

See for similar files: <http://www.ps.bam.de/QE50/>
Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

Page count: 2

www.ps.bam.de/QE50/10Q/Q50E01NP.PS/.PDF; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 93/360 = 0.258$

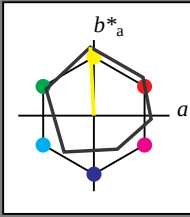
lab^*tch and lab^*nch

D50: hue Y

LCH*Ma: 91 91 93

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 94$

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	95.46	-0.39	4.69	
LAB*LAB	95.46	0.0	0.0	
LAB*TCRa	99.99	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	76.12	-0.12	3.4	
LAB*LAB	76.12	0.0	0.0	
LAB*TCRa	75.00	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	56.78	0.13	2.11	
LAB*LAB	56.78	0.0	0.0	
LAB*TCRa	50.00	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	37.44	-0.37	0.82	
LAB*LAB	37.44	0.0	0.0	
LAB*TCRa	25.00	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	18.1	0.0	0.46	
LAB*LAB	18.1	0.0	0.0	
LAB*TCRa	0.00	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	0.0	0.0	0.0	
LAB*LAB	0.0	0.0	0.0	
LAB*TCRa	0.00	0.01	-	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	94.34	-1.17	22.64	
LAB*LAB	94.34	0.0	0.0	
LAB*TCRa	87.5	22.67	92.99	

relative CIELAB lab*

lab*lab	0.985	-0.012	0.25	
lab*tch	0.875	0.25	0.258	
lab*nch	0.0	0.25	0.258	
relative Natural Colour (NC)				
lab*trj	0.985	-0.022	0.249	
lab*tce	0.875	0.25	0.265	
lab*nce	0.0	0.25	0.265	

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	75.0	-1.17	22.64	
LAB*LAB	75.0	0.0	0.0	
LAB*TCRa	62.5	22.68	92.99	

relative CIELAB lab*

lab*lab	0.75	0.0	0.0	
lab*tch	0.625	0.25	0.258	
lab*nch	0.0	0.25	0.258	
relative Natural Colour (NC)				
lab*trj	0.736	-0.022	0.249	
lab*tce	0.625	0.25	0.265	
lab*nce	0.0	0.25	0.265	

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	55.66	-1.02	24.69	
LAB*LAB	55.66	-1.17	22.64	
LAB*TCRa	37.5	22.68	92.99	

relative CIELAB lab*

lab*lab	0.486	-0.012	0.25	
lab*tch	0.375	0.25	0.258	
lab*nch	0.0	0.25	0.258	
relative Natural Colour (NC)				
lab*trj	0.486	-0.022	0.249	
lab*tce	0.375	0.25	0.265	
lab*nce	0.0	0.25	0.265	

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	36.32	-0.75	23.99	
LAB*LAB	36.32	-1.17	22.64	
LAB*TCRa	12.5	22.67	92.99	

relative CIELAB lab*

lab*lab	0.236	-0.012	0.25	
lab*tch	0.125	0.25	0.258	
lab*nch	0.0	0.25	0.258	
relative Natural Colour (NC)				
lab*trj	0.236	-0.022	0.249	
lab*tce	0.125	0.25	0.265	
lab*nce	0.0	0.25	0.265	

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	0.0	0.0	0.0	
LAB*LAB	0.0	0.0	0.0	
LAB*TCRa	0.00	0.01	-	

relative CIELAB lab*

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RC _{IE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	93.22	-2.72	49.83	
LAB*LAB	93.22	-2.76	45.28	
LAB*TCRa	75.0	45.34	92.99	

relative CIELAB lab*

lab*lab	0.971	-0.025	0.499	
lab*tch	0.75	0.5	0.258	
lab*nch	0.0	0.5	0.258	
relative Natural Colour (NC)				
lab*trj	0.971	-0.046	0.498	
lab*tce	0.75	0.5	0.265	
lab*nce	0.0	0.5	0.265	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	73.89	-2.46	48.55	
LAB*LAB	73.89	-2.36	45.29	
LAB*TCRa	50.0	45.35	92.99	

relative CIELAB lab*

lab*lab	0.741	-0.025	0.499	
lab*tch	0.5	0.5	0.258	
lab*nch	0.0	0.5	0.258	
relative Natural Colour (NC)				
lab*trj	0.721	-0.046	0.498	
lab*tce	0.5	0.5	0.265	
lab*nce	0.0	0.5	0.265	

