

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 91/360 = 0.252$

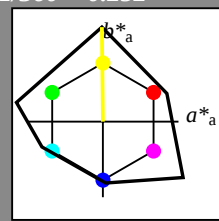
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 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 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 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 94.39 -0.3 31.24
LAB*Lab 94.39 -0.31 31.26
LAB*TC_{Ma} 97.31 31.25 90.59

relative CIELAB lab*
lab*lab 0.988 -0.002 0.25
lab*tch 0.875 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.988 0.01 0.25
lab*tce 0.875 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 93.38 -0.62 62.5
LAB*Lab 93.38 -0.63 62.5
LAB*TC_{Ma} 97.31 62.5 90.59

relative CIELAB lab*
lab*lab 0.976 -0.004 0.5
lab*tch 0.75 0.5 0.252
lab*nch 0.0 0.5 0.252
relative Natural Colour (NC)
lab*trj 0.976 0.02 0.493
lab*tce 0.75 0.5 0.243
lab*nce 0.0 0.5 0.252

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 92.37 -0.94 93.76
LAB*Lab 92.37 -0.95 93.76
LAB*TC_{Ma} 96.25 93.76 90.59

relative CIELAB lab*
lab*lab 0.964 -0.007 0.75
lab*tch 0.625 0.75 0.252
lab*nch 0.0 0.75 0.252
relative Natural Colour (NC)
lab*trj 0.964 0.031 0.749
lab*tce 0.625 0.75 0.243
lab*nce 0.0 0.75 0.252

relative Inform. Technology (IT)
olvi3* 1.0 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 91.36 -1.27 125.0
LAB*Lab 91.36 -1.27 125.0
LAB*TC_{Ma} 95.00 125.01 90.59

relative CIELAB lab*
lab*lab 0.952 -0.009 1.0
lab*tch 0.5 1.0 0.252
lab*nch 0.0 1.0 0.252
relative Natural Colour (NC)
lab*trj 0.952 0.041 0.999
lab*tce 0.5 1.0 0.252
lab*nce 0.0 1.0 0.252

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 72.29 -0.63 62.51
LAB*Lab 72.29 -0.63 62.51
LAB*TC_{Ma} 50.0 62.52 90.59

relative CIELAB lab*
lab*lab 0.964 -0.007 0.75
lab*tch 0.625 0.75 0.252
lab*nch 0.0 0.75 0.252
relative Natural Colour (NC)
lab*trj 0.964 0.031 0.749
lab*tce 0.625 0.75 0.243
lab*nce 0.0 0.75 0.252

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 51.18 -0.59 62.51
LAB*Lab 51.18 -0.59 62.51
LAB*TC_{Ma} 37.5 62.52 90.59

relative CIELAB lab*
lab*lab 0.714 -0.007 0.75
lab*tch 0.375 0.75 0.252
lab*nch 0.0 0.75 0.252
relative Natural Colour (NC)
lab*trj 0.714 0.031 0.749
lab*tce 0.375 0.75 0.243
lab*nce 0.0 0.75 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 31.05 -0.25 31.26
LAB*Lab 31.05 -0.25 31.26
LAB*TC_{Ma} 12.5 31.25 90.59

relative CIELAB lab*
lab*lab 0.476 -0.004 0.5
lab*tch 0.25 0.5 0.252
lab*nch 0.0 0.5 0.252
relative Natural Colour (NC)
lab*trj 0.476 0.02 0.493
lab*tce 0.25 0.5 0.243
lab*nce 0.0 0.5 0.252

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 -0.07 0.01
LAB*Lab 11.01 0.0 0.0
LAB*TC_{Ma} 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.238 -0.002 0.25
lab*tch 0.125 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.238 0.01 0.25
lab*tce 0.125 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (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 0.0 0.0 0.0
LAB*Lab 0.0 0.0 0.0
LAB*TC_{Ma} 0.0 0.0 0.0

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

UE580-7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: $cmY0^* setcmykcolor$

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

Output: Colorimetric Reflective System MRS18

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

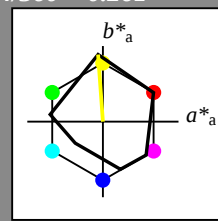
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*Lab 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* 0.75 0.75 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*Lab 76.06 -0.6 3.44
LAB*TC_{Ma} 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.95 0.5 0.5 (1.0)
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.5 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 0.5 0.0

