

Input: Colorimetric Reflective System ORS18

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

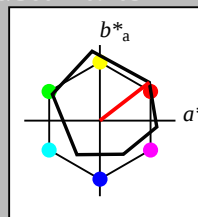
lab^*tch and lab^*nch

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*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*LABb 76.06 0.0 0.0
LAB*TCHa 75.0 0.01

relative CIELAB lab*
lab*lab 0.847 0.198 0.153
lab*tch 0.875 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.847 0.238 0.075
lab*tce 0.875 0.25 0.048
lab*nce 0.0 0.25 0.119

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*LABb 56.71 0.0 0.0
LAB*TCHa 50.0 0.01

relative CIELAB lab*
lab*lab 0.597 0.198 0.153
lab*tch 0.625 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.597 0.239 0.075
lab*tce 0.625 0.25 0.048
lab*nce 0.0 0.25 0.119

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 37.36 0.3 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*TCHa 25.0 0.01

relative CIELAB lab*
lab*lab 0.347 0.198 0.153
lab*tch 0.375 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.347 0.239 0.075
lab*tce 0.375 0.25 0.048
lab*nce 0.0 0.25 0.119

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 18.02 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCHa 0.01 0.01

relative CIELAB lab*
lab*lab 0.097 0.198 0.153
lab*tch 0.125 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.097 0.239 0.075
lab*tce 0.125 0.25 0.048
lab*nce 0.0 0.25 0.119

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

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

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

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 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*TCHa 75.0 41.3 37.7

relative CIELAB lab*
lab*lab 0.693 0.396 0.306
lab*tch 0.75 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*trj 0.693 0.477 0.15
lab*tce 0.75 0.5 0.048
lab*nce 0.0 0.5 0.119

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 (1.0)
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*LABb 52.33 32.53 27.11
LAB*TCHa 50.0 41.3 37.7

relative CIELAB lab*
lab*lab 0.54 0.593 0.459
lab*tch 0.625 0.75 0.105
lab*nch 0.0 0.75 0.105
relative Natural Colour (NC)
lab*trj 0.54 0.715 0.225
lab*tce 0.625 0.75 0.048
lab*nce 0.0 0.75 0.119

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 0.0 (0.0)
olvi4* 1.0 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 40.46 49.1 38.93
LAB*LABa 40.46 49.1 38.93
LAB*LABb 40.46 49.1 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 0.75 0.105
relative Natural Colour (NC)
lab*trj 0.29 0.715 0.225
lab*tce 0.375 0.75 0.048
lab*nce 0.0 0.75 0.119

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.5 1.0 0.0 (0.0)
olvi4* 1.0 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 22.98 32.9 37.7
LAB*LABa 22.98 32.9 37.7
LAB*LABb 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 0.048
lab*nce 0.0 0.5 0.119

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 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 12.5 16.7 12.67
LAB*LABa 12.5 16.7 12.67
LAB*LABb 12.5 16.7 12.67
LAB*TCHa 12.5 20.65 37.7

relative CIELAB lab*
lab*lab 0.097 0.198 0.153
lab*tch 0.125 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.097 0.239 0.075
lab*tce 0.125 0.25 0.048
lab*nce 0.0 0.25 0.119

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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

Output: Colorimetric Reflective System MRS18

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

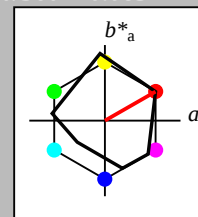
lab^*tch and lab^*nch

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*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*LABb 76.06 0.0 0.0
LAB*TCHa 75.0 0.01

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 0.071

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*LABb 56.71 0.0 0.0
LAB*TCHa 50.0 0.01

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

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 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.3 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*TCHa 25.0 0.01

relative CIELAB lab*
lab*lab 0.347 0.198 0.153
lab*tch 0.375 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.347 0.239 0.075
lab*tce 0.375 0.25 0.048
lab*nce 0.0 0.25 0.119

