

Input: Colorimetric Reflective System MRS18

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

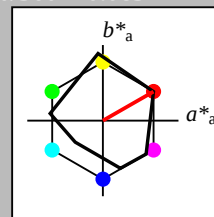
lab^*tch and lab^*nch

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*TCa 95.41 0.0 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 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*TCa 76.06 0.0 0.0

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*lab 0.852 0.248 0.03
lab*tch 0.875 0.25 0.019
lab*nch 0.0 0.25 0.019

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*TCa 56.71 0.0 0.0

relative CIELAB lab*
lab*lab 0.602 0.248 0.03
lab*tch 0.625 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.602 0.248 0.03
lab*tch 0.625 0.25 0.019
lab*nch 0.0 0.25 0.019

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*TCa 37.36 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.102 0.217 0.124
lab*tch 0.125 0.25 0.083
lab*nch 0.0 0.25 0.083
relative Natural Colour (NC)
lab*lab 0.102 0.217 0.124
lab*tch 0.125 0.25 0.083
lab*nch 0.0 0.25 0.083

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

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 19.19 0.0 0.0
LAB*LABa 19.19 0.0 0.0
LAB*LABb 19.19 0.0 0.0
LAB*TCa 19.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019
relative Natural Colour (NC)
lab*lab 0.352 0.248 0.03
lab*tch 0.375 0.25 0.019
lab*nch 0.0 0.25 0.019

MRS18; adapted (a) CIELAB data

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

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

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 72.52 32.93 22.4
LAB*LABa 72.52 32.93 22.4
LAB*LABb 72.52 32.93 22.4
LAB*TCa 72.52 32.93 22.4

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

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 61.07 49.89 31.22
LAB*LABa 61.07 49.89 31.22
LAB*LABb 61.07 49.89 31.22
LAB*TCa 61.07 49.89 31.22

relative CIELAB lab*
lab*lab 0.559 0.651 0.373
lab*tch 0.625 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.559 0.745 0.09
lab*tch 0.625 0.75 0.019
lab*nch 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 33.17 33.31 21.09
LAB*LABa 33.17 33.31 21.09
LAB*LABb 33.17 33.31 21.09
LAB*TCa 33.17 33.31 21.09

relative CIELAB lab*
lab*lab 0.454 0.496 0.06
lab*tch 0.454 0.496 0.06
lab*nch 0.0 0.496 0.06
relative Natural Colour (NC)
lab*lab 0.454 0.496 0.06
lab*tch 0.454 0.496 0.06
lab*nch 0.0 0.496 0.06

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.409 0.993 0.119
lab*tch 0.409 0.993 0.119
lab*nch 0.0 0.993 0.119
relative Natural Colour (NC)
lab*lab 0.409 0.993 0.119
lab*tch 0.409 0.993 0.119
lab*nch 0.0 0.993 0.119

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.306 0.651 0.373
lab*tch 0.375 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.306 0.745 0.09
lab*tch 0.375 0.75 0.019
lab*nch 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.306 0.651 0.373
lab*tch 0.375 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.306 0.745 0.09
lab*tch 0.375 0.75 0.019
lab*nch 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.306 0.651 0.373
lab*tch 0.375 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.306 0.745 0.09
lab*tch 0.375 0.75 0.019
lab*nch 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.306 0.651 0.373
lab*tch 0.375 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.306 0.745 0.09
lab*tch 0.375 0.75 0.019
lab*nch 0.0 0.75 0.019

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 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 49.63 66.96 38.37
LAB*LABa 49.63 66.96 38.37
LAB*LABb 49.63 66.96 38.37
LAB*TCa 49.63 66.96 38.37

relative CIELAB lab*
lab*lab 0.306 0.651 0.373
lab*tch 0.375 0.75 0.083
lab*nch 0.0 0.75 0.083
relative Natural Colour (NC)
lab*lab 0.306 0.745 0.09
lab*tch 0.375 0.75 0.019
lab*nch 0.0 0.75 0.019

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 24/360 = 0.066$

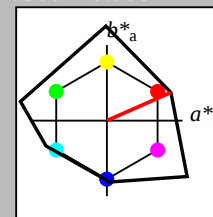
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 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*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*TCa 95.41 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.0 0.0
LAB*LABa 74.31 0.0 0.0
LAB*LABb 74.31 0.0 0.0
LAB*TCa 74.31 0.0 0.0

relative CIELAB lab*
lab*lab 0.857 0.229 0.101
lab*tch 0.875 0.25 0.066
lab*nch 0.0 0.25 0.066
relative Natural Colour (NC)
lab*lab 0.857 0.25 0.005
lab*tch 0.875 0.25 0.996
lab*nch 0.0 0.25 0.996

