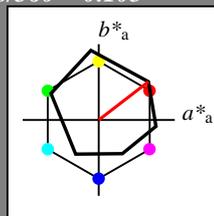


Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
 lab^*tch and lab^*nch

D65: hue O
 LCH*Ma: 48 83 38
 olv*Ma: 1.0 0.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

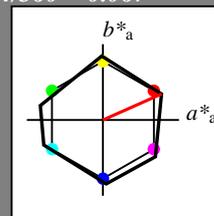
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 24/360 = 0.067$
 lab^*tch and lab^*nch

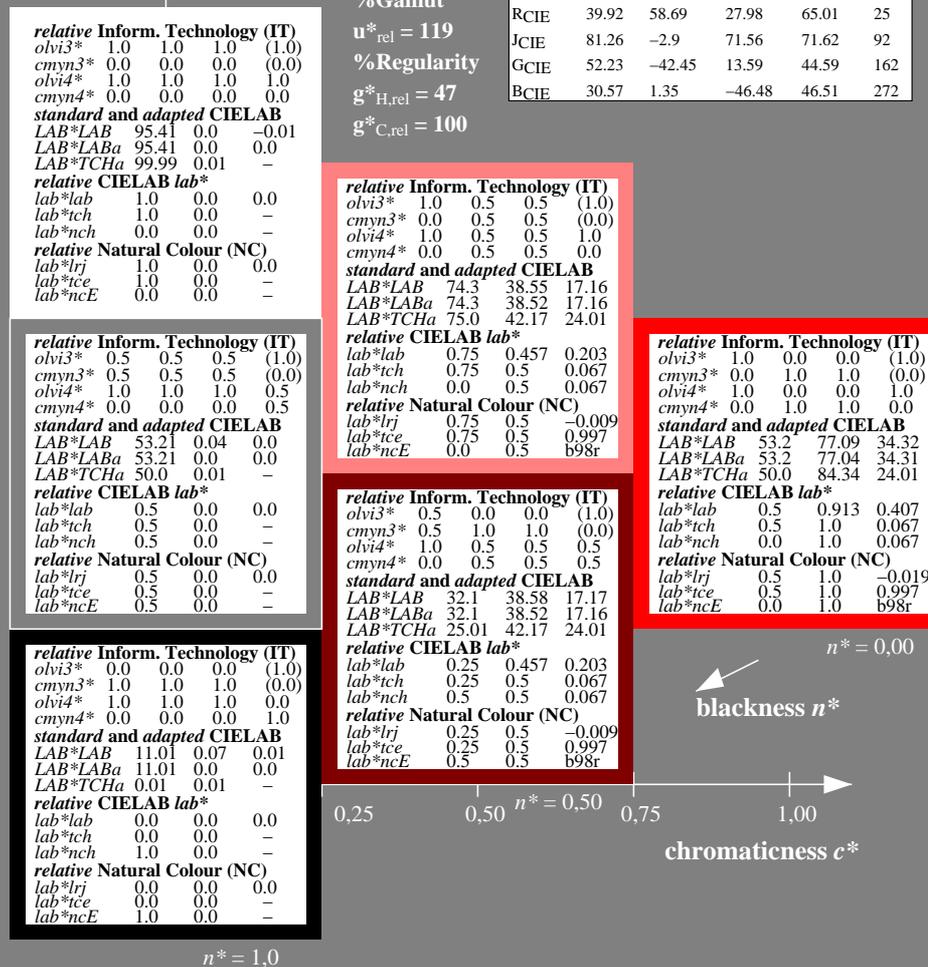
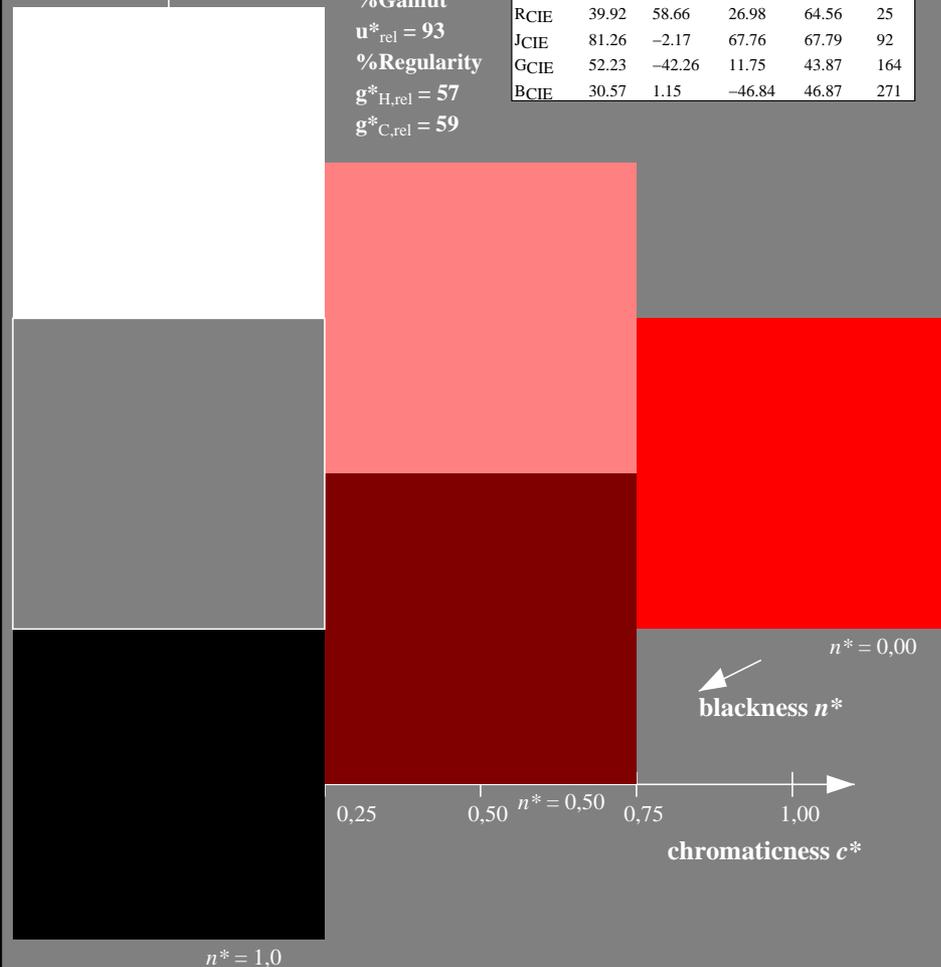
D65: hue R
 LCH*Ma: 53 84 24
 olv*Ma: 1.0 0.0 0.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$



TE020-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

3 step scales for constant CIELAB hue 24/360 = 0.067 (right)

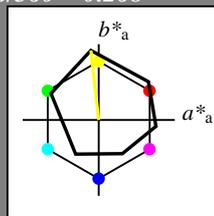
BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
 lab^*tch and lab^*nch

D65: hue Y
 LCH*Ma: 90 92 96
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

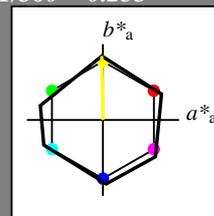
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 91/360 = 0.253$
 lab^*tch and lab^*nch

D65: hue J
 LCH*Ma: 53 84 91
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

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	-0.01
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	74.3	-0.72	42.18
LAB*LABa	74.3	-0.75	42.18
LAB*TCHa	75.0	42.19	91.03

relative CIELAB lab*

lab*lab	0.75	-0.008	0.5
lab*tch	0.75	0.5	0.253
lab*nch	0.0	0.5	0.253

relative Natural Colour (NC)

lab*lrj	0.75	0.015	0.5
lab*tce	0.75	0.5	0.245
lab*nce	0.0	0.5	r98j

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	53.21	0.04	0.0
LAB*LABa	53.21	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	32.1	-0.69	42.2
LAB*LABa	32.1	-0.75	42.18
LAB*TCHa	25.01	42.19	91.03

relative CIELAB lab*

lab*lab	0.25	-0.008	0.5
lab*tch	0.25	0.5	0.253
lab*nch	0.5	0.5	0.253

relative Natural Colour (NC)

