

Input: Colorimetric Reflective System MRS18

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

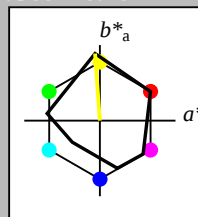
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	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 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 47.5
LAB*LAB 95.41 0.0 0.0
LAB*TC_{Ha} 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*TC_{Ha} 75.00 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TC_{Ha} 55.00 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 -0.3 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TC_{Ha} 35.00 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TC_{Ha} 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 11.01 0.0 0.01
LAB*LAB 11.01 0.0 0.0
LAB*TC_{Ha} 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* 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 94.22 -2.54 26.86
LAB*LAB 94.22 -1.58 22.18
LAB*TC_{Ha} 97.5 22.24 94.1

relative CIELAB lab*
lab*lab 0.985 -0.017 0.249
lab*tch 0.875 0.25 0.261
lab*nch 0.0 0.25 0.261
relative Natural Colour (NC)
lab*trj 0.985 -0.011 0.25
lab*tce 0.875 0.25 0.258
lab*nce 0.0 0.25 0.258

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.88 -2.17 25.56
LAB*LAB 74.88 -1.58 22.19
LAB*TC_{Ha} 72.5 22.24 94.1

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TC_{Ha} 55.00 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 -0.3 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TC_{Ha} 35.00 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TC_{Ha} 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 11.01 0.0 0.01
LAB*LAB 11.01 0.0 0.0
LAB*TC_{Ha} 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* 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 93.05 -4.11 48.97
LAB*LAB 93.05 -3.17 44.37
LAB*TC_{Ha} 94.0 44.8 94.1

relative CIELAB lab*
lab*lab 0.969 -0.035 0.499
lab*tch 0.75 0.5 0.261
lab*nch 0.0 0.5 0.261
relative Natural Colour (NC)
lab*trj 0.969 -0.023 0.499
lab*tce 0.75 0.5 0.258
lab*nce 0.0 0.5 0.258

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 73.7 -3.74 47.67
LAB*LAB 73.7 -3.17 44.38
LAB*TC_{Ha} 70.0 44.9 94.1

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TC_{Ha} 55.00 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 -0.3 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TC_{Ha} 35.00 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TC_{Ha} 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 11.01 0.0 0.01
LAB*LAB 11.01 0.0 0.0
LAB*TC_{Ha} 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* 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 91.87 -5.68 71.07
LAB*LAB 91.87 -4.77 66.55
LAB*TC_{Ha} 92.5 66.73 94.1

relative CIELAB lab*
lab*lab 0.954 -0.053 0.748
lab*tch 0.625 0.75 0.261
lab*nch 0.0 0.75 0.261
relative Natural Colour (NC)
lab*trj 0.954 -0.036 0.749
lab*tce 0.625 0.75 0.258
lab*nce 0.0 0.75 0.258

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 72.53 -5.31 69.77
LAB*LAB 72.53 -4.77 66.55
LAB*TC_{Ha} 70.0 66.73 94.1

relative CIELAB lab*
lab*lab 0.704 -0.053 0.748
lab*tch 0.375 0.75 0.261
lab*nch 0.0 0.75 0.261
relative Natural Colour (NC)
lab*trj 0.704 -0.036 0.749
lab*tce 0.375 0.75 0.258
lab*nce 0.0 0.75 0.258

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TC_{Ha} 55.00 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 -0.3 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TC_{Ha} 35.00 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TC_{Ha} 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 11.01 0.0 0.01
LAB*LAB 11.01 0.0 0.0
LAB*TC_{Ha} 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* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*TC_{Ha} 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 74.31 0.02 0.0
LAB*LAB 74.31 0.0 0.0
LAB*TC_{Ha} 75.00 0.01 -

relative CIELAB lab*
lab*lab 0.738 -0.002 0.25
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.738 0.01 0.25
lab*tce 0.75 0.0 0.243
lab*nce 0.0 0.0 0.243

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

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.243
LAB*LAB 32.11 0.0 0.0
LAB*TC_{Ha} 30.0 0.01 -

relative CIELAB lab*
lab*lab 0.488 -0.004 0.5
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.243

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

www.ps.bam.de/UE53/10Q/Q53E02FP.PS/.PDF; linearized output
 F: Output Linearization (OL) data UE53/10Q/Q53E02FP.DAT in File (F)

Input: Colorimetric Reflective System MRS18

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

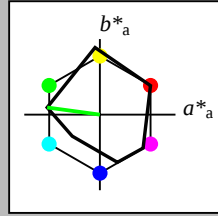
lab^*ch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

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

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* 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)
 LAB*LAB 76.06 -0.6 3.44
 LAB*Lab 76.06 0.0 0.0
 LAB*TCMa 75.00 0.01

relative CIELAB lab*

lab*lab 0.75 0.0 0.0
 lab*ch 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*trc 0.75 0.0 0.0
 lab*ncc 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)
 LAB*LAB 56.71 -0.23 2.14
 LAB*Lab 56.71 0.0 0.0
 LAB*TCMa 50.00 0.01

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* 0.25 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 0.13 0.83
 LAB*Lab 37.36 0.0 0.0
 LAB*TCMa 25.00 0.01

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* 0.0 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)
 LAB*LAB 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01

relative CIELAB lab*

lab*lab 0.0 0.0 0.0
 lab*ch 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*trc 0.0 0.0 0.0
 lab*ncc 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)
 LAB*LAB 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01

relative CIELAB lab*

lab*lab 0.0 0.0 0.0
 lab*ch 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*trc 0.0 0.0 0.0
 lab*ncc 0.0 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)
 LAB*LAB 84.58 -18.19 6.39
 LAB*Lab 84.58 -17.42 2.36
 LAB*TCMa 97.5 17.59 172.29

relative CIELAB lab*

lab*lab 0.86 -0.247 0.034
 lab*ch 0.875 0.25 0.479
 lab*nch 0.0 0.25 0.479
 standard and adapted CIELAB
 lab*trj 0.86 -0.247 -0.028
 lab*trc 0.875 0.25 0.518
 lab*ncc 0.0 0.25 0.670

