

Input: Colorimetric Reflective System ORS18

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

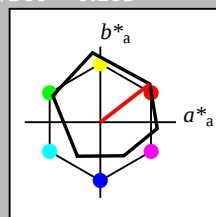
$lab \cdot tch$ and $lab \cdot nch$

D65: hue O

LCH*Ma: 48 83 38

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

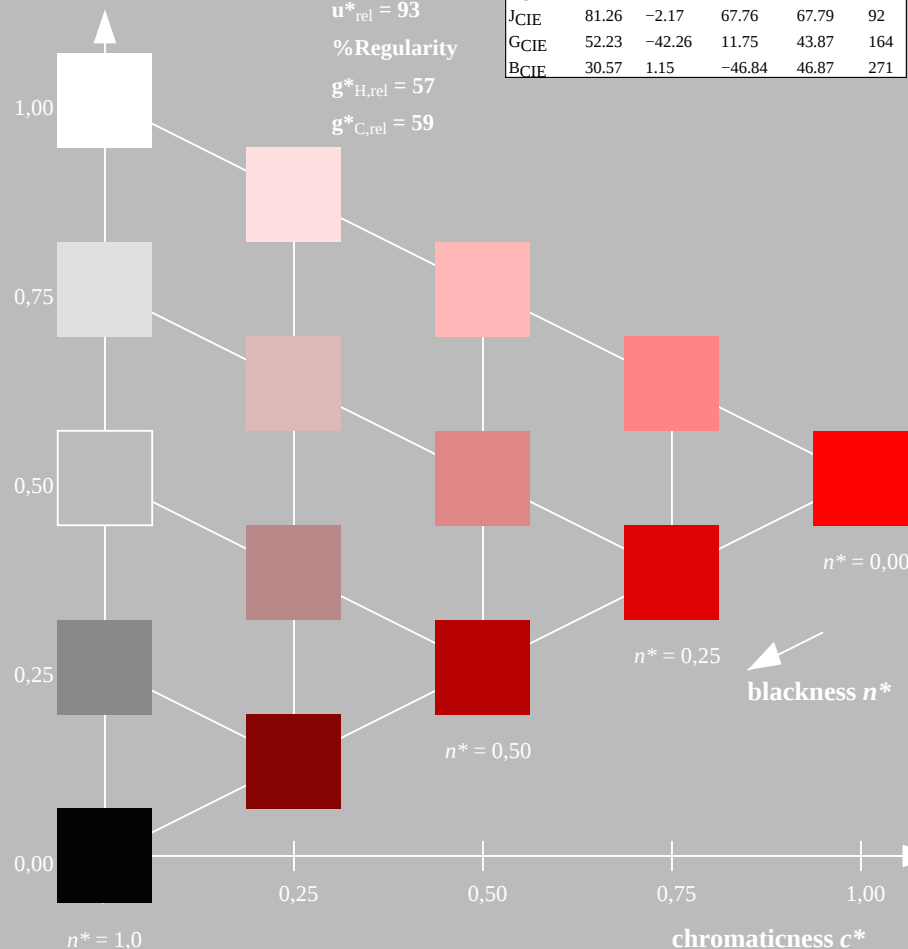
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 31/360 = 0.086$

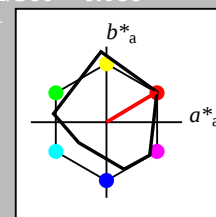
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue R

LCH*Ma: 50 78 31

rgb*Ma: 1.0 0.0 0.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

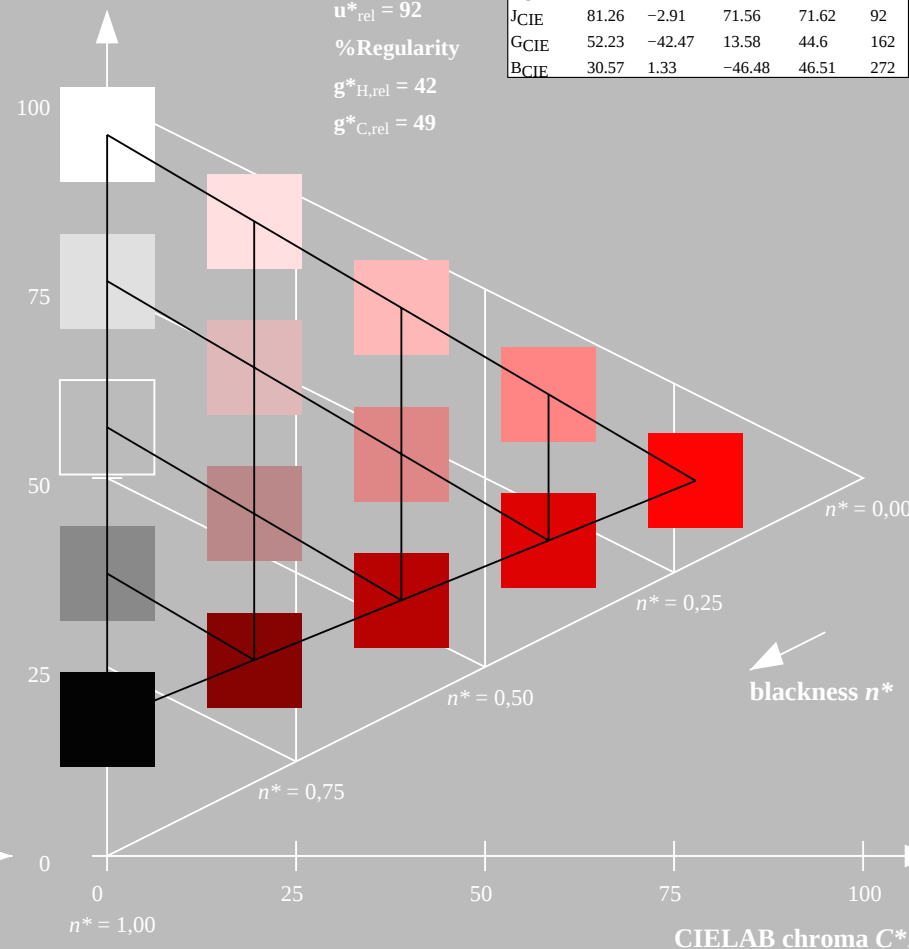
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



5 step scales for constant CIELAB hue 31/360 = 0.086 (right)

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

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

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

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

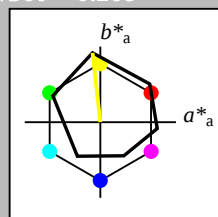
$lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 90 92 96

