Farbmetrische "Norm-Daten": Farbmetrische Daten des Natürliches Farbsystems NCS18 für Helligkeit *L**=18 von Schwarz für D65

System NCS18
NCS system

	Farbe	*r=olv*₁*	*g=olv*₂*	*b=olv*₃*	*L*=LAB*₁*	*a*=LAB*₂*	*b*=LAB*₃*	*C*ab=LAB*r*	*hab*	*X=XYZ₁*	*Y=XYZ₂*	*Z=XYZ₃*	*x*	*y*	*Y/88.59*
00	Y00R	1.0	1.0	0.0	90.76	−0.82	124.09	124.09	90	73.69	77.96	2.94	0.4767	0.5043	0.88
01	Y05R	1.0	0.95	0.0	89.83	5.6	122.81	122.94	87	74.86	75.94	2.89	0.4871	0.4941	0.8572
02	Y10R	1.0	0.9	0.0	87.77	12.49	120.61	121.25	84	73.89	71.58	2.7	0.4987	0.4831	0.808
03	Y15R	1.0	0.85	0.0	84.58	19.29	116.34	117.93	81	70.6	65.19	2.53	0.5104	0.4713	0.7359
04	Y20R	1.0	0.8	0.0	80.98	25.51	110.3	113.22	77	66.34	58.43	2.51	0.5212	0.4591	0.6596
05	Y25R	1.0	0.75	0.0	77.79	31.16	104.74	109.27	73	62.77	52.86	2.52	0.5313	0.4474	0.5967
06	Y30R	1.0	0.7	0.0	74.98	36.13	100.39	106.7	70	59.74	48.25	2.45	0.5409	0.4369	0.5447
07	Y35R	1.0	0.65	0.0	72.28	40.31	96.43	104.52	67	56.66	44.07	2.36	0.5496	0.4275	0.4975
08	Y40R	1.0	0.6	0.0	69.7	43.96	92.22	102.16	65	53.7	40.33	2.33	0.5573	0.4185	0.4552
09	Y45R	1.0	0.55	0.0	67.39	47.46	87.59	99.62	62	51.23	37.15	2.42	0.5642	0.4092	0.4194
10	Y50R	1.0	0.5	0.0	65.32	51.18	83.49	97.93	58	49.28	34.45	2.48	0.5716	0.3996	0.3889
11	Y55R	1.0	0.45	0.0	63.4	55.23	80.36	97.51	56	47.74	32.07	2.46	0.5803	0.3898	0.362
12	Y60R	1.0	0.4	0.0	61.57	59.15	77.68	97.63	53	46.33	29.9	2.4	0.5892	0.3803	0.3375
13	Y65R	1.0	0.35	0.0	59.77	62.58	74.78	97.51	50	44.81	27.87	2.37	0.5971	0.3713	0.3145
14	Y70R	1.0	0.3	0.0	57.94	65.66	71.17	96.83	47	43.18	25.9	2.43	0.6038	0.3622	0.2924
15	Y75R	1.0	0.25	0.0	56.04	68.55	66.17	95.28	44	41.41	23.95	2.66	0.6088	0.3521	0.2703
16	Y80R	1.0	0.2	0.0	54.06	71.0	60.95	93.58	41	39.46	22.03	2.92	0.6126	0.3421	0.2487
17	Y85R	1.0	0.25	0.0	52.0	72.9	56.6	92.29	38	37.27	20.14	3.03	0.6166	0.3332	0.2274
18	Y90R	1.0	0.1	0.0	49.88	74.57	51.67	90.72	35	35.05	18.32	3.23	0.6192	0.3237	0.2068
19	Y95R	1.0	0.05	0.0	47.78	76.51	45.35	88.94	31	33.0	16.62	3.67	0.6192	0.3119	0.1876
20	R00B	1.0	0.0	0.0	45.83	77.83	36.96	86.16	25	31.04	15.14	4.59	0.6113	0.2982	0.1709
21	R05B	1.0	0.0	0.1	44.25	78.82	27.82	83.59	19	29.5	14.01	5.99	0.5959	0.2831	0.1582
22	R10B	1.0	0.0	0.2	43.21	80.67	19.25	82.93	13	28.81	13.3	7.74	0.578	0.2668	0.1501
23	R15B	1.0	0.0	0.3	42.66	83.2	10.83	83.9	7	28.85	12.93	10.02	0.5569	0.2496	0.146
24	R20B	1.0	0.0	0.4	42.27	86.82	1.66	86.83	1	29.35	12.67	13.13	0.5322	0.2298	0.1431
25	R25B	1.0	0.0	0.5	41.87	87.68	−8.59	88.11	354	29.14	12.42	17.33	0.4948	0.2109	0.1402
26	R30B	1.0	0.0	0.6	41.76	90.24	−19.98	92.42	348	29.68	12.35	23.27	0.4545	0.1891	0.1394
27	R35B	1.0	0.0	0.7	42.19	96.59	−33.99	102.4	341	31.88	12.62	32.99	0.4114	0.1629	0.1425
28	R40B	1.0	0.0	0.8	42.86	101.66	−48.43	112.61	335	34.12	13.06	45.86	0.3667	0.1404	0.1475
29	R45B	1.0	0.0	0.9	43.53	104.52	−61.51	121.28	330	35.8	13.51	60.2	0.3269	0.1234	0.1525
30	R50B	1.0	0.0	1.0	44.24	104.14	−73.11	127.24	325	36.61	14.0	75.44	0.2904	0.1111	0.1581
31	R55B	0.9	0.0	1.0	45.02	97.88	−82.53	128.04	320	35.74	14.56	90.08	0.2546	0.1037	0.1643
32	R60B	0.8	0.0	1.0	45.88	86.67	−89.0	124.24	314	33.56	15.18	102.02	0.2226	0.1007	0.1714
33	R65B	0.7	0.0	1.0	46.69	70.9	−89.55	114.23	308	30.18	15.78	105.08	0.1998	0.1045	0.1782
34	R70B	0.6	0.0	1.0	47.57	56.7	−88.65	105.25	303	27.5	16.46	106.08	0.1833	0.1097	0.1858
35	R75B	0.5	0.0	1.0	48.47	43.85	−87.95	98.28	296	25.32	17.17	107.43	0.1689	0.1145	0.1938
36	R80B	0.4	0.0	1.0	49.29	30.84	−86.64	91.97	290	23.15	17.83	107.61	0.1558	0.12	0.2013
37	R85B	0.3	0.0	1.0	50.08	16.7	−83.29	84.95	281	20.84	18.49	104.41	0.145	0.1286	0.2087
38	R90B	0.2	0.0	1.0	51.11	2.21	−78.01	78.05	272	18.83	19.36	98.95	0.1373	0.1412	0.2186
39	R95B	0.1	0.0	1.0	52.44	−11.62	−71.57	72.52	261	17.3	20.54	92.74	0.1325	0.1573	0.2319
40	B00G	0.0	0.0	1.0	53.84	−24.65	−65.25	69.76	249	16.05	21.82	87.11	0.1284	0.1746	0.2463
41	B05G	0.0	0.1	1.0	55.11	−36.67	−58.85	69.36	238	14.94	23.04	81.33	0.1252	0.1931	0.26
42	B10G	0.0	0.2	1.0	56.28	−47.82	−53.65	71.88	228	13.95	24.19	77.12	0.121	0.2099	0.2731
43	B15G	0.0	0.3	1.0	57.35	−56.7	−48.82	74.83	221	13.28	25.28	73.29	0.1187	0.226	0.2853
44	B20G	0.0	0.4	1.0	58.33	−63.79	−44.2	77.62	215	12.85	26.31	69.7	0.118	0.2417	0.297
45	B25G	0.0	0.5	1.0	59.23	−70.17	−39.8	80.69	210	12.47	27.27	66.29	0.1176	0.2572	0.3079
46	B30G	0.0	0.6	1.0	60.02	−76.12	−35.81	84.14	205	12.1	28.14	63.26	0.1169	0.2719	0.3177
47	B35G	0.0	0.7	1.0	60.74	−81.57	−32.21	87.71	202	11.76	28.95	60.62	0.1161	0.2857	0.3268
48	B40G	0.0	0.8	1.0	61.4	−86.84	−28.72	91.47	198	11.43	29.71	58.06	0.1152	0.2995	0.3353
49	B45G	0.0	0.9	1.0	62.02	−92.35	−25.09	95.71	195	11.03	30.42	55.34	0.114	0.3143	0.3434

Farbmetrische "Norm-Daten": Farbmetrische Daten des Natürliches Farbsystems NCS18 für Helligkeit *L**=18 von Schwarz für D65

System NCS18
NCS system

	Farbe	*r=olv*₁*	*g=olv*₂*	*b=olv*₃*	*L*=LAB*₁*	*a*=LAB*₂*	*b*=LAB*₃*	*C*ab=LAB*r*	*hab*	*X=XYZ₁*	*Y=XYZ₂*	*Z=XYZ₃*	*x*	*y*	*Y/88.59*
50	B50G	0.0	1.0	1.0	62.54	−96.75	−21.46	99.11	193	10.75	31.04	52.56	0.1139	0.329	0.3503
51	B55G	0.0	1.0	0.9	62.91	−99.44	−18.09	101.08	190	10.6	31.48	49.85	0.1153	0.3424	0.3553
52	B60G	0.0	1.0	0.8	63.16	−102.05	−14.92	103.15	188	10.4	31.78	47.25	0.1163	0.3554	0.3588
53	B65G	0.0	1.0	0.7	63.32	−106.59	−11.72	107.24	186	9.91	31.98	44.57	0.1146	0.3699	0.361
54	B70G	0.0	1.0	0.6	63.48	−111.9	−8.25	112.22	184	9.33	32.16	41.74	0.1121	0.3864	0.363
55	B75G	0.0	1.0	0.5	63.63	−116.1	−4.46	116.2	182	8.91	32.35	38.77	0.1113	0.4042	0.3651
56	B80G	0.0	1.0	0.4	63.79	−119.89	−0.52	119.9	180	8.55	32.54	35.84	0.1111	0.423	0.3673
57	B85G	0.0	1.0	0.3	63.92	−123.02	3.68	123.09	178	8.26	32.7	32.83	0.1119	0.4432	0.3692
58	B90G	0.0	1.0	0.2	64.1	−125.73	9.91	126.13	175	8.04	32.93	28.67	0.1155	0.4728	0.3717
59	B95G	0.0	1.0	0.1	64.48	−126.58	20.17	128.19	171	8.13	33.4	22.7	0.1266	0.52	0.377
60	G00Y	0.0	1.0	0.0	65.0	−126.76	34.09	131.27	165	8.36	34.04	16.01	0.1431	0.5828	0.3843
61	G05Y	0.05	1.0	0.0	65.61	−114.79	46.12	123.72	158	10.12	34.82	11.52	0.1792	0.6168	0.3931
62	G10Y	0.1	1.0	0.0	66.33	−101.38	56.42	116.03	151	12.38	35.75	8.51	0.2186	0.6311	0.4036
63	G15Y	0.15	1.0	0.0	67.22	−89.66	67.6	112.29	143	14.8	36.92	5.95	0.2567	0.6402	0.4167
64	G20Y	0.2	1.0	0.0	68.29	−77.98	77.28	109.79	135	17.66	38.36	4.29	0.2928	0.6361	0.433
65	G25Y	0.25	1.0	0.0	69.61	−67.53	83.74	107.59	129	20.83	40.2	3.55	0.3226	0.6225	0.4538
66	G30Y	0.3	1.0	0.0	71.2	−59.24	90.53	108.2	123	24.13	42.48	2.91	0.3471	0.611	0.4796
67	G35Y	0.35	1.0	0.0	73.03	−51.61	95.09	108.2	118	27.86	45.22	2.71	0.3676	0.5966	0.5104
68	G40Y	0.4	1.0	0.0	75.09	−45.29	99.63	109.45	114	31.86	48.43	2.58	0.3845	0.5844	0.5467
69	G45Y	0.45	1.0	0.0	77.34	−40.25	103.85	111.38	111	36.09	52.1	2.53	0.3978	0.5743	0.5881
70	G50Y	0.5	1.0	0.0	79.64	−36.3	107.57	113.53	109	40.4	56.05	2.56	0.408	0.5661	0.6327
71	G55Y	0.55	1.0	0.0	81.87	−33.12	110.69	115.54	107	44.66	60.06	2.66	0.4159	0.5593	0.6779
72	G60Y	0.6	1.0	0.0	83.85	−30.36	113.54	117.53	105	48.67	63.78	2.74	0.4225	0.5537	0.72
73	G65Y	0.65	1.0	0.0	85.49	−27.59	116.24	119.47	103	52.35	66.97	2.76	0.4288	0.5486	0.756
74	G70Y	0.7	1.0	0.0	86.85	−24.81	118.69	121.26	102	55.73	69.7	2.74	0.4348	0.5438	0.7867
75	G75Y	0.75	1.0	0.0	87.98	−21.86	120.86	122.82	100	58.91	72.02	2.71	0.4408	0.5389	0.8129
76	G80Y	0.8	1.0	0.0	88.88	−18.65	122.5	123.92	99	61.91	73.92	2.7	0.4469	0.5336	0.8344
77	G85Y	0.85	1.0	0.0	89.56	−15.09	123.9	124.82	97	64.73	75.36	2.67	0.4534	0.5279	0.8507
78	G90Y	0.9	1.0	0.0	90.16	−11.07	124.88	125.38	95	67.68	76.64	2.68	0.4604	0.5214	0.8651
79	G95Y	0.95	1.0	0.0	90.7	−6.37	124.91	125.07	93	70.93	77.83	2.8	0.468	0.5135	0.8785
80	Y00R	0.0	1.0	0.0	90.76	−0.82	124.09	124.09	90	73.69	77.96	2.94	0.4767	0.5043	0.88
81	9500	1.0	1.0	1.0	18.31	0.0	0.0	0.01	0	2.46	2.59	2.82	0.3127	0.329	0.0292
82	9000	0.944	0.944	0.944	25.26	0.0	0.0	0.01	347	4.28	4.5	4.9	0.3127	0.329	0.0508
83	8500	0.889	0.889	0.889	30.78	0.0	0.0	0.01	104	6.23	6.56	7.14	0.3127	0.329	0.074
84	8000	0.833	0.833	0.833	35.53	0.0	0.0	0.01	9	8.33	8.77	9.55	0.3127	0.329	0.099
85	7500	0.778	0.778	0.778	39.83	0.0	0.0	0.01	324	10.6	11.15	12.14	0.3127	0.329	0.1259
86	7000	0.722	0.722	0.722	43.84	0.01	0.0	0.01	6	13.05	13.73	14.95	0.3127	0.329	0.155
87	6500	0.667	0.667	0.667	47.65	0.01	0.0	0.01	162	15.7	16.52	17.99	0.3127	0.329	0.1865
88	6000	0.611	0.611	0.611	51.35	0.01	0.0	0.01	166	18.6	19.57	21.31	0.3127	0.329	0.2209
89	5500	0.556	0.556	0.556	54.97	0.01	0.0	0.02	11	21.77	22.9	24.94	0.3127	0.329	0.2585
90	5000	0.5	0.5	0.5	58.56	0.01	0.0	0.02	21	25.24	26.56	28.92	0.3127	0.329	0.2998
91	4500	0.444	0.444	0.444	62.17	0.01	0.0	0.02	101	29.08	30.6	33.32	0.3127	0.329	0.3454
92	4000	0.389	0.389	0.389	65.81	0.01	0.0	0.02	153	33.34	35.08	38.2	0.3127	0.329	0.396
93	3500	0.333	0.333	0.333	69.52	0.01	0.0	0.02	100	38.08	40.07	43.64	0.3127	0.329	0.4523
94	3000	0.278	0.278	0.278	73.33	0.01	0.0	0.02	300	43.41	45.68	49.74	0.3127	0.329	0.5156
95	2500	0.222	0.222	0.222	77.29	0.01	0.0	0.02	162	49.43	52.01	56.64	0.3127	0.329	0.5871
96	2000	0.167	0.167	0.167	81.42	0.01	0.0	0.02	154	56.31	59.24	64.52	0.3127	0.329	0.6687
97	1500	0.111	0.111	0.111	85.78	0.01	0.0	0.02	165	64.2	67.55	73.56	0.3127	0.329	0.7625
98	1000	0.056	0.056	0.056	90.42	0.01	0.0	0.02	132	73.39	77.21	84.09	0.3127	0.329	0.8716
99	0500	0.0	0.0	0.0	95.41	0.01	−0.01	0.02	0	84.2	88.59	96.48	0.3127	0.329	1.0

Farbmetrische "Norm-Daten": Farbmetrische Daten des Natürliches Farbsystems NCS18 für Helligkeit *L=18 von Schwarz für D65**

System NCS18
NCS system

***J* Gelb**
*LCH** = 90.8 124.1 90
*LAB** = 90.8 −0.8 124.1

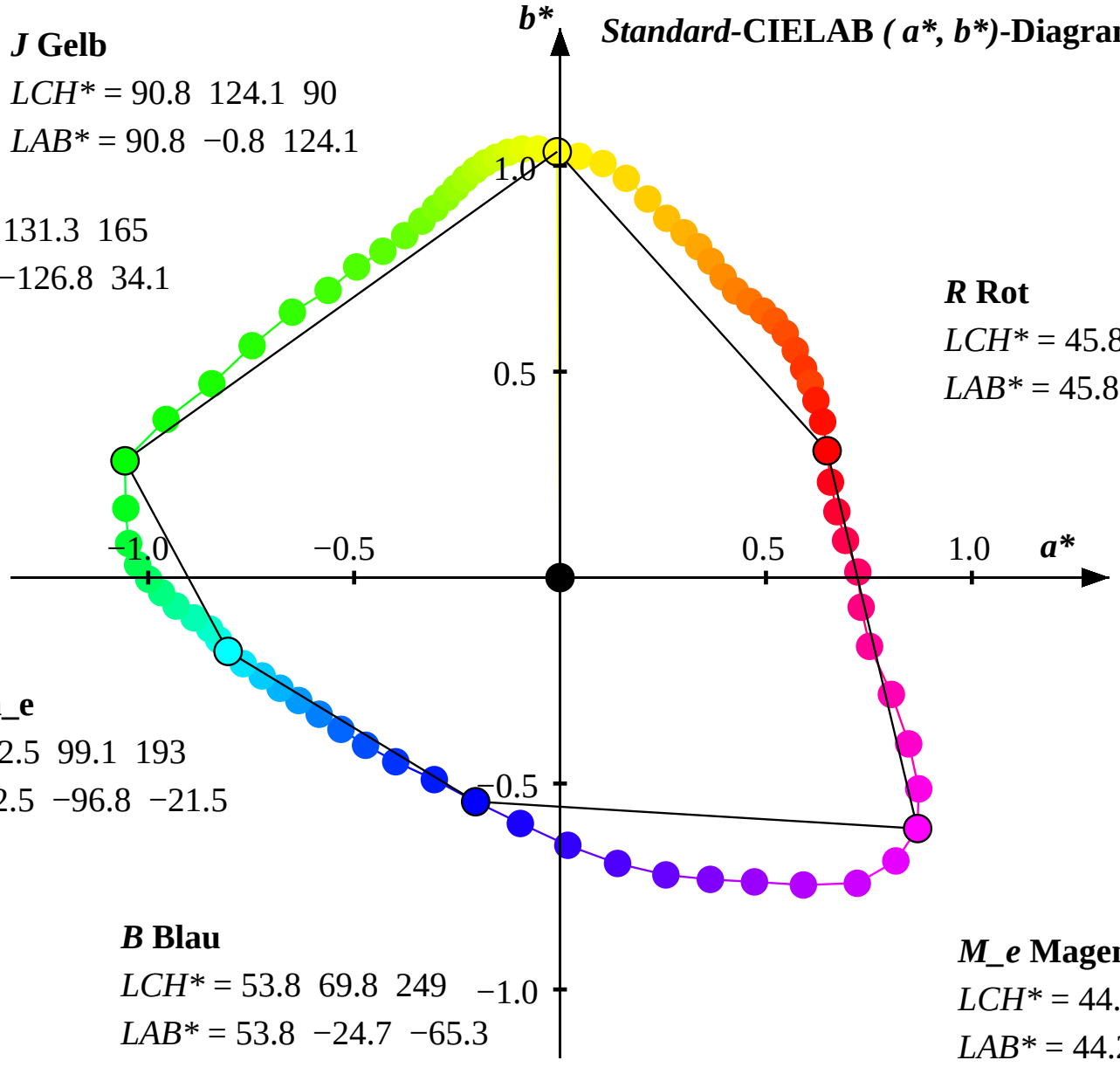
***G* Grün**
*LCH** = 65.0 131.3 165
*LAB** = 65.0 −126.8 34.1

***R* Rot**
*LCH** = 45.8 86.2 25
*LAB** = 45.8 77.8 37.0

***C_e* Cyan_e**
*LCH** = 62.5 99.1 193
*LAB** = 62.5 −96.8 −21.5

***B* Blau**
*LCH** = 53.8 69.8 249
*LAB** = 53.8 −24.7 −65.3

***M_e* Magenta_e**
*LCH** = 44.2 127.2 325
*LAB** = 44.2 104.1 −73.1



Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches Farbsystems NCS18a für Helligkeit *L**=18 von Schwarz für D65

System NCS18a
NCS system

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ra}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.76	−0.83	124.1	124.11	90	73.69	77.96	2.94	0.4767	0.5043	0.88
01	Y05R	1.0	0.95	0.0	89.83	5.59	122.82	122.95	87	74.86	75.94	2.89	0.4871	0.4941	0.8572
02	Y10R	1.0	0.9	0.0	87.77	12.49	120.62	121.27	84	73.88	71.58	2.69	0.4987	0.4831	0.808
03	Y15R	1.0	0.85	0.0	84.58	19.28	116.35	117.94	81	70.6	65.19	2.53	0.5104	0.4713	0.7359
04	Y20R	1.0	0.8	0.0	80.98	25.51	110.32	113.23	77	66.33	58.43	2.51	0.5212	0.4591	0.6596
05	Y25R	1.0	0.75	0.0	77.79	31.15	104.75	109.28	73	62.77	52.86	2.51	0.5313	0.4474	0.5967
06	Y30R	1.0	0.7	0.0	74.98	36.13	100.4	106.71	70	59.74	48.25	2.45	0.5409	0.4369	0.5447
07	Y35R	1.0	0.65	0.0	72.28	40.31	96.44	104.53	67	56.65	44.07	2.36	0.5496	0.4275	0.4975
08	Y40R	1.0	0.6	0.0	69.7	43.95	92.23	102.17	65	53.7	40.33	2.33	0.5573	0.4185	0.4552
09	Y45R	1.0	0.55	0.0	67.39	47.46	87.6	99.63	62	51.23	37.15	2.41	0.5642	0.4092	0.4194
10	Y50R	1.0	0.5	0.0	65.32	51.17	83.5	97.93	58	49.28	34.45	2.48	0.5716	0.3996	0.3889
11	Y55R	1.0	0.45	0.0	63.4	55.22	80.37	97.51	56	47.74	32.07	2.46	0.5803	0.3898	0.362
12	Y60R	1.0	0.4	0.0	61.57	59.14	77.69	97.64	53	46.32	29.9	2.4	0.5892	0.3803	0.3375
13	Y65R	1.0	0.35	0.0	59.77	62.57	74.79	97.51	50	44.81	27.87	2.37	0.5971	0.3713	0.3145
14	Y70R	1.0	0.3	0.0	57.94	65.65	71.18	96.83	47	43.18	25.9	2.43	0.6038	0.3622	0.2924
15	Y75R	1.0	0.25	0.0	56.04	68.54	66.18	95.28	44	41.41	23.95	2.66	0.6088	0.3521	0.2703
16	Y80R	1.0	0.2	0.0	54.06	71.0	60.96	93.58	41	39.46	22.03	2.92	0.6126	0.3421	0.2487
17	Y85R	1.0	0.25	0.0	52.0	72.89	56.61	92.29	38	37.27	20.14	3.03	0.6166	0.3332	0.2274
18	Y90R	1.0	0.1	0.0	49.88	74.56	51.68	90.72	35	35.05	18.32	3.23	0.6192	0.3237	0.2068
19	Y95R	1.0	0.05	0.0	47.78	76.51	45.36	88.94	31	33.0	16.62	3.67	0.6192	0.3119	0.1876
20	R00B	1.0	0.0	0.0	45.83	77.82	36.97	86.16	25	31.04	15.14	4.59	0.6113	0.2982	0.1709
21	R05B	1.0	0.0	0.1	44.25	78.82	27.83	83.59	19	29.5	14.01	5.99	0.5959	0.2831	0.1582
22	R10B	1.0	0.0	0.2	43.21	80.66	19.26	82.93	13	28.81	13.3	7.73	0.578	0.2668	0.1501
23	R15B	1.0	0.0	0.3	42.66	83.19	10.83	83.89	7	28.85	12.93	10.02	0.5569	0.2496	0.146
24	R20B	1.0	0.0	0.4	42.27	86.81	1.67	86.83	1	29.35	12.67	13.12	0.5322	0.2298	0.1431
25	R25B	1.0	0.0	0.5	41.87	87.68	−8.59	88.1	354	29.14	12.42	17.33	0.4948	0.2109	0.1402
26	R30B	1.0	0.0	0.6	41.76	90.23	−19.97	92.42	348	29.68	12.35	23.27	0.4545	0.1891	0.1394
27	R35B	1.0	0.0	0.7	42.19	96.58	−33.98	102.39	341	31.88	12.62	32.98	0.4114	0.1629	0.1425
28	R40B	1.0	0.0	0.8	42.86	101.65	−48.42	112.6	335	34.12	13.06	45.85	0.3667	0.1404	0.1475
29	R45B	1.0	0.0	0.9	43.53	104.51	−61.5	121.27	330	35.8	13.51	60.19	0.3269	0.1234	0.1525
30	R50B	1.0	0.0	1.0	44.24	104.13	−73.1	127.23	325	36.6	14.0	75.43	0.2904	0.1111	0.1581
31	R55B	0.9	0.0	1.0	45.02	97.87	−82.53	128.03	320	35.74	14.56	90.07	0.2546	0.1037	0.1643
32	R60B	0.8	0.0	1.0	45.88	86.67	−89.0	124.23	314	33.56	15.18	102.0	0.2226	0.1007	0.1714
33	R65B	0.7	0.0	1.0	46.69	70.9	−89.54	114.22	308	30.18	15.78	105.07	0.1998	0.1045	0.1782
34	R70B	0.6	0.0	1.0	47.57	56.7	−88.65	105.24	303	27.5	16.46	106.07	0.1833	0.1097	0.1858
35	R75B	0.5	0.0	1.0	48.47	43.85	−87.94	98.27	296	25.32	17.17	107.42	0.1689	0.1145	0.1938
36	R80B	0.4	0.0	1.0	49.29	30.83	−86.63	91.96	290	23.15	17.83	107.59	0.1558	0.12	0.2013
37	R85B	0.3	0.0	1.0	50.08	16.69	−83.28	84.94	281	20.84	18.49	104.4	0.145	0.1286	0.2087
38	R90B	0.2	0.0	1.0	51.11	2.21	−78.0	78.04	272	18.83	19.36	98.94	0.1373	0.1412	0.2186
39	R95B	0.1	0.0	1.0	52.44	−11.63	−71.56	72.51	261	17.3	20.54	92.73	0.1325	0.1573	0.2319
40	B00G	0.0	0.0	1.0	53.84	−24.66	−65.24	69.76	249	16.05	21.82	87.09	0.1284	0.1746	0.2463
41	B05G	0.0	0.1	1.0	55.11	−36.68	−58.84	69.35	238	14.94	23.04	81.32	0.1252	0.1931	0.26
42	B10G	0.0	0.2	1.0	56.28	−47.82	−53.64	71.88	228	13.95	24.19	77.11	0.121	0.2099	0.2731
43	B15G	0.0	0.3	1.0	57.35	−56.7	−48.81	74.83	221	13.28	25.28	73.28	0.1187	0.226	0.2853
44	B20G	0.0	0.4	1.0	58.33	−63.79	−44.19	77.62	215	12.84	26.31	69.69	0.118	0.2417	0.297
45	B25G	0.0	0.5	1.0	59.23	−70.17	−39.79	80.69	210	12.47	27.27	66.28	0.1176	0.2572	0.3079
46	B30G	0.0	0.6	1.0	60.02	−76.13	−35.8	84.14	205	12.1	28.14	63.25	0.1169	0.2719	0.3177
47	B35G	0.0	0.7	1.0	60.74	−81.58	−32.2	87.71	202	11.76	28.95	60.6	0.1161	0.2857	0.3268
48	B40G	0.0	0.8	1.0	61.4	−86.84	−28.71	91.48	198	11.43	29.71	58.04	0.1152	0.2995	0.3353
49	B45G	0.0	0.9	1.0	62.02	−92.35	−25.08	95.71	195	11.03	30.42	55.33	0.114	0.3143	0.3434

