

Input: Colorimetric Offset Reflective System ORS18

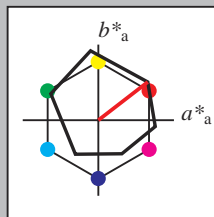
for hue  $h^* = lab^*h = 38/360 = 0.105$

$LAB^*LCH, LAB^*NCH$

D50: hue O

$LCH^*Ma: 48\ 83\ 38$

$olv^*Ma: 1.0\ 0.0\ 0.0$



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

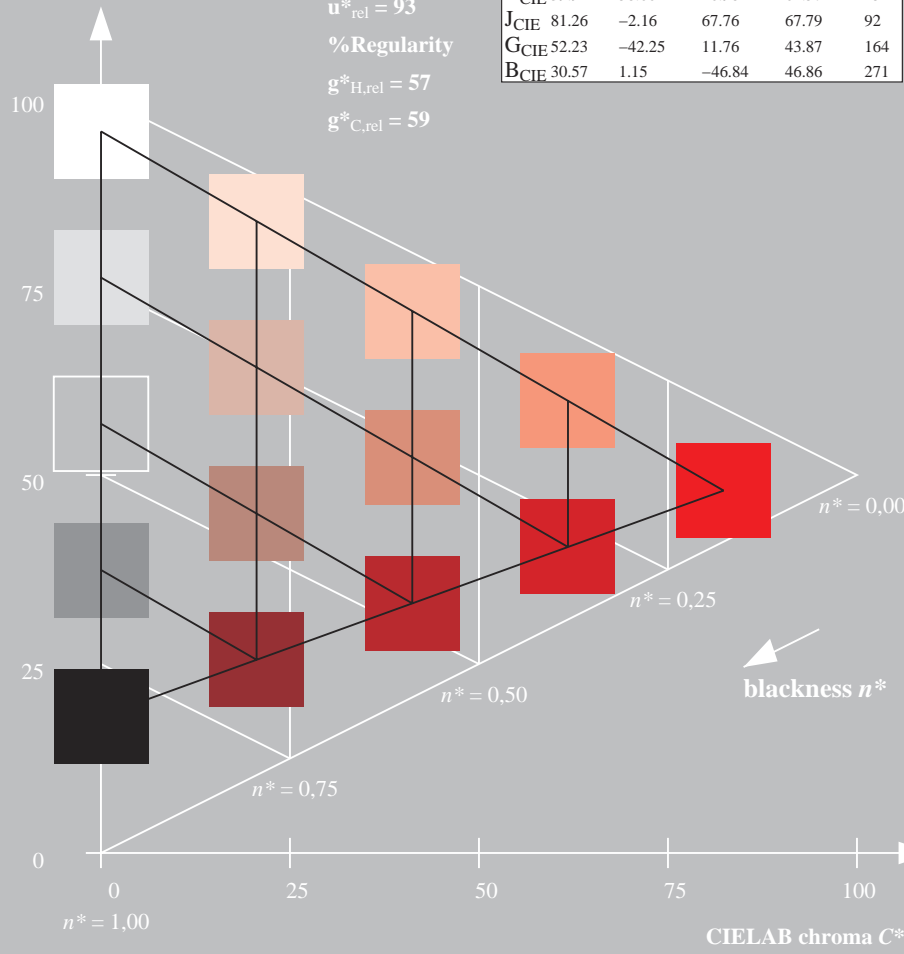
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Television Luminous System TLS00

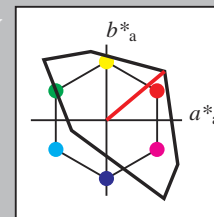
for hue  $h^* = lab^*h = 40/360 = 0.111$

$LAB^*LCH, LAB^*NCH$

D50: hue O

$LCH^*Ma: 51\ 100\ 40$

$olv^*Ma: 1.0\ 0.0\ 0.0$



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

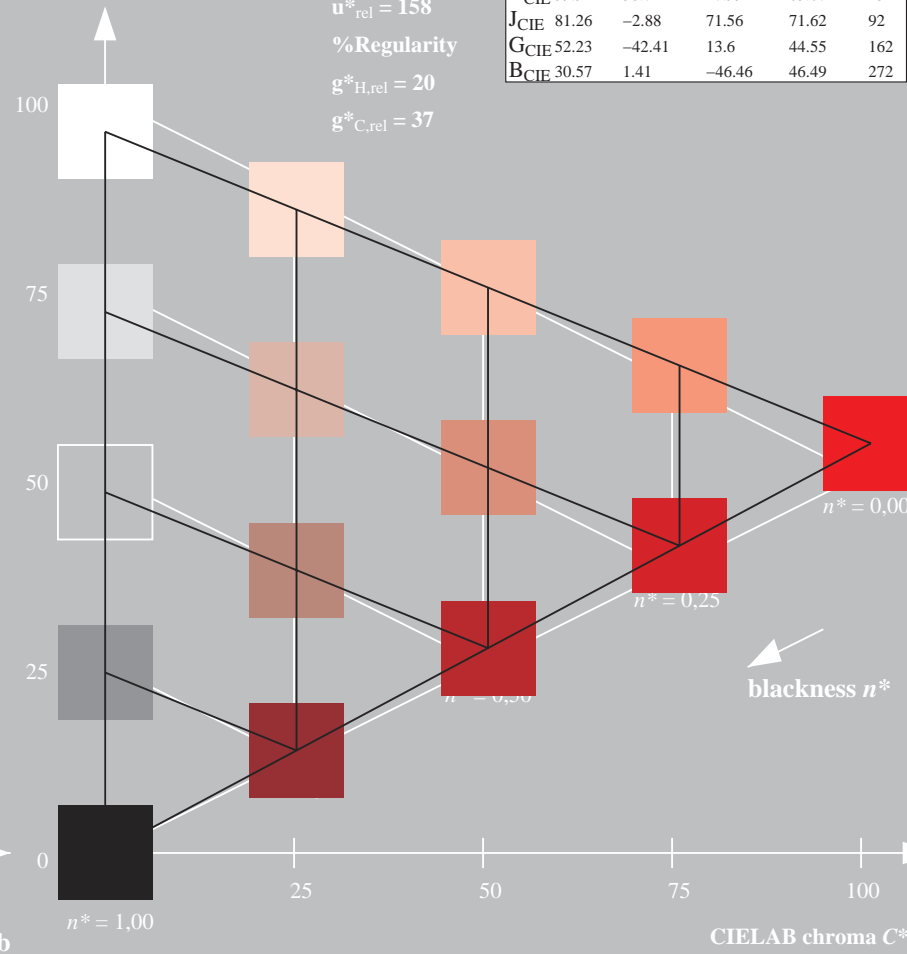
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



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

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00  
 D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmykcolor}$   
 output:  $cmY0^*/000n^*_{setcmykcolor}$

Input: Colorimetric Offset Reflective System ORS18

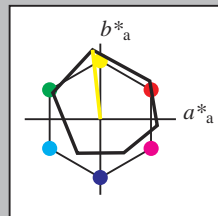
for hue  $h^* = lab^*h = 96/360 = 0.268$

