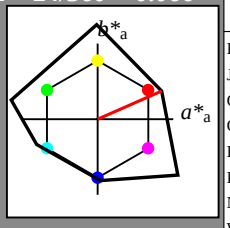
Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 24/360 = 0.066***
lab*tch* und *lab*nch

D65: Buntton R
LCH*Ma: 47 92 24
olv*Ma: 1.0 0.0 0.0

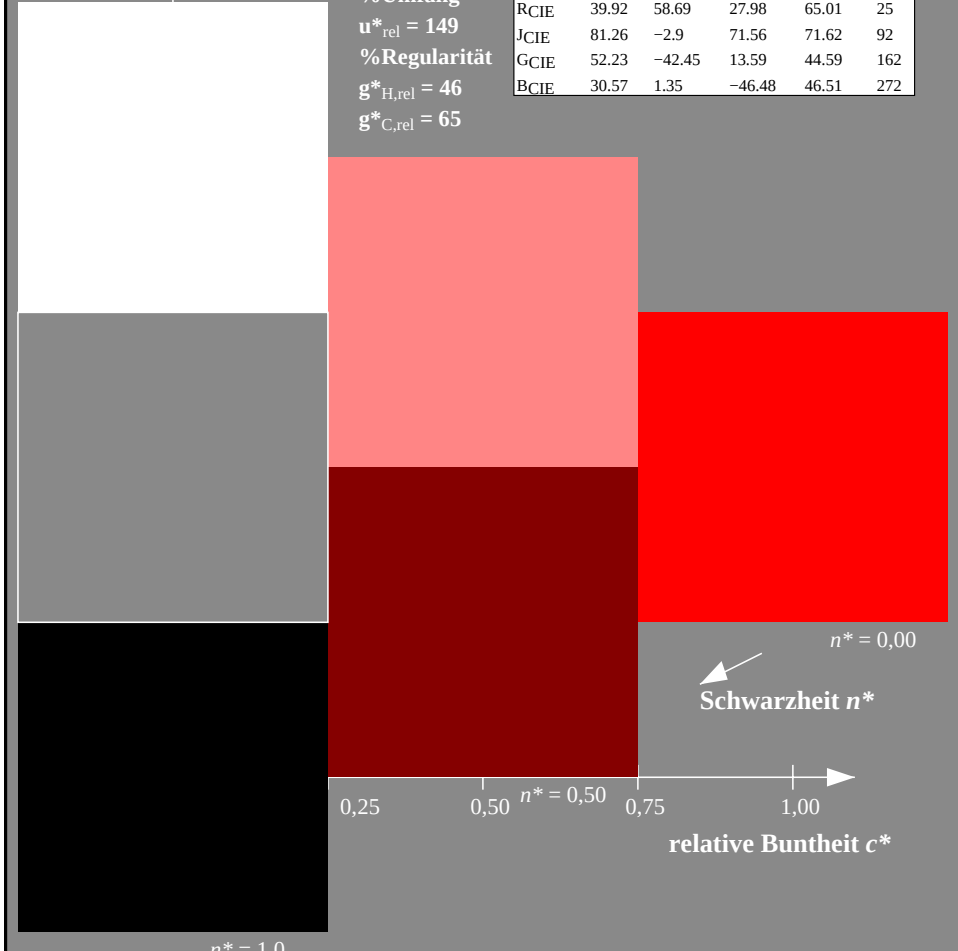
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

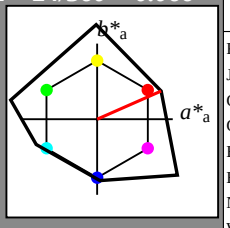
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 24/360 = 0.066***
lab*tch* und *lab*nch

D65: Buntton R
LCH*Ma: 47 92 24
olv*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	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	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	0.5	(1.0)
*cmyn3**	0.0	0.5	0.5	(0.0)
*olvi4**	1.0	0.5	0.5	1.0
*cmyn4**	0.0	0.5	0.5	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	71.27	42.34	18.63
*LAB*LABa*	71.27	42.31	18.62
*LAB*TCHa*	75.0	46.23	23.75

relative* CIELAB *lab*

*lab*lab*	0.714	0.458	0.201
*lab*tch*	0.75	0.5	0.066
*lab*nch*	0.0	0.5	0.066

***relative* Natural Colour (NC)**

*lab*lrj*	0.714	0.5	−0.011
*lab*tce*	0.75	0.5	0.996
*lab*ncE*	0.0	0.5	b98r

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.0	0.0	(1.0)
*cmyn3**	0.5	1.0	1.0	(0.0)
*olvi4**	1.0	0.5	0.5	0.5
*cmyn4**	0.0	0.5	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	29.07	42.38	18.64
*LAB*LABa*	29.07	42.31	18.62
*LAB*TCHa*	25.01	46.23	23.75

relative* CIELAB *lab*

*lab*lab*	0.214	0.458	0.201
*lab*tch*	0.25	0.5	0.066
*lab*nch*	0.5	0.5	0.066

***relative* Natural Colour (NC)**

*lab*lrj*	0.214	0.5	−0.011
*lab*tce*	0.25	0.5	0.996
*lab*ncE*	0.5	0.5	b98r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

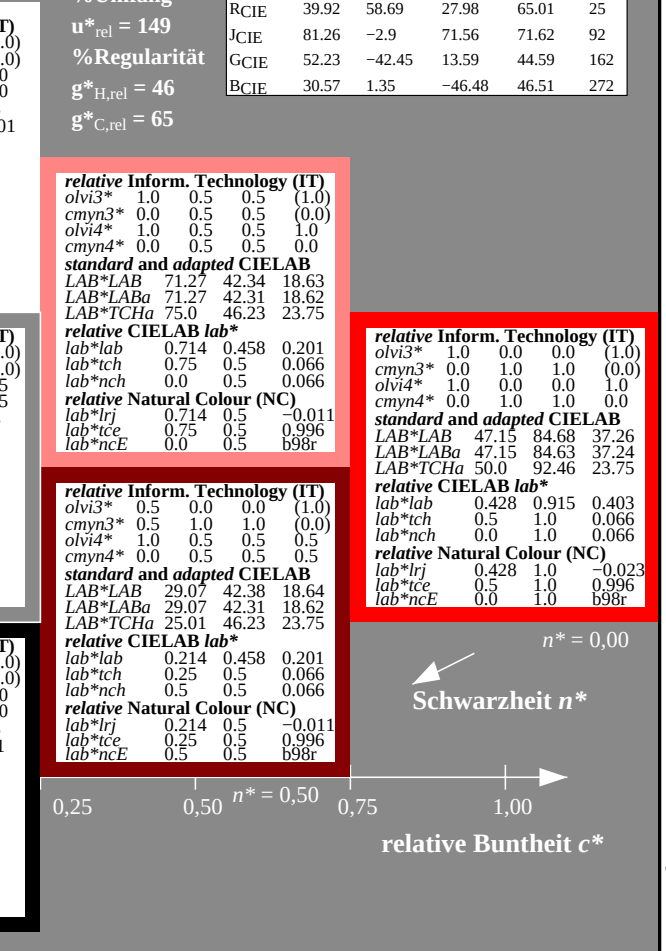
*LAB*LAB*	47.15	84.68	37.26
*LAB*LABa*	47.15	84.63	37.24
*LAB*TCHa*	50.0	92.46	23.75

relative* CIELAB *lab*

*lab*lab*	0.428	0.915	0.403
*lab*tch*	0.5	1.0	0.066
*lab*nch*	0.0	1.0	0.066

***relative* Natural Colour (NC)**

*lab*lrj*	0.428	1.0	−0.023
*lab*tce*	0.5	1.0	0.996
*lab*ncE*	0.0	1.0	b98r



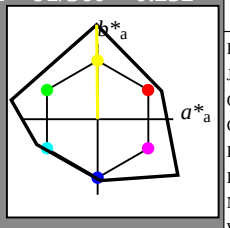
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.066 (links)

3 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.066 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 91/360 = 0.252***
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 91 125 91
olv*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

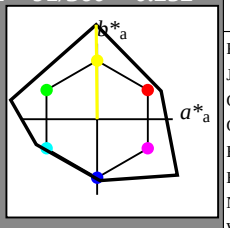
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 91/360 = 0.252***
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 91 125 91
olv*Ma: 1.0 1.0 0.0

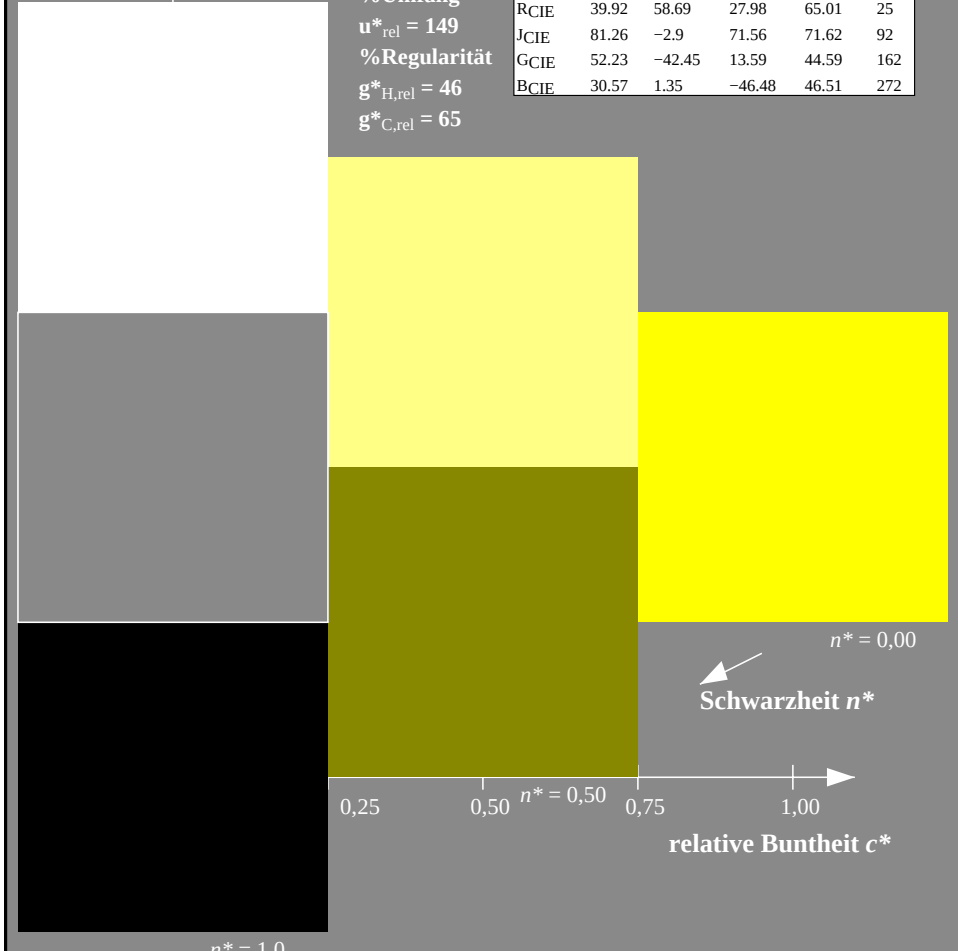
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0	1.0
*cmyn4**	0.0	0.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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)**