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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0
LAB*TCHa 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0

Input: Colorimetric Reflective System ORS18

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

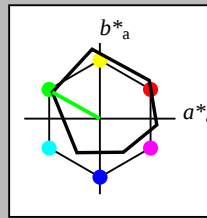
lab^*tch and lab^*nch

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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

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*LABa 84.28 -15.68 8.73
LAB*TCHa 97.5 17.96 150.91

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

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

relative Inform. Technology (IT)
olvi3* 0.0 1.0 0.0 (1.0)
cmyn3* 0.0 0.0 1.0 (0.0)
olvi4* 0.0 1.0 0.0 (1.0)
cmyn4* 0.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 50.9 -62.91 36.69
LAB*LABa 50.9 -62.78 34.94
LAB*TCHa 50.0 71.86 150.91

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 0.0 0.75 0.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 42.68 -47.06 27.41
LAB*LABa 42.68 -47.09 26.21
LAB*TCHa 37.51 53.9 150.91

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.0 0.5 0.0 (0.0)
olvi4* 0.0 0.5 0.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 35.9 -65.4 36.5
LAB*LABa 35.9 -65.4 36.5
LAB*TCHa 35.0 71.86 150.91

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 0.0 0.25 0.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 31.9 -71.17 21.17
LAB*LABa 31.9 -71.17 21.17
LAB*TCHa 31.9 -71.17 21.17

relative Inform. Technology (IT)
olvi3* 0.0 0.1 0.0 (1.0)
cmyn3* 0.0 0.1 0.0 (0.0)
olvi4* 0.0 0.1 0.0 (1.0)
cmyn4* 0.0 0.1 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 26.24 -75.54 8.82
LAB*LABa 26.24 -75.54 8.82
LAB*TCHa 26.24 -75.54 8.82

relative Inform. Technology (IT)
olvi3* 0.0 0.05 0.0 (1.0)
cmyn3* 0.0 0.05 0.0 (0.0)
olvi4* 0.0 0.05 0.0 (1.0)
cmyn4* 0.0 0.05 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.18 -78.02 0.5
LAB*LABa 20.18 -78.02 0.5
LAB*TCHa 20.18 -78.02 0.5

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 (0.25)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 37.36 0.3 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.0 0.01 -

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.0 0.5 0.0 (0.0)
olvi4* 0.0 0.5 0.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 34.46 -31.2 18.11
LAB*LABa 34.46 -31.2 18.11
LAB*TCHa 35.0 35.93 150.91

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 0.0 0.25 0.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 31.9 -71.17 21.17
LAB*LABa 31.9 -71.17 21.17
LAB*TCHa 31.9 -71.17 21.17

relative Inform. Technology (IT)
olvi3* 0.0 0.1 0.0 (1.0)
cmyn3* 0.0 0.1 0.0 (0.0)
olvi4* 0.0 0.1 0.0 (1.0)
cmyn4* 0.0 0.1 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 26.24 -75.54 8.82
LAB*LABa 26.24 -75.54 8.82
LAB*TCHa 26.24 -75.54 8.82

relative Inform. Technology (IT)
olvi3* 0.0 0.05 0.0 (1.0)
cmyn3* 0.0 0.05 0.0 (0.0)
olvi4* 0.0 0.05 0.0 (1.0)
cmyn4* 0.0 0.05 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.18 -78.02 0.5
LAB*LABa 20.18 -78.02 0.5
LAB*TCHa 20.18 -78.02 0.5

relative Inform. Technology (IT)
olvi3* 0.0 0.0 1.0 (0.0)
cmyn3* 0.0 1.0 0.0 (0.0)
olvi4* 0.0 0.0 1.0 (0.0)
cmyn4* 0.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 18.02 0.0 0.46

