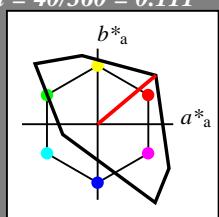


Eingabe: Farbmétrisches Fernseh-Licht-System TLS00  
für Bunton  $h^* = lab^*h = 40/360 = 0.111$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton O  
LCH\*Ma: 51 100 40  
olv\*Ma: 1.0 0.0 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  
 $LAB^*LAB$  95.41 0.0 0.0  
 $LAB^*LABa$  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  
 $LAB^*LAB$  47.72 0.0 0.0  
 $LAB^*LABa$  47.72 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  
 $LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 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 -

$n^* = 1,0$

TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

lab\*tch und lab\*nch

D65: Bunton O

LCH\*Ma: 51 100 40  
olv\*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit  $t^*$

%Umfang

$u^*_{rel} = 158$

%Regularität

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

Ausgabe: Farbmétrisches Fernseh-Licht-System TLS70

für Bunton  $h^* = lab^*h = 22/360 = 0.061$

lab\*tch und lab\*nch

D65: Bunton O

LCH\*Ma: 76 28 22

olv\*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit  $t^*$

%Umfang

$u^*_{rel} = 16$

%Regularität

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

TLS70; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	0.0	0.0	0.0	0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.26	13.13	5.28	25
Y <sub>Ma</sub>	85.92	13.13	5.28	25	21.92
L <sub>Ma</sub>	82.56	0.0	0.0	0.0	-
C <sub>Ma</sub>	82.56	0.0	0.0	0.0	-
V <sub>Ma</sub>	50.0	100.4	40.0	-	-
M <sub>Ma</sub>	63.1	0.499	-0.024	-	-
N <sub>Ma</sub>	0.0	0.5	0.992	b96r	-
W <sub>Ma</sub>	0.0	0.5	b96r	-	-
R <sub>CIE</sub>	73.07	13.13	5.28	25	21.92
J <sub>CIE</sub>	73.07	13.13	5.28	25	21.92
G <sub>CIE</sub>	25.01	14.16	21.92	-	-
B <sub>CIE</sub>	0.131	0.464	0.187	-	-
L <sub>TCh</sub>	0.25	0.5	0.061	-	-
C <sub>TCh</sub>	0.5	0.5	0.061	-	-
V <sub>TCh</sub>	0.5	0.5	0.061	-	-
M <sub>TCh</sub>	0.01	0.0	0.0	-	-
N <sub>TCh</sub>	0.0	0.0	0.0	-	-
W <sub>TCh</sub>	0.0	0.0	0.0	-	-
R <sub>TCh</sub>	0.0	0.0	0.0	-	-
J <sub>TCh</sub>	0.0	0.0	0.0	-	-
G <sub>TCh</sub>	0.0	0.0	0.0	-	-
B <sub>TCh</sub>	0.0	0.0	0.0	-	-

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.26	13.13	5.28	25
Y <sub>Ma</sub>	76.43	26.26	13.13	5.28	25
L <sub>Ma</sub>	28.31	21.92	-	-	-
C <sub>Ma</sub>	28.31	21.92	-	-	-
V <sub>Ma</sub>	25.01	14.16	21.92	-	-
M <sub>Ma</sub>	0.262	0.928	0.373	-	-
N <sub>Ma</sub>	0.5	1.0	0.061	-	-
W <sub>Ma</sub>	0.0	1.0	0.061	-	-
R <sub>CIE</sub>	0.262	0.999	-0.048	-	-
J <sub>CIE</sub>	0.5	1.0	0.992	-	-
G <sub>CIE</sub>	0.0	1.0	b96r	-	-
B <sub>CIE</sub>	1.0	0.0	-	-	-

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

$n^* = 1,0$

$n^* = 1,0$

3 stufige Reihen für konstanten CIELAB Bunnton 22/360 = 0.061 (rechts)

BAM-Prüfvorlage NG13; Farbmétrik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$   
D65: 2 Koordinatendaten; 3stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend

