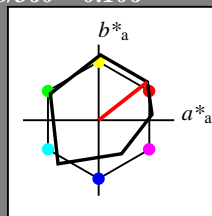


Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.106$
 lab^*tch and lab^*nch

A: hue O
 LCH*Ma: 48 82 38
 olv*Ma: 1.0 0.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

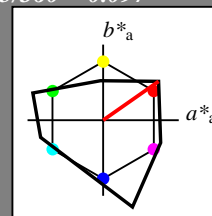
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.097$
 lab^*tch and lab^*nch

A: hue O
 LCH*Ma: 66 90 35
 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	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

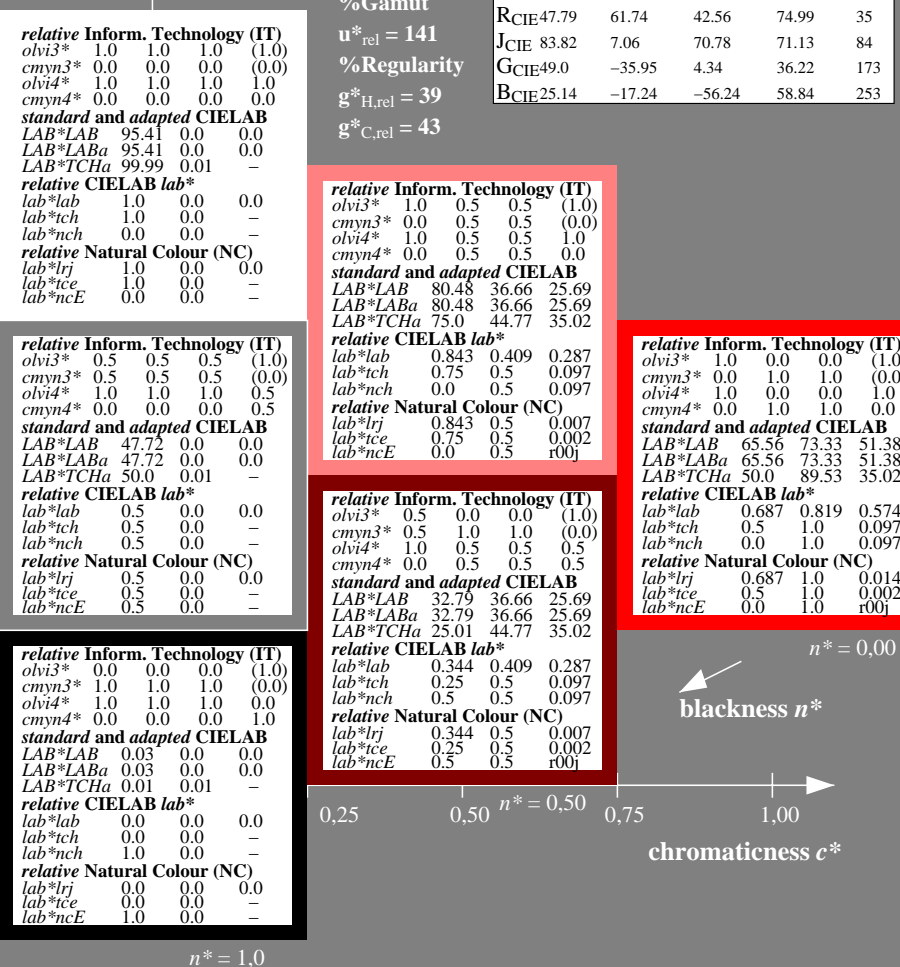
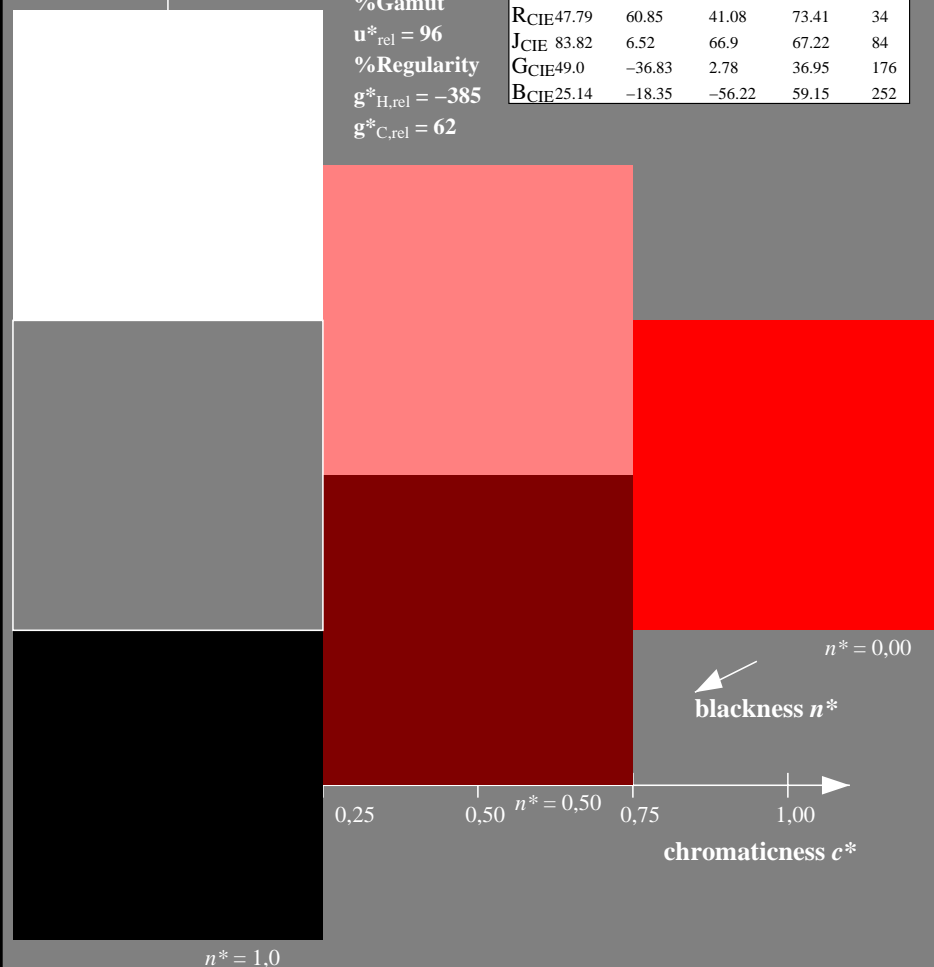
relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$
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
 $LAB^*LAB = 80.48 \ 36.66 \ 25.69$
 $LAB^*LABa = 80.48 \ 36.66 \ 25.69$
 $LAB^*TCHa = 75.0 \ 44.77 \ 35.02$
relative CIELAB lab*
 $lab^*lab = 0.843 \ 0.409 \ 0.287$
 $lab^*tch = 0.75 \ 0.5 \ 0.097$
 $lab^*nch = 0.0 \ 0.5 \ 0.097$
relative Natural Colour (NC)
 $lab^*lrj = 0.843 \ 0.5 \ 0.007$
 $lab^*tce = 0.75 \ 0.5 \ 0.002$
 $lab^*nce = 0.0 \ 0.5 \ r00j$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$
relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.5 \ 0.5 \ 0.5$
 $cmyn4^* = 0.0 \ 0.5 \ 0.5 \ 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 32.79 \ 36.66 \ 25.69$
 $LAB^*LABa = 32.79 \ 36.66 \ 25.69$
 $LAB^*TCHa = 25.01 \ 44.77 \ 35.02$
relative CIELAB lab*
 $lab^*lab = 0.344 \ 0.409 \ 0.287$
 $lab^*tch = 0.25 \ 0.5 \ 0.097$
 $lab^*nch = 0.5 \ 0.5 \ 0.097$
relative Natural Colour (NC)
 $lab^*lrj = 0.344 \ 0.5 \ 0.007$
 $lab^*tce = 0.25 \ 0.5 \ 0.002$
 $lab^*nce = 0.5 \ 0.5 \ r00j$

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
 $LAB^*LAB = 65.56 \ 73.33 \ 51.38$
 $LAB^*LABa = 65.56 \ 73.33 \ 51.38$
 $LAB^*TCHa = 50.0 \ 89.53 \ 35.02$
relative CIELAB lab*
 $lab^*lab = 0.687 \ 0.819 \ 0.574$
 $lab^*tch = 0.5 \ 1.0 \ 0.097$
 $lab^*nch = 0.0 \ 1.0 \ 0.097$
relative Natural Colour (NC)
 $lab^*lrj = 0.687 \ 1.0 \ 0.014$
 $lab^*tce = 0.5 \ 1.0 \ 0.002$
 $lab^*nce = 0.0 \ 1.0 \ r00j$



RE000-7, 3 step scales for constant CIELAB hue 38/360 = 0.106 (left)

3 step scales for constant CIELAB hue 35/360 = 0.097 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: $olv^* setrgbcolor$
 output: no change compared to input

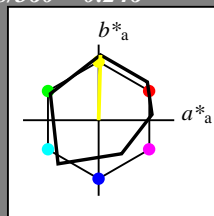
See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-RE00/10L/L00E00NP.PS/.PDF BAM material: code=rhadata
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 1/10, Serie: 1/1, Page: 1 Page count: 1

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 88/360 = 0.246$
 lab^*tch and lab^*nch

A: hue Y
 LCH*Ma: 93 86 88
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

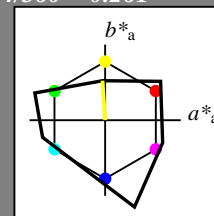
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 94/360 = 0.261$
 lab^*tch and lab^*nch

