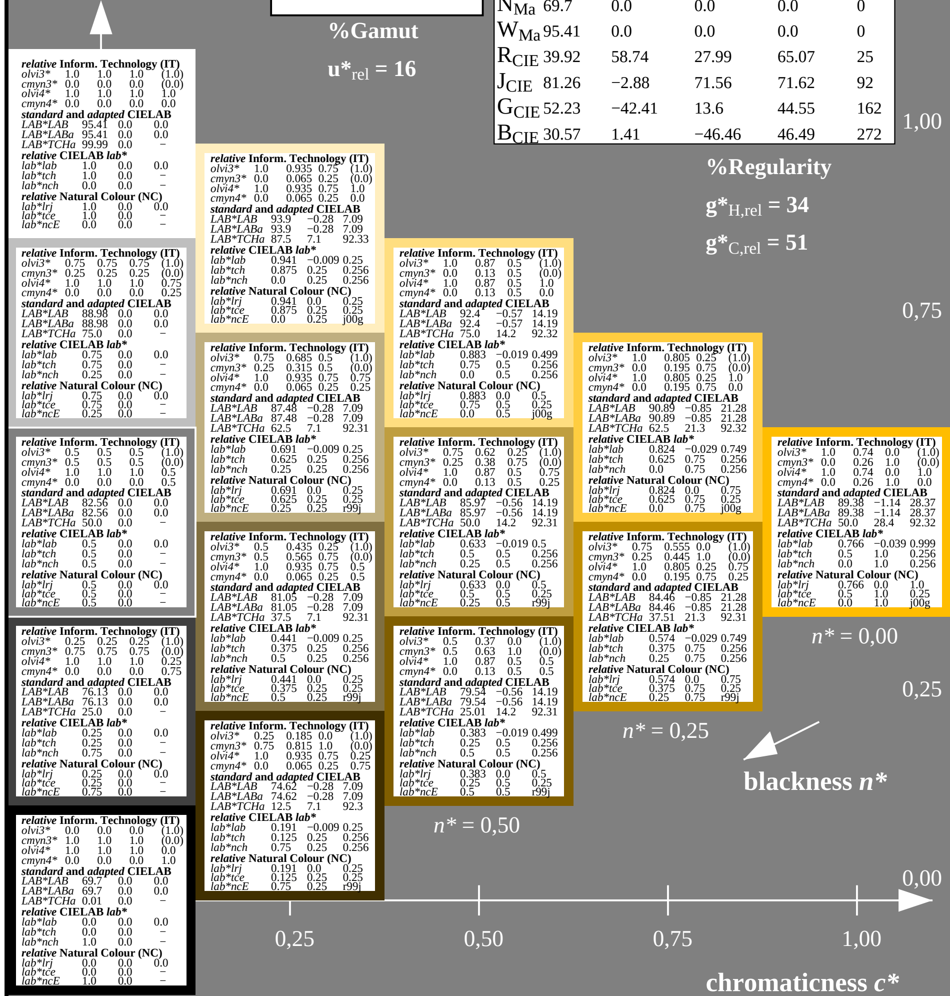
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

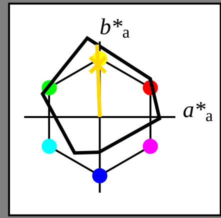
g*C,rel = 51



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

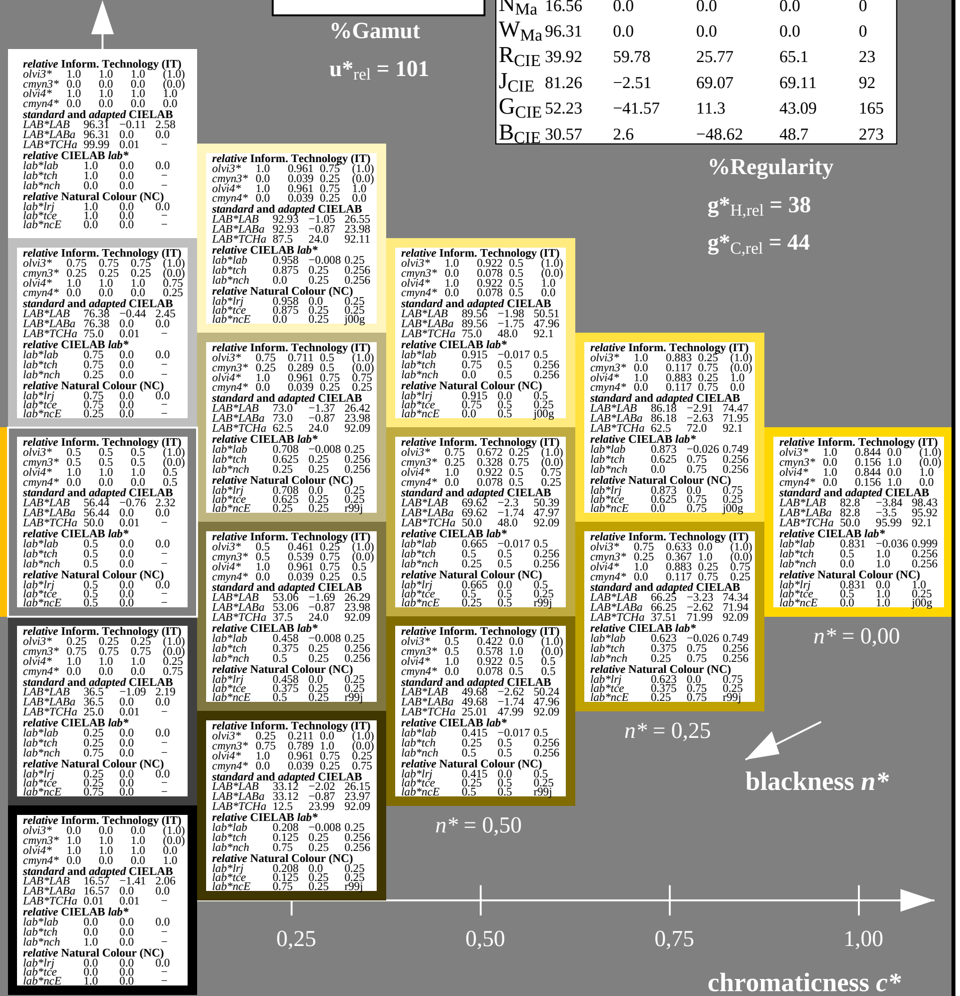
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

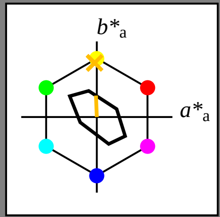
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

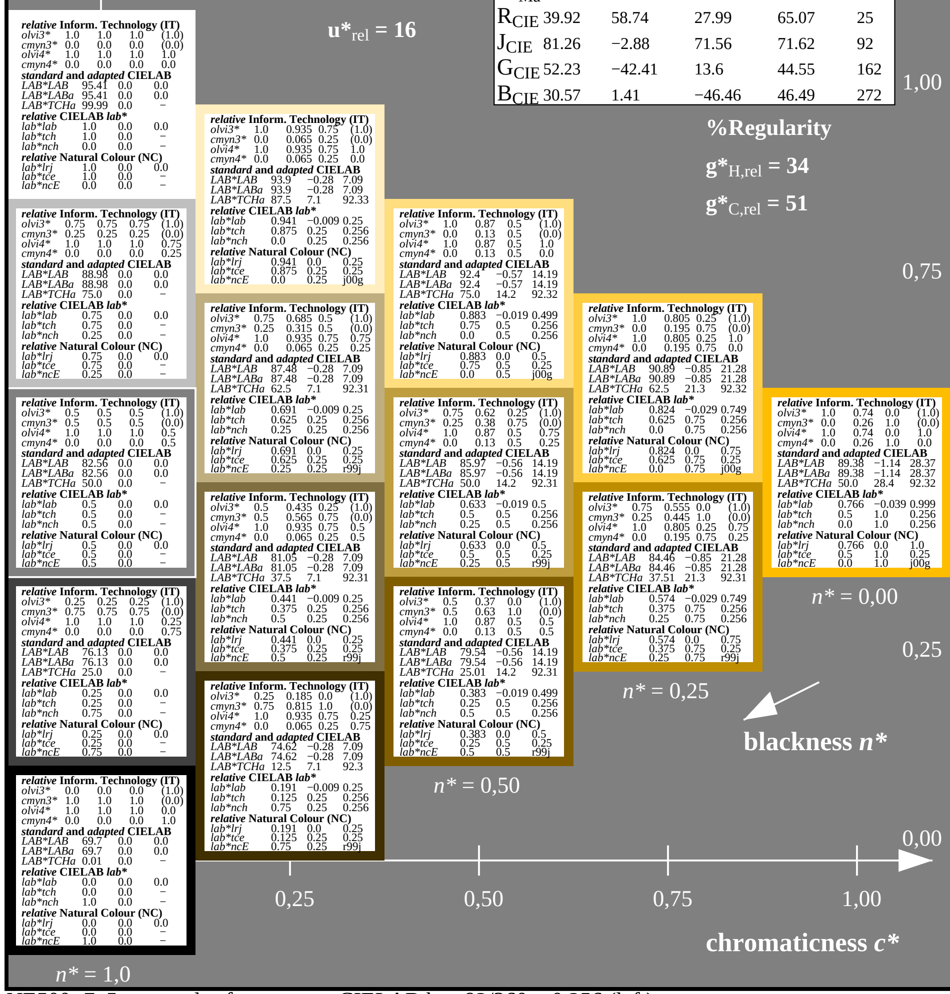
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 92/360 = 0.256$

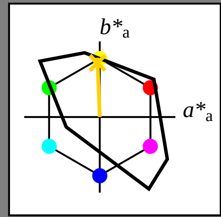
*lab*tch and lab*nch*

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

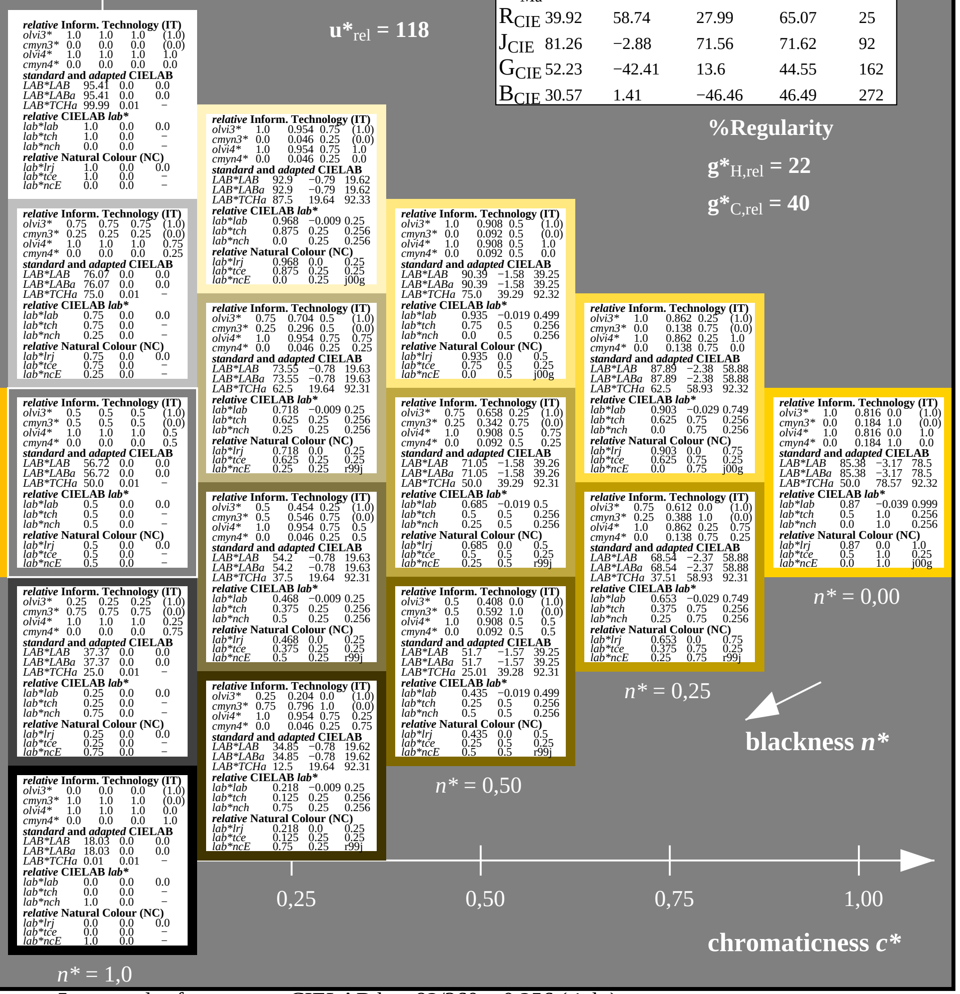
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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

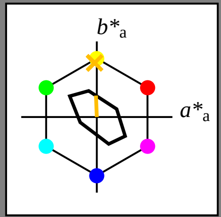
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 16

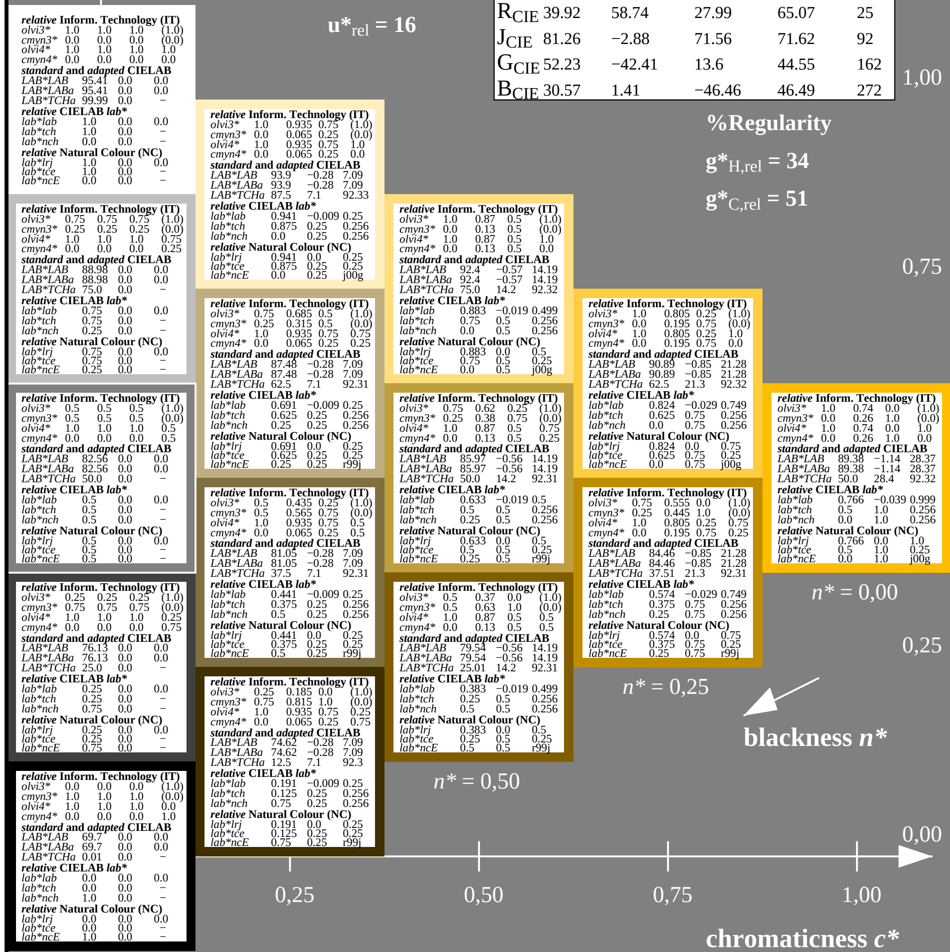
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h** = *lab*h* = 92/360 = 0.256

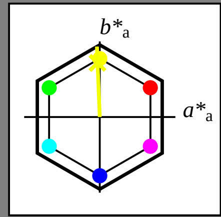
*lab*tch* and *lab*nch*

D65: hue J

LCH*Ma: 62 93 92

olv*Ma: 0.95 1.0 0.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

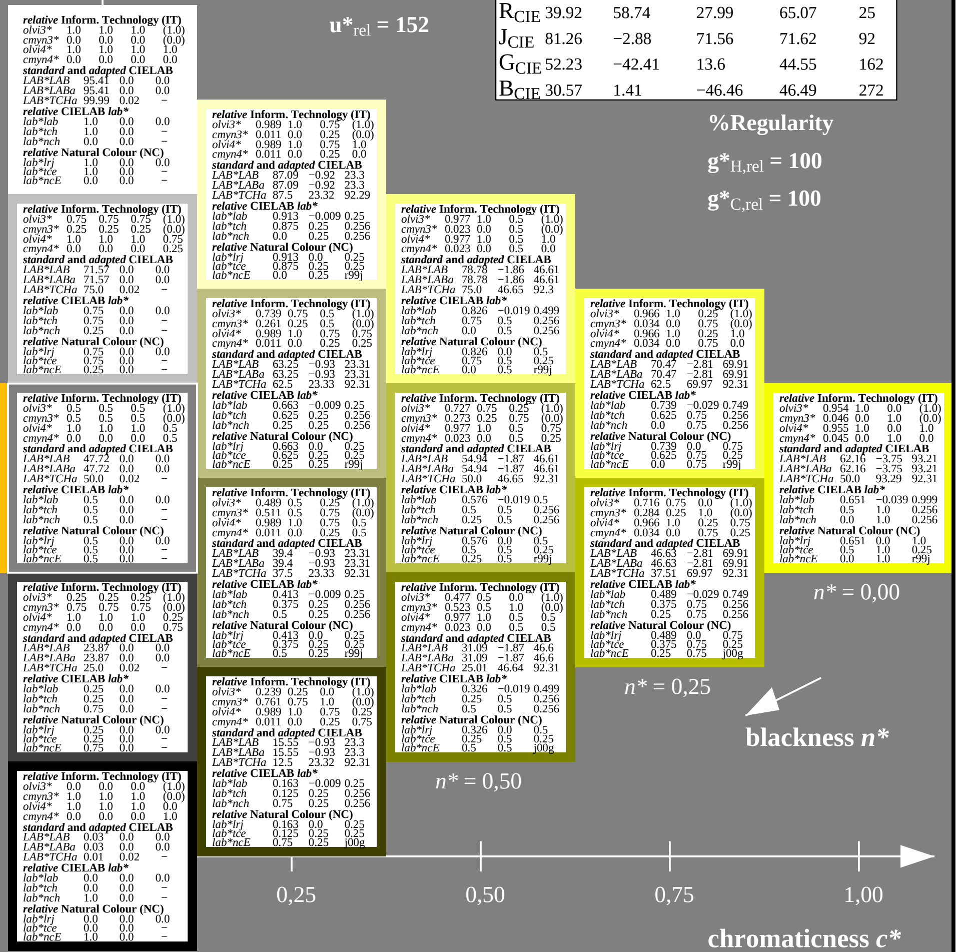
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 92/360 = 0.256$

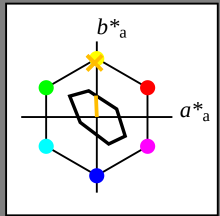
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 89 28 92

olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



%Gamut

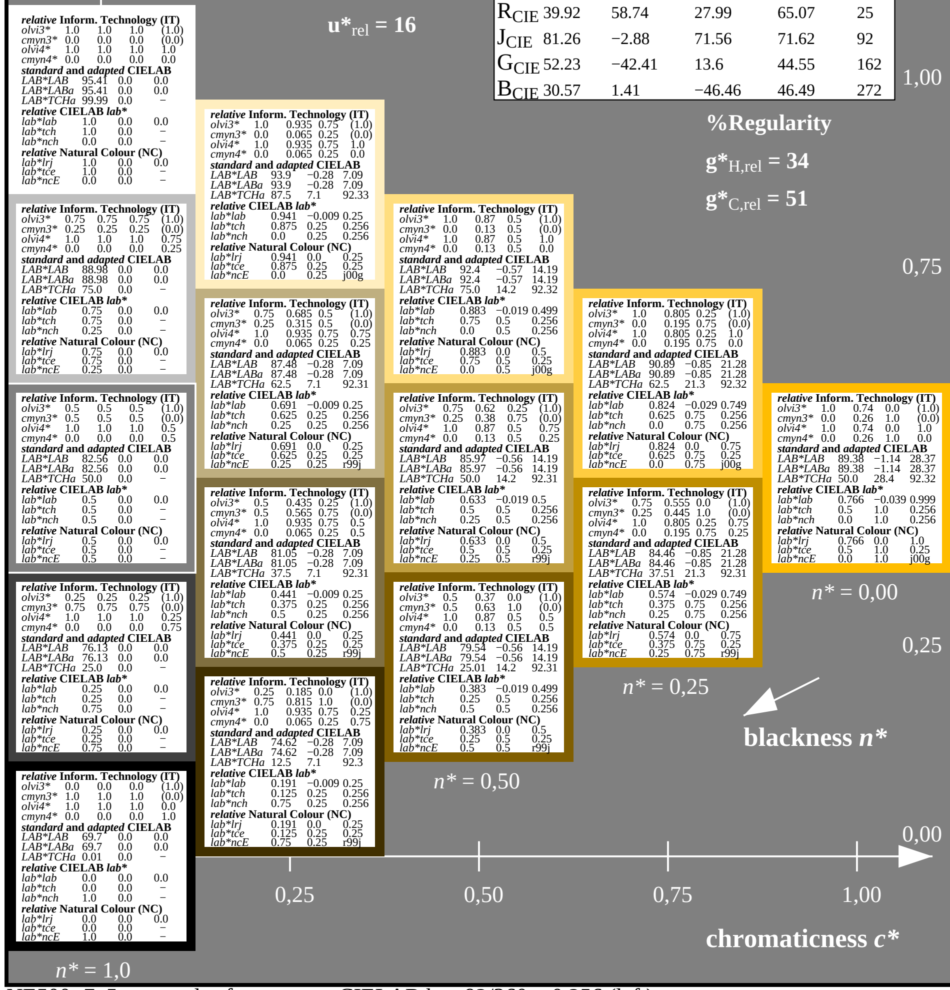
$u^*_{rel} = 16$

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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 92/360 = 0.256$

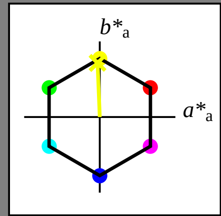
lab*tch* and *lab*nch

D65: hue J

LCH*Ma: 68 76 92

olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



%Gamut

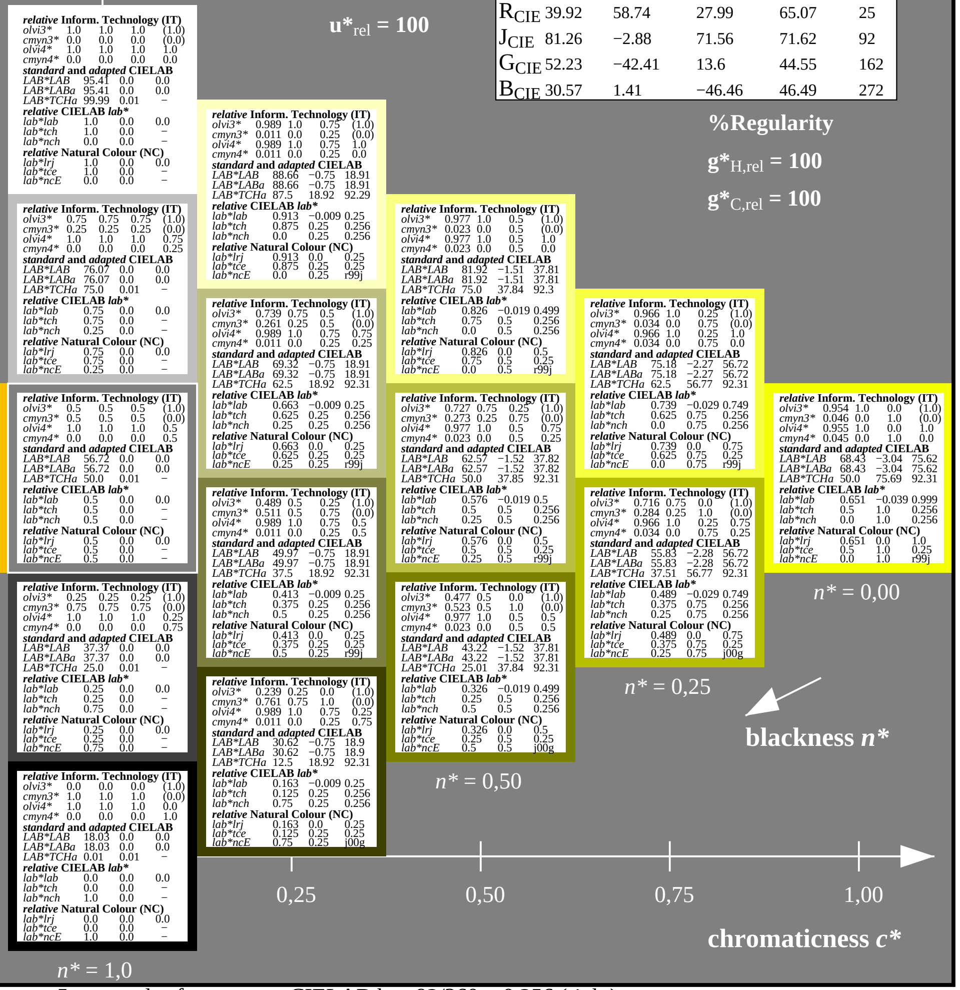
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



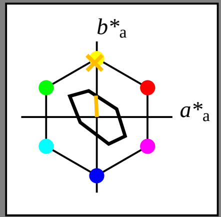
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

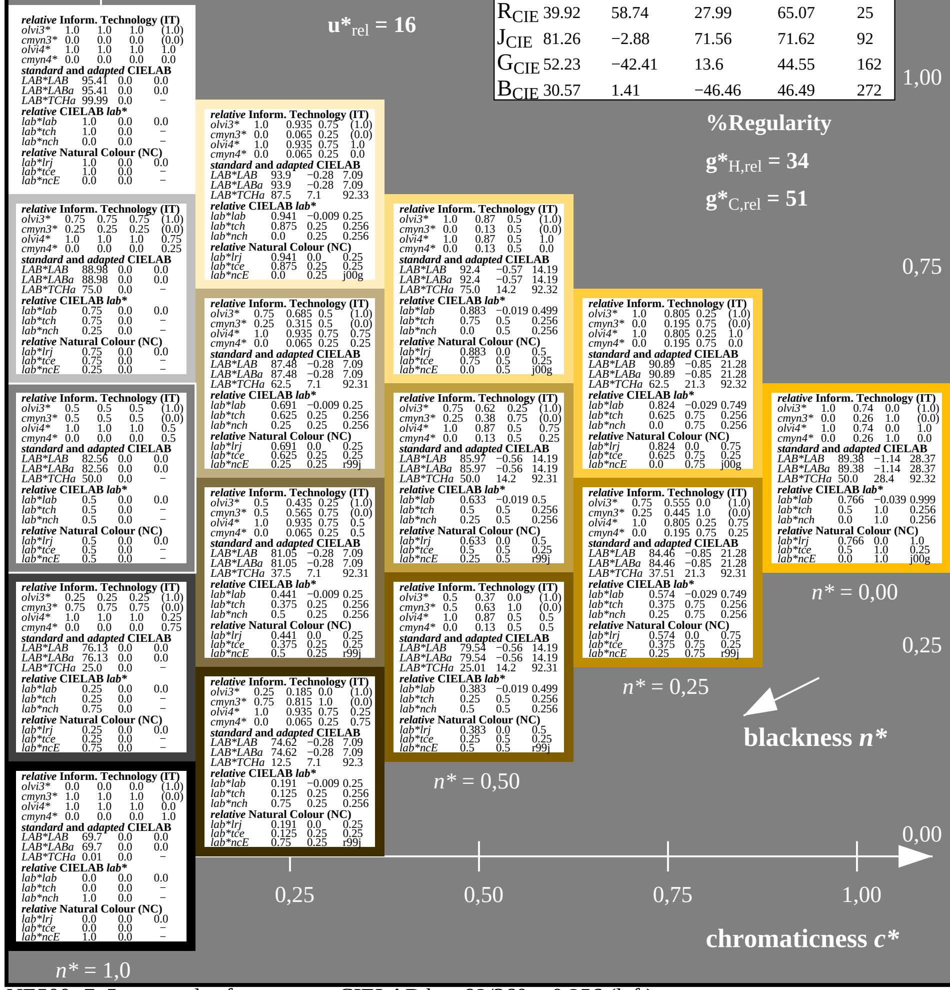
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

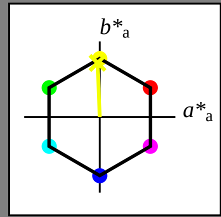
$g^*_{C,rel}$ = 51



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

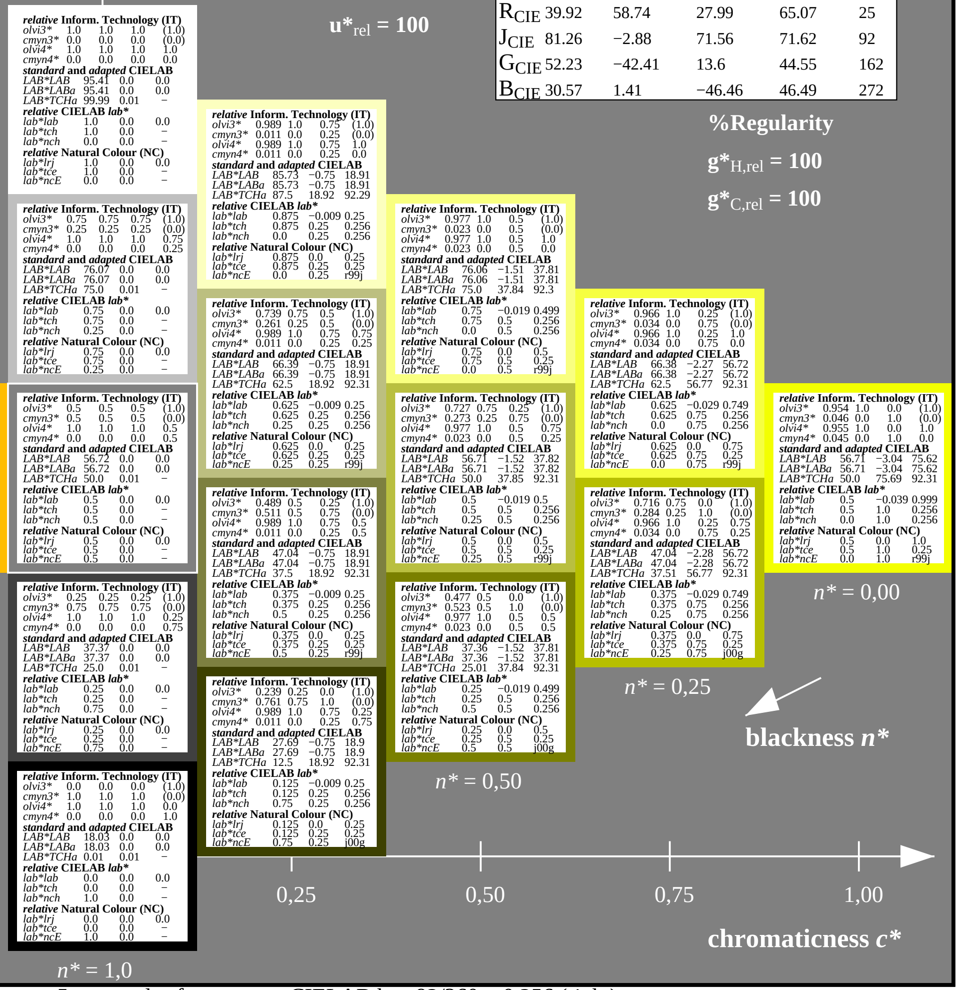
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



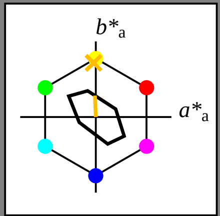
NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

$u^*_{rel} = 16$

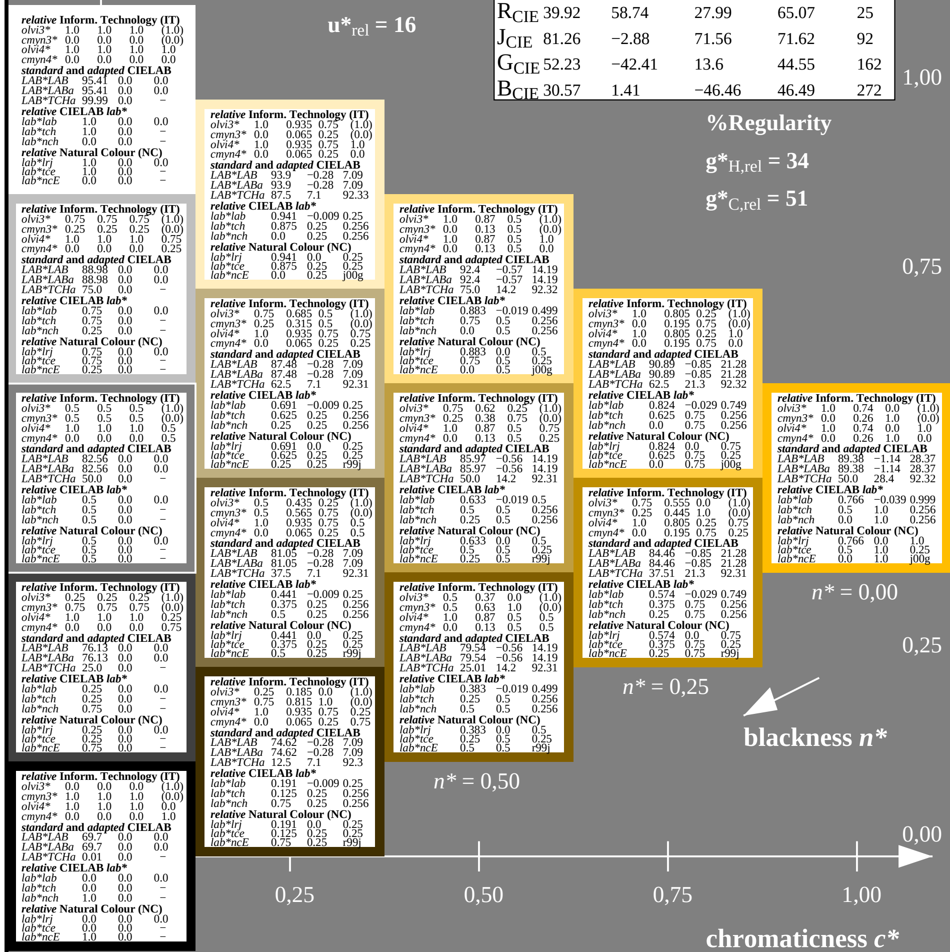
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

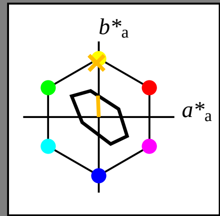


NE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

$u^*_{rel} = 16$

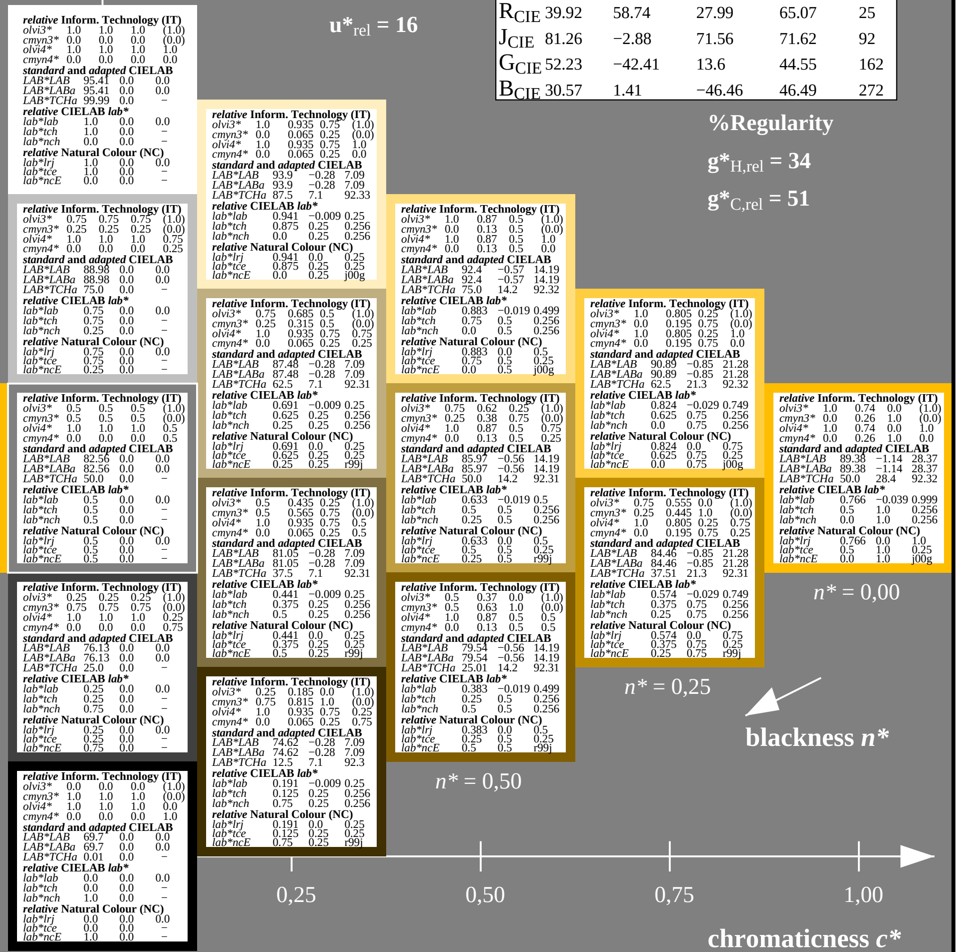
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Offset Reflective System ORS18

for hue *h = *lab*h* = 164/360 = 0.457**

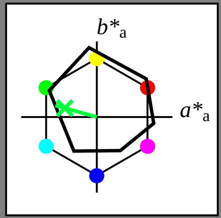
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness *t**



%Gamut

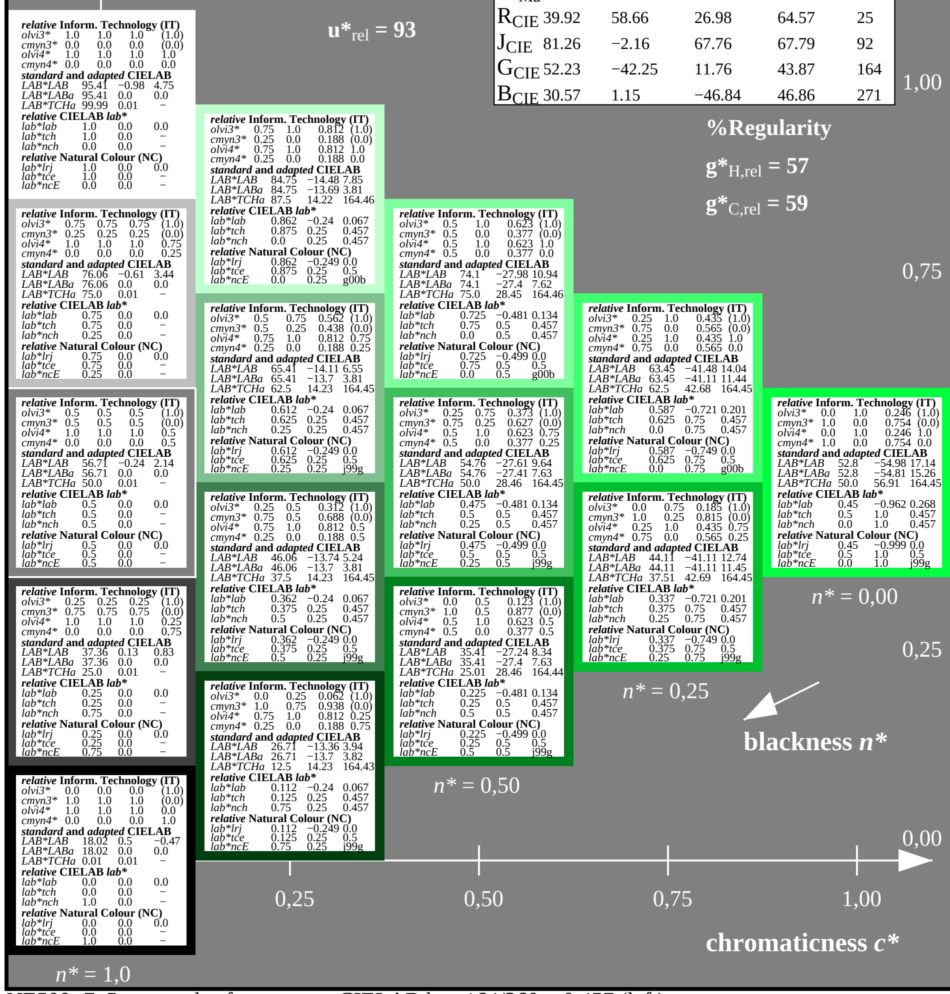
u^*_{rel} = 93

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 Offset Reflective System ORS18

for hue *h = *lab*h* = 164/360 = 0.457**

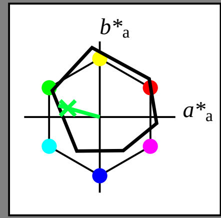
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness *t**



%Gamut

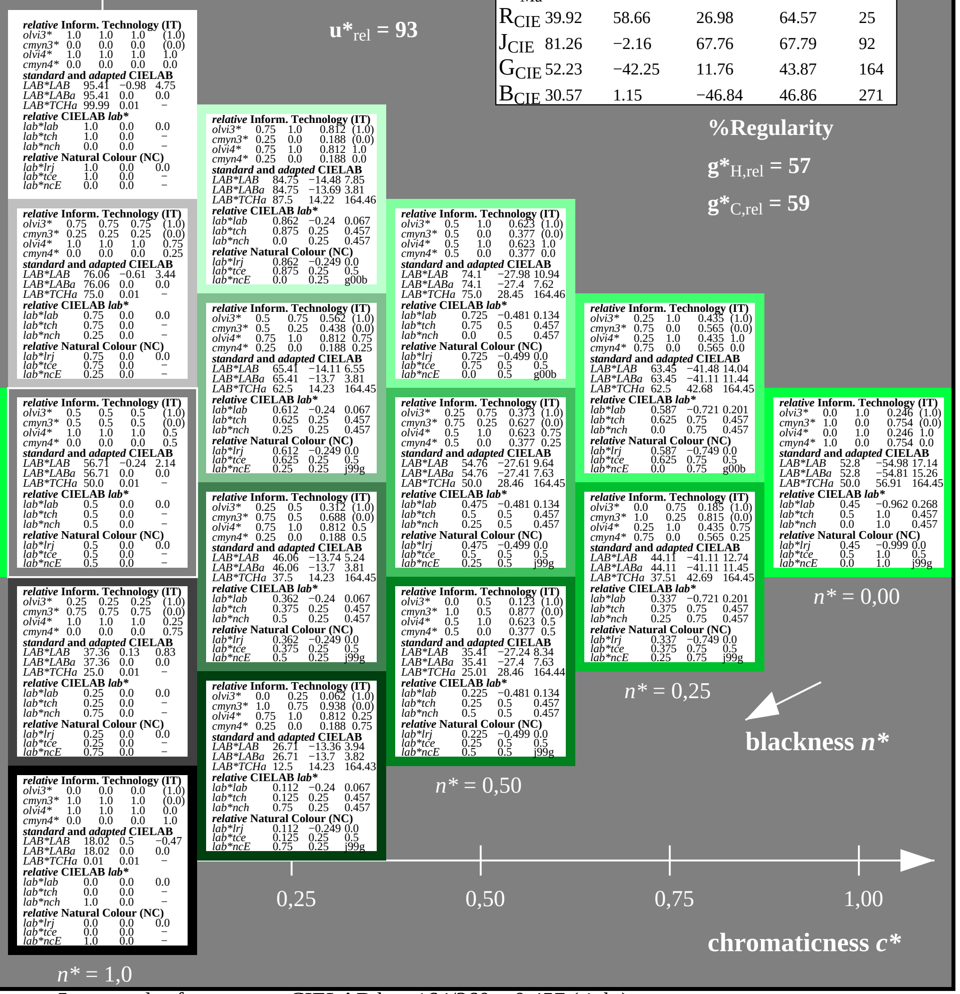
u^*_{rel} = 93

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



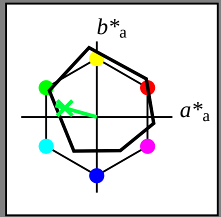
NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

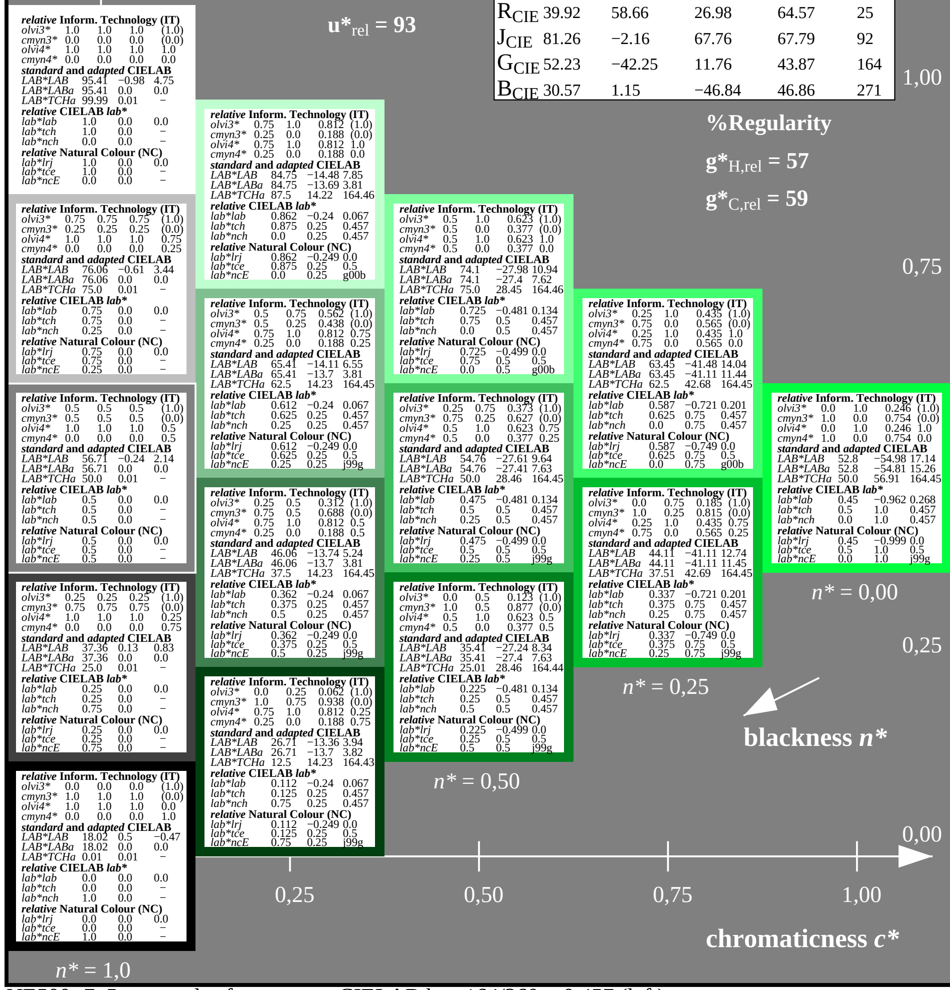
triangle lightness t^*



%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

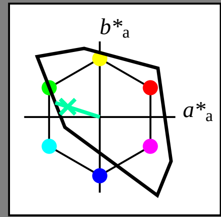
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



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

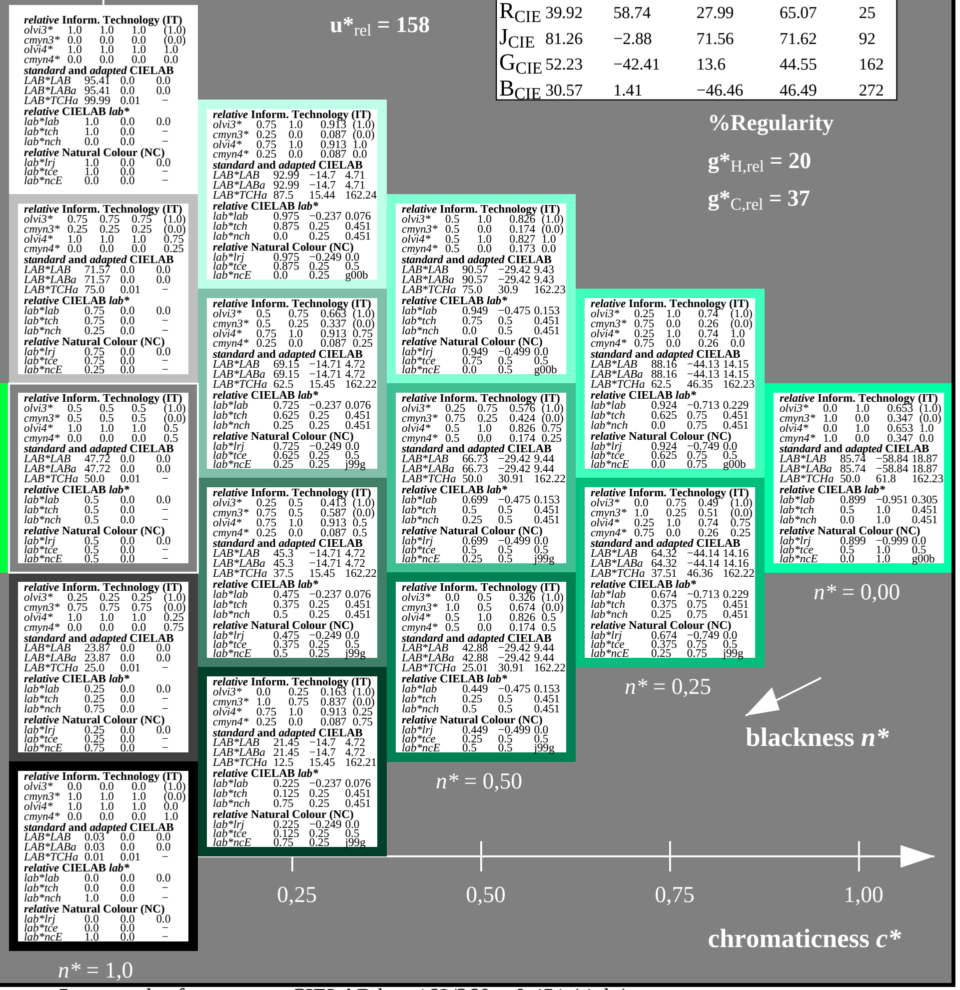
triangle lightness t^*



%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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$

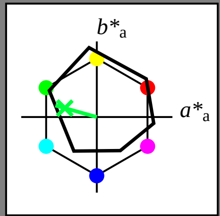


NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left) 5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

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**

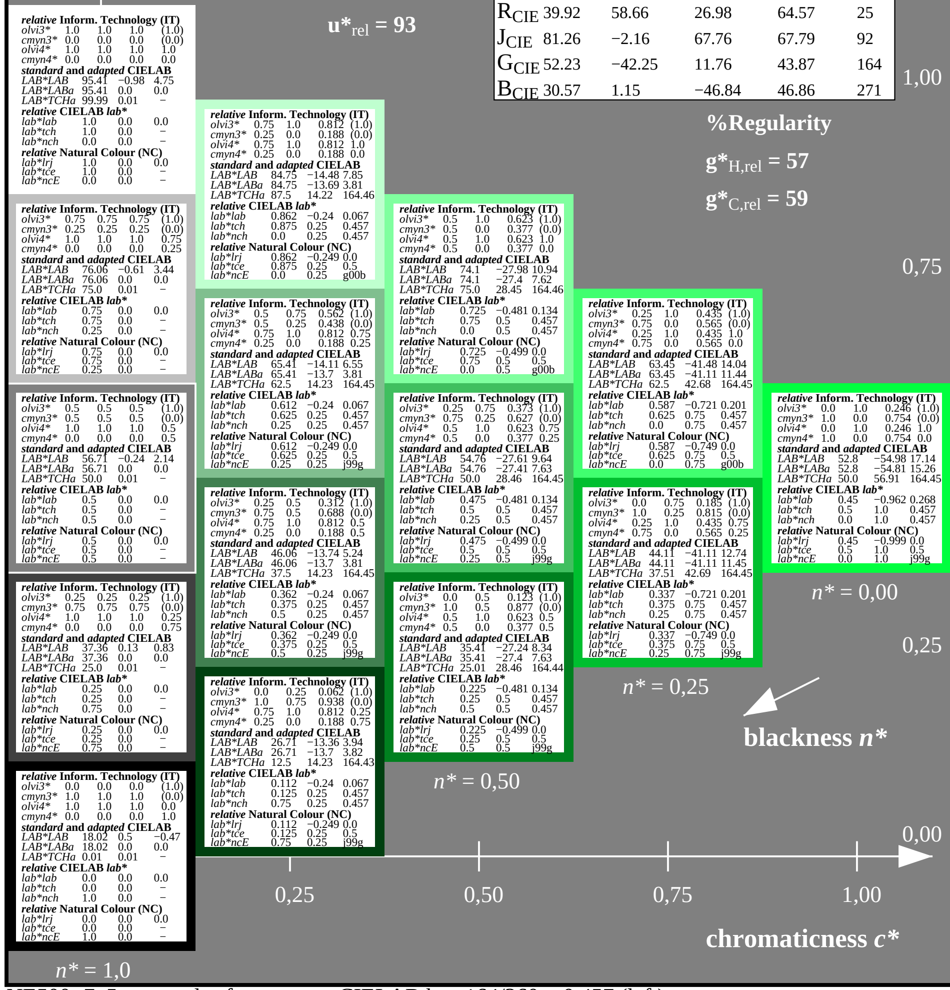


%Gamut
u^*_{rel} = 93

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

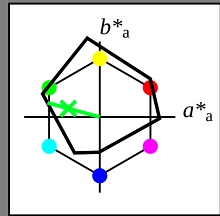
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59



Output: Colorimetric 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**

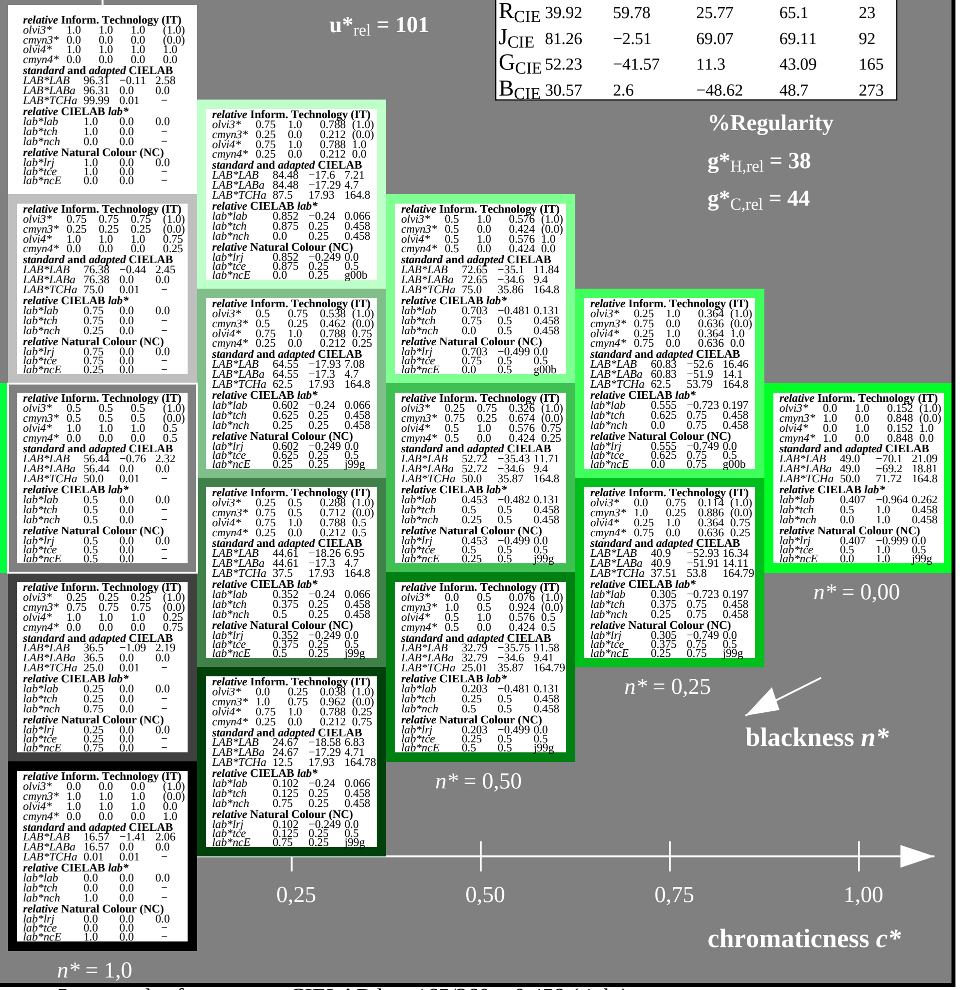


%Gamut
u^*_{rel} = 101

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



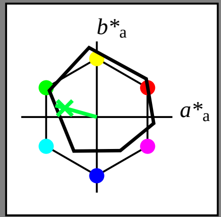
NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

triangle lightness t^*

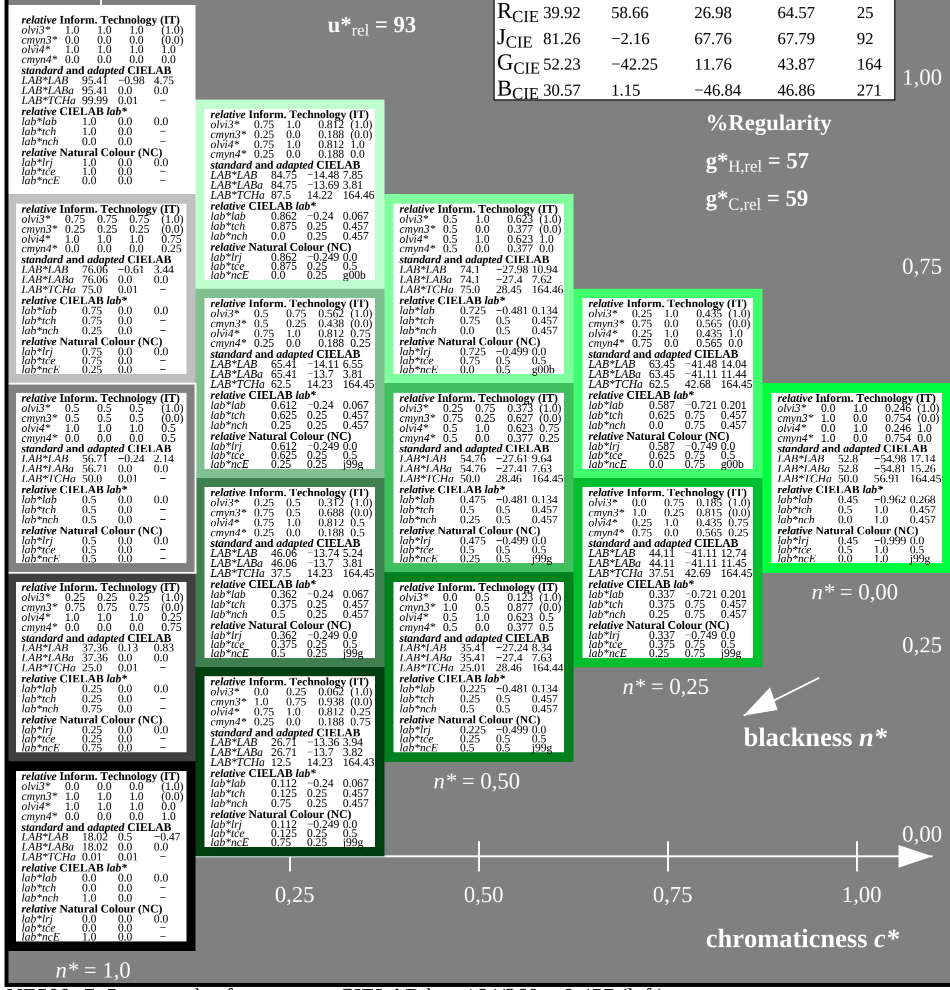


%Gamut
$u^*_{rel} = 93$

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

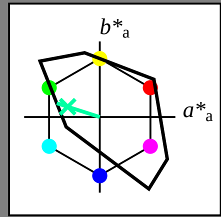
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*

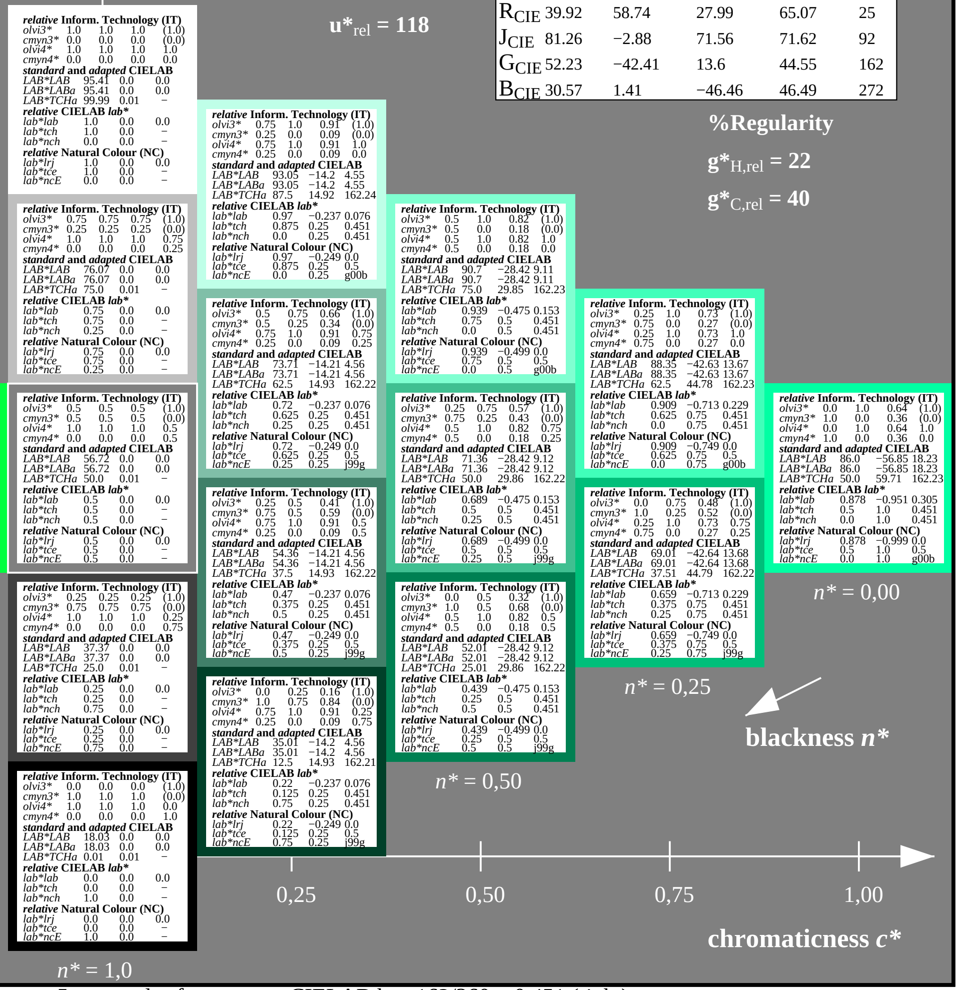


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



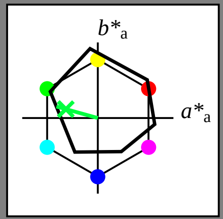
NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

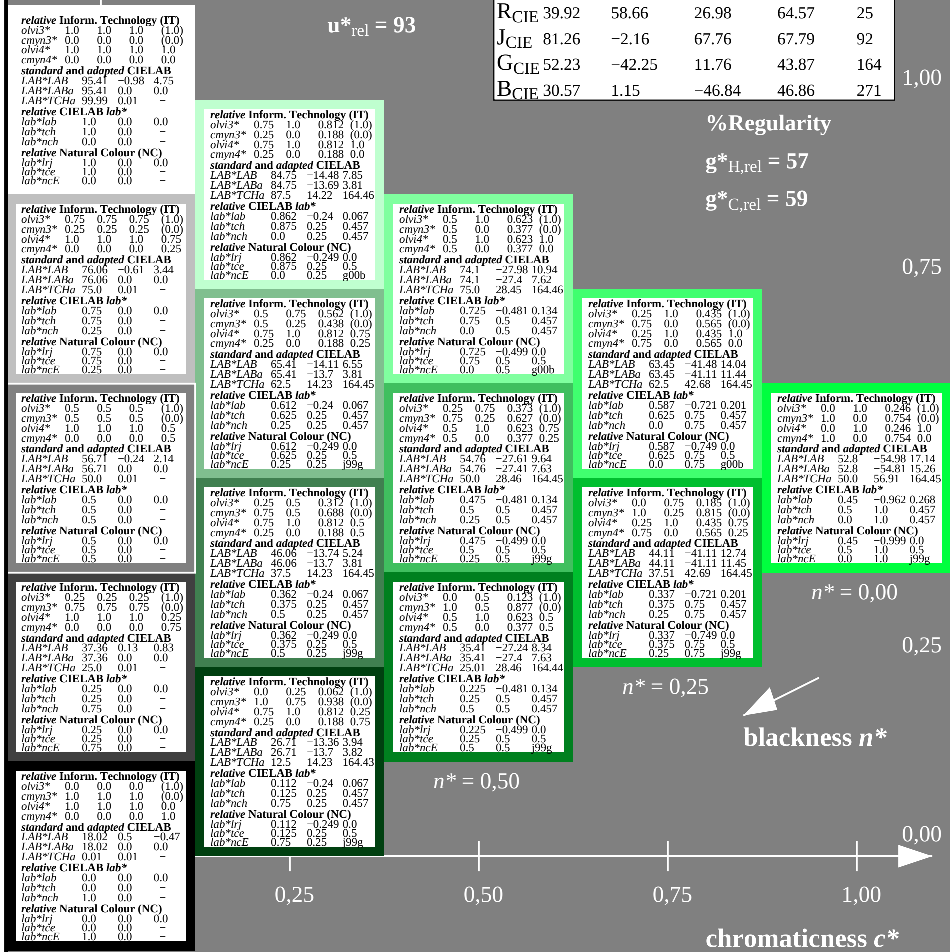
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

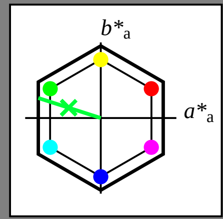
$g^*_{C,rel}$ = 59



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

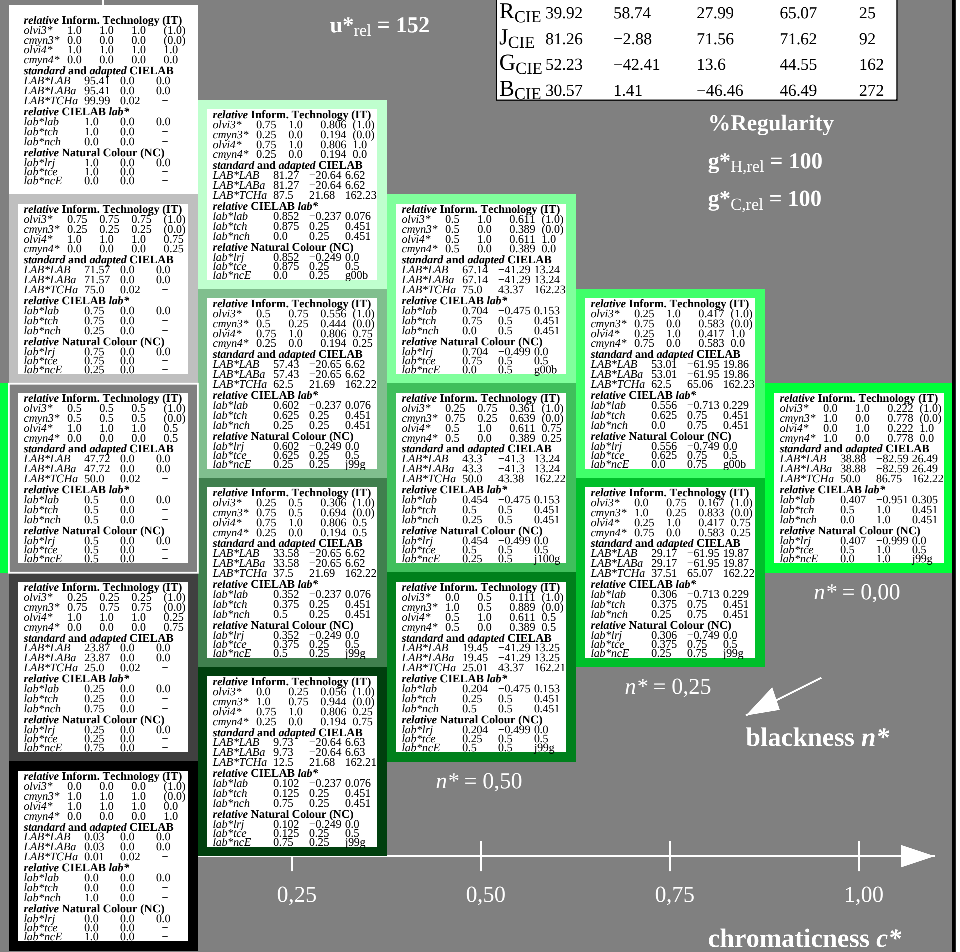
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

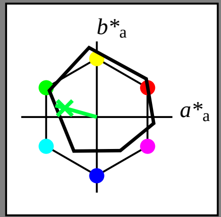
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness *t*



%Gamut

u^*_{rel} = 93

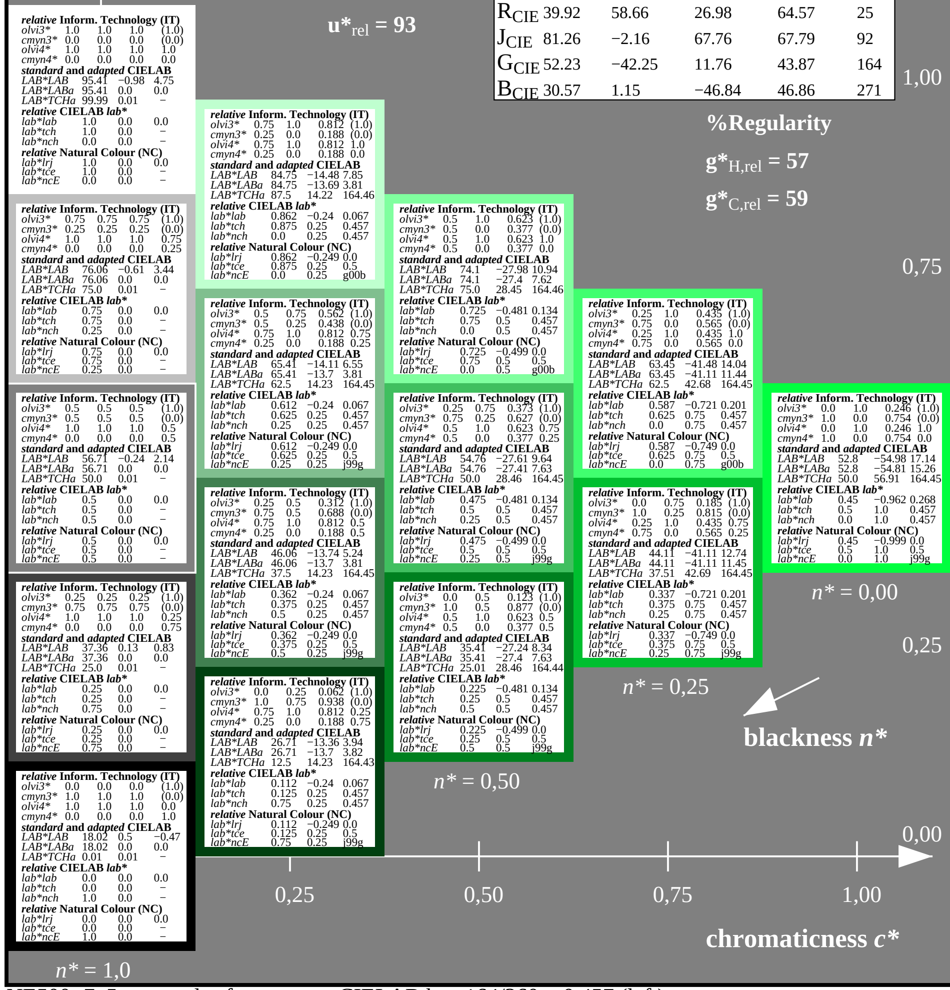
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Reflective System NRS18

for hue *h* = lab*h = 162/360 = 0.451*

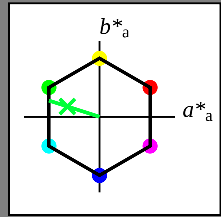
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 100

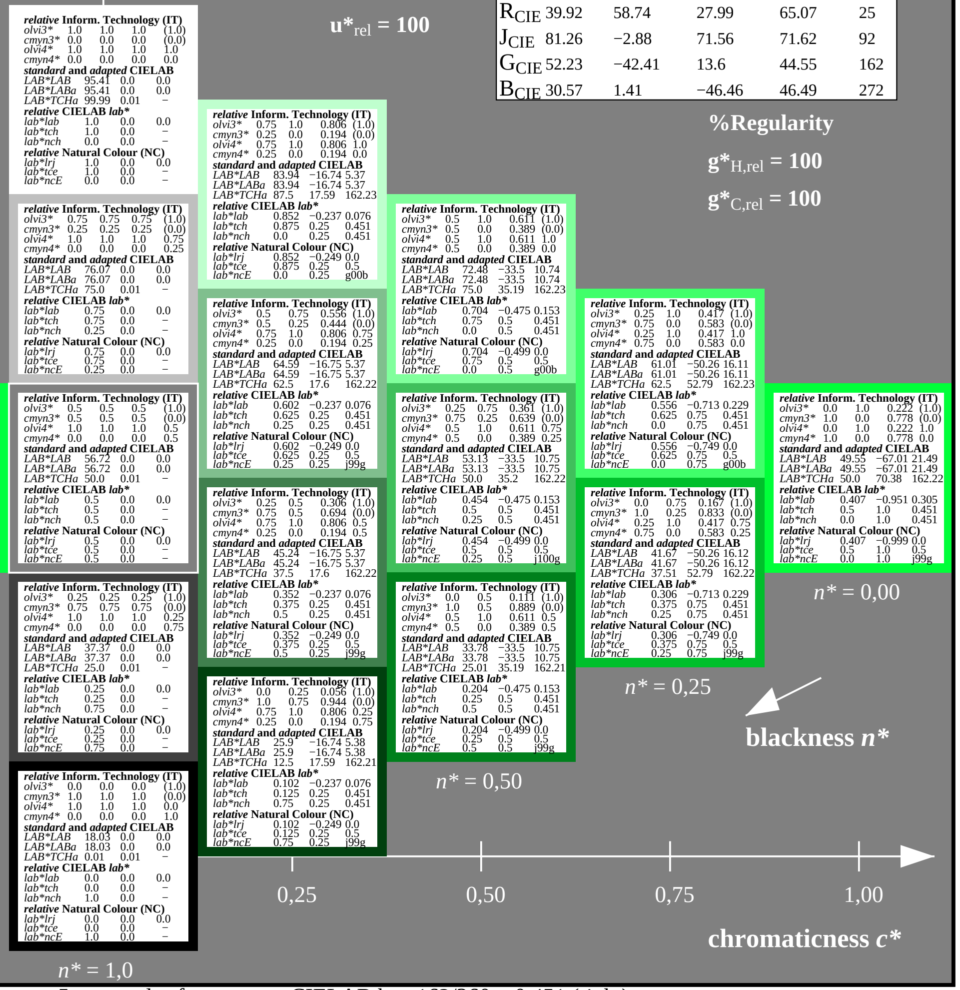
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



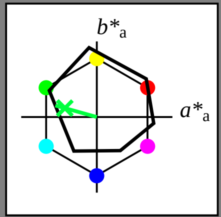
NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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*

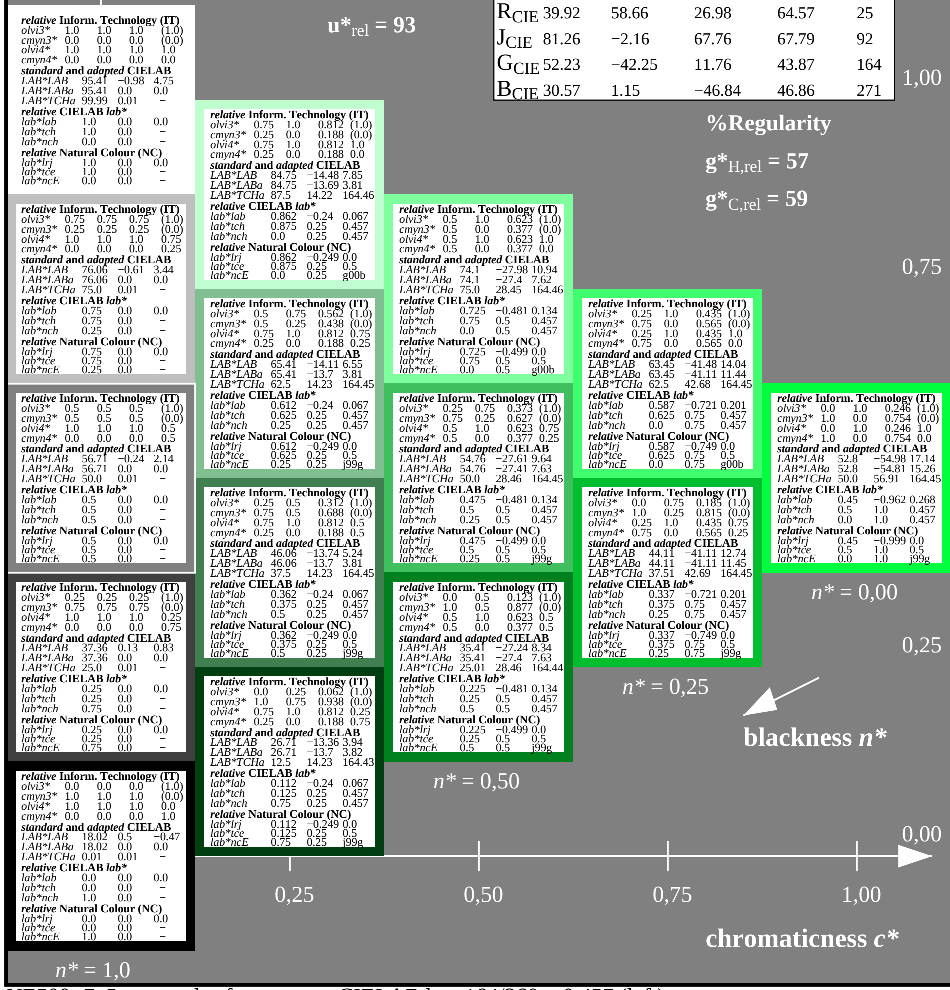


%Gamut
$u^*_{rel} = 93$

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

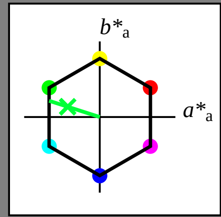
%Regularity
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$



Output: Colorimetric 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*

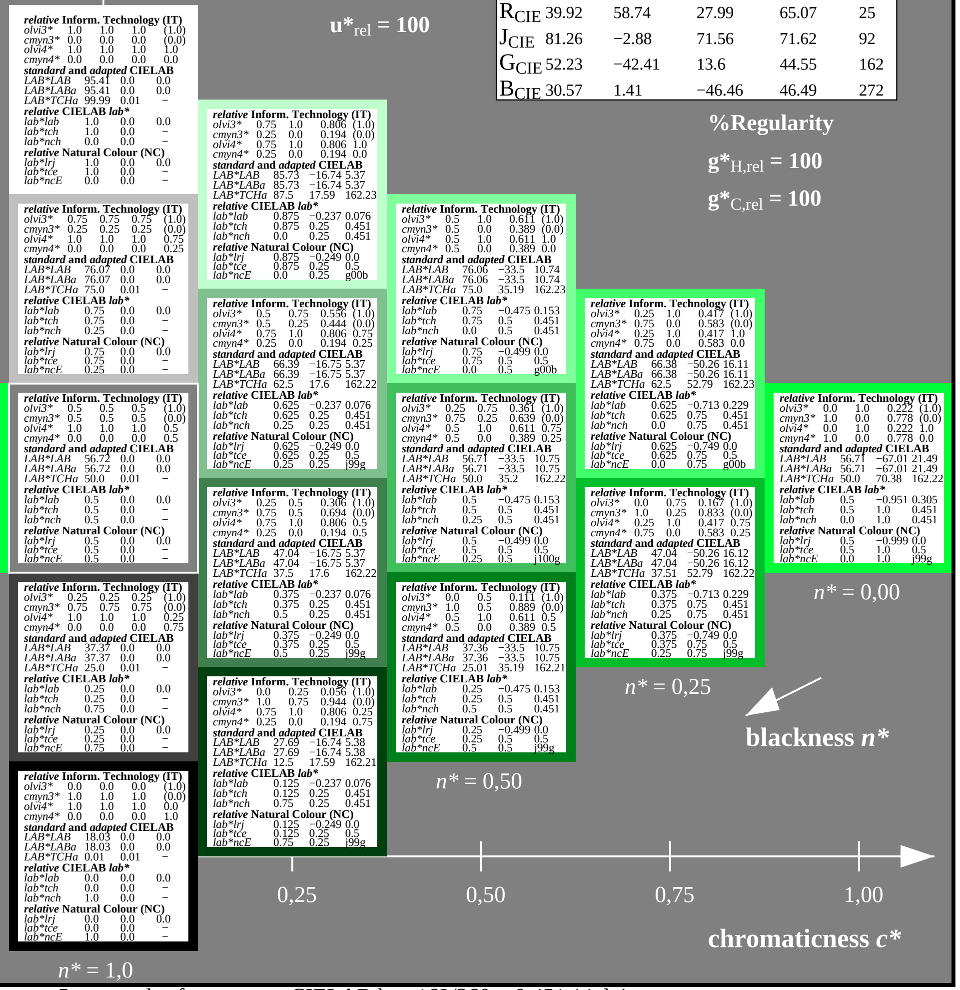


%Gamut
$u^*_{rel} = 100$

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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



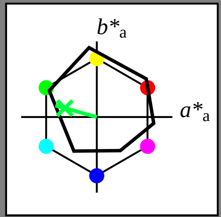
NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

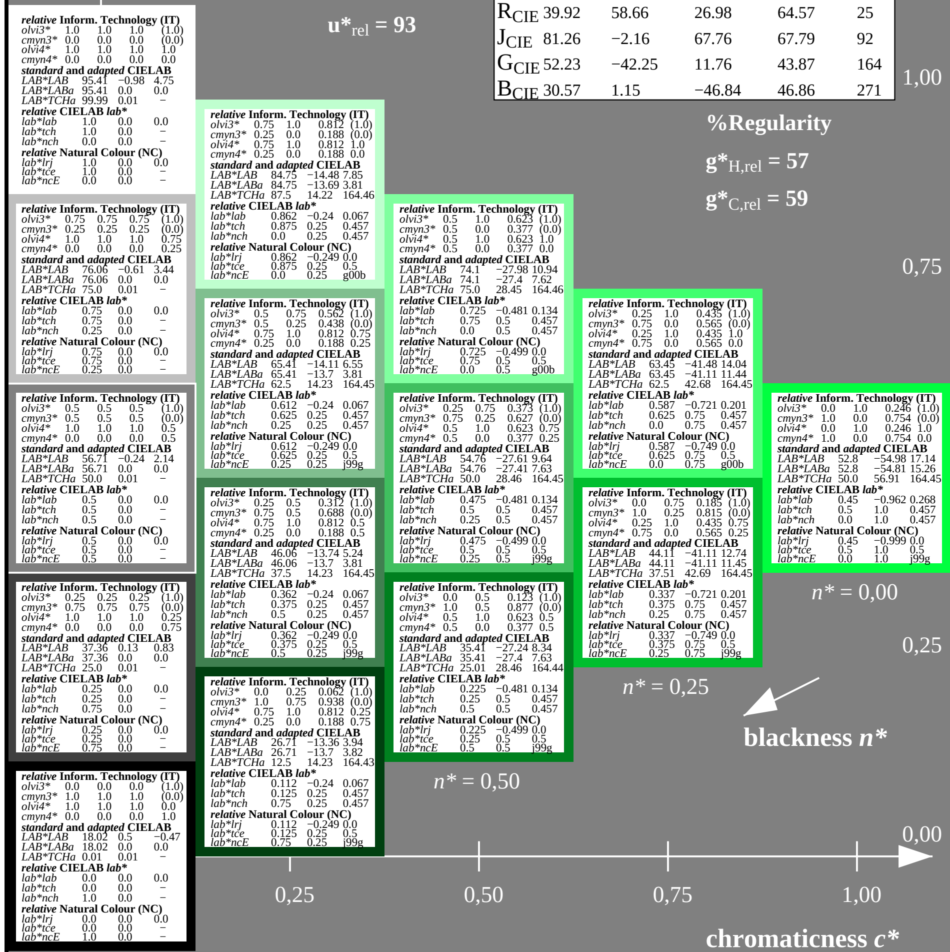
triangle lightness *t**



%Gamut
u*rel = 93

ORS18; adapted (a) CIELAB data	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	−10.26	91.75	92.32	96
LMa	50.9	−62.83	34.96	71.91	151
CMa	58.62	−30.34	−45.01	54.3	236
VMa	25.72	31.1	−44.4	54.22	305
MMa	48.13	75.28	−8.36	75.74	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.57	25
JCIE	81.26	−2.16	67.76	67.79	92
GCIE	52.23	−42.25	11.76	43.87	164
BCIE	30.57	1.15	−46.84	46.86	271

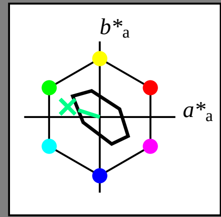
%Regularity
g*H,rel = 57
g*C,rel = 59



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

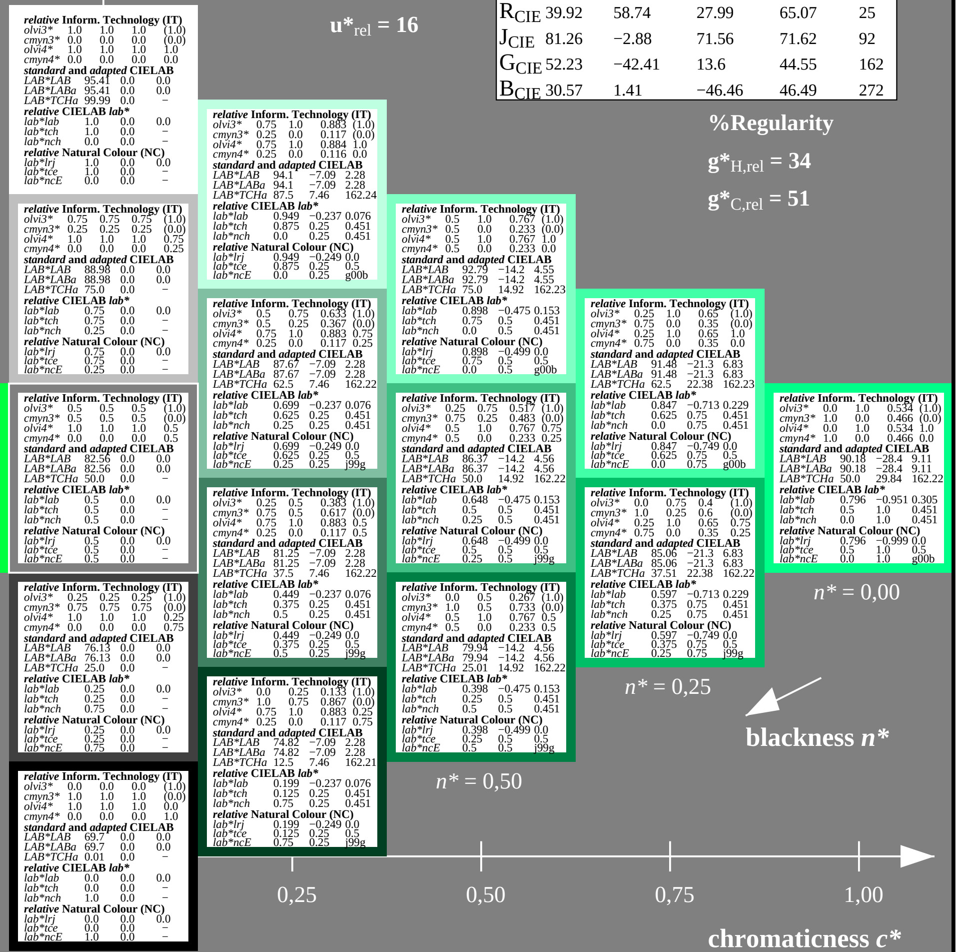
triangle lightness *t**



%Gamut
u*rel = 16

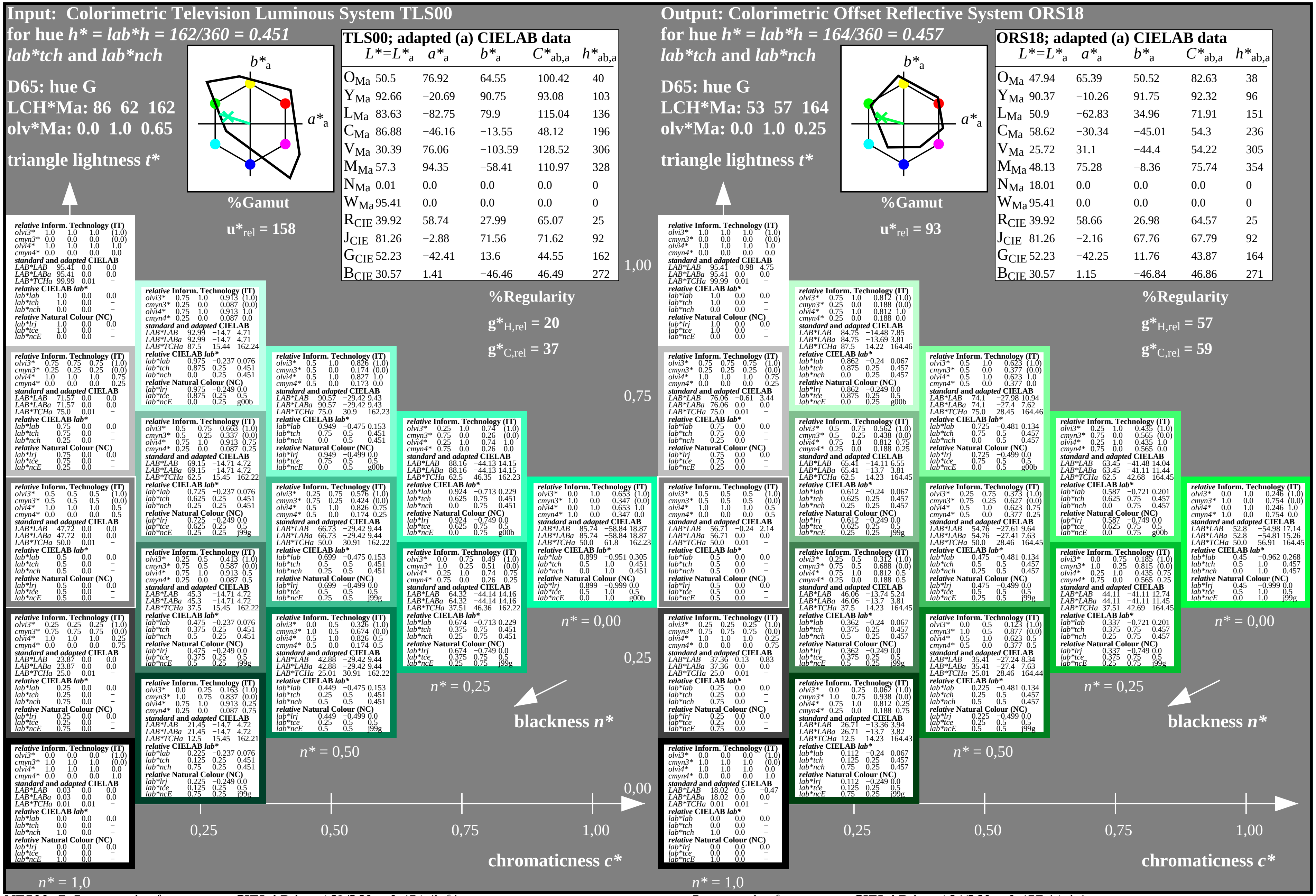
TLS70; adapted (a) CIELAB data	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	76.43	26.27	10.57	28.32	22
YMa	93.93	−10.76	34.63	36.27	107
LMa	89.32	−35.8	27.64	45.24	142
CMa	90.93	−21.95	−7.07	23.07	198
VMa	72.1	15.76	−35.63	38.97	294
MMa	78.5	37.52	−25.23	45.22	326
NMa	69.7	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

%Regularity
g*H,rel = 34
g*C,rel = 51



NE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

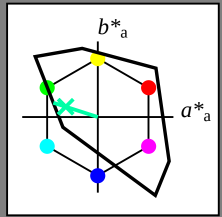
5 step scales for constant CIELAB hue 162/360 = 0.451 (right)



NE500−7, 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



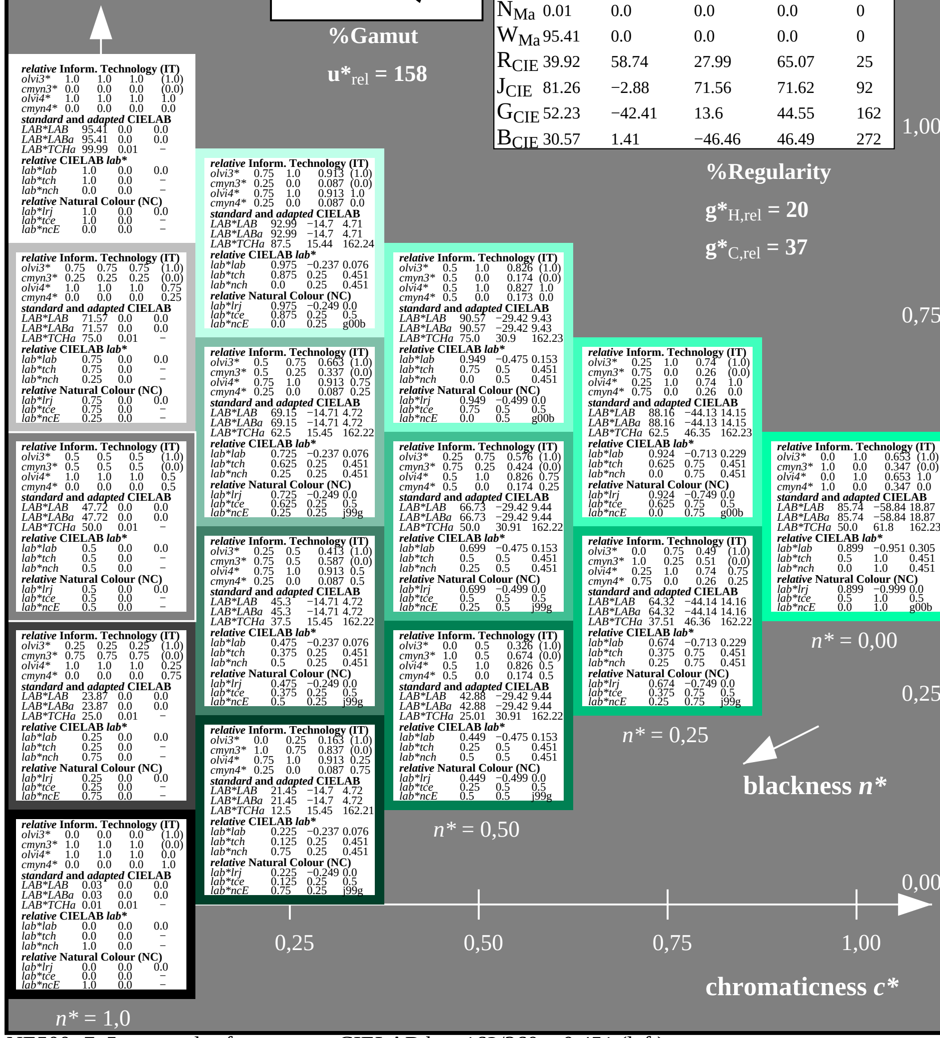
D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

triangle lightness *t**

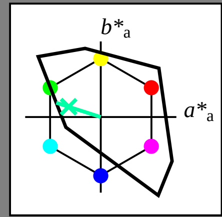
%Gamut
$u^*_{rel} = 158$

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric Television Luminous System TLS00
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch



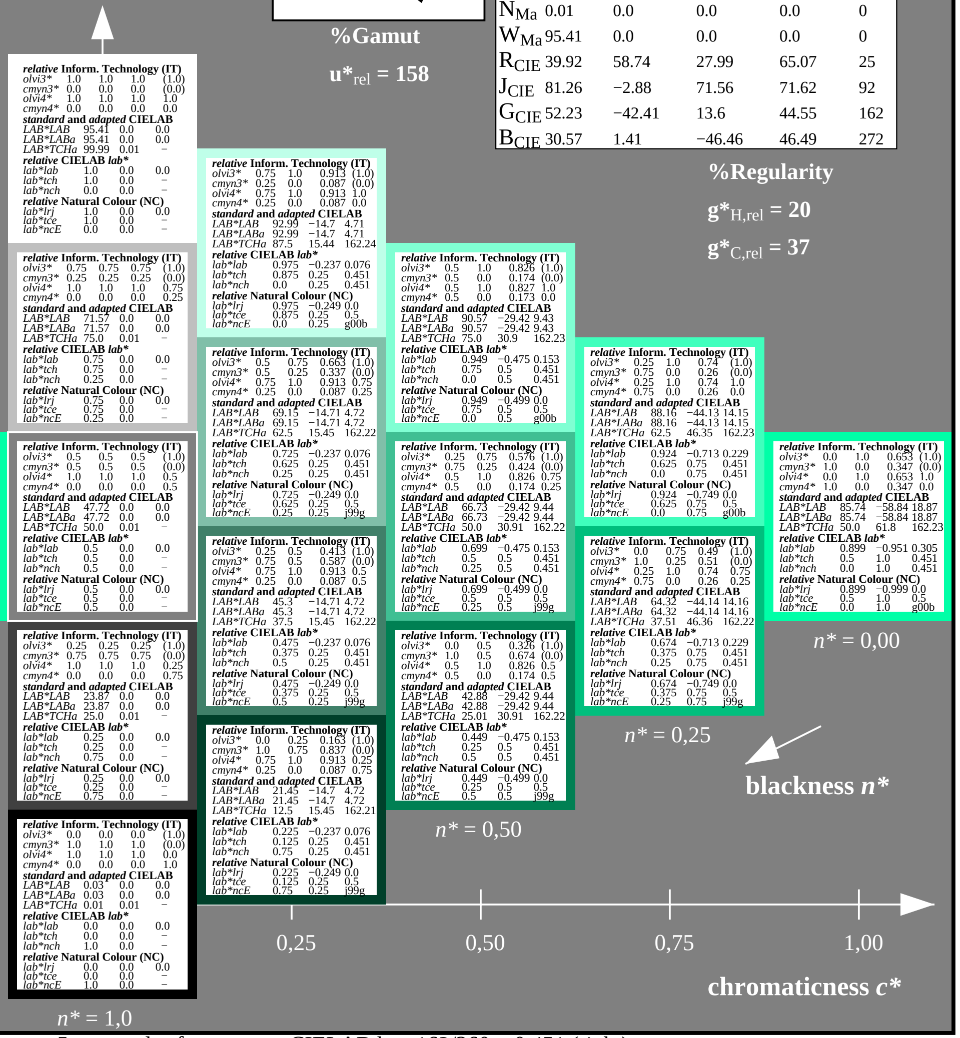
D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



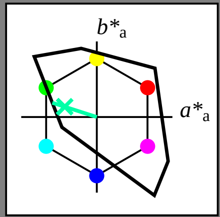
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System 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^*

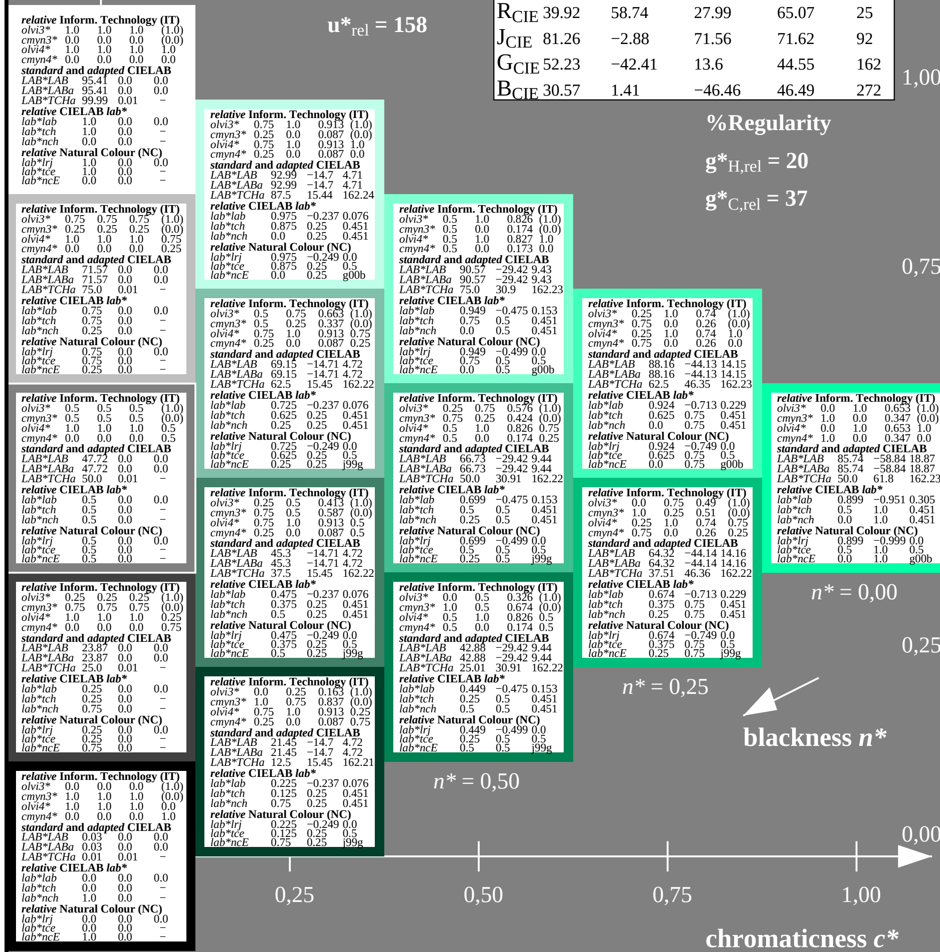


%Gamut
$u^*_{rel} = 158$

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

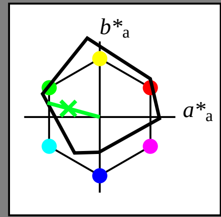
%Regularity
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



Output: Colorimetric 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^*

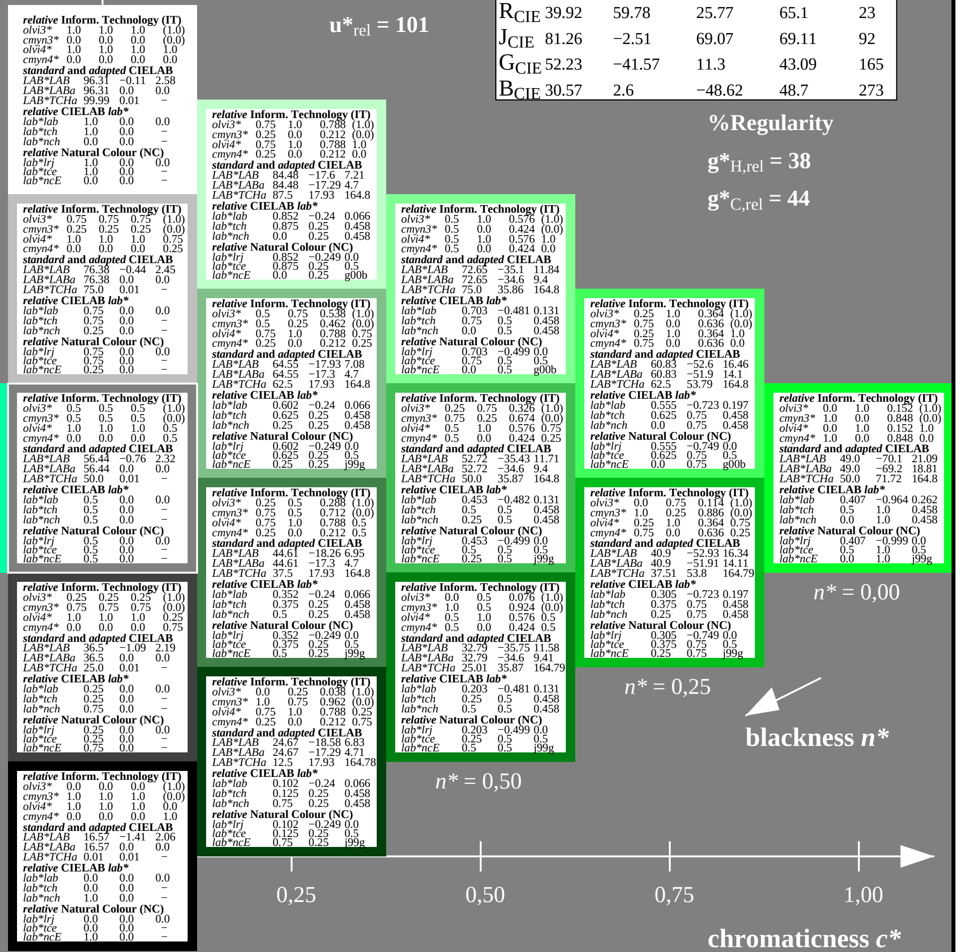


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



NE500−7, 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 TLS00

for hue *h** = *lab*h* = 162/360 = 0.451

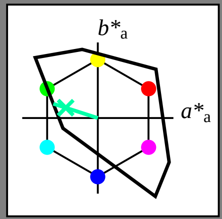
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness *t**



