

Input: Colorimetric Reflective System NCS11

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

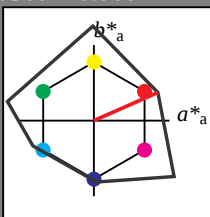
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



$u^*_{rel} = 149$

relative Inform. Technology (IT)

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

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	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	0.0	0.0	
LAB*TCHa	75.0	0.01	0.0	

relative CIELAB lab*

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

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	0.0	0.0	
LAB*TCHa	50.0	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	0.07	0.01	
LAB*LABa	32.11	0.0	0.0	
LAB*TCHa	25.0	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*LABa	11.01	0.0	0.0	
LAB*TCHa	0.01	0.01	0.0	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	
lab*tch	0.0	0.0	0.0	
lab*nch	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 24/360 = 0.066 (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*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.27	42.34	18.63	
LAB*LABa	71.27	42.34	18.63	
LAB*TCHa	75.0	46.23	23.75	

relative CIELAB lab*

lab*lab	0.714	0.458	0.201	
lab*tch	0.75	0.5	0.066	
lab*nch	0.0	0.5	0.066	
relative Natural Colour (NC)				
lab*trj	0.714	0.5	-0.011	
lab*tce	0.75	0.5	0.066	
lab*nce	0.0	0.5	0.066	

relative Inform. Technology (IT)

olvi3*	0.75	0.25	0.25	(1.0)
cmyn3*	0.25	0.75	0.75	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	50.17	42.37	18.64	
LAB*LABa	50.17	42.37	18.64	
LAB*TCHa	50.0	46.23	23.75	

relative CIELAB lab*

lab*lab	0.571	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	0.571	0.75	-0.017	
lab*tce	0.625	0.75	0.066	
lab*nce	0.0	0.75	0.066	

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.0	(1.0)
cmyn3*	0.5	0.0	0.0	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	38.11	63.53	27.95	
LAB*LABa	38.11	63.48	27.93	
LAB*TCHa	37.51	69.35	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	0.066	
lab*nce	0.0	0.75	0.066	

relative Inform. Technology (IT)

olvi3*	0.25	0.0	0.0	(1.0)
cmyn3*	0.25	0.0	0.0	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	29.07	42.38	18.64	
LAB*LABa	29.07	42.31	18.62	
LAB*TCHa	25.01	46.23	23.75	

relative CIELAB lab*

lab*lab	0.214	0.458	0.201	
lab*tch	0.25	0.5	0.066	
lab*nch	0.0	0.5	0.066	
relative Natural Colour (NC)				
lab*trj	0.214	0.5	-0.011	
lab*tce	0.25	0.5	0.066	
lab*nce	0.0	0.5	0.066	

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	0.5	0.5	(1.0)
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*TCHa	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	0.066	
lab*nce	0.0	0.25	0.066	

Output: Colorimetric Reflective System MRS18

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

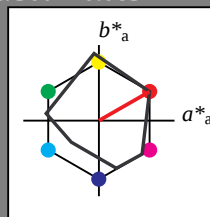
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	95.41	-0.97	4.75	
LAB*LABa	95.41	0.0	0.0	
LAB*TCHa	99.99	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	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*TCHa	75.0	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	56.71	0.23	2.14	
LAB*LABa	56.71	0.0	0.0	
LAB*TCHa	50.0	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	33.82	0.13	1.07	
LAB*LABa	33.82	0.0	0.0	
LAB*TCHa	25.0	0.01	0.0	

relative CIELAB lab*

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

<i>relative Inform. Technology (IT)</i>				
<i>olvi3*</i>	0.0	0.0	0.0	(1.0)
<i>cmyn3*</i>	1.0	1.0	1.0	(0.0)
<i>olvi4*</i>	1.0	1.0	1.0	0.0
<i>cmyn4*</i>	0.0	0.0	0.0	1.0
<i>standard and adapted CIELAB</i>				
<i>LAB*LAB</i>	18.02	0.5		-0.46
<i>LAB*LABa</i>	18.02	0.0		0.0
<i>LAB*TCHa</i>	0.01	0.01		-
<i>relative CIELAB lab*</i>				

www.ps.bam.de/UE58/10L/L58E01NP.PS/.PDF; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