LAB\*LCH, LAB\*NCH

D50: hue Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

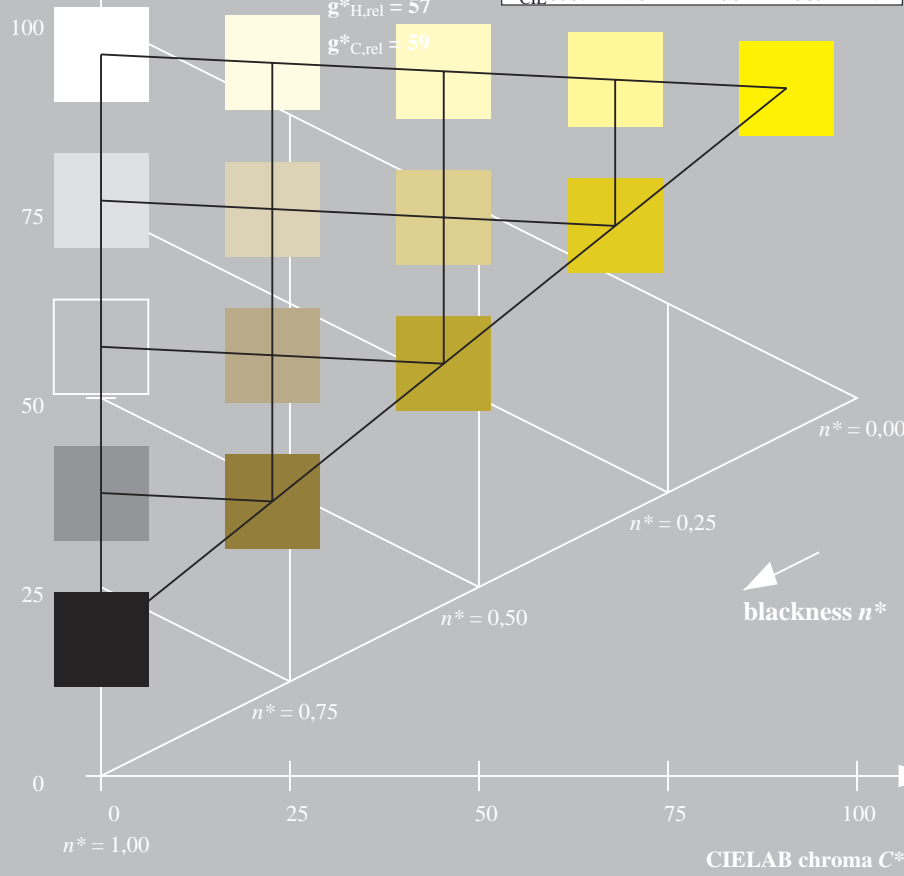
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS00

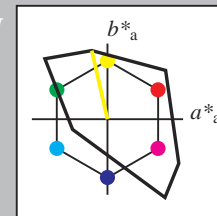
for hue  $h^* = lab^*h = 103/360 = 0.286$

LAB\*LCH, LAB\*NCH

D50: hue Y

LCH\*Ma: 93 93 103

olv\*Ma: 1.0 1.0 0.0



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

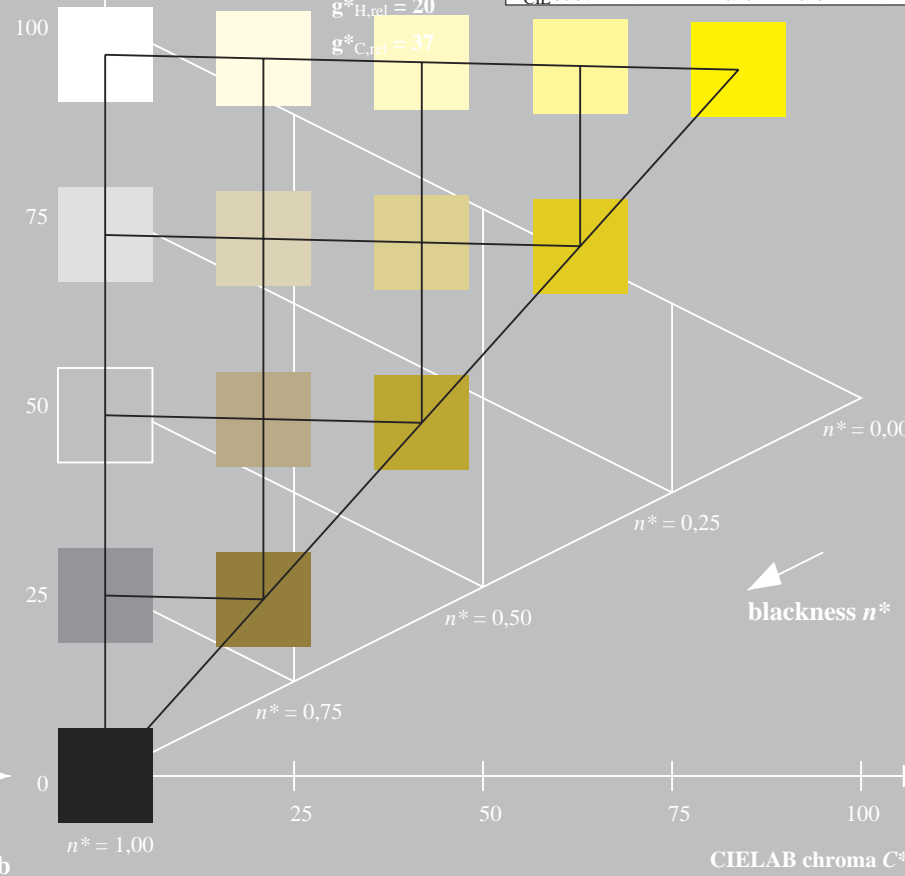
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00

input:  $cmY0^* setcmykcolor$

D50: Coordinate systems of 5 step colour scales for 10 hues

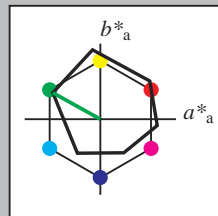
output:  $cmY0^*/000n^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

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

$LAB^*LCH, LAB^*NCH$

D50: hue L  
 LCH\*Ma: 51 72 151  
 olv\*Ma: 0.0 1.0 0.0



**ORS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

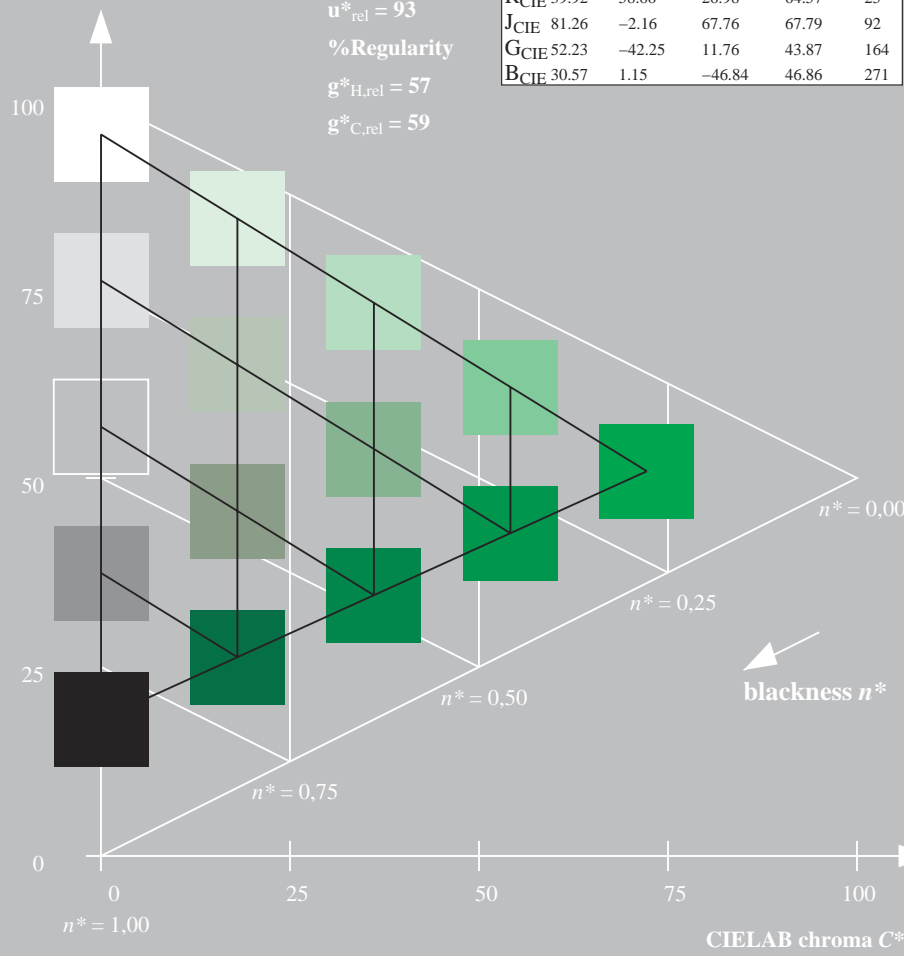
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

