

Input: Colorimetric Reflective System ORS18

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

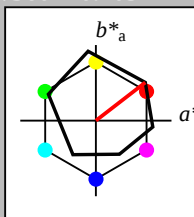
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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 47.5
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 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.00 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.00 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.63
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.00 0.01 -

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 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 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 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 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

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

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

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

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 32.15 28.41
LAB*TCHa 75.00 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*trj 0.693 0.477 0.15
lab*tce 0.75 0.5 0.105
lab*nce 0.0 0.5 0.191

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 52.33 32.53 27.11
LAB*LABa 52.33 32.53 27.11
LAB*TCHa 50.00 41.3 37.7

relative CIELAB lab*
lab*lab 0.443 0.396 0.306
lab*tch 0.5 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*trj 0.443 0.477 0.15
lab*tce 0.5 0.5 0.105
lab*nce 0.0 0.5 0.191

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 40.46 49.17 38.93
LAB*LABa 40.46 49.17 38.93
LAB*TCHa 37.51 61.95 37.7

relative CIELAB lab*
lab*lab 0.29 0.593 0.459
lab*tch 0.375 0.75 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*trj 0.29 0.715 0.225
lab*tce 0.375 0.75 0.105
lab*nce 0.0 0.5 0.191

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 22.98 32.9 37.7
LAB*LABa 22.98 32.9 37.7
LAB*TCHa 25.01 41.3 37.7

relative CIELAB lab*
lab*lab 0.193 0.396 0.306
lab*tch 0.25 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*trj 0.193 0.477 0.15
lab*tce 0.25 0.5 0.105
lab*nce 0.0 0.5 0.191

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 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 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

Output: Colorimetric Reflective System NRS11

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

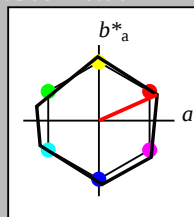
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 53 84 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.0 0.0
LAB*LABa 74.31 0.0 0.0
LAB*TCHa 75.00 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 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* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.4 0.0
LAB*LABa 53.21 0.4 0.0
LAB*TCHa 50.00 0.01 -

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* 0.75 0.75 0.75 (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 32.11 0.05 0.91
LAB*LABa 32.11 0.05 0.91
LAB*TCHa 32.11 0.05 0.91

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

NRS11; adapted (a) CIELAB data

$L^*=L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

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

% Regularity

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

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

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 74.3 38.55 17.16
LAB*LABa 74.3 38.55 17.16
LAB*TCHa 75.00 42.17 24.01

relative CIELAB lab*
lab*lab 0.75 0.457 0.203
lab*tch 0.75 0.5 0.067
lab*nch 0.0 0.5 0.067
relative Natural Colour (NC)
lab*trj 0.75 0.5 -0.009
lab*tce 0.75 0.5 0.067
lab*nce 0.0 0.5 0.997

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.2 38.57 17.17
LAB*LABa 53.2 38.57 17.17
LAB*TCHa 50.00 42.18 24.01

relative CIELAB lab*
lab*lab 0.75 0.457 0.203
lab*tch 0.75 0.5 0.067
lab*nch 0.0 0.5 0.067
relative Natural Colour (NC)
lab*trj 0.75 0.5 -0.009
lab*tce 0.75 0.5 0.067
lab*nce 0.0 0.5 0.997

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 32.1 38.58 17.17
LAB*LABa 32.1 38.58 17.17
LAB*TCHa 32.1 38.58 17.17

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 0.0 0.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.03 38.6 8.6
LAB*LABa 21.03 38.6 8.6
LAB*TCHa 21.03 38.6 8.6

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 63.75 57.82 25.74
LAB*LABa 63.75 57.82 25.74
LAB*TCHa 62.5 63.26 24.01

relative CIELAB lab*
lab*lab 0.625 0.685 0.305
lab*tch 0.625 0.75 0.067
lab*nch 0.0 0.5 0.067
relative Natural Colour (NC)
lab*trj 0.625 0.75 -0.014
lab*tce 0.625 0.75 0.067
lab*nce 0.0 0.5 0.997

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.75 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 42.65 57.84 25.75
LAB*LABa 42.65 57.84 25.75
LAB*TCHa 42.65 57.84 25.75

relative CIELAB lab*
lab*lab 0.625 0.685 0.305
lab*tch 0.625 0.75 0.067
lab*nch 0.0 0.5 0.067
relative Natural Colour (NC)
lab*trj 0.625 0.75 -0.014
lab*tce 0.625 0.75 0.067
lab*nce 0.0 0.5 0.997

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.03 38.6 8.6
LAB*LABa 21.03 38.6 8.6
LAB*TCHa 21.03 38.6 8.6

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.

