

Input: Colorimetric Natural Reflective System CNS18

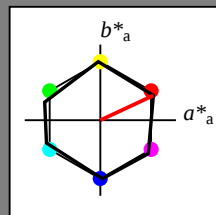
for hue $h^* = lab \cdot h = 25/360 = 0.069$

LAB*LCH, LAB*NCH

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.0 0.0



CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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

CIELAB lightness L^*

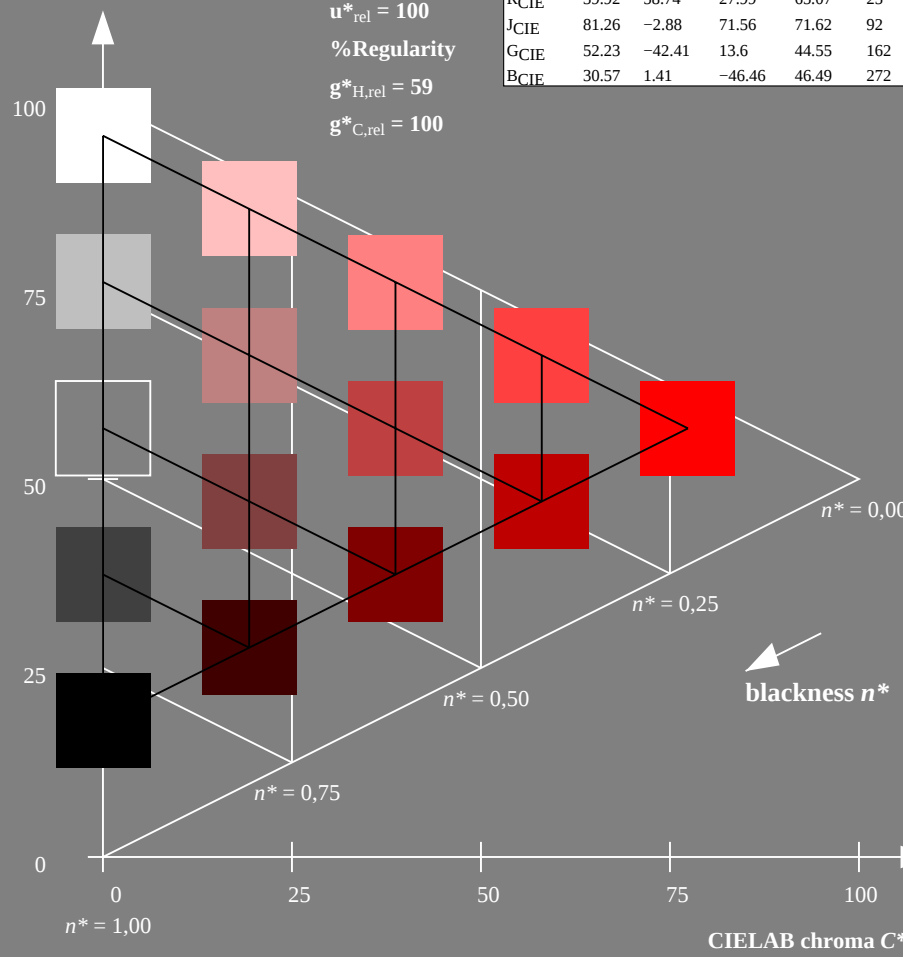
% Gamut

$u^*_{rel} = 100$

% Regularity

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

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



VE630-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Television Luminous System TLS18

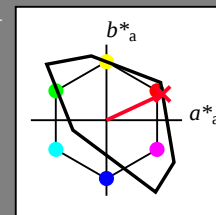
for hue $h^* = lab \cdot h = 25/360 = 0.069$

LAB*LCH, LAB*NCH

D65: hue O

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	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

CIELAB lightness L^*

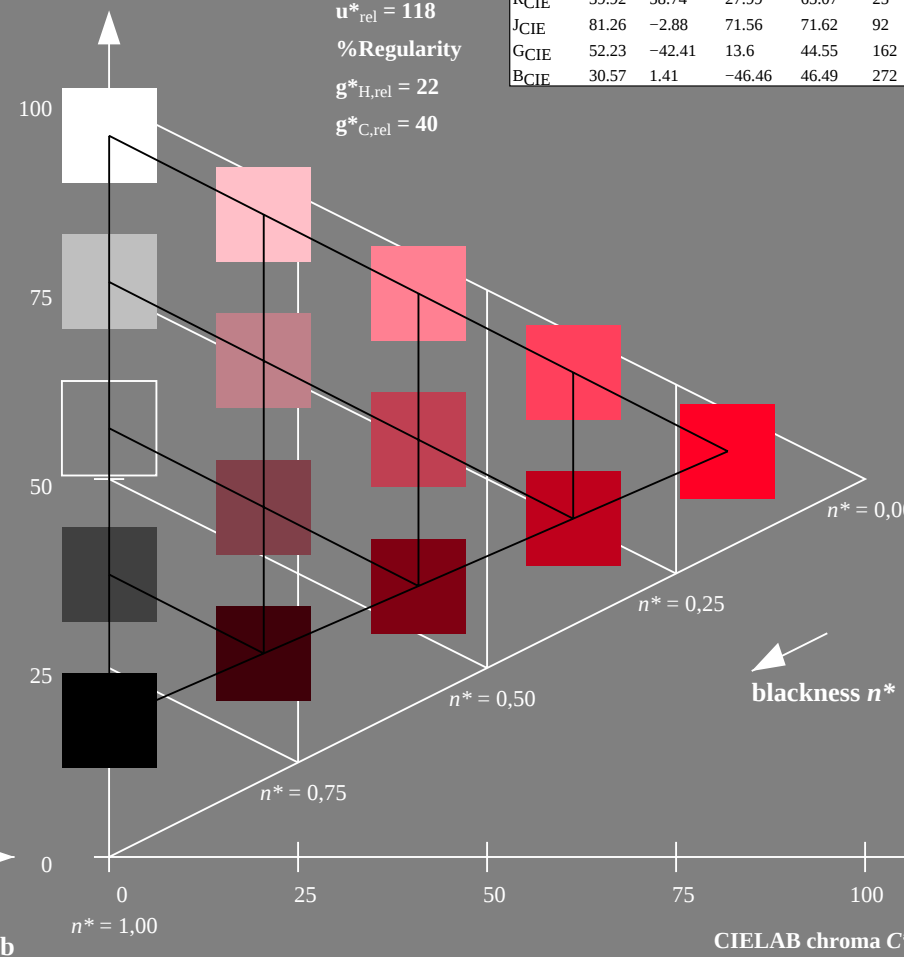
% Gamut

$u^*_{rel} = 118$

% Regularity

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

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



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

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

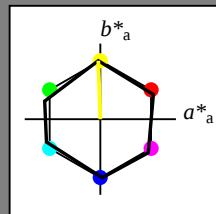
for hue $h^* = lab^*h = 92/360 = 0.256$

LAB*LCH, LAB*NCH

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 1.0 1.0 0.0



CNS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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

