

Input: Colorimetric Offset Reflective System ORS18

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

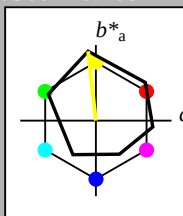
lab^*tch and lab^*nch

D50: 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 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 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*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 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
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 0.13 0.63
LAB*LABa 37.36 0.0 0.0
LAB*LABb 35.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*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 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 18.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*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 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 18.00 0.01 0.0

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	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 92.88 -6.06 50.46
LAB*LABa 92.88 -3.12 45.87
LAB*LABb 92.88 0.0 0.0

relative CIELAB lab*
lab*lab 0.967 -0.055 4.97
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 4.97
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 0.75 (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 73.54 -5.12 45.88
LAB*LABa 73.54 -5.12 45.88
LAB*LABb 73.54 0.0 0.0

relative CIELAB lab*
lab*lab 0.717 -0.055 4.97
lab*tch 0.5 0.5 0.268
lab*nch 0.0 0.5 0.268
relative Natural Colour (NC)
lab*trj 0.717 -0.048 4.97
lab*tce 0.5 0.5 0.268
lab*nce 0.0 0.5 0.268

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 54.19 -5.22 47.64
LAB*LABa 54.19 -5.22 47.64
LAB*LABb 54.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.467 -0.055 4.97
lab*tch 0.25 0.5 0.268
lab*nch 0.0 0.5 0.268
relative Natural Colour (NC)
lab*trj 0.467 -0.048 4.97
lab*tce 0.25 0.5 0.268
lab*nce 0.0 0.5 0.268

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 36.1 -5.26 22.93
LAB*LABa 36.1 -5.26 22.93
LAB*LABb 36.1 0.0 0.0

relative CIELAB lab*
lab*lab 0.234 -0.027 0.248
lab*tch 0.125 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.234 -0.024 0.249
lab*tce 0.125 0.25 0.268
lab*nce 0.0 0.25 0.268

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 18.00 0.01 0.0

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

Output: Colorimetric Television Luminous System TLS00

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

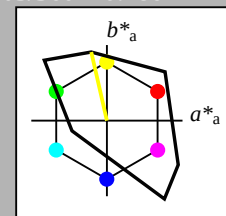
lab^*tch and lab^*nch

D50: 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 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 50.36 -11.15 96.15
LAB*LABa 50.36 -11.15 96.15
LAB*LABb 50.36 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 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
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 -0.97 9.95
LAB*LABa 30.57 -0.97 9.95
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 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 18.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*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 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 18.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 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 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 94.03 -10.34 45.37
LAB*LABa 94.03 -10.34 45.37
LAB*LABb 94.03 0.0 0.0

relative CIELAB lab*
lab*lab 0.985 -0.11 0.487
lab*tch 0.75 0.5 0.286
lab*nch 0.0 0.5 0.286
relative Natural Colour (NC)
lab*trj 0.985 -0.116 0.486
lab*tce 0.75 0.5 0.286
lab*nce 0.0 0.5 0.286

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 70.19 -10.34 45.38
LAB*LABa 70.19 -10.34 45.38
LAB*LABb 70.19 0.0 0.0

relative CIELAB lab*
lab*lab 0.728 -0.11 0.487
lab*tch 0.5 0.5 0.286
lab*nch 0.0 0.5 0.286
relative Natural Colour (NC)
lab*trj 0.728 -0.116 0.486
lab*tce 0.5 0.5 0.286
lab*nce 0.0 0.5 0.286

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 46.34 -15.51 68.05
LAB*LABa 46.34 -15.51 68.05
LAB*LABb 46.34 0.0 0.0

relative CIELAB lab*
lab*lab 0.486 -0.11 0.487
lab*tch 0.25 0.5 0.286
lab*nch 0.0 0.5 0.286
relative Natural Colour (NC)
lab*trj 0.486 -0.116 0.486
lab*tce 0.25 0.5 0.286
lab*nce 0.0 0.5 0.286

