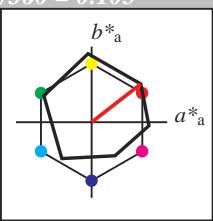


**Input: Colorimetric Offset Reflective System ORS18**

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  $t^*$



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

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

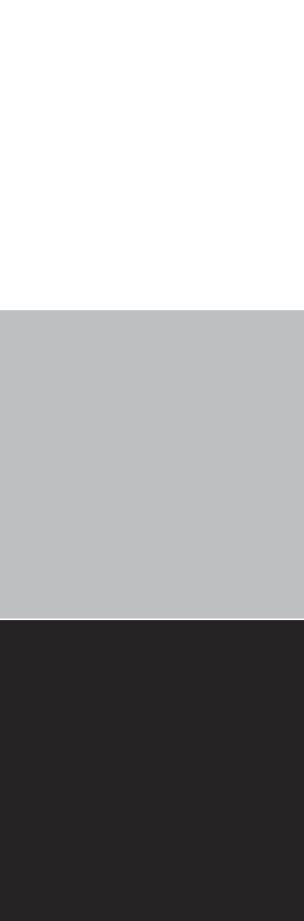
%Gamut

$u^*_{rel} = 94$

%Regularity

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

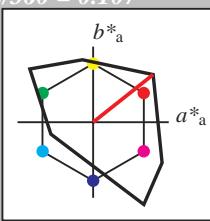
$g^*_{C,rel} = 60$



**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  $t^*$



%Gamut

$u^*_{rel} = 156$

%Regularity

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

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

**relative Inform. Technology (IT)**

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  0.0 0.0 0.0 0.0

**standard and adapted CIELAB**

$LAB^*LAB$  95.41 0.0 0.0  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  99.99 0.01 -

**relative CIELAB lab\***

$lab^*lab$  1.0 0.0 0.0  
 $lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

**relative Natural Colour (NC)**

$lab^*lrj$  1.0 0.0 0.0  
 $lab^*ice$  1.0 0.0 -

$lab^*ncE$  0.0 0.0 -

**relative Inform. Technology (IT)**

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.5 0.0

**standard and adapted CIELAB**

$LAB^*LAB$  47.72 0.0 0.0  
 $LAB^*LABa$  47.72 0.0 0.0  
 $LAB^*TCh_a$  50.0 0.01 -

**relative CIELAB lab\***

$lab^*lab$  0.5 0.0 0.0  
 $lab^*tch$  0.5 0.0 -

$lab^*nch$  0.5 0.0 -

**relative Natural Colour (NC)**

$lab^*lrj$  0.5 0.0 0.0  
 $lab^*ice$  0.5 0.0 -

$lab^*ncE$  0.5 0.0 -

**relative Inform. Technology (IT)**

$olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.5 0.5

**standard and adapted CIELAB**

$LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

**relative CIELAB lab\***

$lab^*lab$  0.0 0.0 0.0  
 $lab^*tch$  0.0 0.0 -

$lab^*nch$  1.0 0.0 -

**relative Natural Colour (NC)**

$lab^*lrj$  0.0 0.0 0.0  
 $lab^*ice$  0.0 0.0 -

$lab^*ncE$  1.0 0.0 -

**relative Inform. Technology (IT)**

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 1.0 1.0 (0.0)

$olv_i4^*$  1.0 0.5 0.5 0.5  
 $cmy_n4^*$  0.0 0.5 0.5 0.5

**standard and adapted CIELAB**

$LAB^*LAB$  27.1 39.67 31.49  
 $LAB^*LABa$  27.1 39.67 31.49  
 $LAB^*TCh_a$  25.01 50.65 38.44

**relative CIELAB lab\***

$lab^*lab$  0.284 0.392 0.311  
 $lab^*tch$  0.25 0.5 0.107  
 $lab^*nch$  0.5 0.5 0.107

**relative Natural Colour (NC)**

$lab^*lrj$  0.284 0.479 0.142  
 $lab^*ice$  0.25 0.5 0.046  
 $lab^*ncE$  0.5 0.5 r18j

