

Input: Colorimetric Offset Reflective System ORS18

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

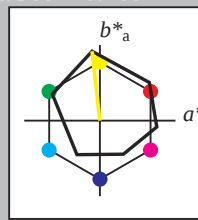
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

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 -0.98 47.5
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)
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 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 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)
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 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 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)
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 37.36 -0.03 0.63
LAB*LABa 37.36 0.0 0.0
LAB*LABb 35.00 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)
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 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 16.00 0.01 -

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

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

% Regularity

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

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

relative Inform. Technology (IT)
olv3* 1.0 1.0 0.5 (1.0)
cmyn3* 0.0 0.0 0.5 (0.0)
olv4* 1.0 1.0 0.5 1.0
cmyn4* 0.0 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 92.88 -6.06 50.46
LAB*LABa 92.88 -5.12 45.87
LAB*LABb 94.14 -2.56 22.93

relative CIELAB lab*
lab*lab 0.967 -0.055 0.497
lab*tch 0.75 0.5 0.268
lab*nch 0.0 0.5 0.268
relative Natural Colour (NC)
lab*trj 0.967 -0.048 0.497
lab*tce 0.75 0.5 0.268
lab*nce 0.0 0.5 0.268

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.75 (0.0)
olv4* 1.0 1.0 0.75 0.75
cmyn4* 0.0 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 74.8 -3.15 26.3
LAB*LABa 74.8 -2.56 22.94
LAB*LABb 62.5 23.08 96.38

relative CIELAB lab*
lab*lab 0.748 -0.024 0.248
lab*tch 0.625 0.25 0.268
lab*nch 0.25 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.748 -0.024 0.248
lab*tce 0.625 0.25 0.268
lab*nce 0.25 0.25 0.268

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 0.5 0.5
cmyn4* 0.0 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 55.45 -2.78 5.0
LAB*LABa 55.45 -2.56 22.94
LAB*LABb 37.5 23.08 96.38

relative CIELAB lab*
lab*lab 0.484 -0.082 0.748
lab*tch 0.375 0.25 0.268
lab*nch 0.25 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.484 -0.024 0.248
lab*tce 0.375 0.25 0.268
lab*nce 0.25 0.25 0.268

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 0.25 0.25
cmyn4* 0.0 0.0 0.25 0.25
standard and adapted CIELAB
LAB*LAB 36.1 -2.56 22.93
LAB*LABa 36.1 -2.56 22.93
LAB*LABb 12.5 23.07 96.38

relative CIELAB lab*
lab*lab 0.234 -0.027 0.248
lab*tch 0.125 0.25 0.268
lab*nch 0.25 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.234 -0.024 0.248
lab*tce 0.125 0.25 0.268
lab*nce 0.25 0.25 0.268

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 1.0 1.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 91.62 -8.61 73.31
LAB*LABa 91.62 -6.89 68.8
LAB*LABb 62.5 69.23 96.38

relative CIELAB lab*
lab*lab 0.951 -0.082 0.745
lab*tch 0.625 0.75 0.268
lab*nch 0.0 0.75 0.268
relative Natural Colour (NC)
lab*trj 0.951 -0.073 0.746
lab*tce 0.625 0.75 0.268
lab*nce 0.0 0.75 0.268

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.0 (1.0)
cmyn3* 0.25 0.25 1.0 (0.0)
olv4* 1.0 1.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 90.36 -11.15 96.15
LAB*LABa 90.36 -10.25 91.73
LAB*LABb 50.0 92.3 96.38

relative CIELAB lab*
lab*lab 0.701 -0.082 0.745
lab*tch 0.375 0.75 0.268
lab*nch 0.0 0.75 0.268
relative Natural Colour (NC)
lab*trj 0.701 -0.073 0.746
lab*tce 0.375 0.75 0.268
lab*nce 0.0 0.75 0.268

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.0 (1.0)
cmyn3* 0.5 0.5 0.0 (0.0)
olv4* 1.0 1.0 0.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 72.28 -8.23 72.0
LAB*LABa 72.28 -7.09 68.8
LAB*LABb 37.51 69.23 96.38

relative CIELAB lab*
lab*lab 0.484 -0.082 0.745
lab*tch 0.375 0.75 0.268
lab*nch 0.0 0.75 0.268
relative Natural Colour (NC)
lab*trj 0.484 -0.073 0.746
lab*tce 0.375 0.75 0.268
lab*nce 0.0 0.75 0.268

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.0 (1.0)
cmyn3* 0.75 0.75 0.0 (0.0)
olv4* 1.0 1.0 0.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 44.19 -2.56 47.84
LAB*LABa 44.19 -2.56 47.84
LAB*LABb 25.01 46.15 96.38

$n^* = 0.25$

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 1.0 1.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 16.00 0.01 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 0.0 (0.0)
olv4* 1.0 1.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 16.00 0.01 -

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

$n^* = 0.00$

1.00

0.75

0.25

0.00

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$

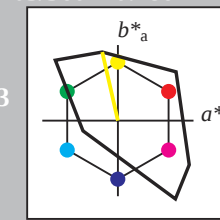
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*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)
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 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*LABb 70.00 0.01 -

relative CIELAB lab*
lab*lab 0.715 0.0 0.0
lab*tch 0.715 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.715 0.0 0.0
lab*tce 0.715 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 50.01 -0.097 0.995
LAB*LABa 50.01 -0.097 0.995
LAB*LABb 50.01 0.0 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 30.57 -0.097 0.995
LAB*LABa 30.57 -0.097 0.995
LAB*LABb 30.57 0.0 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 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 16.00 0.01 -

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

$n^* = 1.0$

5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

input: $cmY0^* setcmykcolor$

output: $cmY0^* / 000n^* setcmykcolor$

BAM-test chart SE50; Colorimetric systems ORS18 & TLS00

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

SE500-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Input: Colorimetric Offset Reflective System ORS18

