

Input: 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

olw*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

% Regularity

$g^*_{Hrel} = 57$

$g^*_{Crel} = 59$

relative Inform. Technology (IT)
olw3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olw4* 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*LABo 95.41 0.0 0.0
LAB*TCHo 99.99 0.01 -

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

relative Inform. Technology (IT)
olw3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olw4* 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 -0.24 2.14
LAB*LABo 56.71 0.0 0.0
LAB*TCHo 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 - (0.0)
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0 (1.0)
lab*nce 0.5 0.0 0.0 (1.0)
lab*nce 0.5 0.0 - (0.0)

relative Inform. Technology (IT)
olw3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olw4* 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 0.5 -0.47
LAB*LABo 18.02 0.0 0.0
LAB*TCHo 18.01 0.01 -

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

$n^* = 1.0$

relative Inform. Technology (IT)
olw3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olw4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 71.67 32.15 28.41
LAB*LABo 71.67 32.69 29.25
LAB*TCHo 75.0 41.31 37.69

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)
olw3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olw4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 32.98 32.9 25.85
LAB*LABo 32.98 32.69 25.25
LAB*TCHo 25.01 41.31 37.69

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)
olw3* 1.0 0.0 0.0 (1.0)
cmyn3* 0.0 1.0 0.0 (0.0)
olw4* 1.0 0.0 1.0 (1.0)
cmyn4* 0.0 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 47.94 65.3 52.06
LAB*LABo 47.94 65.37 50.51
LAB*TCHo 50.0 82.61 37.69

relative CIELAB lab*
lab*lab 0.387 0.791 0.611
lab*tch 0.5 1.0 0.105
lab*nch 0.0 1.0 0.105
relative Natural Colour (NC)
lab*lrj 0.387 0.954 0.299
lab*nce 0.5 1.0 0.048
lab*nce 0.0 1.0 r19

$n^* = 0.00$

blackness n^*

chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 57 77 30

olw*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 100$

% Regularity

$g^*_{Hrel} = 100$

$g^*_{Crel} = 100$

relative Inform. Technology (IT)
olw3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olw4* 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*LABo 95.41 0.0 0.0
LAB*TCHo 99.99 0.01 -

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

relative Inform. Technology (IT)
olw3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olw4* 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*LABo 56.72 0.0 0.0
LAB*TCHo 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 - (0.0)
relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0 (1.0)
lab*nce 0.5 0.0 0.0 (1.0)
lab*nce 0.5 0.0 - (0.0)

relative Inform. Technology (IT)
olw3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olw4* 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*LABo 18.03 0.0 0.0
LAB*TCHo 18.01 0.01 -

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

$n^* = 1.0$

SRS18; adapted (a) CIELAB data

$L^* = L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

Om	56.71	67.03	38.7	77.4	30
YMa	56.71	0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
WMa	18.01	0	0	0	0
WMa	95.41	0	0	0	0
RCIE	39.92	58.74	27.99	65.07	25
GCIE	81.26	-2.88	71.56	71.62	92
BCIE	21.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

relative Inform. Technology (IT)
olw3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olw4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 33.51 19.35
LAB*LABo 76.06 33.51 19.35
LAB*TCHo 75.0 38.69 30.0

relative CIELAB lab*
lab*lab 0.75 0.433 0.25
lab*tch 0.75 0.5 0.083
lab*nch 0.0 0.5 0.083
relative Natural Colour (NC)
lab*lrj 0.75 0.497 0.053
lab*nce 0.75 0.5 0.017
lab*nce 0.0 0.5 r06

relative Inform. Technology (IT)
olw3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olw4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 33.51 19.35
LAB*LABo 37.36 33.51 19.35
LAB*TCHo 25.01 38.69 30.0

relative CIELAB lab*
lab*lab 0.25 0.433 0.25
lab*tch 0.25 0.5 0.083
lab*nch 0.0 0.5 0.083
relative Natural Colour (NC)
lab*lrj 0.25 0.497 0.053
lab*nce 0.25 0.5 0.017
lab*nce 0.0 0.5 r06

$n^* = 0.00$

blackness n^*

chromaticness c^*