

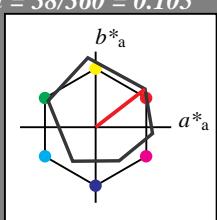
Eingabe: Farbmétrisches Reflexions-System ORS18  
für Bunton  $h^* = lab^*h = 38/360 = 0.105$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  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  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*tce$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  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  
 $LAB^*TCh_a$  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)

$lab^*lrij$  0.5 0.0 0.0

$lab^*tce$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  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  
 $LAB^*TCh_a$  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)

$lab^*lrij$  0.0 0.0 0.0

$lab^*tce$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

### ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

$olv_i3^*$  1.0 0.5 0.5 (1.0)

$cmy_n3^*$  0.0 0.5 0.5 (0.0)

$olv_i4^*$  1.0 0.5 0.5 1.0

$cmy_n4^*$  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

$LAB^*TCh_a$  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)

$lab^*lrij$  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)

$olv_i3^*$  0.0 1.0 1.0 (0.0)

$cmy_n3^*$  0.0 1.0 1.0 1.0

$olv_i4^*$  0.0 1.0 1.0 0.0

$cmy_n4^*$  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

$LAB^*TCh_a$  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)

$lab^*lrij$  0.387 0.954 0.299

$lab^*tce$  0.5 1.0 0.048

$lab^*nCE$  0.0 1.0 r19j

relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (0.0)

$cmy_n3^*$  0.0 1.0 1.0 1.0

$olv_i4^*$  1.0 1.0 1.0 0.0

$cmy_n4^*$  0.0 1.0 1.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  32.98 32.9 25.8

$LAB^*LABa$  32.98 32.68 25.25

$LAB^*TCh_a$  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)

$lab^*lrij$  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)

$olv_i3^*$  1.0 1.0 1.0 (0.0)

$cmy_n3^*$  0.0 1.0 1.0 1.0

$olv_i4^*$  1.0 1.0 1.0 0.0

$cmy_n4^*$  0.0 1.0 1.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  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)

$lab^*lrij$  0.0 0.0 0.0

$lab^*tce$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

$n^* = 1,0$

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 30/360 = 0.083$

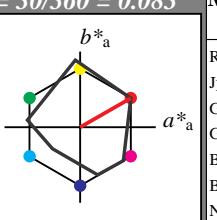
$lab^*tch$  und  $lab^*nch$

D65: Bunton R

LCH\*Ma: 50 77 30

olv\*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  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  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*tce$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  72.52 32.93 22.4  
 $LAB^*LABa$  72.52 33.47 19.18  
 $LAB^*TCh_a$  75.0 38.58 29.82

relative CIELAB lab\*

$lab^*lab$  0.704 0.434 0.249

$lab^*tch$  0.75 0.5 0.083

$lab^*nch$  0.0 0.5 0.083

relative Natural Colour (NC)

$lab^*lrij$  0.704 0.496 0.06

$lab^*tce$  0.75 0.5 0.019

$lab^*nCE$  0.0 0.5 r07j

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  33.82 33.67 19.79  
 $LAB^*LABa$  33.82 33.47 19.18  
 $LAB^*TCh_a$  25.01 38.58 29.82

relative CIELAB lab\*

$lab^*lab$  0.204 0.434 0.249

$lab^*tch$  0.25 0.5 0.083

$lab^*nch$  0.5 0.5 0.083

relative Natural Colour (NC)

$lab^*lrij$  0.204 0.496 0.06

$lab^*tce$  0.25 0.5 0.019

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

relative Buntheit  $c^*$

$n^* = 0,50$

UG100-7, 3 stufige Reihen für konstanten CIELAB Bunnton 38/360 = 0.105 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 30/360 = 0.083 (rechts)

BAM-Prüfvorlage UG10; Farbmétrik-Systeme ORS18 & MRS18  
Input:  $cmy0^* setcmykcolor$   
D65: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunntöne  
Output: no change compared to input

Siehe ähnliche Dateien: http://www.ps.bam.de/UG10/

Technische Information: http://www.ps.bam.de Version 2.1, io=0

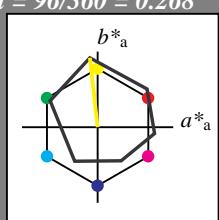
Eingabe: Farbmétrisches Reflexions-System ORS18  
für Bunton  $h^* = lab^*h = 96/360 = 0.268$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

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)

$lab^*lrij 1.0 0.0 0.0$

$lab^*ice 1.0 0.0 -$

$lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.5 0.5 0.5 (1.0)$   
 $cmy^3* 0.5 0.5 0.5 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.5$   
 $cmy^4* 0.0 0.0 0.0 0.5$

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)

