

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

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

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

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

Output: Colorimetric Reflective System MRS18a

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

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

D65: hue R
LCH*Ma: 50 78 31
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 92$

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

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

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

UE410-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

D65: 5 step colour scales and coordinate data for 10 hues

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

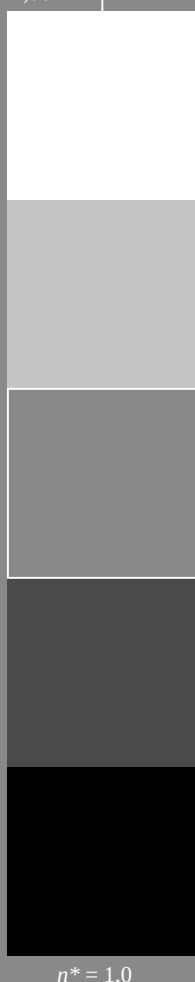
for hue $h^* = lab \cdot h = 96/360 = 0.268$

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

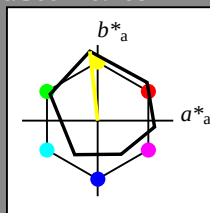
D65: hue Y
LCH*Ma: 90 92 96
rgb*Ma: 1.0 1.0 0.0

triangle lightness

1,00



UE410-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)



%Gamut
 $u^*_{rel} = 93$

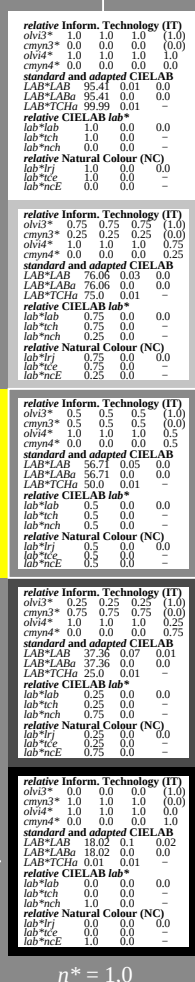
ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	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

%Regularity

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

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

1,00



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

Output: Colorimetric Reflective System MRS18a

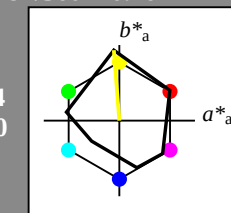
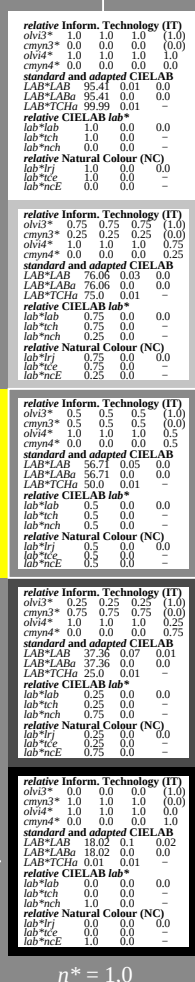
for hue $h^* = lab \cdot h = 94/360 = 0.262$

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

D65: hue J
LCH*Ma: 91 93 94
rgb*Ma: 1.0 1.0 0.0

triangle lightness

1,00



%Gamut
 $u^*_{rel} = 92$

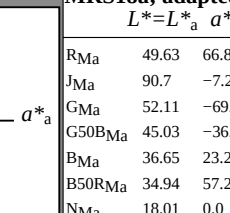
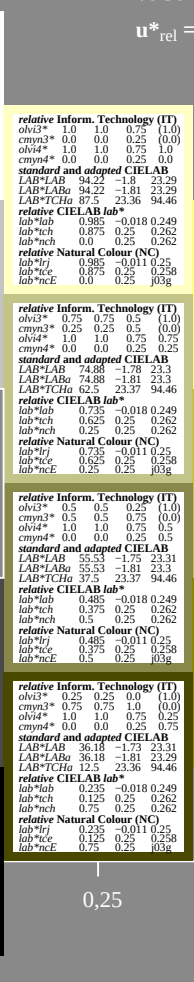
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

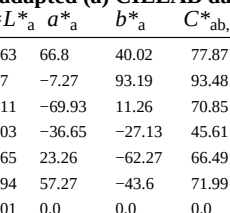
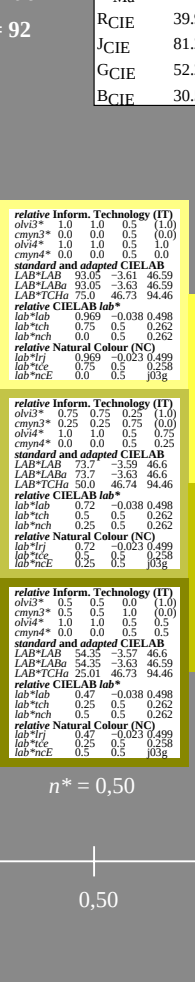
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

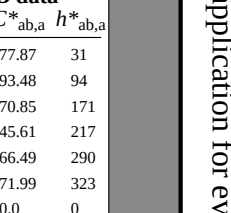
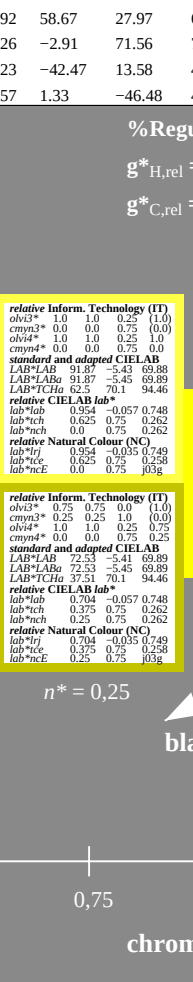
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

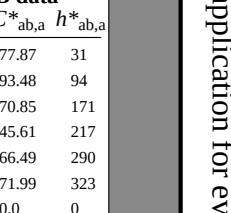
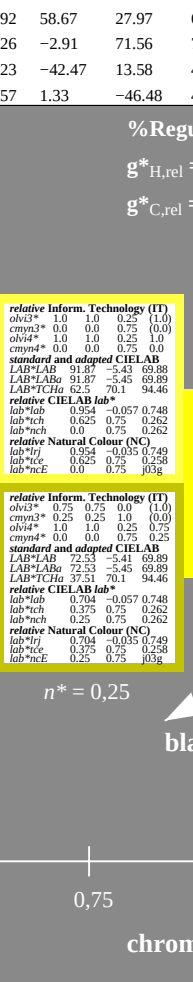
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

