

Input: Colorimetric Television Luminous System TLS18

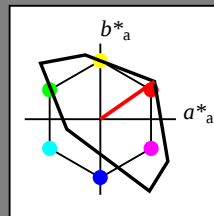
for hue $h^* = lab^*h = 35/360 = 0.097$

LAB*LCH, LAB*NCH

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0



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

CIELAB lightness L^*

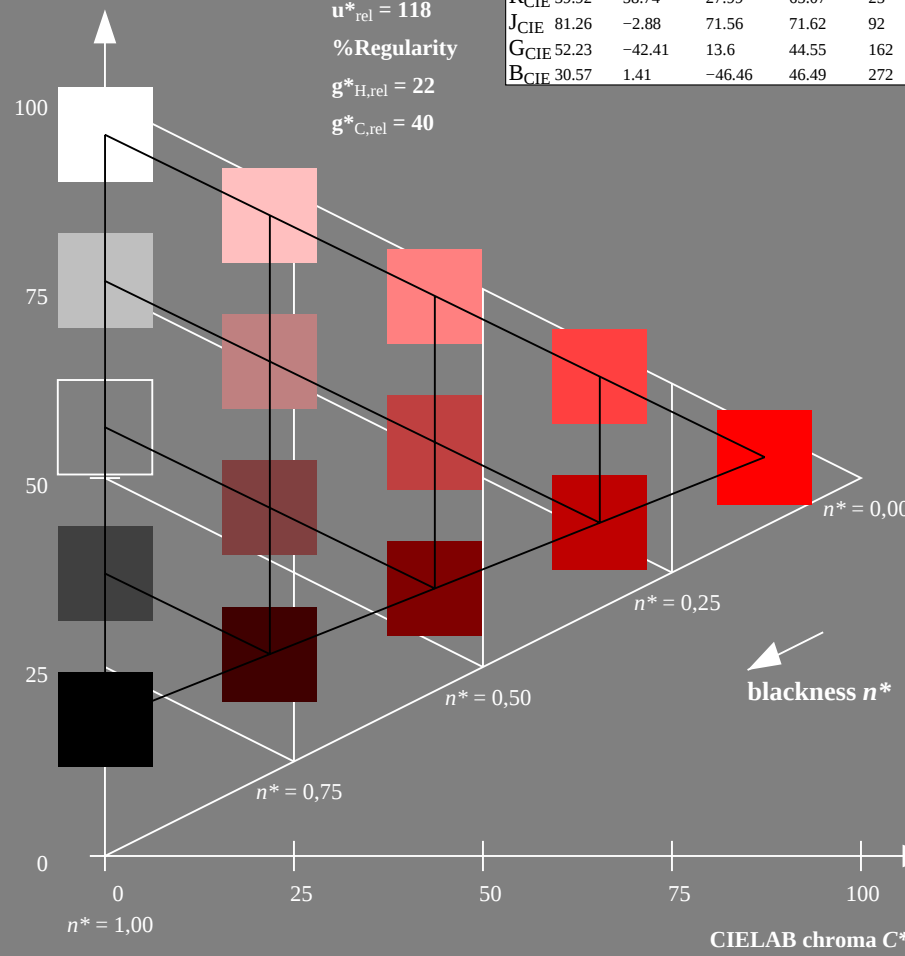
%Gamut

$u^*_{rel} = 118$

%Regularity

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

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



NE360-7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

Output: Colorimetric Offset Reflective System ORS18

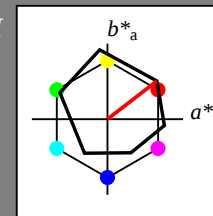
for hue $h^* = lab^*h = 38/360 = 0.105$

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	65.39	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

CIELAB lightness L^*

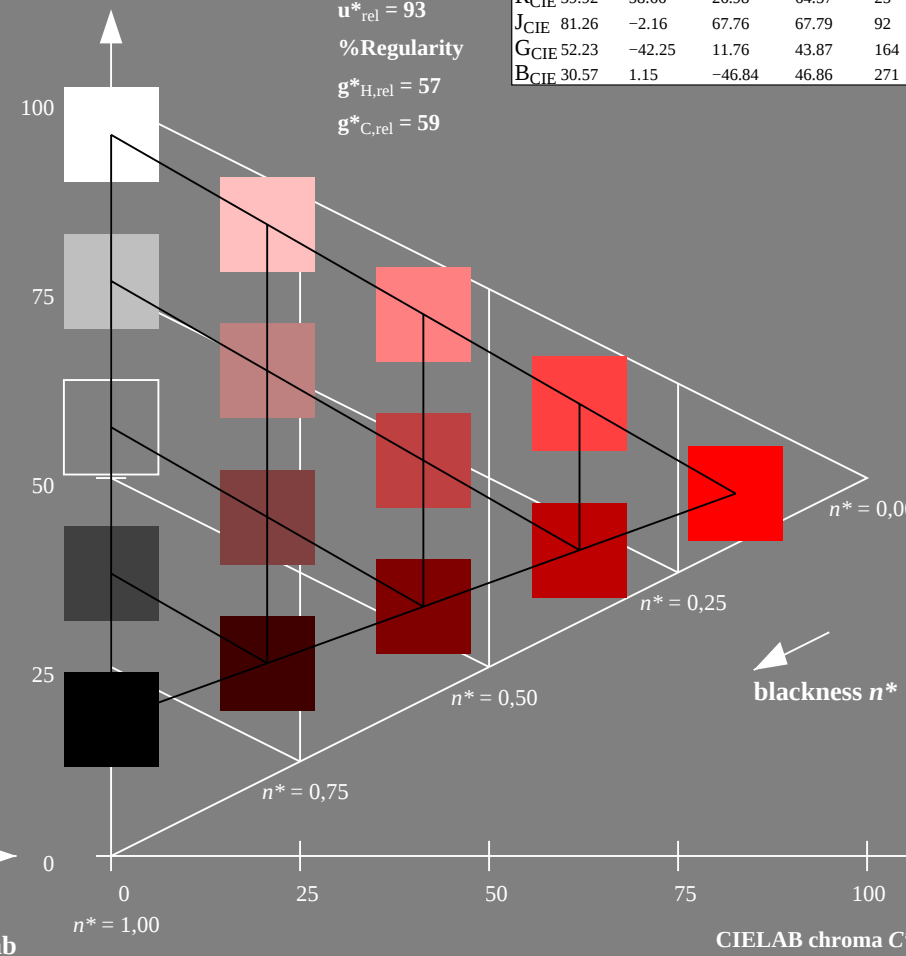
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



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

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

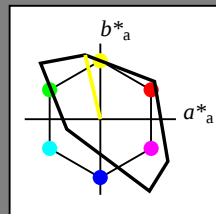
for hue $h^* = lab^*h = 103/360 = 0.287$