$lab^*lrij 0.5 0.0 0.0$

$lab^*ice 0.5 0.0 -$

$lab^*nCE 0.5 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.0 0.0 0.0 (1.0)$   
 $cmy^3* 1.0 1.0 1.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.0$   
 $cmy^4* 0.0 0.0 0.0 1.0$

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)

$lab^*lrij 0.0 0.0 0.0$

$lab^*ice 0.0 0.0 -$

$lab^*nCE 1.0 0.0 -$

$n^* = 1,0$

### ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 94/360 = 0.261$

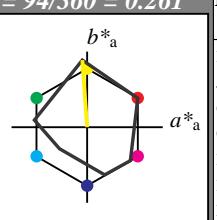
$lab^*tch$  und  $lab^*nch$

D65: Bunton J

LCH\*Ma: 91 89 94

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

### MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

$n^* = 0,00$

Schwarzheit  $n^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

relative Buntheit  $c^*$

UG100-7, 3 stufige Reihen für konstanten CIELAB Bunnton 96/360 = 0.268 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 94/360 = 0.261 (rechts)

BAM-Prüfvorlage UG10; Farbmétrik-Systeme ORS18 & MRS18  
Input:  $cmy0*$  setcmykcolor  
D65: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunntöne  
Output: no change compared to input

C M Y O L V

Eingabe: Farbmétrisches Reflexions-System ORS18

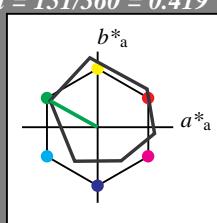
für Bunton  $h^* = lab^*h = 151/360 = 0.419$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)

olv13\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)

olv14\* 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)

olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)

olv14\* 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)

olv13\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)

olv14\* 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 -

$n^* = 1,0$

ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

olv13\* 0.5 1.0 0.5 (1.0)  
cmyn3\* 0.5 0.0 0.5 (0.0)

olv14\* 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

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 0.0 0.5 0.0 (1.0)  
cmyn3\* 1.0 0.5 1.0 (0.0)

olv14\* 0.0 1.0 0.0 1.0

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 0.425 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -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

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 0.213 -0.436 0.243  
lab\*tch 0.25

C

M

M

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-8

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8

### Eingabe: Farbmétrisches Reflexions-System ORS18

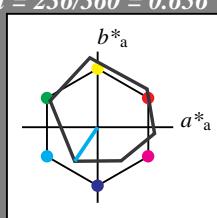
für Bunton  $h^* = lab^*h = 236/360 = 0.656$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 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)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 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 -

$n^* = 1,0$

### ORS18; adaptierte CIELAB-Daten

$L^* = L^*_a \quad a^*_a \quad b^*_a \quad C^*_{ab,a} \quad h^*_{ab,a}$

	$L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

olv3\* 0.5 1.0 1.0 (1.0)

cmyn3\* 0.5 0.0 0.0 (0.0)

olv4\* 0.5 1.0 1.0 1.0

cmyn4\* 0.0 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 g66b

relative Inform. Technology (IT)

olv3\* 0.0 1.0 1.0 (1.0)

cmyn3\* 1.0 0.0 0.0 (0.0)

olv4\* 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 g66b

relative Inform. Technology (IT)

olv3\* 1.0 1.0 1.0 (1.0)

cmyn3\* 1.0 1.0 1.0 0.0

olv4\* 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 0.262 -0.278 -0.413

lab\*tch 0.25 0.5 0.656

lab\*nch 0.5 0.5 0.656

relative Natural Colour (NC)

lab\*lrj 0.262 -0.247 -0.433

lab\*tce 0.25 0.5 0.667

lab\*nCE 0.5 0.5 g66b

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

O

Y

M

C

BAM-Registrierung: 20060101-UG10/10S/S10G03NP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 218/360 = 0.605$

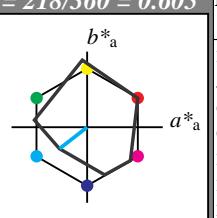
lab^\*tch und lab^\*nch

D65: Bunton G50B

LCH\*Ma: 45 46 218

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

olv3\* 1.0 1.0 1.0 (1.0)

cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 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)

olv3\* 0.5 1.0 1.0 (1.0)

cmyn3\* 0.5 0.0 0.0 (0.0)

olv4\* 0.5 1.0 1.0 1.0

cmyn4\* 0.5 0.0 0.0 0.0

standard and adapted CIELAB

LAB\*LAB 70.21 -18.77 -11.17

LAB\*LABa 70.21 -18.27 -14.23

LAB\*TChA 75.0 23.17 217.91

relative CIELAB lab\*

lab\*lab 0.674 -0.393 -0.306

lab\*tch 0.75 0.5 0.605

lab\*nch 0.0 0.5 0.605

relative Natural Colour (NC)