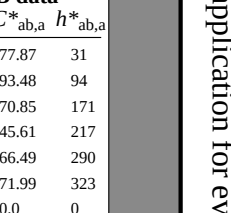
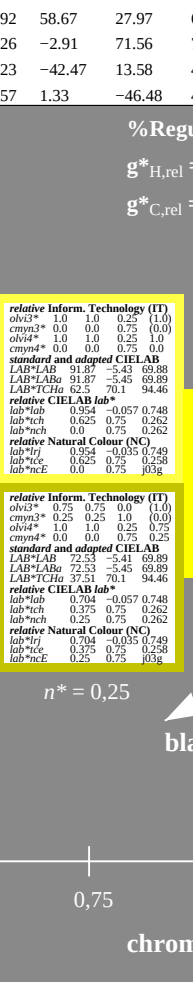
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

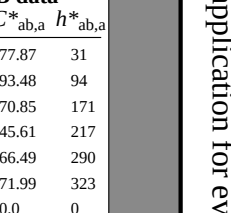
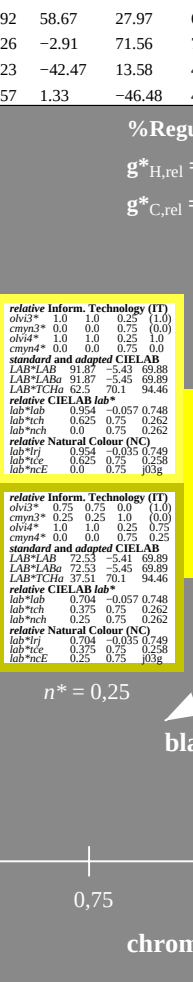
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



%Gamut
 $u^*_{rel} = 92$

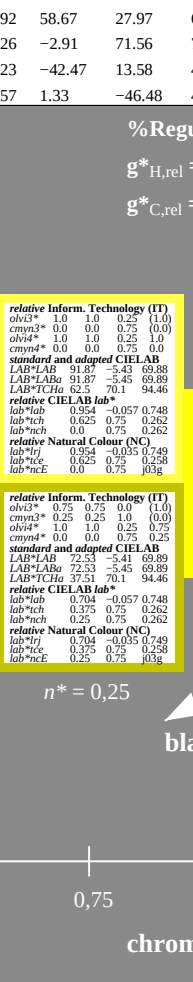
MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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

1,00



Input: Colorimetric Reflective System ORS18

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

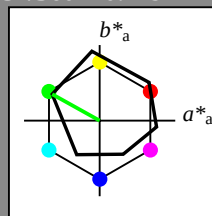
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 1.0 0.0

triangle lightness



1,00

%Gamut

$u^*_{rel} = 93$

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

%Regularity

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

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

Output: Colorimetric Reflective System MRS18a

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

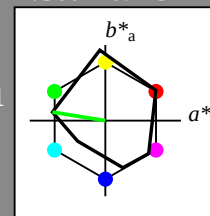
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 52 71 171

