

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$

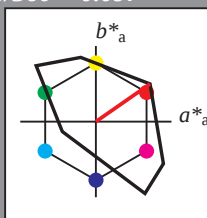
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



TLS18; adapted (a) CIELAB data

	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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

relative 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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01 0.0

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

relative Inform. Technology (IT)
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 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*TCHa 50.00 0.01 0.0

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

relative Inform. Technology (IT)
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 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.00 0.01 0.0

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

relative Inform. Technology (IT)
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 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

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

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 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olv3* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 84.74 17.9 12.47
LAB*LABa 84.74 17.9 12.47
LAB*TCHa 87.5 21.81 34.85

relative CIELAB lab*
lab*lab 0.862 0.205 0.143
lab*tch 0.875 0.25 0.097
lab*nch 0.0 0.25 0.097
relative Natural Colour (NC)
lab*trj 0.862 0.244 0.055
lab*tce 0.875 0.25 0.035
lab*nce 0.0 0.25 0.14

relative Inform. Technology (IT)
olv3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 65.4 17.91 12.47
LAB*LABa 65.4 17.91 12.47
LAB*TCHa 62.5 21.82 34.85

relative CIELAB lab*
lab*lab 0.612 0.244 0.055
lab*tch 0.625 0.25 0.035
lab*nch 0.0 0.25 0.035
relative Natural Colour (NC)
lab*trj 0.612 0.244 0.055
lab*tce 0.625 0.25 0.035
lab*nce 0.0 0.25 0.14

relative Inform. Technology (IT)
olv3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 46.05 17.91 12.47
LAB*LABa 46.05 17.91 12.47
LAB*TCHa 37.5 21.82 34.85

relative CIELAB lab*
lab*lab 0.382 0.205 0.143
lab*tch 0.375 0.25 0.097
lab*nch 0.0 0.25 0.097
relative Natural Colour (NC)
lab*trj 0.382 0.244 0.055
lab*tce 0.375 0.25 0.035
lab*nce 0.0 0.25 0.14

relative Inform. Technology (IT)
olv3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 0.0 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 35.39 35.81 24.94
LAB*LABa 35.39 35.81 24.94
LAB*TCHa 25.01 43.63 34.85

relative CIELAB lab*
lab*lab 0.112 0.205 0.143
lab*tch 0.125 0.25 0.097
lab*nch 0.0 0.25 0.097
relative Natural Colour (NC)
lab*trj 0.112 0.244 0.055
lab*tce 0.125 0.25 0.035
lab*nce 0.0 0.25 0.14

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 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olv3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 74.08 35.81 24.94
LAB*LABa 74.08 35.81 24.94
LAB*TCHa 75.0 43.63 34.85

relative CIELAB lab*
lab*lab 0.724 0.41 0.286
lab*tch 0.75 0.5 0.097
lab*nch 0.0 0.5 0.097
relative Natural Colour (NC)
lab*trj 0.724 0.488 0.109
lab*tce 0.75 0.5 0.035
lab*nce 0.0 0.5 0.14

relative Inform. Technology (IT)
olv3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 54.74 35.82 24.94
LAB*LABa 54.74 35.82 24.94
LAB*TCHa 50.0 43.64 34.85

relative CIELAB lab*
lab*lab 0.474 0.41 0.286
lab*tch 0.5 0.5 0.097
lab*nch 0.0 0.5 0.097
relative Natural Colour (NC)
lab*trj 0.474 0.488 0.109
lab*tce 0.5 0.5 0.035
lab*nce 0.0 0.5 0.14

relative Inform. Technology (IT)
olv3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olv4* 1.0 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 44.08 35.72 37.41
LAB*LABa 44.08 35.72 37.41
LAB*TCHa 37.51 65.46 34.85

relative CIELAB lab*
lab*lab 0.337 0.615 0.429
lab*tch 0.375 0.75 0.097
lab*nch 0.0 0.75 0.097
relative Natural Colour (NC)
lab*trj 0.337 0.732 0.164
lab*tce 0.375 0.75 0.035
lab*nce 0.0 0.75 0.14

relative Inform. Technology (IT)
olv3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 0.0 (0.0)
olv4* 1.0 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 35.39 35.81 24.94
LAB*LABa 35.39 35.81 24.94
LAB*TCHa 25.01 43.63 34.85

relative CIELAB lab*
lab*lab 0.225 0.41 0.286
lab*tch 0.25 0.5 0.097
lab*nch 0.0 0.5 0.097
relative Natural Colour (NC)
lab*trj 0.225 0.488 0.109
lab*tce 0.25 0.5 0.035
lab*nce 0.0 0.5 0.14

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 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

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

relative Inform. Technology (IT)
olv3* 1.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olv4* 1.0 0.25 0.25 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 63.42 53.72 37.41
LAB*LABa 63.42 53.72 37.41
LAB*TCHa 62.5 65.46 34.85

relative CIELAB lab*
lab*lab 0.587 0.615 0.429
lab*tch 0.625 0.75 0.097
lab*nch 0.0 0.75 0.097
relative Natural Colour (NC)
lab*trj 0.587 0.732 0.164
lab*tce 0.625 0.75 0.035
lab*nce 0.0 0.75 0.14

relative Inform. Technology (IT)
olv3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 52.76 71.62 49.87
LAB*LABa 52.76 71.62 49.87
LAB*TCHa 50.0 87.27 34.85

relative CIELAB lab*
lab*lab 0.449 0.82 0.571
lab*tch 0.5 1.0 0.097
lab*nch 0.0 1.0 0.097
relative Natural Colour (NC)
lab*trj 0.449 0.976 0.218
lab*tce 0.5 1.0 0.035
lab*nce 0.0 1.0 0.14

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 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 2.24 2.14
LAB*LABa 56.71 2.24 2.14
LAB*TCHa 50.0 0.01 0.0

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

relative Inform. Technology (IT)
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 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 37.37 34.13 12.66
LAB*LABa 37.37 34.13 12.66
LAB*TCHa 25.0 20.65 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*trj 0.347 0.229 0.075
lab*tce 0.375 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)
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 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.01 0.0

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.0$

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*TCHa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
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 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.00 0.01 0.0