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

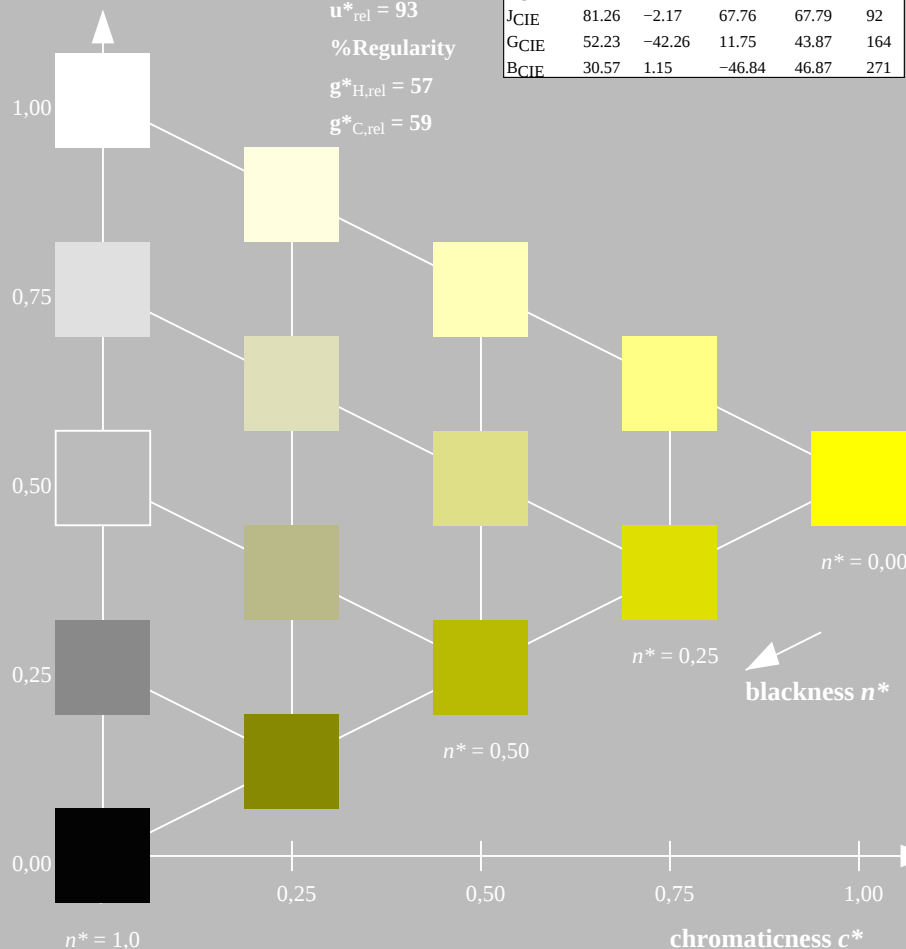
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 94/360 = 0.262$

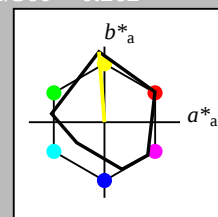
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue J

LCH*Ma: 91 93 94

rgb*Ma: 1.0 1.0 0.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

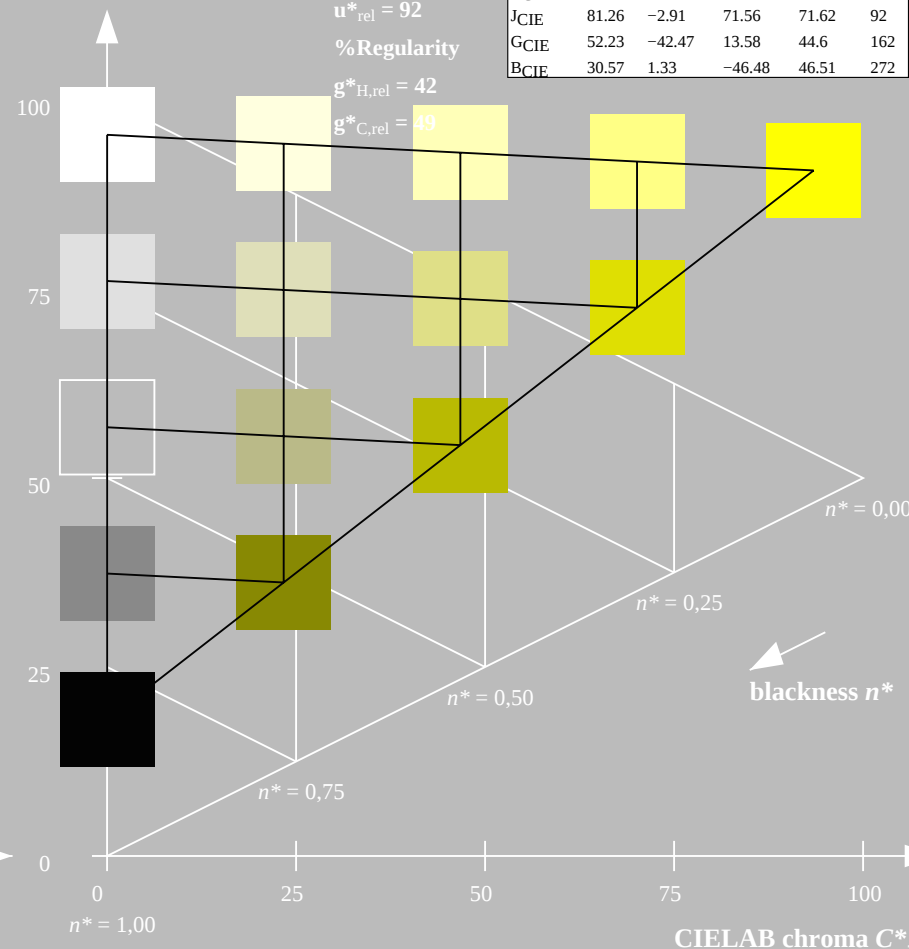
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



5 step scales for constant CIELAB hue 94/360 = 0.262 (right)

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: $cmY0^* setcmykcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System ORS18

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

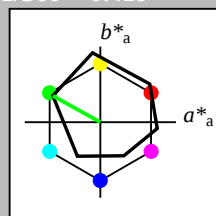
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