LAB*LCH, LAB*NCH

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0



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

CIELAB lightness L^*

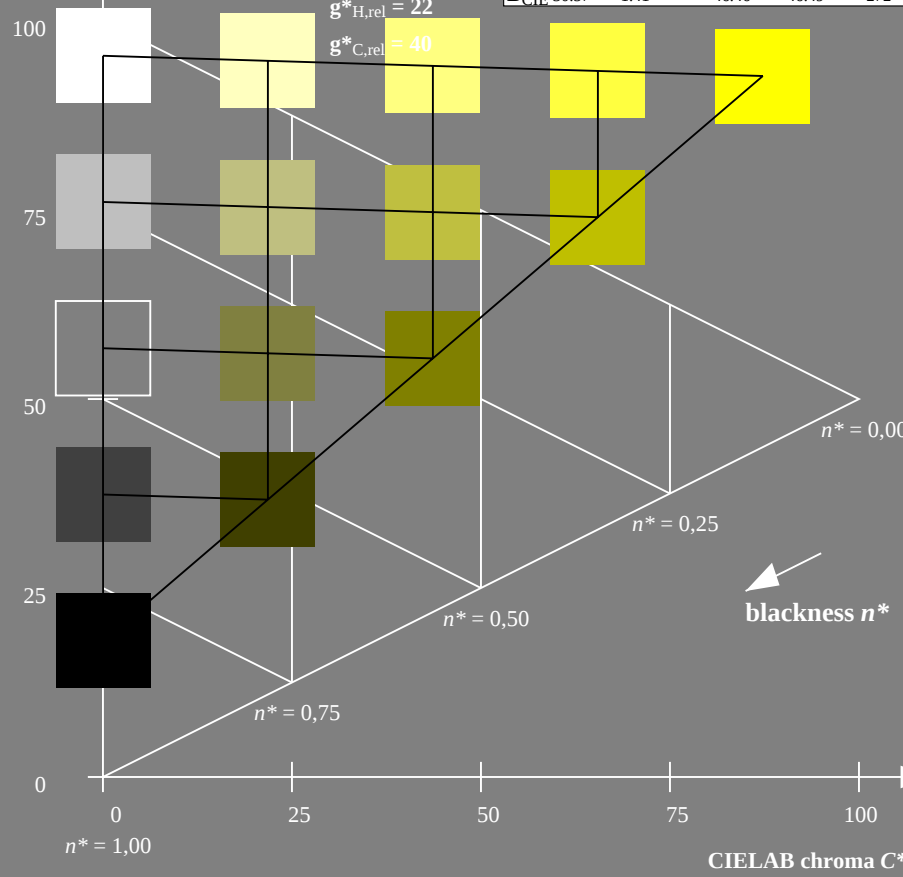
%Gamut

$u^*_{rel} = 118$

%Regularity

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

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



NE360-7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

Output: Colorimetric Offset Reflective System ORS18

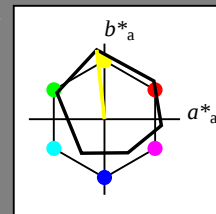
for hue $h^* = lab^*h = 96/360 = 0.268$

LAB*LCH, LAB*NCH

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0



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

CIELAB lightness L^*

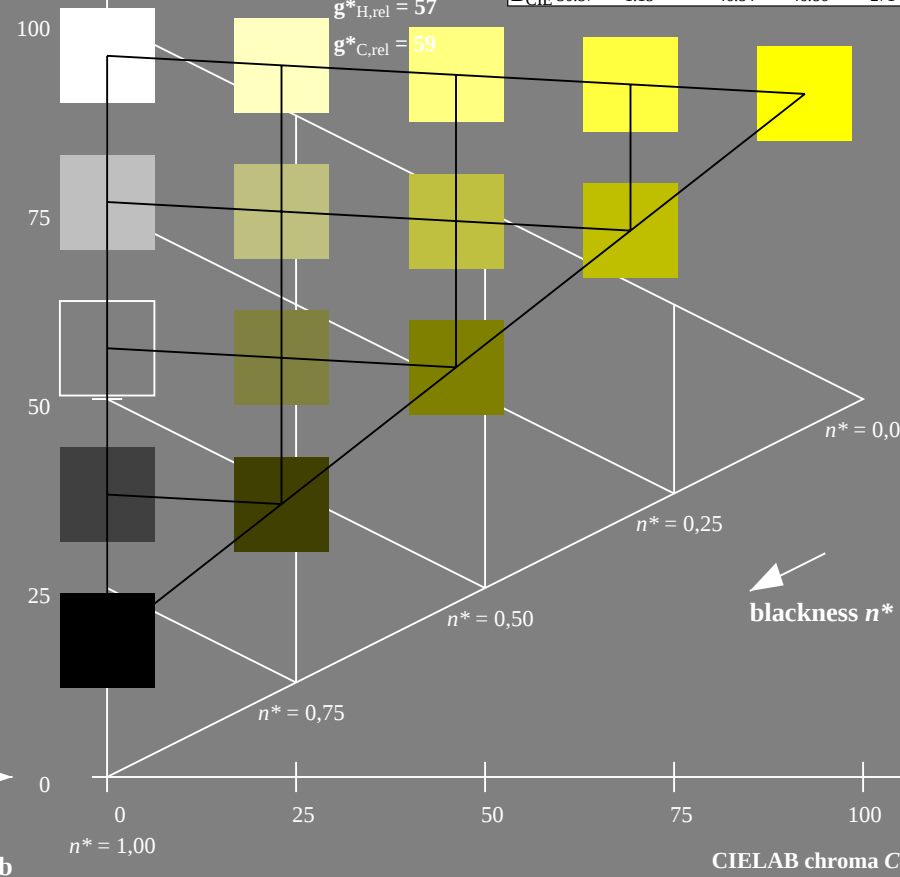
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



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

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

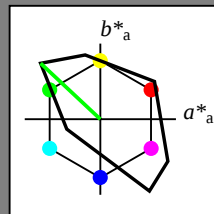
for hue $h^* = lab \cdot h = 137/360 = 0.38$

LAB*LCH, LAB*NCH

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0



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

CIELAB lightness L^*

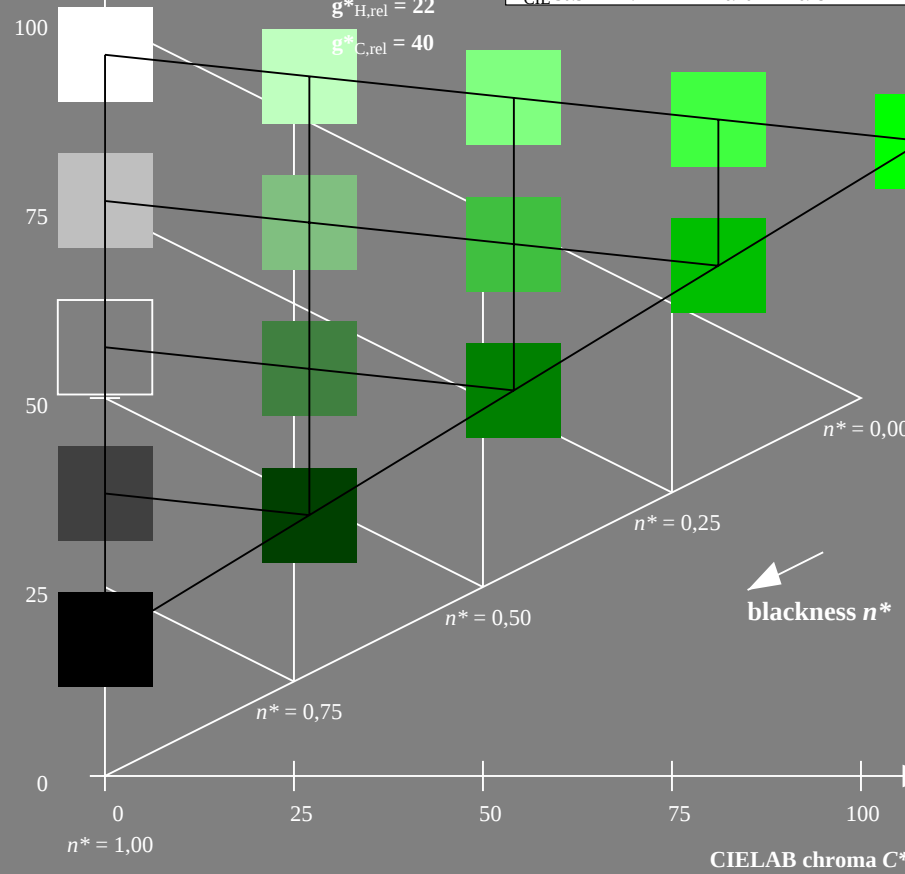
%Gamut

$u^*_{rel} = 118$

%Regularity

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

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



NE360-7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

Output: Colorimetric Offset Reflective System ORS18

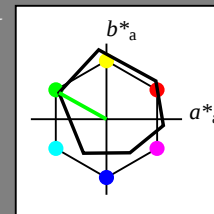
for hue $h^* = lab \cdot h = 151/360 = 0.419$

LAB*LCH, LAB*NCH

D65: 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 _{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