*olvi3**	0.0	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0	0.0
*cmyn4**	0.0	0.0	0.0	1.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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	–	

***relative* Inform. Technology (IT)**

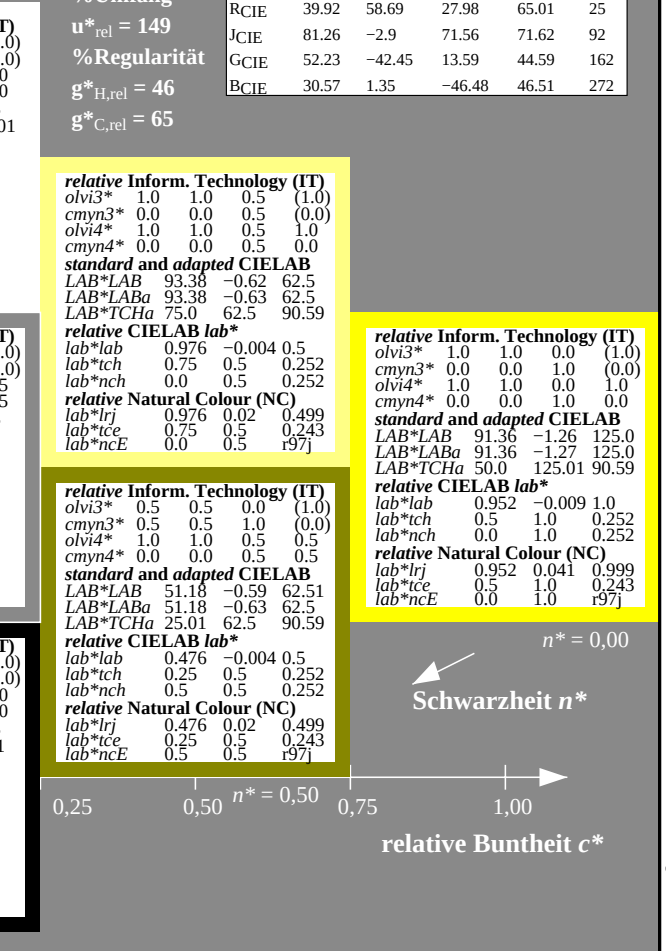
*olvi3**	1.0	1.0	0.5	(1.0)
*cmyn3**	0.0	0.0	0.5	(0.0)
*olvi4**	1.0	1.0	0.5	1.0
*cmyn4**	0.0	0.0	0.5	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	93.38	−0.62	62.5	
*LAB*LABa*	93.38	−0.63	62.5	
*LAB*TCHa*	75.0	62.5	90.59	
relative* CIELAB *lab*				
*lab*lab*	0.976	−0.004	0.5	
*lab*tch*	0.75	0.5	0.252	
*lab*nch*	0.0	0.5	0.252	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.976	0.02	0.499	
*lab*tce*	0.75	0.5	0.243	
*lab*ncE*	0.0	0.5	r97j	

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.0	(1.0)
*cmyn3**	0.5	0.5	1.0	(0.0)
*olvi4**	1.0	1.0	0.5	0.5
*cmyn4**	0.0	0.0	0.5	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	51.18	−0.59	62.51	
*LAB*LABa*	51.18	−0.63	62.5	
*LAB*TCHa*	25.01	62.5	90.59	
relative* CIELAB *lab*				
*lab*lab*	0.476	−0.004	0.5	
*lab*tch*	0.25	0.5	0.252	
*lab*nch*	0.5	0.5	0.252	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.476	0.02	0.499	
*lab*tce*	0.25	0.5	0.243	
*lab*ncE*	0.5	0.5	r97j	

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.0	(1.0)
*cmyn3**	0.0	0.0	1.0	(0.0)
*olvi4**	1.0	1.0	0.0	1.0
*cmyn4**	0.0	0.0	1.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	91.36	−1.26	125.0	
*LAB*LABa*	91.36	−1.27	125.0	
*LAB*TCHa*	50.0	125.01	90.59	
relative* CIELAB *lab*				
*lab*lab*	0.952	−0.009	1.0	
*lab*tch*	0.5	1.0	0.252	
*lab*nch*	0.0	1.0	0.252	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.952	0.041	0.999	
*lab*tce*	0.5	1.0	0.243	
*lab*ncE*	0.0	1.0	r97j	



TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.252 (links)

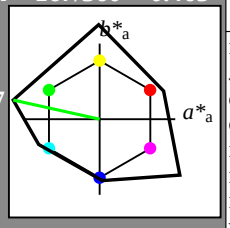
3 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.252 (rechts)

BAM-Registrierung: 20060101-TG09/10L/L09G01FP.PS/.PDF BAM-Material: Code=rha4ta
Anwendung für Beurteilung und Messung von Drucker− oder Monitorsystemen, Yr=2.5, XYZ
/TG09/ Form: 2/10, Serie: 1/1, Seite: 2 Seitenz hlung 2

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 167/360 = 0.465***
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 63 117 167
olv*Ma: 0.0 1.0 0.0

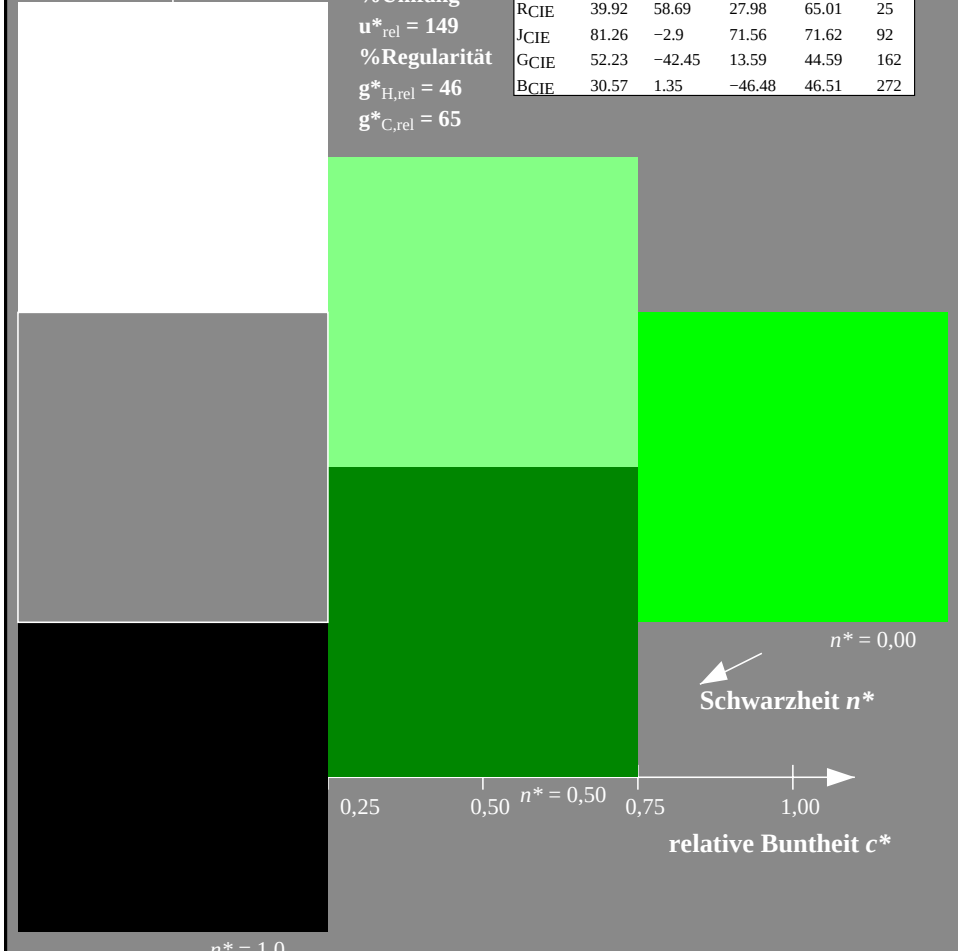
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