Input: Colorimetric Reflective System NCS11

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

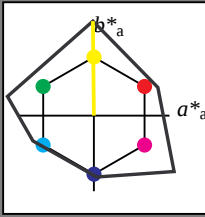
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 149$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*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)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*LAB 75.00 0.01 0.0

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* 0.75 0.75 0.75 (1.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.02 0.0
LAB*LAB 75.00 0.01 0.0

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* 0.5 0.5 0.5 (0.0)
olvi3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LAB 53.21 0.04 0.0
LAB*LAB 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.738 0.01 0.25
lab*tch 0.625 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.738 0.01 0.25
lab*tce 0.625 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LAB 32.11 0.01 0.0
LAB*LAB 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.488 -0.007 0.75
lab*tch 0.375 0.25 0.252
lab*nch 0.0 0.25 0.252
relative Natural Colour (NC)
lab*trj 0.488 0.01 0.25
lab*tce 0.375 0.25 0.243
lab*nce 0.0 0.25 0.252

UE580-7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 93.38 -0.62 62.5
LAB*LAB 93.38 -0.62 62.5
LAB*LAB 93.38 -0.62 62.5

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 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 93.37 -0.94 93.76
LAB*LAB 93.37 -0.94 93.76
LAB*LAB 93.37 -0.94 93.76

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 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 91.36 -1.26 125.0
LAB*LAB 91.36 -1.26 125.0
LAB*LAB 91.36 -1.26 125.0

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 0.243
lab*nce 0.0 1.0 0.252

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.28 -0.92 93.76
LAB*LAB 71.28 -0.92 93.76
LAB*LAB 71.28 -0.92 93.76

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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 51.18 -0.59 62.51
LAB*LAB 51.18 -0.59 62.51
LAB*LAB 51.18 -0.59 62.51

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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 31.09 -0.31 31.24
LAB*LAB 31.09 -0.31 31.24
LAB*LAB 31.09 -0.31 31.24

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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.16 -0.25 31.26
LAB*LAB 23.16 -0.25 31.26
LAB*LAB 23.16 -0.25 31.26

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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LAB 11.01 0.07 0.01
LAB*LAB 11.01 0.07 0.01

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* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*LAB 18.02 0.5 0.46
LAB*LAB 18.02 0.5 0.46

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

chromaticness c^*

$n^* = 0.25$

$n^* = 0.50$

$n^* = 1.0$

Output: Colorimetric Reflective System MRS18

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

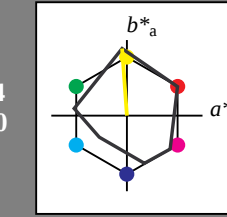
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LAB 95.41 -0.97 4.75
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)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 -0.6 3.44

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

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

relative CIELAB lab*
lab*lab 0.735 -0.011 0.25
lab*tch 0.625 0.5 0.258
lab*nch 0.0 0.5

Input: Colorimetric Reflective System NCS11

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

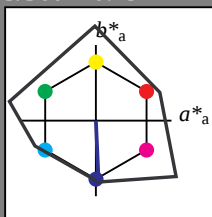
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



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

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LABa 74.31 0.02 0.0
LAB*LABb 74.31 0.02 0.0
LAB*LABc 74.31 0.02 0.0

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

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LABa 53.21 0.04 0.0
LAB*LABb 53.21 0.04 0.0
LAB*LABc 53.21 0.04 0.0

relative CIELAB lab*
lab*lab 0.625 0.25 0.757
lab*tch 0.625 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.625 0.25 0.757
lab*trc 0.625 0.25 0.757
lab*trb 0.0 0.25 0.757

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 32.11 0.08 0.0
LAB*LABa 32.11 0.08 0.0
LAB*LABb 32.11 0.08 0.0
LAB*LABc 32.11 0.08 0.0

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

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 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*LABb 11.01 0.07 0.01
LAB*LABc 11.01 0.07 0.01

relative CIELAB lab*
lab*lab 0.113 0.011 -0.249
lab*tch 0.125 0.25 0.757
lab*nch 0.0 0.25 0.757
relative Natural Colour (NC)
lab*trj 0.113 0.003 -0.249
lab*trc 0.125 0.25 0.757
lab*trb 0.0 0.25 0.757

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

UE580-7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (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 $h^* = lab^*h = 290/360 = 0.806$

