

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 92/360 = 0.256$

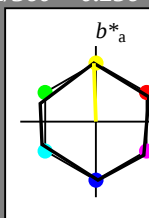
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

relative Inform. Technology (IT)					
olv3*	1.0	1.0	1.0	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8*	0.0	0.0	0.0	0.0	0.0
olv9*	0.0	0.0	0.0	0.0	0.0
olv10*	0.0	0.0	0.0	0.0	0.0
olv11*	0.0	0.0	0.0	0.0	0.0
olv12*	0.0	0.0	0.0	0.0	0.0
olv13*	0.0	0.0	0.0	0.0	0.0
olv14*	0.0	0.0	0.0	0.0	0.0
olv15*	0.0	0.0	0.0	0.0	0.0
olv16*	0.0	0.0	0.0	0.0	0.0
olv17*	0.0	0.0	0.0	0.0	0.0
olv18*	0.0	0.0	0.0	0.0	0.0
olv19*	0.0	0.0	0.0	0.0	0.0
olv20*	0.0	0.0	0.0	0.0	0.0
olv21*	0.0	0.0	0.0	0.0	0.0
olv22*	0.0	0.0	0.0	0.0	0.0
olv23*	0.0	0.0	0.0	0.0	0.0
olv24*	0.0	0.0	0.0	0.0	0.0
olv25*	0.0	0.0	0.0	0.0	0.0
olv26*	0.0	0.0	0.0	0.0	0.0
olv27*	0.0	0.0	0.0	0.0	0.0
olv28*	0.0	0.0	0.0	0.0	0.0
olv29*	0.0	0.0	0.0	0.0	0.0
olv30*	0.0	0.0	0.0	0.0	0.0
olv31*	0.0	0.0	0.0	0.0	0.0
olv32*	0.0	0.0	0.0	0.0	0.0
olv33*	0.0	0.0	0.0	0.0	0.0
olv34*	0.0	0.0	0.0	0.0	0.0
olv35*	0.0	0.0	0.0	0.0	0.0
olv36*	0.0	0.0	0.0	0.0	0.0
olv37*	0.0	0.0	0.0	0.0	0.0
olv38*	0.0	0.0	0.0	0.0	0.0
olv39*	0.0	0.0	0.0	0.0	0.0
olv40*	0.0	0.0	0.0	0.0	0.0
olv41*	0.0	0.0	0.0	0.0	0.0
olv42*	0.0	0.0	0.0	0.0	0.0
olv43*	0.0	0.0	0.0	0.0	0.0
olv44*	0.0	0.0	0.0	0.0	0.0
olv45*	0.0	0.0	0.0	0.0	0.0
olv46*	0.0	0.0	0.0	0.0	0.0
olv47*	0.0	0.0	0.0	0.0	0.0
olv48*	0.0	0.0	0.0	0.0	0.0
olv49*	0.0	0.0	0.0	0.0	0.0
olv50*	0.0	0.0	0.0	0.0	0.0
olv51*	0.0	0.0	0.0	0.0	0.0
olv52*	0.0	0.0	0.0	0.0	0.0
olv53*	0.0	0.0	0.0	0.0	0.0
olv54*	0.0	0.0	0.0	0.0	0.0
olv55*	0.0	0.0	0.0	0.0	0.0
olv56*	0.0	0.0	0.0	0.0	0.0
olv57*	0.0	0.0	0.0	0.0	0.0
olv58*	0.0	0.0	0.0	0.0	0.0
olv59*	0.0	0.0	0.0	0.0	0.0
olv60*	0.0	0.0	0.0	0.0	0.0
olv61*	0.0	0.0	0.0	0.0	0.0
olv62*	0.0	0.0	0.0	0.0	0.0
olv63*	0.0	0.0	0.0	0.0	0.0
olv64*	0.0	0.0	0.0	0.0	0.0
olv65*	0.0	0.0	0.0	0.0	0.0
olv66*	0.0	0.0	0.0	0.0	0.0
olv67*	0.0	0.0	0.0	0.0	0.0
olv68*	0.0	0.0	0.0	0.0	0.0
olv69*	0.0	0.0	0.0	0.0	0.0
olv70*	0.0	0.0	0.0	0.0	0.0
olv71*	0.0	0.0	0.0	0.0	0.0
olv72*	0.0	0.0	0.0	0.0	0.0
olv73*	0.0	0.0	0.0	0.0	0.0
olv74*	0.0	0.0	0.0	0.0	0.0
olv75*	0.0	0.0	0.0	0.0	0.0
olv76*	0.0	0.0	0.0	0.0	0.0
olv77*	0.0	0.0	0.0	0.0	0.0
olv78*	0.0	0.0	0.0	0.0	0.0
olv79*	0.0	0.0	0.0	0.0	0.0
olv80*	0.0	0.0	0.0	0.0	0.0
olv81*	0.0	0.0	0.0	0.0	0.0
olv82*	0.0	0.0	0.0	0.0	0.0
olv83*	0.0	0.0	0.0	0.0	0.0
olv84*	0.0	0.0	0.0	0.0	0.0
olv85*	0.0	0.0	0.0	0.0	0.0
olv86*	0.0	0.0	0.0	0.0	0.0
olv87*	0.0	0.0	0.0	0.0	0.0
olv88*	0.0	0.0	0.0	0.0	0.0
olv89*	0.0	0.0	0.0	0.0	0.0
olv90*	0.0	0.0	0.0	0.0	0.0
olv91*	0.0	0.0	0.0	0.0	0.0
olv92*	0.0	0.0	0.0	0.0	0.0
olv93*	0.0	0.0	0.0	0.0	0.0
olv94*	0.0	0.0	0.0	0.0	0.0
olv95*	0.0	0.0	0.0	0.0	0.0
olv96*	0.0	0.0	0.0	0.0	0.0
olv97*	0.0	0.0	0.0	0.0	0.0
olv98*	0.0	0.0	0.0	0.0	0.0
olv99*	0.0	0.0	0.0	0.0	0.0
olv100*	0.0	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)					
