

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$

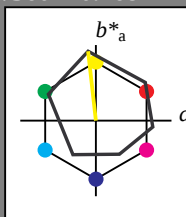
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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	7.5
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	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	94.14	-3.51	27.61
LAB*LAB	94.14	-2.56	22.93
LAB*LAB	94.14	-2.56	22.93

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	0.0	0.0
LAB*LAB	76.06	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	56.71	-0.23	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	56.71	0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	56.71	0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	56.71	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	37.36	-0.53	0.63
LAB*LAB	37.36	0.0	0.0
LAB*LAB	37.36	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	36.1	-2.56	22.93
LAB*LAB	36.1	0.0	0.0
LAB*LAB	36.1	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	18.02	0.0	0.46
LAB*LAB	18.02	0.0	0.0
LAB*LAB	18.02	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	18.02	0.0	0.46
LAB*LAB	18.02	0.0	0.0
LAB*LAB	18.02	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	18.02	0.0	0.46
LAB*LAB	18.02	0.0	0.0
LAB*LAB	18.02	0.0	0.0

ORS18; adapted (a) CIELAB data

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

QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

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	92.88	-6.06	50.46
LAB*LAB	92.88	-5.13	45.87
LAB*LAB	92.88	-5.13	45.87

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 91/360 = 0.253$

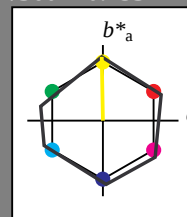
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 53 84 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

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	7.5
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	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	95.41	-0.97	7.5
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	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	0.0	0.0
LAB*LAB	74.31	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	0.0	0.0
LAB*LAB	74.31	0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	74.31	0.02	0.0
LAB*LAB	74.31	0.0	0.0
LAB*LAB	74.31	0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	74.31	0.02	0.0
LAB*LAB	74.31	0.0	0.0
LAB*LAB	74.31	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	74.31	0.02	0.0
LAB*LAB	74.31	0.0	0.0
LAB*LAB	74.31	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	74.31	0.02	0.0
LAB*LAB	74.31	0.0	0.0
LAB*LAB	74.31	0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	11.01	0.07	0.01
LAB*LAB ₀	11.01	0.0	0.0

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab \cdot h = 151/360 = 0.419$

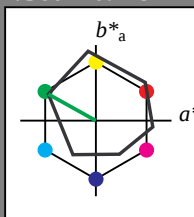
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

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 47.5
LAB*Lab 95.41 0.0 0.0
LAB*TCh 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)
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 0.0 0.0
LAB*TCh 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)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*Lab 56.71 0.0 0.0
LAB*TCh 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)
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 37.36 -0.38 0.83
LAB*Lab 37.36 0.0 0.0
LAB*TCh 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)
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 18.02 0.0 0.46
LAB*Lab 18.02 0.0 0.0
LAB*TCh 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 -
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 -
lab*nce 1.0 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.75 (1.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.75 (1.0)
standard and adapted CIELAB
LAB*LAB 84.28 -16.45 12.74
LAB*Lab 84.28 -15.68 8.73
LAB*TCh 97.5 17.96 150.91

relative CIELAB lab*
lab*lab 0.856 -0.217 0.122
lab*tch 0.875 0.25 0.419
lab*nch 0.0 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.856 -0.238 0.072
lab*tce 0.875 0.25 0.453
lab*nce 0.0 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 0.75 1.0 0.75 (0.0)
cmyn4* 0.25 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 64.93 -16.09 11.44
LAB*Lab 64.93 -15.69 8.74
LAB*TCh 62.5 17.97 150.91

relative CIELAB lab*
lab*lab 0.616 -0.217 0.122
lab*tch 0.625 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.616 -0.238 0.072
lab*tce 0.625 0.25 0.453
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.75 1.0 0.75 (0.0)
cmyn4* 0.25 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 45.58 -15.72 10.13
LAB*Lab 45.58 -15.69 8.74
LAB*TCh 37.5 17.97 150.91

relative CIELAB lab*
lab*lab 0.356 -0.217 0.122
lab*tch 0.375 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.356 -0.238 0.072
lab*tce 0.375 0.25 0.453
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 1.0 0.5 1.0 (0.0)
olvi4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 34.46 -31.2 18.11
LAB*Lab 34.46 -31.38 17.47
LAB*TCh 25.01 35.93 150.91

relative CIELAB lab*
lab*lab 0.213 -0.436 0.243
lab*tch 0.25 0.5 0.419
lab*nch 0.5 0.5 0.419
relative Natural Colour (NC)
lab*trj 0.213 -0.478 0.144
lab*tce 0.25 0.5 0.453
lab*nce 0.5 0.5 0.419

