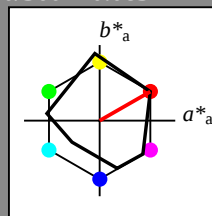


Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 30/360 = 0.083$

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

D65: hue R
LCH*Ma: 50 77 30
rgb*Ma: 1.0 0.0 0.0
triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

UE430-7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)



BAM-test chart UE43; Colorimetric systems MRS18 & NCS11a input: $cmY0^* setcmykcolor$

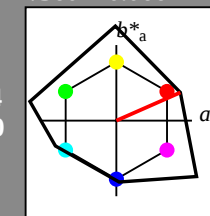
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab \cdot h = 24/360 = 0.066$

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

D65: hue R
LCH*Ma: 47 92 24
rgb*Ma: 1.0 0.0 0.0
triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	47.15	84.64	37.25	92.48	24
J _{Ma}	91.37	-1.27	125.03	125.03	91
G _{Ma}	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)

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

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 94/360 = 0.261$

lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

rgb*Ma: 1.0 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,50

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

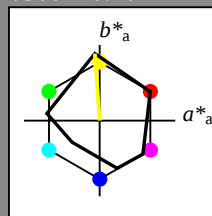
$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,50

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 91/360 = 0.252$

lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,50

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

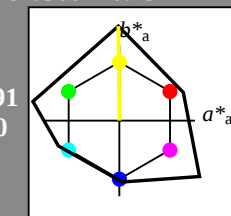
$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 52$



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,50

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

UE430-7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

BAM-test chart UE43; Colorimetric systems MRS18 & NCS11a input: $cmY0^* setcmykcolor$

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

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

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 172/360 = 0.479$

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

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

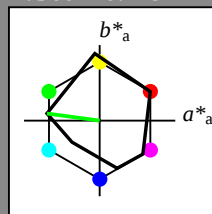
$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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 NCS11

for hue $h^* = lab \cdot h = 167/360 = 0.465$

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

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

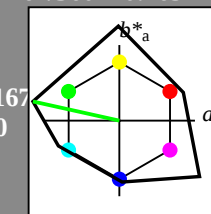
$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$



NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

UE430-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

BAM-test chart UE43; Colorimetric systems MRS18 & NCS11a input: $cmY0^* setcmykcolor$

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

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

Input: Colorimetric Reflective System MRS18

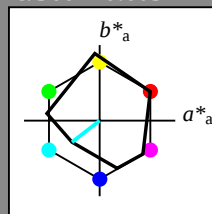
for hue $h^* = lab \cdot h = 218/360 = 0.605$

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

D65: hue G50B
LCH*Ma: 45 46 218
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 91$

MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

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	0.0	-0.01		
LAB*LABa	95.41	0.0	0.0		
LAB*TC _{Ma}	98.99	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	0.0	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	0.75	
cmyn4*	0.0	0.0	0.0	0.25	
standard and adapted CIELAB					
LAB*LAB	74.31	0.02	0.0		
LAB*LABa	74.31	0.0	0.0		
LAB*TC _{Ma}	75.0	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.75	0.0	0.0		
lab*tch	0.75	0.0	0.0		
lab*nch	0.25	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	0.25	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	0.5	
cmyn4*	0.0	0.0	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	53.21	0.04	0.0		
LAB*LABa	53.21	0.0	0.0		
LAB*TC _{Ma}	50.0	0.01	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	0.25	
cmyn4*	0.0	0.0	0.0	0.75	
standard and adapted CIELAB					
LAB*LAB	32.11	0.05	0.01		
LAB*LABa	32.11	0.0	0.0		
LAB*TC _{Ma}	25.0	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.25	0.0	0.0		
lab*tch	0.25	0.0	0.0		
lab*nch	0.75	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	0.75	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	0.0	
cmyn4*	0.0	0.0	0.0	1.0	
standard and adapted CIELAB					
LAB*LAB	11.01	0.07	0.01		
LAB*LABa	11.01	0.0	0.0		
LAB*TC _{Ma}	0.01	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	0.0		
lab*nch	1.0	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	1.0	0.0	0.0		