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 (0.75)
 cmyn4* 0.25 0.0 0.25 (0.25)
 LAB*LAB 65.23 -17.42 2.36
 LAB*Lab 65.23 -17.42 2.36
 LAB*TCMa 62.5 17.59 172.29

relative CIELAB lab*

lab*lab 0.61 -0.247 -0.028
 lab*ch 0.625 0.25 0.518
 lab*nch 0.0 0.25 0.518
 standard and adapted CIELAB
 lab*trj 0.61 -0.247 -0.028
 lab*trc 0.625 0.25 0.518
 lab*ncc 0.0 0.25 0.670

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 (0.5)
 cmyn4* 0.25 0.0 0.25 (0.5)
 LAB*LAB 45.88 -17.46 3.78
 LAB*Lab 45.88 -17.42 2.36
 LAB*TCMa 37.5 17.59 172.29

relative CIELAB lab*

lab*lab 0.36 -0.247 -0.028
 lab*ch 0.375 0.25 0.479
 lab*nch 0.0 0.25 0.479
 standard and adapted CIELAB
 lab*trj 0.36 -0.247 -0.028
 lab*trc 0.375 0.25 0.518
 lab*ncc 0.0 0.25 0.670

relative Inform. Technology (IT)

olvi3* 0.0 0.5 0.0 (1.0)
 cmyn3* 1.0 0.5 0.0 (0.0)
 olvi4* 0.5 0.5 0.0 (0.5)
 cmyn4* 0.5 0.0 0.5 (0.5)
 LAB*LAB 35.06 -34.67 5.41
 LAB*Lab 35.06 -34.65 4.72
 LAB*TCMa 25.01 35.18 172.29

relative CIELAB lab*

lab*lab 0.22 -0.494 0.067
 lab*ch 0.25 0.5 0.479
 lab*nch 0.0 0.5 0.479
 standard and adapted CIELAB
 lab*trj 0.22 -0.494 -0.056
 lab*trc 0.25 0.5 0.518
 lab*ncc 0.0 0.5 0.670

relative Inform. Technology (IT)

olvi3* 0.11 -0.247 0.034
 cmyn3* 0.125 0.25 0.479
 olvi4* 0.1 0.0 0.0 (0.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 LAB*LAB 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01

relative CIELAB lab*

lab*lab 0.11 -0.247 0.034
 lab*ch 0.125 0.25 0.479
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 lab*trj 0.11 -0.247 -0.028
 lab*trc 0.125 0.25 0.518
 lab*ncc 0.0 0.25 0.670

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)
 LAB*LAB 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01

relative CIELAB lab*

lab*lab 0.0 0.0 0.0
 lab*ch 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*trc 0.0 0.0 0.0
 lab*ncc 0.0 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* 0.25 1.0 0.25 (1.0)
 cmyn3* 0.75 0.0 0.75 (0.0)
 olvi4* 0.25 1.0 0.25 (1.0)
 cmyn4* 0.75 0.0 0.75 (0.0)
 LAB*LAB 62.93 -52.64 9.65
 LAB*Lab 62.93 -52.28 7.08
 LAB*TCMa 62.5 52.77 172.29

relative CIELAB lab*

lab*lab 0.38 -0.742 0.101
 lab*ch 0.625 0.75 0.479
 lab*nch 0.0 0.75 0.479
 standard and adapted CIELAB
 lab*trj 0.38 -0.742 -0.085
 lab*trc 0.625 0.75 0.518
 lab*ncc 0.0 0.75 0.670

relative Inform. Technology (IT)

olvi3* 0.0 1.0 0.0 (0.0)
 cmyn3* 1.0 0.0 1.0 (0.0)
 olvi4* 0.0 1.0 0.0 (0.0)
 cmyn4* 1.0 0.0 1.0 (0.0)
 LAB*LAB 52.11 -69.73 9.44
 LAB*Lab 52.11 -69.71 9.44
 LAB*TCMa 50.0 70.36 172.29

relative CIELAB lab*

lab*lab 0.441 -0.99 0.134
 lab*ch 0.5 1.0 0.479
 lab*nch 0.0 1.0 0.479
 standard and adapted CIELAB
 lab*trj 0.441 -0.992 -0.114
 lab*trc 0.5 1.0 0.518
 lab*ncc 0.0 1.0 0.670

relative Inform. Technology (IT)

olvi3* 0.33 -0.744 -0.085
 cmyn3* 0.625 0.75 0.518
 olvi4* 0.33 0.0 0.33 (0.33)
 cmyn4* 0.625 0.75 0.518
 LAB*LAB 43.59 -52.28 7.08
 LAB*Lab 43.59 -52.28 7.08
 LAB*TCMa 37.51 52.77 172.29

relative CIELAB lab*

lab*lab 0.33 -0.742 0.101
 lab*ch 0.375 0.75 0.479
 lab*nch 0.0 0.75 0.479
 standard and adapted CIELAB
 lab*trj 0.33 -0.744 -0.085
 lab*trc 0.375 0.75 0.518
 lab*ncc 0.0 0.75 0.670

relative Inform. Technology (IT)

olvi3* 0.0 0.5 0.0 (1.0)
 cmyn3* 1.0 0.5 0.0 (0.0)
 olvi4* 0.5 0.5 0.0 (0.5)
 cmyn4* 0.5 0.0 0.5 (0.5)
 LAB*LAB 35.06 -34.67 5.41
 LAB*Lab 35.06 -34.65 4.72
 LAB*TCMa 25.01 35.18 172.29

relative CIELAB lab*

lab*lab 0.22 -0.494 0.067
 lab*ch 0.25 0.5 0.479
 lab*nch 0.0 0.5 0.479
 standard and adapted CIELAB
 lab*trj 0.22 -0.494 -0.056
 lab*trc 0.25 0.5 0.518
 lab*ncc 0.0 0.5 0.670

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)
 LAB*LAB 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01

relative CIELAB lab*

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

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 167/360 = 0.465$

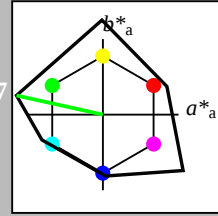
lab^*ch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

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)
 LAB*LAB 95.41 0.0 -0.01
 LAB*Lab 95.41 0.0 0.0
 LAB*TCMa 99.99 0.01