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	54.55	-2.19	47.25	
LAB*LAB	54.55	-2.37	42.92	
LAB*TCRa	37.5	45.34	92.99	

relative CIELAB lab*

lab*lab	0.486	-0.038	0.749	
lab*tch	0.375	0.75	0.258	
lab*nch	0.0	0.75	0.258	
relative Natural Colour (NC)				
lab*trj	0.471	-0.069	0.747	
lab*tce	0.375	0.75	0.265	
lab*nce	0.0	0.75	0.265	

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	36.32	-0.75	23.99	
LAB*LAB	36.32	-1.17	22.64	
LAB*TCRa	12.5	22.67	92.99	

relative CIELAB lab*

lab*lab	0.236	-0.012	0.25	
lab*tch	0.125	0.25	0.258	
lab*nch	0.0	0.25	0.258	
relative Natural Colour (NC)				
lab*trj	0.236	-0.022	0.249	
lab*tce	0.125	0.25	0.265	
lab*nce	0.0	0.25	0.265	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0
--------	-----	-----	-----	------

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.42$

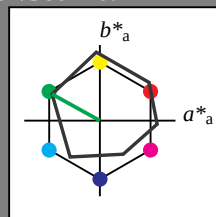
lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.46 -39.34 4.69
LAB*LAB 95.46 0.0 0.0
LAB*LAB 95.46 0.0 0.0
relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 84.32 -16.03 12.7
LAB*LAB 84.32 -15.78 8.74
LAB*LAB 84.32 -15.78 8.74
relative CIELAB lab*
lab*lab 0.856 -0.218 0.121
lab*lab 0.875 0.25 0.42
lab*lab 0.875 0.25 0.42
relative Natural Colour (NC)
lab*lab 0.856 -0.218 0.121
lab*lab 0.875 0.25 0.42
lab*lab 0.875 0.25 0.42

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.18 -31.67 20.7
LAB*LAB 73.18 -31.58 17.49
LAB*LAB 73.18 -31.58 17.49
relative CIELAB lab*
lab*lab 0.712 -0.436 0.242
lab*lab 0.75 0.5 0.42
lab*lab 0.75 0.5 0.42
relative Natural Colour (NC)
lab*lab 0.712 -0.436 0.242
lab*lab 0.75 0.5 0.42
lab*lab 0.75 0.5 0.42

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 62.04 -47.31 28.7
LAB*LAB 62.04 -47.31 28.7
LAB*LAB 62.04 -47.31 28.7
relative CIELAB lab*
lab*lab 0.568 -0.655 0.363
lab*lab 0.625 0.75 0.42
lab*lab 0.625 0.75 0.42
relative Natural Colour (NC)
lab*lab 0.568 -0.655 0.363
lab*lab 0.625 0.75 0.42
lab*lab 0.625 0.75 0.42

relative Inform. Technology (IT)
olv3* 0.0 1.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olv4* 0.0 1.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 50.9 -62.95 36.7
LAB*LAB 50.9 -63.16 34.97
LAB*LAB 50.9 -63.16 34.97
relative CIELAB lab*
lab*lab 0.424 -0.874 0.484
lab*lab 0.5 1.0 0.42
lab*lab 0.5 1.0 0.42
relative Natural Colour (NC)
lab*lab 0.424 -0.874 0.484
lab*lab 0.5 1.0 0.42
lab*lab 0.5 1.0 0.42

$n^* = 0.00$

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.0 0.75 0.0 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 33.84 -31.41 19.41
LAB*LAB 33.84 -31.58 17.49
LAB*LAB 33.84 -31.58 17.49
relative CIELAB lab*
lab*lab 0.462 -0.474 0.155
lab*lab 0.462 0.75 0.42
lab*lab 0.462 0.75 0.42
relative Natural Colour (NC)
lab*lab 0.462 -0.474 0.155
lab*lab 0.462 0.75 0.42
lab*lab 0.462 0.75 0.42

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.0 0.5 0.0 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
relative CIELAB lab*
lab*lab 0.318 -0.655 0.363
lab*lab 0.375 0.75 0.42
lab*lab 0.375 0.75 0.42
relative Natural Colour (NC)
lab*lab 0.318 -0.655 0.363
lab*lab 0.375 0.75 0.42
lab*lab 0.375 0.75 0.42

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.0 0.25 0.0 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
relative CIELAB lab*
lab*lab 0.212 -0.436 0.242
lab*lab 0.25 0.5 0.42
lab*lab 0.25 0.5 0.42
relative Natural Colour (NC)
lab*lab 0.212 -0.436 0.242
lab*lab 0.25 0.5 0.42
lab*lab 0.25 0.5 0.42

