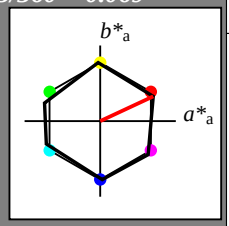
Input: Colorimetric Natural Reflective System CNS18
for hue *h = *lab*h* = 25/360 = 0.069**
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 57 77 25
olv*Ma: 1.0 0.0 0.0

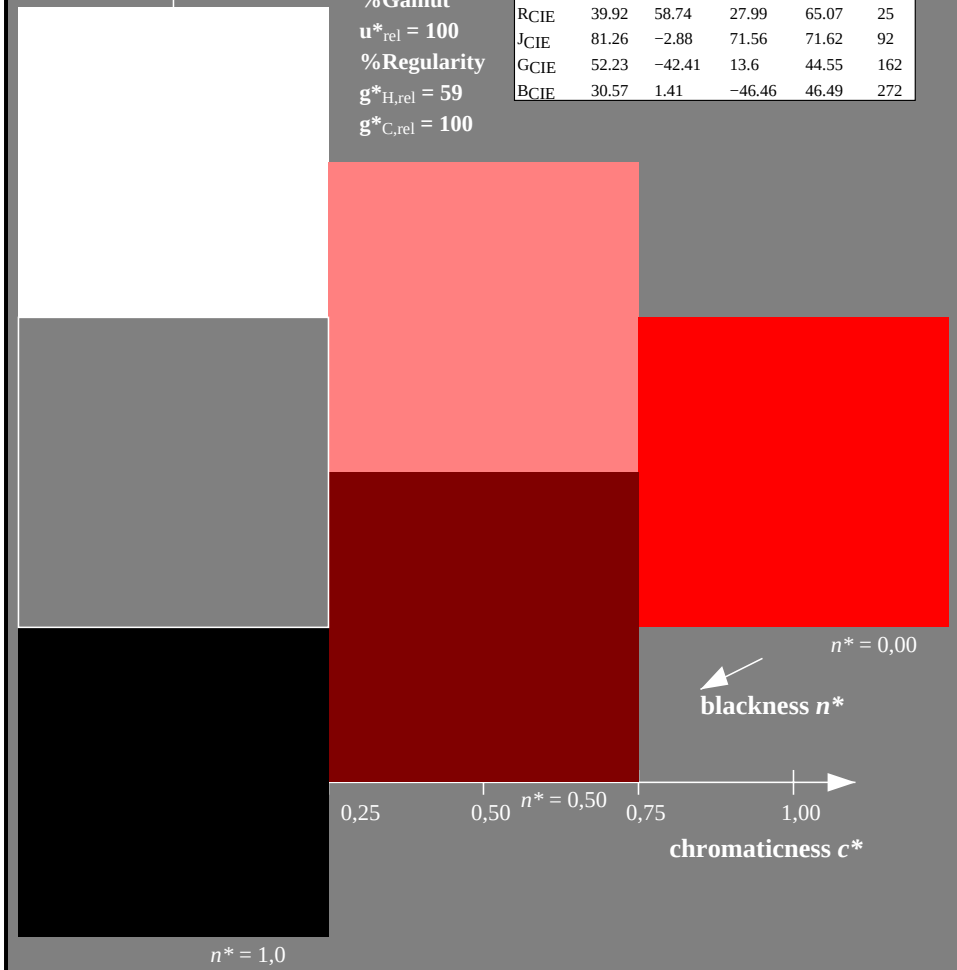
triangle lightness *t**



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
$G50B_{Ma}$	56.7	−71.24	−30.23	77.4	203
B_{Ma}	56.7	2.7	−77.34	77.4	272
$B50R_{Ma}$	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

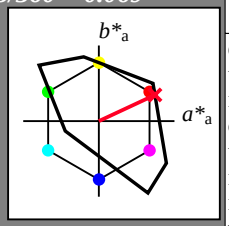
%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 59
$g^*_{C,rel}$ = 100



Output: Colorimetric Television Luminous System TLS18
for hue *h = *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 *t**



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
M_{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

%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

***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	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	0.572 (1.0)
*cmyn3**	0.0	0.5	0.428 (0.0)
*olvi4**	1.0	0.5	0.572 1.0
*cmyn4**	0.0	0.5	0.428 0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.53	37.09	17.29
*LAB*LABa*	74.53	37.09	17.29
*LAB*TCHa*	75.0	40.92	25.0

relative* CIELAB *lab*

*lab*lab*	0.73	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*	0.73	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	0.072 (1.0)
*cmyn3**	0.5	1.0	0.928 (0.0)
*olvi4**	1.0	0.5	0.572 0.5
*cmyn4**	0.0	0.5	0.428 0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	35.84	37.09	17.3
*LAB*LABa*	35.84	37.09	17.3
*LAB*TCHa*	25.01	40.93	25.01

relative* CIELAB *lab*

*lab*lab*	0.23	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*	0.23	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	0.145 (1.0)
*cmyn3**	0.0	1.0	0.855 (0.0)
*olvi4**	1.0	0.0	0.145 1.0
*cmyn4**	0.0	1.0	0.855 0.0

***standard* and *adapted* CIELAB**

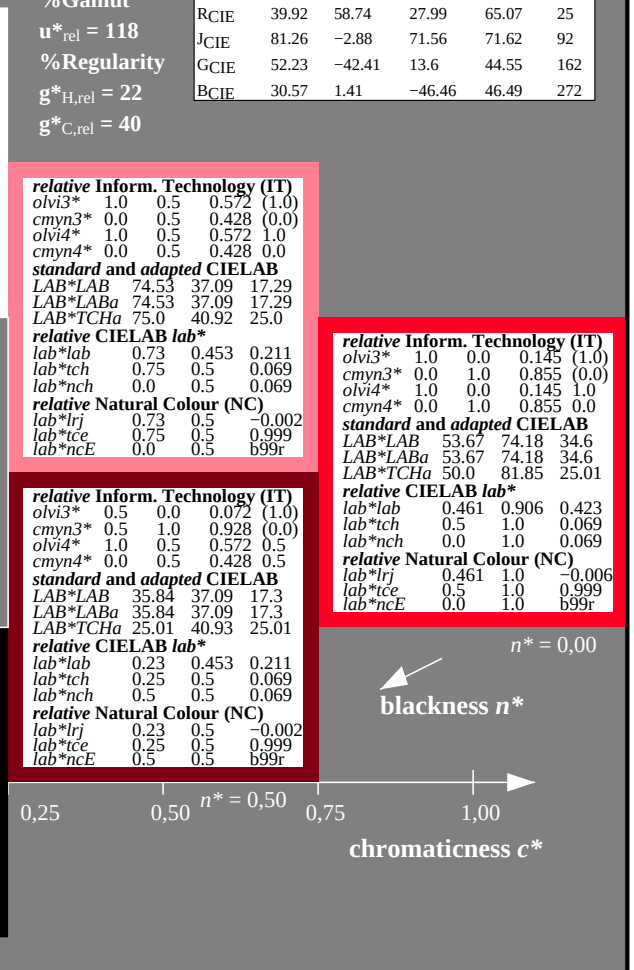
*LAB*LAB*	53.67	74.18	34.6
*LAB*LABa*	53.67	74.18	34.6
*LAB*TCHa*	50.0	81.85	25.01

relative* CIELAB *lab*

*lab*lab*	0.461	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*	0.461	1.0	−0.006
*lab*tce*	0.5	1.0	0.999
*lab*ncE*	0.0	1.0	b99r



VE600−7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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