

Input: Colorimetric Reflective System MRS18a

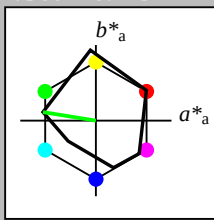
for hue $h^* = lab^*h = 171/360 = 0.475$
 lab^*ch and lab^*nch

D65: hue G

LCH*Ma: 52 71 171

rgb*Ma: 0.0 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 0.01 0.0
LAB*LABa 95.41 0.01 0.0
LAB*LABb 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*ch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 1.0 0.0 0.0
lab*ce 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 0.03 0.0
LAB*LABa 76.06 0.03 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*ch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.75 0.0 0.0
lab*ce 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 0.05 0.0
LAB*LABa 56.71 0.05 0.0
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*ch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.5 0.0 0.0
lab*ce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*LABb 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*ch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.25 0.0 0.0
lab*ce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.00 0.0
LAB*LABa 18.02 0.00 0.0
LAB*LABb 12.50 0.00 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 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*ce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.00 0.0
LAB*LABa 18.02 0.00 0.0
LAB*LABb 12.50 0.00 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 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*ce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

MRS18a; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.75 -34.92 5.64
LAB*LABa 73.75 -34.92 5.64
LAB*LABb 17.47 17.08 5.64

relative CIELAB lab*
lab*lab 0.72 -0.493 0.079
lab*ch 0.75 0.5 0.475
lab*nch 0.0 0.5 0.475
relative Natural Colour (NC)
lab*tr 0.72 -0.493 0.079
lab*ce 0.75 0.5 0.475
lab*nce 0.0 0.5 0.475

relative Inform. Technology (IT)
olvi3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 54.41 -34.91 5.65
LAB*LABa 54.41 -34.91 5.65
LAB*LABb 17.47 17.08 5.65

relative CIELAB lab*
lab*lab 0.61 -0.247 -0.03
lab*ch 0.625 0.25 0.475
lab*nch 0.25 0.25 0.475
relative Natural Colour (NC)
lab*tr 0.61 -0.247 -0.03
lab*ce 0.625 0.25 0.475
lab*nce 0.25 0.25 0.475

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 45.88 -17.41 2.83
LAB*LABa 45.88 -17.41 2.83
LAB*LABb 17.47 17.08 2.83

relative CIELAB lab*
lab*lab 0.36 -0.247 -0.03
lab*ch 0.375 0.25 0.475
lab*nch 0.25 0.25 0.475
relative Natural Colour (NC)
lab*tr 0.36 -0.247 -0.03
lab*ce 0.375 0.25 0.475
lab*nce 0.25 0.25 0.475

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 35.06 -34.88 5.63
LAB*LABa 35.06 -34.88 5.63
LAB*LABb 17.47 17.08 5.63

relative CIELAB lab*
lab*lab 0.22 -0.493 0.079
lab*ch 0.25 0.5 0.475
lab*nch 0.0 0.5 0.475
relative Natural Colour (NC)
lab*tr 0.22 -0.493 0.079
lab*ce 0.25 0.5 0.475
lab*nce 0.0 0.5 0.475

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 0.00 0.0
LAB*LABa 18.02 0.00 0.0
LAB*LABb 12.50 0.00 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 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*ce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

Output: Colorimetric Reflective System ORS18

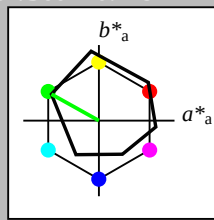
for hue $h^* = lab^*h = 151/360 = 0.419$
 lab^*ch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

rgb*Ma: 0.0 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 -0.97 4.75
LAB*LABa 95.41 -0.97 4.75
LAB*LABb 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*ch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 1.0 0.0 0.0
lab*ce 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*LABa 76.06 -0.6 3.44
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*ch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.75 0.0 0.0
lab*ce 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 -0.23 2.14
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*ch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.5 0.0 0.0
lab*ce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*LABb 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*ch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*tr 0.25 0.0 0.0
lab*ce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 45.88 -17.41 2.83
LAB*LABa 45.88 -17.41 2.83
LAB*LABb 17.47 17.08 2.83

relative CIELAB lab*
lab*lab 0.33 -0.243 -0.091
lab*ch 0.33 0.25 0.475
lab*nch 0.25 0.25 0.475
relative Natural Colour (NC)
lab*tr 0.33 -0.243 -0.091
lab*ce 0.33 0.25 0.475
lab*nce 0.25 0.25 0.475

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 35.06 -34.88 5.63
LAB*LABa 35.06 -34.88 5.63
LAB*LABb 17.47 17.08 5.63

relative CIELAB lab*
lab*lab 0.22 -0.493 0.079
lab*ch 0.25 0.5 0.475
lab*nch 0.0 0.5 0.475
relative Natural Colour (NC)
lab*tr 0.22 -0.493 0.079
lab*ce 0.25 0.5 0.475
lab*nce 0.0 0.5 0.475

