

Input: Colorimetric Reflective System ORS18

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

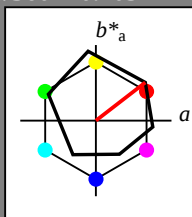
lab^*tch and lab^*nch

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 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

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

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 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 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 -0.38 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

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*LABa 18.02 0.0 0.46
LAB*LABb 18.02 0.0 0.46
LAB*LABc 18.02 0.0 0.46

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 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 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*LABb 71.67 32.15 28.41
LAB*LABc 71.67 32.15 28.41

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 0.105

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

relative CIELAB lab*
lab*lab 0.443 0.477 0.15
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 0.105

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (0.75)
cmyn4* 0.0 0.5 0.5 (0.25)
standard and adapted CIELAB
LAB*LAB 40.46 49.18 38.93
LAB*LABa 40.46 49.18 38.93
LAB*LABb 40.46 49.18 38.93
LAB*LABc 40.46 49.18 38.93

relative CIELAB lab*
lab*lab 0.29 0.593 0.459
lab*tch 0.375 0.75 0.105
lab*nch 0.0 0.75 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 0.75 0.105

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 0.0 0.0 (0.0)
olvi4* 1.0 0.25 0.25 (0.75)
cmyn4* 0.0 0.25 0.25 (0.25)
standard and adapted CIELAB
LAB*LAB 22.98 32.9 37.88
LAB*LABa 22.98 32.9 37.88
LAB*LABb 22.98 32.9 37.88
LAB*LABc 22.98 32.9 37.88

relative CIELAB lab*
lab*lab 0.193 0.477 0.15
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 0.105

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 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 MRS18

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

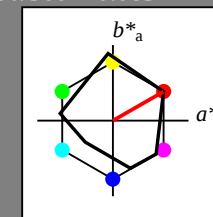
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

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

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 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 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 -0.38 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

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 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*LABb 18.02 0.0 0.46
LAB*LABc 18.02 0.0 0.46

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 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 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

MRS18; adapted (a) CIELAB data

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

RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 0.5 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 83.96 15.97 13.58
LAB*LABa 83.96 15.97 13.58
LAB*LABb 83.96 15.97 13.58
LAB*LABc 83.96 15.97 13.58

relative CIELAB lab*
lab*lab 0.852 0.217 0.124
lab*tch 0.875 0.25 0.083
lab*nch 0.0 0.25 0.083
relative Natural Colour (NC)
lab*trj 0.852 0.248 0.03
lab*tce 0.875 0.25 0.019
lab*nce 0.0 0.25 0.07

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (0.75)
cmyn4* 0.0 0.5 0.5 (0.25)
standard and adapted CIELAB
LAB*LAB 64.61 16.74 9.59
LAB*LABa 64.61 16.74 9.59
LAB*LABb 64.61 16.74 9.59
LAB*LABc 64.61 16.74 9.59

relative CIELAB lab*
lab*lab 0.704 0.434 0.249
lab*tch 0.75 0.5 0.083
lab*nch 0.0 0.5 0.083
relative Natural Colour (NC)
lab*trj 0.704 0.496 0.06
lab*tce 0.75 0.5 0.019
lab*nce 0.0 0.5 0.07

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (0.75)
cmyn4* 0.0 0.5 0.5 (0.25)
standard and adapted CIELAB
LAB*LAB 53.17 33.48 19.19
LAB*LABa 53.17 33.48 19.19
LAB*LABb 53.17 33.48 19.19
LAB*LABc 53.17 33.48 19.19

relative CIELAB lab*
lab*lab 0.625 0.75 0.019
lab*tch 0.625 0.75 0.019
lab*nch 0.0 0.75 0.019
relative Natural Colour (NC)
lab*trj 0.625 0.75 0.019
lab*tce 0.625 0.75 0.019
lab*nce 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 0.0 0.0 (0.0)
olvi4* 1.0 0.25 0.25 (0.75)
cmyn4* 0.0 0.25 0.25 (0.25)
standard and adapted CIELAB
LAB*LAB 22.98 32.9 37.88
LAB*LABa 22.98 32.9 37.88
LAB*LABb 22.98 32.9 37.88
LAB*LABc 22.98 32.9 37.88

relative CIELAB lab*
lab*lab 0.306 0.745 0.07
lab*tch 0.306 0.745 0.07
lab*nch 0.0 0.745 0.07
relative Natural Colour (NC)
lab*trj 0.306 0.745 0.07
lab*tce 0.306 0.745 0.07
lab*nce 0.0 0.745 0.07