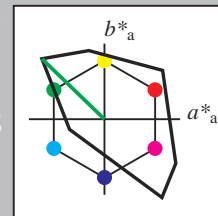


Output: Colorimetric Television Luminous System TLS00

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

$LAB^*LCH, LAB^*NCH$

D50: hue L  
 LCH\*Ma: 84 115 136  
 olv\*Ma: 0.0 1.0 0.0



**TLS00; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

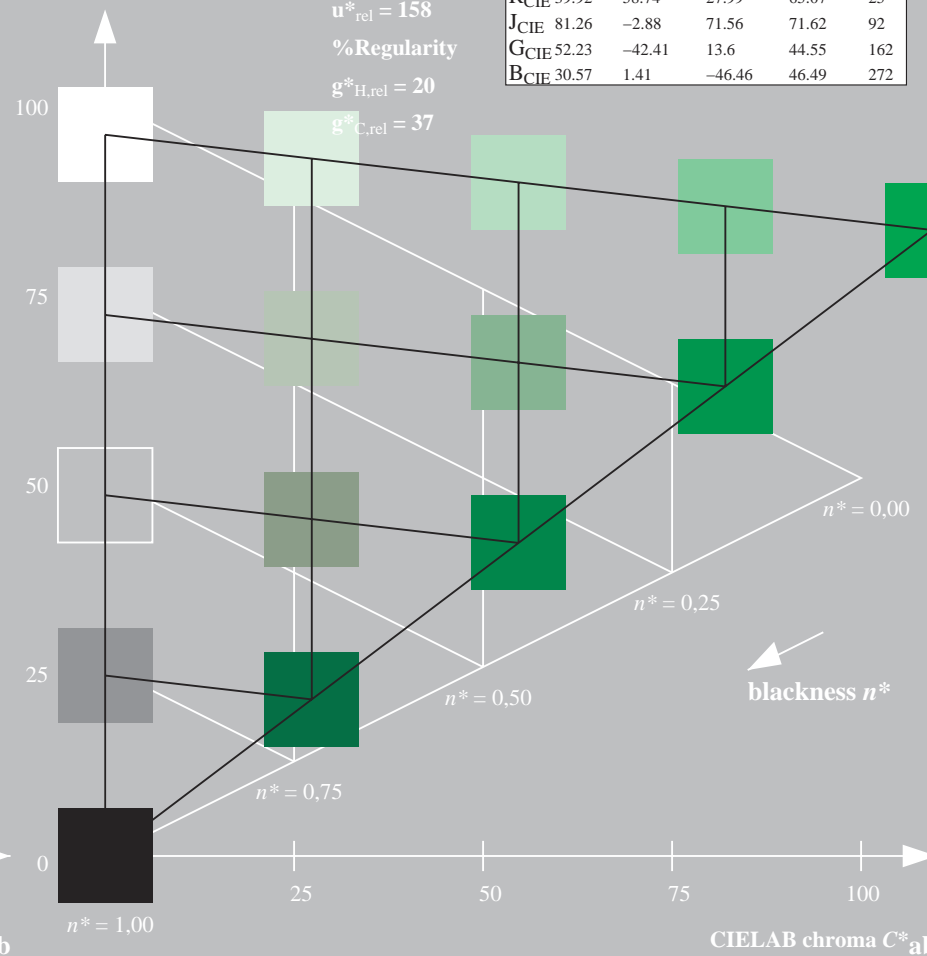
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00  
 D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmykcolor}$   
 output:  $cmY0^*/000n^*_{setcmykcolor}$

Input: Colorimetric Offset Reflective System ORS18

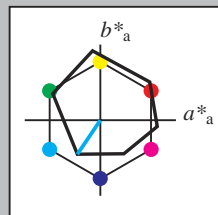
for hue  $h^* = lab^*h = 236/360 = 0.656$

LAB\*LCH, LAB\*NCH

D50: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

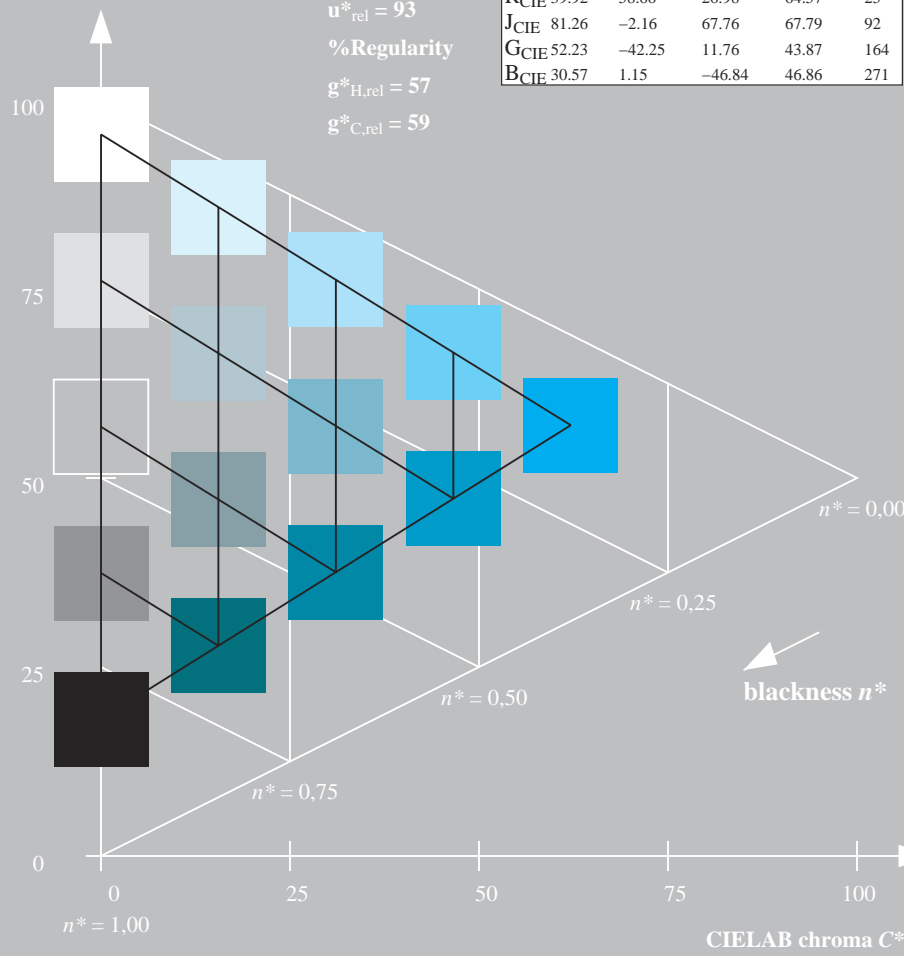
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Television Luminous System TLS00

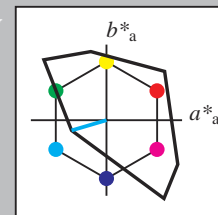
for hue  $h^* = lab^*h = 196/360 = 0.545$

LAB\*LCH, LAB\*NCH

D50: hue C

LCH\*Ma: 87 48 196

olv\*Ma: 0.0 1.0 1.0



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

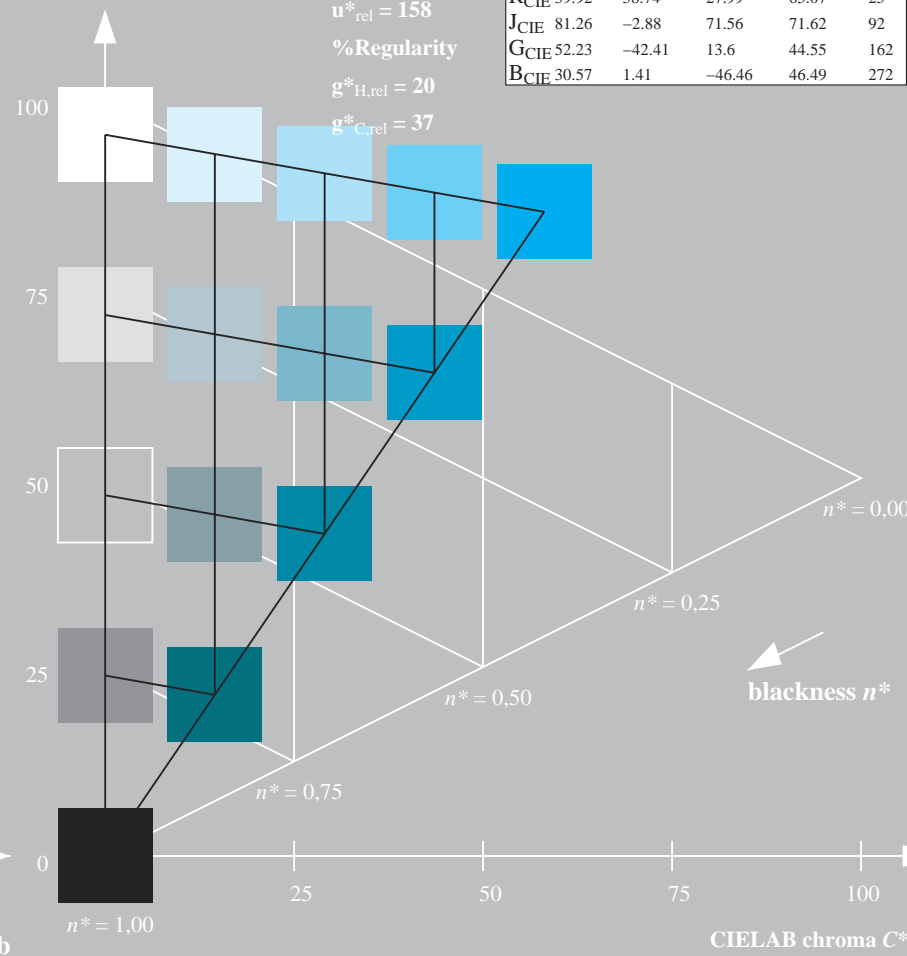
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00