%Regularity

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

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

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 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.15 -31.94 20.73
LAB*LABa 73.15 -31.94 20.73
LAB*LABb 15.91 15.91 15.91

relative CIELAB lab*
lab*lab 0.712 -0.436 0.243
lab*ch 0.75 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*tr 0.712 -0.436 0.243
lab*ce 0.75 0.5 0.419
lab*nce 0.0 0.5 0.419

relative Inform. Technology (IT)
olvi3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 53.8 -31.57 19.42
LAB*LABa 53.8 -31.57 19.42
LAB*LABb 15.91 15.91 15.91

relative CIELAB lab*
lab*lab 0.606 -0.217 0.122
lab*ch 0.625 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*tr 0.606 -0.217 0.122
lab*ce 0.625 0.25 0.419
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 45.88 -17.41 2.83
LAB*LABa 45.88 -17.41 2.83
LAB*LABb 17.47 17.08 2.83

relative CIELAB lab*
lab*lab 0.462 -0.478 0.144
lab*ch 0.462 0.25 0.419
lab*nch 0.25 0.25 0.419
relative Natural Colour (NC)
lab*tr 0.462 -0.478 0.144
lab*ce 0.462 0.25 0.419
lab*nce 0.25 0.25 0.419

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 34.46 -15.88 7.47
LAB*LABa 34.46 -15.88 7.47
LAB*LABb 12.50 12.50 12.50

relative CIELAB lab*
lab*lab 0.213 -0.436 0.243
lab*ch 0.25 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*tr 0.213 -0.436 0.243
lab*ce 0.25 0.5 0.419
lab*nce 0.0 0.5 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 18.02 0.0 0.546
LAB*LABa 18.02 0.0 0.546
LAB*LABb 12.50 0.0 0.546

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*ch 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*ce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

TE560-7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

BAM-test chart TE56; Colorimetric systems MRS18a & ORS18

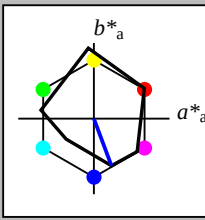
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: `olv* setrgbcolor`

output: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System MRS18a
 for hue $h^* = lab^*h = 290/360 = 0.807$
 lab^*tch and lab^*nch

D65: hue B
 LCH*Ma: 37 66 290
 rgb*Ma: 0.0 0.0 1.0
 triangle lightness t^*



% Gamut

$u^*_{rel} = 92$

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 0.01 0.0
 LAB*LABa 95.41 0.01 0.0
 LAB*TCa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 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 0.03 0.0
 LAB*LABa 76.06 0.03 0.0
 LAB*TCa 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)
 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 56.71 0.05 0.0
 LAB*LABa 56.71 0.05 0.0
 LAB*TCa 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
 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)
 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 37.26 0.07 0.01
 LAB*LABa 37.26 0.07 0.01
 LAB*TCa 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
 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)
 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 18.02 0.02 0.0
 LAB*LABa 18.02 0.02 0.0
 LAB*TCa 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
 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

$n^* = 1.0$

MRS18a; adapted (a) CIELAB data
 $L^* = L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 0.5 0.5 1.0 0.5
 cmyn4* 0.5 0.5 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 66.03 11.67 -31.12
 LAB*LABa 66.03 11.67 -31.12
 LAB*TCa 75.00 33.24 290.48

relative CIELAB lab*
 lab*lab 0.5 0.175 -0.467
 lab*tch 0.75 0.5 0.807
 lab*nch 0.0 0.5 0.807
 relative Natural Colour (NC)
 lab*trj 0.62 0.128 -0.482
 lab*tce 0.75 0.5 0.791
 lab*nce 0.0 0.5 0.169

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.75 (1.0)
 cmyn3* 0.75 0.75 0.25 (0.0)
 olv4* 0.5 0.5 1.0 0.75
 cmyn4* 0.5 0.5 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 46.68 11.69 -31.11
 LAB*LABa 46.68 11.69 -31.11
 LAB*TCa 50.00 33.24 290.48

relative CIELAB lab*
 lab*lab 0.37 0.175 -0.467
 lab*tch 0.5 0.5 0.807
 lab*nch 0.0 0.5 0.807
 relative Natural Colour (NC)
 lab*trj 0.37 0.128 -0.482
 lab*tce 0.5 0.5 0.791
 lab*nce 0.0 0.5 0.169

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.5 (0.0)
 olv4* 0.5 0.5 1.0 0.5
 cmyn4* 0.5 0.5 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 27.34 11.71 31.11
 LAB*LABa 27.34 11.71 31.11
 LAB*TCa 50.00 33.24 290.48

relative CIELAB lab*
 lab*lab 0.181 0.262 -0.702
 lab*tch 0.375 0.75 0.807
 lab*nch 0.0 0.75 0.807
 relative Natural Colour (NC)
 lab*trj 0.181 0.193 -0.724
 lab*tce 0.375 0.75 0.791
 lab*nce 0.0 0.75 0.169

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.75 (0.0)
 olv4* 0.5 0.5 1.0 0.75
 cmyn4* 0.5 0.5 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 18.02 0.02 0.0
 LAB*LABa 18.02 0.02 0.0
 LAB*TCa 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
 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

$n^* = 0.50$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

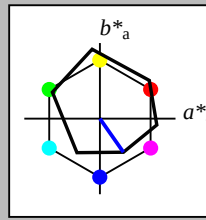
$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

Output: Colorimetric Reflective System ORS18
 for hue $h^* = lab^*h = 305/360 = 0.847$
 lab^*tch and lab^*nch

