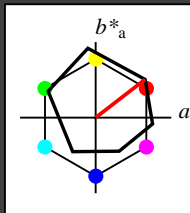


**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 38/360 = 0.105$   
 $lab^*tch$  and  $lab^*nch$

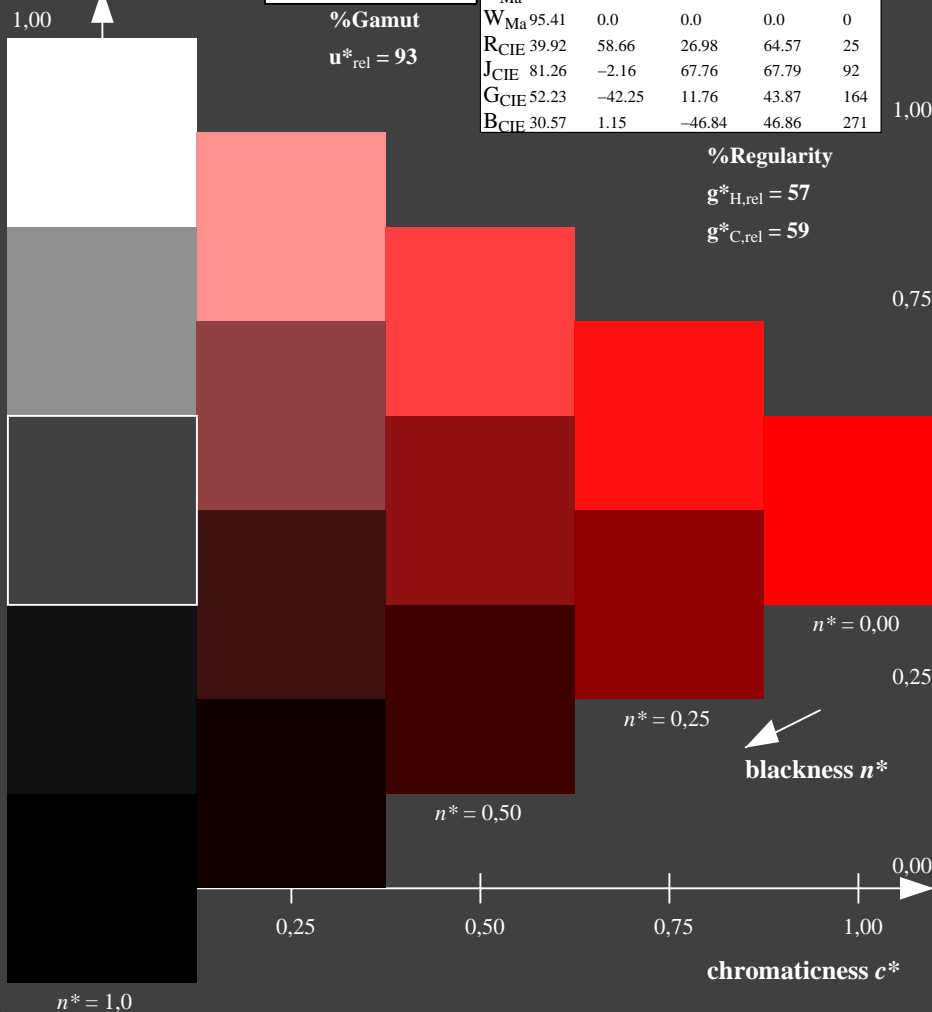
D65: hue O  
 LCH\*Ma: 48 83 38  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness



**ORS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

**%Regularity**  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

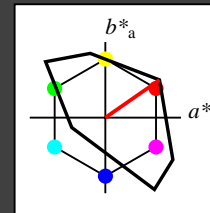


NE410-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

**Output: Colorimetric Television Luminous System TLS18**

for hue  $h^* = lab^*h = 35/360 = 0.097$   
 $lab^*tch$  and  $lab^*nch$

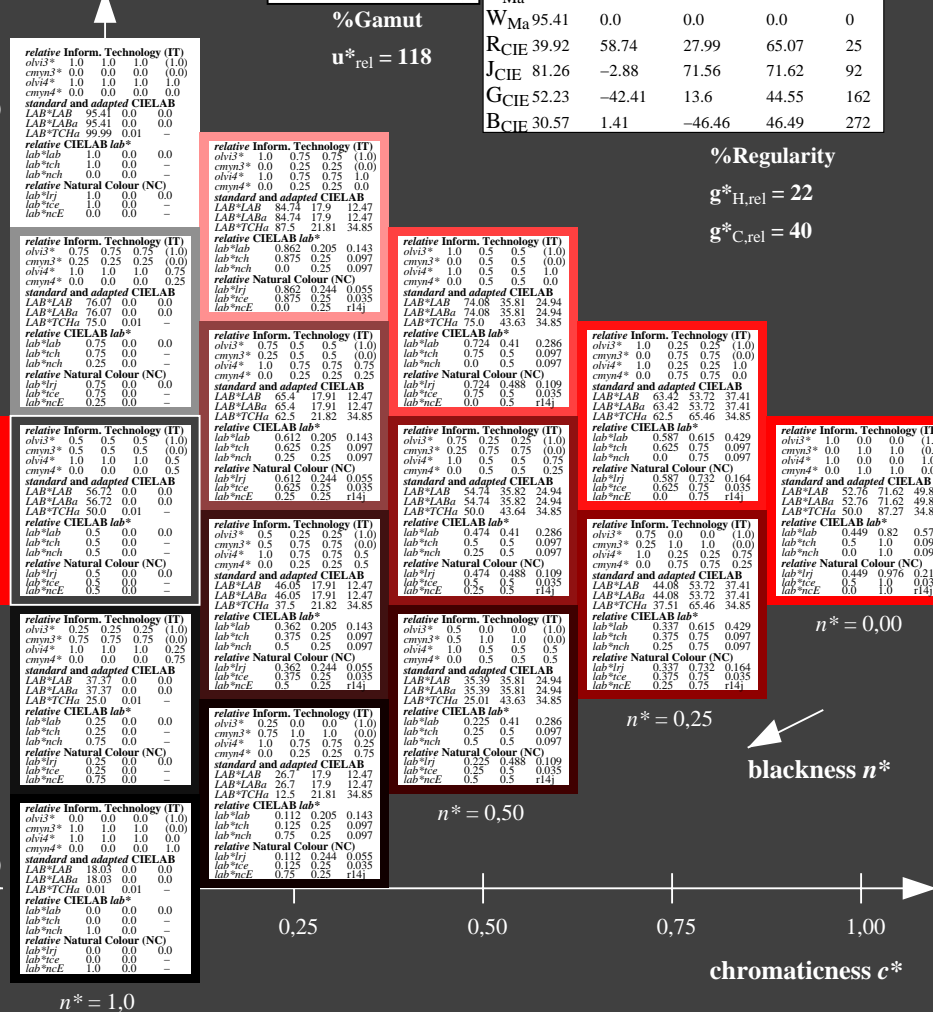
D65: hue O  
 LCH\*Ma: 53 87 35  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness



**TLS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.4	-20.02	84.97	87.3	103
L <sub>Ma</sub>	80.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

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



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

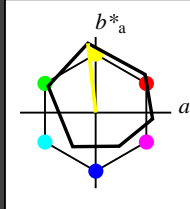
BAM-test chart NE41; Colorimetric systems ORS18 & TLS18  
 D65: 5 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 96/360 = 0.268$   
 $lab^*tch$  and  $lab^*nch$

D65: hue Y  
 LCH\*Ma: 90 92 96  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness



