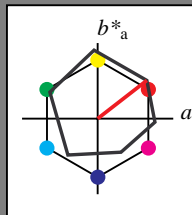


Input: Colorimetric Offset Reflective System ORS18

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

D50: hue O  
 LCH\*Ma: 48 82 38  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness



% Gamut

$u^*_{rel} = 94$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

% Regularity

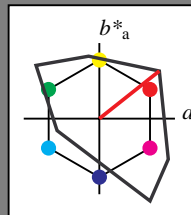
$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 38/360 = 0.107$   
 $lab^*tch$  and  $lab^*nch$

D50: hue O  
 LCH\*Ma: 54 101 38  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness



% Gamut

$u^*_{rel} = 156$

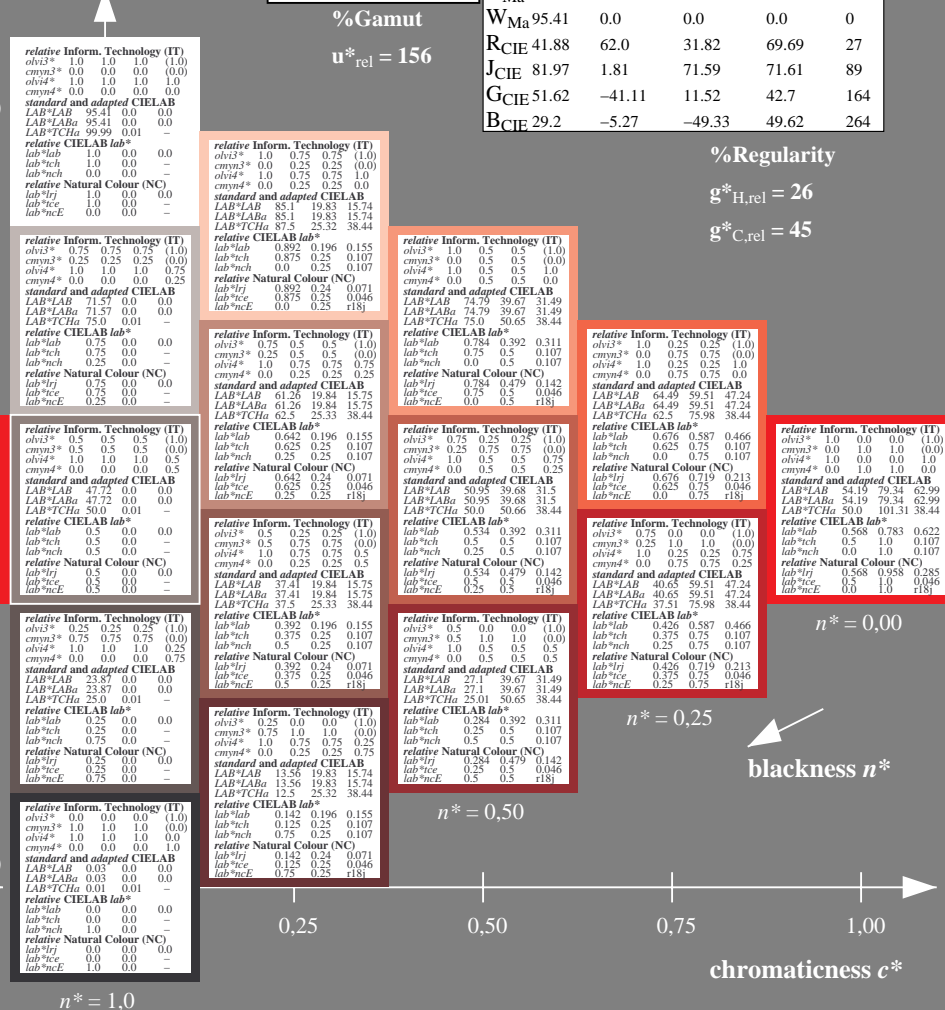
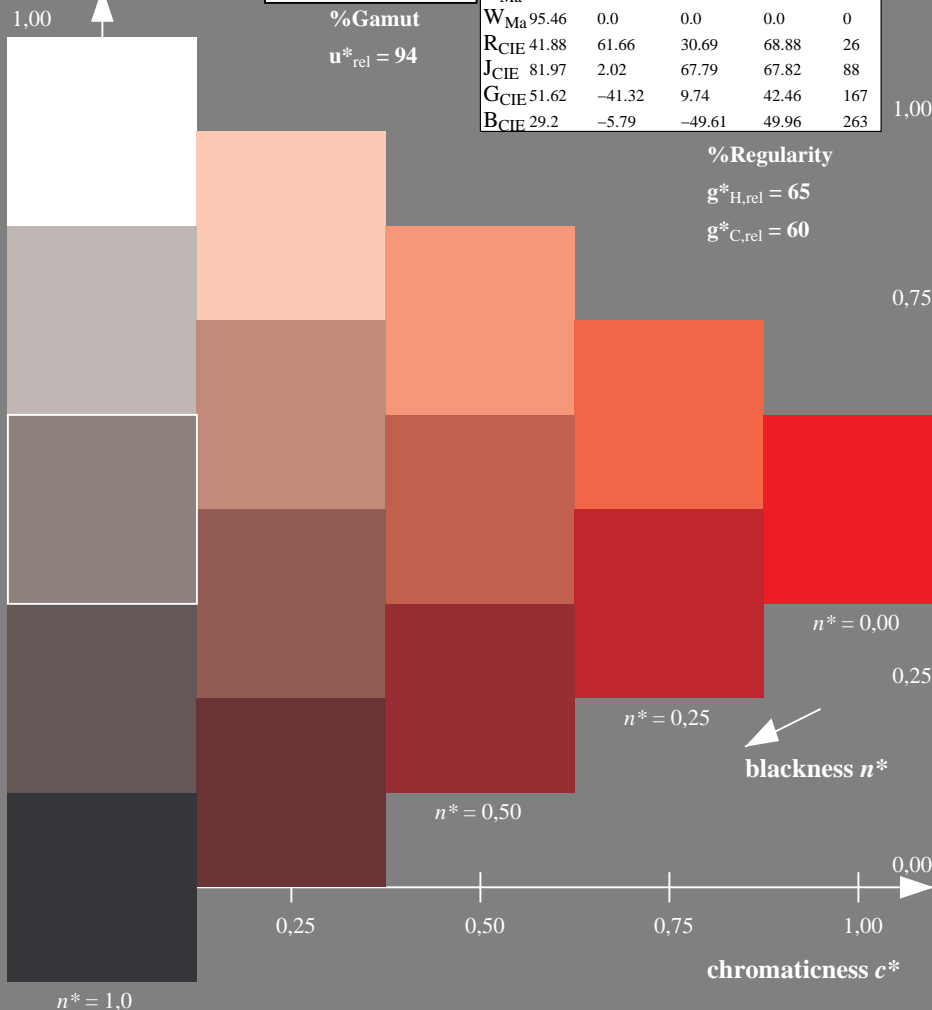
TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.9	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

% Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



QE40-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 38/360 = 0.107 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY^*_{set}$   $cmY^*_{color}$   
 output: no change compared to input

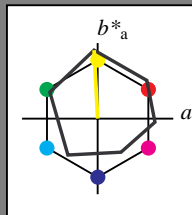
See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE40/10Q/Q40E00NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form 1/10, Serie: 1/1, Page: 1 Page count: 1

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 93/360 = 0.258$   
 $lab^*tch$  and  $lab^*nch$