$n^* = 1,0$

Output: Colorimetric Reflective System NCS11

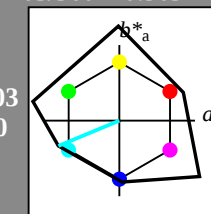
for hue $h^* = lab \cdot h = 203/360 = 0.563$

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

D65: hue G50B
LCH*Ma: 59 87 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 149$

NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

relative Inform. Technology (IT)					
olvi3*	0.75	1.0	1.0	(1.0)	
cmyn3*	0.25	0.0	0.0	(0.0)	
olvi4*	0.75	1.0	1.0	1.0	
cmyn4*	0.25	0.0	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	86.42	-20.12	-8.35		
LAB*LABa	86.42	-20.13	-8.35		
LAB*TC _{Ma}	87.5	21.81	202.54		
relative CIELAB lab*					
lab*lab	0.893	-0.23	-0.095		
lab*tch	0.875	0.25	0.563		
lab*nch	0.0	0.25	0.563		
relative Natural Colour (NC)					
lab*trj	0.893	-0.208	-0.136		
lab*tce	0.875	0.25	0.592		
lab*nce	0.0	0.25	0.563		

relative Inform. Technology (IT)					
olvi3*	0.5	0.75	0.75	(1.0)	
cmyn3*	0.5	0.25	0.25	(0.0)	
olvi4*	0.75	1.0	1.0	0.75	
cmyn4*	0.5	0.0	0.0	0.25	
standard and adapted CIELAB					
LAB*LAB	65.32	-20.11	-8.35		
LAB*LABa	65.32	-20.14	-8.36		
LAB*TC _{Ma}	62.5	21.82	202.54		
relative CIELAB lab*					
lab*lab	0.5	0.75	0.75		
lab*tch	0.5	0.25	0.563		
lab*nch	0.5	0.25	0.563		
relative Natural Colour (NC)					
lab*trj	0.537	-0.418	-0.272		
lab*tce	0.537	0.25	0.592		
lab*nce	0.5	0.25	0.563		

relative Inform. Technology (IT)					
olvi3*	0.25	0.75	0.75	(1.0)	
cmyn3*	0.75	0.25	0.25	(0.0)	
olvi4*	0.5	1.0	1.0	0.5	
cmyn4*	0.5	0.0	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	56.33	-40.26	-16.71		
LAB*LABa	56.33	-40.3	-16.72		
LAB*TC _{Ma}	50.0	43.64	202.54		
relative CIELAB lab*					
lab*lab	0.537	-0.461	-0.191		
lab*tch	0.5	0.25	0.563		
lab*nch	0.5	0.25	0.563		
relative Natural Colour (NC)					
lab*trj	0.537	-0.418	-0.272		
lab*tce	0.537	0.25	0.592		
lab*nce	0.5	0.25	0.563		

relative Inform. Technology (IT)					
olvi3*	0.0	0.5	0.5	(1.0)	
cmyn3*	1.0	0.5	0.5	(0.0)	
olvi4*	0.5	1.0	1.0	0.5	
cmyn4*	0.5	0.0	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	35.23	-40.23	-16.7		
LAB*LABa	35.23	-40.29	-16.72		
LAB*TC _{Ma}	25.01	43.63	202.54		
relative CIELAB lab*					
lab*lab	0.287	-0.461	-0.191		
lab*tch	0.25	0.5	0.563		
lab*nch	0.5	0.5	0.563		
relative Natural Colour (NC)					
lab*trj	0.287	-0.418	-0.272		
lab*tce	0.25	0.5	0.592		
lab*nce	0.5	0.5	0.563		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
cmyn3*	1.0	0.75	0.75	(0.0)	
olvi4*	1.0	1.0	1.0	0.0	
cmyn4*	0.0	0.0	0.0	1.0	
standard and adapted CIELAB					
LAB*LAB	11.01	0.07	0.01		
LAB*LABa	11.01	0.0	0.0		
LAB*TC _{Ma}	0.01	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	0.0		
lab*nch	1.0	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	1.0	0.0	0.0		

$n^* = 0,50$

relative Inform. Technology (IT)					
olvi3*	0.5	1.0	1.0	(1.0)	
cmyn3*	0.5	0.0	0.0	(0.0)	
olvi4*	0.5	1.0	1.0	1.0	
cmyn4*	0.5	0.0	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	77.43	-			

