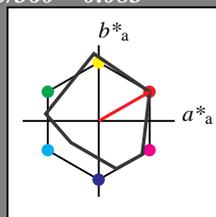


Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 30/360 = 0.083$   
 $lab^*tch$  and  $lab^*nch$

D65: hue R  
 LCH\*Ma: 50 77 30  
 olv\*Ma: 1.0 0.0 0.0  
 triangle lightness  $t^*$



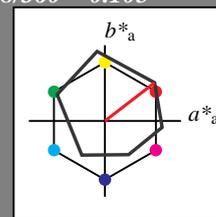
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: 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	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

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	-0.97	4.75
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	71.67	32.15	28.41
LAB*LABa	71.67	32.68	25.25
LAB*TCHa	75.0	41.3	37.7

relative CIELAB lab\*

lab*lab	0.693	0.396	0.306
lab*tch	0.75	0.5	0.105
lab*nch	0.0	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.693	0.477	0.15
lab*tce	0.75	0.5	0.048
lab*nce	0.0	0.5	r19j

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	56.71	-0.23	2.14
LAB*LABa	56.71	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	32.98	32.9	25.8
LAB*LABa	32.98	32.68	25.25
LAB*TCHa	25.01	41.3	37.7

relative CIELAB lab\*

lab*lab	0.193	0.396	0.306
lab*tch	0.25	0.5	0.105
lab*nch	0.5	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.193	0.477	0.15
lab*tce	0.25	0.5	0.048
lab*nce	0.5	0.5	r19j

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

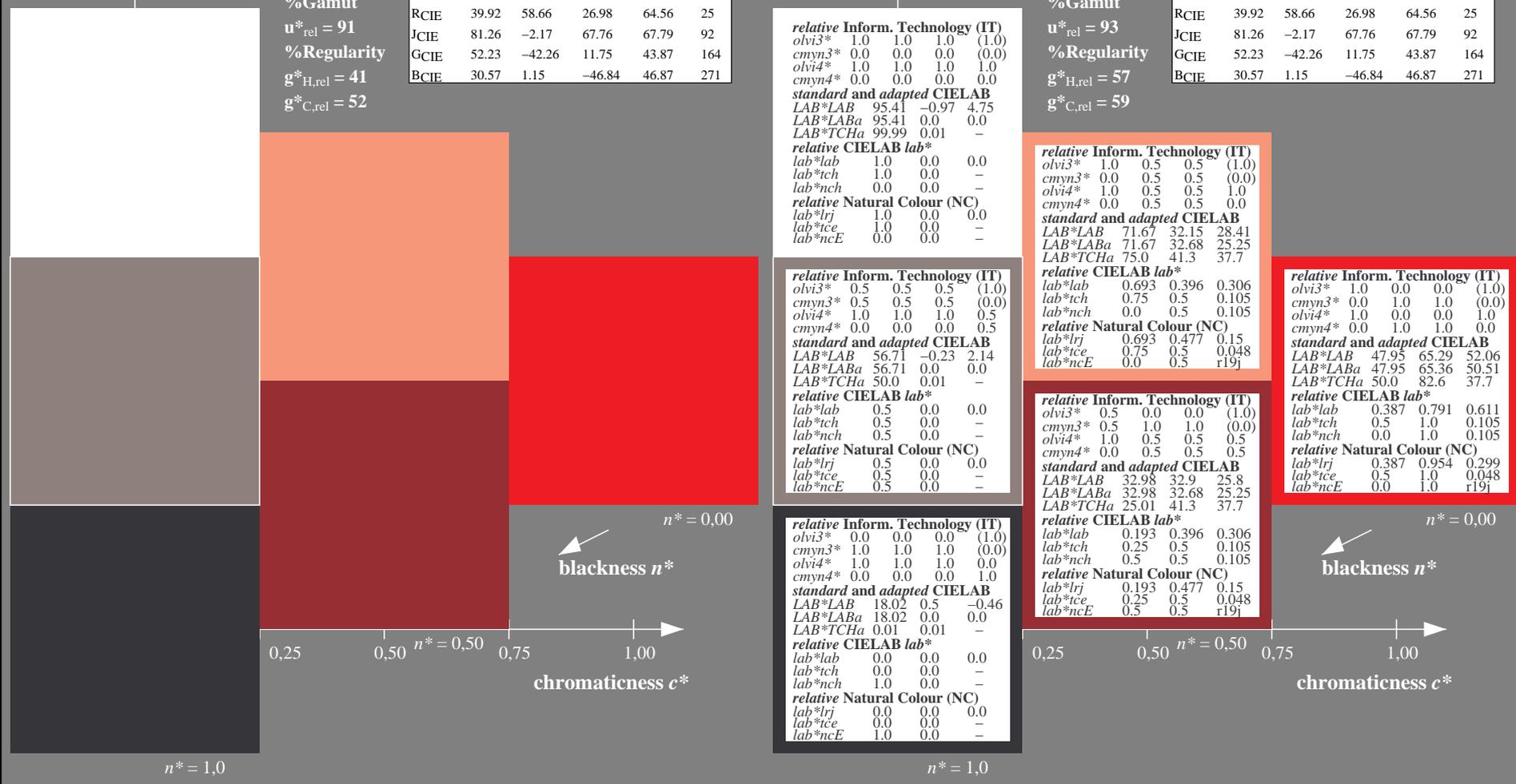
LAB*LAB	47.95	65.29	52.06
LAB*LABa	47.95	65.36	50.51
LAB*TCHa	50.0	82.6	37.7

relative CIELAB lab\*

lab*lab	0.387	0.791	0.611
lab*tch	0.5	1.0	0.105
lab*nch	0.0	1.0	0.105

relative Natural Colour (NC)

lab*lrj	0.387	0.954	0.299
lab*tce	0.5	1.0	0.048
lab*nce	0.0	1.0	r19j



UE050-7, 3 step scales for constant CIELAB hue 30/360 = 0.083 (left)

3 step scales for constant CIELAB hue 38/360 = 0.105 (right)

BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

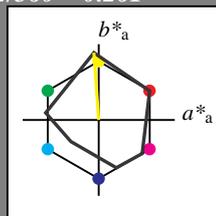
See for similar files: <http://www.ps.bam.de/UE05/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0.0

BAM registration: 20060101-UE05/10S/S05E00NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /UE05/ Form: 1/10, Serie: 1/1, Page: 1 Page count: 1

Input: Colorimetric Reflective System MRS18

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

D65: hue J  
 LCH\*Ma: 91 89 94  
 olv\*Ma: 1.0 1.0 0.0  
 triangle lightness  $t^*$



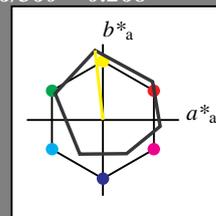
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: 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	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

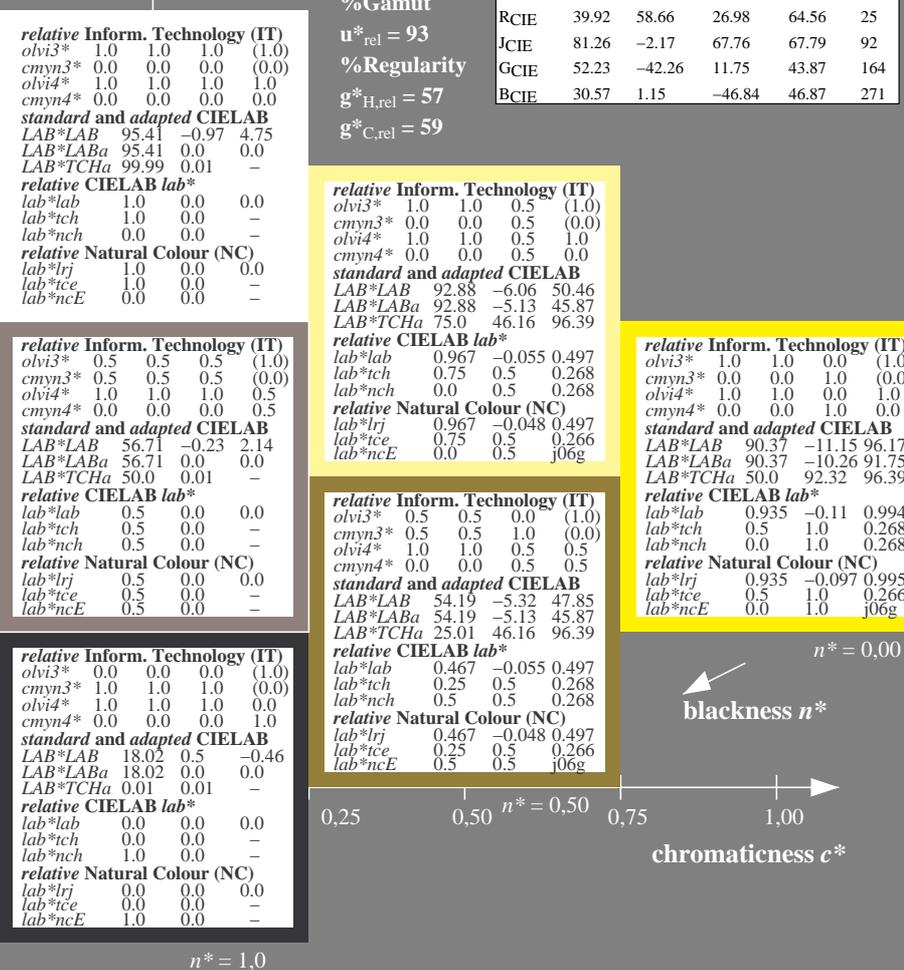
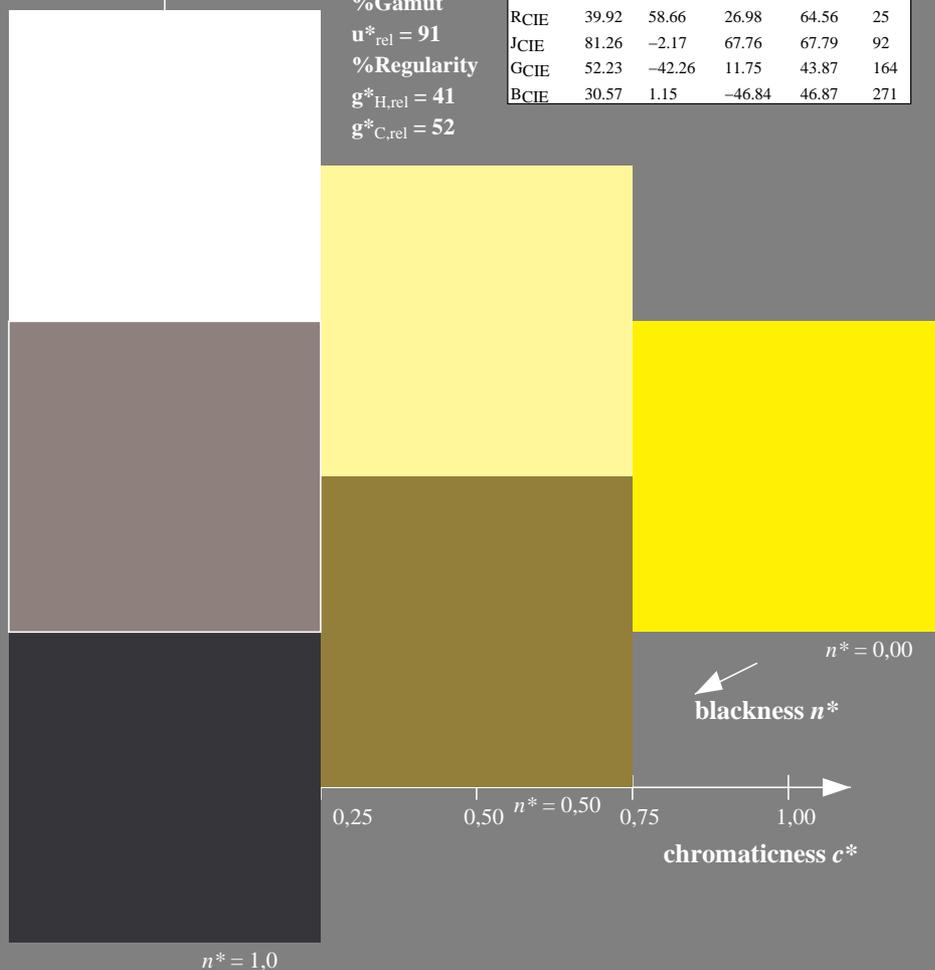
relative Inform. Technology (IT)  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
 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  
 $LAB^*LAB = 92.88 \ -6.06 \ 50.46$   
 $LAB^*LABa = 92.88 \ -5.13 \ 45.87$   
 $LAB^*TCHa = 75.0 \ 46.16 \ 96.39$   
 relative CIELAB lab\*  
 $lab^*lab = 0.967 \ -0.055 \ 0.497$   
 $lab^*tch = 0.75 \ 0.5 \ 0.268$   
 $lab^*nch = 0.0 \ 0.5 \ 0.268$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.967 \ -0.048 \ 0.497$   
 $lab^*tce = 0.75 \ 0.5 \ 0.266$   
 $lab^*nce = 0.0 \ 0.5 \ j06g$

