

Input: Colorimetric Reflective System NCS11

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

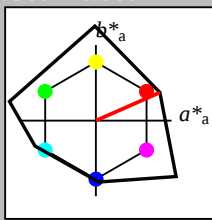
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



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

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 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 Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 74.31 0.02 0.0
 LAB*TCHa 75.00 0.01 0.0

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*LABa 74.31 0.02 0.0
 LAB*TCHa 75.00 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 53.21 0.04 0.0
 LAB*LABa 53.21 0.04 0.0
 LAB*TCHa 50.00 0.01 0.0

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 53.21 0.04 0.0
 LAB*LABa 53.21 0.04 0.0
 LAB*TCHa 50.00 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*LABa 32.11 0.07 0.01
 LAB*TCHa 25.00 0.01 0.0

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*tch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*LABa 32.11 0.07 0.01
 LAB*TCHa 25.00 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*LABa 11.01 0.07 0.01
 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 1.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*LABa 11.01 0.07 0.01
 LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*LABa 11.01 0.07 0.01
 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 1.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*LABa 11.01 0.07 0.01
 LAB*TCHa 0.01 0.01 0.0

NCS11; adapted (a) CIELAB data

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

%Regularity

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

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

relative Inform. Technology (IT)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 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 75.00 46.23 23.75

relative CIELAB lab*
 lab*lab 0.714 0.58 0.201
 lab*tch 0.75 0.5 0.066
 lab*nch 0.0 0.5 0.066
 standard and adapted CIELAB
 LAB*LAB 71.27 42.34 18.63
 LAB*LABa 71.27 42.34 18.63
 LAB*TCHa 75.00 46.23 23.75

relative Inform. Technology (IT)
 olv3* 0.75 0.25 0.25 (1.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 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 50.00 46.24 23.75

relative CIELAB lab*
 lab*lab 0.464 0.58 0.201
 lab*tch 0.75 0.5 0.066
 lab*nch 0.0 0.5 0.066
 standard and adapted CIELAB
 LAB*LAB 50.17 42.37 18.64
 LAB*LABa 50.17 42.37 18.64
 LAB*TCHa 50.00 46.24 23.75

relative Inform. Technology (IT)
 olv3* 0.5 0.0 0.0 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 38.11 63.53 27.95
 LAB*LABa 38.11 63.53 27.95
 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
 standard and adapted CIELAB
 LAB*LAB 38.11 63.53 27.95
 LAB*LABa 38.11 63.53 27.95
 LAB*TCHa 37.51 69.35 23.75

relative Inform. Technology (IT)
 olv3* 0.25 0.0 0.0 (1.0)
 cmy3* 0.25 0.5 0.5 (0.0)
 olv4* 1.0 0.25 0.25 (1.0)
 cmy4* 0.0 0.25 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 29.07 42.36 18.64
 LAB*LABa 29.07 42.36 18.64
 LAB*TCHa 25.01 46.23 23.75

relative CIELAB lab*
 lab*lab 0.214 0.58 0.201
 lab*tch 0.25 0.5 0.066
 lab*nch 0.0 0.5 0.066
 standard and adapted CIELAB
 LAB*LAB 29.07 42.36 18.64
 LAB*LABa 29.07 42.36 18.64
 LAB*TCHa 25.01 46.23 23.75

relative Inform. Technology (IT)
 olv3* 0.0 0.25 0.25 (1.0)
 cmy3* 0.75 1.0 1.0 (0.0)
 olv4* 1.0 0.75 0.75 (1.0)
 cmy4* 0.0 0.25 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 20.04 21.22 9.33
 LAB*LABa 20.04 21.22 9.33
 LAB*TCHa 12.51 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
 standard and adapted CIELAB
 LAB*LAB 20.04 21.22 9.33
 LAB*LABa 20.04 21.22 9.33
 LAB*TCHa 12.51 23.11 23.75

Output: Colorimetric Reflective System MRS18

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

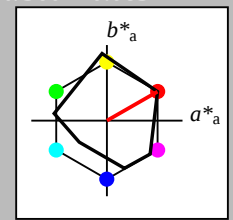
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



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

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 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 Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.00 0.01 0.0

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.00 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.5 0.5 (1.0)
 cmy3* 0.25 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 56.71 0.23 2.14
 LAB*LABa 56.71 0.23 2.14
 LAB*TCHa 50.00 0.01 0.0

relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*tch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 56.71 0.23 2.14
 LAB*LABa 56.71 0.23 2.14
 LAB*TCHa 50.00 0.01 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 47.15 84.63 37.24
 LAB*LABa 47.15 84.63 37.24
 LAB*TCHa 50.00 92.46 23.75

relative CIELAB lab*
 lab*lab 0.428 0.915 0.403
 lab*tch 0.5 0.0 0.066
 lab*nch 0.0 0.0 0.066
 standard and adapted CIELAB
 LAB*LAB 47.15 84.63 37.24
 LAB*LABa 47.15 84.63 37.24
 LAB*TCHa 50.00 92.46 23.75

