

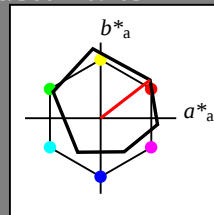
Input: Colorimetric Reflective System ORS18

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

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

ORS18; adapted (a) CIELAB data

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

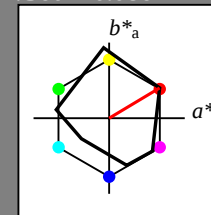
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 31/360 = 0.086$ lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 78 31

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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*	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 72.52 33.43 20.01

LAB*LABa 72.52 33.39 20.01

LAB*TCHa 75.0 38.93 30.93

relative CIELAB lab*

lab*lab 0.704 0.429 0.257

lab*tch 0.75 0.5 0.086

lab*nch 0.0 0.5 0.086

relative Natural Colour (NC)

lab*lrj 0.704 0.496 0.064

lab*tce 0.75 0.5 0.02

lab*nce 0.0 0.5 r08j

relative Inform. Technology (IT)

olvi3* 0.5 0.0 0.0 (1.0)

cmyn3* 0.5 1.0 1.0 (0.0)

olvi4* 1.0 0.5 0.5 0.5

cmyn4* 0.0 0.5 0.5 0.5

standard and adapted CIELAB

LAB*LAB 33.82 33.47 20.03

LAB*LABa 33.82 33.39 20.01

LAB*TCHa 25.01 38.93 30.93

relative CIELAB lab*

lab*lab 0.204 0.429 0.257

lab*tch 0.25 0.5 0.086

lab*nch 0.5 0.5 0.086

relative Natural Colour (NC)

lab*lrj 0.204 0.496 0.064

lab*tce 0.25 0.5 0.02

lab*nce 0.5 0.5 r08j

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 49.63 66.84 40.03

LAB*LABa 49.63 66.78 40.02

LAB*TCHa 50.0 77.85 30.93

relative CIELAB lab*

lab*lab 0.409 0.858 0.514

lab*tch 0.5 1.0 0.086

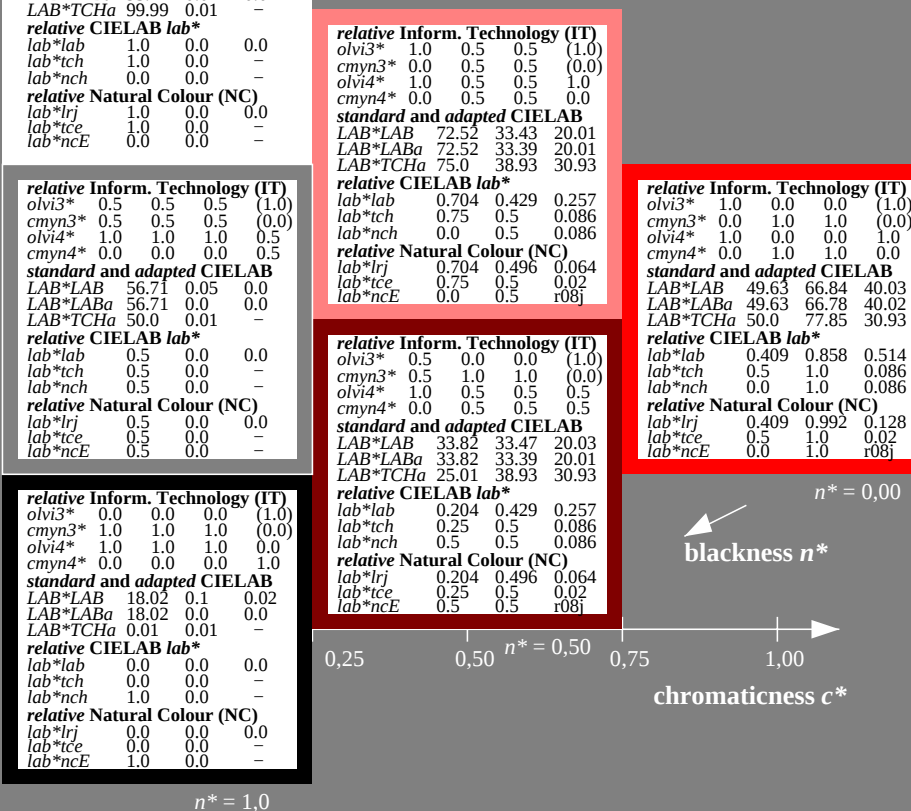
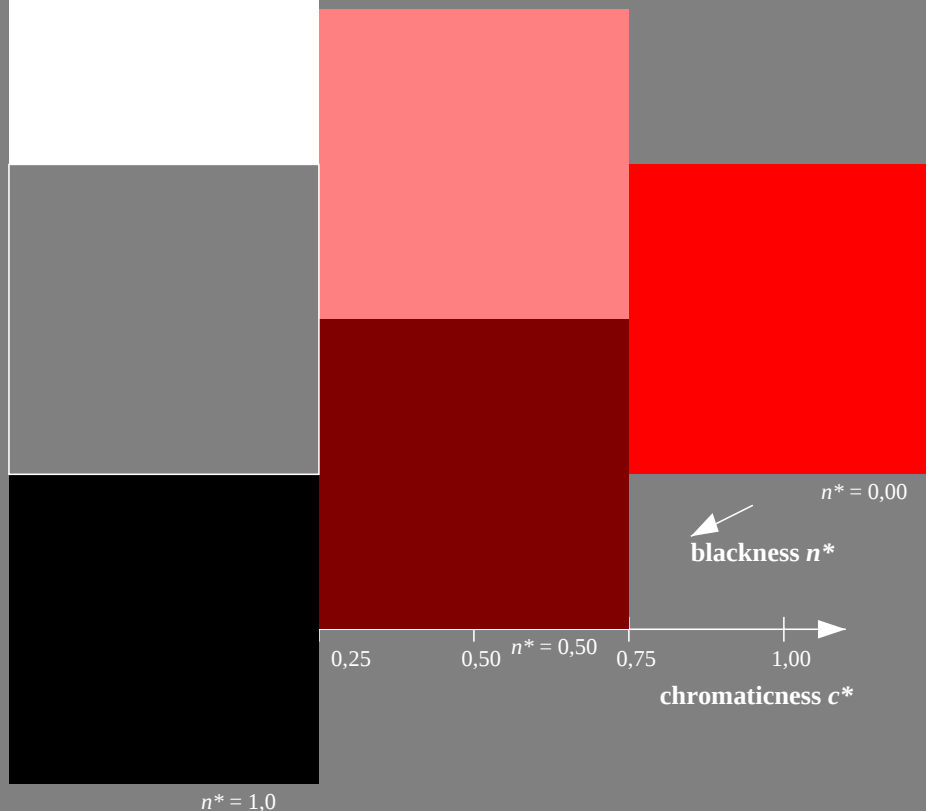
lab*nch 0.0 1.0 0.086