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*trj 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* 0.5 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 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 64.19 16.35 12.63
LAB*LABa 64.19 16.35 12.63
LAB*TCHa 62.5 20.66 37.69

relative CIELAB lab*
lab*lab 0.537 0.198 0.153
lab*tch 0.525 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*trj 0.537 0.239 0.075
lab*tce 0.525 0.25 0.048
lab*nce 0.0 0.25 0.19

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 44.84 16.33 13.97
LAB*LABa 44.84 16.33 13.97
LAB*TCHa 37.5 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*trj 0.347 0.229 0.075
lab*tce 0.375 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)
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 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*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 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.01 0.0

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

Output: Colorimetric Offset Reflective System ORS18

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

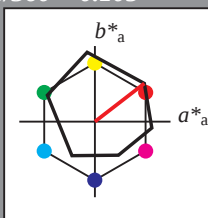
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$

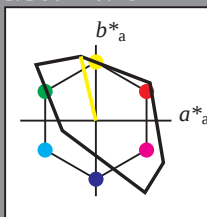
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



TLS18; adapted (a) CIELAB data					
	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.056 0.243
lab*tch 0.875 0.25 0.287
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 94.74 -5.0 21.23
LAB*LABa 94.74 -5.0 21.23
LAB*TCHa 87.5 21.82 103.26

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.991 -0.06 0.242
lab*tch 0.875 0.25 0.289
lab*nch 0.0 0.25 0.287
relative Natural Colour (NC)
lab*trj 0.991 -0.06 0.242
lab*tce 0.875 0.25 0.289
lab*nce 0.0 0.25 0.158

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.983 -0.114 0.487
lab*tch 0.75 0.5 0.287
lab*nch 0.0 0.5 0.287
relative Natural Colour (NC)
lab*trj 0.983 -0.121 0.485
lab*tce 0.75 0.5 0.289
lab*nce 0.0 0.5 0.158

OE560-7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

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

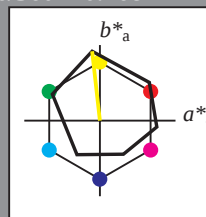
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

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

relative Inform. Technology (IT)
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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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*TCHa 75.00 0.01

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
lab*nch 0.0 0.25 0.268
relative Natural Colour (NC)
lab*trj 0.984 -0.024 0.249
lab*tce 0.875 0.25 0.266
lab*nce 0.0 0.25 0.068

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

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 304/360 = 0.845$

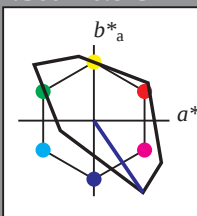
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



