

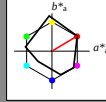
Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 31/360 = 0.086$ lab**tch* and lab**nch*

D65: hue R

LCH*Ma: 50 78 31

olw*Ma: 1.0 0.0 0.0

triangle lightness l^* 

%Gamut

 $u^*_{rel} = 92$

%Regularity

 $g^*_{H,rel} = 42$ $g^*_{C,rel} = 49$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 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 0.5 (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)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmy4* 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
 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)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 0.0 0.0 0.0 0.0
 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
 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)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 0.0
 cmy4* 0.0 0.5 0.5 0.0
 standard and adapted CIELAB
 LAB*LAB 72.52 33.43 20.01
 LAB*LABa 72.52 33.43 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 r08

relative Inform. Technology (IT)
 olv3* 0.5 0.0 0.0 (1.0)
 cmy3* 0.5 1.0 0.0 (0.0)
 olv4* 1.0 0.5 0.5 0.5
 cmy4* 0.0 0.5 0.5 0.5
 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 20.03
 LAB*LABa 33.82 33.47 20.03
 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 r08
 lab*nce 0.5 0.5 r08

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 0.0 0.0 0.0 0.0
 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
 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^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$
 RMa 49.63 66.8 40.02 77.87 31
 JMa 90.7 -7.27 93.19 93.48 94
 GMa 52.11 -69.93 11.26 70.85 171
 G50BMa 45.03 -36.65 -27.13 45.51 217
 BMa 36.65 23.26 -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

blackness n^* chromaticness c^* $n^* = 0.00$

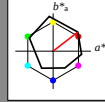
Output: Colorimetric Reflective System ORS18

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

D65: hue O

LCH*Ma: 48 83 38

olw*Ma: 1.0 0.0 0.0

triangle lightness l^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 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 -
 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)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmy4* 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
 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)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 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
 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^*_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 92.84 96
 VMa 50.9 -62.79 34.95 71.87 151
 VMa 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

relative Inform. Technology (IT)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 0.0
 cmy4* 0.0 0.5 0.5 0.0
 standard and adapted CIELAB
 LAB*LAB 71.67 32.15 28.41
 LAB*LABa 71.67 32.15 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 r19

relative Inform. Technology (IT)
 olv3* 0.5 0.0 0.0 (1.0)
 cmy3* 0.5 1.0 0.0 (0.0)
 olv4* 1.0 0.5 0.5 0.5
 cmy4* 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 31.3 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 r19

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmy4* 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
 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 -

blackness n^* chromaticness c^* $n^* = 0.00$

UE160-7, 3 step scales for constant CIELAB hue 31/360 = 0.086 (left)

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

BAM-test chart UE16; Colorimetric systems MRS18a & ORS18 input: cmy0* setqycolor

D65: 2 coordinate data of 3 step colour scales for 10 hues

output: olv* setqycolor / w* setgray