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

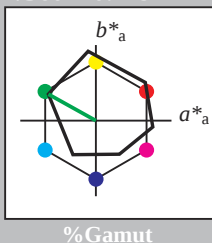
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

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

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

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 -0.98 47.5
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.75 (0.0)
olv4* 0.75 1.0 0.75 1.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 84.28 -16.47 12.74
LAB*LABa 84.28 -15.69 8.74
LAB*TCHa 97.5 17.97 150.91

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 1.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 73.15 -31.96 20.73
LAB*LABa 73.15 -31.4 17.48
LAB*TCHa 75.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.25 1.0 0.25 1.0
cmyn4* 0.25 0.0 0.25 0.0
standard and adapted CIELAB
LAB*LAB 62.02 -47.11 26.21
LAB*LABa 62.02 -47.11 26.21
LAB*TCHa 62.5 53.92 150.91

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 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.75 1.0 0.75 0.75
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 64.93 -16.1 11.44
LAB*LABa 64.93 -15.7 8.74
LAB*TCHa 62.5 17.98 150.91

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.75
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 53.81 -31.6 19.43
LAB*LABa 53.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 33.81 -31.6 19.43
LAB*LABa 33.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

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 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.5
cmyn4* 0.25 0.0 0.75 0.5
standard and adapted CIELAB
LAB*LAB 45.58 -15.73 10.13
LAB*LABa 45.58 -15.7 8.74
LAB*TCHa 37.5 17.98 150.91

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.5
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 33.81 -31.6 19.43
LAB*LABa 33.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 23.81 -31.6 19.43
LAB*LABa 23.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

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 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 37.36 -0.38 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.0 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.75 1.0 0.75 0.5
cmyn4* 0.25 0.0 0.75 0.5
standard and adapted CIELAB
LAB*LAB 26.24 -15.5 8.82
LAB*LABa 26.24 -15.69 8.74
LAB*TCHa 12.5 17.97 150.91

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 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 0.25
standard and adapted CIELAB
LAB*LAB 37.36 -0.38 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.0 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.5
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 34.46 -31.22 18.12
LAB*LABa 34.46 -31.4 17.48
LAB*TCHa 25.01 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 23.81 -31.6 19.43
LAB*LABa 23.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.25
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 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 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 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 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 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 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 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 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 18.02 18.02 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

SE500-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

BAM-test chart SE50; Colorimetric systems ORS18 & TLS00

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

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$

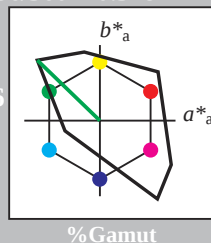
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

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

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.75 (0.0)
olv4* 0.75 1.0 0.75 1.0
cmyn4* 0.25 0.0 0.75 0.0
standard and adapted CIELAB
LAB*LAB 84.28 -16.47 12.74
LAB*LABa 84.28 -15.69 8.74
LAB*TCHa 97.5 17.97 150.91

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 1.0
cmyn4* 0.5 0.0 0.5 0.0
standard and adapted CIELAB
LAB*LAB 73.15 -31.96 20.73
LAB*LABa 73.15 -31.4 17.48
LAB*TCHa 75.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olv4* 0.25 1.0 0.25 1.0
cmyn4* 0.25 0.0 0.25 0.0
standard and adapted CIELAB
LAB*LAB 62.02 -47.11 26.21
LAB*LABa 62.02 -47.11 26.21
LAB*TCHa 62.5 53.92 150.91

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 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.5 (0.0)
olv4* 0.75 1.0 0.75 0.75
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 64.93 -16.1 11.44
LAB*LABa 64.93 -15.7 8.74
LAB*TCHa 62.5 17.98 150.91

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.75 1.0 0.75 0.75
cmyn4* 0.25 0.0 0.75 0.25
standard and adapted CIELAB
LAB*LAB 53.81 -31.6 19.43
LAB*LABa 53.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 33.81 -31.6 19.43
LAB*LABa 33.81 -31.41 17.48
LAB*TCHa 50.0 35.95 150.91

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 -0.2

Input: Colorimetric Offset Reflective System ORS18

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

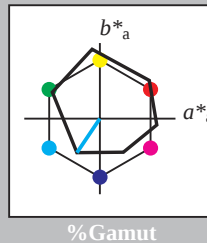
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



$u^*_{rel} = 93$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	-0.98	47.5
LAB*LAB	95.41	0.0	0.0
LAB*LAB	99.99	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
olvi4*	0.25	0.25	0.25	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.06	-0.61	3.44
LAB*LAB	76.06	0.0	0.0
LAB*LAB	75.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
olvi4*	0.5	0.5	0.5	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.71	-0.24	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	50.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
olvi4*	0.75	0.75	0.75	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	37.36	-0.03	0.83
LAB*LAB	37.36	0.0	0.0
LAB*LAB	25.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	18.02	0.03	0.47
LAB*LAB	18.02	0.0	0.0
LAB*LAB	0.01	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	0.01	0.01	0.0
LAB*LAB	0.01	0.0	0.0
LAB*LAB	0.01	0.0	0.0

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

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

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

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
olvi4*	0.5	0.5	0.5	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	77.01	-15.8	-19.98
LAB*LAB	77.01	-15.16	-22.5
LAB*LAB	75.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
olvi4*	0.75	0.75	0.75	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	57.67	-15.43	-20.29
LAB*LAB	57.67	-15.16	-22.5
LAB*LAB	50.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	38.32	-15.03	-17.03
LAB*LAB	38.32	-15.16	-22.5
LAB*LAB	25.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	28.17	-7.57	-11.03
LAB*LAB	28.17	-7.57	-11.24
LAB*LAB	12.5	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	0.03	0.0	0.0
LAB*LAB	0.03	0.0	0.0
LAB*LAB	0.01	0.01	0.0