lab\*lrj 0.674 -0.353 -0.352

lab\*tce 0.75 0.5 0.625

lab\*nCE 0.0 0.5 g49b

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

### MRS18; adaptierte CIELAB-Daten

$L^* = L^*_a \quad a^*_a \quad b^*_a \quad C^*_{ab,a} \quad h^*_{ab,a}$

	$L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

relative Inform. Technology (IT)

olv3\* 0.5 1.0 1.0 (1.0)

cmyn3\* 0.5 0.0 0.0 (0.0)

olv4\* 0.5 1.0 1.0 1.0

cmyn4\* 0.5 0.0 0.0 0.0

standard and adapted CIELAB

LAB\*LAB 70.21 -18.77 -11.17

LAB\*LABa 70.21 -18.27 -14.23

LAB\*TChA 75.0 23.17 217.91

relative CIELAB lab\*

lab\*lab 0.674 -0.393 -0.306

lab\*tch 0.75 0.5 0.605

lab\*nch 0.0 0.5 0.605

relative Natural Colour (NC)

lab\*lrj 0.674 -0.353 -0.352

lab\*tce 0.75 0.5 0.625

lab\*nCE 0.0 0.5 g49b

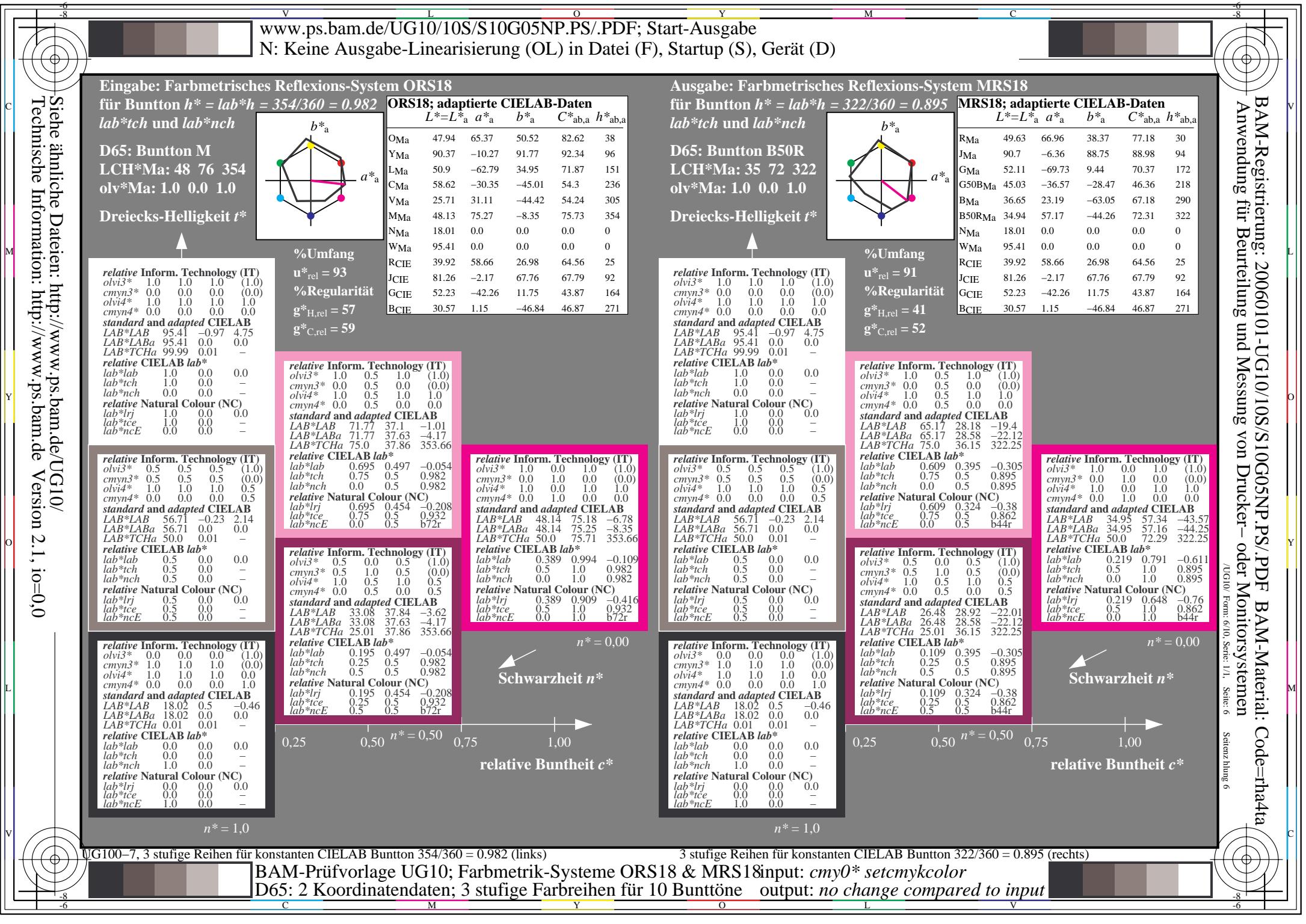
$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