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 0.0 0.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 15.0 0.0 0.0
LAB*LABa 15.0 0.0 0.0
LAB*TCHa 15.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.25 (1.0)
cmyn3* 0.0 0.0 0.25 (0.0)
olvi4* 0.0 0.0 0.25 (1.0)
cmyn4* 0.0 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 12.5 0.0 0.0
LAB*LABa 12.5 0.0 0.0
LAB*TCHa 12.5 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.1 (1.0)
cmyn3* 0.0 0.0 0.1 (0.0)
olvi4* 0.0 0.0 0.1 (1.0)
cmyn4* 0.0 0.0 0.1 (0.0)
standard and adapted CIELAB
LAB*LAB 10.0 0.0 0.0
LAB*LABa 10.0 0.0 0.0
LAB*TCHa 10.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.05 (1.0)
cmyn3* 0.0 0.0 0.05 (0.0)
olvi4* 0.0 0.0 0.05 (1.0)
cmyn4* 0.0 0.0 0.05 (0.0)
standard and adapted CIELAB
LAB*LAB 8.0 0.0 0.0
LAB*LABa 8.0 0.0 0.0
LAB*TCHa 8.0 0.0 0.0

TE500-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (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: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System ORS18

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

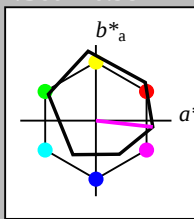
lab^*tch and lab^*nch

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*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 75.0 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 37.36 0.3 0.63
LAB*LABa 37.36 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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

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 -1.17
LAB*LABa 71.77 37.63 -1.17
LAB*TCHa 75.0 37.63 353.66

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 -1.17
LAB*LABa 52.42 37.63 -1.17
LAB*TCHa 50.0 37.63 353.66

relative CIELAB lab*
lab*lab 0.445 0.454 -0.208
lab*tch 0.625 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*trj 0.445 0.454 -0.208
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 33.08 37.63 -1.17
LAB*LABa 33.08 37.63 -1.17
LAB*TCHa 25.01 37.63 353.66

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 0.0 0.75 (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 25.54 19.17 -2.04
LAB*LABa 25.54 18.81 -2.08
LAB*TCHa 12.5 18.92 353.66

relative CIELAB lab*
lab*lab 0.097 0.248 -0.027
lab*tch 0.125 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.097 0.227 -0.103
lab*tce 0.125 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 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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

Output: Colorimetric Reflective System MRS18

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

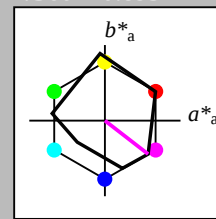
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

rgb*Ma: 1.0 0.0 1.0

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*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 75.0 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 37.36 0.3 0.63
LAB*LABa 37.36 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 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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

MRS18; adapted (a) CIELAB data

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

% Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 0.5 1.0 (1.0)
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 -1.17
LAB*LABa 71.77 37.63 -1.17
LAB*TCHa 75.0 37.63 353.66

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 -1.17
LAB*LABa 52.42 37.63 -1.17
LAB*TCHa 50.0 37.63 353.66

relative CIELAB lab*
lab*lab 0.445 0.454 -0.208
lab*tch 0.625 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*trj 0.445 0.454 -0.208
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 33.08 37.63 -1.17
LAB*LABa 33.08 37.63 -1.17
LAB*TCHa 25.01 37.63 353.66

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 0.0 0.75 (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 25.54 19.17 -2.04
LAB*LABa 25.54 18.81 -2.08
LAB*TCHa 12.5 18.92 353.66

relative CIELAB lab*
lab*lab 0.097 0.248 -0.027
lab*tch 0.125 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.097 0.227 -0.103
lab*tce 0.125 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 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 0.5 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 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

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 -1.17
LAB*LABa 52.42 37.63 -1.17
LAB*TCHa 50.0 37.63 353.66

relative CIELAB lab*
lab*lab 0.445 0.454 -0.208
lab*tch 0.625 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*trj 0.445 0.454 -0.208
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 33.08 37.63 -1.17
LAB*LABa 33.08 37.63 -1.17
LAB*TCHa 25.01 37.63 353.66

