

Input: Colorimetric Reflective System NCS11

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

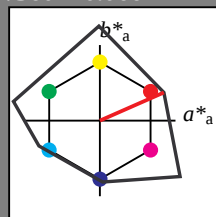
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



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
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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 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*TC_{Ma} 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* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 83.34 21.17 9.31
LAB*LABa 83.34 21.15 9.31
LAB*TC_{Ma} 97.5 23.11 23.75

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*trj 0.857 0.25 -0.005
lab*tce 0.875 0.25 0.996
lab*nce 0.0 0.25 0.996

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*LABa 74.31 0.02 0.0
LAB*TC_{Ma} 75.0 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 62.24 21.2 9.32
LAB*LABa 62.24 21.16 9.31
LAB*TC_{Ma} 62.5 23.12 23.75

relative CIELAB lab*
lab*lab 0.607 0.229 0.101
lab*tch 0.625 0.25 0.066
lab*nch 0.0 0.25 0.066
relative Natural Colour (NC)
lab*trj 0.607 0.25 -0.005
lab*tce 0.625 0.25 0.996
lab*nce 0.0 0.25 0.996

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*LABa 53.21 0.04 0.0
LAB*TC_{Ma} 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.0
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0
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 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 50.17 42.37 18.63
LAB*LABa 50.17 42.32 18.63
LAB*TC_{Ma} 50.0 46.23 23.75

relative CIELAB lab*
lab*lab 0.371 0.686 0.302
lab*tch 0.625 0.75 0.066
lab*nch 0.0 0.75 0.066
relative Natural Colour (NC)
lab*trj 0.371 0.75 -0.017
lab*tce 0.625 0.75 0.996
lab*nce 0.0 0.75 0.996

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 33.18 18.64 0.0
LAB*LABa 33.18 18.64 0.0
LAB*TC_{Ma} 32.11 0.01 -

relative CIELAB lab*
lab*lab 0.337 0.229 0.101
lab*tch 0.375 0.25 0.066
lab*nch 0.0 0.25 0.066
relative Natural Colour (NC)
lab*trj 0.337 0.25 -0.005
lab*tce 0.375 0.25 0.996
lab*nce 0.0 0.25 0.996

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 29.07 42.38 18.64
LAB*LABa 29.07 42.31 18.62
LAB*TC_{Ma} 29.01 46.23 23.75

relative CIELAB lab*
lab*lab 0.321 0.686 0.302
lab*tch 0.375 0.75 0.066
lab*nch 0.0 0.75 0.066
relative Natural Colour (NC)
lab*trj 0.321 0.75 -0.017
lab*tce 0.375 0.75 0.996
lab*nce 0.0 0.75 0.996

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
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 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 20.04 21.22 9.33
LAB*LABa 20.04 21.15 9.31
LAB*TC_{Ma} 12.5 23.11 23.75

relative CIELAB lab*
lab*lab 0.107 0.229 0.101
lab*tch 0.125 0.25 0.066
lab*nch 0.0 0.25 0.066
relative Natural Colour (NC)
lab*trj 0.107 0.25 -0.005
lab*tce 0.125 0.25 0.996
lab*nce 0.0 0.25 0.996

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (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 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (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 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (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 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (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 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (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 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LABa 18.02 0.5 0.46
LAB*TC_{Ma} 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 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 0.0 0.0 0.0

Output: Colorimetric Reflective System MRS18

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

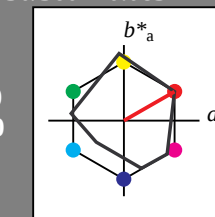
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



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 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TC_{Ma} 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* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 83.96 15.97 13.58
LAB*LABa 83.96 16.73 9.59
LAB*TC_{Ma} 87.5 19.29 29.82

relative CIELAB lab*
lab*lab 0.852 0.217 0.124
lab*tch 0.875 0.25 0.083
lab*nch 0.0 0.25 0.083
relative Natural Colour (NC)
lab*trj 0.852 0.248 0.03
lab*tce 0.875 0.25 0.019
lab*nce 0.0 0.25 0.071

relative Inform. Technology (IT)
olvi3* 0.75 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 -0.5 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TC_{Ma} 75.0 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 64.61 16.35 12.27
LAB*LABa 64.61 16.74 9.59
LAB*TC_{Ma} 62.5 19.29 29.82

relative CIELAB lab*
lab*lab 0.602 0.217 0.124
lab*tch 0.625 0.25 0.083
lab*nch 0.0 0.25 0.083
relative Natural Colour (NC)
lab*trj 0.602 0.248 0.03
lab*tce 0.625 0.25 0.019
lab*nce 0.0 0.25 0.071

