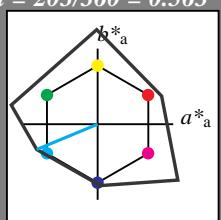


### Eingabe: Farbmétrisches Reflexions-System NCS11

für Bunton  $h^* = lab^*h = 203/360 = 0.563$   
 $lab^*tch$  und  $lab^*nch$



D65: Bunton G50B

LCH\*Ma: 59 87 203

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 0.0 -0.01

LAB\*LABa 95.41 0.0 0.0

LAB\*TChA 99.99 0.01 -

relative CIELAB lab\*

lab\*lab 1.0 0.0 0.0

lab\*tch 1.0 0.0 -

lab\*nch 0.0 0.0 -

relative Natural Colour (NC)

lab\*lrj 1.0 0.0 0.0

lab\*tce 1.0 0.0 -

lab\*nCE 0.0 0.0 -

relative Inform. Technology (IT)

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 53.21 0.0 0.04

LAB\*LABa 53.21 0.0 0.0

LAB\*TChA 50.0 0.01 -

relative CIELAB lab\*

lab\*lab 0.5 0.0 0.0

lab\*tch 0.5 0.0 -

lab\*nch 0.5 0.0 -

relative Natural Colour (NC)

lab\*lrj 0.5 0.0 0.0

lab\*tce 0.5 0.0 -

lab\*nCE 0.5 0.0 -

relative Inform. Technology (IT)

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 11.01 0.07 0.01

LAB\*LABa 11.01 0.0 0.0

LAB\*TChA 0.01 0.01 -

relative CIELAB lab\*

lab\*lab 0.0 0.0 0.0

lab\*tch 0.0 0.0 -

lab\*nch 1.0 0.0 -

relative Natural Colour (NC)

lab\*lrj 0.0 0.0 0.0

lab\*tce 0.0 0.0 -

lab\*nCE 1.0 0.0 -

$n^* = 1,0$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 0,25$

### NCS11; adaptierte CIELAB-Daten

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

	RMa	JMa	GMa	G50BMa	BMa	B50RMa	NMa	WMa	RCIE	JCIE	GCIE	BCIE
$L^*$	47.15	84.64	37.25	92.48	24							
$a^*$		-1.27	125.03	125.03	91							
$b^*$			-114.28	25.35	117.06	167						
$C^*_{ab,a}$				-80.6	-33.45	87.28	203					
$h^*_{ab,a}$							273					

%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

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

### 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  $t^*$



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 77.43 -40.26 -16.71

LAB\*LABa 77.43 -40.29 -16.72

LAB\*TChA 75.0 43.63 202.54

relative CIELAB lab\*

lab\*lab 0.787 -0.418 -0.272

lab\*tce 0.75 0.5 0.592

lab\*nCE 0.0 0.5 g36b

relative Inform. Technology (IT)

olv3\* 0.0 1.0 1.0 (1.0)  
 cmyn3\* 1.0 0.5 0.5 (0.0)

olv4\* 0.5 1.0 1.0 0.5  
 cmyn4\* 0.5 0.0 0.0 0.5

standard and adapted CIELAB

LAB\*LAB 59.47 -80.55 -33.44

LAB\*LABa 59.47 -80.59 -33.44

LAB\*TChA 50.0 87.26 202.54

relative CIELAB lab\*

lab\*lab 0.574 -0.836 -0.546

lab\*tce 0.5 1.0 0.592

lab\*nCE 0.0 1.0 g36b

$n^* = 0,00$

Schwarzheit  $n^*$



$n^* = 0,00$

### MRS18; adaptierte CIELAB-Daten

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

	RMa	JMa	GMa	G50BMa	BMa	B50RMa	NMa	WMa	RCIE	JCIE	GCIE	BCIE
$L^*$	49.63	66.96	38.37	77.18	30							
$a^*$		-6.36	88.75	88.98	94							
$b^*$		-69.73	9.44	70.37	172							
$C^*_{ab,a}$		-36.57	-28.47	46.36	218							
$h^*_{ab,a}$						290						

