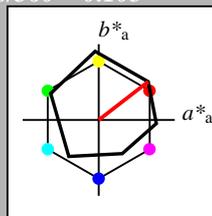


**Input: Colorimetric Offset Reflective System ORS18**

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**

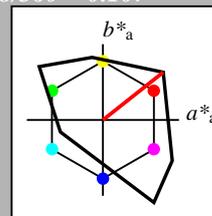
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$   
**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)**  
 $olvi3^* = 1.0 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.5 \ 0.5 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.5 \ 0.5 \ 0.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 74.79 \ 39.67 \ 31.49$   
 $LAB^*LABa = 74.79 \ 39.67 \ 31.49$   
 $LAB^*TCHa = 75.0 \ 50.65 \ 38.44$

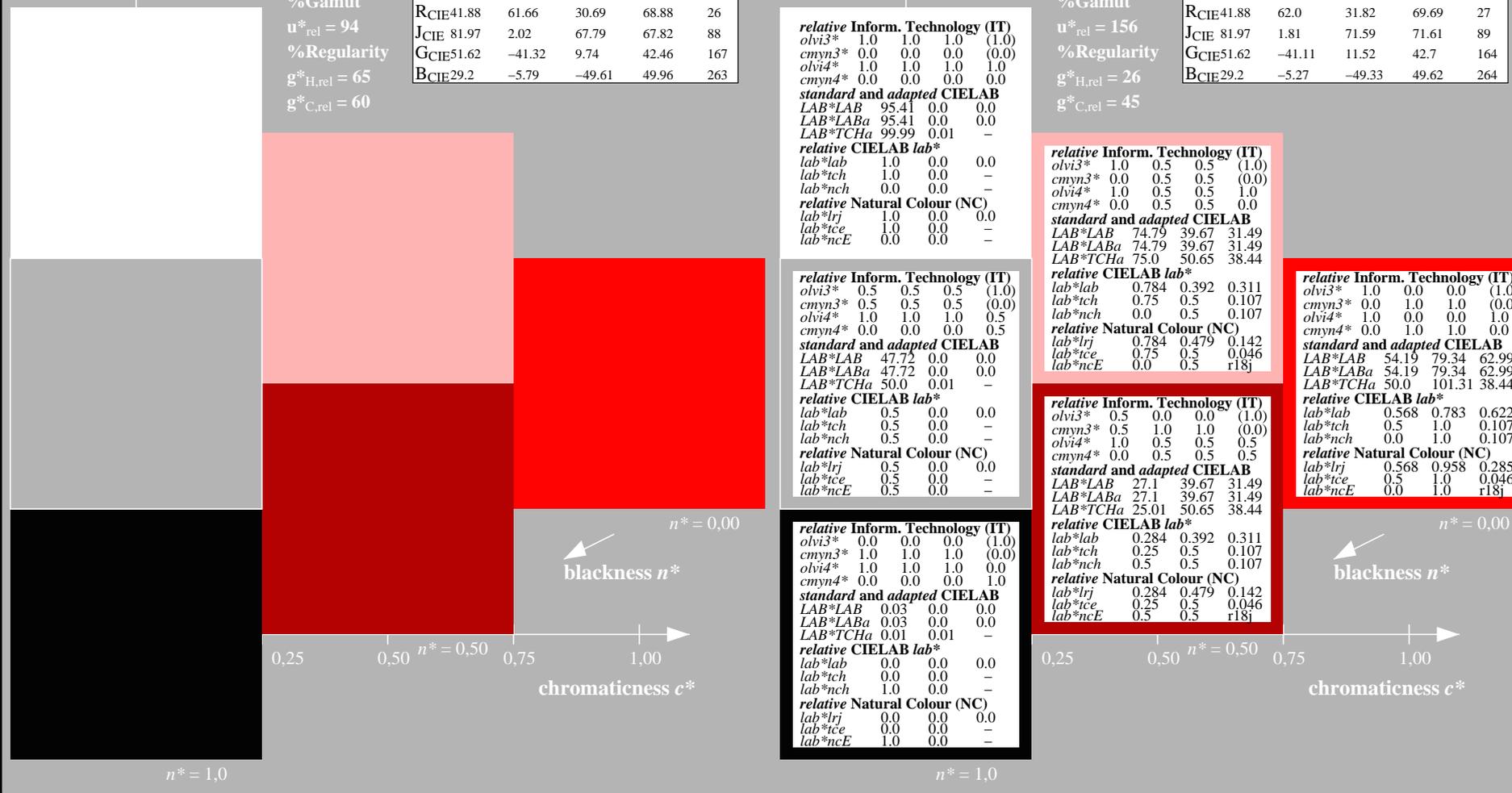
**relative CIELAB lab\***  
 $lab^*lab = 0.784 \ 0.392 \ 0.311$   
 $lab^*tch = 0.75 \ 0.5 \ 0.107$   
 $lab^*nch = 0.0 \ 0.5 \ 0.107$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.784 \ 0.479 \ 0.142$   
 $lab^*tce = 0.75 \ 0.5 \ 0.046$   
 $lab^*nce = 0.0 \ 0.5 \ r18j$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.0 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.5 \ 1.0 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.5 \ 0.5 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.5 \ 0.5 \ 0.5$   
**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)**  
 $lab^*lrj = 0.568 \ 0.958 \ 0.285$   
 $lab^*tce = 0.5 \ 1.0 \ 0.046$   
 $lab^*nce = 0.0 \ 1.0 \ r18j$



PE00-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

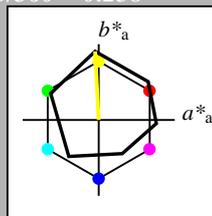
BAM-test chart PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* \ setrgbcolor$   
 output:  $olv^* \ setrgbcolor / w^* \ setgray$

**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**

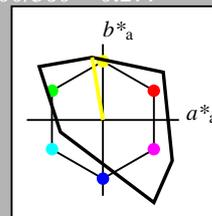
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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*	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	0.5	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

