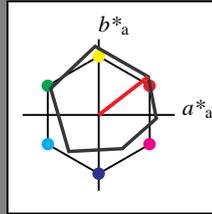


Input: Colorimetric Offset Reflective System ORS18

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

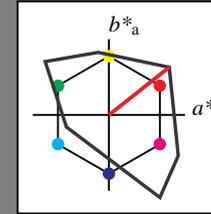
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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*	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

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*	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	0.0	(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

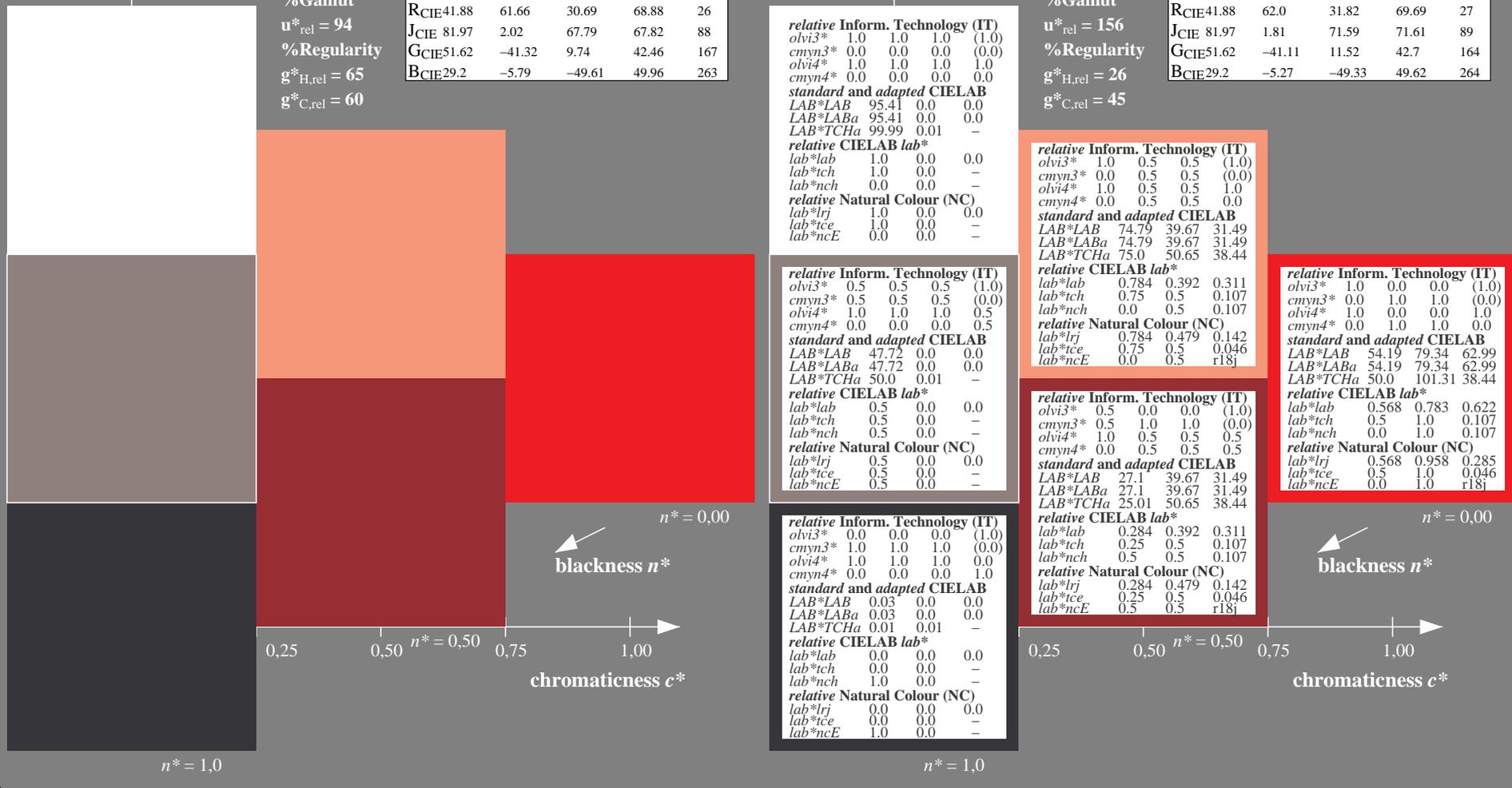
LAB*LAB	27.1	39.67	31.49
LAB*LABa	27.1	39.67	31.49
LAB*TCHa	25.01	50.65	38.44

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



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

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

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

input:  $cmY0^*$  setcmYcolor  
output: Startup (S) data dependend

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-QE00/10L/L00E00SP.PS/.PDF  
application for evaluation and measurement of printer or monitor systems  
BAM material: code=rh4ta  
/QE00/ Form: 1/10, Serie: 1/1, Page: 1 Page count: 1

Input: Colorimetric Offset Reflective System ORS18

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

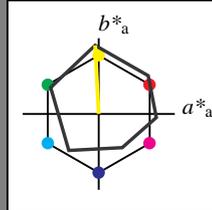
$lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 91 91 93

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data table with columns L\*, a\*, b\*, C\*, h\* and rows OMa, YMa, LMa, CMa, VMa, MMa, NMa, WMa, RCIE, JCIE, GCIE, BCIE.

%Gamut u\*rel = 94, %Regularity g\*H,rel = 65, g\*C,rel = 60

Output: Colorimetric Television Luminous System TLS00

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

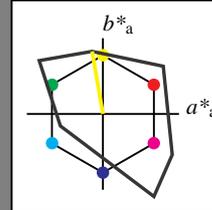
$lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 93 84 100

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



TLS00; adapted (a) CIELAB data table with columns L\*, a\*, b\*, C\*, h\* and rows OMa, YMa, LMa, CMa, VMa, MMa, NMa, WMa, RCIE, JCIE, GCIE, BCIE.