%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\* 0.5 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

relative Inform. Technology (IT)

olv3\* 0.0 0.5 0.5 (1.0)  
 cmyn3\* 1.0 0.5 0.5 (0.0)

olv4\* 0.5 1.0 1.0 0.5  
 cmyn4\* 0.5 0.0 0.0 0.5

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 -

$n^* = 0,00$

Schwarzheit  $n^*$



$n^* = 0,00$

C

L

O

M

C

M

H

O

V

C

V

Y

Y

L

C

L

M

Y

V

C

M

T

Ch

nch

C

T

Ch

nch

C

C

Ch

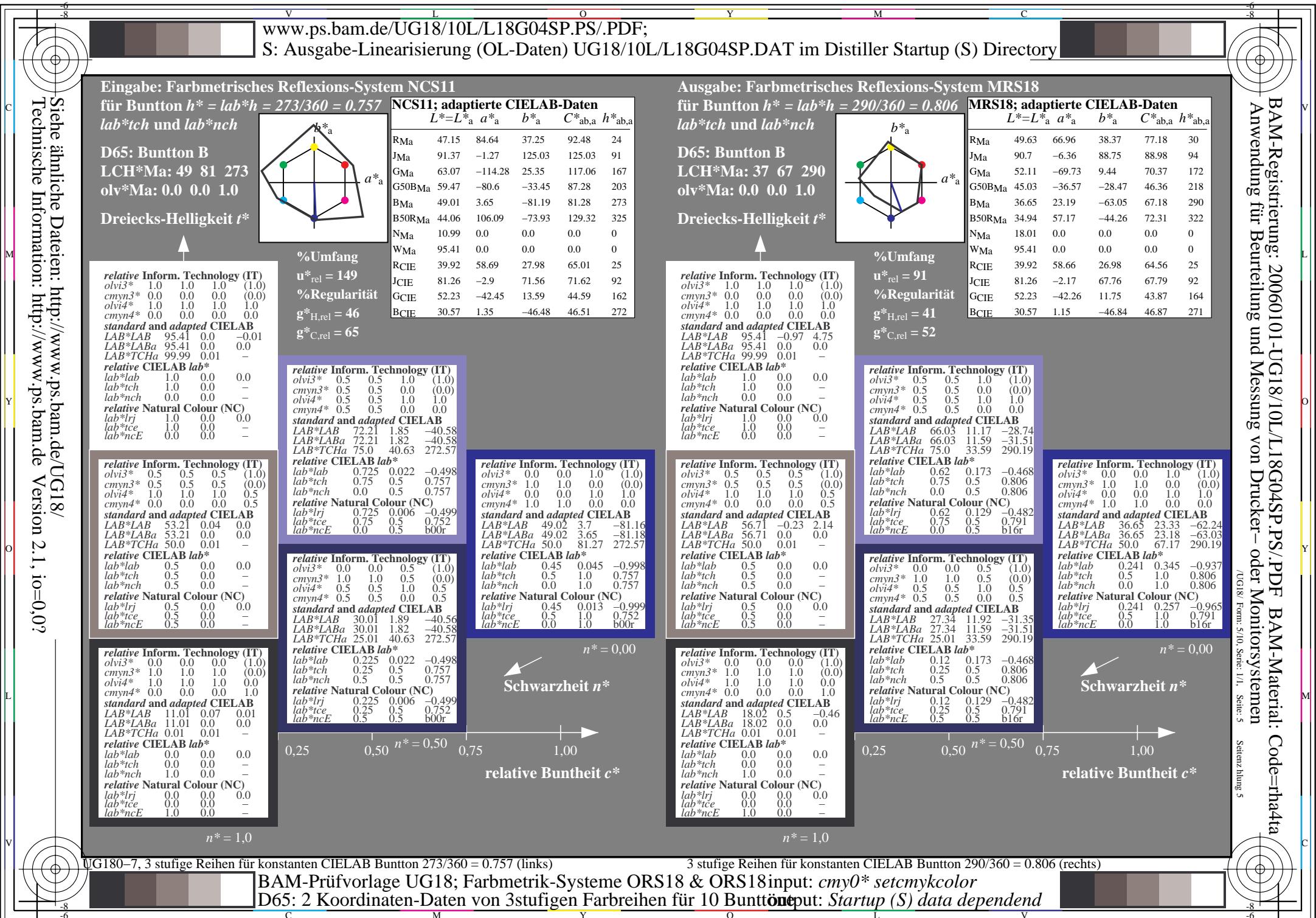
nch

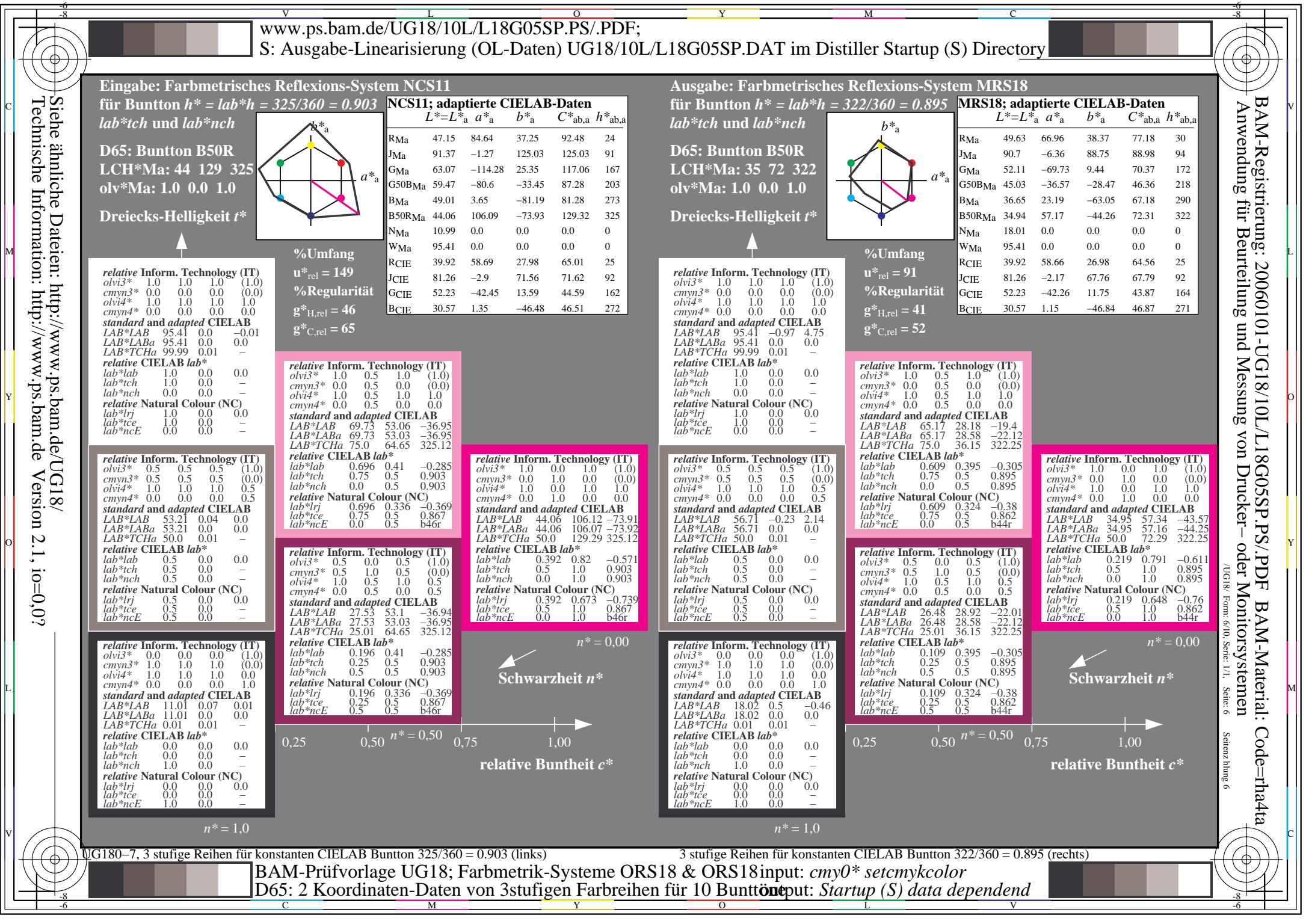
C

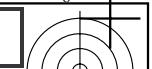
C

C

Ch



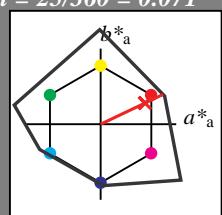




Siehe ähnliche Dateien: <http://www.ps.bam.de/UG18/>  
Technische Information: <http://www.ps.bam.de>

D65: Bunton R  
LCH\*Ma: 48 91 25  
olv\*Ma: 1.0 0.02 0.0

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 0.0 -0.01  
LAB\*LABa 95.41 0.0 0.0  
LAB\*TChA 99.99 0.01 -

relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*tch 1.0 0.0 -  
lab\*nch 0.0 0.0 -  
relative Natural Colour (NC)  
lab\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nCE 0.0 0.0 -

relative Inform. Technology (IT)  