D65: hue V
 LCH*Ma: 26 54 305
 rgb*Ma: 0.0 0.0 1.0
 triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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 0.01 0.0
 LAB*TCa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 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*TCa 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)
 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 0.23 2.14
 LAB*TCa 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
 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)
 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 37.26 0.07 0.01
 LAB*LABa 37.26 0.07 0.01
 LAB*TCa 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
 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)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.75 (0.0)
 olv4* 0.5 0.5 1.0 0.75
 cmyn4* 0.5 0.5 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 18.02 0.02 0.0
 LAB*LABa 18.02 0.02 0.0
 LAB*TCa 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
 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

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

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)
 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 0.56 15.24 -19.79
 LAB*LABa 76.06 0.56 15.24 -19.79
 LAB*TCa 75.00 27.11 305.0

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)
 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 0.23 2.14
 LAB*TCa 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
 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)
 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 37.26 0.07 0.01
 LAB*LABa 37.26 0.07 0.01
 LAB*TCa 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
 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)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.75 (0.0)
 olv4* 0.5 0.5 1.0 0.75
 cmyn4* 0.5 0.5 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 18.02 0.02 0.0
 LAB*LABa 18.02 0.02 0.0
 LAB*TCa 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
 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

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 0.25
 cmyn4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 43.14 23.35 -32.08
 LAB*LABa 43.14 23.35 -32.08
 LAB*TCa 62.5 40.67 305.0

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*tce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.5 (0.0)
 olv4* 0.5 0.5 1.0 0.5
 cmyn4* 0.5 0.5 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 25.72 31.46 -44.36
 LAB*LABa 25.72 31.46 -44.36
 LAB*TCa 50.00 33.24 290.48

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 0.75 (0.0)
 olv4* 0.5 0.5 1.0 0.75
 cmyn4* 0.5 0.5 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 18.02 0.02 0.0
 LAB*LABa 18.02 0.02 0.0
 LAB*TCa 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
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 323/360 = 0.896$

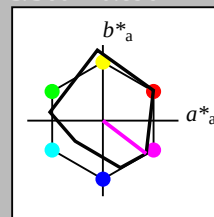
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 323

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

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 0.01 0.0
LAB*LABa 95.41 0.01 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 0.03 0.0
LAB*LABa 76.06 0.03 0.0
LAB*TCHa 75.0 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* 0.5 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 0.05 0.0
LAB*LABa 56.71 0.05 0.0
LAB*TCHa 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*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*TCHa 25.0 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*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

MRS18a; adapted (a) CIELAB data

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

RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

% Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

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 80.29 14.34 -10.89
LAB*LABa 80.29 14.34 -10.89
LAB*TCHa 97.5 17.99 322.71

relative CIELAB lab*
lab*lab 0.609 0.398 -0.15
lab*tch 0.875 0.25 0.896
lab*nch 0.0 0.25 0.896
relative Natural Colour (NC)
lab*trj 0.805 0.162 -0.189
lab*tce 0.875 0.25 0.862
lab*nce 0.0 0.25 0.844

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 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 65.17 28.63 -21.78
LAB*LABa 65.17 28.63 -21.78
LAB*TCHa 75.0 35.99 322.71

relative CIELAB lab*
lab*lab 0.609 0.398 -0.302
lab*tch 0.75 0.5 0.896
lab*nch 0.0 0.5 0.896
relative Natural Colour (NC)
lab*trj 0.609 0.324 -0.38
lab*tce 0.75 0.5 0.862
lab*nce 0.0 0.5 0.844

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.25 0.75 0.25 (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 45.83 28.7 -21.78
LAB*LABa 45.83 28.7 -21.78
LAB*TCHa 50.0 35.99 322.71

relative CIELAB lab*
lab*lab 0.414 0.597 -0.453
lab*tch 0.625 0.75 0.896
lab*nch 0.0 0.75 0.896
relative Natural Colour (NC)
lab*trj 0.414 0.486 -0.57
lab*tce 0.625 0.75 0.862
lab*nce 0.0 0.75 0.844

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 0.5 1.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 30.72 42.95 -32.67
LAB*LABa 30.72 42.95 -32.67
LAB*TCHa 37.51 53.98 322.71

relative CIELAB lab*
lab*lab 0.164 0.597 -0.453
lab*tch 0.375 0.75 0.896
lab*nch 0.0 0.75 0.896
relative Natural Colour (NC)
lab*trj 0.164 0.486 -0.57
lab*tce 0.375 0.75 0.862
lab*nce 0.0 0.75 0.844

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 0.5 (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 26.48 28.72 -11.77
LAB*LABa 26.48 28.72 -11.77
LAB*TCHa 25.01 35.99 322.71

relative CIELAB lab*
lab*lab 0.305 0.199 -0.15
lab*tch 0.375 0.25 0.896
lab*nch 0.0 0.25 0.896
relative Natural Colour (NC)
lab*trj 0.305 0.162 -0.189
lab*tce 0.375 0.25 0.862
lab*nce 0.0 0.25 0.844

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 50.06 43.01 -32.68
LAB*LABa 50.06 43.01 -32.68
LAB*TCHa 62.5 53.98 322.71

relative CIELAB lab*
lab*lab 0.414 0.597 -0.453
lab*tch 0.625 0.75 0.896
lab*nch 0.0 0.75 0.896
relative Natural Colour (NC)
lab*trj 0.414 0.486 -0.57
lab*tce 0.625 0.75 0.862
lab*nce 0.0 0.75 0.844

