

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = \text{lab}^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.0 0.0

triangle lightness

1.00

%Gamut

$u^*_{rel} = 100$

%Regularity

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

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$n^* = 1.0$

VE640-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

CNS18; adapted (a) CIELAB data

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

R _{Ma}	56.7	70.15	32.71	77.4	25
J _{Ma}	56.7	-2.69	77.35	77.4	92
G _{Ma}	56.7	-73.6	23.92	77.4	162
B _{50Ma}	56.7	-71.24	-30.23	77.4	203
B _{60Ma}	56.7	2.7	-77.34	77.4	272
B _{50R_{Ma}}	56.7	63.4	-44.38	77.4	325
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	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

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

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$n^* = 1.0$

Output: Colorimetric Television Luminous System TLS18

for hue $h^* = \text{lab}^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness

1.00

%Gamut

$u^*_{rel} = 118$

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$n^* = 1.0$

TLS18; adapted (a) CIELAB data

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

O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
N _{Ma}	59.01	89.33	-55.67	105.26	328
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	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

$n^* = 1.0$

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

BAM-test chart VE64; Colorimetric systems CNS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor

output: no change compared to input