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 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* 0.75 0.0 0.0 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.75)
cmyn4* 0.0 0.5 0.5 (0.25)
standard and adapted CIELAB
LAB*LAB 52.33 32.53 27.11
LAB*LABa 52.33 32.53 27.11
LAB*LABb 52.33 32.53 27.11
LAB*LABc 52.33 32.53 27.11

relative CIELAB lab*
lab*lab 0.443 0.477 0.15
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 0.105

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (0.75)
cmyn4* 0.0 0.5 0.5 (0.25)
standard and adapted CIELAB
LAB*LAB 40.46 49.18 38.93
LAB*LABa 40.46 49.18 38.93
LAB*LABb 40.46 49.18 38.93
LAB*LABc 40.46 49.18 38.93

relative CIELAB lab*
lab*lab 0.29 0.593 0.459
lab*tch 0.375 0.75 0.105
lab*nch 0.0 0.75 0.105
relative Natural Colour

Input: Colorimetric Reflective System ORS18

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

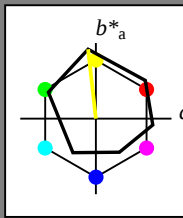
lab^*tch and lab^*nch

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	50.59	-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)	
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*TCa 99.99 0.01	

relative Inform. Technology (IT)	
olvi3* 1.0 1.0 0.75 (1.0)	
cmyn3* 0.0 0.0 0.25 (0.0)	
olvi4* 1.0 1.0 0.75 (1.0)	
cmyn4* 0.0 0.0 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 94.14 -3.51 27.61	
LAB*LAB 94.14 -2.56 22.94	
LAB*TCa 97.5 25.08 96.39	

relative Inform. Technology (IT)	
olvi3* 1.0 1.0 0.5 (1.0)	
cmyn3* 0.0 0.0 0.5 (0.0)	
olvi4* 1.0 1.0 0.5 (1.0)	
cmyn4* 0.0 0.0 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 92.88 -6.06 50.46	
LAB*LAB 92.88 -5.13 45.87	
LAB*TCa 75.0 46.16 96.39	

relative Inform. Technology (IT)	
olvi3* 1.0 1.0 0.25 (1.0)	
cmyn3* 0.0 0.0 0.25 (0.0)	
olvi4* 1.0 1.0 0.25 (1.0)	
cmyn4* 0.0 0.0 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 91.62 -8.6 73.32	
LAB*LAB 91.62 -7.7 68.82	
LAB*TCa 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 -11.15 96.17	
LAB*LAB 90.37 -10.26 91.75	
LAB*TCa 50.0 92.32 96.39	

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*TCa 75.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.5 (1.0)	
cmyn3* 0.25 0.25 0.5 (0.0)	
olvi4* 1.0 1.0 0.75 (1.0)	
cmyn4* 0.0 0.0 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 74.8 -3.14 26.31	
LAB*LAB 74.8 -2.56 22.94	
LAB*TCa 62.5 23.09 96.39	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.25 (1.0)	
cmyn3* 0.25 0.25 0.25 (0.0)	
olvi4* 1.0 1.0 0.5 (1.0)	
cmyn4* 0.0 0.0 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 73.54 -5.13 45.88	
LAB*LAB 73.54 -4.61 41.75	
LAB*TCa 50.0 46.17 96.39	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.0 (1.0)	
cmyn3* 0.25 0.25 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 72.38 -8.23 72.01	
LAB*LAB 72.38 -7.7 68.82	
LAB*TCa 50.0 92.32 96.39	