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

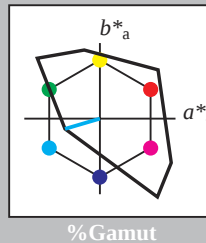
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



$u^*_{rel} = 158$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	99.99	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
olvi4*	0.25	0.25	0.25	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	71.57	0.0	0.0
LAB*LAB	71.57	0.0	0.0
LAB*LAB	75.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
olvi4*	0.5	0.5	0.5	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	58.62	-30.33	-45.01
LAB*LAB	58.62	-30.33	-45.01
LAB*LAB	50.00	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
olvi4*	0.75	0.75	0.75	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	48.47	-22.83	-32.17
LAB*LAB	48.47	-22.75	-33.75
LAB*LAB	37.51	0.01	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(0.0)
olvi5*	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	(0.0)
olvi7*	1.0	1.0	1.0	(1.0)
olvi8*	0.0	0.0	0.0	(0.0)
olvi9*	1.0	1.0	1.0	(1.0)
olvi10*	0.0	0.0	0.0	(0.0)
olvi11*	1.0	1.0	1.0	(1.0)
olvi12*	0.0	0.0	0.0	(0.0)

Input: Colorimetric Offset Reflective System ORS18

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

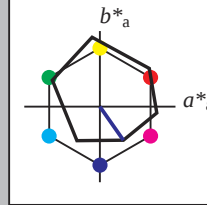
lab^*tch and lab^*nch

A: hue V

LCH*Ma: 26 54 305

olv*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 -0.98 47.5
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*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 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*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.36 0.83
LAB*LABa 37.36 0.0 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*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.03 0.47
LAB*LABa 18.02 0.0 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*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	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

% Regularity

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

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

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 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 60.56 15.23 -19.79
LAB*LABa 60.56 15.23 -19.79
LAB*LABb 77.99 7.77 -11.09
LAB*LABc 87.5 13.55 305.0

relative CIELAB lab*
lab*lab 0.5 0.287 -0.408
lab*tch 0.75 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.5 0.225 -0.446
lab*trc 0.75 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 41.22 15.55 -22.2
LAB*LABa 41.22 15.55 -22.2
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.287 -0.409
lab*tch 0.5 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.25 0.225 -0.446
lab*trc 0.5 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.97 -33.37
LAB*LABa 21.87 15.97 -33.37
LAB*LABb 27.51 40.66 305.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

$n^* = 0.00$

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.34
LAB*LABa 25.73 31.09 -44.34
LAB*LABb 31.09 44.34 305.0

relative CIELAB lab*
lab*lab 0.25 0.287 -0.408
lab*tch 0.5 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.25 0.225 -0.446
lab*trc 0.5 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

$n^* = 0.25$

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

$n^* = 0.75$

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

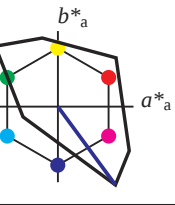
relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*LABb 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.573 -0.818
lab*tch 0.375 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*trc 0.0 0.5 0.824
lab*ncc 0.0 0.5 0.824

$n^* = 1.0$



% Gamut

$u^*_{rel} = 158$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*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*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*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*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 55.31 19.01 -25.89
LAB*LABa 55.31 19.01 -25.89
LAB*LABb 55.31 19.01 -25.89

relative CIELAB lab*
lab*lab 0.5 0.287 -0.408
lab*tch 0.75 0.5 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.5 0.225 -0.446
lab*trc 0.75 0.5

Input: Colorimetric Offset Reflective System ORS18

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

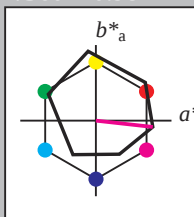
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	95.41	-0.98	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	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	

relative Natural Colour (NC)

lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.75	1.0	(1.0)
cmv3*	0.0	0.25	0.0	(0.0)
olv4*	1.0	0.75	1.0	(1.0)
cmv4*	0.0	0.25	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.59	18.05	1.87	
LAB*LAB	83.59	18.01	-2.08	
LAB*LAB	87.5	18.93	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	
standard and adapted CIELAB				
LAB*LAB	83.59	18.05	1.87	
LAB*LAB	83.59	18.01	-2.08	
LAB*LAB	87.5	18.93	353.66	

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	0.932	

relative Inform. Technology (IT)

olv3*	1.0	0.5	1.0	(1.0)
cmv3*	0.0	0.5	0.0	(0.0)
olv4*	1.0	0.5	1.0	(1.0)
cmv4*	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*LAB	75.0	37.86	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	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

relative Natural Colour (NC)

lab*trj	0.695	0.454	-0.208	
lab*tce	0.75	0.5	0.932	
lab*nce	0.0	0.5	0.932	

relative Inform. Technology (IT)

olv3*	1.0	0.25	1.0	(1.0)
cmv3*	0.0	0.75	0.0	(0.0)
olv4*	1.0	0.25	1.0	(1.0)
cmv4*	0.0	0.75	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	59.95	56.15	-3.9	
LAB*LAB	59.95	56.45	-6.26	
LAB*LAB	62.5	56.8	353.66	

relative CIELAB lab*

lab*lab	0.542	0.745	-0.082	
lab*tch	0.625	0.75	0.982	
lab*nch	0.0	0.75	0.982	
standard and adapted CIELAB				
LAB*LAB	59.95	56.15	-3.9	
LAB*LAB	59.95	56.45	-6.26	
LAB*LAB	62.5	56.8	353.66	

relative Natural Colour (NC)

lab*trj	0.542	0.682	-0.312	
lab*tce	0.625	0.75	0.932	
lab*nce	0.0	0.75	0.932	

relative Inform. Technology (IT)