%Gamut u\*rel = 156, %Regularity g\*H,rel = 26, g\*C,rel = 45

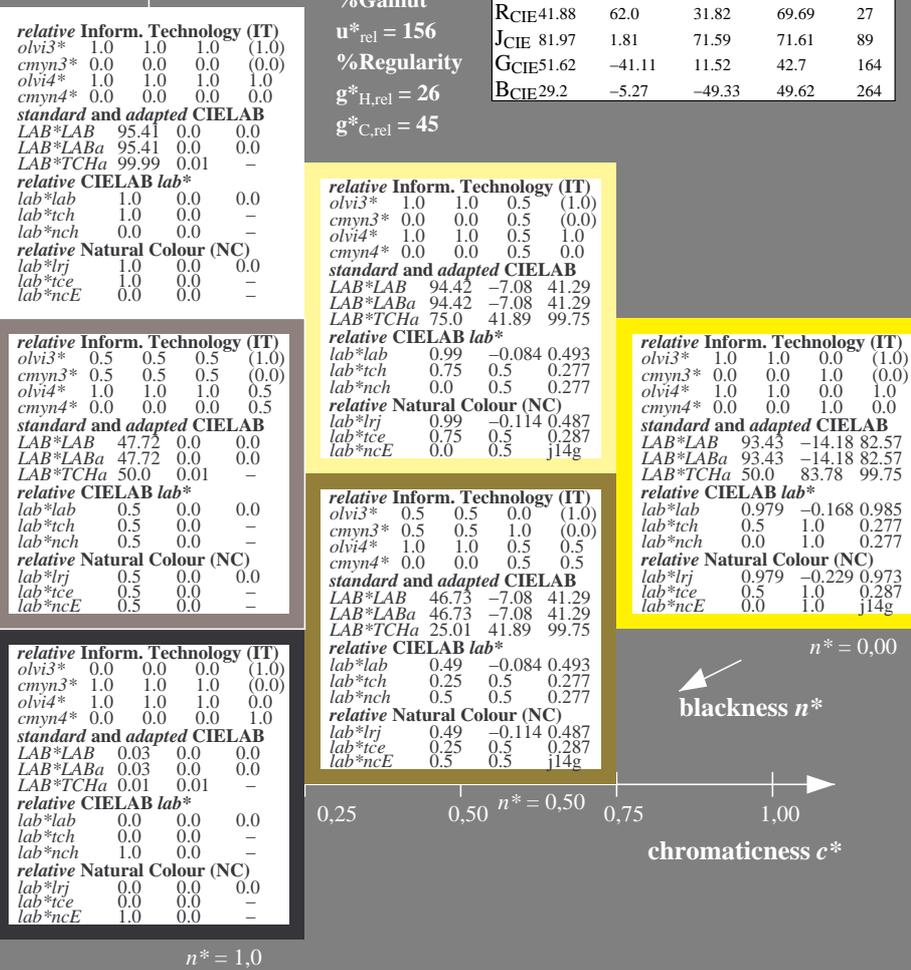
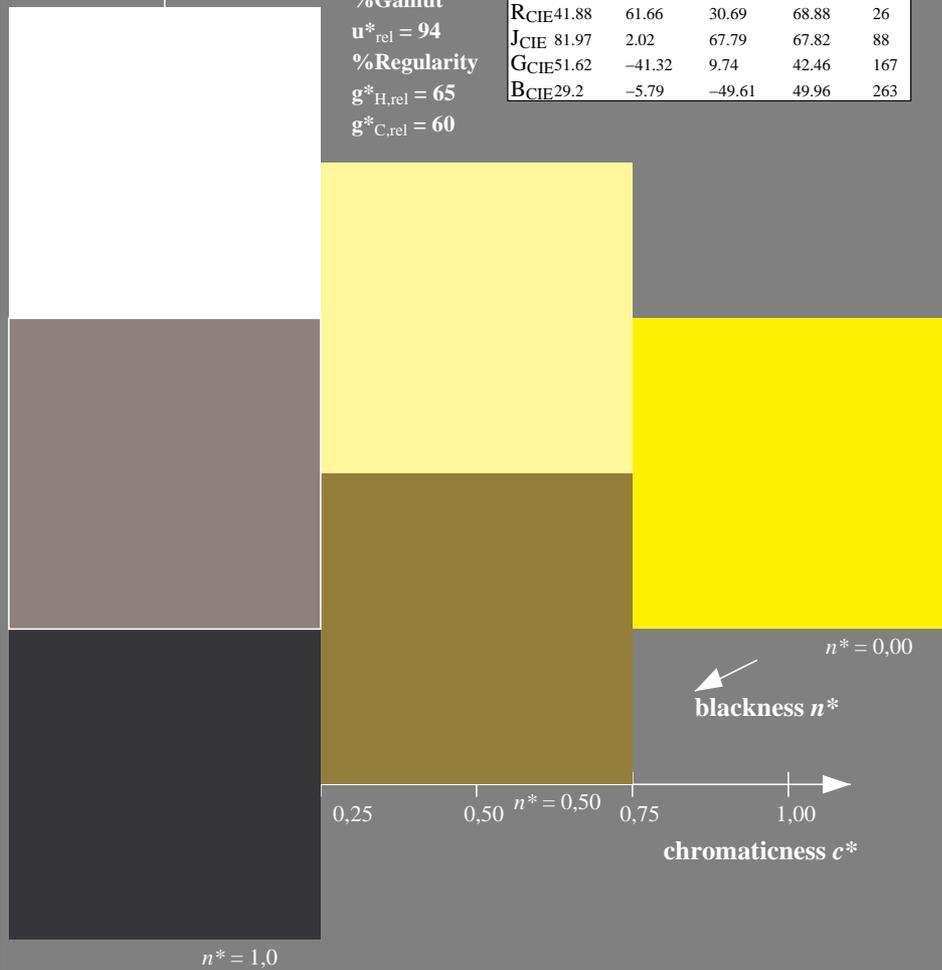
relative Inform. Technology (IT) olvi3\*, cmyn3\*, olvi4\*, cmyn4\* and standard and adapted CIELAB LAB\*LAB, LAB\*LABa, LAB\*TCHa.

relative Inform. Technology (IT) olvi3\*, cmyn3\*, olvi4\*, cmyn4\* and standard and adapted CIELAB LAB\*LAB, LAB\*LABa, LAB\*TCHa.

relative Inform. Technology (IT) olvi3\*, cmyn3\*, olvi4\*, cmyn4\* and standard and adapted CIELAB LAB\*LAB, LAB\*LABa, LAB\*TCHa.

relative Inform. Technology (IT) olvi3\*, cmyn3\*, olvi4\*, cmyn4\* and standard and adapted CIELAB LAB\*LAB, LAB\*LABa, LAB\*TCHa.

relative Inform. Technology (IT) olvi3\*, cmyn3\*, olvi4\*, cmyn4\* and standard and adapted CIELAB LAB\*LAB, LAB\*LABa, LAB\*TCHa.



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)

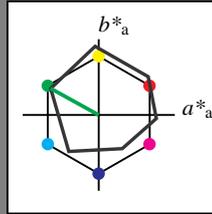
BAM-test chart QE00; Colorimetric systems ORS18 & ORS18 D50: 3 step colour scales and coordinate data for 10 hues

input: cmy0\* setcmykcolor output: Startup (S) data dependend

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

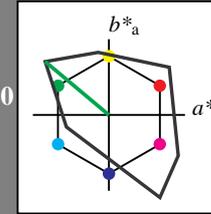
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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*	0.0	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