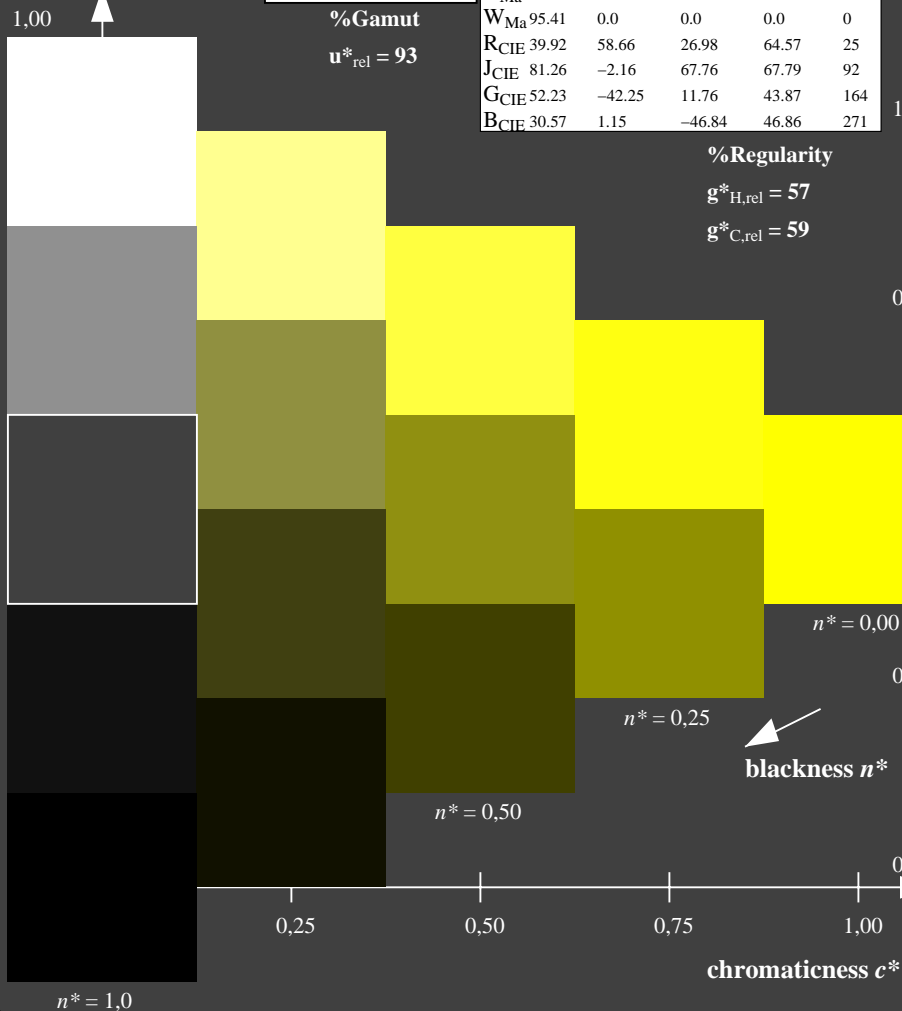
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

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

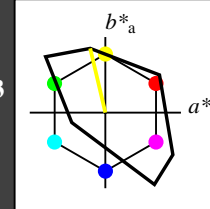


NE410-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

**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



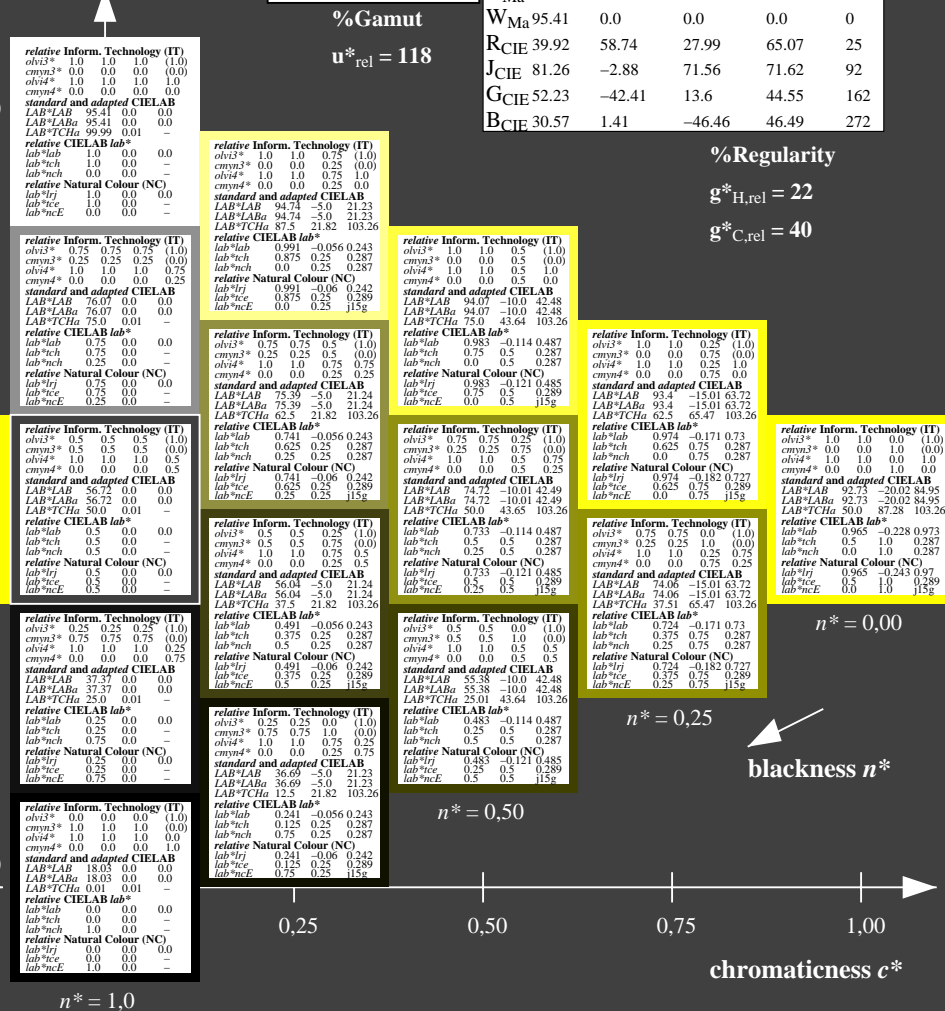
TLS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Regularity

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

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



5 step scales for constant CIELAB hue 103/360 = 0.287 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

input:  $olv^* setrgbcolor$

output:  $olv^* setrgbcolor / w^* setgray$

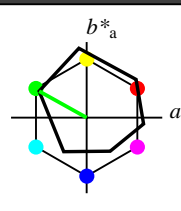
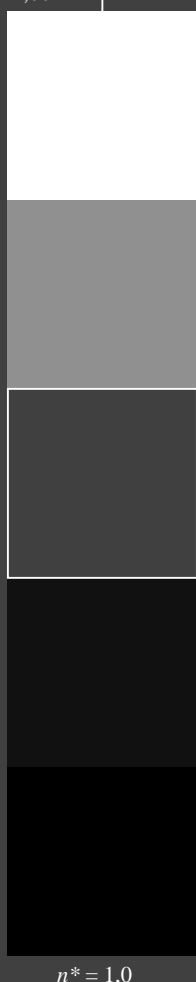
**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 151/360 = 0.419$   
 $lab^*tch$  and  $lab^*nch$

D65: hue L  
 LCH\*Ma: 51 72 151  
 olv\*Ma: 0.0 1.0 0.0

triangle lightness

1.00



**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

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

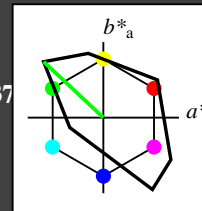
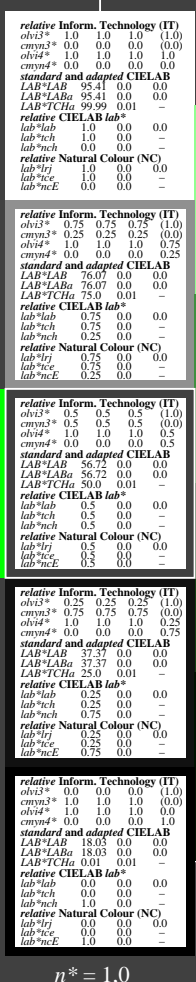
**Output: Colorimetric Television Luminous System TLS18**

