
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$

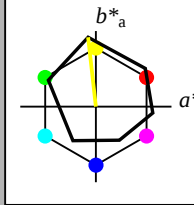
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



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}	50.9	-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

%Regularity

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

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

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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
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
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.984 -0.027 0.248
lab*tch 0.875 0.25 0.268
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LAB*LAB 92.88 -6.06 50.46
LAB*LABa 92.88 -5.12 45.87
LAB*TCHa 75.00 46.15 96.38

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lab*nch 0.0 0.5 0.268
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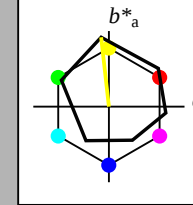
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NE540-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart NE54; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 5 step colour scales for 10 hues

input: $olv^*setrgbcolor$

output: $olv^*setrgbcolor / w^*setgray$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

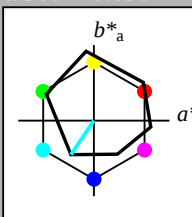
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

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olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	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}	50.9	-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

%Regularity

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

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

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

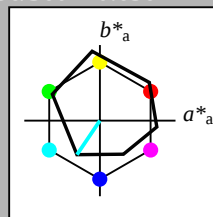
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	1.0	1.0
olv4*	0.75	0.75	0.75	1.0	1.0
olv5*	0.75	0.75	0.75	1.0	1.0
olv6*	0.75	0.75	0.75	1.0	1.0
olv7*	0.75	0.75	0.75	1.0	1.0
olv8*	0.75	0.75	0.75	1.0	1.0
olv9*	0.75	0.75	0.75	1.0	1.0
olv10*	0.75	0.75	0.75	1.0	1.0
olv11*	0.75	0.75	0.75	1.0	1.0
olv12*	0.75	0.75	0.75	1.0	1.0
olv13*	0.75	0.75	0.75	1.0	1.0
olv14*	0.75	0.75	0.75	1.0	1.0
olv15*	0.75	0.75	0.75	1.0	1.0
olv16*	0.75	0.75	0.75	1.0	1.0
olv17*	0.75	0.75	0.75	1.0	1.0
olv18*	0.75	0.75	0.75	1.0	1.0

relative Inform. Technology (IT)					
olv3*	0.75	1.0	1.0	1.0	(1.0)
olv3*	0.25	0.0	0.0	0.0	0.0
olv4*	0.75	1.0	1.0	1.0	(1.0)
olv4*	0.25	0.0	0.0	0.0	0.0
standard and adapted CIELAB					
LAB*LAB	86.21	-8.39	-7.1		
LAB*LAB	86.21	-7.37	-11.1		
LAB*TCHe	87.5	13.57	236.6		
relative CIELAB lab*					
lab*lab	0.881	-0.139	-0.28		
lab*tcH	0.875	0.25	0.656		
lab*tcH	0.0	0.25	0.656		
relative Natural Colour (NC)					
lab*nc	0.881	-0.123	-0.27		
lab*tcE	0.875	0.25	0.666		
lab*ncE	0.0	0.25	0.666		

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$

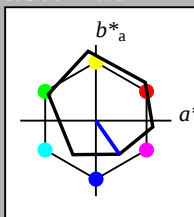
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



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}	50.9	-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

%Regularity

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

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

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*Lab 95.41 0.0 0.0
LAB*TCh 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 76.06 -0.61 3.44
LAB*Lab 76.06 0.0 0.0
LAB*TCh 75.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
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*Lab 56.71 0.0 0.0
LAB*TCh 50.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*Lab 37.36 0.0 0.0
LAB*TCh 25.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
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 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
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 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$u^*_{rel} = 93$

