

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

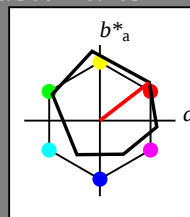
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 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)
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*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*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)
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 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*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)
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 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*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)
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 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*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)
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 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.00 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

$n^* = 1.0$

relative Inform. Technology (IT)
olv3* 1.0 0.75 0.75 (1.0)
cmv3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmv4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 83.54 15.58 16.58
LAB*LABa 83.54 16.34 12.63
LAB*LABb 87.5 20.65 37.69

relative CIELAB lab*
lab*lab 0.847 0.198 0.153
lab*tch 0.875 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*tr 0.847 0.238 0.075
lab*tce 0.875 0.25 0.048
lab*nce 0.0 0.25 0.19

relative Inform. Technology (IT)
olv3* 0.75 0.5 0.5 (1.0)
cmv3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmv4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 64.19 15.96 15.28
LAB*LABa 64.19 16.35 12.63
LAB*LABb 62.5 20.66 37.69

relative CIELAB lab*
lab*lab 0.597 0.198 0.153
lab*tch 0.625 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*tr 0.597 0.238 0.075
lab*tce 0.625 0.25 0.048
lab*nce 0.0 0.25 0.19

relative Inform. Technology (IT)
olv3* 0.5 0.25 0.25 (1.0)
cmv3* 0.0 0.125 0.125 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmv4* 0.0 0.125 0.125 (0.0)
standard and adapted CIELAB
LAB*LAB 44.84 16.33 13.97
LAB*LABa 44.84 16.35 12.63
LAB*LABb 42.5 20.66 37.69

relative CIELAB lab*
lab*lab 0.347 0.198 0.153
lab*tch 0.375 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*tr 0.347 0.238 0.075
lab*tce 0.375 0.25 0.048
lab*nce 0.0 0.25 0.19

relative Inform. Technology (IT)
olv3* 0.25 0.125 0.125 (1.0)
cmv3* 0.0 0.0625 0.0625 (0.0)
olv4* 1.0 0.25 0.25 (1.0)
cmv4* 0.0 0.0625 0.0625 (0.0)
standard and adapted CIELAB
LAB*LAB 22.98 16.7 12.66
LAB*LABa 22.98 16.34 12.62
LAB*LABb 20.61 20.65 37.69

relative CIELAB lab*
lab*lab 0.193 0.198 0.153
lab*tch 0.125 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*tr 0.193 0.238 0.075
lab*tce 0.125 0.25 0.048
lab*nce 0.0 0.25 0.19

relative Inform. Technology (IT)
olv3* 0.0 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 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.00 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* 1.0 0.5 0.5 (1.0)
cmv3* 0.0 0.5 0.5 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmv4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 71.67 32.69 25.25
LAB*LABa 71.67 32.69 25.25
LAB*LABb 75.0 41.31 37.69

relative CIELAB lab*
lab*lab 0.693 0.396 0.306
lab*tch 0.75 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.693 0.477 0.15
lab*tce 0.75 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.75 0.25 0.25 (1.0)
cmv3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmv4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 59.8 48.73 40.24
LAB*LABa 59.8 49.03 37.88
LAB*LABb 62.5 61.96 37.69

relative CIELAB lab*
lab*lab 0.593 0.458 0.306
lab*tch 0.625 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.593 0.477 0.15
lab*tce 0.625 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.5 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.387 0.791 0.611
lab*tch 0.5 0.0 0.105
lab*nch 0.0 0.0 0.105
relative Natural Colour (NC)
lab*tr 0.387 0.954 0.299
lab*tce 0.5 0.0 0.19
lab*nce 0.0 0.0 0.19

relative Inform. Technology (IT)
olv3* 0.25 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.29 0.593 0.458
lab*tch 0.375 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.29 0.716 0.224
lab*tce 0.375 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.0 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 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.00 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* 1.0 0.25 0.25 (1.0)
cmv3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.25 0.25 (1.0)
cmv4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 59.8 48.73 40.24
LAB*LABa 59.8 49.03 37.88
LAB*LABb 62.5 61.96 37.69

relative CIELAB lab*
lab*lab 0.593 0.458 0.306
lab*tch 0.625 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.593 0.477 0.15
lab*tce 0.625 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.75 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.387 0.791 0.611
lab*tch 0.5 0.0 0.105
lab*nch 0.0 0.0 0.105
relative Natural Colour (NC)
lab*tr 0.387 0.954 0.299
lab*tce 0.5 0.0 0.19
lab*nce 0.0 0.0 0.19

relative Inform. Technology (IT)
olv3* 0.5 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.29 0.593 0.458
lab*tch 0.375 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.29 0.716 0.224
lab*tce 0.375 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.25 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.29 0.593 0.458
lab*tch 0.375 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.29 0.716 0.224
lab*tce 0.375 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.0 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 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.00 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* 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 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*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 0.0 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 71.67 32.69 25.25
LAB*LABa 71.67 32.69 25.25
LAB*LABb 75.0 41.31 37.69

