

Input: Colorimetric Television Luminous System TLS00

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

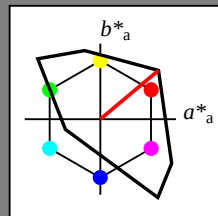
$lab \cdot tch$ and $lab \cdot nch$

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

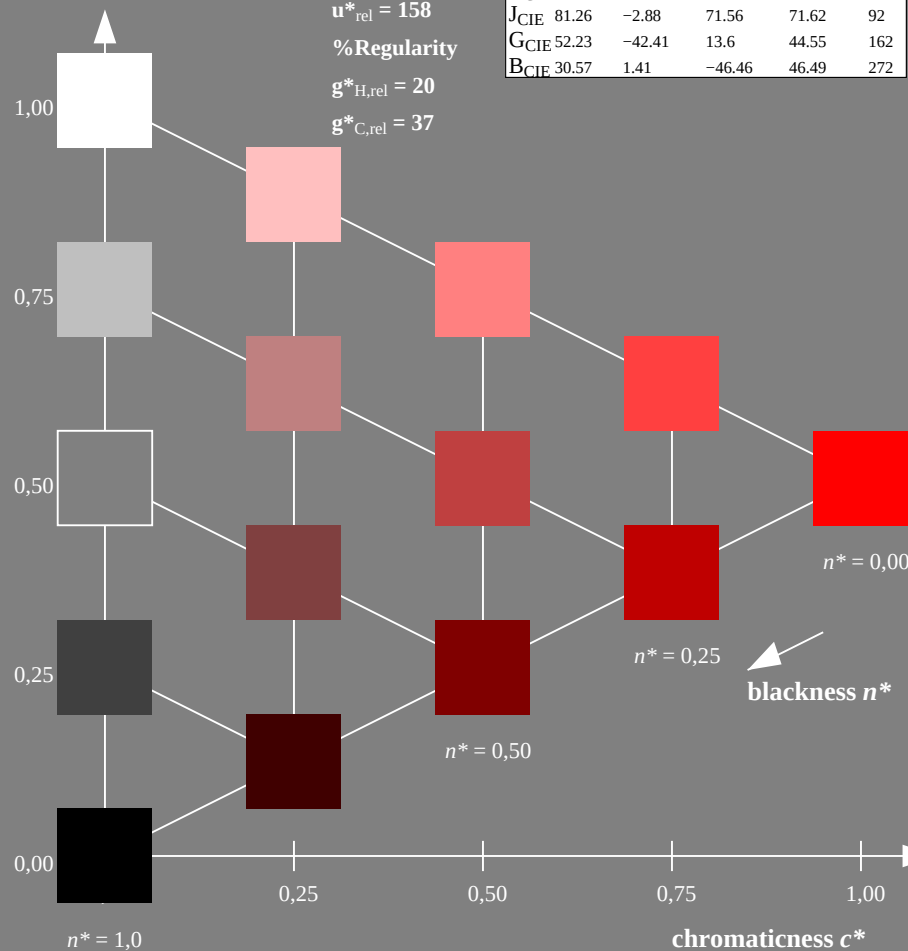
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	-2.88	71.56	71.62	92
G_{CIE}	52.23	-42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

Output: Colorimetric Offset Reflective System ORS18

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

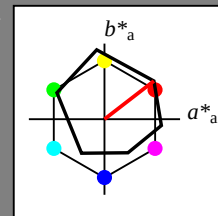
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

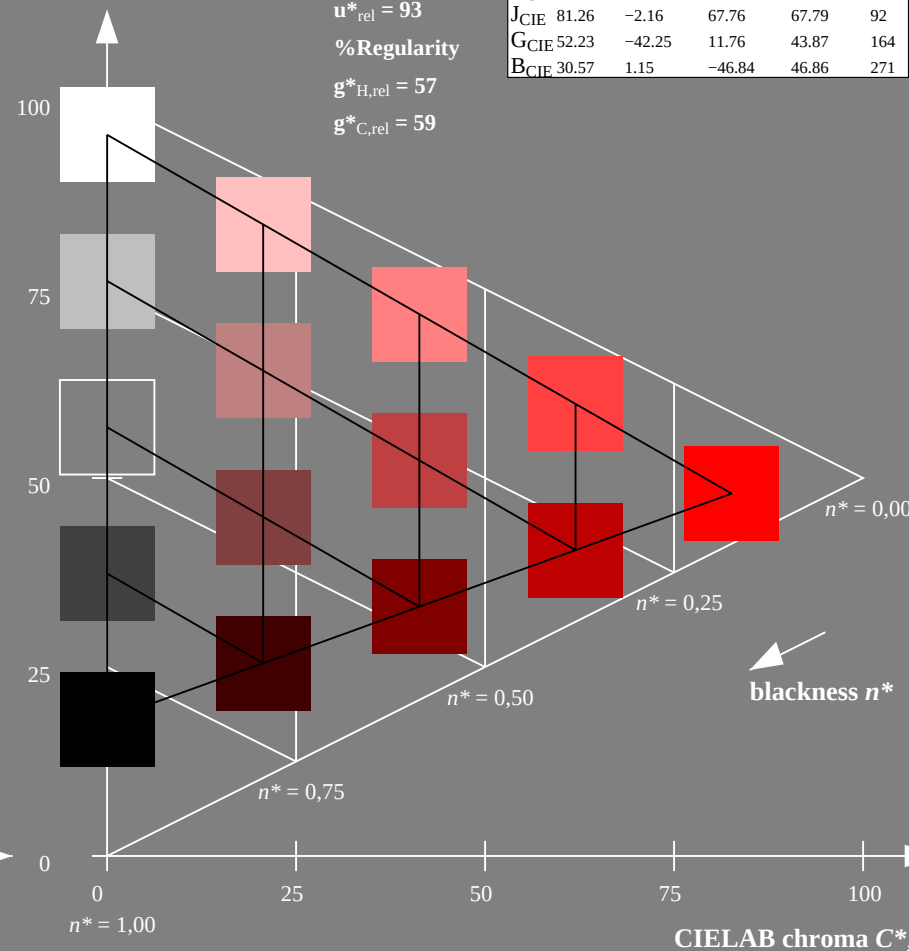
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	-2.16	67.76	67.79	92
G_{CIE}	52.23	-42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	-46.84	46.86	271



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

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS00

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

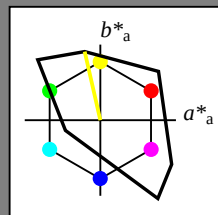
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