</







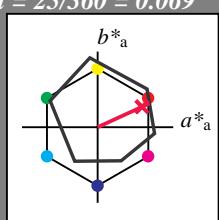
**Eingabe:** Farbmétrisches Reflexions-System ORS18  
für Bunton  $h^* = lab^*h = 25/360 = 0.069$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
 $olv13^*$  1.0 1.0 1.0 (1.0)  
 $cmy3^*$  0.0 0.0 0.0 (0.0)  
 $olv4^*$  1.0 1.0 1.0 1.0  
 $cmy4^*$  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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv13^*$  0.5 0.5 0.5 (1.0)  
 $cmy3^*$  0.5 0.5 0.5 (0.0)  
 $olv4^*$  1.0 1.0 1.0 0.5  
 $cmy4^*$  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)

$lab^*lrij$  0.5 0.0 0.0  
 $lab^*ice$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

relative Inform. Technology (IT)  
 $olv13^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  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)

$lab^*lrij$  0.0 0.0 0.0  
 $lab^*ice$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

### ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

$olv13^*$  1.0 0.5 0.661 (1.0)

$cmy3^*$  0.0 0.5 0.339 (0.0)

$olv4^*$  1.0 0.5 0.661 1.0

$cmy4^*$  0.0 0.5 0.339 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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv13^*$  0.5 0.5 0.5 (1.0)

$cmy3^*$  0.5 0.5 0.5 (0.0)

$olv4^*$  1.0 1.0 1.0 0.5

$cmy4^*$  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)

$lab^*lrij$  0.5 0.0 0.0

$lab^*ice$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 25/360 = 0.069$

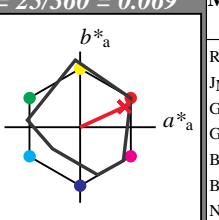
$lab^*tch$  und  $lab^*nch$

D65: Bunton R

LCH\*Ma: 48 73 25

olv\*Ma: 1.0 0.0 0.32

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

$olv13^*$  1.0 1.0 1.0 (1.0)

$cmy3^*$  0.0 0.0 0.0 (0.0)

$olv4^*$  1.0 1.0 1.0 1.0

$cmy4^*$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv13^*$  0.5 0.5 0.5 (1.0)

$cmy3^*$  0.5 0.5 0.5 (0.0)

$olv4^*$  1.0 1.0 1.0 0.5

$cmy4^*$  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)

$lab^*lrij$  0.5 0.0 0.0

$lab^*ice$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

$n^* = 1,0$

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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

%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

$olv13^*$  1.0 1.0 1.0 (1.0)

$cmy3^*$  0.0 0.0 0.0 (0.0)

