

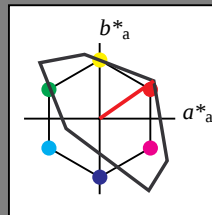
Input: Colorimetric Television Luminous System TLS18

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

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

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness



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

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

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

1,00

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 1.0 1.0 1.0 (1.0)	lab*lab 1.0 0.0 0.0	lab*lab 1.0 0.0 0.0
cmyn3* 0.0 0.0 0.0 (0.0)	lab*tch 1.0 0.0 0.0	lab*tch 1.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 95.41 -0.98 4.75	LAB*LAB 95.41 -0.98 4.75
LAB*LAB 95.41 -0.98 4.75	LAB*TChA 99.99 0.01 0.0	LAB*TChA 99.99 0.01 0.0
relative CIELAB lab*	lab*lab 1.0 0.0 0.0	lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0	lab*tch 1.0 0.0 0.0	lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 95.41 -0.98 4.75	LAB*LAB 95.41 -0.98 4.75
LAB*LAB 95.41 -0.98 4.75	LAB*TChA 99.99 0.01 0.0	LAB*TChA 99.99 0.01 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.75 0.75 0.75 (1.0)	lab*lab 0.75 0.0 0.0	lab*lab 0.75 0.0 0.0
cmyn3* 0.25 0.25 0.25 (0.0)	lab*tch 0.75 0.0 0.0	lab*tch 0.75 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 76.06 -0.61 3.44	LAB*LAB 76.06 -0.61 3.44
LAB*LAB 76.06 -0.61 3.44	LAB*TChA 75.0 0.01 0.0	LAB*TChA 75.0 0.01 0.0
relative CIELAB lab*	lab*lab 0.75 0.0 0.0	lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0	lab*tch 0.75 0.0 0.0	lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 64.19 15.96 15.28	LAB*LAB 64.19 15.96 15.28
LAB*LAB 64.19 15.96 15.28	LAB*TChA 62.5 20.66 37.69	LAB*TChA 62.5 20.66 37.69

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.5 0.5 0.5 (1.0)	lab*lab 0.5 0.0 0.0	lab*lab 0.5 0.0 0.0
cmyn3* 0.5 0.5 0.5 (0.0)	lab*tch 0.5 0.0 0.0	lab*tch 0.5 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 56.71 0.24 2.14	LAB*LAB 56.71 0.24 2.14
LAB*LAB 56.71 0.24 2.14	LAB*TChA 50.0 0.01 0.0	LAB*TChA 50.0 0.01 0.0
relative CIELAB lab*	lab*lab 0.5 0.0 0.0	lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0	lab*tch 0.5 0.0 0.0	lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 44.84 16.33 13.97	LAB*LAB 44.84 16.33 13.97
LAB*LAB 44.84 16.33 13.97	LAB*TChA 37.5 20.66 37.69	LAB*TChA 37.5 20.66 37.69

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.25 0.25 0.25 (1.0)	lab*lab 0.25 0.0 0.0	lab*lab 0.25 0.0 0.0
cmyn3* 0.75 0.75 0.75 (0.0)	lab*tch 0.25 0.0 0.0	lab*tch 0.25 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 37.36 0.13 0.83	LAB*LAB 37.36 0.13 0.83
LAB*LAB 37.36 0.13 0.83	LAB*TChA 25.0 0.01 0.0	LAB*TChA 25.0 0.01 0.0
relative CIELAB lab*	lab*lab 0.25 0.0 0.0	lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0	lab*tch 0.25 0.0 0.0	lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 25.5 16.34 12.62	LAB*LAB 25.5 16.34 12.62
LAB*LAB 25.5 16.34 12.62	LAB*TChA 12.5 20.66 37.69	LAB*TChA 12.5 20.66 37.69

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 18.02 0.5 -0.47	LAB*LAB 18.02 0.5 -0.47
LAB*LAB 18.02 0.5 -0.47	LAB*TChA 0.01 0.01 0.0	LAB*TChA 0.01 0.01 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

relative Inform. Technology (IT)	relative CIELAB lab*	relative Natural Colour (NC)
olvi3* 0.0 0.0 0.0 (1.0)	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
cmyn3* 1.0 1.0 1.0 (0.0)	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
olvi4* 1.0 1.0 1.0 (1.0)	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 (0.0)	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0
relative CIELAB lab*	lab*lab 0.0 0.0 0.0	lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0	lab*tch 0.0 0.0 0.0
lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0	lab*nch 0.0 0.0 0.0
lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0	lab*trj 1.0 0.0 0.0
standard and adapted CIELAB	LAB*LAB 0.0 0.0 0.0	LAB*LAB 0.0 0.0 0.0
LAB*LAB 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0	LAB*TChA 0.0 0.0 0.0