olv3*	1.0	1.0	1.0	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8*	0.0	0.0	0.0	0.0	0.0
olv9*	0.0	0.0	0.0	0.0	0.0
olv10*	0.0	0.0	0.0	0.0	0.0
olv11*	0.0	0.0	0.0	0.0	0.0
olv12*	0.0	0.0	0.0	0.0	0.0
olv13*	0.0	0.0	0.0	0.0	0.0
olv14*	0.0	0.0	0.0	0.0	0.0
olv15*	0.0	0.0	0.0	0.0	0.0
olv16*	0.0	0.0	0.0	0.0	0.0
olv17*	0.0	0.0	0.0	0.0	0.0
olv18*	0.0	0.0	0.0	0.0	0.0
olv19*	0.0	0.0	0.0	0.0	0.0
olv20*	0.0	0.0	0.0	0.0	0.0
olv21*	0.0	0.0	0.0	0.0	0.0
olv22*	0.0	0.0	0.0	0.0	0.0
olv23*	0.0	0.0	0.0	0.0	0.0
olv24*	0.0	0.0	0.0	0.0	0.0
olv25*	0.0	0.0	0.0	0.0	0.0
olv26*	0.0	0.0	0.0	0.0	0.0
olv27*	0.0	0.0	0.0	0.0	0.0
olv28*	0.0	0.0	0.0	0.0	0.0
olv29*	0.0	0.0	0.0	0.0	0.0
olv30*	0.0	0.0	0.0	0.0	0.0
olv31*	0.0	0.0	0.0	0.0	0.0
olv32*	0.0	0.0	0.0	0.0	0.0
olv33*	0.0	0.0	0.0	0.0	0.0
olv34*	0.0	0.0	0.0	0.0	0.0
olv35*	0.0	0.0	0.0	0.0	0.0
olv36*	0.0	0.0	0.0	0.0	0.0
olv37*	0.0	0.0	0.0	0.0	0.0
olv38*	0.0	0.0	0.0	0.0	0.0
olv39*	0.0	0.0	0.0	0.0	0.0
olv40*	0.0	0.0	0.0	0.0	0.0
olv41*	0.0	0.0	0.0	0.0	0.0
olv42*	0.0	0.0	0.0	0.0	0.0
olv43*	0.0	0.0	0.0	0.0	0.0
olv44*	0.0	0.0	0.0	0.0	0.0
olv45*	0.0	0.0	0.0	0.0	0.0
olv46*	0.0	0.0	0.0	0.0	0.0
olv47*	0.0	0.0	0.0	0.0	0.0
olv48*	0.0	0.0	0.0	0.0	0.0
olv49*	0.0	0.0	0.0	0.0	0.0
olv50*	0.0	0.0	0.0	0.0	0.0
olv51*	0.0	0.0	0.0	0.0	0.0
olv52*	0.0	0.0	0.0	0.0	0.0
olv53*	0.0	0.0	0.0	0.0	0.0
olv54*	0.0	0.0	0.0	0.0	0.0
olv55*	0.0	0.0	0.0	0.0	0.0
olv56*	0.0	0.0	0.0	0.0	0.0
olv57*	0.0	0.0	0.0	0.0	0.0
olv58*	0.0	0.0	0.0	0.0	0.0
olv59*	0.0	0.0	0.0	0.0	0.0
olv60*	0.0	0.0	0.0	0.0	0.0
olv61*	0.0	0.0	0.0	0.0	0.0
olv62*	0.0	0.0	0.0	0.0	0.0
olv63*	0.0	0.0	0.0	0.0	0.0
olv64*	0.0	0.0	0.0	0.0	0.0
olv65*	0.0	0.0	0.0	0.0	0.0
olv66*	0.0	0.0	0.0	0.0	0.0
olv67*	0.0	0.0	0.0	0.0	0.0
olv68*	0.0	0.0	0.0	0.0	0.0
olv69*	0.0	0.0	0.0	0.0	0.0
olv70*	0.0	0.0	0.0	0.0	0.0
olv71*	0.0	0.0	0.0	0.0	0.0
olv72*	0.0	0.0	0.0	0.0	0.0
olv73*	0.0	0.0	0.0	0.0	0.0
olv74*	0.0	0.0	0.0	0.0	0.0
olv75*	0.0	0.0	0.0	0.0	0.0
olv76*	0.0	0.0	0.0	0.0	0.0
olv77*	0.0	0.0	0.0	0.0	0.0
olv78*	0.0	0.0	0.0	0.0	0.0
olv79*	0.0	0.0	0.0	0.0	0.0
olv80*	0.0	0.0	0.0	0.0	0.0
olv81*	0.0	0.0	0.0	0.0	0.0
olv82*	0.0	0.0	0.0	0.0	0.0
olv83*	0.0	0.0	0.0	0.0	0.0
olv84*	0.0	0.0	0.0	0.0	0.0
olv85*	0.0	0.0	0.0	0.0	0.0
olv86*	0.0	0.0	0.0	0.0	0.0
olv87*	0.0	0.0	0.0	0.0	0.0
olv88*	0.0	0.0	0.0	0.0	0.0
olv89*	0.0	0.0	0.0	0.0	0.0
olv90*	0.0	0.0	0.0	0.0	0.0
olv91*	0.0	0.0	0.0	0.0	0.0
olv92*	0.0	0.0	0.0	0.0	0.0
olv93*	0.0	0.0	0.0	0.0	0.0
olv94*	0.0	0.0	0.0	0.0	0.0
olv95*	0.0	0.0	0.0	0.0	0.0
olv96*	0.0	0.0	0.0	0.0	0.0
olv97*	0.0	0.0	0.0	0.0	0.0
olv98*	0.0	0.0	0.0	0.0	0.0
olv99*	0.0	0.0	0.0	0.0	0.0
olv100*	0.0	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)				
olv3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olv4*	1.0	1.0	0.5	1.0
cmyn4*	0.0	0.0	0.5	0.0
standard and adapted CIELAB				
LAB*LAB	76.05	-1.34	38.65	
LAR*LAB	76.05	-1.34	38.65	

