

Eingabe: Farbmimetrisches Reflexions-System NCS11

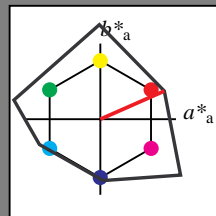
für Buntton  $h^* = lab^*h = 24/360 = 0.066$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 47 92 24

olv\*Ma: 1.0 0.0 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

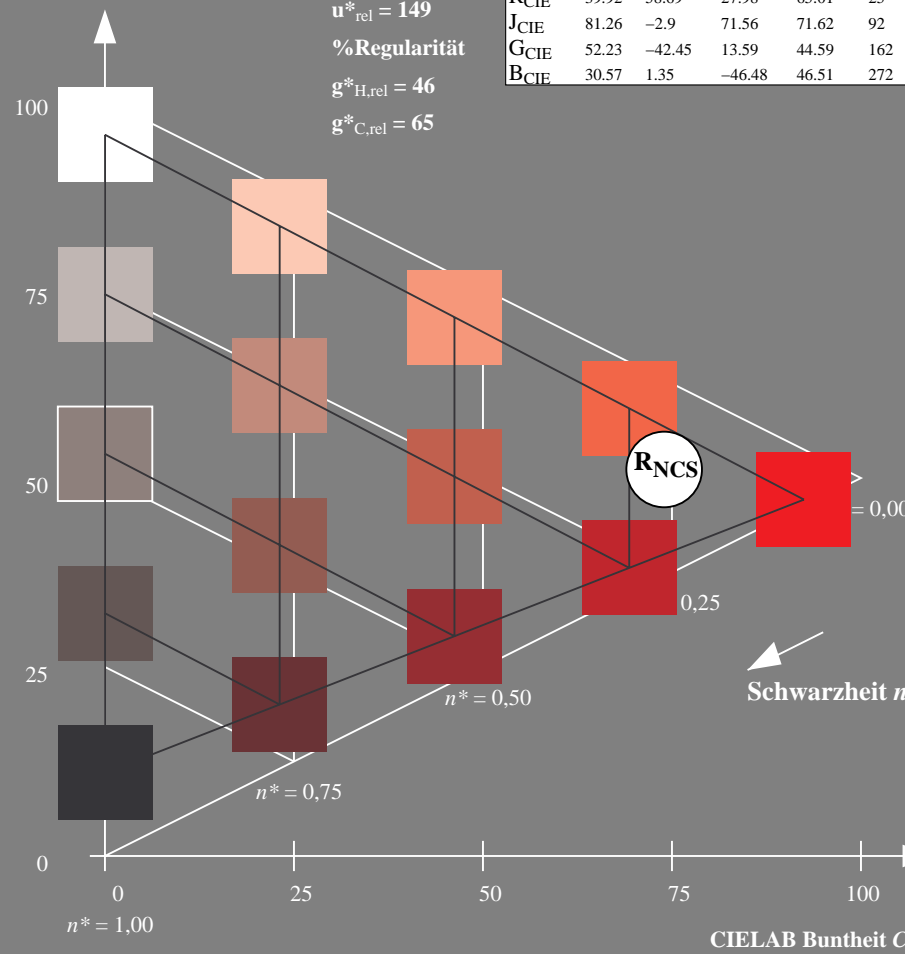
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.066 (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

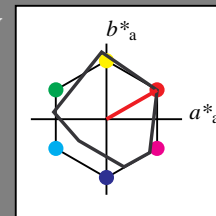
für Buntton  $h^* = lab^*h = 30/360 = 0.083$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 50 77 30

olv\*Ma: 1.0 0.0 0.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

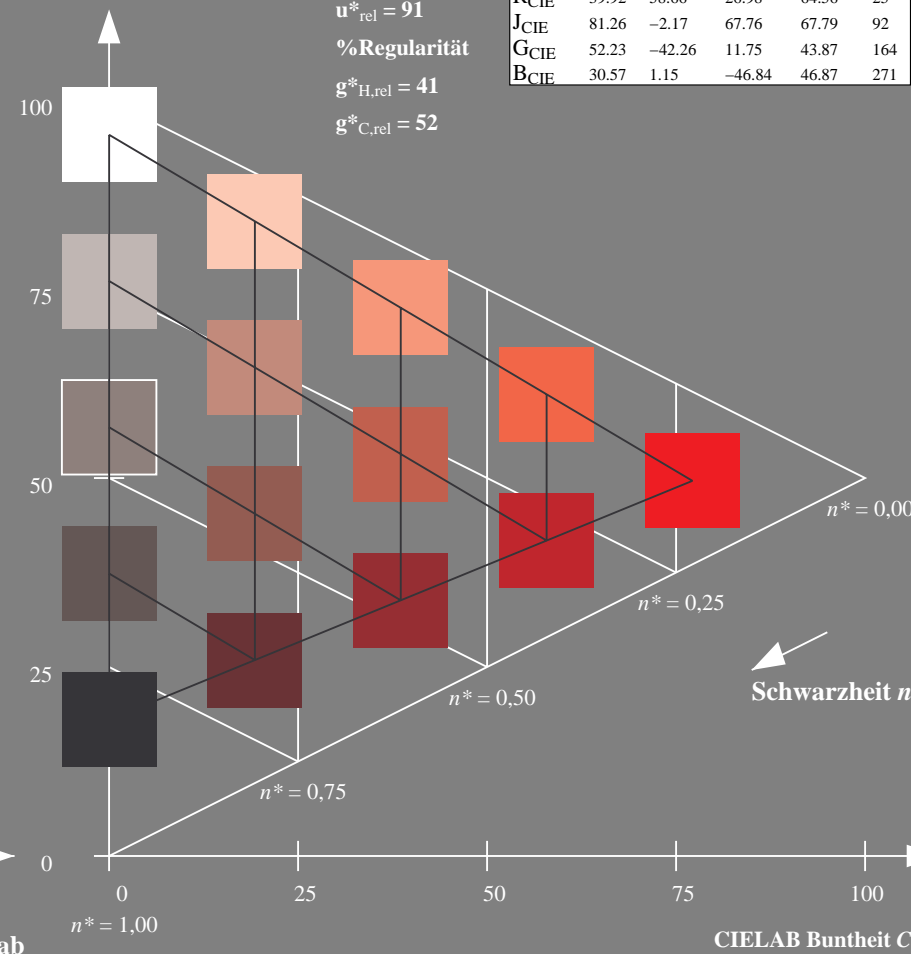
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton 30/360 = 0.083 (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: cmy0\* setcmykcolor

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System NCS11

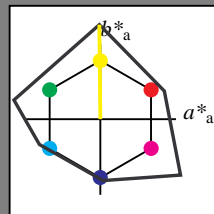
für Buntton  $h^* = lab^*h = 91/360 = 0.252$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 91 125 91

olv\*Ma: 1.0 1.0 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

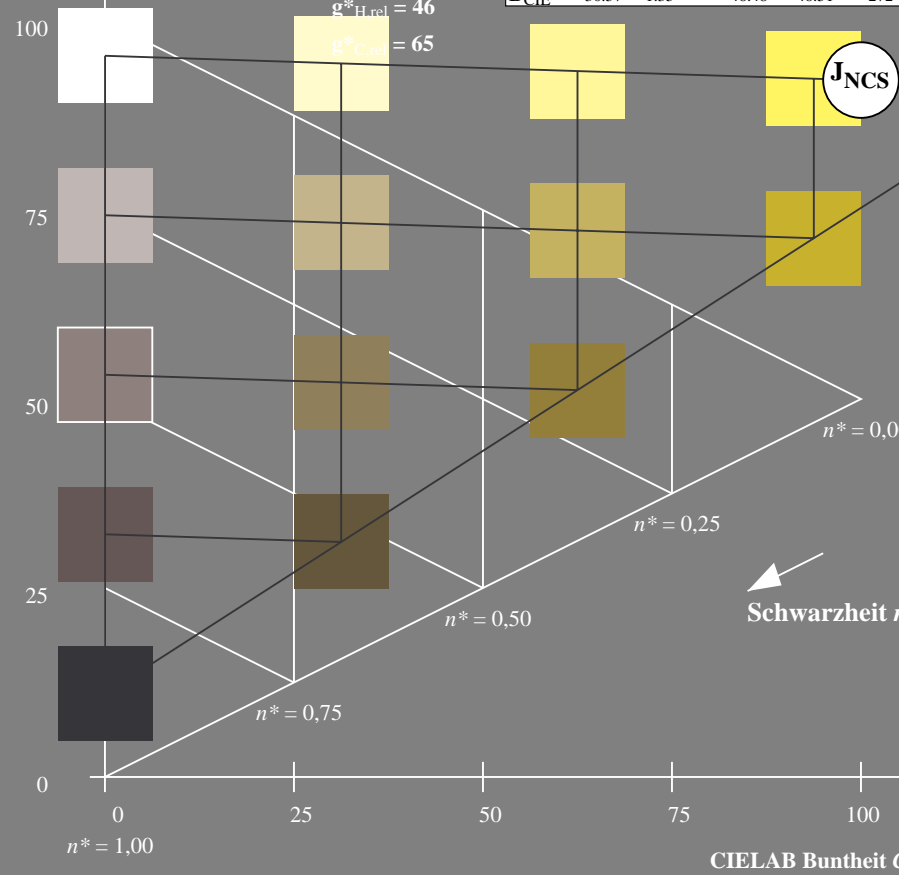
%Umfang

$u^*_{rel} = 149$

%Regularität

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

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



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.252 (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