rgb*Ma: 0.0 1.0 0.0

triangle lightness



%Gamut

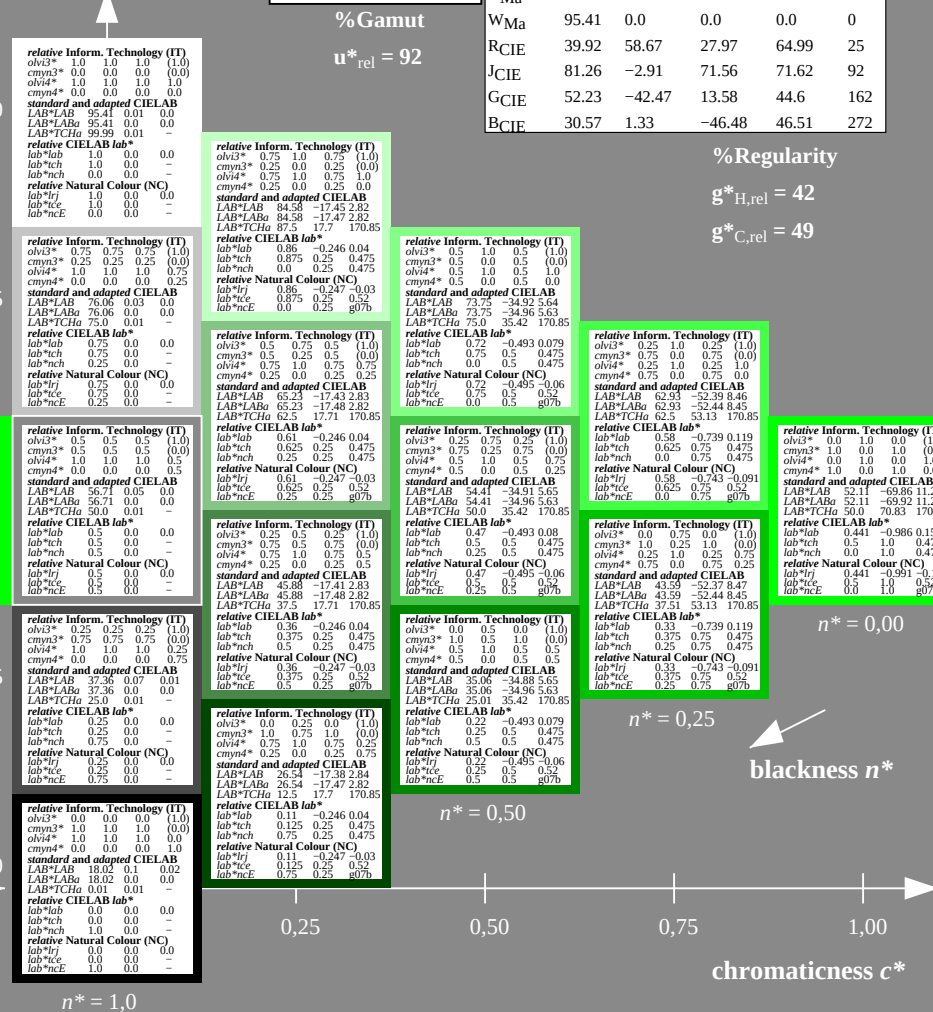
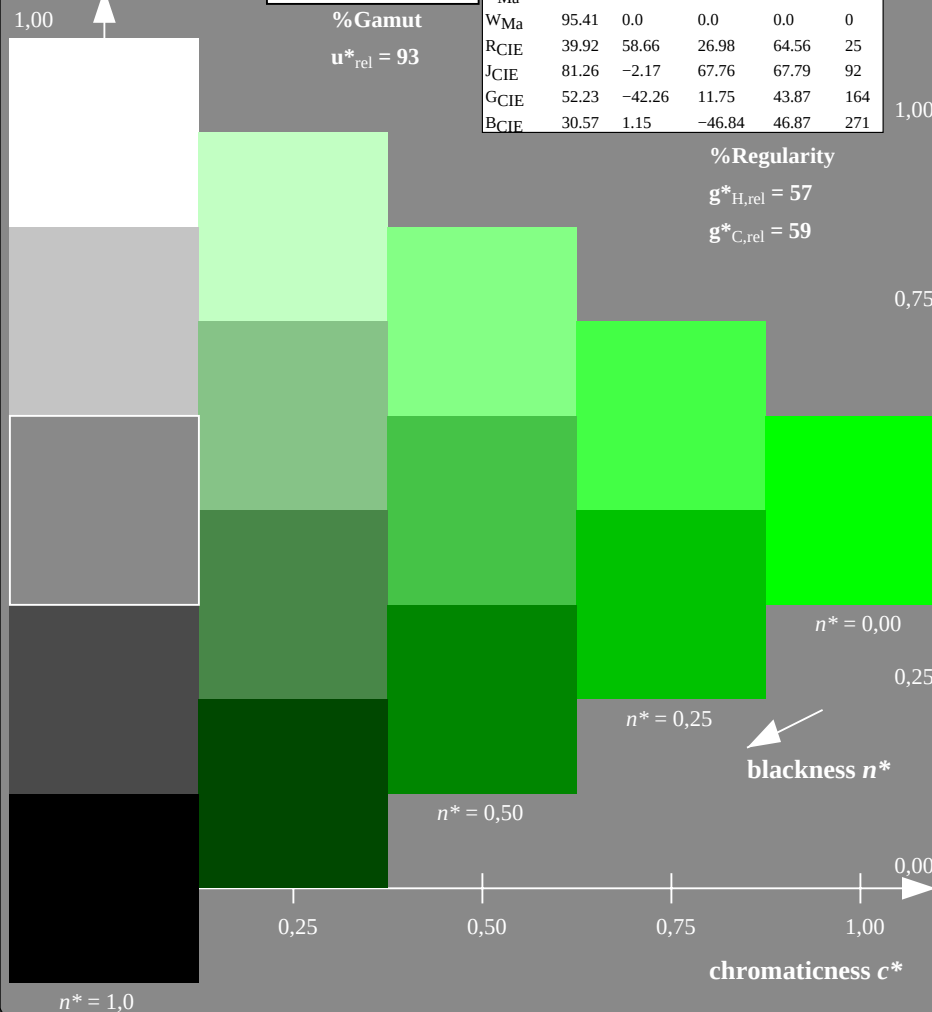
$u^*_{rel} = 92$

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

%Regularity

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

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



UE410-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

D65: 5 step colour scales and coordinate data for 10 hues

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

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

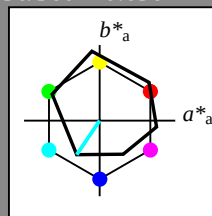
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

rgb*Ma: 0.0 1.0 1.0

triangle lightness



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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

UE410-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)



BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: $cmy0^* setcmykcolor$

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System MRS18a

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

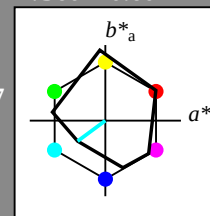
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 217

rgb*Ma: 0.0 1.0 1.0

triangle lightness



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
G50B _{Ma}	45.03	-36.65	-27.13	45.61	217
B _{Ma}	36.65	23.26	-62.27	66.49	290
B50R _{Ma}	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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

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

BAM material: code=rh4ta

application for evaluation and measurement of printer or monitor systems, Yr=2.5, XYZ

Input: Colorimetric Reflective System ORS18

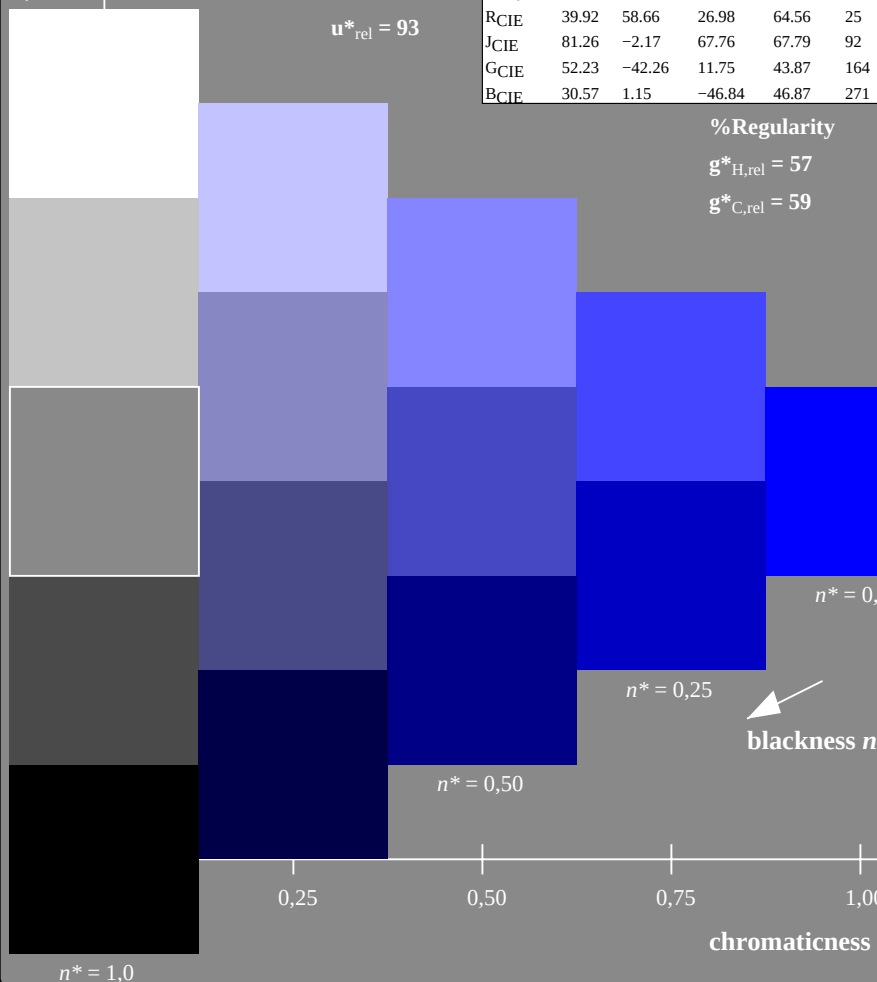
for hue $h^* = lab \cdot h = 305/360 = 0.847$