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 162/360 = 0.45$

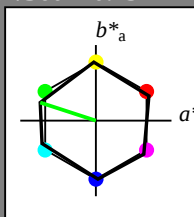
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.0

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 0.0 0.0
LAB*Lab 95.41 0.0 0.0
LAB*TCa 99.99 0.01

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 76.07 0.0 0.0
LAB*Lab 76.07 0.0 0.0
LAB*TCa 75.00 0.01

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 56.72 0.0 0.0
LAB*Lab 56.72 0.0 0.0
LAB*TCa 50.00 0.01

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)
cmyn3* 0.75 0.75 0.75 (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 37.37 0.0 0.0
LAB*Lab 37.37 0.0 0.0
LAB*TCa 25.00 0.01

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 18.03 0.0 0.0
LAB*Lab 18.03 0.0 0.0
LAB*TCa 0.01 0.01

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

$n^* = 1.0$

CNS18; adapted (a) CIELAB data

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

RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 76.05 -36.79 11.96
LAB*Lab 76.05 -36.79 11.96
LAB*TCa 75.0 38.69 16.20

relative CIELAB lab*
lab*lab 0.75 -0.474 0.154
lab*tch 0.75 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.75 -0.499 0.003
lab*tce 0.75 0.5 0.499
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -36.8 11.96
LAB*Lab 56.71 -36.8 11.96
LAB*TCa 50.0 38.7 16.20

relative CIELAB lab*
lab*lab 0.25 -0.475 0.155
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 1.0 0.5 0.0 (0.0)
olv4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.75 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -36.79 11.96
LAB*Lab 37.36 -36.79 11.96
LAB*TCa 25.01 38.69 16.20

relative CIELAB lab*
lab*lab 0.25 -0.474 0.154
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.125 -0.237 0.077
cmyn3* 0.125 0.25 0.45
olv4* 0.125 0.25 0.45
cmyn4* 0.125 0.25 0.45
standard and adapted CIELAB
LAB*LAB 27.69 -18.39 5.98
LAB*Lab 27.69 -18.39 5.98
LAB*TCa 12.5 19.34 16.20

relative CIELAB lab*
lab*lab 0.125 -0.237 0.077
lab*tch 0.125 0.25 0.45
lab*nch 0.0 0.25 0.45
relative Natural Colour (NC)
lab*trj 0.125 -0.249 0.001
lab*tce 0.125 0.25 0.499
lab*nce 0.0 0.25 0.998

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.375 -0.712 0.232
cmyn3* 0.375 0.75 0.45
olv4* 0.375 0.75 0.45
cmyn4* 0.375 0.75 0.45
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.47
LAB*Lab 18.02 0.5 0.47
LAB*TCa 0.0 0.01

relative CIELAB lab*
lab*lab 0.375 -0.712 0.232
lab*tch 0.375 0.75 0.45
lab*nch 0.0 0.75 0.45
relative Natural Colour (NC)
lab*trj 0.375 -0.749 0.004
lab*tce 0.375 0.75 0.499
lab*nce 0.0 0.75 0.998

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

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

$n^* = 0.00$

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*TCa 99.99 0.01

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 -0.61 3.44
LAB*TCa 75.0 0.01

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 -0.24 2.14
LAB*TCa 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 0.0 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)
cmyn3* 0.75 0.75 0.75 (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 37.36 -0.13 1.61
LAB*Lab 37.36 0.0 0.0
LAB*TCa 25.0 0.01

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*Lab 18.02 0.0 0.0
LAB*TCa 0.0 0.01

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

$n^* = 1.0$

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 162/360 = 0.45$

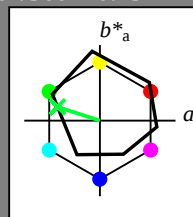
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 53 59 162

olv*Ma: 0.0 1.0 0.21

triangle lightness t^*



ORS18; adapted (a) CIELAB data

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

OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CLMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	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 0.75 0.5 (1.0)
cmyn3* 0.5 0.25 0.45
olv4* 0.5 1.0 0.5 (1.0)
cmyn4* 0.5 0.25 0.45
standard and adapted CIELAB
LAB*LAB 73.96 -28.58 12.41
LAB*Lab 73.96 -28.58 12.41
LAB*TCa 75.0 29.45 16.20

relative CIELAB lab*
lab*lab 0.723 -0.474 0.154
lab*tch 0.75 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.723 -0.498 0.026
lab*tce 0.723 0.5 0.492
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*Lab 56.71 -0.24 2.14
LAB*TCa 50.0 0.01

relative CIELAB lab*
lab*lab 0.25 -0.475 0.155
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 1.0 0.5 0.0 (0.0)
olv4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.75 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.13 1.61
LAB*Lab 37.36 0.0 0.0
LAB*TCa 25.0 0.01

relative CIELAB lab*
lab*lab 0.25 -0.474 0.154
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.75 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olv3* 0.125 -0.237 0.077
cmyn3* 0.125 0.25 0.45
olv4* 0.125 0.25 0.45
cmyn4* 0.125 0.25 0.45
standard and adapted CIELAB
LAB*LAB 27.69 -18.39 5.98
LAB*Lab 27.69 -18.39 5.98
LAB*TCa 12.5 19.34 16.20

relative CIELAB lab*
lab*lab 0.125 -0.237 0.077
lab*tch 0.125 0.25 0.45
lab*nch 0.0 0.25 0.45
relative Natural Colour (NC)
lab*trj 0.125 -0.249 0.001
lab*tce 0.125 0.25 0.499
lab*nce 0.0 0.25 0.998

$n^* = 0.50$

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olv4* 0.5 1.0 0.5 (0.0)
cmyn4* 0.5 0.25 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*Lab 56.71 -0.24 2.14
LAB*TCa 50.0 0.01

relative CIELAB lab*
lab*lab 0.25 -0.475 0.155
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.5 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.0 (1.0)
cmyn3* 1.0 0.5 0.0 (0.0)
olv4* 0.25 1.0 0.25 (0.0)
cmyn4* 0.75 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 -0.13 1.61
LAB*Lab 37.36 0.0 0.0
LAB*TCa 25.0 0.01

relative CIELAB lab*
lab*lab 0.25 -0.474 0.154
lab*tch 0.25 0.5 0.45
lab*nch 0.0 0.75 0.45
relative Natural Colour (NC)
lab*trj 0.25 -0.499 0.003
lab*tce 0.25 0.5 0.499
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olv3* 0.375 -0.712 0.232
cmyn3* 0.375 0.75 0.45
olv4* 0.375 0.75 0.45
cmyn4* 0.375 0.75 0.45
standard and adapted CIELAB
LAB*LAB 18.02 0.5 0.47
LAB*Lab 18.02 0.5 0.47
LAB*TCa 0.0 0.01

relative CIELAB lab*
lab*lab 0.375 -0.712 0.232
lab*tch 0.375 0.75 0.45
lab*nch 0.0 0.75 0.45
relative Natural Colour (NC)
lab*trj 0.375 -0.749 0.004
lab*tce 0.375 0.75 0.499
lab*nce 0.0 0.75 0.998