olv3*	1.0	0.0	1.0	(1.0)
cmv3*	0.0	1.0	0.0	(0.0)
olv4*	1.0	0.0	1.0	(1.0)
cmv4*	0.0	1.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	48.13	75.18	-6.79	
LAB*LAB	48.13	75.26	-8.35	
LAB*LAB	50.0	75.73	353.66	

relative CIELAB lab*

lab*lab	0.389	0.994	-0.109	
lab*tch	0.5	1.0	0.982	
lab*nch	0.0	1.0	0.982	
standard and adapted CIELAB				
LAB*LAB	48.13	75.18	-6.79	
LAB*LAB	48.13	75.26	-8.35	
LAB*LAB	50.0	75.73	353.66	

relative Natural Colour (NC)

lab*trj	0.389	0.909	-0.416	
lab*tce	0.5	1.0	0.932	
lab*nce	0.0	1.0	0.932	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	0.0	0.0	(1.0)
cmv4*	0.0	0.0	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*LAB	75.0	37.86	353.66	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	0.0	1.0	0.0	
lab*nch	0.0	0.0	1.0	
standard and adapted CIELAB				
LAB*LAB	71.77	37.1	-1.01	
LAB*LAB	71.77	37.63	-4.17	
LAB*LAB	75.0	37.86	353.66	

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	1.0	

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
cmv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	76.06	-0.61	3.44	
LAB*LAB	76.06	0.0	0.0	
LAB*LAB	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	
standard and adapted CIELAB				
LAB*LAB	76.06	-0.61	3.44	
LAB*LAB	76.06	0.0	0.0	
LAB*LAB	75.0	0.01	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*	0.75	0.5	0.75	(1.0)
cmv3*	0.25	0.5	0.25	(0.0)
olv4*	1.0	0.75	1.0	(1.0)
cmv4*	0.0	0.25	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	64.24	18.43	0.56	
LAB*LAB	64.24	18.82	-2.08	
LAB*LAB	62.5	18.94	353.66	

relative CIELAB lab*

lab*lab	0.597	0.248	-0.027	
lab*tch	0.625	0.25	0.982	
lab*nch	0.0	0.25	0.982	
standard and adapted CIELAB				
LAB*LAB	64.24	18.43	0.56	
LAB*LAB	64.24	18.82	-2.08	
LAB*LAB	62.5	18.94	353.66	

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	0.932	

relative Inform. Technology (IT)

olv3*	0.75	0.25	0.75	(1.0)
cmv3*	0.25	0.75	0.25	(0.0)
olv4*	1.0	0.5	1.0	(1.0)
cmv4*	0.0	0.5	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.42	37.48	-2.32	
LAB*LAB	52.42	37.64	-4.17	
LAB*LAB	50.0	37.86	353.66	

relative CIELAB lab*

lab*lab	0.445	0.497	-0.054	
lab*tch	0.5	0.5	0.982	
lab*nch	0.0	0.5	0.982	
standard and adapted CIELAB				
LAB*LAB	52.42	37.48	-2.32	
LAB*LAB	52.42	37.64	-4.17	
LAB*LAB	50.0	37.86	353.66	

relative Natural Colour (NC)

lab*trj	0.445	0.454	-0.208	
lab*tce	0.5	0.5	0.932	
lab*nce	0.0	0.5	0.932	

relative Inform. Technology (IT)

olv13*	1.0	0.25	1.0	(1.0)
cmv13*	0.0	0.75	0.0	(0.0)
olv14*	1.0	0.25	1.0	(1.0)
cmv14*	0.0	0.75	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	59.95	56.15	-3.44	

Input: Colorimetric Offset Reflective System ORS18

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

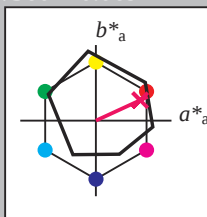
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



$u^*_{rel} = 93$

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 -0.98 47.5
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 76.06 0.0 0.0
LAB*LABc 76.06 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 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)
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 37.36 -0.03 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 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)
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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

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

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

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

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

relative Inform. Technology (IT)
olv3* 1.0 0.5 0.661 (1.0)
cmyn3* 0.0 0.5 0.339 (0.0)
olv4* 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 33.75 18.92
LAB*LABa 71.7 34.28 15.76
LAB*LABb 71.7 33.75 18.92
LAB*LABc 71.7 34.28 15.76

relative CIELAB lab*
lab*lab 0.694 0.54 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*trc 0.75 0.5 0.0
lab*ncc 0.0 0.5 0.069

relative Inform. Technology (IT)
olv3* 0.75 0.5 0.411 (1.0)
cmyn3* 0.25 0.5 0.589 (0.0)
olv4* 1.0 0.5 0.661 0.75
cmyn4* 0.0 0.5 0.339 0.25
standard and adapted CIELAB
LAB*LAB 52.36 34.13 17.62
LAB*LABa 52.36 34.29 15.77
LAB*LABb 52.36 34.13 17.62
LAB*LABc 52.36 34.29 15.77

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*trc 0.625 0.75 0.0
lab*ncc 0.0 0.75 0.069

relative Inform. Technology (IT)
olv3* 0.5 0.0 0.242 (1.0)
cmyn3* 0.5 0.0 0.758 (0.0)
olv4* 1.0 0.25 0.492 0.75
cmyn4* 0.0 0.75 0.508 0.25
standard and adapted CIELAB
LAB*LAB 40.51 51.49 24.71
LAB*LABa 40.51 51.42 23.65
LAB*LABb 40.51 51.49 24.71
LAB*LABc 40.51 51.42 23.65