**relative Inform. Technology (IT)**

$olv_i3^*$  0.5 0.0 0.0 (1.0)  
 $cmy_n3^*$  0.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 0.0 0.0 1.0  
 $cmy_n4^*$  0.0 1.0 1.0 0.0

**standard and adapted CIELAB**

$LAB^*LAB$  54.19 79.34 62.99  
 $LAB^*LABa$  54.19 79.34 62.99  
 $LAB^*TCh_a$  50.0 101.31 38.44

**relative CIELAB lab\***

$lab^*lab$  0.568 0.783 0.622  
 $lab^*tch$  0.5 1.0 0.107  
 $lab^*nch$  0.0 1.0 0.107

**relative Natural Colour (NC)**

$lab^*lrj$  0.568 0.958 0.285  
 $lab^*ice$  0.5 1.0 0.046  
 $lab^*ncE$  0.0 1.0 r18j

QE000-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
D50: 3 step colour scales and coordinate data for 10 hues

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

input:  $cmy0^* \text{ setcmykcolor}$   
output:  $cmy0^* / 000n^* \text{ setcmykcolor}$



See for similar files: <http://www.ps.bam.de/QE00/>

Technical information: <http://www.ps.bam.de>

Version 2.1, io=0, CIELAB

### Input: Colorimetric Offset Reflective System ORS18

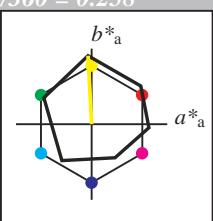
for hue  $h^* = lab^*h = 93/360 = 0.258$   
 $lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 91 91 93

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



### ORS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

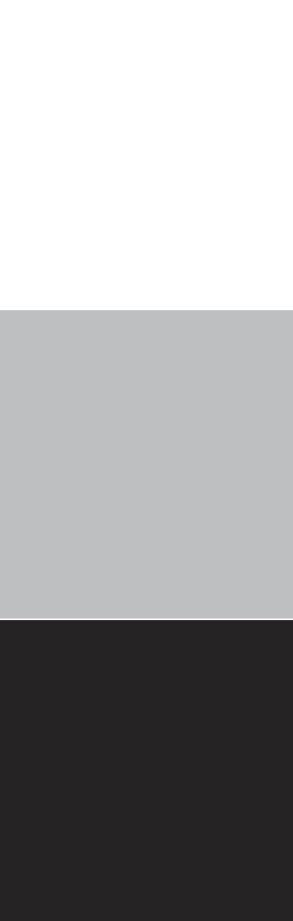
%Gamut

$u^*_{rel} = 94$

%Regularity

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

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



$n^* = 1,0$

QE000-7, 3 step scales for constant CIELAB hue 93/360 = 0.258 (left)

BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
D50: 3 step colour scales and coordinate data for 10 hues

### Output: Colorimetric Television Luminous System TLS00

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

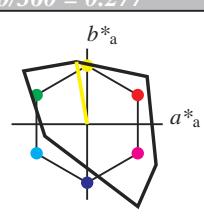
$lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 93 84 100