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 0.0 0.75 (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 25.54 19.17 -2.04
LAB*LABa 25.54 18.81 -2.08
LAB*TCHa 12.5 18.92 353.66

relative CIELAB lab*
lab*lab 0.097 0.248 -0.027
lab*tch 0.125 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.097 0.227 -0.103
lab*tce 0.125 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 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0

output: *oly** *setrabc* color

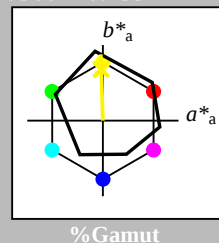
Input: Colorimetric Reflective System ORS18

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	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)
LAB*Lab	95.41	-0.97	4.75	
LAB*Lab	95.41	0.0	0.0	
LAB*Lab	99.99	0.01	0.0	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*ch	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*trc	1.0	0.0	0.0
lab*ncc	0.0	0.0	0.0

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)
LAB*Lab	93.11	-1.64	26.52	
LAB*Lab	93.11	-0.7	21.93	
LAB*Lab	87.5	21.93	91.86	

relative CIELAB lab*

lab*lab	0.97	-0.007	0.25
lab*ch	0.875	0.25	0.255
lab*nch	0.0	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.97	0.0	0.25
lab*trc	0.875	0.25	0.25
lab*ncc	0.0	0.25	0.25

relative Inform. Technology (IT)

olvi3*	1.0	0.951	0.5	(1.0)
cmyn3*	0.0	0.049	0.5	(0.0)
olvi4*	1.0	0.951	0.5	(1.0)
cmyn4*	0.0	0.049	0.5	(0.0)
LAB*Lab	90.8	-2.3	48.29	
LAB*Lab	90.8	-1.41	43.85	
LAB*Lab	75.0	43.87	91.85	

relative CIELAB lab*

lab*lab	0.94	-0.015	0.5
lab*ch	0.75	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*trj	0.94	0.0	0.5
lab*trc	0.75	0.5	0.25
lab*ncc	0.0	0.5	0.25

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)
LAB*Lab	88.49	-2.96	70.06	
LAB*Lab	88.49	-2.11	65.77	
LAB*Lab	62.5	65.81	91.85	

relative CIELAB lab*

lab*lab	0.911	-0.023	0.75
lab*ch	0.625	0.75	0.255
lab*nch	0.0	0.75	0.255

relative Natural Colour (NC)

lab*trj	0.911	0.0	0.75
lab*trc	0.625	0.75	0.25
lab*ncc	0.0	0.75	0.25

relative Inform. Technology (IT)

olvi3*	1.0	0.901	0.0	(1.0)
cmyn3*	0.0	0.099	0.0	(0.0)
olvi4*	1.0	0.902	0.0	(1.0)
cmyn4*	0.0	0.099	0.0	(0.0)
LAB*Lab	86.15	-3.62	91.83	
LAB*Lab	86.15	-2.82	87.69	
LAB*Lab	50.0	87.73	91.85	

relative CIELAB lab*

lab*lab	0.881	-0.031	0.999
lab*ch	0.5	1.0	0.255
lab*nch	0.0	1.0	0.255

relative Natural Colour (NC)

lab*trj	0.881	0.0	1.0
lab*trc	0.5	1.0	0.25
lab*ncc	0.0	1.0	0.25

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)
LAB*Lab	56.71	-0.23	21.4	
LAB*Lab	56.71	-0.71	0.0	
LAB*Lab	50.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*ch	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*trc	0.5	0.0	0.0
lab*ncc	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	0.988	0.75	(1.0)
cmyn4*	0.0	0.012	0.25	(0.0)
LAB*Lab	74.38	-1.26	24.91	
LAB*Lab	74.38	-0.68	21.57	
LAB*Lab	62.5	21.58	91.84	

relative CIELAB lab*

lab*lab	0.728	-0.007	0.25
lab*ch	0.525	0.25	0.255
lab*nch	0.25	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.728	0.0	0.25
lab*trc	0.525	0.25	0.25
lab*ncc	0.25	0.25	0.25