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 1.0 0.5 1.0 (0.0)
olvi4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 34.46 -31.2 18.11
LAB*Lab 34.46 -31.38 17.47
LAB*TCh 25.01 35.93 150.91

relative CIELAB lab*
lab*lab 0.319 -0.654 0.365
lab*tch 0.375 0.75 0.419
lab*nch 0.5 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.319 -0.717 0.217
lab*tce 0.375 0.75 0.453
lab*nce 0.5 0.75 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 26.24 -15.68 8.73
LAB*Lab 26.24 -15.68 8.73
LAB*TCh 12.5 17.96 150.91

relative CIELAB lab*
lab*lab 0.106 -0.217 0.122
lab*tch 0.125 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.106 -0.238 0.072
lab*tce 0.125 0.25 0.453
lab*nce 0.25 0.25 0.419

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 26.24 -15.68 8.73
LAB*Lab 26.24 -15.68 8.73
LAB*TCh 12.5 17.96 150.91

relative CIELAB lab*
lab*lab 0.106 -0.217 0.122
lab*tch 0.125 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.106 -0.238 0.072
lab*tce 0.125 0.25 0.453
lab*nce 0.25 0.25 0.419

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*Lab 11.01 0.0 0.0
LAB*TCh 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 -
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 -
lab*nce 1.0 0.0 -

chromaticness c^*

$n^* = 1.0$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 167/360 = 0.464$

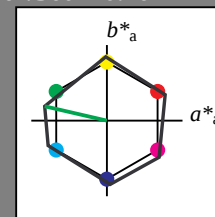
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 84 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	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

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$

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*TCh 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)
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 -0.38 0.0
LAB*TCh 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)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*Lab 53.21 0.0 0.0
LAB*TCh 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)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.0
LAB*Lab 32.11 0.0 0.0
LAB*TCh 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)
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*Lab 11.01 0.0 0.0
LAB*TCh 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 -
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 -
lab*nce 1.0 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.75 (1.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.75 (1.0)
standard and adapted CIELAB
LAB*LAB 84.85 -20.53 4.74
LAB*Lab 84.85 -20.53 4.74
LAB*TCh 87.5 21.1 167.01

relative CIELAB lab*
lab*lab 0.875 -0.248 -0.016
lab*tch 0.875 0.25 0.464
lab*nch 0.0 0.25 0.464
relative Natural Colour (NC)
lab*trj 0.875 -0.248 -0.016
lab*tce 0.875 0.25 0.511
lab*nce 0.0 0.25 0.464

relative Inform. Technology (IT)
olvi3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 0.75 1.0 0.75 (0.0)
cmyn4* 0.25 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 63.75 -20.53 4.75
LAB*Lab 63.75 -20.56 4.74
LAB*TCh 62.5 21.11 167.01

relative CIELAB lab*
lab*lab 0.625 -0.243 0.056
lab*tch 0.625 0.25 0.464
lab*nch 0.25 0.25 0.464
relative Natural Colour (NC)
lab*trj 0.625 -0.248 -0.016
lab*tce 0.625 0.25 0.511
lab*nce 0.25 0.25 0.464

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.75 1.0 0.75 (0.0)
cmyn4* 0.25 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 42.65 -20.51 4.76
LAB*Lab 42.65 -20.56 4.74
LAB*TCh 37.5 21.11 167.01

relative CIELAB lab*
lab*lab 0.375 -0.243 0.056
lab*tch 0.375 0.25 0.464
lab*nch 0.25 0.25 0.464
relative Natural Colour (NC)
lab*trj 0.375 -0.248 -0.016
lab*tce 0.375 0.25 0.511
lab*nce 0.25 0.25 0.464

