

### Eingabe: Farbmétrisches Offset-Reflektiv-System ORS18

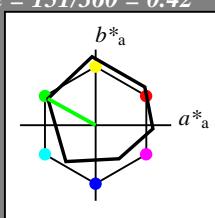
für Bunton  $h^* = lab^*h = 151/360 = 0.42$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 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 95.46 -0.39 4.69  
LAB\*LABa 95.46 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 56.78 0.13 2.11  
LAB\*LABa 56.78 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 18.1 0.67 -0.46  
LAB\*LABa 18.1 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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Umfang

$u^*_{rel} = 94$

%Regularität

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

$g^*_{C,rel} = 60$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

für Bunton  $h^* = lab^*h = 140/360 = 0.389$

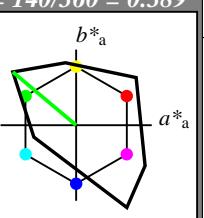
lab\*tch und lab\*nch

D50: Bunton L

LCH\*Ma: 83 109 140

olv\*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 156$

%Regularität

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

### TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
M <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
W <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

$n^* = 1,0$

$n^* = 1,0$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$



### Eingabe: Farbmétrisches Offset-Reflektiv-System ORS18

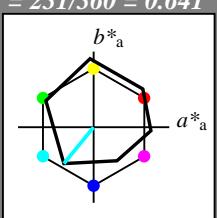
für Bunton  $h^* = lab^*h = 231/360 = 0.641$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton C

LCH\*Ma: 57 62 231

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



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  
 $LAB^*LAB$  95.46 -0.39 4.69  
 $LAB^*LABa$  95.46 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 1.0 1.0 0.5  
 $cmy^4*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.78 0.13 2.11  
 $LAB^*LABa$  56.78 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  
 $LAB^*LAB$  18.1 0.67 -0.46  
 $LAB^*LABa$  18.1 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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Umfang

$u^*_{rel} = 94$

%Regularität

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)

$olv^3*$  0.5 1.0 1.0 (1.0)

$cmy^3*$  0.5 0.0 0.0 (0.0)

$olv^4*$  0.5 1.0 1.0 1.0

$cmy^4*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  95.41 0.0 0.0

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TChA$  99.99 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  1.0 0.0 0.0

$lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv^3*$  0.0 0.5 0.5 (1.0)

$cmy^3*$  1.0 0.5 0.5 (0.0)

$olv^4*$  0.5 1.0 1.0 0.5

$cmy^4*$  0.5 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  56.99 -39.2 -45.96

$LAB^*LABa$  56.99 -39.33 -48.09

$LAB^*TChA$  50.0 62.15 230.72

relative CIELAB  $lab^*$

$lab^*lab$  0.503 -0.632 -0.773

$lab^*tch$  0.5 1.0 0.641

$lab^*nch$  0.0 1.0 0.641

relative Natural Colour (NC)

$lab^*lrij$  0.503 -0.505 -0.861

$lab^*ice$  0.5 1.0 0.666

$lab^*nCE$  0.0 1.0 g66b

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 1,0$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

für Bunton  $h^* = lab^*h = 196/360 = 0.544$

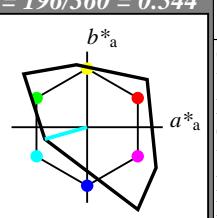
$lab^*tch$  und  $lab^*nch$

D50: Bunton C

LCH\*Ma: 85 58 196

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 156$

%Regularität

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

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 0.0 0.0

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TChA$  99.99 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  1.0 0.0 0.0

$lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  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 1.0 1.0 (1.0)

$cmy^3*$  0.0 0.5 0.5 (0.0)

$olv^4*$  0.5 1.0 1.0 0.5

$cmy^4*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  56.99 -39.2 -45.96

$LAB^*LABa$  56.99 -39.33 -48.09

$LAB^*TChA$  50.0 62.15 230.72

relative CIELAB  $lab^*$

$lab^*lab$  0.503 -0.632 -0.773

$lab^*tch$  0.5 1.0 0.641

$lab^*nch$  0.0 1.0 0.641

relative Natural Colour (NC)