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*trc 0.375 0.75 0.0
lab*ncc 0.0 0.75 0.069

relative Inform. Technology (IT)
olv3* 0.25 0.0 0.161 (1.0)
cmyn3* 0.75 0.0 0.839 (0.0)
olv4* 1.0 0.0 0.661 0.5
cmyn4* 0.0 0.839 0.0 0.161
standard and adapted CIELAB
LAB*LAB 33.01 34.49 16.37
LAB*LABa 33.01 34.49 16.37
LAB*LABb 33.01 34.49 16.37
LAB*LABc 33.01 34.49 16.37

relative CIELAB lab*
lab*lab 0.194 0.454 0.209
lab*tch 0.25 0.5 0.069
lab*nch 0.0 0.5 0.069
relative Natural Colour (NC)
lab*trj 0.194 0.5 0.0
lab*trc 0.25 0.5 0.0
lab*ncc 0.0 0.5 0.069

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 1.0 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

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

Output: Colorimetric Television Luminous System TLS00

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

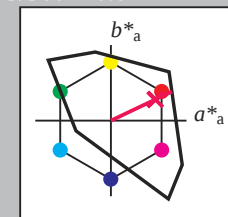
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



$u^*_{rel} = 158$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*LABb 71.57 0.0 0.0
LAB*LABc 71.57 0.0 0.0

relative CIELAB lab*
lab*lab 0.886 0.226 0.107
lab*tch 0.875 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*trj 0.886 0.25 0.0
lab*trc 0.875 0.25 0.0
lab*ncc 0.0 0.25 0.071

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 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 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)
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 37.36 -0.03 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 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)
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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

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

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

relative Inform. Technology (IT)
olv3* 1.0 0.5 0.696 (1.0)
cmyn3* 0.0 0.5 0.304 (0.0)
olv4* 1.0 0.5 0.696 1.0
cmyn4* 0.0 0.5 0.304 0.0
standard and adapted CIELAB
LAB*LAB 84.54 20.15 9.6
LAB*LABa 84.54 20.15 9.6
LAB*LABb 84.54 20.15 9.6
LAB*LABc 84.54 20.15 9.6

relative CIELAB lab*
lab*lab 0.886 0.226 0.107
lab*tch 0.875 0.25 0.071
lab*nch 0.0 0.25 0.071
relative Natural Colour (NC)
lab*trj 0.886 0.25 0.0
lab*trc 0.875 0.25 0.0
lab*ncc 0.0 0.25 0.071

relative Inform. Technology (IT)
olv3* 0.75 0.5 0.323 (1.0)
cmyn3* 0.25 0.5 0.677 (0.0)
olv4* 1.0 0.5 0.696 0.75
cmyn4* 0.0 0.5 0.304 0.25
standard and adapted CIELAB
LAB*LAB 60.69 20.16 9.6
LAB*LABa 60.69 20.16 9.6
LAB*LABb 60.69 20.16 9.6
LAB*LABc 60.69 20.16 9.6

relative CIELAB lab*
lab*lab 0.638 0.677 0.323
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.5 0.071
relative Natural Colour (NC)
lab*trj 0.638 0.75 0.0
lab*trc 0.75 0.5 0.0
lab*ncc 0.0 0.5 0.071

relative Inform. Technology (IT)
olv3* 0.5 0.0 0.159 (1.0)
cmyn3* 0.5 0.0 0.841 (0.0)
olv4* 1.0 0.25 0.409 0.75
cmyn4* 0.0 0.75 0.591 0.25
standard and adapted CIELAB
LAB*LAB 49.83 40.31 19.21
LAB*LABa 49.83 40.31 19.21
LAB*LABb 49.83 40.31 19.21
LAB*LABc 49.83 40.31 19.21

relative CIELAB lab*
lab*lab 0.408 0.677 0.323
lab*tch 0.5 0.0 0.071
lab*nch 0.0 0.0 0.071
relative Natural Colour (NC)
lab*trj 0.408 0.75 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.071

relative Inform. Technology (IT)
olv3* 0.25 0.0 0.084 (1.0)
cmyn3* 0.75 0.0 0.916 (0.0)
olv4* 1.0 0.0 0.696 0.5
cmyn4* 0.0 0.916 0.0 0.084
standard and adapted CIELAB
LAB*LAB 35.97 60.46 28.82
LAB*LABa 35.97 60.46 28.82
LAB*LABb 35.97 60.46 28.82
LAB*LABc 35.97 60.46 28.82

relative CIELAB lab*
lab*lab 0.408 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 0.408 0.75 0.0
lab*trc 0.375 0.75 0.0
lab*ncc 0.0 0.75 0.071

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 1.0 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.75 0.25 0.336 (1.0)
cmyn3* 0.25 0.75 0.664 (0.0)
olv4* 1.0 0.5 0.696 0.75
cmyn4* 0.0 0.75 0.304 0.25
standard and adapted CIELAB
LAB*LAB 62.81 60.46 28.81
LAB*LABa 62.81 60.46 28.81
LAB*LABb 62.81 60.46 28.81
LAB*LABc 62.81 60.46 28.81

relative CIELAB lab*
lab*lab 0.658 0.677 0.323
lab*tch 0.625 0.75 0.071
lab*nch 0.0 0.75 0.071
relative Natural Colour (NC)
lab*trj 0.658 0.75 0.0
lab*trc 0.625 0.75 0.0
lab*ncc 0.0 0.75 0.071

relative Inform. Technology (IT)
olv3* 0.5 0.0 0.159 (1.0)
cmyn3* 0.5 0.0 0.841 (0.0)
olv4* 1.0 0.25 0.409 0.75
cmyn4* 0.0 0.75 0.591 0.25
standard and adapted CIELAB
LAB*LAB 49.83 40.31 19.21
LAB*LABa 49.83 40.31 19.21
LAB*LABb 49.83 40.31 19.21
LAB*LABc 49.83 40.31 19.21

relative CIELAB lab*
lab*lab 0.408 0.677 0.323
lab*tch 0.5 0.0 0.071
lab*nch 0.0 0.0 0.071
relative Natural Colour (NC)
lab*trj 0.408 0.75 0.0
lab*trc 0.