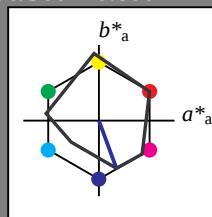
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



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

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*trc 1.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.34 4.4
LAB*LABa 76.06 0.0 0.0
LAB*LABb 76.06 0.0 0.0
LAB*LABc 76.06 0.0 0.0

relative CIELAB lab*
lab*lab 0.81 0.086 -0.234
lab*tch 0.875 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.81 0.064 -0.24
lab*trc 0.875 0.25 0.791
lab*trb 0.0 0.25 0.791

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

relative CIELAB lab*
lab*lab 0.56 0.086 -0.234
lab*tch 0.56 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.56 0.064 -0.241
lab*trc 0.56 0.25 0.791
lab*trb 0.0 0.25 0.791

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 0.08 0.0
LAB*LABa 32.11 0.08 0.0
LAB*LABb 32.11 0.08 0.0
LAB*LABc 32.11 0.08 0.0

relative CIELAB lab*
lab*lab 0.31 0.086 -0.234
lab*tch 0.31 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.31 0.064 -0.241
lab*trc 0.31 0.25 0.791
lab*trb 0.0 0.25 0.791

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

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

relative CIELAB lab*
lab*lab 0.125 0.25 0.806
lab*tch 0.125 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.125 0.25 0.791
lab*trc 0.125 0.25 0.791
lab*trb 0.0 0.25 0.791

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.01 0.01 0.01
LAB*LABa 0.01 0.01 0.01
LAB*LABb 0.01 0.01 0.01
LAB*LABc 0.01 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*trc 0.0 0.0 0.0
lab*trb 0.0 0.0 0.0

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

output: no change compared to input

chromaticness c^*

chromaticness c^*

BAM registration: 20060101-UE58/10L/L58E05NP.PS/.PDF BAM material: code=in4ta
application for evaluation and measurement of printer or monitor systems

Input: Colorimetric Reflective System NCS11

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

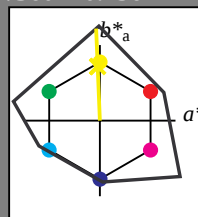
lab^*tch and lab^*nch

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
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 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*TCa 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*TCa 87.5 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*TCa 75.0 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*TCa 62.5 91.41 92.32

relative Inform. Technology (IT)
olvi3* 0.967 1.0 0.0 (1.0)
cmyn3* 0.033 0.0 0.0 (0.0)
olvi4* 0.967 1.0 0.0 (1.0)
cmyn4* 0.033 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 90.45 -4.92 121.77
LAB*Lab 90.45 -4.93 121.77
LAB*TCa 50.0 121.87 92.32

relative Inform. Technology (IT)
olvi3* 0.959 1.0 0.0 (1.0)
cmyn3* 0.041 0.0 0.0 (0.0)
olvi4* 0.959 1.0 0.0 (1.0)
cmyn4* 0.041 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 89.45 -6.19 191.33
LAB*Lab 89.45 -6.20 191.33
LAB*TCa 37.5 191.43 92.33

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*TCa 75.0 0.01 -

relative Inform. Technology (IT)
olvi3* 0.742 0.75 0.5 (1.0)
cmyn3* 0.258 0.25 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 73.07 -1.2 30.45
LAB*Lab 73.07 -1.23 30.45
LAB*TCa 62.5 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*TCa 50.0 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 0.25 0.25
standard and adapted CIELAB
LAB*LAB 70.59 -3.68 91.33
LAB*Lab 70.59 -3.71 91.33
LAB*TCa 37.5 91.4 92.33

relative Inform. Technology (IT)
olvi3* 0.706 0.75 0.0 (1.0)
cmyn3* 0.292 0.25 1.0 (0.0)
olvi4* 0.941 0.5 1.0 0.256
cmyn4* 0.059 0.5 0.0 0.256
standard and adapted CIELAB
LAB*LAB 68.81 -5.19 191.33
LAB*Lab 68.81 -5.20 191.33
LAB*TCa 25.0 191.43 92.33

relative Inform. Technology (IT)
olvi3* 0.698 0.75 0.0 (1.0)
cmyn3* 0.300 0.25 1.0 (0.0)
olvi4* 0.933 0.5 1.0 0.25
cmyn4* 0.067 0.5 0.0 0.25
standard and adapted CIELAB
LAB*LAB 67.93 -6.19 191.33
LAB*Lab 67.93 -6.20 191.33
LAB*TCa 12.5 191.43 92.33