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 0.0 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 59.8 48.73 40.24
LAB*LABa 59.8 49.03 37.88
LAB*LABb 62.5 61.96 37.69

relative CIELAB lab*
lab*lab 0.593 0.458 0.306
lab*tch 0.625 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*tr 0.593 0.477 0.15
lab*tce 0.625 0.5 0.048
lab*nce 0.0 0.5 0.19

relative Inform. Technology (IT)
olv3* 0.25 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 47.94 65.37 52.06
LAB*LABa 47.94 65.37 52.06
LAB*LABb 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.387 0.791 0.611
lab*tch 0.5 0.0 0.105
lab*nch 0.0 0.0 0.105
relative Natural Colour (NC)
lab*tr 0.387 0.954 0.299
lab*tce 0.5 0.0 0.19
lab*nce 0.0 0.0 0.19

relative Inform. Technology (IT)
olv3* 0.0 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 18.02 0.03 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.00 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

$n^* = 1.0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

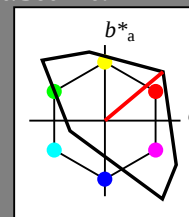
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

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

Input: Colorimetric Offset Reflective System ORS18

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

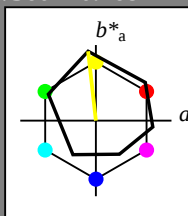
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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*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

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* 0.75 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*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* 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 92.88 -6.06 50.46
LAB*LABa 92.88 -3.12 45.87
LAB*LABb 91.50 46.15 96.38

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 0.75 (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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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* 0.75 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*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

Output: Colorimetric Television Luminous System TLS00

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

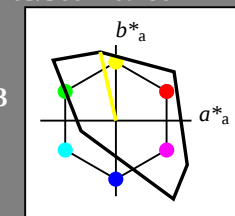
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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 0.0 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

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)
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 0.0 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* 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 0.0 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)
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 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*LABb 70.87 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* 0.75 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 70.87

Input: Colorimetric Offset Reflective System ORS18

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

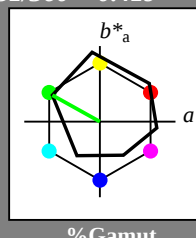
lab*tch and lab*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*


$$\mathbf{u}_{\text{rel}}^* = \mathbf{g}$$
ORS18: adapted (a) CIELAB data

	$L^* = L^*_{\text{a}}$	a^*_{a}	b^*_{a}	$C^*_{\text{ab,a}}$	$h^*_{\text{ab,a}}$
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*	1.0	1.0	1.0 (1.0)
cmyn3*	0.0	0.0	0.0 (0.0)
olvi4*	1.0	1.0	1.0 1.0
cmyn4*	0.0	0.0	0.0 0.0
standard and adapted CIELAB			
LAB*LAB	95.41	-0.98	4.75
LAB*LABa	95.41	0.0	0.0

relative Inform. Technology (IT)			
olvi3*	0.75	1.0	0.75 (1.0)
cmyn3*	0.25	0.0	0.25 (0.0)
olvi4*	0.75	1.0	0.75 1.0
cmyn4*	0.25	0.0	0.25 0.0
standard and adapted CIELAB			
LAB*LAB	84.28	-16.47	12.74
LAB*LABa	84.28	-15.69	8.74

relative Inform. Technology (IT)			
olvi3*	0.5	1.0	0.5 (1.0)
cmyn3*	0.5	0.0	0.5 (0.0)
olvi4*	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

relative Inform. Technology (IT)			
olvi3*	0.25	1.0	0.25 (1.0)
cmyn3*	0.75	0.0	0.75 (0.0)
olvi4*	0.25	1.0	0.25 1.0
cmyn4*	0.75	0.0	0.75 0.0
standard and adapted CIELAB			
LAB*LAB	62.02	-47.46	28.72
LAB*LABa	62.02	-47.11	26.21

relative Inform. Technology (IT)			
olvi3*	0.0	1.0	0.0 (1.0)
cmyn3*	1.0	0.0	1.0 (0.0)
olvi4*	0.0	1.0	0.0 1.0
cmyn4*	1.0	0.0	1.0 0.0
standard and adapted CIELAB			
LAB*LAB	50.9	-62.95	36.7
LAB*LAB _a	50.9	-62.81	34.95

LAB*TCHa	50.0	0.01	—
relative CIELAB lab*			
lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	—
lab*nch	0.5	0.0	—
relative Natural Colour (NC)			
lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	—
lab*nce	0.5	0.0	—

LAB* <i>TCHa</i>	37.5	28.76	136.01
relative CIELAB lab*			
<i>lab*lab</i>	0.469	-0.179	0.174
<i>lab*tch</i>	0.375	0.25	0.378
<i>lab*ncH</i>	0.5	0.25	0.378
relative Natural Colour (NC)			
<i>lab*lrj</i>	0.469	-0.207	0.139
<i>lab*tce</i>	0.375	0.25	0.406
<i>lab*nce</i>	0.5	0.25	0.62g