C

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Y

O

L

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N

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C

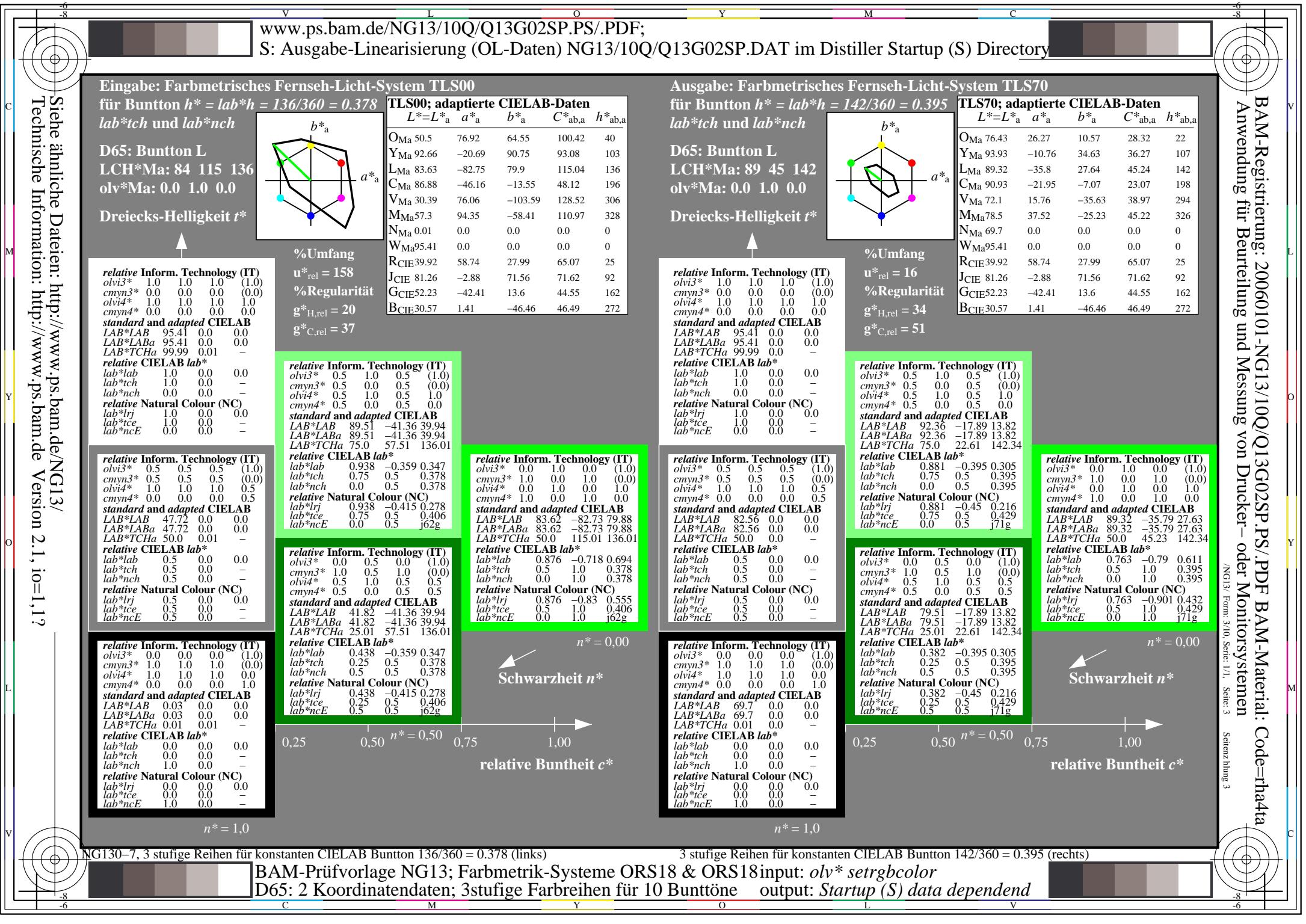
M

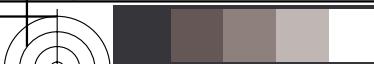
Y

O

C



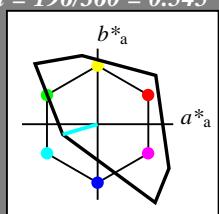




Eingabe: Farbmetrisches Fernseh-Licht-System TLS00  
für Bunton  $h^* = lab^*h = 196/360 = 0.545$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton C  
LCH\*Ma: 87 48 196  
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  
 $LAB^*LAB$  95.41 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)  
 $olv^4*$  0.5 1.0 1.0 1.0  
 $cmy^4*$  0.5 0.0 0.0 0.0

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  $lab^*$   
 $lab^*lab$  0.5 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  
 $LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 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 -

$n^* = 1,0$

### TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
$O_{Ma}$	50.5	76.92	64.55	100.42	40
$Y_{Ma}$	92.66	-20.69	90.75	93.08	103
$L_{Ma}$	83.63	-82.75	79.9	115.04	136
$C_{Ma}$	86.88	-46.16	-13.55	48.12	196
$V_{Ma}$	30.39	76.06	-103.59	128.52	306
$M_{Ma}$	57.3	94.35	-58.41	110.97	328
$N_{Ma}$	0.01	0.0	0.0	0	0
$W_{Ma}$	95.41	0.0	0.0	0	0
$R_{CIE}$	39.92	58.74	27.99	65.07	25
$J_{CIE}$	81.26	-2.88	71.56	71.62	92
$G_{CIE}$	52.23	-42.41	13.6	44.55	162
$B_{CIE}$	30.57	1.41	-46.46	46.49	272

