

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

$u^*_{rel} = 93$

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 NRS11

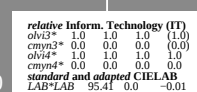
for hue $h^* = lab \cdot h = 24/360 = 0.067$

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

D65: hue R
LCH*Ma: 53 84 24
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 119$

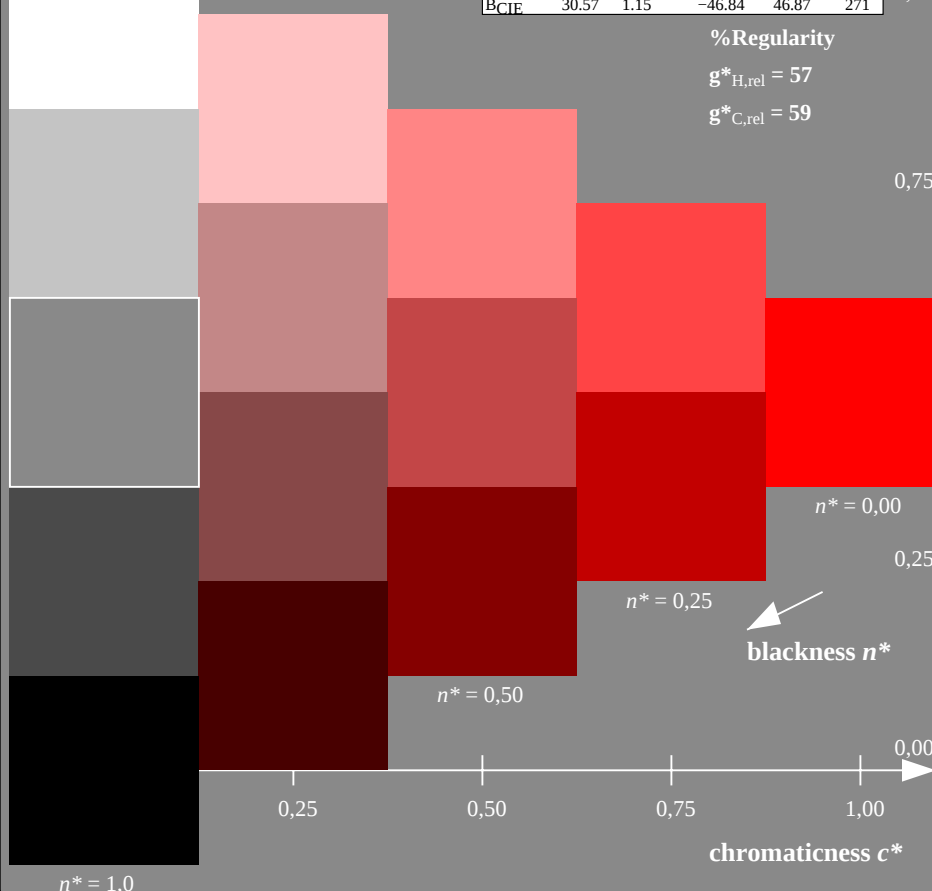
NRS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

