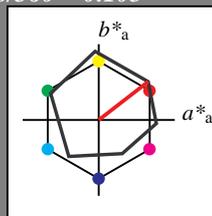


**Input: Colorimetric Offset Reflective System ORS18**

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**

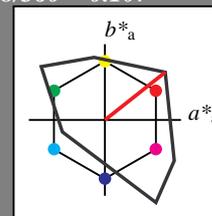
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	74.79	39.67	31.49
LAB*LABa	74.79	39.67	31.49
LAB*TCHa	75.0	50.65	38.44

**relative CIELAB lab\***

lab*lab	0.784	0.392	0.311
lab*tch	0.75	0.5	0.107
lab*nch	0.0	0.5	0.107

**relative Natural Colour (NC)**

lab*lrj	0.784	0.479	0.142
lab*tce	0.75	0.5	0.046
lab*nce	0.0	0.5	r18j

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	27.1	39.67	31.49
LAB*LABa	27.1	39.67	31.49
LAB*TCHa	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*tce	0.25	0.5	0.046
lab*nce	0.5	0.5	r18j

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

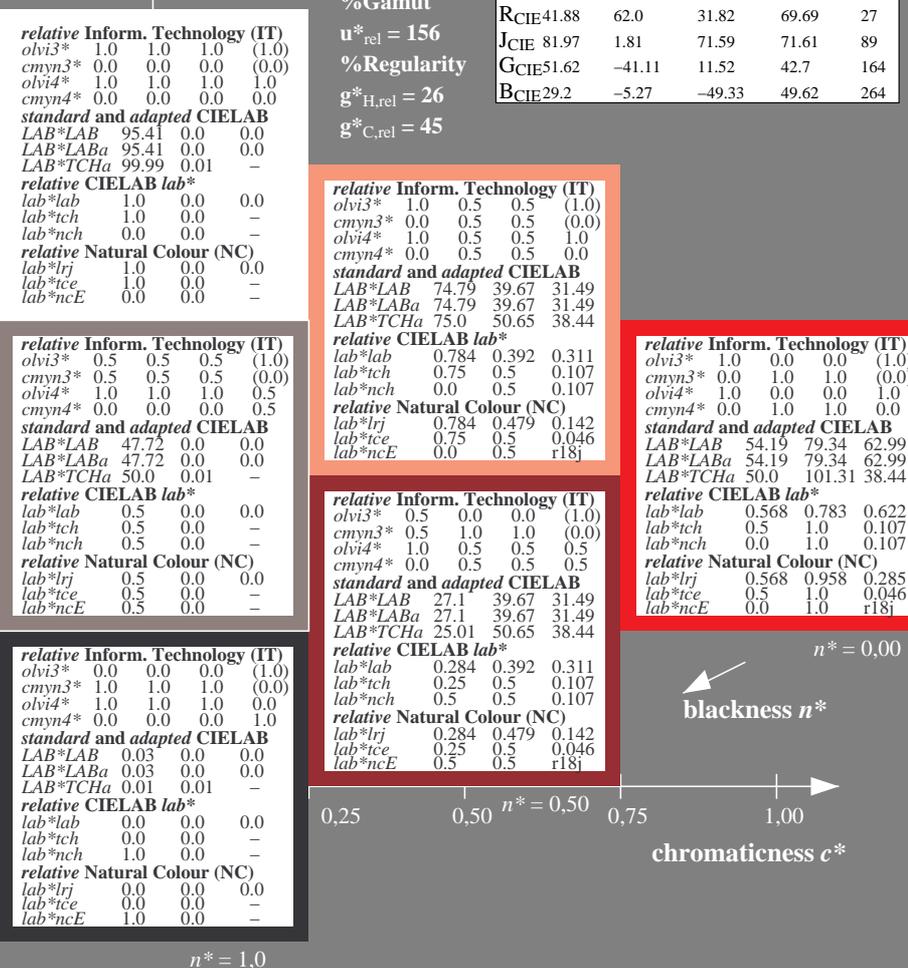
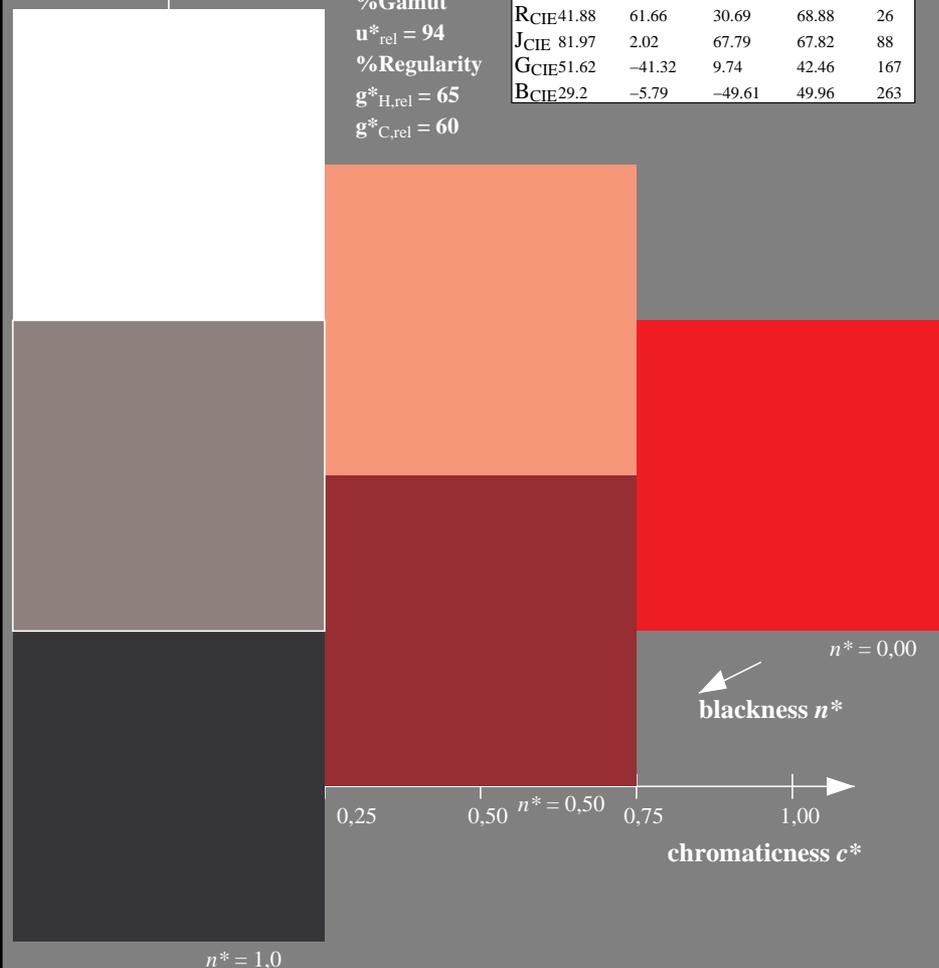
LAB*LAB	54.19	79.34	62.99
LAB*LABa	54.19	79.34	62.99
LAB*TCHa	50.0	101.31	38.44

**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*tce	0.5	1.0	0.046
lab*nce	0.0	1.0	r18j



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

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

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

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

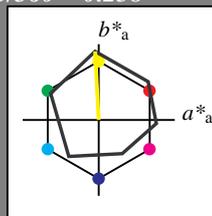
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E00NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ 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  $t^*$



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

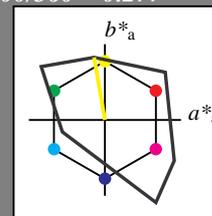
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 100/360 = 0.277$   
 $lab^*tch$  and  $lab^*nch$