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 1.0 0.5 1.0 (0.0)
olvi4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 32.1 0.05 0.51
LAB*Lab 32.1 -0.48 0.76
LAB*TCh 25.01 42.21 167.01

relative CIELAB lab*
lab*lab 0.25 -0.486 0.112
lab*tch 0.25 0.5 0.464
lab*nch 0.5 0.5 0.464
relative Natural Colour (NC)
lab*trj 0.25 -0.490 -0.033
lab*tce 0.25 0.5 0.511
lab*nce 0.5 0.5 0.464

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 1.0 0.25 1.0 (0.0)
olvi4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 25.01 0.01 0.01
LAB*Lab 25.01 0.0 0.0
LAB*TCh 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 -
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 -
lab*nce 1.0 0.0 -

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.75 (1.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.75 (1.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*Lab 95.41 0.0 0.0
LAB*TCh 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)
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 -0.38 0.0
LAB*TCh 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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

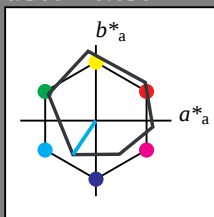
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.59	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

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 47.5
LAB*LABa 95.41 0.0 0.0
LAB*TCMa 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)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCMa 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)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCMa 55.0 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)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.08 0.63
LAB*LABa 37.36 0.0 0.0
LAB*TCMa 35.0 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)
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 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCMa 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 -
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)
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 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCMa 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 -
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)
olvi3* 0.75 1.0 1.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olvi4* 0.75 1.0 1.0 (1.0)
cmyn4* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.21 -8.38 -7.1
LAB*LABa 86.21 -7.58 -11.24
LAB*TCMa 87.5 13.57 236.01

relative CIELAB lab*
lab*lab 0.881 -0.139 -0.206
lab*tch 0.875 0.25 0.656
lab*nch 0.0 0.25 0.656
relative Natural Colour (NC)
lab*trj 0.881 -0.123 -0.216
lab*tce 0.875 0.25 0.593
lab*nce 0.0 0.25 0.656

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.75 1.0 1.0 (1.0)
cmyn4* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 66.86 -8.01 -8.41
LAB*LABa 66.86 -7.58 -11.25
LAB*TCMa 62.5 13.58 236.01

relative CIELAB lab*
lab*lab 0.631 -0.139 -0.206
lab*tch 0.625 0.25 0.656
lab*nch 0.0 0.25 0.656
relative Natural Colour (NC)
lab*trj 0.631 -0.123 -0.216
lab*tce 0.625 0.25 0.593
lab*nce 0.0 0.25 0.656

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.5 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 57.66 -15.42 -20.29
LAB*LABa 57.66 -15.17 -22.5
LAB*TCMa 50.0 27.15 236.01

relative CIELAB lab*
lab*lab 0.512 -0.279 -0.414
lab*tch 0.5 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*trj 0.512 -0.247 -0.433
lab*tce 0.5 0.5 0.593
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.5 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 47.51 -7.64 -9.72
LAB*LABa 47.51 -7.58 -11.25
LAB*TCMa 37.5 13.58 236.01

relative CIELAB lab*
lab*lab 0.381 -0.139 -0.206
lab*tch 0.375 0.25 0.656
lab*nch 0.0 0.25 0.656
relative Natural Colour (NC)
lab*trj 0.381 -0.123 -0.216
lab*tce 0.375 0.25 0.593
lab*nce 0.0 0.25 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.5 (1.0)
cmyn3* 1.0 0.75 0.75 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 28.17 -2.27 11.02
LAB*LABa 28.17 -7.58 -11.24
LAB*TCMa 12.5 13.57 236.01

relative CIELAB lab*
lab*lab 0.131 -0.139 -0.206
lab*tch 0.125 0.25 0.656
lab*nch 0.0 0.25 0.656
relative Natural Colour (NC)
lab*trj 0.131 -0.123 -0.216
lab*tce 0.125 0.25 0.593
lab*nce 0.0 0.25 0.656

