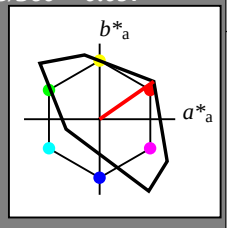
Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 35/360 = 0.097**
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

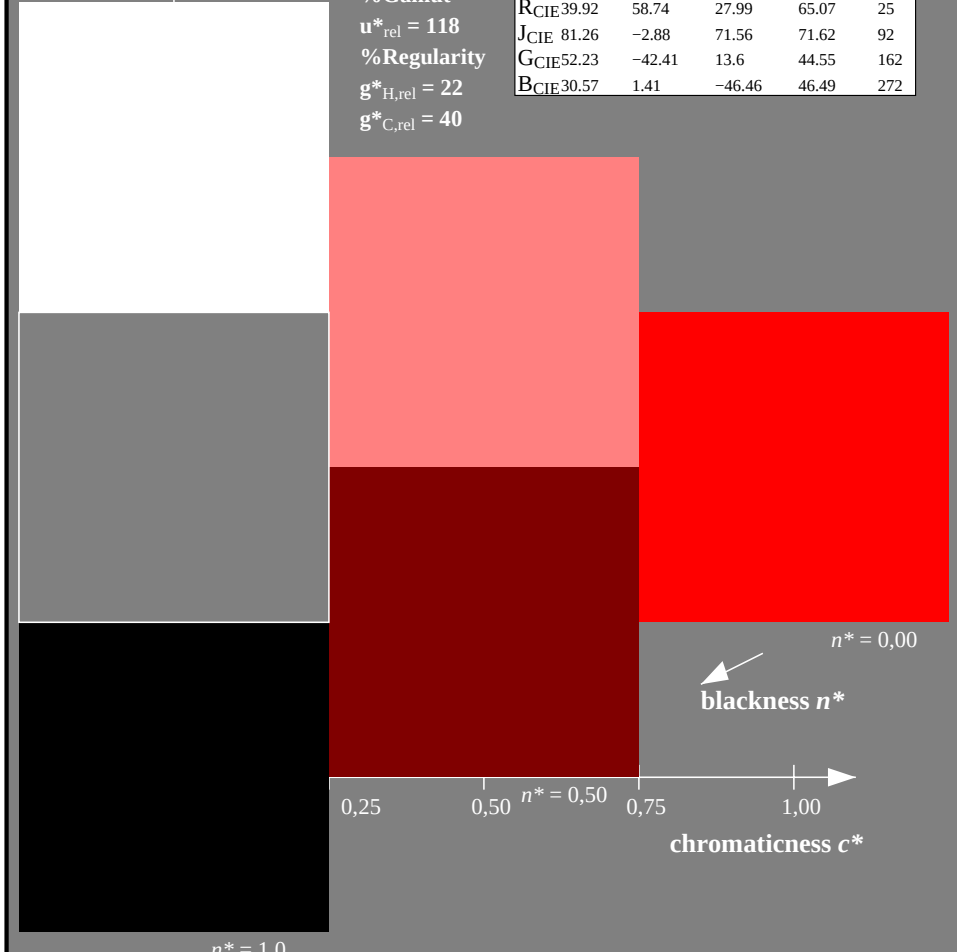
triangle lightness *t**



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

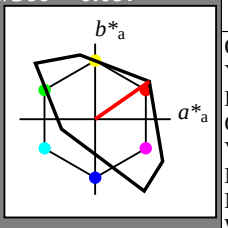
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 35/360 = 0.097**
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

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	0.5 (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*	74.08	35.81	24.94
*LAB*LABa*	74.08	35.81	24.94
*LAB*TCHa*	75.0	43.63	34.85

relative* CIELAB *lab*

*lab*lab*	0.724	0.41	0.286
*lab*tch*	0.75	0.5	0.097
*lab*nch*	0.0	0.5	0.097

***relative* Natural Colour (NC)**

*lab*lrj*	0.724	0.488	0.109
*lab*tce*	0.75	0.5	0.035
*lab*ncE*	0.0	0.5	r14j

***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*	35.39	35.81	24.94
*LAB*LABa*	35.39	35.81	24.94
*LAB*TCHa*	25.01	43.63	34.85

relative* CIELAB *lab*

*lab*lab*	0.225	0.41	0.286
*lab*tch*	0.25	0.5	0.097
*lab*nch*	0.5	0.5	0.097

***relative* Natural Colour (NC)**

*lab*lrj*	0.225	0.488	0.109
*lab*tce*	0.25	0.5	0.035
*lab*ncE*	0.5	0.5	r14j

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

*olvi3**	1.0	0.0	0.0 (1.0)
*cmyn3**	0.0	1.0	1.0 (0.0)
*olvi4**	1.0	0.0	0.0 1.0
*cmyn4**	0.0	1.0	1.0 0.0

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

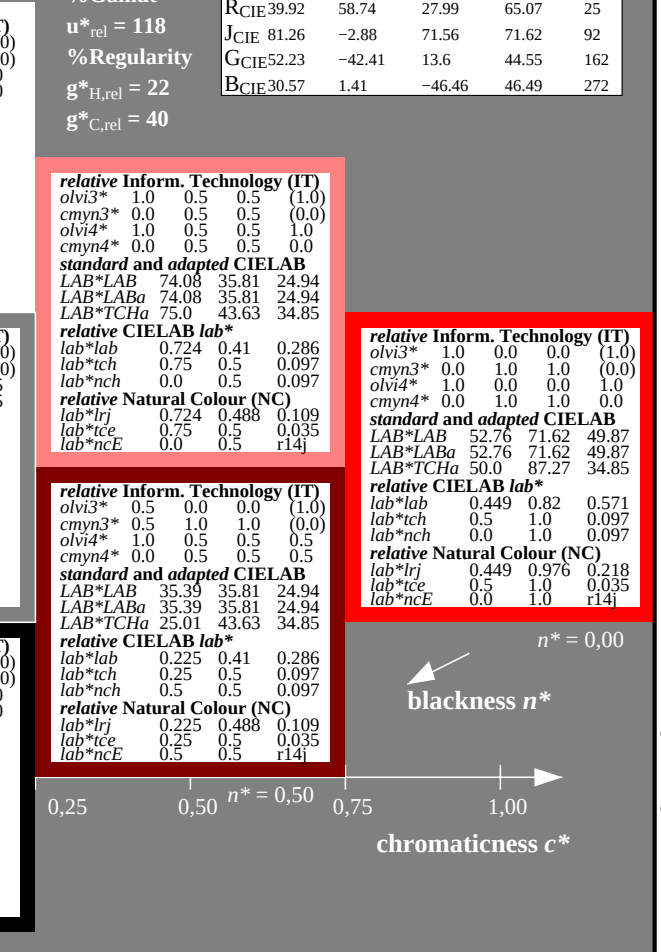
*LAB*LAB*	52.76	71.62	49.87
*LAB*LABa*	52.76	71.62	49.87
*LAB*TCHa*	50.0	87.27	34.85

relative* CIELAB *lab*

*lab*lab*	0.449	0.82	0.571
*lab*tch*	0.5	1.0	0.097
*lab*nch*	0.0	1.0	0.097

***relative* Natural Colour (NC)**

*lab*lrj*	0.449	0.976	0.218
*lab*tce*	0.5	1.0	0.035
*lab*ncE*	0.0	1.0	r14j



NE090−7, 3 step scales for constant CIELAB hue 35/360 = 0.097 (left)

3 step scales for constant CIELAB hue 35/360 = 0.097 (right)

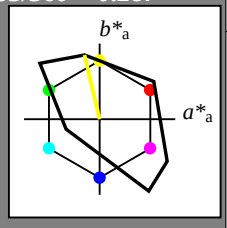
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 103/360 = 0.287**
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

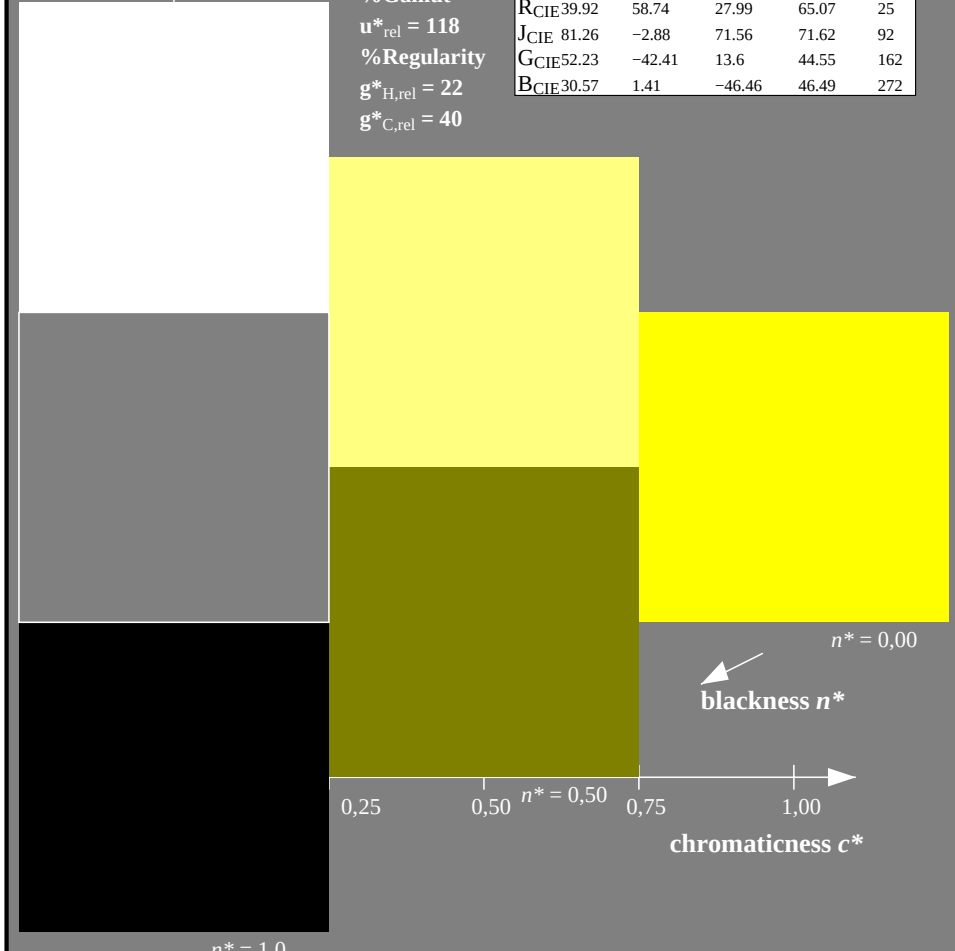
triangle lightness *t**



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

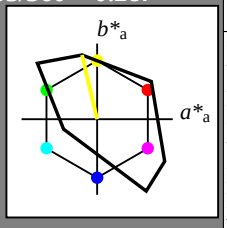
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 103/360 = 0.287**
lab*tch* and *lab*nch