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 23.17 -5.16 22.68
LAB*LABa 23.17 -5.16 22.68
LAB*LABb 23.17 0.0 0.0

relative CIELAB lab*
lab*lab 0.234 -0.027 0.248
lab*tch 0.125 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.234 -0.024 0.249
lab*tce 0.125 0.25 0.268
lab*nce 0.0 0.25 0.268

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 18.00 0.01 0.0

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

BAM-test chart PE50; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

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

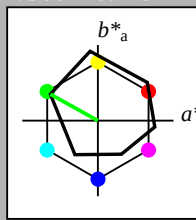
lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 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 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)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 -0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 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)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 1.0 1.0 1.0 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 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

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

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

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

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

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

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 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.5
cmyn4* 0.5 0.0 0.5 0.5
standard and adapted CIELAB
LAB*LAB 73.15 -31.96 20.73
LAB*LABa 73.15 -31.4 17.48
LAB*LABb 75.0 35.95 150.91

relative CIELAB lab*
lab*lab 0.712 -0.436 0.243
lab*tch 0.75 0.5 0.419
lab*nch 0.0 0.5 0.419
relative Natural Colour (NC)
lab*trj 0.712 -0.478 0.144
lab*tce 0.75 0.5 0.453
lab*nce 0.0 0.5 0.818

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 0.5 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 53.81 -31.6 19.43
LAB*LABa 53.81 -31.4 17.48
LAB*LABb 50.0 35.95 150.91

relative CIELAB lab*
lab*lab 0.569 -0.654 0.365
lab*tch 0.625 0.75 0.419
lab*nch 0.0 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.569 -0.717 0.217
lab*tce 0.625 0.75 0.453
lab*nce 0.0 0.75 0.818

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 0.0 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 -31.4 17.48
LAB*LABb 50.0 35.95 150.91

relative CIELAB lab*
lab*lab 0.319 -0.654 0.365
lab*tch 0.375 0.75 0.419
lab*nch 0.0 0.75 0.419
relative Natural Colour (NC)
lab*trj 0.319 -0.717 0.217
lab*tce 0.375 0.75 0.453
lab*nce 0.0 0.75 0.818

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olv4* 0.5 0.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 26.24 -15.69 8.74
LAB*LABa 26.24 -15.3 8.82
LAB*LABb 12.5 28.75 136.01

relative CIELAB lab*
lab*lab 0.106 -0.217 0.121
lab*tch 0.125 0.25 0.419
lab*nch 0.0 0.25 0.419
relative Natural Colour (NC)
lab*trj 0.106 -0.258 0.072
lab*tce 0.125 0.25 0.453
lab*nce 0.0 0.25 0.818

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olv4* 0.5 0.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
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 -

relative CIELAB lab*
lab*lab 0.0106 -0.0217 0.0121
lab*tch 0.0125 0.025 0.0419
lab*nch 0.0 0.025 0.0419
relative Natural Colour (NC)
lab*trj 0.0106 -0.0258 0.0072
lab*tce 0.0125 0.025 0.0453
lab*nce 0.0 0.025 0.0818

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

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

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

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

Output: Colorimetric Television Luminous System TLS00

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

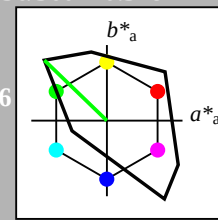
lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 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 75.00 0.01 -

relative CIELAB lab*
lab*lab 0.7157 -0.0000 0.0000
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.7157 -0.0000 0.0000
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 50.9 -62.83 34.96
LAB*LABa 50.9 -62.83 34.96
LAB*LABb 50.0 35.95 150.91

relative CIELAB lab*
lab*lab 0.425 -0.956 0.289
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.5 0.0
relative Natural Colour (NC)
lab*trj 0.425 -0.956 0.289
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.5 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.25 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 -0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 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)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 0.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
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 -

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

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olv4* 0.5 0.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 26.24 -15.69 8.74
LAB*LABa 26.24 -15.3 8.82
LAB*LABb 12.5 28.75 136.01

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

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olv4* 0.5 0.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
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 -