	25.01	57.51	136.01
relative CIELAB <i>lab</i> *			
<i>lab</i> * <i>lab</i>	0.438	-0.359	0.347
<i>lab</i> * <i>tch</i>	0.25	0.5	0.378
<i>lab</i> * <i>nch</i>	0.5	0.5	0.378
relative Natural Colour (NC)			
<i>lab</i> * <i>irj</i>	0.438	-0.415	0.278
<i>lab</i> * <i>tce</i>	0.25	0.5	0.406
<i>lab</i> * <i>nCe</i>	0.5	0.5	0.62

1,00

relative Inform. Technology (IT)				
olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	0.25
cmyn4*	0.0	0.0	0.0	0.75
standard and adapted CIELAB				
LAB*LAB	37.36	0.13	0.83	
LAB*LAB ₂	37.36	0.0	0.0	

relative Inform. Technology (IT)			
<i>olvi3*</i>	0.0	0.25	0.0 (1.0)
<i>cmyn3*</i>	1.0	0.75	1.0 (0.0)
<i>olvi4*</i>	0.75	1.0	0.75 0.25
<i>cmyn4*</i>	0.25	0.0	0.25 0.75
standard and adapted CIELAB			
LAB*LAB	26.24	-15.35	8.82
LAR*AR ₀	26.24	-15.69	8.74

0,75

chron

systems ORS1

0 hues

output: *no chan*

age compared to

11

NE500-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

BAM-test chart NE50: Colorimetric systems ORS18 & TLS00

input: *olv** *setrgbcolor*

output: *no change compared to input*

	C	M	Y	O
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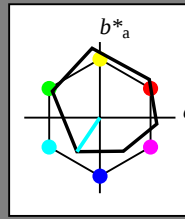
Input: Colorimetric Offset Reflective System ORS18

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

lab^*tch and lab^*nch

D65: hue C
LCH*Ma: 59 54 236
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)
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 4.75
LAB*Lab 95.41 0.0 0.0
LAB*TCha 99.99 0.01

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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 1.0 1.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olv4* 0.75 1.0 1.0 (1.0)
cmyn4* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.21 -8.39 -7.1
LAB*Lab 86.21 -7.57 -11.24
LAB*TCha 87.5 13.57 236.02

relative CIELAB lab*
lab*lab 0.881 -0.139 -0.206
lab*tch 0.875 0.25 0.566
lab*nch 0.0 0.25 0.566
relative Natural Colour (NC)
lab*lrj 0.881 -0.123 -0.216
lab*tce 0.875 0.25 0.567
lab*nce 0.0 0.25 0.566

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*TCha 75.0 0.01

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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 66.86 -8.02 -8.42
LAB*Lab 66.86 -7.58 -11.25
LAB*TCha 62.5 13.57 236.02

relative CIELAB lab*
lab*lab 0.631 -0.123 -0.216
lab*tch 0.625 0.25 0.567
lab*nch 0.0 0.25 0.566

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*TCha 50.0 0.01

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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 0.25 0.25 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 47.51 -7.64 -9.72
LAB*Lab 47.51 -7.58 -11.25
LAB*TCha 47.5 13.57 236.02

relative CIELAB lab*
lab*lab 0.381 -0.139 -0.206
lab*tch 0.375 0.25 0.566
lab*nch 0.0 0.25 0.566

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 -0.63 0.63
LAB*Lab 37.36 0.0 0.0
LAB*TCha 25.0 0.01

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 28.17 -7.57 -11.03
LAB*Lab 28.17 -7.57 -11.24
LAB*TCha 25.0 13.57 236.02

relative CIELAB lab*
lab*lab 0.131 -0.139 -0.206
lab*tch 0.125 0.25 0.566
lab*nch 0.0 0.25 0.566

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*TCha 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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)
cmyn3* 1.0 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 8.12 -7.57 -11.03
LAB*Lab 8.12 -7.57 -11.24
LAB*TCha 0.01 13.57 236.02

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 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*TCha 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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)
cmyn3* 1.0 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 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*TCha 0.0 0.0

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

relative 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*TCha 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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)
cmyn3* 1.0 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 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*TCha 0.0 0.0

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

relative 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*TCha 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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)
cmyn3* 1.0 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 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*TCha 0.0 0.0

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

relative 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*TCha 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*lrj 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)
cmyn3* 1.0 0.5 0.5 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 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*TCha 0.0 0.0

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

NE500-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

BAM-test chart NE50; Colorimetric systems ORS18 & TLS00

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

input: `olv* setrgbcolor`

output: `no change compared to input`

chromaticness c^*

chromaticness c^*

$n^* = 1.0$

$n^* = 1.0$

Input: Colorimetric Offset Reflective System ORS18

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

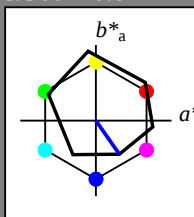
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