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  
 $LAB^*LAB = 56.71 \ -0.23 \ 2.14$   
 $LAB^*LABa = 56.71 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$   
 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  
 $LAB^*LAB = 54.19 \ -5.32 \ 47.85$   
 $LAB^*LABa = 54.19 \ -5.13 \ 45.87$   
 $LAB^*TCHa = 25.01 \ 46.16 \ 96.39$   
 relative CIELAB lab\*  
 $lab^*lab = 0.467 \ -0.055 \ 0.497$   
 $lab^*tch = 0.25 \ 0.5 \ 0.268$   
 $lab^*nch = 0.5 \ 0.5 \ 0.268$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.467 \ -0.048 \ 0.497$   
 $lab^*tce = 0.25 \ 0.5 \ 0.266$   
 $lab^*nce = 0.5 \ 0.5 \ j06g$

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  
 $LAB^*LAB = 90.37 \ -11.15 \ 96.17$   
 $LAB^*LABa = 90.37 \ -10.26 \ 91.75$   
 $LAB^*TCHa = 50.0 \ 92.32 \ 96.39$   
 relative CIELAB lab\*  
 $lab^*lab = 0.935 \ -0.11 \ 0.994$   
 $lab^*tch = 0.5 \ 1.0 \ 0.268$   
 $lab^*nch = 0.0 \ 1.0 \ 0.268$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.935 \ -0.097 \ 0.995$   
 $lab^*tce = 0.5 \ 1.0 \ 0.266$   
 $lab^*nce = 0.0 \ 1.0 \ j06g$



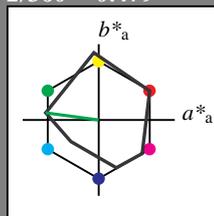
UE050-7, 3 step scales for constant CIELAB hue 94/360 = 0.261 (left)

3 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 172/360 = 0.479$   
 $lab^*tch$  and  $lab^*nch$

D65: hue G  
 LCH\*Ma: 52 70 172  
 olv\*Ma: 0.0 1.0 0.0  
 triangle lightness  $t^*$



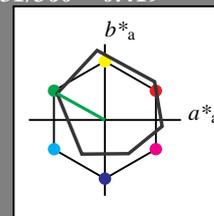
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: Colorimetric Reflective System ORS18

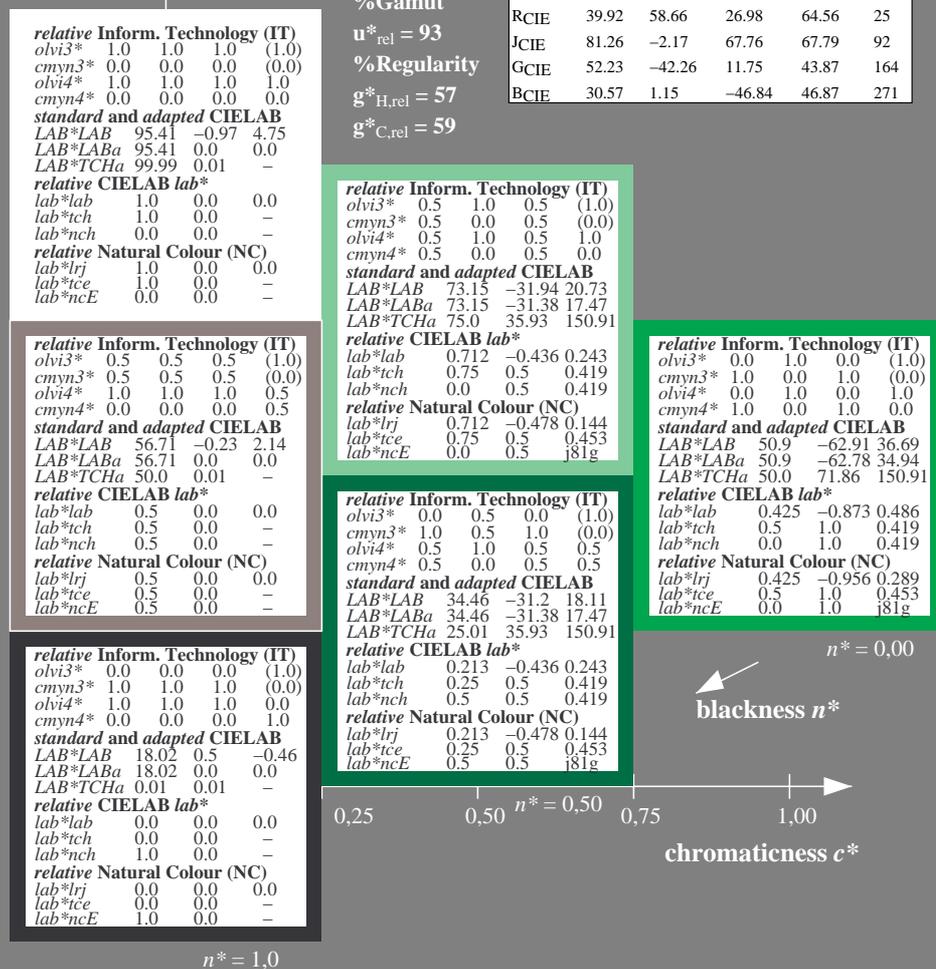
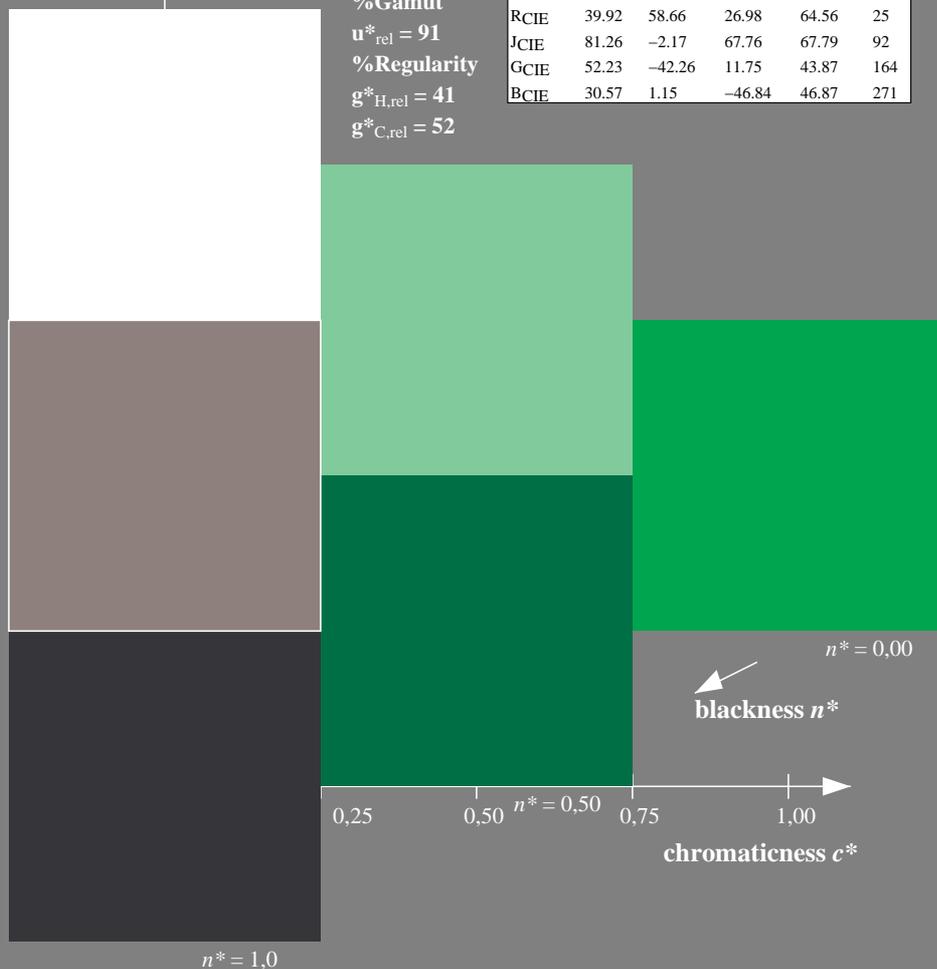
for hue  $h^* = lab^*h = 151/360 = 0.419$   
 $lab^*tch$  and  $lab^*nch$