TUB-Prüfvorlage JG25; Bunttonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttône, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches Farbsystems NCS00a für Helligkeit *L**=00 von Schwarz für D65

System NCS00a
NCS system

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ra}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	62.54	−96.76	−21.45	99.12	193	10.74	31.04	52.54	0.1139	0.329	0.3503
51	B55G	0.0	1.0	0.9	62.91	−99.44	−18.08	101.09	190	10.6	31.48	49.84	0.1153	0.3424	0.3553
52	B60G	0.0	1.0	0.8	63.16	−102.06	−14.91	103.15	188	10.4	31.78	47.24	0.1163	0.3554	0.3588
53	B65G	0.0	1.0	0.7	63.32	−106.6	−11.71	107.25	186	9.91	31.98	44.56	0.1146	0.3699	0.361
54	B70G	0.0	1.0	0.6	63.48	−111.91	−8.24	112.22	184	9.33	32.16	41.73	0.1121	0.3864	0.363
55	B75G	0.0	1.0	0.5	63.63	−116.11	−4.45	116.2	182	8.91	32.35	38.76	0.1113	0.4042	0.3651
56	B80G	0.0	1.0	0.4	63.79	−119.9	−0.51	119.91	180	8.55	32.54	35.83	0.1111	0.4231	0.3673
57	B85G	0.0	1.0	0.3	63.92	−123.03	3.69	123.1	178	8.26	32.7	32.82	0.1119	0.4433	0.3692
58	B90G	0.0	1.0	0.2	64.1	−125.74	9.92	126.14	175	8.04	32.93	28.67	0.1155	0.4729	0.3717
59	B95G	0.0	1.0	0.1	64.48	−126.59	20.18	128.19	171	8.13	33.4	22.69	0.1266	0.5201	0.377
60	G00Y	0.0	1.0	0.0	65.0	−126.77	34.1	131.28	165	8.36	34.04	16.01	0.1431	0.5829	0.3843
61	G05Y	0.05	1.0	0.0	65.61	−114.8	46.13	123.73	158	10.12	34.82	11.51	0.1792	0.6169	0.3931
62	G10Y	0.1	1.0	0.0	66.33	−101.38	56.43	116.04	151	12.38	35.75	8.51	0.2186	0.6311	0.4036
63	G15Y	0.15	1.0	0.0	67.22	−89.67	67.61	112.31	143	14.8	36.92	5.94	0.2567	0.6402	0.4167
64	G20Y	0.2	1.0	0.0	68.29	−77.99	77.29	109.81	135	17.66	38.36	4.29	0.2928	0.6361	0.433
65	G25Y	0.25	1.0	0.0	69.61	−67.54	83.75	107.6	129	20.83	40.2	3.54	0.3226	0.6225	0.4538
66	G30Y	0.3	1.0	0.0	71.2	−59.25	90.54	108.21	123	24.13	42.48	2.91	0.3471	0.611	0.4796
67	G35Y	0.35	1.0	0.0	73.03	−51.62	95.1	108.21	118	27.86	45.22	2.71	0.3676	0.5966	0.5104
68	G40Y	0.4	1.0	0.0	75.09	−45.3	99.65	109.46	114	31.86	48.43	2.58	0.3845	0.5844	0.5467
69	G45Y	0.45	1.0	0.0	77.34	−40.26	103.87	111.4	111	36.09	52.1	2.53	0.3978	0.5743	0.5881
70	G50Y	0.5	1.0	0.0	79.64	−36.31	107.58	113.55	109	40.39	56.05	2.56	0.408	0.5661	0.6327
71	G55Y	0.55	1.0	0.0	81.87	−33.13	110.7	115.55	107	44.66	60.06	2.66	0.4159	0.5593	0.6779
72	G60Y	0.6	1.0	0.0	83.85	−30.37	113.55	117.55	105	48.67	63.78	2.74	0.4225	0.5537	0.72
73	G65Y	0.65	1.0	0.0	85.49	−27.6	116.25	119.49	103	52.35	66.97	2.76	0.4288	0.5486	0.756
74	G70Y	0.7	1.0	0.0	86.85	−24.81	118.71	121.28	102	55.72	69.7	2.74	0.4348	0.5438	0.7867
75	G75Y	0.75	1.0	0.0	87.98	−21.87	120.87	122.83	100	58.9	72.02	2.71	0.4408	0.5389	0.8129
76	G80Y	0.8	1.0	0.0	88.88	−18.66	122.52	123.93	99	61.91	73.92	2.7	0.4469	0.5336	0.8344
77	G85Y	0.85	1.0	0.0	89.56	−15.1	123.92	124.83	97	64.72	75.36	2.67	0.4534	0.5279	0.8507
78	G90Y	0.9	1.0	0.0	90.16	−11.08	124.9	125.39	95	67.67	76.64	2.67	0.4604	0.5214	0.8651
79	G95Y	0.95	1.0	0.0	90.7	−6.38	124.92	125.08	93	70.93	77.83	2.8	0.468	0.5135	0.8785
80	Y00R	0.0	1.0	0.0	90.76	−0.83	124.1	124.11	90	73.69	77.96	2.94	0.4767	0.5043	0.88
81	9500	1.0	1.0	1.0	18.31	0.0	0.0	0.01	0	2.46	2.59	2.82	0.3127	0.329	0.0292
82	9000	0.944	0.944	0.944	25.26	0.0	0.0	0.01	347	4.28	4.5	4.9	0.3127	0.329	0.0508
83	8500	0.889	0.889	0.889	30.78	0.0	0.0	0.01	104	6.23	6.56	7.14	0.3127	0.329	0.074
84	8000	0.833	0.833	0.833	35.53	0.0	0.0	0.01	9	8.33	8.77	9.55	0.3127	0.329	0.099
85	7500	0.778	0.778	0.778	39.83	0.0	0.0	0.01	324	10.6	11.15	12.14	0.3127	0.329	0.1259
86	7000	0.722	0.722	0.722	43.84	0.0	0.0	0.01	6	13.05	13.73	14.95	0.3127	0.329	0.155
87	6500	0.667	0.667	0.667	47.65	0.0	0.0	0.01	162	15.7	16.52	17.99	0.3127	0.329	0.1865
88	6000	0.611	0.611	0.611	51.35	0.0	0.0	0.01	166	18.6	19.57	21.31	0.3127	0.329	0.2209
89	5500	0.556	0.556	0.556	54.97	0.0	0.0	0.01	11	21.77	22.9	24.94	0.3127	0.329	0.2585
90	5000	0.5	0.5	0.5	58.56	0.0	0.0	0.01	21	25.24	26.56	28.91	0.3127	0.329	0.2998
91	4500	0.444	0.444	0.444	62.17	0.0	0.0	0.01	101	29.08	30.6	33.31	0.3127	0.329	0.3454
92	4000	0.389	0.389	0.389	65.81	0.0	0.0	0.01	153	33.34	35.08	38.19	0.3127	0.329	0.396
93	3500	0.333	0.333	0.333	69.52	0.0	0.0	0.01	100	38.08	40.07	43.63	0.3127	0.329	0.4523
94	3000	0.278	0.278	0.278	73.33	0.0	0.0	0.01	300	43.41	45.68	49.73	0.3127	0.329	0.5156
95	2500	0.222	0.222	0.222	77.29	0.0	0.0	0.01	162	49.43	52.01	56.63	0.3127	0.329	0.5871
96	2000	0.167	0.167	0.167	81.42	0.0	0.0	0.01	154	56.3	59.24	64.5	0.3127	0.329	0.6687
97	1500	0.111	0.111	0.111	85.78	0.0	0.0	0.01	165	64.2	67.55	73.55	0.3127	0.329	0.7625
98	1000	0.056	0.056	0.056	90.42	0.0	0.0	0.01	132	73.38	77.21	84.07	0.3127	0.329	0.8716
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

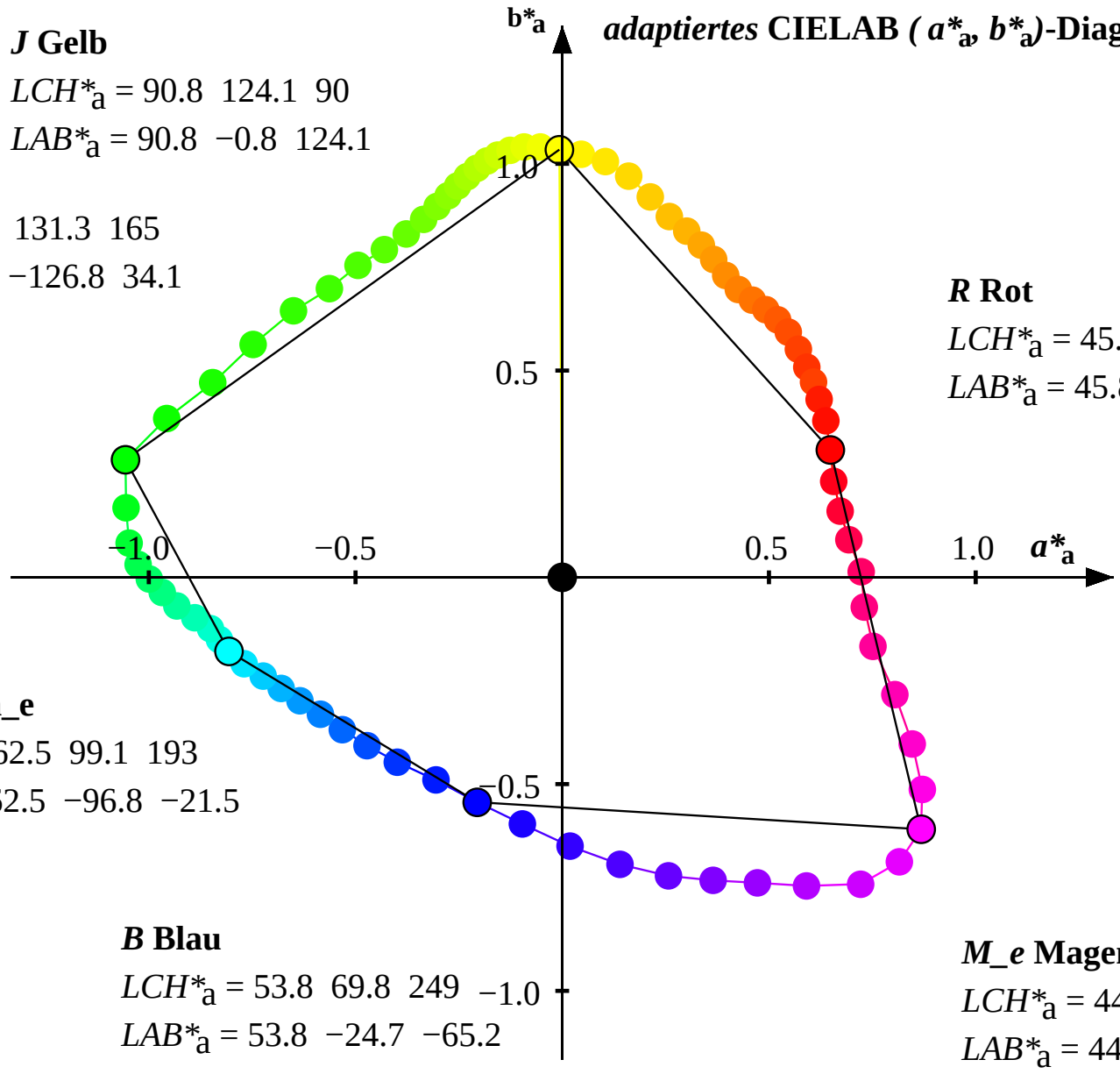
TUB-Prüfvorlage JG25; Buntontkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches Farbsystems NCS00a für Helligkeit *L=00 von Schwarz für D65**

System NCS00a
NCS system

adaptiertes CIELAB (*a**a, *b**a)-Diagramm



J Gelb
*LCH**a = 90.8 124.1 90
*LAB**a = 90.8 −0.8 124.1

G Grün
*LCH**a = 65.0 131.3 165
*LAB**a = 65.0 −126.8 34.1

R Rot
*LCH**a = 45.8 86.2 25
*LAB**a = 45.8 77.8 37.0

C_e Cyan_e
*LCH**a = 62.5 99.1 193
*LAB**a = 62.5 −96.8 −21.5

B Blau
*LCH**a = 53.8 69.8 249
*LAB**a = 53.8 −24.7 −65.2

M_e Magenta_e
*LCH**a = 44.2 127.2 325
*LAB**a = 44.2 104.1 −73.1

Farbmetrische "Adaptierte Daten (a0)": Farbmetrische Daten des Natürliches Farbsystems NCS00a für Helligkeit *L**=00 von Schwarz für D65

System NCS00a
NCS system

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.62	−0.86	154.51	154.51	90	73.37	77.64	0.12	0.4855	0.5137	0.8764
01	Y05R	1.0	0.95	0.0	89.65	5.78	153.55	153.66	88	74.57	75.55	0.07	0.4965	0.503	0.8529
02	Y10R	1.0	0.9	0.0	87.52	12.91	150.89	151.44	85	73.57	71.07	−0.12	0.5091	0.4918	0.8022
03	Y15R	1.0	0.85	0.0	84.22	19.97	145.21	146.57	82	70.19	64.49	−0.29	0.5223	0.4799	0.728
04	Y20R	1.0	0.8	0.0	80.47	26.48	138.75	141.25	79	65.8	57.53	−0.31	0.5349	0.4677	0.6493
05	Y25R	1.0	0.75	0.0	77.15	32.41	133.02	136.91	76	62.12	51.78	−0.3	0.5469	0.4559	0.5845
06	Y30R	1.0	0.7	0.0	74.22	37.68	127.96	133.39	74	59.0	47.04	−0.37	0.5584	0.4452	0.531
07	Y35R	1.0	0.65	0.0	71.37	42.14	123.05	130.07	71	55.83	42.73	−0.46	0.5692	0.4357	0.4823
08	Y40R	1.0	0.6	0.0	68.66	46.07	118.38	127.03	69	52.78	38.87	−0.49	0.579	0.4265	0.4388
09	Y45R	1.0	0.55	0.0	66.22	49.88	114.17	124.59	66	50.23	35.61	−0.41	0.588	0.4168	0.4019
10	Y50R	1.0	0.5	0.0	64.02	53.91	110.38	122.84	64	48.23	32.82	−0.34	0.5976	0.4067	0.3705
11	Y55R	1.0	0.45	0.0	61.97	58.31	106.85	121.72	61	46.64	30.37	−0.36	0.6086	0.3962	0.3428
12	Y60R	1.0	0.4	0.0	60.01	62.61	103.47	120.93	59	45.18	28.14	−0.42	0.6199	0.386	0.3176
13	Y65R	1.0	0.35	0.0	58.07	66.41	100.13	120.15	56	43.62	26.04	−0.45	0.6304	0.3763	0.2939
14	Y70R	1.0	0.3	0.0	56.1	69.88	96.73	119.33	54	41.94	24.02	−0.39	0.6398	0.3663	0.2711
15	Y75R	1.0	0.25	0.0	54.03	73.22	93.15	118.48	52	40.12	22.0	−0.15	0.6475	0.3551	0.2484
16	Y80R	1.0	0.2	0.0	51.87	76.15	87.99	116.36	49	38.11	20.03	0.1	0.6543	0.3439	0.2261
17	Y85R	1.0	0.25	0.0	49.6	78.56	82.34	113.81	46	35.86	18.08	0.22	0.6621	0.3338	0.2041
18	Y90R	1.0	0.1	0.0	47.24	80.82	75.38	110.52	43	33.57	16.21	0.42	0.6687	0.3229	0.1829
19	Y95R	1.0	0.05	0.0	44.88	83.45	64.82	105.67	38	31.46	14.46	0.88	0.6723	0.309	0.1632
20	R00B	1.0	0.0	0.0	42.66	85.46	49.92	98.97	30	29.44	12.93	1.83	0.6661	0.2926	0.1459
21	R05B	1.0	0.0	0.1	40.85	87.08	35.88	94.18	22	27.85	11.77	3.27	0.6494	0.2744	0.1329
22	R10B	1.0	0.0	0.2	39.64	89.46	24.0	92.62	15	27.14	11.03	5.06	0.6277	0.2552	0.1245
23	R15B	1.0	0.0	0.3	38.99	92.4	13.12	93.33	8	27.18	10.65	7.42	0.6006	0.2354	0.1203
24	R20B	1.0	0.0	0.4	38.53	96.46	1.97	96.48	1	27.7	10.39	10.62	0.5687	0.2133	0.1173
25	R25B	1.0	0.0	0.5	38.07	97.57	−9.94	98.07	354	27.48	10.13	14.94	0.5229	0.1927	0.1143
26	R30B	1.0	0.0	0.6	37.94	100.35	−22.67	102.88	347	28.03	10.05	21.06	0.4739	0.17	0.1135
27	R35B	1.0	0.0	0.7	38.44	106.93	−37.8	113.42	341	30.3	10.34	31.07	0.4226	0.1441	0.1167
28	R40B	1.0	0.0	0.8	39.23	112.0	−53.01	123.92	335	32.61	10.79	44.33	0.3717	0.123	0.1218
29	R45B	1.0	0.0	0.9	40.01	114.72	−66.57	132.65	330	34.34	11.25	59.1	0.328	0.1075	0.127
30	R50B	1.0	0.0	1.0	40.83	114.01	−78.48	138.42	325	35.17	11.76	74.8	0.2889	0.0966	0.1327
31	R55B	0.9	0.0	1.0	41.73	107.06	−88.06	138.63	321	34.28	12.33	89.88	0.2512	0.0903	0.1392
32	R60B	0.8	0.0	1.0	42.72	94.86	−94.55	133.94	315	32.03	12.97	102.17	0.2177	0.0881	0.1464
33	R65B	0.7	0.0	1.0	43.64	77.79	−94.96	122.76	309	28.55	13.59	105.33	0.1936	0.0922	0.1534
34	R70B	0.6	0.0	1.0	44.64	62.33	−93.87	112.69	304	25.8	14.29	106.36	0.1761	0.0976	0.1613
35	R75B	0.5	0.0	1.0	45.66	48.28	−92.99	104.79	297	23.55	15.02	107.75	0.1609	0.1026	0.1695
36	R80B	0.4	0.0	1.0	46.58	34.03	−91.51	97.64	290	21.31	15.7	107.93	0.147	0.1083	0.1772
37	R85B	0.3	0.0	1.0	47.46	18.48	−87.94	89.87	282	18.93	16.38	104.64	0.1353	0.117	0.1848
38	R90B	0.2	0.0	1.0	48.61	2.45	−82.35	82.4	272	16.86	17.28	99.01	0.1266	0.1298	0.1951
39	R95B	0.1	0.0	1.0	50.09	−12.93	−75.54	76.65	260	15.29	18.49	92.62	0.121	0.1463	0.2088
40	B00G	0.0	0.0	1.0	51.62	−27.44	−68.85	74.13	248	13.99	19.81	86.81	0.116	0.1642	0.2236
41	B05G	0.0	0.1	1.0	53.02	−40.85	−62.11	74.35	237	12.85	21.06	80.86	0.112	0.1835	0.2378
42	B10G	0.0	0.2	1.0	54.3	−53.33	−56.61	77.79	227	11.83	22.26	76.53	0.107	0.2012	0.2512
43	B15G	0.0	0.3	1.0	55.45	−63.27	−51.51	81.6	219	11.14	23.37	72.58	0.104	0.2182	0.2638
44	B20G	0.0	0.4	1.0	56.52	−71.18	−46.64	85.11	213	10.7	24.44	68.88	0.1028	0.2349	0.2758
45	B25G	0.0	0.5	1.0	57.49	−78.29	−42.01	88.86	208	10.31	25.43	65.37	0.102	0.2515	0.287
46	B30G	0.0	0.6	1.0	58.34	−84.95	−37.81	92.99	204	9.93	26.32	62.25	0.1008	0.2672	0.2971
47	B35G	0.0	0.7	1.0	59.12	−91.05	−34.01	97.21	200	9.58	27.16	59.53	0.0996	0.2821	0.3065
48	B40G	0.0	0.8	1.0	59.83	−96.97	−30.33	101.62	197	9.24	27.94	56.89	0.0982	0.297	0.3153
49	B45G	0.0	0.9	1.0	60.49	−103.22	−26.51	106.58	194	8.83	28.67	54.09	0.0964	0.313	0.3237

n = 28.67 / (28.67 − 2.59) = 1.03

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a0)": Farbmetrische Daten des Natürliches Farbsystems NCS00a0 für Helligkeit *L**=00 von Schwarz für D65