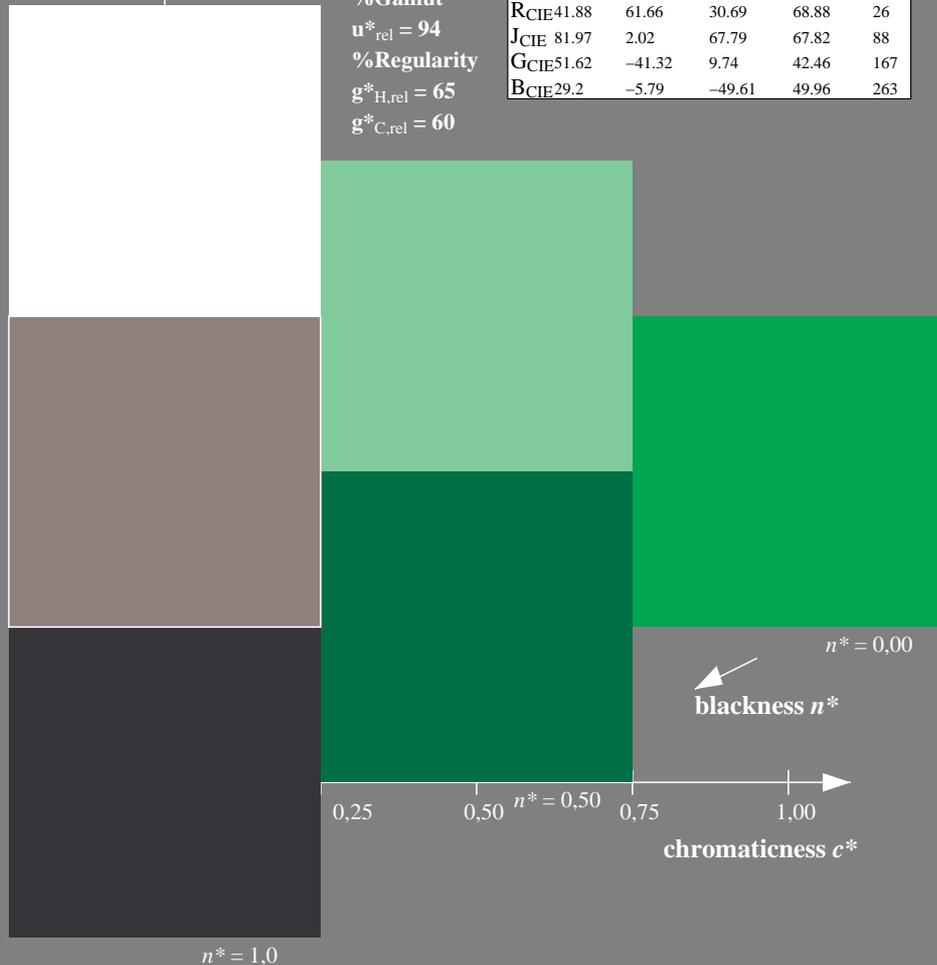
LAB*LAB	82.81	-83.71	70.4
LAB*LABa	82.81	-83.71	70.4
LAB*TCHa	50.0	109.39	139.94

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



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

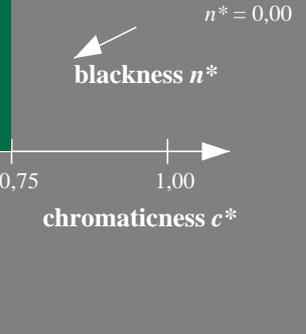
LAB*LAB	41.42	-41.85	35.2
LAB*LABa	41.42	-41.85	35.2
LAB*TCHa	25.01	54.69	139.94

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



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 & ORS18  
D50: 3 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
output: Startup (S) data dependend

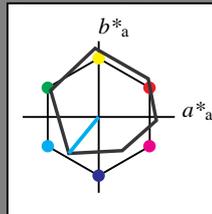
See for similar files: <http://www.ps.bam.de/QE00/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0.0?

BAM registration: 20060101-QE00/10L/L00E02SP.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**

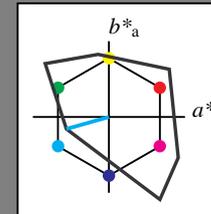
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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	0.0	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

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

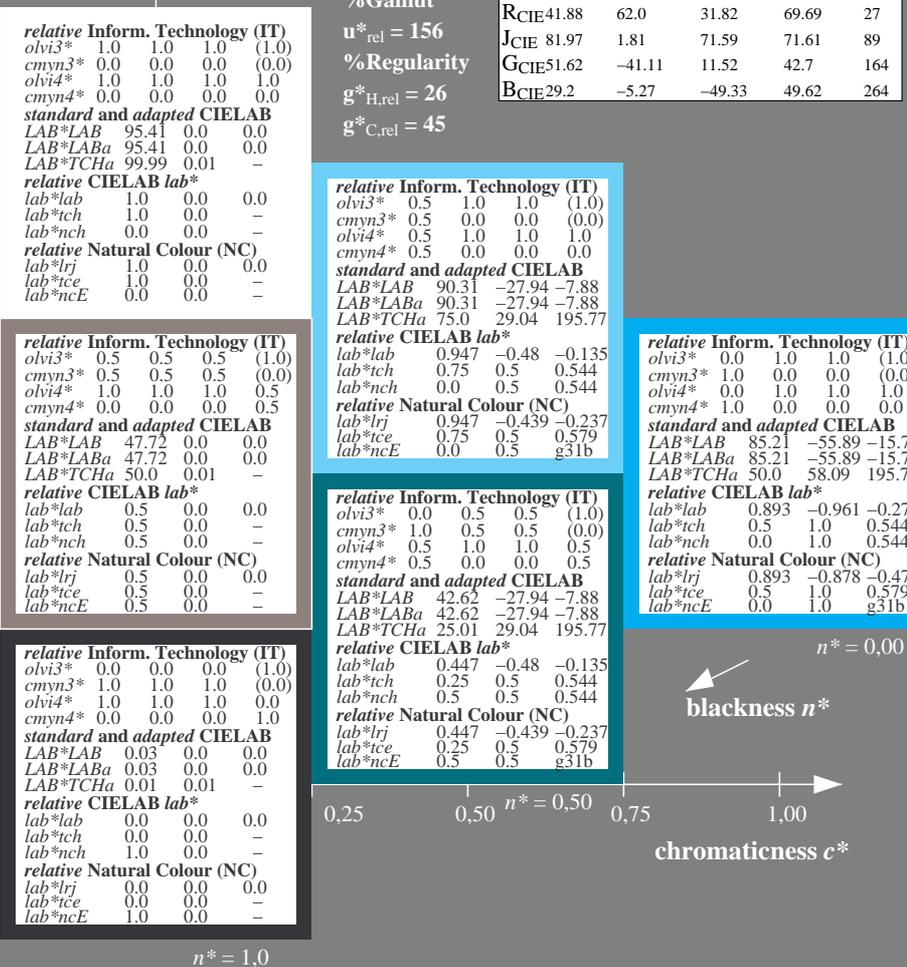
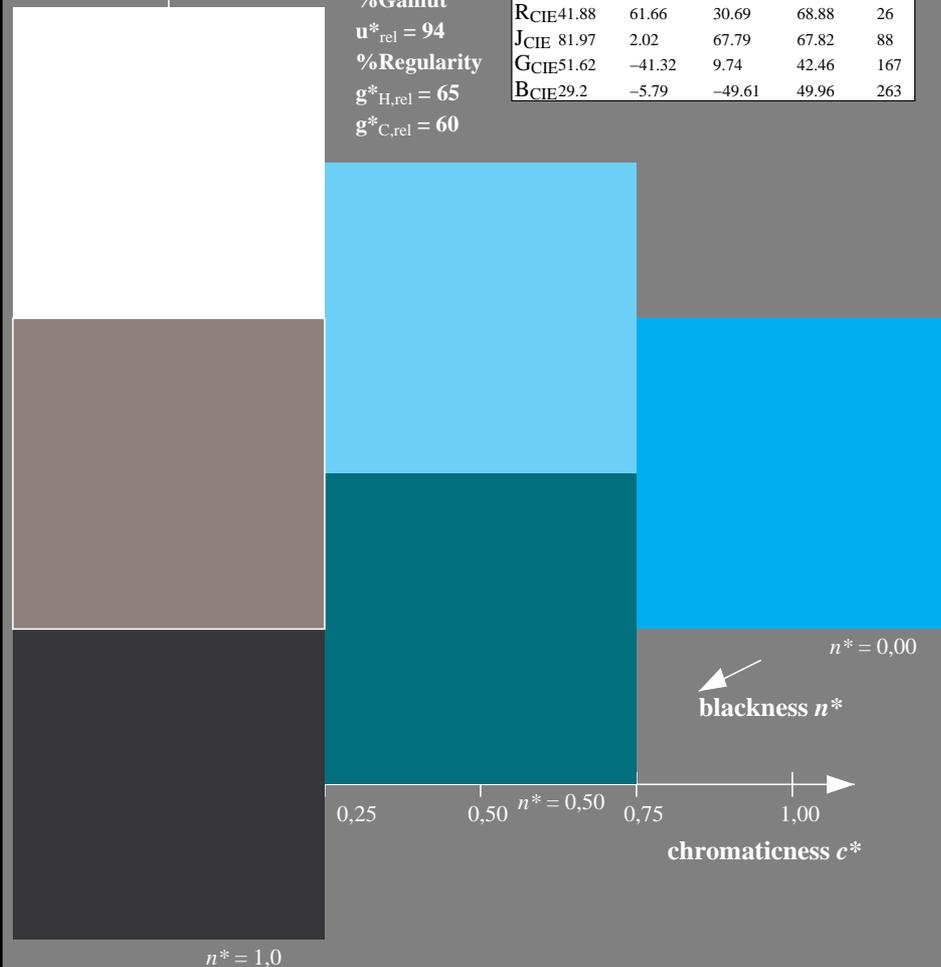
LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**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 231/360 = 0.641 (left)