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 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 66.25 0.75 2.66	
LAB*LAB 66.25 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.25 (1.0)	
cmyn3* 0.25 0.25 0.25 (0.0)	
olvi4* 1.0 1.0 0.75 (1.0)	
cmyn4* 0.0 0.0 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 66.25 0.75 2.66	
LAB*LAB 66.25 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.0 (1.0)	
cmyn3* 0.25 0.25 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.75 0.75 0.0 (1.0)	
cmyn3* 0.25 0.25 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.0 (1.0)	
cmyn3* 0.5 0.5 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 65.71 -0.23 2.14	
LAB*LAB 65.71 0.0 0.0	
LAB*TCa 50.0 0.01	

relative Inform. Technology (IT)				
olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	1.0	(0.0)
olvi4*	1.0	1.0	0.75	0.25
cmyn4*	0.0	0.0	0.25	0.75
standard and adapted CIELAB				
LAB*LAB	36.1	-2.4	23.69	
LAB*LAB _a	36.1	-2.56	22.93	
LAB*TC ₁₀	12.5	72.08	96.39	

Input: Colorimetric Reflective System ORS18

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

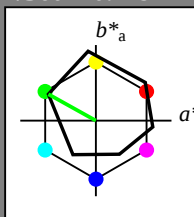
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 1.0 0.0

triangle lightness 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)
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*TCa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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*TCa 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 (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 56.71 -0.23 2.14
LAB*Lab 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 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 -0.03 0.63
LAB*Lab 37.36 0.0 0.0
LAB*TCa 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 0.0 0.46
LAB*Lab 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 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 0.0 0.46
LAB*Lab 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 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 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 84.28 -16.45 12.74
LAB*Lab 84.28 -15.68 8.73
LAB*TCa 97.5 17.96 150.91

relative CIELAB lab*
lab*lab 0.856 -0.217 0.122
lab*tch 0.875 0.25 0.419
lab*nch 0.0 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.856 -0.238 0.072
lab*tce 0.875 0.25 0.453
lab*nce 0.0 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 64.93 -16.09 11.44
LAB*Lab 64.93 -15.69 8.74
LAB*TCa 62.5 17.97 150.91

relative CIELAB lab*
lab*lab 0.616 -0.217 0.122
lab*tch 0.625 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.606 -0.238 0.072
lab*tce 0.625 0.25 0.453
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.5 0.75 (0.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 45.56 -15.72 10.13
LAB*Lab 45.56 -15.69 8.74
LAB*TCa 37.5 17.97 150.91

relative CIELAB lab*
lab*lab 0.356 -0.217 0.122
lab*tch 0.375 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.356 -0.238 0.072
lab*tce 0.375 0.25 0.453
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 1.0 0.5 1.0 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 34.46 -31.2 18.11
LAB*Lab 34.46 -31.38 17.47
LAB*TCa 25.01 35.93 150.91

relative CIELAB lab*
lab*lab 0.213 -0.436 0.243
lab*tch 0.25 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*trj 0.213 -0.478 0.144
lab*tce 0.25 0.5 0.453
lab*nce 0.0 0.5 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.15 -31.94 20.73
LAB*Lab 73.15 -31.36 17.47
LAB*TCa 75.0 35.93 150.91

relative CIELAB lab*
lab*lab 0.712 -0.436 0.243
lab*tch 0.75 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*trj 0.712 -0.478 0.144
lab*tce 0.75 0.5 0.453
lab*nce 0.0 0.5 0.419

relative Inform. Technology (IT)
olvi3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 62.02 -47.43 28.71
LAB*Lab 62.02 -47.09 26.21
LAB*TCa 62.5 53.9 150.91

relative CIELAB lab*
lab*lab 0.569 -0.654 0.365
lab*tch 0.625 0.75 0.419
lab*nch 0.0 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.569 -0.717 0.217
lab*tce 0.625 0.75 0.453
lab*nce 0.0 0.75 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.0 0.75 0.0 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 53.8 -31.57 19.42
LAB*Lab 53.8 -31.39 17.47
LAB*TCa 50.0 35.94 150.91