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 0.23 2.14
LAB*LABa 56.71 0.17 0.01
LAB*TC_{Ma} 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.0
lab*tch 0.5 0.25 0.0
lab*nch 0.0 0.25 0.0
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 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 (0.0)
cmyn4*

Input: Colorimetric Reflective System NCS11

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

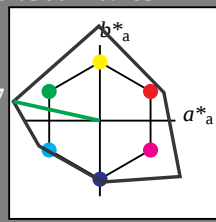
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 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)
olvi4* 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)
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)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*LAB 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.904 -0.243 0.054
lab*tch 0.875 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.904 -0.243 -0.018
lab*tce 0.875 0.25 0.512
lab*nce 0.0 0.25 0.512

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
olvi3* 0.5 0.5 0.5 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 79.24 -57.12 12.67
LAB*LAB 79.24 -57.12 12.67
LAB*LAB 79.24 -57.12 12.67
LAB*LAB 75.00 58.52 167.5

relative CIELAB lab*
lab*lab 0.808 -0.487 0.108
lab*tch 0.75 0.5 0.465
lab*nch 0.0 0.5 0.465
lab*trj 0.808 -0.487 -0.037
lab*tce 0.75 0.5 0.512
lab*nce 0.0 0.5 0.512

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 66.22 -28.53 6.34
LAB*LAB 66.22 -28.53 6.34
LAB*LAB 66.22 -28.53 6.34
LAB*LAB 62.25 29.27 167.5

relative CIELAB lab*
lab*lab 0.654 -0.243 0.054
lab*tch 0.625 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.654 -0.243 -0.018
lab*tce 0.625 0.25 0.512
lab*nce 0.0 0.25 0.512

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*LAB 50.00 58.52 167.5

relative CIELAB lab*
lab*lab 0.508 -0.487 0.108
lab*tch 0.5 0.5 0.465
lab*nch 0.0 0.5 0.465
lab*trj 0.508 -0.487 -0.037
lab*tce 0.5 0.5 0.512
lab*nce 0.0 0.5 0.512

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 58.14 -57.09 12.68
LAB*LAB 58.14 -57.09 12.68
LAB*LAB 58.14 -57.09 12.68
LAB*LAB 50.00 58.52 167.5

relative CIELAB lab*
lab*lab 0.463 -0.731 0.162
lab*tch 0.463 0.75 0.465
lab*nch 0.0 0.75 0.465
lab*trj 0.463 -0.731 -0.053
lab*tce 0.463 0.75 0.512
lab*nce 0.0 0.75 0.512

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 63.07 -114.225 35
LAB*LAB 63.07 -114.225 35
LAB*LAB 63.07 -114.225 35
LAB*LAB 50.00 117.04 167.5

relative CIELAB lab*
lab*lab 0.517 -0.975 0.216
lab*tch 0.5 1.0 0.465
lab*nch 0.0 1.0 0.465
lab*trj 0.517 -0.975 -0.074
lab*tce 0.5 1.0 0.512
lab*nce 0.0 1.0 0.512

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*LAB 32.11 0.07 0.01
LAB*LAB 32.11 0.07 0.01
LAB*LAB 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.404 -0.487 0.108
lab*tch 0.375 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.404 -0.487 -0.018
lab*tce 0.375 0.25 0.512
lab*nce 0.0 0.25 0.512

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.04 -57.07 12.69
LAB*LAB 37.04 -57.07 12.69
LAB*LAB 37.04 -57.07 12.69
LAB*LAB 25.01 58.52 167.5

relative CIELAB lab*
lab*lab 0.404 -0.731 0.162
lab*tch 0.375 0.75 0.465
lab*nch 0.0 0.75 0.465
lab*trj 0.404 -0.731 -0.053
lab*tce 0.375 0.75 0.512
lab*nce 0.0 0.75 0.512

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.0 0.0
LAB*LAB 37.36 0.0 0.0
LAB*LAB 37.36 0.0 0.0
LAB*LAB 25.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.336 -0.247 0.034
lab*tch 0.375 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.336 -0.247 -0.028
lab*tce 0.375 0.25 0.518
lab*nce 0.0 0.25 0.518