CIELAB lightness L^*

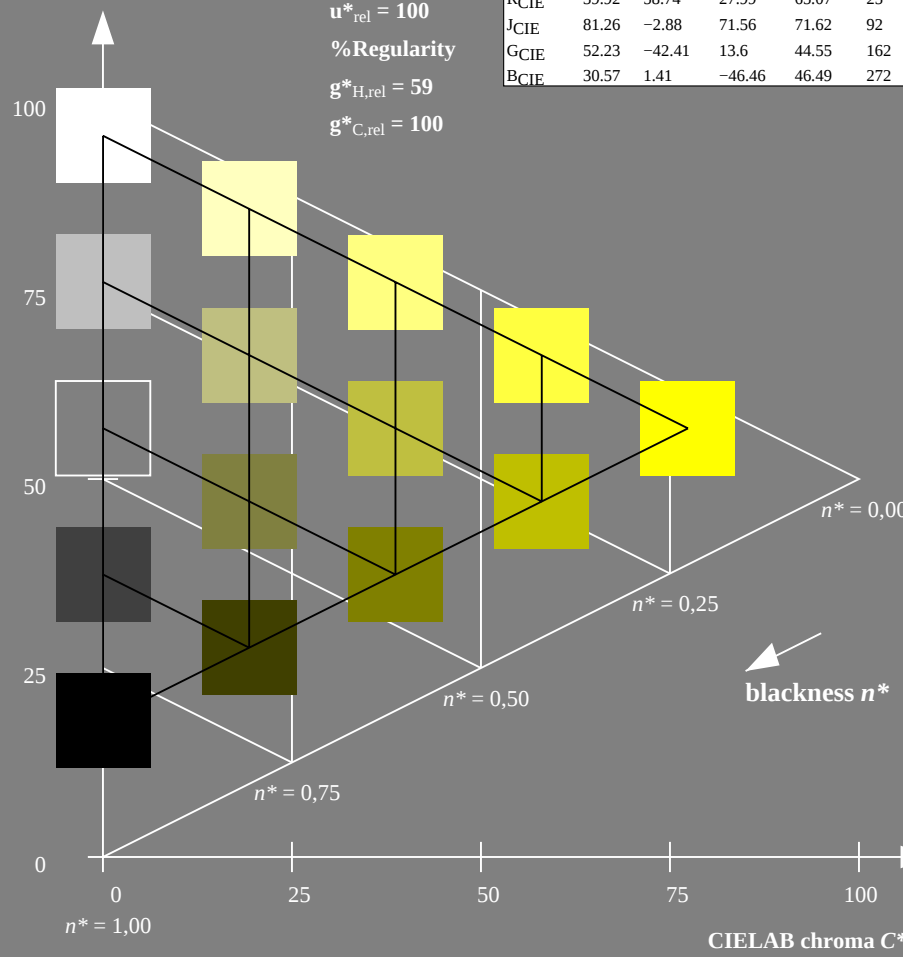
% Gamut

$u_{rel}^* = 100$

% Regularity

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

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



VE630-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

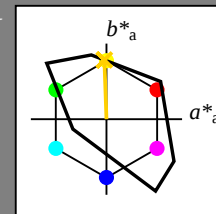
for hue $h^* = lab^*h = 92/360 = 0.256$

LAB*LCH, LAB*NCH

D65: hue Y

LCH*Ma: 85 78 92

olv*Ma: 1.0 0.81 0.0



TLS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	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

CIELAB lightness L^*

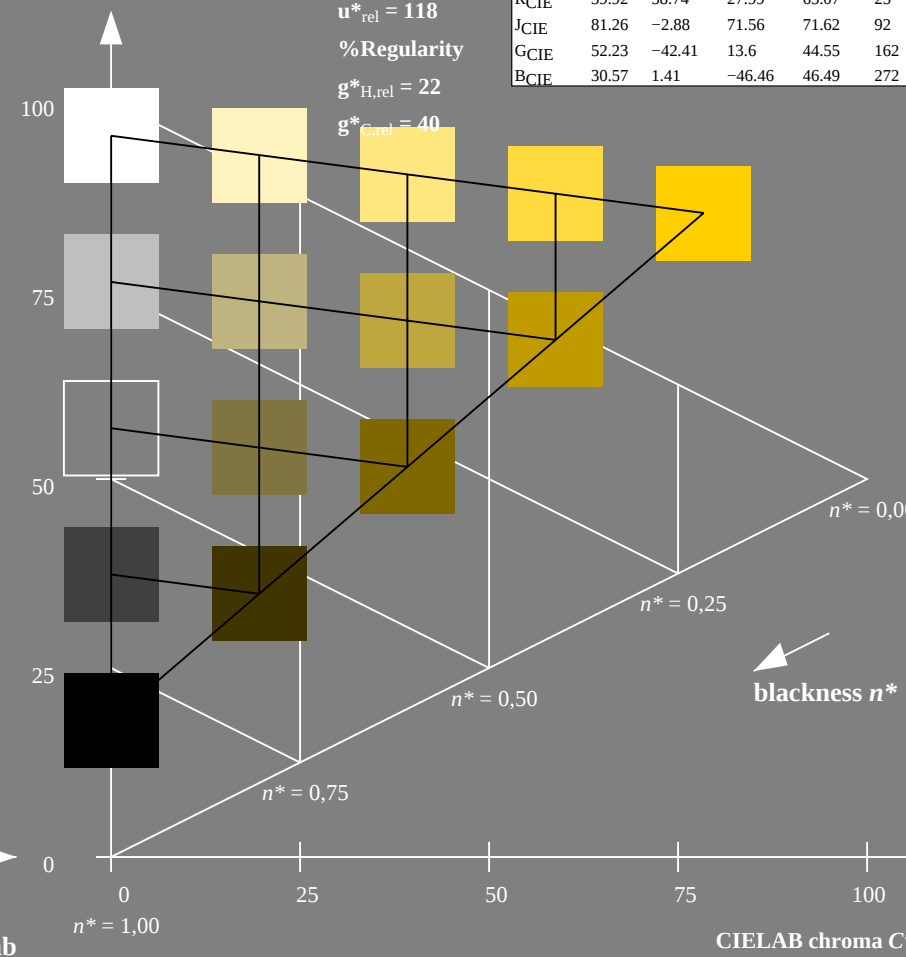
% Gamut

$u_{rel}^* = 118$

% Regularity

$g_{H,rel}^* = 22$

$g_{C,rel}^* = 40$



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

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab \cdot h = 162/360 = 0.45$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 100$

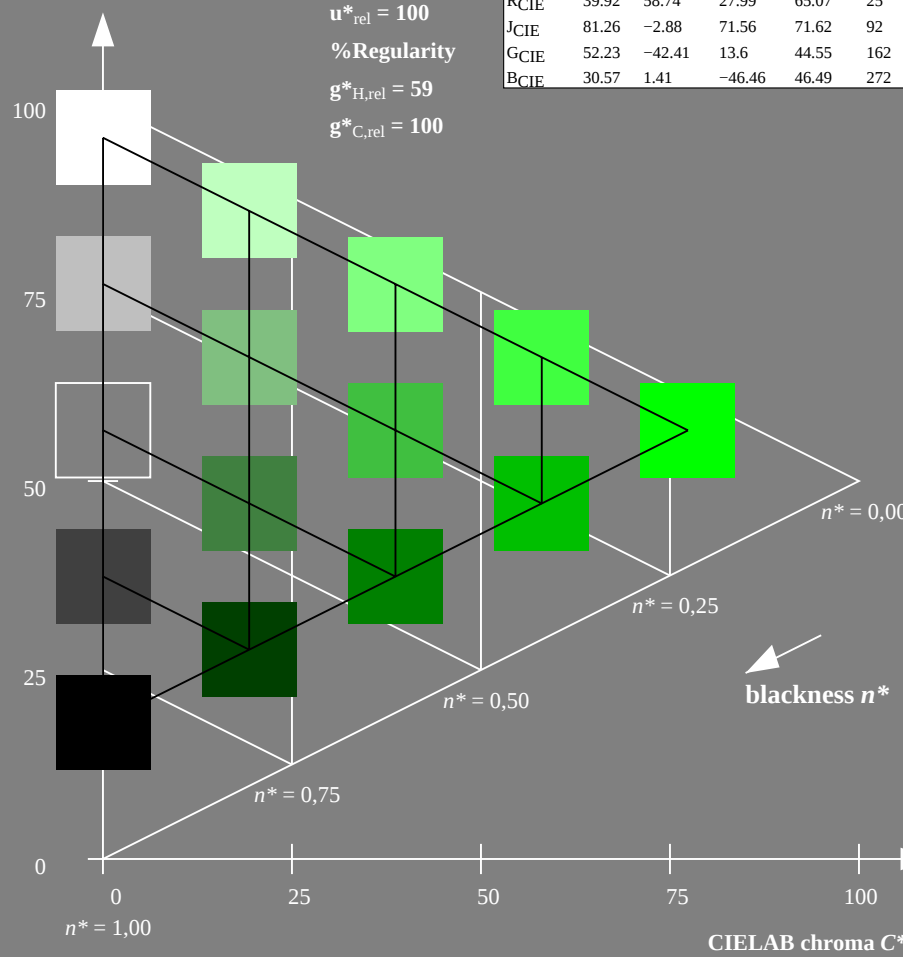
% Regularity

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

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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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



VE630-7, 5 step scales for constant CIELAB hue 162/360 = 0.45 (left)