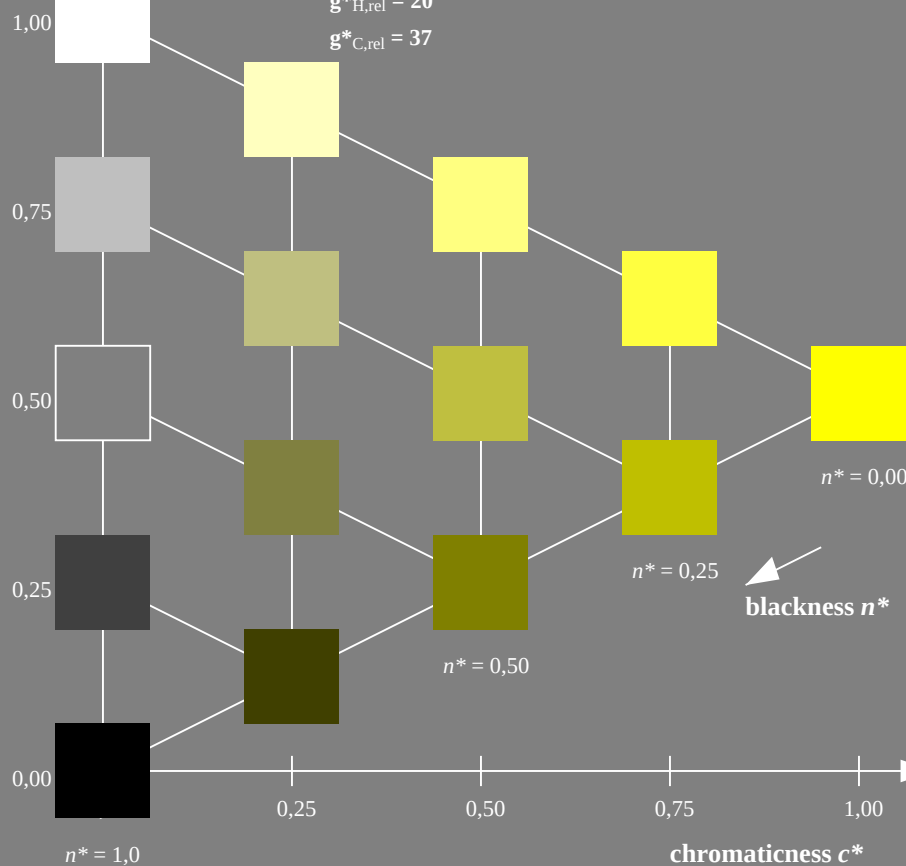
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	-2.88	71.56	71.62	92
G_{CIE}	52.23	-42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)

Output: Colorimetric Offset Reflective System ORS18

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

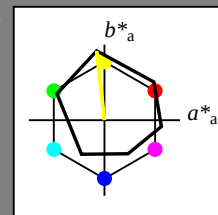
LAB^*LCH , LAB^*NCH

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

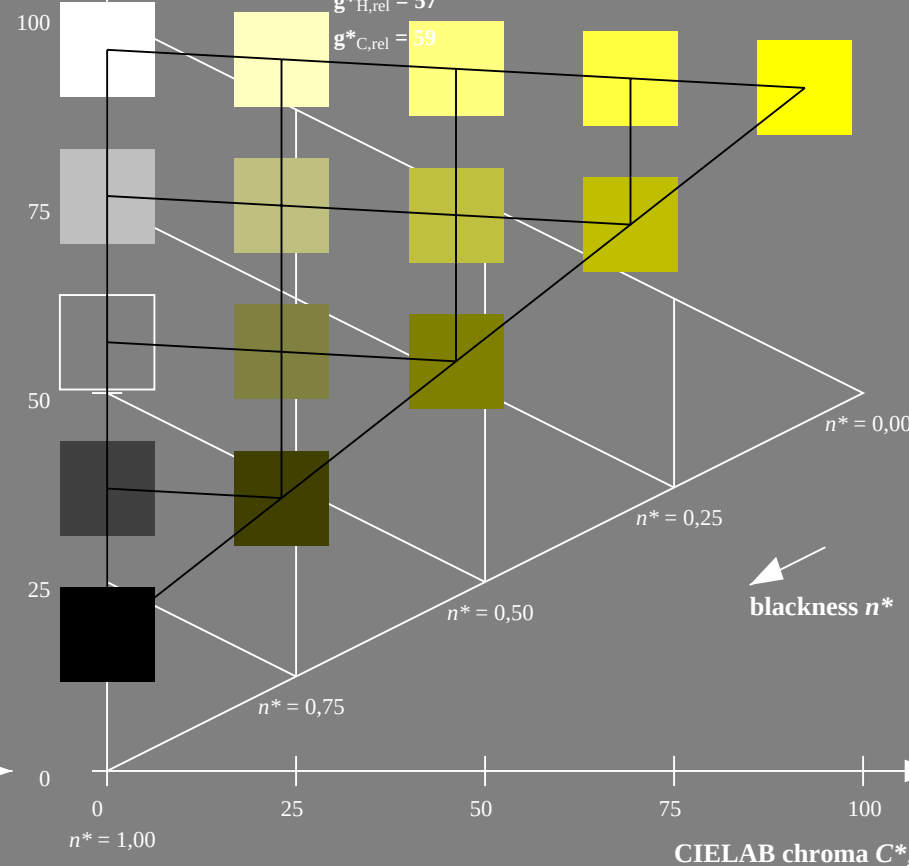
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	-2.16	67.76	67.79	92
G_{CIE}	52.23	-42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	-46.84	46.86	271



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

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

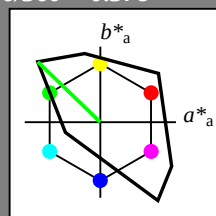
lab*tch and lab*nch

olv*Ma: 0.0 1.0 0.0

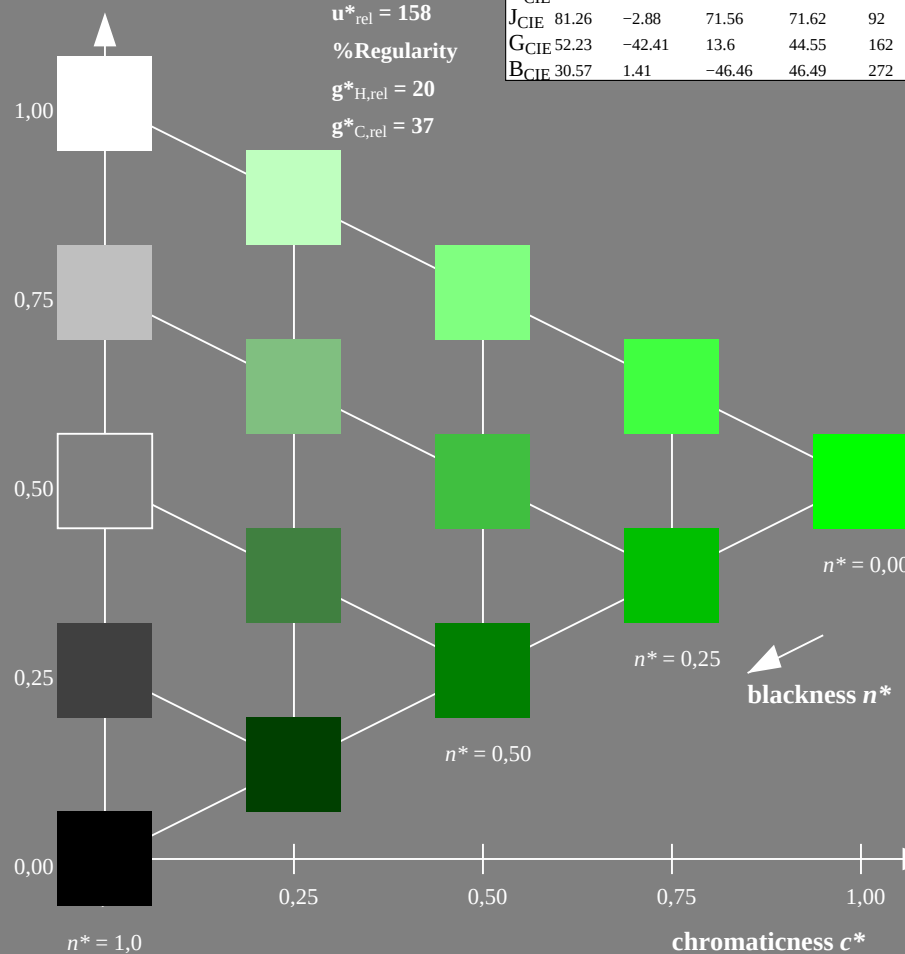
% Gamut

$$\mathbf{u}_{rel}^* = 158$$

%Regularity

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


TLS00; adapted (a) CIELAB data					
	L^*_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _m	50.5	76.92	64.55	100.42	40
Y _m	92.66	-20.69	90.75	93.08	103
L _m	83.63	-82.75	79.9	115.04	136
C _m	86.88	-46.16	-13.55	48.12	196
V _m	30.39	76.06	-103.59	128.52	306
M _m	57.3	94.35	-58.41	110.97	328
N _m	0.01	0.0	0.0	0.0	0
W _m	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)