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.0 0.0
LAB*LABa 74.31 0.0 0.0
LAB*LABb 74.31 0.0 0.0
LAB*TCa 74.31 0.0 0.0

relative CIELAB lab*
lab*lab 0.75 0.5 0.5
lab*tch 0.75 0.5 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*lab 0.75 0.5 0.0
lab*tch 0.75 0.5 0.0
lab*nch 0.0 0.5 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 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.24 0.0 0.0
LAB*LABa 53.24 0.0 0.0
LAB*LABb 53.24 0.0 0.0
LAB*TCa 53.24 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.24 0.0 0.0
LAB*LABa 53.24 0.0 0.0
LAB*LABb 53.24 0.0 0.0
LAB*TCa 53.24 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.25 0.25
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0
relative Natural Colour (NC)
lab*lab 0.5 0.25 0.25
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.24 0.0 0.0
LAB*LABa 53.24 0.0 0.0
LAB*LABb 53.24 0.0 0.0
LAB*TCa 53.24 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.25 0.25
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0
relative Natural Colour (NC)
lab*lab 0.5 0.25 0.25
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.24 0.0 0.0
LAB*LABa 53.24 0.0 0.0
LAB*LABb 53.24 0.0 0.0
LAB*TCa 53.24 0.0 0

Input: Colorimetric Reflective System MRS18

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

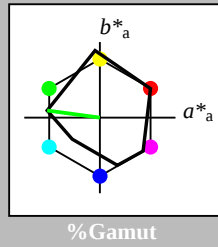
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 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
 LAB*LABc 95.41 0.0 0.0
 LAB*LABd 95.41 0.0 0.0
 LAB*LABe 95.41 0.0 0.0
 LAB*LABf 95.41 0.0 0.0
 LAB*LABg 95.41 0.0 0.0
 LAB*LABh 95.41 0.0 0.0
 LAB*LABi 95.41 0.0 0.0
 LAB*LABj 95.41 0.0 0.0
 LAB*LABk 95.41 0.0 0.0
 LAB*LABl 95.41 0.0 0.0
 LAB*LABm 95.41 0.0 0.0
 LAB*LABn 95.41 0.0 0.0
 LAB*LABo 95.41 0.0 0.0
 LAB*LABp 95.41 0.0 0.0
 LAB*LABq 95.41 0.0 0.0
 LAB*LABr 95.41 0.0 0.0
 LAB*LABs 95.41 0.0 0.0
 LAB*LABt 95.41 0.0 0.0
 LAB*LABu 95.41 0.0 0.0
 LAB*LABv 95.41 0.0 0.0
 LAB*LABw 95.41 0.0 0.0
 LAB*LABx 95.41 0.0 0.0
 LAB*LABy 95.41 0.0 0.0
 LAB*LABz 95.41 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 1.0 0.75 (1.0)
 cmyn3* 0.25 0.0 0.25 (0.0)
 olv4* 0.75 1.0 0.75 (1.0)
 cmyn4* 0.25 0.0 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 84.58 -18.19 6.39
 LAB*LABa 84.58 -18.19 6.39
 LAB*LABb 84.58 -18.19 6.39
 LAB*LABc 84.58 -18.19 6.39
 LAB*LABd 84.58 -18.19 6.39
 LAB*LABe 84.58 -18.19 6.39
 LAB*LABf 84.58 -18.19 6.39
 LAB*LABg 84.58 -18.19 6.39
 LAB*LABh 84.58 -18.19 6.39
 LAB*LABi 84.58 -18.19 6.39
 LAB*LABj 84.58 -18.19 6.39
 LAB*LABk 84.58 -18.19 6.39
 LAB*LABl 84.58 -18.19 6.39
 LAB*LABm 84.58 -18.19 6.39
 LAB*LABn 84.58 -18.19 6.39
 LAB*LABo 84.58 -18.19 6.39
 LAB*LABp 84.58 -18.19 6.39
 LAB*LABq 84.58 -18.19 6.39
 LAB*LABr 84.58 -18.19 6.39
 LAB*LABs 84.58 -18.19 6.39
 LAB*LABt 84.58 -18.19 6.39
 LAB*LABu 84.58 -18.19 6.39
 LAB*LABv 84.58 -18.19 6.39
 LAB*LABw 84.58 -18.19 6.39
 LAB*LABx 84.58 -18.19 6.39
 LAB*LABy 84.58 -18.19 6.39
 LAB*LABz 84.58 -18.19 6.39