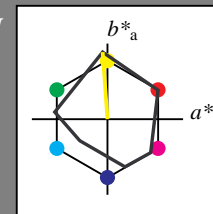
für Buntton  $h^* = lab^*h = 94/360 = 0.261$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 91 89 94

olv\*Ma: 1.0 1.0 0.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

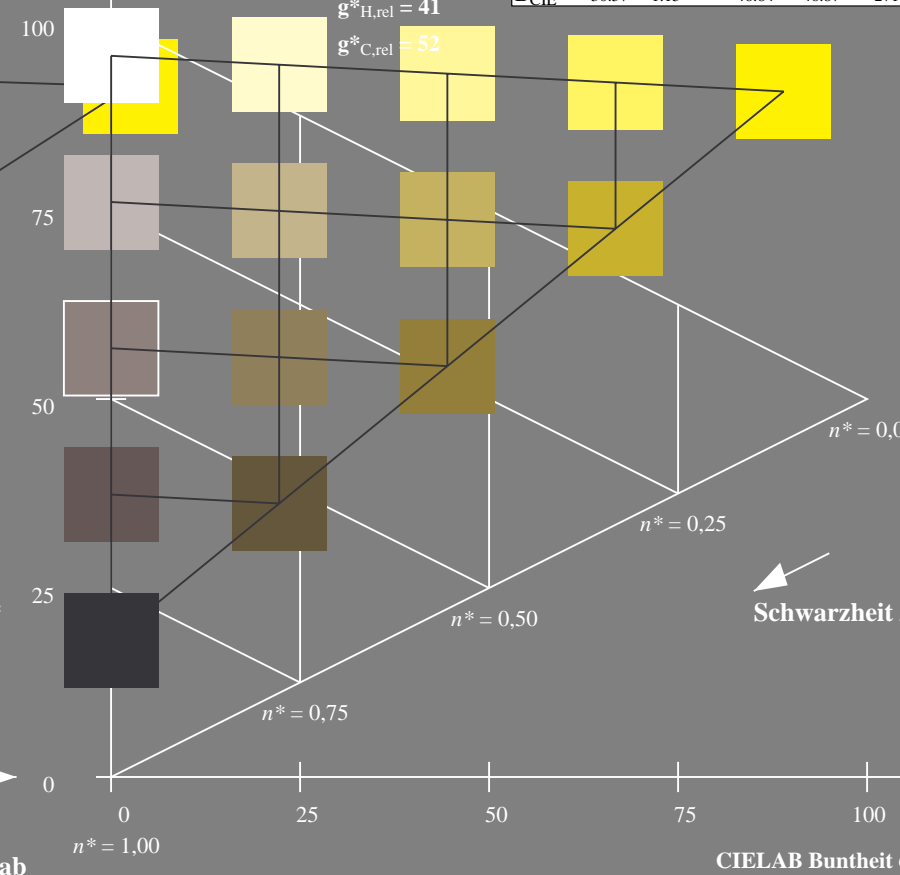
%Umfang

$u^*_{rel} = 91$

%Regularität

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

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



5 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.261 (rechts)

BAM-Prüfvorlage UG38; Farbmimetrik-Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: cmy0\* setcmykcolor

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System NCS11

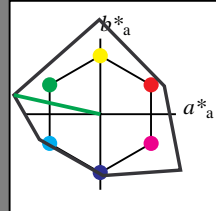
für Buntton  $h^* = lab^*h = 167/360 = 0.465$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 63 117 167

olv\*Ma: 0.0 1.0 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

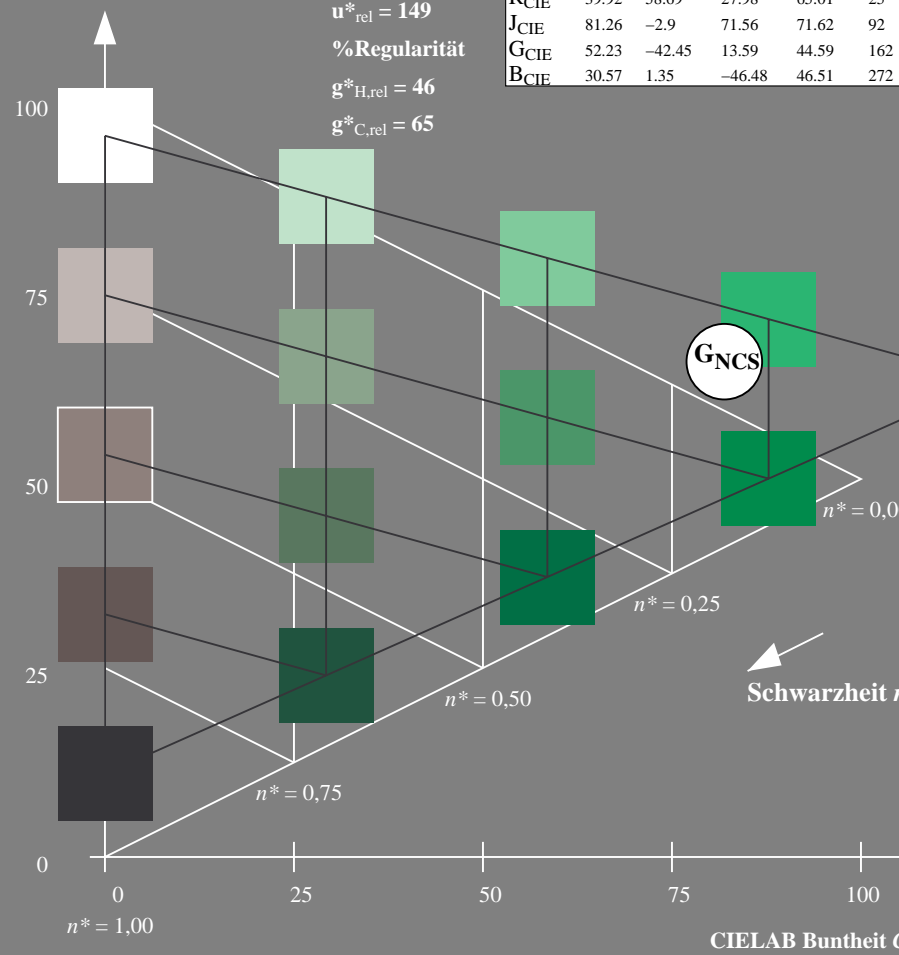
%Umfang

$u^*_{rel} = 149$

%Regularität

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

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



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton  $167/360 = 0.465$  (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