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

D65: hue V
LCH*Ma: 26 54 305
rgb*Ma: 0.0 0.0 1.0

triangle lightness

1,00



UE410-7, 5 step scales for constant CIE LAB hue 305/360 = 0.847 (left)



BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System MRS18a

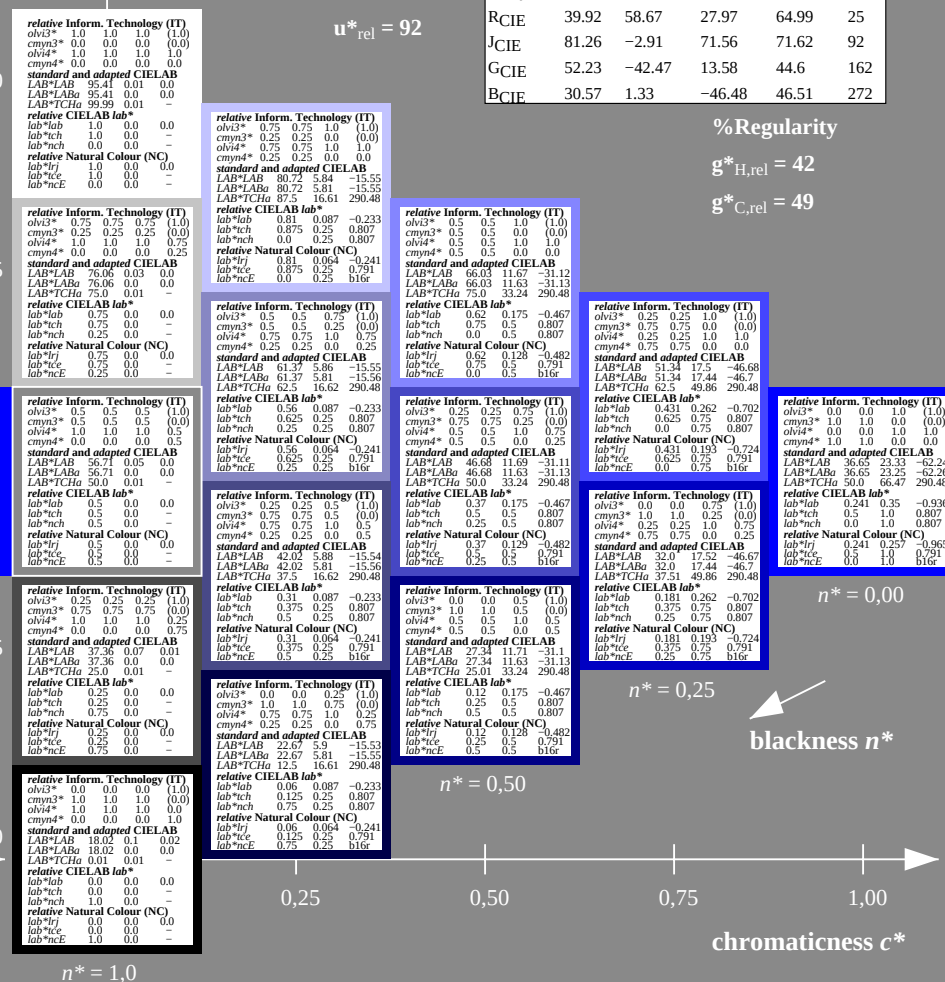
for hue $h^* = lab \cdot h = 290/360 = 0.807$

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

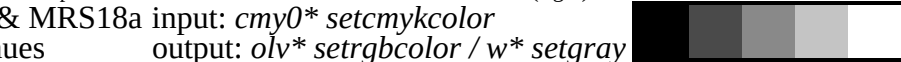
D65: hue B
LCH*Ma: 37 66 290
rgb*Ma: 0.0 0.0 1.0

triangle lightness

1,00



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



output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

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

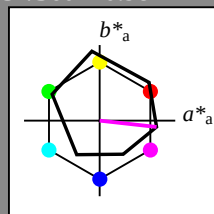
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M
LCH*Ma: 48 76 354
rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00