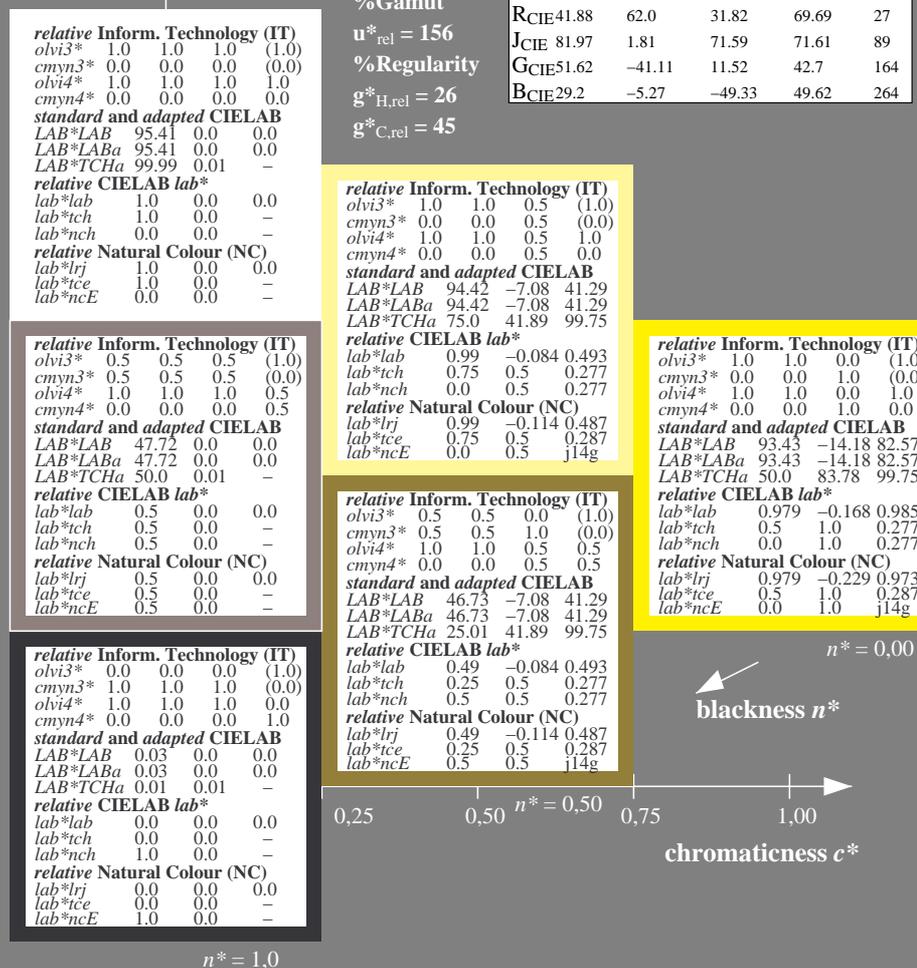
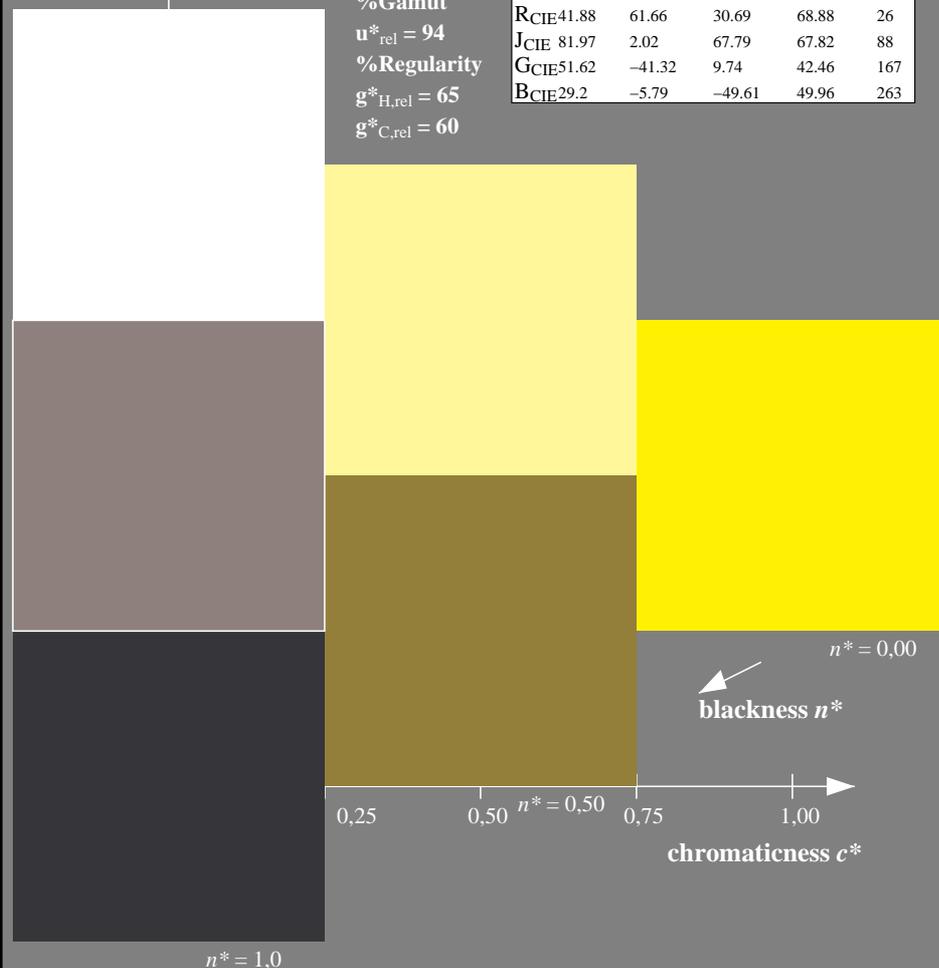
D50: hue Y  
 LCH\*Ma: 93 84 100  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$



**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	94.42	-7.08	41.29
LAB*LABa	94.42	-7.08	41.29
LAB*TCHa	75.0	41.89	99.75

**relative CIELAB lab\***

lab*lab	0.99	-0.084	0.493
lab*tch	0.75	0.5	0.277
lab*nch	0.0	0.5	0.277

**relative Natural Colour (NC)**

lab*lrj	0.99	-0.114	0.487
lab*tce	0.75	0.5	0.287
lab*nce	0.0	0.5	j14g

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	93.43	-14.18	82.57
LAB*LABa	93.43	-14.18	82.57
LAB*TCHa	50.0	83.78	99.75

**relative CIELAB lab\***

lab*lab	0.979	-0.168	0.985
lab*tch	0.5	1.0	0.277
lab*nch	0.0	1.0	0.277

**relative Natural Colour (NC)**

lab*lrj	0.979	-0.229	0.973
lab*tce	0.5	1.0	0.287
lab*nce	0.0	1.0	j14g

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**relative CIELAB lab\***

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	46.73	-7.08	41.29
LAB*LABa	46.73	-7.08	41.29
LAB*TCHa	25.01	41.89	99.75

**relative CIELAB lab\***

lab*lab	0.49	-0.084	0.493
lab*tch	0.25	0.5	0.277
lab*nch	0.5	0.5	0.277

**relative Natural Colour (NC)**

lab*lrj	0.49	-0.114	0.487
lab*tce	0.25	0.5	0.287
lab*nce	0.5	0.5	j14g

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

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

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

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

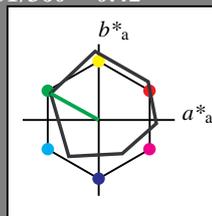
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E01NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ Form 2/10, Serie: 1/1, Page: 2 Page count: 2

**Input: Colorimetric Offset Reflective System ORS18**

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

D50: hue L  
 LCH\*Ma: 51 72 151  
 olv\*Ma: 0.0 1.0 0.0  
 triangle lightness  $t^*$



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

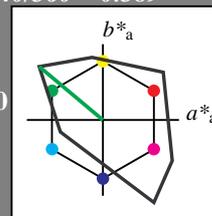
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 140/360 = 0.389$   
 $lab^*tch$  and  $lab^*nch$

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



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	89.11	-41.85	35.2
LAB*LABa	89.11	-41.85	35.2
LAB*TCHa	75.0	54.69	139.94

**relative CIELAB lab\***

lab*lab	0.934	-0.382	0.322
lab*tch	0.75	0.5	0.389
lab*nch	0.0	0.5	0.389

**relative Natural Colour (NC)**

lab*lrj	0.934	-0.436	0.242
lab*tce	0.75	0.5	0.419
lab*nce	0.0	0.5	0.67g

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

olvi3*	0.0	0.5	0.0	(1.0)
cmyn3*	0.25	0.5	1.0	(0.0)
olvi4*	0.5	1.0	0.5	0.5
cmyn4*	0.5	0.0	0.5	0.5

**standard and adapted CIELAB**

LAB*LAB	41.42	-41.85	35.2
LAB*LABa	41.42	-41.85	35.2
LAB*TCHa	25.01	54.69	139.94

**relative CIELAB lab\***

lab*lab	0.434	-0.382	0.322
lab*tch	0.25	0.5	0.389
lab*nch	0.5	0.5	0.389

**relative Natural Colour (NC)**

lab*lrj	0.434	-0.436	0.242
lab*tce	0.25	0.5	0.419
lab*nce	0.5	0.5	0.67g

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

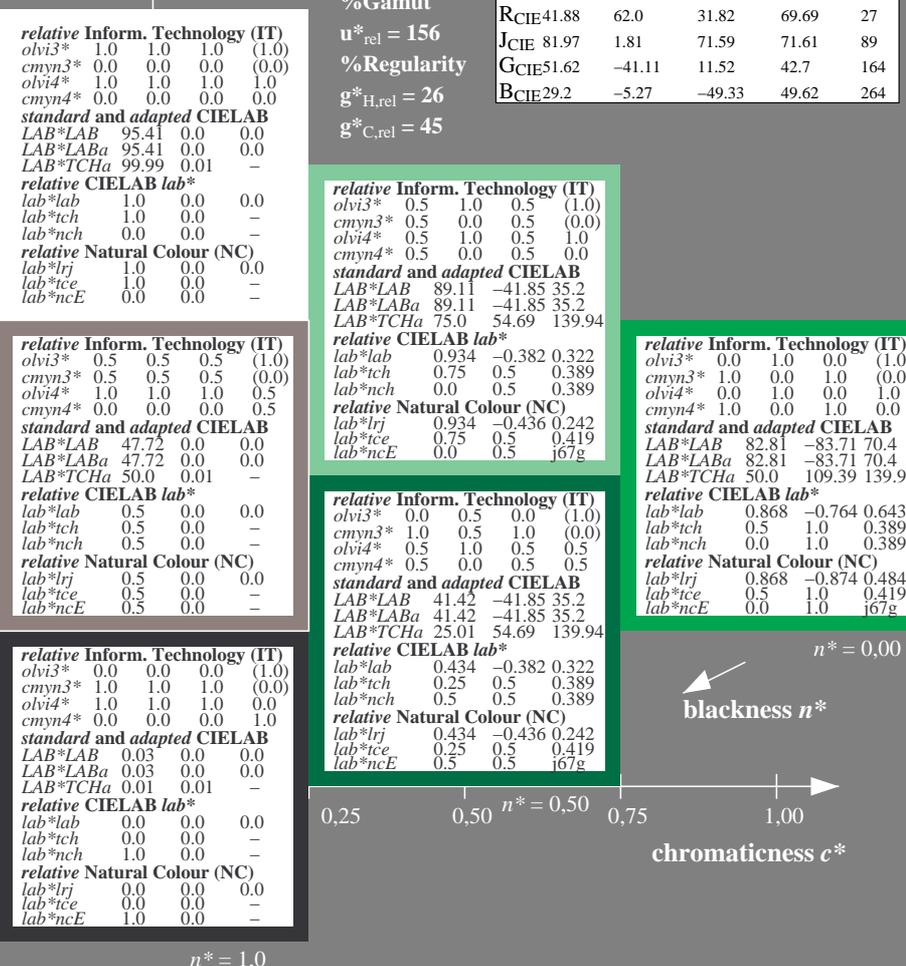
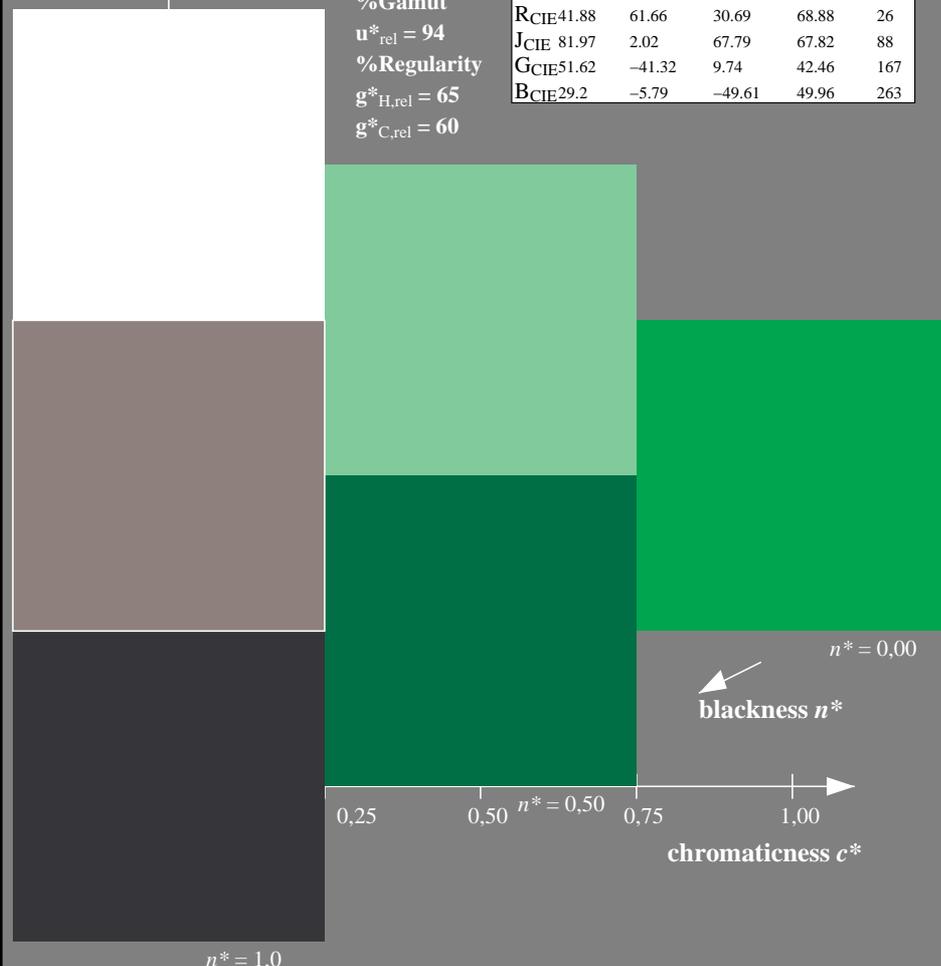
LAB*LAB	82.81	-83.71	70.4
LAB*LABa	82.81	-83.71	70.4
LAB*TCHa	50.0	109.39	139.94

