

Input: Colorimetric Television Luminous System TLS18

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

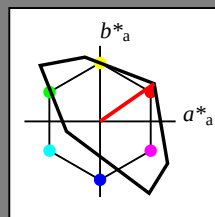
lab^*ich and lab^*nch

D65: hue O

LCH*Ma: 53 87 35

ol v^* Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

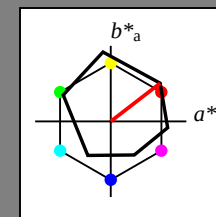
lab^*ich and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

ol v^* Ma: 1.0 0.0 0.0

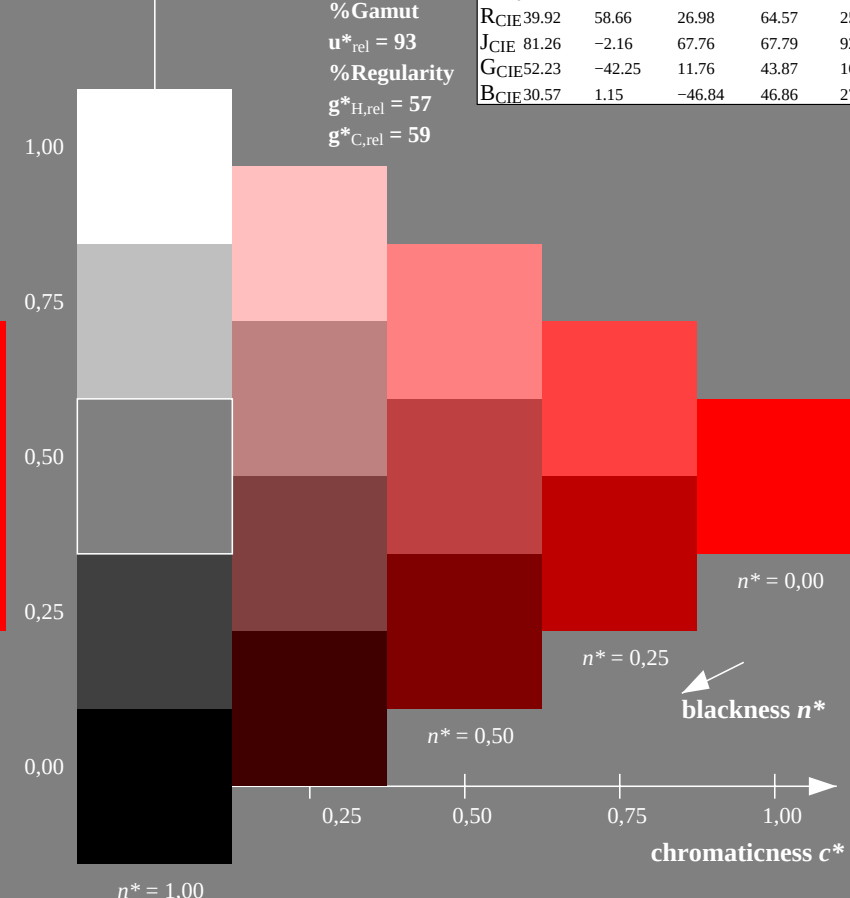
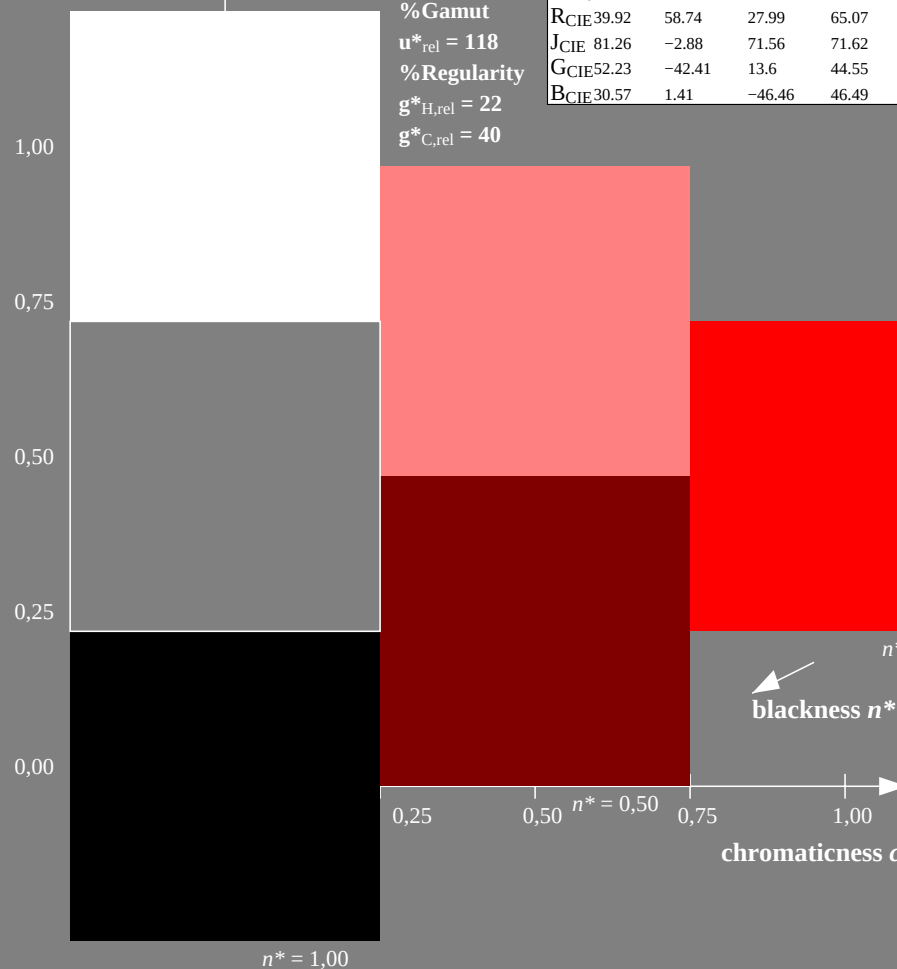
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 35/360 = 0.097 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: ol v^* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

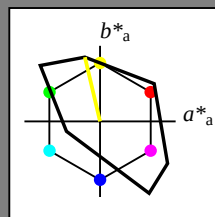
lab^*ich and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

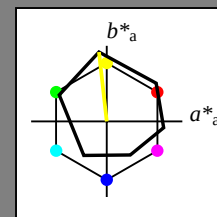
lab^*ich and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