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* 0.75 0.75 0.75 (1.0)
 cmyn3* 0.25 0.0 0.25 (0.0)
 olvi4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 LAB*LAB 87.32 -28.53 6.33
 LAB*Lab 87.32 -28.55 6.33
 LAB*TCMa 87.5 29.25 167.5

relative CIELAB lab*

lab*lab 0.904 -0.248 -0.018
 lab*ch 0.875 0.25 0.512
 lab*nch 0.0 0.25 0.512
 standard and adapted CIELAB
 lab*trj 0.904 -0.248 -0.018
 lab*trc 0.875 0.25 0.512
 lab*ncc 0.0 0.25 0.646

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 74.31 0.02 0.0
 LAB*Lab 74.31 0.02 0.0
 LAB*TCMa 75.00 0.01

relative CIELAB lab*

lab*lab 0.75 0.0 0.0
 lab*ch 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*trc 0.75 0.0 0.0
 lab*ncc 0.0 0.0 0.0

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 (0.5)
 cmyn4* 0.25 0.0 0.25 (0.5)
 LAB*LAB 66.22 -28.53 6.34
 LAB*Lab 66.22 -28.56 6.34
 LAB*TCMa 62.5 29.27 167.5

relative CIELAB lab*

lab*lab 0.625 0.25 0.512
 lab*ch 0.625 0.25 0.512
 lab*nch 0.0 0.25 0.512
 standard and adapted CIELAB
 lab*trj 0.625 0.25 0.512
 lab*trc 0.625 0.25 0.512
 lab*ncc 0.0 0.25 0.646

relative Inform. Technology (IT)

olvi3* 0.0 0.5 0.0 (1.0)
 cmyn3* 1.0 0.5 0.0 (0.0)
 olvi4* 0.5 0.5 0.0 (0.5)
 cmyn4* 0.5 0.0 0.5 (0.5)
 LAB*LAB 50.00 -34.65 4.72
 LAB*Lab 50.00 -34.65 4.72
 LAB*TCMa 25.01 35.18 172.29

relative CIELAB lab*

lab*lab 0.404 -0.992 -0.114
 lab*ch 0.5 1.0 0.479
 lab*nch 0.0 1.0 0.479
 standard and adapted CIELAB
 lab*trj 0.404 -0.992 -0.114
 lab*trc 0.5 1.0 0.518
 lab*ncc 0.0

Input: Colorimetric Reflective System MRS18

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

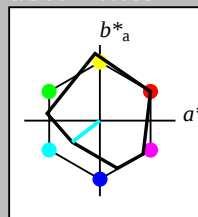
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 218

rgb*Ma: 0.0 1.0 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
LAB*LAB	95.41	-0.97	47.5	0.0
LAB*LAB	95.41	0.0	0.0	0.0
LAB*TCMa	99.99	0.01	0.0	0.0

standard and adapted CIELAB

LAB*LAB	95.41	-0.97	47.5	0.0
LAB*LAB	95.41	0.0	0.0	0.0
LAB*TCMa	99.99	0.01	0.0	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	0.0
lab*tch	1.0	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0	0.0
lab*trj	1.0	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.75	1.0	1.0	(1.0)
cmyn3*	0.25	0.0	0.0	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.0	0.0	0.0
LAB*LAB	82.81	-0.87	-3.2	0.0
LAB*LAB	82.81	-0.13	-7.11	0.0
LAB*TCMa	97.5	11.58	21.91	0.0

standard and adapted CIELAB

LAB*LAB	82.81	-0.87	-3.2	0.0
LAB*LAB	82.81	-0.13	-7.11	0.0
LAB*TCMa	97.5	11.58	21.91	0.0

relative CIELAB lab*

lab*lab	0.837	-0.196	-0.153	0.0
lab*tch	0.875	0.25	0.605	0.0
lab*nch	0.0	0.25	0.605	0.0
lab*trj	0.837	-0.176	-0.176	0.0
lab*tce	0.875	0.25	0.625	0.0
lab*nce	0.0	0.25	0.625	0.0

relative Inform. Technology (IT)

olvi3*	0.5	1.0	1.0	(1.0)
cmyn3*	0.5	0.0	0.0	(0.0)
olvi4*	0.5	1.0	1.0	1.0
cmyn4*	0.5	0.0	0.0	0.0
LAB*LAB	70.21	-18.77	-11.17	0.0
LAB*LAB	70.21	-18.27	-14.23	0.0
LAB*TCMa	75.0	23.17	21.91	0.0

standard and adapted CIELAB

LAB*LAB	70.21	-18.77	-11.17	0.0
LAB*LAB	70.21	-18.27	-14.23	0.0
LAB*TCMa	75.0	23.17	21.91	0.0

relative CIELAB lab*

lab*lab	0.674	-0.393	-0.306	0.0
lab*tch	0.75	0.5	0.605	0.0
lab*nch	0.0	0.5	0.605	0.0
lab*trj	0.674	-0.353	-0.352	0.0
lab*tce	0.75	0.5	0.625	0.0
lab*nce	0.0	0.5	0.625	0.0

relative Inform. Technology (IT)

olvi3*	0.25	1.0	1.0	(1.0)
cmyn3*	0.25	0.0	0.0	(0.0)
olvi4*	0.25	1.0	1.0	1.0
cmyn4*	0.25	0.0	0.0	0.0
LAB*LAB	57.62	-27.67	-19.14	0.0
LAB*LAB	57.62	-27.42	-21.35	0.0
LAB*TCMa	62.5	34.76	21.91	0.0

standard and adapted CIELAB

LAB*LAB	57.62	-27.67	-19.14	0.0
LAB*LAB	57.62	-27.42	-21.35	0.0
LAB*TCMa	62.5	34.76	21.91	0.0

relative CIELAB lab*

lab*lab	0.512	-0.591	-0.46	0.0
lab*tch	0.625	0.75	0.605	0.0
lab*nch	0.0	0.75	0.605	0.0
lab*trj	0.512	-0.529	-0.529	0.0
lab*tce	0.625	0.75	0.625	0.0
lab*nce	0.0	0.75	0.625	0.0

