

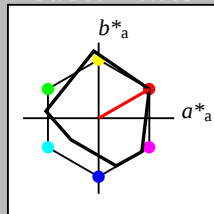
Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 30/360 = 0.083$

lab^*ch und lab^*nch

D65: Buntton R
LCH*Ma: 50 77 30
olv*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

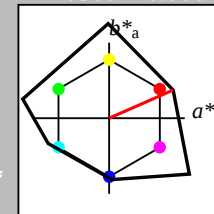
Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 24/360 = 0.066$

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

%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*TCa	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*TCa	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*TCa	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*TCa	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	0.996

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*TCa	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	0.996

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*TCa	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	0.996

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 94/360 = 0.261$

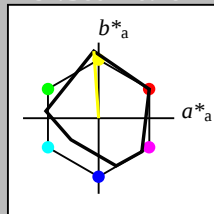
lab^*ch und lab^*nch

D65: Buntton J

LCH*Ma: 91 89 94

olv*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 91/360 = 0.252$

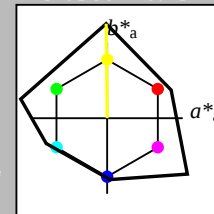
lab^*ch und lab^*nch

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

%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

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10Q/Q03G01FP.PS/.PDF BAM-Material: Code=rha4ta
Anwendung für Beurteilung und Messung von Drucker- oder Monitorssystemen, Yr=2.5, XYZ
/UG03/ Form: 2/10, Serie: 1/1, Seite: 2 Seite 2 von 2

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.261 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

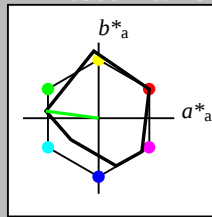
D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne
input: `cmv0* setcmvcolor`
output: `olv* setrgbcolor / w* setgray`

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = \text{lab}^*h = 172/360 = 0.479$
 lab^*ch und lab^*nch

D65: Buntton G
LCH*Ma: 52 70 172
olv*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

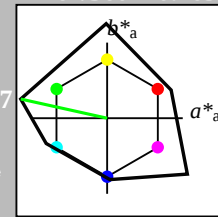
$g^*_{C,rel} = 52$

Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = \text{lab}^*h = 167/360 = 0.465$
 lab^*ch 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	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%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 -114.225.35
LAB*LABa 63.07 -114.225.34
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

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10Q/Q03G02FP.PS/.PDF BAM-Material: Code=rha4ta
Anwendung für Beurteilung und Messung von Drucker- oder Monitorssystemen, Yr=2.5, XYZ
/UG03/ Form: 3/10, Serie: 1/1, Seite: 3
Seite 3 von 3

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 172/360 = 0.479 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne
input: `cmv0* setcmvcolor`
output: `olv* setrgbcolor / w* setgray`

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 218/360 = 0.605$

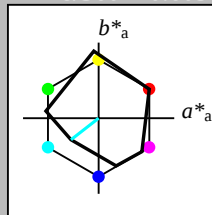
lab^*tch und lab^*nch

D65: Buntton G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	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

$u^*_{rel} = 91$

%Regularität

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

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

Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 203/360 = 0.563$

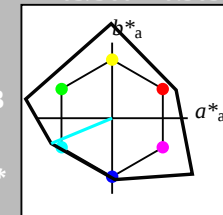
lab^*tch und lab^*nch

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	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
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
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

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*TCa	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*TCa	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*	0.0	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	35.23	-40.23	-16.7
LAB*LABa	35.23	-40.29	-16.72
LAB*TCa	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*TCa	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*TCa	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*	0.0	0.5	0.5	(1.0)
cmyn3*	0.5	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*TCa	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

Schwarzheit n^*

relative Buntheit c^*

Schwarzheit n^*

relative Buntheit c^*

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

input: $cmv0^* setcmykcolor$

output: $olv^* setrgbcolor / w^* setgray$

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

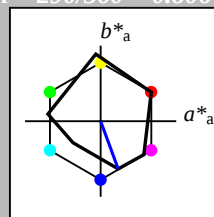
D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = \text{lab}^*h = 290/360 = 0.806$
 lab^*tch und lab^*nch

D65: Buntton B
LCH*Ma: 37 67 290
olv*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

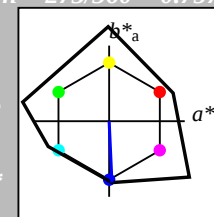
$g^*_{C,rel} = 52$

Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = \text{lab}^*h = 273/360 = 0.757$
 lab^*tch und lab^*nch