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

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

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

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

Input: Colorimetric Offset Reflective System ORS18

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

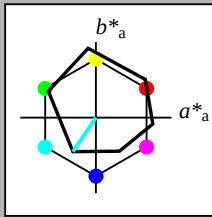
lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	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)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 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*tr 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
olv4* 0.25 0.25 0.25 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.13 0.83
LAB*LAB 37.36 0.0 0.0
LAB*LAB 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*tr 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
olv4* 0.25 0.25 0.25 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.21 -8.39 -7.1
LAB*LAB 86.21 -7.57 -11.24
LAB*LAB 87.5 13.57 236.02

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 66.86 -8.02 -8.42
LAB*LAB 66.86 -7.58 -11.25
LAB*LAB 62.5 13.57 236.02

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 47.51 -7.64 -9.72
LAB*LAB 47.51 -7.58 -11.25
LAB*LAB 37.5 13.57 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 13.57 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00
LAB*LAB 0.00 0.00 0.00

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 75.0 27.14 236.02

relative CIELAB lab*
lab*lab 0.762 -0.278 -0.414
lab*tch 0.75 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*tr 0.762 -0.247 -0.433
lab*tce 0.75 0.5 0.656
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 50.0 27.14 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 40.72 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 38.32 -15.03 -19.81
LAB*LAB 38.32 -15.16 -22.5
LAB*LAB 25.01 27.14 236.02

relative CIELAB lab*
lab*lab 0.262 -0.278 -0.414
lab*tch 0.25 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*tr 0.262 -0.247 -0.433
lab*tce 0.25 0.5 0.656
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 67.81 -23.21 -30.86
LAB*LAB 67.81 -22.75 -33.75
LAB*LAB 62.5 40.72 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 50.0 54.29 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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 40.72 236.02

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 38.32 -15.03 -19.81
LAB*LAB 38.32 -15.16 -22.5
LAB*LAB 25.01 27.14 236.02

relative CIELAB lab*
lab*lab 0.262 -0.278 -0.414
lab*tch 0.25 0.5 0.656
lab*nch 0.0 0.5 0.656
relative Natural Colour (NC)
lab*tr 0.262 -0.247 -0.433
lab*tce 0.25 0.5 0.656
lab*nce 0.0 0.5 0.656

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.0$

Output: Colorimetric Television Luminous System TLS00

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

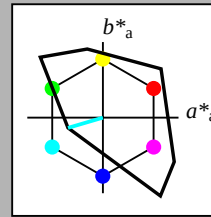
lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LAB 95.41 0.0 0.0
LAB*LAB 95.41 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
olv4* 0.25 0.25 0.25 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

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

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 0.0 0.0
LAB*LAB 56.71 0.0 0.0
LAB*LAB 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*tr 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.0 0.0
LAB*LAB 37.36 0.0 0.0
LAB*LAB 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*tr 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
olv5* 0.0 0.0 0.0 (0.0)
olv6* 0.0 0.0 0.0 (0.0)
olv7* 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

relative CIELAB lab*
lab*lab 0.0

Input: Colorimetric Offset Reflective System ORS18

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

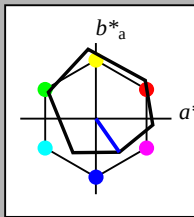
lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%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 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)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 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)
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 0.01 0.01 -

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

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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 58.64 7.77 -11.09
LAB*LABc 58.64 7.77 -11.09

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

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 0.75
cmyn4* 0.5 0.5 0.5 0.25
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 0.25 0.287 -0.409
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.25 0.225 -0.446
lab*tce 0.25 0.225 -0.446
lab*nce 0.0 0.5 0.847

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 0.0
cmyn4* 0.5 0.5 0.5 1.0
standard and adapted CIELAB
LAB*LAB 23.8 23.31 -33.37
LAB*LABa 23.8 23.31 -33.37
LAB*LABb 37.51 40.66 30.50

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

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 0.0
cmyn4* 0.5 0.5 0.5 1.0
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 -

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)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 0.25 0.25 0.25 1.0
cmyn4* 0.75 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.1 0.573 -0.818
lab*tch 0.1 0.573 -0.818
lab*nch 0.0 1.0 0.847
relative Natural Colour (NC)
lab*trj 0.1 0.449 -0.892
lab*tce 0.1 0.449 -0.892
lab*nce 0.0 1.0 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