relative Inform. Technology (IT)

olvi3*	0.0	1.0	1.0	(1.0)
cmyn3*	1.0	0.0	0.0	(0.0)
olvi4*	0.0	1.0	1.0	1.0
cmyn4*	1.0	0.0	0.0	0.0
LAB*LAB	45.03	-36.57	-27.11	0.0
LAB*LAB	45.03	-36.36	-29.47	0.0
LAB*TCMa	50.0	46.35	21.91	0.0

standard and adapted CIELAB

LAB*LAB	45.03	-36.57	-27.11	0.0
LAB*LAB	45.03	-36.36	-29.47	0.0
LAB*TCMa	50.0	46.35	21.91	0.0

relative CIELAB lab*

lab*lab	0.349	-0.788	-0.613	0.0
lab*tch	0.5	1.0	0.605	0.0
lab*nch	0.0	1.0	0.605	0.0
lab*trj	0.349	-0.706	-0.706	0.0
lab*tce	0.5	1.0	0.625	0.0
lab*nce	0.0	1.0	0.625	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*	0.5	0.5	0.5	0.0
LAB*LAB	53.21	0.04	-0.136	0.0
LAB*LAB	53.21	0.04	-0.136	0.0
LAB*TCMa	50.0	0.01	0.0	0.0

standard and adapted CIELAB

LAB*LAB	53.21	0.04	-0.136	0.0
LAB*LAB	53.21	0.04	-0.136	0.0
LAB*TCMa	50.0	0.01	0.0	0.0

relative CIELAB lab*

lab*lab	0.5	0.5	0.0	0.0
lab*tch	0.5	0.5	0.0	0.0
lab*nch	0.0	0.5	0.0	0.0
lab*trj	0.5	0.5	0.0	0.0
lab*tce	0.5	0.5	0.0	0.0
lab*nce	0.0	0.5	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.5	0.5	(1.0)
cmyn3*	0.75	0.5	0.5	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.5	0.5	0.0
LAB*LAB	44.22	-20.09	-8.34	0.0
LAB*LAB	44.22	-20.14	-8.36	0.0
LAB*TCMa	37.5	21.82	20.54	0.0

standard and adapted CIELAB

LAB*LAB	44.22	-20.09	-8.34	0.0
LAB*LAB	44.22	-20.14	-8.36	0.0
LAB*TCMa	37.5	21.82	20.54	0.0

relative CIELAB lab*

lab*lab	0.394	-0.23	-0.095	0.0
lab*tch	0.375	0.25	0.563	0.0
lab*nch	0.0	0.25	0.563	0.0
lab*trj	0.394	-0.208	-0.136	0.0
lab*tce	0.375	0.25	0.592	0.0
lab*nce	0.0	0.25	0.592	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	0.75	0.5	0.5	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.5	0.5	0.0
LAB*LAB	44.22	-20.09	-8.34	0.0
LAB*LAB	44.22	-20.14	-8.36	0.0
LAB*TCMa	37.5	21.82	20.54	0.0

standard and adapted CIELAB

LAB*LAB	44.22	-20.09	-8.34	0.0
LAB*LAB	44.22	-20.14	-8.36	0.0
LAB*TCMa	37.5	21.82	20.54	0.0

relative CIELAB lab*

lab*lab	0.394	-0.23	-0.095	0.0
lab*tch	0.375	0.25	0.563	0.0
lab*nch	0.0	0.25	0.563	0.0
lab*trj	0.394	-0.208	-0.136	0.0
lab*tce	0.375	0.25	0.592	0.0
lab*nce	0.0	0.25	0.592	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.75	0.75	(1.0)
cmyn3*	0.75	0.25	0.25	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.75	0.75	0.0
LAB*LAB	56.33	-40.26	-16.71	0.0
LAB*LAB	56.33	-40.3	-16.72	0.0
LAB*TCMa	50.0	43.64	20.54	0.0

standard and adapted CIELAB

LAB*LAB	56.33	-40.26	-16.71	0.0
LAB*LAB	56.33	-40.3	-16.72	0.0
LAB*TCMa	50.0	43.64	20.54	0.0

relative CIELAB lab*

lab*lab	0.681	-0.692	-0.286	0.0
lab*tch	0.625	0.75	0.563	0.0
lab*nch	0.0	0.75	0.563	0.0
lab*trj	0.681	-0.627	-0.409	0.0
lab*tce	0.625	0.75	0.592	0.0
lab*nce	0.0	0.75	0.592	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.75	0.75	(1.0)
cmyn3*	1.0	0.25	0.25	(0.0)
olvi4*	0.25	1.0	1.0	1.0
cmyn4*	0.75	0.25	0.25	0.0
LAB*LAB	59.47	-80.55	-33.44	0.0
LAB*LAB	59.47	-80.59	-33.44	0.0
LAB*TCMa	50.0	87.26	20.54	0.0

standard and adapted CIELAB

LAB*LAB	59.47	-80.55	-33.44	0.0
LAB*LAB	59.47	-80.59	-33.44	0.0
LAB*TCMa	50.0	87.26	20.54	0.0

relative CIELAB lab*

lab*lab	0.574	-0.836	-0.546	0.0
lab*tch	0.5	1.0	0.563	0.0
lab*nch	0.0	1.0	0.563	0.0
lab*trj	0.574	-0.836	-0.546	0.0
lab*tce	0.5	1.0	0.592	0.0
lab*nce	0.0	1.0	0.592	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*	0.25	0.25	0.25	0.0
LAB*LAB	37.36	-13.03	-0.83	0.0
LAB*LAB	37.36	-13.03	-0.83	0.0
LAB*TCMa	25.0	0.01	0.0	0.0

standard and adapted CIELAB

LAB*LAB	37.36	-13.03	-0.83	0.0
LAB*LAB	37.36	-13.03	-0.83	0.0
LAB*TCMa	25.0	0.01	0.0	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0	0.0
lab*tch	0.25	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0	0.0
lab*trj	0.25	0.0	0.0	0.0
lab*tce	0.25	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	1.0	0.5	0.5	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.5	0.5	0.0
LAB*LAB	44.11	-9.13	-5.81	0.0
LAB*LAB	44.11	-9.13	-5.81	0.0
LAB*TCMa	37.5	11.59	21.91	0.0