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

1.00



**TLS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Regularity

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

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

NE410-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 137/360 = 0.38 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

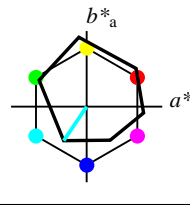
input:  $olv^* setrgbcolor$

output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 236/360 = 0.656$   
 $lab^*tch$  and  $lab^*nch$

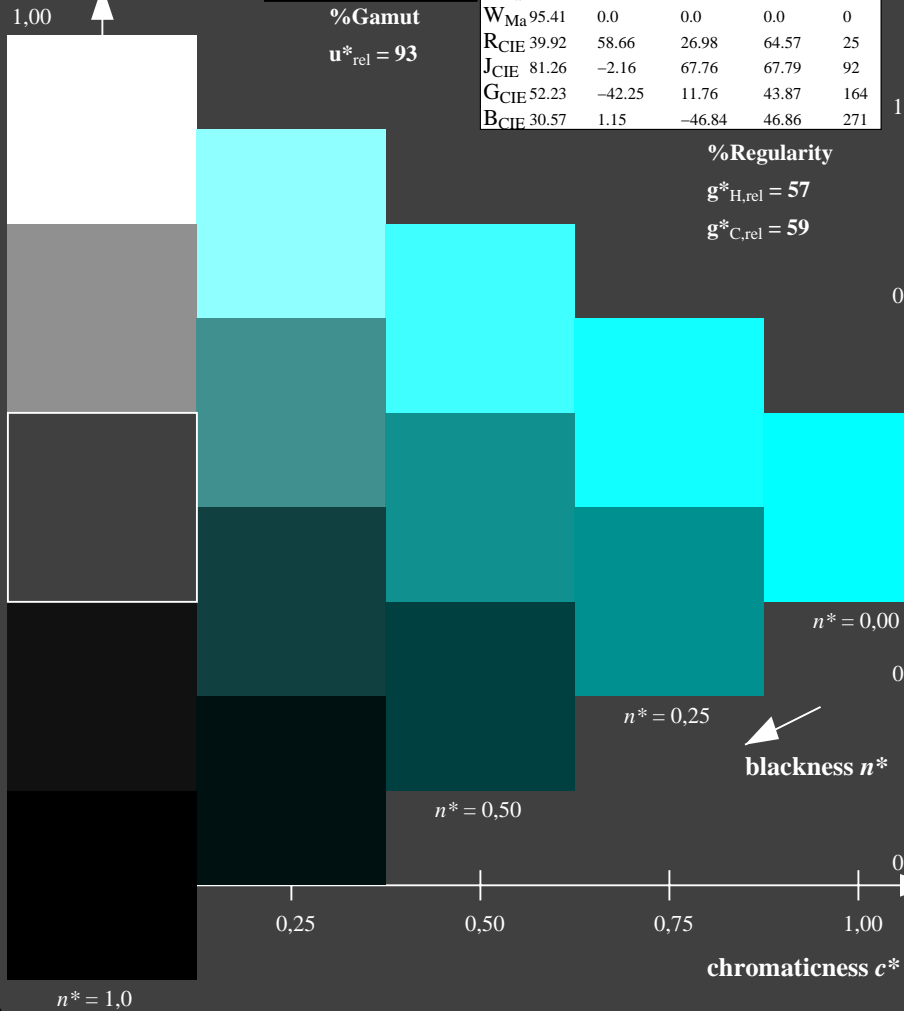
D65: hue C  
 LCH\*Ma: 59 54 236  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness



**ORS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

**%Regularity**  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

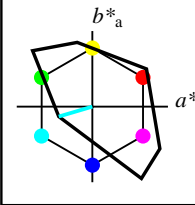


NE410-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

**Output: Colorimetric Television Luminous System TLS18**

for hue  $h^* = lab^*h = 196/360 = 0.546$   
 $lab^*tch$  and  $lab^*nch$

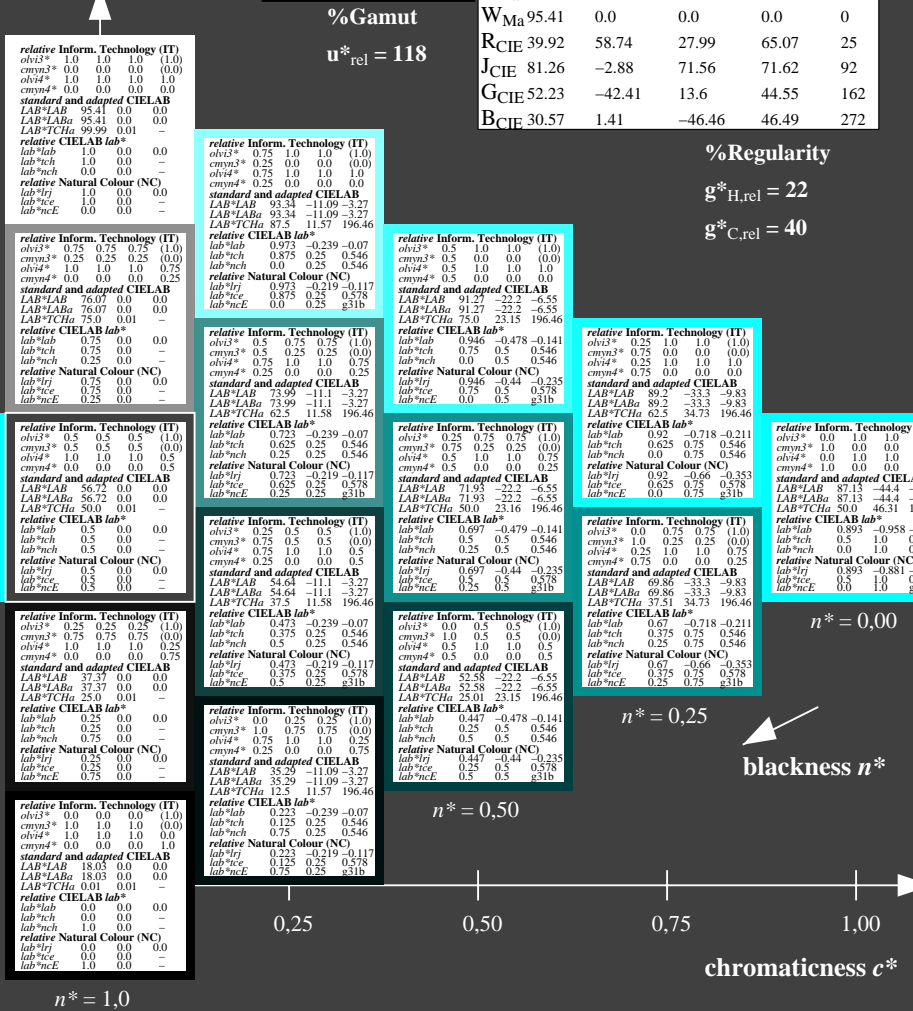
D65: hue C  
 LCH\*Ma: 87 46 196  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness



**TLS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

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



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

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

input:  $olv^* setrgbcolor$

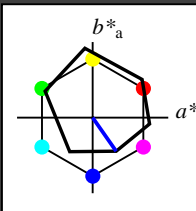
output:  $olv^* setrgbcolor / w^* setgray$



**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 305/360 = 0.847$   
 $lab^*tch$  and  $lab^*nch$

D65: hue V  
 LCH\*Ma: 26 54 305  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness