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	0.988	0.75	(1.0)
cmyn4*	0.0	0.012	0.25	(0.0)
LAB*Lab	74.38	-1.26	24.91	
LAB*Lab	74.38	-0.68	21.57	
LAB*Lab	62.5	21.58	91.84	

relative CIELAB lab*

lab*lab	0.728	-0.007	0.25
lab*ch	0.525	0.25	0.255
lab*nch	0.25	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.728	0.0	0.25
lab*trc	0.525	0.25	0.25
lab*ncc	0.25	0.25	0.25

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	0.988	0.75	(1.0)
cmyn4*	0.0	0.012	0.25	(0.0)
LAB*Lab	74.38	-1.26	24.91	
LAB*Lab	74.38	-0.68	21.57	
LAB*Lab	62.5	21.58	91.84	

relative CIELAB lab*

lab*lab	0.728	-0.007	0.25
lab*ch	0.525	0.25	0.255
lab*nch	0.25	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.728	0.0	0.25
lab*trc	0.525	0.25	0.25
lab*ncc	0.25	0.25	0.25

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	0.988	0.75	(1.0)
cmyn4*	0.0	0.012	0.25	(0.0)
LAB*Lab	74.38	-1.26	24.91	
LAB*Lab	74.38	-0.68	21.57	
LAB*Lab	62.5	21.58	91.84	

relative CIELAB lab*

lab*lab	0.728	-0.007	0.25
lab*ch	0.525	0.25	0.255
lab*nch	0.25	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.728	0.0	0.25
lab*trc	0.525	0.25	0.25
lab*ncc	0.25	0.25	0.25

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)
LAB*Lab	37.36	0.3	0.83	
LAB*Lab	37.36	0.0	0.0	
LAB*Lab	25.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	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*trc	0.25	0.0	0.0
lab*ncc	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)
LAB*Lab	35.05	-0.69	21.92	
LAB*Lab	35.05	-0.69	21.92	
LAB*Lab	12.5	21.93	91.84	

relative CIELAB lab*

lab*lab	0.22	-0.007	0.25
lab*ch	0.125	0.25	0.255
lab*nch	0.0	0.25	0.255

relative Natural Colour (NC)

lab*trj	0.125	0.25	0.25
lab*trc	0.125	0.25	0.25
lab*ncc	0.0	0.25	0.25

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	0.951	0.5	(1.0)
cmyn4*	0.0	0.049	0.5	(0.0)
LAB*Lab	86.15	-3.62	91.83	
LAB*Lab	86.15	-2.82	87.69	
LAB*Lab	50.0	87.73	91.85	

relative CIELAB lab*

lab*lab	0.661	-0.023	0.75
lab*ch	0.375	0.75	0.255
lab*nch	0.0	0.75	0.255

relative Natural Colour (NC)

lab*trj	0.661	0.0	0.75
lab*trc	0.375	0.75	0.25
lab*ncc	0.0	0.75	0.25

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)
LAB*Lab	37.36	0.3	0.83	
LAB*Lab	37.36	0.0	0.0	
LAB*Lab	25.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	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*trc	0.25	0.0	0.0
lab*ncc	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)
LAB*Lab	37.36	0.3	0.83	
LAB*Lab	37.36	0.0	0.0	
LAB*Lab	25.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	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*trc	0.25	0.0	0.0
lab*ncc	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)
LAB*Lab	37.36	0.3	0.83	
LAB*Lab	37.36	0.0	0.0	
LAB*Lab	25.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	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*trc	0.25	0.0	0.0
lab*ncc	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)
LAB*Lab	37.36	0.3	0.83	
LAB*Lab	37.36	0.0	0.0	
LAB*Lab	25.0	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	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*trc	0.25	0.0	0.0
lab*ncc	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.476	0.0	(1.0)
cmyn3*	0.5	0.524	0.0	(0.0)
olvi4*	1.0	0.976	0.5	0.5
cmyn4*	0.0	0.024	0.5	0.5
Standard and adapted CIELAB				
*LAB	53.35	-1.55	45.05	
*LABa	53.35	-1.38	43.13	
*LABb	25.01	43.16	91.84	
Standard CIELAB Lab				
*lab		-0.015	0.5	
*lch	0.25	0.5	0.255	
*nch	0.5	0.5	0.255	
relative Natural Colour (NC)				
*lrv	0.457	0.0	0.5	
*lce	0.25	0.5	0.25	
*nce	0.5	0.5	0.255	