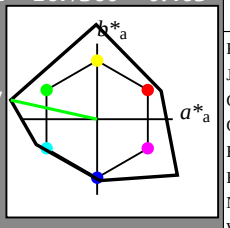
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 167/360 = 0.465***
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 63 117 167
olv*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	1.0	0.5	(1.0)
*cmyn3**	0.5	0.0	0.5	(0.0)
*olvi4**	0.5	1.0	0.5	1.0
*cmyn4**	0.5	0.0	0.5	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	79.24	−57.1	12.67
*LAB*LABa*	79.24	−57.12	12.67
*LAB*TCHa*	75.0	58.52	167.5

relative* CIELAB *lab*

*lab*lab*	0.808	−0.487	0.108
*lab*tch*	0.75	0.5	0.465
*lab*nch*	0.0	0.5	0.465

***relative* Natural Colour (NC)**

*lab*lrj*	0.808	−0.497	−0.037
*lab*tce*	0.75	0.5	0.512
*lab*ncE*	0.0	0.5	g04b

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.5	0.0	(1.0)
*cmyn3**	1.0	0.5	1.0	(0.0)
*olvi4**	0.5	1.0	0.5	0.5
*cmyn4**	0.5	0.0	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	37.04	−57.07	12.69
*LAB*LABa*	37.04	−57.12	12.67
*LAB*TCHa*	25.01	58.52	167.5

relative* CIELAB *lab*

*lab*lab*	0.309	−0.487	0.108
*lab*tch*	0.25	0.5	0.465
*lab*nch*	0.5	0.5	0.465

***relative* Natural Colour (NC)**

*lab*lrj*	0.309	−0.497	−0.037
*lab*tce*	0.25	0.5	0.512
*lab*ncE*	0.5	0.5	g04b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

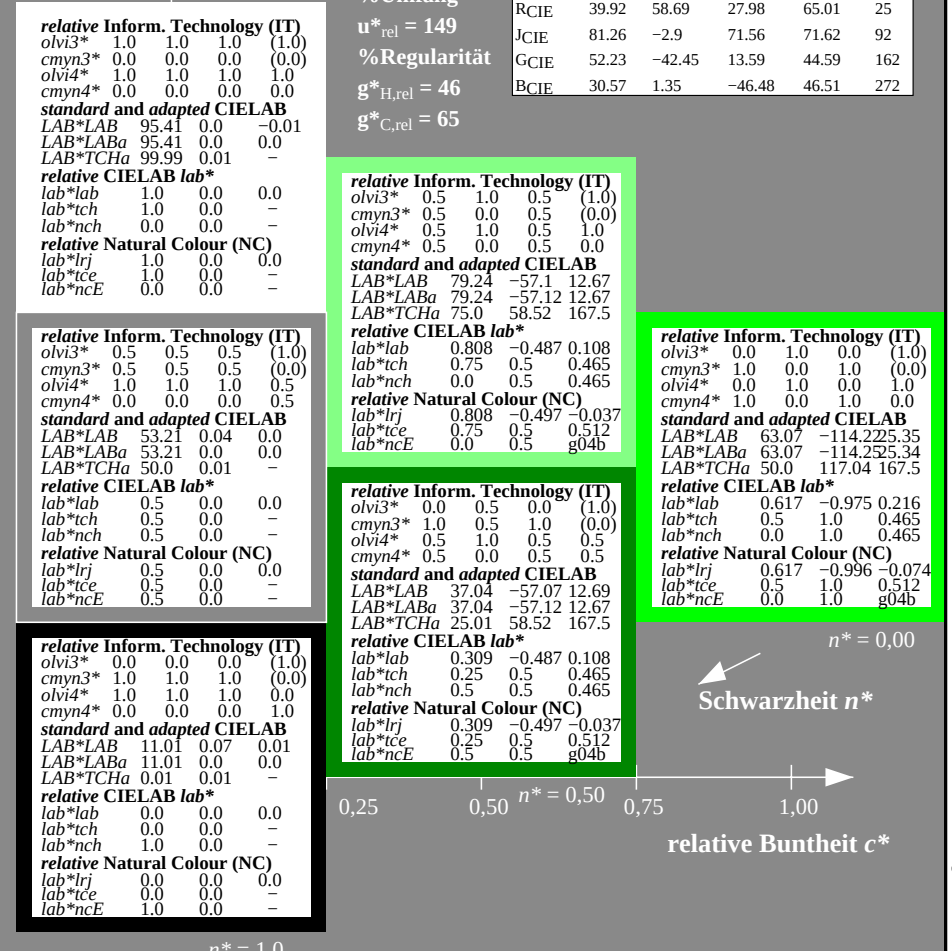
*LAB*LAB*	63.07	−114.22	25.35
*LAB*LABa*	63.07	−114.25	25.34
*LAB*TCHa*	50.0	117.04	167.5

relative* CIELAB *lab*

*lab*lab*	0.617	−0.975	0.216
*lab*tch*	0.5	1.0	0.465
*lab*nch*	0.0	1.0	0.465

***relative* Natural Colour (NC)**

*lab*lrj*	0.617	−0.996	−0.074
*lab*tce*	0.5	1.0	0.512
*lab*ncE*	0.0	1.0	g04b



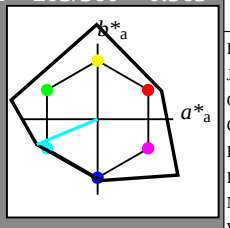
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.465 (links)

3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.465 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 203/360 = 0.563***
lab*tch* und *lab*nch

D65: Buntton G50B
LCH*Ma: 59 87 203
olv*Ma: 0.0 1.0 1.0

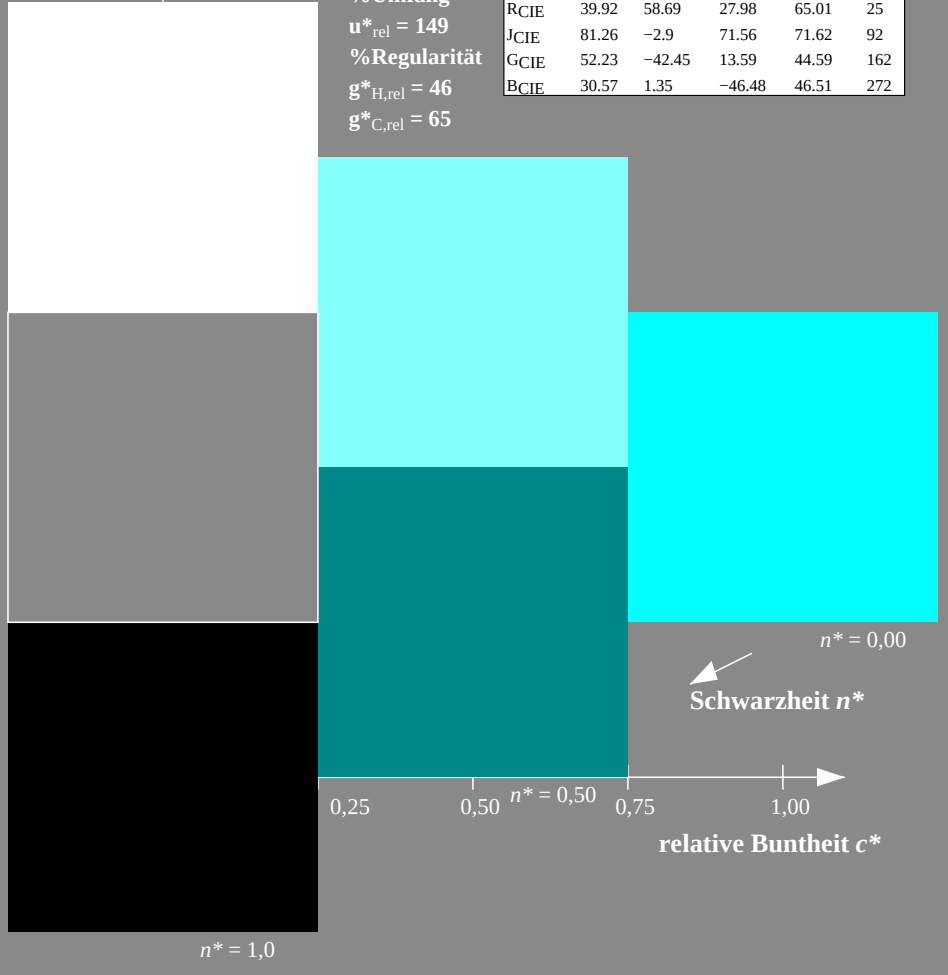
Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

NCS11; adaptierte CIELAB-Daten

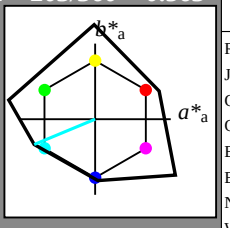
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 203/360 = 0.563***
lab*tch* und *lab*nch

D65: Buntton G50B
LCH*Ma: 59 87 203
olv*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 −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 −