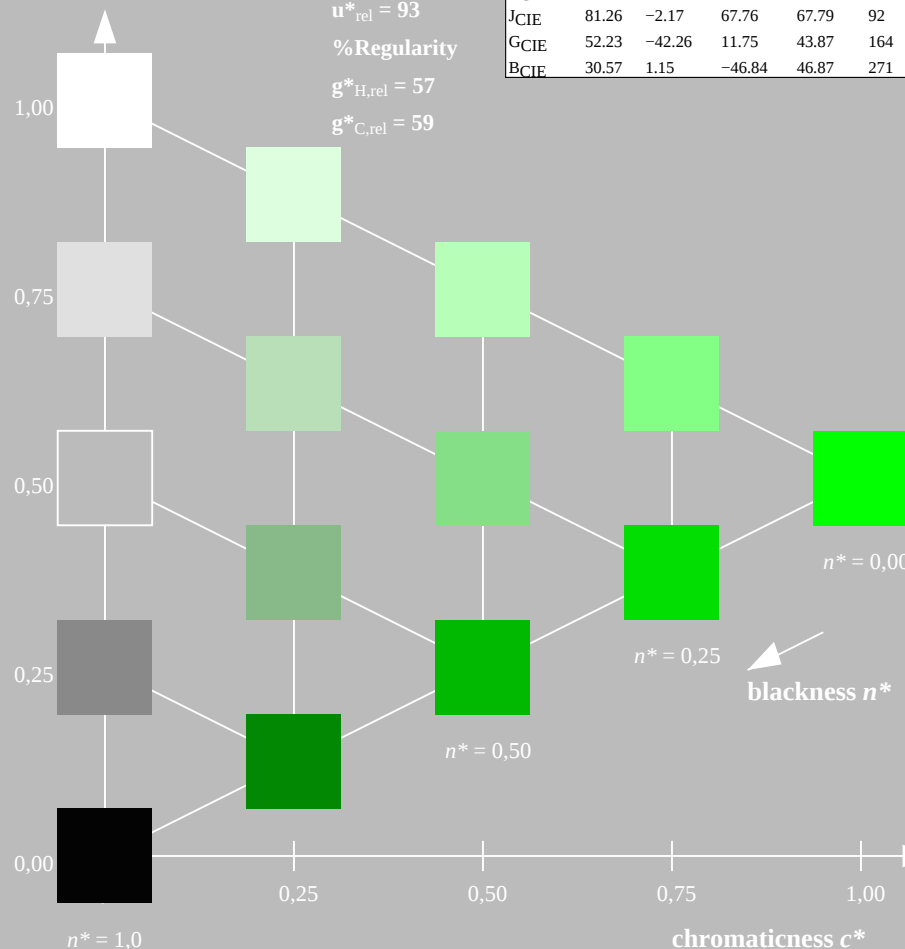
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 171/360 = 0.475$

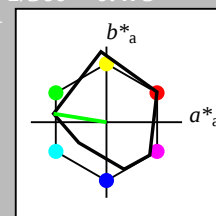
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue G

LCH*Ma: 52 71 171

rgb*Ma: 0.0 1.0 0.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

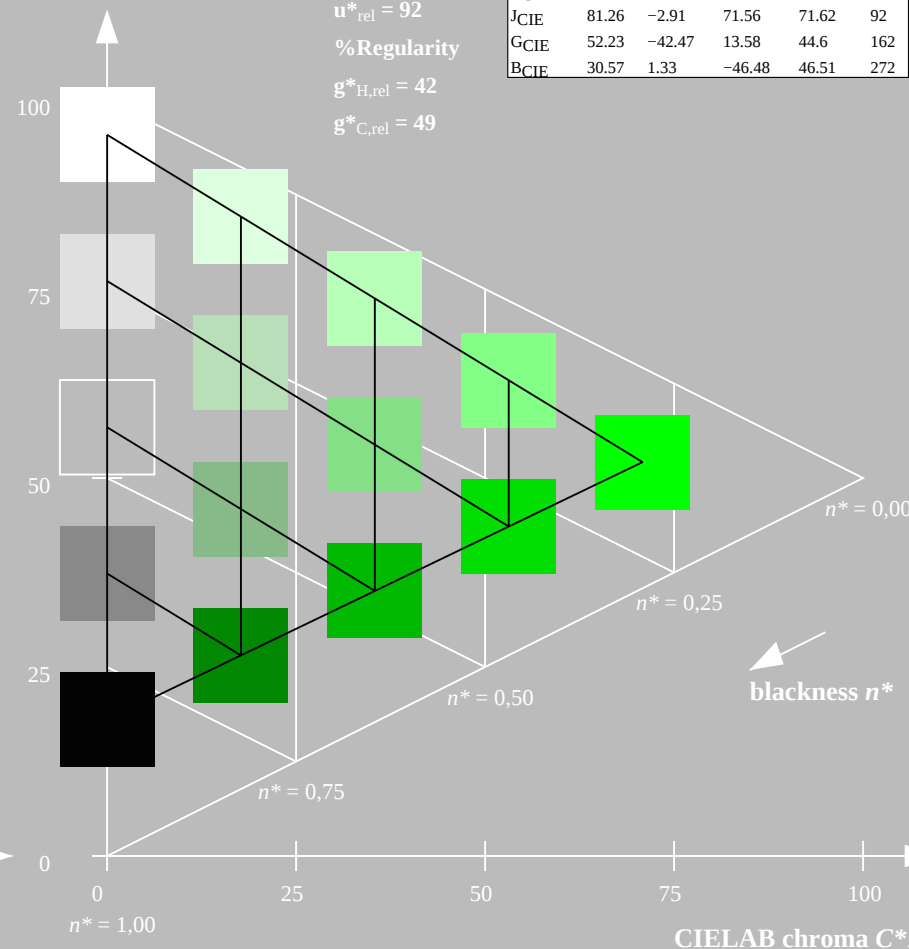
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



5 step scales for constant CIELAB hue 171/360 = 0.475 (right)

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: $cmY0^* setcmykcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System ORS18

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

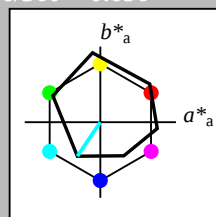
$lab \cdot tch$ and $lab \cdot nch$

D65: hue C

LCH*Ma: 59 54 236

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

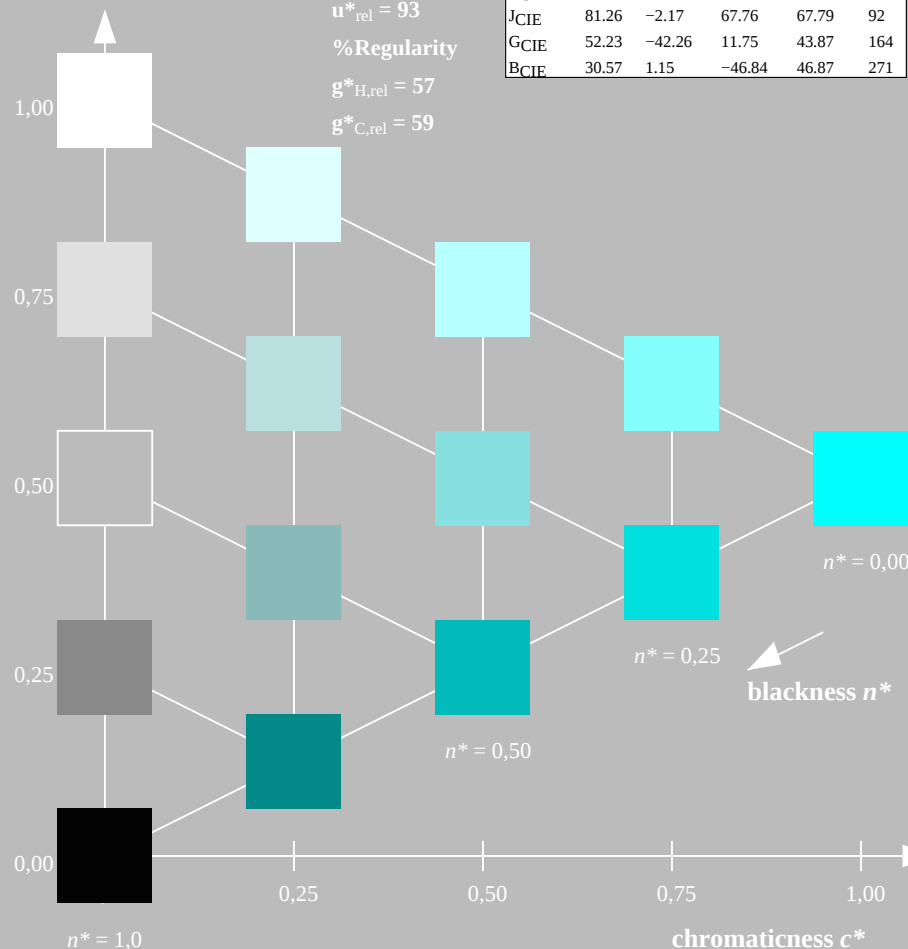
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 217/360 = 0.601$