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.75 (1.0)
cmyn3* 0.25 0.75 0.25 (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 34.95 57.34 -43.57
LAB*LABa 34.95 57.34 -43.57
LAB*TCHa 50.0 71.98 322.71

relative CIELAB lab*
lab*lab 0.219 0.795 -0.605
lab*tch 0.5 1.0 0.896
lab*nch 0.0 1.0 0.896
relative Natural Colour (NC)
lab*trj 0.219 0.648 -0.761
lab*tce 0.5 1.0 0.862
lab*nce 0.0 1.0 0.844

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.25 1.0 0.5 (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 30.72 42.95 -32.67
LAB*LABa 30.72 42.95 -32.67
LAB*TCHa 37.51 53.98 322.71

relative CIELAB lab*
lab*lab 0.164 0.597 -0.453
lab*tch 0.375 0.75 0.896
lab*nch 0.0 0.75 0.896
relative Natural Colour (NC)
lab*trj 0.164 0.486 -0.57
lab*tce 0.375 0.75 0.862
lab*nce 0.0 0.75 0.844

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 0.5 1.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 26.48 28.72 -11.77
LAB*LABa 26.48 28.72 -11.77
LAB*TCHa 25.01 35.99 322.71

relative CIELAB lab*
lab*lab 0.305 0.199 -0.15
lab*tch 0.375 0.25 0.896
lab*nch 0.0 0.25 0.896
relative Natural Colour (NC)
lab*trj 0.305 0.162 -0.189
lab*tce 0.375 0.25 0.862
lab*nce 0.0 0.25 0.844

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 0.5 (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 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

Output: Colorimetric Reflective System ORS18

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

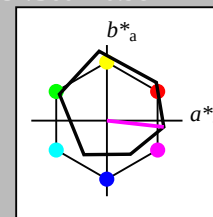
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

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

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 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*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 0.0

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

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*TCHa 25.0 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*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 1.0 0.75 1.0 (1.0)
cmyn3* 0.0 0.25 0.0 (0.0)
olvi4* 1.0 0.75 1.0 (1.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 84.87 0.248 -0.027
LAB*LABa 84.87 0.248 -0.027
LAB*TCHa 87.5 16.32 353.66

relative CIELAB lab*
lab*lab 0.847 0.248 -0.027
lab*tch 0.875 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.847 0.227 -0.103
lab*tce 0.875 0.25 0.932
lab*nce 0.0 0.25 0.927

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.75 (1.0)
cmyn3* 0.25 0.5 0.25 (0.0)
olvi4* 1.0 0.75 1.0 (1.0)
cmyn4* 0.0 0.5 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 64.24 18.82 -2.08
LAB*LABa 64.24 18.82 -2.08
LAB*TCHa 62.5 18.93 353.66

relative CIELAB lab*
lab*lab 0.625 0.25 0.932
lab*tch 0.625 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.597 0.227 -0.103
lab*tce 0.625 0.25 0.932
lab*nce 0.0 0.25 0.927

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olvi4* 1.0 0.75 1.0 (1.0)
cmyn4* 0.0 0.25 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 44.89 18.8 -0.73
LAB*LABa 44.89 18.8 -0.73
LAB*TCHa 37.51 18.93 353.66

relative CIELAB lab*
lab*lab 0.347 0.248 -0.027
lab*tch 0.375 0.25 0.982
lab*nch 0.0 0.25 0.982
relative Natural Colour (NC)
lab*trj 0.347 0.227 -0.103
lab*tce 0.375 0.25 0.932
lab*nce 0.0 0.25 0.927

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 1.0 0.5 (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 33.08 17.17 2.04
LAB*LABa 33.08 17.17 2.04
LAB*TCHa 25.01 35.99 353.66

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*trj 0.195 0.454 -0.208
lab*tce 0.25 0.5 0.932
lab*nce 0.0 0.5 0.927

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 0.5 (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 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCHa 0.01 0.01 0.0

Input: Colorimetric Reflective System MRS18a

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

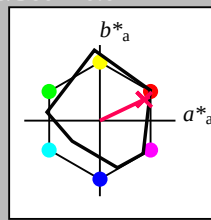
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 73 25

rgb*Ma: 1.0 0.0 0.1

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 0.01 0.0
LAB*LABa 95.41 0.01 0.0
LAB*LABb 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 0.03 0.0
LAB*LABa 76.06 0.03 0.0
LAB*LABb 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* 0.5 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 0.05 0.0
LAB*LABa 56.71 0.05 0.0
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.07 0.0
LAB*LABa 37.36 0.07 0.0
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*LABb 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
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

MRS18a; adapted (a) CIELAB data

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

RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.552 (1.0)
cmyn3* 0.0 0.5 0.448 (0.0)
olvi4* 1.0 0.5 0.552 (1.0)
cmyn4* 0.0 0.5 0.448 (0.0)
standard and adapted CIELAB
LAB*LAB 71.76 32.94 15.69
LAB*LABa 71.76 32.94 15.69
LAB*LABb 71.76 32.94 15.69

relative CIELAB lab*
lab*lab 0.694 0.451 0.215
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.5 0.071
relative Natural Colour (NC)
lab*trj 0.694 0.5 0.0
lab*tce 0.75 0.5 0.0
lab*nce 0.0 0.5 0.071