TLS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)					
olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8*	0.0	0.0	0.0	0.0	0.0
olv9*	0.0	0.0	0.0	0.0	0.0
olv10*	0.0	0.0	0.0	0.0	0.0
olv11*	0.0	0.0	0.0	0.0	0.0
olv12*	0.0	0.0	0.0	0.0	0.0
olv13*	0.0	0.0	0.0	0.0	0.0
olv14*	0.0	0.0	0.0	0.0	0.0
olv15*	0.0	0.0	0.0	0.0	0.0
olv16*	0.0	0.0	0.0	0.0	0.0
olv17*	0.0	0.0	0.0	0.0	0.0
olv18*	0.0	0.0	0.0	0.0	0.0
olv19*	0.0	0.0	0.0	0.0	0.0
olv20*	0.0	0.0	0.0	0.0	0.0
olv21*	0.0	0.0	0.0	0.0	0.0
olv22*	0.0	0.0	0.0	0.0	0.0
olv23*	0.0	0.0	0.0	0.0	0.0
olv24*	0.0	0.0	0.0	0.0	0.0
olv25*	0.0	0.0	0.0	0.0	0.0
olv26*	0.0	0.0	0.0	0.0	0.0
olv27*	0.0	0.0	0.0	0.0	0.0
olv28*	0.0	0.0	0.0	0.0	0.0
olv29*	0.0	0.0	0.0	0.0	0.0
olv30*	0.0	0.0	0.0	0.0	0.0
olv31*	0.0	0.0	0.0	0.0	0.0
olv32*	0.0	0.0	0.0	0.0	0.0
olv33*	0.0	0.0	0.0	0.0	0.0
olv34*	0.0	0.0	0.0	0.0	0.0
olv35*	0.0	0.0	0.0	0.0	0.0
olv36*	0.0	0.0	0.0	0.0	0.0
olv37*	0.0	0.0	0.0	0.0	0.0
olv38*	0.0	0.0	0.0	0.0	0.0
olv39*	0.0	0.0	0.0	0.0	0.0
olv40*	0.0	0.0	0.0	0.0	0.0
olv41*	0.0	0.0	0.0	0.0	0.0
olv42*	0.0	0.0	0.0	0.0	0.0
olv43*	0.0	0.0	0.0	0.0	0.0
olv44*	0.0	0.0	0.0	0.0	0.0
olv45*	0.0	0.0	0.0	0.0	0.0
olv46*	0.0	0.0	0.0	0.0	0.0
olv47*	0.0	0.0	0.0	0.0	0.0
olv48*	0.0	0.0	0.0	0.0	0.0
olv49*	0.0	0.0	0.0	0.0	0.0
olv50*	0.0	0.0	0.0	0.0	0.0
olv51*	0.0	0.0	0.0	0.0	0.0
olv52*	0.0	0.0	0.0	0.0	0.0
olv53*	0.0	0.0	0.0	0.0	0.0
olv54*	0.0	0.0	0.0	0.0	0.0
olv55*	0.0	0.0	0.0	0.0	0.0
olv56*	0.0	0.0	0.0	0.0	0.0
olv57*	0.0	0.0	0.0	0.0	0.0
olv58*	0.0	0.0	0.0	0.0	0.0
olv59*	0.0	0.0	0.0	0.0	0.0
olv60*	0.0	0.0	0.0	0.0	0.0
olv61*	0.0	0.0	0.0	0.0	0.0
olv62*	0.0	0.0	0.0	0.0	0.0
olv63*	0.0	0.0	0.0	0.0	0.0
olv64*	0.0	0.0	0.0	0.0	0.0
olv65*	0.0	0.0	0.0	0.0	0.0
olv66*	0.0	0.0	0.0	0.0	0.0
olv67*	0.0	0.0	0.0	0.0	0.0
olv68*	0.0	0.0	0.0	0.0	0.0
olv69*	0.0	0.0	0.0	0.0	0.0
olv70*	0.0	0.0	0.0	0.0	0.0
olv71*	0.0	0.0	0.0	0.0	0.0
olv72*	0.0	0.0	0.0	0.0	0.0
olv73*	0.0	0.0	0.0	0.0	0.0
olv74*	0.0	0.0	0.0	0.0	0.0
olv75*	0.0	0.0	0.0	0.0	0.0
olv76*	0.0	0.0	0.0	0.0	0.0
olv77*	0.0	0.0	0.0	0.0	0.0
olv78*	0.0	0.0	0.0	0.0	0.0
olv79*	0.0	0.0	0.0	0.0	0.0
olv80*	0.0	0.0	0.0	0.0	0.0
olv81*	0.0	0.0	0.0	0.0	0.0
olv82*	0.0	0.0	0.0	0.0	0.0
olv83*	0.0	0.0	0.0	0.0	0.0
olv84*	0.0	0.0	0.0	0.0	0.0
olv85*	0.0	0.0	0.0	0.0	0.0
olv86*	0.0	0.0	0.0	0.0	0.0
olv87*	0.0	0.0	0.0	0.0	0.0
olv88*	0.0	0.0	0.0	0.0	0.0
olv89*	0.0	0.0	0.0	0.0	0.0
olv90*	0.0	0.0	0.0	0.0	0.0
olv91*	0.0	0.0	0.0	0.0	0.0
olv92*	0.0	0.0	0.0	0.0	0.0
olv93*	0.0	0.0	0.0	0.0	0.0
olv94*	0.0	0.0	0.0	0.0	0.0
olv95*	0.0	0.0	0.0	0.0	0.0
olv96*	0.0	0.0	0.0	0.0	0.0
olv97*	0.0	0.0	0.0	0.0	0.0
olv98*	0.0	0.0	0.0	0.0	0.0
olv99*	0.0	0.0	0.0	0.0	0.0
olv100*	0.0	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)					
olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8*	0.0	0.0	0.0	0.0	0.0
olv9*	0.0	0.0	0.0	0.0	0.0
olv10*	0.0	0.0	0.0	0.0	0.0
olv11*	0.0	0.0	0.0	0.0	0.0
olv12*	0.0	0.0	0.0	0.0	0.0
olv13*	0.0	0.0	0.0	0.0	0.0
olv14*	0.0	0.0	0.0	0.0	0.0
olv15*	0.0	0.0	0.0	0.0	0.0
olv16*	0.0	0.0	0.0	0.0	0.0
olv17*	0.0	0.0	0.0	0.0	0.0
olv18*	0.0	0.0	0.0	0.0	0.0
olv19*	0.0	0.0	0.0	0.0	0.0
olv20*	0.0	0.0	0.0	0.0	0.0
olv21*	0.0	0.0	0.0	0.0	0.0
olv22*	0.0	0.0	0.0	0.0	0.0
olv23*	0.0	0.0	0.0	0.0	0.0
olv24*	0.0	0.0	0.0	0.0	0.0
olv25*	0.0	0.0	0.0	0.0	0.0
olv26*	0.0	0.0	0.0	0.0	0.0
olv27*	0.0	0.0	0.0	0.0	0.0
olv28*	0.0	0.0	0.0	0.0	0.0
olv29*	0.0	0.0	0.0	0.0	0.0
olv30*	0.0	0.0	0.0	0.0	0.0
olv31*	0.0	0.0	0.0	0.0	0.0
olv32*	0.0	0.0	0.0	0.0	0.0
olv33*	0.0	0.0	0.0	0.0	0.0
olv34*	0.0	0.0	0.0	0.0	0.0
olv35*	0.0	0.0	0.0	0.0	0.0
olv36*	0.0	0.0	0.0	0.0	0.0
olv37*	0.0	0.0	0.0	0.0	0.0
olv38*	0.0	0.0	0.0	0.0	0.0
olv39*	0.0	0.0	0.0	0.0	0.0
olv40*	0.0	0.0	0.0	0.0	0.0
olv41*	0.0	0.0	0.0	0.0	0.0
olv42*	0.0	0.0	0.0	0.0	0.0
olv43*	0.0	0.0	0.0	0.0	0.0
olv44*	0.0	0.0	0.0	0.0	0.0
olv45*	0.0	0.0	0.0	0.0	0.0
olv46*	0.0	0.0	0.0	0.0	0.0
olv47*	0.0	0.0	0.0	0.0	0.0
olv48*	0.0	0.0	0.0	0.0	0.0
olv49*	0.0	0.0	0.0	0.0	0.0
olv50*	0.0	0.0	0.0	0.0	0.0
olv51*	0.0	0.0	0.0	0.0	0.0
olv52*	0.0	0.0	0.0	0.0	0.0
olv53*	0.0	0.0	0.0	0.0	0.0
olv54*	0.0	0.0	0.0	0.0	0.0
olv55*	0.0	0.0	0.0	0.0	0.0
olv56*	0.0	0.0	0.0	0.0	0.0
olv57*	0.0	0.0	0.0	0.0	0.0
olv58*	0.0	0.0	0.0	0.0	0.0
olv59*	0.0	0.0	0.0	0.0	0.0
olv60*	0.0	0.0	0.0	0.0	0.0
olv61*	0.0	0.0	0.0	0.0	0.0
olv62*	0.0	0.0	0.0	0.0	0.0
olv63*	0.0	0.0	0.0	0.0	0.0
olv64*	0.0	0.0	0.0	0.0	0.0
olv65*	0.0	0.0	0.0	0.0	0.0
olv66*	0.0	0.0	0.0	0.0	0.0
olv67*	0.0	0.0	0.0	0.0	0.0
olv68*	0.0	0.0	0.0	0.0	0.0
olv69*	0.0	0.0	0.0	0.0	0.0
olv70*	0.0	0.0	0.0	0.0	0.0
olv71*	0.0	0.0	0.0	0.0	0.0
olv72*	0.0	0.0	0.0	0.0	0.0
olv73*	0.0	0.0	0.0	0.0	0.0
olv74*	0.0	0.0	0.0	0.0	0.0
olv75*	0.0	0.0	0.0	0.0	0.0
olv76*	0.0	0.0	0.0	0.0	0.0
olv77*	0.0	0.0	0.0	0.0	0.0
olv78*	0.0	0.0	0.0	0.0	0.0
olv79*	0.0	0.0	0.0	0.0	0.0
olv80*	0.0	0.0	0.0	0.0	0.0
olv81*	0.0	0.0	0.0	0.0	0.0
olv82*	0.0	0.0	0.0	0.0	0.0
olv83*	0.0	0.0	0.0	0.0	0.0
olv84*	0.0	0.0	0.0	0.0	0.0
olv85*	0.0	0.0	0.0	0.0	0.0
olv86*	0.0	0.0	0.0	0.0	0.0
olv87*	0.0	0.0	0.0	0.0	0.0
olv88*	0.0	0.0	0.0	0.0	0.0
olv89*	0.0	0.0	0.0	0.0	0.0
olv90*	0.0	0.0	0.0	0.0	0.0
olv91*	0.0	0.0	0.0	0.0	0.0
olv92*	0.0	0.0	0.0	0.0	0.0
olv93*	0.0	0.0	0.0	0.0	0.0
olv94*	0.0	0.0	0.0	0.0	0.0
olv95*	0.0	0.0	0.0	0.0	0.0
olv96*	0.0	0.0	0.0	0.0	0.0
olv97*	0.0	0.0	0.0	0.0	0.0
olv98*	0.0	0.0	0.0	0.0	0.0
olv99*	0.0	0.0	0.0	0.0	0.0
olv100*	0.0	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)					
olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8					