**relative Inform. Technology (IT)**

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

**standard and adapted CIELAB**

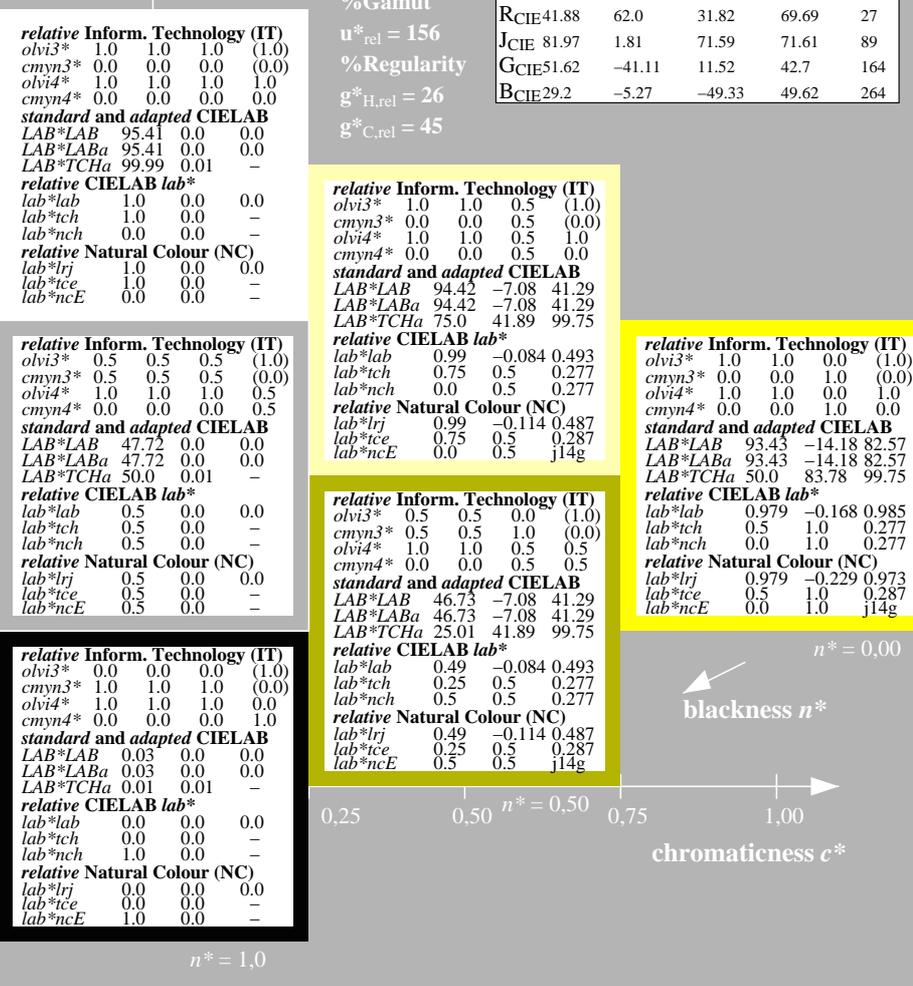
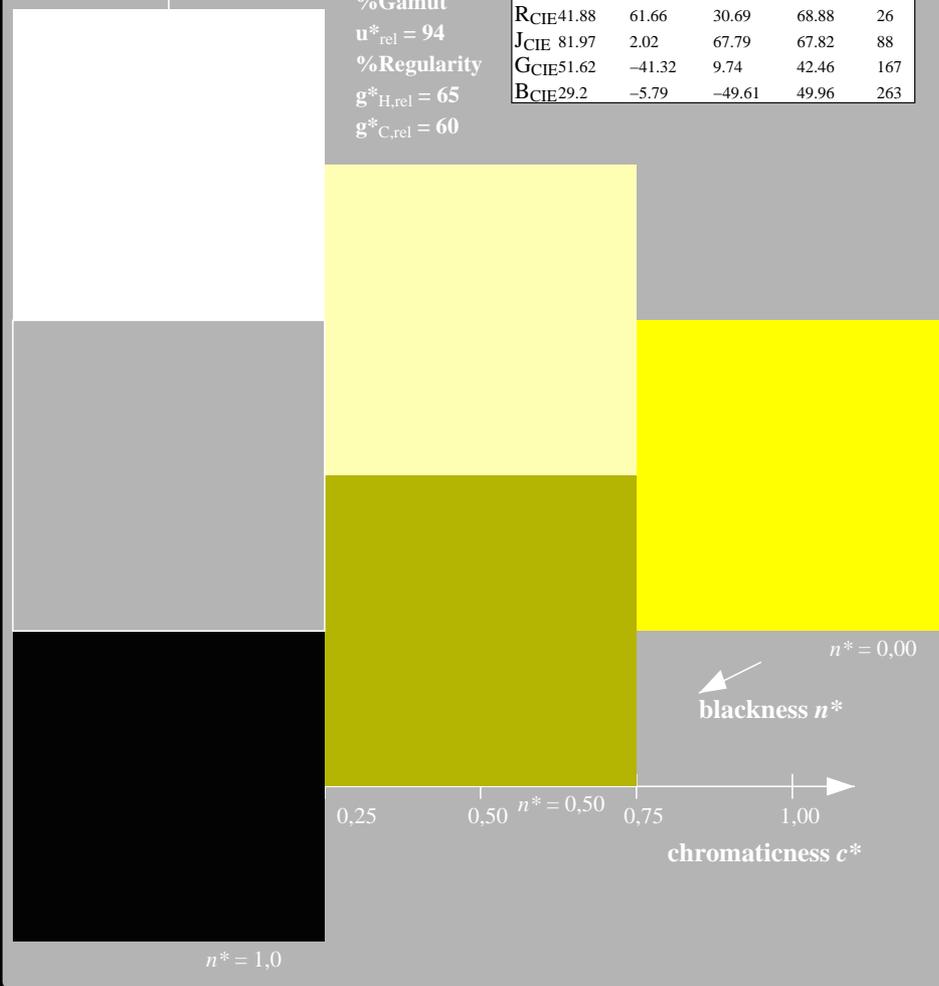
LAB*LAB	93.43	-14.18	82.57
LAB*LABa	93.43	-14.18	82.57
LAB*TCHa	50.0	83.78	99.75

**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



PE00-7, 3 step scales for constant CIELAB hue 93/360 = 0.258 (left)

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

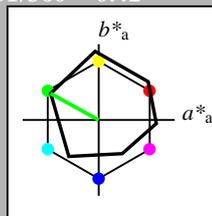
BAM-test chart PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input: `olv* setrgbcolor`  
 output: `olv* setrgbcolor / w* setgray`

**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**

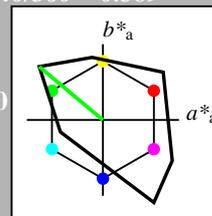
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	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)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

**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)**  
 $olvi3^* = 0.5 \ 1.0 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.0 \ 0.5 \ (0.0)$   
 $olvi4^* = 0.5 \ 1.0 \ 0.5 \ 1.0$   
 $cmyn4^* = 0.5 \ 0.0 \ 0.5 \ 0.0$

**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)**  
 $lab^*lrj = 0.934 \ -0.436 \ 0.242$   
 $lab^*tce = 0.75 \ 0.5 \ 0.419$   
 $lab^*nce = 0.0 \ 0.5 \ j67g$

**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\***  
 $lab^*lab = 0.434 \ -0.382 \ 0.322$   
 $lab^*tch = 0.25 \ 0.5 \ 0.389$   
 $lab^*nch = 0.5 \ 0.5 \ 0.389$

