



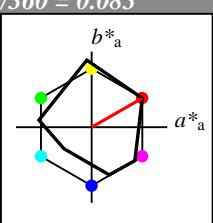
See for similar files: <http://www.ps.bam.de/TE05/>
Technical information: <http://www.ps.bam.de>

Version 2.1, io=1/1, CIEXYZ

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
 lab^*tch and lab^*nch

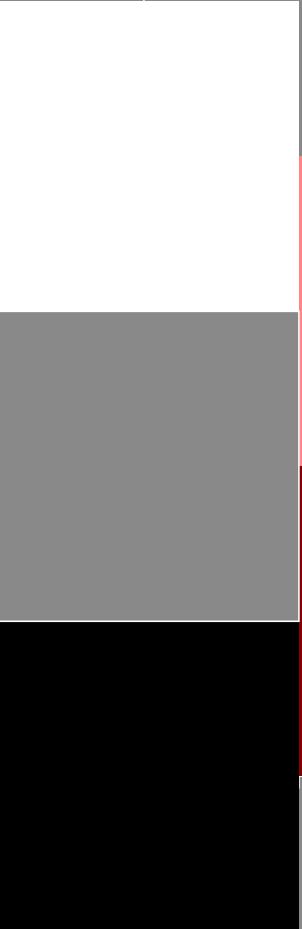
D65: hue R
LCH*Ma: 50 77 30
olv*Ma: 1.0 0.0 0.0
triangle lightness t^*



%Gamut

$u^*_{rel} = 91$
%Regularity
 $g^*_{H,rel} = 41$
 $g^*_{C,rel} = 52$

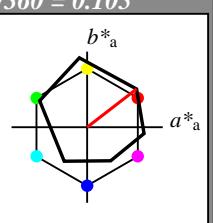
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	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



Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
 lab^*tch and lab^*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0
triangle lightness t^*



%Gamut
 $u^*_{rel} = 93$
%Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

	$L^*=L^*_a$	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

	$relative$	$Inform.$	$Technology$	(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*LABa	95.41	0.0	0.0	
LAB*TChA	99.99	0.01	-	
relative CIELAB lab*				
lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	-	
lab*nch	0.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	1.0	0.0	0.0	
lab*tce	1.0	0.0	-	
lab*ncE	0.0	0.0	-	

	$relative$	$Inform.$	$Technology$	(IT)
olvi3*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	1.0
cmyn4*	0.0	0.5	0.5	0.0
standard and adapted CIELAB				
LAB*LAB	71.67	32.15	28.41	
LAB*LABa	71.67	32.68	25.25	
LAB*TChA	75.0	41.3	37.7	
relative CIELAB lab*				
lab*lab	0.693	0.396	0.306	
lab*tch	0.75	0.5	0.105	
lab*nch	0.0	0.5	0.105	
relative Natural Colour (NC)				
lab*lrj	0.693	0.477	0.15	
lab*tce	0.75	0.5	0.048	
lab*ncE	0.0	0.5	r19j	

	$relative$	$Inform.$	$Technology$	(IT)
olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	1.0	1.0	(0.0)
olvi4*	1.0	0.0	0.0	1.0
cmyn4*	0.0	1.0	1.0	0.0
standard and adapted CIELAB				
LAB*LAB	47.95	65.29	52.06	
LAB*LABa	47.95	65.36	50.51	
LAB*TChA	50.0	82.6	37.7	
relative CIELAB lab*				
lab*lab	0.387	0.791	0.611	
lab*tch	0.5	1.0	0.105	
lab*nch	0.0	1.0	0.105	
relative Natural Colour (NC)				
lab*lrj	0.387	0.954	0.299	
lab*tce	0.5	1.0	0.048	
lab*ncE	0.0	1.0	r19j	

	$relative$	$Inform.$	$Technology$	(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	0.5	-0.46	
LAB*LABa	18.02	0.0	0.0	
LAB*TChA	0.01	0.01	-	
relative CIELAB lab*				
lab*lab	0.0	0.0	0.0	
lab*tch	0.0	0.0	-	
lab*nch	1.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	0.0	0.0	0.0	
lab*tce	0.0	0.0	-	
lab*ncE	1.0	0.0	-	

3 step scales for constant CIELAB hue 38/360 = 0.105 (right)

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



TE050-7, 3 step scales for constant CIELAB hue 30/360 = 0.083 (left)

BAM-test chart TE05; Colorimetric systems MRS18 & ORS18
D65: 3 step colour scales and coordinate data for 10 hues

Input: Colorimetric Reflective System MRS18

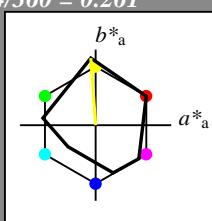
for hue $h^* = lab^*h = 94/360 = 0.261$
 lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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

%Gamut

$u^*_{rel} = 91$

%Regularity

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

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



$n^* = 1,0$

$n^* = 0,00$
 blackness n^*
 chromaticness c^*

Output: Colorimetric Reflective System ORS18

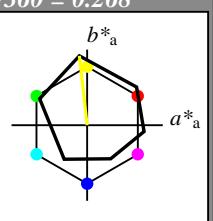
for hue $h^* = lab^*h = 96/360 = 0.268$
 lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