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 0.25 0.25 (1.0)
 cmy4* 0.0 0.25 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 37.51 63.53 27.95
 LAB*LABa 37.51 63.53 27.95
 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
 standard and adapted CIELAB
 LAB*LAB 37.51 63.53 27.95
 LAB*LABa 37.51 63.53 27.95
 LAB*TCHa 37.51 69.35 23.75

relative Inform. Technology (IT)
 olv3* 0.25 0.0 0.0 (1.0)
 cmy3* 0.25 0.5 0.5 (0.0)
 olv4* 1.0 0.25 0.25 (1.0)
 cmy4* 0.0 0.25 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 29.07 42.36 18.64
 LAB*LABa 29.07 42.36 18.64
 LAB*TCHa 25.01 46.23 23.75

relative CIELAB lab*
 lab*lab 0.214 0.58 0.201
 lab*tch 0.25 0.5 0.066
 lab*nch 0.0 0.5 0.066
 standard and adapted CIELAB
 LAB*LAB 29.07 42.36 18.64
 LAB*LABa 29.07 42.36 18.64
 LAB*TCHa 25.01 46.23 23.75

MRS18; adapted (a) CIELAB data

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

%Regularity

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

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

relative Inform. Technology (IT)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 72.52 32.93 22.4
 LAB*LABa 72.52 32.93 22.4
 LAB*TCHa 75.00 38.58 29.82

relative CIELAB lab*
 lab*lab 0.704 0.434 0.249
 lab*tch 0.75 0.5 0.083
 lab*nch 0.0 0.5 0.083
 standard and adapted CIELAB
 LAB*LAB 72.52 32.93 22.4
 LAB*LABa 72.52 32.93 22.4
 LAB*TCHa 75.00 38.58 29.82

relative Inform. Technology (IT)
 olv3* 0.75 0.25 0.25 (1.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 53.17 33.31 21.09
 LAB*LABa 53.17 33.31 21.09
 LAB*TCHa 50.00 38.59 29.82

relative CIELAB lab*
 lab*lab 0.506 0.651 0.373
 lab*tch 0.625 0.75 0.083
 lab*nch 0.0 0.75 0.083
 standard and adapted CIELAB
 LAB*LAB 53.17 33.31 21.09
 LAB*LABa 53.17 33.31 21.09
 LAB*TCHa 50.00 38.59 29.82

relative Inform. Technology (IT)
 olv3* 0.75 0.5 0.5 (1.0)
 cmy3* 0.25 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 45.26 16.72 10.97
 LAB*LABa 45.26 16.72 10.97
 LAB*TCHa 37.51 69.35 23.75

relative CIELAB lab*
 lab*lab 0.502 0.217 0.124
 lab*tch 0.625 0.25 0.083
 lab*nch 0.0 0.25 0.083
 standard and adapted CIELAB
 LAB*LAB 45.26 16.72 10.97
 LAB*LABa 45.26 16.72 10.97
 LAB*TCHa 37.51 69.35 23.75

relative Inform. Technology (IT)
 olv3* 0.5 0.0 0.0 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 19.18
 LAB*LABa 33.82 33.47 19.18
 LAB*TCHa 25.01 38.58 29.82

relative CIELAB lab*
 lab*lab 0.352 0.217 0.124
 lab*tch 0.375 0.25 0.083
 lab*nch 0.0 0.25 0.083
 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 19.18
 LAB*LABa 33.82 33.47 19.18
 LAB*TCHa 25.01 38.58 29.82

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 1.0 1.0 (0.0)
 olv4* 1.0 0.25 0.25 (1.0)
 cmy4* 0.0 0.25 0.25 (0.0)
 standard and adapted CIELAB
 LAB*LAB 20.04 21.22 9.33
 LAB

Input: Colorimetric Reflective System NCS11

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

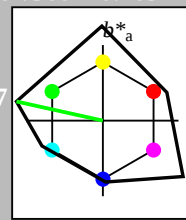
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)

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

relative Inform. Technology (IT)

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

relative CIELAB lab*			
lab*lab	0.904	-0.243	0.054
lab*tch	0.875	0.25	0.465
lab*nch	0.0	0.25	0.465
relative Natural Colour (NC)			
lab*lrj	0.904	-0.248	-0.018
lab*tce	0.875	0.25	0.512
lab*nce	0.0	0.25	g04b

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 203/360 = 0.563$

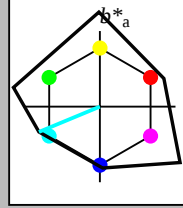
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 59 87 203

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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

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

relative Inform. Technology (IT)
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*TCHa 75.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.893 -0.23 -0.095
lab*tch 0.875 0.25 0.563
lab*nch 0.0 0.25 0.563
relative Natural Colour (NC)
lab*trj 0.893 -0.208 -0.136
lab*tce 0.875 0.25 0.592
lab*nce 0.0 0.25 0.592