D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^* setcmykcolor$

output:  $cmY0^* / 000n^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

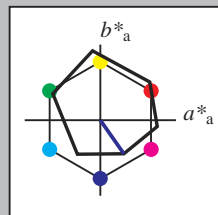
for hue  $h^* = lab^*h = 305/360 = 0.847$

LAB\*LCH, LAB\*NCH

D50: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

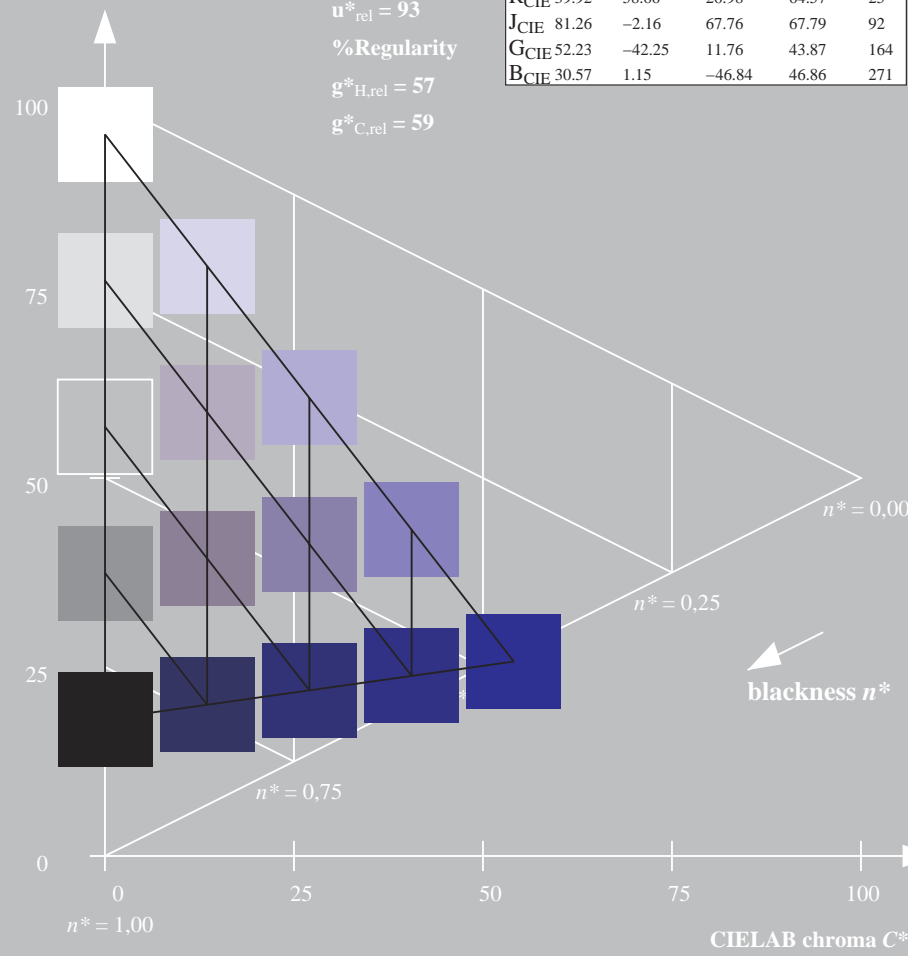
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS00

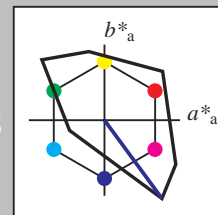
for hue  $h^* = lab^*h = 306/360 = 0.851$

LAB\*LCH, LAB\*NCH

D50: hue V

LCH\*Ma: 30 129 306

olv\*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

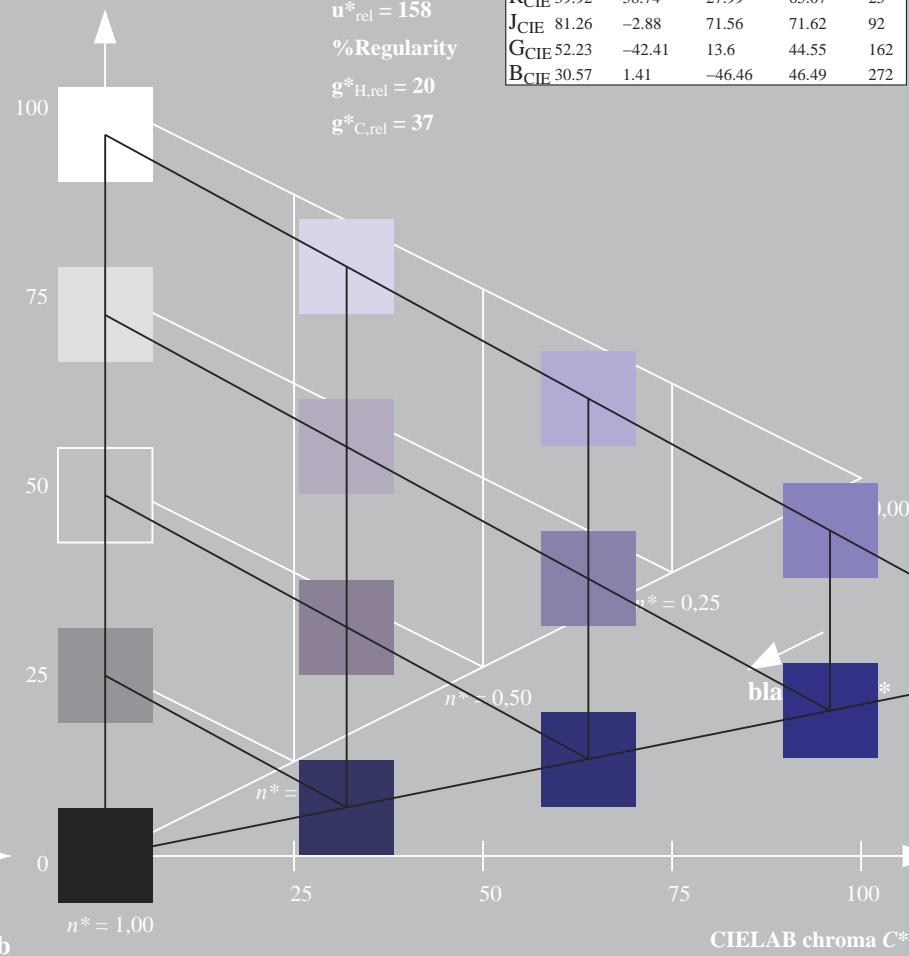
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00

D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmykcolor}$

output:  $cmY0^*/000n^*_{setcmykcolor}$

Input: Colorimetric Offset Reflective System ORS18

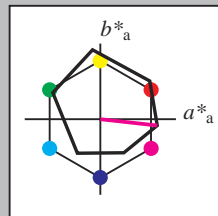
for hue  $h^* = lab^*h = 354/360 = 0.982$