CIELAB lightness L^*

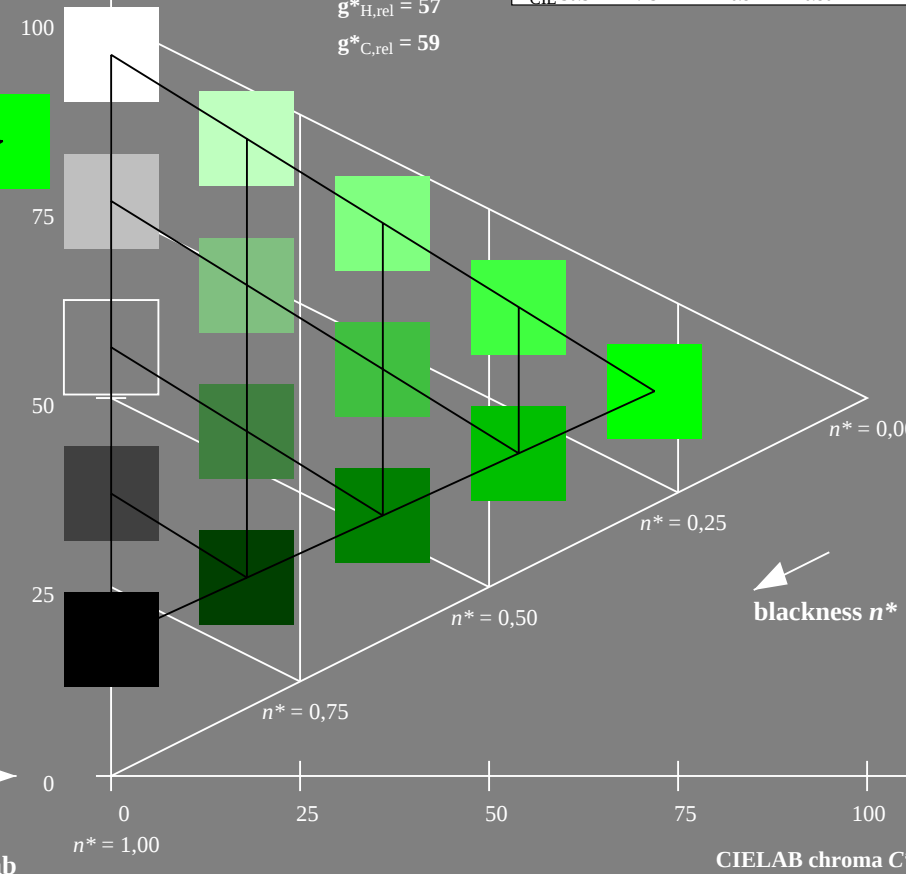
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



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

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

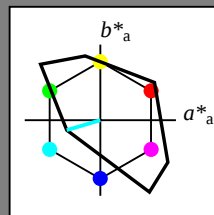
for hue $h^* = lab \cdot h = 196/360 = 0.546$

LAB*LCH, LAB*NCH

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0



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

CIELAB lightness L^*

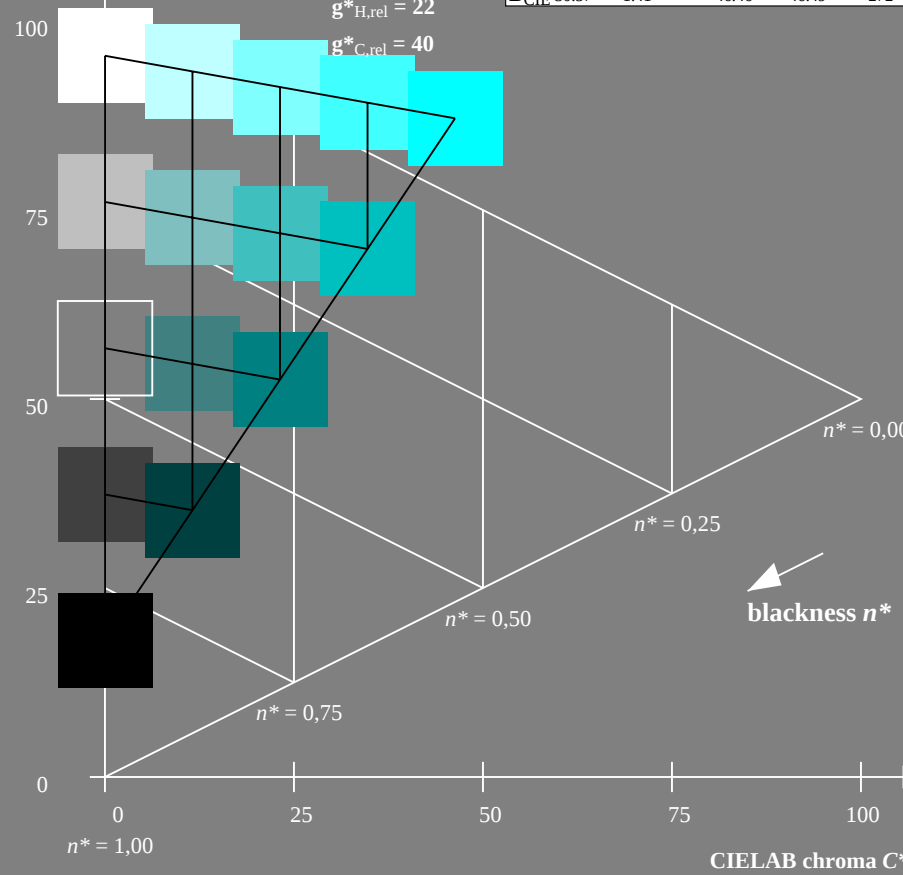
%Gamut

$u^*_{rel} = 118$

%Regularity

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

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



NE360-7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

Output: Colorimetric Offset Reflective System ORS18

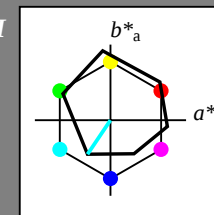
for hue $h^* = lab \cdot h = 236/360 = 0.656$

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	65.39	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

CIELAB lightness L^*

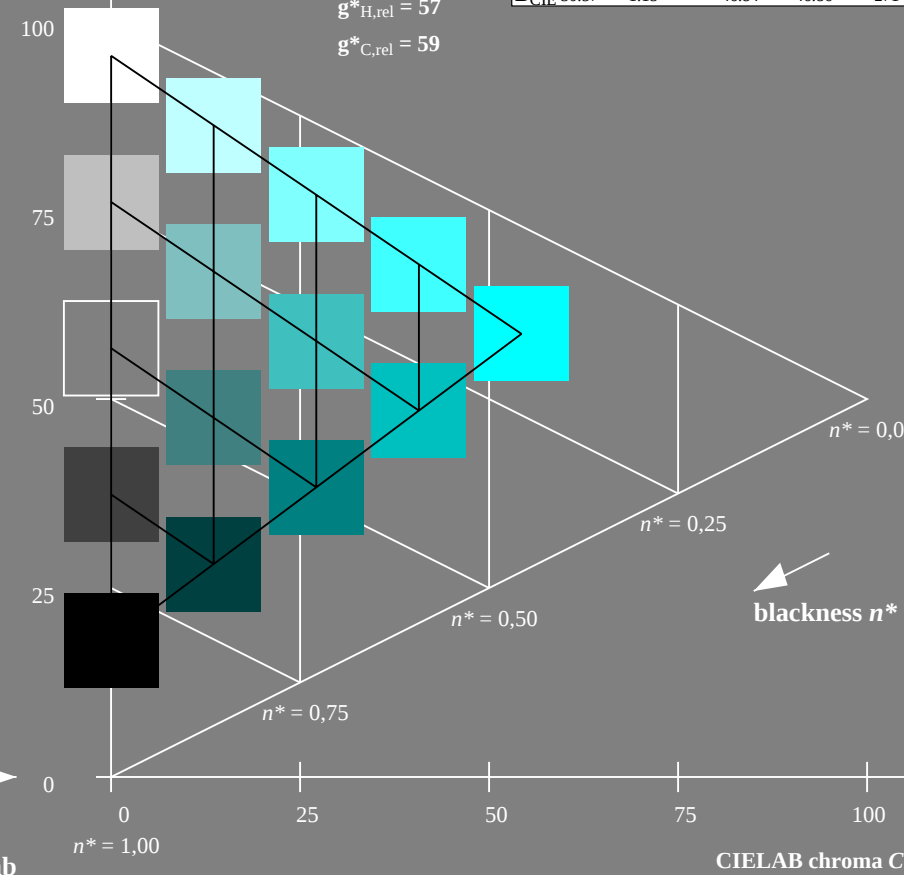
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