$lab^*lrij$  0.503 -0.505 -0.861

$lab^*ice$  0.5 1.0 0.666

$lab^*nCE$  0.0 1.0 g66b

$n^* = 1,00$

Schwarzheit  $n^*$

$n^* = 0,50$

$n^* = 1,00$

### TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
M <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
W <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

relative Inform. Technology (IT)

$olv^3*$  0.5 1.0 1.0 (1.0)

$cmy^3*$  0.5 0.0 0.0 (0.0)

$olv^4*$  0.5 1.0 1.0 1.0

$cmy^4*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  90.31 -27.94 -7.88

$LAB^*LABa$  90.31 -27.94 -7.88

$LAB^*TChA$  75.0 29.04 195.77

relative CIELAB  $lab^*$

$lab^*lab$  0.947 -0.439 -0.237

$lab^*tch$  0.75 0.5 0.579

$lab^*nch$  0.0 0.5 g31b

relative Inform. Technology (IT)

$olv^3*$  0.0 0.5 0.5 (1.0)

$cmy^3*$  1.0 0.5 0.5 (0.0)

$olv^4*$  0.5 1.0 1.0 0.5

$cmy^4*$  0.5 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  42.62 -27.94 -7.88

$LAB^*LABa$  42.62 -27.94 -7.88

$LAB^*TChA$  25.01 29.04 195.77

relative CIELAB  $lab^*$

$lab^*lab$  0.447 -0.439 -0.237

$lab^*tch$  0.25 0.5 0.579

$lab^*nch$  0.5 0.5 g31b

$n^* = 1,00$

Schwarzheit  $n^*$

Siehe ähnliche Dateien: <http://www.ps.bam.de/PG10/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=1,1?

### Eingabe: Farbmétrisches Offset-Reflektiv-System ORS18

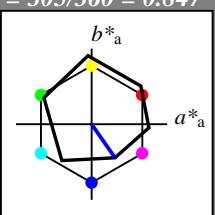
für Bunton  $h^* = lab^*h = 305/360 = 0.847$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



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  
 $LAB^*LAB 95.46 -0.39 4.69$   
 $LAB^*LABa 95.46 0.0 0.0$   
 $LAB^*TChA 99.99 0.01 -$

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)

$lab^*lrij 1.0 0.0 0.0$

$lab^*tce 1.0 0.0 -$

$lab^*ncE 0.0 0.0 -$

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

standard and adapted CIELAB  
 $LAB^*LAB 60.59 15.52 -19.82$   
 $LAB^*LABa 60.59 15.44 -22.19$   
 $LAB^*TChA 75.0 27.04 304.82$

relative CIELAB lab\*

$lab^*lab 0.549 0.285 -0.409$

$lab^*tch 0.75 0.5 0.847$

$lab^*nch 0.0 0.5 0.847$

relative Natural Colour (NC)

$lab^*lrij 0.549 0.252 -0.431$

$lab^*tce 0.75 0.5 0.834$

$lab^*ncE 0.0 0.5 b33r$

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

standard and adapted CIELAB  
 $LAB^*LAB 21.91 16.06 -22.4$   
 $LAB^*LABa 21.91 15.44 -22.19$   
 $LAB^*TChA 25.01 27.04 304.82$

relative CIELAB lab\*

$lab^*lab 0.049 0.285 -0.409$

$lab^*tch 0.25 0.5 0.847$

$lab^*nch 0.5 0.5 0.847$

relative Natural Colour (NC)

$lab^*lrij 0.049 0.252 -0.431$

$lab^*tce 0.25 0.5 0.834$

$lab^*ncE 0.5 0.5 b33r$

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  
 $LAB^*LAB 18.1 0.67 -0.46$   
 $LAB^*LABa 18.1 0.0 0.0$   
 $LAB^*TChA 0.01 0.01 -$

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)

$lab^*lrij 0.0 0.0 0.0$

$lab^*tce 0.0 0.0 -$

$lab^*ncE 1.0 0.0 -$

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$

$n^* = 1,00$   
relative Buntheit  $c^*$

Schwarzheit  $n^*$

PG100-7, 3 stufige Reihen für konstanten CIELAB Bunton 305/360 = 0.847 (links)

BAM-Prüfvorlage PG10; Farbmétrik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$