**relative CIELAB lab\***

lab*lab	0.868	-0.764	0.643
lab*tch	0.5	1.0	0.389
lab*nch	0.0	1.0	0.389

**relative Natural Colour (NC)**

lab*lrj	0.868	-0.874	0.484
lab*tce	0.5	1.0	0.419
lab*nce	0.0	1.0	0.67g



QE000-7, 3 step scales for constant CIELAB hue 151/360 = 0.42 (left)

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

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

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

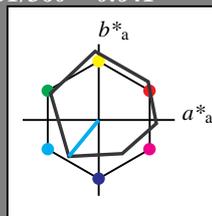
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E02NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ 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  $t^*$



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

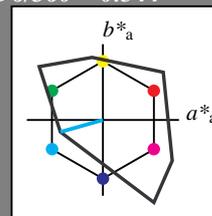
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 196/360 = 0.544$   
 $lab^*tch$  and  $lab^*nch$

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



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	90.31	-27.94	-7.88
LAB*LABa	90.31	-27.94	-7.88
LAB*TCHa	75.0	29.04	195.77

**relative CIELAB lab\***

lab*lab	0.947	-0.48	-0.135
lab*tch	0.75	0.5	0.544
lab*nch	0.0	0.5	0.544

**relative Natural Colour (NC)**

lab*lrj	0.947	-0.439	-0.237
lab*tce	0.75	0.5	0.579
lab*nce	0.0	0.5	g31b

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	85.21	-55.89	-15.78
LAB*LABa	85.21	-55.89	-15.78
LAB*TCHa	50.0	58.09	195.77

**relative CIELAB lab\***

lab*lab	0.893	-0.961	-0.271
lab*tch	0.5	1.0	0.544
lab*nch	0.0	1.0	0.544

**relative Natural Colour (NC)**

lab*lrj	0.893	-0.878	-0.475
lab*tce	0.5	1.0	0.579
lab*nce	0.0	1.0	g31b

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	42.62	-27.94	-7.88
LAB*LABa	42.62	-27.94	-7.88
LAB*TCHa	25.01	29.04	195.77

**relative CIELAB lab\***

lab*lab	0.447	-0.48	-0.135
lab*tch	0.25	0.5	0.544
lab*nch	0.5	0.5	0.544

**relative Natural Colour (NC)**

lab*lrj	0.447	-0.439	-0.237
lab*tce	0.25	0.5	0.579
lab*nce	0.5	0.5	g31b

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**relative CIELAB lab\***

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

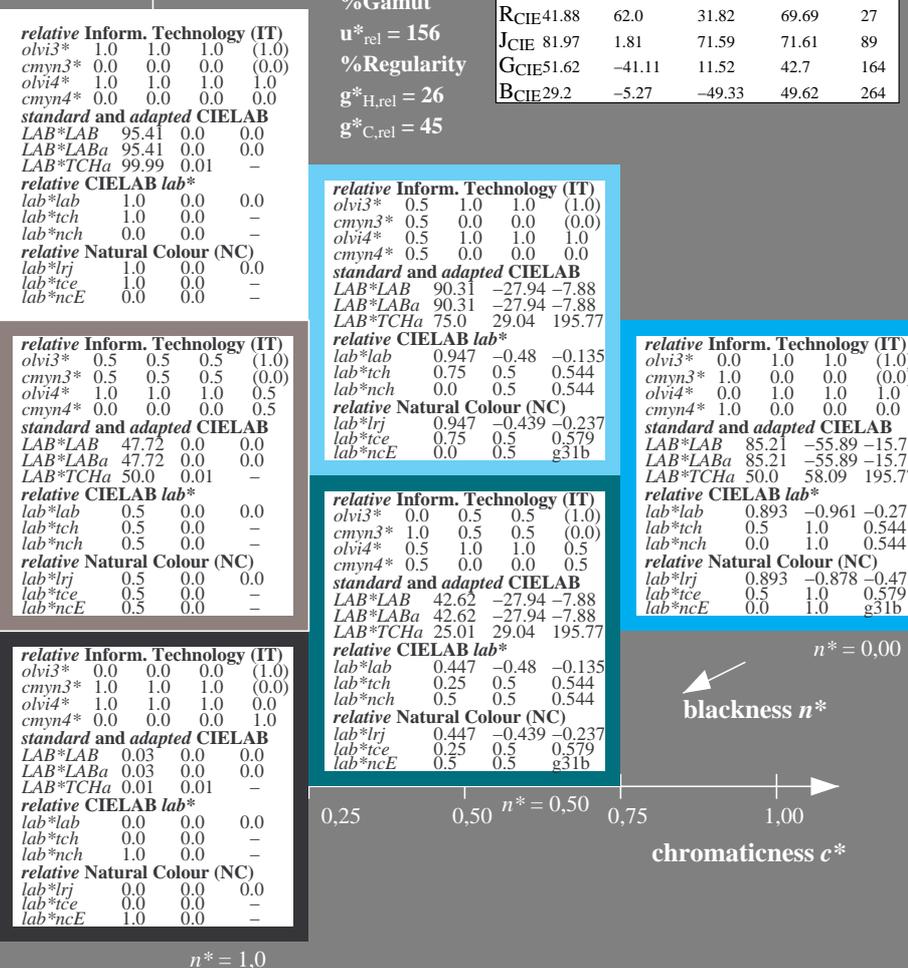
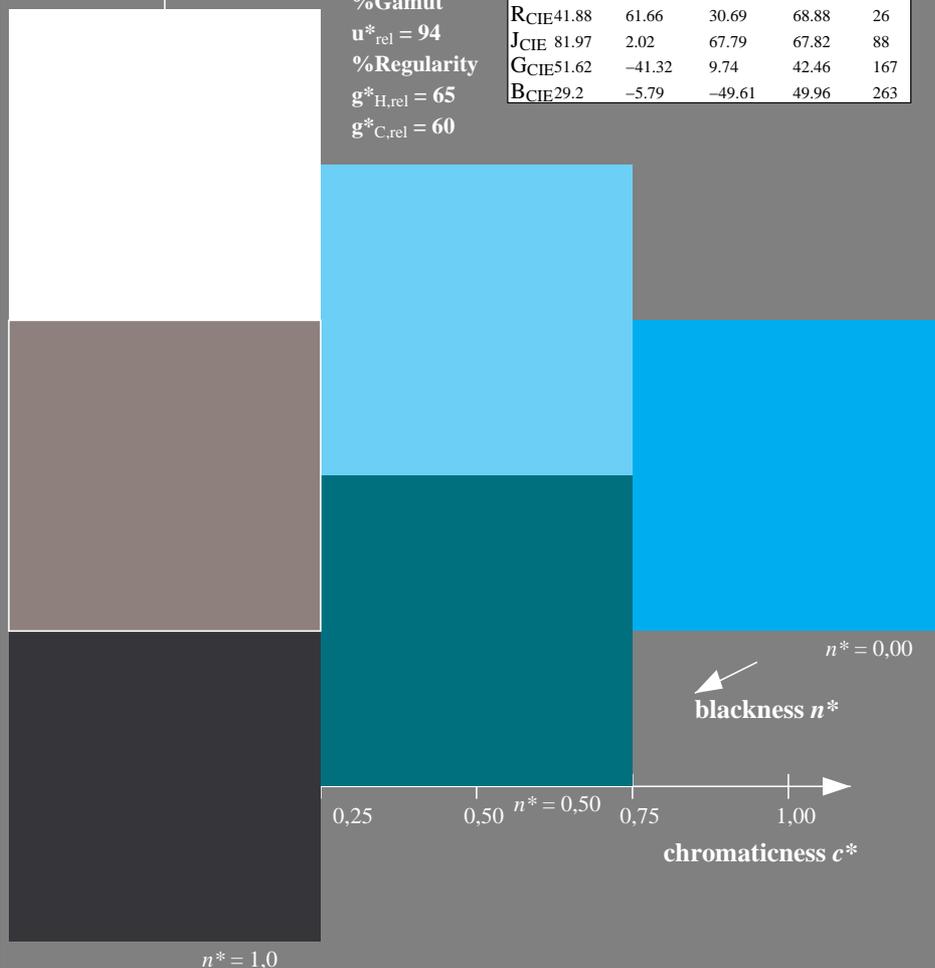
LAB*LAB	42.62	-27.94	-7.88
LAB*LABa	42.62	-27.94	-7.88
LAB*TCHa	25.01	29.04	195.77