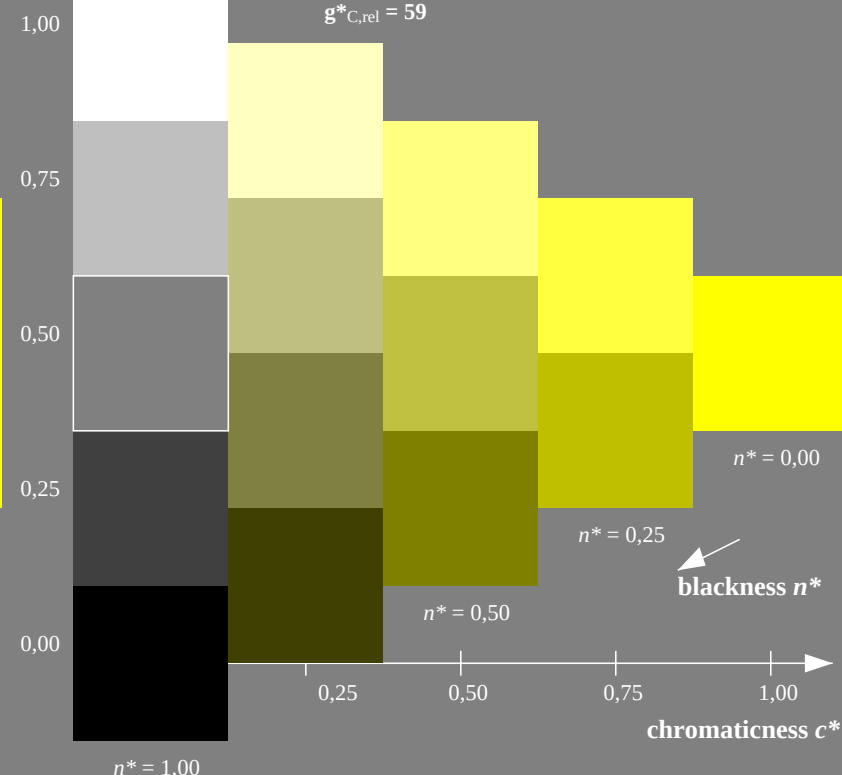
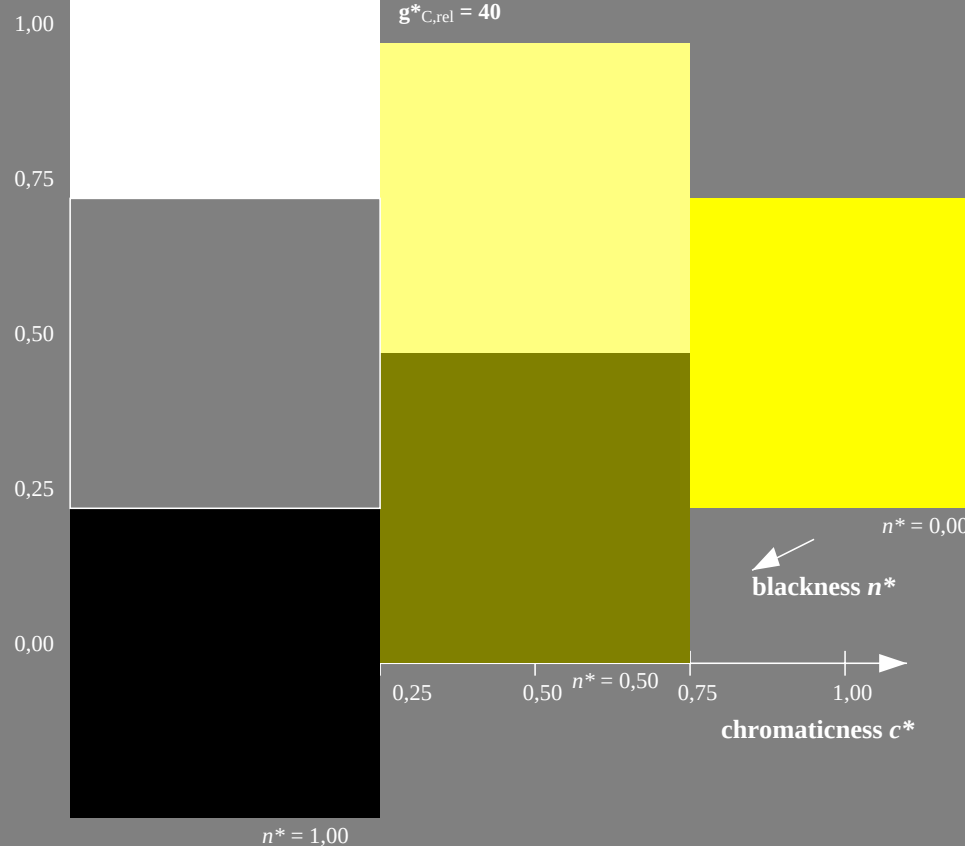
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 103/360 = 0.287 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

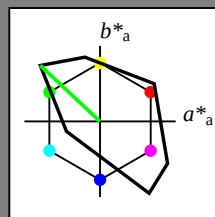
lab^*ich and lab^*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

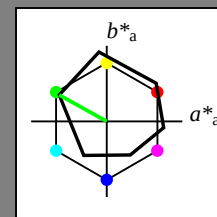
lab^*ich and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

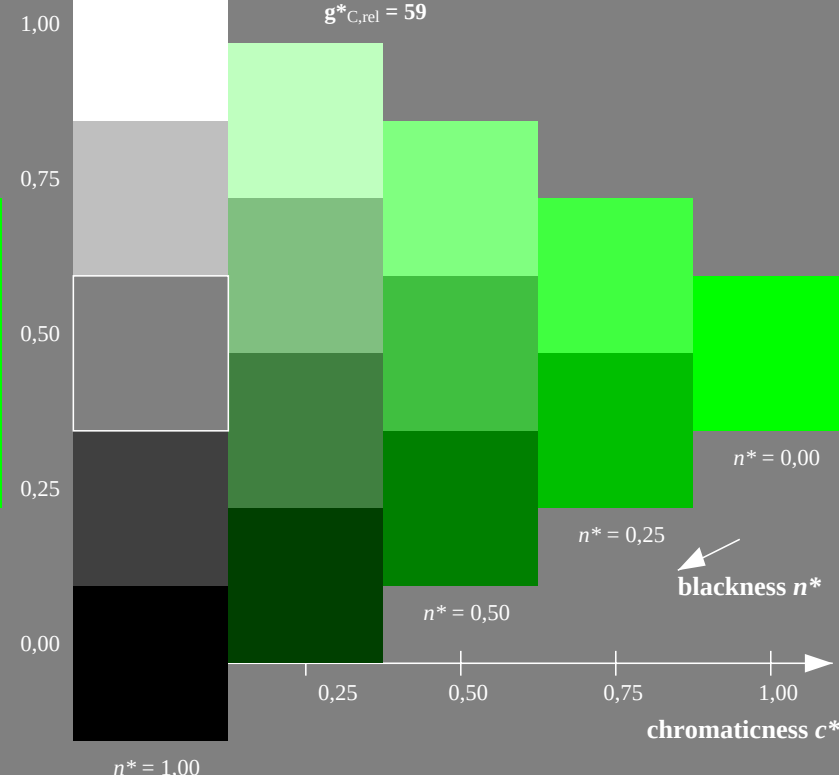
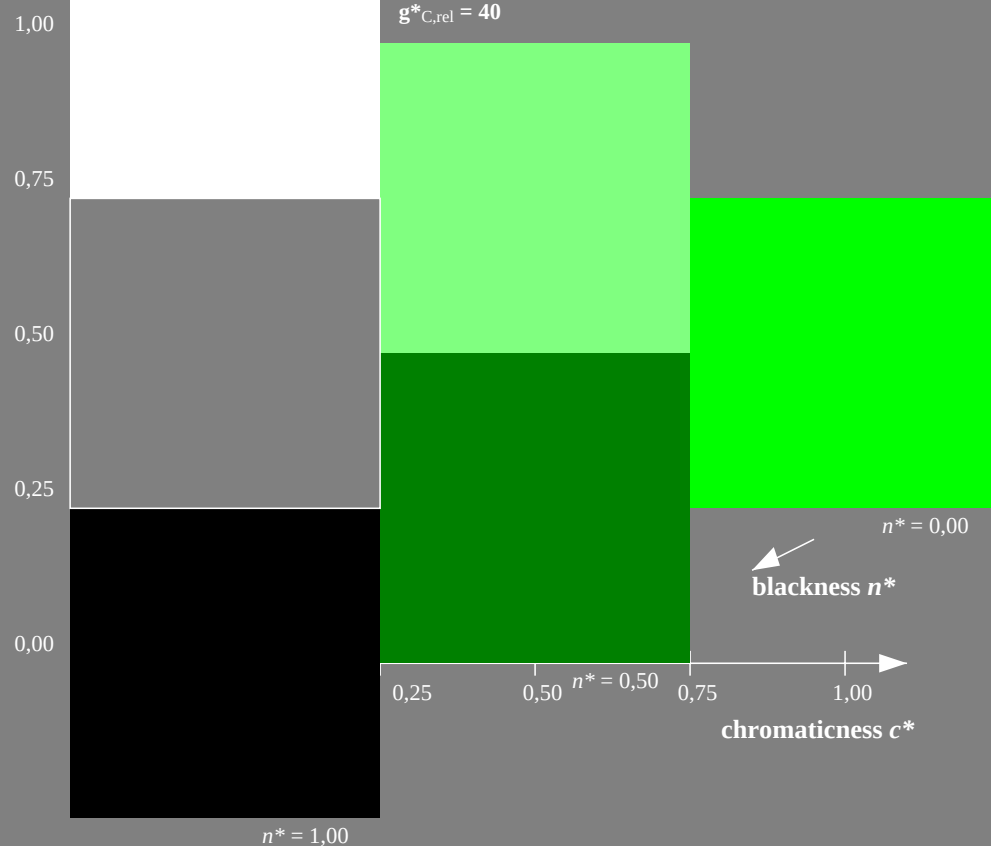
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIE LAB hue 137/360 = 0.38 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$