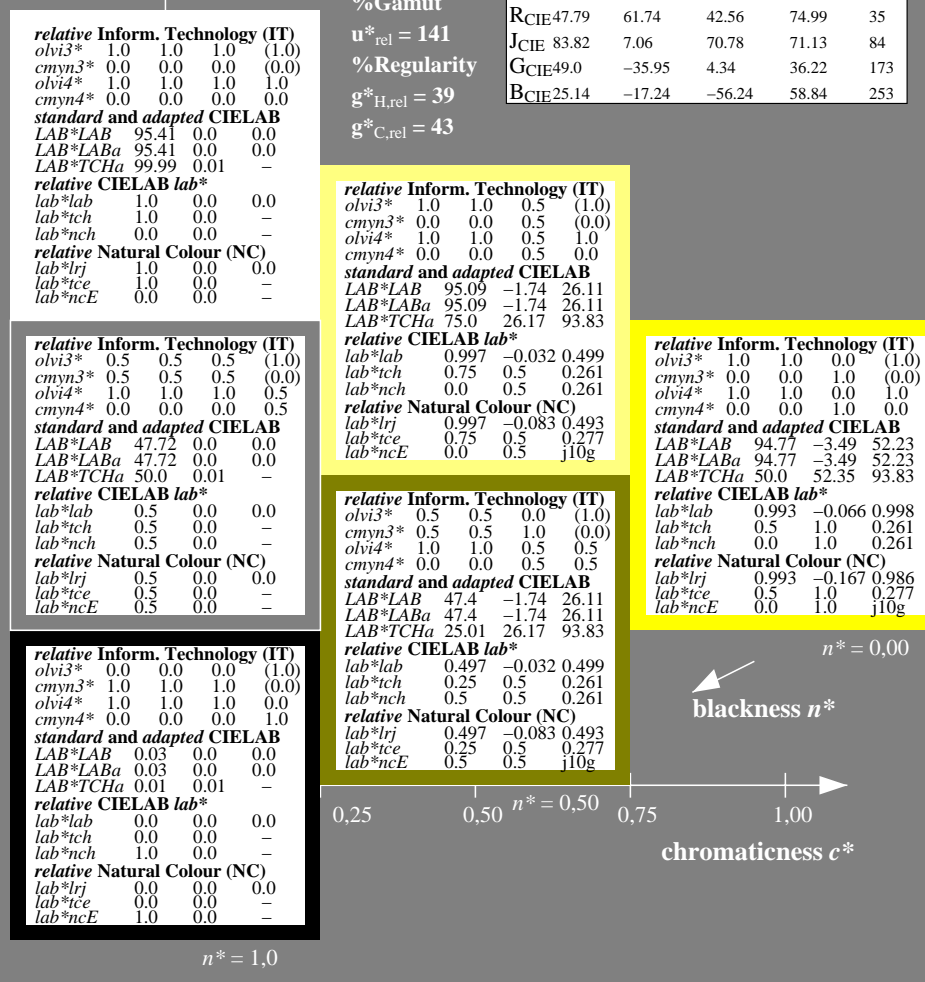
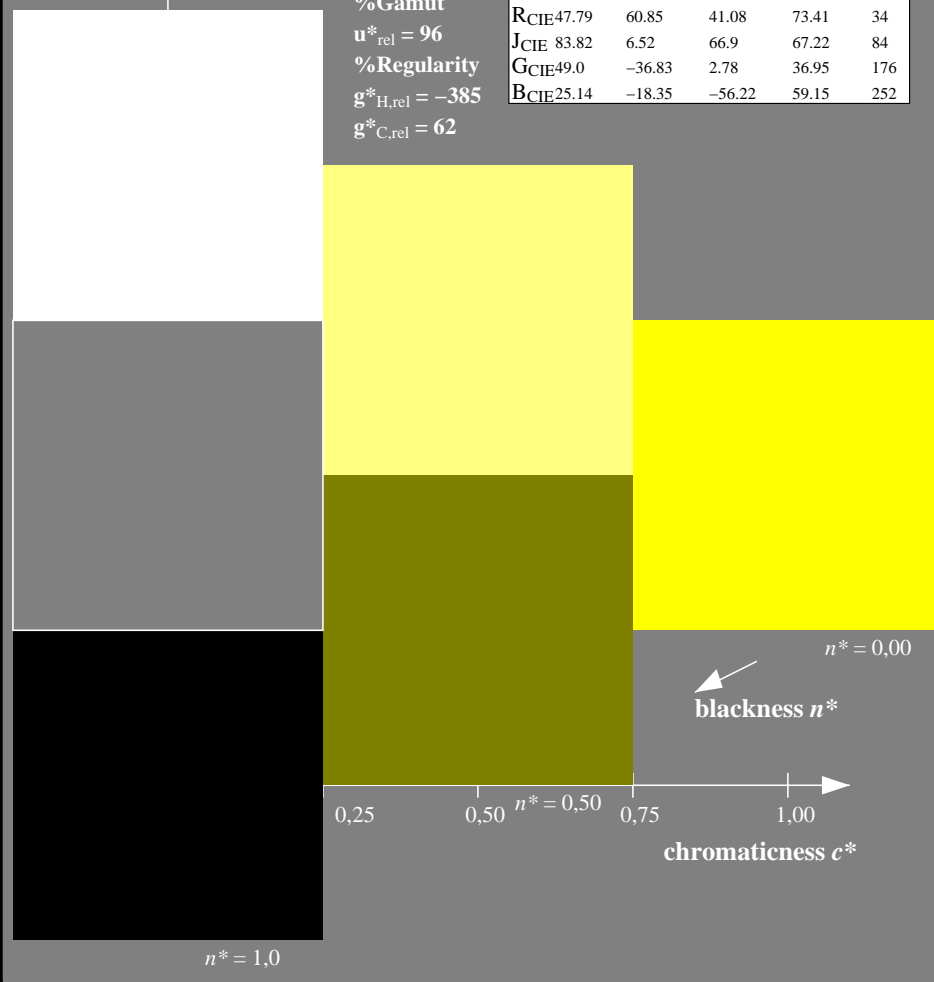
A: hue Y
 LCH*Ma: 95 52 94
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$



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

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

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

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

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

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

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

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

standard and adapted CIELAB
 $LAB^*LAB = 95.09 \ -1.74 \ 26.11$
 $LAB^*LABa = 95.09 \ -1.74 \ 26.11$
 $LAB^*TCHa = 75.0 \ 26.17 \ 93.83$

relative CIELAB lab*
 $lab^*lab = 0.997 \ -0.032 \ 0.499$
 $lab^*tch = 0.75 \ 0.5 \ 0.261$
 $lab^*nch = 0.0 \ 0.5 \ 0.261$

relative Natural Colour (NC)
 $lab^*lrj = 0.997 \ -0.083 \ 0.493$
 $lab^*tce = 0.75 \ 0.5 \ 0.277$
 $lab^*nce = 0.0 \ 0.5 \ j10g$

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
 $LAB^*LAB = 47.4 \ -1.74 \ 26.11$
 $LAB^*LABa = 47.4 \ -1.74 \ 26.11$
 $LAB^*TCHa = 25.01 \ 26.17 \ 93.83$

relative CIELAB lab*
 $lab^*lab = 0.497 \ -0.032 \ 0.499$
 $lab^*tch = 0.25 \ 0.5 \ 0.261$
 $lab^*nch = 0.5 \ 0.5 \ 0.261$

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
 $LAB^*LAB = 94.77 \ -3.49 \ 52.23$
 $LAB^*LABa = 94.77 \ -3.49 \ 52.23$
 $LAB^*TCHa = 50.0 \ 52.35 \ 93.83$

relative CIELAB lab*
 $lab^*lab = 0.993 \ -0.066 \ 0.998$
 $lab^*tch = 0.5 \ 1.0 \ 0.261$
 $lab^*nch = 0.0 \ 1.0 \ 0.261$

relative Natural Colour (NC)
 $lab^*lrj = 0.993 \ -0.167 \ 0.986$
 $lab^*tce = 0.5 \ 1.0 \ 0.277$
 $lab^*nce = 0.0 \ 1.0 \ j10g$

See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-RE00/10L/L00E01NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 2/10, Serie: 1/1, Page: 2 Page count: 2

RE00-7, 3 step scales for constant CIELAB hue 88/360 = 0.246 (left)

3 step scales for constant CIELAB hue 94/360 = 0.261 (right)

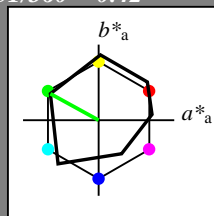
BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: $olv^* setrgbcolor$
 output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

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

A: hue L
 LCH*Ma: 51 73 151
 olv*Ma: 0.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

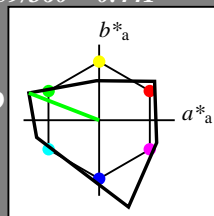
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 159/360 = 0.441$
 lab^*tch and lab^*nch