**relative CIELAB lab\***

lab*lab	0.447	-0.48	-0.135
lab*tch	0.25	0.5	0.544
lab*nch	0.5	0.5	0.544

**relative Natural Colour (NC)**

lab*lrj	0.447	-0.439	-0.237
lab*tce	0.25	0.5	0.579
lab*nce	0.5	0.5	g31b



QE000-7, 3 step scales for constant CIELAB hue 231/360 = 0.641 (left)

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

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

input: *cmly0\* setcmlycolor*  
 output: *no change compared to input*

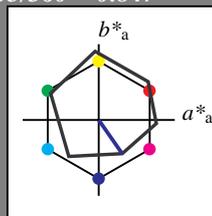
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E03NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ Form 4/10, Serie: 1/1, Page: 4 Page count: 4

**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  $t^*$



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

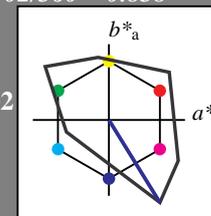
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 302/360 = 0.838$   
 $lab^*tch$  and  $lab^*nch$

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



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	60.51	33.52	-54.42
LAB*LABa	60.51	33.52	-54.42
LAB*TCHa	75.0	63.92	301.63

**relative CIELAB lab\***

lab*lab	0.634	0.262	-0.425
lab*tch	0.75	0.5	0.838
lab*nch	0.0	0.5	0.838

**relative Natural Colour (NC)**

lab*lrj	0.634	0.231	-0.442
lab*tce	0.75	0.5	0.827
lab*nce	0.0	0.5	b30r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	25.61	67.04	-108.8
LAB*LABa	25.61	67.04	-108.8
LAB*TCHa	50.0	127.84	301.63

**relative CIELAB lab\***

lab*lab	0.268	0.524	-0.85
lab*tch	0.5	1.0	0.838
lab*nch	0.0	1.0	0.838

**relative Natural Colour (NC)**

lab*lrj	0.268	0.462	-0.885
lab*tce	0.5	1.0	0.827
lab*nce	0.0	1.0	b30r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	12.82	33.52	-54.42
LAB*LABa	12.82	33.52	-54.42
LAB*TCHa	25.01	63.92	301.63

**relative CIELAB lab\***

lab*lab	0.134	0.262	-0.425
lab*tch	0.25	0.5	0.838
lab*nch	0.5	0.5	0.838

**relative Natural Colour (NC)**

lab*lrj	0.134	0.231	-0.442
lab*tce	0.25	0.5	0.827
lab*nce	0.5	0.5	b30r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

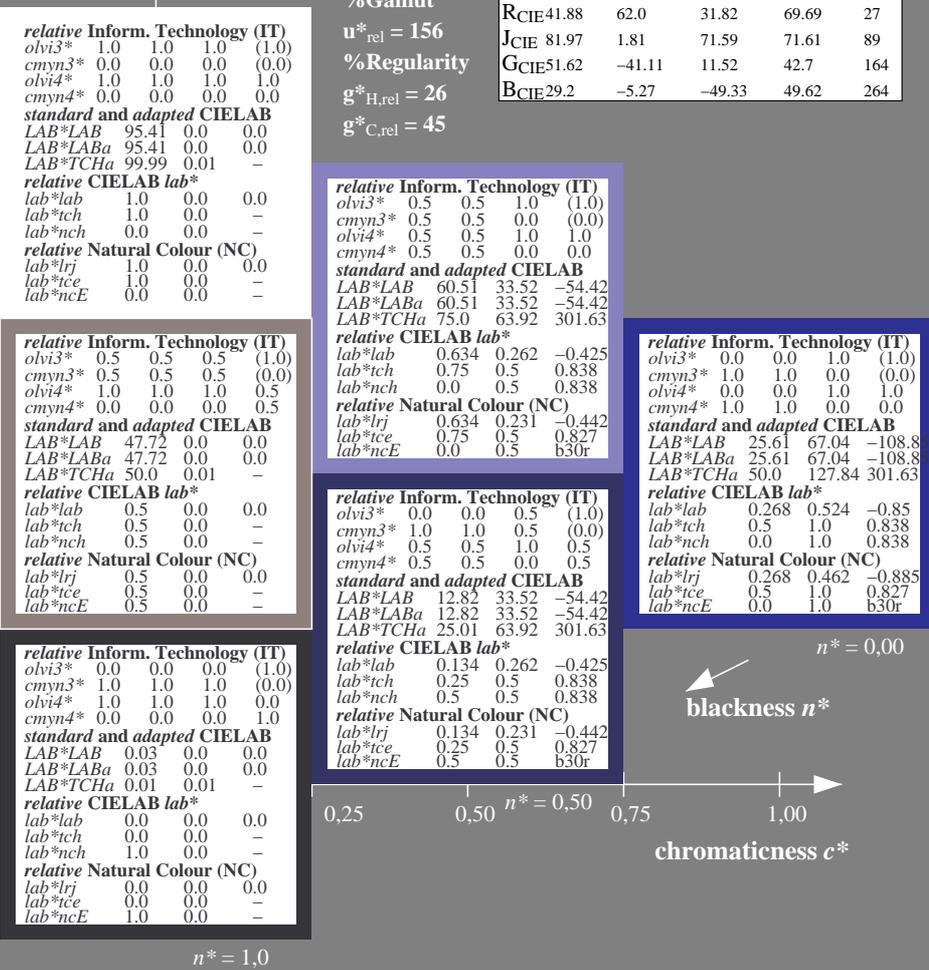
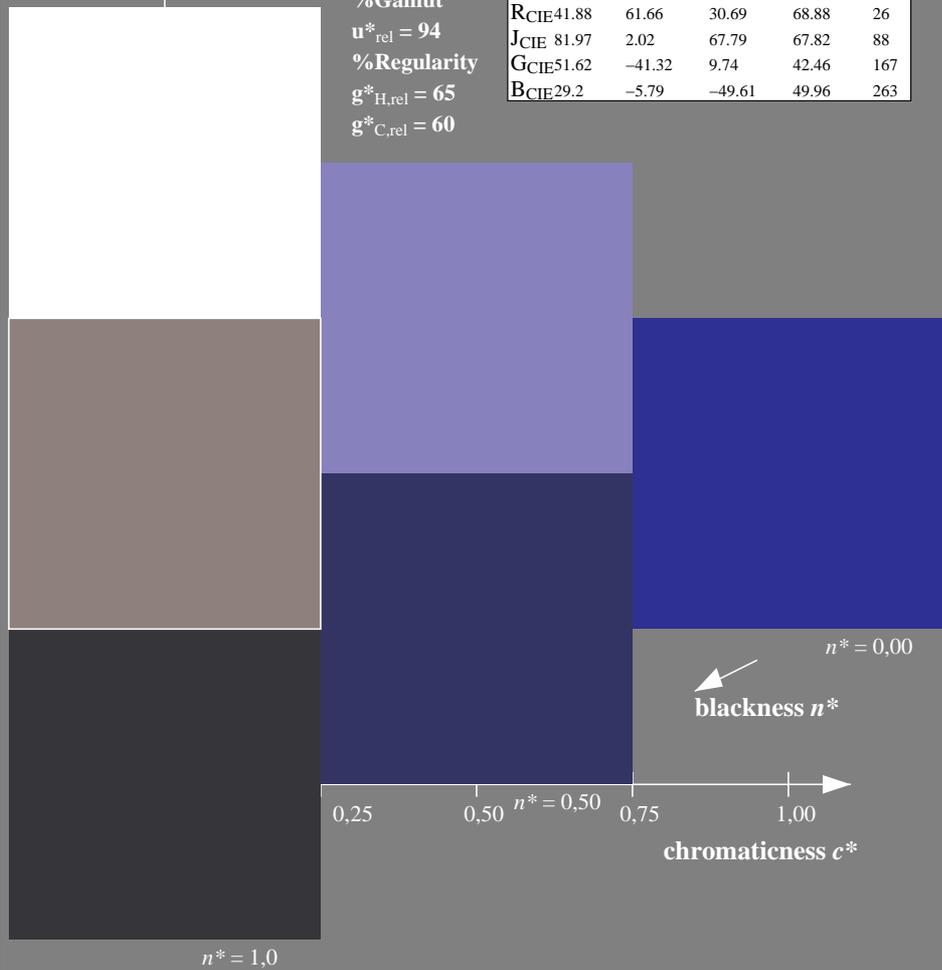
LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**relative CIELAB lab\***

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-



QE000-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

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

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

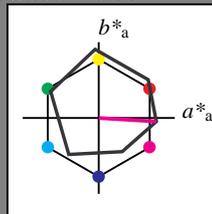
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E04NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ Form: 5/10, Serie: 1/1, Page: 5 Page count: 5

**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  $t^*$



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

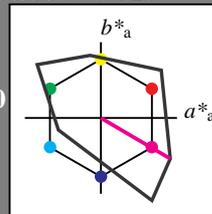
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 330/360 = 0.915$   
 $lab^*tch$  and  $lab^*nch$

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



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	77.08	45.58	-26.83
LAB*LABa	77.08	45.58	-26.83
LAB*TCHa	75.0	52.9	329.5

