

Input: Colorimetric Reflective System NRS11

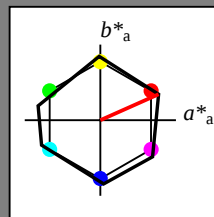
for hue $h^* = lab \cdot h = 24/360 = 0.067$

LAB*LCH, LAB*NCH

D65: hue R

LCH*Ma: 53 84 24

olv*Ma: 1.0 0.0 0.0



NRS11; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272

CIELAB lightness L^*

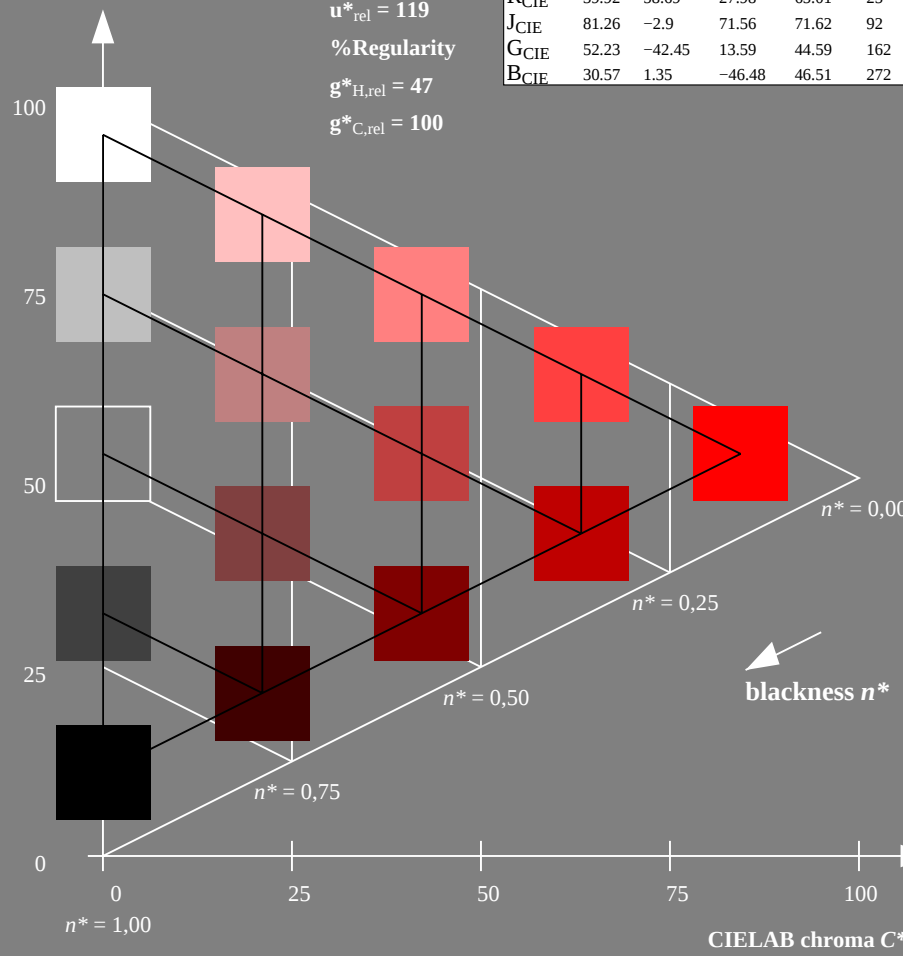
% Gamut

$u_{rel}^* = 119$

% Regularity

$g_{H,rel}^* = 47$

$g_{C,rel}^* = 100$



TE370-7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

Output: Colorimetric Reflective System ORS18

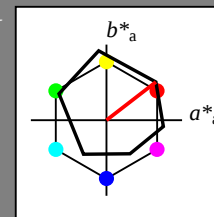
for hue $h^* = lab \cdot h = 38/360 = 0.105$

