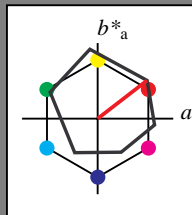


Input: Colorimetric Offset Reflective System ORS18

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

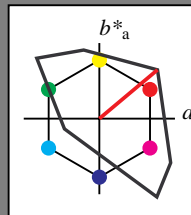
$g^*_{H,rel} = 57$

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

Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 40/360 = 0.111$   
 $lab^*tch$  and  $lab^*nch$

D65: hue O  
 LCH\*Ma: 51 100 40  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness



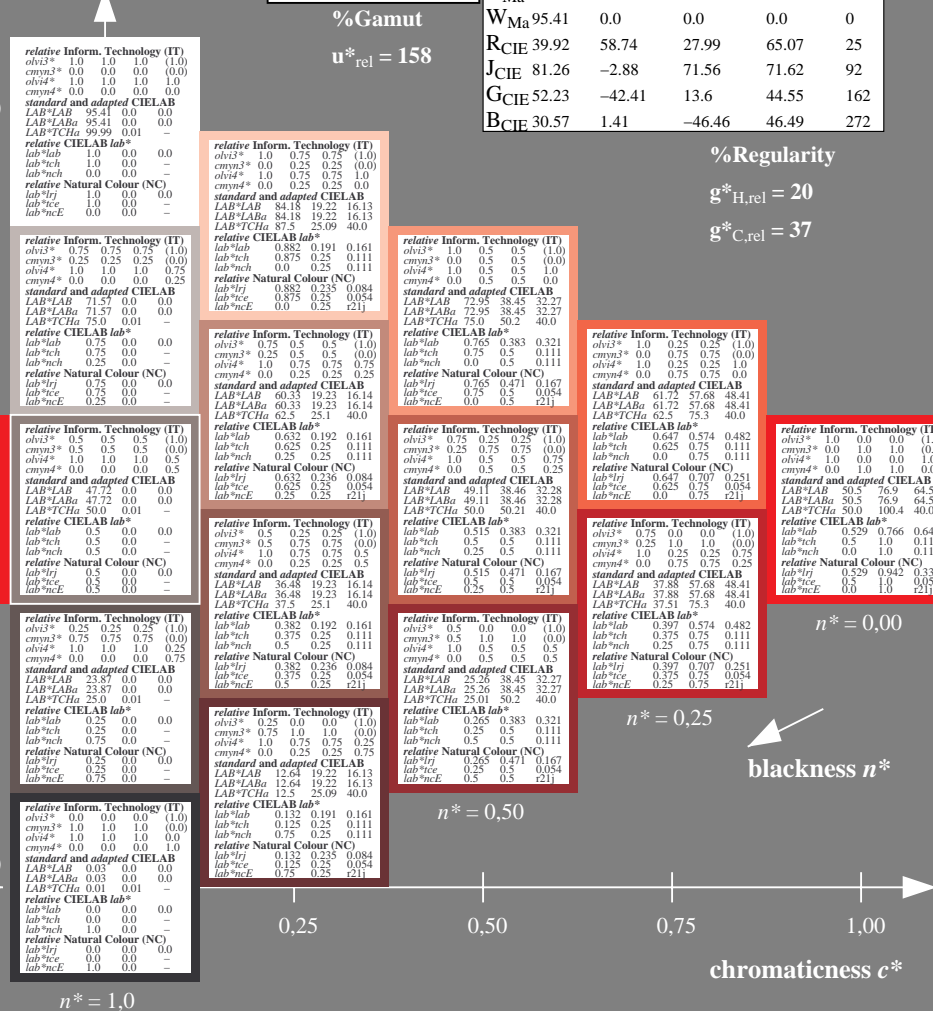
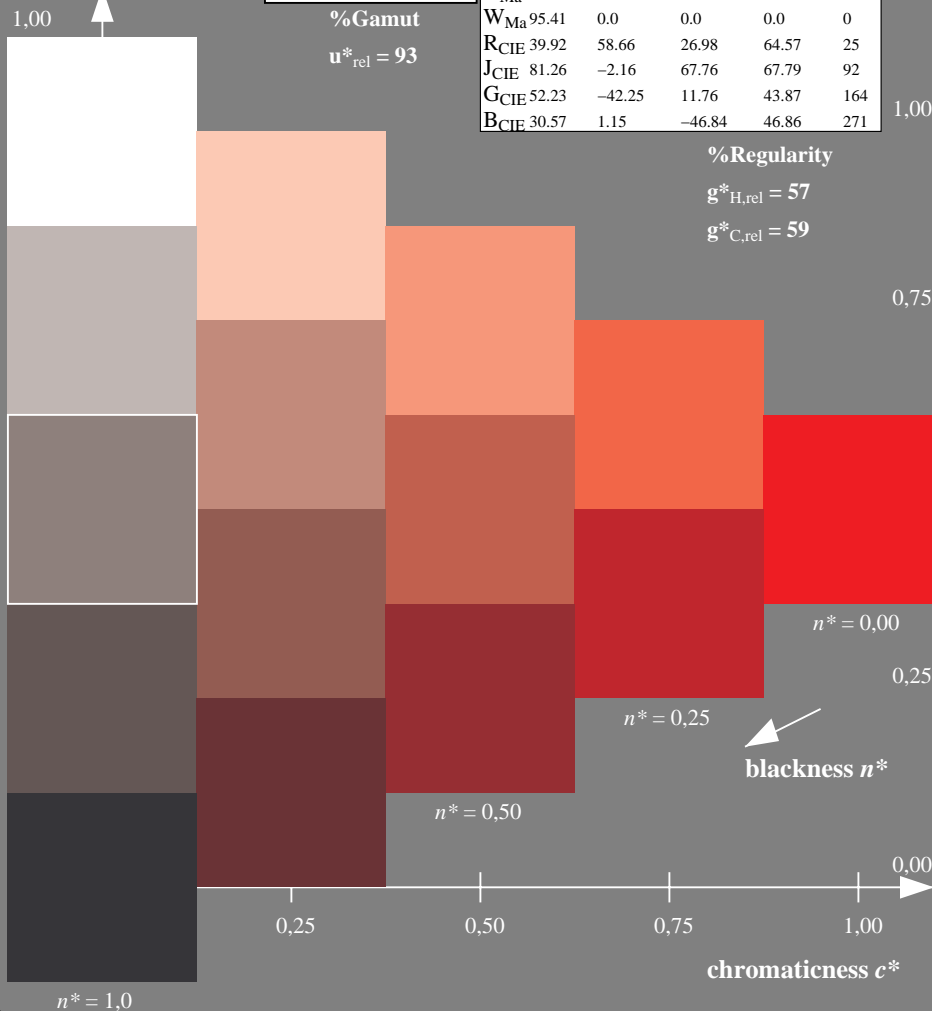
TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE40-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 40/360 = 0.111 (right)

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

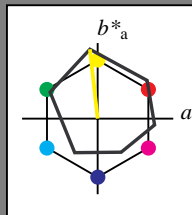
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E00NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form 1/10, Serie: 1/1, Page: 1 Page count: 1

**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

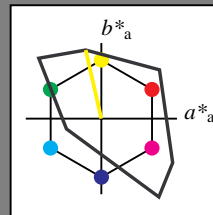
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 103/360 = 0.286$   
 $lab^*tch$  and  $lab^*nch$

D65: hue Y  
 LCH\*Ma: 93 93 103  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness