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 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TChA 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -  
relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nCE 0.5 0.0 -

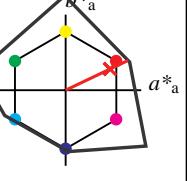
relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TChA 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -  
relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nCE 1.0 0.0 -

$n^* = 1,0$

### Eingabe: Farbmétrisches Reflexions-System NCS11

für Bunton  $h^* = lab^*h = 25/360 = 0.071$   
 $lab^*tch$  und  $lab^*nch$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

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

relative Inform. Technology (IT)

olv3\* 1.0 0.512 0.5 (1.0)

cmyn3\* 0.0 0.488 0.5 (0.0)

olv4\* 1.0 0.512 0.5 1.0

cmyn4\* 0.0 0.488 0.5 0.0

standard and adapted CIELAB

LAB\*LAB 71.81 41.31 19.68

LAB\*LABa 71.81 41.28 19.68

LAB\*TChA 75.0 45.73 25.49

relative CIELAB lab\*

lab\*lab 0.72 0.451 0.215

lab\*tch 0.75 0.5 0.071

lab\*nch 0.0 0.5 0.071

relative Natural Colour (NC)

lab\*lrj 0.72 0.5 0.0

lab\*tce 0.75 0.5 0.0

lab\*nCE 0.0 0.5 r00j

standard and adapted CIELAB

LAB\*LAB 48.21 82.61 39.36