%Gamut
 $u^*_{rel} = 93$



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

%Regularity

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

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

1,00

relative Inform. Technology (IT)
 $olvi3^* 1.0 1.0 1.0 (1.0)$
 $cmyn3^* 0.0 0.0 0.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 95.41 0.01 0.0$
 $lab^*tch 95.41 0.01 0.0$
 $lab^*nch 95.41 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 1.0 0.0 0.0$
 $lab^*tch 1.0 0.0 0.0$
 $lab^*nch 1.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 1.0 0.0 0.0$
 $lab^*tce 1.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.75 0.75 0.75 (1.0)$
 $cmyn3^* 0.25 0.25 0.25 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 76.06 0.03 0.0$
 $lab^*tch 76.06 0.03 0.0$
 $lab^*nch 76.06 0.03 0.0$
relative CIELAB lab*
 $lab^*lab 0.75 0.0 0.0$
 $lab^*tch 0.75 0.0 0.0$
 $lab^*nch 0.75 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.75 0.0 0.0$
 $lab^*tce 0.75 0.0 0.0$
 $lab^*nce 0.75 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.5 0.5 0.5 (1.0)$
 $cmyn3^* 0.5 0.5 0.5 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 56.71 0.05 0.0$
 $lab^*tch 56.71 0.05 0.0$
 $lab^*nch 56.71 0.05 0.0$
relative CIELAB lab*
 $lab^*lab 0.5 0.0 0.0$
 $lab^*tch 0.5 0.0 0.0$
 $lab^*nch 0.5 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.5 0.0 0.0$
 $lab^*tce 0.5 0.0 0.0$
 $lab^*nce 0.5 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.25 0.25 0.25 (1.0)$
 $cmyn3^* 0.75 0.75 0.75 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 37.36 0.07 0.0$
 $lab^*tch 37.36 0.07 0.0$
 $lab^*nch 37.36 0.07 0.0$
relative CIELAB lab*
 $lab^*lab 0.25 0.0 0.0$
 $lab^*tch 0.25 0.0 0.0$
 $lab^*nch 0.25 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.25 0.0 0.0$
 $lab^*tce 0.25 0.0 0.0$
 $lab^*nce 0.25 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 18.02 0.01 0.0$
 $lab^*tch 18.02 0.01 0.0$
 $lab^*nch 18.02 0.01 0.0$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0$
 $lab^*tch 0.0 0.0 0.0$
 $lab^*nch 0.0 0.0 0.0$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0$
 $lab^*tce 0.0 0.0 0.0$
 $lab^*nce 0.0 0.0 0.0$

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab \cdot h = 323/360 = 0.896$

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

D65: hue B50R

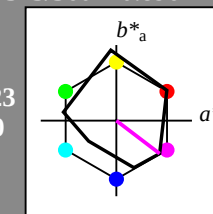
LCH*Ma: 35 72 323

rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00

%Gamut
 $u^*_{rel} = 92$



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

%Regularity

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

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

relative Inform. Technology (IT)
 $olvi3^* 1.0 0.75 1.0 (1.0)$
 $cmyn3^* 0.0 0.25 0.0 (0.0)$
 $olvi4^* 1.0 0.75 1.0 (1.0)$
 $cmyn4^* 0.0 0.25 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 80.29 14.34 -10.89$
 $lab^*tch 80.29 14.34 -10.89$
 $lab^*nch 80.29 14.34 -10.89$
relative CIELAB lab*
 $lab^*lab 0.805 0.199 -0.15$
 $lab^*tch 0.805 0.199 -0.15$
 $lab^*nch 0.805 0.199 -0.15$
relative Natural Colour (NC)
 $lab^*trj 0.805 0.199 -0.15$
 $lab^*tce 0.805 0.199 -0.15$
 $lab^*nce 0.805 0.199 -0.15$

relative Inform. Technology (IT)
 $olvi3^* 0.75 0.5 0.75 (1.0)$
 $cmyn3^* 0.25 0.5 0.25 (0.0)$
 $olvi4^* 1.0 0.75 1.0 (1.0)$
 $cmyn4^* 0.0 0.25 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 60.94 14.32 -10.89$
 $lab^*tch 60.94 14.32 -10.89$
 $lab^*nch 60.94 14.32 -10.89$
relative CIELAB lab*
 $lab^*lab 0.75 0.5 0.75 (1.0)$
 $lab^*tch 0.75 0.5 0.75 (1.0)$
 $lab^*nch 0.75 0.5 0.75 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.75 0.5 0.75 (1.0)$
 $lab^*tce 0.75 0.5 0.75 (1.0)$
 $lab^*nce 0.75 0.5 0.75 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.5 0.5 0.5 (1.0)$
 $cmyn3^* 0.5 0.5 0.5 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 41.59 14.39 -10.87$
 $lab^*tch 41.59 14.39 -10.87$
 $lab^*nch 41.59 14.39 -10.87$
relative CIELAB lab*
 $lab^*lab 0.5 0.5 0.5 (1.0)$
 $lab^*tch 0.5 0.5 0.5 (1.0)$
 $lab^*nch 0.5 0.5 0.5 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.5 0.5 0.5 (1.0)$
 $lab^*tce 0.5 0.5 0.5 (1.0)$
 $lab^*nce 0.5 0.5 0.5 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.25 0.25 0.25 (1.0)$
 $cmyn3^* 0.75 0.75 0.75 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.25 0.25 0.25 (1.0)$
 $lab^*tch 0.25 0.25 0.25 (1.0)$
 $lab^*nch 0.25 0.25 0.25 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.25 0.25 0.25 (1.0)$
 $lab^*tce 0.25 0.25 0.25 (1.0)$
 $lab^*nce 0.25 0.25 0.25 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0 (1.0)$
 $lab^*tch 0.0 0.0 0.0 (1.0)$
 $lab^*nch 0.0 0.0 0.0 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0 (1.0)$
 $lab^*tce 0.0 0.0 0.0 (1.0)$
 $lab^*nce 0.0 0.0 0.0 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0 (1.0)$
 $lab^*tch 0.0 0.0 0.0 (1.0)$
 $lab^*nch 0.0 0.0 0.0 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0 (1.0)$
 $lab^*tce 0.0 0.0 0.0 (1.0)$
 $lab^*nce 0.0 0.0 0.0 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0 (1.0)$
 $lab^*tch 0.0 0.0 0.0 (1.0)$
 $lab^*nch 0.0 0.0 0.0 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0 (1.0)$
 $lab^*tce 0.0 0.0 0.0 (1.0)$
 $lab^*nce 0.0 0.0 0.0 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0 (1.0)$
 $lab^*tch 0.0 0.0 0.0 (1.0)$
 $lab^*nch 0.0 0.0 0.0 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0 (1.0)$
 $lab^*tce 0.0 0.0 0.0 (1.0)$
 $lab^*nce 0.0 0.0 0.0 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 0.0 0.0 0.0 (1.0)$
 $cmyn3^* 1.0 1.0 1.0 (0.0)$
 $olvi4^* 1.0 1.0 1.0 (1.0)$
 $cmyn4^* 0.0 0.0 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 26.46 28.72 21.77$
 $lab^*tch 26.46 28.72 21.77$
 $lab^*nch 26.46 28.72 21.77$
relative CIELAB lab*
 $lab^*lab 0.0 0.0 0.0 (1.0)$
 $lab^*tch 0.0 0.0 0.0 (1.0)$
 $lab^*nch 0.0 0.0 0.0 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.0 0.0 0.0 (1.0)$
 $lab^*tce 0.0 0.0 0.0 (1.0)$
 $lab^*nce 0.0 0.0 0.0 (1.0)$