relative Natural Colour (NC)

lab*lrj 0.409 0.992 0.128

lab*tce 0.5 1.0 0.02

lab*nce 0.0 1.0 r08j



TE010-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data dependend

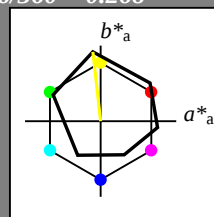
Input: Colorimetric Reflective System ORS18

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

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 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
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

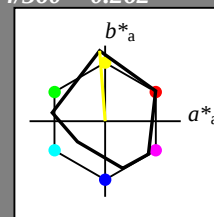
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 94/360 = 0.262$ lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 93 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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 0.1 0.02

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* 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 93.05 -3.61 46.59

LAB*LABa 93.05 -3.63 46.59

LAB*TCHa 75.0 46.73 94.46

relative CIELAB lab*

lab*lab 0.969 -0.038 0.498

lab*tch 0.75 0.5 0.262

lab*nch 0.0 0.5 0.262

relative Natural Colour (NC)

lab*lrj 0.969 -0.023 0.499

lab*tce 0.75 0.5 0.258

lab*nce 0.0 0.5 j03g

relative Inform. Technology (IT)

olvi3* 0.5 0.5 0.0 (1.0)

cmyn3* 0.5 0.5 1.0 (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 54.35 -3.57 46.6

LAB*LABa 54.35 -3.63 46.59

LAB*TCHa 25.01 46.73 94.46

relative CIELAB lab*

lab*lab 0.47 -0.038 0.498

lab*tch 0.25 0.5 0.262

lab*nch 0.5 0.5 0.262

relative Natural Colour (NC)

lab*lrj 0.47 -0.023 0.499

lab*tce 0.25 0.5 0.258

lab*nce 0.5 0.5 j03g

relative Inform. Technology (IT)

olvi3* 1.0 1.0 0.0 (1.0)

cmyn3* 0.0 0.0 1.0 (0.0)

olvi4* 1.0 1.0 0.0 1.0

cmyn4* 0.0 0.0 1.0 0.0

standard and adapted CIELAB

LAB*LAB 90.69 -7.25 93.17

LAB*LABa 90.69 -7.26 93.18

LAB*TCHa 50.0 93.46 94.46

relative CIELAB lab*

lab*lab 0.939 -0.077 0.997

lab*tch 0.5 1.0 0.262

lab*nch 0.0 1.0 0.262

relative Natural Colour (NC)

lab*lrj 0.939 -0.047 0.999

lab*tce 0.5 1.0 0.258

lab*nce 0.0 1.0 j03g

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

chromaticness c^*

blackness n^* $n^* = 0,00$ $n^* = 1,0$

TE010-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

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

input: olv* setrgbcolor

output: Startup (S) data dependend

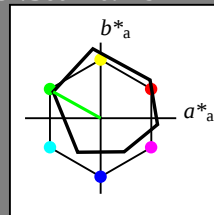
Input: Colorimetric Reflective System ORS18

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

D65: hue L

LCH*Ma: 51 72 151

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
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

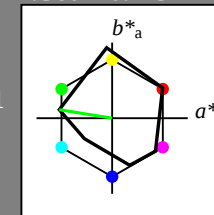
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 171/360 = 0.475$ lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 71 171

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*LABa 95.41 0.0 0.0

LAB*TCa 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*	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 0.05 0.0