Input: Colorimetric Reflective System ORS18

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

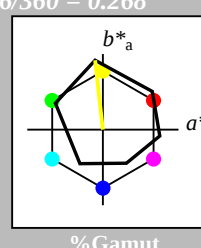
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.99	-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

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

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

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 47.5
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.75 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 94.14 -3.51 27.61
LAB*LABa 94.14 -2.56 22.93
LAB*TCHa 97.5 25.08 96.39

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (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 Inform. Technology (IT)
olvi3* 1.0 1.0 0.25 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.25 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 91.62 -8.6 73.32
LAB*LABa 91.62 -7.7 68.82
LAB*TCHa 62.5 69.25 96.39

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.37 -10.26 91.77
LAB*LABa 90.37 -10.26 91.77
LAB*TCHa 50.0 92.32 96.39

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.5)
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 90.37 -10.26 91.77
LAB*LABa 90.37 -10.26 91.77
LAB*TCHa 50.0 92.32 96.39

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.37 -10.26 91.77
LAB*LABa 90.37 -10.26 91.77
LAB*TCHa 50.0 92.32 96.39

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.37 -10.26 91.77
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relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
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standard and adapted CIELAB
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olvi3* 0.5 0.5 0.0 (0.5)
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olvi4* 1.0 1.0 0.5 (1.0)
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standard and adapted CIELAB
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olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
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standard and adapted CIELAB
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olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
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standard and adapted CIELAB
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relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
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standard and adapted CIELAB
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relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.0 (0.5)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.37 -10.26 91.77
LAB*LABa 90.37 -10.26 91.77
LAB*TCHa 50.0 92.32 96.39

UE520-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

BAM-test chart UE52; Colorimetric systems ORS18 & NRS11

D65: 2 coordinate data of 5 step colour scales for 10 hues

input: $cmv0^* setcmykcolor$

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

Input: Colorimetric Reflective System ORS18

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

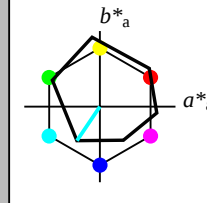
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.59	-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