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$

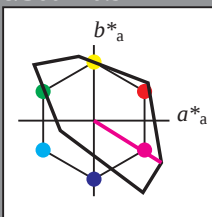
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 59 105 328

ol v^* Ma: 1.0 0.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)

ol v^*_3	1.0	1.0	1.0	(1.0)
ol v^*_2	0.0	0.0	0.0	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.0	0.0	0.0	(0.0)
ol v^*_{-3}	1.0	1.0	1.0	(1.0)

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 Inform. Technology (IT)

ol v^*_3	1.0	0.75	1.0	(1.0)
ol v^*_2	0.0	0.25	0.0	(0.0)
ol v^*_1	1.0	0.75	1.0	(1.0)
ol v^*_0	0.0	0.25	0.0	(0.0)
ol v^*_{-1}	1.0	0.75	1.0	(1.0)
ol v^*_{-2}	0.0	0.25	0.0	(0.0)
ol v^*_{-3}	1.0	0.75	1.0	(1.0)

standard and adapted CIELAB

LAB*Lab	86.31	22.32	-13.9
LAB*Lab	86.31	22.32	-13.9
LAB*Lab	86.31	22.32	-13.9

relative Inform. Technology (IT)

ol v^*_3	0.882	0.175	-0.177
ol v^*_2	0.875	0.25	0.874
ol v^*_1	0.875	0.25	0.874
ol v^*_0	0.875	0.25	0.874
ol v^*_{-1}	0.875	0.25	0.874
ol v^*_{-2}	0.875	0.25	0.874
ol v^*_{-3}	0.875	0.25	0.874

standard and adapted CIELAB

LAB*Lab	76.07	0.0	0.0
LAB*Lab	76.07	0.0	0.0
LAB*Lab	76.07	0.0	0.0

relative Inform. Technology (IT)

ol v^*_3	0.75	0.75	0.75	(1.0)
ol v^*_2	0.25	0.25	0.25	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.25	0.25	0.25	(0.0)
ol v^*_{-3}	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*Lab	66.96	22.33	-13.91
LAB*Lab	66.96	22.33	-13.91
LAB*Lab	66.96	22.33	-13.91

relative Inform. Technology (IT)

ol v^*_3	0.625	0.375	0.625	(1.0)
ol v^*_2	0.375	0.375	0.375	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.375	0.375	0.375	(0.0)
ol v^*_{-3}	0.625	0.375	0.625	(1.0)

standard and adapted CIELAB

LAB*Lab	56.72	0.0	0.0
LAB*Lab	56.72	0.0	0.0
LAB*Lab	56.72	0.0	0.0

relative Inform. Technology (IT)

ol v^*_3	0.5	0.5	0.5	(1.0)
ol v^*_2	0.5	0.5	0.5	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.5	0.5	0.5	(0.0)
ol v^*_{-3}	0.5	0.5	0.5	(1.0)

standard and adapted CIELAB

LAB*Lab	46.61	0.0	0.0
LAB*Lab	46.61	0.0	0.0
LAB*Lab	46.61	0.0	0.0

relative Inform. Technology (IT)

ol v^*_3	0.382	0.212	-0.131
ol v^*_2	0.375	0.25	0.911
ol v^*_1	0.375	0.25	0.911
ol v^*_0	0.375	0.25	0.911
ol v^*_{-1}	0.375	0.25	0.911
ol v^*_{-2}	0.375	0.25	0.911
ol v^*_{-3}	0.375	0.25	0.911

standard and adapted CIELAB

LAB*Lab	38.51	44.66	-27.82
LAB*Lab	38.51	44.66	-27.82
LAB*Lab	38.51	44.66	-27.82

relative Inform. Technology (IT)

ol v^*_3	0.25	0.0	0.0	(1.0)
ol v^*_2	0.75	1.0	0.75	(0.0)
ol v^*_1	0.75	1.0	0.75	(1.0)
ol v^*_0	0.25	0.0	0.0	(0.0)
ol v^*_{-1}	0.75	1.0	0.75	(1.0)
ol v^*_{-2}	0.75	1.0	0.75	(0.0)
ol v^*_{-3}	0.25	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	28.26	22.32	-13.9
LAB*Lab	28.26	22.32	-13.9
LAB*Lab	28.26	22.32	-13.9

relative Inform. Technology (IT)

ol v^*_3	0.132	0.212	-0.131
ol v^*_2	0.125	0.25	0.911
ol v^*_1	0.125	0.25	0.911
ol v^*_0	0.125	0.25	0.911
ol v^*_{-1}	0.125	0.25	0.911
ol v^*_{-2}	0.125	0.25	0.911
ol v^*_{-3}	0.125	0.25	0.911

standard and adapted CIELAB

LAB*Lab	18.03	18.03	0.0
LAB*Lab	18.03	18.03	0.0
LAB*Lab	18.03	18.03	0.0

relative Inform. Technology (IT)