D50: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

für Bunton  $h^* = lab^*h = 302/360 = 0.838$

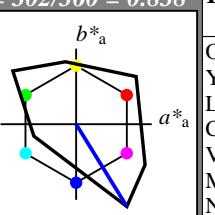
$lab^*tch$  und  $lab^*nch$

D50: Bunton V

LCH\*Ma: 26 128 302

olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang  
 $u^*_{rel} = 94$   
%Regularität  
 $g^*_{H,rel} = 65$   
 $g^*_{C,rel} = 60$

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  
 $LAB^*LAB 95.41 0.0 0.0$   
 $LAB^*LABa 95.41 0.0 0.0$   
 $LAB^*TChA 99.99 0.01 -$

relative CIELAB lab\*

$lab^*lab 1.0 0.0 0.0$

$lab^*tch 1.0 0.0 -$

$lab^*nch 0.0 0.0 -$

relative Natural Colour (NC)

$lab^*lrij 1.0 0.0 0.0$

$lab^*tce 1.0 0.0 -$

$lab^*ncE 0.0 0.0 -$

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

standard and adapted CIELAB  
 $LAB^*LAB 60.51 33.52 -54.42$   
 $LAB^*LABa 60.51 33.52 -54.42$   
 $LAB^*TChA 75.0 63.92 301.63$

relative CIELAB lab\*

$lab^*lab 0.634 0.262 -0.425$

$lab^*tch 0.75 0.5 0.838$

$lab^*nch 0.0 0.5 0.838$

relative Natural Colour (NC)

$lab^*lrij 0.634 0.231 -0.442$

$lab^*tce 0.75 0.5 0.827$

$lab^*ncE 0.0 0.5 b30r$

$n^* = 0,00$

### TLS00; adaptierte CIELAB-Daten

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

O <sub>Ma</sub> 54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub> 93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub> 82.82	-83.73	70.41	109.41	140
C <sub>Ma</sub> 85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub> 25.61	67.05	-108.87	127.87	302
M <sub>Ma</sub> 58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub> 0.01	0.0	0.0	0.0	0
W <sub>Ma</sub> 95.41	0.0	0.0	0.0	0
R <sub>CIE</sub> 41.88	62.0	31.82	69.69	27
J <sub>CIE</sub> 81.97	1.81	71.59	71.61	89
G <sub>CIE</sub> 51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub> 29.2	-5.27	-49.33	49.62	264

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

standard and adapted CIELAB  
 $LAB^*LAB 25.61 67.04 -108.88$   
 $LAB^*LABa 25.61 67.04 -108.88$   
 $LAB^*TChA 50.0 127.84 301.63$

relative CIELAB lab\*

$lab^*lab 0.268 0.524 -0.85$

$lab^*tch 0.5 1.0 0.838$

$lab^*nch 0.0 1.0 0.838$

relative Natural Colour (NC)

$lab^*lrij 0.268 0.462 -0.885$

$lab^*tce 0.5 1.0 0.827$

$lab^*ncE 0.0 1.0 b30r$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 1,00$

$n^* = 0,50$

$n^* = 0,00$

relative Buntheit  $c^*$

3 stufige Reihen für konstanten CIELAB Bunton 302/360 = 0.838 (rechts)

BAM-Prüfvorlage PG10; Farbmétrik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$

D50: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend



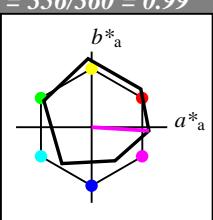
**Eingabe:** Farbmétrisches Offset-Reflektiv-System ORS18  
für Bunton  $h^* = lab^*h = 356/360 = 0.99$   
 $lab^*tch$  und  $lab^*nch$

**D50:** Bunton M

**LCH\*Ma:** 50 76 356

**olv\*Ma:** 1.0 0.0 1.0

**Dreiecks-Helligkeit  $t^*$**



**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**  
 $LAB^*LAB$  95.46 -0.39 4.69  
 $LAB^*LABa$  95.46 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**  
 $LAB^*LAB$  56.78 0.13 2.11  
 $LAB^*LABa$  56.78 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**  
 $LAB^*LAB$  18.1 0.67 -0.46  
 $LAB^*LABa$  18.1 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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Umfang

$u^*_{rel} = 94$

%Regularität

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

$g^*_{C,rel} = 60$

**relative Inform. Technology (IT)**

$olv^3*$  1.0 0.5 1.0 (1.0)  
 $cmy^3*$  0.0 0.5 0.0 (0.0)