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

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

$n^* = 0.00$

VE45-7, 5 step scales for constant CIELAB hue 162/360 = 0.45 (left)

5 step scales for constant CIELAB hue 162/360 = 0.45 (right)

BAM-test chart VE45; Colorimetric systems CNS18 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 203/360 = 0.564$

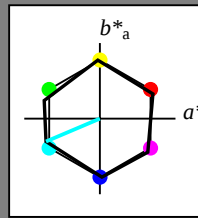
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 57 77 203

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

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*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

relative Inform. Technology (IT)
olv3* 0.75 1.0 1.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olv4* 0.75 1.0 1.0 (1.0)
cmyn4* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 85.73 -17.79 -7.55
LAB*LABa 85.73 -17.79 -7.55
LAB*TCHa 97.5 19.34 203.0

relative Inform. Technology (IT)
olv3* 0.5 1.0 1.0 (1.0)
cmyn3* 0.5 0.0 0.0 (0.0)
olv4* 0.5 1.0 1.0 (1.0)
cmyn4* 0.5 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.05 -35.61 -15.11
LAB*LABa 76.05 -35.61 -15.11
LAB*TCHa 75.0 38.69 203.0

relative Inform. Technology (IT)
olv3* 0.25 1.0 1.0 (1.0)
cmyn3* 0.25 0.0 0.0 (0.0)
olv4* 0.25 1.0 1.0 (1.0)
cmyn4* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 66.37 -53.42 -22.67
LAB*LABa 66.37 -53.42 -22.67
LAB*TCHa 62.5 58.04 203.0

relative Inform. Technology (IT)
olv3* 0.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 0.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -71.22 -30.23
LAB*LABa 56.71 -71.22 -30.23
LAB*TCHa 50.0 77.38 203.0

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 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01

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 66.38 -17.8 -7.55
LAB*LABa 66.38 -17.8 -7.55
LAB*TCHa 62.5 19.35 203.0

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 56.71 -35.61 -15.11
LAB*LABa 56.71 -35.61 -15.11
LAB*TCHa 50.0 38.7 203.0

relative Inform. Technology (IT)
olv3* 0.5 0.75 0.75 (1.0)
cmyn3* 0.5 0.25 0.25 (0.0)
olv4* 0.5 1.0 1.0 0.75
cmyn4* 0.5 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 47.03 -53.42 -22.67
LAB*LABa 47.03 -53.42 -22.67
LAB*TCHa 37.51 58.04 203.0

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.25 1.0 1.0 0.75
cmyn4* 0.25 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 37.51 -53.42 -22.67
LAB*LABa 37.51 -53.42 -22.67
LAB*TCHa 30.0 77.38 203.0

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*TCHa 50.0 0.01

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 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 47.03 -17.8 -7.55
LAB*LABa 47.03 -17.8 -7.55
LAB*TCHa 37.5 19.35 203.0

relative Inform. Technology (IT)
olv3* 0.25 0.5 0.5 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.25 1.0 1.0 0.5
cmyn4* 0.25 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 37.51 -35.61 -15.11
LAB*LABa 37.51 -35.61 -15.11
LAB*TCHa 30.0 38.7 203.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 0.25 1.0 1.0 0.25
cmyn4* 0.25 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 27.69 -53.42 -22.67
LAB*LABa 27.69 -53.42 -22.67
LAB*TCHa 25.01 38.69 203.0

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olv4* 0.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 27.69 -17.79 -7.55
LAB*LABa 27.69 -17.79 -7.55
LAB*TCHa 25.01 38.69 203.0

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olv4* 0.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
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 -0.61 3.44
LAB*TCHa 75.0 0.01

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*TCHa 0.01 0.01

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
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 -0.61 3.44
LAB*TCHa 75.0 0.01

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmyn4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 95.41 0.0 0.0
LAB*LABa 95.41 0.0 0.0
LAB*TCHa 99.99 0.01

VE45-7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

BAM-test chart VE45; Colorimetric systems CNS18 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

chromaticness c^*

chromaticness c^*

chromaticness c^*

-See for similar files: <http://www.ps.bam.de/VE45/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM material: code=rha4ta

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 325/360 = 0.903$

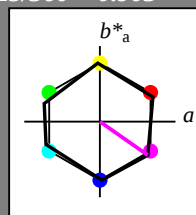
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 57 77 325

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



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 0.0 0.0
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*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmv3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmv4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 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*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmv3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 0.5
cmv4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*LABb 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmv3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmv4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*LABb 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*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmv3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmv4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*LABb 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmv3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmv4* 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*LABb 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

CNS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

$c^* = 1.00$

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

$c^* = 1.00$

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 325/360 = 0.903$

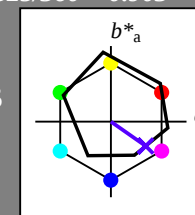
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 33 56 325

olv*Ma: 0.34 0.0 1.0

triangle lightness t^*



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*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*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmv3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmv4* 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*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*trc 0.75 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmv3* 0.5 0.5 0.5 (0.0)
olv4* 1.0 1.0 1.0 0.5
cmv4* 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*LABb 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*trc 0.5 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (1.0)
cmv3* 0.75 0.75 0.75 (0.0)
olv4* 1.0 1.0 1.0 0.25
cmv4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 1.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 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*trc 0.25 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmv3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmv4* 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 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmv3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 1.0 1.0 0.0
cmv4* 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 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*trc 0.0 0.0 0.0
lab*ncc 1.0 0.0 0.0