A: hue L
 LCH*Ma: 77 100 159
 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	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	86.44	-46.47	18.0
LAB*LABa	86.44	-46.47	18.0
LAB*TCHa	75.0	49.84	158.83

relative CIELAB lab*

lab*lab	0.906	-0.465	0.18
lab*tch	0.75	0.5	0.441
lab*nch	0.0	0.5	0.441

relative Natural Colour (NC)

lab*lrj	0.906	-0.483	0.125
lab*tce	0.75	0.5	0.46
lab*nce	0.0	0.5	j83g

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*	1.0	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	38.75	-46.47	18.0
LAB*LABa	38.75	-46.47	18.0
LAB*TCHa	25.01	49.84	158.83

relative CIELAB lab*

lab*lab	0.406	-0.465	0.18
lab*tch	0.25	0.5	0.441
lab*nch	0.5	0.5	0.441

relative Natural Colour (NC)

lab*lrj	0.406	-0.483	0.125
lab*tce	0.25	0.5	0.46
lab*nce	0.5	0.5	j83g

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

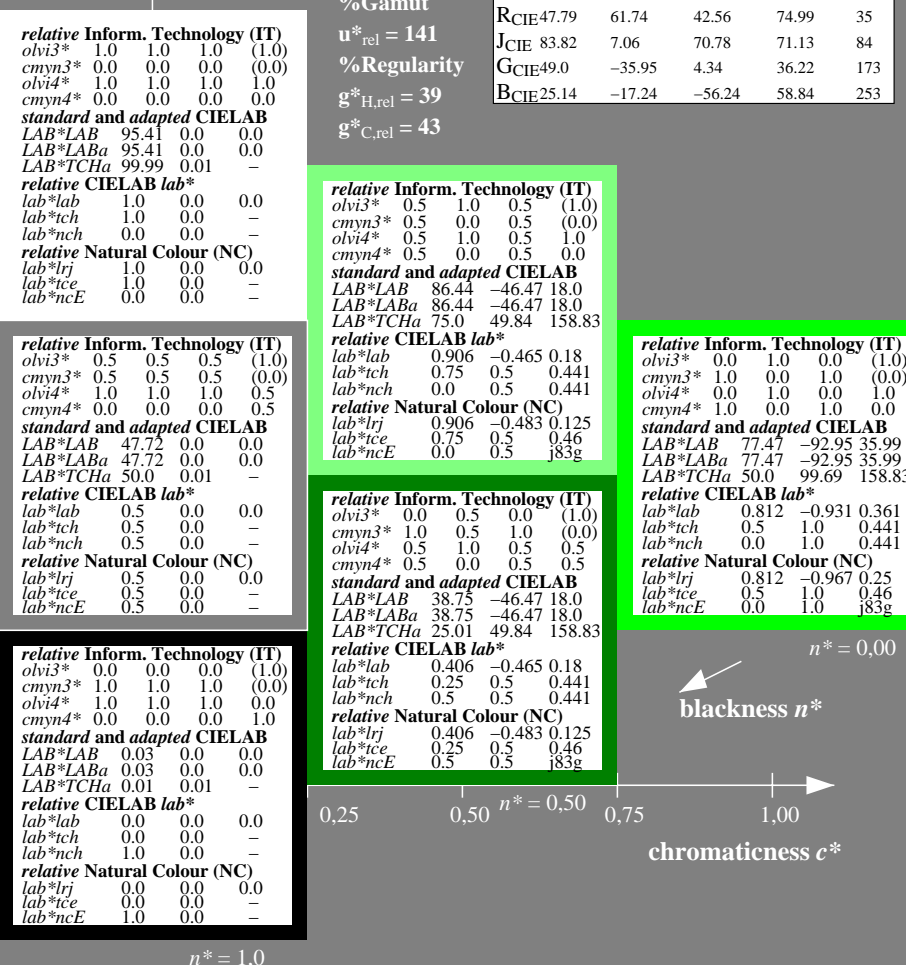
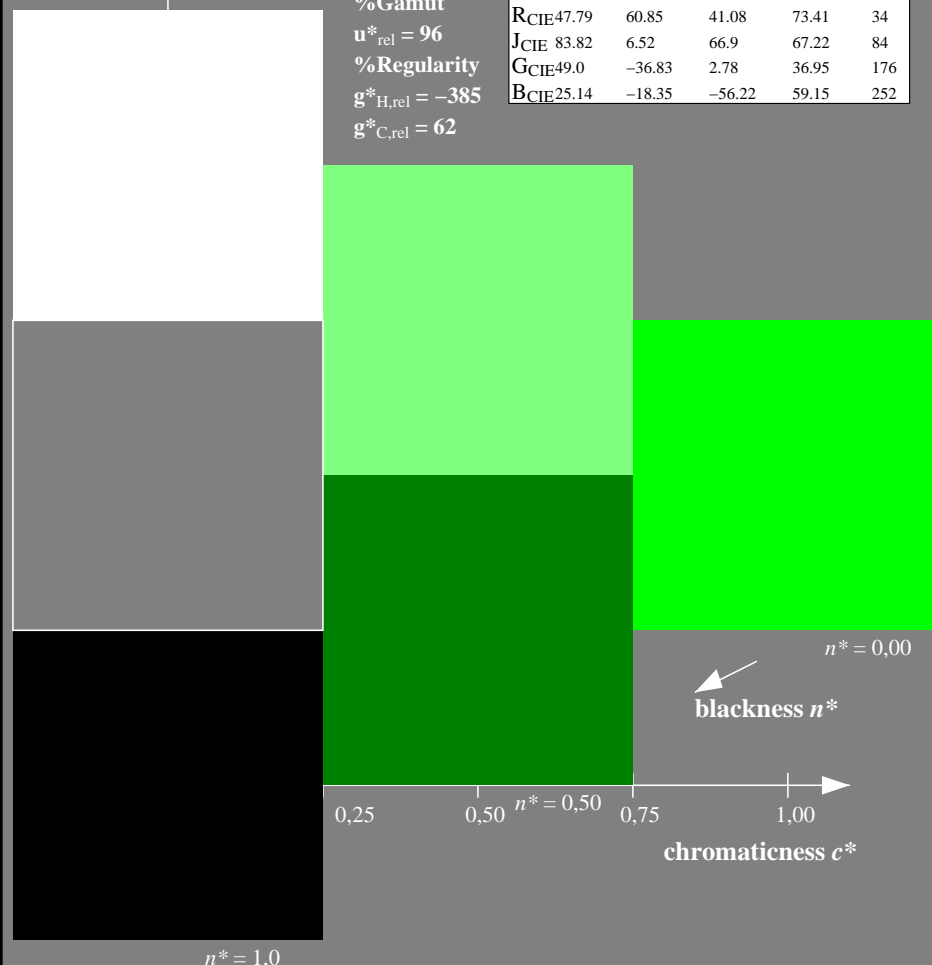
LAB*LAB	77.47	-92.95	35.99
LAB*LABa	77.47	-92.95	35.99
LAB*TCHa	50.0	99.69	158.83

relative CIELAB lab*

lab*lab	0.812	-0.931	0.361
lab*tch	0.5	1.0	0.441
lab*nch	0.0	1.0	0.441

relative Natural Colour (NC)

lab*lrj	0.812	-0.967	0.25
lab*tce	0.5	1.0	0.46
lab*nce	0.0	1.0	j83g



RE000-7, 3 step scales for constant CIELAB hue 151/360 = 0.42 (left)

3 step scales for constant CIELAB hue 159/360 = 0.441 (right)

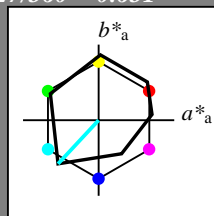
BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: $olv^* setrgbcolor$
 output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 227/360 = 0.631$
 lab^*tch and lab^*nch

A: hue C
 LCH*Ma: 51 79 227
 olv*Ma: 0.0 1.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

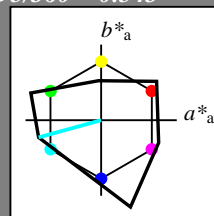
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 195/360 = 0.543$
 lab^*tch and lab^*nch

A: hue C
 LCH*Ma: 78 86 195
 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	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	86.88	-41.33	-11.36
LAB*LABa	86.88	-41.33	-11.36
LAB*TCHa	75.0	42.88	195.38

relative CIELAB lab*

lab*lab	0.911	-0.481	-0.132
lab*tch	0.75	0.5	0.543
lab*nch	0.0	0.5	0.543

relative Natural Colour (NC)

lab*lrj	0.911	-0.452	-0.211
lab*tce	0.75	0.5	0.57
lab*nce	0.0	0.5	g27b

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	39.19	-41.33	-11.36
LAB*LABa	39.19	-41.33	-11.36
LAB*TCHa	25.01	42.88	195.38

relative CIELAB lab*

lab*lab	0.411	-0.481	-0.132
lab*tch	0.25	0.5	0.543
lab*nch	0.5	0.5	0.543

relative Natural Colour (NC)