$olv^4*$  1.0 0.5 1.0 1.0  
 $cmy^4*$  0.0 0.5 0.0 0.0

**standard and adapted CIELAB**  
 $LAB^*LAB$  72.72 37.79 0.86  
 $LAB^*LABa$  72.72 37.87 -2.31  
 $LAB^*TChA$  75.0 37.94 356.49

**relative CIELAB lab\***

$lab^*lab$  0.706 0.499 -0.03  
 $lab^*tch$  0.75 0.5 0.99  
 $lab^*nch$  0.0 0.5 0.99

**relative Natural Colour (NC)**

$lab^*lrij$  0.706 0.464 -0.186  
 $lab^*ice$  0.75 0.5 0.939  
 $lab^*ncE$  0.0 0.5 b75r

**relative Inform. Technology (IT)**

$olv^3*$  0.5 0.0 0.5 (1.0)  
 $cmy^3*$  0.5 1.0 0.5 (0.0)

$olv^4*$  1.0 0.5 1.0 0.5  
 $cmy^4*$  0.0 0.5 0.0 0.5

**standard and adapted CIELAB**  
 $LAB^*LAB$  49.99 75.97 -2.97  
 $LAB^*LABa$  49.99 75.75 -4.64  
 $LAB^*TChA$  50.0 75.89 356.49

**relative CIELAB lab\***

$lab^*lab$  0.412 0.998 -0.06  
 $lab^*tch$  0.5 1.0 0.99  
 $lab^*nch$  0.0 1.0 0.99

**relative Natural Colour (NC)**

$lab^*lrij$  0.412 0.928 -0.372  
 $lab^*ice$  0.5 1.0 0.939  
 $lab^*ncE$  0.0 1.0 b75r

**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**  
 $LAB^*LAB$  18.1 0.67 -0.46  
 $LAB^*LABa$  18.1 0.0 0.0  
 $LAB^*TChA$  0.01 0.01 -

**relative CIELAB lab\***

$lab^*lab$  0.206 0.499 -0.03  
 $lab^*tch$  0.25 0.5 0.99  
 $lab^*nch$  0.5 0.5 0.99

**relative Natural Colour (NC)**

$lab^*lrij$  0.206 0.464 -0.186  
 $lab^*ice$  0.25 0.5 0.939  
 $lab^*ncE$  0.5 0.5 b75r

$n^* = 0,00$

### ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Umfang

$u^*_{rel} = 94$

%Regularität

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

$g^*_{C,rel} = 60$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

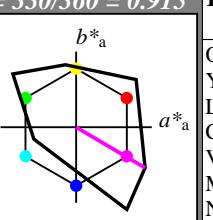
für Bunton  $h^* = lab^*h = 330/360 = 0.915$

**D50:** Bunton M

**LCH\*Ma:** 59 106 330

**olv\*Ma:** 1.0 0.0 1.0

**Dreiecks-Helligkeit  $t^*$**



**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 0.0 0.0  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TChA$  99.99 0.01 -

**relative CIELAB lab\***

$lab^*lab$  1.0 0.0 0.0  
 $lab^*tch$  1.0 0.0 -  
 $lab^*nch$  0.0 0.0 -

**relative Natural Colour (NC)**

$lab^*lrij$  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 1.0 (1.0)  
 $cmy^3*$  0.0 0.5 0.0 (0.0)

$olv^4*$  1.0 0.5 1.0 0.5  
 $cmy^4*$  0.0 0.5 0.0 0.5

**standard and adapted CIELAB**  
 $LAB^*LAB$  77.08 45.58 -26.83  
 $LAB^*LABa$  77.08 45.58 -26.83  
 $LAB^*TChA$  75.0 52.9 329.5

**relative CIELAB lab\***

$lab^*lab$  0.808 0.431 -0.253  
 $lab^*tch$  0.75 0.5 0.915  
 $lab^*nch$  0.0 0.5 0.915

**relative Natural Colour (NC)**

$lab^*lrij$  0.808 0.371 -0.334  
 $lab^*ice$  0.75 0.5 0.883  
 $lab^*ncE$  0.0 0.5 b53r

**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**  
 $LAB^*LAB$  29.39 45.58 -26.83  
 $LAB^*LABa$  29.39 45.58 -26.83  
 $LAB^*TChA$  25.01 52.9 329.5