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

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

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

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	0.75 0.75 0.75 (1.0)
olvi6*	0.25 0.25 0.25 (0.0)
olvi7*	0.75 0.75 0.75 (1.0)
olvi8*	0.25 0.25 0.25 (0.0)
olvi9*	0.75 0.75 0.75 (1.0)
olvi10*	0.25 0.25 0.25 (0.0)
olvi11*	0.75 0.75 0.75 (1.0)
olvi12*	0.25 0.25 0.25 (0.0)
olvi13*	0.75 0.75 0.75 (1.0)
olvi14*	0.25 0.25 0.25 (0.0)
olvi15*	0.75 0.75 0.75 (1.0)
olvi16*	0.25 0.25 0.25 (0.0)
olvi17*	0.75 0.75 0.75 (1.0)
olvi18*	0.25 0.25 0.25 (0.0)
olvi19*	0.75 0.75 0.75 (1.0)
olvi20*	0.25 0.25 0.25 (0.0)
olvi21*	0.75 0.75 0.75 (1.0)
olvi22*	0.25 0.25 0.25 (0.0)
olvi23*	0.75 0.75 0.75 (1.0)
olvi24*	0.25 0.25 0.25 (0.0)
olvi25*	0.75 0.75 0.75 (1.0)
olvi26*	0.25 0.25 0.25 (0.0)
olvi27*	0.75 0.75 0.75 (1.0)
olvi28*	0.25 0.25 0.25 (0.0)
olvi29*	0.75 0.75 0.75 (1.0)
olvi30*	0.25 0.25 0.25 (0.0)
olvi31*	0.75 0.75 0.75 (1.0)
olvi32*	0.25 0.25 0.25 (0.0)
olvi33*	0.75 0.75 0.75 (1.0)
olvi34*	0.25 0.25 0.25 (0.0)
olvi35*	0.75 0.75 0.75 (1.0)
olvi36*	0.25 0.25 0.25 (0.0)
olvi37*	0.75 0.75 0.75 (1.0)
olvi38*	0.25 0.25 0.25 (0.0)
olvi39*	0.75 0.75 0.75 (1.0)
olvi40*	0.25 0.25 0.25 (0.0)
olvi41*	0.75 0.75 0.75 (1.0)
olvi42*	0.25 0.25 0.25 (0.0)
olvi43*	0.75 0.75 0.75 (1.0)
olvi44*	0.25 0.25 0.25 (0.0)
olvi45*	0.75 0.75 0.75 (1.0)
olvi46*	0.25 0.25 0.25 (0.0)
olvi47*	0.75 0.75 0.75 (1.0)
olvi48*	0.25 0.25 0.25 (0.0)
olvi49*	0.75 0.75 0.75 (1.0)
olvi50*	0.25 0.25 0.25 (0.0)
olvi51*	0.75 0.75 0.75 (1.0)
olvi52*	0.25 0.25 0.25 (0.0)
olvi53*	0.75 0.75 0.75 (1.0)
olvi54*	0.25 0.25 0.25 (0.0)
olvi55*	0.75 0.75 0.75 (1.0)
olvi56*	0.25 0.25 0.25 (0.0)
olvi57*	0.75 0.75 0.75 (1.0)
olvi58*	0.25 0.25 0.25 (0.0)
olvi59*	0.75 0.75 0.75 (1.0)
olvi60*	0.25 0.25 0.25 (0.0)
olvi61*	0.75 0.75 0.75 (1.0)
olvi62*	0.25 0.25 0.25 (0.0)
olvi63*	0.75 0.75 0.75 (1.0)
olvi64*	0.25 0.25 0.25 (0.0)
olvi65*	0.75 0.75 0.75 (1.0)
olvi66*	0.25 0.25 0.25 (0.0)
olvi67*	0.75 0.75 0.75 (1.0)
olvi68*	0.25 0.25 0.25 (0.0)
olvi69*	0.75 0.75 0.75 (1.0)
olvi70*	0.25 0.25 0.25 (0.0)
olvi71*	0.75 0.75 0.75 (1.0)
olvi72*	0.25 0.25 0.25 (0.0)
olvi73*	0.75 0.75 0.75 (1.0)
olvi74*	0.25 0.25 0.25 (0.0)
olvi75*	0.75 0.75 0.75 (1.0)
olvi76*	0.25 0.25 0.25 (0.0)
olvi77*	0.75 0.75 0.75 (1.0)
olvi78*	0.25 0.25 0.25 (0.0)
olvi79*	0.75 0.75 0.75 (1.0)
olvi80*	0.25 0.25 0.25 (0.0)
olvi81*	0.75 0.75 0.75 (1.0)
olvi82*	0.25 0.25 0.25 (0.0)
olvi83*	0.75 0.75 0.75 (1.0)
olvi84*	0.25 0.25 0.25 (0.0)
olvi85*	0.75 0.75 0.75 (1.0)
olvi86*	0.25 0.25 0.25 (0.0)
olvi87*	0.75 0.75 0.75 (1.0)
olvi88*	0.25 0.25 0.25 (0.0)
olvi89*	0.75 0.75 0.75 (1.0)
olvi90*	0.25 0.25 0.25 (0.0)
olvi91*	0.75 0.75 0.75 (1.0)