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

LAB*LCH, LAB*NCH

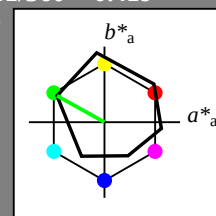
olv*Ma: 0.0 1.0 0.0

CIELAB lightness L^*

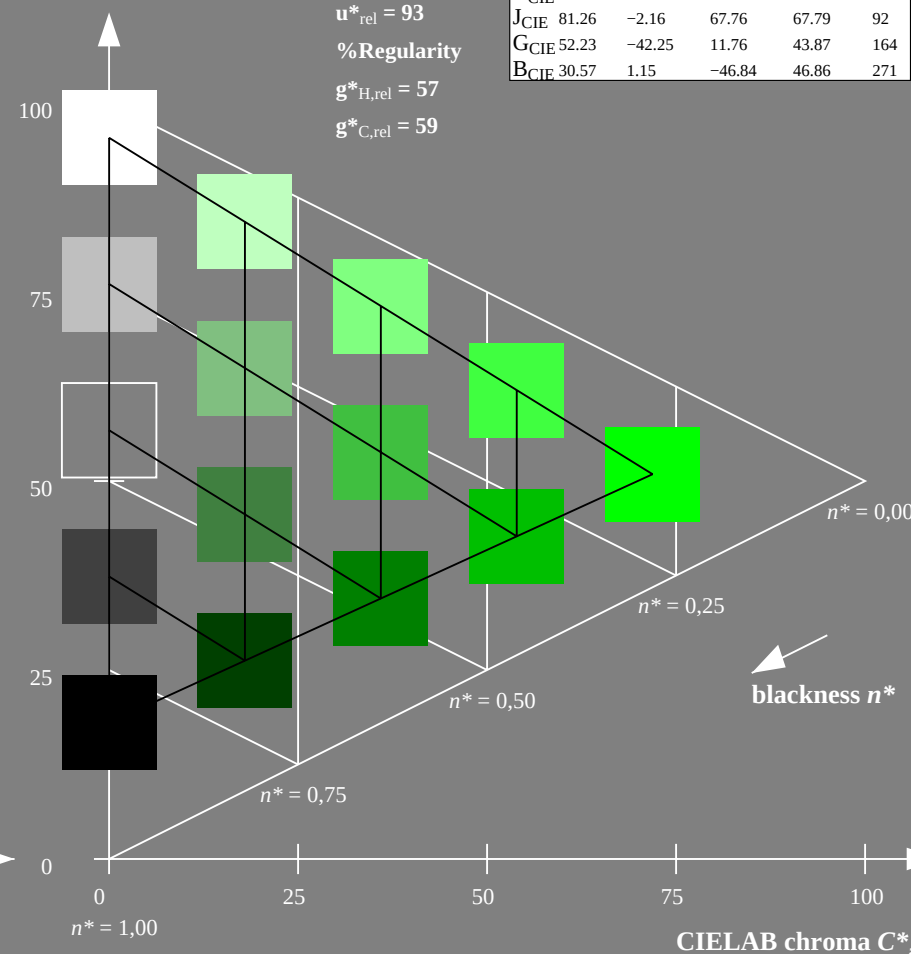
% Gamut

$$\mathbf{u}_{rel}^* = 93$$

%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 _m	47.94	65.39	50.52	82.63	38
Y _m	90.37	-10.26	91.75	92.32	96
L _m	50.9	-62.83	34.96	71.91	151
C _m	58.62	-30.34	-45.01	54.3	236
V _m	25.72	31.1	-44.4	54.22	305
M _m	48.13	75.28	-8.36	75.74	354
N _m	18.01	0.0	0.0	0.0	0
W _m	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271



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

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS00

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

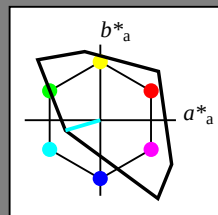
$lab \cdot tch$ and $lab \cdot nch$

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

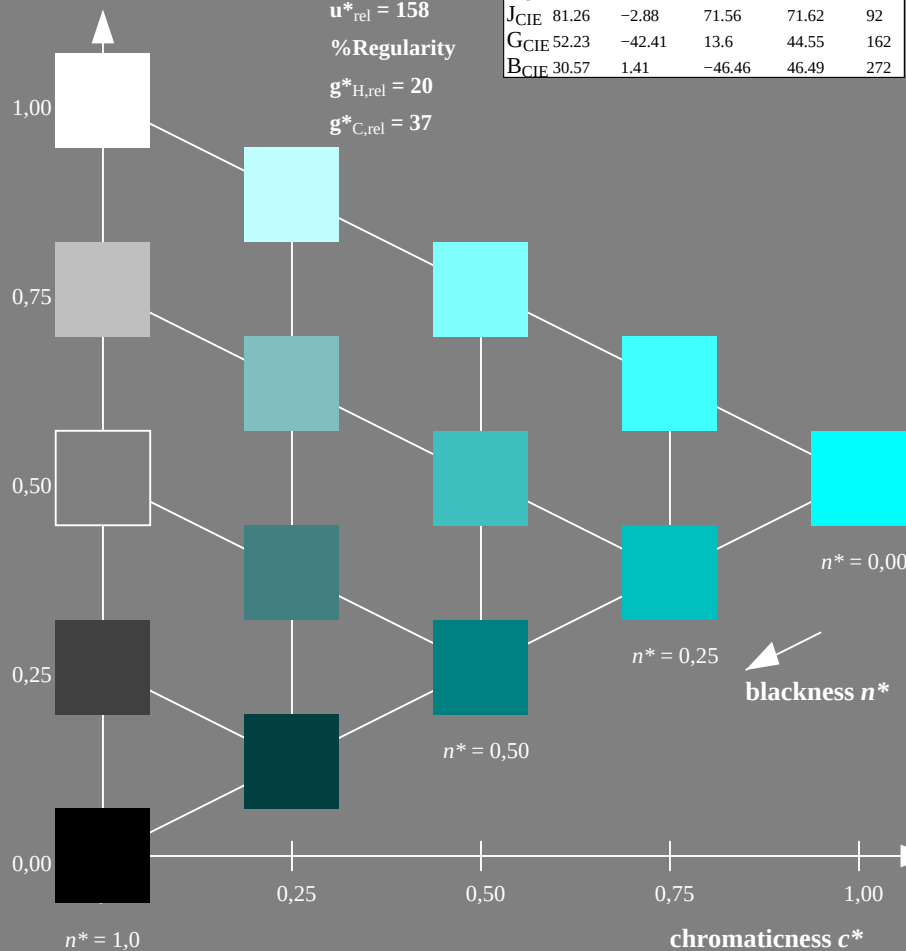
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	-2.88	71.56	71.62	92
G_{CIE}	52.23	-42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)