relative Inform. Technology (IT)
 olv3* 0.5 1.0 0.5 (1.0)
 cmyn3* 0.5 0.0 0.5 (0.0)
 olv4* 0.5 1.0 0.5 (1.0)
 cmyn4* 0.5 0.0 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 73.75 -35.42 8.02
 LAB*LABa 73.75 -35.42 8.02
 LAB*LABb 73.75 -35.42 8.02
 LAB*LABc 73.75 -35.42 8.02
 LAB*LABd 73.75 -35.42 8.02
 LAB*LABe 73.75 -35.42 8.02
 LAB*LABf 73.75 -35.42 8.02
 LAB*LABg 73.75 -35.42 8.02
 LAB*LABh 73.75 -35.42 8.02
 LAB*LABi 73.75 -35.42 8.02
 LAB*LABj 73.75 -35.42 8.02
 LAB*LABk 73.75 -35.42 8.02
 LAB*LABl 73.75 -35.42 8.02
 LAB*LABm 73.75 -35.42 8.02
 LAB*LABn 73.75 -35.42 8.02
 LAB*LABo 73.75 -35.42 8.02
 LAB*LABp 73.75 -35.42 8.02
 LAB*LABq 73.75 -35.42 8.02
 LAB*LABr 73.75 -35.42 8.02
 LAB*LABs 73.75 -35.42 8.02
 LAB*LABt 73.75 -35.42 8.02
 LAB*LABu 73.75 -35.42 8.02
 LAB*LABv 73.75 -35.42 8.02
 LAB*LABw 73.75 -35.42 8.02
 LAB*LABx 73.75 -35.42 8.02
 LAB*LABy 73.75 -35.42 8.02
 LAB*LABz 73.75 -35.42 8.02

relative Inform. Technology (IT)
 olv3* 0.25 1.0 0.25 (1.0)
 cmyn3* 0.75 0.0 0.75 (0.0)
 olv4* 0.25 1.0 0.25 (1.0)
 cmyn4* 0.75 0.0 0.75 (0.0)
 standard and adapted CIELAB
 LAB*LAB 62.93 -52.64 9.65
 LAB*LABa 62.93 -52.64 9.65
 LAB*LABb 62.93 -52.64 9.65
 LAB*LABc 62.93 -52.64 9.65
 LAB*LABd 62.93 -52.64 9.65
 LAB*LABe 62.93 -52.64 9.65
 LAB*LABf 62.93 -52.64 9.65
 LAB*LABg 62.93 -52.64 9.65
 LAB*LABh 62.93 -52.64 9.65
 LAB*LABi 62.93 -52.64 9.65
 LAB*LABj 62.93 -52.64 9.65
 LAB*LABk 62.93 -52.64 9.65
 LAB*LABl 62.93 -52.64 9.65
 LAB*LABm 62.93 -52.64 9.65
 LAB*LABn 62.93 -52.64 9.65
 LAB*LABo 62.93 -52.64 9.65
 LAB*LABp 62.93 -52.64 9.65
 LAB*LABq 62.93 -52.64 9.65
 LAB*LABr 62.93 -52.64 9.65
 LAB*LABs 62.93 -52.64 9.65
 LAB*LABt 62.93 -52.64 9.65
 LAB*LABu 62.93 -52.64 9.65
 LAB*LABv 62.93 -52.64 9.65
 LAB*LABw 62.93 -52.64 9.65
 LAB*LABx 62.93 -52.64 9.65
 LAB*LABy 62.93 -52.64 9.65
 LAB*LABz 62.93 -52.64 9.65

relative Inform. Technology (IT)
 olv3* 0.0 1.0 0.0 (1.0)
 cmyn3* 1.0 0.0 1.0 (0.0)
 olv4* 0.0 1.0 0.0 (1.0)
 cmyn4* 1.0 0.0 1.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 52.11 -69.71 11.28
 LAB*LABa 52.11 -69.71 11.28
 LAB*LABb 52.11 -69.71 11.28
 LAB*LABc 52.11 -69.71 11.28
 LAB*LABd 52.11 -69.71 11.28
 LAB*LABe 52.11 -69.71 11.28
 LAB*LABf 52.11 -69.71 11.28
 LAB*LABg 52.11 -69.71 11.28
 LAB*LABh 52.11 -69.71 11.28
 LAB*LABi 52.11 -69.71 11.28
 LAB*LABj 52.11 -69.71 11.28
 LAB*LABk 52.11 -69.71 11.28
 LAB*LABl 52.11 -69.71 11.28
 LAB*LABm 52.11 -69.71 11.28
 LAB*LABn 52.11 -69.71 11.28
 LAB*LABo 52.11 -69.71 11.28
 LAB*LABp 52.11 -69.71 11.28
 LAB*LABq 52.11 -69.71 11.28
 LAB*LABr 52.11 -69.71 11.28
 LAB*LABs 52.11 -69.71 11.28
 LAB*LABt 52.11 -69.71 11.28
 LAB*LABu 52.11 -69.71 11.28
 LAB*LABv 52.11 -69.71 11.28
 LAB*LABw 52.11 -69.71 11.28
 LAB*LABx 52.11 -69.71 11.28
 LAB*LABy 52.11 -69.71 11.28
 LAB*LABz 52.11 -69.71 11.28

