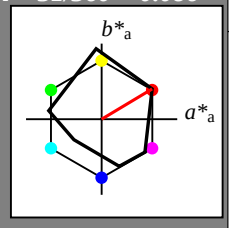
Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 31/360 = 0.086*
lab*tch* und *lab*nch

D65: Buntton R
LCH*Ma: 50 78 31
olv*Ma: 1.0 0.0 0.0

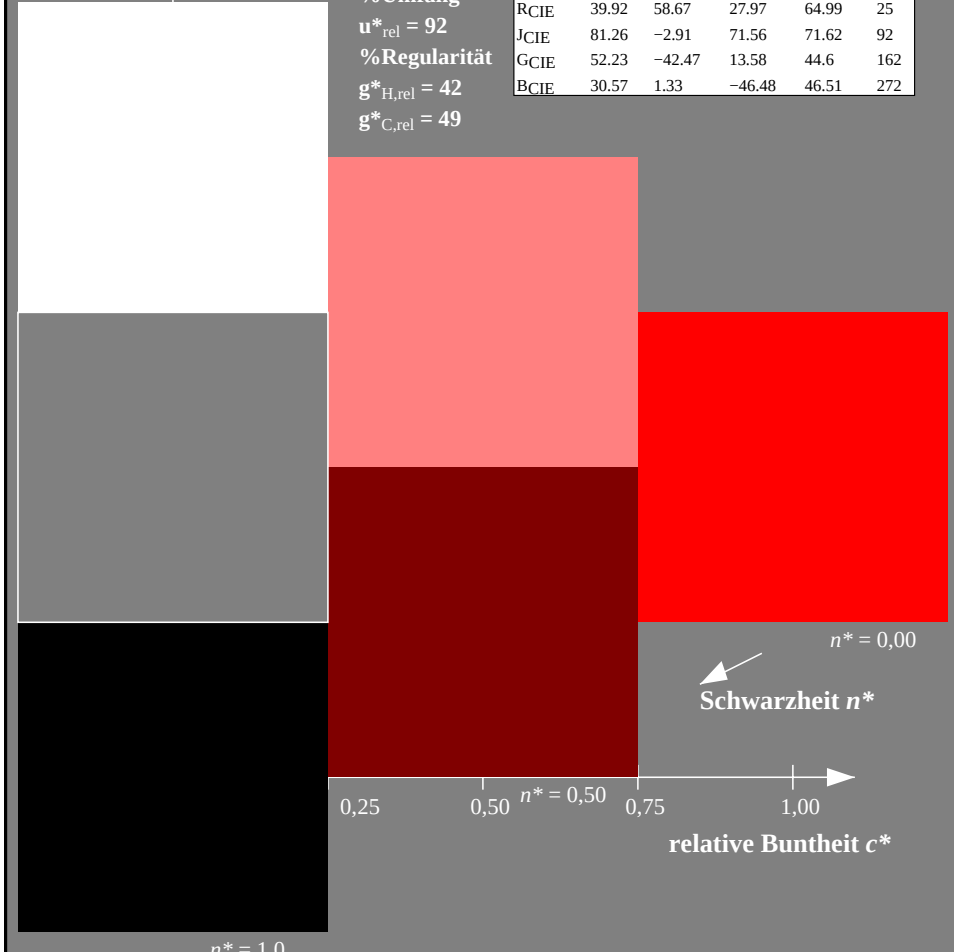
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Umfang
u^*_{rel} = 92
%Regularität
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49

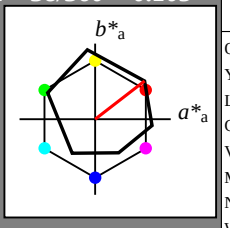


TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 31/360 = 0.086 (links)

Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 38/360 = 0.105*
lab*tch* und *lab*nch

D65: Buntton O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

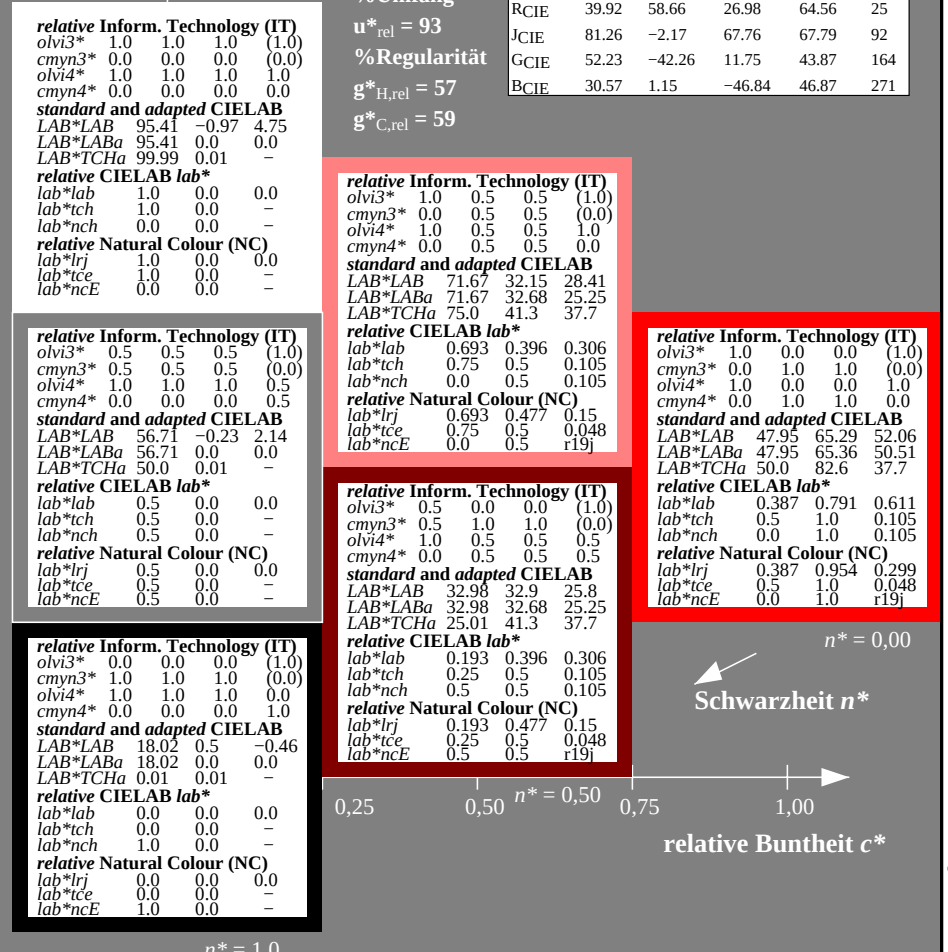
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

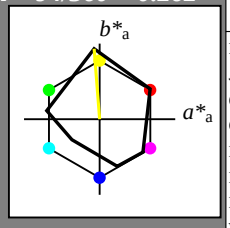


3 stufige Reihen für konstanten CIELAB Buntton 38/360 = 0.105 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 94/360 = 0.262*
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 91 93 94
olv*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

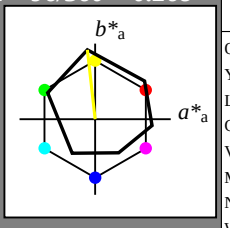
	L=L*a*	*a*a*	*b*a*	*C*ab,a*	*h*ab,a*
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Umfang
u^*_{rel} = 92
%Regularität
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49

Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 96/360 = 0.268*
lab*tch* und *lab*nch

D65: Buntton Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

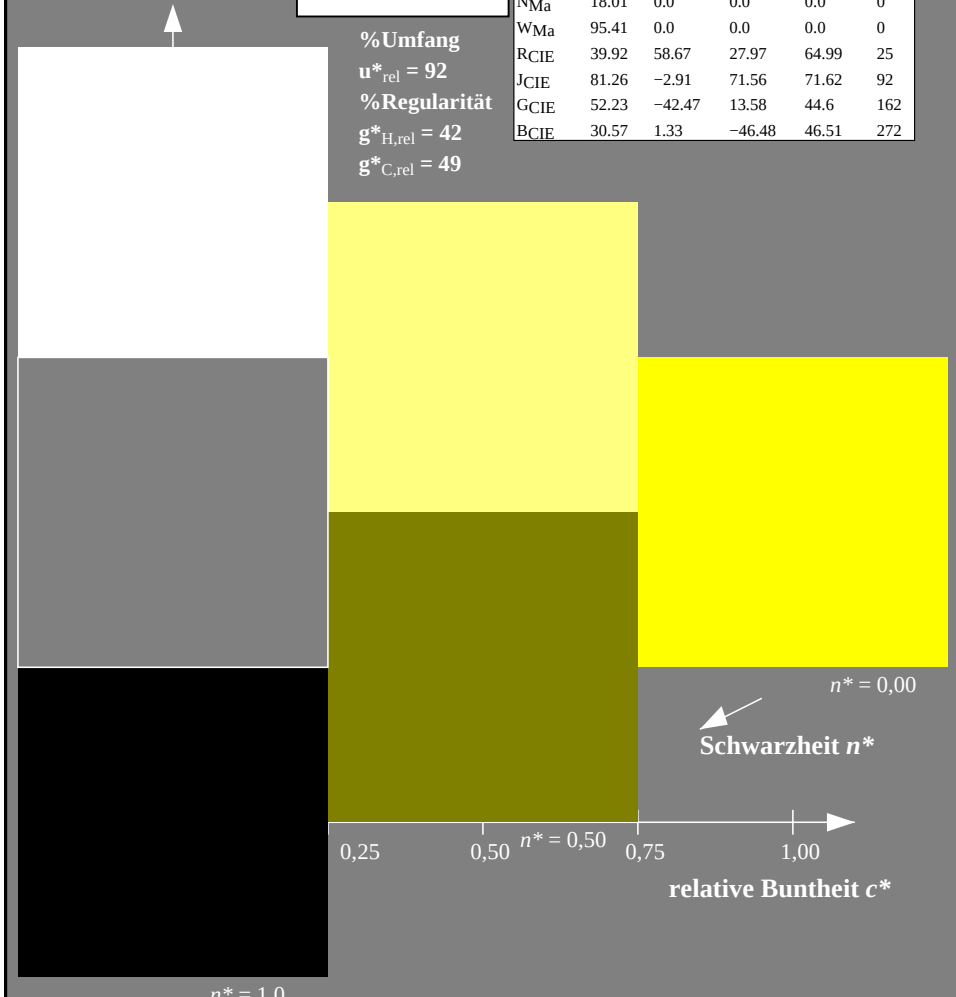
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L=L*a*	*a*a*	*b*a*	*C*ab,a*	*h*ab,a*
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59