lab*lrj	0.411	-0.452	-0.211
lab*tce	0.25	0.5	0.57
lab*nce	0.5	0.5	g27b

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

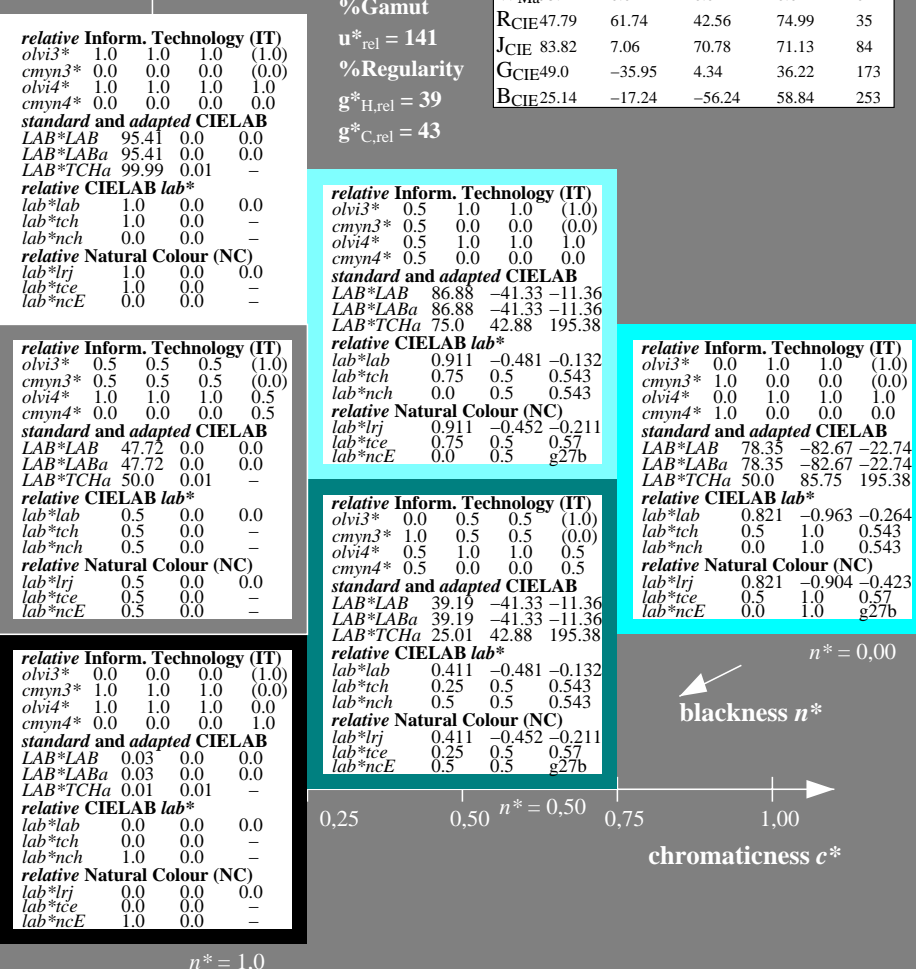
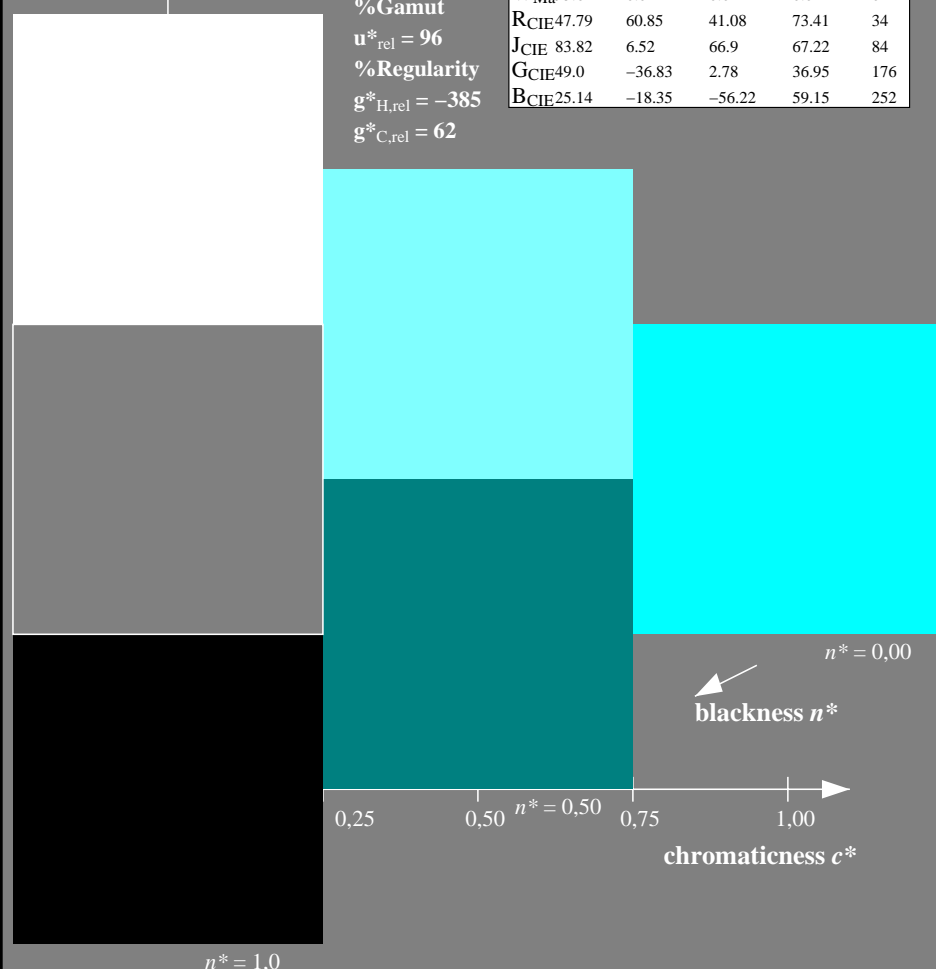
LAB*LAB	78.35	-82.67	-22.74
LAB*LABa	78.35	-82.67	-22.74
LAB*TCHa	50.0	85.75	195.38

relative CIELAB lab*

lab*lab	0.821	-0.963	-0.264
lab*tch	0.5	1.0	0.543
lab*nch	0.0	1.0	0.543

relative Natural Colour (NC)

lab*lrj	0.821	-0.904	-0.423
lab*tce	0.5	1.0	0.57
lab*nce	0.0	1.0	g27b



RE000-7, 3 step scales for constant CIELAB hue 227/360 = 0.631 (left)

3 step scales for constant CIELAB hue 195/360 = 0.543 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: $olv^* setrgbcolor$
 output: no change compared to input

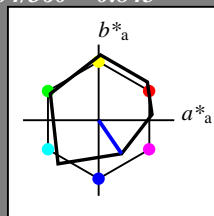
See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-RE00/10L/L00E03NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 4/10, Serie: 1/1, Page: 4 Page count: 4

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 304/360 = 0.845$
 lab^*tch and lab^*nch

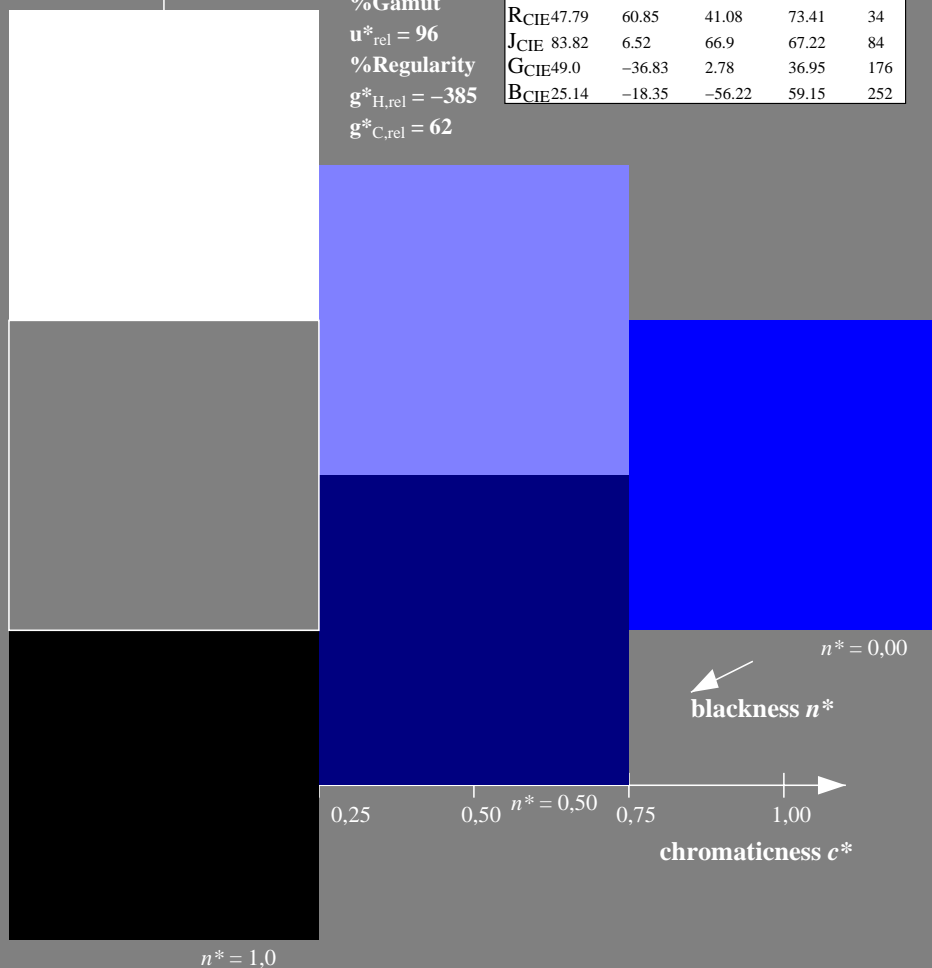
A: hue V
 LCH*Ma: 26 54 304
 olv*Ma: 0.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

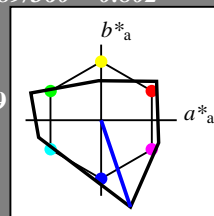
%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 289/360 = 0.802$
 lab^*tch and lab^*nch

A: hue V
 LCH*Ma: 13 121 289
 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	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	53.98	19.4	-57.39
LAB*LABa	53.98	19.4	-57.39
LAB*TCHa	75.0	60.59	288.68

relative CIELAB lab*

lab*lab	0.566	0.16	-0.473
lab*tch	0.75	0.5	0.802
lab*nch	0.0	0.5	0.802

relative Natural Colour (NC)

lab*lrj	0.566	0.193	-0.46
lab*tce	0.75	0.5	0.813
lab*nce	0.0	0.5	b25r

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	6.29	19.4	-57.39
LAB*LABa	6.29	19.4	-57.39
LAB*TCHa	25.01	60.59	288.68

relative CIELAB lab*

lab*lab	0.066	0.16	-0.473
lab*tch	0.25	0.5	0.802
lab*nch	0.5	0.5	0.802

relative Natural Colour (NC)

lab*lrj	0.066	0.193	-0.46
lab*tce	0.25	0.5	0.813
lab*nce	0.5	0.5	b25r

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

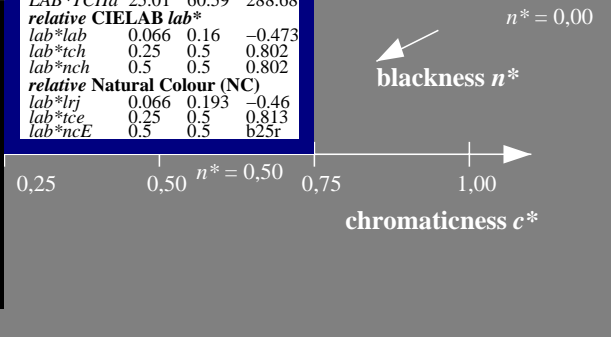
LAB*LAB	12.56	38.8	-114.79
LAB*LABa	12.56	38.8	-114.79
LAB*TCHa	50.0	121.18	288.68

relative CIELAB lab*

lab*lab	0.132	0.32	-0.946
lab*tch	0.5	1.0	0.802
lab*nch	0.0	1.0	0.802

relative Natural Colour (NC)

lab*lrj	0.132	0.386	-0.921
lab*tce	0.5	1.0	0.813
lab*nce	0.0	1.0	b25r



RE00-7, 3 step scales for constant CIELAB hue 304/360 = 0.845 (left)