**relative CIELAB lab\***

lab*lab	0.808	0.431	-0.253
lab*tch	0.75	0.5	0.915
lab*nch	0.0	0.5	0.915

**relative Natural Colour (NC)**

lab*lrj	0.808	0.371	-0.334
lab*tce	0.75	0.5	0.883
lab*nce	0.0	0.5	b53r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	58.76	91.16	-53.68
LAB*LABa	58.76	91.16	-53.68
LAB*TCHa	50.0	105.8	329.5

**relative CIELAB lab\***

lab*lab	0.616	0.861	-0.506
lab*tch	0.5	1.0	0.915
lab*nch	0.0	1.0	0.915

**relative Natural Colour (NC)**

lab*lrj	0.616	0.742	-0.669
lab*tce	0.5	1.0	0.883
lab*nce	0.0	1.0	b53r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	29.39	45.58	-26.83
LAB*LABa	29.39	45.58	-26.83
LAB*TCHa	25.01	52.9	329.5

**relative CIELAB lab\***

lab*lab	0.308	0.431	-0.253
lab*tch	0.25	0.5	0.915
lab*nch	0.5	0.5	0.915

**relative Natural Colour (NC)**

lab*lrj	0.308	0.371	-0.334
lab*tce	0.25	0.5	0.883
lab*nce	0.5	0.5	b53r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**relative CIELAB lab\***

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

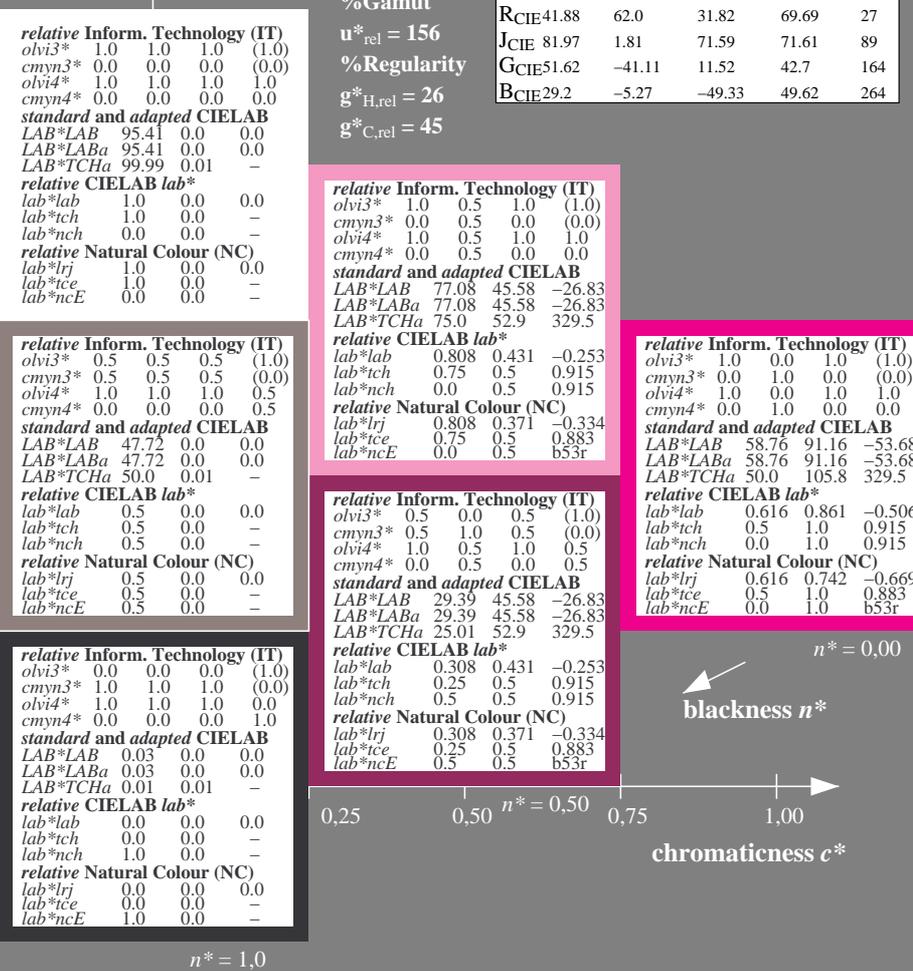
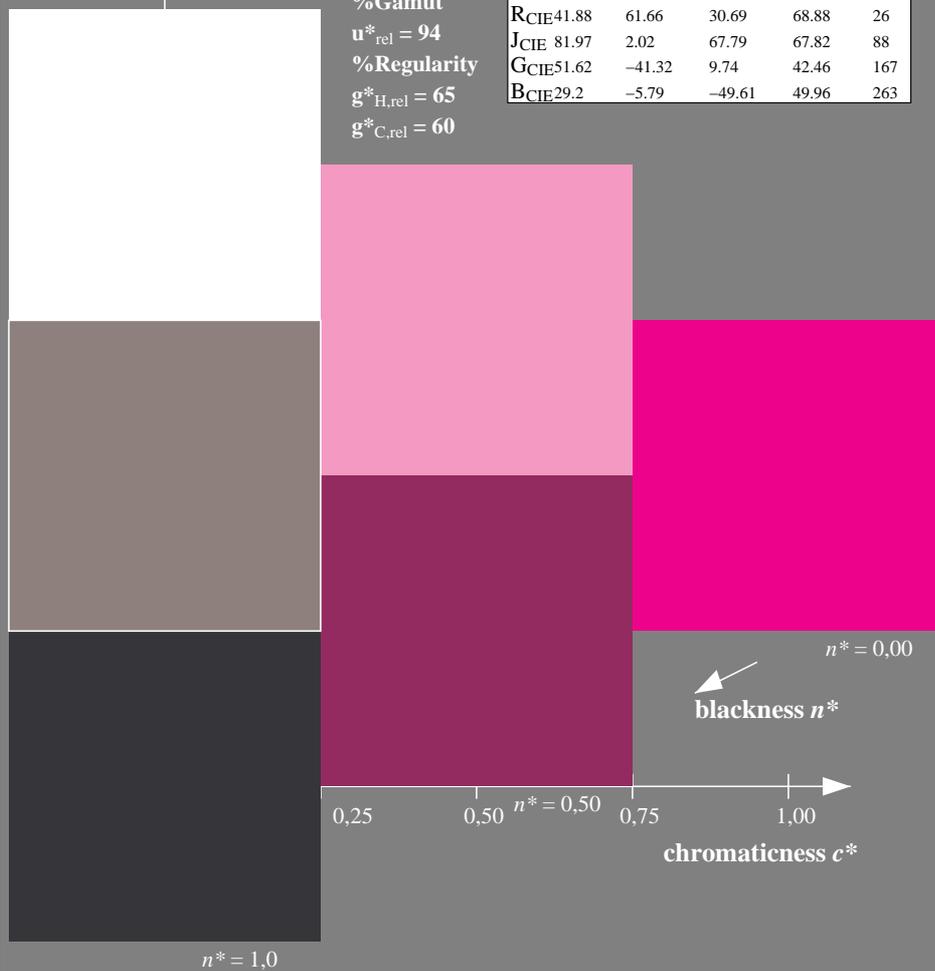
LAB*LAB	29.39	45.58	-26.83
LAB*LABa	29.39	45.58	-26.83
LAB*TCHa	25.01	52.9	329.5

**relative CIELAB lab\***

lab*lab	0.308	0.431	-0.253
lab*tch	0.25	0.5	0.915
lab*nch	0.5	0.5	0.915

**relative Natural Colour (NC)**

lab*lrj	0.308	0.371	-0.334
lab*tce	0.25	0.5	0.883
lab*nce	0.5	0.5	b53r



QE000-7, 3 step scales for constant CIELAB hue 356/360 = 0.99 (left)

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

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

input: *cmY0\* setcmykcolor*  
 output: *no change compared to input*

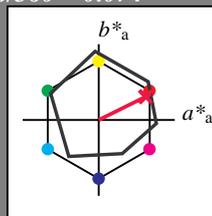
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E05NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ Form 6/10, Serie: 1/1, Page: 6 Page count: 6

**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  $t^*$



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

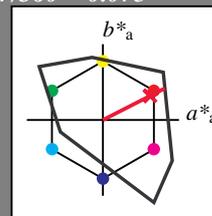
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 27/360 = 0.075$   
 $lab^*tch$  and  $lab^*nch$

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



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

olvi3*	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

**standard and adapted CIELAB**

LAB*LAB	75.21	40.74	20.91
LAB*LABa	75.21	40.74	20.91
LAB*TCHa	75.0	45.8	27.17

**relative CIELAB lab\***

lab*lab	0.788	0.445	0.228
lab*tch	0.75	0.5	0.075
lab*nch	0.0	0.5	0.075

**relative Natural Colour (NC)**

lab*lrj	0.788	0.5	0.0
lab*tce	0.75	0.5	1.0
lab*nce	0.0	0.5	0.99r

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*TCHa	50.0	0.01	-

**relative CIELAB lab\***

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

**relative Inform. Technology (IT)**

olvi3*	0.5	0.0	0.091	(1.0)
cmyn3*	0.5	1.0	0.909	(0.0)
olvi4*	1.0	0.5	0.591	0.5
cmyn4*	0.0	0.5	0.409	0.5

**standard and adapted CIELAB**

LAB*LAB	27.52	40.74	20.92
LAB*LABa	27.52	40.74	20.92
LAB*TCHa	25.01	45.8	27.18

**relative CIELAB lab\***

lab*lab	0.288	0.445	0.228
lab*tch	0.25	0.5	0.075
lab*nch	0.5	0.5	0.075

**relative Natural Colour (NC)**

lab*lrj	0.288	0.5	0.0
lab*tce	0.25	0.5	0.0
lab*nce	0.5	0.5	r00j

**relative Inform. Technology (IT)**

olvi3*	1.0	0.0	0.181	(1.0)
cmyn3*	0.0	1.0	0.819	(0.0)
olvi4*	1.0	0.0	0.182	1.0
cmyn4*	0.0	1.0	0.818	0.0