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 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*TCMa 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 -
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)
olvi3* 0.5 1.0 1.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 77.01 -15.79 -19.98
LAB*LABa 77.01 -15.16 -22.5
LAB*TCMa 75.0 27.15 236.01

relative CIELAB lab*
lab*lab 0.762 -0.278 -0.413
lab*tch 0.75 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*trj 0.762 -0.247 -0.433
lab*tce 0.75 0.5 0.593
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olvi3* 0.25 1.0 1.0 (1.0)
cmyn3* 0.75 0.25 0.25 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 67.81 -23.21 -30.86
LAB*LABa 67.81 -22.75 -33.75
LAB*TCMa 62.5 40.72 236.01

relative CIELAB lab*
lab*lab 0.642 -0.418 -0.621
lab*tch 0.625 0.75 0.656
lab*nch 0.0 0.75 0.656
relative Natural Colour (NC)
lab*trj 0.642 -0.371 -0.65
lab*tce 0.625 0.75 0.593
lab*nce 0.0 0.75 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.75 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 58.62 -30.34 -45.01
LAB*LABa 58.62 -30.34 -45.01
LAB*TCMa 50.0 54.29 236.01

relative CIELAB lab*
lab*lab 0.525 -0.558 -0.828
lab*tch 0.5 1.0 0.656
lab*nch 0.0 1.0 0.656
relative Natural Colour (NC)
lab*trj 0.525 -0.496 -0.867
lab*tce 0.5 1.0 0.593
lab*nce 0.0 1.0 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.25 (1.0)
cmyn3* 1.0 0.25 0.25 (0.0)
olvi4* 0.25 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 48.47 -22.83 -33.16
LAB*LABa 48.47 -22.75 -33.75
LAB*TCMa 37.51 40.72 236.01

relative CIELAB lab*
lab*lab 0.394 -0.418 -0.621
lab*tch 0.375 0.75 0.656
lab*nch 0.0 0.75 0.656
relative Natural Colour (NC)
lab*trj 0.394 -0.371 -0.65
lab*tce 0.375 0.75 0.593
lab*nce 0.0 0.75 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.5 (1.0)
cmyn3* 1.0 0.5 0.5 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 38.32 -15.16 -22.5
LAB*LABa 38.32 -15.16 -22.5
LAB*TCMa 25.01 27.15 236.01

relative CIELAB lab*
lab*lab 0.262 -0.278 -0.413
lab*tch 0.25 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*trj 0.262 -0.247 -0.433
lab*tce 0.25 0.5 0.593
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.75 0.75 (0.0)
olvi4* 0.5 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 28.17 -2.27 11.02
LAB*LABa 28.17 -7.58 -11.24
LAB*TCMa 12.5 13.57 236.01

relative CIELAB lab*
lab*lab 0.131 -0.139 -0.206
lab*tch 0.125 0.25 0.656
lab*nch 0.0 0.25 0.656
relative Natural Colour (NC)
lab*trj 0.131 -0.123 -0.216
lab*tce 0.125 0.25 0.593
lab*nce 0.0 0.25 0.656

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 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
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)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olvi4* 0.0 1.0 1.0 (1.0)
cmyn4* 1.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*LABa 11.01 0.0 0.0
LAB*TCMa 0.0 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 -
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 -
lab*nce 0.0 0.0 -

Input: Colorimetric Reflective System ORS18

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

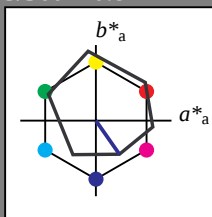
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 7.5
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 0.0 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*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 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (0.5)
cmyn4* 0.0 0.0 0.0 (0.5)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*Lab 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*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 (0.25)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 37.36 -0.38 0.63
LAB*Lab 37.36 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*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 (0.0)
cmyn4* 0.0 0.0 0.0 (1.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*Lab 18.02 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*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

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

OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 273/360 = 0.758$

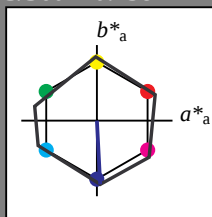
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 53 84 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*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 (0.75)
cmyn4* 0.0 0.0 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*Lab 74.31 0.0 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*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 (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 -0.36
LAB*Lab 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*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 (0.25)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 25.72 0.16 -0.44
LAB*Lab 25.72 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*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 (0.0)
cmyn4* 0.0 0.0 0.0 (1.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.0 0.01
LAB*Lab 11.01 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 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