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

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

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

*LAB*LAB*	95.41	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

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

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

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

*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

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

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

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

*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

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

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

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

*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*	92.88	−6.06	50.46
*LAB*LABa*	92.88	−5.13	45.87
*LAB*TCHa*	75.0	46.16	96.39

relative* CIELAB *lab*

*lab*lab*	0.967	−0.055	0.497
*lab*tch*	0.75	0.5	0.268
*lab*nch*	0.0	0.5	0.268

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

*lab*lrj*	0.967	−0.048	0.497
*lab*tce*	0.75	0.5	0.266
*lab*ncE*	0.0	0.5	j06g

***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*	54.19	−5.32	47.85
*LAB*LABa*	54.19	−5.13	45.87
*LAB*TCHa*	25.01	46.16	96.39

relative* CIELAB *lab*

*lab*lab*	0.467	−0.055	0.497
*lab*tch*	0.25	0.5	0.268
*lab*nch*	0.5	0.5	0.268

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

*lab*lrj*	0.467	−0.048	0.497
*lab*tce*	0.25	0.5	0.266
*lab*ncE*	0.5	0.5	j06g

***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*	90.37	−11.15	96.17
*LAB*LABa*	90.37	−10.26	91.75
*LAB*TCHa*	50.0	92.32	96.39

relative* CIELAB *lab*

*lab*lab*	0.935	−0.11	0.994
*lab*tch*	0.5	1.0	0.268
*lab*nch*	0.0	1.0	0.268

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

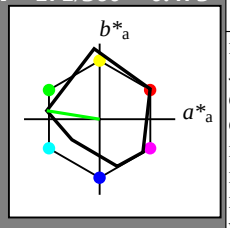
*lab*lrj*	0.935	−0.097	0.995
*lab*tce*	0.5	1.0	0.266
*lab*ncE*	0.0	1.0	j06g

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.262 (links)
3 stufige Reihen für konstanten CIELAB Buntton 96/360 = 0.268 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 171/360 = 0.475*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 52 71 171
olv*Ma: 0.0 1.0 0.0

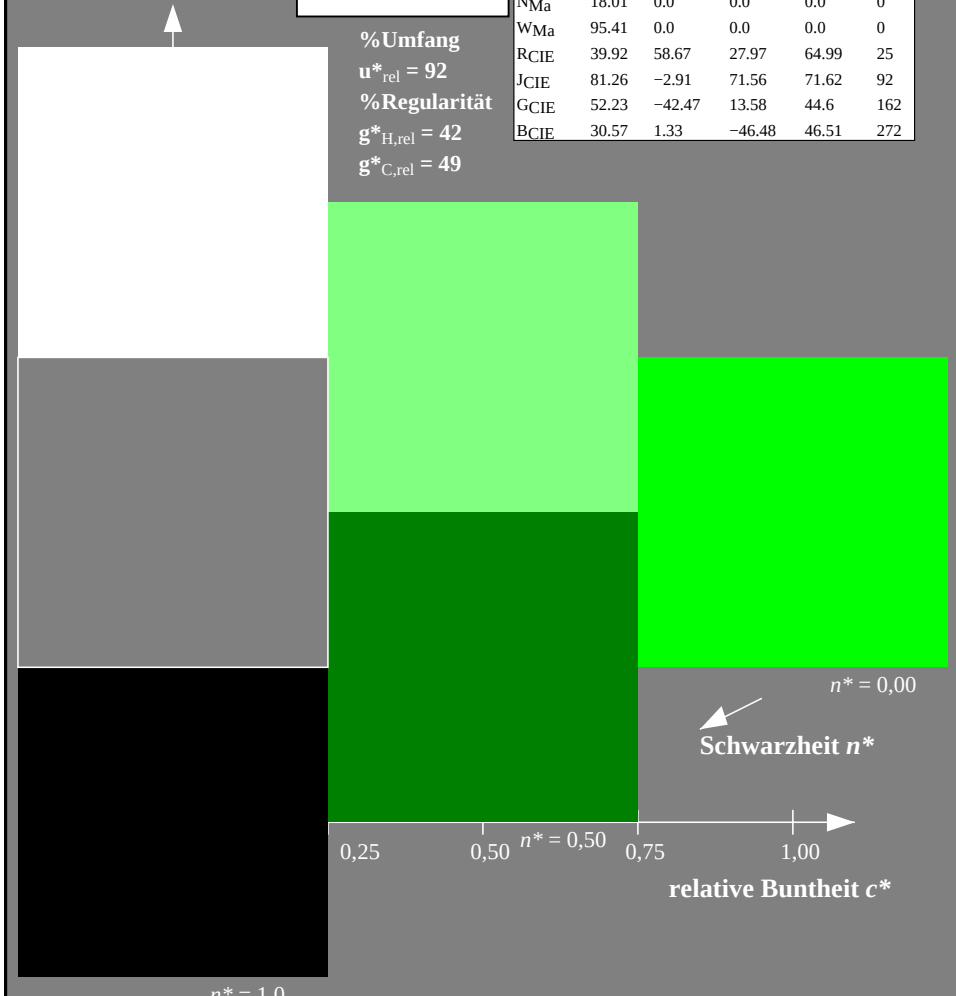
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	−7.27	93.19	93.48	94
GMa	52.11	−69.93	11.26	70.85	171
G50BMa	45.03	−36.65	−27.13	45.61	217
BMa	36.65	23.26	−62.27	66.49	290
B50RMa	34.94	57.27	−43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	−2.91	71.56	71.62	92
GCIE	52.23	−42.47	13.58	44.6	162
BCIE	30.57	1.33	−46.48	46.51	272

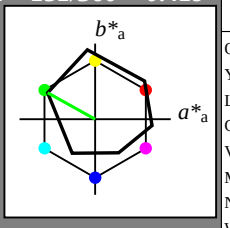
%Umfang
u*rel = 92
%Regularität
g*H,rel = 42
g*C,rel = 49



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 151/360 = 0.419*
lab*tch* und *lab*nch

D65: Buntton L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

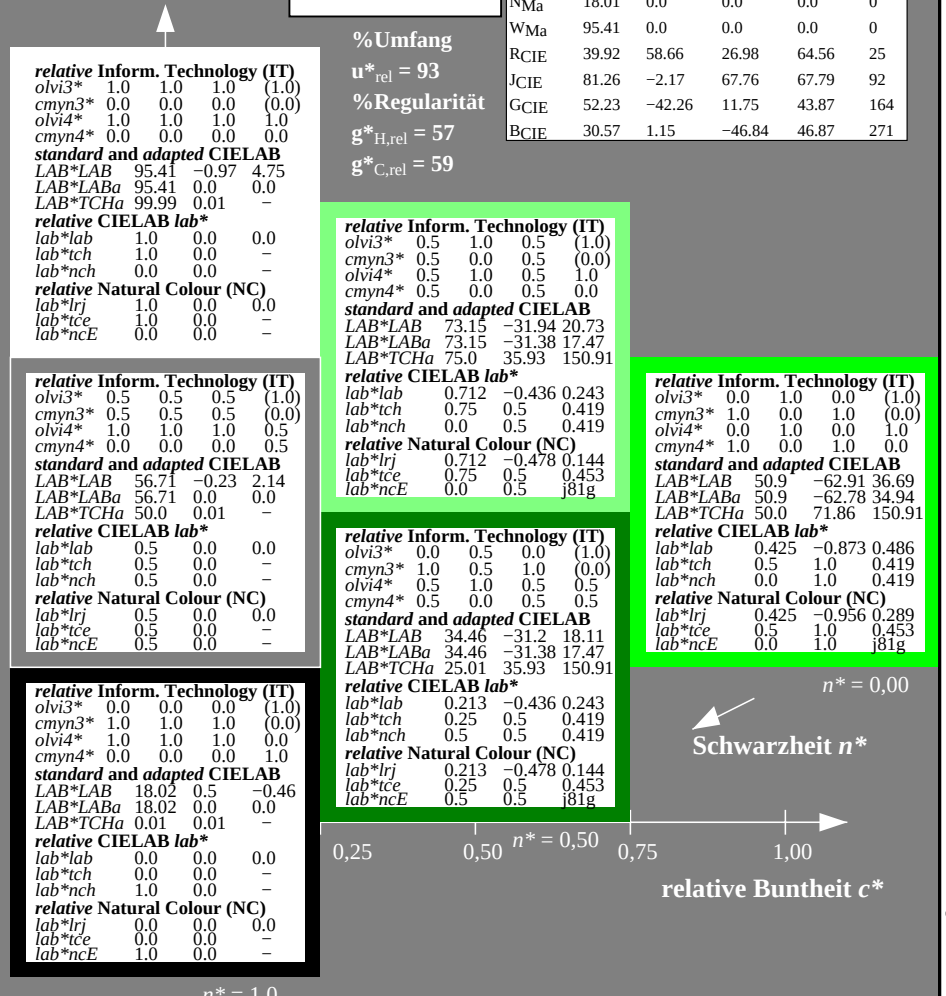
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	−10.27	91.77	92.34	96
LMa	50.9	−62.79	34.95	71.87	151
CMa	58.62	−30.35	−45.01	54.3	236
VMa	25.71	31.11	−44.42	54.24	305
MMa	48.13	75.27	−8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	−2.17	67.76	67.79	92
GCIE	52.23	−42.26	11.75	43.87	164
BCIE	30.57	1.15	−46.84	46.87	271

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59



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

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

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

*LAB*LAB*	95.41	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

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

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

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

*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

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

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

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

*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

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

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

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

*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*	73.15	−31.94	20.73
*LAB*LABa*	73.15	−31.38	17.47
*LAB*TCHa*	75.0	35.93	150.91

relative* CIELAB *lab*

*lab*lab*	0.712	−0.436	0.243
*lab*tch*	0.75	0.5	0.419
*lab*nch*	0.0	0.5	0.419

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

*lab*lrj*	0.712	−0.478	0.144
*lab*tce*	0.75	0.5	0.453
*lab*ncE*	0.0	0.5	j81g

***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*	34.46	−31.2	18.11
*LAB*LABa*	34.46	−31.38	17.47
*LAB*TCHa*	25.01	35.93	150.91

relative* CIELAB *lab*

*lab*lab*	0.213	−0.436	0.243
*lab*tch*	0.25	0.5	0.419
*lab*nch*	0.5	0.5	0.419

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

*lab*lrj*	0.213	−0.478	0.144
*lab*tce*	0.25	0.5	0.453
*lab*ncE*	0.5	0.5	j81g

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

*olvi3**	0.0	1.0	0.0 (1.0)
*cmyn3**	1.0	1.0	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*	50.9	−62.91	36.69
*LAB*LABa*	50.9	−62.78	34.94
*LAB*TCHa*	50.0	71.86	150.91

relative* CIELAB *lab*

*lab*lab*	0.425	−0.873	0.486
*lab*tch*	0.5	1.0	0.419
*lab*nch*	0.0	1.0	0.419

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

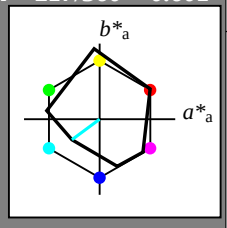
*lab*lrj*	0.425	−0.956	0.289
*lab*tce*	0.5	1.0	0.453
*lab*ncE*	0.0	1.0	j81g

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 171/360 = 0.475 (links)
3 stufige Reihen für konstanten CIELAB Buntton 151/360 = 0.419 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 217/360 = 0.601*
lab*tch* und *lab*nch