LAB*LABa 56.71 0.0 0.0

LAB*TCa 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 0.1 0.02

LAB*LABa 18.02 0.0 0.0

LAB*TCa 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*	0.5	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 73.75 -34.92 5.64

LAB*LABa 73.75 -34.96 5.63

LAB*TCa 75.0 35.42 170.85

relative CIELAB lab*

lab*lab 0.72 -0.493 0.079

lab*tch 0.75 0.5 0.475

lab*nch 0.0 0.5 0.475

relative Natural Colour (NC)

lab*lrj 0.72 -0.495 -0.06

lab*tce 0.75 0.5 0.52

lab*nce 0.0 0.5 g07b

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.0	(1.0)
cmyn3*	0.5	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 35.06 -34.88 5.65

LAB*LABa 35.06 -34.96 5.63

LAB*TCa 25.01 35.42 170.85

relative CIELAB lab*

lab*lab 0.22 -0.493 0.079

lab*tch 0.25 0.5 0.475

lab*nch 0.5 0.5 0.475

relative Natural Colour (NC)

lab*lrj 0.22 -0.495 -0.06

lab*tce 0.25 0.5 0.52

lab*nce 0.5 0.5 g07b

relative Inform. Technology (IT)

olvi3*	0.0	1.0	0.0	(1.0)
cmyn3*	1.0	0.0	1.0	(0.0)
olvi4*	0.0	1.0	0.0	1.0
cmyn4*	1.0	0.0	1.0	0.0

standard and adapted CIELAB

LAB*LAB 52.11 -69.86 11.28

LAB*LABa 52.11 -69.92 11.26

LAB*TCa 50.0 70.83 170.85

relative CIELAB lab*

lab*lab 0.441 -0.986 0.159

lab*tch 0.5 1.0 0.475

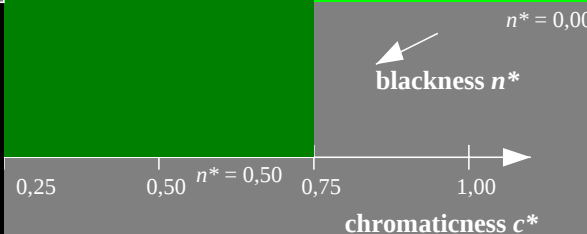
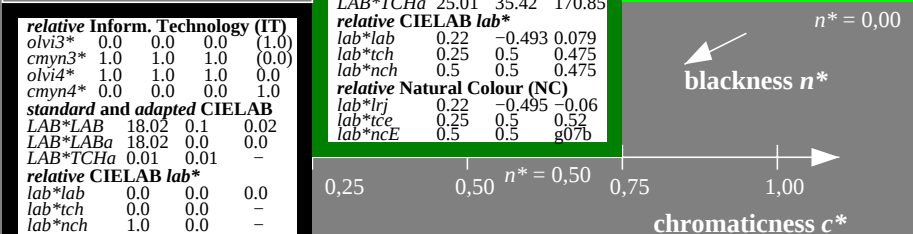
lab*nch 0.0 1.0 0.475

relative Natural Colour (NC)

lab*lrj 0.441 -0.991 -0.122

lab*tce 0.5 1.0 0.52

lab*nce 0.0 1.0 g07b

blackness n^* chromaticness c^* $n^* = 1.0$ $n^* = 0.50$ $n^* = 0.00$ blackness n^* chromaticness c^* $n^* = 1.0$ $n^* = 0.50$ $n^* = 0.00$

TE010-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data depend

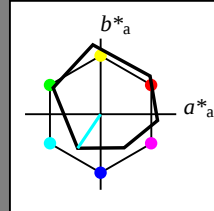
Input: Colorimetric Reflective System ORS18

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

D65: hue C

LCH*Ma: 59 54 236

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

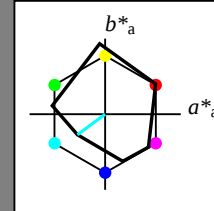
Output: Colorimetric Reflective System MRS18a

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

D65: hue G50B

LCH*Ma: 45 46 217

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*LABa 95.41 0.0 0.0

LAB*TCa 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*	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 0.05 0.0

LAB*LABa 56.71 0.0 0.0

LAB*TCa 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 0.1 0.02

LAB*LABa 18.02 0.0 0.0

LAB*TCa 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*	0.5	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 70.21 -18.28 -13.55

LAB*LABa 70.21 -18.31 -13.56

LAB*TCa 75.0 22.8 216.52

relative CIELAB lab*

lab*lab 0.674 -0.401 -0.296

lab*tch 0.75 0.5 0.601

lab*nch 0.0 0.5 0.601

relative Natural Colour (NC)

lab*lrj 0.674 -0.355 -0.35

lab*tce 0.75 0.5 0.624

lab*nce 0.0 0.5 g49b

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 31.52 -18.23 -13.53

LAB*LABa 31.52 -18.31 -13.56

LAB*TCa 25.01 22.8 216.52

relative CIELAB lab*

lab*lab 0.175 -0.401 -0.296

lab*tch 0.25 0.5 0.601

lab*nch 0.5 0.5 0.601

relative Natural Colour (NC)

lab*lrj 0.175 -0.355 -0.35

lab*tce 0.25 0.5 0.624

lab*nce 0.5 0.5 g49b

relative Inform. Technology (IT)

olvi3*	0.0	1.0	1.0	(1.0)
cmyn3*	1.0	0.0	0.0	(0.0)
olvi4*	0.0	1.0	1.0	1.0
cmyn4*	1.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 45.03 -36.57 -27.11