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 162/360 = 0.45$

LAB*LCH, LAB*NCH

D65: hue L

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 118$

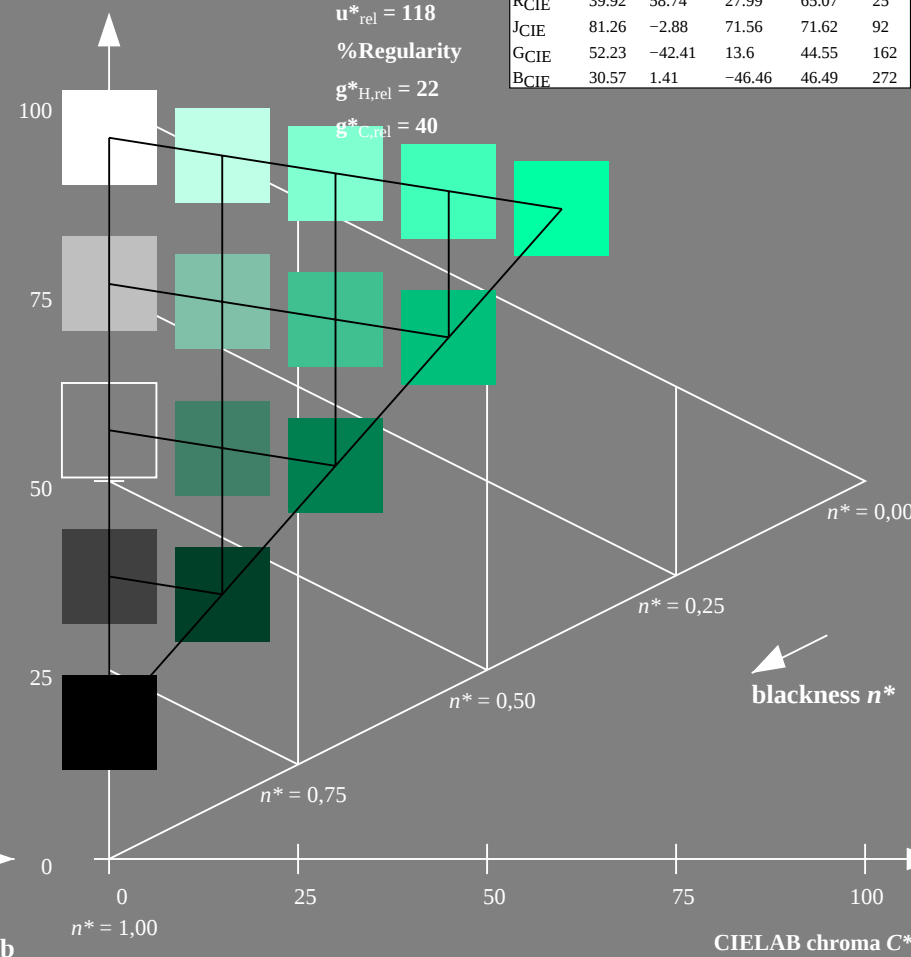
% Regularity

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

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

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	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



5 step scales for constant CIELAB hue 162/360 = 0.45 (right)

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

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

LAB*LCH, LAB*NCH

D65: hue G50B

LCH*Ma: 57 77 203

olv*Ma: 0.0 1.0 1.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 100$

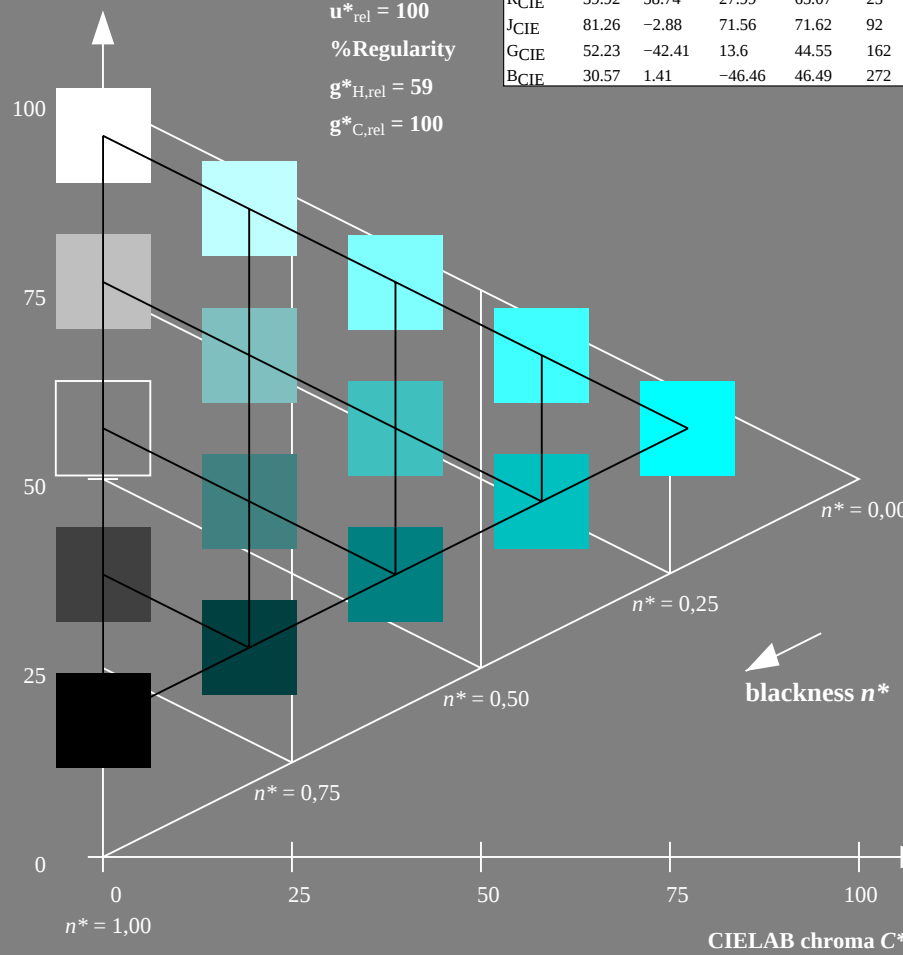
% Regularity

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

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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
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



VE630-7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

Output: Colorimetric Television Luminous System TLS18

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

LAB*LCH, LAB*NCH

D65: hue C

LCH*Ma: 85 43 203

olv*Ma: 0.0 0.96 1.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 118$

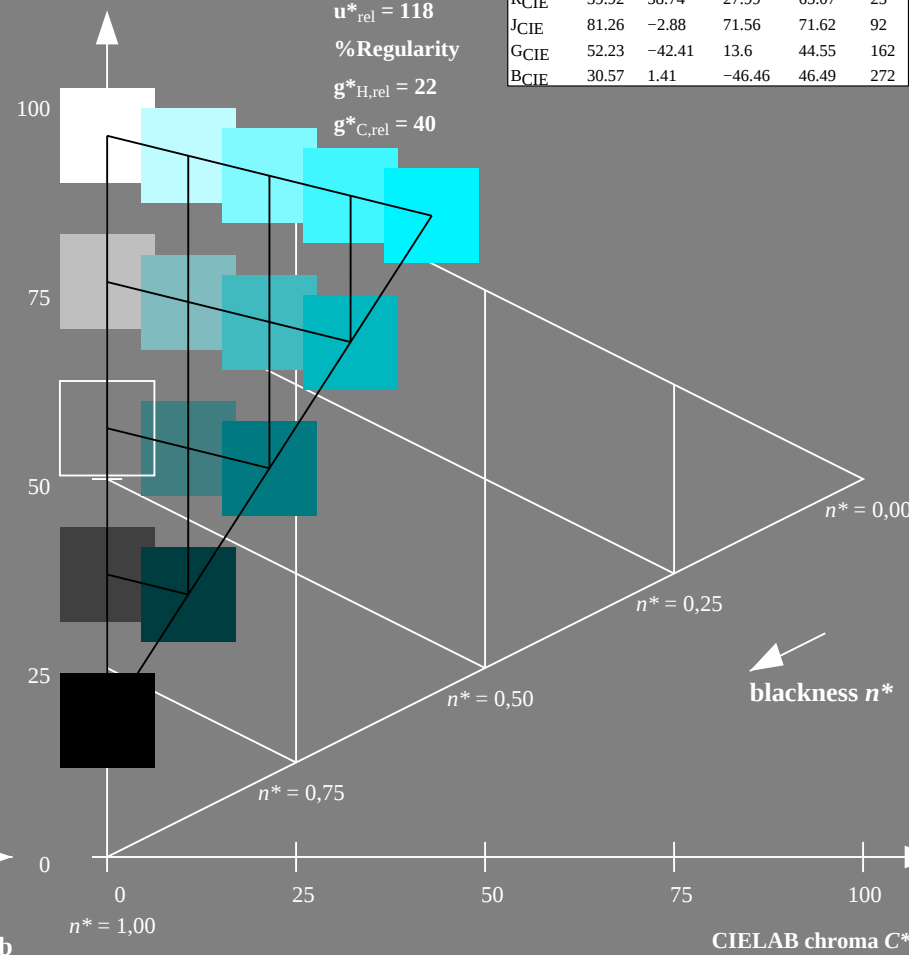
% Regularity

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

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

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	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