Output: Colorimetric Offset Reflective System ORS18

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

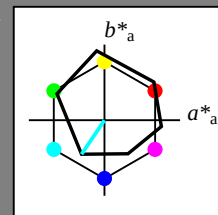
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

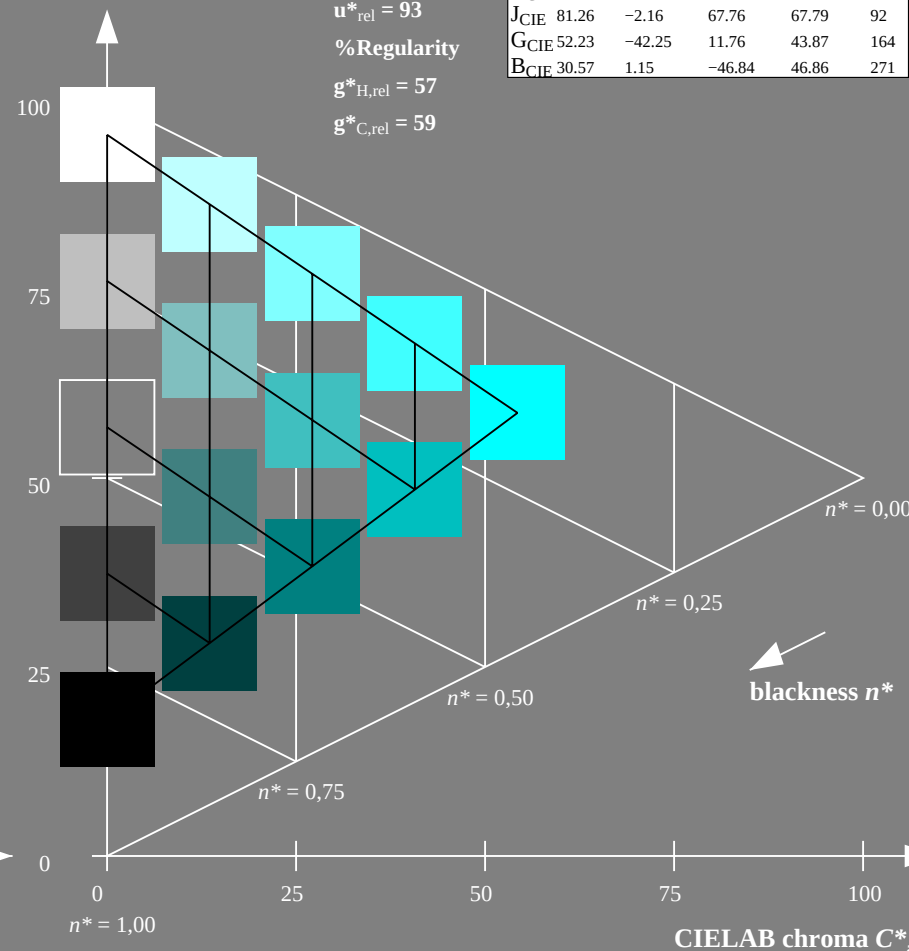
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.57	25
J_{CIE}	81.26	-2.16	67.76	67.79	92
G_{CIE}	52.23	-42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	-46.84	46.86	271



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

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS00

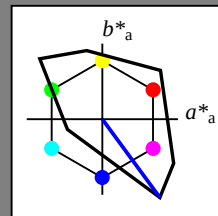
for hue $h^* = lab^*h = 306/360 = 0.851$

lab*tch* and *lab*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

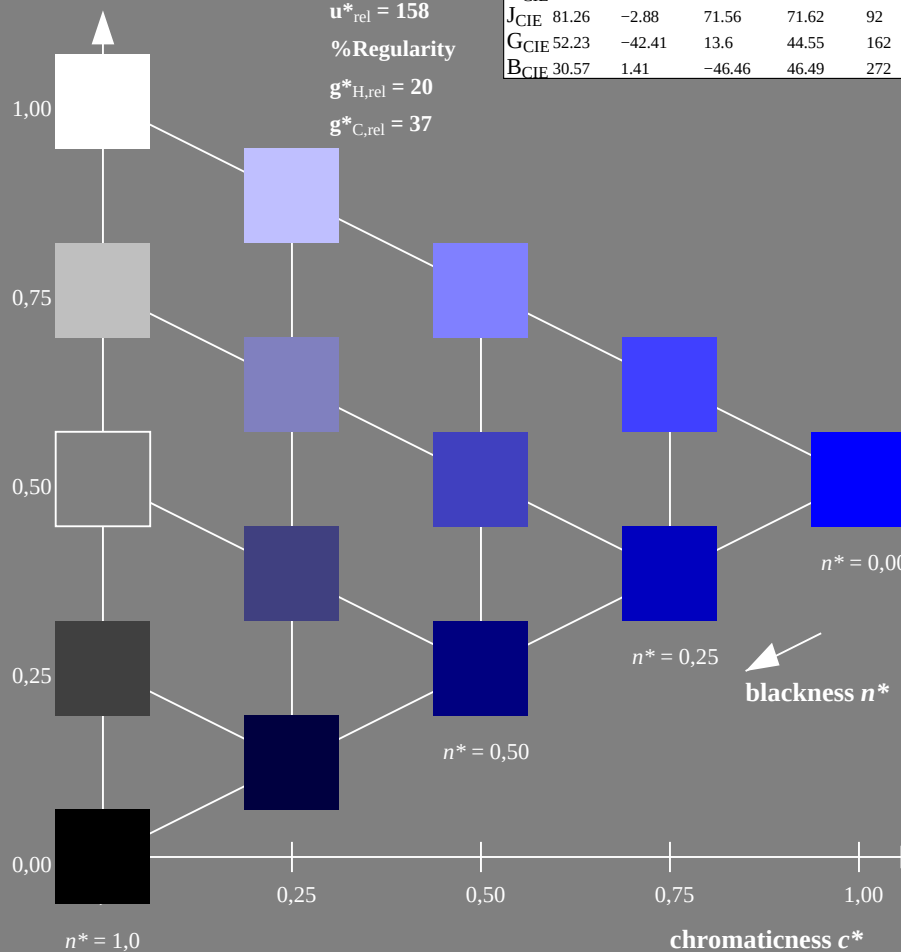


triangle lightness t^*

%Gamut

$$\mathbf{u}_{\text{rel}}^* = 158$$

%Regularity

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


NE250-7, 5 step scales for constant CIELAB hue 306/360 = 0.851 (left)

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

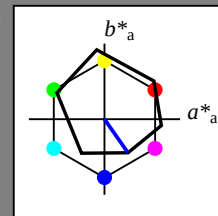
for hue $h^* = lab^*h = 305/360 = 0.847$