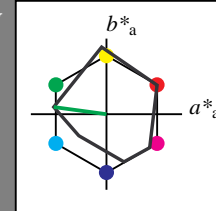
für Buntton  $h^* = lab^*h = 172/360 = 0.479$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 52 70 172

olv\*Ma: 0.0 1.0 0.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

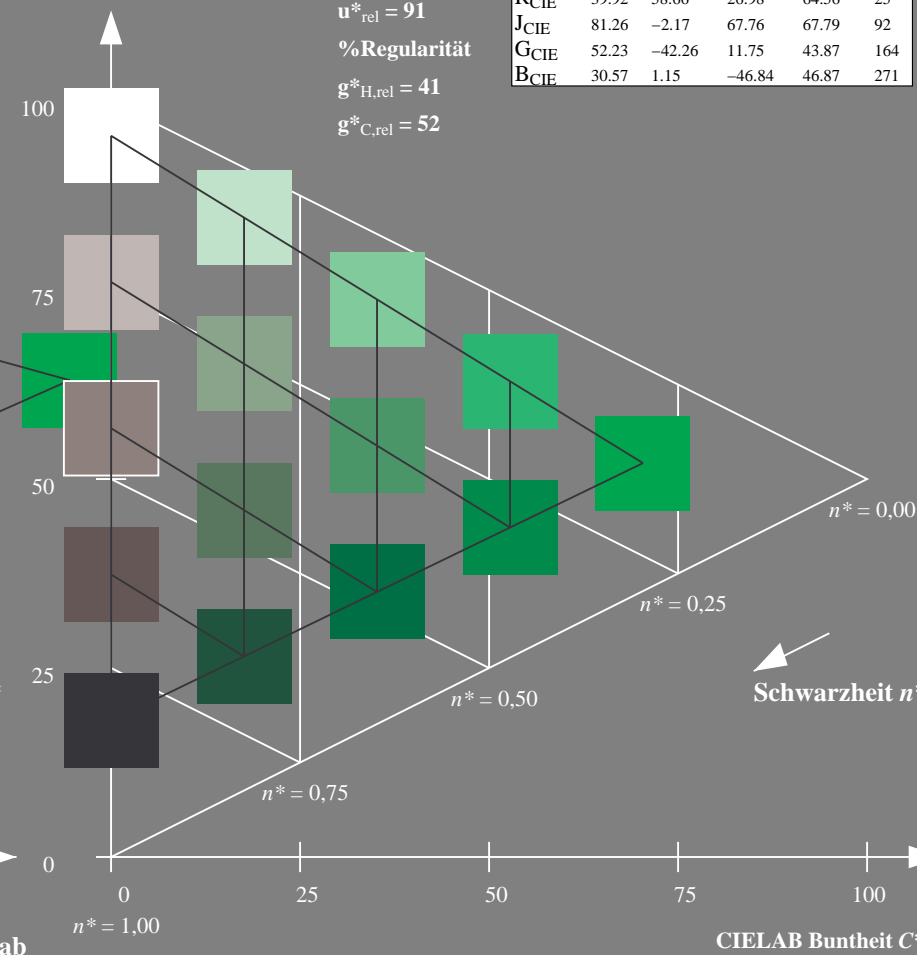
%Umfang

$u^*_{rel} = 91$

%Regularität

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

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



5 stufige Reihen für konstanten CIELAB Buntton  $172/360 = 0.479$  (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: *cmY0\* setcmykcolor*

Output: *no change compared to input*

Eingabe: Farbmimetrisches Reflexions-System NCS11

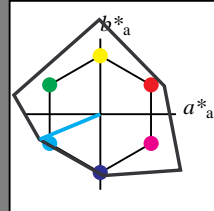
für Buntton  $h^* = lab \cdot h = 203/360 = 0.563$

LAB\*LCH, LAB\*NCH

D65: Buntton G50B

LCH\*Ma: 59 87 203

olv\*Ma: 0.0 1.0 1.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

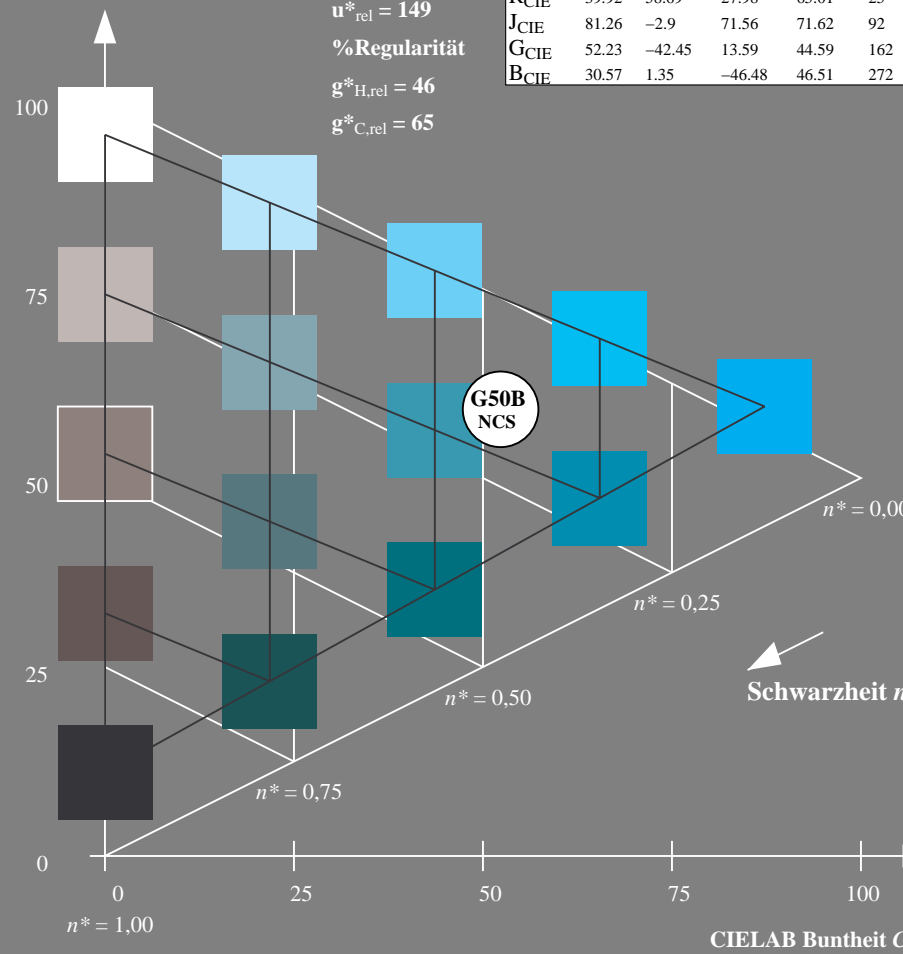
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

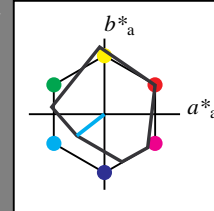
für Buntton  $h^* = lab \cdot h = 218/360 = 0.605$

LAB\*LCH, LAB\*NCH

D65: Buntton G50B

LCH\*Ma: 45 46 218

olv\*Ma: 0.0 1.0 1.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

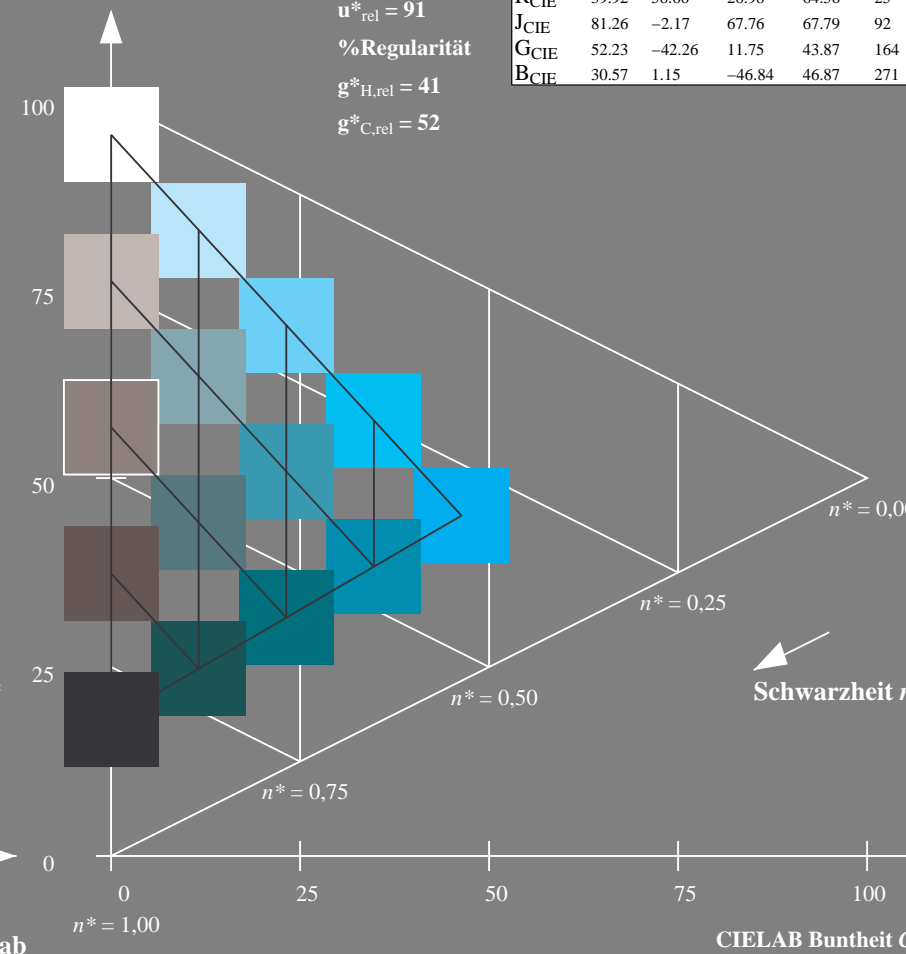
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton 218/360 = 0.605 (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: *cmY0\* setcmykcolor*