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

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)
*cmyn3**	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0
*cmyn4**	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	1.0	0.5 (1.0)
*cmyn3**	0.0	0.0	0.5 (0.0)
*olvi4**	1.0	1.0	0.5 1.0
*cmyn4**	0.0	0.0	0.5 0.0

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

*LAB*LAB*	94.07	−10.0	42.48
*LAB*LABa*	94.07	−10.0	42.48
*LAB*TCHa*	75.0	43.64	103.26

relative* CIELAB *lab*

*lab*lab*	0.983	−0.114	0.487
*lab*tch*	0.75	0.5	0.287
*lab*nch*	0.0	0.5	0.287

***relative* Natural Colour (NC)**

*lab*lrj*	0.983	−0.121	0.485
*lab*tce*	0.75	0.5	0.289
*lab*ncE*	0.0	0.5	j15g

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

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

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

*LAB*LAB*	55.38	−10.0	42.48
*LAB*LABa*	55.38	−10.0	42.48
*LAB*TCHa*	25.01	43.64	103.26

relative* CIELAB *lab*

*lab*lab*	0.483	−0.114	0.487
*lab*tch*	0.25	0.5	0.287
*lab*nch*	0.5	0.5	0.287

***relative* Natural Colour (NC)**

*lab*lrj*	0.483	−0.121	0.485
*lab*tce*	0.25	0.5	0.289
*lab*ncE*	0.5	0.5	j15g

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

*olvi3**	1.0	1.0	0.0 (1.0)
*cmyn3**	0.0	0.0	1.0 (0.0)
*olvi4**	1.0	1.0	0.0 1.0
*cmyn4**	0.0	0.0	1.0 0.0

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

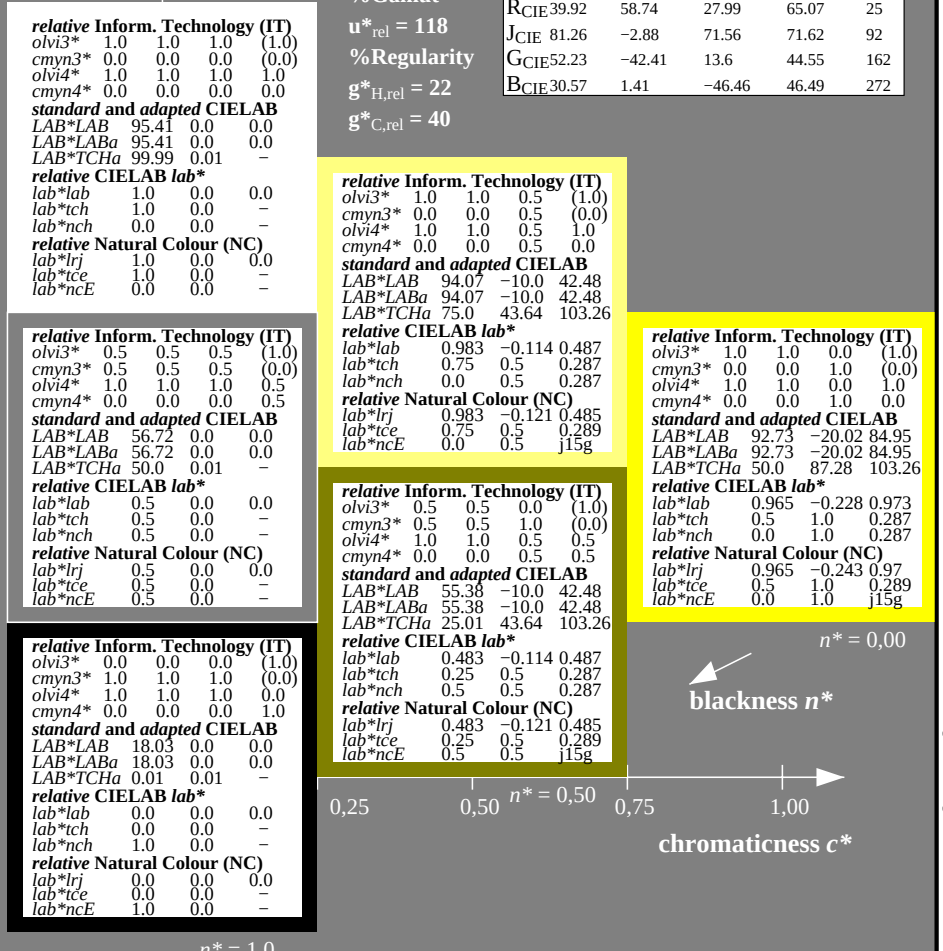
*LAB*LAB*	92.73	−20.02	84.95
*LAB*LABa*	92.73	−20.02	84.95
*LAB*TCHa*	50.0	87.28	103.26

relative* CIELAB *lab*

*lab*lab*	0.965	−0.228	0.973
*lab*tch*	0.5	1.0	0.287
*lab*nch*	0.0	1.0	0.287

***relative* Natural Colour (NC)**

*lab*lrj*	0.965	−0.243	0.97
*lab*tce*	0.5	1.0	0.289
*lab*ncE*	0.0	1.0	j15g



NE090−7, 3 step scales for constant CIELAB hue 103/360 = 0.287 (left)
3 step scales for constant CIELAB hue 103/360 = 0.287 (right)

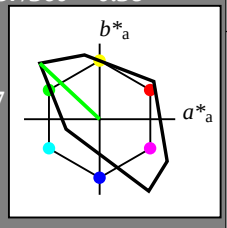
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 137/360 = 0.38**
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

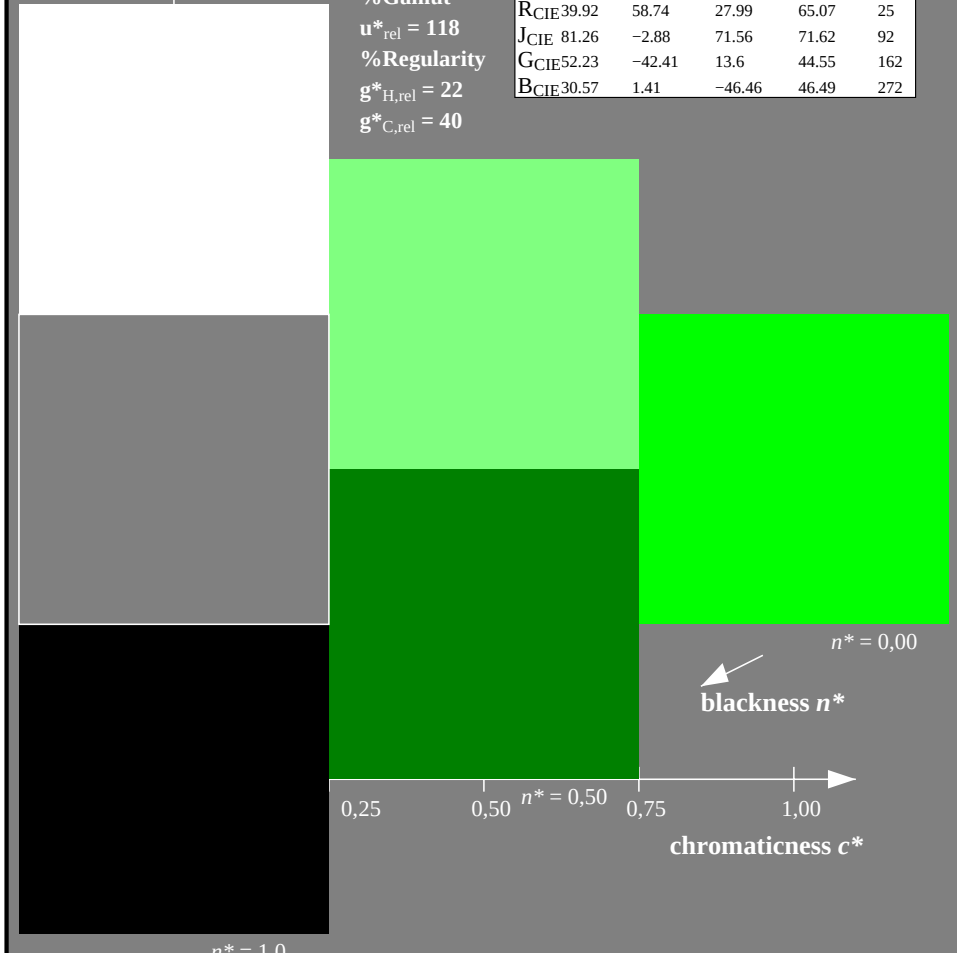
triangle lightness *t**



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

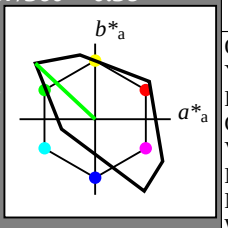
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 137/360 = 0.38**
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

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)
*cmyn3**	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0
*cmyn4**	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**	0.5	1.0	0.5	(1.0)
*cmyn3**	0.5	0.0	0.5	(0.0)
*olvi4**	0.5	1.0	0.5	1.0
*cmyn4**	0.5	0.0	0.5	0.0