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



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



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  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

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  
 $LAB^*LAB = 56.71 \ -0.23 \ 2.14$   
 $LAB^*LABa = 56.71 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

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  
 $LAB^*LAB = 18.02 \ 0.5 \ -0.46$   
 $LAB^*LABa = 18.02 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

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

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

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

standard and adapted CIELAB  
 $LAB^*LAB = 73.15 \ -31.94 \ 20.73$   
 $LAB^*LABa = 73.15 \ -31.38 \ 17.47$   
 $LAB^*TCHa = 75.0 \ 35.93 \ 150.91$

relative CIELAB lab\*  
 $lab^*lab = 0.712 \ -0.436 \ 0.243$   
 $lab^*tch = 0.75 \ 0.5 \ 0.419$   
 $lab^*nch = 0.0 \ 0.5 \ 0.419$

relative Natural Colour (NC)  
 $lab^*lrj = 0.712 \ -0.478 \ 0.144$   
 $lab^*tce = 0.75 \ 0.5 \ 0.453$   
 $lab^*nce = 0.0 \ 0.5 \ j81g$

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  
 $LAB^*LAB = 34.46 \ -31.2 \ 18.11$   
 $LAB^*LABa = 34.46 \ -31.38 \ 17.47$   
 $LAB^*TCHa = 25.01 \ 35.93 \ 150.91$

relative CIELAB lab\*  
 $lab^*lab = 0.213 \ -0.436 \ 0.243$   
 $lab^*tch = 0.25 \ 0.5 \ 0.419$   
 $lab^*nch = 0.5 \ 0.5 \ 0.419$

relative Natural Colour (NC)  
 $lab^*lrj = 0.213 \ -0.478 \ 0.144$   
 $lab^*tce = 0.25 \ 0.5 \ 0.453$   
 $lab^*nce = 0.5 \ 0.5 \ j81g$

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  
 $LAB^*LAB = 50.9 \ -62.91 \ 36.69$   
 $LAB^*LABa = 50.9 \ -62.78 \ 34.94$   
 $LAB^*TCHa = 50.0 \ 71.86 \ 150.91$

relative CIELAB lab\*  
 $lab^*lab = 0.425 \ -0.873 \ 0.486$   
 $lab^*tch = 0.5 \ 1.0 \ 0.419$   
 $lab^*nch = 0.0 \ 1.0 \ 0.419$

relative Natural Colour (NC)  
 $lab^*lrj = 0.425 \ -0.956 \ 0.289$   
 $lab^*tce = 0.5 \ 1.0 \ 0.453$   
 $lab^*nce = 0.0 \ 1.0 \ j81g$

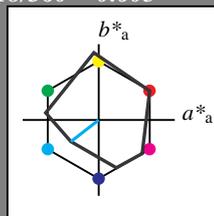
See for similar files: <http://www.ps.bam.de/UE05/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0,0

BAM registration: 20060101-UE05/10S/S05E02NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /UE05/ Form: 3/10, Serie: 1/1, Page: 3 Page count: 3

Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 218/360 = 0.605$   
 $lab^*tch$  and  $lab^*nch$

D65: hue G50B  
 LCH\*Ma: 45 46 218  
 olv\*Ma: 0.0 1.0 1.0  
 triangle lightness  $t^*$



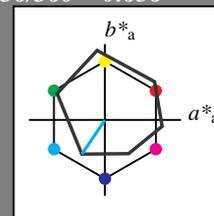
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: 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  $t^*$



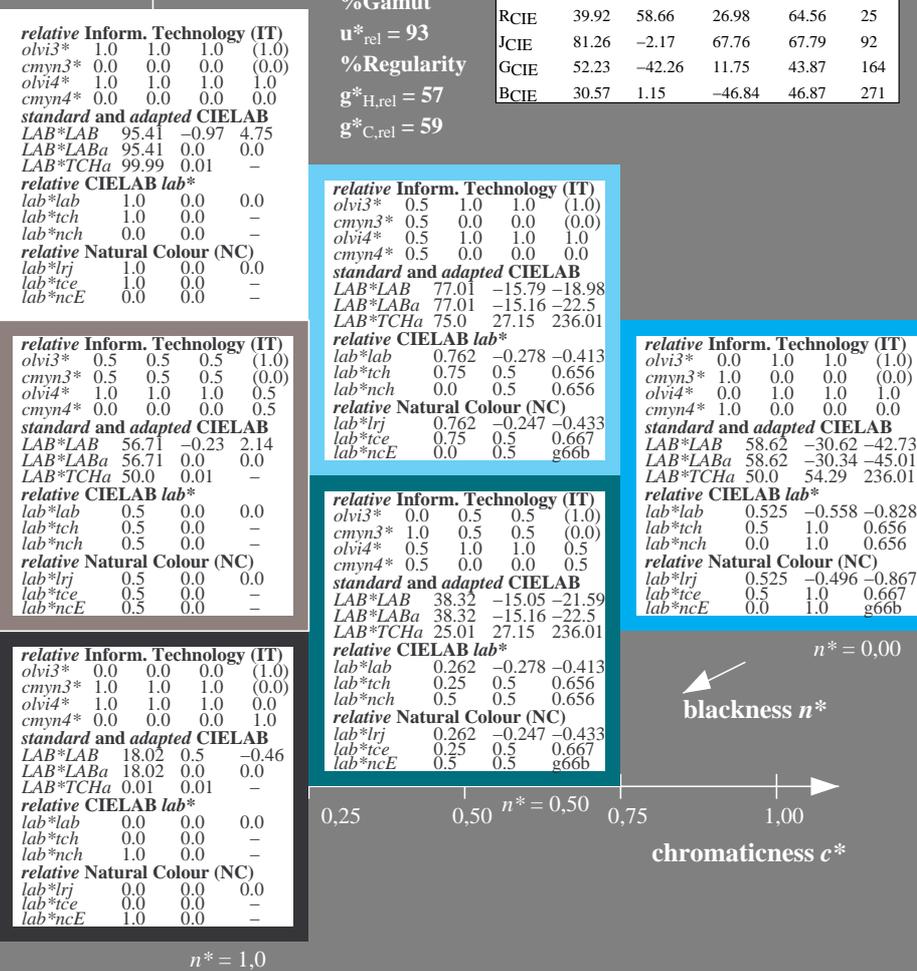
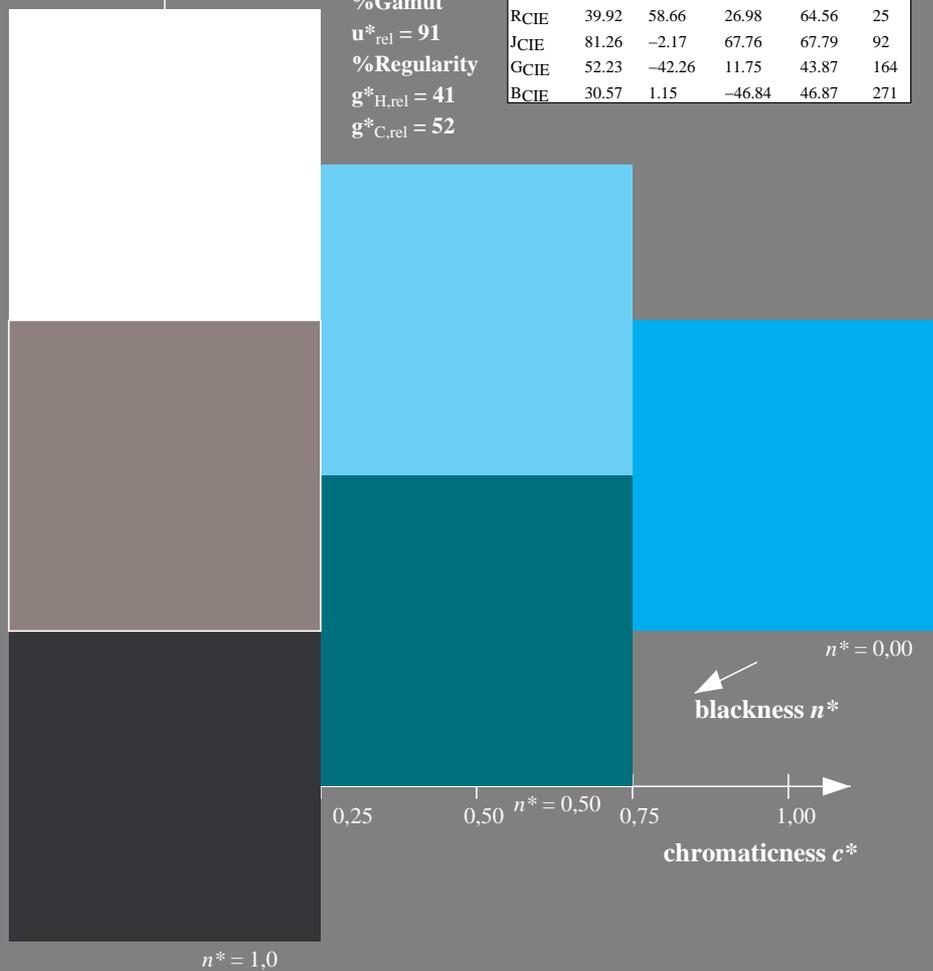
ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