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LAB 11.01 0.07 0.01
LAB*LAB 11.01 0.07 0.01
LAB*LAB 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.154 -0.243 0.054
lab*tch 0.125 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.154 -0.243 -0.018
lab*tce 0.125 0.25 0.512
lab*nce 0.0 0.25 0.512

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 24.02 -28.53 6.33
LAB*LAB 24.02 -28.53 6.33
LAB*LAB 24.02 -28.53 6.33
LAB*LAB 12.5 29.25 167.5

relative CIELAB lab*
lab*lab 0.154 -0.487 0.108
lab*tch 0.25 0.5 0.465
lab*nch 0.0 0.5 0.465
lab*trj 0.154 -0.487 -0.037
lab*tce 0.25 0.5 0.512
lab*nce 0.0 0.5 0.512

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LAB 18.02 0.0 0.0
LAB*LAB 18.02 0.0 0.0
LAB*LAB 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.11 -0.247 0.034
lab*tch 0.125 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.11 -0.247 -0.028
lab*tce 0.125 0.25 0.518
lab*nce 0.0 0.25 0.518

$n^* = 1.0$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

$n^* = 0.00$

$n^* = 1.0$

UE580-7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: $cmv0^*$ setcmvcolor

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

output: no change compared to input

Output: Colorimetric Reflective System MRS18

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

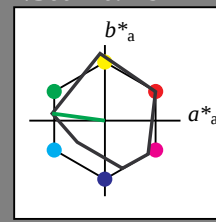
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



% 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)
olvi4* 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)
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)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.86 -0.247 0.034
lab*tch 0.875 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.86 -0.247 -0.028
lab*tce 0.875 0.25 0.518
lab*nce 0.0 0.25 0.518

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
olvi3* 0.5 0.5 0.5 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 65.23 -17.83 5.08
LAB*LAB 65.23 -17.83 5.08
LAB*LAB 65.23 -17.83 5.08
LAB*LAB 62.25 17.59 172.29

relative CIELAB lab*
lab*lab 0.61 -0.247 0.034
lab*tch 0.625 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.61 -0.247 -0.028
lab*tce 0.625 0.25 0.518
lab*nce 0.0 0.25 0.518

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 0.23 2.14
LAB*LAB 56.71 0.23 2.14
LAB*LAB 56.71 0.23 2.14
LAB*LAB 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.51 -0.247 0.034
lab*tch 0.5 0.5 0.479
lab*nch 0.0 0.5 0.479
lab*trj 0.51 -0.247 -0.028
lab*tce 0.5 0.5 0.518
lab*nce 0.0 0.5 0.518

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 45.88 -17.46 3.78
LAB*LAB 45.88 -17.46 3.78
LAB*LAB 45.88 -17.46 3.78
LAB*LAB 37.5 17.59 172.29

relative CIELAB lab*
lab*lab 0.458 -0.247 0.034
lab*tch 0.458 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.458 -0.247 -0.028
lab*tce 0.458 0.25 0.518
lab*nce 0.0 0.25 0.518

$n^* = 1.0$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

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)
olvi3* 0.5 0.5 0.5 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 73.75 -35.42 8.02
LAB*LAB 73.75 -35.42 8.02
LAB*LAB 73.75 -35.42 8.02
LAB*LAB 75.00 35.18 172.29

relative CIELAB lab*
lab*lab 0.72 -0.494 0.067
lab*tch 0.75 0.5 0.479
lab*nch 0.0 0.5 0.479
lab*trj 0.72 -0.494 -0.056
lab*tce 0.75 0.5 0.518
lab*nce 0.0 0.5 0.518

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.25 0.25 0.25 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.41 -34.80 4.72
LAB*LAB 54.41 -34.80 4.72
LAB*LAB 54.41 -34.80 4.72
LAB*LAB 50.00 35.18 172.29

relative CIELAB lab*
lab*lab 0.58 -0.494 0.067
lab*tch 0.58 0.5 0.479
lab*nch 0.0 0.5 0.479
lab*trj 0.58 -0.494 -0.056
lab*tce 0.58 0.5 0.518
lab*nce 0.0 0.5 0.518

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 35.06 -34.85 4.72
LAB*LAB 35.06 -34.85 4.72
LAB*LAB 35.06 -34.85 4.72
LAB*LAB 25.01 35.18 172.29

relative CIELAB lab*
lab*lab 0.336 -0.247 0.034
lab*tch 0.375 0.25 0.479
lab*nch 0.0 0.25 0.479
lab*trj 0.336 -0.247 -0.028
lab*tce 0.375 0.25 0.518
lab*nce 0.0 0.25 0.518