System NCS00a0
NCS system

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	61.05	−108.21	−22.7	110.57	192	8.53	29.31	51.22	0.0958	0.329	0.3308
51	B55G	0.0	1.0	0.9	61.45	−111.23	−19.14	112.87	190	8.38	29.76	48.44	0.0968	0.3437	0.3359
52	B60G	0.0	1.0	0.8	61.72	−114.23	−15.8	115.33	188	8.18	30.07	45.76	0.0974	0.358	0.3395
53	B65G	0.0	1.0	0.7	61.89	−119.64	−12.43	120.3	186	7.67	30.27	42.99	0.0948	0.374	0.3417
54	B70G	0.0	1.0	0.6	62.05	−126.07	−8.76	126.39	184	7.08	30.46	40.09	0.0912	0.3924	0.3439
55	B75G	0.0	1.0	0.5	62.21	−131.19	−4.74	131.28	182	6.64	30.65	37.03	0.0893	0.4124	0.346
56	B80G	0.0	1.0	0.4	62.38	−135.83	−0.54	135.84	180	6.27	30.85	34.01	0.0881	0.4338	0.3483
57	B85G	0.0	1.0	0.3	62.53	−139.7	3.95	139.76	178	5.97	31.02	30.91	0.0879	0.4569	0.3502
58	B90G	0.0	1.0	0.2	62.72	−143.0	10.66	143.41	176	5.75	31.25	26.63	0.0904	0.4912	0.3528
59	B95G	0.0	1.0	0.1	63.13	−143.73	21.85	145.39	171	5.84	31.74	20.47	0.1006	0.5467	0.3583
60	G00Y	0.0	1.0	0.0	63.67	−143.48	37.43	148.3	165	6.08	32.4	13.59	0.1167	0.6224	0.3658
61	G05Y	0.05	1.0	0.0	64.33	−128.13	51.51	138.11	158	7.89	33.2	8.96	0.1576	0.6635	0.3748
62	G10Y	0.1	1.0	0.0	65.09	−111.74	64.28	128.92	150	10.22	34.16	5.86	0.2034	0.6799	0.3856
63	G15Y	0.15	1.0	0.0	66.03	−97.86	79.59	126.14	141	12.71	35.36	3.22	0.2478	0.6894	0.3992
64	G20Y	0.2	1.0	0.0	67.16	−84.38	95.32	127.3	132	15.65	36.85	1.51	0.2898	0.6822	0.416
65	G25Y	0.25	1.0	0.0	68.57	−72.52	107.53	129.7	124	18.93	38.75	0.75	0.324	0.6632	0.4374
66	G30Y	0.3	1.0	0.0	70.24	−63.22	119.73	135.4	118	22.33	41.1	0.1	0.3515	0.647	0.4639
67	G35Y	0.35	1.0	0.0	72.17	−54.77	124.43	135.95	114	26.16	43.91	−0.1	0.3739	0.6276	0.4957
68	G40Y	0.4	1.0	0.0	74.33	−47.83	128.15	136.79	110	30.29	47.22	−0.24	0.392	0.6112	0.533
69	G45Y	0.45	1.0	0.0	76.68	−42.32	132.21	138.82	108	34.64	51.0	−0.29	0.4059	0.5976	0.5757
70	G50Y	0.5	1.0	0.0	79.08	−38.03	136.35	141.55	106	39.07	55.07	−0.25	0.4162	0.5866	0.6216
71	G55Y	0.55	1.0	0.0	81.4	−34.59	140.35	144.55	104	43.47	59.2	−0.15	0.424	0.5775	0.6683
72	G60Y	0.6	1.0	0.0	83.46	−31.64	143.9	147.34	102	47.6	63.04	−0.07	0.4305	0.5702	0.7115
73	G65Y	0.65	1.0	0.0	85.16	−28.69	146.83	149.61	101	51.39	66.32	−0.05	0.4368	0.5637	0.7487
74	G70Y	0.7	1.0	0.0	86.57	−25.76	149.25	151.46	100	54.87	69.13	−0.07	0.4428	0.5579	0.7803
75	G75Y	0.75	1.0	0.0	87.74	−22.67	151.27	152.96	99	58.14	71.52	−0.1	0.4488	0.552	0.8073
76	G80Y	0.8	1.0	0.0	88.68	−19.33	152.89	154.11	97	61.24	73.48	−0.11	0.455	0.5459	0.8294
77	G85Y	0.85	1.0	0.0	89.38	−15.63	154.1	154.89	96	64.14	74.96	−0.14	0.4616	0.5395	0.8462
78	G90Y	0.9	1.0	0.0	89.99	−11.46	155.16	155.58	94	67.17	76.28	−0.14	0.4687	0.5323	0.8611
79	G95Y	0.95	1.0	0.0	90.55	−6.59	156.13	156.27	92	70.53	77.5	−0.01	0.4765	0.5236	0.8749
80	Y00R	0.0	1.0	0.0	90.62	−0.86	154.51	154.51	90	73.37	77.64	0.12	0.4855	0.5137	0.8764
81	9500	1.0	1.0	1.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
82	9000	0.944	0.944	0.944	15.33	0.0	0.0	0.01	280	1.87	1.97	2.15	0.3127	0.329	0.0222
83	8500	0.889	0.889	0.889	23.96	0.0	0.0	0.01	80	3.89	4.09	4.45	0.3127	0.329	0.0462
84	8000	0.833	0.833	0.833	30.31	0.0	0.0	0.01	0	6.05	6.36	6.93	0.3127	0.329	0.0718
85	7500	0.778	0.778	0.778	35.64	0.0	0.0	0.01	280	8.38	8.82	9.6	0.3127	0.329	0.0996
86	7000	0.722	0.722	0.722	40.37	0.0	0.0	0.01	0	10.91	11.48	12.49	0.3127	0.329	0.1295
87	6500	0.667	0.667	0.667	44.73	0.0	0.0	0.01	158	13.64	14.35	15.63	0.3127	0.329	0.162
88	6000	0.611	0.611	0.611	48.87	0.0	0.0	0.01	158	16.62	17.49	19.05	0.3127	0.329	0.1975
89	5500	0.556	0.556	0.556	52.87	0.0	0.0	0.01	0	19.89	20.93	22.79	0.3127	0.329	0.2362
90	5000	0.5	0.5	0.5	56.77	0.0	0.0	0.01	0	23.47	24.69	26.88	0.3127	0.329	0.2787
91	4500	0.444	0.444	0.444	60.65	0.0	0.0	0.01	0	27.42	28.85	31.41	0.3127	0.329	0.3257
92	4000	0.389	0.389	0.389	64.54	0.0	0.0	0.01	158	31.81	33.47	36.44	0.3127	0.329	0.3778
93	3500	0.333	0.333	0.333	68.47	0.0	0.0	0.01	158	36.69	38.61	42.04	0.3127	0.329	0.4358
94	3000	0.278	0.278	0.278	72.48	0.0	0.0	0.01	158	42.18	44.38	48.33	0.3127	0.329	0.501
95	2500	0.222	0.222	0.222	76.62	0.0	0.0	0.01	158	48.38	50.91	55.43	0.3127	0.329	0.5746
96	2000	0.167	0.167	0.167	80.94	0.0	0.0	0.01	158	55.46	58.36	63.54	0.3127	0.329	0.6587
97	1500	0.111	0.111	0.111	85.46	0.0	0.0	0.01	172	63.6	66.91	72.86	0.3127	0.329	0.7553
98	1000	0.056	0.056	0.056	90.26	0.0	0.0	0.01	88	73.06	76.87	83.7	0.3127	0.329	0.8677
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

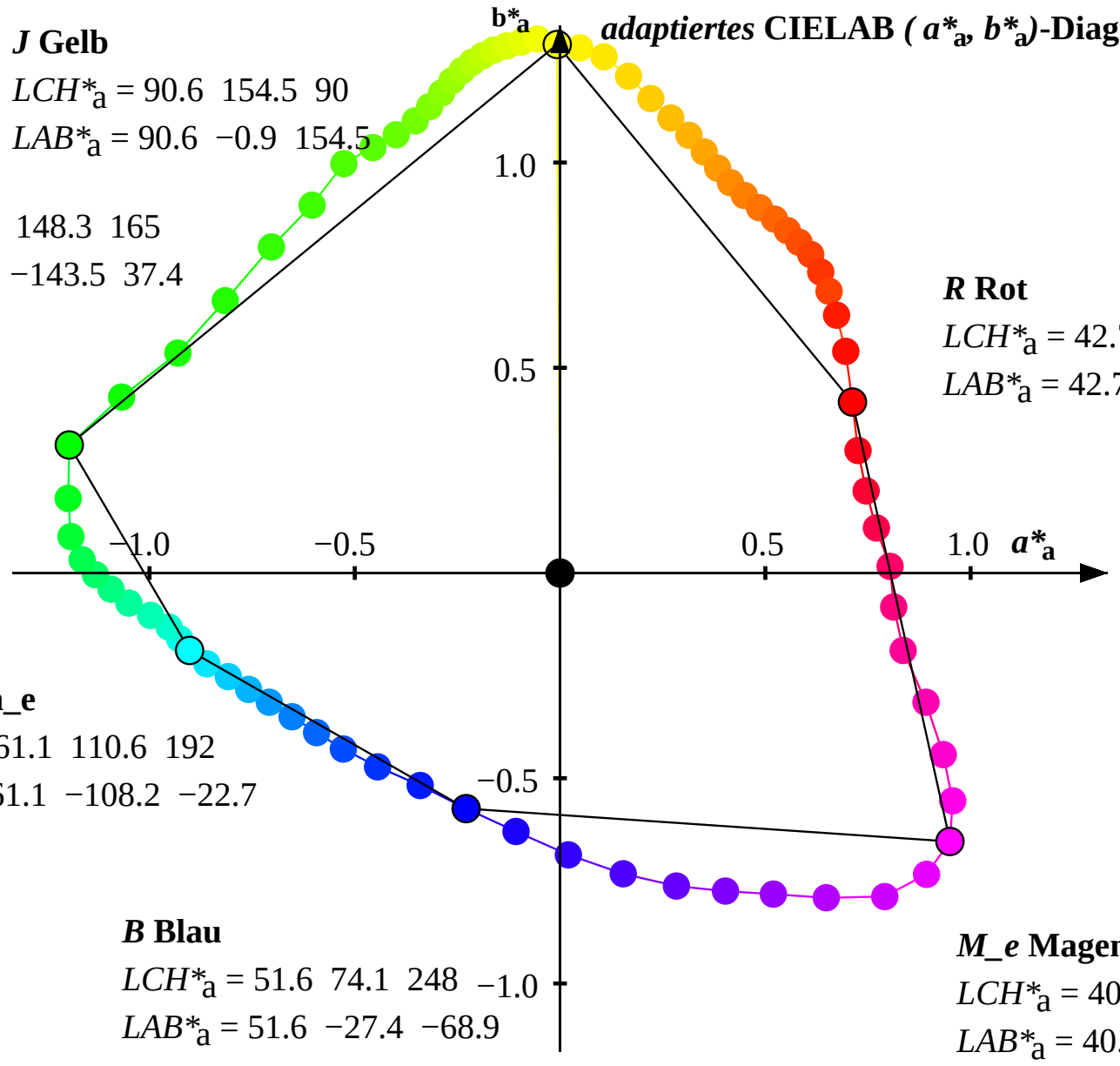
n = 88.59 / (88.59 − 2.59) = 1.03

TUB-Prüfvorlage JG25; Bunttonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a0)": Farbmetrische Daten des Natürliches Farbsystems NCS00a0 für Helligkeit *L=00 von Schwarz für D65**

System NCS00a0
NCS system



***adaptiertes* CIELAB (*a**a, *b**a)-Diagramm**

***J* Gelb**
*LCH**a = 90.6 154.5 90
*LAB**a = 90.6 −0.9 154.5

***G* Grün**
*LCH**a = 63.7 148.3 165
*LAB**a = 63.7 −143.5 37.4

***R* Rot**
*LCH**a = 42.7 99.0 30
*LAB**a = 42.7 85.5 49.9

***C_e* Cyan_e**
*LCH**a = 61.1 110.6 192
*LAB**a = 61.1 −108.2 −22.7

***B* Blau**
*LCH**a = 51.6 74.1 248
*LAB**a = 51.6 −27.4 −68.9

***M_e* Magenta_e**
*LCH**a = 40.8 138.4 325
*LAB**a = 40.8 114.0 −78.5

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS00a für Helligkeit *L**=00 von Schwarz für D65

System NLS00a
NCS system

D65-Reflexion:
Y_N **= 0.0**
L^*_N **= 0.0**

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.62	−0.86	154.51	154.51	90	73.37	77.64	0.12	0.4855	0.5137	0.8764
01	Y05R	1.0	0.95	0.0	89.65	5.78	153.55	153.66	88	74.57	75.55	0.07	0.4965	0.503	0.8529
02	Y10R	1.0	0.9	0.0	87.52	12.91	150.89	151.44	85	73.57	71.07	−0.12	0.5091	0.4918	0.8022
03	Y15R	1.0	0.85	0.0	84.22	19.97	145.21	146.57	82	70.19	64.49	−0.29	0.5223	0.4799	0.728
04	Y20R	1.0	0.8	0.0	80.47	26.48	138.75	141.25	79	65.8	57.53	−0.31	0.5349	0.4677	0.6493
05	Y25R	1.0	0.75	0.0	77.15	32.41	133.02	136.91	76	62.12	51.78	−0.3	0.5469	0.4559	0.5845
06	Y30R	1.0	0.7	0.0	74.22	37.68	127.96	133.39	74	59.0	47.04	−0.37	0.5584	0.4452	0.531
07	Y35R	1.0	0.65	0.0	71.37	42.14	123.05	130.07	71	55.83	42.73	−0.46	0.5692	0.4357	0.4823
08	Y40R	1.0	0.6	0.0	68.66	46.07	118.38	127.03	69	52.78	38.87	−0.49	0.579	0.4265	0.4388
09	Y45R	1.0	0.55	0.0	66.22	49.88	114.17	124.59	66	50.23	35.61	−0.41	0.588	0.4168	0.4019
10	Y50R	1.0	0.5	0.0	64.02	53.91	110.38	122.84	64	48.23	32.82	−0.34	0.5976	0.4067	0.3705
11	Y55R	1.0	0.45	0.0	61.97	58.31	106.85	121.72	61	46.64	30.37	−0.36	0.6086	0.3962	0.3428
12	Y60R	1.0	0.4	0.0	60.01	62.61	103.47	120.93	59	45.18	28.14	−0.42	0.6199	0.386	0.3176
13	Y65R	1.0	0.35	0.0	58.07	66.41	100.13	120.15	56	43.62	26.04	−0.45	0.6304	0.3763	0.2939
14	Y70R	1.0	0.3	0.0	56.1	69.88	96.73	119.33	54	41.94	24.02	−0.39	0.6398	0.3663	0.2711
15	Y75R	1.0	0.25	0.0	54.03	73.22	93.15	118.48	52	40.12	22.0	−0.15	0.6475	0.3551	0.2484
16	Y80R	1.0	0.2	0.0	51.87	76.15	87.99	116.36	49	38.11	20.03	0.1	0.6543	0.3439	0.2261
17	Y85R	1.0	0.25	0.0	49.6	78.56	82.34	113.81	46	35.86	18.08	0.22	0.6621	0.3338	0.2041
18	Y90R	1.0	0.1	0.0	47.24	80.82	75.38	110.52	43	33.57	16.21	0.42	0.6687	0.3229	0.1829
19	Y95R	1.0	0.05	0.0	44.88	83.45	64.82	105.67	38	31.46	14.46	0.88	0.6723	0.309	0.1632
20	R00B	1.0	0.0	0.0	42.66	85.46	49.92	98.97	30	29.44	12.93	1.83	0.6661	0.2926	0.1459
21	R05B	1.0	0.0	0.1	40.85	87.08	35.88	94.18	22	27.85	11.77	3.27	0.6494	0.2744	0.1329
22	R10B	1.0	0.0	0.2	39.64	89.46	24.0	92.62	15	27.14	11.03	5.06	0.6277	0.2552	0.1245
23	R15B	1.0	0.0	0.3	38.99	92.4	13.12	93.33	8	27.18	10.65	7.42	0.6006	0.2354	0.1203
24	R20B	1.0	0.0	0.4	38.53	96.46	1.97	96.48	1	27.7	10.39	10.62	0.5687	0.2133	0.1173
25	R25B	1.0	0.0	0.5	38.07	97.57	−9.94	98.07	354	27.48	10.13	14.94	0.5229	0.1927	0.1143
26	R30B	1.0	0.0	0.6	37.94	100.35	−22.67	102.88	347	28.03	10.05	21.06	0.4739	0.17	0.1135
27	R35B	1.0	0.0	0.7	38.44	106.93	−37.8	113.42	341	30.3	10.34	31.07	0.4226	0.1441	0.1167
28	R40B	1.0	0.0	0.8	39.23	112.0	−53.01	123.92	335	32.61	10.79	44.33	0.3717	0.123	0.1218
29	R45B	1.0	0.0	0.9	40.01	114.72	−66.57	132.65	330	34.34	11.25	59.1	0.328	0.1075	0.127
30	R50B	1.0	0.0	1.0	40.83	114.01	−78.48	138.42	325	35.17	11.76	74.8	0.2889	0.0966	0.1327
31	R55B	0.9	0.0	1.0	41.73	107.06	−88.06	138.63	321	34.28	12.33	89.88	0.2512	0.0903	0.1392
32	R60B	0.8	0.0	1.0	42.72	94.86	−94.55	133.94	315	32.03	12.97	102.17	0.2177	0.0881	0.1464
33	R65B	0.7	0.0	1.0	43.64	77.79	−94.96	122.76	309	28.55	13.59	105.33	0.1936	0.0922	0.1534
34	R70B	0.6	0.0	1.0	44.64	62.33	−93.87	112.69	304	25.8	14.29	106.36	0.1761	0.0976	0.1613
35	R75B	0.5	0.0	1.0	45.66	48.28	−92.99	104.79	297	23.55	15.02	107.75	0.1609	0.1026	0.1695
36	R80B	0.4	0.0	1.0	46.58	34.03	−91.51	97.64	290	21.31	15.7	107.93	0.147	0.1083	0.1772
37	R85B	0.3	0.0	1.0	47.46	18.48	−87.94	89.87	282	18.93	16.38	104.64	0.1353	0.117	0.1848
38	R90B	0.2	0.0	1.0	48.61	2.45	−82.35	82.4	272	16.86	17.28	99.01	0.1266	0.1298	0.1951
39	R95B	0.1	0.0	1.0	50.09	−12.93	−75.54	76.65	260	15.29	18.49	92.62	0.121	0.1463	0.2088
40	B00G	0.0	0.0	1.0	51.62	−27.44	−68.85	74.13	248	13.99	19.81	86.81	0.116	0.1642	0.2236
41	B05G	0.0	0.1	1.0	53.02	−40.85	−62.11	74.35	237	12.85	21.06	80.86	0.112	0.1835	0.2378
42	B10G	0.0	0.2	1.0	54.3	−53.33	−56.61	77.79	227	11.83	22.26	76.53	0.107	0.2012	0.2512
43	B15G	0.0	0.3	1.0	55.45	−63.27	−51.51	81.6	219	11.14	23.37	72.58	0.104	0.2182	0.2638
44	B20G	0.0	0.4	1.0	56.52	−71.18	−46.64	85.11	213	10.7	24.44	68.88	0.1028	0.2349	0.2758
45	B25G	0.0	0.5	1.0	57.49	−78.29	−42.01	88.86	208	10.31	25.43	65.37	0.102	0.2515	0.287
46	B30G	0.0	0.6	1.0	58.34	−84.95	−37.81	92.99	204	9.93	26.32	62.25	0.1008	0.2672	0.2971
47	B35G	0.0	0.7	1.0	59.12	−91.05	−34.01	97.21	200	9.58	27.16	59.53	0.0996	0.2821	0.3065
48	B40G	0.0	0.8	1.0	59.83	−96.97	−30.33	101.62	197	9.24	27.94	56.89	0.0982	0.297	0.3153
49	B45G	0.0	0.9	1.0	60.49	−103.22	−26.51	106.58	194	8.83	28.67	54.09	0.0964	0.313	0.3237

n = 28.67 / (28.67 + 0.0) = 1.0

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS00a für Helligkeit *L**=00 von Schwarz für D65

System NLS00a
NCS system

D65-Reflexion:
Y_N = 0.0
***L**$_N$ = 0.0**

	Farbe	*r=olv*$_1$*	*g=olv*$_2$*	*b=olv*$_3$*	*L*$_a$=LAB*$_{1a}$*	*a*$_a$=LAB*$_{2a}$*	*b*$_a$=LAB*$_{3a}$*	*C*$_{ab,a}$=LAB*$_{ab,a}$*	*h$_{ab,a}$*	*X$_a$=XYZ$_{1a}$*	*Y$_a$=XYZ$_{2a}$*	*Z$_a$=XYZ$_{3a}$*	*x$_a$*	*y$_a$*	*Y$_a$/88.59*
50	B50G	0.0	1.0	1.0	61.05	−108.21	−22.7	110.57	192	8.53	29.31	51.22	0.0958	0.329	0.3308
51	B55G	0.0	1.0	0.9	61.45	−111.23	−19.14	112.87	190	8.38	29.76	48.44	0.0968	0.3437	0.3359
52	B60G	0.0	1.0	0.8	61.72	−114.23	−15.8	115.33	188	8.18	30.07	45.76	0.0974	0.358	0.3395
53	B65G	0.0	1.0	0.7	61.89	−119.64	−12.43	120.3	186	7.67	30.27	42.99	0.0948	0.374	0.3417
54	B70G	0.0	1.0	0.6	62.05	−126.07	−8.76	126.39	184	7.08	30.46	40.09	0.0912	0.3924	0.3439
55	B75G	0.0	1.0	0.5	62.21	−131.19	−4.74	131.28	182	6.64	30.65	37.03	0.0893	0.4124	0.346
56	B80G	0.0	1.0	0.4	62.38	−135.83	−0.54	135.84	180	6.27	30.85	34.01	0.0881	0.4338	0.3483
57	B85G	0.0	1.0	0.3	62.53	−139.7	3.95	139.76	178	5.97	31.02	30.91	0.0879	0.4569	0.3502
58	B90G	0.0	1.0	0.2	62.72	−143.0	10.66	143.41	176	5.75	31.25	26.63	0.0904	0.4912	0.3528
59	B95G	0.0	1.0	0.1	63.13	−143.73	21.85	145.39	171	5.84	31.74	20.47	0.1006	0.5467	0.3583
60	G00Y	0.0	1.0	0.0	63.67	−143.48	37.43	148.3	165	6.08	32.4	13.59	0.1167	0.6224	0.3658
61	G05Y	0.05	1.0	0.0	64.33	−128.13	51.51	138.11	158	7.89	33.2	8.96	0.1576	0.6635	0.3748
62	G10Y	0.1	1.0	0.0	65.09	−111.74	64.28	128.92	150	10.22	34.16	5.86	0.2034	0.6799	0.3856
63	G15Y	0.15	1.0	0.0	66.03	−97.86	79.59	126.14	141	12.71	35.36	3.22	0.2478	0.6894	0.3992
64	G20Y	0.2	1.0	0.0	67.16	−84.38	95.32	127.3	132	15.65	36.85	1.51	0.2898	0.6822	0.416
65	G25Y	0.25	1.0	0.0	68.57	−72.52	107.53	129.7	124	18.93	38.75	0.75	0.324	0.6632	0.4374
66	G30Y	0.3	1.0	0.0	70.24	−63.22	119.73	135.4	118	22.33	41.1	0.1	0.3515	0.647	0.4639
67	G35Y	0.35	1.0	0.0	72.17	−54.77	124.43	135.95	114	26.16	43.91	−0.1	0.3739	0.6276	0.4957
68	G40Y	0.4	1.0	0.0	74.33	−47.83	128.15	136.79	110	30.29	47.22	−0.24	0.392	0.6112	0.533
69	G45Y	0.45	1.0	0.0	76.68	−42.32	132.21	138.82	108	34.64	51.0	−0.29	0.4059	0.5976	0.5757
70	G50Y	0.5	1.0	0.0	79.08	−38.03	136.35	141.55	106	39.07	55.07	−0.25	0.4162	0.5866	0.6216
71	G55Y	0.55	1.0	0.0	81.4	−34.59	140.35	144.55	104	43.47	59.2	−0.15	0.424	0.5775	0.6683
72	G60Y	0.6	1.0	0.0	83.46	−31.64	143.9	147.34	102	47.6	63.04	−0.07	0.4305	0.5702	0.7115
73	G65Y	0.65	1.0	0.0	85.16	−28.69	146.83	149.61	101	51.39	66.32	−0.05	0.4368	0.5637	0.7487
74	G70Y	0.7	1.0	0.0	86.57	−25.76	149.25	151.46	100	54.87	69.13	−0.07	0.4428	0.5579	0.7803
75	G75Y	0.75	1.0	0.0	87.74	−22.67	151.27	152.96	99	58.14	71.52	−0.1	0.4488	0.552	0.8073
76	G80Y	0.8	1.0	0.0	88.68	−19.33	152.89	154.11	97	61.24	73.48	−0.11	0.455	0.5459	0.8294
77	G85Y	0.85	1.0	0.0	89.38	−15.63	154.1	154.89	96	64.14	74.96	−0.14	0.4616	0.5395	0.8462
78	G90Y	0.9	1.0	0.0	89.99	−11.46	155.16	155.58	94	67.17	76.28	−0.14	0.4687	0.5323	0.8611
79	G95Y	0.95	1.0	0.0	90.55	−6.59	156.13	156.27	92	70.53	77.5	−0.01	0.4765	0.5236	0.8749
80	Y00R	0.0	1.0	0.0	90.62	−0.86	154.51	154.51	90	73.37	77.64	0.12	0.4855	0.5137	0.8764
81	9500	1.0	1.0	1.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
82	9000	0.944	0.944	0.944	15.33	0.0	0.0	0.01	280	1.87	1.97	2.15	0.3127	0.329	0.0222
83	8500	0.889	0.889	0.889	23.96	0.0	0.0	0.01	80	3.89	4.09	4.45	0.3127	0.329	0.0462
84	8000	0.833	0.833	0.833	30.31	0.0	0.0	0.01	0	6.05	6.36	6.93	0.3127	0.329	0.0718
85	7500	0.778	0.778	0.778	35.64	0.0	0.0	0.01	280	8.38	8.82	9.6	0.3127	0.329	0.0996
86	7000	0.722	0.722	0.722	40.37	0.0	0.0	0.01	0	10.91	11.48	12.49	0.3127	0.329	0.1295
87	6500	0.667	0.667	0.667	44.73	0.0	0.0	0.01	158	13.64	14.35	15.63	0.3127	0.329	0.162
88	6000	0.611	0.611	0.611	48.87	0.0	0.0	0.01	158	16.62	17.49	19.05	0.3127	0.329	0.1975
89	5500	0.556	0.556	0.556	52.87	0.0	0.0	0.01	0	19.89	20.93	22.79	0.3127	0.329	0.2362
90	5000	0.5	0.5	0.5	56.77	0.0	0.0	0.01	0	23.47	24.69	26.88	0.3127	0.329	0.2787
91	4500	0.444	0.444	0.444	60.65	0.0	0.0	0.01	0	27.42	28.85	31.41	0.3127	0.329	0.3257
92	4000	0.389	0.389	0.389	64.54	0.0	0.0	0.01	158	31.81	33.47	36.44	0.3127	0.329	0.3778
93	3500	0.333	0.333	0.333	68.47	0.0	0.0	0.01	158	36.69	38.61	42.04	0.3127	0.329	0.4358
94	3000	0.278	0.278	0.278	72.48	0.0	0.0	0.01	158	42.18	44.38	48.33	0.3127	0.329	0.501
95	2500	0.222	0.222	0.222	76.62	0.0	0.0	0.01	158	48.38	50.91	55.43	0.3127	0.329	0.5746
96	2000	0.167	0.167	0.167	80.94	0.0	0.0	0.01	158	55.46	58.36	63.54	0.3127	0.329	0.6587
97	1500	0.111	0.111	0.111	85.46	0.0	0.0	0.01	172	63.6	66.91	72.86	0.3127	0.329	0.7553
98	1000	0.056	0.056	0.056	90.26	0.0	0.0	0.01	88	73.06	76.87	83.7	0.3127	0.329	0.8677
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 0.0) = 1.0