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

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

for hue $h^* = lab \cdot h = 304/360 = 0.845$

LAB*LCH, LAB*NCH

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

CIELAB lightness L^*

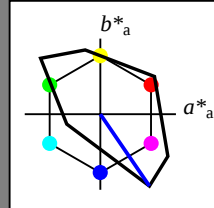
%Gamut

$u^*_{rel} = 118$

%Regularity

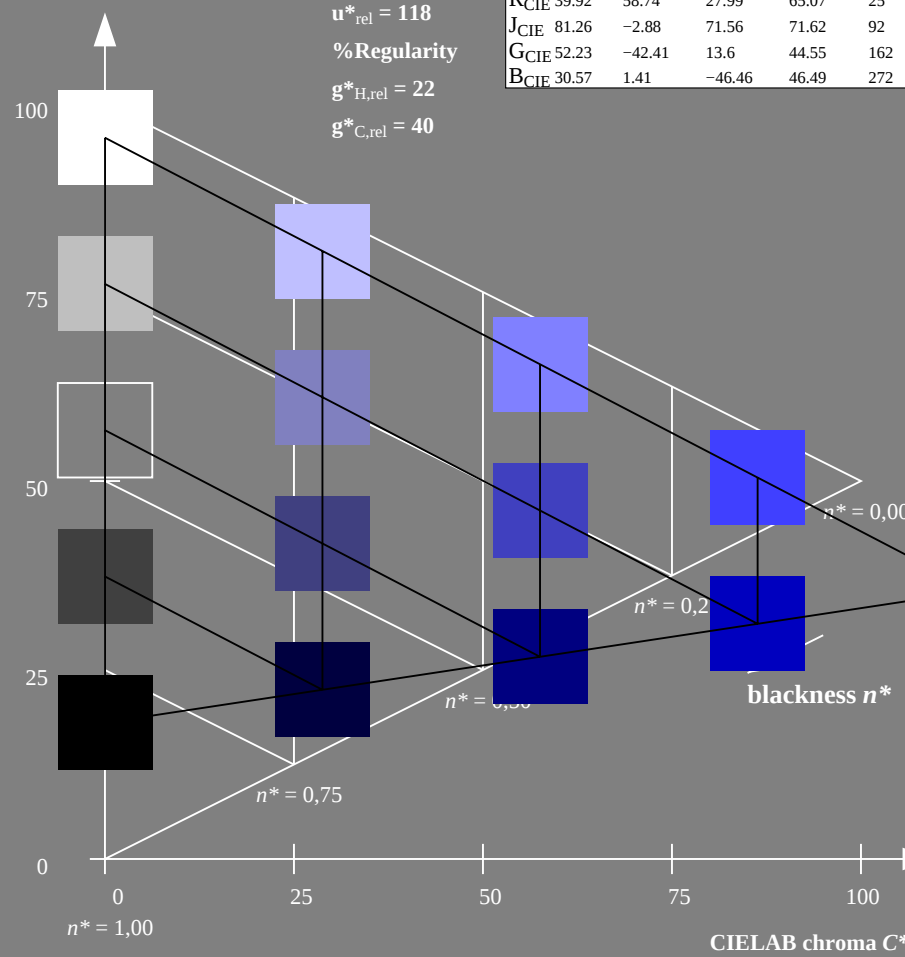
$g^*_{H,rel} = 22$

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



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



NE360-7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

Output: Colorimetric Offset 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

CIELAB lightness L^*

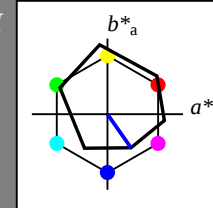
%Gamut

$u^*_{rel} = 93$

%Regularity

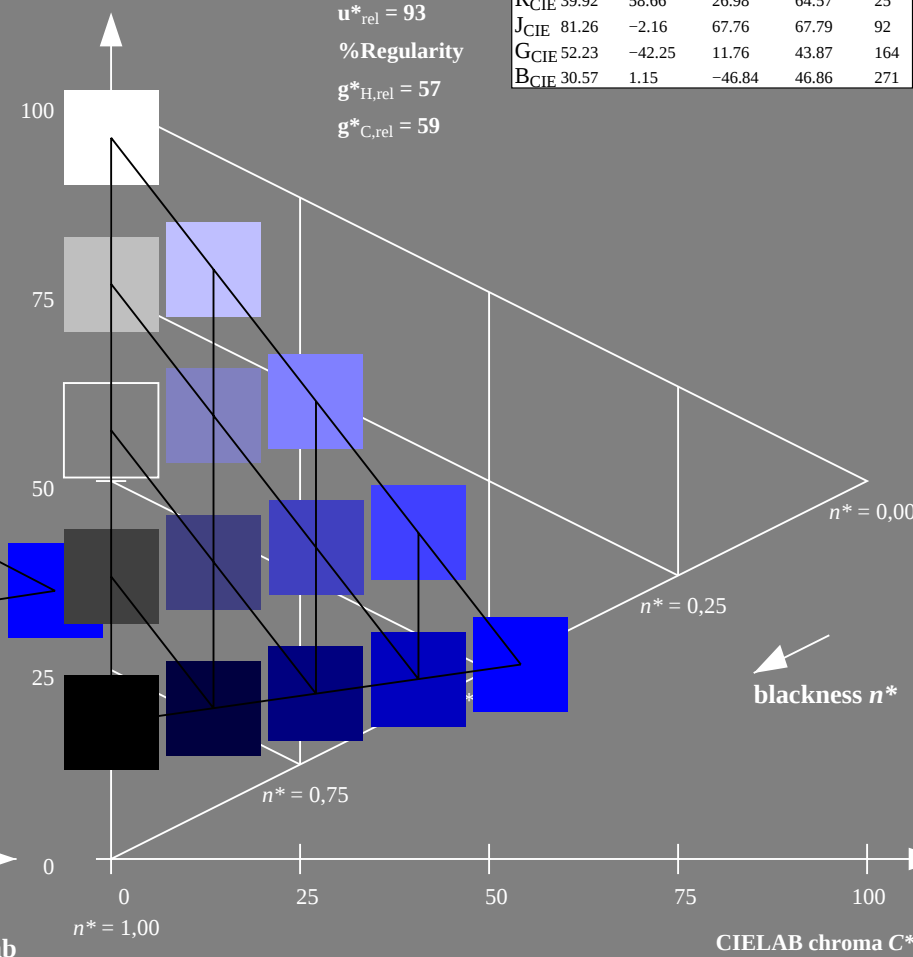
$g^*_{H,rel} = 57$

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



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	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)

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

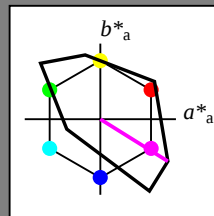
for hue $h^* = lab \cdot h = 328/360 = 0.911$