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*LABa 53.21 0.04 0.0
LAB*TCHa 50.0 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LABa 32.11 0.01 0.0
LAB*TCHa 25.0 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LABa 32.11 0.01 0.0
LAB*TCHa 25.0 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LABa 32.11 0.01 0.0
LAB*TCHa 25.0 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.01 0.0
LAB*LABa 32.11 0.01 0.0
LAB*TCHa 25.0 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.144 -0.23 -0.095
lab*tch 0.125 0.25 0.563
lab*nch 0.0 0.25 0.563
relative Natural Colour (NC)
lab*trj 0.144 -0.208 -0.136
lab*tce 0.125 0.25 0.592
lab*nce 0.0 0.25 0.592

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.144 -0.23 -0.095
lab*tch 0.125 0.25 0.563
lab*nch 0.0 0.25 0.563
relative Natural Colour (NC)
lab*trj 0.144 -0.208 -0.136
lab*tce 0.125 0.25 0.592
lab*nce 0.0 0.25 0.592

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.0
LAB*LABa 11.01 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.144 -0.23 -0.095
lab*tch 0.125 0.25 0.563
lab*nch 0.0 0.25 0.563
relative Natural Colour (NC)
lab*trj 0.144 -0.208 -0.136
lab*tce 0.125 0.25 0.592
lab*nce 0.0 0.25 0.592

UE580-7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

NCS11; adapted (a) CIELAB data

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

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

% Regularity

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

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

relative Inform. Technology (IT)

olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 0.5 0.5 0.5
cmyn4* 0.5 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 77.43 -40.26 -16.71
LAB*LABa 77.43 -40.26 -16.72
LAB*TCHa 75.0 43.63 20.54

relative CIELAB lab*

lab*lab 0.787 -0.461 -0.191
lab*tch 0.75 0.5 0.563
lab*nch 0.0 0.5 0.563
relative Natural Colour (NC)
lab*trj 0.787 -0.418 -0.272
lab*tce 0.75 0.5 0.592
lab*nce 0.0 0.5 0.592

relative Inform. Technology (IT)

olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 0.25 0.25 0.25 0.25
cmyn4* 0.75 0.75 0.75 0.75
standard and adapted CIELAB
LAB*LAB 56.33 -40.26 -16.71
LAB*LABa 56.33 -40.26 -16.72
LAB*TCHa 50.0 43.63 20.54

relative CIELAB lab*

lab*lab 0.581 -0.692 -0.286
lab*tch 0.625 0.75 0.563
lab*nch 0.0 0.75 0.563
relative Natural Colour (NC)
lab*trj 0.581 -0.627 -0.409
lab*tce 0.625 0.75 0.592
lab*nce 0.0 0.75 0.592

relative Inform. Technology (IT)

olvi3* 0.0 1.0 1.0 (0.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 59.47 -80.55 -33.44
LAB*LABa 59.47 -80.55 -33.44
LAB*TCHa 50.0 87.26 20.54

relative CIELAB lab*

lab*lab 0.574 -0.922 -0.382
lab*tch 0.5 1.0 0.563
lab*nch 0.0 1.0 0.563
relative Natural Colour (NC)
lab*trj 0.574 -0.836 -0.546
lab*tce 0.5 1.0 0.592
lab*nce 0.0 1.0 0.592

relative Inform. Technology (IT)

olvi3* 0.0 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 0.25 0.25 0.25 0.25
cmyn4* 0.75 0.75 0.75 0.75
standard and adapted CIELAB
LAB*LAB 47.35 -60.39 -25.07
LAB*LABa 47.35 -60.44 -25.08
LAB*TCHa 37.51 65.45 20.54

relative CIELAB lab*

lab*lab 0.431 -0.692 -0.286
lab*tch 0.375 0.75 0.563
lab*nch 0.0 0.75 0.563
relative Natural Colour (NC)
lab*trj 0.431 -0.627 -0.409
lab*tce 0.375 0.75 0.592
lab*nce 0.0 0.75 0.592

relative Inform. Technology (IT)

olvi3* 0.0 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.0 0.5 0.5 0.5
cmyn4* 0.5 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 35.23 -40.23 -16.71
LAB*LABa 35.23 -40.23 -16.72
LAB*TCHa 25.01 43.63 20.54

relative CIELAB lab*

lab*lab 0.287 -0.461 -0.191
lab*tch 0.25 0.5 0.563
lab*nch 0.0 0.5 0.563
relative Natural Colour (NC)
lab*trj 0.287 -0.418 -0.272
lab*tce 0.25 0.5 0.592
lab*nce 0.0 0.5 0.592

relative Inform. Technology (IT)

olvi3* 0.0 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 0.0 0.25 0.25 0.25
cmyn4* 0.75 0.75 0.75 0.75
standard and adapted CIELAB
LAB*LAB 23.11 -40.23 -16.71
LAB*LABa 23.11 -40.23 -16.72
LAB*TCHa 12.51 43.63 20.54

relative CIELAB lab*

lab*lab 0.144 -0.23 -0.095
lab*tch 0.125 0.25 0.563
lab*nch 0.0 0.25 0.563
relative Natural Colour (NC)
lab*trj 0.144 -0.208 -0.136
lab*tce 0.125 0.25 0.592
lab*nce 0.0 0.25 0.592