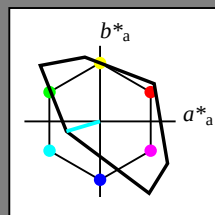
lab^*ich and lab^*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

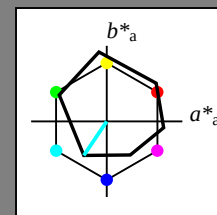
lab^*ich and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

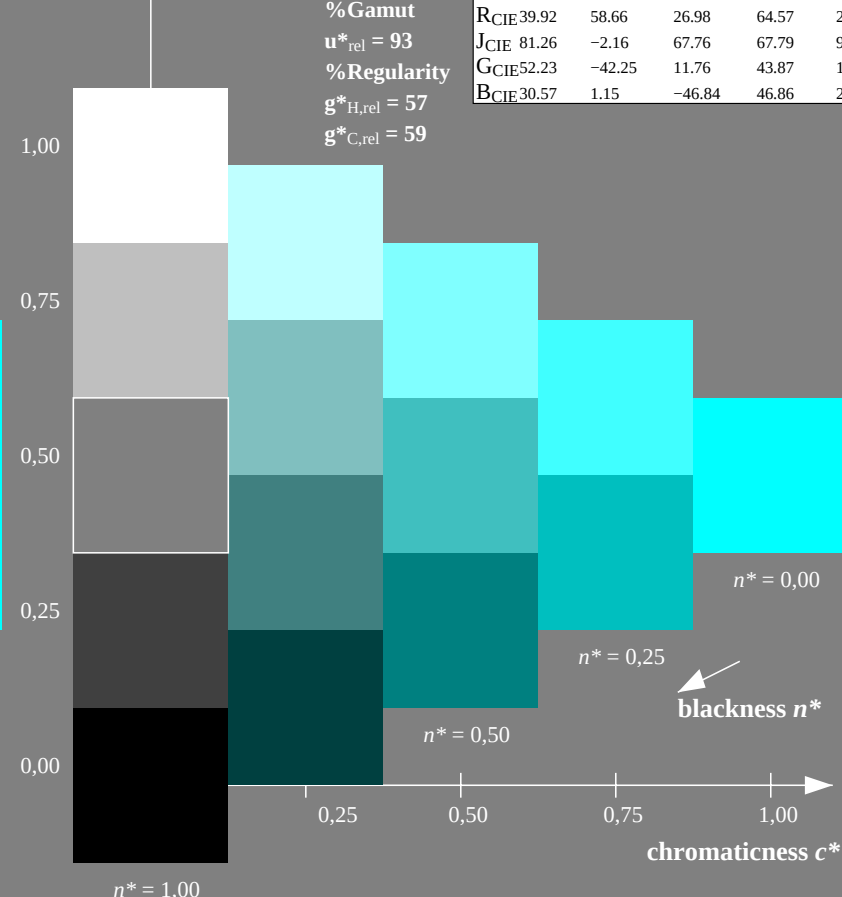
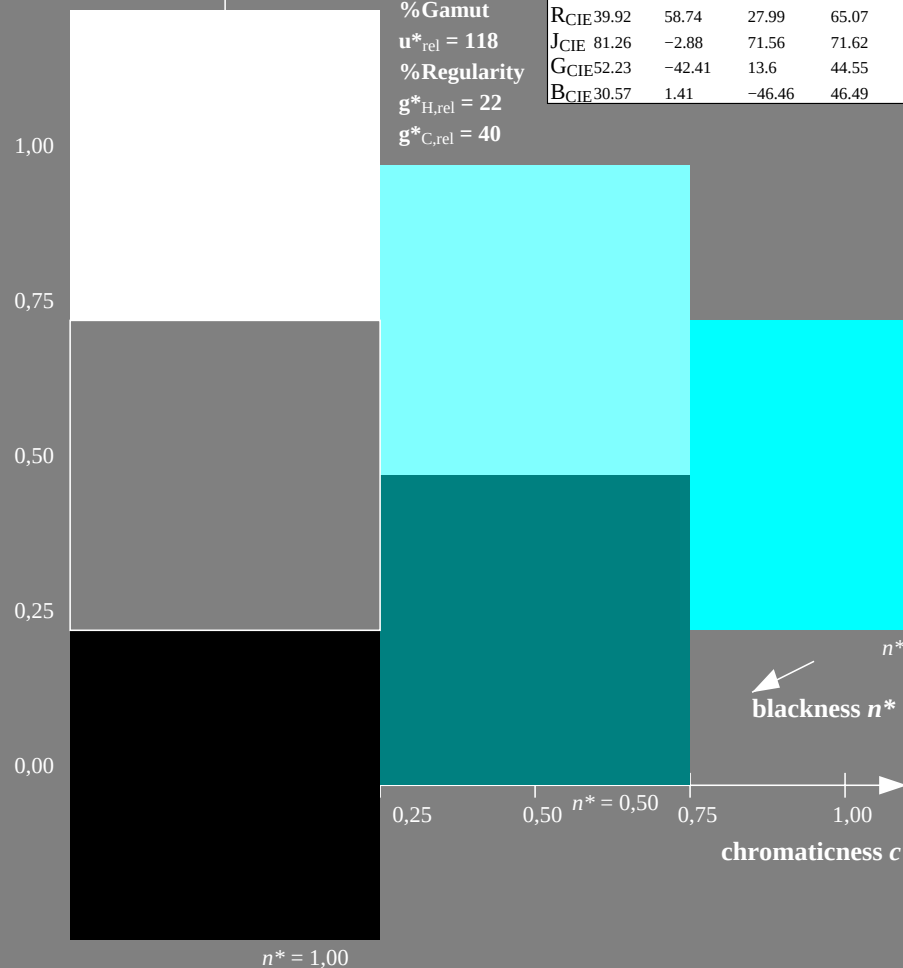
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 196/360 = 0.546 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