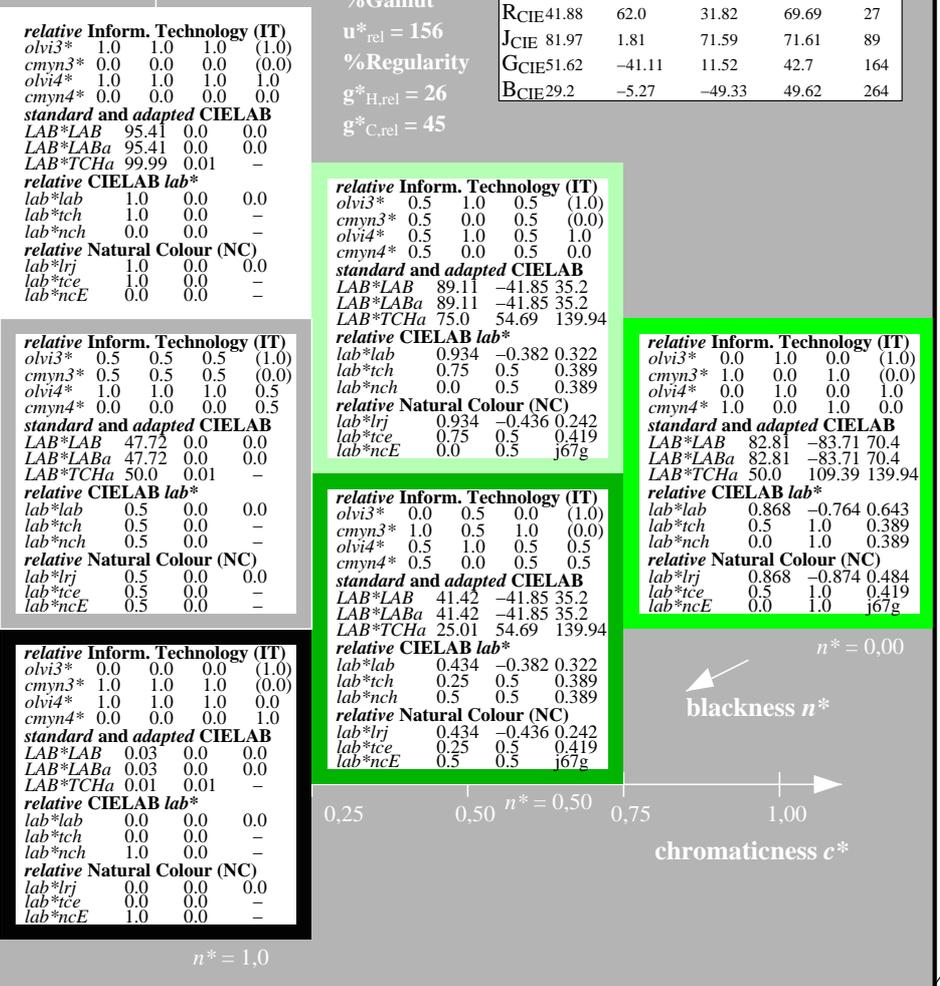
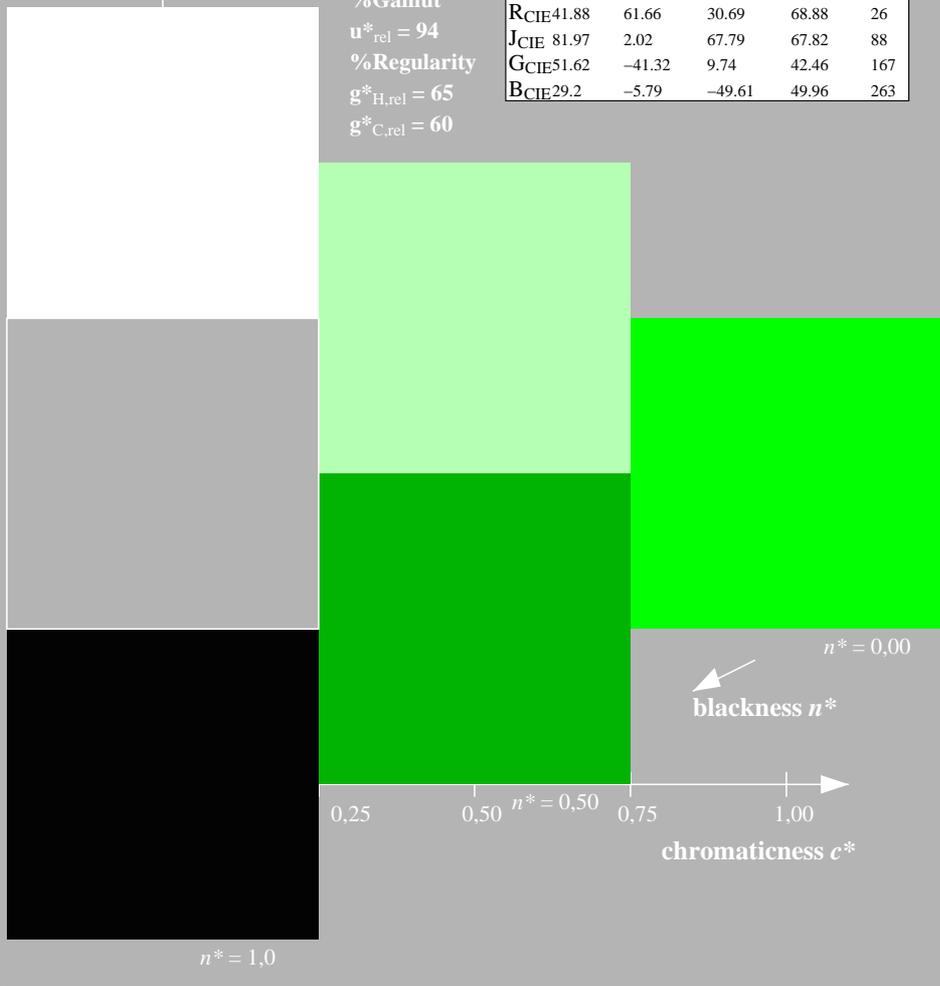
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.434 \ -0.436 \ 0.242$   
 $lab^*tce = 0.25 \ 0.5 \ 0.419$   
 $lab^*nce = 0.5 \ 0.5 \ j67g$

**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)**  
 $lab^*lrj = 0.868 \ -0.874 \ 0.484$   
 $lab^*tce = 0.5 \ 1.0 \ 0.419$   
 $lab^*nce = 0.0 \ 1.0 \ j67g$



PE00-7, 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 PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* \ setrgbcolor$   
 output:  $olv^* \ setrgbcolor / w^* \ setgray$