relative CIELAB lab*
lab*lab 0.462 -0.436 0.243
lab*tch 0.5 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*trj 0.462 -0.478 0.144
lab*tce 0.5 0.5 0.453
lab*nce 0.0 0.5 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 42.68 -47.06 27.41
LAB*Lab 42.68 -47.09 26.21
LAB*TCa 37.51 53.9 150.91

relative CIELAB lab*
lab*lab 0.319 -0.654 0.365
lab*tch 0.375 0.75 0.419
lab*nch 0.0 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.319 -0.717 0.217
lab*tce 0.375 0.75 0.453
lab*nce 0.0 0.75 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*Lab 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 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 62.02 -47.43 28.71
LAB*Lab 62.02 -47.09 26.21
LAB*TCa 62.5 53.9 150.91

relative CIELAB lab*
lab*lab 0.569 -0.654 0.365
lab*tch 0.625 0.75 0.419
lab*nch 0.0 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.569 -0.717 0.217
lab*tce 0.625 0.75 0.453
lab*nce 0.0 0.75 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.0 0.25 0.0 (1.0)
cmyn4* 1.0 0.25 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 50.9 -62.78 34.94
LAB*Lab 50.9 -62.78 34.94
LAB*TCa 50.0 71.86 150.91

relative CIELAB lab*
lab*lab 0.425 -0.873 0.486
lab*tch 0.5 1.0 0.419
lab*nch 0.0 1.0 0.419
relative Natural Colour (NC)
lab*trj 0.425 -0.956 0.289
lab*tce 0.5 1.0 0.453
lab*nce 0.0 1.0 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*Lab 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 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*Lab 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 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 0.25 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.03 0.63
LAB*Lab 37.36 0.0 0.0
LAB*TCa 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 0.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*Lab 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 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 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 0.0 1.0 (0.0)
olvi4* 1.0 0.0 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*TCa 0.01 0.01 -

Input: Colorimetric Reflective System ORS18

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

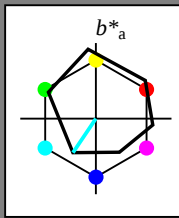
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



$u^*_{rel} = 93$

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*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

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

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 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 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 -0.38 0.63
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

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*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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

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	50.9	-62.79	34.95	71.87	151
CLMa	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* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 77.01 -15.16 -19.98
LAB*LABa 77.01 0.0 0.0
LAB*LABb 77.01 0.0 0.0
LAB*LABc 77.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 57.66 -15.17 -22.5
LAB*LABa 57.66 0.0 0.0
LAB*LABb 57.66 0.0 0.0
LAB*LABc 57.66 0.0 0.0

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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 48.47 -22.83 -32.16
LAB*LABa 48.47 0.0 0.0
LAB*LABb 48.47 0.0 0.0
LAB*LABc 48.47 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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 38.12 -15.03 -11.59
LAB*LABa 38.12 0.0 0.0
LAB*LABb 38.12 0.0 0.0
LAB*LABc 38.12 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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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

Output: Colorimetric Reflective System MRS18

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

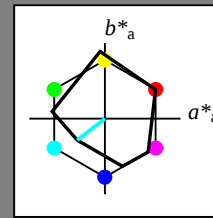
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 218

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

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

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 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 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 -0.38 0.63
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

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*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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

MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 70.21 -18.27 -11.17
LAB*LABa 70.21 0.0 0.0
LAB*LABb 70.21 0.0 0.0
LAB*LABc 70.21 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 50.87 -18.24 -12.48
LAB*LABa 50.87 0.0 0.0
LAB*LABb 50.87 0.0 0.0
LAB*LABc 50.87 0.0 0.0

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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 31.52 -13.78 -14.23
LAB*LABa 31.52 0.0 0.0
LAB*LABb 31.52 0.0 0.0
LAB*LABc 31.52 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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 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