LAB*LCH, LAB*NCH

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0



ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

CIELAB lightness L^*

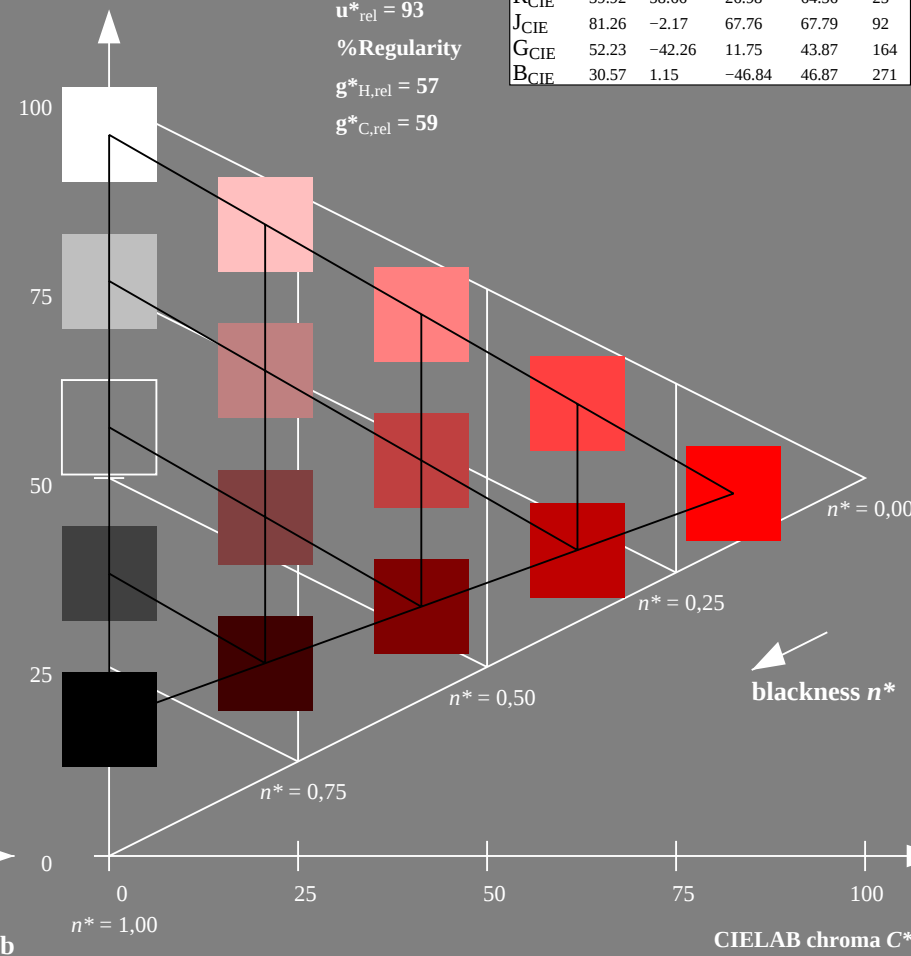
% Gamut

$u_{rel}^* = 93$

% Regularity

$g_{H,rel}^* = 57$

$g_{C,rel}^* = 59$



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

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

output: no change compared to input

output: no change compared to input

Input: Colorimetric Reflective System NRS11

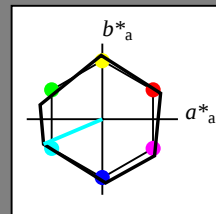
for hue $h^* = lab \cdot h = 203/360 = 0.564$

LAB*LCH, LAB*NCH

D65: hue G50B

LCH*Ma: 53 84 203

olv*Ma: 0.0 1.0 1.0



NRS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272

CIELAB lightness L^*

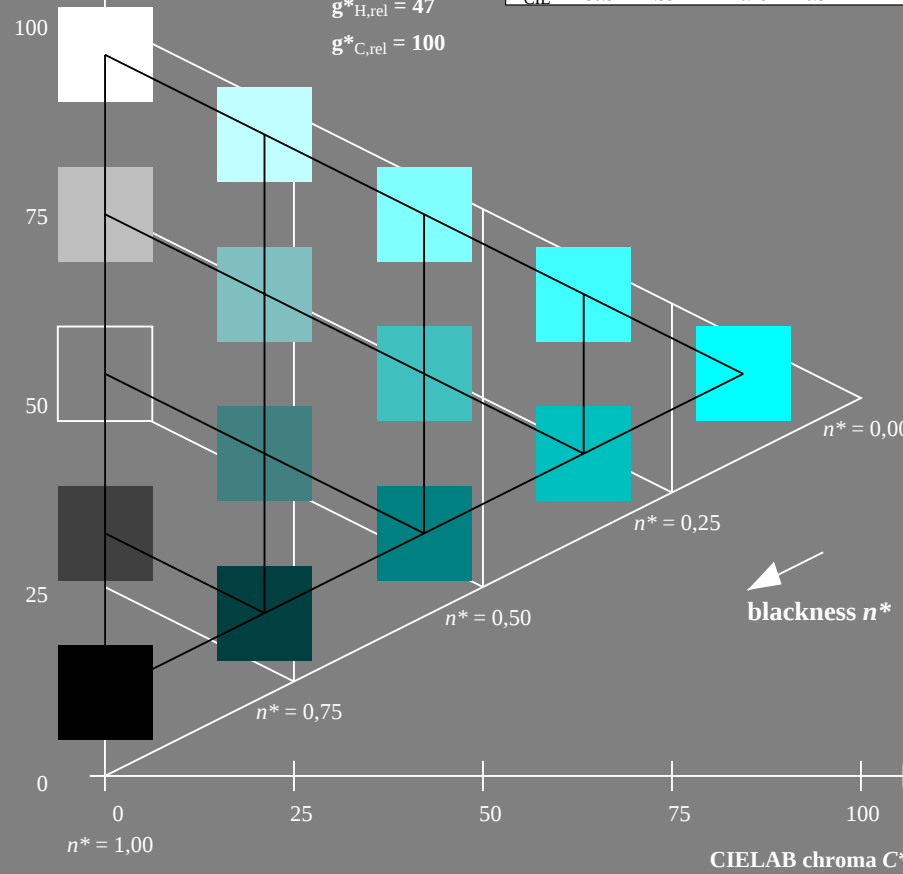
% Gamut

$u^*_{rel} = 119$

% Regularity

$g^*_{H,rel} = 47$

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



TE370-7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

Output: Colorimetric Reflective System ORS18

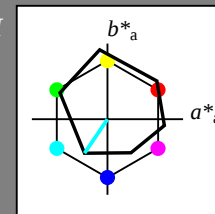
for hue $h^* = lab \cdot h = 236/360 = 0.656$