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

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

$g^*_{C,rel} = 155$

Output: Colorimetric Television Luminous System TLS00

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

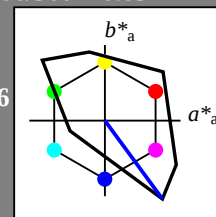
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

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*	0.0 0.0 1.0 (1.0)
olv4*	0.0 0.0 1.0 (1.0)
olv5*	0.0 0.0 1.0 (1.0)
olv6*	0.0 0.0 1.0 (1.0)
olv7*	0.0 0.0 1.0 (1.0)
olv8*	0.0 0.0 1.0 (1.0)
olv9*	0.0 0.0 1.0 (1.0)
olv10*	0.0 0.0 1.0 (1.0)
olv11*	0.0 0.0 1.0 (1.0)
olv12*	0.0 0.0 1.0 (1.0)
olv13*	0.0 0.0 1.0 (1.0)
olv14*	0.0 0.0 1.0 (1.0)
olv15*	0.0 0.0 1.0 (1.0)
olv16*	0.0 0.0 1.0 (1.0)
olv17*	0.0 0.0 1.0 (1.0)
olv18*	0.0 0.0 1.0 (1.0)
olv19*	0.0 0.0 1.0 (1.0)
olv20*	0.0 0.0 1.0 (1.0)
olv21*	0.0 0.0 1.0 (1.0)
olv22*	0.0 0.0 1.0 (1.0)
olv23*	0.0 0.0 1.0 (1.0)
olv24*	0.0 0.0 1.0 (1.0)
olv25*	0.0 0.0 1.0 (1.0)
olv26*	0.0 0.0 1.0 (1.0)
olv27*	0.0 0.0 1.0 (1.0)
olv28*	0.0 0.0 1.0 (1.0)
olv29*	0.0 0.0 1.0 (1.0)
olv30*	0.0 0.0 1.0 (1.0)
olv31*	0.0 0.0 1.0 (1.0)
olv32*	0.0 0.0 1.0 (1.0)
olv33*	0.0 0.0 1.0 (1.0)
olv34*	0.0 0.0 1.0 (1.0)
olv35*	0.0 0.0 1.0 (1.0)
olv36*	0.0 0.0 1.0 (1.0)
olv37*	0.0 0.0 1.0 (1.0)
olv38*	0.0 0.0 1.0 (1.0)
olv39*	0.0 0.0 1.0 (1.0)
olv40*	0.0 0.0 1.0 (1.0)
olv41*	0.0 0.0 1.0 (1.0)
olv42*	0.0 0.0 1.0 (1.0)
olv43*	0.0 0.0 1.0 (1.0)
olv44*	0.0 0.0 1.0 (1.0)
olv45*	0.0 0.0 1.0 (1.0)
olv46*	0.0 0.0 1.0 (1.0)
olv47*	0.0 0.0 1.0 (1.0)
olv48*	0.0 0.0 1.0 (1.0)
olv49*	0.0 0.0 1.0 (1.0)
olv50*	0.0 0.0 1.0 (1.0)
olv51*	0.0 0.0 1.0 (1.0)
olv52*	0.0 0.0 1.0 (1.0)
olv53*	0.0 0.0 1.0 (1.0)
olv54*	0.0 0.0 1.0 (1.0)
olv55*	0.0 0.0 1.0 (1.0)
olv56*	0.0 0.0 1.0 (1.0)
olv57*	0.0 0.0 1.0 (1.0)
olv58*	0.0 0.0 1.0 (1.0)
olv59*	0.0 0.0 1.0 (1.0)
olv60*	0.0 0.0 1.0 (1.0)
olv61*	0.0 0.0 1.0 (1.0)
olv62*	0.0 0.0 1.0 (1.0)
olv63*	0.0 0.0 1.0 (1.0)
olv64*	0.0 0.0 1.0 (1.0)
olv65*	0.0 0.0 1.0 (1.0)
olv66*	0.0 0.0 1.0 (1.0)
olv67*	0.0 0.0 1.0 (1.0)
olv68*	0.0 0.0 1.0 (1.0)
olv69*	0.0 0.0 1.0 (1.0)
olv70*	0.0 0.0 1.0 (1.0)
olv71*	0.0 0.0 1.0 (1.0)
olv72*	0.0 0.0 1.0 (1.0)
olv73*	0.0 0.0 1.0 (1.0)
olv74*	0.0 0.0 1.0 (1.0)
olv75*	0.0 0.0 1.0 (1.0)
olv76*	0.0 0.0 1.0 (1.0)
olv77*	0.0 0.0 1.0 (1.0)
olv78*	0.0 0.0 1.0 (1.0)
olv79*	0.0 0.0 1.0 (1.0)
olv80*	0.0 0.0 1.0 (1.0)
olv81*	0.0 0.0 1.0 (1.0)
olv82*	0.0 0.0 1.0 (1.0)
olv83*	0.0 0.0 1.0 (1.0)
olv84*	0.0 0.0 1.0 (1.0)
olv85*	0.0 0.0 1.0 (1.0)
olv86*	0.0 0.0 1.0 (1.0)
olv87*	0.0 0.0 1.0 (1.0)
olv88*	0.0 0.0 1.0 (1.0)
olv89*	0.0 0.0 1.0 (1.0)
olv90*	0.0 0.0 1.0 (1.0)
olv91*	0.0 0.0 1.0 (1.0)
olv92*	0.0 0.0 1.0 (1.0)
olv93*	0.0 0.0 1.0 (1.0)
olv94*	0.0 0.0 1.0 (1.0)
olv95*	0.0 0.0 1.0 (1.0)
olv96*	0.0 0.0 1.0 (1.0)
olv97*	0.0 0.0 1.0 (1.0)
olv98*	0.0 0.0 1.0 (1.0)
olv99*	0.0 0.0 1.0 (1.0)
olv100*	0.0 0.0 1.0 (1.0)