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

relative Inform. Technology (IT)
olvi3* 0.492 0.5 0.25 (1.0)
cmyn3* 0.508 0.5 0.75 (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 51.96 -1.18 30.46
LAB*Lab 51.96 -1.23 30.45
LAB*TCa 37.5 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 0.75
cmyn4* 0.016 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 50.72 -2.42 60.89
LAB*Lab 50.72 -2.47 60.89
LAB*TCa 25.0 60.93 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 0.75
cmyn4* 0.024 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 49.45 -3.68 91.33
LAB*Lab 49.45 -3.71 91.33
LAB*TCa 12.5 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 0.75
cmyn4* 0.033 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 48.57 -4.92 121.77
LAB*Lab 48.57 -4.93 121.77
LAB*TCa 50.0 121.87 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 0.75
cmyn4* 0.041 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 47.69 -6.19 191.33
LAB*Lab 47.69 -6.20 191.33
LAB*TCa 25.0 191.43 92.33

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*TCa 25.0 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 (1.0)
cmyn4* 0.008 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 30.86 -1.17 30.45
LAB*Lab 30.86 -1.23 30.45
LAB*TCa 12.5 30.46 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 0.75
cmyn4* 0.016 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 29.59 -2.42 60.89
LAB*Lab 29.59 -2.47 60.89
LAB*TCa 25.0 60.93 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 0.75
cmyn4* 0.024 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 28.71 -3.68 91.33
LAB*Lab 28.71 -3.71 91.33
LAB*TCa 12.5 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 0.75
cmyn4* 0.033 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 27.83 -4.92 121.77
LAB*Lab 27.83 -4.93 121.77
LAB*TCa 50.0 121.87 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 0.75
cmyn4* 0.041 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 26.95 -6.19 191.33
LAB*Lab 26.95 -6.20 191.33
LAB*TCa 25.0 191.43 92.33

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*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 0.01 0.01 -

relative Inform. Technology (IT)
olvi3* 0.235 -0.009 0.25
cmyn3* 0.125 0.25 0.256
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*Lab 11.01 0.07 0.01
LAB*TCa 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 $h^* = lab^*h = 162/360 = 0.451$

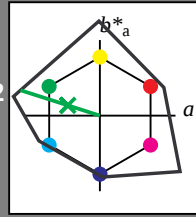
lab^*tch and lab^*nch

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
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

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

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

relative Inform. Technology (IT)

olvi3*	1.0	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)

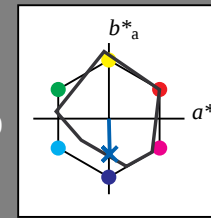
relative Inform. Technology (IT)

olvi3*	0.771	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)

MRS18; adapted (a) CIELAB data

$$L^* = L_a^* \quad a_a^* \quad b_a^* \quad C_{ab,a}^* \quad h_{ab,a}^*$$

R _{Ma}	49.63	66.96	38.37	77.18	30
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R _{Ma}	49.63
I _{Ma}	99.7

JMa	90.7	-6.36	88
GMa	52.11	-69.73	9

GMa	32.11	69.79	3.1
G50B _{Ma}	45.03	-36.57	-2

BMa	36.65	23.19	-0.00
B50BMa	34.94	57.17	-0.00

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

L
L
L

0,75

64.56	25
67.79	92
43.87	164
46.87	271

relative Inform. Technology (IT)				
<i>olvi3*</i>	0.0	0.367	1.0	(1.0)
<i>cmyn3*</i>	1.0	0.633	0.0	(0.0)
<i>olvi4*</i>	0.0	0.367	1.0	1.0
<i>cmyn4*</i>	1.0	0.633	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	39.73	1.32		-49.33
LAB*LAB _a	39.73	1.23		-50.34
LAB*TChe	50.0	50.36		271.41

$$n^* = 0,00$$

matchless c⁺

BAM-test chart UE58; Colorimetric systems NCS11a & MRS18 input: *cmy0** *setcmykcolor*

output: no change compared to input