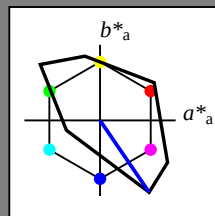
$$304/360 = 0.845$$

D65: hue V

LCH*Ma: 35 115 304

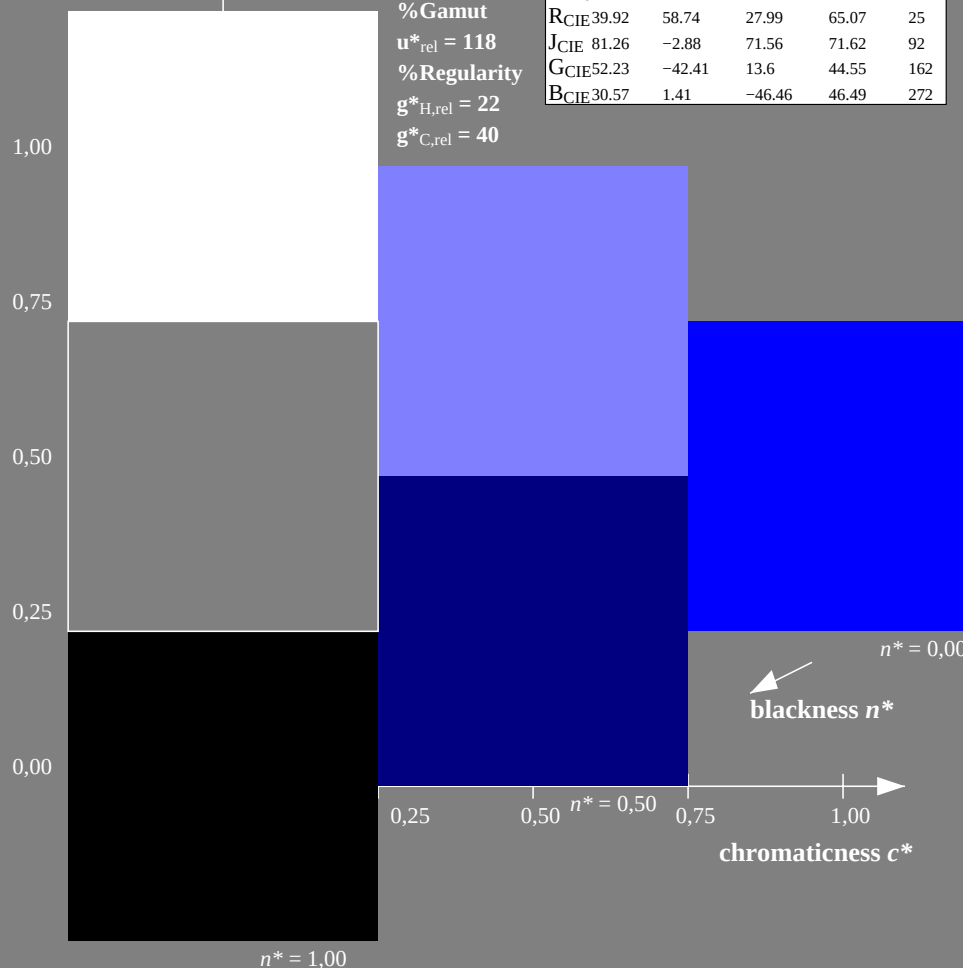
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut
 $u^*_{\text{rel}} = 118$
%Regularity
 $g^*_{\text{H,rel}} = 22$
 $g^*_{\text{C,rel}} = 40$

	$L^* = L^*_{\text{a}}$	a^*_{a}	b^*_{a}	$C^*_{\text{ab,a}}$	$h^*_{\text{ab,a}}$
O _{Ma} 52.76	71.63	49.88	87.29	35	
Y _{Ma} 92.74	-20.02	84.97	87.3	103	
L _{Ma} 84.0	-78.98	73.94	108.2	137	
C _{Ma} 87.14	-44.41	-13.11	46.32	196	
V _{Ma} 35.47	64.92	-95.06	115.12	304	
M _{Ma} 59.01	89.33	-55.67	105.26	328	
N _{Ma} 18.01	0.0	0.0	0.0	0	
W _{Ma} 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	



NE860-7, 3 step scales for constant CIELAB hue 304/360 = 0.845 (left)

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

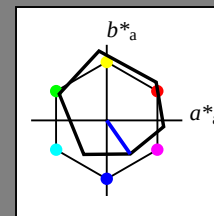
D65: 3 and 5 step colour scales for 10 hues

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

D65: hue V

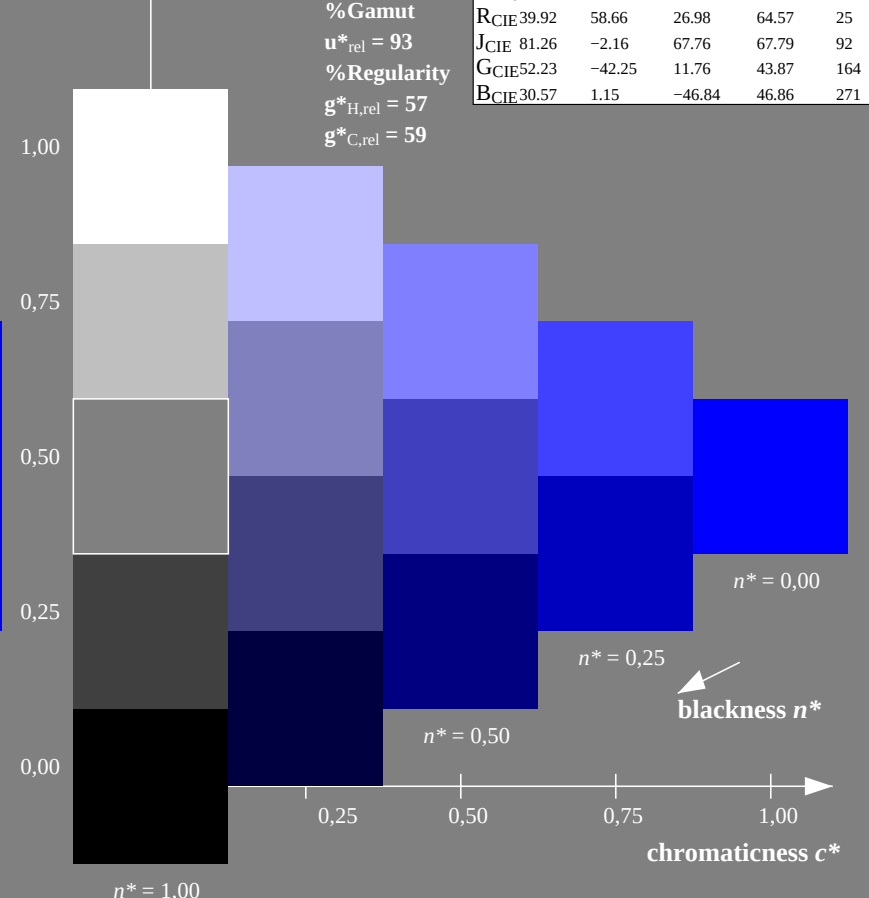
LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut
 $u^*_{\text{rel}} = 93$
%Regularity
 $g^*_{\text{H,rel}} = 57$
 $g^*_{\text{C,rel}} = 59$