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

*LAB*LAB*	89.7	−39.48	36.96
*LAB*LABa*	89.7	−39.48	36.96
*LAB*TCHa*	75.0	54.09	136.89

relative* CIELAB *lab*

*lab*lab*	0.926	−0.364	0.342
*lab*tch*	0.75	0.5	0.38
*lab*nch*	0.0	0.5	0.38

***relative* Natural Colour (NC)**

*lab*lrj*	0.926	−0.42	0.269
*lab*tce*	0.75	0.5	0.409
*lab*ncE*	0.0	0.5	j63g

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

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

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

*LAB*LAB*	51.01	−39.48	36.96
*LAB*LABa*	51.01	−39.48	36.96
*LAB*TCHa*	25.01	54.09	136.89

relative* CIELAB *lab*

*lab*lab*	0.426	−0.364	0.342
*lab*tch*	0.25	0.5	0.38
*lab*nch*	0.5	0.5	0.38

***relative* Natural Colour (NC)**

*lab*lrj*	0.426	−0.42	0.269
*lab*tce*	0.25	0.5	0.409
*lab*ncE*	0.5	0.5	j63g

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

*olvi3**	0.0	1.0	0.0	(1.0)
*cmyn3**	1.0	0.0	1.0	(0.0)
*olvi4**	0.0	1.0	0.0	1.0
*cmyn4**	0.0	0.0	1.0	0.0

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

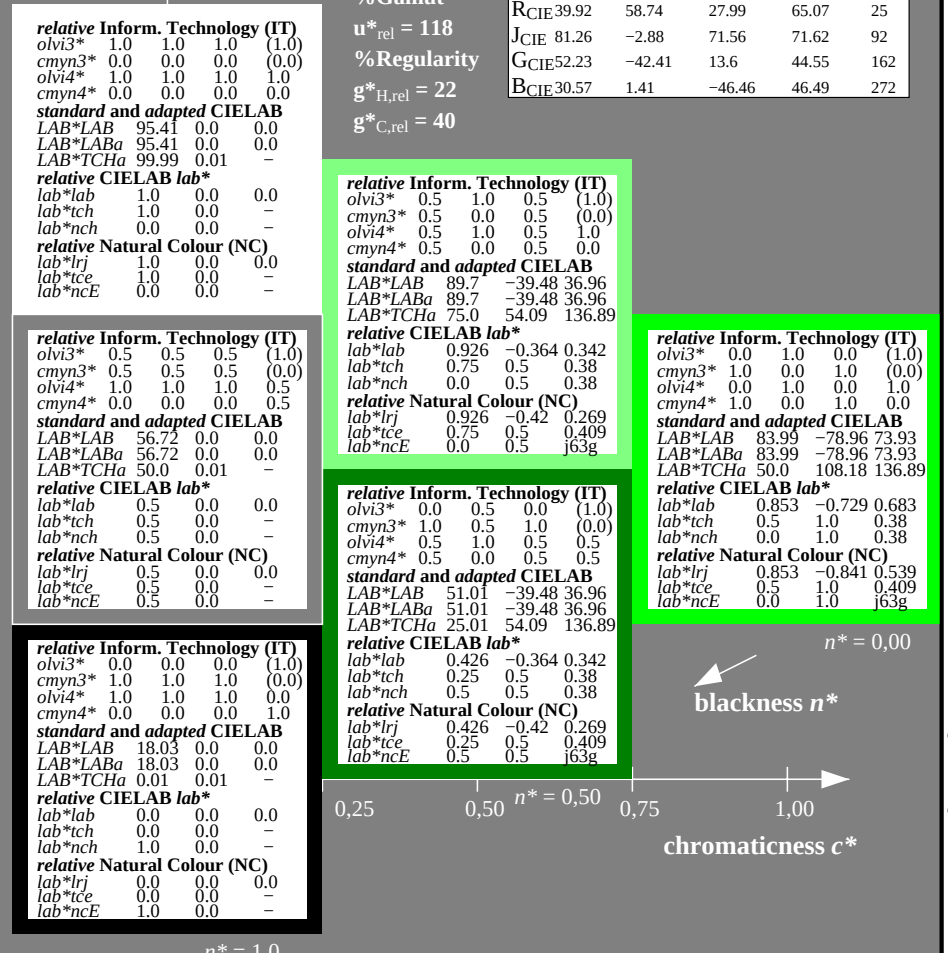
*LAB*LAB*	83.99	−78.96	73.93
*LAB*LABa*	83.99	−78.96	73.93
*LAB*TCHa*	50.0	108.18	136.89

relative* CIELAB *lab*

*lab*lab*	0.853	−0.729	0.683
*lab*tch*	0.5	1.0	0.38
*lab*nch*	0.0	1.0	0.38

***relative* Natural Colour (NC)**

*lab*lrj*	0.853	−0.841	0.539
*lab*tce*	0.5	1.0	0.409
*lab*ncE*	0.0	1.0	j63g



NE090−7, 3 step scales for constant CIELAB hue 137/360 = 0.38 (left)
3 step scales for constant CIELAB hue 137/360 = 0.38 (right)

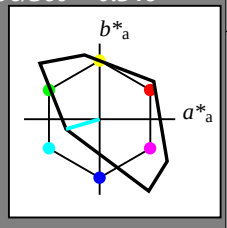
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 196/360 = 0.546**
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

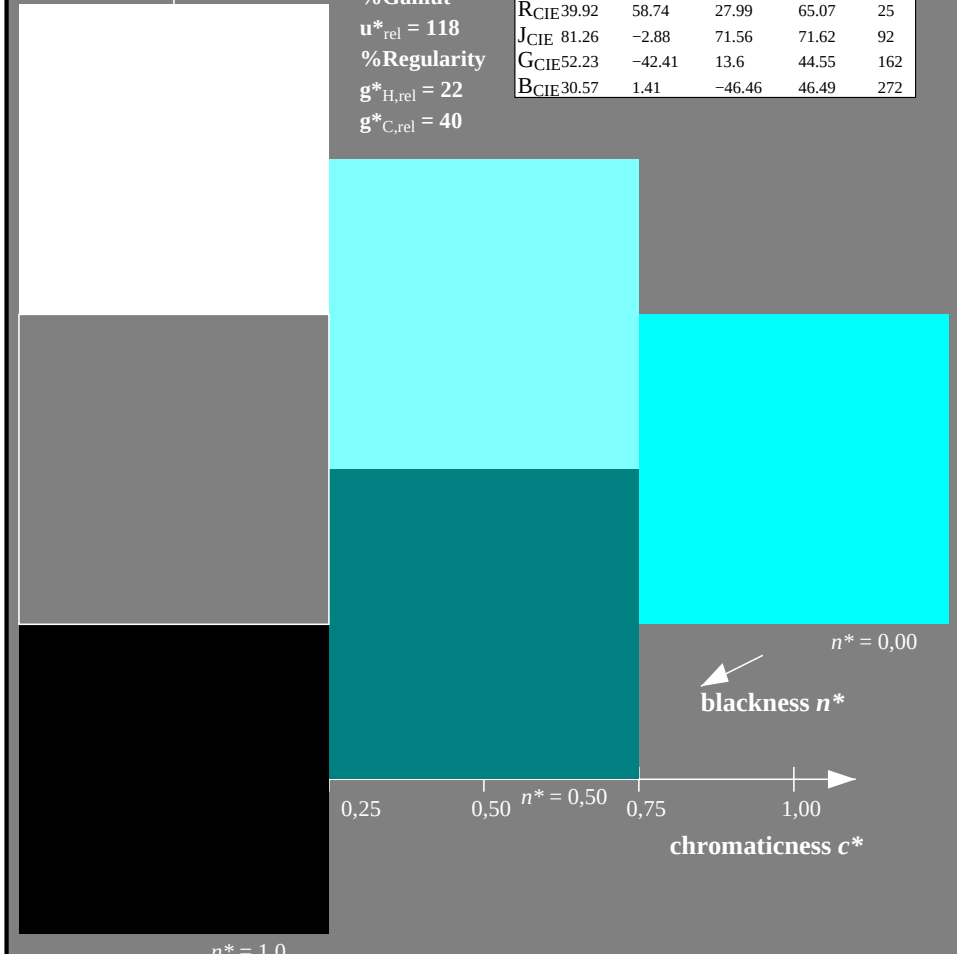
triangle lightness *t**



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

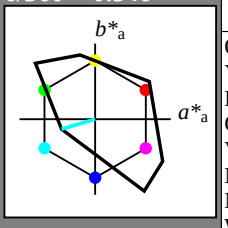
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 196/360 = 0.546**
lab*tch* and *lab*nch

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

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**	0.5	1.0	1.0	(1.0)
*cmyn3**	0.5	0.0	0.0	(0.0)
*olvi4**	0.5	1.0	1.0	1.0
*cmyn4**	0.5	0.0	0.0	0.0

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

*LAB*LAB*	91.27	−22.2	−6.55
*LAB*LABa*	91.27	−22.2	−6.55
*LAB*TCHa*	75.0	23.15	196.46

relative* CIELAB *lab*

*lab*lab*	0.946	−0.478	−0.141
*lab*tch*	0.75	0.5	0.546
*lab*nch*	0.0	0.5	0.546

***relative* Natural Colour (NC)**

*lab*lrj*	0.946	−0.44	−0.235
*lab*tce*	0.75	0.5	0.578
*lab*ncE*	0.0	0.5	g31b

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

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

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

*LAB*LAB*	52.58	−22.2	−6.55
*LAB*LABa*	52.58	−22.2	−6.55
*LAB*TCHa*	25.01	23.15	196.46

relative* CIELAB *lab*

*lab*lab*	0.447	−0.478	−0.141
*lab*tch*	0.25	0.5	0.546
*lab*nch*	0.5	0.5	0.546

***relative* Natural Colour (NC)**

*lab*lrj*	0.447	−0.44	−0.235
*lab*tce*	0.25	0.5	0.578
*lab*ncE*	0.5	0.5	g31b

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

*olvi3**	0.0	1.0	1.0	(1.0)
*cmyn3**	1.0	0.0	0.0	(0.0)
*olvi4**	0.0	1.0	1.0	1.0
*cmyn4**	1.0	0.0	0.0	0.0