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^*LABa 95.41 0.0 0.0

LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 1.0 1.0 0.5 (1.0)
 $cmyn3^*$ 0.0 0.0 0.5 (0.0)

$olvi4^*$ 1.0 1.0 0.5 1.0
 $cmyn4^*$ 0.0 0.0 0.5 0.0

standard and adapted CIELAB

LAB^*LAB 92.88 -6.06 50.46

LAB^*LABa 92.88 -5.13 45.87

LAB^*TChA 75.0 46.16 96.39

relative CIELAB lab*

lab^*lab 0.967 -0.055 0.497

lab^*tch 0.75 0.5 0.268

lab^*nch 0.0 0.5 0.268

relative Natural Colour (NC)

lab^*lrj 0.967 -0.048 0.497

lab^*ice 0.75 0.5 0.266

lab^*ncE 0.0 0.5 j06g

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 0.5 0.5
 $cmyn4^*$ 0.0 0.0 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 56.71 -0.23 2.14

LAB^*LABa 56.71 0.0 0.0

LAB^*TChA 50.0 0.01 -

relative CIELAB lab*

lab^*lab 0.5 0.0 0.0

lab^*tch 0.5 0.0 -

lab^*nch 0.5 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.5 0.0 0.0

lab^*ice 0.5 0.0 -

lab^*ncE 0.5 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 0.5 -0.46

LAB^*LABa 18.02 0.0 0.0

LAB^*TChA 0.01 0.01 -

relative CIELAB lab*

lab^*lab 0.0 0.0 0.0

lab^*tch 0.0 0.0 -

lab^*nch 1.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.0 0.0 0.0

lab^*ice 0.0 0.0 -

lab^*ncE 1.0 0.0 -

TE050-7, 3 step scales for constant CIELAB hue 94/360 = 0.261 (left)

BAM-test chart TE05; Colorimetric systems MRS18 & ORS18 input: $olv^* setrgbcolor$

D65: 3 step colour scales and coordinate data for 10 hues

3 step scales for constant CIELAB hue 96/360 = 0.268 (right)

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

Input: Colorimetric Reflective System MRS18

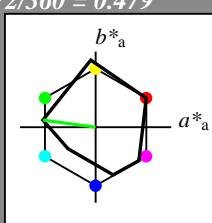
for hue $h^* = lab^*h = 172/360 = 0.479$
 lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

%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
B50BMa	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



$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

Output: Colorimetric Reflective System ORS18

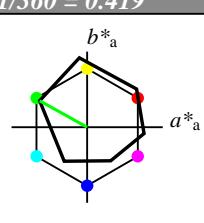
for hue $h^* = lab^*h = 151/360 = 0.419$
 lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YM	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

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^*LABa 95.41 0.0 0.0

LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 1.0 0.5 (1.0)

$cmyn3^*$ 0.5 0.0 0.5 (0.0)

$olvi4^*$ 0.5 1.0 0.5 1.0

$cmyn4^*$ 0.5 0.0 0.5 0.0

standard and adapted CIELAB

LAB^*LAB 73.15 -31.94 20.73

LAB^*LABa 73.15 -31.38 17.47

LAB^*TChA 75.0 35.93 150.91

relative CIELAB lab*

lab^*lab 0.712 -0.436 0.243

lab^*tch 0.75 0.5 0.419

lab^*nch 0.0 0.5 0.419

relative Natural Colour (NC)

lab^*lrj 0.712 -0.478 0.144

lab^*ice 0.75 0.5 0.453

lab^*ncE 0.0 0.5 81g

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.5 0.0 (1.0)

$cmyn3^*$ 1.0 0.5 1.0 (0.0)

$olvi4^*$ 0.5 1.0 0.5 0.5

$cmyn4^*$ 0.5 0.0 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 56.71 -0.23 2.14

LAB^*LABa 56.71 0.0 0.0

LAB^*TChA 50.0 0.01 -

relative CIELAB lab*

lab^*lab 0.5 0.0 0.0

lab^*tch 0.5 0.0 -

lab^*nch 0.5 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.5 0.0 0.0

lab^*ice 0.5 0.0 -

lab^*ncE 0.5 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.5 0.0 (1.0)

$cmyn3^*$ 1.0 0.5 1.0 (0.0)

$olvi4^*$ 0.5 1.0 0.5 0.5

$cmyn4^*$ 0.5 0.0 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 18.02 0.5 -0.46

LAB^*LABa 18.02 0.0 0.0

LAB^*TChA 0.01 0.01 -

relative CIELAB lab*

lab^*lab 0.0 0.0 0.0

lab^*tch 0.0 0.0 -

lab^*nch 1.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.0 0.0 0.0

lab^*ice 0.0 0.0 -

lab^*ncE 1.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.213 -0.478 0.144