$n^* = 1.0$

NRS11; adapted (a) CIELAB data

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

RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	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

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

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$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

UE520-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

BAM-test chart UE52; Colorimetric systems ORS18 & ORS11

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

input: $cmY0^* \text{ set } cmYkcolor$

output: Startup (S) data dependent

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

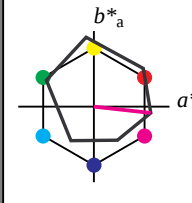
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 47.5
LAB*Lab 95.41 0.0 0.0
LAB*TCa 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*tr 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 0.0 0.0
LAB*TCa 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*tr 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 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (0.5)
cmyn4* 0.0 0.0 0.0 (0.5)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*Lab 56.71 0.0 0.0
LAB*TCa 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*tr 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 (0.25)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 37.36 0.0 0.63
LAB*Lab 37.36 0.0 0.0
LAB*TCa 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*tr 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 (0.0)
cmyn4* 0.0 0.0 0.0 (1.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*Lab 18.02 0.0 0.0
LAB*TCa 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*tr 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)
olvi3* 1.0 0.5 1.0 (1.0)
cmyn3* 0.0 0.5 0.0 (0.0)
olvi4* 1.0 0.5 1.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.77 37.1 -1.01
LAB*Lab 71.77 37.63 -4.17
LAB*TCa 75.0 37.96 353.66

relative CIELAB lab*
lab*lab 0.695 0.497 -0.054
lab*tch 0.75 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.695 0.454 -0.208
lab*tce 0.75 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (0.0)
olvi4* 1.0 0.5 1.0 (0.75)
cmyn4* 0.0 0.5 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 52.42 37.63 -4.17
LAB*Lab 52.42 37.63 -4.17
LAB*TCa 50.0 37.96 353.66

relative CIELAB lab*
lab*lab 0.445 0.454 -0.208
lab*tch 0.5 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.445 0.454 -0.208
lab*tce 0.5 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 1.0 0.5 1.0 (0.5)
cmyn4* 0.0 0.5 0.0 (0.5)
standard and adapted CIELAB
LAB*LAB 40.61 56.51 -3.2
LAB*Lab 40.61 56.44 -6.26
LAB*TCa 37.51 56.79 353.66

relative CIELAB lab*
lab*lab 0.292 0.745 -0.082
lab*tch 0.375 0.75 0.982
lab*nch 0.0 0.75 0.982
relative Natural Colour (NC)
lab*tr 0.292 0.682 -0.312
lab*tce 0.375 0.75 0.932
lab*nce 0.0 0.75 0.724

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

$n^* = 0.00$

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

$n^* = 0.25$

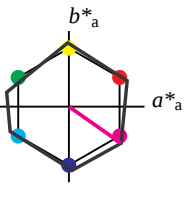
relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 33.08 37.63 -4.17
LAB*Lab 33.08 37.63 -4.17
LAB*TCa 25.01 37.96 353.66

relative CIELAB lab*
lab*lab 0.195 0.497 -0.054
lab*tch 0.25 0.5 0.982
lab*nch 0.0 0.5 0.982
relative Natural Colour (NC)
lab*tr 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.724

$n^* = 1.0$



Output: Colorimetric Reflective System NRS11

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

lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 53 84 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*Lab 95.41 0.0 0.0
LAB*TCa 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*tr 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 0.25 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*Lab 74.31 0.02 0.0
LAB*TCa 75.0 0.01 -

relative 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*tr 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 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (0.5)
cmyn4* 0.0 0.5 0.0 (0.5)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*Lab 53.21 0.04 0.0
LAB*TCa 50.0 0.01 -

relative 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*tr 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 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.0
LAB*Lab 32.11 0.05 0.0
LAB*TCa 25.01 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*tr 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.0
LAB*Lab 32.11 0.05 0.0
LAB*TCa 25.01 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*tr 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (0.0)
olvi4* 1.0 0.5 1.0 (0.75)
cmyn4* 0.0 0.5 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*Lab 53.21 0.04 0.0
LAB*TCa 50.0 0.01 -

