

BAM material: code=rh4ta

Input: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*nch

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

triangle lightness

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

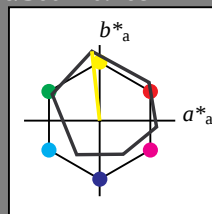
$n^* = 0,50$

$n^* = 1,0$

UE400-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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



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
GMa	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

%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^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

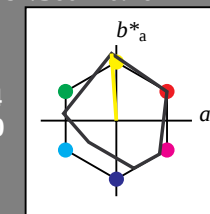
$n^* = 1,0$

5 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM material: code=rhda4a

input: cmy0* setcmykcolor

output: no change compared to input



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
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
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

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

5 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM material: code=rhda4a

input: cmy0* setcmykcolor

output: no change compared to input

Input: Colorimetric Reflective System ORS18

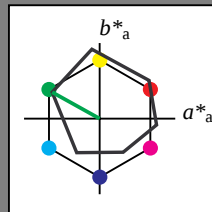
for hue $h^* = lab^*h = 151/360 = 0.419$

lab^*tch and lab^*nch

D65: hue L
LCH*Ma: 51 72 151
rgb*Ma: 0.0 1.0 0.0

triangle lightness

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

%Regularity

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

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

1,00

Output: Colorimetric Reflective System MRS18

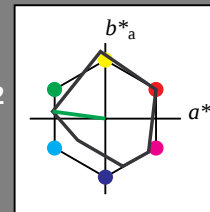
for hue $h^* = lab^*h = 172/360 = 0.479$

lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 52 70 172
rgb*Ma: 0.0 1.0 0.0

triangle lightness

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
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

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

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

0,75

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	-0.97	4.75		
LAB*LAB	95.41	0.0	0.0		
LAB*TChA	99.99	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*	0.5	0.5	0.5	(1.0)	
cmyn3*	0.5	0.5	0.5	(0.0)	
olvi4*	0.5	1.0	0.5	0.5	
cmyn4*	0.0	0.0	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	56.71	-0.23	2.14		
LAB*LAB	56.71	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	0.0	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	0.0	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	0.25	0.5	0.25	0.5	
cmyn4*	0.0	0.0	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	45.88	-1.46	3.78		
LAB*LAB	45.88	0.0	0.0		
LAB*TChA	37.5	17.59	172.29		
relative CIELAB lab*					
lab*lab	0.25	0.0	0.0		
lab*tch	0.25	0.0	0.0		
lab*nch	0.0	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	0.0	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	0.0	
cmyn4*	0.0	0.0	0.0	1.0	
standard and adapted CIELAB					
LAB*LAB	18.02	0.3	-0.46		
LAB*LAB	18.02	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	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	1.0	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	0.0	
cmyn4*	0.0	0.0	0.0	1.0	
standard and adapted CIELAB					
LAB*LAB	26.54	-1.08	2.47		
LAB*LAB	26.54	0.0	0.0		
LAB*TChA	12.5	17.59	172.29		
relative CIELAB lab*					
lab*lab	0.11	-0.247	0.034		
lab*tch	0.11	0.25	0.479		
lab*nch	0.0	0.0	0.0		
relative Natural Colour (NC)					
lab*trj	0.11	-0.247	0.034		
lab*tce	0.11	0.25	0.479		
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	0.0	
cmyn4*	0.0	0.0	0.0	1.0	
standard and adapted CIELAB					
LAB*LAB	18.02	0.3	-0.46		
LAB*LAB	18.02	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	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	1.0	0.0	0.0		

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

UE400-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System ORS18

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

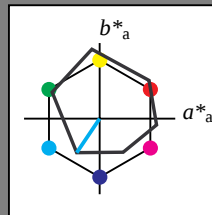
lab^*tch and lab^*nch

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

0,25

0,00

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

$n^* = 1,0$

chromaticness c^*

UE400-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)



BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

Output: Colorimetric Reflective System MRS18

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

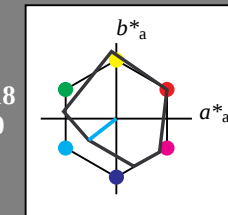
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 218

rgb*Ma: 0.0 1.0 1.0

triangle lightness



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
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
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

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

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

1,00

0,75

0,25

0,00

$n^* = 0,25$

$n^* = 0,50$

0,00

$n^* = 1,0$

chromaticness c^*

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

input: $cmY0^* setcmykcolor$

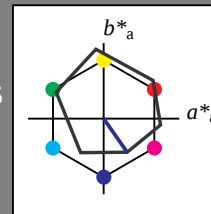
output: no change compared to input

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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