$cmyn3^*$ 0.25 0.5 0.453

$olvi4^*$ 0.5 0.5 0.419

$cmyn4^*$ 0.5 0.5 0.419

relative CIELAB lab*

lab^*lab 0.213 -0.436 0.243

lab^*tch 0.25 0.5 0.419

lab^*nch 0.5 0.5 0.419

relative Natural Colour (NC)

lab^*lrj 0.213 -0.478 0.144

lab^*ice 0.25 0.5 0.453

lab^*ncE 0.5 0.5 81g

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$
blackness n^*

chromaticness c^*

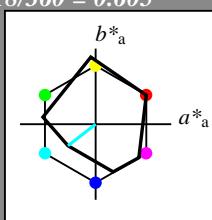
$n^* = 1,0$

$n^* = 0,50$

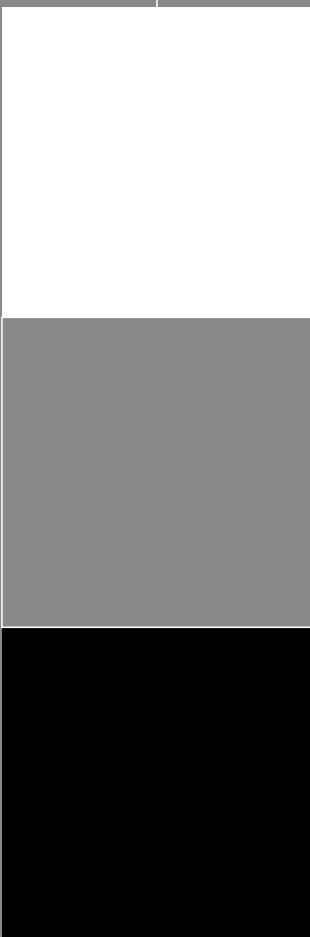
$n^* = 0,00$
blackness n^*

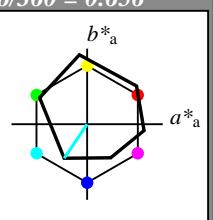
chromaticness $c^$

Input: 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
olv*Ma: 0.0 1.0 1.0
triangle lightness t^*

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


%Gamut
 $u^*_{rel} = 91$
%Regularity
 $g^*_{H,rel} = 41$
 $g^*_{C,rel} = 52$
Output: 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
olv*Ma: 0.0 1.0 1.0
triangle lightness t^*

%Gamut
 $u^*_{rel} = 93$
%Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$
ORS18; adapted (a) CIELAB data