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  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
 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  
 $LAB^*LAB = 77.01 \ -15.79 \ -18.98$   
 $LAB^*LABa = 77.01 \ -15.16 \ -22.5$   
 $LAB^*TCHa = 75.0 \ 27.15 \ 236.01$   
 relative CIELAB lab\*  
 $lab^*lab = 0.762 \ -0.278 \ -0.413$   
 $lab^*tch = 0.75 \ 0.5 \ 0.656$   
 $lab^*nch = 0.0 \ 0.5 \ 0.656$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.762 \ -0.247 \ -0.433$   
 $lab^*tce = 0.75 \ 0.5 \ 0.667$   
 $lab^*nce = 0.0 \ 0.5 \ 0.666$

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  
 $LAB^*LAB = 58.62 \ -30.62 \ -42.73$   
 $LAB^*LABa = 58.62 \ -30.34 \ -45.01$   
 $LAB^*TCHa = 50.0 \ 54.29 \ 236.01$   
 relative CIELAB lab\*  
 $lab^*lab = 0.525 \ -0.558 \ -0.828$   
 $lab^*tch = 0.5 \ 1.0 \ 0.656$   
 $lab^*nch = 0.0 \ 1.0 \ 0.656$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.525 \ -0.496 \ -0.867$   
 $lab^*tce = 0.5 \ 1.0 \ 0.667$   
 $lab^*nce = 0.0 \ 1.0 \ 0.666$



UE050-7, 3 step scales for constant CIELAB hue 218/360 = 0.605 (left)

3 step scales for constant CIELAB hue 236/360 = 0.656 (right)

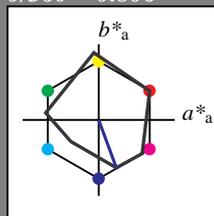
BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 290/360 = 0.806$   
 $lab^*tch$  and  $lab^*nch$

D65: hue B  
 LCH\*Ma: 37 67 290  
 olv\*Ma: 0.0 0.0 1.0  
 triangle lightness  $t^*$



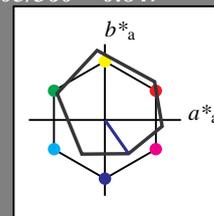
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: Colorimetric Reflective System ORS18

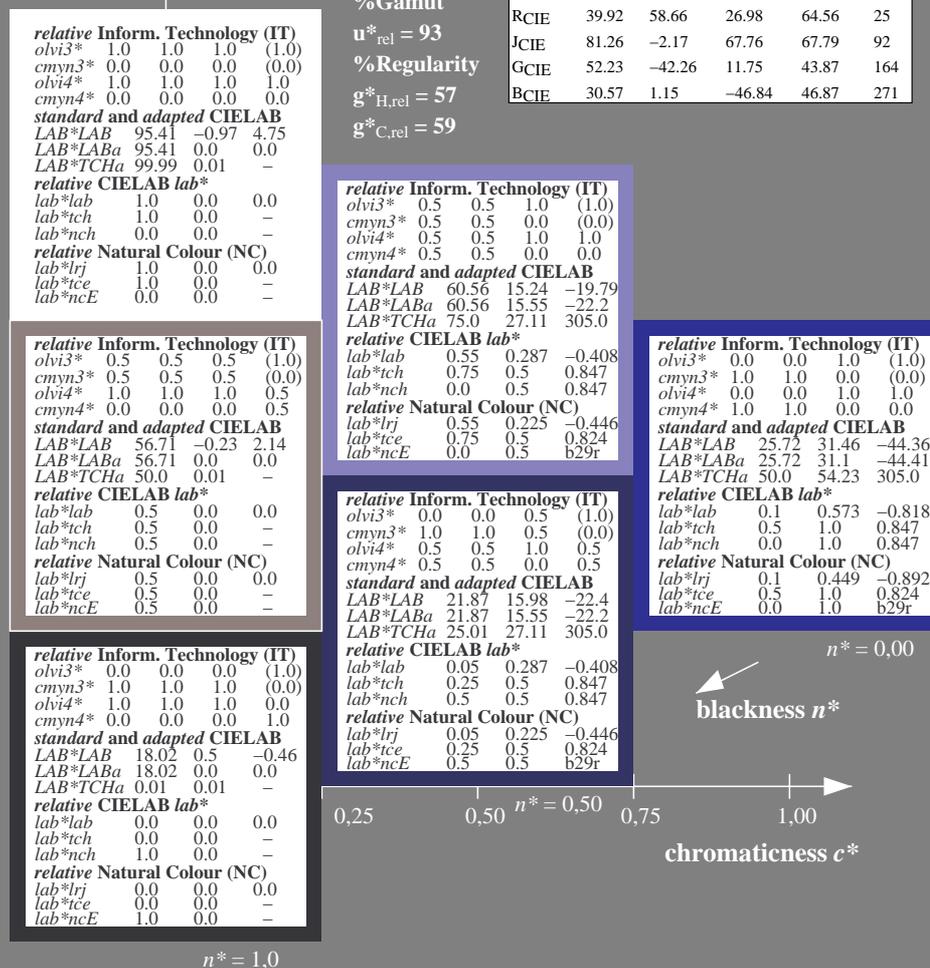
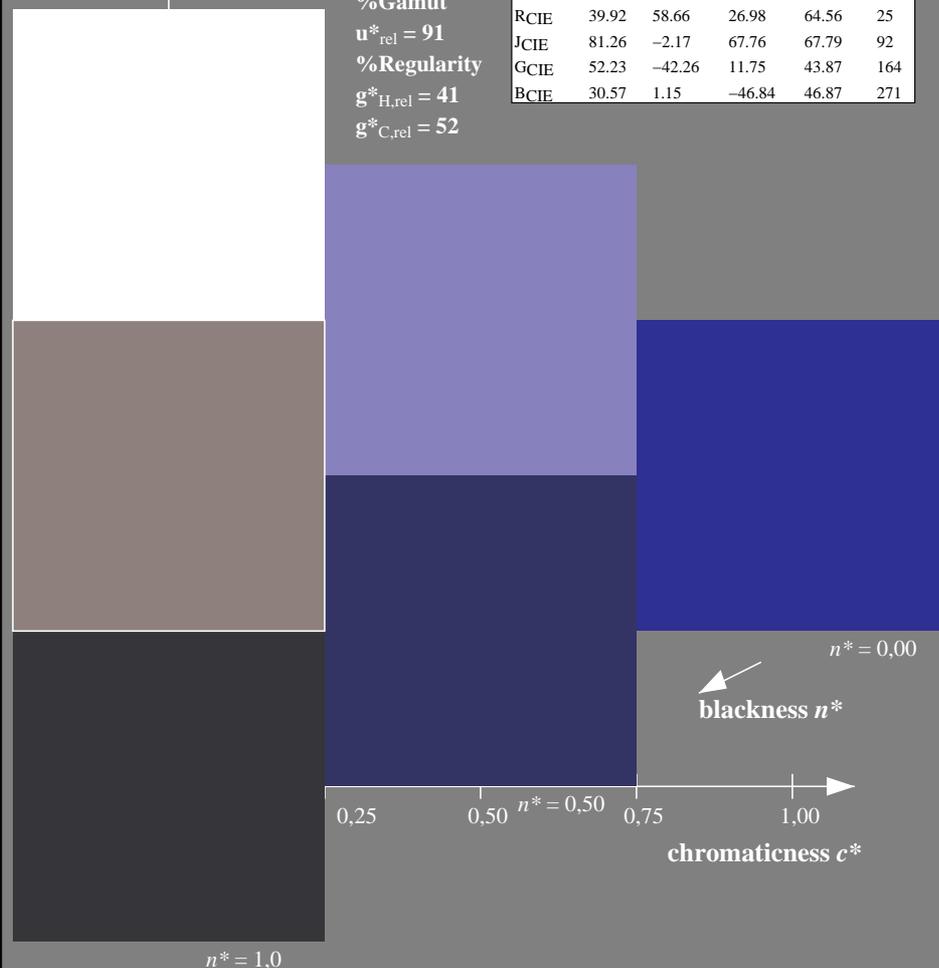
for hue  $h^* = lab^*h = 305/360 = 0.847$   
 $lab^*tch$  and  $lab^*nch$

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



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



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  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

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  
 $LAB^*LAB = 56.71 \ -0.23 \ 2.14$   
 $LAB^*LABa = 56.71 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

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  
 $LAB^*LAB = 18.02 \ 0.5 \ -0.46$   
 $LAB^*LABa = 18.02 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

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

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

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

standard and adapted CIELAB  
 $LAB^*LAB = 60.56 \ 15.24 \ -19.79$   
 $LAB^*LABa = 60.56 \ 15.55 \ -22.2$   
 $LAB^*TCHa = 75.0 \ 27.11 \ 305.0$

relative CIELAB lab\*  
 $lab^*lab = 0.55 \ 0.287 \ -0.408$   
 $lab^*tch = 0.75 \ 0.5 \ 0.847$   
 $lab^*nch = 0.0 \ 0.5 \ 0.847$

relative Natural Colour (NC)  
 $lab^*lrj = 0.55 \ 0.225 \ -0.446$   
 $lab^*tce = 0.75 \ 0.5 \ 0.824$   
 $lab^*nce = 0.0 \ 0.5 \ b29r$

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  
 $LAB^*LAB = 21.87 \ 15.98 \ -22.4$   
 $LAB^*LABa = 21.87 \ 15.55 \ -22.2$   
 $LAB^*TCHa = 25.01 \ 27.11 \ 305.0$

relative CIELAB lab\*  
 $lab^*lab = 0.05 \ 0.287 \ -0.408$   
 $lab^*tch = 0.25 \ 0.5 \ 0.847$   
 $lab^*nch = 0.5 \ 0.5 \ 0.847$

relative Natural Colour (NC)  
 $lab^*lrj = 0.05 \ 0.225 \ -0.446$   
 $lab^*tce = 0.25 \ 0.5 \ 0.824$   
 $lab^*nce = 0.5 \ 0.5 \ b29r$