LAB\*LABa 48.21 82.57 39.35

LAB\*TChA 50.0 91.46 25.48

relative CIELAB lab\*

lab\*lab 0.441 0.903 0.43

lab\*tch 0.5 1.0 0.071

lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)

lab\*lrj 0.441 1.0 0.0

lab\*tce 0.5 1.0 1.0

lab\*nCE 0.0 1.0 b99r

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 -

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 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.695 0.5 0.0

lab\*tch 0.75 0.5 1.0

lab\*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.695 0.5 0.0

lab\*tce 0.75 0.5 1.0

lab\*nCE 0.0 0.5 b99r

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)

cmyn3\* 0.5 1.0 0.952 0.0

olv4\* 1.0 0.5 0.548 0.5

cmyn4\* 0.0 0.5 0.452 0.5

standard and adapted CIELAB

LAB\*LAB 33.11 33.21 15.74

LAB\*LABa 33.11 33.0 15.18

LAB\*TChA 25.01 36.33 24.71

relative CIELAB lab\*

lab\*lab 0.39 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 0.39 1.0 0.0

lab\*tce 0.5 1.0 0.0

lab\*nCE 0.0 1.0 r00j

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)

cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 0.0 0.0 0.0 1.0

cmyn4\* 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB\*LAB 48.21 71.8 32.47