**relative CIELAB lab\***

$lab^*lab$  0.308 0.431 -0.253  
 $lab^*tch$  0.25 0.5 0.915  
 $lab^*nch$  0.5 0.5 0.915

**relative Natural Colour (NC)**

$lab^*lrij$  0.308 0.371 -0.334  
 $lab^*ice$  0.25 0.5 0.883  
 $lab^*ncE$  1.0 0.0 -

$n^* = 1,0$

### TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	54.19	79.36	63.0	101.33	38
Y <sub>Ma</sub>	93.44	-14.18	82.59	83.8	100
L <sub>Ma</sub>	82.82	-83.73	70.41	109.41	140
M <sub>Ma</sub>	85.22	-55.9	-15.78	58.1	196
V <sub>Ma</sub>	25.61	67.05	-108.87	127.87	302
W <sub>Ma</sub>	58.76	91.18	-53.69	105.82	330
N <sub>Ma</sub>	0.01	0.0	0.0	0	0
R <sub>CIE</sub>	41.88	62.0	31.82	69.69	27
J <sub>CIE</sub>	81.97	1.81	71.59	71.61	89
G <sub>CIE</sub>	51.62	-41.11	11.52	42.7	164
B <sub>CIE</sub>	29.2	-5.27	-49.33	49.62	264

%Umfang

$u^*_{rel} = 156$

%Regularität

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

**relative Inform. Technology (IT)**

$olv^3*$  1.0 0.5 1.0 (1.0)  
 $cmy^3*$  0.0 0.5 0.0 (0.0)

$olv^4*$  1.0 0.5 1.0 1.0  
 $cmy^4*$  0.0 0.5 0.0 0.0

**standard and adapted CIELAB**  
 $LAB^*LAB$  77.08 45.58 -26.83  
 $LAB^*LABa$  77.08 45.58 -26.83  
 $LAB^*TChA$  75.0 52.9 329.5

**relative CIELAB lab\***

$lab^*lab$  0.808 0.431 -0.253  
 $lab^*tch$  0.75 0.5 0.915  
 $lab^*nch$  0.0 0.5 0.915

**relative Natural Colour (NC)**

$lab^*lrij$  0.808 0.371 -0.334  
 $lab^*ice$  0.75 0.5 0.883  
 $lab^*ncE$  0.0 0.5 b53r

**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**  
 $LAB^*LAB</math$



### Eingabe: Farbmétrisches Offset-Reflektiv-System ORS18

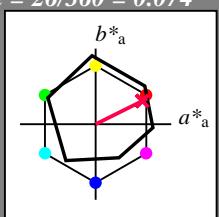
für Bunton  $h^* = lab^*h = 26/360 = 0.074$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton R

LCH\*Ma: 49 76 26

olv\*Ma: 1.0 0.0 0.3

Dreiecks-Helligkeit  $t^*$



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  
 $LAB^*LAB$  95.46 -0.39 4.69  
 $LAB^*LABa$  95.46 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  
 $LAB^*LAB$  56.78 0.13 2.11  
 $LAB^*LABa$  56.78 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  
 $LAB^*LAB$  18.1 0.67 -0.46  
 $LAB^*LABa$  18.1 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

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

O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

%Umfang

$u^*_{rel} = 94$

%Regularität

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

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)

$olv^3*$  1.0 0.5 0.65 (1.0)

$cmy^3*$  0.0 0.5 0.35 (0.0)

$olv^4*$  1.0 0.5 0.65 1.0

$cmy^4*$  0.0 0.5 0.35 0.0

standard and adapted CIELAB

$LAB^*LAB$  72.0 34.05 20.12

$LAB^*LABa$  72.0 34.13 16.99

$LAB^*TChA$  75.0 38.12 26.46

relative CIELAB lab\*

$lab^*lab$  0.697 0.448 0.223

$lab^*tch$  0.75 0.5 0.074

$lab^*nch$  0.0 0.5 0.074

relative Natural Colour (NC)

$lab^*lrij$  0.697 0.5 0.0

$lab^*ice$  0.75 0.5 1.0

$lab^*nCE$  0.0 0.5 b99r

relative Inform. Technology (IT)

$olv^3*$  0.0 1.0 0.3 (1.0)