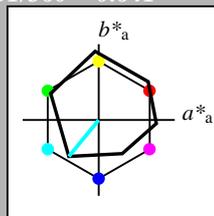
See for similar files: <http://www.ps.bam.de/PE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=1,1, CIELAB

BAM registration: 20060101-PE00/10Q/Q00E02FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /PE00 Form: 3/0, 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  $lab^*nch$

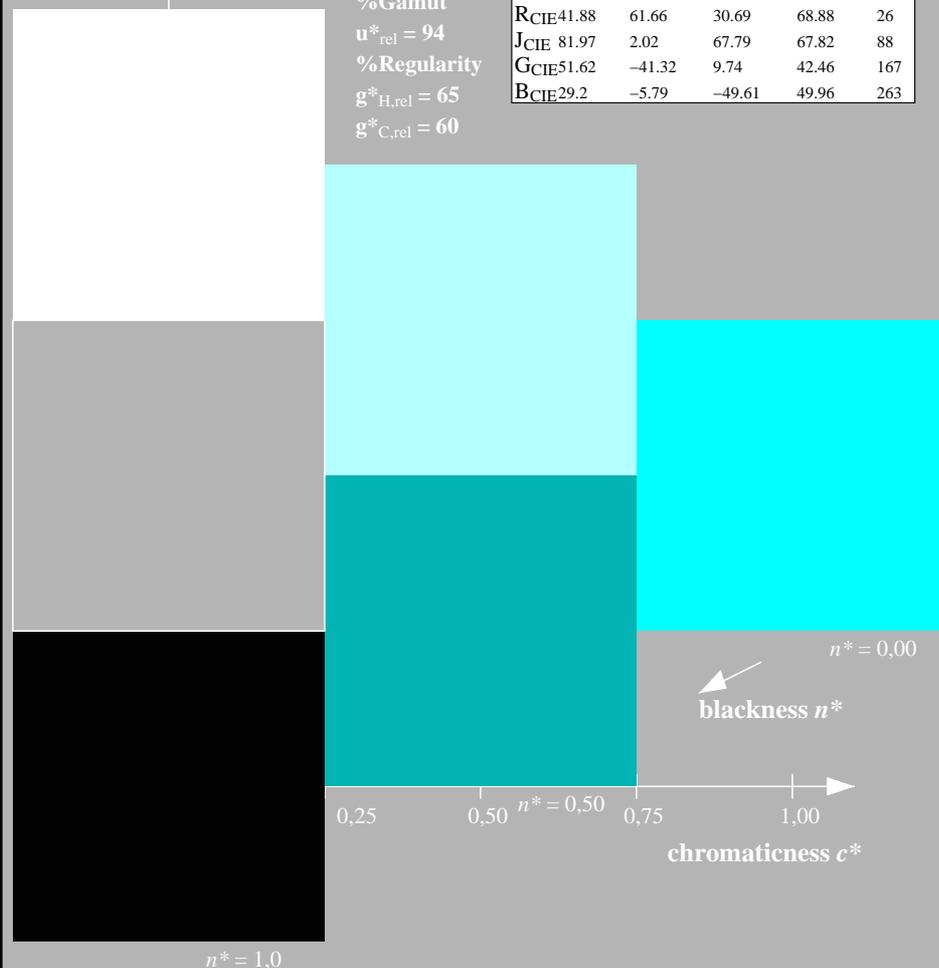
D50: hue C  
 LCH\*Ma: 57 62 231  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness  $t^*$



**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

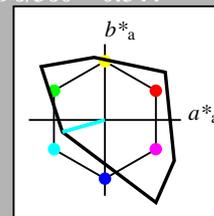
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$



**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*	0.5	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	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**

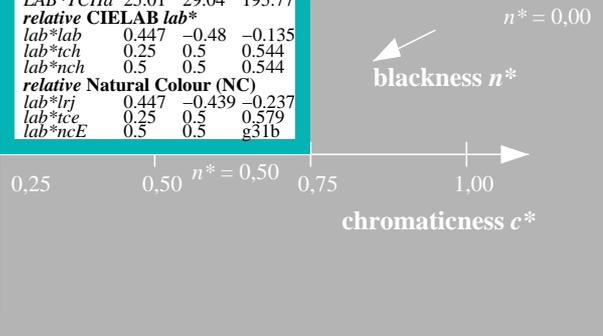
LAB*LAB	85.21	-55.89	-15.78
LAB*LABa	85.21	-55.89	-15.78
LAB*TCHa	50.0	58.09	195.77

**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



PE00-7, 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 PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$

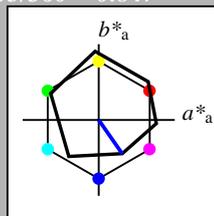
See for similar files: <http://www.ps.bam.de/PE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=1,1, CIELAB

BAM registration: 20060101-PE00/10Q/Q00E03FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /PE00 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  $lab^*nch$

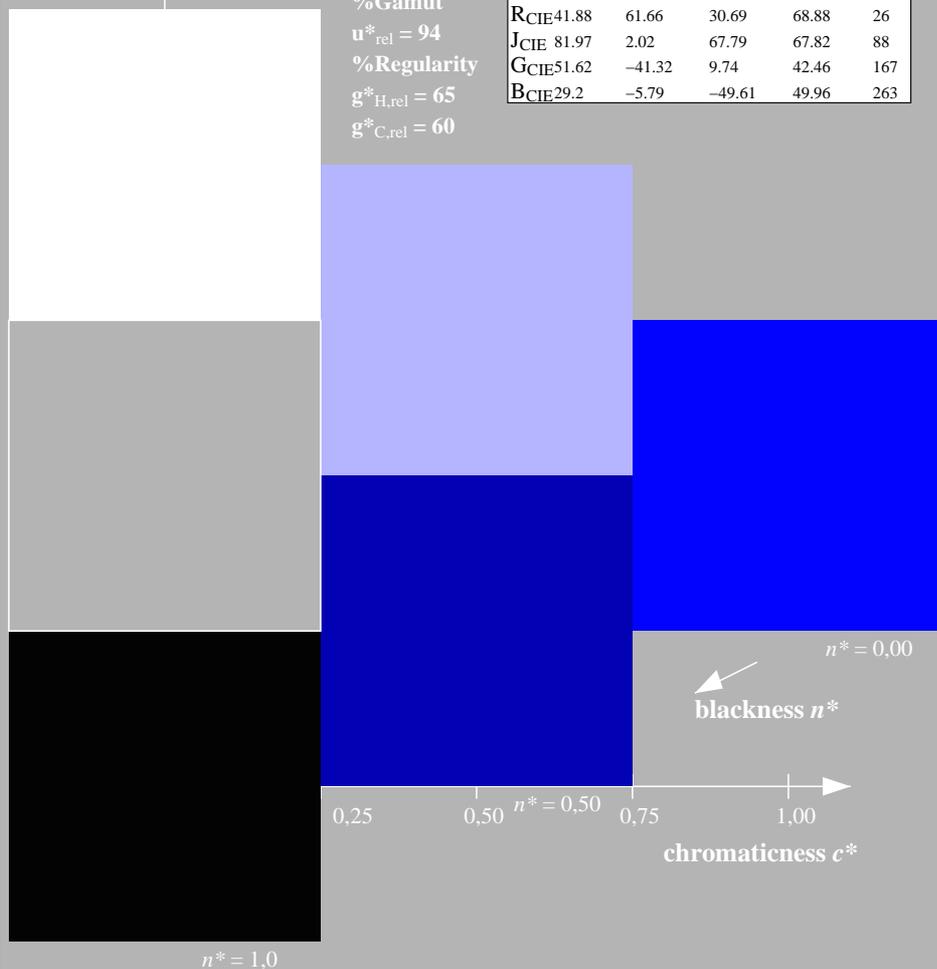
D50: hue V  
 LCH\*Ma: 26 54 305  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness  $t^*$