Output: *no change compared to input*

Eingabe: Farbmimetrisches Reflexions-System NCS11

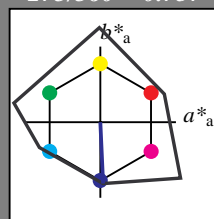
für Buntton  $h^* = lab^*h = 273/360 = 0.757$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 49 81 273

olv\*Ma: 0.0 0.0 1.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

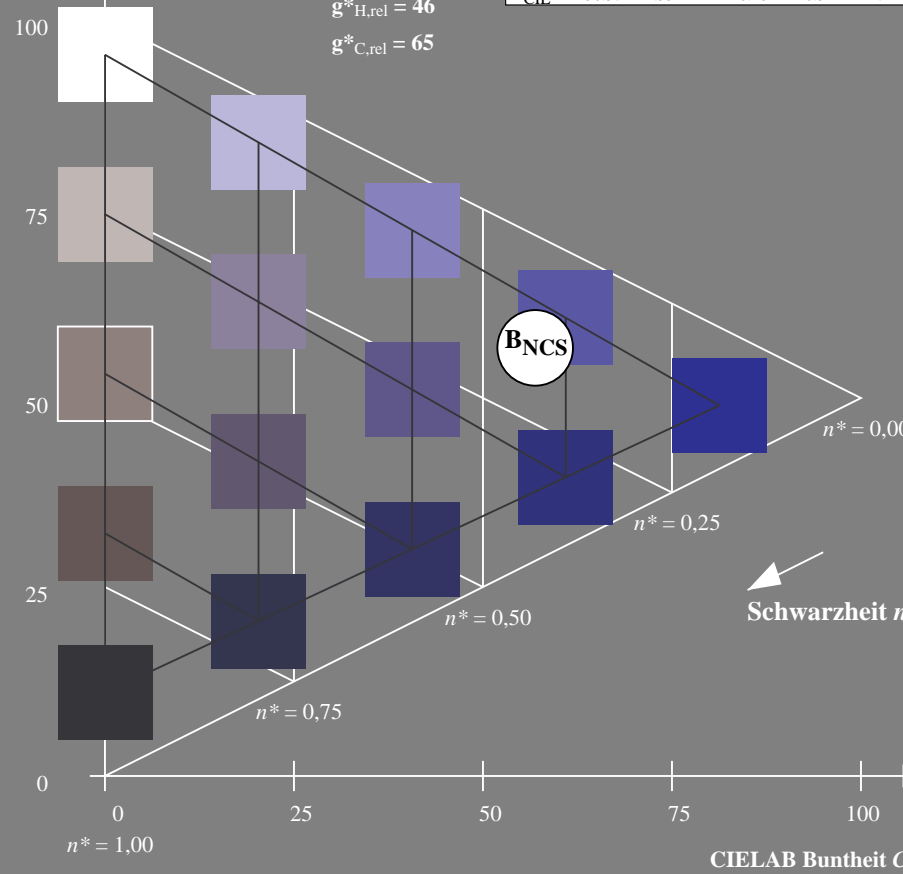
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.757 (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

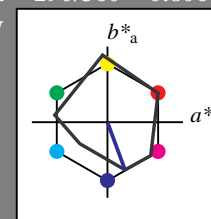
für Buntton  $h^* = lab^*h = 290/360 = 0.806$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 37 67 290

olv\*Ma: 0.0 0.0 1.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

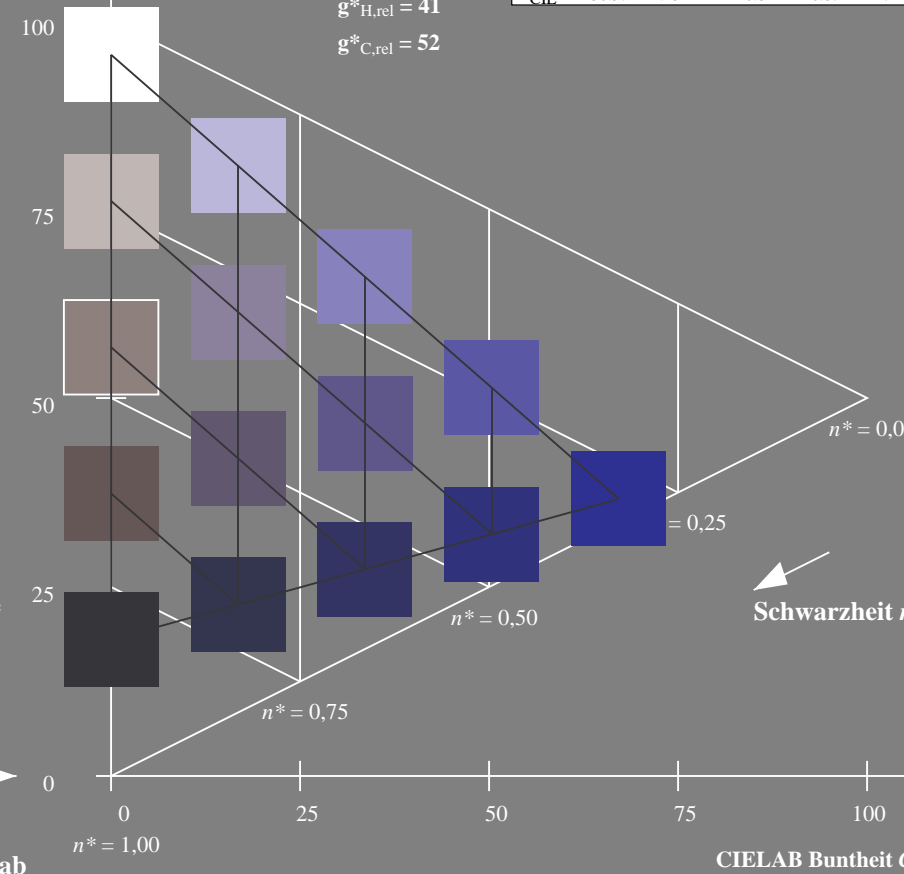
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton 290/360 = 0.806 (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische-Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: cmy0\* setcmykcolor

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System NCS11

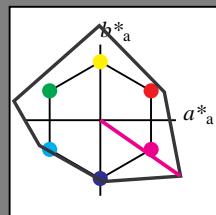
für Buntton  $h^* = lab^*h = 325/360 = 0.903$