LAB*LCH, LAB*NCH

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

CIELAB lightness L^*

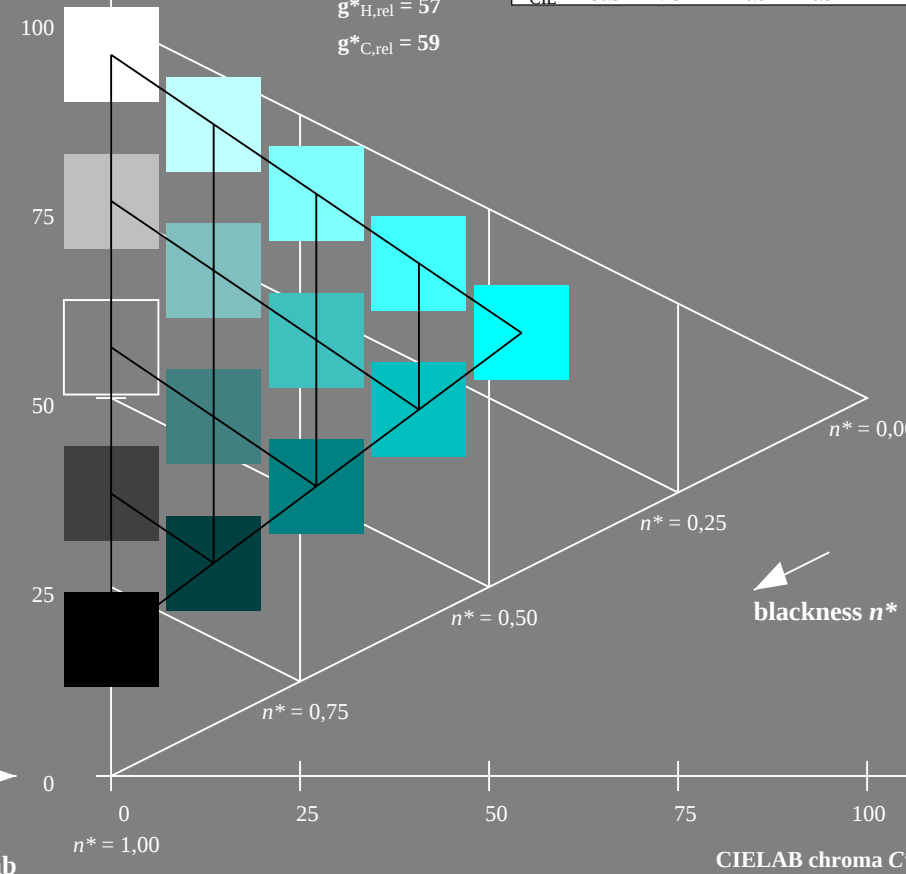
% Gamut

$u^*_{rel} = 93$

% Regularity

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

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



5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Reflective System NRS11

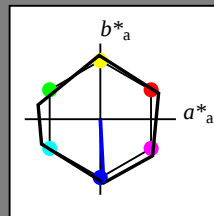
for hue $h^* = lab \cdot h = 273/360 = 0.758$