LAB\*LABa 71.8 33.0 15.17

LAB\*TChA 75.0 36.32 24.7

relative CIELAB lab\*

lab\*lab 0.695 0.5 0.0

lab\*tch 0.75 0.5 1.0

lab\*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.695 0.5 0.0

lab\*tce 0.75 0.5 1.0

lab\*nCE 0.0 0.5 b99r

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 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.39 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 0.39 1.0 0.0

lab\*tce 0.5 1.0 0.0

lab\*nCE 0.0 1.0 r00j

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)

cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 0.0 0.0 0.0 1.0

cmyn4\* 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB\*LAB 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.195 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 0.195 0.5 0.0

lab\*tce 0.25 0.5 0.0

lab\*nCE 0.5 0.5 r00j

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 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.195 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 0.195 0.5 0.0

lab\*tce 0.25 0.5 0.0

lab\*nCE 0.5 0.5 r00j

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 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.195 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 0.195 0.5 0.0

lab\*tce 0.25 0.5 0.0

lab\*nCE 0.5 0.5 r00j

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 48.21 65.92 31.93

LAB\*LABa 48.21 66.0 30.36

LAB\*TChA 50.0 72.65 24.7

relative CIELAB lab\*

lab\*lab 0.195 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 0.195 0.5 0.0

lab\*tce 0.25 0.5 0.0

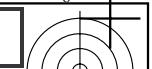
lab\*nCE 0.5 0.5 r00j

relative Inform. Technology (IT)

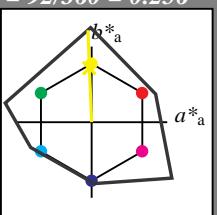
olv3\* 1.0 1.0 1.0 (1.0)

cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 1.0 1.0 1.0 1.0</



**Eingabe:** Farbmétrisches Reflexions-System NCS11  
für Bunton  $h^* = lab^*h = 92/360 = 0.256$   
 $lab^*tch$  und  $lab^*nch$



D65: Bunton J

LCH\*Ma: 90 122 92

olv\*Ma: 0.97 1.0 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 0.0 -0.01

$LAB^*LABa$  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

$LAB^*LAB$  53.21 0.0 0.0

$LAB^*LABa$  53.21 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)  
 $olv_i3^*$  0.484 0.5 0.0 (1.0)

$cmy_n3^*$  0.516 0.5 1.0 (0.0)

$olv_i4^*$  0.984 1.0 0.5 0.5

$cmy_n4^*$  0.016 0.0 0.5 0.5

standard and adapted CIELAB

$LAB^*LAB$  50.72 -2.42 60.89

$LAB^*LABa$  50.72 -2.47 60.88

$LAB^*TCh_a$  25.01 60.93 92.32

relative CIELAB  $lab^*$

$lab^*lab$  0.471 -0.019 0.499

$lab^*tch$  0.25 0.5 0.256

$lab^*nch$  0.5 0.5 0.256

relative Natural Colour (NC)