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

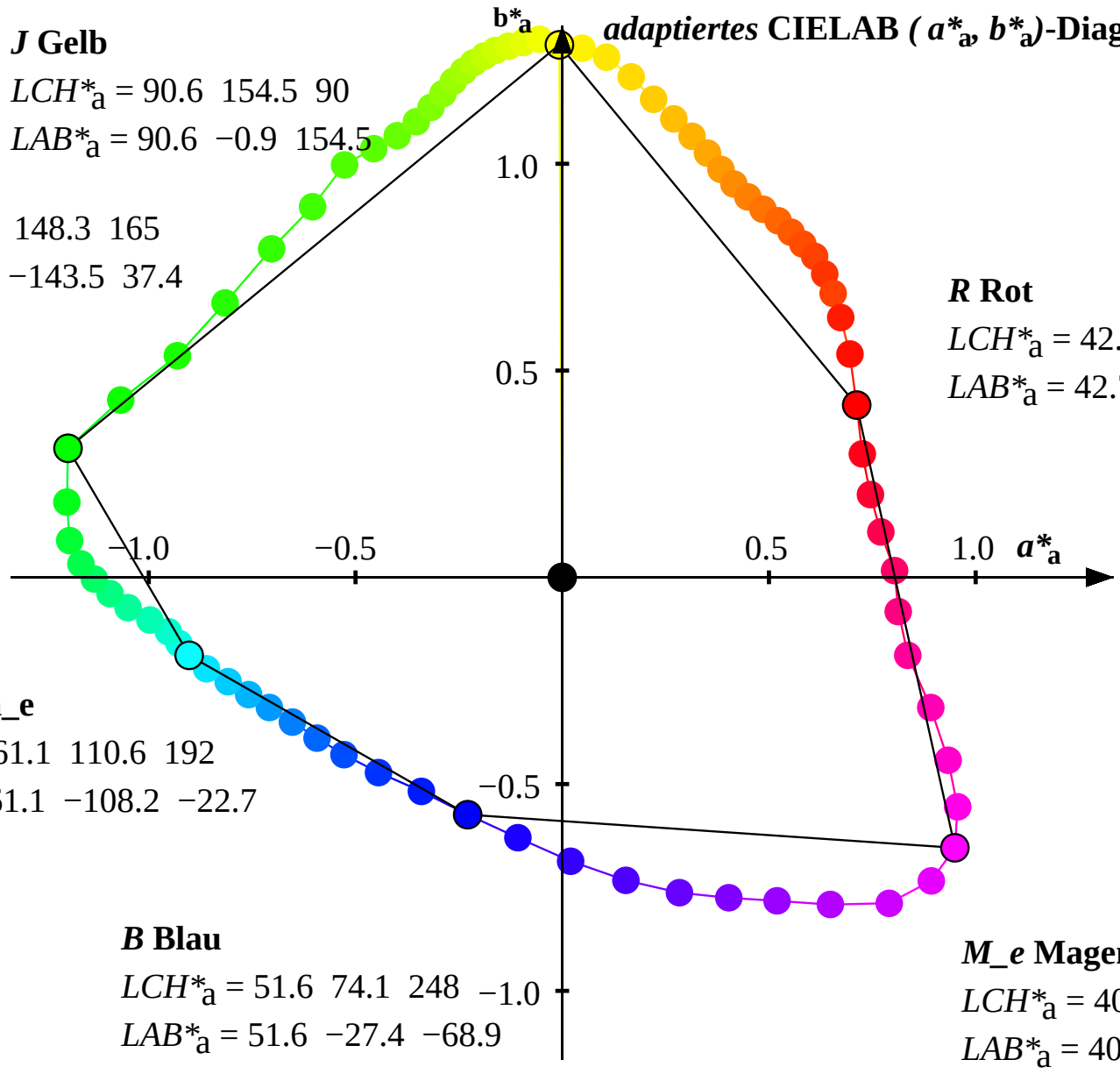
input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS00a für Helligkeit *L=00 von Schwarz für D65**

System NLS00a
NCS system

D65-Reflexion:
Y_N = 0.0
***L**$_N$ = 0.0**

adaptiertes CIELAB (*a**$_a$, *b**$_a$)-Diagramm



J Gelb
*LCH**$_a$ = 90.6 154.5 90
*LAB**$_a$ = 90.6 −0.9 154.5

G Grün
*LCH**$_a$ = 63.7 148.3 165
*LAB**$_a$ = 63.7 −143.5 37.4

R Rot
*LCH**$_a$ = 42.7 99.0 30
*LAB**$_a$ = 42.7 85.5 49.9

C_e Cyan_e
*LCH**$_a$ = 61.1 110.6 192
*LAB**$_a$ = 61.1 −108.2 −22.7

B Blau
*LCH**$_a$ = 51.6 74.1 248
*LAB**$_a$ = 51.6 −27.4 −68.9

M_e Magenta_e
*LCH**$_a$ = 40.8 138.4 325
*LAB**$_a$ = 40.8 114.0 −78.5

TUB-Prüfvorlage JG25; Bunttonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttône, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS06a für Helligkeit *L**=06 von Schwarz für D65

System NLS06a
NCS system

D65-Reflexion:
Y_N = 0.63
L^*_N = 5.69

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	L^*_a=*LAB*1a*	a^*_a=*LAB*2a*	b^*_a=*LAB*3a*	$C^*_{ab,a}$=*LAB*ab,a*	$h_{ab,a}$	X_a=*XYZ1a*	Y_a=*XYZ2a*	Z_a=*XYZ3a*	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.65	−0.85	144.77	144.77	90	73.45	77.72	0.81	0.4833	0.5114	0.8773
01	Y05R	1.0	0.95	0.0	89.7	5.73	143.82	143.94	88	74.64	75.65	0.76	0.4942	0.5008	0.8539
02	Y10R	1.0	0.9	0.0	87.58	12.81	142.99	143.56	85	73.65	71.19	0.56	0.5065	0.4896	0.8036
03	Y15R	1.0	0.85	0.0	84.31	19.8	139.77	141.16	82	70.29	64.66	0.39	0.5193	0.4778	0.7299
04	Y20R	1.0	0.8	0.0	80.6	26.24	133.72	136.27	79	65.93	57.75	0.37	0.5315	0.4655	0.6518
05	Y25R	1.0	0.75	0.0	77.31	32.1	127.91	131.88	76	62.28	52.04	0.38	0.543	0.4537	0.5875
06	Y30R	1.0	0.7	0.0	74.4	37.29	123.85	129.34	73	59.18	47.34	0.31	0.554	0.4431	0.5343
07	Y35R	1.0	0.65	0.0	71.59	41.69	120.34	127.35	71	56.03	43.06	0.22	0.5642	0.4336	0.486
08	Y40R	1.0	0.6	0.0	68.92	45.55	116.14	124.75	69	53.0	39.23	0.19	0.5735	0.4245	0.4428
09	Y45R	1.0	0.55	0.0	66.51	49.28	110.77	121.24	66	50.47	35.98	0.27	0.582	0.4149	0.4062
10	Y50R	1.0	0.5	0.0	64.34	53.23	106.04	118.65	63	48.49	33.22	0.34	0.5909	0.4049	0.375
11	Y55R	1.0	0.45	0.0	62.32	57.54	102.9	117.9	61	46.91	30.78	0.32	0.6013	0.3946	0.3475
12	Y60R	1.0	0.4	0.0	60.4	61.74	100.48	117.94	58	45.46	28.57	0.26	0.612	0.3846	0.3224
13	Y65R	1.0	0.35	0.0	58.49	65.45	97.59	117.51	56	43.91	26.48	0.23	0.6218	0.375	0.2989
14	Y70R	1.0	0.3	0.0	56.56	68.82	93.38	116.0	54	42.24	24.47	0.29	0.6304	0.3653	0.2763
15	Y75R	1.0	0.25	0.0	54.53	72.04	86.54	112.6	50	40.43	22.48	0.52	0.6374	0.3543	0.2537
16	Y80R	1.0	0.2	0.0	52.42	74.85	79.13	108.92	47	38.44	20.52	0.79	0.6434	0.3435	0.2316
17	Y85R	1.0	0.25	0.0	50.2	77.12	73.58	106.6	44	36.2	18.58	0.91	0.6501	0.3337	0.2098
18	Y90R	1.0	0.1	0.0	47.91	79.23	66.85	103.66	40	33.93	16.72	1.11	0.6555	0.3231	0.1888
19	Y95R	1.0	0.05	0.0	45.61	81.67	57.67	99.98	35	31.83	14.98	1.56	0.658	0.3097	0.1691
20	R00B	1.0	0.0	0.0	43.46	83.49	45.66	95.16	29	29.82	13.47	2.5	0.6513	0.2941	0.152
21	R05B	1.0	0.0	0.1	41.72	84.93	33.42	91.27	21	28.25	12.32	3.93	0.6349	0.2768	0.139
22	R10B	1.0	0.0	0.2	40.55	87.16	22.62	90.05	15	27.55	11.58	5.71	0.6143	0.2583	0.1308
23	R15B	1.0	0.0	0.3	39.93	89.99	12.47	90.85	8	27.59	11.21	8.05	0.5889	0.2392	0.1265
24	R20B	1.0	0.0	0.4	39.49	93.93	1.89	93.95	1	28.1	10.95	11.23	0.559	0.2177	0.1236
25	R25B	1.0	0.0	0.5	39.04	94.97	−9.57	95.45	354	27.88	10.68	15.52	0.5155	0.1975	0.1206
26	R30B	1.0	0.0	0.6	38.92	97.7	−21.95	100.13	347	28.43	10.61	21.6	0.4689	0.175	0.1198
27	R35B	1.0	0.0	0.7	39.4	104.23	−36.8	110.53	341	30.69	10.89	31.54	0.4197	0.149	0.123
28	R40B	1.0	0.0	0.8	40.15	109.31	−51.82	120.98	335	32.98	11.34	44.7	0.3704	0.1274	0.128
29	R45B	1.0	0.0	0.9	40.9	112.08	−65.27	129.7	330	34.7	11.8	59.36	0.3277	0.1115	0.1332
30	R50B	1.0	0.0	1.0	41.7	111.46	−77.1	135.53	325	35.52	12.31	74.95	0.2893	0.1002	0.1389
31	R55B	0.9	0.0	1.0	42.57	104.69	−86.65	135.91	320	34.63	12.87	89.92	0.252	0.0937	0.1453
32	R60B	0.8	0.0	1.0	43.52	92.74	−93.14	131.45	315	32.4	13.51	102.13	0.2189	0.0913	0.1525
33	R65B	0.7	0.0	1.0	44.41	76.01	−93.59	120.57	309	28.95	14.13	105.27	0.1951	0.0952	0.1595
34	R70B	0.6	0.0	1.0	45.38	60.88	−92.56	110.79	303	26.21	14.82	106.29	0.1779	0.1006	0.1673
35	R75B	0.5	0.0	1.0	46.36	47.13	−91.72	103.13	297	23.98	15.54	107.67	0.1629	0.1056	0.1754
36	R80B	0.4	0.0	1.0	47.26	33.2	−90.28	96.2	290	21.76	16.22	107.85	0.1492	0.1112	0.1831
37	R85B	0.3	0.0	1.0	48.12	18.01	−86.77	88.63	282	19.4	16.89	104.58	0.1377	0.1199	0.1906
38	R90B	0.2	0.0	1.0	49.24	2.39	−81.26	81.31	272	17.34	17.79	98.99	0.1293	0.1326	0.2008
39	R95B	0.1	0.0	1.0	50.68	−12.59	−74.55	75.61	260	15.78	18.99	92.64	0.1238	0.1491	0.2144
40	B00G	0.0	0.0	1.0	52.17	−26.71	−67.95	73.03	249	14.49	20.3	86.88	0.1191	0.1668	0.2291
41	B05G	0.0	0.1	1.0	53.54	−39.76	−61.29	73.07	237	13.36	21.54	80.97	0.1153	0.1859	0.2432
42	B10G	0.0	0.2	1.0	54.79	−51.89	−55.87	76.26	227	12.35	22.73	76.67	0.1105	0.2034	0.2565
43	B15G	0.0	0.3	1.0	55.92	−61.55	−50.83	79.84	220	11.66	23.84	72.75	0.1077	0.2202	0.2691
44	B20G	0.0	0.4	1.0	56.97	−69.24	−46.03	83.16	214	11.22	24.89	69.08	0.1067	0.2366	0.281
45	B25G	0.0	0.5	1.0	57.92	−76.16	−41.46	86.73	209	10.84	25.88	65.6	0.1059	0.2529	0.2921
46	B30G	0.0	0.6	1.0	58.76	−82.63	−37.31	90.67	204	10.46	26.77	62.49	0.1049	0.2684	0.3021
47	B35G	0.0	0.7	1.0	59.52	−88.56	−33.56	94.72	201	10.11	27.59	59.79	0.1037	0.283	0.3115
48	B40G	0.0	0.8	1.0	60.22	−94.3	−29.93	98.95	198	9.77	28.37	57.17	0.1025	0.2976	0.3202
49	B45G	0.0	0.9	1.0	60.87	−100.35	−26.15	103.72	195	9.37	29.1	54.39	0.1009	0.3134	0.3285

n = 28.67 / (28.67 + 0.63) = 0.979

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS06a für Helligkeit *L**=06 von Schwarz für D65

System NLS06a
NCS system

D65-Reflexion:
Y_N = 0.63
L^*_N = 5.69

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	61.42	−105.18	−22.39	107.55	192	9.07	29.73	51.55	0.1004	0.329	0.3356
51	B55G	0.0	1.0	0.9	61.81	−108.11	−18.88	109.76	190	8.92	30.18	48.78	0.1015	0.3434	0.3406
52	B60G	0.0	1.0	0.8	62.08	−111.01	−15.58	112.11	188	8.72	30.49	46.12	0.1022	0.3573	0.3442
53	B65G	0.0	1.0	0.7	62.24	−116.18	−12.25	116.83	186	8.22	30.69	43.37	0.0998	0.373	0.3464
54	B70G	0.0	1.0	0.6	62.4	−122.29	−8.63	122.6	184	7.63	30.88	40.49	0.0965	0.3909	0.3485
55	B75G	0.0	1.0	0.5	62.56	−127.14	−4.67	127.23	182	7.19	31.07	37.45	0.095	0.4103	0.3507
56	B80G	0.0	1.0	0.4	62.73	−131.53	−0.53	131.54	180	6.82	31.26	34.45	0.0941	0.431	0.3529
57	B85G	0.0	1.0	0.3	62.87	−135.19	3.88	135.25	178	6.53	31.43	31.37	0.0941	0.4534	0.3548
58	B90G	0.0	1.0	0.2	63.06	−138.32	10.47	138.72	176	6.31	31.66	27.12	0.0969	0.4864	0.3574
59	B95G	0.0	1.0	0.1	63.46	−139.09	21.42	140.74	171	6.4	32.14	21.01	0.1074	0.5397	0.3628
60	G00Y	0.0	1.0	0.0	64.0	−138.97	36.57	143.71	165	6.63	32.8	14.18	0.1237	0.6119	0.3703
61	G05Y	0.05	1.0	0.0	64.64	−124.61	50.09	134.3	158	8.43	33.6	9.58	0.1633	0.651	0.3793
62	G10Y	0.1	1.0	0.0	65.4	−109.05	62.14	125.52	150	10.75	34.55	6.51	0.2075	0.6669	0.39
63	G15Y	0.15	1.0	0.0	66.32	−95.75	76.11	122.32	142	13.22	35.74	3.88	0.2502	0.6763	0.4035
64	G20Y	0.2	1.0	0.0	67.44	−82.75	89.5	121.9	133	16.14	37.22	2.19	0.2906	0.67	0.4201
65	G25Y	0.25	1.0	0.0	68.82	−71.26	99.08	122.05	126	19.39	39.1	1.43	0.3236	0.6526	0.4414
66	G30Y	0.3	1.0	0.0	70.48	−62.22	110.33	126.67	119	22.77	41.43	0.78	0.3503	0.6376	0.4677
67	G35Y	0.35	1.0	0.0	72.38	−53.98	116.54	128.44	115	26.58	44.23	0.58	0.3723	0.6196	0.4992
68	G40Y	0.4	1.0	0.0	74.52	−47.2	122.21	131.01	111	30.67	47.51	0.44	0.3901	0.6043	0.5363
69	G45Y	0.45	1.0	0.0	76.84	−41.81	126.9	133.61	108	34.99	51.27	0.39	0.4038	0.5917	0.5787
70	G50Y	0.5	1.0	0.0	79.22	−37.61	130.51	135.82	106	39.4	55.31	0.42	0.4141	0.5814	0.6243
71	G55Y	0.55	1.0	0.0	81.52	−34.23	133.03	137.36	104	43.76	59.41	0.53	0.422	0.5729	0.6706
72	G60Y	0.6	1.0	0.0	83.56	−31.33	135.4	138.98	103	47.86	63.22	0.61	0.4285	0.5661	0.7136
73	G65Y	0.65	1.0	0.0	85.24	−28.43	138.05	140.95	102	51.62	66.48	0.62	0.4348	0.56	0.7504
74	G70Y	0.7	1.0	0.0	86.64	−25.53	140.69	142.99	100	55.07	69.27	0.61	0.4408	0.5544	0.7819
75	G75Y	0.75	1.0	0.0	87.8	−22.48	143.13	144.88	99	58.33	71.64	0.58	0.4468	0.5488	0.8087
76	G80Y	0.8	1.0	0.0	88.73	−19.16	144.9	146.16	98	61.4	73.59	0.56	0.453	0.5429	0.8306
77	G85Y	0.85	1.0	0.0	89.42	−15.5	146.56	147.38	96	64.28	75.06	0.53	0.4596	0.5366	0.8473
78	G90Y	0.9	1.0	0.0	90.03	−11.37	147.53	147.97	94	67.29	76.37	0.54	0.4667	0.5296	0.8621
79	G95Y	0.95	1.0	0.0	90.59	−6.54	146.61	146.76	93	70.63	77.58	0.67	0.4744	0.5211	0.8758
80	Y00R	0.0	1.0	0.0	90.65	−0.85	144.77	144.77	90	73.45	77.72	0.81	0.4833	0.5114	0.8773
81	9500	1.0	1.0	1.0	5.69	0.0	0.0	0.01	0	0.6	0.63	0.69	0.3127	0.329	0.0071
82	9000	0.944	0.944	0.944	18.31	0.0	0.0	0.01	280	2.46	2.59	2.82	0.3127	0.329	0.0292
83	8500	0.889	0.889	0.889	25.83	0.0	0.0	0.01	85	4.46	4.69	5.11	0.3127	0.329	0.0529
84	8000	0.833	0.833	0.833	31.69	0.0	0.0	0.01	0	6.6	6.95	7.57	0.3127	0.329	0.0784
85	7500	0.778	0.778	0.778	36.72	0.0	0.0	0.01	0	8.92	9.39	10.22	0.3127	0.329	0.106
86	7000	0.722	0.722	0.722	41.25	0.0	0.0	0.01	157	11.43	12.02	13.09	0.3127	0.329	0.1357
87	6500	0.667	0.667	0.667	45.47	0.0	0.0	0.01	158	14.14	14.88	16.2	0.3127	0.329	0.168
88	6000	0.611	0.611	0.611	49.49	0.0	0.0	0.01	158	17.11	18.0	19.6	0.3127	0.329	0.2032
89	5500	0.556	0.556	0.556	53.39	0.0	0.0	0.01	0	20.35	21.41	23.31	0.3127	0.329	0.2417
90	5000	0.5	0.5	0.5	57.22	0.0	0.0	0.01	0	23.9	25.14	27.38	0.3127	0.329	0.2838
91	4500	0.444	0.444	0.444	61.03	0.0	0.0	0.01	0	27.82	29.28	31.88	0.3127	0.329	0.3305
92	4000	0.389	0.389	0.389	64.85	0.0	0.0	0.01	158	32.18	33.86	36.87	0.3127	0.329	0.3822
93	3500	0.333	0.333	0.333	68.73	0.0	0.0	0.01	140	37.03	38.97	42.43	0.3127	0.329	0.4398
94	3000	0.278	0.278	0.278	72.69	0.0	0.0	0.01	158	42.48	44.7	48.67	0.3127	0.329	0.5046
95	2500	0.222	0.222	0.222	76.79	0.0	0.0	0.01	0	48.64	51.18	55.72	0.3127	0.329	0.5777
96	2000	0.167	0.167	0.167	81.06	0.0	0.0	0.01	158	55.67	58.57	63.77	0.3127	0.329	0.6612
97	1500	0.111	0.111	0.111	85.54	0.0	0.0	0.01	169	63.74	67.07	73.02	0.3127	0.329	0.7571
98	1000	0.056	0.056	0.056	90.3	0.0	0.0	0.01	88	73.14	76.96	83.79	0.3127	0.329	0.8687
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 0.63) = 0.993

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttône, 8 Reflexionen

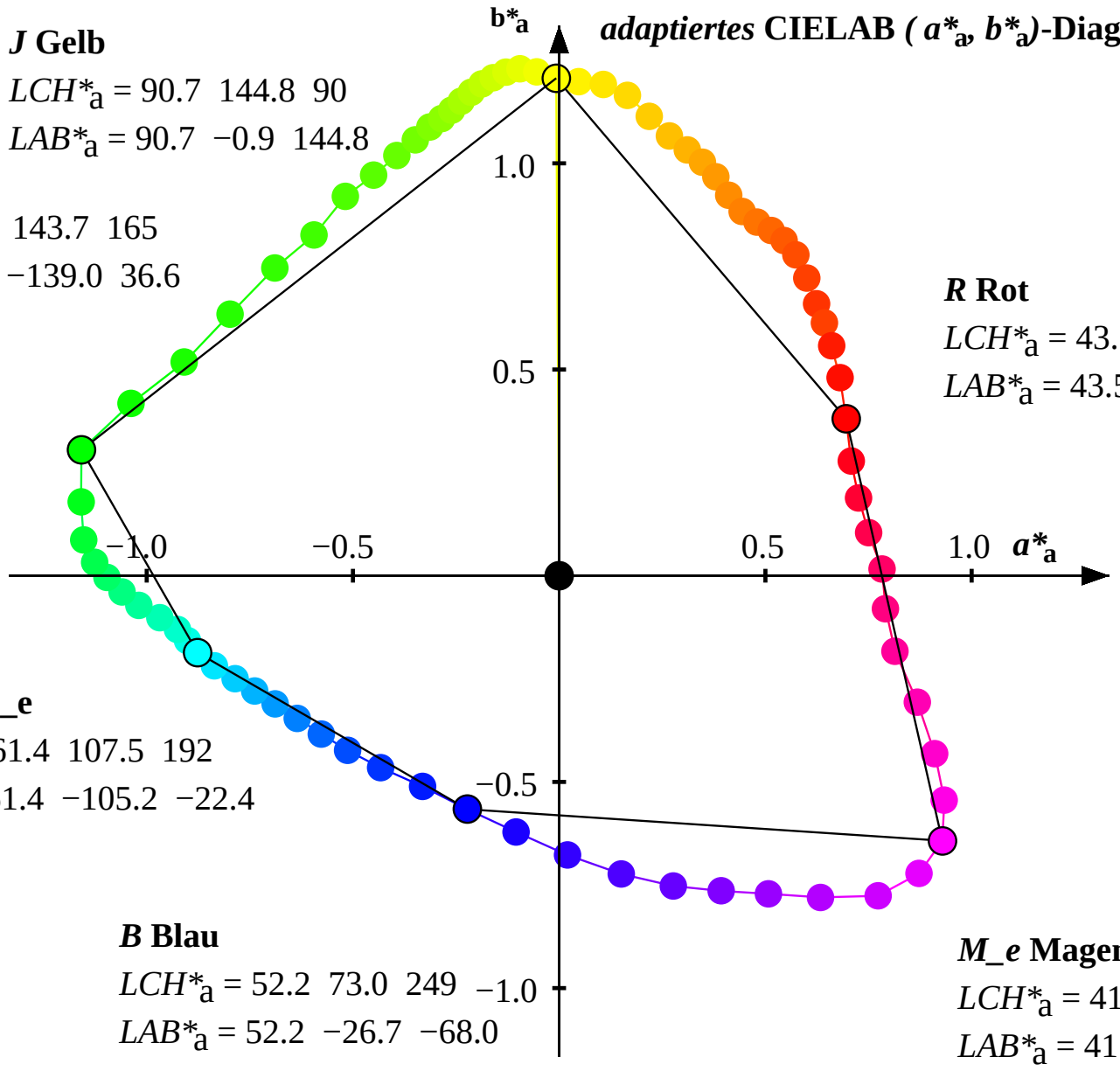
input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS06a für Helligkeit *L=06 von Schwarz für D65**

System NLS06a
NCS system

D65-Reflexion:
Y_N = 0.63
***L**$_N$ = 5.69**

***adaptiertes* CIELAB (*a**$_a$, *b**$_a$)-Diagramm**



***J* Gelb**
*LCH**$_a$ = 90.7 144.8 90
*LAB**$_a$ = 90.7 −0.9 144.8

***G* Grün**
*LCH**$_a$ = 64.0 143.7 165
*LAB**$_a$ = 64.0 −139.0 36.6

***R* Rot**
*LCH**$_a$ = 43.5 95.2 29
*LAB**$_a$ = 43.5 83.5 45.7

***C_e* Cyan_e**
*LCH**$_a$ = 61.4 107.5 192
*LAB**$_a$ = 61.4 −105.2 −22.4

***B* Blau**
*LCH**$_a$ = 52.2 73.0 249
*LAB**$_a$ = 52.2 −26.7 −68.0

***M_e* Magenta_e**
*LCH**$_a$ = 41.7 135.5 325
*LAB**$_a$ = 41.7 111.5 −77.1

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS11a für Helligkeit *L**=11 von Schwarz für D65