3 step scales for constant CIELAB hue 289/360 = 0.802 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input

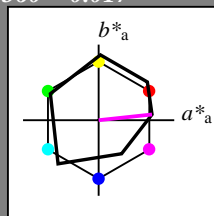
See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-RE00/10L/L00E04NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 5/10, Serie: 1/1, Page: 5 Page count: 5

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 6/360 = 0.017$
 lab^*tch and lab^*nch

A: hue M
 LCH*Ma: 56 71 6
 olv*Ma: 1.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

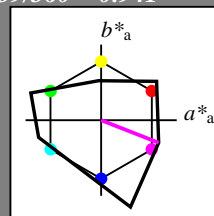
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 339/360 = 0.941$
 lab^*tch and lab^*nch

A: hue M
 LCH*Ma: 67 82 339
 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	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	81.05	38.03	-14.89
LAB*LABa	81.05	38.03	-14.89
LAB*TCHa	75.0	40.85	338.6

relative CIELAB lab*

lab*lab	0.85	0.465	-0.181
lab*tch	0.75	0.5	0.941
lab*nch	0.0	0.5	0.941

relative Natural Colour (NC)

lab*lrj	0.85	0.407	-0.29
lab*tce	0.75	0.5	0.901
lab*nce	0.0	0.5	b60r

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	66.71	76.06	-29.79
LAB*LABa	66.71	76.06	-29.79
LAB*TCHa	50.0	81.7	338.6

relative CIELAB lab*

lab*lab	0.699	0.931	-0.364
lab*tch	0.5	1.0	0.941
lab*nch	0.0	1.0	0.941

relative Natural Colour (NC)

lab*lrj	0.699	0.813	-0.581
lab*tce	0.5	1.0	0.901
lab*nce	0.0	1.0	b60r

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	33.36	38.03	-14.89
LAB*LABa	33.36	38.03	-14.89
LAB*TCHa	25.01	40.85	338.6

relative CIELAB lab*

lab*lab	0.35	0.465	-0.181
lab*tch	0.25	0.5	0.941
lab*nch	0.5	0.5	0.941

relative Natural Colour (NC)

lab*lrj	0.35	0.407	-0.29
lab*tce	0.25	0.5	0.901
lab*nce	0.5	0.5	b60r

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

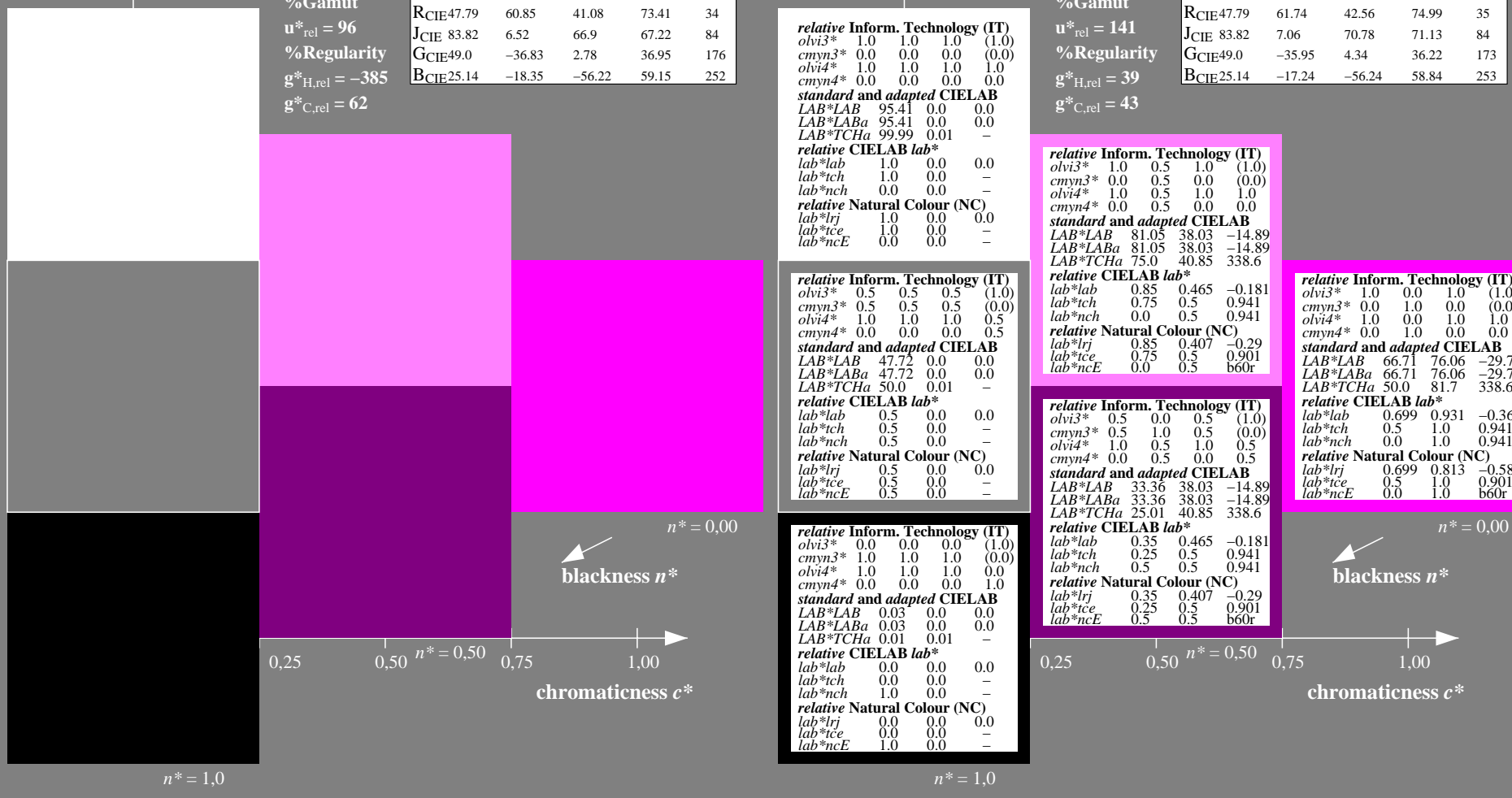
LAB*LAB	0.03	0.0	0.0
LAB*LABa	0.03	0.0	0.0
LAB*TCHa	0.01	0.01	-

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	-



RE00-7, 3 step scales for constant CIELAB hue 6/360 = 0.017 (left)

3 step scales for constant CIELAB hue 339/360 = 0.941 (right)

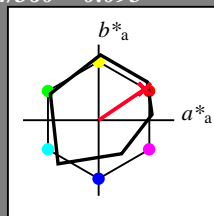
BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 34/360 = 0.095$
 lab^*tch and lab^*nch

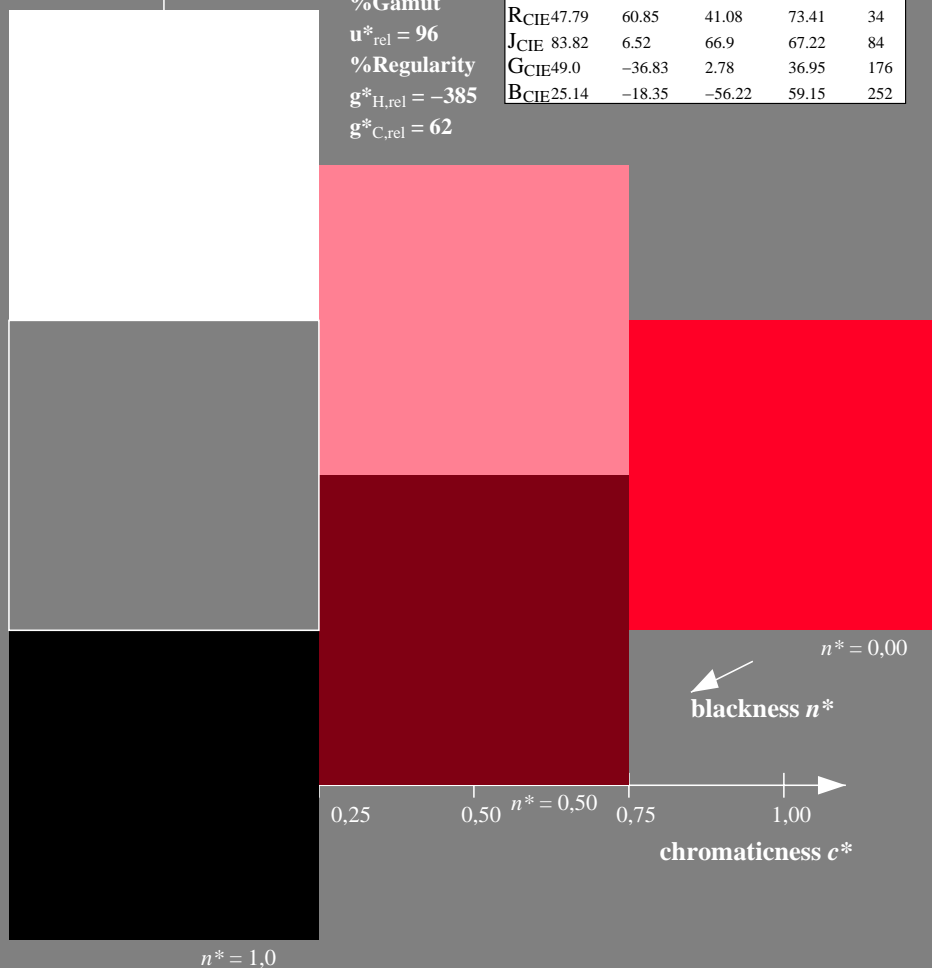
A: hue R
 LCH*Ma: 49 79 34
 olv*Ma: 1.0 0.0 0.15
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