lab*lrj	0.25	0.015	0.5
lab*tce	0.25	0.5	0.245
lab*nce	0.5	0.5	r98j

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

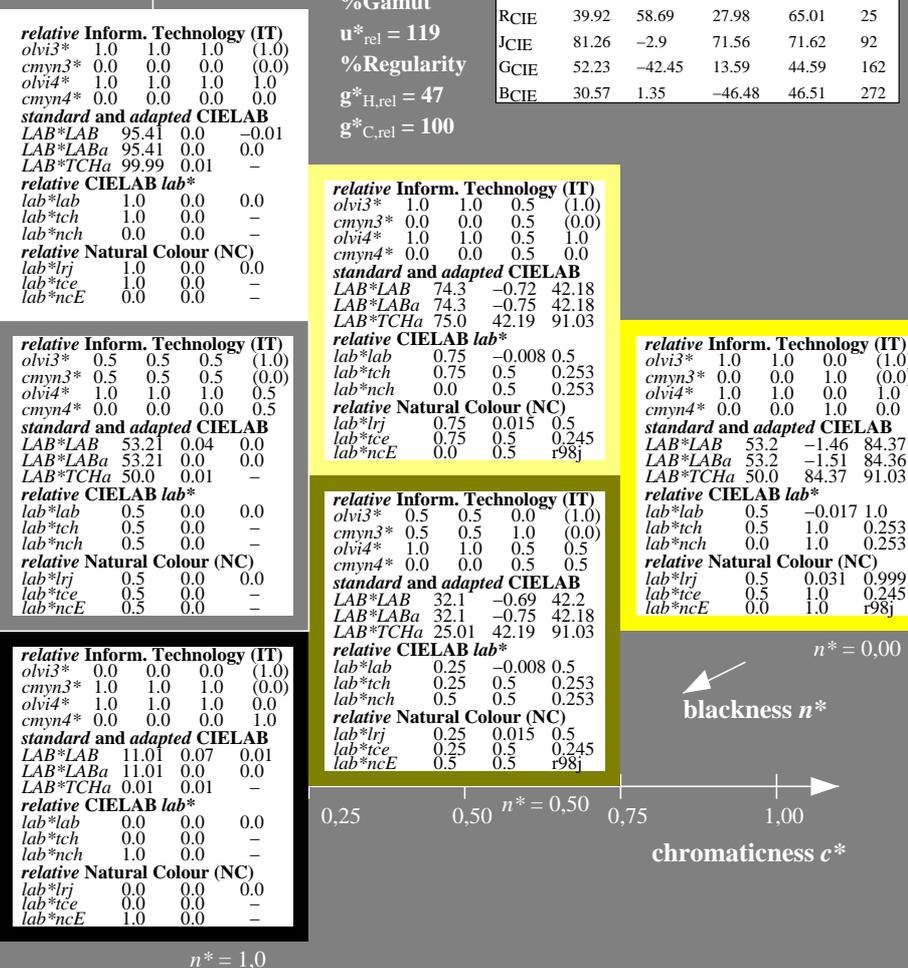
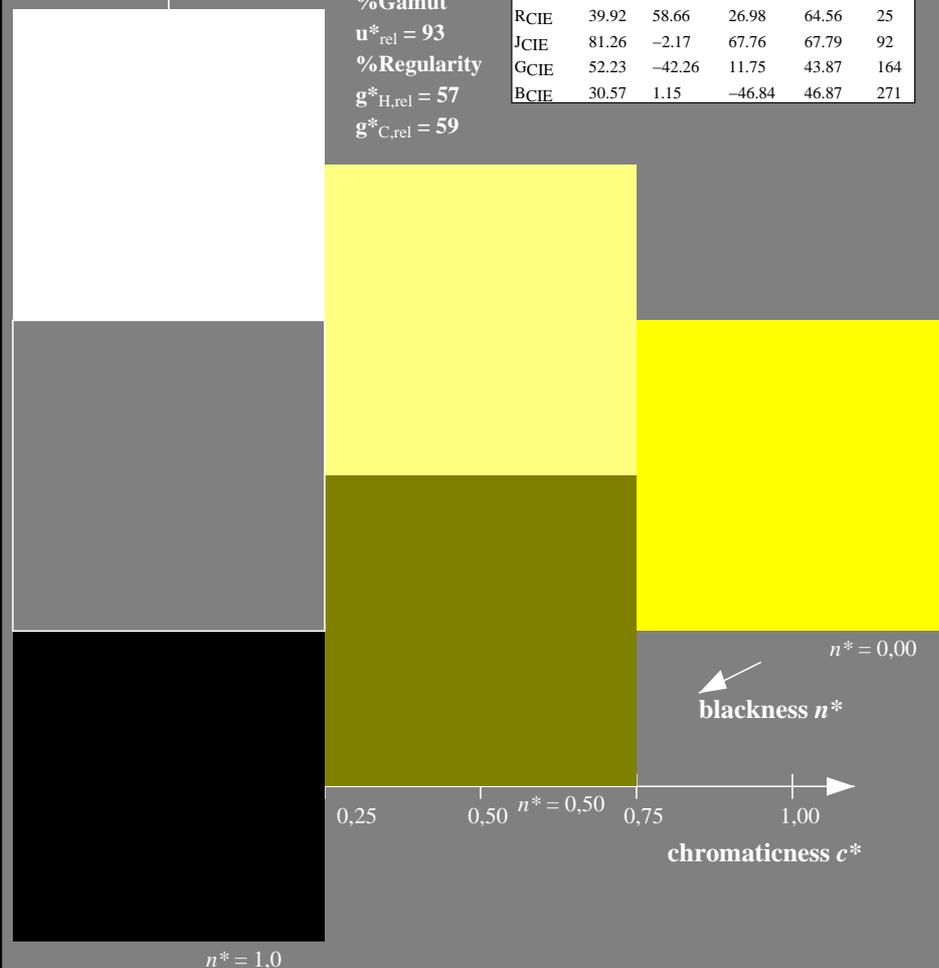
LAB*LAB	53.2	-1.46	84.37
LAB*LABa	53.2	-1.51	84.36
LAB*TCHa	50.0	84.37	91.03

relative CIELAB lab*

lab*lab	0.5	-0.017	1.0
lab*tch	0.5	1.0	0.253
lab*nch	0.0	1.0	0.253

relative Natural Colour (NC)

lab*lrj	0.5	0.031	0.999
lab*tce	0.5	1.0	0.245
lab*nce	0.0	1.0	r98j



TE020-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

3 step scales for constant CIELAB hue 91/360 = 0.253 (right)

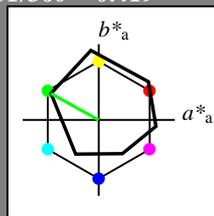
BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
 lab^*tch and lab^*nch

D65: hue L
 LCH*Ma: 51 72 151
 olv*Ma: 0.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

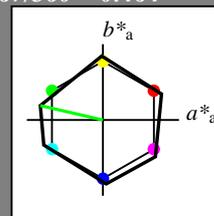
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 167/360 = 0.464$
 lab^*tch and lab^*nch

D65: hue G
 LCH*Ma: 53 84 167
 olv*Ma: 0.0 1.0 0.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

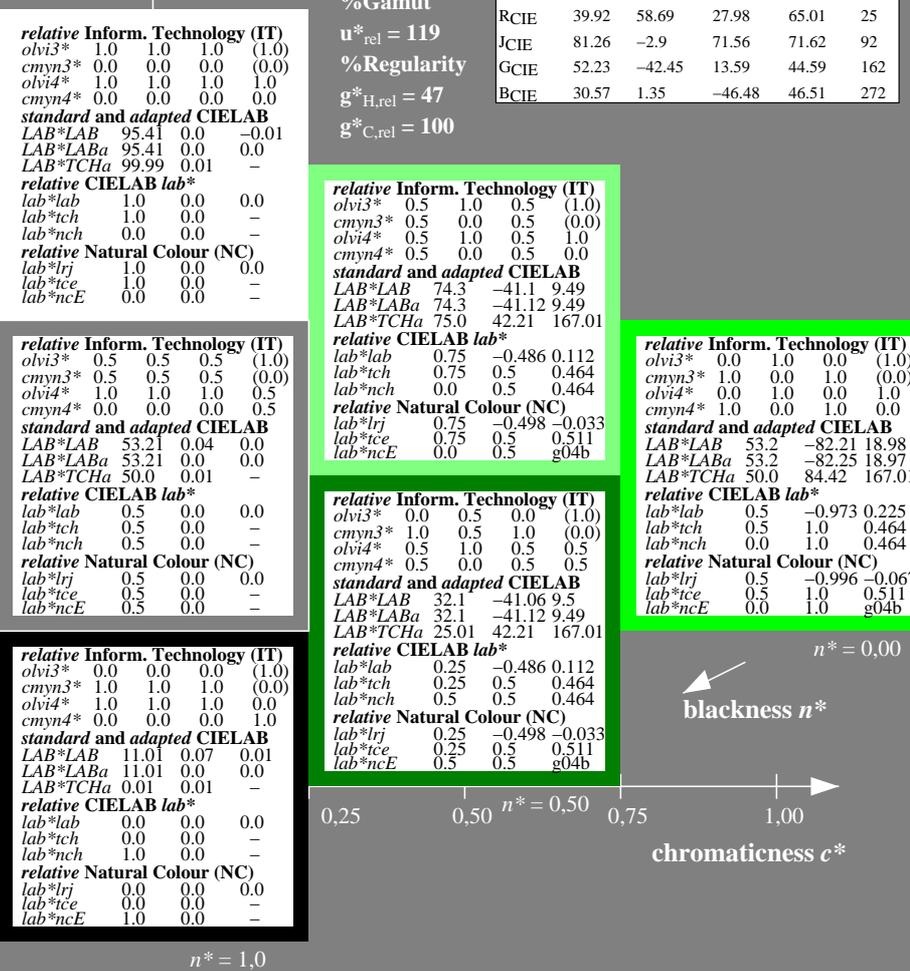
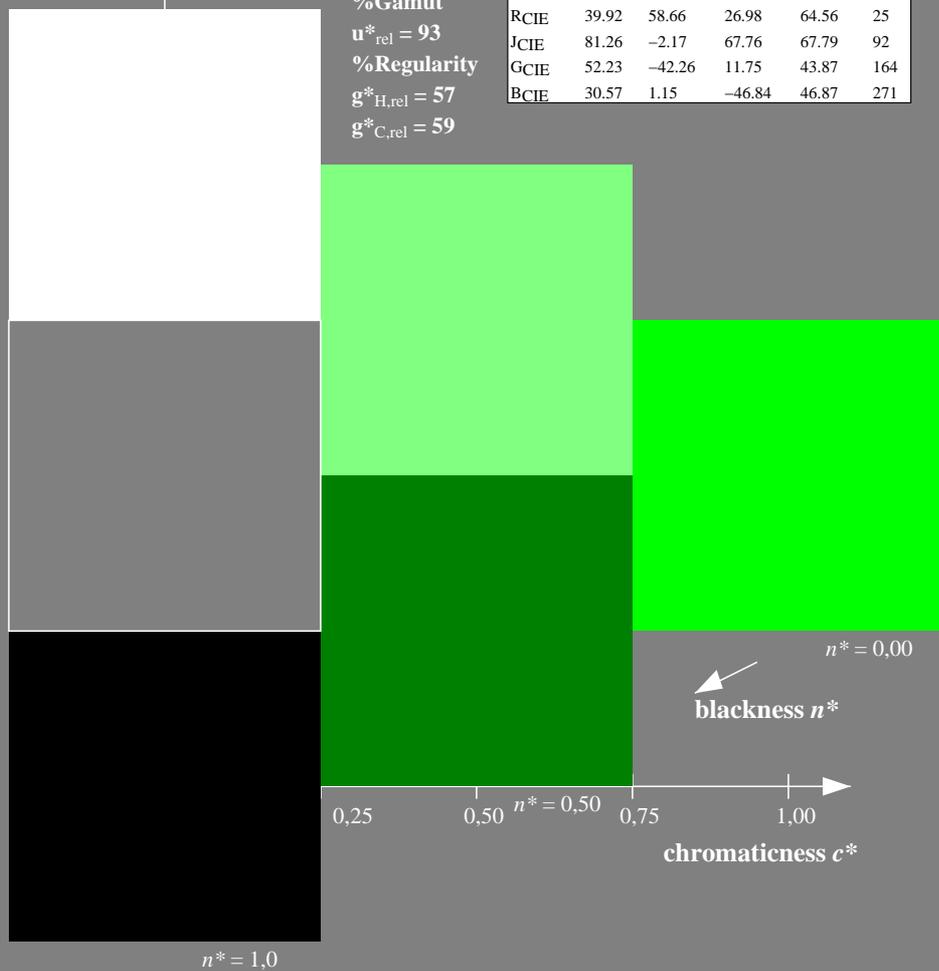
relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ -0.01$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$
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
 $LAB^*LAB = 74.3 \ -41.1 \ 9.49$
 $LAB^*LABa = 74.3 \ -41.12 \ 9.49$
 $LAB^*TCHa = 75.0 \ 42.21 \ 167.01$
relative CIELAB lab*
 $lab^*lab = 0.75 \ -0.486 \ 0.112$
 $lab^*tch = 0.75 \ 0.5 \ 0.464$
 $lab^*nch = 0.0 \ 0.5 \ 0.464$
relative Natural Colour (NC)
 $lab^*lrj = 0.75 \ -0.498 \ -0.033$
 $lab^*tce = 0.75 \ 0.5 \ 0.511$
 $lab^*nce = 0.0 \ 0.5 \ g04b$