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.302 (1.0)
cmyn3* 0.25 0.5 0.698 (0.0)
olvi4* 1.0 0.5 0.552 (1.0)
cmyn4* 0.0 0.5 0.448 (0.0)
standard and adapted CIELAB
LAB*LAB 52.41 32.96 15.7
LAB*LABa 52.41 32.96 15.7
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.542 0.727 0.323
lab*tch 0.625 0.75 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*trj 0.542 0.75 0.0
lab*tce 0.625 0.75 0.0
lab*nce 0.0 0.75 0.071

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 33.07 32.96 15.7
LAB*LABa 33.07 32.96 15.7
LAB*LABb 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.292 0.677 0.323
lab*tch 0.375 0.75 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*trj 0.292 0.75 0.0
lab*tce 0.375 0.75 0.0
lab*nce 0.0 0.75 0.071

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.195 0.5 0.0
lab*tch 0.25 0.5 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*trj 0.195 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.0 0.5 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* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*LABb 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
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

Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

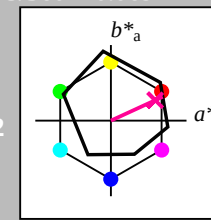
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

rgb*Ma: 1.0 0.0 0.32

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 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*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.5 0.5 (1.0)
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.5 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (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 0.23 2.14
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 1.08
LAB*LABa 37.36 0.13 1.08
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*LABb 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
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

ORS18; adapted (a) CIELAB data

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

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
CLMa	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 0.661 (1.0)
cmyn3* 0.0 0.5 0.339 (0.0)
olvi4* 1.0 0.5 0.661 (1.0)
cmyn4* 0.0 0.5 0.339 (0.0)
standard and adapted CIELAB
LAB*LAB 71.7 34.27 15.76
LAB*LABa 71.7 34.27 15.76
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.694 0.454 0.209
lab*tch 0.75 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.694 0.5 0.0
lab*tce 0.75 0.5 0.0
lab*nce 0.0 0.5 0.069

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.411 (1.0)
cmyn3* 0.25 0.75 0.589 (0.0)
olvi4* 1.0 0.5 0.661 (1.0)
cmyn4* 0.0 0.5 0.339 (0.0)
standard and adapted CIELAB
LAB*LAB 52.36 34.13 17.62
LAB*LABa 52.36 34.13 17.62
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.541 0.681 0.313
lab*tch 0.625 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.541 0.75 0.0
lab*tce 0.625 0.75 0.0
lab*nce 0.0 0.75 0.069

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 33.01 34.13 17.62
LAB*LABa 33.01 34.13 17.62
LAB*LABb 25.00 0.01 0.0

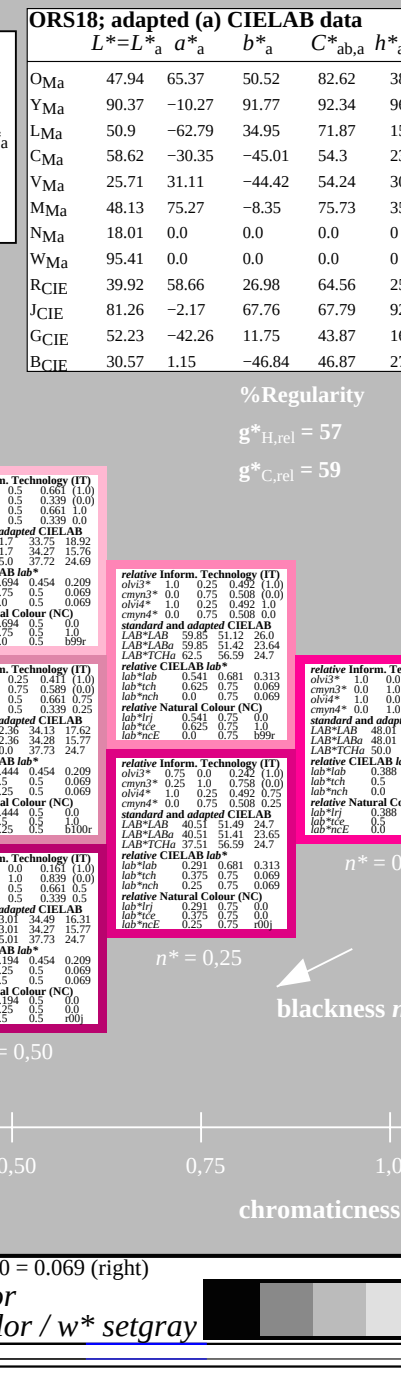
relative CIELAB lab*
lab*lab 0.291 0.681 0.313
lab*tch 0.375 0.75 0.069
lab*nch 0.0 0.75 0.069
relative Natural Colour (NC)
lab*trj 0.291 0.75 0.0
lab*tce 0.375 0.75 0.0
lab*nce 0.0 0.75 0.069

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 0.0 0.0 (0.0)
olvi4* 1.0 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 0.46
LAB*LABa 18.02 0.0 0.46
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.194 0.5 0.0
lab*tch 0.25 0.5 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*trj 0.194 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.0 0.5 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 0.46
LAB*LABb 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
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



TE560-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart TE56; Colorimetric systems MRS18a & ORS18 input: $olv^* setrgbcolor$

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

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

Input: Colorimetric Reflective System MRS18a

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

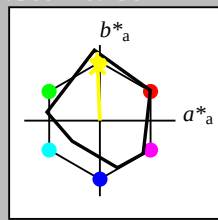
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 91 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness t^*