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 0.0 0.0 0.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 17.08 2.47
LAB*LAB 17.08 2.47
LAB*LAB 17.08 2.47
LAB*LAB 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.22 -0.494 0.067
lab*tch 0.25 0.5 0.479
lab*nch 0.0 0.5 0.479
lab*trj 0.22 -0.494 -0.056
lab*tce 0.25 0.5 0.518
lab*nce 0.0 0.5 0.518

$n^* = 1.0$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

chromaticness c^*

A 3D coordinate system with three axes: a vertical axis labeled 'I', a horizontal axis pointing to the right labeled 'V', and a diagonal axis pointing towards the bottom-left labeled 'L'. The axes are represented by black lines with arrows at their ends.

Input: Colorimetric Reflective System NCS11

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

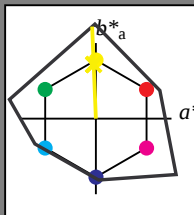
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 90 122 92

rgb*Ma: 0.97 1.0 0.0

triangle lightness t^*



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
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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 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_{Ma} 99.99 0.01 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
LAB*Lab 94.16 -1.22 30.45
LAB*TC_{Ma} 97.5 30.47 92.31

relative Inform. Technology (IT)
olvi3* 0.984 1.0 0.5 (1.0)
cmyn3* 0.016 0.0 0.5 (0.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 92.52 -2.44 60.89
LAB*Lab 92.52 -2.46 60.89
LAB*TC_{Ma} 95.0 60.94 92.32

relative Inform. Technology (IT)
olvi3* 0.976 1.0 0.25 (1.0)
cmyn3* 0.024 0.0 0.25 (0.0)
olvi4* 0.976 1.0 0.25 (1.0)
cmyn4* 0.024 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 91.68 -3.68 91.34
LAB*Lab 91.68 -3.69 91.34
LAB*TC_{Ma} 92.5 91.41 92.32

relative Inform. Technology (IT)
olvi3* 0.967 1.0 0.0 (1.0)
cmyn3* 0.033 0.0 1.0 (0.0)
olvi4* 0.967 1.0 0.0 (1.0)
cmyn4* 0.033 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.45 -4.92 121.77
LAB*Lab 90.45 -4.93 121.77
LAB*TC_{Ma} 90.0 121.87 92.32

relative Inform. Technology (IT)
olvi3* 0.959 1.0 0.0 (1.0)
cmyn3* 0.041 0.0 1.0 (0.0)
olvi4* 0.959 1.0 0.0 (1.0)
cmyn4* 0.041 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 89.45 -5.92 121.77
LAB*Lab 89.45 -5.93 121.77
LAB*TC_{Ma} 89.0 121.87 92.32

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*TC_{Ma} 75.0 0.01 -

relative Inform. Technology (IT)
olvi3* 0.742 0.75 0.5 (1.0)
cmyn3* 0.258 0.25 0.5 (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 73.07 -1.2 30.45
LAB*Lab 73.07 -1.23 30.45
LAB*TC_{Ma} 75.0 30.47 92.33

relative Inform. Technology (IT)
olvi3* 0.734 0.75 0.25 (1.0)
cmyn3* 0.266 0.25 0.75 (0.0)
olvi4* 0.984 1.0 0.5 0.75
cmyn4* 0.016 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 71.83 -2.44 60.89
LAB*Lab 71.83 -2.47 60.89
LAB*TC_{Ma} 75.0 60.94 92.33

relative Inform. Technology (IT)
olvi3* 0.726 0.75 0.0 (1.0)
cmyn3* 0.274 0.25 1.0 (0.0)
olvi4* 0.976 1.0 0.25 0.75
cmyn4* 0.024 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 70.59 -3.68 91.33
LAB*Lab 70.59 -3.71 91.33
LAB*TC_{Ma} 70.5 91.4 92.33

relative Inform. Technology (IT)
olvi3* 0.718 0.75 0.0 (1.0)
cmyn3* 0.282 0.25 1.0 (0.0)
olvi4* 0.967 1.0 0.25 0.75
cmyn4* 0.024 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 69.45 -4.92 121.77
LAB*Lab 69.45 -4.93 121.77
LAB*TC_{Ma} 69.0 121.87 92.32

relative Inform. Technology (IT)
olvi3* 0.710 0.75 0.0 (1.0)
cmyn3* 0.290 0.25 1.0 (0.0)
olvi4* 0.959 1.0 0.25 0.75
cmyn4* 0.024 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 68.45 -5.92 121.77
LAB*Lab 68.45 -5.93 121.77
LAB*TC_{Ma} 68.0 121.87 92.32