relative 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*tr 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 0.25 0.5 (0.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 1.0 0.5 1.0 (0.5)
cmyn4* 0.0 0.25 0.0 (0.5)
standard and adapted CIELAB
LAB*LAB 42.65 17.32 -12.09
LAB*Lab 42.65 17.32 -12.09
LAB*TCa 37.5 21.09 324.98

relative CIELAB lab*
lab*lab 0.5 0.25 0.5 (0.0)
lab*tch 0.5 0.25 0.903
lab*nch 0.0 0.25 0.903
relative Natural Colour (NC)
lab*tr 0.5 0.25 0.903
lab*tce 0.5 0.25 0.867
lab*nce 0.0 0.25 0.649

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.0
LAB*Lab 32.11 0.05 0.0
LAB*TCa 25.01 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*tr 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.25 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 32.11 0.05 0.0
LAB*Lab 32.11 0.05 0.0
LAB*TCa 25.01 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*tr 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (0.0)
olvi4* 1.0 0.5 1.0 (0.75)
cmyn4* 0.0 0.5 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*Lab 53.21 0.04 0.0
LAB*TCa 50.0 0.01 -

relative 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*tr 0.75 0.0 0.0
lab*tce 0.7

Input: Colorimetric Reflective System ORS18

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

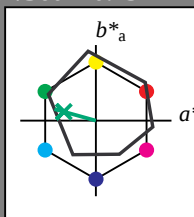
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 47.5
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 Inform. Technology (IT)
olvi3* 0.75 1.0 0.812 (1.0)
olvi3* 0.25 0.0 0.188 (0.0)
olvi4* 0.75 1.0 0.812 (1.0)
olvi4* 0.25 0.0 0.188 (0.0)
olvi5* 0.75 1.0 0.812 (1.0)
olvi5* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 84.75 -14.46 7.85
LAB*LAB 84.75 -13.69 3.81
LAB*LAB 84.75 -14.22 16.46

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ORS18; adapted (a) CIELAB data

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

QMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.59	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.25$