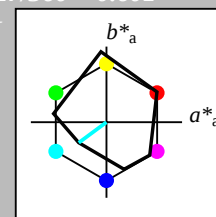
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue G50B

LCH*Ma: 45 46 217

rgb*Ma: 0.0 1.0 1.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

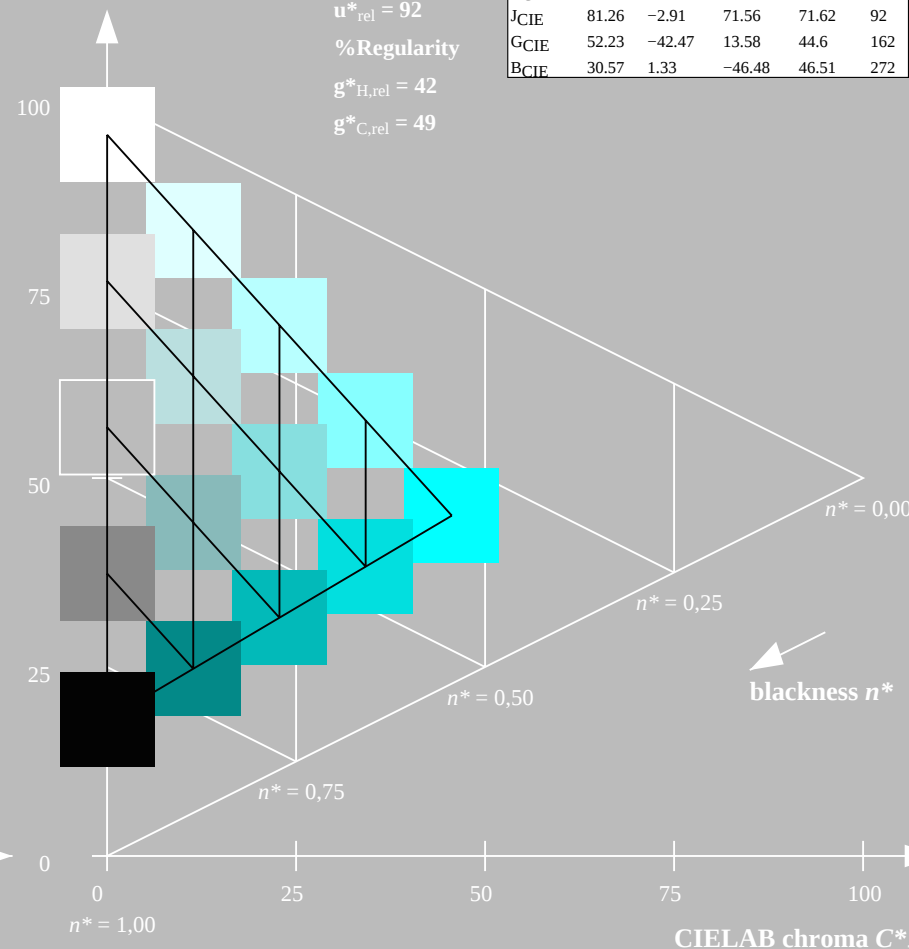
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

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

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

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

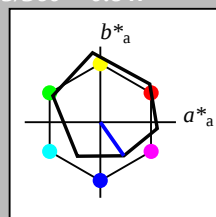
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

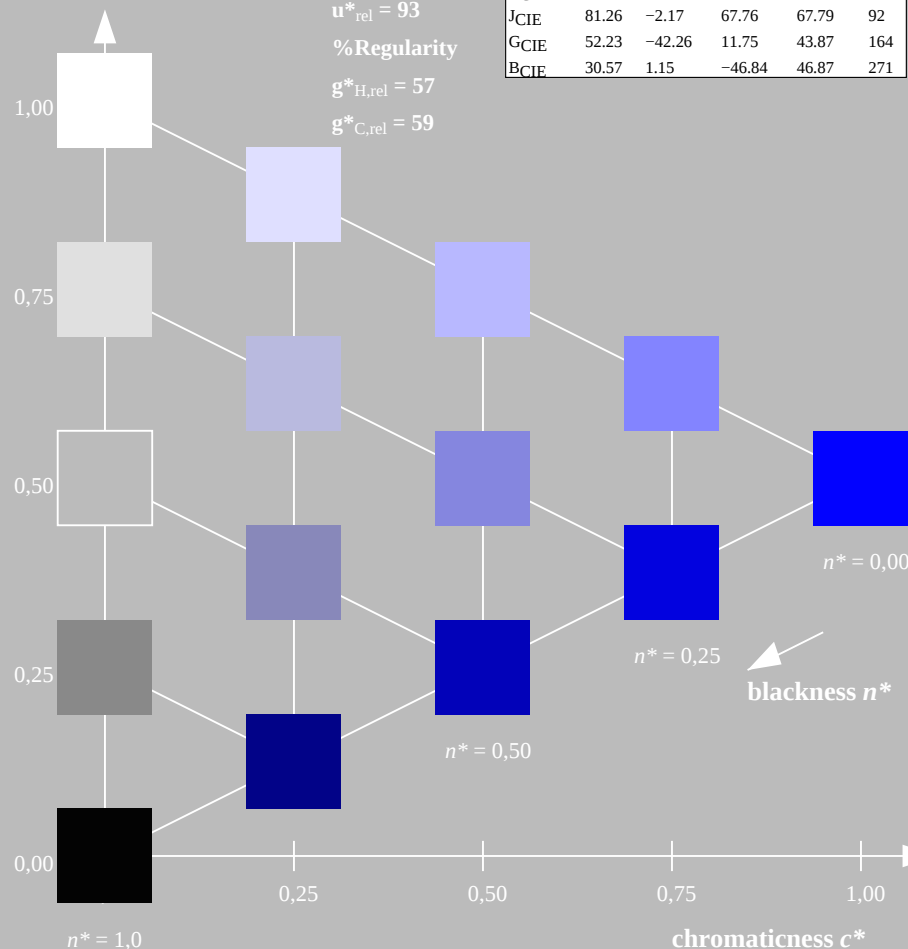
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 290/360 = 0.807$

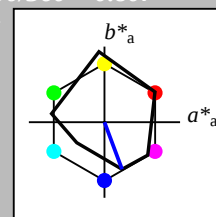
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue B