**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

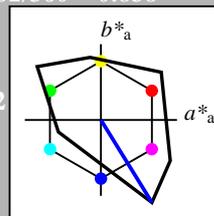
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$



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

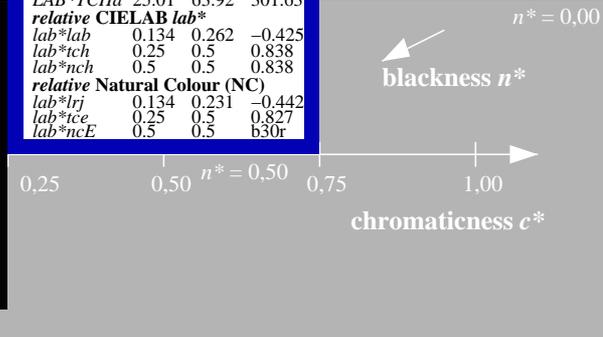
**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
**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**  
 $LAB^*LAB = 25.61 \ 67.04 \ -108.85$   
 $LAB^*LABa = 25.61 \ 67.04 \ -108.85$   
 $LAB^*TCHa = 50.0 \ 127.84 \ 301.63$   
**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)**  
 $lab^*lrj = 0.268 \ 0.462 \ -0.885$   
 $lab^*tce = 0.5 \ 1.0 \ 0.827$   
 $lab^*nce = 0.0 \ 1.0 \ b30r$



PE00-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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

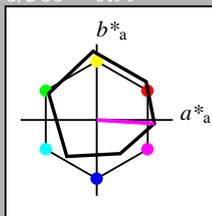
BAM-test chart PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* \ setrgbcolor$   
 output:  $olv^* \ setrgbcolor / w^* \ setgray$

**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**

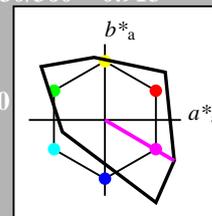
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88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

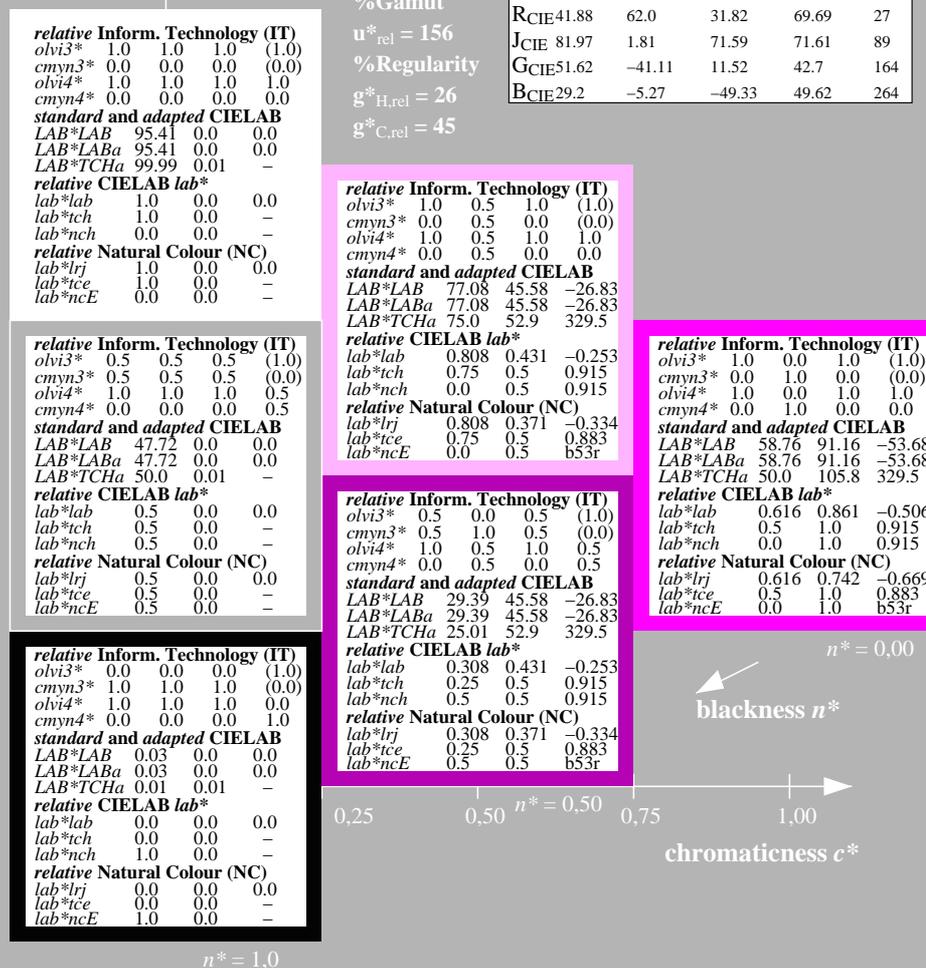
LAB*LAB	58.76	91.16	-53.68
LAB*LABa	58.76	91.16	-53.68
LAB*TCHa	50.0	105.8	329.5

**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



PE00-7, 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 PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$

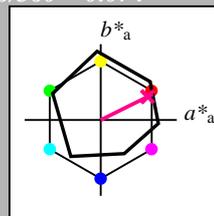
See for similar files: <http://www.ps.bam.de/PE00/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB

BAM registration: 20060101-PE00/10Q/Q00E05FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /PE00 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**

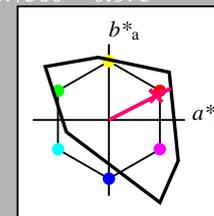
	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88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