LAB*LABa 45.03 -36.64 -27.13

LAB*TCa 50.0 45.6 216.52

relative CIELAB lab*

lab*lab 0.349 -0.803 -0.594

lab*tch 0.5 1.0 0.601

lab*nch 0.0 1.0 0.601

relative Natural Colour (NC)

lab*lrj 0.349 -0.71 -0.702

lab*tce 0.5 1.0 0.624

lab*nce 0.0 1.0 g49b

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

TE010-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data dependend

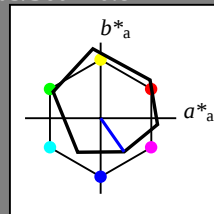
Input: Colorimetric Reflective System ORS18

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^* 

%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

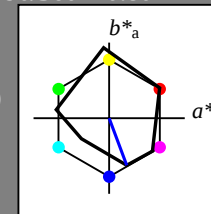
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 290/360 = 0.807$ lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 66 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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	0.5	1.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	0.5	0.5	1.0	1.0
cmyn4*	0.5	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB 66.03 11.67 -31.12

LAB*LABa 66.03 11.63 -31.13

LAB*TCHa 75.0 33.24 290.48

relative CIELAB lab*

lab*lab 0.62 0.175 -0.467

lab*tch 0.75 0.5 0.807

lab*nch 0.0 0.5 0.807

relative Natural Colour (NC)

lab*lrj 0.62 0.128 -0.482

lab*tce 0.75 0.5 0.791

lab*nce 0.0 0.5 b16r

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.5 (1.0)

cmyn3* 1.0 1.0 0.5 (0.0)

olvi4* 0.5 0.5 1.0 0.5

cmyn4* 0.5 0.5 0.0 0.5

standard and adapted CIELAB

LAB*LAB 27.34 11.71 -31.1

LAB*LABa 27.34 11.63 -31.13

LAB*TCHa 25.01 33.24 290.48

relative CIELAB lab*

lab*lab 0.12 0.175 -0.467

lab*tch 0.25 0.5 0.807

lab*nch 0.5 0.5 0.807

relative Natural Colour (NC)

lab*lrj 0.12 0.128 -0.482

lab*tce 0.25 0.5 0.791

lab*nce 0.5 0.5 b16r

relative Inform. Technology (IT)

olvi3*	0.0	0.0	1.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	0.0	0.0	1.0	1.0
cmyn4*	1.0	1.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 36.65 23.33 -62.24