5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

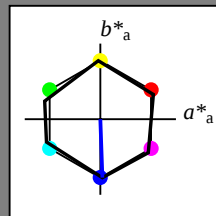
for hue $h^* = lab \cdot h = 272/360 = 0.756$

LAB*LCH, LAB*NCH

D65: hue B

LCH*Ma: 57 77 272

olv*Ma: 0.0 0.0 1.0



CNS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
R _{Ma}	56.7	70.15	32.71	77.4	25
J _{Ma}	56.7	-2.69	77.35	77.4	92
G _{Ma}	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
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^*

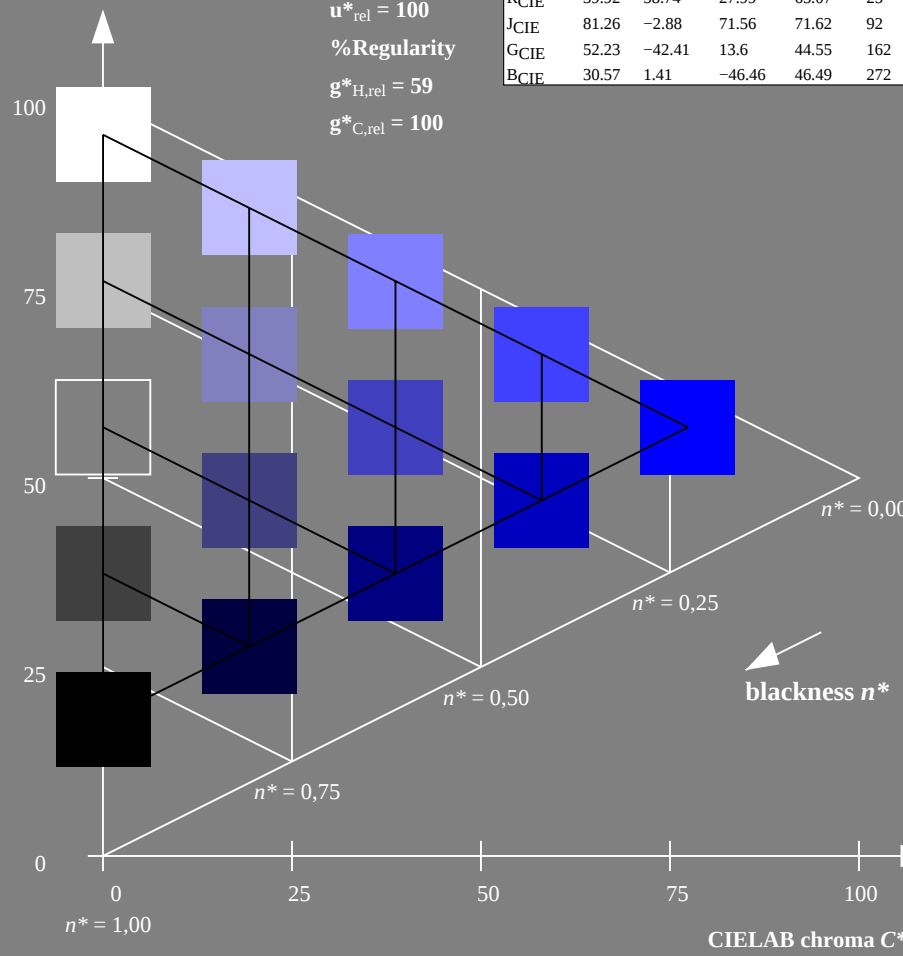
% Gamut

$u_{rel}^* = 100$

% Regularity

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

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



VE630-7, 5 step scales for constant CIELAB hue 272/360 = 0.756 (left)

Output: Colorimetric Television Luminous System TLS18

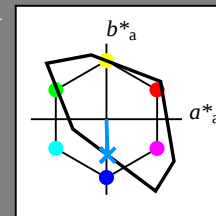
for hue $h^* = lab \cdot h = 272/360 = 0.756$

LAB*LCH, LAB*NCH

D65: hue V

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 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^*

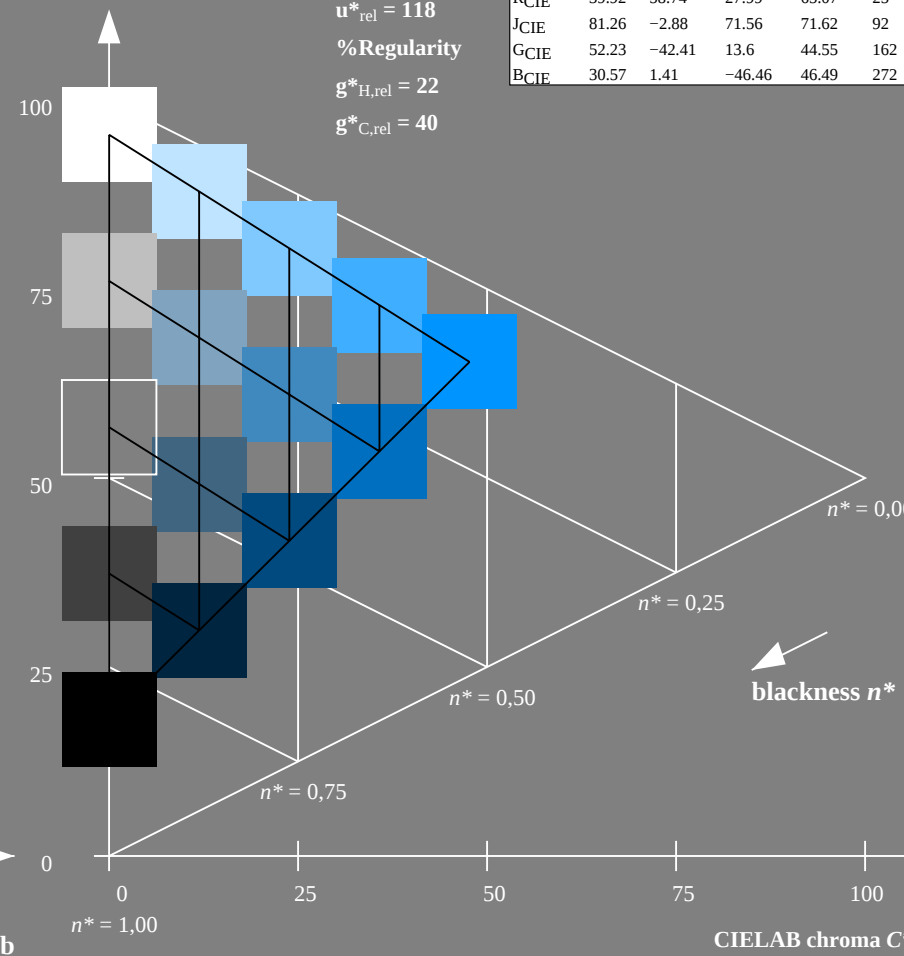
% Gamut

$u_{rel}^* = 118$

% Regularity

$g_{H,rel}^* = 22$

$g_{C,rel}^* = 40$



5 step scales for constant CIELAB hue 272/360 = 0.756 (right)