LAB*LCH, LAB*NCH

D65: hue B

LCH*Ma: 53 84 273

olv*Ma: 0.0 0.0 1.0



NRS11; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272

CIELAB lightness L^*

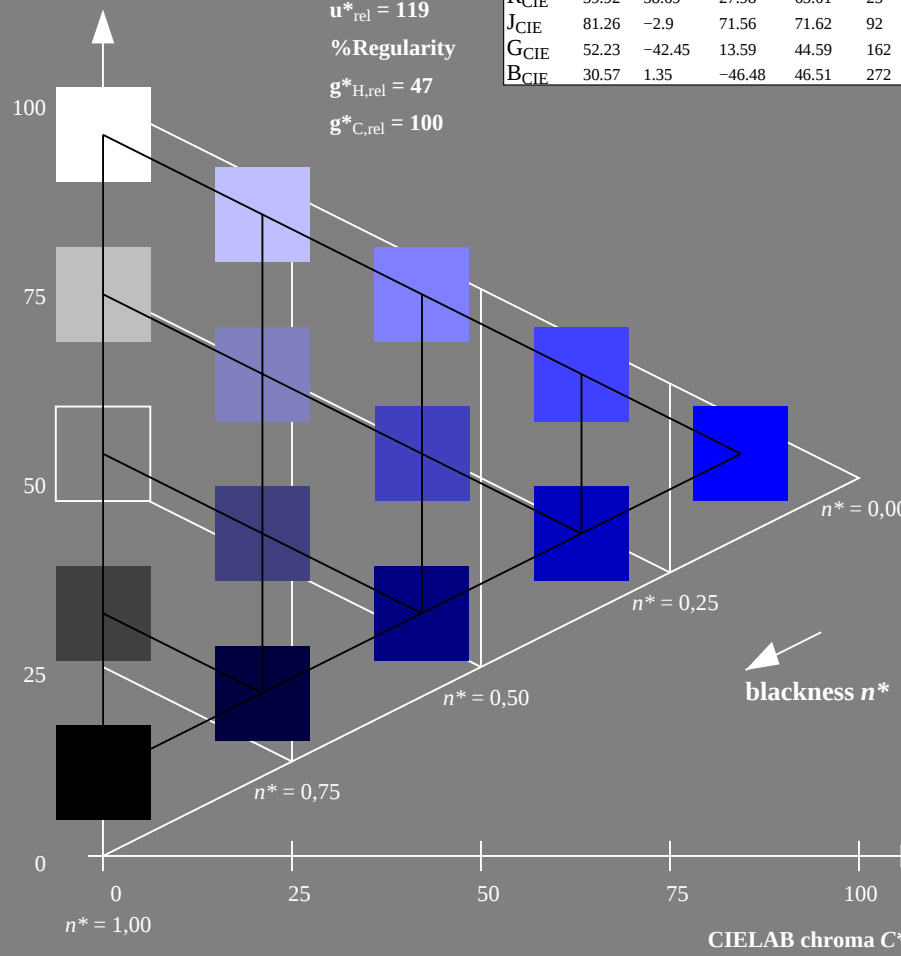
% Gamut

$u_{rel}^* = 119$

% Regularity

$g_{H,rel}^* = 47$

$g_{C,rel}^* = 100$



TE370-7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

Output: Colorimetric Reflective System ORS18

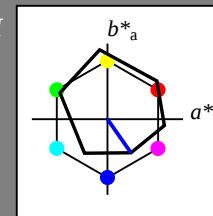
for hue $h^* = lab \cdot h = 305/360 = 0.847$

LAB*LCH, LAB*NCH

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

CIELAB lightness L^*

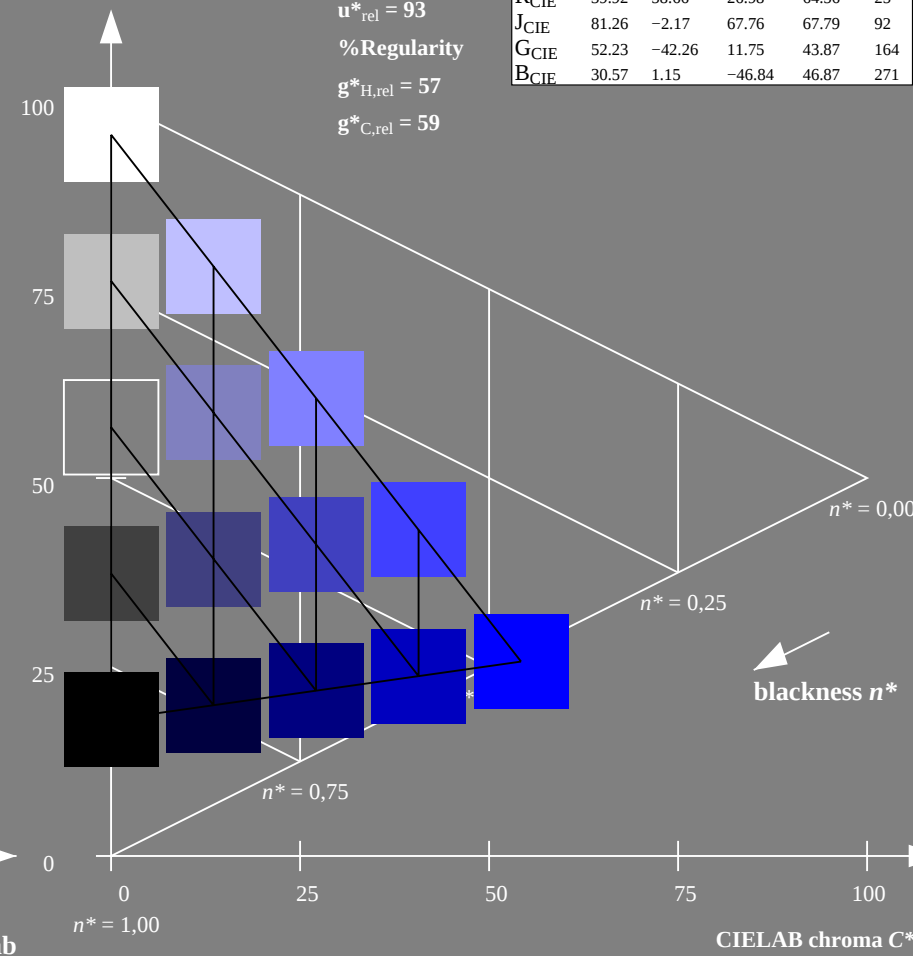
% Gamut

$u_{rel}^* = 93$

% Regularity

$g_{H,rel}^* = 57$

$g_{C,rel}^* = 59$



5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Reflective System NRS11

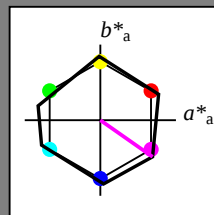
for hue $h^* = lab \cdot h = 325/360 = 0.903$