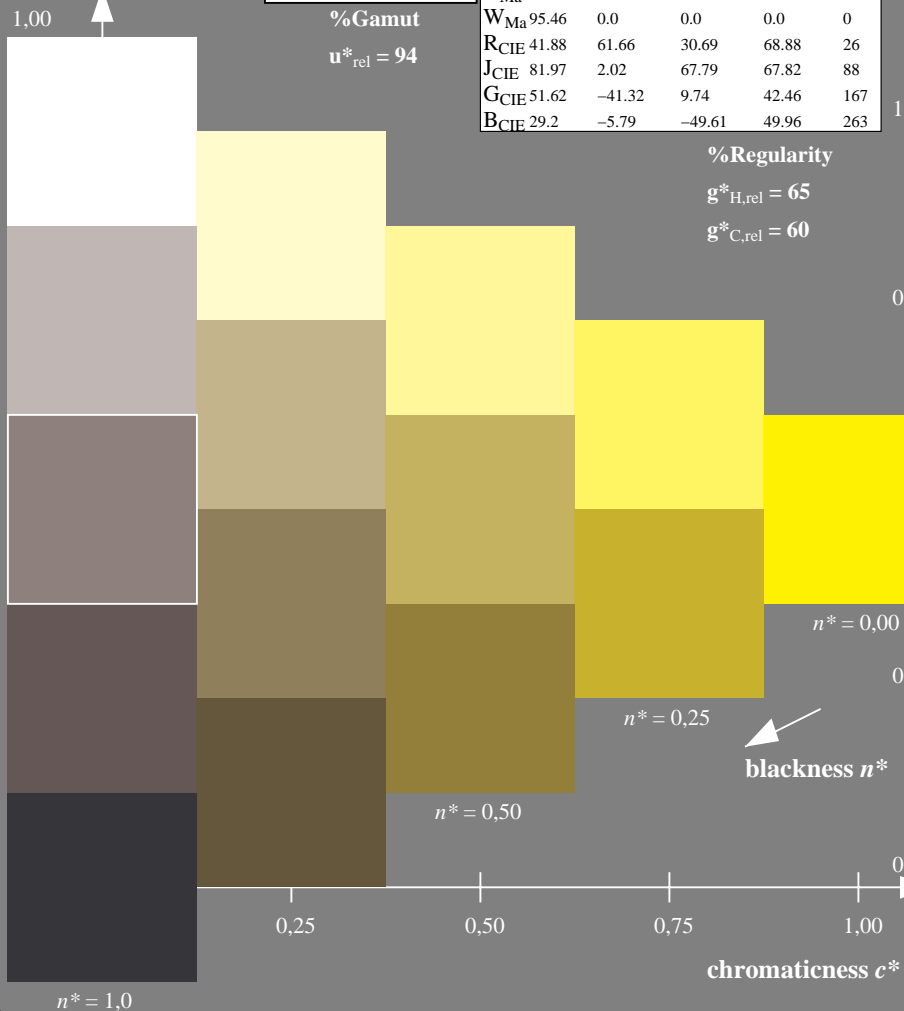
D50: hue Y  
 LCH\*Ma: 91 91 93  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness



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

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

**%Regularity**  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$

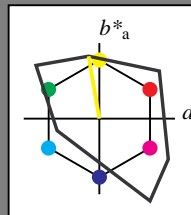


QE400-7, 5 step scales for constant CIELAB hue 93/360 = 0.258 (left)

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 100/360 = 0.277$   
 $lab^*tch$  and  $lab^*nch$

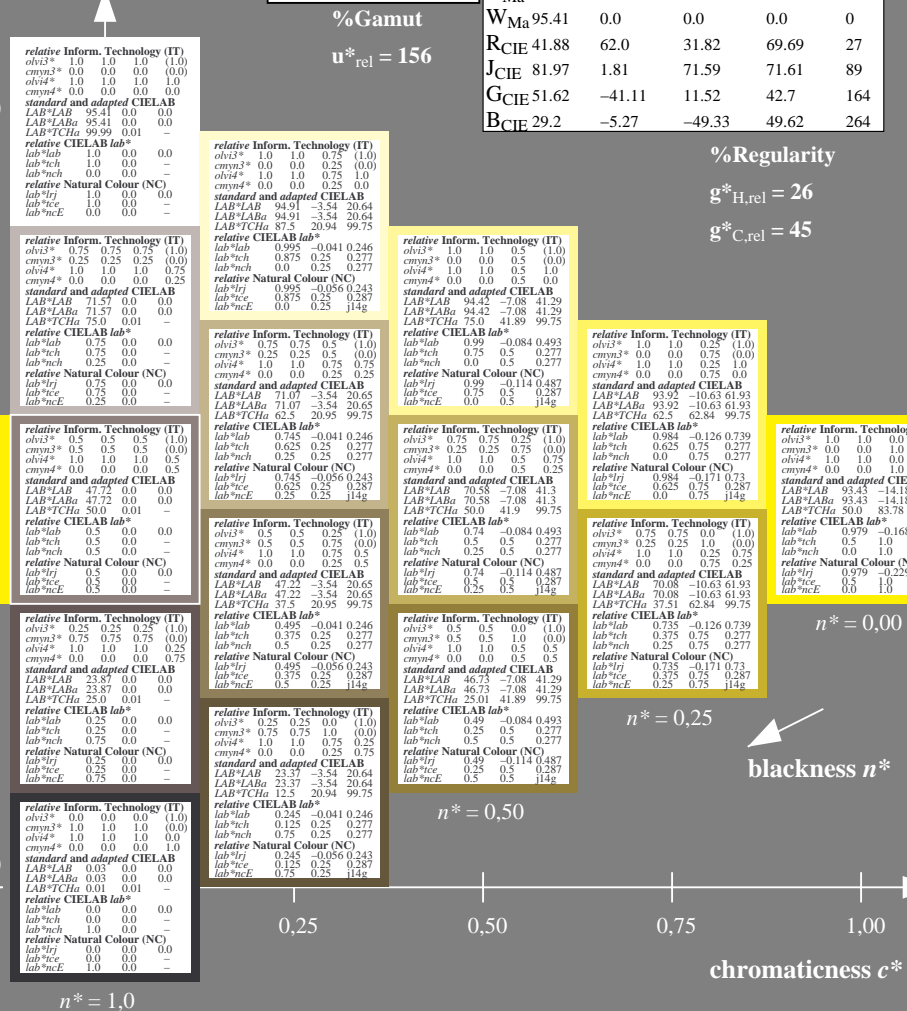
D50: hue Y  
 LCH\*Ma: 93 84 100  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness



**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

**%Regularity**  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$



5 step scales for constant CIELAB hue 100/360 = 0.277 (right)

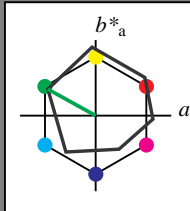
BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY^* setcmykcolor$   
 output: no change compared to input

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 151/360 = 0.42$   
 $lab^*tch$  and  $lab^*nch$

D50: hue L  
 LCH\*Ma: 51 72 151  
 olv\*Ma: 0.0 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	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

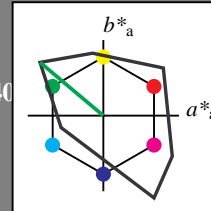
$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 140/360 = 0.389$   
 $lab^*tch$  and  $lab^*nch$