$cmy^3*$  0.0 1.0 0.7 (0.0)

$olv^4*$  1.0 0.0 0.3 1.0

$cmy^4*$  0.0 1.0 0.7 0.0

standard and adapted CIELAB

$LAB^*LAB$  48.56 68.5 35.55

$LAB^*LABa$  48.56 68.25 33.98

$LAB^*TChA$  50.0 76.24 26.47

relative CIELAB lab\*

$lab^*lab$  0.394 0.895 0.446

$lab^*tch$  0.5 1.0 0.074

$lab^*nch$  0.0 1.0 0.074

relative Natural Colour (NC)

$lab^*lrij$  0.394 1.0 0.0

$lab^*ice$  0.5 1.0 0.0

$lab^*nCE$  0.0 1.0 r00j

relative Inform. Technology (IT)

$olv^3*$  0.5 0.0 0.15 (1.0)

$cmy^3*$  0.5 1.0 0.85 (0.0)

$olv^4*$  1.0 0.5 0.65 0.5

$cmy^4*$  0.0 0.5 0.35 0.5

standard and adapted CIELAB

$LAB^*LAB$  33.33 34.58 17.55

$LAB^*LABa$  33.33 34.13 16.99

$LAB^*TChA$  25.01 38.12 26.47

relative CIELAB lab\*

$lab^*lab$  0.197 0.447 0.223

$lab^*tch$  0.25 0.5 0.074

$lab^*nch$  0.5 0.5 0.074

relative Natural Colour (NC)

$lab^*lrij$  0.197 0.5 0.0

$lab^*ice$  0.25 0.5 0.0

$lab^*nCE$  0.5 0.5 r00j

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

$LAB^*LAB$  18.1 0.67 -0.46

$LAB^*LABa$  18.1 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 -

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,50$

$n^* = 1,00$

Schwarzheit  $n^*$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

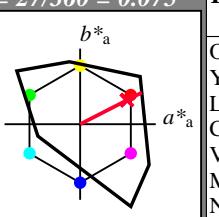
für Bunton  $h^* = lab^*h = 27/360 = 0.075$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton R

LCH\*Ma: 55 92 27

olv\*Ma: 1.0 0.0 0.18

Dreiecks-Helligkeit  $t^*$



%Umfang  
 $u^*_{rel} = 156$   
%Regularität  
 $g^*_{H,rel} = 26$   
 $g^*_{C,rel} = 45$

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 0.0 0.0

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TChA$  99.99 0.01 -

relative CIELAB lab\*

$lab^*lab$  1.0 0.0 0.0

$lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv^3*$  1.0 0.5 0.591 (1.0)  
 $cmy^3*$  0.0 0.5 0.409 (0.0)

$olv^4*$  1.0 0.5 0.591 1.0  
 $cmy^4*$  0.0 0.5 0.409 0.0

standard and adapted CIELAB

$LAB^*LAB$  75.21 40.74 20.91

$LAB^*LABa$  75.21 40.74 20.91

$LAB^*TChA$  75.0 45.8 27.17

relative CIELAB lab\*

$lab^*lab$  0.788 0.445 0.228

$lab^*tch$  0.75 0.5 0.075

$lab^*nch$  0.0 0.5 0.075

relative Natural Colour (NC)

$lab^*lrij$  0.788 0.5 0.0

$lab^*ice$  0.75 0.5 1.0

$lab^*nCE$  0.0 0.5 b99r

$n^* = 0,00$

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

$LAB^*LAB$  55.02 81.49 41.83

$LAB^*LABa$  55.02 81.49 41.83

$LAB^*TChA$  50.0 91.6 27.17

relative CIELAB lab\*

$lab^*lab$  0.577 0.889 0.457

$lab^*tch$  0.5 1.0 0.075

$lab^*nch$  0.0 1.0 0.075

relative Natural Colour (NC)