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 77.99 7.12 -7.51
LAB*Lab 77.99 7.77 -11.09
LAB*TCh 87.5 13.55 305.0

relative CIELAB lab*
lab*lab 0.75 0.143 -0.204
lab*tch 0.875 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.775 0.112 -0.222
lab*tce 0.875 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 58.64 7.49 -8.82
LAB*Lab 58.64 7.77 -11.09
LAB*TCh 62.5 13.55 305.0

relative CIELAB lab*
lab*lab 0.5 0.25 0.143 -0.204
lab*tch 0.625 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.525 0.112 -0.222
lab*tce 0.625 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.22 15.56 -22.2
LAB*Lab 41.22 15.55 -22.2
LAB*TCh 50.0 27.1 305.0

relative CIELAB lab*
lab*lab 0.25 0.143 -0.204
lab*tch 0.375 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.275 0.112 -0.222
lab*tce 0.375 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.57 -22.2
LAB*Lab 21.87 15.55 -22.2
LAB*TCh 25.01 27.1 305.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.25 0.847
lab*tce 0.0 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$

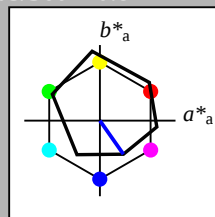
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



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}	50.9	-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

%Regularity

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

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

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*Lab 95.41 0.0 0.0
LAB*TCh 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 76.06 -0.61 3.44
LAB*Lab 76.06 0.0 0.0
LAB*TCh 75.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
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*Lab 56.71 0.0 0.0
LAB*TCh 50.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*Lab 37.36 0.0 0.0
LAB*TCh 25.0 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.57 -22.2
LAB*Lab 21.87 15.55 -22.2
LAB*TCh 25.01 27.1 305.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.25 0.847
lab*tce 0.0 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 77.99 7.12 -7.51
LAB*Lab 77.99 7.77 -11.09
LAB*TCh 87.5 13.55 305.0

relative CIELAB lab*
lab*lab 0.75 0.143 -0.204
lab*tch 0.875 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.775 0.112 -0.222
lab*tce 0.875 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 58.64 7.49 -8.82
LAB*Lab 58.64 7.77 -11.09
LAB*TCh 62.5 13.55 305.0

relative CIELAB lab*
lab*lab 0.5 0.25 0.143 -0.204
lab*tch 0.625 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.525 0.112 -0.222
lab*tce 0.625 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 0.75 0.75 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 41.22 15.56 -22.2
LAB*Lab 41.22 15.55 -22.2
LAB*TCh 50.0 27.1 305.0

relative CIELAB lab*
lab*lab 0.25 0.143 -0.204
lab*tch 0.375 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.275 0.112 -0.222
lab*tce 0.375 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.5 0.5 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 21.87 15.57 -22.2
LAB*Lab 21.87 15.55 -22.2
LAB*TCh 25.01 27.1 305.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.25 0.847
lab*nch 0.0 0.25 0.847
relative Natural Colour (NC)
lab*trj 0.0 0.25 0.847
lab*tce 0.0 0.25 0.824
lab*nce 0.0 0.25 0.824

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (0.0)
cmyn3* 1.0 1.0 1.0 (1.0)
olv4* 0.0 0.0 0.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.0
LAB*Lab 18.02 0.0 0.0
LAB*TCh 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

BAM-test chart NE54; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 5 step colour scales for 10 hues

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

input: $olv^* setrgbcolor$

output: $olv^* setrgbcolor / w^* setgray$

NE540-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Technical information: <http://www.ps.bam.de/NE54/> Version 2.1, io=1,1, CIELAB

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

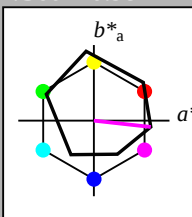
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)			
olv3*	1.0	1.0	1.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	95.41	-0.98	4.75
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
relative CIELAB lab*			
lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	1.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.75	0.75	0.75 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	76.06	-0.61	3.44
LAB*LAB	76.06	0.0	0.0
LAB*LAB	76.06	0.0	0.0
relative CIELAB lab*			
lab*lab	1.0	0.0	0.0
lab*tch	0.75	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.75	0.0	0.0
lab*tce	0.75	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (0.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	56.71	-0.24	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	56.71	0.0	0.0
relative CIELAB lab*			
lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.25	0.25	0.25 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	37.36	0.13	0.63
LAB*LAB	37.36	0.0	0.0
LAB*LAB	37.36	0.0	0.0
relative CIELAB lab*			
lab*lab	0.25	0.0	0.0
lab*tch	0.25	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.25	0.0	0.0
lab*tce	0.25	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.0	0.0	0.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	18.02	0.0	0.47
LAB*LAB	18.02	0.0	0.0
LAB*LAB	18.02	0.0	0.0
relative CIELAB lab*			
lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.0	0.0	0.0
lab*tce	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.0	0.0	0.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	0.01	0.0	0.01
LAB*LAB	0.01	0.0	0.0
LAB*LAB	0.01	0.0	0.0
relative CIELAB lab*			
lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.0	0.0	0.0
lab*tce	0.0	0.0	0.0
lab*nce	0.0	0.0	0.0