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
 $LAB^*LAB = 53.21 \ 0.04 \ 0.0$
 $LAB^*LABa = 53.21 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$
relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.5 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.5 \ 1.0 \ (0.0)$
 $olvi4^* = 0.5 \ 1.0 \ 0.5 \ 0.5$
 $cmyn4^* = 0.5 \ 0.0 \ 0.5 \ 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 32.1 \ -41.06 \ 9.5$
 $LAB^*LABa = 32.1 \ -41.12 \ 9.49$
 $LAB^*TCHa = 25.01 \ 42.21 \ 167.01$
relative CIELAB lab*
 $lab^*lab = 0.25 \ -0.486 \ 0.112$
 $lab^*tch = 0.25 \ 0.5 \ 0.464$
 $lab^*nch = 0.5 \ 0.5 \ 0.464$
relative Natural Colour (NC)
 $lab^*lrj = 0.25 \ -0.498 \ -0.033$
 $lab^*tce = 0.25 \ 0.5 \ 0.511$
 $lab^*nce = 0.5 \ 0.5 \ g04b$

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
 $LAB^*LAB = 53.2 \ -82.21 \ 18.98$
 $LAB^*LABa = 53.2 \ -82.25 \ 18.97$
 $LAB^*TCHa = 50.0 \ 84.42 \ 167.01$
relative CIELAB lab*
 $lab^*lab = 0.5 \ -0.973 \ 0.225$
 $lab^*tch = 0.5 \ 1.0 \ 0.464$
 $lab^*nch = 0.0 \ 1.0 \ 0.464$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ -0.996 \ -0.067$
 $lab^*tce = 0.5 \ 1.0 \ 0.511$
 $lab^*nce = 0.0 \ 1.0 \ g04b$



See for similar files: <http://www.ps.bam.de/TE02/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-TE02/10L/L02E02NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /TE02/ Form: 3/10, Serie: 1/1, Page: 3 Page count: 3

TE020-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

3 step scales for constant CIELAB hue 167/360 = 0.464 (right)

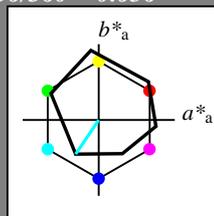
BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
 lab^*tch and lab^*nch

D65: hue C
 LCH*Ma: 59 54 236
 olv*Ma: 0.0 1.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

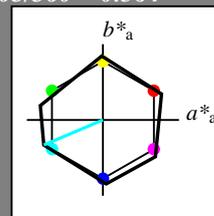
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 203/360 = 0.564$
 lab^*tch and lab^*nch

D65: hue G50B
 LCH*Ma: 53 84 203
 olv*Ma: 0.0 1.0 1.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

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	-0.01
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	74.3	-38.82	-16.48
LAB*LABa	74.3	-38.85	-16.48
LAB*TCHa	75.0	42.21	203.0

relative CIELAB lab*

lab*lab	0.75	-0.459	-0.194
lab*tch	0.75	0.5	0.564
lab*nch	0.0	0.5	0.564

relative Natural Colour (NC)

lab*lrj	0.75	-0.416	-0.275
lab*tce	0.75	0.5	0.593
lab*nce	0.0	0.5	g37b

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	53.21	0.04	0.0
LAB*LABa	53.21	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	32.1	-38.79	-16.46
LAB*LABa	32.1	-38.85	-16.48
LAB*TCHa	25.01	42.21	203.0

relative CIELAB lab*

lab*lab	0.25	-0.459	-0.194
lab*tch	0.25	0.5	0.564
lab*nch	0.5	0.5	0.564

relative Natural Colour (NC)

lab*lrj	0.25	-0.416	-0.275
lab*tce	0.25	0.5	0.593
lab*nce	0.5	0.5	g37b

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

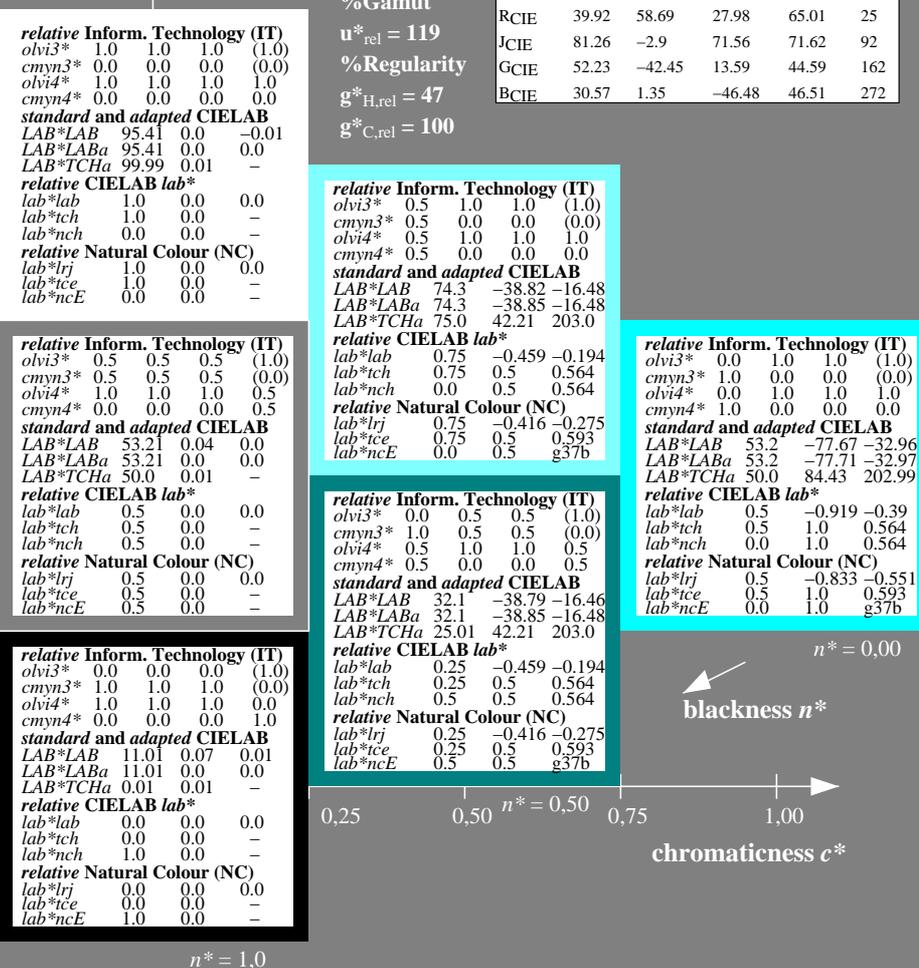
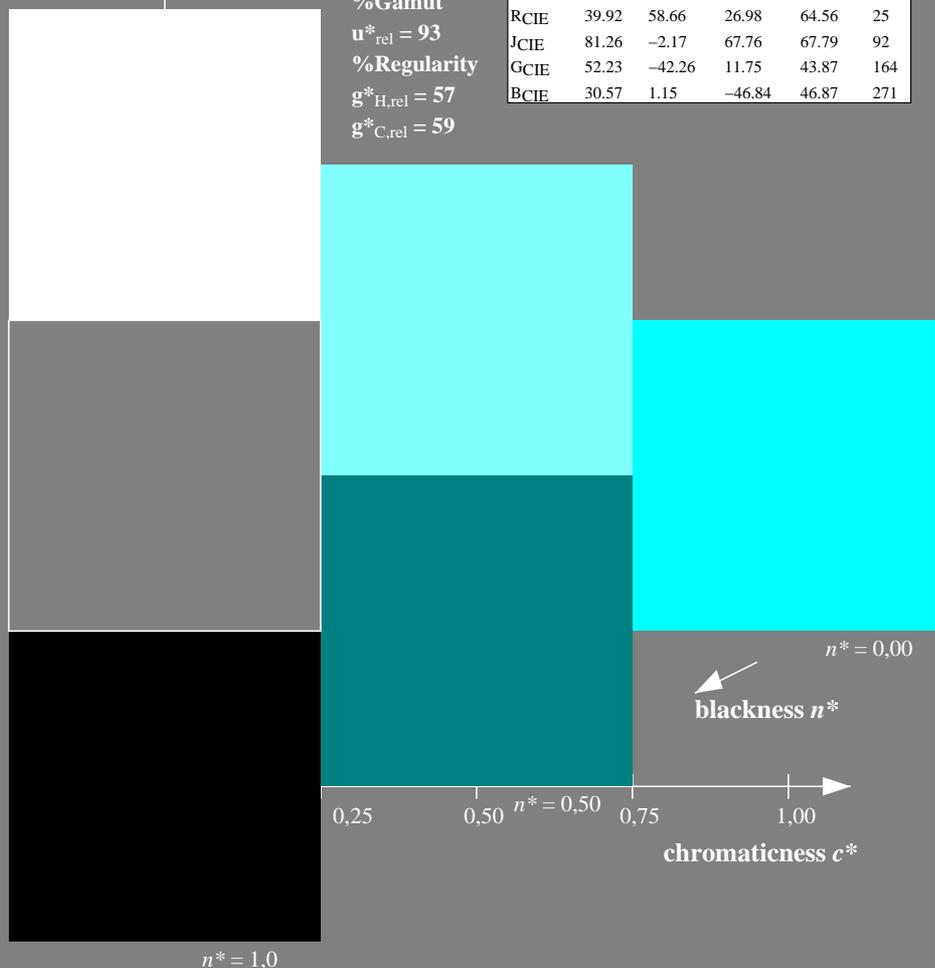
LAB*LAB	53.2	-77.67	-32.96
LAB*LABa	53.2	-77.71	-32.97
LAB*TCHa	50.0	84.43	202.99