D50: hue L  
 LCH\*Ma: 83 109 140  
 olv\*Ma: 0.0 1.0 0.0  
 triangle lightness



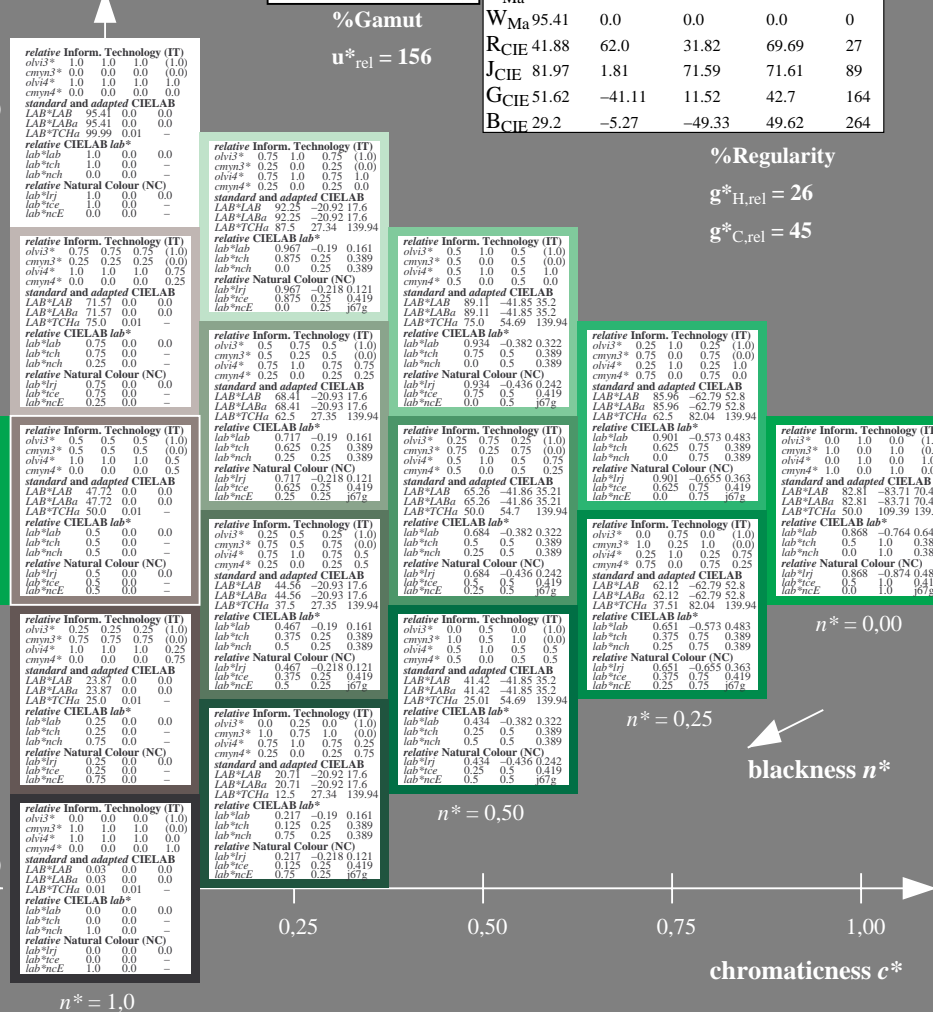
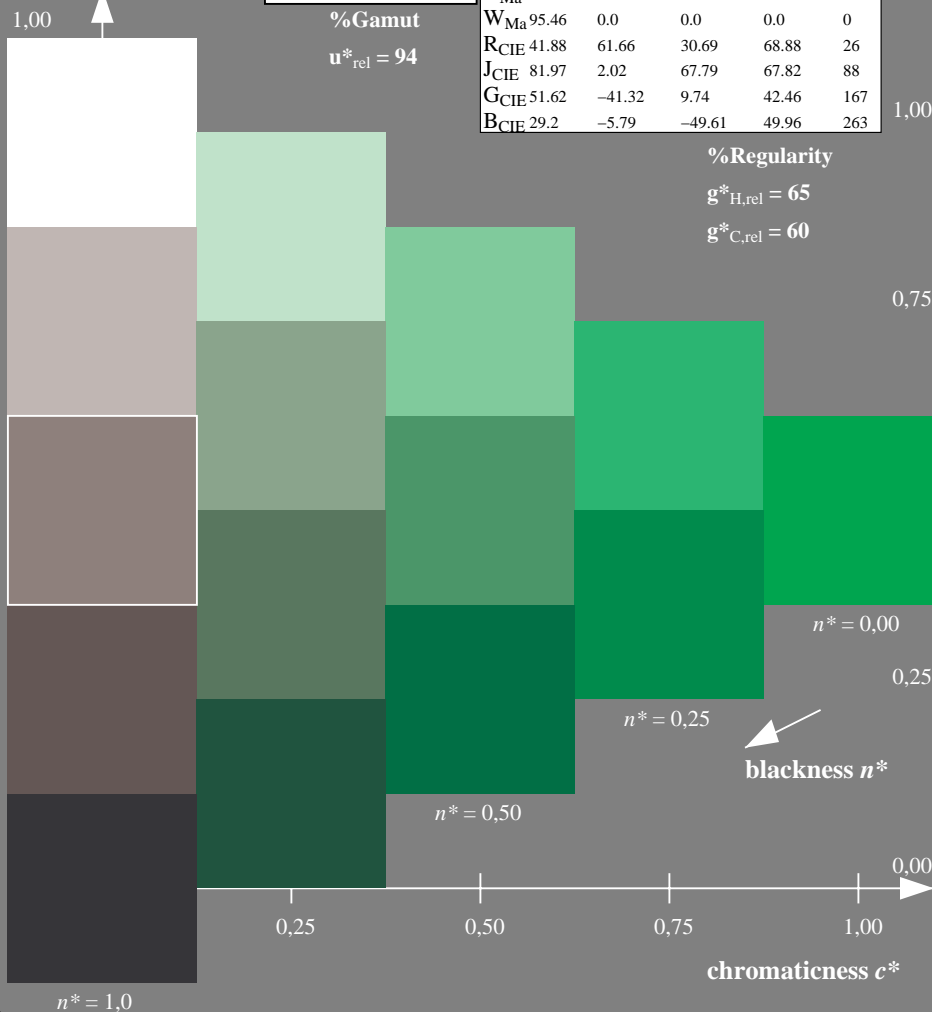
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



QE40-7, 5 step scales for constant CIELAB hue 151/360 = 0.42 (left)

5 step scales for constant CIELAB hue 140/360 = 0.389 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^* setcmYcolor$   
 output: no change compared to input

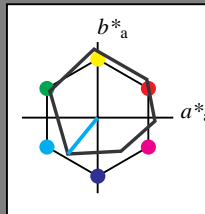
See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-QE40/10Q/Q40E02NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form: 3/10, Serie: 1/1, Page: 3 Page count: 3

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 231/360 = 0.641$   
 $lab^*tch$  and  $lab^*nch$

D50: hue C  
 LCH\*Ma: 57 62 231  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness



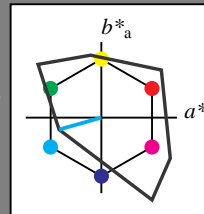
**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

**Output: Colorimetric Television Luminous System TLS00**

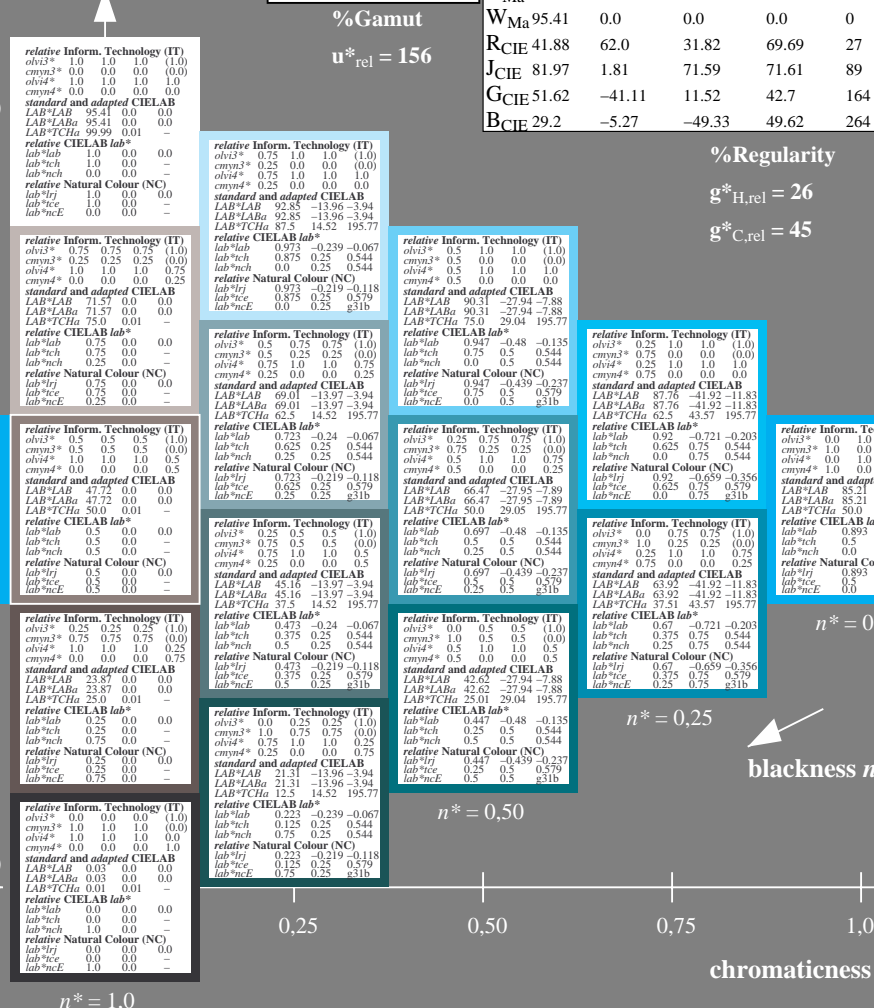
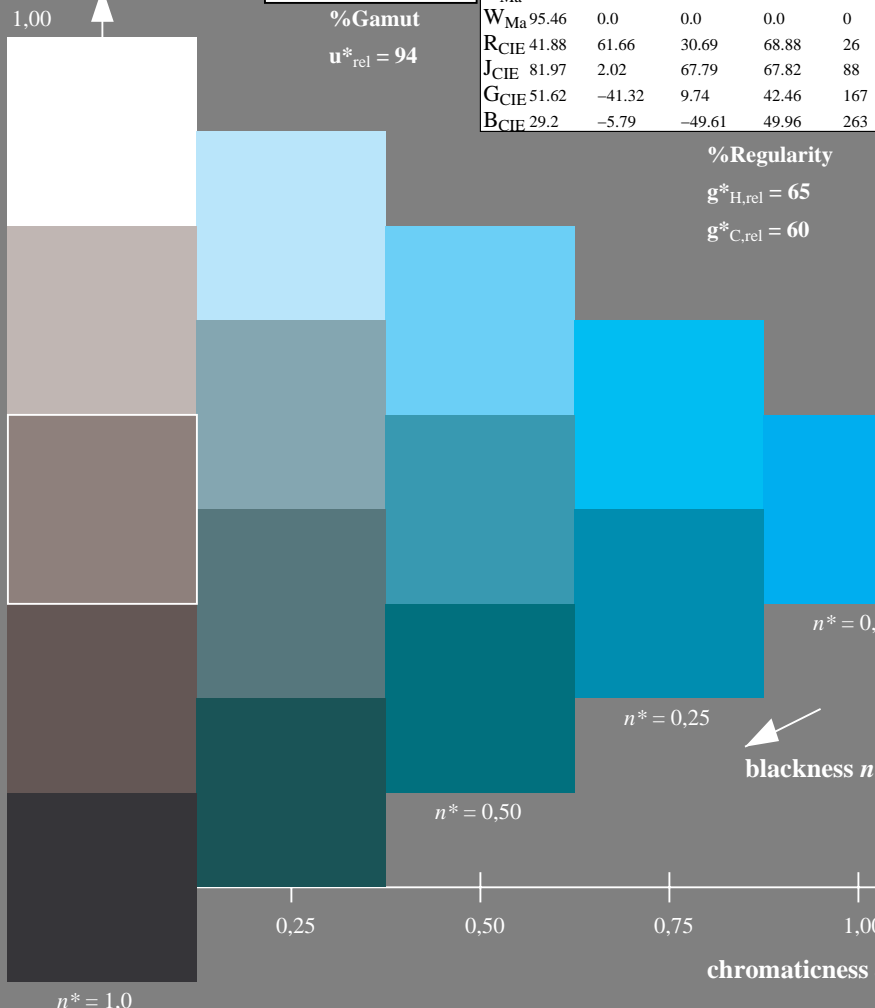
for hue  $h^* = lab^*h = 196/360 = 0.544$   
 $lab^*tch$  and  $lab^*nch$