$olv4^*$  1.0 1.0 1.0 1.0

$cmy4^*$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

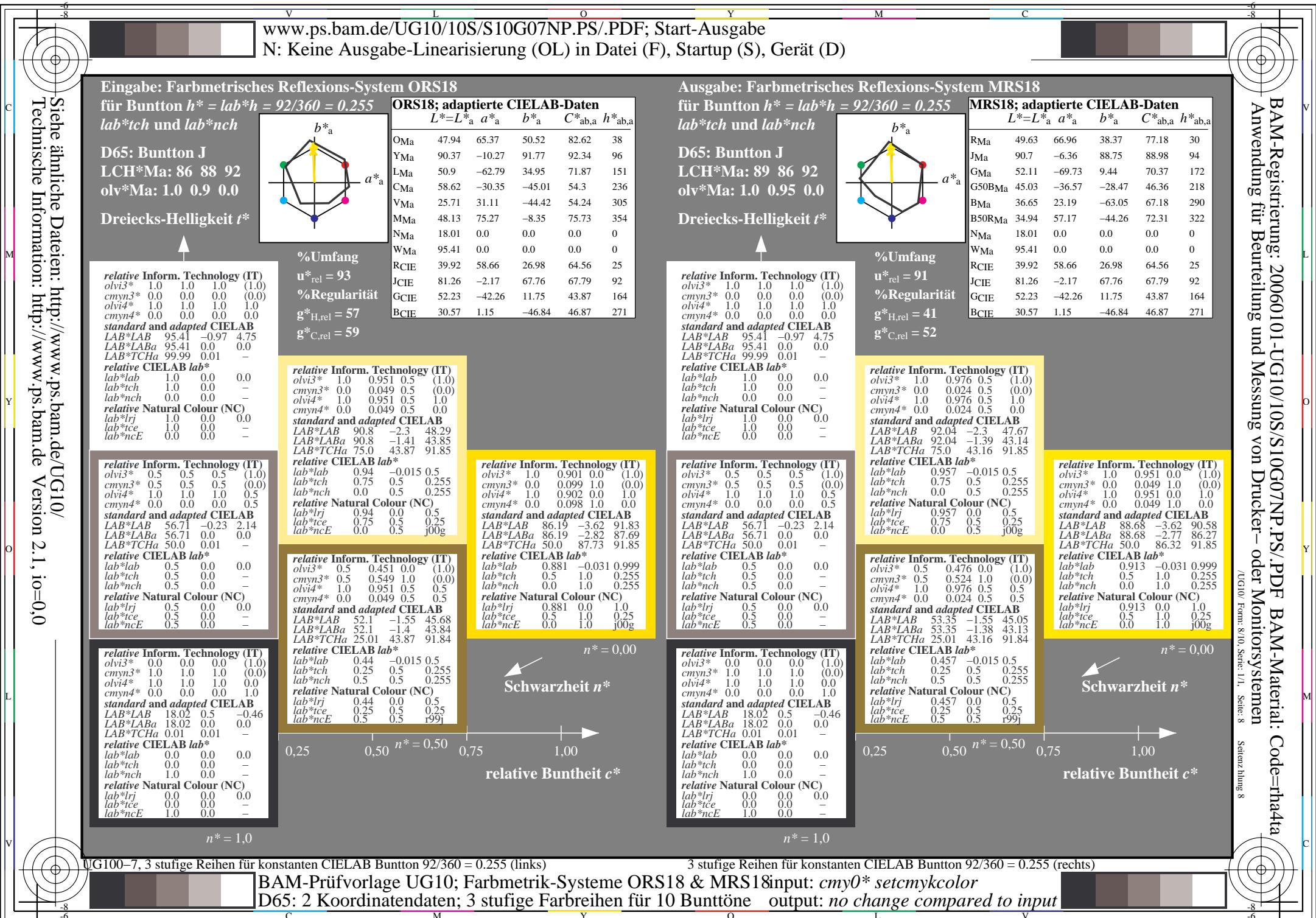
$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
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					



### Eingabe: Farbmétrisches Reflexions-System ORS18

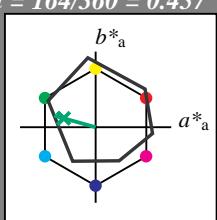
für Bunton  $h^* = lab^*h = 164/360 = 0.457$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 95.41 -0.97 4.75$   
 $LAB^*LABa 95.41 0.0 0.0$   
 $LAB^*TCh 99.99 0.01 -$

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)

$lab^*lrij 1.0 0.0 0.0$

$lab^*ice 1.0 0.0 -$

$lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.5 0.5 0.5 (1.0)$   
 $cmy^3* 0.5 0.5 0.5 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.5$   
 $cmy^4* 0.0 0.0 0.0 0.5$

standard and adapted CIELAB  
 $LAB^*LAB 56.71 -0.23 2.14$   
 $LAB^*LABa 56.71 0.0 0.0$   
 $LAB^*TCh 50.0 0.01 -$

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)

$lab^*lrij 0.5 0.0 0.0$

$lab^*ice 0.5 0.0 -$

$lab^*nCE 0.5 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.0 0.0 0.0 (1.0)$   
 $cmy^3* 1.0 1.0 1.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.0$   
 $cmy^4* 0.0 0.0 0.0 1.0$

standard and adapted CIELAB  
 $LAB^*LAB 18.02 0.5 -0.46$   
 $LAB^*LABa 18.02 0.0 0.0$   
 $LAB^*TCh 0.01 0.01 -$

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)

$lab^*lrij 0.0 0.0 0.0$

$lab^*ice 0.0 0.0 -$

$lab^*nCE 1.0 0.0 -$

$n^* = 1,0$

### ORS18; adaptierte CIELAB-Daten

$L^*=L^*_a \quad a^*_a \quad b^*_a \quad C^*_{ab,a} \quad h^*_{ab,a}$

	O Ma	Y Ma	L Ma	C Ma	V Ma	M Ma	N Ma	W Ma	R CIE	J CIE	G CIE	B CIE
	47.94	65.37	50.52	82.62	38							
	90.37	-10.27	91.77	92.34	96							
	50.9	-62.79	34.95	71.87	151							
	58.62	-30.35	-45.01	54.3	236							
	25.71	31.11	-44.42	54.24	305							
	48.13	75.27	-8.35	75.73	354							
	18.01	0.0	0.0	0.0	0							
	95.41	0.0	0.0	0.0	0							
	RCIE	39.92	58.66	26.98	64.56	25						
	J CIE	81.26	-2.17	67.76	67.79	92						
	G CIE	52.23	-42.26	11.75	43.87	164						
	B CIE	30.57	1.15	-46.84	46.87	271						