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.44 -37.44 0.82
LAB*LAB 37.44 -37.44 0.82
LAB*LAB 37.44 -37.44 0.82
relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*lab 0.25 0.0 0.0
lab*lab 0.25 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.25 0.0 0.0
lab*lab 0.25 0.0 0.0
lab*lab 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

$n^* = 1.0$

QE500-7, 5 step scales for constant CIELAB hue 151/360 = 0.42 (left)

BAM-test chart QE50; Colorimetric systems ORS18 & TLS00

D50: 2 coordinate data of 5 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 140/360 = 0.389$

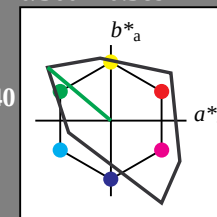
lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 83 109 140

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LAB 95.41 0.0 0.0
LAB*LAB 95.41 0.0 0.0
relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0
lab*lab 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 92.25 -20.92 17.6
LAB*LAB 92.25 -20.92 17.6
LAB*LAB 92.25 -20.92 17.6
relative CIELAB lab*
lab*lab 0.967 -0.218 0.121
lab*lab 0.985 0.25 0.419
lab*lab 0.985 0.25 0.419
relative Natural Colour (NC)
lab*lab 0.967 -0.218 0.121
lab*lab 0.985 0.25 0.419
lab*lab 0.985 0.25 0.419

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 89.11 -41.85 35.2
LAB*LAB 89.11 -41.85 35.2
LAB*LAB 89.11 -41.85 35.2
relative CIELAB lab*
lab*lab 0.924 -0.382 0.322
lab*lab 0.975 0.5 0.389
lab*lab 0.975 0.5 0.389
relative Natural Colour (NC)
lab*lab 0.924 -0.382 0.322
lab*lab 0.975 0.5 0.389
lab*lab 0.975 0.5 0.389

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 86.96 -62.75 52.8
LAB*LAB 86.96 -62.75 52.8
LAB*LAB 86.96 -62.75 52.8
relative CIELAB lab*
lab*lab 0.924 -0.436 0.242
lab*lab 0.975 0.5 0.419
lab*lab 0.975 0.5 0.419
relative Natural Colour (NC)
lab*lab 0.924 -0.436 0.242
lab*lab 0.975 0.5 0.419
lab*lab 0.975 0.5 0.419

relative Inform. Technology (IT)
olv3* 0.0 1.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olv4* 0.0 1.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.81 -83.71 70.4
LAB*LAB 82.81 -83.71 70.4
LAB*LAB 82.81 -83.71 70.4
relative CIELAB lab*
lab*lab 0.868 -0.764 0.643
lab*lab 0.9 0.0 1.0 0.389
lab*lab 0.9 0.0 1.0 0.389
relative Natural Colour (NC)
lab*lab 0.868 -0.764 0.643
lab*lab 0.9 0.0 1.0 0.389
lab*lab 0.9 0.0 1.0 0.389

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.0 0.75 0.0 (1.0)
cmyn4* 0.75 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 50.9 -62.95 36.7
LAB*LAB 50.9 -63.16 34.97
LAB*LAB 50.9 -63.16 34.97
relative CIELAB lab*
lab*lab 0.424 -0.874 0.484
lab*lab 0.5 1.0 0.42
lab*lab 0.5 1.0 0.42
relative Natural Colour (NC)
lab*lab 0.424 -0.874 0.484
lab*lab 0.5 1.0 0.42
lab*lab 0.5 1.0 0.42

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.5 0.75 (0.0)
olv4* 0.25 0.5 0.25 (1.0)
cmyn4* 0.75 0.5 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 44.56 -20.93 17.6
LAB*LAB 44.56 -20.93 17.6
LAB*LAB 44.56 -20.93 17.6
relative CIELAB lab*
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
relative Natural Colour (NC)
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.0 0.25 0.0 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
LAB*LAB 34.5 -31.58 17.49
relative CIELAB lab*
lab*lab 0.318 -0.655 0.363
lab*lab 0.375 0.75 0.42
lab*lab 0.375 0.75 0.42
relative Natural Colour (NC)
lab*lab 0.318 -0.655 0.363
lab*lab 0.375 0.75 0.42
lab*lab 0.375 0.75 0.42

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
LAB*LAB 18.1 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0
lab*lab 0.0 0.0 0.0

$n^* = 1.0$

5 step scales for constant CIELAB hue 140/360 = 0.389 (right)

input: $cmv0^* setcmykcolor$

output: no change compared to input

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.5 0.75 (0.0)
olv4* 0.25 0.5 0.25 (1.0)
cmyn4* 0.75 0.5 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 44.56 -20.93 17.6
LAB*LAB 44.56 -20.93 17.6
LAB*LAB 44.56 -20.93 17.6
relative CIELAB lab*
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
relative Natural Colour (NC)
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419
lab*lab 0.625 0.75 0.419

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.0 0.5 0.0 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 65.26 -41.86 35.21
LAB*LAB 65.