D50: hue C  
 LCH\*Ma: 85 58 196  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness



**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264



QE40-7, 5 step scales for constant CIELAB hue 231/360 = 0.641 (left)

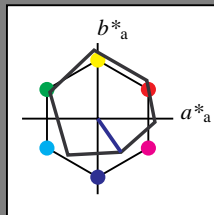
5 step scales for constant CIELAB hue 196/360 = 0.544 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues  
 input: *cmY0\* setcmYcolor*  
 output: *no change compared to input*

**Input: Colorimetric Offset Reflective System ORS18**

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

D50: hue V  
 LCH\*Ma: 26 54 305  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness



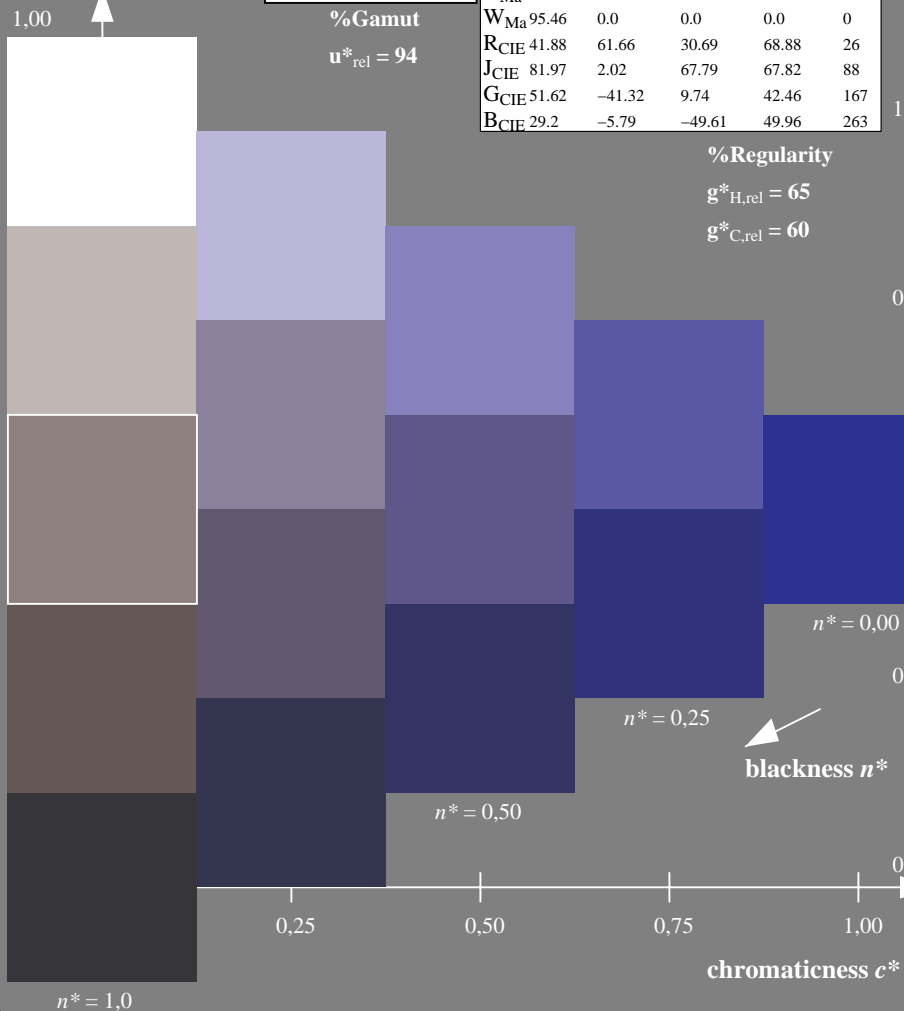
**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

$g^*_{H,rel} = 65$

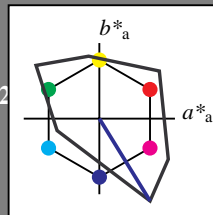
$g^*_{C,rel} = 60$



**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 302/360 = 0.838$   
 $lab^*tch$  and  $lab^*nch$

D50: hue V  
 LCH\*Ma: 26 128 302  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness



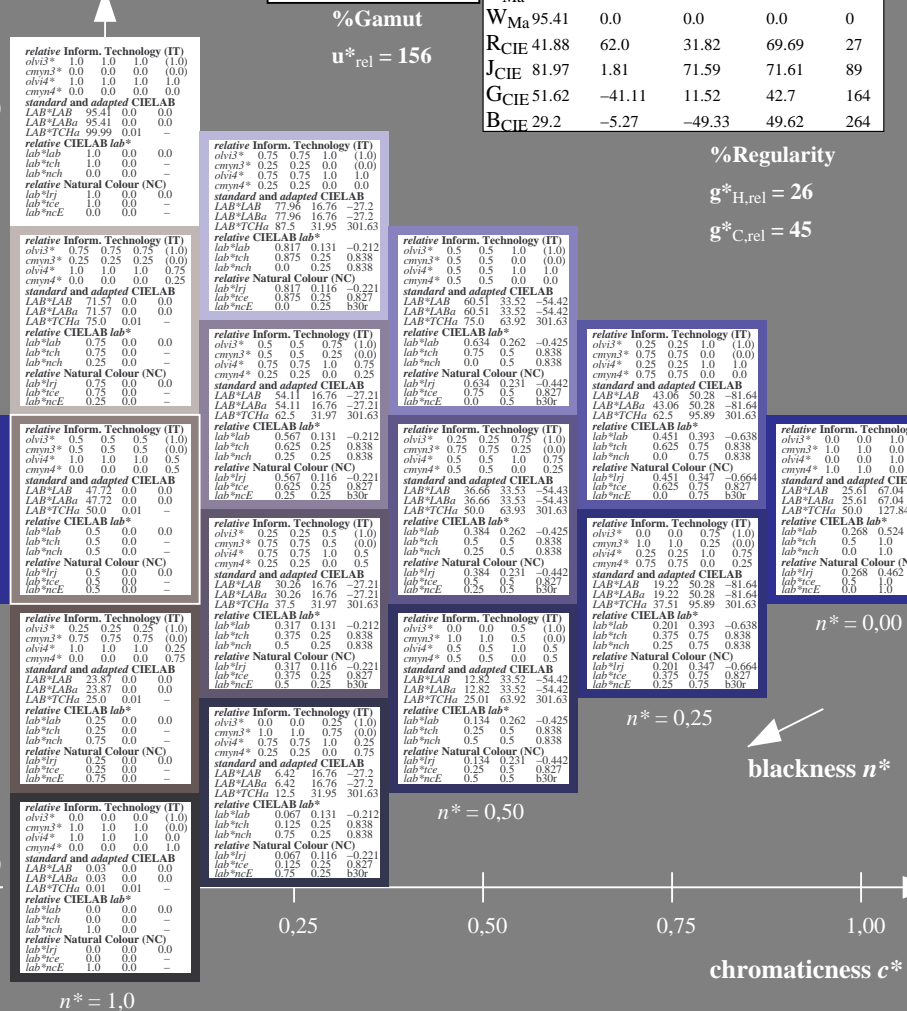
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



QE40-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 302/360 = 0.838 (right)

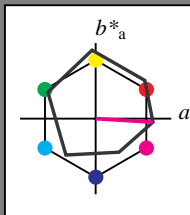
BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^* setcmykcolor$   
 output: no change compared to input

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 356/360 = 0.99$   
 $lab^*tch$  and  $lab^*nch$