relative Inform. Technology (IT)
 olv3* 0.0 0.75 0.0 (1.0)
 cmyn3* 0.75 0.25 0.75 (0.0)
 olv4* 0.0 0.75 0.0 (1.0)
 cmyn4* 0.75 0.25 0.75 (0.0)
 standard and adapted CIELAB
 LAB*LAB 43.59 -52.27 8.34
 LAB*LABa 43.59 -52.27 8.34
 LAB*LABb 43.59 -52.27 8.34
 LAB*LABc 43.59 -52.27 8.34
 LAB*LABd 43.59 -52.27 8.34
 LAB*LABe 43.59 -52.27 8.34
 LAB*LABf 43.59 -52.27 8.34
 LAB*LABg 43.59 -52.27 8.34
 LAB*LABh 43.59 -52.27 8.34
 LAB*LABi 43.59 -52.27 8.34
 LAB*LABj 43.59 -52.27 8.34
 LAB*LABk 43.59 -52.27 8.34
 LAB*LABl 43.59 -52.27 8.34
 LAB*LABm 43.59 -52.27 8.34
 LAB*LABn 43.59 -52.27 8.34
 LAB*LABo 43.59 -52.27 8.34
 LAB*LABp 43.59 -52.27 8.34
 LAB*LABq 43.59 -52.27 8.34
 LAB*LABr 43.59 -52.27 8.34
 LAB*LABs 43.59 -52.27 8.34
 LAB*LABt 43.59 -52.27 8.34
 LAB*LABu 43.59 -52.27 8.34
 LAB*LABv 43.59 -52.27 8.34
 LAB*LABw 43.59 -52.27 8.34
 LAB*LABx 43.59 -52.27 8.34
 LAB*LABy 43.59 -52.27 8.34
 LAB*LABz 43.59 -52.27 8.34

relative Inform. Technology (IT)
 olv3* 0.0 0.5 0.0 (1.0)
 cmyn3* 0.5 0.25 0.5 (0.0)
 olv4* 0.0 0.5 0.0 (1.0)
 cmyn4* 0.5 0.25 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 37.36 -45.12 9.65
 LAB*LABa 37.36 -45.12 9.65
 LAB*LABb 37.36 -45.12 9.65
 LAB*LABc 37.36 -45.12 9.65
 LAB*LABd 37.36 -45.12 9.65
 LAB*LABe 37.36 -45.12 9.65
 LAB*LABf 37.36 -45.12 9.65
 LAB*LABg 37.36 -45.12 9.65
 LAB*LABh 37.36 -45.12 9.65
 LAB*LABi 37.36 -45.12 9.65
 LAB*LABj 37.36 -45.12 9.65
 LAB*LABk 37.36 -45.12 9.65
 LAB*LABl 37.36 -45.12 9.65
 LAB*LABm 37.36 -45.12 9.65
 LAB*LABn 37.36 -45.12 9.65
 LAB*LABo 37.36 -45.12 9.65
 LAB*LABp 37.36 -45.12 9.65
 LAB*LABq 37.36 -45.12 9.65
 LAB*LABr 37.36 -45.12 9.65
 LAB*LABs 37.36 -45.12 9.65
 LAB*LABt 37.36 -45.12 9.65
 LAB*LABu 37.36 -45.12 9.65
 LAB*LABv 37.36 -45.12 9.65
 LAB*LABw 37.36 -45.12 9.65
 LAB*LABx 37.36 -45.12 9.65
 LAB*LABy 37.36 -45.12 9.65
 LAB*LABz 37.36 -45.12 9.65

relative Inform. Technology (IT)
 olv3* 0.0 0.25 0.0 (1.0)
 cmyn3* 0.75 0.25 0.75 (0.0)
 olv4* 0.0 0.25 0.0 (1.0)
 cmyn4* 0.75 0.25 0.75 (0.0)
 standard and adapted CIELAB
 LAB*LAB 30.06 -50.86 10.01
 LAB*LABa 30.06 -50.86 10.01
 LAB*LABb 30.06 -50.86 10.01
 LAB*LABc 30.06 -50.86 10.01
 LAB*LABd 30.06 -50.86 10.01
 LAB*LABe 30.06 -50.86 10.01
 LAB*LABf 30.06 -50.86 10.01
 LAB*LABg 30.06 -50.86 10.01
 LAB*LABh 30.06 -50.86 10.01
 LAB*LABi 30.06 -50.86 10.01
 LAB*LABj 30.06 -50.86 10.01
 LAB*LABk 30.06 -50.86 10.01
 LAB*LABl 30.06 -50.86 10.01
 LAB*LABm 30.06 -50.86 10.01
 LAB*LABn 30.06 -50.86 10.01
 LAB*LABo 30.06 -50.86 10.01
 LAB*LABp 30.06 -50.86 10.01
 LAB*LABq 30.06 -50.86 10.01
 LAB*LABr 30.06 -50.86 10.01
 LAB*LABs 30.06 -50.86 10.01
 LAB*LABt 30.06 -50.86 10.01
 LAB*LABu 30.06 -50.86 10.01
 LAB*LABv 30.06 -50.86 10.01
 LAB*LABw 30.06 -50.86 10.01
 LAB*LABx 30.06 -50.86 10.01
 LAB*LABy 30.06 -50.86 10.01
 LAB*LABz 30.06 -50.86 10.01