LAB*LABa 36.65 23.25 -62.26

LAB*TCHa 50.0 66.47 290.48

relative CIELAB lab*

lab*lab 0.241 0.35 -0.936

lab*tch 0.5 1.0 0.807

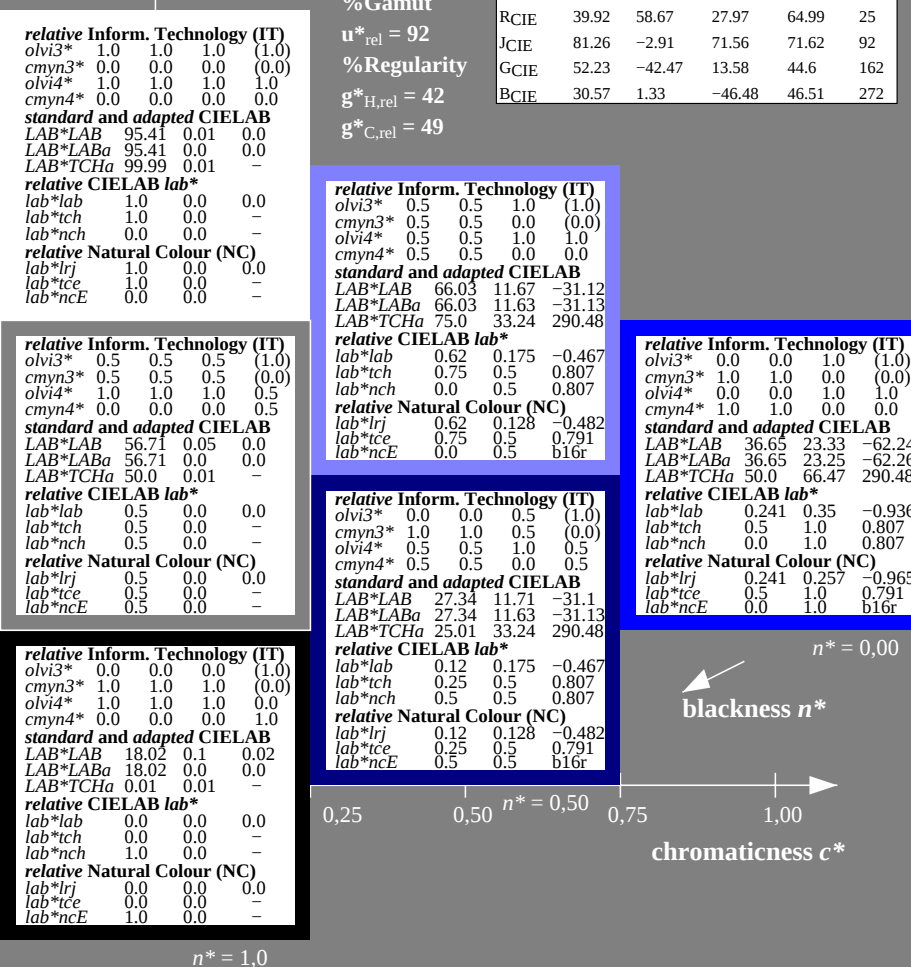
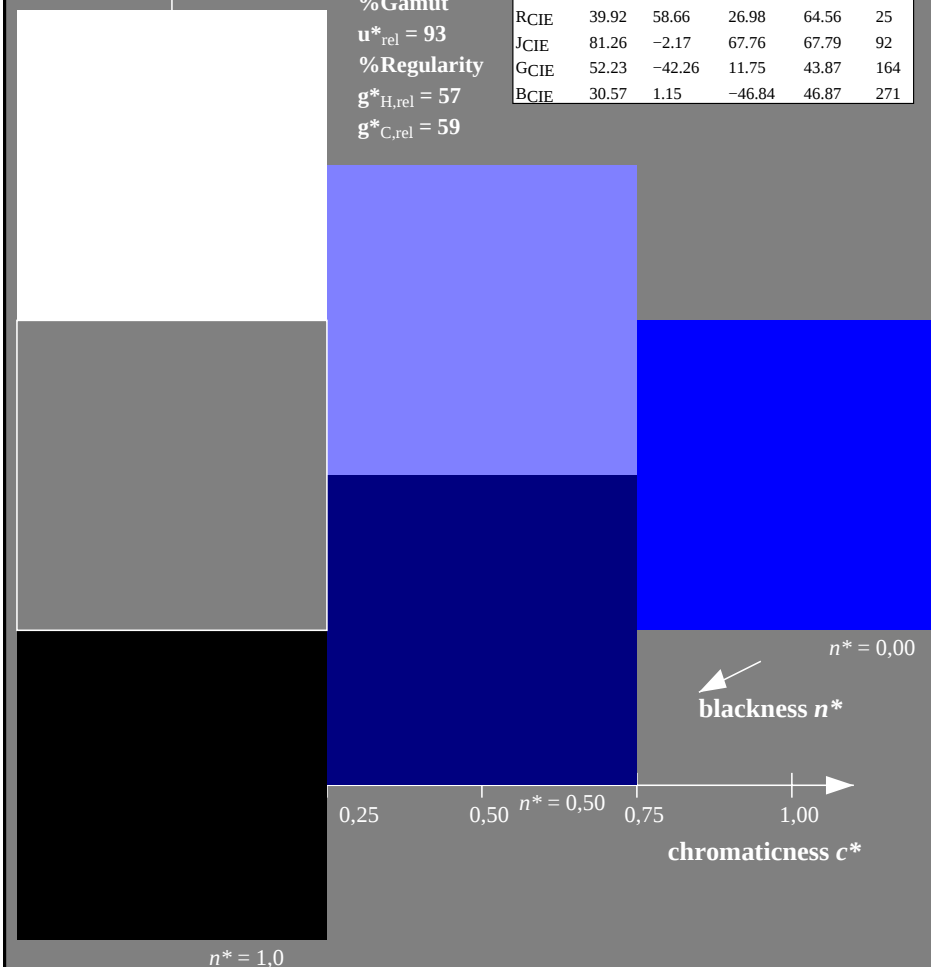
lab*nch 0.0 1.0 0.807

relative Natural Colour (NC)

lab*lrj 0.241 0.257 -0.965

lab*tce 0.5 1.0 0.791

lab*nce 0.0 1.0 b16r



TE010-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

3 step scales for constant CIELAB hue 290/360 = 0.807 (right)

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data dependend

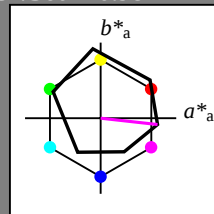
Input: Colorimetric Reflective System ORS18

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

D65: hue M

LCH*Ma: 48 76 354

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

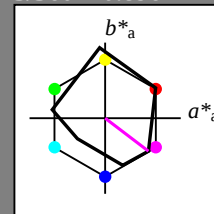
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 323/360 = 0.896$ lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 323

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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*	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 0.05 0.0

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 0.1 0.02

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*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB 65.17 28.68 -21.78