D50: hue M  
 LCH\*Ma: 50 76 356  
 olv\*Ma: 1.0 0.0 1.0  
 triangle lightness



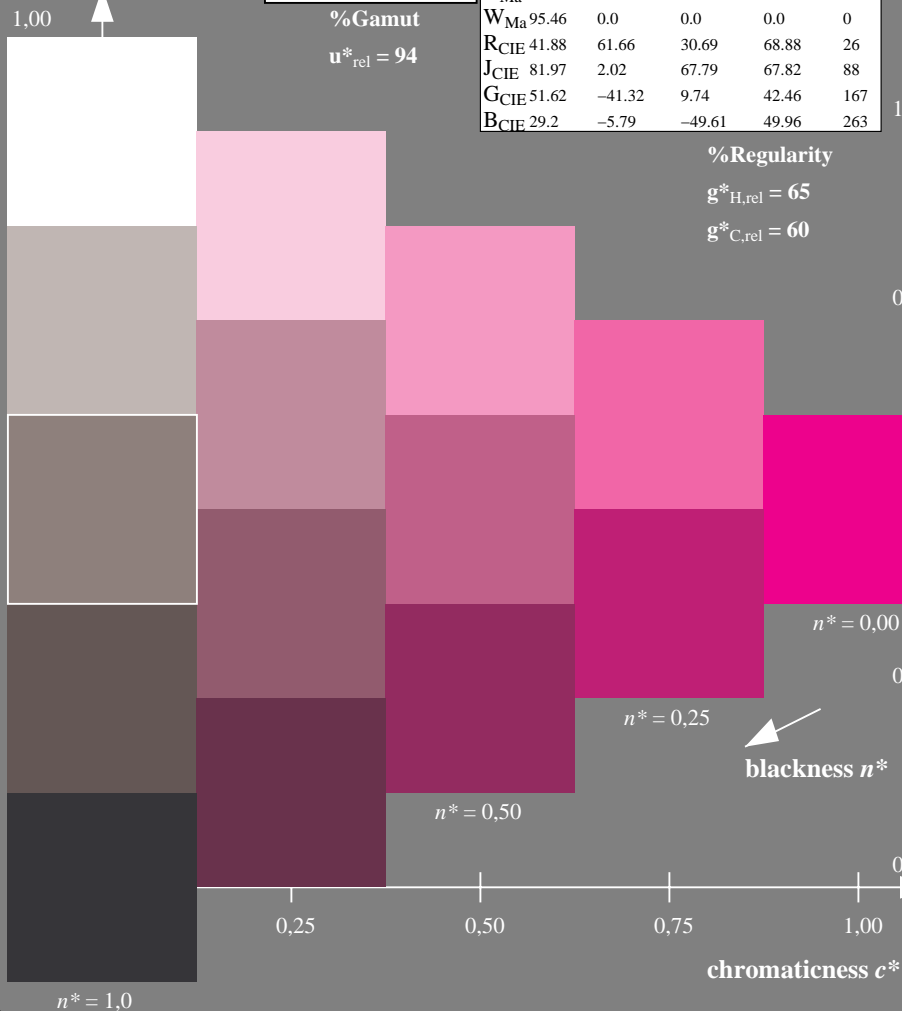
**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

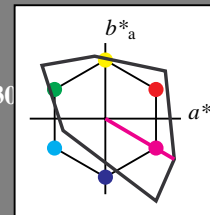


QE40-7, 5 step scales for constant CIELAB hue 356/360 = 0.99 (left)

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 330/360 = 0.915$   
 $lab^*tch$  and  $lab^*nch$

D50: hue M  
 LCH\*Ma: 59 106 330  
 olv\*Ma: 1.0 0.0 1.0  
 triangle lightness



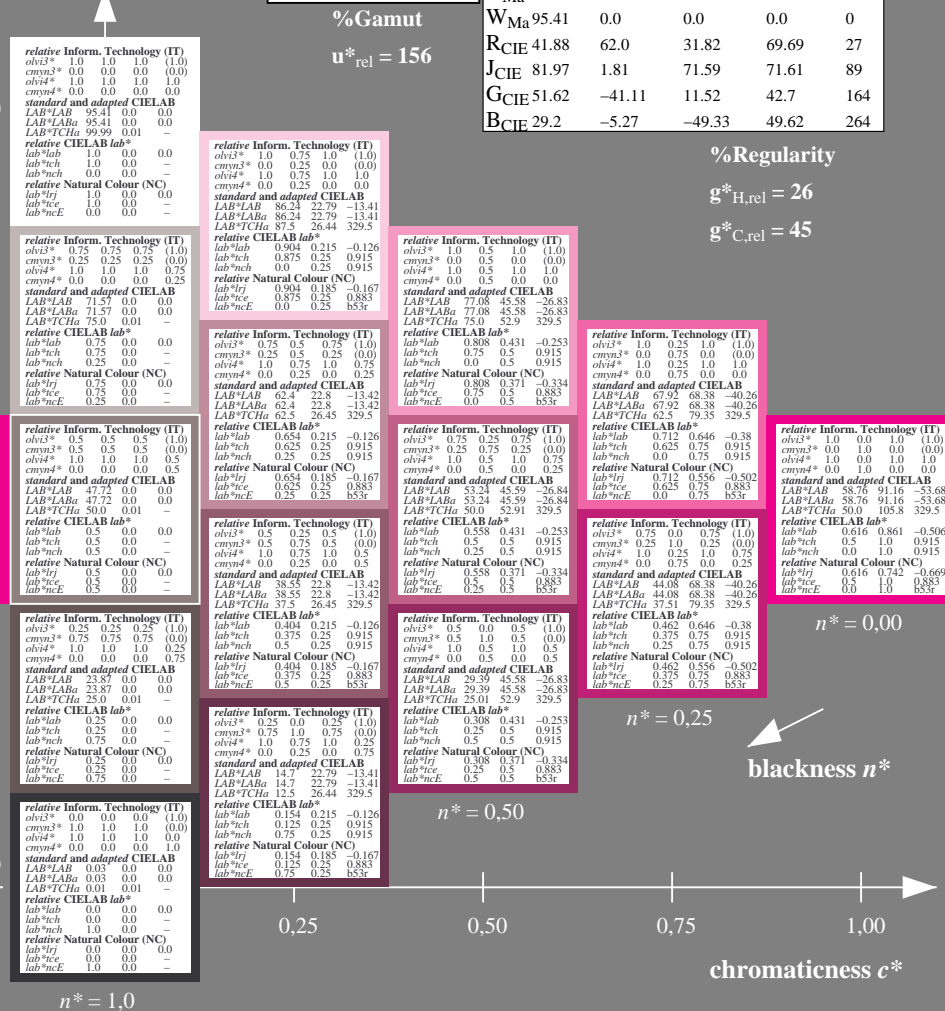
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



5 step scales for constant CIELAB hue 330/360 = 0.915 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^* setcmYcolor$   
 output: no change compared to input

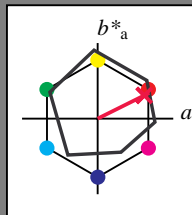
See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE40/10Q/Q40E05NP.PS/.PDF  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form 6/10, Seite: 1/1, Page: 6  
 Page count: 6  
 BAM material: code=rhadt4

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 26/360 = 0.074$   
 $lab^*tch$  and  $lab^*nch$

D50: hue R  
 LCH\*Ma: 49 76 26  
 olv\*Ma: 1.0 0.0 0.3  
 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	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

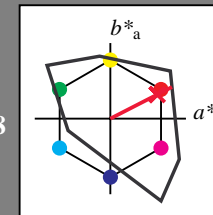
$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 27/360 = 0.075$   
 $lab^*tch$  and  $lab^*nch$