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 231/360 = 0.641$

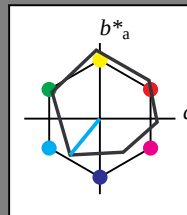
lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 57 62 231

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RC _{IE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.46 -0.39 4.69
LAB*ABa 95.46 0.0 0.0
LAB*TCha 99.99 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.12 -0.12 3.4
LAB*ABa 76.12 0.0 0.0
LAB*TCha 75.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*ABa 56.78 0.0 0.0
LAB*TCha 50.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.44 -0.62 0.82
LAB*ABa 37.44 0.0 0.0
LAB*TCha 25.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*ABa 18.1 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.544$

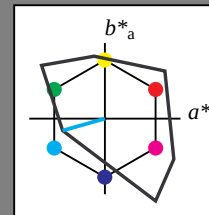
lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 85 58 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RC _{IE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*ABa 95.41 0.0 0.0
LAB*TCha 99.99 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*ABa 71.57 0.0 0.0
LAB*TCha 75.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.99 -0.12 3.4
LAB*ABa 56.99 0.0 0.0
LAB*TCha 50.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.44 -0.62 0.82
LAB*ABa 37.44 0.0 0.0
LAB*TCha 25.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.0 0.0
LAB*ABa 18.1 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*ABa 0.0 0.0 0.0
LAB*TCha 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$

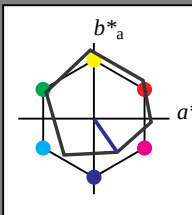
lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.46 -0.39 4.69
LAB*LABa 95.46 0.0 0.0
LAB*LABb 99.99 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.12 -0.12 3.4
LAB*LABa 76.12 0.0 0.0
LAB*LABb 75.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*LABb 50.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.16 0.62 0.82
LAB*LABa 37.16 0.0 0.0
LAB*LABb 25.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.1 0.67 0.46
LAB*LABa 18.1 0.0 0.0
LAB*LABb 0.0 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 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 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 78.02 7.56 -7.55
LAB*LABa 78.02 7.72 -11.09
LAB*LABb 87.5 13.52 304.82

relative CIELAB lab*
lab*lab 0.75 0.143 -0.204
lab*tch 0.875 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.775 0.126 -0.215
lab*tce 0.875 0.25 0.834
lab*nce 0.0 0.25 0.834

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 1.0 (0.0)
cmyn4* 0.25 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 60.59 15.52 -19.82
LAB*LABa 60.59 15.44 -22.19
LAB*LABb 75.0 27.04 304.82

relative CIELAB lab*
lab*lab 0.549 0.285 -0.409
lab*tch 0.75 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.549 0.252 -0.431
lab*tce 0.75 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.25 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.25 15.44 -22.19
LAB*LABa 41.25 15.44 -22.19
LAB*LABb 50.0 27.04 304.82

relative CIELAB lab*
lab*lab 0.299 0.285 -0.409
lab*tch 0.5 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.299 0.252 -0.431
lab*tce 0.5 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 21.91 16.06 11.42
LAB*LABa 21.91 15.44 -22.19
LAB*LABb 25.01 27.04 304.82

relative CIELAB lab*
lab*lab 0.049 0.285 -0.409
lab*tch 0.25 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.049 0.252 -0.431
lab*tce 0.25 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.0 7.72 -11.09
LAB*LABa 20.0 7.72 -11.09
LAB*LABb 12.5 13.52 304.82

relative CIELAB lab*
lab*lab 0.025 0.143 -0.204
lab*tch 0.125 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.025 0.126 -0.215
lab*tce 0.125 0.25 0.834
lab*nce 0.0 0.25 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 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 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 1.0 (0.0)
cmyn4* 0.25 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.15 23.48 -32.08
LAB*LABa 43.15 23.48 -32.08
LAB*LABb 62.5 40.56 304.82

relative CIELAB lab*
lab*lab 0.324 0.428 -0.615
lab*tch 0.625 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.324 0.379 -0.646
lab*tce 0.625 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 25.73 31.44 -44.34
LAB*LABa 25.73 30.88 -44.38
LAB*LABb 50.0 54.08 304.82

relative CIELAB lab*
lab*lab 0.099 0.571 -0.82
lab*tch 0.5 1.0 0.847
lab*nch 0.0 1.0 0.847
relative Natural Colour (NC)
lab*trj 0.099 0.505 -0.862
lab*tce 0.5 1.0 0.834
lab*nce 0.0 1.0 0.834