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$C_{Ma}$

$V_{Ma}$

$M_{Ma}$

$N_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

Schwarzheit  $n^*$

$n^* = 0,00$

### Ausgabe: Farbmetrisches Fernseh-Licht-System TLS70

für Bunton  $h^* = lab^*h = 198/360 = 0.55$

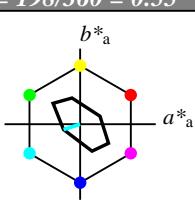
$lab^*tch$  und  $lab^*nch$

D65: Bunton C

LCH\*Ma: 91 23 198

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang  
 $u^*_{rel} = 158$   
%Regularität  
 $g^*_{H,rel} = 20$   
 $g^*_{C,rel} = 37$

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 0.0 -

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)  
 $cmy^3*$  0.5 0.0 0.0 (0.0)  
 $olv^4*$  0.5 1.0 1.0 1.0  
 $cmy^4*$  0.5 0.0 0.0 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  93.17 -23.07 -6.77  
 $LAB^*LABa$  93.17 -23.07 -6.77  
 $LAB^*TChA$  75.00 24.06 196.37

relative CIELAB  $lab^*$   
 $lab^*lab$  0.913 -0.479 -0.14  
 $lab^*tch$  0.75 0.5 0.545  
 $lab^*nch$  0.0 0.5 0.545

relative Natural Colour (NC)

$lab^*lrij$  0.911 -0.881 -0.469

$lab^*ice$  0.5 1.0 0.578

$lab^*nCE$  0.0 1.0 g31b

$n^* = 1,00$

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
$O_{Ma}$	76.43	26.27	10.57	28.32	22
$Y_{Ma}$	93.93	-10.76	34.63	36.27	107
$L_{Ma}$	89.32	-35.8	27.64	45.24	142
$C_{Ma}$	90.93	-21.95	-7.07	23.07	198
$V_{Ma}$	72.1	15.76	-35.63	38.97	294
$M_{Ma}$	78.5	37.52	-25.23	45.22	326
$N_{Ma}$	69.7	0.0	0.0	0.0	0
$W_{Ma}$	95.41	0.0	0.0	0.0	0
$R_{CIE}$	39.92	58.74	27.99	65.07	25
$J_{CIE}$	81.26	-2.88	71.56	71.62	92
$G_{CIE}$	52.23	-42.41	13.6	44.55	162
$B_{CIE}$	30.57	1.41	-46.46	46.49	272