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 0.0 0.0 0.0 (1.0)
 cmyn4* 1.0 1.0 1.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 -18.02 0.0
 LAB*LABa 18.02 -18.02 0.0
 LAB*LABb 18.02 -18.02 0.0
 LAB*LABc 18.02 -18.02 0.0
 LAB*LABd 18.02 -18.02 0.0
 LAB*LABe 18.02 -18.02 0.0
 LAB*LABf 18.02 -18.02 0.0
 LAB*LABg 18.02 -18.02 0.0
 LAB*LABh 18.02 -18.02 0.0
 LAB*LABi 18.02 -18.02 0.0
 LAB*LABj 18.02 -18.02 0.0
 LAB*LABk 18.02 -18.02 0.0
 LAB*LABl 18.02 -18.02 0.0
 LAB*LABm 18.02 -18.02 0.0
 LAB*LABn 18.02 -18.02 0.0
 LAB*LABo 18.02 -18.02 0.0
 LAB*LABp 18.02 -18.02 0.0
 LAB*LABq 18.02 -18.02 0.0
 LAB*LABr 18.02 -18.02 0.0
 LAB*LABs 18.02 -18.02 0.0
 LAB*LABt 18.02 -18.02 0.0
 LAB*LABu 18.02 -18.02 0.0
 LAB*LABv 18.02 -18.02 0.0
 LAB*LABw 18.02 -18.02 0.0
 LAB*LABx 18.02 -18.02 0.0
 LAB*LABy 18.02 -18.02 0.0
 LAB*LABz 18.02 -18.02 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* 0.0 0.0 0.0 (1.0)
 cmyn4* 1.0 1.0 1.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 -18.02 0.0
 LAB*LABa 18.02 -18.02 0.0
 LAB*LABb 18.02 -18.02 0.0
 LAB*LABc 18.02 -18.02 0.0
 LAB*LABd 18.02 -18.02 0.0
 LAB*LABe 18.02 -18.02 0.0
 LAB*LABf 18.02 -18.02 0.0
 LAB*LABg 18.02 -18.02 0.0
 LAB*LABh 18.02 -18.02 0.0
 LAB*LABi 18.02 -18.02 0.0
 LAB*LABj 18.02 -18.02 0.0
 LAB*LABk 18.02 -18.02 0.0
 LAB*LABl 18.02 -18.02 0.0
 LAB*LABm 18.02 -18.02 0.0
 LAB*LABn 18.02 -18.02 0.0
 LAB*LABo 18.02 -18.02 0.0
 LAB*LABp 18.02 -18.02 0.0
 LAB*LABq 18.02 -18.02 0.0
 LAB*LABr 18.02 -18.02 0.0
 LAB*LABs 18.02 -18.02 0.0
 LAB*LABt 18.02 -18.02 0.0
 LAB*LABu 18.02 -18.02 0.0
 LAB*LABv 18.02 -18.02 0.0
 LAB*LABw 18.02 -18.02 0.0
 LAB*LABx 18.02 -18.02 0.0
 LAB*LABy 18.02 -18.02 0.0
 LAB*LABz 18.02 -18.02 0.0

TE530-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

BAM-test chart TE53; Colorimetric systems MRS18 & NCS11a input: `olv* setrgbcolor`

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

output: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System MRS18

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

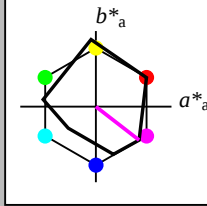
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



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 Inform. Technology (IT)
olvi3* 1.0 0.75 1.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 1.0 0.75 1.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 80.29 13.6 -7.31
LAB*LABa 80.29 14.29 -11.05
LAB*TCHa 87.5 18.07 322.25

relative Inform. Technology (IT)
olvi3* 1.0 0.5 1.0 (1.0)
cmyn3* 0.0 0.5 0.0 (0.0)
olvi4* 1.0 0.5 1.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 65.17 28.58 -22.12
LAB*LABa 65.17 28.58 -22.12
LAB*TCHa 75.0 36.15 322.25

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

relative Inform. Technology (IT)
olvi3* 1.0 0.0 1.0 (1.0)
cmyn3* 0.0 1.0 0.0 (0.0)
olvi4* 1.0 0.0 1.0 (1.0)
cmyn4* 0.0 1.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 34.95 57.16 -44.25
LAB*LABa 34.95 57.16 -44.25
LAB*TCHa 50.0 72.29 322.25