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

relative Inform. Technology (IT)
 $olv_i3^* = 1.0 \quad 1.0 \quad 1.0 \quad (1.0)$
 $cmy_n3^* = 0.0 \quad 0.0 \quad 0.0 \quad (0.0)$
 $olv_i4^* = 1.0 \quad 1.0 \quad 1.0 \quad 1.0$
 $cmy_n4^* = 0.0 \quad 0.0 \quad 0.0 \quad 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 95.41 \quad -0.97 \quad 4.75$
 $LAB^*LAB_a = 95.41 \quad 0.0 \quad 0.0$
 $LAB^*TCh_a = 99.99 \quad 0.01 \quad -$
relative CIELAB lab*
 $lab^*lab = 1.0 \quad 0.0 \quad 0.0$
 $lab^*tch = 1.0 \quad 0.0 \quad -$
 $lab^*nch = 0.0 \quad 0.0 \quad -$
relative Natural Colour (NC)
 $lab^*lrj = 1.0 \quad 0.0 \quad 0.0$
 $lab^*ice = 1.0 \quad 0.0 \quad -$
 $lab^*ncE = 0.0 \quad 0.0 \quad -$
relative Inform. Technology (IT)
 $olv_i3^* = 0.5 \quad 1.0 \quad 1.0 \quad (1.0)$
 $cmy_n3^* = 0.5 \quad 0.0 \quad 0.0 \quad (0.0)$
 $olv_i4^* = 0.5 \quad 1.0 \quad 1.0 \quad 1.0$
 $cmy_n4^* = 0.5 \quad 0.0 \quad 0.0 \quad 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 77.01 \quad -15.79 \quad -18.98$
 $LAB^*LAB_a = 77.01 \quad -15.16 \quad -22.5$
 $LAB^*TCh_a = 75.0 \quad 27.15 \quad 236.01$
relative CIELAB lab*
 $lab^*lab = 0.762 \quad -0.278 \quad -0.413$
 $lab^*tch = 0.75 \quad 0.5 \quad 0.656$
 $lab^*nch = 0.0 \quad 0.5 \quad 0.656$
relative Natural Colour (NC)
 $lab^*lrj = 0.762 \quad -0.247 \quad -0.433$
 $lab^*ice = 0.75 \quad 0.5 \quad 0.667$
 $lab^*ncE = 0.0 \quad 0.5 \quad g66b$
relative Inform. Technology (IT)
 $olv_i3^* = 0.0 \quad 0.5 \quad 0.5 \quad (1.0)$
 $cmy_n3^* = 1.0 \quad 0.5 \quad 0.5 \quad (0.0)$
 $olv_i4^* = 0.5 \quad 1.0 \quad 1.0 \quad 0.5$
 $cmy_n4^* = 0.5 \quad 0.0 \quad 0.0 \quad 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 56.71 \quad -0.23 \quad 2.14$
 $LAB^*LAB_a = 56.71 \quad 0.0 \quad 0.0$
 $LAB^*TCh_a = 50.0 \quad 0.01 \quad -$
relative CIELAB lab*
 $lab^*lab = 0.5 \quad 0.0 \quad 0.0$
 $lab^*tch = 0.5 \quad 0.0 \quad -$
 $lab^*nch = 0.5 \quad 0.0 \quad -$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \quad 0.0 \quad 0.0$
 $lab^*ice = 0.5 \quad 0.0 \quad -$
 $lab^*ncE = 0.5 \quad 0.0 \quad -$
relative Inform. Technology (IT)
 $olv_i3^* = 0.0 \quad 0.5 \quad 0.5 \quad (1.0)$
 $cmy_n3^* = 1.0 \quad 0.5 \quad 0.5 \quad (0.0)$
 $olv_i4^* = 0.5 \quad 1.0 \quad 1.0 \quad 0.5$
 $cmy_n4^* = 0.5 \quad 0.0 \quad 0.0 \quad 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 18.02 \quad 0.5 \quad -0.46$
 $LAB^*LAB_a = 18.02 \quad 0.0 \quad 0.0$
 $LAB^*TCh_a = 0.01 \quad 0.01 \quad -$
relative CIELAB lab*
 $lab^*lab = 0.0 \quad 0.0 \quad 0.0$
 $lab^*tch = 0.0 \quad 0.0 \quad -$
 $lab^*nch = 1.0 \quad 0.0 \quad -$
relative Natural Colour (NC)
 $lab^*lrj = 0.0 \quad 0.0 \quad 0.0$
 $lab^*ice = 0.0 \quad 0.0 \quad -$
 $lab^*ncE = 1.0 \quad 0.0 \quad -$
relative Inform. Technology (IT)
 $olv_i3^* = 0.0 \quad 0.5 \quad 0.5 \quad (1.0)$
 $cmy_n3^* = 1.0 \quad 0.5 \quad 0.5 \quad (0.0)$
 $olv_i4^* = 0.5 \quad 1.0 \quad 1.0 \quad 0.5$
 $cmy_n4^* = 0.5 \quad 0.0 \quad 0.0 \quad 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 18.02 \quad 0.5 \quad -0.46$
 $LAB^*LAB_a = 18.02 \quad 0.0 \quad 0.0$
 $LAB^*TCh_a = 0.01 \quad 0.01 \quad -$
relative CIELAB lab*
 $lab^*lab = 0.262 \quad -0.278 \quad -0.413$
 $lab^*tch = 0.25 \quad 0.5 \quad 0.656$
 $lab^*nch = 0.5 \quad 0.5 \quad 0.656$
relative Natural Colour (NC)
 $lab^*lrj = 0.262 \quad -0.247 \quad -0.433$
 $lab^*ice = 0.25 \quad 0.5 \quad 0.667$
 $lab^*ncE = 0.5 \quad 0.5 \quad g66b$
TE050-7, 3 step scales for constant CIELAB hue 218/360 = 0.605 (left)
**BAM-test chart TE05; Colorimetric systems MRS18 & ORS18
 D65: 3 step colour scales and coordinate data for 10 hues**
3 step scales for constant CIELAB hue 236/360 = 0.656 (right)
**input: olv* setrgbcolor
 output: olv* setrgbcolor / w* setgray**



Input: Colorimetric Reflective System MRS18

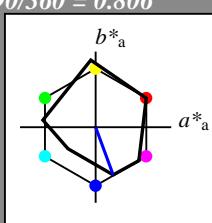
for hue $h^* = lab^*h = 290/360 = 0.806$
 lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*

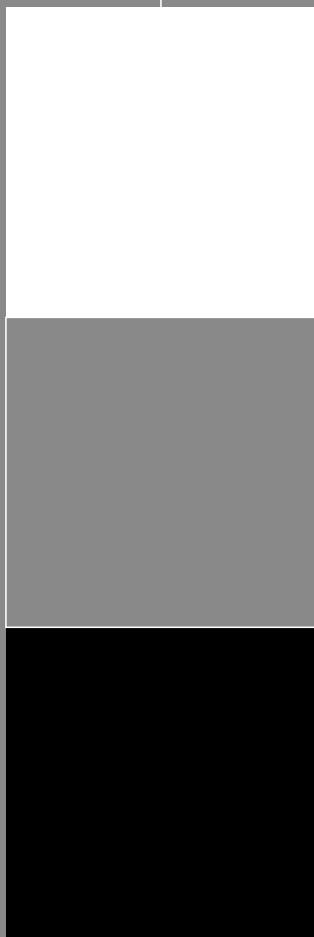


MRS18; adapted (a) CIELAB data

	$L^*=L_a^*$	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

%Gamut

$u^*_{rel} = 91$
%Regularity
 $g^*_{H,rel} = 41$
 $g^*_{C,rel} = 52$



Output: Colorimetric Reflective System ORS18

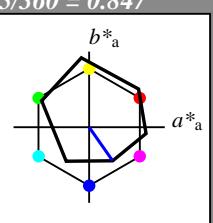
for hue $h^* = lab^*h = 305/360 = 0.847$
 lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*