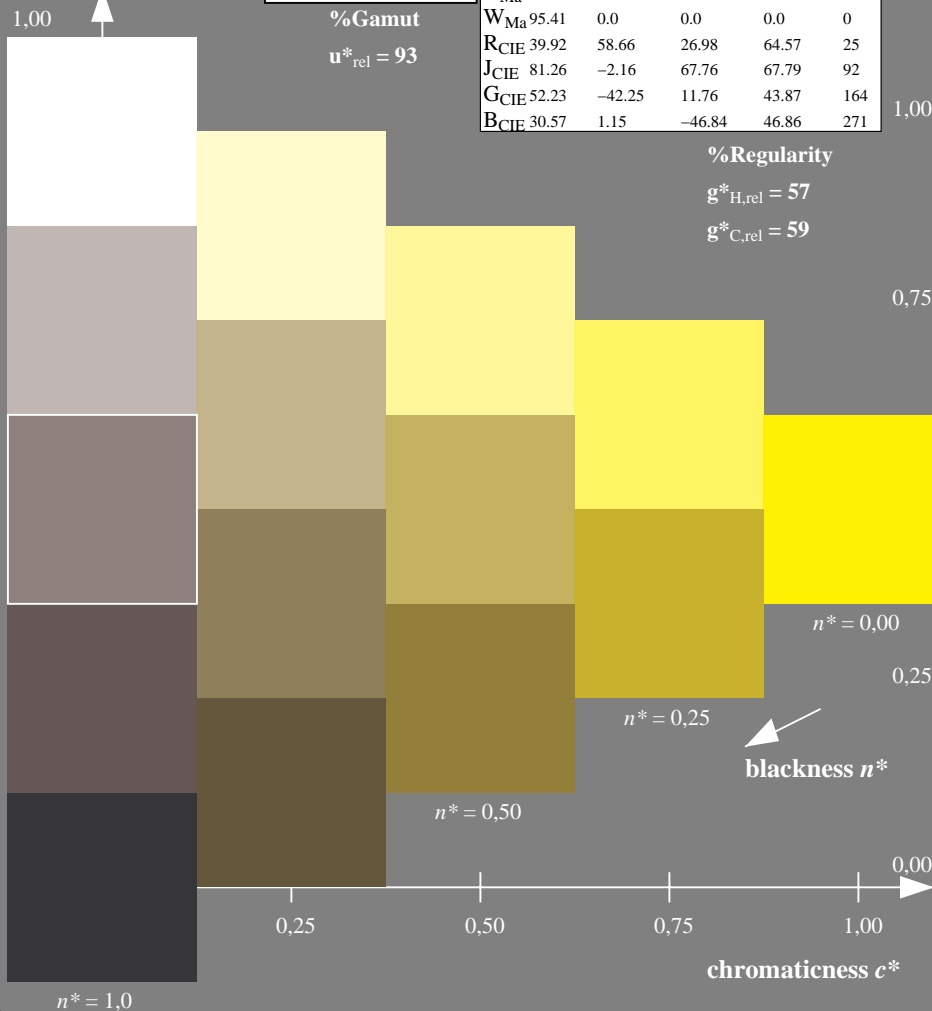
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

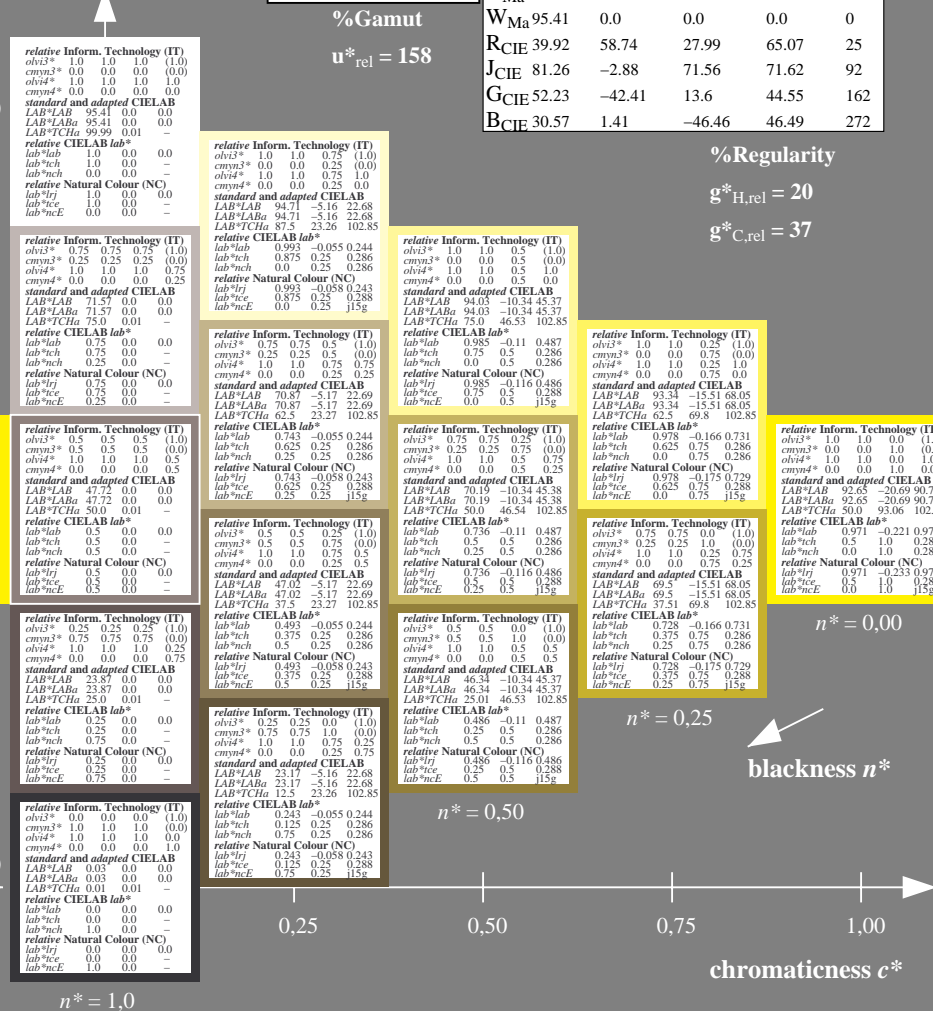
%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE400-7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)



5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

input: `cmY* setcmykcolor`  
 output: *no change compared to input*

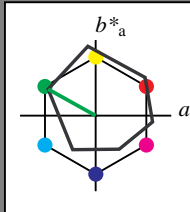
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E01NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form: 2/10, Serie: 1/1, Page: 2 Page count: 2

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



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

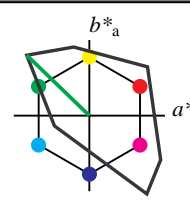
$g^*_{H,rel} = 57$

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

Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 136/360 = 0.378$   
 $lab^*tch$  and  $lab^*nch$

D65: hue L  
 LCH\*Ma: 84 115 136  
 olv\*Ma: 0.0 1.0 0.0  
 triangle lightness



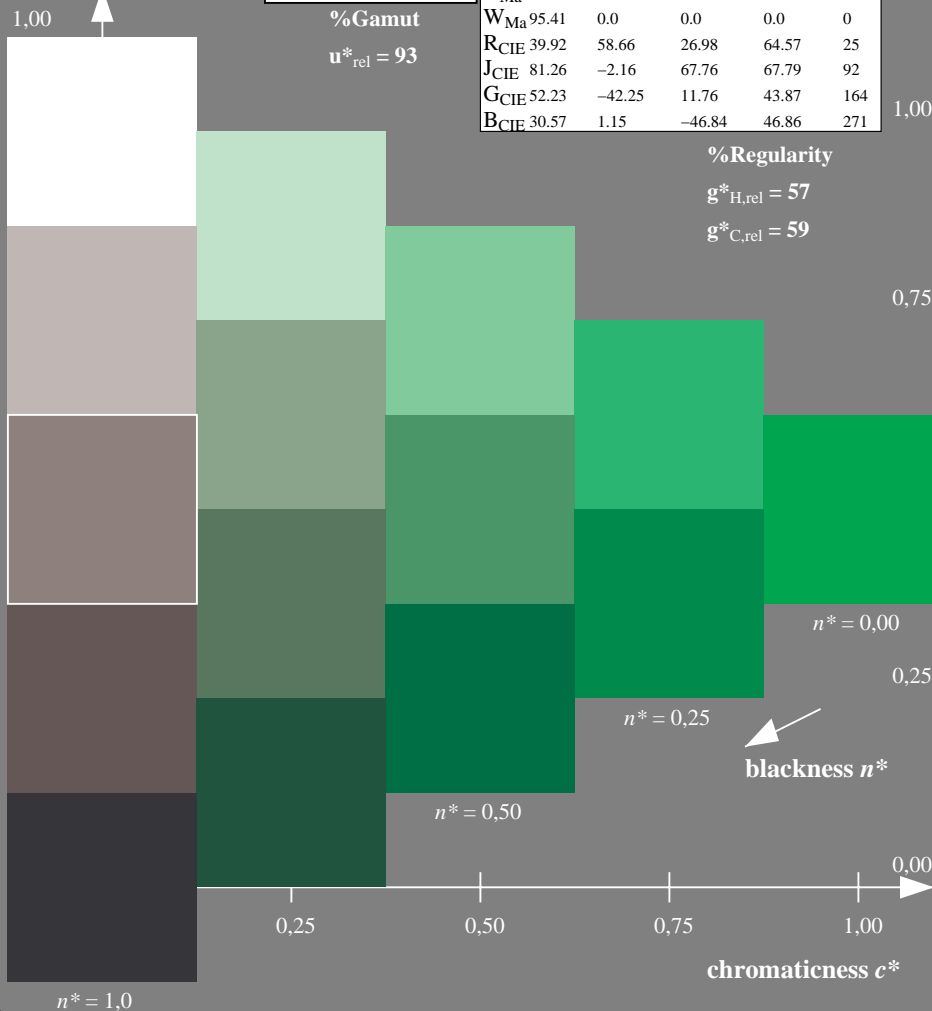
TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