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

Dreiecks-Helligkeit t^*



NCS11; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%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*TCa 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 -

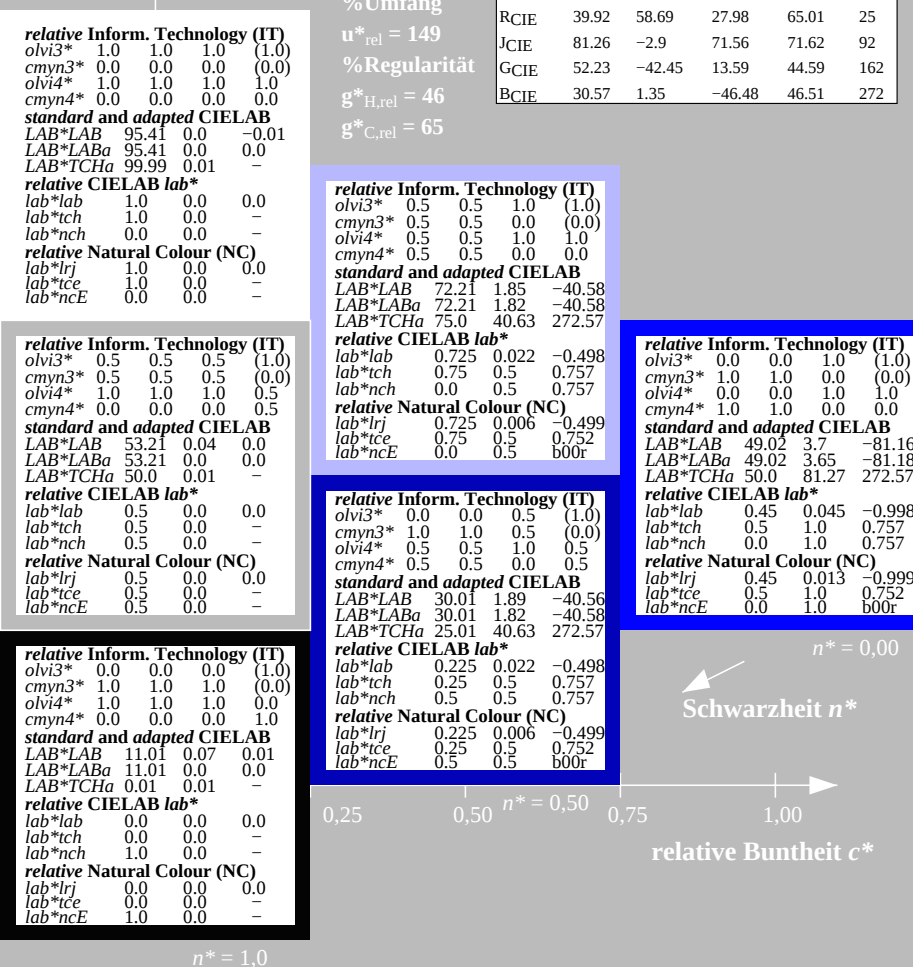
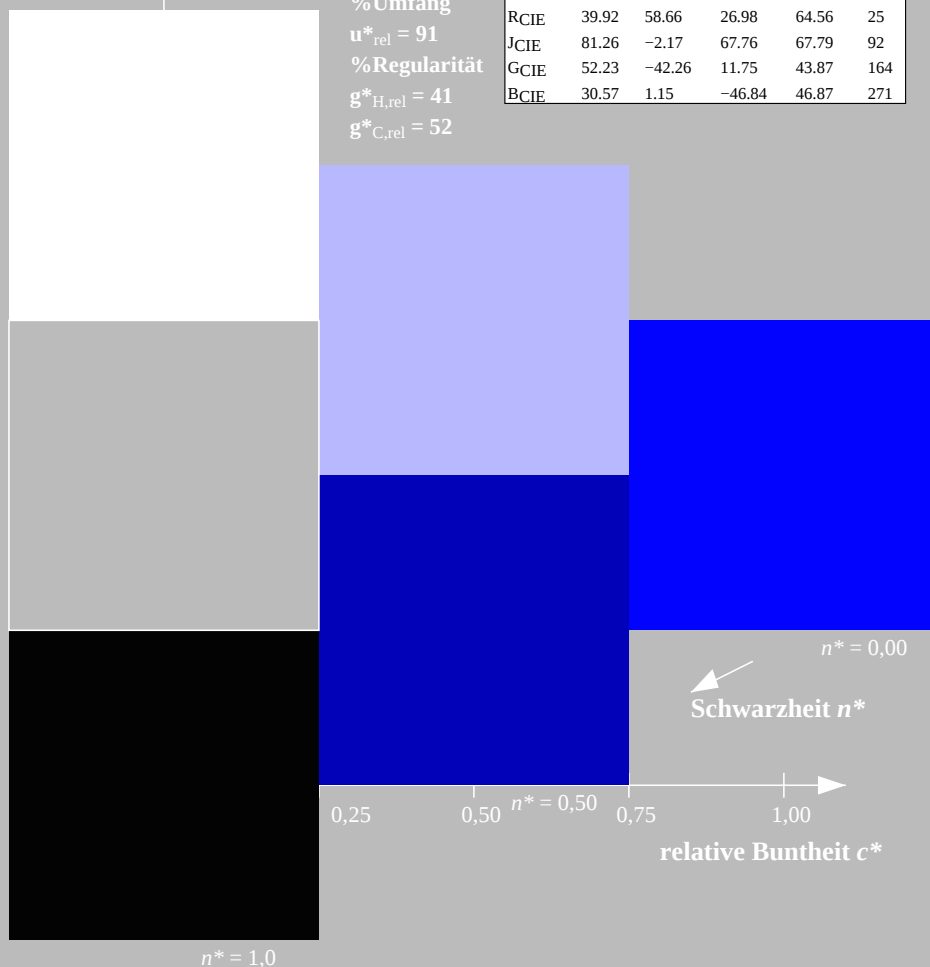
relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LABa 53.21 0.0 0.0
LAB*TCa 50.0 0.01 -
relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 -
lab*nch 0.5 0.0 -
relative 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*TCa 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*TCa 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 0.00r