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



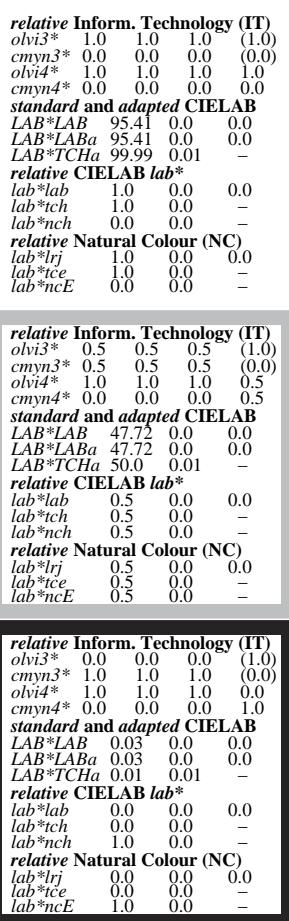
%Gamut

$u^*_{rel} = 156$

%Regularity

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

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

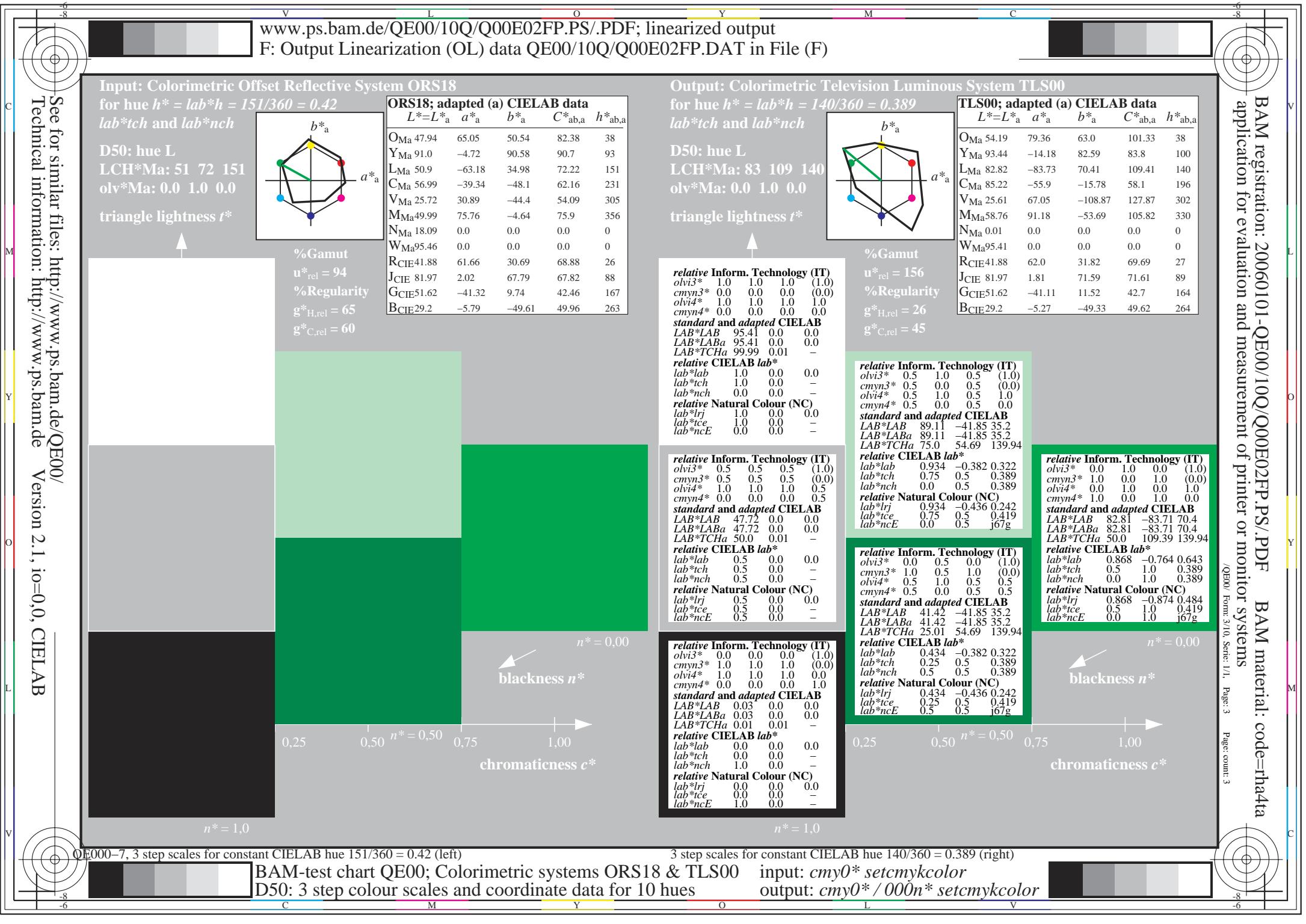