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

relative CIELAB lab*
lab*lab 0.73 0.5 0.5 (1.0)
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*trj 0.73 0.0 0.0
lab*tce 0.73 0.0 0.0
lab*nce 0.0 0.5 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 31.05 -0.25 31.26
LAB*Lab 31.05 -0.25 31.26
LAB*TC_{Ma} 12.5 31.25 90.59

relative CIELAB lab*
lab*lab 0.485 -0.017 0.249
lab*tch 0.25 0.25 0.261
lab*nch 0.0 0.25 0.261
relative Natural Colour (NC)
lab*trj 0.485 -0.017 0.25
lab*tce 0.25 0.25 0.258
lab*nce 0.0 0.25 0.261

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olvi4* 1.0 1.0 0.5 (1.0)
cmyn4* 0.0 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 -0.07 0.01
LAB*Lab 11.01 0.0 0.0
LAB*TC_{Ma} 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.235 -0.017 0.249
lab*tch 0.125 0.25 0.261
lab*nch 0.0 0.25 0.261
relative Natural Colour (NC)
lab*trj 0.235 -0.017 0.25
lab*tce 0.125 0.25 0.258
lab*nce 0.0 0.25 0.261

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (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 0.0 0.0 0.0
LAB*Lab 0.0 0.0 0.0
LAB*TC_{Ma} 0.0 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 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 0.0 0.0 0.0
LAB*Lab 0.0 0.0 0.0
LAB*TC_{Ma} 0.0 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 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 0.0 0.0 0.0
LAB*Lab 0.0 0.0 0.0
LAB*TC_{Ma} 0.0 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 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 0.0 0.0 0.0
LAB*Lab 0.0 0.0 0.0
LAB*TC_{Ma} 0.0 0.0 0.0

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

5 step scales for constant CIELAB hue 94/360 = 0.261 (right)

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

BAM material: code=rhda4

Input: Colorimetric Reflective System NCS11

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

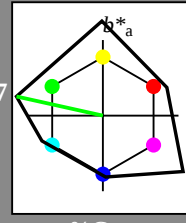
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



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*	0.75	1.0	0.75	(1.0)
olvi4*	0.25	0.0	0.25	(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*	0.25	0.0	0.25	(0.0)
olvi4*	0.75	1.0	0.75	(1.0)
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)

[illegible]

www.ps.bam.de/UE58/10L/L58E05FP.PS/.PDF; linearized output
 F: Output Linearization (OL) data UE58/10L/L58E05FP.DAT in File (F)

Input: Colorimetric Reflective System NCS11

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

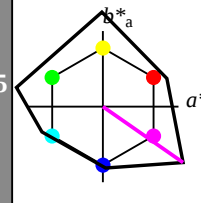
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 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 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)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.848 0.205 -0.142
 lab*tch 0.875 0.25 0.903
 lab*nch 0.0 0.25 0.903
 relative Natural Colour (NC)
 lab*trj 0.848 0.198 -0.184
 lab*tce 0.875 0.25 0.903
 lab*nce 0.0 0.25 0.903

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)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

relative Inform. Technology (IT)
 olv3* 1.0 0.5 1.0 (1.0)
 cmy3* 0.0 0.5 0.0 (0.0)
 olv4* 1.0 0.5 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 69.73 53.03 -36.95
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.696 0.41 -0.285
 lab*tch 0.75 0.5 0.903
 lab*nch 0.0 0.5 0.903
 relative Natural Colour (NC)
 lab*trj 0.696 0.336 -0.369
 lab*tce 0.75 0.5 0.903
 lab*nce 0.0 0.5 0.903

Output: Colorimetric Reflective System MRS18

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

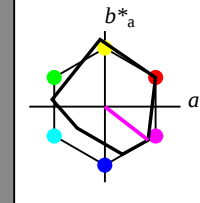
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 0.0 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 0.0 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.805 0.198 -0.152
 lab*tch 0.875 0.25 0.895
 lab*nch 0.0 0.25 0.895
 relative Natural Colour (NC)
 lab*trj 0.805 0.162 -0.189
 lab*tce 0.875 0.25 0.895
 lab*nce 0.0 0.25 0.895

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 69.73 53.03 -36.95
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.805 0.198 -0.152
 lab*tch 0.875 0.25 0.895
 lab*nch 0.0 0.25 0.895
 relative Natural Colour (NC)
 lab*trj 0.805 0.162 -0.189
 lab*tce 0.875 0.25 0.895
 lab*nce 0.0 0.25 0.895