**standard and adapted CIELAB**

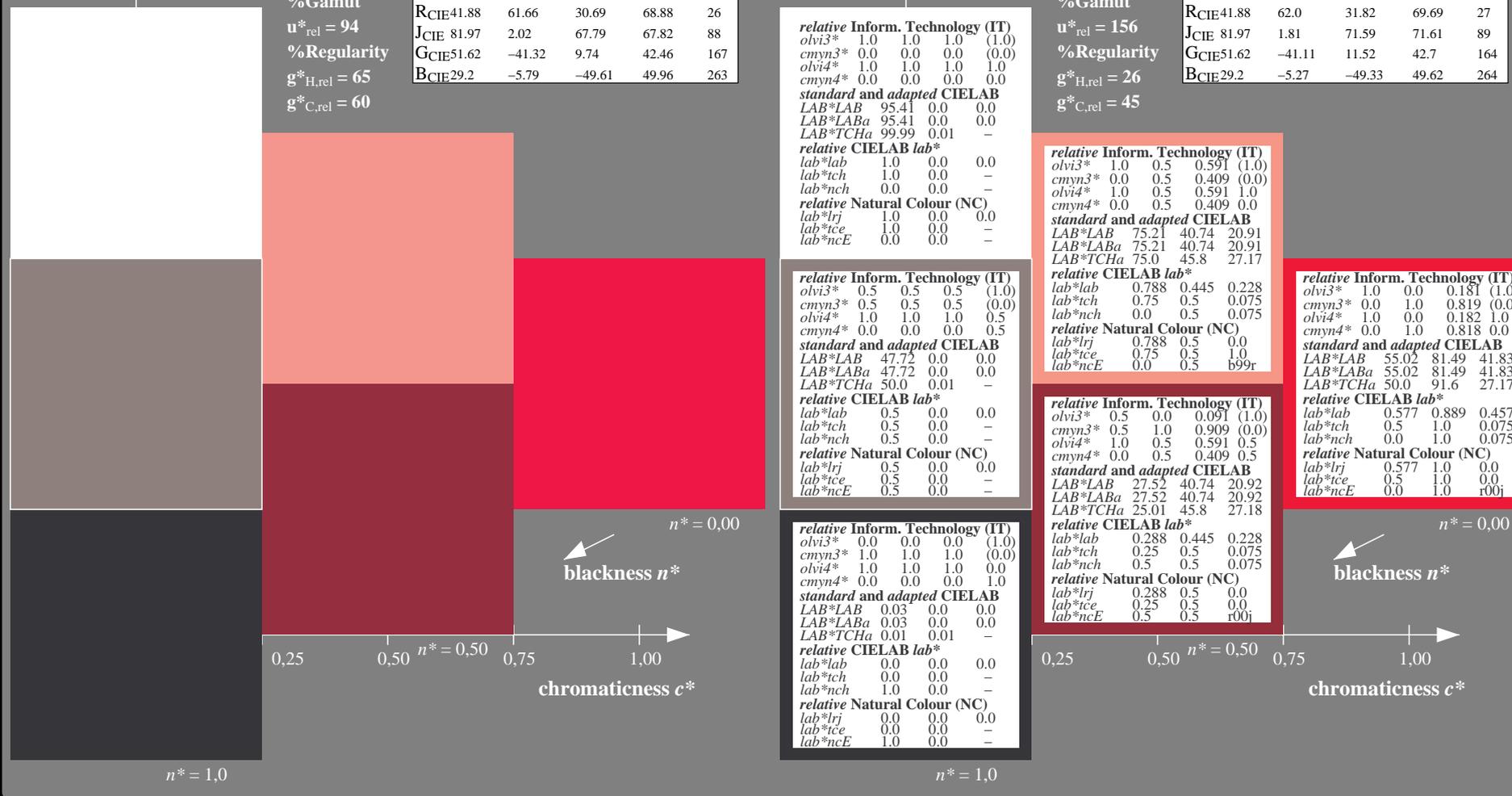
LAB*LAB	55.02	81.49	41.83
LAB*LABa	55.02	81.49	41.83
LAB*TCHa	50.0	91.6	27.17

**relative CIELAB lab\***

lab*lab	0.577	0.889	0.457
lab*tch	0.5	1.0	0.075
lab*nch	0.0	1.0	0.075

**relative Natural Colour (NC)**

lab*lrj	0.577	1.0	0.0
lab*tce	0.5	1.0	0.0
lab*nce	0.0	1.0	r00j



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

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

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

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

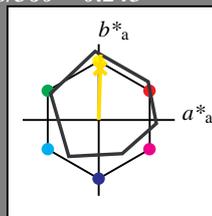
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-QE00/10Q/Q00E06NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ 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  $t^*$



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

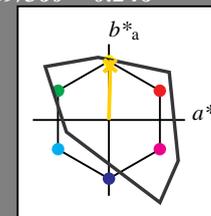
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 89/360 = 0.246$   
 $lab^*tch$  and  $lab^*nch$

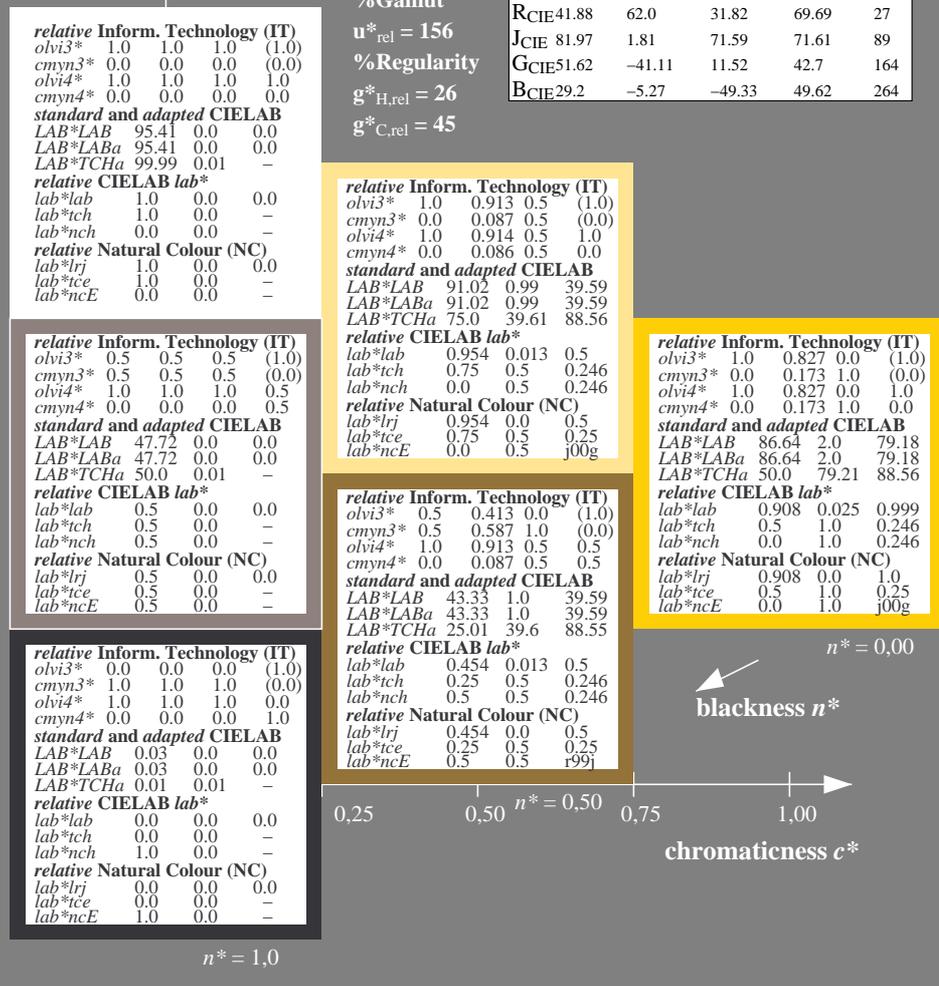
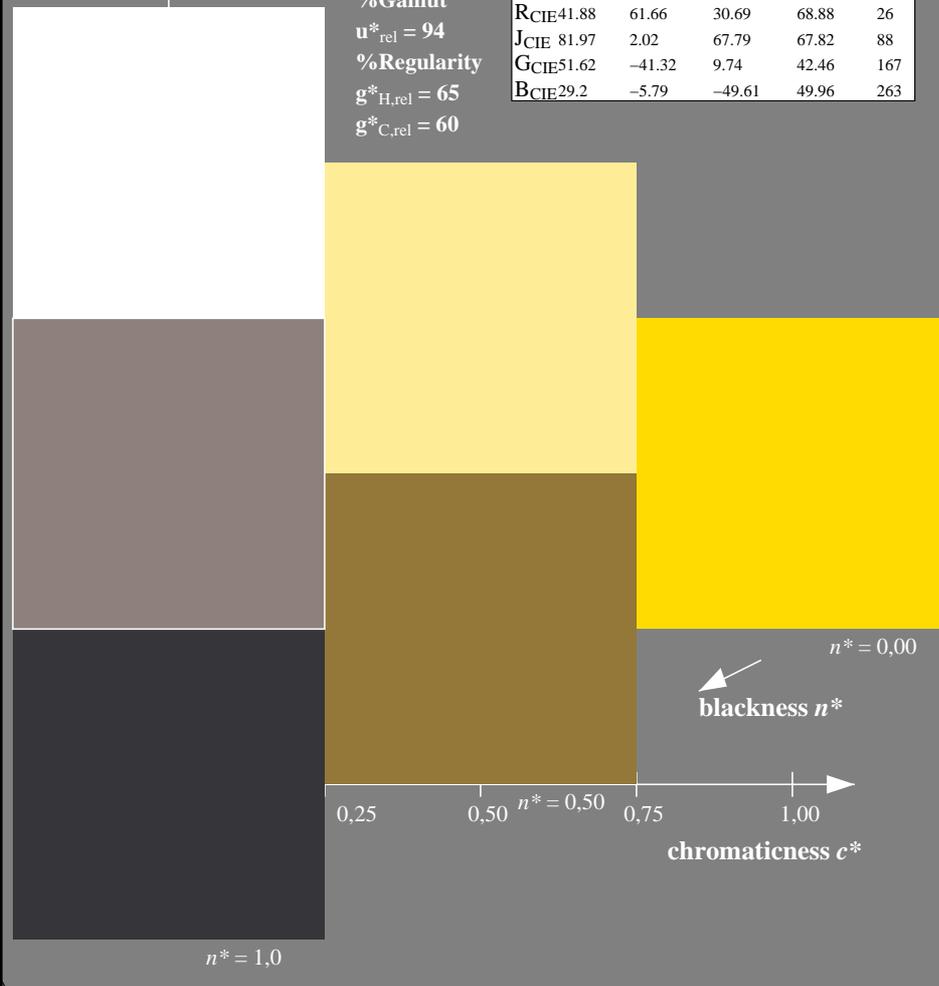
D50: hue J  
 LCH\*Ma: 87 79 89  
 olv\*Ma: 1.0 0.83 0.0  
 triangle lightness  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$