	$L^* = L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	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 305/360 = 0.847 (right)

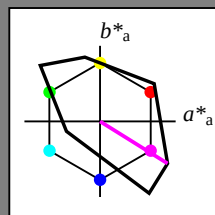
```
input: olv* setrgbcolor
```

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
 lab^*ich and lab^*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%Gamut
 $u^*_{rel} = 118$
%Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

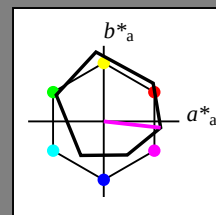
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

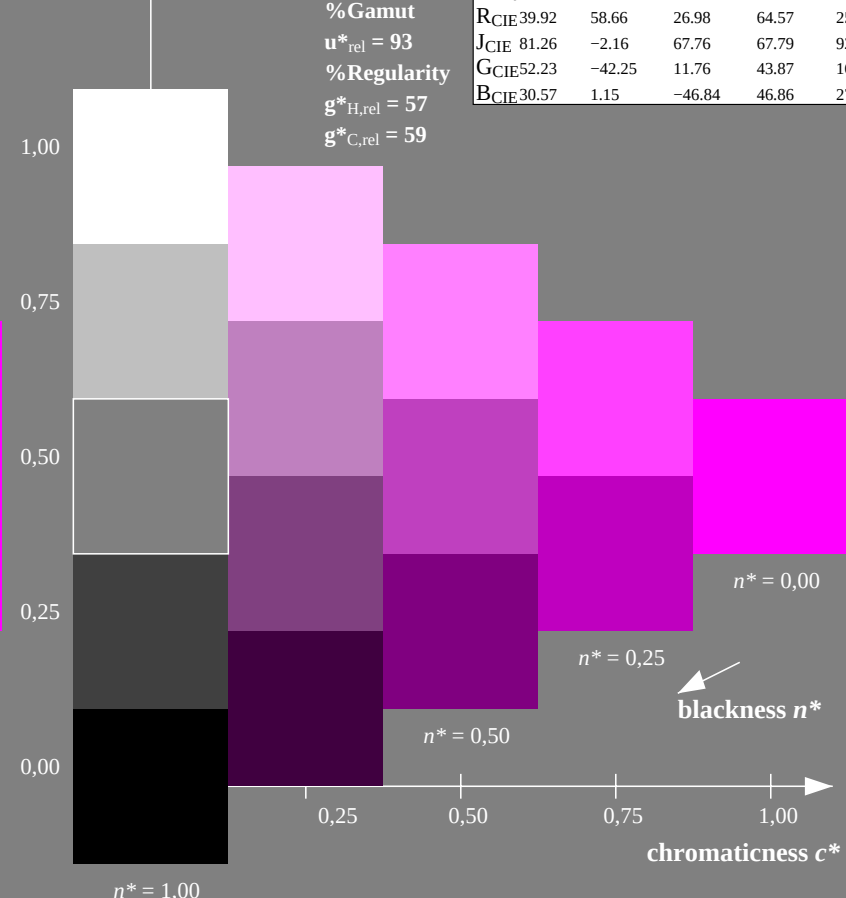
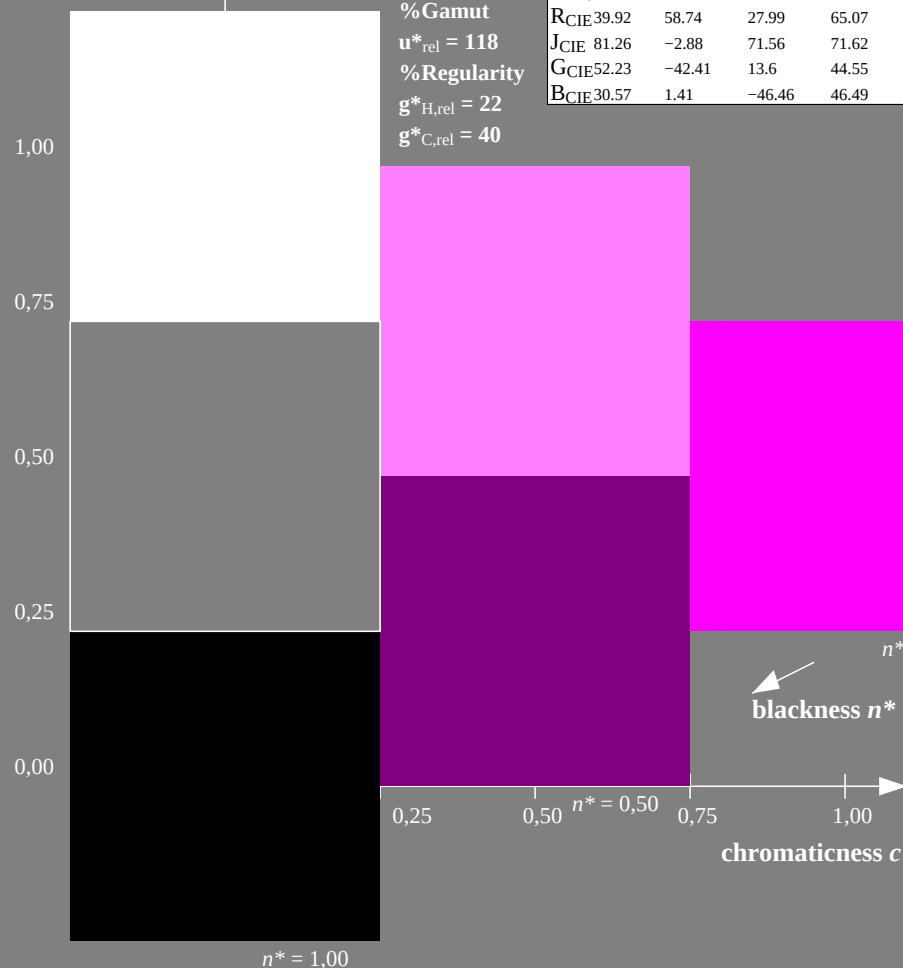
D65: hue M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0
triangle lightness t^*



%Gamut
 $u^*_{rel} = 93$
%Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 328/360 = 0.911 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18
D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor
output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

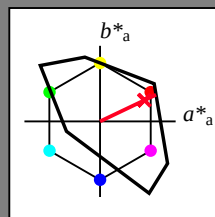
lab^*ich and lab^*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