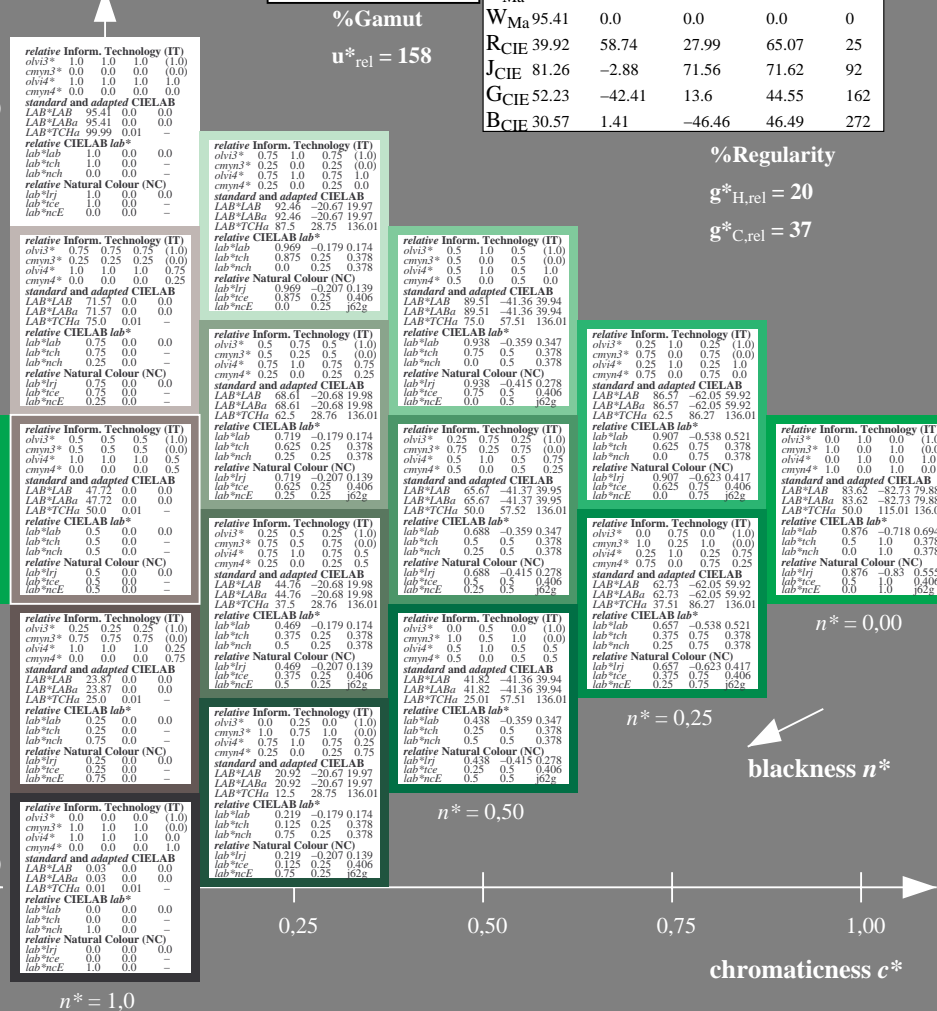
%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE400-7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)



5 step scales for constant CIELAB hue 136/360 = 0.378 (right)

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

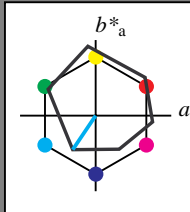
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E02NP.PS/.PDF BAM material: code=rh4da  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form: 3/10, Serie: 1/1, Page: 3 Page count: 3

**Input: Colorimetric Offset Reflective System ORS18**

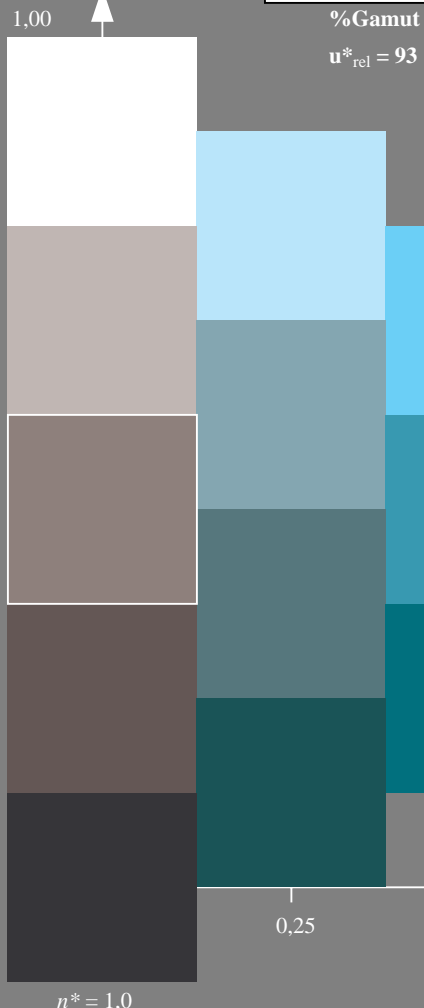
for hue  $h^* = lab^*h = 236/360 = 0.656$   
 $lab^*tch$  and  $lab^*nch$

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



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

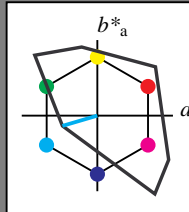
	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-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



**Output: Colorimetric Television Luminous System TLS00**

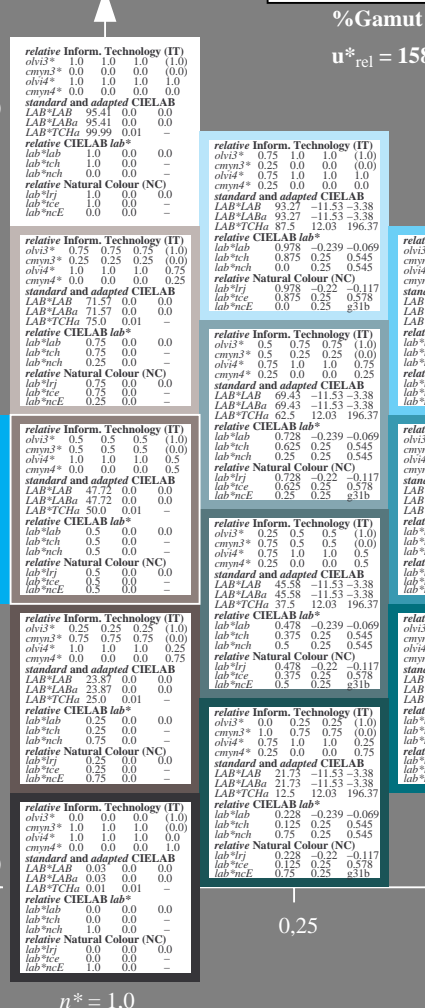
for hue  $h^* = lab^*h = 196/360 = 0.545$   
 $lab^*tch$  and  $lab^*nch$

D65: hue C  
 LCH\*Ma: 87 48 196  
 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>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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



OE40-7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 196/360 = 0.545 (right)

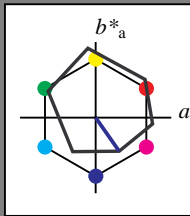
BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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  $lab^*nch$

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

%Regularity

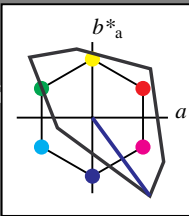
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 306/360 = 0.851$   
 $lab^*tch$  and  $lab^*nch$

D65: hue V  
 LCH\*Ma: 30 129 306  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness



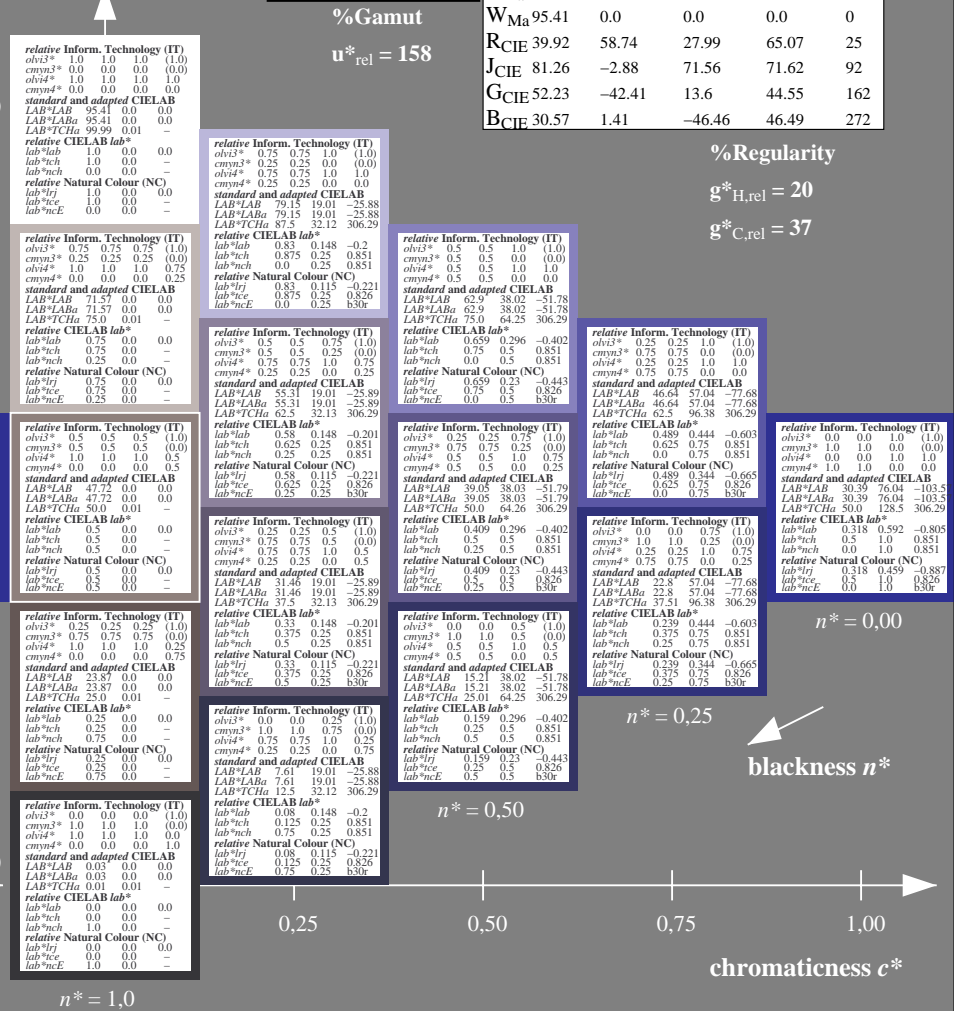
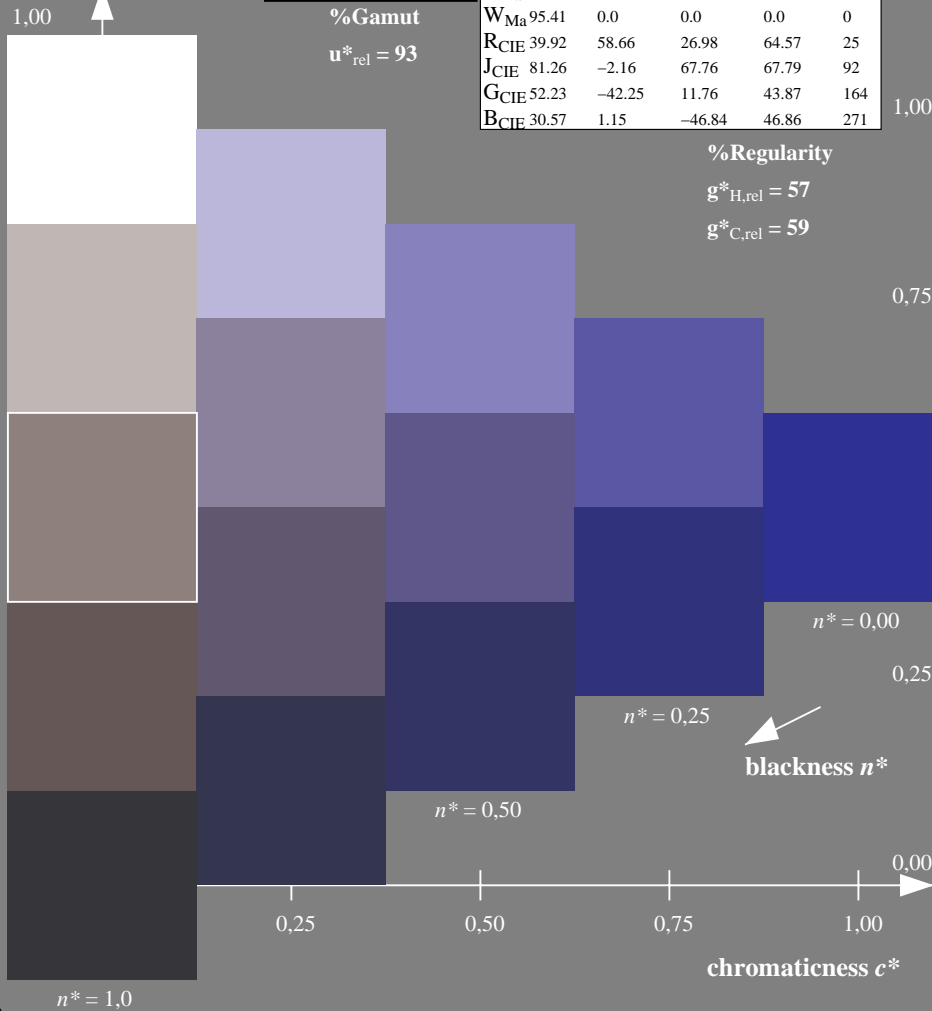
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE40-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

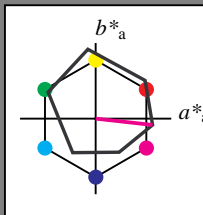
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E04NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form 5/10, Serie: 1/1, Page: 5 Page count: 5

**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

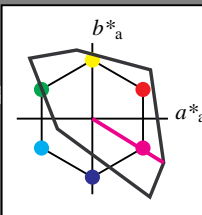
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 328/360 = 0.912$   
 $lab^*tch$  and  $lab^*nch$