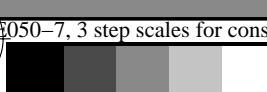
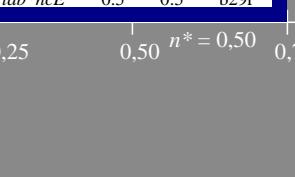
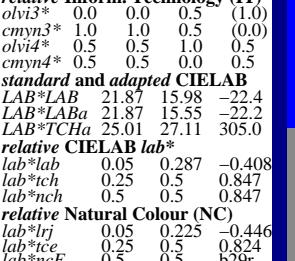
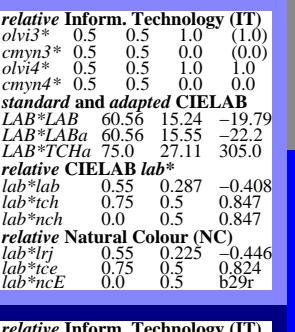
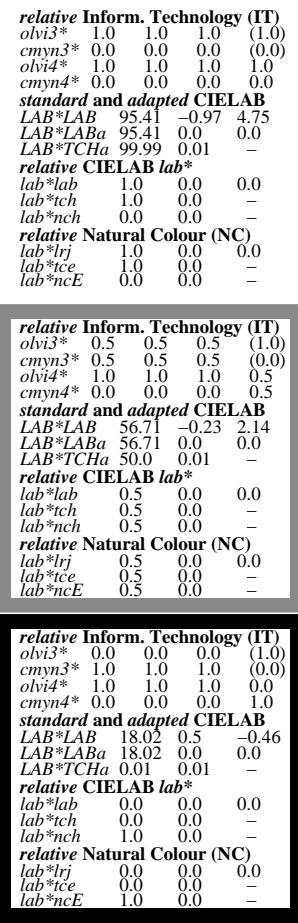


ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	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

%Gamut

$u^*_{rel} = 93$
%Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Input: Colorimetric Reflective System MRS18

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

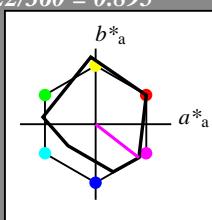
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

%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
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



blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

$n^* = 1,0$

Output: Colorimetric Reflective System ORS18

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

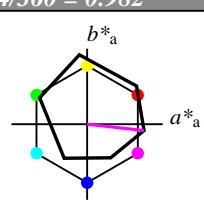
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

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

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*LABa	95.41	0.0	0.0		
LAB*TChA	99.99	0.01	-		

relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

lab*tch

lab*nch

relative Natural Colour (NC)

lab*lrj

lab*tce

lab*ncE

relative Inform. Technology (IT)

olvi3*

cmyn3*

olvi4*

cmyn4*

standard and adapted CIELAB

LAB*LAB

LAB*LABa

LAB*TChA

relative CIELAB lab*

lab*lab

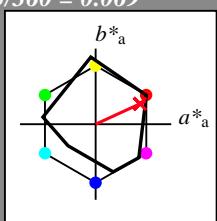
lab*tch

</

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 25/360 = 0.069$
 lab^*tch and lab^*nch

D65: hue R
 LCH*Ma: 48 73 25
 oly*Ma: 1.0 0.0 0.1
 triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

%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
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



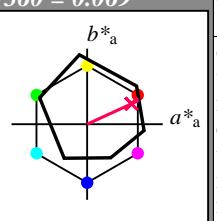
$n^* = 1,0$

$n^* = 0,00$
 blackness n^*
 chromaticness c^*

Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
 lab^*tch and lab^*nch

D65: hue R
 LCH*Ma: 48 75 25
 oly*Ma: 1.0 0.0 0.32
 triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

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

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*LABa	95.41	0.0	0.0		
LAB*TChA	99.99	0.01	-		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*ncE	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	1.0	0.5	0.661	(1.0)	
cmyn3*	0.0	0.5	0.339	(0.0)	
olvi4*	1.0	0.5	0.661	1.0	
cmyn4*	0.0	0.5	0.339	0.0	
standard and adapted CIELAB					
LAB*LAB	71.7	33.75	18.92		
LAB*LABa	71.7	34.27	15.76		
LAB*TChA	75.0	37.72	24.69		
relative CIELAB lab*					
lab*lab	0.694	0.454	0.209		
lab*tch	0.75	0.5	0.069		
lab*nch	0.0	0.5	0.069		
relative Natural Colour (NC)					
lab*lrj	0.694	0.5	0.0		
lab*tce	0.75	0.5	1.0		
lab*ncE	0.0	0.5	b99r		