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

standard and adapted CIELAB  
 $LAB^*LAB = 25.72 \ 31.46 \ -44.36$   
 $LAB^*LABa = 25.72 \ 31.1 \ -44.41$   
 $LAB^*TCHa = 50.0 \ 54.23 \ 305.0$

relative CIELAB lab\*  
 $lab^*lab = 0.1 \ 0.573 \ -0.818$   
 $lab^*tch = 0.5 \ 1.0 \ 0.847$   
 $lab^*nch = 0.0 \ 1.0 \ 0.847$

relative Natural Colour (NC)  
 $lab^*lrj = 0.1 \ 0.449 \ -0.892$   
 $lab^*tce = 0.5 \ 1.0 \ 0.824$   
 $lab^*nce = 0.0 \ 1.0 \ b29r$

See for similar files: <http://www.ps.bam.de/UE05/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0.0

BAM registration: 20060101-UE05/10S/S05E04NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /UE05/ Form: 5/10, Serie: 1/1, Page: 5 Page count: 5

UE050-7, 3 step scales for constant CIE LAB hue 290/360 = 0.806 (left)

3 step scales for constant CIE LAB hue 305/360 = 0.847 (right)

BAM-test chart UE05; Colorimetric systems MRS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

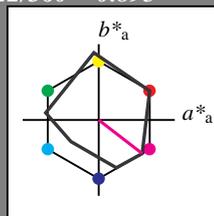
input:  $cmY0^*$  setcmykcolor

output: no change compared to input

Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 322/360 = 0.895$   
 $lab^*tch$  and  $lab^*nch$

D65: hue B50R  
 LCH\*Ma: 35 72 322  
 olv\*Ma: 1.0 0.0 1.0  
 triangle lightness  $t^*$



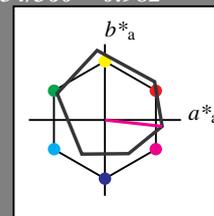
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: Colorimetric Reflective System ORS18

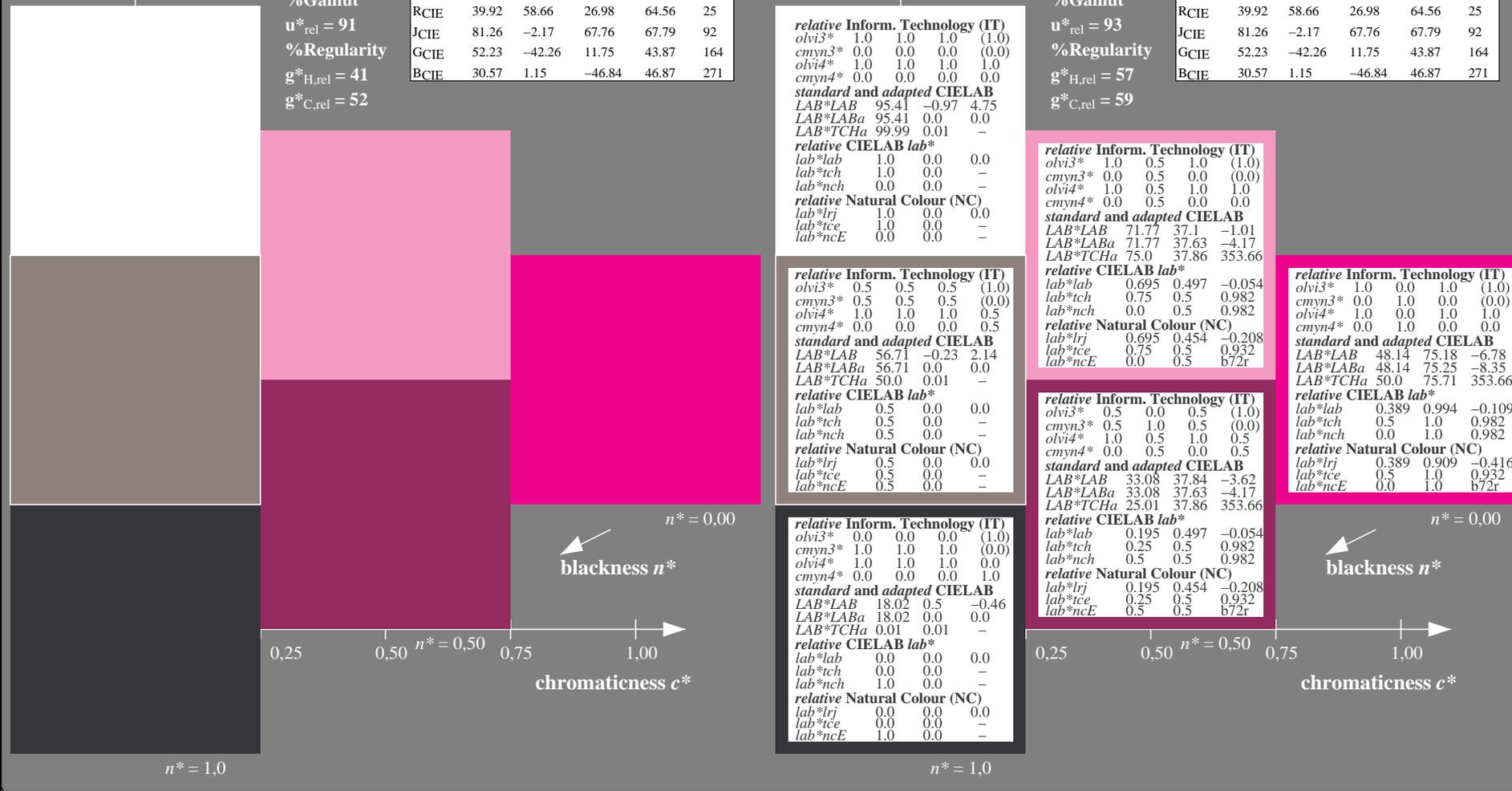
for hue  $h^* = lab^*h = 354/360 = 0.982$   
 $lab^*tch$  and  $lab^*nch$

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



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



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	-0.97	4.75
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	71.77	37.1	-1.01
LAB*LABa	71.77	37.63	-4.17
LAB*TCHa	75.0	37.86	353.66

relative CIELAB lab\*

lab*lab	0.695	0.497	-0.054
lab*tch	0.75	0.5	0.982
lab*nch	0.0	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.695	0.454	-0.208
lab*tce	0.75	0.5	0.932
lab*nce	0.0	0.5	b72r

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	48.14	75.18	-6.78
LAB*LABa	48.14	75.25	-8.35
LAB*TCHa	50.0	75.71	353.66

relative CIELAB lab\*

lab*lab	0.389	0.994	-0.109
lab*tch	0.5	1.0	0.982
lab*nch	0.0	1.0	0.982

relative Natural Colour (NC)

lab*lrj	0.389	0.909	-0.416
lab*tce	0.5	1.0	0.932
lab*nce	0.0	1.0	b72r

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	18.02	0.5	-0.46
LAB*LABa	18.02	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	33.08	37.84	-3.62
LAB*LABa	33.08	37.63	-4.17
LAB*TCHa	25.01	37.86	353.66

relative CIELAB lab\*

lab*lab	0.195	0.497	-0.054
lab*tch	0.25	0.5	0.982
lab*nch	0.5	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.195	0.454	-0.208
lab*tce	0.25	0.5	0.932
lab*nce	0.5	0.5	b72r

UE050-7, 3 step scales for constant CIELAB hue 322/360 = 0.895 (left)

3 step scales for constant CIELAB hue 354/360 = 0.982 (right)

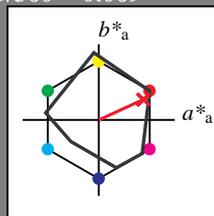
BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System MRS18

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

D65: hue R  
 LCH\*Ma: 48 73 25  
 olv\*Ma: 1.0 0.0 0.1  
 triangle lightness  $t^*$



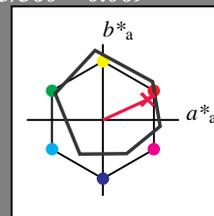
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: 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	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