%Gamut

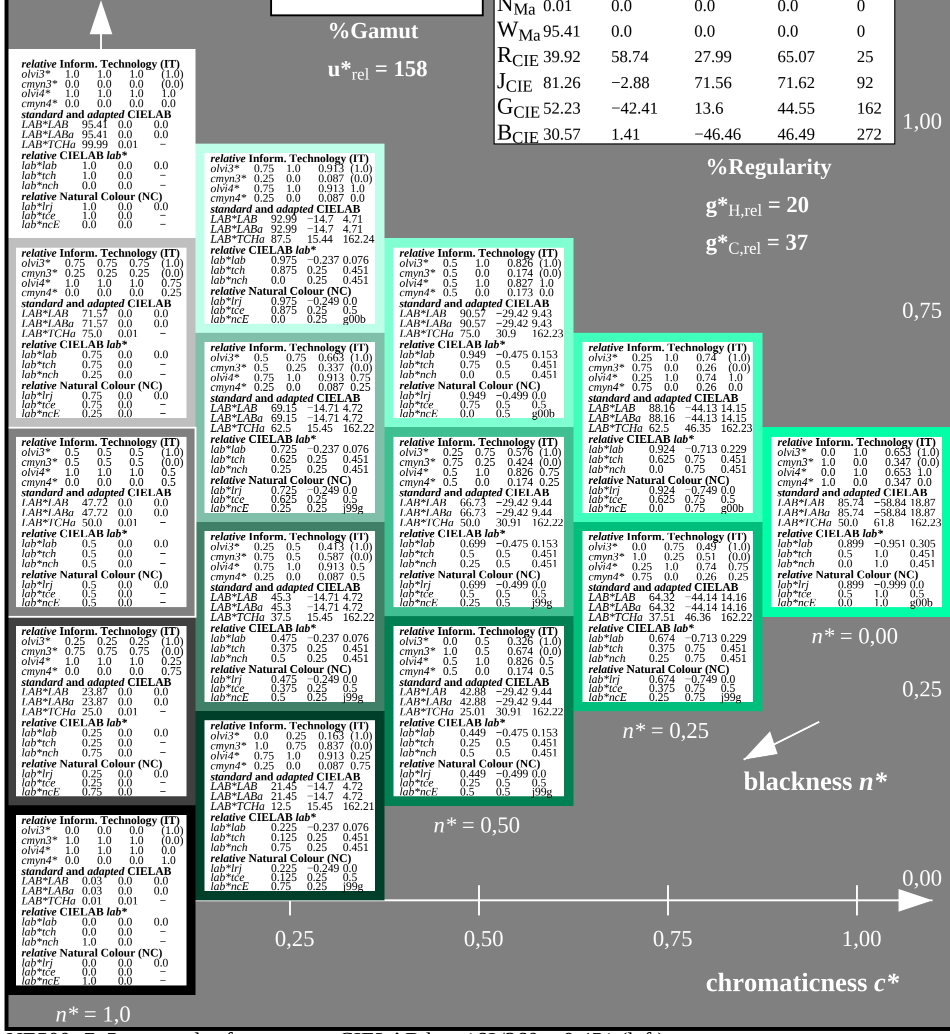
u^*_{rel} = 158

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 Television Luminous System TLS18

for hue *h** = *lab*h* = 162/360 = 0.451

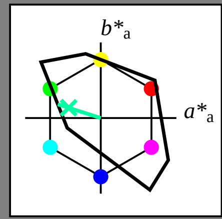
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t**



%Gamut

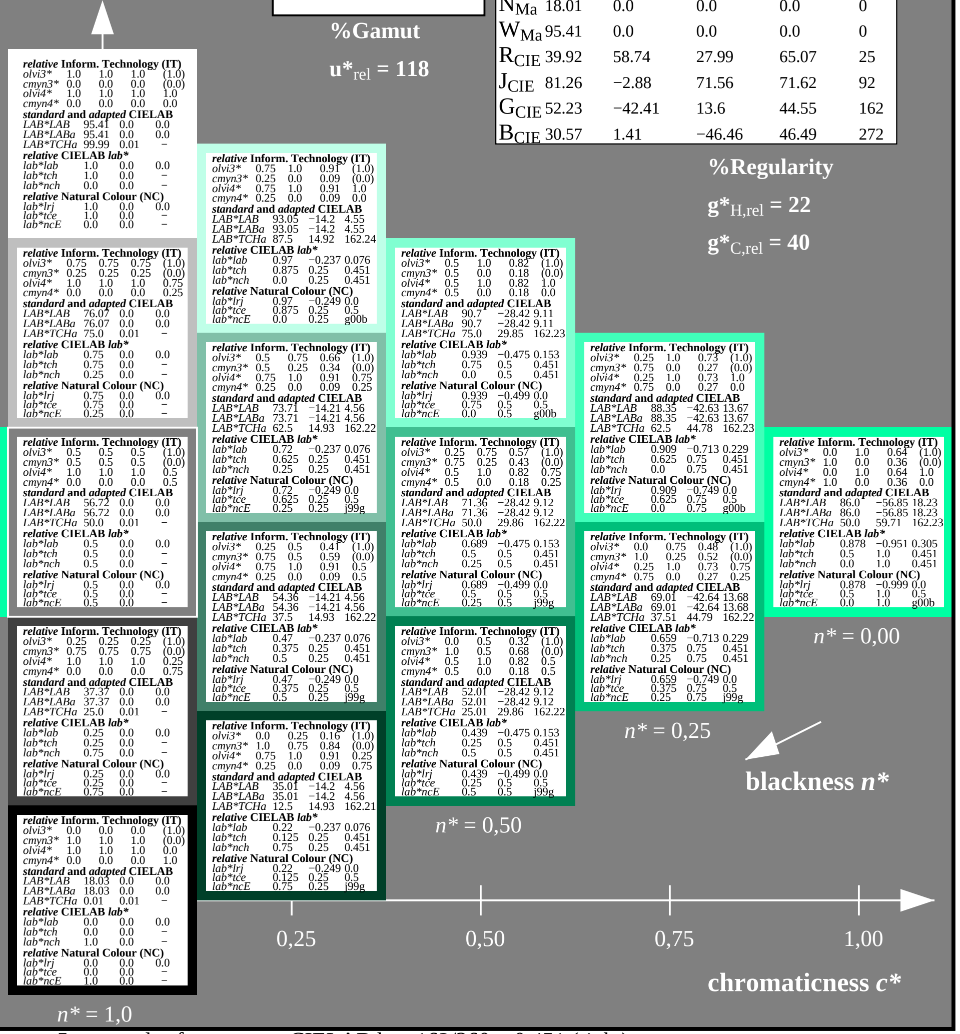
u^*_{rel} = 118

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



NE500−7, 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 TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

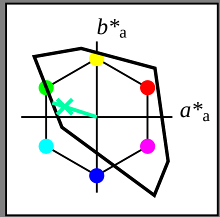
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

u^*_{rel} = 158

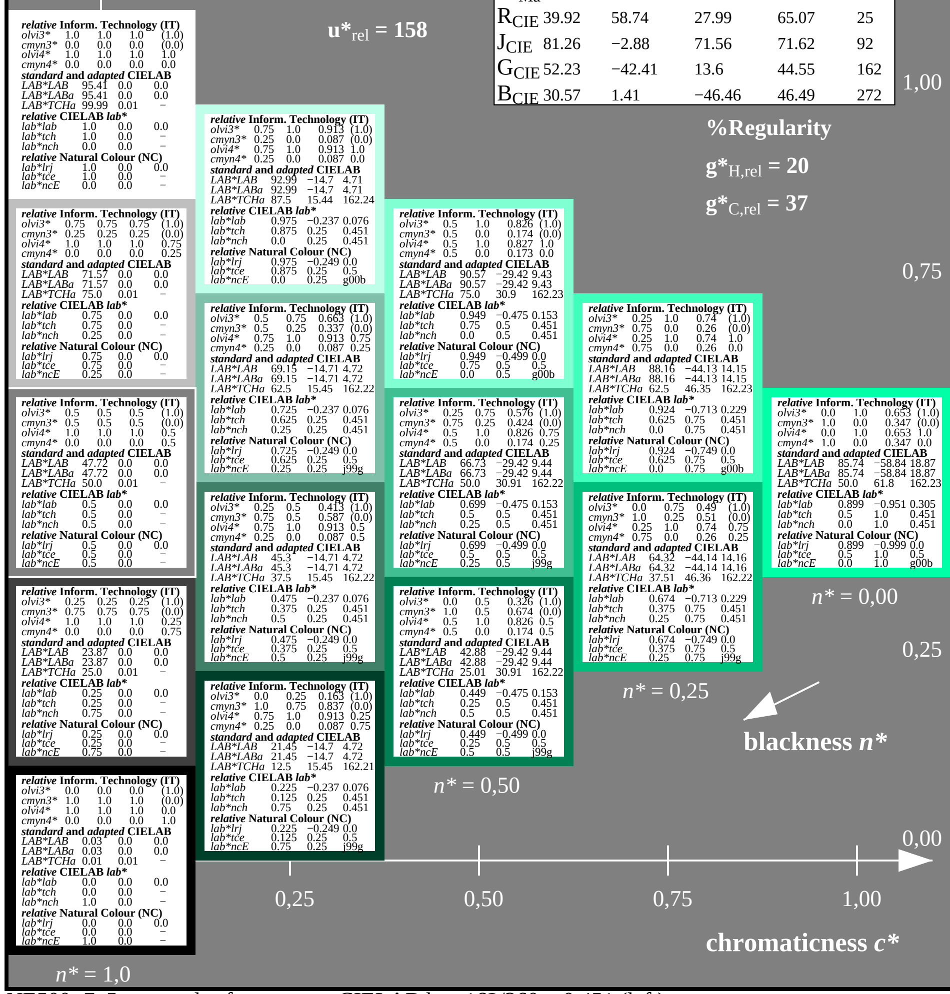
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

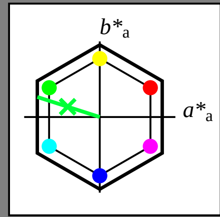
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

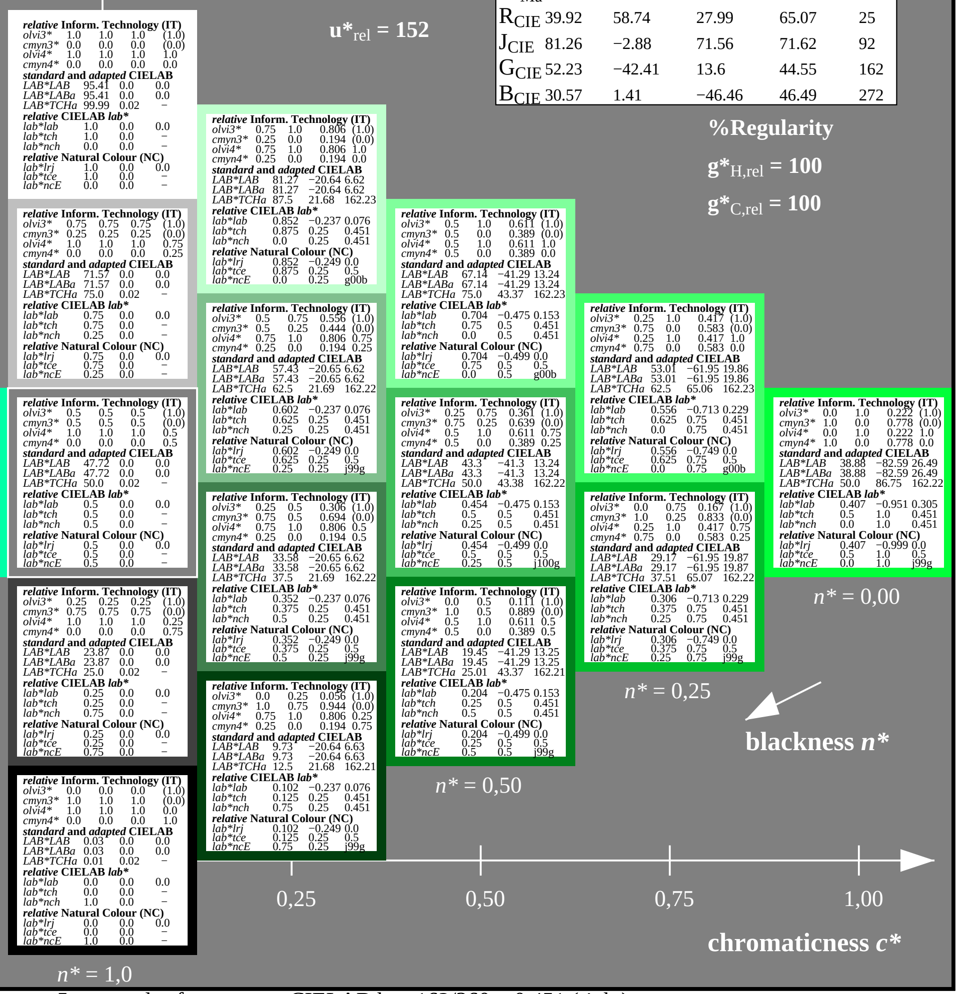
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS00
for hue $h^* = lab^*h = 162/360 = 0.451$

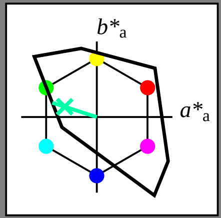
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness *t*



%Gamut

u^*_{rel} = 158

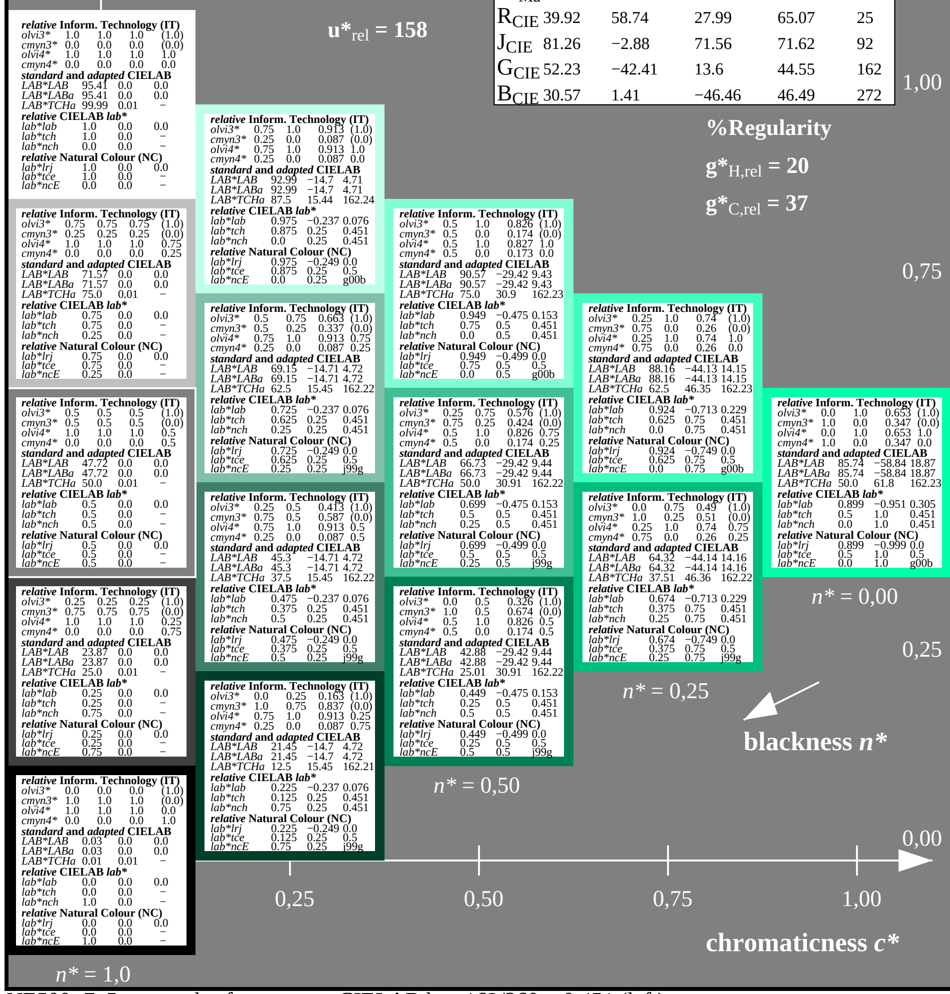
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18
for hue $h^* = lab^*h = 162/360 = 0.451$

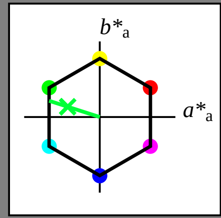
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 100

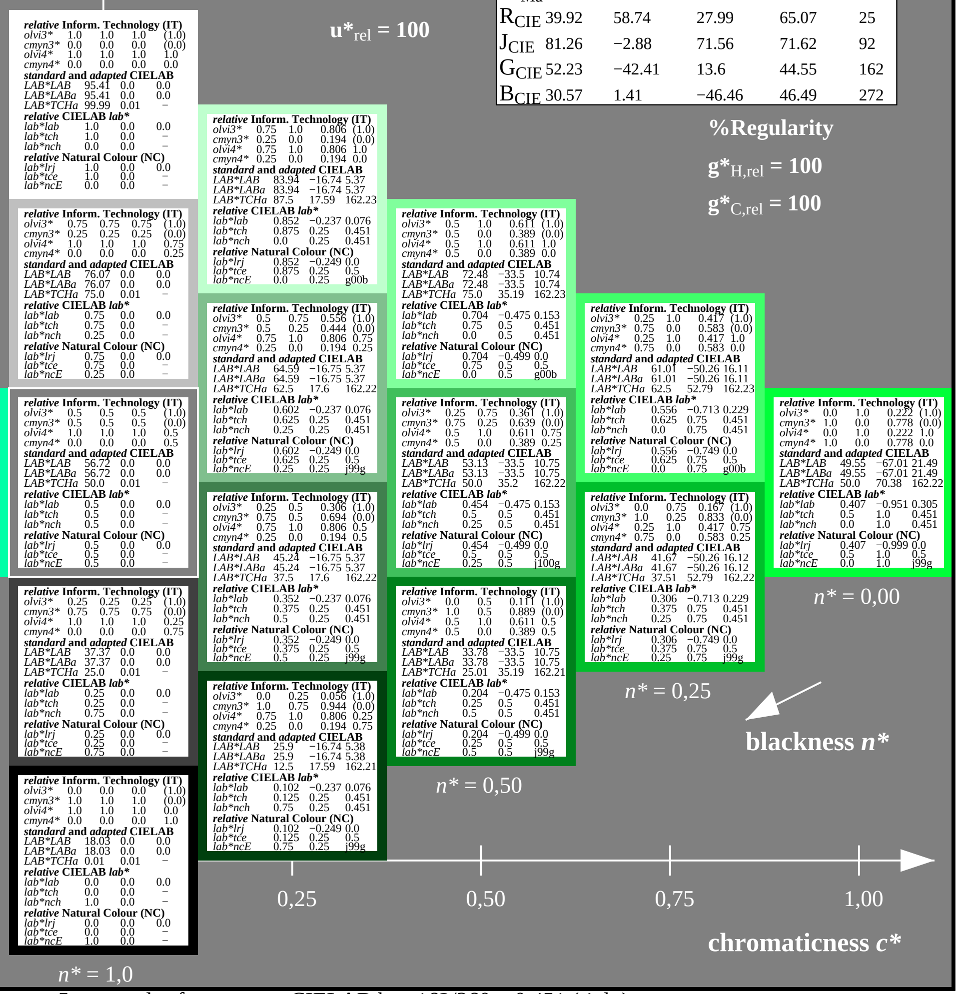
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 TLS00

for hue *h* = lab*h = 162/360 = 0.451*

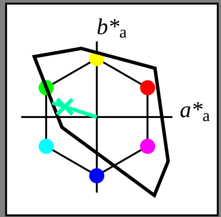
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness *t*



%Gamut

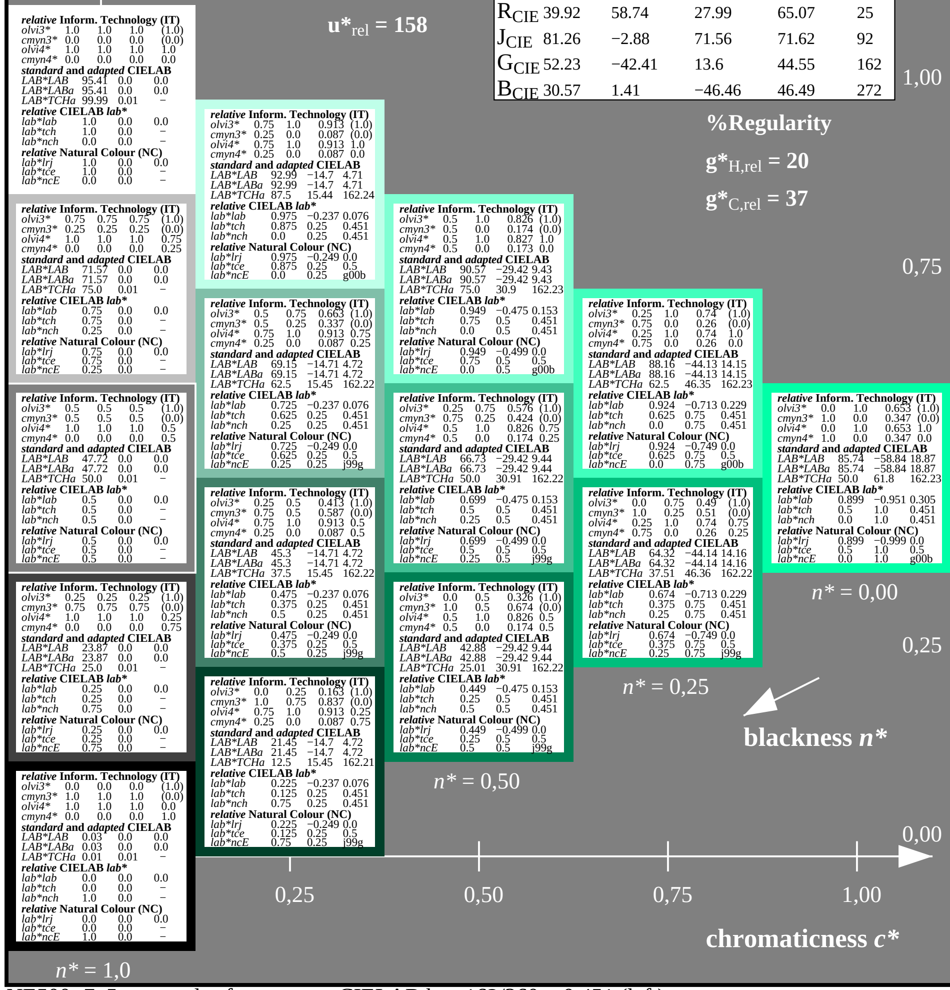
u^*_{rel} = 158

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 Standard Reflective System SRS18

for hue *h* = lab*h = 162/360 = 0.451*

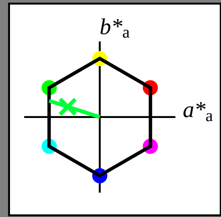
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

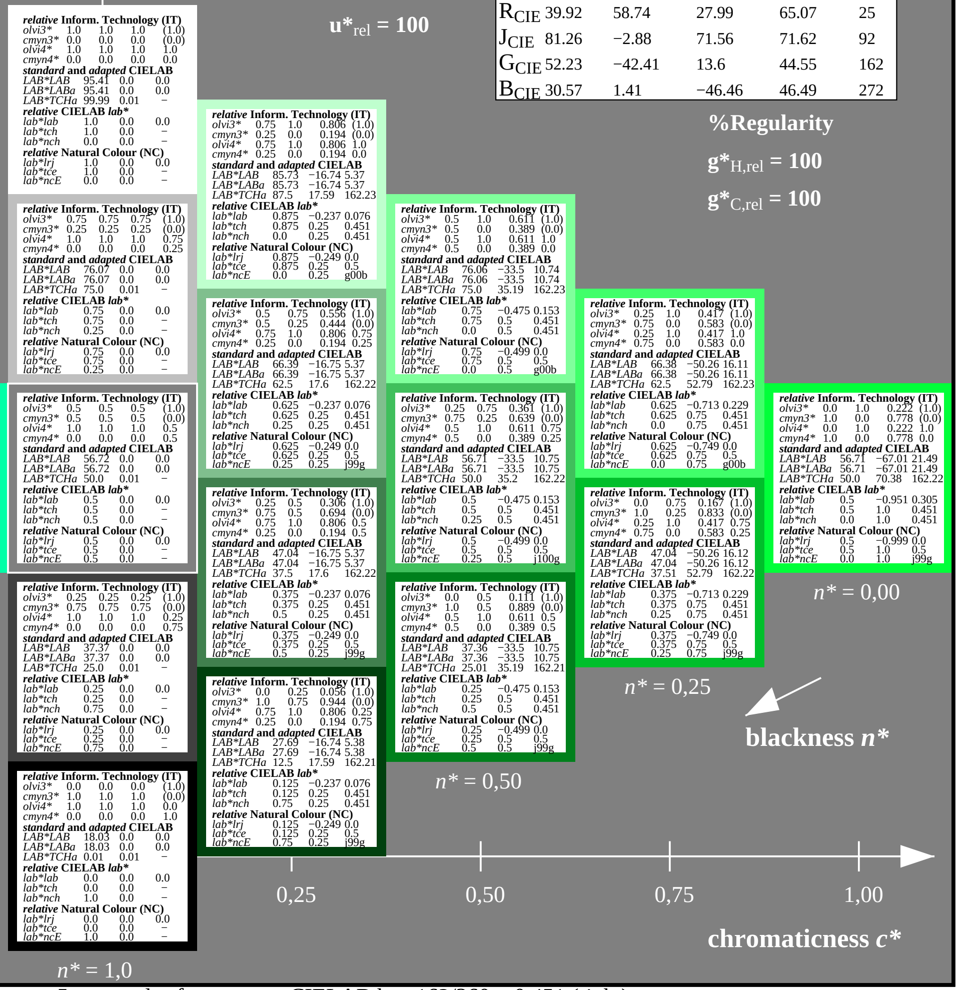
u^*_{rel} = 100

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



NE500−7, 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 TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

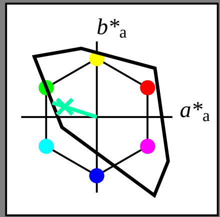
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness *t**



%Gamut

$u^*_{rel} = 158$

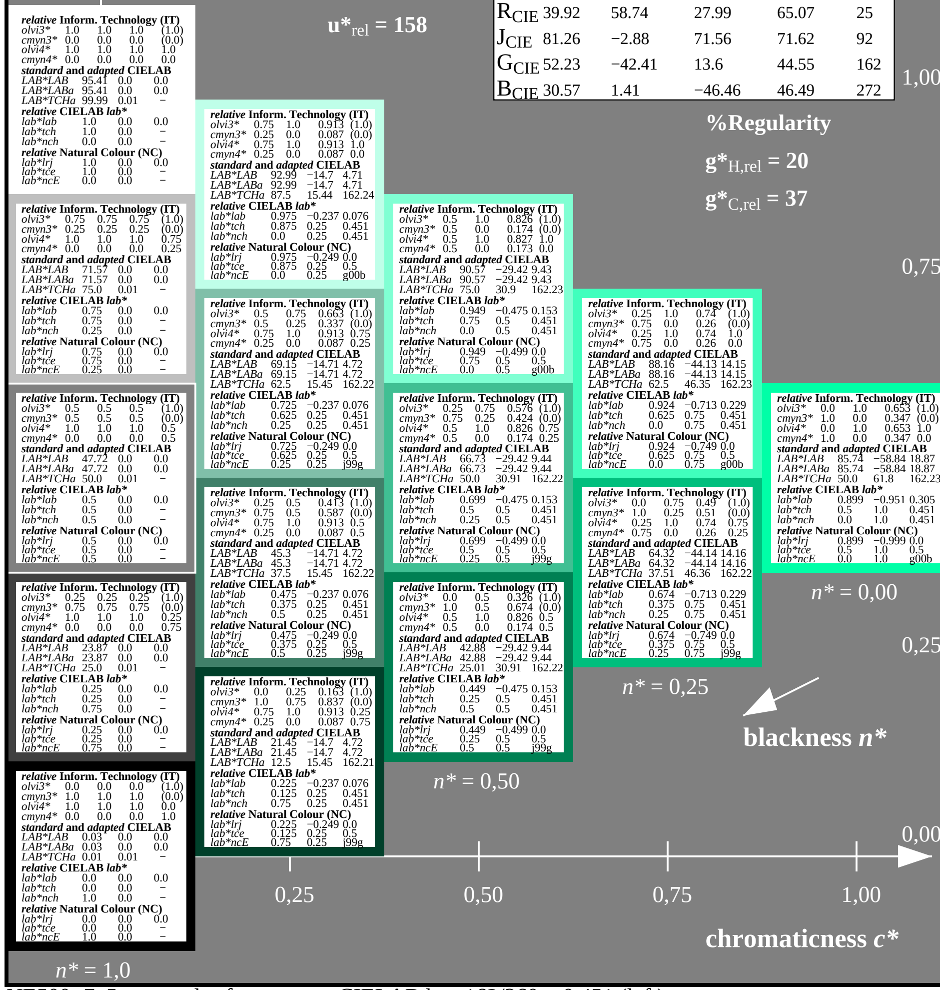
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

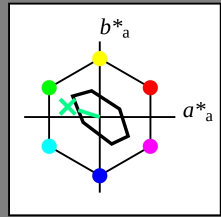
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t**



%Gamut

$u^*_{rel} = 16$

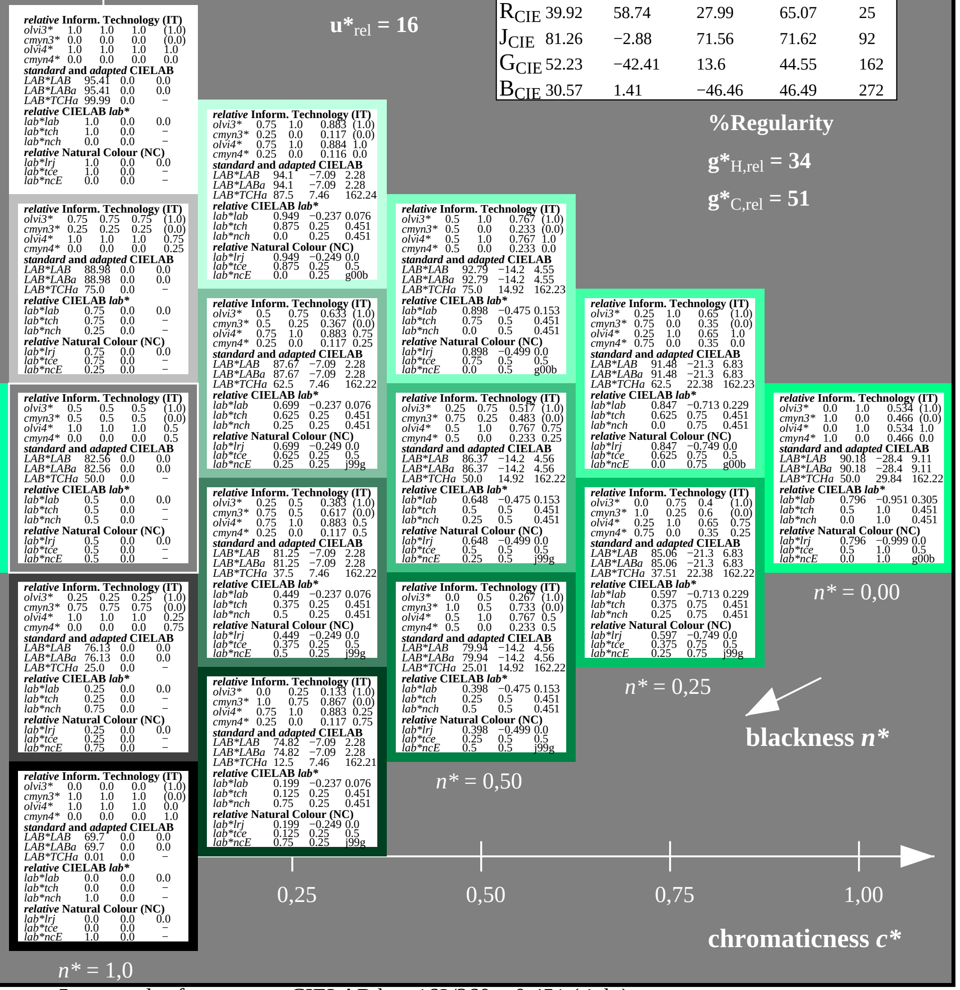
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



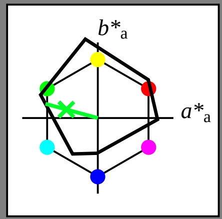
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric 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^*

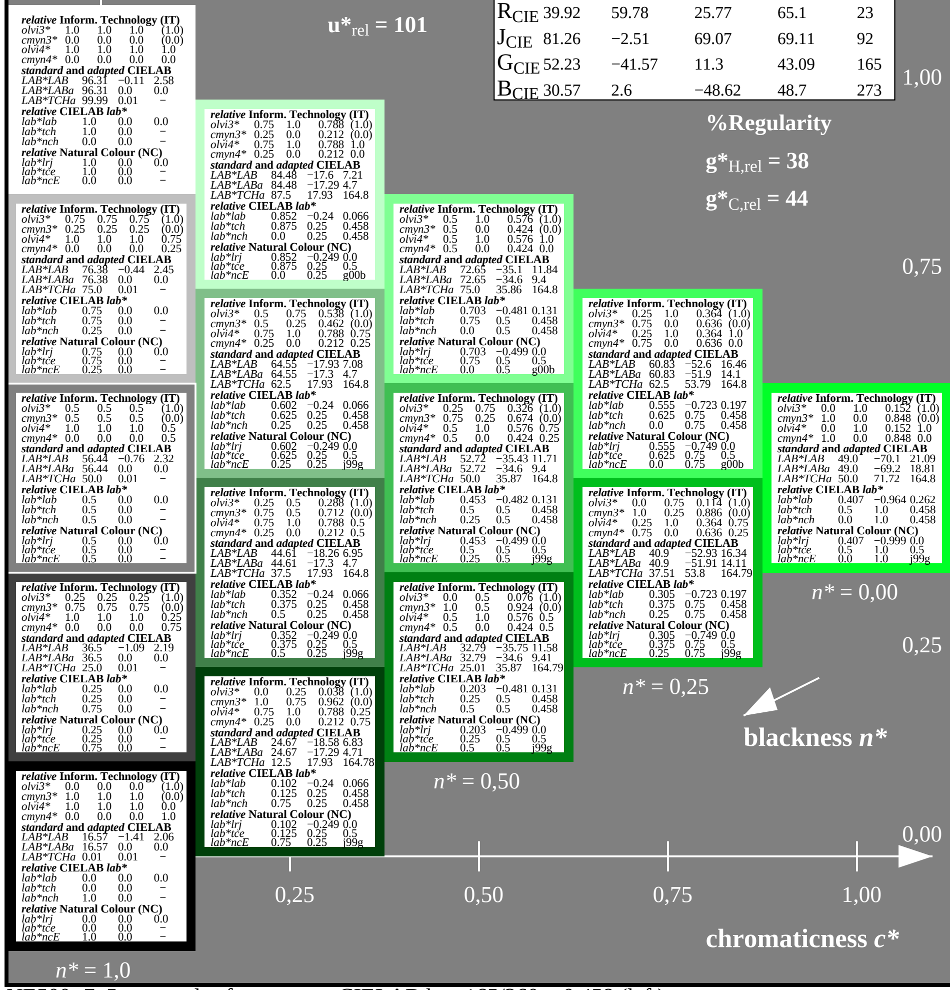


%Gamut
$u^*_{rel} = 101$

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

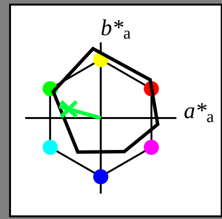
%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



Output: Colorimetric 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^*

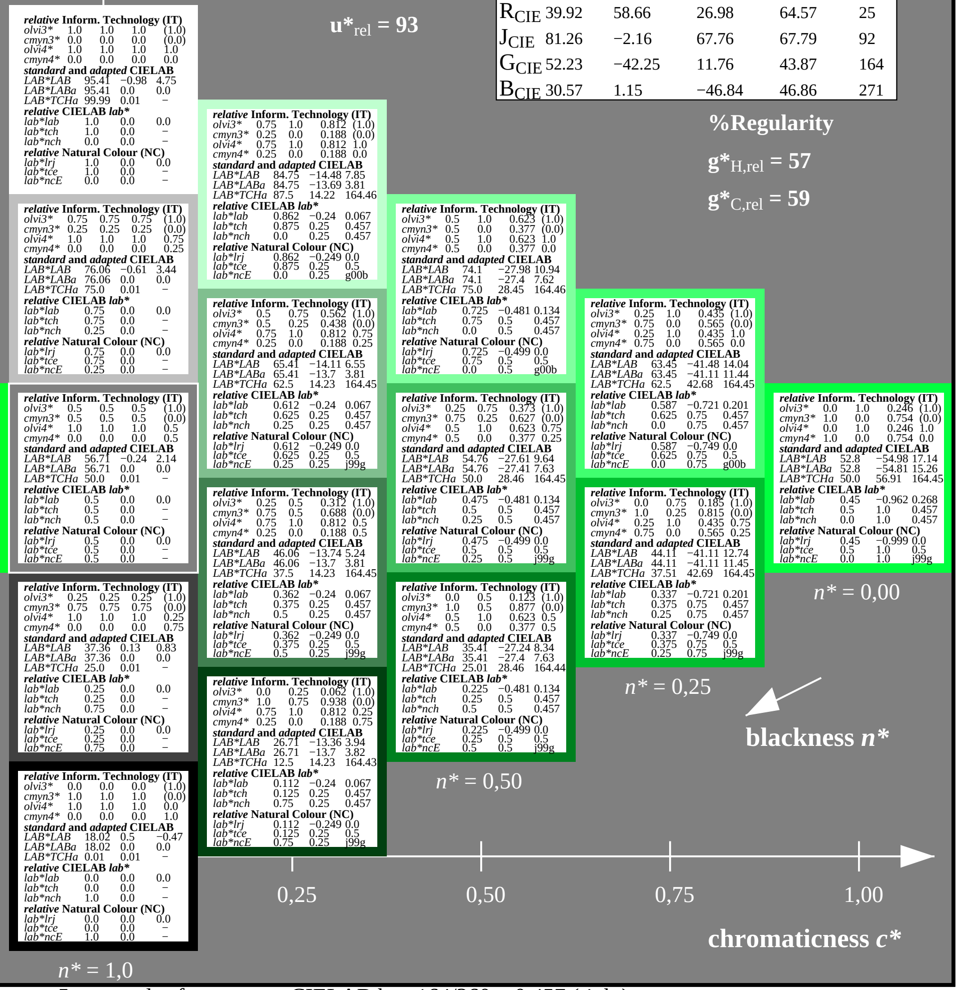


%Gamut
$u^*_{rel} = 93$

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
$g^*_{H,rel} = 57$
$g^*_{C,rel} = 59$

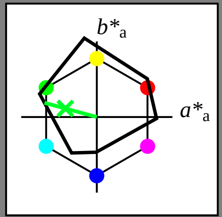


NE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

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**

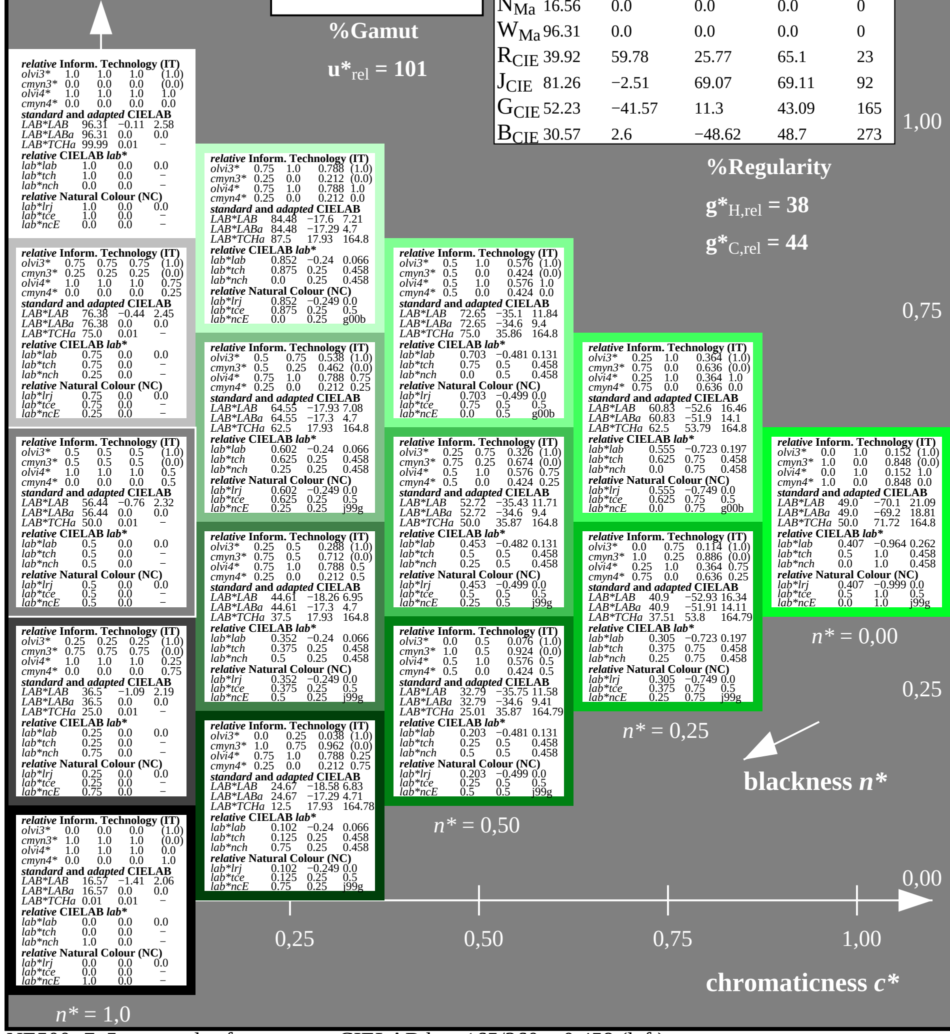


%Gamut
u^*_{rel} = 101

DRSXX; adapted (a) CIELAB data

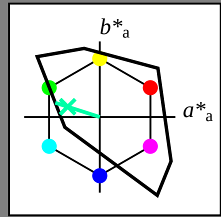
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	42.21	66.82	50.6	83.82	37
Y_{Ma}	90.32	−16.51	104.33	105.63	99
L_{Ma}	48.21	−75.63	30.65	81.61	158
C_{Ma}	53.44	−33.33	−47.49	58.03	235
V_{Ma}	34.16	−0.92	−46.56	46.58	269
M_{Ma}	42.71	79.0	−1.95	79.03	359
N_{Ma}	16.56	0.0	0.0	0.0	0
W_{Ma}	96.31	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



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**

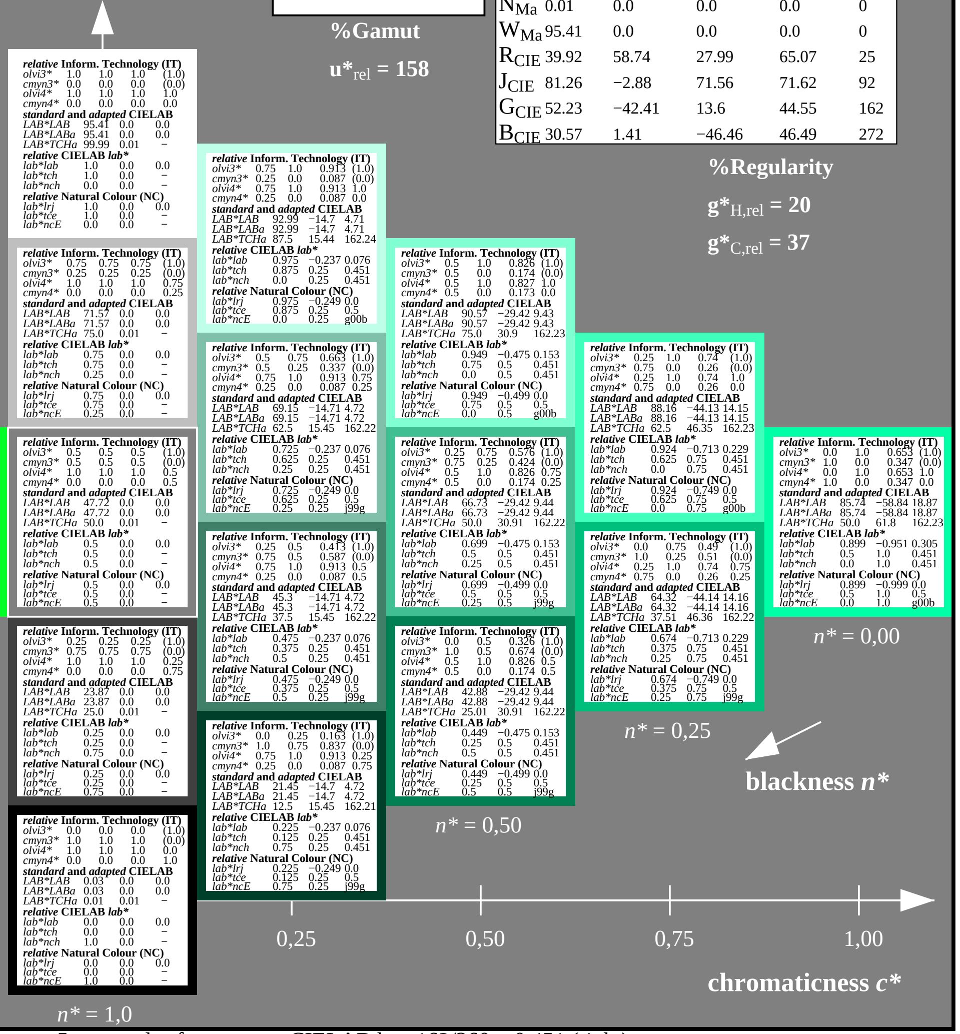


%Gamut
u^*_{rel} = 158

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



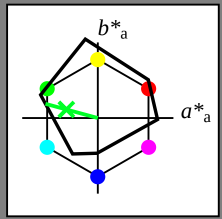
NE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

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^*

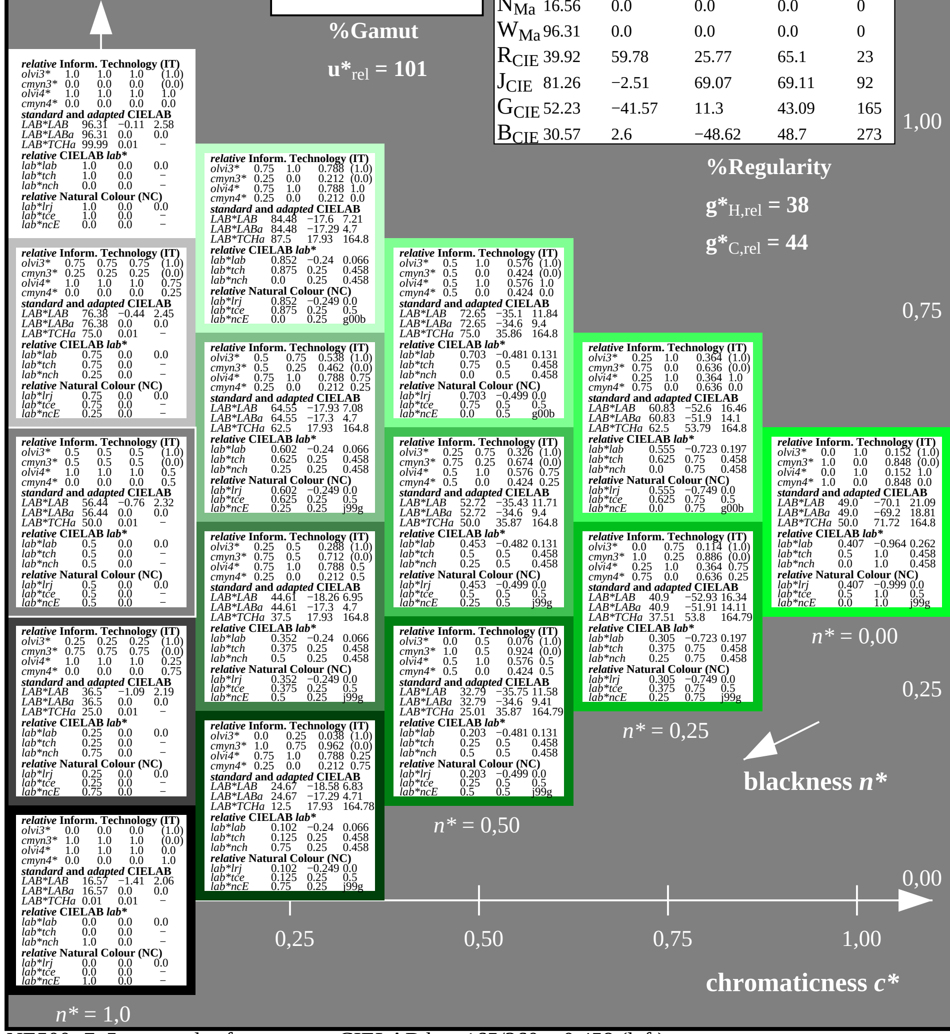


%Gamut
$u^*_{rel} = 101$

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

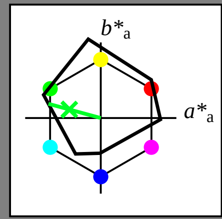
%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



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

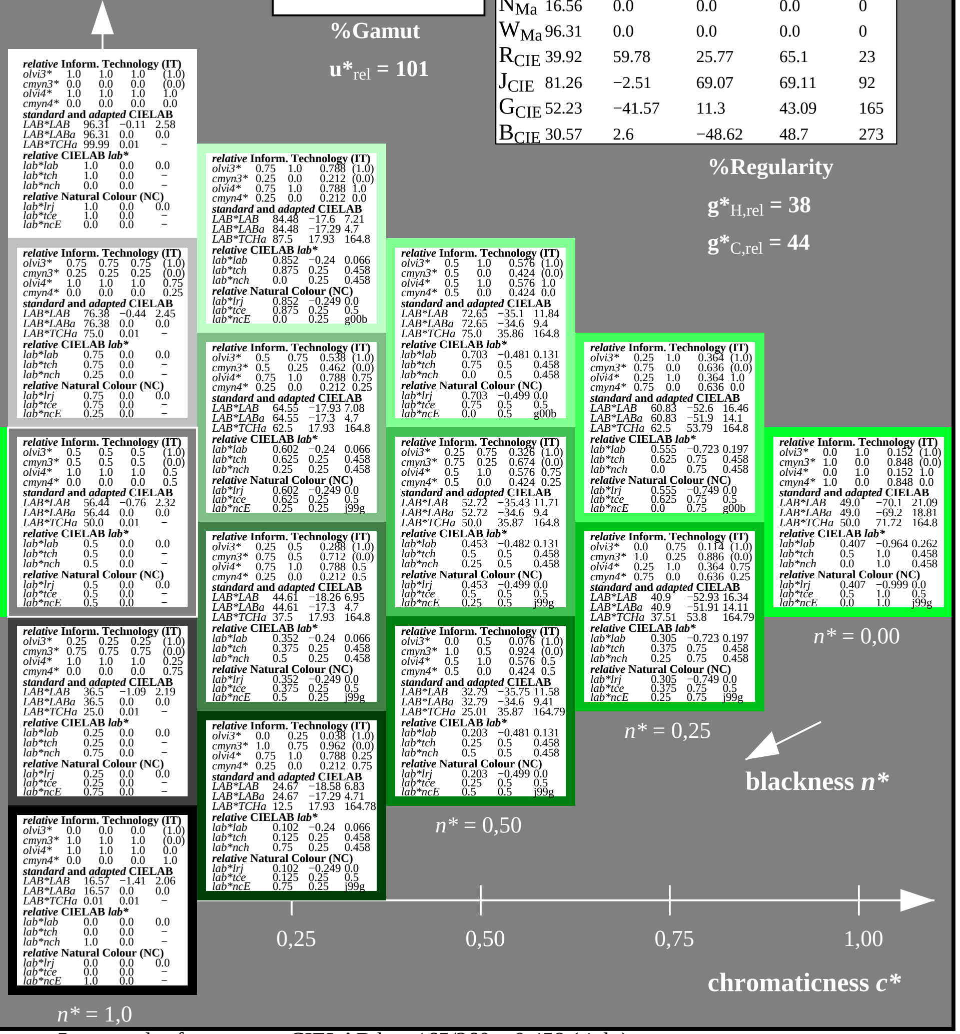
triangle lightness t^*



%Gamut
$u^*_{rel} = 101$

DRSXX; adapted (a) CIELAB data

%Regularity
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



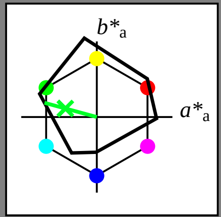
NE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

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

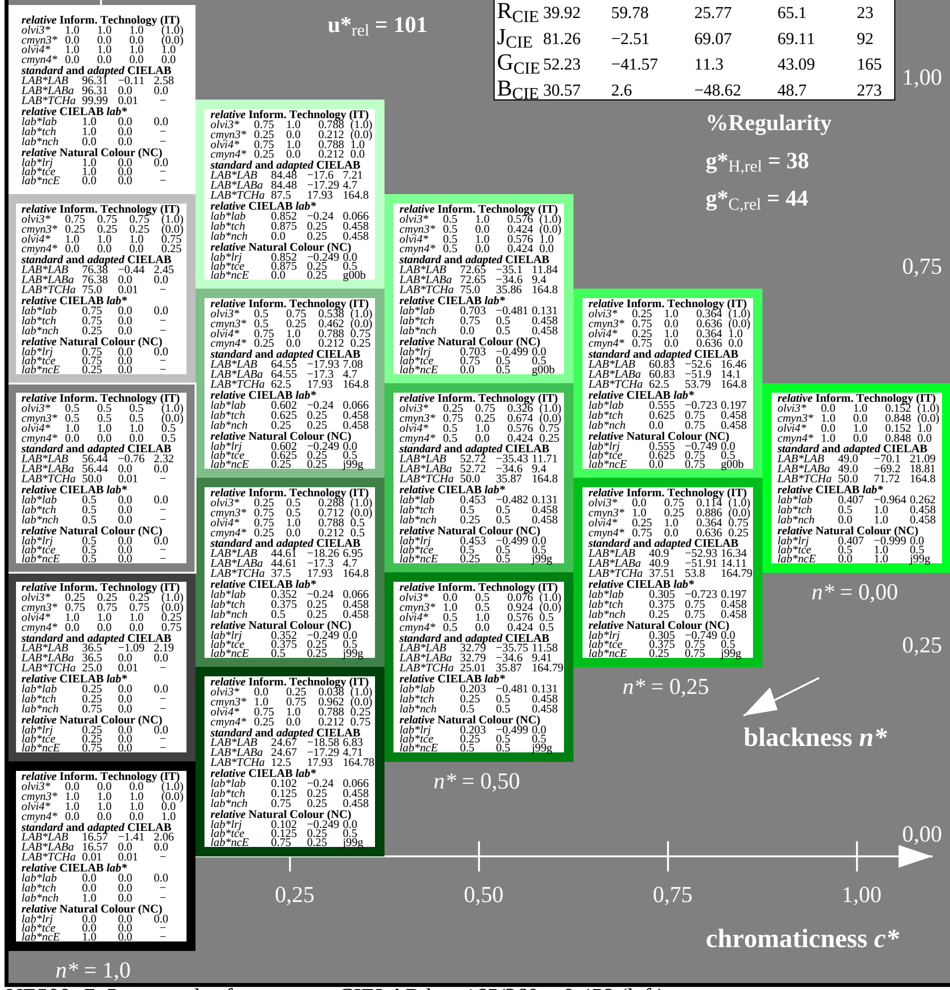
triangle lightness *t**



%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

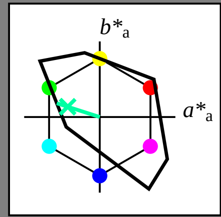
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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

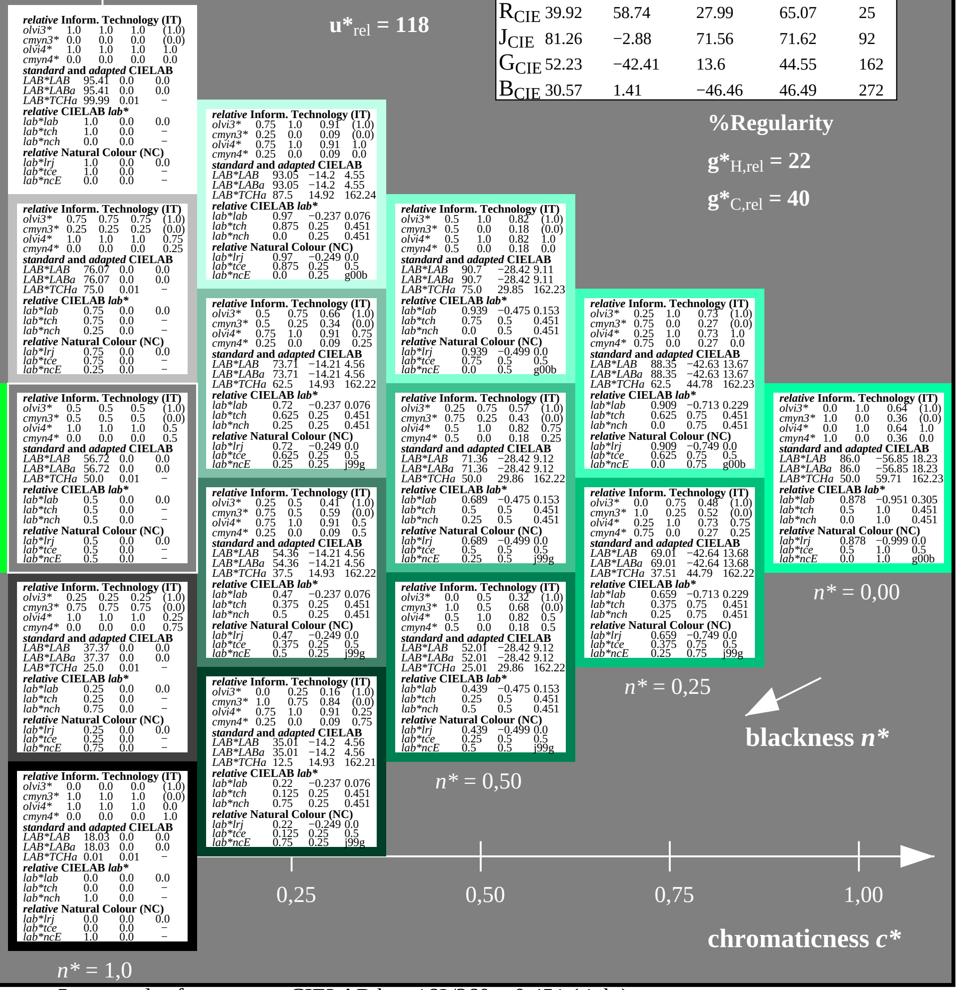
triangle lightness *t**



%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



NE500−7, 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

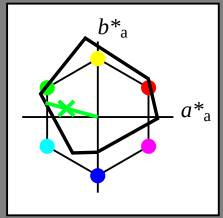
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness *t**



%Gamut

u^*_{rel} = 101

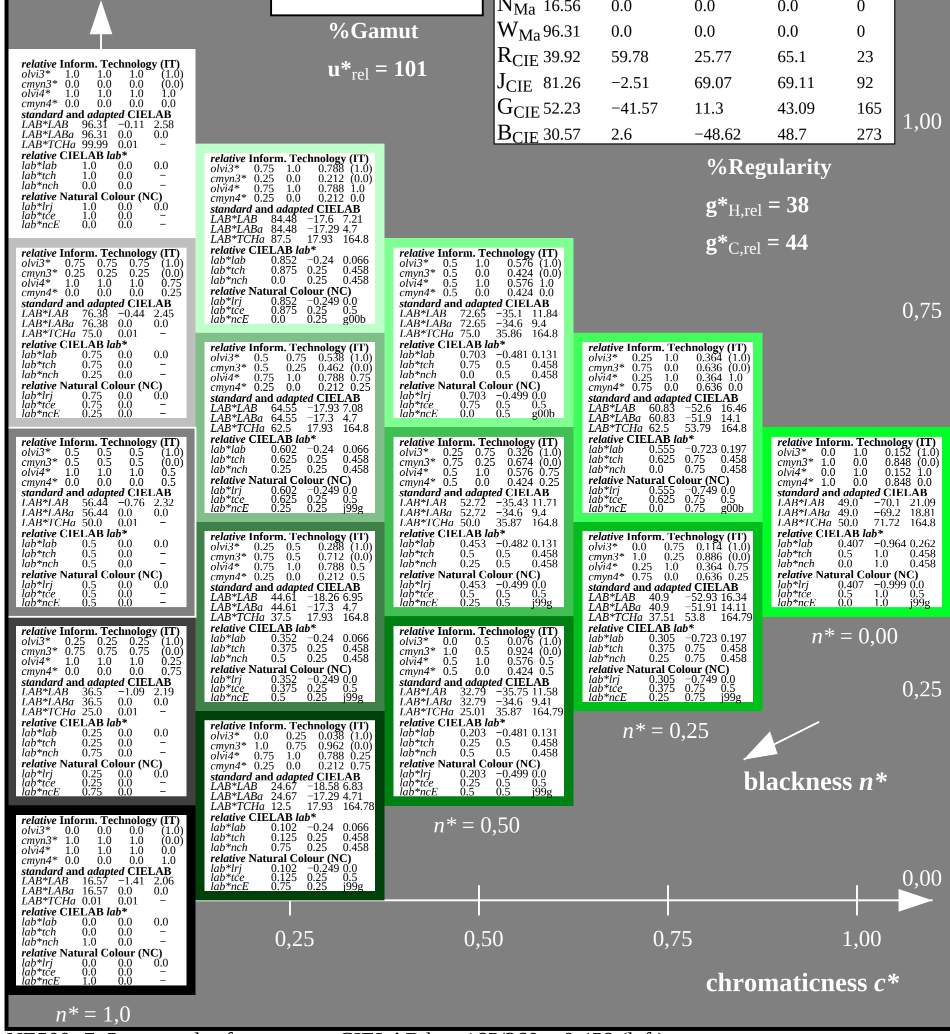
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h** = *lab*h* = 162/360 = 0.451

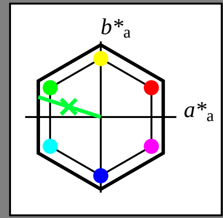
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t**



%Gamut

u^*_{rel} = 152

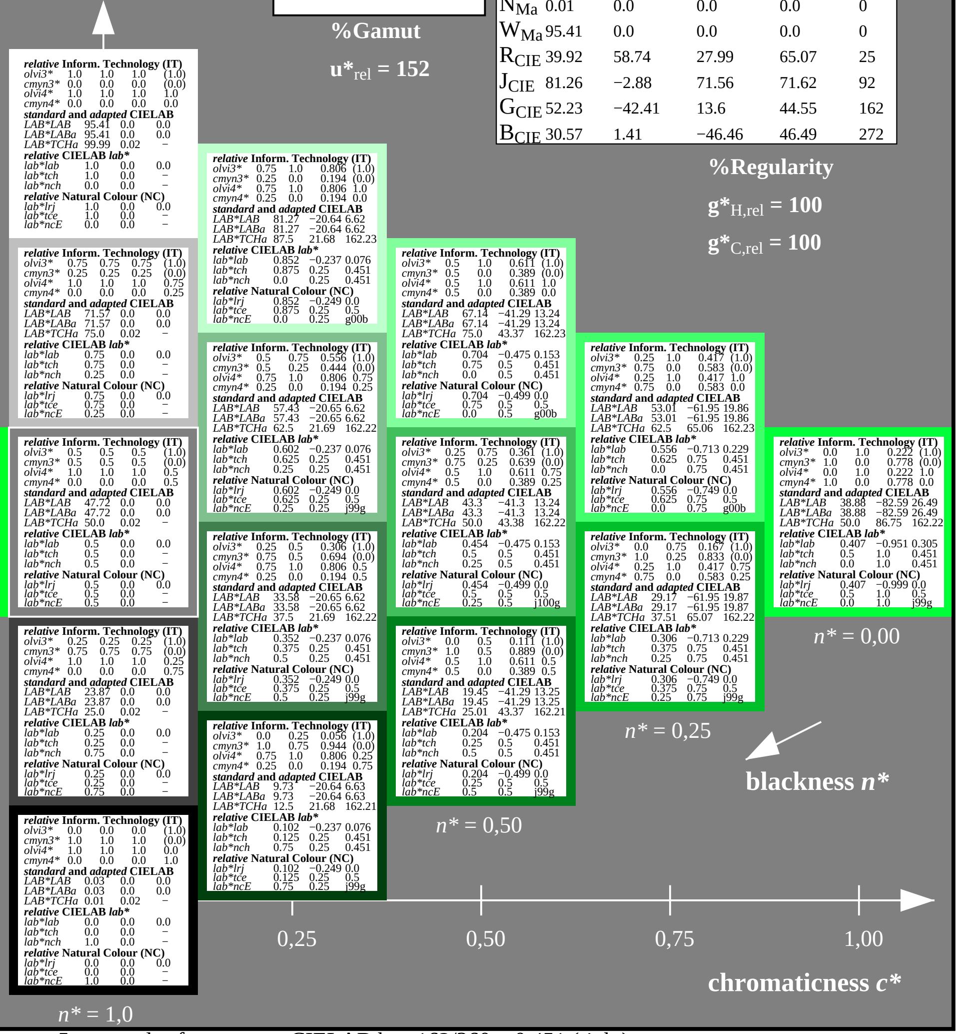
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



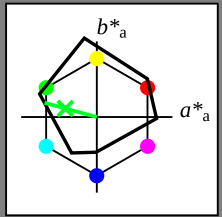
NE500−7, 5 step scales for constant CIELAB hue 165/360 = 0.458 (left)

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

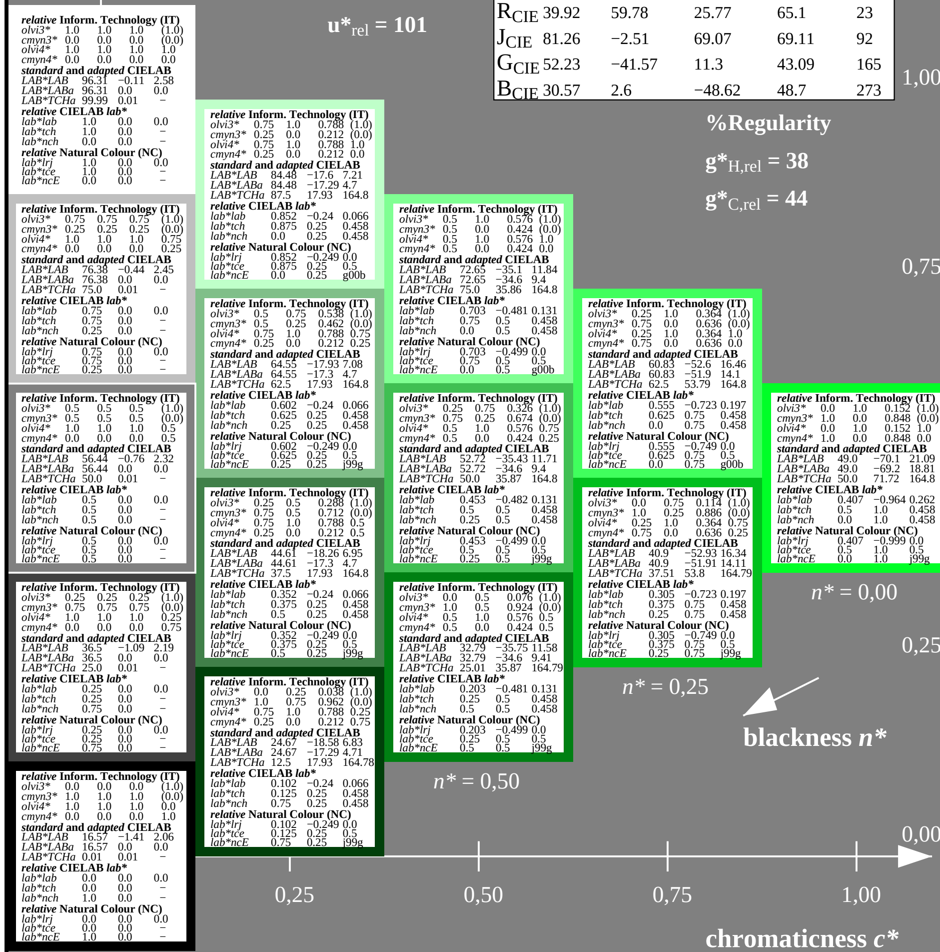
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

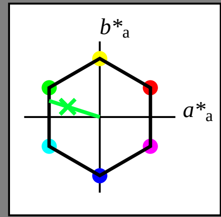
$g^*_{C,rel}$ = 44



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

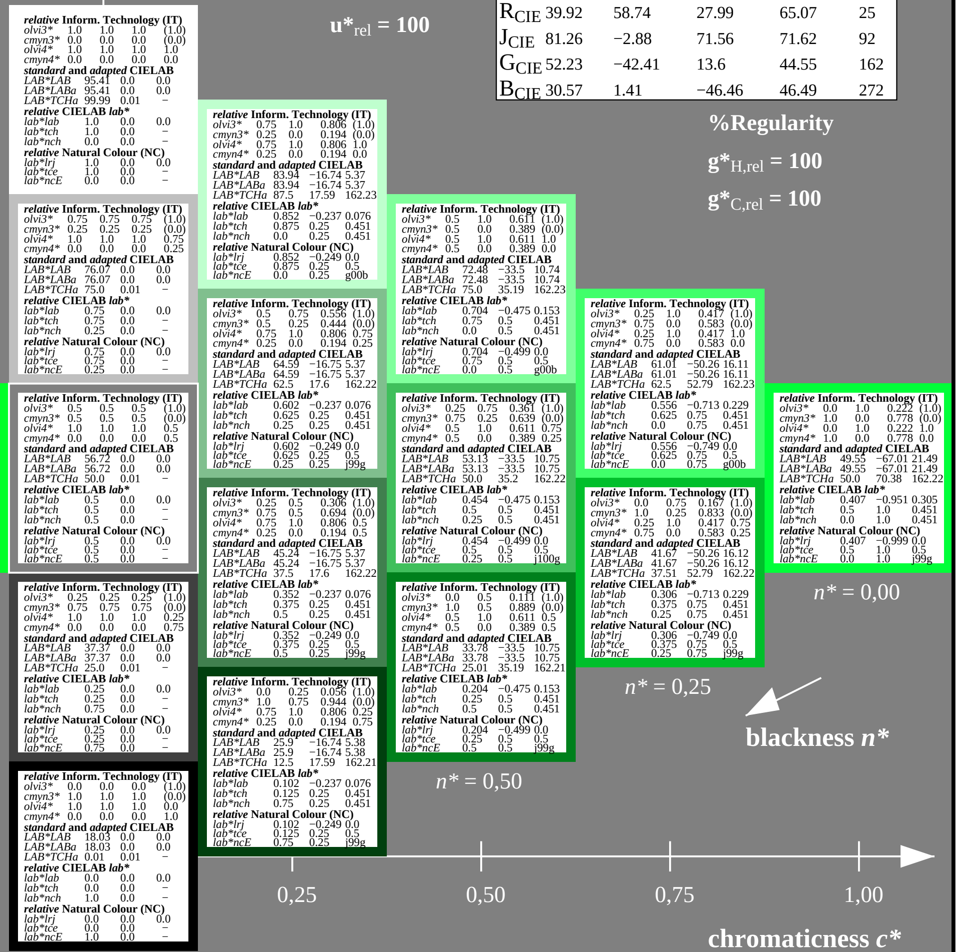
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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*

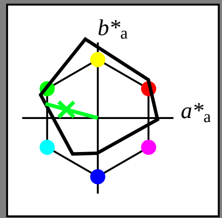
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness *t*



%Gamut

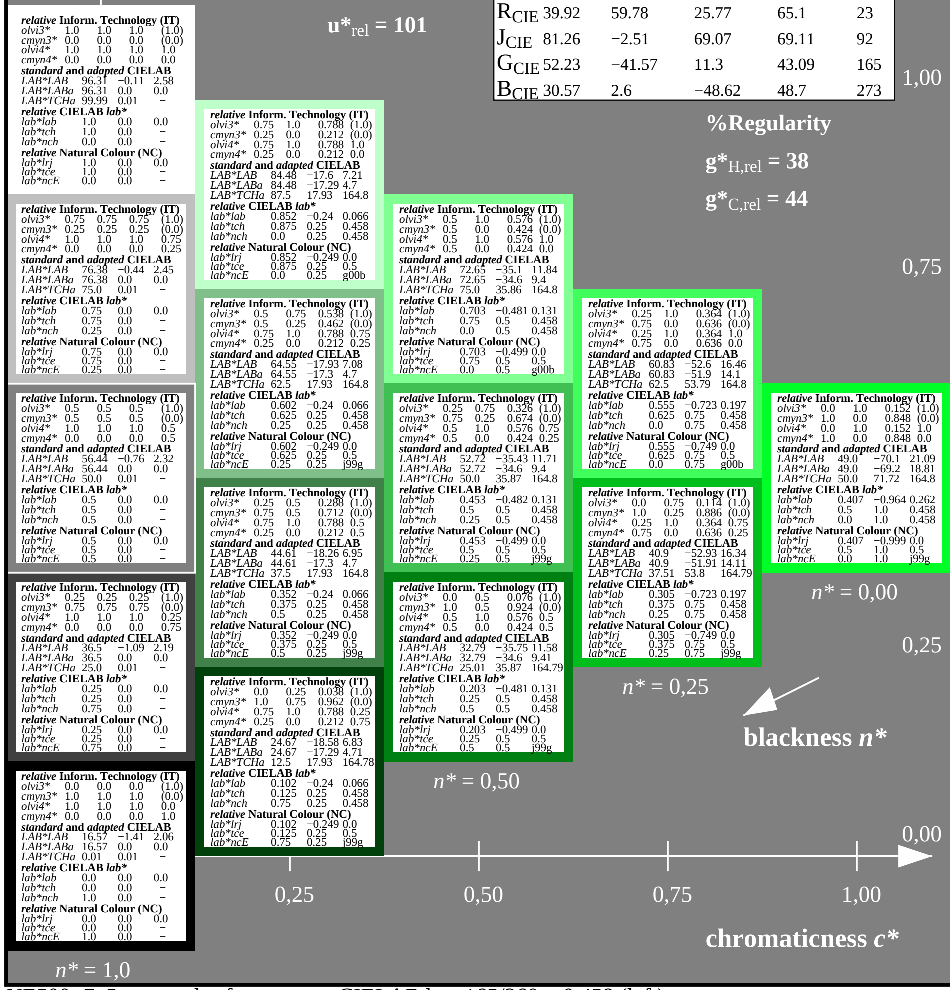
u^*_{rel} = 101

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



Output: Colorimetric Standard Reflective System SRS18

for hue *h* = lab*h = 162/360 = 0.451*

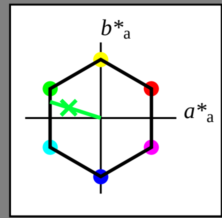
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

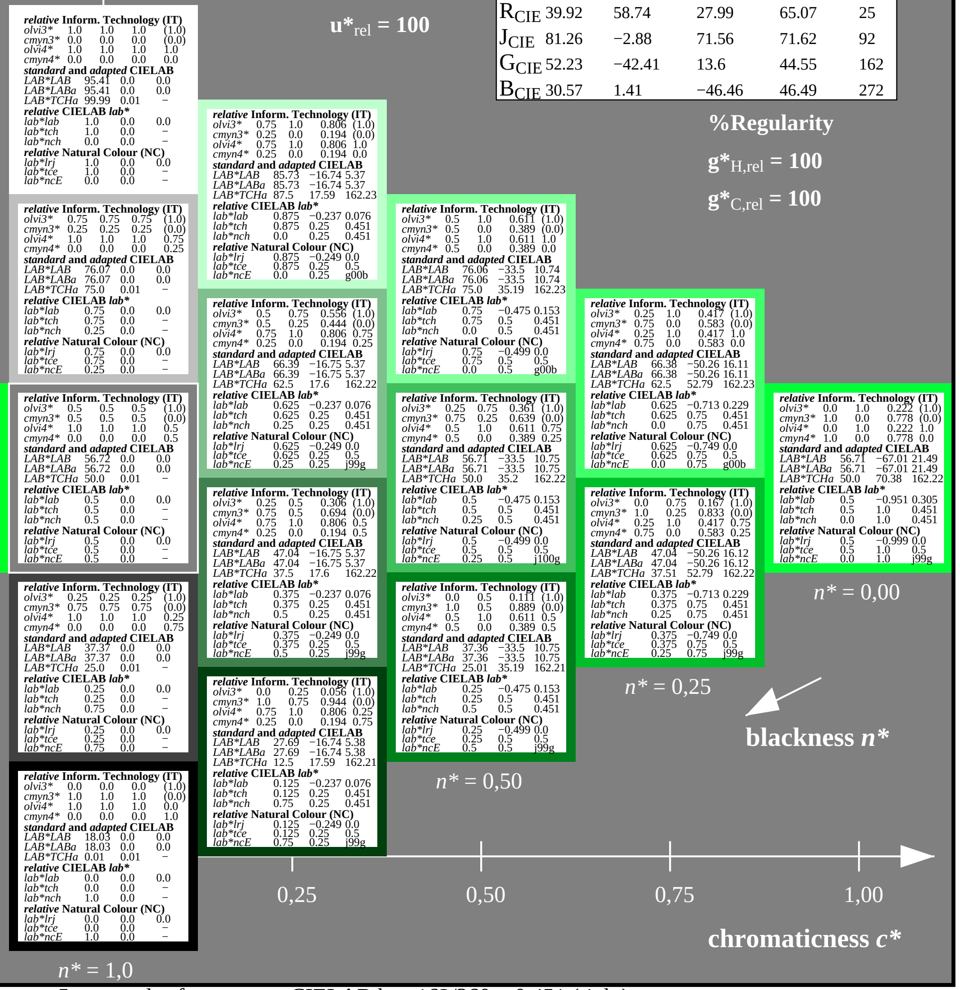
u^*_{rel} = 100

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



NE500−7, 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*

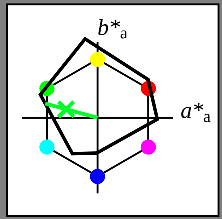
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness *t*



%Gamut

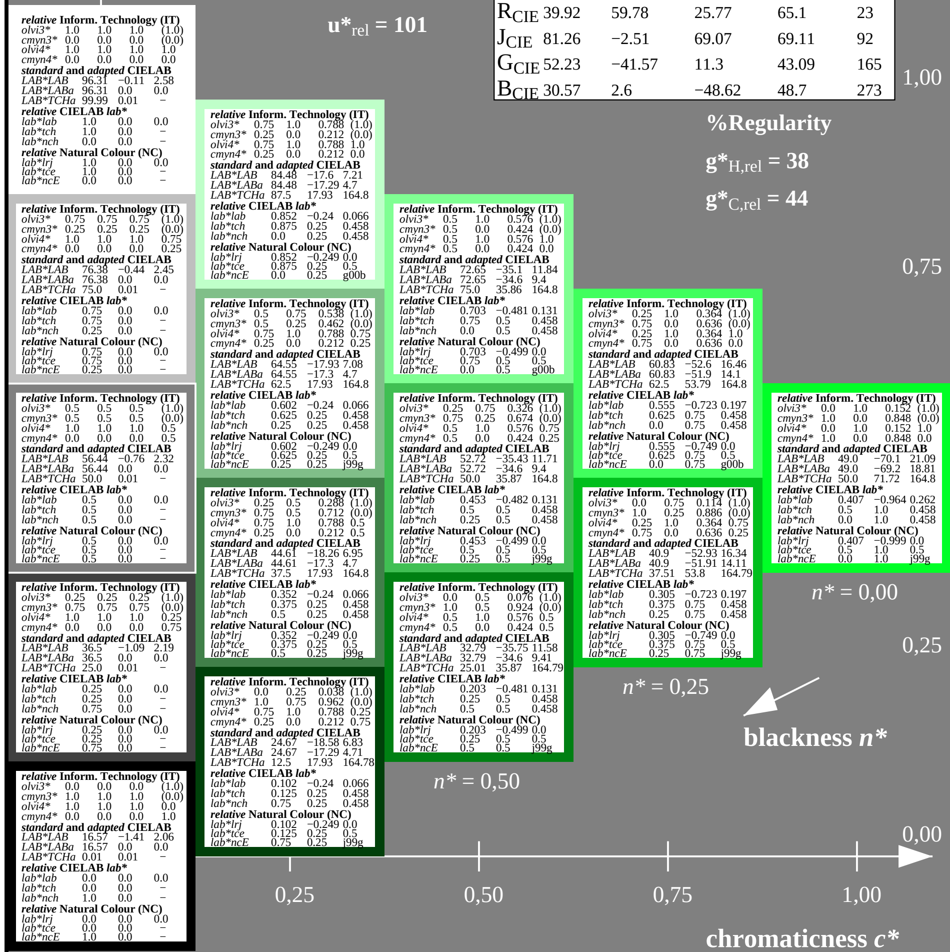
u^*_{rel} = 101

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



Output: Colorimetric Television Luminous System TLS70

for hue *h** = *lab*h* = *162/360* = *0.451*

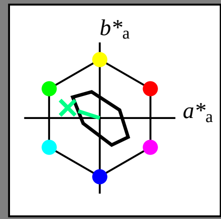
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t*



%Gamut

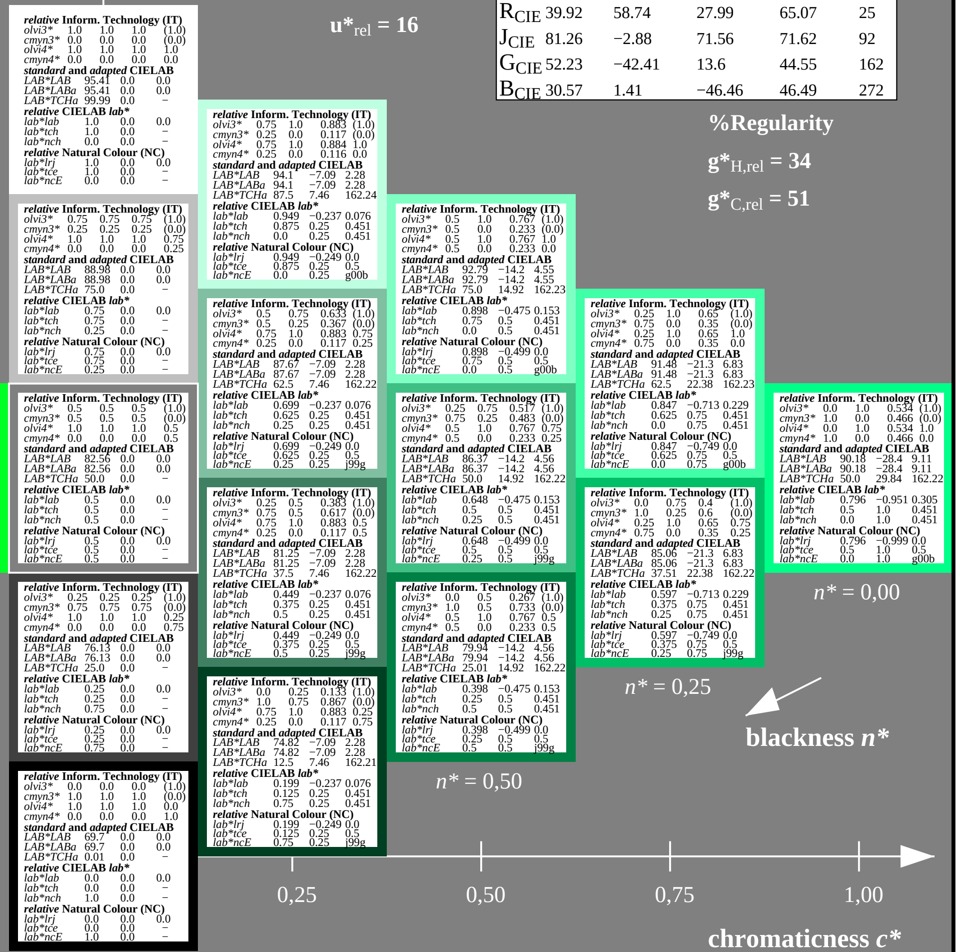
u^*_{rel} = 16

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



NE500−7, 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 Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

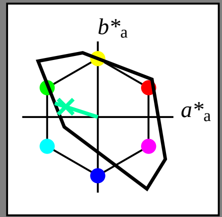
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

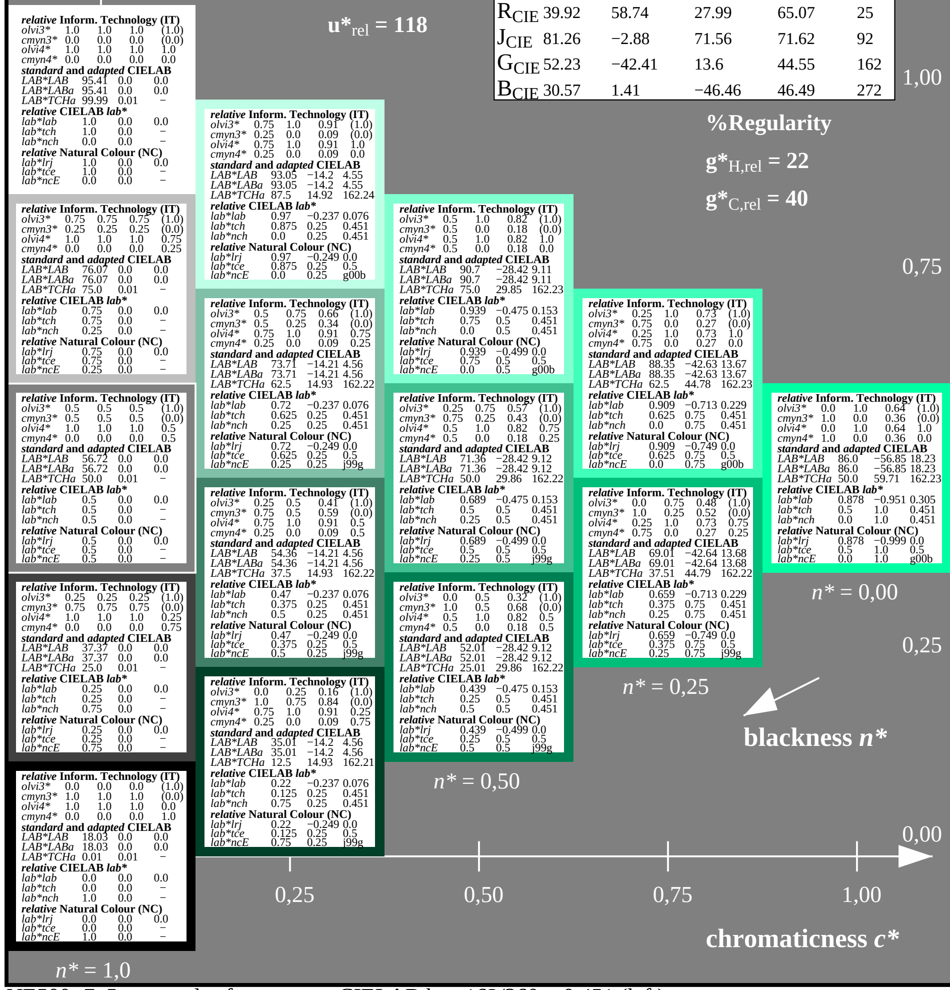
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$

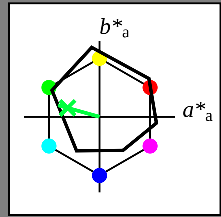
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

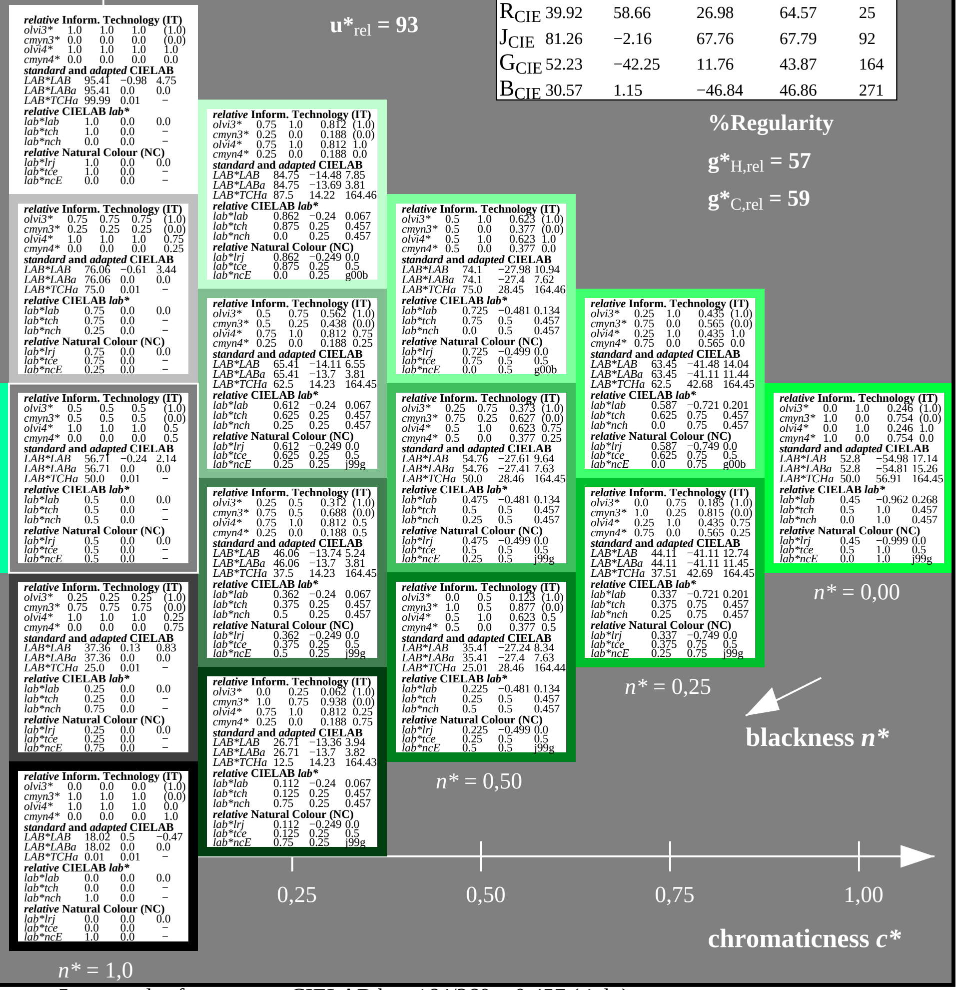
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

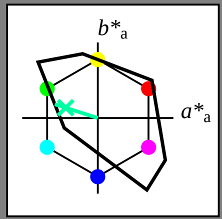


NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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*

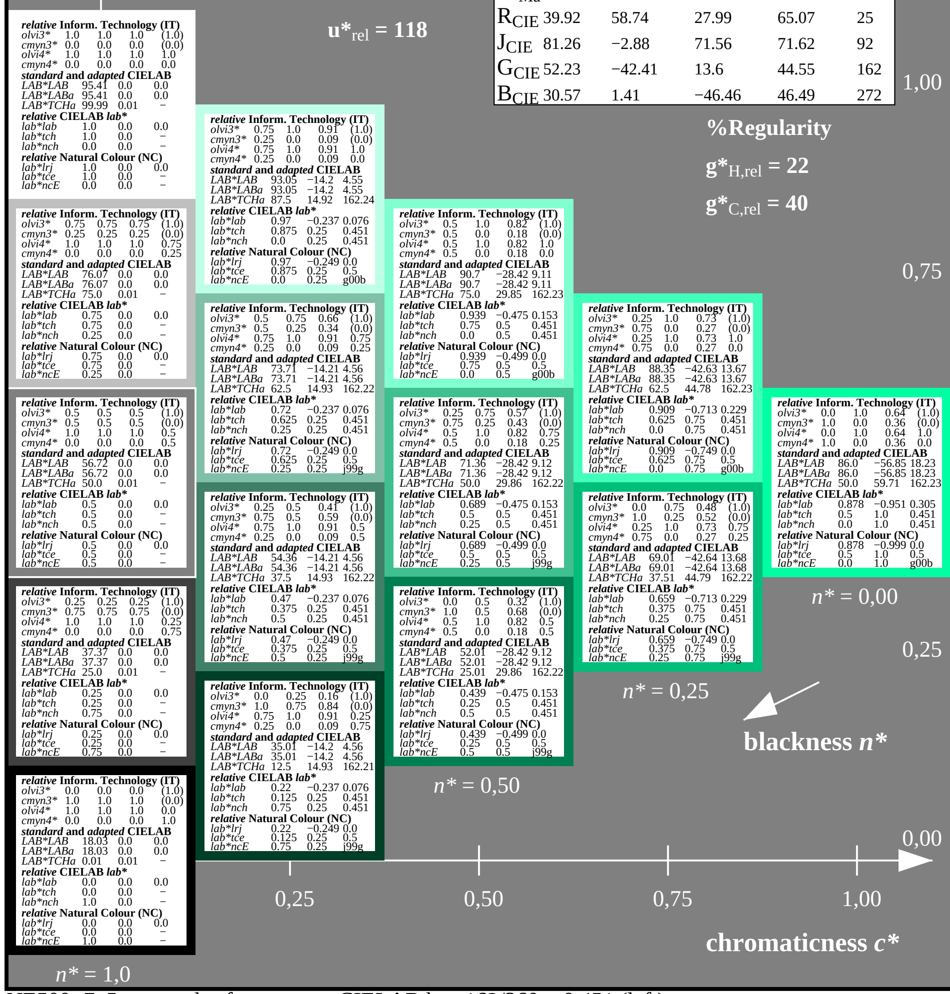
D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64
triangle lightness *t**



%Gamut
u^*_{rel} = 118

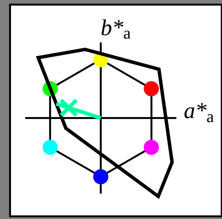
TLS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	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 = 162/360 = 0.451*
*lab*tch* and *lab*nch*

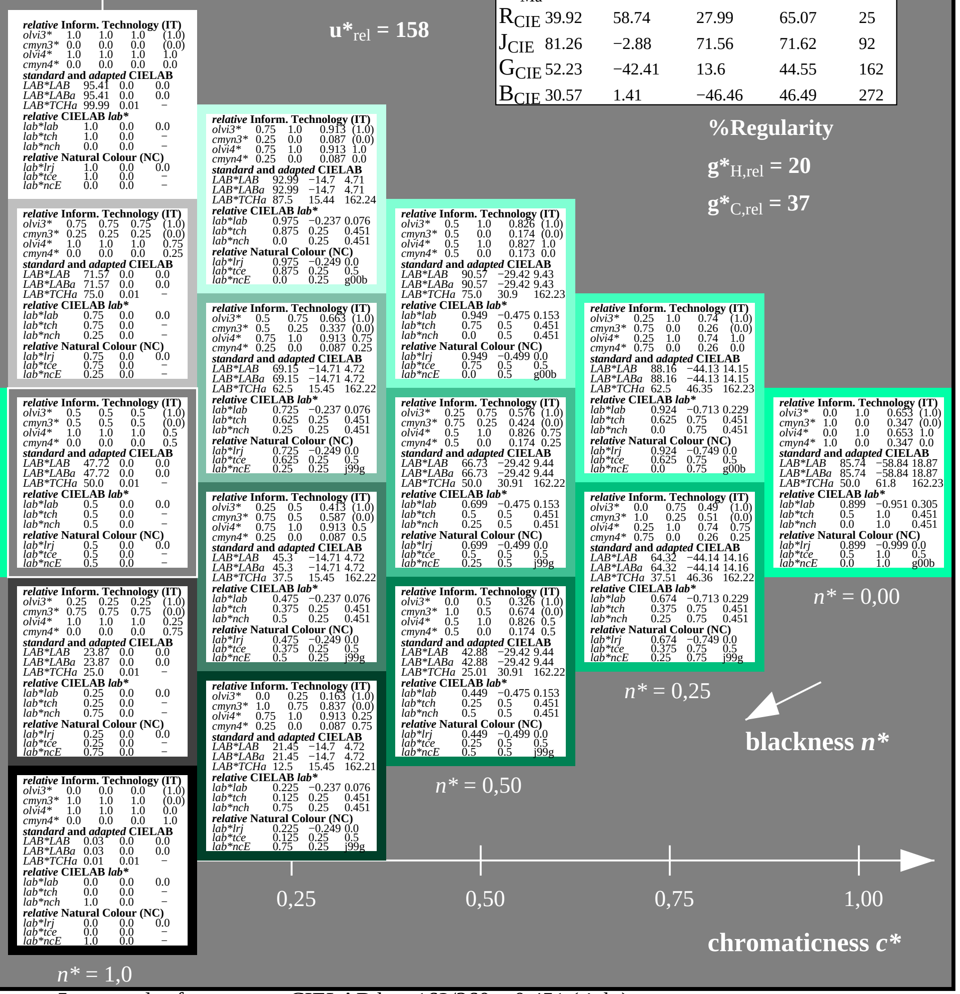
D65: hue G
LCH*Ma: 86 62 162
olv*Ma: 0.0 1.0 0.65
triangle lightness *t**



%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



NE500−7, 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 TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

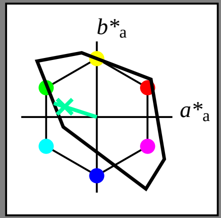
*lab*tch and lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

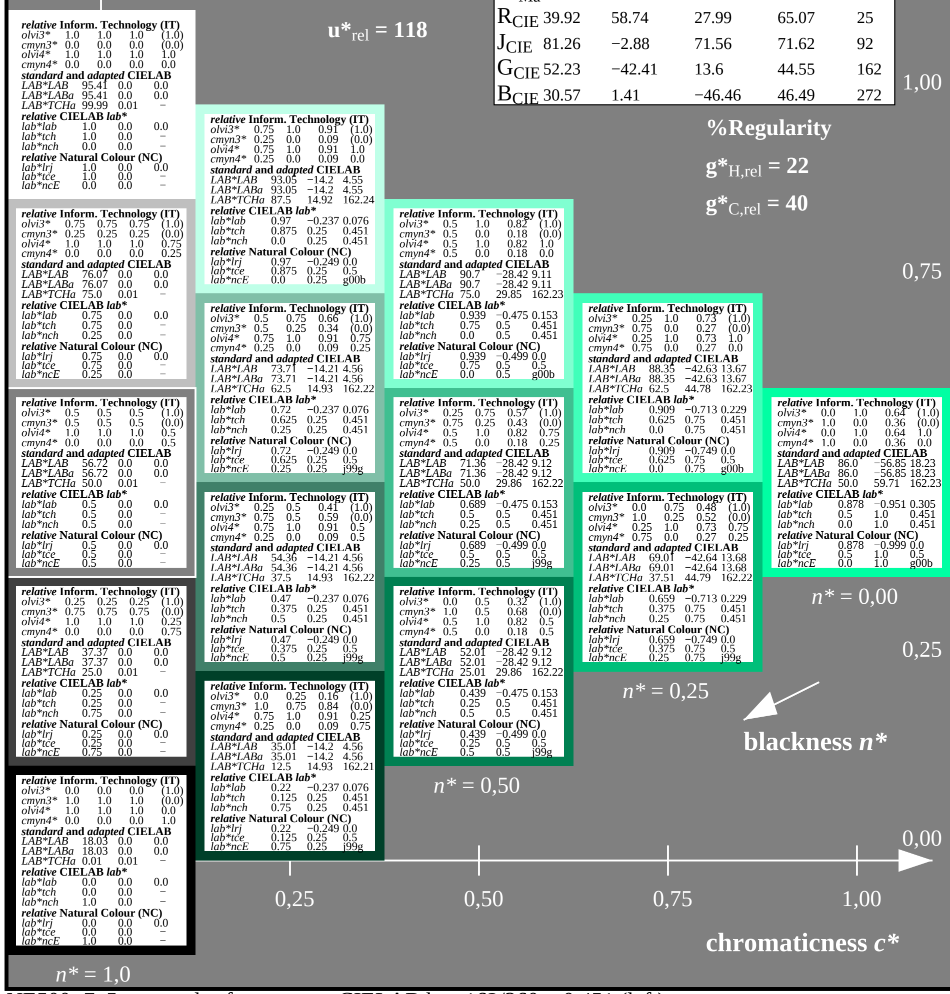
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 165/360 = 0.458$

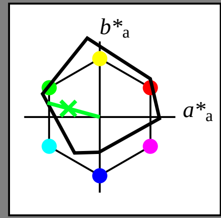
*lab*tch and lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

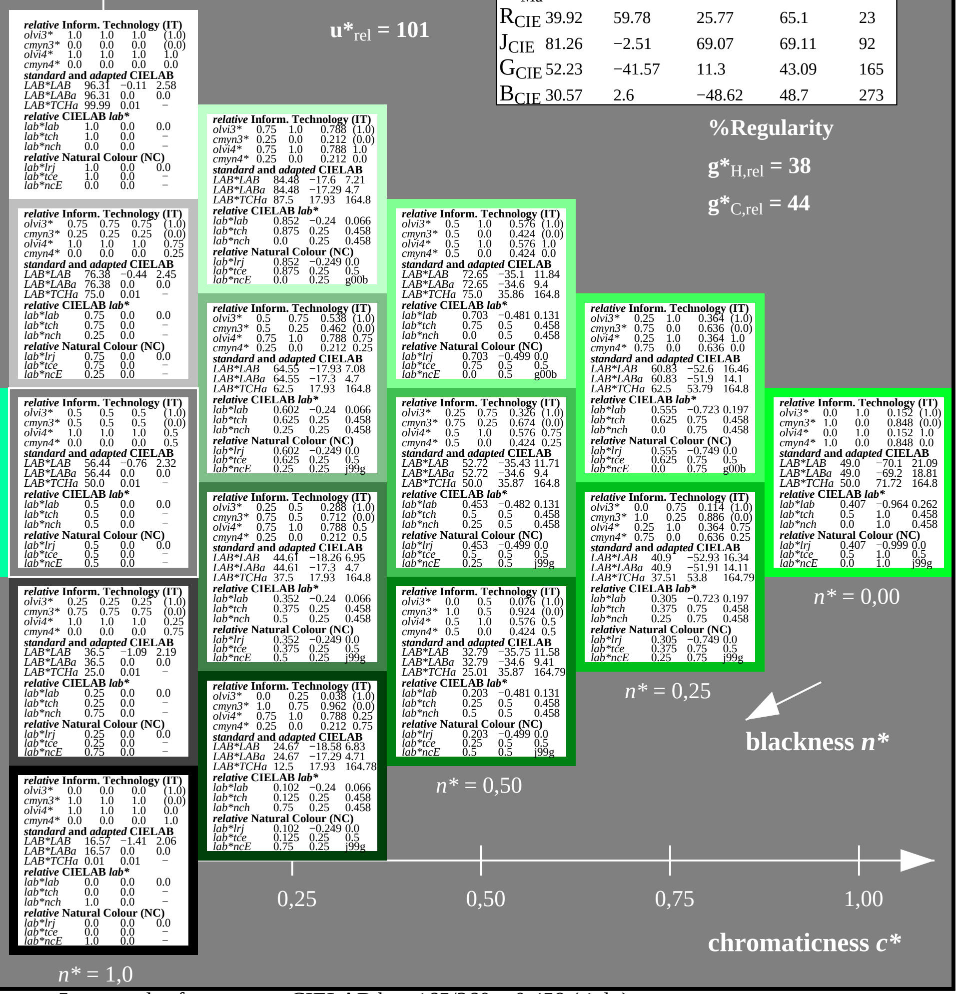
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



NE500−7, 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 TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

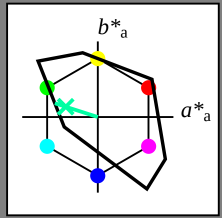
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t**



%Gamut

u^*_{rel} = 118

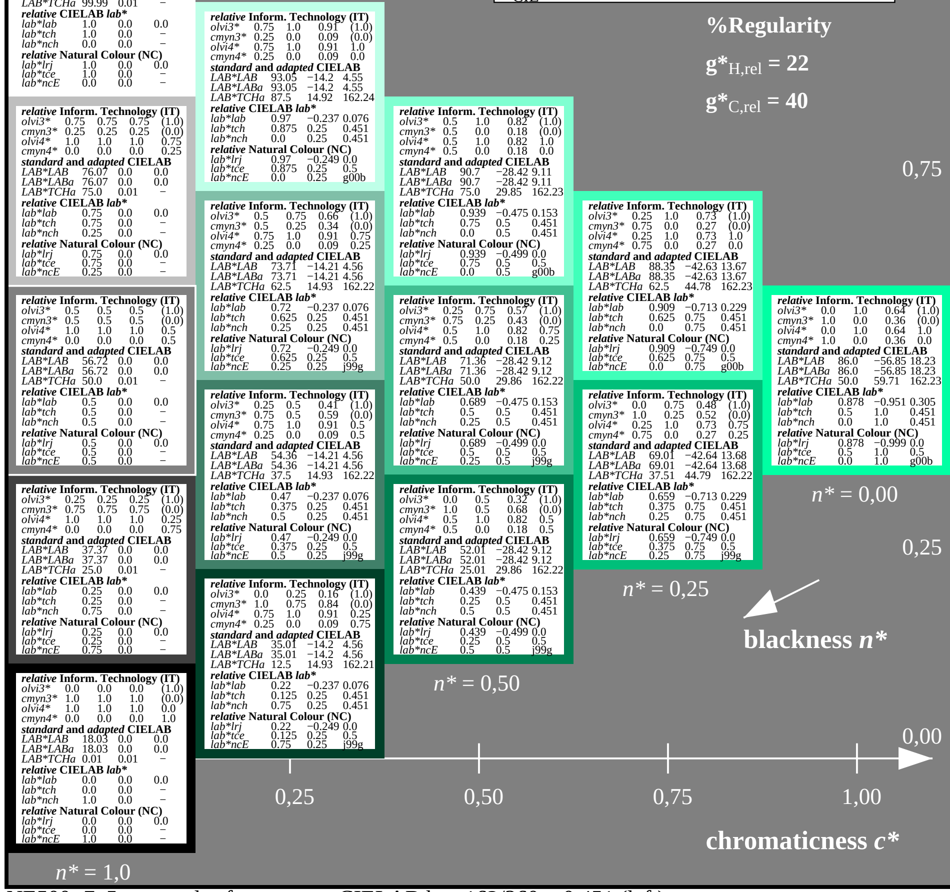
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

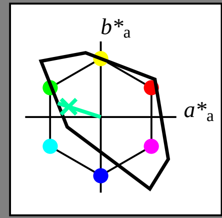
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t**