*LAB*LCH, LAB*NCH*

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

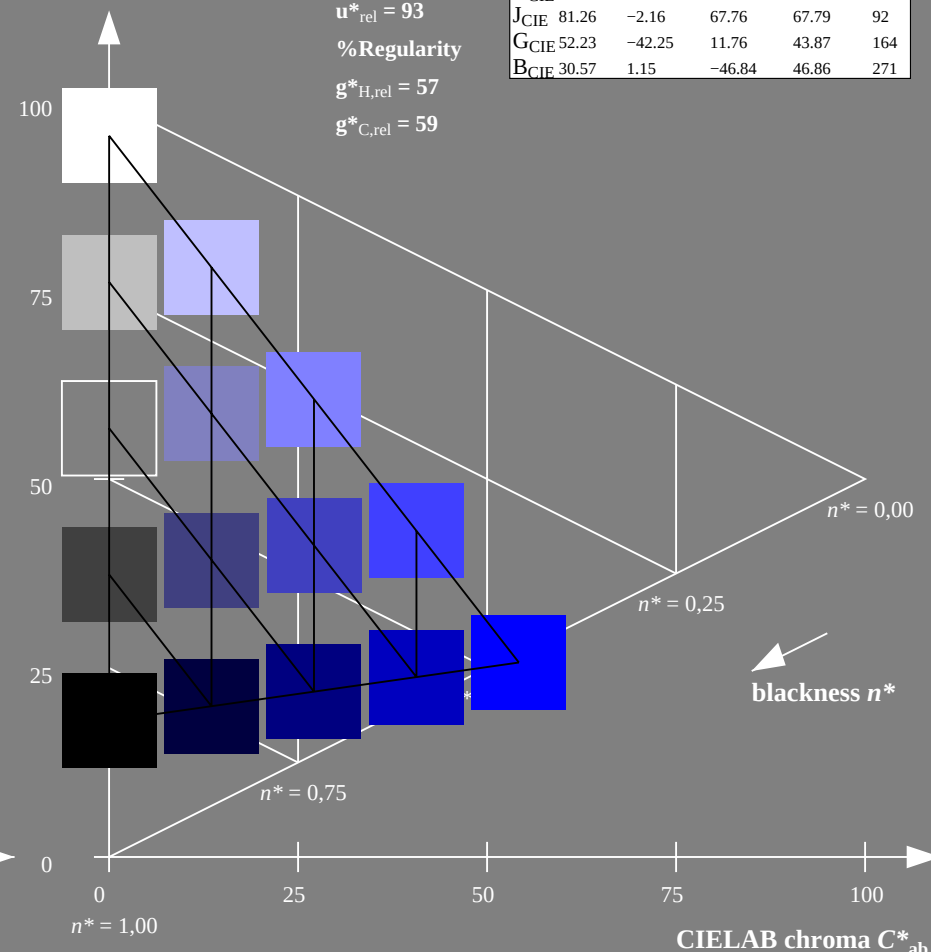


CIELAB lightness L^*

%Gamut

$$\mathbf{u}_{\text{rel}}^* = 93$$

%Regularity

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


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

input: *olv** *setrgbcolor*

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS00

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

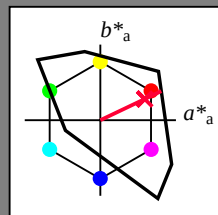
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

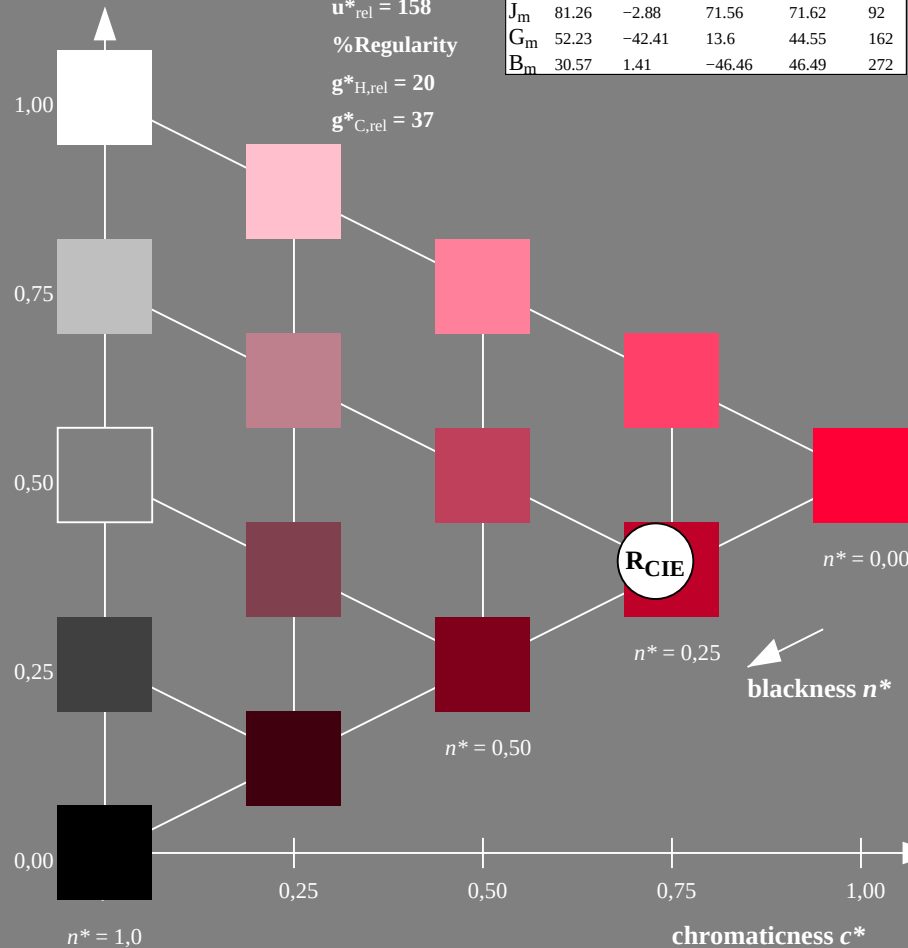
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.74	27.99	65.07	25
J_m	81.26	-2.88	71.56	71.62	92
G_m	52.23	-42.41	13.6	44.55	162
B_m	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Offset Reflective System ORS18

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

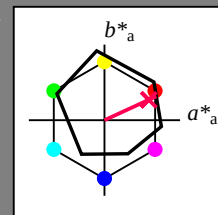
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