$LAB^*LCH, LAB^*NCH$

D50: hue M

$LCH^*Ma: 48\ 76\ 354$

$olv^*Ma: 1.0\ 0.0\ 1.0$



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

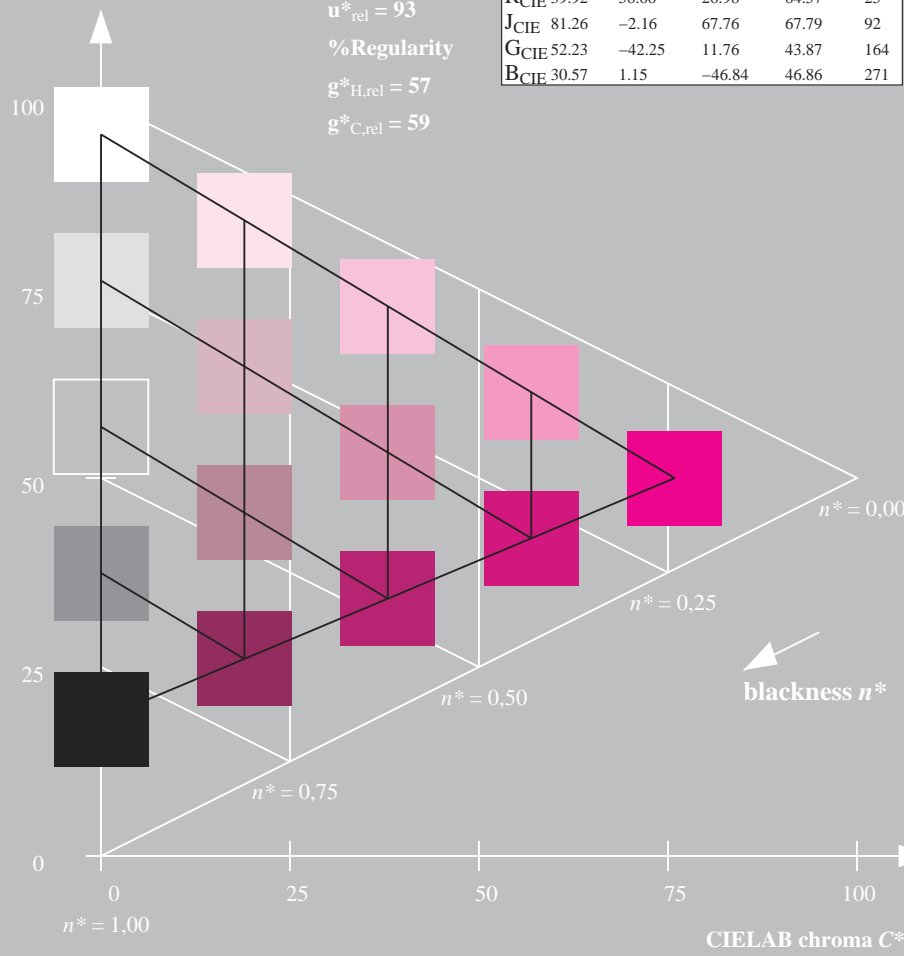
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Television Luminous System TLS00

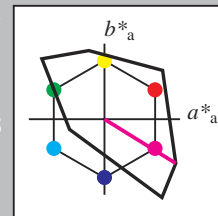
for hue  $h^* = lab^*h = 328/360 = 0.912$

$LAB^*LCH, LAB^*NCH$

D50: hue M

$LCH^*Ma: 57\ 111\ 328$

$olv^*Ma: 1.0\ 0.0\ 1.0$



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

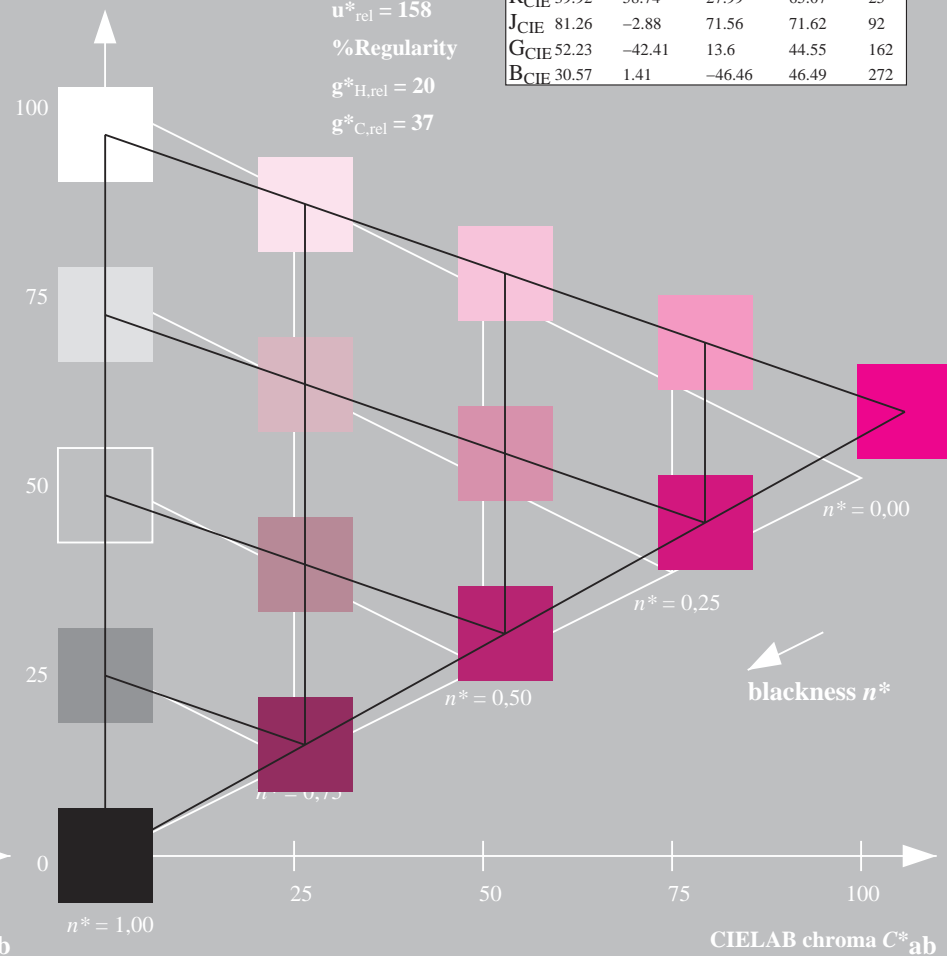
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00  
 D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^* setcmykcolor$   
 output:  $cmY0^*/000n^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

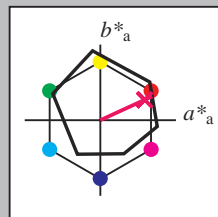
for hue  $h^* = lab^*h = 25/360 = 0.069$

LAB\*LCH, LAB\*NCH

D50: hue R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

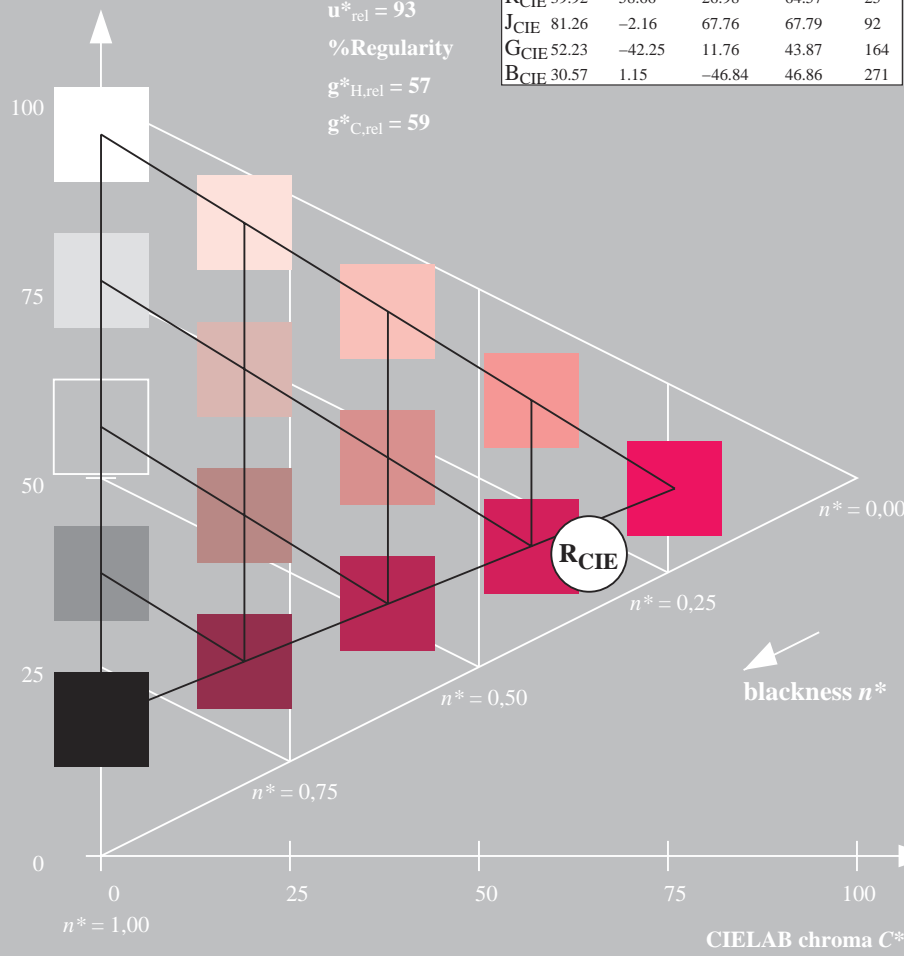
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS00