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CLMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	271

%Regularity

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

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

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

$c^* = 1.00$

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

$c^* = 1.00$

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$c^* = 0.25$

$c^* = 0.50$

$c^* = 0.75$

VE45-7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

BAM-test chart VE45; Colorimetric systems CNS18 & ORS18

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

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 25/360 = 0.071$

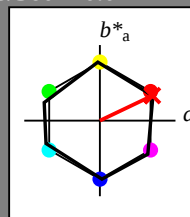
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.01 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 100$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv5*	0.0	0.0	0.0	(0.0)
olv6*	0.0	0.0	0.0	(0.0)
olv7*	0.0	0.0	0.0	(0.0)
olv8*	0.0	0.0	0.0	(0.0)
olv9*	0.0	0.0	0.0	(0.0)
olv10*	0.0	0.0	0.0	(0.0)
olv11*	0.0	0.0	0.0	(0.0)
olv12*	0.0	0.0	0.0	(0.0)
olv13*	0.0	0.0	0.0	(0.0)
olv14*	0.0	0.0	0.0	(0.0)
olv15*	0.0	0.0	0.0	(0.0)
olv16*	0.0	0.0	0.0	(0.0)
olv17*	0.0	0.0	0.0	(0.0)
olv18*	0.0	0.0	0.0	(0.0)
olv19*	0.0	0.0	0.0	(0.0)
olv20*	0.0	0.0	0.0	(0.0)
olv21*	0.0	0.0	0.0	(0.0)
olv22*	0.0	0.0	0.0	(0.0)
olv23*	0.0	0.0	0.0	(0.0)
olv24*	0.0	0.0	0.0	(0.0)
olv25*	0.0	0.0	0.0	(0.0)
olv26*	0.0	0.0	0.0	(0.0)
olv27*	0.0	0.0	0.0	(0.0)
olv28*	0.0	0.0	0.0	(0.0)
olv29*	0.0	0.0	0.0	(0.0)
olv30*	0.0	0.0	0.0	(0.0)
olv31*	0.0	0.0	0.0	(0.0)
olv32*	0.0	0.0	0.0	(0.0)
olv33*	0.0	0.0	0.0	(0.0)
olv34*	0.0	0.0	0.0	(0.0)
olv35*	0.0	0.0	0.0	(0.0)
olv36*	0.0	0.0	0.0	(0.0)
olv37*	0.0	0.0	0.0	(0.0)
olv38*	0.0	0.0	0.0	(0.0)
olv39*	0.0	0.0	0.0	(0.0)
olv40*	0.0	0.0	0.0	(0.0)
olv41*	0.0	0.0	0.0	(0.0)
olv42*	0.0	0.0	0.0	(0.0)
olv43*	0.0	0.0	0.0	(0.0)
olv44*	0.0	0.0	0.0	(0.0)
olv45*	0.0	0.0	0.0	(0.0)
olv46*	0.0	0.0	0.0	(0.0)
olv47*	0.0	0.0	0.0	(0.0)
olv48*	0.0	0.0	0.0	(0.0)
olv49*	0.0	0.0	0.0	(0.0)
olv50*	0.0	0.0	0.0	(0.0)
olv51*	0.0	0.0	0.0	(0.0)
olv52*	0.0	0.0	0.0	(0.0)
olv53*	0.0	0.0	0.0	(0.0)
olv54*	0.0	0.0	0.0	(0.0)
olv55*	0.0	0.0	0.0	(0.0)
olv56*	0.0	0.0	0.0	(0.0)
olv57*	0.0	0.0	0.0	(0.0)
olv58*	0.0	0.0	0.0	(0.0)
olv59*	0.0	0.0	0.0	(0.0)
olv60*	0.0	0.0	0.0	(0.0)
olv61*	0.0	0.0	0.0	(0.0)
olv62*	0.0	0.0	0.0	(0.0)
olv63*	0.0	0.0	0.0	(0.0)
olv64*	0.0	0.0	0.0	(0.0)
olv65*	0.0	0.0	0.0	(0.0)
olv66*	0.0	0.0	0.0	(0.0)
olv67*	0.0	0.0	0.0	(0.0)
olv68*	0.0	0.0	0.0	(0.0)
olv69*	0.0	0.0	0.0	(0.0)
olv70*	0.0	0.0	0.0	(0.0)
olv71*	0.0	0.0	0.0	(0.0)
olv72*	0.0	0.0	0.0	(0.0)
olv73*	0.0	0.0	0.0	(0.0)
olv74*	0.0	0.0	0.0	(0.0)
olv75*	0.0	0.0	0.0	(0.0)
olv76*	0.0	0.0	0.0	(0.0)
olv77*	0.0	0.0	0.0	(0.0)
olv78*	0.0	0.0	0.0	(0.0)
olv79*	0.0	0.0	0.0	(0.0)
olv80*	0.0	0.0	0.0	(0.0)
olv81*	0.0	0.0	0.0	(0.0)
olv82*	0.0	0.0	0.0	(0.0)
olv83*	0.0	0.0	0.0	(0.0)
olv84*	0.0	0.0	0.0	(0.0)
olv85*	0.0	0.0	0.0	(0.0)
olv86*	0.0	0.0	0.0	(0.0)
olv87*	0.0	0.0	0.0	(0.0)
olv88*	0.0	0.0	0.0	(0.0)
olv89*	0.0	0.0	0.0	(0.0)
olv90*	0.0	0.0	0.0	(0.0)
olv91*	0.0	0.0	0.0	(0.0)
olv92*	0.0	0.0	0.0	(0.0)
olv93*	0.0	0.0	0.0	(0.0)
olv94*	0.0	0.0	0.0	(0.0)
olv95*	0.0	0.0	0.0	(0.0)
olv96*	0.0	0.0	0.0	(0.0)
olv97*	0.0	0.0	0.0	(0.0)
olv98*	0.0	0.0	0.0	(0.0)
olv99*	0.0	0.0	0.0	(0.0)
olv100*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	56.7	70.15	32.71	77.4	25
LAB*Lab	56.7	-2.69	77.35	77.4	92
LAB*Lab	56.7	-73.6	23.92	77.4	162
LAB*Lab	56.7	-71.24	-30.23	77.4	203
LAB*Lab	56.7	2.7	-77.34	77.4	272
LAB*Lab	56.7	63.4	-44.38	77.4	325
LAB*Lab	18.01	0.0	0.0	0.0	0
LAB*Lab	95.41	0.0	0.0	0.0	0
LAB*Lab	39.92	58.74	27.99	65.07	25
LAB*Lab	81.26	-2.88	71.56	71.62	92
LAB*Lab	52.23	-42.41	13.6	44.55	162
LAB*Lab	30.57	1.41	-46.46	46.49	272