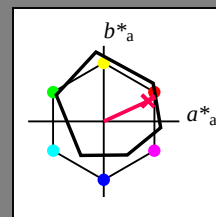
lab^*ich and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

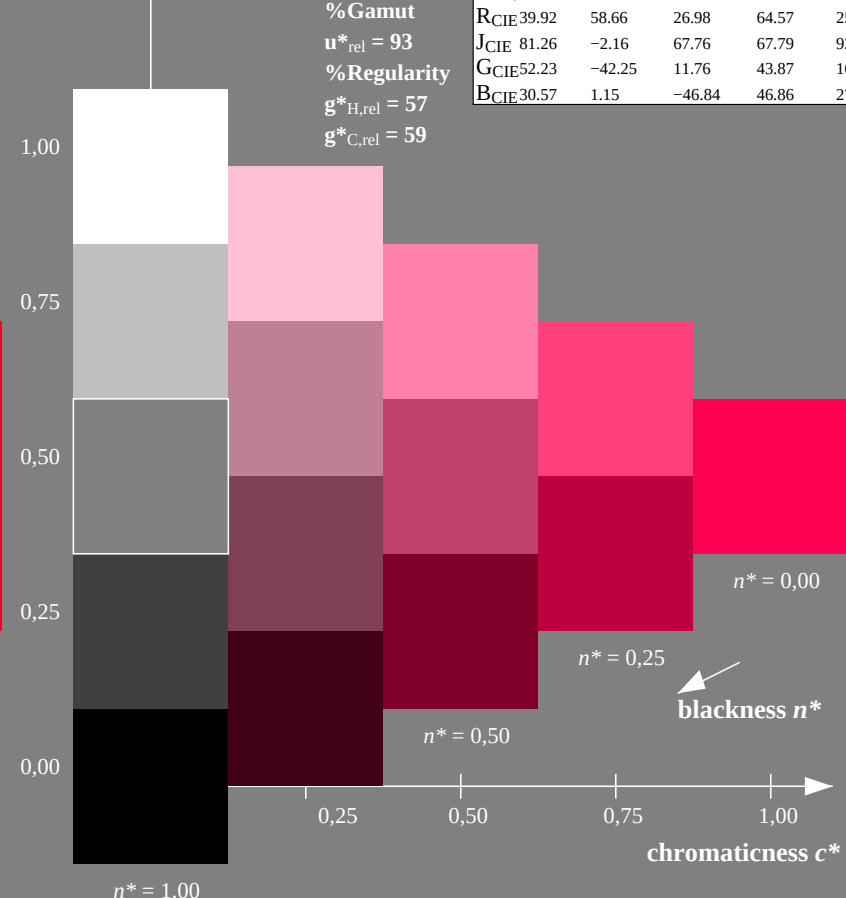
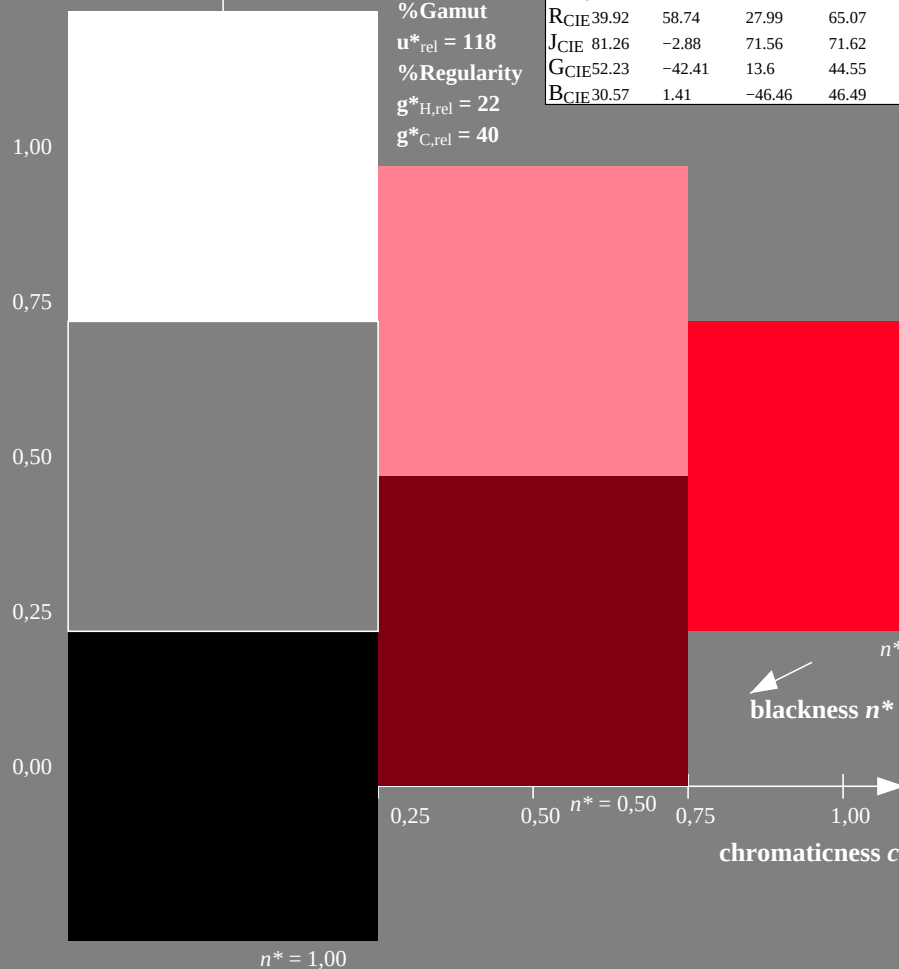
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

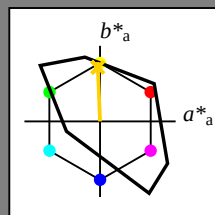
lab^*ich and lab^*nch

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

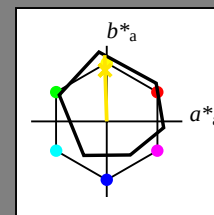
lab^*ich and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