relative CIELAB lab*

lab*lab	0.5	-0.919	-0.39
lab*tch	0.5	1.0	0.564
lab*nch	0.0	1.0	0.564

relative Natural Colour (NC)

lab*lrj	0.5	-0.833	-0.551
lab*tce	0.5	1.0	0.593
lab*nce	0.0	1.0	g37b



TE020-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

3 step scales for constant CIELAB hue 203/360 = 0.564 (right)

BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

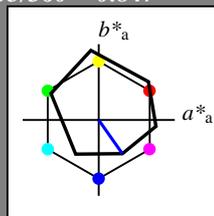
See for similar files: <http://www.ps.bam.de/TE02/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-TE02/10L/L02E03NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 TE02 Form: 4/10, Serie: 1/1, Page: 4 Page count: 4

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
 lab^*tch and lab^*nch

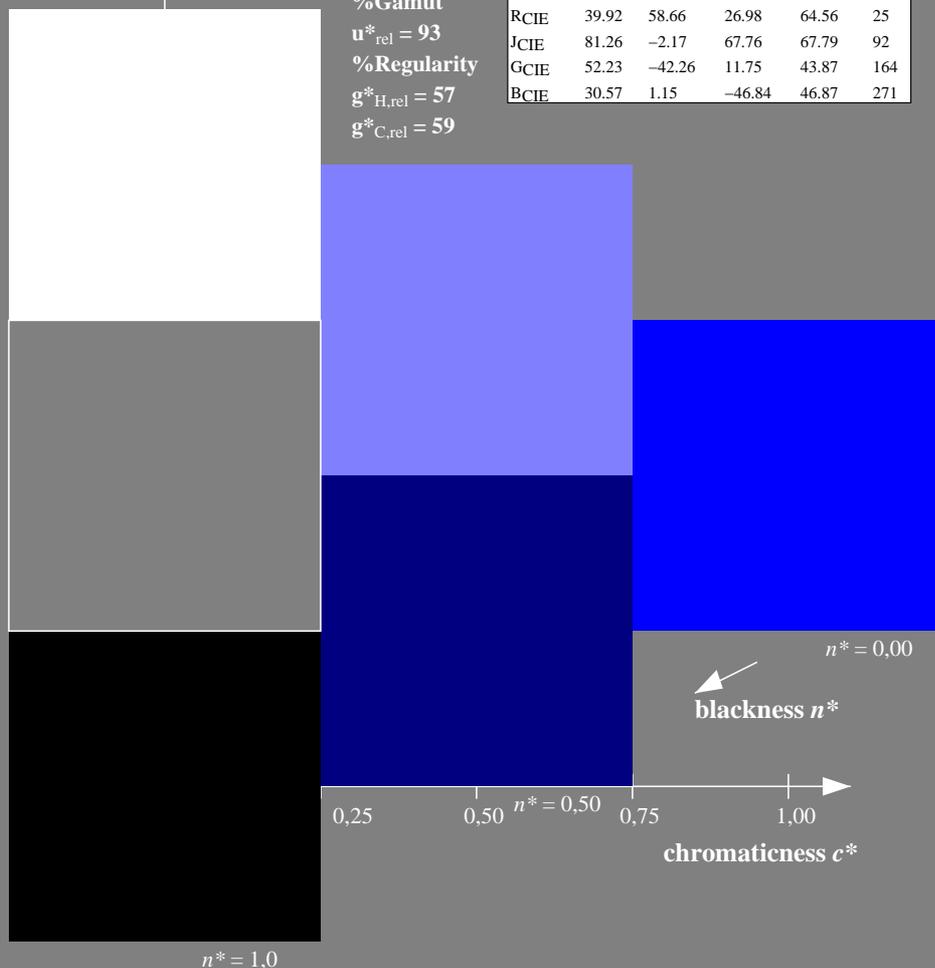
D65: hue V
 LCH*Ma: 26 54 305
 olv*Ma: 0.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

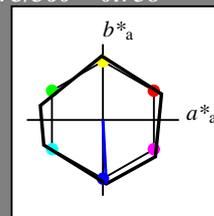
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 273/360 = 0.758$
 lab^*tch and lab^*nch

D65: hue B
 LCH*Ma: 53 84 273
 olv*Ma: 0.0 0.0 1.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

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	-0.01
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	74.3	2.21	-42.13
LAB*LABa	74.3	2.19	-42.13
LAB*TCHa	75.0	42.2	272.97

relative CIELAB lab*

lab*lab	0.75	0.026	-0.498
lab*tch	0.75	0.5	0.758
lab*nch	0.0	0.5	0.758

relative Natural Colour (NC)

lab*lrj	0.75	0.009	-0.499
lab*tce	0.75	0.5	0.753
lab*nce	0.0	0.5	b01r

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	53.21	0.04	0.0
LAB*LABa	53.21	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	32.1	2.25	-42.11
LAB*LABa	32.1	2.19	-42.13
LAB*TCHa	25.01	42.2	272.97

relative CIELAB lab*

lab*lab	0.25	0.026	-0.498
lab*tch	0.25	0.5	0.758
lab*nch	0.5	0.5	0.758

relative Natural Colour (NC)

lab*lrj	0.25	0.009	-0.499
lab*tce	0.25	0.5	0.753
lab*nce	0.5	0.5	b01r

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

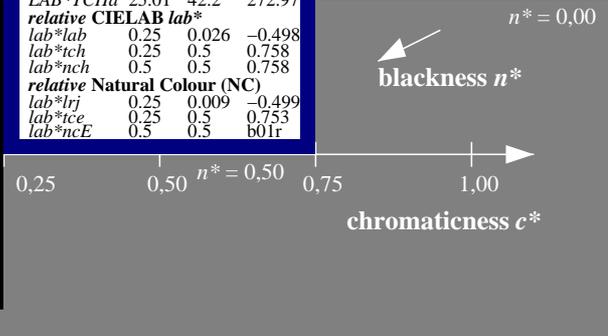
LAB*LAB	53.2	4.42	-84.26
LAB*LABa	53.2	4.37	-84.27
LAB*TCHa	50.0	84.39	272.97

relative CIELAB lab*

lab*lab	0.5	0.052	-0.997
lab*tch	0.5	1.0	0.758
lab*nch	0.0	1.0	0.758

relative Natural Colour (NC)

lab*lrj	0.5	0.018	-0.999
lab*tce	0.5	1.0	0.753
lab*nce	0.0	1.0	b01r



TE020-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

3 step scales for constant CIELAB hue 273/360 = 0.758 (right)

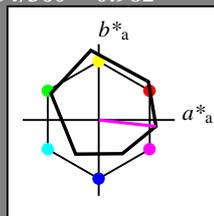
BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
 lab^*tch and lab^*nch

D65: hue M
 LCH*Ma: 48 76 354
 olv*Ma: 1.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

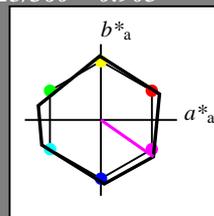
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 325/360 = 0.903$
 lab^*tch and lab^*nch