ol v^*_3	0.0	0.0	0.0	(1.0)
ol v^*_2	1.0	1.0	1.0	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.0	0.0	0.0	(0.0)
ol v^*_{-3}	0.0	0.0	0.0	(1.0)

standard and adapted CIELAB

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

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O $_{Ma}$	52.76	71.63	49.88	87.29	35
Y $_{Ma}$	92.74	-20.02	84.97	87.3	103
L $_{Ma}$	84.0	-78.98	73.94	108.2	137
C $_{Ma}$	87.14	-44.41	-13.11	46.32	196
V $_{Ma}$	35.47	64.92	-95.06	115.12	304
M $_{Ma}$	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)

ol v^*_3	1.0	0.5	1.0	(1.0)
ol v^*_2	0.0	0.5	0.0	(0.0)
ol v^*_1	1.0	0.5	1.0	(1.0)
ol v^*_0	0.0	0.5	0.0	(0.0)
ol v^*_{-1}	1.0	0.5	1.0	(1.0)
ol v^*_{-2}	0.0	0.5	0.0	(0.0)
ol v^*_{-3}	1.0	0.5	1.0	(1.0)

standard and adapted CIELAB

LAB*Lab	77.21	44.66	-27.82
LAB*Lab	77.21	44.66	-27.82
LAB*Lab	77.21	44.66	-27.82

relative Inform. Technology (IT)

ol v^*_3	0.75	0.25	0.75	(1.0)
ol v^*_2	0.25	0.25	0.25	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.25	0.25	0.25	(0.0)
ol v^*_{-3}	0.75	0.25	0.75	(1.0)

standard and adapted CIELAB

LAB*Lab	68.11	66.99	-41.74
LAB*Lab	68.11	66.99	-41.74
LAB*Lab	68.11	66.99	-41.74

relative Inform. Technology (IT)

ol v^*_3	0.625	0.375	0.625	(1.0)
ol v^*_2	0.375	0.375	0.375	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.375	0.375	0.375	(0.0)
ol v^*_{-3}	0.625	0.375	0.625	(1.0)

standard and adapted CIELAB

LAB*Lab	57.86	44.67	-27.83
LAB*Lab	57.86	44.67	-27.83
LAB*Lab	57.86	44.67	-27.83

relative Inform. Technology (IT)

ol v^*_3	0.5	0.0	0.5	(1.0)
ol v^*_2	0.5	0.0	0.5	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.5	0.0	0.5	(0.0)
ol v^*_{-3}	0.5	0.0	0.5	(1.0)

standard and adapted CIELAB

LAB*Lab	46.61	0.0	0.0
LAB*Lab	46.61	0.0	0.0
LAB*Lab	46.61	0.0	0.0

relative Inform. Technology (IT)

ol v^*_3	0.382	0.212	-0.131
ol v^*_2	0.375	0.25	0.911
ol v^*_1	0.375	0.25	0.911
ol v^*_0	0.375	0.25	0.911
ol v^*_{-1}	0.375	0.25	0.911
ol v^*_{-2}	0.375	0.25	0.911
ol v^*_{-3}	0.375	0.25	0.911

standard and adapted CIELAB

LAB*Lab	38.51	44.66	-27.82
LAB*Lab	38.51	44.66	-27.82
LAB*Lab	38.51	44.66	-27.82

relative Inform. Technology (IT)

ol v^*_3	0.25	0.0	0.0	(1.0)
ol v^*_2	0.75	1.0	0.75	(0.0)
ol v^*_1	0.75	1.0	0.75	(1.0)
ol v^*_0	0.25	0.0	0.0	(0.0)
ol v^*_{-1}	0.75	1.0	0.75	(1.0)
ol v^*_{-2}	0.75	1.0	0.75	(0.0)
ol v^*_{-3}	0.25	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	28.26	22.32	-13.9
LAB*Lab	28.26	22.32	-13.9
LAB*Lab	28.26	22.32	-13.9

relative Inform. Technology (IT)

ol v^*_3	0.132	0.212	-0.131
ol v^*_2	0.125	0.25	0.911
ol v^*_1	0.125	0.25	0.911
ol v^*_0	0.125	0.25	0.911
ol v^*_{-1}	0.125	0.25	0.911
ol v^*_{-2}	0.125	0.25	0.911
ol v^*_{-3}	0.125	0.25	0.911

standard and adapted CIELAB

LAB*Lab	18.03	18.03	0.0
LAB*Lab	18.03	18.03	0.0
LAB*Lab	18.03	18.03	0.0

relative Inform. Technology (IT)

ol v^*_3	0.0	0.0	0.0	(1.0)
ol v^*_2	1.0	1.0	1.0	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.0	0.0	0.0	(0.0)
ol v^*_{-3}	0.0	0.0	0.0	(1.0)

standard and adapted CIELAB

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

Output: Colorimetric Offset Reflective System ORS18

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

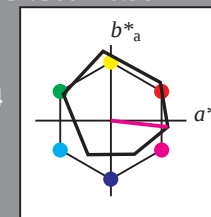
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

ol v^* Ma: 1.0 0.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)

ol v^*_3	1.0	1.0	1.0	(1.0)
ol v^*_2	0.0	0.0	0.0	(0.0)
ol v^*_1	1.0	1.0	1.0	(1.0)
ol v^*_0	0.0	0.0	0.0	(0.0)
ol v^*_{-1}	1.0	1.0	1.0	(1.0)
ol v^*_{-2}	0.0	0.0	0.0	(0.0)
ol v^*_{-3}	1.0	1.0	1.0	(1.0)

Input: Colorimetric Television Luminous System TLS18

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

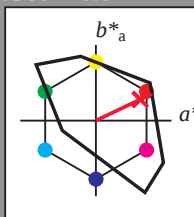
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



TLS18; adapted (a) CIELAB data					
	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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

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

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

relative Inform. Technology (IT)			
olv3*	0.5	0.285	1.0
olv3*	0.5	0.75	0.71
olv4*	1.0	0.75	0.785
olv4*	1.0	0.75	0.785
olv4*	0.0	0.25	0.215
standard and adapted CIELAB			
LAB*LAB	46.26	18.52	8.82
LAB*LABa	46.26	18.52	8.82
LAB*TCha	37.5	20.01	25.48
relative CIELAB lab*			
lab*lab	0.365	0.226	0.108
lab*tch	0.375	0.25	0.071
lab*tch	0.375	0.25	0.071
relative Natural Colour (NC)			
lab*lrj	0.365	0.25	0.0
lab*tce	0.375	0.25	1.0