System NLS11a
NCS system

D65-Reflexion:
Y_N = 1.26
L^*_N = 11.0

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	L^*_a=*LAB*1a*	a^*_a=*LAB*2a*	b^*_a=*LAB*3a*	$C^*_{ab,a}$=*LAB*ab,a*	$h_{ab,a}$	X_a=*XYZ1a*	Y_a=*XYZ2a*	Z_a=*XYZ3a*	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.69	−0.84	136.1	136.1	90	73.53	77.8	1.49	0.4812	0.5091	0.8782
01	Y05R	1.0	0.95	0.0	89.74	5.69	134.99	135.11	88	74.71	75.74	1.44	0.4919	0.4986	0.855
02	Y10R	1.0	0.9	0.0	87.64	12.7	133.61	134.21	85	73.73	71.32	1.25	0.504	0.4875	0.805
03	Y15R	1.0	0.85	0.0	84.4	19.63	130.14	131.61	81	70.39	64.83	1.08	0.5164	0.4757	0.7318
04	Y20R	1.0	0.8	0.0	80.72	26.0	124.13	126.82	78	66.06	57.97	1.05	0.5281	0.4634	0.6543
05	Y25R	1.0	0.75	0.0	77.46	31.8	118.38	122.58	75	62.44	52.31	1.06	0.5391	0.4517	0.5904
06	Y30R	1.0	0.7	0.0	74.59	36.92	114.33	120.14	72	59.36	47.63	1.0	0.5497	0.4411	0.5377
07	Y35R	1.0	0.65	0.0	71.81	41.24	110.86	118.28	70	56.23	43.38	0.91	0.5594	0.4316	0.4897
08	Y40R	1.0	0.6	0.0	69.17	45.03	106.72	115.83	67	53.23	39.58	0.88	0.5682	0.4225	0.4468
09	Y45R	1.0	0.55	0.0	66.79	48.68	101.41	112.49	64	50.72	36.36	0.96	0.5761	0.413	0.4104
10	Y50R	1.0	0.5	0.0	64.66	52.56	96.76	110.11	61	48.74	33.62	1.03	0.5845	0.4031	0.3795
11	Y55R	1.0	0.45	0.0	62.67	56.78	93.66	109.53	59	47.18	31.2	1.01	0.5943	0.393	0.3522
12	Y60R	1.0	0.4	0.0	60.78	60.89	91.28	109.73	56	45.74	29.0	0.94	0.6044	0.3831	0.3273
13	Y65R	1.0	0.35	0.0	58.91	64.51	88.44	109.47	54	44.2	26.93	0.92	0.6135	0.3738	0.304
14	Y70R	1.0	0.3	0.0	57.01	67.78	84.31	108.17	51	42.54	24.93	0.98	0.6215	0.3642	0.2815
15	Y75R	1.0	0.25	0.0	55.02	70.89	77.82	105.27	48	40.74	22.95	1.21	0.6278	0.3536	0.2591
16	Y80R	1.0	0.2	0.0	52.96	73.58	71.25	102.42	44	38.77	21.01	1.47	0.633	0.343	0.2371
17	Y85R	1.0	0.25	0.0	50.79	75.72	66.26	100.62	41	36.55	19.09	1.59	0.6387	0.3335	0.2154
18	Y90R	1.0	0.1	0.0	48.56	77.68	60.44	98.42	38	34.29	17.24	1.79	0.6431	0.3233	0.1946
19	Y95R	1.0	0.05	0.0	46.33	79.95	52.68	95.74	33	32.21	15.51	2.24	0.6447	0.3105	0.1751
20	R00B	1.0	0.0	0.0	44.24	81.59	42.31	91.91	27	30.21	14.01	3.17	0.6375	0.2955	0.1581
21	R05B	1.0	0.0	0.1	42.56	82.87	31.35	88.6	21	28.65	12.86	4.59	0.6215	0.279	0.1452
22	R10B	1.0	0.0	0.2	41.43	84.97	21.4	87.62	14	27.95	12.14	6.36	0.6018	0.2613	0.137
23	R15B	1.0	0.0	0.3	40.84	87.7	11.89	88.5	8	27.99	11.76	8.69	0.5779	0.2428	0.1328
24	R20B	1.0	0.0	0.4	40.41	91.53	1.81	91.55	1	28.51	11.5	11.84	0.5498	0.2219	0.1298
25	R25B	1.0	0.0	0.5	39.99	92.51	−9.23	92.97	354	28.29	11.24	16.1	0.5084	0.2021	0.1269
26	R30B	1.0	0.0	0.6	39.87	95.17	−21.27	97.52	347	28.83	11.17	22.14	0.464	0.1798	0.1261
27	R35B	1.0	0.0	0.7	40.33	101.65	−35.85	107.79	341	31.07	11.45	32.0	0.4169	0.1536	0.1293
28	R40B	1.0	0.0	0.8	41.05	106.74	−50.68	118.16	335	33.34	11.9	45.07	0.3692	0.1317	0.1343
29	R45B	1.0	0.0	0.9	41.77	109.54	−64.01	126.88	330	35.05	12.35	59.63	0.3275	0.1154	0.1395
30	R50B	1.0	0.0	1.0	42.54	109.0	−75.77	132.76	325	35.87	12.85	75.11	0.2897	0.1038	0.1451
31	R55B	0.9	0.0	1.0	43.38	102.41	−85.29	133.28	320	34.99	13.41	89.97	0.2529	0.0969	0.1514
32	R60B	0.8	0.0	1.0	44.3	90.71	−91.78	129.05	315	32.77	14.05	102.09	0.2201	0.0943	0.1586
33	R65B	0.7	0.0	1.0	45.17	74.3	−92.26	118.46	309	29.34	14.66	105.2	0.1967	0.0983	0.1655
34	R70B	0.6	0.0	1.0	46.1	59.48	−91.27	108.95	303	26.63	15.35	106.22	0.1797	0.1036	0.1732
35	R75B	0.5	0.0	1.0	47.06	46.03	−90.48	101.52	297	24.41	16.06	107.59	0.1649	0.1085	0.1813
36	R80B	0.4	0.0	1.0	47.93	32.41	−89.08	94.8	290	22.21	16.74	107.76	0.1514	0.1141	0.1889
37	R85B	0.3	0.0	1.0	48.76	17.57	−85.62	87.42	282	19.86	17.4	104.52	0.1401	0.1227	0.1964
38	R90B	0.2	0.0	1.0	49.85	2.33	−80.19	80.24	272	17.82	18.3	98.98	0.1319	0.1354	0.2065
39	R95B	0.1	0.0	1.0	51.26	−12.27	−73.57	74.6	261	16.27	19.49	92.67	0.1267	0.1518	0.22
40	B00G	0.0	0.0	1.0	52.72	−26.02	−67.06	71.95	249	14.99	20.79	86.95	0.1222	0.1694	0.2347
41	B05G	0.0	0.1	1.0	54.05	−38.72	−60.49	71.84	237	13.87	22.03	81.08	0.1185	0.1883	0.2486
42	B10G	0.0	0.2	1.0	55.28	−50.52	−55.14	74.8	228	12.86	23.2	76.81	0.1139	0.2055	0.2619
43	B15G	0.0	0.3	1.0	56.39	−59.91	−50.17	78.16	220	12.18	24.3	72.92	0.1113	0.2221	0.2743
44	B20G	0.0	0.4	1.0	57.41	−67.4	−45.43	81.3	214	11.74	25.35	69.28	0.1104	0.2383	0.2861
45	B25G	0.0	0.5	1.0	58.34	−74.14	−40.91	84.69	209	11.36	26.33	65.82	0.1098	0.2543	0.2972
46	B30G	0.0	0.6	1.0	59.17	−80.43	−36.82	88.47	205	10.99	27.21	62.74	0.1088	0.2696	0.3071
47	B35G	0.0	0.7	1.0	59.92	−86.19	−33.12	92.35	201	10.65	28.03	60.05	0.1078	0.2839	0.3164
48	B40G	0.0	0.8	1.0	60.6	−91.77	−29.53	96.42	198	10.3	28.8	57.45	0.1067	0.2983	0.3251
49	B45G	0.0	0.9	1.0	61.24	−97.64	−25.8	101.0	195	9.9	29.53	54.69	0.1052	0.3137	0.3333

n = 28.67 / (28.67 + 1.26) = 0.958

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS11a für Helligkeit *L**=11 von Schwarz für D65

System NLS11a
NCS system

D65-Reflexion:
Y_N = 1.26
L^*_N = 11.0

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	61.78	−102.32	−22.08	104.69	192	9.61	30.15	51.87	0.1049	0.329	0.3403
51	B55G	0.0	1.0	0.9	62.16	−105.17	−18.62	106.81	190	9.46	30.6	49.12	0.1061	0.3431	0.3454
52	B60G	0.0	1.0	0.8	62.43	−107.97	−15.36	109.06	188	9.26	30.91	46.48	0.1069	0.3567	0.3489
53	B65G	0.0	1.0	0.7	62.6	−112.91	−12.07	113.57	186	8.76	31.1	43.75	0.1048	0.372	0.3511
54	B70G	0.0	1.0	0.6	62.75	−118.74	−8.5	119.05	184	8.17	31.29	40.89	0.1017	0.3894	0.3532
55	B75G	0.0	1.0	0.5	62.91	−123.36	−4.6	123.45	182	7.74	31.48	37.87	0.1004	0.4083	0.3553
56	B80G	0.0	1.0	0.4	63.07	−127.53	−0.53	127.54	180	7.38	31.68	34.9	0.0998	0.4283	0.3576
57	B85G	0.0	1.0	0.3	63.21	−131.0	3.82	131.06	178	7.08	31.84	31.84	0.1001	0.45	0.3594
58	B90G	0.0	1.0	0.2	63.4	−133.98	10.29	134.38	176	6.87	32.07	27.62	0.1032	0.4818	0.362
59	B95G	0.0	1.0	0.1	63.79	−134.78	21.01	136.41	171	6.96	32.55	21.55	0.1139	0.5331	0.3674
60	G00Y	0.0	1.0	0.0	64.32	−134.77	35.74	139.44	165	7.19	33.2	14.76	0.1303	0.602	0.3748
61	G05Y	0.05	1.0	0.0	64.96	−121.27	48.74	130.71	158	8.97	33.99	10.2	0.1688	0.6394	0.3837
62	G10Y	0.1	1.0	0.0	65.7	−106.47	60.16	122.3	151	11.27	34.94	7.15	0.2113	0.6547	0.3944
63	G15Y	0.15	1.0	0.0	66.61	−93.72	73.06	118.84	142	13.73	36.12	4.55	0.2524	0.664	0.4077
64	G20Y	0.2	1.0	0.0	67.71	−81.17	84.87	117.44	134	16.63	37.59	2.86	0.2913	0.6585	0.4243
65	G25Y	0.25	1.0	0.0	69.08	−70.04	92.98	116.41	127	19.85	39.46	2.11	0.3233	0.6424	0.4454
66	G30Y	0.3	1.0	0.0	70.71	−61.25	101.91	118.91	121	23.21	41.77	1.47	0.3492	0.6287	0.4715
67	G35Y	0.35	1.0	0.0	72.59	−53.21	107.46	119.92	116	26.99	44.55	1.26	0.3707	0.6119	0.5028
68	G40Y	0.4	1.0	0.0	74.7	−46.58	112.82	122.06	112	31.05	47.81	1.13	0.3882	0.5977	0.5397
69	G45Y	0.45	1.0	0.0	77.0	−41.31	117.39	124.45	109	35.34	51.54	1.08	0.4018	0.5859	0.5817
70	G50Y	0.5	1.0	0.0	79.36	−37.19	121.01	126.59	107	39.72	55.55	1.11	0.4121	0.5764	0.627
71	G55Y	0.55	1.0	0.0	81.63	−33.87	123.66	128.22	105	44.05	59.62	1.21	0.42	0.5685	0.673
72	G60Y	0.6	1.0	0.0	83.65	−31.02	126.19	129.95	104	48.12	63.4	1.29	0.4265	0.562	0.7157
73	G65Y	0.65	1.0	0.0	85.32	−28.16	128.86	131.91	102	51.85	66.64	1.31	0.4328	0.5562	0.7522
74	G70Y	0.7	1.0	0.0	86.7	−25.3	131.44	133.85	101	55.28	69.4	1.29	0.4388	0.5509	0.7834
75	G75Y	0.75	1.0	0.0	87.85	−22.28	133.78	135.63	99	58.51	71.76	1.26	0.4448	0.5456	0.81
76	G80Y	0.8	1.0	0.0	88.78	−19.0	135.52	136.84	98	61.56	73.69	1.25	0.451	0.5399	0.8319
77	G85Y	0.85	1.0	0.0	89.47	−15.37	137.1	137.96	96	64.42	75.16	1.22	0.4575	0.5338	0.8484
78	G90Y	0.9	1.0	0.0	90.07	−11.28	138.07	138.53	95	67.42	76.46	1.22	0.4646	0.5269	0.863
79	G95Y	0.95	1.0	0.0	90.63	−6.49	137.48	137.64	93	70.72	77.66	1.36	0.4723	0.5186	0.8766
80	Y00R	0.0	1.0	0.0	90.69	−0.84	136.1	136.1	90	73.53	77.8	1.49	0.4812	0.5091	0.8782
81	9500	1.0	1.0	1.0	10.99	0.0	0.0	0.01	0	1.2	1.26	1.37	0.3127	0.329	0.0142
82	9000	0.944	0.944	0.944	20.84	0.0	0.0	0.01	0	3.04	3.2	3.49	0.3127	0.329	0.0361
83	8500	0.889	0.889	0.889	27.55	0.0	0.0	0.01	80	5.03	5.29	5.76	0.3127	0.329	0.0597
84	8000	0.833	0.833	0.833	32.99	0.0	0.0	0.01	0	7.16	7.53	8.2	0.3127	0.329	0.085
85	7500	0.778	0.778	0.778	37.76	0.0	0.0	0.01	0	9.46	9.95	10.84	0.3127	0.329	0.1124
86	7000	0.722	0.722	0.722	42.11	0.0	0.0	0.01	0	11.95	12.57	13.69	0.3127	0.329	0.1419
87	6500	0.667	0.667	0.667	46.19	0.0	0.0	0.01	158	14.64	15.41	16.78	0.3127	0.329	0.1739
88	6000	0.611	0.611	0.611	50.1	0.0	0.0	0.01	85	17.59	18.5	20.15	0.3127	0.329	0.2089
89	5500	0.556	0.556	0.556	53.91	0.0	0.0	0.01	85	20.8	21.89	23.83	0.3127	0.329	0.2471
90	5000	0.5	0.5	0.5	57.65	0.0	0.0	0.01	85	24.33	25.6	27.87	0.3127	0.329	0.289
91	4500	0.444	0.444	0.444	61.4	0.0	0.0	0.01	0	28.23	29.7	32.34	0.3127	0.329	0.3353
92	4000	0.389	0.389	0.389	65.16	0.0	0.0	0.01	158	32.55	34.25	37.29	0.3127	0.329	0.3866
93	3500	0.333	0.333	0.333	68.98	0.0	0.0	0.01	158	37.37	39.32	42.81	0.3127	0.329	0.4439
94	3000	0.278	0.278	0.278	72.9	0.0	0.0	0.01	0	42.78	45.01	49.01	0.3127	0.329	0.5081
95	2500	0.222	0.222	0.222	76.95	0.0	0.0	0.01	0	48.89	51.44	56.01	0.3127	0.329	0.5807
96	2000	0.167	0.167	0.167	81.17	0.0	0.0	0.01	158	55.87	58.79	64.01	0.3127	0.329	0.6636
97	1500	0.111	0.111	0.111	85.62	0.0	0.0	0.01	165	63.89	67.22	73.19	0.3127	0.329	0.7588
98	1000	0.056	0.056	0.056	90.34	0.0	0.0	0.01	140	73.22	77.04	83.88	0.3127	0.329	0.8696
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 1.26) = 0.986

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttône, 8 Reflexionen

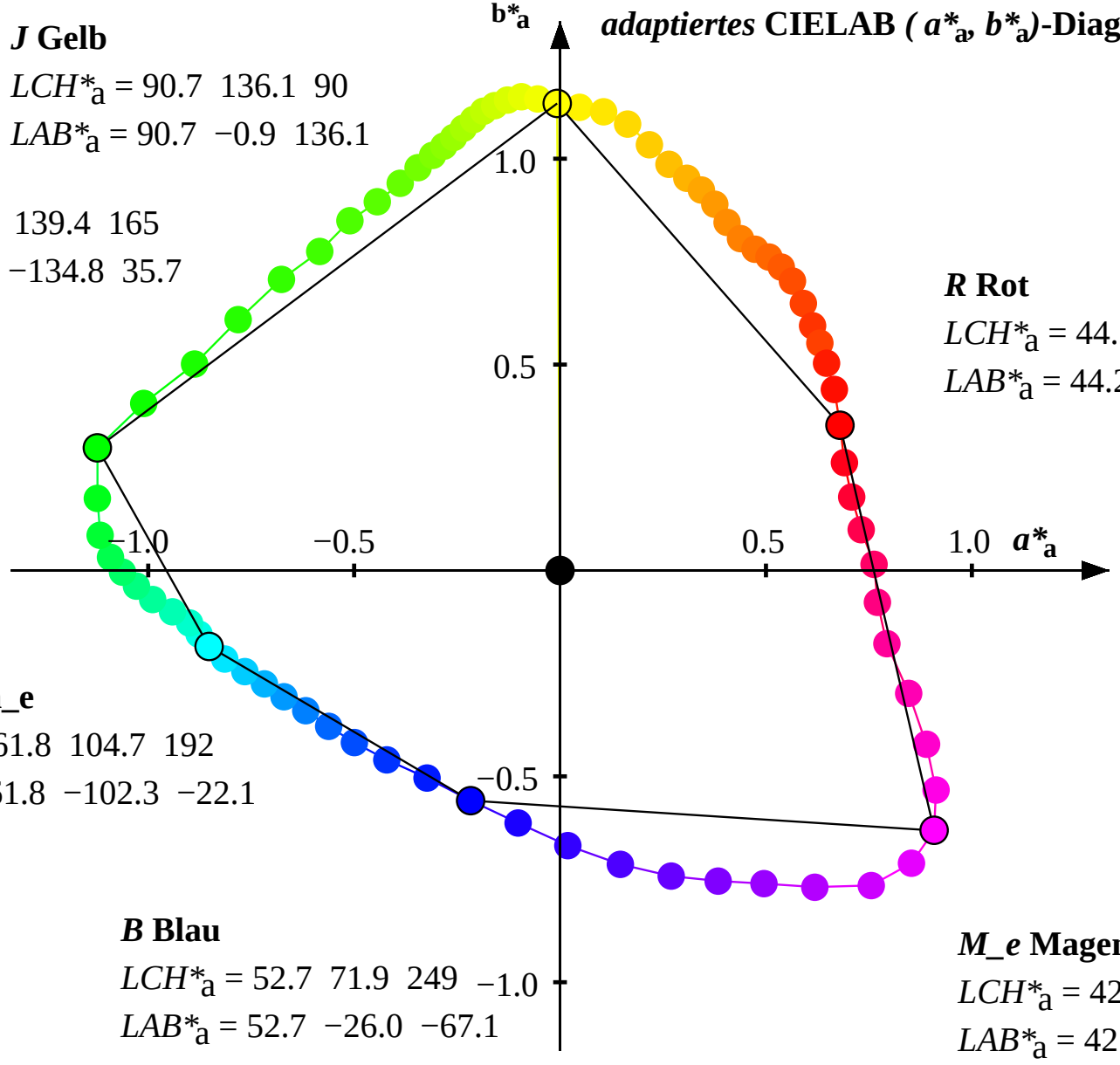
input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS11a für Helligkeit *L=11 von Schwarz für D65**

System NLS11a
NCS system

D65-Reflexion:
Y_N = 1.26
***L**$_N$ = 11.0**

***adaptiertes* CIELAB (*a**$_a$, *b**$_a$)-Diagramm**



***J* Gelb**
*LCH**$_a$ = 90.7 136.1 90
*LAB**$_a$ = 90.7 −0.9 136.1

***G* Grün**
*LCH**$_a$ = 64.3 139.4 165
*LAB**$_a$ = 64.3 −134.8 35.7

***R* Rot**
*LCH**$_a$ = 44.2 91.9 27
*LAB**$_a$ = 44.2 81.6 42.3

***C_e* Cyan_e**
*LCH**$_a$ = 61.8 104.7 192
*LAB**$_a$ = 61.8 −102.3 −22.1

***B* Blau**
*LCH**$_a$ = 52.7 71.9 249
*LAB**$_a$ = 52.7 −26.0 −67.1

***M_e* Magenta_e**
*LCH**$_a$ = 42.5 132.8 325
*LAB**$_a$ = 42.5 109.0 −75.8

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS18a für Helligkeit *L**=18 von Schwarz für D65

System NLS18a
NCS system

D65-Reflexion:
Y_N = 2.52
L^*_N = 18.01

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	90.76	−0.83	124.61	124.61	90	73.68	77.95	2.86	0.4769	0.5046	0.8799
01	Y05R	1.0	0.95	0.0	89.82	5.6	123.33	123.46	87	74.85	75.93	2.81	0.4873	0.4944	0.857
02	Y10R	1.0	0.9	0.0	87.76	12.5	121.15	121.79	84	73.88	71.56	2.62	0.499	0.4833	0.8078
03	Y15R	1.0	0.85	0.0	84.57	19.3	116.9	118.48	81	70.59	65.18	2.46	0.5107	0.4715	0.7357
04	Y20R	1.0	0.8	0.0	80.97	25.53	110.86	113.77	77	66.32	58.41	2.43	0.5215	0.4593	0.6593
05	Y25R	1.0	0.75	0.0	77.77	31.18	105.29	109.81	74	62.75	52.83	2.44	0.5317	0.4476	0.5963
06	Y30R	1.0	0.7	0.0	74.96	36.17	100.95	107.23	70	59.72	48.22	2.38	0.5413	0.4371	0.5443
07	Y35R	1.0	0.65	0.0	72.25	40.35	96.99	105.05	67	56.63	44.03	2.28	0.5501	0.4277	0.4971
08	Y40R	1.0	0.6	0.0	69.67	44.01	92.78	102.69	65	53.67	40.29	2.26	0.5578	0.4187	0.4548
09	Y45R	1.0	0.55	0.0	67.36	47.52	88.13	100.12	62	51.2	37.11	2.34	0.5648	0.4094	0.4189
10	Y50R	1.0	0.5	0.0	65.29	51.24	84.02	98.41	59	49.25	34.41	2.41	0.5722	0.3998	0.3884
11	Y55R	1.0	0.45	0.0	63.36	55.3	80.88	97.98	56	47.71	32.03	2.38	0.581	0.39	0.3615
12	Y60R	1.0	0.4	0.0	61.53	59.23	78.21	98.11	53	46.29	29.86	2.32	0.5899	0.3805	0.337
13	Y65R	1.0	0.35	0.0	59.72	62.67	75.31	97.97	50	44.78	27.82	2.3	0.5979	0.3714	0.314
14	Y70R	1.0	0.3	0.0	57.9	65.76	71.68	97.27	47	43.14	25.85	2.36	0.6047	0.3623	0.2918
15	Y75R	1.0	0.25	0.0	55.98	68.66	66.64	95.68	44	41.37	23.9	2.58	0.6097	0.3522	0.2697
16	Y80R	1.0	0.2	0.0	54.01	71.13	61.37	93.95	41	39.42	21.98	2.84	0.6136	0.3422	0.2481
17	Y85R	1.0	0.25	0.0	51.94	73.03	57.0	92.64	38	37.24	20.09	2.96	0.6177	0.3332	0.2268
18	Y90R	1.0	0.1	0.0	49.82	74.72	52.04	91.05	35	35.01	18.27	3.16	0.6204	0.3237	0.2062
19	Y95R	1.0	0.05	0.0	47.71	76.68	45.67	89.25	31	32.96	16.57	3.6	0.6204	0.3118	0.187
20	R00B	1.0	0.0	0.0	45.75	78.01	37.21	86.43	25	30.99	15.08	4.52	0.6126	0.2981	0.1702
21	R05B	1.0	0.0	0.1	44.17	79.02	27.99	83.83	20	29.46	13.96	5.92	0.5971	0.2829	0.1575
22	R10B	1.0	0.0	0.2	43.12	80.87	19.36	83.16	13	28.77	13.24	7.66	0.5792	0.2666	0.1494
23	R15B	1.0	0.0	0.3	42.57	83.41	10.88	84.12	7	28.8	12.87	9.95	0.5579	0.2493	0.1453
24	R20B	1.0	0.0	0.4	42.18	87.05	1.68	87.06	1	29.31	12.61	13.06	0.5331	0.2294	0.1424
25	R25B	1.0	0.0	0.5	41.78	87.92	−8.62	88.34	354	29.09	12.36	17.26	0.4955	0.2105	0.1395
26	R30B	1.0	0.0	0.6	41.67	90.47	−20.03	92.67	348	29.63	12.29	23.21	0.455	0.1887	0.1387
27	R35B	1.0	0.0	0.7	42.1	96.83	−34.07	102.66	341	31.84	12.56	32.93	0.4117	0.1625	0.1418
28	R40B	1.0	0.0	0.8	42.77	101.9	−48.53	112.88	335	34.08	13.0	45.81	0.3668	0.14	0.1468
29	R45B	1.0	0.0	0.9	43.44	104.76	−61.62	121.54	330	35.76	13.45	60.16	0.3269	0.123	0.1519
30	R50B	1.0	0.0	1.0	44.15	104.37	−73.23	127.51	325	36.57	13.95	75.42	0.2904	0.1107	0.1574
31	R55B	0.9	0.0	1.0	44.94	98.09	−82.66	128.29	320	35.7	14.5	90.06	0.2545	0.1034	0.1637
32	R60B	0.8	0.0	1.0	45.8	86.87	−89.13	124.47	314	33.52	15.12	102.01	0.2225	0.1004	0.1707
33	R65B	0.7	0.0	1.0	46.61	71.06	−89.68	114.43	308	30.14	15.73	105.08	0.1997	0.1042	0.1775
34	R70B	0.6	0.0	1.0	47.5	56.84	−88.78	105.42	303	27.46	16.4	106.07	0.1831	0.1094	0.1852
35	R75B	0.5	0.0	1.0	48.4	43.96	−88.07	98.44	297	25.27	17.11	107.43	0.1687	0.1142	0.1931
36	R80B	0.4	0.0	1.0	49.22	30.91	−86.75	92.11	290	23.1	17.77	107.6	0.1556	0.1197	0.2006
37	R85B	0.3	0.0	1.0	50.01	16.73	−83.4	85.07	281	20.79	18.43	104.41	0.1448	0.1283	0.208
38	R90B	0.2	0.0	1.0	51.05	2.21	−78.11	78.15	272	18.78	19.31	98.94	0.137	0.1409	0.218
39	R95B	0.1	0.0	1.0	52.38	−11.66	−71.66	72.62	261	17.25	20.49	92.73	0.1322	0.157	0.2313
40	B00G	0.0	0.0	1.0	53.78	−24.73	−65.33	69.87	249	15.99	21.77	87.08	0.1281	0.1744	0.2457
41	B05G	0.0	0.1	1.0	55.06	−36.78	−58.92	69.48	238	14.88	22.99	81.3	0.1249	0.1929	0.2595
42	B10G	0.0	0.2	1.0	56.23	−47.95	−53.72	72.02	228	13.89	24.14	77.09	0.1207	0.2097	0.2725
43	B15G	0.0	0.3	1.0	57.3	−56.86	−48.87	74.99	221	13.22	25.23	73.26	0.1183	0.2258	0.2848
44	B20G	0.0	0.4	1.0	58.28	−63.97	−44.26	77.8	215	12.79	26.26	69.67	0.1176	0.2416	0.2964
45	B25G	0.0	0.5	1.0	59.18	−70.37	−39.85	80.88	210	12.41	27.22	66.26	0.1172	0.2571	0.3073
46	B30G	0.0	0.6	1.0	59.97	−76.34	−35.85	84.35	205	12.04	28.09	63.22	0.1165	0.2718	0.3171
47	B35G	0.0	0.7	1.0	60.7	−81.8	−32.25	87.94	202	11.71	28.9	60.58	0.1157	0.2856	0.3263
48	B40G	0.0	0.8	1.0	61.36	−87.08	−28.75	91.72	198	11.37	29.66	58.01	0.1148	0.2995	0.3348
49	B45G	0.0	0.9	1.0	61.98	−92.61	−25.11	95.97	195	10.98	30.38	55.3	0.1136	0.3143	0.3429

n = 28.67 / (28.67 + 2.52) = 0.919

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS18a für Helligkeit *L**=18 von Schwarz für D65