%Gamut

u^*_{rel} = 118

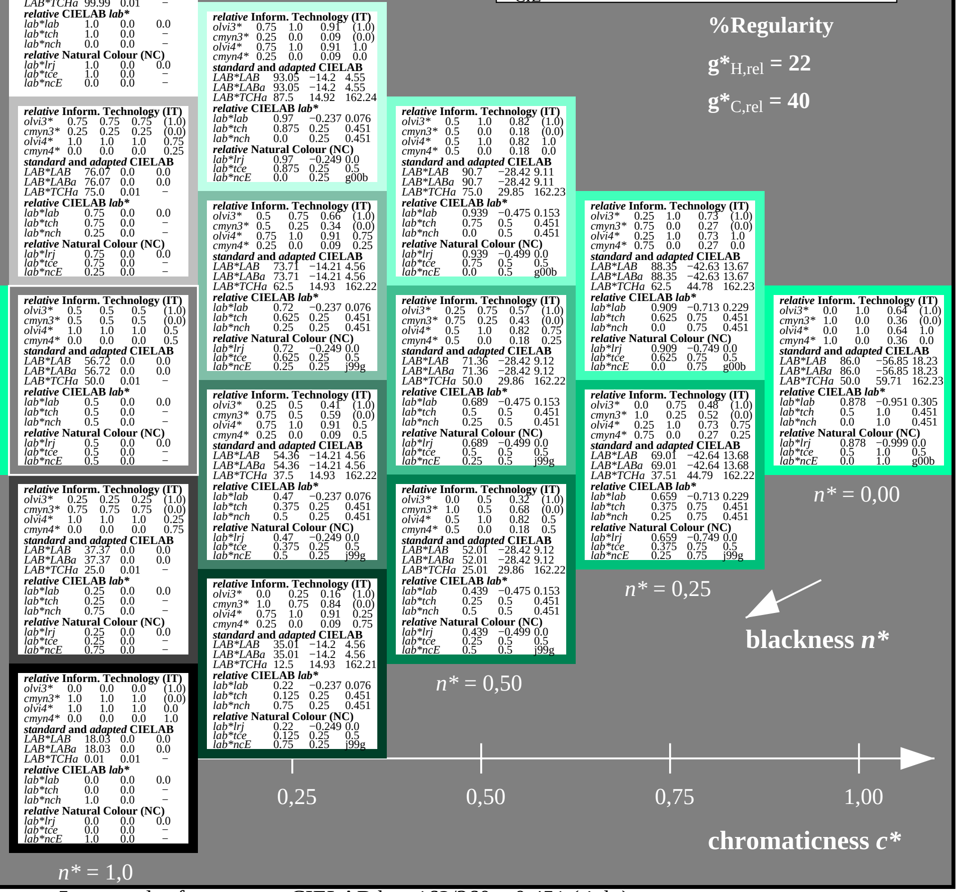
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



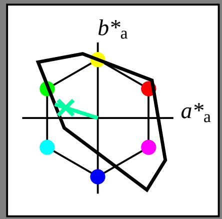
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric Television Luminous System 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*

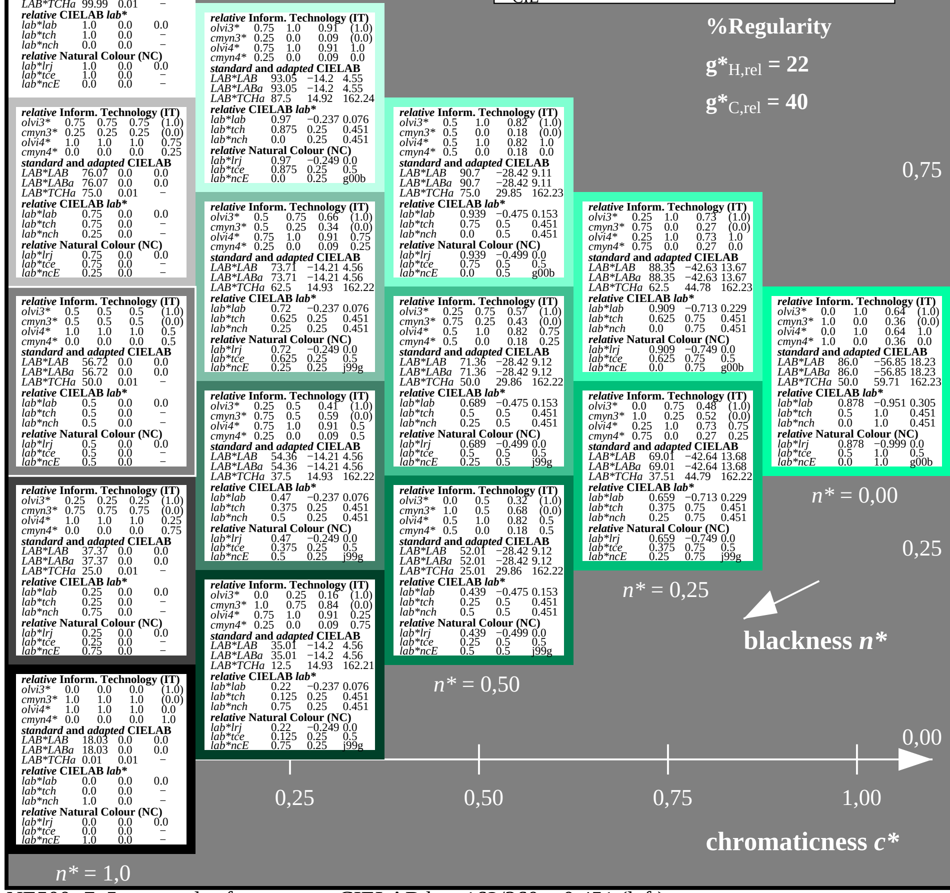


%Gamut
u^*_{rel} = 118

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

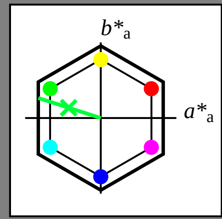
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



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*

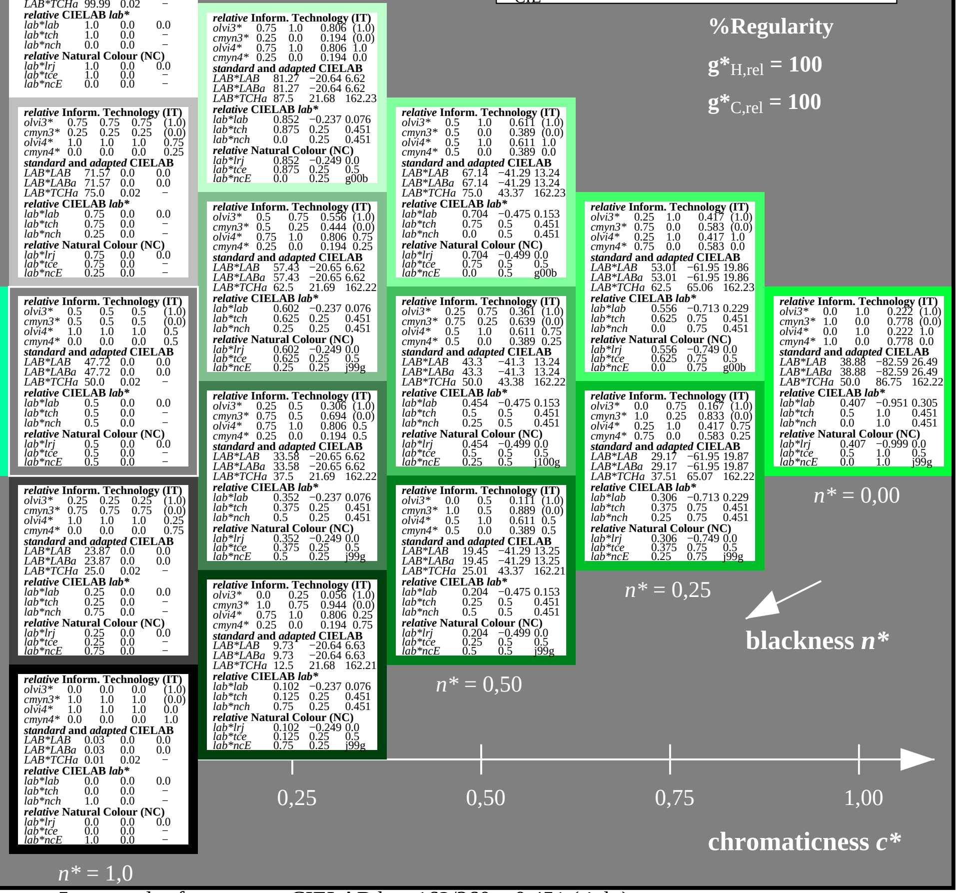


%Gamut
u^*_{rel} = 152

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



NE500−7, 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 TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

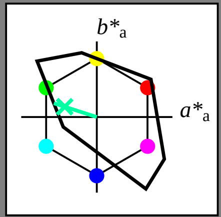
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

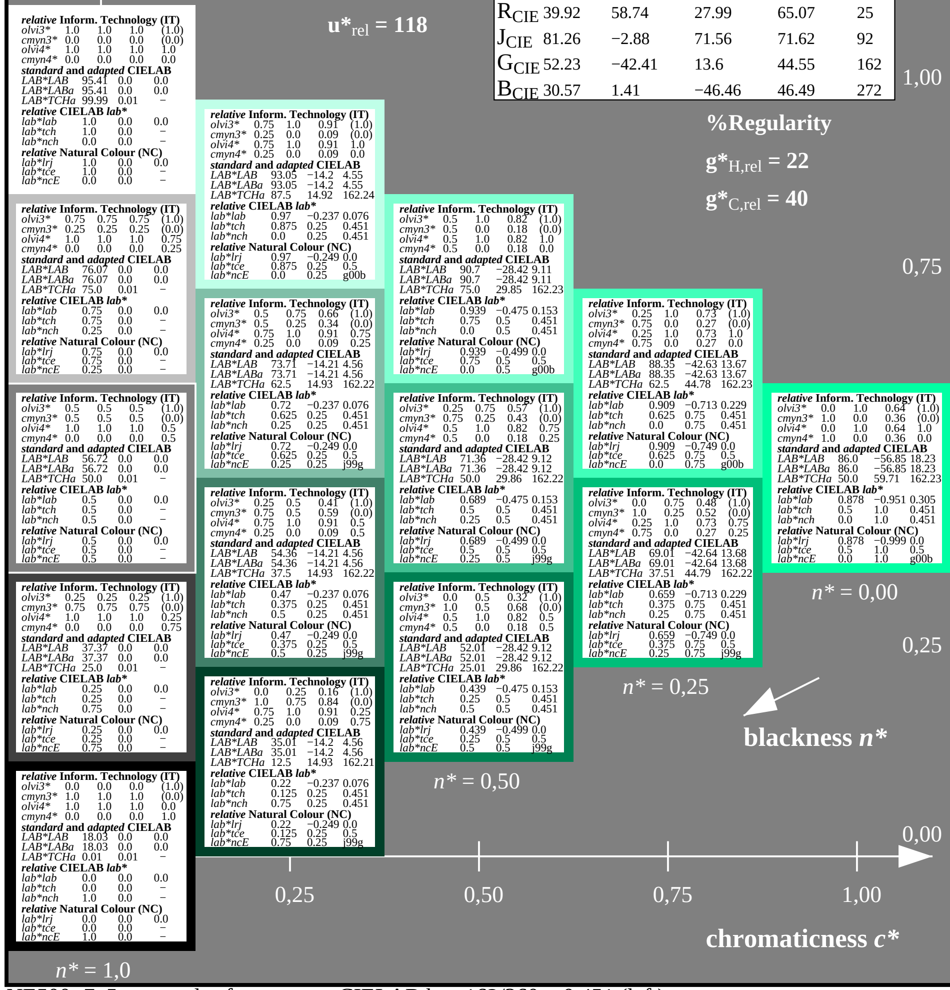
$u^*_{rel} = 118$

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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

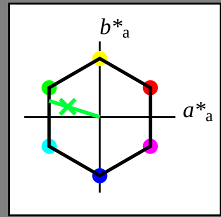
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

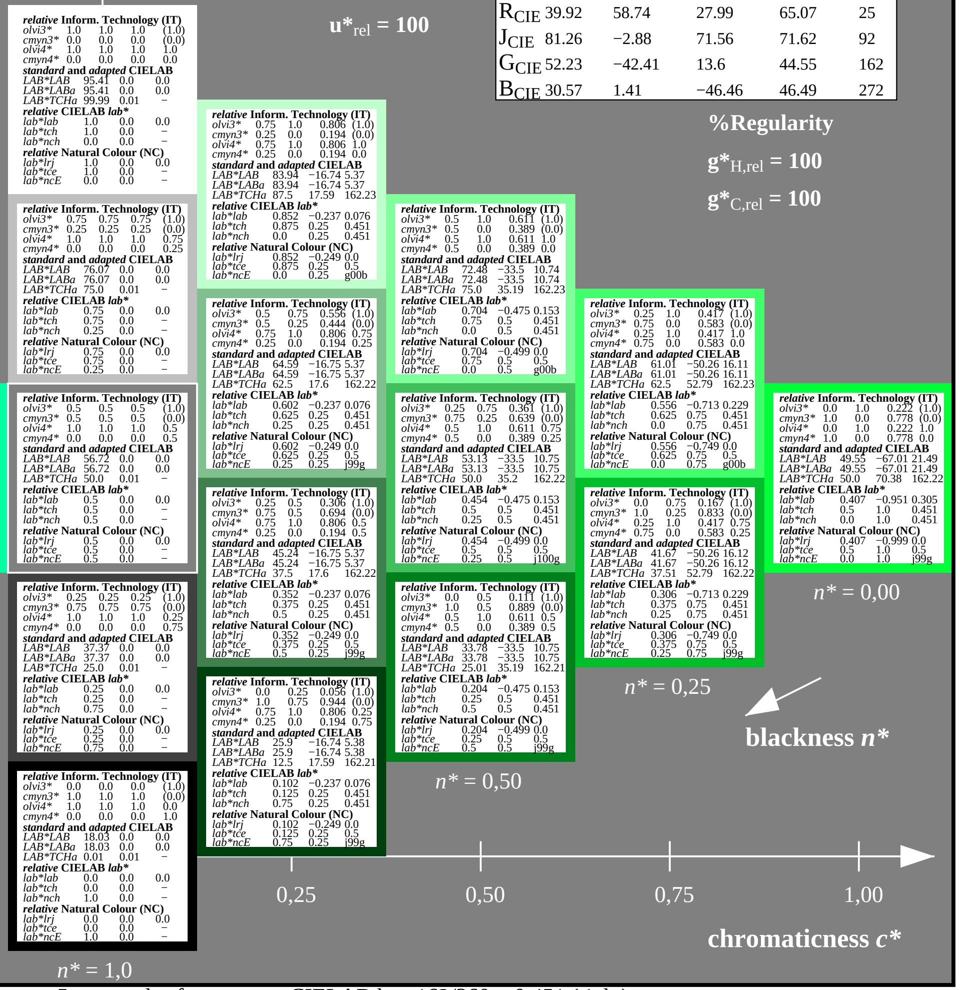
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 TLS18

for hue *h = *lab*h* = 162/360 = 0.451**

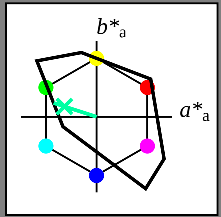
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t*



%Gamut

u^*_{rel} = 118

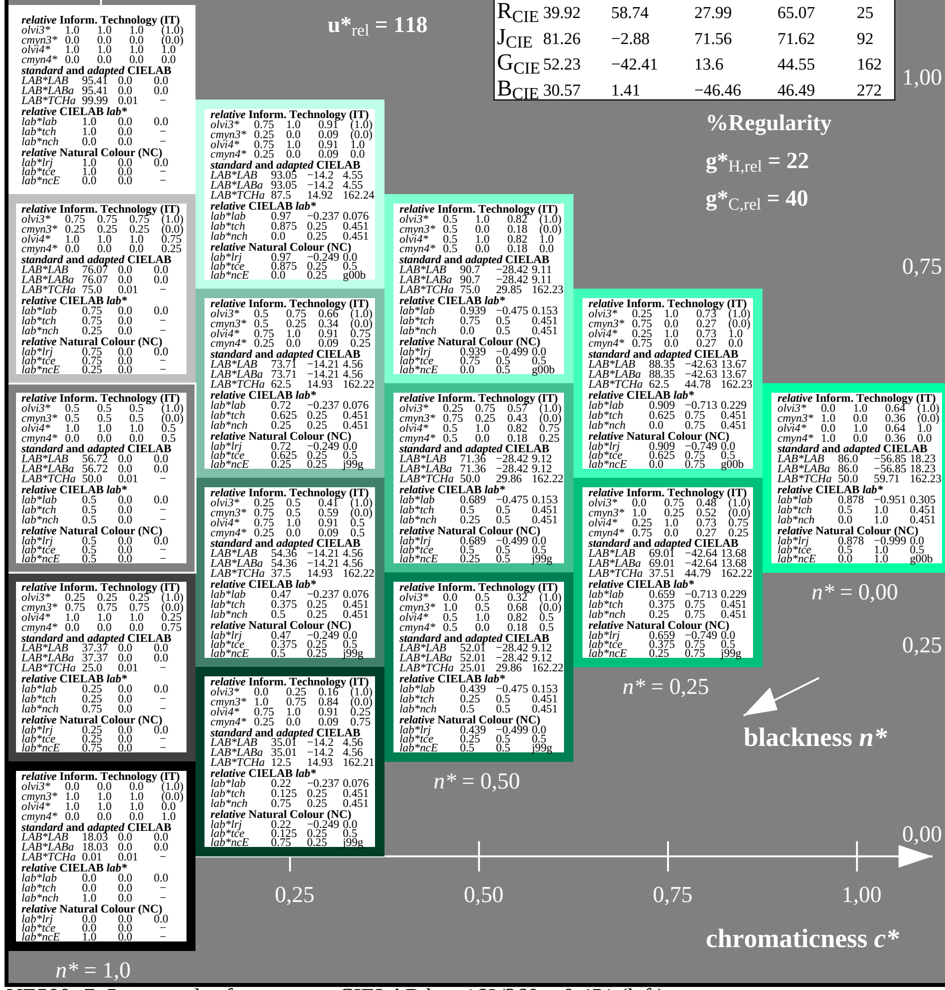
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Standard Reflective System SRS18

for hue *h = *lab*h* = 162/360 = 0.451**

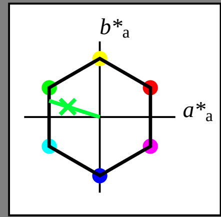
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 100

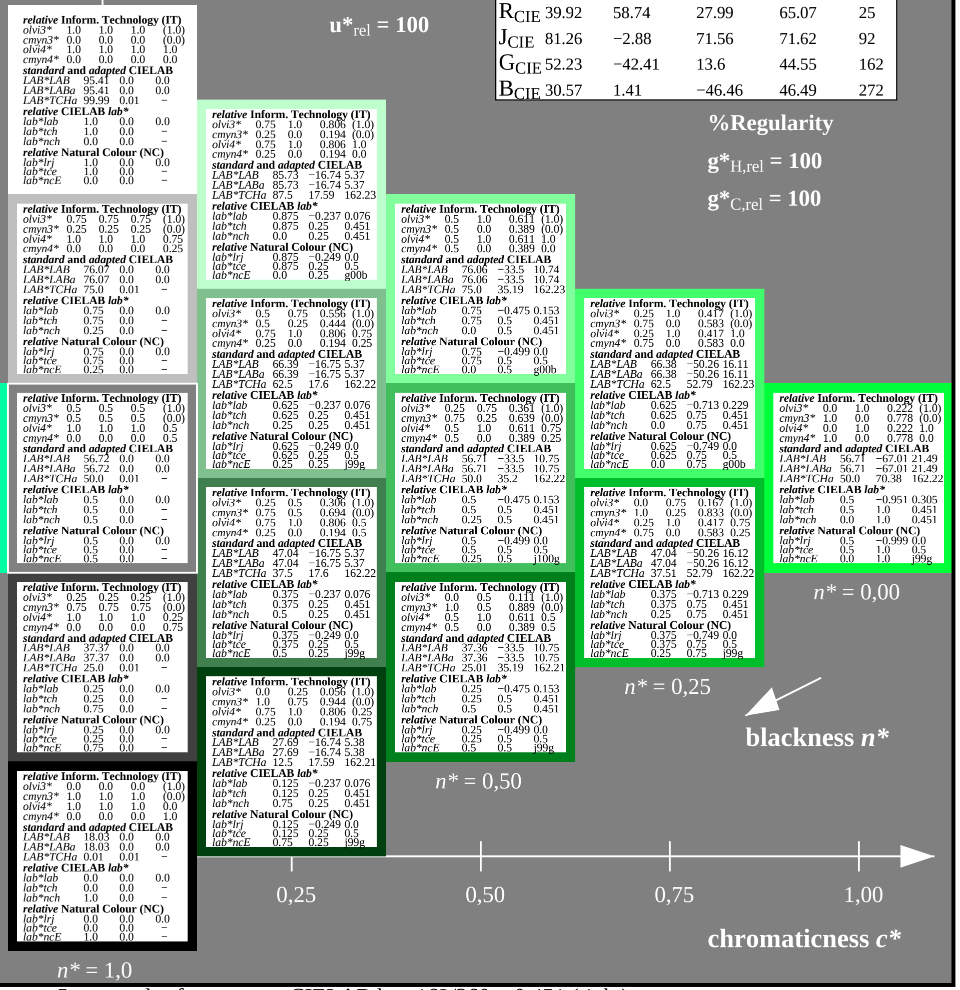
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

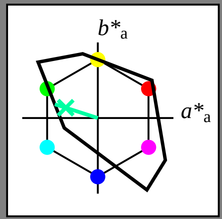
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

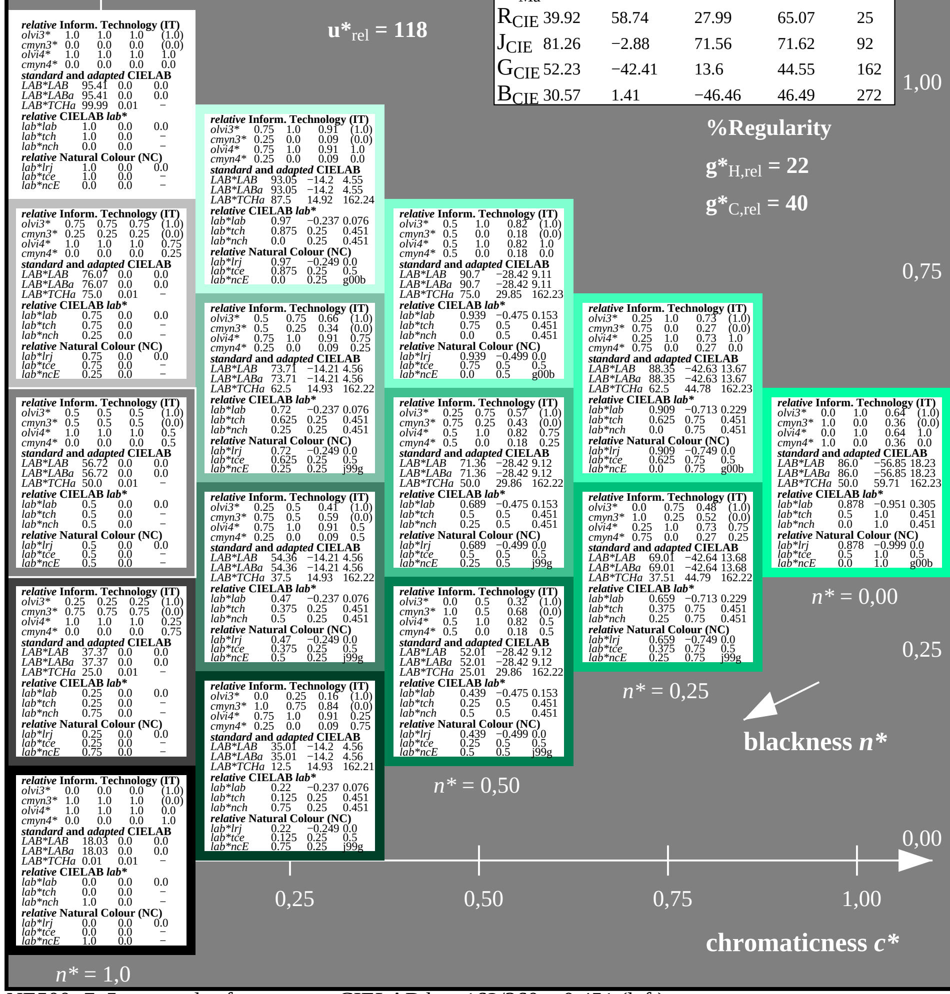
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

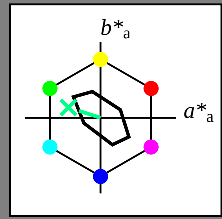
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

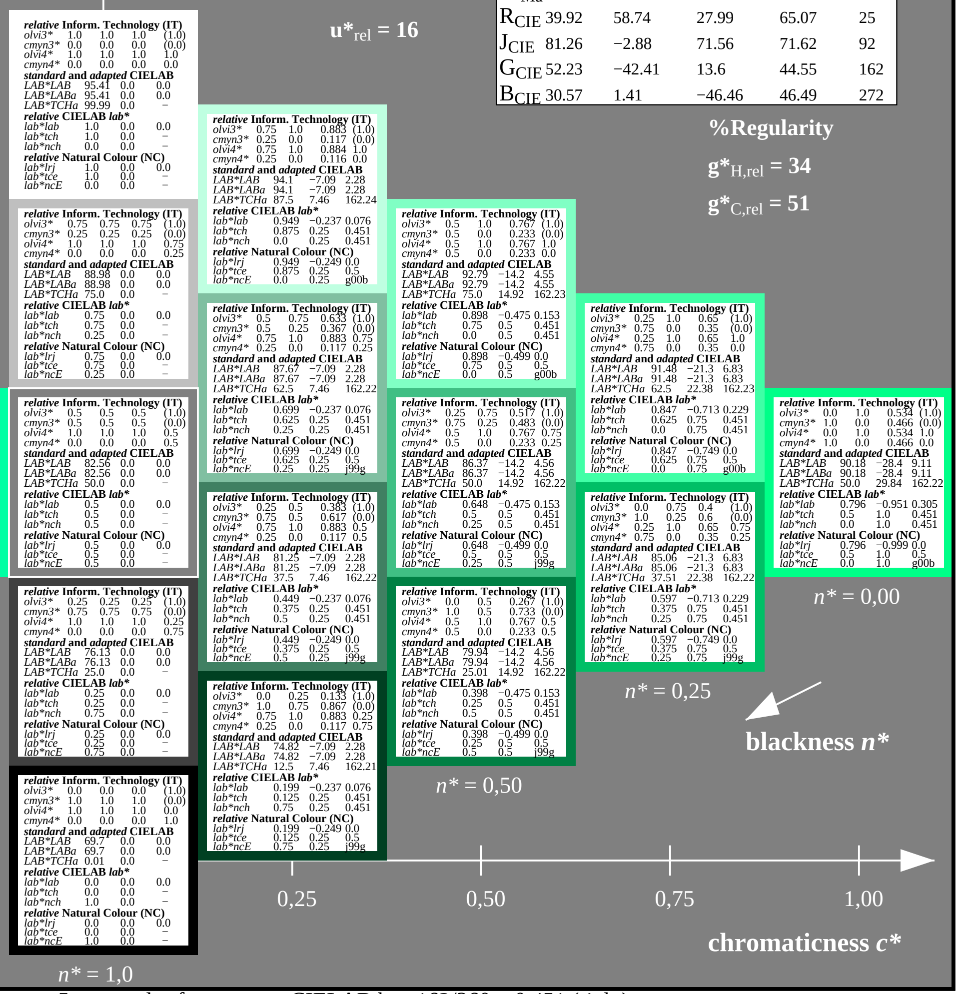
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

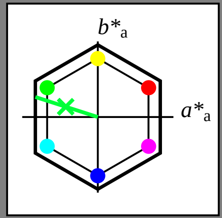
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

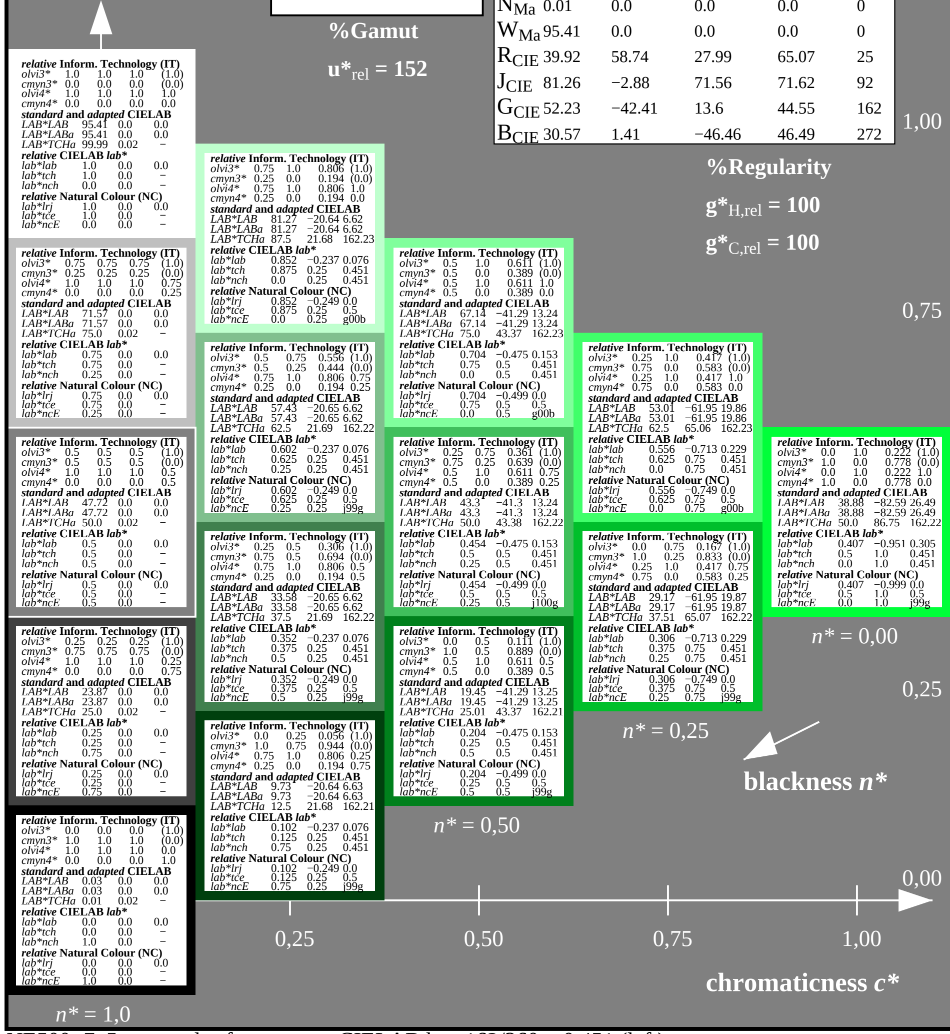
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 164/360 = 0.457$

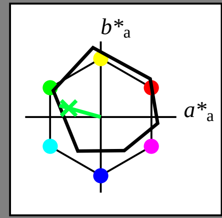
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness *t**



%Gamut

$u^*_{rel} = 93$

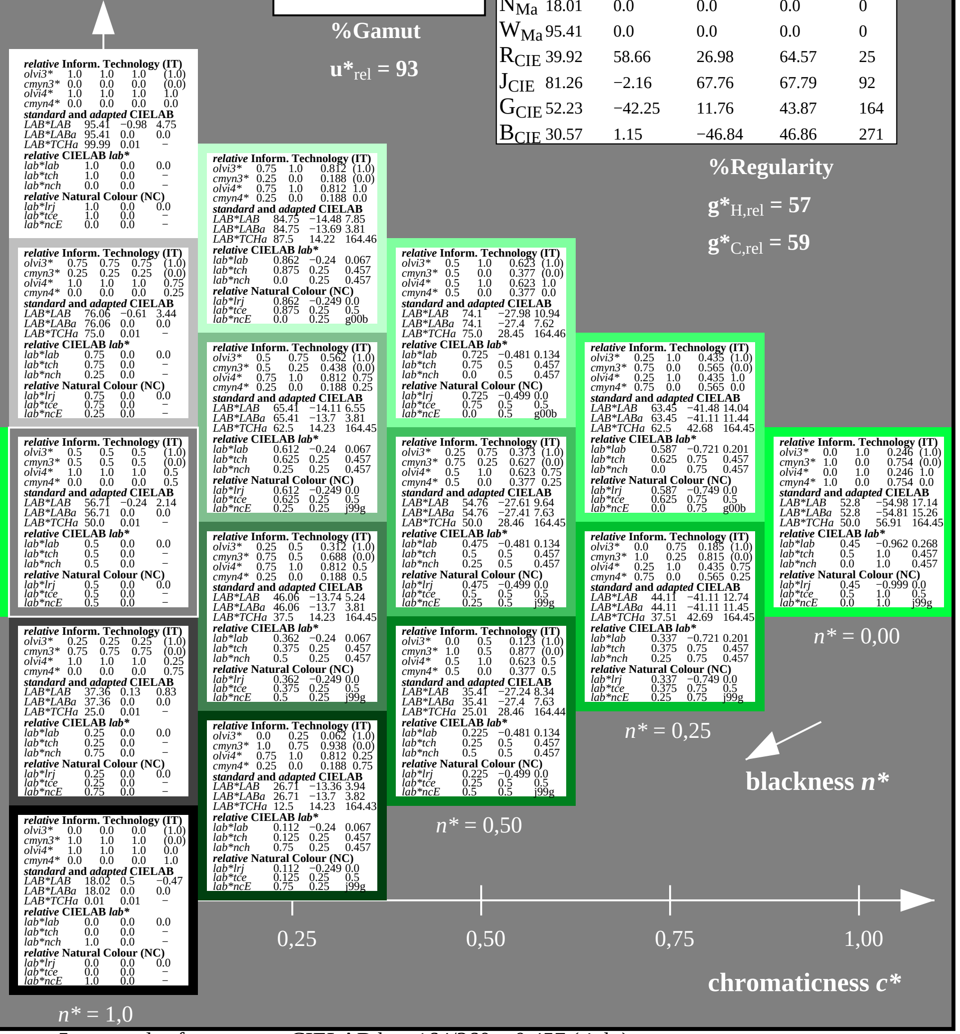
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

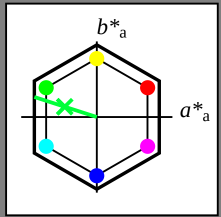
5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

Input: Colorimetric Natural 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*

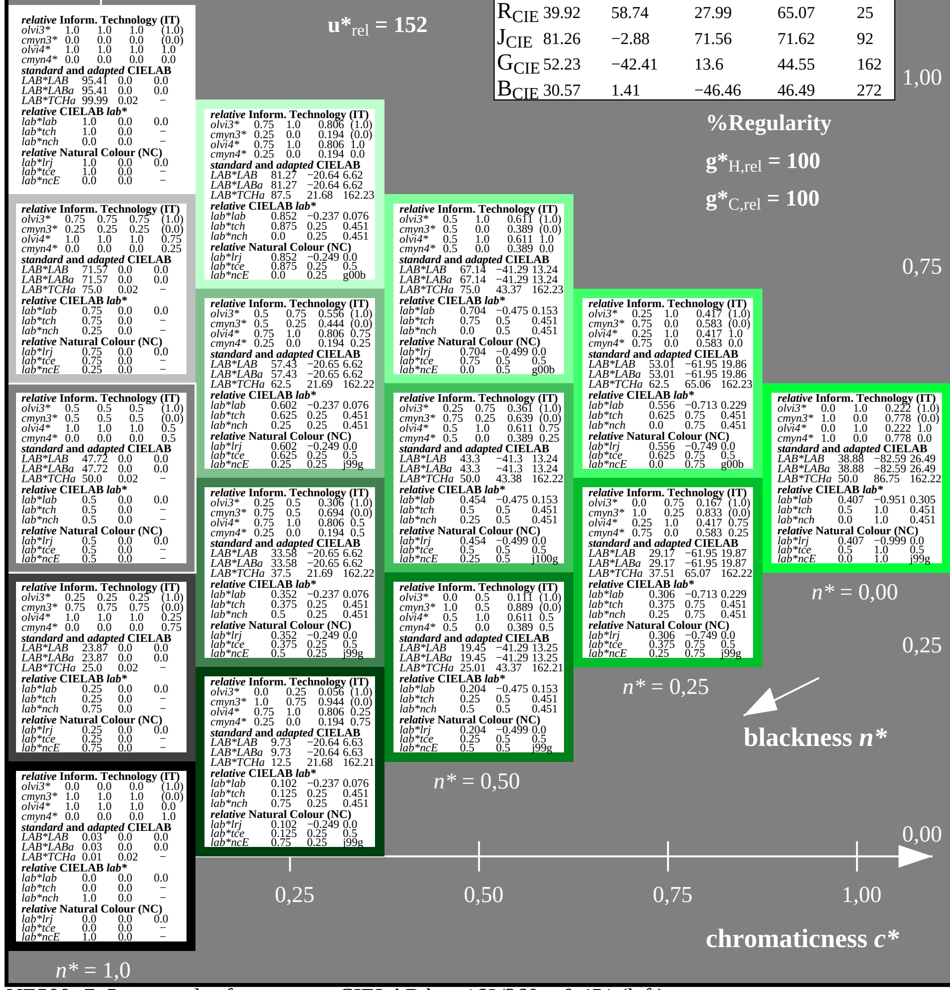


%Gamut
$u^*_{rel} = 152$

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
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$

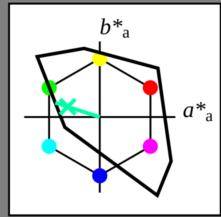


Output: Colorimetric Television Luminous System TLS00

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*

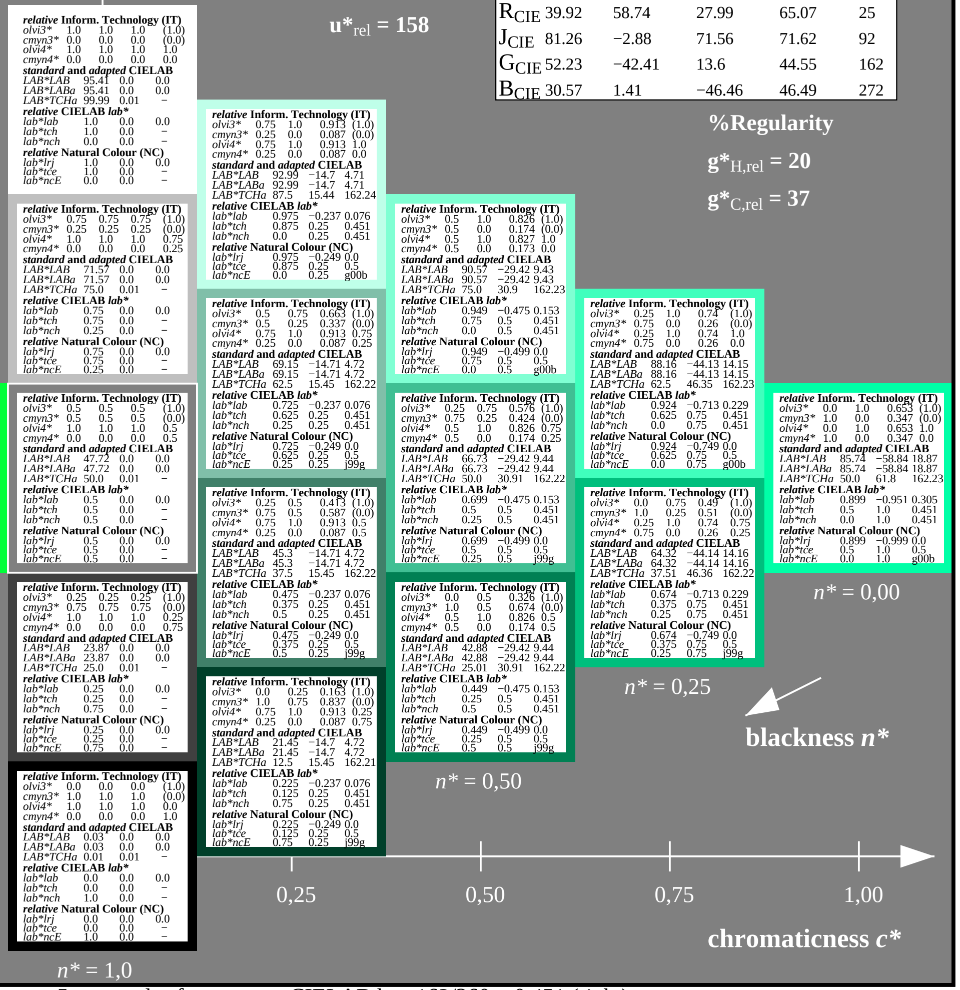


%Gamut
$u^*_{rel} = 158$

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
$g^*_{H,rel} = 20$
$g^*_{C,rel} = 37$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

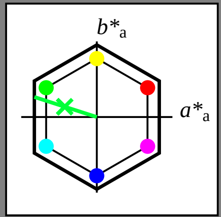
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

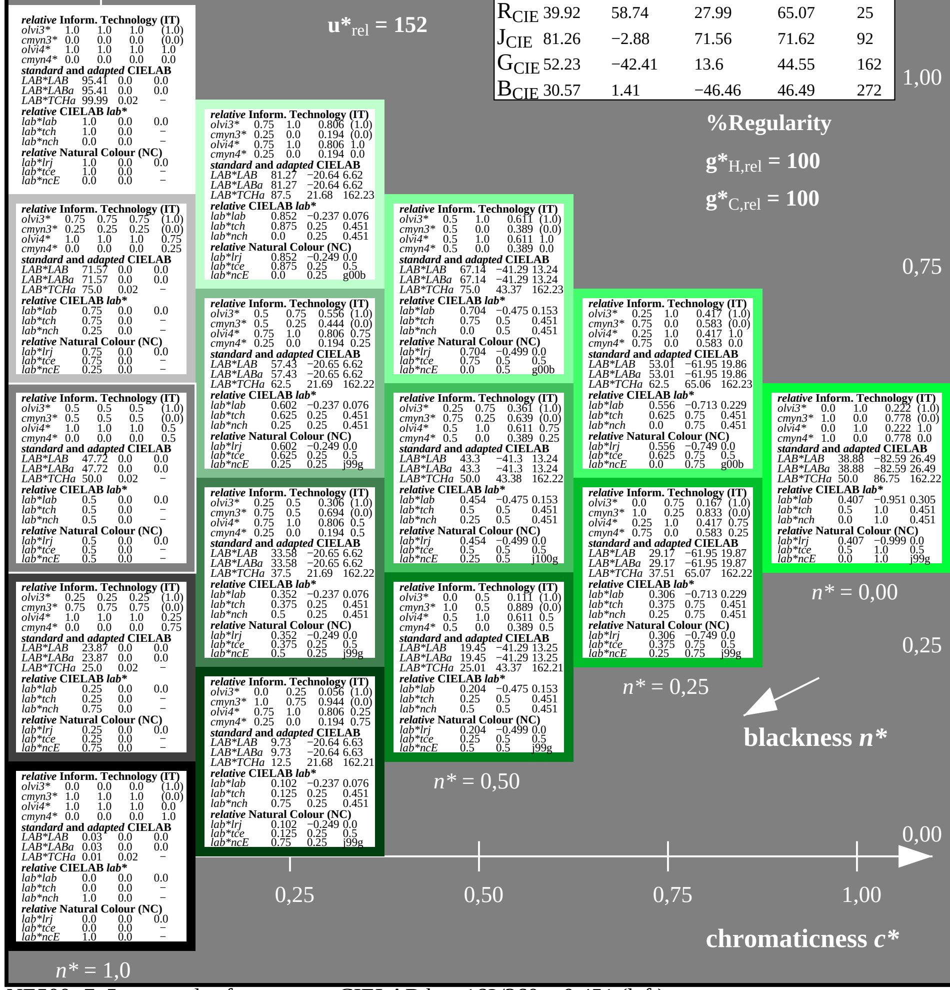
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 165/360 = 0.458$

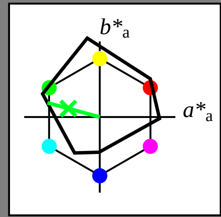
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

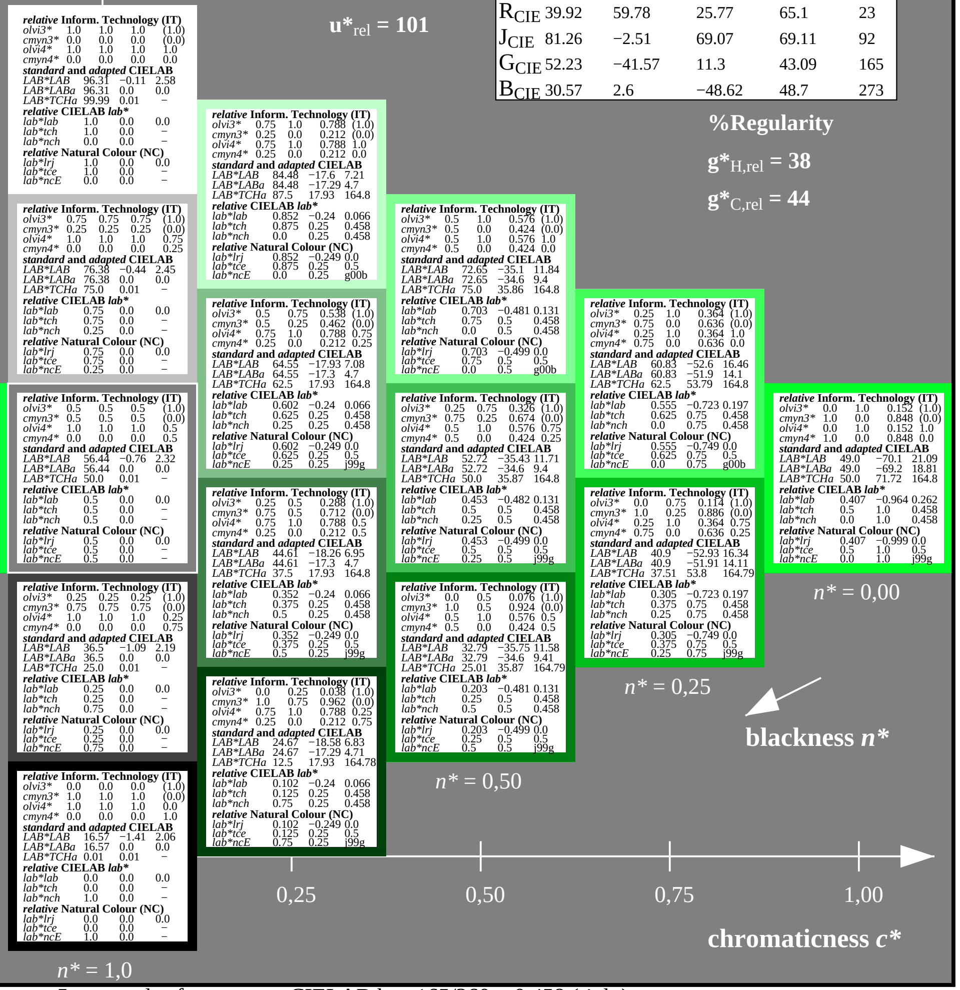
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



NE500−7, 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 Natural Luminous System NLS00

for hue *h* = lab*h* = 162/360 = 0.451

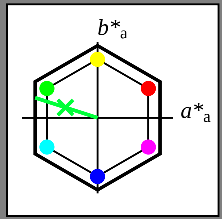
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 152

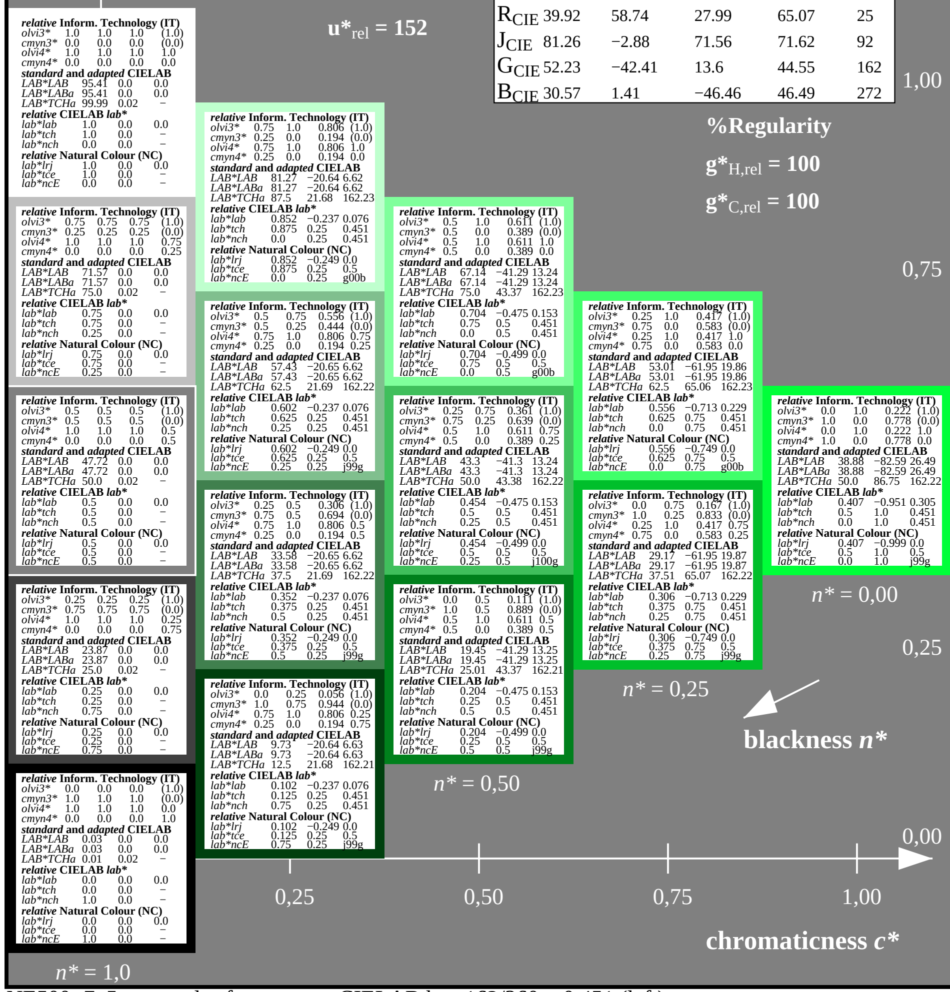
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 TLS18

for hue *h* = lab*h* = 162/360 = 0.451

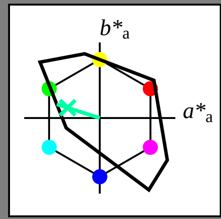
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t*



%Gamut

u^*_{rel} = 118

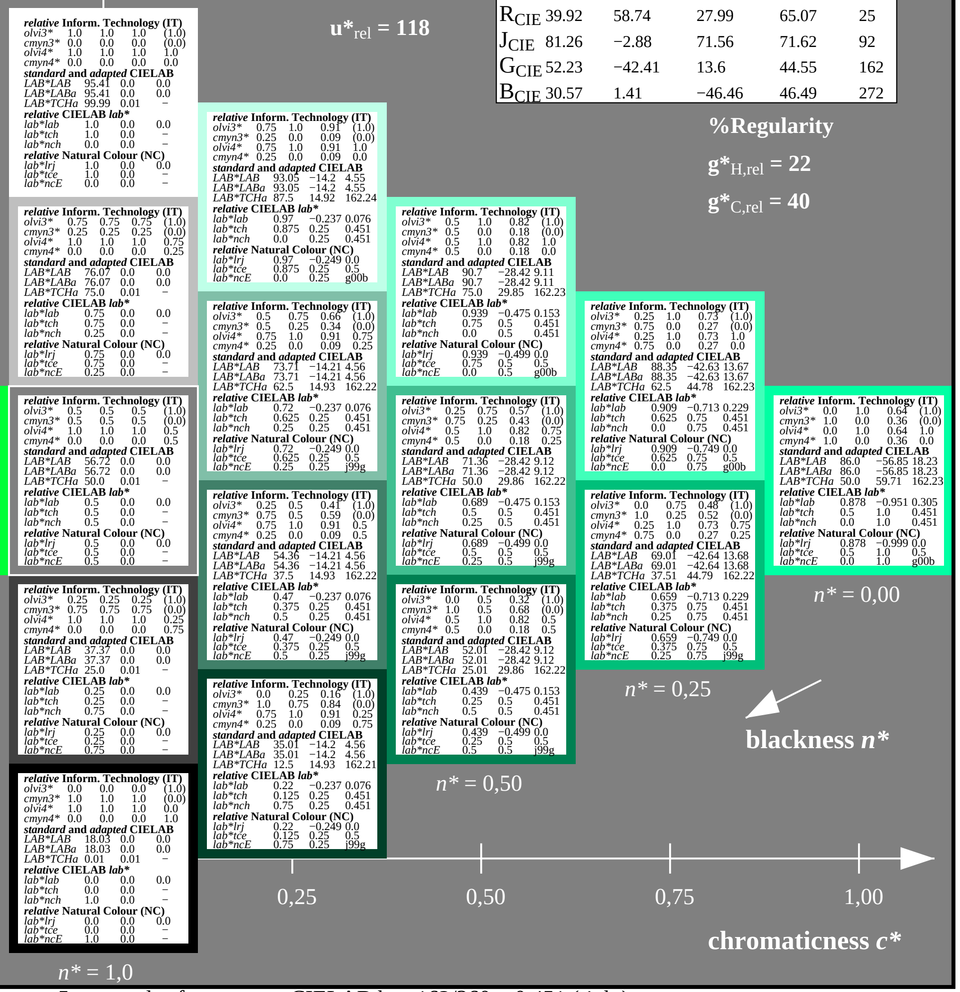
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

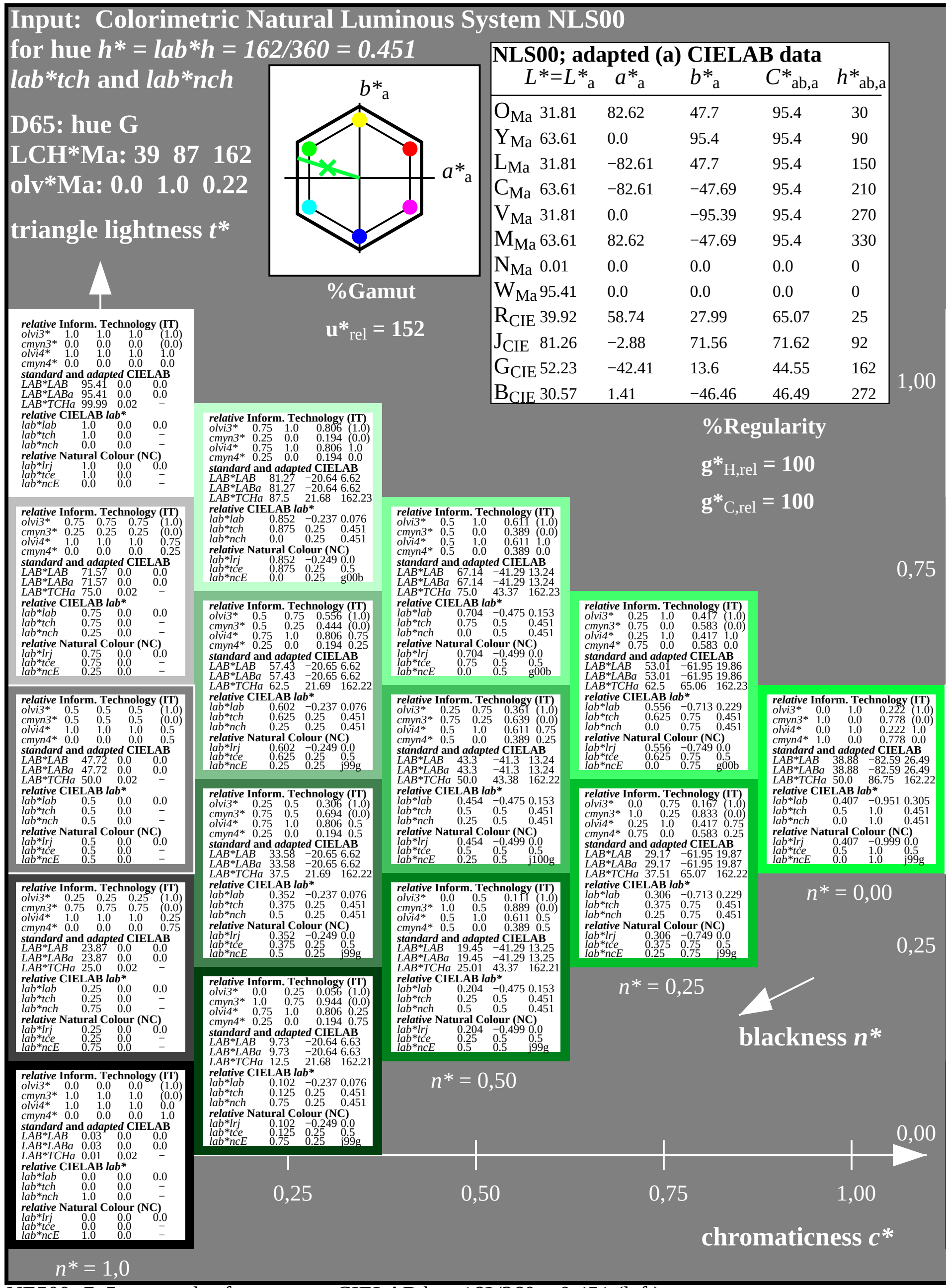
$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

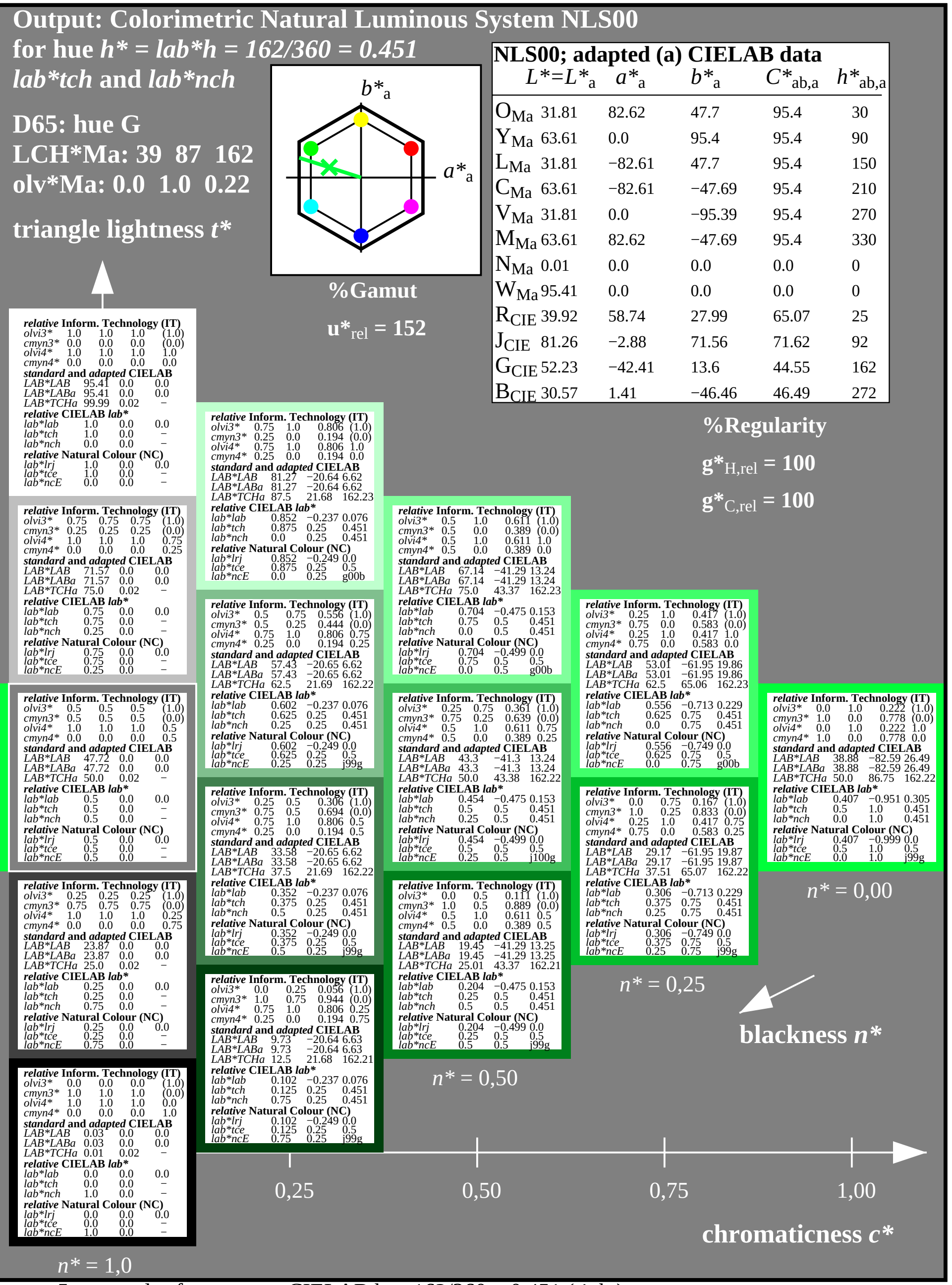


NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)



NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

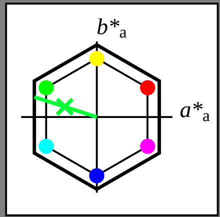


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

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

triangle lightness *t*



%Gamut

u^*_{rel} = 152

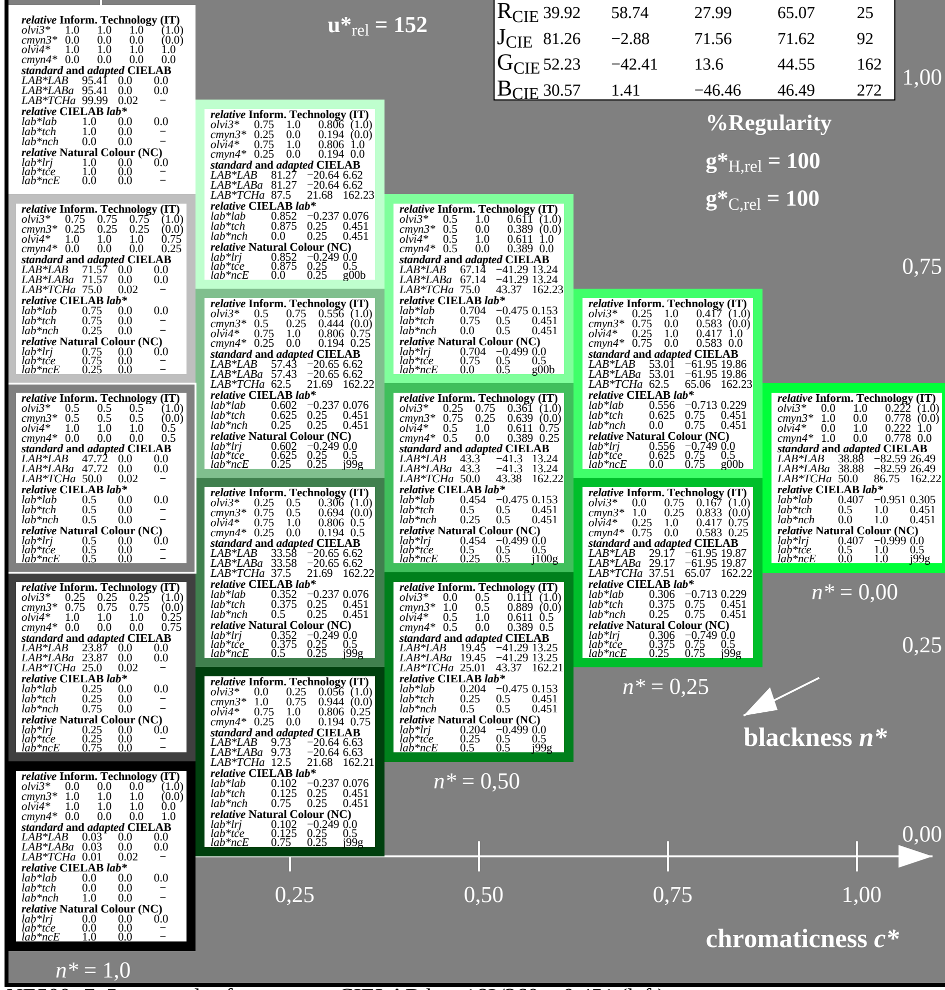
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

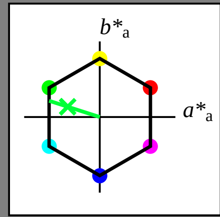
$g^*_{C,rel}$ = 100



Output: Colorimetric 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

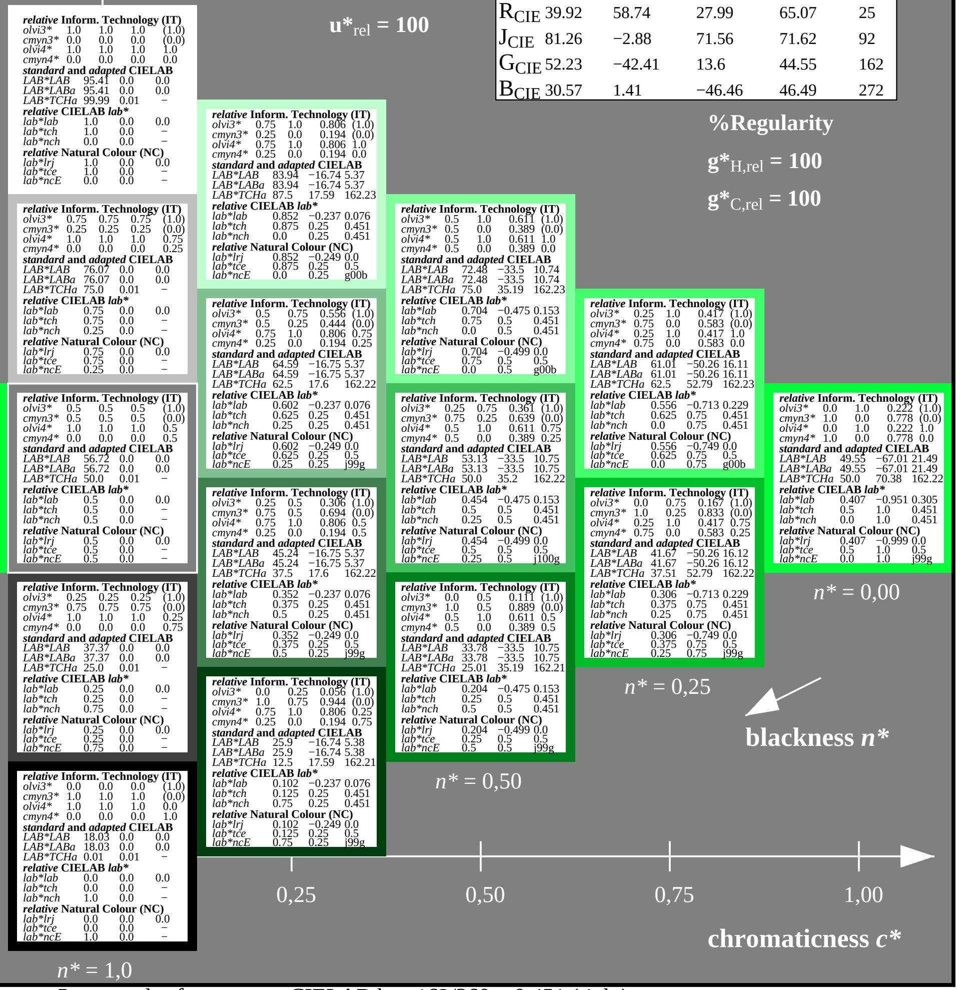
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



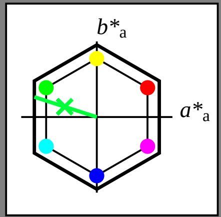
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

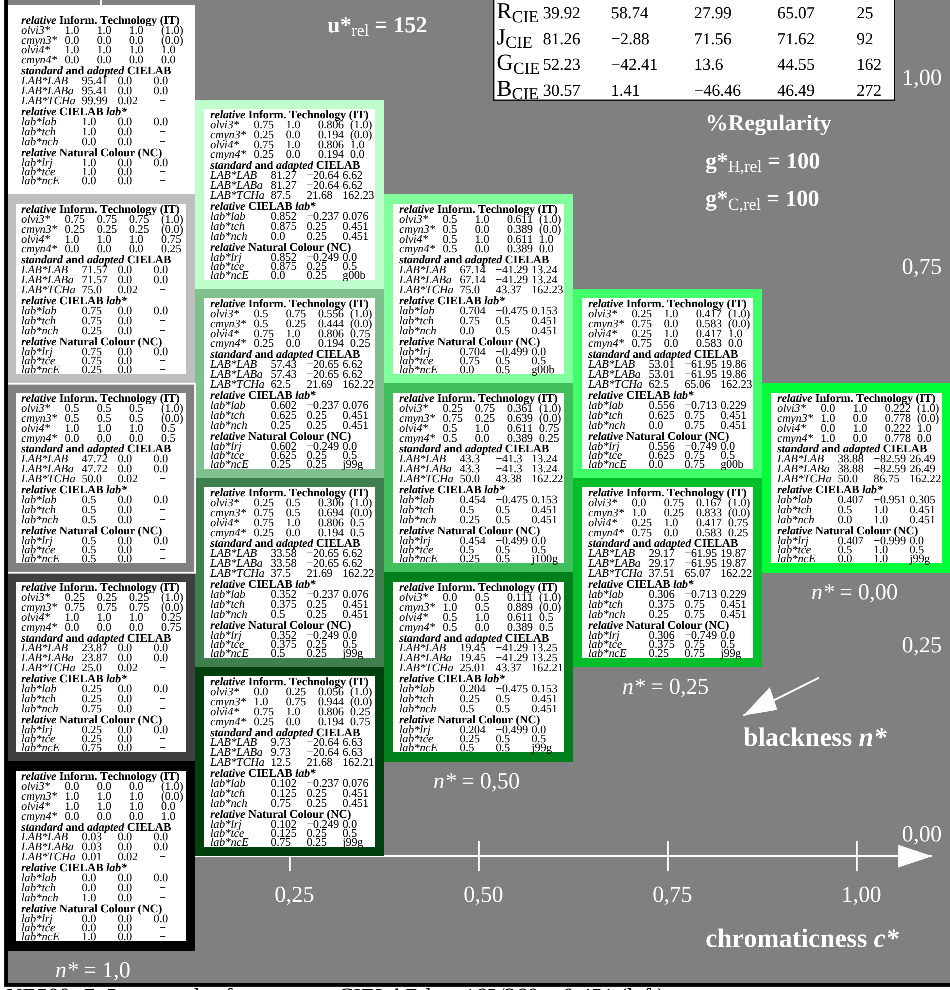
triangle lightness t^*



%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

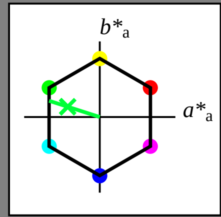
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

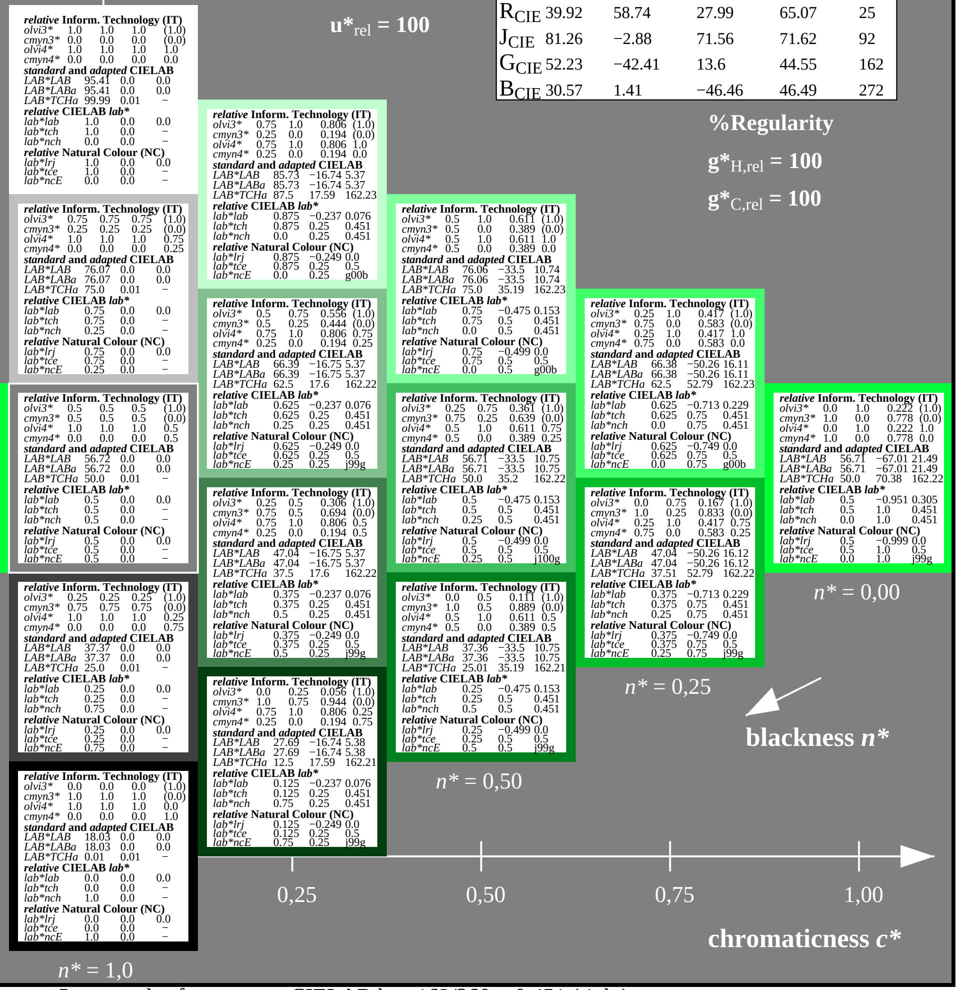
triangle lightness t^*



%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



NE500−7, 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

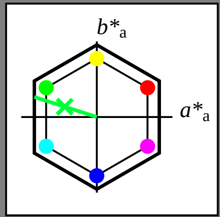
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

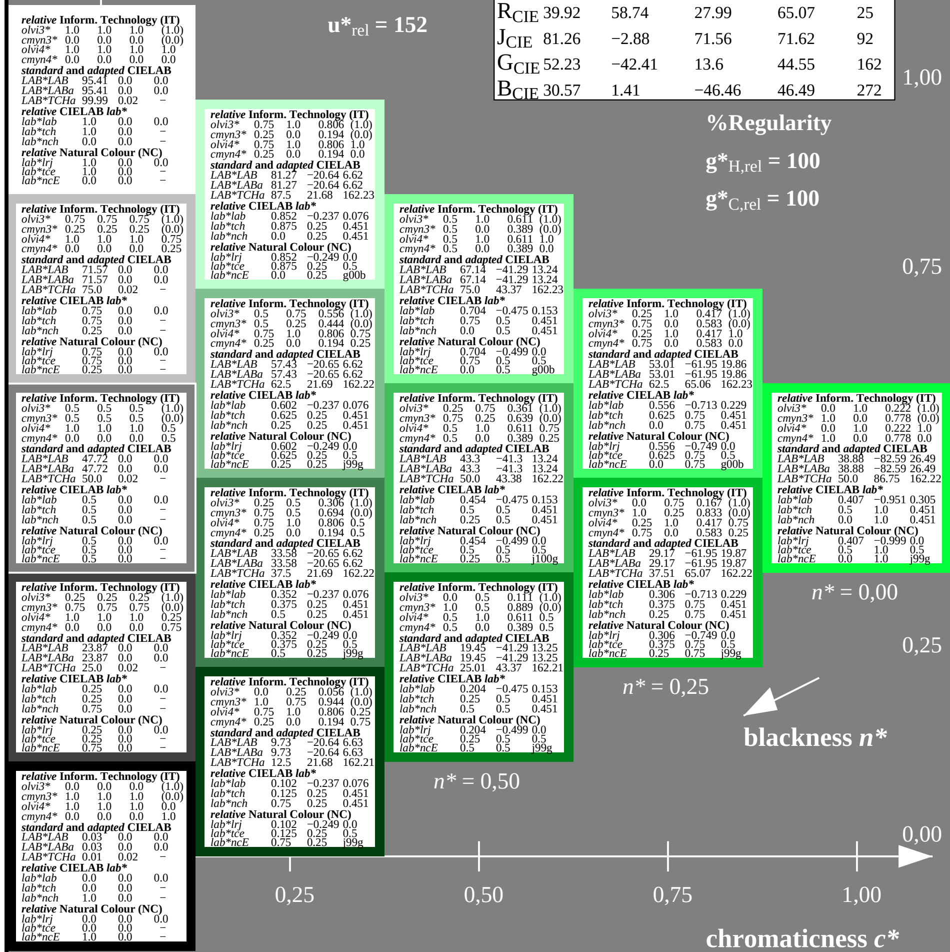
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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

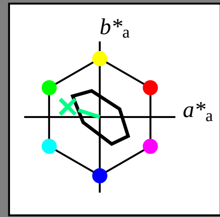
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

u^*_{rel} = 16

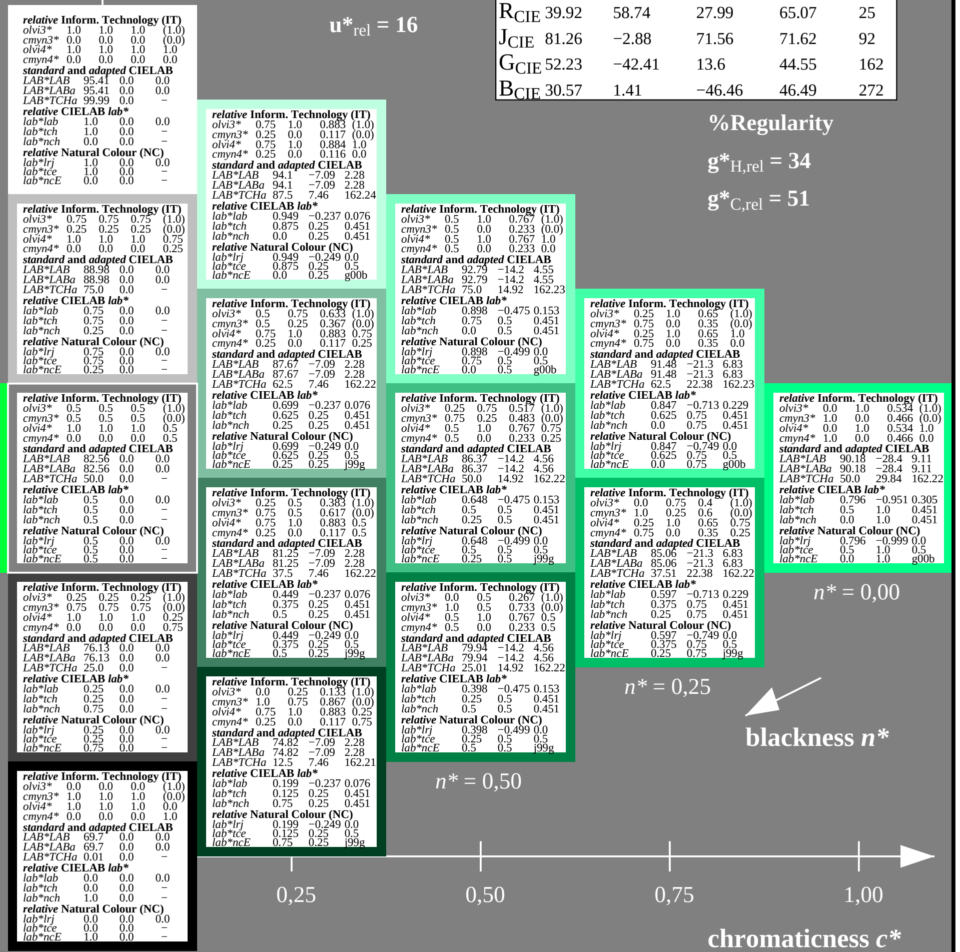
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

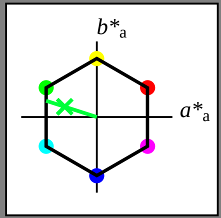
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t*



%Gamut

$u^*_{rel} = 100$

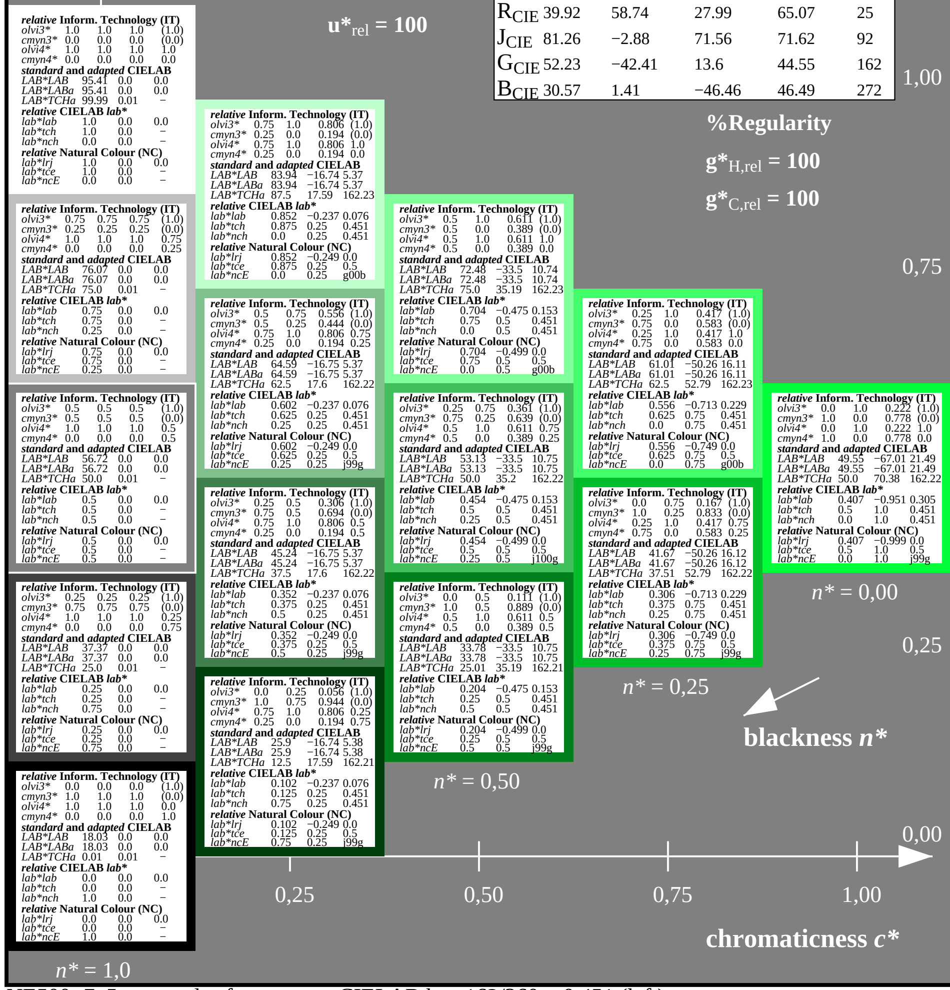
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 164/360 = 0.457$

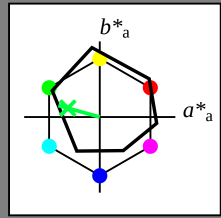
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t*



%Gamut

$u^*_{rel} = 93$

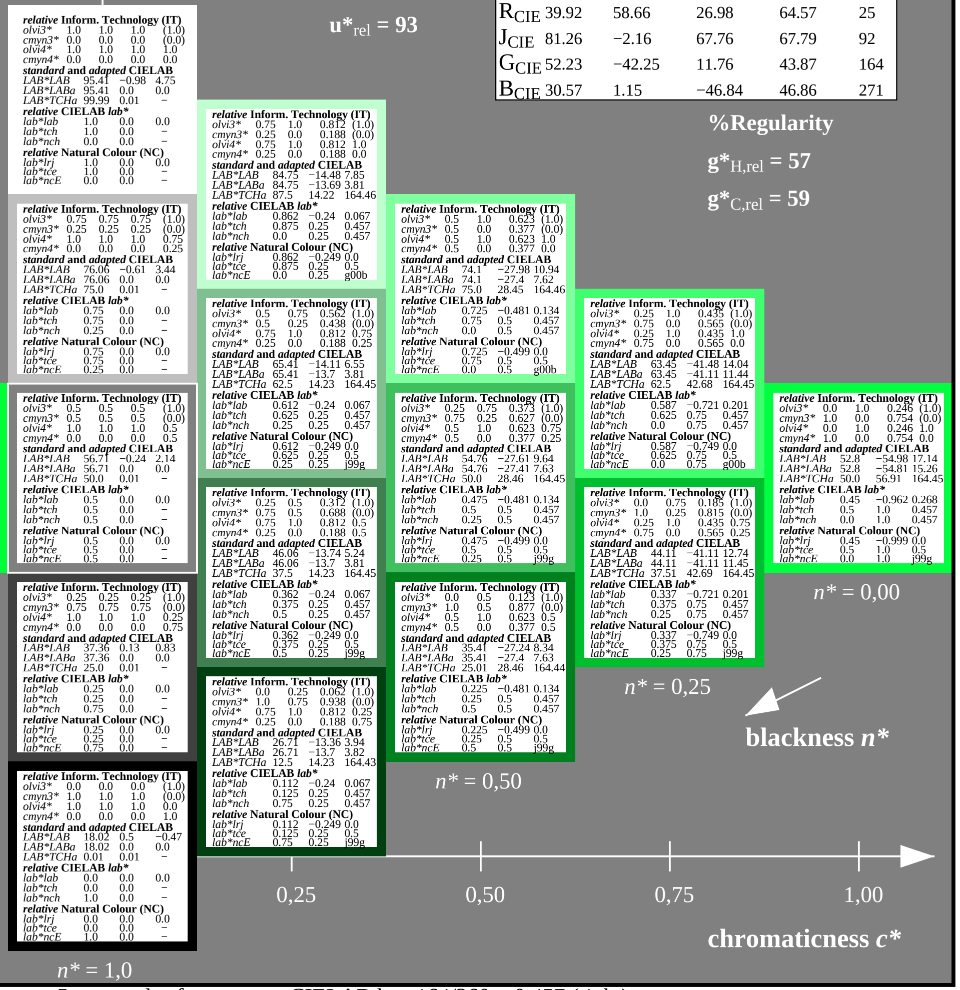
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



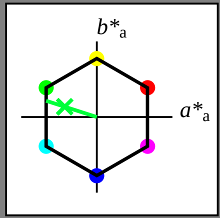
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

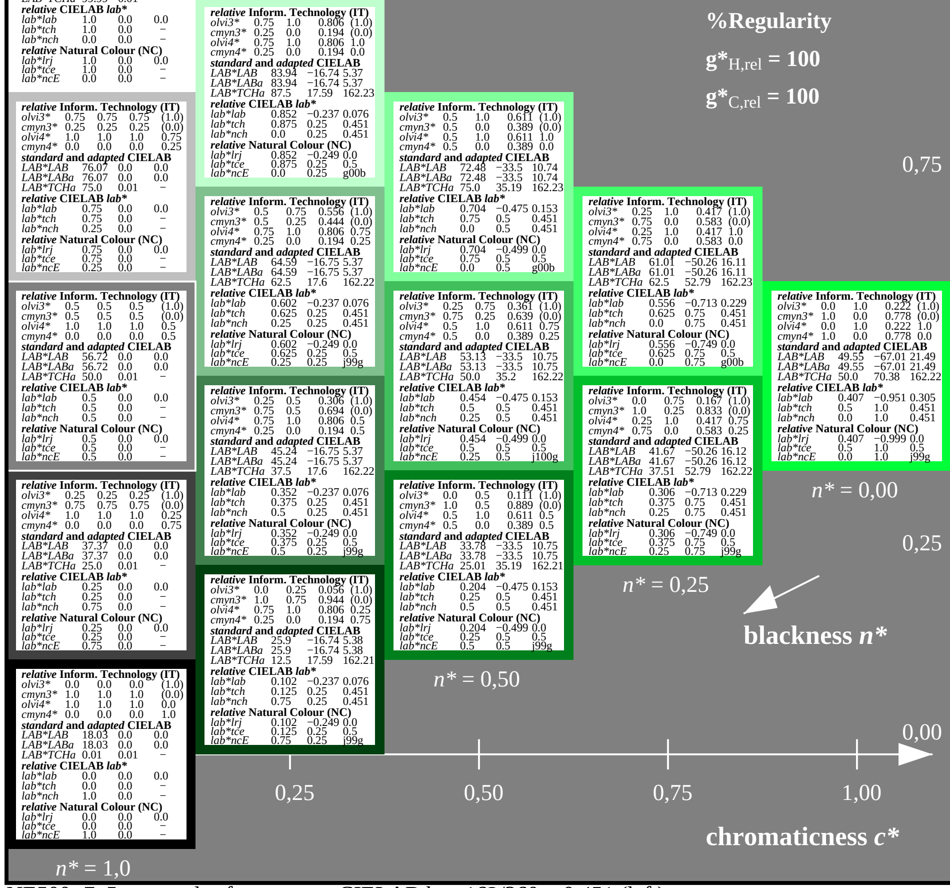
triangle lightness *t*



%Gamut
u*rel = 100

NRS18; adapted (a) CIELAB data

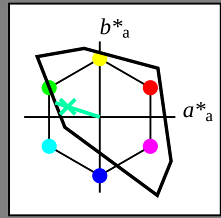
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	43.81	67.03	38.7	77.4	30
Y_{Ma}	69.61	0.0	77.4	77.4	90
L_{Ma}	43.81	−67.02	38.7	77.4	150
C_{Ma}	69.61	−67.02	−38.69	77.4	210
V_{Ma}	43.81	0.0	−77.39	77.4	270
M_{Ma}	69.61	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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

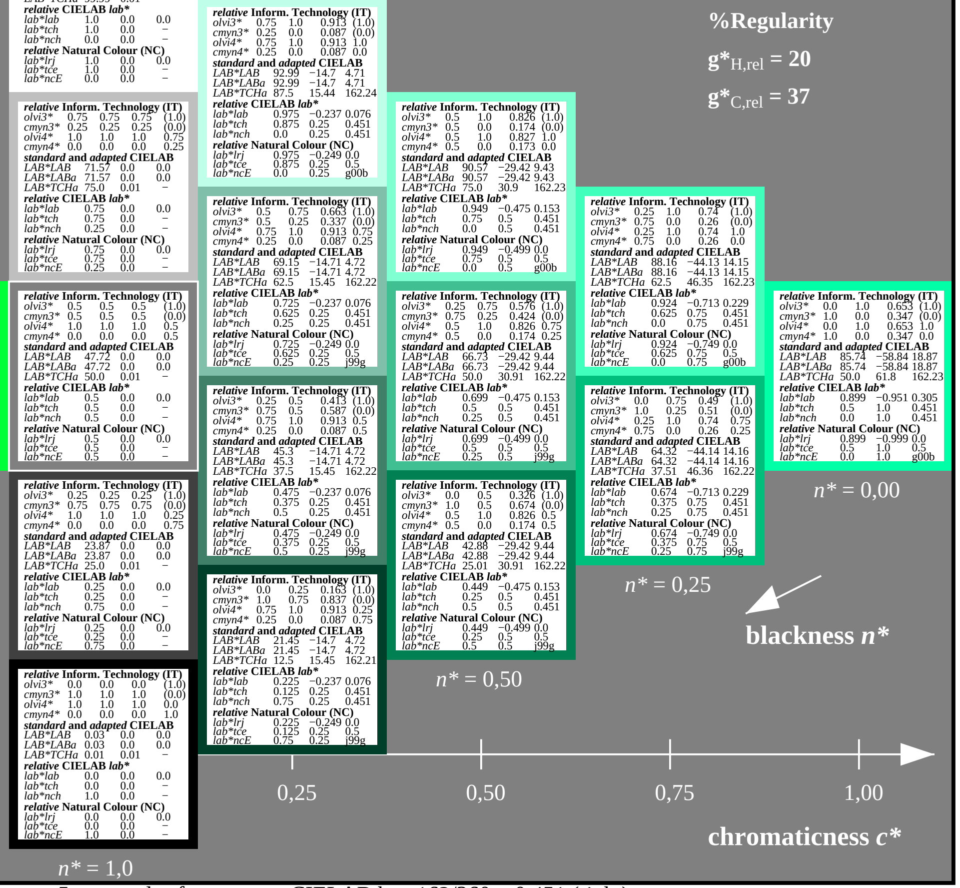
triangle lightness *t*



%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



NE500−7, 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

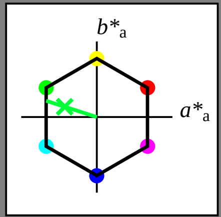
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t**



%Gamut

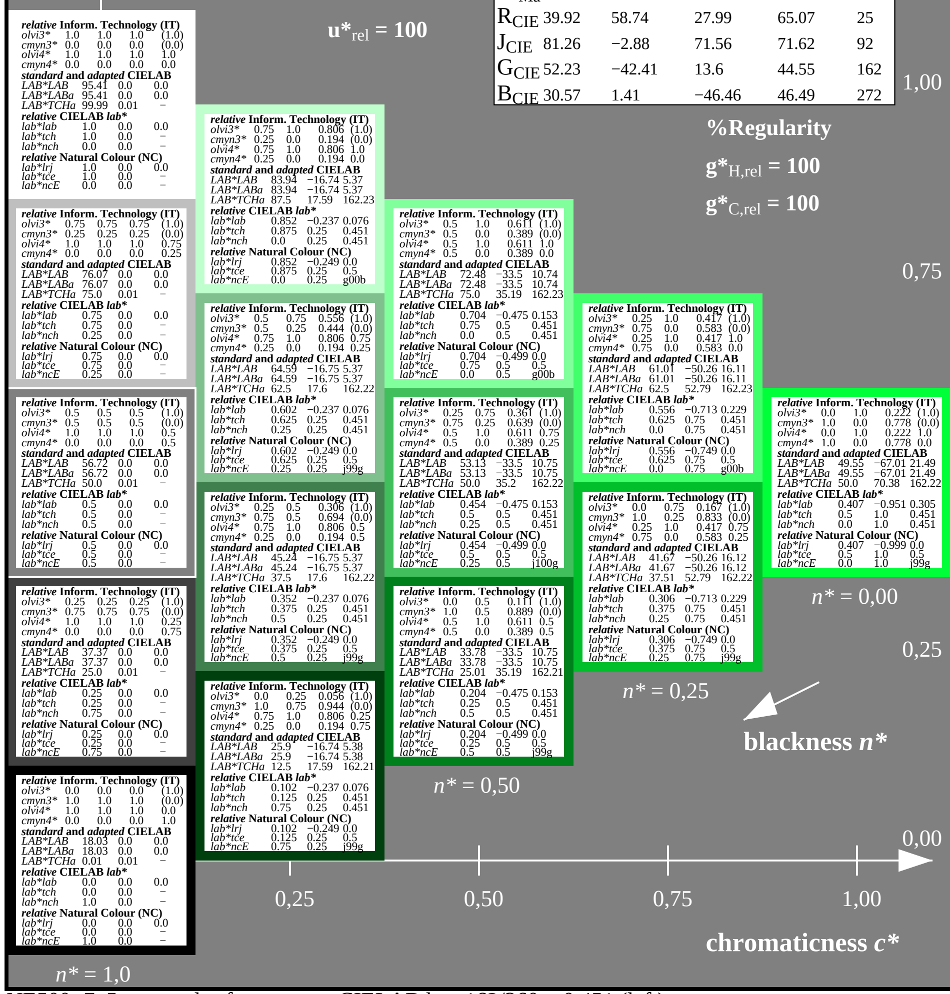
u^*_{rel} = 100

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



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h$ = 165/360 = 0.458

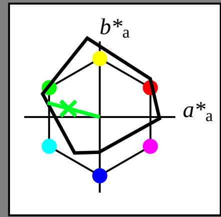
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness *t**



%Gamut

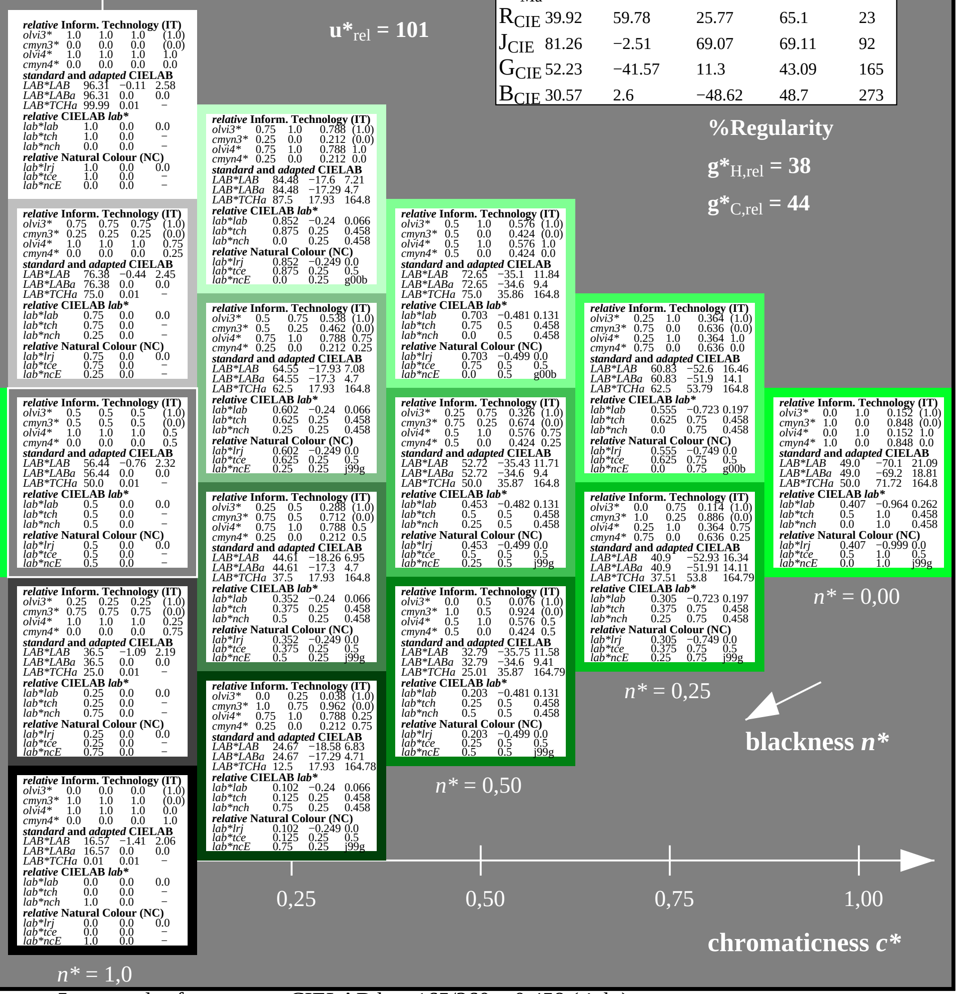
u^*_{rel} = 101

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



NE500−7, 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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

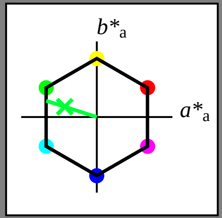
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

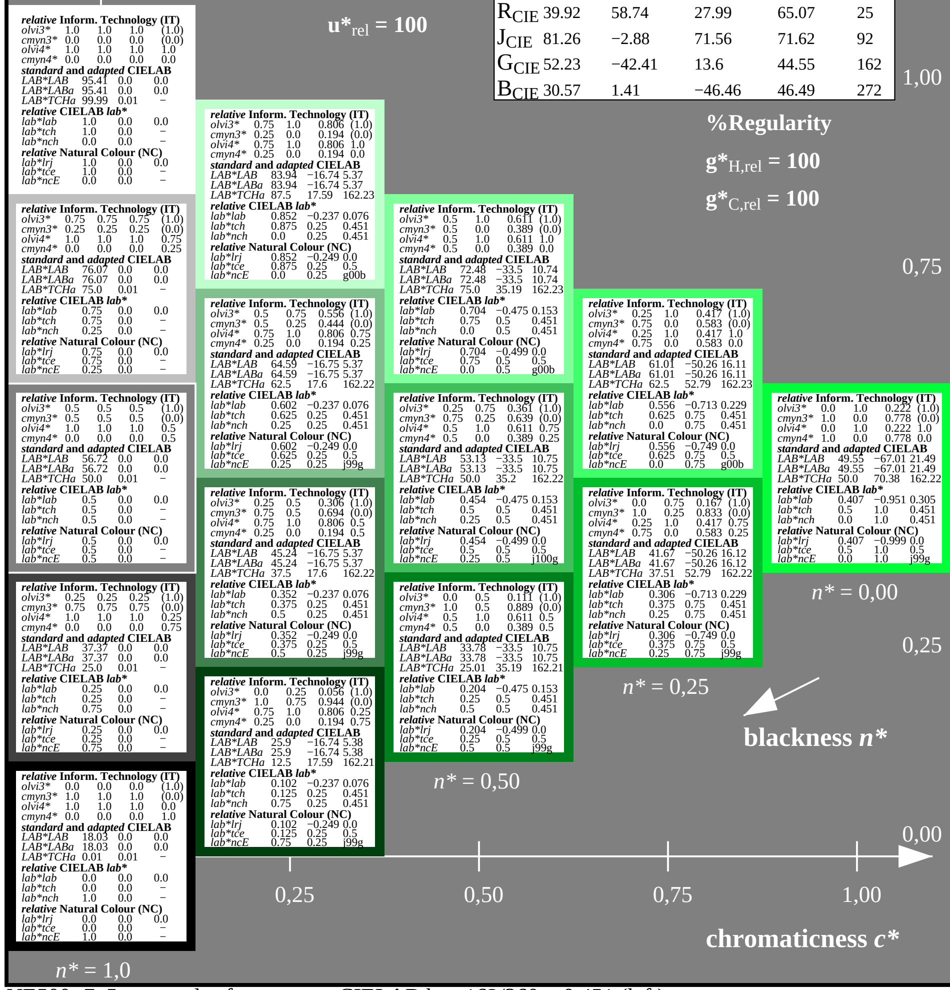
$u^*_{rel} = 100$

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 $h^* = lab^*h = 162/360 = 0.451$

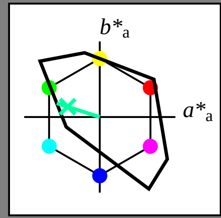
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t*



%Gamut

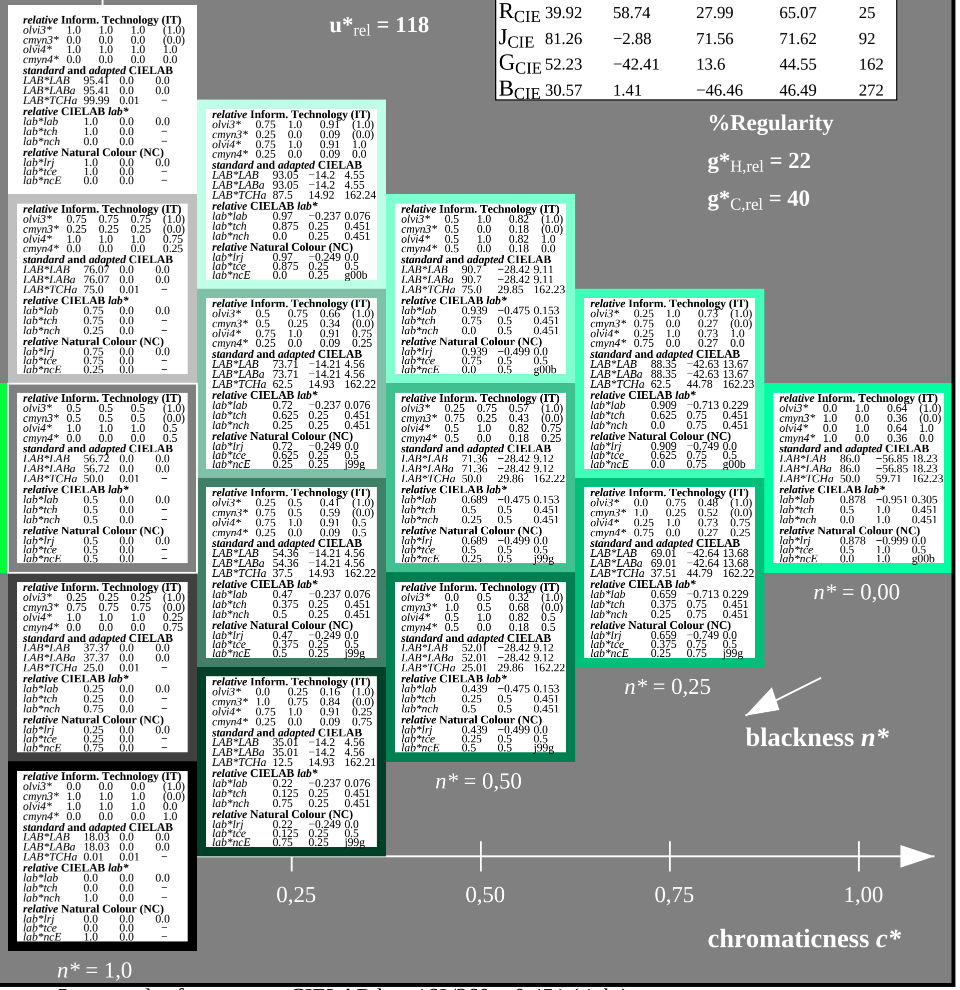
$u^*_{rel} = 118$

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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

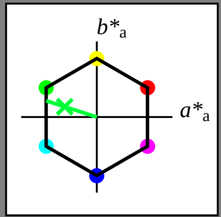
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 100