olvi92*	0.25 0.25 0.25 (0.0)
olvi93*	0.75 0.75 0.75 (1.0)
olvi94*	0.25 0.25 0.25 (0.0)
olvi95*	0.75 0.75 0.75 (1.0)
olvi96*	0.25 0.25 0.25 (0.0)
olvi97*	0.75 0.75 0.75 (1.0)
olvi98*	0.25 0.25 0.25 (0.0)
olvi99*	0.75 0.75 0.75 (1.0)
olvi100*	0.25 0.25 0.25 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.881 -0.139 -0.206
olvi4*	0.875 0.25 0.656
olvi5*	0.875 0.25 0.656
olvi6*	0.875 0.25 0.656
olvi7*	0.875 0.25 0.656
olvi8*	0.875 0.25 0.656
olvi9*	0.875 0.25 0.656
olvi10*	0.875 0.25 0.656
olvi11*	0.875 0.25 0.656
olvi12*	0.875 0.25 0.656
olvi13*	0.875 0.25 0.656
olvi14*	0.875 0.25 0.656
olvi15*	0.875 0.25 0.656
olvi16*	0.875 0.25 0.656
olvi17*	0.875 0.25 0.656
olvi18*	0.875 0.25 0.656
olvi19*	0.875 0.25 0.656
olvi20*	0.875 0.25 0.656
olvi21*	0.875 0.25 0.656
olvi22*	0.875 0.25 0.656
olvi23*	0.875 0.25 0.656
olvi24*	0.875 0.25 0.656
olvi25*	0.875 0.25 0.656
olvi26*	0.875 0.25 0.656
olvi27*	0.875 0.25 0.656
olvi28*	0.875 0.25 0.656
olvi29*	0.875 0.25 0.656
olvi30*	0.875 0.25 0.656
olvi31*	0.875 0.25 0.656
olvi32*	0.875 0.25 0.656
olvi33*	0.875 0.25 0.656
olvi34*	0.875 0.25 0.656
olvi35*	0.875 0.25 0.656
olvi36*	0.875 0.25 0.656
olvi37*	0.875 0.25 0.656
olvi38*	0.875 0.25 0.656
olvi39*	0.875 0.25 0.656
olvi40*	0.875 0.25 0.656
olvi41*	0.875 0.25 0.656
olvi42*	0.875 0.25 0.656
olvi43*	0.875 0.25 0.656
olvi44*	0.875 0.25 0.656
olvi45*	0.875 0.25 0.656
olvi46*	0.875 0.25 0.656
olvi47*	0.875 0.25 0.656
olvi48*	0.875 0.25 0.656
olvi49*	0.875 0.25 0.656
olvi50*	0.875 0.25 0.656
olvi51*	0.875 0.25 0.656
olvi52*	0.875 0.25 0.656
olvi53*	0.875 0.25 0.656
olvi54*	0.875 0.25 0.656
olvi55*	0.875 0.25 0.656
olvi56*	0.875 0.25 0.656
olvi57*	0.875 0.25 0.656
olvi58*	0.875 0.25 0.656
olvi59*	0.875 0.25 0.656
olvi60*	0.875 0.25 0.656
olvi61*	0.875 0.25 0.656
olvi62*	0.875 0.25 0.656
olvi63*	0.875 0.25 0.656
olvi64*	0.875 0.25 0.656
olvi65*	0.875 0.25 0.656
olvi66*	0.875 0.25 0.656
olvi67*	0.875 0.25 0.656
olvi68*	0.875 0.25 0.656
olvi69*	0.875 0.25 0.656
olvi70*	0.875 0.25 0.656
olvi71*	0.875 0.25 0.656
olvi72*	0.875 0.25 0.656
olvi73*	0.875 0.25 0.656
olvi74*	0.875 0.25 0.656
olvi75*	0.875 0.25 0.656
olvi76*	0.875 0.25 0.656
olvi77*	0.875 0.25 0.656
olvi78*	0.875 0.25 0.656
olvi79*	0.875 0.25 0.656
olvi80*	0.875 0.25 0.656
olvi81*	0.875 0.25 0.656
olvi82*	0.875 0.25 0.656
olvi83*	0.875 0.25 0.656
olvi84*	0.875 0.25 0.656
olvi85*	0.875 0.25 0.656
olvi86*	0.875 0.25 0.656
olvi87*	0.875 0.25 0.656
olvi88*	0.875 0.25 0.656
olvi89*	0.875 0.25 0.656
olvi90*	0.875 0.25 0.656
olvi91*	0.875 0.25 0.656
olvi92*	0.875 0.25 0.656
olvi93*	0.875 0.25 0.656
olvi94*	0.875 0.25 0.656
olvi95*	0.875 0.25 0.656
olvi96*	0.875 0.25 0.656
olvi97*	0.875 0.25 0.656
olvi98*	0.875 0.25 0.656
olvi99*	0.875 0.25 0.656
olvi100*	0.875 0.25 0.656