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0

Input: Colorimetric Reflective System NCS11

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

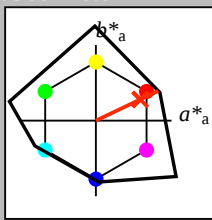
lab^*ch and lab^*nch

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	95.41	0.0	-0.01
LAB*Lab	95.41	0.0	0.0
LAB*Lab	99.99	0.01	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*ch	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*trc	0.0	1.0	0.0
lab*trn	0.0	0.0	1.0

relative Inform. Technology (IT)

olvi3*	1.0	0.756	0.75	(1.0)
cmyn3*	0.0	0.244	0.25	(0.0)
olvi4*	1.0	0.756	0.75	(1.0)
cmyn4*	0.0	0.244	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	83.61	20.65	9.84
LAB*Lab	83.61	20.64	9.84
LAB*Lab	87.5	21.86	25.49

relative CIELAB lab*

lab*lab	0.86	0.26	0.108
lab*ch	0.875	0.25	0.071
lab*nch	0.0	0.25	0.071

relative Natural Colour (NC)

lab*trj	0.86	0.25	0.0
lab*trc	0.875	0.25	0.0
lab*trn	0.0	0.25	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.512	0.5	(1.0)
cmyn3*	0.0	0.488	0.5	(0.0)
olvi4*	1.0	0.512	0.5	(1.0)
cmyn4*	0.0	0.488	0.5	(0.0)

standard and adapted CIELAB

LAB*Lab	71.81	41.31	19.68
LAB*Lab	71.81	41.28	19.68
LAB*Lab	75.0	45.73	25.49

relative CIELAB lab*

lab*lab	0.71	0.451	0.215
lab*ch	0.71	0.5	0.071
lab*nch	0.0	0.5	0.071

relative Natural Colour (NC)

lab*trj	0.71	0.5	0.0
lab*trc	0.71	0.5	0.0
lab*trn	0.0	0.5	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.268	0.25	(1.0)
cmyn3*	0.0	0.732	0.25	(0.0)
olvi4*	1.0	0.268	0.25	(1.0)
cmyn4*	0.0	0.732	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	60.01	61.96	29.53
LAB*Lab	60.01	61.92	29.52
LAB*Lab	62.5	68.6	25.49

relative CIELAB lab*

lab*lab	0.581	0.677	0.323
lab*ch	0.625	0.75	0.071
lab*nch	0.0	0.75	0.071

relative Natural Colour (NC)

lab*trj	0.581	0.75	0.0
lab*trc	0.625	0.75	0.0
lab*trn	0.0	0.75	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.024	0.0	(1.0)
cmyn3*	0.0	0.976	0.0	(0.0)
olvi4*	1.0	0.024	0.0	(1.0)
cmyn4*	0.0	0.976	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	48.21	82.61	39.36
LAB*Lab	48.21	82.57	39.35
LAB*Lab	50.0	91.46	25.48

relative CIELAB lab*

lab*lab	0.441	0.903	0.43
lab*ch	0.5	1.0	0.071
lab*nch	0.0	1.0	0.071

relative Natural Colour (NC)

lab*trj	0.441	1.0	0.0
lab*trc	0.5	1.0	0.0
lab*trn	0.0	1.0	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	56.71	62.23	21.4
LAB*Lab	56.71	62.23	21.4
LAB*Lab	50.0	0.0	0.0

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*ch	0.5	0.0	0.0
lab*nch	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*trc	0.5	0.0	0.0
lab*trn	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.25	0.25	(1.0)
cmyn3*	0.5	0.75	0.25	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	64.26	16.12	10.25
LAB*Lab	64.26	16.5	7.59
LAB*Lab	62.5	18.16	24.7

relative CIELAB lab*

lab*lab	0.58	0.227	0.104
lab*ch	0.58	0.25	0.069
lab*nch	0.0	0.25	0.069

relative Natural Colour (NC)

lab*trj	0.58	0.25	0.0
lab*trc	0.58	0.25	0.0
lab*trn	0.0	0.25	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.25	0.25	(1.0)
cmyn3*	0.25	0.75	0.25	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	52.46	32.85	17.04
LAB*Lab	52.46	33.01	15.18
LAB*Lab	50.0	36.33	24.7

relative CIELAB lab*

lab*lab	0.695	0.454	0.209
lab*ch	0.75	0.5	0.069
lab*nch	0.0	0.5	0.069

relative Natural Colour (NC)

lab*trj	0.695	0.5	0.0
lab*trc	0.75	0.5	0.0
lab*trn	0.0	0.5	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.0	0.75	(1.0)
cmyn3*	0.25	0.75	0.75	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	60.0	49.2	25.13
LAB*Lab	60.0	49.5	22.76
LAB*Lab	62.5	54.49	24.7

