

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.106$

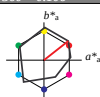
lab^*tch and lab^*nch

A: hue 0

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 96$

% Regularity

$g^*_{Hrel} = -385$

$g^*_{Crel} = 62$

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 95.6 0.43 4.65
LAB*LAB0 95.6 0.0 0.0
LAB*TCHe 99.99 0.01

relative CIELAB lab*
lab*lab 1.0 0.5 0.0 (1.0)
lab*tch 1.0 0.0 -

relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*nch 1.0 0.0 0.0
lab*nchE 0.0 0.0 -

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (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 56.86 0.8 2.08
LAB*LAB0 56.86 0.0 0.0
LAB*TCHe 50.0 0.01

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 -

relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*nch 0.5 0.0 -

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 1.0 1.0 1.0 (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 18.12 1.18 -0.49
LAB*LAB0 18.12 0.0 0.0
LAB*TCHe 0.01 0.01 -

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 -

relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nch 0.0 0.0 -

$n^* = 1.0$

ORS18; adapted (a) CIELAB data

$L^*a^*b^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
QMa 47.94	64.42	50.58	81.9	38
YMa 92.62	2.41	86.36	86.39	88
LMa 50.69	-63.82	35.02	72.81	151
CMa 51.25	-53.68	-57.69	78.62	227
VMa 25.72	30.34	-44.37	53.76	304
MMa 56.25	70.59	7.57	70.99	6
NMa 18.11	0.0	0.0	0.0	0
WMa 95.6	0.0	0.0	0.0	0
RCie 47.79	60.85	41.08	73.41	34
GCie 83.82	6.52	66.9	67.22	84
BCie 49.0	-36.83	2.78	36.95	176
TCie 25.14	-18.35	-56.22	59.15	252

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)

standard and adapted CIELAB
LAB*LAB 71.77 32.86 28.36
LAB*LAB0 71.77 32.86 28.36
LAB*TCHe 75.0 40.94 38.14

relative CIELAB lab*
lab*lab 0.692 0.393 0.309
lab*tch 0.75 0.5 0.106
lab*nch 0.0 0.5 0.106

relative Natural Colour (NC)
lab*lrj 0.692 0.496 0.064
lab*nch 0.75 0.5 0.02
lab*nchE 0.0 0.5 r08

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)

standard and adapted CIELAB
LAB*LAB 33.03 33.24 25.79
LAB*LAB0 33.03 32.2 25.28
LAB*TCHe 25.01 40.94 38.14

relative CIELAB lab*
lab*lab 0.193 0.393 0.309
lab*tch 0.25 0.5 0.106
lab*nch 0.0 0.5 0.106

relative Natural Colour (NC)
lab*lrj 0.193 0.496 0.064
lab*nch 0.25 0.5 0.02
lab*nchE 0.0 0.5 r08

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

standard and adapted CIELAB
LAB*LAB 47.94 65.3 52.06
LAB*LAB0 47.94 64.41 50.57
LAB*TCHe 50.0 81.89 38.14

relative CIELAB lab*
lab*lab 0.385 0.786 0.617
lab*tch 0.385 0.92 0.128
lab*nch 0.0 1.0 0.106

relative Natural Colour (NC)
lab*lrj 0.385 0.92 0.128
lab*nch 0.0 1.0 0.02
lab*nchE 0.0 1.0 r08

$n^* = 0.00$

blackness n^*

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.097$

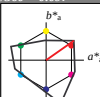
lab^*tch and lab^*nch

A: hue 0

LCH*Ma: 66 90 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 141$

% Regularity

$g^*_{Hrel} = 39$

$g^*_{Crel} = 43$

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 0.0 0.0
LAB*LAB0 95.41 0.0 0.0
LAB*TCHe 99.99 0.01

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 -

relative Natural Colour (NC)
lab*lrj 1.0 0.0 0.0
lab*nch 1.0 0.0 0.0
lab*nchE 0.0 0.0 -

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 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*LAB0 47.72 0.0 0.0
LAB*TCHe 50.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 -

relative Natural Colour (NC)
lab*lrj 0.5 0.0 0.0
lab*nch 0.5 0.0 -

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 1.0 1.0 1.0 (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 0.03 0.0 0.0
LAB*LAB0 0.03 0.0 0.0
LAB*TCHe 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 -

relative Natural Colour (NC)
lab*lrj 0.0 0.0 0.0
lab*nch 0.0 0.0 -

$n^* = 1.0$

TLS00; adapted (a) CIELAB data

$L^*a^*b^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
QMa 65.56	73.34	51.39	89.55	35
YMa 94.78	-3.49	52.24	52.36	94
LMa 77.48	-92.97	36.0	99.71	159
CMa 78.36	-82.69	-22.74	85.77	195
VMa 12.55	38.81	-114.81	121.2	289
MMa 66.71	76.08	-29.8	81.71	339
NMa 0.01	0.0	0.0	0.0	0
WMa 95.41	0.0	0.0	0.0	0
RCie 47.79	61.74	42.56	74.99	35
GCie 83.82	7.06	70.78	71.13	84
BCie 49.0	-35.95	4.34	36.22	173
TCie 25.14	-17.24	-56.24	58.84	253

relative Inform. Technology (IT)
olvi3* 1.0 0.5 0.5 (1.0)
cmyn3* 0.0 0.5 0.5 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)

standard and adapted CIELAB
LAB*LAB 80.48 36.66 25.69
LAB*LAB0 80.48 36.66 25.69
LAB*TCHe 75.0 44.77 35.02

relative CIELAB lab*
lab*lab 0.843 0.409 0.287
lab*tch 0.75 0.5 0.097
lab*nch 0.0 0.5 0.097

relative Natural Colour (NC)
lab*lrj 0.843 0.5 0.007
lab*nch 0.75 0.5 0.002
lab*nchE 0.0 0.5 r09

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olvi4* 1.0 0.5 0.5 (1.0)
cmyn4* 0.0 0.5 0.5 (0.0)

standard and adapted CIELAB
LAB*LAB 32.79 36.66 25.69
LAB*LAB0 32.79 36.66 25.69
LAB*TCHe 25.01 44.77 35.02

relative CIELAB lab*
lab*lab 0.344 0.409 0.287
lab*tch 0.25 0.5 0.097
lab*nch 0.0 0.5 0.097

relative Natural Colour (NC)
lab*lrj 0.344 0.5 0.007
lab*nch 0.25 0.5 0.002
lab*nchE 0.0 0.5 r09

$n^* = 0.00$

blackness n^*

chromaticness c^*

SE100-7, 3 step scales for constant CIELAB hue 38/360 = 0.106 (left)

BAM-test chart SE10; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 35/360 = 0.097 (right)

input: cmy0* setcmykcolor

output: no change compared to input