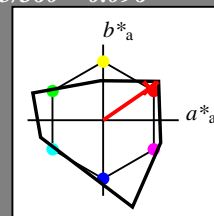
%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.096$
 lab^*tch and lab^*nch

A: hue R
 LCH*Ma: 66 89 35
 olv*Ma: 1.0 0.0 0.01
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	0.505	(1.0)
cmyn3*	0.0	0.5	0.495	(0.0)
olvi4*	1.0	0.5	0.505	1.0
cmyn4*	0.0	0.5	0.495	0.0

standard and adapted CIELAB

LAB*LAB	80.48	36.68	25.28
LAB*LABa	80.48	36.68	25.28
LAB*TCHa	75.0	44.55	34.58

relative CIELAB lab*

lab*lab	0.844	0.412	0.284
lab*tch	0.75	0.5	0.096
lab*nch	0.0	0.5	0.096

relative Natural Colour (NC)

lab*lrj	0.844	0.5	0.0
lab*tce	0.75	0.5	1.0
lab*nce	0.0	0.5	b99r

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	0.005	(1.0)
cmyn3*	0.5	1.0	0.995	(0.0)
olvi4*	1.0	0.5	0.505	0.5
cmyn4*	0.0	0.5	0.495	0.5

standard and adapted CIELAB

LAB*LAB	32.79	36.68	25.29
LAB*LABa	32.79	36.68	25.29
LAB*TCHa	25.01	44.55	34.59

relative CIELAB lab*

lab*lab	0.344	0.412	0.284
lab*tch	0.25	0.5	0.096
lab*nch	0.5	0.5	0.096

relative Natural Colour (NC)

lab*lrj	0.344	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	0.01	(1.0)
cmyn3*	0.0	1.0	0.99	(0.0)
olvi4*	1.0	0.0	0.01	1.0
cmyn4*	0.0	1.0	0.99	0.0

standard and adapted CIELAB

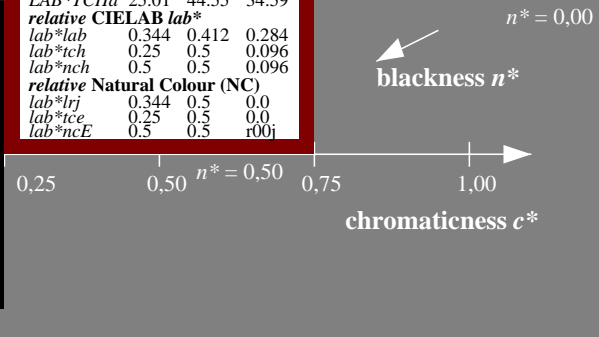
LAB*LAB	65.57	73.35	50.57
LAB*LABa	65.57	73.35	50.57
LAB*TCHa	50.0	89.1	34.58

relative CIELAB lab*

lab*lab	0.687	0.823	0.568
lab*tch	0.5	1.0	0.096
lab*nch	0.0	1.0	0.096

relative Natural Colour (NC)

lab*lrj	0.687	1.0	0.0
lab*tce	0.5	1.0	0.0
lab*nce	0.0	1.0	r00j



RE000-7, 3 step scales for constant CIELAB hue 34/360 = 0.095 (left)

3 step scales for constant CIELAB hue 35/360 = 0.096 (right)

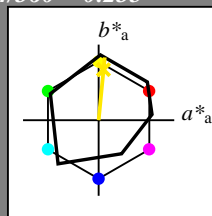
BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 84/360 = 0.235$
 lab^*tch and lab^*nch

A: hue J
 LCH*Ma: 89 83 84
 olv*Ma: 1.0 0.91 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

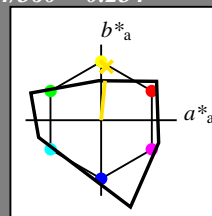
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 84/360 = 0.234$
 lab^*tch and lab^*nch

A: hue J
 LCH*Ma: 91 52 84
 olv*Ma: 1.0 0.89 0.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	0.943	0.5	(1.0)
cmyn3*	0.0	0.057	0.5	(0.0)
olvi4*	1.0	0.943	0.5	1.0
cmyn4*	0.0	0.057	0.5	0.0

standard and adapted CIELAB

LAB*LAB	93.43	2.59	26.07
LAB*LABa	93.43	2.59	26.07
LAB*TCHa	75.0	26.2	84.32

relative CIELAB lab*

lab*lab	0.979	0.049	0.497
lab*tch	0.75	0.5	0.234
lab*nch	0.0	0.5	0.234

relative Natural Colour (NC)

lab*lrj	0.979	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	0.443	0.0	(1.0)
cmyn3*	0.5	0.557	1.0	(0.0)
olvi4*	1.0	0.943	0.5	0.5
cmyn4*	0.0	0.057	0.5	0.5

standard and adapted CIELAB

LAB*LAB	45.74	2.6	26.07
LAB*LABa	45.74	2.6	26.07
LAB*TCHa	25.01	26.2	84.3

relative CIELAB lab*

lab*lab	0.479	0.05	0.497
lab*tch	0.25	0.5	0.234
lab*nch	0.5	0.5	0.234

relative Natural Colour (NC)

lab*lrj	0.479	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	0.887	0.0	(1.0)
cmyn3*	0.0	0.113	1.0	(0.0)
olvi4*	1.0	0.887	0.0	1.0
cmyn4*	0.0	0.113	1.0	0.0

standard and adapted CIELAB

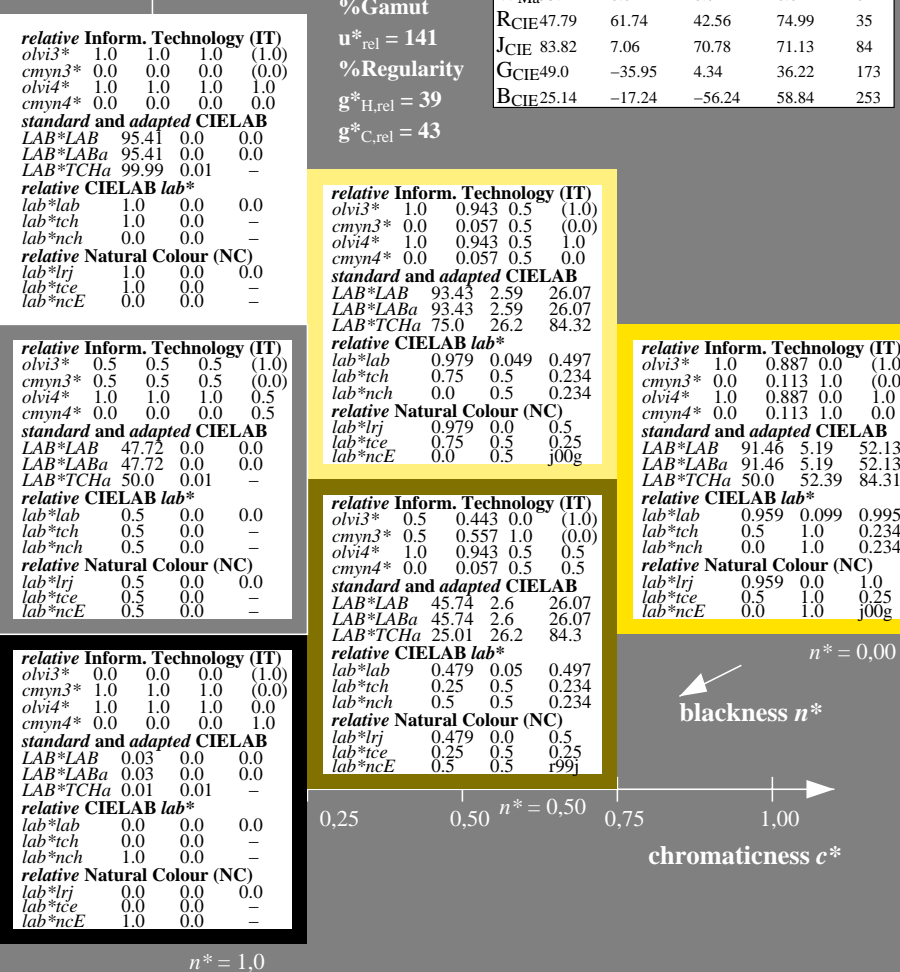
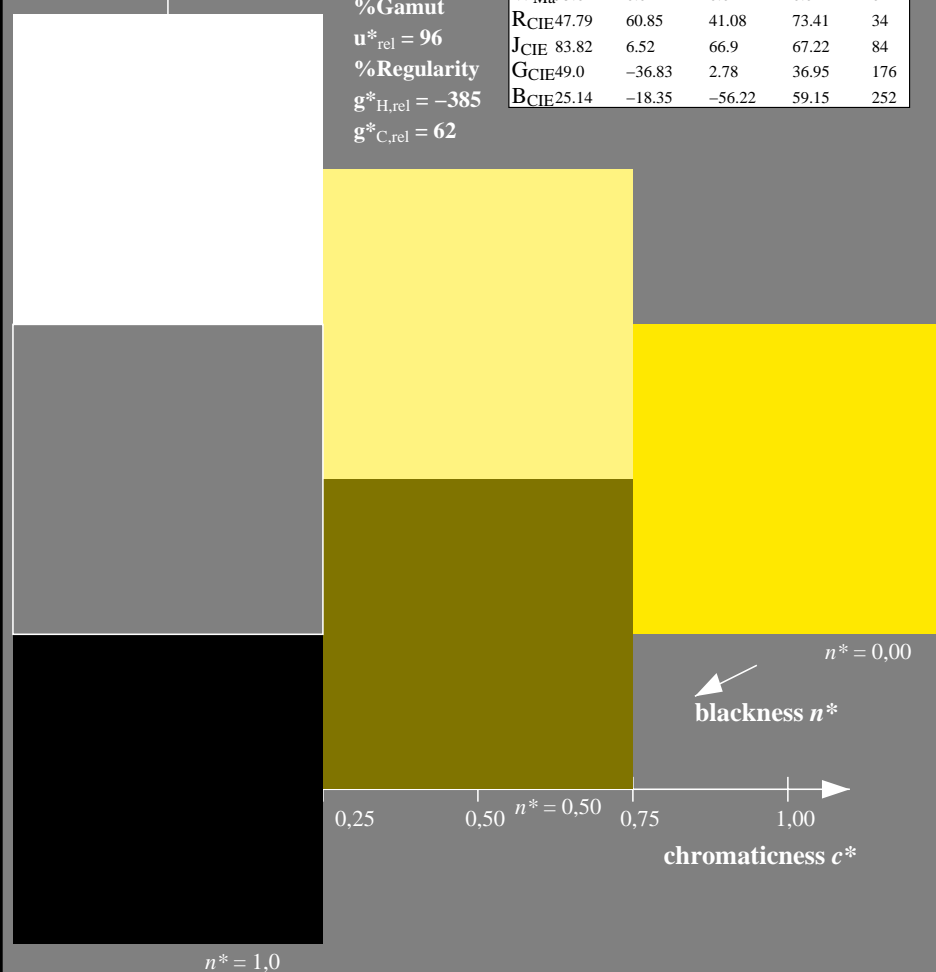
LAB*LAB	91.46	5.19	52.13
LAB*LABa	91.46	5.19	52.13
LAB*TCHa	50.0	52.39	84.31