D65: hue M  
 LCH\*Ma: 57 111 328  
 olv\*Ma: 1.0 0.0 1.0  
 triangle lightness



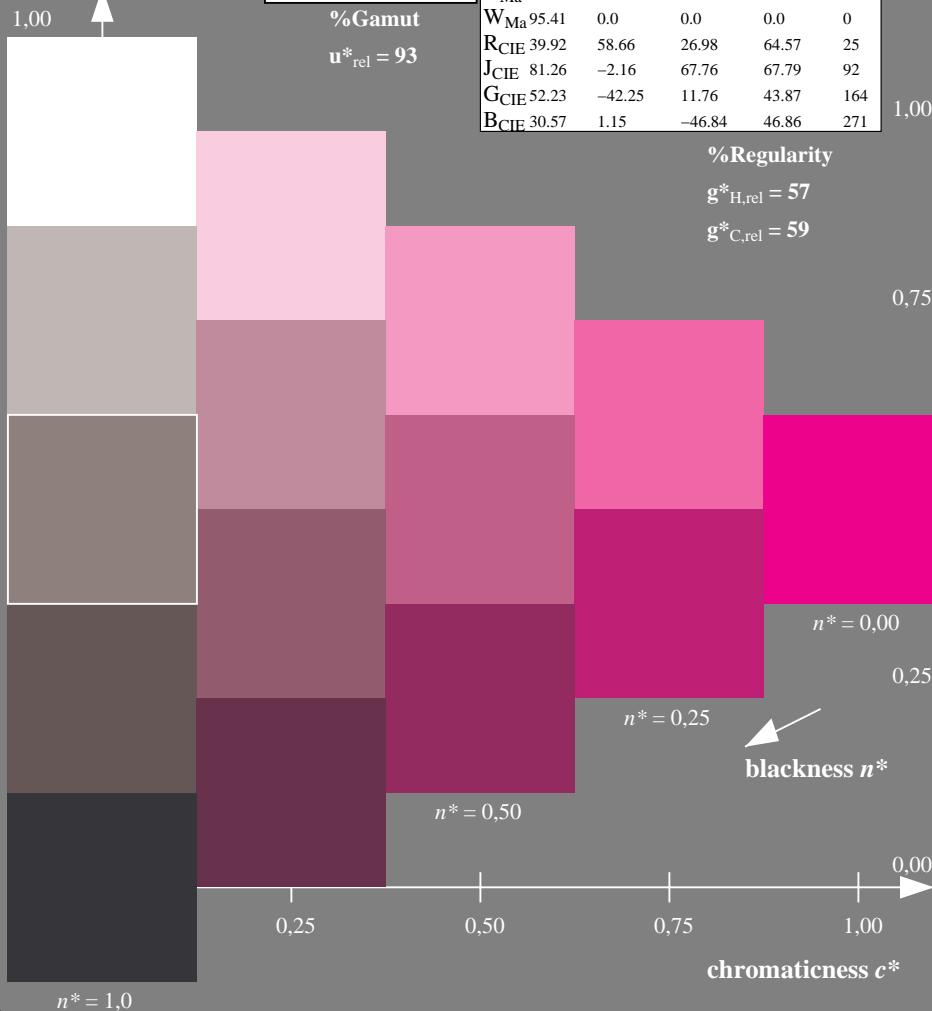
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

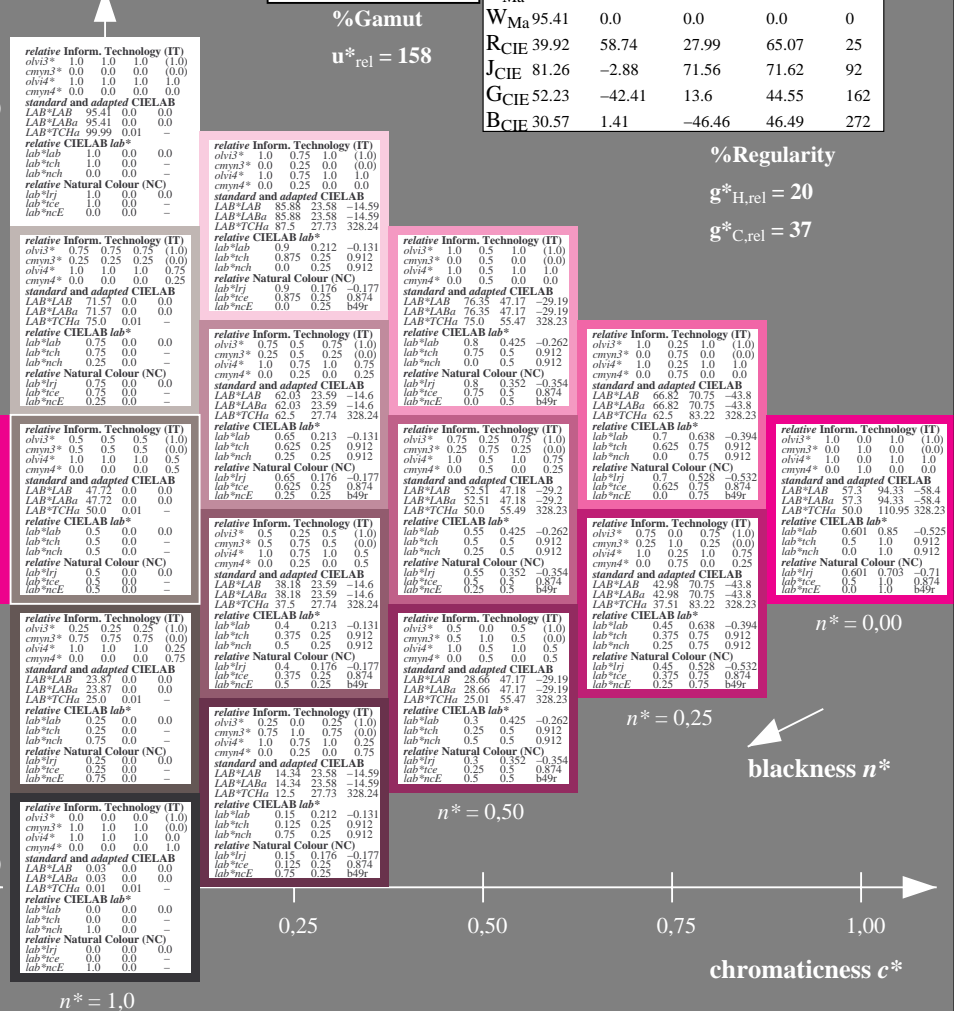
%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE400-7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)



5 step scales for constant CIELAB hue 328/360 = 0.912 (right)

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

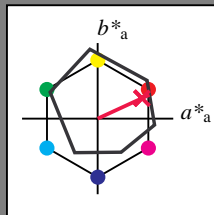
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E05NP.PS/.PDF  
 application for evaluation and measurement of printer or monitor systems

**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

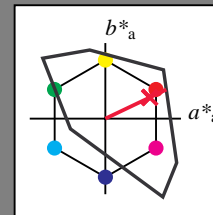
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 25/360 = 0.071$   
 $lab^*tch$  and  $lab^*nch$