$n^* = 0.00$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

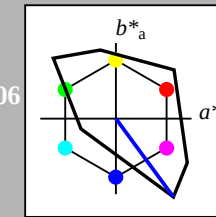
lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 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*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 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 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 0.25 0.826
lab*tch 0.5 0.25 0.826
lab*nch 0.0 0.5 0.826
relative Natural Colour (NC)
lab*trj 0.5 0.25 0.826
lab*tce 0.5 0.25 0.826
lab*nce 0.0 0.5 0.826

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 39.05 38.03 -51.79
LAB*LABa 39.05 38.03 -51.79
LAB*LABb 50.00 0.01 0.0

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 23.8 23.31 -33.37
LAB*LABa 23.8 23.31 -33.37
LAB*LABb 37.51 40.66 30.50

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

$n^* = 0.00$

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 0.25 0.25 0.25 1.0
cmyn4* 0.75 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.1 0.573 -0.818
lab*tch 0.1 0.573 -0.818
lab*nch 0.0 1.0 0.847
relative Natural Colour (NC)
lab*trj 0.1 0.449 -0.892
lab*tce 0.1 0.449 -0.892
lab*nce 0.0 1.0 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.0 0.0 0.0 1.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 25.73 31.09 -44.38
LAB*LABa 25.73 31.09 -44.38
LAB*LABb 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.75 0.847
lab*tch 0.0 0.75 0.847
lab*nch 0.0 0.5 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.449 -0.892
lab*tce 0.0 0.449 -0.892
lab*nce 0.0 0.5 0.847

$n^* = 1.0$

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	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* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 62.9 38.02 -51.78
LAB*LABa 62.9 38.02 -51.78
LAB*LABb 62.9 38.02 -51.78

relative CIELAB lab*
lab*lab 0.659 0.296 -0.402
lab*tch 0.659 0.296 -0.402
lab*nch 0.0 0.5 0.851
relative Natural Colour (NC)
lab*trj 0.659 0.23 -0.443
lab*tce 0.659 0.23 -0.443
lab*nce 0.0 0.5 0.851

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 0.75 0.5
cmyn4* 0.5 0.5 0.5 0.5
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 0.25 0.826
lab*tch 0.5 0.25 0.826
lab*nch 0.0 0.5 0.826
relative Natural Colour (NC)
lab*trj 0.5 0.25 0.826
lab*tce 0.5 0.25 0.826
lab*nce 0.0 0.5 0.826

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 0.25 0.25 0.25 1.0
cmyn4* 0.75 0.75 0.75

Input: Colorimetric Offset Reflective System ORS18

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

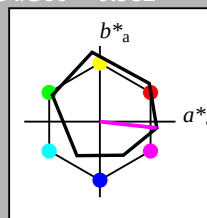
lab^*tch and lab^*nch

D50: 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	95.41	0.0	0.0
relative CIELAB lab*			
lab*lab	1.0	0.0	0.0
lab*tch	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	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*	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	18.05	1.87
LAB*Lab	83.59	18.05	1.87
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	0.932

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	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	37.1	-1.01
LAB*Lab	71.77	37.1	-1.01
relative CIELAB lab*			
lab*lab	0.695	0.497	-0.054
lab*tch	0.75	0.5	0.982
lab*nch	0.0	0.5	0.982
relative Natural Colour (NC)			
lab*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*	0.75	0.5	0.75 (1.0)
cmv3*	0.25	0.5	0.0 (0.0)
olv4*	1.0	0.75	1.0 (1.0)
cmv4*	0.0	0.75	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	64.24	18.43	0.56
LAB*Lab	64.24	18.43	0.56
LAB*Lab	64.24	18.43	0.56
relative CIELAB lab*			
lab*lab	0.597	0.227	-0.103
lab*tch	0.625	0.25	0.932
lab*nch	0.0	0.25	0.932