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$O_{Ma}$

$Y_{Ma}$

$L_{Ma}$

$C_{Ma}$

$V_{Ma}$

$M_{Ma}$

$N_{Ma}$

$W_{Ma}$

$R_{CIE}$

$J_{CIE}$

$G_{CIE}$

$B_{CIE}$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

relative Buntheit  $c^*$

Schwarzheit  $n^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

Siehe ähnliche Dateien: http://www.ps.bam.de/NG13/

C

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Y

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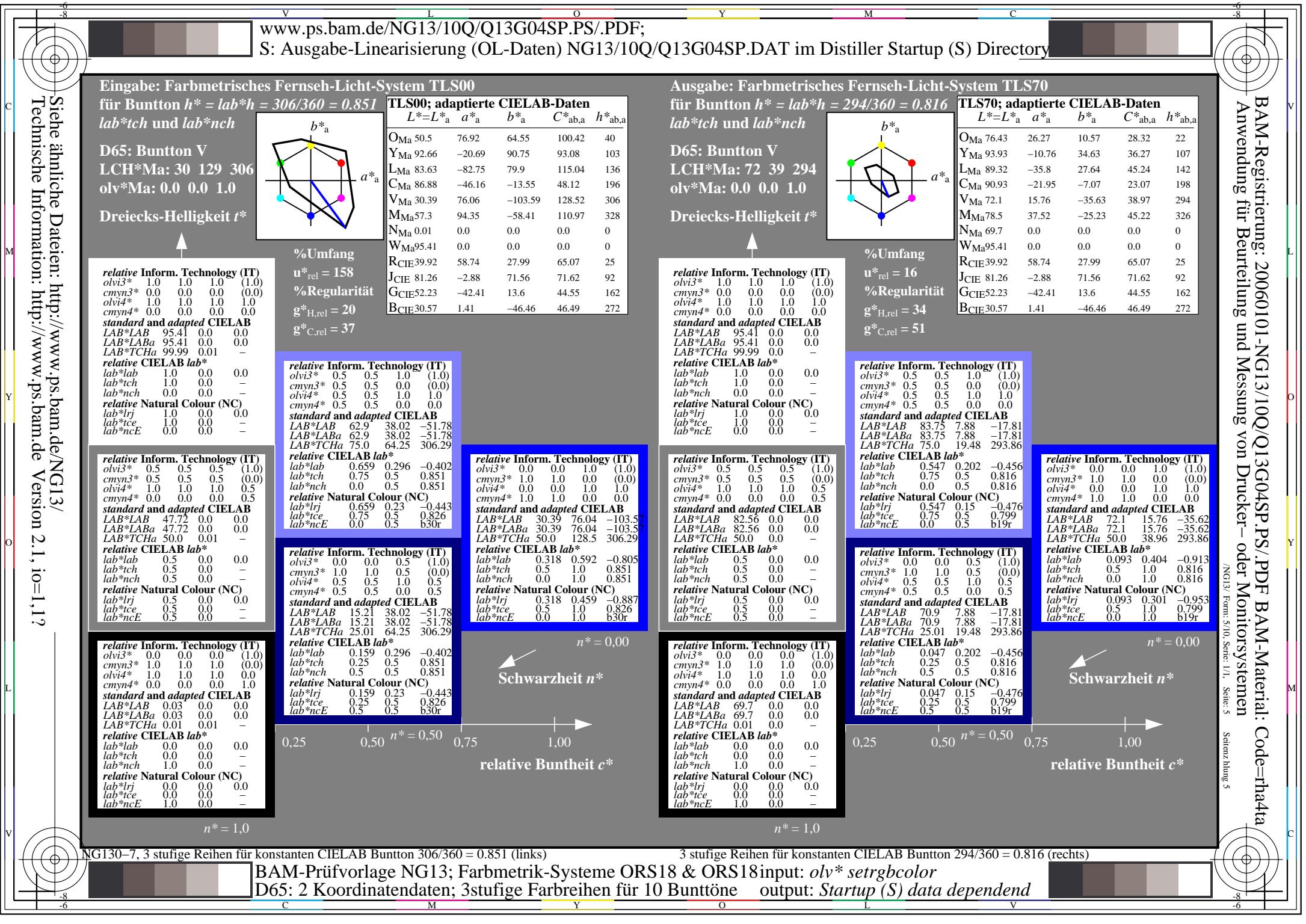
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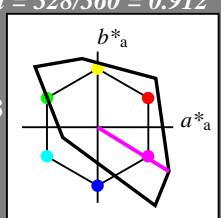
Eingabe: Farbmétrisches Fernseh-Licht-System TLS00  
für Bunton  $h^* = lab^*h = 328/360 = 0.912$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton M

LCH\*Ma: 57 111 328

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  
 $LAB^*TCh$  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

$LAB^*LAB$  47.72 0.0 0.0  
 $LAB^*LABa$  47.72 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

$LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 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 -

$n^* = 1.0$

#### TLS00; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Umfang

$u^*_{rel} = 158$

%Regularität

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

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

$LAB^*LAB$  76.35 47.17 -29.19

$LAB^*LABa$  76.35 47.17 -29.19

$LAB^*TCh$  75.0 55.47 328.23

relative CIELAB lab\*

$lab^*lab$  0.8 0.425 -0.262

$lab^*tch$  0.75 0.5 0.912

$lab^*nch$  0.0 0.5 0.912

relative Natural Colour (NC)

$lab^*lrij$  0.8 0.352 -0.354

$lab^*ice$  0.75 0.5 0.874

$lab^*ncE$  0.0 0.5 b49r

relative Inform. Technology (IT)

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

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

$olv^4* 1.0 0.0 1.0 1.0$

$cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB

$LAB^*LAB$  57.3 94.33 -58.4

$LAB^*LABa$  57.3 94.33 -58.4

$LAB^*TCh$  50.0 110.95 328.23

relative CIELAB lab\*

$lab^*lab$  0.601 0.85 -0.525

$lab^*tch$  0.5 1.0 0.912

$lab^*nch$  0.0 1.0 0.912

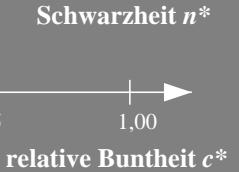
relative Natural Colour (NC)

$lab^*lrij$  0.601 0.703 -0.71

$lab^*ice$  0.5 1.0 0.874

$lab^*ncE$  0.0 1.0 b49r

$n^* = 0,00$



#### Ausgabe: Farbmétrisches Fernseh-Licht-System TLS70

für Bunton  $h^* = lab^*h = 326/360 = 0.906$

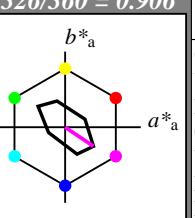
lab\*tch und lab\*nch

D65: Bunton M

LCH\*Ma: 79 45 326

olv\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 16$

%Regularität

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)

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

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

$olv^4* 1.0 0.5 1.0 1.0$

$cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB

$LAB^*LAB$  86.95 18.76 -12.61

$LAB^*LABa$  86.95 18.76 -12.61

$LAB^*TCh$  75.0 22.61 326.07

relative CIELAB lab\*

$lab^*lab$  0.671 0.415 -0.278

$lab^*tch$  0.75 0.5 0.906

$lab^*nch$  0.0 0.5 0.906

relative Natural Colour (NC)