relative Inform. Technology (IT)	
olvi3*	0.5 0.5 0.5 (1.0)
olvi4*	0.5 0.5 0.5 (1.0)
olvi5*	0.5 0.5 0.5 (1.0)
olvi6*	0.5 0.5 0.5 (1.0)
olvi7*	0.5 0.5 0.5 (1.0)
olvi8*	0.5 0.5 0.5 (1.0)
olvi9*	0.5 0.5 0.5 (1.0)
olvi10*	0.5 0.5 0.5 (1.0)
olvi11*	0.5 0.5 0.5 (1.0)
olvi12*	0.5 0.5 0.5 (1.0)
olvi13*	0.5 0.5 0.5 (1.0)
olvi14*	0.5 0.5 0.5 (1.0)
olvi15*	0.5 0.5 0.5 (1.0)

Input: Colorimetric Reflective System ORS18

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

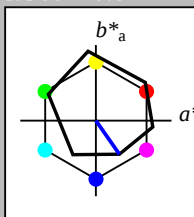
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 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 47.5
 LAB*LAB 95.41 0.0 0.0
 LAB*TCRa 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)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LAB 76.06 0.0 0.0
 LAB*TCRa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.75 0.0 0.0
 lab*tce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 56.71 -0.23 2.14
 LAB*LAB 56.71 0.0 0.0
 LAB*TCRa 50.0 0.01 -

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)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 37.36 0.13 0.63
 LAB*LAB 37.36 0.0 0.0
 LAB*TCRa 25.0 0.01 -

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)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 0.0 0.46
 LAB*LAB 18.02 0.0 0.0
 LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 0.0 0.46
 LAB*LAB 18.02 0.0 0.0
 LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

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

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

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

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 60.56 15.24 -19.79
 LAB*LAB 60.56 15.24 -19.79
 LAB*TCRa 75.0 27.11 305.0

relative CIELAB lab*
 lab*lab 0.5 0.287 -0.408
 lab*tch 0.75 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.5 0.225 -0.446
 lab*tce 0.75 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 41.21 15.61 -21.1
 LAB*LAB 41.21 15.61 -21.1
 LAB*TCRa 50.0 27.12 305.0

relative CIELAB lab*
 lab*lab 0.25 0.287 -0.408
 lab*tch 0.5 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.25 0.225 -0.446
 lab*tce 0.5 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 21.87 15.96 -22.4
 LAB*LAB 21.87 15.96 -22.4
 LAB*TCRa 25.01 27.11 305.0

relative CIELAB lab*
 lab*lab 0.0 0.287 -0.408
 lab*tch 0.25 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.0 0.225 -0.446
 lab*tce 0.25 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 19.94 8.84 -11.43
 LAB*LAB 19.94 8.84 -11.43
 LAB*TCRa 12.5 13.55 305.0

relative CIELAB lab*
 lab*lab 0.0 0.025 0.143 -0.204
 lab*tch 0.125 0.25 0.847
 lab*nch 0.0 0.25 0.847
 relative Natural Colour (NC)
 lab*trj 0.0 0.112 0.222
 lab*tce 0.125 0.25 0.824
 lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.0 0.01
 LAB*LAB 11.01 0.0 0.01
 LAB*TCRa 0.0 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

Output: Colorimetric Reflective System NRS11

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

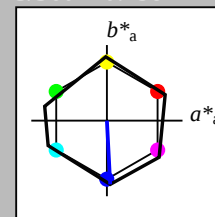
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 53 84 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 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 0.0 -0.01
 LAB*LAB 95.41 0.0 0.0
 LAB*TCRa 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)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LAB 74.31 0.02 0.0
 LAB*TCRa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.75 0.0 0.0
 lab*tce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 53.21 0.04 -0.436
 LAB*LAB 53.21 0.04 -0.436
 LAB*TCRa 50.0 24.3 305.0

relative CIELAB lab*
 lab*lab 0.5 0.573 -0.818
 lab*tch 0.5 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.5 0.449 -0.892
 lab*tce 0.5 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 25.72 23.32 -33.30
 LAB*LAB 25.72 23.32 -33.30
 LAB*TCRa 37.51 40.67 305.0

relative CIELAB lab*
 lab*lab 0.25 0.43 -0.613
 lab*tch 0.375 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.25 0.337 -0.669
 lab*tce 0.375 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.0 0.01
 LAB*LAB 11.01 0.0 0.01
 LAB*TCRa 0.0 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.0 0.01
 LAB*LAB 11.01 0.0 0.01
 LAB*TCRa 0.0 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

NRS11; adapted (a) CIELAB data

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

% Regularity

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

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

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 74.3 2.21 -42.13
 LAB*LAB 74.3 2.21 -42.13
 LAB*TCRa 75.0 42.2 272.97

relative CIELAB lab*
 lab*lab 0.5 0.026 -0.498
 lab*tch 0.75 0.5 0.758
 lab*nch 0.0 0.5 0.758
 relative Natural Colour (NC)
 lab*trj 0.5 0.009 -0.499
 lab*tce 0.75 0.5 0.753
 lab*nce 0.0 0.5 0.753

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 53.2 2.23 -42.13
 LAB*LAB 53.2 2.23 -42.13
 LAB*TCRa 50.0 42.2 272.97

relative CIELAB lab*
 lab*lab 0.25 0.026 -0.498
 lab*tch 0.5 0.5 0.758
 lab*nch 0.0 0.5 0.758
 relative Natural Colour (NC)
 lab*trj 0.25 0.009 -0.499
 lab*tce 0.5 0.5 0.753
 lab*nce 0.0 0.5 0.753