relative CIELAB lab*

lab*lab	0.543	0.681	0.313
lab*ch	0.625	0.75	0.069
lab*nch	0.0	0.75	0.069

relative Natural Colour (NC)

lab*trj	0.543	0.75	0.0
lab*trc	0.625	0.75	0.0
lab*trn	0.0	0.75	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.25	0.25	(1.0)
cmyn3*	0.0	0.75	0.25	(0.0)
olvi4*	1.0	0.25	0.25	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	48.21	65.92	31.93
LAB*Lab	48.21	66.0	30.36
LAB*Lab	50.0	72.65	24.7

relative CIELAB lab*

lab*lab	0.39	0.908	0.418
lab*ch	0.5	1.0	0.069
lab*nch	0.0	1.0	0.069

relative Natural Colour (NC)

lab*trj	0.39	1.0	0.0
lab*trc	0.5	1.0	0.0
lab*trn	0.0	1.0	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(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	53.21	0.04	0.0
LAB*Lab	53.21	0.0	0.0
LAB*Lab	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*ch	0.5	0.0	0.0
lab*nch	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*trc	0.5	0.0	0.0
lab*trn	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.756	0.75	(1.0)
cmyn3*	0.0	0.244	0.25	(0.0)
olvi4*	1.0	0.756	0.75	(1.0)
cmyn4*	0.0	0.244	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	41.4	20.7	9.86
LAB*Lab	41.4	20.64	9.84
LAB*Lab	37.5	22.87	25.49

relative CIELAB lab*

lab*lab	0.61	0.25	0.108
lab*ch	0.625	0.25	0.071
lab*nch	0.0	0.25	0.071

relative Natural Colour (NC)

lab*trj	0.61	0.25	0.0
lab*trc	0.625	0.25	0.0
lab*trn	0.0	0.25	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.012	0.0	(1.0)
cmyn3*	0.25	0.988	0.0	(0.0)
olvi4*	1.0	0.012	0.0	(1.0)
cmyn4*	0.0	0.988	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	50.71	41.33	19.69
LAB*Lab	50.71	41.29	19.68
LAB*Lab	50.0	45.74	25.49

relative CIELAB lab*

lab*lab	0.47	0.5	0.071
lab*ch	0.47	0.5	0.071
lab*nch	0.0	0.5	0.071

relative Natural Colour (NC)

lab*trj	0.47	0.5	0.0
lab*trc	0.47	0.5	0.0
lab*trn	0.0	0.5	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.268	0.25	(1.0)
cmyn3*	0.25	0.732	0.25	(0.0)
olvi4*	1.0	0.268	0.25	(1.0)
cmyn4*	0.0	0.732	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	38.91	61.99	29.53
LAB*Lab	38.91	61.93	29.51
LAB*Lab	37.51	68.6	25.48

relative CIELAB lab*

lab*lab	0.331	0.677	0.323
lab*ch	0.375	0.75	0.071
lab*nch	0.0	0.75	0.071

relative Natural Colour (NC)

lab*trj	0.331	0.75	0.0
lab*trc	0.375	0.75	0.0
lab*trn	0.0	0.75	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(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	37.51	0.0	0.0
LAB*Lab	37.51	0.0	0.0
LAB*Lab	30.0	0.0	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*ch	0.25	0.0	0.0
lab*nch	0.0	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.25	0.0	0.0
lab*trc	0.25	0.0	0.0
lab*trn	0.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.5	0.75	0.25	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	44.91	16.49	8.94
LAB*Lab	44.91	16.5	7.59
LAB*Lab	37.5	18.16	24.7

relative CIELAB lab*

lab*lab	0.348	0.227	0.104
lab*ch	0.375	0.25	0.069
lab*nch	0.0	0.25	0.069

relative Natural Colour (NC)

lab*trj	0.348	0.25	0.0
lab*trc	0.375	0.25	0.0
lab*trn	0.0	0.25	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	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	33.11	33.0	15.18
LAB*Lab	33.11	33.0	15.18
LAB*Lab	30.0	36.33	24.7

relative CIELAB lab*

lab*lab	0.293	0.681	0.313
lab*ch	0.375	0.75	0.069
lab*nch	0.0	0.75	0.069

relative Natural Colour (NC)

lab*trj	0.293	0.75	0.0
lab*trc	0.375	0.75	0.0
lab*trn	0.0	0.75	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.0	0.75	(1.0)
cmyn3*	0.25	0.75	0.75	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	40.66	49.5	25.94
LAB*Lab	40.66	49.5	22.77
LAB*Lab	37.51	54.49	24.7

relative CIELAB lab*

lab*lab	0.543	0.681	0.313
lab*ch	0.625	0.75	0.069
lab*nch	0.0	0.75	0.069

relative Natural Colour (NC)

lab*trj	0.543	0.75	0.0
lab*trc	0.625	0.75	0.0
lab*trn	0.0	0.75	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	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	33.11	33.0	15.18
LAB*Lab	33.11	33.0	15.18
LAB*Lab	30.0	36.33	24.7

relative CIELAB lab*

lab*lab	0.293	0.681	0.313
lab*ch	0.375	0.75	0.06

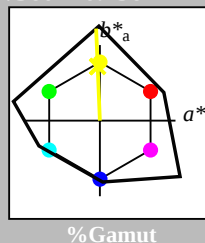
Input: Colorimetric Reflective System NCS11