$lab^*lrij$  0.671 0.341 -0.365

$lab^*ice$  0.75 0.5 0.869

$lab^*ncE$  0.0 0.5 b47r

relative Inform. Technology (IT)

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

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

$olv^4* 1.0 1.0 1.0 0.5$

$cmy^4* 0.0 0.5 0.0 0.5$

standard and adapted CIELAB

$LAB^*LAB$  74.1 18.76 -12.61

$LAB^*LABa$  74.1 18.76 -12.61

$LAB^*TCh$  25.01 22.61 326.07

relative CIELAB lab\*

$lab^*lab$  0.171 0.415 -0.278

$lab^*tch$  0.25 0.5 0.906

$lab^*nch$  0.5 0.5 0.906

relative Natural Colour (NC)

$lab^*lrij$  0.171 0.341 -0.365

$lab^*ice$  0.25 0.5 0.869

$lab^*ncE$  0.5 0.5 b47r

$n^* = 1,00$

#### TLS70; adaptierte CIELAB-Daten

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

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

%Umfang

$u^*_{rel} = 16$

%Regularität

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)

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

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

$olv^4* 1.0 0.5 1.0 1.0$

$cmy^4* 0.0 0.0 0.0 0.0$

standard and adapted CIELAB

$LAB^*LAB$  86.95 18.76 -12.61

$LAB^*LABa$  86.95 18.76 -12.61

$LAB^*TCh$  75.0 22.61 326.07

relative CIELAB lab\*

$lab^*lab$  0.671 0.415 -0.278

$lab^*tch$  0.75 0.5 0.906

$lab^*nch$  0.0 0.5 0.906

relative Natural Colour (NC)

$lab^*lrij$  0.671 0.341 -0.365

$lab^*ice$  0.75 0.5 0.869

$lab^*ncE$  0.0 0.5 b47r

$n^* = 1,00$

3 stufige Reihen für konstanten CIELAB Bunnton 328/360 = 0.912 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 326/360 = 0.906 (rechts)