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 42.65 1.15 -21.05
 LAB*LAB 42.65 1.15 -21.05
 LAB*TCRa 37.51 21.1 272.97

relative CIELAB lab*
 lab*lab 0.0 0.025 0.143 -0.204
 lab*tch 0.375 0.5 0.847
 lab*nch 0.0 0.5 0.847
 relative Natural Colour (NC)
 lab*trj 0.0 0.012 0.222
 lab*tce 0.375 0.5 0.824
 lab*nce 0.0 0.5 0.824

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.0 0.01
 LAB*LAB 11.01 0.0 0.01
 LAB*TCRa 0.0 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.0 0.01
 LAB*LAB 11.01 0.0 0.01
 LAB*TCRa 0.0 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 0.5 0.5 0.5 (1.0)
 cmy4* 0.5 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 42.65 3.33 -63.19
 LAB*LAB 42.65 3.3

Input: Colorimetric Reflective System ORS18

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

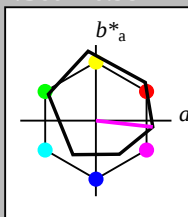
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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*TCRa 99.99 0.01

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCRa 75.0 0.01

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCRa 50.0 0.01

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* 0.75 0.75 0.75 (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 37.36 0.3 0.63
LAB*LAB 37.36 0.0 0.0
LAB*TCRa 25.0 0.01

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.1 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCRa 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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

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

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

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 71.77 37.63 -41.7
LAB*LAB 71.77 37.63 -41.7
LAB*TCRa 75.0 37.86 353.66

relative CIELAB lab*
lab*lab 0.695 0.497 -0.054
lab*tch 0.75 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*trj 0.695 0.454 -0.208
lab*tce 0.75 0.5 0.932
lab*nce 0.0 0.5 0.72

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (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 52.42 37.63 -41.7
LAB*LAB 52.42 37.63 -41.7
LAB*TCRa 50.0 37.86 353.66

relative CIELAB lab*
lab*lab 0.542 0.745 -0.082
lab*tch 0.625 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*trj 0.542 0.682 -0.312
lab*tce 0.625 0.75 0.932
lab*nce 0.0 0.75 0.72

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (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 44.89 18.8 -0.73
LAB*LAB 44.89 18.8 -0.73
LAB*TCRa 37.5 18.93 353.66

relative CIELAB lab*
lab*lab 0.347 0.248 -0.027
lab*tch 0.375 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.347 0.227 -0.103
lab*tce 0.375 0.25 0.932
lab*nce 0.0 0.25 0.72

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.25 (1.0)
cmyn3* 0.75 1.0 0.75 (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 33.08 37.84 -0.62
LAB*LAB 33.08 37.84 -0.62
LAB*TCRa 25.01 37.86 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*trj 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.72

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 1.0 0.25 1.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 1.0 0.25 1.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 59.95 56.14 -3.9
LAB*LAB 59.95 56.14 -3.9
LAB*TCRa 62.5 56.79 353.66

relative CIELAB lab*
lab*lab 0.542 0.745 -0.082
lab*tch 0.625 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*trj 0.542 0.682 -0.312
lab*tce 0.625 0.75 0.932
lab*nce 0.0 0.75 0.72

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 48.14 75.18 -6.78
LAB*LAB 48.14 75.18 -6.78
LAB*TCRa 50.0 75.71 353.66

relative CIELAB lab*
lab*lab 0.389 0.994 -0.109
lab*tch 0.5 1.0 0.982
lab*nch 0.0 1.0 0.982
relative Natural Colour (NC)
lab*trj 0.389 0.909 -0.416
lab*tce 0.5 1.0 0.932
lab*nce 0.0 1.0 0.72

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 34.54 -24.2
LAB*LAB 32.11 34.54 -24.2
LAB*TCRa 25.01 37.86 353.66

relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.25 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.25 (1.0)
lab*tce 0.25 0.25 0.932
lab*nce 0.0 0.25 0.72

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.0 0.0 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 0.00$

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 34.54 -24.2
LAB*LAB 32.11 34.54 -24.2
LAB*TCRa 25.01 37.86 353.66

relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.25 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.25 (1.0)
lab*tce 0.25 0.25 0.932
lab*nce 0.0 0.25 0.72

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.0 0.0 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

Output: Colorimetric Reflective System NRS11

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

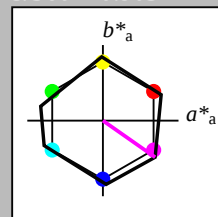
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 53 84 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*TCRa 99.99 0.01