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*TC_{Ma} 50.0 0.01 -

relative Inform. Technology (IT)
olvi3* 0.492 0.5 0.25 (1.0)
cmyn3* 0.508 0.5 0.25 (0.0)
olvi4* 0.992 1.0 0.75 0.5
cmyn4* 0.008 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 51.96 -1.18 30.46
LAB*Lab 51.96 -1.23 30.45
LAB*TC_{Ma} 50.0 30.47 92.33

relative Inform. Technology (IT)
olvi3* 0.484 0.5 0.0 (1.0)
cmyn3* 0.516 0.5 1.0 (0.0)
olvi4* 0.984 1.0 0.5 0.5
cmyn4* 0.016 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 50.72 -2.44 60.89
LAB*Lab 50.72 -2.47 60.89
LAB*TC_{Ma} 50.0 60.94 92.33

relative Inform. Technology (IT)
olvi3* 0.476 0.5 0.0 (1.0)
cmyn3* 0.524 0.5 1.0 (0.0)
olvi4* 0.976 1.0 0.25 0.5
cmyn4* 0.024 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 49.45 -3.68 91.33
LAB*Lab 49.45 -3.71 91.33
LAB*TC_{Ma} 49.5 91.4 92.33

relative Inform. Technology (IT)
olvi3* 0.468 0.5 0.0 (1.0)
cmyn3* 0.532 0.5 1.0 (0.0)
olvi4* 0.967 1.0 0.25 0.5
cmyn4* 0.024 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 48.45 -4.92 121.77
LAB*Lab 48.45 -4.93 121.77
LAB*TC_{Ma} 48.0 121.87 92.32

relative Inform. Technology (IT)
olvi3* 0.460 0.5 0.0 (1.0)
cmyn3* 0.540 0.5 1.0 (0.0)
olvi4* 0.959 1.0 0.25 0.5
cmyn4* 0.024 0.0 0.25 0.5
standard and adapted CIELAB
LAB*LAB 47.45 -5.92 121.77
LAB*Lab 47.45 -5.93 121.77
LAB*TC_{Ma} 47.0 121.87 92.32

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 0.25
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*Lab 32.11 0.07 0.01
LAB*TC_{Ma} 30.0 0.01 -

relative Inform. Technology (IT)
olvi3* 0.242 0.25 0.5 (1.0)
cmyn3* 0.758 0.75 1.0 (0.0)
olvi4* 0.992 1.0 0.75 0.25
cmyn4* 0.008 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 30.86 -1.17 30.45
LAB*Lab 30.86 -1.23 30.45
LAB*TC_{Ma} 30.0 30.47 92.33

relative Inform. Technology (IT)
olvi3* 0.234 0.25 0.0 (1.0)
cmyn3* 0.766 0.75 1.0 (0.0)
olvi4* 0.984 1.0 0.5 0.25
cmyn4* 0.016 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 29.59 -2.44 60.89
LAB*Lab 29.59 -2.47 60.89
LAB*TC_{Ma} 29.0 60.94 92.33

relative Inform. Technology (IT)
olvi3* 0.226 0.25 0.0 (1.0)
cmyn3* 0.774 0.75 1.0 (0.0)
olvi4* 0.976 1.0 0.25 0.25
cmyn4* 0.024 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 28.45 -3.68 91.33
LAB*Lab 28.45 -3.71 91.33
LAB*TC_{Ma} 28.5 91.4 92.33

relative Inform. Technology (IT)
olvi3* 0.218 0.25 0.0 (1.0)
cmyn3* 0.782 0.75 1.0 (0.0)
olvi4* 0.967 1.0 0.25 0.25
cmyn4* 0.024 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 27.45 -4.92 121.77
LAB*Lab 27.45 -4.93 121.77
LAB*TC_{Ma} 27.0 121.87 92.32

relative Inform. Technology (IT)
olvi3* 0.210 0.25 0.0 (1.0)
cmyn3* 0.790 0.75 1.0 (0.0)
olvi4* 0.959 1.0 0.25 0.25
cmyn4* 0.024 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 26.45 -5.92 121.77
LAB*Lab 26.45 -5.93 121.77
LAB*TC_{Ma} 26.0 121.87 92.32

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

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 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 -