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^*



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*TCha 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*Lab 74.31 0.02 0.0
LAB*TCha 75.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 53.21 0.04 0.0
LAB*Lab 53.21 0.04 0.0
LAB*TCha 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 32.11 0.01 0.0
LAB*Lab 32.11 0.01 0.0
LAB*TCha 30.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 11.01 0.00 0.0
LAB*Lab 11.01 0.00 0.0
LAB*TCha 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 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 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

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

NCS11; adapted (a) CIELAB data

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

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 0.984 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 -2.44 60.89
LAB*TCha 92.52 -2.44 60.89

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

relative Inform. Technology (IT)
olvi3* 0.734 0.75 0.5 (1.0)
cmyn3* 0.266 0.25 0.75 (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 71.83 -2.44 60.89
LAB*Lab 71.83 -2.44 60.89
LAB*TCha 50.00 60.94 92.33

relative CIELAB lab*
lab*lab 0.726 0.75 0.0 (1.0)
lab*tch 0.625 0.75 0.256
lab*nch 0.0 0.75 0.256
relative Natural Colour (NC)
lab*trj 0.726 0.75 0.0
lab*tce 0.625 0.75 0.256
lab*nce 0.0 0.75 0.256

relative Inform. Technology (IT)
olvi3* 0.625 0.625 0.625 (1.0)
cmyn3* 0.375 0.375 0.375 (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 50.72 -2.44 60.89
LAB*Lab 50.72 -2.44 60.89
LAB*TCha 30.00 60.94 92.33

relative CIELAB lab*
lab*lab 0.596 -0.029 0.749
lab*tch 0.625 0.75 0.256
lab*nch 0.0 0.75 0.256
relative Natural Colour (NC)
lab*trj 0.596 0.0 0.75
lab*tce 0.625 0.75 0.256
lab*nce 0.0 0.75 0.256

relative Inform. Technology (IT)
olvi3* 0.485 -0.029 0.749
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 30.86 -1.17 30.45
LAB*Lab 30.86 -1.17 30.45
LAB*TCha 12.5 30.46 92.33

relative CIELAB lab*
lab*lab 0.471 -0.019 0.499
lab*tch 0.485 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.471 0.0 0.5
lab*tce 0.485 0.5 0.256
lab*nce 0.0 0.5 0.256

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*Lab 18.02 0.5 0.46
LAB*TCha 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

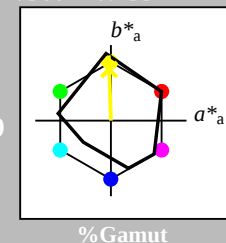
Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 92/360 = 0.255$

lab^*tch and lab^*nch

D65: hue J
LCH*Ma: 89 86 92
rgb*Ma: 1.0 0.95 0.0

triangle lightness t^*



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

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*Lab 76.06 -0.6 3.44
LAB*TCha 75.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.734 0.75 0.5 (1.0)
cmyn3* 0.266 0.25 0.75 (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 50.72 -2.44 60.89
LAB*Lab 50.72 -2.44 60.89
LAB*TCha 30.00 60.94 92.33

relative CIELAB lab*
lab*lab 0.596 -0.029 0.749
lab*tch 0.625 0.75 0.256
lab*nch 0.0 0.75 0.256
relative Natural Colour (NC)
lab*trj 0.596 0.0 0.75
lab*tce 0.625 0.75 0.256
lab*nce 0.0 0.75 0.256

relative Inform. Technology (IT)
olvi3* 0.625 0.625 0.625 (1.0)
cmyn3* 0.375 0.375 0.375 (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 30.86 -1.17 30.45
LAB*Lab 30.86 -1.17 30.45
LAB*TCha 12.5 30.46 92.33

relative CIELAB lab*
lab*lab 0.471 -0.019 0.499
lab*tch 0.485 0.5 0.256
lab*nch 0.0 0.5 0.256
relative Natural Colour (NC)
lab*trj 0.471 0.0 0.5
lab*tce 0.485 0.5 0.256
lab*nce 0.0 0.5 0.256

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.46
LAB*Lab 18.02 0.5 0.46
LAB*TCha 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

relative CIELAB lab*
lab*lab 0.471 0.471 0.471 (1.0)
lab*tch 0.485 0.485 0.485
lab*nch 0.0 0.485 0.485
relative Natural Colour (NC)
lab*trj 0.471 0.471 0.471
lab*tce 0.485 0.485 0.485
lab*nce 0.0 0.485 0.485

relative Inform. Technology (IT)
olvi3* 0.485 0.485 0.485 (1.0)
cmyn3* 0.516 0.5 0.0 (1.0)
olvi4* 0.984 1.0 0.5 (1.0)
cmyn4* 0.016 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.00 0.0
LAB*Lab 0.01 0.00 0.0
LAB*TCha 0.00 0.00 0.0