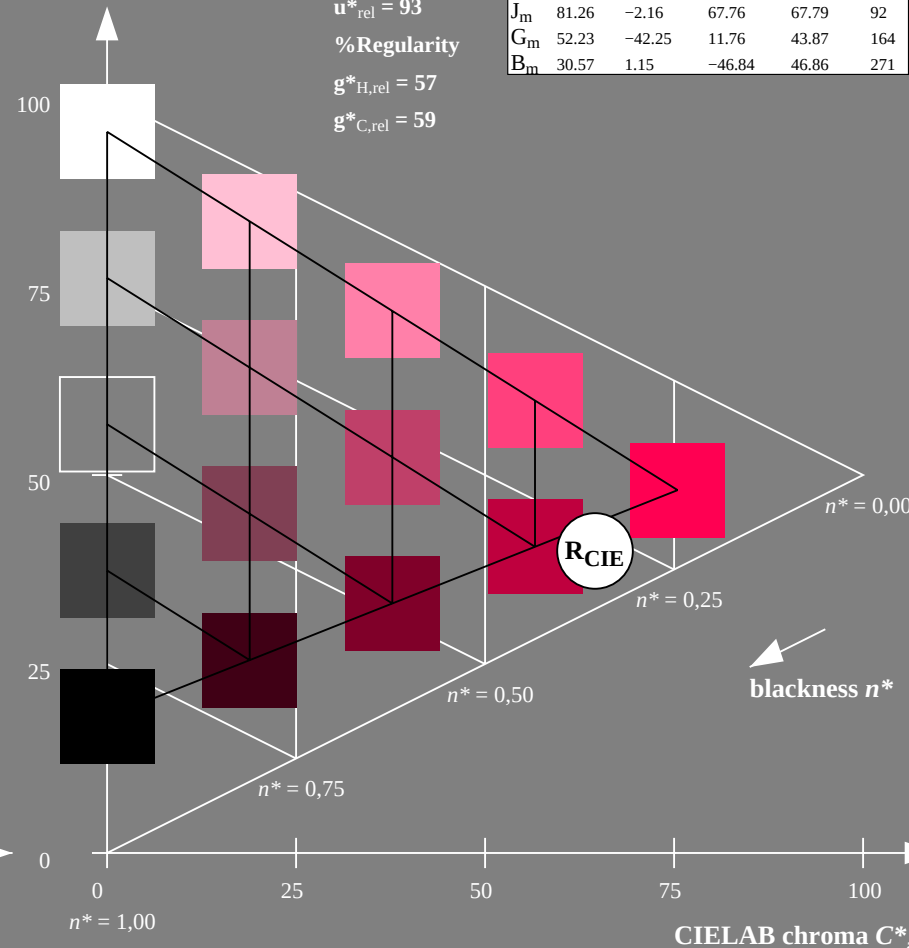
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.66	26.98	64.57	25
J_m	81.26	-2.16	67.76	67.79	92
G_m	52.23	-42.25	11.76	43.87	164
B_m	30.57	1.15	-46.84	46.86	271



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

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS00

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

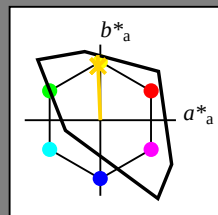
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

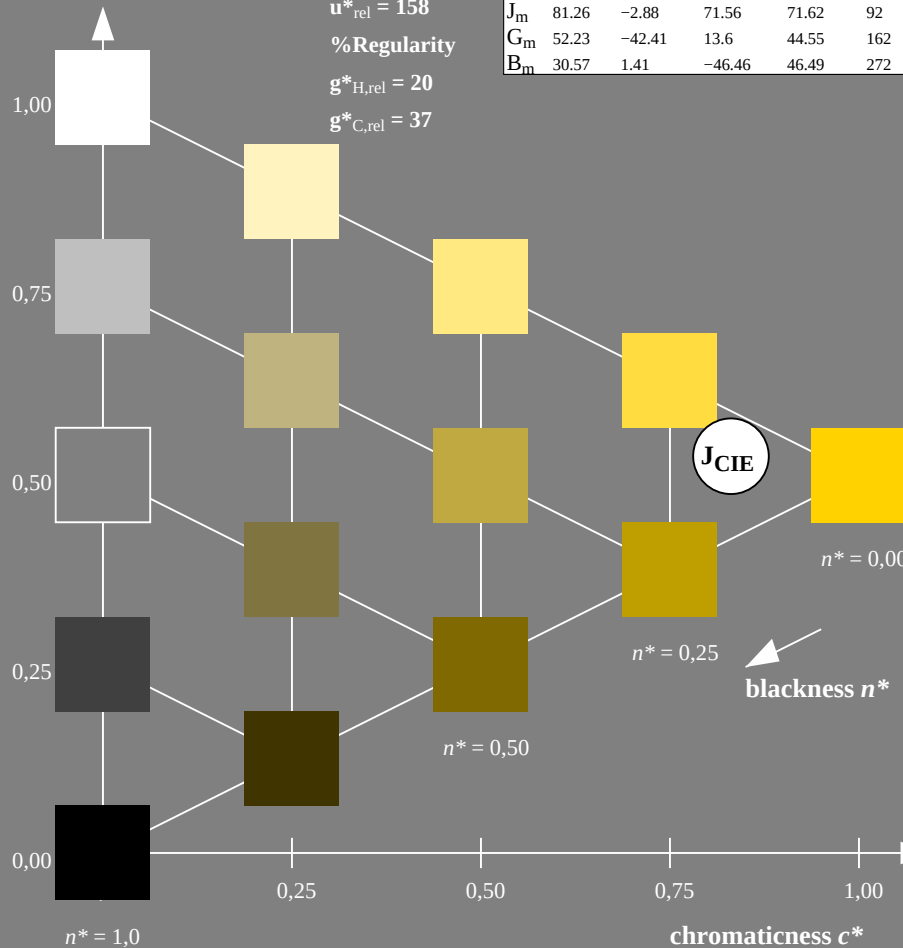
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.74	27.99	65.07	25
J_m	81.26	-2.88	71.56	71.62	92
G_m	52.23	-42.41	13.6	44.55	162
B_m	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

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

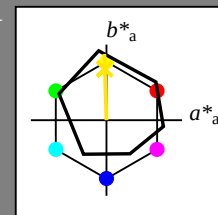
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

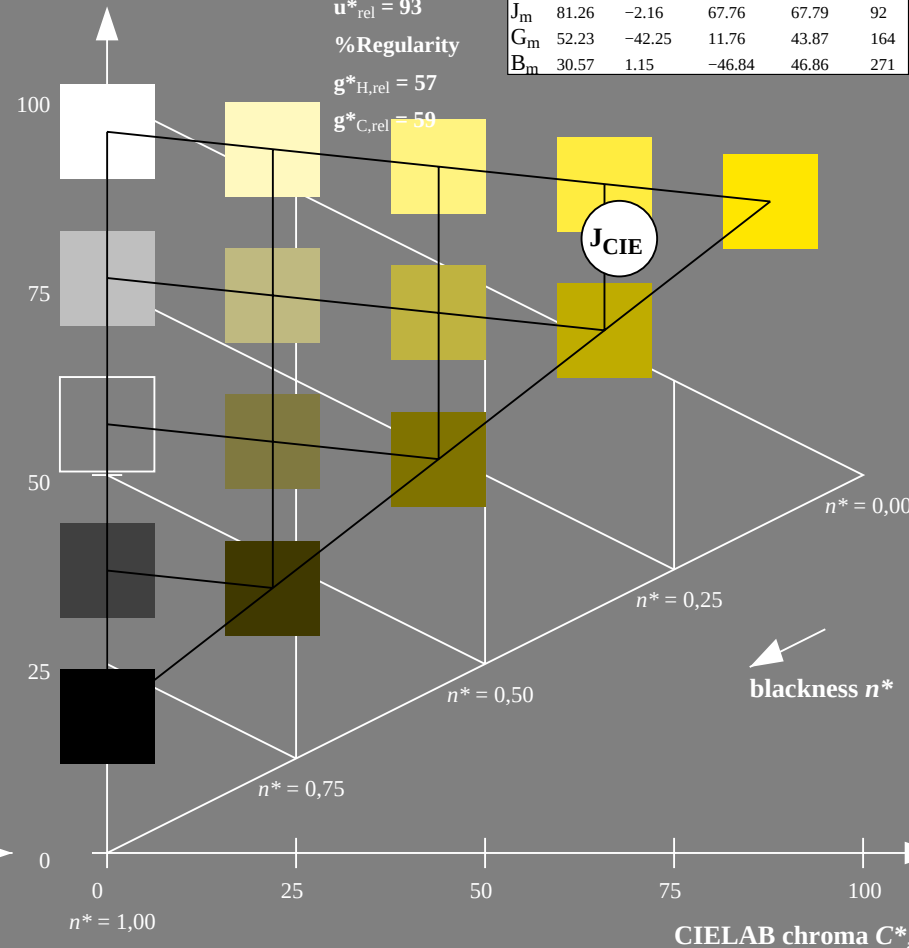
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.66	26.98	64.57	25
J_m	81.26	-2.16	67.76	67.79	92
G_m	52.23	-42.25	11.76	43.87	164
B_m	30.57	1.15	-46.84	46.86	271