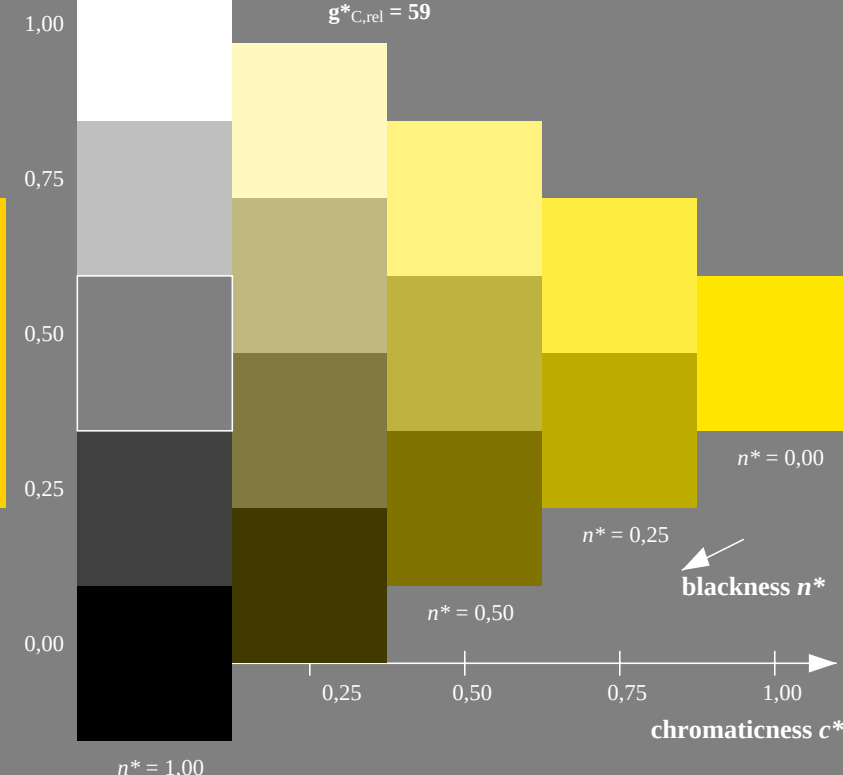
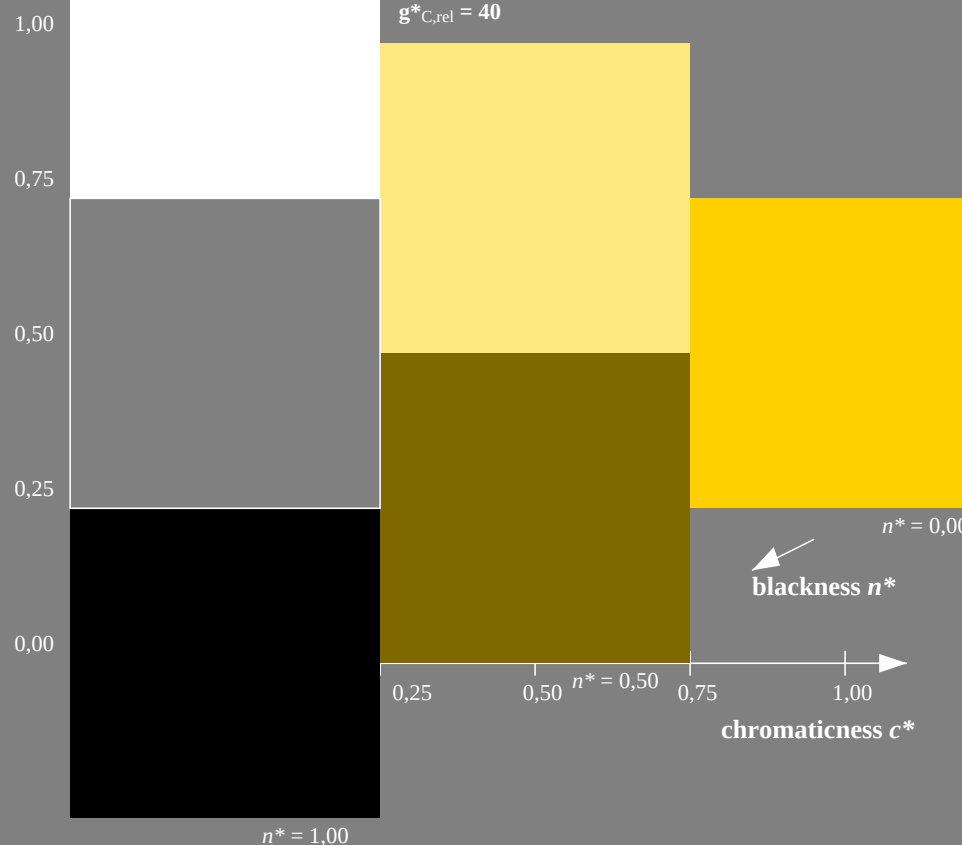
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIE hue 92/360 = 0.256 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

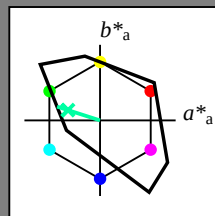
input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

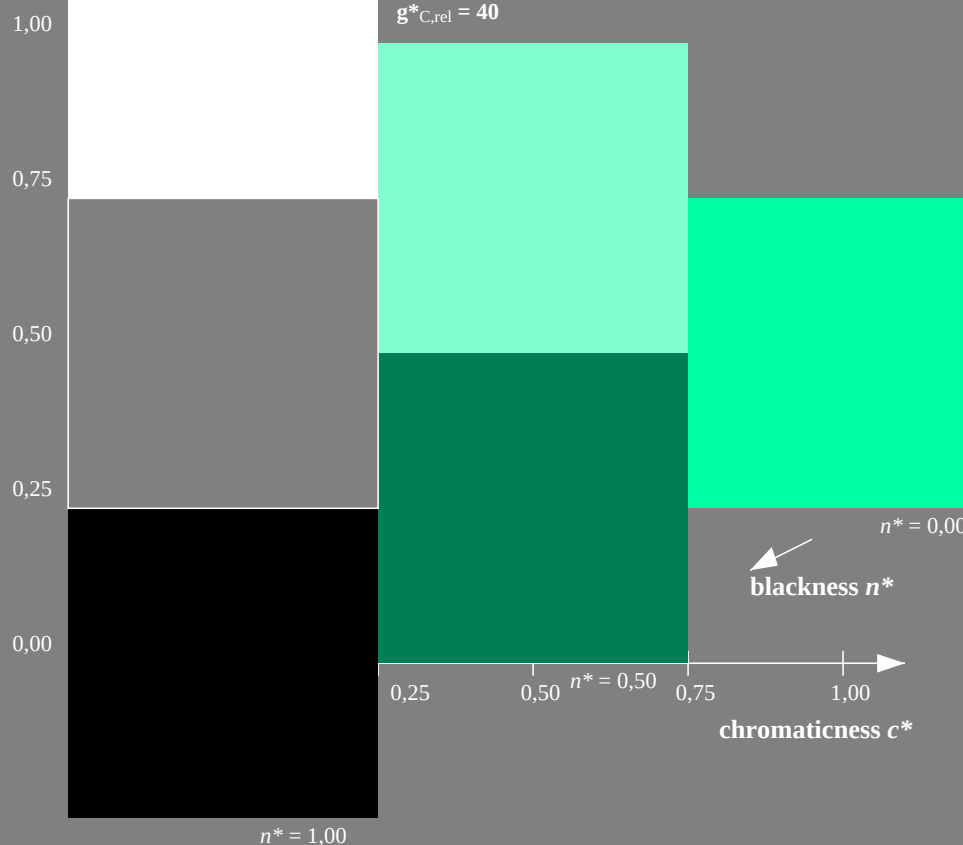
D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64
triangle lightness t^*



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

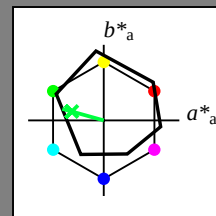
% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$