Input: Colorimetric Offset Reflective System ORS18

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

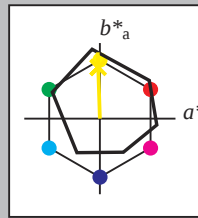
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	-0.98	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	0.0	1.0	0.0
lab*nch	0.0	0.0	1.0

relative Natural Colour (NC)

lab*trj	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	76.06	-0.61	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	0.75	0.75	(1.0)
lab*tch	0.75	0.75	0.75	(1.0)
lab*nch	0.75	0.75	0.75	(1.0)

relative Natural Colour (NC)

lab*trj	0.75	0.75	0.75	(1.0)
lab*tce	0.75	0.75	0.75	(1.0)
lab*nce	0.75	0.75	0.75	(1.0)

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	56.71	-0.24	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	0.5	0.5	(1.0)
lab*tch	0.5	0.5	0.5	(1.0)
lab*nch	0.5	0.5	0.5	(1.0)

relative Natural Colour (NC)

lab*trj	0.5	0.5	0.5	(1.0)
lab*tce	0.5	0.5	0.5	(1.0)
lab*nce	0.5	0.5	0.5	(1.0)

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	43.16	-0.37	0.83
LAB*Lab	43.16	0.0	0.0
LAB*Lab	42.50	0.01	0.0

relative CIELAB lab*

lab*lab	0.25	0.25	0.25	(1.0)
lab*tch	0.25	0.25	0.25	(1.0)
lab*nch	0.25	0.25	0.25	(1.0)

relative Natural Colour (NC)

lab*trj	0.25	0.25	0.25	(1.0)
lab*tce	0.25	0.25	0.25	(1.0)
lab*nce	0.25	0.25	0.25	(1.0)

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	1.0	1.0	1.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	18.02	0.03	0.47
LAB*Lab	18.02	0.0	0.0
LAB*Lab	18.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
lab*tch	0.0	0.0	0.0	(1.0)
lab*nch	0.0	0.0	0.0	(1.0)

relative Natural Colour (NC)

lab*trj	0.0	0.0	0.0	(1.0)
lab*tce	0.0	0.0	0.0	(1.0)
lab*nce	0.0	0.0	0.0	(1.0)

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
olv3*	1.0	1.0	1.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	0.01	0.01	0.01
LAB*Lab	0.01	0.01	0.01
LAB*Lab	0.01	0.01	0.01

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

% Regularity

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

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

relative Inform. Technology (IT)

olv3*	1.0	0.951 0.5	(1.0)
olv3*	0.0	0.049 0.5	(0.0)
olv4*	1.0	0.951 0.5	(1.0)
olv4*	0.0	0.049 0.5	(0.0)
olv4*	0.0	0.049 0.5	(0.0)

standard and adapted CIELAB

LAB*Lab	90.8	-2.3	48.29
LAB*Lab	90.8	-1.4	43.84
LAB*Lab	75.0	43.86	91.85

relative CIELAB lab*

lab*lab	0.94	-0.015 0.5	(1.0)
lab*tch	0.75	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*trj	0.94	0.0	0.5
lab*tce	0.75	0.5	0.255
lab*nce	0.0	0.5	0.255

relative Inform. Technology (IT)

olv3*	1.0	0.926 0.25	(1.0)
olv3*	0.0	0.074 0.25	(0.0)
olv4*	1.0	0.926 0.25	(1.0)
olv4*	0.0	0.074 0.25	(0.0)
olv4*	0.0	0.074 0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	88.49	-2.96	70.05
LAB*Lab	88.49	-2.1	65.76
LAB*Lab	62.5	65.79	91.84

relative CIELAB lab*

lab*lab	0.91	-0.023 0.75	(1.0)
lab*tch	0.625	0.75	0.255
lab*nch	0.0	0.75	0.255

relative Natural Colour (NC)

lab*trj	0.91	0.0	0.75
lab*tce	0.625	0.75	0.255
lab*nce	0.0	0.75	0.255

relative Inform. Technology (IT)

olv3*	0.75	0.701 0.25	(1.0)
olv3*	0.25	0.299 0.75	(0.0)
olv4*	1.0	0.951 0.5	(1.0)
olv4*	0.0	0.049 0.5	(0.0)
olv4*	0.0	0.049 0.5	(0.0)

standard and adapted CIELAB

LAB*Lab	71.45	-1.92	46.98
LAB*Lab	71.45	-1.4	43.84
LAB*Lab	50.0	43.87	91.84

relative CIELAB lab*

lab*lab	0.75	0.675 0.0	(1.0)
lab*tch	0.5	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*trj	0.75	0.0	0.5
lab*tce	0.75	0.5	0.255
lab*nce	0.0	0.5	0.255

relative Inform. Technology (IT)

olv3*	0.5	0.456 0.25	(1.0)
olv3*	0.5	0.544 0.75	(0.0)
olv4*	1.0	0.956 0.75	(1.0)
olv4*	0.0	0.044 0.25	(0.0)
olv4*	0.0	0.044 0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	66.47	-1.73	43.06
LAB*Lab	66.47	-1.73	43.06
LAB*Lab	50.0	43.1	92.31

relative CIELAB lab*

lab*lab	0.5	0.456 0.25	(1.0)
lab*tch	0.5	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.5
lab*tce	0.5	0.5	0.255
lab*nce	0.0	0.5	0.255

relative Inform. Technology (IT)