relative Inform. Technology (IT)	
olv3*	0.0 0.0 1.0 (1.0)
olv4*	0.0 0.0 1.0 (1.0)
olv5*	0.0 0.0 1.0 (1.0)
olv6*	0.0 0.0 1.0 (1.0)
olv7*	0.0 0.0 1.0 (1.0)
olv8*	0.0 0.0 1.0 (1.0)
olv9*	0.0 0.0 1.0 (1.0)
olv10*	0.0 0.0 1.0 (1.0)
olv11*	0.0 0.0 1.0 (1.0)
olv12*	0.0 0.0 1.0 (1.0)
olv13*	0.0 0.0 1.0 (1.0)
olv14*	0.0 0.0 1.0 (1.0)
olv15*	0.0 0.0 1.0 (1.0)
olv16*	0.0 0.0 1.0 (1.0)
olv17*	0.0 0.0 1.0 (1.0)
olv18*	0.0 0.0 1.0 (1.0)
olv19*	0.0 0.0 1.0 (1.0)
olv20*	0.0 0.0 1.0 (1.0)
olv21*	0.0 0.0 1.0 (1.0)
olv22*	0.0 0.0 1.0 (1.0)
olv23*	0.0 0.0 1.0 (1.0)
olv24*	0.0 0.0 1.0 (1.0)
olv25*	0.0 0.0 1.0 (1.0)
olv26*	0.0 0.0 1.0 (1.0)
olv27*	0.0 0.0 1.0 (1.0)
olv28*	0.0 0.0 1.0 (1.0)
olv29*	0.0 0.0 1.0 (1.0)
olv30*	0.0 0.0 1.0 (1.0)
olv31*	0.0 0.0 1.0 (1.0)
olv32*	0.0 0.0 1.0 (1.0)
olv33*	0.0 0.0 1.0 (1.0)
olv34*	0.0 0.0 1.0 (1.0)
olv35*	0.0 0.0 1.0 (1.0)
olv36*	0.0 0.0 1.0 (1.0)
olv37*	0.0 0.0 1.0 (1.0)
olv38*	0.0 0.0 1.0 (1.0)
olv39*	0.0 0.0 1.0 (1.0)
olv40*	0.0 0.0 1.0 (1.0)
olv41*	0.0 0.0 1.0 (1.0)
olv42*	0.0 0.0 1.0 (1.0)
olv43*	0.0 0.0 1.0 (1.0)
olv44*	0.0 0.0 1.0 (1.0)
olv45*	0.0 0.0 1.0 (1.0)
olv46*	0.0 0.0 1.0 (1.0)
olv47*	0.0 0.0 1.0 (1.0)
olv48*	0.0 0.0 1.0 (1.0)
olv49*	0.0 0.0 1.0 (1.0)
olv50*	0.0 0.0 1.0 (1.0)
olv51*	0.0 0.0 1.0 (1.0)
olv52*	0.0 0.0 1.0 (1.0)
olv53*	0.0 0.0 1.0 (1.0)
olv54*	0.0 0.0 1.0 (1.0)
olv55*	0.0 0.0 1.0 (1.0)
olv56*	0.0 0.0 1.0 (1.0)
olv57*	0.0 0.0 1.0 (1.0)
olv58*	0.0 0.0 1.0 (1.0)
olv59*	0.0 0.0 1.0 (1.0)
olv60*	0.0 0.0 1.0 (1.0)
olv61*	0.0 0.0 1.0 (1.0)
olv62*	0.0 0.0 1.0 (1.0)
olv63*	0.0 0.0 1.0 (1.0)
olv64*	0.0 0.0 1.0 (1.0)
olv65*	0.0 0.0 1.0 (1.0)
olv66*	0.0 0.0 1.0 (1.0)
olv67*	0.0 0.0 1.0 (1.0)
olv68*	0.0 0.0 1.0 (1.0)
olv69*	0.0 0.0 1.0 (1.0)
olv70*	0.0 0.0 1.0 (1.0)
olv71*	0.0 0.0 1.0 (1.0)
olv72*	0.0 0.0 1.0 (1.0)
olv73*	0.0 0.0 1.0 (1.0)
olv74*	0.0 0.0 1.0 (1.0)
olv75*	0.0 0.0 1.0 (1.0)
olv76*	0.0 0.0 1.0 (1.0)
olv77*	0.0 0.0 1.0 (1.0)
olv78*	0.0 0.0 1.0 (1.0)
olv79*	0.0 0.0 1.0 (1.0)
olv80*	0.0 0.0 1.0 (1.0)
olv81*	0.0 0.0 1.0 (1.0)
olv82*	0.0 0.0 1.0 (1.0)
olv83*	0.0 0.0 1.0 (1.0)
olv84*	0.0 0.0 1.0 (1.0)
olv85*	0.0 0.0 1.0 (1.0)
olv86*	0.0 0.0 1.0 (1.0)
olv87*	0.0 0.0 1.0 (1.0)
olv88*	0.0 0.0 1.0 (1.0)
olv89*	0.0 0.0 1.0 (1.0)
olv90*	0.0 0.0 1.0 (1.0)
olv91*	0.0 0.0 1.0 (1.0)
olv92*	0.0 0.0 1.0 (1.0)
olv93*	0.0 0.0 1.0 (1.0)
olv94*	0.0 0.0 1.0 (1.0)
olv95*	0.0 0.0 1.0 (1.0)
olv96*	0.0 0.0 1.0 (1.0)
olv97*	0.0 0.0 1.0 (1.0)
olv98*	0.0 0.0 1.0 (1.0)
olv99*	0.0 0.0 1.0 (1.0)
olv100*	0.0 0.0 1.0 (1.0)