Input: Colorimetric Reflective System NCS11

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

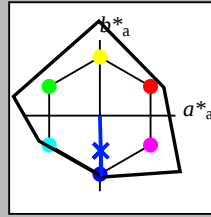
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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 -0.01
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 1.0 0.0 0.0
 lab*trc 1.0 0.0 0.0
 lab*ncc 0.0 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 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 0.0 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 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.75 0.0 0.0
 lab*trc 0.75 0.0 0.0
 lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
 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 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 0.0 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 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.5 0.0 0.0
 lab*trc 0.5 0.0 0.0
 lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
 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 0.25
 cmyn4* 0.0 0.0 0.0 0.75
 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 -

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*trc 0.25 0.0 0.0
 lab*ncc 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* 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*LABa 11.01 0.0 0.0
 LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*trc 0.0 0.0 0.0
 lab*ncc 1.0 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* 1.0 1.0 1.0 0.0
 cmyn4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 0.01 0.01 -

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

NCS11; adapted (a) CIELAB data

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

% Regularity

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

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

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmyn4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 72.29 1.2 -40.21
 LAB*LABa 72.29 1.17 -40.21
 LAB*TCHa 75.0 40.24 271.66

relative CIELAB lab*
 lab*lab 0.75 0.014 -0.499
 lab*tch 0.75 0.5 0.755
 lab*nch 0.0 0.5 0.755
 relative Natural Colour (NC)
 lab*trj 0.726 0.0 -0.499
 lab*trc 0.75 0.5 0.75
 lab*ncc 0.0 0.5 0.996

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.74 0.25 (0.0)
 olv4* 0.5 0.508 1.0 0.75
 cmyn4* 0.5 0.492 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 51.19 1.21 -40.21
 LAB*LABa 51.19 1.17 -40.22
 LAB*TCHa 50.0 40.25 271.66

relative CIELAB lab*
 lab*lab 0.25 0.015 -0.499
 lab*tch 0.5 0.5 0.755
 lab*nch 0.0 0.5 0.755
 relative Natural Colour (NC)
 lab*trj 0.476 0.0 -0.499
 lab*trc 0.5 0.5 0.75
 lab*ncc 0.0 0.5 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.008 0.5 (1.0)
 cmyn3* 1.0 0.988 0.25 (0.0)
 olv4* 0.25 0.262 1.0 0.75
 cmyn4* 0.75 0.738 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 39.63 1.81 -60.33
 LAB*LABa 39.63 1.75 -60.33
 LAB*TCHa 37.51 60.36 271.67

relative CIELAB lab*
 lab*lab 0.339 0.022 -0.749
 lab*tch 0.375 0.75 0.755
 lab*nch 0.0 0.75 0.755
 relative Natural Colour (NC)
 lab*trj 0.339 0.0 -0.749
 lab*trc 0.375 0.75 0.75
 lab*ncc 0.0 0.75 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.008 0.5 (1.0)
 cmyn3* 1.0 0.988 0.25 (0.0)
 olv4* 0.25 0.262 1.0 0.75
 cmyn4* 0.75 0.738 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 30.09 1.24 -40.21
 LAB*LABa 30.09 1.18 -40.21
 LAB*TCHa 25.01 40.24 271.67

relative CIELAB lab*
 lab*lab 0.226 0.015 -0.499
 lab*tch 0.25 0.5 0.755
 lab*nch 0.0 0.5 0.755
 relative Natural Colour (NC)
 lab*trj 0.226 0.0 -0.499
 lab*trc 0.25 0.5 0.75
 lab*ncc 0.0 0.5 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 0.996 0.75 (0.0)
 olv4* 0.75 0.754 1.0 0.5
 cmyn4* 0.25 0.246 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 20.54 0.66 20.08
 LAB*LABa 20.54 0.59 -20.1
 LAB*TCHa 12.5 20.12 271.69

relative CIELAB lab*
 lab*lab 0.113 0.007 -0.249
 lab*tch 0.125 0.25 0.755
 lab*nch 0.0 0.25 0.755
 relative Natural Colour (NC)
 lab*trj 0.113 0.0 -0.249
 lab*trc 0.125 0.25 0.75
 lab*ncc 0.0 0.25 0.996

relative Inform. Technology (IT)
 olv3* 0.25 0.262 1.0 (1.0)
 cmyn3* 0.75 0.738 0.0 (0.0)
 olv4* 0.25 0.262 1.0 0.75
 cmyn4* 0.75 0.738 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 60.73 1.79 -60.32
 LAB*LABa 60.73 1.75 -60.32
 LAB*TCHa 62.5 60.36 271.66