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*TCRa 75.0 0.01

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*TCRa 50.0 0.01

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* 0.75 0.75 0.75 (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 32.11 34.54 -24.2
LAB*LAB 32.11 34.54 -24.2
LAB*TCRa 25.01 37.86 353.66

relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.25 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.25 (1.0)
lab*tce 0.25 0.25 0.932
lab*nce 0.0 0.25 0.72

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.0 0.0 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

NRS11; adapted (a) CIELAB data

$L^*=L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

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

% Regularity

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

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

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 74.3 34.54 -24.2
LAB*LAB 74.3 34.54 -24.2
LAB*TCRa 75.0 42.18 324.98

relative CIELAB lab*
lab*lab 0.75 0.409 -0.286
lab*tch 0.75 0.5 0.903
lab*nch 0.0 0.5 0.903
relative Natural Colour (NC)
lab*trj 0.75 0.336 -0.37
lab*tce 0.75 0.5 0.867
lab*nce 0.0 0.5 0.646

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (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 53.2 34.59 -24.19
LAB*LAB 53.2 34.59 -24.19
LAB*TCRa 50.0 42.19 324.98

relative CIELAB lab*
lab*lab 0.625 0.503 -0.555
lab*tch 0.625 0.75 0.903
lab*nch 0.0 0.75 0.903
relative Natural Colour (NC)
lab*trj 0.625 0.503 -0.555
lab*tce 0.625 0.75 0.867
lab*nce 0.0 0.75 0.646

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (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 42.65 51.86 -36.29
LAB*LAB 42.65 51.86 -36.29
LAB*TCRa 37.51 63.27 324.98

relative CIELAB lab*
lab*lab 0.625 0.614 -0.429
lab*tch 0.625 0.75 0.903
lab*nch 0.0 0.75 0.903
relative Natural Colour (NC)
lab*trj 0.625 0.503 -0.555
lab*tce 0.625 0.75 0.867
lab*nce 0.0 0.75 0.646

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.25 (1.0)
cmyn3* 0.75 1.0 0.75 (0.0)
olvi4*

See for similar files: <http://www.ps.bam.de/UE52/>
Technical information: <http://www.ps.bam.de>

Version 2.1, io=0,1, CIEXYZ

Page count: 7

www.ps.bam.de/UE52/10Q/Q52E06FP.PS/.PDF; linearized output
F: Output Linearization (OL) data UE52/10Q/Q52E06FP.DAT in File (F)

Input: Colorimetric Reflective System ORS18

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

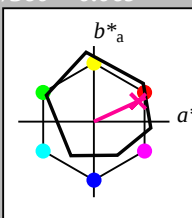
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

rgb*Ma: 1.0 0.0 0.32

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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*TCRa 99.99 0.01 -

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCRa 75.00 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCRa 50.00 0.01 -

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 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TCRa 25.00 0.01 -

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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	50.59	-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

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

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

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*LAB 71.7 34.27 15.76
LAB*TCRa 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*trj 0.694 0.5 0.0
lab*tce 0.75 0.5 0.0
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.411 (1.0)
cmyn3* 0.25 0.75 0.589 (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 52.36 34.28 15.77
LAB*LAB 52.36 34.28 15.77
LAB*TCRa 50.0 37.73 24.7

relative CIELAB lab*
lab*lab 0.444 0.454 0.209
lab*tch 0.5 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.444 0.5 0.0
lab*tce 0.5 0.5 0.0
lab*nce 0.0 0.5 0.100

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.161 (1.0)
cmyn3* 0.5 0.0 0.839 (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 33.01 34.49 16.31
LAB*LAB 33.01 34.27 15.77
LAB*TCRa 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 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.194 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.0 0.5 0.100

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 0.919 (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 16.48 18.02 0.0
LAB*LAB 16.48 18.02 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.097 0.227 0.104
lab*tch 0.125 0.25 0.069
lab*nch 0.0 0.25 0.069
relative Natural Colour (NC)
lab*trj 0.097 0.25 0.0
lab*tce 0.125 0.25 0.0
lab*nce 0.0 0.25 0.100

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 0.00$

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.492 (1.0)
cmyn3* 0.0 0.5 0.508 (0.0)
olvi4* 1.0 0.5 0.492 (1.0)
cmyn4* 0.0 0.5 0.508 (0.0)
standard and adapted CIELAB
LAB*LAB 59.85 51.12 26.60
LAB*LAB 59.85 51.42 23.64
LAB*TCRa 62.5 56.39 24.7

relative CIELAB lab*
lab*lab 0.541 0.681 0.313
lab*tch 0.625 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.541 0.75 0.0
lab*tce 0.625 0.75 0.0
lab*nce 0.0 0.75 0.069