D65: Buntton G50B
LCH*Ma: 45 46 217
olv*Ma: 0.0 1.0 1.0

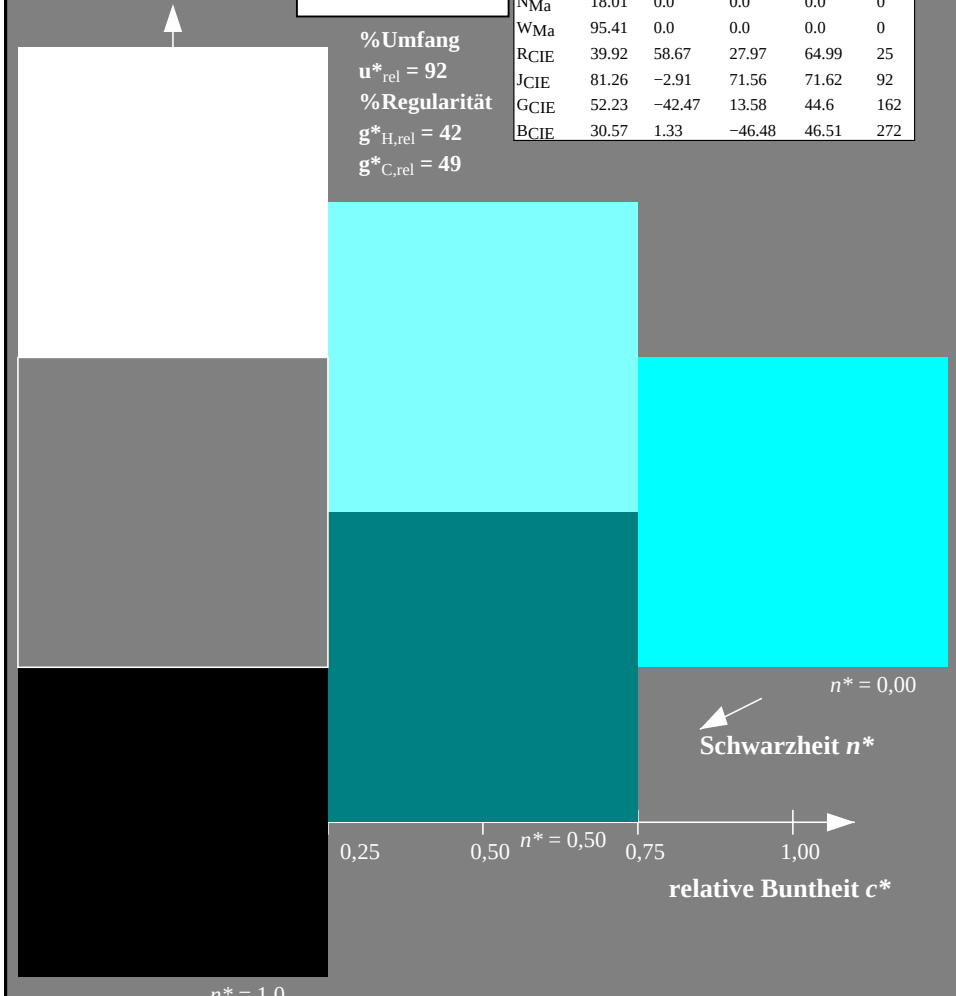
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	−7.27	93.19	93.48	94
GMa	52.11	−69.93	11.26	70.85	171
G50BMa	45.03	−36.65	−27.13	45.61	217
BMa	36.65	23.26	−62.27	66.49	290
B50RMa	34.94	57.27	−43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	−2.91	71.56	71.62	92
GCIE	52.23	−42.47	13.58	44.6	162
BCIE	30.57	1.33	−46.48	46.51	272

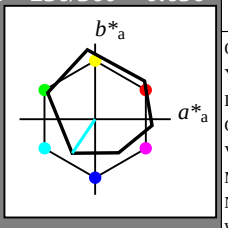
%Umfang
u*rel = 92
%Regularität
g*H,rel = 42
g*C,rel = 49



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 236/360 = 0.656*
lab*tch* und *lab*nch

D65: Buntton C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

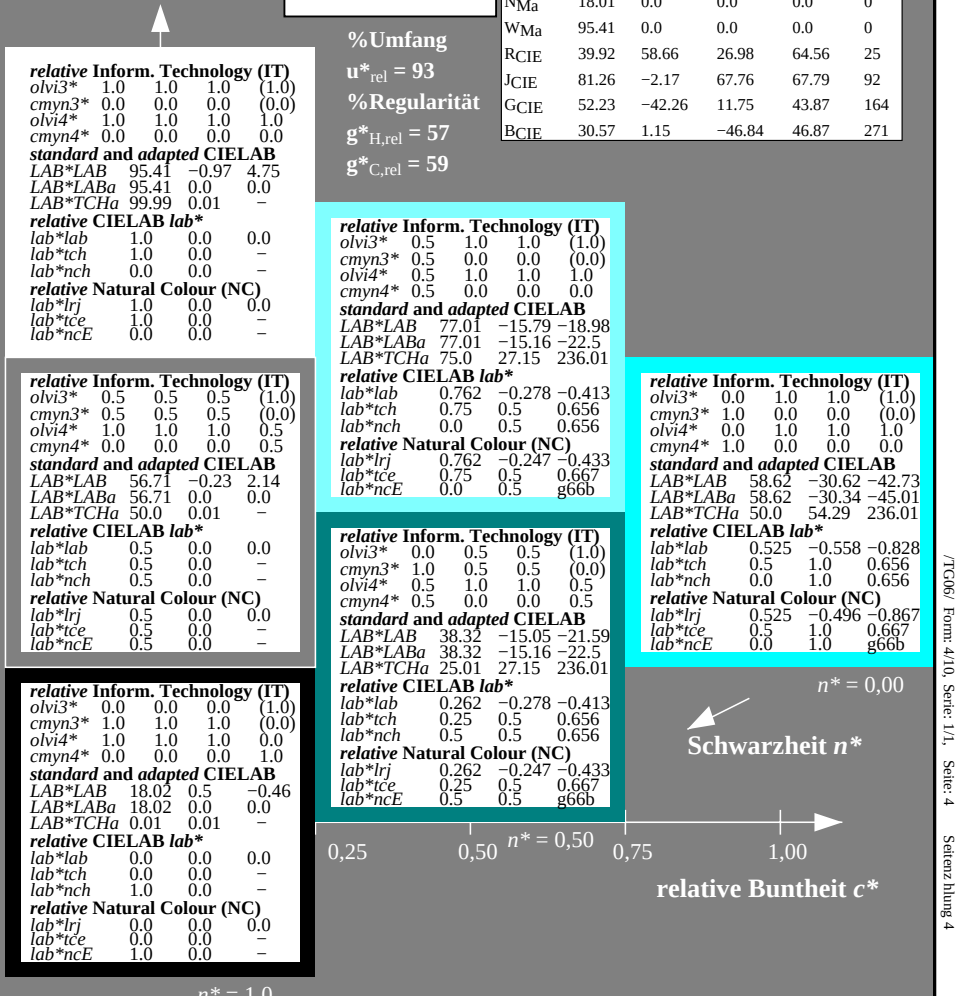
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	−10.27	91.77	92.34	96
LMa	50.9	−62.79	34.95	71.87	151
CMa	58.62	−30.35	−45.01	54.3	236
VMa	25.71	31.11	−44.42	54.24	305
MMa	48.13	75.27	−8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	−2.17	67.76	67.79	92
GCIE	52.23	−42.26	11.75	43.87	164
BCIE	30.57	1.15	−46.84	46.87	271

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59



***relative* Inform. Technology (IT)**				
*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	−0.97	4.75	
*LAB*LABa*	95.41	0.0	0.0	
*LAB*TCHa*	99.99	0.01	–	
relative* CIELAB *lab				
*lab*lab*	1.0	0.0	0.0	
*lab*tch*	1.0	0.0	–	
*lab*nch*	0.0	0.0	–	
***relative* Natural Colour (NC)**				
*lab*lrj*	1.0	0.0	0.0	
*lab*tce*	1.0	0.0	–	
*lab*ncE*	0.0	0.0	–	

***relative* Inform. Technology (IT)**				
*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*	56.71	−0.23	2.14	
*LAB*LABa*	56.71	0.0	0.0	
*LAB*TCHa*	50.0	0.01	–	
relative* CIELAB *lab				
*lab*lab*	0.5	0.0	0.0	
*lab*tch*	0.5	0.0	–	
*lab*nch*	0.5	0.0	–	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.5	0.0	0.0	
*lab*tce*	0.5	0.0	–	
*lab*ncE*	0.5	0.0	–	

***relative* Inform. Technology (IT)**				
*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*	18.02	0.5	−0.46	
*LAB*LABa*	18.02	0.0	0.0	
*LAB*TCHa*	0.01	0.01	–	
relative* CIELAB *lab				
*lab*lab*	0.0	0.0	0.0	
*lab*tch*	0.0	0.0	–	
*lab*nch*	1.0	0.0	–	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.0	0.0	0.0	
*lab*tce*	0.0	0.0	–	
*lab*ncE*	1.0	0.0	–	

***relative* Inform. Technology (IT)**				
*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*	77.01	−15.79	−18.98	
*LAB*LABa*	77.01	−15.16	−22.5	
*LAB*TCHa*	75.0	27.15	236.01	
relative* CIELAB *lab				
*lab*lab*	0.762	−0.278	−0.413	
*lab*tch*	0.75	0.5	0.656	
*lab*nch*	0.0	0.5	0.656	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.762	−0.247	−0.433	
*lab*tce*	0.75	0.5	0.667	
*lab*ncE*	0.0	0.5	g66b	

***relative* Inform. Technology (IT)**				
*olvi3**	0.0	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*	38.32	−15.05	−21.59	
*LAB*LABa*	38.32	−15.16	−22.5	
*LAB*TCHa*	25.01	27.15	236.01	
relative* CIELAB *lab				
*lab*lab*	0.262	−0.278	−0.413	
*lab*tch*	0.25	0.5	0.656	
*lab*nch*	0.5	0.5	0.656	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.262	−0.247	−0.433	
*lab*tce*	0.25	0.5	0.667	
*lab*ncE*	0.5	0.5	g66b	

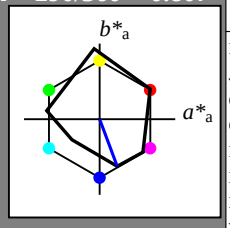
***relative* Inform. Technology (IT)**				
*olvi3**	0.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	0.0	1.0	1.0	1.0
*cmyn4**	1.0	0.0	0.0	0.0
***standard* and *adapted* CIELAB**				
*LAB*LAB*	58.62	−30.62	−42.73	
*LAB*LABa*	58.62	−30.34	−45.01	
*LAB*TCHa*	50.0	54.29	236.01	
relative* CIELAB *lab				
*lab*lab*	0.525	−0.558	−0.828	
*lab*tch*	0.5	1.0	0.656	
*lab*nch*	0.0	1.0	0.656	
***relative* Natural Colour (NC)**				
*lab*lrj*	0.525	−0.496	−0.867	
*lab*tce*	0.5	1.0	0.667	
*lab*ncE*	0.0	1.0	g66b	