LAB\*LCH, LAB\*NCH

D65: Buntton B50R

LCH\*Ma: 44 129 325

olv\*Ma: 1.0 0.0 1.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

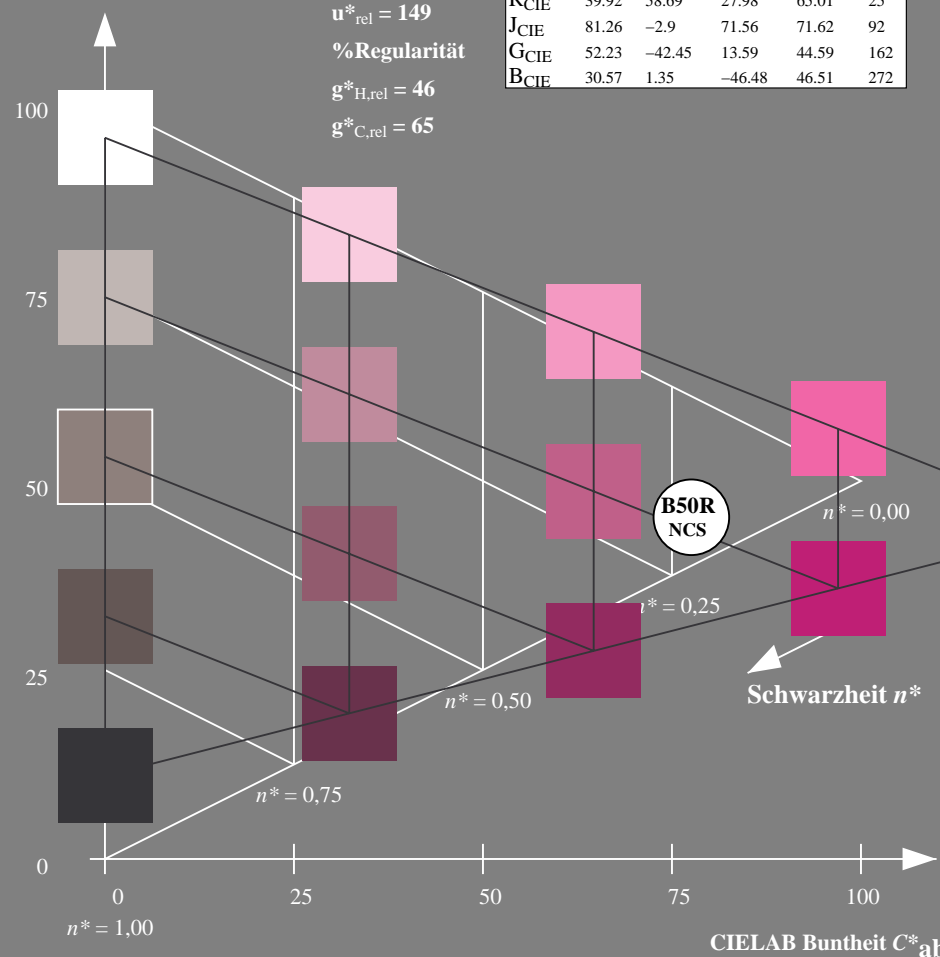
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (links)

BAM-Prüfvorlage UG38; Farbmimetrik-Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Ausgabe: Farbmimetrisches Reflexions-System MRS18

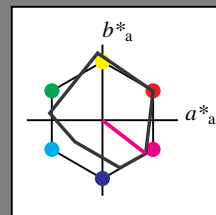
für Buntton  $h^* = lab^*h = 322/360 = 0.895$

LAB\*LCH, LAB\*NCH

D65: Buntton B50R

LCH\*Ma: 35 72 322

olv\*Ma: 1.0 0.0 1.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

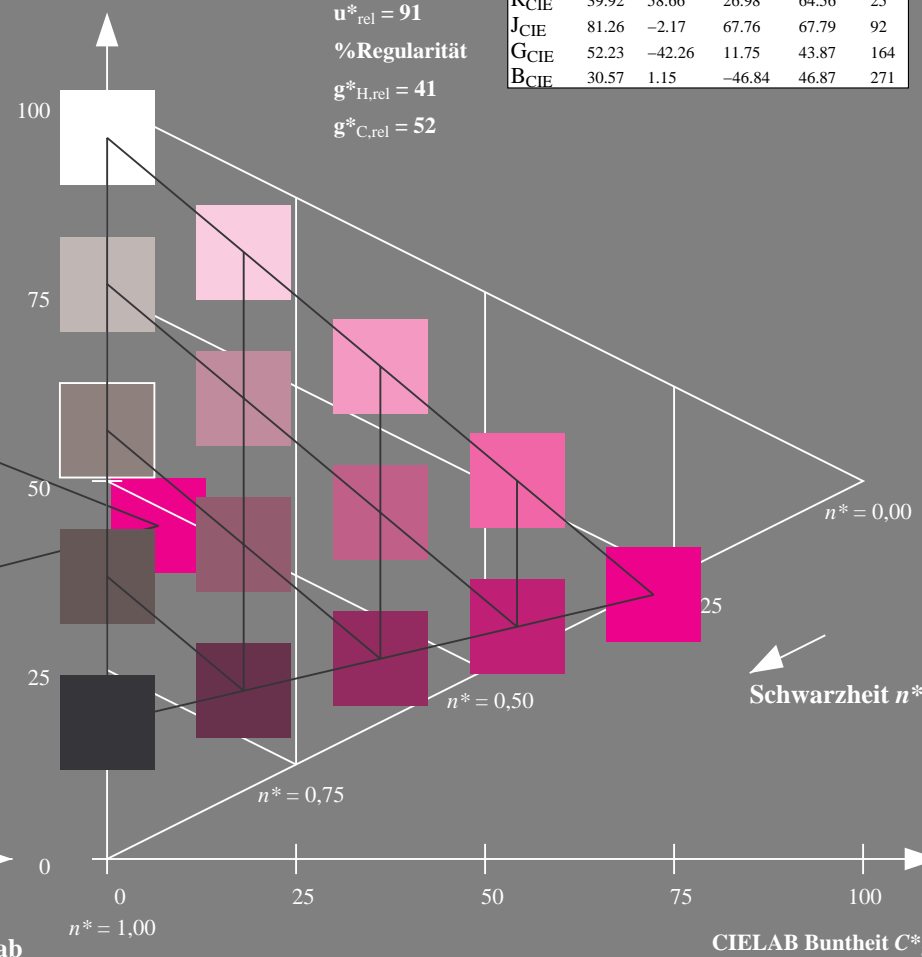
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton 322/360 = 0.895 (rechts)

Input: cmy0\* setcmykcolor

Output: no change compared to input



Eingabe: Farbmimetrisches Reflexions-System NCS11

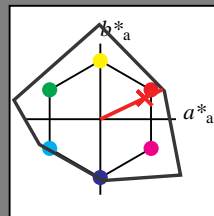
für Buntton  $h^* = lab^*h = 25/360 = 0.071$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 48 91 25

olv\*Ma: 1.0 0.02 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

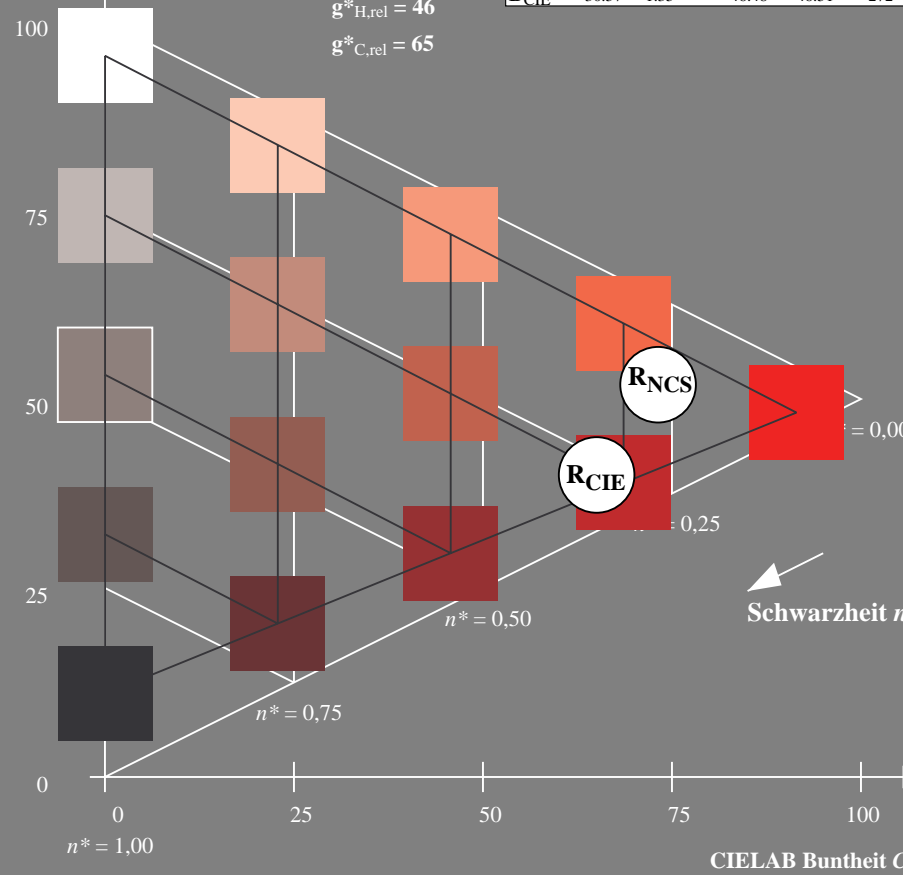
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