relative Inform. Technology (IT)	
olv3*	0.0 0.0 1.0 (1.0)
olv4*	0.0 0.0 1.0 (1.0)
olv5*	0.0 0.0 1.0 (1.0)
olv6*	0.0 0.0 1.0 (1.0)
olv7*	0.0 0.0 1.0 (1.0)
olv8*	0.0 0.0 1.0 (1.0)
olv9*	0.0 0.0 1.0 (1.0)
olv10*	0.0 0.0 1.0 (1.0)
olv11*	0.0 0.0 1.0 (1.0)
olv12*	0.0 0.0 1.0 (1.0)
olv13*	0.0 0.0 1.0 (1.0)
olv14*	0.0 0.0 1.0 (1.0)
olv15*	0.0 0.0 1.0 (1.0)
olv16*	0.0 0.0 1.0 (1.0)
olv17*	0.0 0.0 1.0 (1.0)
olv18*	0.0 0.0 1.0 (1.0)
olv19*	0.0 0.0 1.0 (1.0)
olv20*	0.0 0.0 1.0 (1.0)
olv21*	0.0 0.0 1.0 (1.0)
olv22*	0.0 0.0 1.0 (1.0)
olv23*	0.0 0.0 1.0 (1.0)
olv24*	0.0 0.0 1.0 (1.0)
olv25*	0.0 0.0 1.0 (1.0)
olv26*	0.0 0.0 1.0 (1.0)
olv27*	0.0 0.0 1.0 (1.0)
olv28*	0.0 0.0 1.0 (1.0)
olv29*	0.0 0.0 1.0 (1.0)
olv30*	0.0 0.0 1.0 (1.0)
olv31*	0.0 0.0 1.0 (1.0)
olv32*	0.0 0.0 1.0 (1.0)
olv33*	0.0 0.0 1.0 (1.0)
olv34*	0.0 0.0 1.0 (1.0)
olv35*	0.0 0.0 1.0 (1.0)
olv36*	0.0 0.0 1.0 (1.0)
olv37*	0.0 0.0 1.0 (1.0)
olv38*	0.0 0.0 1.0 (1.0)
olv39*	0.0 0.0 1.0 (1.0)
olv40*	0.0 0.0 1.0 (1.0)
olv41*	0.0 0.0 1.0 (1.0)
olv42*	0.0 0.0 1.0 (1.0)
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olv45*	0.0 0.0 1.0 (1.0)
olv46*	0.0 0.0 1.0 (1.0)
olv47*	0.0 0.0 1.0 (1.0)
olv48*	0.0 0.0 1.0 (1.0)
olv49*	0.0 0.0 1.0 (1.0)
olv50*	0.0 0.0 1.0 (1.0)
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olv62*	0.0 0.0 1.0 (1.0)
olv63*	0.0 0.0 1.0 (1.0)
olv64*	0.0 0.0 1.0 (1.0)
olv65*	0.0 0.0 1.0 (1.0)
olv66*	0.0 0.0 1.0 (1.0)
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olv73*	0.0 0.0 1.0 (1.0)
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olv75*	0.0 0.0 1.0 (1.0)
olv76*	0.0 0.0 1.0 (1.0)
olv77*	0.0 0.0 1.0 (1.0)
olv78*	0.0 0.0 1.0 (1.0)
olv79*	0.0 0.0 1.0 (1.0)
olv80*	0.0 0.0 1.0 (1.0)
olv81*	0.0 0.0 1.0 (1.0)
olv82*	0.0 0.0 1.0 (1.0)
olv83*	0.0 0.0 1.0 (1.0)
olv84*	0.0