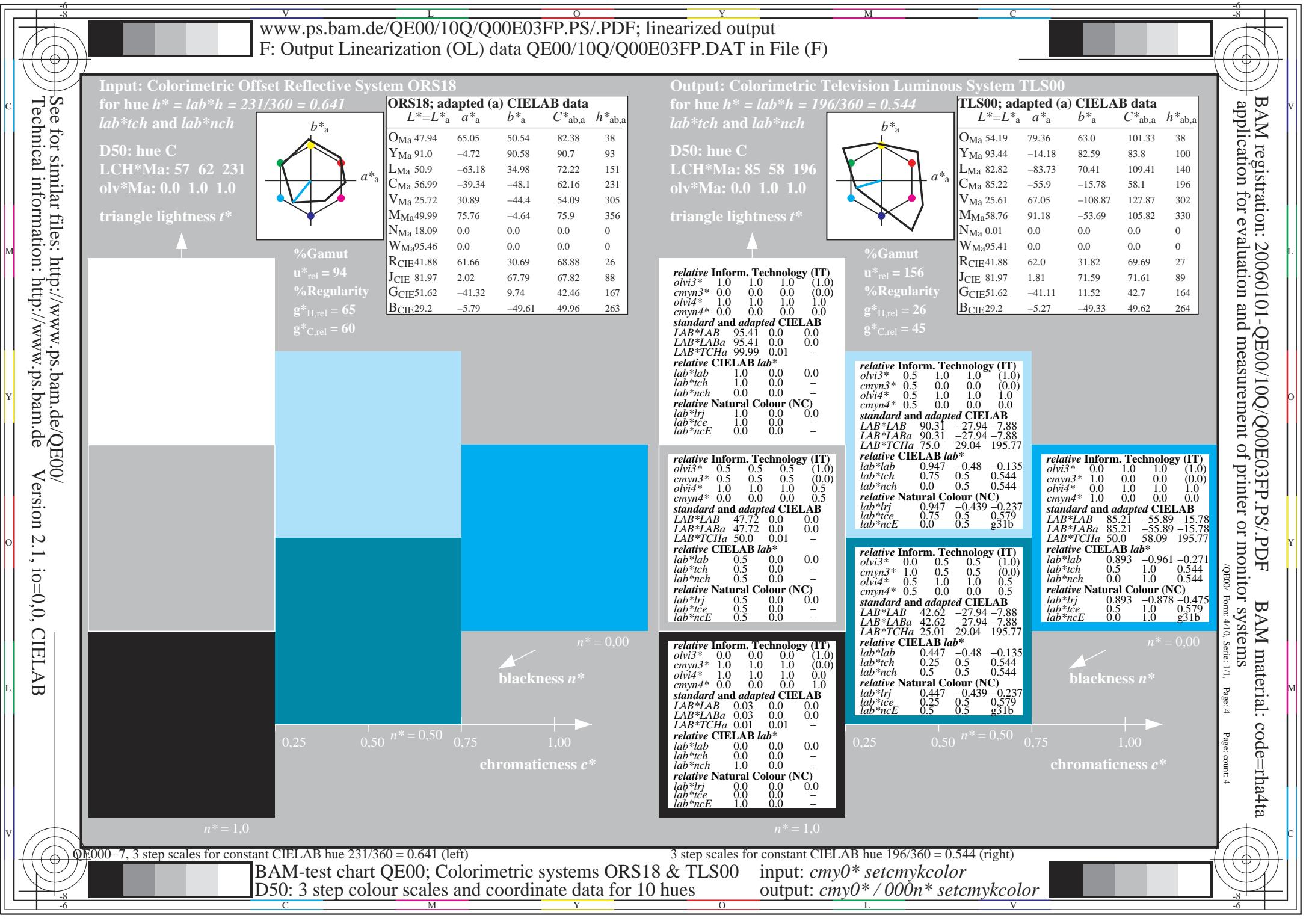
$n^* = 1,0$

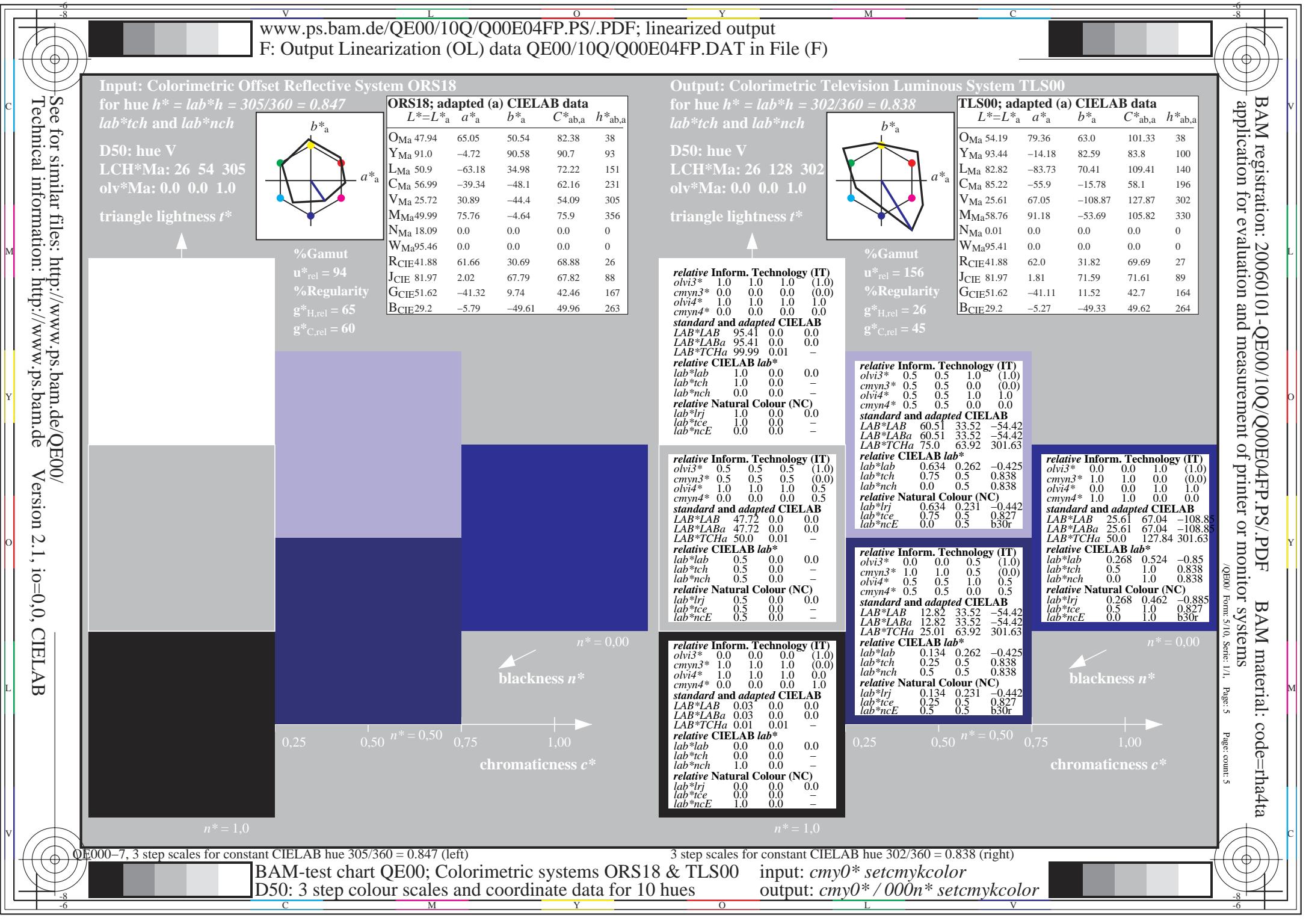
3 step scales for constant CIELAB hue 100/360 = 0.277 (right)

