

Input: Colorimetric Offset Reflective System ORS18

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

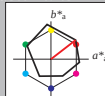
lab^*ch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness l^*



% Gamut

$u^*_{rel} = 93$

% Regularity

$g^*_{Hrel} = 57$

$g^*_{Crel} = 59$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 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*ch 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)

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 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*ch 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)

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 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 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*ch 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)

$n^* = 1.0$

relative Inform. Technology (IT)
olv3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olv4* 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 25.25
LAB*TCHo 75.0 41.31 37.69

relative CIELAB lab*
lab*lab 0.693 0.396 0.306
lab*ch 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)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 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 25.8
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*ch 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* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0 (0.0)
LAB*LABo 0.03 0.0 0.0
LAB*TCHo 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*ch 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)

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} 50.39 -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

$n^* = 0.00$

blackness n^*

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$

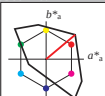
lab^*ch and lab^*nch

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness l^*



% Gamut

$u^*_{rel} = 158$

% Regularity

$g^*_{Hrel} = 20$

$g^*_{Crel} = 37$

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 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*ch 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)

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 47.72 0.0 0.0
LAB*LABo 47.72 0.0 0.0
LAB*TCHo 50.0 0.01 -

relative CIELAB lab*
lab*lab 0.5 0.0 0.0 (1.0)
lab*ch 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)

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0 (0.0)
LAB*LABo 0.03 0.0 0.0
LAB*TCHo 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*ch 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)

$n^* = 1.0$

TLS00; adapted (a) CIELAB data

$L^* = L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$
O_{Ma} 50.5 76.92 64.55 100.42 40
Y_{Ma} 92.66 -20.69 90.75 93.08 103
L_{Ma} 83.63 -82.75 79.9 115.04 136
C_{Ma} 86.88 -46.16 -13.55 48.12 196
V_{Ma} 30.39 76.06 -103.59 128.52 306
M_{Ma} 57.3 94.35 -58.41 110.97 328
N_{Ma} 0.01 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

relative Inform. Technology (IT)
olv3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 72.95 38.45 32.27
LAB*LABo 72.95 38.45 32.27
LAB*TCHo 75.0 50.2 40.0

relative CIELAB lab*
lab*lab 0.765 0.383 0.321
lab*ch 0.75 0.5 0.111
lab*nch 0.0 0.5 0.111
relative Natural Colour (NC)
lab*lrj 0.765 0.471 0.167
lab*nce 0.75 0.5 0.054
lab*nce 0.0 0.5 r21

relative Inform. Technology (IT)
olv3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 25.26 38.45 32.27
LAB*LABo 25.26 38.45 32.27
LAB*TCHo 25.01 40.2 40.0

relative CIELAB lab*
lab*lab 0.265 0.383 0.321
lab*ch 0.25 0.5 0.111
lab*nch 0.0 0.5 0.111
relative Natural Colour (NC)
lab*lrj 0.265 0.471 0.167
lab*nce 0.25 0.5 0.054
lab*nce 0.0 0.5 r21

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.03 0.0 0.0 (0.0)
LAB*LABo 0.03 0.0 0.0
LAB*TCHo 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*ch 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)

$n^* = 1.0$

chromaticness c^*

OE100-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart OE10; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 40/360 = 0.111 (right)

input: $cmY0^* \text{ setcmYcolor}$

output: $cmY0^* / 000n^* \text{ setcmYcolor}$