

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 172/360 = 0.479$

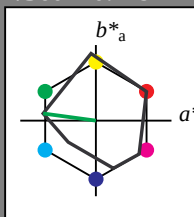
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.75 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 1.0 0.75 1.0 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 84.58 -18.19 6.39
LAB*LABa 84.58 -17.42 2.36
LAB*TCHa 97.5 17.59 172.29

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 73.75 -35.42 8.02
LAB*LABa 73.75 -34.85 4.72
LAB*TCHa 75.0 35.18 172.29

relative Inform. Technology (IT)
olvi3* 0.25 1.0 0.25 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.25 1.0 0.25 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 62.93 -52.64 9.65
LAB*LABa 62.93 -52.28 7.08
LAB*TCHa 62.5 52.77 172.29

relative Inform. Technology (IT)
olvi3* 0.0 1.0 0.0 (1.0)
cmyn3* 1.0 0.0 1.0 (0.0)
olvi4* 0.0 1.0 0.0 (1.0)
cmyn4* 1.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 52.11 -69.86 11.28
LAB*LABa 52.11 -69.71 9.44
LAB*TCHa 50.0 70.36 172.29

relative Inform. Technology (IT)
olvi3* 0.0 0.75 0.0 (1.0)
cmyn3* 0.75 0.0 0.75 (0.0)
olvi4* 0.0 0.75 0.0 (1.0)
cmyn4* 0.75 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 44.41 -35.05 6.71
LAB*LABa 44.41 -34.86 4.72
LAB*TCHa 50.0 35.19 172.29

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.0 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.0 0.5 0.0 (1.0)
cmyn4* 0.5 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 33.33 -24.41 -0.085
LAB*LABa 33.33 -24.41 -0.085
LAB*TCHa 30.0 25.0 80.76

relative Inform. Technology (IT)
olvi3* 0.0 0.25 0.0 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.0 0.25 0.0 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 25.00 -17.42 2.36
LAB*LABa 25.00 -17.42 2.36
LAB*TCHa 25.0 17.59 172.29

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 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 0.01 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.0 0.0 0.0 (1.0)
cmyn4* 1.0 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 0.01 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 1.0 0.25 1.0 (0.0)
cmyn4* 0.0 0.25 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 0.0

UE55-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

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

BAM-test chart UE55; Colorimetric systems ORS18 & ORS18

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

input: $cmY0^* setcmykcolor$

output: $Startup (S)$ data dependend

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 290/360 = 0.806$

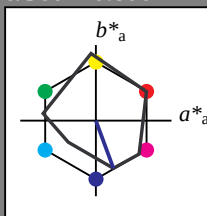
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 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 -
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 -
lab*nce 0.0 0.0 -

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.81 0.086 -0.234
lab*tch 0.875 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.81 0.064 -0.24
lab*tce 0.875 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.25 0.806
lab*tch 0.75 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.75 0.25 0.806
lab*tce 0.75 0.25 0.806
lab*nce 0.0 0.25 0.806

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.806
lab*tch 0.625 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.56 0.064 -0.241
lab*tce 0.625 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.806
lab*tch 0.625 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.56 0.064 -0.241
lab*tce 0.625 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.61 -0.38 0.83
LAB*LABa 37.61 0.0 0.0
LAB*TCHa 25.0 0.01 -

relative CIELAB lab*
lab*lab 0.31 0.086 -0.234
lab*tch 0.375 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.31 0.064 -0.241
lab*tce 0.375 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

UE55-7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

BAM-test chart UE55; Colorimetric systems ORS18 & ORS18

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

Output: Colorimetric Reflective System ORS18

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

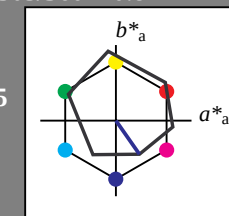
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 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 -
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 -
lab*nce 0.0 0.0 -

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.81 0.086 -0.234
lab*tch 0.875 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.81 0.064 -0.24
lab*tce 0.875 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 -

relative CIELAB lab*
lab*lab 0.75 0.25 0.806
lab*tch 0.75 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.75 0.25 0.806
lab*tce 0.75 0.25 0.806
lab*nce 0.0 0.25 0.806