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 290/360 = 0.806$

lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

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^*

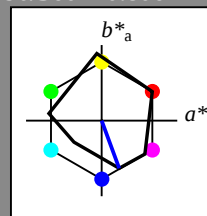
blackness n^*

blackness n^*

blackness n^*

blackness n^*

MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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



$u^*_{rel} = 91$

%Gamut

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

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^*

blackness n^*

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

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^*

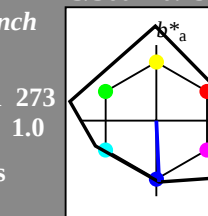
blackness n^*

blackness n^*

blackness n^*

blackness n^*

NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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



$u^*_{rel} = 149$

%Gamut

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

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^*

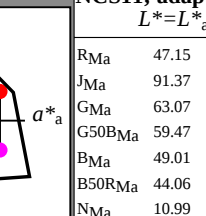
blackness n^*

blackness n^*

blackness n^*

blackness n^*

NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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



$u^*_{rel} = 149$

%Gamut

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

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^*

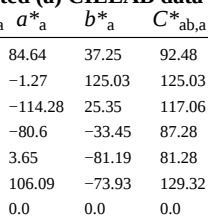
blackness n^*

blackness n^*

blackness n^*

blackness n^*

NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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



$u^*_{rel} = 149$

%Gamut

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 322/360 = 0.895$

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

D65: hue B50R
LCH*Ma: 35 72 322
rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00

% Gamut
 $u^*_{rel} = 91$

% Regularity
 $g^*_{H,rel} = 41$
 $g^*_{C,rel} = 52$

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

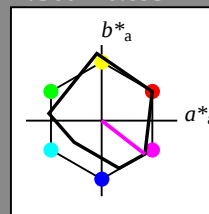
$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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 NCS11

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

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

D65: hue B50R
LCH*Ma: 44 129 325
rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00

% Gamut
 $u^*_{rel} = 149$

% Regularity
 $g^*_{H,rel} = 46$
 $g^*_{C,rel} = 65$

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

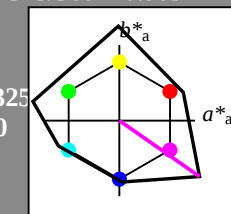
$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$



NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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
 $g^*_{H,rel} = 46$
 $g^*_{C,rel} = 65$

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

BAM-test chart UE43; Colorimetric systems MRS18 & NCS11a input: $cmy0^* setcmykcolor$

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

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

Input: Colorimetric Reflective System MRS18

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

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

D65: hue R

LCH*Ma: 48 73 25

rgb*Ma: 1.0 0.0 0.1

triangle lightness

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

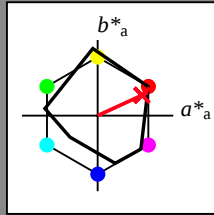
1,00

0,25

0,50

0,75

1,00



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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 NCS11

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

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

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

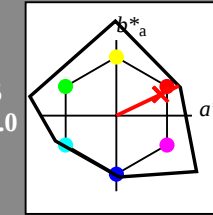
1,00

0,25

0,50

0,75

1,00



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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
 $g^*_{H,rel} = 46$
 $g^*_{C,rel} = 65$

0,75

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

UE430-7, 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 UE43; Colorimetric systems MRS18 & NCS11a input: `cmY0* setcmYcolor`

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

output: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System MRS18

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

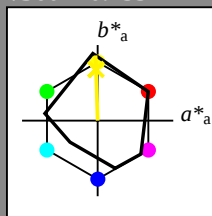
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness



1,00

% Gamut

$u^*_{rel} = 91$

MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

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	0.0	-0.01		
LAB*LABa	95.41	0.0	0.0		
LAB*TCha	98.99	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	0.0	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	0.25	
standard and adapted CIELAB					
LAB*LAB	74.31	0.02	0.0		
LAB*LABa	74.31	0.0	0.0		
LAB*TCha	75.0	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.75	0.0	0.0		
lab*tch	0.75	0.0	0.0		
lab*nch	0.25	0.0	0.0		
relative Natural Colour (NC)					
lab*trj	0.75	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*	0.5	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	0.5	
standard and adapted CIELAB					
LAB*LAB	53.21	0.04	0.0		
LAB*LABa	53.21	0.0	0.0		
LAB*TCha	50.0	0.01	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	0.75	
standard and adapted CIELAB					
LAB*LAB	32.11	0.05	0.01		
LAB*LABa	32.11	0.0	0.0		
LAB*TCha	25.0	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.25	0.0	0.0		
lab*tch	0.25	0.0	0.0		
lab*nch	0.75	0.0	0.0		
relative Natural Colour (NC)					
lab*trj	0.25	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*	0.0	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	1.0	
standard and adapted CIELAB					
LAB*LAB	11.01	0.07	0.01		
LAB*LABa	11.01	0.0	0.0		
LAB*TCha	0.01	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	1.0	0.0	0.0		
relative Natural Colour (NC)					
lab*trj	0.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	1.0	0.0	0.0		

$n^* = 1.0$

Output: Colorimetric Reflective System NCS11

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

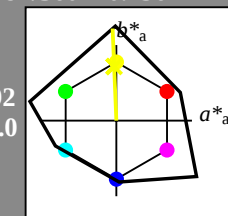
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 90 122 92

rgb*Ma: 0.97 1.0 0.0

triangle lightness



% Gamut

$u^*_{rel} = 149$

NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

relative Inform. Technology (IT)					
olvi3*	0.992	1.0	0.75	(1.0)	
cmyn3*	0.008	0.0	0.25	(0.0)	
olvi4*	0.992	1.0	0.75	1.0	
cmyn4*	0.008	0.0	0.25	0.0	
standard and adapted CIELAB					
LAB*LAB	94.16	-1.21	30.44		
LAB*LABa	94.16	-1.22	30.44		
LAB*TCha	87.5	30.47	92.31		
relative CIELAB lab*					
lab*lab	0.995	-0.009	0.25		
lab*tch	0.875	0.25	0.256		
lab*nch	0.0	0.25	0.256		
relative Natural Colour (NC)					
lab*trj	0.985	0.0	0.25		
lab*tce	0.875	0.25	0.25		
lab*nce	0.0	0.25	0.99		

relative Inform. Technology (IT)					
olvi3*	0.742	0.75	0.5	(1.0)	
cmyn3*	0.258	0.25	0.5	(0.0)	
olvi4*	0.992	1.0	0.75	0.75	
cmyn4*	0.008	0.0	0.5	0.25	
standard and adapted CIELAB					
LAB*LAB	73.07	-1.2	30.45		
LAB*LABa	73.07	-1.23	30.45		
LAB*TCha	62.5	30.47	92.33		
relative CIELAB lab*					
lab*lab	0.735	-0.009	0.25		
lab*tch	0.625	0.25	0.256		
lab*nch	0.25	0.25	0.256		
relative Natural Colour (NC)					
lab*trj	0.735	0.0	0.25		
lab*tce	0.625	0.25	0.25		
lab*nce	0.25	0.25	0.99		

relative Inform. Technology (IT)					
olvi3*	0.508	0.5	0.75	(1.0)	
cmyn3*	0.492	0.5	0.75	(0.0)	
olvi4*	0.992	1.0	0.75	0.5	
cmyn4*	0.008	0.0	0.75	0.25	
standard and adapted CIELAB					
LAB*LAB	51.96	-1.18	30.46		
LAB*LABa	51.96	-1.23	30.46		
LAB*TCha	37.5	30.47	92.33		
relative CIELAB lab*					
lab*lab	0.485	-0.009	0.25		
lab*tch	0.375	0.25	0.256		
lab*nch	0.5	0.25	0.256		
relative Natural Colour (NC)					
lab*trj	0.485	0.0	0.25		
lab*tce	0.375	0.25	0.25		
lab*nce	0.5	0.25	0.99		