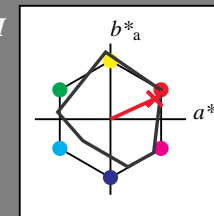
für Buntton  $h^* = lab^*h = 25/360 = 0.069$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 48 73 25

olv\*Ma: 1.0 0.0 0.1



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

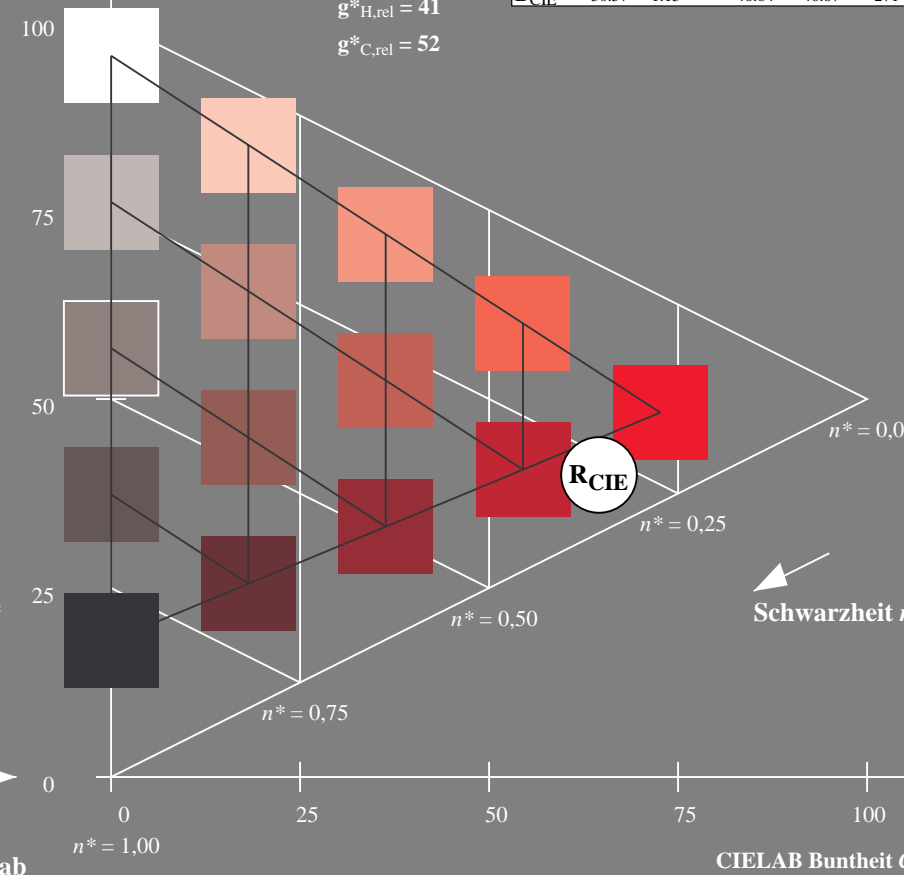
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18  
D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen  
Input: *cmY0\* setcmykcolor*  
Output: *no change compared to input*

Eingabe: Farbmimetrisches Reflexions-System NCS11

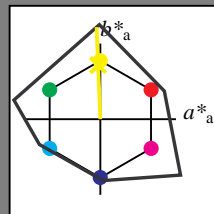
für Buntton  $h^* = lab \cdot h = 92/360 = 0.256$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 90 122 92

olv\*Ma: 0.97 1.0 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

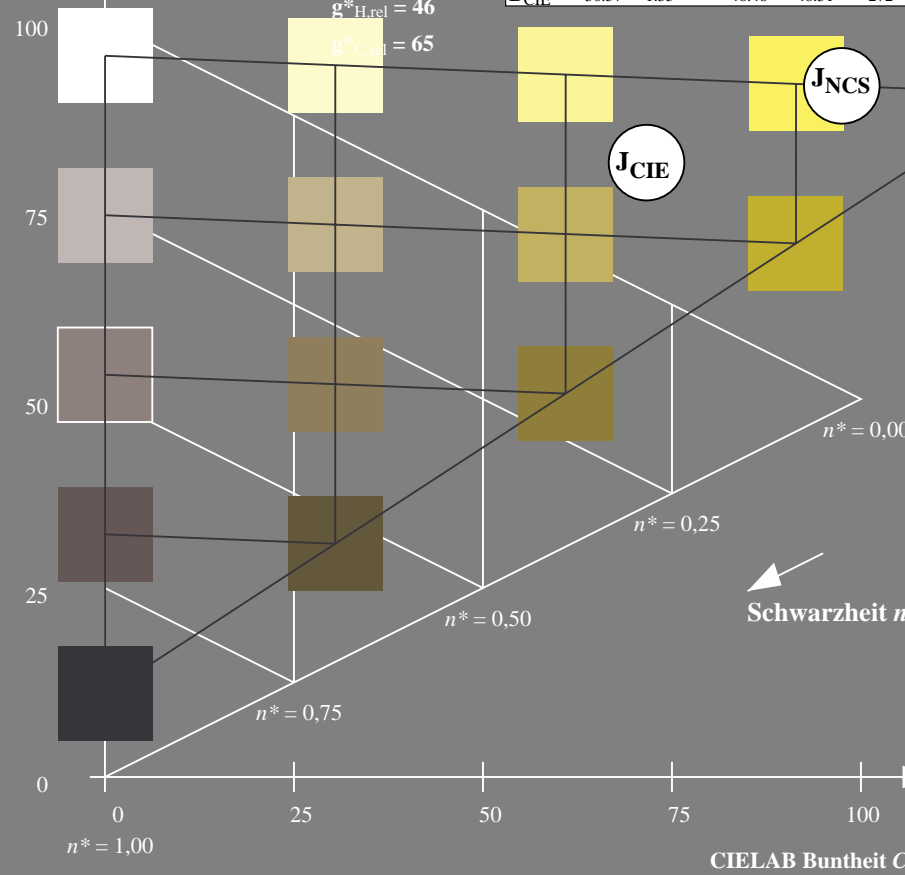
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton  $92/360 = 0.256$  (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

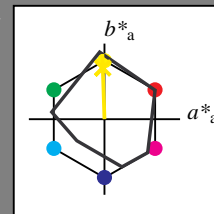
für Buntton  $h^* = lab \cdot h = 92/360 = 0.255$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 89 86 92

olv\*Ma: 1.0 0.95 0.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

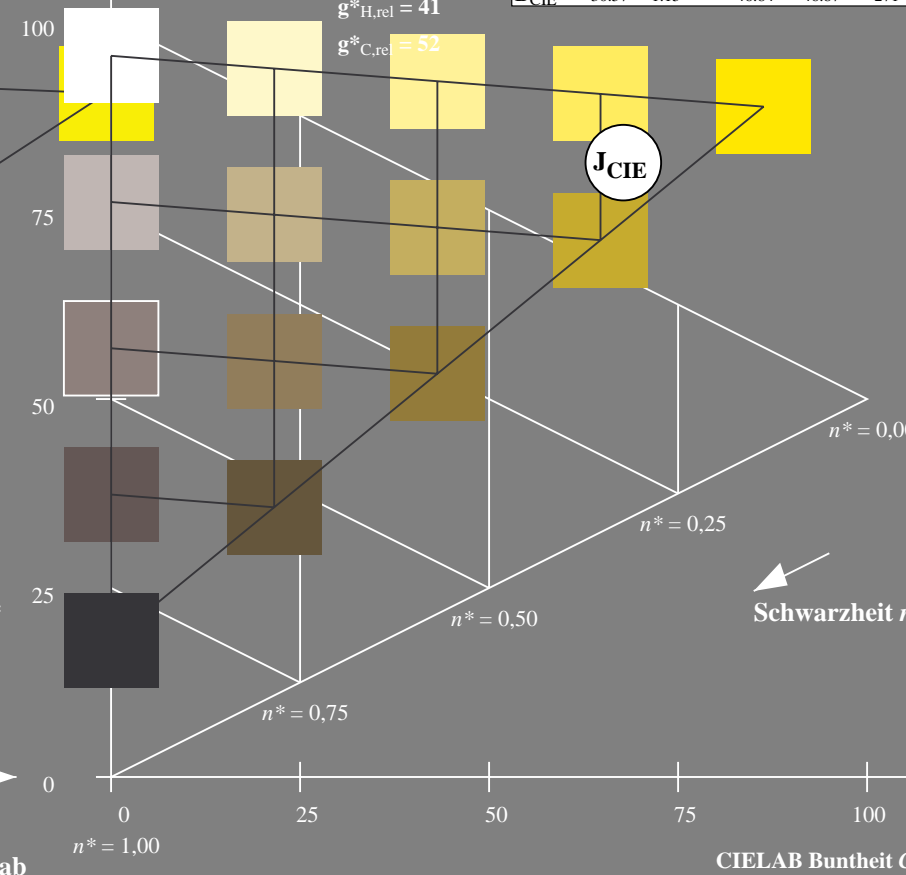
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