$lab^*lrij$  0.471 0.0 0.5

$lab^*tce$  0.25 0.5 0.25

$lab^*nCE$  0.5 0.5 j00g

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

$LAB^*LAB$  11.01 0.07 0.01

$LAB^*LABa$  11.01 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 -

$n^* = 1,0$

0,25

0,50

$n^* = 0,50$

0,75

1,00

relative Buntheit  $c^*$

$n^* = 0,00$

Schwarzheit  $n^*$

### NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

$h^*_{ab,a} = lab^*h = 92/360 = 0.256$

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

D65: Bunton J

LCH\*Ma: 90 122 92

olv\*Ma: 0.97 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

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

### Ausgabe: Farbmétrisches Reflexions-System MRS18

für Bunton  $h^* = lab^*h = 92/360 = 0.255$

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

D65: Bunton J

LCH\*Ma: 89 86 92

olv\*Ma: 1.0 0.95 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

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

$h^*_{ab,a} = lab^*h = 92/360 = 0.255$

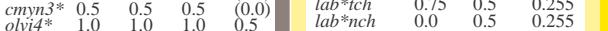
$lab^*tch$  und  $lab^*nch$

D65: Bunton J

LCH\*Ma: 89 86 92

olv\*Ma: 1.0 0.95 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)

$olv_i3^*$  0.5 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

$LAB^*LAB$  50.0 0.0 0.0

$LAB^*LABa$  50.0 0.0 0.0

$LAB^*TCh_a$  50.0 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  0.941 -0.04 0.999

$lab^*tch$  0.5 1.0 0.256

$lab^*nch$  0.0 1.0 0.256

relative Natural Colour (NC)

$lab^*lrij$  0.941 0.0 1.0

$lab^*tce$  0.5 1.0 0.25

$lab^*nCE$  0.5 0.0 j00g

relative Inform. Technology (IT)

$olv_i3^*$  0.484 0.5 0.0 (1.0)

$cmy_n3^*$  0.516 0.5 1.0 (0.0)

$olv_i4^*$  0.984 1.0 0.5 0.5

$cmy_n4^*$  0.016 0.0 0.5 0.5

standard and adapted CIELAB

$LAB^*LAB$  50.72 -2.42 60.89

$LAB^*LABa$  50.72 -2.47 60.88

$LAB^*TCh_a$  25.01 60.93 92.32

relative CIELAB  $lab^*$

$lab^*lab$  0.471 -0.019 0.499

$lab^*tch$  0.25 0.5 0.256

$lab^*nch$  0.5 0.5 0.256

relative Natural Colour (NC)