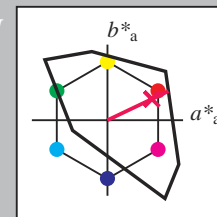
for hue  $h^* = lab^*h = 25/360 = 0.071$

LAB\*LCH, LAB\*NCH

D50: hue R

LCH\*Ma: 52 89 25

olv\*Ma: 1.0 0.0 0.21



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

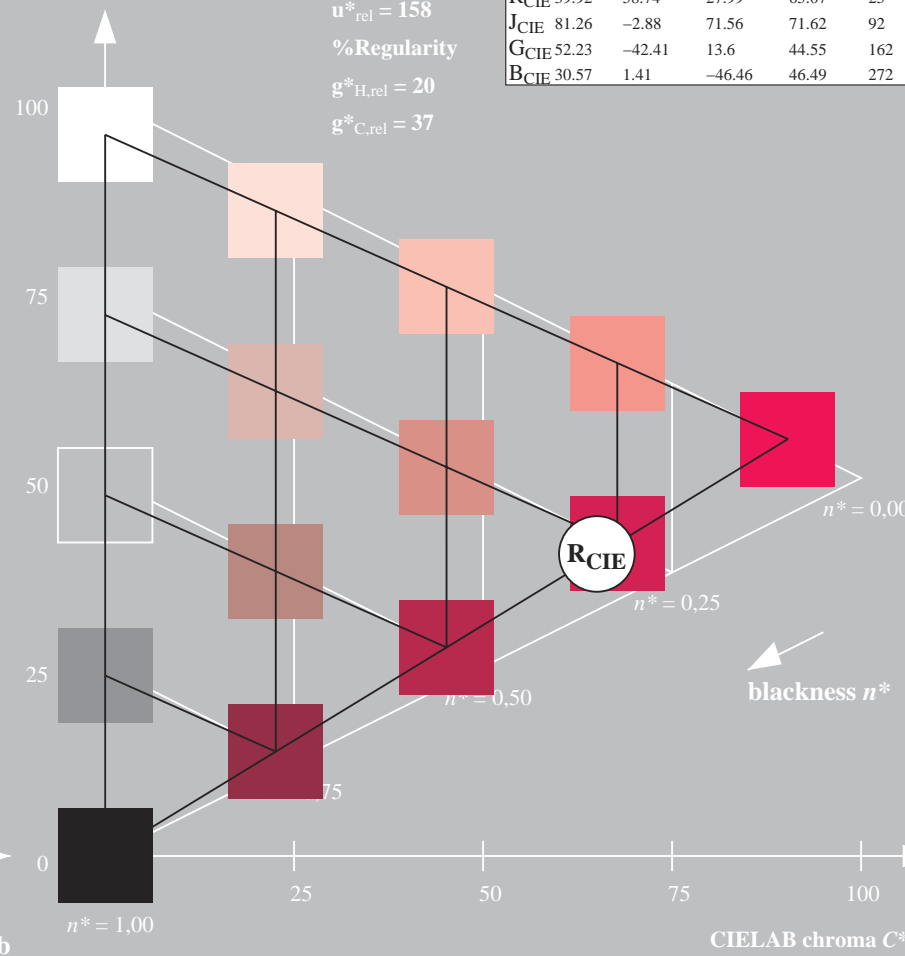
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00  
 D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmykcolor}$   
 output:  $cmY0^*/000n^*_{setcmykcolor}$

See for similar files: <http://www.ps.bam.de/QE30/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-QE30/10Q/Q30E06FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE30/ Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

Input: Colorimetric Offset Reflective System ORS18

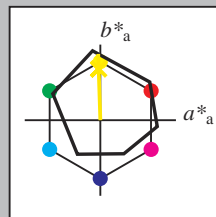
for hue  $h^* = lab^*h = 92/360 = 0.255$

LAB\*LCH, LAB\*NCH

D50: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

CIELAB lightness  $L^*$

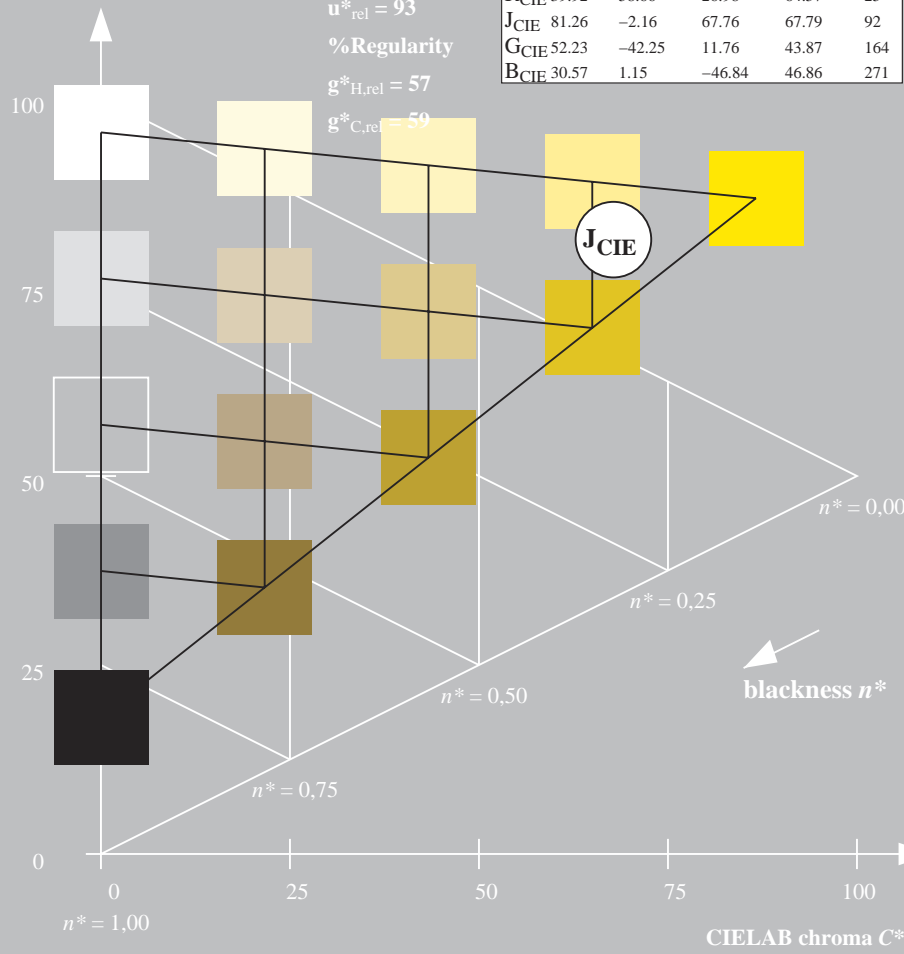
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



Output: Colorimetric Television Luminous System TLS00

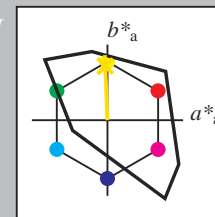
for hue  $h^* = lab^*h = 92/360 = 0.256$