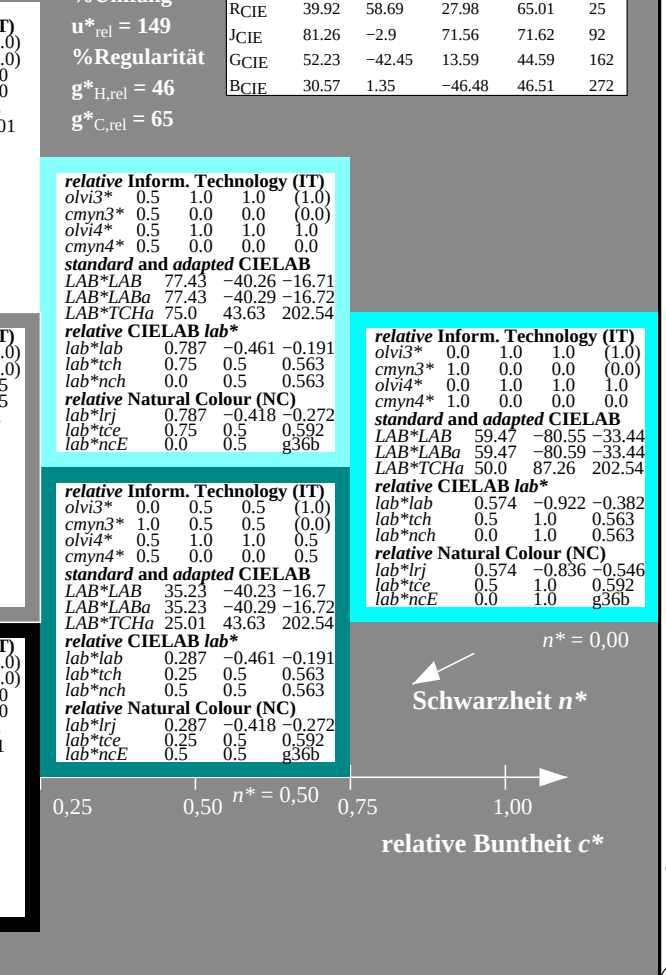
***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 1.0 (1.0)
*cmyn3** 0.5 0.0 0.0 (0.0)
*olvi4** 0.5 1.0 1.0 1.0
*cmyn4** 0.5 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 77.43 −40.26 −16.71
*LAB*LABa* 77.43 −40.29 −16.72
*LAB*TCHa* 75.0 43.63 202.54
relative* CIELAB *lab*
*lab*lab* 0.787 −0.461 −0.191
*lab*tch* 0.75 0.5 0.563
*lab*nch* 0.0 0.5 0.563
***relative* Natural Colour (NC)**
*lab*lrj* 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)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 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)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 1.0 0.5 0.5 (0.0)
*olvi4** 0.5 1.0 1.0 0.5
*cmyn4** 0.5 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 35.23 −40.23 −16.7
*LAB*LABa* 35.23 −40.29 −16.72
*LAB*TCHa* 25.01 43.63 202.54
relative* CIELAB *lab*
*lab*lab* 0.287 −0.461 −0.191
*lab*tch* 0.25 0.5 0.563
*lab*nch* 0.5 0.5 0.563
***relative* Natural Colour (NC)**
*lab*lrj* 0.287 −0.418 −0.272
*lab*tce* 0.25 0.5 0.592
*lab*ncE* 0.5 0.5 g36b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 1.0 (1.0)
*cmyn3** 1.0 0.0 0.0 (0.0)
*olvi4** 0.0 1.0 1.0 1.0
*cmyn4** 1.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 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 −0.922 −0.382
*lab*tch* 0.5 1.0 0.563
*lab*nch* 0.0 1.0 0.563
***relative* Natural Colour (NC)**
*lab*lrj* 0.574 −0.836 −0.546
*lab*tce* 0.5 1.0 0.592
*lab*ncE* 0.0 1.0 g36b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 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 −



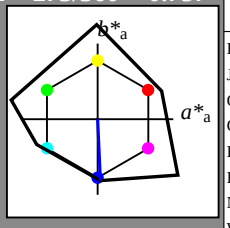
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (links)

3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 273/360 = 0.757***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 49 81 273
olv*Ma: 0.0 0.0 1.0

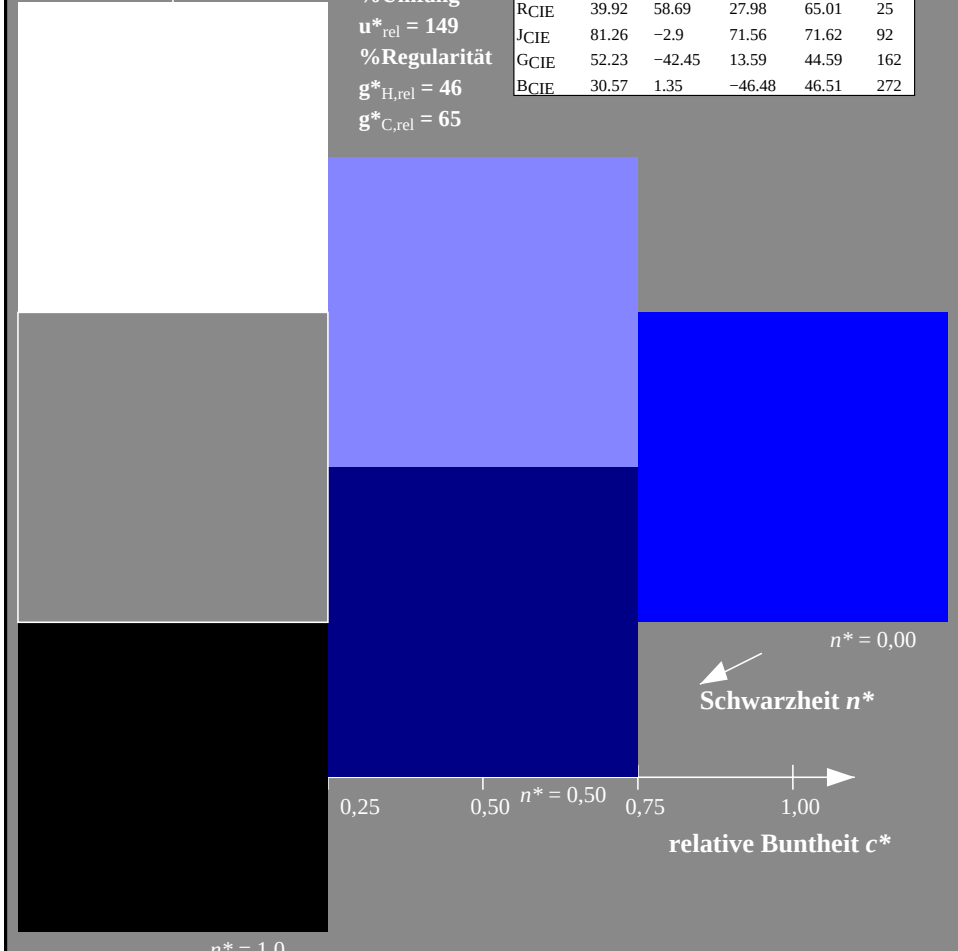
Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

NCS11; adaptierte CIELAB-Daten

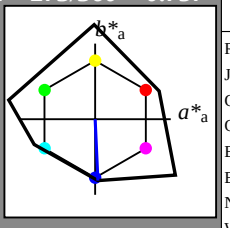
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 273/360 = 0.757***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 49 81 273
olv*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 −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 –

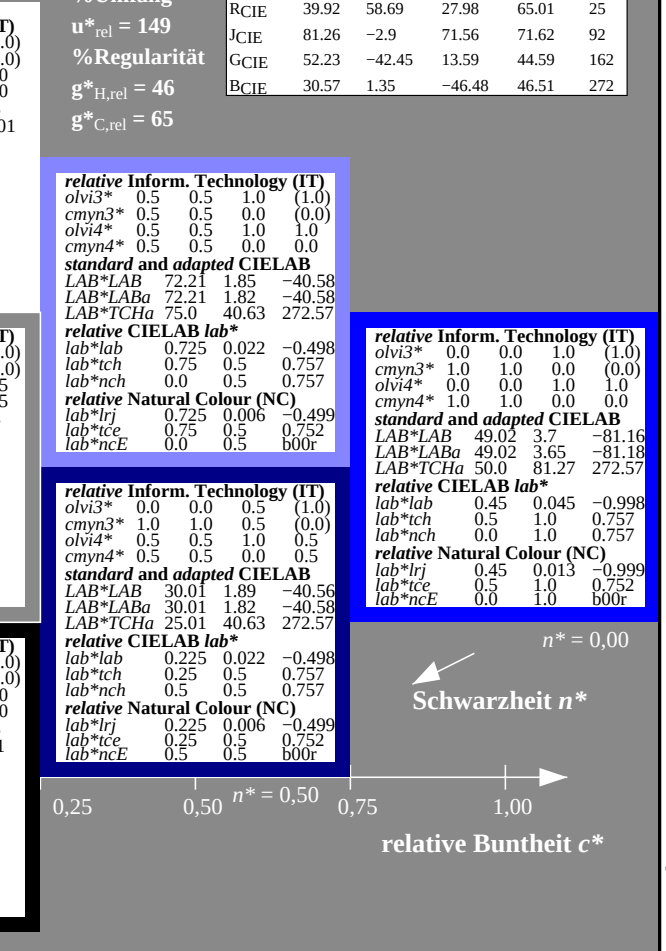
***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 53.21 0.04 0.0
*LAB*LABa* 53.21 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 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)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 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 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 1.0 (1.0)
*cmyn3** 0.5 0.5 0.0 (0.0)
*olvi4** 0.5 0.5 1.0 1.0
*cmyn4** 0.5 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 72.21 1.85 −40.58
*LAB*LABa* 72.21 1.82 −40.58
*LAB*TCHa* 75.0 40.63 272.57
relative* CIELAB *lab*
*lab*lab* 0.725 0.022 −0.498
*lab*tch* 0.75 0.5 0.757
*lab*nch* 0.0 0.5 0.757
***relative* Natural Colour (NC)**
*lab*lrj* 0.725 0.006 −0.499
*lab*tce* 0.75 0.5 0.752
*lab*ncE* 0.0 0.5 b00r

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.5 (1.0)
*cmyn3** 1.0 1.0 0.5 (0.0)
*olvi4** 0.5 0.5 1.0 0.5
*cmyn4** 0.5 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 30.01 1.89 −40.56
*LAB*LABa* 30.01 1.82 −40.58
*LAB*TCHa* 25.01 40.63 272.57
relative* CIELAB *lab*
*lab*lab* 0.225 0.022 −0.498
*lab*tch* 0.25 0.5 0.757
*lab*nch* 0.5 0.5 0.757
***relative* Natural Colour (NC)**
*lab*lrj* 0.225 0.006 −0.499
*lab*tce* 0.25 0.5 0.752
*lab*ncE* 0.5 0.5 b00r

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 1.0 (1.0)
*cmyn3** 1.0 1.0 0.0 (0.0)
*olvi4** 0.0 0.0 1.0 1.0
*cmyn4** 1.0 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 49.02 3.7 −81.16
*LAB*LABa* 49.02 3.65 −81.18
*LAB*TCHa* 50.0 81.27 272.57
relative* CIELAB *lab*
*lab*lab* 0.45 0.045 −0.998
*lab*tch* 0.5 1.0 0.757
*lab*nch* 0.0 1.0 0.757
***relative* Natural Colour (NC)**
*lab*lrj* 0.45 0.013 −0.999
*lab*tce* 0.5 1.0 0.752
*lab*ncE* 0.0 1.0 b00r