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*TCa 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 0.00r

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*TCa 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 0.00r



UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 290/360 = 0.806 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

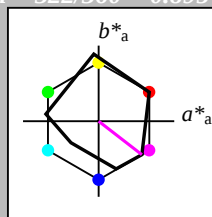
D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne
input: $\text{cm}y0^* \text{ setcm}y\text{color}$
output: $\text{olv}^* \text{ setrg}b\text{color} / w^* \text{ setgray}$

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 322/360 = 0.895$
 lab^*tch und lab^*nch

D65: Buntton B50R
LCH*Ma: 35 72 322
olv*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

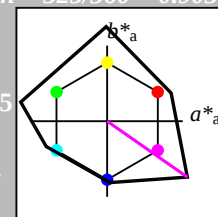
$g^*_{C,rel} = 52$

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

%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

$n^* = 0.00$
Schwarzheit n^*

relative Buntheit c^*

$n^* = 1.0$

$n^* = 1.0$

$n^* = 0.00$
Schwarzheit n^*

relative Buntheit c^*

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 322/360 = 0.895 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne
input: $cmv0^* setcmykcolor$
output: $olv^* setrgbcolor / w^* setgray$

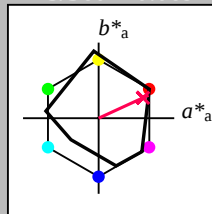
Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 25/360 = 0.069$

lab^*ch und lab^*nch

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

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

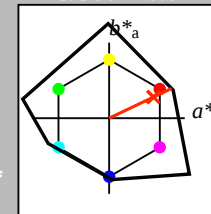
Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 25/360 = 0.071$

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

%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 0.512 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 0.012 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

Eingabe: Farbmétrisches Reflexions-System MRS18

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

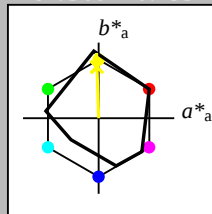
lab^*tch und lab^*nch

D65: Buntton J

LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 92/360 = 0.256$

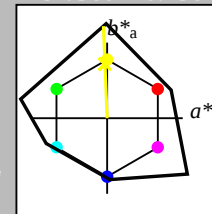
lab^*tch und lab^*nch

D65: Buntton J

LCH*Ma: 90 122 92

olv*Ma: 0.97 1.0 0.0

Dreiecks-Helligkeit t^*



%Umfang

$u^*_{rel} = 149$

%Regularität

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

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

NCS11; adaptierte CIELAB-Daten

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

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 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	