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

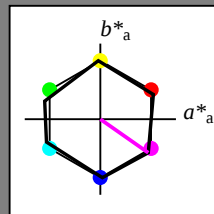
for hue $h^* = lab^*h = 325/360 = 0.903$

LAB*LCH, LAB*NCH

D65: hue B50R

LCH*Ma: 57 77 325

olv*Ma: 1.0 0.0 1.0



CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
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

CIELAB lightness L^*

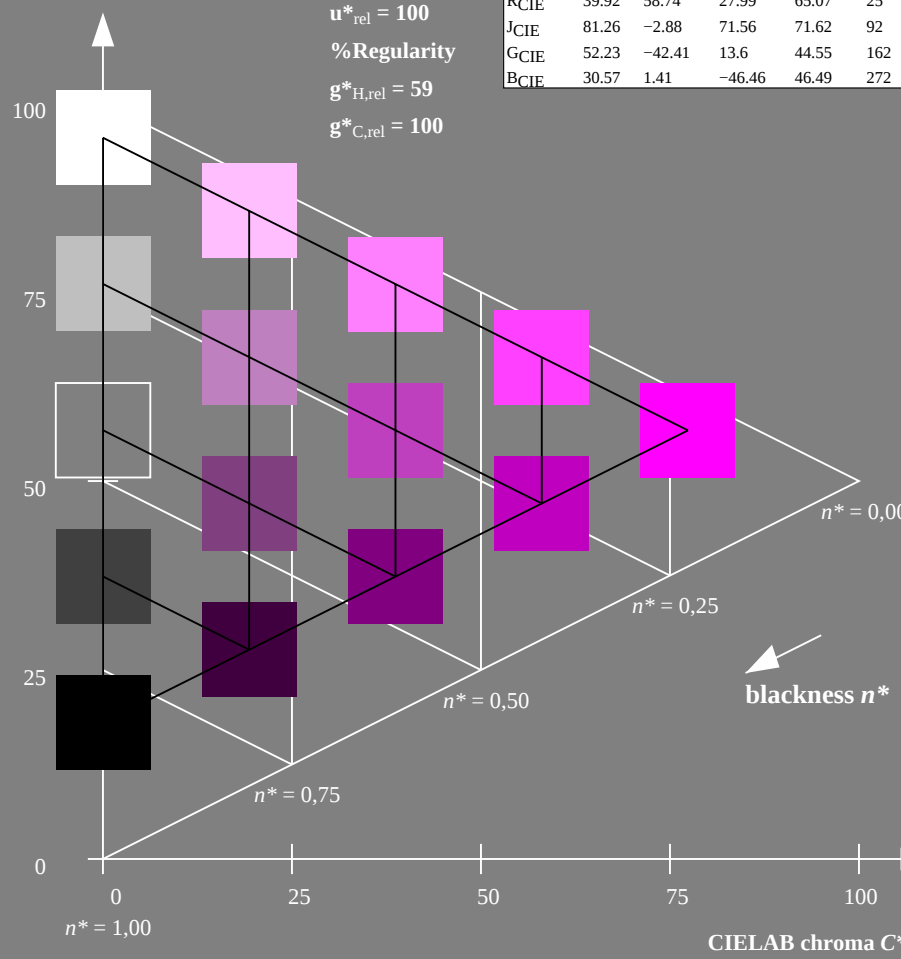
% Gamut

$u^*_{rel} = 100$

% Regularity

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

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



VE630-7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

Output: Colorimetric Television Luminous System TLS18

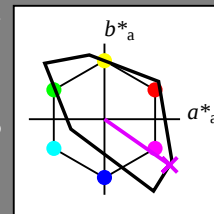
for hue $h^* = lab^*h = 325/360 = 0.903$

LAB*LCH, LAB*NCH

D65: hue M

LCH*Ma: 56 105 325

olv*Ma: 0.88 0.0 1.0



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	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

CIELAB lightness L^*

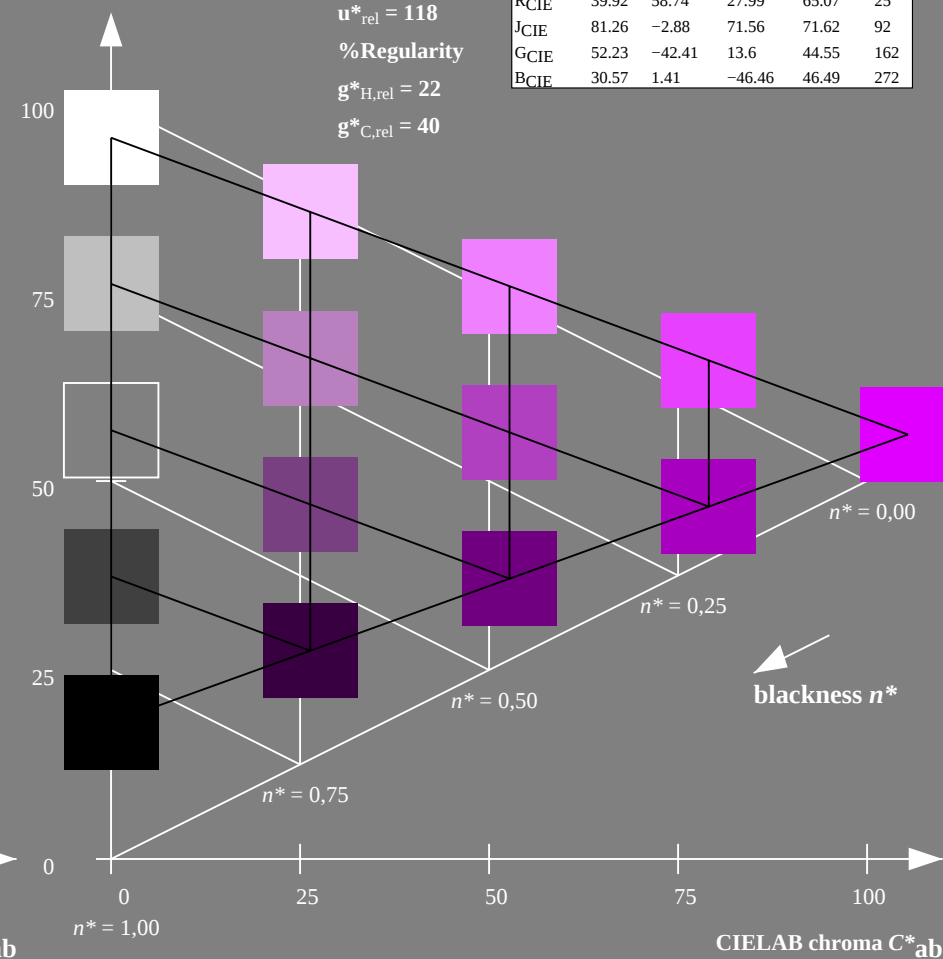
% Gamut

$u^*_{rel} = 118$

% Regularity

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

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



5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

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

LAB*LCH, LAB*NCH

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.01 0.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 100$