LAB*LCH, LAB*NCH

D65: hue B50R

LCH*Ma: 53 84 325

olv*Ma: 1.0 0.0 1.0



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272

CIELAB lightness L^*

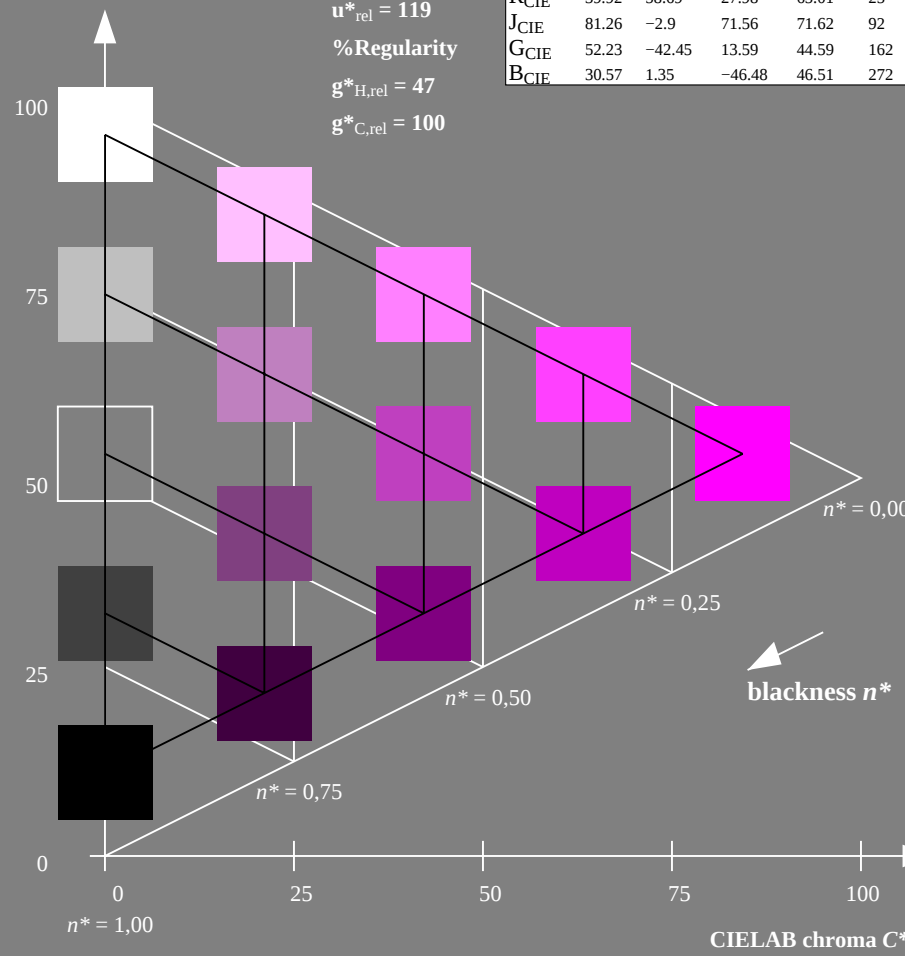
% Gamut

$u^*_{rel} = 119$

% Regularity

$g^*_{H,rel} = 47$

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



TE370-7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

Output: Colorimetric Reflective System ORS18

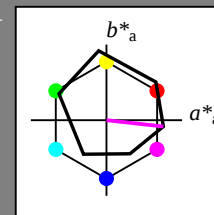
for hue $h^* = lab \cdot h = 354/360 = 0.982$