standard and adapted CIELAB

LAB*LAB	44.11	-9.13	-5.81	0.0
LAB*LAB	44.11	-9.13	-5.81	0.0
LAB*TCMa	37.5	11.59	21.91	0.0

relative CIELAB lab*

lab*lab	0.337	-0.196	-0.153	0.0
lab*tch	0.375	0.25	0.605	0.0
lab*nch	0.0	0.25	0.605	0.0
lab*trj	0.337	-0.176	-0.176	0.0
lab*tce	0.375	0.25	0.625	0.0
lab*nce	0.0	0.25	0.625	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	1.0	0.5	0.5	(0.0)
olvi4*	0.75	1.0	1.0	1.0
cmyn4*	0.25	0.5	0.5	0.0
LAB*LAB	31.52	-18.03	-13.78	0.0
LAB*LAB	31.52	-18.27	-14.23	0.0
LAB*TCMa	25.01	23.17	21.91	0.0

standard and adapted CIELAB

LAB*LAB	31.52	-18.03	-13.78	0.0
LAB*LAB	31.52	-18.27	-14.23	0.0
LAB*TCMa	25.01	23.17	21.91	0.0

relative CIELAB lab*

lab*lab	0.175	-0.393	-0.306	0.0
lab*tch	0.25	0.5	0.605	0.0
lab*nch	0.0	0.5	0.605	0.0
lab*trj	0.175	-0.353	-0.352	0.0
lab*tce	0.25	0.5	0.625	0.0
lab*nce	0.0	0.5	0.625	0.0

relative Inform. Technology (IT)

olvi3*	0.262	-0.591	-0.46	0.0
cmyn3*	0.737	0.75	0.605	0.0
olvi4*	0.25	1.0	1.0	1.0
cmyn4*	0.25	0.75	0.605	0.0
LAB*LAB	26.2	-0.229	-0.529	0.0
LAB*LAB	26.2	-0.229	-0.529	0.0
LAB*TCMa	25.0	0.75	0.605	0.0

standard and adapted CIELAB

LAB*LAB	26.2	-0.229	-0.529	0.0
LAB*LAB	26.2	-0.229	-0.529	0.0
LAB*TCMa	25.0	0.75	0.605	0.0

relative CIELAB lab*

lab*lab	0.262	-0.591	-0.46	0.0
lab*tch	0.375	0.75	0.605	0.0
lab*nch	0.0	0.75	0.605	0.0
lab*trj	0.262	-0.529	-0.529	0.0
lab*tce	0.375	0.75	0.625	0.0
lab*nce	0.0	0.75	0.625	0.0

Input: Colorimetric Reflective System MRS18

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

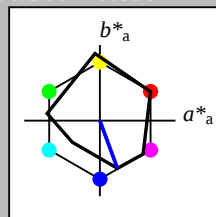
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

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 47.5
LAB*LAB 95.41 0.0 0.0
LAB*TCBa 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 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCBa 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCBa 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TCBa 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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 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* 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 80.72 5.1 -11.98
LAB*LAB 80.72 5.1 -11.98
LAB*TCBa 87.5 16.79 290.19

relative CIELAB lab*
lab*lab 0.62 0.173 -0.468
lab*tch 0.75 0.5 0.806
lab*nch 0.0 0.5 0.806
relative Natural Colour (NC)
lab*trj 0.62 0.125 -0.482
lab*tce 0.75 0.5 0.91
lab*nce 0.0 0.5 0.91

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 0.25
standard and adapted CIELAB
LAB*LAB 61.37 5.47 -13.29
LAB*LAB 61.37 5.47 -13.29
LAB*TCBa 62.5 16.8 290.19

relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.625 0.25 0.806
lab*nch 0.25 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.91
lab*tce 0.625 0.25 0.91
lab*nce 0.0 0.25 0.91

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 0.0
cmyn4* 0.5 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 46.68 11.39 -31.52
LAB*LAB 46.68 11.39 -31.52
LAB*TCBa 50.0 33.59 290.19

relative CIELAB lab*
lab*lab 0.431 0.259 -0.703
lab*tch 0.625 0.75 0.806
lab*nch 0.0 0.75 0.806
relative Natural Colour (NC)
lab*trj 0.431 0.193 -0.724
lab*tce 0.625 0.75 0.91
lab*nce 0.0 0.75 0.91

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 0.0
cmyn4* 0.5 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 27.34 11.92 -31.51
LAB*LAB 27.34 11.92 -31.51
LAB*TCBa 25.01 33.59 290.19

relative CIELAB lab*
lab*lab 0.181 0.259 -0.703
lab*tch 0.375 0.75 0.806
lab*nch 0.0 0.75 0.806
relative Natural Colour (NC)
lab*trj 0.181 0.193 -0.724
lab*tce 0.375 0.75 0.91
lab*nce 0.0 0.75 0.91

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 0.0
cmyn4* 0.5 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 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 NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

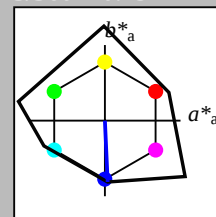
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

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 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*TCBa 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 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*TCBa 75.00 0.01

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*TCBa 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.08 0.0
LAB*LAB 32.11 0.08 0.0
LAB*TCBa 30.00 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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 11.01 0.01 0.01
LAB*LAB 11.01 0.01 0.01
LAB*TCBa 0.0 0.01

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

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

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

relative Inform. Technology (IT)
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* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 83.81 0.93 -20.28
LAB*LAB 83.81 0.93 -20.28
LAB*TCBa 87.5 20.31 272.57

relative CIELAB lab*
lab*lab 0.863 0.011 -0.249
lab*tch 0.875 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.863 0.003 -0.249
lab*tce 0.875 0.25 0.752
lab*nce 0.0 0.25 0.752

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 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 62.71 0.95 -20.28
LAB*LAB 62.71 0.95 -20.28
LAB*TCBa 62.5 20.32 272.57

relative CIELAB lab*
lab*lab 0.513 0.011 -0.249
lab*tch 0.525 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.513 0.003 -0.249
lab*tce 0.525 0.25 0.752
lab*nce 0.0 0.25 0.752