D65: hue R  
 LCH\*Ma: 52 89 25  
 olv\*Ma: 1.0 0.0 0.21  
 triangle lightness



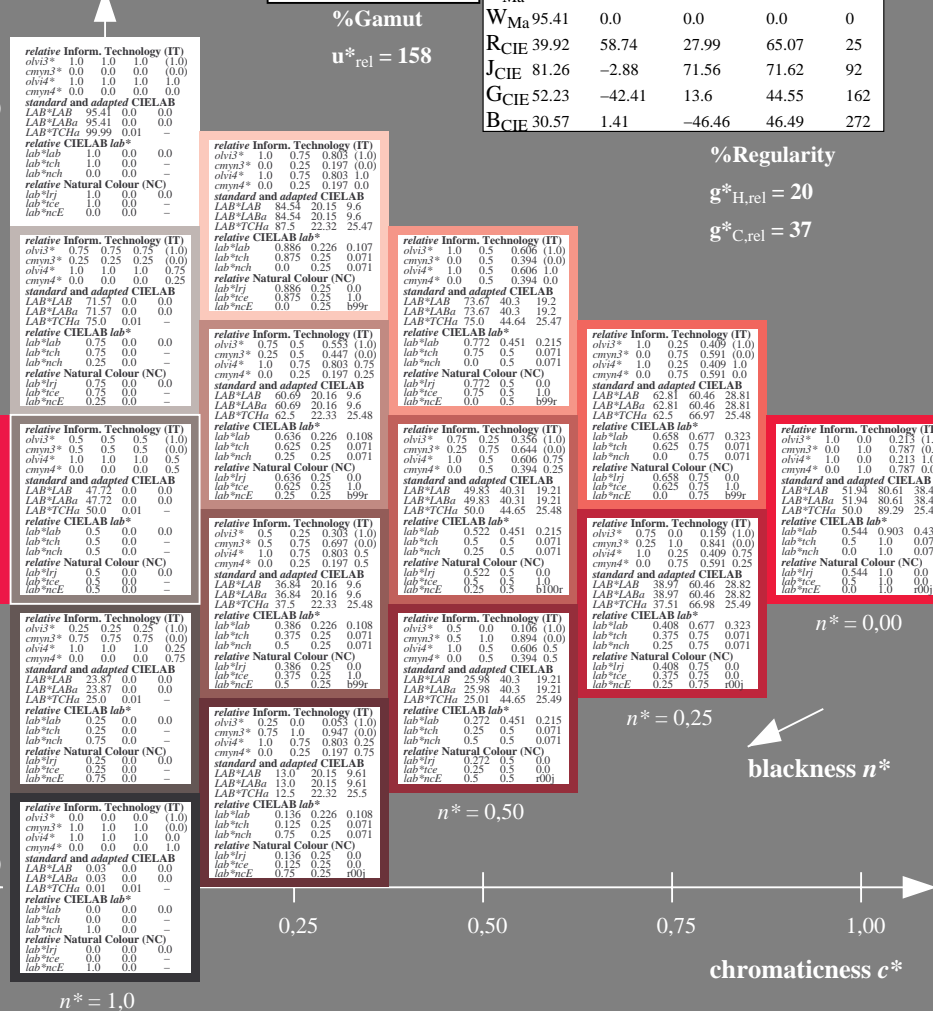
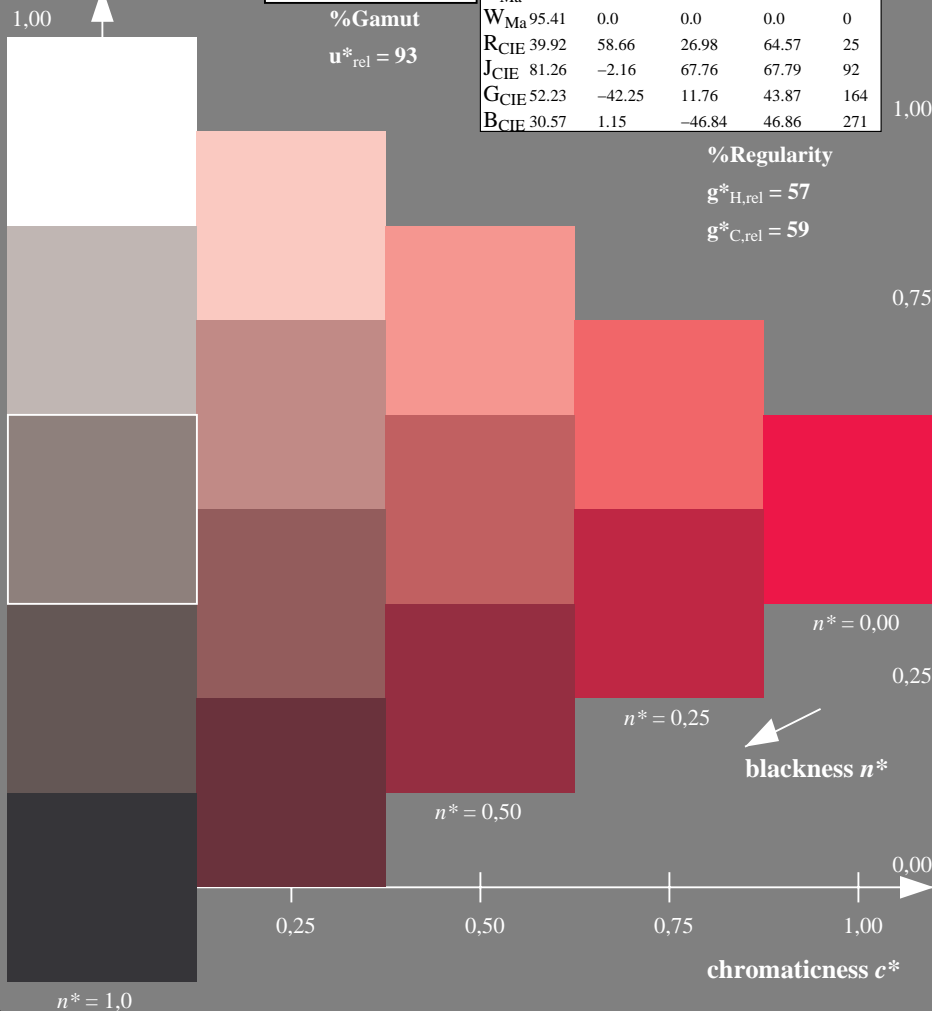
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE400-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

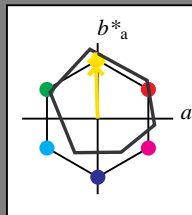
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E06NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 OE40; Form 7/10; Serie: 1/1; Page: 7 Page count: 7

**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

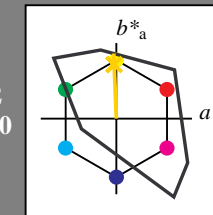
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

for hue  $h^* = lab^*h = 92/360 = 0.256$   
 $lab^*tch$  and  $lab^*nch$

D65: hue J  
 LCH\*Ma: 85 86 92  
 olv\*Ma: 1.0 0.82 0.0  
 triangle lightness



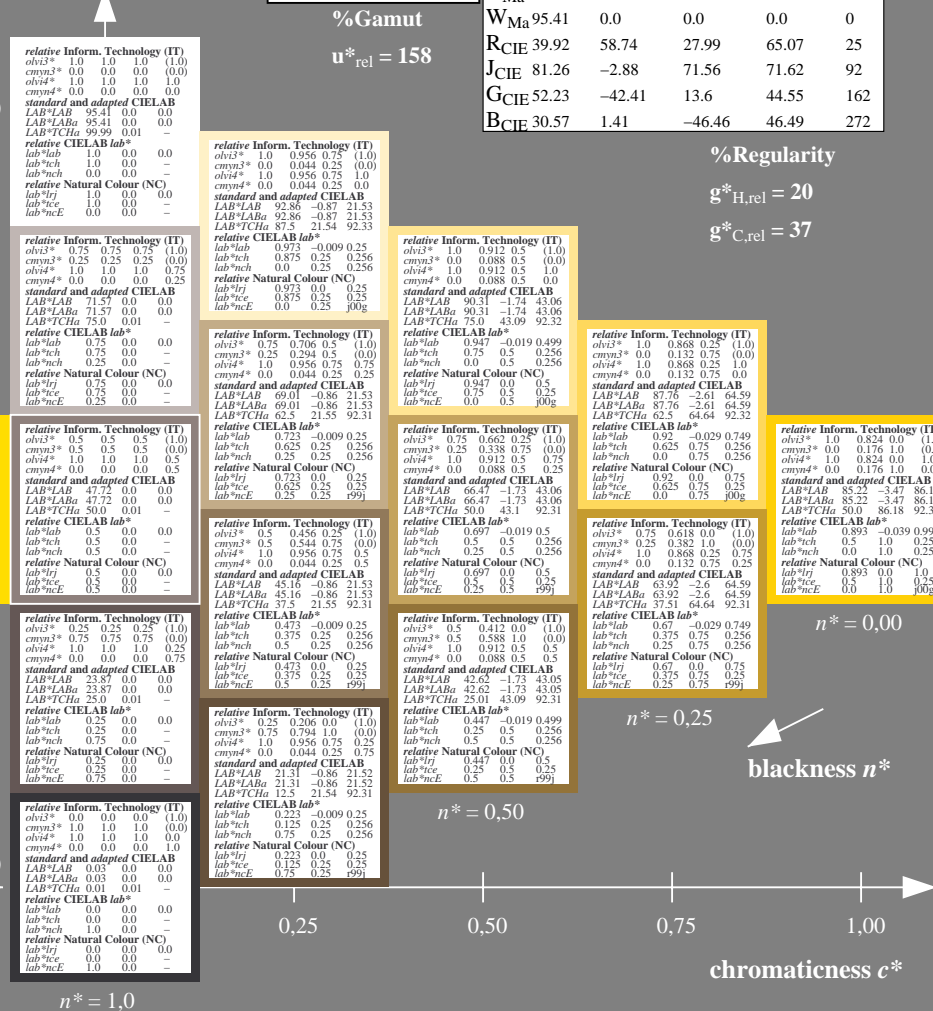
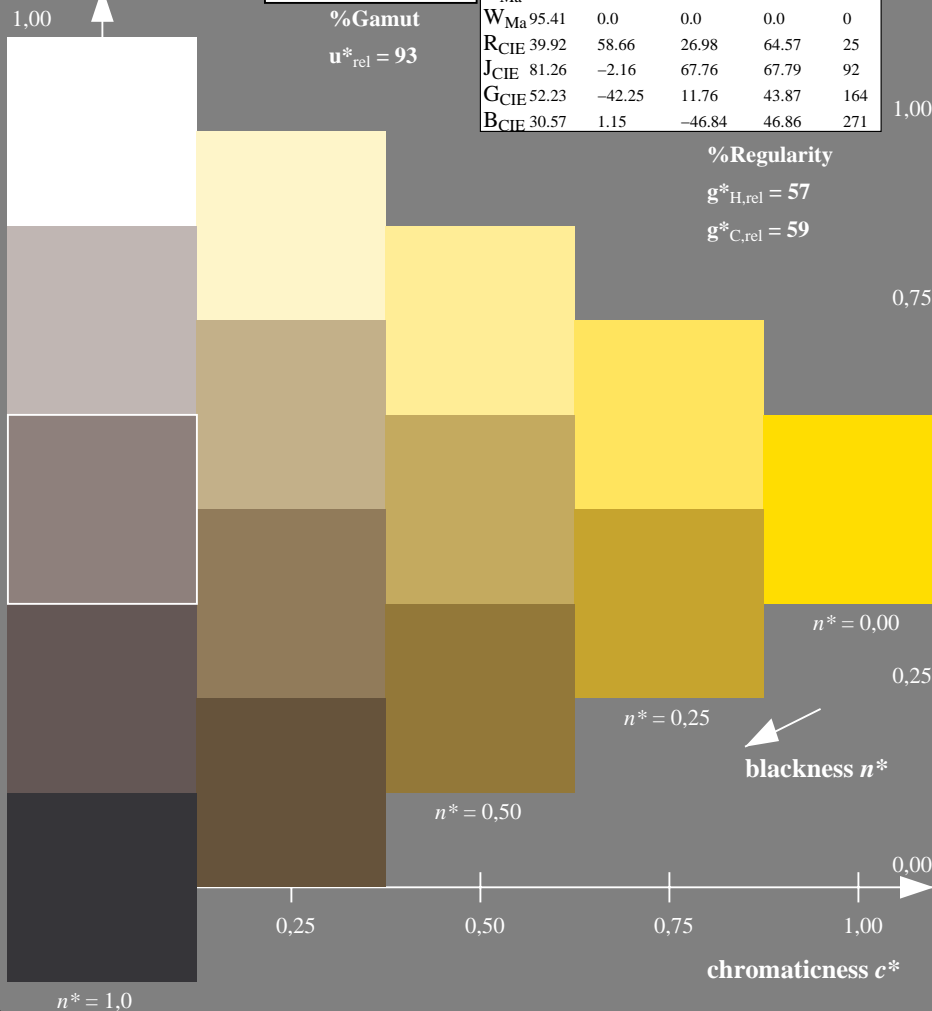
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE40-7, 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 OE40; Colorimetric systems ORS18 & TLS00  
 D65: 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/OE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