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

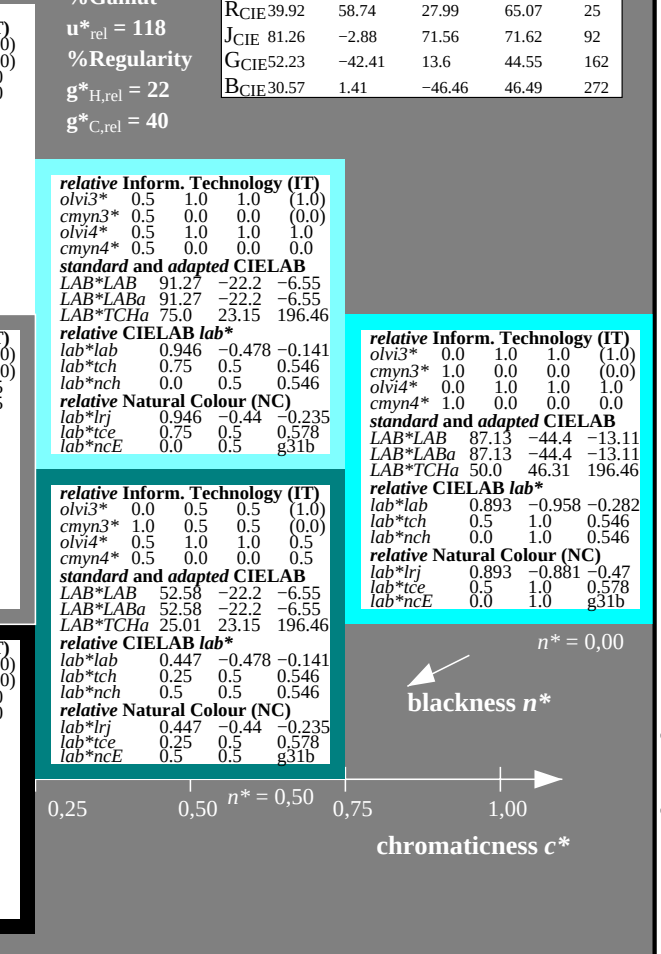
*LAB*LAB*	87.13	−44.4	−13.11
*LAB*LABa*	87.13	−44.4	−13.11
*LAB*TCHa*	50.0	46.31	196.46

relative* CIELAB *lab*

*lab*lab*	0.893	−0.958	−0.282
*lab*tch*	0.5	1.0	0.546
*lab*nch*	0.0	1.0	0.546

***relative* Natural Colour (NC)**

*lab*lrj*	0.893	−0.881	−0.47
*lab*tce*	0.5	1.0	0.578
*lab*ncE*	0.0	1.0	g31b



NE090−7, 3 step scales for constant CIELAB hue 196/360 = 0.546 (left)

3 step scales for constant CIELAB hue 196/360 = 0.546 (right)

BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

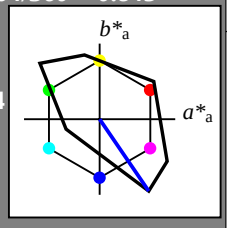
See for similar files: http://www.ps.bam.de/NE09/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1

BAM registration: 20060101-NE09/10L/L09E03NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/NE09/ Form: 4/10, Serie: 1/1, Page: 4 Page: count: 4

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 304/360 = 0.845**
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

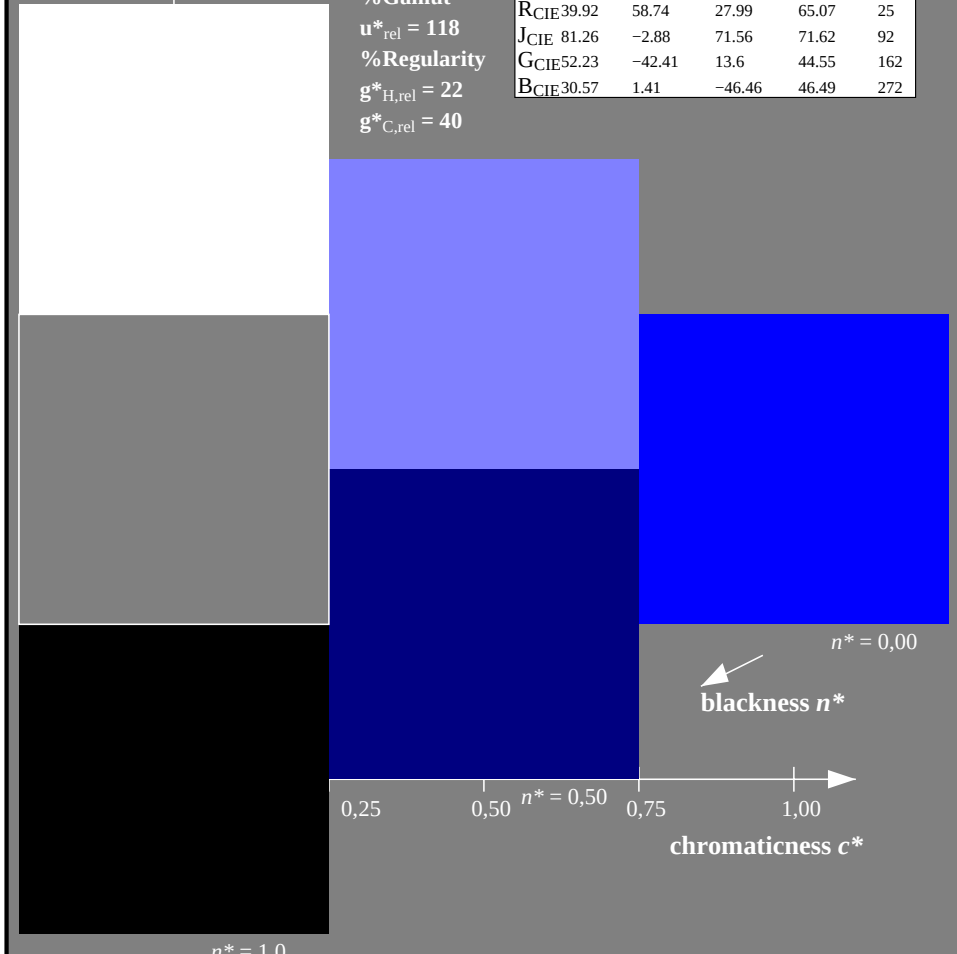
triangle lightness *t**



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

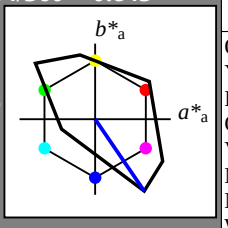
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 304/360 = 0.845**
lab*tch* and *lab*nch

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

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	–	

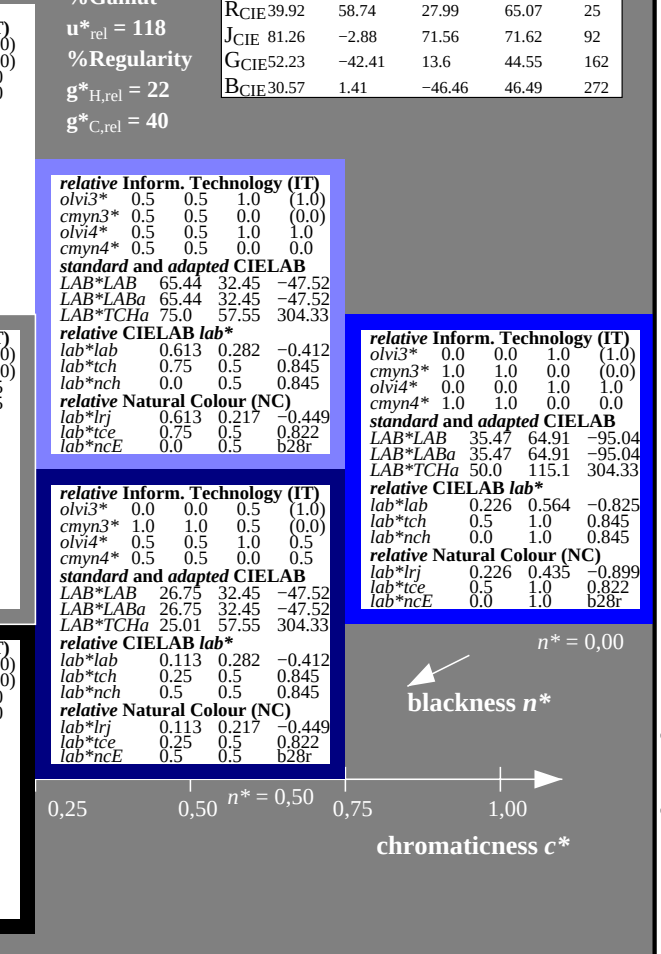
***relative* Inform. Technology (IT)**				
*olvi3**	0.5	0.5	1.0	(1.0)
*cmyn3**	0.5	0.5	0.0	(0.0)
*olvi4**	0.5	0.5	1.0	1.0
*cmyn4**	0.5	0.5	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	65.44	32.45	−47.52	
*LAB*LABa*	65.44	32.45	−47.52	
*LAB*TCHa*	75.0	57.55	304.33	
relative* CIELAB *lab				
*lab*lab*	0.613	0.282	−0.412	
*lab*tch*	0.75	0.5	0.845	
*lab*nch*	0.0	0.5	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.613	0.217	−0.449	
*lab*tce*	0.75	0.5	0.822	
*lab*ncE*	0.0	0.5	b28r	

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	0.0	1.0	(1.0)
*cmyn3**	1.0	1.0	0.0	(0.0)
*olvi4**	0.0	0.0	1.0	1.0
*cmyn4**	1.0	1.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	35.47	64.91	−95.04	
*LAB*LABa*	35.47	64.91	−95.04	
*LAB*TCHa*	50.0	115.1	304.33	
relative* CIELAB *lab				
*lab*lab*	0.226	0.564	−0.825	
*lab*tch*	0.5	1.0	0.845	
*lab*nch*	0.0	1.0	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.226	0.435	−0.899	
*lab*tce*	0.5	1.0	0.822	
*lab*ncE*	0.0	1.0	b28r	

***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	0.5	(1.0)
*cmyn3**	1.0	1.0	0.5	(0.0)
*olvi4**	0.5	0.5	1.0	0.5
*cmyn4**	0.5	0.5	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	26.75	32.45	−47.52	
*LAB*LABa*	26.75	32.45	−47.52	
*LAB*TCHa*	25.01	57.55	304.33	
relative* CIELAB *lab				
*lab*lab*	0.113	0.282	−0.412	
*lab*tch*	0.25	0.5	0.845	
*lab*nch*	0.5	0.5	0.845	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.113	0.217	−0.449	
*lab*tce*	0.25	0.5	0.822	
*lab*ncE*	0.5	0.5	b28r	

***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	–	



NE090−7, 3 step scales for constant CIELAB hue 304/360 = 0.845 (left)
3 step scales for constant CIELAB hue 304/360 = 0.845 (right)