$lab^*lrij$  0.577 1.0 0.0

$lab^*ice$  0.5 1.0 0.0

$lab^*nCE$  0.0 1.0 r00j

$n^* = 0,00$

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

$LAB^*LAB$  27.52 40.74 20.92

$LAB^*LABa$  27.52 40.74 20.92

$LAB^*TChA$  25.01 45.8 27.18

relative CIELAB lab\*

$lab^*lab$  0.288 0.445 0.228

$lab$



-8 -6



6 -8



6 -8

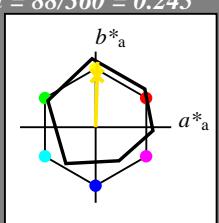
**Eingabe:** Farbmétrisches Offset-Reflektiv-System ORS18  
für Bunton  $h^* = lab^*h = 88/360 = 0.245$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton J

LCH\*Ma: 86 86 88

olv\*Ma: 1.0 0.9 0.0

Dreiecks-Helligkeit  $t^*$



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  
 $LAB^*LAB$  95.46 -0.39 4.69  
 $LAB^*LABa$  95.46 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  
 $LAB^*LAB$  56.78 0.13 2.11  
 $LAB^*LABa$  56.78 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  
 $LAB^*LAB$  18.1 0.67 -0.46  
 $LAB^*LABa$  18.1 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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
M <sub>Ma</sub>	49.99	75.76	-4.64	75.9	356
N <sub>Ma</sub>	18.09	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$M_{Ma}$

$V_{Ma}$

$M_{Ma}$

$N_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

für Bunton  $h^* = lab^*h = 89/360 = 0.246$

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

D50: Bunton J

LCH\*Ma: 87 79 89

olv\*Ma: 1.0 0.83 0.0

Dreiecks-Helligkeit  $t^*$

### TLS00; adaptierte CIELAB-Daten

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$M_{Ma}$

$V_{Ma}$

$M_{Ma}$

$N_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

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 0.0 0.0

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TChA$  99.99 0.01 -

relative CIELAB  $lab^*$

$lab^*lab$  1.0 0.0 0.0

$lab^*tch$  1.0 0.0 -

$lab^*nch$  0.0 0.0 -

relative Natural Colour (NC)

$lab^*lrij$  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

$LAB^*LAB$  91.02 0.99 39.59

$LAB^*LABa$  91.02 0.99 39.59

$LAB^*TChA$  75.0 39.61 88.56

relative CIELAB  $lab^*$

$lab^*lab$  0.954 0.013 0.5

$lab^*tch$  0.75 0.5 0.246

$lab^*nch$  0.0 0.5 0.246

relative Natural Colour (NC)

$lab^*lrij$  0.954 0.0 0.5

$lab^*ice$  0.75 0.5 0.25

$lab^*ncE$  0.0 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

$LAB^*LAB$  86.64 2.0 79.18

$LAB^*LABa$  86.64 2.0 79.18

$LAB^*TChA$  50.0 79.21 88.56

relative CIELAB  $lab^*$

$lab^*lab$  0.908 0.025 0.999

$lab^*tch$  0.5 1.0 0.246

$lab^*nch$  0.0 1.0 0.246

relative Natural Colour (NC)

$lab^*lrij$  0.908 0.0 1.0

$lab^*ice$  0.5 1.0 0.25

$lab^*ncE$  0.0 1.0 0.0

$n^* = 1,00$

$n^* = 0,50$

$n^* = 0,00$

PG100-7, 3 stufige Reihen für konstanten CIELAB Bunton 88/360 = 0.245 (links)

3 stufige Reihen für konstanten CIELAB Bunton 89/360 = 0.246 (rechts)

BAM-Prüfvorlage PG10; Farbmétrik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$   
D50: 2 Koordinatendaten; 3 stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend

C M Y O L V

C M Y O L V



### Eingabe: Farbmétrisches Offset-Reflektiv-System ORS18

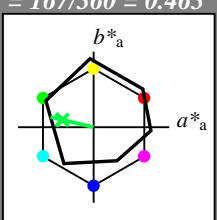
für Bunton  $h^* = lab^*h = 167/360 = 0.463$   
 $lab^*tch$  und  $lab^*nch$

D50: Bunton G

LCH\*Ma: 52 59 167

olv\*Ma: 0.0 1.0 0.26

Dreiecks-Helligkeit  $t^*$



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  
 $LAB^*LAB 95.46 -0.39 4.69$   
 $LAB^*LABa 95.46 0.0 0.0$   
 $LAB^*TChA 99.99 0.01 -$

