

Input: Colorimetric Natural Reflective System CNS18

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

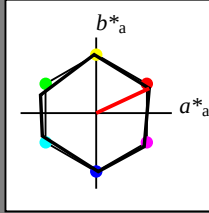
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 100$

% Regularity

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

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

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 56.72 0.0 0.0
 LAB^*LABa 56.72 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 18.03 0.0 0.0
 LAB^*LABa 18.03 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 -

$n^* = 1.0$

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

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

standard and adapted CIELAB
 LAB^*LAB 76.05 35.07 16.35
 LAB^*LABa 76.05 35.07 16.35
 LAB^*TCHa 75.0 38.69 25.0

relative CIELAB lab*
 lab^*lab 0.75 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 0.75 0.5 -0.002
 lab^*tce 0.75 0.5 0.999
 lab^*nce 0.0 0.5 0.999

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

standard and adapted CIELAB
 LAB^*LAB 37.36 35.07 16.35
 LAB^*LABa 37.36 35.07 16.35
 LAB^*TCHa 25.01 38.69 25.0

relative CIELAB lab*
 lab^*lab 0.25 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 0.25 0.5 -0.002
 lab^*tce 0.25 0.5 0.999
 lab^*nce 0.5 0.5 0.999

$n^* = 0.00$

blackness n^*

chromaticness c^*

$n^* = 0.50$

$n^* = 1.0$

Output: Colorimetric Printer Reflective System FRS06

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

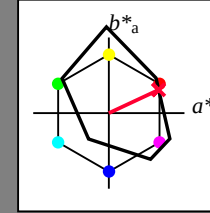
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 33 73 25

olv*Ma: 1.0 0.0 0.2

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

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 91.97 -0.17 -5.11
 LAB^*LABa 91.97 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 49.11 -0.89 -3.42
 LAB^*LABa 49.11 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 6.26 -1.62 -1.73
 LAB^*LABa 6.26 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 -

$n^* = 1.0$

FRS06; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	32.57	62.32	46.49	77.75	37
YMa	82.73	-3.16	113.99	114.03	92
LMa	39.43	-61.79	45.84	76.95	143
CMa	47.86	-26.79	-34.24	43.49	232
VMa	10.16	55.12	-61.03	82.24	312
MMa	34.5	80.68	-33.92	87.52	337
NMa	6.25	0.0	0.0	0.0	0
WMa	91.97	0.0	0.0	0.0	0
RCIE	39.92	59.8	31.05	67.38	27
JCIE	81.26	-2.52	76.25	76.29	92
GCIE	52.23	-41.56	17.14	44.96	158
BCIE	30.57	2.63	-43.77	43.86	273

relative Inform. Technology (IT)
 $olvi3^*$ 1.0 0.5 0.598 (1.0)
 $cmyn3^*$ 0.0 0.5 0.402 (0.0)
 $olvi4^*$ 1.0 0.5 0.598 1.0
 $cmyn4^*$ 0.0 0.5 0.402 0.0

standard and adapted CIELAB
 LAB^*LAB 62.46 32.27 11.42
 LAB^*LABa 62.46 32.95 15.36
 LAB^*TCHa 75.0 36.36 25.0

relative CIELAB lab*
 lab^*lab 0.656 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 0.656 0.5 -0.016
 lab^*tce 0.75 0.5 0.995
 lab^*nce 0.0 0.5 0.995

relative Inform. Technology (IT)
 $olvi3^*$ 0.5 0.0 0.098 (1.0)
 $cmyn3^*$ 0.5 1.0 0.902 (0.0)
 $olvi4^*$ 1.0 0.5 0.598 0.5
 $cmyn4^*$ 0.0 0.5 0.402 0.5

standard and adapted CIELAB
 LAB^*LAB 19.6 31.55 13.12
 LAB^*LABa 19.6 32.95 15.37
 LAB^*TCHa 25.01 36.36 25.01

relative CIELAB lab*
 lab^*lab 0.156 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 0.156 0.5 -0.016
 lab^*tce 0.25 0.5 0.995
 lab^*nce 0.5 0.5 0.995

$n^* = 0.00$

blackness n^*

chromaticness c^*

$n^* = 0.50$

$n^* = 1.0$

VE310-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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