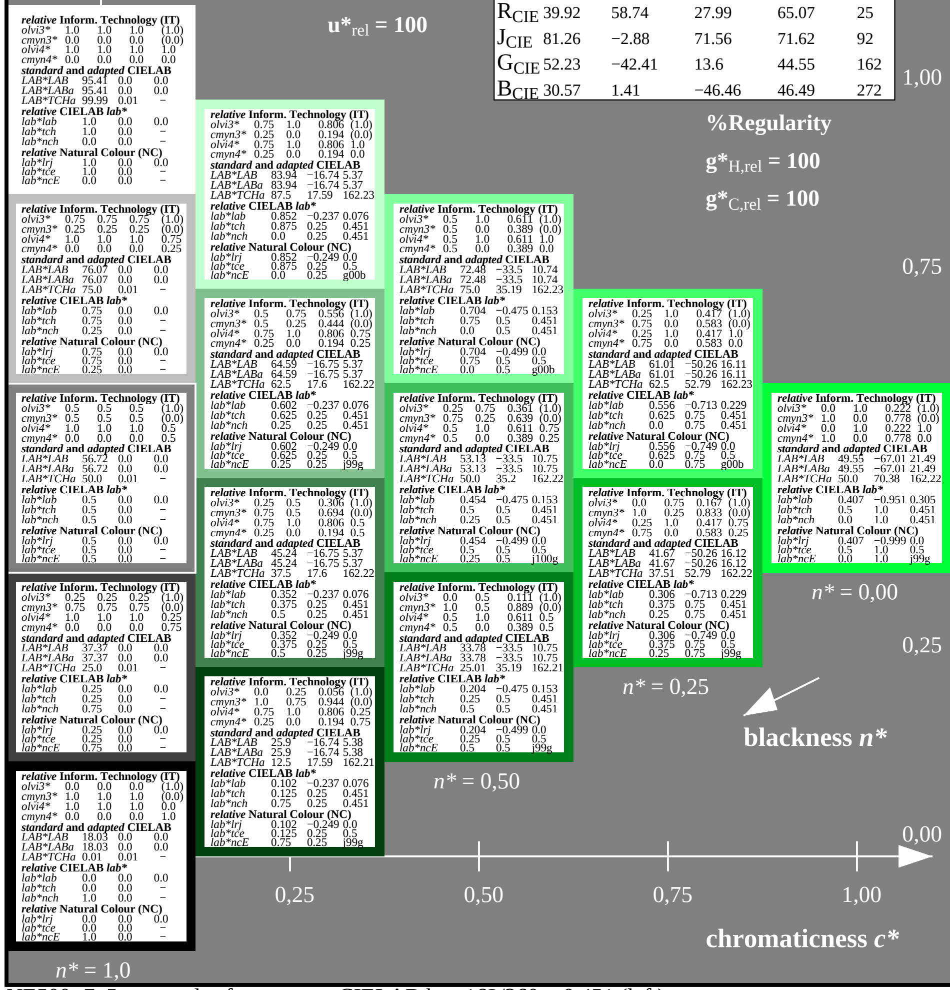
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

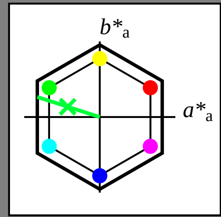
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 152

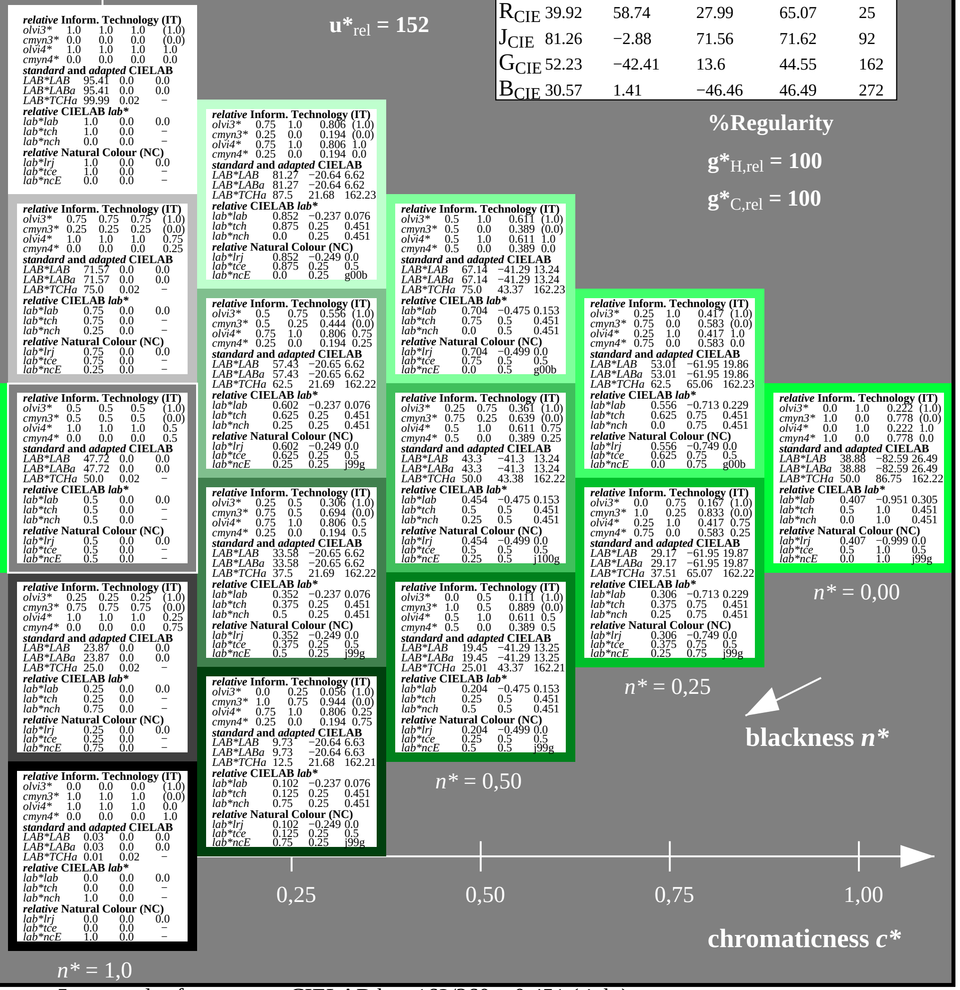
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

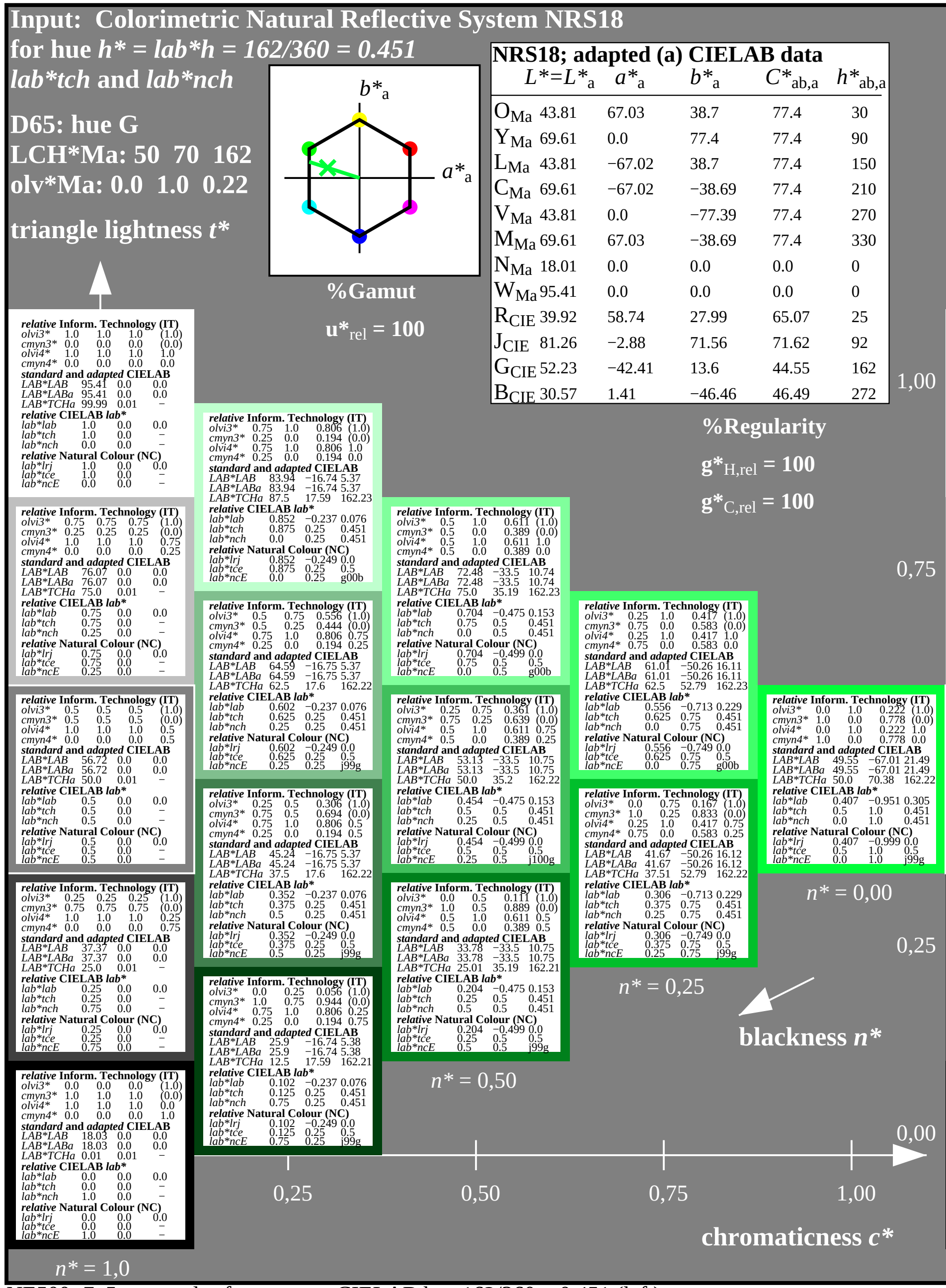
%Regularity

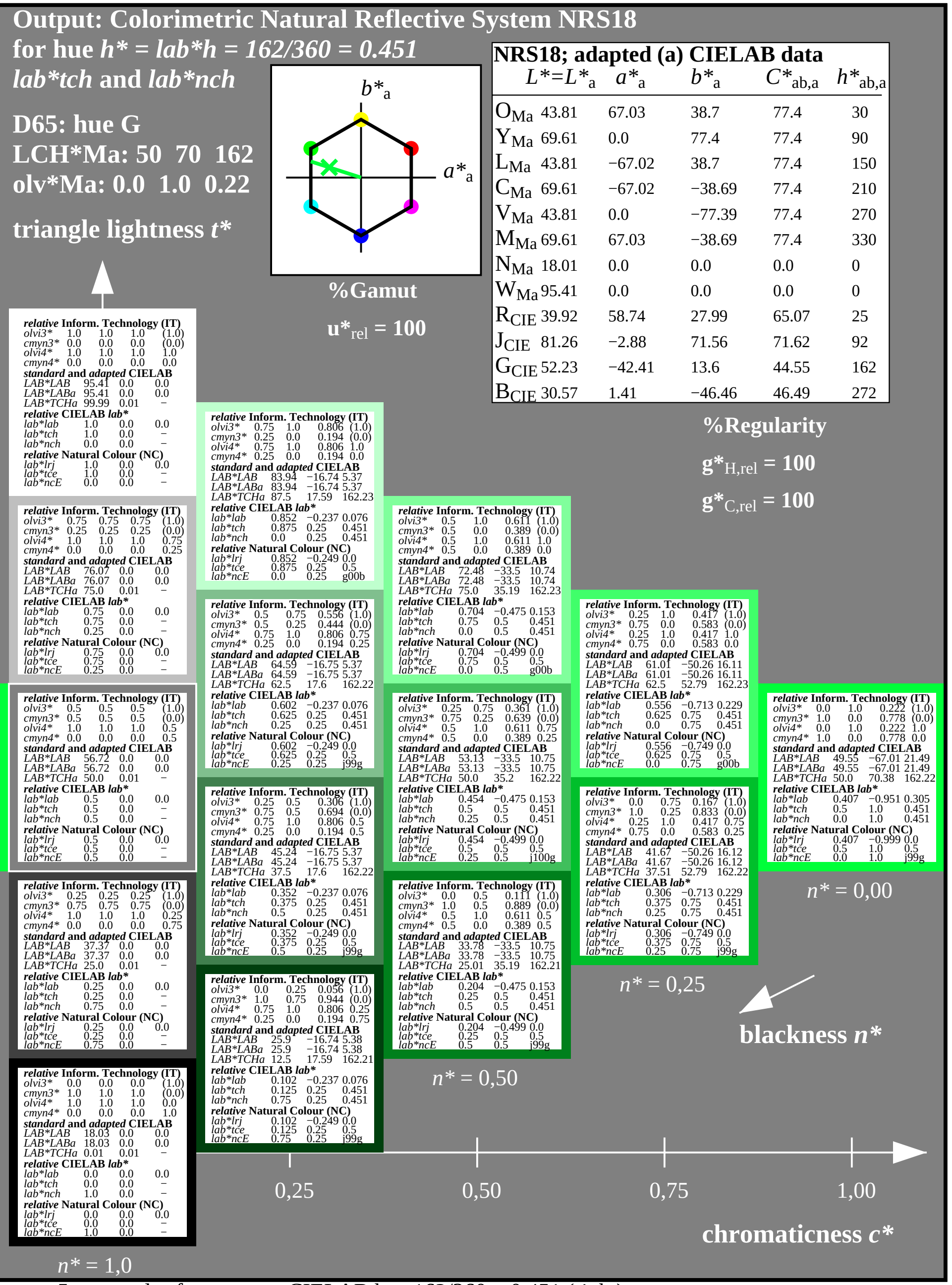
$g^*_{H,rel}$ = 100

$g^*_{C,rel}$ = 100



5 step scales for constant CIELAB hue 162/360 = 0.451 (right)





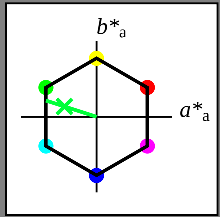
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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*

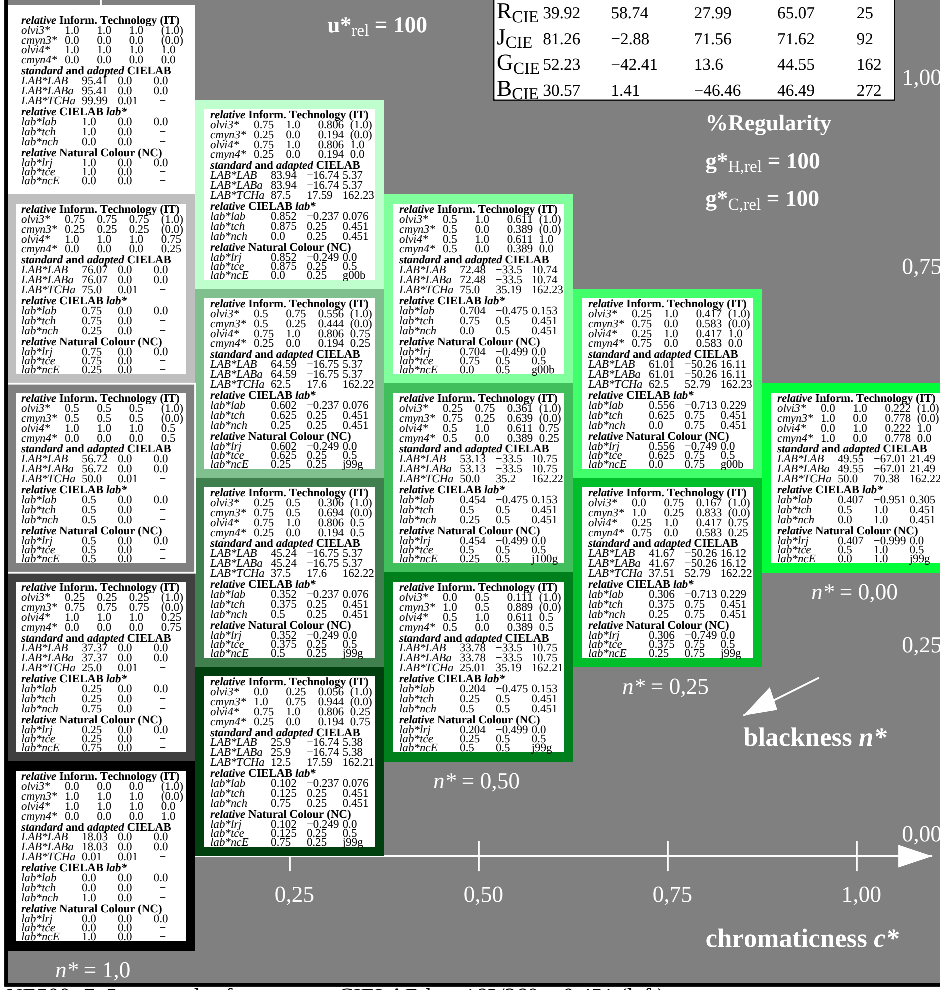


%Gamut
u^*_{rel} = 100

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

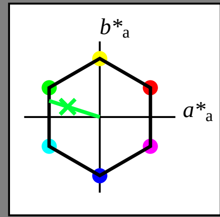
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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*

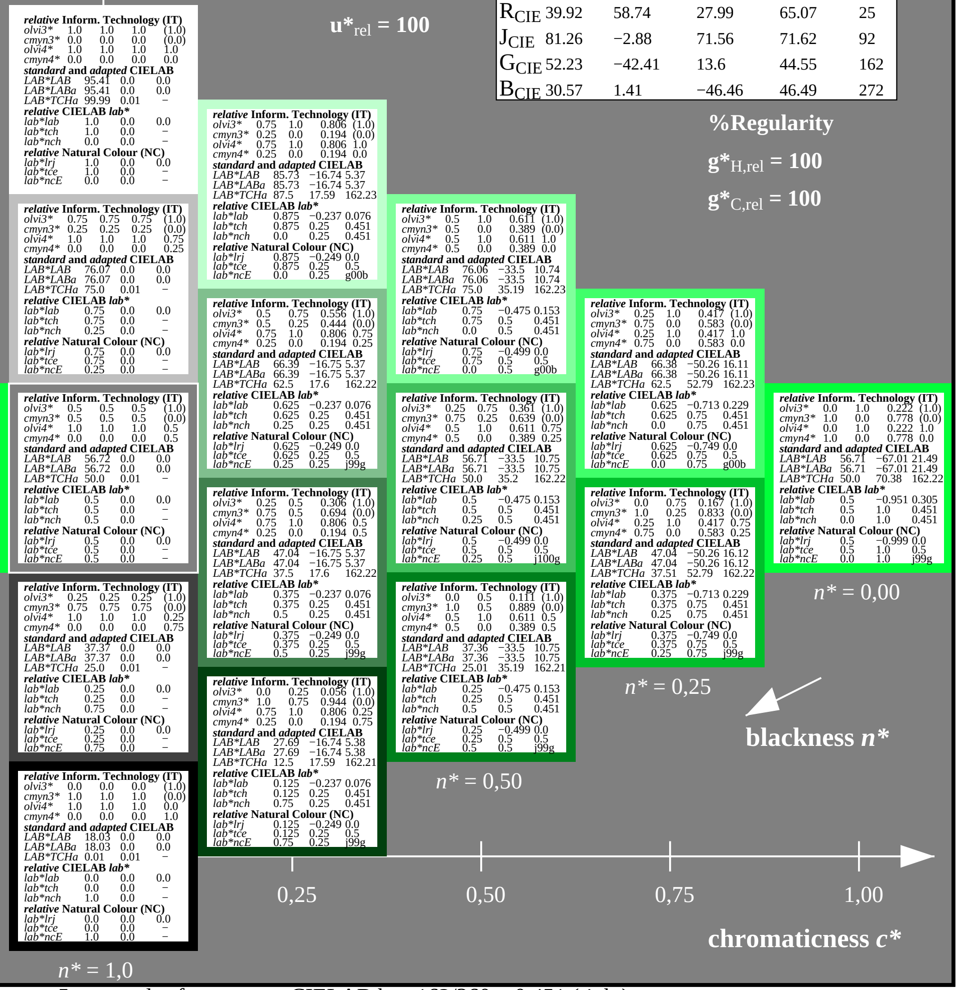


%Gamut
u^*_{rel} = 100

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



NE500−7, 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

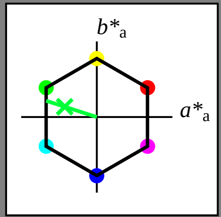
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 100

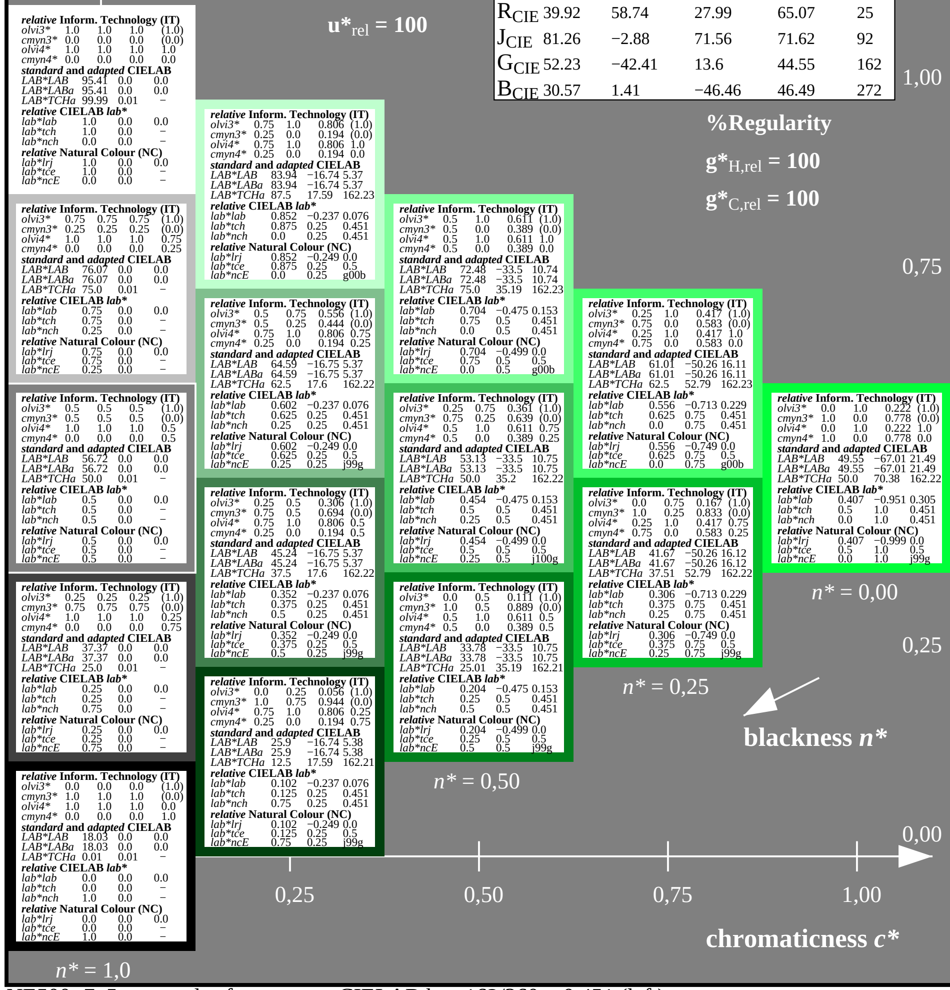
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

for hue *h* = lab*h* = 162/360 = 0.451

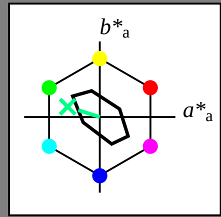
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t*



%Gamut

u^*_{rel} = 16

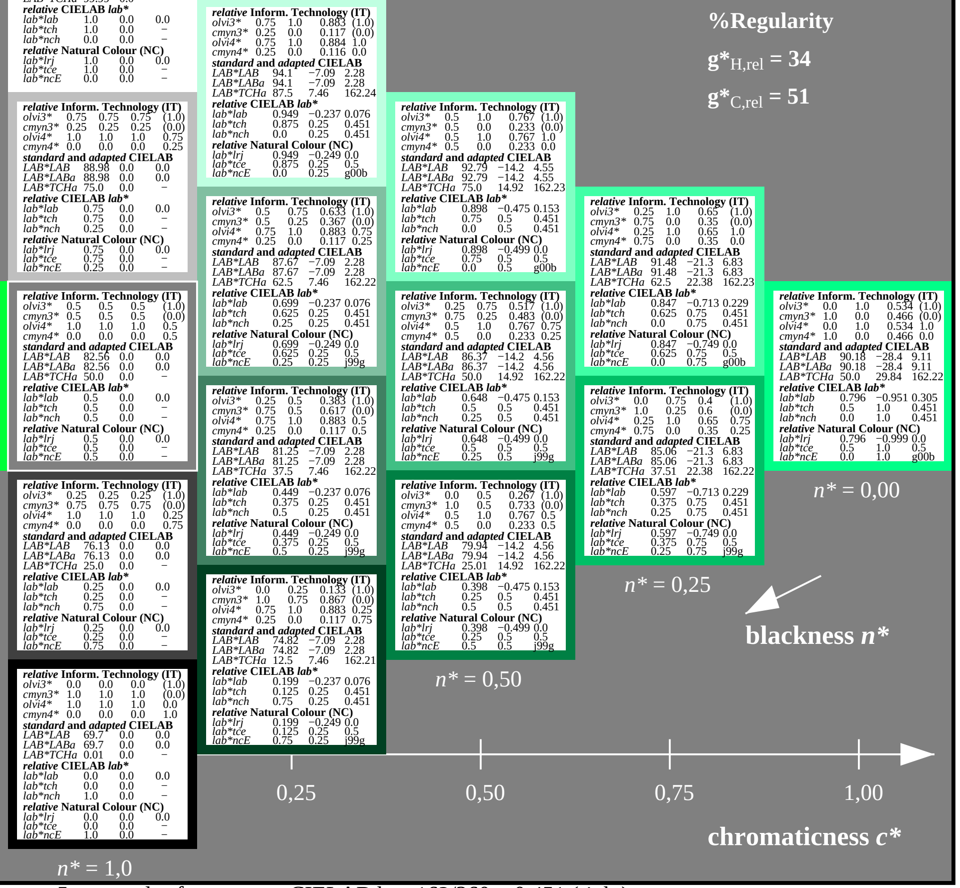
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h$ = 162/360 = 0.451

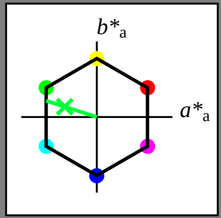
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

u^*_{rel} = 100

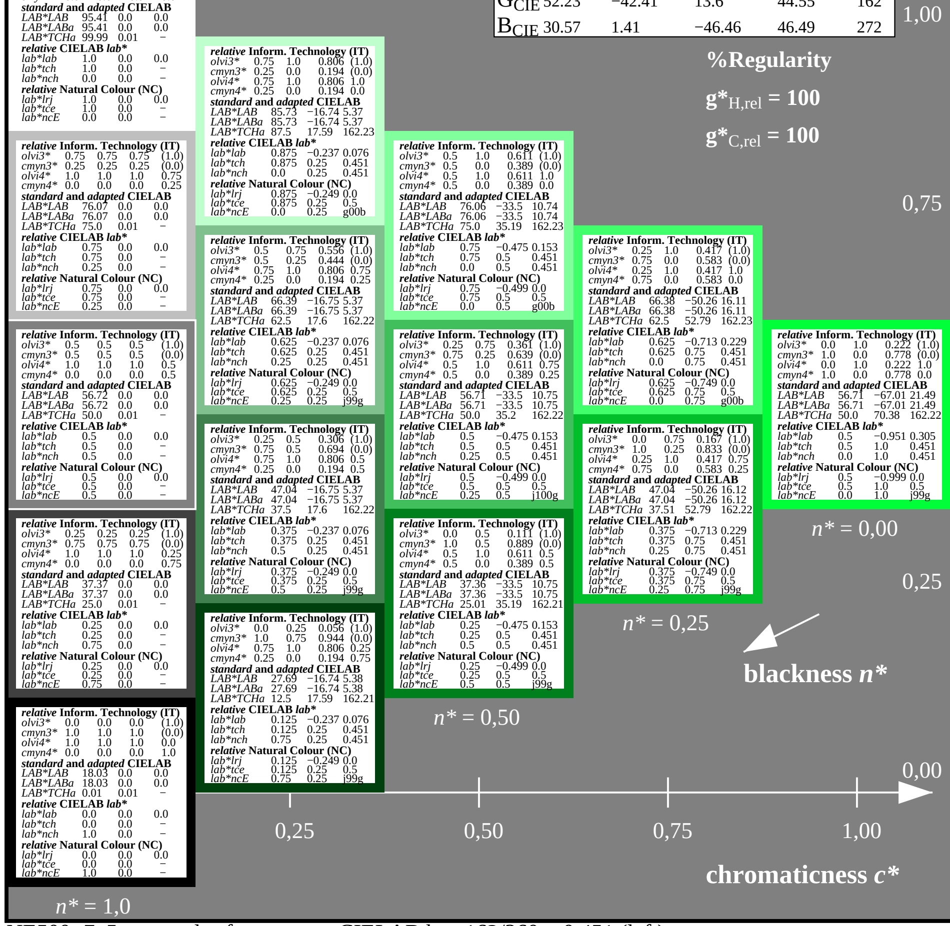
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Offset Reflective System ORS18

for hue $h^* = lab^*h$ = 164/360 = 0.457

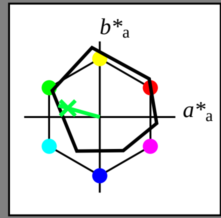
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

u^*_{rel} = 93

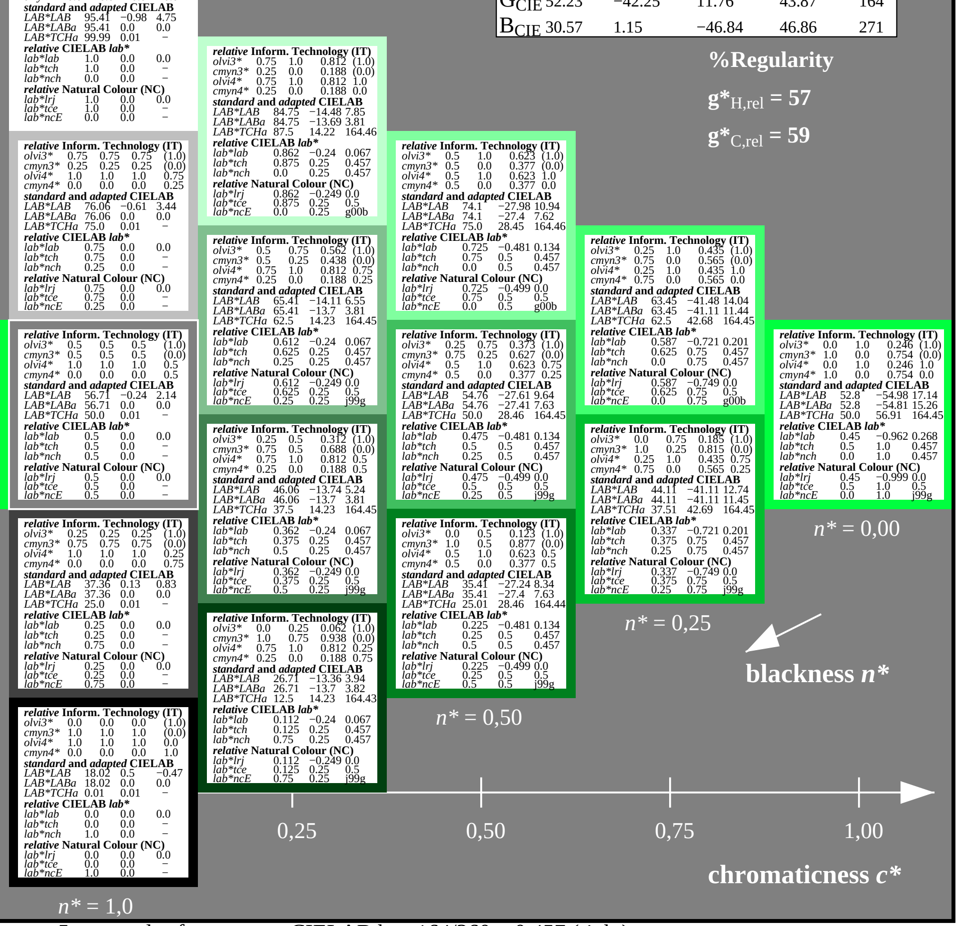
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

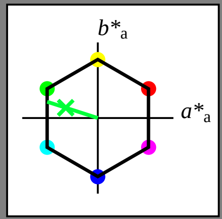
for hue $h^* = lab^*h = 162/360 = 0.451$

*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^*

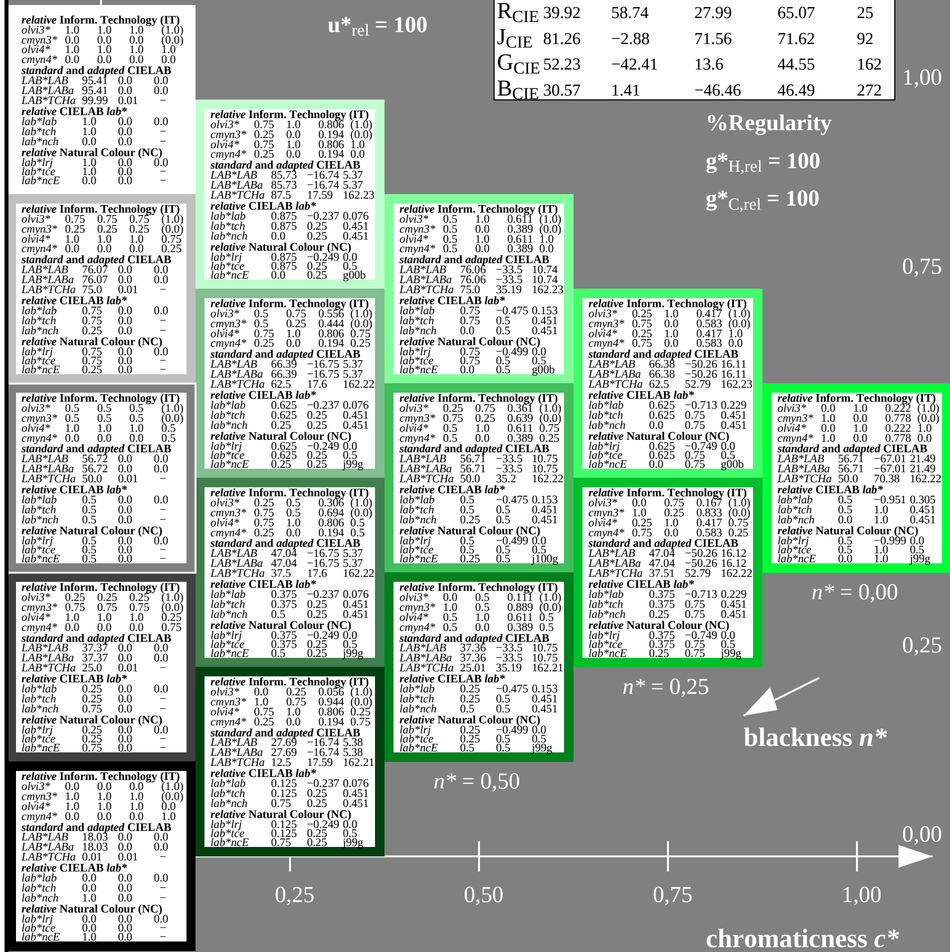
%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

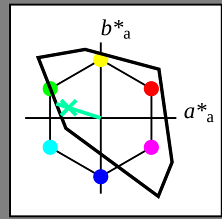
for hue $h^* = lab^*h = 162/360 = 0.451$

*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

triangle lightness t^*

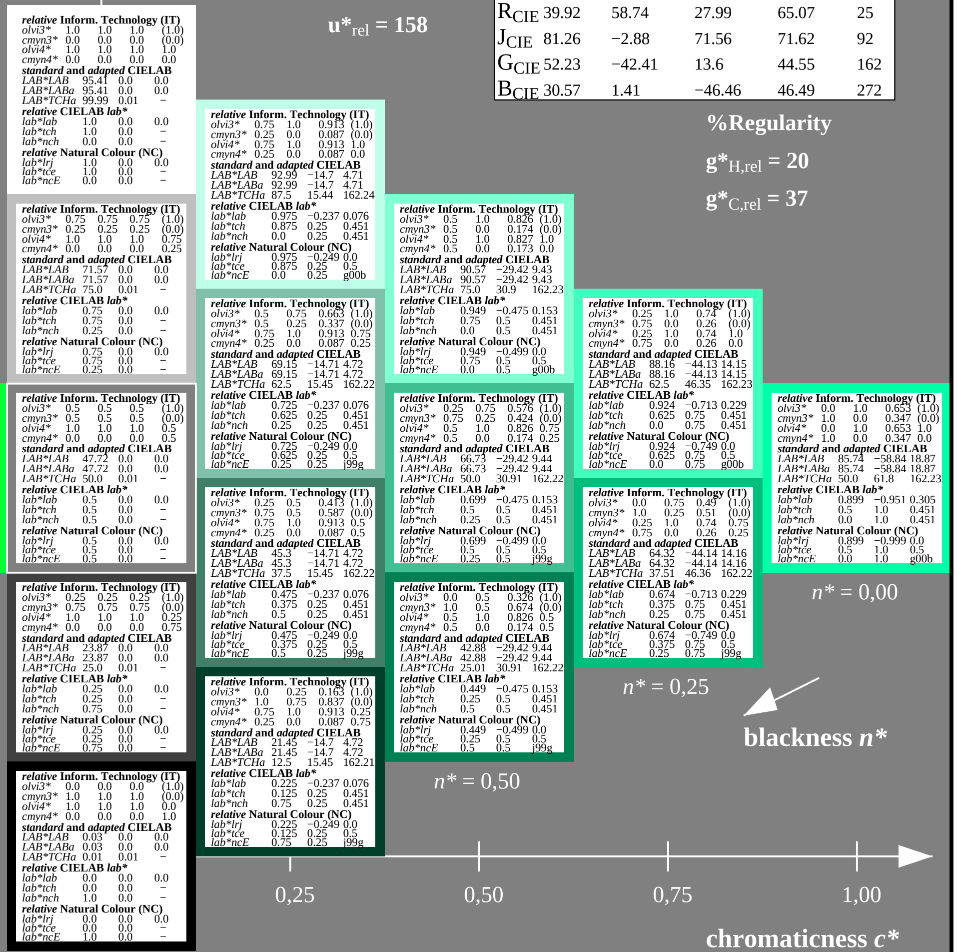
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



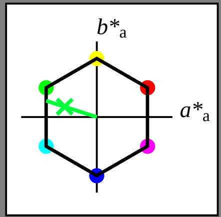
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric 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**

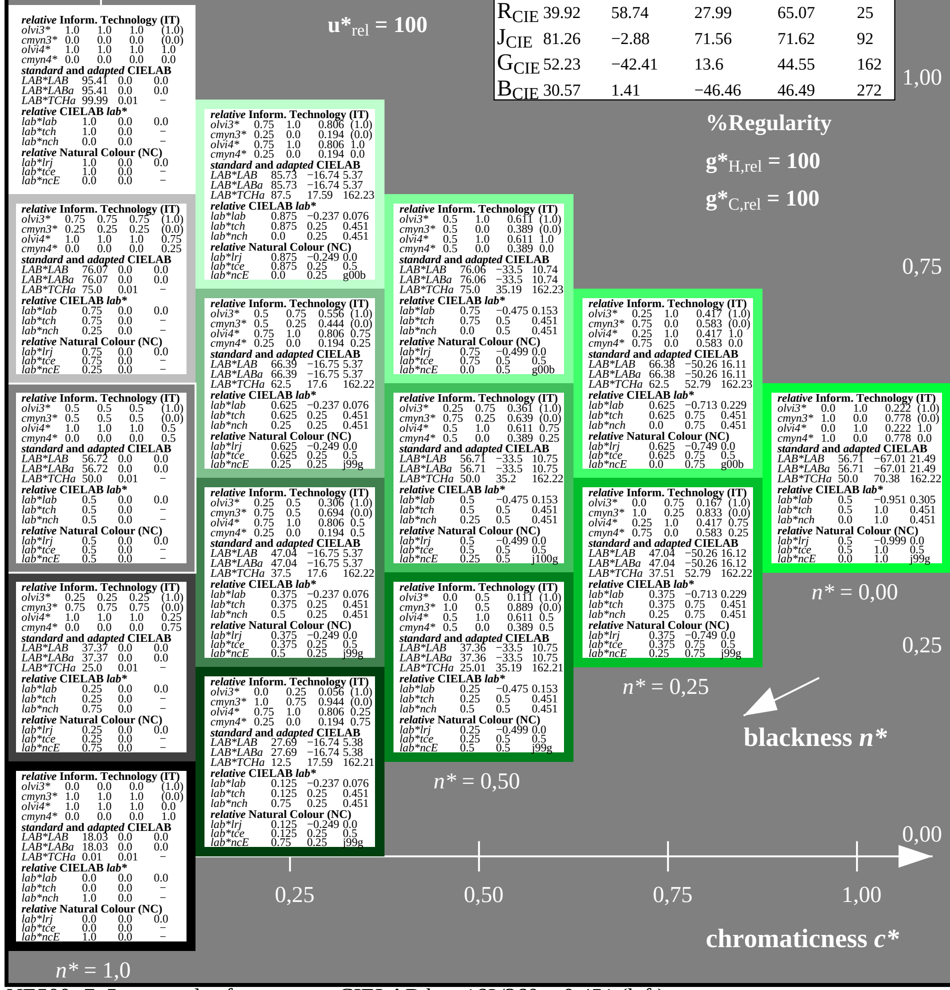


%Gamut
u^*_{rel} = 100

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

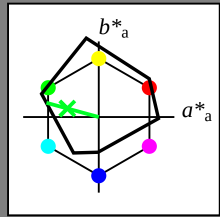
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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**

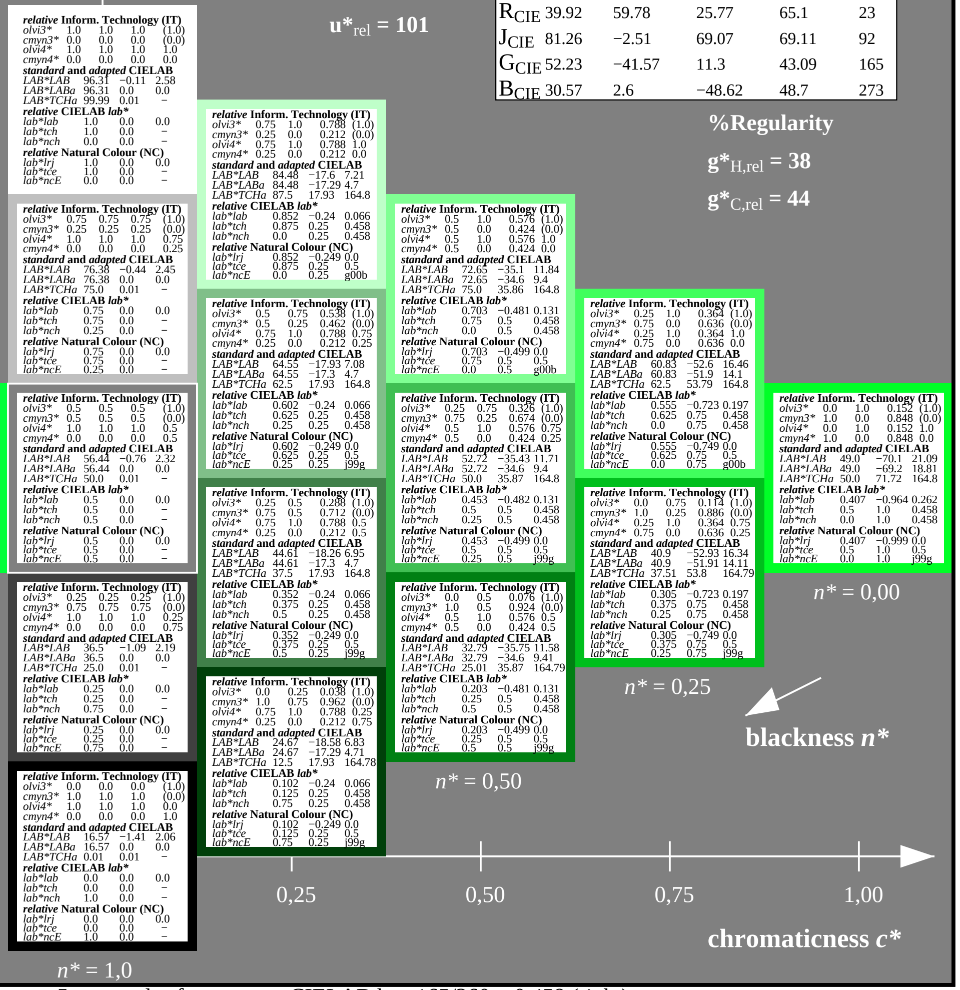


%Gamut
u^*_{rel} = 101

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



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

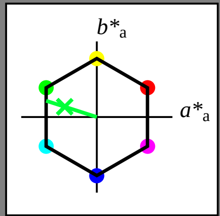
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

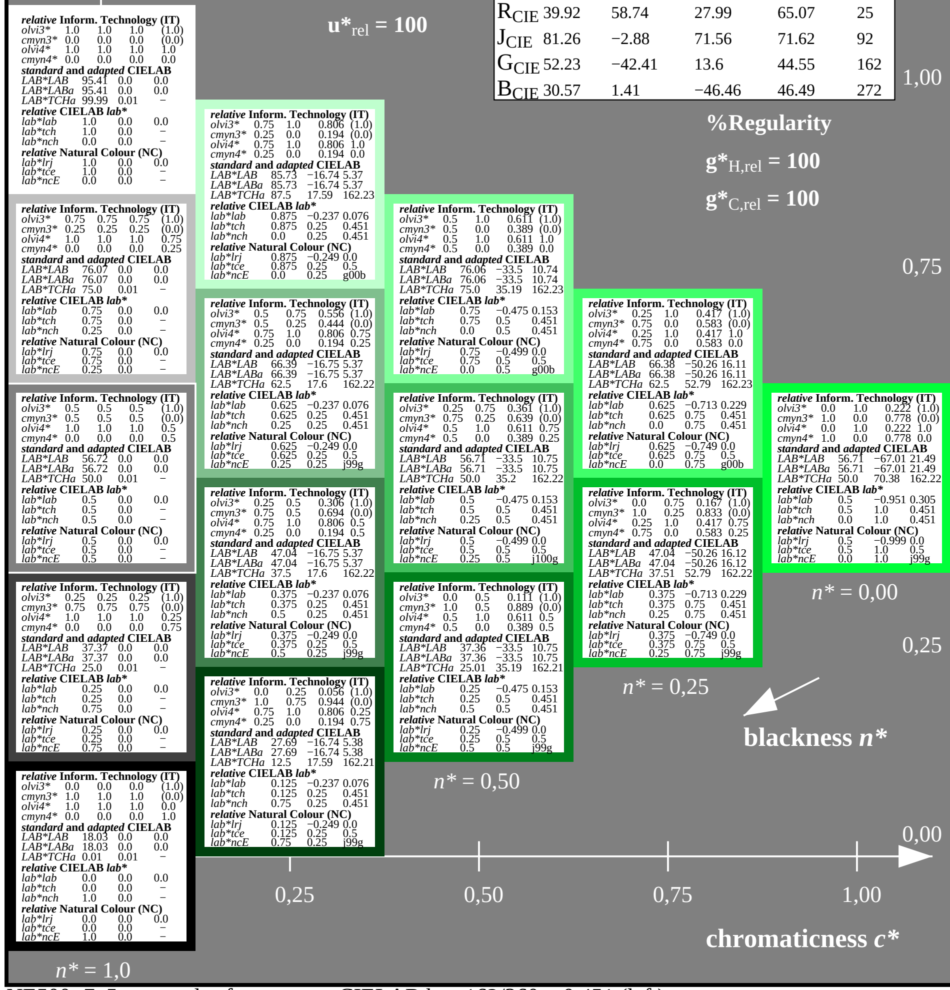
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$

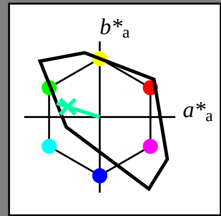
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

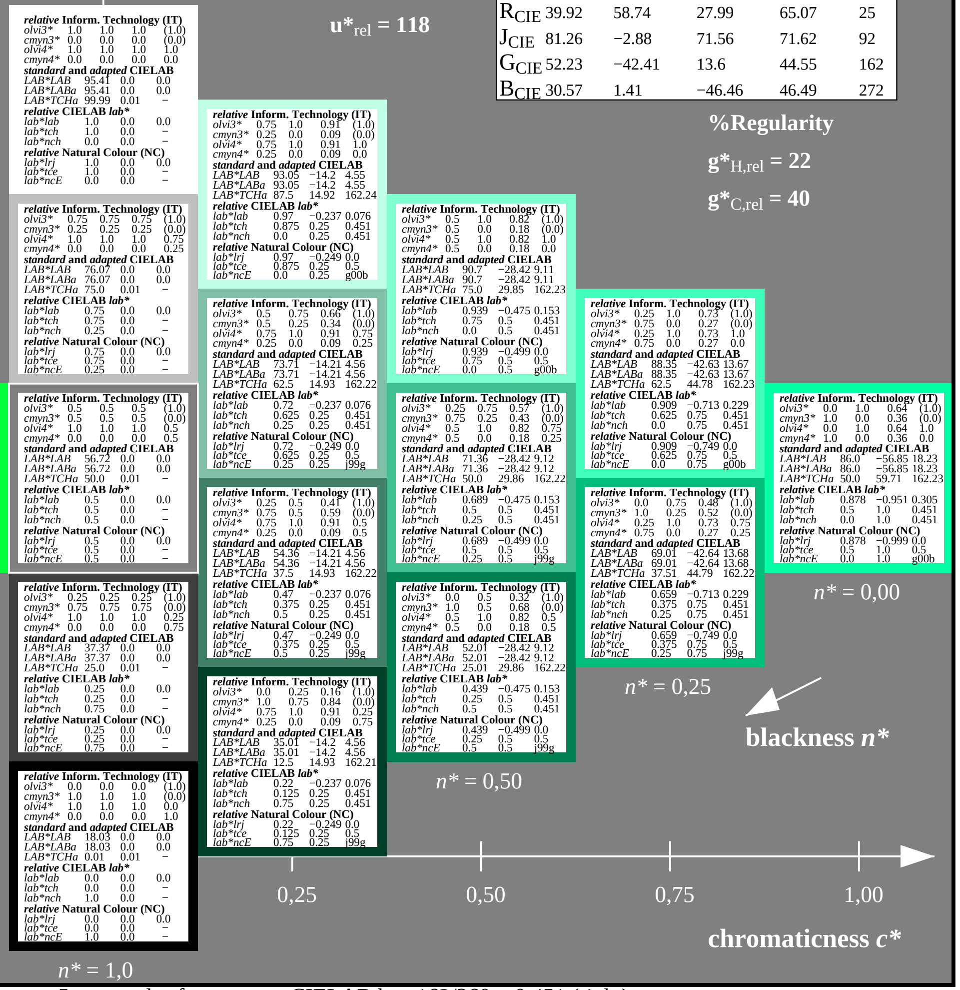
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

*lab*tch* and *lab*nch*

D65: hue G

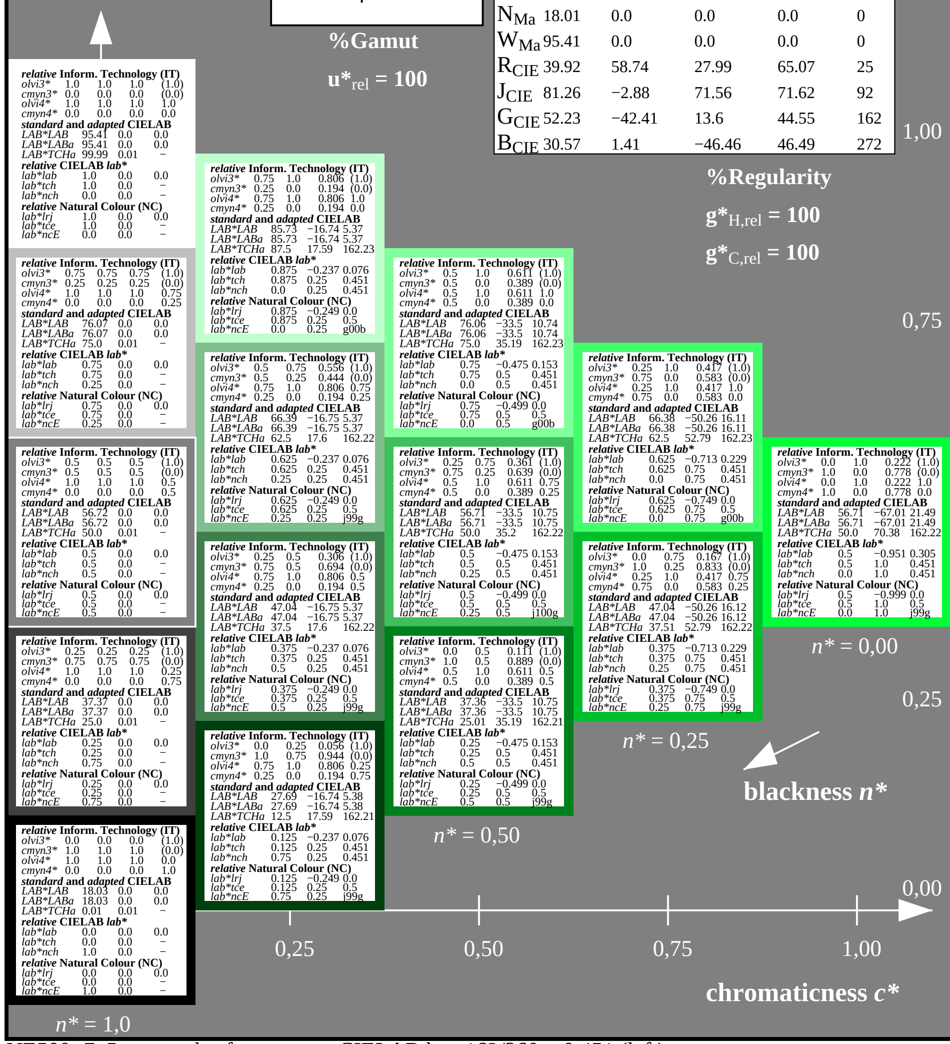
LCH*Ma: 57 70 162

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



NE500−7, 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

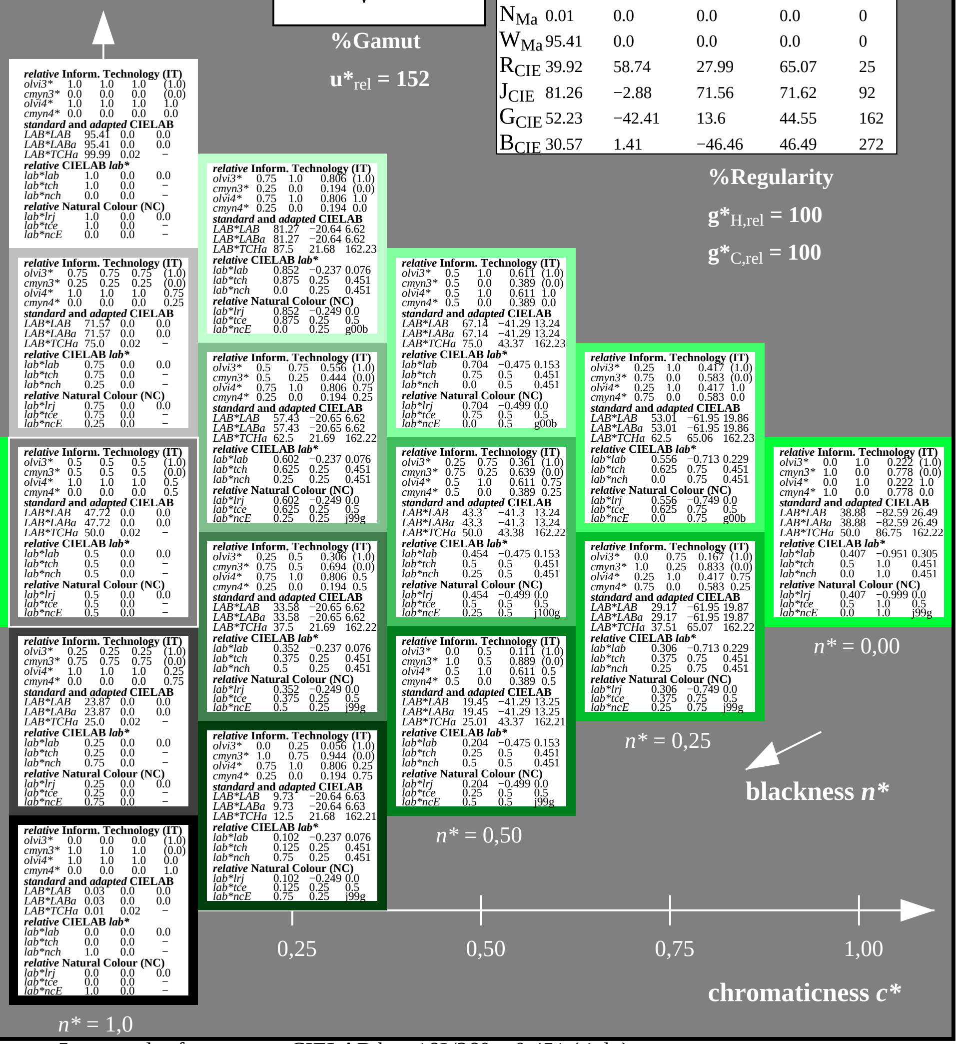
LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*

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

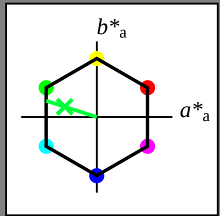


5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

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^*

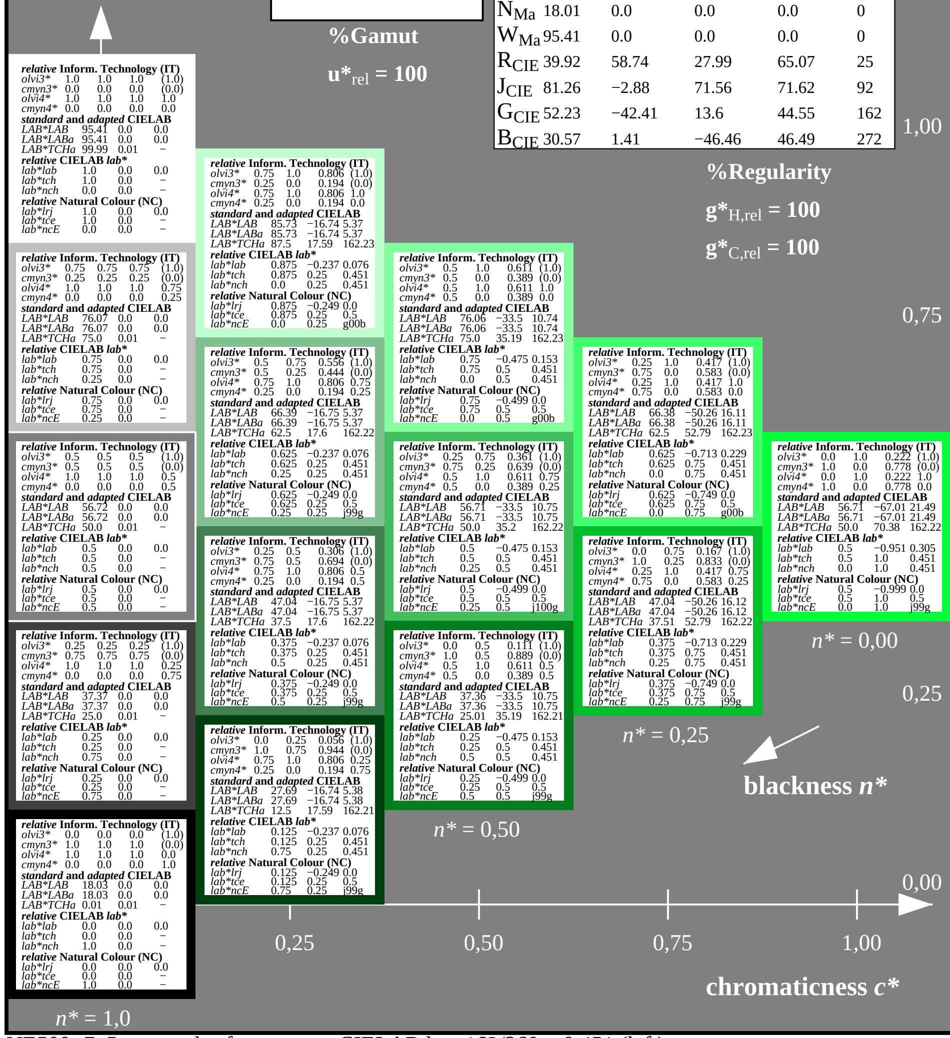


%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

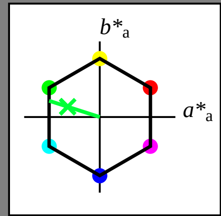
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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^*

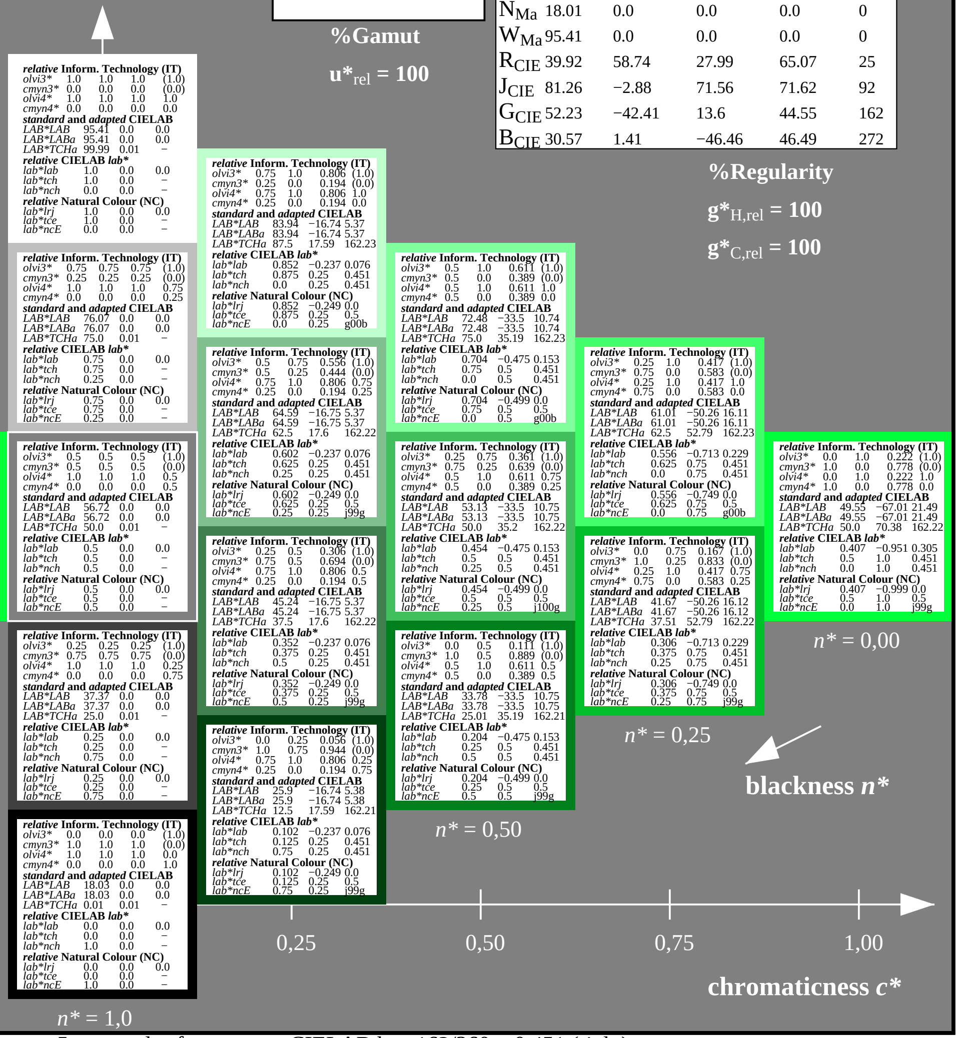


%Gamut

$u^*_{rel} = 100$

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



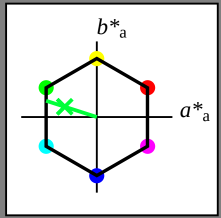
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

Input: Colorimetric 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

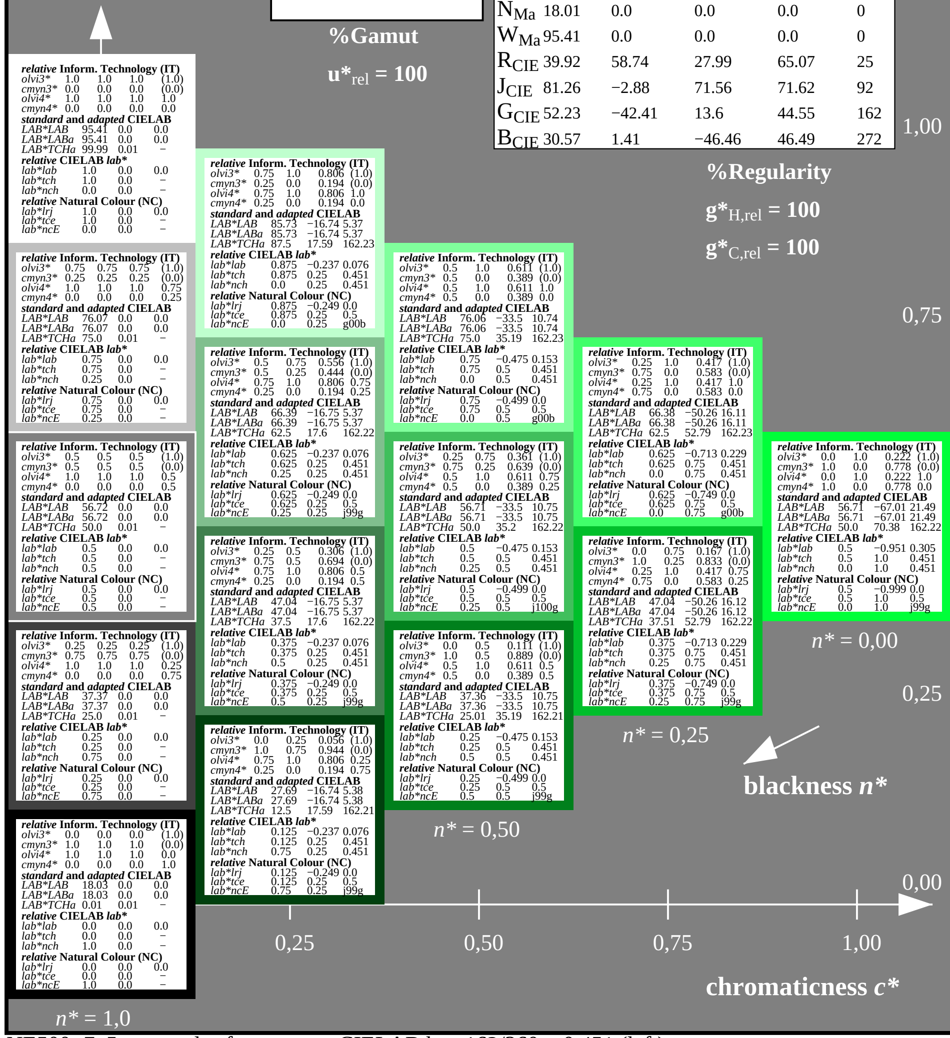
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

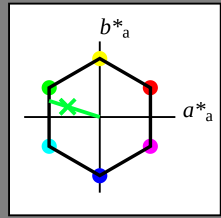
$g^*_{C,rel}$ = 100



Output: Colorimetric 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

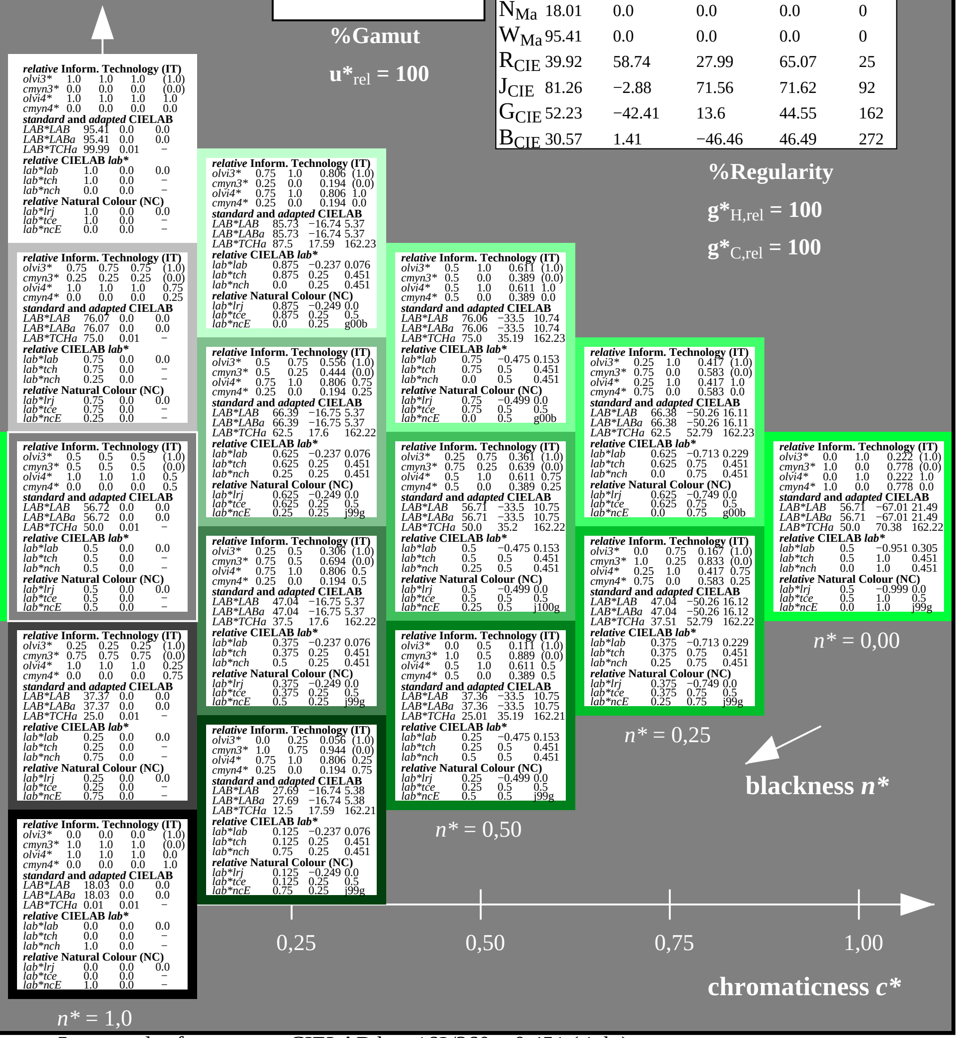
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Standard Reflective System SRS18

for hue *h = *lab*h* = 162/360 = 0.451**

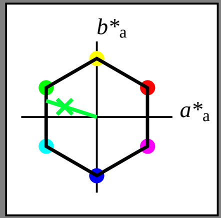
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness *t*



%Gamut

u^*_{rel} = 100

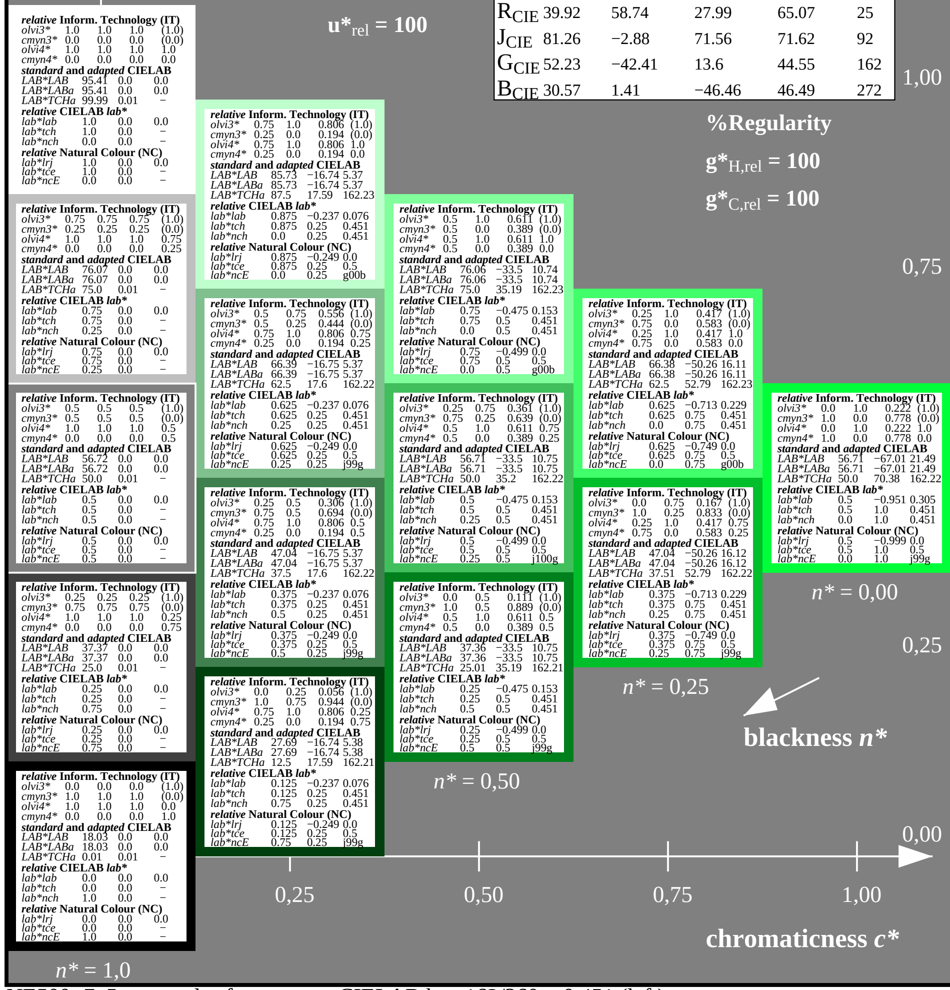
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS70

for hue *h = *lab*h* = 162/360 = 0.451**

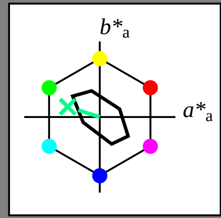
lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t*



%Gamut

u^*_{rel} = 16

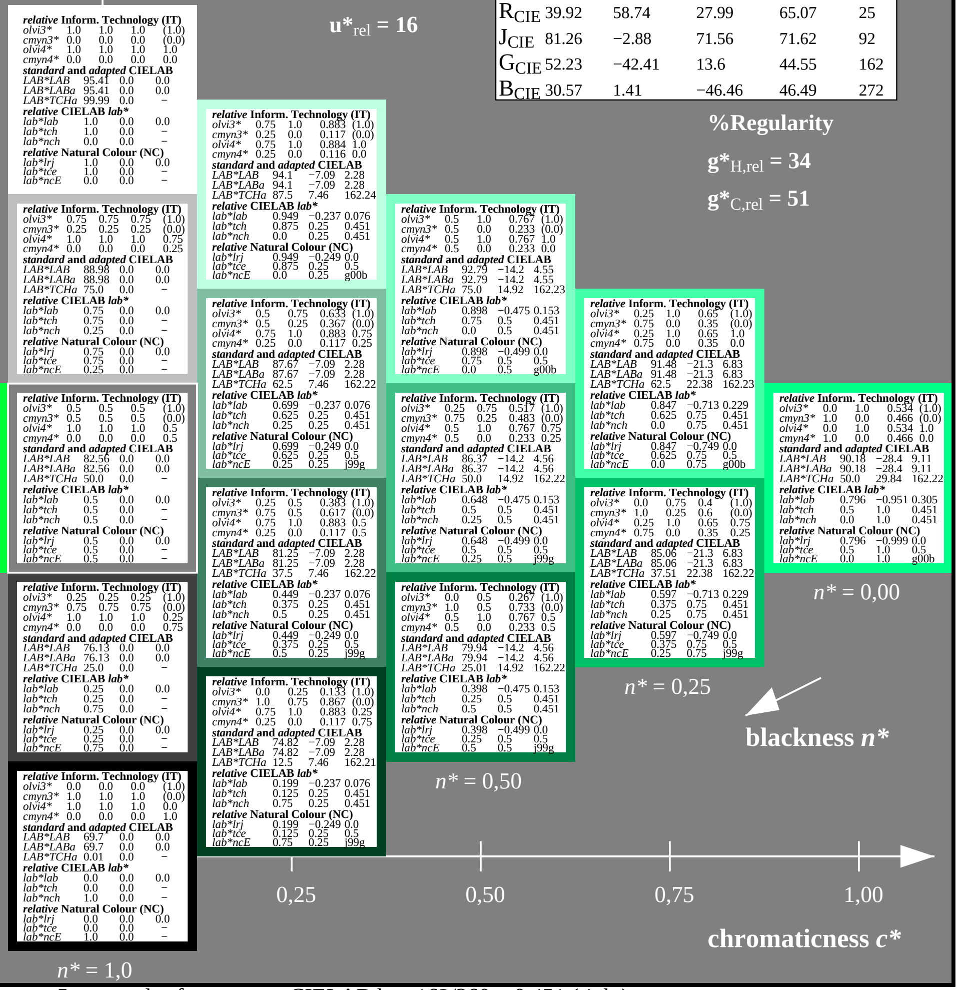
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



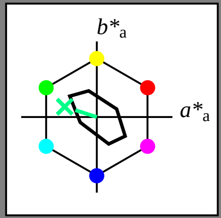
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

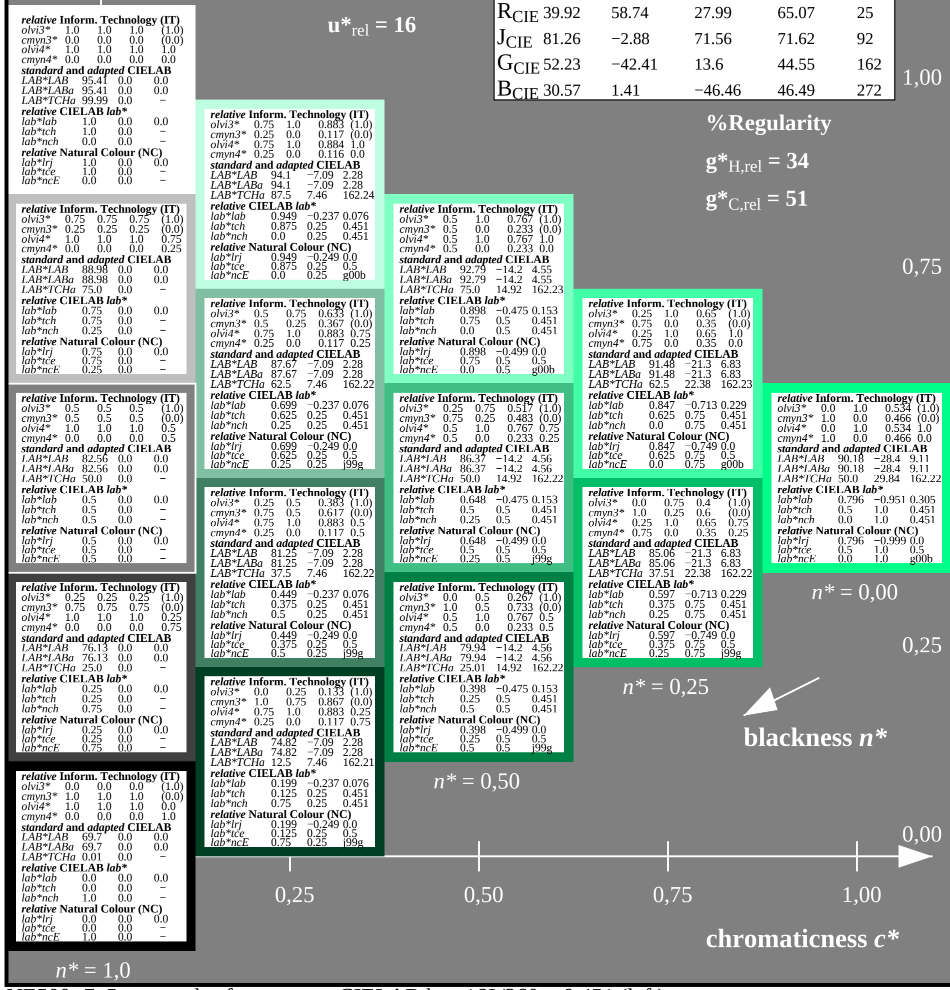
triangle lightness *t**



%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

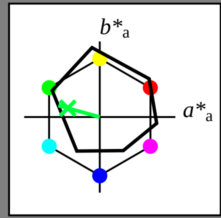
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



Output: Colorimetric 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

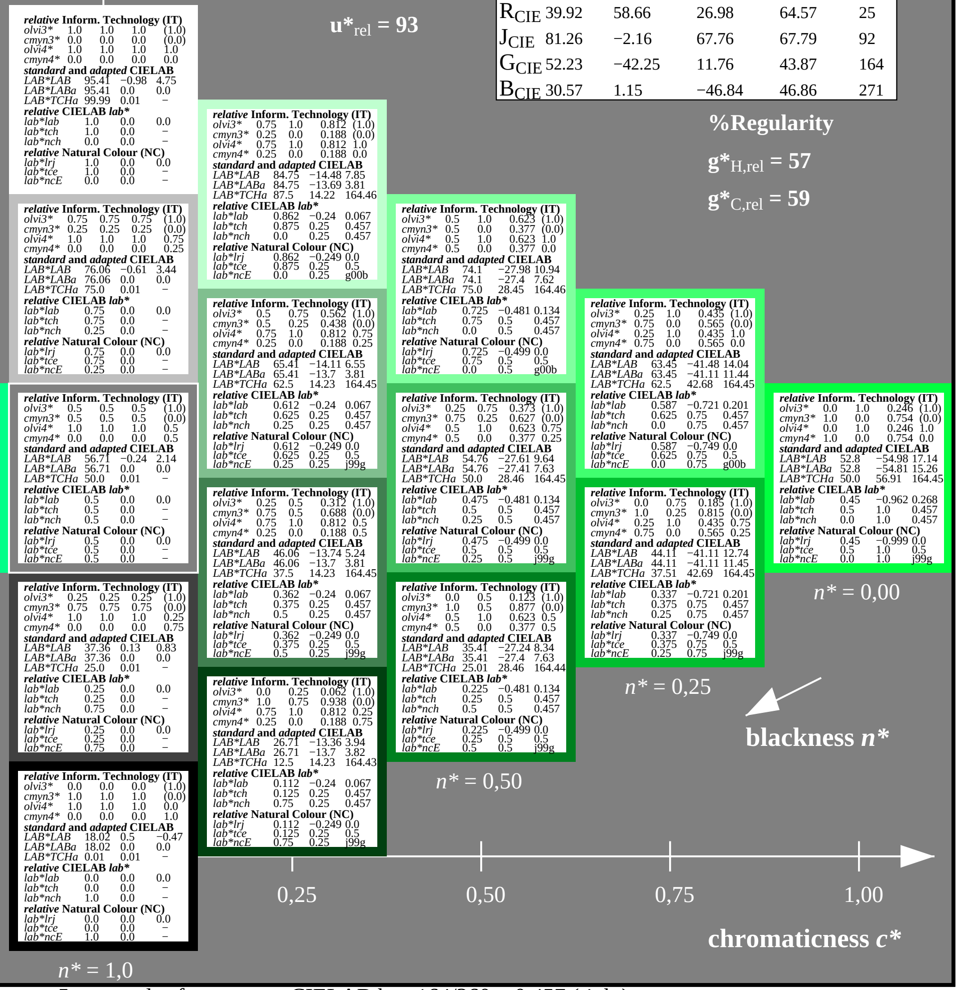
triangle lightness *t**



%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



NE500−7, 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 TLS70

for hue $h^* = lab^*h = 162/360 = 0.451$

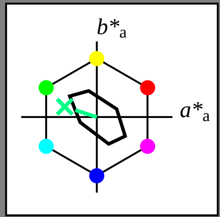
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t**



%Gamut

$u^*_{rel} = 16$

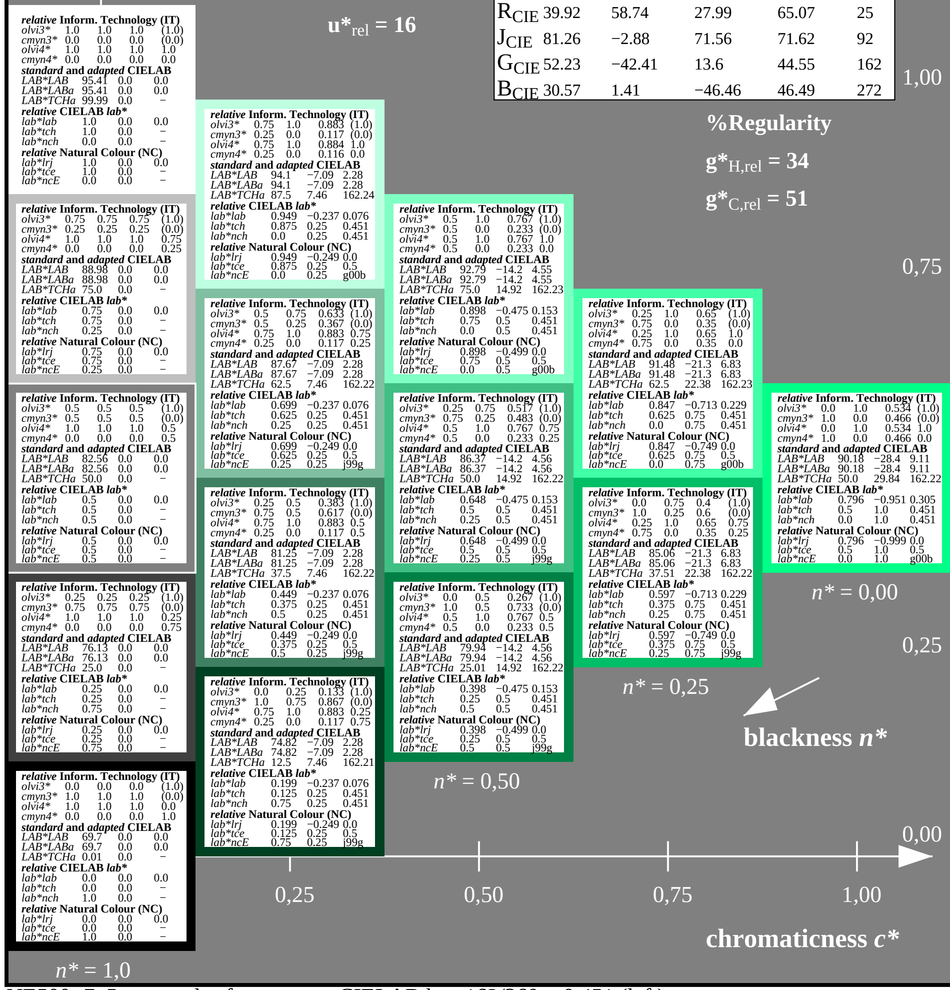
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 162/360 = 0.451$

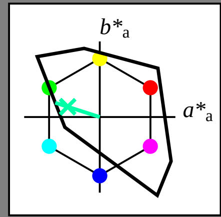
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness *t**



%Gamut

$u^*_{rel} = 158$

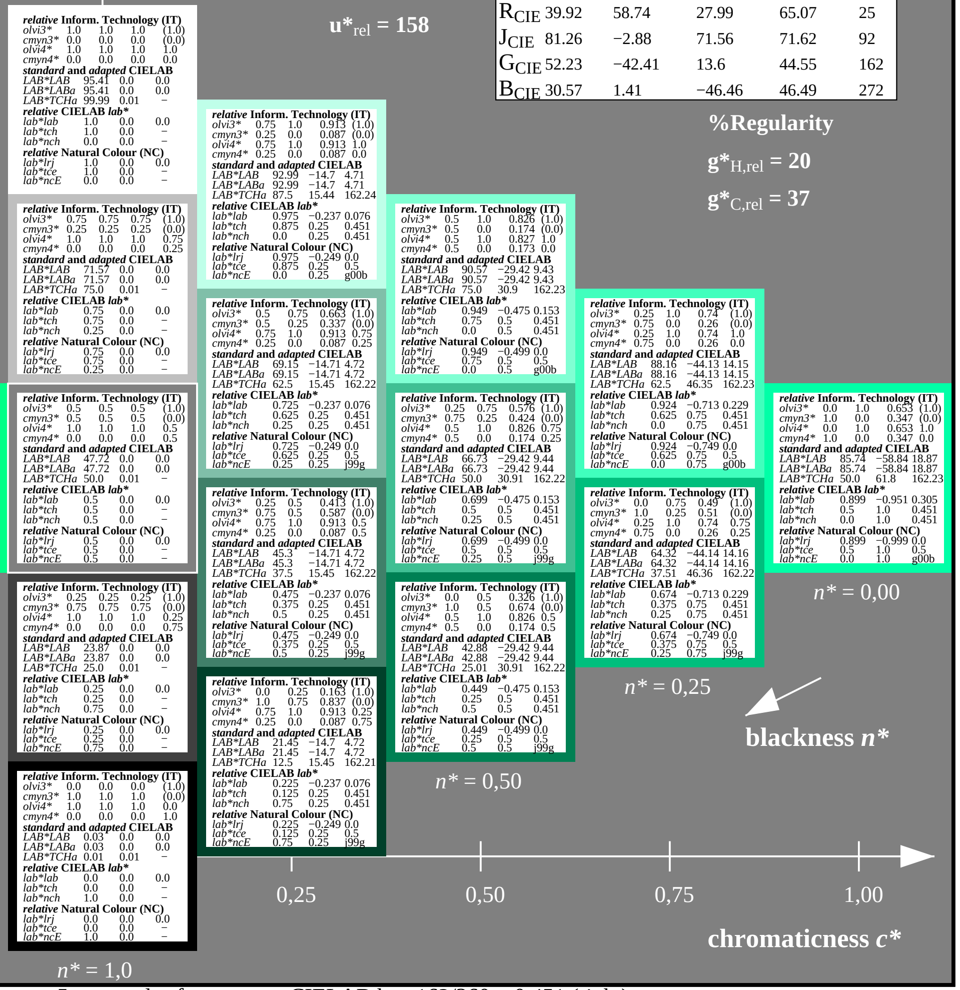
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

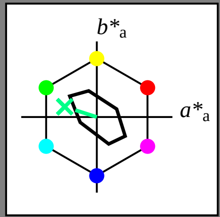
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

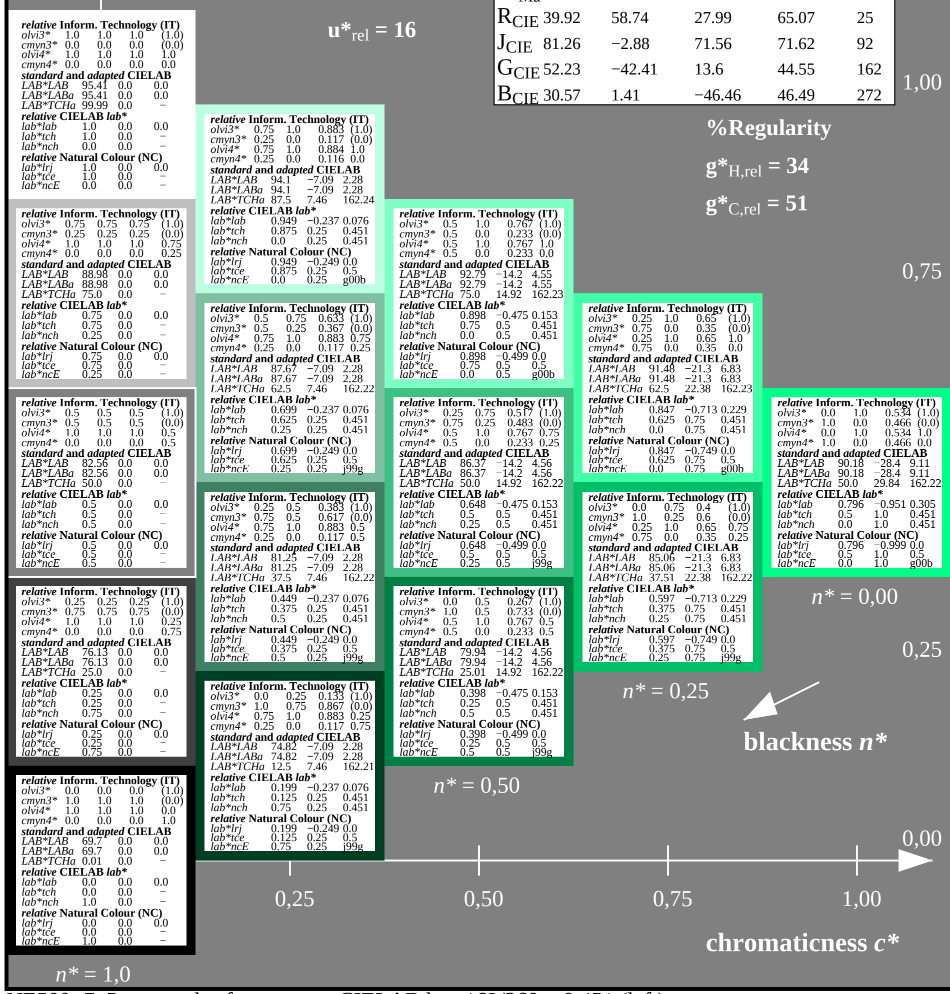
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 165/360 = 0.458$

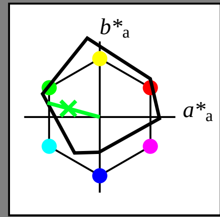
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 49 72 165

olv*Ma: 0.0 1.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

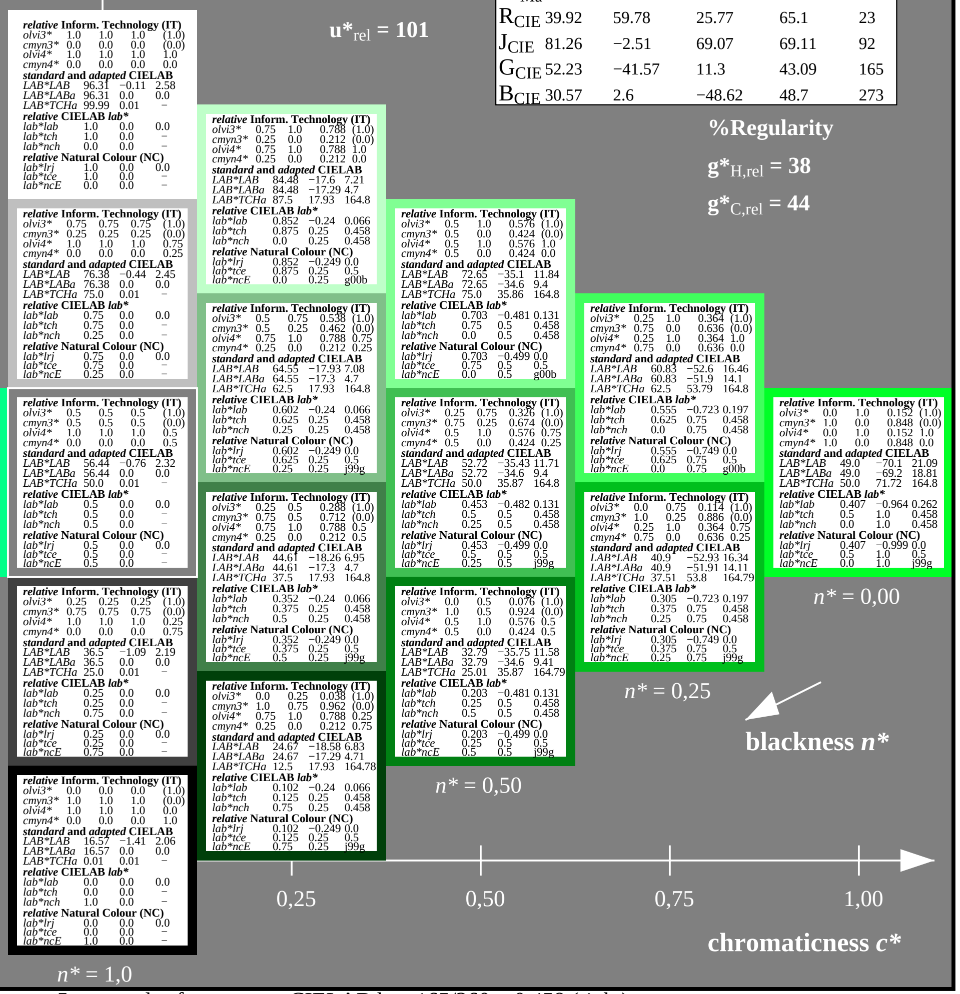
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



NE500−7, 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*

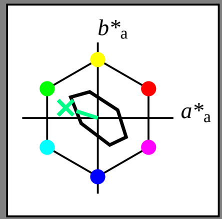
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness *t**



%Gamut

u^*_{rel} = 16

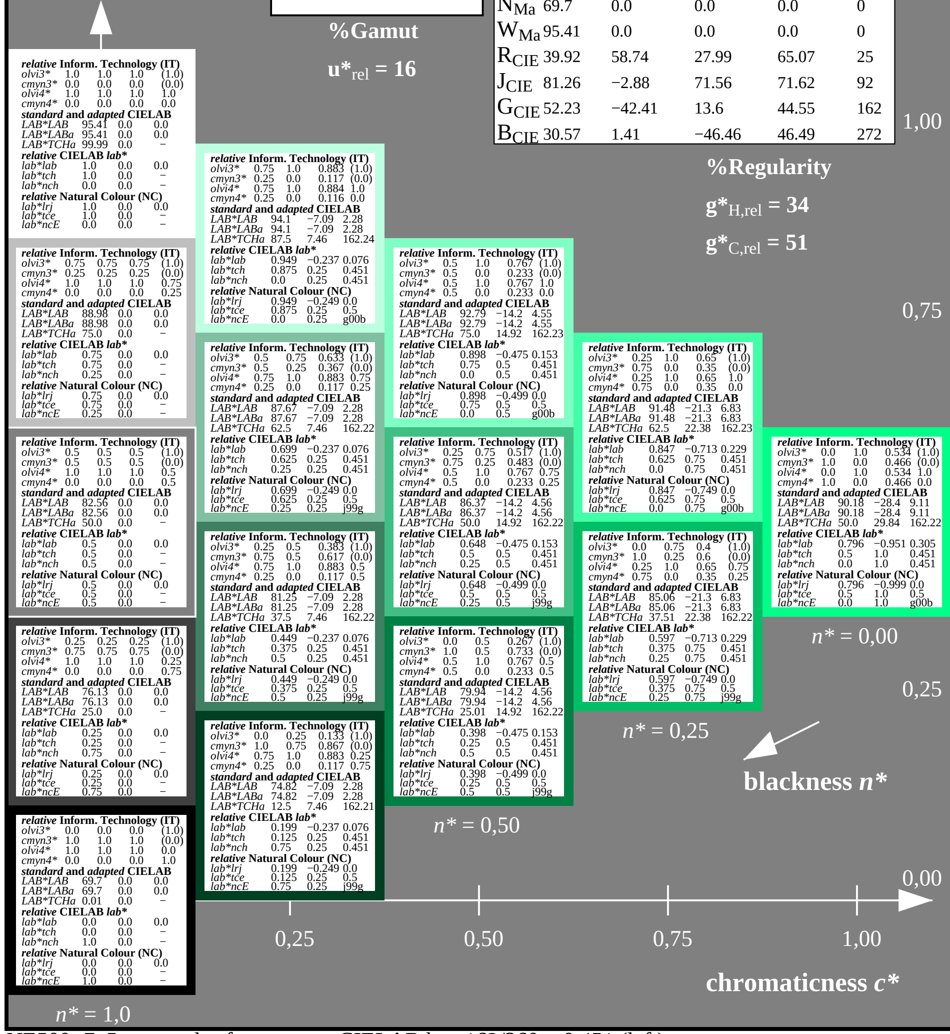
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 = 162/360 = 0.451*

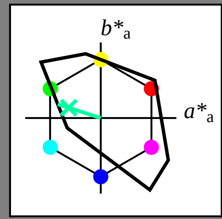
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness *t**



%Gamut

u^*_{rel} = 118

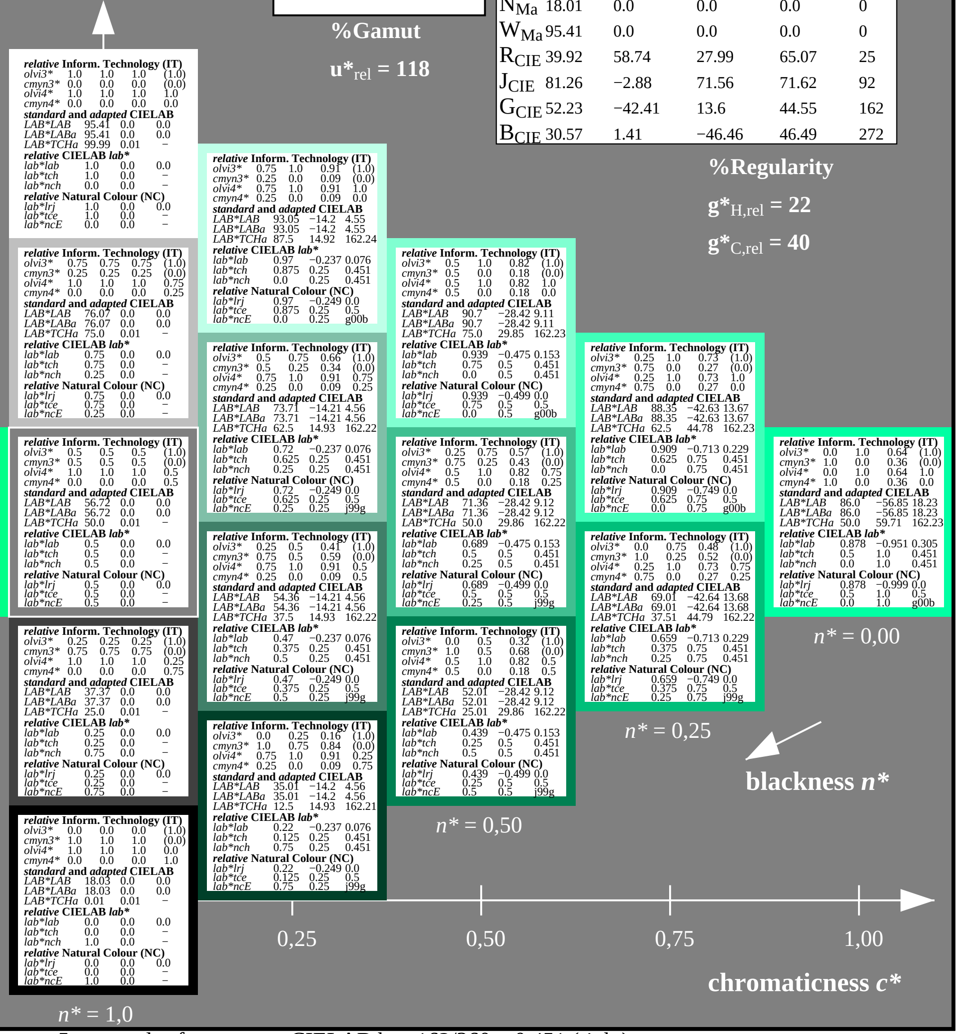
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

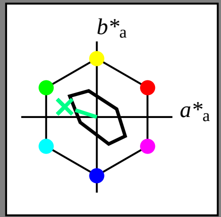
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

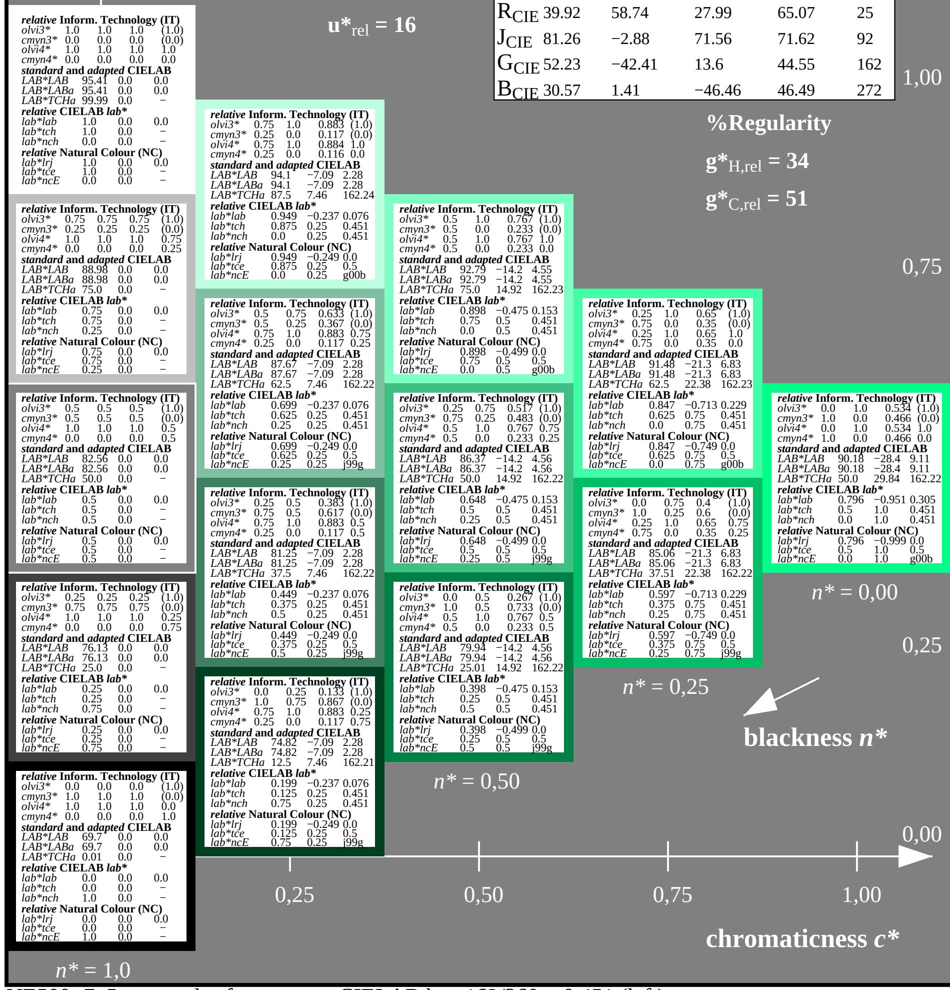
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Natural Luminous System NLS00

for hue $h^* = lab^*h = 162/360 = 0.451$

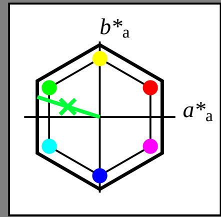
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 39 87 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