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.242 (1.0)
cmyn3* 0.25 0.75 0.758 (0.0)
olvi4* 1.0 0.5 0.492 (1.0)
cmyn4* 0.0 0.5 0.508 (0.0)
standard and adapted CIELAB
LAB*LAB 40.51 51.49 24.7
LAB*LAB 40.51 51.41 23.65
LAB*TCRa 37.51 56.39 24.7

relative CIELAB lab*
lab*lab 0.291 0.681 0.313
lab*tch 0.375 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.291 0.75 0.0
lab*tce 0.375 0.75 0.0
lab*nce 0.0 0.75 0.100

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 48.01 68.48 33.09
LAB*LAB 48.01 68.55 31.53
LAB*TCRa 50.0 75.45 24.7

relative CIELAB lab*
lab*lab 0.388 0.908 0.418
lab*tch 0.5 1.0 0.069
lab*nch 0.0 1.0 0.069
relative Natural Colour (NC)
lab*trj 0.388 1.0 0.0
lab*tce 0.5 1.0 0.0
lab*nce 0.0 1.0 0.100

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.0 0.0
LAB*LAB 32.11 0.0 0.0
LAB*TCRa 25.01 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 1.0 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 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 0.00$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

blackness n^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

Output: Colorimetric Reflective System NRS11

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

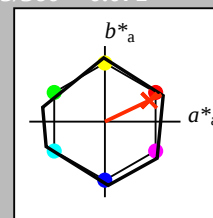
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 53 83 25

rgb*Ma: 1.0 0.03 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*TCRa 99.99 0.01 -

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.0 0.0
LAB*LAB 74.31 0.0 0.0
LAB*TCRa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*TCRa 50.0 0.01 -

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* 0.75 0.75 0.75 (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 32.11 0.0 0.0
LAB*LAB 32.11 0.0 0.0
LAB*TCRa 25.01 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 1.0 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 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

relative Inform. Technology (IT)
olvi3* 0.75 0.507 0.5 (1.0)
cmyn3* 0.25 0.493 0.5 (0.0)
olvi4* 1.0 0.757 0.75 (0.0)
cmyn4* 0.0 0.243 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 63.75 18.72 8.93
LAB*LAB 63.75 18.72 8.93
LAB*TCRa 62.5 20.74 25.49

relative CIELAB lab*
lab*lab 0.625 0.226 0.108
lab*tch 0.875 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*trj 0.625 0.25 0.0
lab*tce 0.875 0.25 0.0
lab*nce 0.0 0.25 0.071

relative Inform. Technology (IT)
olvi3* 0.75 0.264 0.25 (1.0)
cmyn3* 0.25 0.736 0.75 (0.0)
olvi4* 1.0 0.514 0.5 (0.0)
cmyn4* 0.0 0.486 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.2 37.49 17.86
LAB*LAB 53.2 37.49 17.86
LAB*TCRa 50.0 41.48 25.49

relative CIELAB lab*
lab*lab 0.451 0.215 0.071
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*trj 0.451 0.5 0.0
lab*tce 0.75 0.5 0.0
lab*nce 0.0 0.75 0.071

relative Inform. Technology (IT)
olvi3* 0.5 0.014 0.0 (1.0)
cmyn3* 0.5 0.743 0.75 (0.0)
olvi4* 1.0 0.514 0.5 (0.0)
cmyn4* 0.0 0.486 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 42.65 18.77 8.94
LAB*LAB 42.65 18.72 8.93
LAB*TCRa 37.51 20.74 25.49

relative CIELAB lab*
lab*lab 0.375 0.226 0.108
lab*tch 0.375 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*trj 0.375 0.25 0.0
lab*tce 0.375 0.25 0.0
lab*nce 0.0 0.25 0.071

relative Inform. Technology (IT)
olvi3* 0.25 0.007 0.0 (1.0)
cmyn3* 0.75 0.993 1.0 (0.0)
olvi4* 1.0 0.514 0.5 (0.0)
cmyn4* 0.0 0.486 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 17.86 18.02 0.0
LAB*LAB 17.86 18.02 0.0
LAB*TCRa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.451 0.215
lab*tch 0.25 0.5 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*trj 0.25 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.0 0.75 0.071

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0