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.806
lab*tch 0.625 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.56 0.064 -0.241
lab*tce 0.625 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.25 0.806
lab*tch 0.625 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.56 0.064 -0.241
lab*tce 0.625 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.61 -0.38 0.83
LAB*LABa 37.61 0.0 0.0
LAB*TCHa 25.0 0.01 -

relative CIELAB lab*
lab*lab 0.31 0.086 -0.234
lab*tch 0.375 0.25 0.806
lab*nch 0.0 0.25 0.806
relative Natural Colour (NC)
lab*trj 0.31 0.064 -0.241
lab*tce 0.375 0.25 0.791
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.46
LAB*TCHa 0.01 0.01 -

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

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

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependent

Input: Colorimetric Reflective System MRS18

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

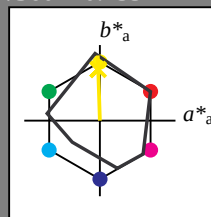
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

relative Inform. Technology (IT)
olvi3* 1.0 0.988 0.75 (1.0)
cmyn3* 0.0 0.012 0.25 (0.0)
olvi4* 1.0 0.988 0.75 (1.0)
cmyn4* 0.0 0.012 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 93.72 -1.64 26.21
LAB*LABa 93.72 -0.69 21.57
LAB*TCHa 97.5 21.58 91.86

relative Inform. Technology (IT)
olvi3* 1.0 0.978 0.75 (1.0)
cmyn3* 0.0 0.024 0.5 (0.0)
olvi4* 1.0 0.978 0.75 (1.0)
cmyn4* 0.0 0.024 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 92.04 -2.3 47.67
LAB*LABa 92.04 -1.29 43.14
LAB*TCHa 75.0 43.16 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.963 0.5 (1.0)
cmyn3* 0.0 0.037 0.75 (0.0)
olvi4* 1.0 0.963 0.5 (1.0)
cmyn4* 0.0 0.037 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 90.36 -2.96 69.13
LAB*LABa 90.36 -2.08 64.71
LAB*TCHa 62.5 64.74 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.951 0.0 (1.0)
cmyn3* 0.0 0.049 1.0 (0.0)
olvi4* 1.0 0.951 0.0 (1.0)
cmyn4* 0.0 0.049 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 88.68 -3.62 90.58
LAB*LABa 88.68 -2.77 86.27
LAB*TCHa 50.0 86.32 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.933 0.0 (1.0)
cmyn3* 0.0 0.062 1.0 (0.0)
olvi4* 1.0 0.933 0.0 (1.0)
cmyn4* 0.0 0.062 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.85 -4.38 91.85
LAB*LABa 86.85 -3.43 87.34
LAB*TCHa 37.51 64.74 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.913 -0.031 0.999
olvi4* 1.0 0.913 0.0 (0.0)
cmyn3* 0.0 0.085 0.5 (0.0)
cmyn4* 0.0 0.085 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 84.88 -5.15 91.85
LAB*LABa 84.88 -4.20 87.34
LAB*TCHa 25.01 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.888 0.0 (1.0)
cmyn3* 0.0 0.107 1.0 (0.0)
olvi4* 1.0 0.888 0.0 (1.0)
cmyn4* 0.0 0.107 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.99 -5.83 91.85
LAB*LABa 82.99 -4.88 87.34
LAB*TCHa 12.5 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.868 -0.023 0.75
olvi4* 1.0 0.868 0.0 (0.0)
cmyn3* 0.0 0.125 0.5 (0.0)
cmyn4* 0.0 0.125 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 81.15 -6.51 91.85
LAB*LABa 81.15 -5.56 87.34
LAB*TCHa 0.01 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.848 0.0 (1.0)
cmyn3* 0.0 0.143 1.0 (0.0)
olvi4* 1.0 0.848 0.0 (1.0)
cmyn4* 0.0 0.143 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 79.31 -7.19 91.85
LAB*LABa 79.31 -6.24 87.34
LAB*TCHa -1.4 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.828 0.0 (1.0)
cmyn3* 0.0 0.161 1.0 (0.0)
olvi4* 1.0 0.828 0.0 (1.0)
cmyn4* 0.0 0.161 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 77.47 -7.87 91.85
LAB*LABa 77.47 -6.92 87.34
LAB*TCHa -2.8 43.16 91.84

MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.25$

blackness n^*

$n^* = 0.50$

$n^* = 1.0$

0.25

0.50

0.75

1.00

chromaticness c^*

$n^* = 1.0$

0.25

0.50

0.75

1.00

chromaticness c^*

Output: Colorimetric Reflective System ORS18

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

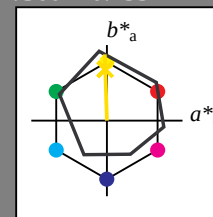
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

rgb*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

relative Inform. Technology (IT)
olvi3* 1.0 0.975 0.75 (1.0)
cmyn3* 0.0 0.025 0.25 (0.0)
olvi4* 1.0 0.975 0.75 (1.0)
cmyn4* 0.0 0.025 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 93.1 -1.64 26.52
LAB*LABa 93.1 0.7 21.92
LAB*TCHa 87.5 21.93 91.86

relative Inform. Technology (IT)
olvi3* 1.0 0.975 0.75 (1.0)
cmyn3* 0.0 0.025 0.25 (0.0)
olvi4* 1.0 0.975 0.75 (1.0)
cmyn4* 0.0 0.025 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 90.8 -2.3 48.29
LAB*LABa 90.8 -1.41 43.85
LAB*TCHa 75.0 43.87 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.951 0.5 (1.0)
cmyn3* 0.0 0.049 0.5 (0.0)
olvi4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.049 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 88.49 -2.96 70.06
LAB*LABa 88.49 -2.11 65.77
LAB*TCHa 62.5 65.81 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.926 0.25 (1.0)
cmyn3* 0.0 0.074 0.75 (0.0)
olvi4* 1.0 0.926 0.25 (1.0)
cmyn4* 0.0 0.074 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 86.89 -3.62 91.83
LAB*LABa 86.89 -2.82 87.69
LAB*TCHa 50.0 87.73 91.85

relative Inform. Technology (IT)
olvi3* 1.0 0.901 0.0 (1.0)
cmyn3* 0.0 0.099 1.0 (0.0)
olvi4* 1.0 0.901 0.0 (1.0)
cmyn4* 0.0 0.099 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 84.89 -4.38 91.85
LAB*LABa 84.89 -3.43 87.34
LAB*TCHa 37.51 64.74 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.881 0.0 (1.0)
cmyn3* 0.0 0.107 1.0 (0.0)
olvi4* 1.0 0.881 0.0 (1.0)
cmyn4* 0.0 0.107 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.99 -5.83 91.85
LAB*LABa 82.99 -4.88 87.34
LAB*TCHa 12.5 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.861 -0.023 0.75
olvi4* 1.0 0.861 0.0 (0.0)
cmyn3* 0.0 0.125 0.5 (0.0)
cmyn4* 0.0 0.125 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 81.15 -6.51 91.85
LAB*LABa 81.15 -5.56 87.34
LAB*TCHa 0.01 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.841 0.0 (1.0)
cmyn3* 0.0 0.143 1.0 (0.0)
olvi4* 1.0 0.841 0.0 (1.0)
cmyn4* 0.0 0.143 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 79.31 -7.19 91.85
LAB*LABa 79.31 -6.24 87.34
LAB*TCHa -1.4 43.16 91.84

relative Inform. Technology (IT)
olvi3* 1.0 0.821 0.0 (1.0)
cmyn3* 0.0 0.161 1.0 (0.0)
olvi4* 1.0 0.821 0.0 (1.0)
cmyn4* 0.0 0.161 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 77.47 -7.87 91.85
LAB*LABa 77.47 -6.92 87.34
LAB*TCHa -2.8 43.16 91.84

ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

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

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.25$

blackness n^*

$n^* = 0.50$

$n^* = 1.0$

0.25

0.50

0.75

1.00

chromaticness c^*

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

BAM-test chart UE55; Colorimetric systems ORS18 & ORS18

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

input: $cmY0^* setcmykcolor$

output: $Startup (S)$ data dependent

UE55-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