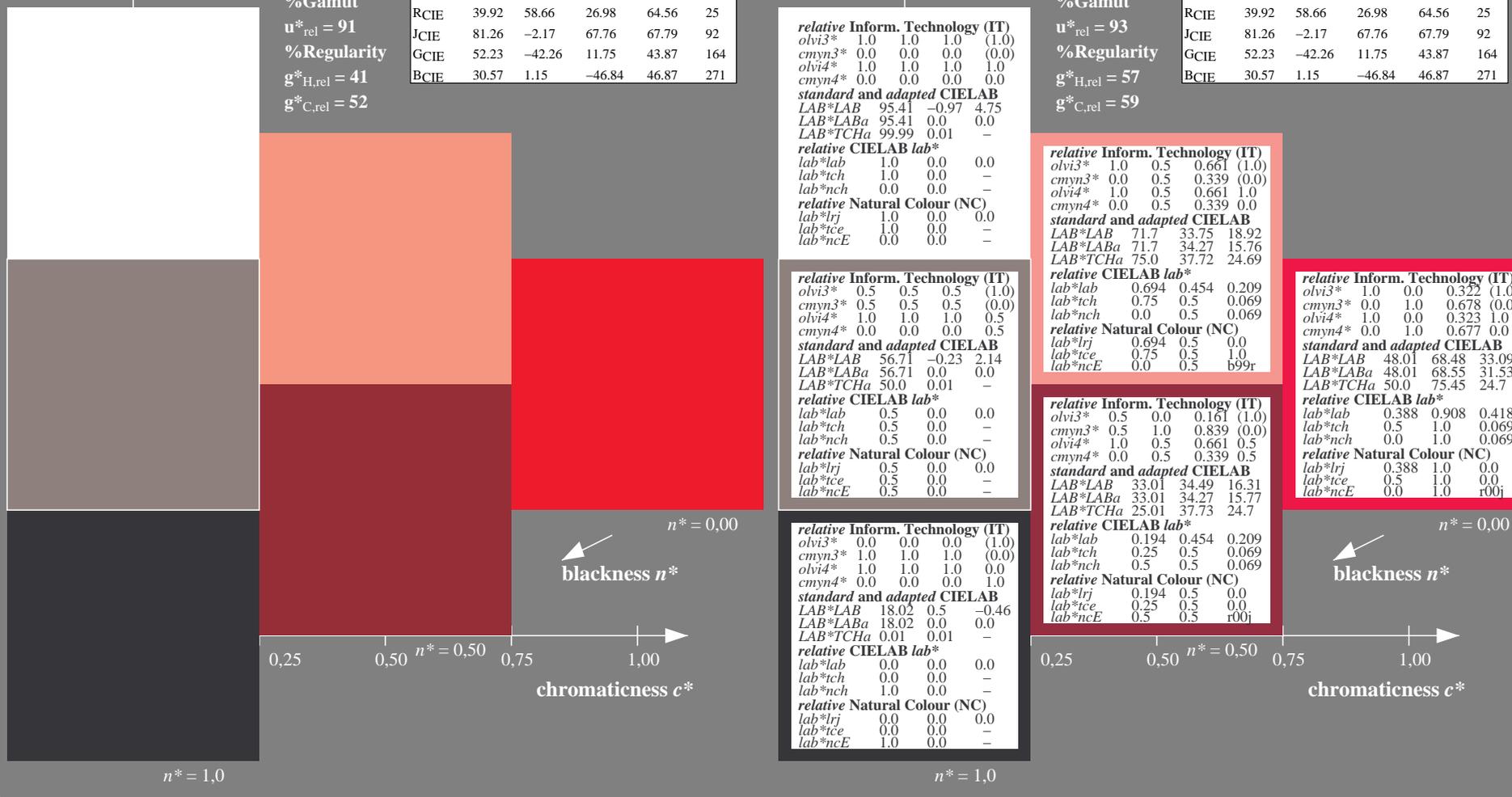
relative Inform. Technology (IT)  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
 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)  
 $olvi3^* = 1.0 \ 0.5 \ 0.661 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.5 \ 0.339 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.5 \ 0.661 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.5 \ 0.339 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 71.7 \ 33.75 \ 18.92$   
 $LAB^*LABa = 71.7 \ 34.27 \ 15.76$   
 $LAB^*TCHa = 75.0 \ 37.72 \ 24.69$   
 relative CIELAB lab\*  
 $lab^*lab = 0.694 \ 0.454 \ 0.209$   
 $lab^*tch = 0.75 \ 0.5 \ 0.069$   
 $lab^*nch = 0.0 \ 0.5 \ 0.069$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.694 \ 0.5 \ 0.0$   
 $lab^*tce = 0.75 \ 0.5 \ 1.0$   
 $lab^*nce = 0.0 \ 0.5 \ b99r$

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  
 $LAB^*LAB = 56.71 \ -0.23 \ 2.14$   
 $LAB^*LABa = 56.71 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$   
 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)  
 $olvi3^* = 0.5 \ 0.0 \ 0.161 \ (1.0)$   
 $cmyn3^* = 0.5 \ 1.0 \ 0.839 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.5 \ 0.661 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.5 \ 0.339 \ 0.5$   
 standard and adapted CIELAB  
 $LAB^*LAB = 33.01 \ 34.49 \ 16.31$   
 $LAB^*LABa = 33.01 \ 34.27 \ 15.77$   
 $LAB^*TCHa = 25.01 \ 37.73 \ 24.7$   
 relative CIELAB lab\*  
 $lab^*lab = 0.194 \ 0.454 \ 0.209$   
 $lab^*tch = 0.25 \ 0.5 \ 0.069$   
 $lab^*nch = 0.5 \ 0.5 \ 0.069$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.194 \ 0.5 \ 0.0$   
 $lab^*tce = 0.25 \ 0.5 \ 0.0$   
 $lab^*nce = 0.5 \ 0.5 \ r00j$

relative Inform. Technology (IT)  
 $olvi3^* = 1.0 \ 0.0 \ 0.322 \ (1.0)$   
 $cmyn3^* = 0.0 \ 1.0 \ 0.678 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.0 \ 0.323 \ 1.0$   
 $cmyn4^* = 0.0 \ 1.0 \ 0.677 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 48.01 \ 68.48 \ 33.09$   
 $LAB^*LABa = 48.01 \ 68.55 \ 31.53$   
 $LAB^*TCHa = 50.0 \ 75.45 \ 24.7$   
 relative CIELAB lab\*  
 $lab^*lab = 0.388 \ 0.908 \ 0.418$   
 $lab^*tch = 0.5 \ 1.0 \ 0.069$   
 $lab^*nch = 0.0 \ 1.0 \ 0.069$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.388 \ 1.0 \ 0.0$   
 $lab^*tce = 0.5 \ 1.0 \ 0.0$   
 $lab^*nce = 0.0 \ 1.0 \ r00j$



UE050-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

3 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

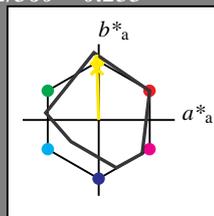
See for similar files: <http://www.ps.bam.de/UE05/>  
 Technical information: <http://www.ps.bam.de>  
 Version 2.1, io=0,0

BAM registration: 20060101-UE05/10S/S05E06NP.PS/.PDF BAM material: code=rh4ta  
 application for evaluation and measurement of printer or monitor systems  
 /UE05/ Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

Input: Colorimetric Reflective System MRS18

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

D65: hue J  
 LCH\*Ma: 89 86 92  
 olv\*Ma: 1.0 0.95 0.0  
 triangle lightness  $t^*$



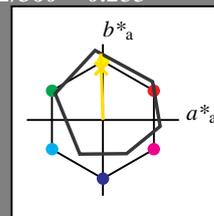
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: 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	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

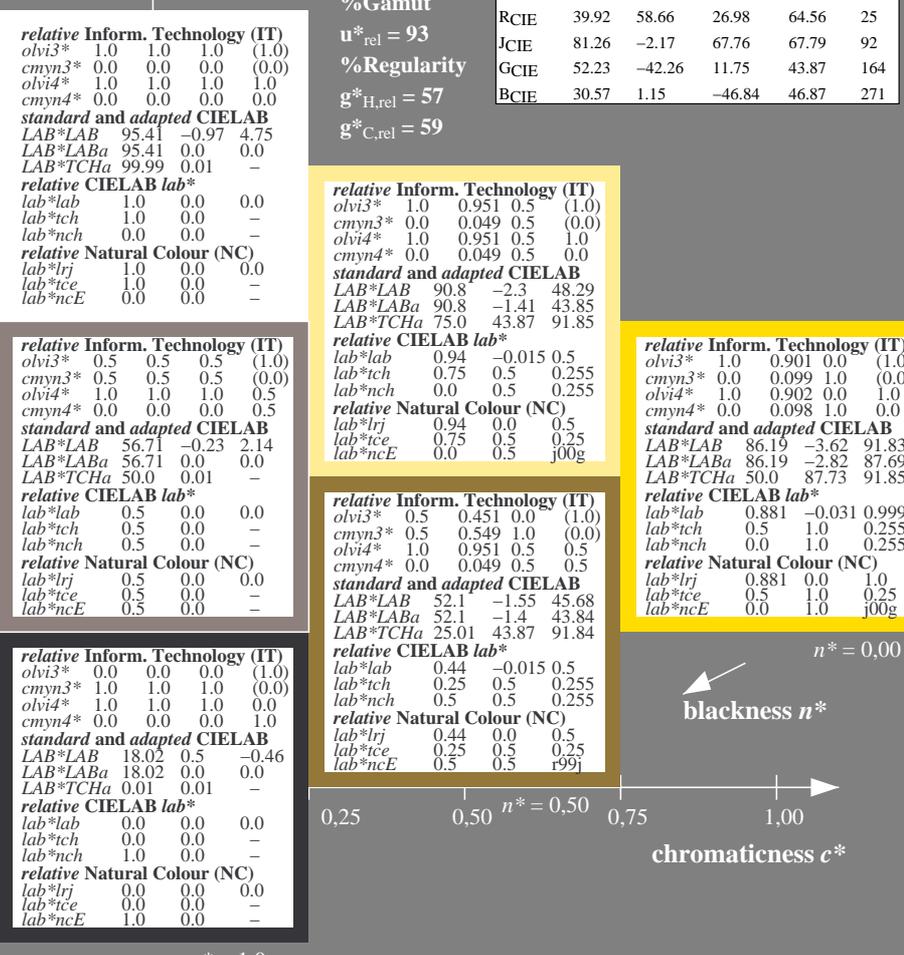
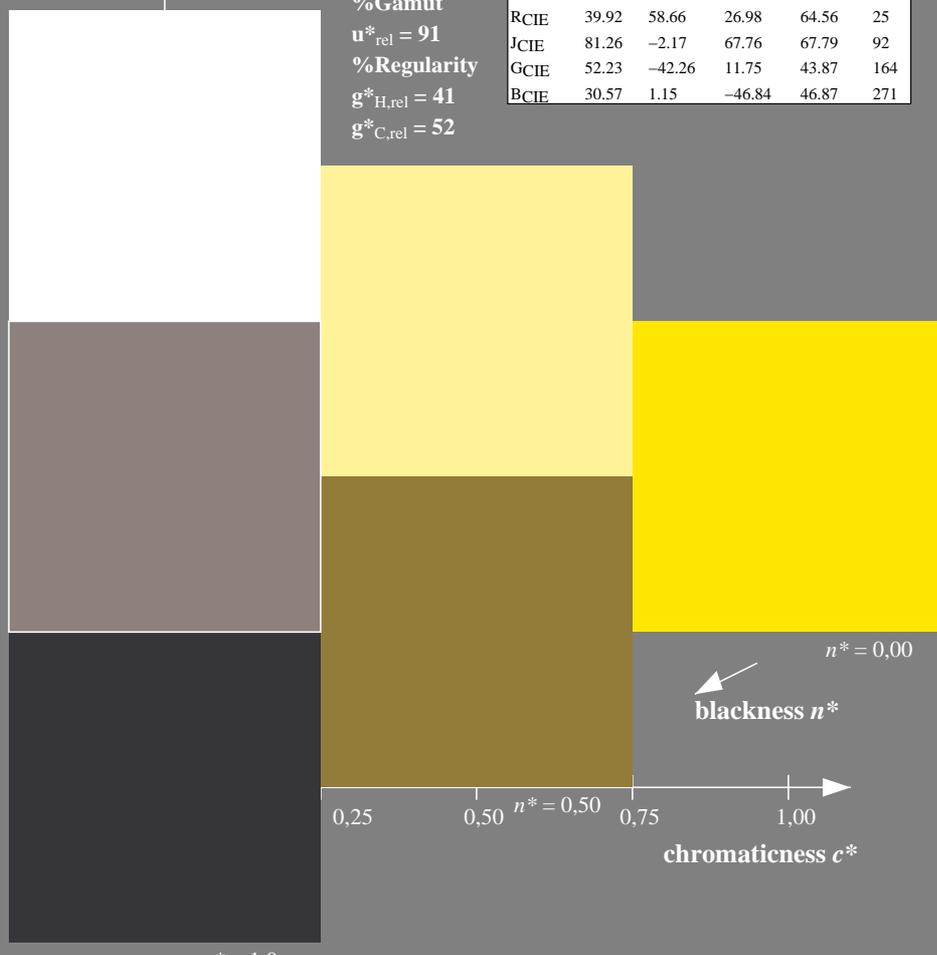
relative Inform. Technology (IT)  
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 95.41 \ -0.97 \ 4.75$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$   
 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)  
 $olvi3^* = 1.0 \ 0.951 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.049 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.951 \ 0.5 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.049 \ 0.5 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 90.8 \ -2.3 \ 48.29$   
 $LAB^*LABa = 90.8 \ -1.41 \ 43.85$   
 $LAB^*TCHa = 75.0 \ 43.87 \ 91.85$   
 relative CIELAB lab\*  
 $lab^*lab = 0.94 \ -0.015 \ 0.5$   
 $lab^*tch = 0.75 \ 0.5 \ 0.255$   
 $lab^*nch = 0.0 \ 0.5 \ 0.255$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.94 \ 0.0 \ 0.5$   
 $lab^*tce = 0.75 \ 0.5 \ 0.25$   
 $lab^*nce = 0.0 \ 0.5 \ j00g$