LCH*Ma: 37 66 290

rgb*Ma: 0.0 0.0 1.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

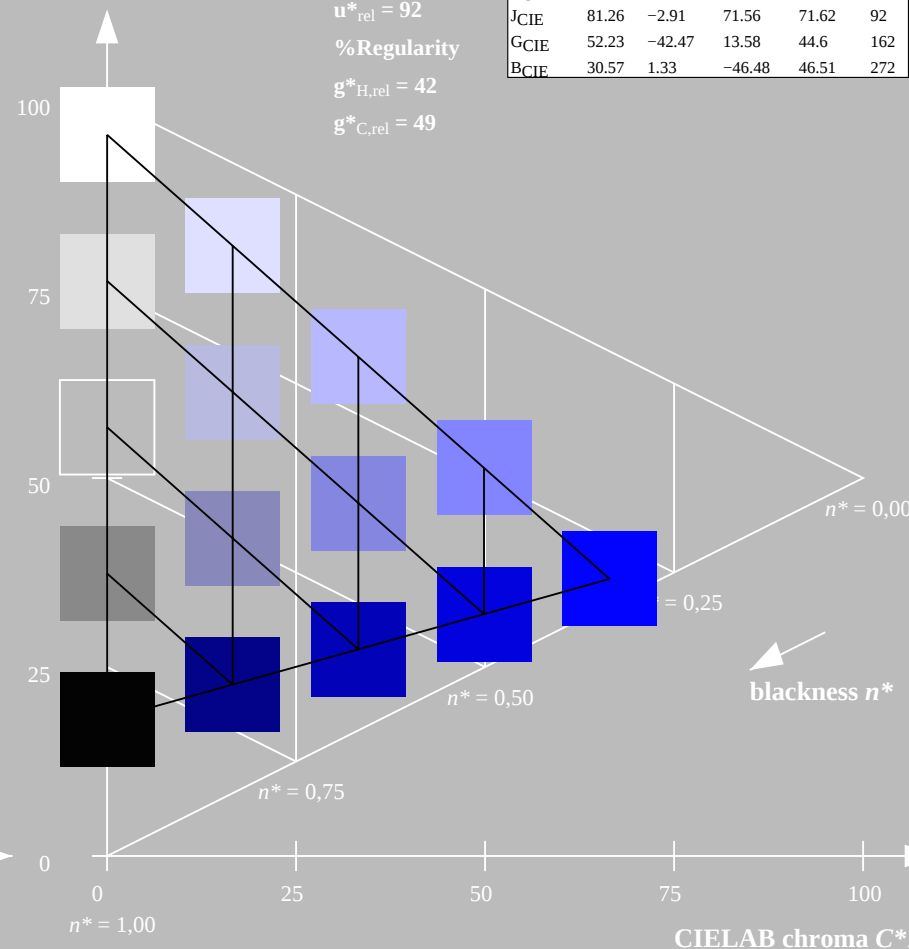
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



5 step scales for constant CIELAB hue 290/360 = 0.807 (right)

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

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

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

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

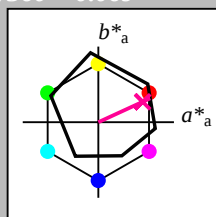
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 48 75 25

rgb*Ma: 1.0 0.0 0.32

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

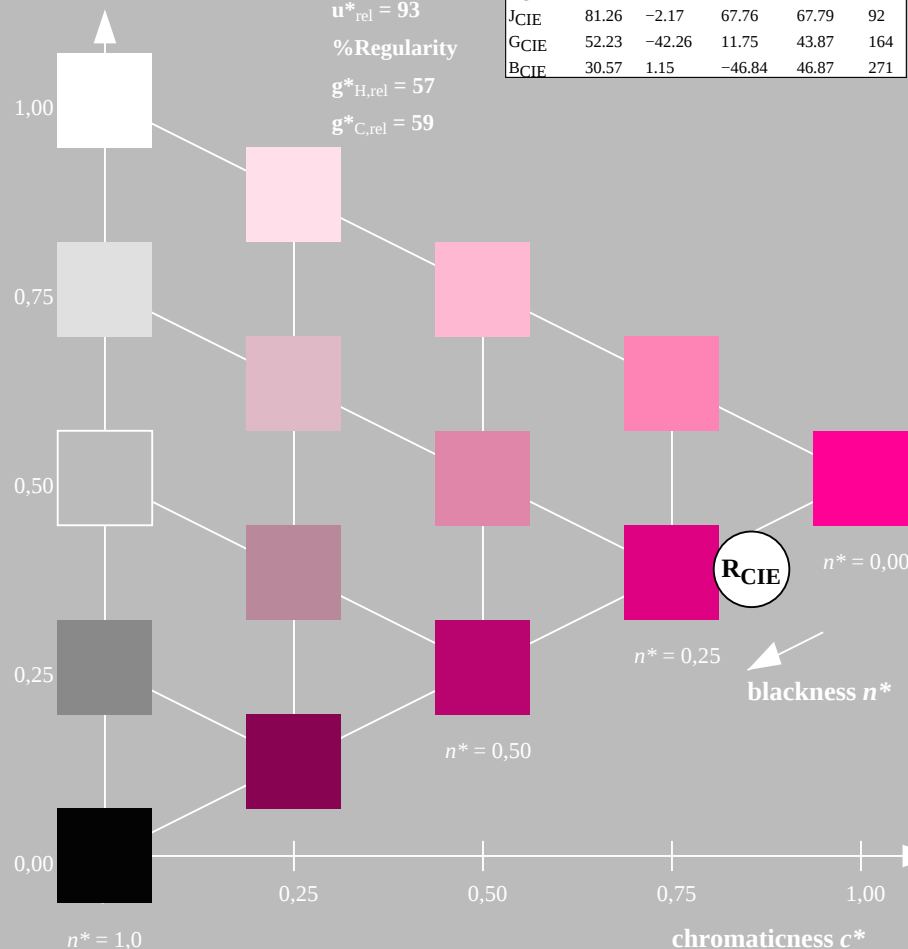
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Reflective System MRS18a

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

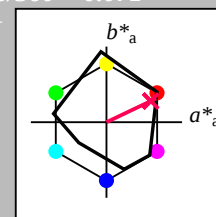
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue R