olv3*	0.5	0.451 0.0	(1.0)
olv3*	0.5	0.549 1.0	(0.0)
olv4*	1.0	0.951 0.5	(1.0)
olv4*	0.0	0.049 0.5	(0.0)
olv4*	0.0	0.049 0.5	(0.0)

standard and adapted CIELAB

LAB*Lab	52.1	-1.39	43.83
LAB*Lab	52.1	-1.39	43.83
LAB*Lab	25.01	43.86	91.84

relative CIELAB lab*

lab*lab	0.44	-0.015 0.5	(1.0)
lab*tch	0.25	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*trj	0.44	0.0	0.5
lab*tce	0.25	0.5	0.255
lab*nce	0.0	0.5	0.255

relative Inform. Technology (IT)

olv3*	0.25	0.25 0.0	(1.0)
olv3*	0.75	0.75 1.0	(0.0)
olv4*	1.0	1.0 1.0	(1.0)
olv4*	0.0	0.0 0.0	(0.0)
olv4*	0.0	0.0 0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	23.87	0.0	0.0
LAB*Lab	23.87	0.0	0.0
LAB*Lab	25.01	0.01	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0	(1.0)
lab*tch	0.25	0.0	0.0	(1.0)
lab*nch	0.25	0.0	0.0	(1.0)

relative Natural Colour (NC)

lab*trj	0.25	0.0	0.0	(1.0)
lab*tce	0.25	0.0	0.0	(1.0)
lab*nce	0.25	0.0	0.0	(1.0)

relative Inform. Technology (IT)

olv3*	0.25	0.206 0.0	(1.0)
olv3*	0.75	0.794 1.0	(0.0)
olv4*	1.0	1.0 1.0	(1.0)
olv4*	0.0	0.0 0.0	(0.0)
olv4*	0.0	0.0 0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	21.31	-0.86	21.52
LAB*Lab	21.31	-0.86	21.52
LAB*Lab	12.5	21.54	92.31

relative CIELAB lab*

lab*lab	0.223	-0.009 0.25	(1.0)
lab*tch	0.125	0.25	0.256
lab*nch	0.0	0.25	0.256

relative Natural Colour (NC)

lab*trj	0.223	0.0	0.25
lab*tce	0.125	0.25	0.256
lab*nce	0.0	0.25	0.256

relative Inform. Technology (IT)

olv3*	0.0	0.0 0.0	(1.0)
olv3*	1.0	1.0 1.0	(0.0)
olv4*	1.0	1.0 1.0	(1.0)
olv4*	0.0	0.0 0.0	(0.0)
olv4*	0.0	0.0 0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	0.03	0.0	0.0
LAB*Lab	0.03	0.0	0.0
LAB*Lab	0.01	0.01	0.01

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
lab*tch	0.0	0.0	0.0	(1.0)
lab*nch	0.0	0.0	0.0	(1.0)

relative Natural Colour (NC)

lab*trj	0.0	0.0	0.0	(1.0)
lab*tce	0.0	0.0	0.0	(1.0)
lab*nce	0.0	0.0	0.0	(1.0)

Output: Colorimetric Television Luminous System TLS00

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

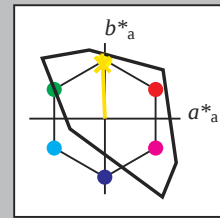
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

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

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	0.0	1.0	0.0
lab*nch	0.0	0.0	1.0

relative Natural Colour (NC)

lab*trj	1.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	1.0

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	71.57	0.0	0.0
LAB*LABa	71.57	0.0	0.0

Input: Colorimetric Offset Reflective System ORS18

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

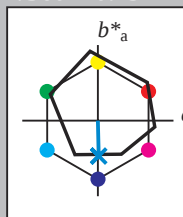
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 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 -0.98 47.5
LAB*LAB 95.41 0.0 0.0
LAB*TCh 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCh 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)
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 -0.24 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCh 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
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 37.36 -0.03 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TCh 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*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.03 0.47
LAB*LAB 18.02 0.0 0.0
LAB*TCh 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*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	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

% Regularity

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

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

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.75 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olv4* 0.5 0.75 0.75 1.0
cmyn4* 0.5 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 68.6 0.0 -19.39
LAB*LAB 68.6 0.5 -22.34
LAB*TCh 75.0 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 0.996

relative Inform. Technology (IT)
olv3* 0.25 0.494 0.75 (1.0)
cmyn3* 0.75 0.506 0.25 (0.0)
olv4* 0.5 0.754 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 49.25 0.45 -20.7
LAB*LAB 49.25 0.55 -22.35
LAB*TCh 50.0 22.36 271.41

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 0.996

relative Inform. Technology (IT)
olv3* 0.0 0.368 0.75 (1.0)
cmyn3* 1.0 0.512 0.0 (0.0)
olv4* 0.0 0.488 1.0 1.0
cmyn4* 0.0 0.512 0.0 0.0
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.55
LAB*LAB 41.79 1.1 -44.69
LAB*TCh 50.0 44.71 271.41

relative CIELAB lab*
lab*lab 0.307 0.025 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 0.0 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 0.0 1.0

relative Inform. Technology (IT)
olv3* 0.0 0.244 0.5 (1.0)
cmyn3* 1.0 0.756 0.5 (0.0)
olv4* 0.5 0.754 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 29.9 0.55 -22.34
LAB*LAB 29.9 0.55 -22.34
LAB*TCh 25.01 22.36 271.42

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 0.996

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.25 0.616 1.0 (1.0)
cmyn3* 0.75 0.384 0.0 (0.0)
olv4* 0.25 0.616 1.0 1.0
cmyn4* 0.75 0.384 0.0 0.0
standard and adapted CIELAB
LAB*LAB 55.19 0.61 -31.48
LAB*LAB 55.19 0.62 -33.52
LAB*TCh 62.5 33.54 271.4