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

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

input:  $cmY0^*$  setcmYcolor  
 output: Startup (S) data dependend

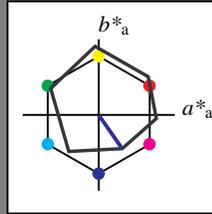
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0?

BAM registration: 20060101-QE00/10L/L00E03SP.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  $lab^*nch$

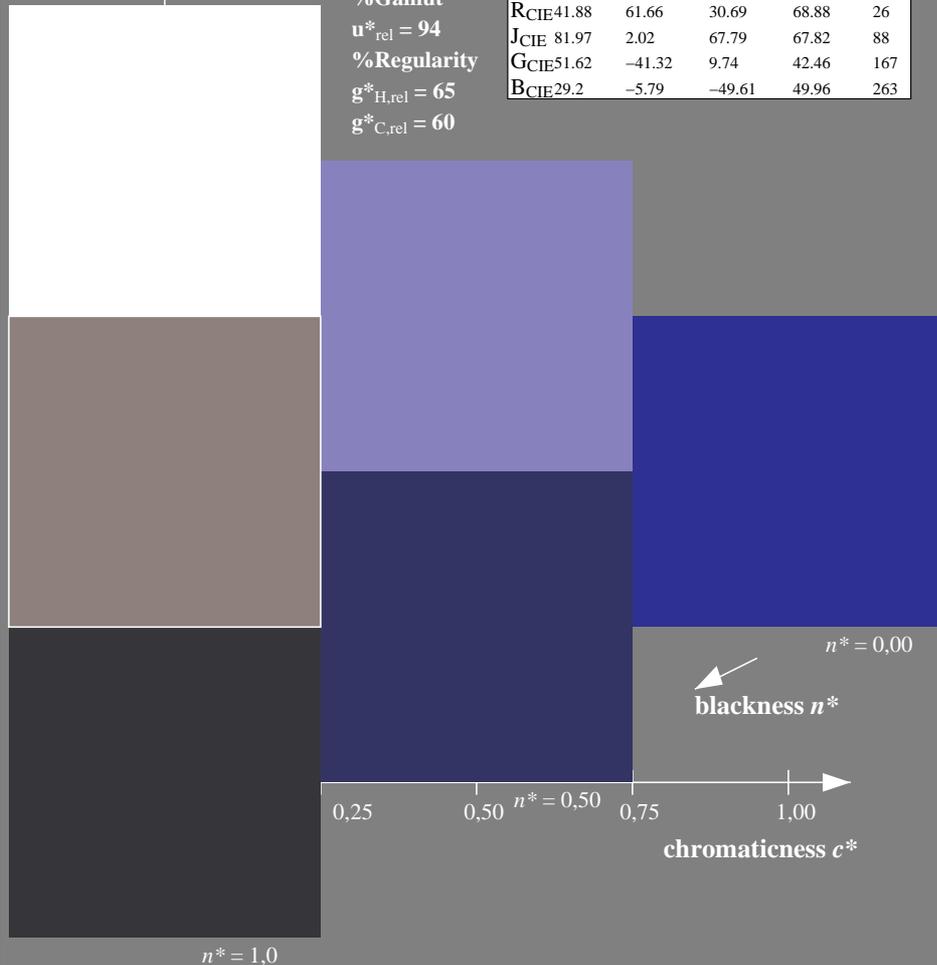
D50: hue V  
 LCH\*Ma: 26 54 305  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness  $t^*$



**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

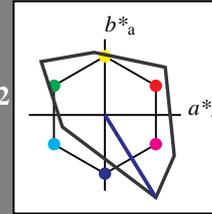
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$



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

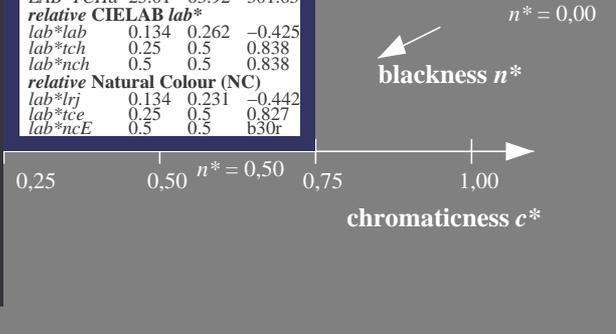
**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
**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)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$   
**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)**  
 $olvi3^* = 0.0 \ 0.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 1.0 \ 1.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 0.0 \ 0.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 1.0 \ 1.0 \ 0.0 \ 0.0$   
**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)**  
 $lab^*lrj = 0.268 \ 0.462 \ -0.885$   
 $lab^*tce = 0.5 \ 1.0 \ 0.827$   
 $lab^*nce = 0.0 \ 1.0 \ b30r$



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)

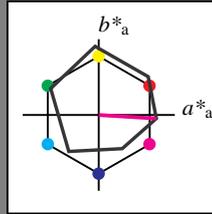
BAM-test chart QE00; Colorimetric systems ORS18 & ORS18  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
 output: Startup (S) data dependend

**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**

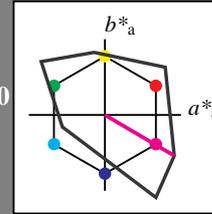
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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*	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**