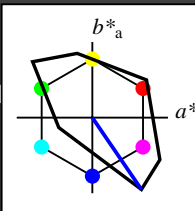
**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

**Output: Colorimetric Television Luminous System TLS18**

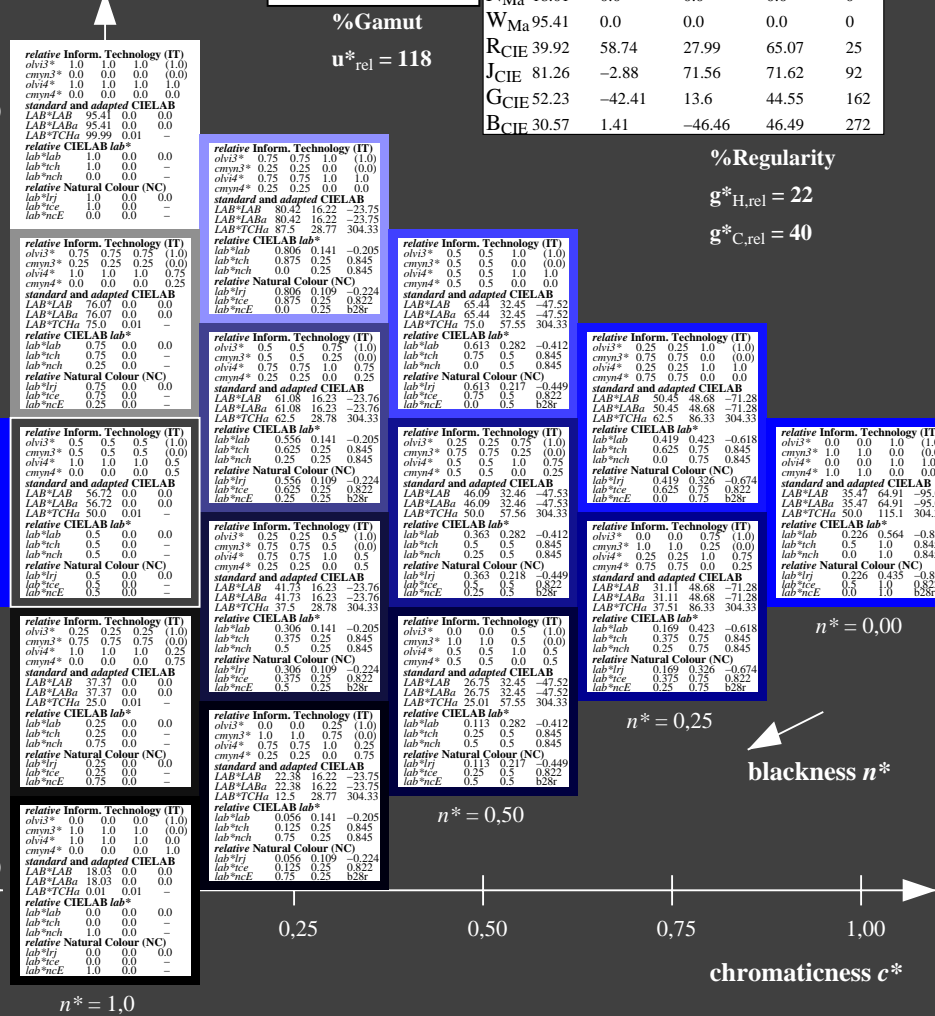
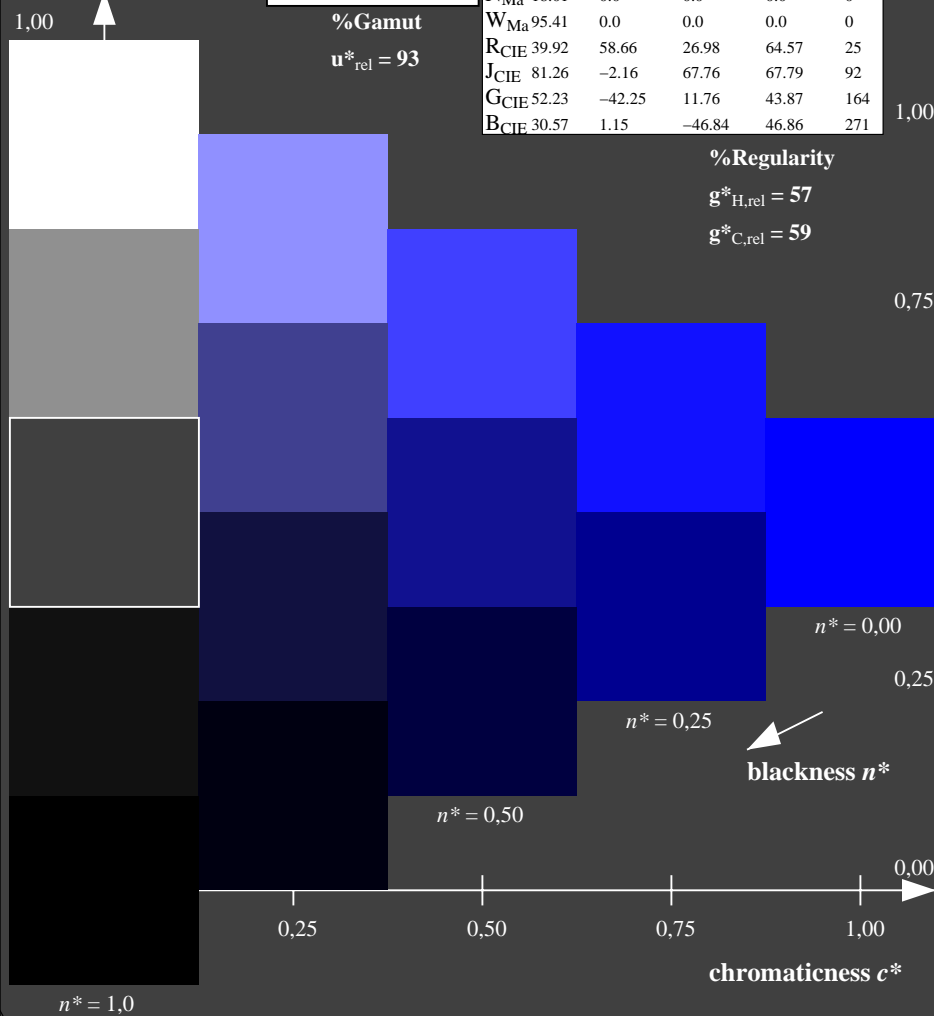
for hue  $h^* = lab^*h = 304/360 = 0.845$   
 $lab^*tch$  and  $lab^*nch$

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



**TLS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272



NE410-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 304/360 = 0.845 (right)

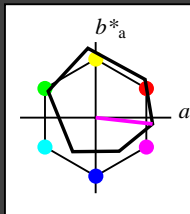
BAM-test chart NE41; Colorimetric systems ORS18 & TLS18  
 D65: 5 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 354/360 = 0.982$   
 $lab^*tch$  and  $lab^*nch$