NE540-7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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}	50.9	-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
RC _{IE}	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

% Regularity

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

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

relative Inform. Technology (IT)			
olv3*	1.0	0.5	1.0 (1.0)
cmv3*	0.0	0.5	0.0 (0.0)
olv4*	1.0	0.5	1.0 (1.0)
cmv4*	0.0	0.5	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	71.77	37.1	-1.01
LAB*LAB	71.77	37.1	-1.01
LAB*LAB	71.77	37.1	-1.01
relative CIELAB lab*			
lab*lab	0.695	0.497	-0.054
lab*tch	0.75	0.5	0.982
lab*nch	0.0	0.5	0.982
relative Natural Colour (NC)			
lab*trj	0.695	0.454	-0.208
lab*tce	0.75	0.5	0.932
lab*nce	0.0	0.5	0.727

relative Inform. Technology (IT)			
olv3*	0.75	0.25	0.75 (1.0)
cmv3*	0.0	0.25	0.0 (0.0)
olv4*	1.0	0.5	1.0 (1.0)
cmv4*	0.0	0.5	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	52.42	37.64	-2.32
LAB*LAB	52.42	37.64	-2.32
LAB*LAB	52.42	37.64	-2.32
relative CIELAB lab*			
lab*lab	0.445	0.454	-0.208
lab*tch	0.75	0.5	0.932
lab*nch	0.0	0.5	0.727

relative Inform. Technology (IT)			
olv3*	0.5	0.0	0.5 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	0.5	1.0 (1.0)
cmv4*	0.0	0.5	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	33.07	37.64	-4.17
LAB*LAB	33.07	37.64	-4.17
LAB*LAB	33.07	37.64	-4.17
relative CIELAB lab*			
lab*lab	0.292	0.454	-0.312
lab*tch	0.375	0.5	0.982
lab*nch	0.0	0.5	0.982
relative Natural Colour (NC)			
lab*trj	0.292	0.454	-0.312
lab*tce	0.375	0.5	0.932
lab*nch	0.0	0.5	0.727

relative Inform. Technology (IT)			
olv3*	0.25	0.0	0.25 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	0.5	1.0 (1.0)
cmv4*	0.0	0.5	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	25.54	37.64	-5.21
LAB*LAB	25.54	37.64	-5.21
LAB*LAB	25.54	37.64	-5.21
relative CIELAB lab*			
lab*lab	0.195	0.454	-0.312
lab*tch	0.25	0.5	0.982
lab*nch	0.0	0.5	0.982
relative Natural Colour (NC)			
lab*trj	0.195	0.454	-0.312
lab*tce	0.25	0.5	0.932
lab*nch	0.0	0.5	0.727

relative Inform. Technology (IT)			
olv3*	0.0	0.0	0.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	0.5	1.0 (1.0)
cmv4*	0.0	0.5	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	12.5	37.64	-6.26
LAB*LAB	12.5	37.64	-6.26
LAB*LAB	12.5	37.64	-6.26
relative CIELAB lab*			
lab*lab	0.097	0.454	-0.312
lab*tch	0.125	0.5	0.982
lab*nch	0.0	0.5	0.982
relative Natural Colour (NC)			
lab*trj	0.097	0.454	-0.312
lab*tce	0.125	0.5	0.932
lab*nch	0.0	0.5	0.727