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 217/360 = 0.601 (links)
3 stufige Reihen für konstanten CIELAB Buntton 236/360 = 0.656 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h = lab*h = 290/360 = 0.807***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 37 66 290
olv*Ma: 0.0 0.0 1.0

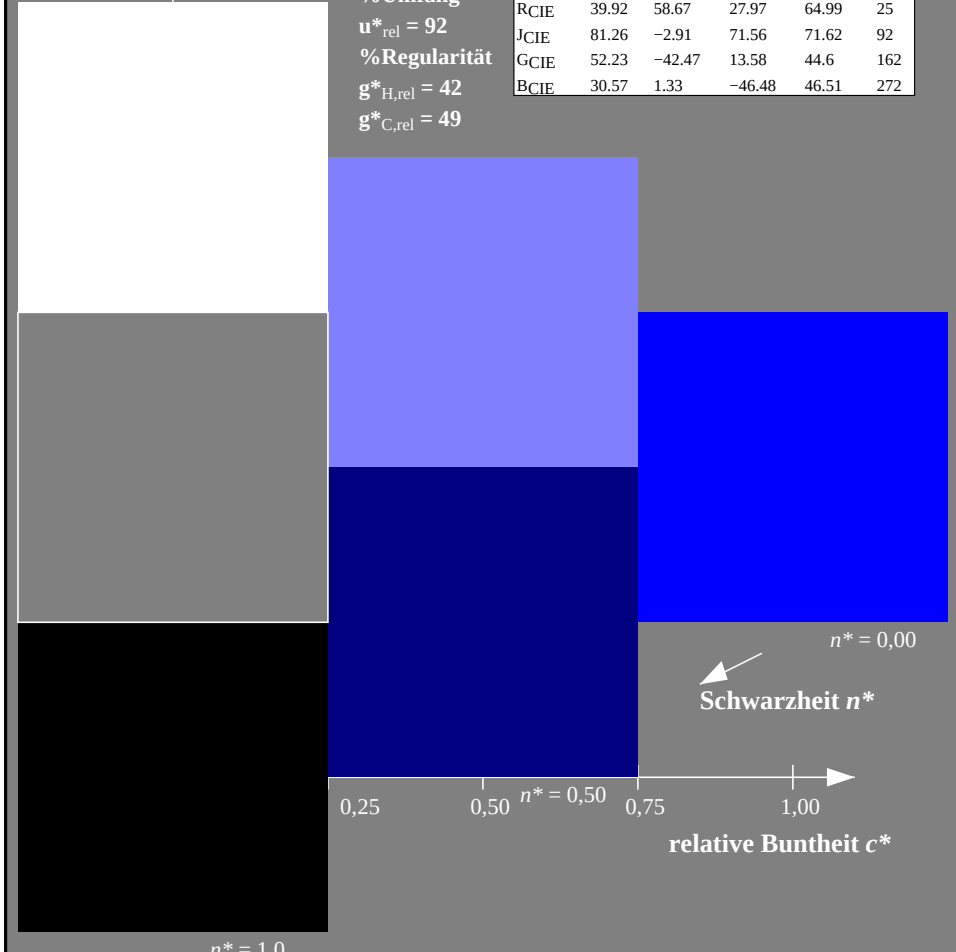
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	−7.27	93.19	93.48	94
GMa	52.11	−69.93	11.26	70.85	171
G50BMa	45.03	−36.65	−27.13	45.61	217
BMa	36.65	23.26	−62.27	66.49	290
B50RMa	34.94	57.27	−43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	−2.91	71.56	71.62	92
GCIE	52.23	−42.47	13.58	44.6	162
BCIE	30.57	1.33	−46.48	46.51	272

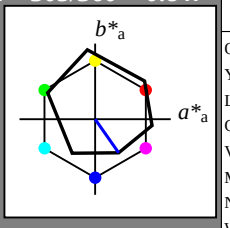
%Umfang
u*rel = 92
%Regularität
g*H,rel = 42
g*C,rel = 49



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h = lab*h = 305/360 = 0.847**
lab*tch* und *lab*nch

D65: Buntton V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

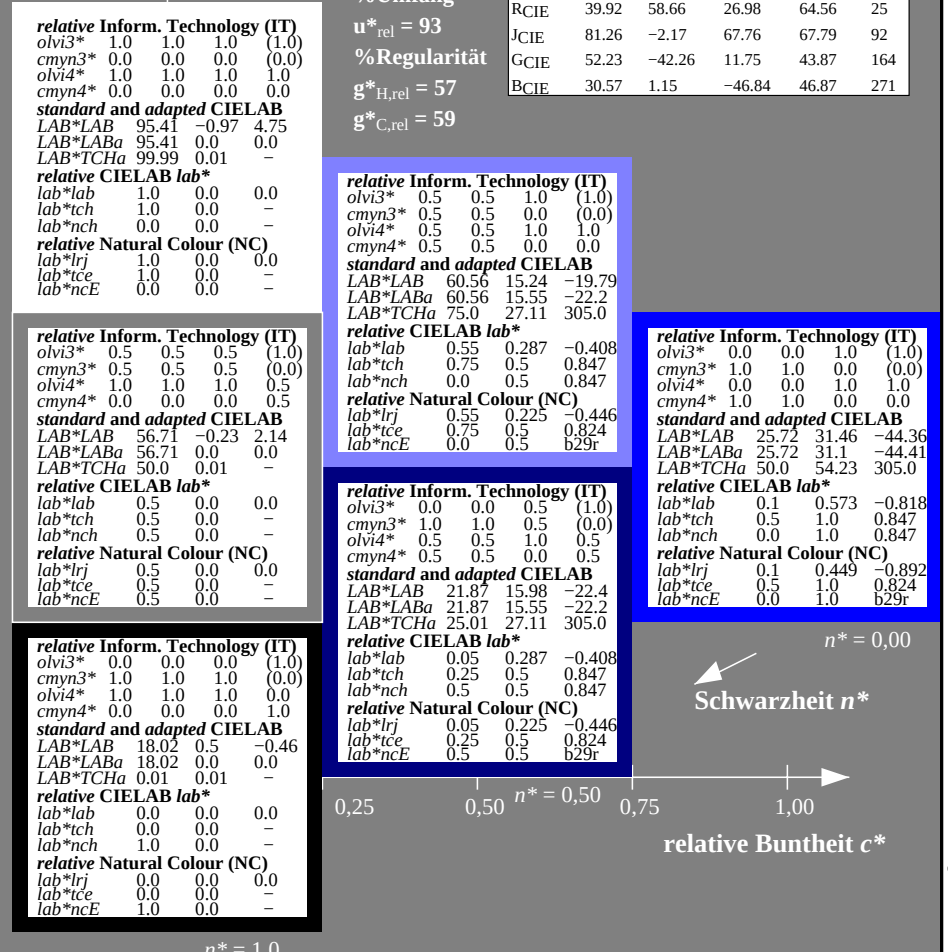
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	−10.27	91.77	92.34	96
LMa	50.9	−62.79	34.95	71.87	151
CMa	58.62	−30.35	−45.01	54.3	236
VMa	25.71	31.11	−44.42	54.24	305
MMa	48.13	75.27	−8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	−2.17	67.76	67.79	92
GCIE	52.23	−42.26	11.75	43.87	164
BCIE	30.57	1.15	−46.84	46.87	271

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59



relative Inform. Technology (IT)			
olvi3*	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0
standard and adapted CIELAB			
LAB*LAB	95.41	−0.97	4.75
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	–
relative CIELAB lab*			
lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	–
lab*nch	0.0	0.0	–
relative Natural Colour (NC)			
lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	–
lab*ncE	0.0	0.0	–

relative Inform. Technology (IT)			
olvi3*	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	(0.0)
olvi4*	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.5
standard and adapted CIELAB			
LAB*LAB	56.71	−0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCHa	50.0	0.01	–
relative CIELAB lab*			
lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	–
lab*nch	0.5	0.0	–
relative Natural Colour (NC)			
lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	–
lab*ncE	0.5	0.0	–

relative Inform. Technology (IT)			
olvi3*	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	(0.0)
olvi4*	1.0	1.0	0.0
cmyn4*	0.0	0.0	1.0
standard and adapted CIELAB			
LAB*LAB	18.02	0.5	−0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	0.01	0.01	–
relative CIELAB lab*			
lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	–
lab*nch	1.0	0.0	–
relative Natural Colour (NC)			
lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	–
lab*ncE	1.0	0.0	–

relative Inform. Technology (IT)			
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	60.56	15.24	−19.79	
LAB*LABa	60.56	15.55	−22.2	
LAB*TCHa	75.0	27.11	305.0	
relative CIELAB lab*				
lab*lab	0.55	0.287	−0.408	
lab*tch	0.75	0.5	0.847	
lab*nch	0.0	0.5	0.847	
relative Natural Colour (NC)				
lab*lrj	0.55	0.225	−0.446	
lab*tce	0.75	0.5	0.824	
lab*ncE	0.0	0.5	b29r	

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	21.87	15.98	−22.4	
LAB*LABa	21.87	15.55	−22.2	
LAB*TCHa	25.01	27.11	305.0	
relative CIELAB lab*				
lab*lab	0.05	0.287	−0.408	
lab*tch	0.25	0.5	0.847	
lab*nch	0.5	0.5	0.847	
relative Natural Colour (NC)				
lab*lrj	0.05	0.225	−0.446	
lab*tce	0.25	0.5	0.824	
lab*ncE	0.5	0.5	b29r	

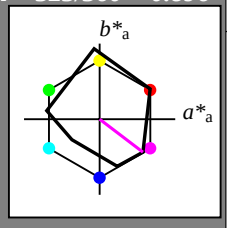
relative Inform. Technology (IT)			
olvi3*	0.0	0.0	1.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	0.0	0.0	1.0	1.0
cmyn4*	1.0	1.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	25.72	31.46	−44.36	
LAB*LABa	25.72	31.1	−44.41	
LAB*TCHa	50.0	54.23	305.0	
relative CIELAB lab*				
lab*lab	0.1	0.573	−0.818	
lab*tch	0.5	1.0	0.847	
lab*nch	0.0	1.0	0.847	
relative Natural Colour (NC)				
lab*lrj	0.1	0.449	−0.892	
lab*tce	0.5	1.0	0.824	
lab*ncE	0.0	1.0	b29r	

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 290/360 = 0.807 (links)
3 stufige Reihen für konstanten CIELAB Buntton 305/360 = 0.847 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 323/360 = 0.896*
lab*tch* und *lab*nch