$n^* = 1.50$

$n^* = 1.75$

$n^* = 2.00$

$n^* = 2.25$

$n^* = 2.50$

$n^* = 2.75$

$n^* = 3.00$

$n^* = 3.25$

$n^* = 3.50$

$n^* = 3.75$

$n^* = 4.00$

$n^* = 4.25$

$n^* = 4.50$

$n^* = 4.75$

$n^* = 5.00$

$n^* = 5.25$

$n^* = 5.50$

$n^* = 5.75$

$n^* = 6.00$

$n^* = 6.25$

$n^* = 6.50$

$n^* = 6.75$

$n^* = 7.00$

$n^* = 7.25$

$n^* = 7.50$

$n^* = 7.75$

$n^* = 8.00$

$n^* = 8.25$

$n^* = 8.50$

$n^* = 8.75$

$n^* = 9.00$

$n^* = 9.25$

$n^* = 9.50$

$n^* = 9.75$

$n^* = 10.00$

$n^* = 10.25$

$n^* = 10.50$

$n^* = 10.75$

$n^* = 11.00$

$n^* = 11.25$

$n^* = 11.50$

$n^* = 11.75$

$n^* = 12.00$

$n^* = 12.25$

$n^* = 12.50$

$n^* = 12.75$

$n^* = 13.00$

$n^* = 13.25$

$n^* = 13.50$

$n^* = 13.75$

$n^* = 14.00$

$n^* = 14.25$

$n^* = 14.50$

$n^* = 14.75$

$n^* = 15.00$

$n^* = 15.25$

$n^* = 15.50$

$n^* = 15.75$

$n^* = 16.00$

$n^* = 16.25$

$n^* = 16.50$

$n^* = 16.75$

$n^* = 17.00$

$n^* = 17.25$

$n^* = 17.50$

$n^* = 17.75$

$n^* = 18.00$

$n^* = 18.25$

$n^* = 18.50$

$n^* = 18.75$

$n^* = 19.00$

$n^* = 19.25$

$n^* = 19.50$

$n^* = 19.75$

$n^* = 20.00$

$n^* = 20.25$

$n^* = 20.50$

$n^* = 20.75$

$n^* = 21.00$

$n^* = 21.25$

$n^* = 21.50$

$n^* = 21.75$

$n^* = 22.00$

$n^* = 22.25$

$n^* = 22.50$

$n^* = 22.75$

$n^* = 23.00$

$n^* = 23.25$

$n^* = 23.50$

$n^* = 23.75$

$n^* = 24.00$

$n^* = 24.25$

$n^* = 24.50$

$n^* = 24.75$

$n^* = 25.00$

$n^* = 25.25$

$n^* = 25.50$

$n^* = 25.75$

$n^* = 26.00$

$n^* = 26.25$

$n^* = 26.50$

$n^* = 26.75$

$n^* = 27.00$

$n^* = 27.25$

$n^* = 27.50$

$n^* = 27.75$

Input: Colorimetric Reflective System ORS18

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

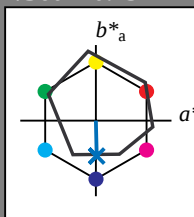
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 47.5
LAB*LAB 95.41 0.0 0.0
LAB*LAB 99.99 0.01 0.0

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

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*LAB 55.00 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
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.03 0.83
LAB*LAB 37.36 0.0 0.0
LAB*LAB 35.00 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
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*LAB 15.00 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
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

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

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

OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
olvi3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 68.59 0.08 -19.4
LAB*LAB 68.59 0.0 0.0
LAB*LAB 67.50 22.36 271.4

relative CIELAB lab*
lab*lab 0.654 0.012 -0.499
lab*tch 0.75 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.654 0.0 -0.499
lab*trc 0.75 0.5 0.75
lab*ncc 0.0 0.5 0.999

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 49.25 0.45 -20.71
LAB*LAB 49.25 0.55 -22.36
LAB*LAB 50.0 22.37 271.4

relative CIELAB lab*
lab*lab 0.404 0.012 -0.499
lab*tch 0.5 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.404 0.0 -0.499
lab*trc 0.5 0.5 0.75
lab*ncc 0.0 0.5 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.25 (1.0)
olvi3* 1.0 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 0.75 0.75 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 29.5 0.85 -22.01
LAB*LAB 29.5 0.95 -22.35
LAB*LAB 25.01 22.36 271.4

relative CIELAB lab*
lab*lab 0.154 0.012 -0.499
lab*tch 0.25 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.154 0.0 -0.499
lab*trc 0.25 0.5 0.75
lab*ncc 0.0 0.5 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
olvi3* 1.0 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 0.0 0.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*LAB 15.00 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
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

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.25 0.616 1.0 (1.0)
olvi3* 0.75 0.384 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 55.19 0.61 -31.48
LAB*LAB 55.19 0.62 -33.53
LAB*LAB 62.5 33.55 271.4

relative CIELAB lab*
lab*lab 0.48 0.018 -0.749
lab*tch 0.625 0.75 0.754
lab*nch 0.0 0.75 0.754
relative Natural Colour (NC)
lab*trj 0.48 0.0 -0.749
lab*trc 0.625 0.75 0.75
lab*ncc 0.0 0.75 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.488 1.0 (1.0)
olvi3* 1.0 0.512 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.488 1.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.488 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.56
LAB*LAB 41.79 1.1 -44.7
LAB*LAB 50.0 44.73 271.4

relative CIELAB lab*
lab*lab 0.307 0.024 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 1.0 0.754
relative Natural Colour (NC)
lab*trj 0.307 0.0 -0.999
lab*trc 0.5 1.0 0.75
lab*ncc 0.0 1.0 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.634 0.25 (1.0)
olvi3* 1.0 0.366 0.75 (0.0)
olvi4* 1.0 0.634 0.25 (1.0)
olvi4* 0.0 0.366 0.75 (0.0)
olvi5* 1.0 0.634 0.25 (1.0)
olvi5* 0.0 0.366 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 35.84 0.98 -32.79
LAB*LAB 35.84 0.92 -33.53
LAB*LAB 37.51 33.55 271.4

relative CIELAB lab*
lab*lab 0.23 0.018 -0.749
lab*tch 0.375 0.75 0.754
lab*nch 0.0 0.75 0.754
relative Natural Colour (NC)
lab*trj 0.23 0.0 -0.749
lab*trc 0.375 0.75 0.75
lab*ncc 0.0 0.75 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.25 (1.0)
olvi3* 1.0 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 0.75 0.75 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 22.01 0.85 -22.01
LAB*LAB 22.01 0.95 -22.35
LAB*LAB 25.01 22.36 271.4

relative CIELAB lab*
lab*lab 0.154 0.012 -0.499
lab*tch 0.25 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.154 0.0 -0.499
lab*trc 0.25 0.5 0.75
lab*ncc 0.0 0.5 0.999