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	56.71	-0.23	2.14		
LAB*LABa	56.71	0.0	0.0		
LAB*TChA	50.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.5	0.0	0.0		
lab*tch	0.5	0.0	-		
lab*nch	0.5	0.0	-		
relative Natural Colour (NC)					
lab*lrj	0.5	0.0	0.0		
lab*tce	0.5	0.0	-		
lab*ncE	0.5	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	0.5	-0.46		
LAB*LABa	18.02	0.0	0.0		
LAB*TChA	0.01	0.01	-		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	-		
lab*nch	1.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	0.0	0.0	0.0		
lab*tce	0.0	0.0	-		
lab*ncE	1.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.0	0.161	(1.0)		
cmyn3*	0.5	1.0	0.839	(0.0)	
olvi4*	1.0	0.5	0.661	0.5	
cmyn4*	0.0	0.5	0.339	0.5	
standard and adapted CIELAB					
LAB*LAB	33.01	34.49	16.31		
LAB*LABa	33.01	34.27	15.77		
LAB*TChA	25.01	37.73	24.7		
relative CIELAB lab*					
lab*lab	0.194	0.454	0.209		
lab*tch	0.25	0.5	0.069		
lab*nch	0.5	0.5	0.069		
relative Natural Colour (NC)					
lab*lrj	0.194	0.5	0.0		
lab*tce	0.25	0.5	0.0		
lab*ncE	0.5	0.5	r00j		

relative Inform. Technology (IT)					
olvi3*	0.388	0.908	0.418		
cmyn3*	0.5	1.0	0.678	(0.0)	
olvi4*	1.0	0.0	0.323	1.0	
cmyn4*	0.0	1.0	0.677	0.0	
standard and adapted CIELAB					
LAB*LAB	48.01	68.48	33.09		
LAB*LABa	48.01	68.55	31.53		
LAB*TChA	50.0	75.45	24.7		
relative CIELAB lab*					
lab*lab	0.388	1.0	0.0		
lab*tce	0.5	1.0	0.0		
lab*ncE	0.0	1.0	r00j		

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

input: $olv^* setrgbcolor$

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

$n^* = 0,00$

blackness n^*

chromaticness c^*

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,50$

blackness n^*

chromaticness c^*

$n^* = 0,25$

blackness n^*

chromaticness c^*

$n^* = 0,00$

blackness n^*

chromaticness c^*

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,50$

blackness n^*

chromaticness c^*

$n^* = 0,25$

blackness n^*

chromaticness c^*

$n^* = 0,00$

</div

Input: Colorimetric Reflective System MRS18

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

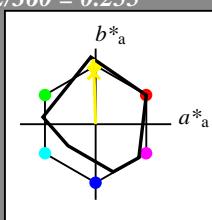
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

%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
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



$n^* = 1,0$

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 0,00$

blackness n^*

Output: Colorimetric Reflective System ORS18

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

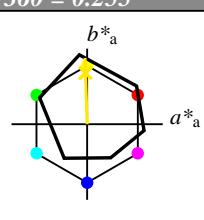
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

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

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*LABa	95.41	0.0	0.0		
LAB*TChA	99.99	0.01	-		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*ncE	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	1.0	0.951	0.5	(1.0)	
cmyn3*	0.0	0.049	0.5	(0.0)	
olvi4*	1.0	0.951	0.5	1.0	
cmyn4*	0.0	0.049	0.5	0.0	
standard and adapted CIELAB					
LAB*LAB	90.8	-2.3	48.29		
LAB*LABa	90.8	-1.41	43.85		
LAB*TChA	75.0	43.87	91.85		
relative CIELAB lab*					
lab*lab	0.94	-0.015	0.5		
lab*tch	0.75	0.5	0.255		
lab*nch	0.0	0.5	0.255		
relative Natural Colour (NC)					
lab*lrj	0.94	0.0	0.5		
lab*tce	0.75	0.5	0.25		
lab*ncE	0.0	0.5	j00g		

relative Inform. Technology (IT)					
olvi3*	0.5	0.451	0.0	(1.0)	
cmyn3*	0.5	0.549	1.0	(0.0)	
olvi4*	1.0	0.951	0.5	0.5	
cmyn4*	0.0	0.049	0.5	0.5	
standard and adapted CIELAB					
LAB*LAB	56.71	-0.23	2.14		
LAB*LABa	56.71	0.0	0.0		
LAB*TChA	50.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.5	0.0	0.0		
lab*tch	0.5	0.0	-		
lab*nch	0.5	0.0	-		
relative Natural Colour (NC)					
lab*lrj	0.5	0.0	0.0		
lab*tce	0.5	0.0	-		
lab*ncE	0.5	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.5	0.451	0.0	(1.0)	
cmyn3*	0.5	0.549	1.0	(0.0)	
olvi4*	1.0	0.951	0.5	0.5	
cmyn4*	0.0	0.049	0.5	0.5	
standard and adapted CIELAB					
LAB*LAB	52.1	-1.55	45.68		
LAB*LABa	52.1	-1.4	43.84		
LAB*TChA	25.01	43.87	91.84		
relative CIELAB lab*					
lab*lab	0.44	-0.015	0.5		
lab*tch	0.25	0.5	0.255		
lab*nch	0.5	0.5	0.255		
relative Natural Colour (NC)					
lab*lrj	0.44	0.0	0.5		
lab*tce	0.25	0.5	0.25		
lab*ncE	0.5	0.5	r99j		