MRS18a; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

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 0.01 0.0	
LAB*LABa 95.41 0.0 0.0	
LAB*TCHa 99.99 0.01	
relative CIELAB lab*	
lab*lab 1.0 0.0 0.0	
lab*tch 1.0 0.0 0.0	
lab*nch 0.0 0.0 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 0.03 0.0	
LAB*LABa 76.06 0.0 0.0	
LAB*TCHa 75.00 0.01	
relative CIELAB lab*	
lab*lab 0.75 0.0 0.0	
lab*tch 0.75 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.75 0.0 0.0	
lab*tce 0.75 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.5 0.5 0.5 (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 0.05 0.0	
LAB*LABa 56.71 0.0 0.0	
LAB*TCHa 50.00 0.01	
relative CIELAB lab*	
lab*lab 0.5 0.0 0.0	
lab*tch 0.5 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.5 0.0 0.0	
lab*tce 0.5 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.25 0.25 0.25 (0.0)	
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 0.01 0.0	
LAB*LABa 37.36 0.0 0.0	
LAB*TCHa 25.00 0.01	
relative CIELAB lab*	
lab*lab 0.25 0.0 0.0	
lab*tch 0.25 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.25 0.0 0.0	
lab*tce 0.25 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.0 0.0 0.0 (0.0)	
cmyn3* 1.0 1.0 1.0 (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 18.02 0.0 0.0	
LAB*LABa 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	

$n^* = 1.0$

relative Inform. Technology (IT)	
olvi3* 1.0 0.988 0.75 (1.0)	
cmyn3* 0.0 0.012 0.25 (0.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 93.73 -0.91 22.65	
LAB*LABa 93.73 -0.92 22.66	
LAB*TCHa 97.5 22.67 92.33	
relative CIELAB lab*	
lab*lab 0.978 -0.009 0.25	
lab*tch 0.875 0.25 0.257	
lab*nch 0.0 0.25 0.257	
relative Natural Colour (NC)	
lab*trj 0.978 0.0 0.25	
lab*tce 0.875 0.25 0.257	
lab*nce 0.0 0.25 0.257	

relative Inform. Technology (IT)	
olvi3* 0.75 0.738 0.5 (1.0)	
cmyn3* 0.25 0.262 0.75 (0.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 74.38 -0.88 22.66	
LAB*LABa 74.38 -0.91 22.66	
LAB*TCHa 62.5 22.67 92.33	
relative CIELAB lab*	
lab*lab 0.738 -0.009 0.25	
lab*tch 0.625 0.25 0.256	
lab*nch 0.0 0.25 0.256	
relative Natural Colour (NC)	
lab*trj 0.738 0.0 0.25	
lab*tce 0.625 0.25 0.256	
lab*nce 0.0 0.25 0.256	

relative Inform. Technology (IT)	
olvi3* 0.5 0.512 0.75 (0.0)	
cmyn3* 0.5 0.488 0.25 (1.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 56.71 0.05 0.0	
LAB*LABa 56.71 0.0 0.0	
LAB*TCHa 50.00 0.01	
relative CIELAB lab*	
lab*lab 0.5 0.0 0.0	
lab*tch 0.5 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.5 0.0 0.0	
lab*tce 0.5 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.25 0.278 0.5 (0.0)	
cmyn3* 0.75 0.722 0.5 (0.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 37.36 0.01 0.0	
LAB*LABa 37.36 0.0 0.0	
LAB*TCHa 25.00 0.01	
relative CIELAB lab*	
lab*lab 0.25 0.0 0.0	
lab*tch 0.25 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.25 0.0 0.0	
lab*tce 0.25 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.0 0.0 0.0 (0.0)	
cmyn3* 1.0 1.0 1.0 (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 18.02 0.0 0.0	
LAB*LABa 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	

$n^* = 0.25$

relative Inform. Technology (IT)	
olvi3* 1.0 0.976 0.5 (1.0)	
cmyn3* 0.0 0.024 0.5 (0.0)	
olvi4* 1.0 0.976 0.5 (1.0)	
cmyn4* 0.0 0.024 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 92.06 -1.83 45.31	
LAB*LABa 92.06 -1.84 45.31	
LAB*TCHa 75.0 45.35 92.34	
relative CIELAB lab*	
lab*lab 0.957 -0.019 0.499	
lab*tch 0.75 0.5 0.257	
lab*nch 0.0 0.5 0.257	
relative Natural Colour (NC)	
lab*trj 0.957 0.0 0.5	
lab*tce 0.75 0.5 0.257	
lab*nce 0.0 0.5 0.257	

relative Inform. Technology (IT)	
olvi3* 0.75 0.714 0.0 (1.0)	
cmyn3* 0.25 0.274 0.75 (0.0)	
olvi4* 1.0 0.976 0.5 (1.0)	
cmyn4* 0.0 0.024 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 72.71 -1.8 45.32	
LAB*LABa 72.71 -1.84 45.31	
LAB*TCHa 50.0 45.35 92.33	
relative CIELAB lab*	
lab*lab 0.714 -0.019 0.5	
lab*tch 0.5 0.5 0.256	
lab*nch 0.0 0.5 0.256	
relative Natural Colour (NC)	
lab*trj 0.714 0.0 0.5	
lab*tce 0.5 0.5 0.256	
lab*nce 0.0 0.5 0.256	

relative Inform. Technology (IT)	
olvi3* 0.5 0.512 0.75 (0.0)	
cmyn3* 0.5 0.488 0.25 (1.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 56.71 0.05 0.0	
LAB*LABa 56.71 0.0 0.0	
LAB*TCHa 50.00 0.01	
relative CIELAB lab*	
lab*lab 0.5 0.0 0.0	
lab*tch 0.5 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.5 0.0 0.0	
lab*tce 0.5 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.25 0.278 0.5 (0.0)	
cmyn3* 0.75 0.722 0.5 (0.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 37.36 0.01 0.0	
LAB*LABa 37.36 0.0 0.0	
LAB*TCHa 25.00 0.01	
relative CIELAB lab*	
lab*lab 0.25 0.0 0.0	
lab*tch 0.25 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.25 0.0 0.0	
lab*tce 0.25 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.0 0.0 0.0 (0.0)	
cmyn3* 1.0 1.0 1.0 (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 18.02 0.0 0.0	
LAB*LABa 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	