LAB*LCH, LAB*NCH

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0



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

CIELAB lightness L^*

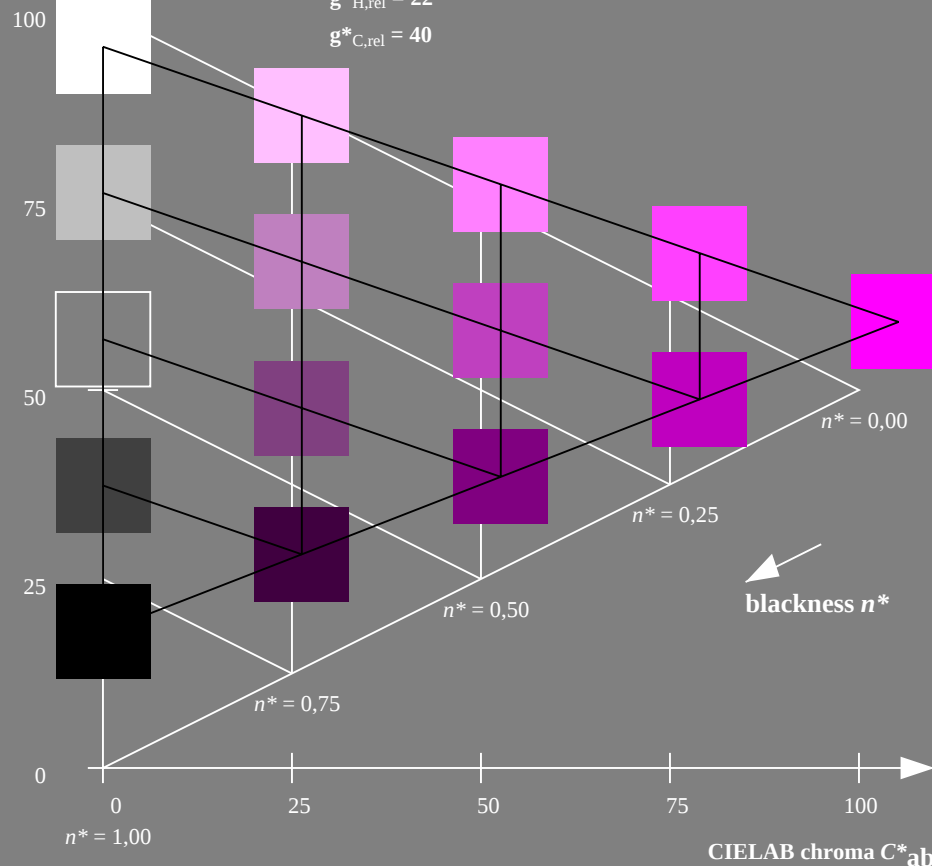
% Gamut

$u^*_{rel} = 118$

% Regularity

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

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



NE360-7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

Output: Colorimetric Offset Reflective System ORS18

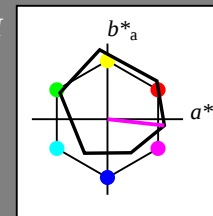
for hue $h^* = lab \cdot h = 354/360 = 0.982$

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	65.39	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

CIELAB lightness L^*

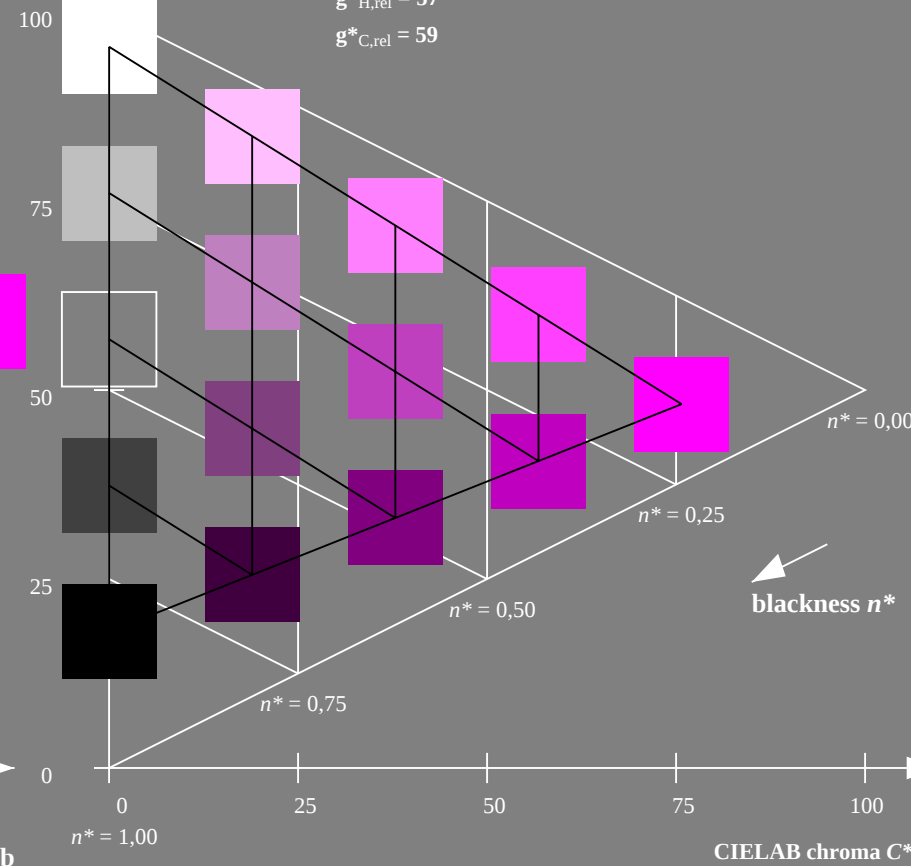
% Gamut

$u^*_{rel} = 93$

% Regularity

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

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



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

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

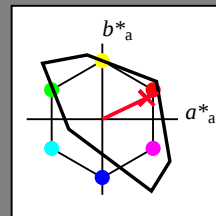
for hue $h^* = lab^*h = 25/360 = 0.071$

LAB*LCH, LAB*NCH

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14



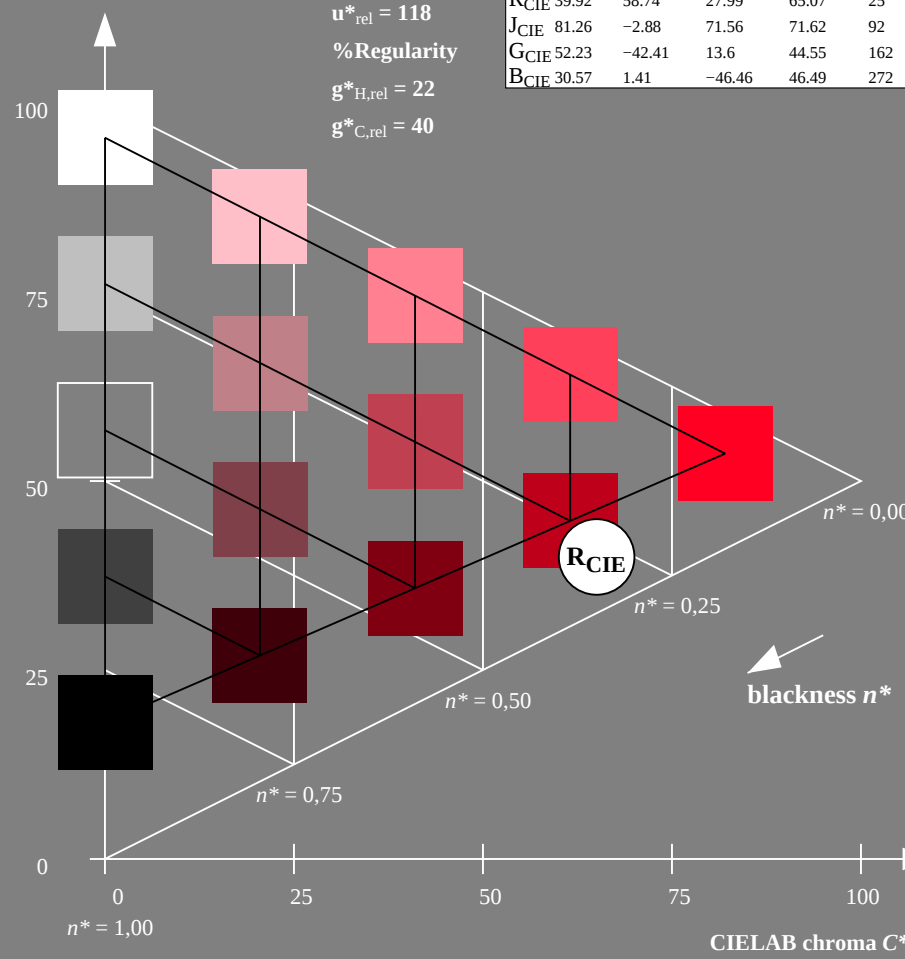
TLS18; adapted (a)		CIELAB data			
	L^*_{*a}	a^*_{*a}	b^*_{*a}	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