Input: Colorimetric Offset Reflective System ORS18

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

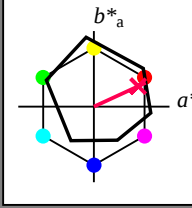
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

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)
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)
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	95.41	0.0	0.0	
LAB*LAB	95.41	0.0	0.0	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	83.55	16.38	11.84	
LAB*LAB	83.55	17.14	7.88	
LAB*LAB	83.55	18.86	24.71	

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	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.831	(1.0)
olv3*	0.0	0.25	0.169	(0.0)
olv4*	1.0	0.75	0.831	(1.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
olv4*	0.0	0.25	0.169	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LAB	71.7	34.28	15.76	
LAB*LAB	71.7	37.73	24.7	

Output: Colorimetric Television Luminous System TLS00

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

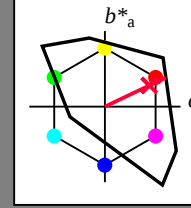
lab^*tch and lab^*nch

D65: 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)
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)
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	95.41	0.0	0.0	

Input: Colorimetric Offset Reflective System ORS18

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

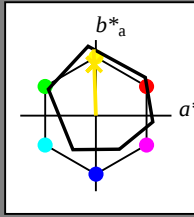
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



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 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 99.99 0.01 0.0

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

relative Inform. Technology (IT)
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 0.0015 0.5
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 37.36 -0.63 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 25.00 0.01 -

relative CIELAB lab*
lab*lab 0.47 -0.007 0.25
lab*tch 0.375 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.47 0.0 0.25
lab*tce 0.375 0.25 0.255
lab*nce 0.0 0.25 0.255

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 -0.63 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 25.00 0.01 -

relative CIELAB lab*
lab*lab 0.47 -0.007 0.25
lab*tch 0.375 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.47 0.0 0.25
lab*tce 0.375 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 0.0 0.25
lab*tce 0.125 0.25 0.255
lab*nce 0.0 0.25 0.255

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 75.0 43.86 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 71.45 -1.92 46.98
LAB*LABa 71.45 -1.4 43.84
LAB*LABb 50.0 43.87 91.84

relative CIELAB lab*
lab*lab 0.911 -0.023 0.75
lab*tch 0.625 0.75 0.255
lab*nch 0.0 0.75 0.255
relative Natural Colour (NC)
lab*trj 0.911 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 43.85
LAB*LABa 52.1 -1.39 43.85
LAB*LABb 25.01 43.86 91.84

relative CIELAB lab*
lab*lab 0.661 -0.023 0.75
lab*tch 0.375 0.75 0.255
lab*nch 0.0 0.75 0.255
relative Natural Colour (NC)
lab*trj 0.661 0.0 0.75
lab*tce 0.375 0.75 0.255
lab*nce 0.0 0.75 0.255

relative Inform. Technology (IT)
olv3* 0.25 0.324 1.0 (0.0)
cmyn3* 0.25 0.676 0.0 (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 28.1 -1.45 43.85
LAB*LABa 28.1 -1.45 43.85
LAB*LABb 12.5 43.86 91.85

relative CIELAB lab*
lab*lab 0.44 -0.015 0.5
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* 0.0 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 0.0 0.25
lab*tce 0.125 0.25 0.255
lab*nce 0.0 0.25 0.255

Output: Colorimetric Television Luminous System TLS00

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

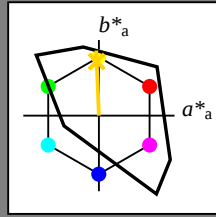
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



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 0.0 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 (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 37.36 -0.63 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 25.00 0.01 -

relative CIELAB lab*
lab*lab 0.47 -0.007 0.25
lab*tch 0.375 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.47 0.0 0.25
lab*tce 0.375 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 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 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.22 -0.007 0.25
lab*tch 0.125 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.22 0.0 0.25
lab*tce 0.125 0.25 0.255
lab*nce 0.0 0.25 0.255

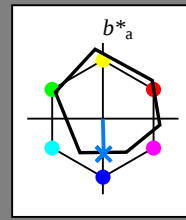
relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02

Input: Colorimetric Offset Reflective System ORS18

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

D65: hue B
LCH*Ma: 42 45 271
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 0.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 99.99 0.01 0.0

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

relative Inform. Technology (IT)
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*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 (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*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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.03 0.63
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*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 0.01 0.01 0.0

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

$n^* = 1.0$

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* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 82.0 -0.45 -7.31
LAB*LABa 82.0 0.27 -11.16
LAB*LABb 87.5 11.18 271.39

relative CIELAB lab*
lab*lab 0.827 0.006 -0.249
lab*tch 0.875 0.25 0.754
lab*nch 0.0 0.25 0.754
relative Natural Colour (NC)
lab*trj 0.827 0.0 -0.249
lab*tce 0.875 0.25 0.754
lab*nce 0.0 0.25 0.754