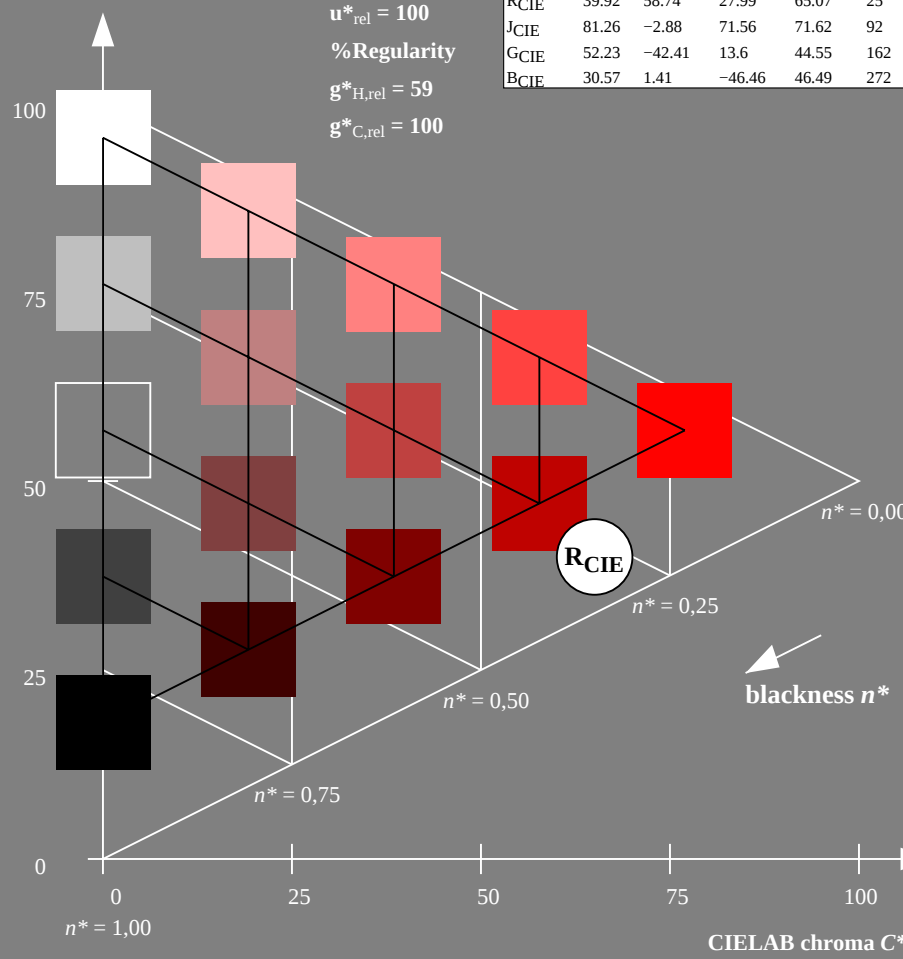
% Regularity

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

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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	56.7	70.15	32.71	77.4	25
J _{Ma}	56.7	-2.69	77.35	77.4	92
G _{Ma}	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
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



VE630-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

Output: Colorimetric Television Luminous System TLS18

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

LAB*LCH, LAB*NCH

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 118$

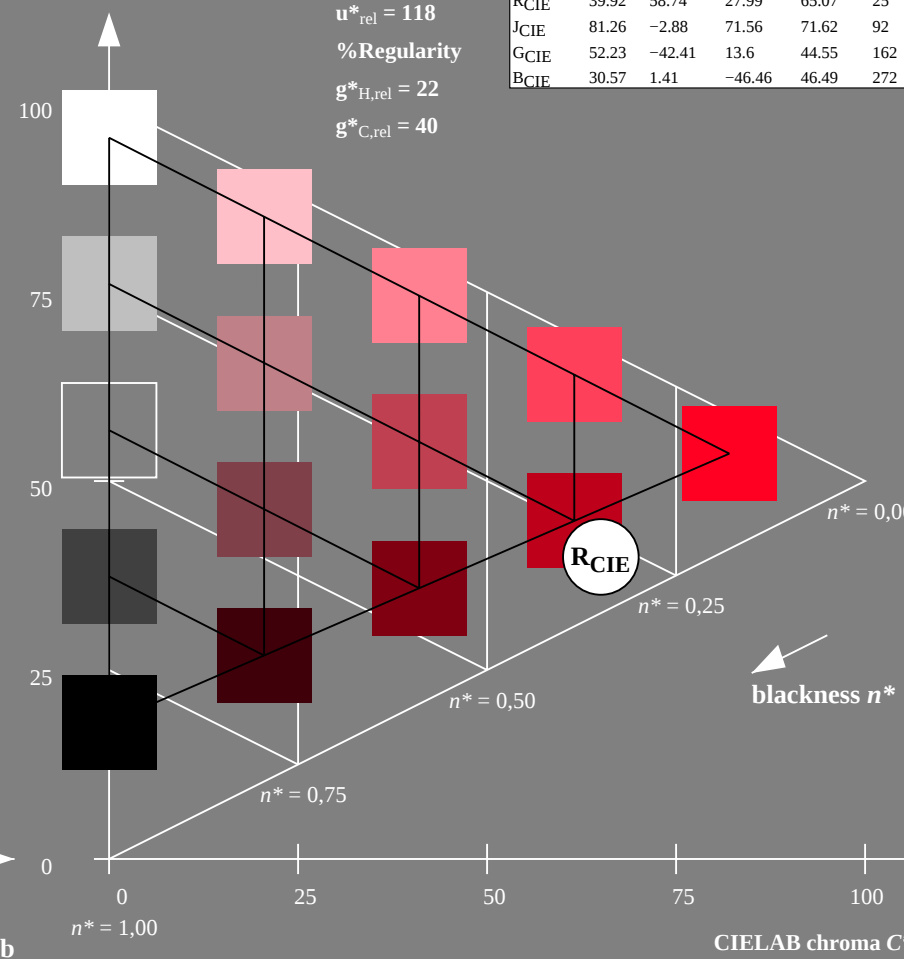
% Regularity

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

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

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



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

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

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

LAB*LCH, LAB*NCH

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 0.99 1.0 0.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 100$

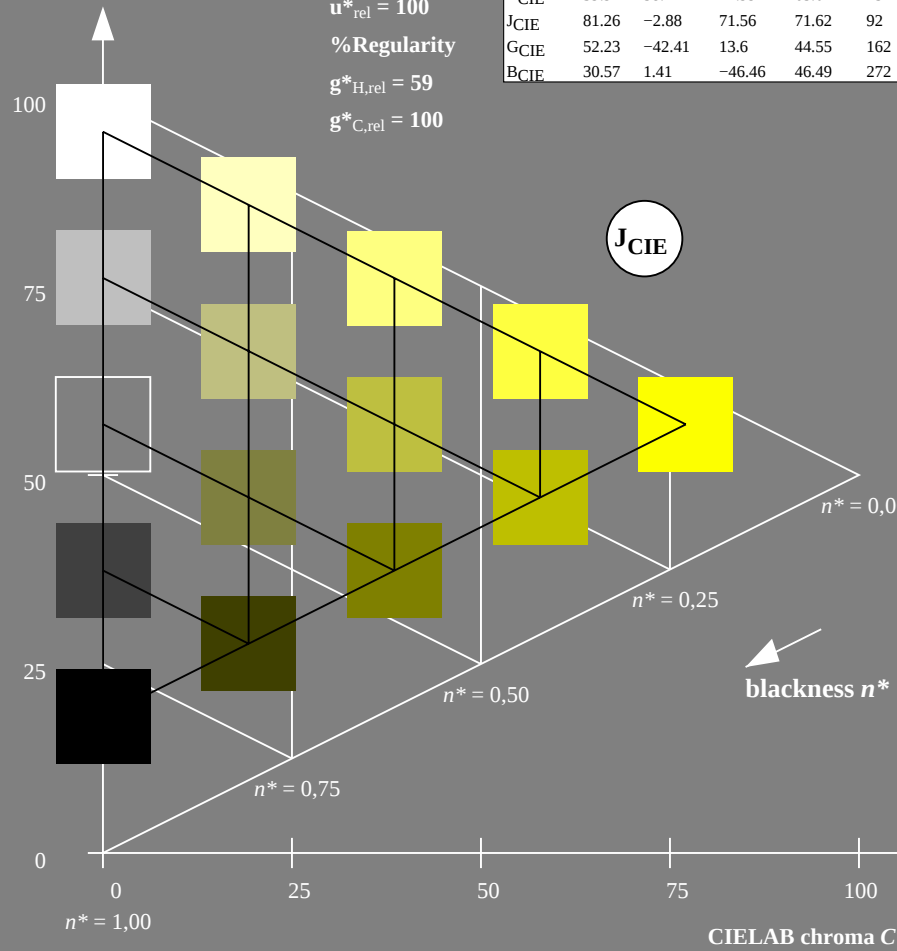
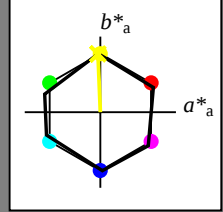
% Regularity

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

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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
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