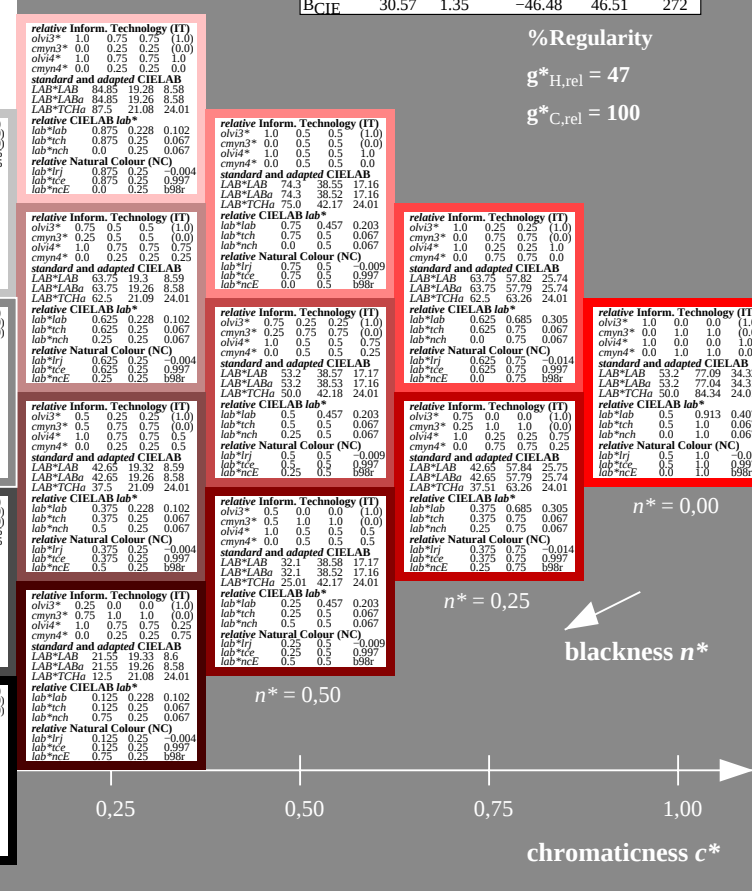
%Regularity

$g^*_{H,rel} = 47$

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



UE420-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)



5 step scales for constant CIELAB hue 24/360 = 0.067 (right)

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11
D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* \text{ set } cmykcolor$
output: $olv^* \text{ set } rgbcolor / w^* \text{ set } gray$

Input: Colorimetric Reflective System ORS18

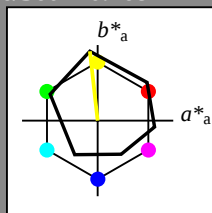
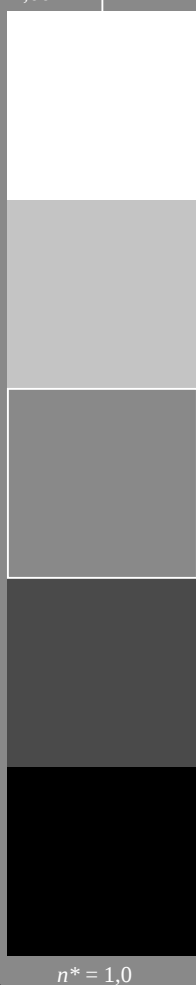
for hue $h^* = lab \cdot h = 96/360 = 0.268$

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

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

triangle lightness

1,00



%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 NRS11

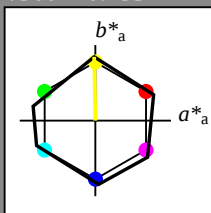
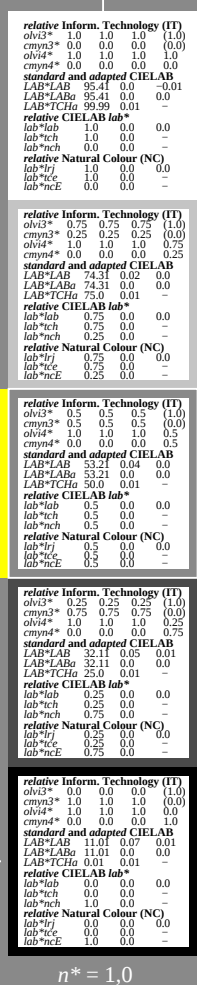
for hue $h^* = lab \cdot h = 91/360 = 0.253$

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

D65: hue J
LCH*Ma: 53 84 91
rgb*Ma: 1.0 1.0 0.0

triangle lightness

1,00



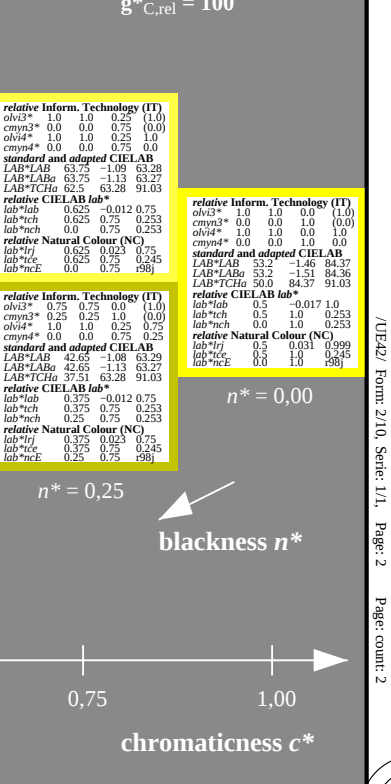
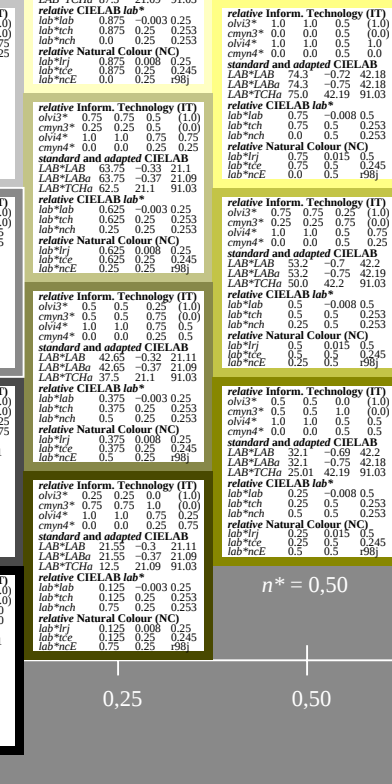
%Gamut
 $u^*_{rel} = 119$