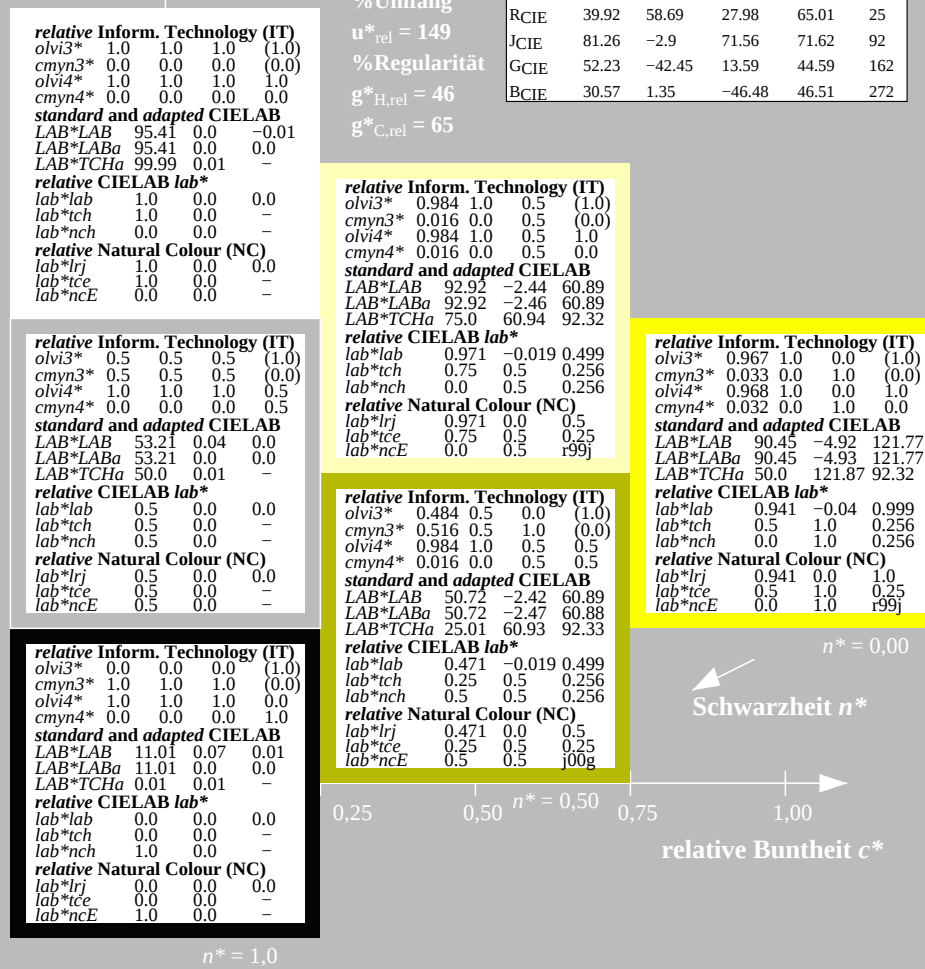
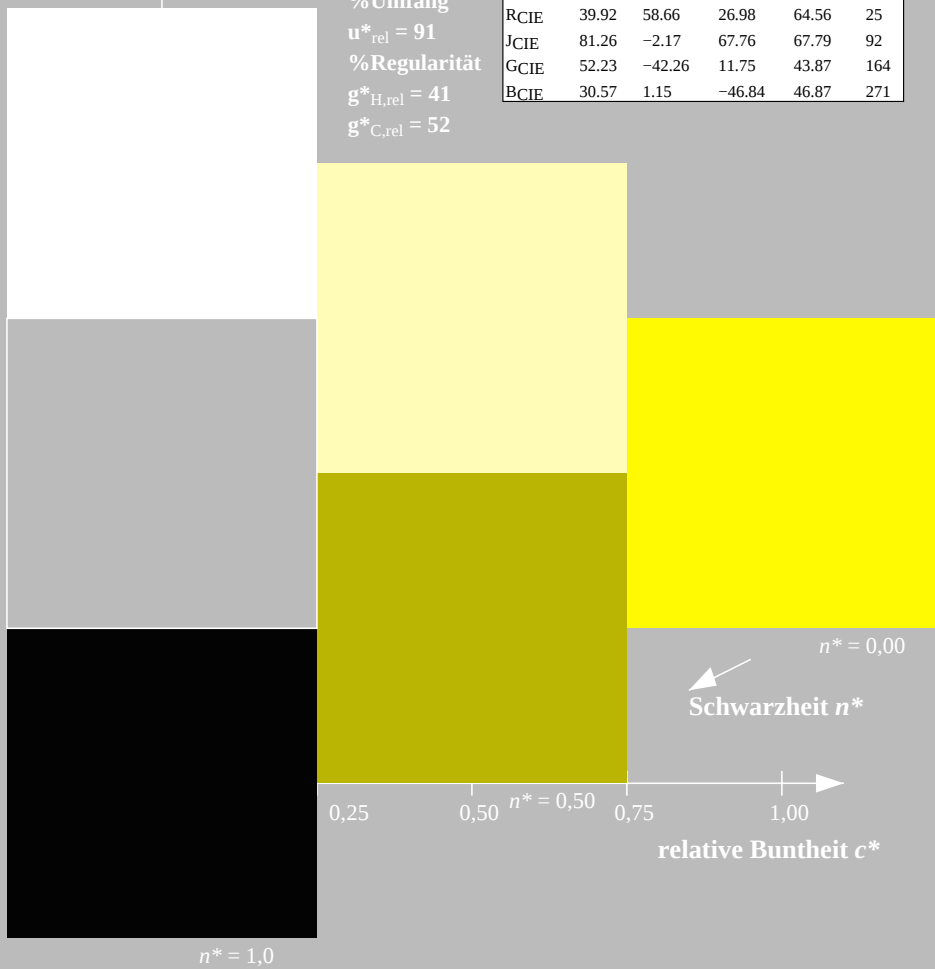
relative Inform. Technology (IT)				
olvi3*	0.971	-0.019	0.499	
lab*lab	0.971	0.0	0.5	
lab*tch	0.75	0.5	0.256	
lab*nch	0.0	0.5	0.256	
relative Natural Colour (NC)				
lab*lrj	0.971	0.0	0.5	
lab*tce	0.75	0.5	0.25	
lab*nce	0.0	0.5	r99j	