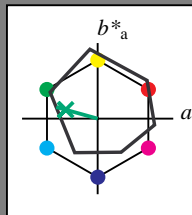
BAM registration: 20060101-OE40/10Q/Q40E07NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form 8/10, Serie: 1/1, Page: 8 Page count: 8



**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**

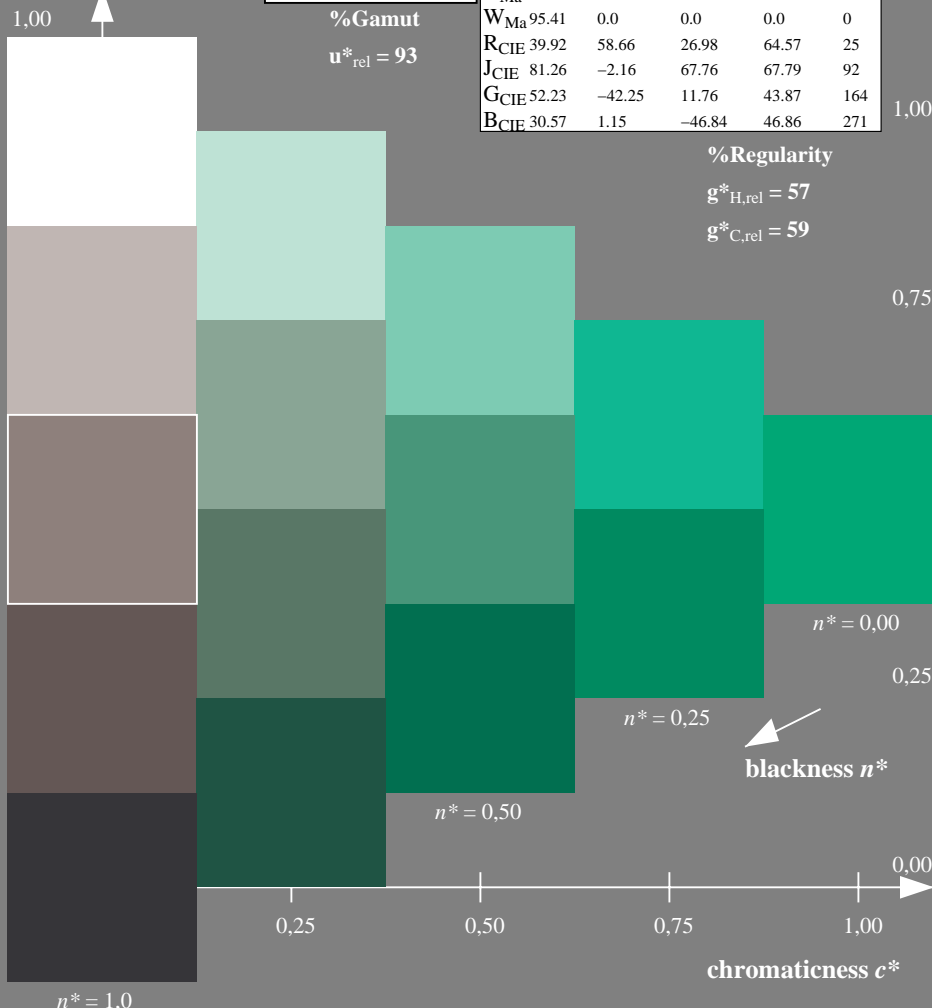
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.39	50.52	82.63	38
Y <sub>Ma</sub>	90.37	-10.26	91.75	92.32	96
L <sub>Ma</sub>	50.9	-62.83	34.96	71.91	151
C <sub>Ma</sub>	58.62	-30.34	-45.01	54.3	236
V <sub>Ma</sub>	25.72	31.1	-44.4	54.22	305
M <sub>Ma</sub>	48.13	75.28	-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**

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

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

**%Gamut**  
 $u^*_{rel} = 93$

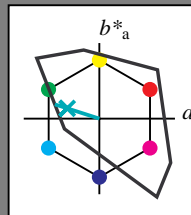


OE400-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

**Output: Colorimetric Television Luminous System TLS00**

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

D65: hue G  
 LCH\*Ma: 86 62 162  
 olv\*Ma: 0.0 1.0 0.65  
 triangle lightness



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

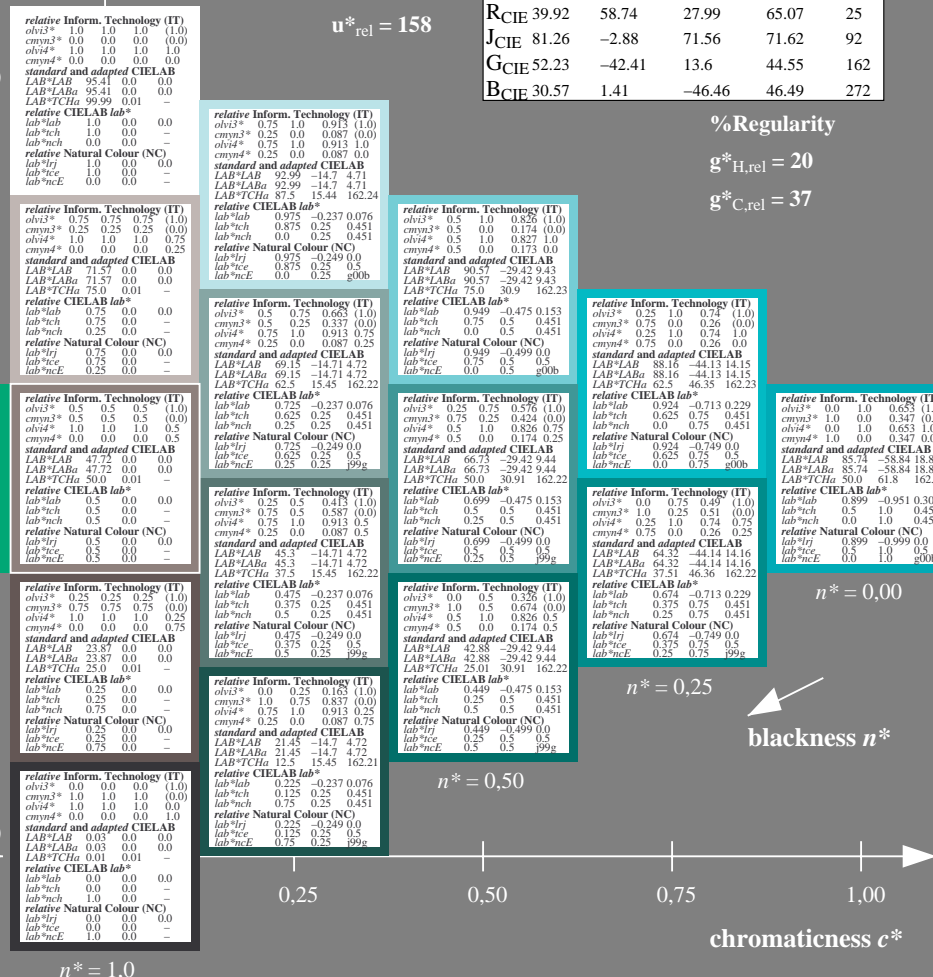
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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**