Input: Colorimetric Reflective System NCS11

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

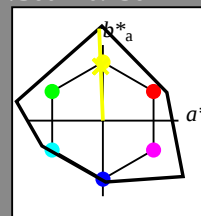
lab^*tch and lab^*nch

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)
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*	0.992	1.0	0.75	(1.0)
olvi4*	0.008	0.0	0.25	(0.0)
olvi5*	0.992	1.0	0.75	(1.0)
olvi6*	0.008	0.0	0.25	(0.0)
olvi7*	0.992	1.0	0.75	(1.0)
olvi8*	0.008	0.0	0.25	(0.0)
olvi9*	0.992	1.0	0.75	(1.0)
olvi10*	0.008	0.0	0.25	(0.0)
olvi11*	0.992	1.0	0.75	(1.0)
olvi12*	0.008	0.0	0.25	(0.0)
olvi13*	0.992	1.0	0.75	(1.0)
olvi14*	0.008	0.0	0.25	(0.0)
olvi15*	0.992	1.0	0.75	(1.0)
olvi16*	0.008	0.0	0.25	(0.0)
olvi17*	0.992	1.0	0.75	(1.0)
olvi18*	0.008	0.0	0.25	(0.0)
olvi19*	0.992	1.0	0.75	(1.0)
olvi20*	0.008	0.0	0.25	(0.0)
olvi21*	0.992	1.0	0.75	(1.0)
olvi22*	0.008	0.0	0.25	(0.0)
olvi23*	0.992	1.0	0.75	(1.0)
olvi24*	0.008	0.0	0.25	(0.0)
olvi25*	0.992	1.0	0.75	(1.0)
olvi26*	0.008	0.0	0.25	(0.0)
olvi27*	0.992	1.0	0.75	(1.0)
olvi28*	0.008	0.0	0.25	(0.0)
olvi29*	0.992	1.0	0.75	(1.0)
olvi30*	0.008	0.0	0.25	(0.0)
olvi31*	0.992	1.0	0.75	(1.0)
olvi32*	0.008	0.0	0.25	(0.0)
olvi33*	0.992	1.0	0.75	(1.0)
olvi34*	0.008	0.0	0.25	(0.0)
olvi35*	0.992	1.0	0.75	(1.0)
olvi36*	0.008	0.0	0.25	(0.0)
olvi37*	0.992	1.0	0.75	(1.0)
olvi38*	0.008	0.0	0.25	(0.0)
olvi39*	0.992	1.0	0.75	(1.0)
olvi40*	0.008	0.0	0.25	(0.0)
olvi41*	0.992	1.0	0.75	(1.0)
olvi42*	0.008	0.0	0.25	(0.0)
olvi43*	0.992	1.0	0.75	(1.0)
olvi44*	0.008	0.0	0.25	(0.0)
olvi45*	0.992	1.0	0.75	(1.0)
olvi46*	0.008	0.0	0.25	(0.0)
olvi47*	0.992	1.0	0.75	(1.0)
olvi48*	0.008	0.0	0.25	(0.0)
olvi49*	0.992	1.0	0.75	(1.0)
olvi50*	0.008	0.0	0.25	(0.0)
olvi51*	0.992	1.0	0.75	(1.0)
olvi52*	0.008	0.0	0.25	(0.0)
olvi53*	0.992	1.0	0.75	(1.0)
olvi54*	0.008	0.0	0.25	(0.0)
olvi55*	0.992	1.0	0.75	(1.0)
olvi56*	0.008	0.0	0.25	(0.0)
olvi57*	0.992	1.0	0.75	(1.0)
olvi58*	0.008	0.0	0.25	(0.0)
olvi59*	0.992	1.0	0.75	(1.0)
olvi60*	0.008	0.0	0.25	(0.0)
olvi61*	0.992	1.0	0.75	(1.0)
olvi62*	0.008	0.0	0.25	(0.0)
olvi63*	0.992	1.0	0.75	(1.0)
olvi64*	0.008	0.0	0.25	(0.0)
olvi65*	0.992	1.0	0.75	(1.0)
olvi66*	0.008	0.0	0.25	(0.0)
olvi67*	0.992	1.0	0.75	(1.0)
olvi68*	0.008	0.0	0.25	(0.0)
olvi69*	0.992	1.0	0.75	(1.0)
olvi70*	0.008	0.0	0.25	(0.0)
olvi71*	0.992	1.0	0.75	(1.0)
olvi72*	0.008	0.0	0.25	(0.0)
olvi73*	0.992	1.0	0.75	(1.0)
olvi74*	0.008	0.0	0.25	(0.0)
olvi75*	0.992	1.0	0.75	(1.0)
olvi76*	0.008	0.0	0.25	(0.0)
olvi77*	0.992	1.0	0.75	(1.0)
olvi78*	0.008	0.0	0.25	(0.0)
olvi79*	0.992	1.0	0.75	(1.0)
olvi80*	0.008	0.0	0.25	(0.0)
olvi81*	0.992	1.0	0.75	(1.0)
olvi82*	0.008	0.0	0.25	(0.0)
olvi83*	0.992	1.0	0.75	(1.0)
olvi84*	0.008	0.0	0.25	(0.0)
olvi85*	0.992	1.0	0.75	(1.0)
olvi86*	0.008	0.0	0.25	(0.0)
olvi87*	0.992	1.0	0.75	(1.0)
olvi88*	0.008	0.0	0.25	(0.0)
olvi89*	0.992	1.0	0.75	(1.0)
olvi90*	0.008	0.0	0.25	(0.0)
olvi91*	0.992	1.0	0.75	(1.0)
olvi92*	0.008	0.0	0.25	(0.0)
olvi93*	0.992	1.0	0.75	(1.0)
olvi94*	0.008	0.0	0.25	(0.0)
olvi95*	0.992	1.0	0.75	(1.0)
olvi96*	0.008	0.0	0.25	(0.0)
olvi97*	0.992	1.0	0.75	(1.0)
olvi98*	0.008	0.0	0.25	(0.0)
olvi99*	0.992	1.0	0.75	(1.0)
olvi100*	0.008	0.0	0.25	(0.0)