relative Inform. Technology (IT)

olv3*	1.0	0.752	0.75	(1.0)
olv4*	0.0	0.248	0.25	(0.0)
olv5*	0.0	0.752	0.75	(1.0)
olv6*	0.0	0.248	0.25	(0.0)
olv7*	0.0	0.752	0.75	(1.0)
olv8*	0.0	0.248	0.25	(0.0)
olv9*	0.0	0.752	0.75	(1.0)
olv10*	0.0	0.248	0.25	(0.0)
olv11*	0.0	0.752	0.75	(1.0)
olv12*	0.0	0.248	0.25	(0.0)
olv13*	0.0	0.752	0.75	(1.0)
olv14*	0.0	0.248	0.25	(0.0)
olv15*	0.0	0.752	0.75	(1.0)
olv16*	0.0	0.248	0.25	(0.0)
olv17*	0.0	0.752	0.75	(1.0)
olv18*	0.0	0.248	0.25	(0.0)
olv19*	0.0	0.752	0.75	(1.0)
olv20*	0.0	0.248	0.25	(0.0)
olv21*	0.0	0.752	0.75	(1.0)
olv22*	0.0	0.248	0.25	(0.0)
olv23*	0.0	0.752	0.75	(1.0)
olv24*	0.0	0.248	0.25	(0.0)
olv25*	0.0	0.752	0.75	(1.0)
olv26*	0.0	0.248	0.25	(0.0)
olv27*	0.0	0.752	0.75	(1.0)
olv28*	0.0	0.248	0.25	(0.0)
olv29*	0.0	0.752	0.75	(1.0)
olv30*	0.0	0.248	0.25	(0.0)
olv31*	0.0	0.752	0.75	(1.0)
olv32*	0.0	0.248	0.25	(0.0)
olv33*	0.0	0.752	0.75	(1.0)
olv34*	0.0	0.248	0.25	(0.0)
olv35*	0.0	0.752	0.75	(1.0)
olv36*	0.0	0.248	0.25	(0.0)
olv37*	0.0	0.752	0.75	(1.0)
olv38*	0.0	0.248	0.25	(0.0)
olv39*	0.0	0.752	0.75	(1.0)
olv40*	0.0	0.248	0.25	(0.0)
olv41*	0.0	0.752	0.75	(1.0)
olv42*	0.0	0.248	0.25	(0.0)
olv43*	0.0	0.752	0.75	(1.0)
olv44*	0.0	0.248	0.25	(0.0)
olv45*	0.0	0.752	0.75	(1.0)
olv46*	0.0	0.248	0.25	(0.0)
olv47*	0.0	0.752	0.75	(1.0)
olv48*	0.0	0.248	0.25	(0.0)
olv49*	0.0	0.752	0.75	(1.0)
olv50*	0.0	0.248	0.25	(0.0)
olv51*	0.0	0.752	0.75	(1.0)
olv52*	0.0	0.248	0.25	(0.0)
olv53*	0.0	0.752	0.75	(1.0)
olv54*	0.0	0.248	0.25	(0.0)
olv55*	0.0	0.752	0.75	(1.0)
olv56*	0.0	0.248	0.25	(0.0)
olv57*	0.0	0.752	0.75	(1.0)
olv58*	0.0	0.248	0.25	(0.0)
olv59*	0.0	0.752	0.75	(1.0)
olv60*	0.0	0.248	0.25	(0.0)
olv61*	0.0	0.752	0.75	(1.0)
olv62*	0.0	0.248	0.25	(0.0)
olv63*	0.0	0.752	0.75	(1.0)
olv64*	0.0	0.248	0.25	(0.0)
olv65*	0.0	0.752	0.75	(1.0)
olv66*	0.0	0.248	0.25	(0.0)
olv67*	0.0	0.752	0.75	(1.0)
olv68*	0.0	0.248	0.25	(0.0)
olv69*	0.0	0.752	0.75	(1.0)
olv70*	0.0	0.248	0.25	(0.0)
olv71*	0.0	0.752	0.75	(1.0)
olv72*	0.0	0.248	0.25	(0.0)
olv73*	0.0	0.752	0.75	(1.0)
olv74*	0.0	0.248	0.25	(0.0)
olv75*	0.0	0.752	0.75	(1.0)
olv76*	0.0	0.248	0.25	(0.0)
olv77*	0.0	0.752	0.75	(1.0)
olv78*	0.0	0.248	0.25	(0.0)
olv79*	0.0	0.752	0.75	(1.0)
olv80*	0.0	0.248	0.25	(0.0)
olv81*	0.0	0.752	0.75	(1.0)
olv82*	0.0	0.248	0.25	(0.0)
olv83*	0.0	0.752	0.75	(1.0)
olv84*	0.0	0.248	0.25	(0.0)
olv85*	0.0	0.752	0.75	(1.0)
olv86*	0.0	0.248	0.25	(0.0)
olv87*	0.0	0.752	0.75	(1.0)
olv88*	0.0	0.248	0.25	(0.0)
olv89*	0.0	0.752	0.75	(1.0)
olv90*	0.0	0.248	0.25	(0.0)
olv91*	0.0	0.752	0.75	(1.0)
olv92*	0.0	0.248	0.25	(0.0)
olv93*	0.0	0.752	0.75	(1.0)
olv94*	0.0	0.248	0.25	(0.0)
olv95*	0.0	0.752	0.75	(1.0)
olv96*	0.0	0.248	0.25	(0.0)
olv97*	0.0	0.752	0.75	(1.0)
olv98*	0.0	0.248	0.25	(0.0)
olv99*	0.0	0.752	0.75	(1.0)
olv100*	0.0	0.248	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	56.7	70.15	32.71	77.4	25
LAB*Lab	56.7	-2.69	77.35	77.4	92
LAB*Lab	56.7	-73.6	23.92	77.4	162
LAB*Lab	56.7	-71.24	-30.23	77.4	203
LAB*Lab	56.7	2.7	-77.34	77.4	272
LAB*Lab	56.7	63.4	-44.38	77.4	325
LAB*Lab	18.01	0.0	0.0	0.0	0
LAB*Lab	95.41	0.0	0.0	0.0	0
LAB*Lab	39.92	58.74	27.99	65.07	25
LAB*Lab	81.26	-2.88	71.56	71.62	92
LAB*Lab	52.23	-42.41	13.6	44.55	162
LAB*Lab	30.57	1.41	-46.46	46.49	272

