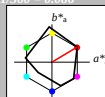


Input: Colorimetric Reflective System MRS18a
for hue $h^* = lab^*h = 31/360 = 0.086$
 lab^*tch and lab^*nch



D65: hue R
LCH*Ma: 50 78 31
olv*Ma: 1.0 0.0 0.0
triangle lightness t^*

relative Inform. Technology (IT)
olv13* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv14* 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 0.01 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 -

relative CIELAB lab*
lab*lab 1.0 0.5 0.0 (1.0)
lab*tch 1.0 0.0 -
lab*nch 0.0 0.0 -
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0
lab*nce 0.0 0.0 -

relative Inform. Technology (IT)
olv13* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv14* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.71 0.05 0.0
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.0 0.0 (1.0)
lab*tch 0.5 0.0 0.0
lab*nch 0.5 0.0 -
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*nce 0.5 0.0 0.0
lab*nce 0.5 0.0 -

relative Inform. Technology (IT)
olv13* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv14* 1.0 1.0 1.0 1.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.1 0.02
LAB*LABa 18.02 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 1.0 0.0 -
lab*nch 1.0 0.0 -
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nce 0.0 0.0 -
lab*nce 1.0 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)
olv13* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olv14* 1.0 0.5 0.0 (0.0)
cmyn4* 0.0 0.5 0.5 0.0
standard and adapted CIELAB
LAB*LAB 72.52 33.43 20.01
LAB*LABa 72.52 33.39 20.01
LAB*TCHa 75.0 38.93 30.93

relative CIELAB lab*
lab*lab 0.704 0.429 0.257
lab*tch 0.75 0.5 0.086
lab*nch 0.0 0.5 0.086
relative Natural Colour (NC)
lab*lrj 0.704 0.496 0.064
lab*nce 0.75 0.5 0.02
lab*nce 0.0 0.5 r08j

relative Inform. Technology (IT)
olv13* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olv14* 1.0 0.5 0.5 (0.5)
cmyn4* 0.0 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 33.82 33.47 20.03
LAB*LABa 33.82 33.39 20.01
LAB*TCHa 25.01 38.93 30.93

relative CIELAB lab*
lab*lab 0.204 0.429 0.257
lab*tch 0.25 0.5 0.086
lab*nch 0.0 0.5 0.086
relative Natural Colour (NC)
lab*lrj 0.204 0.496 0.064
lab*nce 0.25 0.5 0.02
lab*nce 0.0 0.5 r08j

relative Inform. Technology (IT)
olv13* 1.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv14* 1.0 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 0.0 0.0 0.0
LAB*TCHa 0.0 0.0 0.0

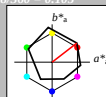
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 1.0 0.0 -
lab*nch 1.0 0.0 -
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nce 0.0 0.0 -
lab*nce 1.0 0.0 -

MRS18a; adapted (a) CIELAB data					
$L^* = L_a$	a^*	b^*	C^*_{ab}	h^*_{ab}	
RMa	49.63	66.8	40.02	77.87	31
GMa	90.7	-7.27	93.19	93.48	94
JMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.51	217
BMa	36.65	-23.66	-62.27	66.49	290
B50BMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

$n^* = 0.00$
blackness n^*

chromaticness c^*

Output: Colorimetric 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^*

relative Inform. Technology (IT)
olv13* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv14* 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 (1.0)
lab*tch 1.0 0.0 -
lab*nch 0.0 0.0 -
relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0
lab*nce 0.0 0.0 -

relative Inform. Technology (IT)
olv13* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv14* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.5 0.5 0.5
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 0.0 0.0 (1.0)
lab*tch 0.5 0.0 0.0
lab*nch 0.5 0.0 -
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*nce 0.5 0.0 0.0
lab*nce 0.5 0.0 -

relative Inform. Technology (IT)
olv13* 1.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv14* 1.0 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.46
LAB*LABa 18.02 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 1.0 0.0 -
lab*nch 1.0 0.0 -
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nce 0.0 0.0 -
lab*nce 1.0 0.0 -

$n^* = 1.0$

ORS18; adapted (a) CIELAB data					
$L^* = L_a$	a^*	b^*	C^*_{ab}	h^*_{ab}	
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
JMa	50.9	-62.79	34.95	71.87	151
VMa	58.62	-30.35	-45.01	54.3	236
WMa	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

relative Inform. Technology (IT)
olv13* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olv14* 1.0 0.5 0.0 (0.0)
cmyn4* 0.0 0.5 0.5 0.0
standard and adapted CIELAB
LAB*LAB 71.67 32.15 28.41
LAB*LABa 71.67 32.08 28.41
LAB*TCHa 75.0 41.3 37.7

relative CIELAB lab*
lab*lab 0.693 0.396 0.306
lab*tch 0.75 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*lrj 0.693 0.477 0.15
lab*nce 0.75 0.5 0.048
lab*nce 0.0 0.5 r19j

relative Inform. Technology (IT)
olv13* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olv14* 1.0 0.5 0.5 (0.5)
cmyn4* 0.0 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 32.98 32.9 25.8
LAB*LABa 32.98 32.68 25.25
LAB*TCHa 25.01 41.3 37.7

relative CIELAB lab*
lab*lab 0.193 0.396 0.306
lab*tch 0.25 0.5 0.105
lab*nch 0.0 0.5 0.105
relative Natural Colour (NC)
lab*lrj 0.193 0.477 0.15
lab*nce 0.25 0.5 0.048
lab*nce 0.0 0.5 r19j

relative Inform. Technology (IT)
olv13* 1.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv14* 1.0 0.0 0.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 0.0 0.0 0.0
LAB*LABa 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 (1.0)
lab*tch 1.0 0.0 -
lab*nch 1.0 0.0 -
relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nce 0.0 0.0 -
lab*nce 1.0 0.0 -

$n^* = 1.0$

chromaticness c^*

BAM-test chart TE16; Colorimetric systems MRS18a & ORS18 input: olv* setrgbcolor
D65: 2 coordinate data of 3 step colour scales for 10 hues output: olv* setrgbcolor / w* setgray