D65: hue M  
 LCH\*Ma: 48 76 354  
 olv\*Ma: 1.0 0.0 1.0  
 triangle lightness



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

%Regularity

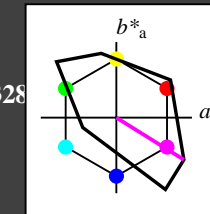
$g^*_{H,rel} = 57$

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

**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



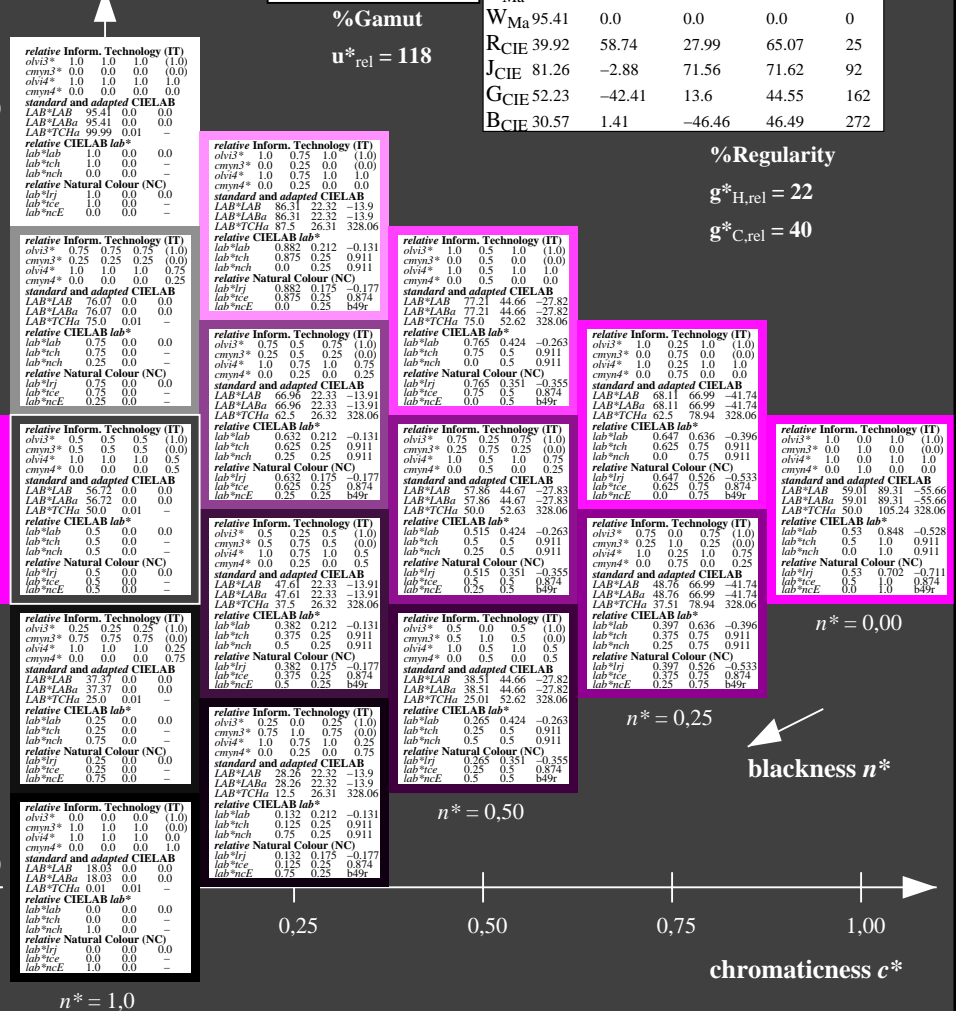
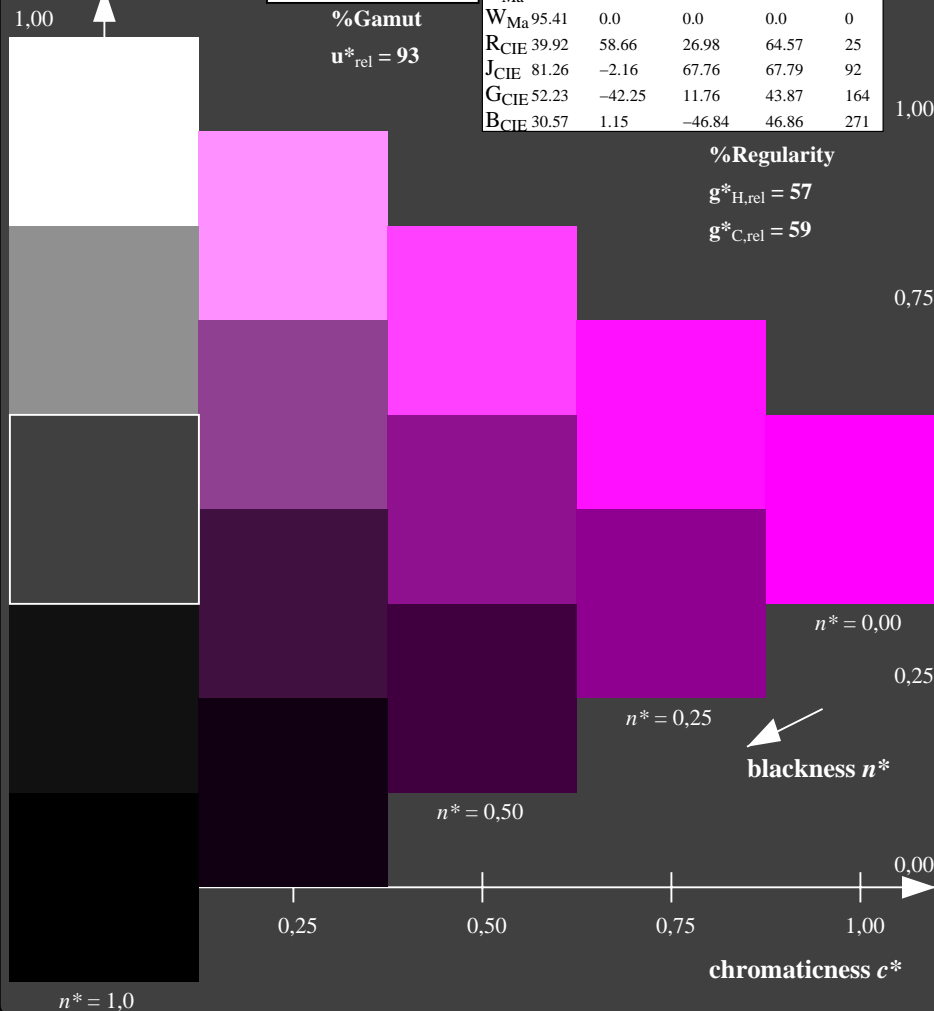
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Regularity

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

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



NE410-7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 328/360 = 0.911 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

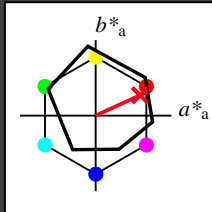
input:  $olv^* setrgbcolor$

output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

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

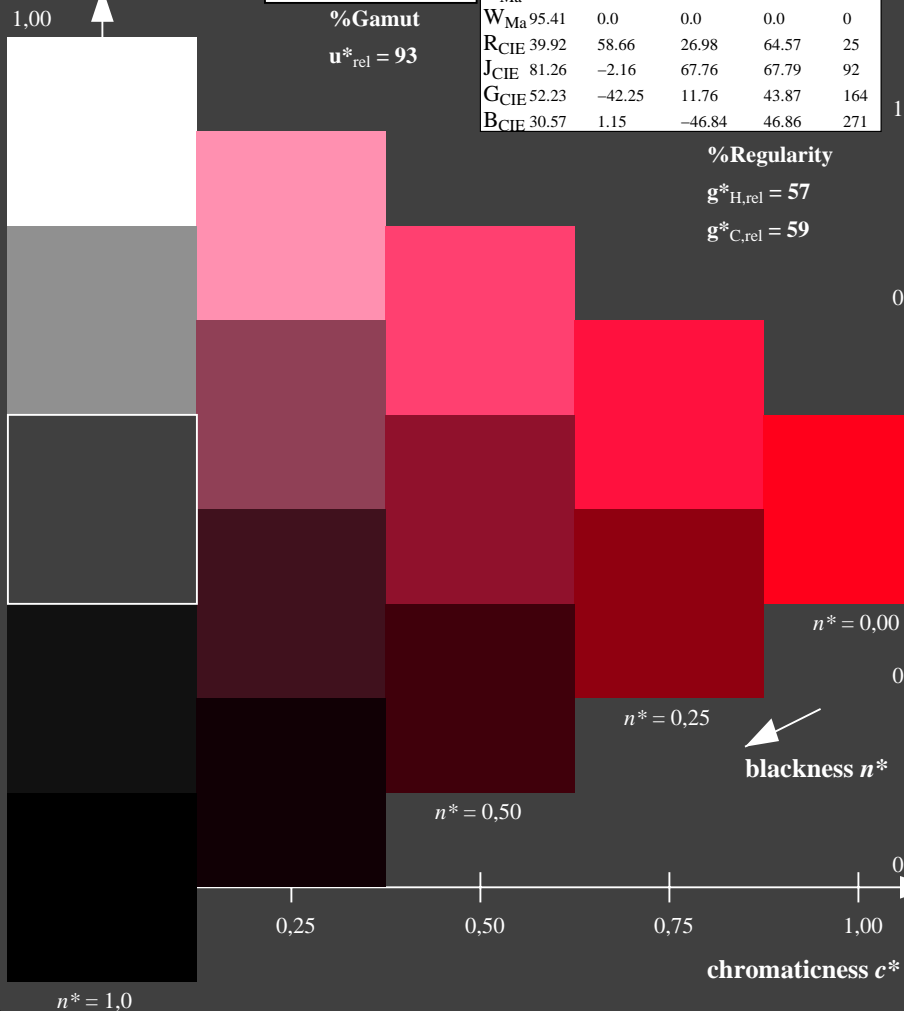
D65: hue R  
 LCH\*Ma: 48 75 25  
 olv\*Ma: 1.0 0.0 0.32  
 triangle lightness