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 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 Inform. Technology (IT)
olvi3* 0.75 0.5 0.75 (1.0)
cmyn3* 0.25 0.5 0.25 (0.0)
olvi4* 1.0 0.75 1.0 (0.75)
cmyn4* 0.0 0.25 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 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 (0.5)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 45.83 28.56 -20.71
LAB*LABa 45.83 28.56 -20.71
LAB*TCHa 50.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.75 (1.0)
cmyn3* 0.25 1.0 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.75 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 30.72 43.13 -33.79
LAB*LABa 30.72 43.13 -33.79
LAB*TCHa 37.5 54.22 322.25

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 21.9 64.8 -7.6
LAB*LABa 21.9 64.8 -7.6
LAB*TCHa 25.0 72.29 322.25

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
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 Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.5 0.25 (0.0)
olvi4* 1.0 0.75 1.0 (0.5)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 41.26 14.34 -9.93
LAB*LABa 41.26 14.29 -11.06
LAB*TCHa 37.5 18.08 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.5 1.0 (0.5)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 26.48 28.52 -22.01
LAB*LABa 26.48 28.52 -22.01
LAB*TCHa 37.5 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 16.14 0.93 -0.57
LAB*LABa 16.14 0.93 -0.57
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 1.0 0.25 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 25.0 36.15 322.25

TE530-7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

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

BAM-test chart TE53; Colorimetric systems MRS18 & NCS11a input: $olv^* setrgbcolor$

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

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

See for similar files: <http://www.ps.bam.de/TE53/>
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIEXYZ

www.ps.bam.de/TE53/10Q/Q53E06FP.PS/.PDF; linearized output
F: Output Linearization (OL) data TE53/10Q/Q53E06FP.DAT in File (F)

Input: Colorimetric Reflective System MRS18

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

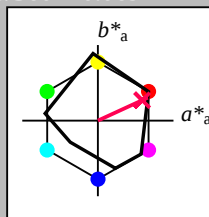
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 73 25

rgb*Ma: 1.0 0.0 0.1

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LAB 95.41 0.0 0.0
LAB*TCa 99.99 0.01 -

relative 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)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCa 75.0 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCa 50.0 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 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*TCa 25.0 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCa 0.01 0.01 -

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

$n^* = 1.0$

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 0.5 (1.0)
olvi3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 71.8 32.47 18.34
LAB*LAB 71.8 33.0 15.17
LAB*TCa 75.0 36.32 24.7

relative CIELAB lab*
lab*lab 0.695 0.454 0.209
lab*tch 0.75 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.847 0.25 0.0
lab*tce 0.875 0.25 0.0
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
olvi3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 60.0 49.2 25.13
LAB*LAB 60.0 49.5 22.76
LAB*TCa 62.5 54.49 24.7

relative CIELAB lab*
lab*lab 0.542 0.681 0.313
lab*tch 0.625 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.543 0.75 0.0
lab*tce 0.625 0.75 0.0
lab*nce 0.0 0.75 0.069

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
olvi3* 0.0 0.5 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 40.66 49.57 23.84
LAB*LAB 40.66 49.5 22.77
LAB*TCa 37.51 54.49 24.7

relative CIELAB lab*
lab*lab 0.293 0.681 0.313
lab*tch 0.375 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.293 0.75 0.0
lab*tce 0.375 0.75 0.0
lab*nce 0.0 0.75 0.069

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
olvi3* 0.0 0.25 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 33.11 32.21 15.74
LAB*LAB 33.11 33.0 15.18
LAB*TCa 25.01 36.33 24.71

relative CIELAB lab*
lab*lab 0.195 0.454 0.209
lab*tch 0.25 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.195 0.5 0.0
lab*tce 0.25 0.5 0.069
lab*nce 0.0 0.5 0.069

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
olvi3* 0.0 0.25 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 24.66 49.57 23.84
LAB*LAB 24.66 49.5 22.77
LAB*TCa 25.01 36.33 24.71

relative CIELAB lab*
lab*lab 0.195 0.454 0.209
lab*tch 0.25 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.195 0.5 0.0
lab*tce 0.25 0.5 0.069
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.125 0.0 0.0 (1.0)
olvi3* 0.0 0.125 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 16.53 49.57 23.84
LAB*LAB 16.53 49.5 22.77
LAB*TCa 16.53 36.33 24.71

relative CIELAB lab*
lab*lab 0.097 0.454 0.209
lab*tch 0.125 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.097 0.5 0.0
lab*tce 0.125 0.5 0.069
lab*nce 0.0 0.5 0.069

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.0625 0.0 0.0 (1.0)
olvi3* 0.0 0.0625 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 8.26 49.57 23.84
LAB*LAB 8.26 49.5 22.77
LAB*TCa 8.26 36.33 24.71

relative CIELAB lab*
lab*lab 0.048 0.454 0.209
lab*tch 0.0625 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.048 0.5 0.0
lab*tce 0.0625 0.5 0.069
lab*nce 0.0 0.5 0.069