LAB*LCH, LAB*NCH

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

CIELAB lightness L^*

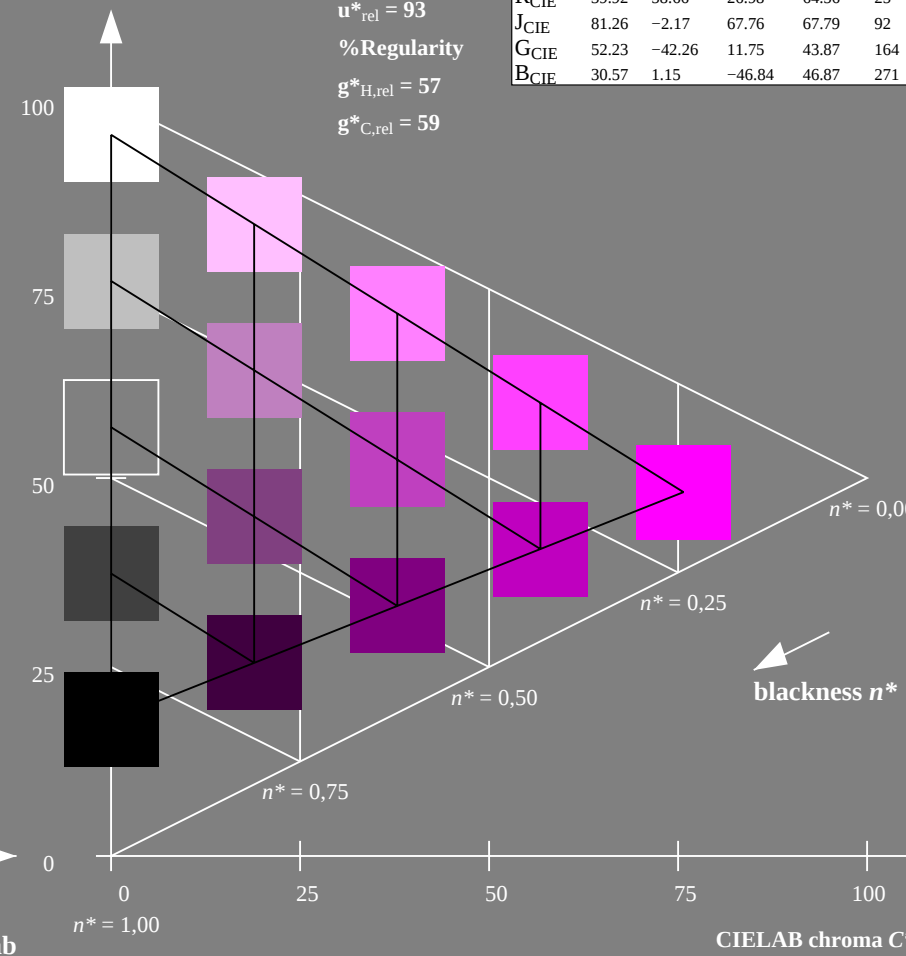
% Gamut

$u^*_{rel} = 93$

% Regularity

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

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



5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Reflective System NRS11

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

LAB*LCH, LAB*NCH

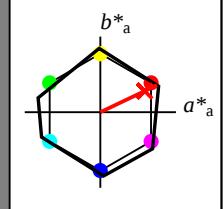
D65: hue R

LCH*Ma: 53 83 25

olv*Ma: 1.0 0.03 0.0

NRS11; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272



CIELAB lightness L^*

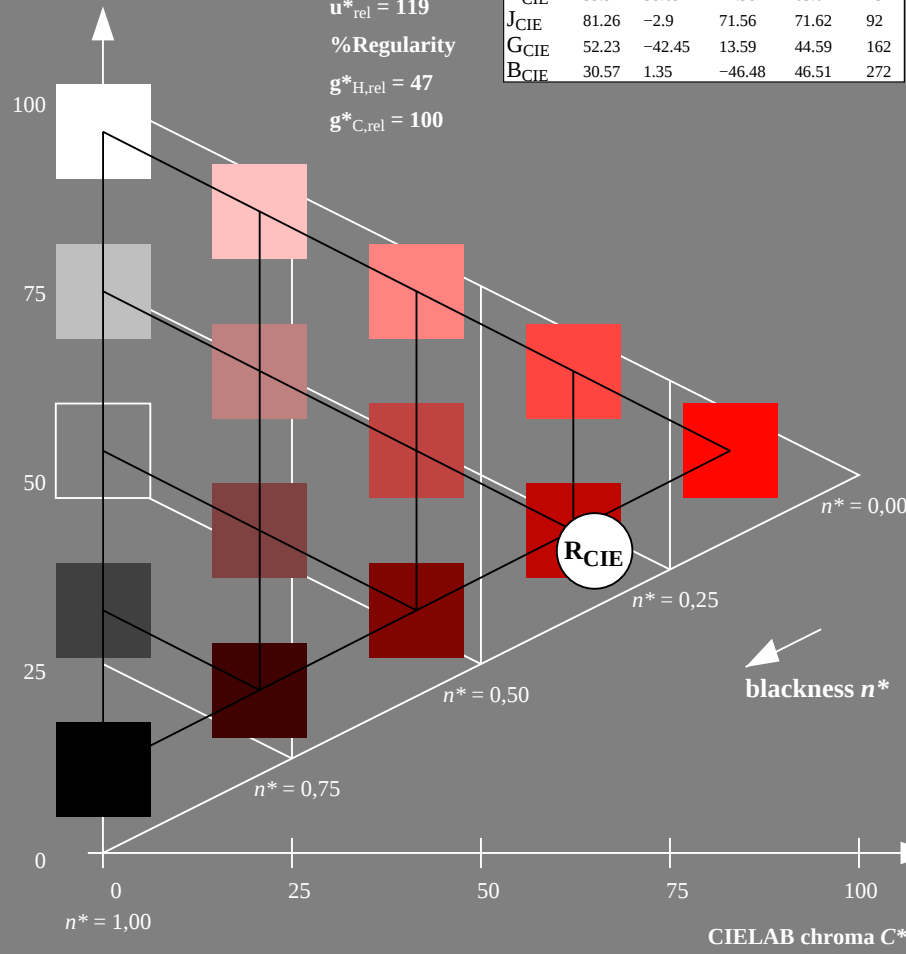
% Gamut

$u^*_{rel} = 119$

% Regularity

$g^*_{H,rel} = 47$

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



TE370-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

Output: Colorimetric Reflective System ORS18

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

LAB*LCH, LAB*NCH

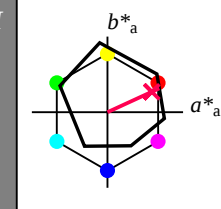
D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271