D50: hue R  
 LCH\*Ma: 55 92 27  
 olv\*Ma: 1.0 0.0 0.18  
 triangle lightness



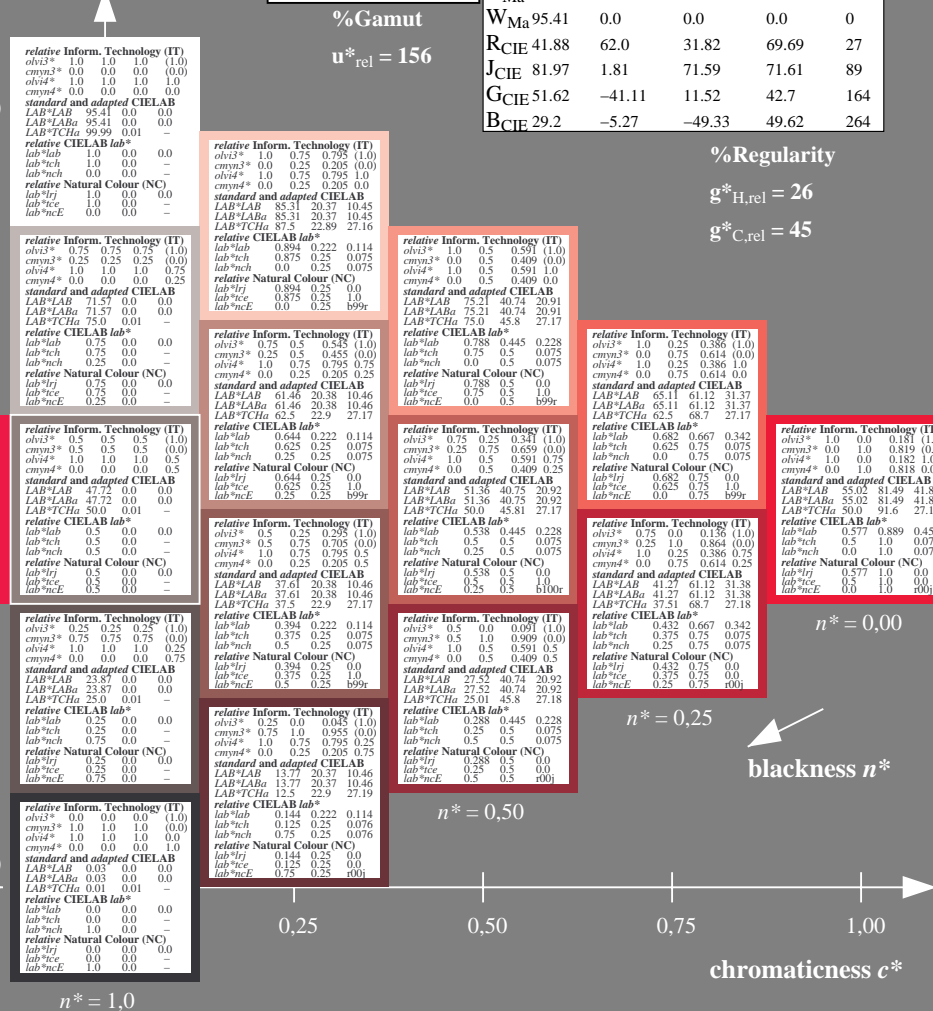
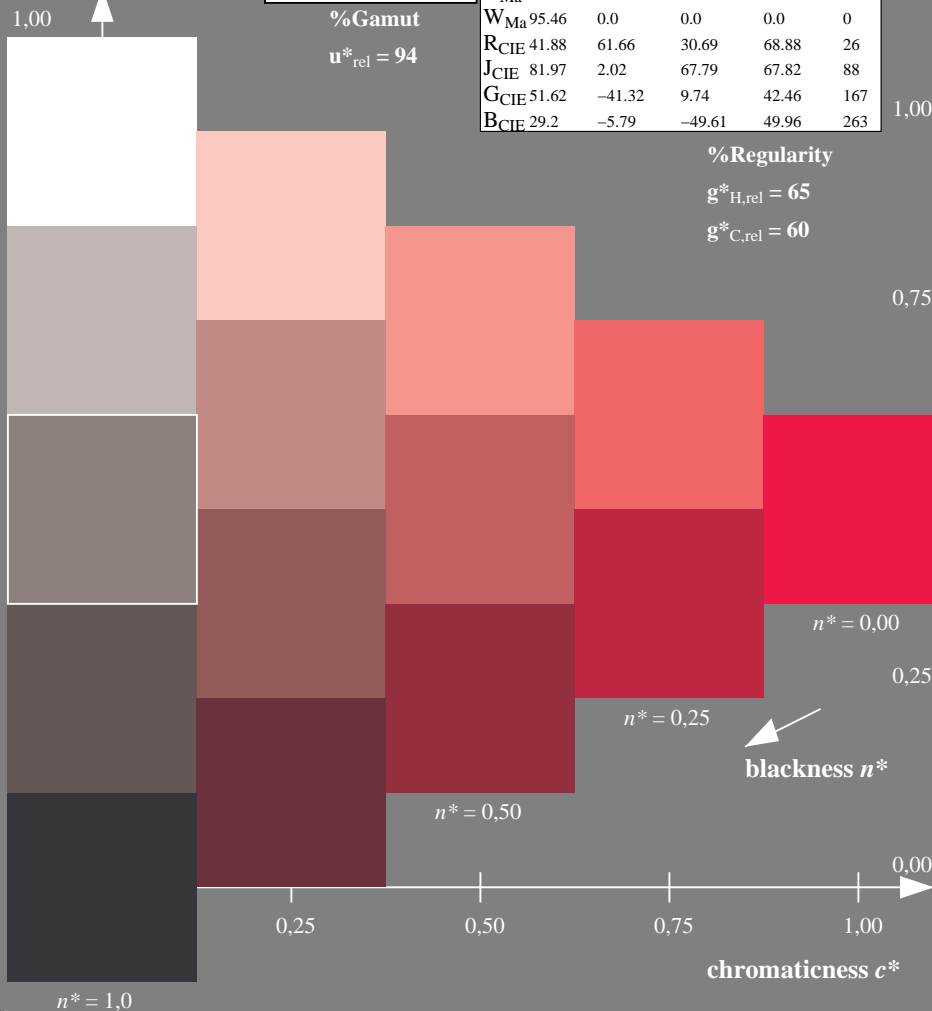
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



QE40-7, 5 step scales for constant CIELAB hue 26/360 = 0.074 (left)

5 step scales for constant CIELAB hue 27/360 = 0.075 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^* setcmYcolor$   
 output: no change compared to input

See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

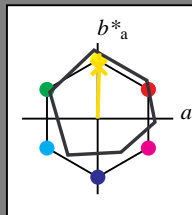
BAM registration: 20060101-QE40/10Q/Q40E06NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 QE40/ Form 7/10, Serie: 1/1, Page: 7 Page count: 7

Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 88/360 = 0.245$   
 $lab^*tch$  and  $lab^*nch$

D50: hue J  
 LCH\*Ma: 86 86 88  
 olv\*Ma: 1.0 0.9 0.0

triangle lightness



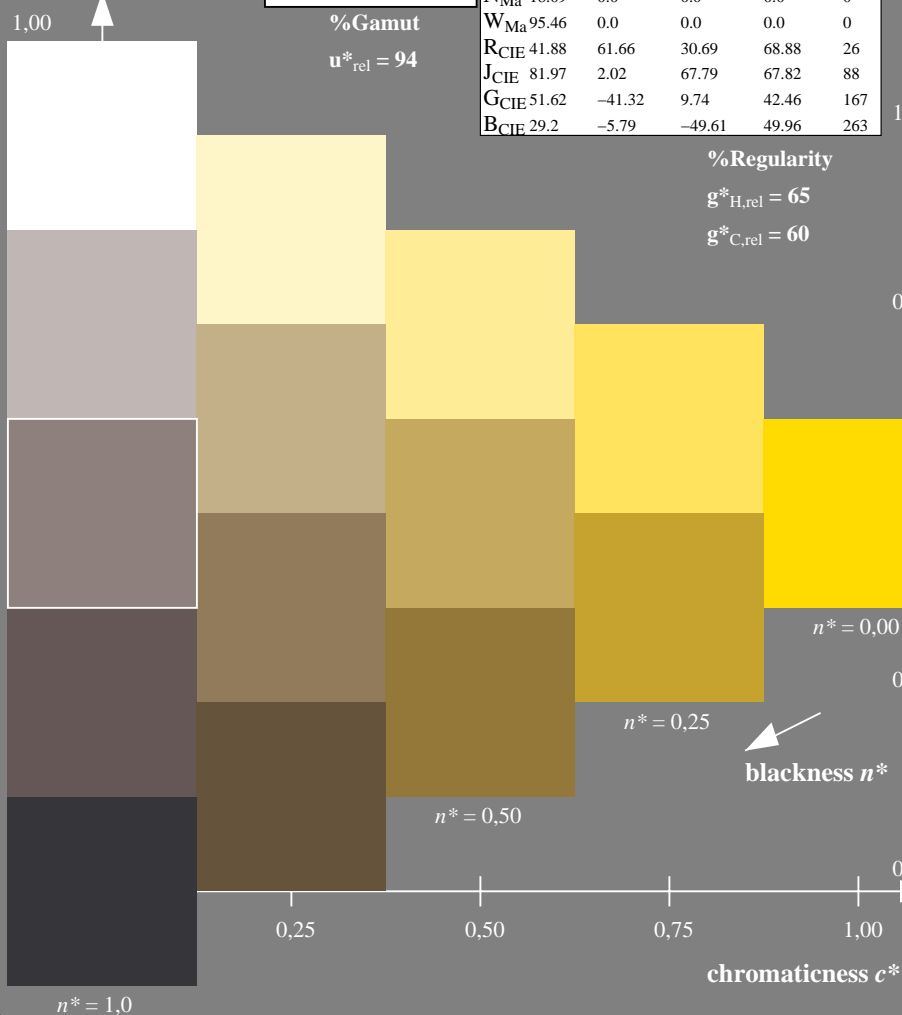
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$



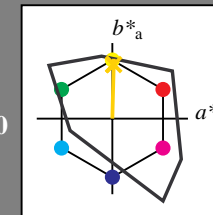
QE40-7, 5 step scales for constant CIELAB hue 88/360 = 0.245 (left)

Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 89/360 = 0.246$   
 $lab^*tch$  and  $lab^*nch$