relative Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	56.71	-0.24	2.14
LAB*Lab	56.71	-0.24	2.14
LAB*Lab	56.71	-0.24	2.14
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*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	44.89	18.8	-0.74
LAB*Lab	44.89	18.8	-0.74
LAB*Lab	44.89	18.8	-0.74
relative CIELAB lab*			
lab*lab	0.445	0.454	-0.208
lab*tch	0.5	0.5	0.932
lab*nch	0.0	0.5	0.932

relative Inform. Technology (IT)			
olv3*	0.75	0.75	0.75 (1.0)
cmv3*	0.25	0.75	0.25 (0.0)
olv4*	1.0	0.75	1.0 (1.0)
cmv4*	0.0	0.75	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	52.42	37.48	-2.32
LAB*Lab	52.42	37.48	-2.32
LAB*Lab	52.42	37.48	-2.32
relative CIELAB lab*			
lab*lab	0.445	0.454	-0.208
lab*tch	0.5	0.75	0.932
lab*nch	0.0	0.75	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	59.95	56.15	-3.9
LAB*Lab	59.95	56.15	-3.9
LAB*Lab	59.95	56.15	-3.9
relative CIELAB lab*			
lab*lab	0.389	0.909	-0.416
lab*tch	0.5	0.5	0.932
lab*nch	0.0	0.5	0.932

relative Inform. Technology (IT)			
olv3*	1.0	0.0	1.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	0.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	48.13	75.18	-6.79
LAB*Lab	48.13	75.18	-6.79
LAB*Lab	48.13	75.18	-6.79
relative CIELAB lab*			
lab*lab	0.389	0.909	-0.416
lab*tch	0.5	0.0	0.932
lab*nch	0.0	0.0	0.932

relative Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	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 Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	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 Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	0.0	0.0
LAB*Lab	47.72	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 Inform. Technology (IT)			
olv3*	0.75	0.75	0.75 (1.0)
cmv3*	0.25	0.75	0.25 (0.0)
olv4*	1.0	0.75	1.0 (1.0)
cmv4*	0.0	0.75	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	52.51	47.18	-29.2
LAB*Lab	52.51	47.18	-29.2
LAB*Lab	52.51	47.18	-29.2
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	0.0	0.5	0.5 (1.0)

relative Inform. Technology (IT)			
olv3*	0.75	0.75	0.75 (1.0)
cmv3*	0.25	0.75	0.25 (0.0)
olv4*	1.0	0.75	1.0 (1.0)
cmv4*	0.0	0.75	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	52.51	47.18	-29.2
LAB*Lab	52.51	47.18	-29.2
LAB*Lab	52.51	47.18	-29.2
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	0.0	0.5	0.5 (1.0)

relative Inform. Technology (IT)			
olv3*	1.0	0.0	1.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	0.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	57.3	94.33	-58.4
LAB*Lab	57.3	94.33	-58.4
LAB*Lab	57.3	94.33	-58.4
relative CIELAB lab*			
lab*lab	0.601	0.85	-0.525
lab*tch	0.5	0.0	0.912
lab*nch	0.0	0.0	0.912

relative Inform. Technology (IT)			
olv3*	0.25	0.25	0.25 (1.0)
cmv3*	0.75	0.75	0.75 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	37.36	13.03	0.83
LAB*Lab	37.36	13.03	0.83
LAB*Lab	37.36	13.03	0.83
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 Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*Lab	33.07	37.84	-6.62
LAB*Lab	33.07	37.84	-6.62
LAB*Lab	33.07	37.84	-6.62
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 Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (1.0)
cmv3*	0.5	0.5	0.5 (1.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	

Input: Colorimetric Offset Reflective System ORS18

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

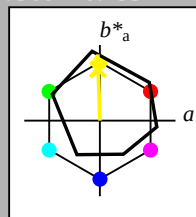
lab^*tch and lab^*nch

D50: 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)
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 (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 -

relative CIELAB lab*
lab*lab 0.97 -0.007 0.25
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.97 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

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

relative CIELAB lab*
lab*lab 0.75 0.25 0.255
lab*tch 0.625 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.25
lab*tce 0.625 0.25 0.255
lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 50.00 0.01 -