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 Inform. Technology (IT)				
olvi3*	0.471	-0.019	0.499	
lab*lab	0.471	0.0	0.5	
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	0.0g	

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 Inform. Technology (IT)				
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	



UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

input: $cmv0^* setcmykcolor$

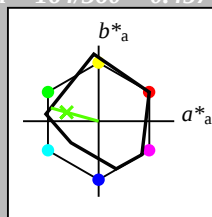
output: $olv^* setrgbcolor / w^* setgray$

Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton $h^* = lab^*h = 164/360 = 0.457$
 lab^*ch und lab^*nch

D65: Buntton G
LCH*Ma: 56 66 164
olv*Ma: 0.1 1.0 0.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

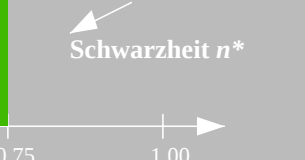
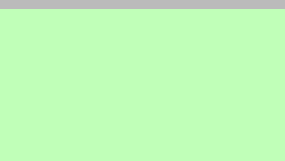
%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

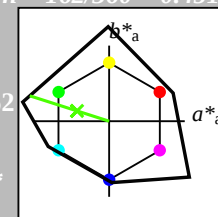


Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton $h^* = lab^*h = 162/360 = 0.451$
 lab^*ch 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	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

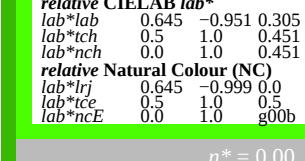
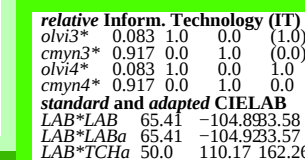
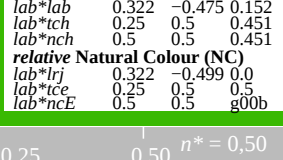
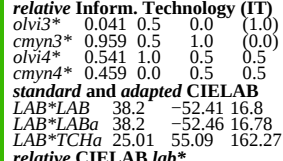
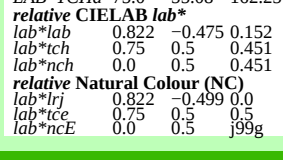
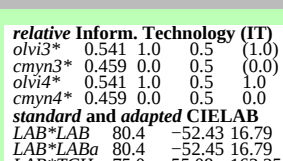
%Umfang

$u^*_{rel} = 149$

%Regularität

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

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

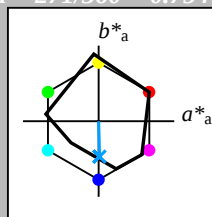


Eingabe: Farbmétrisches Reflexions-System MRS18

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

D65: Buntton B
LCH*Ma: 40 50 271
olv*Ma: 0.0 0.37 1.0

Dreiecks-Helligkeit t^*



MRS18; adaptierte CIELAB-Daten					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