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 164/360 = 0.457$

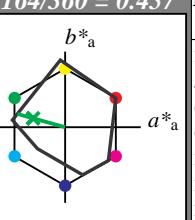
lab\*tch und lab\*nch

D65: Bunton G

LCH\*Ma: 56 66 164

olv\*Ma: 0.1 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 95.41 -0.97 4.75$   
 $LAB^*LABa 95.41 0.0 0.0$   
 $LAB^*TCh 99.99 0.01 -$

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)

$lab^*lrij 1.0 0.0 0.0$

$lab^*ice 1.0 0.0 -$

$lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.5 0.5 0.5 (1.0)$   
 $cmy^3* 0.449 0.0 0.5 (0.0)$   
 $olv^4* 0.551 1.0 0.5 1.0$   
 $cmy^4* 0.449 0.0 0.5 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 75.74 -32.2 12.22$   
 $LAB^*LABa 75.74 -31.6 8.79$   
 $LAB^*TCh 75.0 32.81 164.46$

relative CIELAB lab\*

$lab^*lab 0.746 -0.481 0.134$

$lab^*tch 0.75 0.5 0.457$

$lab^*nch 0.0 0.5 0.457$

relative Natural Colour (NC)

$lab^*lrij 0.746 -0.499 0.0$

$lab^*ice 0.75 0.5 0.5$

$lab^*nCE 0.0 0.5 j99g$

relative Inform. Technology (IT)  
 $olv^3* 0.0 0.0 0.0 (1.0)$   
 $cmy^3* 1.0 1.0 1.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.0$   
 $cmy^4* 0.0 0.0 0.0 1.0$

standard and adapted CIELAB  
 $LAB^*LAB 56.71 -0.23 2.14$   
 $LAB^*LABa 56.71 0.0 0.0$   
 $LAB^*TCh 50.0 0.01 -$

relative CIELAB lab\*

$lab^*lab 0.45 -0.962 0.268$

$lab^*tch 0.5 1.0 0.457$

$lab^*nch 0.0 1.0 0.457$

relative Natural Colour (NC)

$lab^*lrij 0.45 -0.999 0.0$

$lab^*ice 0.5 1.0 0.5$

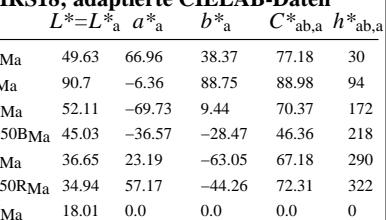
$lab^*nCE 0.0 1.0 j99g$

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 1,00$

relative Buntheit  $c^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 95.41 -0.97 4.75$   
 $LAB^*LABa 95.41 0.0 0.0$   
 $LAB^*TCh 99.99 0.01 -$

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)

$lab^*lrij 1.0 0.0 0.0$

$lab^*ice 1.0 0.0 -$

$lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.551 1.0 0.5 (1.0)$   
 $cmy^3* 0.449 0.0 0.5 (0.0)$   
 $olv^4* 0.551 1.0 0.5 1.0$   
 $cmy^4* 0.449 0.0 0.5 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 75.74 -32.2 12.22$   
 $LAB^*LABa 75.74 -31.6 8.79$   
 $LAB^*TCh 75.0 32.81 164.46$

relative CIELAB lab\*

$lab^*lab 0.746 -0.481 0.134$

$lab^*tch 0.75 0.5 0.457$

$lab^*nch 0.0 0.5 0.457$

relative Natural Colour (NC)

$lab^*lrij 0.746 -0.499 0.0$

$lab^*ice 0.75 0.5 0.5$

$lab^*nCE 0.0 0.5 j99g$

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 1,00$

relative Buntheit  $c^*$

UG100-7, 3 stufige Reihen für konstanten CIELAB Bunnton 164/360 = 0.457 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 164/360 = 0.457 (rechts)

BAM-Prüfvorlage UG10; Farbmétrik-Systeme ORS18 & MRS18  
 Input:  $cmy0* setcmykcolor$

D65: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunttöne  
 Output: no change compared to input

**Eingabe: Farbmétrisches Reflexions-System ORS18**

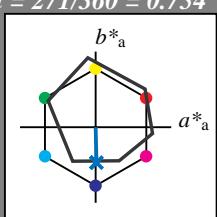
für Bunton  $h^* = lab^*h = 271/360 = 0.754$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