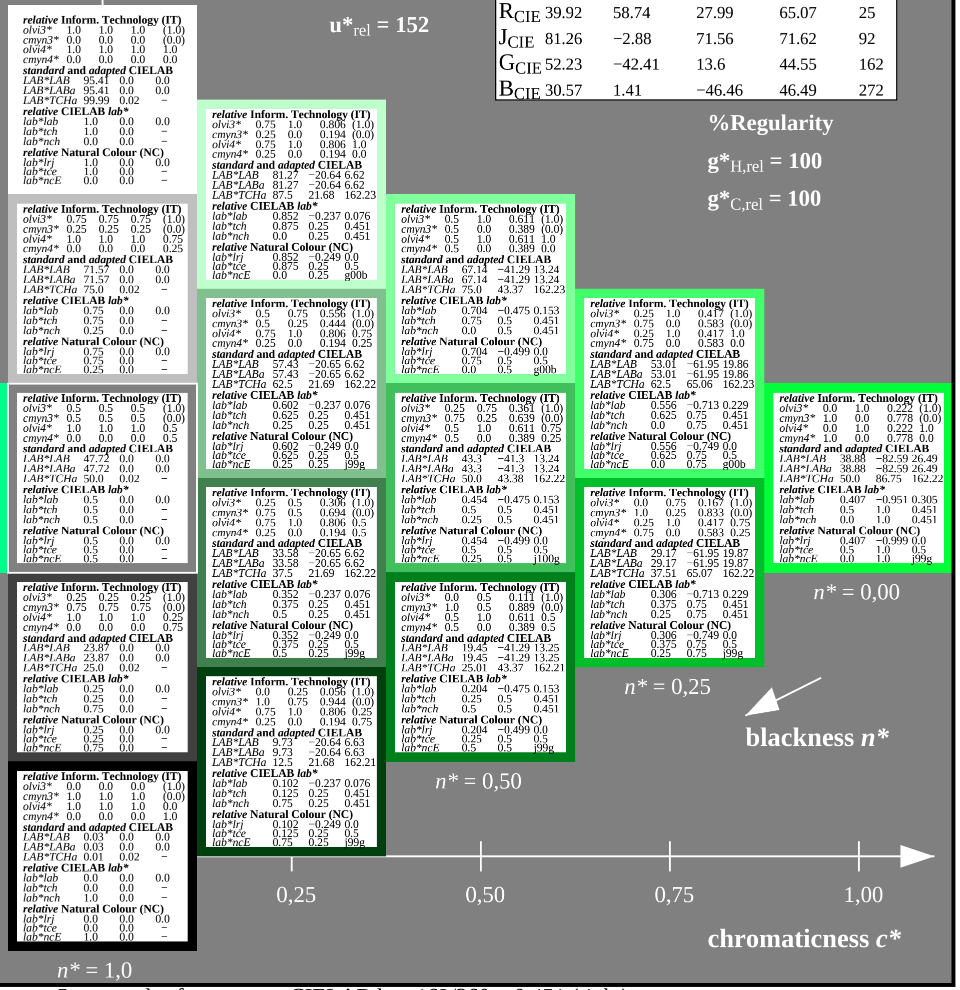
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

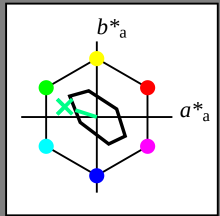
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

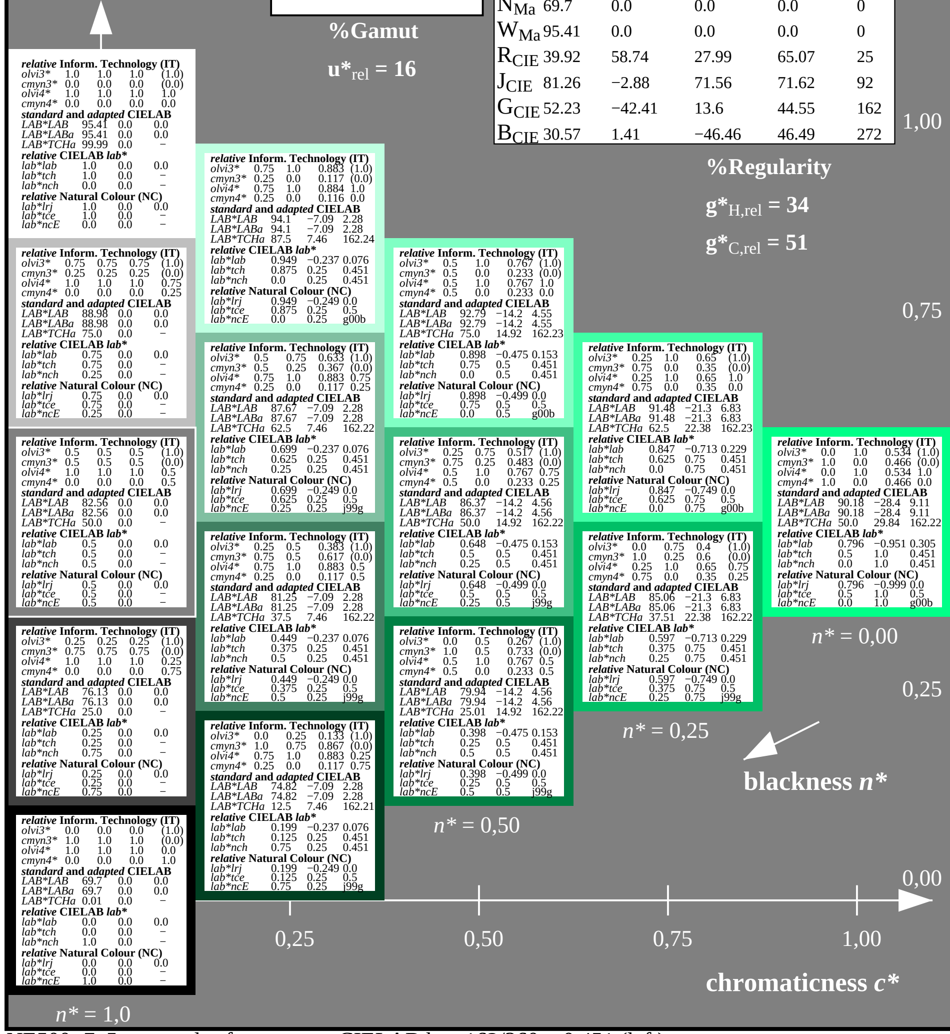
$u^*_{rel} = 16$

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 Natural Reflective System NRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

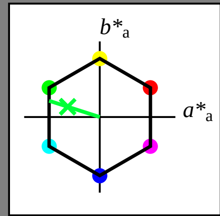
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 50 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

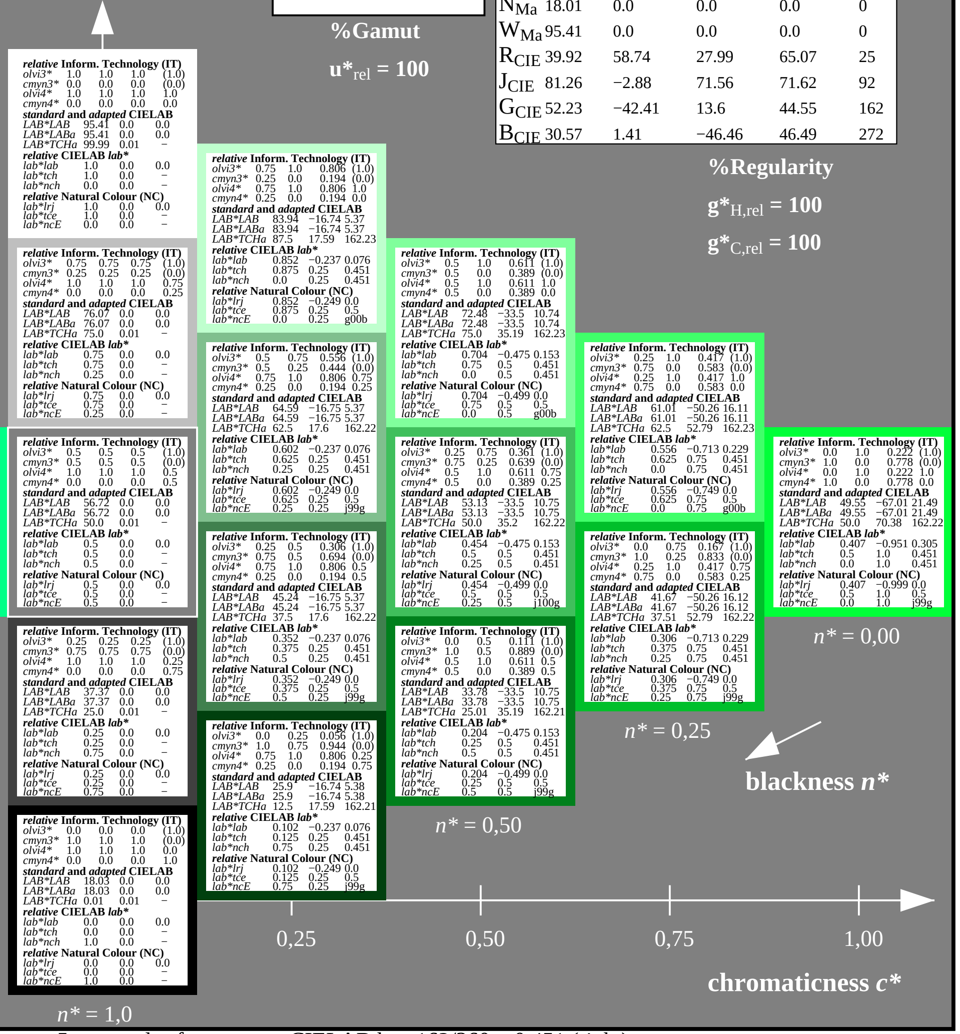
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 162/360 = 0.451$

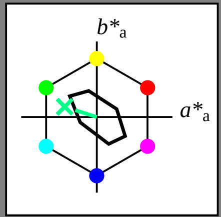
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 90 30 162

olv*Ma: 0.0 1.0 0.53

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

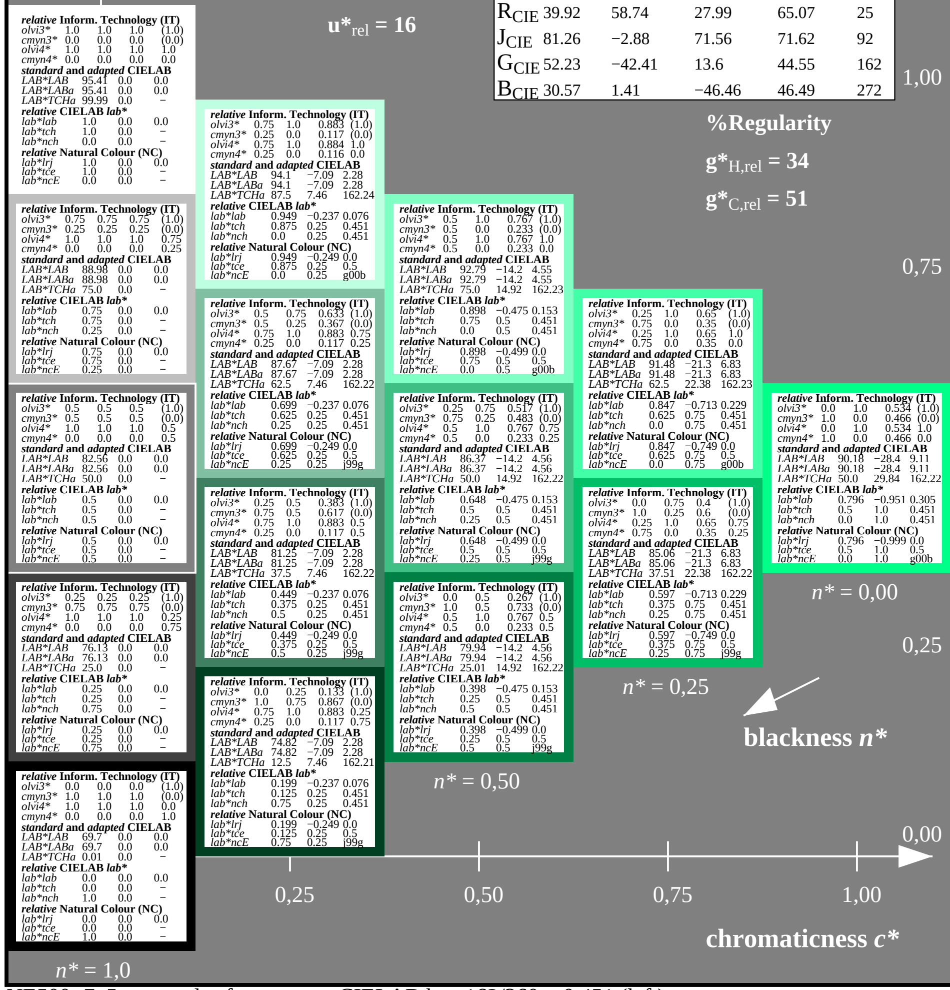
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 162/360 = 0.451$

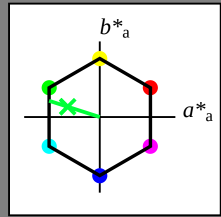
*lab*tch* and *lab*nch*

D65: hue G

LCH*Ma: 57 70 162

olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

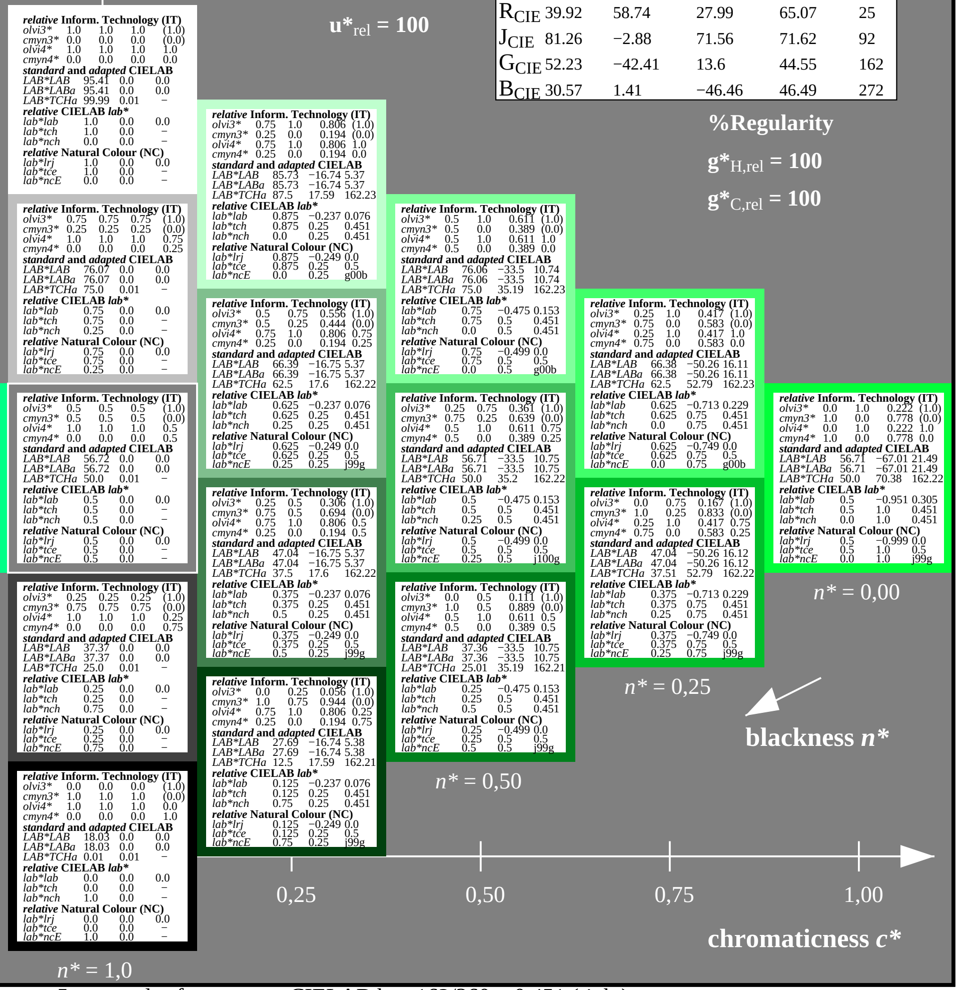
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



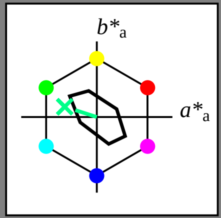
NE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

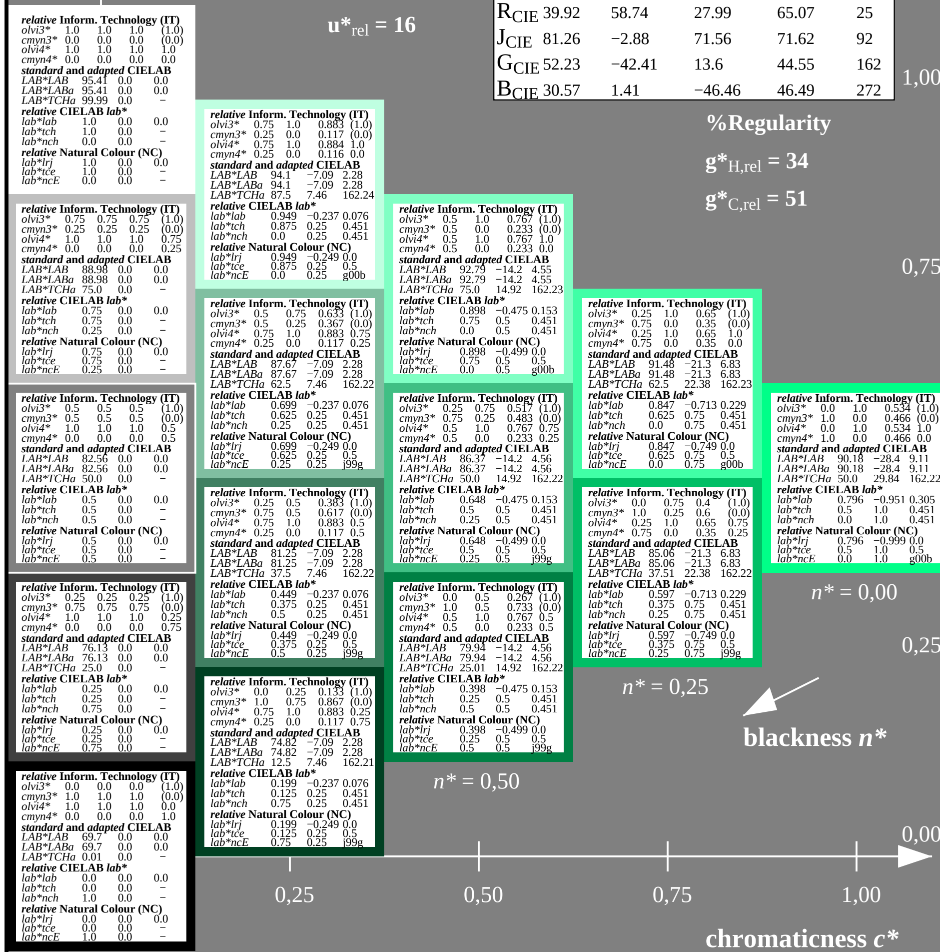
triangle lightness *t**



%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

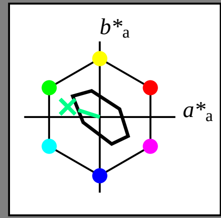
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric 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

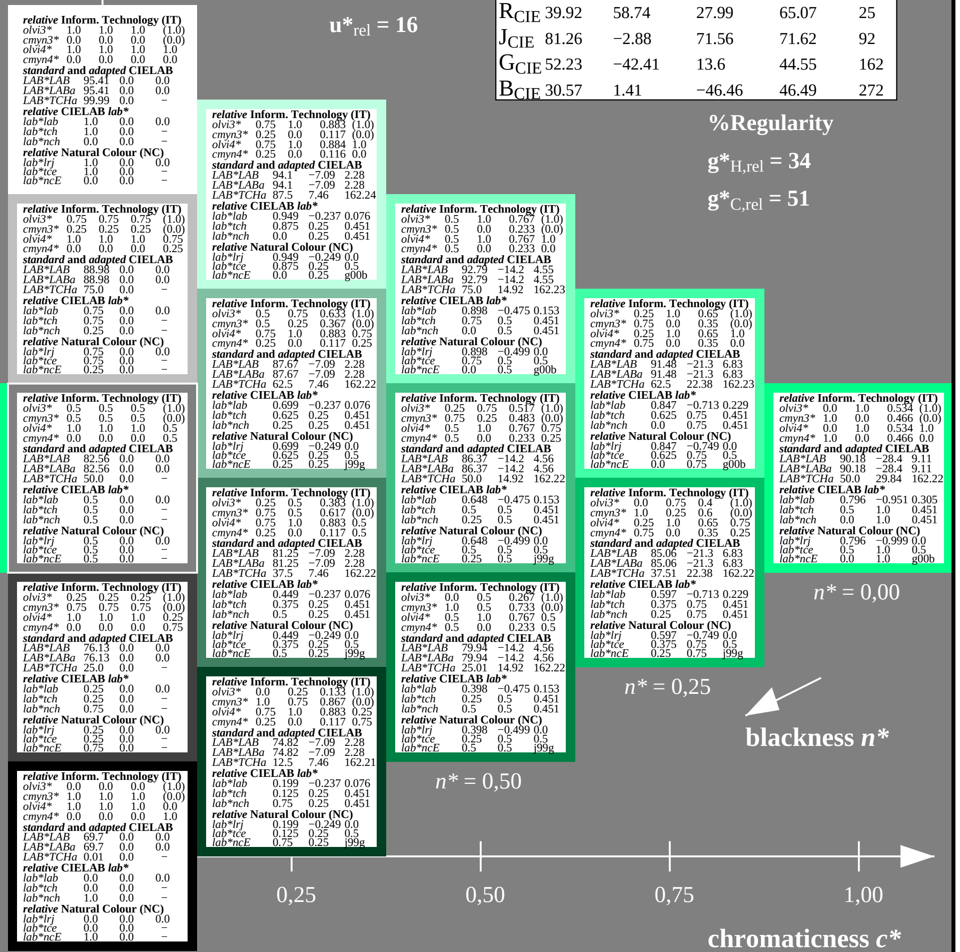
triangle lightness *t**



%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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



NE500−7, 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 Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$

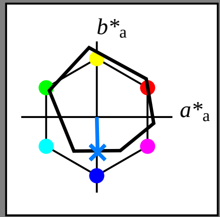
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

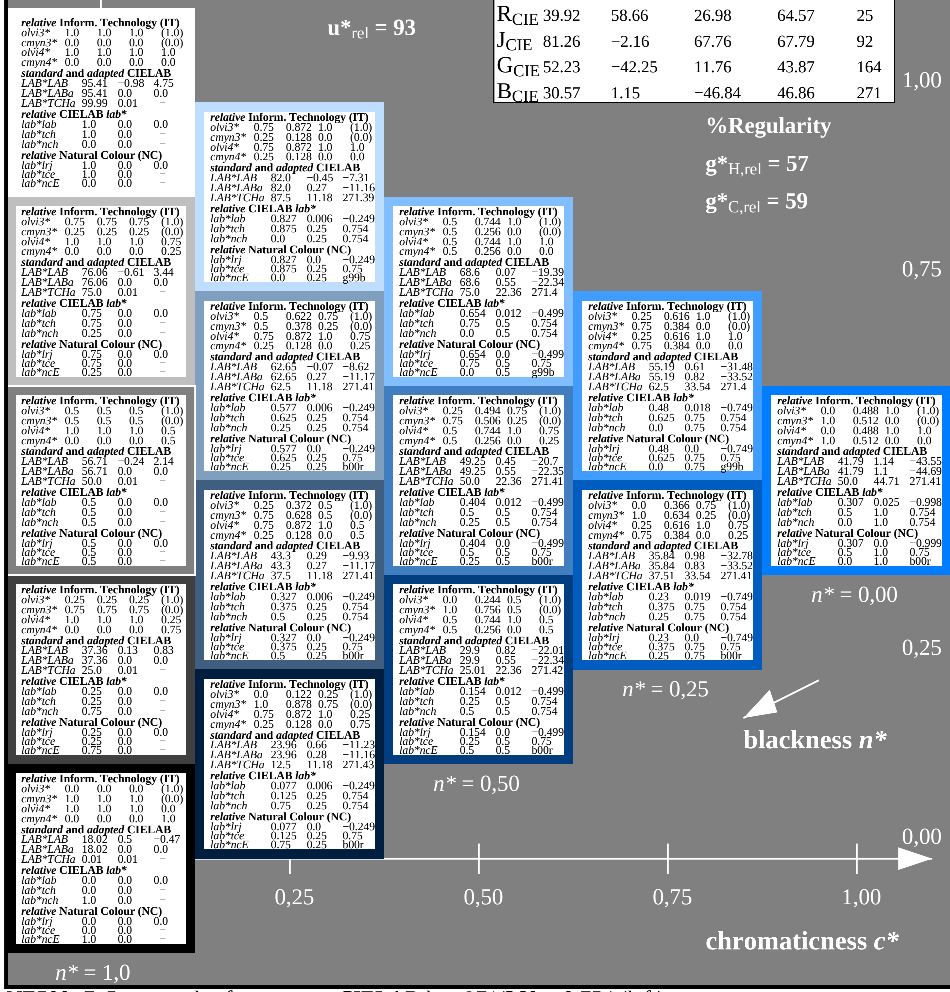
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



NE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$

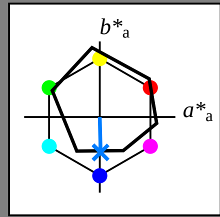
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

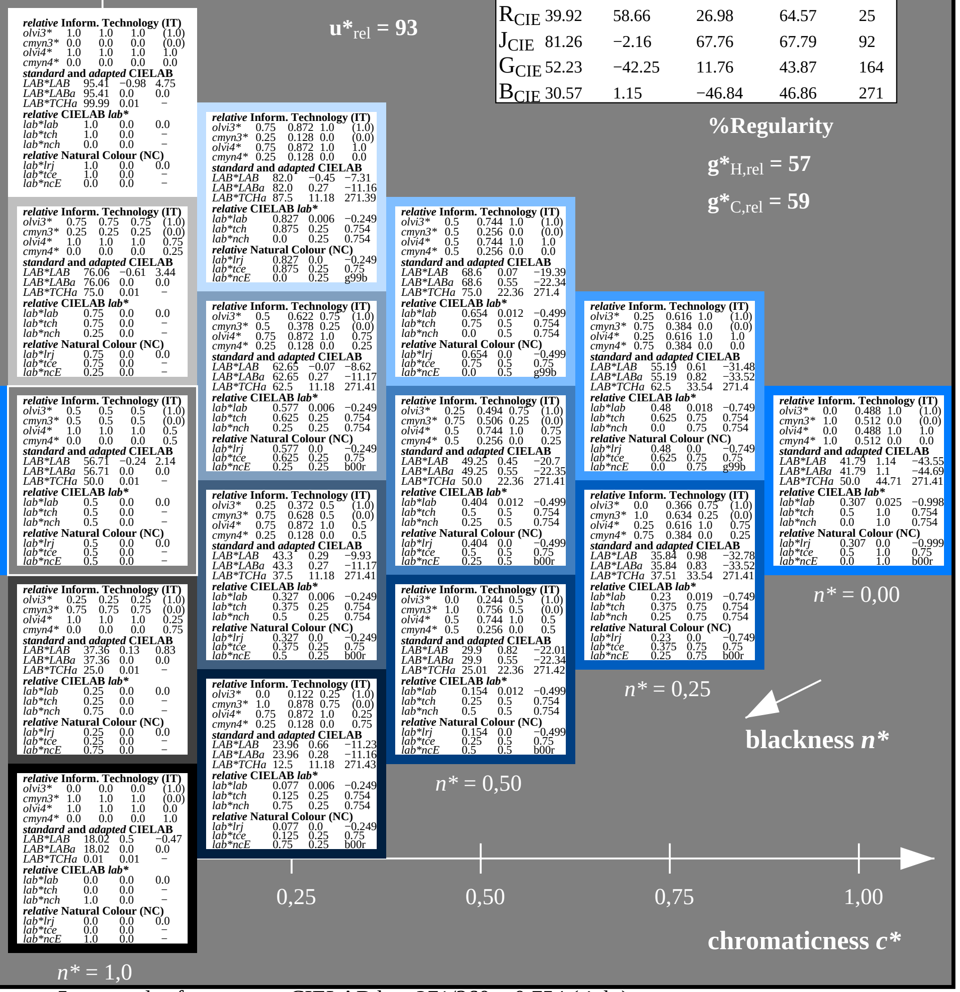
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

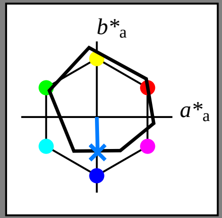


5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric 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

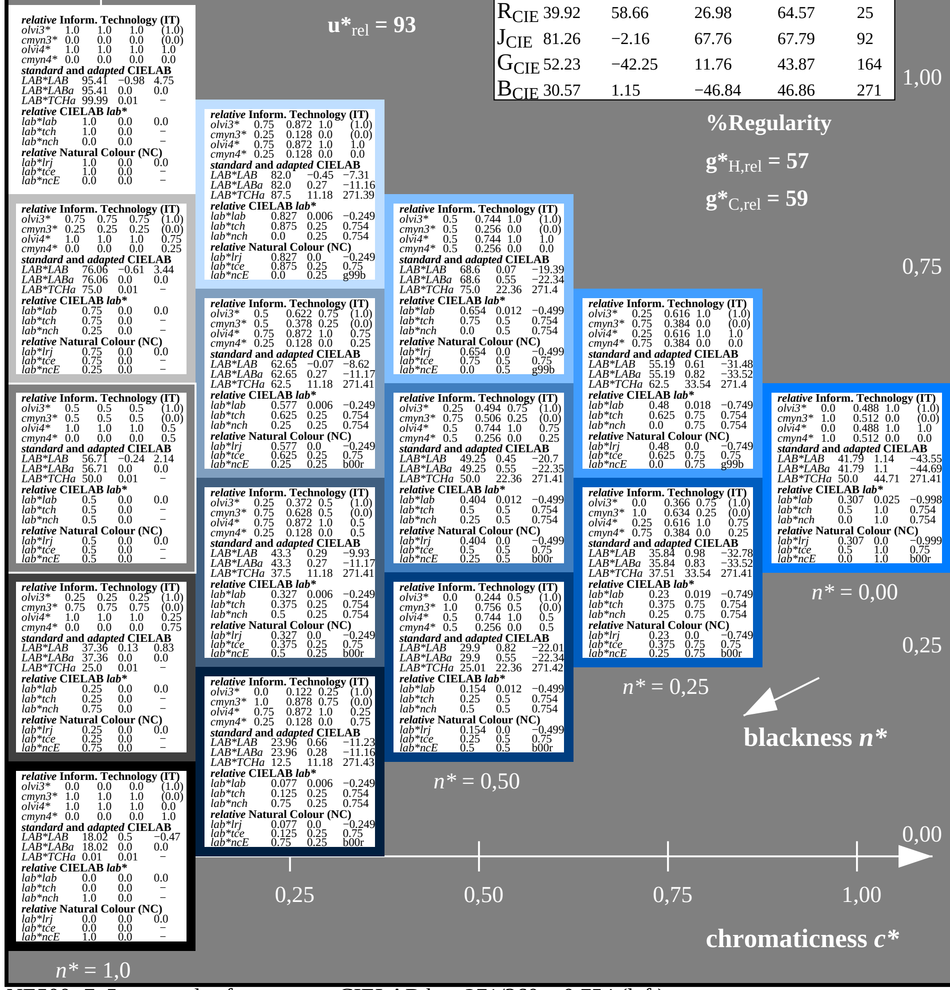
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

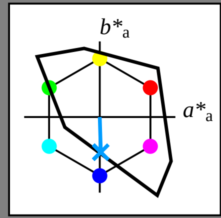
$g^*_{C,rel}$ = 59



Output: Colorimetric 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

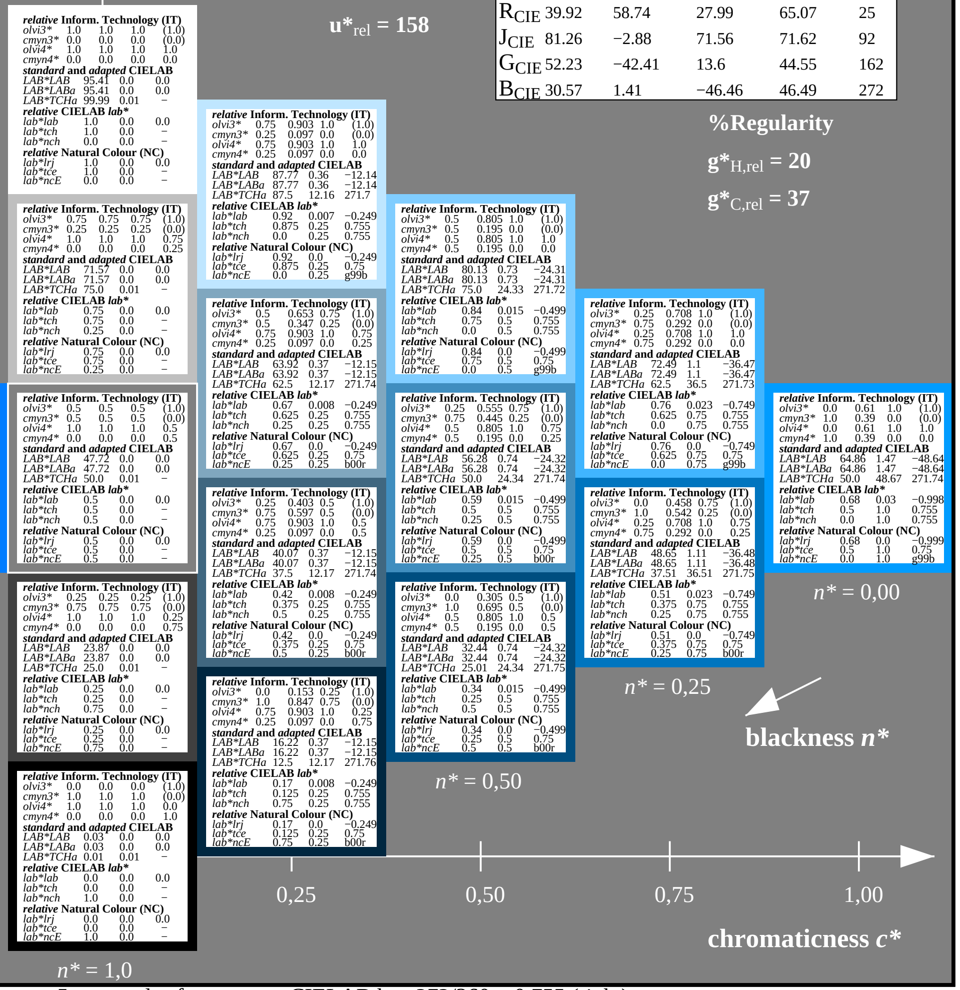
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



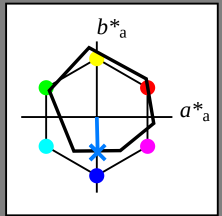
NE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

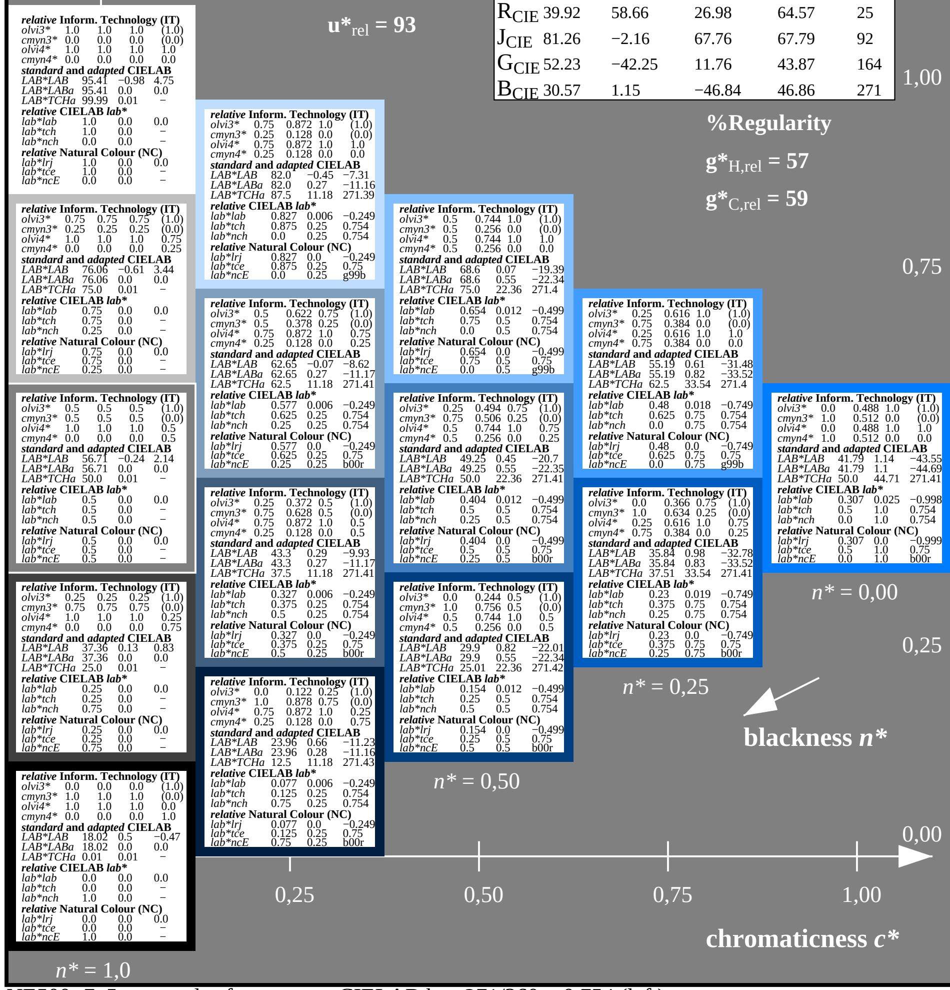
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

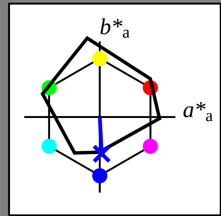
$g^*_{C,rel}$ = 59



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

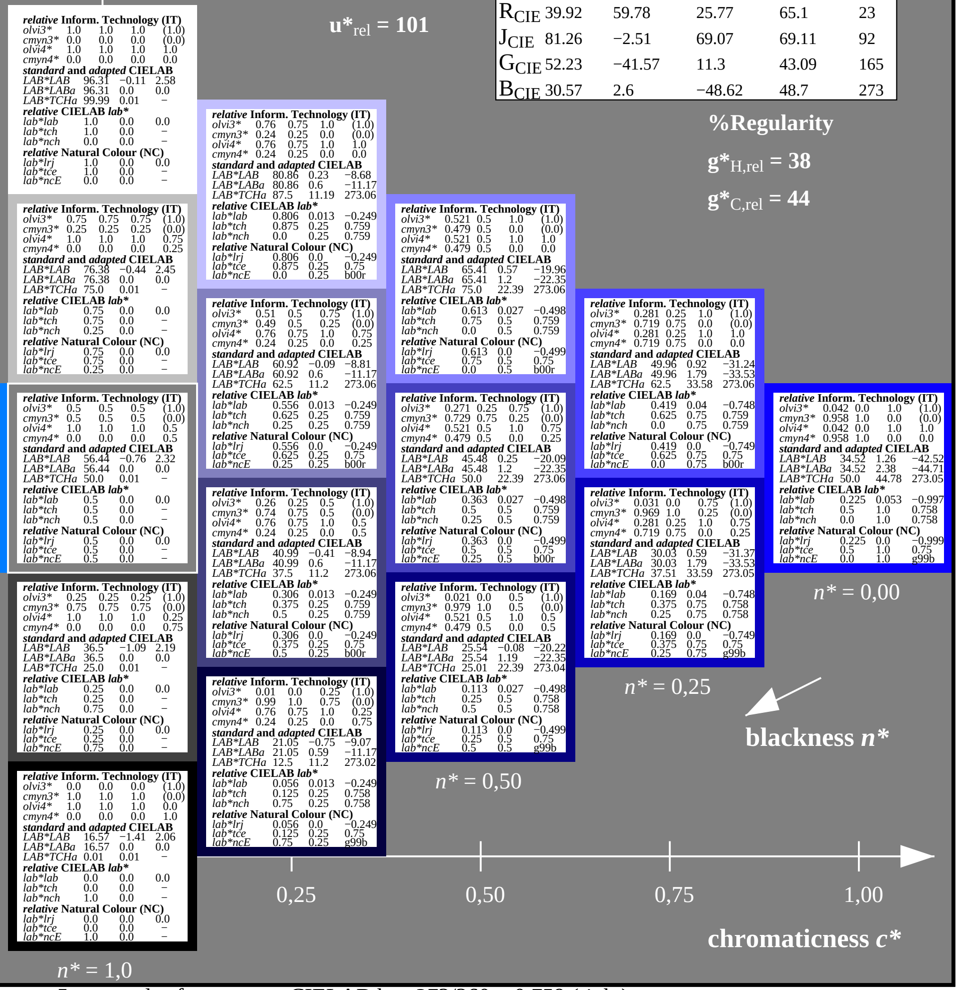
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

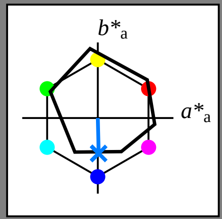


NE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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*

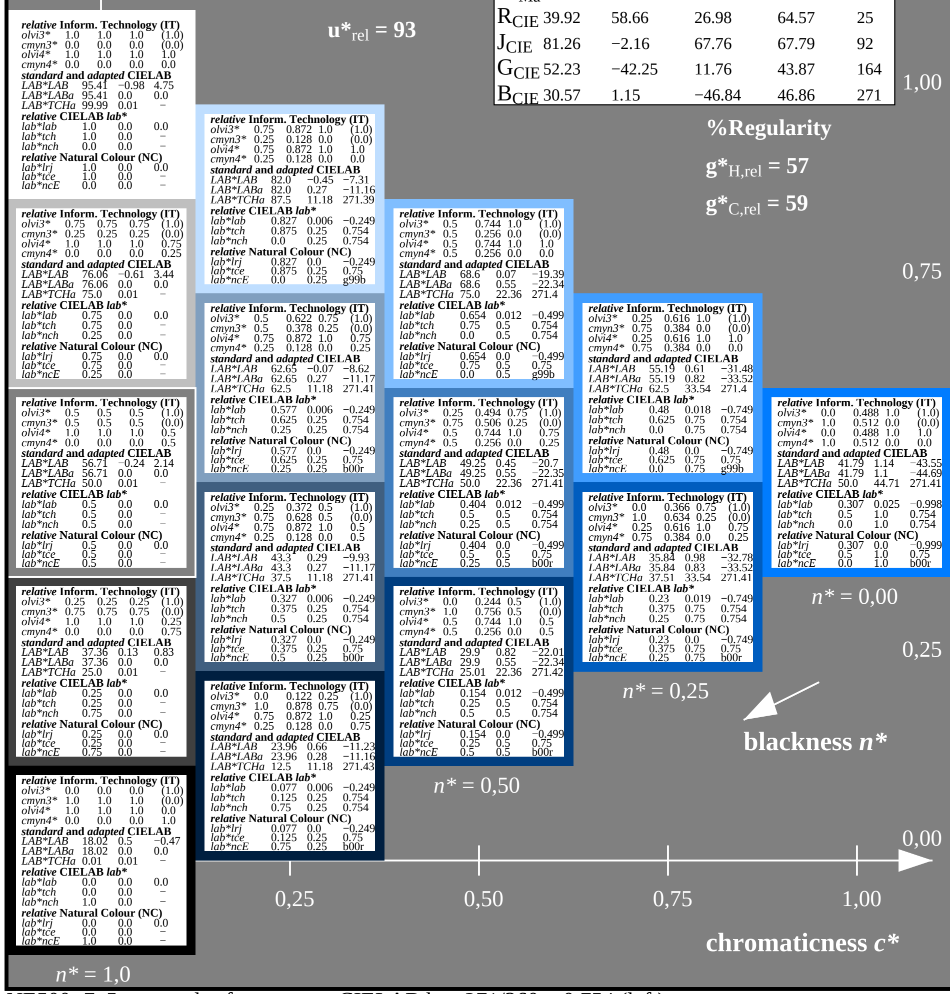
D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0
triangle lightness t^*



%Gamut
$u^*_{rel} = 93$

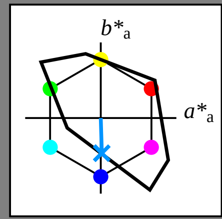
ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.39	50.52	82.63	38
Y_{Ma}	90.37	−10.26	91.75	92.32	96
L_{Ma}	50.9	−62.83	34.96	71.91	151
C_{Ma}	58.62	−30.34	−45.01	54.3	236
V_{Ma}	25.72	31.1	−44.4	54.22	305
M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	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 $h^* = lab^*h = 272/360 = 0.755$
*lab*tch* and *lab*nch*

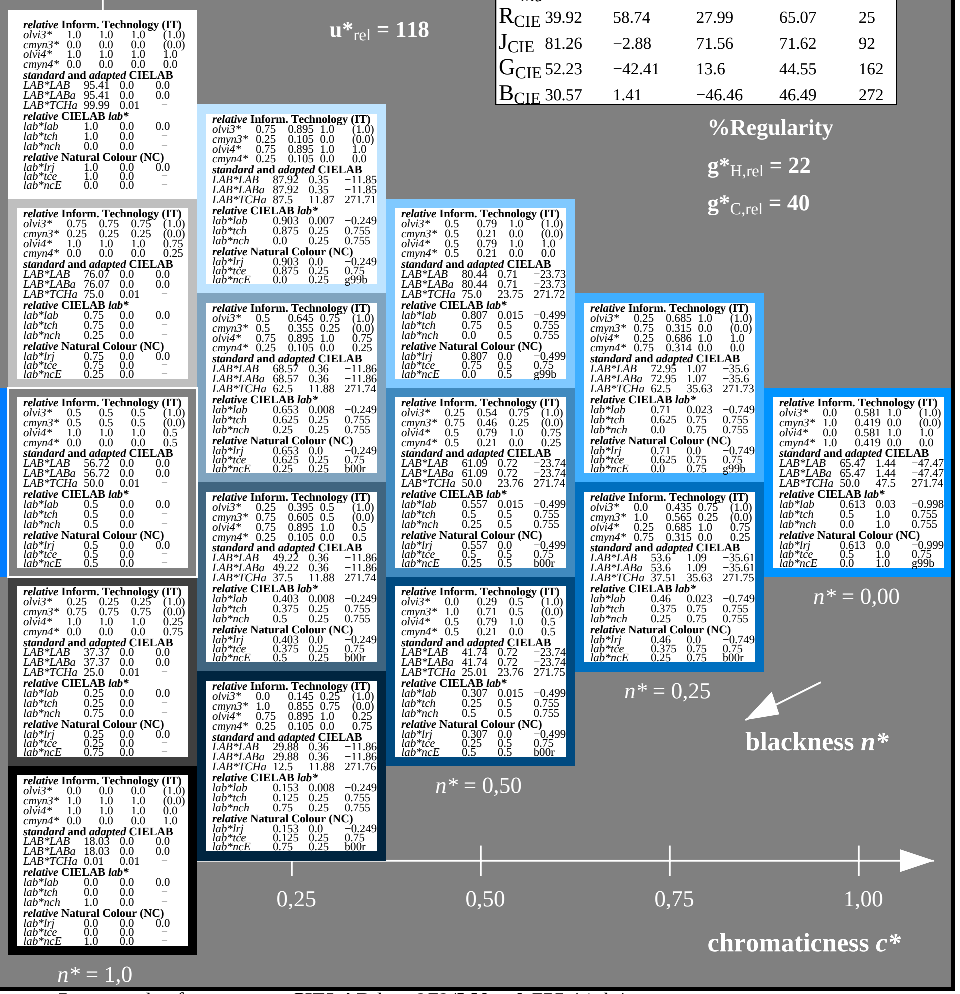
D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0
triangle lightness t^*



%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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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 $h^* = lab^*h = 271/360 = 0.754$

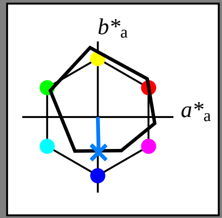
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

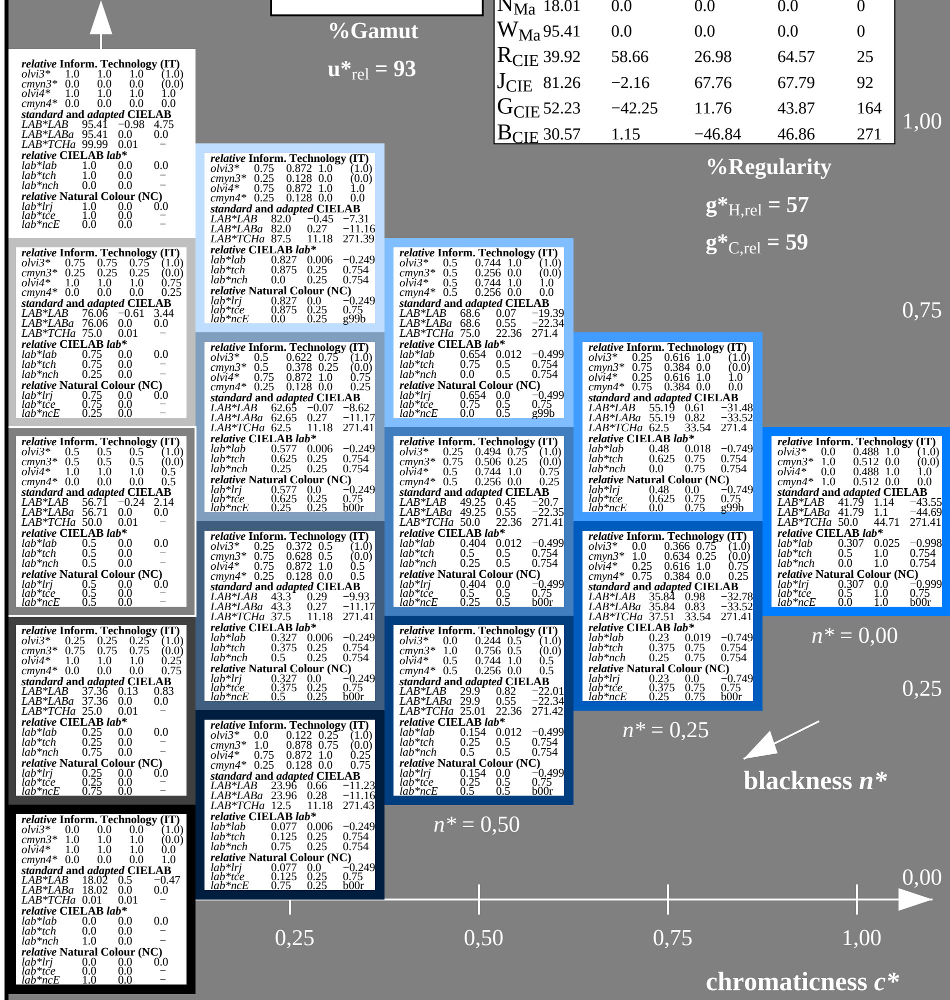
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

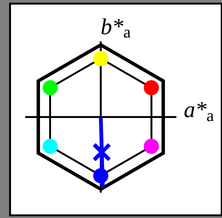
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

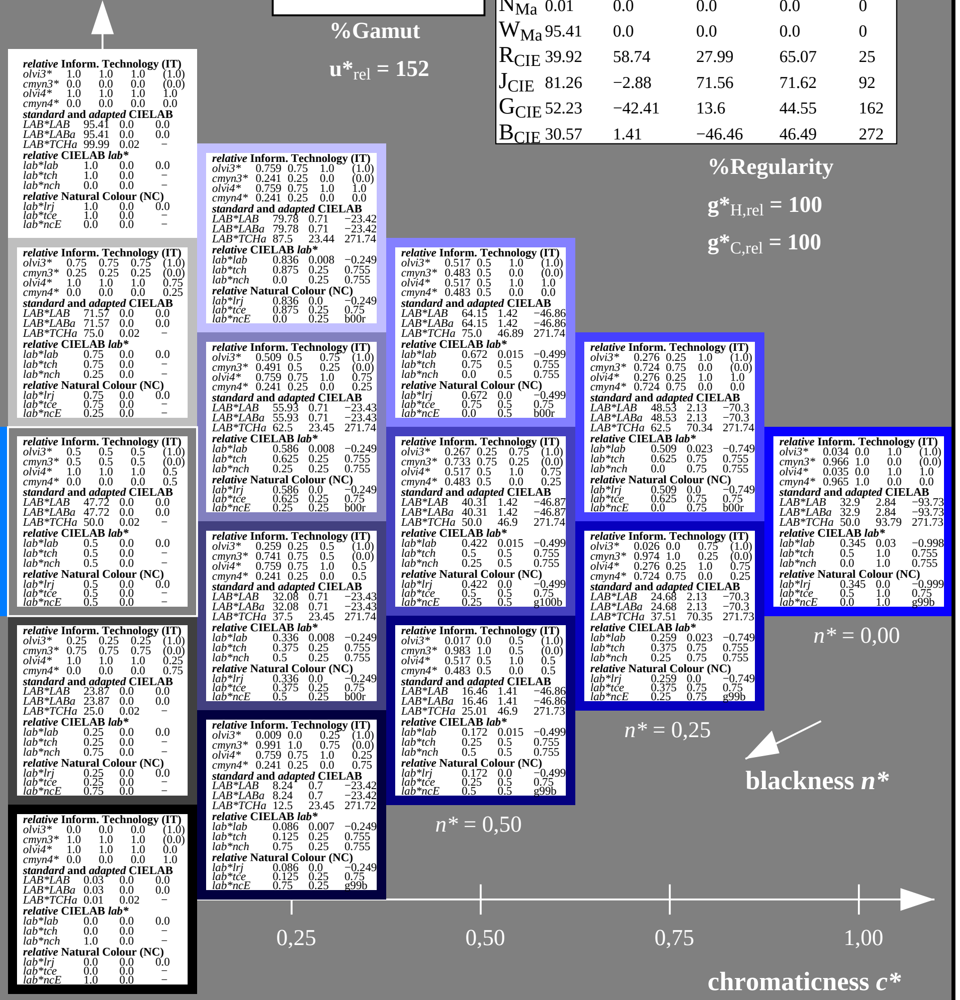
$u^*_{rel} = 152$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 271/360 = 0.754$

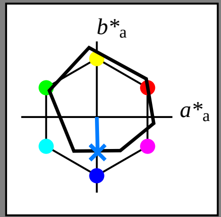
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness *t*



%Gamut

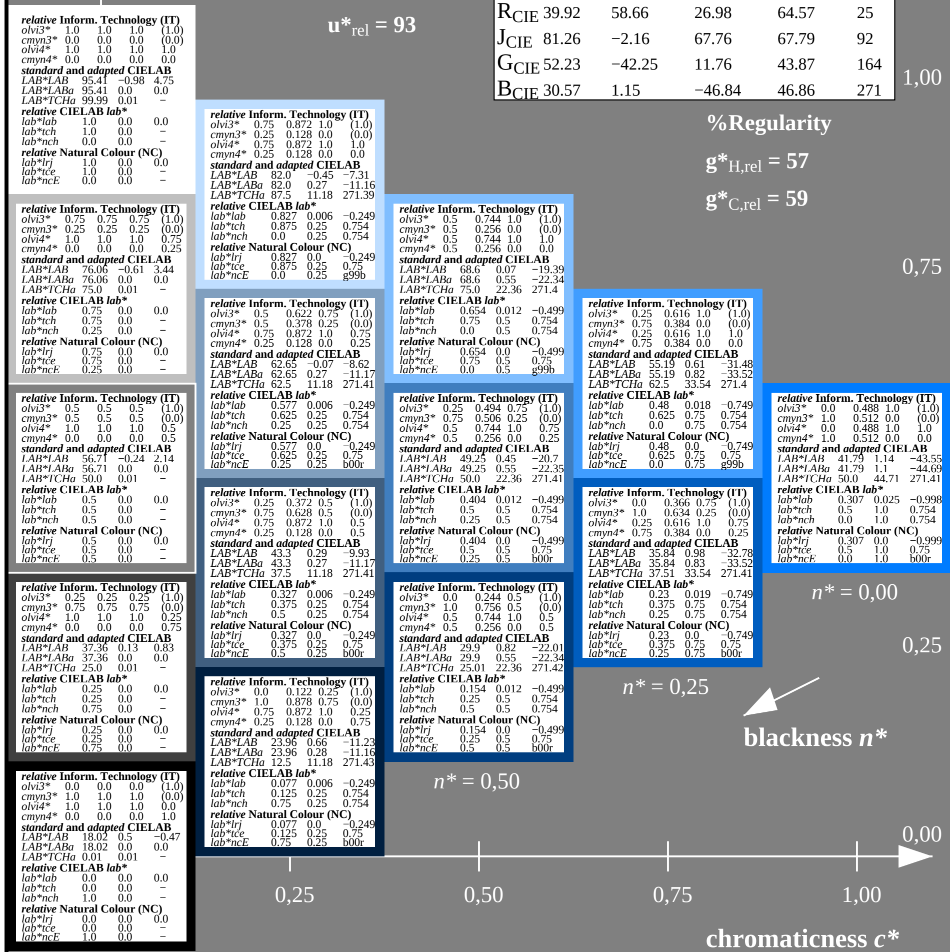
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

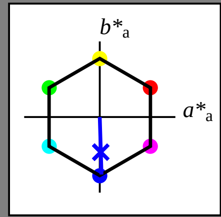
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

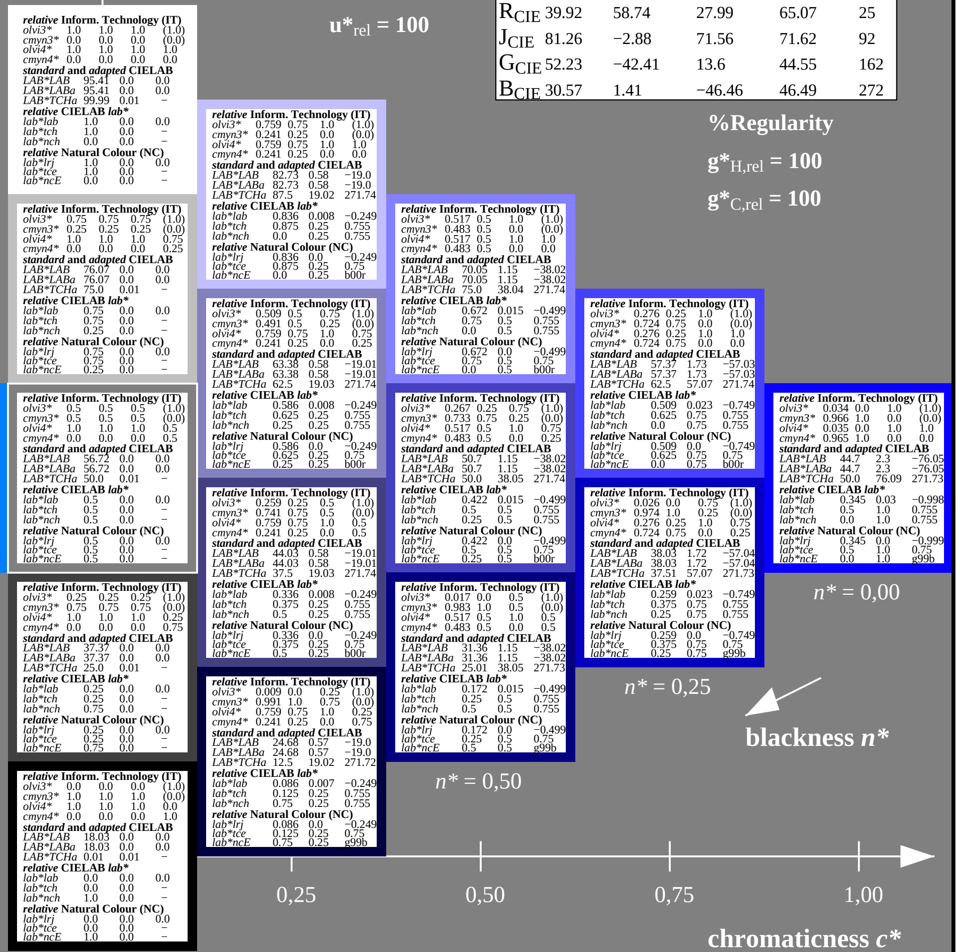
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 271/360 = 0.754$

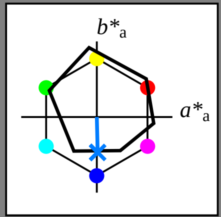
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

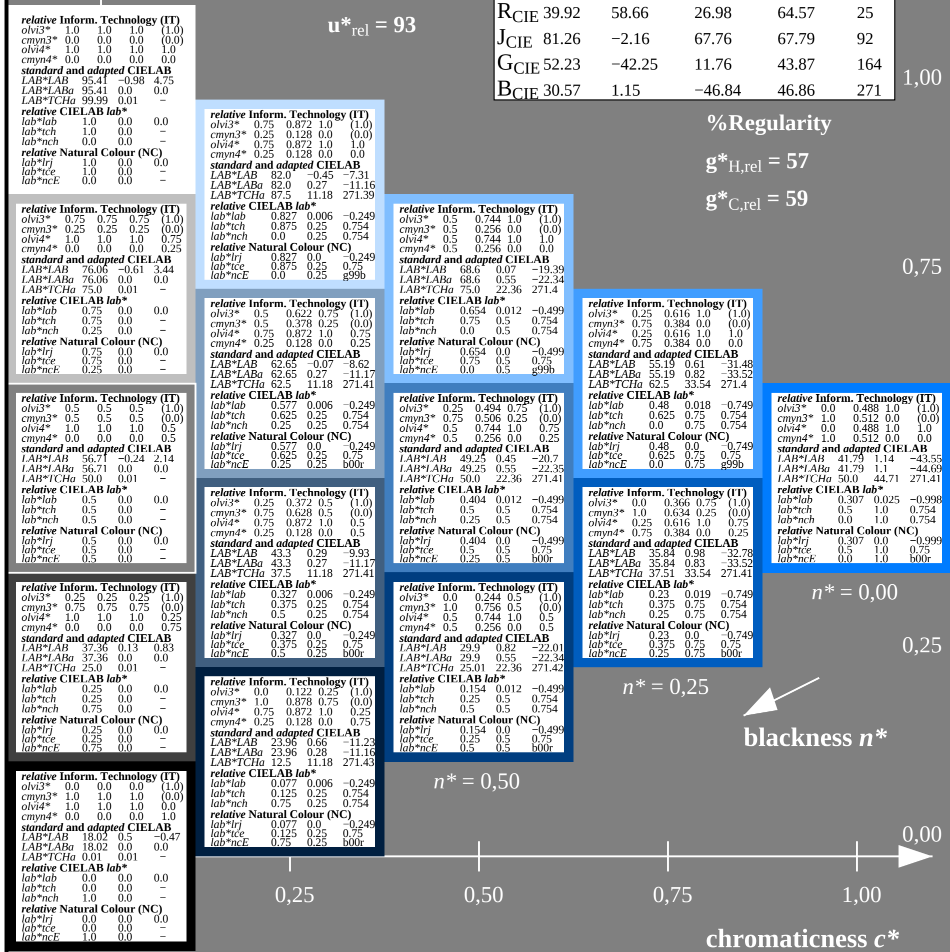
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

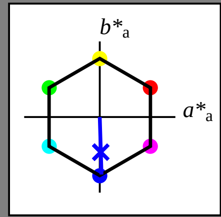
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

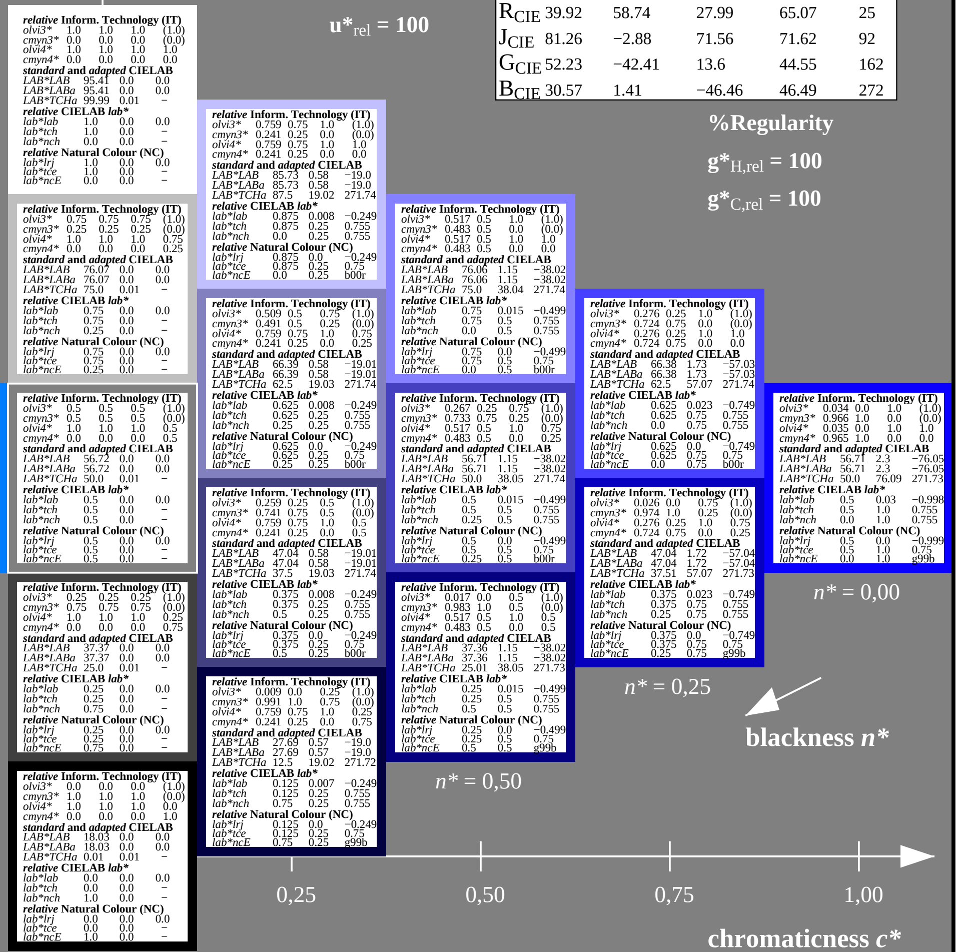
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 271/360 = 0.754$

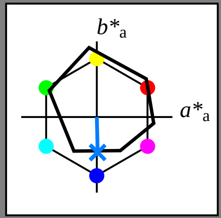
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

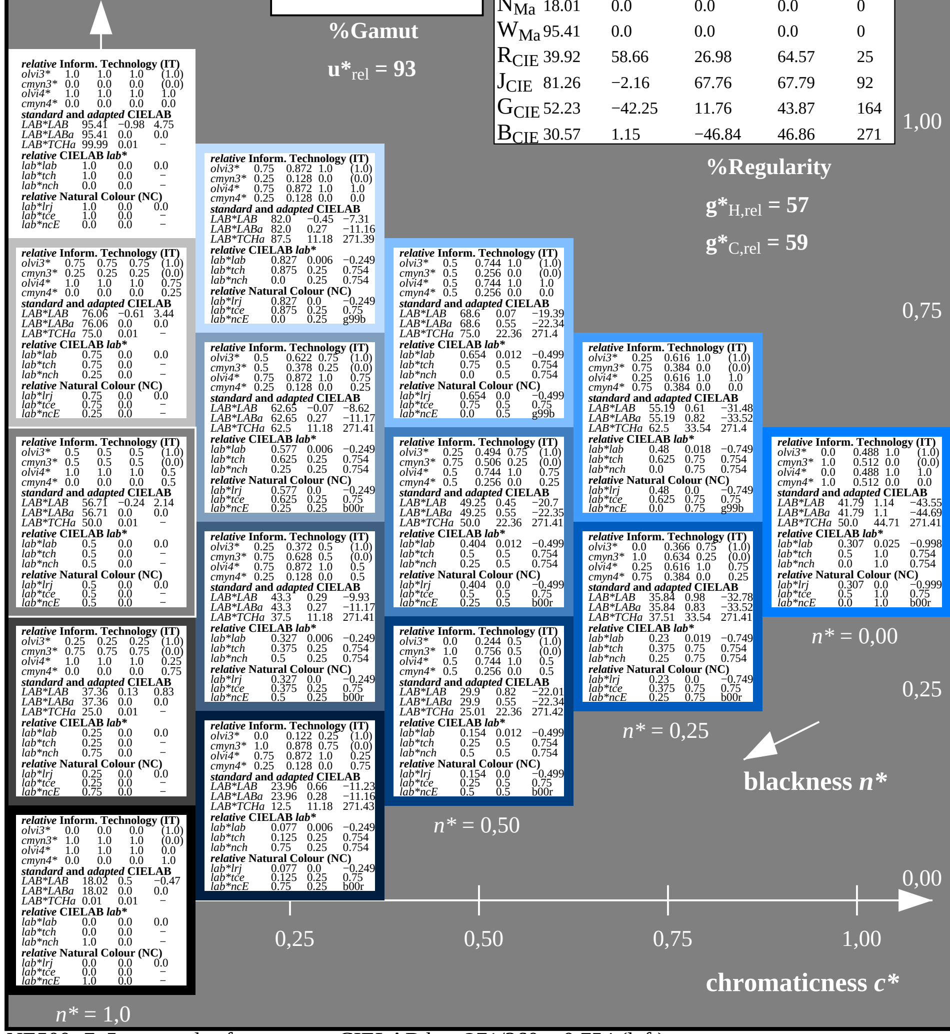
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

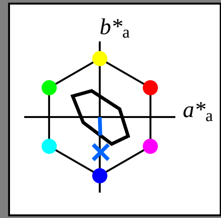
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

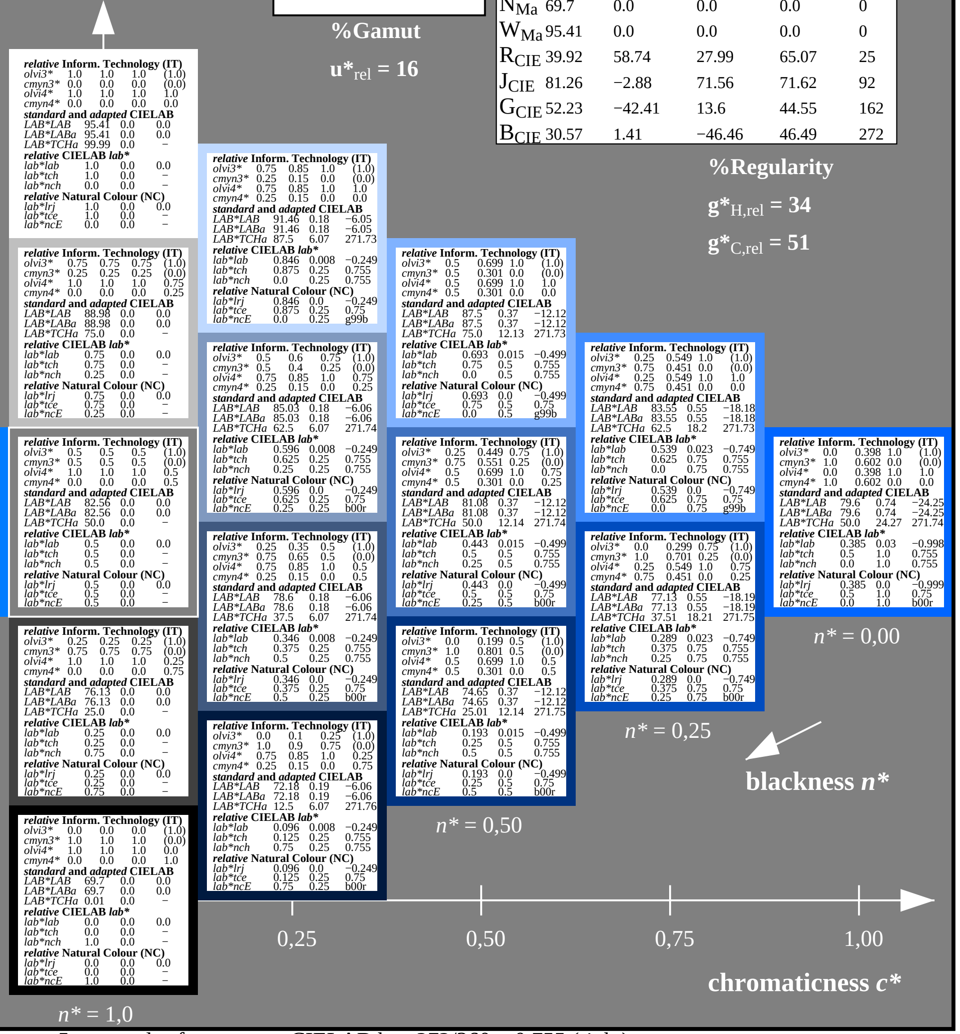
$u^*_{rel} = 16$

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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



NE500−7, 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 Television Luminous System TLS00

for hue *h** = *lab*h* = *272/360* = *0.755*

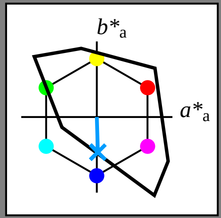
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness *t**



%Gamut

u*rel = 158

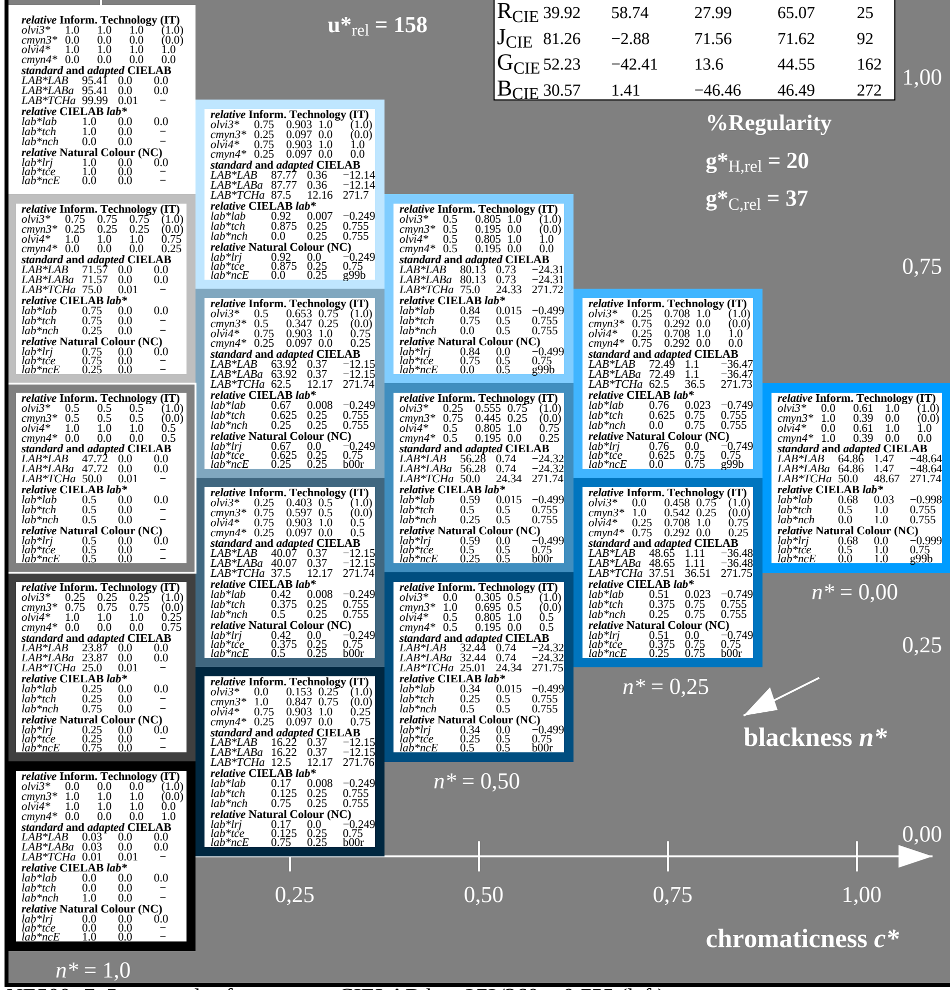
TLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	−20.69	90.75	93.08	103
LMa	83.63	−82.75	79.9	115.04	136
CMa	86.88	−46.16	−13.55	48.12	196
VMa	30.39	76.06	−103.59	128.52	306
MMa	57.3	94.35	−58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	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* = *271/360* = *0.754*

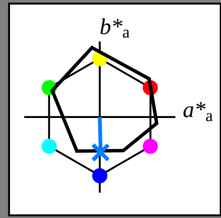
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness *t**



%Gamut

u*rel = 93

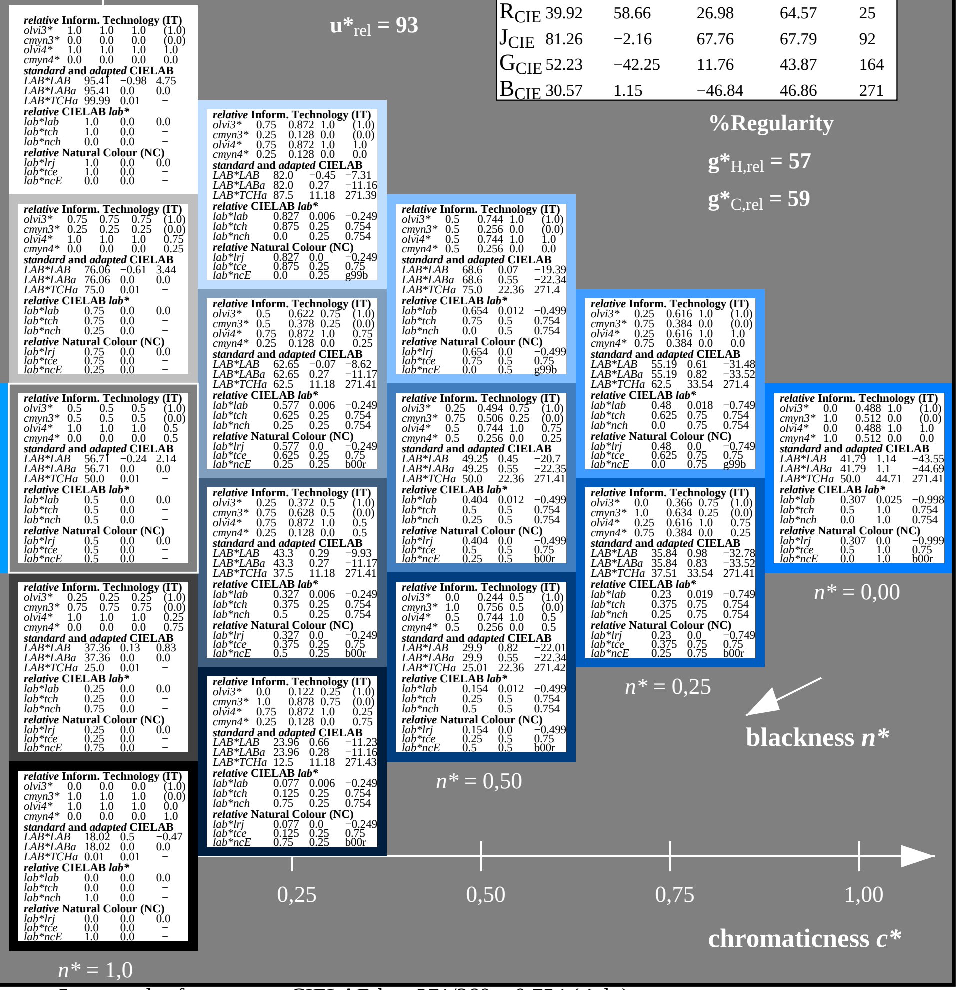
ORS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	−10.26	91.75	92.32	96
LMa	50.9	−62.83	34.96	71.91	151
CMa	58.62	−30.34	−45.01	54.3	236
VMa	25.72	31.1	−44.4	54.22	305
MMa	48.13	75.28	−8.36	75.74	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.57	25
JCIE	81.26	−2.16	67.76	67.79	92
GCIE	52.23	−42.25	11.76	43.87	164
BCIE	30.57	1.15	−46.84	46.86	271

%Regularity

g*H,rel = 57

g*C,rel = 59



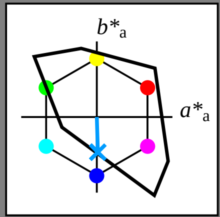
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

Input: Colorimetric 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

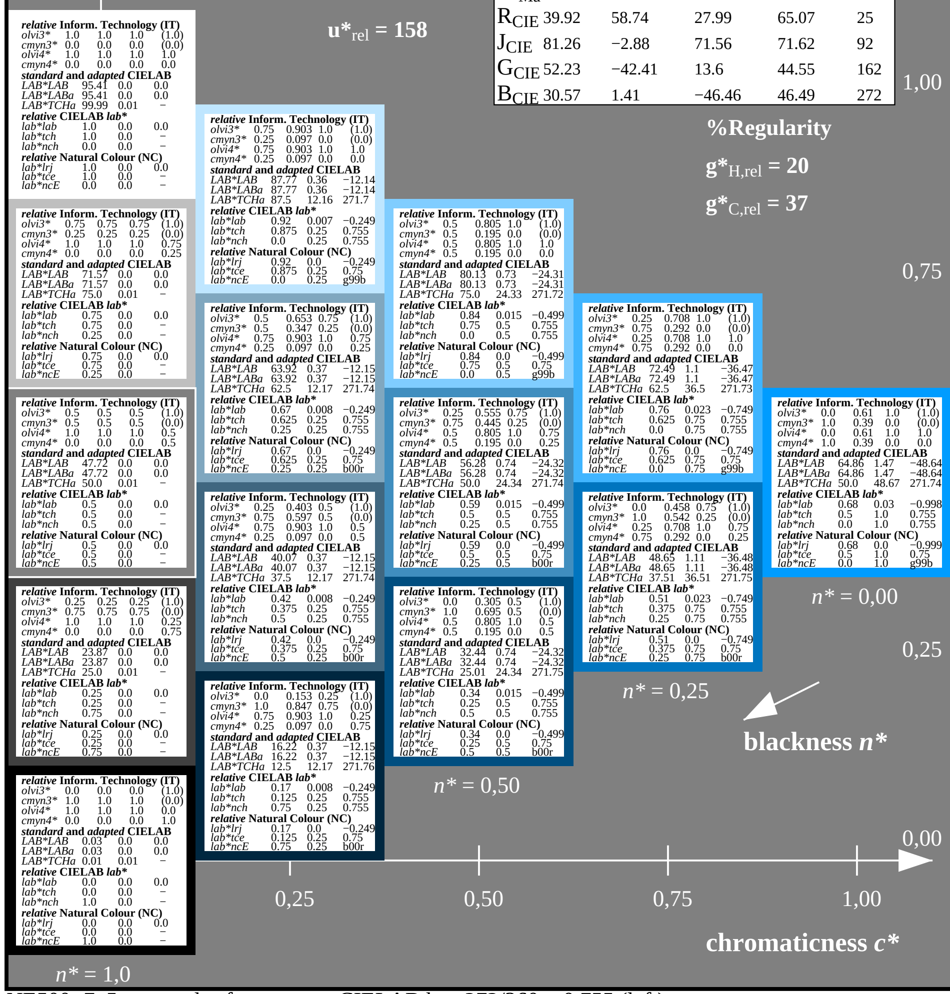
u*rel = 158

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

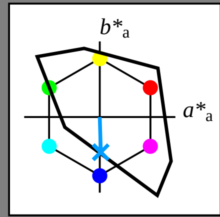
g*C,rel = 37



Output: Colorimetric 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

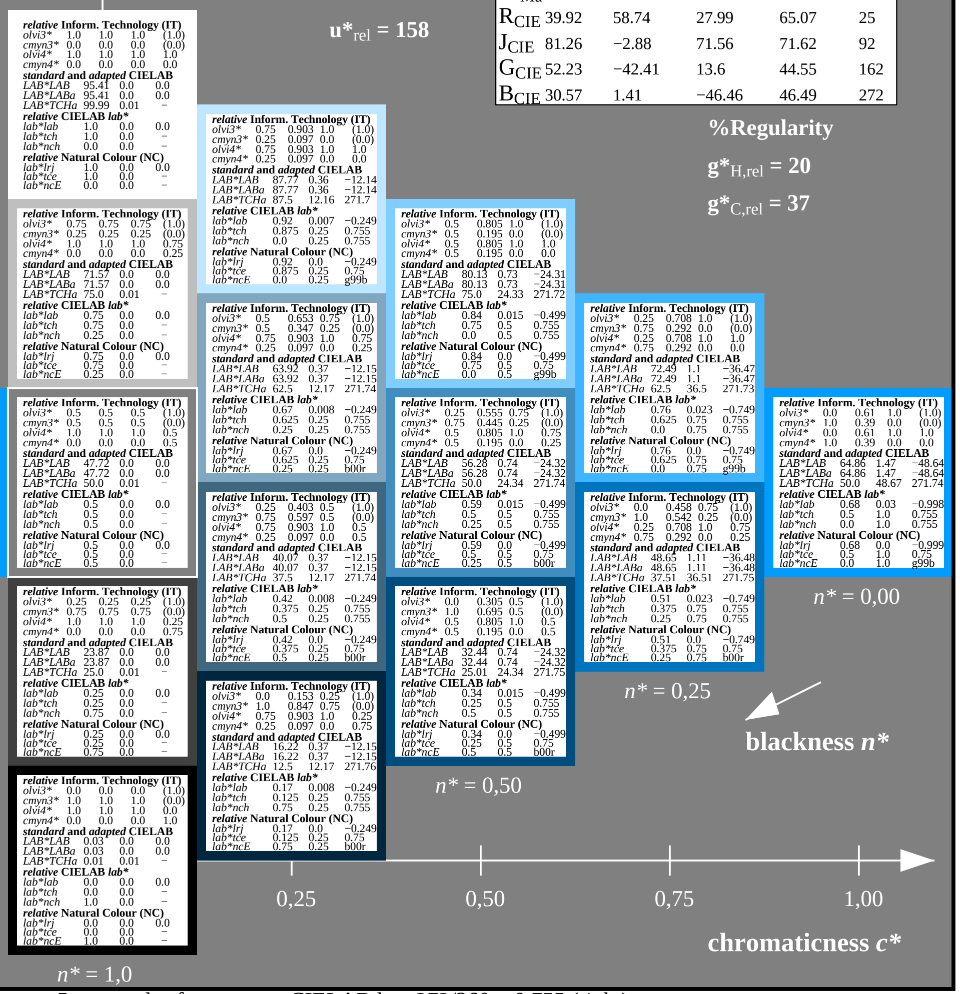
u*rel = 158

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



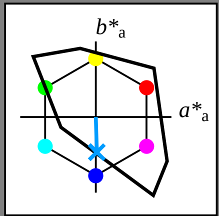
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

1,00
0,75
0,25
0,00

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1,0

blackness n^*

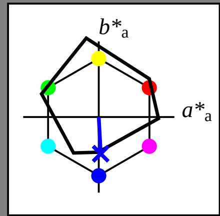
0,25 0,50 0,75 1,00

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

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^*

NE500−7, 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*

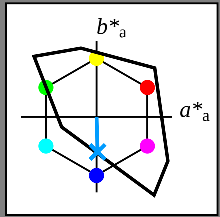
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness *t*



%Gamut

u*rel = 158

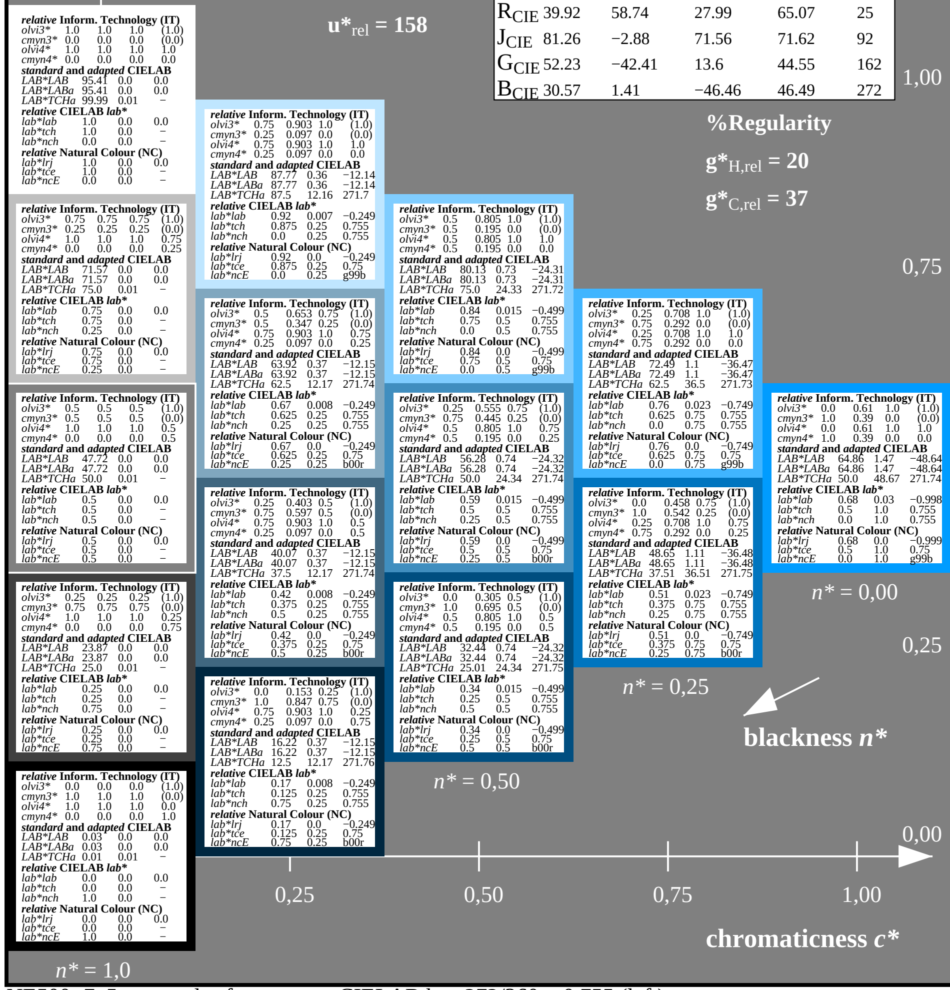
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 272/360 = 0.755*

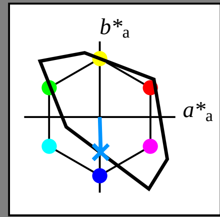
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness *t*



%Gamut

u*rel = 118

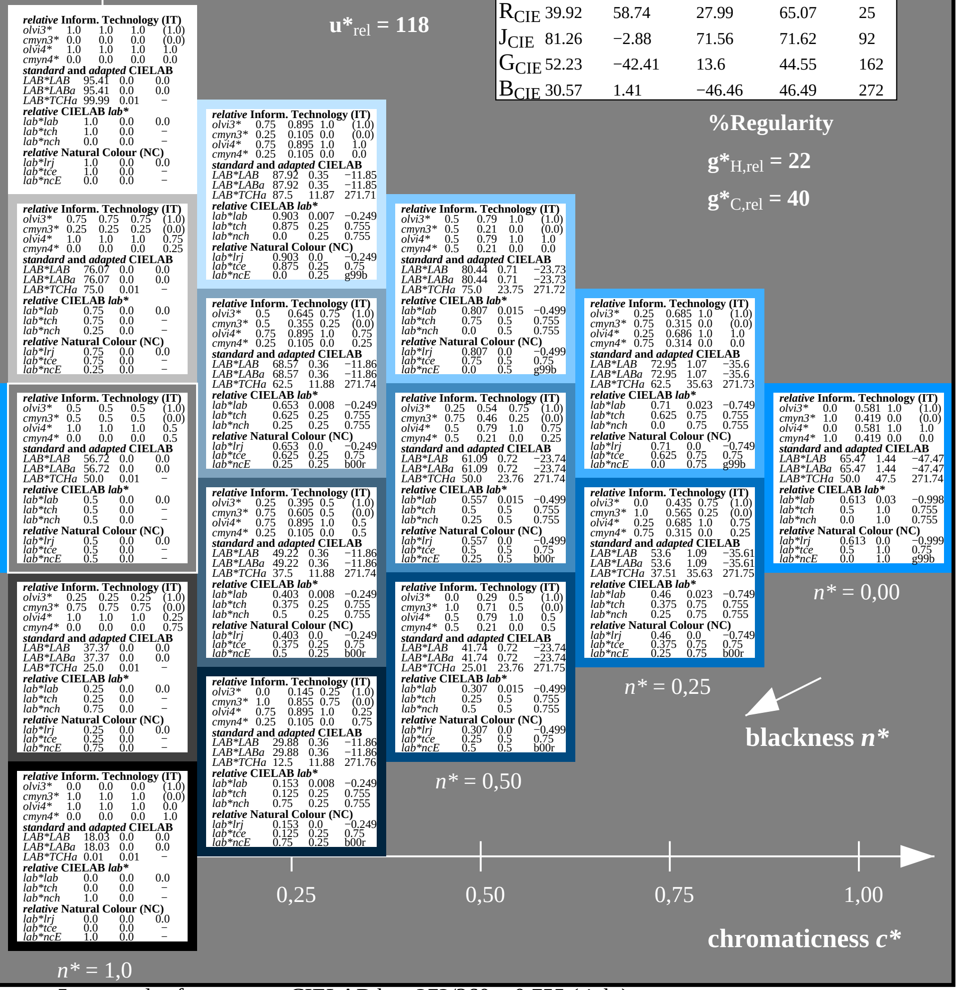
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

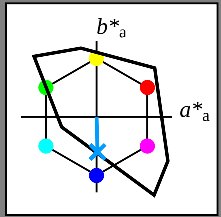
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

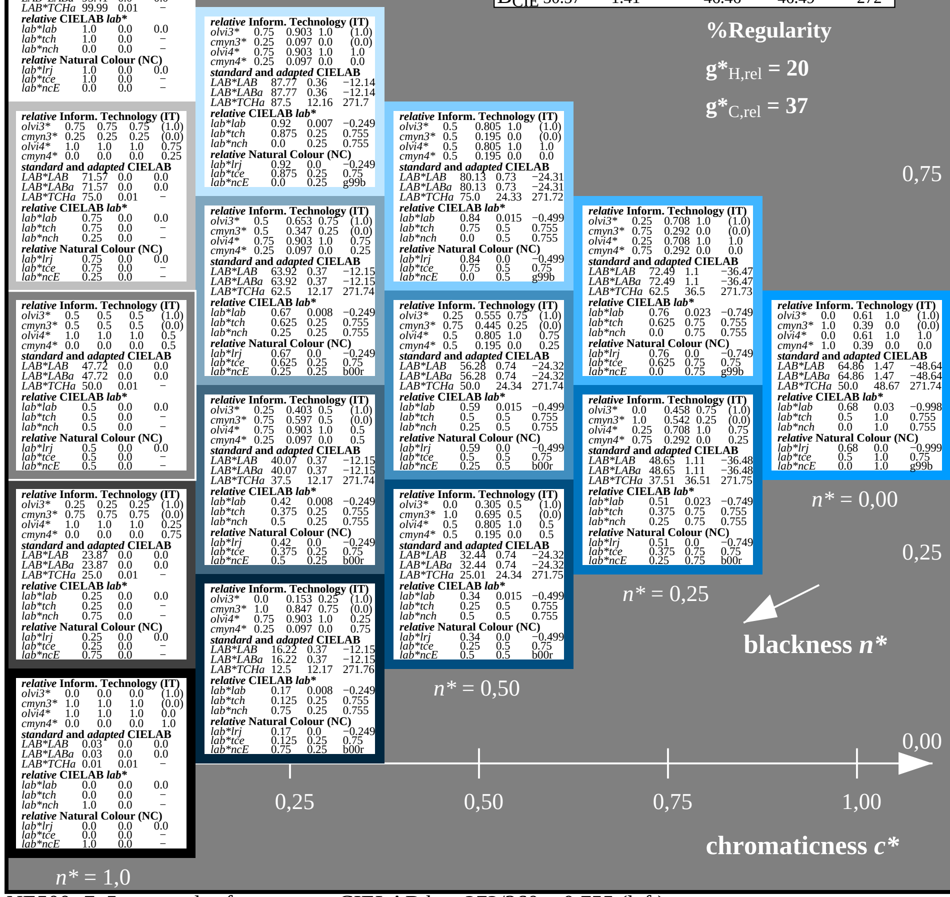
u^*_{rel} = 158

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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

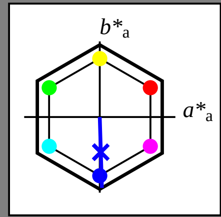
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

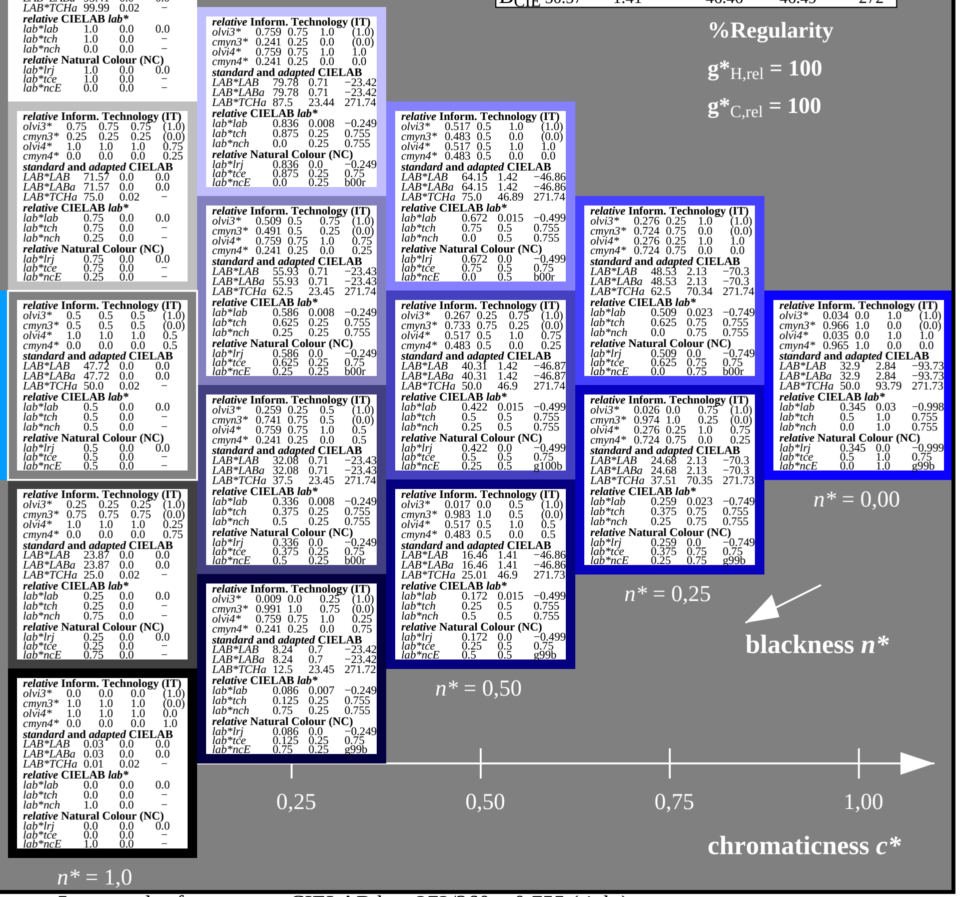
u^*_{rel} = 152

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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

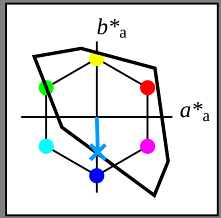
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

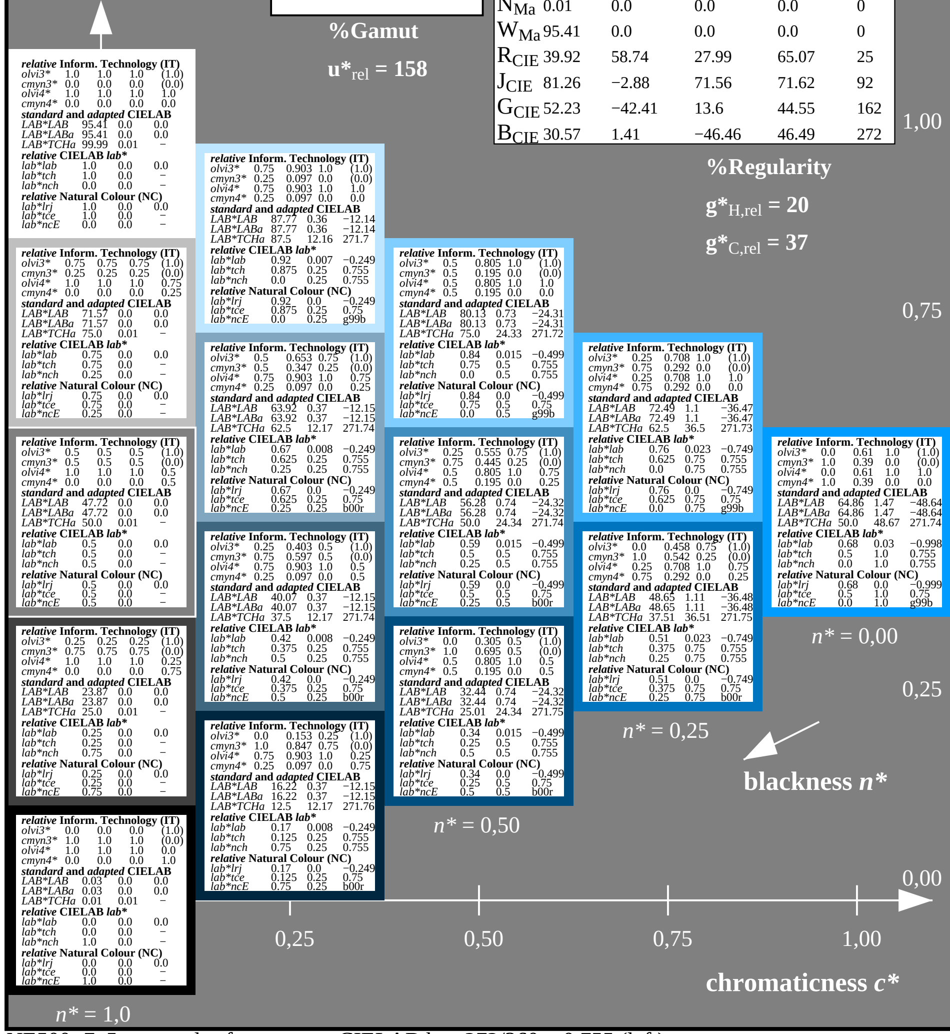
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

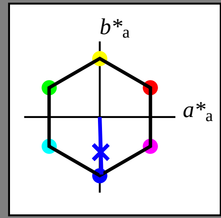
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

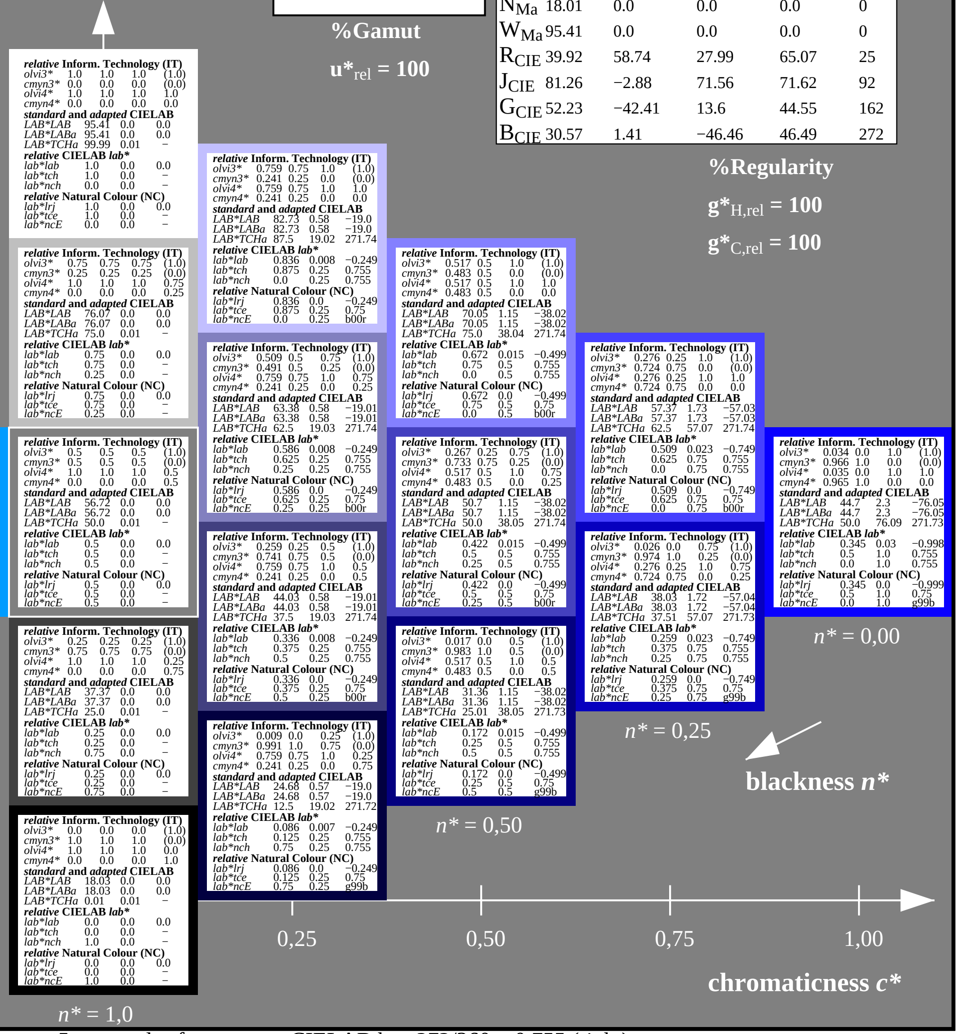
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

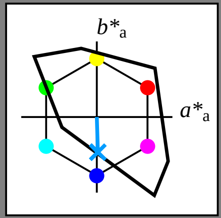
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