LAB\*LCH, LAB\*NCH

D50: hue J

LCH\*Ma: 85 86 92

olv\*Ma: 1.0 0.82 0.0



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

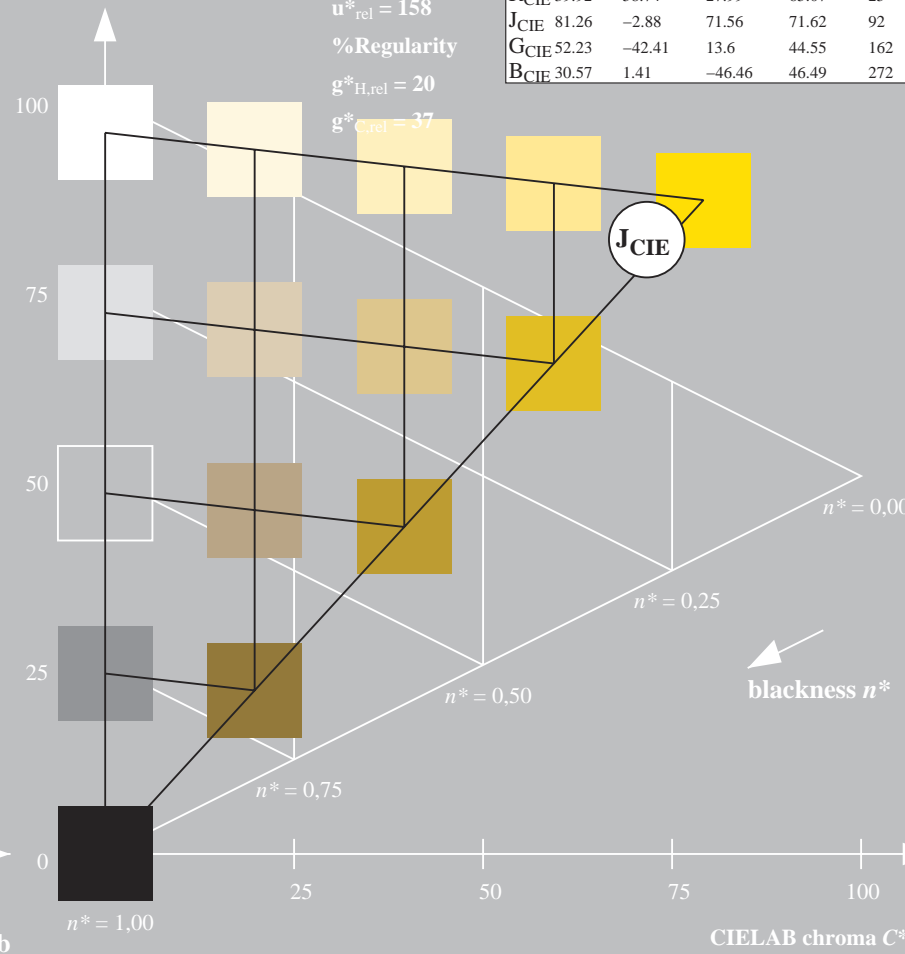
%Gamut

$u^*_{rel} = 158$

%Regularity

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

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



QE300-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00

input:  $cmY0^* setcmykcolor$

D50: Coordinate systems of 5 step colour scales for 10 hues

output:  $cmY0^* / 000n^* setcmykcolor$



Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 164/360 = 0.457$

LAB\*LCH, LAB\*NCH

D50: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25

CIE LAB lightness  $L^*$

%Gamut

$u^*_{rel} = 93$

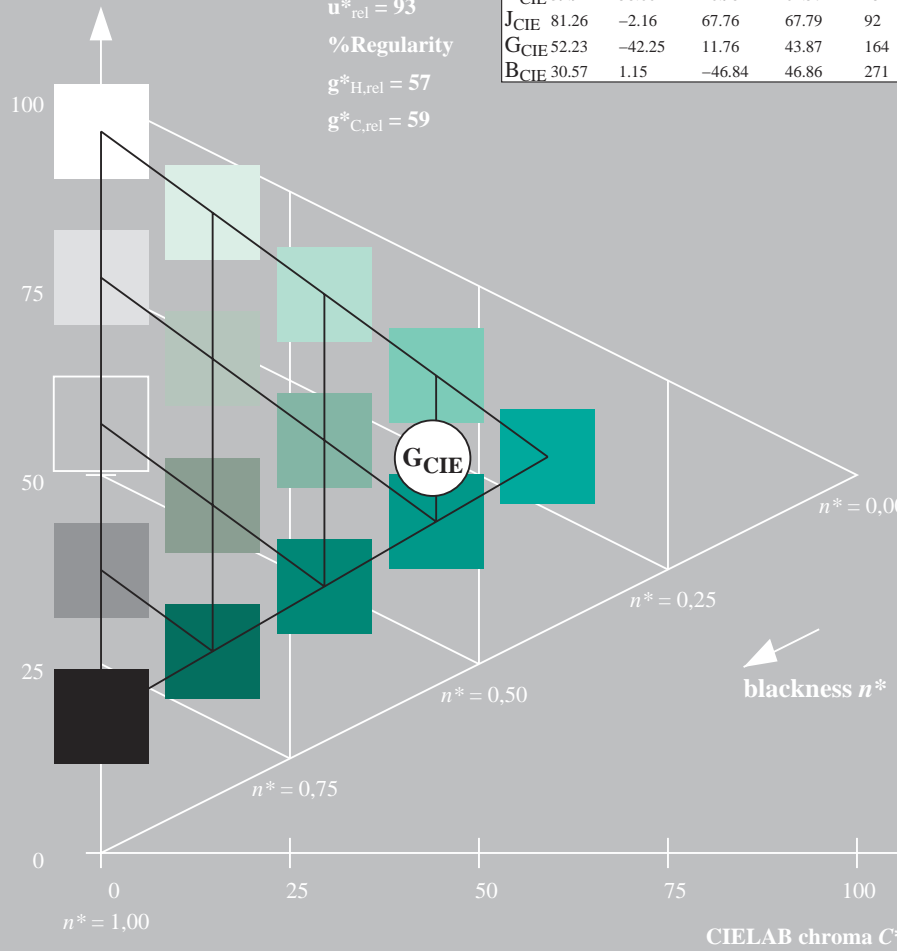
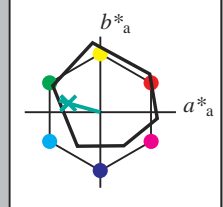
%Regularity

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

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

ORS18; adapted (a) CIE LAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271



Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D50: hue G

LCH\*Ma: 86 62 162

olv\*Ma: 0.0 1.0 0.65

CIE LAB lightness  $L^*$

%Gamut

$u^*_{rel} = 158$

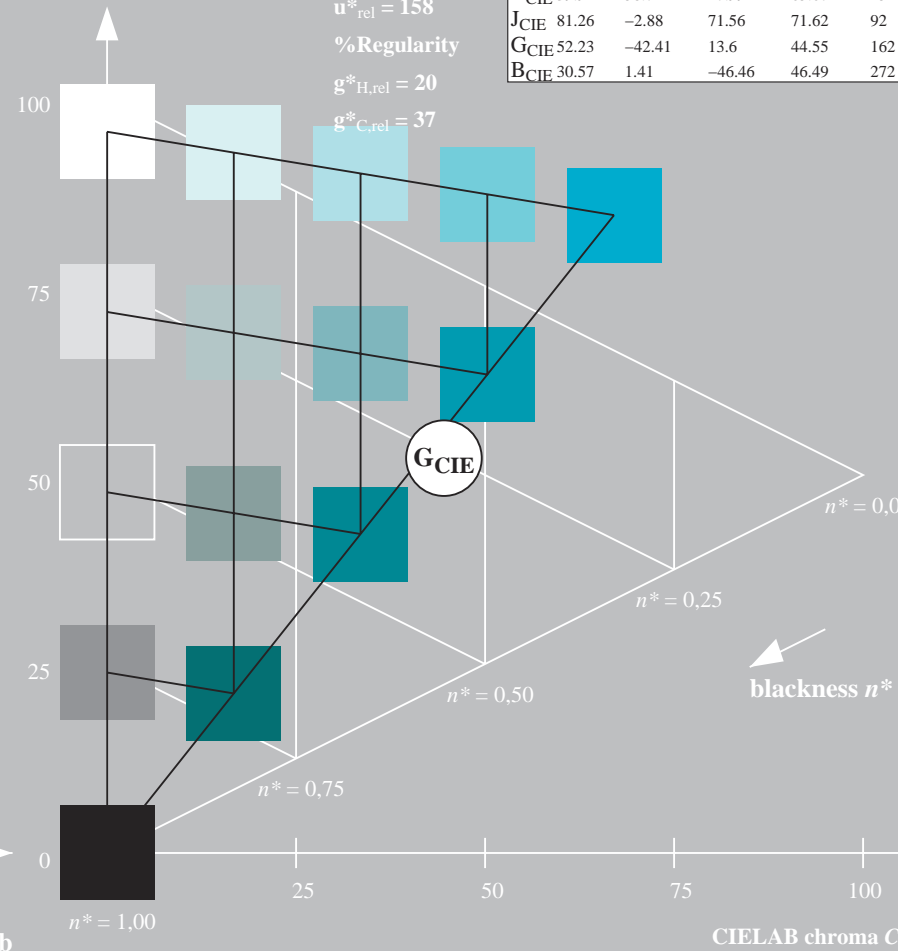
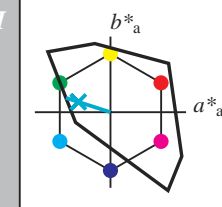
%Regularity