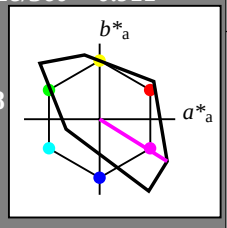
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 328/360 = 0.911**
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

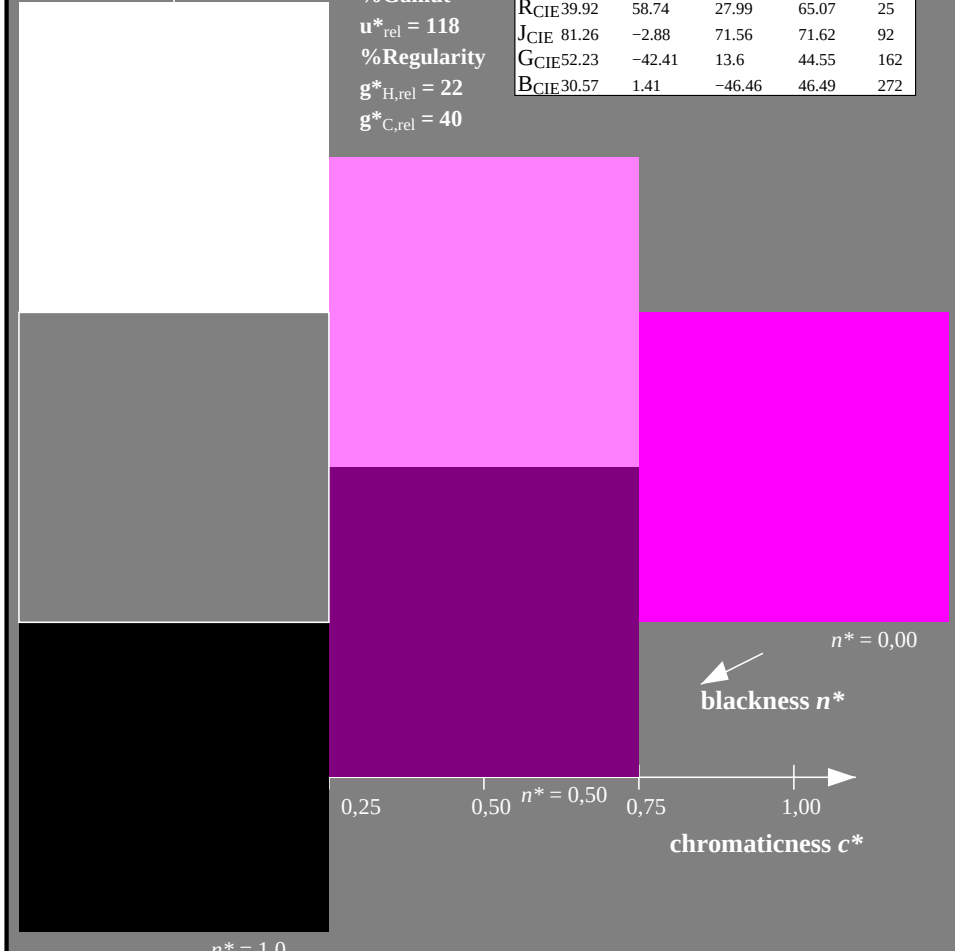
triangle lightness *t**



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

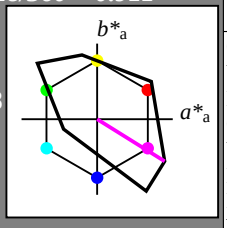
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 328/360 = 0.911**
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

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	1.0	(1.0)
*cmyn3**	0.0	0.5	0.0	(0.0)
*olvi4**	1.0	0.5	1.0	1.0
*cmyn4**	0.0	0.5	0.0	0.0

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

*LAB*LAB*	77.21	44.66	−27.82
*LAB*LABa*	77.21	44.66	−27.82
*LAB*TCHa*	75.0	52.62	328.06

relative* CIELAB *lab*

*lab*lab*	0.765	0.424	−0.263
*lab*tch*	0.75	0.5	0.911
*lab*nch*	0.0	0.5	0.911

***relative* Natural Colour (NC)**

*lab*lrj*	0.765	0.351	−0.355
*lab*tce*	0.75	0.5	0.874
*lab*ncE*	0.0	0.5	b49r

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

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

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

*LAB*LAB*	38.51	44.66	−27.82
*LAB*LABa*	38.51	44.66	−27.82
*LAB*TCHa*	25.01	52.62	328.06

relative* CIELAB *lab*

*lab*lab*	0.265	0.424	−0.263
*lab*tch*	0.25	0.5	0.911
*lab*nch*	0.5	0.5	0.911

***relative* Natural Colour (NC)**

*lab*lrj*	0.265	0.351	−0.355
*lab*tce*	0.25	0.5	0.874
*lab*ncE*	0.5	0.5	b49r

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

*olvi3**	1.0	0.0	1.0	(1.0)
*cmyn3**	0.0	1.0	0.0	(0.0)
*olvi4**	1.0	0.0	1.0	1.0
*cmyn4**	0.0	1.0	0.0	0.0

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

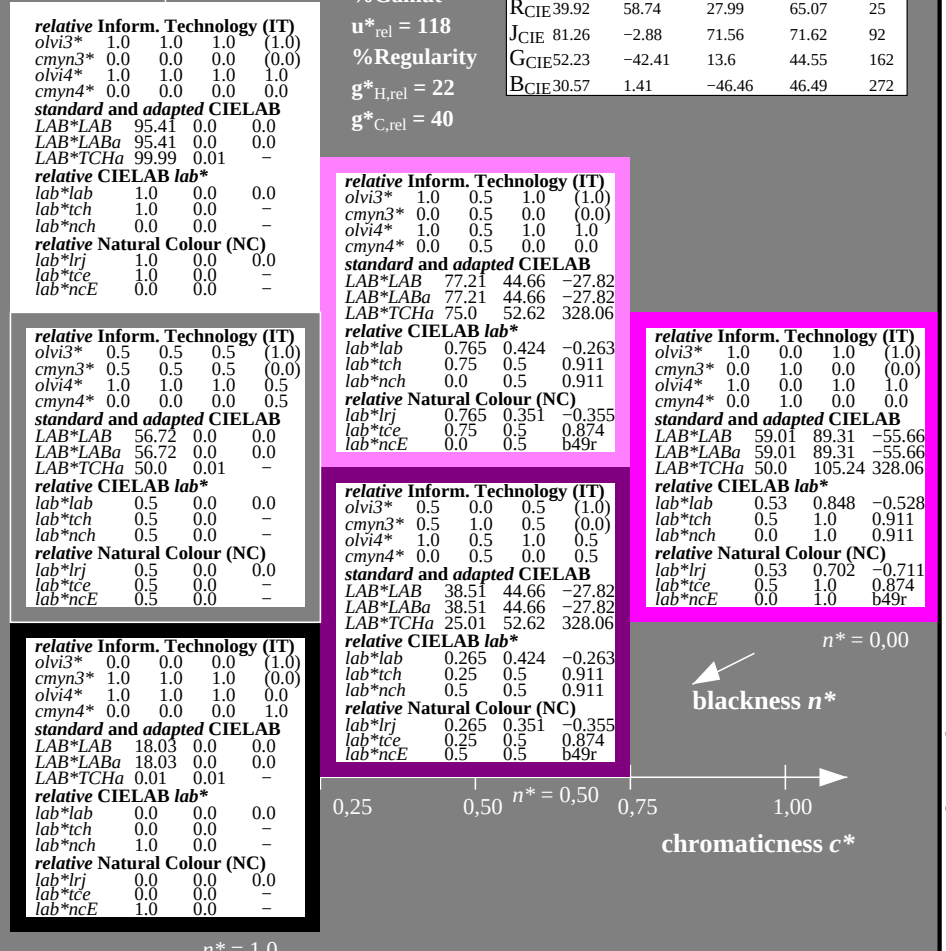
*LAB*LAB*	59.01	89.31	−55.66
*LAB*LABa*	59.01	89.31	−55.66
*LAB*TCHa*	50.0	105.24	328.06

relative* CIELAB *lab*

*lab*lab*	0.53	0.848	−0.528
*lab*tch*	0.5	1.0	0.911
*lab*nch*	0.0	1.0	0.911

***relative* Natural Colour (NC)**

*lab*lrj*	0.53	0.702	−0.711
*lab*tce*	0.5	1.0	0.874
*lab*ncE*	0.0	1.0	b49r



NE090−7, 3 step scales for constant CIELAB hue 328/360 = 0.911 (left)
3 step scales for constant CIELAB hue 328/360 = 0.911 (right)

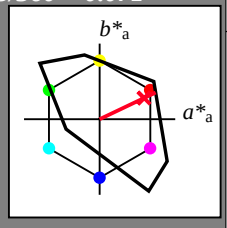
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 25/360 = 0.071**
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