CIELAB lightness L^*

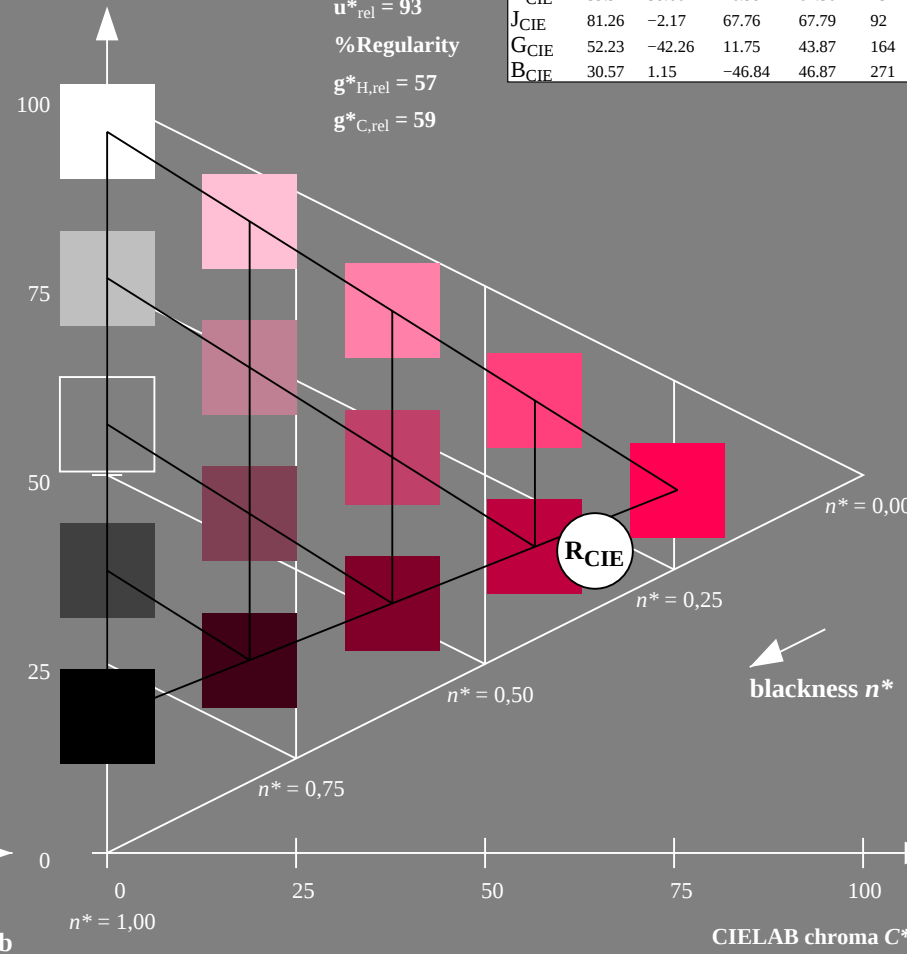
% Gamut

$u^*_{rel} = 93$

% Regularity

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

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



5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

input: olv* setrgbcolor

output: no change compared to input

output: no change compared to input

Input: Colorimetric Reflective System NRS11

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

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 53 80 162

olv*Ma: 0.08 1.0 0.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 119$

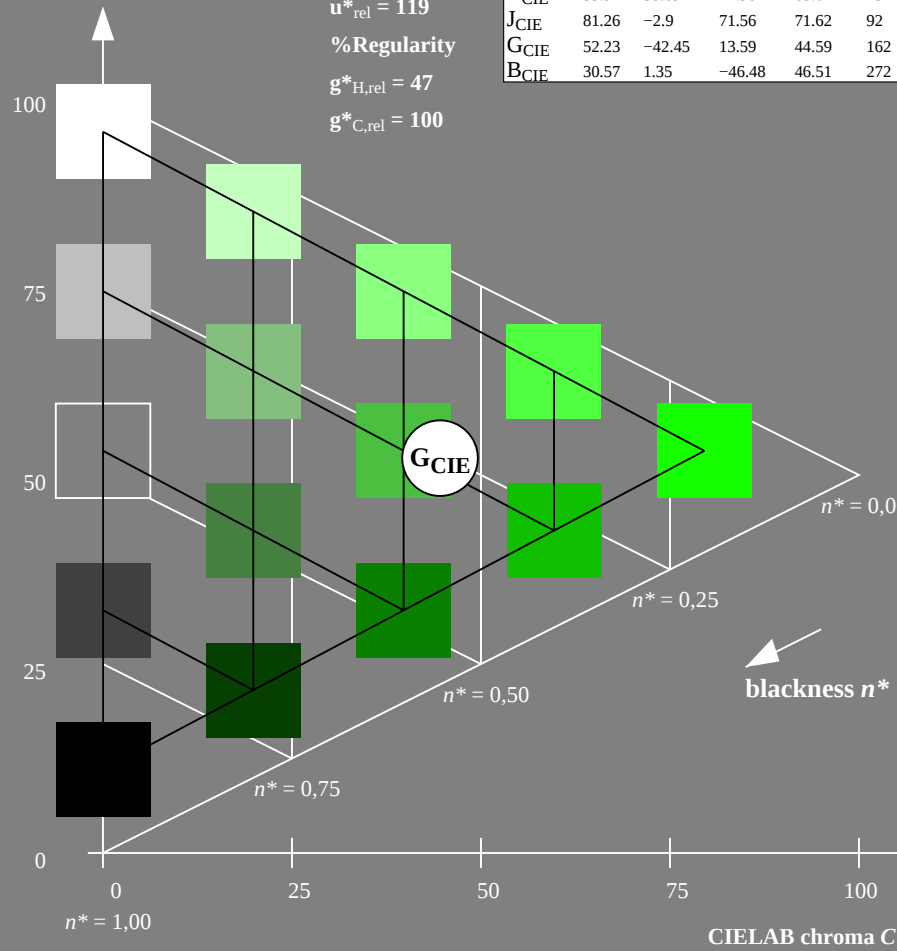