$n^* = 0.50$

relative Inform. Technology (IT)	
olvi3* 1.0 0.964 0.25 (1.0)	
cmyn3* 0.0 0.036 0.25 (0.0)	
olvi4* 1.0 0.964 0.25 (1.0)	
cmyn4* 0.0 0.036 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 90.38 -2.75 67.96	
LAB*LABa 90.38 -2.77 67.96	
LAB*TCHa 62.5 68.02 92.34	
relative CIELAB lab*	
lab*lab 0.932 -0.03 0.749	
lab*tch 0.625 0.75 0.256	
lab*nch 0.0 0.75 0.256	
relative Natural Colour (NC)	
lab*trj 0.932 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* 0.75 0.714 0.0 (1.0)	
cmyn3* 0.25 0.274 0.75 (0.0)	
olvi4* 1.0 0.976 0.5 (1.0)	
cmyn4* 0.0 0.024 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 72.71 -1.8 45.32	
LAB*LABa 72.71 -1.84 45.31	
LAB*TCHa 50.0 45.35 92.33	
relative CIELAB lab*	
lab*lab 0.714 -0.019 0.5	
lab*tch 0.5 0.5 0.256	
lab*nch 0.0 0.5 0.256	
relative Natural Colour (NC)	
lab*trj 0.714 0.0 0.5	
lab*tce 0.5 0.5 0.256	
lab*nce 0.0 0.5 0.256	

relative Inform. Technology (IT)	
olvi3* 0.5 0.512 0.75 (0.0)	
cmyn3* 0.5 0.488 0.25 (1.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 56.71 0.05 0.0	
LAB*LABa 56.71 0.0 0.0	
LAB*TCHa 50.00 0.01	
relative CIELAB lab*	
lab*lab 0.5 0.0 0.0	
lab*tch 0.5 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.5 0.0 0.0	
lab*tce 0.5 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.25 0.278 0.5 (0.0)	
cmyn3* 0.75 0.722 0.5 (0.0)	
olvi4* 1.0 0.988 0.75 (1.0)	
cmyn4* 0.0 0.012 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 37.36 0.01 0.0	
LAB*LABa 37.36 0.0 0.0	
LAB*TCHa 25.00 0.01	
relative CIELAB lab*	
lab*lab 0.25 0.0 0.0	
lab*tch 0.25 0.0 0.0	
lab*nch 0.0 0.0 0.0	
relative Natural Colour (NC)	
lab*trj 0.25 0.0 0.0	
lab*tce 0.25 0.0 0.0	
lab*nce 0.0 0.0 0.0	

relative Inform. Technology (IT)	
olvi3* 0.0 0.0 0.0 (0.0)	
cmyn3* 1.0 1.0 1.0 (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 18.02 0.0 0.0	
LAB*LABa 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	

$n^* = 1.0$

64.99	25	1,00
71.62	92	
44.6	162	
46.51	272	
larity		
42		

Input: Colorimetric Reflective System MRS18a

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

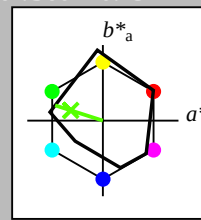
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 162

rgb*Ma: 0.11 1.0 0.0

triangle lightness t^*



MRS18a; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

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 0.01 0.0
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	76.06 0.03 0.0
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
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 0.0 0.0
LAB*LABa	56.71 0.0 0.0
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
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 0.01 0.0
LAB*LABa	37.36 0.0 0.0
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
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 0.0
LAB*LABa	18.02 0.0 0.0
LAB*TCHa	0.01 0.01 0.0
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 0.0
lab*nch	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

TE560-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

BAM-test chart TE56; Colorimetric systems MRS18a & ORS18 input: `olv* setrgbcolor`

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

Output: Colorimetric Reflective System ORS18

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

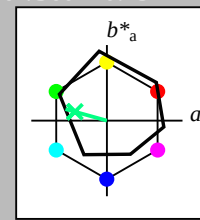
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness t^*



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
CLMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
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 4.75
LAB*LABa	95.41 0.0 0.0
LAB*TCHa	99.99 0.01 0.0
relative CIELAB lab*	
lab*lab	1.0 0.0 0.0
lab*tch	1.0 0.0 0.0
lab*nch	0.0 0.0 0.0
relative Natural Colour (NC)	
lab*trj	1.0 0.0 0.0
lab*tce	1.0 0.0 0.0
lab*nce	0.0 0.0 0.0