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

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input: cmy0\* setcmykcolor

Output: no change compared to input



Eingabe: Farbmimetrisches Reflexions-System NCS11

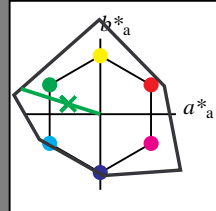
für Buntton  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 65 110 162

olv\*Ma: 0.08 1.0 0.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

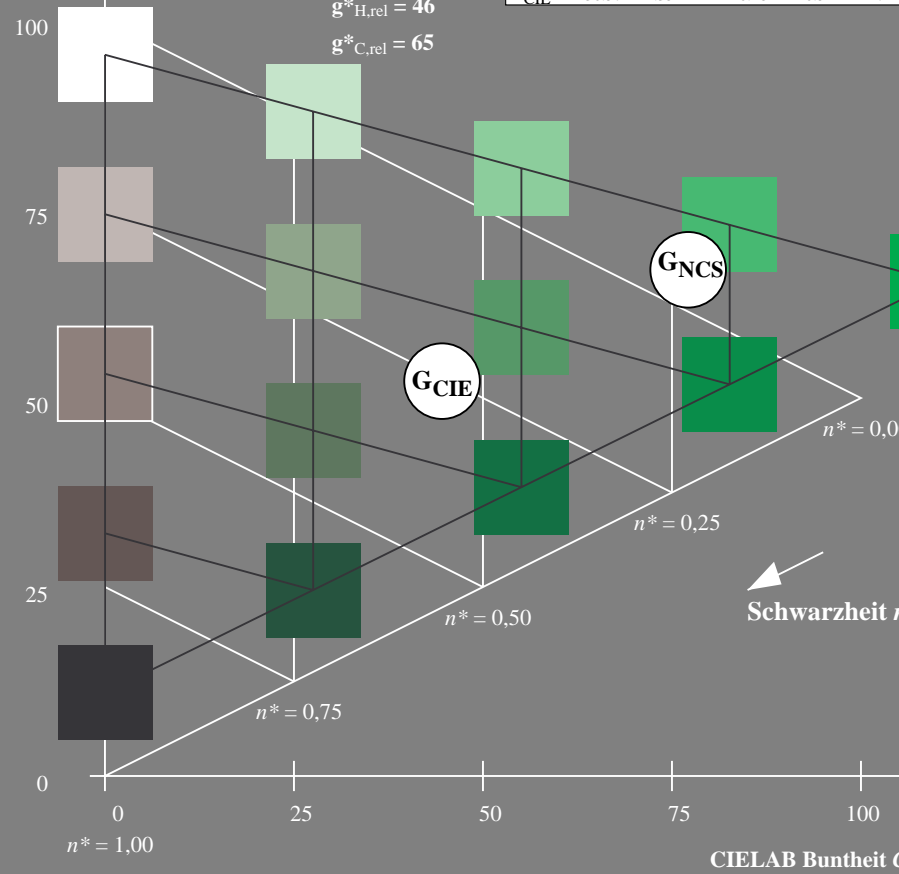
%Umfang

$u^*_{rel} = 149$

%Regularität

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

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



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton  $162/360 = 0.451$  (links)

Ausgabe: Farbmimetrisches Reflexions-System MRS18

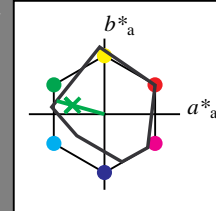
für Buntton  $h^* = lab^*h = 164/360 = 0.457$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 56 66 164

olv\*Ma: 0.1 1.0 0.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

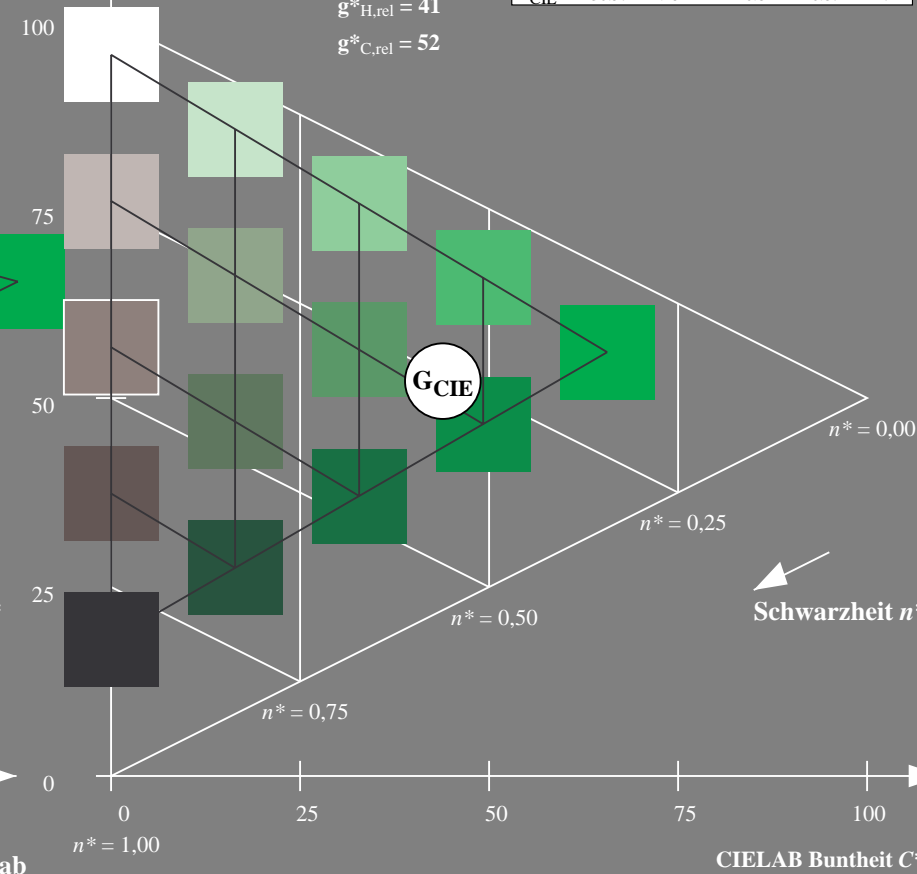
%Umfang

$u^*_{rel} = 91$

%Regularität

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

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



5 stufige Reihen für konstanten CIELAB Buntton  $164/360 = 0.457$  (rechts)

BAM-Prüfvorlage UG38; Farbmimetrische Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input:  $cmY^0 * setcmykcolor$

Output: no change compared to input

Eingabe: Farbmetrisches Reflexions-System NCS11

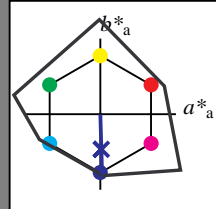
für Buntton  $h^* = lab \cdot h = 272/360 = 0.755$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 49 80 272

olv\*Ma: 0.0 0.02 1.0



NCS11; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	47.15	84.64	37.25	92.48	24
J <sub>Ma</sub>	91.37	-1.27	125.03	125.03	91
G <sub>Ma</sub>	63.07	-114.28	25.35	117.06	167
G50B <sub>Ma</sub>	59.47	-80.6	-33.45	87.28	203
B <sub>Ma</sub>	49.01	3.65	-81.19	81.28	273
B50R <sub>Ma</sub>	44.06	106.09	-73.93	129.32	325
N <sub>Ma</sub>	10.99	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.69	27.98	65.01	25
J <sub>CIE</sub>	81.26	-2.9	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.45	13.59	44.59	162
B <sub>CIE</sub>	30.57	1.35	-46.48	46.51	272