Input: Colorimetric Reflective System ORS18

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

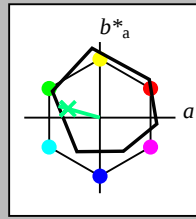
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmyn3* 0.0 0.0 0.0 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 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)
 cmyn3* 0.25 0.25 0.25 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 0.862 -0.24 0.067
 lab*tch 0.875 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.862 -0.249 0.0
 lab*tce 0.875 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmyn3* 0.25 0.25 0.25 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 0.75 0.75 0.75 (1.0)
 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)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 0.5 0.5 0.5 (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)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 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*LABa 37.36 0.0 0.0
 LAB*LABb 37.36 0.0 0.0

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.375 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.362 -0.249 0.0
 lab*tce 0.375 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

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)
 olv3* 0.5 0.5 0.5 (1.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 74.1 -27.96 10.94
 LAB*LABa 74.1 -27.96 10.94
 LAB*LABb 74.1 -27.96 10.94

relative CIELAB lab*
 lab*lab 0.75 0.75 0.75 (1.0)
 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* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 54.75 -27.96 9.64
 LAB*LABa 54.75 -27.96 9.64
 LAB*LABb 54.75 -27.96 9.64

relative CIELAB lab*
 lab*lab 0.5 0.5 0.5 (1.0)
 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* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 52.8 -54.95 17.13
 LAB*LABa 52.8 -54.95 17.13
 LAB*LABb 52.8 -54.95 17.13

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 50.0 -56.88 16.45
 LAB*LABa 50.0 -56.88 16.45
 LAB*LABb 50.0 -56.88 16.45

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 35.41 -27.28 8.34
 LAB*LABa 35.41 -27.28 8.34
 LAB*LABb 35.41 -27.28 8.34

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 25.01 -28.44 16.45
 LAB*LABa 25.01 -28.44 16.45
 LAB*LABb 25.01 -28.44 16.45

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 12.5 -13.69 3.82
 LAB*LABa 12.5 -13.69 3.82
 LAB*LABb 12.5 -13.69 3.82

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 0.0 0.0 0.0
 LAB*LABa 0.0 0.0 0.0
 LAB*LABb 0.0 0.0 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 0.0 0.0 0.0
 LAB*LABa 0.0 0.0 0.0
 LAB*LABb 0.0 0.0 0.0

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

Output: Colorimetric Reflective System MRS18

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

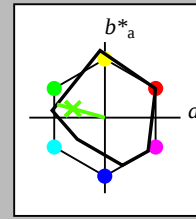
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmyn3* 0.0 0.0 0.0 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 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)
 cmyn3* 0.25 0.25 0.25 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 0.75 0.75 0.75 (1.0)
 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)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 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

relative CIELAB lab*
 lab*lab 0.5 0.5 0.5 (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)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 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*LABa 37.36 0.0 0.0
 LAB*LABb 37.36 0.0 0.0

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.375 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.362 -0.249 0.0
 lab*tce 0.375 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 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 0.0
 LAB*LABa 18.02 0.0 0.0
 LAB*LABb 18.02 0.0 0.0

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.125 0.25 0.457
 lab*nch 0.0 0.25 0.457
 relative Natural Colour (NC)
 lab*trj 0.125 0.25 0.5
 lab*tce 0.125 0.25 0.5
 lab*nce 0.0 0.25 0.998

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0