relative CIELAB lab*

lab*lab	0.959	0.099	0.995
lab*tch	0.5	1.0	0.234
lab*nch	0.0	1.0	0.234

relative Natural Colour (NC)

lab*lrj	0.959	0.0	1.0
lab*tce	0.5	1.0	0.25
lab*nce	0.0	1.0	j00g



RE00-7, 3 step scales for constant CIELAB hue 84/360 = 0.235 (left)

3 step scales for constant CIELAB hue 84/360 = 0.234 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input

See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

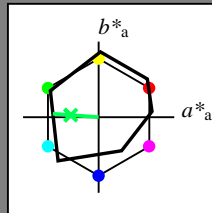
BAM registration: 20060101-RE00/10L/L00E07NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 8/10, Serie: 1/1, Page: 8 Page count: 8

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 176/360 = 0.488$
 lab^*tch and lab^*nch

A: hue G
 LCH*Ma: 51 61 176
 olv*Ma: 0.0 1.0 0.33

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

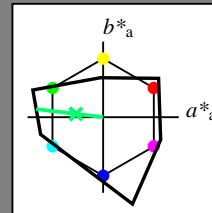
%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 173/360 = 0.481$
 lab^*tch and lab^*nch

A: hue G
 LCH*Ma: 78 89 173
 olv*Ma: 0.0 1.0 0.43

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	0.715	(1.0)
cmyn3*	0.5	0.0	0.285	(0.0)
olvi4*	0.5	1.0	0.716	1.0
cmyn4*	0.5	0.0	0.284	0.0

standard and adapted CIELAB

LAB*LAB	86.63	-44.26	5.34
LAB*LABa	86.63	-44.26	5.34
LAB*TCHa	75.0	44.59	173.12

relative CIELAB lab*

lab*lab	0.908	-0.495	0.06
lab*tch	0.75	0.5	0.481
lab*nch	0.0	0.5	0.481

relative Natural Colour (NC)

lab*lrj	0.908	-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	0.215	(1.0)
cmyn3*	1.0	0.5	0.785	(0.0)
olvi4*	0.5	1.0	0.715	0.5
cmyn4*	0.5	0.0	0.285	0.5

standard and adapted CIELAB

LAB*LAB	38.94	-44.26	5.35
LAB*LABa	38.94	-44.26	5.35
LAB*TCHa	25.01	44.59	173.11

relative CIELAB lab*

lab*lab	0.408	-0.495	0.06
lab*tch	0.25	0.5	0.481
lab*nch	0.5	0.5	0.481

relative Natural Colour (NC)

lab*lrj	0.408	-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	0.431	(1.0)
cmyn3*	1.0	0.0	0.569	(0.0)
olvi4*	0.0	1.0	0.431	1.0
cmyn4*	1.0	0.0	0.569	0.0

standard and adapted CIELAB

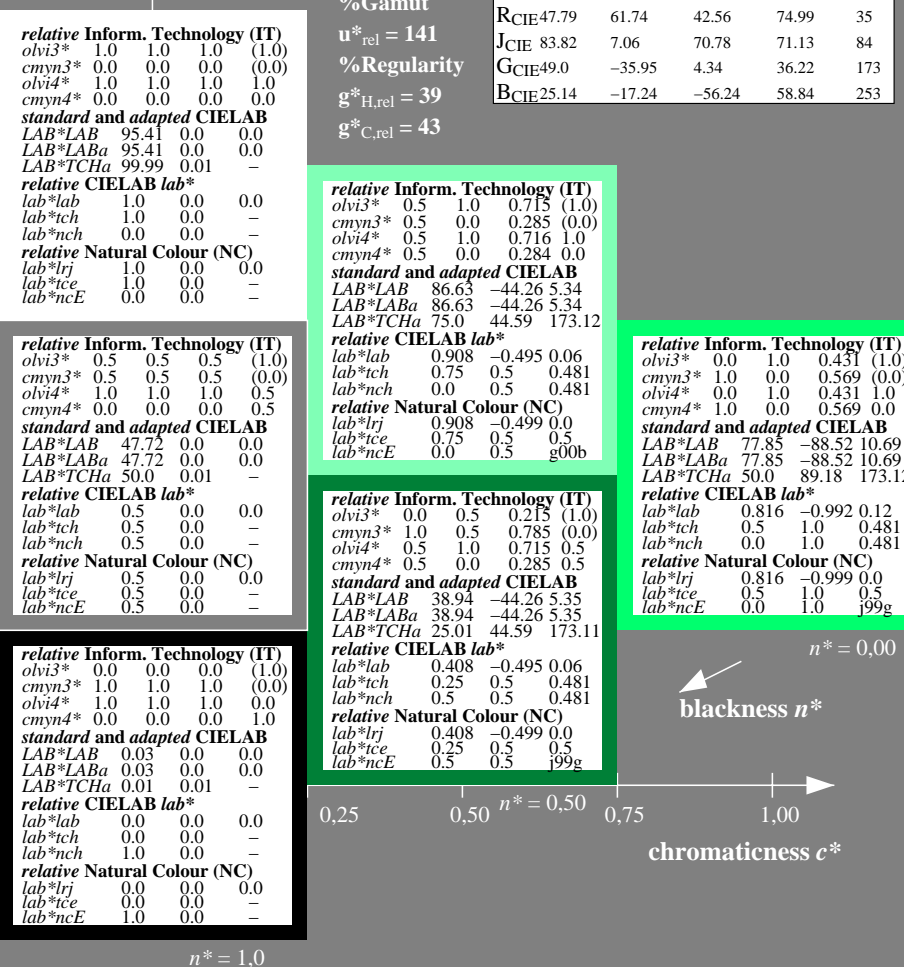
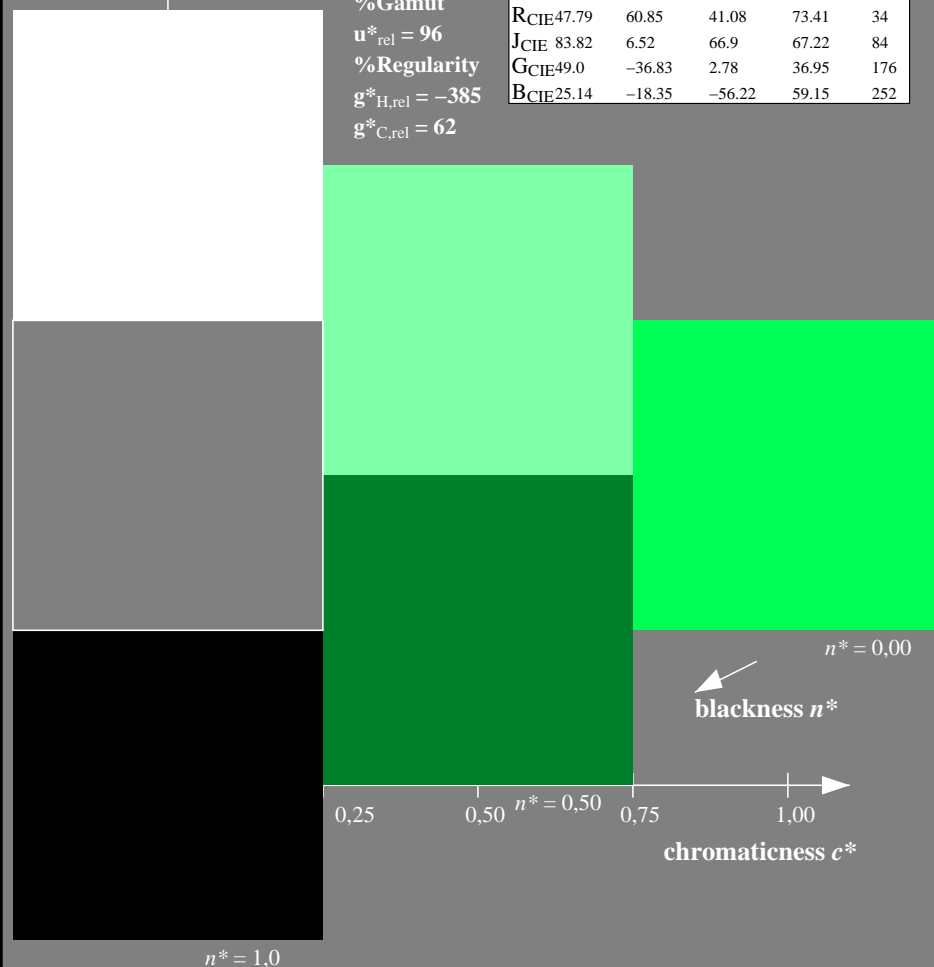
LAB*LAB	77.85	-88.52	10.69
LAB*LABa	77.85	-88.52	10.69
LAB*TCHa	50.0	89.18	173.12

relative CIELAB lab*

lab*lab	0.816	-0.992	0.12
lab*tch	0.5	1.0	0.481
lab*nch	0.0	1.0	0.481

relative Natural Colour (NC)

lab*lrj	0.816	-0.999	0.0
lab*tce	0.5	1.0	0.5
lab*nce	0.0	1.0	g99g



RE000-7, 3 step scales for constant CIELAB hue 176/360 = 0.488 (left)