CIELAB-Helligkeit  $L^*$

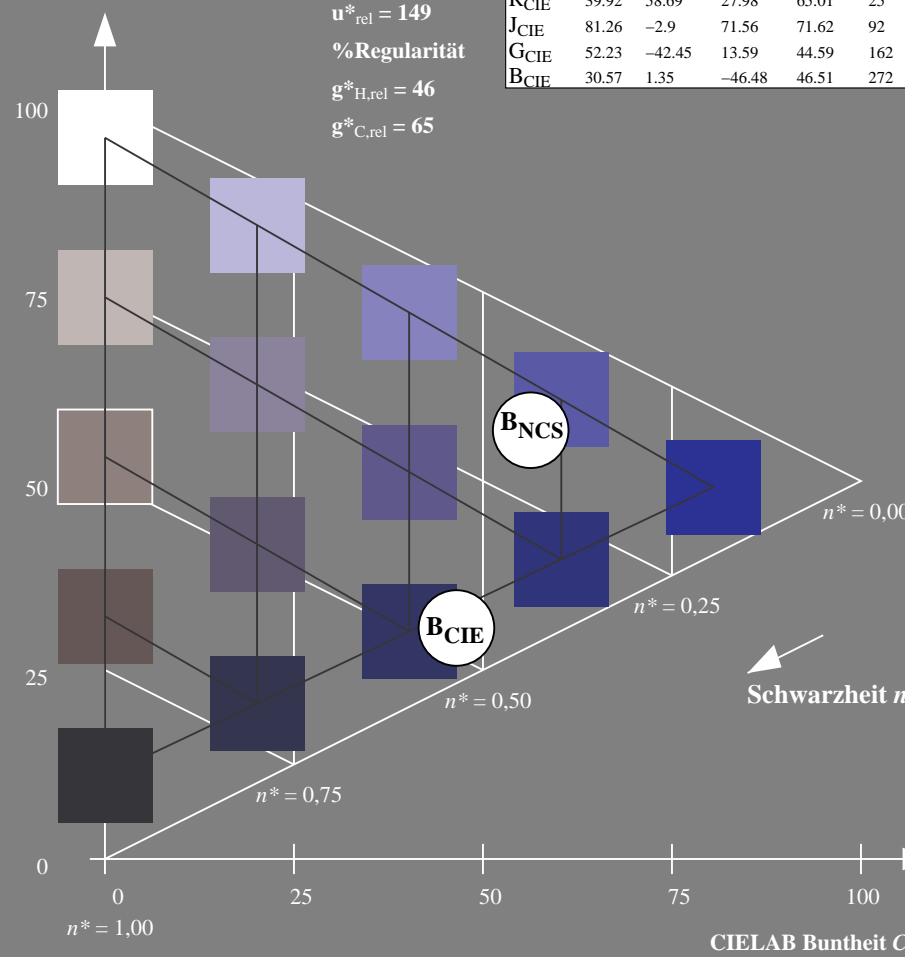
%Umfang

$u_{rel}^* = 149$

%Regularität

$g_{H,rel}^* = 46$

$g_{C,rel}^* = 65$



UG380-7, 5 stufige Reihen für konstanten CIELAB Buntton  $272/360 = 0.755$  (links)

Ausgabe: Farbmetrisches Reflexions-System MRS18

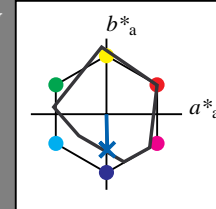
für Buntton  $h^* = lab \cdot h = 271/360 = 0.754$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 40 50 271

olv\*Ma: 0.0 0.37 1.0



MRS18; adaptierte CIELAB-Daten

	$L^*=L_a^*$	$a_a^*$	$b_a^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
R <sub>Ma</sub>	49.63	66.96	38.37	77.18	30
J <sub>Ma</sub>	90.7	-6.36	88.75	88.98	94
G <sub>Ma</sub>	52.11	-69.73	9.44	70.37	172
G50B <sub>Ma</sub>	45.03	-36.57	-28.47	46.36	218
B <sub>Ma</sub>	36.65	23.19	-63.05	67.18	290
B50R <sub>Ma</sub>	34.94	57.17	-44.26	72.31	322
N <sub>Ma</sub>	18.01	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.66	26.98	64.56	25
J <sub>CIE</sub>	81.26	-2.17	67.76	67.79	92
G <sub>CIE</sub>	52.23	-42.26	11.75	43.87	164
B <sub>CIE</sub>	30.57	1.15	-46.84	46.87	271

CIELAB-Helligkeit  $L^*$

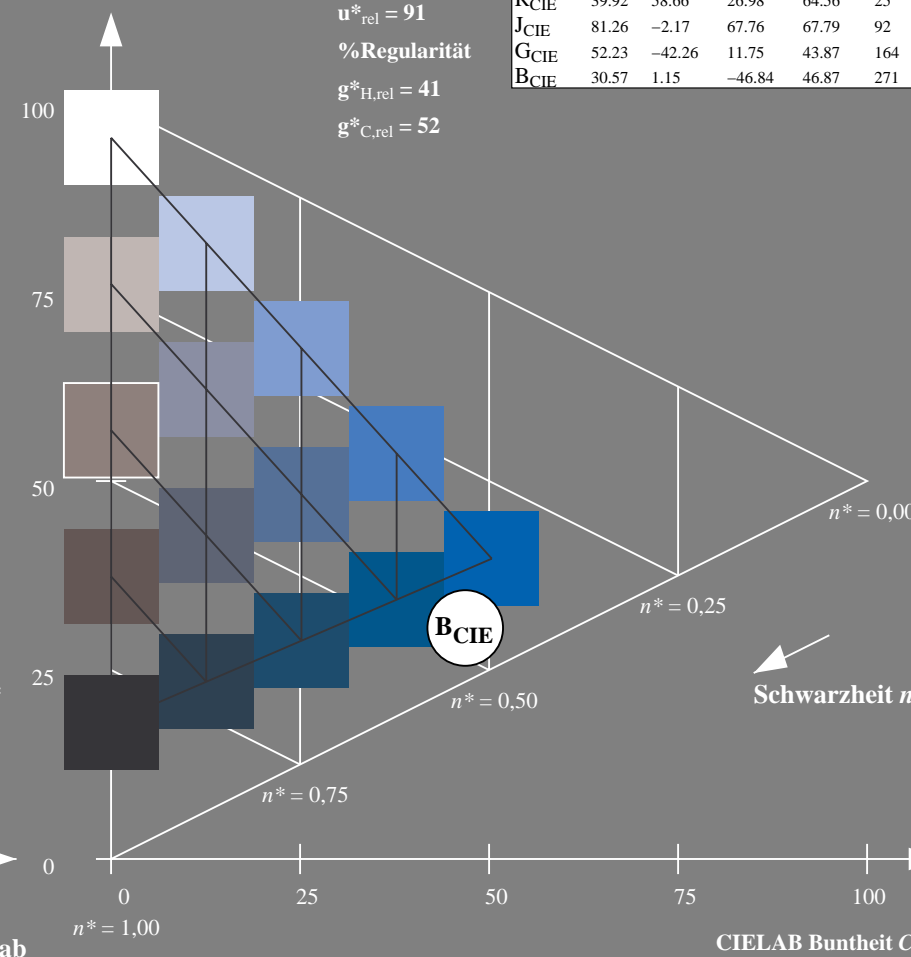
%Umfang

$u_{rel}^* = 91$

%Regularität

$g_{H,rel}^* = 41$

$g_{C,rel}^* = 52$



5 stufige Reihen für konstanten CIELAB Buntton  $271/360 = 0.754$  (rechts)

BAM-Prüfvorlage UG38; Farbmetrik-Systeme NCS11a & MRS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttöne

Input:  $cmY0^* setcmykcolor$

Output: no change compared to input