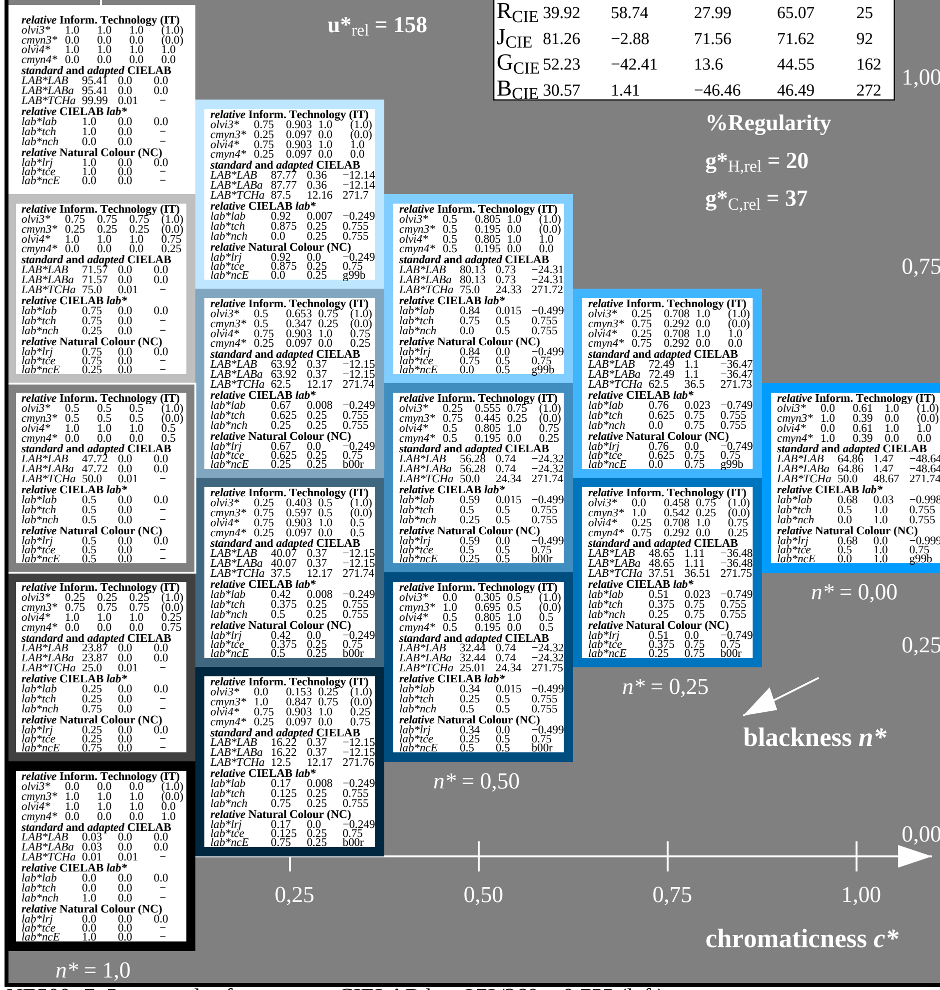
$u^*_{rel} = 158$

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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

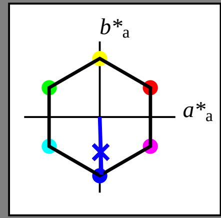
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

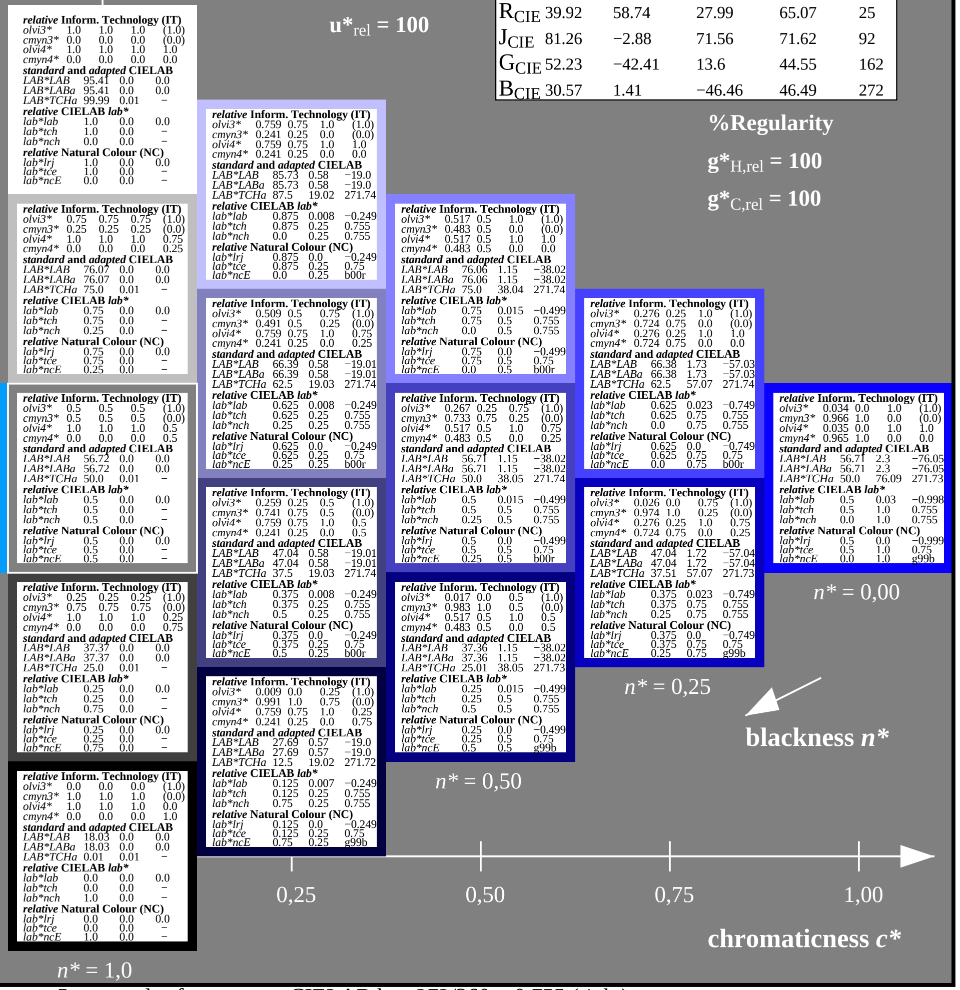
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

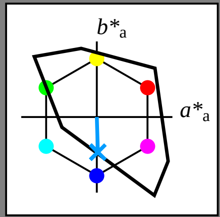
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

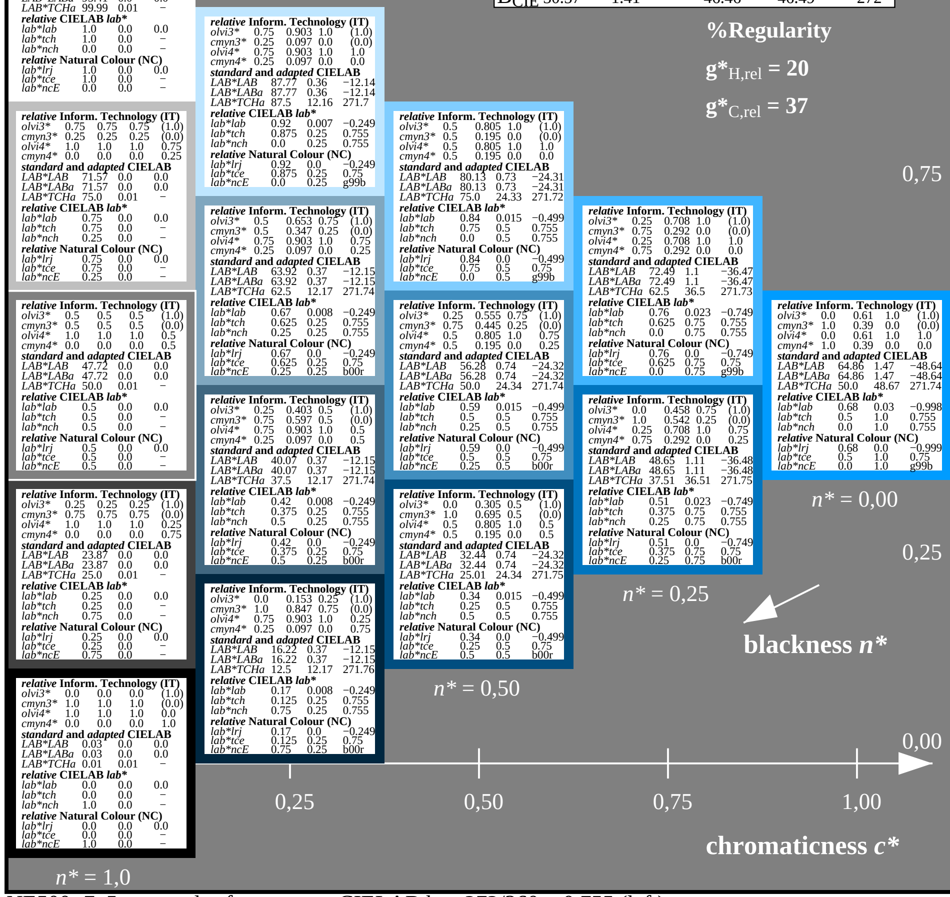
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

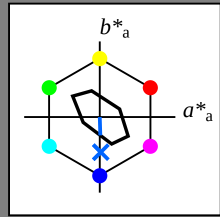
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 16

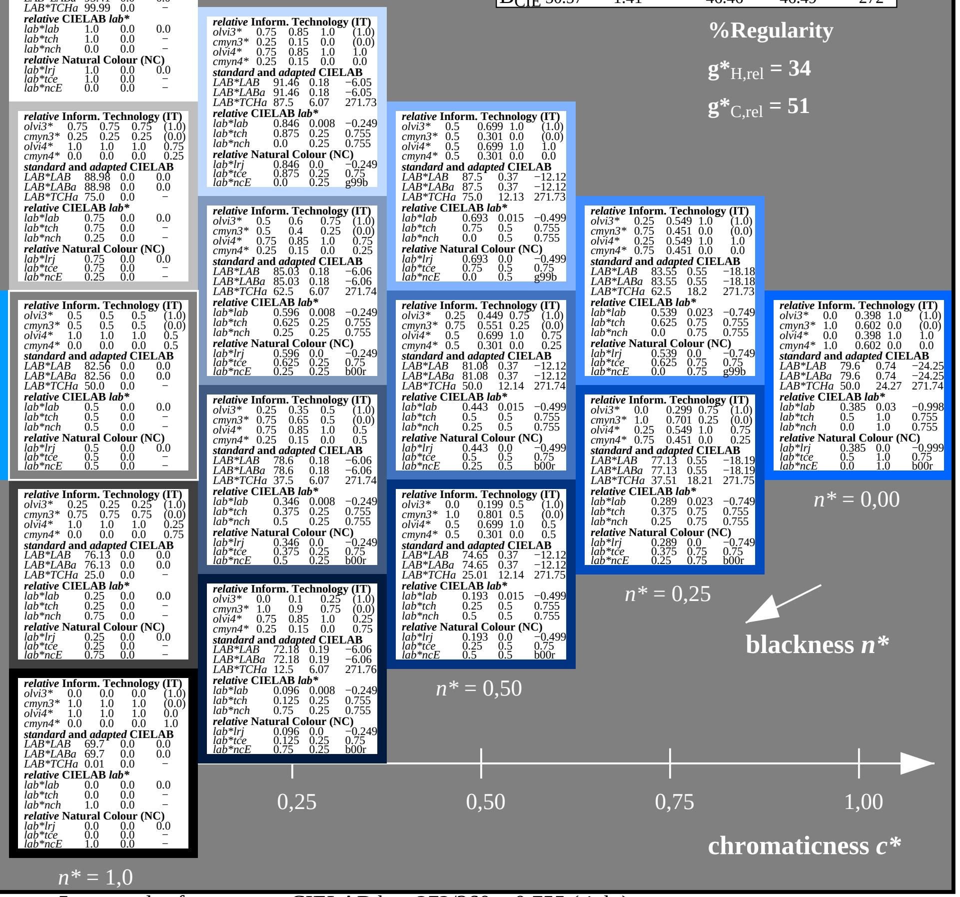
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Printer Reflective System DRSXX
for hue $h^* = lab^*h = 273/360 = 0.759$

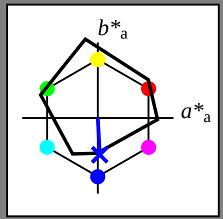
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

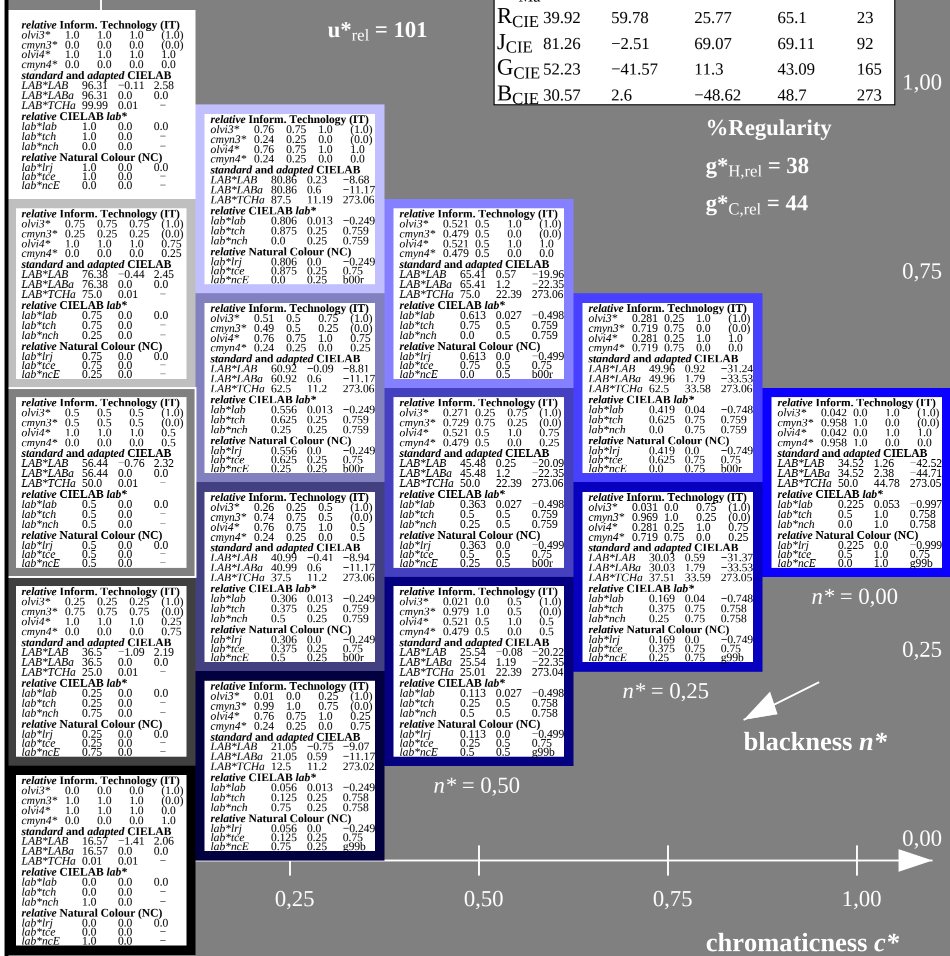
$u^*_{rel} = 101$

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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 271/360 = 0.754$

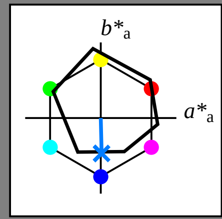
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

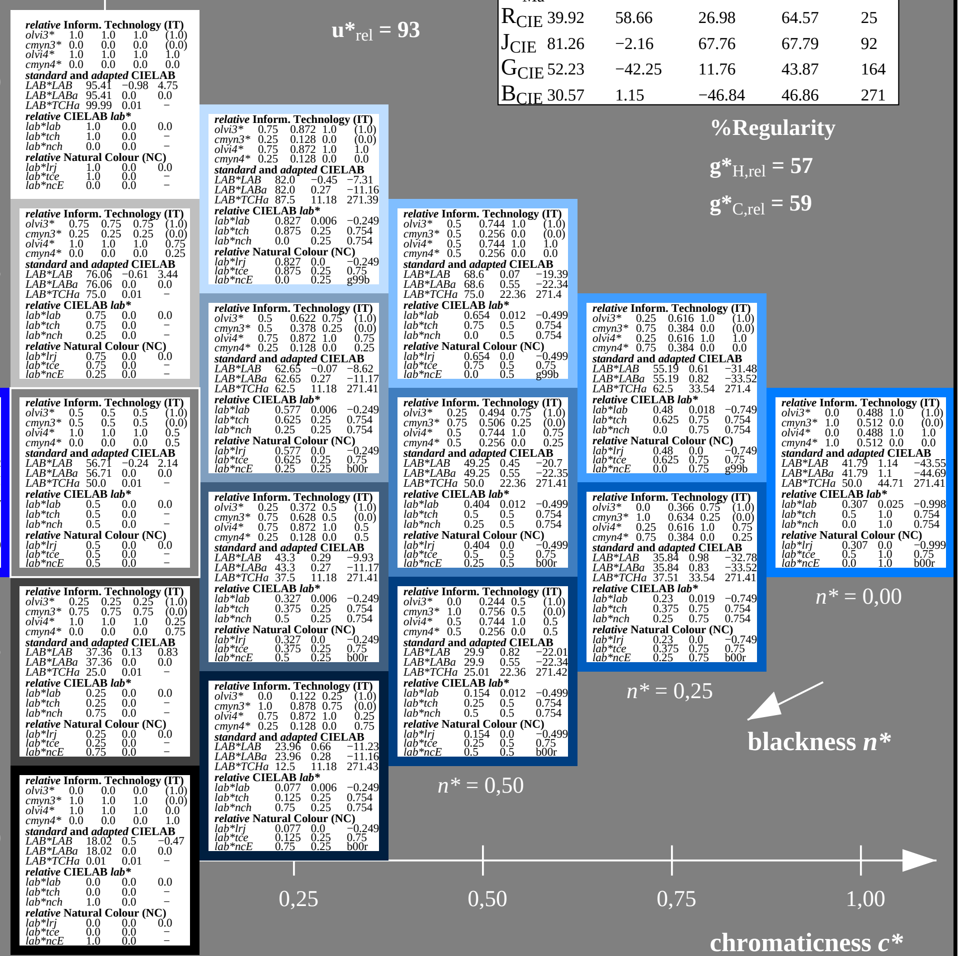
$u^*_{rel} = 93$

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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



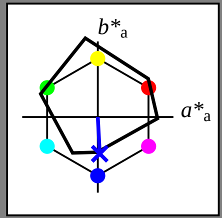
NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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**

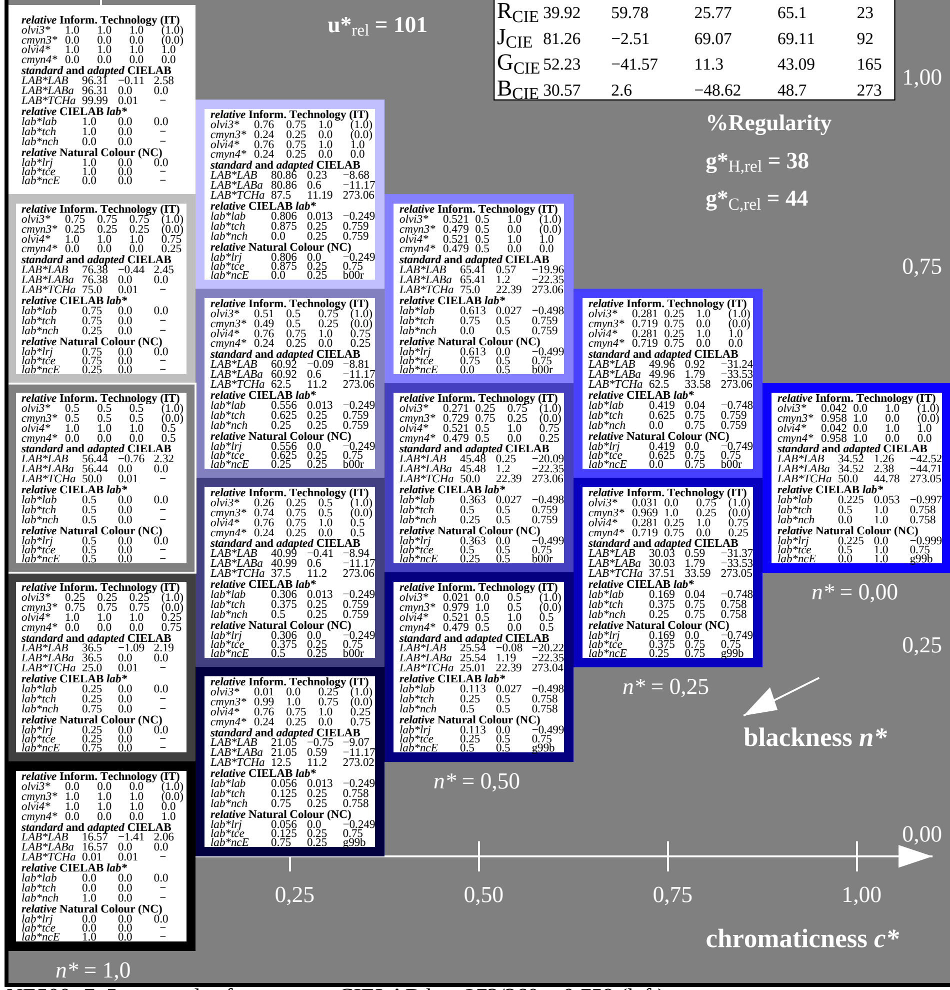


%Gamut
u^*_{rel} = 101

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

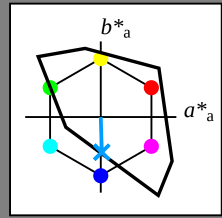
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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**

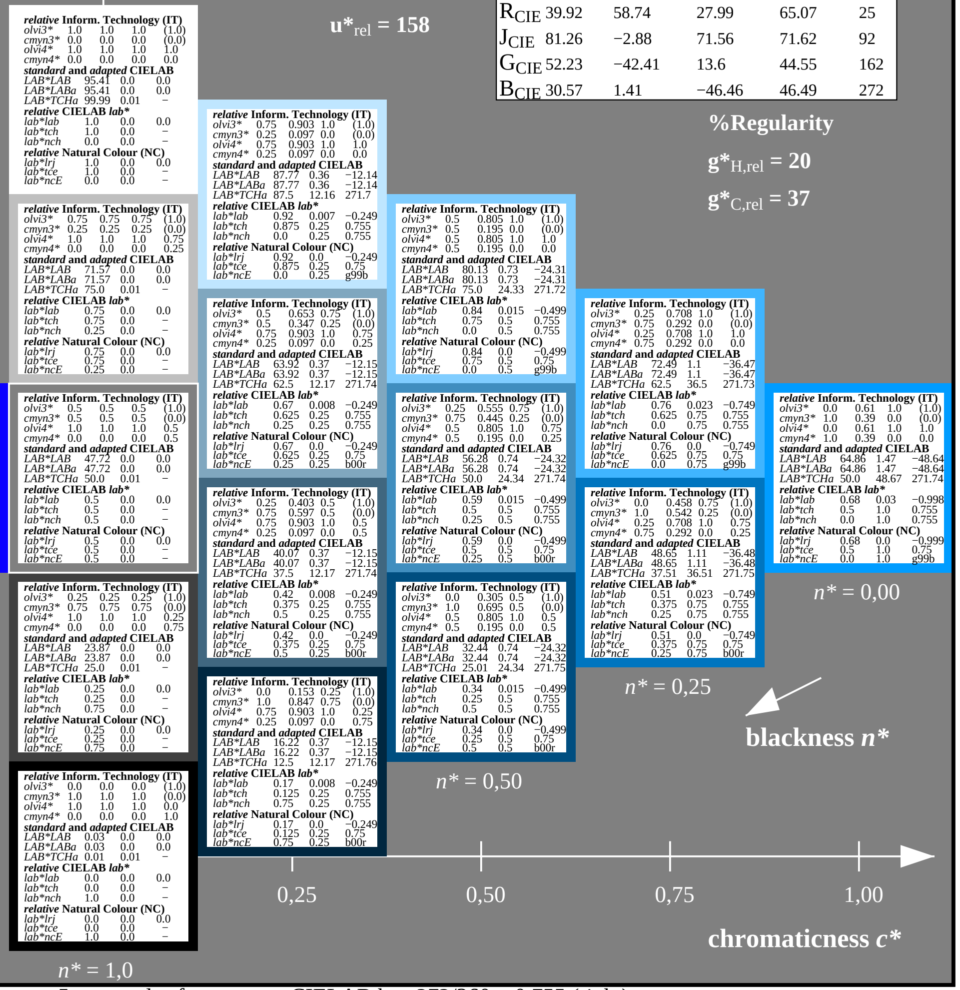


%Gamut
u^*_{rel} = 158

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



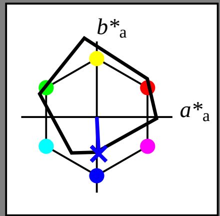
NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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

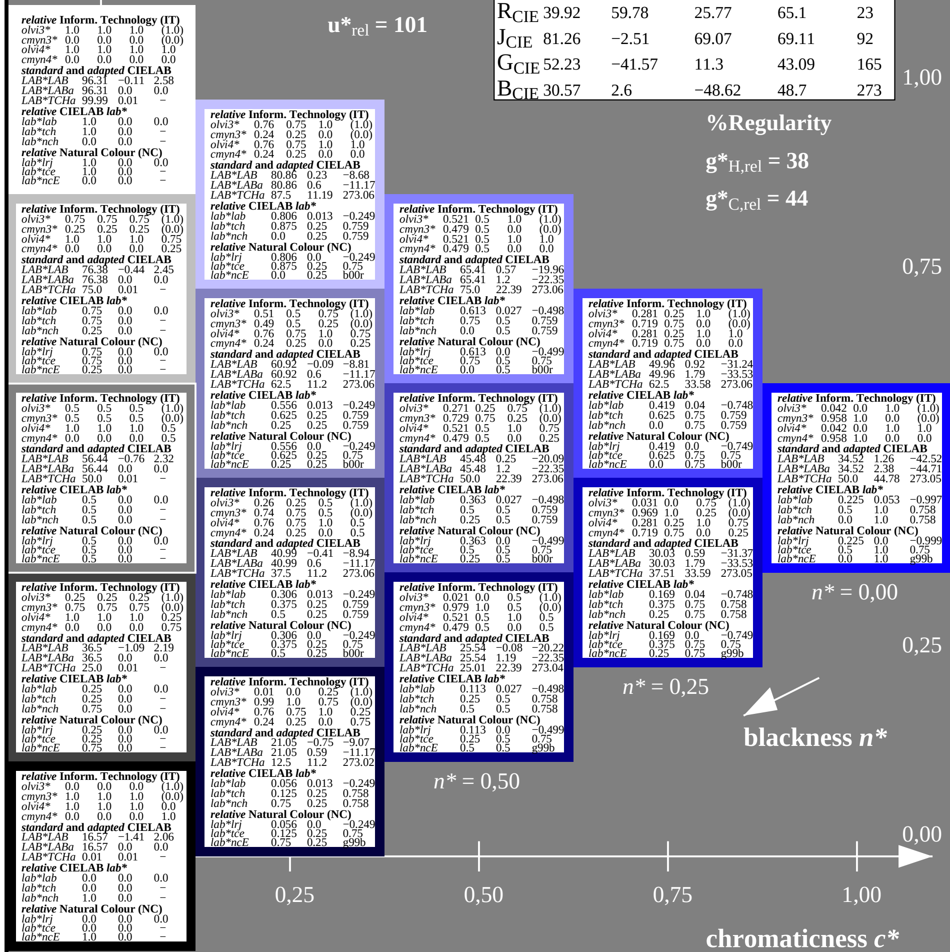
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

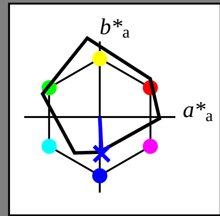
$g^*_{C,rel}$ = 44



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

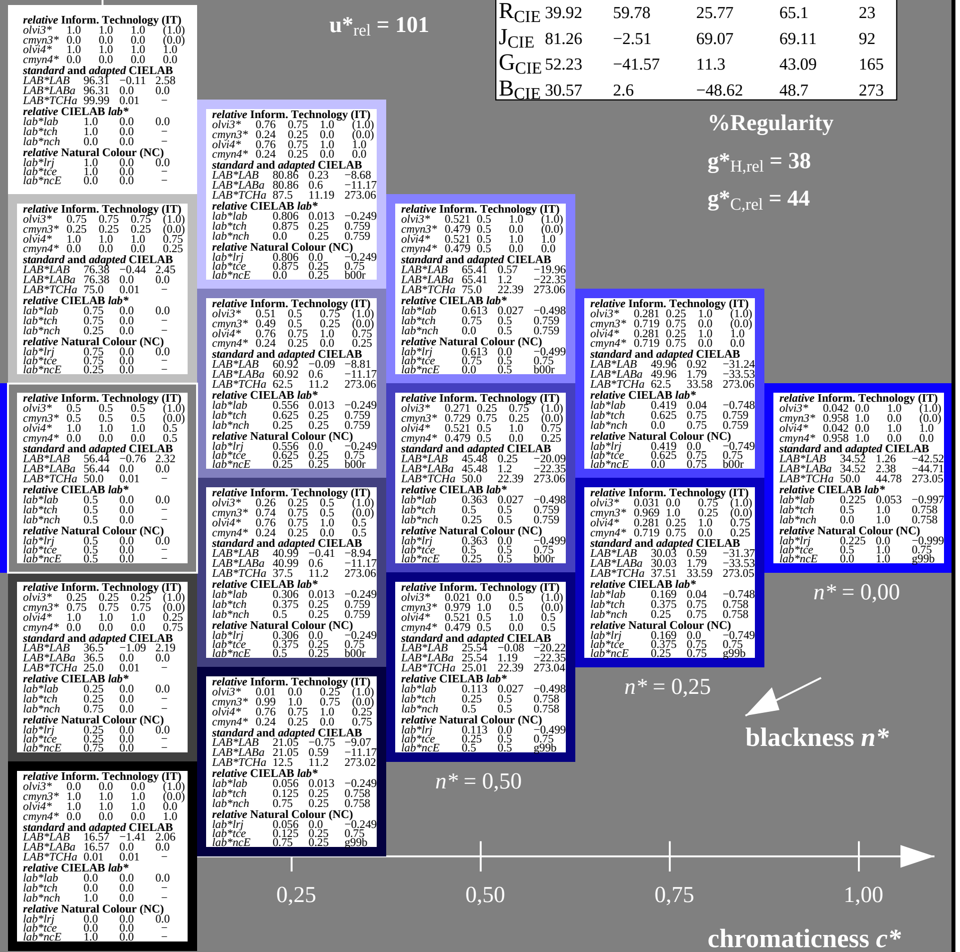
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



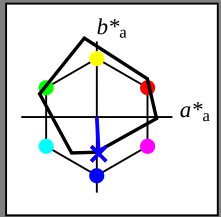
NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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**

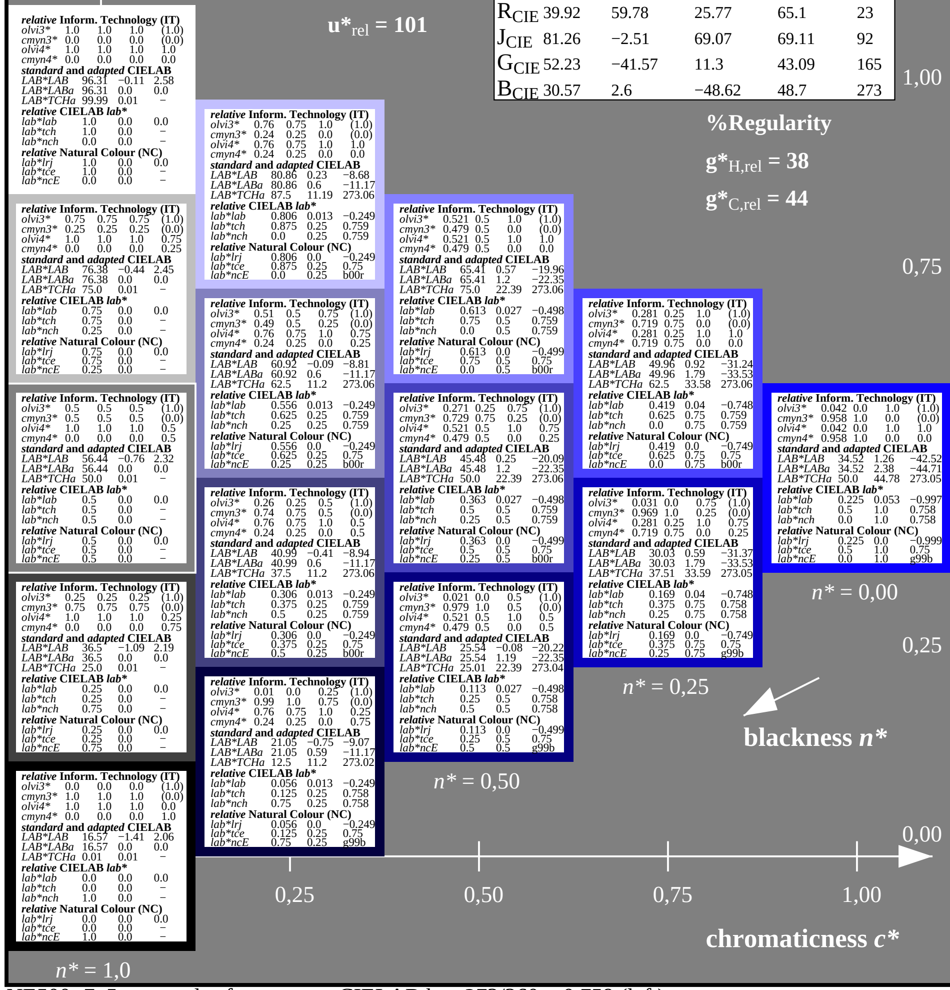


%Gamut
u^*_{rel} = 101

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

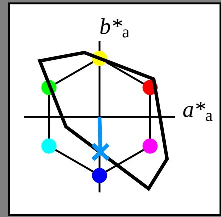
%Regularity
$g^*_{H,rel}$ = 38
$g^*_{C,rel}$ = 44



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**

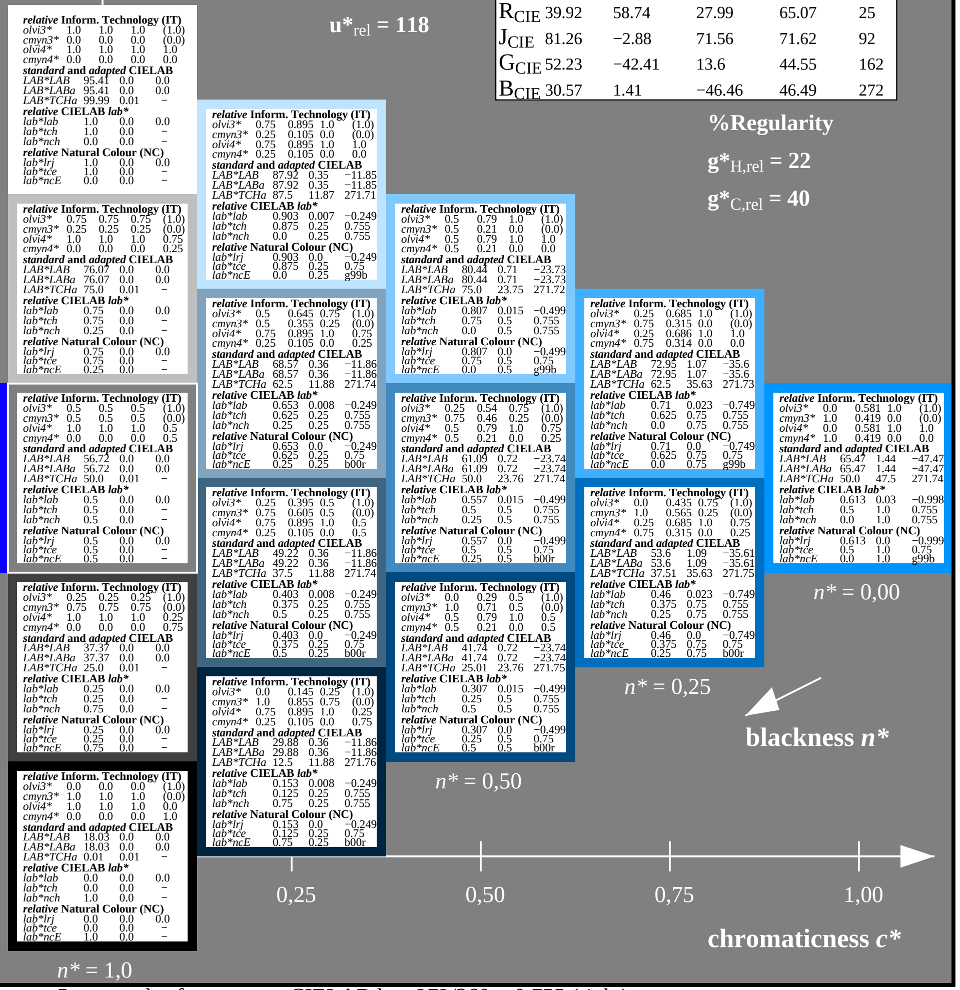


%Gamut
u^*_{rel} = 118

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



NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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

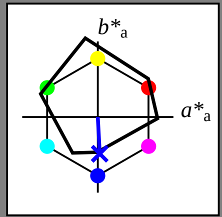
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 101

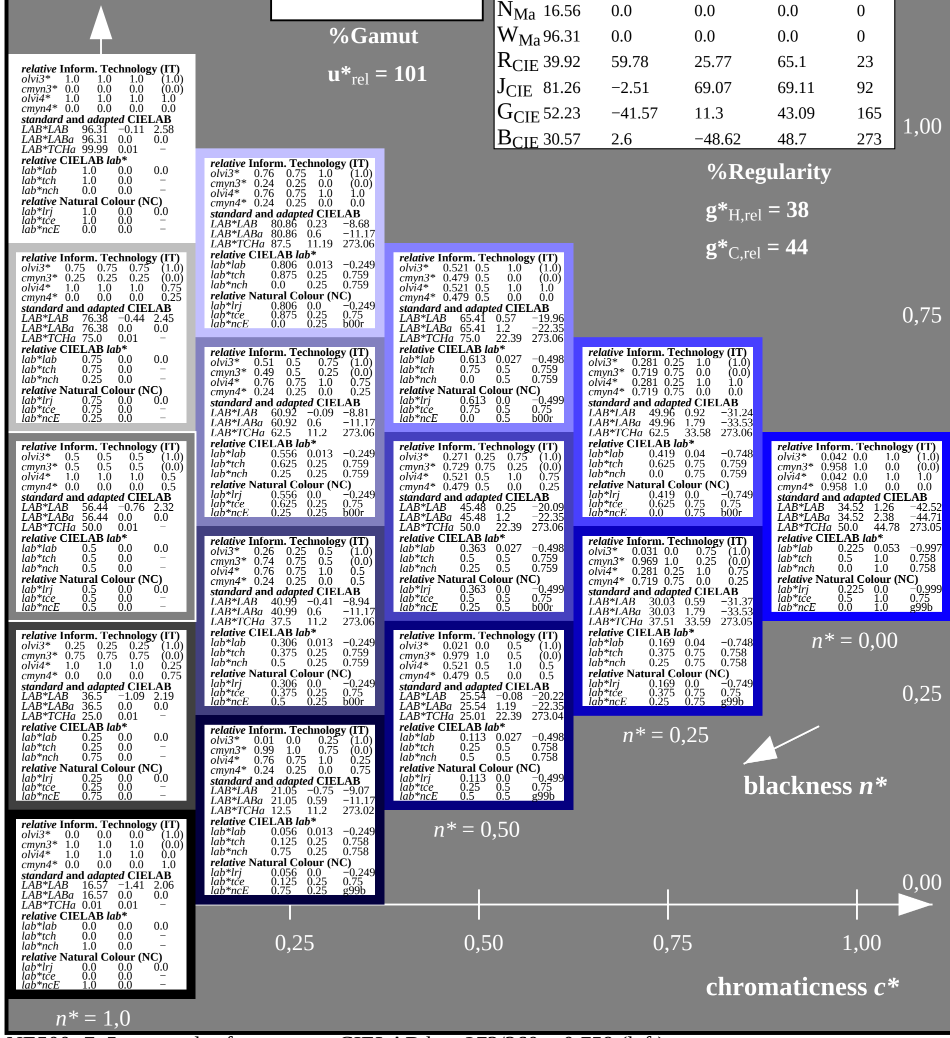
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue *h** = *lab*h* = 272/360 = 0.755

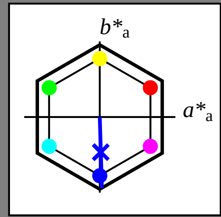
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 152

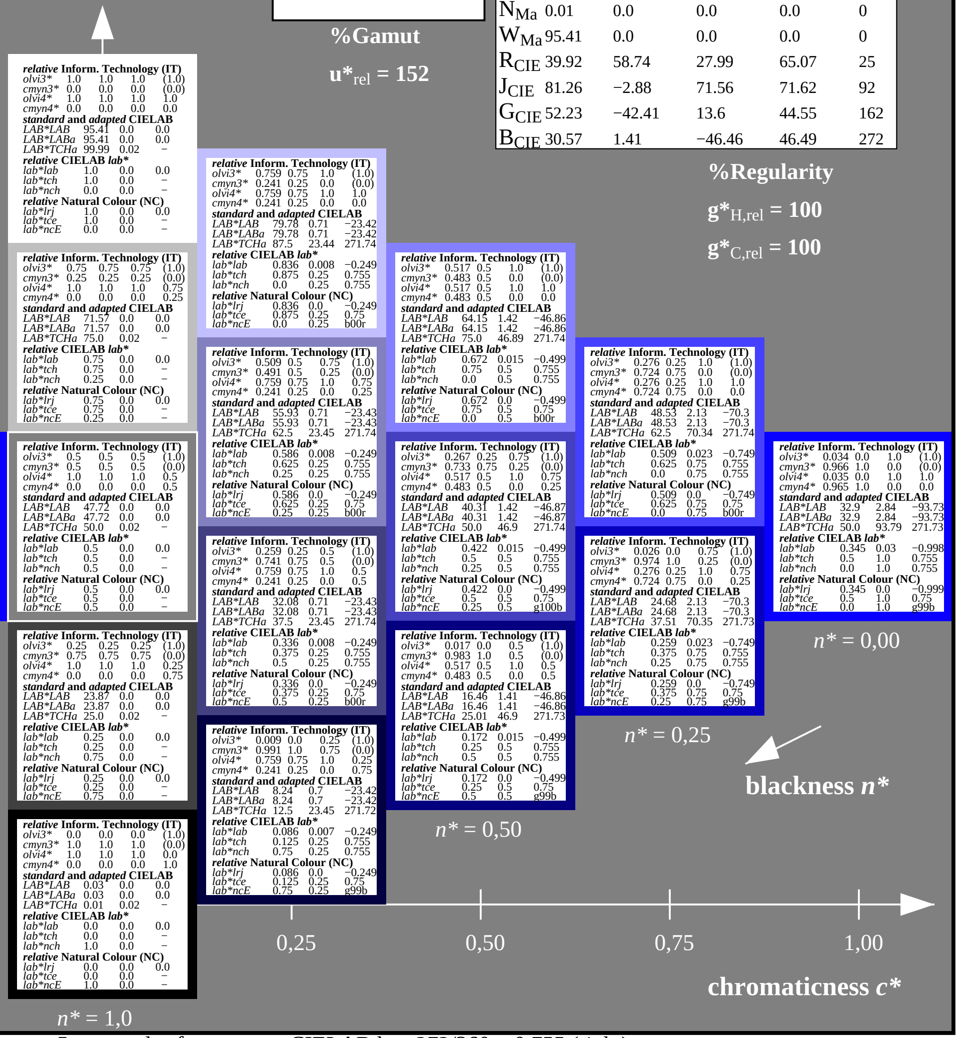
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



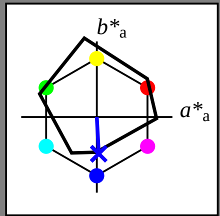
NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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

$u^*_{rel} = 101$

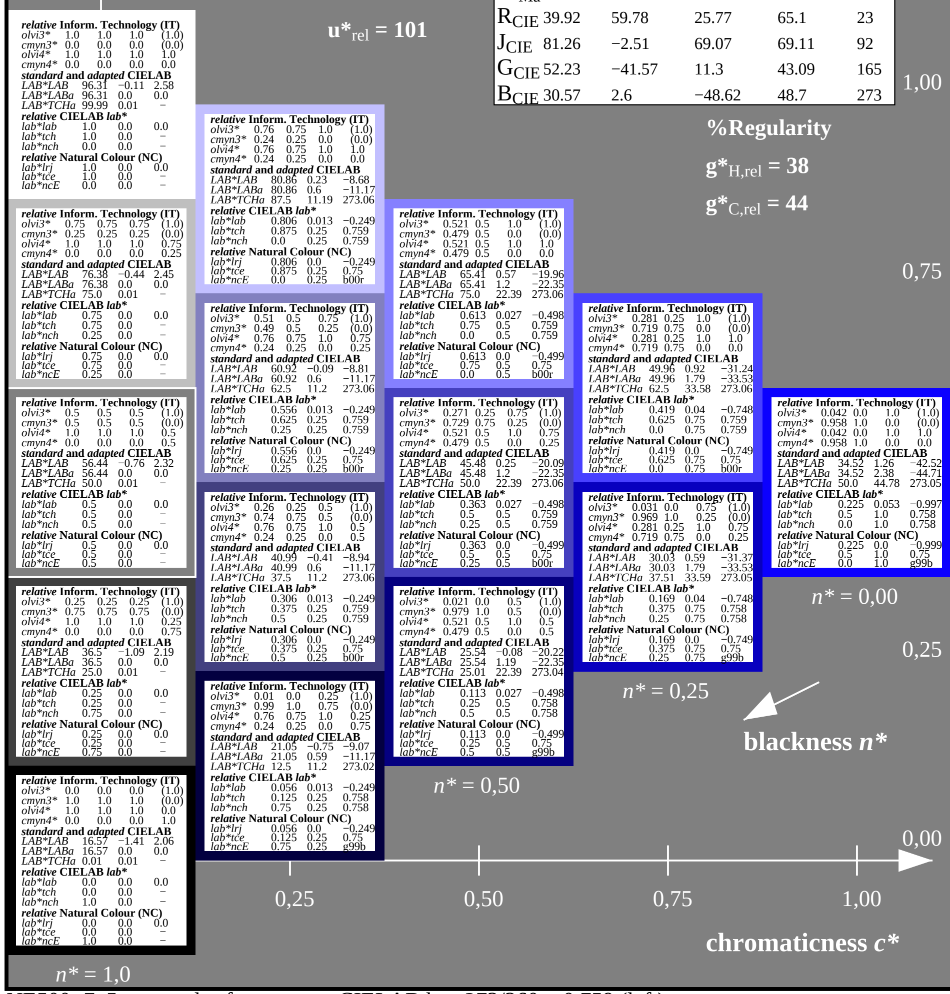
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

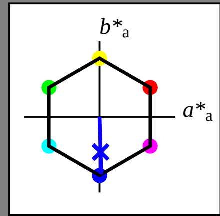
$g^*_{C,rel} = 44$



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

$u^*_{rel} = 100$

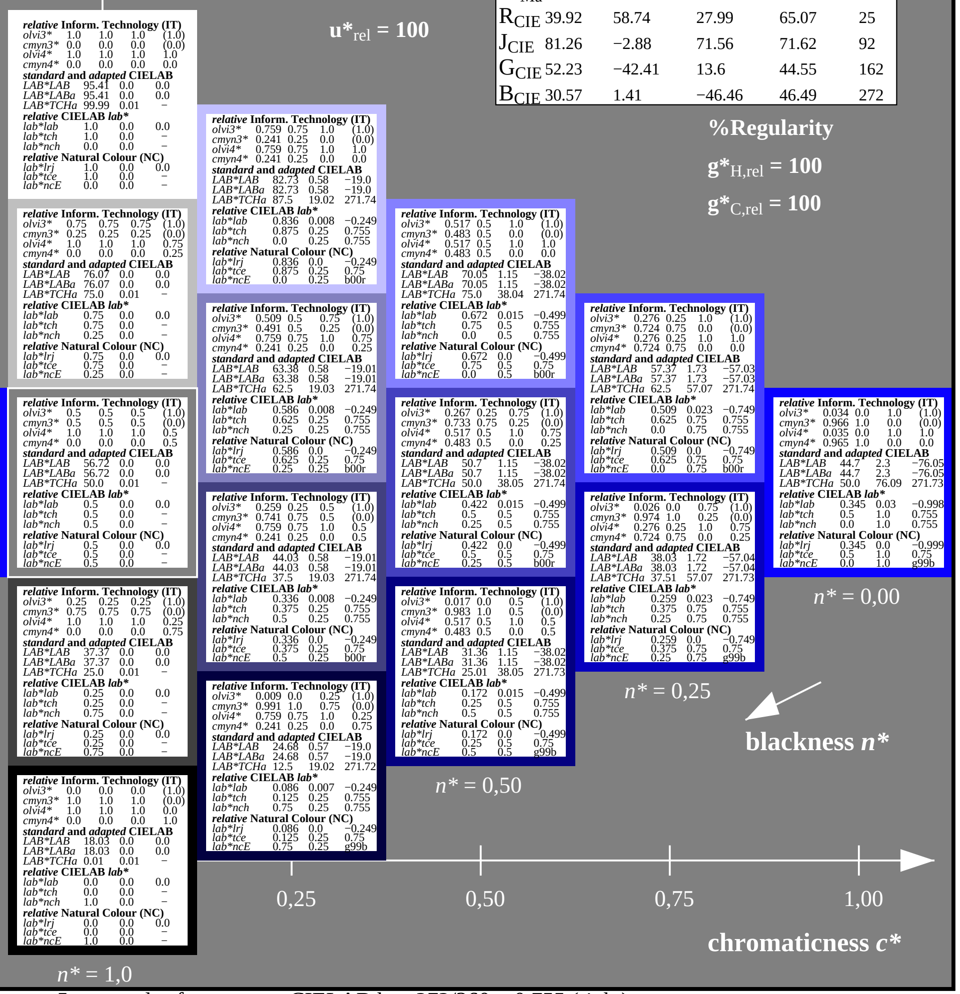
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



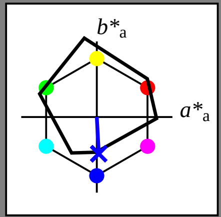
NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

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

1,00

0,75

0,25

0,00

n* = 0,00

n* = 0,25

n* = 0,50

n* = 1,0

blackness *n**

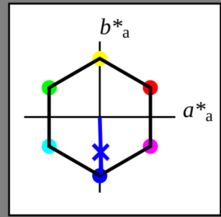
0,25 0,50 0,75 1,00

chromaticness *c**

Output: Colorimetric Standard Reflective System SRS18
for hue *h = *lab*h* = 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

n* = 0,00

n* = 0,25

n* = 0,50

n* = 1,0

blackness *n**

0,25 0,50 0,75 1,00

chromaticness *c**

NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

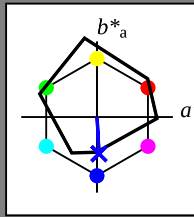
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness *t**



%Gamut

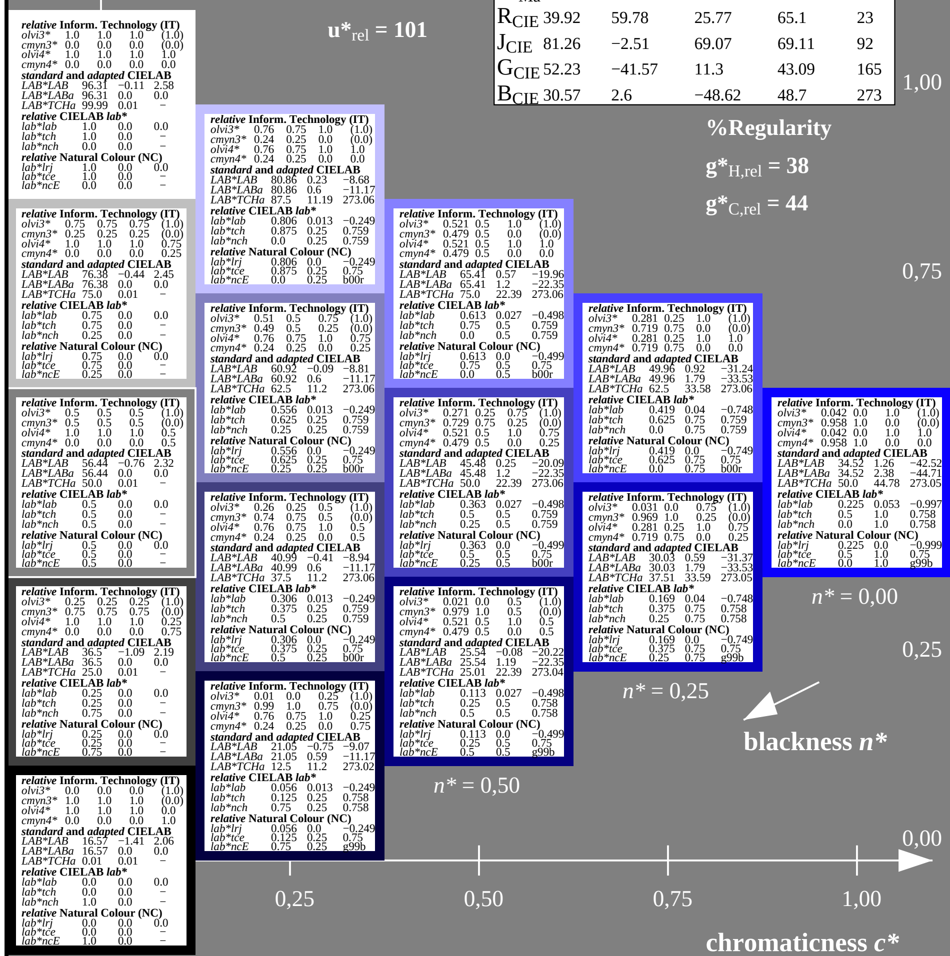
u^*_{rel} = 101

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

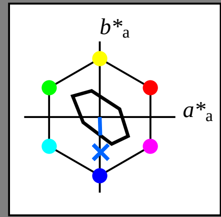
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness *t**



%Gamut

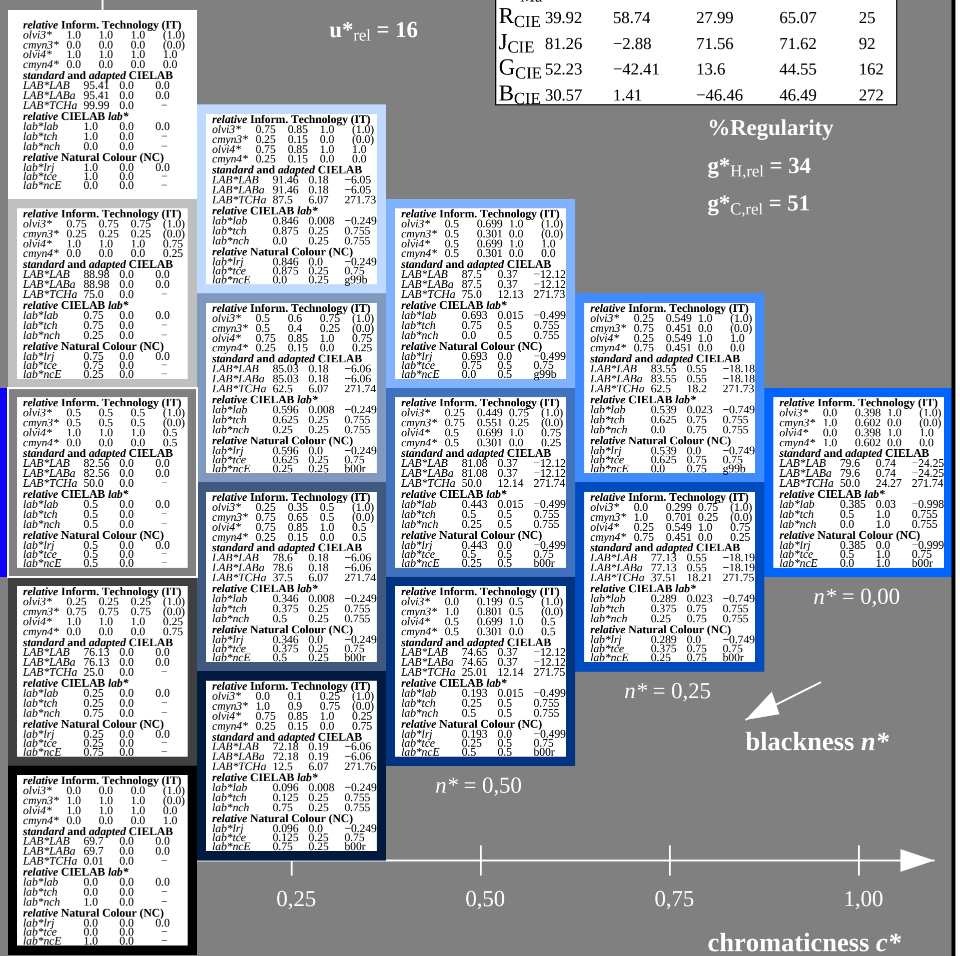
u^*_{rel} = 16

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



NE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.759 (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

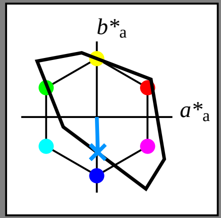
lab*tch* and *lab*nch

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

1,00 0,75 0,50 0,25 0,00

0,25 0,50 0,75 1,00

chromaticness *c*

blackness *n*

*n** = 0,00 *n** = 0,25 *n** = 0,50 *n** = 1,0

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* 0.75 0.895 1.0 (1.0)
cmyn3* 0.25 0.105 0.0 (0.0)
olvi4* 0.75 0.895 1.0 1.0
cmyn4* 0.25 0.105 0.0 0.0
standard and adapted CIELAB
LAB*LAB 87.92 0.35 −11.85
LAB*LABa 87.92 0.35 −11.85
LAB*TCHa 87.5 11.87 271.71
relative CIELAB lab*
lab*lab 0.903 0.007 −0.249
lab*tch 0.875 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*lrj 0.903 0.0 −0.249
lab*tce 0.875 0.25 0.75
lab*ncE 0.0 0.25 g99b

relative Inform. Technology (IT)
olvi3* 0.5 0.645 0.75 (1.0)
cmyn3* 0.5 0.355 0.25 (0.0)
olvi4* 0.75 0.895 1.0 0.75
cmyn4* 0.25 0.105 0.0 0.25
standard and adapted CIELAB
LAB*LAB 68.57 0.36 −11.86
LAB*LABa 68.57 0.36 −11.86
LAB*TCHa 62.5 11.88 271.74
relative CIELAB lab*
lab*lab 0.653 0.008 −0.249
lab*tch 0.625 0.25 0.755
lab*nch 0.25 0.25 0.755
relative Natural Colour (NC)
lab*lrj 0.653 0.0 −0.249
lab*tce 0.625 0.25 0.75
lab*ncE 0.25 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.395 0.5 (1.0)
cmyn3* 0.75 0.605 0.5 (0.0)
olvi4* 0.75 0.895 1.0 0.5
cmyn4* 0.25 0.105 0.0 0.5
standard and adapted CIELAB
LAB*LAB 49.22 0.36 −11.86
LAB*LABa 49.22 0.36 −11.86
LAB*TCHa 37.5 11.88 271.74
relative CIELAB lab*
lab*lab 0.403 0.008 −0.249
lab*tch 0.375 0.25 0.755
lab*nch 0.5 0.25 0.755
relative Natural Colour (NC)
lab*lrj 0.403 0.0 −0.249
lab*tce 0.375 0.25 0.75
lab*ncE 0.5 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.145 0.25 (1.0)
cmyn3* 1.0 0.855 0.75 (0.0)
olvi4* 0.75 0.895 1.0 0.25
cmyn4* 0.25 0.105 0.0 0.75
standard and adapted CIELAB
LAB*LAB 29.88 0.36 −11.86
LAB*LABa 29.88 0.36 −11.86
LAB*TCHa 12.5 11.88 271.76
relative CIELAB lab*
lab*lab 0.153 0.008 −0.249
lab*tch 0.125 0.25 0.755
lab*nch 0.75 0.25 0.755
relative Natural Colour (NC)
lab*lrj 0.153 0.0 −0.249
lab*tce 0.125 0.25 0.75
lab*ncE 0.75 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.5 0.79 1.0 (1.0)
cmyn3* 0.5 0.21 0.0 (0.0)
olvi4* 0.5 0.79 1.0 1.0
cmyn4* 0.5 0.21 0.0 0.0
standard and adapted CIELAB
LAB*LAB 80.44 0.71 −23.73
LAB*LABa 80.44 0.71 −23.73
LAB*TCHa 75.0 23.75 271.72
relative CIELAB lab*
lab*lab 0.807 0.015 −0.499
lab*tch 0.75 0.5 0.755
lab*nch 0.0 0.5 0.755
relative Natural Colour (NC)
lab*lrj 0.807 0.0 −0.499
lab*tce 0.75 0.5 0.75
lab*ncE 0.0 0.5 g99b

relative Inform. Technology (IT)
olvi3* 0.25 0.54 0.75 (1.0)
cmyn3* 0.75 0.46 0.25 (0.0)
olvi4* 0.5 0.79 1.0 0.75
cmyn4* 0.5 0.21 0.0 0.25
standard and adapted CIELAB
LAB*LAB 61.09 0.72 −23.74
LAB*LABa 61.09 0.72 −23.74
LAB*TCHa 50.0 23.76 271.74
relative CIELAB lab*
lab*lab 0.557 0.015 −0.499
lab*tch 0.5 0.5 0.755
lab*nch 0.25 0.5 0.755
relative Natural Colour (NC)
lab*lrj 0.557 0.0 −0.499
lab*tce 0.5 0.5 0.75
lab*ncE 0.25 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.29 0.5 (1.0)
cmyn3* 1.0 0.71 0.5 (0.0)
olvi4* 0.5 0.79 1.0 0.5
cmyn4* 0.5 0.21 0.0 0.5
standard and adapted CIELAB
LAB*LAB 41.74 0.72 −23.74
LAB*LABa 41.74 0.72 −23.74
LAB*TCHa 25.01 23.76 271.75
relative CIELAB lab*
lab*lab 0.307 0.015 −0.499
lab*tch 0.25 0.5 0.755
lab*nch 0.5 0.5 0.755
relative Natural Colour (NC)
lab*lrj 0.307 0.0 −0.499
lab*tce 0.25 0.5 0.75
lab*ncE 0.5 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.685 1.0 (1.0)
cmyn3* 0.75 0.315 0.0 (0.0)
olvi4* 0.25 0.686 1.0 1.0
cmyn4* 0.75 0.314 0.0 0.0
standard and adapted CIELAB
LAB*LAB 72.95 1.07 −35.6
LAB*LABa 72.95 1.07 −35.6
LAB*TCHa 62.5 35.63 271.73
relative CIELAB lab*
lab*lab 0.71 0.023 −0.749
lab*tch 0.625 0.75 0.755
lab*nch 0.0 0.75 0.755
relative Natural Colour (NC)
lab*lrj 0.71 0.0 −0.749
lab*tce 0.625 0.75 0.75
lab*ncE 0.0 0.75 g99b

relative Inform. Technology (IT)
olvi3* 0.0 0.435 0.75 (1.0)
cmyn3* 1.0 0.565 0.25 (0.0)
olvi4* 0.25 0.685 1.0 0.75
cmyn4* 0.75 0.315 0.0 0.25
standard and adapted CIELAB
LAB*LAB 53.6 1.09 −35.61
LAB*LABa 53.6 1.09 −35.61
LAB*TCHa 37.51 35.63 271.75
relative CIELAB lab*
lab*lab 0.46 0.023 −0.749
lab*tch 0.375 0.75 0.755
lab*nch 0.25 0.75 0.755
relative Natural Colour (NC)
lab*lrj 0.46 0.0 −0.749
lab*tce 0.375 0.75 0.75
lab*ncE 0.25 0.75 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.581 1.0 (1.0)
cmyn3* 1.0 0.419 0.0 (0.0)
olvi4* 0.0 0.581 1.0 1.0
cmyn4* 1.0 0.419 0.0 0.0
standard and adapted CIELAB
LAB*LAB 65.47 1.44 −47.47
LAB*LABa 65.47 1.44 −47.47
LAB*TCHa 50.0 47.5 271.74
relative CIELAB lab*
lab*lab 0.613 0.03 −0.998
lab*tch 0.5 1.0 0.755
lab*nch 0.0 1.0 0.755
relative Natural Colour (NC)
lab*lrj 0.613 0.0 −0.999
lab*tce 0.5 1.0 0.75
lab*ncE 0.0 1.0 g99b

Output: Colorimetric Offset Reflective System ORS18

for hue *h* = lab*h* = 271/360 = 0.754

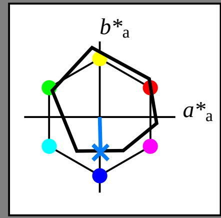
lab*tch* and *lab*nch

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

0,25 0,50 0,75 1,00

chromaticness *c*

blackness *n*

*n** = 0,00 *n** = 0,25 *n** = 0,50 *n** = 1,0

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 −0.98 4.75
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 76.06 −0.61 3.44
LAB*LABa 76.06 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 56.71 −0.24 2.14
LAB*LABa 56.71 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 37.36 0.13 0.83
LAB*LABa 37.36 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 18.02 0.5 −0.47
LAB*LABa 18.02 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* 0.75 0.872 1.0 (1.0)
cmyn3* 0.25 0.128 0.0 (0.0)
olvi4* 0.75 0.872 1.0 1.0
cmyn4* 0.25 0.128 0.0 0.0
standard and adapted CIELAB
LAB*LAB 82.0 −0.45 −7.31
LAB*LABa 82.0 0.27 −11.16
LAB*TCHa 87.5 11.18 271.39
relative CIELAB lab*
lab*lab 0.827 0.006 −0.249
lab*tch 0.875 0.25 0.754
lab*nch 0.0 0.25 0.754
relative Natural Colour (NC)
lab*lrj 0.827 0.0 −0.249
lab*tce 0.875 0.25 0.75
lab*ncE 0.0 0.25 g99b

relative Inform. Technology (IT)
olvi3* 0.5 0.622 0.75 (1.0)
cmyn3* 0.5 0.378 0.25 (0.0)
olvi4* 0.75 0.872 1.0 0.75
cmyn4* 0.25 0.128 0.0 0.25
standard and adapted CIELAB
LAB*LAB 62.65 −0.07 −8.62
LAB*LABa 62.65 0.27 −11.17
LAB*TCHa 62.5 11.18 271.41
relative CIELAB lab*
lab*lab 0.577 0.006 −0.249
lab*tch 0.625 0.25 0.754
lab*nch 0.25 0.25 0.754
relative Natural Colour (NC)
lab*lrj 0.577 0.0 −0.249
lab*tce 0.625 0.25 0.75
lab*ncE 0.25 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.372 0.5 (1.0)
cmyn3* 0.75 0.628 0.5 (0.0)
olvi4* 0.75 0.872 1.0 0.5
cmyn4* 0.25 0.128 0.0 0.5
standard and adapted CIELAB
LAB*LAB 43.3 0.29 −9.93
LAB*LABa 43.3 0.27 −11.17
LAB*TCHa 37.5 11.18 271.41
relative CIELAB lab*
lab*lab 0.327 0.006 −0.249
lab*tch 0.375 0.25 0.754
lab*nch 0.5 0.25 0.754
relative Natural Colour (NC)
lab*lrj 0.327 0.0 −0.249
lab*tce 0.375 0.25 0.75
lab*ncE 0.5 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.122 0.25 (1.0)
cmyn3* 1.0 0.878 0.75 (0.0)
olvi4* 0.75 0.872 1.0 0.25
cmyn4* 0.25 0.128 0.0 0.75
standard and adapted CIELAB
LAB*LAB 23.96 0.66 −11.23
LAB*LABa 23.96 0.28 −11.16
LAB*TCHa 12.5 11.18 271.43
relative CIELAB lab*
lab*lab 0.077 0.006 −0.249
lab*tch 0.125 0.25 0.754
lab*nch 0.75 0.25 0.754
relative Natural Colour (NC)
lab*lrj 0.077 0.0 −0.249
lab*tce 0.125 0.25 0.75
lab*ncE 0.75 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.5 0.744 1.0 (1.0)
cmyn3* 0.5 0.256 0.0 (0.0)
olvi4* 0.5 0.744 1.0 1.0
cmyn4* 0.5 0.256 0.0 0.0
standard and adapted CIELAB
LAB*LAB 68.6 0.07 −19.39
LAB*LABa 68.6 0.55 −22.34
LAB*TCHa 75.0 22.36 271.4
relative CIELAB lab*
lab*lab 0.654 0.012 −0.499
lab*tch 0.75 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*lrj 0.654 0.0 −0.499
lab*tce 0.75 0.5 0.75
lab*ncE 0.0 0.5 g99b

relative Inform. Technology (IT)
olvi3* 0.25 0.494 0.75 (1.0)
cmyn3* 0.75 0.506 0.25 (0.0)
olvi4* 0.5 0.744 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 49.25 0.45 −20.7
LAB*LABa 49.25 0.55 −22.35
LAB*TCHa 50.0 22.36 271.41
relative CIELAB lab*
lab*lab 0.404 0.012 −0.499
lab*tch 0.5 0.5 0.754
lab*nch 0.25 0.5 0.754
relative Natural Colour (NC)
lab*lrj 0.404 0.0 −0.499
lab*tce 0.5 0.5 0.75
lab*ncE 0.25 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.244 0.5 (1.0)
cmyn3* 1.0 0.756 0.5 (0.0)
olvi4* 0.5 0.744 1.0 0.5
cmyn4* 0.5 0.256 0.0 0.5
standard and adapted CIELAB
LAB*LAB 29.9 0.82 −22.01
LAB*LABa 29.9 0.55 −22.34
LAB*TCHa 25.01 22.36 271.42
relative CIELAB lab*
lab*lab 0.154 0.012 −0.499
lab*tch 0.25 0.5 0.754
lab*nch 0.5 0.5 0.754
relative Natural Colour (NC)
lab*lrj 0.154 0.0 −0.499
lab*tce 0.25 0.5 0.75
lab*ncE 0.5 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.616 1.0 (1.0)
cmyn3* 0.75 0.384 0.0 (0.0)
olvi4* 0.25 0.616 1.0 1.0
cmyn4* 0.75 0.384 0.0 0.0
standard and adapted CIELAB
LAB*LAB 55.19 0.61 −31.48
LAB*LABa 55.19 0.82 −33.52
LAB*TCHa 62.5 33.54 271.4
relative CIELAB lab*
lab*lab 0.48 0.018 −0.749
lab*tch 0.625 0.75 0.754
lab*nch 0.0 0.75 0.754
relative Natural Colour (NC)
lab*lrj 0.48 0.0 −0.749
lab*tce 0.625 0.75 0.75
lab*ncE 0.0 0.75 g99b

relative Inform. Technology (IT)
olvi3* 0.0 0.366 0.75 (1.0)
cmyn3* 1.0 0.634 0.25 (0.0)
olvi4* 0.25 0.616 1.0 0.75
cmyn4* 0.75 0.384 0.0 0.25
standard and adapted CIELAB
LAB*LAB 35.84 0.98 −32.78
LAB*LABa 35.84 0.83 −33.52
LAB*TCHa 37.51 33.54 271.41
relative CIELAB lab*
lab*lab 0.23 0.019 −0.749
lab*tch 0.375 0.75 0.754
lab*nch 0.25 0.75 0.754
relative Natural Colour (NC)
lab*lrj 0.23 0.0 −0.749
lab*tce 0.375 0.75 0.75
lab*ncE 0.25 0.75 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.488 1.0 (1.0)
cmyn3* 1.0 0.512 0.0 (0.0)
olvi4* 0.0 0.488 1.0 1.0
cmyn4* 1.0 0.512 0.0 0.0
standard and adapted CIELAB
LAB*LAB 41.79 1.14 −43.55
LAB*LABa 41.79 1.1 −44.69
LAB*TCHa 50.0 44.71 271.41
relative CIELAB lab*
lab*lab 0.307 0.025 −0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 1.0 0.754
relative Natural Colour (NC)
lab*lrj 0.307 0.0 −0.999
lab*tce 0.5 1.0 0.75
lab*ncE 0.0 1.0 b00r

NE500−7, 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 Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$

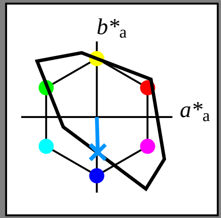
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

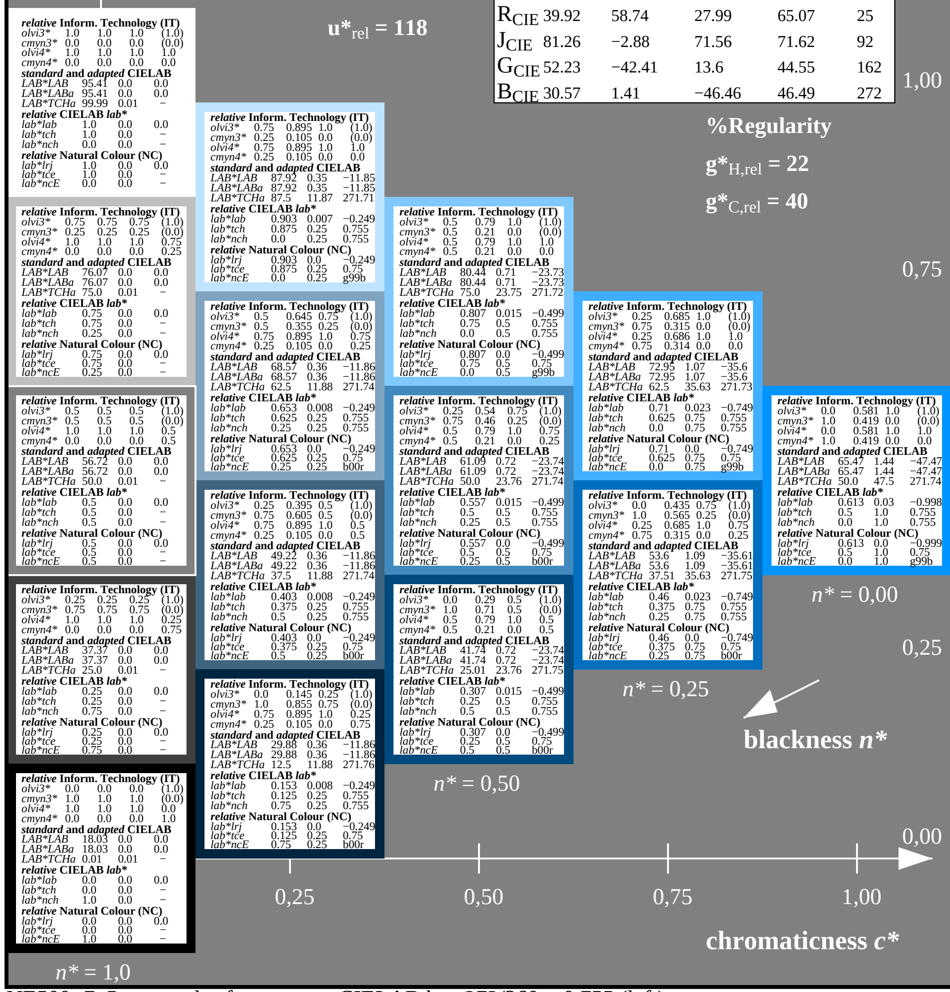
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

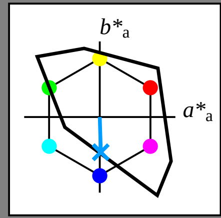
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

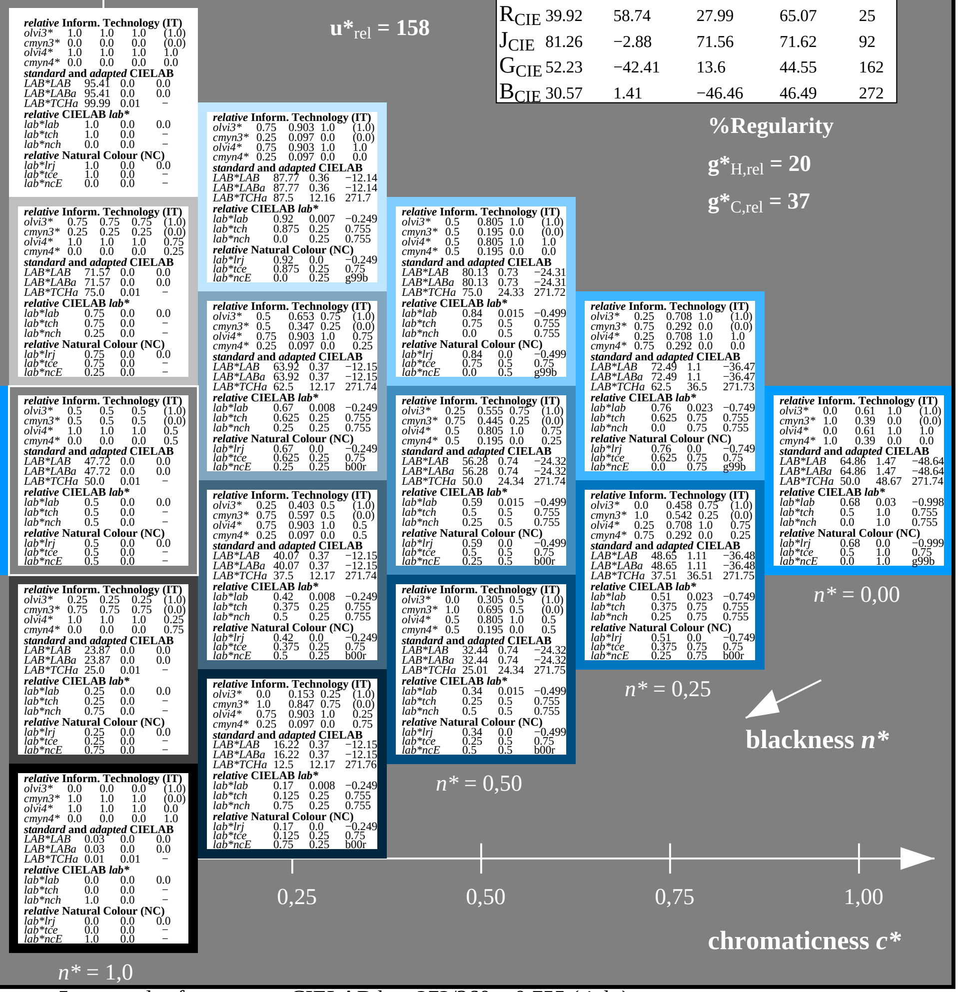
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

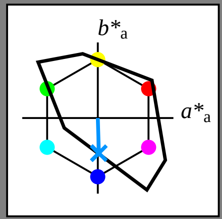
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

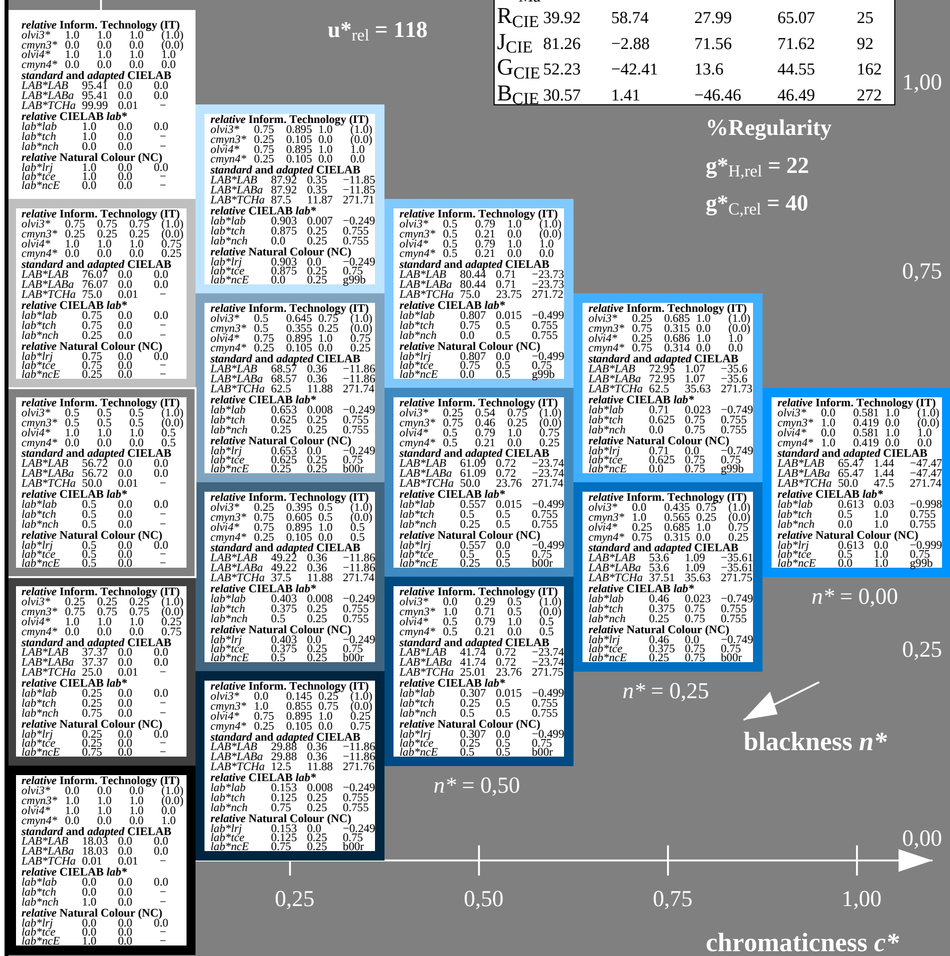
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

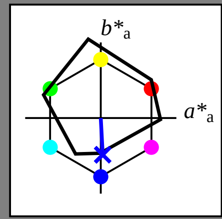
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

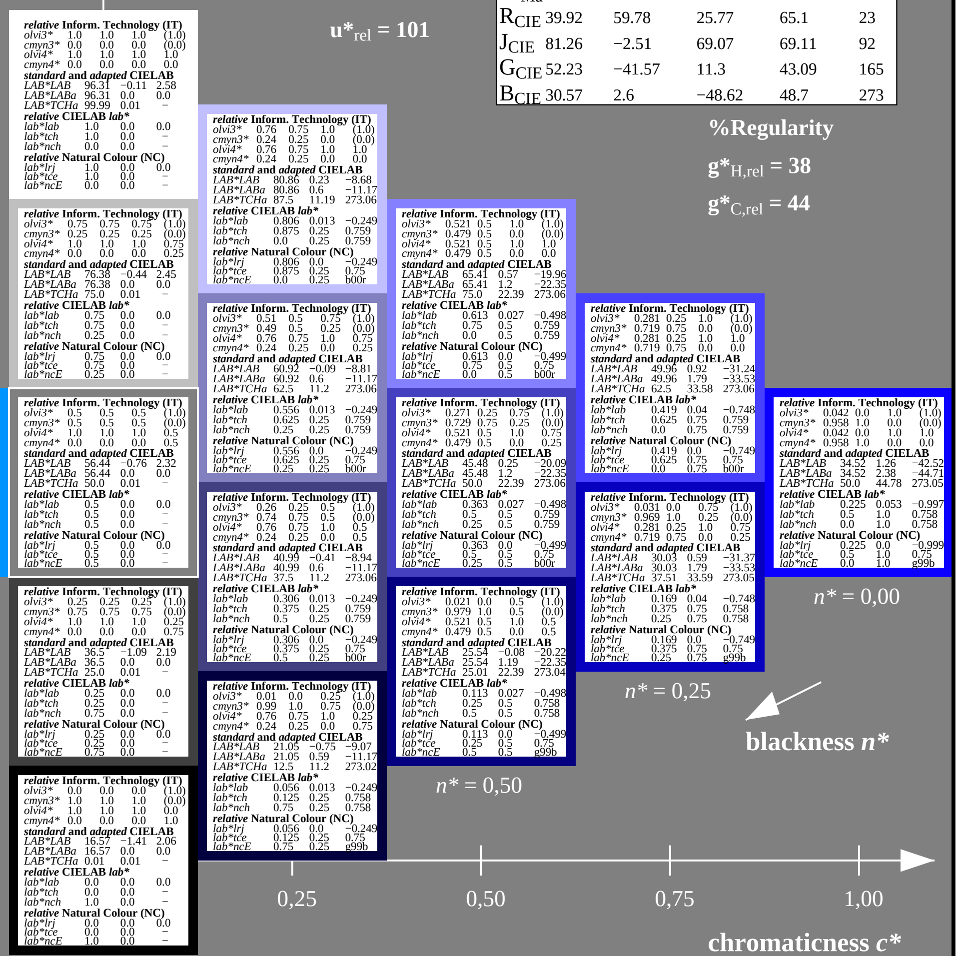
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



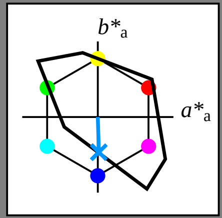
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

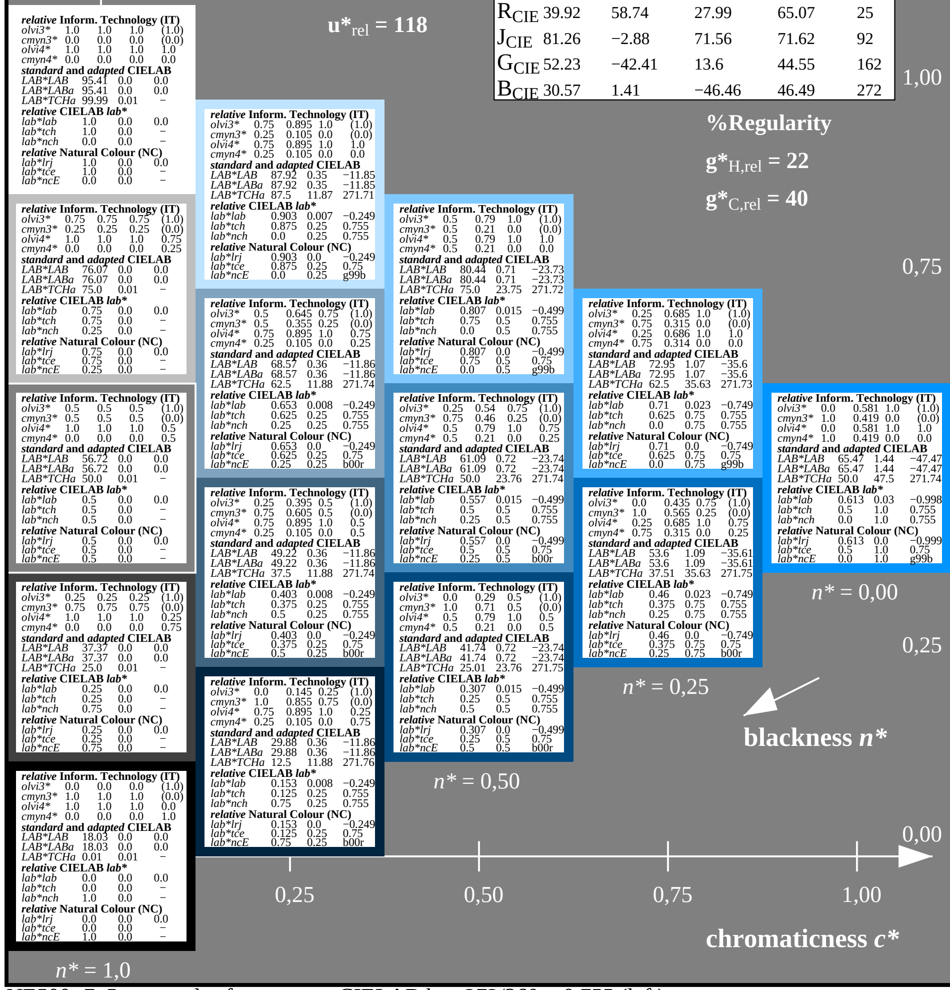
Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 272/360 = 0.755**
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness *t**



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

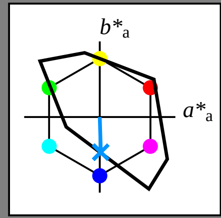


NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

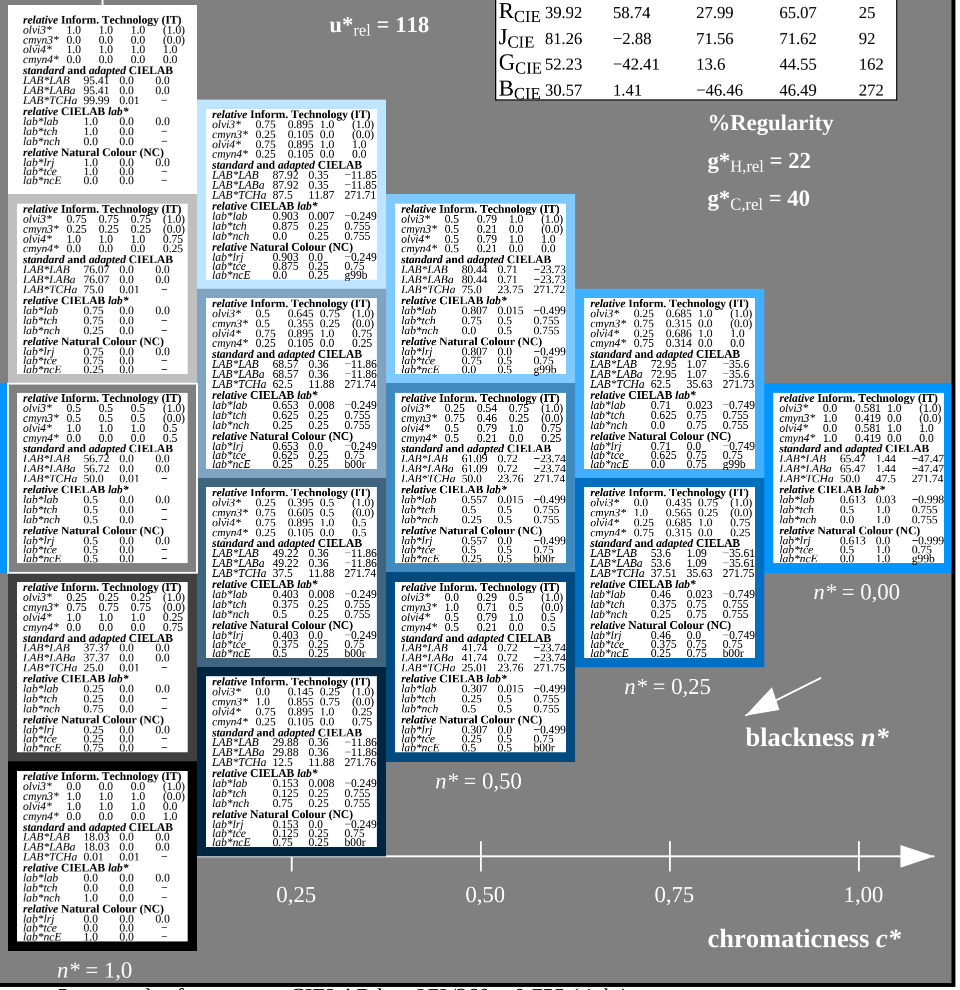
Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 272/360 = 0.755**
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness *t**



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

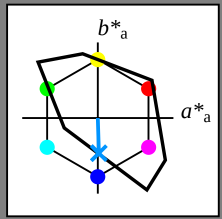


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

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

$u^*_{rel} = 118$

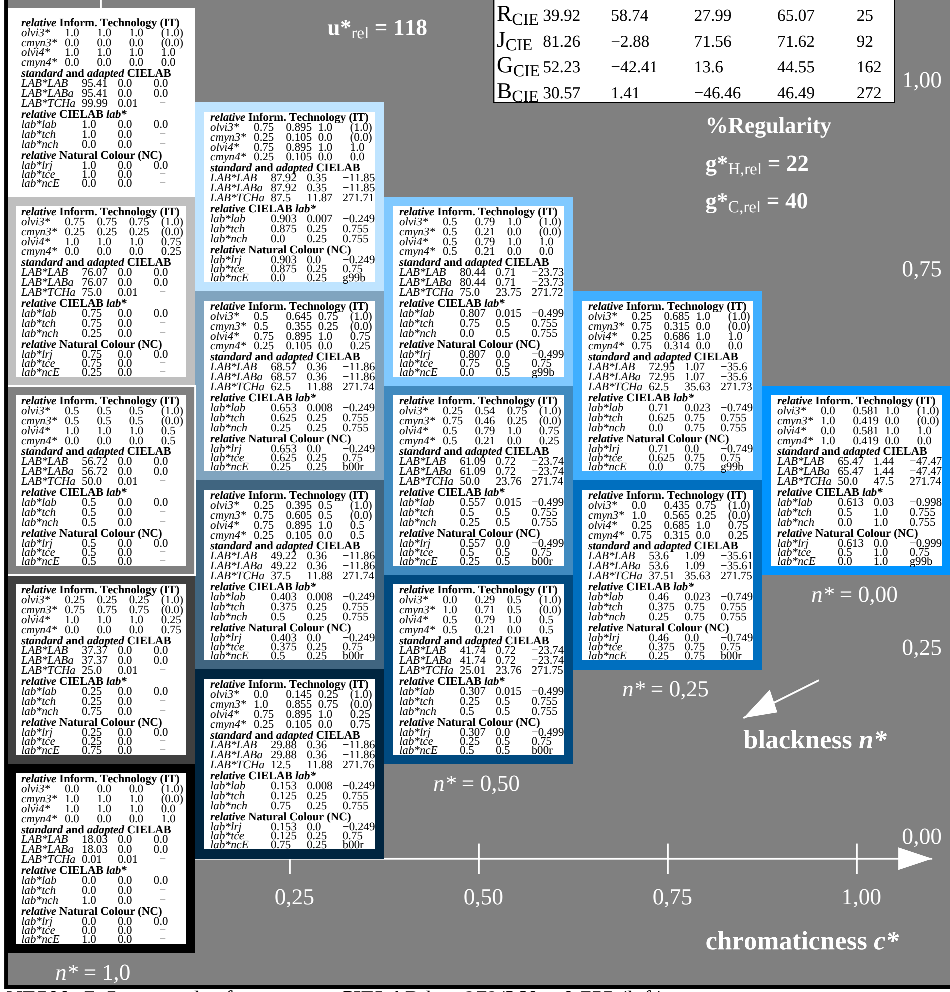
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

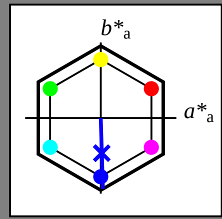
$g^*_{C,rel} = 40$



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

$u^*_{rel} = 152$

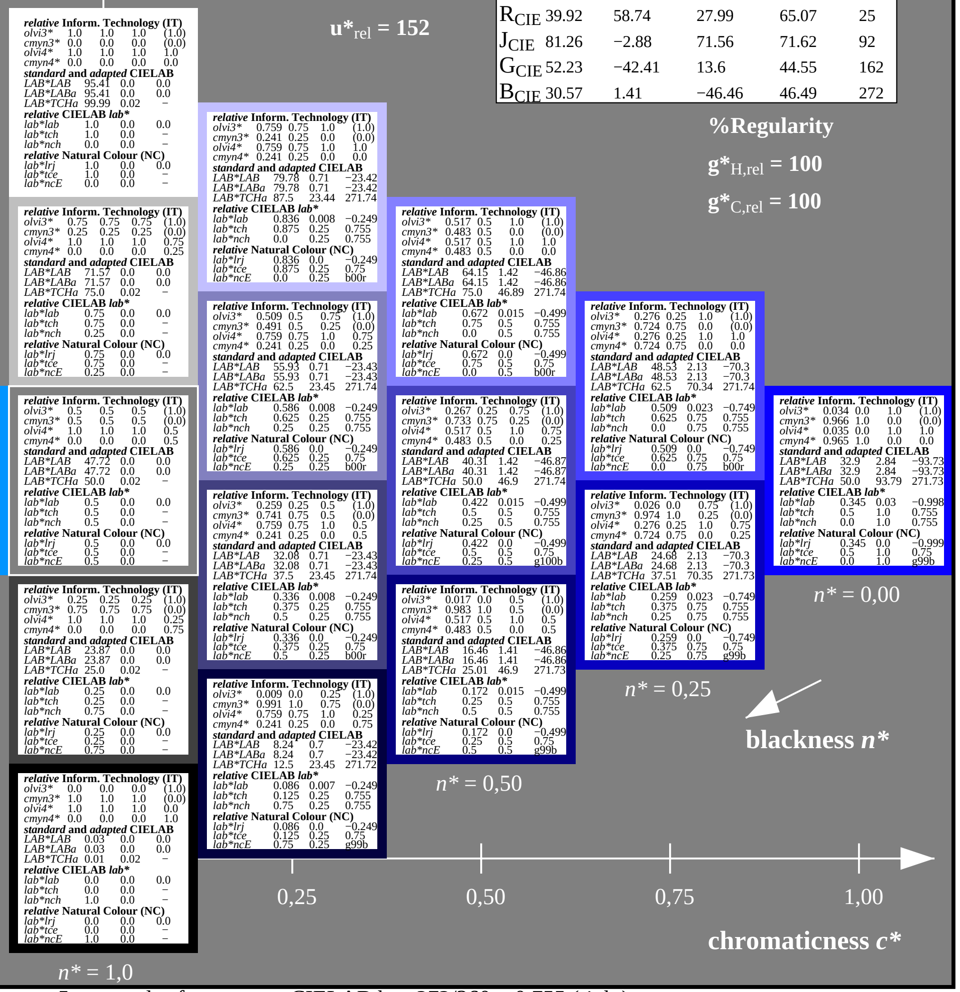
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



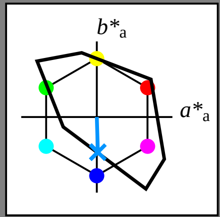
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

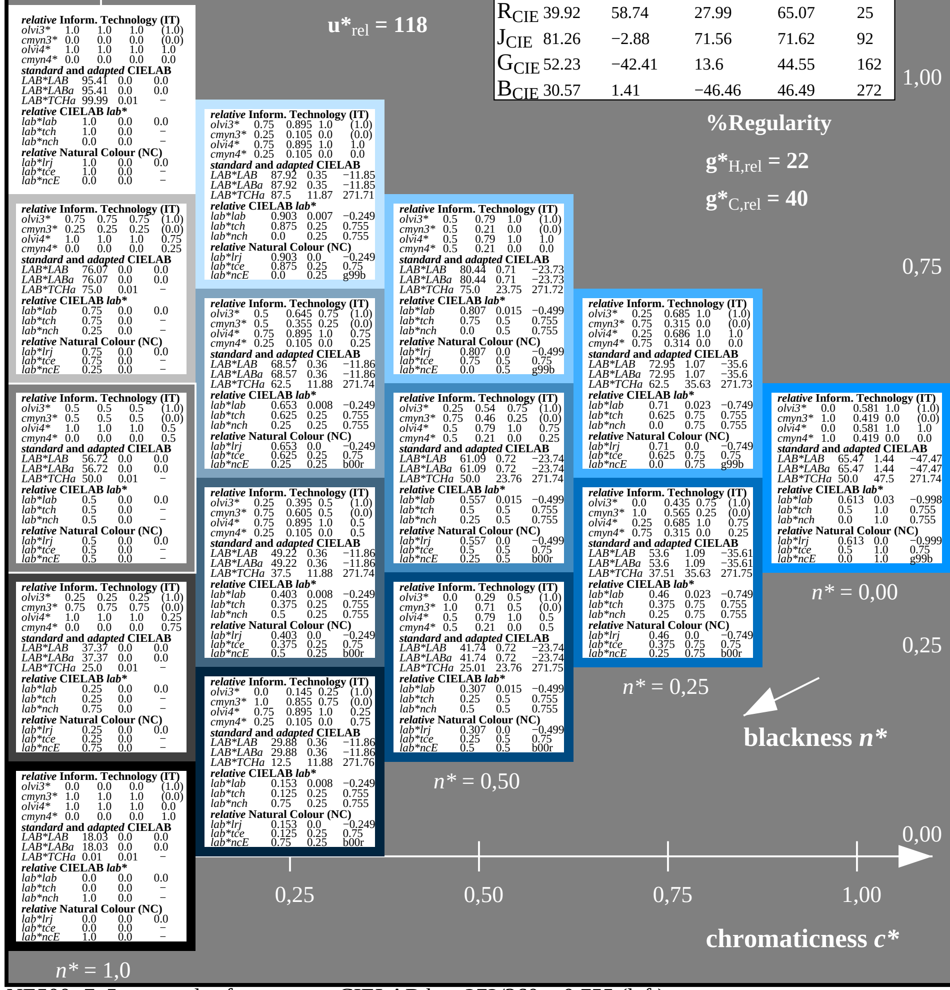
$u^*_{rel} = 118$

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

$g^*_{H,rel} = 22$

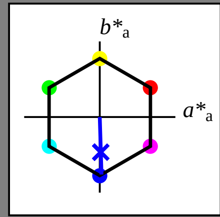
$g^*_{C,rel} = 40$



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

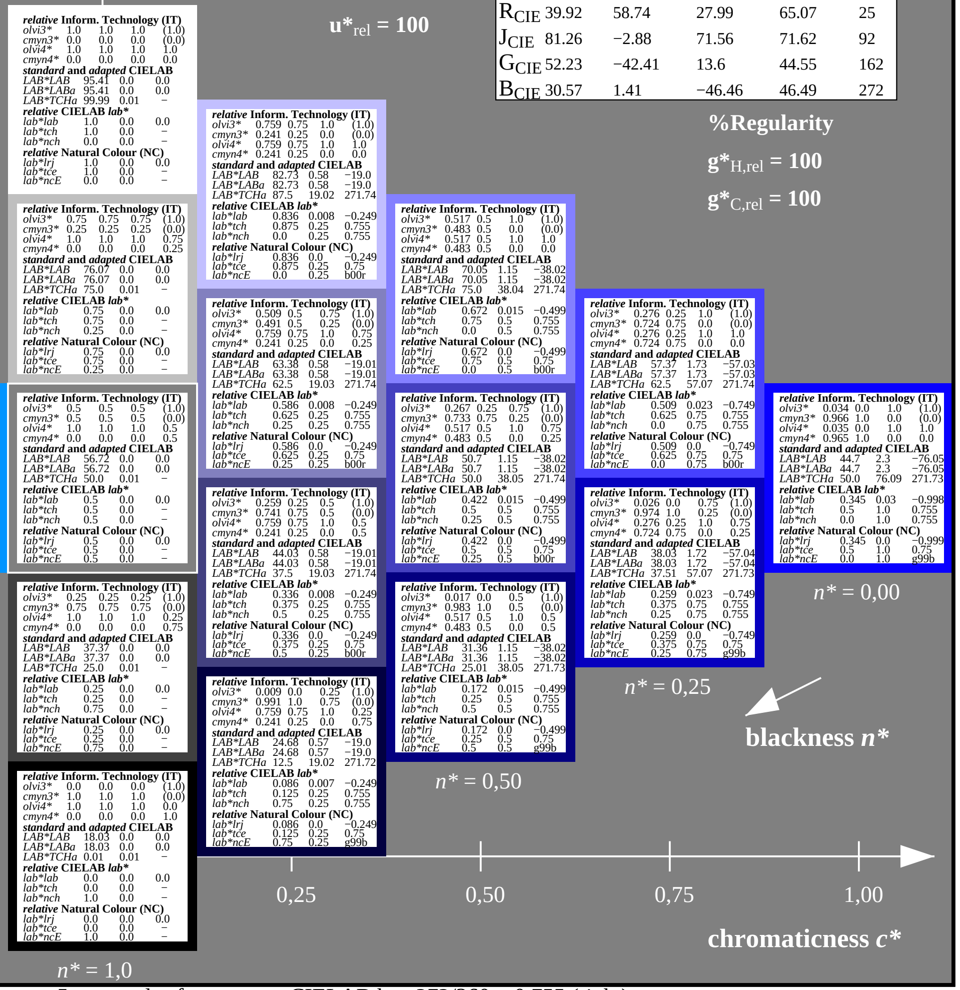
$u^*_{rel} = 100$

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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

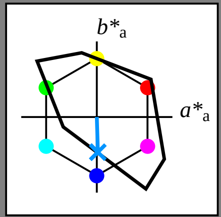
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 118$

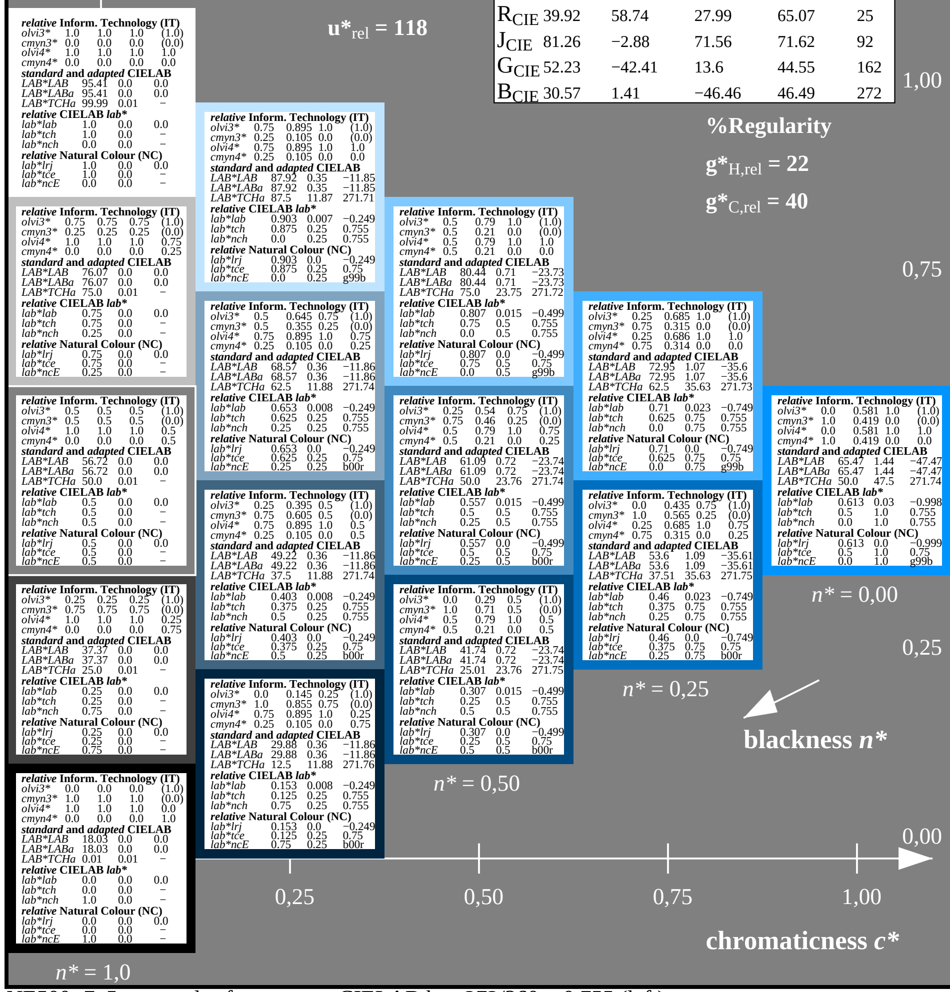
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