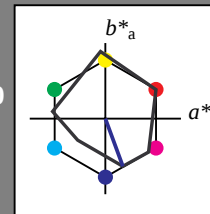
chromaticness c^*

Output: Colorimetric Reflective System MRS18

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

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

D65: hue B
LCH*Ma: 37 67 290
rgb*Ma: 0.0 0.0 1.0
triangle lightness



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
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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

chromaticness c^*

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

input: $cmY0^* set cmykcolor$

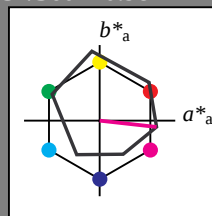
output: no change compared to input

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



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

$n^* = 0,25$

$n^* = 0,50$

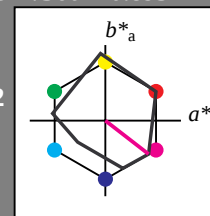
chromaticness c^*

Output: 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



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
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
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

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

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

relative Inform. Technology (IT)					
olvi3*	1.0	0.5	1.0	1.0	1.0
olvi4*	0.0	0.5	0.0	0.0	0.0
olvi5*	0.0	0.0	0.0	0.0	0.0
olvi6*	0.0	0.0	0.0	0.0	0.0
olvi7*	0.0	0.0	0.0	0.0	0.0
olvi8*	0.0	0.0	0.0	0.0	0.0
olvi9*	0.0	0.0	0.0	0.0	0.0
olvi10*	0.0	0.0	0.0	0.0	0.0
olvi11*	0.0	0.0	0.0	0.0	0.0
olvi12*	0.0	0.0	0.0	0.0	0.0
olvi13*	0.0	0.0	0.0	0.0	0.0
olvi14*	0.0	0.0	0.0	0.0	0.0
olvi15*	0.0	0.0	0.0	0.0	0.0
olvi16*	0.0	0.0	0.0	0.0	0.0
olvi17*	0.0	0.0	0.0	0.0	0.0
olvi18*	0.0	0.0	0.0	0.0	0.0
olvi19*	0.0	0.0	0.0	0.0	0.0
olvi20*	0.0	0.0	0.0	0.0	0.0
olvi21*	0.0	0.0	0.0	0.0	0.0
olvi22*	0.0	0.0	0.0	0.0	0.0
olvi23*	0.0	0.0	0.0	0.0	0.0
olvi24*	0.0	0.0	0.0	0.0	0.0
olvi25*	0.0	0.0	0.0	0.0	0.0
olvi26*	0.0	0.0	0.0	0.0	0.0
olvi27*	0.0	0.0	0.0	0.0	0.0
olvi28*	0.0	0.0	0.0	0.0	0.0
olvi29*	0.0	0.0	0.0	0.0	0.0
olvi30*	0.0	0.0	0.0	0.0	0.0
olvi31*	0.0	0.0	0.0	0.0	0.0
olvi32*	0.0	0.0	0.0	0.0	0.0
olvi33*	0.0	0.0	0.0	0.0	0.0
olvi34*	0.0	0.0	0.0	0.0	0.0
olvi35*	0.0	0.0	0.0	0.0	0.0
olvi36*	0.0	0.0	0.0	0.0	0.0
olvi37*	0.0	0.0	0.0	0.0	0.0
olvi38*	0.0	0.0	0.0	0.0	0.0
olvi39*	0.0	0.0	0.0	0.0	0.0
olvi40*	0.0	0.0	0.0	0.0	0.0
olvi41*	0.0	0.0	0.0	0.0	0.0
olvi42*	0.0	0.0	0.0	0.0	0.0
olvi43*	0.0	0.0	0.0	0.0	0.0
olvi44*	0.0	0.0	0.0	0.0	0.0
olvi45*	0.0	0.0	0.0	0.0	0.0
olvi46*	0.0	0.0	0.0	0.0	0.0
olvi47*	0.0	0.0	0.0	0.0	0.0
olvi48*	0.0	0.0	0.0	0.0	0.0
olvi49*	0.0	0.0	0.0	0.0	0.0
olvi50*	0.0	0.0	0.0	0.0	0.0
olvi51*	0.0	0.0	0.0	0.0	0.0
olvi52*	0.0	0.0	0.0	0.0	0.0
olvi53*	0.0	0.0	0.0	0.0	0.0
olvi54*	0.0	0.0	0.0	0.0	0.0
olvi55*	0.0	0.0	0.0	0.0	0.0
olvi56*	0.0	0.0	0.0	0.0	0.0
olvi57*	0.0	0.0	0.0	0.0	0.0
olvi58*	0.0	0.0	0.0	0.0	0.0
olvi59*	0.0	0.0	0.0	0.0	0.0
olvi60*	0.0	0.0	0.0	0.0	0.0
olvi61*	0.0	0.0	0.0	0.0	0.0
olvi62*	0.0	0.0	0.0	0.0	0.0
olvi63*	0.0	0.0	0.0	0.0	0.0
olvi64*	0.0	0.0	0.0	0.0	0.0
olvi65*	0.0	0.0	0.0	0.0	0.0
olvi66*	0.0	0.0	0.0	0.0	0.0
olvi67*	0.0	0.0	0.0	0.0	0.0
olvi68*	0.0	0.0	0.0	0.0	0.0
olvi69*	0.0	0.0	0.0	0.0	0.0
olvi70*	0.0	0.0	0.0	0.0	0.0
olvi71*	0.0	0.0	0.0	0.0	0.0
olvi72*	0.0	0.0	0.0	0.0	0.0
olvi73*	0.0	0.0	0.0	0.0	0.0
olvi74*	0.0	0.0	0.0	0.0	0.0
olvi75*	0.0	0.0	0.0	0.0	0.0
olvi76*	0.0	0.0	0.0	0.0	0.0
olvi77*	0.0	0.0	0.0	0.0	0.0
olvi78*	0.0	0.0	0.0	0.0	0.0
olvi79*	0.0	0.0	0.0	0.0	0.0
olvi80*	0.0	0.0	0.0	0.0	0.0
olvi81*	0.0	0.0	0.0	0.0	0.0
olvi82*	0.0	0.0	0.0	0.0	0.0
olvi83*	0.0	0.0	0.0	0.0	0.0
olvi84*	0.0	0.0	0.0	0.0	0.0
olvi85*	0.0	0.0	0.0	0.0	0.0
olvi86*	0.0	0.0	0.0	0.0	0.0
olvi87*	0.0	0.0	0.0	0.0	0.0
olvi88*	0.0	0.0	0.0	0.0	0.0
olvi89*	0.0	0.0	0.0	0.0	0.0
olvi90*	0.0	0.0	0.0	0.0	0.0
olvi91*	0.0	0.0	0.0	0.0	0.0
olvi92*	0.0	0.0	0.0	0.0	0.0
olvi93*	0.0	0.0	0.0	0.0	0.0
olvi94*	0.0	0.0	0.0	0.0	0.0
olvi95*	0.0	0.0	0.0	0.0	0.0
olvi96*	0.0	0.0	0.0	0.0	0.0
olvi97*	0.0	0.0	0.0	0.0	0.0
olvi98*	0.0	0.0	0.0	0.0	0.0
olvi99*	0.0	0.0	0.0	0.0	0.0
olvi100*	0.0	0.0	0.0	0.0	0.0