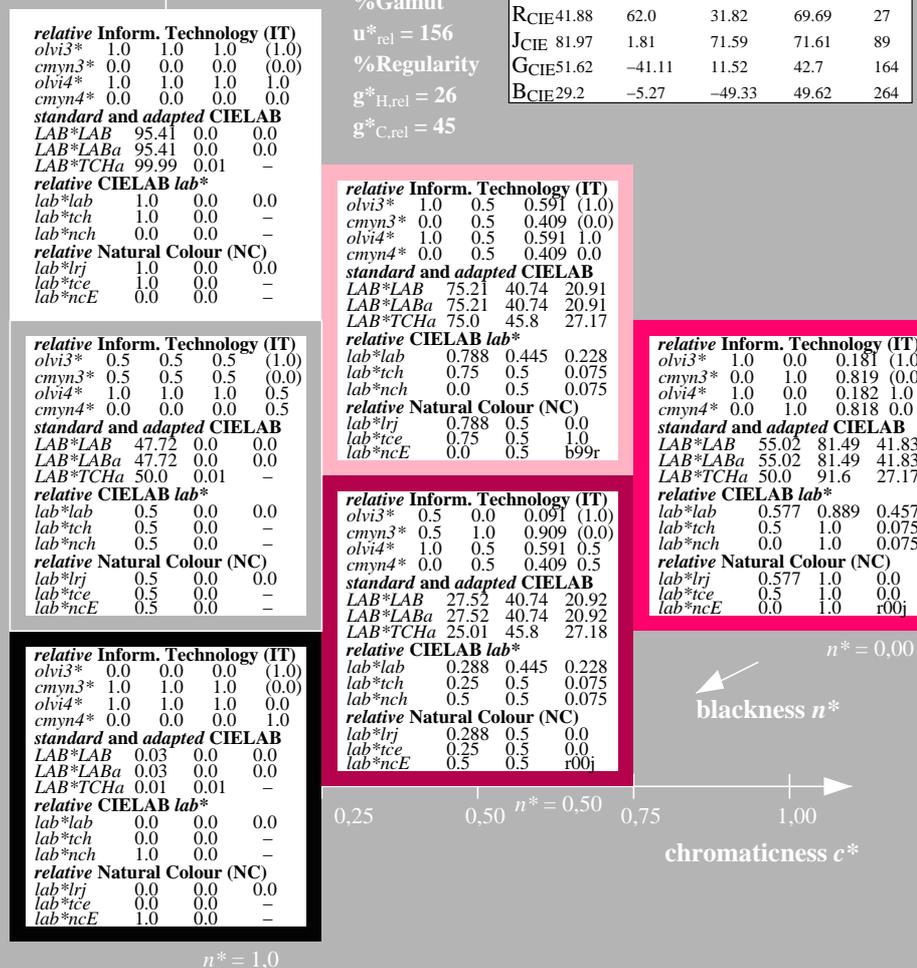
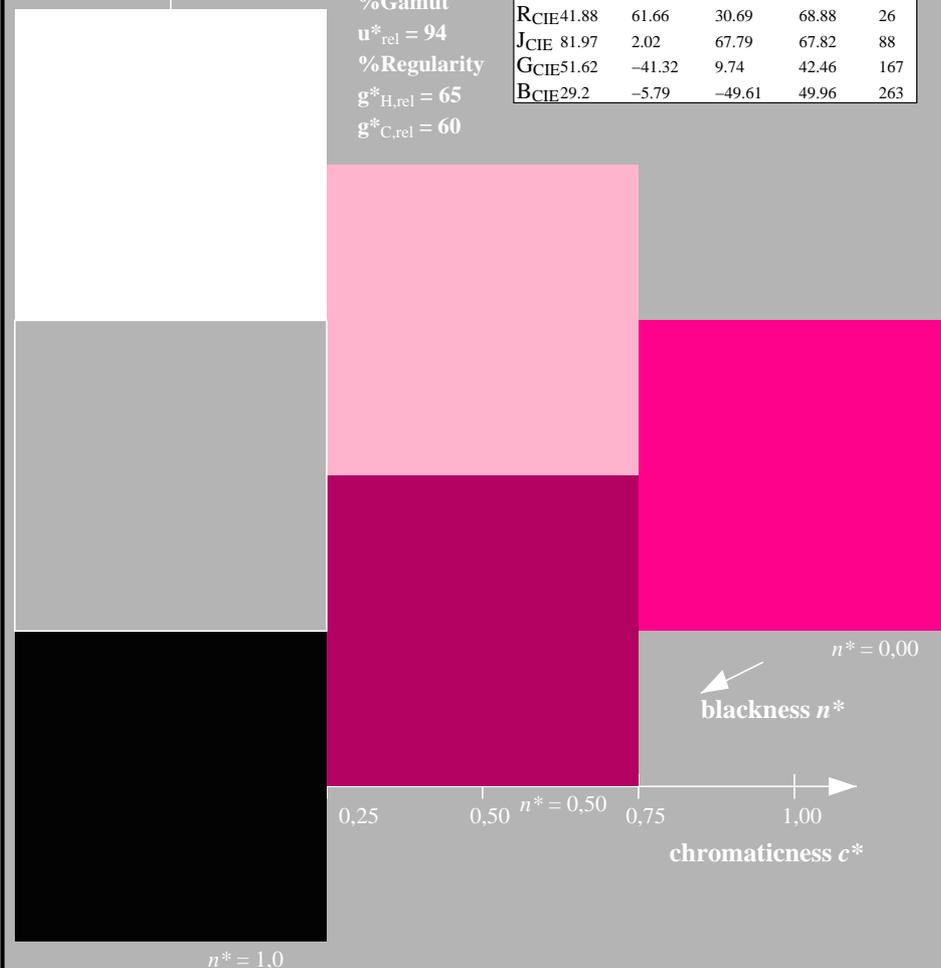
LAB*LAB	55.02	81.49	41.83
LAB*LABa	55.02	81.49	41.83
LAB*TCHa	50.0	91.6	27.17

**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



PE00-7, 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 PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$

See for similar files: <http://www.ps.bam.de/PE00/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=1,1, CIELAB

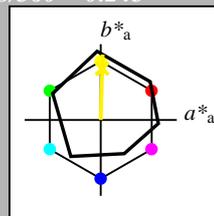
BAM registration: 20060101-PE00/10Q/Q00E06FP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /PE00 Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