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

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 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 25.00 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.25 0.255
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.25
lab*tce 0.125 0.25 0.255
lab*nce 0.0 0.25 0.255

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 -

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 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 -

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 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 -

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 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 -

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 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 -

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	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)
cmyn3* 0.0 0.049 0.5 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 90.8 -2.3 48.29
LAB*LABa 90.8 -1.4 43.84
LAB*LABb 87.5 21.93 91.85

relative CIELAB lab*
lab*lab 0.94 -0.015 0.5
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* 0.75 0.701 0.25 (1.0)
cmyn3* 0.25 0.299 0.75 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.75 -1.27 25.22
LAB*LABa 73.75 -0.69 21.92
LAB*LABb 62.5 21.93 91.84

relative CIELAB lab*
lab*lab 0.75 0.675 0.0 (1.0)
lab*tch 0.625 0.75 0.255
lab*nch 0.0 0.75 0.255
relative Natural Colour (NC)
lab*trj 0.75 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* 0.5 0.451 0.0 (1.0)
cmyn3* 0.5 0.549 1.0 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 52.1 -1.39 43.84
LAB*LABa 52.1 -0.69 21.92
LAB*LABb 25.01 43.86 91.84

relative CIELAB lab*
lab*lab 0.5 0.451 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 0.5 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* 0.25 0.451 0.0 (1.0)
cmyn3* 0.75 0.549 1.0 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 25.01 43.86 91.84
LAB*LABa 25.01 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.451 0.0 (1.0)
lab*tch 0.25 0.5 0.255
lab*nch 0.0 0.5 0.255
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.25
lab*tce 0.25 0.5 0.255
lab*nce 0.0 0.5 0.255

relative Inform. Technology (IT)
olv3* 0.0 0.451 0.0 (1.0)
cmyn3* 1.0 0.549 1.0 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (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 -

relative CIELAB lab*
lab*lab 0.0 0.451 0.0 (1.0)
lab*tch 0.0 0.5 0.255
lab*nch 1.0 0.5 0.255
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.5
lab*tce 0.0 0.5 0.255
lab*nce 1.0 0.5 0.255

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 -

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 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 -

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 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 -

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 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 -

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 Television Luminous System TLS00

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

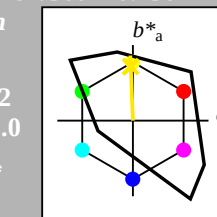
lab^*tch and lab^*nch

D50: 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)
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 (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 -

relative CIELAB lab*
lab*lab 0.75 0.75 0.75 (1.0)
lab*tch 0.625 0.25 0.256
lab*nch 0.0 0.25 0.256
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.25
lab*tce 0.625 0.25 0.256
lab*nce 0.0 0.25 0.256

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 50.00 0.01 -

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

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 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 25.00 0.01 -

relative CIELAB lab*
lab*lab 0.25 0.25 0.255
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.25
lab*tce 0.125 0.25 0.255
lab*nce 0.0 0.25 0.255

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 -

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 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 -

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 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 -

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 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 -

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 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 -

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 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 -

<

Input: Colorimetric Offset Reflective System ORS18

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

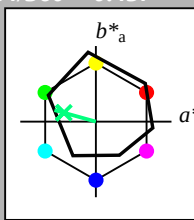
lab^*tch and lab^*nch

D50: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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*LAB 95.41 0.0 0.0
LAB*LAB 99.99 0.01 0.0

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

relative Inform. Technology (IT)
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*LAB 76.06 0.0 0.0
LAB*LAB 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*tr 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
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*LAB 56.71 0.0 0.0
LAB*LAB 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*tr 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
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 -0.13 0.83
LAB*LAB 37.36 0.0 0.0
LAB*LAB 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*tr 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
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*LAB 18.02 0.0 0.0
LAB*LAB 0.01 0.01 -