NRS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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



UE420-7, 5 step scales for constant CIE LAB hue 96/360 = 0.268 (left)

5 step scales for constant CIE LAB hue 91/360 = 0.253 (right)

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11
D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* \text{ set } cmykcolor$
output: $cmY0^* \text{ set } rgbcolor / w^* \text{ set } gray$

Input: Colorimetric Reflective System ORS18

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

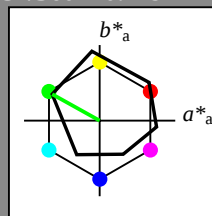
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 1.0 0.0

triangle lightness



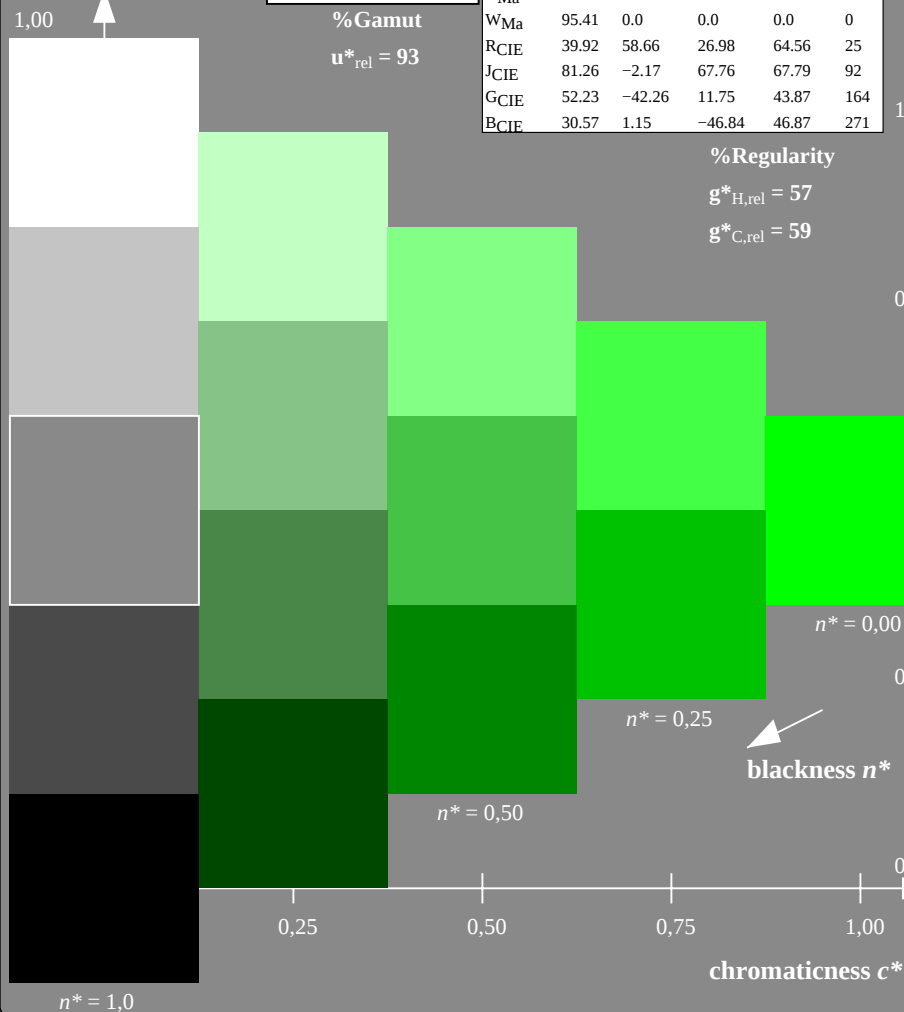
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	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