LCH*Ma: 48 73 25

rgb*Ma: 1.0 0.0 0.1

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

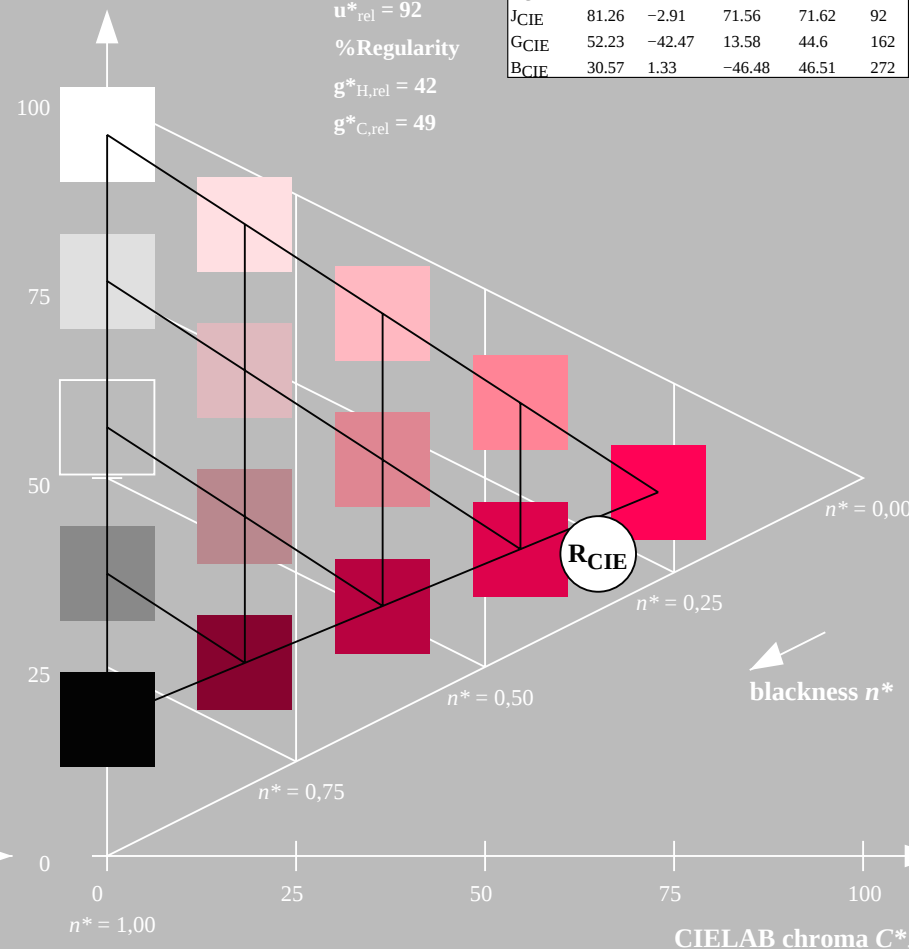
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



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

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: $cmY0^* setcmykcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System ORS18

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

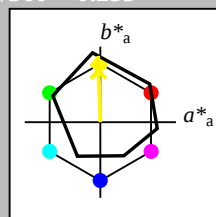
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 86 88 92

rgb*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

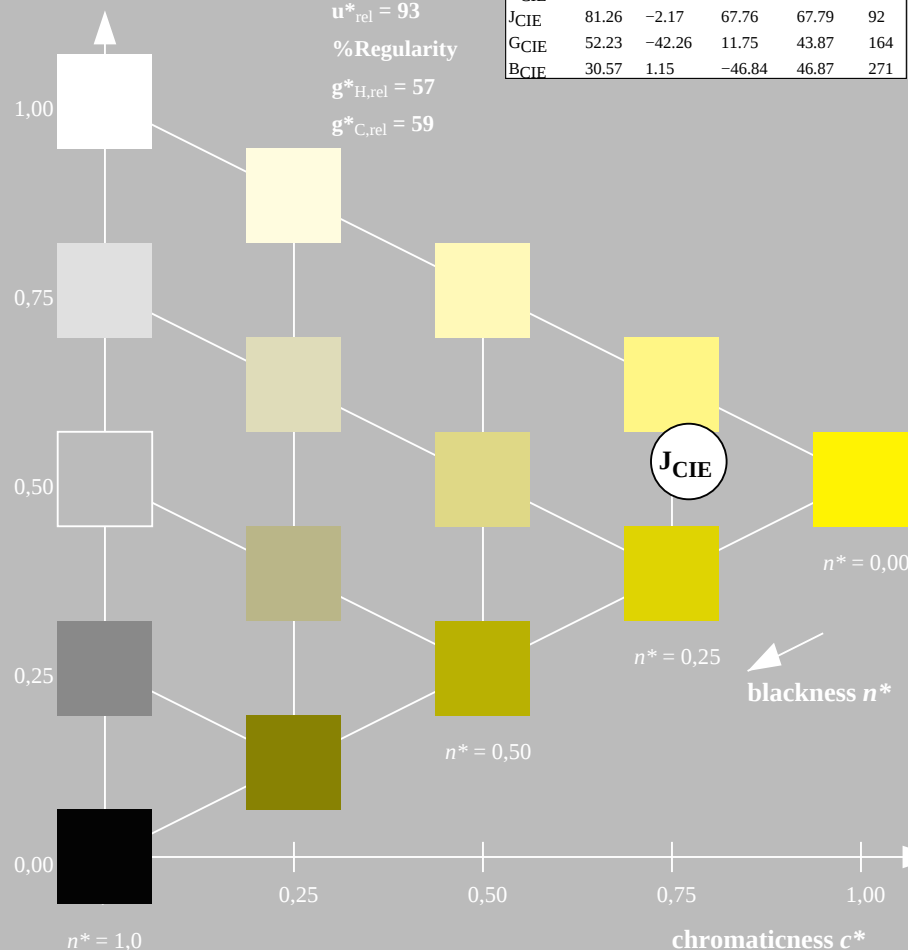
% Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271



UE210-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Reflective System MRS18a

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

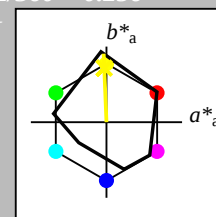
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue J

LCH*Ma: 89 91 92

rgb*Ma: 1.0 0.95 0.0

CIELAB lightness L^*



% Gamut

$u^*_{rel} = 92$

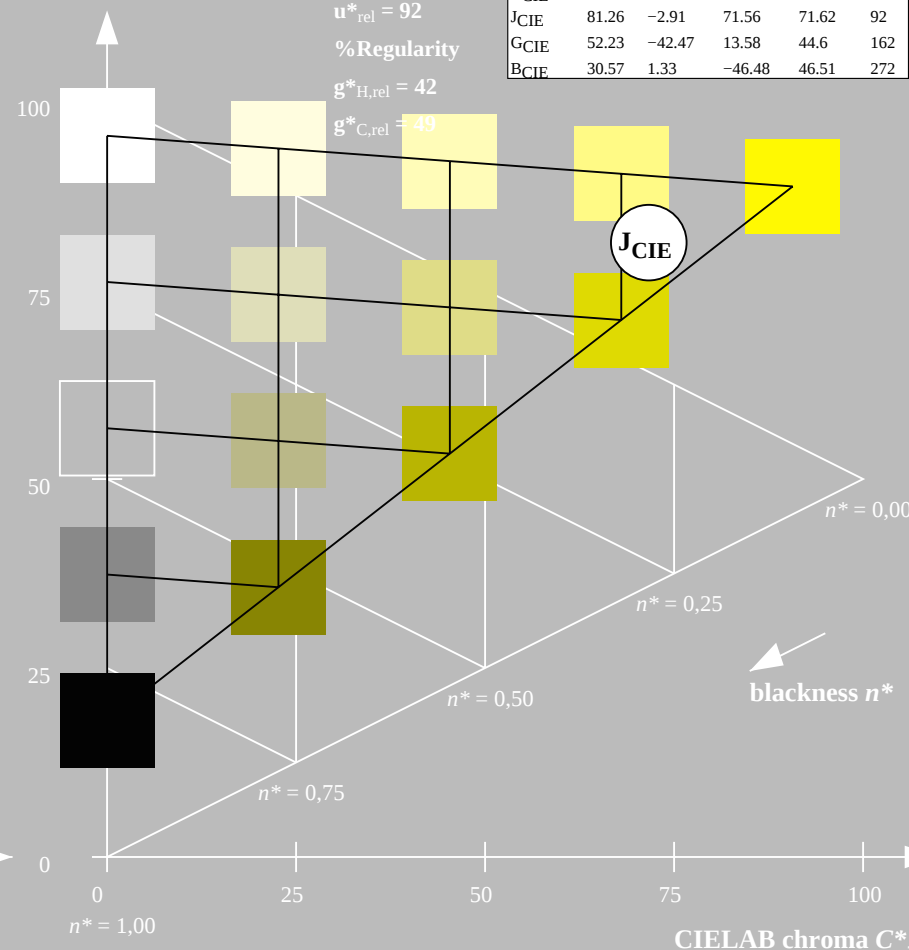
% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272