System NLS18a
NCS system

D65-Reflexion:
Y_N = 2.52
L^*_N = 18.01

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	62.5	−97.03	−21.49	99.39	192	10.69	30.99	52.51	0.1135	0.329	0.3498
51	B55G	0.0	1.0	0.9	62.87	−99.72	−18.11	101.37	190	10.54	31.43	49.81	0.1148	0.3425	0.3548
52	B60G	0.0	1.0	0.8	63.13	−102.35	−14.93	103.44	188	10.34	31.74	47.2	0.1158	0.3555	0.3583
53	B65G	0.0	1.0	0.7	63.29	−106.9	−11.73	107.56	186	9.85	31.93	44.51	0.1141	0.37	0.3605
54	B70G	0.0	1.0	0.6	63.44	−112.24	−8.26	112.55	184	9.27	32.12	41.69	0.1116	0.3866	0.3625
55	B75G	0.0	1.0	0.5	63.59	−116.46	−4.46	116.55	182	8.85	32.3	38.72	0.1108	0.4044	0.3646
56	B80G	0.0	1.0	0.4	63.75	−120.27	−0.51	120.28	180	8.49	32.5	35.78	0.1105	0.4233	0.3668
57	B85G	0.0	1.0	0.3	63.88	−123.41	3.7	123.48	178	8.2	32.66	32.77	0.1113	0.4436	0.3687
58	B90G	0.0	1.0	0.2	64.07	−126.14	9.94	126.54	175	7.98	32.89	28.61	0.1149	0.4733	0.3712
59	B95G	0.0	1.0	0.1	64.45	−126.98	20.23	128.59	171	8.07	33.36	22.63	0.126	0.5207	0.3765
60	G00Y	0.0	1.0	0.0	64.96	−127.15	34.18	131.67	165	8.3	34.0	15.94	0.1425	0.5838	0.3838
61	G05Y	0.05	1.0	0.0	65.58	−115.11	46.26	124.07	158	10.06	34.78	11.45	0.1787	0.6179	0.3926
62	G10Y	0.1	1.0	0.0	66.3	−101.63	56.61	116.35	151	12.33	35.71	8.44	0.2182	0.6323	0.4031
63	G15Y	0.15	1.0	0.0	67.19	−89.87	67.86	112.62	143	14.75	36.88	5.87	0.2565	0.6414	0.4163
64	G20Y	0.2	1.0	0.0	68.26	−78.15	77.63	110.16	135	17.6	38.32	4.21	0.2927	0.6372	0.4326
65	G25Y	0.25	1.0	0.0	69.59	−67.67	84.15	107.99	129	20.78	40.16	3.47	0.3226	0.6235	0.4534
66	G30Y	0.3	1.0	0.0	71.18	−59.35	91.01	108.66	123	24.09	42.45	2.84	0.3472	0.6119	0.4791
67	G35Y	0.35	1.0	0.0	73.01	−51.7	95.6	108.69	118	27.81	45.18	2.64	0.3677	0.5974	0.51
68	G40Y	0.4	1.0	0.0	75.07	−45.36	100.17	109.97	114	31.82	48.4	2.5	0.3847	0.5851	0.5463
69	G45Y	0.45	1.0	0.0	77.32	−40.31	104.4	111.92	111	36.05	52.07	2.45	0.398	0.5749	0.5878
70	G50Y	0.5	1.0	0.0	79.63	−36.36	108.12	114.07	109	40.36	56.02	2.49	0.4082	0.5666	0.6324
71	G55Y	0.55	1.0	0.0	81.86	−33.17	111.22	116.07	107	44.63	60.04	2.59	0.4161	0.5598	0.6777
72	G60Y	0.6	1.0	0.0	83.84	−30.41	114.07	118.05	105	48.64	63.76	2.67	0.4227	0.5541	0.7198
73	G65Y	0.65	1.0	0.0	85.48	−27.63	116.77	120.0	103	52.32	66.96	2.68	0.429	0.549	0.7558
74	G70Y	0.7	1.0	0.0	86.84	−24.84	119.23	121.79	102	55.7	69.68	2.67	0.435	0.5442	0.7866
75	G75Y	0.75	1.0	0.0	87.97	−21.89	121.4	123.36	100	58.88	72.0	2.64	0.441	0.5393	0.8128
76	G80Y	0.8	1.0	0.0	88.88	−18.67	123.05	124.46	99	61.89	73.91	2.63	0.4471	0.5339	0.8343
77	G85Y	0.85	1.0	0.0	89.56	−15.11	124.45	125.37	97	64.71	75.35	2.59	0.4536	0.5282	0.8506
78	G90Y	0.9	1.0	0.0	90.15	−11.09	125.44	125.93	95	67.66	76.63	2.6	0.4606	0.5217	0.865
79	G95Y	0.95	1.0	0.0	90.7	−6.38	125.44	125.6	93	70.92	77.82	2.73	0.4682	0.5138	0.8784
80	Y00R	0.0	1.0	0.0	90.76	−0.83	124.61	124.61	90	73.68	77.95	2.86	0.4769	0.5046	0.8799
81	9500	1.0	1.0	1.0	18.01	0.0	0.0	0.01	0	2.4	2.52	2.74	0.3127	0.329	0.0284
82	9000	0.944	0.944	0.944	25.06	0.0	0.0	0.01	0	4.21	4.43	4.83	0.3127	0.329	0.0501
83	8500	0.889	0.889	0.889	30.62	0.0	0.0	0.01	139	6.17	6.49	7.07	0.3127	0.329	0.0733
84	8000	0.833	0.833	0.833	35.41	0.0	0.0	0.01	0	8.27	8.7	9.48	0.3127	0.329	0.0982
85	7500	0.778	0.778	0.778	39.73	0.0	0.0	0.01	280	10.54	11.09	12.07	0.3127	0.329	0.1252
86	7000	0.722	0.722	0.722	43.75	0.0	0.0	0.01	0	12.99	13.67	14.88	0.3127	0.329	0.1543
87	6500	0.667	0.667	0.667	47.58	0.0	0.0	0.01	158	15.65	16.46	17.93	0.3127	0.329	0.1858
88	6000	0.611	0.611	0.611	51.28	0.0	0.0	0.01	158	18.55	19.51	21.25	0.3127	0.329	0.2203
89	5500	0.556	0.556	0.556	54.92	0.0	0.0	0.01	0	21.72	22.85	24.88	0.3127	0.329	0.258
90	5000	0.5	0.5	0.5	58.52	0.0	0.0	0.01	0	25.19	26.51	28.86	0.3127	0.329	0.2992
91	4500	0.444	0.444	0.444	62.13	0.0	0.0	0.01	85	29.04	30.55	33.26	0.3127	0.329	0.3449
92	4000	0.389	0.389	0.389	65.78	0.0	0.0	0.01	165	33.3	35.04	38.15	0.3127	0.329	0.3955
93	3500	0.333	0.333	0.333	69.49	0.0	0.0	0.01	85	38.05	40.03	43.59	0.3127	0.329	0.4519
94	3000	0.278	0.278	0.278	73.31	0.0	0.0	0.01	85	43.38	45.64	49.7	0.3127	0.329	0.5152
95	2500	0.222	0.222	0.222	77.27	0.0	0.0	0.01	158	49.4	51.98	56.6	0.3127	0.329	0.5867
96	2000	0.167	0.167	0.167	81.41	0.0	0.0	0.01	158	56.28	59.22	64.48	0.3127	0.329	0.6684
97	1500	0.111	0.111	0.111	85.77	0.0	0.0	0.01	169	64.18	67.53	73.53	0.3127	0.329	0.7623
98	1000	0.056	0.056	0.056	90.42	0.0	0.0	0.01	21	73.38	77.21	84.06	0.3127	0.329	0.8715
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	339	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 2.52) = 0.972

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttône, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS18a für Helligkeit *L=18 von Schwarz für D65**

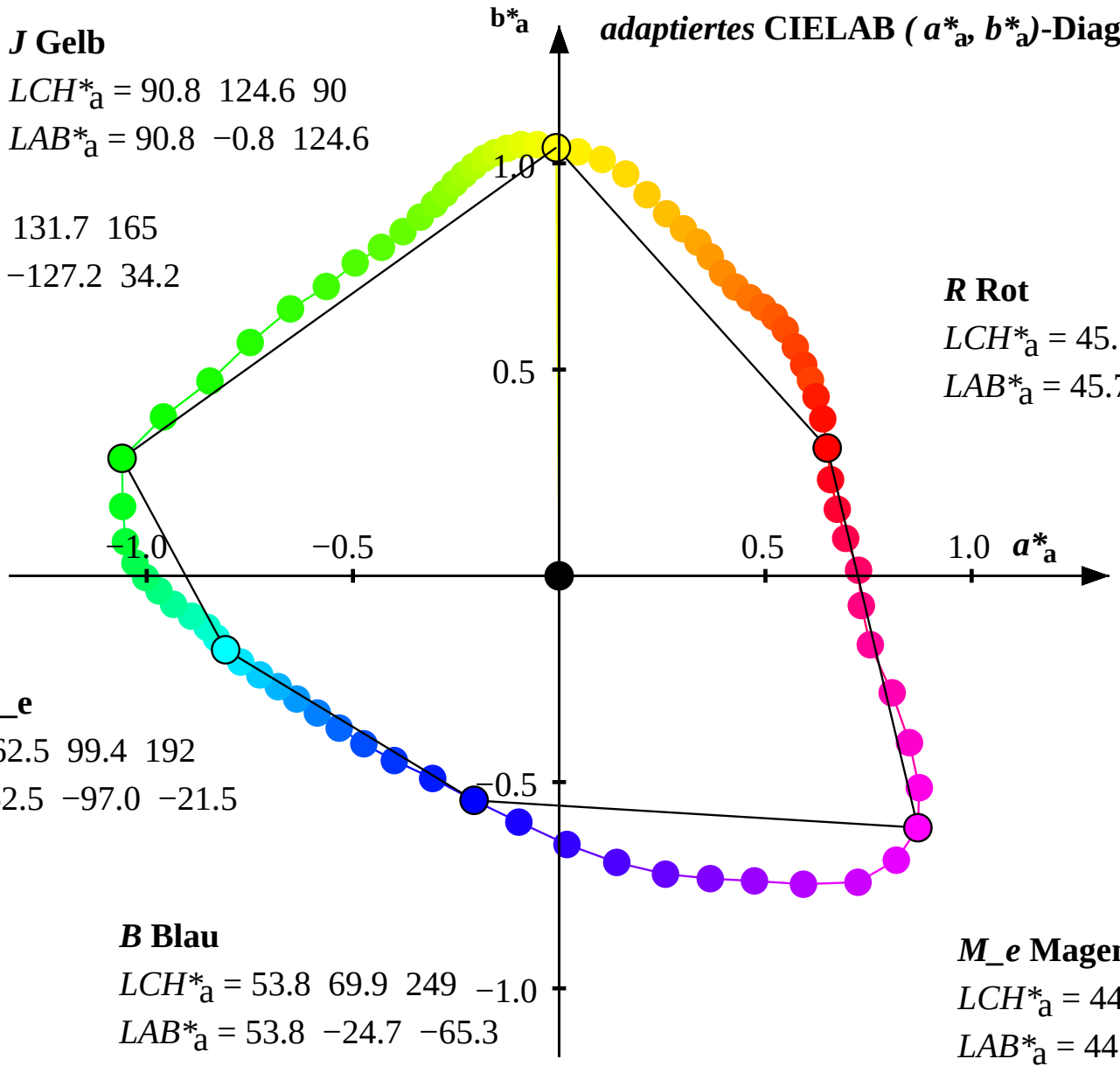
System NLS18a
NCS system

D65-Reflexion:
Y_N = 2.52
***L**$_N$ = 18.01**

J Gelb
*LCH**$_a$ = 90.8 124.6 90
*LAB**$_a$ = 90.8 −0.8 124.6

G Grün
*LCH**$_a$ = 65.0 131.7 165
*LAB**$_a$ = 65.0 −127.2 34.2

adaptiertes CIELAB (*a**$_a$, *b**$_a$)-Diagramm



R Rot
*LCH**$_a$ = 45.7 86.4 25
*LAB**$_a$ = 45.7 78.0 37.2

C_e Cyan_e
*LCH**$_a$ = 62.5 99.4 192
*LAB**$_a$ = 62.5 −97.0 −21.5

B Blau
*LCH**$_a$ = 53.8 69.9 249
*LAB**$_a$ = 53.8 −24.7 −65.3

M_e Magenta_e
*LCH**$_a$ = 44.2 127.5 325
*LAB**$_a$ = 44.2 104.4 −73.2

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS27a für Helligkeit *L**=27 von Schwarz für D65

System NLS27a
NCS system

D65-Reflexion:
Y_N = 5.04
L^*_N = 26.85

Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 Y00R	1.0	1.0	0.0	90.9	−0.8	109.93	109.93	90	73.99	78.26	5.6	0.4687	0.4958	0.8834
01 Y05R	1.0	0.95	0.0	90.0	5.42	108.58	108.71	87	75.12	76.3	5.55	0.4786	0.486	0.8612
02 Y10R	1.0	0.9	0.0	88.0	12.09	105.97	106.66	83	74.18	72.06	5.37	0.4893	0.4753	0.8134
03 Y15R	1.0	0.85	0.0	84.93	18.63	101.41	103.11	80	70.99	65.86	5.21	0.4997	0.4636	0.7434
04 Y20R	1.0	0.8	0.0	81.45	24.6	95.53	98.65	76	66.84	59.29	5.18	0.509	0.4515	0.6693
05 Y25R	1.0	0.75	0.0	78.39	29.98	90.21	95.06	72	63.38	53.88	5.19	0.5176	0.44	0.6082
06 Y30R	1.0	0.7	0.0	75.7	34.69	85.87	92.61	68	60.43	49.4	5.13	0.5257	0.4297	0.5577
07 Y35R	1.0	0.65	0.0	73.11	38.62	81.83	90.48	65	57.44	45.34	5.04	0.5327	0.4205	0.5118
08 Y40R	1.0	0.6	0.0	70.66	42.01	77.74	88.36	62	54.57	41.7	5.01	0.5388	0.4117	0.4707
09 Y45R	1.0	0.55	0.0	68.48	45.26	73.58	86.38	58	52.17	38.62	5.09	0.5441	0.4028	0.436
10 Y50R	1.0	0.5	0.0	66.52	48.7	69.89	85.19	55	50.28	36.0	5.16	0.5499	0.3937	0.4063
11 Y55R	1.0	0.45	0.0	64.71	52.44	66.88	84.99	52	48.78	33.68	5.14	0.5569	0.3845	0.3802
12 Y60R	1.0	0.4	0.0	62.99	56.05	64.2	85.22	49	47.4	31.57	5.08	0.564	0.3756	0.3564
13 Y65R	1.0	0.35	0.0	61.31	59.17	61.41	85.28	46	45.93	29.6	5.05	0.57	0.3673	0.3341
14 Y70R	1.0	0.3	0.0	59.61	61.92	58.21	84.99	43	44.35	27.69	5.11	0.5748	0.3589	0.3126
15 Y75R	1.0	0.25	0.0	57.84	64.46	54.13	84.18	40	42.63	25.79	5.33	0.578	0.3497	0.2911
16 Y80R	1.0	0.2	0.0	56.02	66.54	49.87	83.16	37	40.73	23.93	5.58	0.5798	0.3407	0.2701
17 Y85R	1.0	0.25	0.0	54.13	68.04	46.1	82.19	34	38.61	22.09	5.7	0.5815	0.3327	0.2494
18 Y90R	1.0	0.1	0.0	52.2	69.29	41.96	81.0	31	36.45	20.32	5.89	0.5817	0.3244	0.2294
19 Y95R	1.0	0.05	0.0	50.3	70.74	36.9	79.78	28	34.46	18.68	6.32	0.5796	0.3141	0.2108
20 R00B	1.0	0.0	0.0	48.55	71.58	30.38	77.76	23	32.55	17.23	7.21	0.5711	0.3024	0.1945
21 R05B	1.0	0.0	0.1	47.16	72.16	23.19	75.8	18	31.06	16.14	8.57	0.5569	0.2894	0.1822
22 R10B	1.0	0.0	0.2	46.24	73.64	16.29	75.42	12	30.39	15.45	10.26	0.5417	0.2753	0.1743
23 R15B	1.0	0.0	0.3	45.75	75.87	9.3	76.44	7	30.43	15.09	12.49	0.5246	0.2601	0.1703
24 R20B	1.0	0.0	0.4	45.41	79.16	1.46	79.17	1	30.92	14.84	15.5	0.5047	0.2423	0.1675
25 R25B	1.0	0.0	0.5	45.07	79.86	−7.59	80.22	355	30.71	14.59	19.58	0.4733	0.2249	0.1647
26 R30B	1.0	0.0	0.6	44.97	82.22	−17.91	84.15	348	31.23	14.52	25.35	0.4392	0.2042	0.1639
27 R35B	1.0	0.0	0.7	45.34	88.33	−30.96	93.6	341	33.37	14.79	34.79	0.4023	0.1783	0.1669
28 R40B	1.0	0.0	0.8	45.93	93.31	−44.68	103.46	334	35.55	15.22	47.3	0.3625	0.1552	0.1718
29 R45B	1.0	0.0	0.9	46.52	96.2	−57.28	111.97	329	37.18	15.65	61.22	0.326	0.1373	0.1767
30 R50B	1.0	0.0	1.0	47.15	96.05	−68.56	118.01	324	37.96	16.13	76.03	0.2917	0.124	0.1821
31 R55B	0.9	0.0	1.0	47.84	90.32	−77.8	119.21	319	37.12	16.67	90.25	0.2577	0.1157	0.1881
32 R60B	0.8	0.0	1.0	48.6	79.93	−84.2	116.1	314	35.0	17.27	101.84	0.2271	0.1121	0.195
33 R65B	0.7	0.0	1.0	49.33	65.24	−84.84	107.04	308	31.72	17.86	104.83	0.2054	0.1157	0.2016
34 R70B	0.6	0.0	1.0	50.12	52.09	−84.09	98.92	302	29.12	18.52	105.79	0.1898	0.1207	0.209
35 R75B	0.5	0.0	1.0	50.92	40.23	−83.51	92.71	296	27.0	19.2	107.1	0.1761	0.1253	0.2167
36 R80B	0.4	0.0	1.0	51.66	28.23	−82.34	87.06	289	24.89	19.85	107.28	0.1637	0.1306	0.224
37 R85B	0.3	0.0	1.0	52.38	15.24	−79.17	80.63	281	22.65	20.48	104.17	0.1537	0.1391	0.2312
38 R90B	0.2	0.0	1.0	53.32	2.01	−74.15	74.18	272	20.69	21.34	98.87	0.1469	0.1514	0.2409
39 R95B	0.1	0.0	1.0	54.53	−10.59	−68.03	68.86	261	19.21	22.48	92.84	0.1428	0.1671	0.2538
40 B00G	0.0	0.0	1.0	55.81	−22.44	−62.02	65.97	250	17.99	23.72	87.36	0.1394	0.1838	0.2678
41 B05G	0.0	0.1	1.0	56.98	−33.35	−55.93	65.14	239	16.91	24.91	81.75	0.1369	0.2016	0.2811
42 B10G	0.0	0.2	1.0	58.06	−43.45	−50.99	67.0	230	15.95	26.03	77.66	0.1333	0.2176	0.2938
43 B15G	0.0	0.3	1.0	59.05	−51.5	−46.39	69.33	222	15.3	27.08	73.94	0.1315	0.2328	0.3057
44 B20G	0.0	0.4	1.0	59.97	−57.96	−42.0	71.59	216	14.88	28.09	70.45	0.1312	0.2476	0.317
45 B25G	0.0	0.5	1.0	60.8	−63.77	−37.81	74.15	211	14.51	29.02	67.14	0.1311	0.2622	0.3276
46 B30G	0.0	0.6	1.0	61.54	−69.18	−34.01	77.1	206	14.15	29.87	64.2	0.1308	0.276	0.3371
47 B35G	0.0	0.7	1.0	62.21	−74.13	−30.58	80.2	202	13.83	30.65	61.63	0.1303	0.2889	0.346
48 B40G	0.0	0.8	1.0	62.83	−78.9	−27.25	83.49	199	13.5	31.39	59.14	0.1298	0.3017	0.3543
49 B45G	0.0	0.9	1.0	63.41	−83.87	−23.79	87.19	196	13.12	32.08	56.5	0.129	0.3154	0.3621

n = 28.67 / (28.67 + 5.04) = 0.851

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS27a für Helligkeit *L**=27 von Schwarz für D65