BAM-test chart TE50; Colorimetric systems ORS18 & MRS18

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

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

input: `olv* setrgbcolor`

output: `no change compared to input`

Input: Colorimetric Reflective System ORS18

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

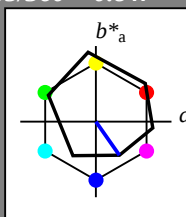
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



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

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

$g^*_{C,rel} = 15.55$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 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*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 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 37.26 -0.38 0.63
LAB*LABa 37.26 0.0 0.0
LAB*TCHa 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 0.0 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 0.0 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* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 77.98 7.13 -7.51
LAB*LABa 77.98 7.77 -11.09
LAB*TCHa 87.5 30.50

relative CIELAB lab*
lab*lab 0.75 0.143 -0.204
lab*tch 0.875 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.775 0.112 -0.222
lab*tce 0.875 0.25 0.824
lab*nce 0.0 0.25 0.29

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 58.63 7.5 -8.82
LAB*LABa 58.63 7.78 -11.11
LAB*TCHa 62.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.5 0.25 0.143 -0.204
lab*tch 0.625 0.25 0.847
lab*nch 0.25 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.525 0.112 -0.222
lab*tce 0.625 0.25 0.824
lab*nce 0.25 0.25 0.29

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 39.28 7.8 -10.13
LAB*LABa 39.28 7.78 -11.11
LAB*TCHa 37.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.25 0.143 -0.204
lab*tch 0.375 0.25 0.847
lab*nch 0.25 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.25 0.112 -0.222
lab*tce 0.375 0.25 0.824
lab*nce 0.25 0.25 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.96 -72.2
LAB*LABa 21.87 15.96 -72.2
LAB*TCHa 25.01 27.11 30.50

relative CIELAB lab*
lab*lab 0.0 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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 19.94 8.24 -11.43
LAB*LABa 19.94 7.77 -11.09
LAB*TCHa 12.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.0 0.0 0.287 -0.408
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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 41.21 15.61 -21.1
LAB*LABa 41.21 15.35 -22.21
LAB*TCHa 50.0 27.11 30.50

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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 31.46 -44.36
LAB*LABa 25.72 31.46 -44.36
LAB*TCHa 50.0 54.23 30.50

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.5 0.0 0.847
lab*nch 0.0 0.0 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.5 0.0 0.824
lab*nce 0.0 0.5 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 23.72 33.30 -33.30
LAB*LABa 23.72 33.30 -33.30
LAB*TCHa 37.51 40.67 30.50

relative CIELAB lab*
lab*lab 0.0 0.75 0.43 -0.613
lab*tch 0.375 0.75 0.847
lab*nch 0.25 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.75 0.847
lab*tce 0.25 0.75 0.824
lab*nce 0.0 0.75 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.96 -72.2
LAB*LABa 21.87 15.96 -72.2
LAB*TCHa 25.01 27.11 30.50

relative CIELAB lab*
lab*lab 0.0 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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 19.94 8.24 -11.43
LAB*LABa 19.94 7.77 -11.09
LAB*TCHa 12.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.0 0.0 0.287 -0.408
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 0.29

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 23.35 -33.08
LAB*LABa 43.14 23.35 -33.31
LAB*TCHa 62.5 40.67 30.50

relative CIELAB lab*
lab*lab 0.25 0.43 -0.613
lab*tch 0.625 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.325 0.337 -0.669
lab*tce 0.625 0.75 0.824
lab*nce 0.0 0.75 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 31.46 -44.36
LAB*LABa 25.72 31.46 -44.36
LAB*TCHa 50.0 54.23 30.50

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.5 0.0 0.847
lab*nch 0.0 0.0 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.5 0.0 0.824
lab*nce 0.0 0.5 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 23.72 33.30 -33.30
LAB*LABa 23.72 33.30 -33.31
LAB*TCHa 37.51 40.67 30.50

relative CIELAB lab*
lab*lab 0.0 0.75 0.43 -0.613
lab*tch 0.375 0.75 0.847
lab*nch 0.25 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.75 0.847
lab*tce 0.25 0.75 0.824
lab*nce 0.0 0.75 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.96 -72.2
LAB*LABa 21.87 15.96 -72.2
LAB*TCHa 25.01 27.11 30.50

relative CIELAB lab*
lab*lab 0.0 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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 19.94 8.24 -11.43
LAB*LABa 19.94 7.77 -11.09
LAB*TCHa 12.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.0 0.0 0.287 -0.408
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 0.29