relative CIELAB lab*
 lab*lab 0.589 0.022 -0.749
 lab*tch 0.625 0.75 0.755
 lab*nch 0.0 0.75 0.755
 relative Natural Colour (NC)
 lab*trj 0.589 0.0 -0.749
 lab*trc 0.625 0.75 0.75
 lab*ncc 0.0 0.75 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.016 1.0 (1.0)
 cmyn3* 1.0 0.984 0.0 (0.0)
 olv4* 0.0 0.016 1.0 0.5
 cmyn4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 49.18 2.39 -80.42
 LAB*LABa 49.18 2.34 -80.43
 LAB*TCHa 50.0 80.48 271.67

relative CIELAB lab*
 lab*lab 0.452 0.029 -0.998
 lab*tch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.452 0.0 -0.999
 lab*trc 0.5 0.0 0.0
 lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.658 0.5 (0.0)
 olv4* 0.75 0.842 1.0 0.5
 cmyn4* 0.25 0.138 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 42.79 0.34 -11.37
 LAB*LABa 42.79 0.31 -12.58
 LAB*TCHa 37.51 12.59 271.4

relative CIELAB lab*
 lab*lab 0.32 0.006 -0.249
 lab*tch 0.375 0.25 0.754
 lab*nch 0.0 0.25 0.754
 relative Natural Colour (NC)
 lab*trj 0.32 0.0 -0.249
 lab*trc 0.375 0.25 0.75
 lab*ncc 0.0 0.25 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.084 0.5 (1.0)
 cmyn3* 1.0 0.816 0.5 (0.0)
 olv4* 0.5 0.842 1.0 0.5
 cmyn4* 0.5 0.316 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 28.87 0.62 -25.16
 LAB*LABa 28.87 0.62 -25.16
 LAB*TCHa 25.01 25.18 271.41

relative CIELAB lab*
 lab*lab 0.211 0.012 -0.499
 lab*tch 0.25 0.5 0.754
 lab*nch 0.0 0.25 0.754
 relative Natural Colour (NC)
 lab*trj 0.211 0.0 -0.499
 lab*trc 0.25 0.5 0.75
 lab*ncc 0.0 0.25 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.084 0.5 (1.0)
 cmyn3* 1.0 0.816 0.5 (0.0)
 olv4* 0.5 0.842 1.0 0.5
 cmyn4* 0.5 0.316 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 18.02 0.5 0.46
 LAB*LABa 18.02 0.5 0.46
 LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*trc 0.0 0.0 0.0
 lab*ncc 1.0 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 0.75
 cmyn4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 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*ncc 0.0 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 0.75
 cmyn4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.0 0.01 -

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

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.658 0.5 (0.0)
 olv4* 0.75 0.842 1.0 0.5
 cmyn4* 0.25 0.138 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 42.79 0.34 -11.37
 LAB*LABa 42.79 0.31 -12.58
 LAB*TCHa 37.51 12.59 271.4

relative CIELAB lab*
 lab*lab 0.32 0.006 -0.249
 lab*tch 0.375 0.25 0.754
 lab*nch 0.0 0.25 0.754
 relative Natural Colour (NC)
 lab*trj 0.32 0.0 -0.249
 lab*trc 0.375 0.25 0.75
 lab*ncc 0.0 0.25 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.084 0.5 (1.0)
 cmyn3* 1.0 0.816 0.5 (0.0)
 olv4* 0.5 0.842 1.0 0.5
 cmyn4* 0.5 0.316 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 28.87 0.62 -25.16
 LAB*LABa 28.87 0.62 -25.16
 LAB*TCHa 25.01 25.18 271.41

relative CIELAB lab*
 lab*lab 0.211 0.012 -0.499
 lab*tch 0.25 0.5 0.754
 lab*nch 0.0 0.25 0.754
 relative Natural Colour (NC)
 lab*trj 0.211 0.0 -0.499
 lab*trc 0.25 0.5 0.75
 lab*ncc 0.0 0.25 0.996

relative Inform. Technology (IT)
 olv3* 0.0 0.084 0.5 (1.0)
 cmyn3* 1.0 0.816 0.5 (0.0)
 olv4* 0.5 0.842 1.0 0.5
 cmyn4* 0.5 0.316 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 18.02 0.5 0.46
 LAB*LABa 18.02 0.5 0.46
 LAB*TCHa 0.01 0.01 -

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

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 271/360 = 0.754$

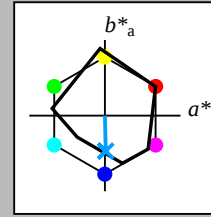
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmyn3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmyn4* 0.0 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 1.0 0.0 0.0
 lab*trc 1.0 0.0 0.0
 lab*ncc 0.0 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 0.75
 cmyn4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.75 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*trc 0.75 0.0 0.0
 lab*ncc 0.0 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* 1.0 1.0 1.0 0.5
 cmyn4* 0.0 0.0 0.0 0.5
 standard and adapted CIEL