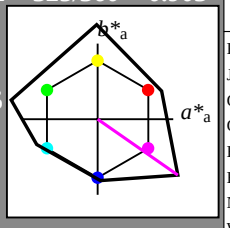
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.757 (links)

3 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.757 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton $h^* = lab^*h = 325/360 = 0.903$
lab*tch* und *lab*nch

D65: Buntton B50R
LCH*Ma: 44 129 325
olv*Ma: 1.0 0.0 1.0

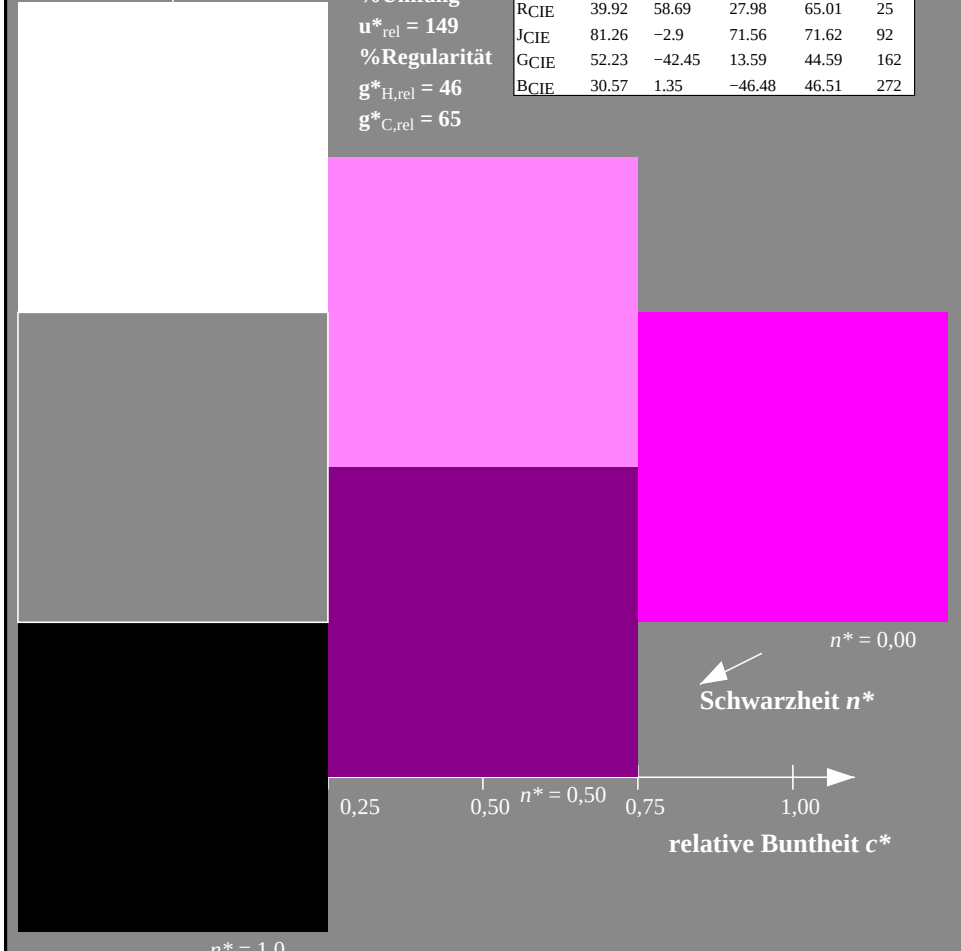
Dreiecks-Helligkeit t^*



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

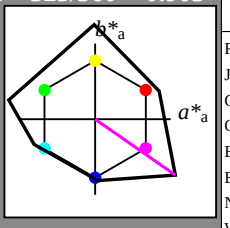
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton $h^* = lab^*h = 325/360 = 0.903$
lab*tch* und *lab*nch

D65: Buntton B50R
LCH*Ma: 44 129 325
olv*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit t^*



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0	1.0
*cmyn4**	0.0	0.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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)**

*olvi3**	0.0	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0	0.0
*cmyn4**	0.0	0.0	0.0	1.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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	–	

***relative* Inform. Technology (IT)**

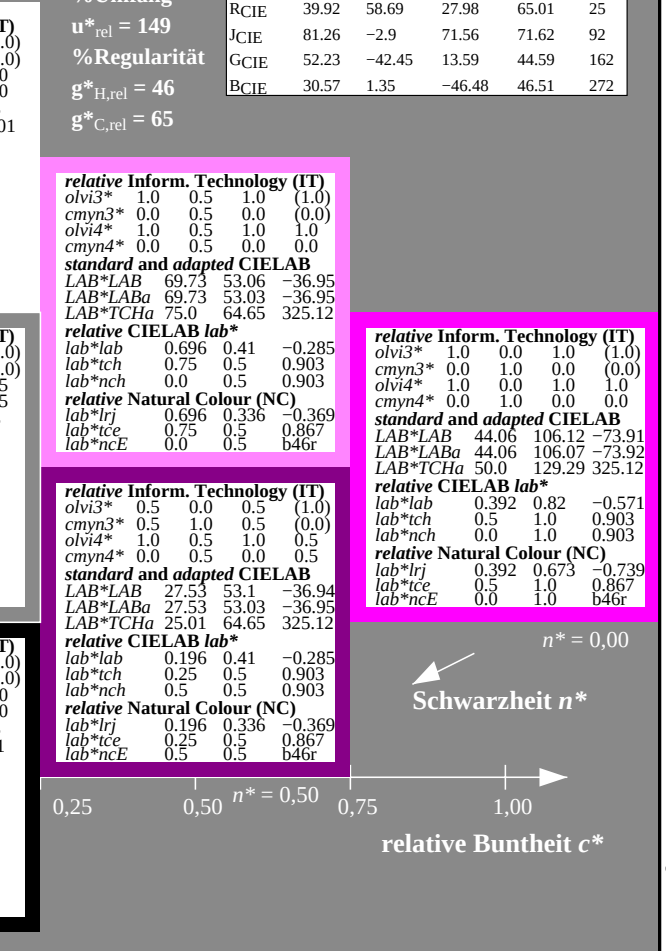
*olvi3**	1.0	0.5	1.0	(1.0)
*cmyn3**	0.0	0.5	0.0	(0.0)
*olvi4**	1.0	0.5	1.0	1.0
*cmyn4**	0.0	0.5	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	69.73	53.06	−36.95	
*LAB*LABa*	69.73	53.03	−36.95	
*LAB*TCHa*	75.0	64.65	325.12	
relative* CIELAB *lab*				
*lab*lab*	0.696	0.41	−0.285	
*lab*tch*	0.75	0.5	0.903	
*lab*nch*	0.0	0.5	0.903	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.696	0.336	−0.369	
*lab*tce*	0.75	0.5	0.867	
*lab*ncE*	0.0	0.5	b46r	

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.0	0.5	(1.0)
*cmyn3**	0.5	1.0	0.5	(0.0)
*olvi4**	1.0	0.5	1.0	0.5
*cmyn4**	0.0	0.5	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	27.53	53.1	−36.94	
*LAB*LABa*	27.53	53.03	−36.95	
*LAB*TCHa*	25.01	64.65	325.12	
relative* CIELAB *lab*				
*lab*lab*	0.196	0.41	−0.285	
*lab*tch*	0.25	0.5	0.903	
*lab*nch*	0.5	0.5	0.903	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.196	0.336	−0.369	
*lab*tce*	0.25	0.5	0.867	
*lab*ncE*	0.5	0.5	b46r	

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.0	1.0	(1.0)
*cmyn3**	0.0	1.0	0.0	(0.0)
*olvi4**	1.0	0.0	1.0	1.0
*cmyn4**	0.0	1.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	44.06	106.12	−73.91	
*LAB*LABa*	44.06	106.07	−73.92	
*LAB*TCHa*	50.0	129.29	325.12	
relative* CIELAB *lab*				
*lab*lab*	0.392	0.82	−0.571	
*lab*tch*	0.5	1.0	0.903	
*lab*nch*	0.0	1.0	0.903	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.392	0.673	−0.739	
*lab*tce*	0.5	1.0	0.867	
*lab*ncE*	0.0	1.0	b46r	



TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (links)

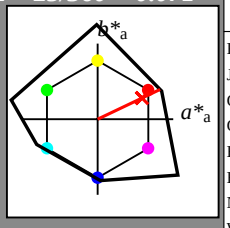
3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (rechts)

BAM-Registrierung: 20060101-TG09/10L/L09G05FP.PS/.PDF BAM-Material: Code=rha4ta
Anwendung für Beurteilung und Messung von Drucker− oder Monitorsystemen, Yr=2.5, XYZ
/TG09/ Form: 6/10, Serie: 1/1, Seite: 6 Seitenz hlung 6

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 25/360 = 0.071***
lab*tch* und *lab*nch