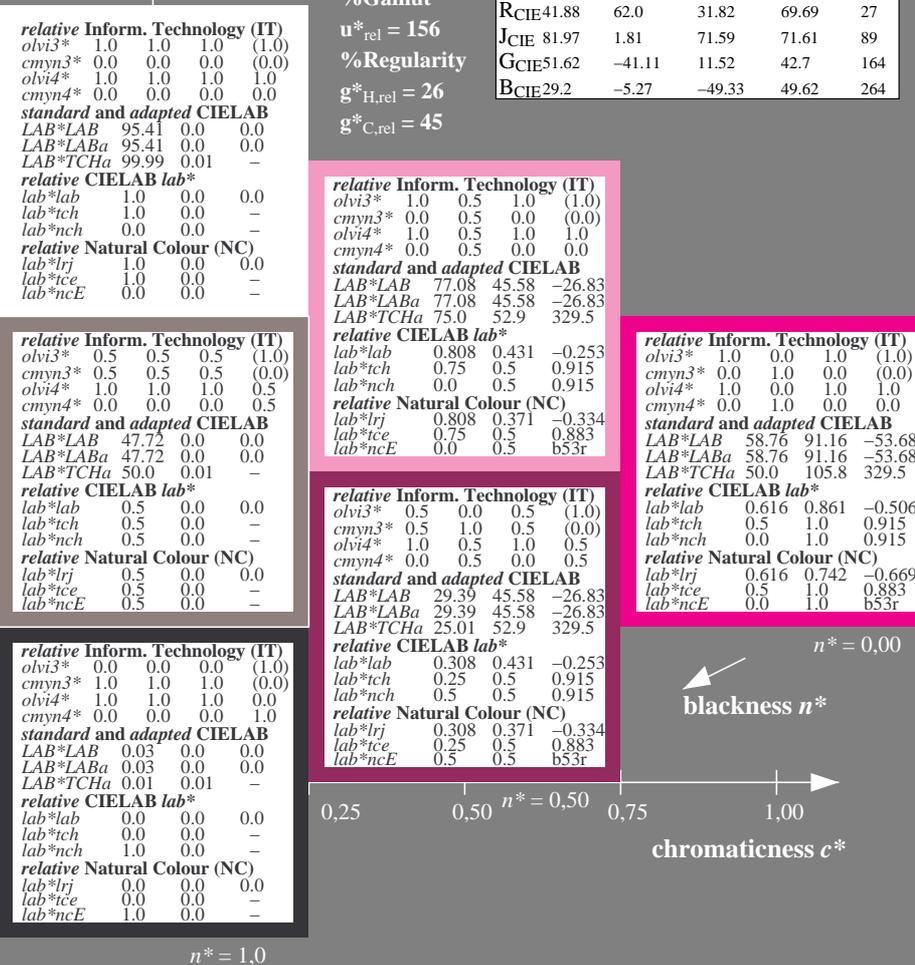
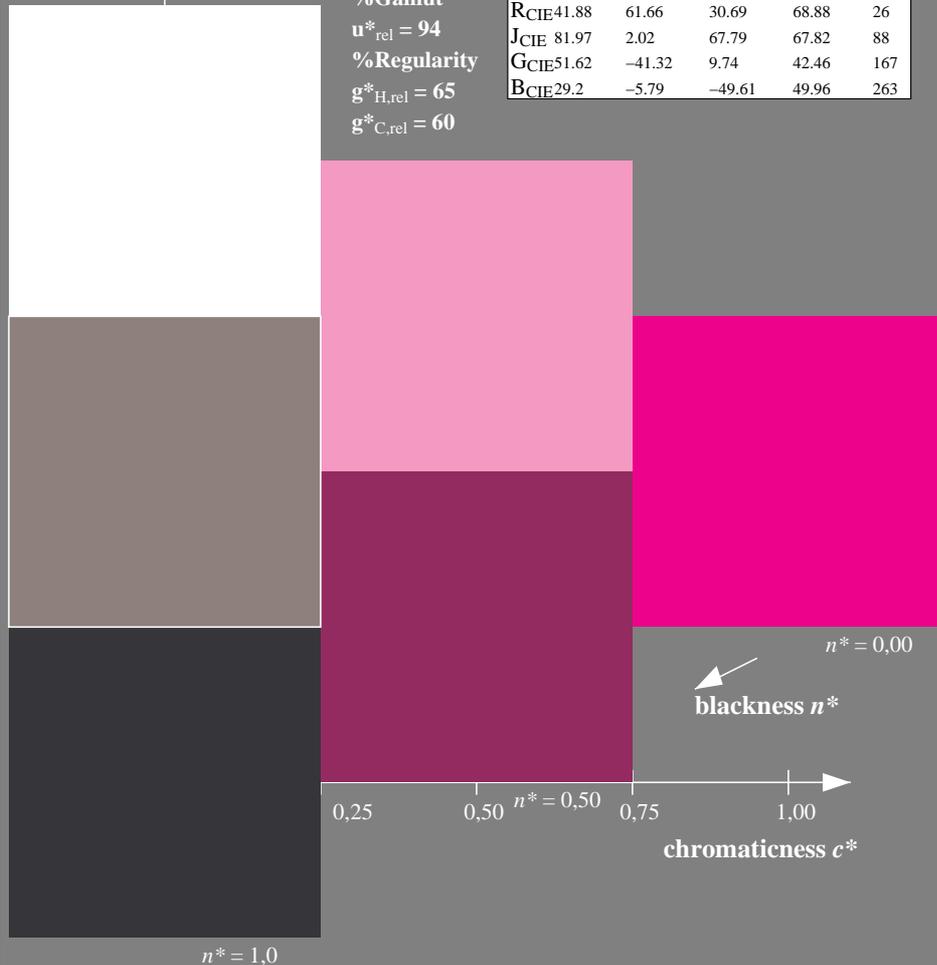
LAB*LAB	29.39	45.58	-26.83
LAB*LABa	29.39	45.58	-26.83
LAB*TCHa	25.01	52.9	329.5

**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



QE00-7, 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 & ORS18  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
 output: Startup (S) data dependend

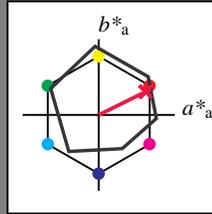
See for similar files: <http://www.ps.bam.de/QE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0.0?

BAM registration: 20060101-QE00/10L/L00E05SP.PS/.PDF  
 application for evaluation and measurement of printer or monitor systems  
 BAM material: code=rh4ta  
 /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

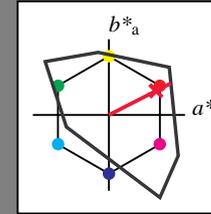
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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	0.97r