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

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



UE420-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11

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

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 167/360 = 0.464$

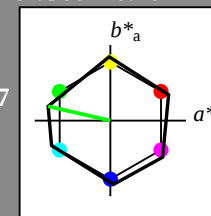
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 84 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness



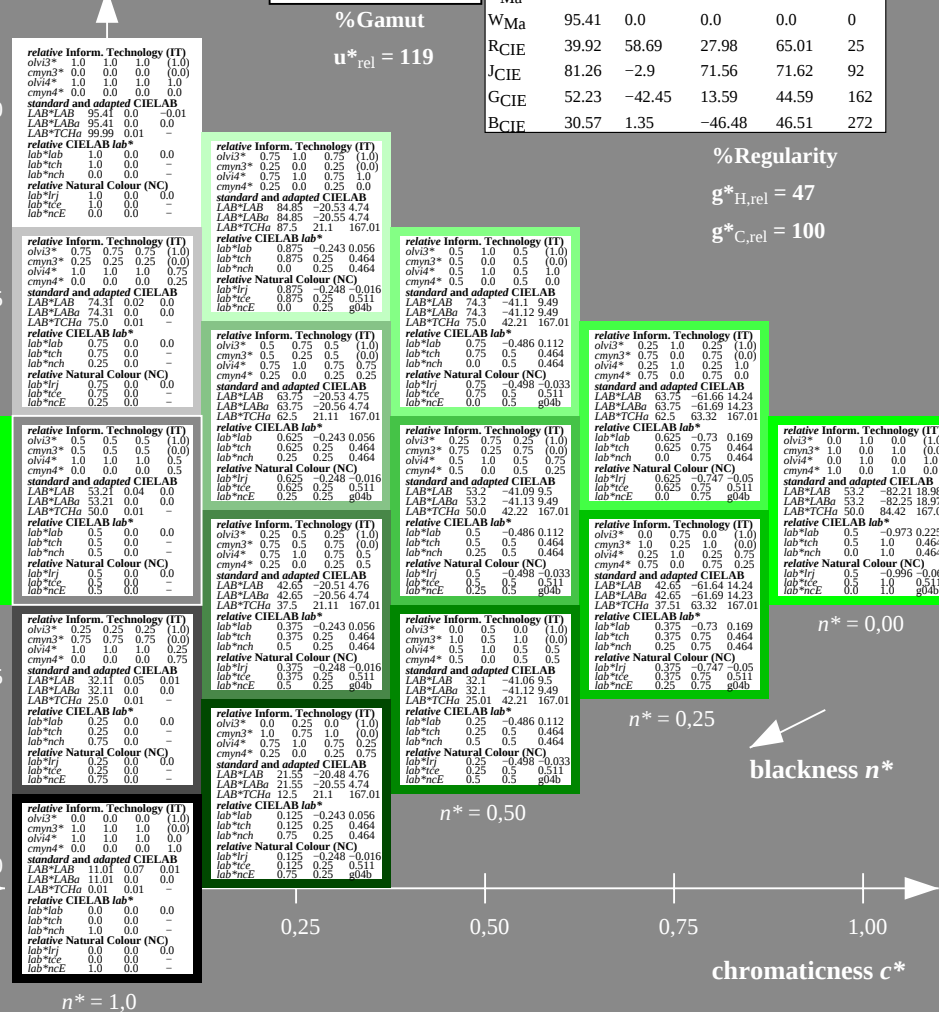
NRS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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



5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

input: $cmy0^* \text{ setcmykcolor}$

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

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

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

blackness n^*

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

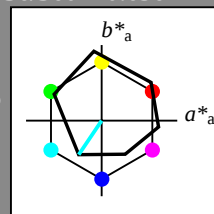
1,00

0,25

0,50

0,75

1,00



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

Output: Colorimetric Reflective System NRS11

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

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

D65: hue G50B
LCH*Ma: 53 84 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 119$