D65: Buntton B50R
LCH*Ma: 35 72 323
olv*Ma: 1.0 0.0 1.0

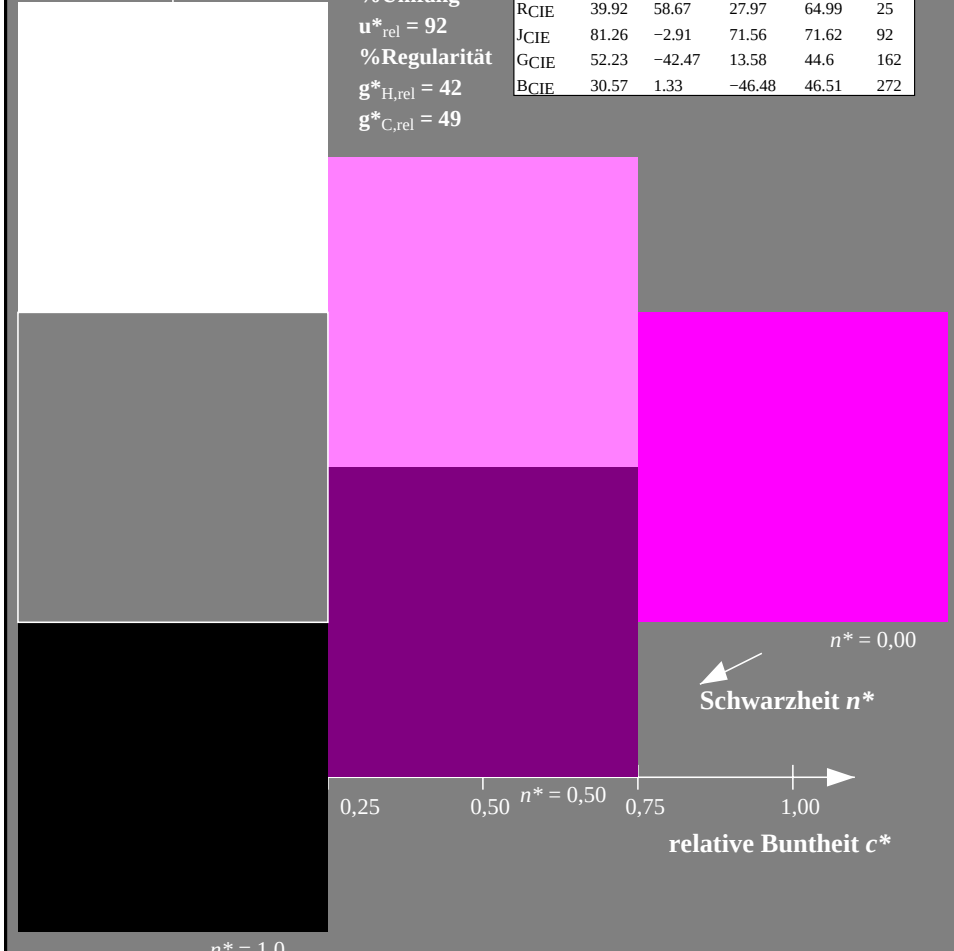
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	−7.27	93.19	93.48	94
GMa	52.11	−69.93	11.26	70.85	171
G50BMa	45.03	−36.65	−27.13	45.61	217
BMa	36.65	23.26	−62.27	66.49	290
B50RMa	34.94	57.27	−43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	−2.91	71.56	71.62	92
GCIE	52.23	−42.47	13.58	44.6	162
BCIE	30.57	1.33	−46.48	46.51	272

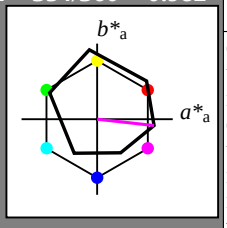
%Umfang
u*rel = 92
%Regularität
g*H,rel = 42
g*C,rel = 49



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 354/360 = 0.982*
lab*tch* und *lab*nch

D65: Buntton M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	−10.27	91.77	92.34	96
LMa	50.9	−62.79	34.95	71.87	151
CMa	58.62	−30.35	−45.01	54.3	236
VMa	25.71	31.11	−44.42	54.24	305
MMa	48.13	75.27	−8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	−2.17	67.76	67.79	92
GCIE	52.23	−42.26	11.75	43.87	164
BCIE	30.57	1.15	−46.84	46.87	271

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

***relative* Inform. Technology (IT)**			
*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	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–
relative* CIELAB *lab*			
*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

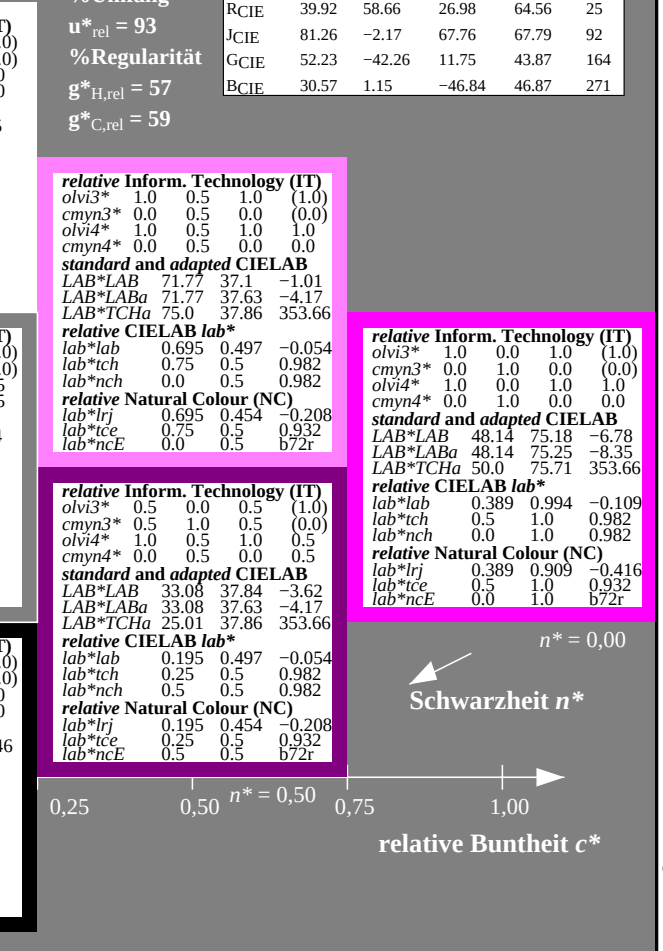
***relative* Inform. Technology (IT)**			
*olvi3**	0.5	0.5	0.5 (1.0)
*cmyn3**	0.5	0.5	0.5 (0.0)
*olvi4**	1.0	1.0	1.0 0.5
*cmyn4**	0.0	0.0	0.0 0.5
***standard* and *adapted* CIELAB**			
*LAB*LAB*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–
relative* CIELAB *lab*			
*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

***relative* Inform. Technology (IT)**			
*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–
relative* CIELAB *lab*			
*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

***relative* Inform. Technology (IT)**			
*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*	71.77	37.1	−1.01
*LAB*LABa*	71.77	37.63	−4.17
*LAB*TCHa*	75.0	37.86	353.66
relative* CIELAB *lab*			
*lab*lab*	0.695	0.497	−0.054
*lab*tch*	0.75	0.5	0.982
*lab*nch*	0.0	0.5	0.982
***relative* Natural Colour (NC)**			
*lab*lrj*	0.695	0.454	−0.208
*lab*tce*	0.75	0.5	0.932
*lab*ncE*	0.0	0.5	b72r

***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*	33.08	37.84	−3.62
*LAB*LABa*	33.08	37.63	−4.17
*LAB*TCHa*	25.01	37.86	353.66
relative* CIELAB *lab*			
*lab*lab*	0.195	0.497	−0.054
*lab*tch*	0.25	0.5	0.982
*lab*nch*	0.5	0.5	0.982
***relative* Natural Colour (NC)**			
*lab*lrj*	0.195	0.454	−0.208
*lab*tce*	0.25	0.5	0.932
*lab*ncE*	0.5	0.5	b72r

***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*	48.14	75.18	−6.78
*LAB*LABa*	48.14	75.25	−8.35
*LAB*TCHa*	50.0	75.71	353.66
relative* CIELAB *lab*			
*lab*lab*	0.389	0.994	−0.109
*lab*tch*	0.5	1.0	0.982
*lab*nch*	0.0	1.0	0.982
***relative* Natural Colour (NC)**			
*lab*lrj*	0.389	0.909	−0.416
*lab*tce*	0.5	1.0	0.932
*lab*ncE*	0.0	1.0	b72r

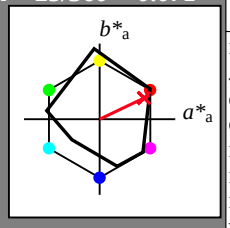


TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 323/360 = 0.896 (links)
3 stufige Reihen für konstanten CIELAB Buntton 354/360 = 0.982 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 25/360 = 0.071*
lab*tch* und *lab*nch

D65: Buntton R
LCH*Ma: 48 73 25
olv*Ma: 1.0 0.0 0.1

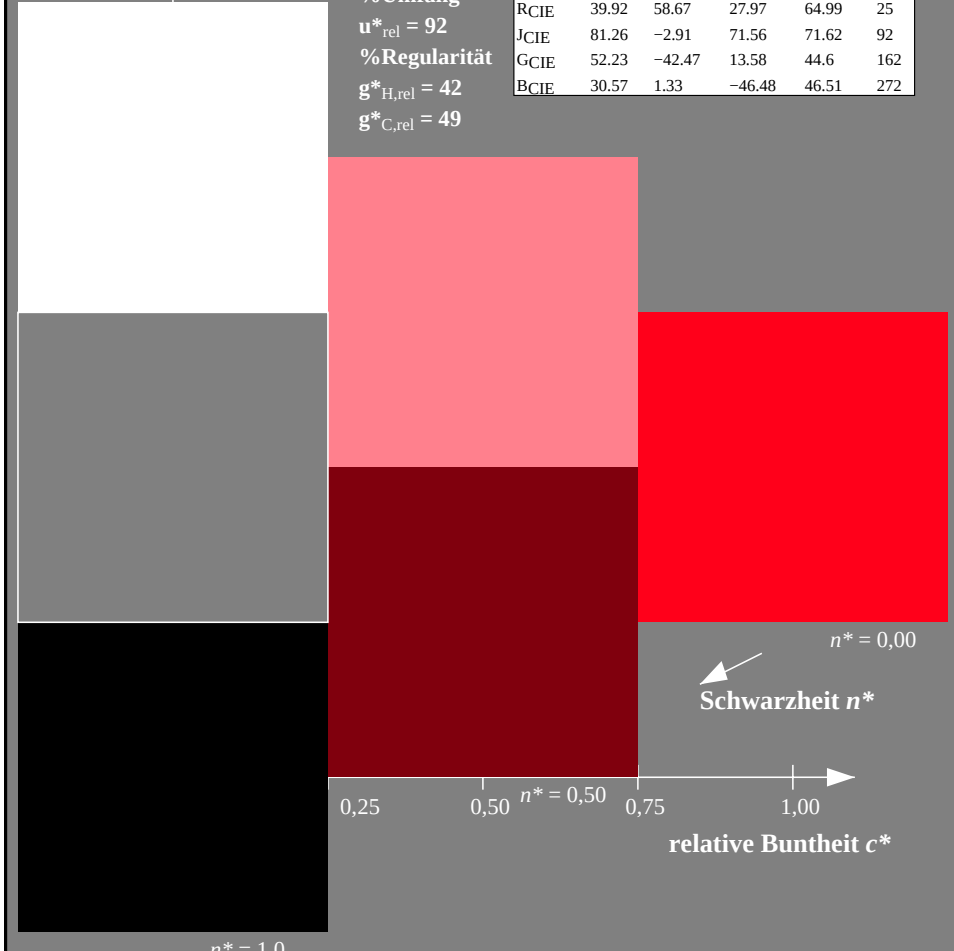
Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 92
%Regularität
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49