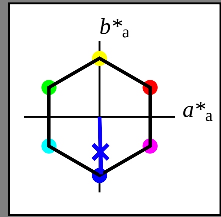
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

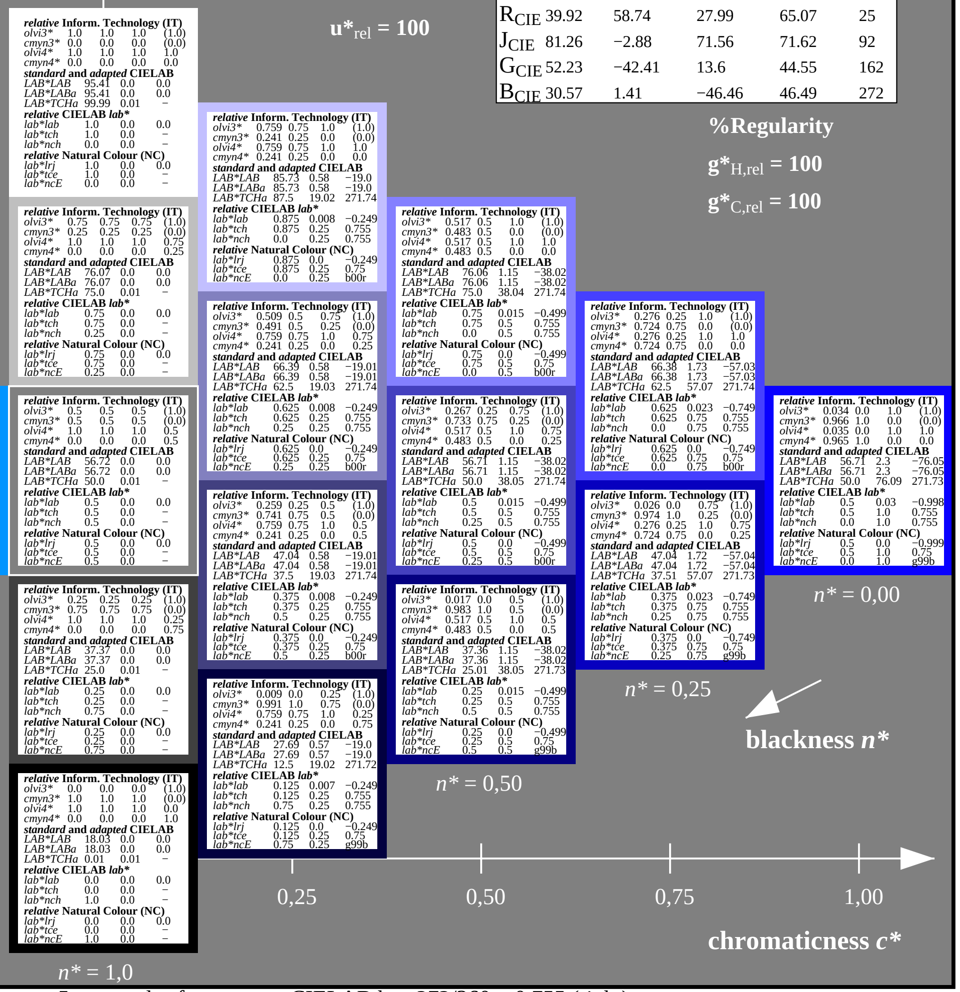
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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

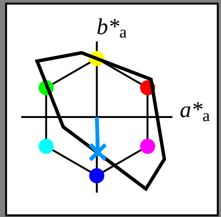
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness *t**



%Gamut

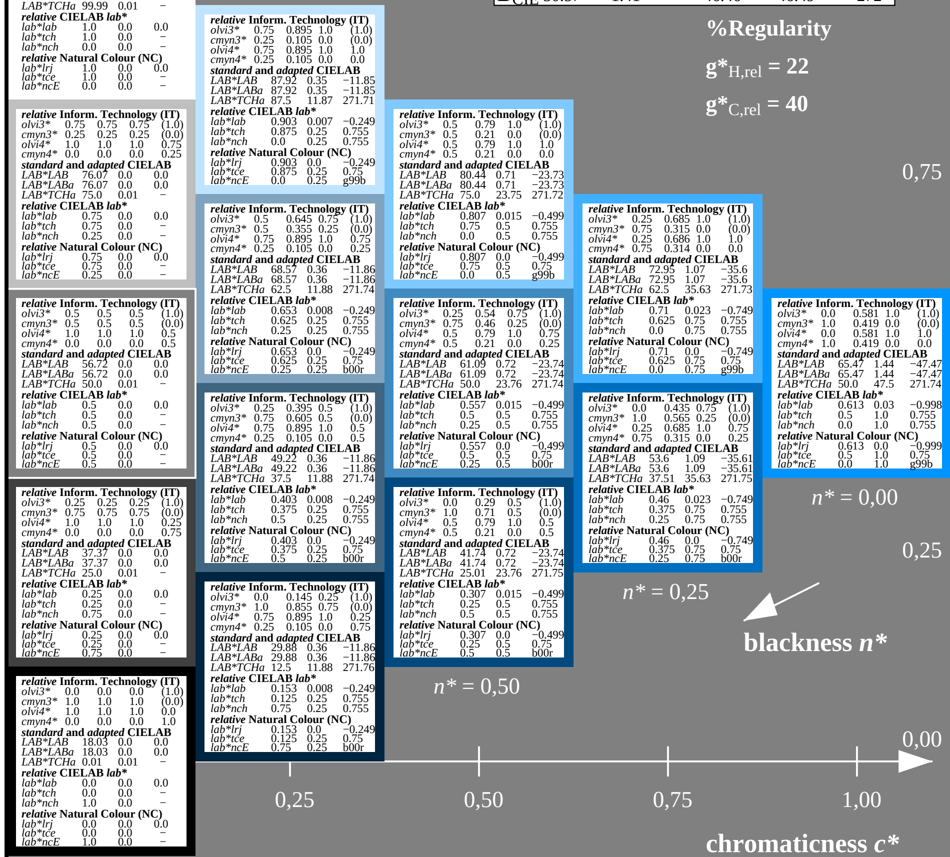
u^*_{rel} = 118

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



Output: Colorimetric Television Luminous System TLS70

for hue *h** = *lab*h* = 272/360 = 0.755

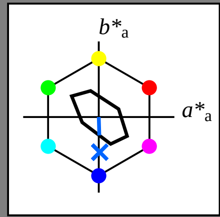
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness *t**



%Gamut

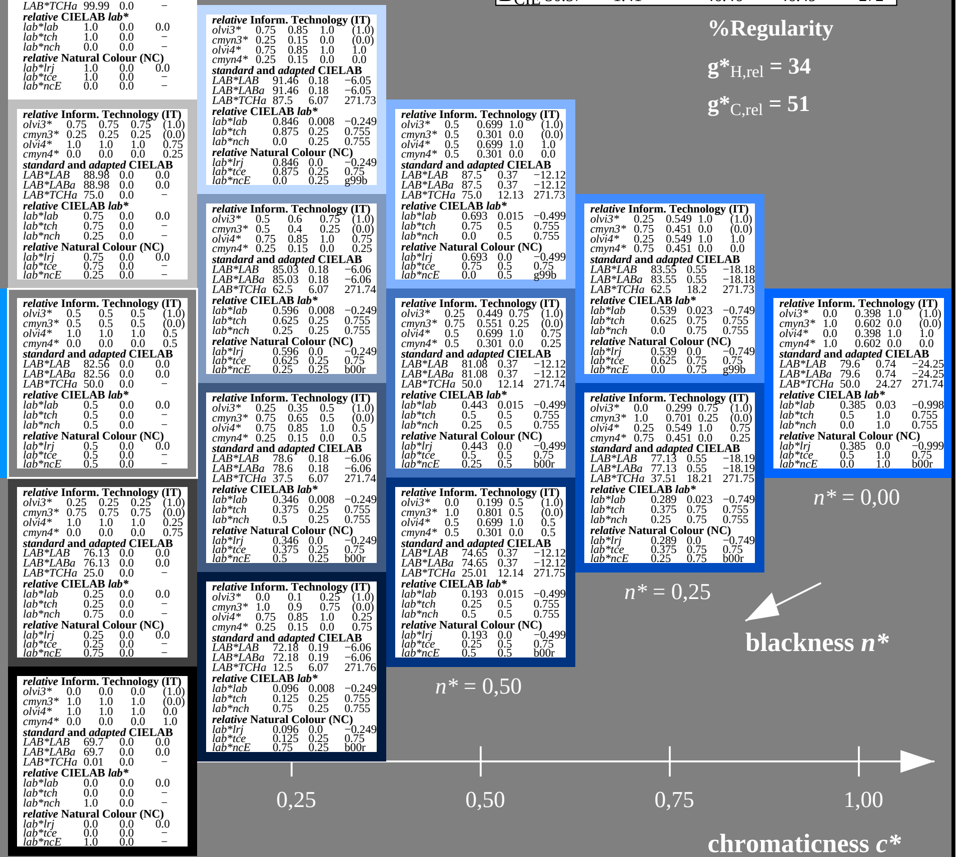
u^*_{rel} = 16

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



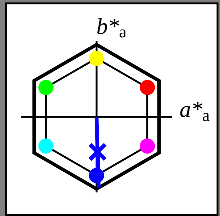
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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**

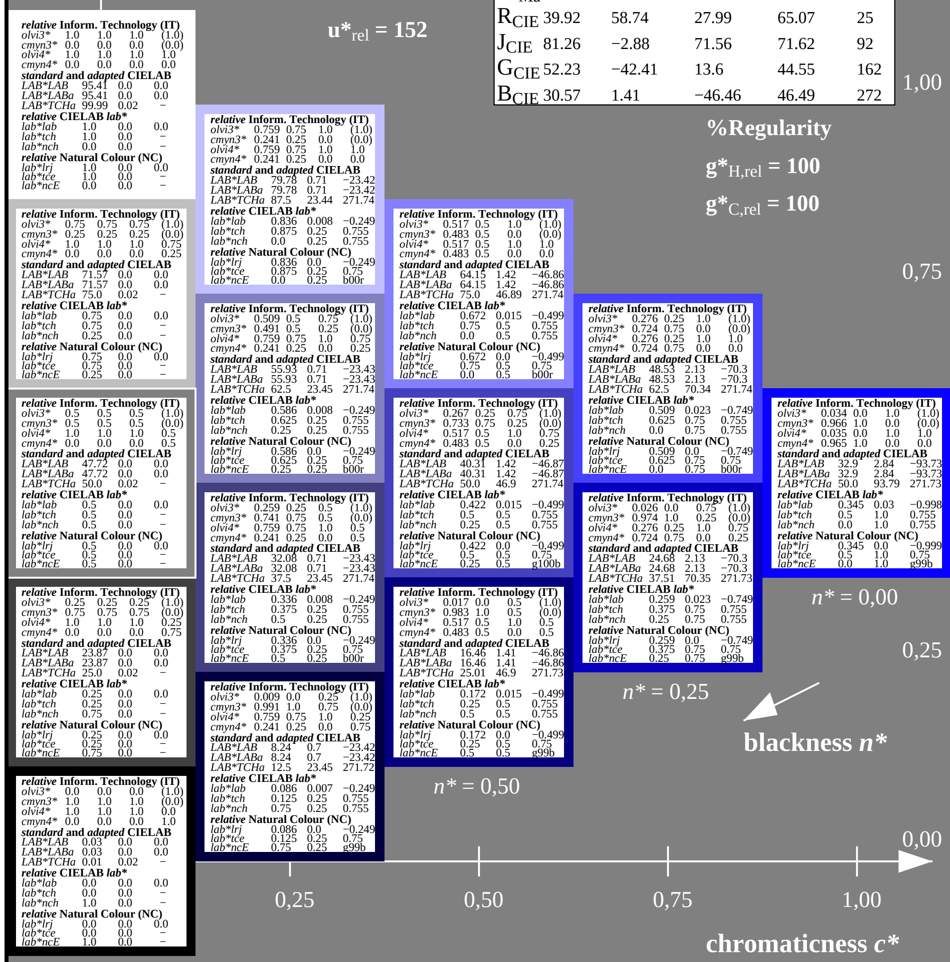


%Gamut
u*rel = 152

NLS00; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	31.81	82.62	47.7	95.4	30
YMa	63.61	0.0	95.4	95.4	90
LMa	31.81	−82.61	47.7	95.4	150
CMa	63.61	−82.61	−47.69	95.4	210
VMa	31.81	0.0	−95.39	95.4	270
MMa	63.61	82.62	−47.69	95.4	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	−2.88	71.56	71.62	92
GCIE	52.23	−42.41	13.6	44.55	162
BCIE	30.57	1.41	−46.46	46.49	272

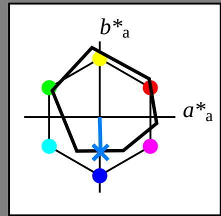
%Regularity
g*H,rel = 100
g*C,rel = 100



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**

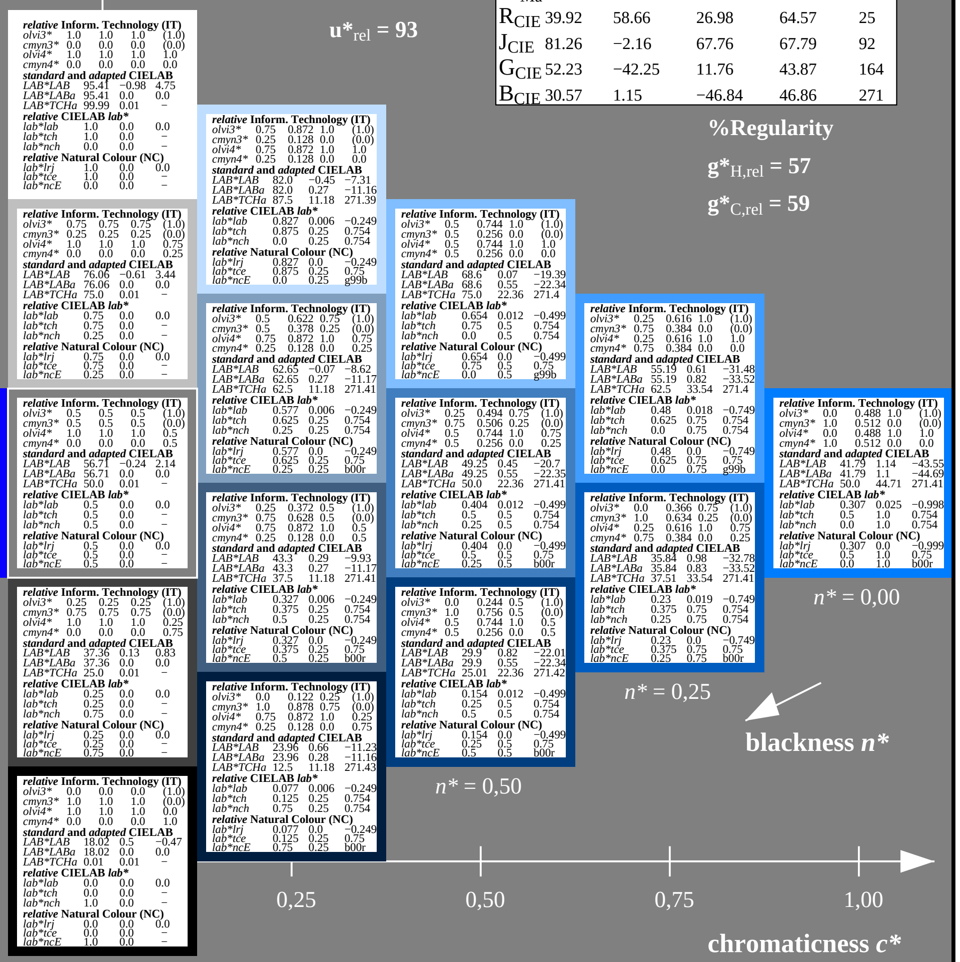


%Gamut
u*rel = 93

ORS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	−10.26	91.75	92.32	96
LMa	50.9	−62.83	34.96	71.91	151
CMa	58.62	−30.34	−45.01	54.3	236
VMa	25.72	31.1	−44.4	54.22	305
MMa	48.13	75.28	−8.36	75.74	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.57	25
JCIE	81.26	−2.16	67.76	67.79	92
GCIE	52.23	−42.25	11.76	43.87	164
BCIE	30.57	1.15	−46.84	46.86	271

%Regularity
g*H,rel = 57
g*C,rel = 59



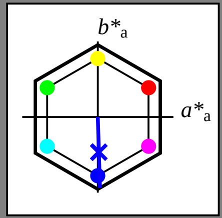
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

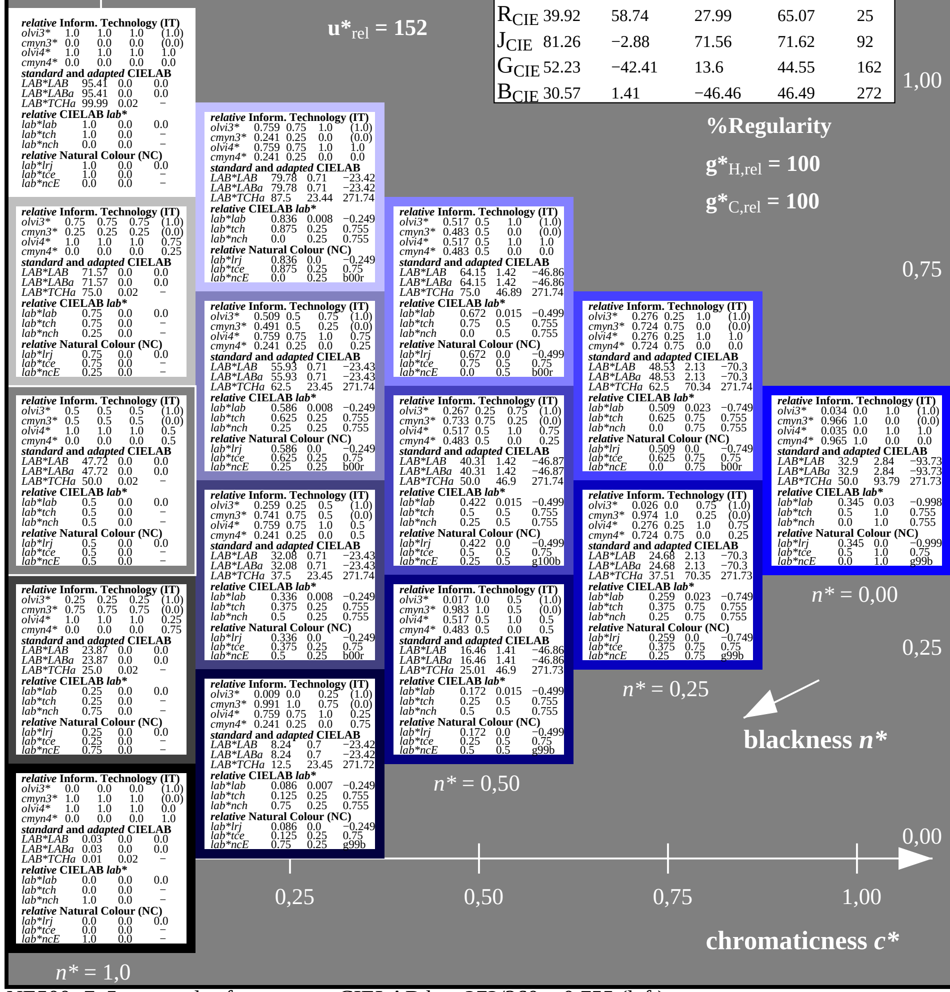
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

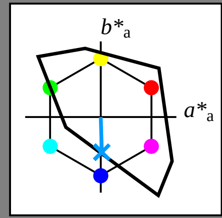
$g^*_{C,rel}$ = 100



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

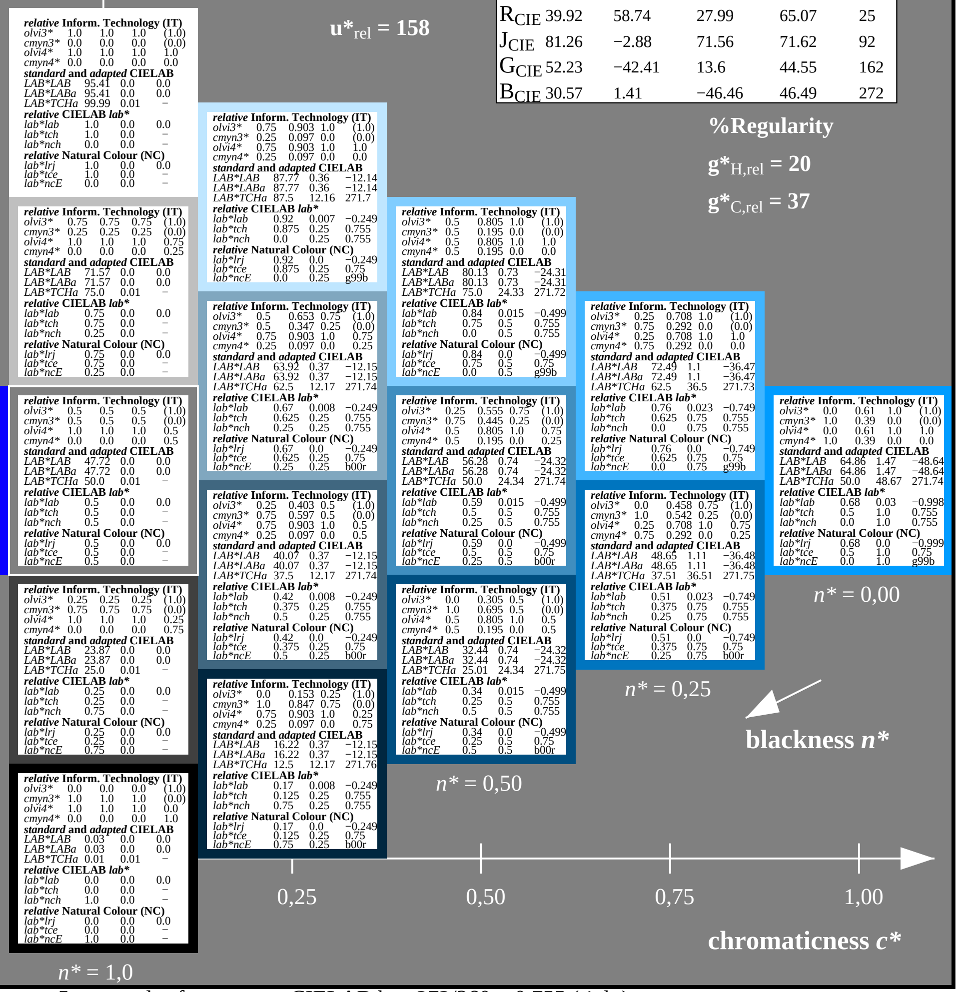
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

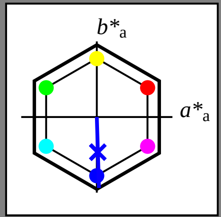
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 152$

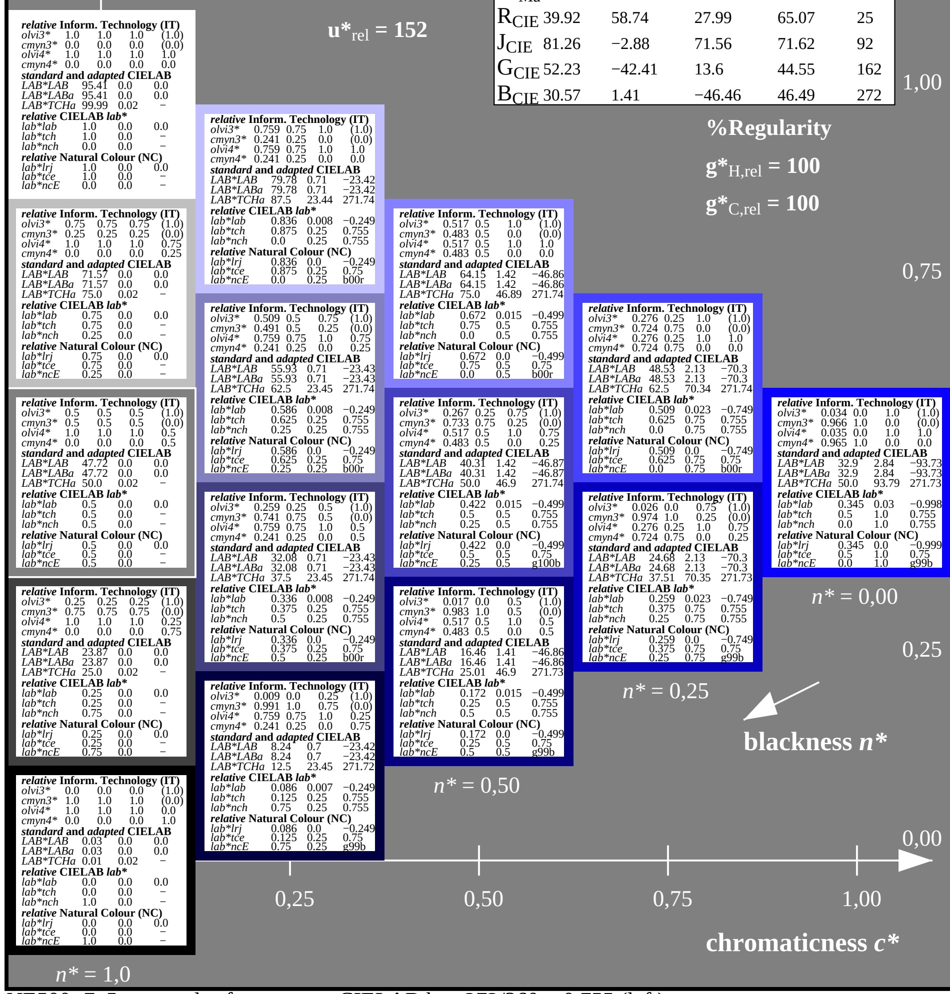
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

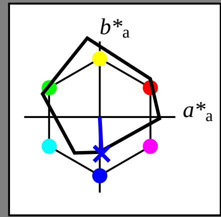
*lab*tch and lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 101$

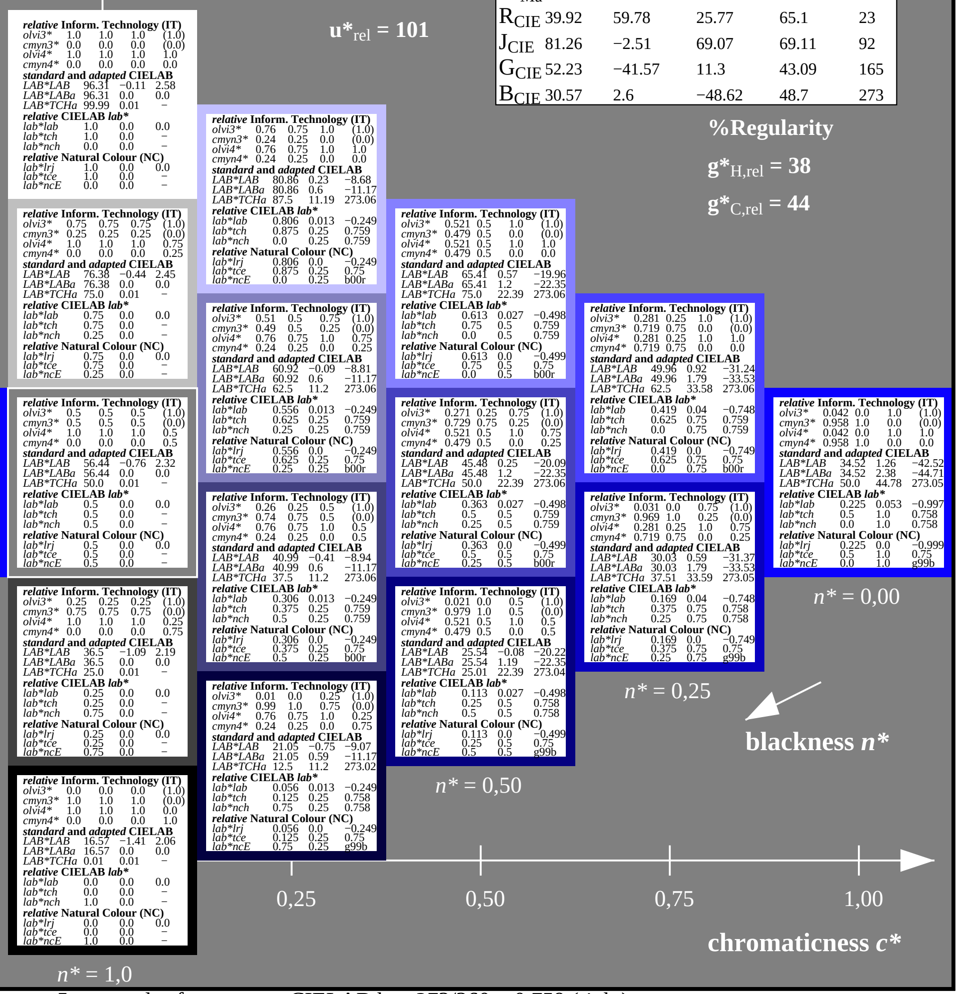
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$



NE500−7, 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 Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

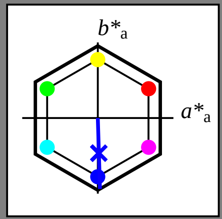
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

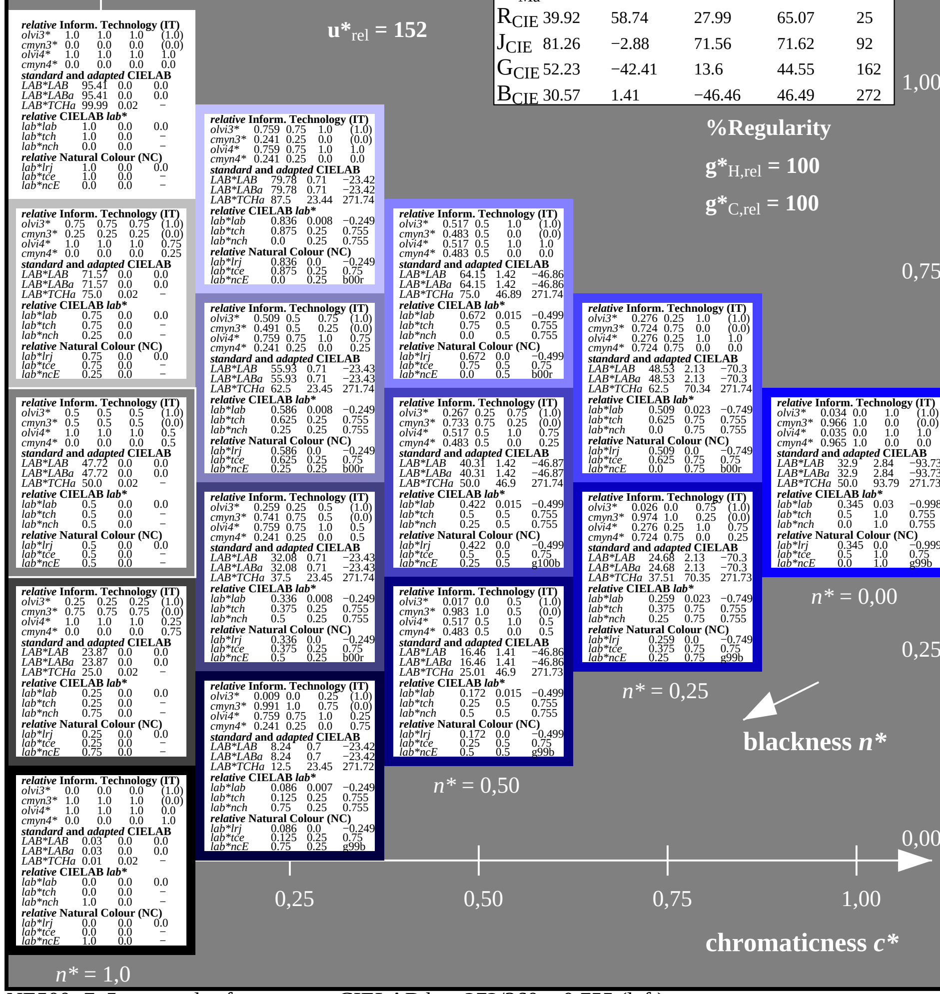
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 272/360 = 0.755$

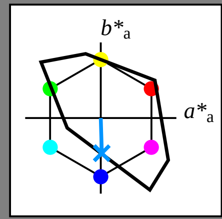
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

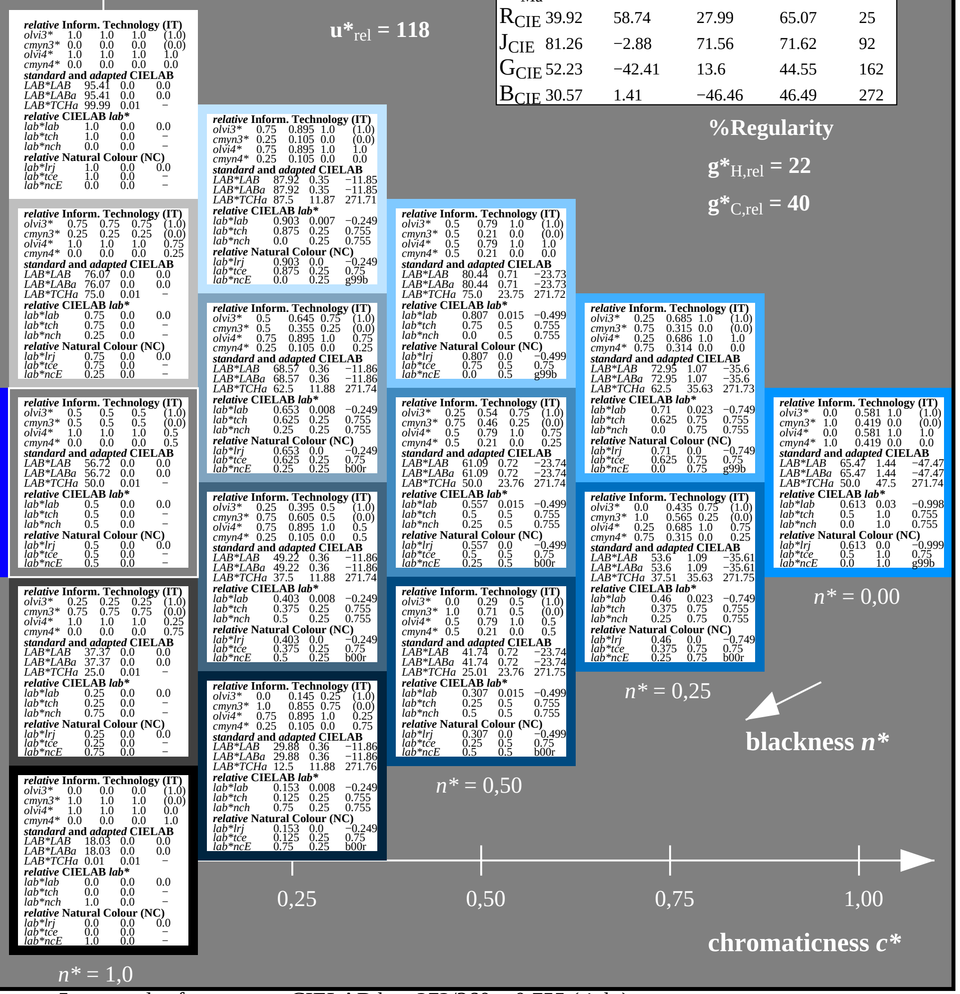
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

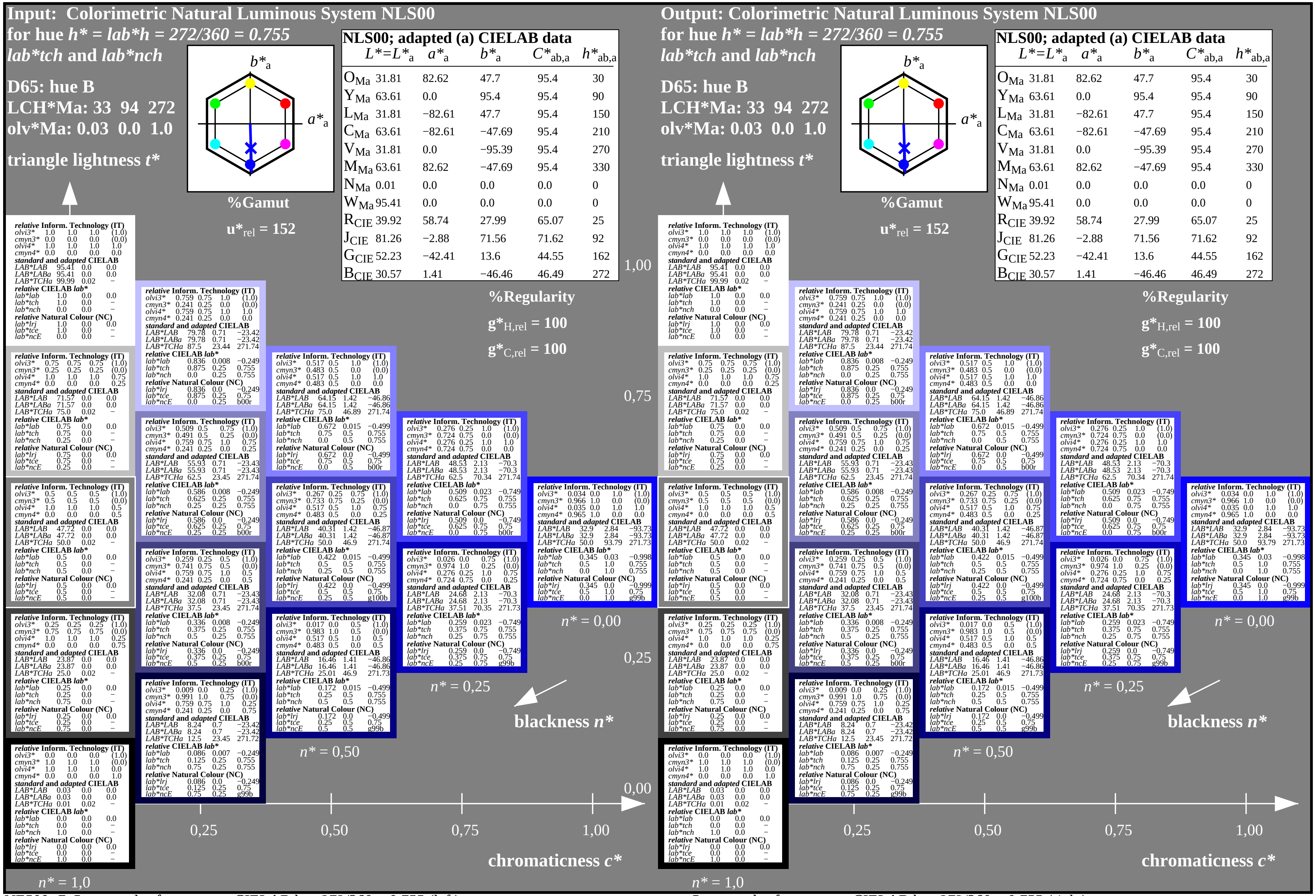
$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)



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

NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

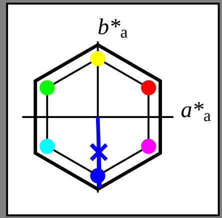
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 152$

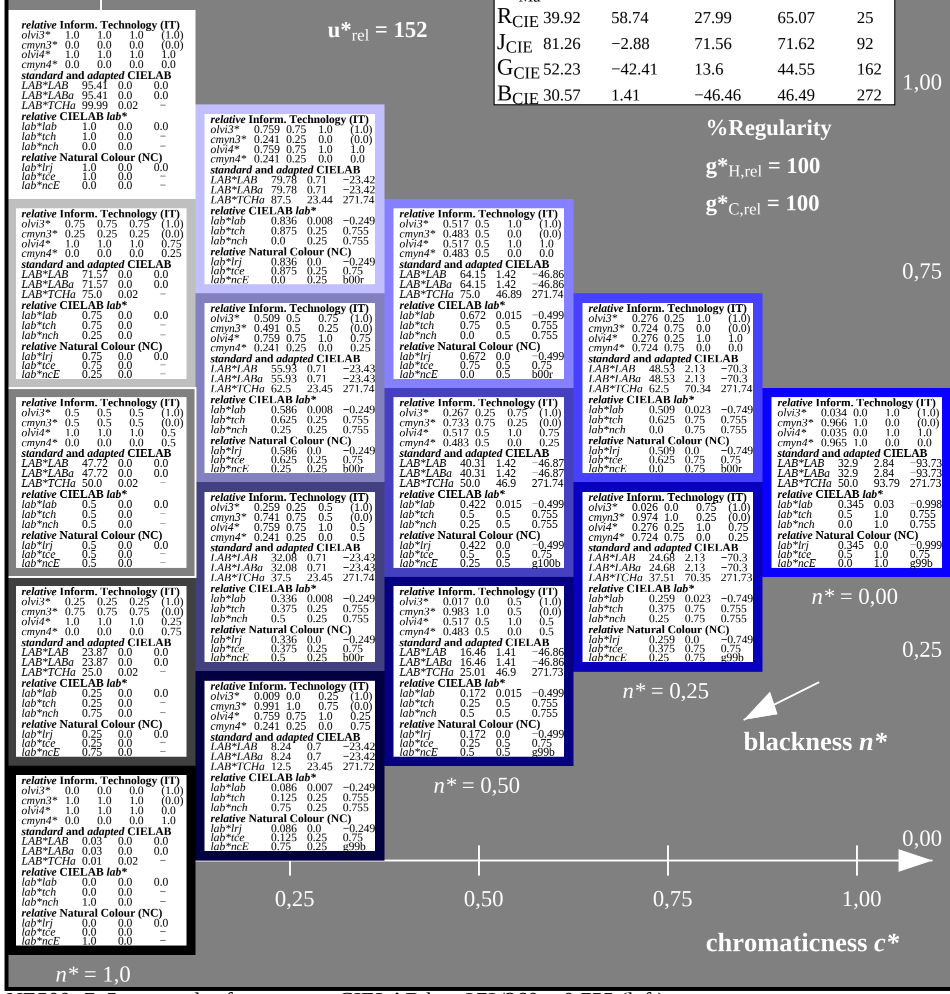
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

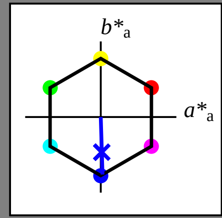
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

$u^*_{rel} = 100$

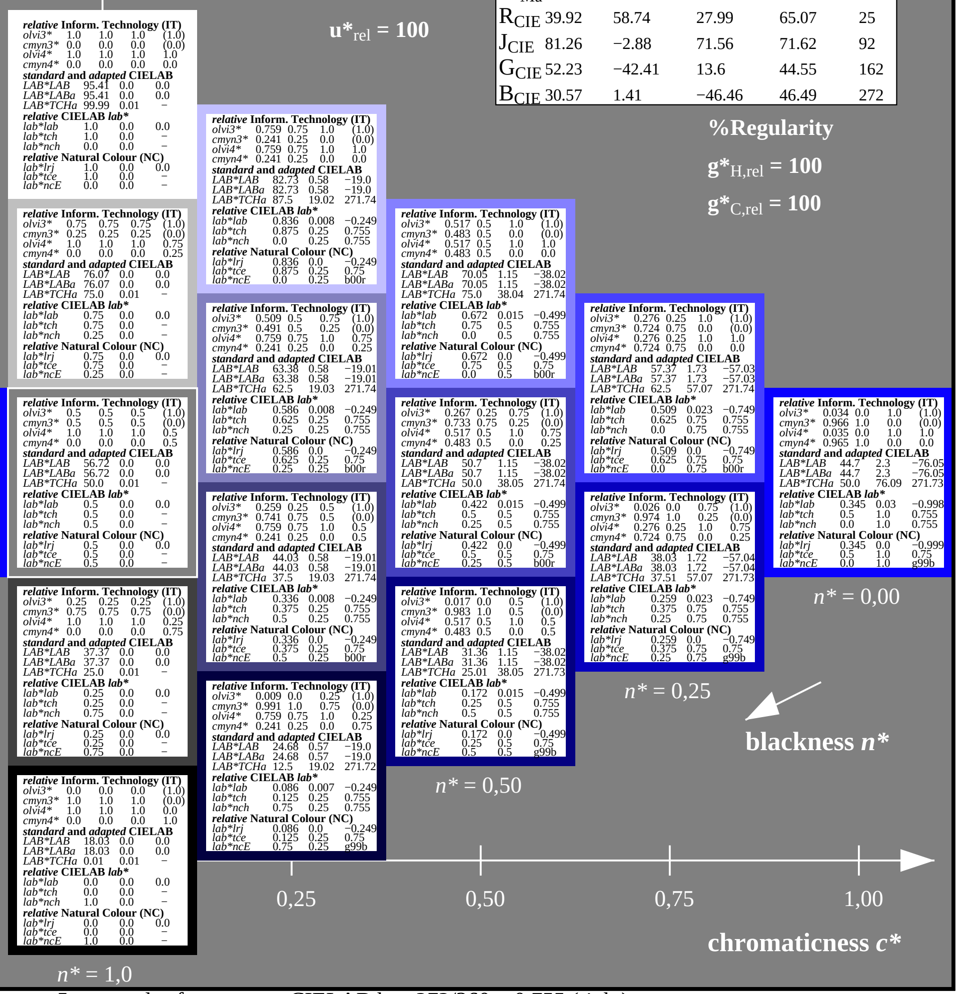
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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

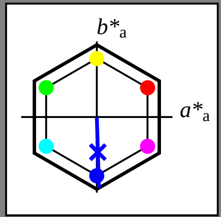
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 152

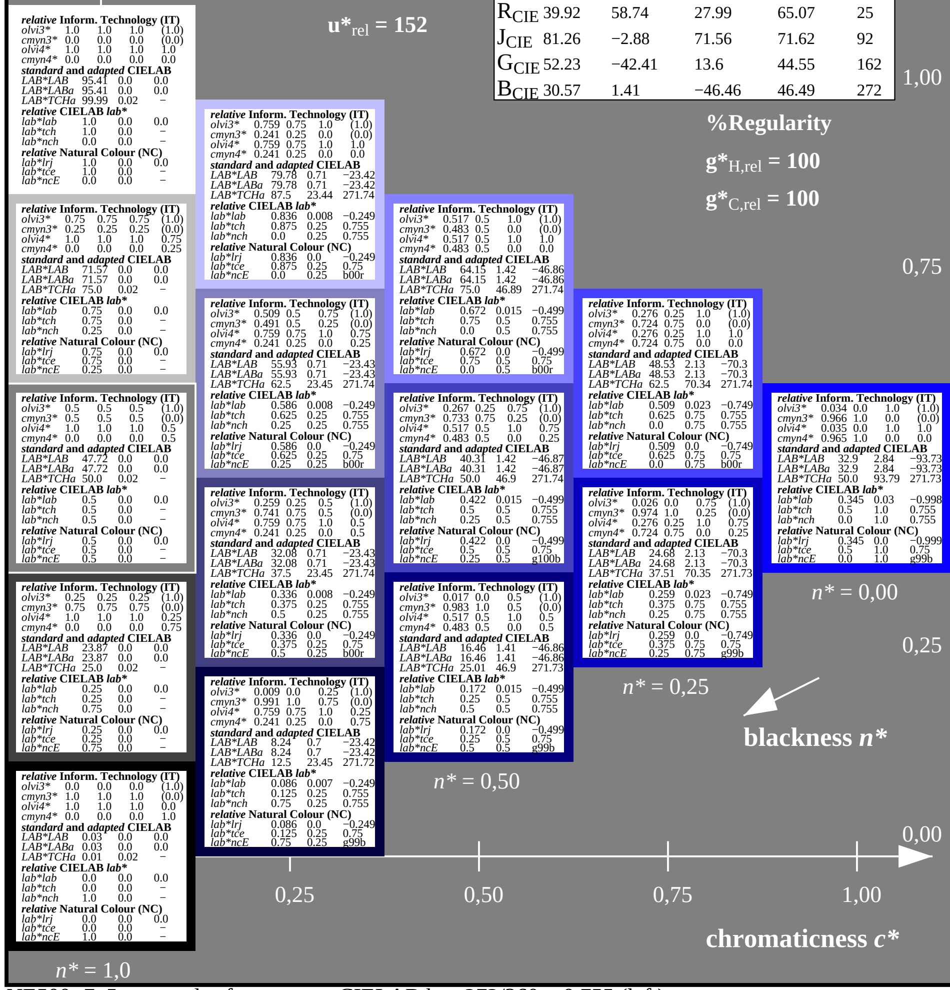
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Standard Reflective System SRS18

for hue *h** = *lab*h* = 272/360 = 0.755

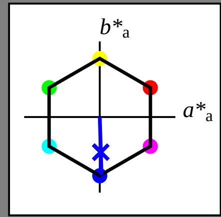
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

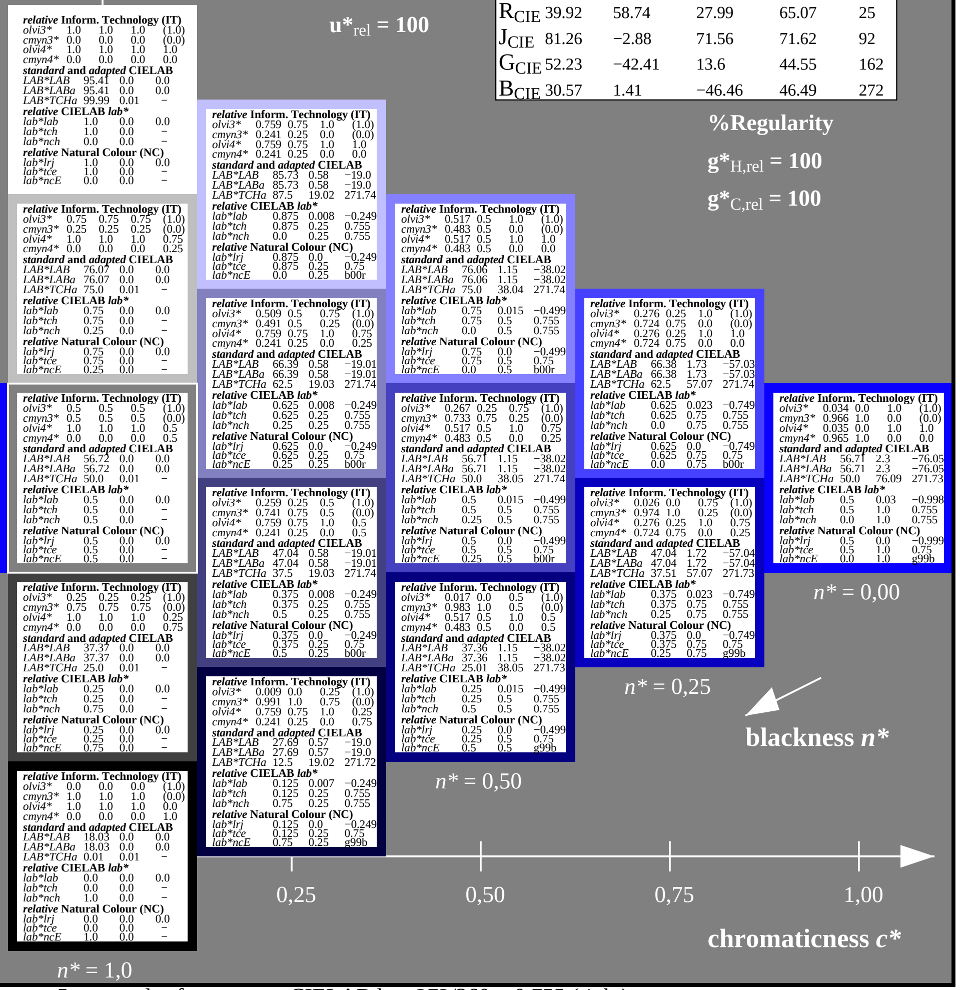
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



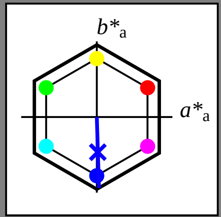
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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**

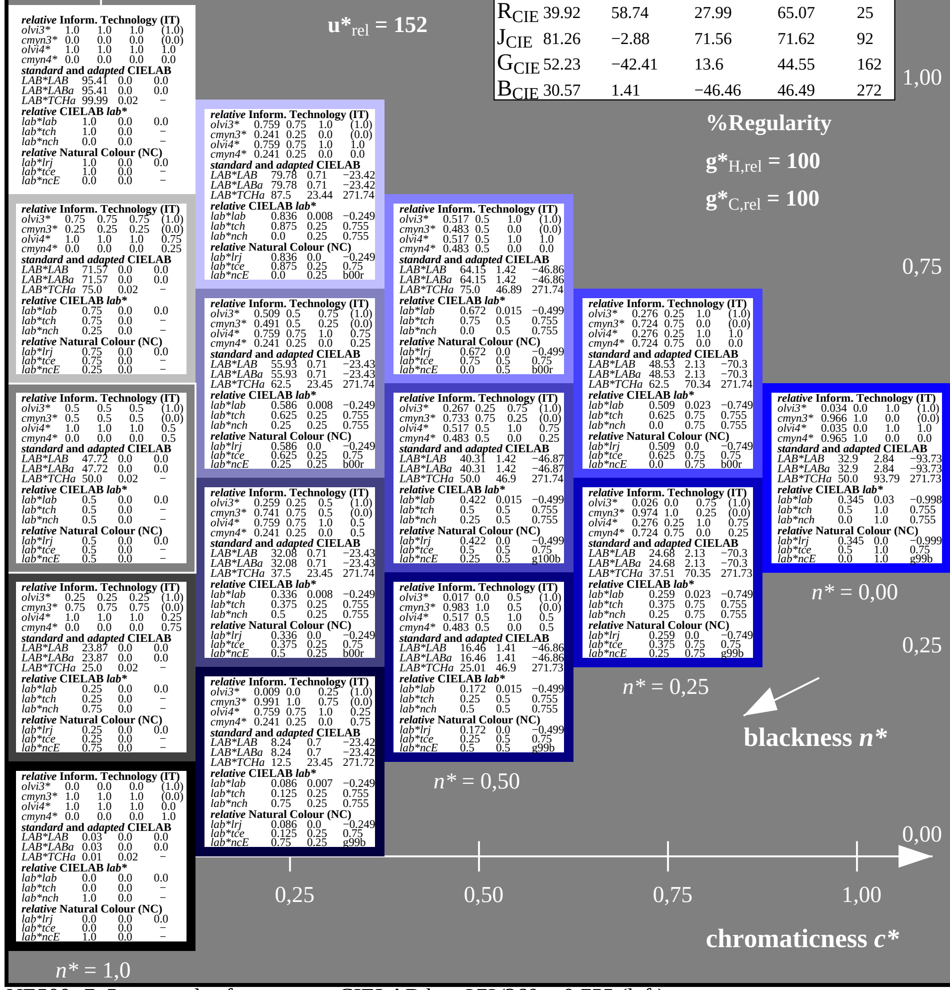


%Gamut
u^*_{rel} = 152

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

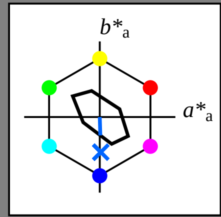
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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**

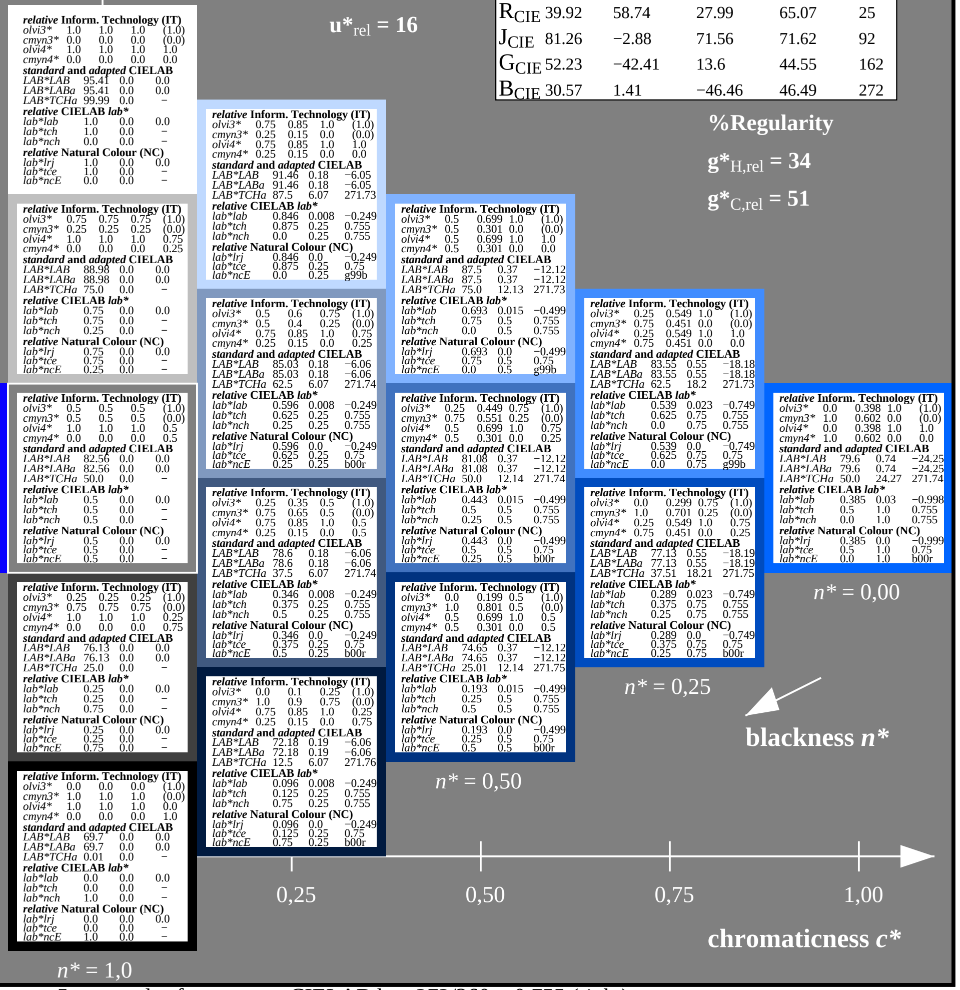


%Gamut
u^*_{rel} = 16

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



NE500−7, 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 Reflective System NRS18

for hue *h** = *lab*h* = 272/360 = 0.755

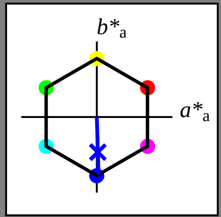
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 100

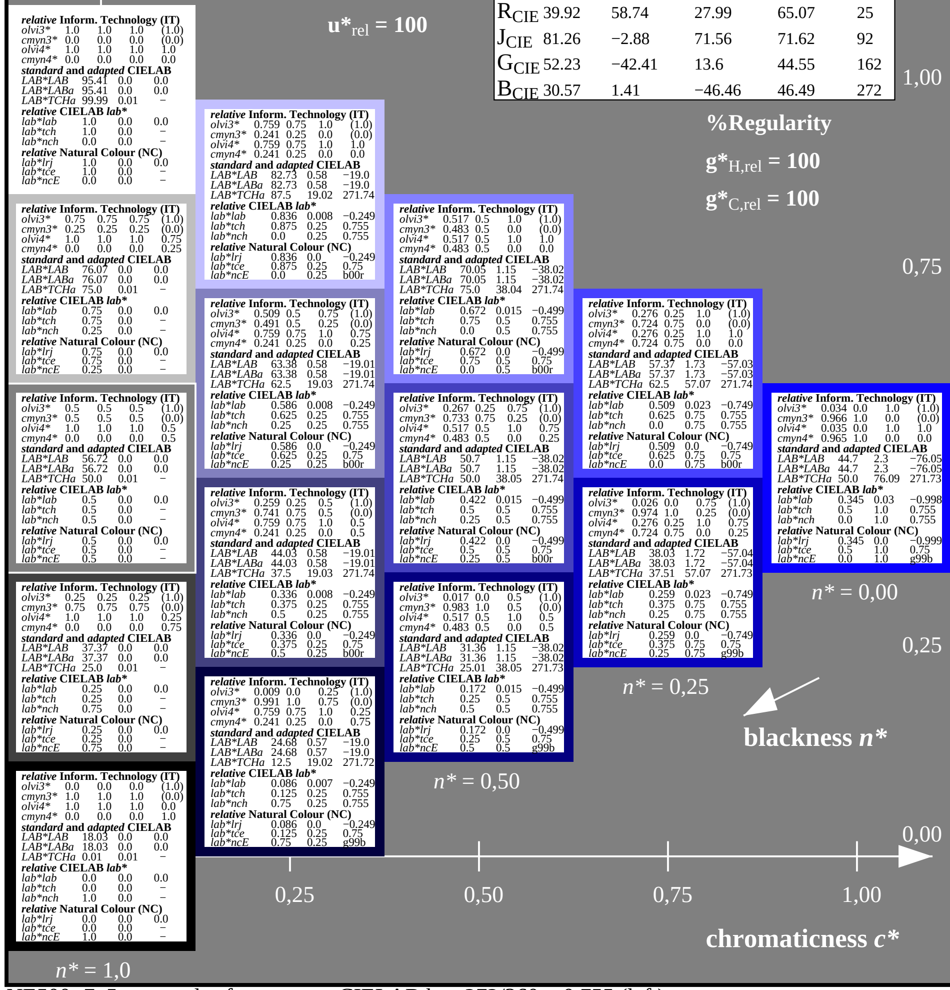
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Offset Reflective System ORS18

for hue *h** = *lab*h* = 271/360 = 0.754

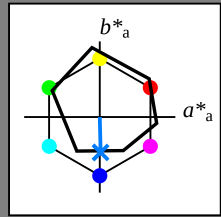
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness *t**



%Gamut

u^*_{rel} = 93

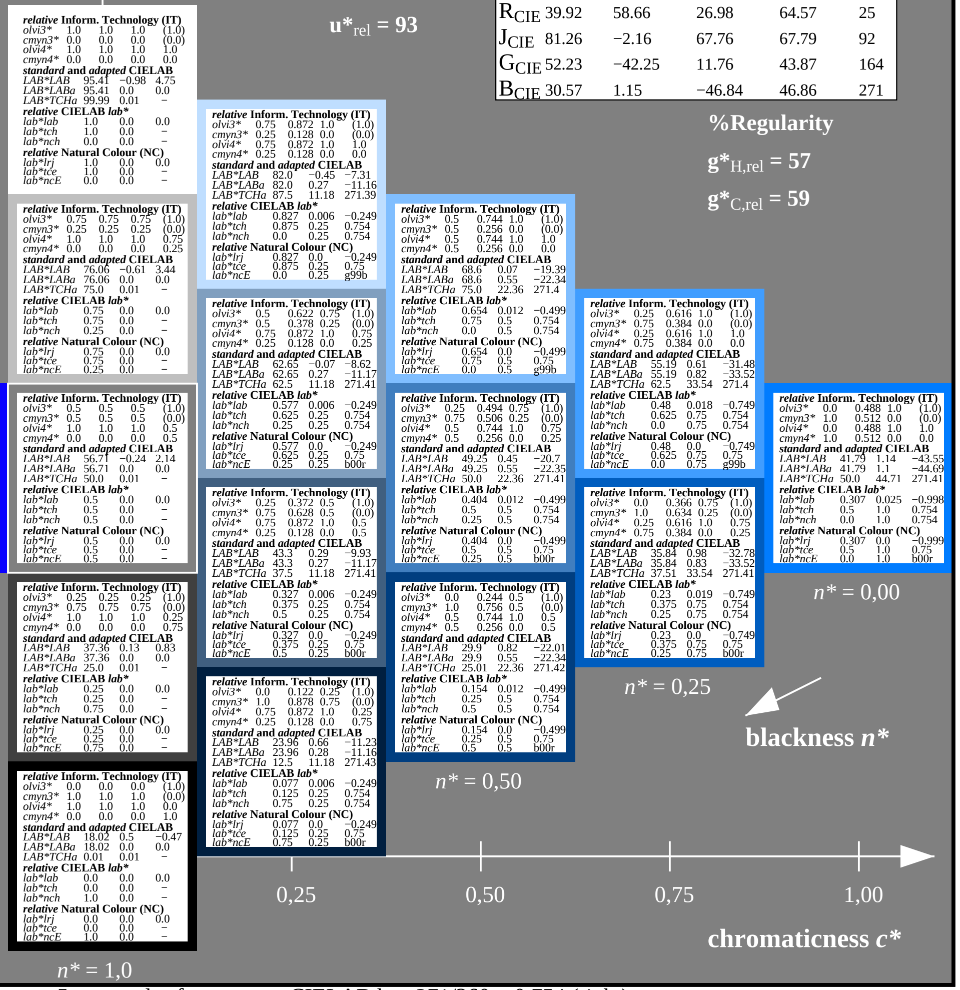
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

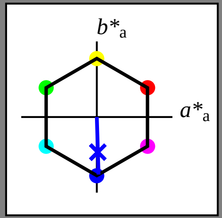
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

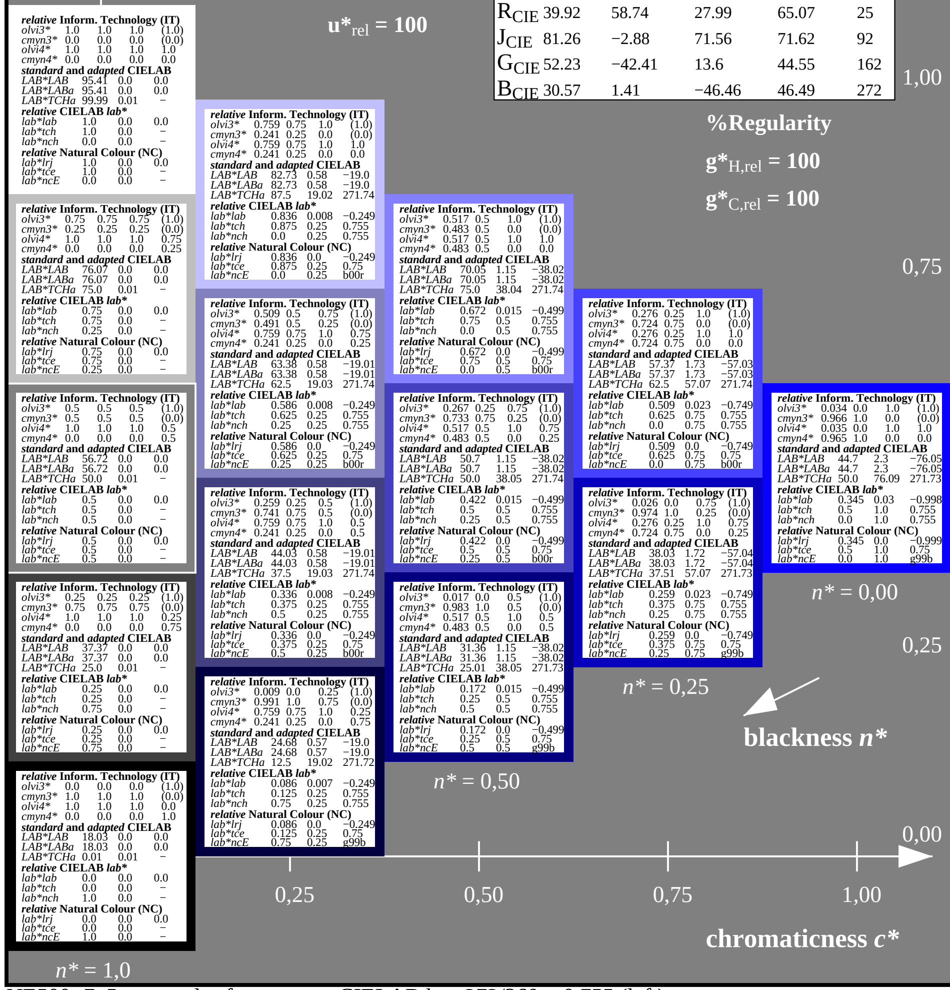
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

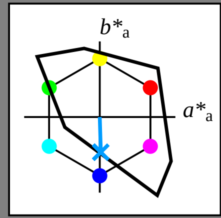
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 158

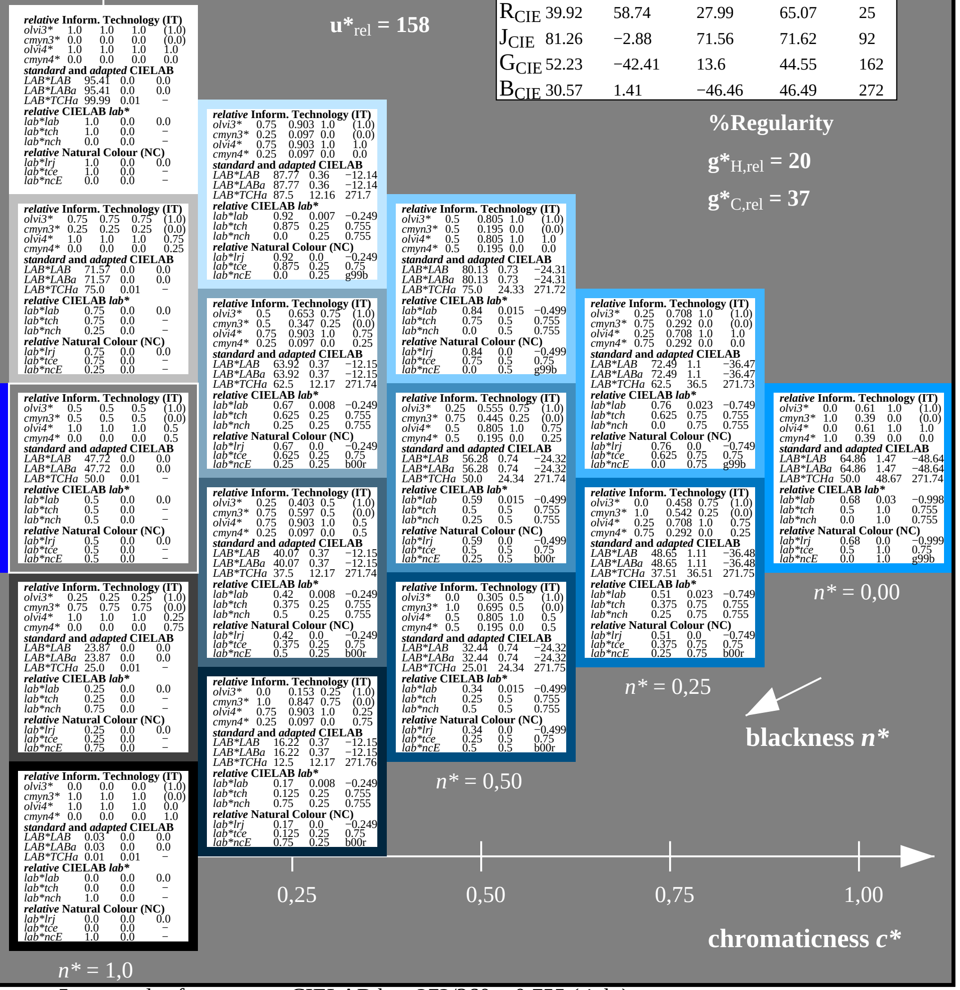
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Reflective System NRS18

for hue *h** = *lab*h* = *272/360* = *0.755*

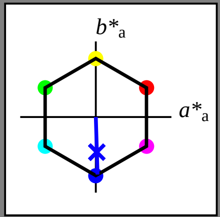
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

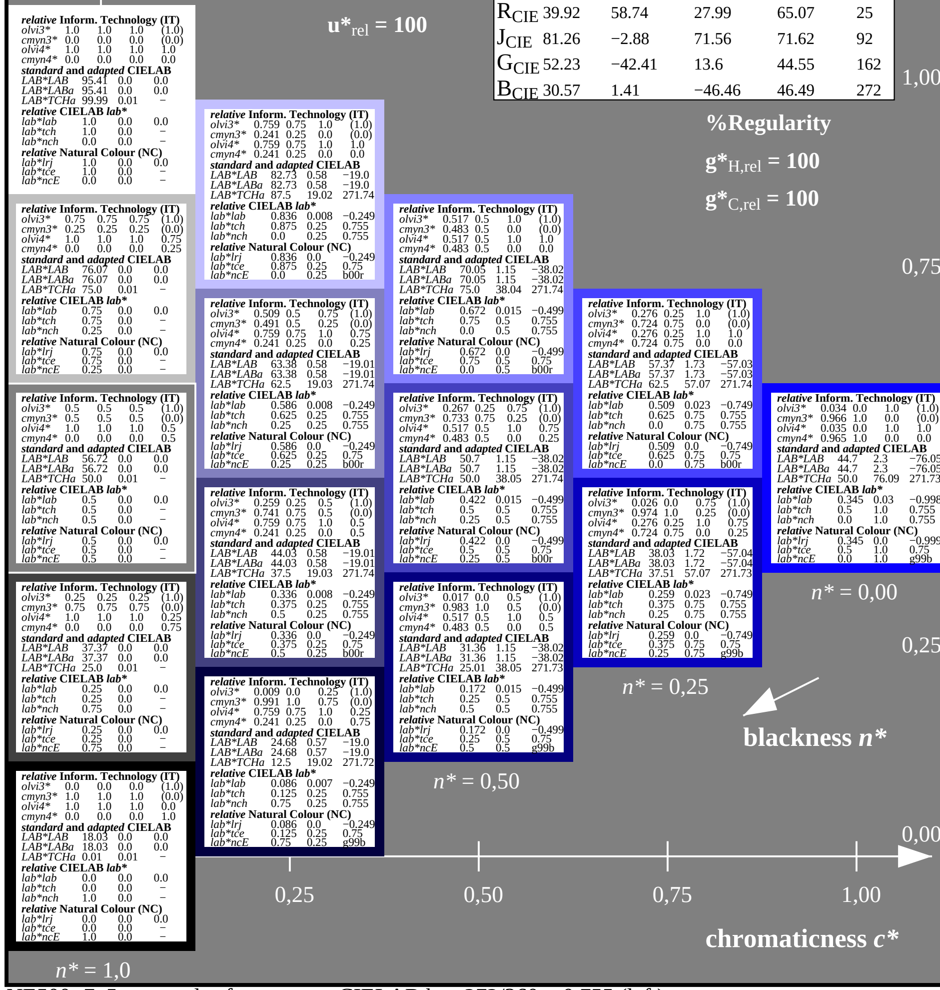
u^*_{rel} = 100

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



Output: Colorimetric Printer Reflective System DRSXX

for hue *h** = *lab*h* = *273/360* = *0.759*

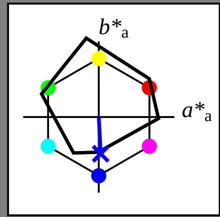
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness *t*



%Gamut

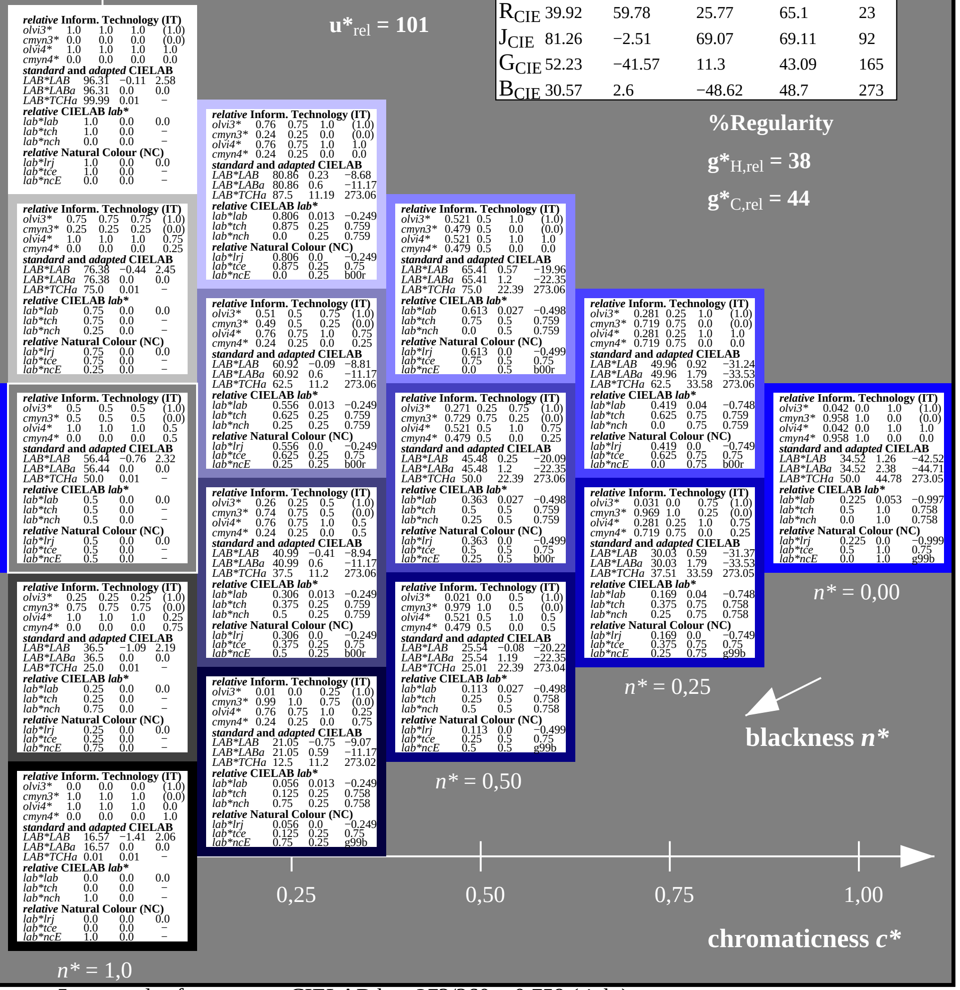
u^*_{rel} = 101

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



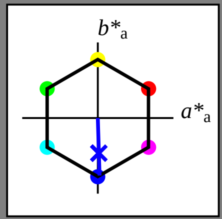
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric 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^*

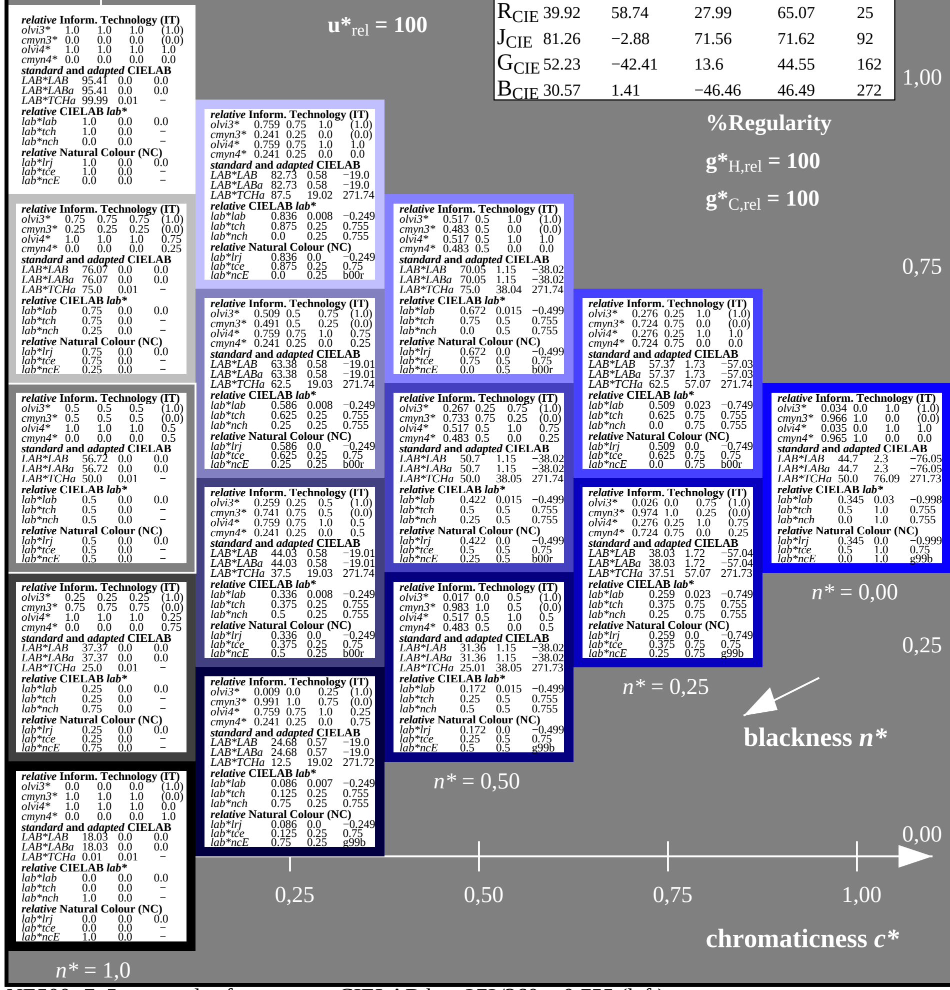


%Gamut
$u^*_{rel} = 100$

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

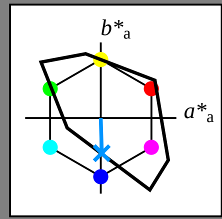
%Regularity
$g^*_{H,rel} = 100$
$g^*_{C,rel} = 100$



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^*

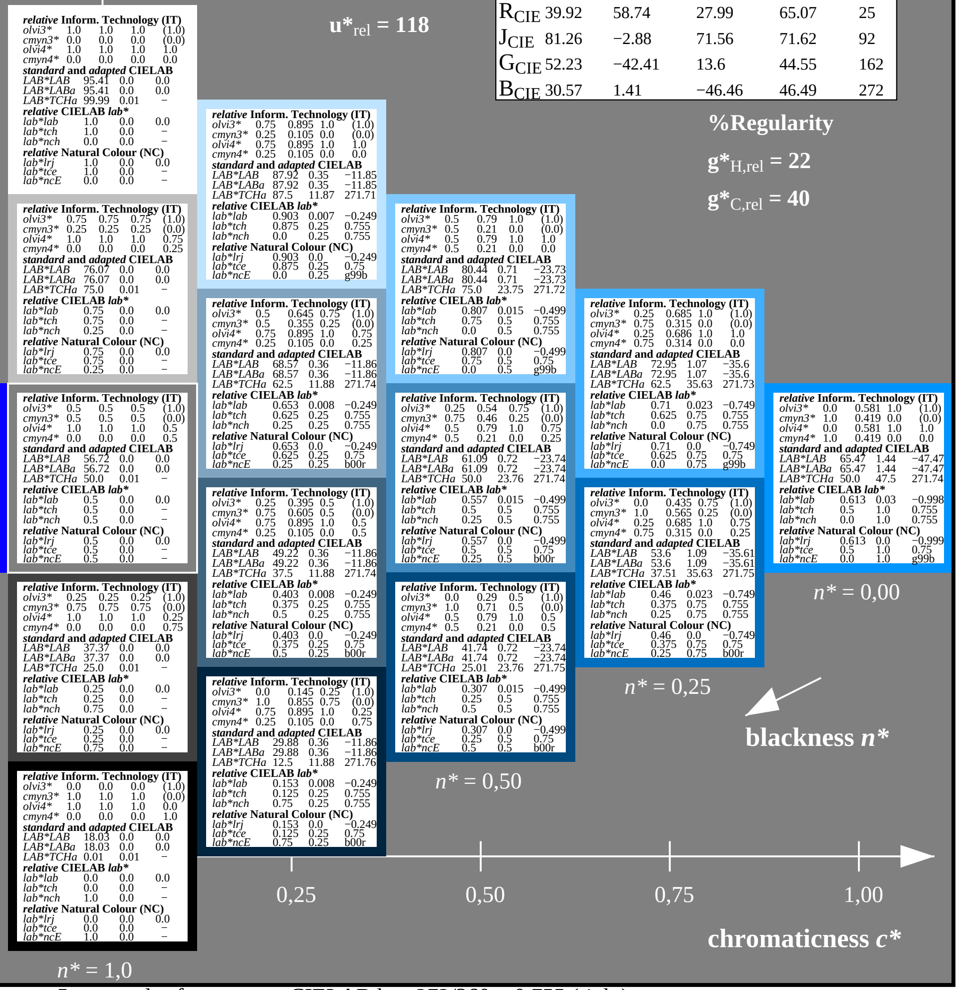


%Gamut
$u^*_{rel} = 118$

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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

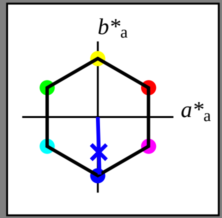
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 100

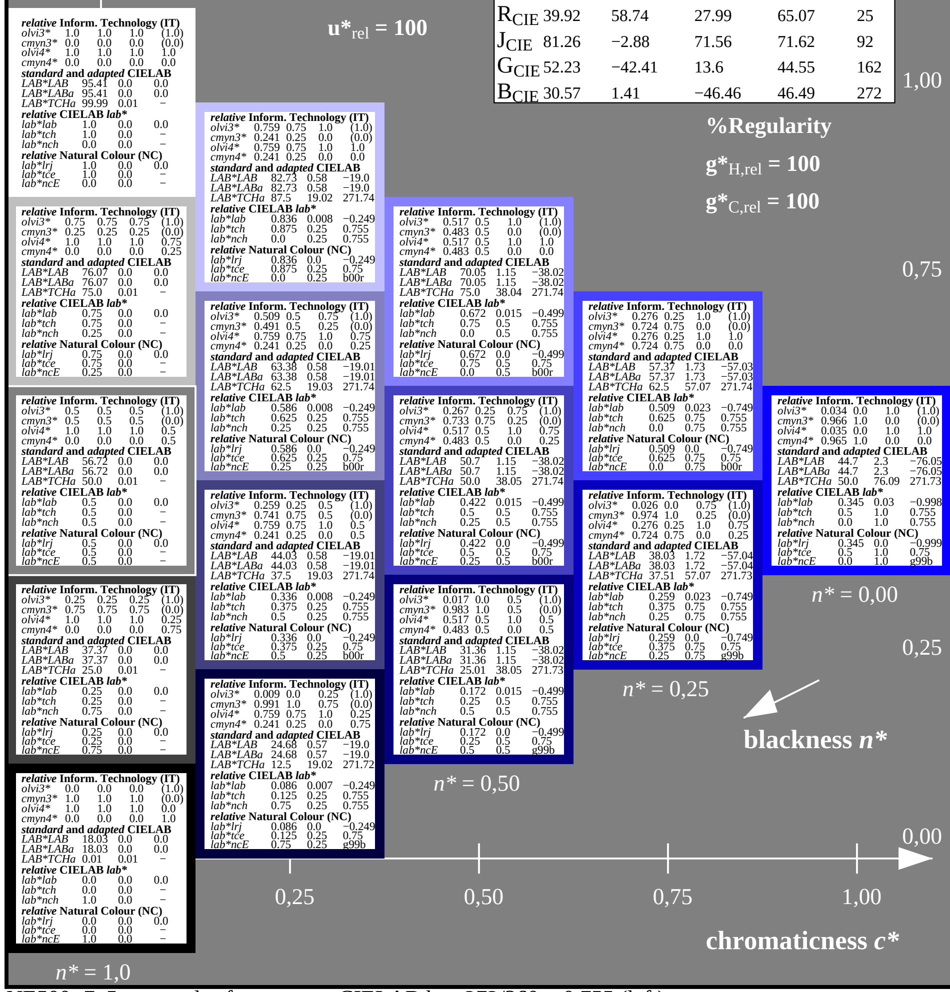
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

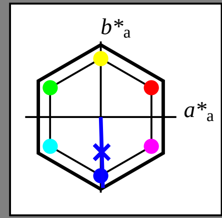
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 152

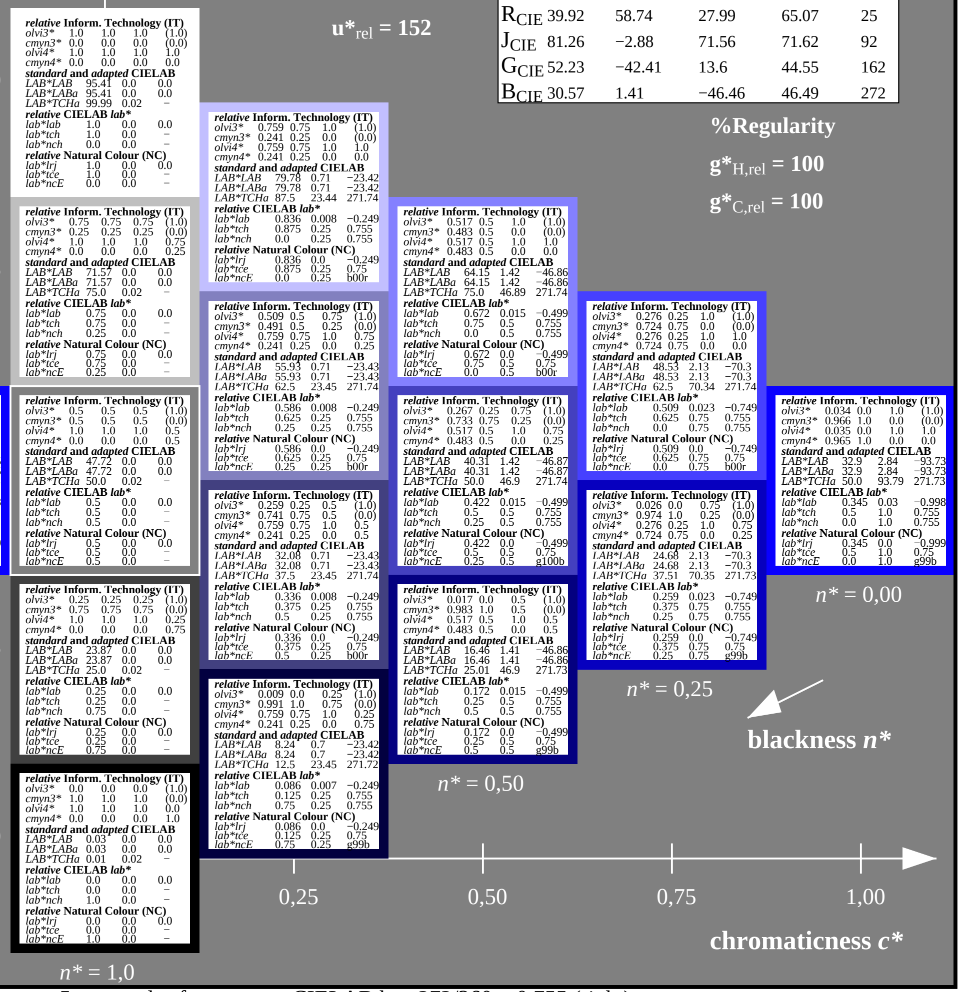
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Reflective System NRS18

for hue *h = *lab*h* = 272/360 = 0.755**

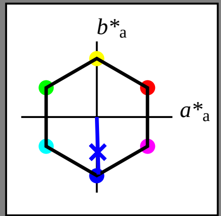
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

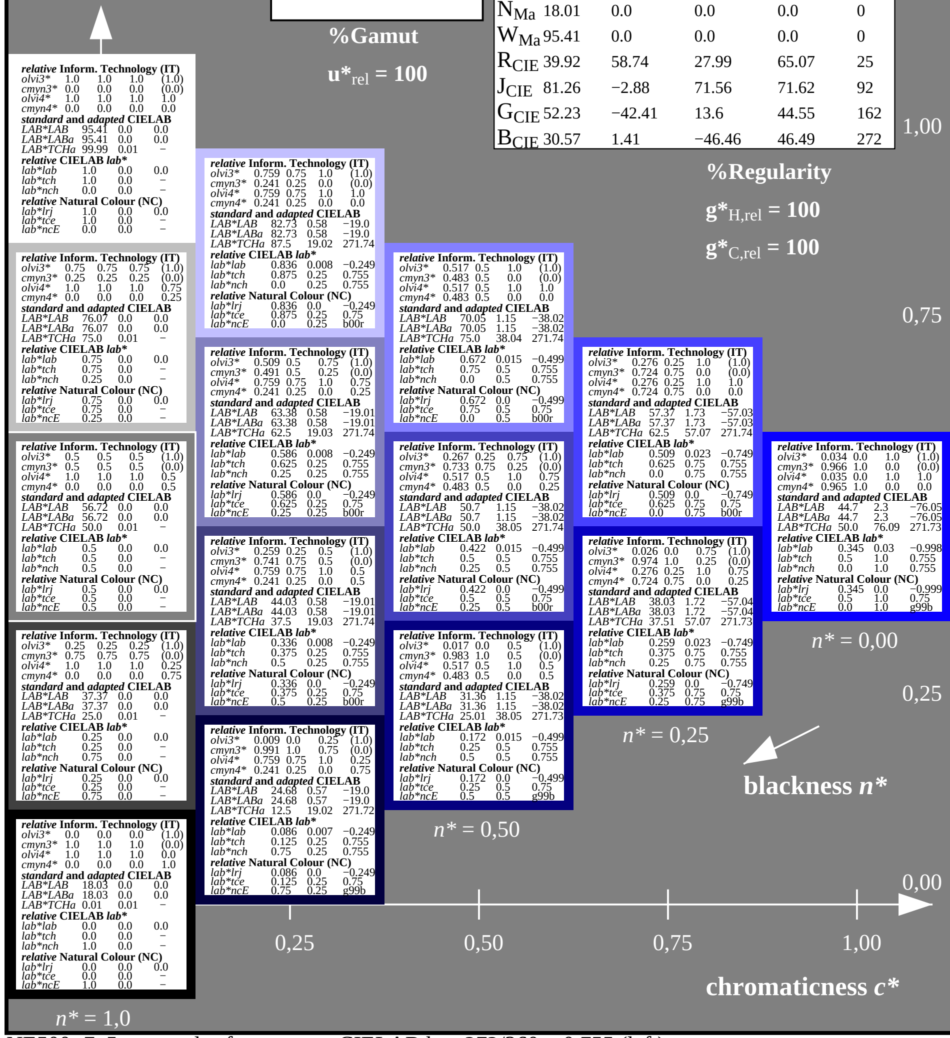
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



Output: Colorimetric Natural Reflective System NRS18

for hue *h = *lab*h* = 272/360 = 0.755**

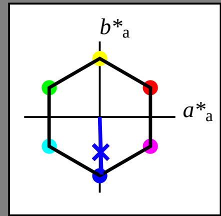
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t*



%Gamut

u^*_{rel} = 100

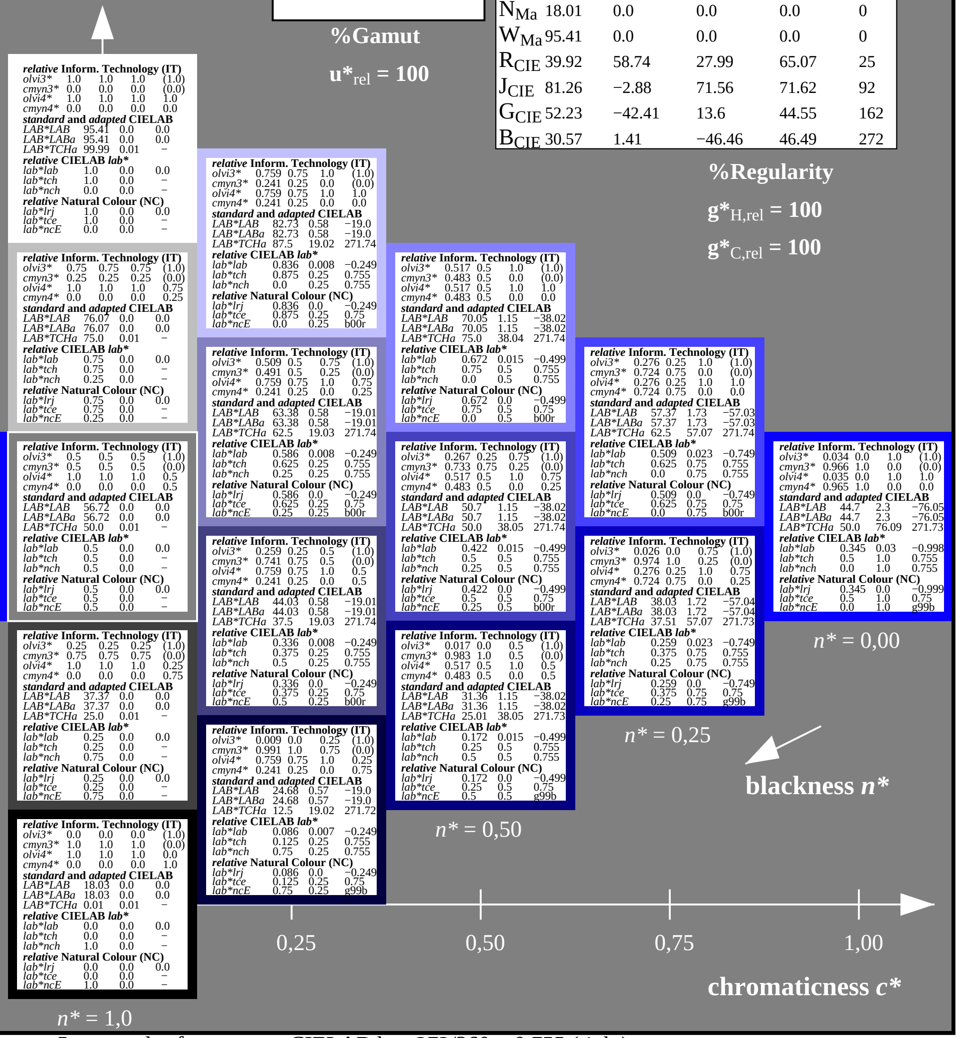
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

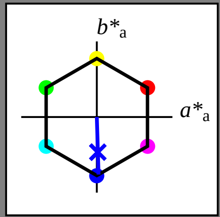
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

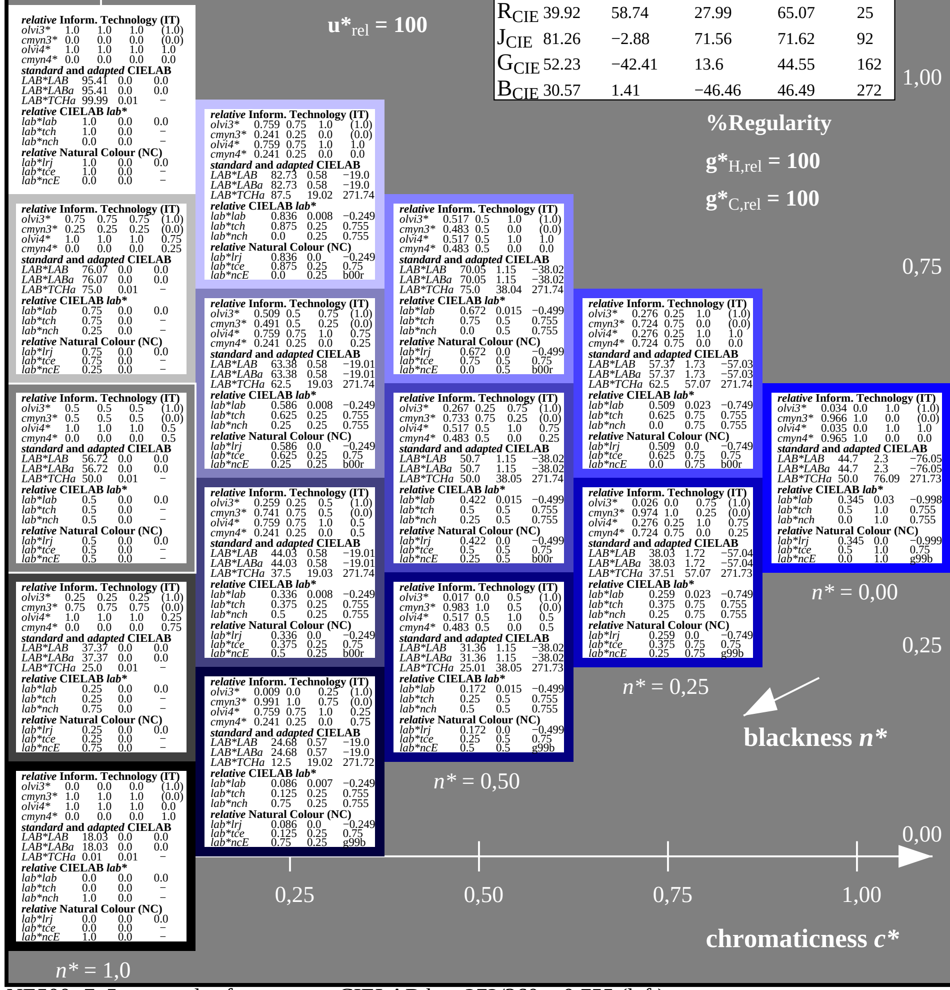
triangle lightness t^*



%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



Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

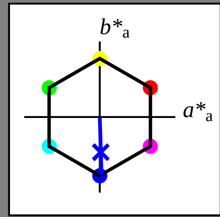
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

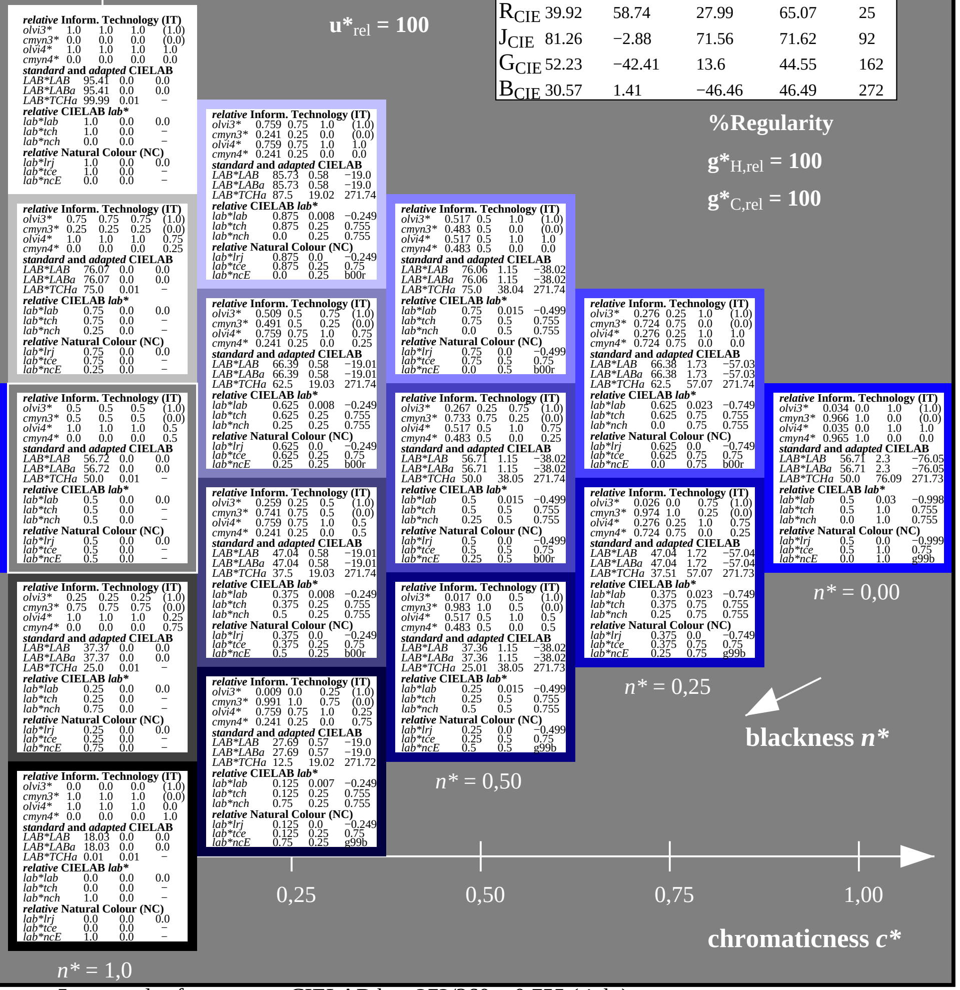
triangle lightness t^*



%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



NE500−7, 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 Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

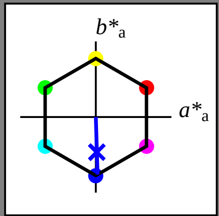
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

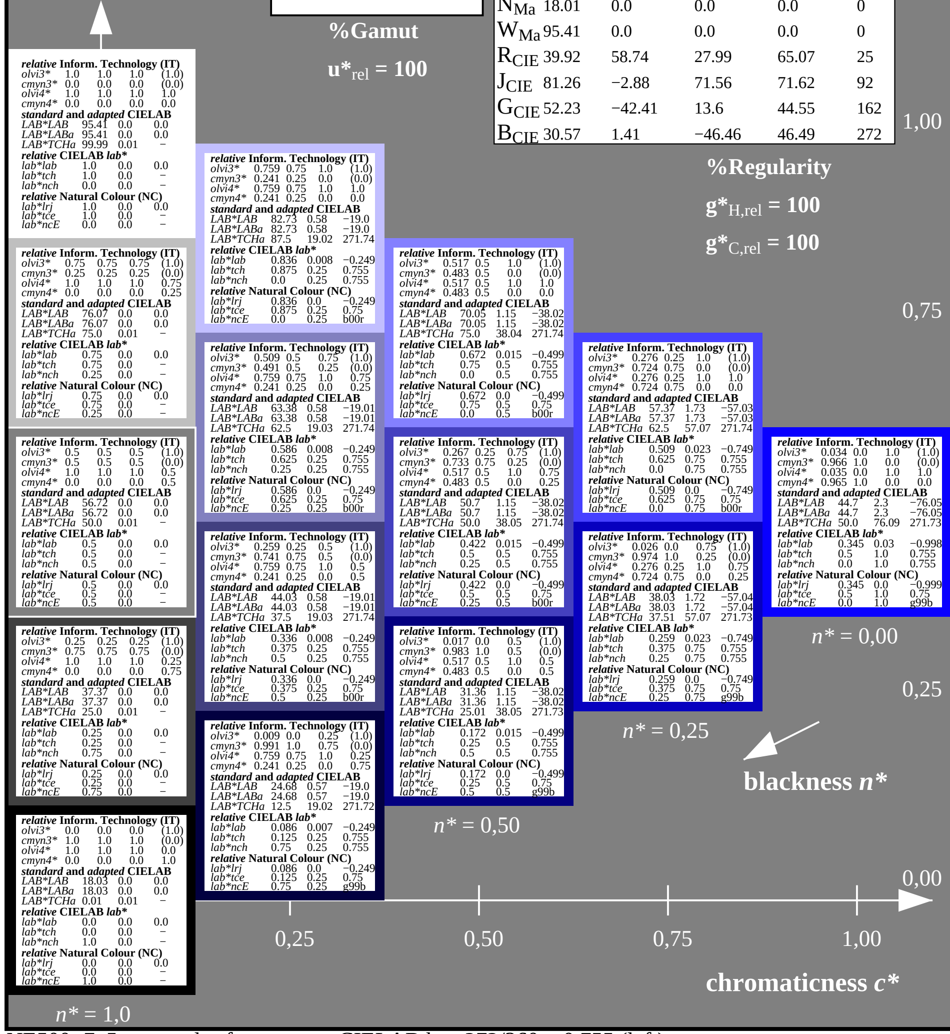
u^*_{rel} = 100

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



Output: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

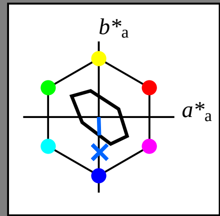
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