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

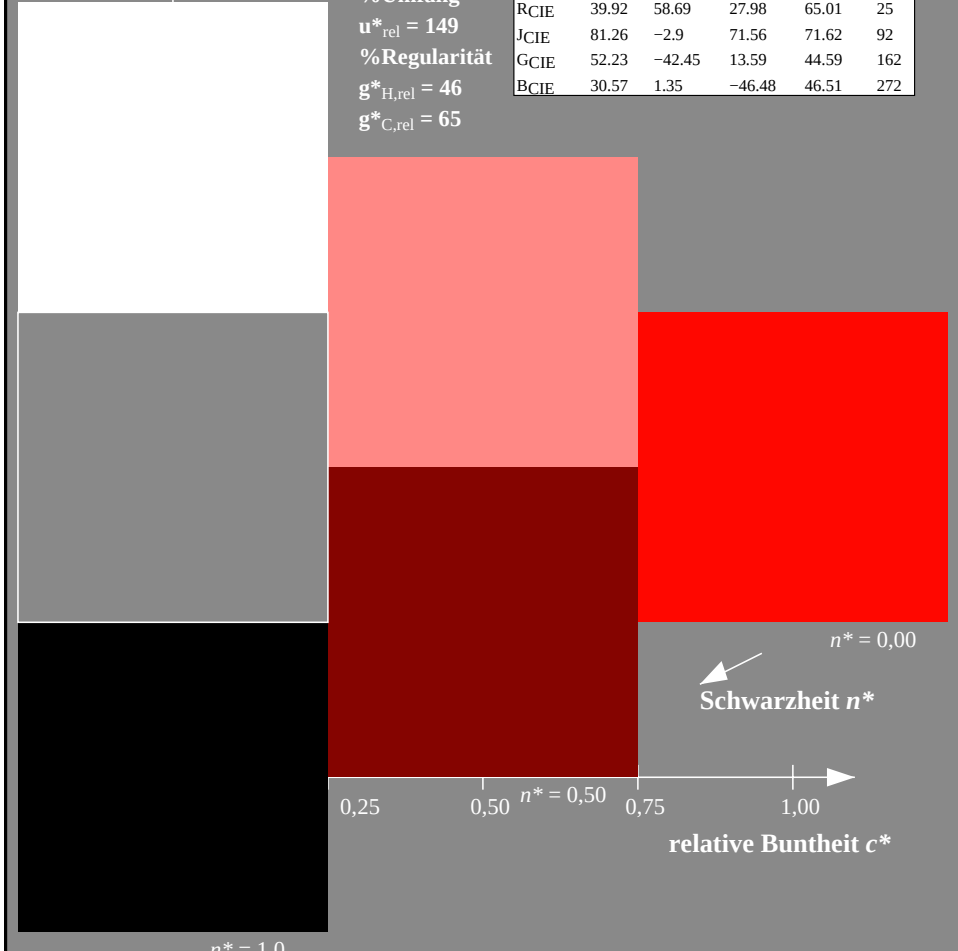
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

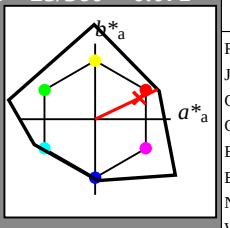
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 25/360 = 0.071***
lab*tch* und *lab*nch

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

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	1.0	0.512	0.5	(1.0)
*cmyn3**	0.0	0.488	0.5	(0.0)
*olvi4**	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

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	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)**

*olvi3**	0.5	0.012	0.0	(1.0)
*cmyn3**	0.5	0.988	1.0	(0.0)
*olvi4**	1.0	0.512	0.5	0.5
*cmyn4**	0.0	0.488	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	29.6	41.35	19.69
*LAB*LABa*	29.6	41.29	19.67
*LAB*TCHa*	25.01	45.73	25.47

relative* CIELAB *lab*

*lab*lab*	0.22	0.451	0.215
*lab*tch*	0.25	0.5	0.071
*lab*nch*	0.5	0.5	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.22	0.5	0.0
*lab*tce*	0.25	0.5	1.0
*lab*ncE*	0.5	0.5	b99r

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.024	0.0	(1.0)
*cmyn3**	0.0	0.976	1.0	(0.0)
*olvi4**	1.0	0.024	0.0	1.0
*cmyn4**	0.0	0.976	1.0	0.0

***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)**

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

***standard* and *adapted* CIELAB**

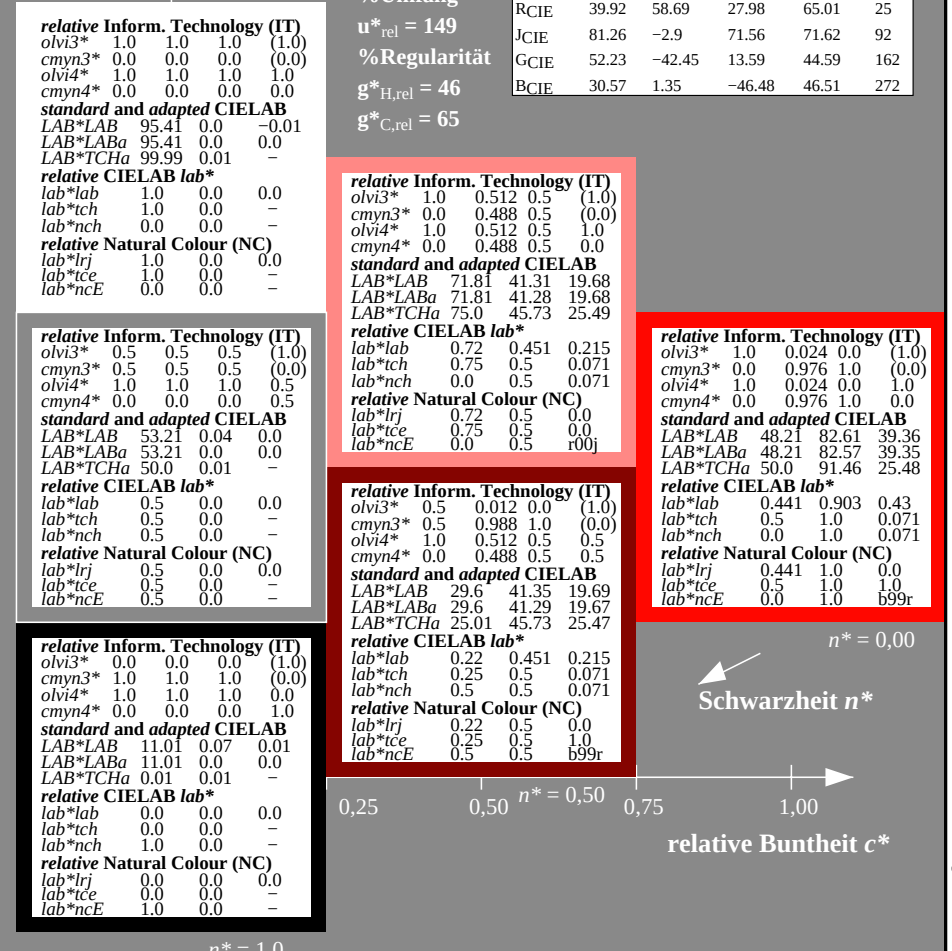
*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

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	–



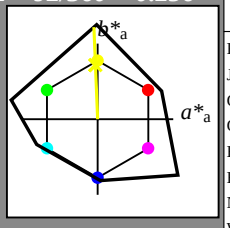
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (links)

3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 92/360 = 0.256***
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 90 122 92
olv*Ma: 0.97 1.0 0.0

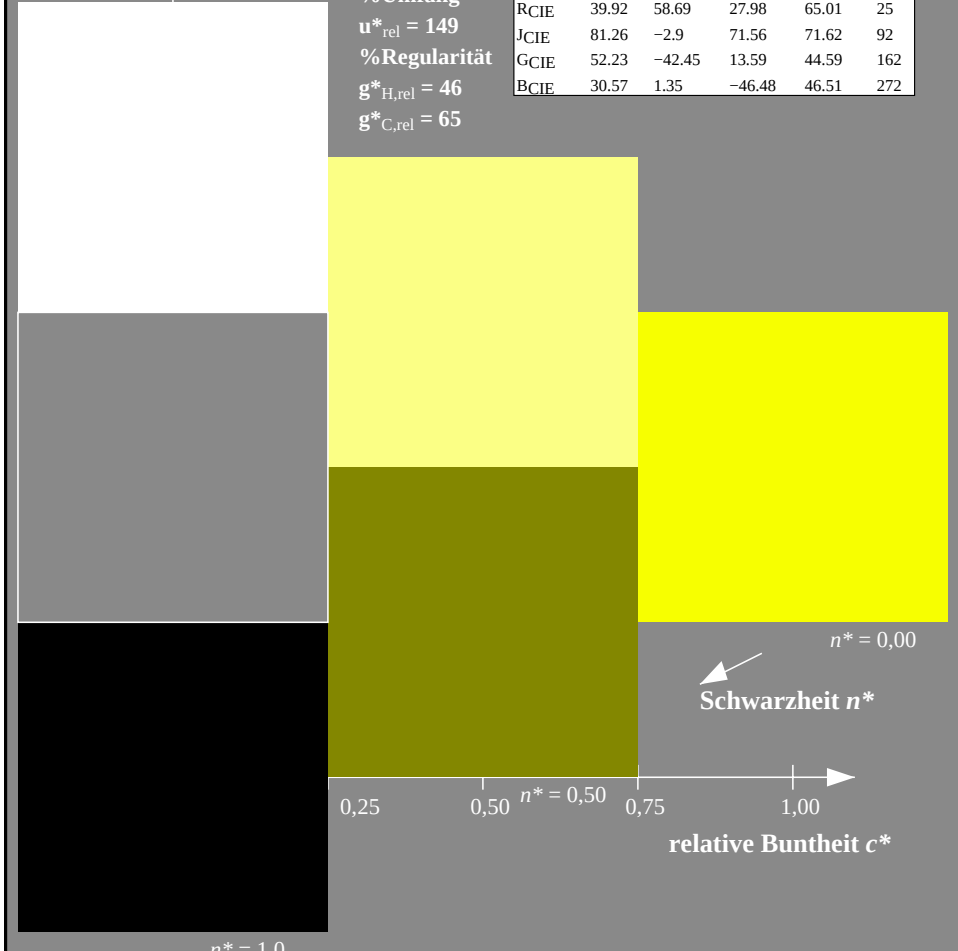
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

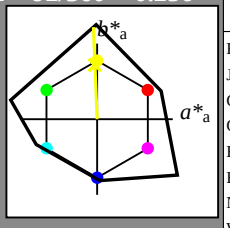
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 92/360 = 0.256***
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 90 122 92
olv*Ma: 0.97 1.0 0.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 −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 −