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 0.996

relative Inform. Technology (IT)
olv3* 0.0 0.368 0.75 (1.0)
cmyn3* 1.0 0.512 0.0 (0.0)
olv4* 0.0 0.488 1.0 1.0
cmyn4* 0.0 0.512 0.0 0.0
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.55
LAB*LAB 41.79 1.1 -44.69
LAB*TCh 50.0 44.71 271.41

relative CIELAB lab*
lab*lab 0.307 0.025 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 0.0 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 0.0 1.0

relative Inform. Technology (IT)
olv3* 0.0 0.244 0.5 (1.0)
cmyn3* 1.0 0.756 0.5 (0.0)
olv4* 0.5 0.754 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 29.9 0.55 -22.34
LAB*LAB 29.9 0.55 -22.34
LAB*TCh 25.01 22.36 271.42

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 0.996

$n^* = 0.25$

$n^* = 0.00$

blackness n^*

chromaticness c^*

$n^* = 1.0$

Output: Colorimetric Television Luminous System TLS00

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

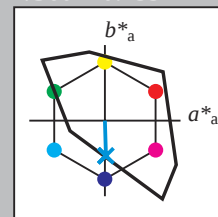
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

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

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 71.57 0.0 0.0
LAB*LAB 71.57 0.0 0.0
LAB*TCh 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)
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 0.0 0.0
LAB*LAB 56.71 0.0 0.0
LAB*TCh 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
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 37.36 -0.03 0.83
LAB*LAB 37.36 0.0 0.0
LAB*TCh 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*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.03 0.47
LAB*LAB 18.02 0.0 0.0
LAB*TCh 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

$n^* = 1.0$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	79.9	93.08	103
L _{Ma}	83.63	-82.75	79.79	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

% Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

relative Inform. Technology (IT)
olv3* 0.5 0.805 1.0 (1.0)
cmyn3* 0.5 0.195 0.0 (0.0)
olv4* 0.5 0.805 1.0 1.0
cmyn4* 0.5 0.195 0.0 0.0
standard and adapted CIELAB
LAB*LAB 80.13 0.73 -24.31
LAB*LAB 80.13 0.73 -24.31
LAB*TCh 75.0 24.33 271.72

relative CIELAB lab*
lab*lab 0.84 0.015 -0.499
lab*tch 0.75 0.5 0.755
lab*nch 0.0 0.5 0.755
relative Natural Colour (NC)
lab*trj 0.84 0.0 -0.499
lab*trc 0.75 0.5 0.75
lab*ncc 0.0 0.5 0.996

relative Inform. Technology (IT)
olv3* 0.25 0.555 0.75 (1.0)
cmyn3* 0.75 0.445 0.25 (0.0)
olv4* 0.5 0.805 1.0 0.75
cmyn4* 0.5 0.195 0.0 0.25
standard and adapted CIELAB
LAB*LAB 56.28 0.74 -24.32
LAB*LAB 56.28 0.74 -24.32
LAB*TCh 50.0 24.34 271.74

relative CIELAB lab*
lab*lab 0.51 0.023 -0.749
lab*tch 0.5 0.755
lab*nch 0.0 0.755
relative Natural Colour (NC)
lab*trj 0.51 0.0 -0.749
lab*trc 0.5 0.755
lab*ncc 0.0 0.75 0.996

relative Inform. Technology (IT)
olv3* 0.0 0.368 0.75 (1.0)
cmyn3* 1.0 0.512 0.0 (0.0)
olv4* 0.0 0.488 1.0 1.0
cmyn4* 0.0 0.512 0.0 0.0
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.55
LAB*LAB 41.79 1.1 -44.69
LAB*TCh 50.0 44.71 271.41

relative CIELAB lab*
lab*lab 0.307 0.025 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 0.0 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 0.0 1.0

relative Inform. Technology (IT)
olv3* 0.0 0.244 0.5 (1.0)
cmyn3* 1.0 0.756 0.5 (0.0)
olv4* 0.5 0.754 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 29.9 0.55 -22.34
LAB*LAB 29.9 0.55 -22.34
LAB*TCh 25.01 22.36 271.42

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 0.996

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.25 0.616 1.0 (1.0)
cmyn3* 0.75 0.384 0.0 (0.0)
olv4* 0.25 0.616 1.0 1.0
cmyn4* 0.75 0.384 0.0 0.0
standard and adapted CIELAB
LAB*LAB 55.19 0.61 -31.48
LAB*LAB 55.19 0.62 -33.52
LAB*TCh 62.5 33.54 271.4

relative CIELAB lab*
lab*lab 0.48 0.018 -0.749
lab*tch 0.625 0.75 0.755
lab*nch 0.0 0.75 0.755
relative Natural Colour (NC)
lab*trj 0.48 0.0 -0.749
lab*trc 0.625 0.75 0.75
lab*ncc 0.0 0.75 0.996

relative Inform. Technology (IT)
olv3* 0.0 0.368 0.75 (1.0)
cmyn3* 1.0 0.512 0.0 (0.0)
olv4* 0.0 0.488 1.0 1.0
cmyn4* 0.0 0.512 0.0 0.0
standard and adapted CIELAB
LAB*LAB 41.79 1.14 -43.55
LAB*LAB 41.79 1.1 -44.69
LAB*TCh 50.0 44.71 271.41

relative CIELAB lab*
lab*lab 0.307 0.025 -0.998
lab*tch 0.5 1.0 0.754
lab*nch 0.0 0.0 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 0.0 1.0

relative Inform. Technology (IT)
olv3* 0.0 0.244 0.5 (1.0)
cmyn3* 1.0 0.756 0.5 (0.0)
olv4* 0.5 0.754 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
standard and adapted CIELAB
LAB*LAB 29.9 0.55 -22.34
LAB*LAB 29.9 0.55 -22.34
LAB*TCh 25.01 22.36 271.42

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