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

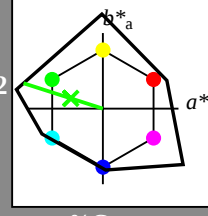
LAB*LAB	92.92	-2.44	60.89
LAB*LAB ₀	92.02	-2.46	60.89

Input: Colorimetric Reflective System NCS11

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

D65: hue G
LCH*Ma: 65 110 162
rgb*Ma: 0.08 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 149$

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 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*ch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 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*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*ch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LABa 53.21 0.04 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*ch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*LABa 32.11 0.07 0.01
LAB*LABb 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*ch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*LABb 12.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

UE580-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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 87.9 -26.2 8.39
LAB*LABa 87.9 -26.2 8.39
LAB*LABb 87.5 27.54 162.25

relative CIELAB lab*
lab*lab 0.822 -0.475 0.152
lab*ch 0.75 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.822 -0.475 0.152
lab*trc 0.75 0.5 0.451
lab*ncc 0.0 0.5 0.451

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 (1.0)
cmyn4* 0.459 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 59.31 -52.42 16.8
LAB*LABa 59.31 -52.42 16.8
LAB*LABb 59.0 55.09 162.25

relative CIELAB lab*
lab*lab 0.733 -0.713 0.229
lab*ch 0.625 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.733 -0.713 0.229
lab*trc 0.625 0.75 0.451
lab*ncc 0.0 0.75 0.451

relative Inform. Technology (IT)
olvi3* 0.083 1.0 0.0 (1.0)
cmyn3* 0.917 0.0 1.0 (0.0)
olvi4* 0.083 1.0 0.0 (1.0)
cmyn4* 0.917 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 65.41 -104.893.58
LAB*LABa 65.41 -104.893.58
LAB*LABb 65.0 110.17 162.25

relative CIELAB lab*
lab*lab 0.645 -0.951 0.305
lab*ch 0.5 1.0 0.451
lab*nch 0.0 1.0 0.451
relative Natural Colour (NC)
lab*trj 0.645 -0.951 0.305
lab*trc 0.5 1.0 0.451
lab*ncc 0.0 1.0 0.451

relative Inform. Technology (IT)
olvi3* 0.048 0.75 0.0 (1.0)
cmyn3* 0.938 0.25 1.0 (0.0)
olvi4* 0.312 1.0 0.25 0.75
cmyn4* 0.688 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 51.81 -78.65 25.19
LAB*LABa 51.81 -78.65 25.19
LAB*LABb 51.5 82.64 162.25