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.25 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.82 23.16 -32.29
LAB*LABa 23.82 23.16 -32.29
LAB*LABb 37.51 40.56 304.82

relative CIELAB lab*
lab*lab 0.074 0.428 -0.615
lab*tch 0.375 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.074 0.379 -0.646
lab*tce 0.375 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 21.91 16.06 11.42
LAB*LABa 21.91 15.44 -22.19
LAB*LABb 25.01 27.04 304.82

relative CIELAB lab*
lab*lab 0.049 0.285 -0.409
lab*tch 0.25 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.049 0.252 -0.431
lab*tce 0.25 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.0 7.72 -11.09
LAB*LABa 20.0 7.72 -11.09
LAB*LABb 12.5 13.52 304.82

relative CIELAB lab*
lab*lab 0.025 0.143 -0.204
lab*tch 0.125 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.025 0.126 -0.215
lab*tce 0.125 0.25 0.834
lab*nce 0.0 0.25 0.834

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 1.0 (0.0)
cmyn4* 0.25 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.15 23.48 -32.08
LAB*LABa 43.15 23.48 -32.08
LAB*LABb 62.5 40.56 304.82

relative CIELAB lab*
lab*lab 0.324 0.428 -0.615
lab*tch 0.625 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.324 0.379 -0.646
lab*tce 0.625 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 25.73 31.44 -44.34
LAB*LABa 25.73 30.88 -44.38
LAB*LABb 50.0 54.08 304.82

relative CIELAB lab*
lab*lab 0.099 0.571 -0.82
lab*tch 0.5 1.0 0.847
lab*nch 0.0 1.0 0.847
relative Natural Colour (NC)
lab*trj 0.099 0.505 -0.862
lab*tce 0.5 1.0 0.834
lab*nce 0.0 1.0 0.834

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.25 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.82 23.16 -32.29
LAB*LABa 23.82 23.16 -32.29
LAB*LABb 37.51 40.56 304.82

relative CIELAB lab*
lab*lab 0.074 0.428 -0.615
lab*tch 0.375 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.074 0.379 -0.646
lab*tce 0.375 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 21.91 16.06 11.42
LAB*LABa 21.91 15.44 -22.19
LAB*LABb 25.01 27.04 304.82

relative CIELAB lab*
lab*lab 0.049 0.285 -0.409
lab*tch 0.25 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.049 0.252 -0.431
lab*tce 0.25 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.0 7.72 -11.09
LAB*LABa 20.0 7.72 -11.09
LAB*LABb 12.5 13.52 304.82

relative CIELAB lab*
lab*lab 0.025 0.143 -0.204
lab*tch 0.125 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.025 0.126 -0.215
lab*tce 0.125 0.25 0.834
lab*nce 0.0 0.25 0.834

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 1.0 (0.0)
cmyn4* 0.25 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.15 23.48 -32.08
LAB*LABa 43.15 23.48 -32.08
LAB*LABb 62.5 40.56 304.82

relative CIELAB lab*
lab*lab 0.324 0.428 -0.615
lab*tch 0.625 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.324 0.379 -0.646
lab*tce 0.625 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 25.73 31.44 -44.34
LAB*LABa 25.73 30.88 -44.38
LAB*LABb 50.0 54.08 304.82

relative CIELAB lab*
lab*lab 0.099 0.571 -0.82
lab*tch 0.5 1.0 0.847
lab*nch 0.0 1.0 0.847
relative Natural Colour (NC)
lab*trj 0.099 0.505 -0.862
lab*tce 0.5 1.0 0.834
lab*nce 0.0 1.0 0.834

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.25 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.82 23.16 -32.29
LAB*LABa 23.82 23.16 -32.29
LAB*LABb 37.51 40.56 304.82

relative CIELAB lab*
lab*lab 0.074 0.428 -0.615
lab*tch 0.375 0.75 0.847
lab*nch 0.0 0.75 0.847
relative Natural Colour (NC)
lab*trj 0.074 0.379 -0.646
lab*tce 0.375 0.75 0.834
lab*nce 0.0 0.75 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 21.91 16.06 11.42
LAB*LABa 21.91 15.44 -22.19
LAB*LABb 25.01 27.04 304.82

relative CIELAB lab*
lab*lab 0.049 0.285 -0.409
lab*tch 0.25 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.049 0.252 -0.431
lab*tce 0.25 0.5 0.834
lab*nce 0.0 0.5 0.834