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

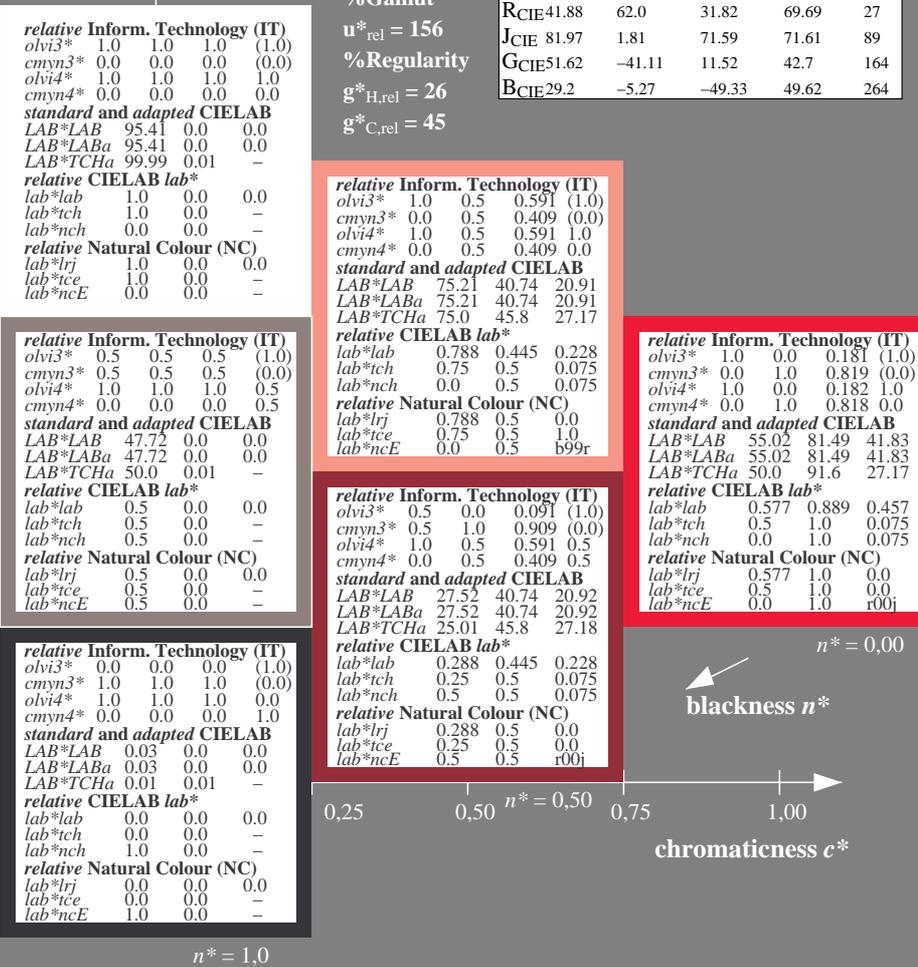
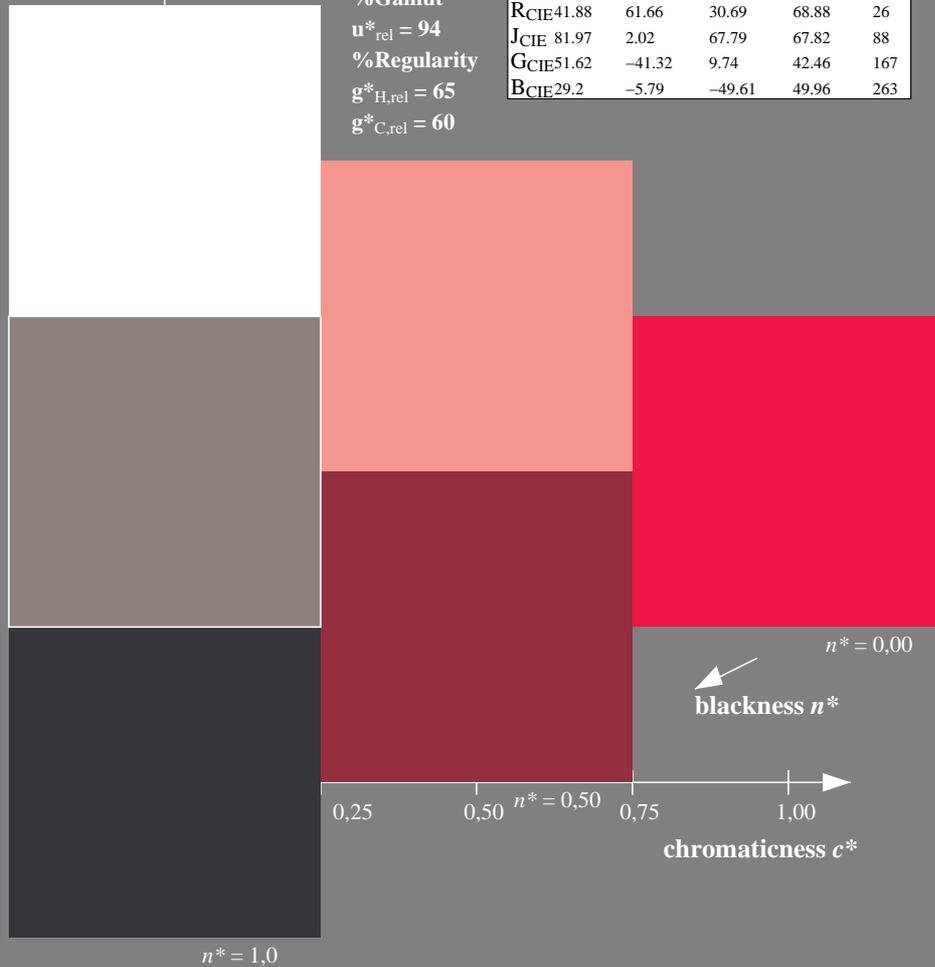
LAB*LAB	55.02	81.49	41.83
LAB*LABa	55.02	81.49	41.83
LAB*TCHa	50.0	91.6	27.17

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 & ORS18  
D50: 3 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
output: Startup (S) data dependend

See for similar files: <http://www.ps.bam.de/QE00/>  
Technical information: <http://www.ps.bam.de> Version 2.1, io=0.0?

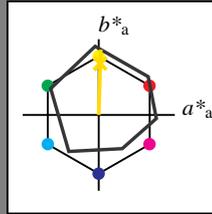
BAM registration: 20060101-QE00/10L/L00E06SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/QE00/ Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

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

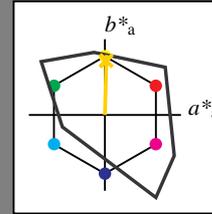
%Gamut  
 $u^*_{rel} = 94$   
%Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$

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*	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*	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

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	0.413	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 CIELAB lab\*

lab*lab	0.454	0.013	0.5
lab*tch	0.25	0.5	0.246
lab*nch	0.5	0.5	0.246

relative Natural Colour (NC)