relative Inform. Technology (IT)					
olvi3*	0.242	0.25	0.5	(1.0)	
cmyn3*	0.758	0.75	1.0	(0.0)	
olvi4*	0.992	1.0	0.75	0.5	
cmyn4*	0.008	0.0	0.25	0.75	
standard and adapted CIELAB					
LAB*LAB	30.86	-1.17	30.45		
LAB*LABa	30.86	-1.23	30.43		
LAB*TCha	12.5	30.46	92.33		
relative CIELAB lab*					
lab*lab	0.235	-0.009	0.25		
lab*tch	0.125	0.25	0.256		
lab*nch	0.75	0.25	0.256		
relative Natural Colour (NC)					
lab*trj	0.235	0.0	0.25		
lab*tce	0.125	0.25	0.25		
lab*nce	0.75	0.25	0.98		

relative Inform. Technology (IT)					
olvi3*	0.024	0.25	0.5	(1.0)	
cmyn3*	0.976	0.75	1.0	(0.0)	
olvi4*	0.984	1.0	0.5	0.5	
cmyn4*	0.016	0.0	0.5	0.25	
standard and adapted CIELAB					
LAB*LAB	50.72	-2.42	60.89		
LAB*LABa	50.72	-2.47	60.88		
LAB*TCha	25.01	60.93	92.33		
relative CIELAB lab*					
lab*lab	0.471	-0.019	0.499		
lab*tch	0.25	0.5	0.256		
lab*nch	0.5	0.5	0.256		
relative Natural Colour (NC)					
lab*trj	0.471	0.0	0.5		
lab*tce	0.25	0.5	0.25		
lab*nce	0.5	0.5	0.98		

$n^* = 0.50$

	G _{CIE}
	B _{CIE}

Input: Colorimetric Reflective System MRS18

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

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

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

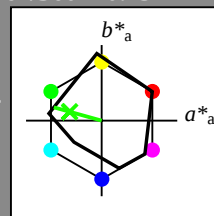
$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	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

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,75

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,00

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,25

%Regularity

Output: Colorimetric Reflective System NCS11

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

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

D65: hue G

LCH*Ma: 65 110 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

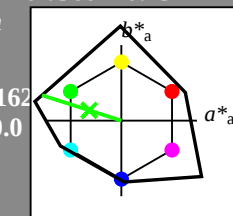
$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$



%Gamut

$u^*_{rel} = 149$

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

NCS11; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,75

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

0,00

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

0,25

%Regularity

$g^*_{H,rel} = 46$

Input: Colorimetric Reflective System MRS18

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

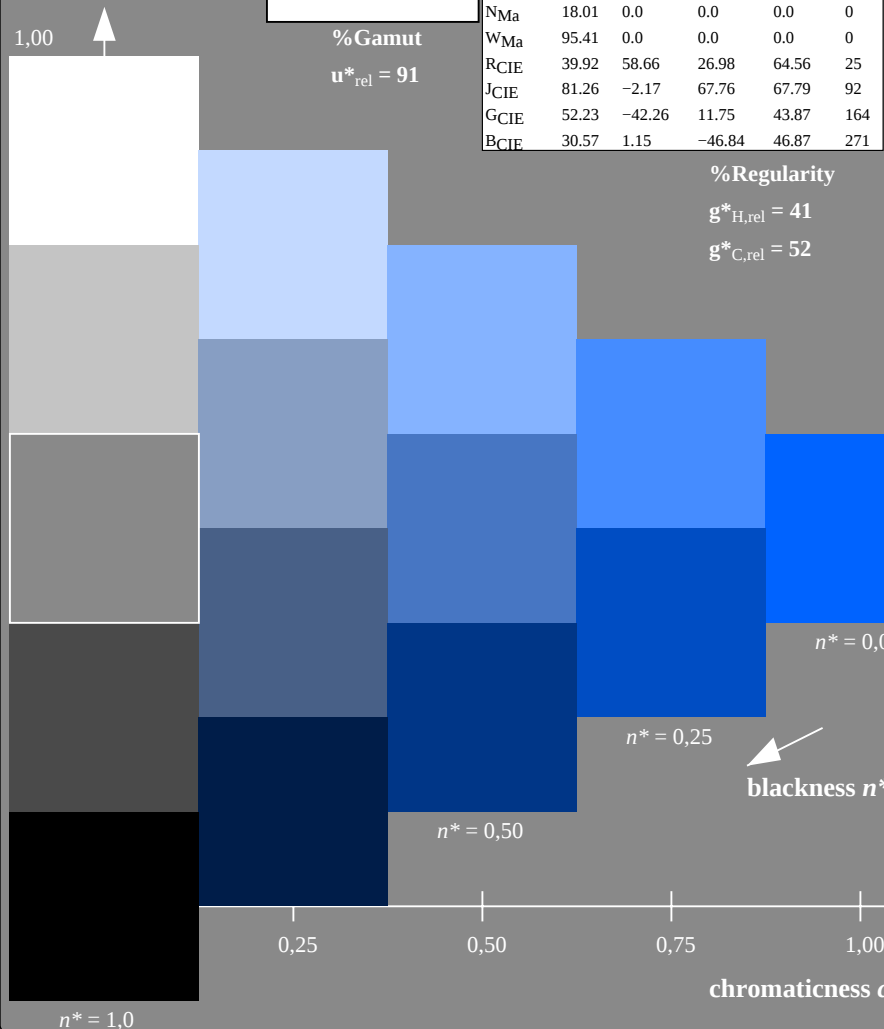
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness



UE430-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)



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

Output: Colorimetric Reflective System NCS11

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

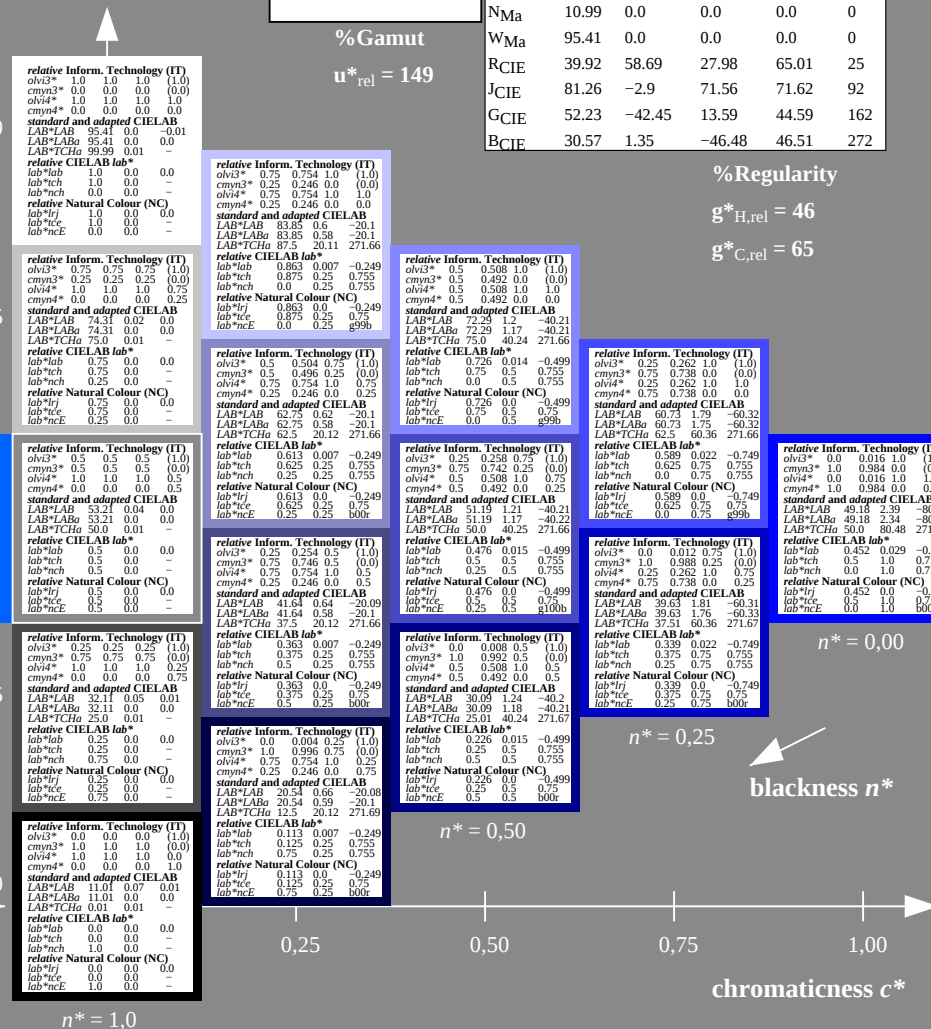
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness



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

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