5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS00

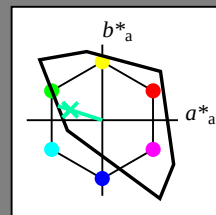
for hue $h^* = lab^*h = 162/360 = 0.451$

lab*tch* and *lab*nch

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

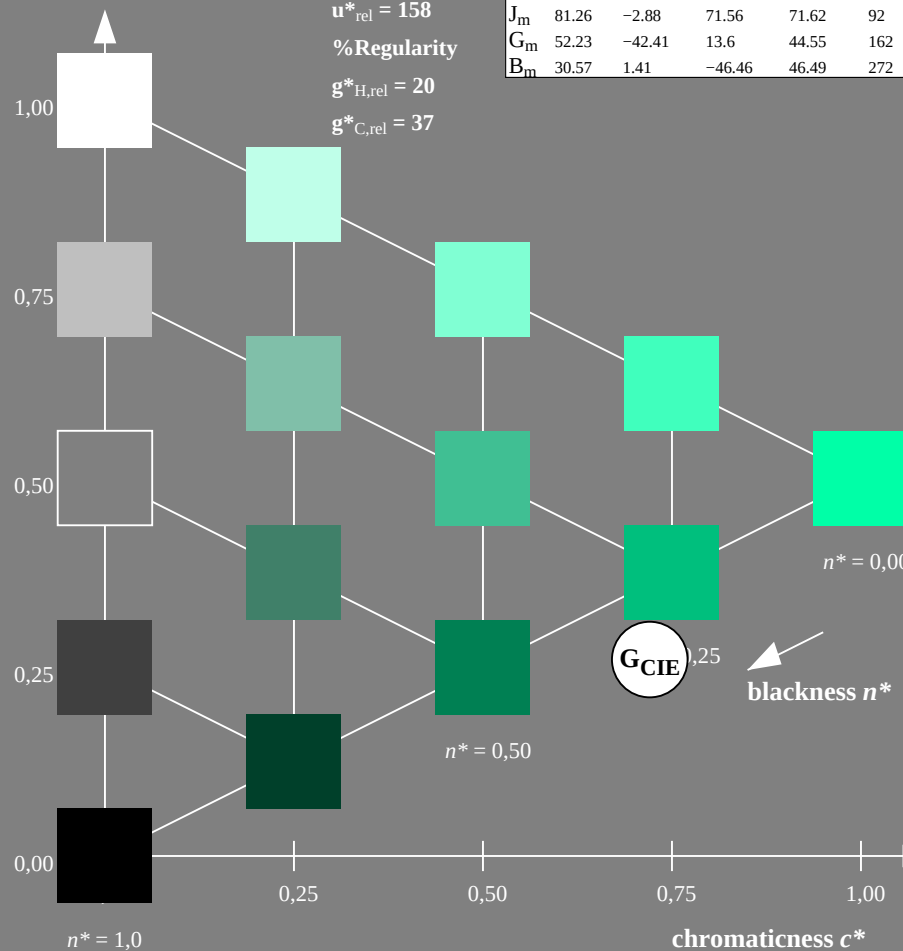


triangle lightness t^*

%Gamut

$$\mathbf{u}_{\text{rel}}^* = 158$$

%Regularity

$$g^*_{H,rel} = 20$$
$$g^*_{C,rel} = 37$$
NE250-7, 5 step scales for constant CIELAB hue $162/360 = 0.451$ (left)

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

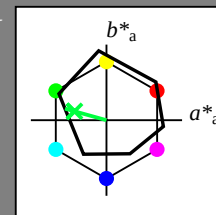
for hue $h^* = lab^*h = 164/360 = 0.457$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 53 57 164

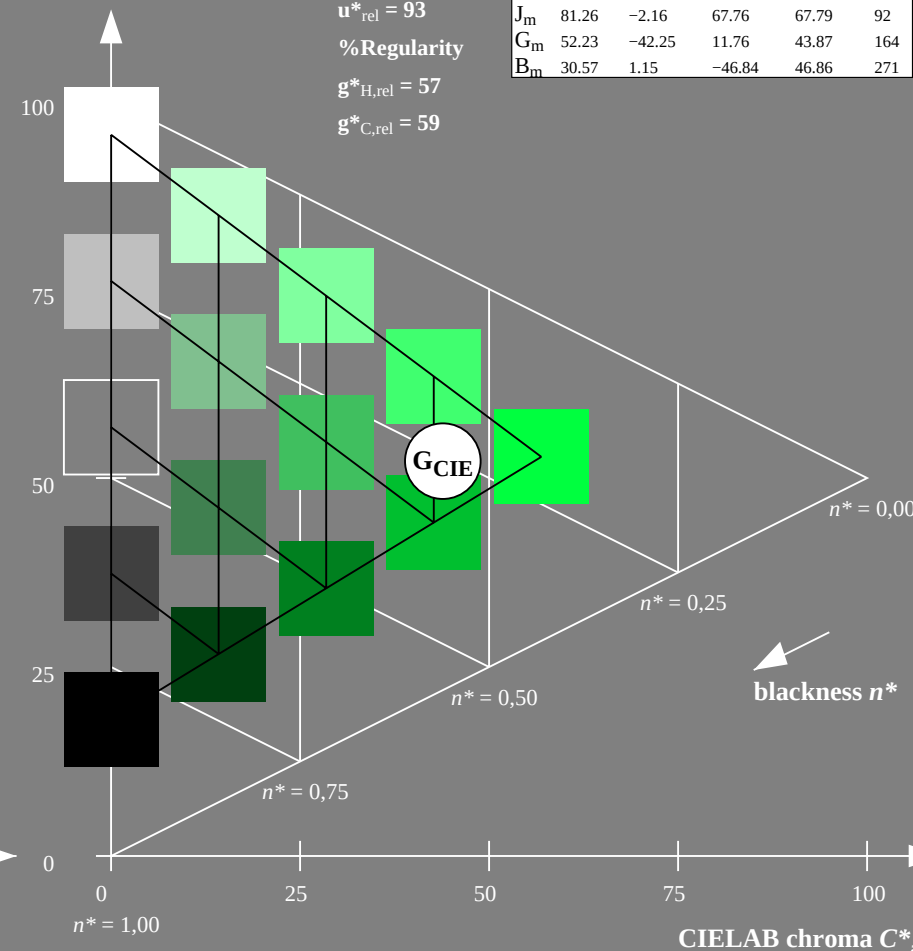
olv*Ma: 0.0 1.0 0.25

CIELAB lightness L^*

%Gamut

$$\mathbf{u}_{rel}^* = 93$$

%Regularity

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


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

input: *olv** *setrgbcolor*

output: no change compared to input

Input: Colorimetric Television Luminous System TLS00

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

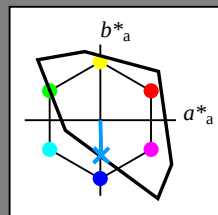
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