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

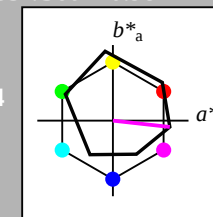
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)			
olv3*	1.0	1.0	1.0 (1.0)
cmv3*	0.0	0.0	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	0.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	95.41	-0.98	4.75
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
relative CIELAB lab*			
lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	1.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.75	0.75	0.75 (1.0)
cmv3*	0.0	0.75	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	76.06	-0.61	3.44
LAB*LAB	76.06	0.0	0.0
LAB*LAB	76.06	0.0	0.0
relative CIELAB lab*			
lab*lab	0.75	0.0	0.0
lab*tch	0.75	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.75	0.0	0.0
lab*tce	0.75	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
olv3*	0.5	0.5	0.5 (0.0)
cmv3*	0.0	0.5	0.0 (0.0)
olv4*	1.0	1.0	1.0 (1.0)
cmv4*	0.0	1.0	0.0 (0.0)
standard and adapted CIELAB			
LAB*LAB	56.71	-0.24	2.14
LAB*LAB	56.71	0.0	0.0
LAB*LAB	56.71	0.0	0.0
relative CIELAB lab*			
lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	0.0
lab*nch	0.0	0.0	0.0
relative Natural Colour (NC)			
lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)			
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Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

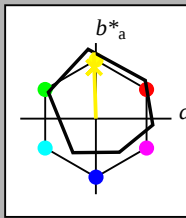
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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*LABa 95.41 0.0 0.0
LAB*LABb 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
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*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 42.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

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 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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}	50.9	-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

% Regularity

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

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

relative Inform. Technology (IT)
olv3* 1.0 0.951 0.5 (1.0)
cmyn3* 0.0 0.025 0.5 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 93.11 -1.64 26.52
LAB*LABa 93.11 -0.7 21.92
LAB*LABb 87.5 21.93 91.85

relative CIELAB lab*
lab*lab 0.94 -0.015 0.5
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.97 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 42.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 1.0 0.926 0.25 (1.0)
cmyn3* 0.0 0.074 0.5 (0.0)
olv4* 1.0 0.926 0.25 (1.0)
cmyn4* 0.0 0.074 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 88.49 -2.96 70.05
LAB*LABa 88.49 -2.1 65.76
LAB*LABb 87.5 21.93 91.85

relative CIELAB lab*
lab*lab 0.911 -0.023 0.75
lab*tch 0.625 0.75 0.255
lab*nch 0.0 0.75 0.255
relative Natural Colour (NC)
lab*trj 0.911 0.0 0.75
lab*tce 0.625 0.75 0.255
lab*nce 0.0 0.75 0.255

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 0.926 0.25 (1.0)
cmyn4* 0.0 0.074 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 0.926 0.25 (1.0)
cmyn4* 0.0 0.074 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 0.926 0.25 (1.0)
cmyn4* 0.0 0.074 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 42.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 0.00$

relative Inform. Technology (IT)
olv3* 1.0 0.901 0.0 (1.0)
cmyn3* 0.0 0.099 1.0 (0.0)
olv4* 1.0 0.902 0.0 (1.0)
cmyn4* 0.0 0.099 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.19 -3.62 91.81
LAB*LABa 86.19 -2.81 87.67
LAB*LABb 85.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.981 -0.031 0.999
lab*tch 0.5 0.0 1.0
lab*nch 0.0 1.0 0.0
relative Natural Colour (NC)
lab*trj 0.981 0.0 1.0
lab*tce 0.5 0.0 1.0
lab*nce 0.0 1.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 0.902 0.0 (1.0)
cmyn4* 0.0 0.099 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 0.902 0.0 (1.0)
cmyn4* 0.0 0.099 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 0.902 0.0 (1.0)
cmyn4* 0.0 0.099 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 42.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

$n^* = 0.00$

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

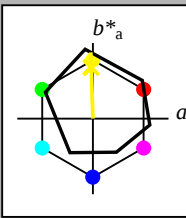
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

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*LABa 95.41 0.0 0.0
LAB*LABb 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (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 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
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*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olv4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 43.14 0.37 0.83
LAB*LABa 43.14 0.0 0.0
LAB*LABb 42.50 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