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 CIELAB lab\*

$lab^*lab 0.5 0.5 0.5 (1.0)$

$cmy^3* 0.5 0.5 0.5 (0.0)$

$olv^4* 1.0 1.0 1.0 0.5$

cmy^4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB 56.78 0.13 2.11$

$LAB^*LABa 56.78 0.0 0.0$

$LAB^*TChA 50.0 0.01 -$

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 CIELAB lab\*

$olv^3* 0.0 0.0 0.0 (1.0)$

$cmy^3* 1.0 1.0 1.0 (0.0)$

$olv^4* 1.0 1.0 1.0 0.0$

cmy^4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB

$LAB^*LAB 18.1 0.67 -0.46$

$LAB^*LABa 18.1 0.0 0.0$

$LAB^*TChA 0.01 0.01 -$

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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	47.94	65.05	50.54	82.38	38
Y <sub>Ma</sub>	91.0	-4.72	90.58	90.7	93
L <sub>Ma</sub>	50.9	-63.18	34.98	72.22	151
M <sub>Ma</sub>	56.99	-39.34	-48.1	62.16	231
V <sub>Ma</sub>	25.72	30.89	-44.4	54.09	305
W <sub>Ma</sub>	95.46	0.0	0.0	0.0	0
R <sub>CIE</sub>	41.88	61.66	30.69	68.88	26
J <sub>CIE</sub>	81.97	2.02	67.79	67.82	88
G <sub>CIE</sub>	51.62	-41.32	9.74	42.46	167
B <sub>CIE</sub>	29.2	-5.79	-49.61	49.96	263

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$M_{Ma}$

$V_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

Schwarzheit  $n^*$

$n^* = 0,00$

### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS00

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

D50: Bunton G

LCH\*Ma: 84 70 164

olv\*Ma: 0.0 1.0 0.6

Dreiecks-Helligkeit  $t^*$

$b^*_a$

$a^*_a$

$L^*=L^*_a$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$M_{Ma}$

$V_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

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

$LAB^*LAB 95.41 0.0 0.0$

$LAB^*LABa 95.41 0.0 0.0$

$LAB^*TChA 99.99 0.01 -$

relative CIELAB lab\*

$lab^*lab 1.0 0.0 0.0$

$lab^*tch 1.0 0.0 -$

$lab^*nch 0.0 0.0 -$

relative Natural Colour (NC)

$lab^*lrij 1.0 0.0 0.0$

$lab^*ice 1.0 0.0 -$

$lab^*nCE 0.0 0.0 -$

relative CIELAB lab\*

$olv^3* 0.5 1.0 0.5 (1.0)$

$cmy^3* 0.5 0.5 0.5 (0.0)$

$olv^4* 0.0 1.0 1.0 0.5$

$cmy^4* 0.0 0.0 0.0 0.5$

standard and adapted CIELAB

$LAB^*LAB 54.51 0.0 0.0$

$LAB^*LABa 54.51 0.0 0.0$

$LAB^*TChA 99.99 0.01 -$

relative CIELAB lab\*

$lab^*lab 0.941 -0.972 0.229$

$lab^*tch 0.75 0.5 0.457$

$lab^*nch 0.0 0.5 0.457$

relative Natural Colour (NC)

$lab^*lrij 0.444 -0.999 0.0$

$lab^*ice 0.75 0.5 0.5$

$lab^*nCE 0.0 0.0 -$

relative CIELAB lab\*

$olv^3* 0.0 0.0 0.0 (1.0)$

$cmy^3* 1.0 1.0 1.0 (0.0)$

$olv^4* 1.0 1.0 1.0 0.0$

$cmy^4* 0.0 0.0 0.0 1.0$

standard and adapted CIELAB

$LAB^*LAB 47.72 0.0 0.0$

$LAB^*LABa 47.72 0.0 0.0$

$LAB^*TChA 50.0 0.01 -$

relative CIELAB lab\*

$lab^*lab 0.442 -0.499 0.0$

$lab^*tch 0.25 0.5 0.457$

$lab^*nch 0.5 0.5 0.457$

relative Natural Colour (NC)

$lab^*lrij 0.0 0.0 0.0$

$lab^*ice 0.0 0.0 -$

$lab^*nCE 1.0 0.0 -$

relative CIELAB lab\*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

$b^*_a$

$a^*_a$

$L^*=L^*_a$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$M_{Ma}$

$V_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

Schwarzheit  $n^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

$n$