**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 1.0 \ 0.0 \ 0.0$   
 $lab^*tch = 1.0 \ 0.0 \ -$   
 $lab^*nch = 0.0 \ 0.0 \ -$

**relative Natural Colour (NC)**  
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$   
 $lab^*tce = 1.0 \ 0.0 \ -$   
 $lab^*nce = 0.0 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

**standard and adapted CIELAB**  
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$   
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 0.5 \ 0.0 \ 0.0$   
 $lab^*tch = 0.5 \ 0.0 \ -$   
 $lab^*nch = 0.5 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 0.913 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.087 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.914 \ 0.5 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.086 \ 0.5 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 91.02 \ 0.99 \ 39.59$   
 $LAB^*LABa = 91.02 \ 0.99 \ 39.59$   
 $LAB^*TCHa = 75.0 \ 39.61 \ 88.56$

**relative CIELAB lab\***  
 $lab^*lab = 0.954 \ 0.013 \ 0.5$   
 $lab^*tch = 0.75 \ 0.5 \ 0.246$   
 $lab^*nch = 0.0 \ 0.5 \ 0.246$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.954 \ 0.0 \ 0.5$   
 $lab^*tce = 0.75 \ 0.5 \ 0.25$   
 $lab^*nce = 0.0 \ 0.5 \ j00g$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.413 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.587 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.913 \ 0.5 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.087 \ 0.5 \ 0.5$

**standard and adapted CIELAB**  
 $LAB^*LAB = 43.33 \ 1.0 \ 39.59$   
 $LAB^*LABa = 43.33 \ 1.0 \ 39.59$   
 $LAB^*TCHa = 25.01 \ 39.6 \ 88.55$

**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 0.827 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.173 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.827 \ 0.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.173 \ 1.0 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 86.64 \ 2.0 \ 79.18$   
 $LAB^*LABa = 86.64 \ 2.0 \ 79.18$   
 $LAB^*TCHa = 50.0 \ 79.21 \ 88.56$

**relative CIELAB lab\***  
 $lab^*lab = 0.908 \ 0.025 \ 0.999$   
 $lab^*tch = 0.5 \ 1.0 \ 0.246$   
 $lab^*nch = 0.0 \ 1.0 \ 0.246$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.908 \ 0.0 \ 1.0$   
 $lab^*tce = 0.5 \ 1.0 \ 0.25$   
 $lab^*nce = 0.0 \ 1.0 \ j00g$

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

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

BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 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/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

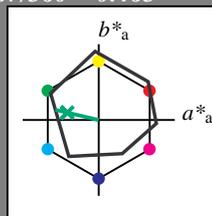
BAM registration: 20060101-QE00/10Q/Q00E07NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /QE00/ Form: 8/10, Serie: 1/1, Page: 8 Page count: 8

**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  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

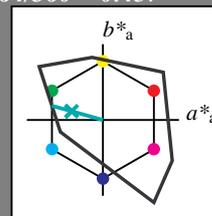
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$

**Output: Colorimetric Television Luminous System TLS00**

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

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

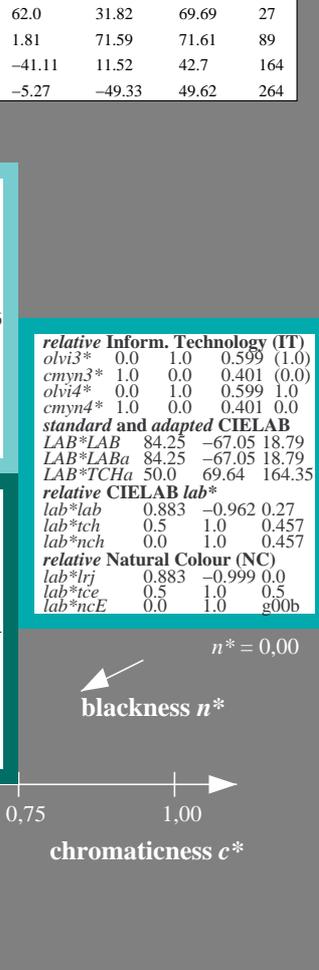
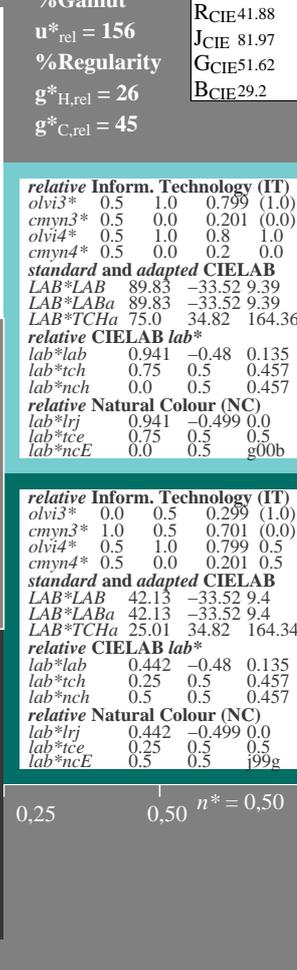
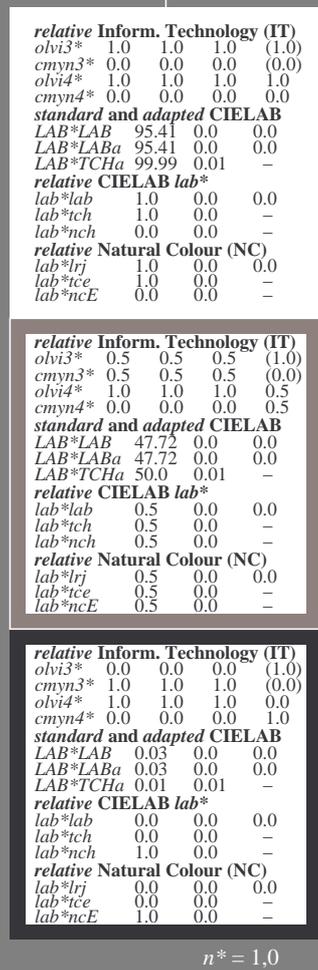
triangle lightness  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$



**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 1.0 \ 0.0 \ 0.0$   
 $lab^*tch = 1.0 \ 0.0 \ -$   
 $lab^*nch = 0.0 \ 0.0 \ -$

**relative Natural Colour (NC)**  
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$   
 $lab^*tce = 1.0 \ 0.0 \ -$   
 $lab^*nce = 0.0 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

**standard and adapted CIELAB**  
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$   
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 0.5 \ 0.0 \ 0.0$   
 $lab^*tch = 0.5 \ 0.0 \ -$   
 $lab^*nch = 0.5 \ 0.0 \ -$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$   
 $lab^*tce = 0.5 \ 0.0 \ -$   
 $lab^*nce = 0.5 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$   
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$   
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 0.0 \ 0.0 \ 0.0$   
 $lab^*tch = 0.0 \ 0.0 \ -$   
 $lab^*nch = 1.0 \ 0.0 \ -$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$   
 $lab^*tce = 0.0 \ 0.0 \ -$   
 $lab^*nce = 1.0 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 1.0 \ 0.799 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.0 \ 0.201 \ (0.0)$   
 $olvi4^* = 0.5 \ 1.0 \ 0.8 \ 1.0$   
 $cmyn4^* = 0.5 \ 0.0 \ 0.2 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 89.83 \ -33.52 \ 9.39$   
 $LAB^*LABa = 89.83 \ -33.52 \ 9.39$   
 $LAB^*TCHa = 75.0 \ 34.82 \ 164.36$

**relative CIELAB lab\***  
 $lab^*lab = 0.941 \ -0.48 \ 0.135$   
 $lab^*tch = 0.75 \ 0.5 \ 0.457$   
 $lab^*nch = 0.0 \ 0.5 \ 0.457$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.941 \ -0.499 \ 0.0$   
 $lab^*tce = 0.75 \ 0.5 \ 0.5$   
 $lab^*nce = 0.0 \ 0.5 \ g00b$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.0 \ 0.5 \ 0.299 \ (1.0)$   
 $cmyn3^* = 1.0 \ 0.5 \ 0.701 \ (0.0)$   
 $olvi4^* = 0.5 \ 1.0 \ 0.799 \ 0.5$   
 $cmyn4^* = 0.5 \ 0.0 \ 0.201 \ 0.5$

**standard and adapted CIELAB**  
 $LAB^*LAB = 42.13 \ -33.52 \ 9.4$   
 $LAB^*LABa = 42.13 \ -33.52 \ 9.4$   
 $LAB^*TCHa = 25.01 \ 34.82 \ 164.34$

**relative CIELAB lab\***  
 $lab^*lab = 0.442 \ -0.48 \ 0.135$   
 $lab^*tch = 0.25 \ 0.5 \ 0.457$   
 $lab^*nch = 0.5 \ 0.5 \ 0.457$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.442 \ -0.499 \ 0.0$   
 $lab^*tce = 0.25 \ 0.5 \ 0.5$   
 $lab^*nce = 0.5 \ 0.5 \ g99g$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.0 \ 1.0 \ 0.599 \ (1.0)$   
 $cmyn3^* = 1.0 \ 0.0 \ 0.401 \ (0.0)$   
 $olvi4^* = 0.0 \ 1.0 \ 0.599 \ 1.0$   
 $cmyn4^* = 1.0 \ 0.0 \ 0.401 \ 0.0$