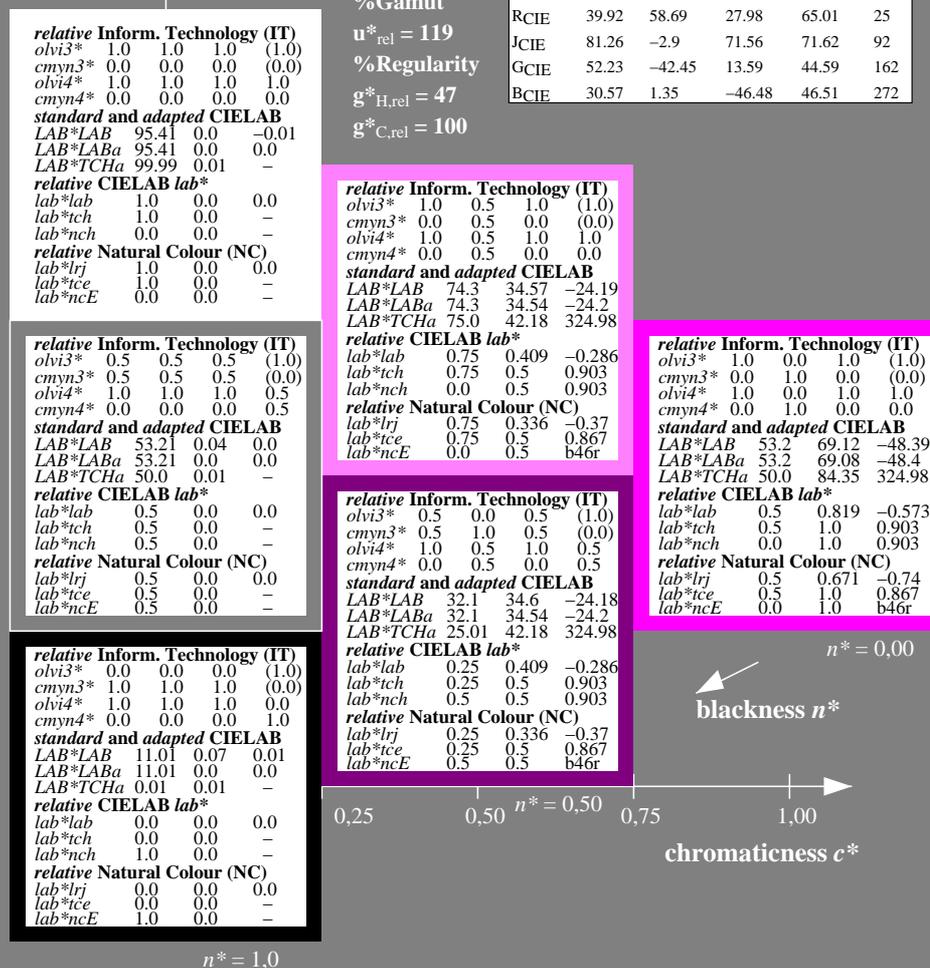
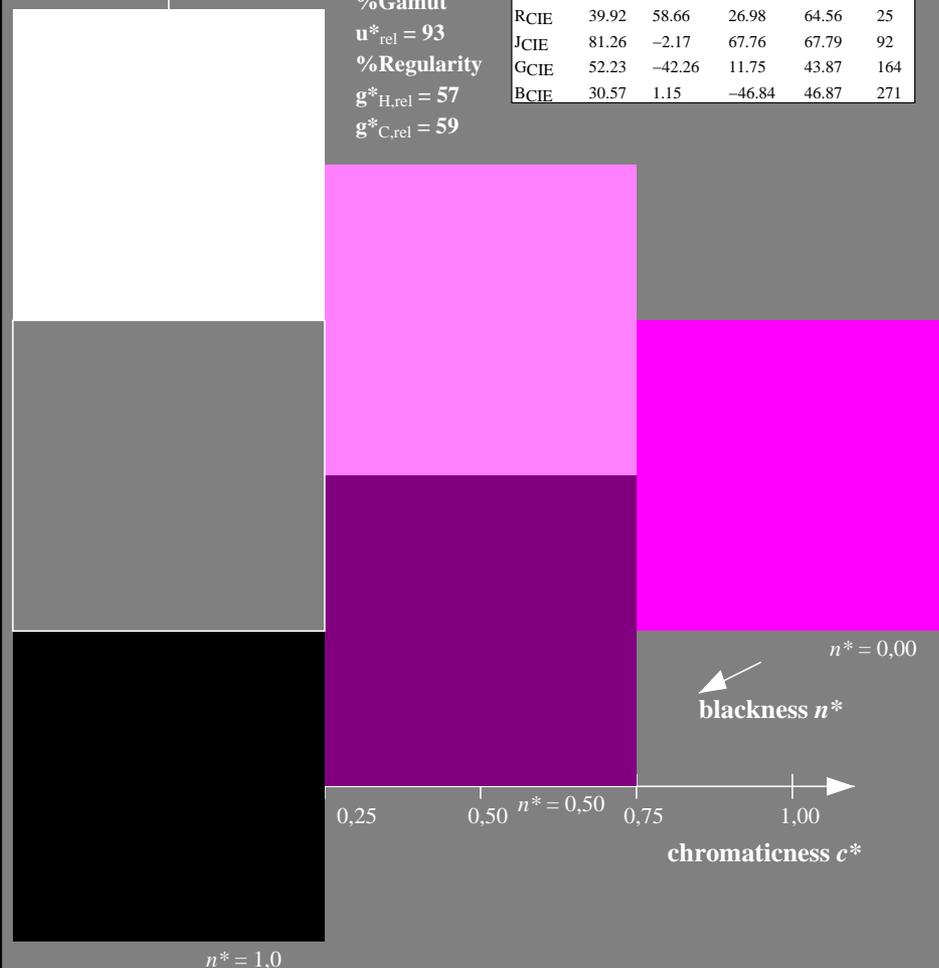
D65: hue B50R
 LCH*Ma: 53 84 325
 olv*Ma: 1.0 0.0 1.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$



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	-0.01
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	74.3	34.57	-24.19
LAB*LABa	74.3	34.54	-24.2
LAB*TCHa	75.0	42.18	324.98

relative CIELAB lab*

lab*lab	0.75	0.409	-0.286
lab*tch	0.75	0.5	0.903
lab*nch	0.0	0.5	0.903

relative Natural Colour (NC)

lab*lrj	0.75	0.336	-0.37
lab*tce	0.75	0.5	0.867
lab*nce	0.0	0.5	b46r

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	53.2	69.12	-48.39
LAB*LABa	53.2	69.08	-48.4
LAB*TCHa	50.0	84.35	324.98

relative CIELAB lab*

lab*lab	0.5	0.819	-0.573
lab*tch	0.5	1.0	0.903
lab*nch	0.0	1.0	0.903

relative Natural Colour (NC)

lab*lrj	0.5	0.671	-0.74
lab*tce	0.5	1.0	0.867
lab*nce	0.0	1.0	b46r

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	11.01	0.07	0.01
LAB*LABa	11.01	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	32.1	34.6	-24.18
LAB*LABa	32.1	34.54	-24.2
LAB*TCHa	25.01	42.18	324.98

relative CIELAB lab*

lab*lab	0.25	0.409	-0.286
lab*tch	0.25	0.5	0.903
lab*nch	0.5	0.5	0.903

relative Natural Colour (NC)

lab*lrj	0.25	0.336	-0.37
lab*tce	0.25	0.5	0.867
lab*nce	0.5	0.5	b46r

TE020-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

3 step scales for constant CIELAB hue 325/360 = 0.903 (right)

BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 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/TE02/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=1,1

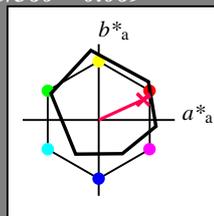
BAM registration: 20060101-TE02/10L/L02E05NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 TE02 Form: 6/10, Serie: 1/1, Page: 6 Page count: 6

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
 lab^*tch and lab^*nch

D65: hue R
 LCH*Ma: 48 75 25
 olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

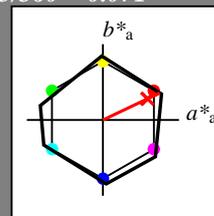
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 25/360 = 0.071$
 lab^*tch and lab^*nch

D65: hue R
 LCH*Ma: 53 83 25
 olv*Ma: 1.0 0.03 0.0

triangle lightness t^*



NRS11; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

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
 $LAB^*LAB = 95.41 \ 0.0 \ -0.01$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

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
 $LAB^*LAB = 53.21 \ 0.04 \ 0.0$
 $LAB^*LABa = 53.21 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

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
 $LAB^*LAB = 11.01 \ 0.07 \ 0.01$
 $LAB^*LABa = 11.01 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

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)
 $olvi3^* = 1.0 \ 0.514 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.486 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 0.514 \ 0.5 \ 1.0$
 $cmyn4^* = 0.0 \ 0.486 \ 0.5 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 74.3 \ 37.46 \ 17.85$
 $LAB^*LABa = 74.3 \ 37.44 \ 17.85$
 $LAB^*TCHa = 75.0 \ 41.47 \ 25.49$

relative CIELAB lab*
 $lab^*lab = 0.75 \ 0.451 \ 0.215$
 $lab^*tch = 0.75 \ 0.5 \ 0.071$
 $lab^*nch = 0.0 \ 0.5 \ 0.071$

relative Natural Colour (NC)
 $lab^*lrj = 0.75 \ 0.5 \ 0.0$
 $lab^*tce = 0.75 \ 0.5 \ 0.0$
 $lab^*nce = 0.0 \ 0.5 \ r00j$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.014 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.986 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.514 \ 0.5 \ 0.5$
 $cmyn4^* = 0.0 \ 0.486 \ 0.5 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 32.1 \ 37.51 \ 17.86$
 $LAB^*LABa = 32.1 \ 37.45 \ 17.84$
 $LAB^*TCHa = 25.01 \ 41.48 \ 25.48$

relative CIELAB lab*
 $lab^*lab = 0.25 \ 0.451 \ 0.215$
 $lab^*tch = 0.25 \ 0.5 \ 0.071$
 $lab^*nch = 0.5 \ 0.5 \ 0.071$