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

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: $cmY0^* setcmykcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System ORS18

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

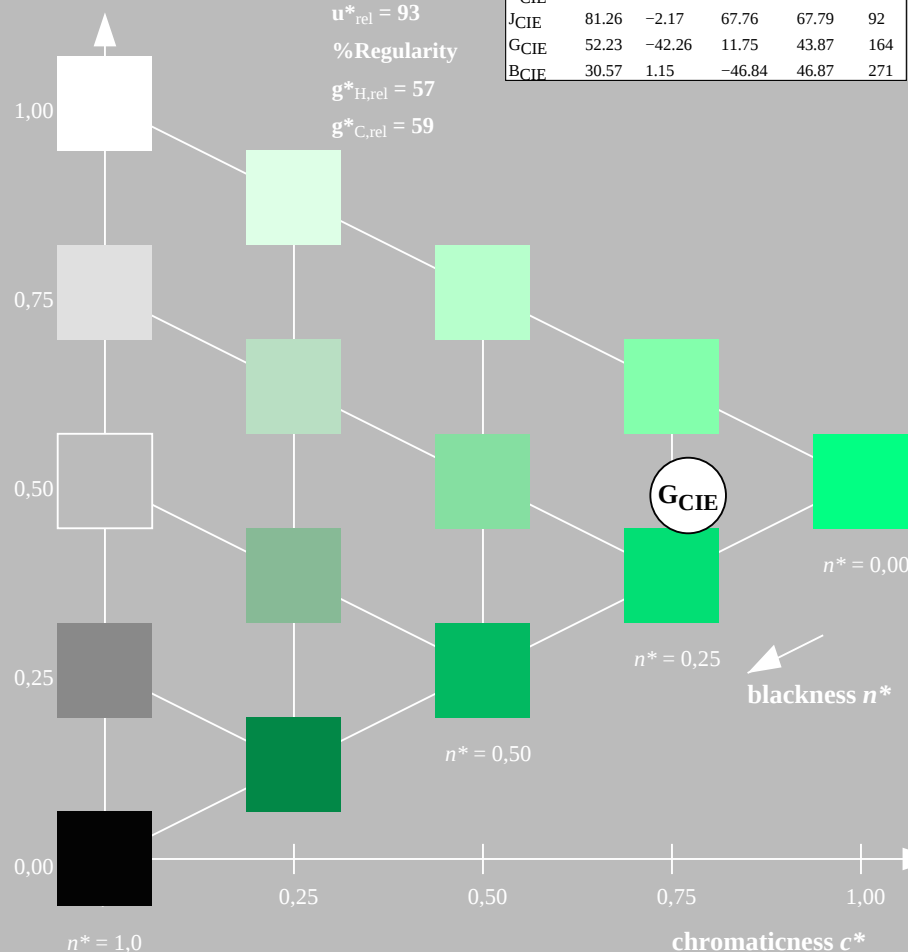
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness t^*



UE210-7, 5 step scales for constant CIE LAB hue 164/360 = 0.457 (left)

Output: Colorimetric Reflective System MRS18a

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

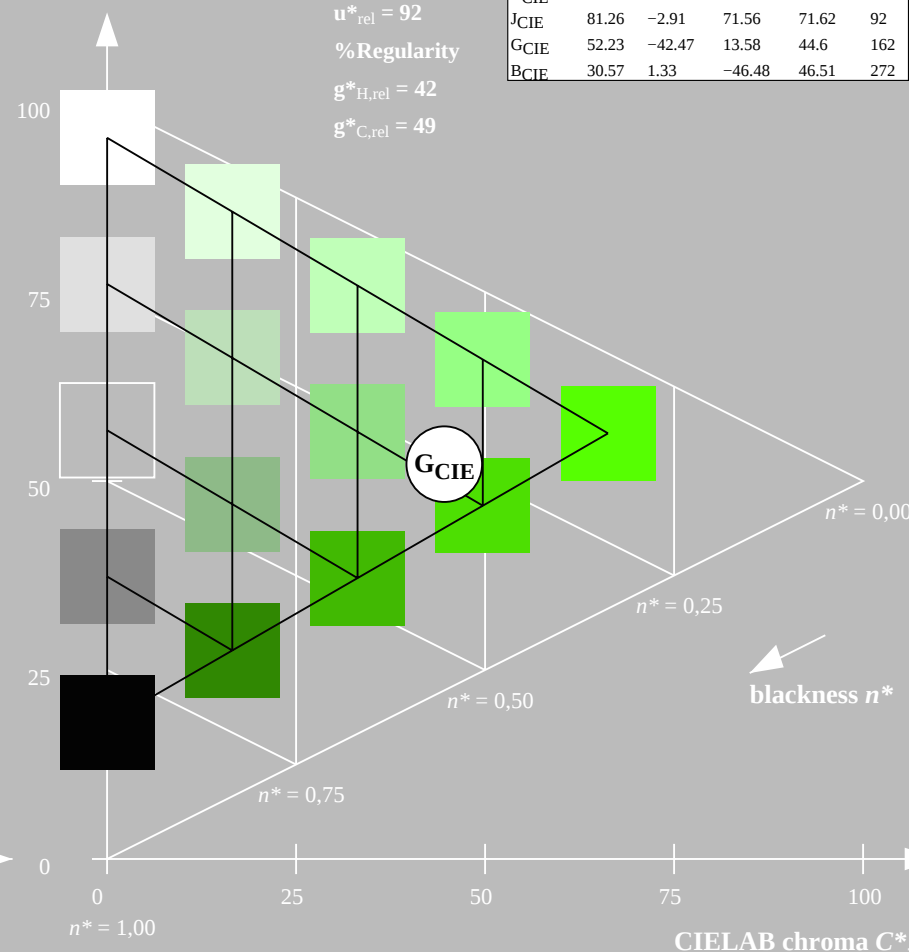
$LAB \cdot LCH$, $LAB \cdot NCH$

D65: hue G

LCH*Ma: 56 66 162

rgb*Ma: 0.11 1.0 0.0

CIELAB lightness L^*



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

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

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

output: *olv* setrgbcolor / w* setgray*

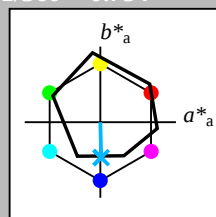
Input: Colorimetric Reflective System ORS18