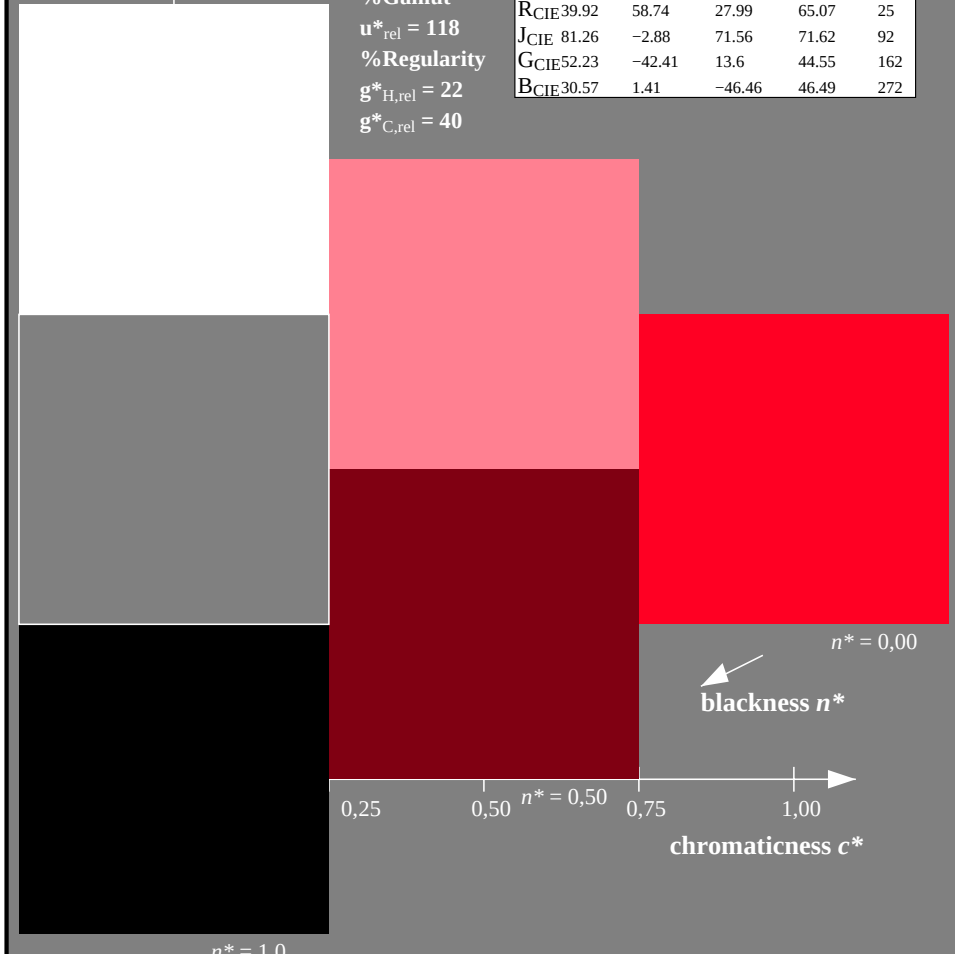
triangle lightness *t**



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

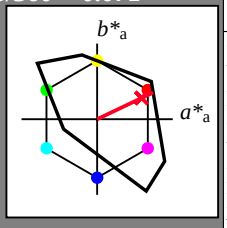
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 25/360 = 0.071**
lab*tch* and *lab*nch

D65: hue R
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	0.569 (1.0)
*cmyn3**	0.0	0.5	0.431 (0.0)
*olvi4**	1.0	0.5	0.569 1.0
*cmyn4**	0.0	0.5	0.431 0.0

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

*LAB*LAB*	74.51	37.03	17.64
*LAB*LABa*	74.51	37.03	17.64
*LAB*TCHa*	75.0	41.02	25.48

relative* CIELAB *lab*

*lab*lab*	0.73	0.451	0.215
*lab*tch*	0.75	0.5	0.071
*lab*nch*	0.0	0.5	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.73	0.5	0.0
*lab*tce*	0.75	0.5	1.0
*lab*ncE*	0.0	0.5	b99r

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

*olvi3**	0.5	0.0	0.069 (1.0)
*cmyn3**	0.5	1.0	0.931 (0.0)
*olvi4**	1.0	0.5	0.569 0.5
*cmyn4**	0.0	0.5	0.431 0.5

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

*LAB*LAB*	35.82	37.03	17.65
*LAB*LABa*	35.82	37.03	17.65
*LAB*TCHa*	25.01	41.02	25.49

relative* CIELAB *lab*

*lab*lab*	0.23	0.451	0.215
*lab*tch*	0.25	0.5	0.071
*lab*nch*	0.5	0.5	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.23	0.5	0.0
*lab*tce*	0.25	0.5	0.0
*lab*ncE*	0.5	0.5	r00j

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

*olvi3**	1.0	0.0	0.138 (1.0)
*cmyn3**	0.0	1.0	0.862 (0.0)
*olvi4**	1.0	0.0	0.138 1.0
*cmyn4**	0.0	1.0	0.862 0.0

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

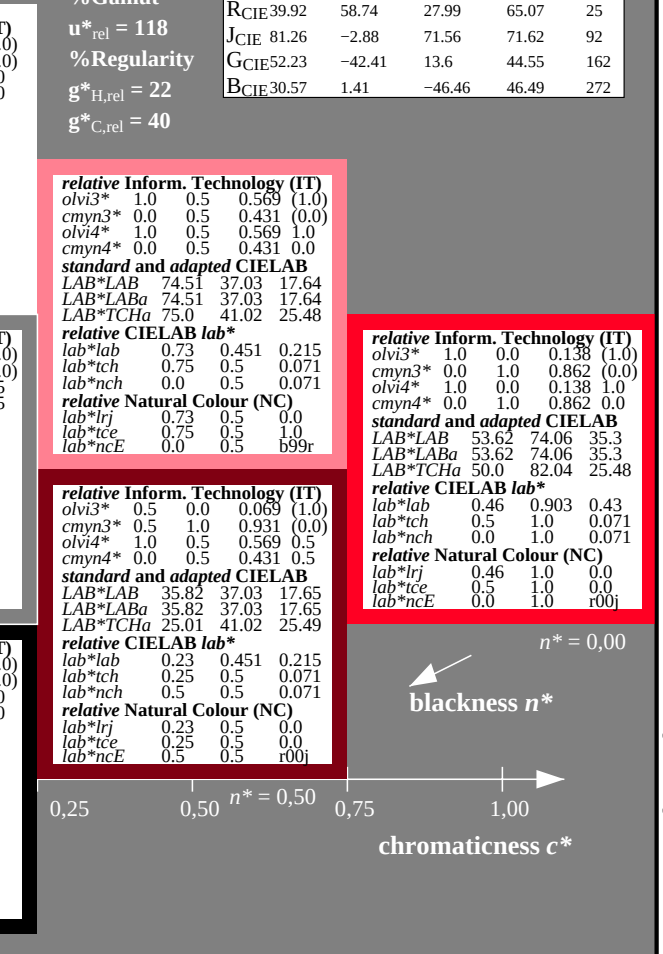
*LAB*LAB*	53.62	74.06	35.3
*LAB*LABa*	53.62	74.06	35.3
*LAB*TCHa*	50.0	82.04	25.48

relative* CIELAB *lab*

*lab*lab*	0.46	0.903	0.43
*lab*tch*	0.5	1.0	0.071
*lab*nch*	0.0	1.0	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.46	1.0	0.0
*lab*tce*	0.5	1.0	0.0
*lab*ncE*	0.0	1.0	r00j



NE090−7, 3 step scales for constant CIELAB hue 25/360 = 0.071 (left)

3 step scales for constant CIELAB hue 25/360 = 0.071 (right)

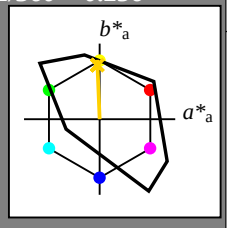
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 92/360 = 0.256**
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

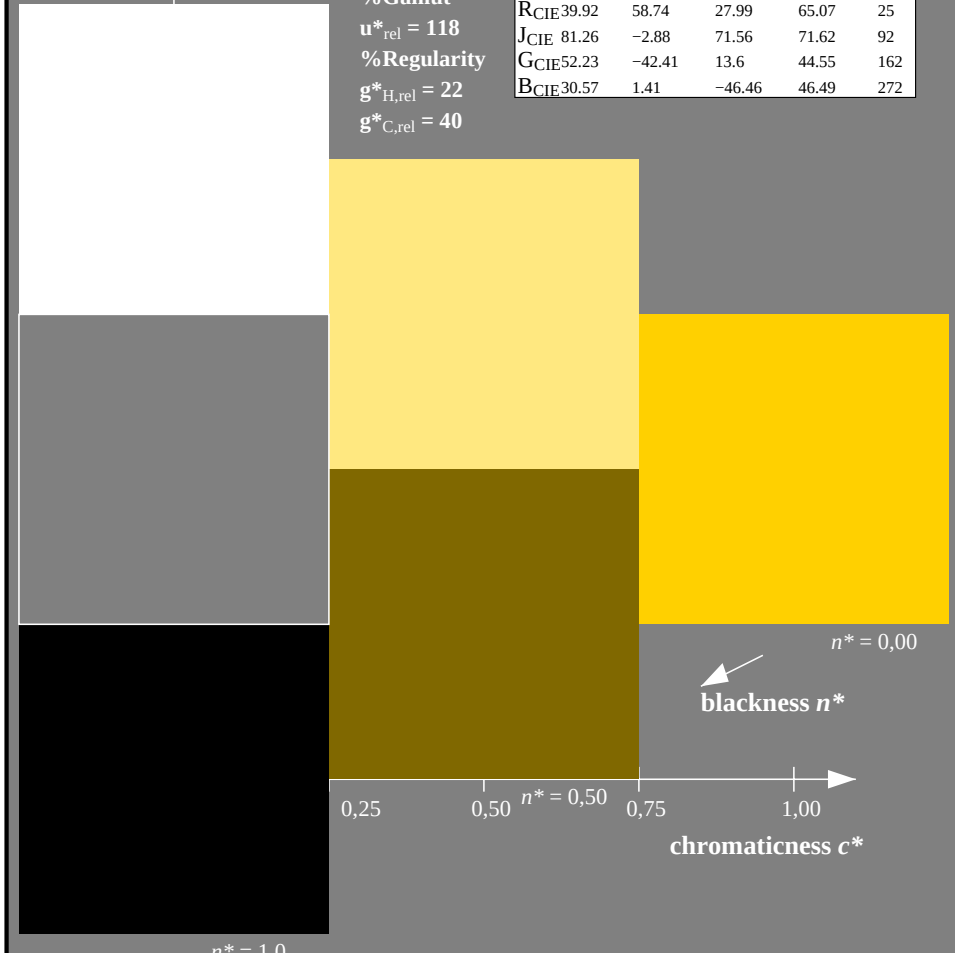
triangle lightness *t**



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

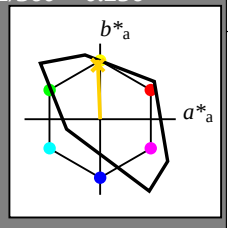
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 92/360 = 0.256**
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

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	0.908	0.5	(1.0)
*cmyn3**	0.0	0.092	0.5	(0.0)
*olvi4**	1.0	0.908	0.5	1.0
*cmyn4**	0.0	0.092	0.5	0.0