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

**%Gamut**  
 $u^*_{rel} = 158$



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

BAM-test chart OE40; Colorimetric systems ORS18 & TLS00  
 D65: 5 step colour scales and coordinate data for 10 hues

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

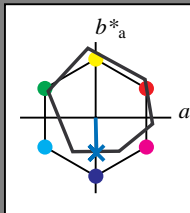
See for similar files: <http://www.ps.bam.de/OE40/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E08NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form 9/10, Serie: 1/1, Page: 9 Page count: 9

**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

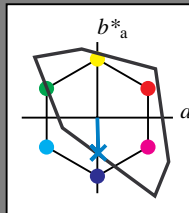
$g^*_{H,rel} = 57$

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

**Output: Colorimetric Television Luminous System TLS00**

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

D65: hue B  
 LCH\*Ma: 65 49 272  
 olv\*Ma: 0.0 0.61 1.0  
 triangle lightness



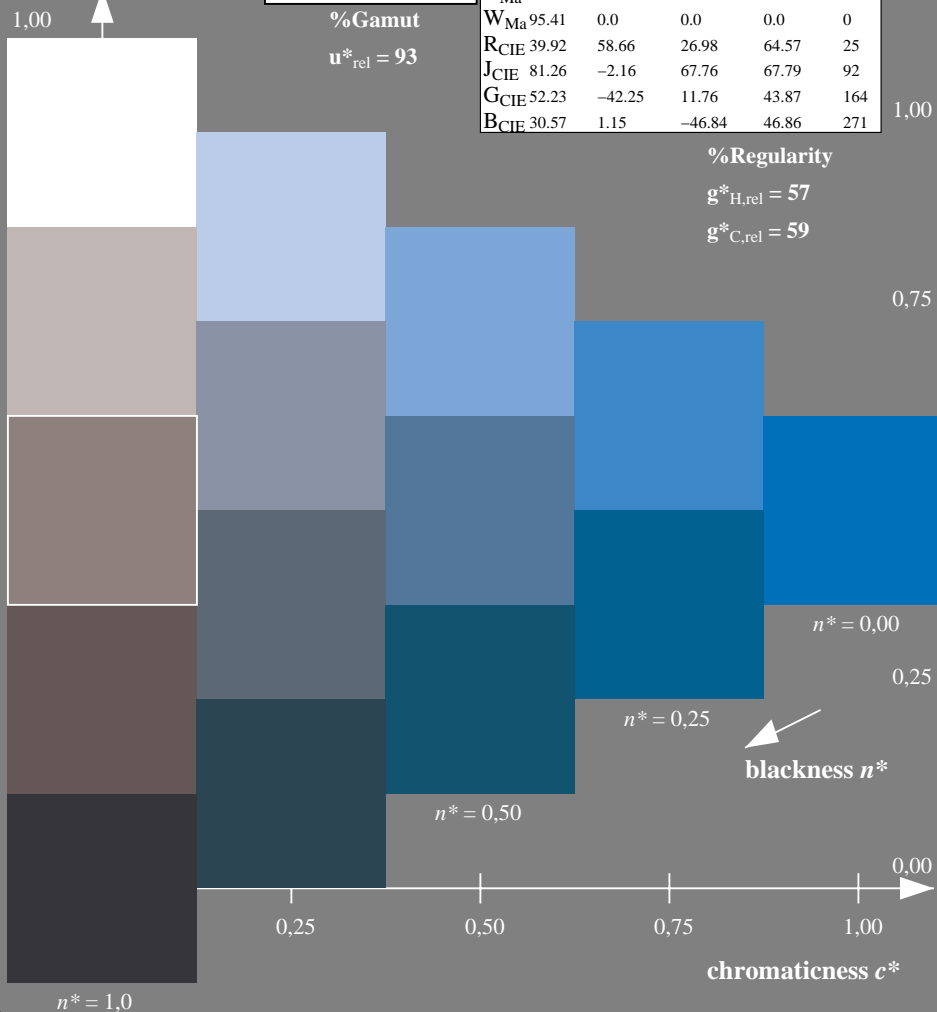
**TLS00; adapted (a) CIELAB data**

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
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>	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

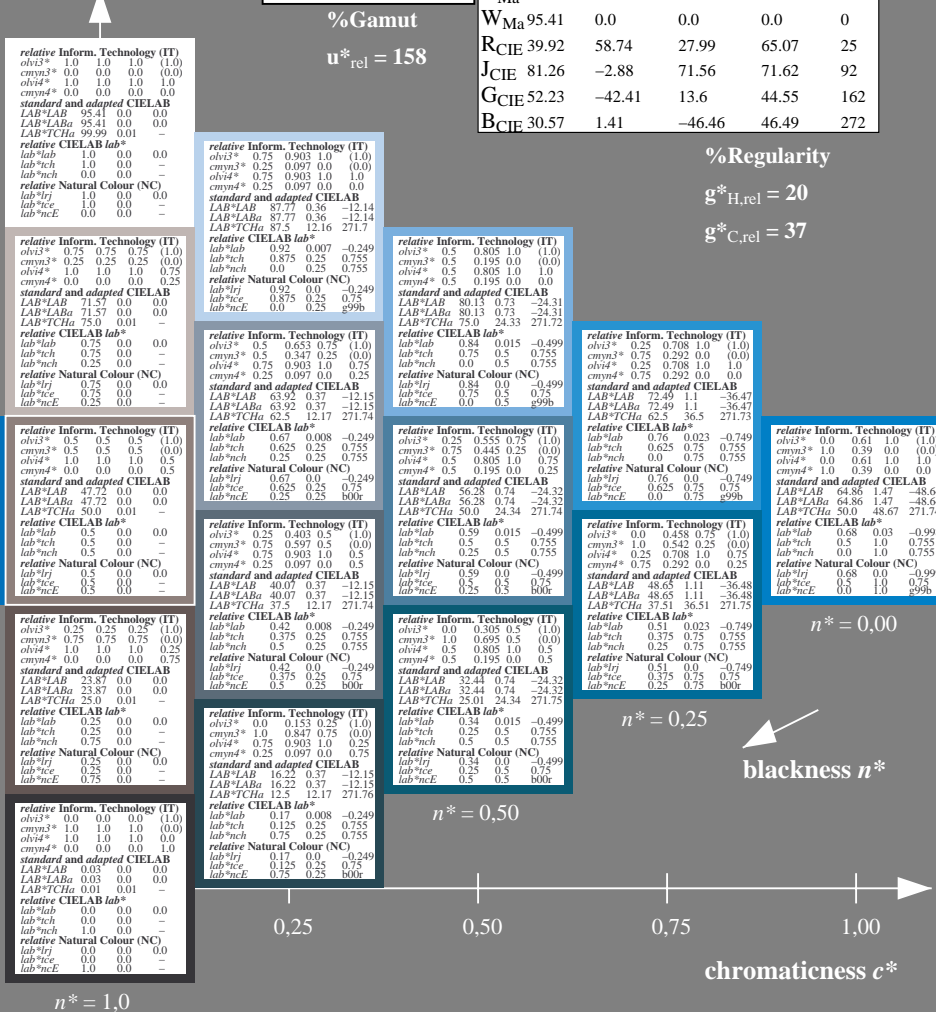
%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



OE40-7, 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 OE40; Colorimetric systems ORS18 & TLS00  
 D65: 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/OE40/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-OE40/10Q/Q40E09NP.PS/.PDF BAM material: code=rhadt4  
 application for evaluation and measurement of printer or monitor systems  
 /OE40/ Form 10/10/5Scene: 1/1, Page: 10 Page count: 10