**ORS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

**%Regularity**  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

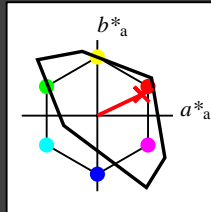


NE410-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

**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



**TLS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

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



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

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

input:  $olv^* setrgbcolor$

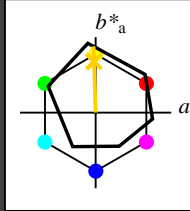
output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 92/360 = 0.255$   
 $lab^*tch$  and  $lab^*nch$

D65: hue J  
 LCH\*Ma: 86 88 92  
 olv\*Ma: 1.0 0.9 0.0

triangle lightness



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

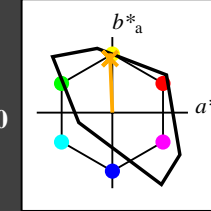
$g^*_{C,rel} = 59$

**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



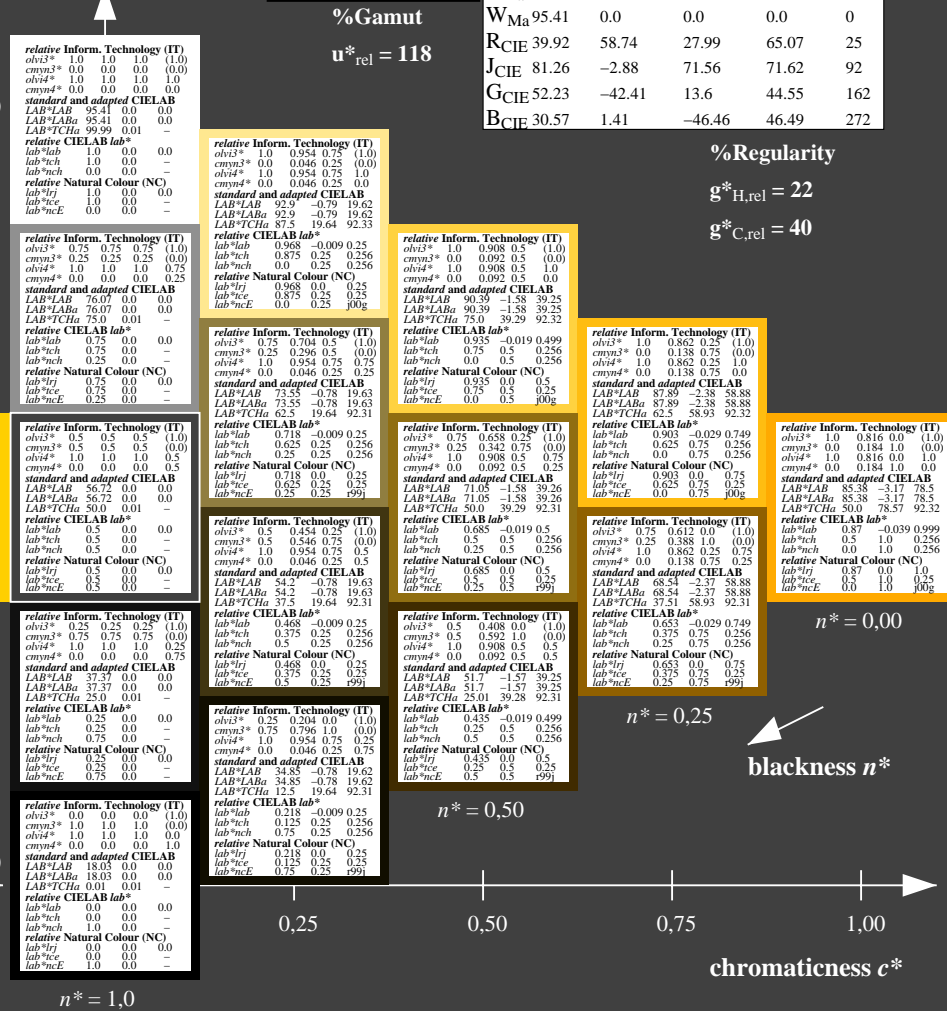
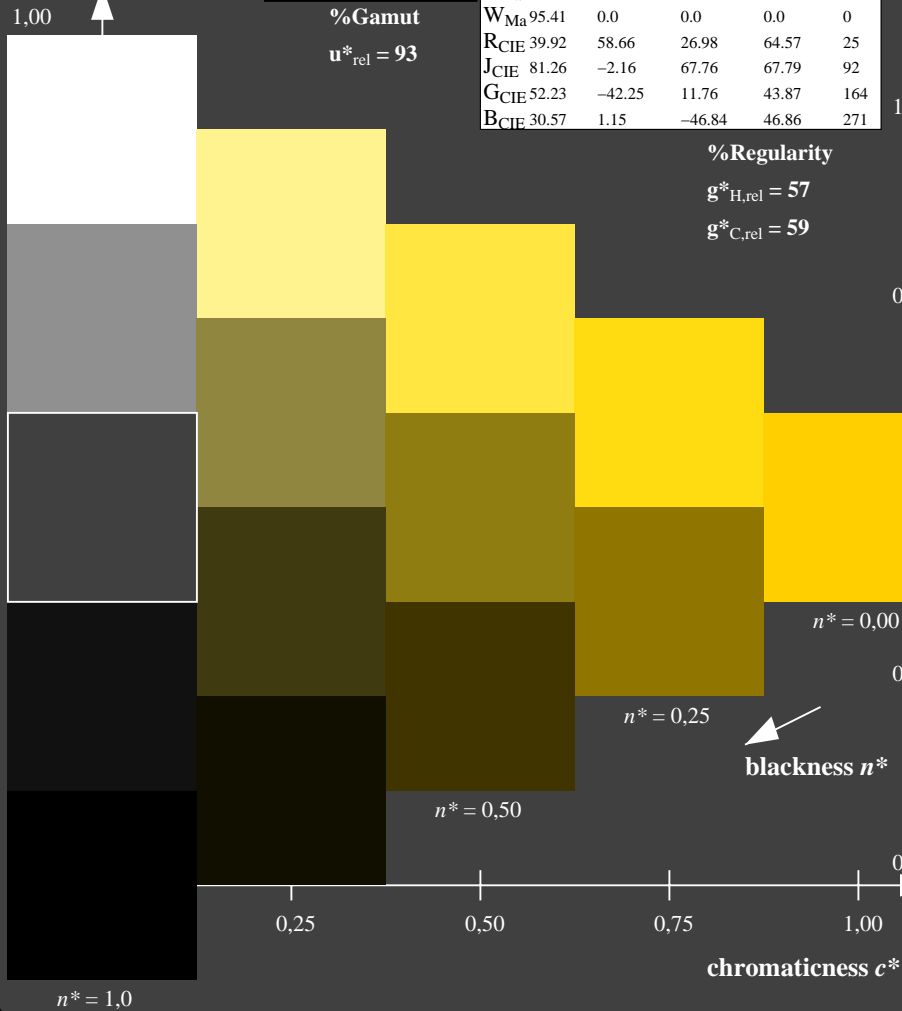
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Regularity