D50: hue J  
 LCH\*Ma: 87 79 89  
 olv\*Ma: 1.0 0.83 0.0

triangle lightness



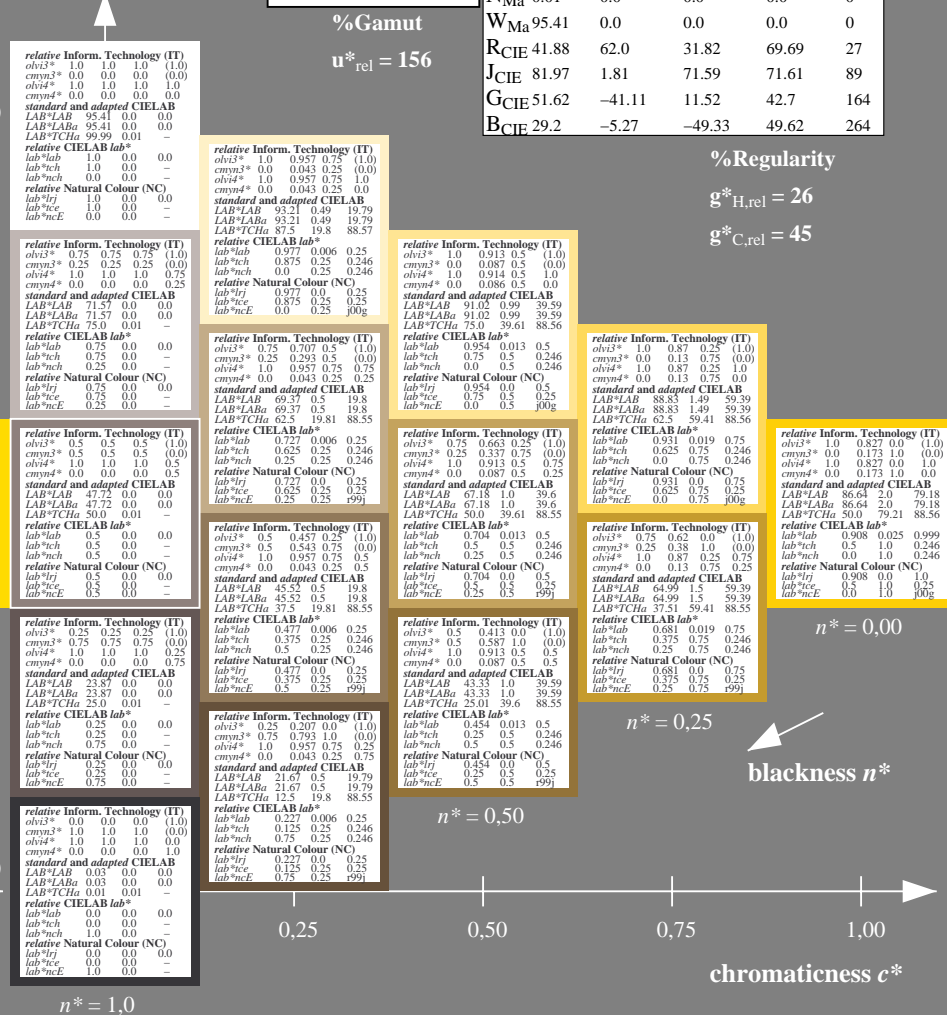
TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



5 step scales for constant CIELAB hue 89/360 = 0.246 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY^*_0$  setcmYcolor  
 output: no change compared to input

See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

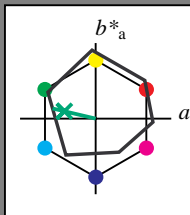
BAM registration: 20060101-QE40/10Q/Q40E07NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form 8/10, Seite: 1/1, Page: 8 Page count: 8



Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 167/360 = 0.463$   
 $lab^*tch$  and  $lab^*nch$

D50: hue G  
 LCH\*Ma: 52 59 167  
 olv\*Ma: 0.0 1.0 0.26  
 triangle lightness



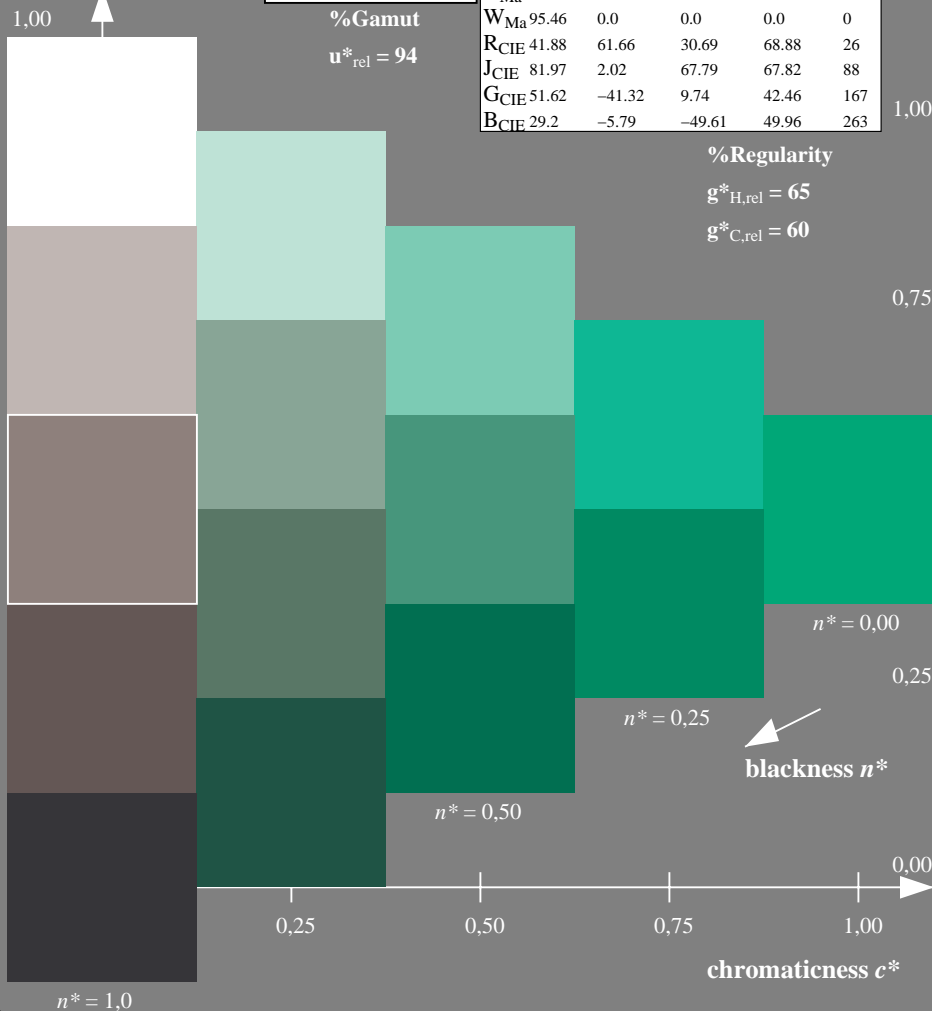
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

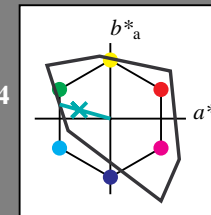


QE400-7, 5 step scales for constant CIELAB hue 167/360 = 0.463 (left)

Output: Colorimetric Television Luminous System TLS00

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

D50: hue G  
 LCH\*Ma: 84 70 164  
 olv\*Ma: 0.0 1.0 0.6  
 triangle lightness



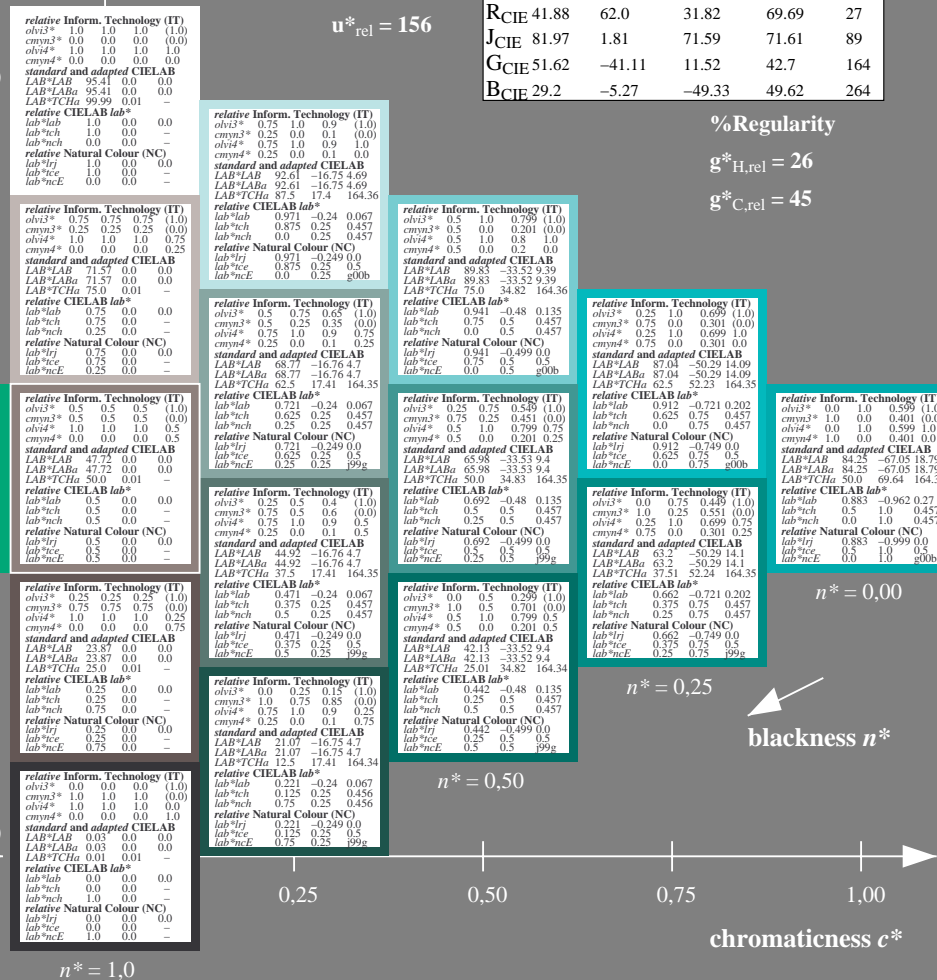
TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^* setcmYcolor$   
 output: no change compared to input