System NLS27a
NCS system

D65-Reflexion:
Y_N = 5.04
L^*_N = 26.85

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	63.9	−87.83	−20.35	90.17	193	12.84	32.68	53.8	0.1293	0.329	0.3689
51	B55G	0.0	1.0	0.9	64.25	−90.27	−17.13	91.9	191	12.7	33.11	51.17	0.1309	0.3414	0.3737
52	B60G	0.0	1.0	0.8	64.49	−92.61	−14.11	93.69	189	12.5	33.4	48.64	0.1323	0.3533	0.3771
53	B65G	0.0	1.0	0.7	64.64	−96.56	−11.07	97.2	187	12.02	33.59	46.04	0.1312	0.3665	0.3792
54	B70G	0.0	1.0	0.6	64.78	−101.13	−7.78	101.44	184	11.46	33.77	43.29	0.1295	0.3815	0.3812
55	B75G	0.0	1.0	0.5	64.92	−104.74	−4.19	104.83	182	11.05	33.95	40.41	0.1294	0.3975	0.3832
56	B80G	0.0	1.0	0.4	65.07	−107.99	−0.48	108.0	180	10.7	34.14	37.56	0.1299	0.4143	0.3854
57	B85G	0.0	1.0	0.3	65.2	−110.66	3.47	110.73	178	10.42	34.3	34.64	0.1313	0.4322	0.3872
58	B90G	0.0	1.0	0.2	65.37	−113.0	9.29	113.39	175	10.21	34.52	30.6	0.1356	0.4582	0.3896
59	B95G	0.0	1.0	0.1	65.73	−113.88	18.78	115.43	171	10.3	34.97	24.8	0.147	0.4991	0.3948
60	G00Y	0.0	1.0	0.0	66.21	−114.28	31.37	118.52	165	10.52	35.6	18.3	0.1633	0.5526	0.4018
61	G05Y	0.05	1.0	0.0	66.79	−104.43	41.95	112.55	158	12.23	36.36	13.93	0.1956	0.5815	0.4104
62	G10Y	0.1	1.0	0.0	67.47	−93.04	50.71	105.97	151	14.43	37.26	11.02	0.2301	0.5942	0.4206
63	G15Y	0.15	1.0	0.0	68.31	−82.89	59.8	102.22	144	16.78	38.39	8.52	0.2634	0.6027	0.4334
64	G20Y	0.2	1.0	0.0	69.32	−72.58	67.32	99.0	137	19.55	39.79	6.91	0.2951	0.6006	0.4492
65	G25Y	0.25	1.0	0.0	70.58	−63.24	72.37	96.11	131	22.64	41.58	6.19	0.3215	0.5905	0.4694
66	G30Y	0.3	1.0	0.0	72.09	−55.77	77.6	95.57	126	25.85	43.8	5.58	0.3436	0.5823	0.4944
67	G35Y	0.35	1.0	0.0	73.84	−48.82	81.48	94.99	121	29.46	46.45	5.38	0.3624	0.5714	0.5244
68	G40Y	0.4	1.0	0.0	75.81	−43.03	85.48	95.71	117	33.35	49.57	5.25	0.3782	0.5622	0.5596
69	G45Y	0.45	1.0	0.0	77.96	−38.39	89.4	97.3	113	37.46	53.14	5.21	0.391	0.5547	0.5998
70	G50Y	0.5	1.0	0.0	80.17	−34.74	93.06	99.33	110	41.64	56.98	5.24	0.4009	0.5486	0.6432
71	G55Y	0.55	1.0	0.0	82.31	−31.78	96.31	101.42	108	45.78	60.87	5.34	0.4088	0.5435	0.6871
72	G60Y	0.6	1.0	0.0	84.22	−29.2	99.26	103.47	106	49.68	64.49	5.41	0.4154	0.5393	0.728
73	G65Y	0.65	1.0	0.0	85.8	−26.58	101.91	105.32	105	53.25	67.59	5.43	0.4217	0.5353	0.763
74	G70Y	0.7	1.0	0.0	87.11	−23.93	104.24	106.95	103	56.53	70.23	5.41	0.4277	0.5314	0.7928
75	G75Y	0.75	1.0	0.0	88.2	−21.11	106.26	108.33	101	59.63	72.49	5.38	0.4336	0.5272	0.8183
76	G80Y	0.8	1.0	0.0	89.08	−18.03	107.82	109.32	99	62.54	74.34	5.37	0.4397	0.5226	0.8391
77	G85Y	0.85	1.0	0.0	89.74	−14.6	109.09	110.07	98	65.28	75.74	5.34	0.446	0.5175	0.8549
78	G90Y	0.9	1.0	0.0	90.31	−10.72	110.06	110.58	96	68.14	76.98	5.35	0.4529	0.5116	0.869
79	G95Y	0.95	1.0	0.0	90.84	−6.18	110.4	110.58	93	71.31	78.14	5.47	0.4603	0.5044	0.882
80	Y00R	0.0	1.0	0.0	90.9	−0.8	109.93	109.93	90	73.99	78.26	5.6	0.4687	0.4958	0.8834
81	9500	1.0	1.0	1.0	26.85	0.0	0.0	0.01	0	4.79	5.04	5.49	0.3127	0.329	0.0569
82	9000	0.944	0.944	0.944	31.57	0.0	0.0	0.01	0	6.56	6.9	7.51	0.3127	0.329	0.0779
83	8500	0.889	0.889	0.889	35.78	0.0	0.0	0.01	0	8.45	8.9	9.69	0.3127	0.329	0.1004
84	8000	0.833	0.833	0.833	39.65	0.0	0.0	0.01	339	10.49	11.04	12.02	0.3127	0.329	0.1246
85	7500	0.778	0.778	0.778	43.3	0.0	0.0	0.01	0	12.7	13.36	14.54	0.3127	0.329	0.1508
86	7000	0.722	0.722	0.722	46.79	0.0	0.0	0.01	0	15.08	15.86	17.27	0.3127	0.329	0.1791
87	6500	0.667	0.667	0.667	50.19	0.0	0.0	0.01	169	17.65	18.58	20.23	0.3127	0.329	0.2097
88	6000	0.611	0.611	0.611	53.53	0.0	0.0	0.01	140	20.47	21.54	23.45	0.3127	0.329	0.2431
89	5500	0.556	0.556	0.556	56.86	0.0	0.0	0.01	0	23.55	24.78	26.98	0.3127	0.329	0.2797
90	5000	0.5	0.5	0.5	60.18	0.0	0.0	0.01	339	26.92	28.33	30.84	0.3127	0.329	0.3197
91	4500	0.444	0.444	0.444	63.55	0.0	0.0	0.01	0	30.65	32.25	35.11	0.3127	0.329	0.364
92	4000	0.389	0.389	0.389	66.98	0.0	0.0	0.01	169	34.79	36.6	39.85	0.3127	0.329	0.4132
93	3500	0.333	0.333	0.333	70.49	0.0	0.0	0.01	158	39.4	41.45	45.13	0.3127	0.329	0.4679
94	3000	0.278	0.278	0.278	74.13	0.0	0.0	0.01	0	44.57	46.9	51.06	0.3127	0.329	0.5294
95	2500	0.222	0.222	0.222	77.91	0.0	0.0	0.01	180	50.42	53.05	57.76	0.3127	0.329	0.5988
96	2000	0.167	0.167	0.167	81.88	0.0	0.0	0.01	158	57.1	60.08	65.41	0.3127	0.329	0.6782
97	1500	0.111	0.111	0.111	86.08	0.0	0.0	0.01	165	64.77	68.15	74.2	0.3127	0.329	0.7692
98	1000	0.056	0.056	0.056	90.57	0.0	0.0	0.01	88	73.69	77.54	84.42	0.3127	0.329	0.8753
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 5.04) = 0.946

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

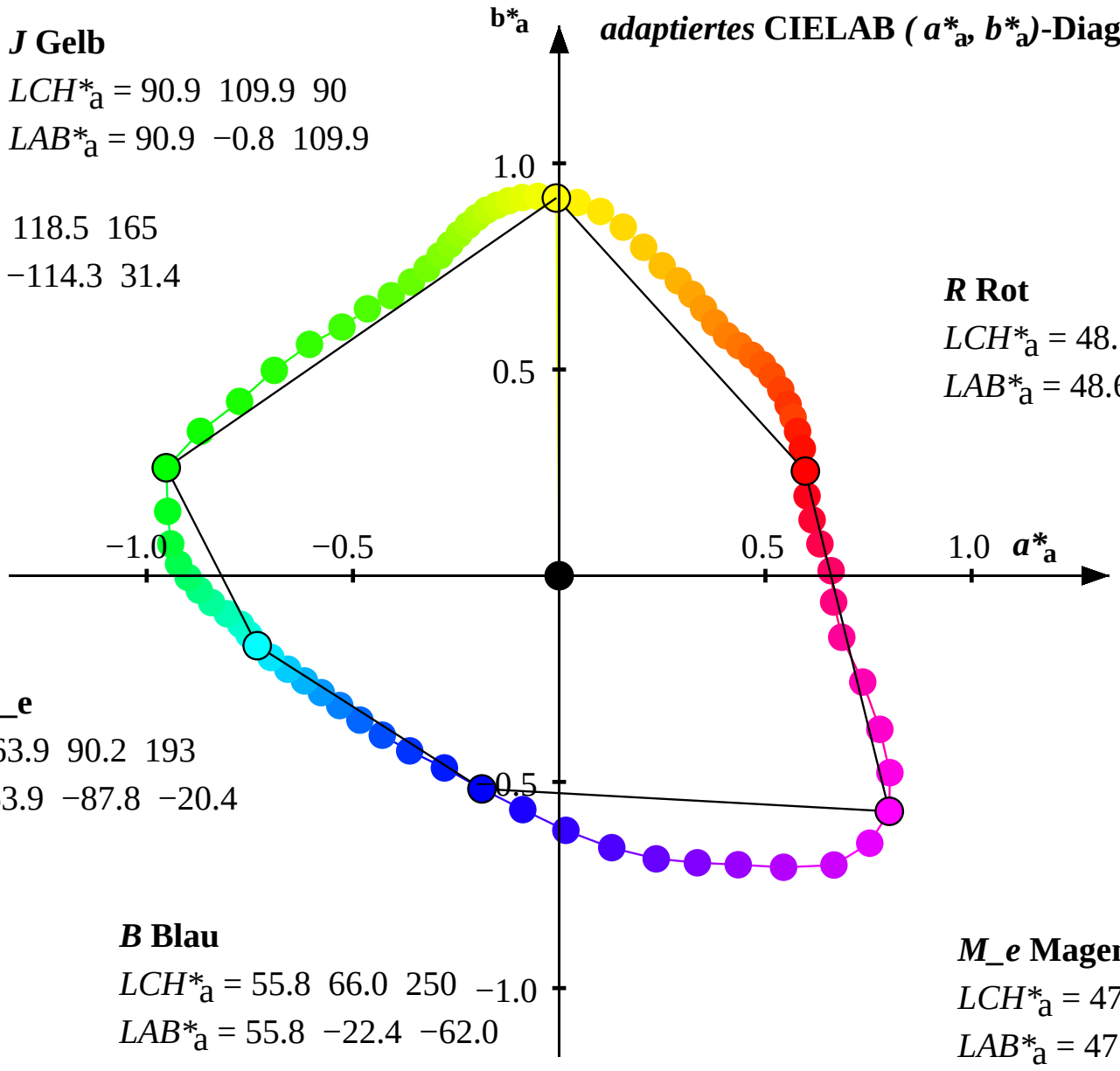
input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS27a für Helligkeit *L=27 von Schwarz für D65**

System NLS27a
NCS system

D65-Reflexion:
Y_N = 5.04
***L**$_N$ = 26.85**

adaptiertes CIELAB (*a**$_a$, *b**$_a$)-Diagramm



J Gelb
*LCH**$_a$ = 90.9 109.9 90
*LAB**$_a$ = 90.9 −0.8 109.9

G Grün
*LCH**$_a$ = 66.2 118.5 165
*LAB**$_a$ = 66.2 −114.3 31.4

R Rot
*LCH**$_a$ = 48.6 77.8 23
*LAB**$_a$ = 48.6 71.6 30.4

C_e Cyan_e
*LCH**$_a$ = 63.9 90.2 193
*LAB**$_a$ = 63.9 −87.8 −20.4

B Blau
*LCH**$_a$ = 55.8 66.0 250
*LAB**$_a$ = 55.8 −22.4 −62.0

M_e Magenta_e
*LCH**$_a$ = 47.1 118.0 324
*LAB**$_a$ = 47.1 96.0 −68.6

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS38a für Helligkeit *L**=38 von Schwarz für D65

System NLS38a
NCS system

D65-Reflexion:
Y_N = 10.08
L^*_N = 37.99

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	L^*_a=*LAB*1a*	a^*_a=*LAB*2a*	b^*_a=*LAB*3a*	$C^*_{ab,a}$=*LAB*ab,a*	$h_{ab,a}$	X_a=*XYZ1a*	Y_a=*XYZ2a*	Z_a=*XYZ3a*	x_a	y_a	Y_a/88.59
00	Y00R	1.0	1.0	0.0	91.18	−0.75	91.42	91.42	90	74.61	78.89	11.08	0.4533	0.4793	0.8905
01	Y05R	1.0	0.95	0.0	90.34	5.06	90.09	90.23	87	75.67	77.04	11.04	0.4621	0.4705	0.8696
02	Y10R	1.0	0.9	0.0	88.48	11.27	87.37	88.1	83	74.78	73.06	10.86	0.4712	0.4603	0.8247
03	Y15R	1.0	0.85	0.0	85.62	17.32	82.88	84.67	78	71.78	67.23	10.71	0.4794	0.449	0.7589
04	Y20R	1.0	0.8	0.0	82.41	22.77	77.41	80.69	74	67.89	61.06	10.69	0.4862	0.4373	0.6892
05	Y25R	1.0	0.75	0.0	79.6	27.64	72.53	77.62	69	64.63	55.97	10.7	0.4922	0.4263	0.6318
06	Y30R	1.0	0.7	0.0	77.14	31.86	68.47	75.52	65	61.87	51.77	10.64	0.4978	0.4166	0.5844
07	Y35R	1.0	0.65	0.0	74.79	35.31	64.66	73.67	61	59.05	47.95	10.56	0.5023	0.4079	0.5412
08	Y40R	1.0	0.6	0.0	72.58	38.24	60.92	71.93	58	56.35	44.53	10.53	0.5058	0.3997	0.5027
09	Y45R	1.0	0.55	0.0	70.62	41.02	57.32	70.48	54	54.1	41.64	10.61	0.5087	0.3915	0.47
10	Y50R	1.0	0.5	0.0	68.87	43.96	54.13	69.73	51	52.32	39.17	10.67	0.5122	0.3834	0.4421
11	Y55R	1.0	0.45	0.0	67.27	47.16	51.43	69.78	47	50.92	36.99	10.65	0.5166	0.3754	0.4176
12	Y60R	1.0	0.4	0.0	65.76	50.21	48.99	70.15	44	49.62	35.01	10.59	0.5211	0.3677	0.3952
13	Y65R	1.0	0.35	0.0	64.29	52.78	46.52	70.36	41	48.24	33.16	10.57	0.5246	0.3605	0.3743
14	Y70R	1.0	0.3	0.0	62.81	54.99	43.82	70.31	39	46.75	31.36	10.62	0.5269	0.3534	0.354
15	Y75R	1.0	0.25	0.0	61.29	56.95	40.59	69.93	35	45.13	29.58	10.83	0.5276	0.3458	0.3339
16	Y80R	1.0	0.2	0.0	59.74	58.44	37.25	69.3	33	43.35	27.83	11.06	0.5271	0.3384	0.3142
17	Y85R	1.0	0.25	0.0	58.14	59.35	34.19	68.49	30	41.36	26.11	11.17	0.526	0.332	0.2947
18	Y90R	1.0	0.1	0.0	56.53	59.97	30.92	67.47	27	39.33	24.44	11.35	0.5235	0.3254	0.2759
19	Y95R	1.0	0.05	0.0	54.96	60.73	27.12	66.51	24	37.46	22.89	11.75	0.5195	0.3175	0.2584
20	R00B	1.0	0.0	0.0	53.53	60.94	22.43	64.93	20	35.67	21.54	12.6	0.511	0.3086	0.2431
21	R05B	1.0	0.0	0.1	52.41	60.99	17.32	63.4	16	34.26	20.51	13.87	0.4991	0.2988	0.2315
22	R10B	1.0	0.0	0.2	51.68	61.96	12.34	63.18	11	33.63	19.86	15.46	0.4878	0.288	0.2242
23	R15B	1.0	0.0	0.3	51.29	63.74	7.17	64.15	6	33.67	19.52	17.55	0.476	0.2759	0.2204
24	R20B	1.0	0.0	0.4	51.02	66.51	1.14	66.52	1	34.13	19.29	20.38	0.4625	0.2613	0.2177
25	R25B	1.0	0.0	0.5	50.75	66.99	−6.08	67.26	355	33.93	19.05	24.22	0.4395	0.2468	0.2151
26	R30B	1.0	0.0	0.6	50.67	69.03	−14.66	70.57	348	34.42	18.99	29.64	0.4145	0.2286	0.2143
27	R35B	1.0	0.0	0.7	50.97	74.57	−25.97	78.97	341	36.44	19.24	38.51	0.3868	0.2043	0.2172
28	R40B	1.0	0.0	0.8	51.43	79.25	−38.3	88.02	334	38.48	19.64	50.26	0.355	0.1812	0.2217
29	R45B	1.0	0.0	0.9	51.9	82.08	−49.89	96.06	329	40.01	20.05	63.35	0.3242	0.1625	0.2264
30	R50B	1.0	0.0	1.0	52.4	82.2	−60.45	102.04	324	40.75	20.5	77.26	0.2942	0.148	0.2314
31	R55B	0.9	0.0	1.0	52.96	77.35	−69.23	103.82	318	39.96	21.01	90.62	0.2636	0.1386	0.2371
32	R60B	0.8	0.0	1.0	53.57	68.36	−75.42	101.8	312	37.97	21.58	101.52	0.2357	0.134	0.2435
33	R65B	0.7	0.0	1.0	54.16	55.57	−76.19	94.31	306	34.88	22.13	104.32	0.2162	0.1372	0.2498
34	R70B	0.6	0.0	1.0	54.81	44.23	−75.65	87.64	300	32.44	22.74	105.23	0.2022	0.1418	0.2567
35	R75B	0.5	0.0	1.0	55.47	34.07	−75.28	82.64	294	30.45	23.39	106.46	0.19	0.1459	0.264
36	R80B	0.4	0.0	1.0	56.08	23.84	−74.32	78.06	288	28.47	23.99	106.62	0.1789	0.1508	0.2708
37	R85B	0.3	0.0	1.0	56.68	12.82	−71.47	72.62	280	26.36	24.59	103.71	0.1704	0.159	0.2776
38	R90B	0.2	0.0	1.0	57.46	1.69	−66.91	66.94	271	24.52	25.4	98.72	0.165	0.1709	0.2867
39	R95B	0.1	0.0	1.0	58.48	−8.86	−61.37	62.02	262	23.13	26.47	93.05	0.1621	0.1856	0.2988
40	B00G	0.0	0.0	1.0	59.56	−18.76	−55.95	59.02	251	21.98	27.64	87.91	0.1598	0.201	0.312
41	B05G	0.0	0.1	1.0	60.56	−27.85	−50.42	57.62	241	20.97	28.75	82.64	0.1584	0.2172	0.3245
42	B10G	0.0	0.2	1.0	61.48	−36.25	−45.96	58.55	232	20.07	29.8	78.79	0.156	0.2316	0.3364
43	B15G	0.0	0.3	1.0	62.33	−42.96	−41.8	59.96	224	19.45	30.79	75.3	0.1549	0.2453	0.3476
44	B20G	0.0	0.4	1.0	63.12	−48.38	−37.83	61.42	218	19.06	31.74	72.02	0.1552	0.2584	0.3582
45	B25G	0.0	0.5	1.0	63.85	−53.26	−34.04	63.22	213	18.72	32.61	68.91	0.1557	0.2712	0.3681
46	B30G	0.0	0.6	1.0	64.49	−57.79	−30.6	65.4	208	18.38	33.41	66.14	0.1558	0.2833	0.3771
47	B35G	0.0	0.7	1.0	65.08	−61.94	−27.5	67.78	204	18.07	34.15	63.73	0.1559	0.2945	0.3854
48	B40G	0.0	0.8	1.0	65.62	−65.92	−24.49	70.34	200	17.76	34.84	61.39	0.1558	0.3056	0.3932
49	B45G	0.0	0.9	1.0	66.13	−70.04	−21.36	73.24	197	17.41	35.49	58.91	0.1557	0.3174	0.4006

n = 28.67 / (28.67 + 10.08) = 0.74

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS38a für Helligkeit *L**=38 von Schwarz für D65

System NLS38a
NCS system

D65-Reflexion:
Y_N = 10.08
***L**$_N$ = 37.99**

	Farbe	*r=olv*$_1$*	*g=olv*$_2$*	*b=olv*$_3$*	*L*$_a$=LAB*$_{1a}$*	*a*$_a$=LAB*$_{2a}$*	*b*$_a$=LAB*$_{3a}$*	*C*$_{ab,a}$=LAB*$_{ab,a}$*	*h$_{ab,a}$*	*X$_a$=XYZ$_{1a}$*	*Y$_a$=XYZ$_{2a}$*	*Z$_a$=XYZ$_{3a}$*	*x$_a$*	*y$_a$*	*Y$_a$/88.59*
50	B50G	0.0	1.0	1.0	66.56	−73.34	−18.24	75.59	194	17.14	36.05	56.37	0.1565	0.329	0.4069
51	B55G	0.0	1.0	0.9	66.86	−75.39	−15.34	76.94	192	17.01	36.45	53.9	0.1584	0.3395	0.4115
52	B60G	0.0	1.0	0.8	67.08	−77.31	−12.61	78.34	189	16.83	36.73	51.52	0.1601	0.3495	0.4146
53	B65G	0.0	1.0	0.7	67.21	−80.41	−9.87	81.02	187	16.38	36.91	49.08	0.16	0.3606	0.4166
54	B70G	0.0	1.0	0.6	67.34	−83.97	−6.92	84.26	185	15.85	37.08	46.5	0.1594	0.3729	0.4185
55	B75G	0.0	1.0	0.5	67.46	−86.77	−3.72	86.86	182	15.46	37.25	43.79	0.1603	0.386	0.4204
56	B80G	0.0	1.0	0.4	67.59	−89.28	−0.42	89.3	180	15.14	37.42	41.11	0.1616	0.3995	0.4224
57	B85G	0.0	1.0	0.3	67.7	−91.35	3.06	91.41	178	14.87	37.57	38.37	0.1638	0.4138	0.4241
58	B90G	0.0	1.0	0.2	67.86	−93.19	8.14	93.55	175	14.68	37.78	34.57	0.1687	0.4341	0.4264
59	B95G	0.0	1.0	0.1	68.17	−94.07	16.27	95.47	170	14.76	38.21	29.12	0.1798	0.4655	0.4313
60	G00Y	0.0	1.0	0.0	68.6	−94.66	26.73	98.37	164	14.96	38.8	23.01	0.1949	0.5053	0.4379
61	G05Y	0.05	1.0	0.0	69.12	−87.55	35.16	94.36	158	16.57	39.51	18.91	0.221	0.5268	0.4459
62	G10Y	0.1	1.0	0.0	69.72	−78.99	41.88	89.41	152	18.64	40.36	16.17	0.248	0.5369	0.4555
63	G15Y	0.15	1.0	0.0	70.47	−71.16	48.55	86.15	146	20.85	41.42	13.83	0.274	0.5443	0.4676
64	G20Y	0.2	1.0	0.0	71.38	−62.99	53.93	82.93	139	23.45	42.74	12.31	0.2987	0.5444	0.4824
65	G25Y	0.25	1.0	0.0	72.51	−55.44	57.68	80.01	134	26.35	44.42	11.64	0.3198	0.539	0.5014
66	G30Y	0.3	1.0	0.0	73.87	−49.33	61.63	78.95	129	29.37	46.5	11.06	0.3378	0.5349	0.5249
67	G35Y	0.35	1.0	0.0	75.45	−43.56	64.87	78.14	124	32.77	48.99	10.88	0.3537	0.5289	0.553
68	G40Y	0.4	1.0	0.0	77.24	−38.7	68.3	78.51	120	36.42	51.93	10.75	0.3675	0.524	0.5861
69	G45Y	0.45	1.0	0.0	79.2	−34.78	71.81	79.79	116	40.28	55.28	10.71	0.379	0.5202	0.624
70	G50Y	0.5	1.0	0.0	81.23	−31.66	75.22	81.62	113	44.21	58.88	10.74	0.3884	0.5173	0.6647
71	G55Y	0.55	1.0	0.0	83.2	−29.12	78.37	83.61	110	48.1	62.54	10.83	0.396	0.5149	0.706
72	G60Y	0.6	1.0	0.0	84.97	−26.87	81.21	85.54	108	51.76	65.94	10.9	0.4025	0.5127	0.7444
73	G65Y	0.65	1.0	0.0	86.43	−24.54	83.69	87.22	106	55.12	68.86	10.92	0.4086	0.5104	0.7773
74	G70Y	0.7	1.0	0.0	87.65	−22.16	85.83	88.65	104	58.2	71.34	10.9	0.4144	0.508	0.8053
75	G75Y	0.75	1.0	0.0	88.67	−19.59	87.66	89.82	103	61.11	73.46	10.88	0.4201	0.5051	0.8292
76	G80Y	0.8	1.0	0.0	89.49	−16.76	89.1	90.67	101	63.85	75.2	10.87	0.4259	0.5016	0.8488
77	G85Y	0.85	1.0	0.0	90.1	−13.6	90.24	91.26	99	66.42	76.52	10.84	0.4319	0.4976	0.8637
78	G90Y	0.9	1.0	0.0	90.63	−10.0	91.15	91.7	96	69.11	77.68	10.84	0.4384	0.4928	0.8769
79	G95Y	0.95	1.0	0.0	91.13	−5.77	91.67	91.85	94	72.08	78.77	10.96	0.4455	0.4868	0.8891
80	Y00R	0.0	1.0	0.0	91.18	−0.75	91.42	91.42	90	74.61	78.89	11.08	0.4533	0.4793	0.8905
81	9500	1.0	1.0	1.0	37.99	0.0	0.0	0.01	0	9.58	10.08	10.98	0.3127	0.329	0.1138
82	9000	0.944	0.944	0.944	40.94	0.0	0.0	0.01	0	11.24	11.83	12.88	0.3127	0.329	0.1335
83	8500	0.889	0.889	0.889	43.8	0.0	0.0	0.01	0	13.02	13.7	14.92	0.3127	0.329	0.1547
84	8000	0.833	0.833	0.833	46.61	0.0	0.0	0.01	0	14.94	15.72	17.12	0.3127	0.329	0.1775
85	7500	0.778	0.778	0.778	49.37	0.0	0.0	0.01	0	17.01	17.9	19.49	0.3127	0.329	0.202
86	7000	0.722	0.722	0.722	52.12	0.0	0.0	0.01	0	19.25	20.25	22.05	0.3127	0.329	0.2286
87	6500	0.667	0.667	0.667	54.86	0.0	0.0	0.01	158	21.67	22.8	24.82	0.3127	0.329	0.2574
88	6000	0.611	0.611	0.611	57.64	0.0	0.0	0.01	158	24.31	25.58	27.85	0.3127	0.329	0.2888
89	5500	0.556	0.556	0.556	60.45	0.0	0.0	0.01	0	27.21	28.63	31.17	0.3127	0.329	0.3231
90	5000	0.5	0.5	0.5	63.31	0.0	0.0	0.01	0	30.38	31.96	34.8	0.3127	0.329	0.3608
91	4500	0.444	0.444	0.444	66.25	0.0	0.0	0.01	85	33.88	35.65	38.81	0.3127	0.329	0.4024
92	4000	0.389	0.389	0.389	69.28	0.0	0.0	0.01	158	37.77	39.74	43.27	0.3127	0.329	0.4486
93	3500	0.333	0.333	0.333	72.43	0.0	0.0	0.01	85	42.1	44.3	48.23	0.3127	0.329	0.5
94	3000	0.278	0.278	0.278	75.71	0.0	0.0	0.01	158	46.96	49.41	53.8	0.3127	0.329	0.5578
95	2500	0.222	0.222	0.222	79.15	0.0	0.0	0.01	0	52.46	55.19	60.1	0.3127	0.329	0.623
96	2000	0.167	0.167	0.167	82.81	0.0	0.0	0.01	158	58.73	61.8	67.29	0.3127	0.329	0.6976
97	1500	0.111	0.111	0.111	86.69	0.0	0.0	0.01	169	65.94	69.38	75.54	0.3127	0.329	0.7832
98	1000	0.056	0.056	0.056	90.87	0.0	0.0	0.01	88	74.33	78.21	85.15	0.3127	0.329	0.8828
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 10.08) = 0.898