LAB*LABa 65.17 28.63 -21.79

LAB*TCHa 75.0 35.99 322.71

relative CIELAB lab*

lab*lab 0.609 0.398 -0.302

lab*tch 0.75 0.5 0.896

lab*nch 0.0 0.5 0.896

relative Natural Colour (NC)

lab*lrj 0.609 0.324 -0.38

lab*tce 0.75 0.5 0.862

lab*nce 0.0 0.5 b44r

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB 26.48 28.72 -21.77

LAB*LABa 26.48 28.63 -21.79

LAB*TCHa 25.01 35.99 322.71

relative CIELAB lab*

lab*lab 0.109 0.398 -0.302

lab*tch 0.25 0.5 0.896

lab*nch 0.5 0.5 0.896

relative Natural Colour (NC)

lab*lrj 0.109 0.324 -0.38

lab*tce 0.25 0.5 0.862

lab*nce 0.5 0.5 b44r

relative Inform. Technology (IT)

olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 34.95 57.34 -43.57

LAB*LABa 34.95 57.26 -43.59

LAB*TCHa 50.0 71.98 322.71

relative CIELAB lab*

lab*lab 0.219 0.795 -0.605

lab*tch 0.5 1.0 0.896

lab*nch 0.0 1.0 0.896

relative Natural Colour (NC)

lab*lrj 0.219 0.648 -0.761

lab*tce 0.5 1.0 0.862

lab*nce 0.0 1.0 b44r

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

chromaticness c^*

blackness n^* $n^* = 0,00$ $n^* = 1,0$

TE010-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

3 step scales for constant CIELAB hue 323/360 = 0.896 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

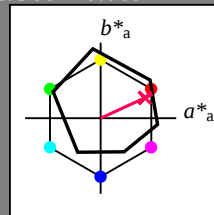
Input: Colorimetric Reflective System ORS18

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

D65: hue R

LCH*Ma: 48 75 25

olv*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

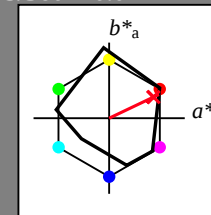
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 25/360 = 0.071$ lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 73 25

olv*Ma: 1.0 0.0 0.1

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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*	1.0	0.5	0.552	(1.0)
cmyn3*	0.0	0.5	0.448	(0.0)
olvi4*	1.0	0.5	0.552	1.0
cmyn4*	0.0	0.5	0.448	0.0

standard and adapted CIELAB

LAB*LAB 71.76 32.94 15.69

LAB*LABa 71.76 32.9 15.68

LAB*TCHa 75.0 36.45 25.49

relative CIELAB lab*

lab*lab 0.694 0.451 0.215

lab*tch 0.75 0.5 0.071

lab*nch 0.0 0.5 0.071

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 0.0 0.052 (1.0)

cmyn3* 0.5 1.0 0.948 (0.0)

olvi4* 1.0 0.5 0.552 0.5

cmyn4* 0.0 0.5 0.448 0.5

standard and adapted CIELAB

LAB*LAB 33.07 32.98 15.72

LAB*LABa 33.07 32.9 15.69

LAB*TCHa 25.01 36.45 25.5

relative CIELAB lab*

lab*lab 0.195 0.451 0.215

lab*tch 0.25 0.5 0.071

lab*nch 0.5 0.5 0.071

relative Natural Colour (NC)

lab*lrj 0.195 0.5 0.0

lab*tce 0.25 0.5 0.0

lab*nce 0.5 0.5 r00j

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.103	(1.0)
cmyn3*	0.0	1.0	0.897	(0.0)
olvi4*	1.0	0.0	0.104	1.0
cmyn4*	0.0	1.0	0.896	0.0

standard and adapted CIELAB

LAB*LAB 48.11 65.86 31.39

LAB*LABa 48.11 65.8 31.37

LAB*TCHa 50.0 72.9 25.49

relative CIELAB lab*

lab*lab 0.389 0.902 0.43

lab*tch 0.5 1.0 0.071

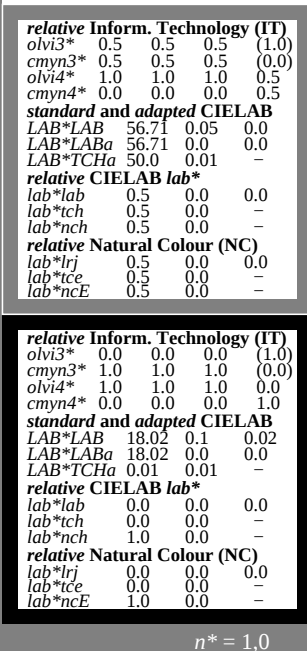
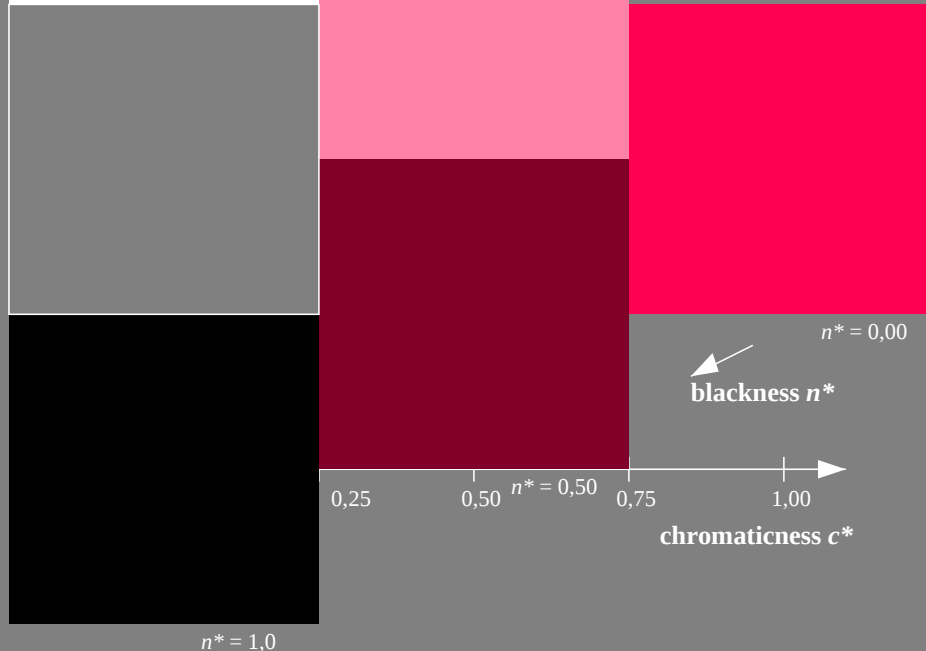
lab*nch 0.0 1.0 0.071