CIELAB lightness L^*

% Gamut

$$\mathbf{u}_{\text{rel}}^* = 118$$

%Regularity

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


NE360-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

BAM-test chart NE36; Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

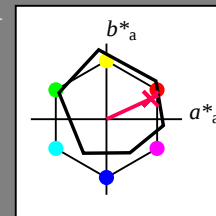
for hue $h^* = lab^*h = 25/360 = 0.069$

*LAB*LCH, LAB*NCH*

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32



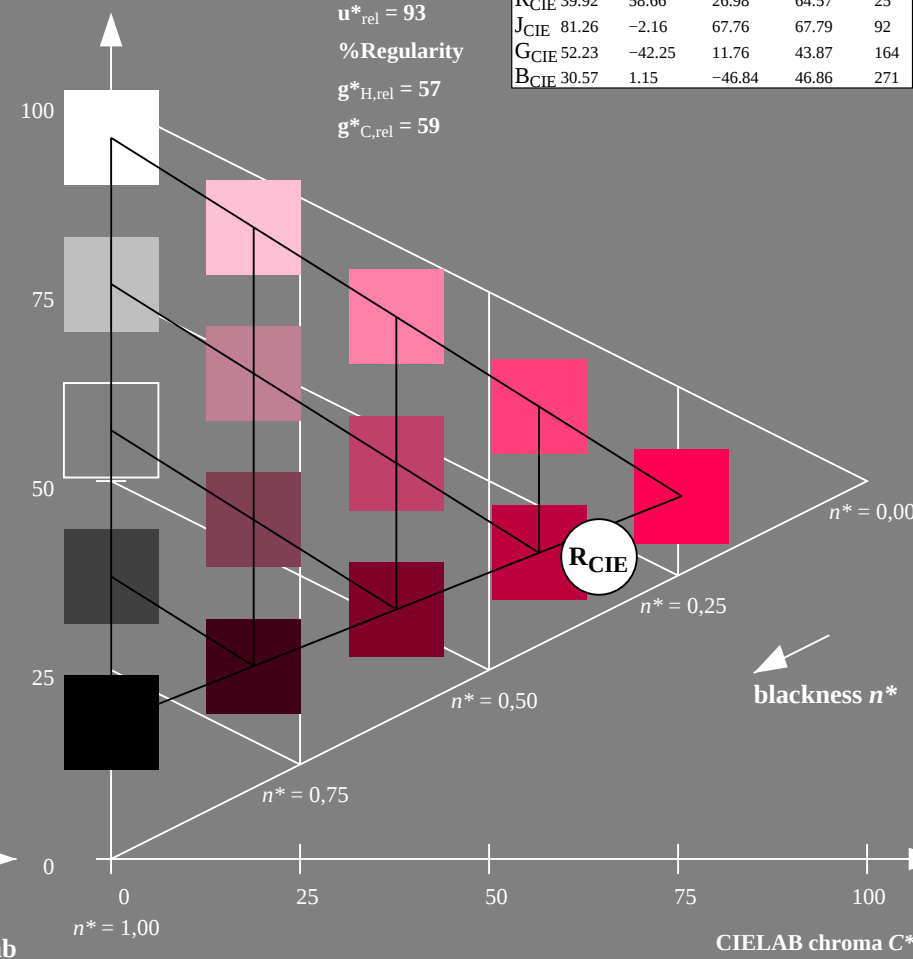
ORS18; adapted (a) CIELAB data					
	L^*_{*a}	a^*_{*a}	b^*_{*a}	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	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

CIELAB lightness L^*

%Gamut

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

%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

Input: Colorimetric Television Luminous System TLS18

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

LAB*LCH, LAB*NCH

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

CIE LAB lightness L^*

% Gamut

$u^*_{rel} = 118$

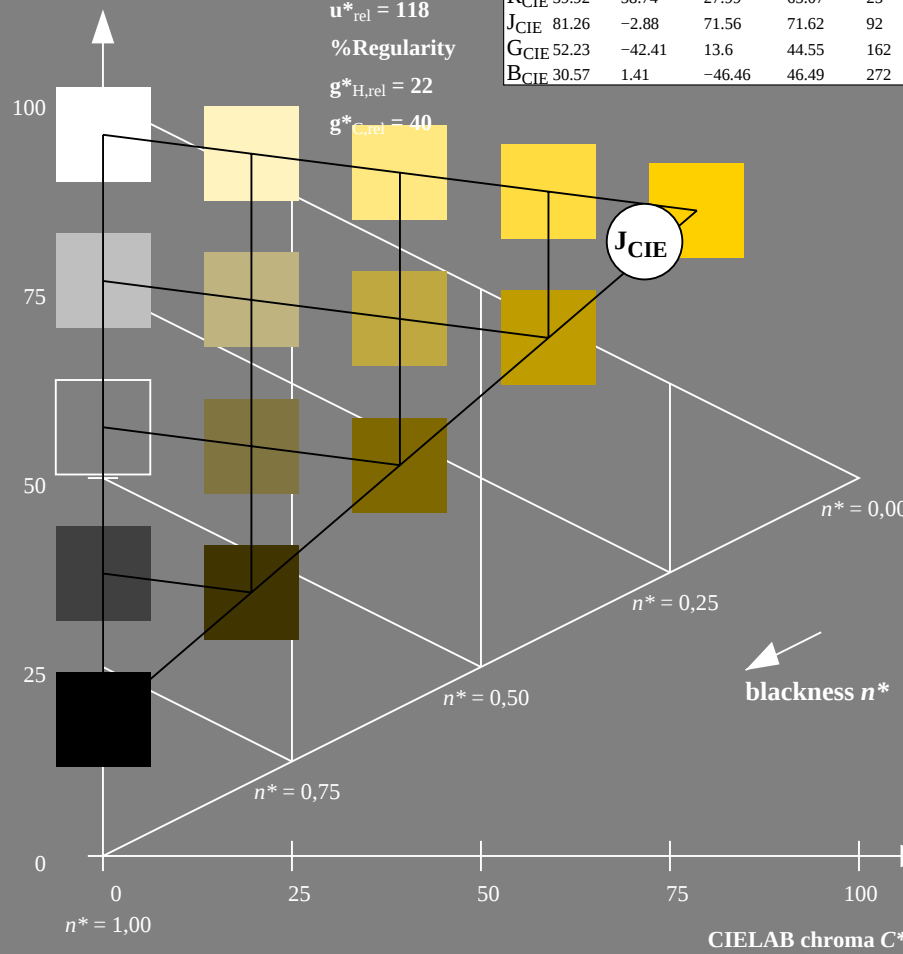
% Regularity

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

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

TLS18; adapted (a) CIE LAB 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



NE360-7, 5 step scales for constant CIE LAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18

