

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 25/360 = 0.069$

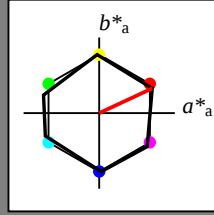
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 100$

% Regularity

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

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

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

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.069$

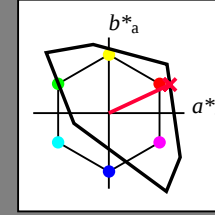
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.22

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

% Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	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

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

standard and adapted CIELAB
 LAB^*LAB 95.41 0.0 0.0
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TCHa 99.99 0.01 -

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

relative Natural Colour (NC)
 lab^*lrj 1.0 0.0 0.0
 lab^*tce 1.0 0.0 -
 lab^*nce 0.0 0.0 -

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

standard and adapted CIELAB
 LAB^*LAB 47.72 0.0 0.0
 LAB^*LABa 47.72 0.0 0.0
 LAB^*TCHa 50.0 0.01 -

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

relative Natural Colour (NC)
 lab^*lrj 0.5 0.0 0.0
 lab^*tce 0.5 0.0 -
 lab^*nce 0.5 0.0 -

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

standard and adapted CIELAB
 LAB^*LAB 0.03 0.0 0.0
 LAB^*LABa 0.03 0.0 0.0
 LAB^*TCHa 0.01 0.01 -

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

relative Natural Colour (NC)
 lab^*lrj 0.0 0.0 0.0
 lab^*tce 0.0 0.0 -
 lab^*nce 1.0 0.0 -

relative Inform. Technology (IT)
 $olvi3^*$ 1.0 0.5 0.609 (1.0)
 $cmyn3^*$ 0.0 0.5 0.391 (0.0)
 $olvi4^*$ 1.0 0.5 0.609 1.0
 $cmyn4^*$ 0.0 0.5 0.391 0.0

standard and adapted CIELAB
 LAB^*LAB 73.69 40.36 18.82
 LAB^*LABa 73.69 40.36 18.82
 LAB^*TCHa 75.0 44.53 25.0

relative CIELAB lab*
 lab^*lab 0.772 0.453 0.211
 lab^*tch 0.75 0.5 0.069
 lab^*nch 0.0 0.5 0.069

relative Natural Colour (NC)
 lab^*lrj 0.772 0.5 -0.002
 lab^*tce 0.75 0.5 0.999
 lab^*nce 0.0 0.5 b99r

relative Inform. Technology (IT)
 $olvi3^*$ 0.5 0.0 0.109 (1.0)
 $cmyn3^*$ 0.5 1.0 0.891 (0.0)
 $olvi4^*$ 1.0 0.5 0.609 0.5
 $cmyn4^*$ 0.0 0.5 0.391 0.5

standard and adapted CIELAB
 LAB^*LAB 26.0 40.36 18.83
 LAB^*LABa 26.0 40.36 18.83
 LAB^*TCHa 25.01 44.53 25.01

relative CIELAB lab*
 lab^*lab 0.272 0.453 0.211
 lab^*tch 0.25 0.5 0.069
 lab^*nch 0.5 0.5 0.069

relative Natural Colour (NC)
 lab^*lrj 0.272 0.5 -0.002
 lab^*tce 0.25 0.5 0.999
 lab^*nce 0.5 0.5 b99r

relative Inform. Technology (IT)
 $olvi3^*$ 1.0 0.0 0.219 (1.0)
 $cmyn3^*$ 0.0 1.0 0.781 (0.0)
 $olvi4^*$ 1.0 0.0 0.219 1.0
 $cmyn4^*$ 0.0 1.0 0.781 0.0

standard and adapted CIELAB
 LAB^*LAB 51.99 80.72 37.65
 LAB^*LABa 51.99 80.72 37.65
 LAB^*TCHa 50.0 89.06 25.0

relative CIELAB lab*
 lab^*lab 0.545 0.906 0.423
 lab^*tch 0.5 1.0 0.069
 lab^*nch 0.0 1.0 0.069

relative Natural Colour (NC)
 lab^*lrj 0.545 1.0 -0.006
 lab^*tce 0.5 1.0 0.999
 lab^*nce 0.0 1.0 b99r

$n^* = 0.00$

blackness n^*

chromaticness c^*

VE500-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

3 step scales for constant CIELAB hue 25/360 = 0.069 (right)