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)  
 $lab^*lrij 1.0 0.0 0.0$   
 $lab^*ice 1.0 0.0 -$   
 $lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.5 0.5 0.5 (1.0)$   
 $cmy^3* 0.5 0.5 0.5 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.5$   
 $cmy^4* 0.0 0.0 0.0 0.5$

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)  
 $lab^*lrij 0.5 0.0 0.0$   
 $lab^*ice 0.5 0.0 -$   
 $lab^*nCE 0.5 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.0 0.0 0.0 (1.0)$   
 $cmy^3* 1.0 1.0 1.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 0.0$   
 $cmy^4* 0.0 0.0 0.0 1.0$

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)  
 $lab^*lrij 0.0 0.0 0.0$   
 $lab^*ice 0.0 0.0 -$   
 $lab^*nCE 1.0 0.0 -$

$n^* = 1,0$

**ORS18; adaptierte CIELAB-Daten**

$L^*=L^*_a \quad a^*_a \quad b^*_a \quad C^*_{ab,a} \quad h^*_{ab,a}$

	O Ma	Y Ma	L Ma	C Ma	V Ma	M Ma	N Ma	W Ma	R CIE	J CIE	G CIE	B CIE
	47.94	65.37	50.52	82.62	38							
	90.37	-10.27	91.77	92.34	96							
	50.9	-62.79	34.95	71.87	151							
	58.62	-30.35	-45.01	54.3	236							
	25.71	31.11	-44.42	54.24	305							
	48.13	75.27	-8.35	75.73	354							
	18.01	0.0	0.0	0.0	0							
	95.41	0.0	0.0	0.0	0							
	RCIE	39.92	58.66	26.98	64.56	25						
	J CIE	81.26	-2.17	67.76	67.79	92						
	G CIE	52.23	-42.26	11.75	43.87	164						
	B CIE	30.57	1.15	-46.84	46.87	271						

**Ausgabe: Farbmétrisches Reflexions-System MRS18**

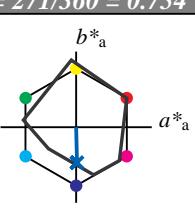
für Bunton  $h^* = lab^*h = 271/360 = 0.754$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton B

LCH\*Ma: 40 50 271

olv\*Ma: 0.0 0.37 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
 $olv^3* 1.0 1.0 1.0 (1.0)$   
 $cmy^3* 0.0 0.0 0.0 (0.0)$   
 $olv^4* 1.0 1.0 1.0 1.0$   
 $cmy^4* 0.0 0.0 0.0 0.0$

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)  
 $lab^*lrij 1.0 0.0 0.0$   
 $lab^*ice 1.0 0.0 -$   
 $lab^*nCE 0.0 0.0 -$

relative Inform. Technology (IT)  
 $olv^3* 0.5 0.5 0.5 (1.0)$   
 $cmy^3* 0.5 0.5 0.5 (0.0)$   
 $olv^4* 0.0 0.0 0.0 0.5$   
 $cmy^4* 0.5 0.316 0.0 0.0$

standard and adapted CIELAB  
 $LAB^*LAB 67.57 0.17 -22.28$   
 $LAB^*LABa 67.57 0.61 -25.16$   
 $LAB^*TChA 75.0 25.18 271.4$

relative CIELAB lab\*  
 $lab^*lab 0.64 0.012 -0.499$   
 $lab^*tch 0.75 0.5 0.754$   
 $lab^*nch 0.0 0.5 0.754$

relative Natural Colour (NC)  
 $lab^*lrij 0.64 0.0 -0.499$   
 $lab^*ice 0.75 0.5 0.75$   
 $lab^*nCE 0.0 0.5 g99b$

relative Inform. Technology (IT)  
 $olv^3* 0.0 0.488 1.0 (1.0)$   
 $cmy^3* 1.0 0.512 0.0 (0.0)$   
 $olv^4* 0.0 0.488 1.0 1.0$   
 $cmy^4* 1.0 0.512 0.0 0.0$

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)  
 $lab^*lrij 0.307 0.0 -0.999$   
 $lab^*ice 0.5 1.0 0.75$   
 $lab^*nCE 0.0 1.0 b00r$