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

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

TLS00; adapted (a) CIE LAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272



QE300-7, 5 step scales for constant CIE LAB hue 164/360 = 0.457 (left)

5 step scales for constant CIE LAB hue 162/360 = 0.451 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00

D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmYkcolor}$

output:  $cmY0^*/000n^*_{setcmYkcolor}$

Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 271/360 = 0.754$

$LAB^*LCH, LAB^*NCH$

D50: hue B

$LCH^*Ma: 42\ 45\ 271$

$olv^*Ma: 0.0\ 0.49\ 1.0$

CIE LAB lightness  $L^*$

%Gamut

$u^*_{rel} = 93$

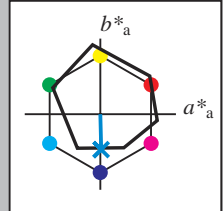
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271



Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 272/360 = 0.755$

$LAB^*LCH, LAB^*NCH$

D50: hue B

$LCH^*Ma: 65\ 49\ 272$

$olv^*Ma: 0.0\ 0.61\ 1.0$

CIE LAB lightness  $L^*$

%Gamut

$u^*_{rel} = 158$

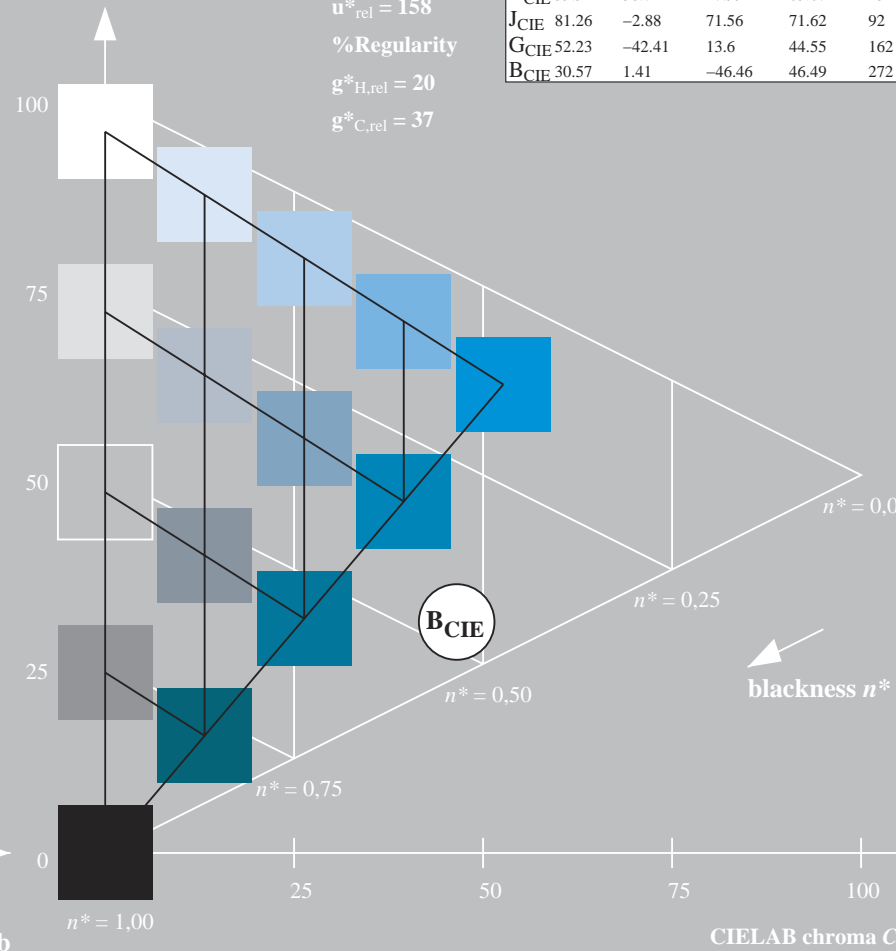
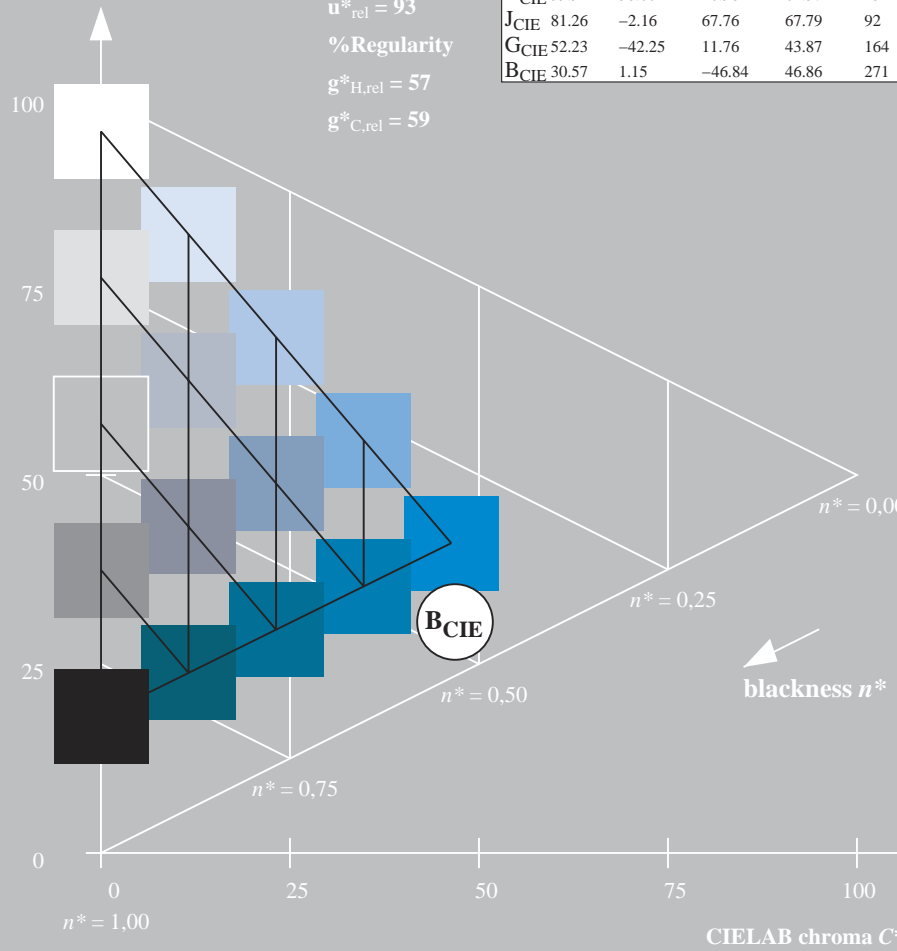
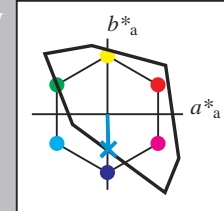
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272



QE300-7, 5 step scales for constant CIE LAB hue 271/360 = 0.754 (left)

5 step scales for constant CIE LAB hue 272/360 = 0.755 (right)

BAM-test chart QE30; Colorimetric systems ORS18 & TLS00  
 D50: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*_{setcmykcolor}$   
 output:  $cmY0^*/000n^*_{setcmykcolor}$

See for similar files: <http://www.ps.bam.de/QE30/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0.0, CIE LAB

BAM registration: 20060101-QE30/10Q/Q30E09FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE30/ Form: 10/10/Scene: 1/1, Page: 10 Page count: 10