C

O

V

L

M

Y

W

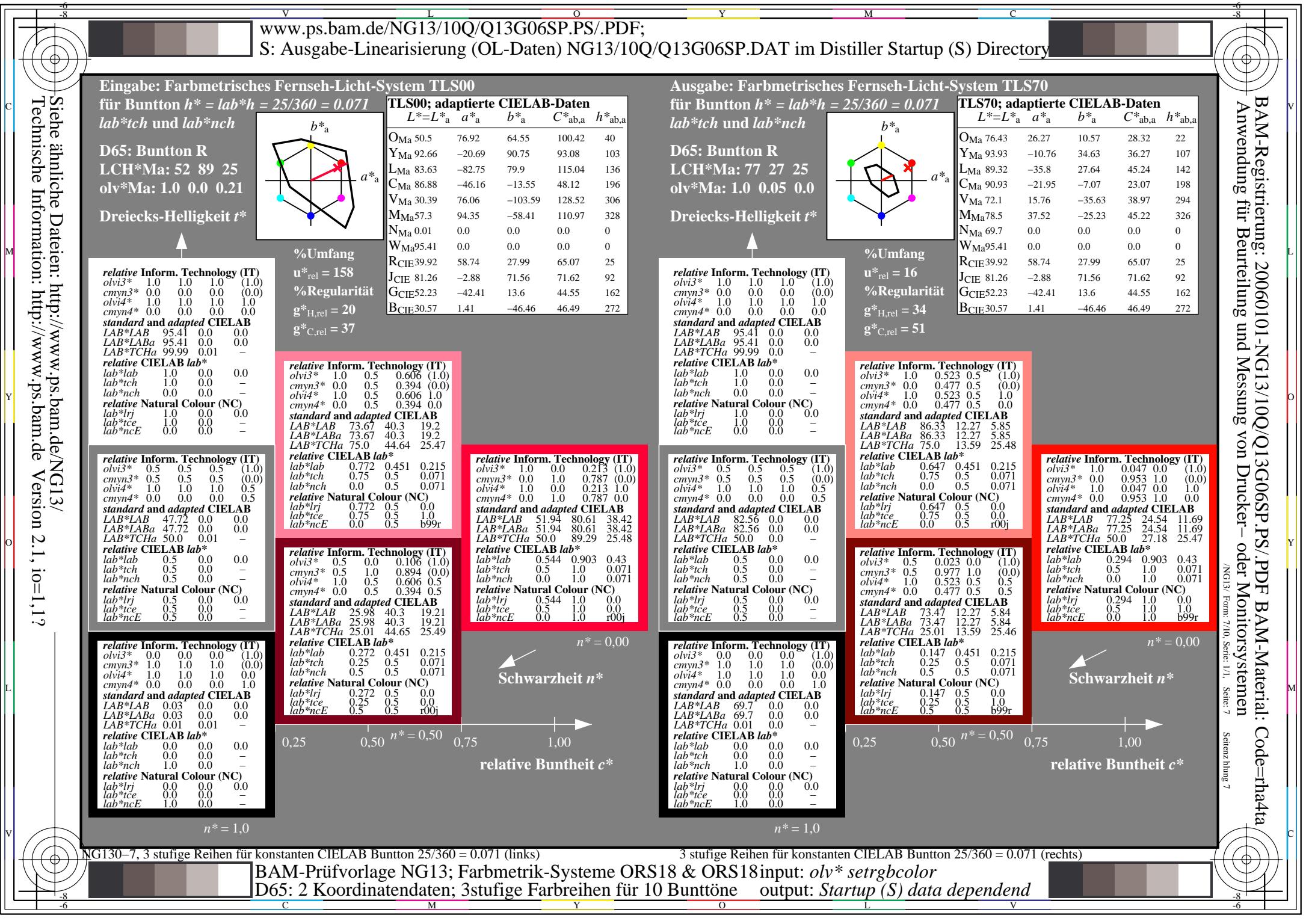
C

C

O

V

L



C

M

M

Y

O

L

V

**Eingabe: Farbmétisches Fernseh-Licht-System TLS00**

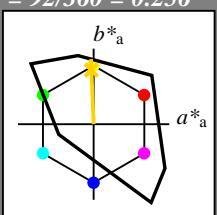
für Bunton  $h^* = lab^*h = 92/360 = 0.256$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton J

LCH\*Ma: 85 86 92

olv\*Ma: 1.0 0.82 0.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
 $olv3^*$  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 0.0  
 $LAB^*LABa$  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)  
 $olv3^*$  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  
 $LAB^*LAB$  47.72 0.0 0.0  
 $LAB^*LABa$  47.72 0.0 0.0  
 $LAB^*TChA$  50.0 0.01 -

relative CIELAB lab\*  
 $lab^*lab$  0.5 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)  
 $olv3^*$  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  
 $LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 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 -

$n^* = 1,0$

**TLS00; adaptierte CIELAB-Daten**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	50.5	76.92	64.55	100.42	40
Y <sub>Ma</sub>	92.66	-20.69	90.75	93.08	103
L <sub>Ma</sub>	83.63	-82.75	79.9	115.04	136
C <sub>Ma</sub>	86.88	-46.16	-13.55	48.12	196
V <sub>Ma</sub>	30.39	76.06	-103.59	128.52	306
M <sub>Ma</sub>	57.3	94.35	-58.41	110.97	328
N <sub>Ma</sub>	0.01	0.0	0.0	0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

$L^*=L^*_a$

$a^*_a$

$b^*_a$

$C^*_{ab,a}$

$h^*_{ab,a}$

$\%Umfang$

$u^*_{rel} = 158$

$\%Regularität$

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

**Ausgabe: Farbmétisches Fernseh-Licht-System TLS70**

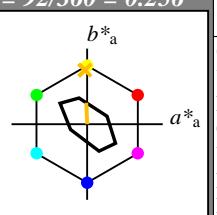
für Bunton  $h^* = lab^*h = 92/360 = 0.256$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton J

LCH\*Ma: 89 28 92

olv\*Ma: 1.0 0.74 0.0

Dreiecks-Helligkeit  $t^*$



$\%Umfang$

$u^*_{rel} = 16$

$\%Regularität$

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

**TLS70; adaptierte CIELAB-Daten**

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

$\%Umfang$

$u^*_{rel} = 16$

$\%Regularität$

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

$n^* = 0,00$

Schwarzheit  $n^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

Schwarzheit  $n^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

Eingabe: Farbmétisches Fernseh-Licht-System TLS00  
 für Bunton  $h^* = lab^*h = 92/360 = 0.256$   
 $lab^*tch$  und  $lab^*nch$