MRS18a; adaptierte CIELAB-Daten

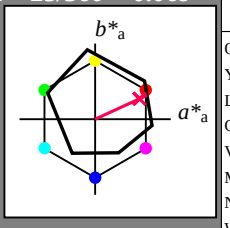
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 25/360 = 0.069*
lab*tch* und *lab*nch

D65: Buntton R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

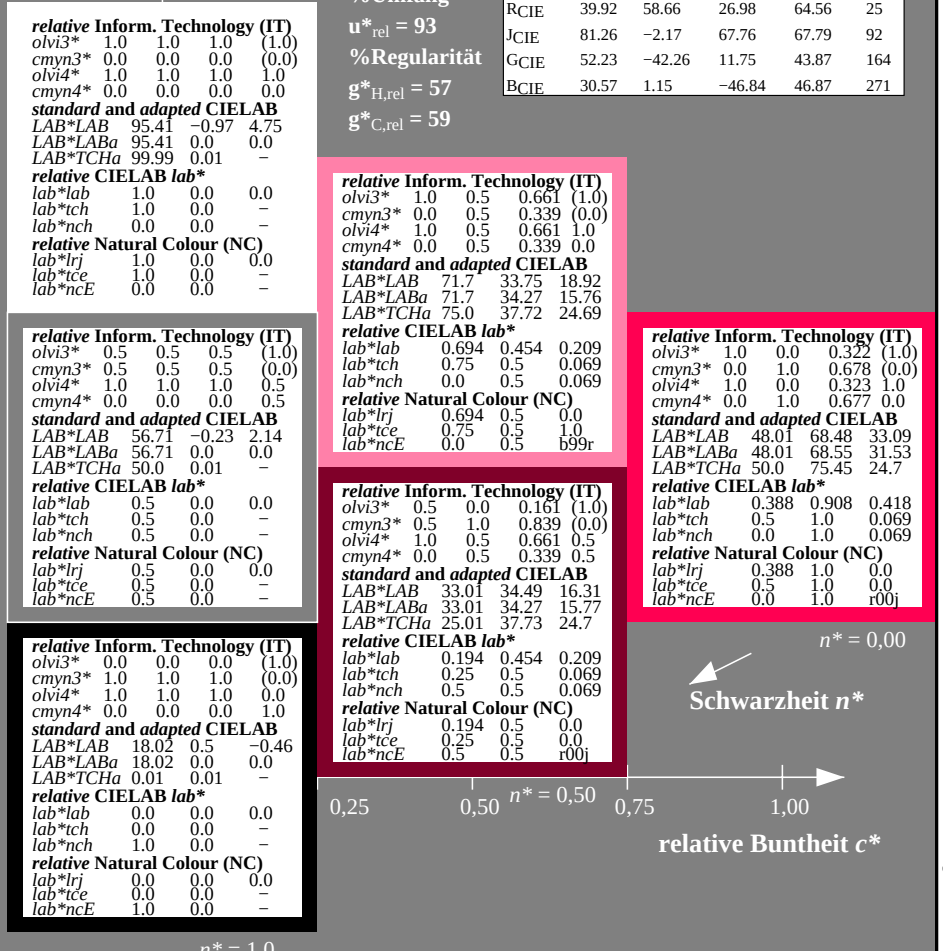
Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271



***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	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

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

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

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

*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

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

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

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

*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

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

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

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

*olvi3**	1.0	0.5	0.661 (1.0)
*cmyn3**	0.0	0.5	0.339 (0.0)
*olvi4**	1.0	0.5	0.661 1.0
*cmyn4**	0.0	0.5	0.339 0.0

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

*LAB*LAB*	71.7	33.75	18.92
*LAB*LABa*	71.7	34.27	15.76
*LAB*TCHa*	75.0	37.72	24.69

relative* CIELAB *lab*

*lab*lab*	0.694	0.454	0.209
*lab*tch*	0.75	0.5	0.069
*lab*nch*	0.0	0.5	0.069

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

*lab*lrj*	0.694	0.5	0.0
*lab*tce*	0.75	0.5	1.0
*lab*ncE*	0.0	0.5	b99r

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

*olvi3**	0.5	0.0	0.161 (1.0)
*cmyn3**	0.5	1.0	0.839 (0.0)
*olvi4**	1.0	0.5	0.661 0.5
*cmyn4**	0.0	0.5	0.339 0.5

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

*LAB*LAB*	33.01	34.49	16.31
*LAB*LABa*	33.01	34.27	15.77
*LAB*TCHa*	25.01	37.73	24.7

relative* CIELAB *lab*

*lab*lab*	0.194	0.454	0.209
*lab*tch*	0.25	0.5	0.069
*lab*nch*	0.5	0.5	0.069

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

*lab*lrj*	0.194	0.5	0.0
*lab*tce*	0.25	0.5	0.0
*lab*ncE*	0.5	0.5	r00j

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

*olvi3**	1.0	0.0	0.322 (1.0)
*cmyn3**	0.0	1.0	0.678 (0.0)
*olvi4**	1.0	0.0	0.323 1.0
*cmyn4**	0.0	1.0	0.677 0.0

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

*LAB*LAB*	48.01	68.48	33.09
*LAB*LABa*	48.01	68.55	31.53
*LAB*TCHa*	50.0	75.45	24.7

relative* CIELAB *lab*

*lab*lab*	0.388	0.908	0.418
*lab*tch*	0.5	1.0	0.069
*lab*nch*	0.0	1.0	0.069

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

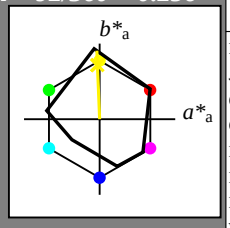
*lab*lrj*	0.388	1.0	0.0
*lab*tce*	0.5	1.0	0.0
*lab*ncE*	0.0	1.0	r00j

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (links)
3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 92/360 = 0.256*
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 89 91 92
olv*Ma: 1.0 0.95 0.0

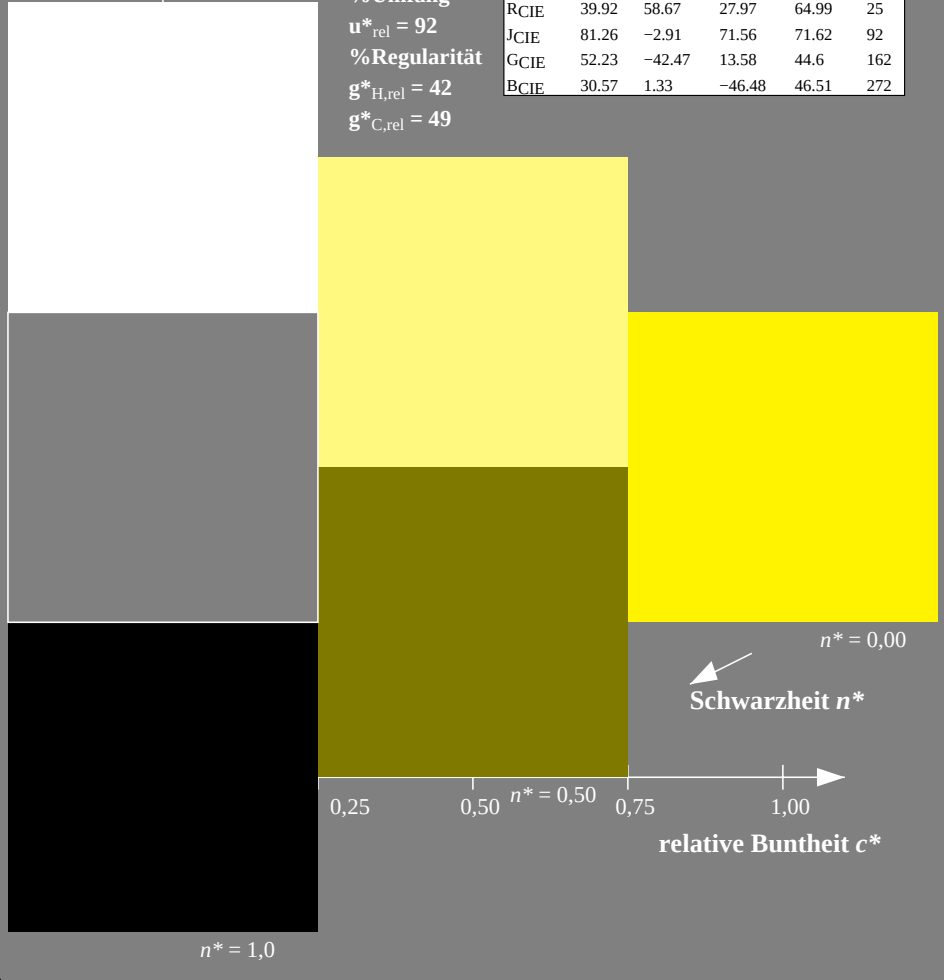
Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 92
%Regularität
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49

MRS18a; adaptierte CIELAB-Daten

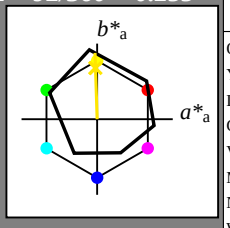
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 92/360 = 0.255*
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

Dreiecks-Helligkeit *t**



%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

***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	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

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

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

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

*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

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

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

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

*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

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

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

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

*olvi3**	1.0	0.951	0.5	(1.0)
*cmyn3**	0.0	0.049	0.5	(0.0)
*olvi4**	1.0	0.951	0.5	1.0
*cmyn4**	0.0	0.049	0.5	0.0

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

*LAB*LAB*	90.8	−2.3	48.29
*LAB*LABa*	90.8	−1.41	43.85
*LAB*TCHa*	75.0	43.87	91.85

relative* CIELAB *lab*

*lab*lab*	0.94	−0.015	0.5
*lab*tch*	0.75	0.5	0.255
*lab*nch*	0.0	0.5	0.255

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

*lab*lrj*	0.94	0.0	0.5
*lab*tce*	0.75	0.5	0.25
*lab*ncE*	0.0	0.5	j00g

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

*olvi3**	0.5	0.451	0.0	(1.0)
*cmyn3**	0.5	0.549	1.0	(0.0)
*olvi4**	1.0	0.951	0.5	0.5
*cmyn4**	0.0	0.049	0.5	0.5

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

*LAB*LAB*	52.1	−1.55	45.68
*LAB*LABa*	52.1	−1.4	43.84
*LAB*TCHa*	25.01	43.87	91.84

relative* CIELAB *lab*

*lab*lab*	0.44	−0.015	0.5
*lab*tch*	0.25	0.5	0.255
*lab*nch*	0.5	0.5	0.255

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

*lab*lrj*	0.44	0.0	0.5
*lab*tce*	0.25	0.5	0.25
*lab*ncE*	0.5	0.5	r99j

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

*olvi3**	1.0	0.901	0.0	(1.0)
*cmyn3**	0.0	0.099	1.0	(0.0)
*olvi4**	1.0	0.902	0.0	1.0
*cmyn4**	0.0	0.098	1.0	0.0