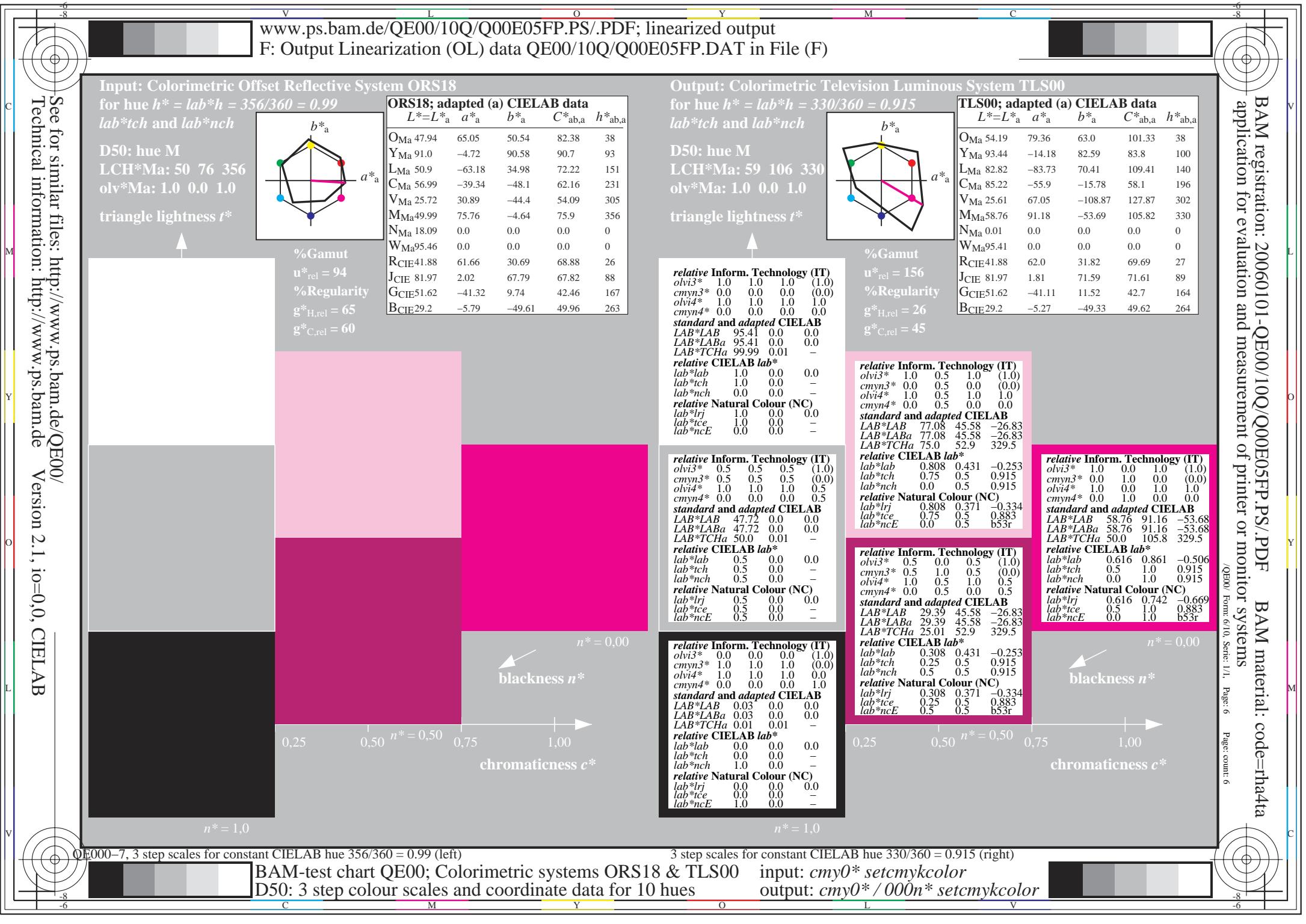
input:  $cmy0^* \text{ setcmykcolor}$   
output:  $cmy0^* / 000n^* \text{ setcmykcolor}$