D65: Bunton J

LCH\*Ma: 85 86 92

olv\*Ma: 1.0 0.82 0.0

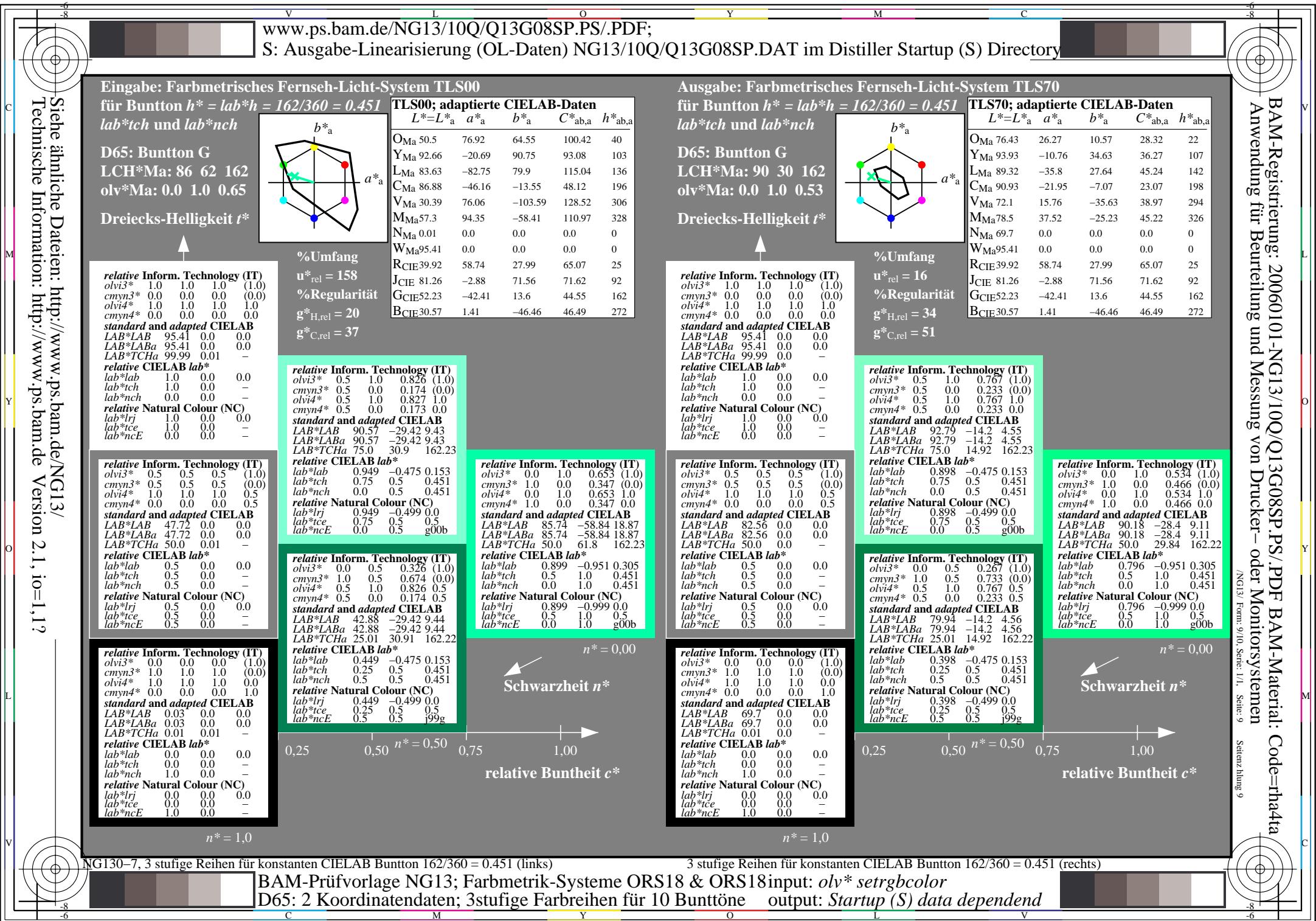
Dreiecks-Helligkeit  $t^*$

$n^* = 1,0$

NG130-7, 3 stufige Reihen für konstanten CIELAB Bunnton 92/360 = 0.256 (links)

3 stufige Reihen für konstanten CIELAB Bunnton 92/360 = 0.256 (rechts)

BAM-Prüfvorlage NG13; Farbmétik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$   
 D65: 2 Koordinatendaten; 3stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend





**Eingabe:** Farbmétrisches Fernseh-Licht-System TLS00  
für Bunton  $h^* = lab^*h = 272/360 = 0.755$

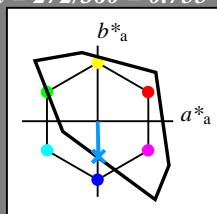
$lab^*tch$  und  $lab^*nch$

**D65:** Bunton B

LCH\*Ma: 65 49 272

olv\*Ma: 0.0 0.61 1.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmyn3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  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 0.0  
 $LAB^*LABa$  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)

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmyn3^*$  0.5 0.5 0.5 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmyn4^*$  0.0 0.0 0.0 0.5

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\*

$lab^*lab$  0.5 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)  
 $cmyn3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmyn4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB

$LAB^*LAB$  0.03 0.0 0.0  
 $LAB^*LABa$  0.03 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 -

$n^* = 1,0$

NG130-7, 3 stufige Reihen für konstanten CIELAB Bunton 272/360 = 0.755 (links)

BAM-Prüfvorlage NG13; Farbmétrik-Systeme ORS18 & ORS18 input:  $olv^* setrgbcolor$   
D65: 2 Koordinatendaten; 3stufige Farbreihen für 10 Bunttöne output: Startup (S) data dependend

C

M

Y

**Ausgabe:** Farbmétrisches Fernseh-Licht-System TLS70

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

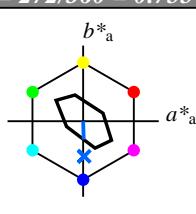
$lab^*tch$  und  $lab^*nch$

**D65:** Bunton B

LCH\*Ma: 80 24 272

olv\*Ma: 0.0 0.4 1.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmyn3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  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 0.0  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TChA$  99.99 0.0 -