relative Natural Colour (NC)

lab*lrj 0.389 1.0 0.0

lab*tce 0.5 1.0 0.0

lab*nce 0.0 1.0 r00j



TE010-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data dependend

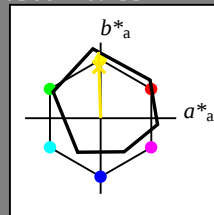
Input: Colorimetric Reflective System ORS18

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

D65: hue J

LCH*Ma: 86 88 92

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

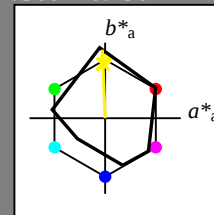
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 92/360 = 0.256$ lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 91 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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*	1.0	0.976	0.5	(1.0)
cmyn3*	0.0	0.024	0.5	(0.0)
olvi4*	1.0	0.976	0.5	1.0
cmyn4*	0.0	0.024	0.5	0.0

standard and adapted CIELAB

LAB*LAB 92.06 -1.83 45.31

LAB*LABa 92.06 -1.84 45.31

LAB*TCHa 75.0 45.35 92.34

relative CIELAB lab*

lab*lab 0.957 -0.019 0.499

lab*tch 0.75 0.5 0.257

lab*nch 0.0 0.5 0.257

relative Natural Colour (NC)

lab*lrj 0.957 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 0.476 0.0 (1.0)

cmyn3* 0.5 0.524 1.0 (0.0)

olvi4* 1.0 0.976 0.5 0.5

cmyn4* 0.0 0.024 0.5 0.5

standard and adapted CIELAB

LAB*LAB 53.36 -1.78 45.32

LAB*LABa 53.36 -1.84 45.3

LAB*TCHa 25.01 45.34 92.33

relative CIELAB lab*

lab*lab 0.457 -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*lrj 0.457 0.0 0.5

lab*tce 0.25 0.5 0.25

lab*nce 0.5 0.5 j99j

relative Inform. Technology (IT)

olvi3*	1.0	0.952	0.0	(1.0)
cmyn3*	0.0	0.048	1.0	(0.0)
olvi4*	1.0	0.952	0.0	1.0
cmyn4*	0.0	0.048	1.0	0.0

standard and adapted CIELAB

LAB*LAB 88.71 -3.67 90.61

LAB*LABa 88.71 -3.69 90.61

LAB*TCHa 50.0 90.68 92.34

relative CIELAB lab*

lab*lab 0.913 -0.04 0.999

lab*tch 0.5 1.0 0.256

lab*nch 0.0 1.0 0.256

relative Natural Colour (NC)

lab*lrj 0.913 0.0 1.0

lab*tce 0.5 1.0 0.25

lab*nce 0.0 1.0 j00g

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 0.00$

$n^* = 0.50$

$n^* = 1.0$

TE010-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & MRS18a

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

input: olv* setrgbcolor

output: Startup (S) data dependend

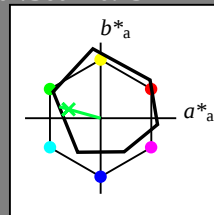
Input: Colorimetric Reflective System ORS18

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

D65: hue G

LCH*Ma: 53 57 164

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

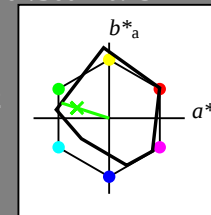
Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 162/360 = 0.451$ lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 162

olv*Ma: 0.11 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*LABa 95.41 0.0 0.0

LAB*TCa 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*	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 0.05 0.0

LAB*LABa 56.71 0.0 0.0

LAB*TCa 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 0.1 0.02

LAB*LABa 18.02 0.0 0.0

LAB*TCa 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*	0.554	1.0	0.5	(1.0)
cmyn3*	0.446	0.0	0.5	(0.0)
olvi4*	0.555	1.0	0.5	1.0
cmyn4*	0.445	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB 75.86 -31.51 10.1