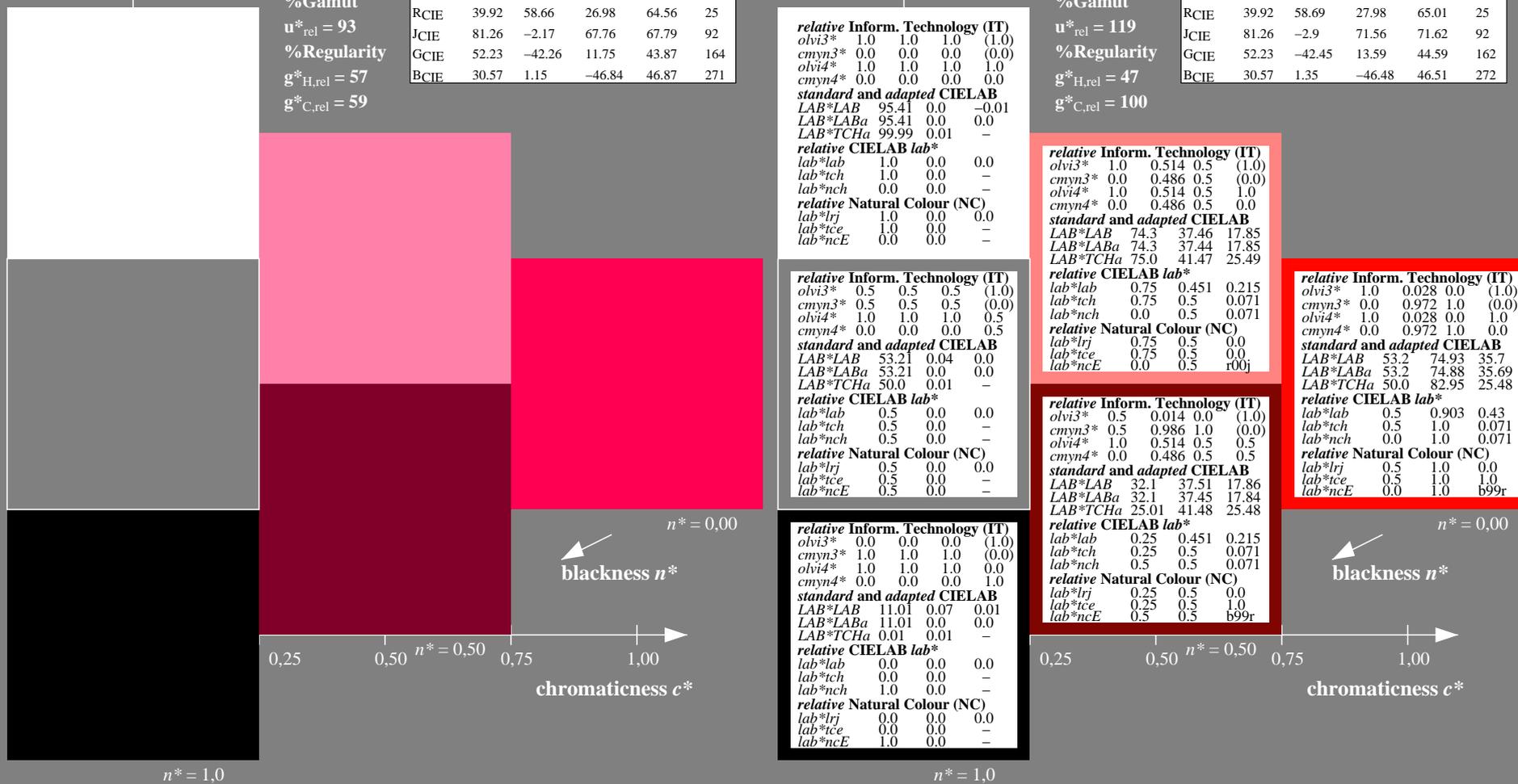
relative Natural Colour (NC)
 $lab^*lrj = 0.25 \ 0.5 \ 0.0$
 $lab^*tce = 0.25 \ 0.5 \ 1.0$
 $lab^*nce = 0.5 \ 0.5 \ b99r$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.028 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.972 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.028 \ 0.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.972 \ 1.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 53.2 \ 74.93 \ 35.7$
 $LAB^*LABa = 53.2 \ 74.88 \ 35.69$
 $LAB^*TCHa = 50.0 \ 82.95 \ 25.48$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.903 \ 0.43$
 $lab^*tch = 0.5 \ 1.0 \ 0.071$
 $lab^*nch = 0.0 \ 1.0 \ 0.071$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 1.0 \ 0.0$
 $lab^*tce = 0.5 \ 1.0 \ 1.0$
 $lab^*nce = 0.0 \ 1.0 \ b99r$



TE020-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

3 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

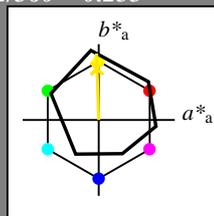
See for similar files: <http://www.ps.bam.de/TE02/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20060101-TE02/10L/L02E06NP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 TE02 Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
 lab^*tch and lab^*nch

D65: hue J
 LCH*Ma: 86 88 92
 olv*Ma: 1.0 0.9 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

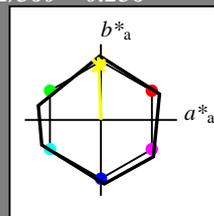
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 92/360 = 0.256$
 lab^*tch and lab^*nch

D65: hue J
 LCH*Ma: 53 83 92
 olv*Ma: 0.98 1.0 0.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

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	-0.01
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*	0.989	1.0	0.5	(1.0)
cmyn3*	0.011	0.0	0.5	(0.0)
olvi4*	0.989	1.0	0.5	1.0
cmyn4*	0.011	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	74.3	-1.64	41.44
LAB*LABa	74.3	-1.67	41.44
LAB*TCHa	75.0	41.47	92.32

relative CIELAB lab*

lab*lab	0.75	-0.019	0.499
lab*tch	0.75	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*lrj	0.75	0.0	0.5
lab*tce	0.75	0.5	0.25
lab*nce	0.0	0.5	r99j

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	53.21	0.04	0.0
LAB*LABa	53.21	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*	0.489	0.5	0.0	(1.0)
cmyn3*	0.511	0.5	1.0	(0.0)
olvi4*	0.989	1.0	0.5	0.5
cmyn4*	0.011	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	32.1	-1.62	41.45
LAB*LABa	32.1	-1.68	41.43
LAB*TCHa	25.01	41.46	92.33

relative CIELAB lab*

lab*lab	0.25	-0.019	0.499
lab*tch	0.25	0.5	0.256
lab*nch	0.5	0.5	0.256

relative Natural Colour (NC)

lab*lrj	0.25	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	100g

relative Inform. Technology (IT)

olvi3*	0.977	1.0	0.0	(1.0)
cmyn3*	0.023	0.0	1.0	(0.0)
olvi4*	0.977	1.0	0.0	1.0
cmyn4*	0.023	0.0	1.0	0.0

standard and adapted CIELAB

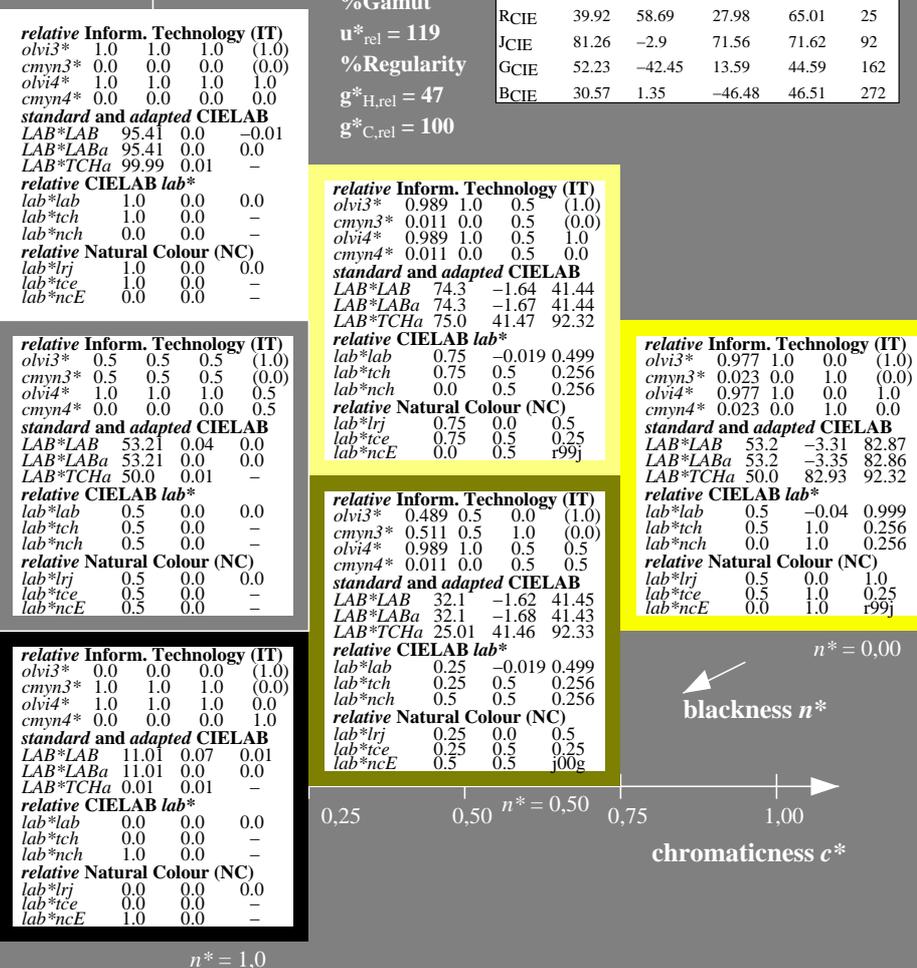
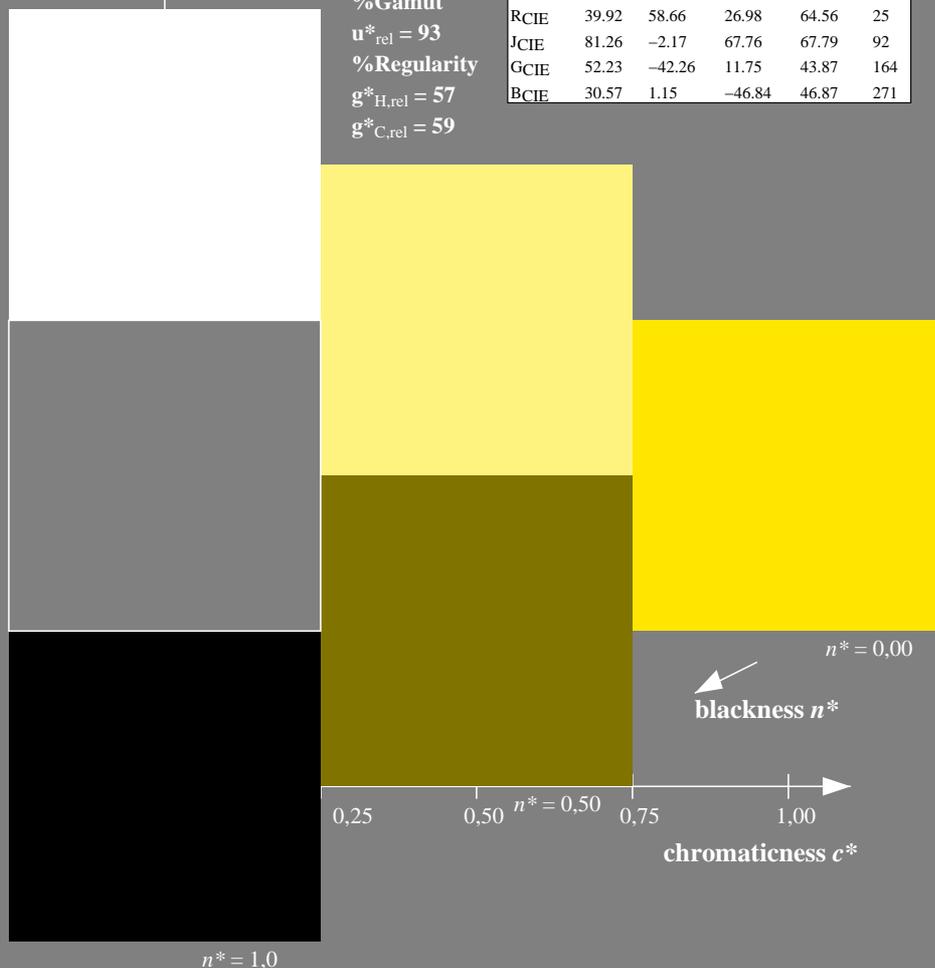
LAB*LAB	53.2	-3.31	82.87
LAB*LABa	53.2	-3.35	82.86
LAB*TCHa	50.0	82.93	92.32