VE630-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS18

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

LAB*LCH, LAB*NCH

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 118$

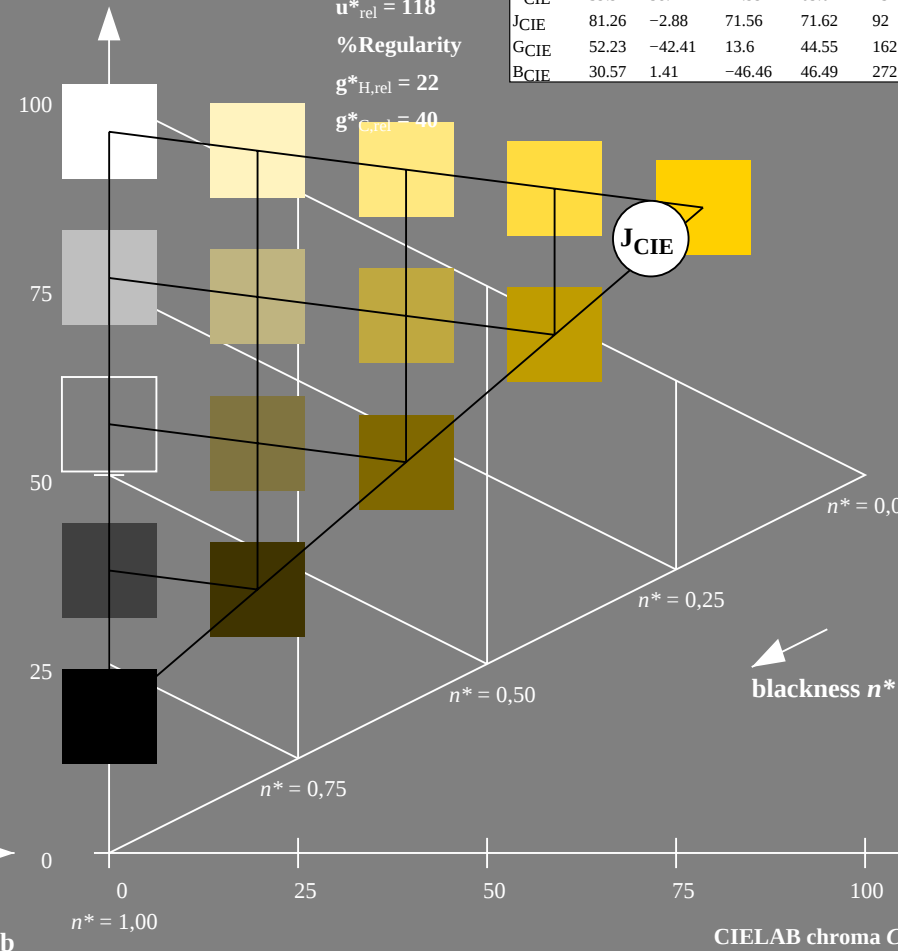
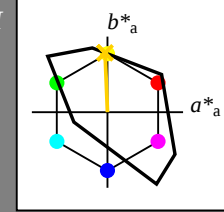
% Regularity

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

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

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	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



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

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

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

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.01

CIELAB lightness L^*

% Gamut

$u^*_{rel} = 100$

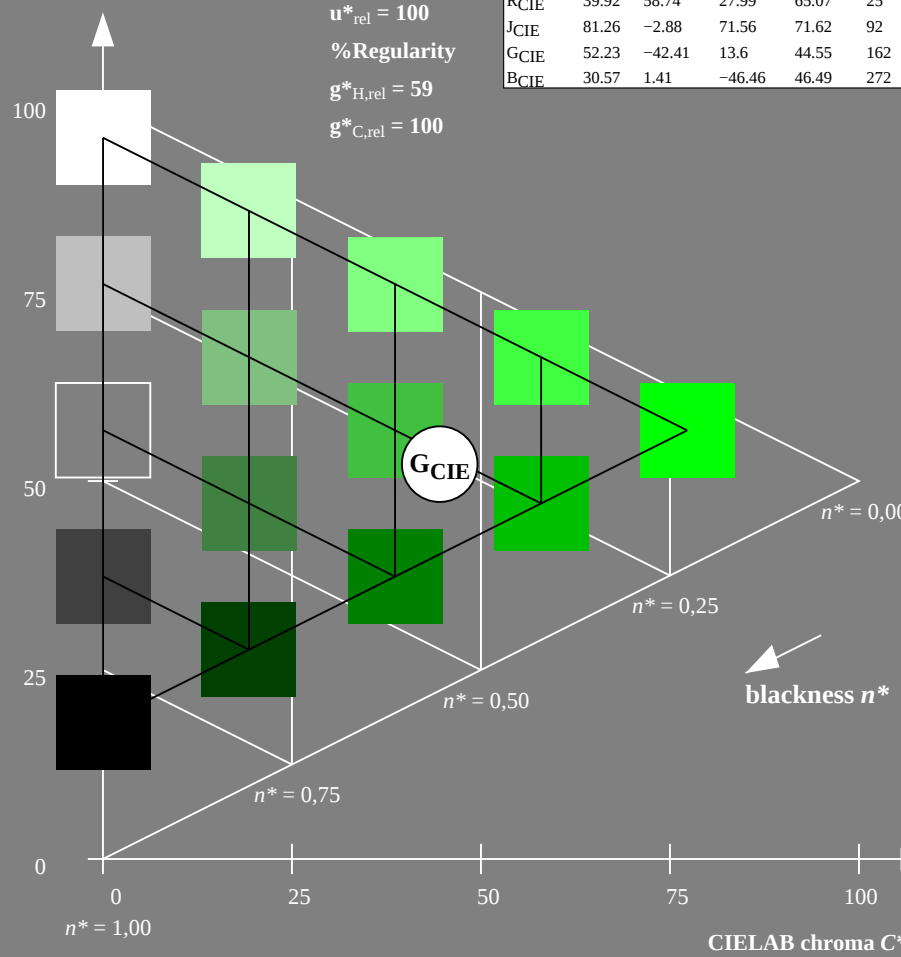
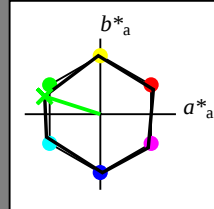
% Regularity

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

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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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



VE630-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: 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

$u^*_{rel} = 118$

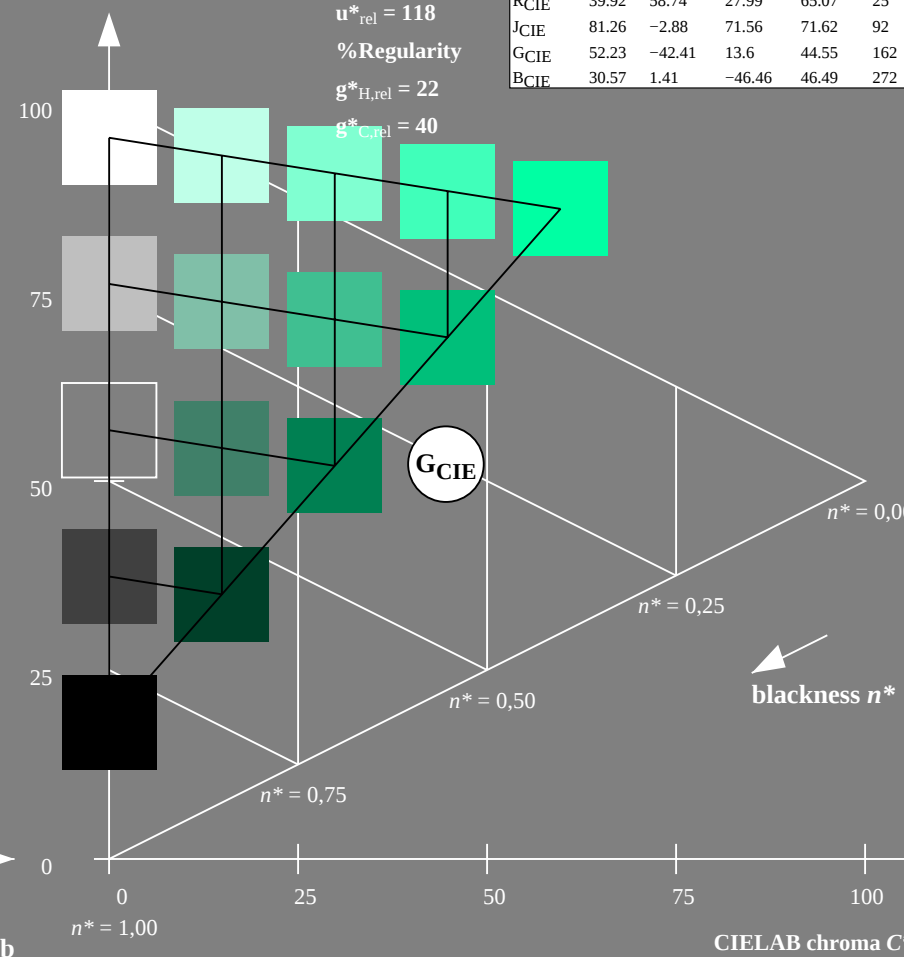
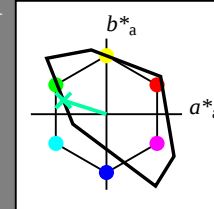
% Regularity