lab*lrj	0.454	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	j99j

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

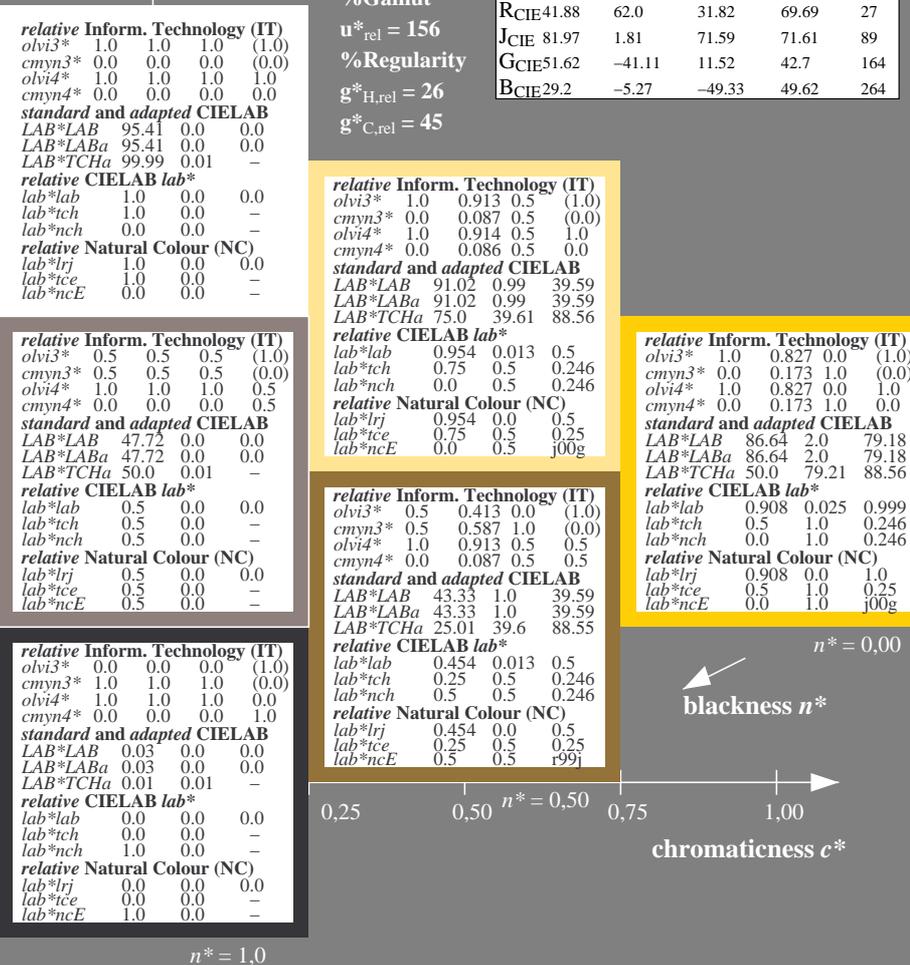
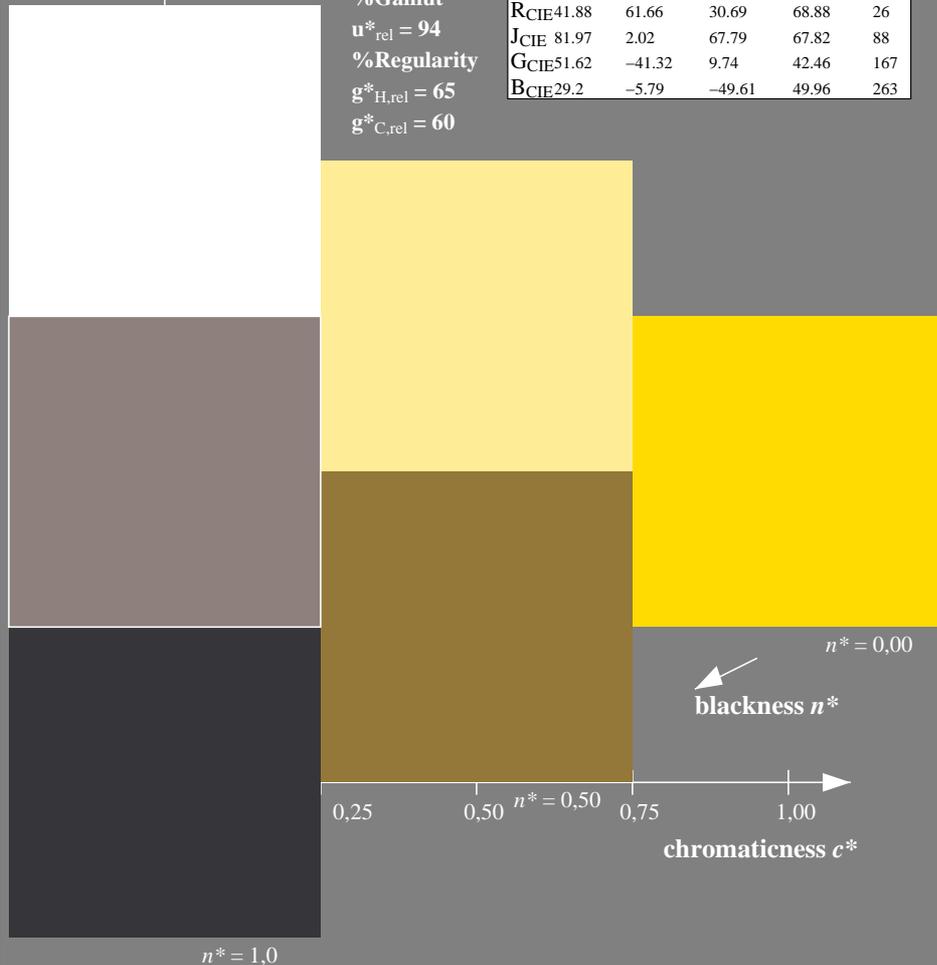
LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

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 88/360 = 0.245 (left)

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

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

input:  $cmY0^*$  setcmYcolor  
output: Startup (S) data dependend

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

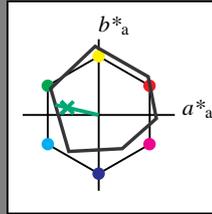
BAM registration: 20060101-QE00/10L/L00E07SP.PS/.PDF  
application for evaluation and measurement of printer or monitor systems  
BAM material: code=rh4ta  
/QE00/ Form: 8/10, Serie: 1/1, Page: 8  
Page count: 8

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

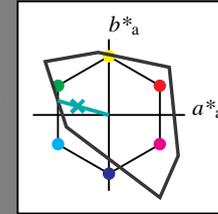
%Gamut  
 $u^*_{rel} = 94$   
%Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$

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	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	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

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	0.299	(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	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	0.299	(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