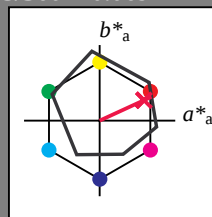
relative Inform. Technology (IT)				
olvi3*	0.75	0.25	0.75	(1.0)
olvi4*	0.25	0.75	0.25	(0.0)
olvi5*	1.0	0.5	1.0	0.75
olvi6*	0.0	0.5	0.0	0.25
standard and adapted CIELAB				
olvi7*	45.83	28.56	-20.71	
olvi8*	45.83	28.59	-22.12	
olvi9*	50.0	36.15	322.25	
relative CIELAB lab*				
olvi10*	0.359	0.395	-0.305	
olvi11*	0.5	0.5	0.895	
olvi12*	0.25	0.5	0.895	
relative Natural Colour (NC)				
olvi13*	0.359	0.324	-0.38	
olvi14*	0.5	0.5	0.862	
olvi15*	0.25	0.5	0.844	

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

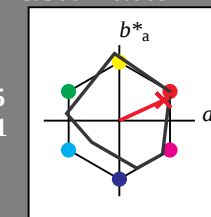
chromaticness c^*

Output: 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



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
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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

UE400-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

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

output: no change compared to input

Input: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*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

0,50

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

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

0,75

1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

0,25

0,50

Input: Colorimetric Reflective System ORS18

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

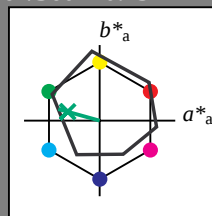
lab^*tch and lab^*nch

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

$n^* = 1,0$

Output: Colorimetric Reflective System MRS18

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

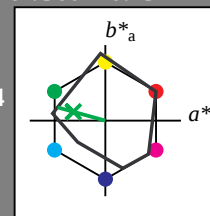
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness



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
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

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

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

$n^* = 1,0$

UE400-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System ORS18

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

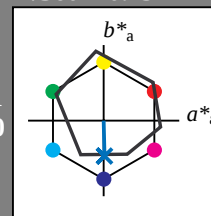
$lab \cdot tch$ and $lab \cdot nch$

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

Output: Colorimetric Reflective System MRS18

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

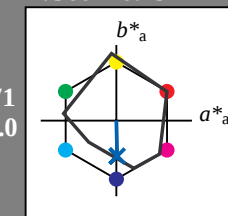
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness



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
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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

UE400-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart UE40; Colorimetric systems ORS18 & MRS18

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

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

output: no change compared to input