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	0.5	-0.46		
LAB*LABa	18.02	0.0	0.0		
LAB*TChA	0.01	0.01	-		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	-		
lab*nch	1.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	0.0	0.0	0.0		
lab*tce	0.0	0.0	-		
lab*ncE	1.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
cmyn3*	0.0	0.099	1.0	(0.0)	
olvi4*	1.0	0.902	0.0	1.0	
cmyn4*	0.0	0.098	1.0	0.0	
standard and adapted CIELAB					
LAB*LAB	86.19	-3.62	91.83		
LAB*LABa	86.19	-2.82	87.69		
LAB*TChA	50.0	87.73	91.85		
relative CIELAB lab*					
lab*lab	0.881	-0.031	0.999		
lab*tch	0.5	1.0	0.255		
lab*nch	0.0	1.0	0.255		
relative Natural Colour (NC)					
lab*lrj	0.881	0.0	1.0		
lab*tce	0.5	1.0	0.25		
lab*ncE	0.0	1.0	j00g		

Input: Colorimetric Reflective System MRS18

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

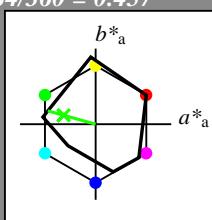
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

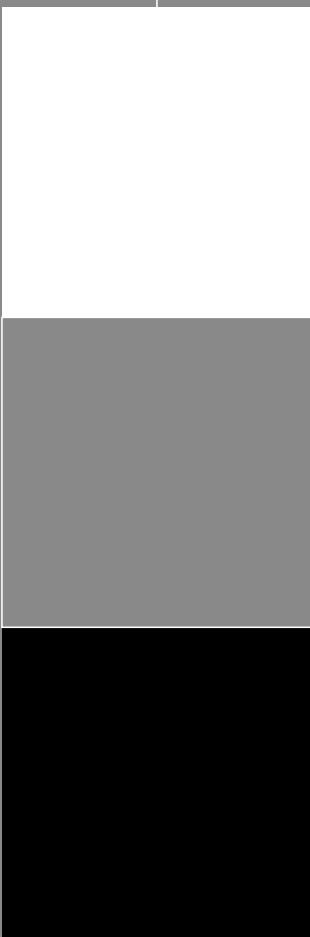
%Regularity

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

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

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
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



Output: Colorimetric Reflective System ORS18

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

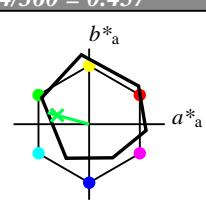
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

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

relative Inform. Technology (IT)

$olvi3^*$ 1.0 1.0 1.0 (1.0)

$cmy3^*$ 0.0 0.0 0.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 1.0

$cmy4^*$ 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 95.41 -0.97 4.75

LAB^*LABa 95.41 0.0 0.0

LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 1.0 0.623 (1.0)

$cmy3^*$ 0.5 0.0 0.377 (0.0)

$olvi4^*$ 0.5 1.0 0.623 1.0

$cmy4^*$ 0.5 0.0 0.377 0.0

standard and adapted CIELAB

LAB^*LAB 74.1 -27.96 10.94

LAB^*LABa 74.1 -27.39 7.62

LAB^*TChA 75.0 28.44 164.46

relative CIELAB lab*

lab^*lab 0.725 -0.481 0.134

lab^*tch 0.75 0.5 0.457

lab^*nch 0.0 0.5 0.457

relative Natural Colour (NC)

lab^*lrj 0.725 -0.499 0.0

lab^*ice 0.75 0.5 0.5

lab^*ncE 0.0 0.5 g00b

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.5 0.123 (1.0)

$cmy3^*$ 1.0 0.5 0.877 (0.0)

$olvi4^*$ 0.5 1.0 0.623 0.5

$cmy4^*$ 0.5 0.0 0.377 0.5

standard and adapted CIELAB

LAB^*LAB 56.71 -0.23 2.14

LAB^*LABa 56.71 0.0 0.0

LAB^*TChA 50.0 0.01 -

relative CIELAB lab*

lab^*lab 0.5 0.0 0.0

lab^*tch 0.5 0.0 -

lab^*nch 0.5 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.5 0.0 0.0

lab^*ice 0.5 0.0 -

lab^*ncE 1.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.0 0.246 (1.0)

$cmy3^*$ 1.0 0.0 0.754 (0.0)

$olvi4^*$ 0.0 1.0 0.246 1.0

$cmy4^*$ 1.0 0.0 0.754 0.0

standard and adapted CIELAB

LAB^*LAB 52.8 -54.95 17.13

LAB^*LABa 52.8 -54.79 15.24

LAB^*TChA 50.0 56.88 164.45

relative CIELAB lab*

lab^*lab 0.45 -0.962 0.268

lab^*tch 0.5 1.0 0.457

lab^*nch 0.0 1.0 0.457

relative Natural Colour (NC)

lab^*lrj 0.45 -0.999 0.0

lab^*ice 0.5 1.0 0.5

lab^*ncE 0.0 1.0 j99g

TE050-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

BAM-test chart TE05; Colorimetric systems MRS18 & ORS18
 D65: 3 step colour scales and coordinate data for 10 hues