Output: Colorimetric Offset Reflective System ORS18

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

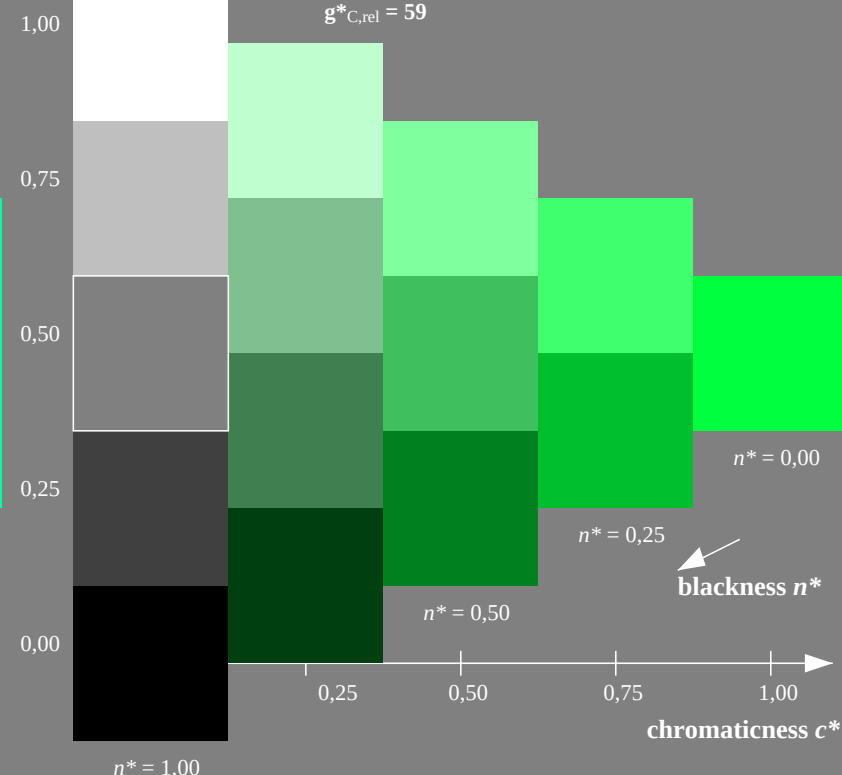
D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25
triangle lightness t^*



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



NE860-7, 3 step scales for constant CIE LAB hue 162/360 = 0.451 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

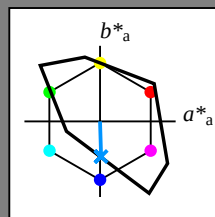
lab^*ich and lab^*nch

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



% Gamut
 $u^*_{rel} = 118$
% Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Offset Reflective System ORS18

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

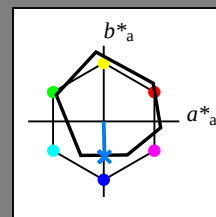
lab^*ich and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

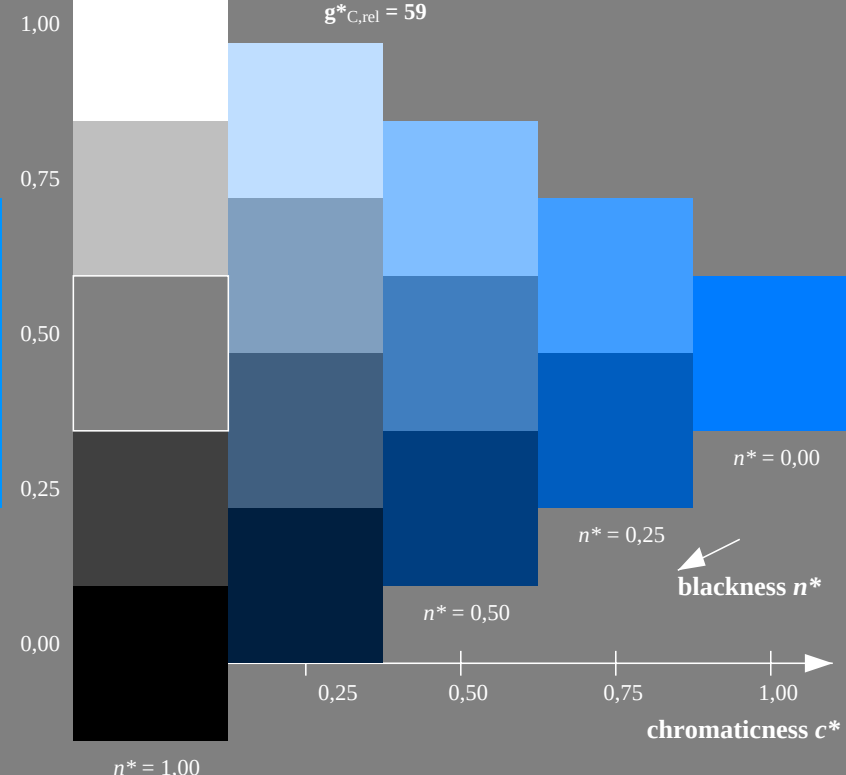
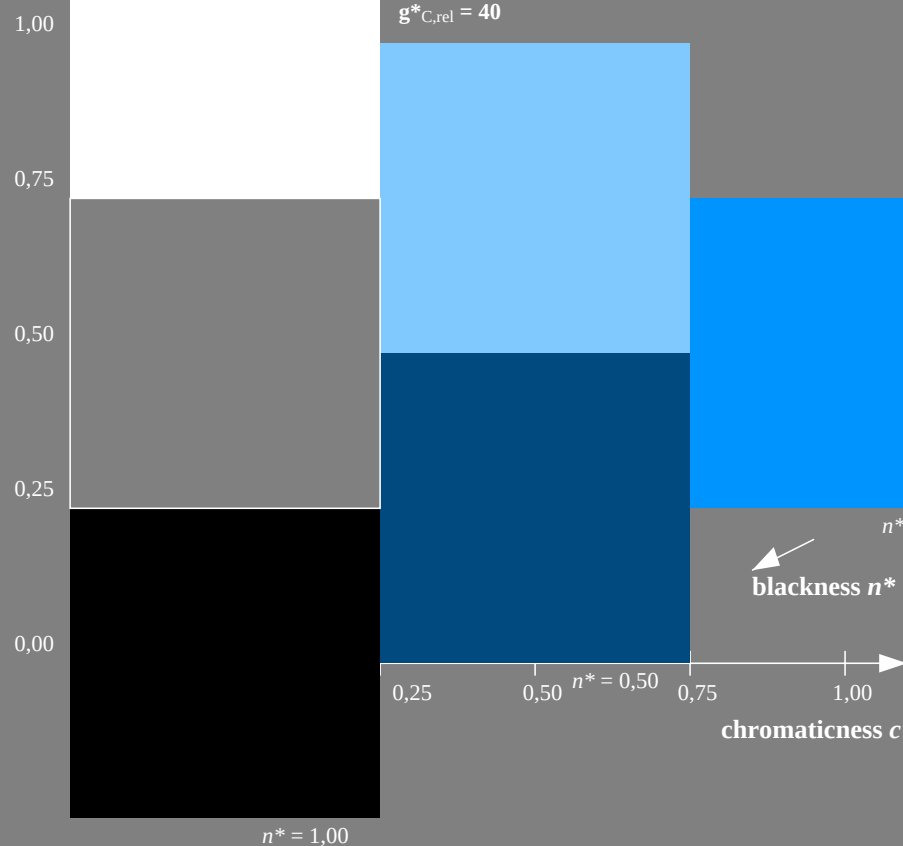
triangle lightness t^*



% Gamut
 $u^*_{rel} = 93$
% Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

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



NE860-7, 3 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

BAM-test chart NE86; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv* setrgbcolor

output: no change compared to input