Input: Colorimetric Television Luminous System TLS18

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

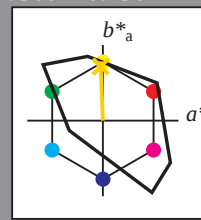
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
olvi3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	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
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.954	0.75	(1.0)
olvi3*	0.0	0.046	0.25	(0.0)
olvi4*	1.0	0.954	0.75	(1.0)
olvi4*	0.0	0.046	0.25	(0.0)
olvi4*	0.0	0.046	0.25	(0.0)
olvi4*	0.0	0.046	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	92.9	-0.79	19.62
LAB*Lab	92.9	-0.79	19.62
LAB*Lab	92.9	-0.79	19.62
LAB*Lab	92.9	-0.79	19.62

relative Inform. Technology (IT)

olvi3*	1.0	0.908	0.5	(1.0)
olvi3*	0.0	0.092	0.5	(0.0)
olvi4*	1.0	0.908	0.5	(1.0)
olvi4*	0.0	0.092	0.5	(0.0)
olvi4*	0.0	0.092	0.5	(0.0)
olvi4*	0.0	0.092	0.5	(0.0)

standard and adapted CIELAB

LAB*Lab	90.39	-1.58	39.25
LAB*Lab	90.39	-1.58	39.25
LAB*Lab	90.39	-1.58	39.25
LAB*Lab	90.39	-1.58	39.25

relative Inform. Technology (IT)

olvi3*	1.0	0.862	0.25	(1.0)
olvi3*	0.0	0.138	0.75	(0.0)
olvi4*	1.0	0.862	0.25	(1.0)
olvi4*	0.0	0.138	0.75	(0.0)
olvi4*	0.0	0.138	0.75	(0.0)
olvi4*	0.0	0.138	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	87.89	-2.38	58.88
LAB*Lab	87.89	-2.38	58.88
LAB*Lab	87.89	-2.38	58.88
LAB*Lab	87.89	-2.38	58.88

relative Inform. Technology (IT)

olvi3*	1.0	0.816	0.0	(1.0)
olvi3*	0.0	0.184	1.0	(0.0)
olvi4*	1.0	0.816	0.0	(1.0)
olvi4*	0.0	0.184	1.0	(0.0)
olvi4*	0.0	0.184	1.0	(0.0)
olvi4*	0.0	0.184	1.0	(0.0)

standard and adapted CIELAB

LAB*Lab	85.38	-3.17	78.5
LAB*Lab	85.38	-3.17	78.5
LAB*Lab	85.38	-3.17	78.5
LAB*Lab	85.38	-3.17	78.5

relative Inform. Technology (IT)

olvi3*	0.75	0.612	0.0	(1.0)
olvi3*	0.25	0.388	1.0	(0.0)
olvi4*	1.0	0.862	0.25	(1.0)
olvi4*	0.0	0.138	0.75	(0.0)
olvi4*	0.0	0.138	0.75	(0.0)
olvi4*	0.0	0.138	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	68.54	-5.87	58.88
LAB*Lab	68.54	-5.87	58.88
LAB*Lab	68.54	-5.87	58.88
LAB*Lab	68.54	-5.87	58.88

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	56.71	-2.24	21.4
LAB*Lab	56.71	-2.24	21.4
LAB*Lab	56.71	-2.24	21.4
LAB*Lab	56.71	-2.24	21.4

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
olvi3*	0.75	0.75	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	54.4	-0.89	23.91
LAB*Lab	54.4	-0.89	23.91
LAB*Lab	54.4	-0.89	23.91
LAB*Lab	54.4	-0.89	23.91

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	52.1	-0.89	23.91
LAB*Lab	52.1	-0.89	23.91
LAB*Lab	52.1	-0.89	23.91
LAB*Lab	52.1	-0.89	23.91

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
olvi3*	0.75	0.75	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	50.0	-0.89	23.91
LAB*Lab	50.0	-0.89	23.91
LAB*Lab	50.0	-0.89	23.91
LAB*Lab	50.0	-0.89	23.91

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
olvi3*	0.75	0.75	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	37.37	-0.0	0.0
LAB*Lab	37.37	-0.0	0.0
LAB*Lab	37.37	-0.0	0.0
LAB*Lab	37.37	-0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	34.85	-0.78	19.62
LAB*Lab	34.85	-0.78	19.62
LAB*Lab	34.85	-0.78	19.62
LAB*Lab	34.85	-0.78	19.62

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
olvi3*	0.75	0.75	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	32.31	-0.0	0.0
LAB*Lab	32.31	-0.0	0.0
LAB*Lab	32.31	-0.0	0.0
LAB*Lab	32.31	-0.0	0.0

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	30.0	-0.0	0.0
LAB*Lab	30.0	-0.0	0.0
LAB*Lab	30.0	-0.0	0.0
LAB*Lab	30.0	-0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
olvi3*	0.75	0.75	0.0	(1.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	27.5	-0.0	0.0
LAB*Lab	27.5	-0.0	0.0
LAB*Lab	27.5	-0.0	0.0
LAB*Lab	27.5	-0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	18.02	0.0	0.0
LAB*Lab	18.02	0.0	0.0
LAB*Lab	18.02	0.0	0.0
LAB*Lab	18.02	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	16.0	0.0	0.0
LAB*Lab	16.0	0.0	0.0
LAB*Lab	16.0	0.0	0.0
LAB*Lab	16.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	14.0	0.0	0.0
LAB*Lab	14.0	0.0	0.0
LAB*Lab	14.0	0.0	0.0
LAB*Lab	14.0	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	12.5	0.0	0.0
LAB*Lab	12.5	0.0	0.0
LAB*Lab	12.5	0.0	0.0
LAB*Lab	12.5	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
olvi3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)
olvi4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	11.0	0.0	0.0
LAB*Lab	11.0	0.0	0.0
LAB*Lab	11.0	0.0	0.0
LAB*Lab	11.0	0.0	0.0