**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

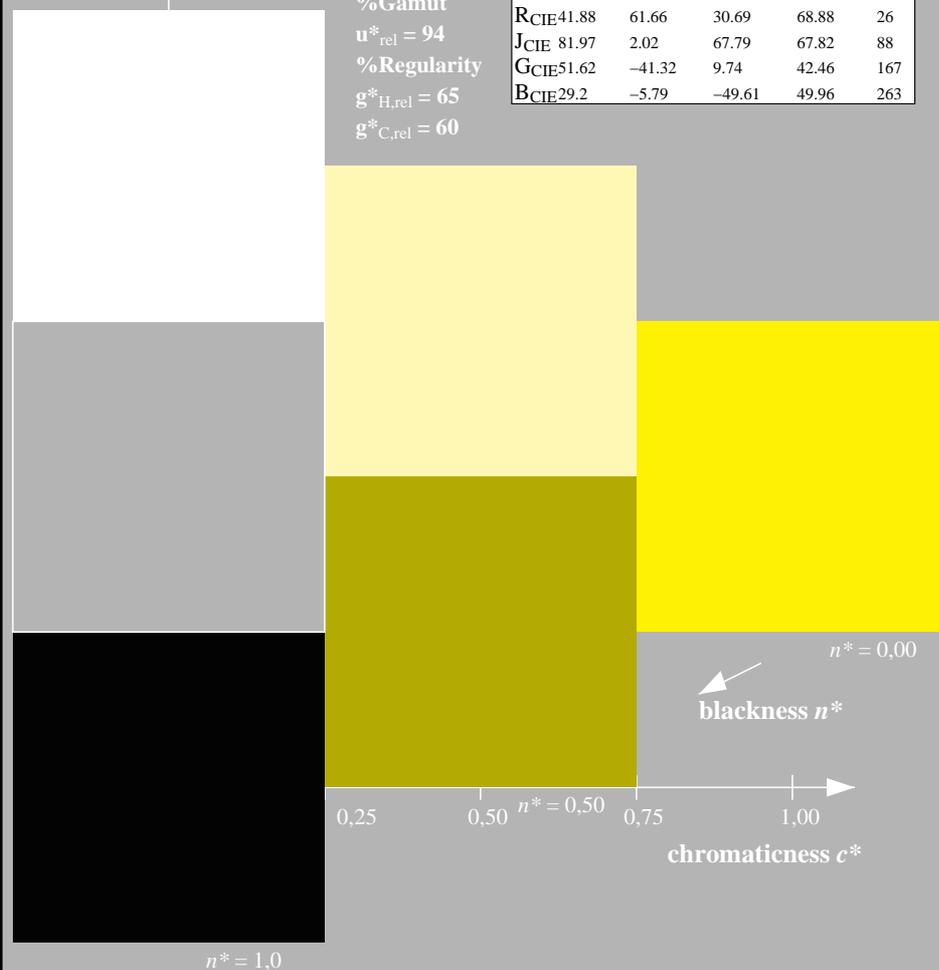
triangle lightness  $t^*$



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

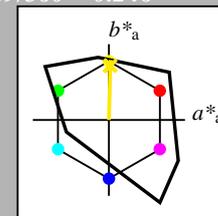


**Output: Colorimetric Television Luminous System TLS00**

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)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

**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\***  
 $lab^*lab = 0.454 \ 0.013 \ 0.5$   
 $lab^*tch = 0.25 \ 0.5 \ 0.246$   
 $lab^*nch = 0.5 \ 0.5 \ 0.246$

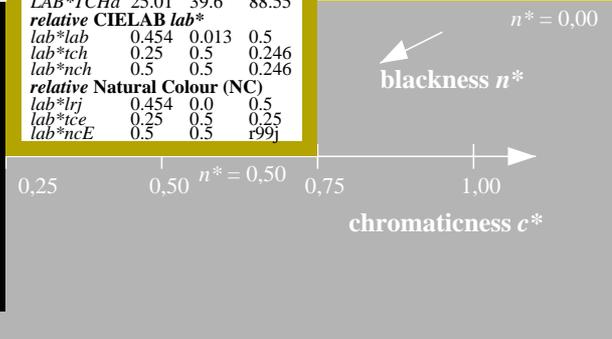
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.454 \ 0.0 \ 0.5$   
 $lab^*tce = 0.25 \ 0.5 \ 0.25$   
 $lab^*nce = 0.5 \ 0.5 \ j99j$

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

**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)**  
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$   
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

**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)**  
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$   
 $lab^*tce = 0.0 \ 0.0 \ -$   
 $lab^*nce = 1.0 \ 0.0 \ -$

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

PE00-7, 3 step scales for constant CIELAB hue 88/360 = 0.245 (left)

BAM-test chart PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

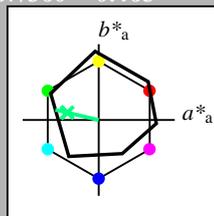
input:  $olv^* \ setrgbcolor$   
 output:  $olv^* \ setrgbcolor / w^* \ setgray$

**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

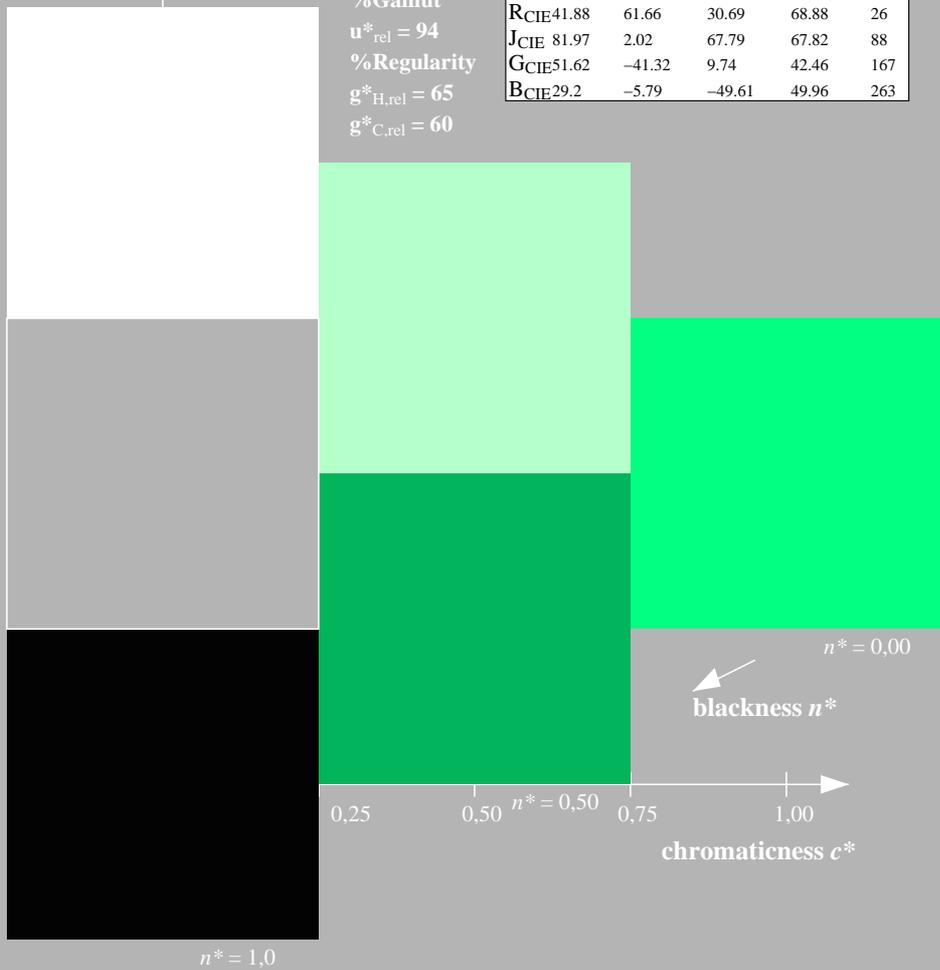
triangle lightness  $t^*$



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

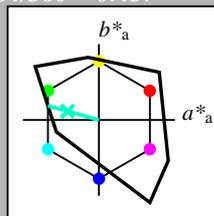


**Output: Colorimetric Television Luminous System TLS00**

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*	0.5	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	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**