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 23.35 -33.08
LAB*LABa 43.14 23.35 -33.31
LAB*TCHa 62.5 40.67 30.50

relative CIELAB lab*
lab*lab 0.25 0.43 -0.613
lab*tch 0.625 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.325 0.337 -0.669
lab*tce 0.625 0.75 0.824
lab*nce 0.0 0.75 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 31.46 -44.36
LAB*LABa 25.72 31.46 -44.36
LAB*TCHa 50.0 54.23 30.50

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.5 0.0 0.847
lab*nch 0.0 0.0 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.5 0.0 0.824
lab*nce 0.0 0.5 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 23.72 33.30 -33.30
LAB*LABa 23.72 33.30 -33.31
LAB*TCHa 37.51 40.67 30.50

relative CIELAB lab*
lab*lab 0.0 0.75 0.43 -0.613
lab*tch 0.375 0.75 0.847
lab*nch 0.25 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.75 0.847
lab*tce 0.25 0.75 0.824
lab*nce 0.0 0.75 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.96 -72.2
LAB*LABa 21.87 15.96 -72.2
LAB*TCHa 25.01 27.11 30.50

relative CIELAB lab*
lab*lab 0.0 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 0.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 19.94 8.24 -11.43
LAB*LABa 19.94 7.77 -11.09
LAB*TCHa 12.5 13.56 30.50

relative CIELAB lab*
lab*lab 0.0 0.0 0.287 -0.408
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 0.29

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

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

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

Input: Colorimetric Reflective System ORS18

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

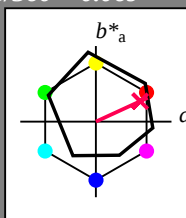
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

rgb*Ma: 1.0 0.0 0.32

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
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* 0.5 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*LABa 56.71 0.0 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 37.36 -0.63 0.83
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 0.0 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 0.0 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 0.661 (1.0)
cmyn3* 0.0 0.5 0.339 (0.0)
olvi4* 1.0 0.5 0.661 (1.0)
cmyn4* 0.0 0.5 0.339 (0.0)
standard and adapted CIELAB
LAB*LAB 71.7 33.75 18.92
LAB*LABa 71.7 34.27 15.76
LAB*TCHa 75.0 37.72 24.69

relative CIELAB lab*
lab*lab 0.694 0.454 0.209
lab*tch 0.75 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*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 34.13 17.62
LAB*LABa 52.36 34.28 15.77
LAB*TCHa 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 0.069
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 0.0 0.661 (0.5)
cmyn4* 0.0 0.5 0.069 (0.0)
standard and adapted CIELAB
LAB*LAB 33.01 34.49 16.31
LAB*LABa 33.01 34.27 15.77
LAB*TCHa 25.01 37.73 24.7

relative CIELAB lab*
lab*lab 0.194 0.454 0.209
lab*tch 0.25 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.194 0.5 0.0
lab*tce 0.25 0.5 0.069
lab*nce 0.0 0.5 0.100

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.091 (1.0)
cmyn3* 0.75 1.0 0.919 (0.0)
olvi4* 1.0 0.0 0.661 (0.5)
cmyn4* 0.0 0.25 0.169 (0.5)
standard and adapted CIELAB
LAB*LAB 18.02 17.49 7.83
LAB*LABa 18.02 17.13 7.88
LAB*TCHa 12.5 18.86 24.71

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

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*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 MRS18

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

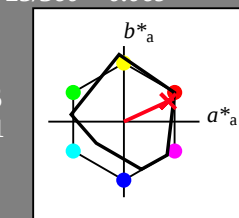
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 73 25

rgb*Ma: 1.0 0.0 0.1

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
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* 0.5 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*LABa 56.71 0.0 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 37.36 -0.63 0.83
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 0.0 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 0.0 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