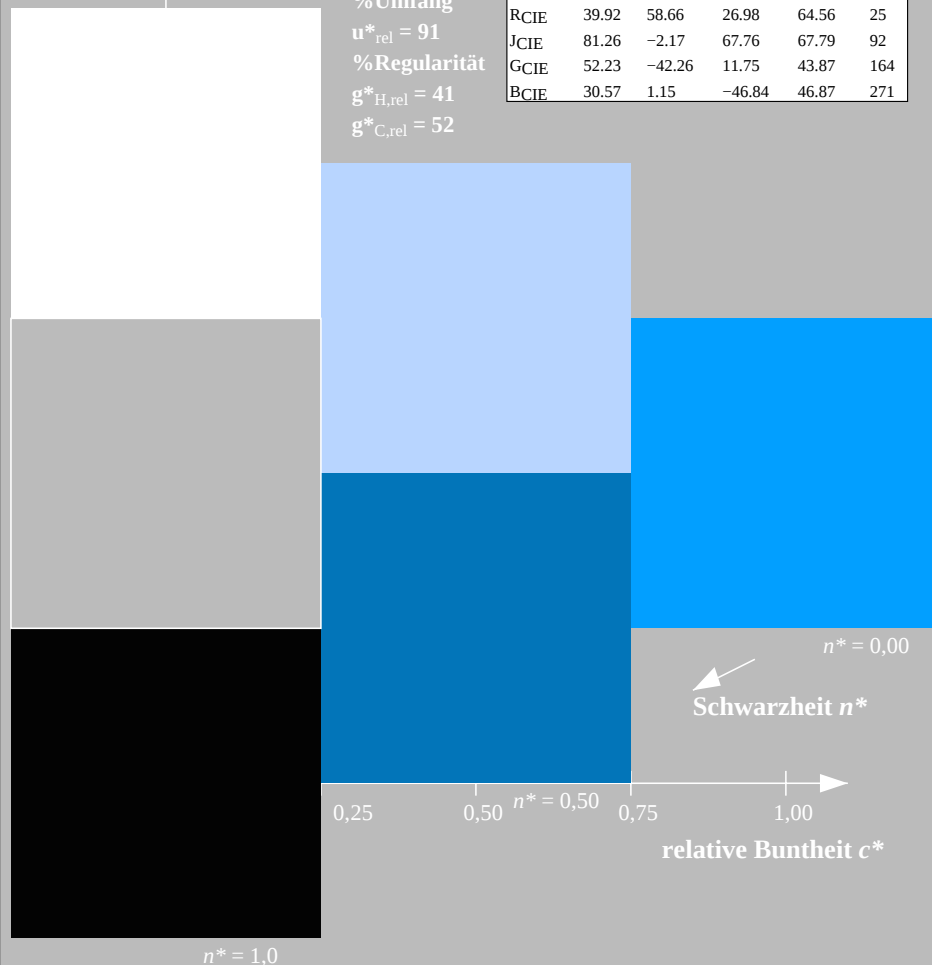
%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

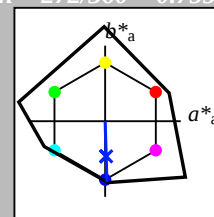


Ausgabe: Farbmétrisches Reflexions-System NCS11

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

%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 -

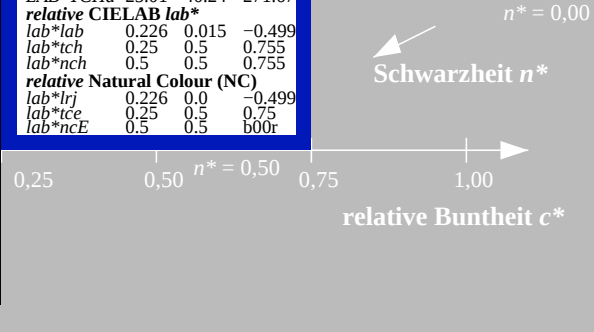
relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 0.5
cmyn4* 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LABa 53.21 0.0 0.0
LAB*TCHa 50.0 0.01 -
relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 -
lab*nch 0.5 0.0 -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



UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (links)

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

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne
input: `cmv0* setcmvcolor`
output: `olv* setrgbcolor / w* setgray`