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 0.5 0.5 1.0 (0.0)
cmyn4* 0.5 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 20.0 7.72 -11.09
LAB*LABa 20.0 7.72 -11.09
LAB*LABb 12.5 13.52 304.82

relative CIELAB lab*
lab*lab 0.025 0.143 -0.204
lab*tch 0.125 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.025 0.126 -0.215
lab*tce 0.125 0.25 0.834
lab*nce 0.0 0.25 0.834

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 302/360 = 0.838$

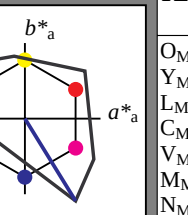
lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 26 128 302

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 26/360 = 0.074$

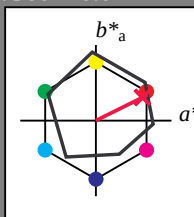
lab^*tch and lab^*nch

D50: hue R

LCH*Ma: 49 76 26

olv*Ma: 1.0 0.0 0.3

triangle lightness t^*



% Gamut

$u^*_{rel} = 94$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	95.46	-39.49	4.69	
LAB*LAB	95.46	0.0	0.0	
LAB*LAB	95.46	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.75	0.825	(1.0)
cmyn3*	0.0	0.25	0.175	(0.0)
olvi4*	1.0	0.75	0.825	(1.0)
cmyn4*	0.0	0.25	0.175	(0.0)
LAB*LAB	83.73	16.82	12.41	
LAB*LAB	83.73	17.06	8.49	
LAB*LAB	83.73	17.06	8.49	

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.65	(1.0)
cmyn3*	0.0	0.5	0.65	(1.0)
olvi4*	1.0	0.5	0.65	(1.0)
cmyn4*	0.0	0.5	0.65	(1.0)
LAB*LAB	72.0	34.13	16.99	
LAB*LAB	72.0	34.13	16.99	
LAB*LAB	72.0	34.13	16.99	

relative Inform. Technology (IT)

olvi3*	1.0	0.25	0.475	(1.0)
cmyn3*	0.0	0.25	0.475	(1.0)
olvi4*	1.0	0.25	0.475	(1.0)
cmyn4*	0.0	0.25	0.475	(1.0)
LAB*LAB	60.28	51.28	27.84	
LAB*LAB	60.28	51.28	27.84	
LAB*LAB	60.28	51.28	27.84	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	0.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	
LAB*LAB	50.0	0.0	0.0	

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RC _{IE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.25$