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

LAB*LCH, LAB*NCH

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

CIE LAB lightness L^*

% Gamut

$u^*_{rel} = 93$

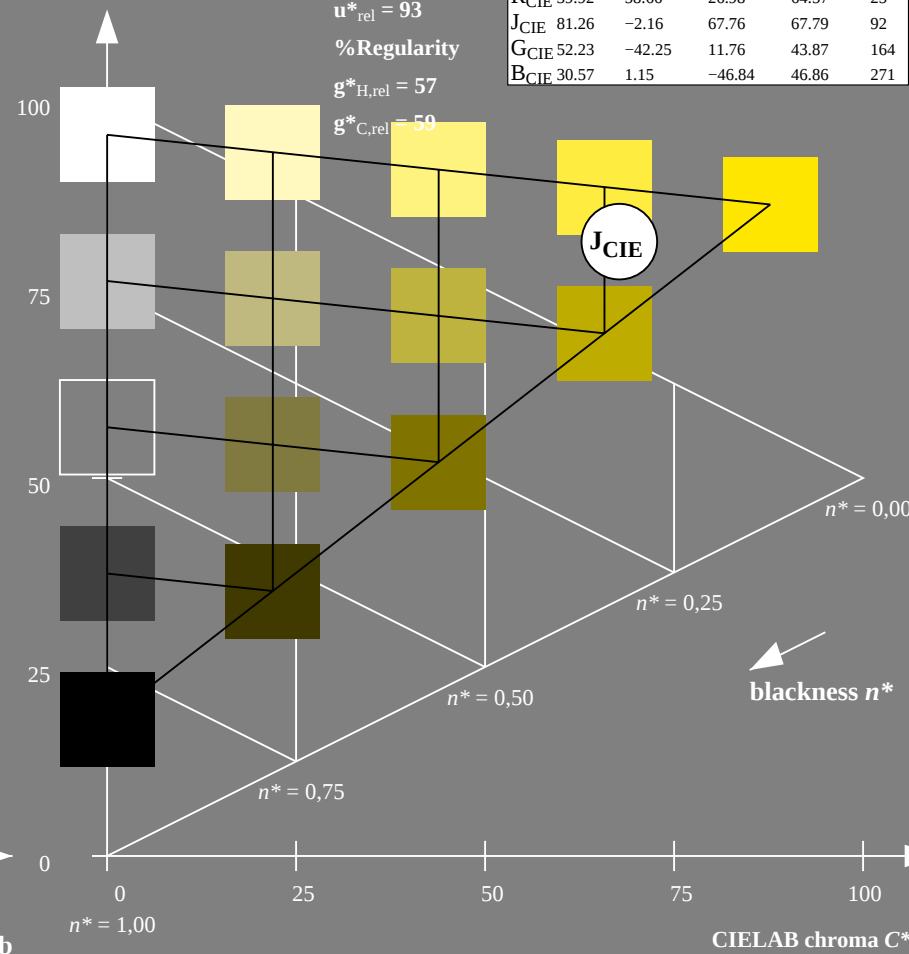
% Regularity

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

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

ORS18; adapted (a) CIE LAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{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 CIE LAB hue 92/360 = 0.255 (right)

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

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

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

CIELAB lightness L^*

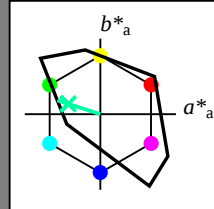
% Gamut

$u^*_{rel} = 118$

% Regularity

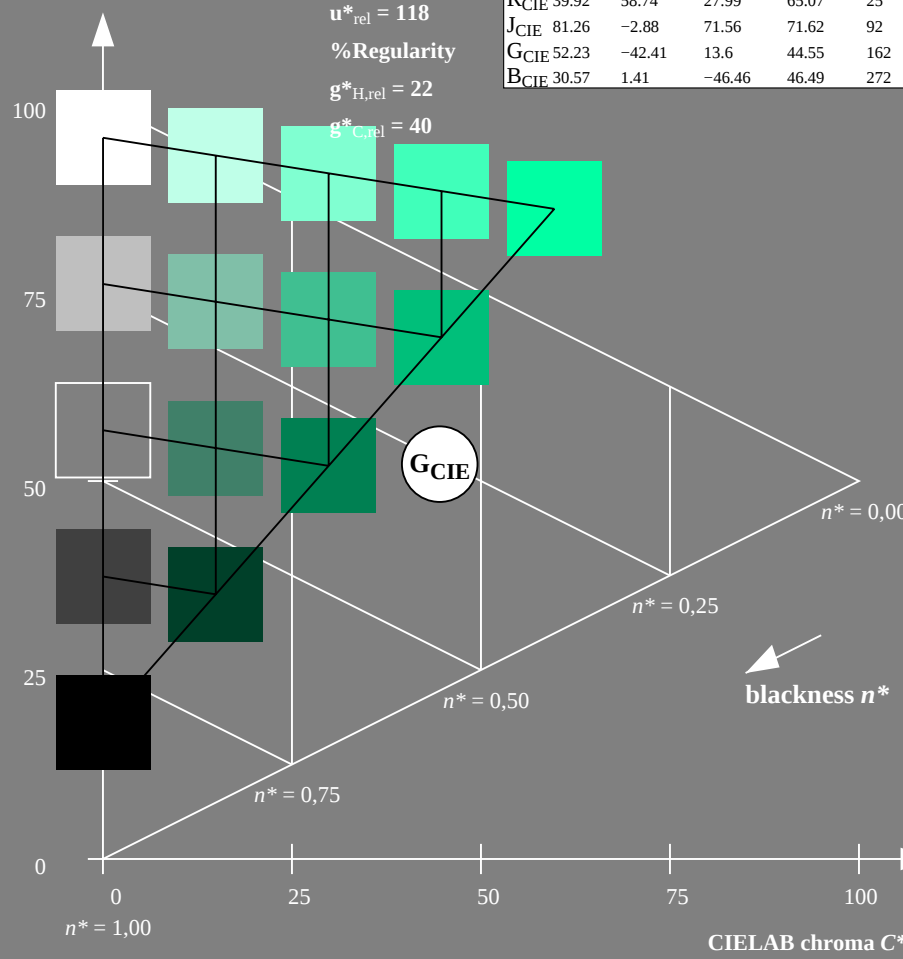
$g^*_{H,rel} = 22$

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



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



NE360-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: Colorimetric Offset 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^*

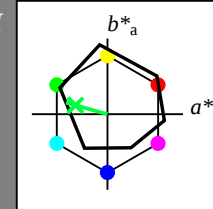
% Gamut

$u^*_{rel} = 93$

% Regularity

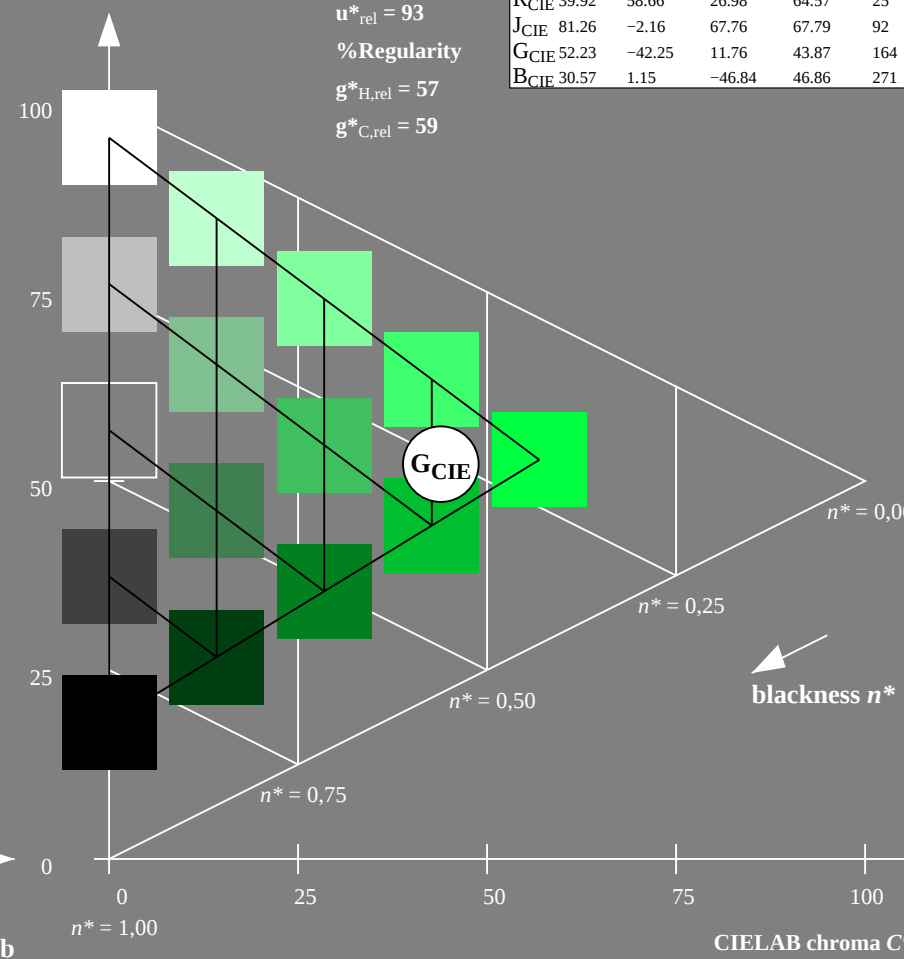
$g^*_{H,rel} = 57$

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



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	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 164/360 = 0.457 (right)