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

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



NE410-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

input:  $olv^* setrgbcolor$

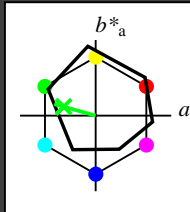
output:  $olv^* setrgbcolor / w^* setgray$



**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 164/360 = 0.457$   
 $lab^*tch$  and  $lab^*nch$

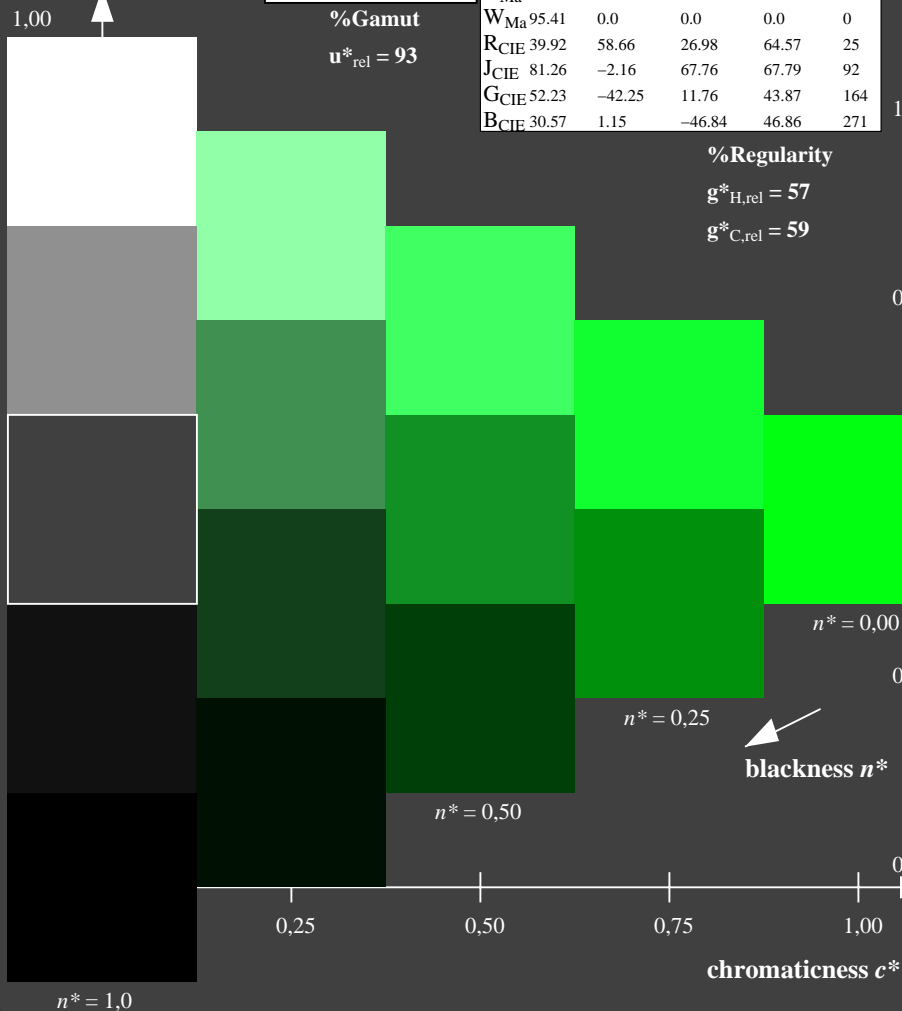
D65: hue G  
 LCH\*Ma: 53 57 164  
 olv\*Ma: 0.0 1.0 0.25  
 triangle lightness



ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

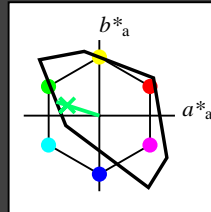
%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



**Output: Colorimetric Television Luminous System TLS18**

for hue  $h^* = lab^*h = 162/360 = 0.451$   
 $lab^*tch$  and  $lab^*nch$

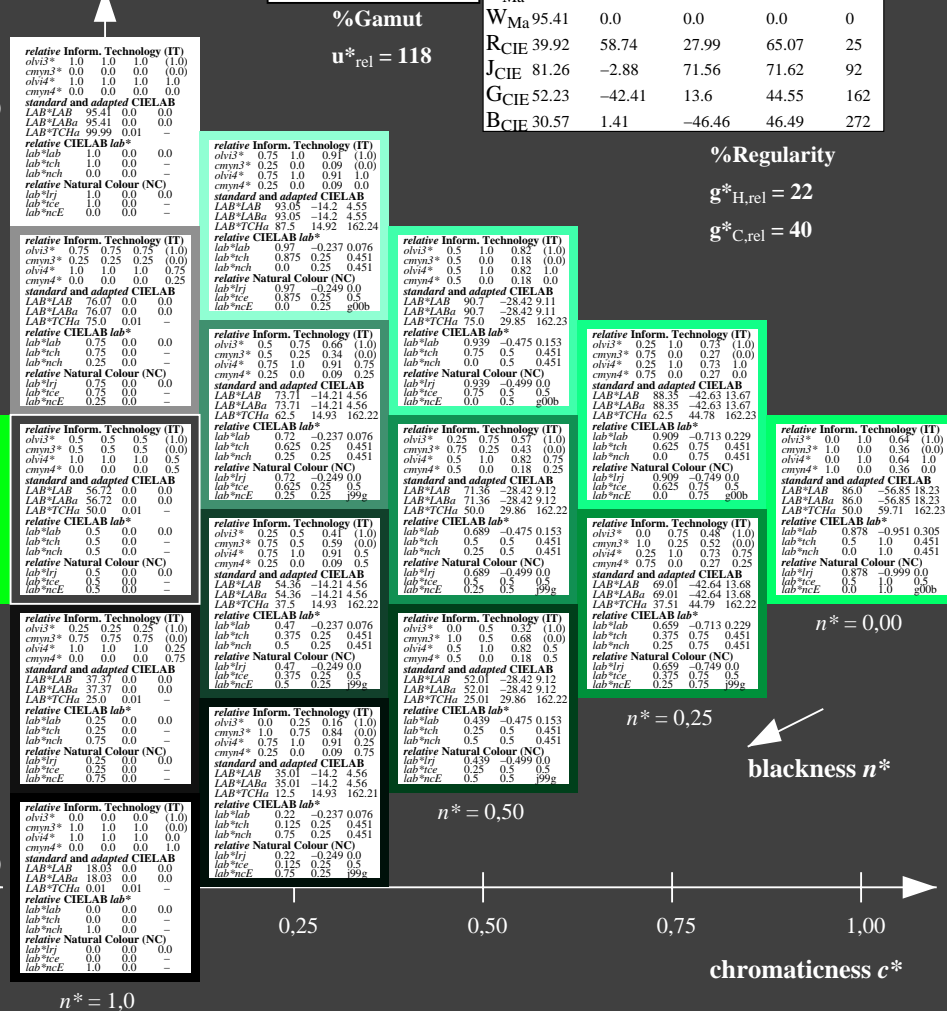
D65: hue G  
 LCH\*Ma: 86 60 162  
 olv\*Ma: 0.0 1.0 0.64  
 triangle lightness