*lab*tch* and *lab*nch*

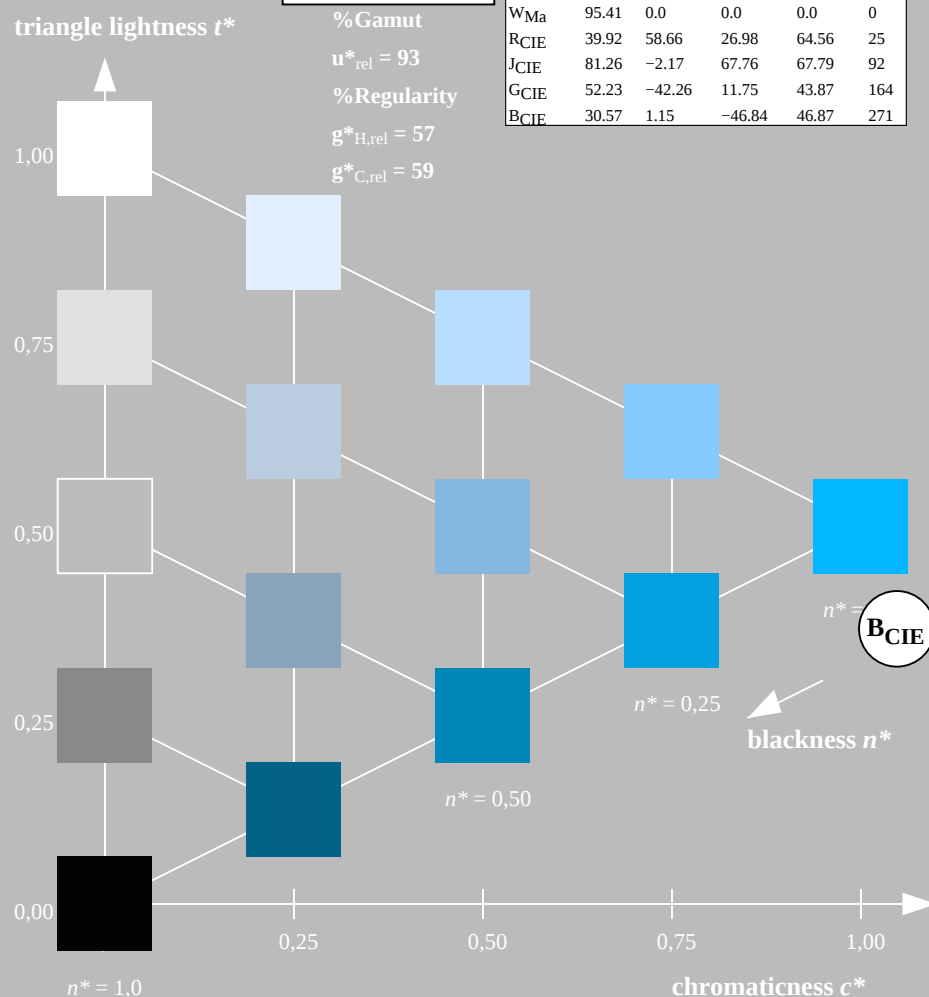
D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0



%Gamut



UE210-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

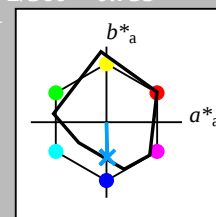
Output: Colorimetric Reflective System MRS18a

*LAB*LCH, LAB*NCH*

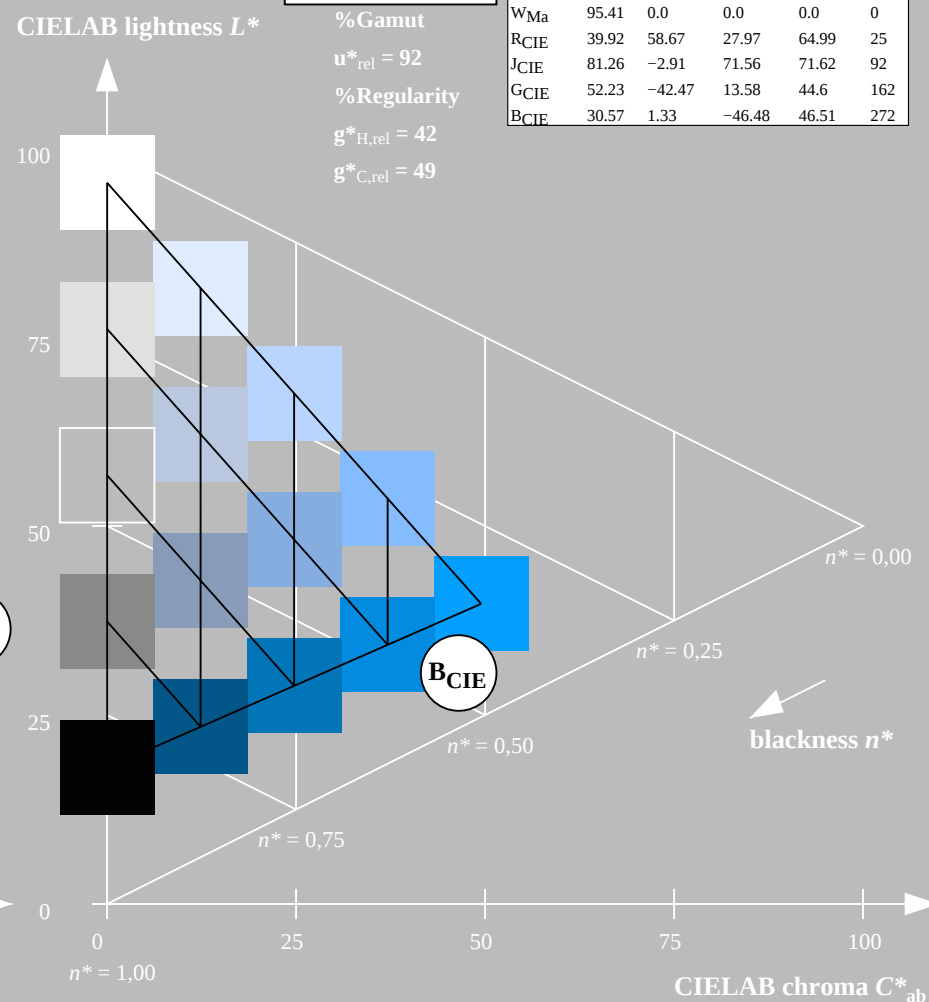
D65: hue B

LCH*Ma: 40 49 272

rgb*Ma: 0.0 0.36 1.0



%Gamut



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

BAM-test chart UE21; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*

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

output: *olv** *setrgbcolor* / *w** *setgray*