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  
 $LAB^*LAB = 56.71 \ -0.23 \ 2.14$   
 $LAB^*LABa = 56.71 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$   
 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)  
 $olvi3^* = 0.5 \ 0.451 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.549 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.951 \ 0.5 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.049 \ 0.5 \ 0.5$   
 standard and adapted CIELAB  
 $LAB^*LAB = 52.1 \ -1.55 \ 45.68$   
 $LAB^*LABa = 52.1 \ -1.4 \ 43.84$   
 $LAB^*TCHa = 25.01 \ 43.87 \ 91.84$   
 relative CIELAB lab\*  
 $lab^*lab = 0.44 \ -0.015 \ 0.5$   
 $lab^*tch = 0.25 \ 0.5 \ 0.255$   
 $lab^*nch = 0.5 \ 0.5 \ 0.255$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.44 \ 0.0 \ 0.5$   
 $lab^*tce = 0.25 \ 0.5 \ 0.25$   
 $lab^*nce = 0.5 \ 0.5 \ j99j$

relative Inform. Technology (IT)  
 $olvi3^* = 1.0 \ 0.901 \ 1.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.099 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 0.902 \ 0.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.098 \ 1.0 \ 0.0$   
 standard and adapted CIELAB  
 $LAB^*LAB = 86.19 \ -3.62 \ 91.83$   
 $LAB^*LABa = 86.19 \ -2.82 \ 87.69$   
 $LAB^*TCHa = 50.0 \ 87.73 \ 91.85$   
 relative CIELAB lab\*  
 $lab^*lab = 0.881 \ -0.031 \ 0.999$   
 $lab^*tch = 0.5 \ 1.0 \ 0.255$   
 $lab^*nch = 0.0 \ 1.0 \ 0.255$   
 relative Natural Colour (NC)  
 $lab^*lrj = 0.881 \ 0.0 \ 1.0$   
 $lab^*tce = 0.5 \ 1.0 \ 0.25$   
 $lab^*nce = 0.0 \ 1.0 \ j00g$



UE050-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

3 step scales for constant CIELAB hue 92/360 = 0.255 (right)

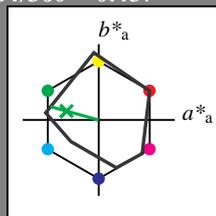
BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System MRS18

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

D65: hue G  
 LCH\*Ma: 56 66 164  
 olv\*Ma: 0.1 1.0 0.0  
 triangle lightness  $t^*$



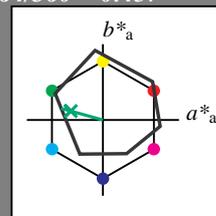
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: Colorimetric Reflective System ORS18

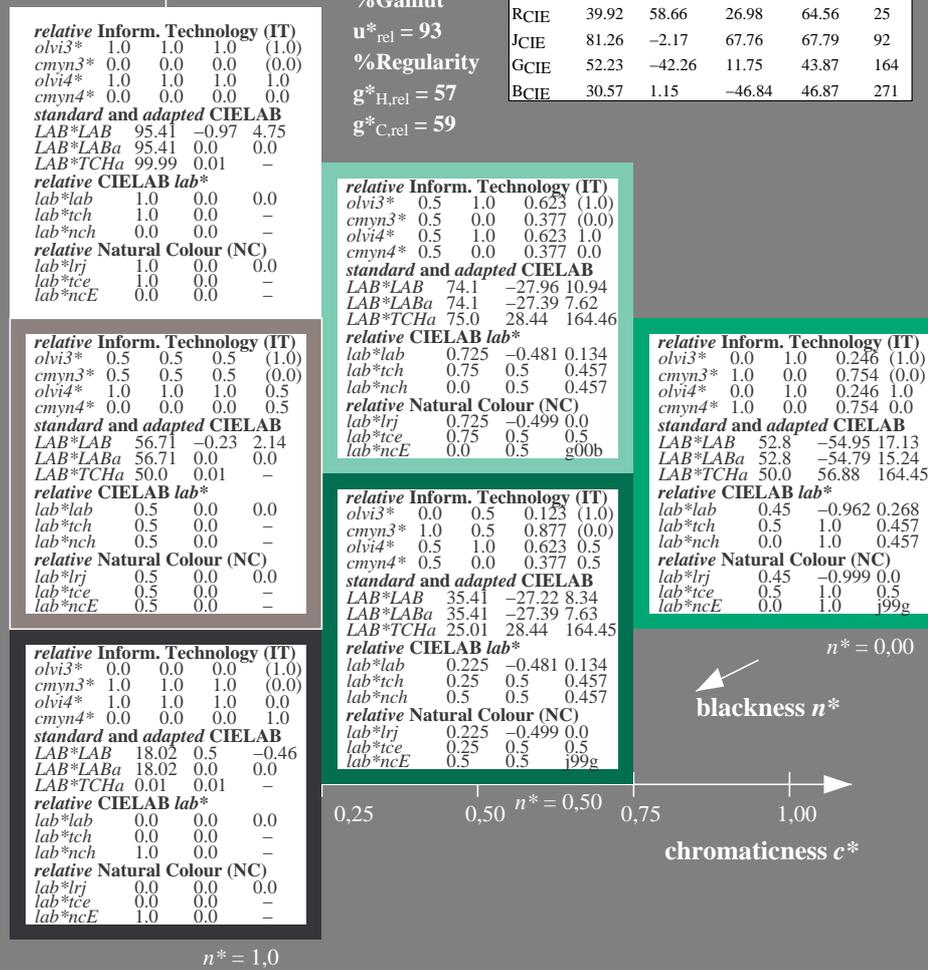
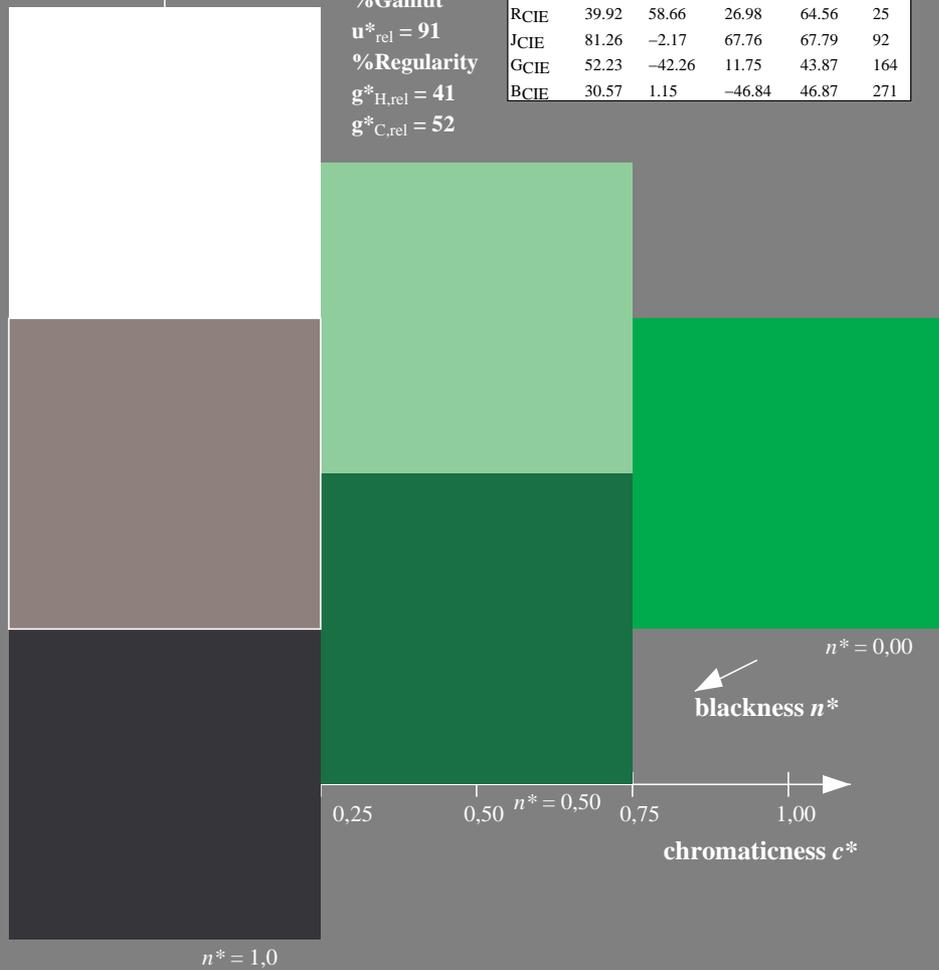
for hue  $h^* = lab^*h = 164/360 = 0.457$   
 $lab^*tch$  and  $lab^*nch$