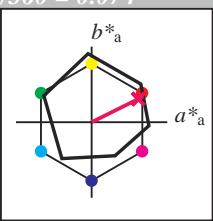




**Input: Colorimetric Offset Reflective System ORS18**

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  $t^*$



	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Gamut

$u^*_{rel} = 94$

%Regularity

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

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



$n^* = 1,0$

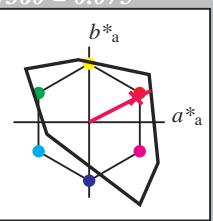
QE000-7, 3 step scales for constant CIELAB hue 26/360 = 0.074 (left)

BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
D50: 3 step colour scales and coordinate data for 10 hues

**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  $t^*$



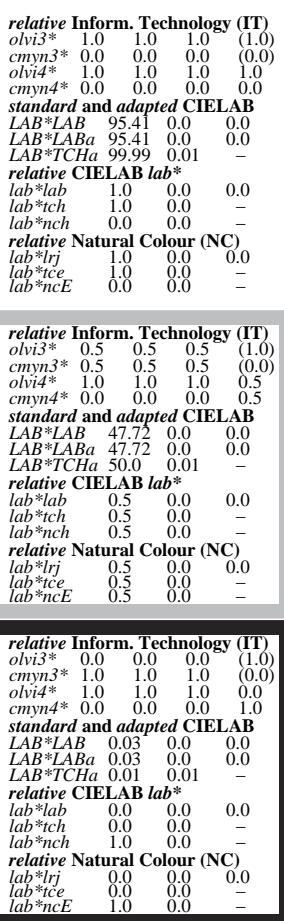
%Gamut

$u^*_{rel} = 156$

%Regularity

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

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



$n^* = 1,0$

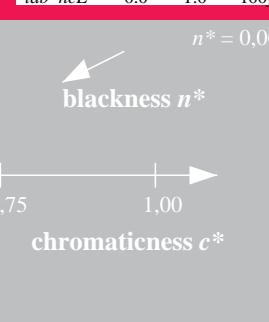
3 step scales for constant CIELAB hue 27/360 = 0.075 (right)

input:  $cmy0^* \text{ setcmykcolor}$   
output:  $cmy0^* / 000n^* \text{ setcmykcolor}$

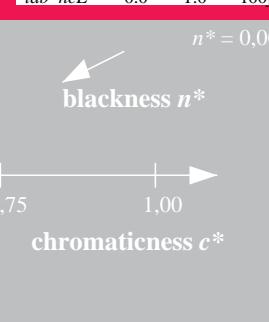
	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
M <sub>Ma</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

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
olvi3*	1.0	0.5	0.591	(1.0)	
cmyn3*	0.0	0.5	0.409	(0.0)	
olvi4*	1.0	1.0	1.0	0.5	
cmyn4*	0.0	0.0	0.0	0.0	
<b>standard and adapted CIELAB</b>					
LAB*LAB	95.41	0.0	0.0		
LAB*LABa	95.41	0.0	0.0		
LAB*TChA	99.99	0.01	-		
<b>relative CIELAB lab*</b>					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
<b>relative Natural Colour (NC)</b>					
lab*lrj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*ncE	0.0	0.0	-		

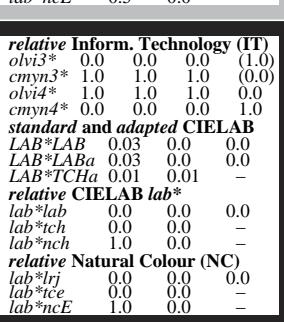
	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
olvi3*	1.0	0.5	0.591	(1.0)	
cmyn3*	0.0	0.5	0.409	(0.0)	
olvi4*	1.0	0.5	0.591	1.0	
cmyn4*	0.0	0.5	0.409	0.0	
<b>relative CIELAB lab*</b>					
lab*lab	0.788	0.445	0.228		
lab*tch	0.75	0.5	0.075		
lab*nch	0.0	0.5	0.075		
<b>relative Natural Colour (NC)</b>					
lab*lrj	0.788	0.5	0.0		
lab*tce	0.75	0.5	1.0		
lab*ncE	0.0	0.5	0.699		