relative Inform. Technology (IT)
 $olvi3^* 1.0 0.5 1.0 (1.0)$
 $cmyn3^* 0.0 0.5 0.0 (0.0)$
 $olvi4^* 1.0 0.5 1.0 (1.0)$
 $cmyn4^* 0.0 0.5 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 65.17 28.63 -21.79$
 $lab^*tch 65.17 28.63 -21.79$
 $lab^*nch 65.17 28.63 -21.79$
relative CIELAB lab*
 $lab^*lab 0.609 0.398 -0.302$
 $lab^*tch 0.609 0.398 -0.302$
 $lab^*nch 0.609 0.398 -0.302$
relative Natural Colour (NC)
 $lab^*trj 0.609 0.398 -0.302$
 $lab^*tce 0.609 0.398 -0.302$
 $lab^*nce 0.609 0.398 -0.302$

relative Inform. Technology (IT)
 $olvi3^* 0.75 0.0 0.75 (1.0)$
 $cmyn3^* 0.25 0.0 0.25 (0.0)$
 $olvi4^* 1.0 0.25 1.0 (1.0)$
 $cmyn4^* 0.0 0.25 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 50.06 43.01 -32.68$
 $lab^*tch 50.06 43.01 -32.68$
 $lab^*nch 50.06 43.01 -32.68$
relative CIELAB lab*
 $lab^*lab 0.414 0.597 -0.453$
 $lab^*tch 0.414 0.597 -0.453$
 $lab^*nch 0.414 0.597 -0.453$
relative Natural Colour (NC)
 $lab^*trj 0.414 0.597 -0.453$
 $lab^*tce 0.414 0.597 -0.453$
 $lab^*nce 0.414 0.597 -0.453$

relative Inform. Technology (IT)
 $olvi3^* 0.5 0.0 0.5 (1.0)$
 $cmyn3^* 0.5 0.0 0.5 (0.0)$
 $olvi4^* 1.0 0.5 1.0 (1.0)$
 $cmyn4^* 0.0 0.5 0.0 (0.0)$
standard and adapted CIELAB
 $lab^*lab 34.95 57.26 -43.59$
 $lab^*tch 34.95 57.26 -43.59$
 $lab^*nch 34.95 57.26 -43.59$
relative CIELAB lab*
 $lab^*lab 0.5 0.0 0.5 (1.0)$
 $lab^*tch 0.5 0.0 0.5 (1.0)$
 $lab^*nch 0.5 0.0 0.5 (1.0)$
relative Natural Colour (NC)
 $lab^*trj 0.5 0.0 0.5 (1.0)$
 $lab^*tce 0.5 0.0 0.5 (1.0)$
 $lab^*nce 0.5 0.0 0.5 (1.0)$

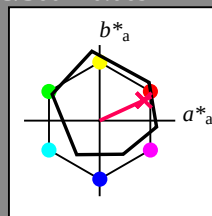
relative Inform. Technology (IT)
 $olvi3^* 0.25 0.0 0.25 (1.0)$
 $cmyn3^* 0.75 0.0 0.75 (0$