relative Inform. Technology (IT)

olv3*	1.0	0.752	0.75	(1.0)
olv4*	0.0	0.248	0.25	(0.0)
olv5*	0.0	0.752	0.75	(1.0)
olv6*	0.0	0.248	0.25	(0.0)
olv7*	0.0	0.752	0.75	(1.0)
olv8*	0.0	0.248	0.25	(0.0)
olv9*	0.0	0.752	0.75	(1.0)
olv10*	0.0	0.248	0.25	(0.0)
olv11*	0.0	0.752	0.75	(1.0)
olv12*	0.0	0.248	0.25	(0.0)
olv13*	0.0	0.752	0.75	(1.0)
olv14*	0.0	0.248	0.25	(0.0)
olv15*	0.0	0.752	0.75	(1.0)
olv16*	0.0	0.248	0.25	(0.0)
olv17*	0.0	0.752	0.75	(1.0)
olv18*	0.0	0.248	0.25	(0.0)
olv19*	0.0	0.752	0.75	(1.0)
olv20*	0.0	0.248	0.25	(0.0)
olv21*	0.0	0.752	0.75	(1.0)
olv22*	0.0	0.248	0.25	(0.0)
olv23*	0.0	0.752	0.75	(1.0)
olv24*	0.0	0.248	0.25	(0.0)
olv25*	0.0	0.752	0.75	(1.0)
olv26*	0.0	0.248	0.25	(0.0)
olv27*	0.0	0.752	0.75	(1.0)

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 92/360 = 0.256$

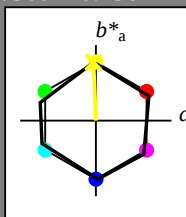
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 0.99 1.0 0.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.999	1.0	0.75	(1.0)
olv3*	0.001	0.0	0.25	(0.0)
olv4*	0.999	1.0	0.75	(1.0)
olv4*	0.001	0.0	0.25	(0.0)
olv4*	0.001	0.0	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26

relative Inform. Technology (IT)

olv3*	0.999	1.0	0.75	(1.0)
olv3*	0.001	0.0	0.25	(0.0)
olv4*	0.999	1.0	0.75	(1.0)
olv4*	0.001	0.0	0.25	(0.0)
olv4*	0.001	0.0	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26

relative Inform. Technology (IT)

olv3*	0.999	1.0	0.75	(1.0)
olv3*	0.001	0.0	0.25	(0.0)
olv4*	0.999	1.0	0.75	(1.0)
olv4*	0.001	0.0	0.25	(0.0)
olv4*	0.001	0.0	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26

relative Inform. Technology (IT)

olv3*	0.999	1.0	0.75	(1.0)
olv3*	0.001	0.0	0.25	(0.0)
olv4*	0.999	1.0	0.75	(1.0)
olv4*	0.001	0.0	0.25	(0.0)
olv4*	0.001	0.0	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26
LAB*LAB	85.73	-0.76	19.26

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
olv3*	0.25	0.25	0.25	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0
LAB*LAB	76.07	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
olv3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0
LAB*LAB	56.72	0.0	0.0

relative Inform. Technology (IT)				
olv3*	0.497	0.5	0.0	(1.0)
cmyn3*	0.503	0.5	1.0	(0.0)
olv4*	0.997	1.0	0.5	0.5
cmyn4*	0.003	0.0	0.5	0.5
standard and adapted CIELAB				
LAB*LAB	37.36	-1.55	38.5	
LAB*LABa	37.36	-1.55	38.5	
LAB*Lab	37.36	-1.55	38.5	

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 162/360 = 0.451$

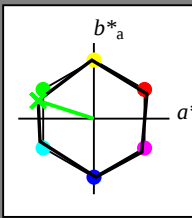
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.01

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 0.0 0.0
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 76.07 0.0 0.0
LAB*LABa 76.07 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 56.72 0.0 0.0
LAB*LABa 56.72 0.0 0.0
LAB*LABb 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 (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 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*LABb 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*LABb 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.03 0.0 0.0
LAB*LABa 18.03 0.0 0.0
LAB*LABb 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

CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Regularity

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

$g^*_{C,rel} = 100$

relative Inform. Technology (IT)
olv3* 0.5 1.0 0.503 (1.0)
cmyn3* 0.5 0.0 0.497 (0.0)
olv4* 0.5 1.0 0.503 (1.0)
cmyn4* 0.5 0.0 0.497 (0.0)
standard and adapted CIELAB
LAB*LAB 76.05 -36.78 11.8
LAB*LABa 76.05 -36.78 11.8
LAB*LABb 75.0 38.64 162.22

relative CIELAB lab*
lab*lab 0.5 0.5 0.503 (1.0)
lab*tch 0.5 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.5 0.5 0.451
lab*tce 0.5 0.5 0.451
lab*nce 0.0 0.5 0.451

relative Inform. Technology (IT)
olv3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.747 (0.0)
olv4* 0.5 1.0 0.503 (0.75)
cmyn4* 0.5 0.0 0.497 (0.25)
standard and adapted CIELAB
LAB*LAB 56.71 -36.79 11.8
LAB*LABa 56.71 -36.79 11.8
LAB*LABb 50.0 38.64 162.22