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

*LAB*LAB*	90.39	−1.58	39.25
*LAB*LABa*	90.39	−1.58	39.25
*LAB*TCHa*	75.0	39.29	92.32

relative* CIELAB *lab*

*lab*lab*	0.935	−0.019	0.499
*lab*tch*	0.75	0.5	0.256
*lab*nch*	0.0	0.5	0.256

***relative* Natural Colour (NC)**

*lab*lrj*	0.935	0.0	0.5
*lab*tce*	0.75	0.5	0.25
*lab*ncE*	0.0	0.5	j00g

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

*olvi3**	0.5	0.408	0.0	(1.0)
*cmyn3**	0.5	0.592	1.0	(0.0)
*olvi4**	1.0	0.908	0.5	0.5
*cmyn4**	0.0	0.092	0.5	0.5

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

*LAB*LAB*	51.7	−1.57	39.25
*LAB*LABa*	51.7	−1.57	39.25
*LAB*TCHa*	25.01	39.28	92.31

relative* CIELAB *lab*

*lab*lab*	0.435	−0.019	0.499
*lab*tch*	0.25	0.5	0.256
*lab*nch*	0.5	0.5	0.256

***relative* Natural Colour (NC)**

*lab*lrj*	0.435	0.0	0.5
*lab*tce*	0.25	0.5	0.25
*lab*ncE*	0.5	0.5	r99j

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

*olvi3**	1.0	0.816	0.0	(1.0)
*cmyn3**	0.0	0.184	1.0	(0.0)
*olvi4**	1.0	0.816	0.0	1.0
*cmyn4**	0.0	0.184	1.0	0.0

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

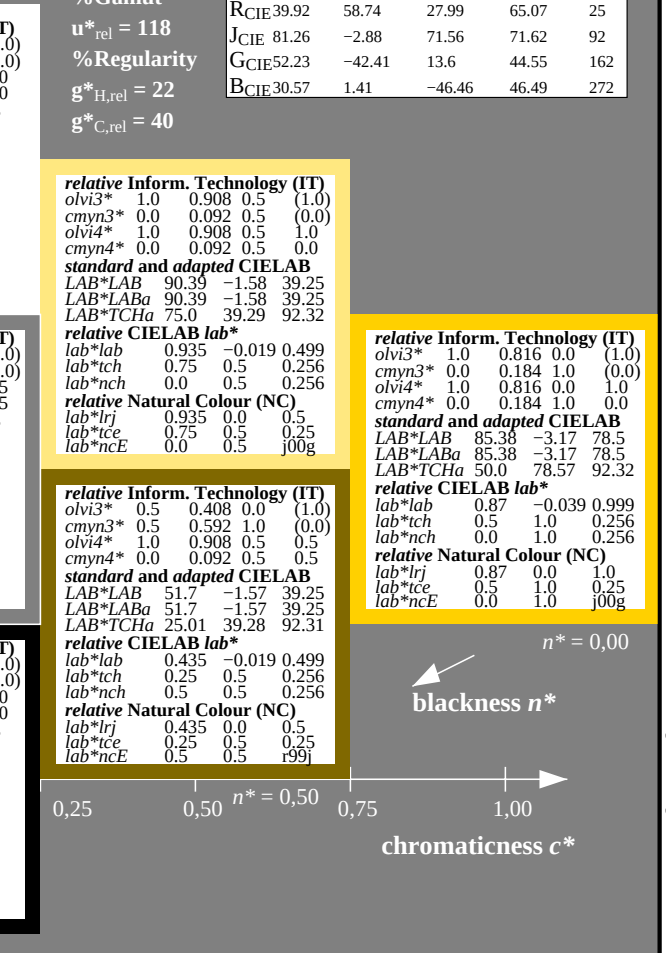
*LAB*LAB*	85.38	−3.17	78.5
*LAB*LABa*	85.38	−3.17	78.5
*LAB*TCHa*	50.0	78.57	92.32

relative* CIELAB *lab*

*lab*lab*	0.87	−0.039	0.999
*lab*tch*	0.5	1.0	0.256
*lab*nch*	0.0	1.0	0.256

***relative* Natural Colour (NC)**

*lab*lrj*	0.87	0.0	1.0
*lab*tce*	0.5	1.0	0.25
*lab*ncE*	0.0	1.0	j00g



NE090−7, 3 step scales for constant CIELAB hue 92/360 = 0.256 (left)
3 step scales for constant CIELAB hue 92/360 = 0.256 (right)

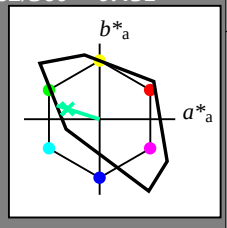
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 162/360 = 0.451**
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

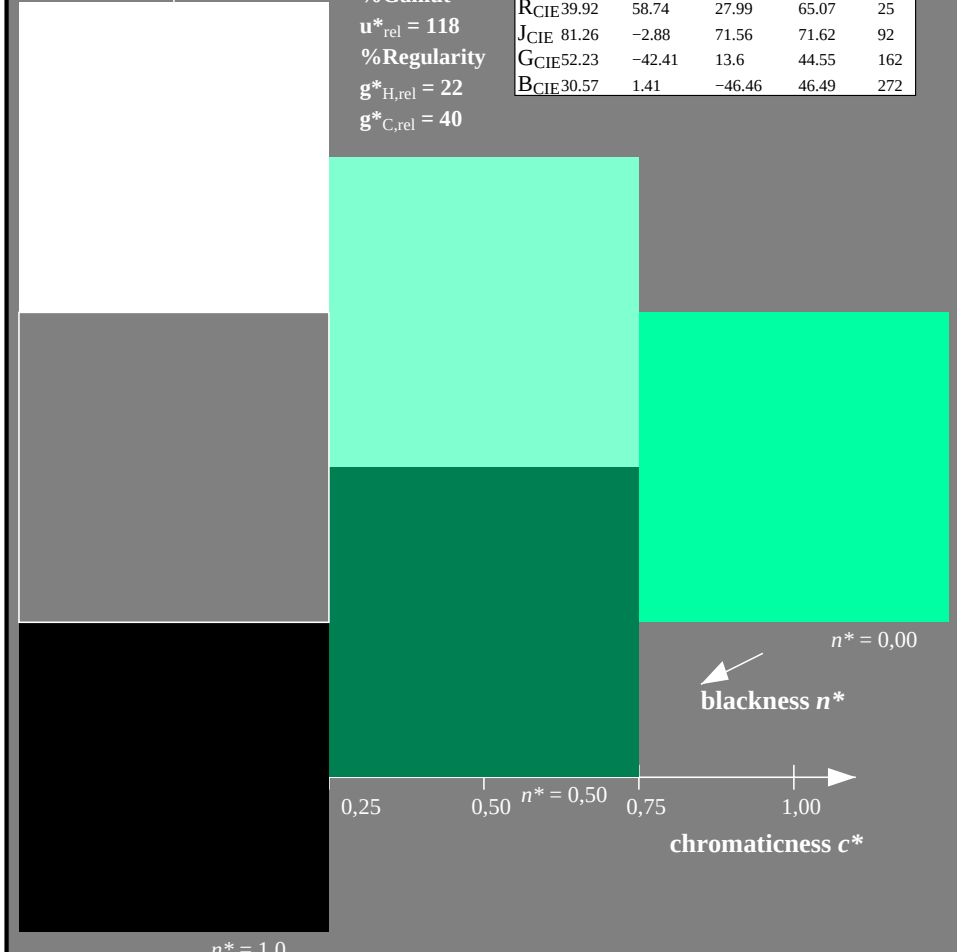
triangle lightness *t**



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

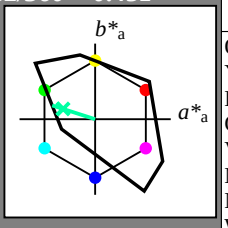
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 162/360 = 0.451**
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

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**	0.5	1.0	0.82 (1.0)
*cmyn3**	0.5	0.0	0.18 (0.0)
*olvi4**	0.5	1.0	0.82 1.0
*cmyn4**	0.5	0.0	0.18 0.0

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

*LAB*LAB*	90.7	−28.42	9.11
*LAB*LABa*	90.7	−28.42	9.11
*LAB*TCHa*	75.0	29.85	162.23

relative* CIELAB *lab*

*lab*lab*	0.939	−0.475	0.153
*lab*tch*	0.75	0.5	0.451
*lab*nch*	0.0	0.5	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.939	−0.499	0.0
*lab*tce*	0.75	0.5	0.5
*lab*ncE*	0.0	0.5	g00b

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

*olvi3**	0.0	0.5	0.32 (1.0)
*cmyn3**	1.0	0.5	0.68 (0.0)
*olvi4**	0.5	1.0	0.82 0.5
*cmyn4**	0.5	0.0	0.18 0.5

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

*LAB*LAB*	52.01	−28.42	9.12
*LAB*LABa*	52.01	−28.42	9.12
*LAB*TCHa*	25.01	29.86	162.22

relative* CIELAB *lab*

*lab*lab*	0.439	−0.475	0.153
*lab*tch*	0.25	0.5	0.451
*lab*nch*	0.5	0.5	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.439	−0.499	0.0
*lab*tce*	0.25	0.5	0.5
*lab*ncE*	0.5	0.5	j99g

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

*olvi3**	0.0	1.0	0.64 (1.0)
*cmyn3**	1.0	0.0	0.36 (0.0)
*olvi4**	0.0	1.0	0.64 1.0
*cmyn4**	1.0	0.0	0.36 0.0