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
cmyn3*	0.25 0.25 0.25 (0.0)
olvi4*	1.0 1.0 1.0 (0.75)
cmyn4*	0.0 0.0 0.0 (0.25)
standard and adapted CIELAB	
LAB*LAB	76.06 -0.6 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
relative Natural Colour (NC)	
lab*trj	0.75 0.0 0.0
lab*tce	0.75 0.0 0.0
lab*nce	0.0 0.0 0.0

relative Inform. Technology (IT)	
olvi3*	0.5 0.5 0.5 (1.0)
cmyn3*	0.5 0.5 0.5 (0.0)
olvi4*	1.0 1.0 1.0 (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	50.00 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*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 0.01 0.0
LAB*LABa	37.36 0.0 0.0
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
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 0.0
LAB*LABa	18.02 0.0 0.0
LAB*TCHa	0.01 0.01 0.0
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 0.0
lab*nch	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

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

BAM material: code=rh4ta

output: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System MRS18a

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

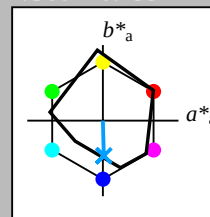
lab^*ch and lab^*nch

D65: hue B

LCH*Ma: 40 49 272

rgb*Ma: 0.0 0.36 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 92$

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 0.01 0.0
LAB*LABa 95.41 0.01 0.0
LAB*TCBa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 0.03 0.0
LAB*LABa 76.06 0.03 0.0
LAB*TCBa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.82 0.007 -0.249
lab*ch 0.875 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.82 0.0 -0.249
lab*trc 0.875 0.25 0.755
lab*ncc 0.0 0.25 0.755

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 0.05 0.0
LAB*LABa 56.71 0.05 0.0
LAB*TCBa 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 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 56.71 0.05 0.0
LAB*LABa 56.71 0.05 0.0
LAB*TCBa 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (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 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*TCBa 25.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 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 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

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

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

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

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

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

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

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

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

MRS18a; adapted (a) CIELAB data

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

RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 67.55 0.74 -24.71
LAB*LABa 67.55 0.74 -24.72
LAB*TCBa 75.00 24.74 271.63

relative CIELAB lab*
lab*lab 0.64 0.014 -0.499
lab*ch 0.75 0.5 0.755
lab*nch 0.0 0.5 0.755
relative Natural Colour (NC)
lab*trj 0.64 0.0 -0.499
lab*trc 0.75 0.5 0.755
lab*ncc 0.0 0.5 0.755

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 48.21 0.77 -24.71
LAB*LABa 48.21 0.77 -24.72
LAB*TCBa 50.00 24.75 271.64

relative CIELAB lab*
lab*lab 0.46 0.021 -0.749
lab*ch 0.625 0.75 0.755
lab*nch 0.0 0.75 0.755
relative Natural Colour (NC)
lab*trj 0.46 0.0 -0.749
lab*trc 0.625 0.75 0.755
lab*ncc 0.0 0.75 0.755

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 48.21 0.77 -24.71
LAB*LABa 48.21 0.77 -24.72
LAB*TCBa 50.00 24.75 271.64

relative CIELAB lab*
lab*lab 0.28 0.029 -0.998
lab*ch 0.5 1.0 0.755
lab*nch 0.0 1.0 0.755
relative Natural Colour (NC)
lab*trj 0.28 0.0 -0.999
lab*trc 0.5 1.0 0.755
lab*ncc 0.0 1.0 0.755

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 34.28 1.14 -37.07
LAB*LABa 34.28 1.14 -37.09
LAB*TCBa 37.51 37.12 271.64

relative CIELAB lab*
lab*lab 0.21 0.021 -0.749
lab*ch 0.375 0.75 0.755
lab*nch 0.0 0.75 0.755
relative Natural Colour (NC)
lab*trj 0.21 0.0 -0.749
lab*trc 0.375 0.75 0.755
lab*ncc 0.0 0.75 0.755

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 28.86 0.79 -24.72
LAB*LABa 28.86 0.79 -24.72
LAB*TCBa 25.01 24.74 271.64

relative CIELAB lab*
lab*lab 0.14 0.014 -0.499
lab*ch 0.25 0.5 0.755
lab*nch 0.0 0.5 0.755
relative Natural Colour (NC)
lab*trj 0.14 0.0 -0.499
lab*trc 0.25 0.5 0.755
lab*ncc 0.0 0.5 0.755

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.44 0.36 -12.36
LAB*LABa 23.44 0.36 -12.36
LAB*TCBa 12.5 12.37 271.65

relative CIELAB lab*
lab*lab 0.07 0.007 -0.249
lab*ch 0.125 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.07 0.0 -0.249
lab*trc 0.125 0.25 0.755
lab*ncc 0.0 0.25 0.755

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

Output: Colorimetric Reflective System ORS18

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

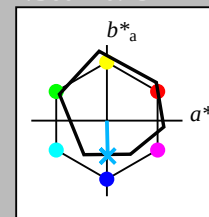
lab^*ch and lab^*nch

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

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

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

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

relative Inform. Technology (IT)
olvi3* 0.25 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 56.71 0.23 2.14
LAB*LABa 56.71 0.23 2.14
LAB*TCBa 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (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 56.71 0.23 2.14
LAB*LABa 56.71 0.23 2.14
LAB*TCBa 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 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 0.01 0.0
LAB*LABa 37.36 0.01 0.0
LAB*TCBa 25.00 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 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 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.01 0.0
LAB*LABa 18.02 0.01 0.0
LAB*TCBa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3