%Regularity

$g^*_{H,rel} = 47$

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

0,75

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

blackness n^*

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

1,00

0,25

0,50

0,75

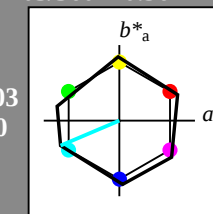
1,00

0,25

0,50

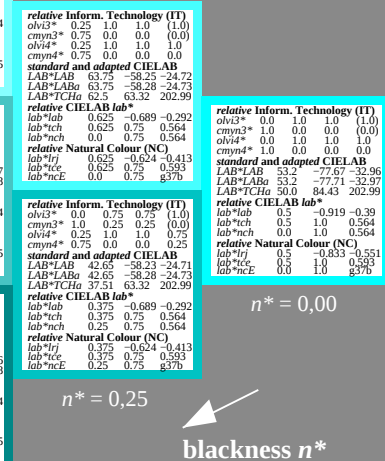
0,75

1,00



NRS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$



relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.75	0.75	0.75	(1.0)	
cmyn4*	0.25	0.25	0.25	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.2	77.06	34.32	84.36	24
LAB*LAB	53.2	-1.51	84.38	84.39	91
LAB*LAB	53.2	-82.27	18.98	84.44	167
LAB*LAB	53.2	-77.72	-32.98	84.44	203
LAB*LAB	53.2	4.37	-84.28	84.41	273
LAB*LAB	53.2	69.09	-48.41	84.37	325
LAB*LAB	10.99	0.0	0.0	0.0	0
LAB*LAB	95.41	0.0	0.0	0.0	0
LAB*LAB	39.92	58.69	27.98	65.01	25
LAB*LAB	81.26	-2.9	71.56	71.62	92
LAB*LAB	52.23	-42.45	13.59	44.59	162
LAB*LAB	30.57	1.35	-46.48	46.51	272

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.75	0.75	0.75	(1.0)	
cmyn4*	0.25	0.25	0.25	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.2	77.06	34.32	84.36	24
LAB*LAB	53.2	-1.51	84.38	84.39	91
LAB*LAB	53.2	-82.27	18.98	84.44	167
LAB*LAB	53.2	-77.72	-32.98	84.44	203
LAB*LAB	53.2	4.37	-84.28	84.41	273
LAB*LAB	53.2	69.09	-48.41	84.37	325
LAB*LAB	10.99	0.0	0.0	0.0	0
LAB*LAB	95.41	0.0	0.0	0.0	0
LAB*LAB	39.92	58.69	27.98	65.01	25
LAB*LAB	81.26	-2.9	71.56	71.62	92
LAB*LAB	52.23	-42.45	13.59	44.59	162
LAB*LAB	30.57	1.35	-46.48	46.51	272

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.75	0.75	0.75	(1.0)	
cmyn4*	0.25	0.25	0.25	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.2	77.06	34.32	84.36	24
LAB*LAB	53.2	-1.51	84.38	84.39	91
LAB*LAB	53.2	-82.27	18.98	84.44	167
LAB*LAB	53.2	-77.72	-32.98	84.44	203
LAB*LAB	53.2	4.37	-84.28	84.41	273
LAB*LAB	53.2	69.09	-48.41	84.37	325
LAB*LAB	10.99	0.0	0.0	0.0	0
LAB*LAB	95.41	0.0	0.0	0.0	0
LAB*LAB	39.92	58.69	27.98	65.01	25
LAB*LAB	81.26	-2.9	71.56	71.62	92
LAB*LAB	52.23	-42.45	13.59	44.59	162
LAB*LAB	30.57	1.35	-46.48	46.51	272

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.75	0.75	0.75	(1.0)	
cmyn4*	0.25	0.25	0.25	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.2	77.06	34.32	84.36	24
LAB*LAB	53.2	-1.51	84.38	84.39	91
LAB*LAB	53.2	-82.27	18.98	84.44	167
LAB*LAB	53.2	-77.72	-32.98	84.44	203
LAB*LAB	53.2	4.37	-84.28	84.41	273
LAB*LAB	53.2	69.09	-48.41	84.37	325
LAB*LAB	10.99	0.0	0.0	0.0	0
LAB*LAB	95.41	0.0	0.0	0.0	0
LAB*LAB	39.92	58.69	27.98	65.01	25
LAB*LAB	81.26	-2.9	71.56	71.62	92
LAB*LAB	52.23	-42.45	13.59	44.59	162
LAB*LAB	30.57	1.35	-46.48	46.51	272

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.75	0.75	0.75	(1.0)	
cmyn4*	0.25	0.25	0.25	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.2	77.06	34.32	84.36	24
LAB*LAB	53.2	-1.51	84.38	84.39	91
LAB*LAB	53.2	-82.27	18.98	84.44	167
LAB*LAB	53.2	-77.72	-32.98	84.44	203
LAB*LAB	53.2	4.37	-84.28	84.41	273
LAB*LAB	53.2	69.09	-48.41	84.37	325
LAB*LAB	10.99	0.0	0.0	0.0	0
LAB*LAB	95.41	0.0	0.0	0.0	0
LAB*LAB	39.92	58.69	27.98	65.01	25
LAB*LAB	81.26	-2.9	71.56	71.62	92
LAB*LAB	52.23	-42.45	13.59	44.59	162
LAB*LAB	30.57	1.35	-46.48	46.51	272