TLS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

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



NE410-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

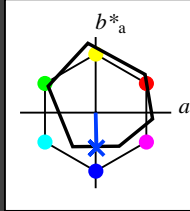
input:  $olv^* setrgbcolor$

output:  $olv^* setrgbcolor / w^* setgray$

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 271/360 = 0.754$   
 $lab^*tch$  and  $lab^*nch$

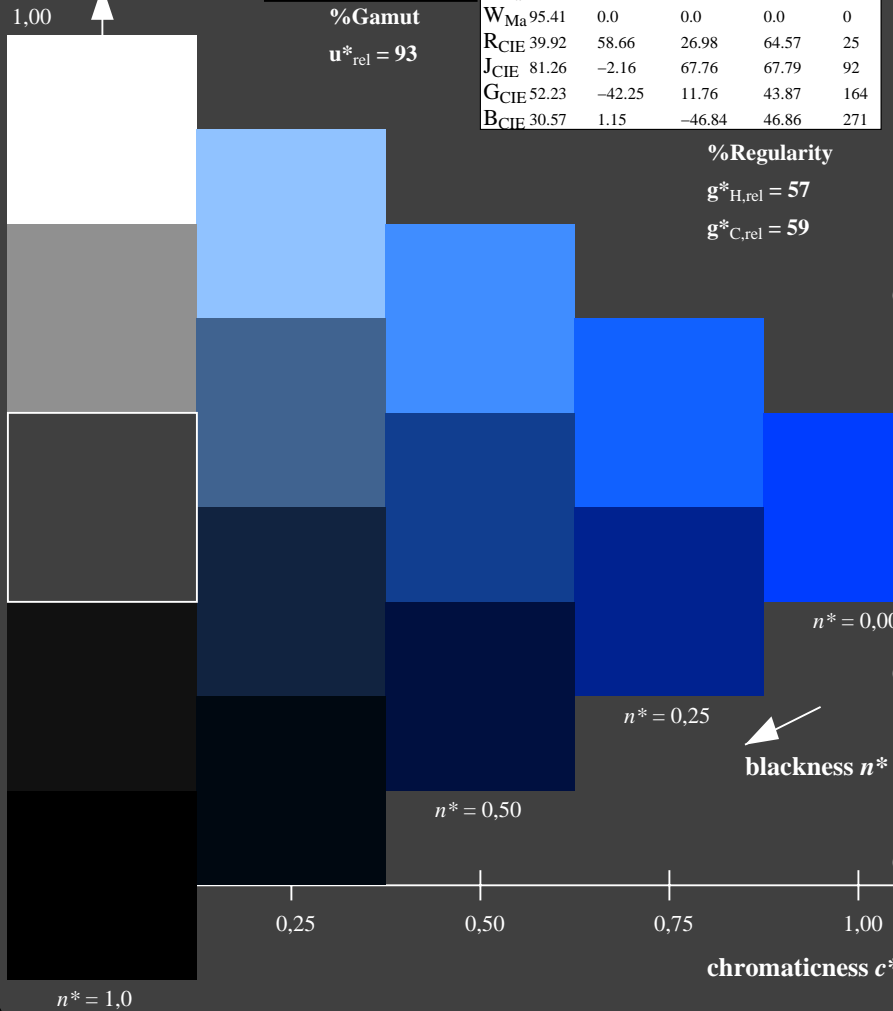
D65: hue B  
 LCH\*Ma: 42 45 271  
 olv\*Ma: 0.0 0.49 1.0  
 triangle lightness



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-8.36	75.74	354
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.57	25
J <sub>CIE</sub>	81.26	-2.16	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.25	11.76	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.86	271

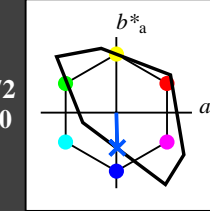
%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



**Output: Colorimetric Television Luminous System TLS18**

for hue  $h^* = lab^*h = 272/360 = 0.755$   
 $lab^*tch$  and  $lab^*nch$

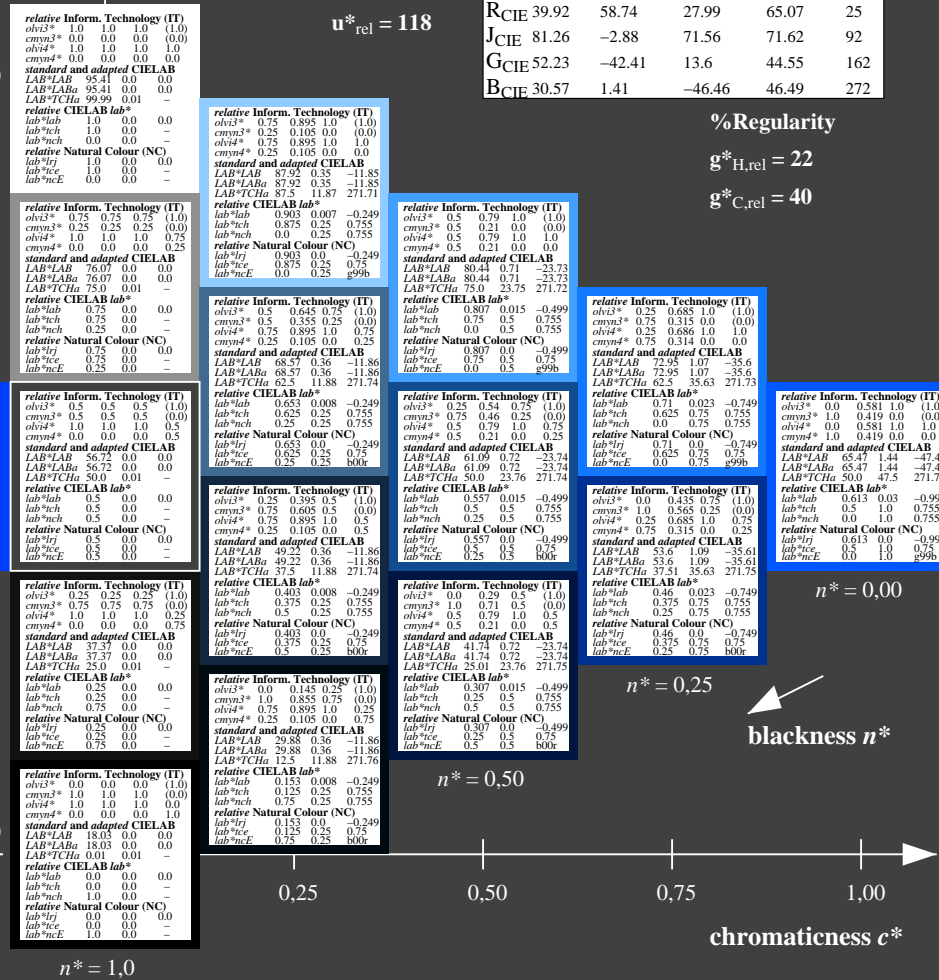
D65: hue B  
 LCH\*Ma: 65 48 272  
 olv\*Ma: 0.0 0.58 1.0  
 triangle lightness



TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	52.76	71.63	49.88	87.29	35
Y <sub>Ma</sub>	92.74	-20.02	84.97	87.3	103
L <sub>Ma</sub>	84.0	-78.98	73.94	108.2	137
C <sub>Ma</sub>	87.14	-44.41	-13.11	46.32	196
V <sub>Ma</sub>	35.47	64.92	-95.06	115.12	304
M <sub>Ma</sub>	59.01	89.33	-55.67	105.26	328
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

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



NE410-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart NE41; Colorimetric systems ORS18 & TLS18

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

input:  $olv^* setrgbcolor$

output:  $olv^* setrgbcolor / w^* setgray$