relative CIELAB lab*
lab*lab 0.25 0.75 0.25 (1.0)
lab*tch 0.25 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.25 0.75 0.451
lab*tce 0.25 0.75 0.451
lab*nce 0.0 0.75 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.75 0.004 (1.0)
cmyn3* 0.75 0.0 0.994 (0.0)
olv4* 0.5 1.0 0.503 (0.5)
cmyn4* 0.5 0.0 0.497 (0.5)
standard and adapted CIELAB
LAB*LAB 56.71 -36.79 11.8
LAB*LABa 56.71 -36.79 11.8
LAB*LABb 50.0 38.64 162.22

relative CIELAB lab*
lab*lab 0.0 0.75 0.004 (1.0)
lab*tch 0.0 0.75 0.451
lab*nch 0.0 0.75 0.451
relative Natural Colour (NC)
lab*trj 0.0 0.75 0.451
lab*tce 0.0 0.75 0.451
lab*nce 0.0 0.75 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.5 0.001 (1.0)
cmyn3* 0.5 0.0 0.999 (0.0)
olv4* 0.5 1.0 0.503 (0.5)
cmyn4* 0.5 0.0 0.497 (0.5)
standard and adapted CIELAB
LAB*LAB 56.71 -36.79 11.8
LAB*LABa 56.71 -36.79 11.8
LAB*LABb 50.0 38.64 162.22

relative CIELAB lab*
lab*lab 0.0 0.5 0.001 (1.0)
lab*tch 0.0 0.5 0.451
lab*nch 0.0 0.5 0.451
relative Natural Colour (NC)
lab*trj 0.0 0.5 0.451
lab*tce 0.0 0.5 0.451
lab*nce 0.0 0.5 0.451

relative Inform. Technology (IT)
olv3* 0.0 0.25 0.000 (1.0)
cmyn3* 0.25 0.0 0.999 (0.0)
olv4* 0.5 1.0 0.503 (0.5)
cmyn4* 0.5 0.0 0.497 (0.5)
standard and adapted CIELAB
LAB*LAB 56.71 -36.79 11.8
LAB*LABa 56.71 -36.79 11.8
LAB*LABb 50.0 38.64 162.22

relative CIELAB lab*
lab*lab 0.0 0.25 0.000 (1.0)
lab*tch 0.0 0.25 0.451
lab*nch 0.0 0.25 0.451
relative Natural Colour (NC)
lab*trj 0.0 0.25 0.451
lab*tce 0.0 0.25 0.451
lab*nce 0.0 0.25 0.451

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.25$

$n^* = 1.50$

$n^* = 1.75$

$n^* = 2.00$

$n^* = 2.25$

$n^* = 2.50$

$n^* = 2.75$

$n^* = 3.00$

$n^* = 3.25$

$n^* = 3.50$

$n^* = 3.75$

$n^* = 4.00$

$n^* = 4.25$

$n^* = 4.50$

$n^* = 4.75$

$n^* = 5.00$

$n^* = 5.25$

$n^* = 5.50$

$n^* = 5.75$

$n^* = 6.00$

$n^* = 6.25$

$n^* = 6.50$

$n^* = 6.75$

$n^* = 7.00$

$n^* = 7.25$

$n^* = 7.50$

$n^* = 7.75$

$n^* = 8.00$

$n^* = 8.25$

$n^* = 8.50$

$n^* = 8.75$

$n^* = 9.00$

$n^* = 9.25$

$n^* = 9.50$

$n^* = 9.75$

$n^* = 10.00$

$n^* = 10.25$

$n^* = 10.50$

$n^* = 10.75$

$n^* = 11.00$

$n^* = 11.25$

$n^* = 11.50$

$n^* = 11.75$

$n^* = 12.00$

$n^* = 12.25$

$n^* = 12.50$

$n^* = 12.75$

$n^* = 13.00$

$n^* = 13.25$

$n^* = 13.50$

$n^* = 13.75$

$n^* = 14.00$

$n^* = 14.25$

$n^* = 14.50$

$n^* = 14.75$

$n^* = 15.00$

$n^* = 15.25$

$n^* = 15.50$

$n^* = 15.75$

$n^* = 16.00$

$n^* = 16.25$

$n^* = 16.50$

$n^* = 16.75$

$n^* = 17.00$

$n^* = 17.25$

$n^* = 17.50$

$n^* = 17.75$

$n^* = 18.00$

$n^* = 18.25$

$n^* = 18.50$

$n^* = 18.75$

$n^* = 19.00$

$n^* = 19.25$

$n^* = 19.50$

$n^* = 19.75$

$n^* = 20.00$

$n^* = 20.25$

$n^* = 20.50$

$n^* = 20.75$

$n^* = 21.00$

$n^* = 21.25$

$n^* = 21.50$

$n^* = 21.75$

$n^* = 22.00$

$n^* = 22.25$

$n^* = 22.50$

$n^* = 22.75$

$n^* = 23.00$

$n^* = 23.25$

$n^* = 23.50$

$n^* = 23.75$

$n^* = 24.00$

$n^* = 24.25$

$n^* = 24.50$

$n^* = 24.75$

$n^* = 25.00$

$n^* = 25.25$

$n^* = 25.50$

$n^* = 25.75$

$n^* = 26.00$

$n^* = 26.25$

$n^* = 26.50$

$n^* = 26.75$

$n^* = 27.00$

$n^* = 27.25$

$n^* = 27.50$

$n^* = 27.75$

$n^* = 28.00$

$n^* = 28.25$

$n^* = 28.50$

$n^* = 28.75$

$n^* = 29.00$

$n^* = 29.25$

$n^* = 29.50$

$n^* = 29.75$

$n^* = 30.00$

$n^* = 30.25$

$n^* = 30.50$

$n^* = 30.75$

$n^* = 31.00$

$n^* = 31.25$

$n^* = 31.50$

$n^* = 31.75$

$n^* = 32.00$

$n^* = 32.25$

$n^* = 32.50$

$n^* = 32.75$

$n^* = 33.00$

$n^* = 33.25$

$n^* = 33.50$

$n^* = 33.75$

$n^* = 34.00$

$n^* = 34.25$

$n^* = 34.50$

$n^* = 34.75$

$n^* = 35.00$

$n^* = 35.25$

$n^* = 35.50$

$n^* = 35.75$