$n^* = 0.125$

relative Inform. Technology (IT)
olvi3* 0.03125 0.0 0.0 (1.0)
olvi3* 0.0 0.03125 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 0.5 0.5 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 4.13 49.57 23.84
LAB*LAB 4.13 49.5 22.77
LAB*TCa 4.13 36.33 24.71

relative CIELAB lab*
lab*lab 0.024 0.454 0.209
lab*tch 0.03125 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.024 0.5 0.0
lab*tce 0.03125 0.5 0.069
lab*nce 0.0 0.5 0.069

$n^* = 0.0625$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

blackness n^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

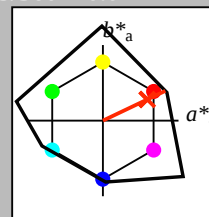
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 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*TCa 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)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 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*TCa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.5 0.5 (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)
olvi3* 0.5 0.5 0.5 (1.0)
olvi3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.5 0.5 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 62.51 20.64 9.84
LAB*LAB 62.51 20.64 9.84
LAB*TCa 62.5 22.86 25.49

relative CIELAB lab*
lab*lab 0.5 0.25 0.25 (1.0)
lab*tch 0.5 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*trj 0.5 0.25 0.0
lab*tce 0.5 0.25 0.0
lab*nce 0.0 0.25 0.071

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.0 0.0
LAB*TCa 50.0 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* 0.125 0.125 0.125 (1.0)
olvi3* 0.0 0.125 0.125 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.125 0.125 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.125 0.125 (0.0)
standard and adapted CIELAB
LAB*LAB 26.61 0.05 0.0
LAB*LAB 26.61 0.0 0.0
LAB*TCa 25.01 0.01 -

relative CIELAB lab*
lab*lab 0.125 0.0 0.0
lab*tch 0.125 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.125 0.0 0.0
lab*tce 0.125 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 1.0$

$n^* = 0.75$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.125$

$n^* = 0.0625$

blackness n^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

chromaticness c^*

NCS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

% Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

relative Inform. Technology (IT)
olvi3* 1.0 0.512 0.5 (1.0)
olvi3* 0.0 0.512 0.5 (0.0)
olvi4* 1.0 0.512 0.5 (1.0)
olvi4* 0.0 0.512 0.5 (0.0)
olvi5* 1.0 0.512 0.5 (1.0)
olvi5* 0.0 0.512 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 83.61 20.65 9.84
LAB*LAB 83.61 20.64 9.84
LAB*TCa

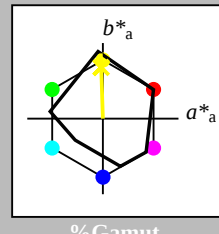
Input: Colorimetric Reflective System MRS18

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^*



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 1.0 1.0
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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.988 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
LAB*LABa 93.72 -0.69 21.57
LAB*TCHa 97.5 21.58 91.86

relative CIELAB lab*
lab*lab 0.978 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.978 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 74.38 -1.26 24.91
LAB*LABa 74.38 -0.68 21.57
LAB*TCHa 62.5 21.58 91.84

relative CIELAB lab*
lab*lab 0.957 -0.015 0.5
lab*tch 0.75 0.5 0.255
lab*nch 0.0 0.5 0.255
relative Natural Colour (NC)
lab*trj 0.957 0.0 0.5
lab*tce 0.75 0.5 0.255
lab*nce 0.0 0.5 0.255

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 0.976 0.75 0.75
cmyn4* 0.0 0.024 0.5 0.25
standard and adapted CIELAB
LAB*LAB 72.7 -1.92 46.37
LAB*LABa 72.7 -1.38 43.14
LAB*TCHa 50.0 43.16 91.84

relative CIELAB lab*
lab*lab 0.932 -0.023 0.75
lab*tch 0.625 0.75 0.255
lab*nch 0.0 0.75 0.255
relative Natural Colour (NC)
lab*trj 0.932 0.0 0.75
lab*tce 0.625 0.75 0.255
lab*nce 0.0 0.75 0.255

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

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 0.963 0.25 1.0
cmyn4* 0.0 0.037 0.75 0.25
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative CIELAB lab*
lab*lab 0.913 -0.031 0.999
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.0 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.913 0.0 0.5
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 0.5 0.5 (1.0)

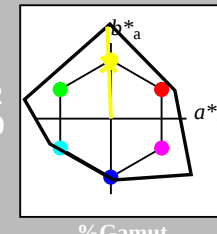
Output: Colorimetric Reflective System NCS11

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^*



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 1.0 1.0
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 0.985 -0.009 0.25
lab*tch 0.875 0.25 0.256
lab*nch 0.0 0.25 0.256
relative Natural Colour (NC)
lab*trj 0.985 0.0 0.25
lab*tce 0.875 0.25 0.256
lab*nce 0.0 0.25 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012 0.25 0.25
standard and adapted CIELAB
LAB*LAB 73.07 -1.2 30.45
LAB*LABa 73.07 -1.23 30.45
LAB*TCHa 62.5 30.47 92.33

relative CIELAB lab*
lab*lab 0.971 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.971 0.0 0.5
lab*tce 0.75 0.5 0.256
lab*nce 0.0 0.5 0.256