$n^* = 1.50$

$n^* = 1.75$

$n^* = 2.00$

$n^* = 2.25$

$n^* = 2.50$

$n^* = 2.75$

$n^* = 3.00$

$n^* = 3.25$

$n^* = 3.50$

$n^* = 3.75$

$n^* = 4.00$

$n^* = 4.25$

$n^* = 4.50$

$n^* = 4.75$

$n^* = 5.00$

$n^* = 5.25$

$n^* = 5.50$

$n^* = 5.75$

$n^* = 6.00$

$n^* = 6.25$

$n^* = 6.50$

$n^* = 6.75$

$n^* = 7.00$

$n^* = 7.25$

$n^* = 7.50$

$n^* = 7.75$

$n^* = 8.00$

$n^* = 8.25$

$n^* = 8.50$

$n^* = 8.75$

$n^* = 9.00$

$n^* = 9.25$

$n^* = 9.50$

$n^* = 9.75$

$n^* = 10.00$

$n^* = 10.25$

$n^* = 10.50$

$n^* = 10.75$

$n^* = 11.00$

$n^* = 11.25$

$n^* = 11.50$

$n^* = 11.75$

$n^* = 12.00$

$n^* = 12.25$

$n^* = 12.50$

$n^* = 12.75$

$n^* = 13.00$

$n^* = 13.25$

$n^* = 13.50$

$n^* = 13.75$

$n^* = 14.00$

$n^* = 14.25$

$n^* = 14.50$

$n^* = 14.75$

$n^* = 15.00$

$n^* = 15.25$

$n^* = 15.50$

$n^* = 15.75$

$n^* = 16.00$

$n^* = 16.25$

$n^* = 16.50$

$n^* = 16.75$

$n^* = 17.00$

$n^* = 17.25$

$n^* = 17.50$

$n^* = 17.75$

$n^* = 18.00$

$n^* = 18.25$

$n^* = 18.50$

$n^* = 18.75$

$n^* = 19.00$

$n^* = 19.25$

$n^* = 19.50$

$n^* = 19.75$

$n^* = 20.00$

$n^* = 20.25$

$n^* = 20.50$

$n^* = 20.75$

$n^* = 21.00$

$n^* = 21.25$

$n^* = 21.50$

$n^* = 21.75$

$n^* = 22.00$

$n^* = 22.25$

$n^* = 22.50$

$n^* = 22.75$

$n^* = 23.00$

$n^* = 23.25$

$n^* = 23.50$

$n^* = 23.75$

$n^* = 24.00$

$n^* = 24.25$

$n^* = 24.50$

$n^* = 24.75$

$n^* = 25.00$

$n^* = 25.25$

$n^* = 25.50$

$n^* = 25.75$

$n^* = 26.00$

$n^* = 26.25$

$n^* = 26.50$

$n^* = 26.75$

$n^* = 27.00$

$n^* = 27.25$

$n^* = 27.50$

$n^* = 27.75$

$n^* = 28.00$

$n^* = 28.25$

$n^* = 28.50$

$n^* = 28.75$

$n^* = 29.00$

$n^* = 29.25$

$n^* = 29.50$

$n^* = 29.75$

$n^* = 30.00$

$n^* = 30.25$

$n^* = 30.50$

$n^* = 30.75$

$n^* = 31.00$

$n^* = 31.25$

$n^* = 31.50$

$n^* = 31.75$

$n^* = 32.00$

$n^* = 32.25$

$n^* = 32.50$

$n^* = 32.75$

$n^* = 33.00$

$n^* = 33.25$

$n^* = 33.50$

$n^* = 33.75$

$n^* = 34.00$

$n^* = 34.25$

$n^* = 34.50$

$n^* = 34.75$

$n^* = 35.00$

$n^* = 35.25$

$n^* = 35.50$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 167/360 = 0.463$

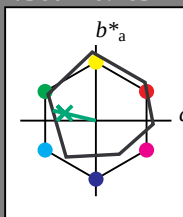
lab^*tch and lab^*nch

D50: hue G

LCH*Ma: 52 59 167

olv*Ma: 0.0 1.0 0.26

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

%Regularity

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	95.46	-39.34	4.69	
LAB*LAB	95.46	0.0	0.0	
LAB*LAB	99.99	0.01	0.0	

relative Inform. Technology (IT)

olv3*	0.75	1.0	0.815	(1.0)
olv3*	0.25	0.0	0.185	(0.0)
olv4*	0.75	1.0	0.815	(1.0)
olv4*	0.25	0.0	0.185	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	84.71	-14.49	7.34	
LAB*LAB	84.71	-14.24	3.36	
LAB*LAB	97.5	14.64	166.74	

relative Inform. Technology (IT)

olv3*	0.5	1.0	0.443	(1.0)
olv3*	0.5	0.0	0.557	(0.0)
olv4*	0.5	1.0	0.443	(1.0)
olv4*	0.5	0.0	0.557	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	73.97	-28.49	9.98	
LAB*LAB	73.97	-28.49	6.72	
LAB*LAB	75.0	29.28	166.74	

relative Inform. Technology (IT)

olv3*	0.25	1.0	0.259	(1.0)
olv3*	0.25	0.0	0.741	(0.0)
olv4*	0.25	1.0	0.259	(1.0)
olv4*	0.25	0.0	0.741	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	63.22	-42.69	12.63	
LAB*LAB	63.22	-42.74	10.08	
LAB*LAB	62.5	43.92	166.74	

relative Inform. Technology (IT)

olv3*	0.0	1.0	0.0	(1.0)
olv3*	0.0	0.0	1.0	(0.0)
olv4*	0.0	1.0	0.0	(1.0)
olv4*	0.0	0.0	1.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	52.48	-56.79	15.28	
LAB*LAB	52.48	-56.99	13.44	
LAB*LAB	50.0	58.56	166.73	

relative Inform. Technology (IT)

olv3*	0.0	0.5	0.0	(1.0)
olv3*	0.0	0.5	0.0	(0.0)
olv4*	0.0	0.5	0.0	(1.0)
olv4*	0.0	0.5	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	37.5	17.41	164.35	

relative Inform. Technology (IT)