$lab^*lrij$  0.471 0.0 0.5

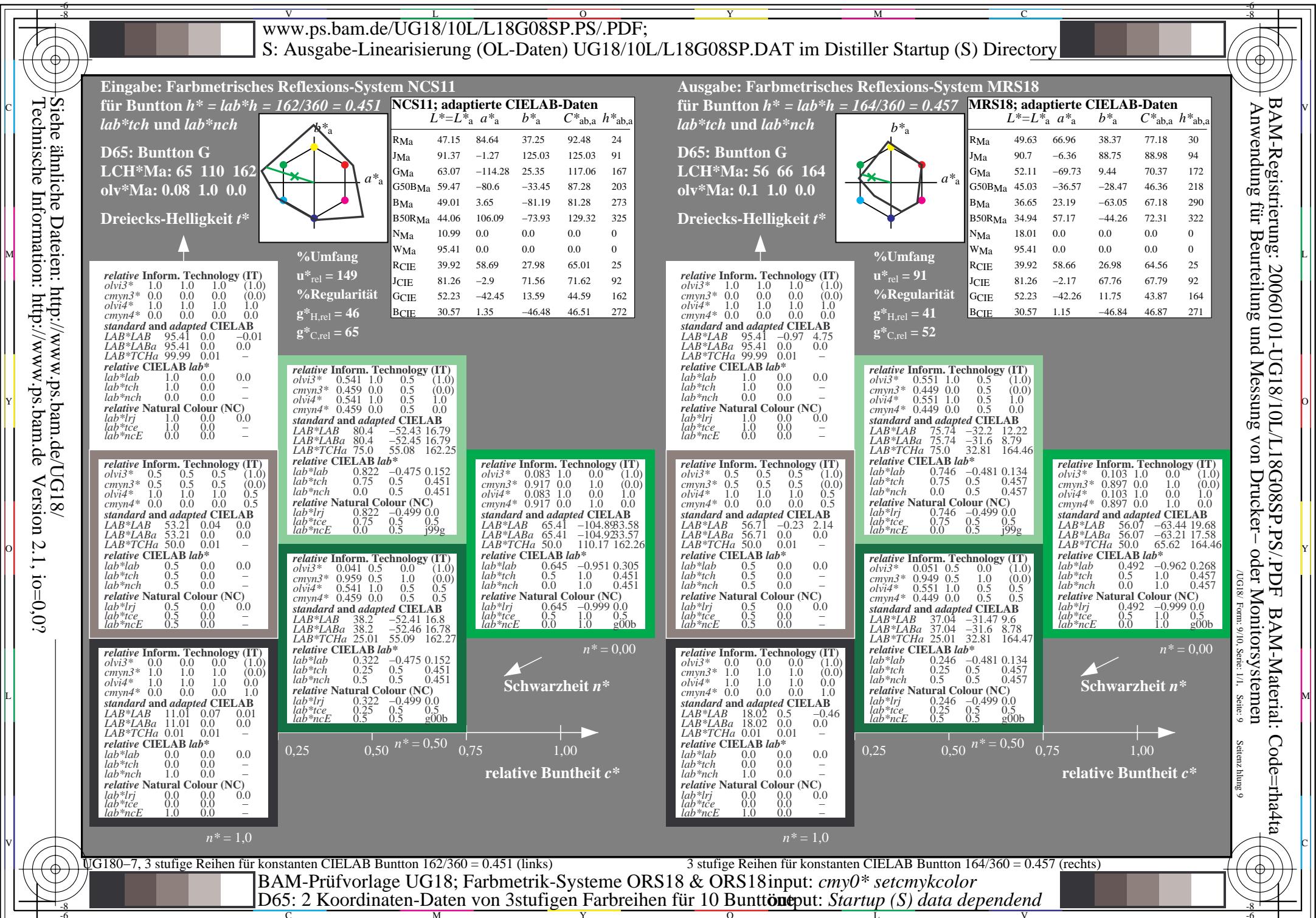
$lab^*tce$  0.25 0.5 0.25

$lab^*nCE$  0.5 0.5 j00g

relative Inform. Technology (IT)

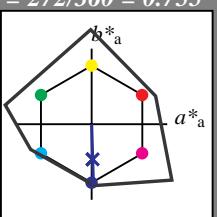
$olv_i3^*$  0.0 0.0 0.0 (1.0)

$cmy_n3^*$  1.0 1.0 1.0 (0.0)



### Eingabe: Farbmétrisches Reflexions-System NCS11

für Bunton  $h^* = lab^*h = 272/360 = 0.755$   
 $lab^*tch$  und  $lab^*nch$



D65: Bunton B

LCH\*Ma: 49 80 272

olv\*Ma: 0.0 0.02 1.0

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 0.0 -0.01

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TChA$  99.99 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  1.0 0.0 0.0

$lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  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

$LAB^*LAB$  53.21 0.0 0.0

$LAB^*LABa$  53.21 0.0 0.0

$LAB^*TChA$  50.0 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  0.5 0.0 0.0

$lab^*tch$  0.5 0.0 -

$lab^*nch$  0.5 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  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

$LAB^*LAB$  11.01 0.07 0.01

$LAB^*LABa$  11.01 0.0 0.0

$LAB^*TChA$  0.01 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  0.0 0.0 0.0

$lab^*tch$  0.0 0.0 -

$lab^*nch$  1.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  0.0 0.0 0.0

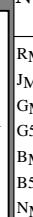
$lab^*ice$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