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



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

%Regularity

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

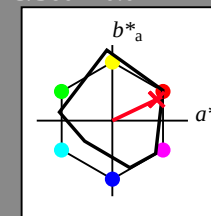
$g^*_{C,rel} = 59$

Output: Colorimetric Reflective System MRS18a

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

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

D65: hue R
LCH*Ma: 48 73 25
rgb*Ma: 1.0 0.0 0.1
triangle lightness

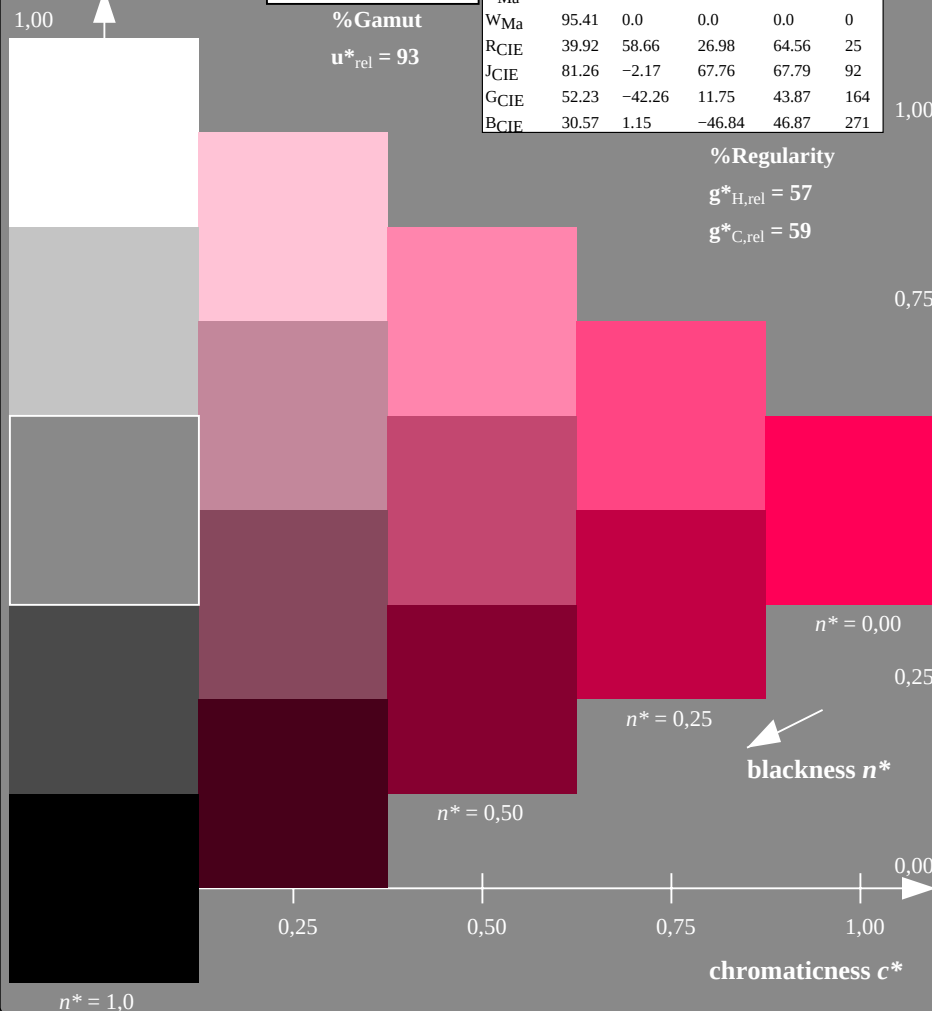


MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

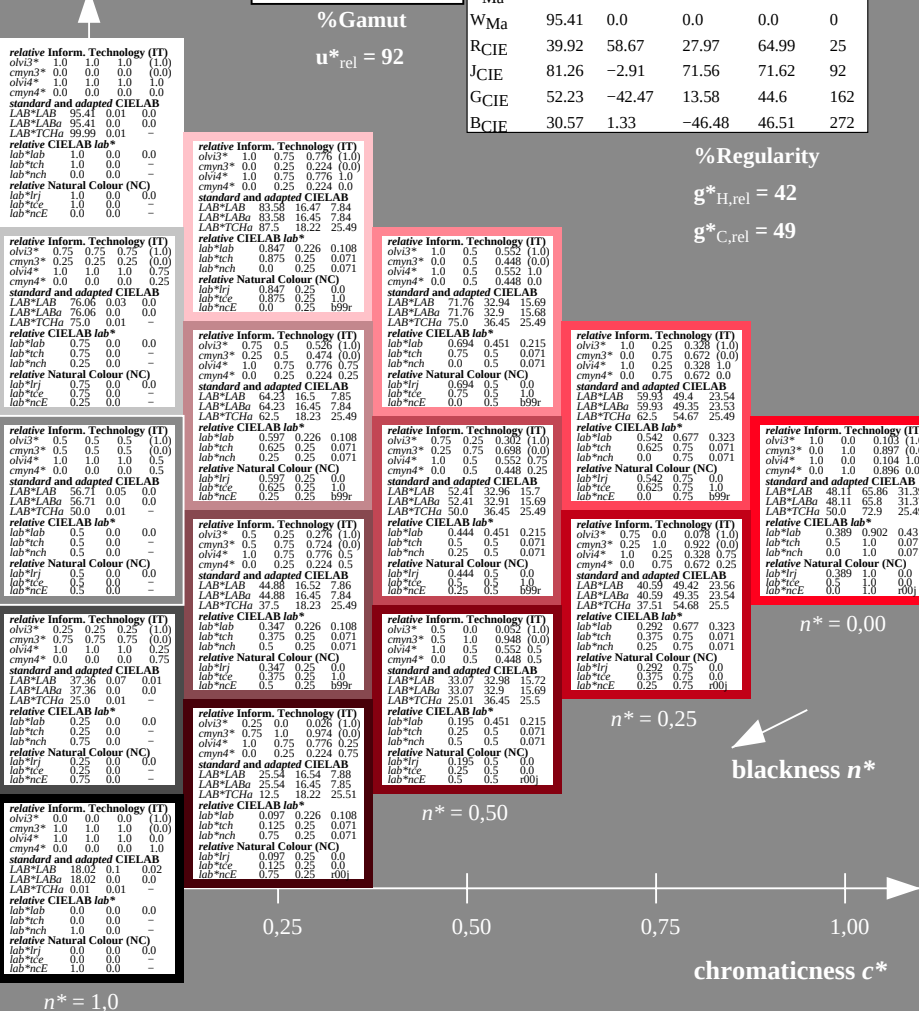
%Regularity

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

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



UE410-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)



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

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: $cmy0^* \text{ setcmykcolor}$

D65: 5 step colour scales and coordinate data for 10 hues

output: $olv^* \text{ setrgbcolor} / w^* \text{ setgray}$

Input: Colorimetric Reflective System ORS18

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

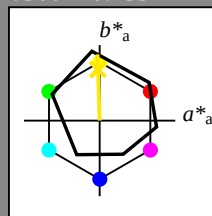
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J
LCH*Ma: 86 88 92
rgb*Ma: 1.0 0.9 0.0

triangle lightness

1,00

%Gamut
 $u^*_{rel} = 93$



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

%Regularity

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

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

Output: Colorimetric Reflective System MRS18a

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

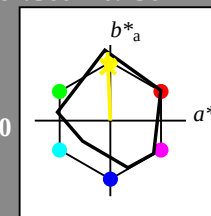
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J
LCH*Ma: 89 91 92
rgb*Ma: 1.0 0.95 0.0