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 41.6 0.96 -20.28
LAB*LAB 41.6 0.96 -20.28
LAB*TCBa 37.5 20.32 272.57

relative CIELAB lab*
lab*lab 0.363 0.011 -0.249
lab*tch 0.375 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.363 0.003 -0.249
lab*tce 0.375 0.25 0.752
lab*nce 0.0 0.25 0.752

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.01 0.46
LAB*TCBa 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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.01 0.46
LAB*TCBa 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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.01 0.46
LAB*TCBa 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* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 83.81 0.93 -20.28
LAB*LAB 83.81 0.93 -20.28
LAB*TCBa 87.5 20.31 272.57

relative CIELAB lab*
lab*lab 0.863 0.011 -0.249
lab*tch 0.875 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.863 0.003 -0.249
lab*tce 0.875 0.25 0.752
lab*nce 0.0 0.25 0.752

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 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 62.71 0.95 -20.28
LAB*LAB 62.71 0.95 -20.28
LAB*TCBa 62.5 20.32 272.57

relative CIELAB lab*
lab*lab 0.513 0.011 -0.249
lab*tch 0.525 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.513 0.003 -0.249
lab*tce 0.525 0.25 0.752
lab*nce 0.0 0.25 0.752

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 41.6 0.96 -20.28
LAB*LAB 41.6 0.96 -20.28
LAB*TCBa 37.5 20.32 272.57

relative CIELAB lab*
lab*lab 0.363 0.011 -0.249
lab*tch 0.375 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.363 0.003 -0.249
lab*tce 0.375 0.25 0.752
lab*nce 0.0 0.25 0.752

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.46
LAB*LAB 18.02 0.01 0.46
LAB*TCBa 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*

Input: Colorimetric Reflective System MRS18

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

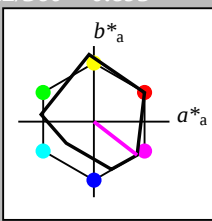
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

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

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.0 0.0 -
lab*tch 0.5 0.0 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.26 1.3 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 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 1.01 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 -

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

$n^* = 1.0$

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 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 60.29 13.6 -7.31
LAB*LABa 60.29 14.29 -11.05
LAB*TCHa 87.5 18.07 322.25

relative CIELAB lab*
lab*lab 0.895 0.198 -0.152
lab*tch 0.875 0.25 0.895
lab*nch 0.0 0.25 0.895
relative Natural Colour (NC)
lab*trj 0.895 0.198 -0.189
lab*tce 0.875 0.25 0.862
lab*nce 0.0 0.25 0.844

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.75 (1.0)
cmyn3* 0.25 0.5 0.25 (0.0)
olvi4* 1.0 0.5 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 60.94 13.97 -8.62
LAB*LABa 60.94 14.29 -11.06
LAB*TCHa 62.5 18.08 322.25

relative CIELAB lab*
lab*lab 0.725 0.5 0.725 (1.0)
lab*tch 0.625 0.25 0.895
lab*nch 0.0 0.25 0.895
relative Natural Colour (NC)
lab*trj 0.555 0.162 -0.189
lab*tce 0.625 0.25 0.862
lab*nce 0.25 0.25 0.844

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 0.5 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.0 0.0 -
lab*tch 0.5 0.0 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 0.25 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.26 1.3 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 -

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 1.0 0.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 50.06 42.76 -31.49
LAB*LABa 50.06 42.87 -33.19
LAB*TCHa 62.5 54.22 322.25

relative CIELAB lab*
lab*lab 0.414 0.593 -0.458
lab*tch 0.625 0.75 0.895
lab*nch 0.0 0.75 0.895
relative Natural Colour (NC)
lab*trj 0.414 0.486 -0.57
lab*tce 0.625 0.75 0.862
lab*nce 0.0 0.75 0.844

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 0.5 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 34.95 57.34 -43.57
LAB*LABa 34.95 57.16 -44.25
LAB*TCHa 50.0 72.29 322.25

relative CIELAB lab*
lab*lab 0.219 0.791 -0.611
lab*tch 0.5 0.0 0.895
lab*nch 0.0 0.0 0.895
relative Natural Colour (NC)
lab*trj 0.219 0.648 -0.76
lab*tce 0.5 0.0 0.862
lab*nce 0.0 0.0 0.844

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 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 26.48 28.92 -22.01
LAB*LABa 26.48 28.58 -22.12
LAB*TCHa 37.51 54.22 322.25

relative CIELAB lab*
lab*lab 0.164 0.593 -0.458
lab*tch 0.375 0.75 0.895
lab*nch 0.0 0.75 0.895
relative Natural Colour (NC)
lab*trj 0.164 0.486 -0.57
lab*tce 0.375 0.75 0.862
lab*nce 0.0 0.75 0.844

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

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

$n^* = 0.00$

blackness n^*

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

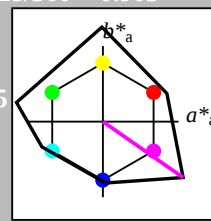
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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

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

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

relative CIELAB lab*
lab*lab 0.5 0.5 0.5 (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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 61.47 26.56 -18.47
LAB*LABa 61.47 26.52 -18.48
LAB*TCHa 62.5 32.33 325.12

relative CIELAB lab*
lab*lab 0.696 0.168 -0.184
lab*tch 0.696 0.168 -0.184
lab*nch 0.0 0.25 0.867
relative Natural Colour (NC)
lab*trj 0.696 0.168 -0.184
lab*tce 0.696 0.168 -0.184
lab*nce 0.0 0.25 0.844

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 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 40.36 26.58 -18.46
LAB*LABa 40.36 26.52 -18.48
LAB*TCHa 37.5 32.33 325.12

relative CIELAB lab*
lab*lab 0.348 0.168 -0.184
lab*tch 0.348 0.168 -0.184
lab*nch 0.0 0.25 0.867
relative Natural Colour (NC)
lab*trj 0.348 0.168 -0.184
lab*tce 0.348 0.168 -0.184
lab*nce 0.0 0.25 0.844