MRS18; adapted (a) CIELAB data

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

RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.548 (1.0)
cmyn3* 0.0 0.5 0.452 (0.0)
olvi4* 1.0 0.5 0.548 (1.0)
cmyn4* 0.0 0.5 0.452 (0.0)
standard and adapted CIELAB
LAB*LAB 60.0 49.2 25.13
LAB*LABa 60.0 49.5 22.76
LAB*TCHa 62.5 54.49 24.7

relative CIELAB lab*
lab*lab 0.543 0.681 0.313
lab*tch 0.75 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.543 0.5 0.0
lab*tce 0.75 0.5 0.069
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.288 (1.0)
cmyn3* 0.25 0.75 0.702 (0.0)
olvi4* 1.0 0.5 0.548 (0.5)
cmyn4* 0.0 0.5 0.452 (0.0)
standard and adapted CIELAB
LAB*LAB 52.46 33.01 15.18
LAB*LABa 52.46 33.01 15.18
LAB*TCHa 50.0 36.33 24.7

relative CIELAB lab*
lab*lab 0.445 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 0.445 0.5 0.0
lab*tce 0.5 0.5 0.069
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.008 (1.0)
cmyn3* 0.5 0.0 0.992 (0.0)
olvi4* 1.0 0.5 0.548 (0.5)
cmyn4* 0.0 0.5 0.452 (0.0)
standard and adapted CIELAB
LAB*LAB 33.11 33.01 15.18
LAB*LABa 33.11 33.01 15.18
LAB*TCHa 25.01 36.33 24.71

relative CIELAB lab*
lab*lab 0.195 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 0.195 0.5 0.0
lab*tce 0.25 0.5 0.069
lab*nce 0.0 0.5 0.100

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.008 (1.0)
cmyn3* 0.75 1.0 0.992 (0.0)
olvi4* 1.0 0.0 0.548 (0.5)
cmyn4* 0.0 0.25 0.169 (0.5)
standard and adapted CIELAB
LAB*LAB 18.02 17.49 7.83
LAB*LABa 18.02 17.13 7.88
LAB*TCHa 12.5 18.86 24.71

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

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*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

TE500-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart TE50; Colorimetric systems ORS18 & MRS18

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

input: `olv* setrgbcolor`

output: *no change compared to input*

Input: Colorimetric Reflective System ORS18

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

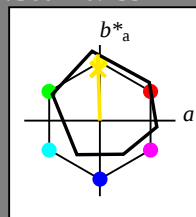
lab^*ch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

rgb*Ma: 1.0 0.9 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
QMa	49.74	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)	
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*TCMa 99.99 0.01	

relative Inform. Technology (IT)	
olvi3* 1.0 0.975 0.75 (1.0)	
cmyn3* 0.0 0.025 0.25 (0.0)	
olvi4* 1.0 0.975 0.75 (1.0)	
cmyn4* 0.0 0.025 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 93.11 -1.64 26.52	
LAB*Lab 93.11 -0.7 21.93	
LAB*TCMa 87.5 21.93 91.86	

relative Inform. Technology (IT)	
olvi3* 1.0 0.975 0.75 (1.0)	
cmyn3* 0.0 0.025 0.25 (0.0)	
olvi4* 1.0 0.975 0.75 (1.0)	
cmyn4* 0.0 0.025 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 90.8 -2.3 48.29	
LAB*Lab 90.8 -1.41 43.85	
LAB*TCMa 75.0 43.87 91.85	

relative Inform. Technology (IT)	
olvi3* 1.0 0.926 0.25 (1.0)	
cmyn3* 0.0 0.074 0.25 (0.0)	
olvi4* 1.0 0.926 0.25 (1.0)	
cmyn4* 0.0 0.074 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 90.8 -2.3 48.29	
LAB*Lab 90.8 -1.41 43.85	
LAB*TCMa 75.0 43.87 91.85	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

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*TCMa 75.0 0.01	

TE500-7, 5 step sca

output: *no change compared to input*