triangle lightness

1,00

%Gamut
 $u^*_{rel} = 92$

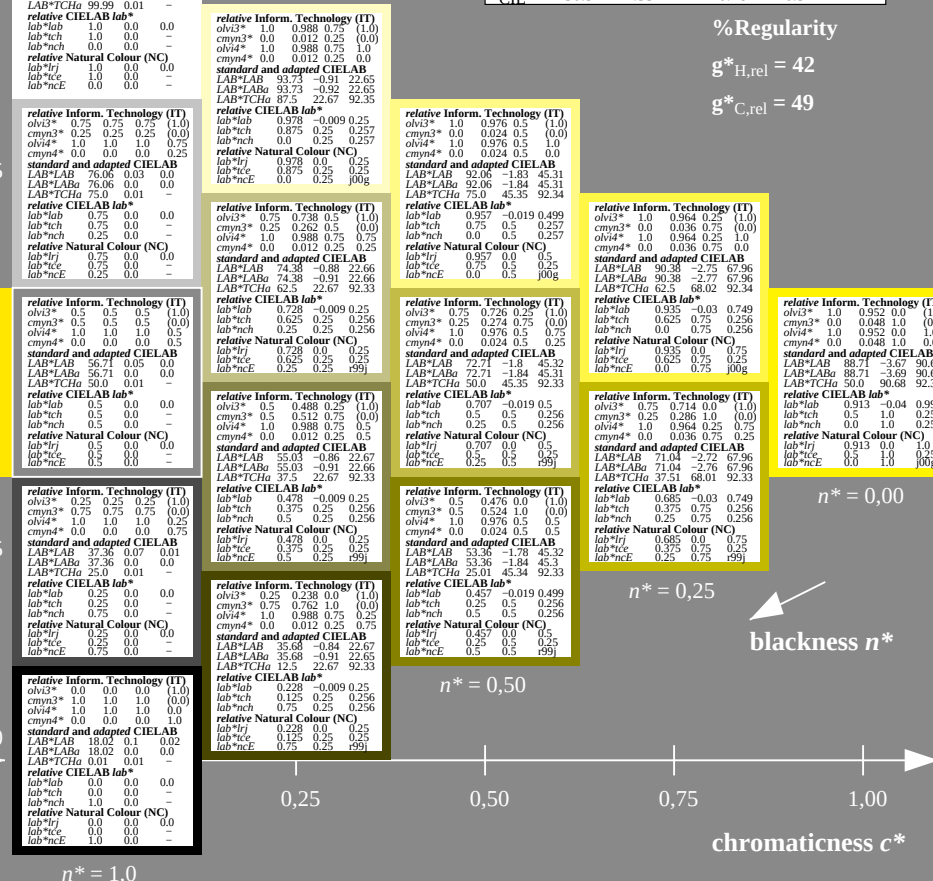
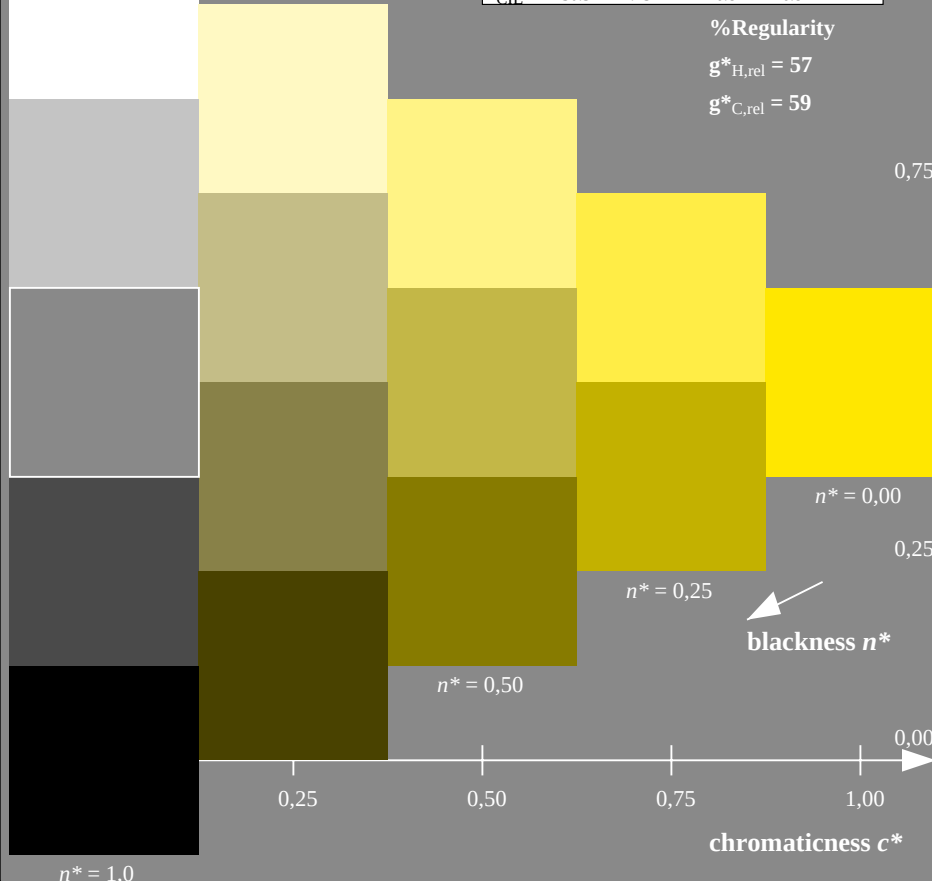


MRS18a; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	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

%Regularity

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

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



UE410-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: $cmy0^* setcmykcolor$

D65: 5 step colour scales and coordinate data for 10 hues

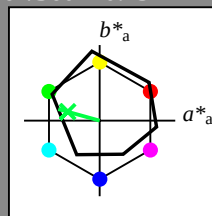
output: $olv^* setrgbcolor / w^* setgray$

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



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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

0,00

$n^* = 1,0$

chromaticness c^*

UE410-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)



BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmY0* setcmykcolor*

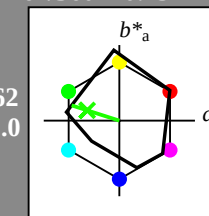
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System MRS18a

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

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

D65: hue G
LCH*Ma: 56 66 162
rgb*Ma: 0.11 1.0 0.0
triangle lightness



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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

0,00

$n^* = 1,0$

chromaticness c^*

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

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System ORS18

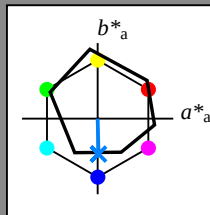
for hue $h^* = lab \cdot h = 271/360 = 0.754$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0

triangle lightness



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

%Regularity

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

1,00

0,75

blackness n^* chromaticness c^*

UE410-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: $cmY0^* \text{ set } cmYkcolor$

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System MRS18a

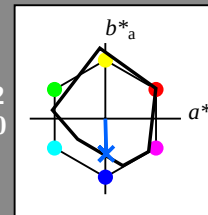
for hue $h^* = lab \cdot h = 272/360 = 0.755$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 49 272

rgb*Ma: 0.0 0.36 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 42$ $g^*_{C,rel} = 49$

1,00

0,75

blackness n^* chromaticness c^*

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

BAM material: code=rh4ta

output: $olv^* \text{ set } rgbcolor / w^* \text{ set } gray$