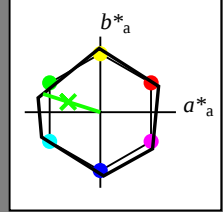
% Regularity

$g^*_{H,rel} = 47$

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

NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272



TE370-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Reflective System ORS18

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

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 93$

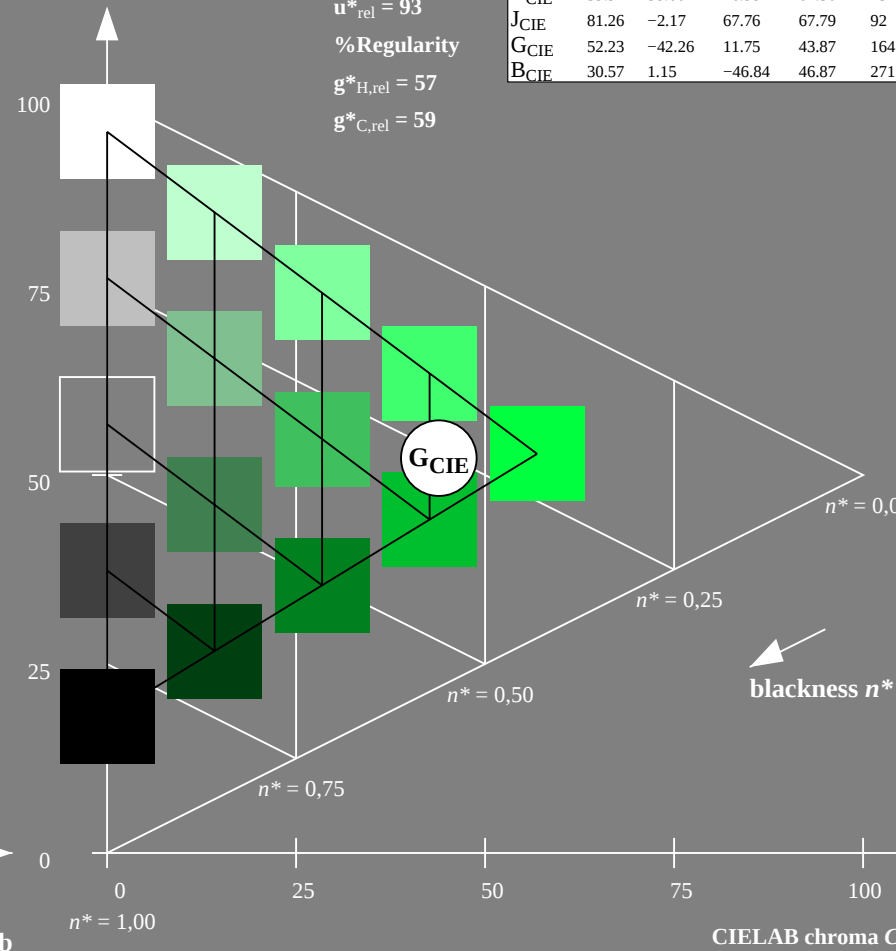
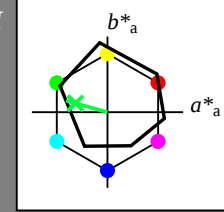
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart TE37; Colorimetric systems NRS11 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

output: *no change compared to input*