**standard and adapted CIELAB**  
 $LAB^*LAB = 84.25 \ -67.05 \ 18.79$   
 $LAB^*LABa = 84.25 \ -67.05 \ 18.79$   
 $LAB^*TCHa = 50.0 \ 69.64 \ 164.35$

**relative CIELAB lab\***  
 $lab^*lab = 0.883 \ -0.962 \ 0.27$   
 $lab^*tch = 0.5 \ 1.0 \ 0.457$   
 $lab^*nch = 0.0 \ 1.0 \ 0.457$

**relative Natural Colour (NC)**  
 $lab^*lrj = 0.883 \ -0.999 \ 0.0$   
 $lab^*tce = 0.5 \ 1.0 \ 0.5$   
 $lab^*nce = 0.0 \ 1.0 \ g00b$

QE000-7, 3 step scales for constant CIELAB hue 167/360 = 0.463 (left)

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

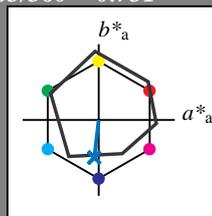
BAM-test chart QE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

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

**Input: Colorimetric Offset Reflective System ORS18**

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

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



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

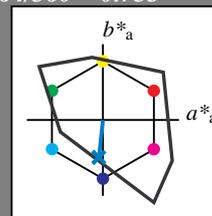
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	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  $h^* = lab^*h = 264/360 = 0.733$   
 $lab^*tch$  and  $lab^*nch$

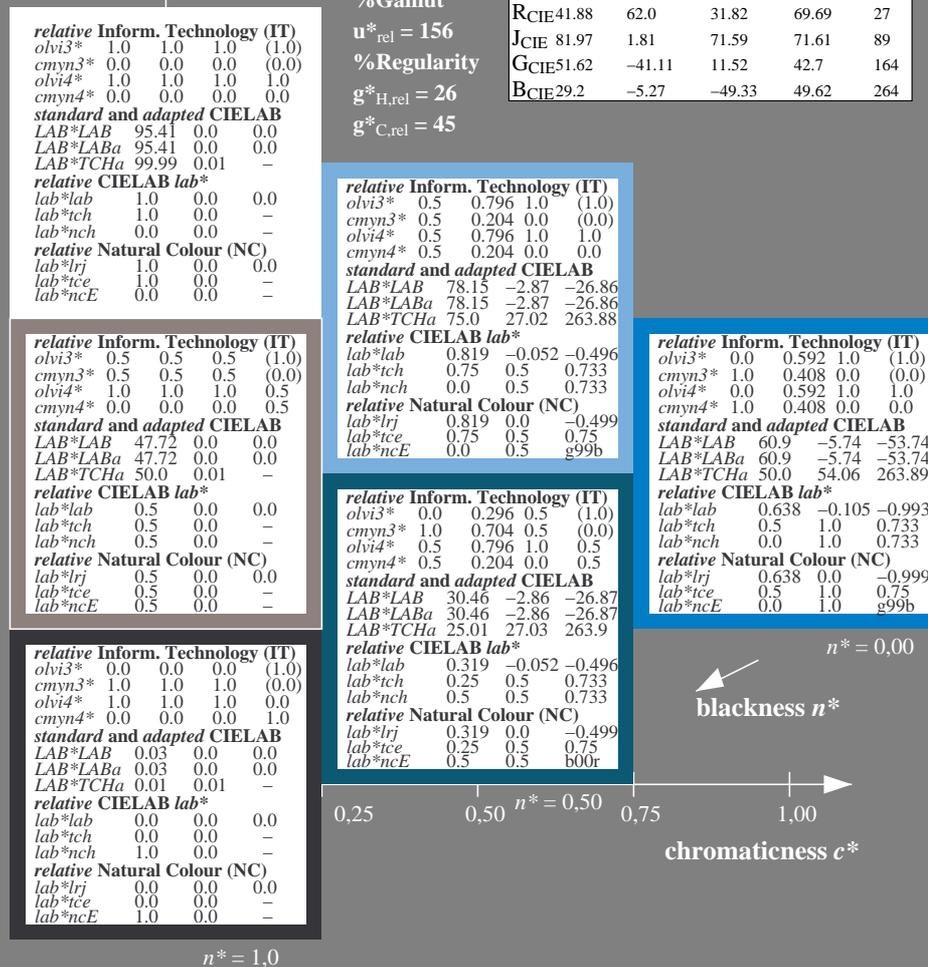
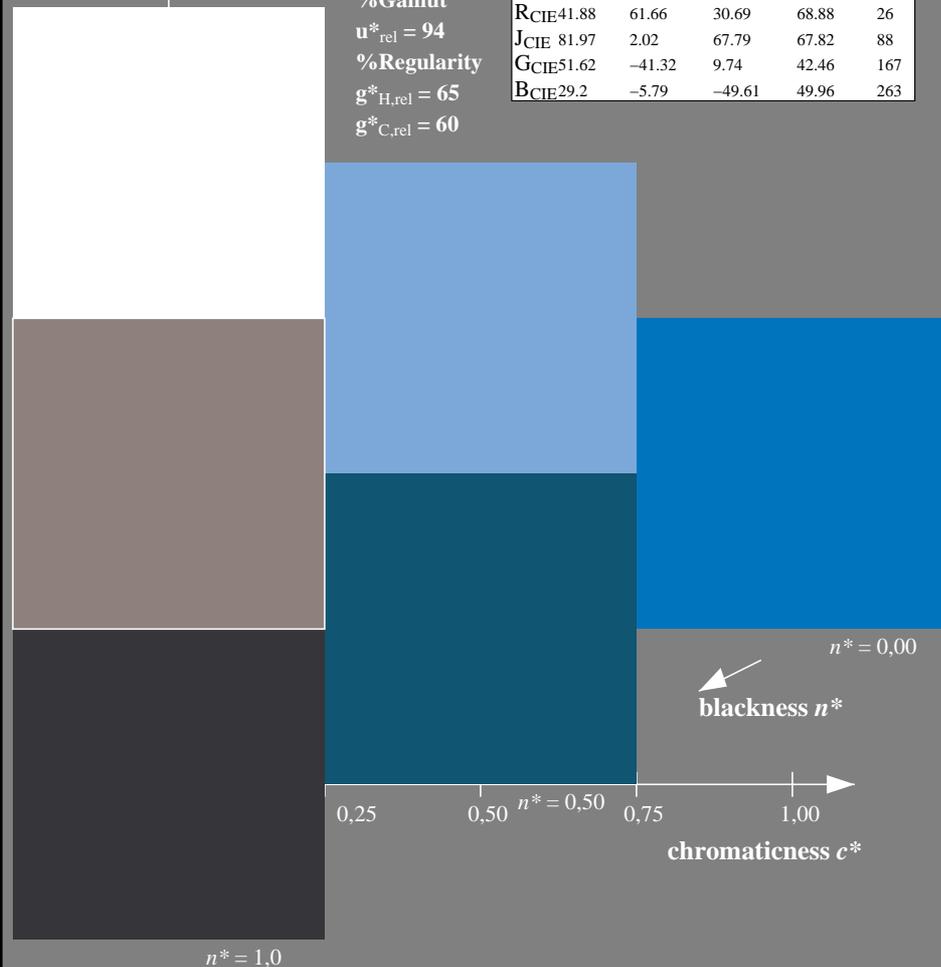
D50: hue B  
 LCH\*Ma: 61 54 264  
 olv\*Ma: 0.0 0.59 1.0  
 triangle lightness  $t^*$



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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

%Gamut  
 $u^*_{rel} = 156$   
 %Regularity  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$



**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	95.41	0.0	0.0
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

**relative CIELAB lab\***

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

**relative Inform. Technology (IT)**

olvi3*	0.5	0.796	1.0	(1.0)
cmyn3*	0.5	0.204	0.0	(0.0)
olvi4*	0.5	0.796	1.0	1.0
cmyn4*	0.5	0.204	0.0	0.0

**standard and adapted CIELAB**

LAB*LAB	78.15	-2.87	-26.86
LAB*LABa	78.15	-2.87	-26.86
LAB*TCHa	75.0	27.02	263.88

**relative CIELAB lab\***

lab*lab	0.819	-0.052	-0.496
lab*tch	0.75	0.5	0.733
lab*nch	0.0	0.5	0.733

**relative Natural Colour (NC)**

lab*lrj	0.819	0.0	-0.499
lab*tce	0.75	0.5	0.75
lab*nce	0.0	0.5	g99b

**relative Inform. Technology (IT)**

olvi3*	0.0	0.592	1.0	(1.0)
cmyn3*	1.0	0.408	0.0	(0.0)
olvi4*	0.0	0.592	1.0	1.0
cmyn4*	1.0	0.408	0.0	0.0

**standard and adapted CIELAB**

LAB*LAB	60.9	-5.74	-53.74
LAB*LABa	60.9	-5.74	-53.74
LAB*TCHa	50.0	54.06	263.89

**relative CIELAB lab\***

lab*lab	0.638	-0.105	-0.993
lab*tch	0.5	1.0	0.733
lab*nch	0.0	1.0	0.733

**relative Natural Colour (NC)**

lab*lrj	0.638	0.0	-0.999
lab*tce	0.5	1.0	0.75
lab*nce	0.0	1.0	g99b

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**relative CIELAB lab\***

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

**relative Natural Colour (NC)**

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

**relative Inform. Technology (IT)**

olvi3*	0.0	0.296	0.5	(1.0)
cmyn3*	1.0	0.704	0.5	(0.0)
olvi4*	0.5	0.796	1.0	0.5
cmyn4*	0.5	0.204	0.0	0.5

**standard and adapted CIELAB**

LAB*LAB	30.46	-2.86	-26.87
LAB*LABa	30.46	-2.86	-26.87
LAB*TCHa	25.01	27.03	263.9

**relative CIELAB lab\***

lab*lab	0.319	-0.052	-0.496
lab*tch	0.25	0.5	0.733
lab*nch	0.5	0.5	0.733

**relative Natural Colour (NC)**

lab*lrj	0.319	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r

QE000-7, 3 step scales for constant CIELAB hue 263/360 = 0.731 (left)

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

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

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