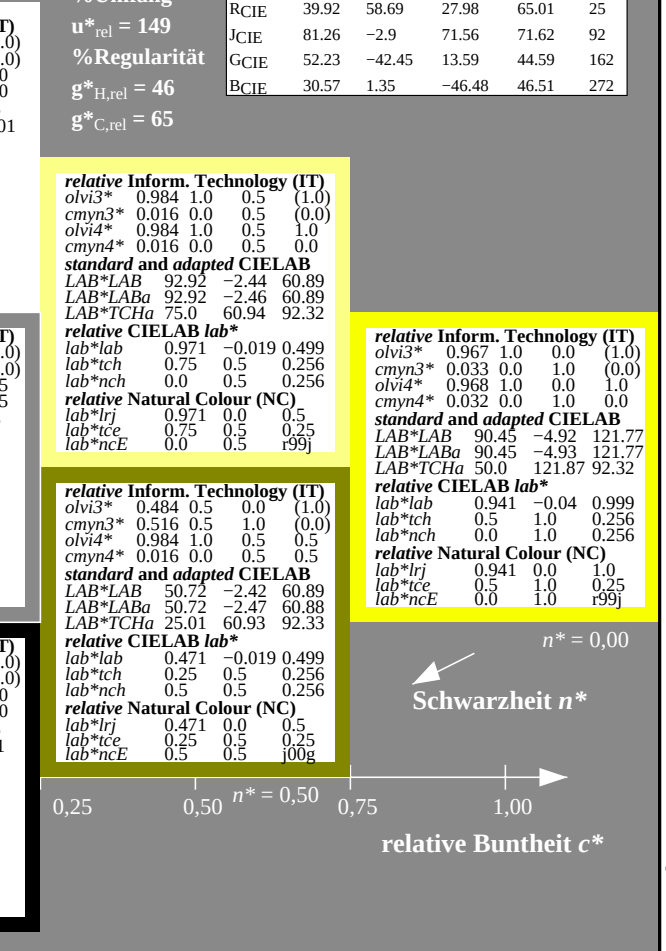
***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 53.21 0.04 0.0
*LAB*LABa* 53.21 0.0 0.0
*LAB*TCHa* 50.0 0.01 −
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 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)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 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 −

***relative* Inform. Technology (IT)**
*olvi3** 0.984 1.0 0.5 (1.0)
*cmyn3** 0.016 0.0 0.5 (0.0)
*olvi4** 0.984 1.0 0.5 1.0
*cmyn4** 0.016 0.0 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 92.92 −2.44 60.89
*LAB*LABa* 92.92 −2.46 60.89
*LAB*TCHa* 75.0 60.94 92.32
relative* CIELAB *lab*
*lab*lab* 0.971 −0.019 0.499
*lab*tch* 0.75 0.5 0.256
*lab*nch* 0.0 0.5 0.256
***relative* Natural Colour (NC)**
*lab*lrj* 0.971 0.0 0.5
*lab*tce* 0.75 0.5 0.25
*lab*ncE* 0.0 0.5 r99j

***relative* Inform. Technology (IT)**
*olvi3** 0.484 0.5 0.0 (1.0)
*cmyn3** 0.516 0.5 1.0 (0.0)
*olvi4** 0.984 1.0 0.5 0.5
*cmyn4** 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*TCHa* 25.01 60.93 92.33
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*lrj* 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)**
*olvi3** 0.967 1.0 0.0 (1.0)
*cmyn3** 0.033 0.0 1.0 (0.0)
*olvi4** 0.968 1.0 0.0 1.0
*cmyn4** 0.032 0.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 90.45 −4.92 121.77
*LAB*LABa* 90.45 −4.93 121.77
*LAB*TCHa* 50.0 121.87 92.32
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*lrj* 0.941 0.0 1.0
*lab*tce* 0.5 1.0 0.25
*lab*ncE* 0.0 1.0 r99j



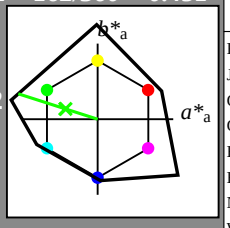
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (links)

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

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h* = lab*h = 162/360 = 0.451*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 65 110 162
olv*Ma: 0.08 1.0 0.0

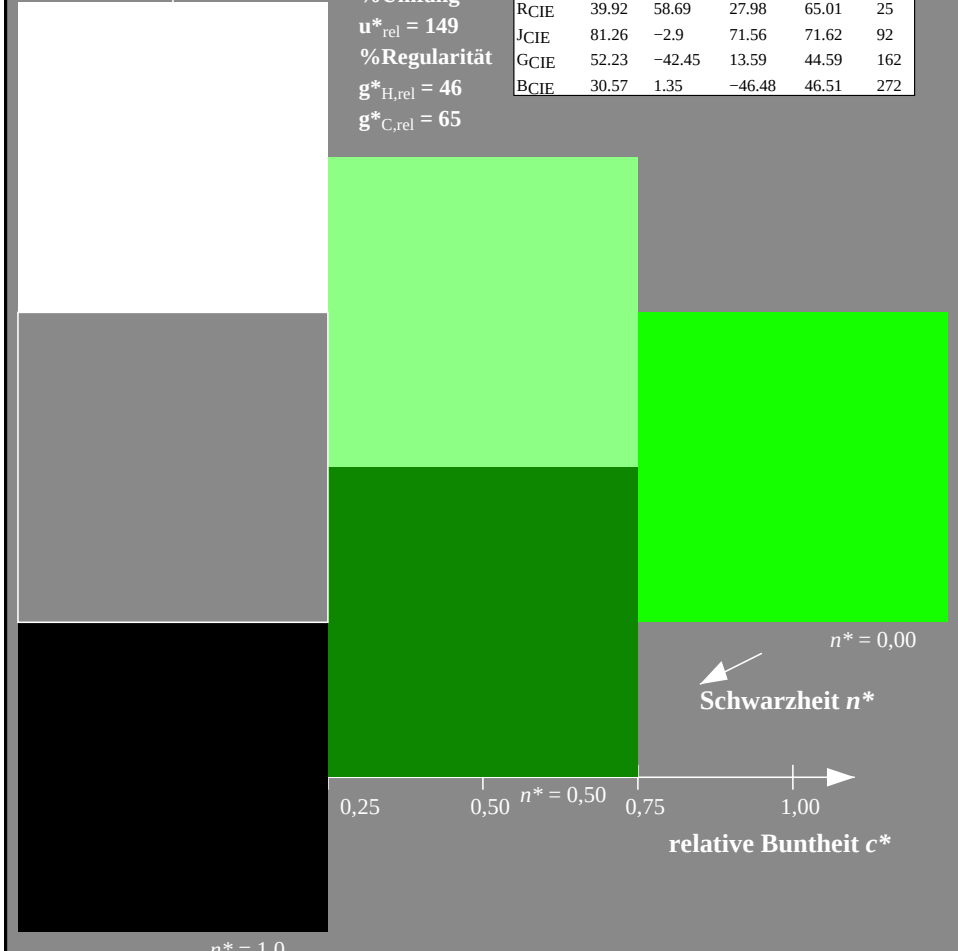
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

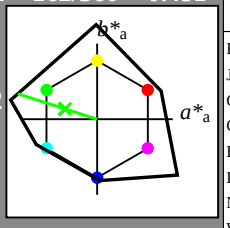
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h* = lab*h = 162/360 = 0.451*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 65 110 162
olv*Ma: 0.08 1.0 0.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0	1.0
*cmyn4**	0.0	0.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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)**

*olvi3**	0.0	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0	0.0
*cmyn4**	0.0	0.0	0.0	1.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	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	–	

***relative* Inform. Technology (IT)**

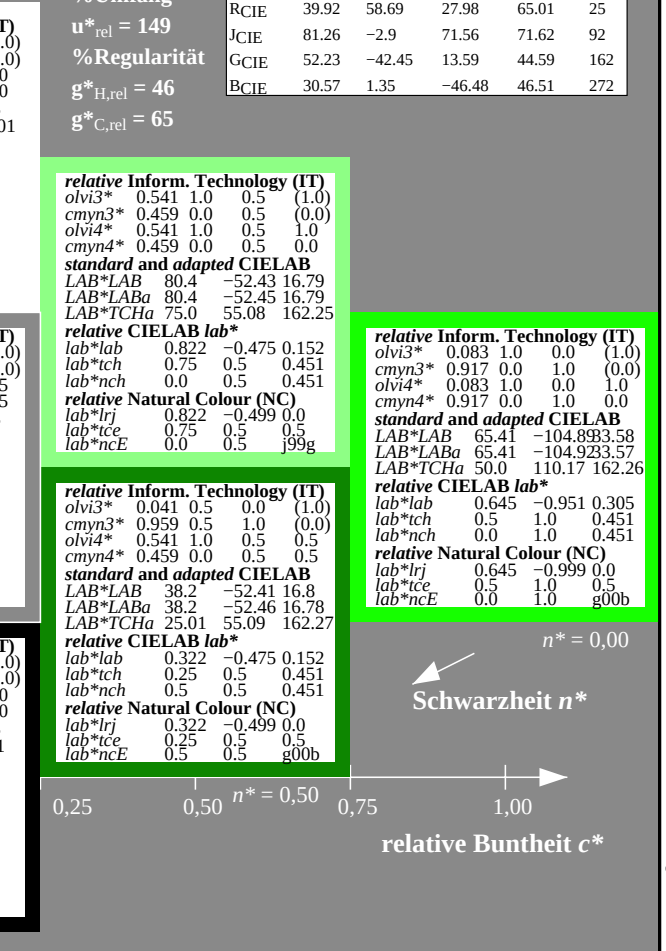
*olvi3**	0.541	1.0	0.5	(1.0)
*cmyn3**	0.459	0.0	0.5	(0.0)
*olvi4**	0.541	1.0	0.5	1.0
*cmyn4**	0.459	0.0	0.5	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	80.4	−52.43	16.79	
*LAB*LABa*	80.4	−52.45	16.79	
*LAB*TCHa*	75.0	55.08	162.25	
relative* CIELAB *lab*				
*lab*lab*	0.822	−0.475	0.152	
*lab*tch*	0.75	0.5	0.451	
*lab*nch*	0.0	0.5	0.451	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.822	−0.499	0.0	
*lab*tce*	0.75	0.5	0.5	
*lab*ncE*	0.0	0.5	j99g	