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input

output: no change compared to input

output: no change compared to input

OE460-7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

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5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

input: $cmY0^* setcmykcolor$

Input: Colorimetric Television Luminous System TLS18

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

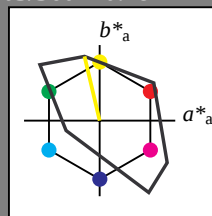
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness



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

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

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

Output: Colorimetric Offset Reflective System ORS18

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

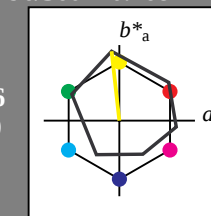
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness



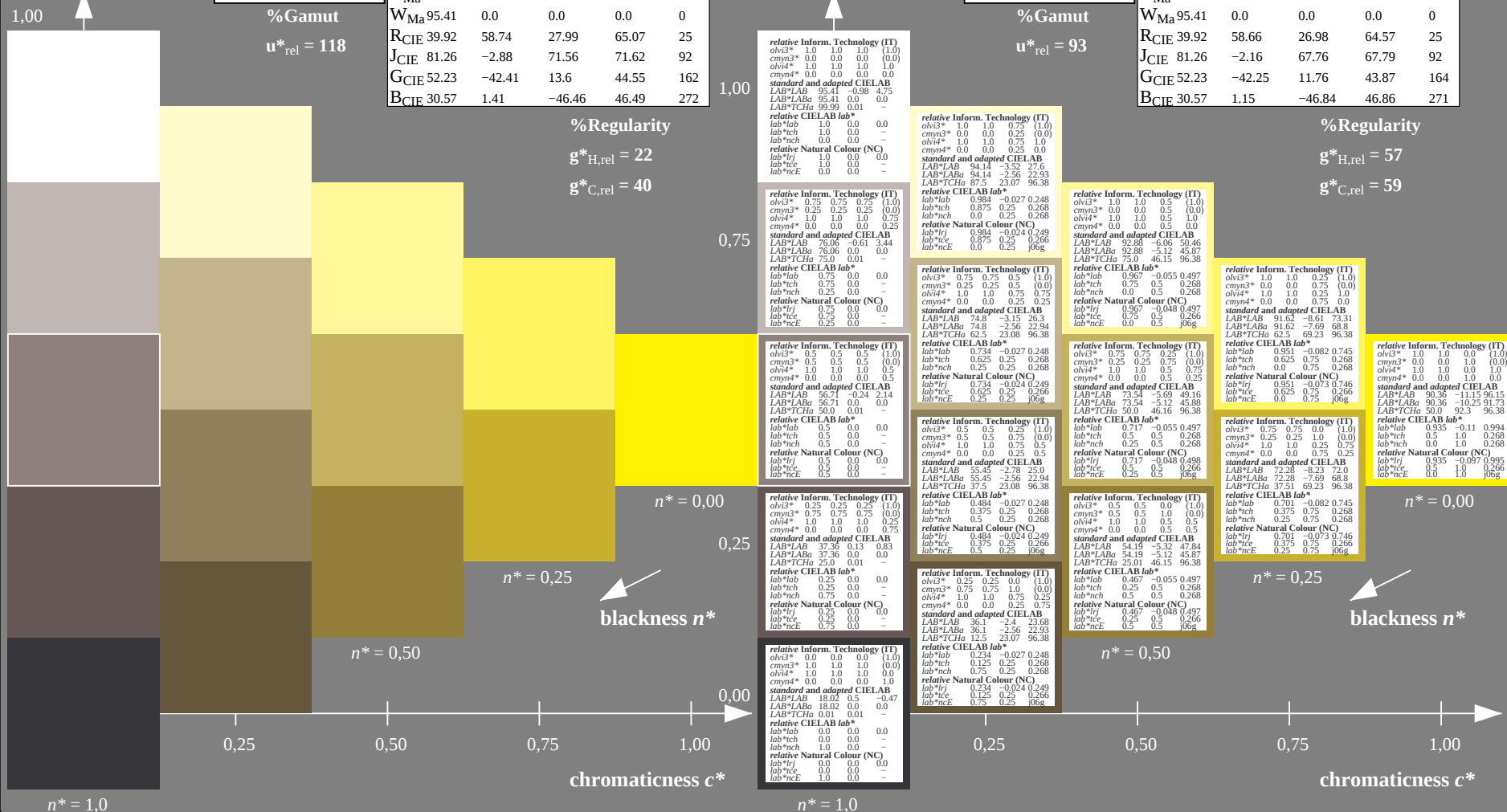
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