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

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

$n^* = 1.0$

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

UE530-7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

BAM-test chart UE53; Colorimetric systems MRS18 & NCS11a input: $cmv0^* setcmykcolor$

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

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

Input: Colorimetric Reflective System MRS18

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

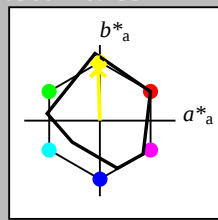
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 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	47.5	0.0
LAB*LAB	95.41	0.0	0.0	0.0
LAB*TCHa	99.99	0.01	0.0	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	0.0
lab*tch	1.0	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	1.0	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.988	0.75	(1.0)
cmyn3*	0.0	0.012	0.25	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.0
standard and adapted CIELAB				
LAB*LAB	93.72	-1.64	26.21	0.0
LAB*LAB	93.72	-0.69	21.57	0.0
LAB*TCHa	97.5	-21.58	91.86	0.0

relative CIELAB lab*

lab*lab	0.978	-0.007	0.25	0.0
lab*tch	0.875	0.25	0.255	0.0
lab*nch	0.0	0.25	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.978	0.0	0.25	0.0
lab*tce	0.875	0.25	0.255	0.0
lab*nce	0.0	0.25	0.255	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
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	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	0.976	0.5	(1.0)
cmyn3*	0.0	0.037	0.25	(0.0)
olvi4*	1.0	0.976	0.5	1.0
cmyn4*	0.0	0.037	0.25	0.0
standard and adapted CIELAB				
LAB*LAB	92.04	-2.3	47.67	0.0
LAB*LAB	92.04	-1.39	43.14	0.0
LAB*TCHa	75.0	43.16	91.85	0.0

relative CIELAB lab*

lab*lab	0.957	-0.015	0.5	0.0
lab*tch	0.75	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.957	0.0	0.5	0.0
lab*tce	0.75	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.963	0.25	(1.0)
cmyn3*	0.0	0.037	0.25	(0.0)
olvi4*	1.0	0.963	0.25	1.0
cmyn4*	0.0	0.037	0.25	0.0
standard and adapted CIELAB				
LAB*LAB	90.36	-2.96	69.13	0.0
LAB*LAB	90.36	-2.08	64.71	0.0
LAB*TCHa	62.5	64.74	91.85	0.0

relative CIELAB lab*

lab*lab	0.932	-0.023	0.75	0.0
lab*tch	0.625	0.75	0.255	0.0
lab*nch	0.0	0.75	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.932	0.0	0.75	0.0
lab*tce	0.625	0.75	0.255	0.0
lab*nce	0.0	0.75	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.713	0.0	(1.0)
cmyn3*	0.25	0.274	0.75	(0.0)
olvi4*	1.0	0.976	0.5	1.0
cmyn4*	0.0	0.024	0.5	0.25
standard and adapted CIELAB				
LAB*LAB	72.7	-1.92	46.37	0.0
LAB*LAB	72.7	-1.38	43.14	0.0
LAB*TCHa	50.0	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.727	-0.015	0.5	0.0
lab*tch	0.5	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.727	0.0	0.5	0.0
lab*tce	0.5	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.476	0.0	(1.0)
cmyn3*	0.5	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	55.03	-0.89	33.16	0.0
LAB*LAB	55.03	-0.68	21.57	0.0
LAB*TCHa	37.5	-21.58	91.84	0.0

relative CIELAB lab*

lab*lab	0.478	-0.007	0.25	0.0
lab*tch	0.375	0.25	0.255	0.0
lab*nch	0.0	0.25	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.478	0.0	0.25	0.0
lab*tce	0.375	0.25	0.255	0.0
lab*nce	0.0	0.25	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.524	0.0	(1.0)
cmyn3*	0.25	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.024	0.5	0.25
standard and adapted CIELAB				
LAB*LAB	33.35	-1.52	45.05	0.0
LAB*LAB	33.35	-1.38	43.13	0.0
LAB*TCHa	25.01	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5	0.0
lab*tch	0.25	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.457	0.0	0.5	0.0
lab*tce	0.25	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.524	0.0	(1.0)
cmyn3*	0.25	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	33.35	-1.52	45.05	0.0
LAB*LAB	33.35	-1.38	43.13	0.0
LAB*TCHa	25.01	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5	0.0
lab*tch	0.25	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.457	0.0	0.5	0.0
lab*tce	0.25	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.524	0.0	(1.0)
cmyn3*	0.25	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	33.35	-1.52	45.05	0.0
LAB*LAB	33.35	-1.38	43.13	0.0
LAB*TCHa	25.01	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5	0.0
lab*tch	0.25	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.457	0.0	0.5	0.0
lab*tce	0.25	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.524	0.0	(1.0)
cmyn3*	0.25	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	33.35	-1.52	45.05	0.0
LAB*LAB	33.35	-1.38	43.13	0.0
LAB*TCHa	25.01	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5	0.0
lab*tch	0.25	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.457	0.0	0.5	0.0
lab*tce	0.25	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.524	0.0	(1.0)
cmyn3*	0.25	0.512	0.75	(0.0)
olvi4*	1.0	0.988	0.75	1.0
cmyn4*	0.0	0.012	0.25	0.5
standard and adapted CIELAB				
LAB*LAB	33.35	-1.52	45.05	0.0
LAB*LAB	33.35	-1.38	43.13	0.0
LAB*TCHa	25.01	43.16	91.84	0.0