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

$n^* = 1.0$

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.812 (1.0)
cmyn3* 0.25 0.0 0.388 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 84.75 -14.48 7.85
LAB*LAB 84.75 -13.69 3.81
LAB*LAB 87.5 14.22 164.46

relative CIELAB lab*
lab*lab 0.862 -0.24 0.067
lab*tch 0.875 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.862 -0.249 0.0
lab*tce 0.875 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.576 (1.0)
cmyn3* 0.5 0.25 0.576 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 65.41 -14.11 6.55
LAB*LAB 65.41 -13.7 3.81
LAB*LAB 62.5 14.22 164.46

relative CIELAB lab*
lab*lab 0.612 -0.249 0.0
lab*tch 0.625 0.25 0.3
lab*nch 0.0 0.25 0.3
relative Natural Colour (NC)
lab*tr 0.612 -0.249 0.0
lab*tce 0.625 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.312 (1.0)
cmyn3* 0.75 0.5 0.688 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 46.06 -13.74 5.24
LAB*LAB 46.06 -13.7 3.81
LAB*LAB 37.5 14.22 164.46

relative CIELAB lab*
lab*lab 0.362 -0.249 0.0
lab*tch 0.375 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.362 -0.249 0.0
lab*tce 0.375 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.5 0.812 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.332 -0.249 0.0
lab*tch 0.332 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.332 -0.249 0.0
lab*tce 0.332 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.75 0.938 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 12.5 14.22 164.43

relative CIELAB lab*
lab*lab 0.112 -0.24 0.067
lab*tch 0.125 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.112 -0.24 0.0
lab*tce 0.125 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.623 (1.0)
cmyn3* 0.5 0.0 0.377 (0.0)
olv4* 0.5 1.0 0.623 (1.0)
cmyn4* 0.5 0.0 0.377 (0.0)
standard and adapted CIELAB
LAB*LAB 74.1 -27.98 10.94
LAB*LAB 74.1 -27.4 7.62
LAB*LAB 75.0 28.46 164.46

relative CIELAB lab*
lab*lab 0.725 -0.481 0.134
lab*tch 0.75 0.5 0.457
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*tr 0.725 -0.489 0.0
lab*tce 0.75 0.5 0.3
lab*nce 0.0 0.5 0.3

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.375 (1.0)
cmyn3* 0.75 0.25 0.625 (0.0)
olv4* 0.5 1.0 0.623 (1.0)
cmyn4* 0.5 0.0 0.377 (0.0)
standard and adapted CIELAB
LAB*LAB 54.76 -27.41 9.64
LAB*LAB 54.76 -27.41 7.63
LAB*LAB 50.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.587 -0.721 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.587 -0.749 0.0
lab*tce 0.625 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.25 0.812 (0.0)
olv4* 0.25 1.0 0.435 (0.0)
cmyn4* 0.75 0.0 0.565 (0.0)
standard and adapted CIELAB
LAB*LAB 44.11 -41.11 12.74
LAB*LAB 44.11 -41.11 11.45
LAB*LAB 37.51 42.69 164.45

relative CIELAB lab*
lab*lab 0.332 -0.721 0.201
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.332 -0.749 0.0
lab*tce 0.375 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.312 (1.0)
cmyn3* 1.0 0.5 0.688 (0.0)
olv4* 0.5 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.332 -0.721 0.201
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.332 -0.749 0.0
lab*tce 0.375 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.75 0.938 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 12.5 14.22 164.43

relative CIELAB lab*
lab*lab 0.112 -0.24 0.067
lab*tch 0.125 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.112 -0.24 0.0
lab*tce 0.125 0.25 0.3
lab*nce 0.0 0.25 0.3

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.623 (1.0)
cmyn3* 0.25 0.0 0.377 (0.0)
olv4* 0.25 1.0 0.623 (1.0)
cmyn4* 0.25 0.0 0.377 (0.0)
standard and adapted CIELAB
LAB*LAB 74.1 -27.98 10.94
LAB*LAB 74.1 -27.4 7.62
LAB*LAB 75.0 28.46 164.46

relative CIELAB lab*
lab*lab 0.725 -0.481 0.134
lab*tch 0.75 0.5 0.457
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*tr 0.725 -0.489 0.0
lab*tce 0.75 0.5 0.3
lab*nce 0.0 0.5 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.25 0.812 (0.0)
olv4* 0.25 1.0 0.435 (0.0)
cmyn4* 0.75 0.0 0.565 (0.0)
standard and adapted CIELAB
LAB*LAB 44.11 -41.11 12.74
LAB*LAB 44.11 -41.11 11.45
LAB*LAB 37.51 42.69 164.45