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

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

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	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



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

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

input: olv* setrgbcolor

output: olv*' (TRI9) setrgbcolor

Input: Colorimetric Natural Reflective System CNS18

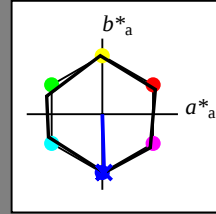
for hue $h^* = lab^*h = 272/360 = 0.755$

*LAB*LCH, LAB*NCH*

D65: hue B

LCH*Ma: 57 77 272

olv*Ma: 0.0 0.0 1.0



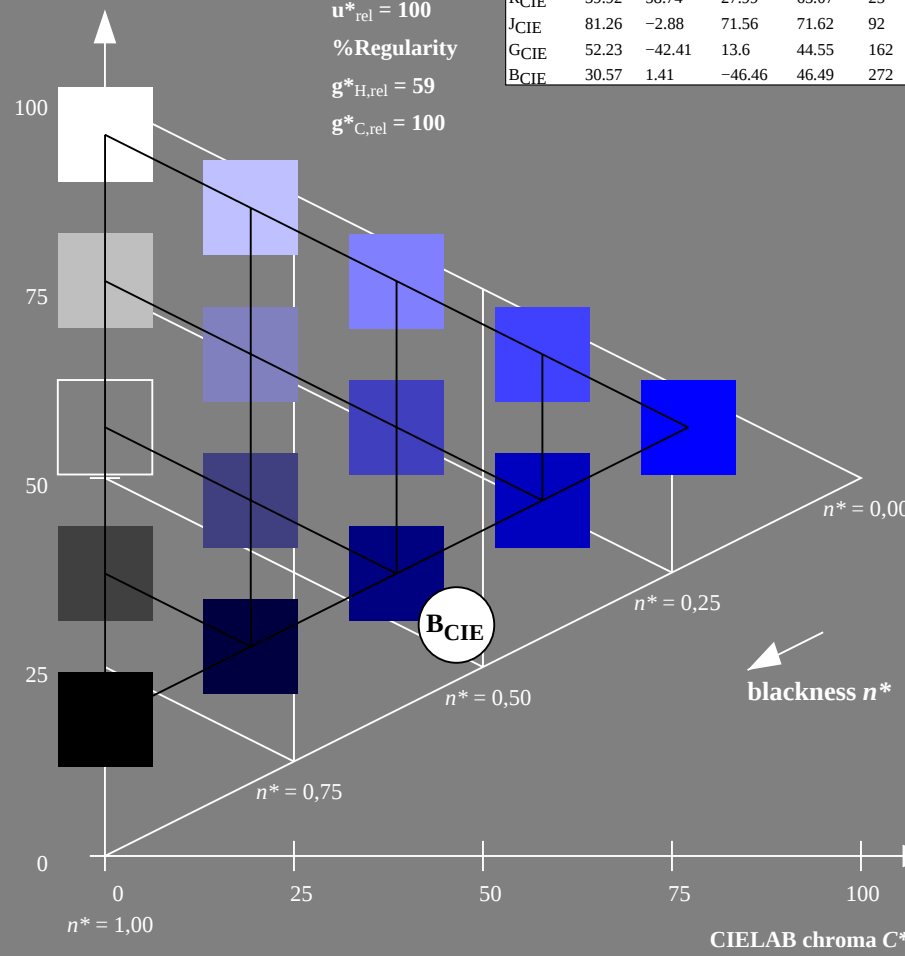
CNS18; adapted (a) CIELAB data					
	L^*_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50B _{Ma}	56.7	-71.24	-30.23	77.4	203
B _{Ma}	56.7	2.7	-77.34	77.4	272
B50R _{Ma}	56.7	63.4	-44.38	77.4	325
N _{Ma}	18.01	0.0	0.0	0.0	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	14.41	-46.46	46.49	272

CIELAB lightness L^*

%Gamut

$$\mathbf{u}_{\text{rel}}^* = 100$$

%Regularity

$$g^*_{H,rel} = 59$$
$$g^*_{C,rel} = 100$$
VE630-7, 5 step scales for constant CIELAB hue $272/360 = 0.755$ (left)

BAM-test chart VE63; Colorimetric systems CNS18 & TLS18

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

Output: Colorimetric Television Luminous System TLS18

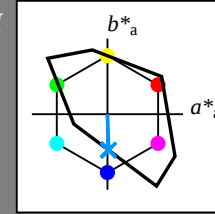
for hue $h^* = lab^*h = 272/360 = 0.755$

*LAB*LCH, LAB*NCH*

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0



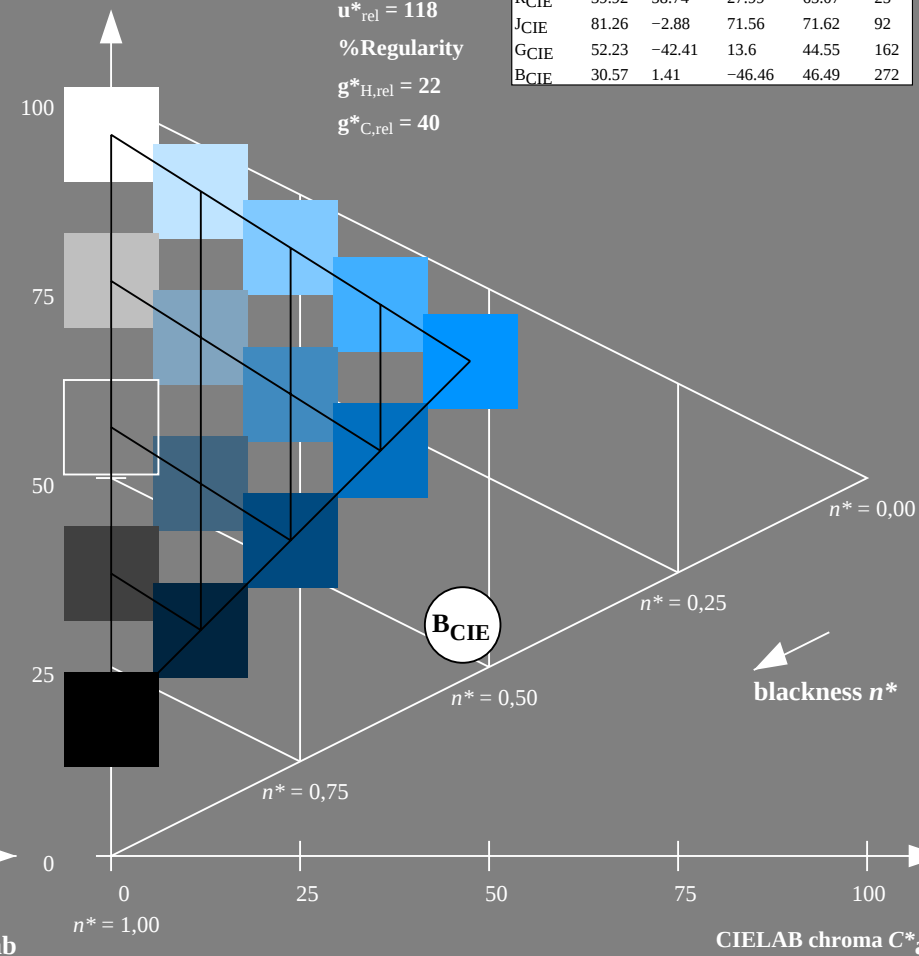
TLS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	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

CIELAB lightness L^*

% Gamut

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

%Regularity

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


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

input: *olv** *setrgbcolor*

output: *olv**, (*TRI9*) *setrgbcolor*