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 0.0 0.0
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

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}	50.9	-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

% Regularity

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

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

relative Inform. Technology (IT)
olv3* 1.0 0.951 0.5 (1.0)
cmyn3* 0.0 0.025 0.5 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 93.11 -1.64 26.52
LAB*LABa 93.11 -0.7 21.92
LAB*LABb 87.5 21.93 91.85

relative CIELAB lab*
lab*lab 0.94 -0.015 0.5
lab*tch 0.875 0.25 0.255
lab*nch 0.0 0.25 0.255
relative Natural Colour (NC)
lab*trj 0.97 0.0 0.25
lab*tce 0.875 0.25 0.255
lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 0.951 0.5 (1.0)
cmyn4* 0.0 0.025 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 55.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$

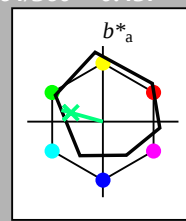
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 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 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

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 0.0
cmyn4* 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

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}	50.9	-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

%Regularity

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

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

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 74.1 -27.98 10.94
LAB*LABa 74.1 -27.4 7.62
LAB*TCHa 75.0 28.45 164.46

relative CIELAB lab*
lab*lab 0.75 -0.481 0.134
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 -0.481 0.134
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.75 (1.0)
cmyn3* 0.75 0.25 0.625 (0.0)
olv4* 0.5 1.0 0.5 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 54.76 -27.61 9.64
LAB*LABa 54.76 -27.41 7.63
LAB*TCHa 50.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.475 -0.481 0.134
lab*tch 0.475 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.475 -0.481 0.134
lab*tce 0.475 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.0 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 35.41 -27.24 6.38
LAB*LABa 35.41 -27.4 7.63
LAB*TCHa 25.01 28.46 164.44

relative CIELAB lab*
lab*lab 0.225 -0.481 0.134
lab*tch 0.225 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.225 -0.481 0.134
lab*tce 0.225 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 0.5 0.5 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 0.5 0.5 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$

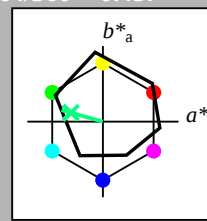
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 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 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*TCHa 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.0 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 35.41 -27.24 6.38
LAB*LABa 35.41 -27.4 7.63
LAB*TCHa 25.01 28.46 164.44

relative CIELAB lab*
lab*lab 0.225 -0.481 0.134
lab*tch 0.225 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.225 -0.481 0.134
lab*tce 0.225 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv4* 0.5 0.5 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

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}	50.9	-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

%Regularity

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

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

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olv4* 0.5 1.0 0.5 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 74.1 -27.98 10.94
LAB*LABa 74.1 -27.4 7.62
LAB*TCHa 75.0 28.45 164.46

relative CIELAB lab*
lab*lab 0.75 -0.481 0.134
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 -0.481 0.134
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.75 (1.0)
cmyn3* 0.75 0.25 0.625 (0.0)
olv4* 0.5 1.0 0.5 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 54.76 -27.61 9.64
LAB*LABa 54.76 -27.41 7.63
LAB*TCHa 50.0 28.46 164.45

relative CIELAB lab*
lab*lab 0.475 -0.481 0.134
lab*tch 0.475 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.475 -0.481 0.134
lab*tce 0.475 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.188 (1.0)
cmyn3* 1.0 0.0 0.75 (0.0)
olv4* 0.5 1.0 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 35.41 -27.24 6.38
LAB*LABa 35.41 -27.4 7.63
LAB*TCHa 25.01 28.46 164.44

relative CIELAB lab*
lab*lab 0.225 -0.481 0.134
lab*tch 0.225 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.225 -0.481 0.134
lab*tce 0.225 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 0.5 0.5 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (0.0)
olv4* 0.5 0.5 0.5 0.0
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.47
LAB*LABa 18.02 0.0 0.0
LAB*TCHa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

NE540-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

BAM-test chart NE54; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 5 step colour scales for 10 hues

input: `olv* setrgbcolor`

output: `olv* setrgbcolor / w* setgray`