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)  
 $cmyn3^*$  0.5 0.5 0.5 (0.0)  
 $olv_i4^*$  0.0 0.61 1.0 1.0  
 $cmyn4^*$  0.5 0.301 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  87.5 0.37 -12.12  
 $LAB^*LABa$  87.5 0.37 -12.12  
 $LAB^*TChA$  75.0 12.13 271.73

relative CIELAB lab\*

$lab^*lab$  0.693 0.015 -0.499  
 $lab^*tch$  0.75 0.5 0.755  
 $lab^*nch$  0.0 0.5 0.755

relative Natural Colour (NC)

$lab^*lrij$  0.693 0.0 -0.499  
 $lab^*tce$  0.75 0.5 0.75  
 $lab^*ncE$  0.0 0.5  $g^{99b}$

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmyn3^*$  0.5 0.5 0.5 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmyn4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  82.56 0.0 0.0  
 $LAB^*LABa$  82.56 0.0 0.0  
 $LAB^*TChA$  50.0 0.0 -

relative CIELAB lab\*

$lab^*lab$  0.68 0.03 -0.998  
 $lab^*tch$  0.5 1.0 0.755  
 $lab^*nch$  0.0 1.0 0.755

relative Natural Colour (NC)

$lab^*lrij$  0.68 0.0 -0.999  
 $lab^*tce$  0.5 1.0 0.75  
 $lab^*ncE$  0.0 1.0  $g^{99b}$

$n^* = 0,00$

C

M

TLS70; adaptierte CIELAB-Daten

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

O<sub>Ma</sub> 50.5 76.92 64.55 100.42 40  
Y<sub>Ma</sub> 92.66 -20.69 90.75 93.08 103  
L<sub>Ma</sub> 83.63 -82.75 79.9 115.04 136  
C<sub>Ma</sub> 86.88 -46.16 -13.55 48.12 196  
V<sub>Ma</sub> 30.39 76.06 -103.59 128.52 306  
M<sub>Ma</sub> 57.3 94.35 -58.41 110.97 328  
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> 39.92 58.74 27.99 65.07 25  
J<sub>CIE</sub> 81.26 -2.88 71.56 71.62 92  
G<sub>CIE</sub> 52.23 -42.41 13.6 44.55 162  
B<sub>CIE</sub> 30.57 1.41 -46.46 46.49 272

N<sub>Ma</sub> 69.7 0.0 0.0 0.0 0  
W<sub>Ma</sub> 95.41 0.0 0.0 0.0 0  
R<sub>CIE</sub> 39.92 58.74 27.99 65.07 25  
J<sub>CIE</sub> 81.26 -2.88 71.56 71.62 92  
G<sub>CIE</sub> 52.23 -42.41 13.6 44.55 162  
B<sub>CIE</sub> 30.57 1.41 -46.46 46.49 272

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

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**relative Inform. Technology (IT)**

$olv_i3^*$  0.0 0.398 1.0 (1.0)  
 $cmyn3^*$  1.0 0.602 0.0 (0.0)  
 $olv_i4^*$  0.0 0.398 1.0 1.0  
 $cmyn4^*$  1.0 0.602 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  79.6 0.74 -24.25  
 $LAB^*LABa$  79.6 0.74 -24.25  
 $LAB^*TChA$  50.0 24.27 271.74

relative CIELAB lab\*

$lab^*lab$  0.385 0.03 -0.998  
 $lab^*tch$  0.5 1.0 0.755  
 $lab^*nch$  0.0 1.0 0.755

relative Natural Colour (NC)

$lab^*lrij$  0.385 0.0 -0.999  
 $lab^*tce$  0.5 1.0 0.75  
 $lab^*ncE$  0.0 1.0 0.750r

**relative Inform. Technology (IT)**

$olv_i3^*$  0.0 0.199 0.5 (1.0)  
 $cmyn3^*$  1.0 0.801 0.5 (0.0)  
 $olv_i4^*$  0.5 0.699 1.0 0.5  
 $cmyn4^*$  0.5 0.301 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  74.65 0.37 -12.12  
 $LAB^*LABa$  74.65 0.37 -12.12  
 $LAB^*TChA$  25.01 12.14 271.75

relative CIELAB lab\*

$lab^*lab$  0.193 0.015 -0.499  
 $lab^*tch$  0.25 0.5 0.755  
 $lab^*nch$  0.5 0.5 0.755

relative Natural Colour (NC)

$lab^*lrij$  0.193 0.0 -0.499  
 $lab^*tce$  0.25 0.5 0.75  
 $lab^*ncE$  0.5 0.5 0.750r

$n^* = 0,00$

**Schwarzheit  $n^*$**

**Schwarzheit  $n^*$**

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