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

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



OE460-7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: *cmv0* setcmvcolor*

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 137/360 = 0.38$

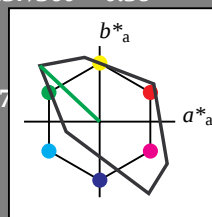
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

OE460-7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)



BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Offset Reflective System ORS18

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

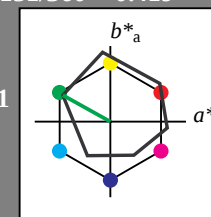
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness



%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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

input: $cmY0^* \text{ set } cmYkcolor$

output: no change compared to input

Page: count:

Input: Colorimetric Television Luminous System TLS18

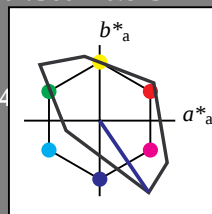
for hue $h^* = lab \cdot h = 304/360 = 0.845$

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

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00



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

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

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

1,00

Output: Colorimetric Offset Reflective System ORS18

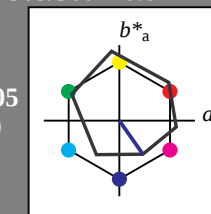
for hue $h^* = lab \cdot h = 305/360 = 0.847$

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

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00



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

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

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

1,00

BAM registration: 20060101-OE46/10Q/Q46E04NP.PS/.PDF

application for evaluation and measurement of printer or monitor systems

BAM material: code=rhda4a
/OE46 Form 5/10, Serie: 1/1, Page: 5
Page count: 5

OE460-7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

input: $cmY0^* \text{ set } cmYkcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

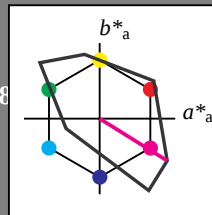
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

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

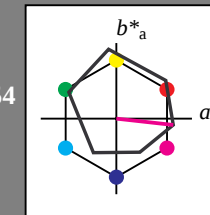
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

OE460-7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

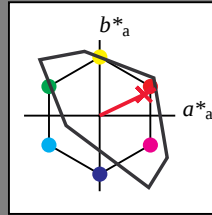
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness



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

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

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

1,00

0,75

0,25

0,00

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

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

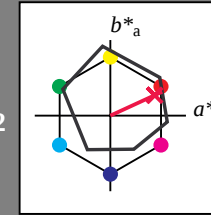
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness



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

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

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

0,75

0,50

chromaticness c^*

OE460-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

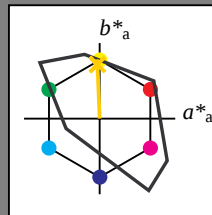
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

OE460-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Offset Reflective System ORS18

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

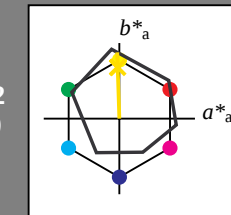
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness



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

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

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

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

input: $cmy0^* \cdot setcmykcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

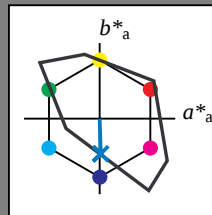
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

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

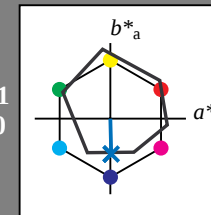
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness



%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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

$n^* = 0,50$

$n^* = 0,25$

blackness n^*

chromaticness c^*

OE460-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart OE46; Colorimetric systems TLS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* \text{ set } cmykcolor$

output: no change compared to input