$n^* = 1,0$



$n^* = 1,0$

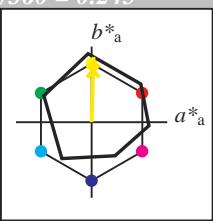


$n^* = 1,0$

**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  $t^*$



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

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

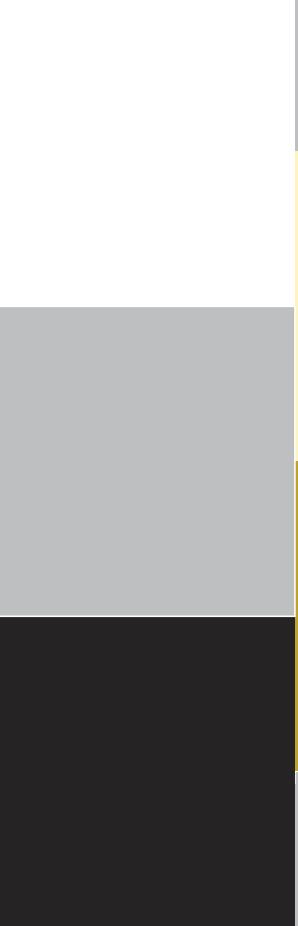
%Gamut

$u^*_{rel} = 94$

%Regularity

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

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



$n^* = 1,0$

$n^* = 0,00$

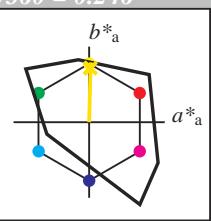
blackness  $n^*$   
chromaticness  $c^*$

**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  $t^*$



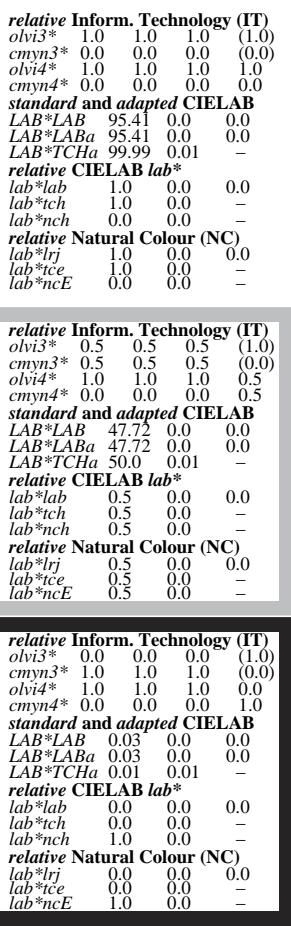
%Gamut

$u^*_{rel} = 156$

%Regularity

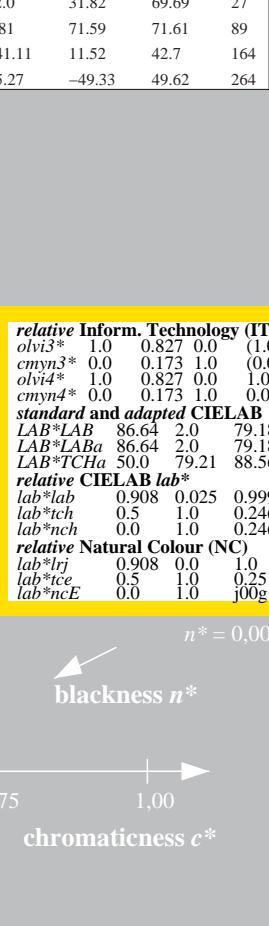
$g^*_{H,rel} = 26$

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



$n^* = 1,0$

$n^* = 0,00$



blackness  $n^*$   
chromaticness  $c^*$

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

input:  $cmy0^* / setcmykcolor$

output:  $cmy0^* / 000n^* / setcmykcolor$

QE000-7, 3 step scales for constant CIELAB hue 88/360 = 0.245 (left)

BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
D50: 3 step colour scales and coordinate data for 10 hues

C

M

Y

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

Y

M

O

L

V