3 step scales for constant CIELAB hue 173/360 = 0.481 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input

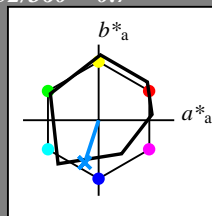
See for similar files: <http://www.ps.bam.de/RE00/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=1,1

BAM registration: 20060101-RE00/10L/L00E08NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /RE00 Form: 9/10, Serie: 1/1, Page: 9 Page count: 9

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 252/360 = 0.7$
 lab^*tch and lab^*nch

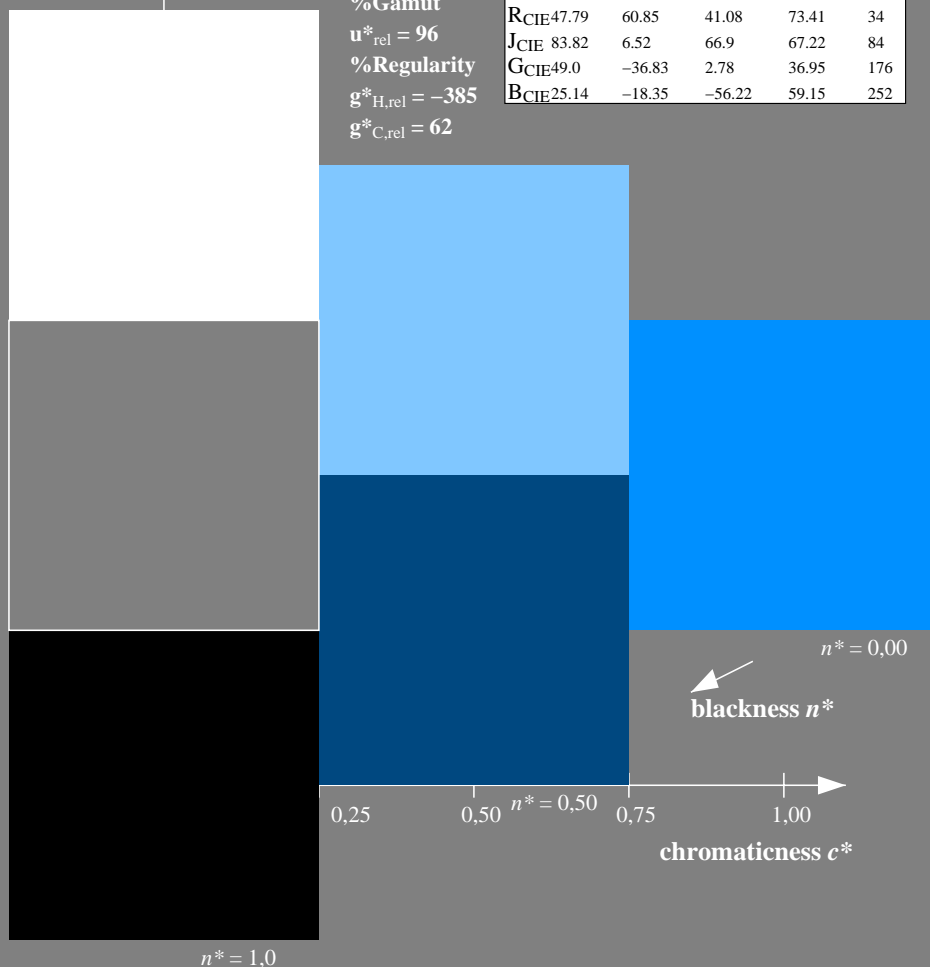
A: hue B
 LCH*Ma: 40 55 252
 olv*Ma: 0.0 0.56 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	64.42	50.58	81.9	38
YMa	92.62	2.41	86.36	86.39	88
LMa	50.9	-63.82	35.02	72.81	151
CMa	51.25	-53.68	-57.69	78.82	227
VMa	25.72	30.34	-44.37	53.76	304
MMa	56.25	70.59	7.57	70.99	6
NMa	18.11	0.0	0.0	0.0	0
WMa	95.6	0.0	0.0	0.0	0
RCIE	47.79	60.85	41.08	73.41	34
JCIE	83.82	6.52	66.9	67.22	84
GCIE	49.0	-36.83	2.78	36.95	176
BCIE	25.14	-18.35	-56.22	59.15	252

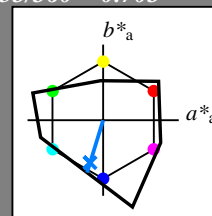
%Gamut
 $u^*_{rel} = 96$
 %Regularity
 $g^*_{H,rel} = -385$
 $g^*_{C,rel} = 62$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 253/360 = 0.703$
 lab^*tch and lab^*nch

A: hue B
 LCH*Ma: 45 72 253
 olv*Ma: 0.0 0.49 1.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	65.56	73.34	51.39	89.55	35
YMa	94.78	-3.49	52.24	52.36	94
LMa	77.48	-92.97	36.0	99.71	159
CMa	78.36	-82.69	-22.74	85.77	195
VMa	12.55	38.81	-114.81	121.2	289
MMa	66.71	76.08	-29.8	81.71	339
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	47.79	61.74	42.56	74.99	35
JCIE	83.82	7.06	70.78	71.13	84
GCIE	49.0	-35.95	4.34	36.22	173
BCIE	25.14	-17.24	-56.24	58.84	253

%Gamut
 $u^*_{rel} = 141$
 %Regularity
 $g^*_{H,rel} = 39$
 $g^*_{C,rel} = 43$

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	0.747	1.0	(1.0)
cmyn3*	0.5	0.253	0.0	(0.0)
olvi4*	0.5	0.747	1.0	1.0
cmyn4*	0.5	0.253	0.0	0.0

standard and adapted CIELAB

LAB*LAB	70.24	-10.62	-34.63
LAB*LABa	70.24	-10.62	-34.63
LAB*TCHa	75.0	36.24	252.94

relative CIELAB lab*

lab*lab	0.736	-0.146	-0.477
lab*tch	0.75	0.5	0.703
lab*nch	0.0	0.5	0.703

relative Natural Colour (NC)

lab*lrj	0.736	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	0.247	0.5	(1.0)
cmyn3*	1.0	0.753	0.5	(0.0)
olvi4*	0.5	0.747	1.0	0.5
cmyn4*	0.5	0.253	0.0	0.5

standard and adapted CIELAB

LAB*LAB	22.55	-10.61	-34.64
LAB*LABa	22.55	-10.61	-34.64
LAB*TCHa	25.01	36.24	252.96

relative CIELAB lab*

lab*lab	0.236	-0.145	-0.477
lab*tch	0.25	0.5	0.703
lab*nch	0.5	0.5	0.703

relative Natural Colour (NC)

lab*lrj	0.236	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	0.494	1.0	(1.0)
cmyn3*	1.0	0.506	0.0	(0.0)
olvi4*	0.0	0.494	1.0	1.0
cmyn4*	1.0	0.506	0.0	0.0

standard and adapted CIELAB

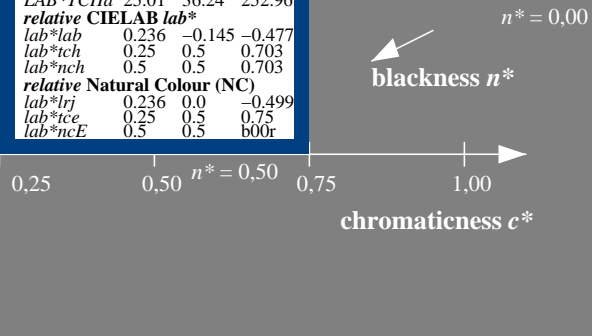
LAB*LAB	45.08	-21.24	-69.28
LAB*LABa	45.08	-21.24	-69.28
LAB*TCHa	50.0	72.48	252.95

relative CIELAB lab*

lab*lab	0.472	-0.292	-0.955
lab*tch	0.5	1.0	0.703
lab*nch	0.0	1.0	0.703

relative Natural Colour (NC)

lab*lrj	0.472	0.0	-0.999
lab*tce	0.5	1.0	0.75
lab*nce	0.0	1.0	b00r



RE000-7, 3 step scales for constant CIELAB hue 252/360 = 0.7 (left)

3 step scales for constant CIELAB hue 253/360 = 0.703 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00
 A: 3 step colour scales and coordinate data for 10 hues

input: olv* setrgbcolor
 output: no change compared to input