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 68.6 0.07 -19.39
LAB*LABa 68.6 0.5 -22.34
LAB*LABb 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*tce 0.75 0.5 0.754
lab*nce 0.0 0.5 0.754

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 49.25 0.45 -20.7
LAB*LABa 49.25 0.5 -22.35
LAB*LABb 50.0 22.36 271.41

relative CIELAB lab*
lab*lab 0.404 0.012 -0.499
lab*tch 0.5 0.5 0.754
lab*nch 0.0 0.5 0.754
relative Natural Colour (NC)
lab*trj 0.404 0.0 -0.499
lab*tce 0.5 0.5 0.754
lab*nce 0.0 0.5 0.754

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 (0.0)
standard and adapted CIELAB
LAB*LAB 29.9 0.5 -22.34
LAB*LABa 29.9 0.5 -22.34
LAB*LABb 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*tce 0.25 0.5 0.754
lab*nce 0.0 0.5 0.754

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 0.25 0.25 0.25 (0.0)
cmyn4* 0.75 0.75 0.75 (1.0)
standard and adapted CIELAB
LAB*LAB 55.19 0.61 -31.48
LAB*LABa 55.19 0.62 -33.52
LAB*LABb 62.5 33.54 271.41

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*tce 0.625 0.75 0.754
lab*nce 0.0 0.75 0.754

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 (0.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.79 1.1 -44.68
LAB*LABa 41.79 1.1 -44.68
LAB*LABb 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 1.0 0.754
relative Natural Colour (NC)
lab*trj 0.307 0.0 -0.999
lab*tce 0.5 1.0 0.754
lab*nce 0.0 1.0 0.754

$n^* = 0.00$

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 (0.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 23.87 0.0 0.0
LAB*LABa 23.87 0.0 0.0
LAB*LABb 25.01 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

$n^* = 0.25$

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

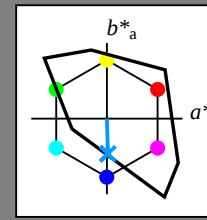
chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

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

D65: 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*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 87.77 0.36 -12.14
LAB*LABa 87.77 0.36 -12.14
LAB*LABb 87.5 12.16 271.7

relative CIELAB lab*
lab*lab 0.92 0.007 -0.249
lab*tch 0.875 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.92 0.0 -0.249
lab*tce 0.875 0.25 0.755
lab*nce 0.0 0.25 0.755

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 71.57 0.0 0.0
LAB*LABa 71.57 0.0 0.0
LAB*LABb 75.0 0.01 0.0

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

relative Inform. Technology (IT)
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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.28 0.74 -24.32
LAB*LABa 56.28 0.74 -24.32
LAB*LABb 50.0 24.34 271.74

relative CIELAB lab*
lab*lab 0.51 0.023 -0.749
lab*tch 0.51 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.51 0.0 -0.749
lab*tce 0.51 0.25 0.755
lab*nce 0.0 0.25 0.755

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 (0.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.44 0.23 -12.15
LAB*LABa 32.44 0.23 -12.15
LAB*LABb 37.51 12.17 271.74

relative CIELAB lab*
lab*lab 0.34 0.015 -0.499
lab*tch 0.34 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.34 0.0 -0.499
lab*tce 0.34 0.25 0.755
lab*nce 0.0 0.25 0.755

$n^* = 0.50$

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

$n^* = 1.0$

chromaticness c^*

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* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 80.13 0.73 -24.31
LAB*LABa 80.13 0.73 -24.31
LAB*LABb 87.5 12.16 271.7

relative CIELAB lab*
lab*lab 0.84 0.015 -0.499
lab*tch 0.875 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.84 0.0 -0.499
lab*tce 0.875 0.25 0.755
lab*nce 0.0 0.25 0.755

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 62.8 0.37 -12.15
LAB*LABa 62.8 0.37 -12.15
LAB*LABb 62.5 12.17 271.74

relative CIELAB lab*
lab*lab 0.67 0.008 -0.249
lab*tch 0.625 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.67 0.0 -0.249
lab*tce 0.625 0.25 0.755
lab*nce 0.0 0.25 0.755

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 (0.0)
cmyn4* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 47.72 0.0 0.0
LAB*LABa 47.72 0.0 0.0
LAB*LABb 50.0 0.01 0.0

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

relative Inform. Technology (IT)
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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 32.44 0.23 -12.15
LAB*LABa 32.44 0.23 -12.15
LAB*LABb 37.51 12.17 271.74

relative CIELAB lab*
lab*lab 0.34 0.015 -0.499
lab*tch 0.34 0.25 0.755
lab*nch 0.0 0.25 0.755
relative Natural Colour (NC)
lab*trj 0.34 0.0 -0.499
lab*tce 0.34 0.25 0.755
lab*nce 0.0 0.25 0.755

$n^* = 0.25$

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

chromaticness c^*

n^*