OE560-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18

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

input: $cmv0^* \text{ setcmvcolor}$

output: $cmv0^* / 000n^* \text{ setcmvcolor}$

Input: Colorimetric Television Luminous System TLS18

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

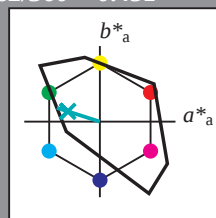
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



TLS18; adapted (a) CIELAB data

	$L^*=L_a$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

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

relative Inform. Technology (IT)
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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01

relative CIELAB lab*
lab*lab 0.75 0.75 0.75 (1.0)
lab*tch 0.75 0.75 0.75 (1.0)
lab*nch 0.25 0.25 0.25 (0.0)
relative Natural Colour (NC)
lab*trj 0.75 0.75 0.75 (1.0)
lab*tce 0.75 0.75 0.75 (1.0)
lab*nce 0.25 0.25 0.25 (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 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*TCHa 50.0 0.01

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 0.0 0.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.5 0.5 0.5 (1.0)
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.0 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 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01

relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.25 0.25 0.25 (1.0)
lab*nch 0.0 0.0 0.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.25 (1.0)
lab*tce 0.25 0.25 0.25 (1.0)
lab*nce 0.0 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 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01

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

$n^* = 1.0$

relative Inform. Technology (IT)
olv3* 0.75 1.0 0.91 (1.0)
cmyn3* 0.25 0.0 0.09 (0.0)
olv4* 0.75 1.0 0.91 (1.0)
cmyn4* 0.25 0.0 0.09 (0.0)
standard and adapted CIELAB
LAB*LAB 93.05 -14.2 4.55
LAB*LABa 93.05 -14.2 4.55
LAB*TCHa 97.5 14.92 162.24

relative CIELAB lab*
lab*lab 0.97 -0.237 0.076
lab*tch 0.875 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.97 -0.249 0.0
lab*tce 0.875 0.25 0.451
lab*nce 0.0 0.25 0.451

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.66 (1.0)
cmyn3* 0.5 0.25 0.34 (0.0)
olv4* 0.75 1.0 0.91 (0.75)
cmyn4* 0.25 0.0 0.09 (0.25)
standard and adapted CIELAB
LAB*LAB 73.71 -14.21 4.56
LAB*LABa 73.71 -14.21 4.56
LAB*TCHa 62.5 14.93 162.22

relative CIELAB lab*
lab*lab 0.72 -0.237 0.076
lab*tch 0.625 0.25 0.451
lab*nch 0.25 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.72 -0.249 0.0
lab*tce 0.625 0.25 0.451
lab*nce 0.25 0.25 0.451

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.41 (1.0)
cmyn3* 0.75 0.5 0.59 (0.0)
olv4* 0.75 1.0 0.91 (0.5)
cmyn4* 0.25 0.0 0.09 (0.5)
standard and adapted CIELAB
LAB*LAB 54.36 -14.21 4.56
LAB*LABa 54.36 -14.21 4.56
LAB*TCHa 37.5 14.93 162.22

relative CIELAB lab*
lab*lab 0.47 -0.237 0.076
lab*tch 0.375 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.47 -0.249 0.0
lab*tce 0.375 0.25 0.451
lab*nce 0.0 0.25 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.33 (1.0)
cmyn3* 1.0 0.5 0.68 (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 32.01 -28.42 9.12
LAB*LABa 32.01 -28.42 9.12
LAB*TCHa 25.01 29.86 162.22

relative CIELAB lab*
lab*lab 0.439 -0.475 0.153
lab*tch 0.25 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.439 -0.499 0.0
lab*tce 0.25 0.5 0.451
lab*nce 0.0 0.5 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.17 (1.0)
cmyn3* 1.0 0.75 0.84 (0.0)
olv4* 1.0 1.0 1.0 (0.25)
cmyn4* 0.0 0.0 0.0 (0.25)
standard and adapted CIELAB
LAB*LAB 22.01 -42.4 4.56
LAB*LABa 22.01 -42.4 4.56
LAB*TCHa 12.5 14.93 162.21

relative CIELAB lab*
lab*lab 0.22 -0.237 0.076
lab*tch 0.125 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.22 -0.249 0.0
lab*tce 0.125 0.25 0.451
lab*nce 0.0 0.25 0.451

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.82 (1.0)
cmyn3* 0.5 0.0 0.18 (0.0)
olv4* 0.5 1.0 0.82 (1.0)
cmyn4* 0.5 0.0 0.18 (0.0)
standard and adapted CIELAB
LAB*LAB 90.7 -28.42 9.11
LAB*LABa 90.7 -28.42 9.11
LAB*TCHa 75.0 29.85 162.23

relative CIELAB lab*
lab*lab 0.939 -0.475 0.153
lab*tch 0.75 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.939 -0.499 0.0
lab*tce 0.75 0.5 0.451
lab*nce 0.0 0.5 0.451

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.57 (1.0)
cmyn3* 0.75 0.25 0.45 (0.0)
olv4* 0.5 1.0 0.82 (0.75)
cmyn4* 0.5 0.0 0.18 (0.25)
standard and adapted CIELAB
LAB*LAB 71.36 -28.42 9.12
LAB*LABa 71.36 -28.42 9.12
LAB*TCHa 50.0 29.86 162.22

relative CIELAB lab*
lab*lab 0.689 -0.475 0.153
lab*tch 0.5 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.689 -0.499 0.0
lab*tce 0.5 0.5 0.451
lab*nce 0.0 0.5 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.48 (1.0)
cmyn3* 1.0 0.25 0.52 (0.0)
olv4* 0.25 1.0 0.73 (0.75)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 69.01 -42.64 13.68
LAB*LABa 69.01 -42.64 13.68
LAB*TCHa 37.51 44.79 162.23

relative CIELAB lab*
lab*lab 0.659 -0.713 0.229
lab*tch 0.375 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.659 -0.749 0.0
lab*tce 0.375 0.75 0.451
lab*nce 0.0 0.75 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.41 (1.0)
cmyn3* 1.0 0.5 0.59 (0.0)
olv4* 0.5 1.0 0.91 (0.5)
cmyn4* 0.0 0.0 0.09 (0.5)
standard and adapted CIELAB
LAB*LAB 54.36 -14.21 4.56
LAB*LABa 54.36 -14.21 4.56
LAB*TCHa 37.5 14.93 162.22

relative CIELAB lab*
lab*lab 0.47 -0.237 0.076
lab*tch 0.375 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.47 -0.249 0.0
lab*tce 0.375 0.25 0.451
lab*nce 0.0 0.25 0.451