relative CIELAB lab*
lab*lab 0.332 -0.721 0.201
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.332 -0.749 0.0
lab*tce 0.375 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.312 (1.0)
cmyn3* 1.0 0.5 0.688 (0.0)
olv4* 0.5 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.72 -31.3 3.81
LAB*LAB 25.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.332 -0.721 0.201
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.332 -0.749 0.0
lab*tce 0.375 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.75 0.938 (0.0)
olv4* 0.75 1.0 0.812 (1.0)
cmyn4* 0.25 0.0 0.188 (0.0)
standard and adapted CIELAB
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 26.71 -13.7 3.82
LAB*LAB 12.5 14.22 164.43

relative CIELAB lab*
lab*lab 0.112 -0.24 0.067
lab*tch 0.125 0.25 0.457
lab*nch 0.0 0.25 0.457
relative Natural Colour (NC)
lab*tr 0.112 -0.24 0.0
lab*tce 0.125 0.25 0.3
lab*nce 0.0 0.25 0.3

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

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

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

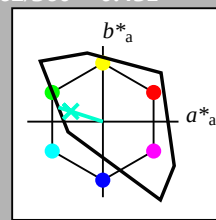
lab^*tch and lab^*nch

D50: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

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*LAB 95.41 0.0 0.0
LAB*LAB 99.99 0.01 0.0

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

relative Inform. Technology (IT)
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*LAB 71.57 0.0 0.0
LAB*LAB 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*tr 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
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 52.8 -54.81 15.26
LAB*LAB 52.8 -54.81 15.26
LAB*LAB 50.0 56.91 164.45

relative CIELAB lab*
lab*lab 0.587 -0.721 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.587 -0.749 0.0
lab*tce 0.625 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.375 (1.0)
cmyn3* 0.75 0.25 0.625 (0.0)
olv4* 0.5 1.0 0.623 (1.0)
cmyn4* 0.5 0.0 0.377 (0.0)
standard and adapted CIELAB
LAB*LAB 54.76 -27.41 9.64
LAB*LAB 54.76 -27.41 7.63
LAB*LAB 50.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.587 -0.721 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*tr 0.587 -0.749 0.0
lab*tce 0.625 0.75 0.3
lab*nce 0.0 0.75 0.3

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.25 0.812 (0.0)
olv4* 0.25 1.0 0.435 (0.0)
cmyn4* 0.75

Input: Colorimetric Offset Reflective System ORS18

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

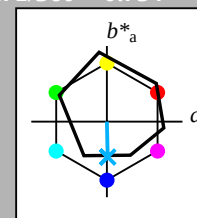
lab^*tch and lab^*nch

D50: 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*LAB 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*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*LAB 76.06 0.0 0.0
LAB*LAB 75.00 0.01 0.0

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

PE500-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

BAM-test chart PE50; Colorimetric systems ORS18 & TLS00

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

Output: Colorimetric Television Luminous System TLS00

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

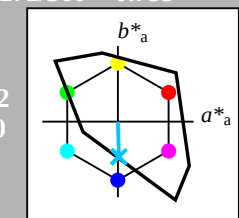
lab^*tch and lab^*nch

D50: 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*LAB 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*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 87.77 0.36 -12.14
LAB*LAB 87.77 0.36 -12.14
LAB*LAB 87.5 12.16 271.7

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* 0.25 0.25 0.25 (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 71.57 0.0 0.0
LAB*LAB 71.57 0.0 0.0
LAB*LAB 75.00 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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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* 0.25 0.25 0.25 (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 41.79 1.1 -44.68
LAB*LAB 41.79 1.1 -44.68
LAB*LAB 50.00 44.71 271.41

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

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

input: $olv^* \text{ setrgbcolor}$

output: $olv^* \text{ setrgbcolor} / w^* \text{ setgray}$

BAM registration: 20060101-PE50/10Q/Q50E09FP.PS/.PDF