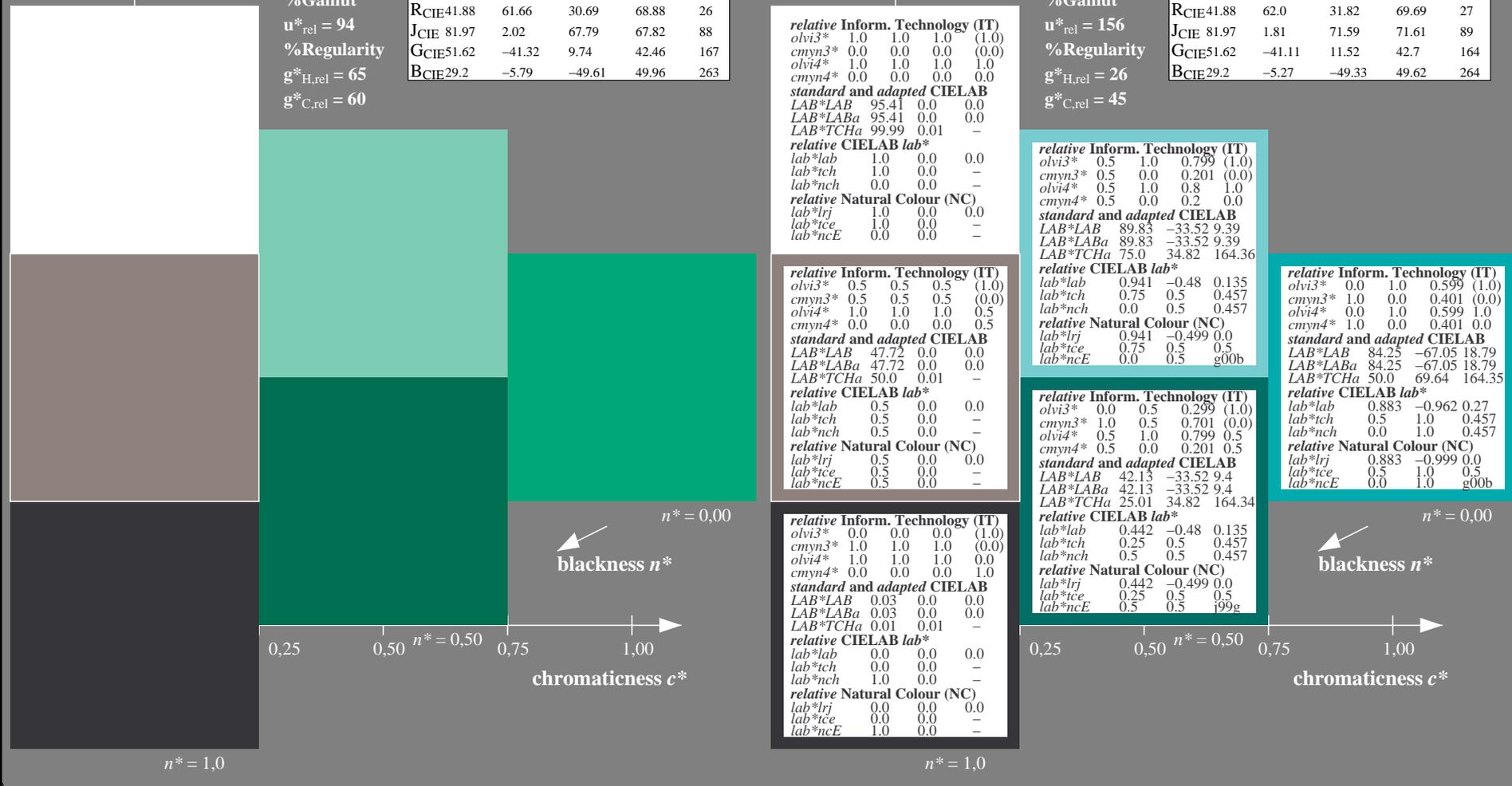
LAB*LAB	42.13	-33.52	9.4
LAB*LABa	42.13	-33.52	9.4
LAB*TCHa	25.01	34.82	164.34

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



QE00-7, 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 & ORS18  
D50: 3 step colour scales and coordinate data for 10 hues

input:  $cmY0^*$  setcmYcolor  
output: Startup (S) data dependend

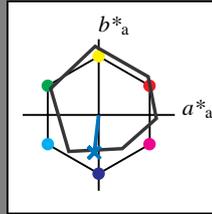
See for similar files: <http://www.ps.bam.de/QE00/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0.0?

BAM registration: 20060101-QE00/10L/L00E08SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/QE00/ Form 9/10, Serie: 1/1, Page: 9 Page count: 9

**Input: Colorimetric Offset Reflective System ORS18**

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

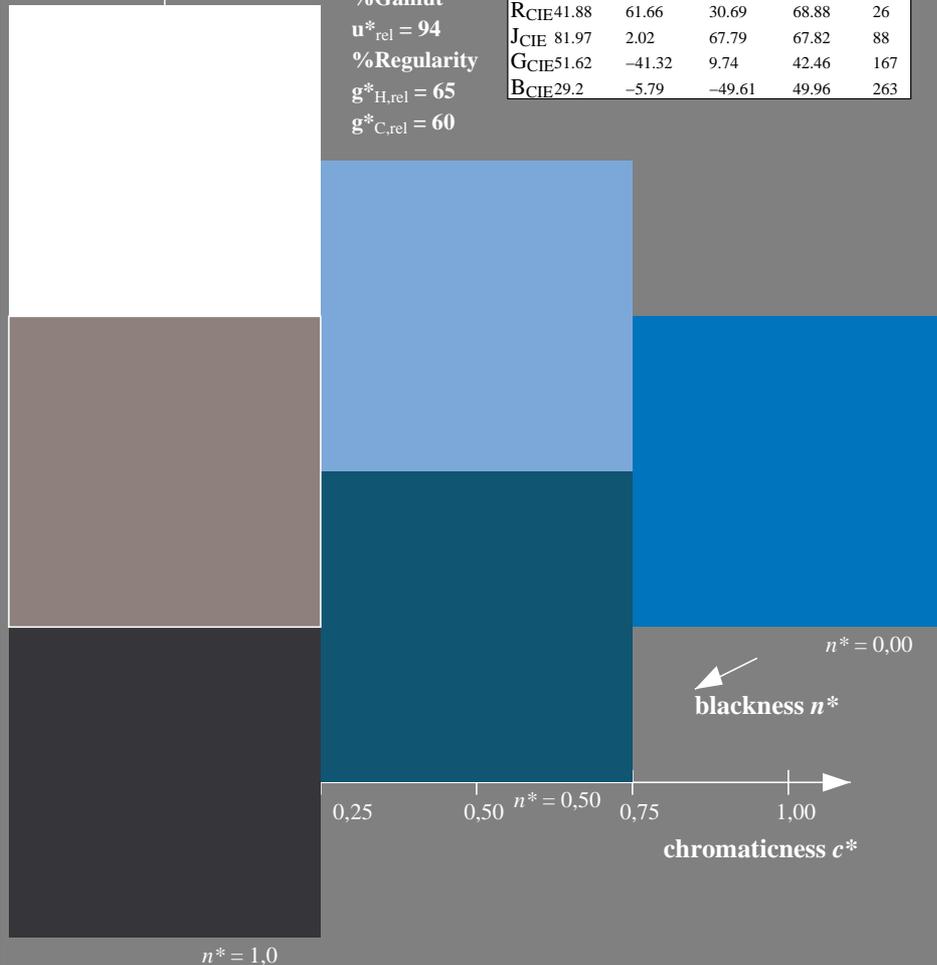
D50: hue B  
 LCH\*Ma: 42 47 263  
 olv\*Ma: 0.0 0.52 1.0  
 triangle lightness  $t^*$



**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

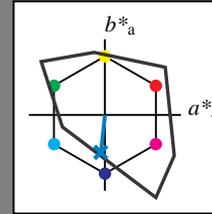
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$



**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*	0.5	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	0.296	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

**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**

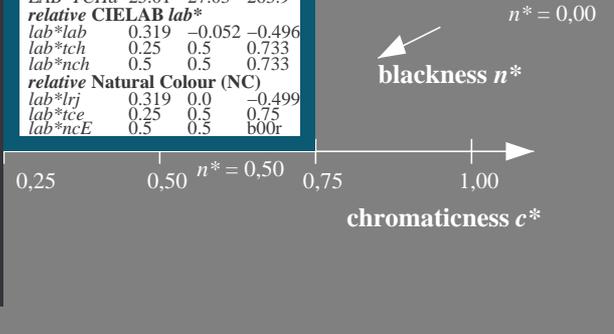
LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

**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 263/360 = 0.731 (left)

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

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

input:  $cmY0^*$  setcmYcolor  
 output: Startup (S) data dependend