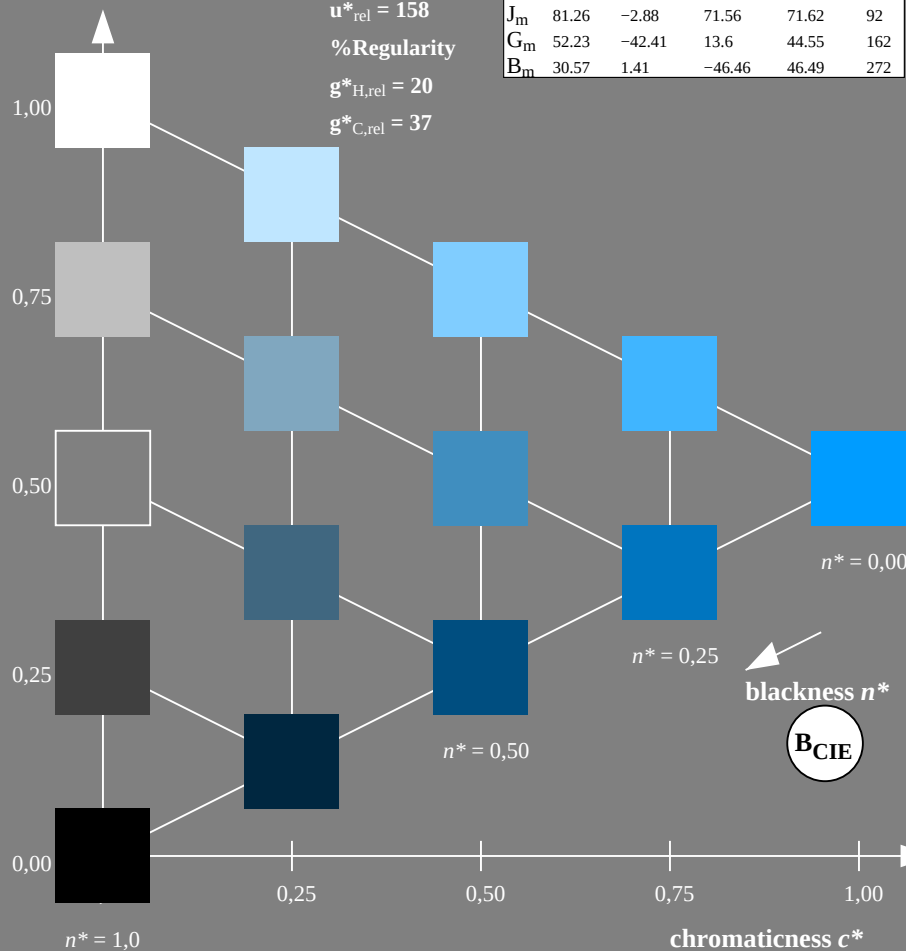
%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	50.5	76.92	64.55	100.42	40
Y_m	92.66	-20.69	90.75	93.08	103
L_m	83.63	-82.75	79.9	115.04	136
C_m	86.88	-46.16	-13.55	48.12	196
V_m	30.39	76.06	-103.59	128.52	306
M_m	57.3	94.35	-58.41	110.97	328
N_m	0.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.74	27.99	65.07	25
J_m	81.26	-2.88	71.56	71.62	92
G_m	52.23	-42.41	13.6	44.55	162
B_m	30.57	1.41	-46.46	46.49	272



NE250-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

Output: Colorimetric Offset Reflective System ORS18

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

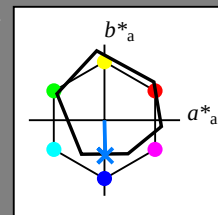
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

CIELAB lightness L^*



%Gamut

$u^*_{rel} = 93$

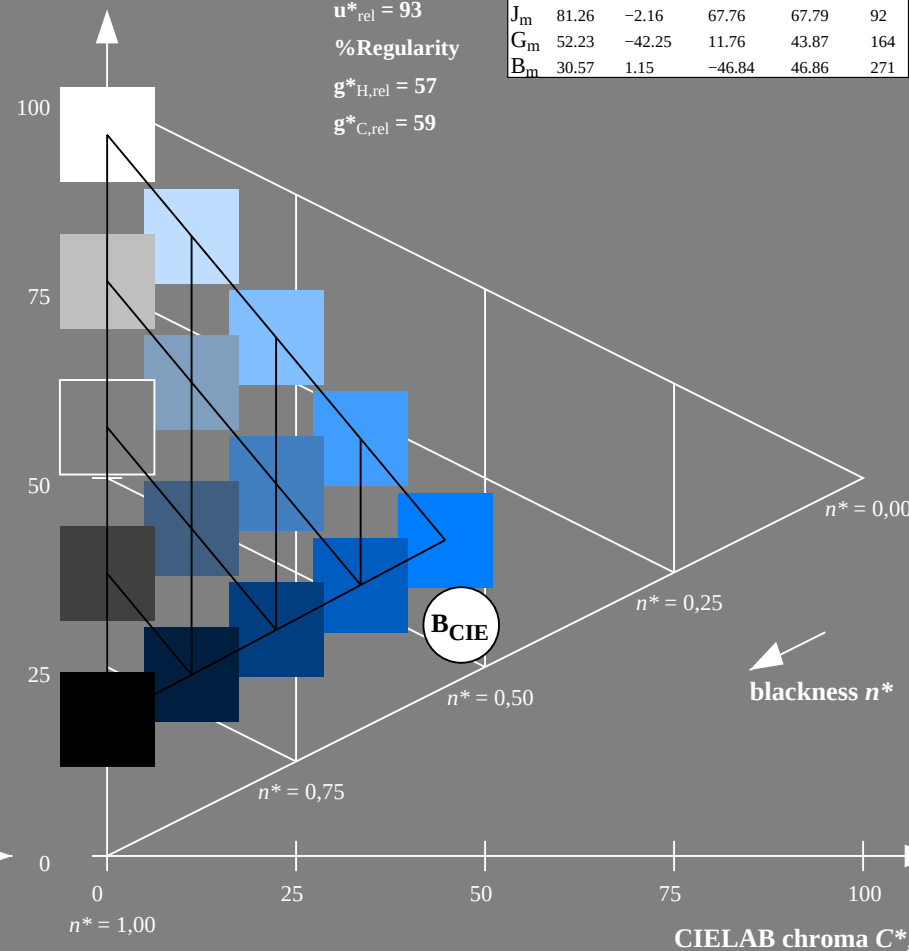
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_m	47.94	65.39	50.52	82.63	38
Y_m	90.37	-10.26	91.75	92.32	96
L_m	50.9	-62.83	34.96	71.91	151
C_m	58.62	-30.34	-45.01	54.3	236
V_m	25.72	31.1	-44.4	54.22	305
M_m	48.13	75.28	-8.36	75.74	354
N_m	18.01	0.0	0.0	0.0	0
W_m	95.41	0.0	0.0	0.0	0
R_m	39.92	58.66	26.98	64.57	25
J_m	81.26	-2.16	67.76	67.79	92
G_m	52.23	-42.25	11.76	43.87	164
B_m	30.57	1.15	-46.84	46.86	271



5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart NE25; Colorimetric systems TLS00 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input