***relative* Inform. Technology (IT)**

*olvi3**	0.041	0.5	0.0	(1.0)
*cmyn3**	0.959	0.5	1.0	(0.0)
*olvi4**	0.541	1.0	0.5	0.5
*cmyn4**	0.459	0.0	0.5	0.5
***standard* and *adapted* CIELAB**				
*LAB*LAB*	38.2	−52.41	16.8	
*LAB*LABa*	38.2	−52.46	16.78	
*LAB*TCHa*	25.01	55.09	162.27	
relative* CIELAB *lab*				
*lab*lab*	0.322	−0.475	0.152	
*lab*tch*	0.25	0.5	0.451	
*lab*nch*	0.5	0.5	0.451	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.322	−0.499	0.0	
*lab*tce*	0.25	0.5	0.5	
*lab*ncE*	0.5	0.5	g00b	

***relative* Inform. Technology (IT)**

*olvi3**	0.083	1.0	0.0	(1.0)
*cmyn3**	0.917	0.0	1.0	(0.0)
*olvi4**	0.083	1.0	0.0	1.0
*cmyn4**	0.917	0.0	1.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	65.41	−104.89	33.58	
*LAB*LABa*	65.41	−104.92	33.57	
*LAB*TCHa*	50.0	110.17	162.26	
relative* CIELAB *lab*				
*lab*lab*	0.645	−0.951	0.305	
*lab*tch*	0.5	1.0	0.451	
*lab*nch*	0.0	1.0	0.451	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.645	−0.999	0.0	
*lab*tce*	0.5	1.0	0.5	
*lab*ncE*	0.0	1.0	g00b	



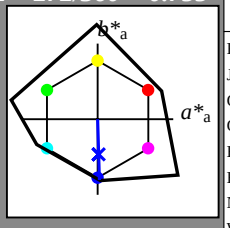
TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (links)

3 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (rechts)

Eingabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 272/360 = 0.755***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 49 80 272
olv*Ma: 0.0 0.02 1.0

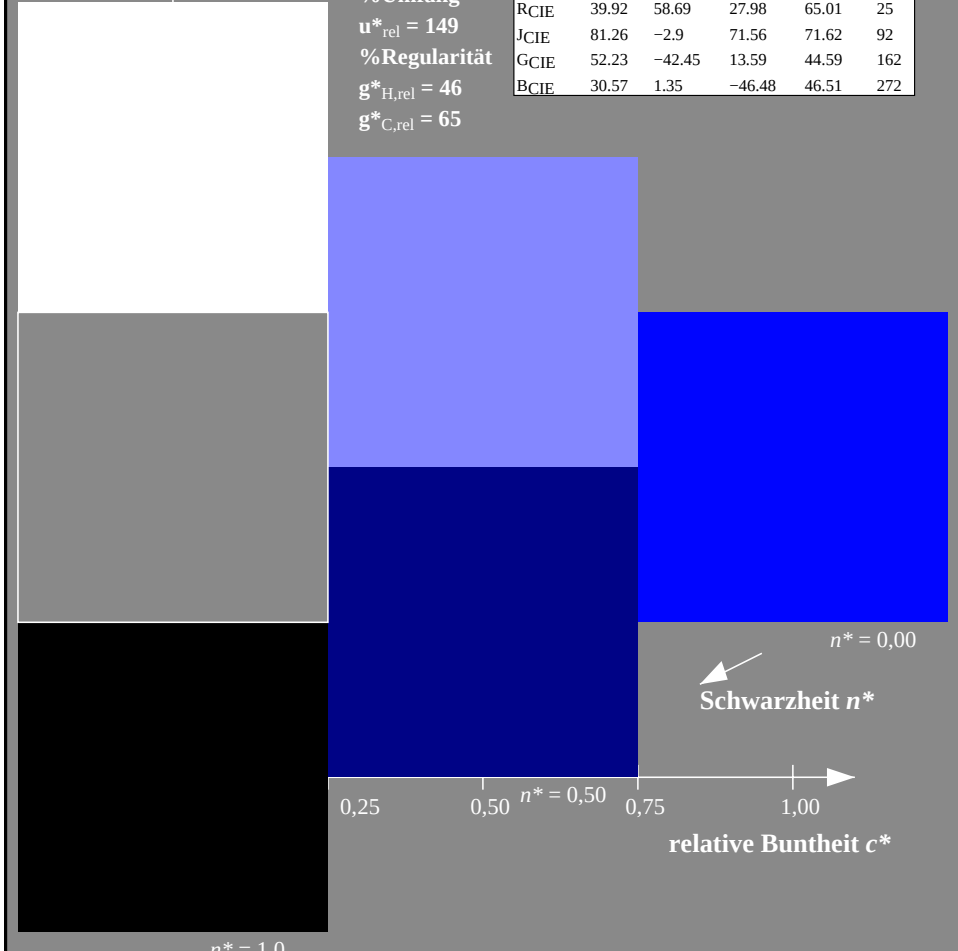
Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

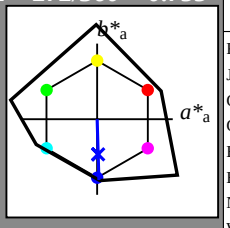
%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65



Ausgabe: Farbmetrisches Reflexions-System NCS11
für Buntton *h = lab*h = 272/360 = 0.755***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 49 80 272
olv*Ma: 0.0 0.02 1.0

Dreiecks-Helligkeit *t**



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	47.15	84.64	37.25	92.48	24
J_{Ma}	91.37	−1.27	125.03	125.03	91
G_{Ma}	63.07	−114.28	25.35	117.06	167
$G50B_{Ma}$	59.47	−80.6	−33.45	87.28	203
B_{Ma}	49.01	3.65	−81.19	81.28	273
$B50R_{Ma}$	44.06	106.09	−73.93	129.32	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 149
%Regularität
$g^*_{H,rel}$ = 46
$g^*_{C,rel}$ = 65

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	0.0	−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)**

*olvi3**	0.5	0.508	1.0	(1.0)
*cmyn3**	0.5	0.492	0.0	(0.0)
*olvi4**	0.5	0.508	1.0	1.0
*cmyn4**	0.5	0.492	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	72.29	1.2	−40.21
*LAB*LABa*	72.29	1.17	−40.21
*LAB*TCHa*	75.0	40.24	271.66

relative* CIELAB *lab*

*lab*lab*	0.726	0.014	−0.499
*lab*tch*	0.75	0.5	0.755
*lab*nch*	0.0	0.5	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.726	0.0	−0.499
*lab*tce*	0.75	0.5	0.75
*lab*ncE*	0.0	0.5	g99b

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	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)**

*olvi3**	0.0	0.008	0.5	(1.0)
*cmyn3**	1.0	0.992	0.5	(0.0)
*olvi4**	0.5	0.508	1.0	0.5
*cmyn4**	0.5	0.492	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	30.09	1.24	−40.2
*LAB*LABa*	30.09	1.18	−40.21
*LAB*TCHa*	25.01	40.24	271.67

relative* CIELAB *lab*

*lab*lab*	0.226	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*lrj*	0.226	0.0	−0.499
*lab*tce*	0.25	0.5	0.75
*lab*ncE*	0.5	0.5	b00r

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.016	1.0	(1.0)
*cmyn3**	1.0	0.984	0.0	(0.0)
*olvi4**	0.0	0.016	1.0	1.0
*cmyn4**	1.0	0.984	0.0	0.0

***standard* and *adapted* CIELAB**

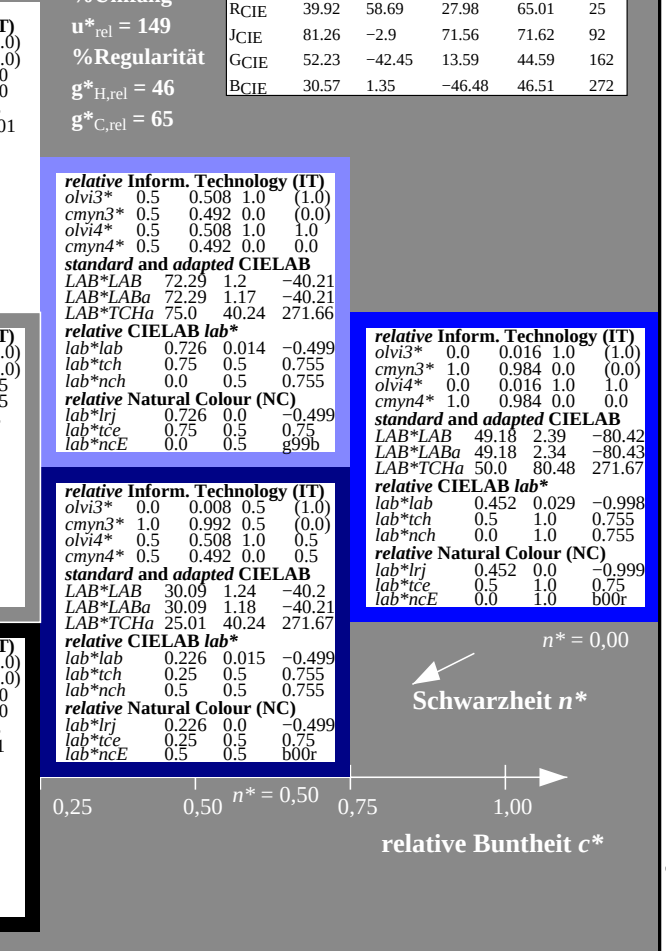
*LAB*LAB*	49.18	2.39	−80.42
*LAB*LABa*	49.18	2.34	−80.43
*LAB*TCHa*	50.0	80.48	271.67

relative* CIELAB *lab*

*lab*lab*	0.452	0.029	−0.998
*lab*tch*	0.5	1.0	0.755
*lab*nch*	0.0	1.0	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.452	0.0	−0.999
*lab*tce*	0.5	1.0	0.75
*lab*ncE*	0.0	1.0	b00r



TG090−7, 3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (links)

3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (rechts)