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

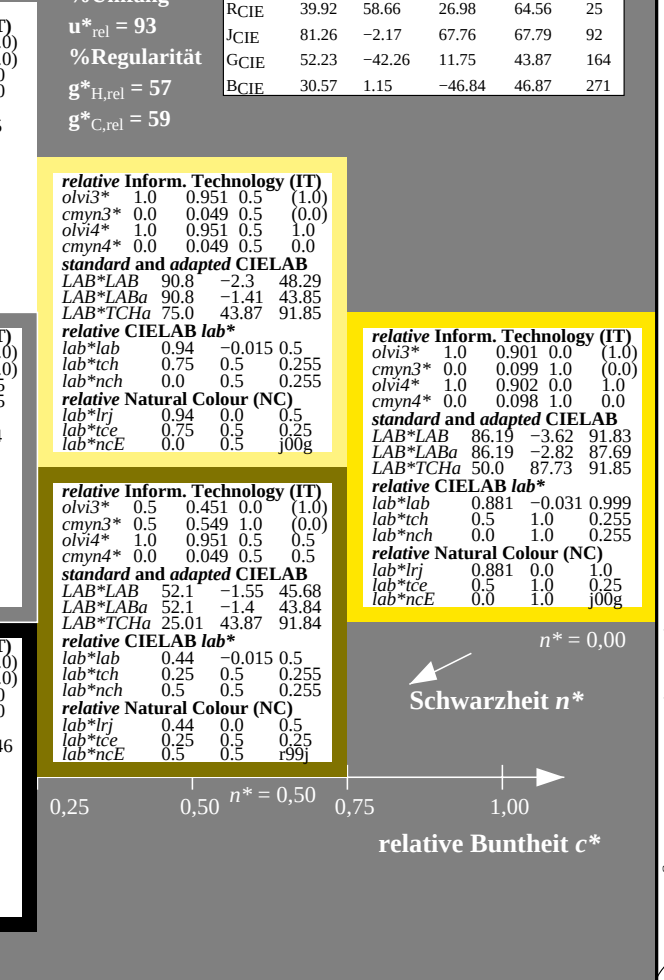
*LAB*LAB*	86.19	−3.62	91.83
*LAB*LABa*	86.19	−2.82	87.69
*LAB*TCHa*	50.0	87.73	91.85

relative* CIELAB *lab*

*lab*lab*	0.881	−0.031	0.999
*lab*tch*	0.5	1.0	0.255
*lab*nch*	0.0	1.0	0.255

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

*lab*lrj*	0.881	0.0	1.0
*lab*tce*	0.5	1.0	0.25
*lab*ncE*	0.0	1.0	j00g

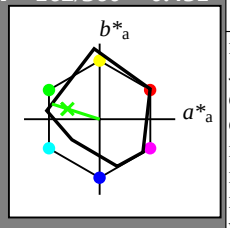


TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (links)

3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h* = lab*h = 162/360 = 0.451*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 56 66 162
olv*Ma: 0.11 1.0 0.0

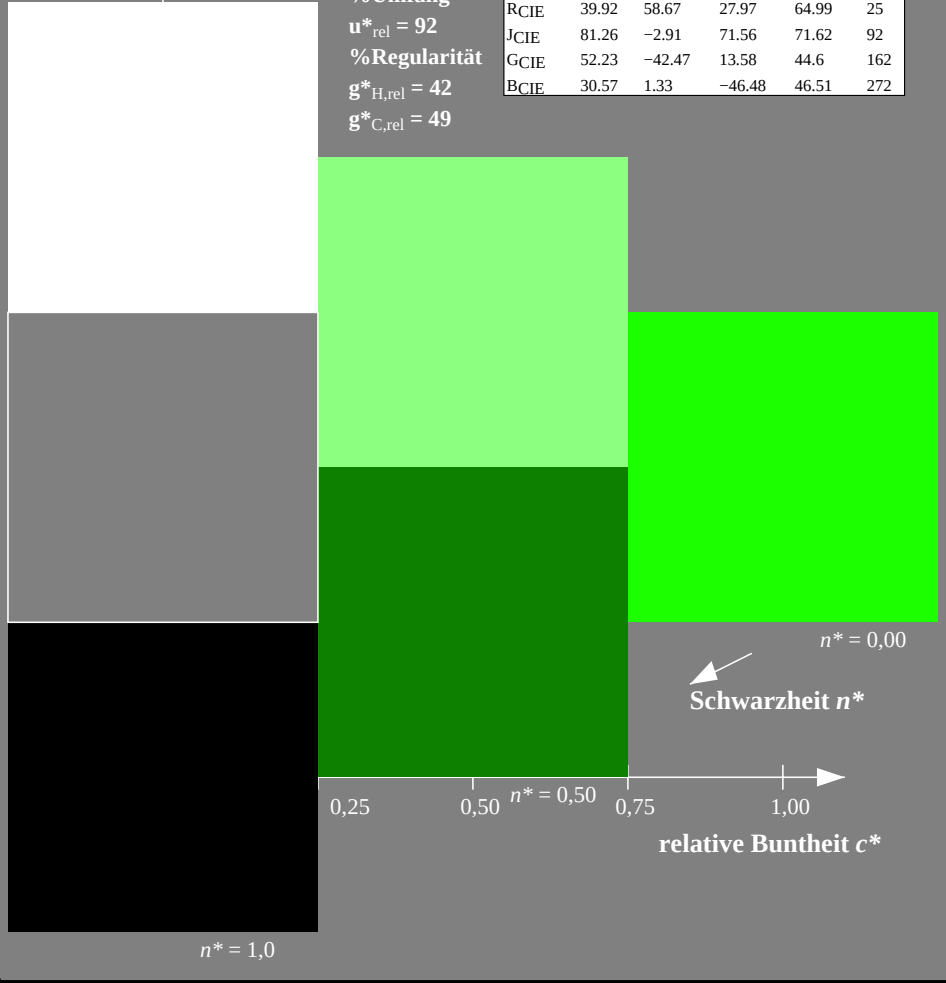


MRS18a; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

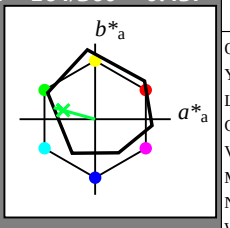
%Umfang
u^*_{rel} = 92
%Regularität
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49

Dreiecks-Helligkeit *t**



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h* = lab*h = 164/360 = 0.457*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

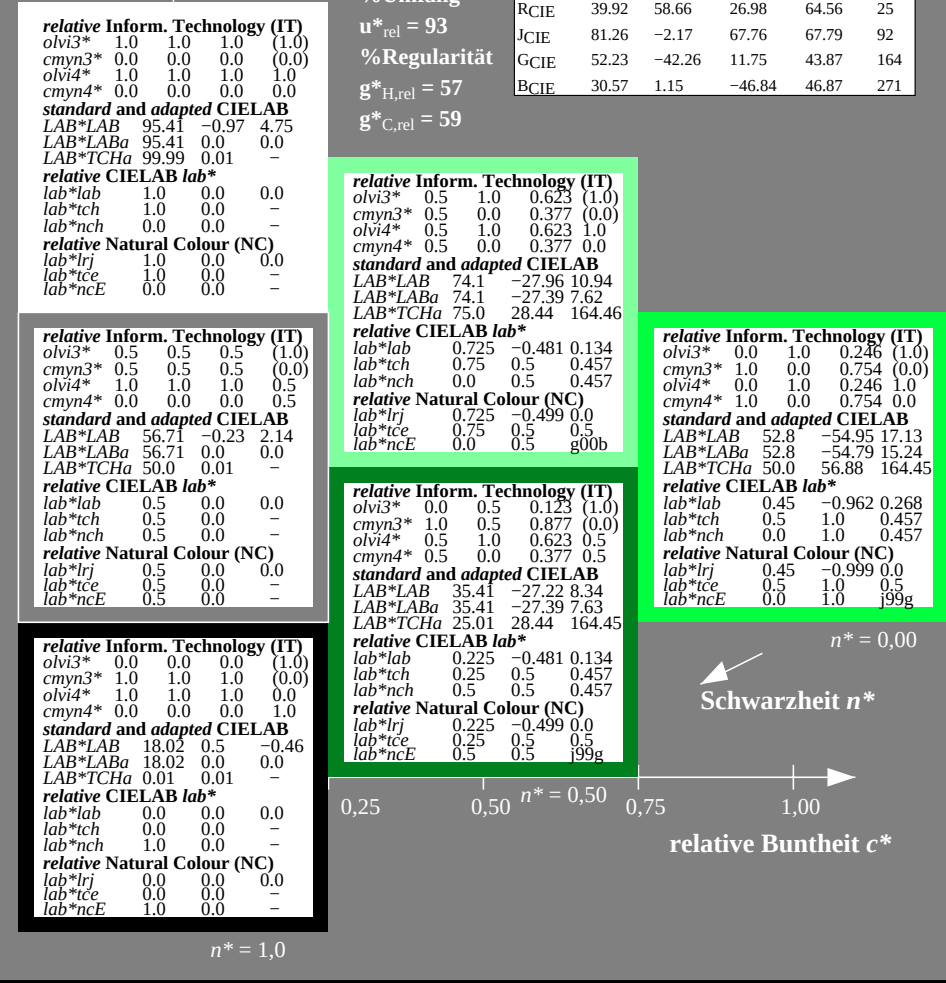


ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

Dreiecks-Helligkeit *t**



***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	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

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

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

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

*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

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

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

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

*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

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

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

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

*olvi3**	0.5	1.0	0.623 (1.0)
*cmyn3**	0.5	0.0	0.377 (0.0)
*olvi4**	0.5	1.0	0.623 1.0
*cmyn4**	0.5	0.0	0.377 0.0

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

*LAB*LAB*	74.1	−27.96	10.94
*LAB*LABa*	74.1	−27.39	7.62
*LAB*TCHa*	75.0	28.44	164.46

relative* CIELAB *lab*

*lab*lab*	0.725	−0.481	0.134
*lab*tch*	0.75	0.5	0.457
*lab*nch*	0.0	0.5	0.457

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

*lab*lrj*	0.725	−0.499	0.0
*lab*tce*	0.75	0.5	0.5
*lab*ncE*	0.0	0.5	g00b

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

*olvi3**	0.0	0.5	0.123 (1.0)
*cmyn3**	1.0	0.5	0.877 (0.0)
*olvi4**	0.5	1.0	0.623 0.5
*cmyn4**	0.5	0.0	0.377 0.5

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

*LAB*LAB*	35.41	−27.22	8.34
*LAB*LABa*	35.41	−27.39	7.63
*LAB*TCHa*	25.01	28.44	164.45

relative* CIELAB *lab*

*lab*lab*	0.225	−0.481	0.134
*lab*tch*	0.25	0.5	0.457
*lab*nch*	0.5	0.5	0.457

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

*lab*lrj*	0.225	−0.499	0.0
*lab*tce*	0.25	0.5	0.5
*lab*ncE*	0.5	0.5	j99g

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

*olvi3**	0.0	1.0	0.246 (1.0)
*cmyn3**	1.0	0.0	0.754 (0.0)
*olvi4**	0.0	1.0	0.246 1.0
*cmyn4**	1.0	0.0	0.754 0.0