UE580-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: $cmv0^* setcmykcolor$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

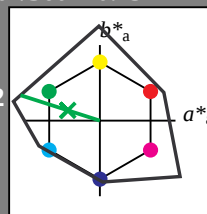
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 65 110 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness t^*



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
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi5*	0.0	0.0	0.0	(0.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	0.0	0.0	0.0	(0.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	0.0	0.0	0.0	(0.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	0.0	0.0	0.0	(0.0)
olvi12*	0.0	0.0	0.0	(0.0)
olvi13*	0.0	0.0	0.0	(0.0)
olvi14*	0.0	0.0	0.0	(0.0)
olvi15*	0.0	0.0	0.0	(0.0)
olvi16*	0.0	0.0	0.0	(0.0)
olvi17*	0.0	0.0	0.0	(0.0)
olvi18*	0.0	0.0	0.0	(0.0)
olvi19*	0.0	0.0	0.0	(0.0)
olvi20*	0.0	0.0	0.0	(0.0)
olvi21*	0.0	0.0	0.0	(0.0)
olvi22*	0.0	0.0	0.0	(0.0)
olvi23*	0.0	0.0	0.0	(0.0)
olvi24*	0.0	0.0	0.0	(0.0)
olvi25*	0.0	0.0	0.0	(0.0)
olvi26*	0.0	0.0	0.0	(0.0)
olvi27*	0.0	0.0	0.0	(0.0)
olvi28*	0.0	0.0	0.0	(0.0)
olvi29*	0.0	0.0	0.0	(0.0)
olvi30*	0.0	0.0	0.0	(0.0)
olvi31*	0.0	0.0	0.0	(0.0)
olvi32*	0.0	0.0	0.0	(0.0)
olvi33*	0.0	0.0	0.0	(0.0)
olvi34*	0.0	0.0	0.0	(0.0)
olvi35*	0.0	0.0	0.0	(0.0)
olvi36*	0.0	0.0	0.0	(0.0)
olvi37*	0.0	0.0	0.0	(0.0)
olvi38*	0.0	0.0	0.0	(0.0)
olvi39*	0.0	0.0	0.0	(0.0)
olvi40*	0.0	0.0	0.0	(0.0)
olvi41*	0.0	0.0	0.0	(0.0)
olvi42*	0.0	0.0	0.0	(0.0)
olvi43*	0.0	0.0	0.0	(0.0)
olvi44*	0.0	0.0	0.0	(0.0)
olvi45*	0.0	0.0	0.0	(0.0)
olvi46*	0.0	0.0	0.0	(0.0)
olvi47*	0.0	0.0	0.0	(0.0)
olvi48*	0.0	0.0	0.0	(0.0)
olvi49*	0.0	0.0	0.0	(0.0)
olvi50*	0.0	0.0	0.0	(0.0)
olvi51*	0.0	0.0	0.0	(0.0)
olvi52*	0.0	0.0	0.0	(0.0)
olvi53*	0.0	0.0	0.0	(0.0)
olvi54*	0.0	0.0	0.0	(0.0)
olvi55*	0.0	0.0	0.0	(0.0)
olvi56*	0.0	0.0	0.0	(0.0)
olvi57*	0.0	0.0	0.0	(0.0)
olvi58*	0.0	0.0	0.0	(0.0)
olvi59*	0.0	0.0	0.0	(0.0)
olvi60*	0.0	0.0	0.0	(0.0)
olvi61*	0.0	0.0	0.0	(0.0)
olvi62*	0.0	0.0	0.0	(0.0)
olvi63*	0.0	0.0	0.0	(0.0)
olvi64*	0.0	0.0	0.0	(0.0)
olvi65*	0.0	0.0	0.0	(0.0)
olvi66*	0.0	0.0	0.0	(0.0)
olvi67*	0.0	0.0	0.0	(0.0)
olvi68*	0.0	0.0	0.0	(0.0)
olvi69*	0.0	0.0	0.0	(0.0)
olvi70*	0.0	0.0	0.0	(0.0)
olvi71*	0.0	0.0	0.0	(0.0)
olvi72*	0.0	0.0	0.0	(0.0)
olvi73*	0.0	0.0	0.0	(0.0)
olvi74*	0.0	0.0	0.0	(0.0)
olvi75*	0.0	0.0	0.0	(0.0)
olvi76*	0.0	0.0	0.0	(0.0)
olvi77*	0.0	0.0	0.0	(0.0)
olvi78*	0.0	0.0	0.0	(0.0)
olvi79*	0.0	0.0	0.0	(0.0)
olvi80*	0.0	0.0	0.0	(0.0)
olvi81*	0.0	0.0	0.0	(0.0)
olvi82*	0.0	0.0	0.0	(0.0)
olvi83*	0.0	0.0	0.0	(0.0)
olvi84*	0.0	0.0	0.0	(0.0)
olvi85*	0.0	0.0	0.0	(0.0)
olvi86*	0.0	0.0	0.0	(0.0)
olvi87*	0.0	0.0	0.0	(0.0)
olvi88*	0.0	0.0	0.0	(0.0)
olvi89*	0.0	0.0	0.0	(0.0)
olvi90*	0.0	0.0	0.0	(0.0)
olvi91*	0.0	0.0	0.0	(0.0)
olvi92*	0.0	0.0	0.0	(0.0)
olvi93*	0.0	0.0	0.0	(0.0)
olvi94*	0.0	0.0	0.0	(0.0)
olvi95*	0.0	0.0	0.0	(0.0)
olvi96*	0.0	0.0	0.0	(0.0)
olvi97*	0.0	0.0	0.0	(0.0)
olvi98*	0.0	0.0	0.0	(0.0)