relative CIELAB lab*
lab*lab 0.483 -0.713 0.228
lab*ch 0.375 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.483 -0.713 0.228
lab*trc 0.375 0.75 0.451
lab*ncc 0.0 0.75 0.451

relative Inform. Technology (IT)
olvi3* 0.041 0.5 0.0 (1.0)
cmyn3* 0.959 0.5 1.0 (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 38.2 -52.46 16.78
LAB*LABa 38.2 -52.46 16.78
LAB*LABb 37.51 55.09 162.27

relative CIELAB lab*
lab*lab 0.322 -0.475 0.152
lab*ch 0.25 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.322 -0.475 0.152
lab*trc 0.25 0.5 0.451
lab*ncc 0.0 0.5 0.451

relative Inform. Technology (IT)
olvi3* 0.021 0.25 0.0 (1.0)
cmyn3* 0.979 0.25 1.0 (0.0)
olvi4* 0.071 1.0 0.25 0.75
cmyn4* 0.229 0.0 0.25 0.75
standard and adapted CIELAB
LAB*LAB 24.6 -26.23 8.38
LAB*LABa 24.6 -26.23 8.38
LAB*LABb 24.5 27.54 162.28

relative CIELAB lab*
lab*lab 0.161 -0.237 0.076
lab*ch 0.125 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.161 -0.237 0.076
lab*trc 0.125 0.25 0.451
lab*ncc 0.0 0.25 0.451

relative Inform. Technology (IT)
olvi3* 0.011 0.07 0.01 (1.0)
cmyn3* 1.01 0.07 0.01 (0.0)
olvi4* 0.011 0.07 0.01 (1.0)
cmyn4* 1.01 0.07 0.01 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.0
LAB*LABa 0.01 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.011 0.07 0.01 (1.0)
lab*ch 0.011 0.07 0.01 (0.0)
lab*nch 0.0 0.07 0.01 (0.0)
relative Natural Colour (NC)
lab*trj 0.011 0.07 0.01 (1.0)
lab*trc 0.011 0.07 0.01 (0.0)
lab*ncc 0.0 0.07 0.01 (0.0)

relative Inform. Technology (IT)
olvi3* 0.001 0.01 0.0 (1.0)
cmyn3* 1.001 0.01 0.0 (0.0)
olvi4* 0.001 0.01 0.0 (1.0)
cmyn4* 1.001 0.01 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.001 0.01 0.0
LAB*LABa 0.001 0.01 0.0
LAB*LABb 0.001 0.01 0.0

relative CIELAB lab*
lab*lab 0.001 0.01 0.0 (1.0)
lab*ch 0.001 0.01 0.0 (0.0)
lab*nch 0.0 0.01 0.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.001 0.01 0.0 (1.0)
lab*trc 0.001 0.01 0.0 (0.0)
lab*ncc 0.0 0.01 0.0 (0.0)

relative Inform. Technology (IT)
olvi3* 0.000 0.00 0.0 (1.0)
cmyn3* 1.000 0.00 0.0 (0.0)
olvi4* 0.000 0.00 0.0 (1.0)
cmyn4* 1.000 0.00 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.000 0.00 0.0
LAB*LABa 0.000 0.00 0.0
LAB*LABb 0.000 0.00 0.0

relative CIELAB lab*
lab*lab 0.000 0.00 0.0 (1.0)
lab*ch 0.000 0.00 0.0 (0.0)
lab*nch 0.0 0.00 0.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.000 0.00 0.0 (1.0)
lab*trc 0.000 0.00 0.0 (0.0)
lab*ncc 0.0 0.00 0.0 (0.0)

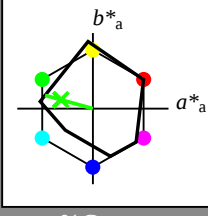
BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: $cmv0^* setcmykcolor$
D65: 2 coordinate data of 5 step colour scales for 10 hues

Output: Colorimetric Reflective System MRS18

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

D65: hue G
LCH*Ma: 56 66 164
rgb*Ma: 0.1 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 91$

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

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*ch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 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 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*ch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 0.23 2.14
LAB*LABa 56.71 0.23 2.14
LAB*LABb 56.0 11.17 162.25

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*ch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (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 0.0 0.0
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.5 16.41 164.46

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*ch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*LABb 0.0 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*trc 0.0 0.0 0.0
lab*ncc 0.0 0.0 0.0</