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

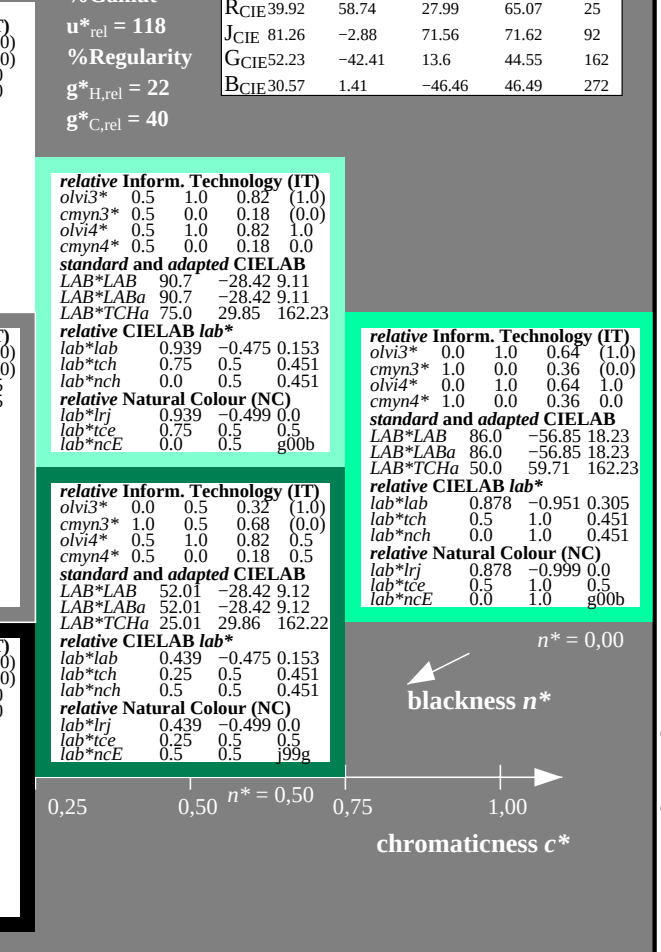
*LAB*LAB*	86.0	−56.85	18.23
*LAB*LABa*	86.0	−56.85	18.23
*LAB*TCHa*	50.0	59.71	162.23

relative* CIELAB *lab*

*lab*lab*	0.878	−0.951	0.305
*lab*tch*	0.5	1.0	0.451
*lab*nch*	0.0	1.0	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.878	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	g00b



NE090−7, 3 step scales for constant CIELAB hue 162/360 = 0.451 (left)
3 step scales for constant CIELAB hue 162/360 = 0.451 (right)

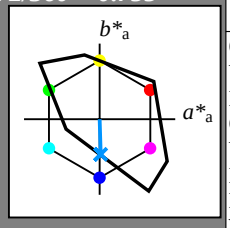
BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 272/360 = 0.755**
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

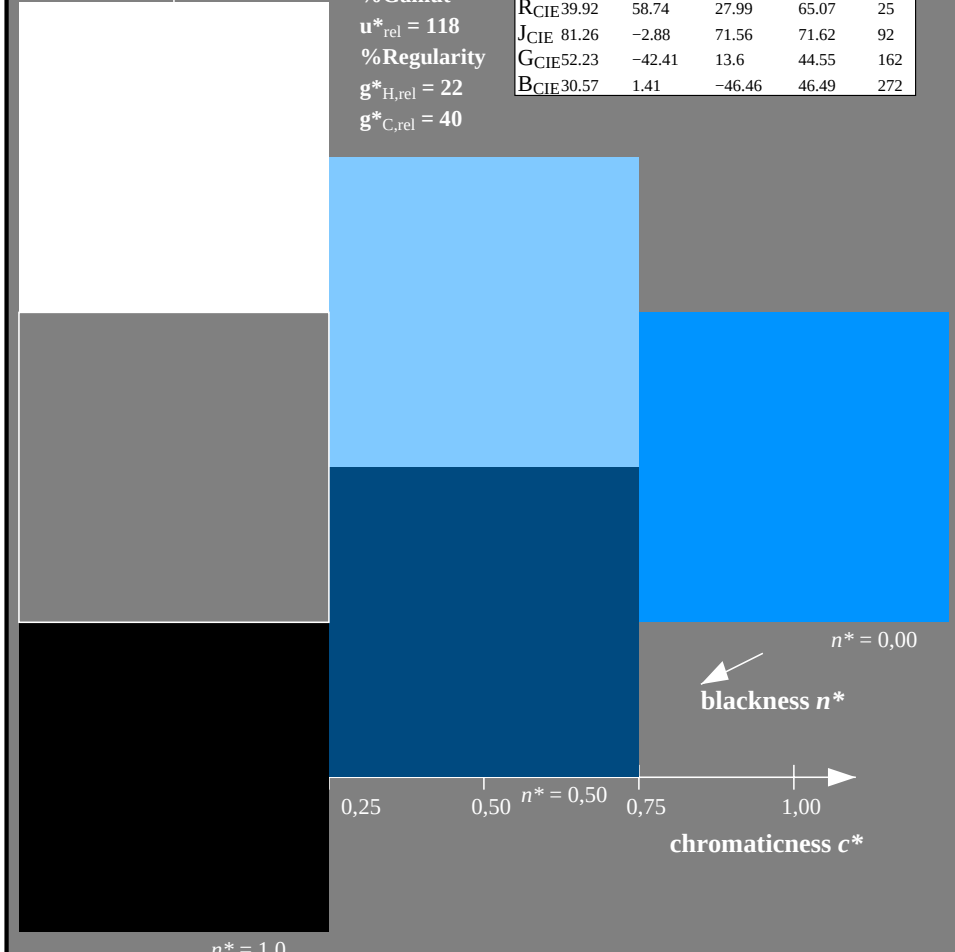
triangle lightness *t**



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

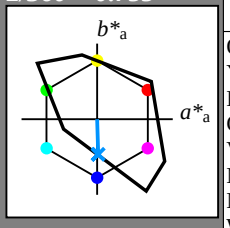
%Gamut
u^*_{rel} = 118
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



Output: Colorimetric Television Luminous System TLS18
for hue *h = *lab*h* = 272/360 = 0.755**
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

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**	0.5	0.79	1.0	(1.0)
*cmyn3**	0.5	0.21	0.0	(0.0)
*olvi4**	0.5	0.79	1.0	1.0
*cmyn4**	0.5	0.21	0.0	0.0

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

*LAB*LAB*	80.44	0.71	−23.73
*LAB*LABa*	80.44	0.71	−23.73
*LAB*TCHa*	75.0	23.75	271.72

relative* CIELAB *lab*

*lab*lab*	0.807	0.015	−0.499
*lab*tch*	0.75	0.5	0.755
*lab*nch*	0.0	0.5	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.807	0.0	−0.499
*lab*tce*	0.75	0.5	0.75
*lab*ncE*	0.0	0.5	g99b

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

*olvi3**	0.0	0.29	0.5	(1.0)
*cmyn3**	1.0	0.71	0.5	(0.0)
*olvi4**	0.5	0.79	1.0	0.5
*cmyn4**	0.5	0.21	0.0	0.5

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

*LAB*LAB*	41.74	0.72	−23.74
*LAB*LABa*	41.74	0.72	−23.74
*LAB*TCHa*	25.01	23.76	271.75

relative* CIELAB *lab*

*lab*lab*	0.307	0.015	−0.499
*lab*tch*	0.25	0.5	0.755
*lab*nch*	0.5	0.5	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.307	0.0	−0.499
*lab*tce*	0.25	0.5	0.75
*lab*ncE*	0.5	0.5	b00r

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

*olvi3**	0.0	0.581	1.0	(1.0)
*cmyn3**	1.0	0.419	0.0	(0.0)
*olvi4**	0.0	0.581	1.0	1.0
*cmyn4**	1.0	0.419	0.0	0.0

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

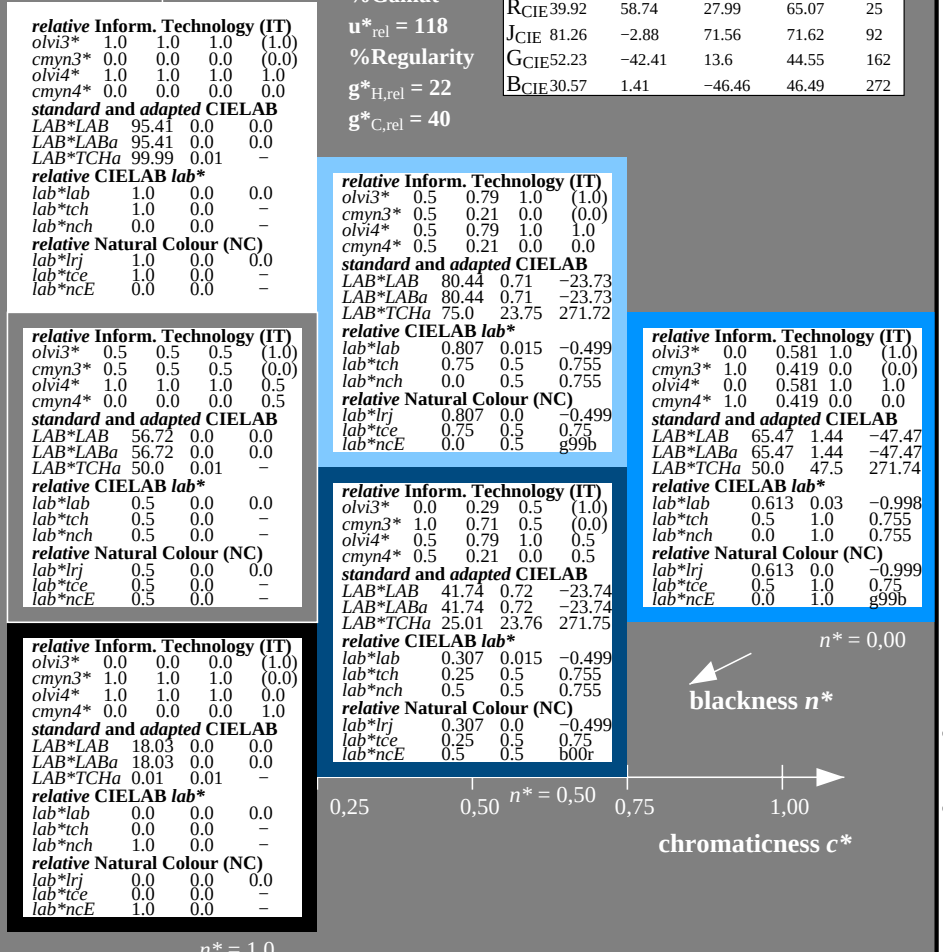
*LAB*LAB*	65.47	1.44	−47.47
*LAB*LABa*	65.47	1.44	−47.47
*LAB*TCHa*	50.0	47.5	271.74

relative* CIELAB *lab*

*lab*lab*	0.613	0.03	−0.998
*lab*tch*	0.5	1.0	0.755
*lab*nch*	0.0	1.0	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.613	0.0	−0.999
*lab*tce*	0.5	1.0	0.75
*lab*ncE*	0.0	1.0	g99b



NE090−7, 3 step scales for constant CIELAB hue 272/360 = 0.755 (left)
3 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart NE09; Colorimetric systems TLS18 & TLS18
D65: 3 step colour scales and coordinate data for 10 hues

input: *olv* setrgbcolor*
output: *no change compared to input*