olvi99*	0.0	0.0	0.0	(0.0)
olvi100*	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.771	1.0	0.75	(1.0)
olvi4*	0.229	0.0	0.25	(0.0)
olvi5*	0.771	1.0	0.75	(1.0)
olvi6*	0.229	0.0	0.25	(0.0)
olvi7*	0.771	1.0	0.75	(1.0)
olvi8*	0.229	0.0	0.25	(0.0)
olvi9*	0.771	1.0	0.75	(1.0)
olvi10*	0.229	0.0	0.25	(0.0)
olvi11*	0.771	1.0	0.75	(1.0)
olvi12*	0.229	0.0	0.25	(0.0)
olvi13*	0.771	1.0	0.75	(1.0)
olvi14*	0.229	0.0	0.25	(0.0)
olvi15*	0.771	1.0	0.75	(1.0)
olvi16*	0.229	0.0	0.25	(0.0)
olvi17*	0.771	1.0	0.75	(1.0)
olvi18*	0.229	0.0	0.25	(0.0)
olvi19*	0.771	1.0	0.75	(1.0)
olvi20*	0.229	0.0	0.25	(0.0)
olvi21*	0.771	1.0	0.75	(1.0)
olvi22*	0.229	0.0	0.25	(0.0)
olvi23*	0.771	1.0	0.75	(1.0)
olvi24*	0.229	0.0	0.25	(0.0)
olvi25*	0.771	1.0	0.75	(1.0)
olvi26*	0.229	0.0	0.25	(0.0)
olvi27*	0.771	1.0	0.75	(1.0)
olvi28*	0.229	0.0	0.25	(0.0)
olvi29*	0.771	1.0	0.75	(1.0)
olvi30*	0.229	0.0	0.25	(0.0)
olvi31*	0.771	1.0	0.75	(1.0)
olvi32*	0.229	0.0	0.25	(0.0)
olvi33*	0.771	1.0	0.75	(1.0)
olvi34*	0.229	0.0	0.25	(0.0)
olvi35*	0.771	1.0	0.75	(1.0)
olvi36*	0.229	0.0	0.25	(0.0)
olvi37*	0.771	1.0	0.75	(1.0)
olvi38*	0.229	0.0	0.25	(0.0)
olvi39*	0.771	1.0	0.75	(1.0)
olvi40*	0.229	0.0	0.25	(0.0)
olvi41*	0.771	1.0	0.75	(1.0)
olvi42*	0.229	0.0	0.25	(0.0)
olvi43*	0.771	1.0	0.75	(1.0)
olvi44*	0.229	0.0	0.25	(0.0)
olvi45*	0.771	1.0	0.75	(1.0)
olvi46*	0.229	0.0	0.25	(0.0)
olvi47*	0.771	1.0	0.75	(1.0)
olvi48*	0.229	0.0	0.25	(0.0)
olvi49*	0.771	1.0	0.75	(1.0)
olvi50*	0.229	0.0	0.25	(0.0)
olvi51*	0.771	1.0	0.75	(1.0)
olvi52*	0.229	0.0	0.25	(0.0)
olvi53*	0.771	1.0	0.75	(1.0)
olvi54*	0.229	0.0	0.25	(0.0)
olvi55*	0.771	1.0	0.75	(1.0)
olvi56*	0.229	0.0	0.25	(0.0)
olvi57*	0.771	1.0	0.75	(1.0)
olvi58*	0.229	0.0	0.25	(0.0)
olvi59*	0.771	1.0	0.75	(1.0)
olvi60*	0.229	0.0	0.25	(0.0)
olvi61*	0.771	1.0	0.75	(1.0)
olvi62*	0.229	0.0	0.25	(0.0)
olvi63*	0.771	1.0	0.75	(1.0)
olvi64*	0.229	0.0	0.25	(0.0)
olvi65*	0.771	1.0	0.75	(1.0)
olvi66*	0.229	0.0	0.25	(0.0)
olvi67*	0.771	1.0	0.75	(1.0)
olvi68*	0.229	0.0	0.25	(0.0)
olvi69*	0.771	1.0	0.75	(1.0)
olvi70*	0.229	0.0	0.25	(0.0)
olvi71*	0.771	1.0	0.75	(1.0)
olvi72*	0.229	0.0	0.25	(0.0)
olvi73*	0.771	1.0	0.75	(1.0)
olvi74*	0.229	0.0	0.25	(0.0)
olvi75*	0.771	1.0	0.75	(1.0)
olvi76*	0.229	0.0	0.25	(0.0)
olvi77*	0.771	1.0	0.75	(1.0)
olvi78*	0.229	0.0	0.25	(0.0)
olvi79*	0.771	1.0	0.75	(1.0)
olvi80*	0.229	0.0	0.25	(0.0)
olvi81*	0.771	1.0	0.75	(1.0)
olvi82*	0.229	0.0	0.25	(0.0)
olvi83*	0.771	1.0	0.75	(1.0)
olvi84*	0.229	0.0	0.25	(0.0)
olvi85*	0.771	1.0	0.75	(1.0)
olvi86*	0.229	0.0	0.25	(0.0)
olvi87*	0.771	1.0	0.75	(1.0)
olvi88*	0.229	0.0	0.25	(0.0)
olvi89*	0.771	1.0	0.75	(1.0)
olvi90*	0.229	0.0	0.25	(0.0)
olvi91*	0.771	1.0	0.75	(1.0)
olvi92*	0.229	0.0	0.25	(0.0)
olvi93*	0.771	1.0	0.75	(1.0)
olvi94*	0.229	0.0	0.25	(0.0)
olvi95*	0.771	1.0	0.75	(1.0)
olvi96*	0.229	0.0	0.25	(0.0)
olvi97*	0.771	1.0	0.75	(1.0)
olvi98*	0.229	0.0	0.25	(0.0)
olvi99*	0.771	1.0	0.75	(1.0)
olvi100*	0.229	0.0	0.25	(0.0)