UE420-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11

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

input: $cmv0^* \text{ setcmvcolor}$

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

Input: Colorimetric Reflective System ORS18

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

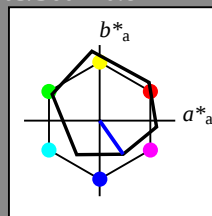
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness

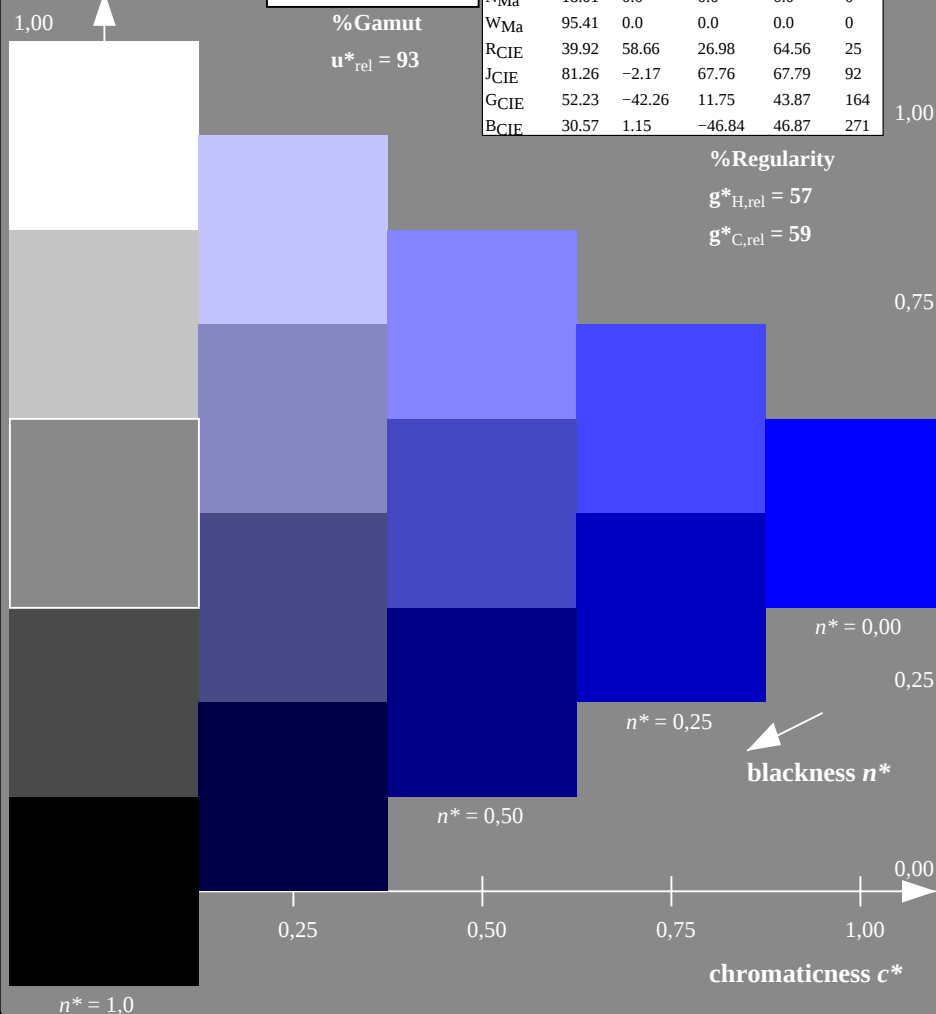


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0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

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

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



UE420-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11

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

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 273/360 = 0.758$

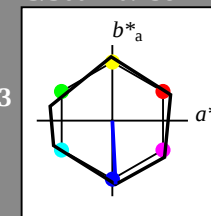
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 53 84 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness

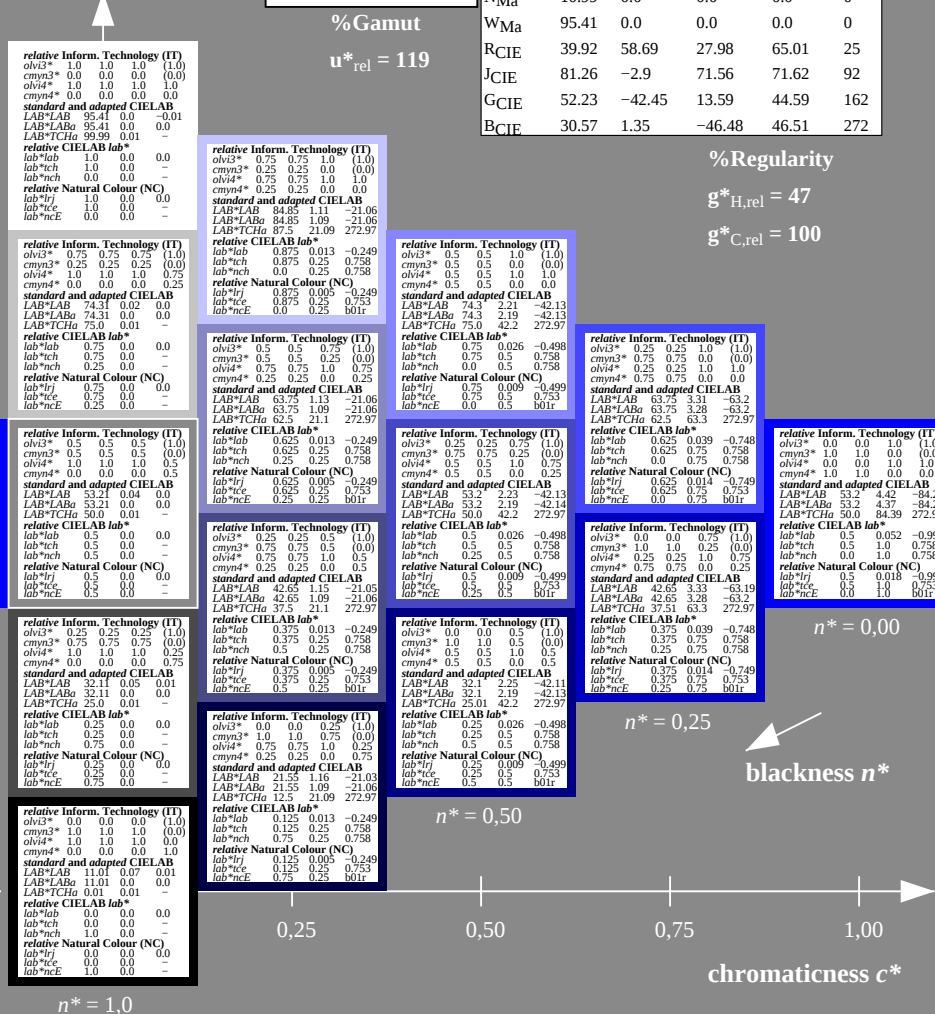


NRS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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



5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

input: $cmY0^* \text{ set } cmykcolor$

output: $cmY0^* \text{ set } rgbcolor / w^* \text{ set } gray$

Input: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*nch

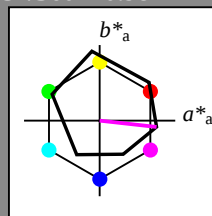
D65: hue M

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

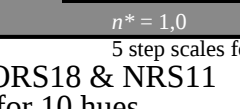
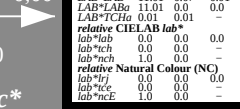
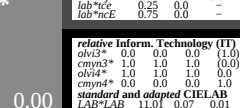
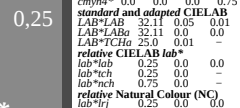
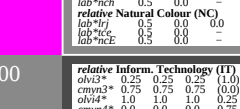
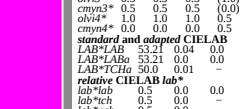
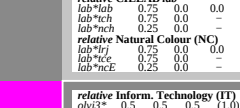
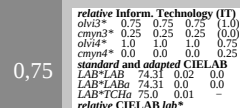
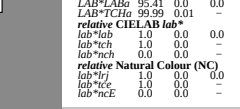
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	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