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5	0.0
lab*tch	0.25	0.5	0.255	0.0
lab*nch	0.0	0.5	0.255	0.0

relative Natural Colour (NC)

lab*trj	0.457	0.0	0.5	0.0
lab*tce	0.25	0.5	0.255	0.0
lab*nce	0.0	0.5	0.255	0.0

Output: Colorimetric Reflective System NCS11

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

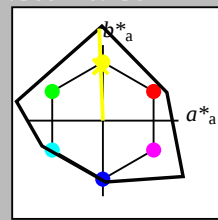
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 90 122 92

rgb*Ma: 0.97 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	95.41	0.0	-0.01	0.0
LAB*LAB	95.41	0.0	0.0	0.0
LAB*TCHa	99.99	0.01	0.0	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	0.0
lab*tch	1.0	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	1.0	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.992	1.0	0.75	(1.0)
cmyn3*	0.008	0.0	0.25	(0.0)
olvi4*	0.992	1.0	0.75	1.0
cmyn4*	0.008	0.0	0.25	0.0
standard and adapted CIELAB				
LAB*LAB	94.16	-1.21	30.44	0.0
LAB*LAB	94.16	-1.22	30.44	0.0
LAB*TCHa	87.5	30.47	92.31	0.0

relative CIELAB lab*

lab*lab	0.985	-0.009	0.25	0.0
lab*tch	0.875	0.25	0.256	0.0
lab*nch	0.0	0.25	0.256	0.0

relative Natural Colour (NC)

lab*trj	0.985	0.0	0.25	0.0
lab*tce	0.875	0.25	0.256	0.0
lab*nce	0.0	0.25	0.256	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	74.31	0.0	0.0	0.0
LAB*LAB	74.31	0.0	0.0	0.0
LAB*TCHa	75.0	0.0	0.0	0.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.0	0.0
lab*tch	0.75	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.75	0.0	0.0	0.0
lab*tce	0.75	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)				
<i>olvi3*</i>	0.5	0.5	0.5	(1.0)
<i>cmyn3*</i>	0.5	0.5	0.5	(0.0)
<i>olvi4*</i>	1.0	1.0	1.0	1.0
<i>cmyn4*</i>	0.0	0.0	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	53.21	0.04	0.0	
LAB*aAB	53.21	0.0	0.0	
LAB*TCbA	50.0	0.01	-	
relative CIELAB lab*				
<i>lab*lab</i>	0.5	0.0	0.0	
<i>lab*ach</i>	0.5	0.0	0.0	
<i>lab*nch</i>	0.5	0.0	-	
relative Natural Colour (NC)				
<i>lab*lrj</i>	0.5	0.0	0.0	
<i>lab*tcce</i>	0.5	0.0	-	
<i>lab*nce</i>	0.5	0.0	-	

Input: Colorimetric Reflective System MRS18

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

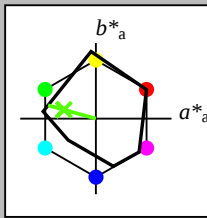
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 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*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*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*LAB 75.00 0.01 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 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*LAB 50.00 0.01 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 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LAB 37.36 0.0 0.0
LAB*LAB 25.00 0.01 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 0.01 0.46
LAB*LAB 18.02 0.0 0.0
LAB*LAB 0.01 0.01 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 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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* 0.351 1.0 0.5 (1.0)
cmyn3* 0.449 0.0 0.5 (0.0)
olvi4* 0.551 1.0 0.5 (1.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 75.74 -32.2 12.22
LAB*LAB 75.74 -31.6 8.79
LAB*LAB 75.0 32.81 164.46

relative CIELAB lab*
lab*lab 0.746 -0.481 0.134
lab*tch 0.75 0.5 0.457
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*trj 0.746 -0.499 0.0
lab*tce 0.75 0.5 0.5
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olvi3* 0.301 0.75 0.25 (1.0)
cmyn3* 0.699 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (1.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.39 -31.61 8.79
LAB*LAB 56.39 32.81 164.46

relative CIELAB lab*
lab*lab 0.619 -0.721 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.749 0.0
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.077 0.75 0.0 (1.0)
cmyn3* 0.923 0.25 1.0 (0.0)
olvi4* 0.327 1.0 0.25 (1.0)
cmyn4* 0.673 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 46.55 -47.46 14.64
LAB*LAB 46.55 -47.41 13.18
LAB*LAB 46.55 49.22 164.47

relative CIELAB lab*
lab*lab 0.369 -0.722 0.201
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.369 -0.749 0.0
lab*tce 0.375 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.051 0.5 0.0 (1.0)
cmyn3* 0.949 0.5 1.0 (0.0)
olvi4* 0.551 1.0 0.5 (1.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 37.04 -31.6 8.78
LAB*LAB 37.04 32.81 164.47

relative CIELAB lab*
lab*lab 0.123 -0.24 0.067
lab*tch 0.125 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*trj 0.123 -0.249 0.0
lab*tce 0.125 0.25 0.5
lab*nce 0.0 0.25 0.998

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.327 1.0 0.25 (1.0)
cmyn3* 0.673 0.0 0.75 (0.0)
olvi4* 0.327 1.0 0.25 (1.0)
cmyn4* 0.673 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 65.9 -47.82 15.96
LAB*LAB 65.9 -47.41 13.19
LAB*LAB 65.9 49.22 164.46

relative CIELAB lab*
lab*lab 0.619 -0.721 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.749 0.0
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.103 1.0 0.0 (1.0)
cmyn3* 0.897 0.0 1.0 (0.0)
olvi4* 0.103 1.0 0.0 (1.0)
cmyn4* 0.897 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.07 -63.21 17.58
LAB*LAB 56.07 63.21 17.58
LAB*LAB 56.07 65.62 164.46

relative CIELAB lab*
lab*lab 0.482 -0.962 0.268
lab*tch 0.5 1.0 0.457
lab*nch 0.0 1.0 0.457
relative Natural Colour (NC)
lab*trj 0.492 -0.999 0.0
lab*tce 0.5 1.0 0.5
lab*nce 0.0 1.0 0.998

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

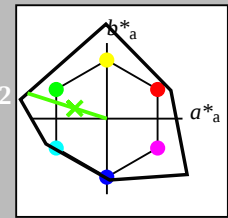
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 65 110 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*LAB 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 74.31 0.0 0.0
LAB*LAB 74.31 0.0 0.0
LAB*LAB 75.0 0.01 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 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04
LAB*LAB 53.21 0.0 0.0
LAB*LAB 50.0 0.01 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 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.81
LAB*LAB 32.11 0.0 0.0
LAB*LAB 25.00 0.01 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 11.01 0.0 0.0
LAB*LAB 11.01 0.0 0.0
LAB*LAB 0.01 0.01 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 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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

UE530-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

BAM-test chart UE53; Colorimetric systems MRS18 & NCS11a input: `cmv0* setcmymcolor`

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

output: `olv* setrgbcolor / w* setgray`