$n^* = 0.25$

relative Inform. Technology (IT)
olvi3* 0.0 0.368 0.75 (1.0)
olvi3* 1.0 0.632 0.25 (0.0)
olvi4* 1.0 0.368 0.75 (1.0)
olvi4* 0.0 0.632 0.25 (0.0)
olvi5* 1.0 0.368 0.75 (1.0)
olvi5* 0.0 0.632 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 49.25 0.45 -20.71
LAB*LAB 49.25 0.55 -22.36
LAB*LAB 50.0 22.37 271.4

relative CIELAB lab*
lab*lab 0.404 0.012 -0.499
lab*tch 0.5 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.404 0.0 -0.499
lab*trc 0.5 0.5 0.75
lab*ncc 0.0 0.5 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.488 1.0 (1.0)
olvi3* 1.0 0.512 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.488 1.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.488 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.56
LAB*LAB 41.79 1.1 -44.7
LAB*LAB 50.0 44.73 271.4

relative CIELAB lab*
lab*lab 0.307 0.024 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 1.0 0.754
relative Natural Colour (NC)
lab*trj 0.307 0.0 -0.999
lab*trc 0.5 1.0 0.75
lab*ncc 0.0 1.0 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.634 0.25 (1.0)
olvi3* 1.0 0.366 0.75 (0.0)
olvi4* 1.0 0.634 0.25 (1.0)
olvi4* 0.0 0.366 0.75 (0.0)
olvi5* 1.0 0.634 0.25 (1.0)
olvi5* 0.0 0.366 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 35.84 0.98 -32.79
LAB*LAB 35.84 0.92 -33.53
LAB*LAB 37.51 33.55 271.4

relative CIELAB lab*
lab*lab 0.23 0.018 -0.749
lab*tch 0.375 0.75 0.754
lab*nch 0.0 0.75 0.754
relative Natural Colour (NC)
lab*trj 0.23 0.0 -0.749
lab*trc 0.375 0.75 0.75
lab*ncc 0.0 0.75 0.999

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.25 (1.0)
olvi3* 1.0 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 0.75 0.75 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 22.01 0.85 -22.01
LAB*LAB 22.01 0.95 -22.35
LAB*LAB 25.01 22.36 271.4

relative CIELAB lab*
lab*lab 0.154 0.012 -0.499
lab*tch 0.25 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.154 0.0 -0.499
lab*trc 0.25 0.5 0.75
lab*ncc 0.0 0.5 0.999

$n^* = 0.00$

Output: Colorimetric Reflective System NRS11

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

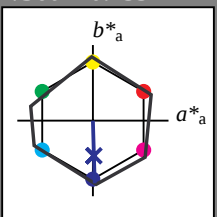
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 53 83 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
LAB*LAB 95.41 0.0 0.0
LAB*LAB 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
olvi3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LAB 74.31 0.0 0.0
LAB*LAB 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 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)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 53.21 0.04 -20.75
LAB*LAB 53.21 0.0 0.0
LAB*LAB 50.0 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
olvi3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.25 0.25 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi5* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 32.11 1.21 -41.52
LAB*LAB 32.11 0.0 0.0
LAB*LAB 30.0 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
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.006 0.25 (1.0)
olvi3* 1.0 0.994 0.75 (0.0)
olvi4* 1.0 0.994 0.75 (1.0)
olvi4* 0.0 0.006 0.25 (0.0)
olvi5* 1.0 0.994 0.75 (1.0)
olvi5* 0.0 0.006 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LAB 11.01 0.0 0.0
LAB*LAB 10.0 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
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

$n^* = 1.0$

NRS11; adapted (a) CIELAB data

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

R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.59	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272