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 0.75
cmyn4* 0.0 0.012

Input: Colorimetric Reflective System MRS18

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

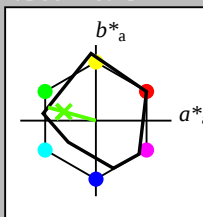
lab^*tch and lab^*nch

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 0.63
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 0.10 0.5 (1.0)
cmyn3* 0.449 0.0 0.5 (0.0)
olvi4* 0.551 0.10 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 0.5

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 0.75
cmyn4* 0.449 0.0 0.5 0.25
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 -0.722 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 0.5

relative Inform. Technology (IT)
olvi3* 0.031 0.5 0.0 (1.0)
cmyn3* 0.949 0.5 0.0 (0.0)
olvi4* 0.551 1.0 0.0 (0.0)
cmyn4* 0.449 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 37.04 -31.6 8.78
LAB*LAB 37.04 32.81 164.46

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 0.5

relative Inform. Technology (IT)
olvi3* 0.028 0.974 0.75 1.0 (0.0)
cmyn3* 0.974 0.75 1.0 (0.0)
olvi4* 0.75 0.0 0.75 0.5
cmyn4* 0.224 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 27.52 -15.8 4.37
LAB*LAB 27.52 16.4 164.49

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 0.5

$n^* = 0.50$

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 -47.1 13.19
LAB*LAB 62.5 -49.22 164.6

relative CIELAB lab*
lab*lab 0.619 -0.722 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 0.5

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 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 0.5

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.0 0.0
LAB*LAB 32.11 0.0 0.0
LAB*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

$n^* = 0.00$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

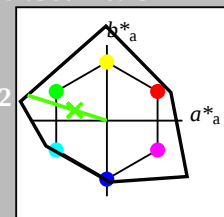
lab^*tch and lab^*nch

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 0.02 0.0
LAB*LAB 74.31 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 53.21 0.04 0.0
LAB*LAB 53.21 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 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.0 0.0
LAB*LAB 32.11 0.0 0.0
LAB*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

$n^* = 1.0$

chromaticness c^*

NCS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

% Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

relative Inform. Technology (IT)
olvi3* 0.541 1.0 0.5 (1.0)
cmyn3* 0.459 0.0 0.5 (0.0)
olvi4* 0.541 1.0 0.5 1.0
cmyn4* 0.459 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 80.4 -52.43 16.79
LAB*LAB 80.4 -52.45 16.79
LAB*LAB 75.00 55.08 162.25

relative CIELAB lab*
lab*lab 0.822 -0.475 0.152
lab*tch 0.75 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.822 -0.499 0.0
lab*tce 0.75 0.5 0.5
lab*nce 0.0 0.5 0.5

relative Inform. Technology (IT)
olvi3* 0.291 0.75 0.25 (1.0)
cmyn3* 0.709 0.25 0.75 (0.0)
olvi4* 0.541 1.0 0.5 0.75
cmyn4* 0.459 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 59.31 -52.42 16.8
LAB*LAB 59.31 -52.46 16.79
LAB*LAB 50.00 55.09 162.25

relative CIELAB lab*
lab*lab 0.661 -0.475 0.152
lab*tch 0.5 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.661 -0.499 0.0
lab*tce 0.5 0.5 0.5
lab*nce 0.0 0.5 0.5

relative Inform. Technology (IT)
olvi3* 0.041 0.5 0.0 (1.0)
cmyn3* 0.938 0.25 1.0 (0.0)
olvi4* 0.541 1.0 0.5 0.5
cmyn4* 0.459 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 38.2 -52.46 16.78
LAB*LAB 38.2 -52.46 16.78
LAB*LAB 25.00 55.09 162.25

relative CIELAB lab*
lab*lab 0.411 -0.475 0.152
lab*tch 0.375 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.411 -0.499 0.0
lab*tce 0.375 0.25 0.5
lab*nce 0.0 0.25 0.5

relative Inform. Technology (IT)
olvi3* 0.021 0.0 0.0 (1.0)
cmyn3* 0.979 0.75 1.0 (0.0)
olvi4* 0.75 0.0 0.75 0.5
cmyn4* 0.229 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 24.6 16.18 4.4
LAB*LAB 24.6 16.23 3.8
LAB*LAB 12.5 27.54 162.28

relative CIELAB lab*
lab*lab 0.161 -0.237 0.076
lab*tch 0.125 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.161 -0.249 0.0
lab*tce 0.125 0.25 0.5
lab*nce 0.0 0.25 0.5

$n^* = 0.50$

chromaticness c^*

TE530-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

BAM-test chart TE53; Colorimetric systems MRS18 & NCS11a input: `olv* setrgbcolor`

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

output: `olv* setrgbcolor / w* setgray`