Output: Colorimetric Reflective System NRS11

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

lab^*tch and lab^*nch

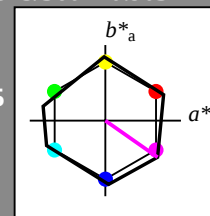
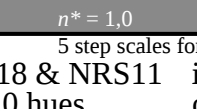
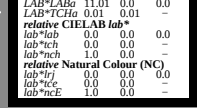
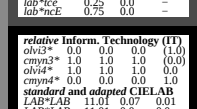
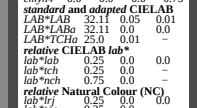
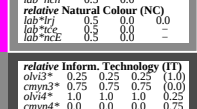
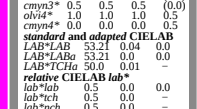
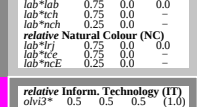
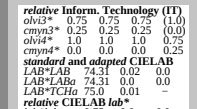
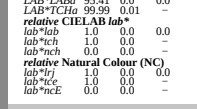
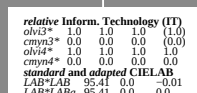
D65: hue B50R

LCH*Ma: 53 84 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 119$

NRS11; adapted (a) CIELAB data

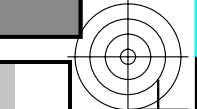
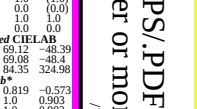
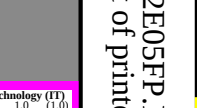
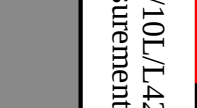
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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

1,00



UE420-7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)



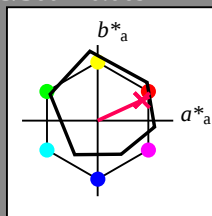
BAM-test chart UE42; Colorimetric systems ORS18 & NRS11
D65: 5 step colour scales and coordinate data for 10 hues

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

input: $cmy0^* setcmykcolor$

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

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

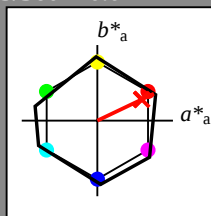
0,75

0,25

0,00

 $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 25/360 = 0.071$ $lab \cdot tch$ and $lab \cdot nch$ D65: hue R
LCH*Ma: 53 83 25
rgb*Ma: 1.0 0.03 0.0
triangle lightness

NRS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

 $g^*_{H,rel} = 47$ $g^*_{C,rel} = 100$

1,00

0,75

0,50

0,25

0,00

 $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 0,75$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$ $n^* = 1,0$

UE420-7, 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 UE42; Colorimetric systems ORS18 & NRS11

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

input: `cmY0* setcmYcolor / w* setgray`output: `olY* 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

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

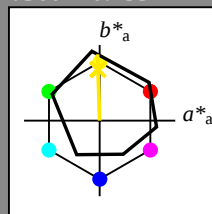
$g^*_{C,rel} = 100$

0,25

%Regularity

$g^*_{H,rel} = 47$

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



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

%Regularity

$g^*_{H,rel} = 47$

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

0,75

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

Output: Colorimetric Reflective System NRS11

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

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

D65: hue J

LCH*Ma: 53 83 92

rgb*Ma: 0.98 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 119$

%Regularity

$g^*_{H,rel} = 47$

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

0,75

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

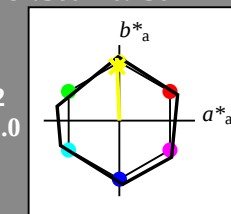
$g^*_{C,rel} = 100$

0,25

%Regularity

$g^*_{H,rel} = 47$

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



%Gamut

$u^*_{rel} = 119$

%Regularity

$g^*_{H,rel} = 47$

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

0,75

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

NRS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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

1,00

%Regularity

$g^*_{H,rel} = 47$

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

0,75

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

0,00

%Regularity

$g^*_{H,rel} = 47$

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

0,25

%Regularity

$g^*_{H,rel} = 47$

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

UE420-7, 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 UE42; Colorimetric systems ORS18 & NRS11

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

input: $cmY0^* setcmykcolor$

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

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

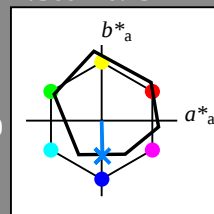
blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*



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

Output: Colorimetric Reflective System NRS11

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

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

D65: hue B

LCH*Ma: 53 83 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 119$

%Regularity

$g^*_{H,rel} = 47$

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

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

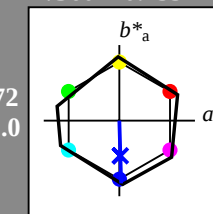
blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*



NRS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11
D65: 5 step colour scales and coordinate data for 10 hues

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

input: $cmY0^* \text{ set } cmYkcolor$
output: $olv^* \text{ set } rgbcolor / w^* \text{ set } gray$