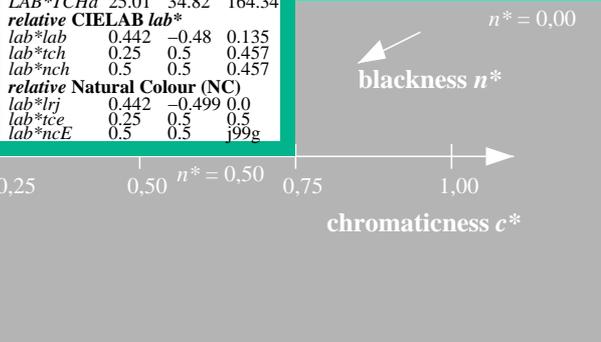
LAB*LAB	84.25	-67.05	18.79
LAB*LABa	84.25	-67.05	18.79
LAB*TCHa	50.0	69.64	164.35

**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*	0.0	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	-

PE00-7, 3 step scales for constant CIELAB hue 167/360 = 0.463 (left)

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

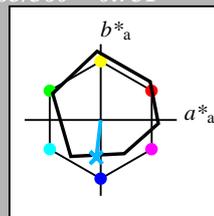
BAM-test chart PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input: `olv* setrgbcolor`  
 output: `olv* setrgbcolor / w* setgray`

**Input: Colorimetric Offset Reflective System ORS18**

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

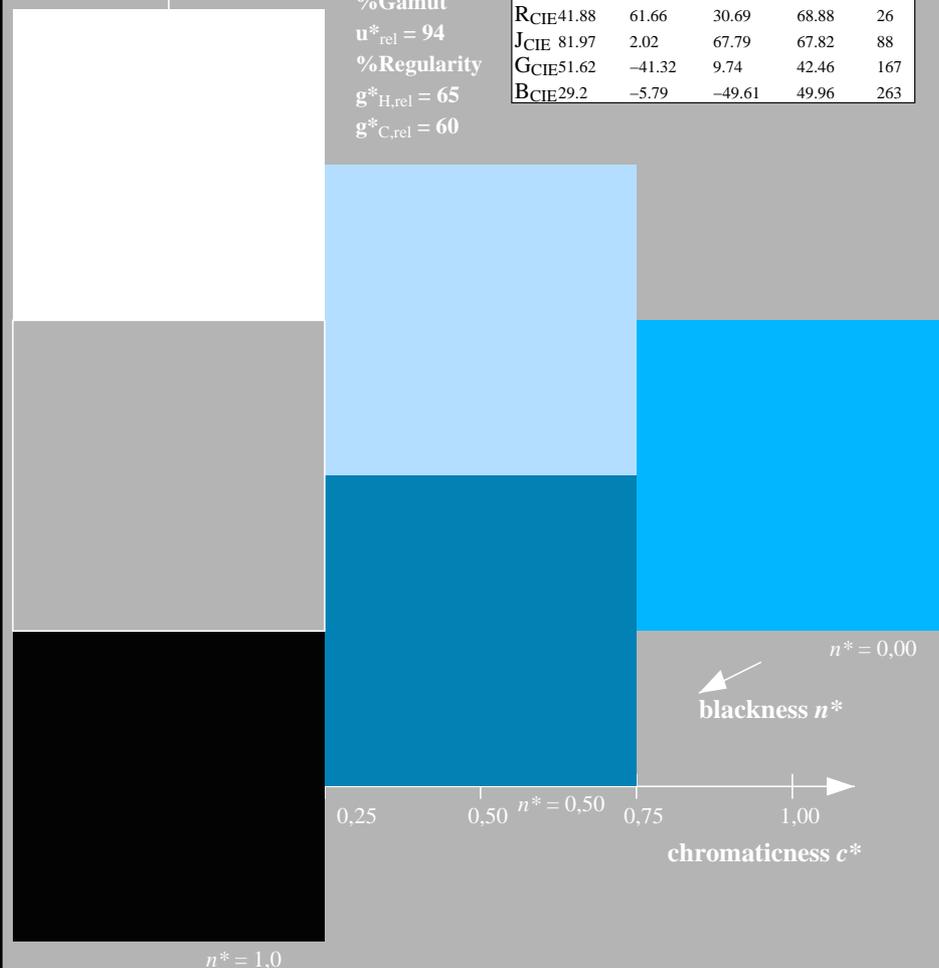
D50: hue B  
 LCH\*Ma: 42 47 263  
 olv\*Ma: 0.0 0.52 1.0  
 triangle lightness  $t^*$



**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

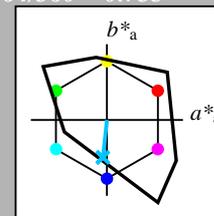
%Gamut  
 $u^*_{rel} = 94$   
 %Regularity  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$



**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	0.592	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**

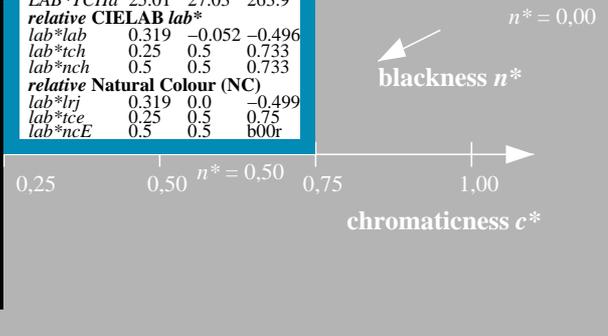
LAB*LAB	60.9	-5.74	-53.74
LAB*LABa	60.9	-5.74	-53.74
LAB*TCHa	50.0	54.06	263.89

**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



PE00-7, 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 PE00; Colorimetric systems ORS18 & TLS00  
 D50: 3 step colour scales and coordinate data for 10 hues

input:  $olv^* setrgbcolor$   
 output:  $olv^* setrgbcolor / w^* setgray$