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 _a	80.4	-52.43	16.79

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 272/360 = 0.755$

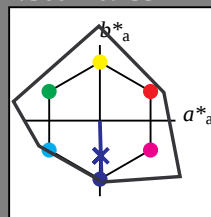
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness t^*



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
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	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 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_{Ma} 99.99 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 83.85 0.6 -20.1
LAB*Lab 83.85 0.58 -20.1
LAB*TC_{Ma} 87.5 20.11 271.66

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 72.29 1.2 -40.21
LAB*Lab 72.29 1.17 -40.21
LAB*TC_{Ma} 75.0 40.24 271.66

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 60.73 1.79 -60.32
LAB*Lab 60.73 1.75 -60.32
LAB*TC_{Ma} 62.5 60.36 271.66

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 49.18 2.39 -80.42
LAB*Lab 49.18 2.34 -80.42
LAB*TC_{Ma} 50.0 80.48 271.66

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 39.63 1.81 -60.31
LAB*Lab 39.63 1.76 -60.31
LAB*TC_{Ma} 37.51 60.36 271.66

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 28.87 0.5 -25.16
LAB*Lab 28.87 0.5 -25.16
LAB*TC_{Ma} 25.01 25.16 271.41

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 -0.01
LAB*Lab 18.02 0.0 -0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 -0.01
LAB*Lab 18.02 0.0 -0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 -0.01
LAB*Lab 18.02 0.0 -0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.25 0.25 0.25 (1.0)
cmyn4* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*Lab 32.11 0.07 0.01
LAB*TC_{Ma} 25.0 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TC_{Ma} 0.01 0.01 0.01

UE580-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: $cmv0^* setcmykcolor$

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

output: no change compared to input