LAB*LABa 75.86 -31.54 10.09

LAB*TCa 75.0 33.13 162.26

relative CIELAB lab*

lab*lab 0.747 -0.475 0.152

lab*tch 0.75 0.5 0.451

lab*nch 0.0 0.5 0.451

relative Natural Colour (NC)

lab*lrj 0.747 -0.499 0.0

lab*tce 0.75 0.5 0.5

lab*nce 0.0 0.5 0.99g

relative Inform. Technology (IT)

olvi3*	0.054	0.5	0.0	(1.0)
cmyn3*	0.946	0.5	1.0	(0.0)
olvi4*	0.554	1.0	0.5	0.5
cmyn4*	0.446	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB 37.16 -31.47 10.11

LAB*LABa 37.16 -31.55 10.08

LAB*TCa 25.01 33.13 162.28

relative CIELAB lab*

lab*lab 0.247 -0.475 0.152

lab*tch 0.25 0.5 0.451

lab*nch 0.5 0.5 0.451

relative Natural Colour (NC)

lab*lrj 0.247 -0.499 0.0

lab*tce 0.25 0.5 0.5

lab*nce 0.5 0.5 0.5g00b

relative Inform. Technology (IT)

olvi3*	0.109	1.0	0.0	(1.0)
cmyn3*	0.891	0.0	1.0	(0.0)
olvi4*	0.109	1.0	0.0	1.0
cmyn4*	0.891	0.0	1.0	0.0

standard and adapted CIELAB

LAB*LAB 56.31 -63.05 20.19

LAB*LABa 56.31 -63.1 20.18

LAB*TCa 50.0 66.26 162.27

relative CIELAB lab*

lab*lab 0.495 -0.951 0.304

lab*tch 0.5 1.0 0.451

lab*nch 0.0 1.0 0.451

relative Natural Colour (NC)

lab*lrj 0.495 -0.999 0.0

lab*tce 0.5 1.0 0.5

lab*nce 0.0 1.0 0.5g00b

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

TE010-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

output: Startup (S) data dependend

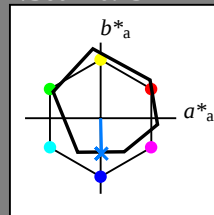
Input: Colorimetric Reflective System ORS18

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

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

ORS18; adapted (a) CIELAB data

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

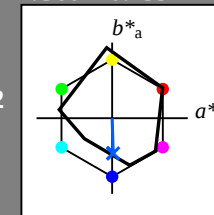
Output: Colorimetric Reflective System MRS18a

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

D65: hue B

LCH*Ma: 40 49 272

olv*Ma: 0.0 0.36 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

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

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB 95.41 0.01 0.0

LAB*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* 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 0.05 0.0

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	0.682	1.0	(1.0)
cmyn3*	0.5	0.318	0.0	(0.0)
olvi4*	0.5	0.682	1.0	1.0
cmyn4*	0.5	0.318	0.0	0.0

standard and adapted CIELAB

LAB*LAB 67.55 0.74 -24.71

LAB*LABa 67.55 0.7 -24.72

LAB*TCHa 75.0 24.74 271.63

relative CIELAB lab*

lab*lab 0.64 0.014 -0.499

lab*tch 0.75 0.5 0.755

lab*nch 0.0 0.5 0.755

relative Natural Colour (NC)

lab*lrj 0.64 0.0 -0.499

lab*tce 0.75 0.5 0.75

lab*nce 0.0 0.5 g99b

relative Inform. Technology (IT)

olvi3* 0.0 0.182 0.5 (1.0)

cmyn3* 1.0 0.818 0.5 (0.0)

olvi4* 0.5 0.682 1.0 0.5

cmyn4* 0.5 0.318 0.0 0.5

standard and adapted CIELAB

LAB*LAB 28.86 0.79 -24.7

LAB*LABa 28.86 0.71 -24.72

LAB*TCHa 25.01 24.74 271.64

relative CIELAB lab*

lab*lab 0.14 0.014 -0.499

lab*tch 0.25 0.5 0.755

lab*nch 0.5 0.5 0.755

relative Natural Colour (NC)

lab*lrj 0.14 0.0 -0.499

lab*tce 0.25 0.5 0.75

lab*nce 0.5 0.5 b00r

relative Inform. Technology (IT)

olvi3*	0.0	0.365	1.0	(1.0)
cmyn3*	1.0	0.635	0.0	(0.0)
olvi4*	0.0	0.365	1.0	1.0
cmyn4*	1.0	0.635	0.0	0.0

standard and adapted CIELAB

LAB*LAB 39.71 1.49 -49.43

LAB*LABa 39.71 1.41 -49.45

LAB*TCHa 50.0 49.48 271.64

relative CIELAB lab*

lab*lab 0.28 0.029 -0.998

lab*tch 0.5 1.0 0.755

lab*nch 0.0 1.0 0.755

relative Natural Colour (NC)

lab*lrj 0.28 0.0 -0.999

lab*tce 0.5 1.0 0.75

lab*nce 0.0 1.0 b00r

blackness n^*

chromaticness c^*

0,25 0,50 0,75 1,00

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

0,25 0,50 0,75 1,00

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

TE010-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

BAM-test chart TE01; Colorimetric systems ORS18 & ORS18

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

input: olv* setrgbcolor

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