olv3*	0.25	0.5	0.0	(1.0)
olv3*	0.25	0.5	0.0	(0.0)
olv4*	0.25	0.5	0.0	(1.0)
olv4*	0.25	0.5	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.5	0.0	(1.0)
olv3*	0.0	0.5	0.0	(0.0)
olv4*	0.0	0.5	0.0	(1.0)
olv4*	0.0	0.5	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	63.22	-42.69	12.63	
LAB*LAB	63.22	-42.74	10.08	
LAB*LAB	62.5	43.92	166.74	

relative Inform. Technology (IT)

olv3*	0.0	0.25	0.0	(1.0)
olv3*	0.0	0.25	0.0	(0.0)
olv4*	0.0	0.25	0.0	(1.0)
olv4*	0.0	0.25	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	52.48	-56.79	15.28	
LAB*LAB	52.48	-56.99	13.44	
LAB*LAB	50.0	58.56	166.73	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	37.5	17.41	164.35	

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	0.25	0.25	0.25	(1.0)
olv4*	0.75	0.75	0.75	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	37.44	-0.62	0.82	
LAB*LAB	37.44	0.0	0.0	
LAB*LAB	25.0	0.01	0.0	

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	0.25	0.25	0.25	(1.0)
olv4*	0.75	0.75	0.75	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	35.29	-28.06	7.41	
LAB*LAB	35.29	-28.49	6.73	
LAB*LAB	25.01	29.28	166.72	

relative Inform. Technology (IT)

olv3*	0.0	0.5	0.0	(1.0)
olv3*	0.0	0.5	0.0	(0.0)
olv4*	0.0	0.5	0.0	(1.0)
olv4*	0.0	0.5	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	44.92	-16.76	4.7	
LAB*LAB	37.5	17.41	164.35	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
cmyn3*	0.0	0.0	0.0	(0.0)
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	42.13	-33.52	9.4	
LAB*LAB	25.01	34.82	164.34	

OE500-7, 5 step scales for constant CIELAB hue 167/360 = 0.463 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart QE50; Colorimetric systems ORS18 & TLS00

D50: 2 coordinate data of 5 step colour scales for 10 hues

input: $cmv0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 263/360 = 0.731$

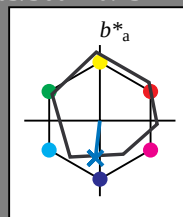
lab^*tch and lab^*nch

D50: hue B

LCH*Ma: 42 47 263

olv*Ma: 0.0 0.52 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RC _{IE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

$\% \text{Regularity}$

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.46 -39.34 49.99
LAB*LABa 95.46 0.0 0.0
LAB*TCHa 99.99 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.12 -0.12 3.4
LAB*LABa 76.12 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.827 -0.028 -0.247
lab*tch 0.875 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.827 0.0 -0.249
lab*tce 0.875 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.12 -0.12 3.4
LAB*LABa 76.12 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.75 0.75 (1.0)
lab*tch 0.75 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.78 0.13 2.11
LAB*LABa 56.78 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.577 -0.028 -0.247
lab*tch 0.625 0.25 0.731
lab*nch 0.0 0.25 0.731
relative Natural Colour (NC)
lab*trj 0.577 0.0 -0.249
lab*tce 0.625 0.25 0.731
lab*nce 0.0 0.25 0.731

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 264/360 = 0.733$

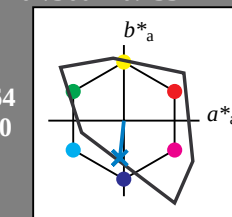
lab^*tch and lab^*nch

D50: hue B

LCH*Ma: 61 54 264

olv*Ma: 0.0 0.59 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RC _{IE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

$\% \text{Regularity}$

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.51 -0.026 -0.247
lab*tch 0.875 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.51 0.0 -0.249
lab*tce 0.875 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.51 -0.026 -0.247
lab*tch 0.875 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.51 0.0 -0.249
lab*tce 0.875 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 54.31 -2.87 -26.87
LAB*LABa 54.31 -2.87 -26.87
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.66 -0.026 -0.248
lab*tch 0.825 0.25 0.733
lab*nch 0.0 0.25 0.733
relative Natural Colour (NC)
lab*trj 0.66 0.0 -0.249
lab*tce 0.825 0.25 0.733
lab*nce 0.0 0.25 0.733

QE500-7, 5 step scales for constant CIELAB hue 263/360 = 0.731 (left)

5 step scales for constant CIELAB hue 264/360 = 0.733 (right)

BAM-test chart QE50; Colorimetric systems ORS18 & TLS00

D50: 2 coordinate data of 5 step colour scales for 10 hues

input: $cmv0^* \text{ setcmvcolor}$

output: no change compared to input