See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

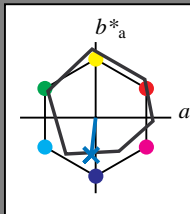
BAM registration: 20060101-QE40/10Q/Q40E08NP.PS/.PDF  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form 9/10, Seite: 1/1, Page: 9  
 Page count: 9

BAM material: code=rhadt4

**Input: Colorimetric Offset Reflective System ORS18**

for hue  $h^* = lab^*h = 263/360 = 0.731$   
 $lab^*tch$  and  $lab^*nch$

D50: hue B  
 LCH\*Ma: 42 47 263  
 olv\*Ma: 0.0 0.52 1.0  
 triangle lightness



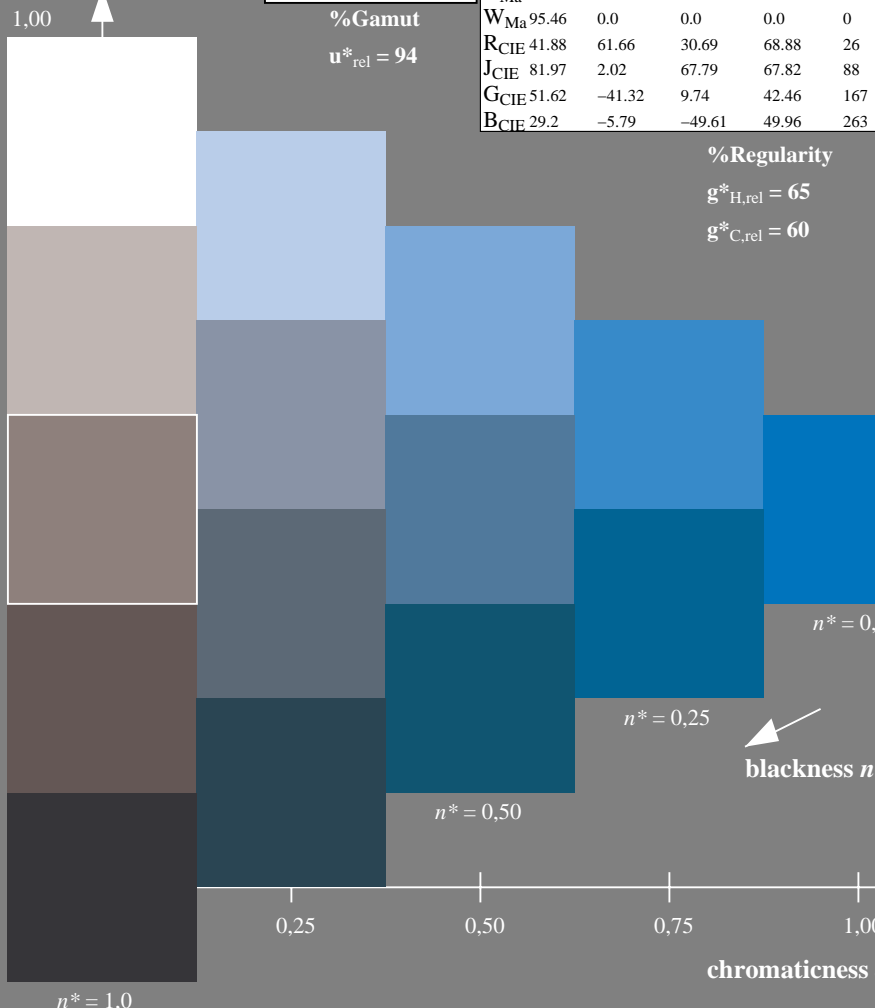
**ORS18; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
C <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Regularity

$g^*_{H,rel} = 65$

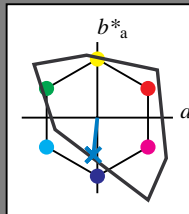
$g^*_{C,rel} = 60$



**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 264/360 = 0.733$   
 $lab^*tch$  and  $lab^*nch$

D50: hue B  
 LCH\*Ma: 61 54 264  
 olv\*Ma: 0.0 0.59 1.0  
 triangle lightness



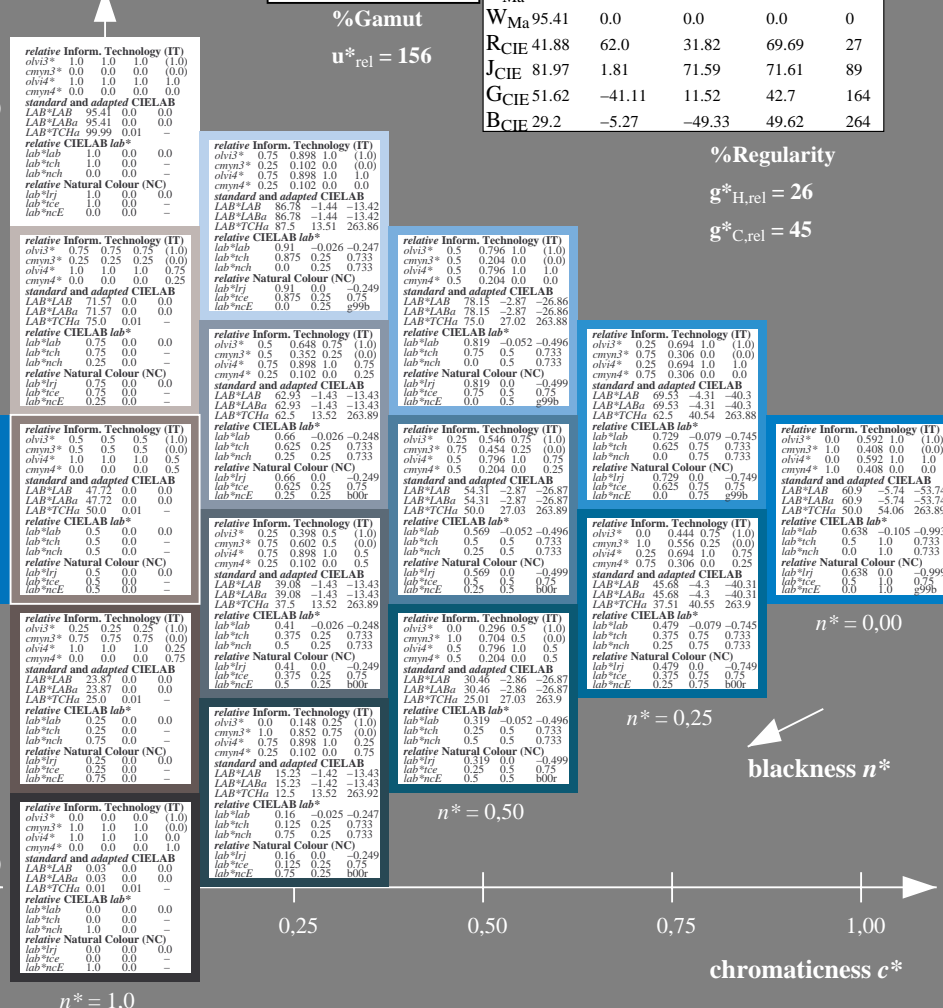
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



QE40-7, 5 step scales for constant CIELAB hue 263/360 = 0.731 (left)

5 step scales for constant CIELAB hue 264/360 = 0.733 (right)

BAM-test chart QE40; Colorimetric systems ORS18 & TLS00  
 D50: 5 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
 output: no change compared to input

See for similar files: <http://www.ps.bam.de/QE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE40/10Q/Q40E09NP.PS/.PDF  
 application for evaluation and measurement of printer or monitor systems  
 /QE40/ Form 10/10/5Scene: 1/1, Page: 10 Page count: 10  
 BAM material: code=rhadt4