### Eingabe: Farbmétrisches Reflexions-System NCS11

für Bunton  $h^* = lab^*h = 271/360 = 0.755$   
 $lab^*tch$  und  $lab^*nch$



%Umfang

$u^*_{rel} = 149$

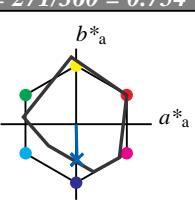
%Regularität

$g^*_{H,rel} = 46$

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

### Ausgabe: Farbmétrisches Reflexions-System MRS18

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



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

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

	$RMa$	47.15	84.64	37.25	92.48	24
$JMa$	91.37	-1.27	125.03	125.03	91	
$GMa$	63.07	-114.28	25.35	117.06	167	
$G50BMa$	59.47	-80.6	-33.45	87.28	203	
$BMa$	49.01	3.65	-81.19	81.28	273	
$B50RMa$	44.06	106.09	-73.93	129.32	325	
$NMa$	10.99	0.0	0.0	0.0	0	
$WMa$	95.41	0.0	0.0	0.0	0	
$RCIE$	39.92	58.69	27.98	65.01	25	
$JCIE$	81.26	-2.9	71.56	71.62	92	
$GCIE$	52.23	-42.45	13.59	44.59	162	
$BCIE$	30.57	1.35	-46.48	46.51	272	

	$olv13^*$	0.5	0.684	1.0	(1.0)
$cmy3^*$	0.5	0.316	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	-		

	$olv13^*$	0.5	0.637	1.0	(1.0)
$cmy3^*$	0.5	0.316	0.0	(0.0)	
$olv4^*$	0.5	0.684	1.0	1.0	
$cmy4^*$	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		

	$olv13^*$	0.0	0.184	0.5	(1.0)
$cmy3^*$	1.0	0.816	0.5	(0.0)	
$olv4^*$	0.5	0.684	1.0	0.5	
$cmy4^*$	0.5	0.316	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	-		

	$olv13^*$	0.0	0.184	0.5	(1.0)
$cmy3^*$	1.0	0.816	0.5	(0.0)	
$olv4^*$	0.5	0.684	1.0	0.5	
$cmy4^*$	0.5	0.316	0.0	0.5	
	$standard and adapted CIELAB$				
$LAB^*LAB$	28.87	0.92	-24.9		
$LAB^*LABa$	28.87	0.62	-25.16		
$LAB^*TChA$	25.01	25.18	271.41		

	$olv13^*$	0.14	0.012	-0.499	
$cmy3^*$	0.25	0.5	0.754		
$olv4^*$	0.5	0.5	0.754		
$cmy4^*$	0.5	0.5	0.754		
	$relative Natural Colour (NC)$				
$lab^*lrij$	0.14	0.0	-0.499		
$lab^*ice$	0.25	0.5	0.75		
$lab^*nCE$	0.5	0.5	0.75		

	$olv13^*$	0.0	0.0	0.0	
$cmy3^*$	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	-		

	$olv13^*$	0.0	0.0	0.0	
$cmy3^*$	1.0	1.0	1.0	(0.0)	
$olv4^*$	1.0	1.0	1.0	0.0	
$cmy4^*$	1.0	1.0	1.0	0.0	
	$relative Natural Colour (NC)$				
$lab^*lrij$	0.0	0.0	0.0		
$lab^*ice$	0.0	0.0	0.0		
$lab^*nCE$	1.0	0.0	0.0		

	$olv13^*$	0.0	0.0	0.0	
$cmy3^*$	1.0	1.0	1.0	(0.0)	
$olv4^*$	1.0	1.0	1.0	0.0	
$cmy4^*$	1.0	1.0	1.0	0.0	
	$standard and adapted CIELAB$				
$LAB^*LAB$	27.1	0.0	0.0		
$LAB^*LABa$	27.1	0.0	0.0		
$LAB^*TChA$	27.1	0.0	0.0		

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 1,0$

$n^* = 0,00$

$n^* = 0,50$

relative Buntheit  $c^*$

$n^* = 1,0$

UG180-7, 3 stufige Reihen für konstanten CIELAB Bunnton 272/360 = 0.755 (links)</p