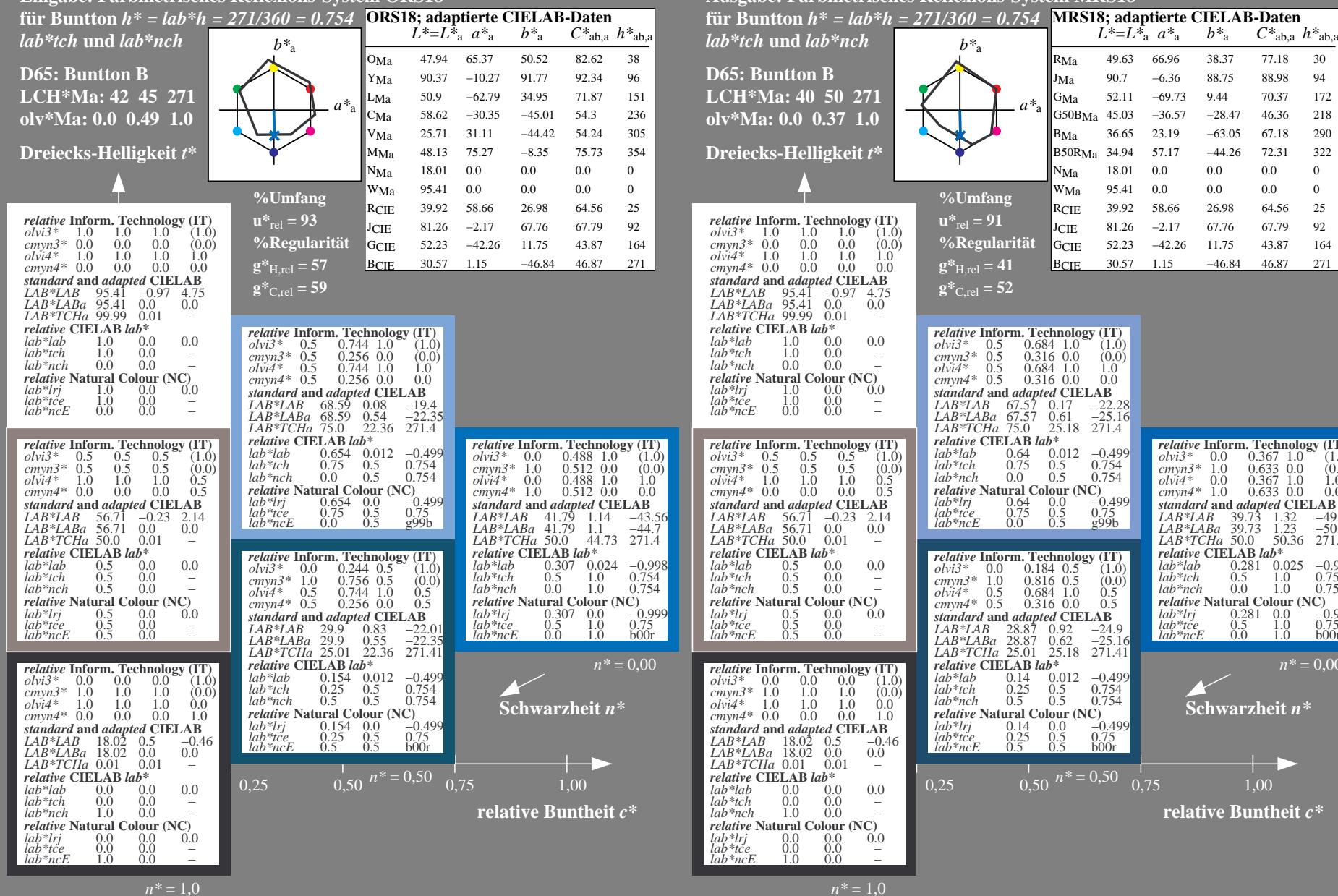
$n^* = 1,0$

**MRS18; adaptierte CIELAB-Daten**

$L^*=L^*_a \quad a^*_a \quad b^*_a \quad C^*_{ab,a} \quad h^*_{ab,a}$

	R Ma	J Ma	G Ma	G50B Ma	B Ma	B50R Ma	N Ma	W Ma	R CIE	J CIE	G CIE	B CIE
	49.63	66.96	38.37	77.18	30							
	90.7	-6.36	88.75	88.98	94							
	52.11	-69.73	9.44	70.37	172							
	45.03	-36.57	-28.47	46.36	218							
	36.65	23.19	-63.05	67.18	290							
	34.94	57.17	-44.26	72.31	322							
	18.01	0.0	0.0	0.0	0							
	95.41	0.0	0.0	0.0	0							
	RCIE	39.92	58.66	26.98	64.56	25						
	J CIE	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						

$n^* = 1,0$



UG100-7, 3 stufige Reihen für konstanten CIELAB Bunnton 271/360 = 0.754 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 271/360 = 0.754 (rechts)

BAM-Prüfvorlage UG10; Farbmétrik-Systeme ORS18 & MRS18  
Input:  $cmy0* setcmykcolor$   
D65: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunttöne  
Output: no change compared to input