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

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

Input: Colorimetric Reflective System MRS18

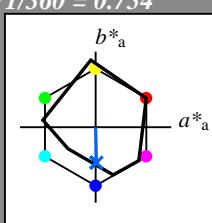
for hue $h^* = lab^*h = 271/360 = 0.754$
 lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

triangle lightness t^*



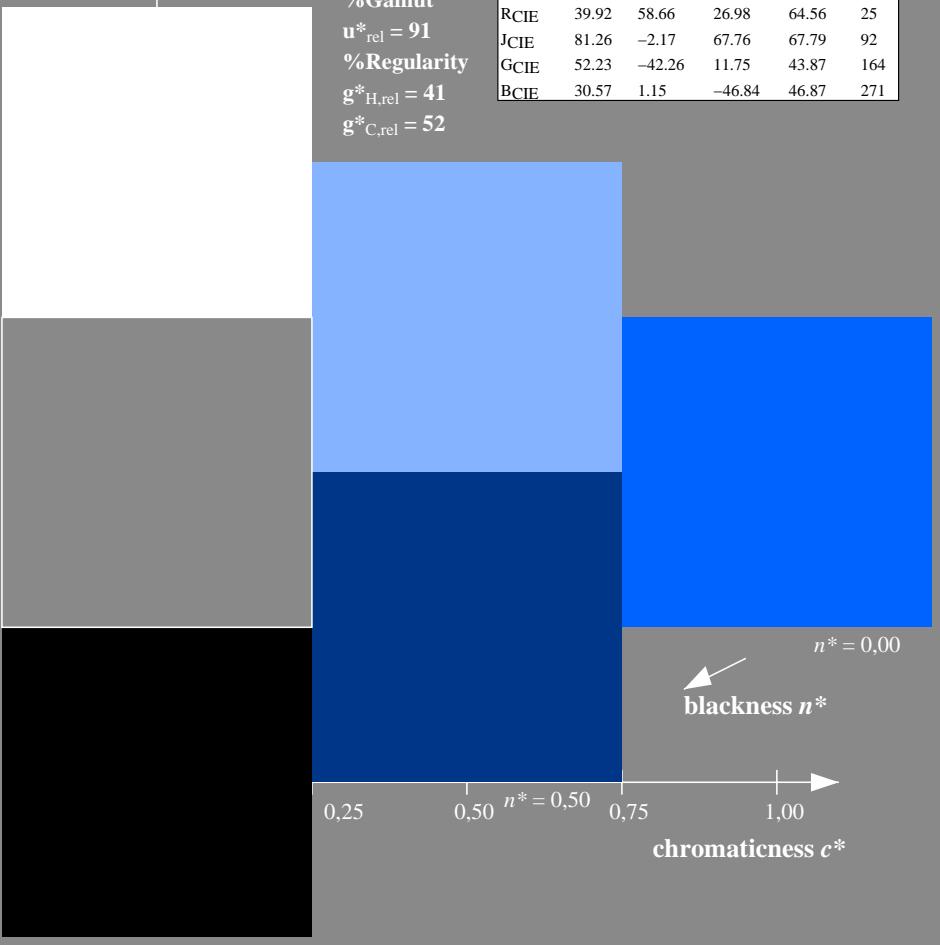
%Gamut

$u^*_{rel} = 91$

%Regularity

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

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



Output: Colorimetric Reflective System ORS18

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

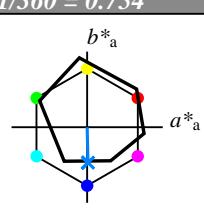
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

relative Inform. Technology (IT)

olv_i3^* 1.0 1.0 1.0 (1.0)

$cmyn3^*$ 0.0 0.0 0.0 (0.0)

olv_i4^* 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^*LABa 95.41 0.0 0.0

LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

olv_i3^* 0.5 0.744 1.0 (1.0)

$cmyn3^*$ 0.5 0.256 0.0 (0.0)

olv_i4^* 0.5 0.744 1.0 1.0

$cmyn4^*$ 0.5 0.256 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 68.59 0.08 -19.4

LAB^*LABa 68.59 0.54 -22.35

LAB^*TChA 75.0 22.36 271.4

relative CIELAB lab*

lab^*lab 0.654 0.012 -0.499

lab^*tch 0.75 0.5 0.754

lab^*nch 0.0 0.5 0.754

relative Natural Colour (NC)

lab^*lrj 0.654 0.0 -0.499

lab^*ice 0.75 0.5 0.75

lab^*ncE 0.0 0.5 g99b

relative Inform. Technology (IT)

olv_i3^* 0.0 0.244 0.5 (1.0)

$cmyn3^*$ 1.0 0.756 0.5 (0.0)

olv_i4^* 0.5 0.744 1.0 0.5

$cmyn4^*$ 0.5 0.256 0.0 0.5

standard and adapted CIELAB

LAB^*LAB 41.79 1.14 -43.56

LAB^*LABa 41.79 1.1 -44.7

LAB^*TChA 50.0 44.73 271.4

relative CIELAB lab*

lab^*lab 0.307 0.024 -0.998

lab^*tch 0.5 1.0 0.754

lab^*nch 0.0 1.0 0.754

relative Natural Colour (NC)

lab^*lrj 0.307 0.0 -0.999

lab^*ice 0.5 1.0 0.75

lab^*ncE 0.0 1.0 600r

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

input: $olv^* setrgbcolor$

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