D65: hue G  
 LCH\*Ma: 53 57 164  
 olv\*Ma: 0.0 1.0 0.25  
 triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



UE050-7, 3 step scales for constant CIE LAB hue 164/360 = 0.457 (left)

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

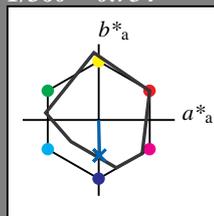
BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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

Input: Colorimetric Reflective System MRS18

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

D65: hue B  
 LCH\*Ma: 40 50 271  
 olv\*Ma: 0.0 0.37 1.0  
 triangle lightness  $t^*$



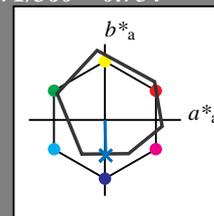
MRS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	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  
 $u^*_{rel} = 91$   
 %Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

Output: Colorimetric Reflective System ORS18

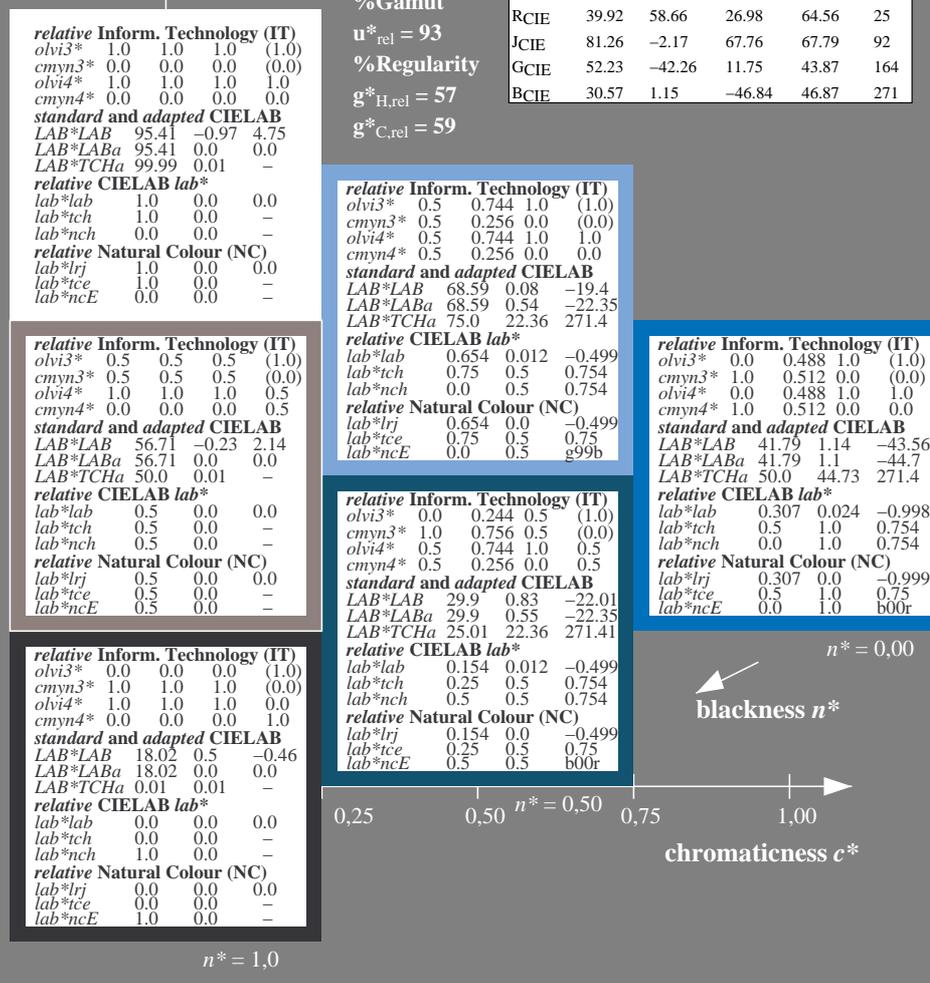
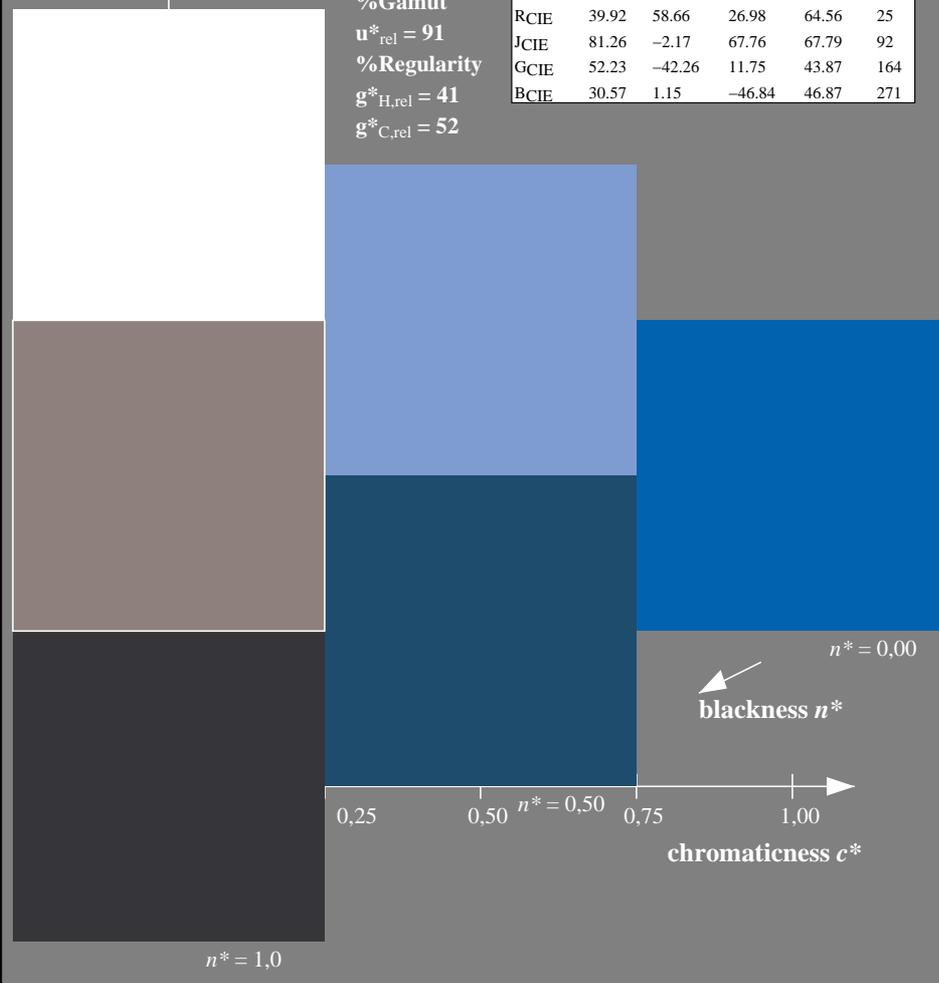
for hue  $h^* = lab^*h = 271/360 = 0.754$   
 $lab^*tch$  and  $lab^*nch$

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



ORS18; adapted (a) CIELAB data	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$



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	-0.97	4.75
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	0.744	1.0	(1.0)
cmyn3*	0.5	0.256	0.0	(0.0)
olvi4*	0.5	0.744	1.0	1.0
cmyn4*	0.5	0.256	0.0	0.0

standard and adapted CIELAB

LAB*LAB	68.59	0.08	-19.4
LAB*LABa	68.59	0.54	-22.35
LAB*TCHa	75.0	22.36	271.4

relative CIELAB lab\*

lab*lab	0.654	0.012	-0.499
lab*tch	0.75	0.5	0.754
lab*nch	0.0	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.654	0.0	-0.499
lab*tce	0.75	0.5	0.75
lab*nce	0.0	0.5	g99b

relative Inform. Technology (IT)

olvi3*	0.0	0.488	1.0	(1.0)
cmyn3*	1.0	0.512	0.0	(0.0)
olvi4*	0.0	0.488	1.0	1.0
cmyn4*	1.0	0.512	0.0	0.0

standard and adapted CIELAB

LAB*LAB	41.79	1.14	-43.56
LAB*LABa	41.79	1.1	-44.7
LAB*TCHa	50.0	44.73	271.4

relative CIELAB lab\*

lab*lab	0.307	0.024	-0.998
lab*tch	0.5	1.0	0.754
lab*nch	0.0	1.0	0.754

relative Natural Colour (NC)

lab*lrj	0.307	0.0	-0.999
lab*tce	0.5	1.0	0.75
lab*nce	0.0	1.0	b00r

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab\*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

olvi3*	0.0	0.244	0.5	(1.0)
cmyn3*	1.0	0.756	0.5	(0.0)
olvi4*	0.5	0.744	1.0	0.5
cmyn4*	0.5	0.256	0.0	0.5

standard and adapted CIELAB

LAB*LAB	29.9	0.83	-22.01
LAB*LABa	29.9	0.55	-22.35
LAB*TCHa	25.01	22.36	271.41

relative CIELAB lab\*

lab*lab	0.154	0.012	-0.499
lab*tch	0.25	0.5	0.754
lab*nch	0.5	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.154	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r

UE050-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

3 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart UE05; Colorimetric systems MRS18 & ORS18  
 D65: 3 step colour scales and coordinate data for 10 hues

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