BAM-test chart NE36; Colorimetric systems TLS18 & 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 TLS18

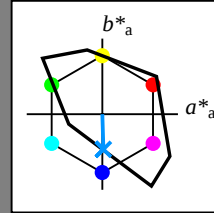
for hue $h^* = lab^*h = 272/360 = 0.755$

*LAB*LCH, LAB*NCH*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



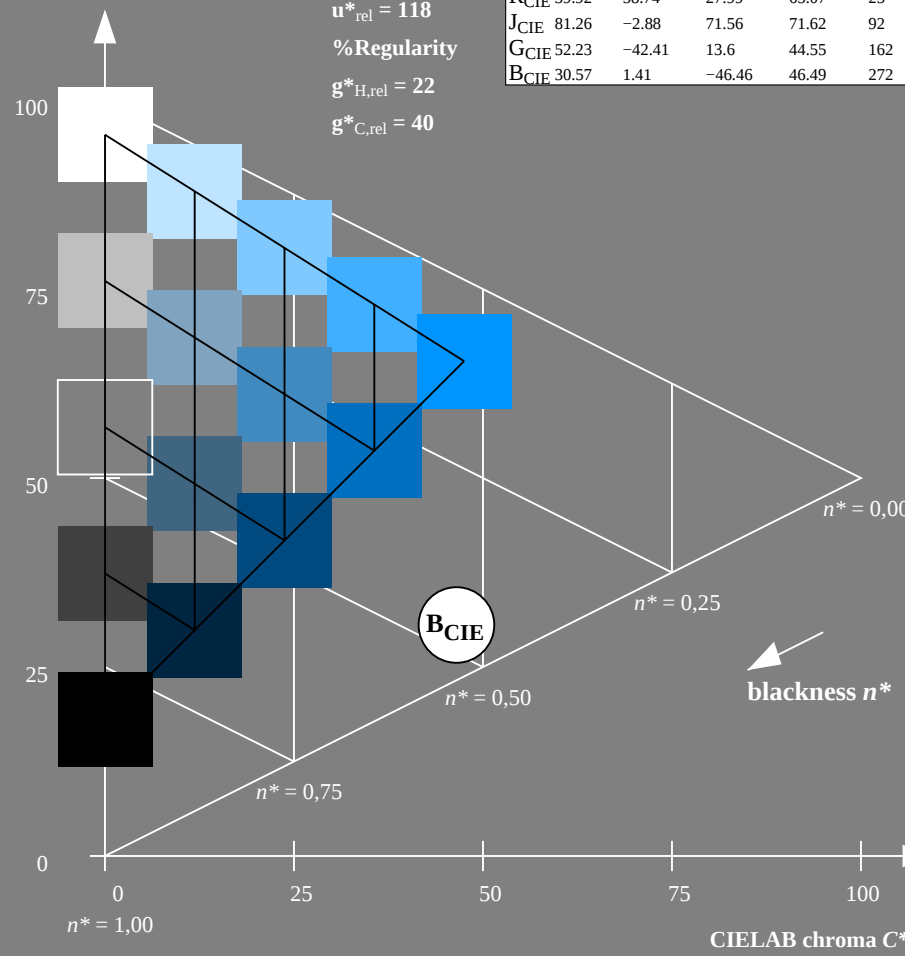
TLS18; adapted (a)		CIELAB data			
	L^*_{*a}	a^*_{*a}	b^*_{*a}	$C^*_{ab,a}$	h^*_{ab}
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

CIELAB lightness L^*

%Gamut

$$u_{rel}^* = 118$$

%Regularity

$$g^*_{H,rel} = 22$$
$$g^*_{C,rel} = 40$$
NE360-7, 5 step scales for constant CIELAB hue $272/360 = 0.755$ (left)

BAM-test chart NE36; Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

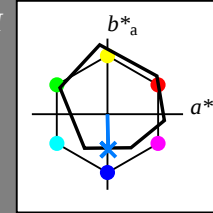
for hue $h^* = lab^*h = 271/360 = 0.754$

*LAB*LCH, LAB*NCH*

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0



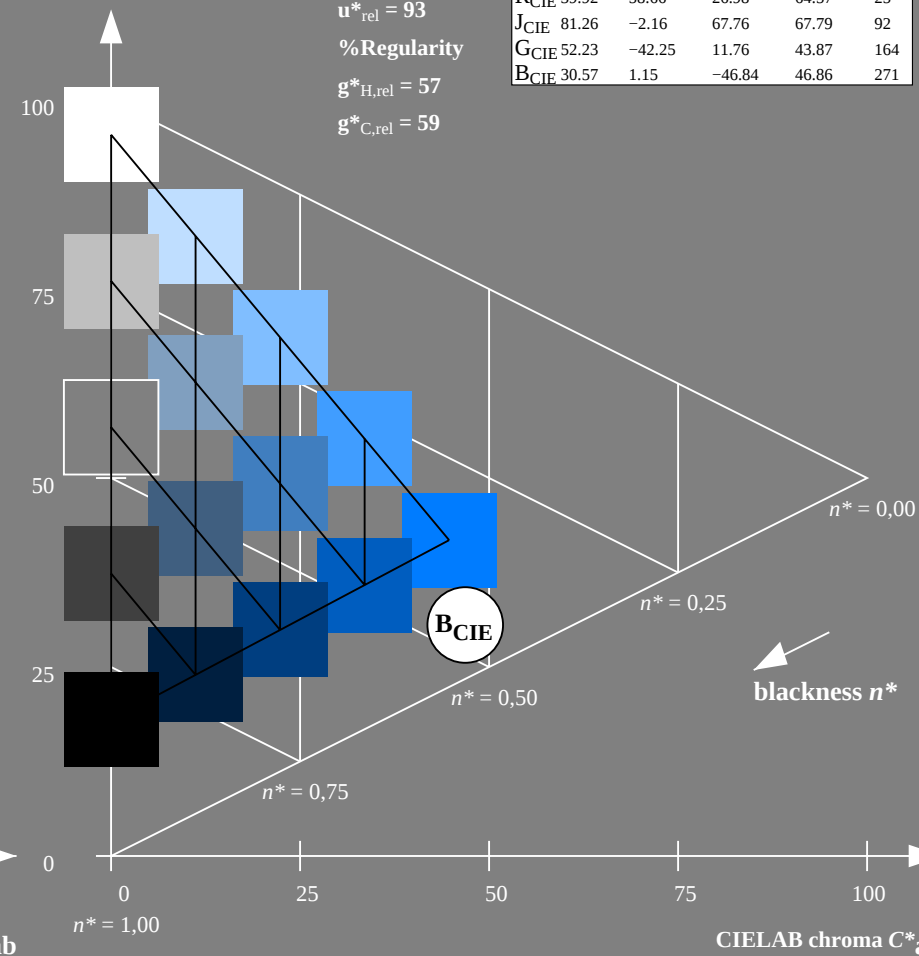
ORS18; adapted (a) CIELAB data					
	L^*_{Ma}	a^*_{Ma}	b^*_{Ma}	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	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

CIELAB lightness L^*

% Gamut

$$u_{rel}^* = 93$$

%Regularity

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


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

input: *olv** *setrgbcolor*

output: *no change compared to input*