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

*LAB*LAB*	52.8	−54.95	17.13
*LAB*LABa*	52.8	−54.79	15.24
*LAB*TCHa*	50.0	56.88	164.45

relative* CIELAB *lab*

*lab*lab*	0.45	−0.962	0.268
*lab*tch*	0.5	1.0	0.457
*lab*nch*	0.0	1.0	0.457

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

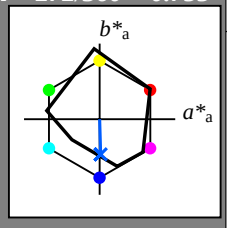
*lab*lrj*	0.45	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	j99g

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (links)
3 stufige Reihen für konstanten CIELAB Buntton 164/360 = 0.457 (rechts)

Eingabe: Farbmetrisches Reflexions-System MRS18a
für Buntton *h = lab*h = 272/360 = 0.755***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 40 49 272
olv*Ma: 0.0 0.36 1.0

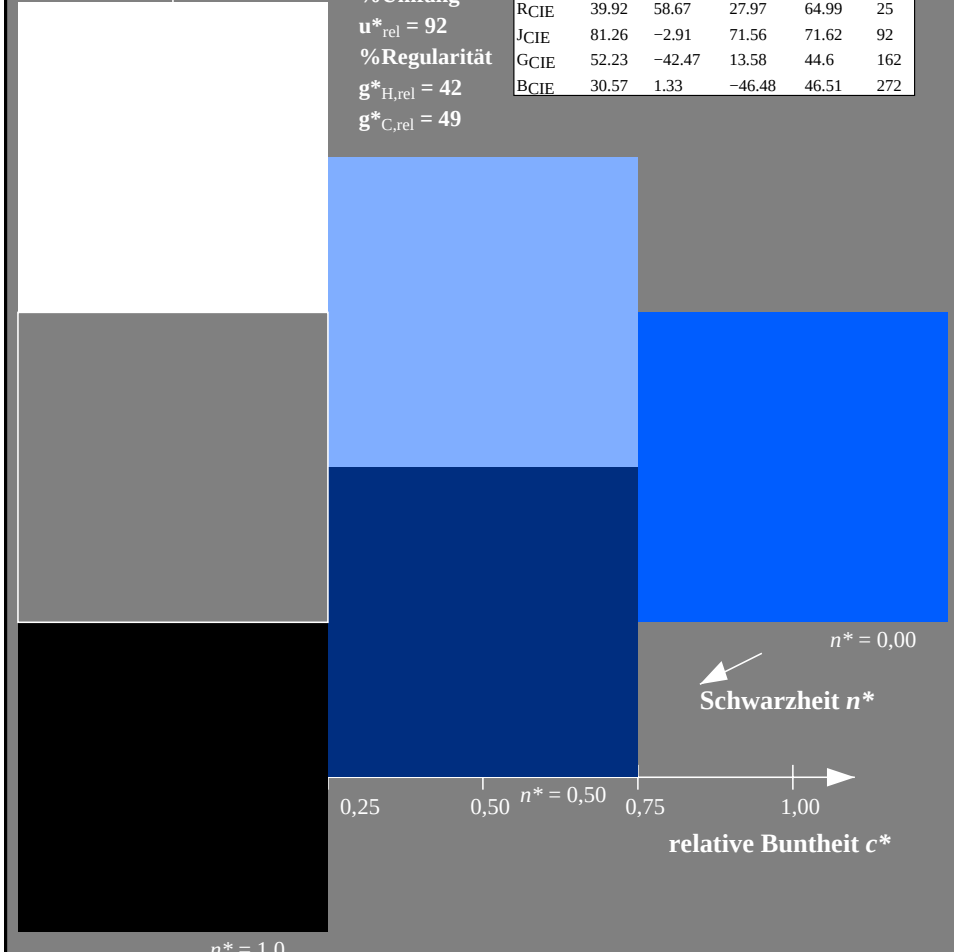
Dreiecks-Helligkeit *t**



MRS18a; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	−7.27	93.19	93.48	94
GMa	52.11	−69.93	11.26	70.85	171
G50BMa	45.03	−36.65	−27.13	45.61	217
BMa	36.65	23.26	−62.27	66.49	290
B50RMa	34.94	57.27	−43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	−2.91	71.56	71.62	92
GCIE	52.23	−42.47	13.58	44.6	162
BCIE	30.57	1.33	−46.48	46.51	272

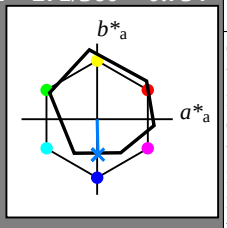
%Umfang
u*rel = 92
%Regularität
g*H,rel = 42
g*C,rel = 49



Ausgabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h = lab*h = 271/360 = 0.754***
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

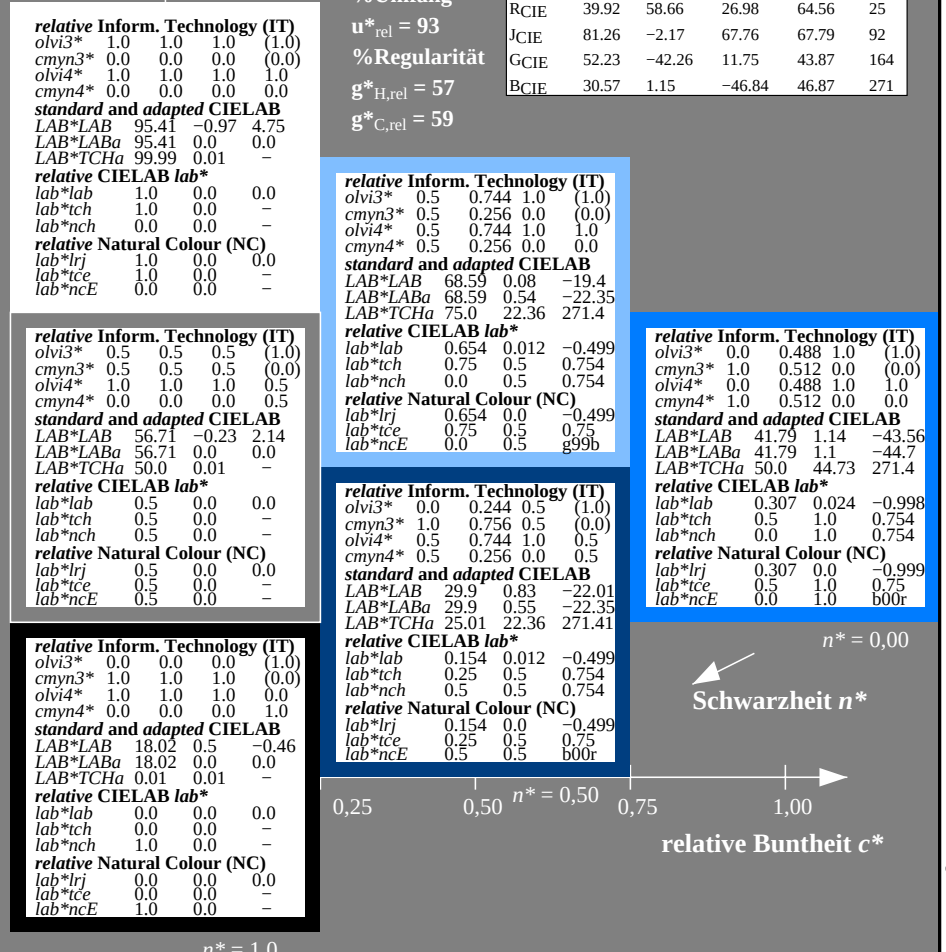
Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	−10.27	91.77	92.34	96
LMa	50.9	−62.79	34.95	71.87	151
CMa	58.62	−30.35	−45.01	54.3	236
VMa	25.71	31.11	−44.42	54.24	305
MMa	48.13	75.27	−8.35	75.73	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	−2.17	67.76	67.79	92
GCIE	52.23	−42.26	11.75	43.87	164
BCIE	30.57	1.15	−46.84	46.87	271

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59



***relative* Inform. Technology (IT)**			
*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	−0.97	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–
relative* CIELAB *lab*			
*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

***relative* Inform. Technology (IT)**			
*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*	56.71	−0.23	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–
relative* CIELAB *lab*			
*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

***relative* Inform. Technology (IT)**			
*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*	18.02	0.5	−0.46
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–
relative* CIELAB *lab*			
*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–
***relative* Natural Colour (NC)**			
*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

***relative* Inform. Technology (IT)**			
*olvi3**	0.5	0.744	1.0 (1.0)
*cmyn3**	0.5	0.256	0.0 (0.0)
*olvi4**	0.5	0.744	1.0 1.0
*cmyn4**	0.5	0.256	0.0 0.0
***standard* and *adapted* CIELAB**			
*LAB*LAB*	68.59	0.08	−19.4
*LAB*LABa*	68.59	0.54	−22.35
*LAB*TCHa*	75.0	22.36	271.4
relative* CIELAB *lab*			
*lab*lab*	0.654	0.012	−0.499
*lab*tch*	0.75	0.5	0.754
*lab*nch*	0.0	0.5	0.754
***relative* Natural Colour (NC)**			
*lab*lrj*	0.654	0.0	−0.499
*lab*tce*	0.75	0.5	0.75
*lab*ncE*	0.0	0.5	g99b

***relative* Inform. Technology (IT)**			
*olvi3**	0.0	0.244	0.5 (1.0)
*cmyn3**	1.0	0.756	0.5 (0.0)
*olvi4**	0.5	0.744	1.0 0.5
*cmyn4**	0.5	0.256	0.0 0.5
***standard* and *adapted* CIELAB**			
*LAB*LAB*	29.9	0.83	−22.01
*LAB*LABa*	29.9	0.55	−22.35
*LAB*TCHa*	25.01	22.36	271.41
relative* CIELAB *lab*			
*lab*lab*	0.154	0.012	−0.499
*lab*tch*	0.25	0.5	0.754
*lab*nch*	0.5	0.5	0.754
***relative* Natural Colour (NC)**			
*lab*lrj*	0.154	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	0.488	1.0 (1.0)
*cmyn3**	1.0	0.512	0.0 (0.0)
*olvi4**	0.0	0.488	1.0 1.0
*cmyn4**	1.0	0.512	0.0 0.0
***standard* and *adapted* CIELAB**			
*LAB*LAB*	41.79	1.14	−43.56
*LAB*LABa*	41.79	1.1	−44.7
*LAB*TCHa*	50.0	44.73	271.4
relative* CIELAB *lab*			
*lab*lab*	0.307	0.024	−0.998
*lab*tch*	0.5	1.0	0.754
*lab*nch*	0.0	1.0	0.754
***relative* Natural Colour (NC)**			
*lab*lrj*	0.307	0.0	−0.999
*lab*tce*	0.5	1.0	0.75
*lab*ncE*	0.0	1.0	b00r

TG060−7, 3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (links)
3 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (rechts)