relative CIELAB lab*

lab*lab	0.5	-0.04	0.999
lab*tch	0.5	1.0	0.256
lab*nch	0.0	1.0	0.256

relative Natural Colour (NC)

lab*lrj	0.5	0.0	1.0
lab*tce	0.5	1.0	0.25
lab*nce	0.0	1.0	r99j



TE020-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

3 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

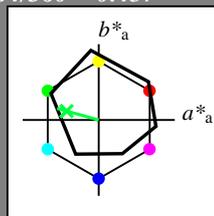
input: olv* setrgbcolor
 output: no change compared to input

Input: Colorimetric Reflective System ORS18

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

D65: hue G
 LCH*Ma: 53 57 164
 olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

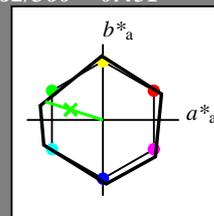
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 162/360 = 0.451$
 lab^*tch and lab^*nch

D65: hue G
 LCH*Ma: 53 80 162
 olv*Ma: 0.08 1.0 0.0

triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$

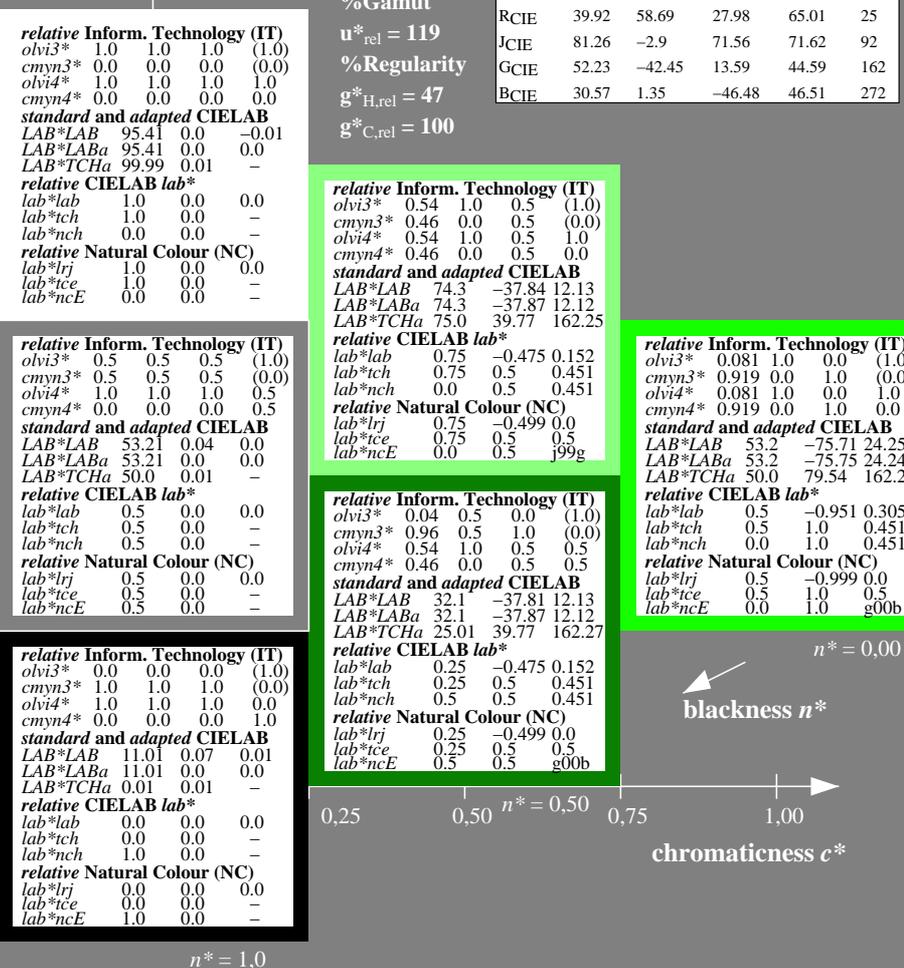
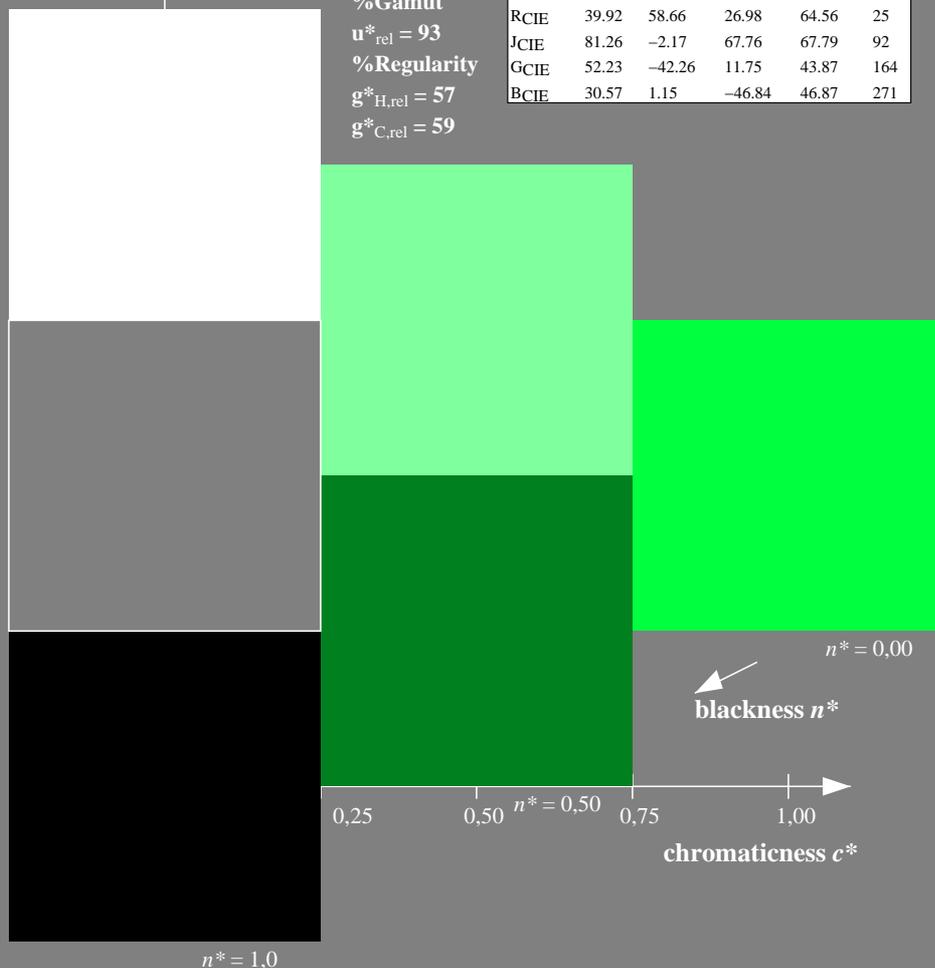
relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ -0.01$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$
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)
 $olvi3^* = 0.54 \ 1.0 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.46 \ 0.0 \ 0.5 \ (0.0)$
 $olvi4^* = 0.54 \ 1.0 \ 0.5 \ 1.0$
 $cmyn4^* = 0.46 \ 0.0 \ 0.5 \ 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 74.3 \ -37.84 \ 12.13$
 $LAB^*LABa = 74.3 \ -37.87 \ 12.12$
 $LAB^*TCHa = 75.0 \ 39.77 \ 162.25$
relative CIELAB lab*
 $lab^*lab = 0.75 \ -0.475 \ 0.152$
 $lab^*tch = 0.75 \ 0.5 \ 0.451$
 $lab^*nch = 0.0 \ 0.5 \ 0.451$
relative Natural Colour (NC)
 $lab^*lrj = 0.75 \ -0.499 \ 0.0$
 $lab^*tce = 0.75 \ 0.5 \ 0.5$
 $lab^*nce = 0.0 \ 0.5 \ 0.99g$

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
 $LAB^*LAB = 53.21 \ 0.04 \ 0.0$
 $LAB^*LABa = 53.21 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$
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)
 $olvi3^* = 0.04 \ 0.5 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.96 \ 0.5 \ 1.0 \ (0.0)$
 $olvi4^* = 0.54 \ 1.0 \ 0.5 \ 0.5$
 $cmyn4^* = 0.46 \ 0.0 \ 0.5 \ 0.5$
standard and adapted CIELAB
 $LAB^*LAB = 32.1 \ -37.81 \ 12.13$
 $LAB^*LABa = 32.1 \ -37.87 \ 12.12$
 $LAB^*TCHa = 25.01 \ 39.77 \ 162.27$
relative CIELAB lab*
 $lab^*lab = 0.25 \ -0.475 \ 0.152$
 $lab^*tch = 0.25 \ 0.5 \ 0.451$
 $lab^*nch = 0.5 \ 0.5 \ 0.451$
relative Natural Colour (NC)
 $lab^*lrj = 0.25 \ -0.499 \ 0.0$
 $lab^*tce = 0.25 \ 0.5 \ 0.5$
 $lab^*nce = 0.5 \ 0.5 \ g00b$

relative Inform. Technology (IT)
 $olvi3^* = 0.081 \ 1.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.919 \ 0.0 \ 1.0 \ (0.0)$
 $olvi4^* = 0.081 \ 1.0 \ 0.0 \ 1.0$
 $cmyn4^* = 0.919 \ 0.0 \ 1.0 \ 0.0$
standard and adapted CIELAB
 $LAB^*LAB = 53.2 \ -75.71 \ 24.25$
 $LAB^*LABa = 53.2 \ -75.75 \ 24.24$
 $LAB^*TCHa = 50.0 \ 79.54 \ 162.26$
relative CIELAB lab*
 $lab^*lab = 0.5 \ -0.951 \ 0.305$
 $lab^*tch = 0.5 \ 1.0 \ 0.451$
 $lab^*nch = 0.0 \ 1.0 \ 0.451$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ -0.999 \ 0.0$
 $lab^*tce = 0.5 \ 1.0 \ 0.5$
 $lab^*nce = 0.0 \ 1.0 \ g00b$