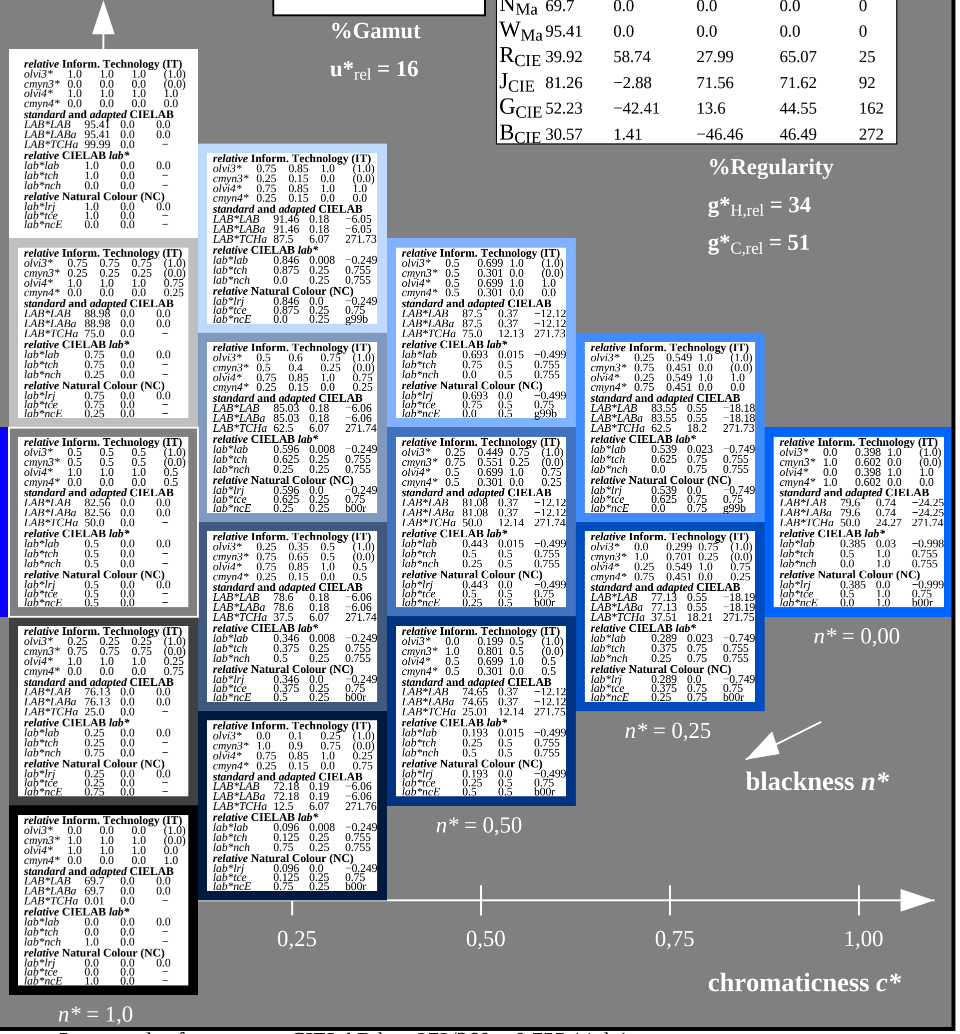
u^*_{rel} = 16

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



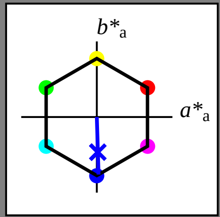
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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^*

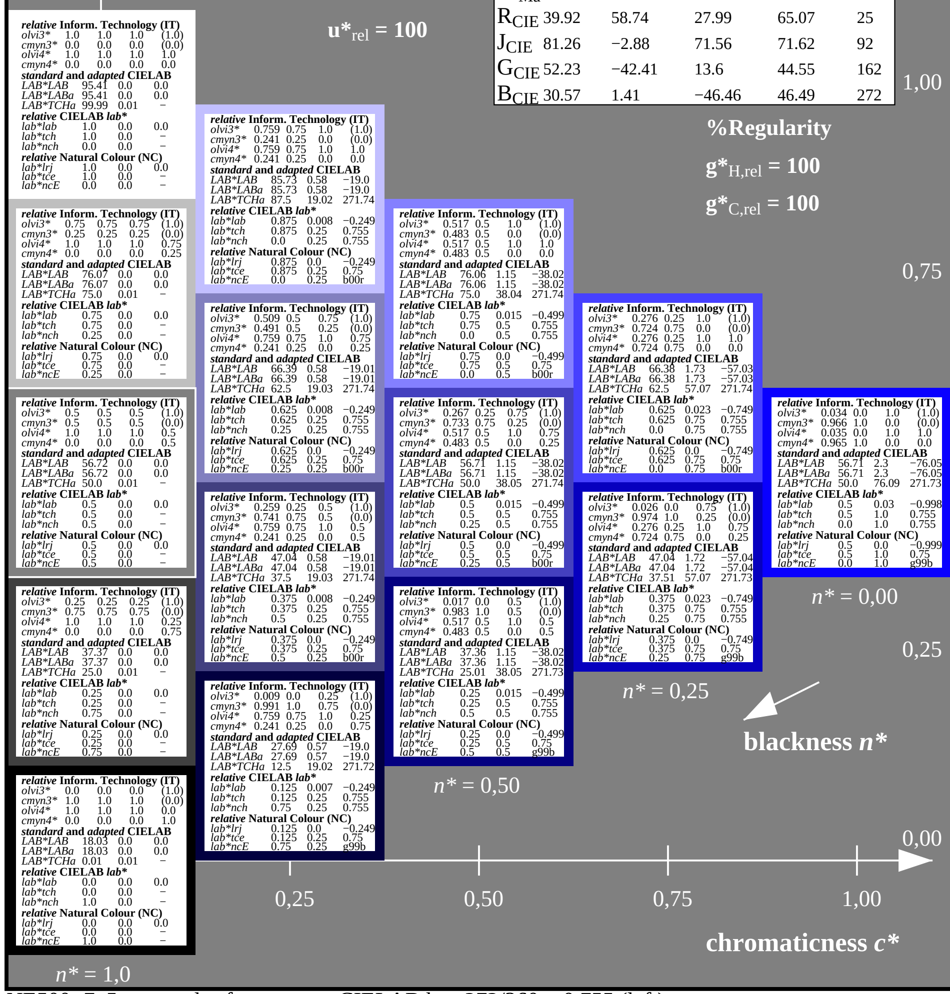


%Gamut
u^*_{rel} = 100

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

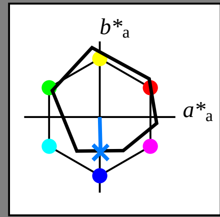
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100



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^*

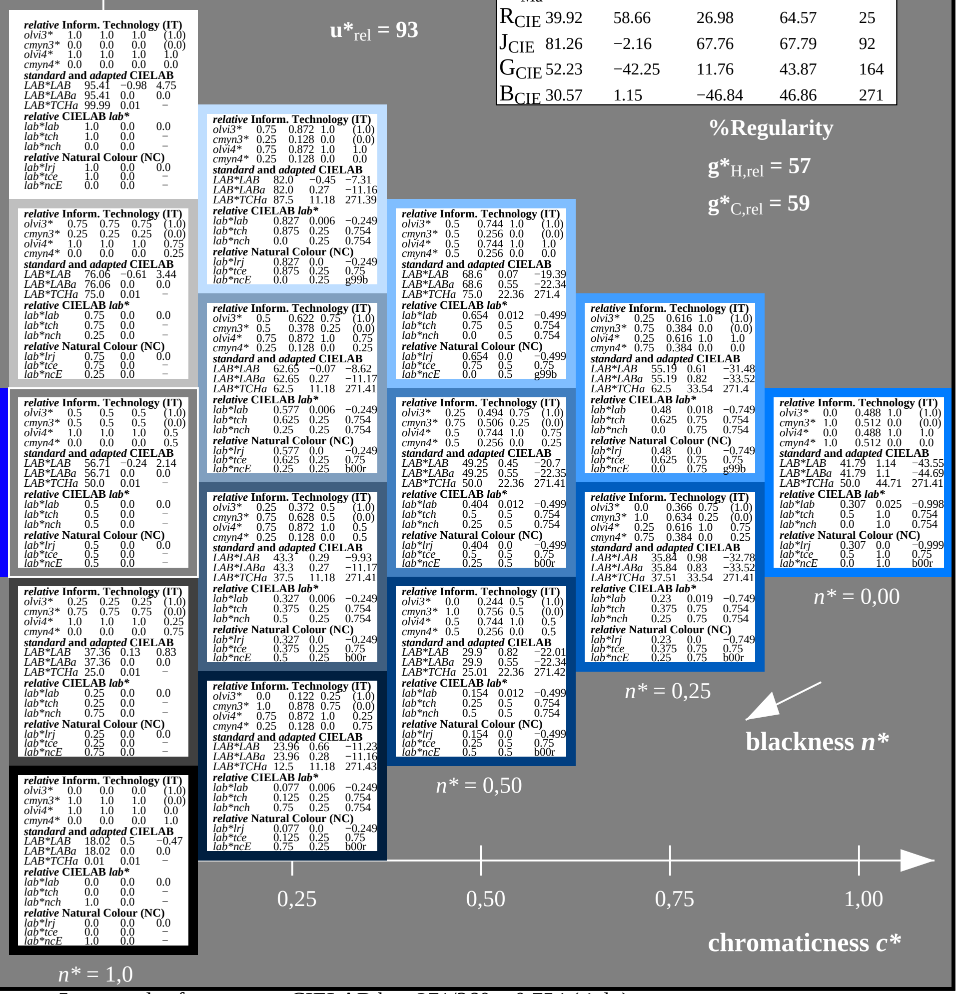


%Gamut
u^*_{rel} = 93

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



NE500−7, 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 Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

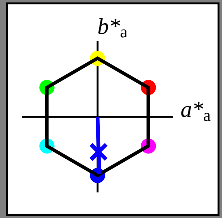
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

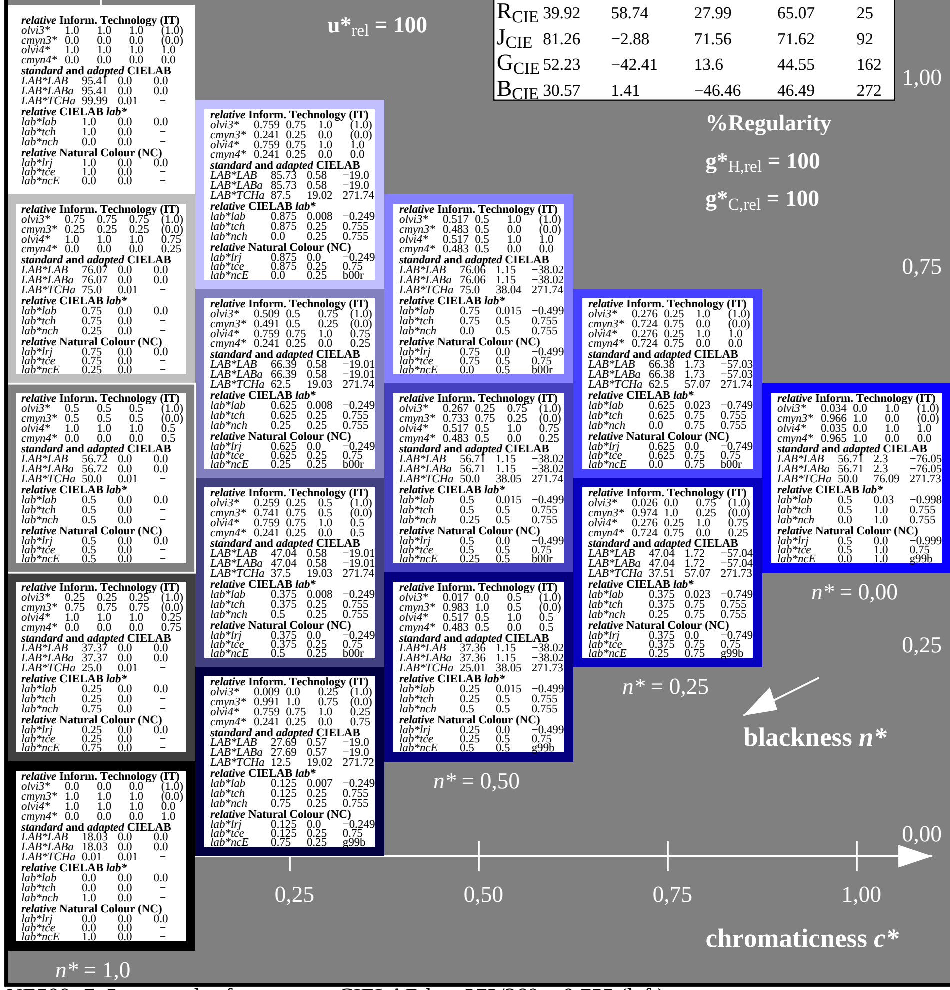
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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 Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

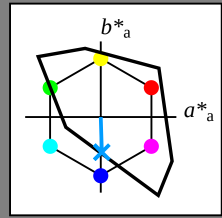
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

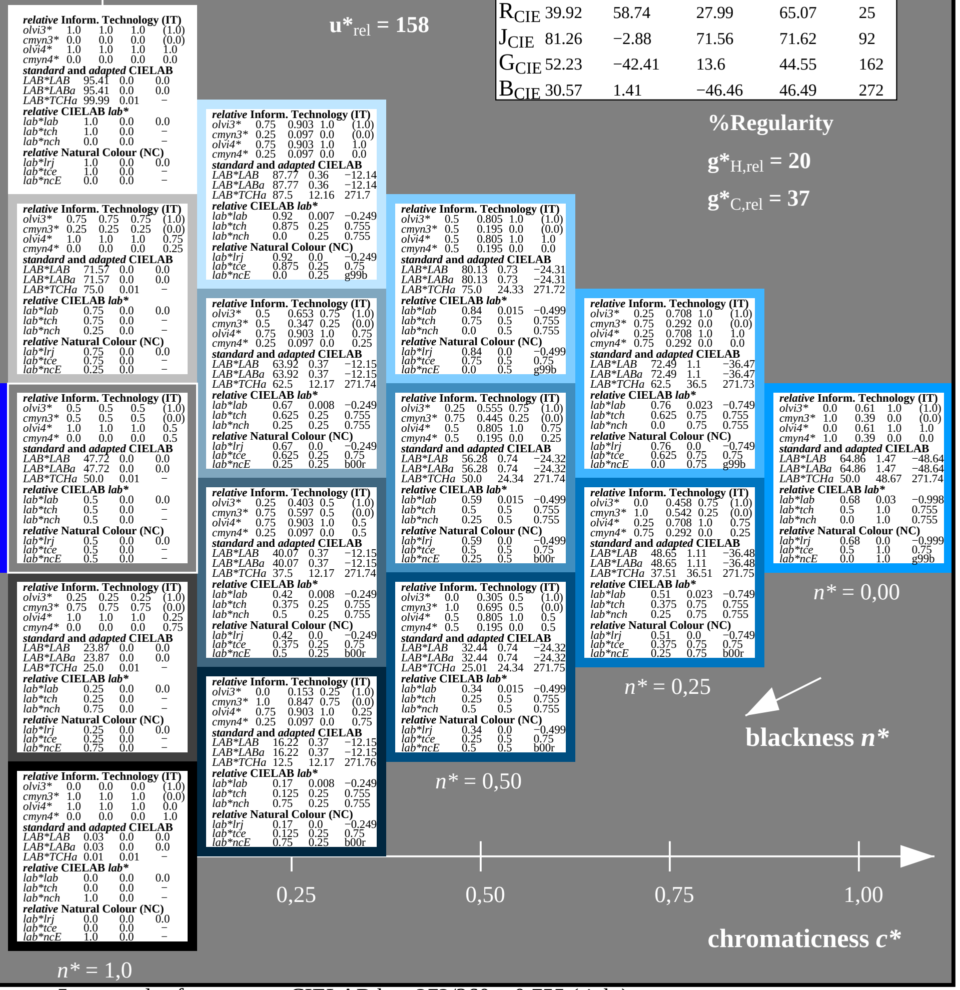
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

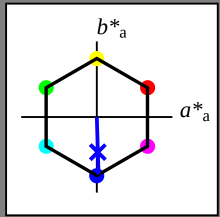
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

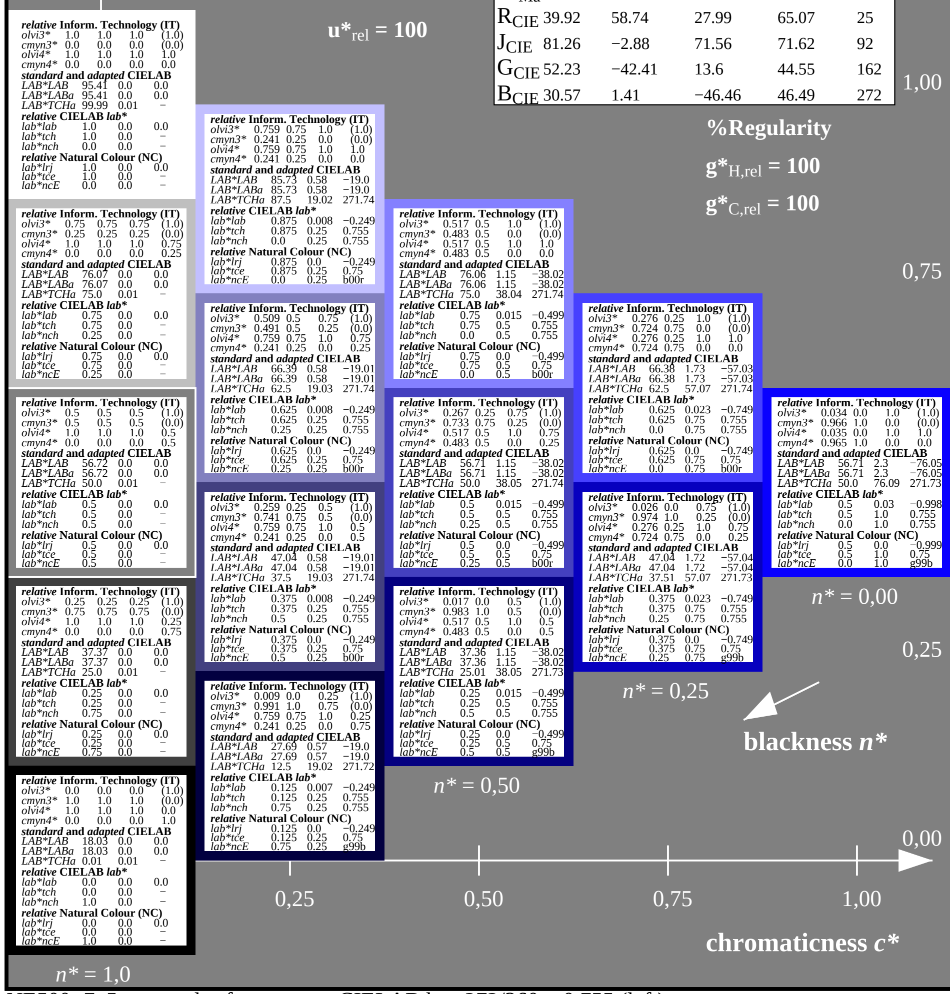
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Printer Reflective System DRSXX

for hue $h^* = lab^*h = 273/360 = 0.759$

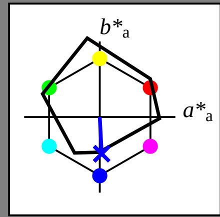
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 35 45 273

olv*Ma: 0.04 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 101$

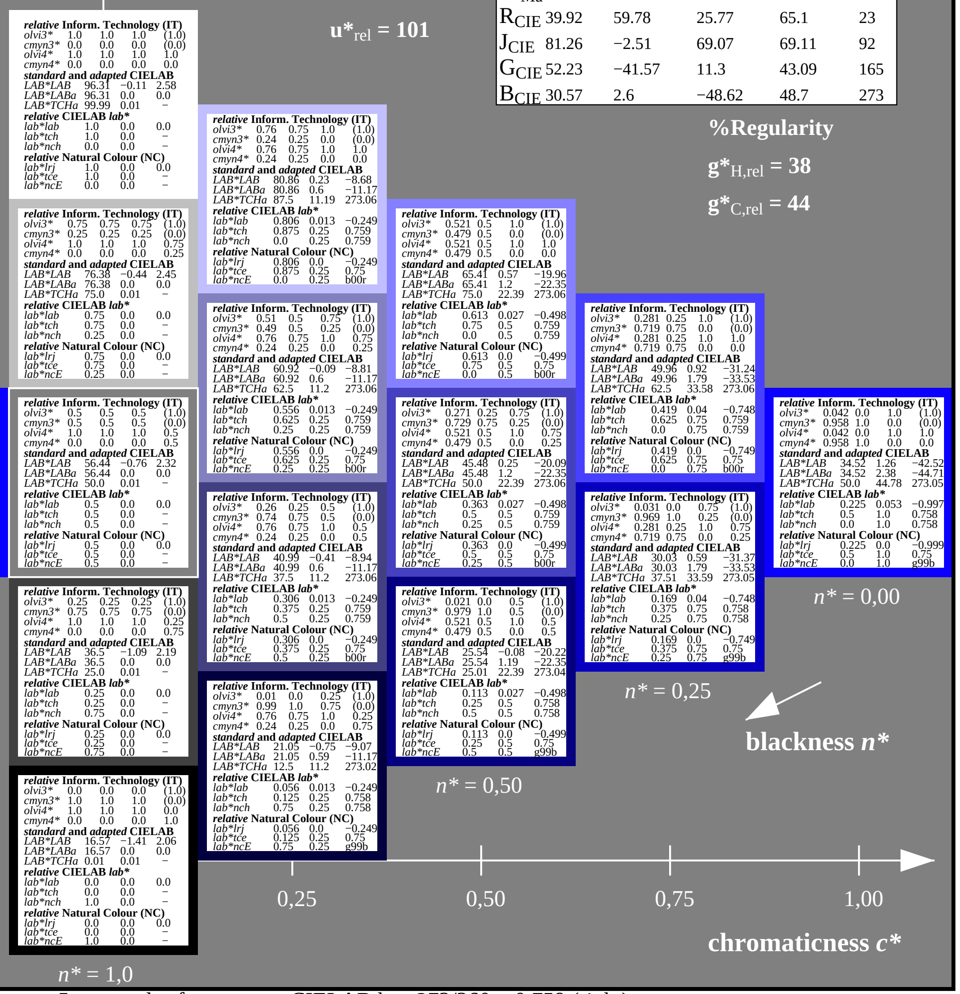
DRSXX; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 38$

$g^*_{C,rel} = 44$

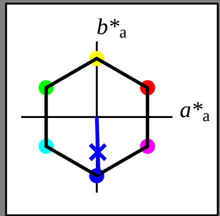


NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 273/360 = 0.759 (right)

Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

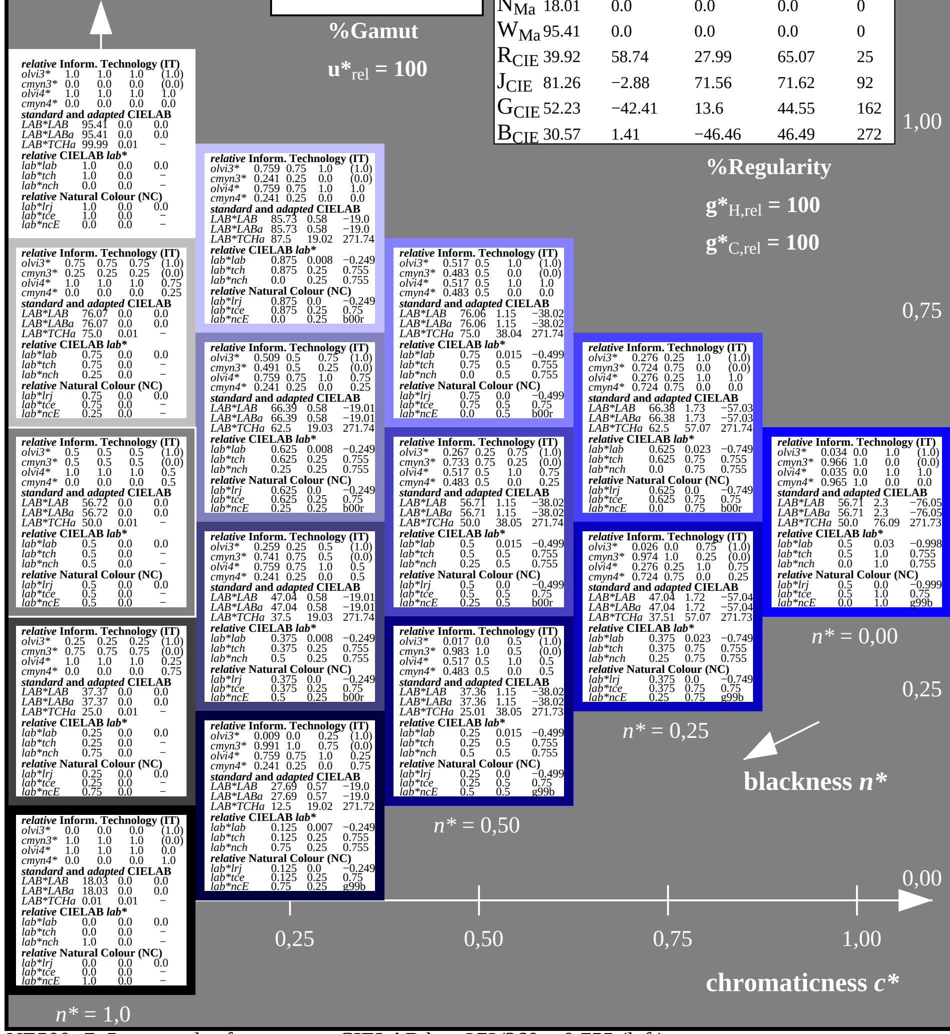
D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0
triangle lightness t^*



%Gamut
$u^*_{rel} = 100$

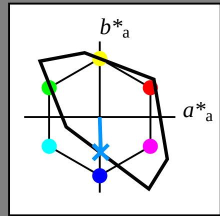
SRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	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 Television Luminous System TLS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

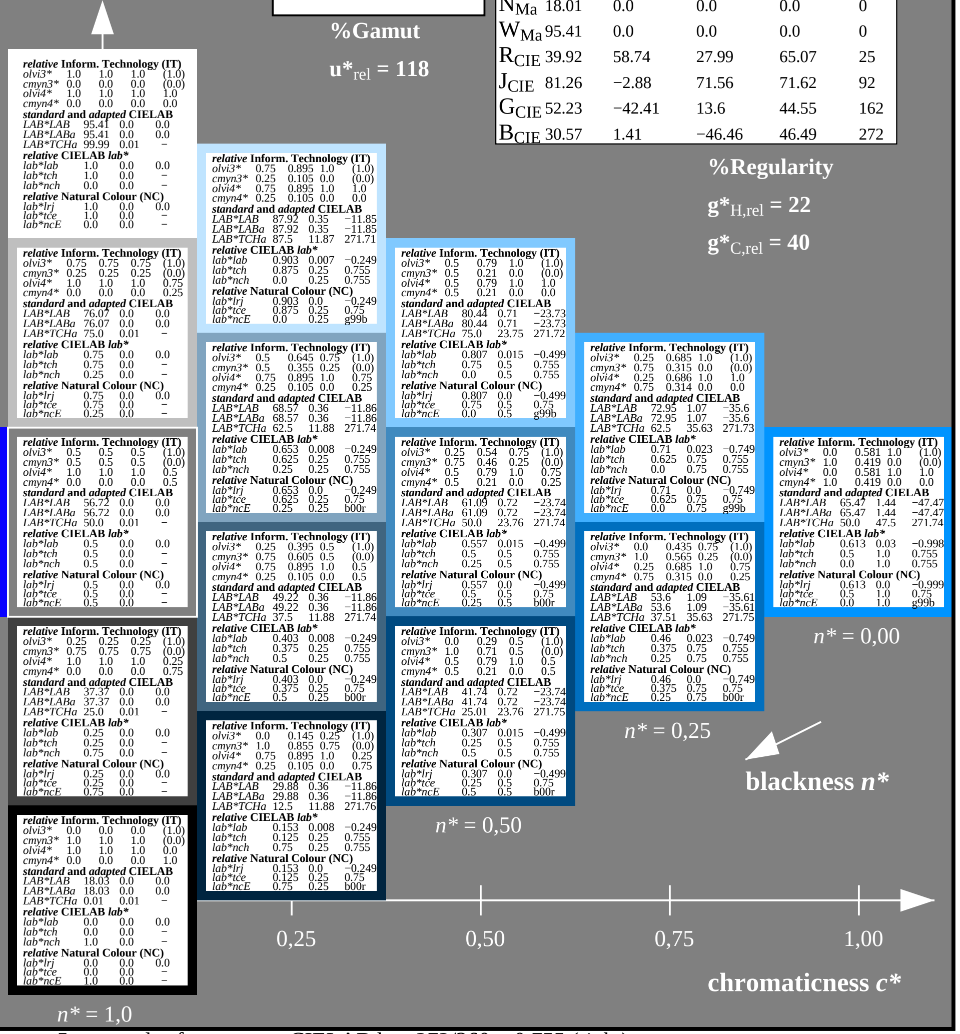
D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0
triangle lightness t^*



%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
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

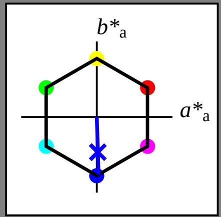
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

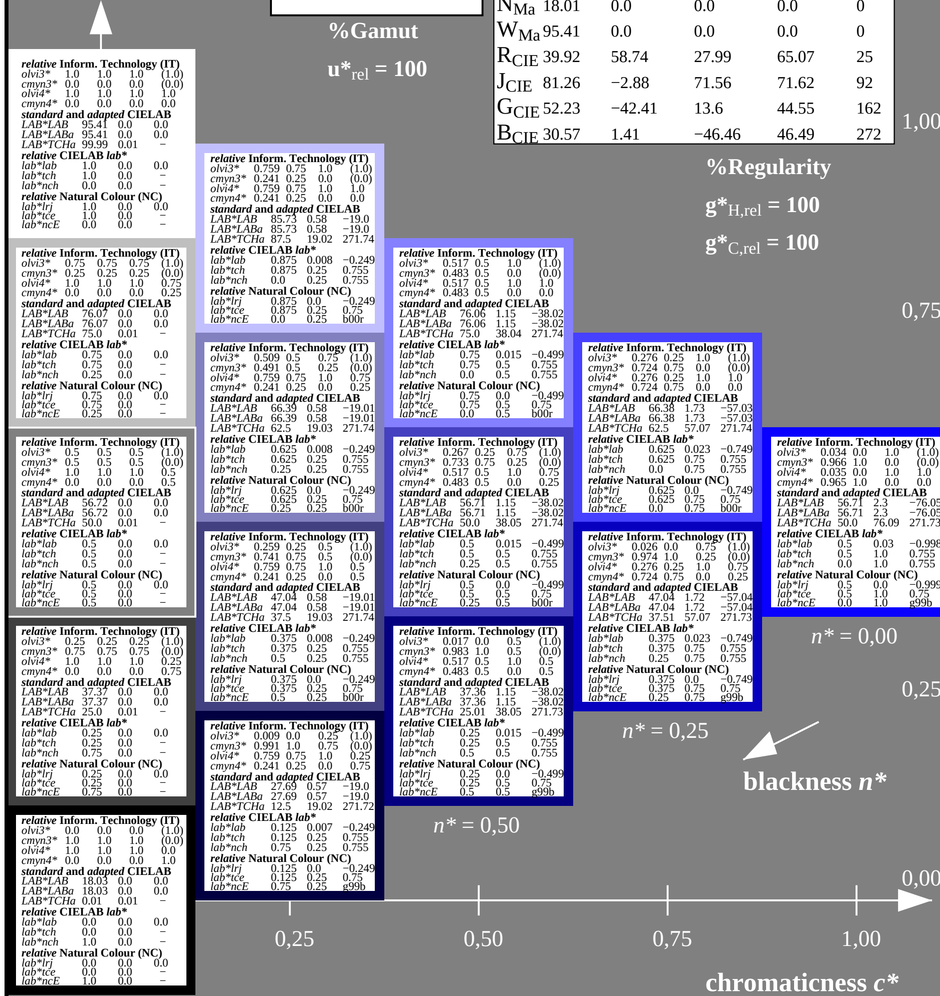
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



Output: Colorimetric Natural Luminous System NLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

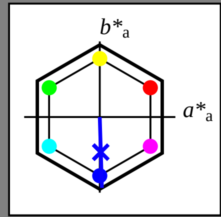
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 33 94 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 152$

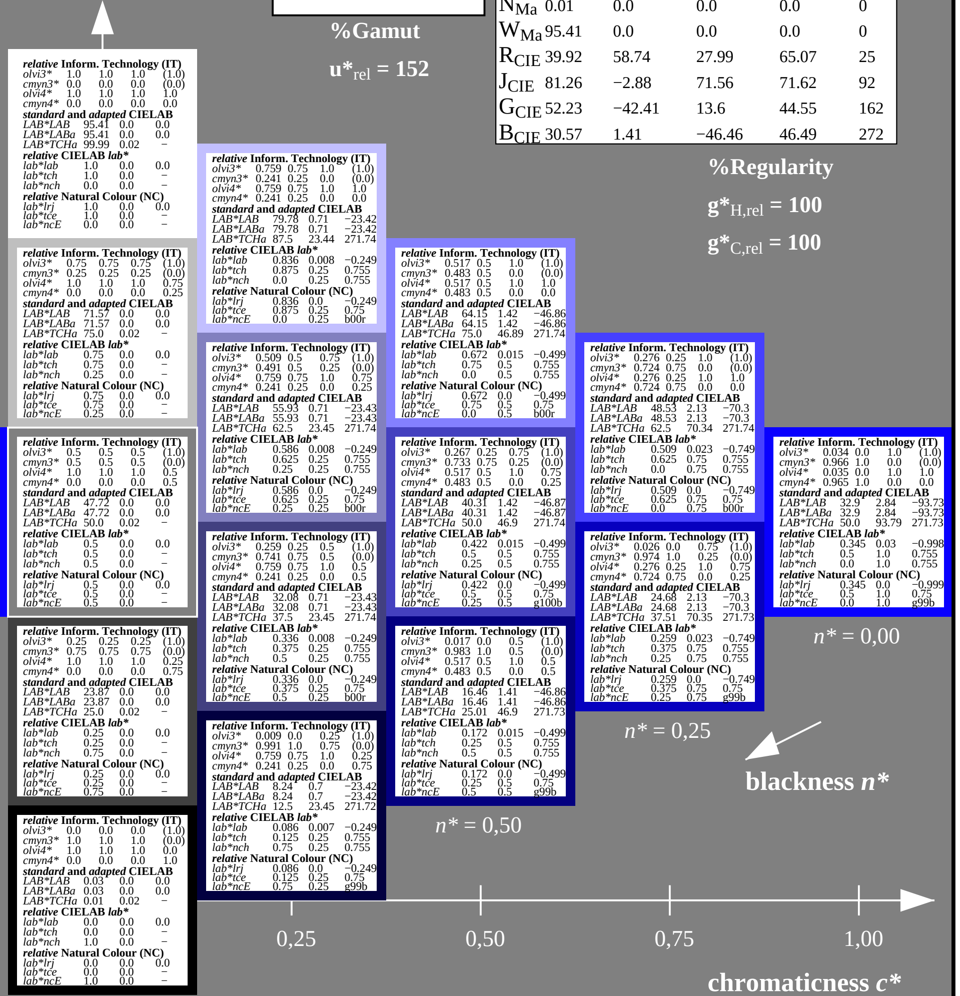
NLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



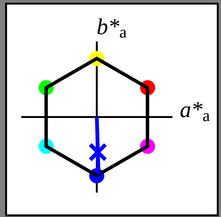
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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^*

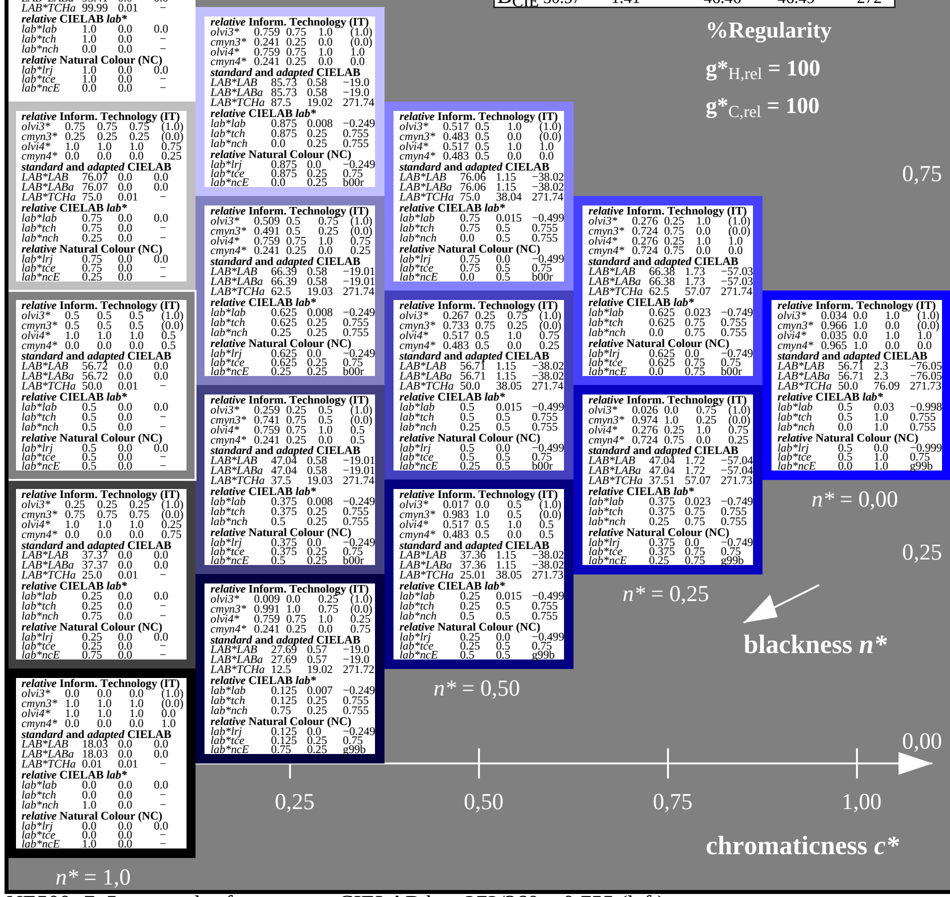


%Gamut

$u^*_{rel} = 100$

SRS18; adapted (a) CIELAB data

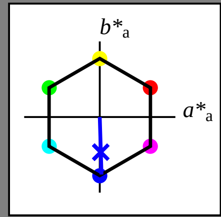
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	56.71	67.03	38.7	77.4	30
Y_{Ma}	56.71	0.0	77.4	77.4	90
L_{Ma}	56.71	−67.02	38.7	77.4	150
C_{Ma}	56.71	−67.02	−38.69	77.4	210
V_{Ma}	56.71	0.0	−77.39	77.4	270
M_{Ma}	56.71	67.03	−38.69	77.4	330
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	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



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^*

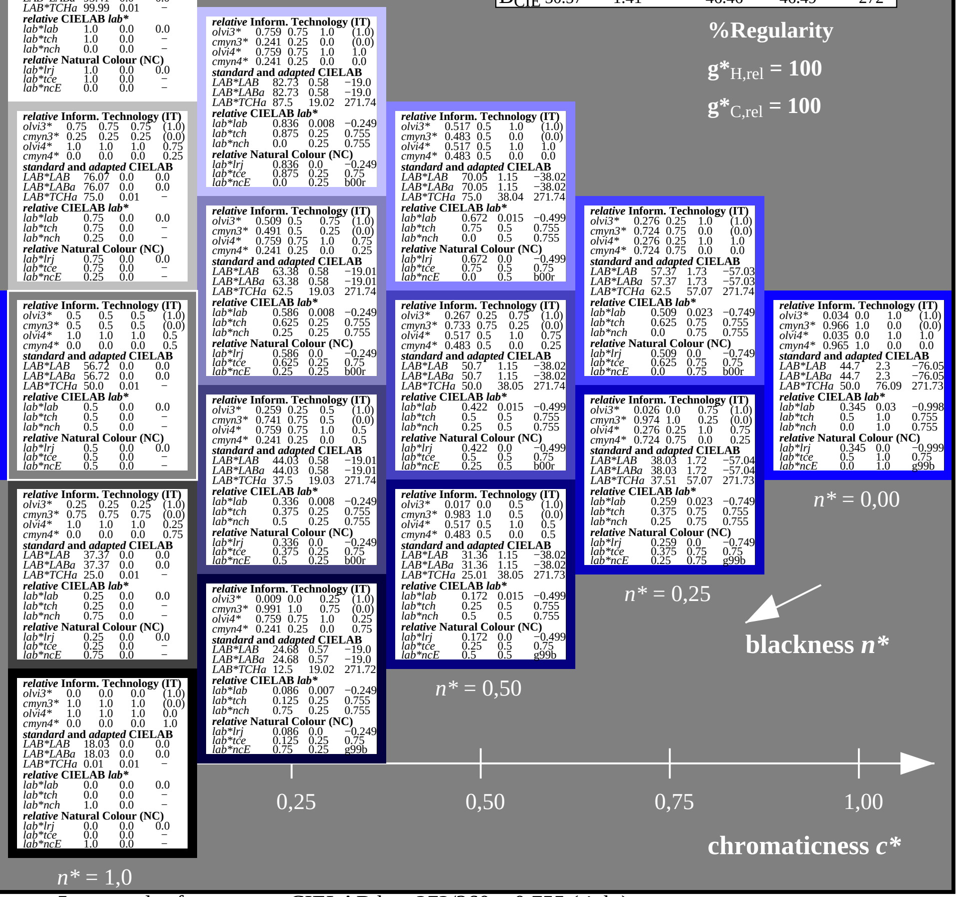


%Gamut

$u^*_{rel} = 100$

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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

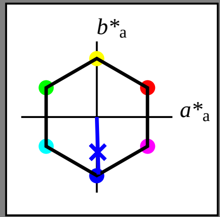
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

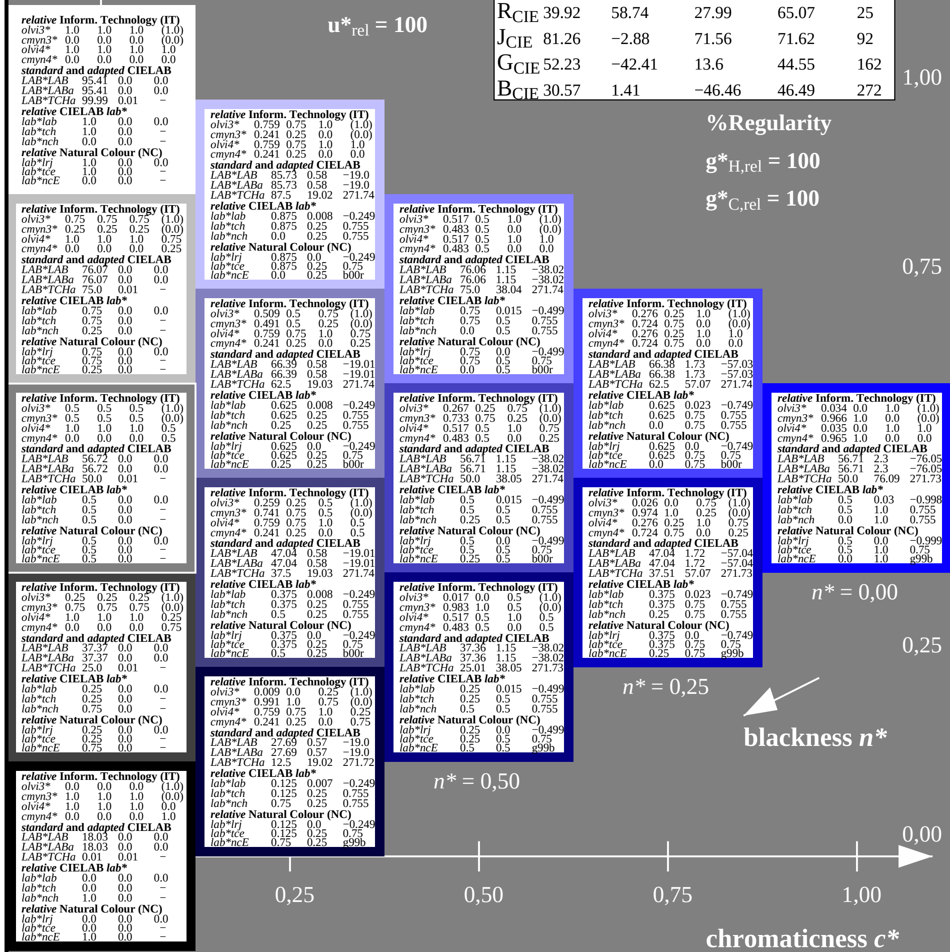
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

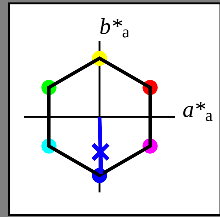
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 100$

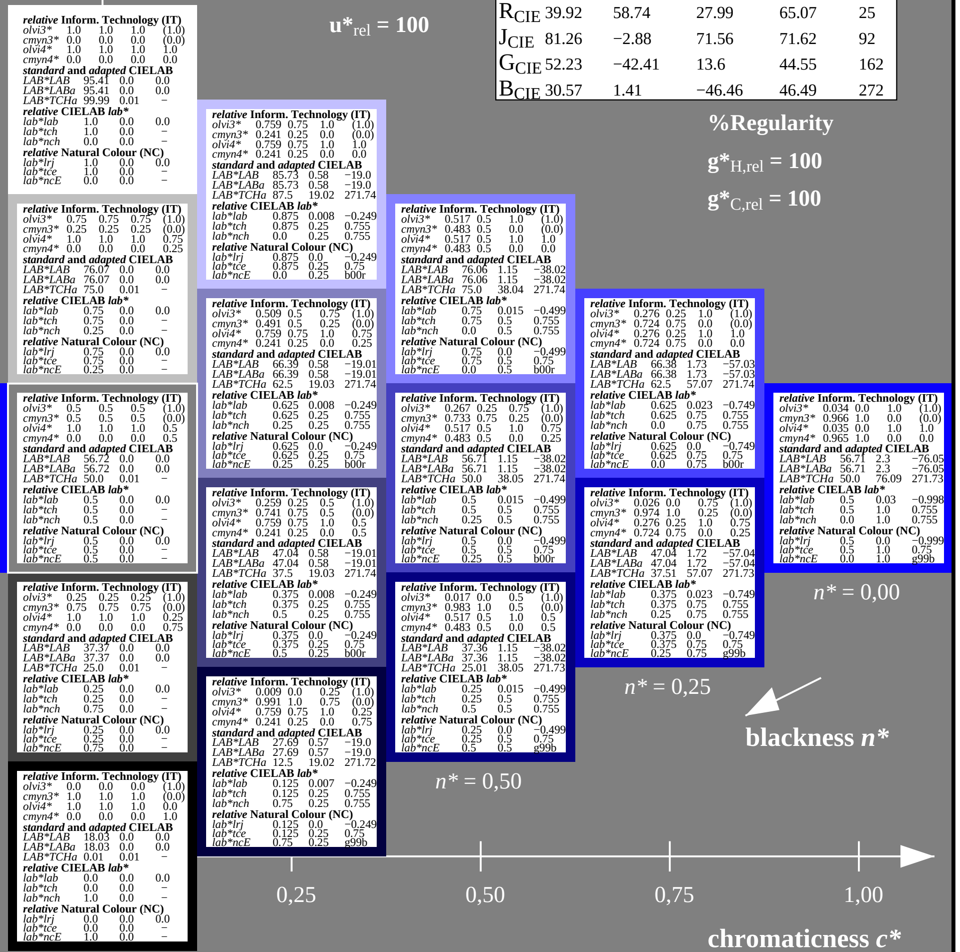
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

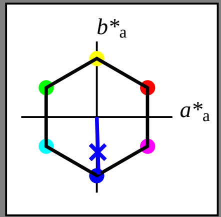


5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

Input: Colorimetric 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*

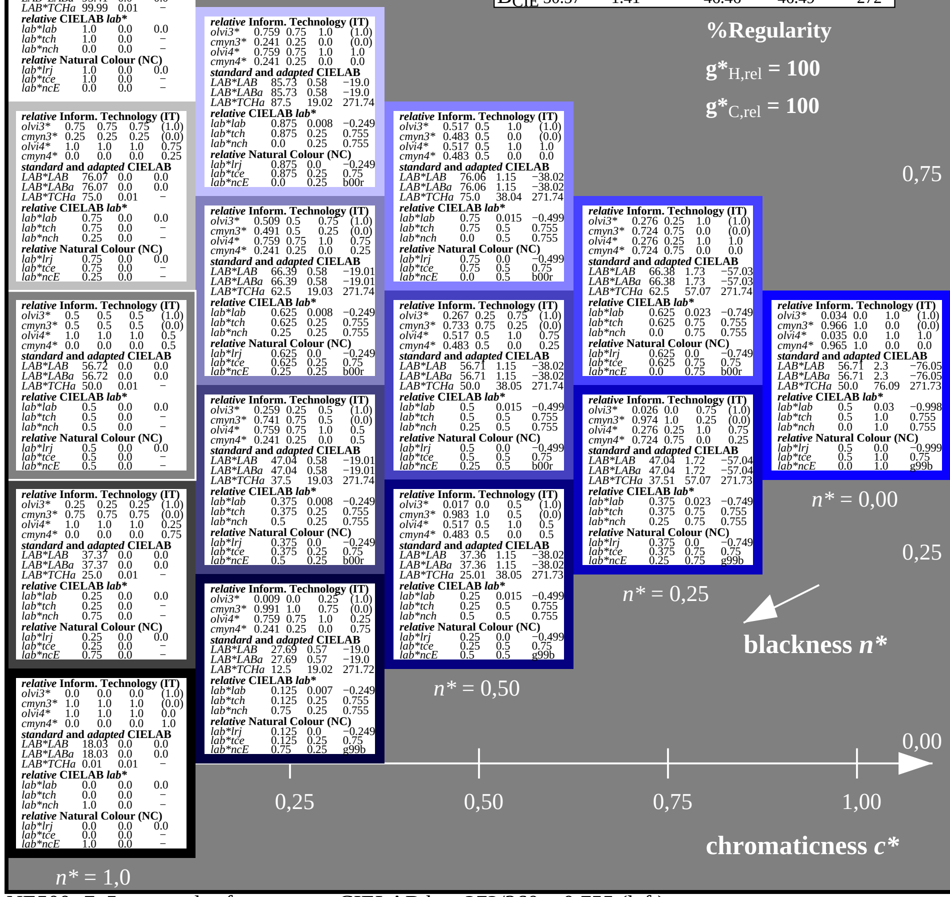


%Gamut
u*rel = 100

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

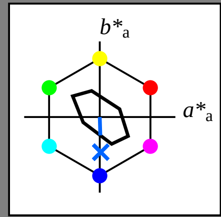
%Regularity
g*H,rel = 100
g*C,rel = 100



Output: Colorimetric 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*

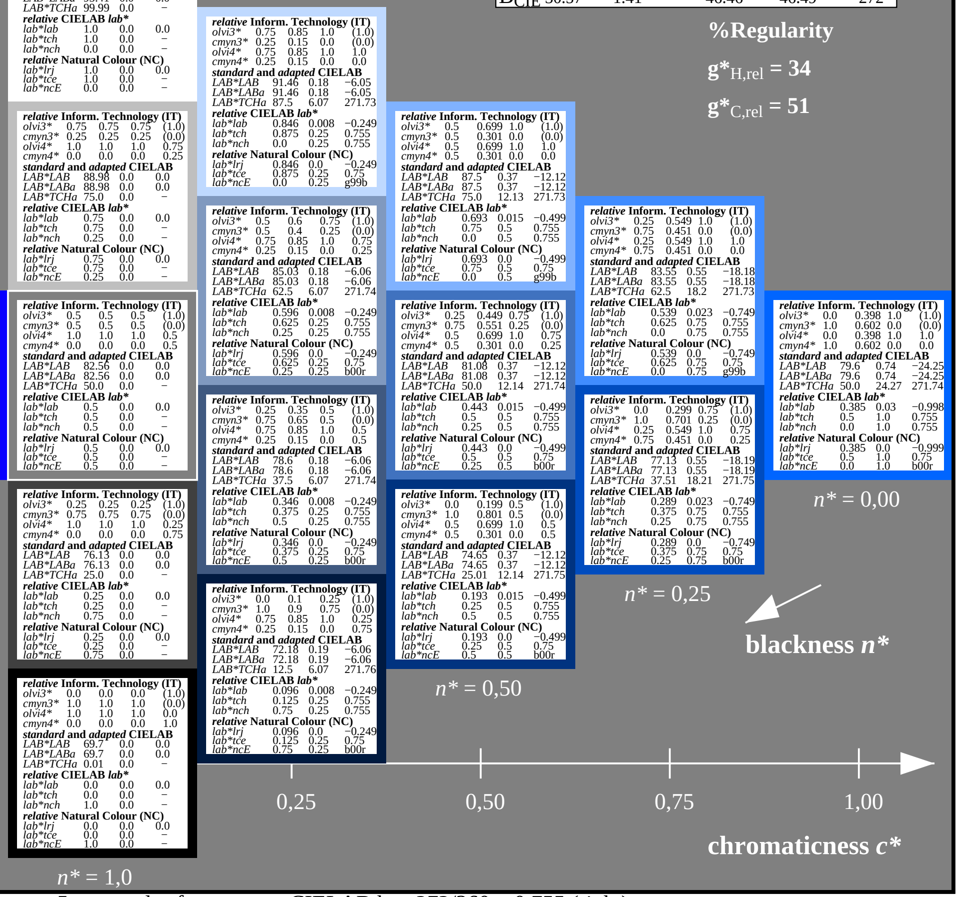


%Gamut
u*rel = 16

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



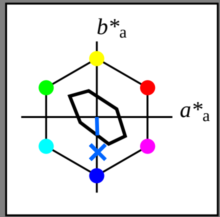
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

triangle lightness t^*

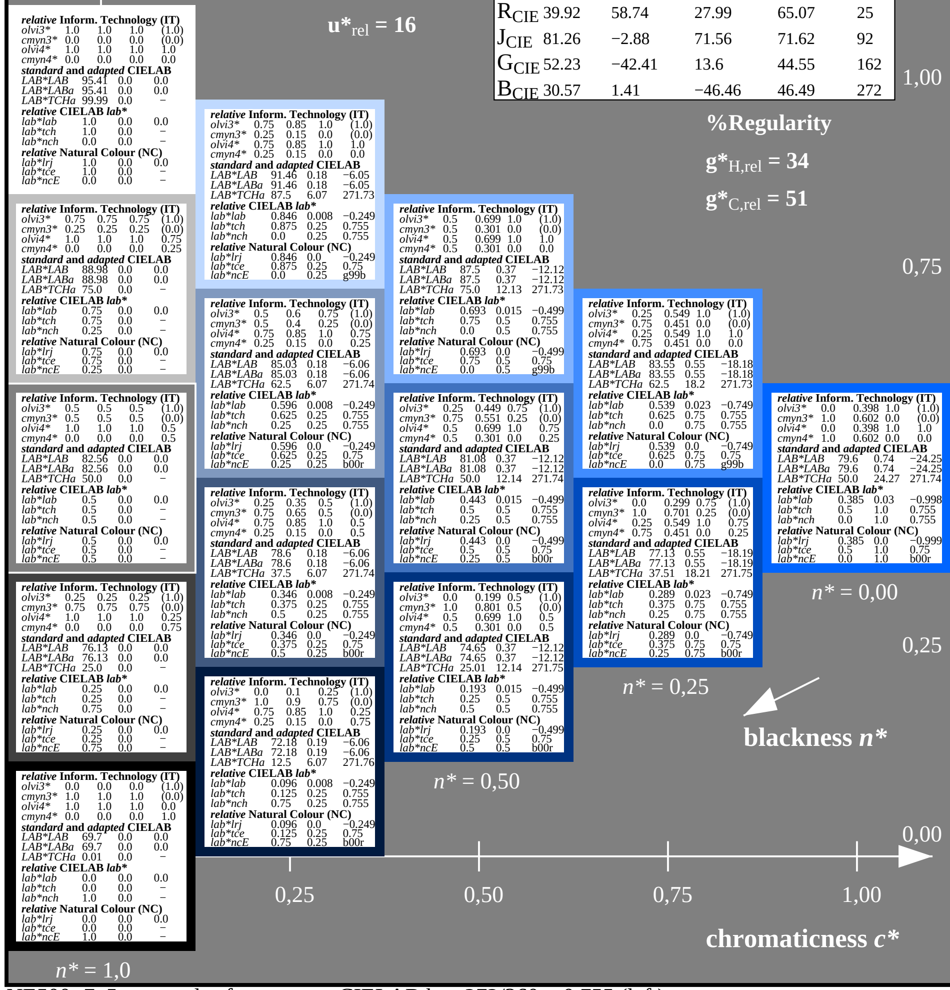


%Gamut
u^*_{rel} = 16

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

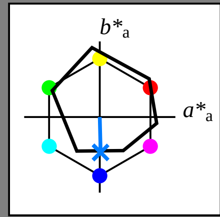
%Regularity
$g^*_{H,rel}$ = 34
$g^*_{C,rel}$ = 51



Output: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch and lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*

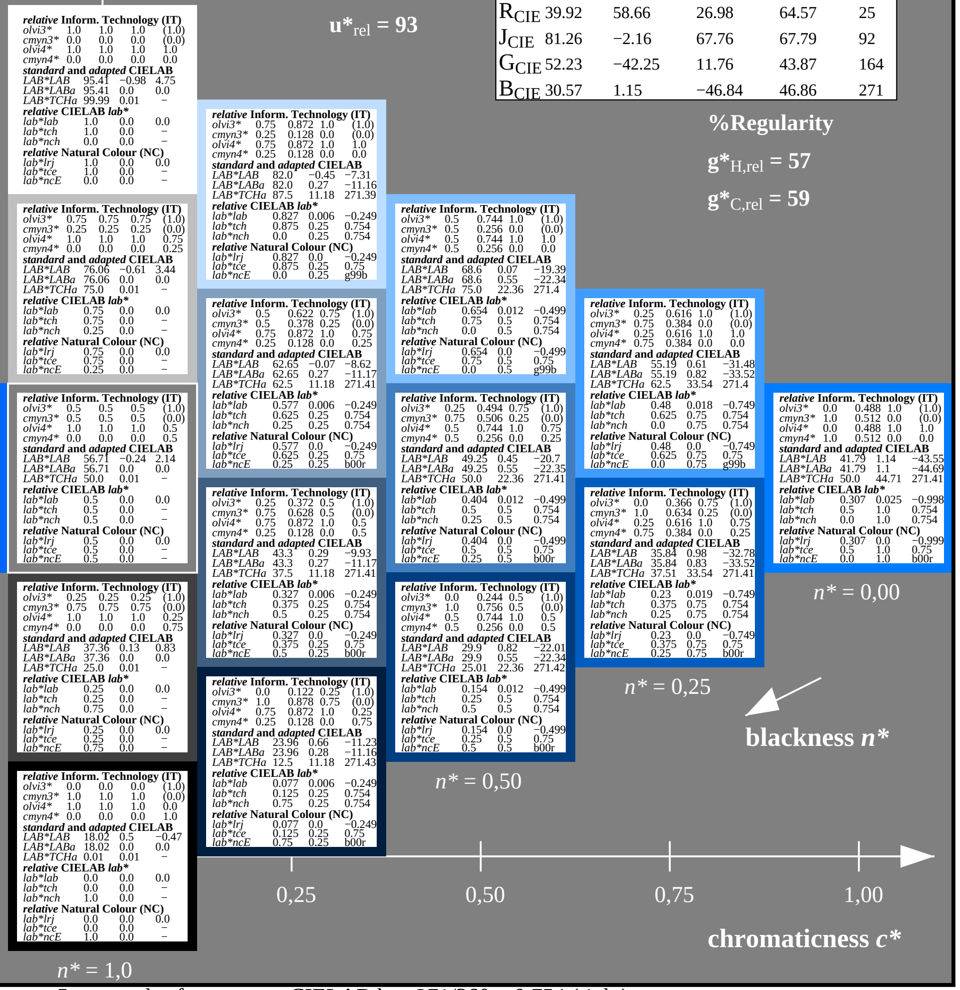


%Gamut
u^*_{rel} = 93

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



NE500−7, 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 Television Luminous System TLS70

for hue $h^* = lab^*h = 272/360 = 0.755$

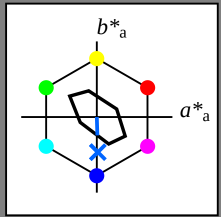
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 16$

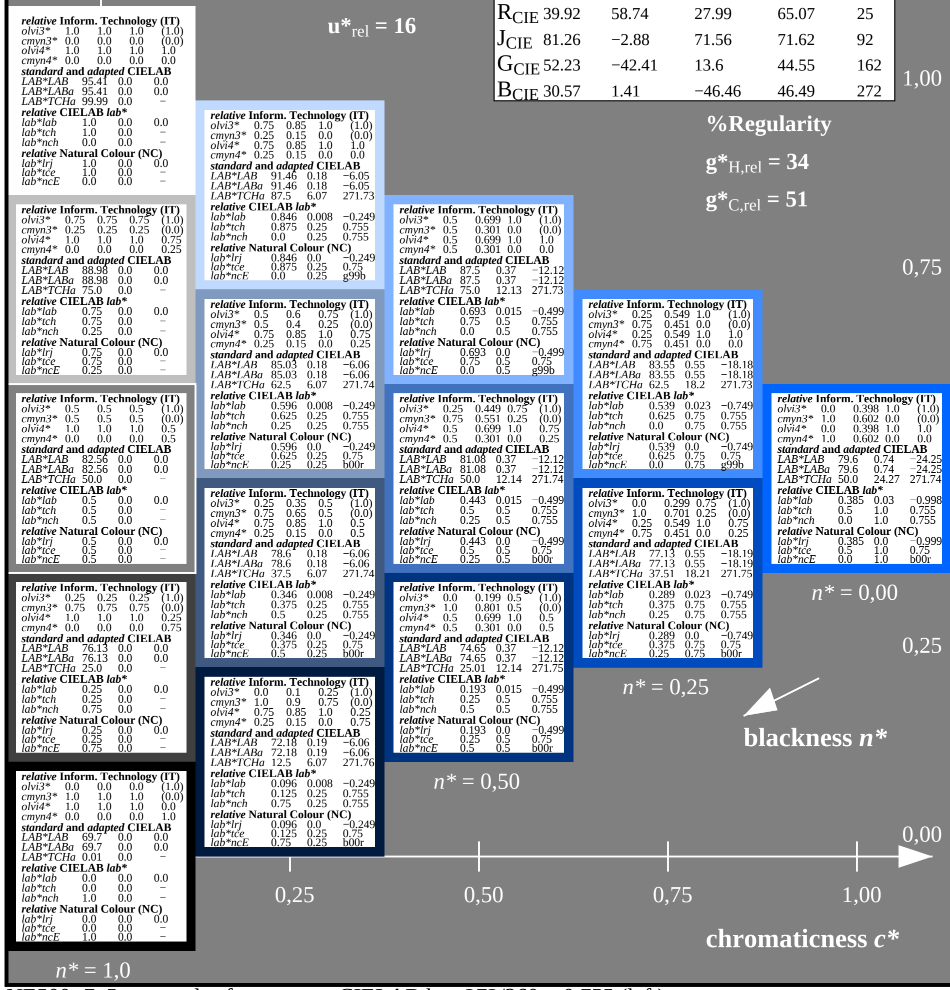
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$

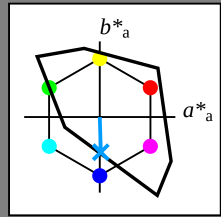
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

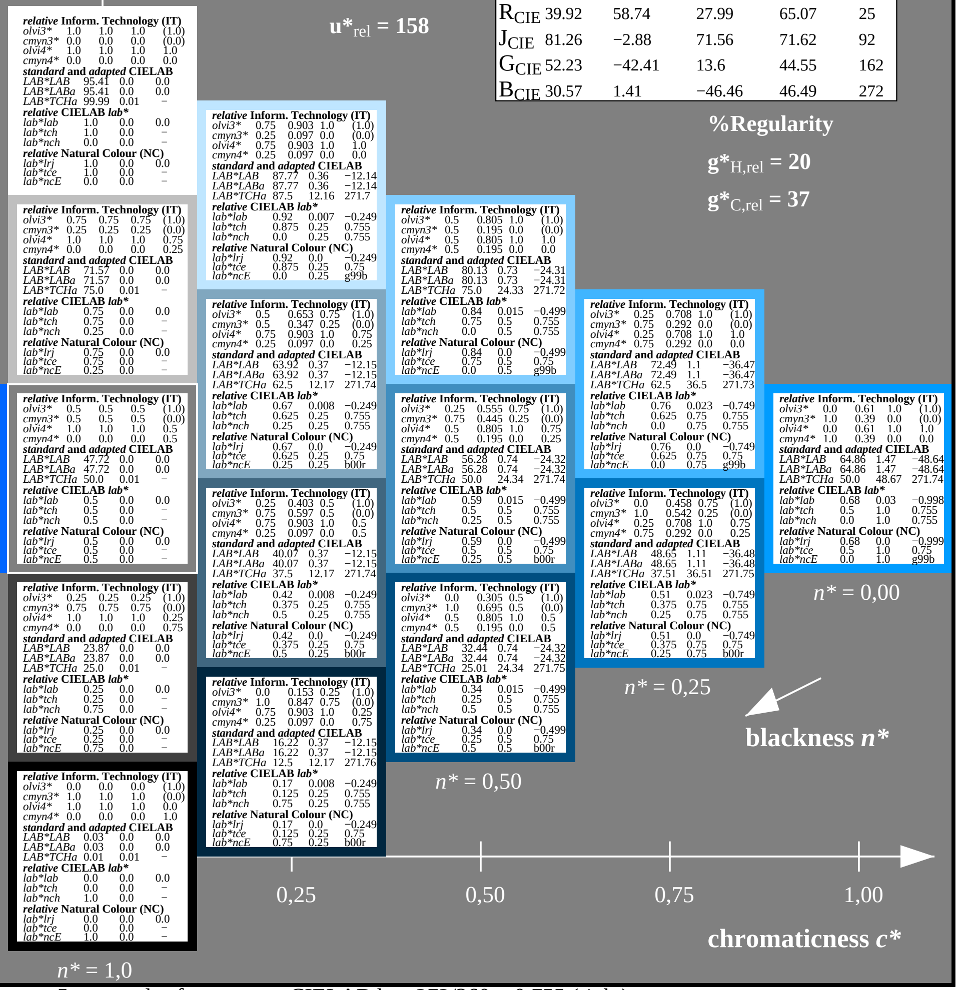
TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



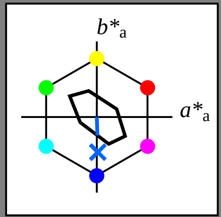
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

triangle lightness t^*

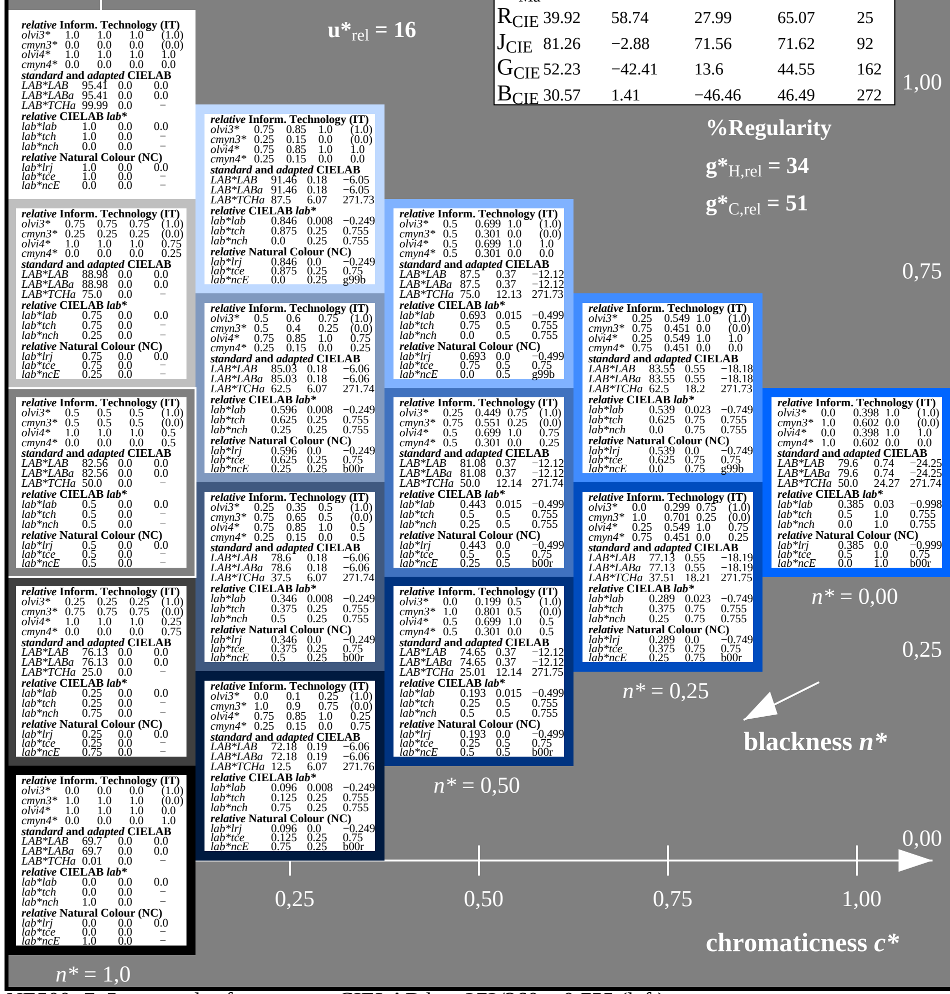


%Gamut
$u^*_{rel} = 16$

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

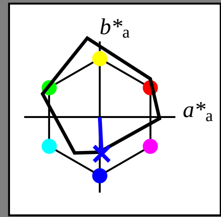
%Regularity
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$



Output: Colorimetric Printer Reflective System DRSXX
for hue $h^* = lab^*h = 273/360 = 0.759$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 35 45 273
olv*Ma: 0.04 0.0 1.0

triangle lightness t^*

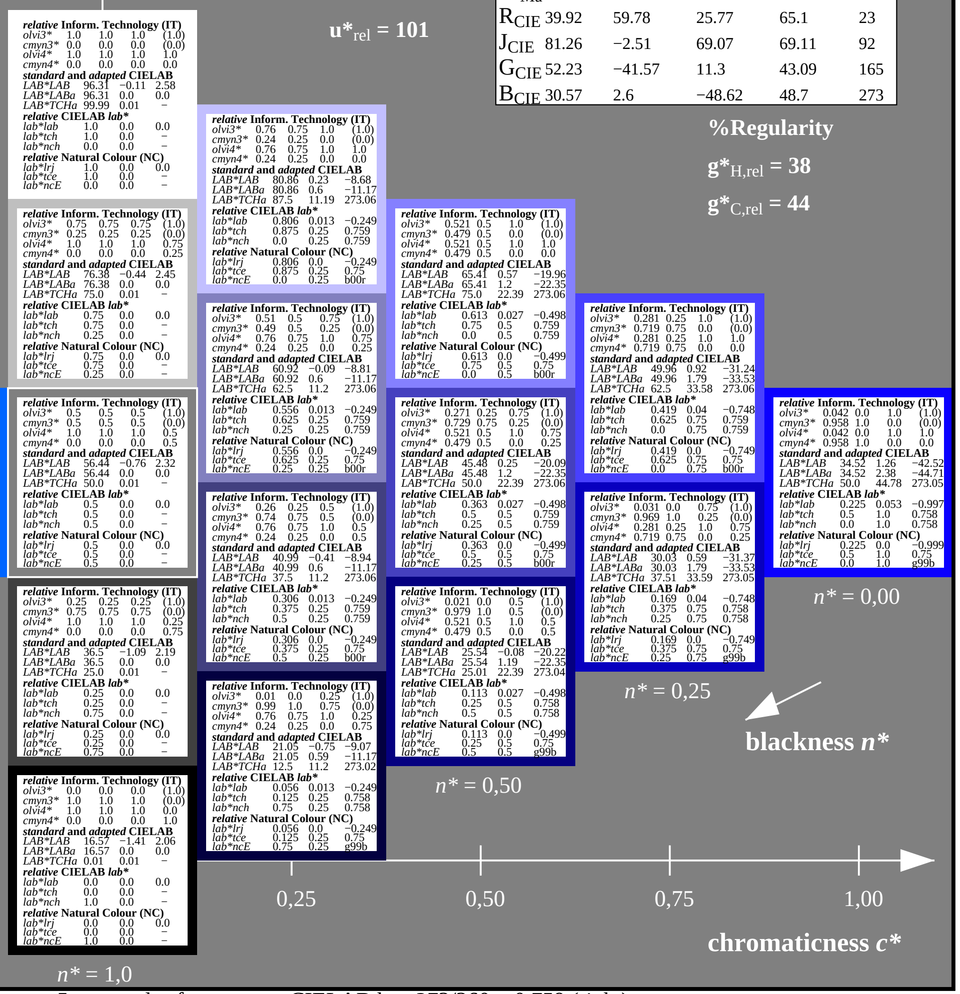


%Gamut
$u^*_{rel} = 101$

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
$g^*_{H,rel} = 38$
$g^*_{C,rel} = 44$



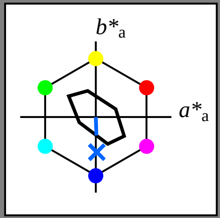
NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

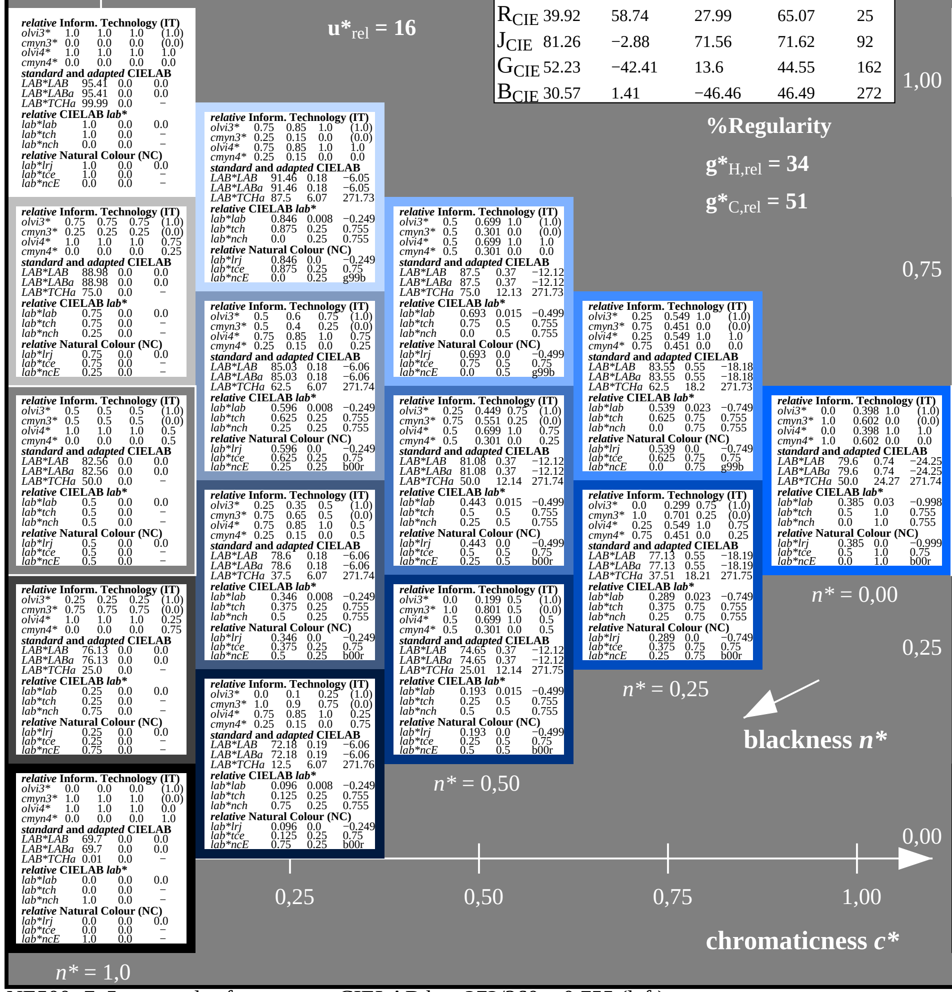
u^*_{rel} = 16

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

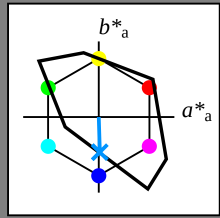
$g^*_{C,rel}$ = 51



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

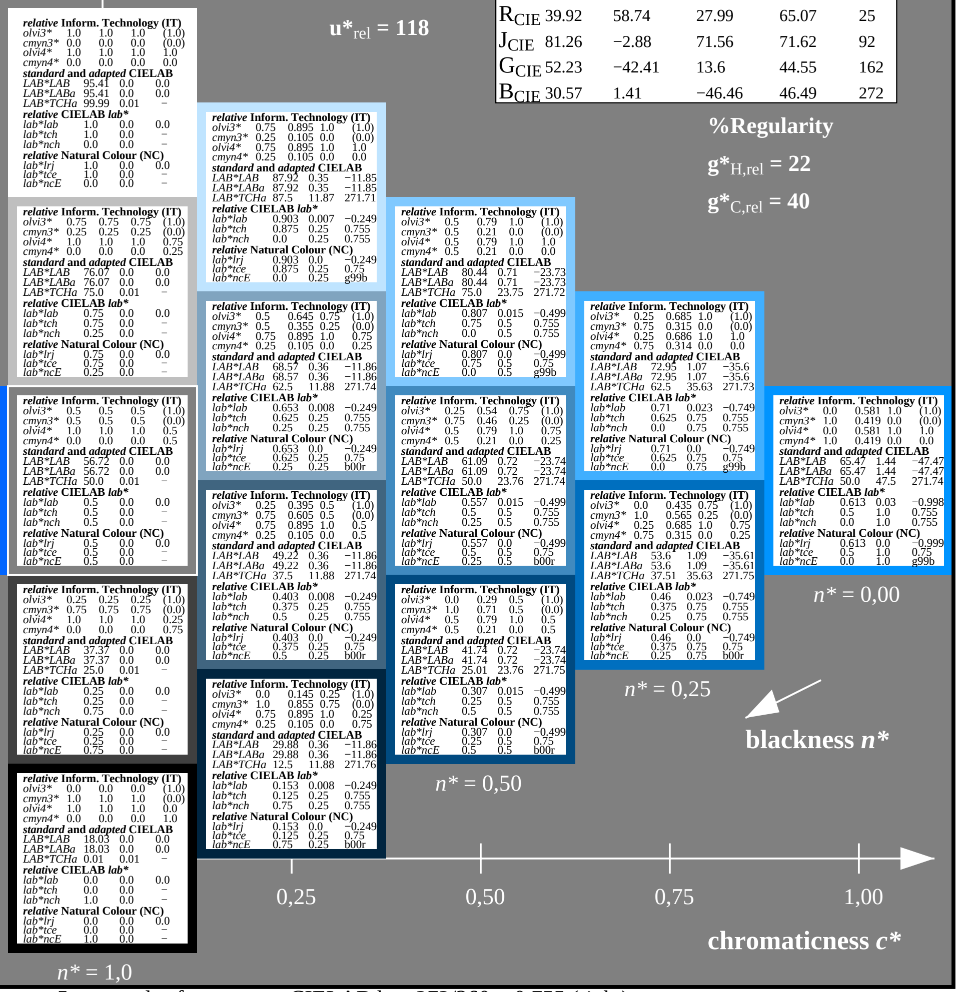
u^*_{rel} = 118

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



NE500−7, 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

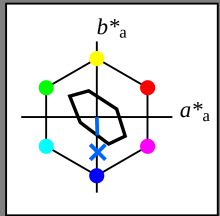
triangle lightness t^*

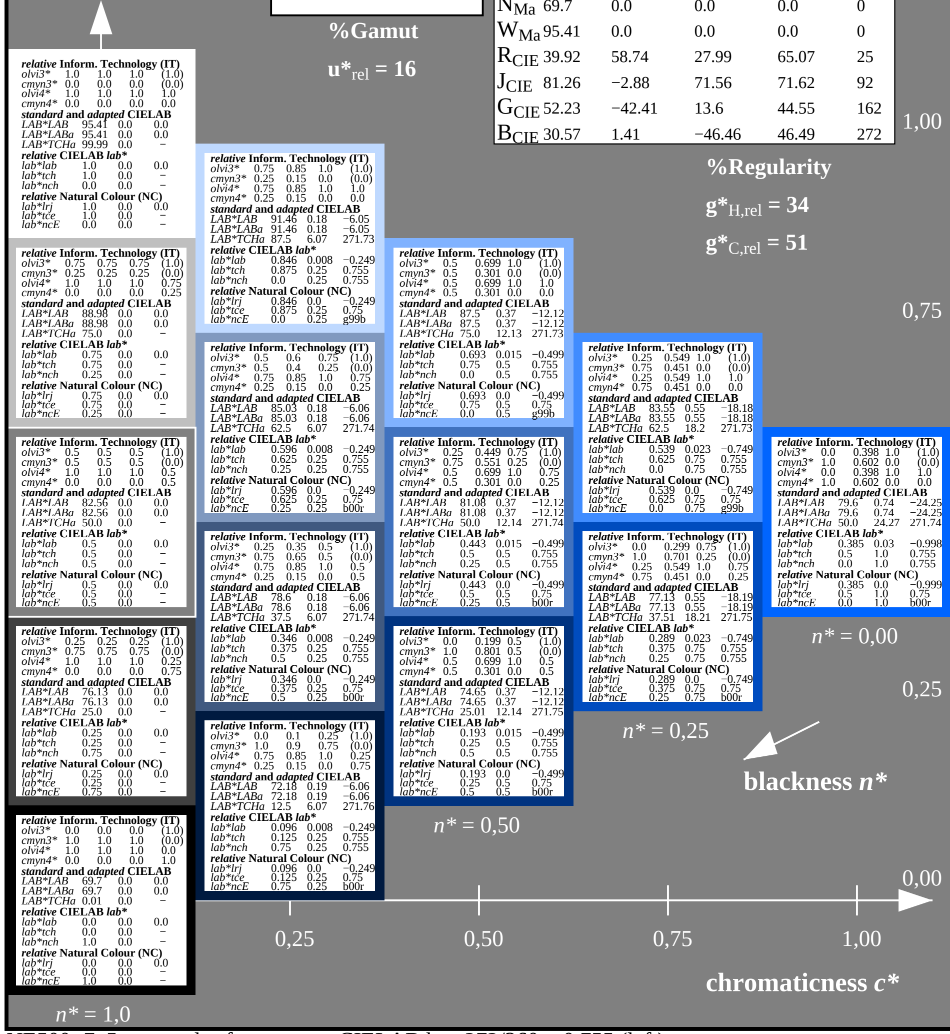
%Gamut
$u^*_{rel} = 16$

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
$g^*_{H,rel} = 34$
$g^*_{C,rel} = 51$





NE500−7, 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

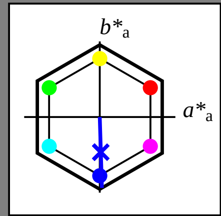
triangle lightness t^*

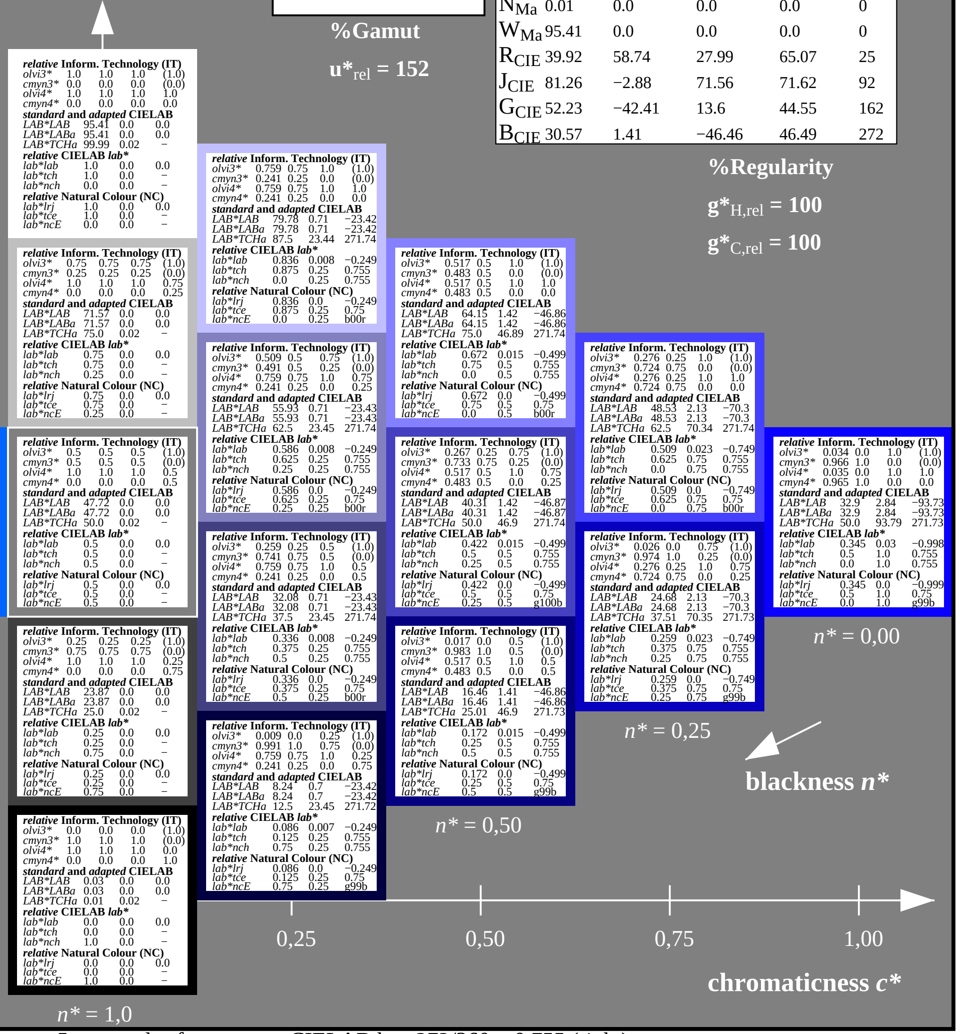
%Gamut
$u^*_{rel} = 152$

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 $h^* = lab^*h = 272/360 = 0.755$

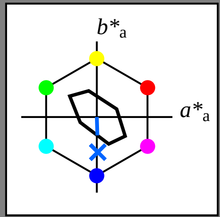
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness t*



%Gamut

$u^*_{rel} = 16$

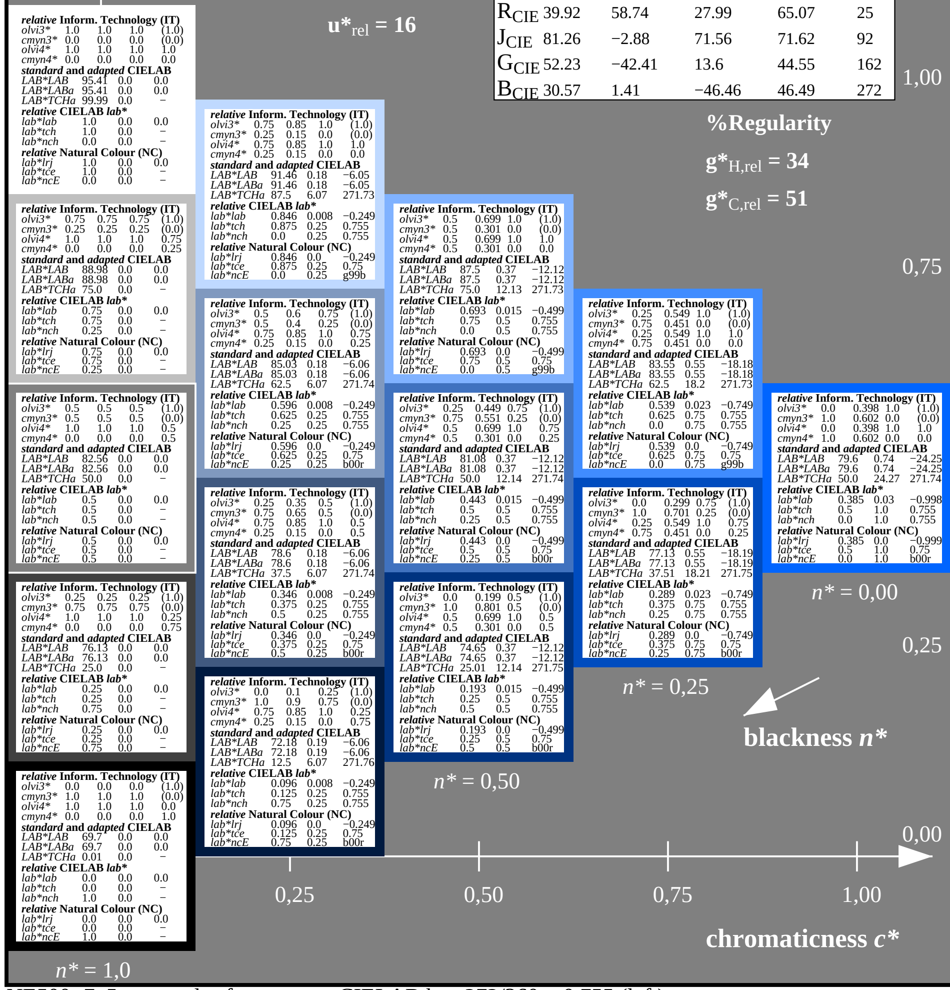
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Natural Reflective System NRS18

for hue $h^* = lab^*h = 272/360 = 0.755$

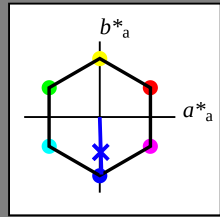
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 45 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness t*



%Gamut

$u^*_{rel} = 100$

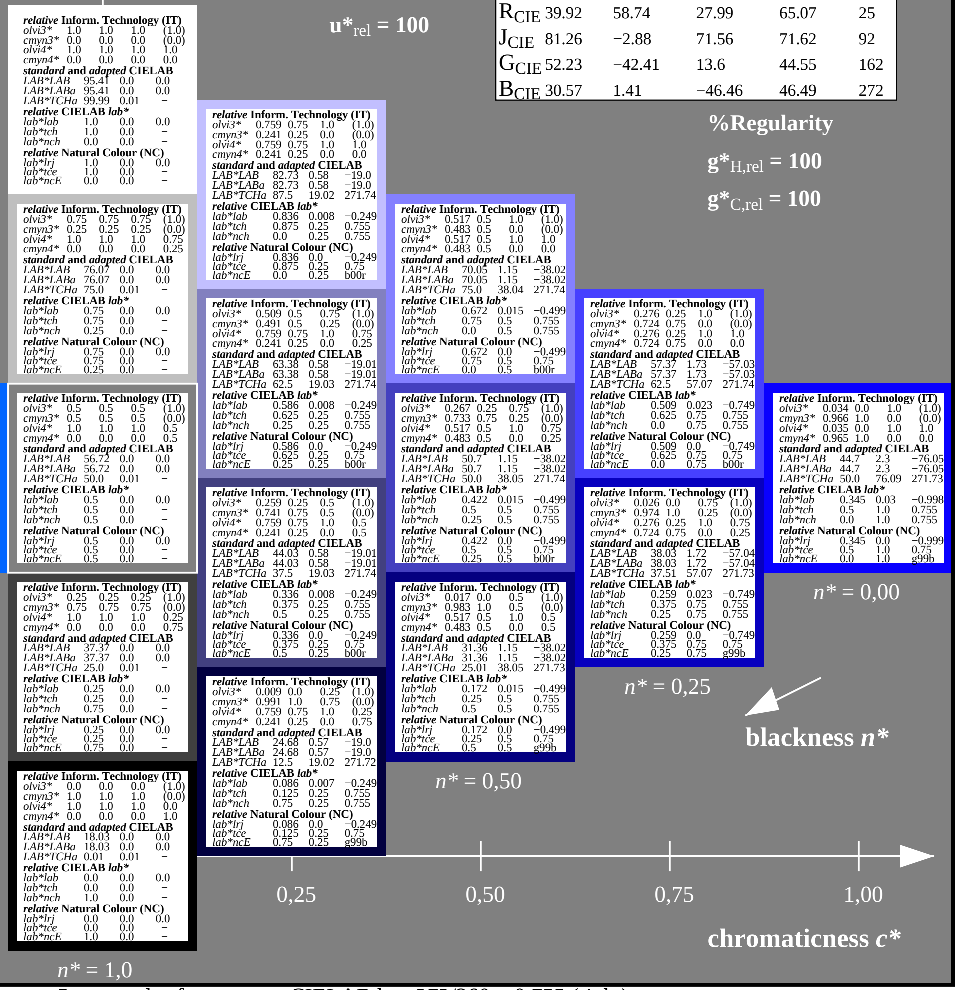
NRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



NE500−7, 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**

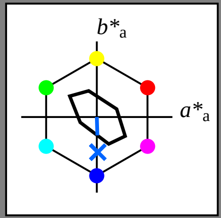
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness *t**



%Gamut

u*rel = 16

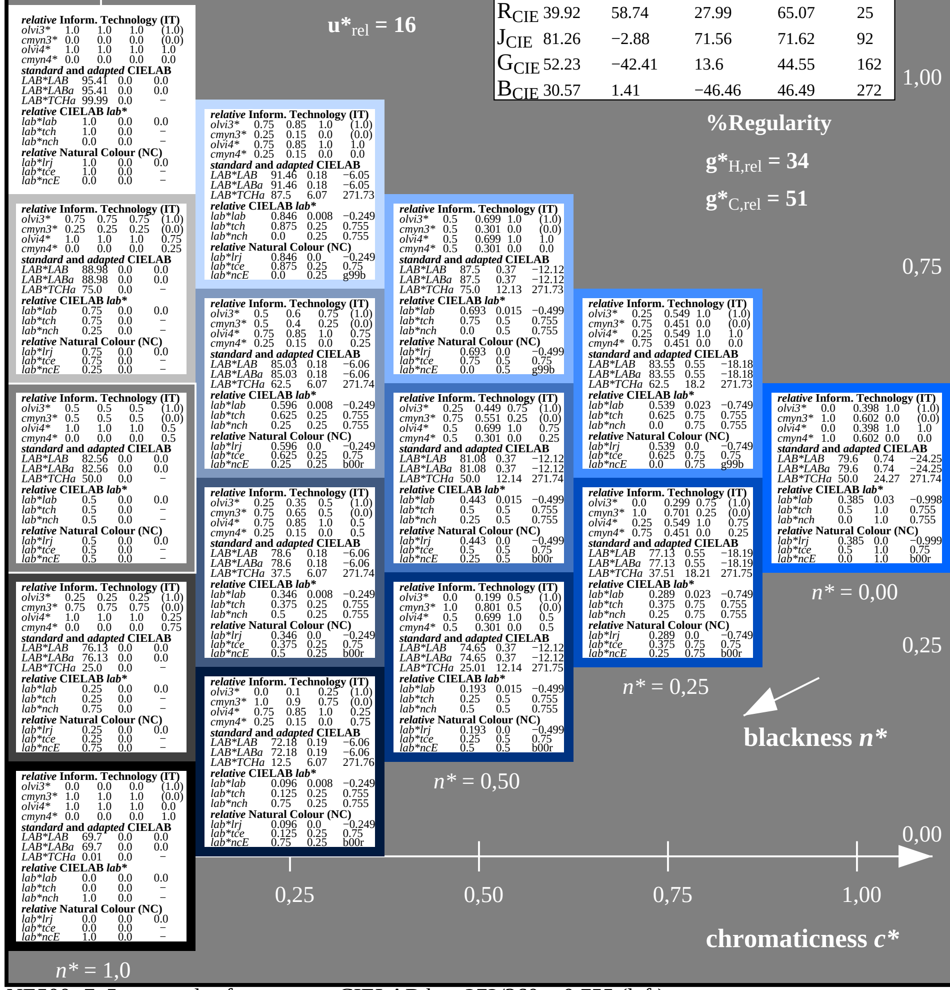
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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* = 272/360 = 0.755**

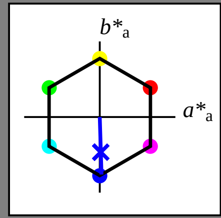
lab*tch* and *lab*nch

D65: hue B

LCH*Ma: 57 76 272

olv*Ma: 0.03 0.0 1.0

triangle lightness *t**



%Gamut

u*rel = 100

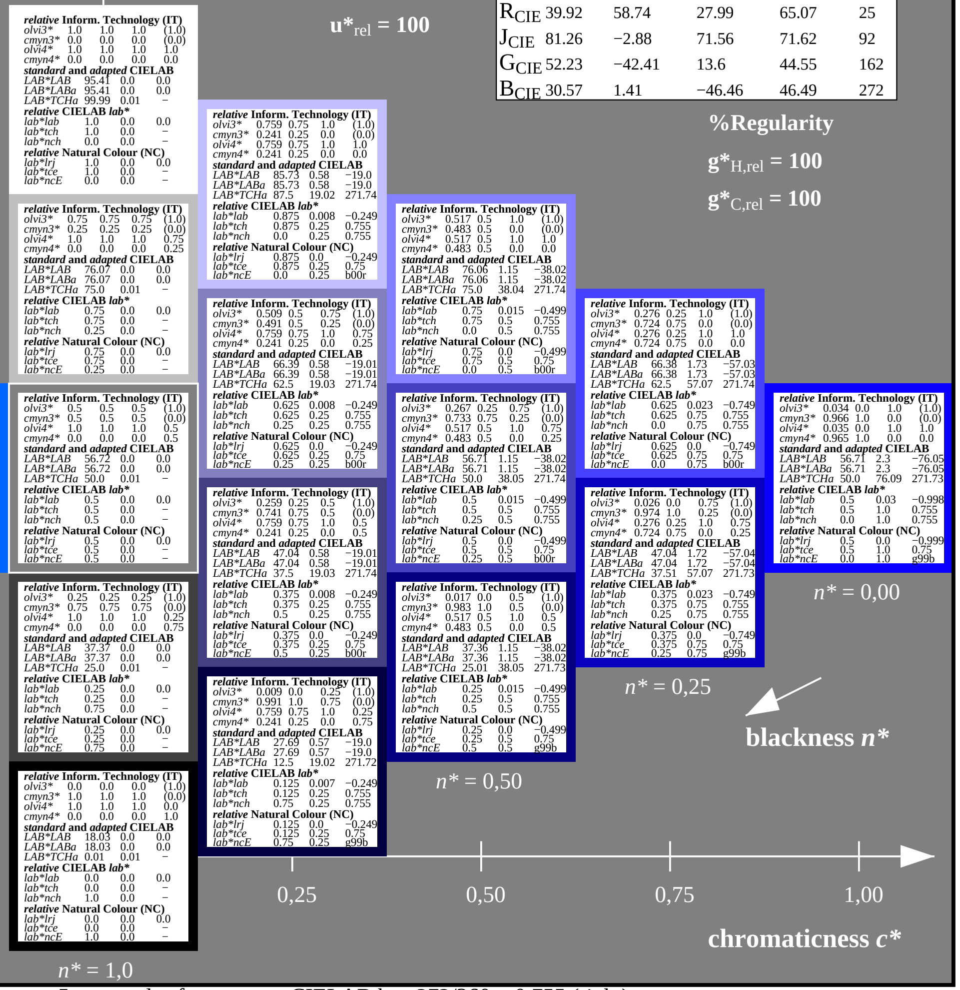
SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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



NE500−7, 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 $h^* = lab^*h = 272/360 = 0.755$

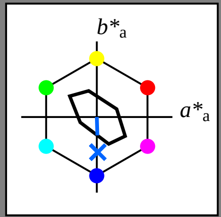
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 16$

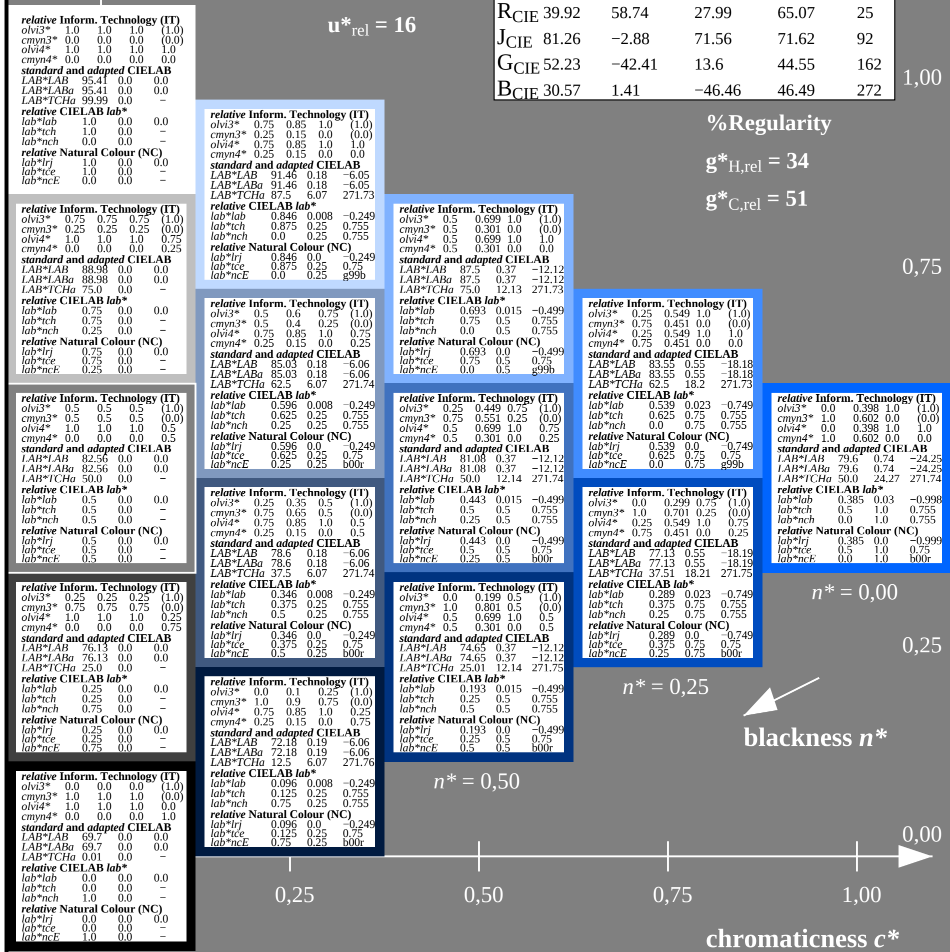
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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 $h^* = lab^*h = 272/360 = 0.755$

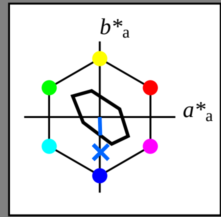
*lab*tch* and *lab*nch*

D65: hue B

LCH*Ma: 80 24 272

olv*Ma: 0.0 0.4 1.0

triangle lightness *t*



%Gamut

$u^*_{rel} = 16$

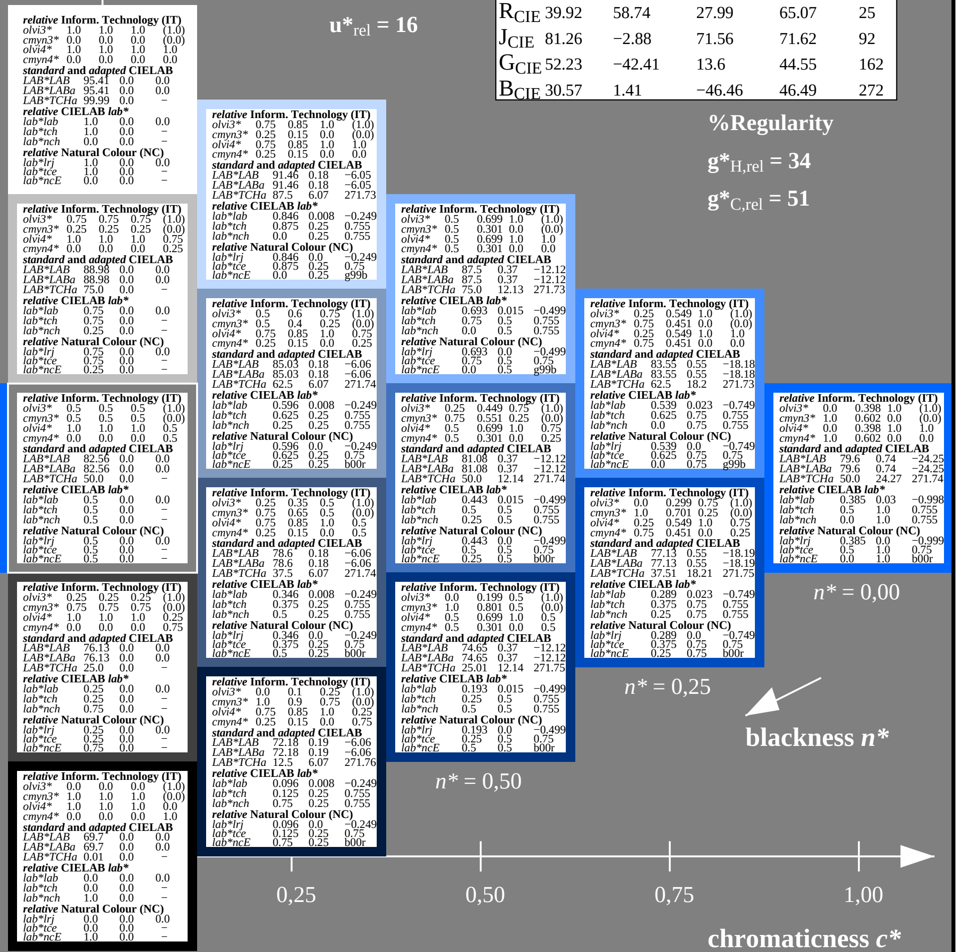
TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	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

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



NE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)