$n^* = 0.25$

relative Inform. Technology (IT)
olv3* 0.25 1.0 0.64 (1.0)
cmyn3* 0.75 0.0 0.36 (0.0)
olv4* 0.25 1.0 0.64 (1.0)
cmyn4* 0.75 0.0 0.36 (0.0)
standard and adapted CIELAB
LAB*LAB 88.35 -42.63 13.67
LAB*LABa 88.35 -42.63 13.67
LAB*TCHa 62.5 44.78 162.23

relative CIELAB lab*
lab*lab 0.909 -0.713 0.229
lab*tch 0.625 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.909 -0.749 0.0
lab*tce 0.625 0.75 0.451
lab*nce 0.0 0.75 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.48 (1.0)
cmyn3* 1.0 0.25 0.52 (0.0)
olv4* 0.25 1.0 0.73 (0.75)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 69.01 -42.64 13.68
LAB*LABa 69.01 -42.64 13.68
LAB*TCHa 37.51 44.79 162.23

relative CIELAB lab*
lab*lab 0.659 -0.713 0.229
lab*tch 0.375 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.659 -0.749 0.0
lab*tce 0.375 0.75 0.451
lab*nce 0.0 0.75 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.17 (1.0)
cmyn3* 1.0 0.75 0.84 (0.0)
olv4* 0.25 1.0 0.91 (0.25)
cmyn4* 0.0 0.0 0.09 (0.25)
standard and adapted CIELAB
LAB*LAB 22.01 -42.4 4.56
LAB*LABa 22.01 -42.4 4.56
LAB*TCHa 12.5 14.93 162.21

relative CIELAB lab*
lab*lab 0.22 -0.237 0.076
lab*tch 0.125 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.22 -0.249 0.0
lab*tce 0.125 0.25 0.451
lab*nce 0.0 0.25 0.451

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 0.0
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

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

$n^* = 0.00$

blackness n^*

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

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

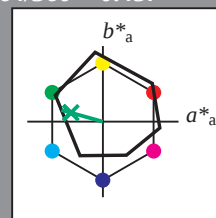
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



ORS18; adapted (a) CIELAB data

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

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

relative Inform. Technology (IT)
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*TCHa 75.0 0.01

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

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.66 (1.0)
cmyn3* 0.5 0.25 0.34 (0.0)
olv4* 0.75 1.0 0.91 (0.75)
cmyn4* 0.25 0.0 0.09 (0.25)
standard and adapted CIELAB
LAB*LAB 65.41 -14.11 6.35
LAB*LABa 65.41 -14.11 6.35
LAB*TCHa 62.5 14.23 164.45

relative CIELAB lab*
lab*lab 0.725 -0.499 0.0
lab*tch 0.625 0.25 0.457
lab*nch 0.25 0.25 0.457
relative Natural Colour (NC)
lab*trj 0.725 -0.499 0.0
lab*tce 0.625 0.25 0.457
lab*nce 0.25 0.25 0.457

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.41 (1.0)
cmyn3* 0.75 0.5 0.59 (0.0)
olv4* 0.75 1.0 0.91 (0.5)
cmyn4* 0.25 0.0 0.09 (0.5)
standard and adapted CIELAB
LAB*LAB 54.76 -27.61 9.64
LAB*LABa 54.76 -27.61 9.64
LAB*TCHa 50.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.475 -0.499 0.0
lab*tch 0.375 0.5 0.457
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*trj 0.475 -0.499 0.0
lab*tce 0.375 0.5 0.457
lab*nce 0.0 0.5 0.457

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.48 (1.0)
cmyn3* 1.0 0.25 0.52 (0.0)
olv4* 0.25 1.0 0.73 (0.75)
cmyn4* 0.0 0.0 0.0 (0.75)
standard and adapted CIELAB
LAB*LAB 65.41 -14.11 6.35
LAB*LABa 65.41 -14.11 6.35
LAB*TCHa 37.5 14.23 164.45

relative CIELAB lab*
lab*lab 0.659 -0.749 0.0
lab*tch 0.375 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.659 -0.749 0.0
lab*tce 0.375 0.75 0.457
lab*nce 0.0 0.75 0.457

$n^* = 0.00$

blackness $n^*</$

Input: Colorimetric Television Luminous System TLS18

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

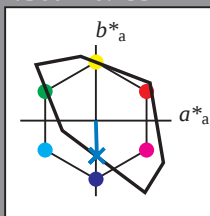
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



TLS18; adapted (a) CIELAB data					
	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	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

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)		
olv3*	1.0	1.0
olv4*	0.0	0.0
olv5*	0.0	0.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	95.41	0.0
LAB*LABa	95.41	0.0
LAB*LABb	99.99	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.895
olv4*	0.25	0.105
olv5*	0.75	0.895
cmyn3*	0.25	0.105
cmyn4*	0.75	0.895
cmyn5*	0.25	0.105
LAB*LAB	87.52	0.35
LAB*LABa	87.52	0.35
LAB*LABb	87.52	0.35

relative Inform. Technology (IT)		
olv3*	0.75	0.895
olv4*	0.25	0.105
olv5*	0.75	0.895
cmyn3*	0.25	0.105
cmyn4*	0.75	0.895
cmyn5*	0.25	0.105
LAB*LAB	87.52	0.35
LAB*LABa	87.52	0.35
LAB*LABb	87.52	0.35

relative Inform. Technology (IT)		
olv3*	0.75	0.895
olv4*	0.25	0.105
olv5*	0.75	0.895
cmyn3*	0.25	0.105
cmyn4*	0.75	0.895
cmyn5*	0.25	0.105
LAB*LAB	87.52	0.35
LAB*LABa	87.52	0.35
LAB*LABb	87.52	0.35

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa	76.07	0.0
LAB*LABb	75.00	0.01

relative Inform. Technology (IT)		
olv3*	0.75	0.75
olv4*	0.25	0.25
olv5*	1.0	1.0
cmyn3*	0.0	0.0
cmyn4*	0.0	0.0
cmyn5*	0.0	0.0
LAB*LAB	76.07	0.0
LAB*LABa		