TE020-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

3 step scales for constant CIELAB hue 162/360 = 0.451 (right)

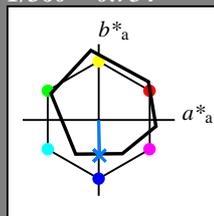
BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
 lab^*tch and lab^*nch

D65: hue B
 LCH*Ma: 42 45 271
 olv*Ma: 0.0 0.49 1.0
 triangle lightness t^*



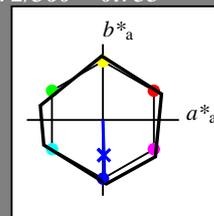
ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
YMa	47.94	65.37	50.52	82.62	38
OMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Reflective System NRS11

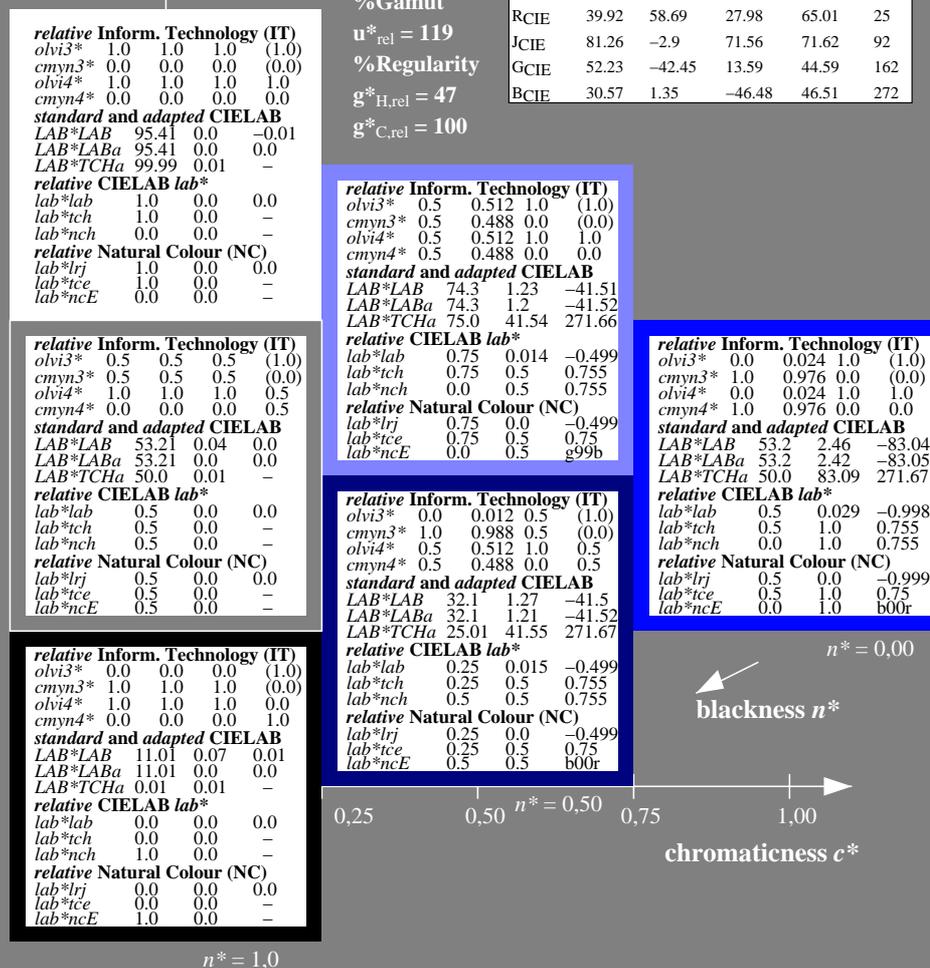
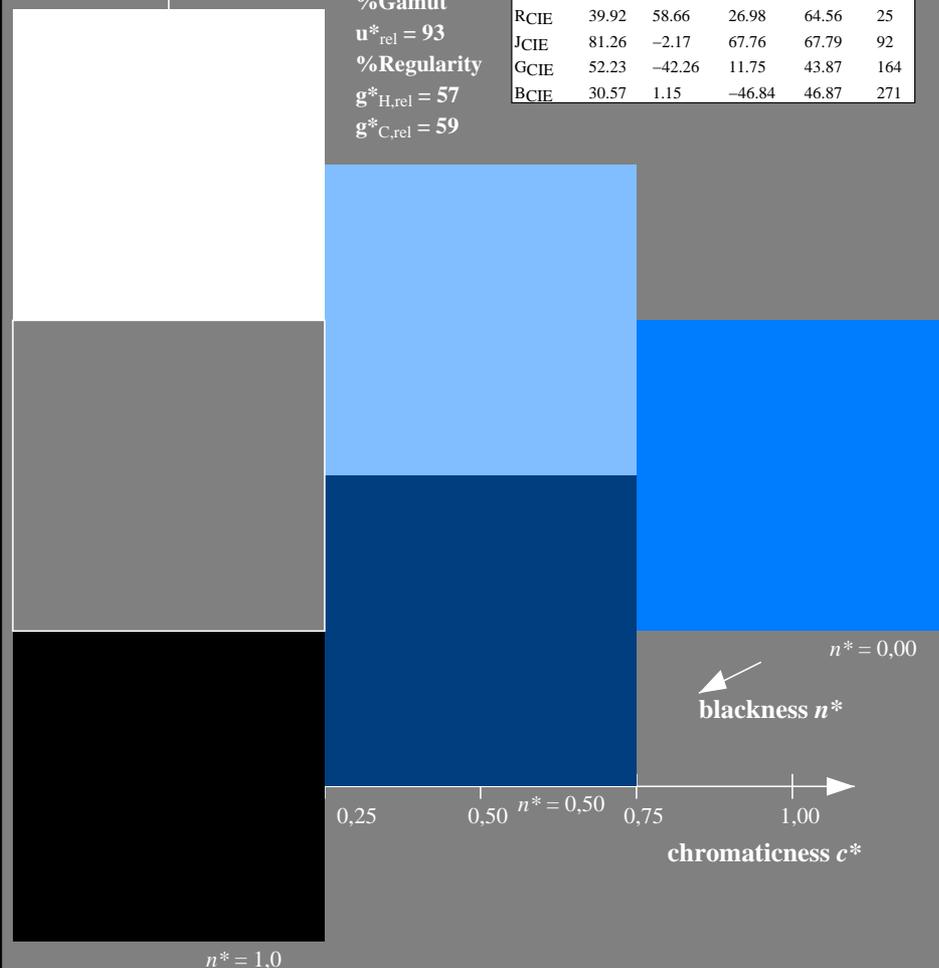
for hue $h^* = lab^*h = 272/360 = 0.755$
 lab^*tch and lab^*nch

D65: hue B
 LCH*Ma: 53 83 272
 olv*Ma: 0.0 0.02 1.0
 triangle lightness t^*



NRS11; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Gamut
 $u^*_{rel} = 119$
 %Regularity
 $g^*_{H,rel} = 47$
 $g^*_{C,rel} = 100$



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	-0.01
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	0.512	1.0	(1.0)
cmyn3*	0.5	0.488	0.0	(0.0)
olvi4*	0.5	0.512	1.0	1.0
cmyn4*	0.5	0.488	0.0	0.0

standard and adapted CIELAB

LAB*LAB	74.3	1.23	-41.51
LAB*LABa	74.3	1.2	-41.52
LAB*TCHa	75.0	41.54	271.66

relative CIELAB lab*

lab*lab	0.75	0.014	-0.499
lab*tch	0.75	0.5	0.755
lab*nch	0.0	0.5	0.755

relative Natural Colour (NC)

lab*lrj	0.75	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	53.21	0.04	0.0
LAB*LABa	53.21	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	0.012	0.5	(1.0)
cmyn3*	1.0	0.988	0.5	(0.0)
olvi4*	0.5	0.512	1.0	0.5
cmyn4*	0.5	0.488	0.0	0.5

standard and adapted CIELAB

LAB*LAB	32.1	1.27	-41.5
LAB*LABa	32.1	1.21	-41.52
LAB*TCHa	25.01	41.55	271.67

relative CIELAB lab*

lab*lab	0.25	0.015	-0.499
lab*tch	0.25	0.5	0.755
lab*nch	0.5	0.5	0.755

relative Natural Colour (NC)

lab*lrj	0.25	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	0.024	1.0	(1.0)
cmyn3*	1.0	0.976	0.0	(0.0)
olvi4*	0.0	0.024	1.0	1.0
cmyn4*	1.0	0.976	0.0	0.0

standard and adapted CIELAB

LAB*LAB	53.2	2.46	-83.04
LAB*LABa	53.2	2.42	-83.05
LAB*TCHa	50.0	83.09	271.67

relative CIELAB lab*

lab*lab	0.5	0.029	-0.998
lab*tch	0.5	1.0	0.755
lab*nch	0.0	1.0	0.755

relative Natural Colour (NC)

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

TE020-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

3 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart TE02; Colorimetric systems ORS18 & NRS11
 D65: 3 step colour scales and coordinate data for 10 hues

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