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Buntt̂one, 8 Reflexionen

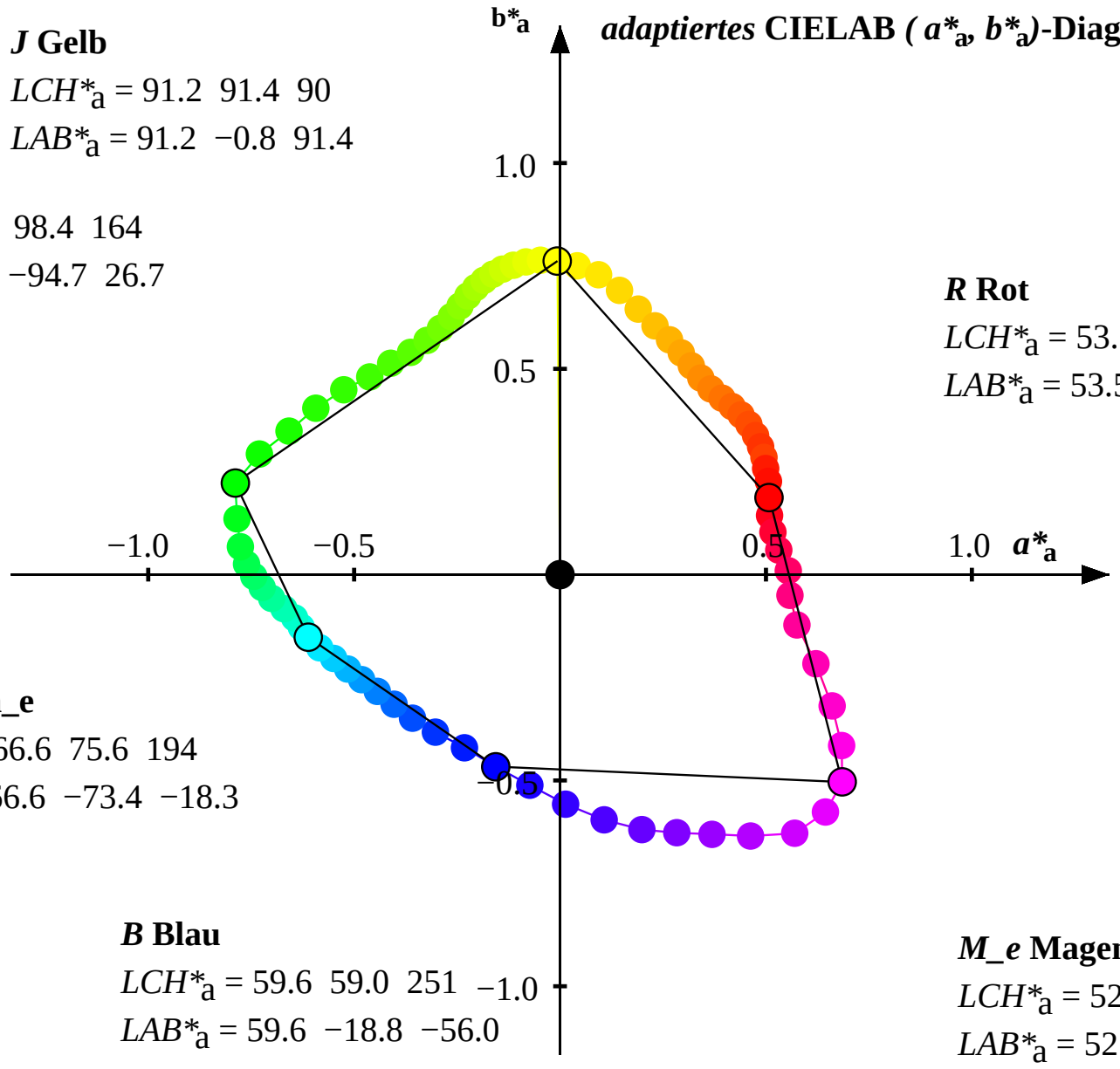
input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS38a für Helligkeit *L=38 von Schwarz für D65**

System NLS38a
NCS system

D65-Reflexion:
Y_N = 10.08
***L**$_N$ = 37.99**

adaptiertes CIELAB (*a**$_a$, *b**$_a$)-Diagramm



J Gelb
*LCH**$_a$ = 91.2 91.4 90
*LAB**$_a$ = 91.2 −0.8 91.4

G Grün
*LCH**$_a$ = 68.6 98.4 164
*LAB**$_a$ = 68.6 −94.7 26.7

R Rot
*LCH**$_a$ = 53.5 64.9 20
*LAB**$_a$ = 53.5 60.9 22.4

C_e Cyan_e
*LCH**$_a$ = 66.6 75.6 194
*LAB**$_a$ = 66.6 −73.4 −18.3

B Blau
*LCH**$_a$ = 59.6 59.0 251
*LAB**$_a$ = 59.6 −18.8 −56.0

M_e Magenta_e
*LCH**$_a$ = 52.4 102.0 324
*LAB**$_a$ = 52.4 82.2 −60.5

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS52a für Helligkeit *L**=52 von Schwarz für D65

System NLS52a
NCS system

D65-Reflexion:
Y_N = 20.16
L^*_N = 52.02

Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 Y00R	1.0	1.0	0.0	91.74	−0.64	68.33	68.33	91	75.84	80.13	22.04	0.426	0.4502	0.9045
01 Y05R	1.0	0.95	0.0	91.02	4.36	67.14	67.28	86	76.76	78.52	22.01	0.433	0.4429	0.8863
02 Y10R	1.0	0.9	0.0	89.42	9.69	64.66	65.38	81	75.99	75.05	21.85	0.4395	0.4341	0.8472
03 Y15R	1.0	0.85	0.0	86.98	14.79	60.7	62.47	76	73.38	69.97	21.72	0.4445	0.4239	0.7899
04 Y20R	1.0	0.8	0.0	84.27	19.29	56.06	59.29	71	69.98	64.59	21.7	0.4478	0.4133	0.7291
05 Y25R	1.0	0.75	0.0	81.92	23.23	51.99	56.95	66	67.14	60.16	21.71	0.4506	0.4037	0.6791
06 Y30R	1.0	0.7	0.0	79.89	26.59	48.59	55.39	61	64.73	56.5	21.66	0.453	0.3954	0.6377
07 Y35R	1.0	0.65	0.0	77.97	29.24	45.4	54.01	57	62.28	53.17	21.59	0.4545	0.388	0.6001
08 Y40R	1.0	0.6	0.0	76.18	31.41	42.36	52.74	53	59.93	50.19	21.56	0.4551	0.3811	0.5665
09 Y45R	1.0	0.55	0.0	74.61	33.45	39.53	51.78	50	57.96	47.66	21.63	0.4555	0.3746	0.538
10 Y50R	1.0	0.5	0.0	73.23	35.6	37.05	51.38	46	56.42	45.51	21.68	0.4564	0.3682	0.5138
11 Y55R	1.0	0.45	0.0	71.97	37.95	34.92	51.57	43	55.19	43.62	21.66	0.4581	0.3621	0.4924
12 Y60R	1.0	0.4	0.0	70.8	40.16	32.98	51.97	39	54.06	41.89	21.62	0.4598	0.3563	0.4729
13 Y65R	1.0	0.35	0.0	69.66	41.94	31.06	52.19	37	52.86	40.27	21.59	0.4607	0.351	0.4546
14 Y70R	1.0	0.3	0.0	68.54	43.39	29.04	52.21	34	51.56	38.71	21.64	0.4607	0.3459	0.437
15 Y75R	1.0	0.25	0.0	67.39	44.58	26.74	51.98	31	50.15	37.16	21.82	0.4595	0.3405	0.4194
16 Y80R	1.0	0.2	0.0	66.24	45.35	24.38	51.49	28	48.6	35.63	22.03	0.4573	0.3353	0.4022
17 Y85R	1.0	0.25	0.0	65.06	45.59	22.19	50.7	26	46.86	34.13	22.12	0.4545	0.331	0.3852
18 Y90R	1.0	0.1	0.0	63.9	45.56	19.91	49.72	24	45.09	32.68	22.28	0.4507	0.3266	0.3689
19 Y95R	1.0	0.05	0.0	62.78	45.63	17.37	48.82	21	43.46	31.33	22.63	0.4461	0.3216	0.3536
20 R00B	1.0	0.0	0.0	61.78	45.27	14.37	47.5	18	41.9	30.15	23.36	0.4391	0.316	0.3403
21 R05B	1.0	0.0	0.1	61.0	44.89	11.16	46.25	14	40.67	29.25	24.47	0.4309	0.3099	0.3302
22 R10B	1.0	0.0	0.2	60.5	45.35	8.04	46.06	10	40.13	28.68	25.86	0.4239	0.303	0.3238
23 R15B	1.0	0.0	0.3	60.24	46.58	4.75	46.82	6	40.16	28.39	27.68	0.4173	0.295	0.3205
24 R20B	1.0	0.0	0.4	60.06	48.61	0.77	48.62	1	40.56	28.19	30.15	0.4101	0.285	0.3182
25 R25B	1.0	0.0	0.5	59.87	48.87	−4.19	49.05	355	40.39	27.98	33.49	0.3965	0.2747	0.3159
26 R30B	1.0	0.0	0.6	59.82	50.42	−10.35	51.47	348	40.82	27.93	38.22	0.3816	0.2611	0.3152
27 R35B	1.0	0.0	0.7	60.02	54.89	−18.94	58.07	341	42.57	28.14	45.95	0.3649	0.2412	0.3177
28 R40B	1.0	0.0	0.8	60.33	58.8	−28.81	65.48	334	44.35	28.49	56.19	0.3437	0.2208	0.3217
29 R45B	1.0	0.0	0.9	60.65	61.28	−38.45	72.35	328	45.69	28.85	67.6	0.3214	0.203	0.3257
30 R50B	1.0	0.0	1.0	61.0	61.62	−47.51	77.82	322	46.33	29.24	79.73	0.2983	0.1883	0.3301
31 R55B	0.9	0.0	1.0	61.38	58.01	−55.22	80.1	316	45.64	29.68	91.37	0.2738	0.1781	0.3351
32 R60B	0.8	0.0	1.0	61.81	51.13	−60.81	79.45	310	43.9	30.18	100.87	0.2509	0.1725	0.3407
33 R65B	0.7	0.0	1.0	62.22	41.31	−61.66	74.22	304	41.21	30.66	103.31	0.2353	0.175	0.3461
34 R70B	0.6	0.0	1.0	62.67	32.71	−61.38	69.56	298	39.09	31.2	104.1	0.2241	0.1789	0.3522
35 R75B	0.5	0.0	1.0	63.14	25.1	−61.24	66.2	292	37.35	31.76	105.18	0.2143	0.1822	0.3585
36 R80B	0.4	0.0	1.0	63.58	17.48	−60.58	63.06	286	35.62	32.29	105.32	0.2056	0.1864	0.3645
37 R85B	0.3	0.0	1.0	64.01	9.35	−58.24	58.99	279	33.79	32.81	102.78	0.1995	0.1937	0.3703
38 R90B	0.2	0.0	1.0	64.57	1.22	−54.46	54.48	271	32.18	33.51	98.43	0.1961	0.2042	0.3782
39 R95B	0.1	0.0	1.0	65.31	−6.41	−49.89	50.31	263	30.97	34.45	93.49	0.1949	0.2168	0.3888
40 B00G	0.0	0.0	1.0	66.11	−13.57	−45.43	47.43	253	29.97	35.46	89.01	0.1941	0.2296	0.4003
41 B05G	0.0	0.1	1.0	66.85	−20.14	−40.88	45.58	244	29.09	36.43	84.41	0.194	0.243	0.4112
42 B10G	0.0	0.2	1.0	67.54	−26.19	−37.22	45.53	235	28.3	37.35	81.06	0.1929	0.2546	0.4216
43 B15G	0.0	0.3	1.0	68.18	−31.05	−33.82	45.93	227	27.77	38.21	78.02	0.1928	0.2654	0.4314
44 B20G	0.0	0.4	1.0	68.78	−35.01	−30.58	46.5	221	27.42	39.04	75.16	0.1936	0.2756	0.4406
45 B25G	0.0	0.5	1.0	69.33	−38.59	−27.48	47.38	215	27.12	39.8	72.45	0.1946	0.2856	0.4493
46 B30G	0.0	0.6	1.0	69.82	−41.9	−24.67	48.64	210	26.83	40.49	70.03	0.1953	0.2948	0.4571
47 B35G	0.0	0.7	1.0	70.27	−44.94	−22.14	50.11	206	26.56	41.14	67.93	0.1959	0.3033	0.4643
48 B40G	0.0	0.8	1.0	70.69	−47.85	−19.7	51.76	202	26.29	41.74	65.89	0.1963	0.3117	0.4711
49 B45G	0.0	0.9	1.0	71.08	−50.84	−17.15	53.66	199	25.98	42.31	63.73	0.1968	0.3205	0.4776

n = 28.67 / (28.67 + 20.16) = 0.587

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS52a für Helligkeit *L**=52 von Schwarz für D65

System NLS52a
NCS system

D65-Reflexion:
Y_N = 20.16
L^*_N = 52.02

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	71.42	−53.24	−14.61	55.22	195	25.75	42.8	61.52	0.198	0.329	0.4831
51	B55G	0.0	1.0	0.9	71.65	−54.75	−12.25	56.11	193	25.64	43.15	59.37	0.2	0.3367	0.487
52	B60G	0.0	1.0	0.8	71.82	−56.13	−10.04	57.03	190	25.48	43.39	57.29	0.2019	0.3439	0.4898
53	B65G	0.0	1.0	0.7	71.92	−58.24	−7.83	58.78	188	25.09	43.55	55.16	0.2026	0.3518	0.4915
54	B70G	0.0	1.0	0.6	72.02	−60.63	−5.47	60.89	185	24.63	43.69	52.91	0.2031	0.3604	0.4932
55	B75G	0.0	1.0	0.5	72.12	−62.52	−2.93	62.6	183	24.29	43.84	50.55	0.2047	0.3694	0.4948
56	B80G	0.0	1.0	0.4	72.22	−64.22	−0.33	64.23	180	24.0	43.99	48.22	0.2065	0.3785	0.4966
57	B85G	0.0	1.0	0.3	72.31	−65.6	2.38	65.66	178	23.77	44.12	45.82	0.209	0.388	0.4981
58	B90G	0.0	1.0	0.2	72.43	−66.87	6.28	67.17	175	23.6	44.3	42.52	0.2138	0.4012	0.5001
59	B95G	0.0	1.0	0.1	72.68	−67.63	12.37	68.76	170	23.67	44.68	37.76	0.2231	0.421	0.5043
60	G00Y	0.0	1.0	0.0	73.02	−68.29	19.89	71.14	164	23.85	45.19	32.44	0.235	0.4453	0.5101
61	G05Y	0.05	1.0	0.0	73.42	−63.98	25.69	68.96	158	25.25	45.81	28.87	0.2527	0.4584	0.5171
62	G10Y	0.1	1.0	0.0	73.9	−58.57	30.16	65.89	153	27.06	46.55	26.48	0.2703	0.4651	0.5254
63	G15Y	0.15	1.0	0.0	74.49	−53.51	34.48	63.66	147	28.98	47.48	24.44	0.2872	0.4706	0.5359
64	G20Y	0.2	1.0	0.0	75.22	−48.05	37.96	61.24	142	31.25	48.62	23.12	0.3034	0.4721	0.5489
65	G25Y	0.25	1.0	0.0	76.12	−42.9	40.54	59.04	137	33.78	50.09	22.53	0.3175	0.4708	0.5654
66	G30Y	0.3	1.0	0.0	77.22	−38.69	43.33	58.1	132	36.41	51.9	22.02	0.33	0.4704	0.5859
67	G35Y	0.35	1.0	0.0	78.51	−34.63	45.82	57.44	127	39.37	54.08	21.87	0.3414	0.469	0.6104
68	G40Y	0.4	1.0	0.0	79.97	−31.15	48.54	57.69	123	42.55	56.63	21.76	0.3518	0.4683	0.6393
69	G45Y	0.45	1.0	0.0	81.6	−28.33	51.41	58.7	119	45.92	59.56	21.72	0.361	0.4682	0.6723
70	G50Y	0.5	1.0	0.0	83.28	−26.07	54.27	60.21	116	49.34	62.7	21.75	0.3688	0.4686	0.7077
71	G55Y	0.55	1.0	0.0	84.94	−24.2	56.98	61.92	113	52.74	65.89	21.83	0.3755	0.4691	0.7437
72	G60Y	0.6	1.0	0.0	86.43	−22.51	59.44	63.57	111	55.93	68.85	21.89	0.3813	0.4694	0.7772
73	G65Y	0.65	1.0	0.0	87.67	−20.68	61.56	64.95	109	58.85	71.39	21.9	0.3868	0.4692	0.8059
74	G70Y	0.7	1.0	0.0	88.71	−18.77	63.38	66.1	107	61.54	73.56	21.89	0.392	0.4686	0.8303
75	G75Y	0.75	1.0	0.0	89.58	−16.66	64.92	67.02	104	64.07	75.4	21.87	0.3971	0.4674	0.8512
76	G80Y	0.8	1.0	0.0	90.28	−14.31	66.14	67.68	102	66.46	76.92	21.86	0.4022	0.4655	0.8682
77	G85Y	0.85	1.0	0.0	90.81	−11.64	67.1	68.1	100	68.7	78.07	21.83	0.4075	0.463	0.8812
78	G90Y	0.9	1.0	0.0	91.27	−8.58	67.88	68.43	97	71.05	79.08	21.84	0.4131	0.4599	0.8927
79	G95Y	0.95	1.0	0.0	91.7	−4.96	68.44	68.62	94	73.64	80.03	21.94	0.4193	0.4557	0.9033
80	Y00R	0.0	1.0	0.0	91.74	−0.64	68.33	68.33	91	75.84	80.13	22.04	0.426	0.4502	0.9045
81	9500	1.0	1.0	1.0	52.02	0.0	0.0	0.01	0	19.16	20.16	21.95	0.3127	0.329	0.2276
82	9000	0.944	0.944	0.944	53.69	0.0	0.0	0.01	0	20.61	21.68	23.61	0.3127	0.329	0.2447
83	8500	0.889	0.889	0.889	55.4	0.0	0.0	0.01	85	22.16	23.32	25.39	0.3127	0.329	0.2632
84	8000	0.833	0.833	0.833	57.15	0.0	0.0	0.01	0	23.83	25.08	27.3	0.3127	0.329	0.2831
85	7500	0.778	0.778	0.778	58.95	0.0	0.0	0.01	0	25.64	26.97	29.37	0.3127	0.329	0.3045
86	7000	0.722	0.722	0.722	60.8	0.0	0.0	0.01	0	27.58	29.02	31.6	0.3127	0.329	0.3276
87	6500	0.667	0.667	0.667	62.71	0.0	0.0	0.01	158	29.7	31.25	34.02	0.3127	0.329	0.3527
88	6000	0.611	0.611	0.611	64.7	0.0	0.0	0.01	0	32.0	33.67	36.66	0.3127	0.329	0.3801
89	5500	0.556	0.556	0.556	66.77	0.0	0.0	0.01	85	34.52	36.33	39.55	0.3127	0.329	0.41
90	5000	0.5	0.5	0.5	68.92	0.0	0.0	0.01	85	37.29	39.23	42.71	0.3127	0.329	0.4428
91	4500	0.444	0.444	0.444	71.18	0.0	0.0	0.01	85	40.34	42.45	46.22	0.3127	0.329	0.4791
92	4000	0.389	0.389	0.389	73.55	0.0	0.0	0.01	158	43.73	46.01	50.1	0.3127	0.329	0.5194
93	3500	0.333	0.333	0.333	76.06	0.0	0.0	0.01	158	47.5	49.98	54.42	0.3127	0.329	0.5642
94	3000	0.278	0.278	0.278	78.72	0.0	0.0	0.01	0	51.74	54.44	59.28	0.3127	0.329	0.6146
95	2500	0.222	0.222	0.222	81.56	0.0	0.0	0.01	0	56.53	59.48	64.76	0.3127	0.329	0.6714
96	2000	0.167	0.167	0.167	84.61	0.0	0.0	0.01	85	62.0	65.24	71.03	0.3127	0.329	0.7364
97	1500	0.111	0.111	0.111	87.89	0.0	0.0	0.01	158	68.28	71.85	78.23	0.3127	0.329	0.811
98	1000	0.056	0.056	0.056	91.48	0.0	0.0	0.01	88	75.59	79.54	86.6	0.3127	0.329	0.8978
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

n = 88.59 / (88.59 + 20.16) = 0.815

TUB-Prüfvorlage JG25; Buntonkreis und farbmetrische Daten
Natürliches Farbsystem NCS, 80 Bunttöne, 8 Reflexionen

input: *olv* setrgbcolor*
output: *no change compared to input*

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS52a für Helligkeit *L=52 von Schwarz für D65**

System NLS52a
NCS system

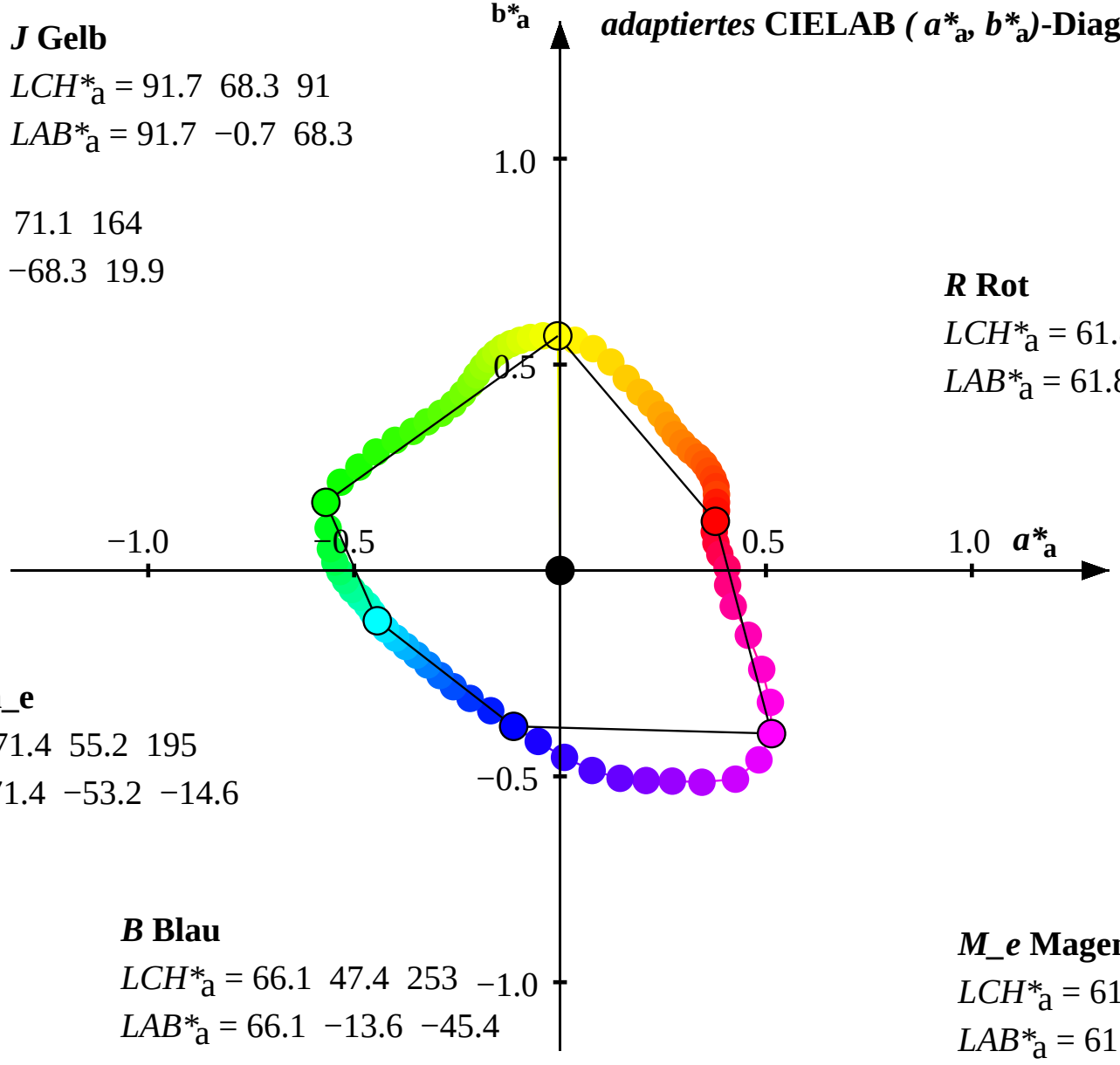
D65-Reflexion:
Y_N = 20.16
***L**$_N$ = 52.02**

J Gelb

*LCH**$_a$ = 91.7 68.3 91
*LAB**$_a$ = 91.7 −0.7 68.3

G Grün

*LCH**$_a$ = 73.0 71.1 164
*LAB**$_a$ = 73.0 −68.3 19.9



R Rot

*LCH**$_a$ = 61.8 47.5 18
*LAB**$_a$ = 61.8 45.3 14.4

C_e Cyan_e

*LCH**$_a$ = 71.4 55.2 195
*LAB**$_a$ = 71.4 −53.2 −14.6

B Blau

*LCH**$_a$ = 66.1 47.4 253
*LAB**$_a$ = 66.1 −13.6 −45.4

M_e Magenta_e

*LCH**$_a$ = 61.0 77.8 322
*LAB**$_a$ = 61.0 61.6 −47.5

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS70a für Helligkeit *L**=70 von Schwarz für D65

System NLS70a
NCS system

D65-Reflexion:
Y_N = 40.32
L^*_N = 69.7

Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 Y00R	1.0	1.0	0.0	92.85	−0.44	39.85	39.85	91	78.3	82.62	43.97	0.3822	0.4033	0.9327
01 Y05R	1.0	0.95	0.0	92.35	3.01	39.01	39.13	86	78.95	81.49	43.94	0.3863	0.3987	0.9198
02 Y10R	1.0	0.9	0.0	91.25	6.65	37.24	37.83	80	78.41	79.04	43.83	0.3895	0.3927	0.8922
03 Y15R	1.0	0.85	0.0	89.61	10.04	34.51	35.94	74	76.56	75.46	43.74	0.3911	0.3855	0.8518
04 Y20R	1.0	0.8	0.0	87.81	12.9	31.42	33.96	68	74.17	71.66	43.73	0.3913	0.3781	0.8089
05 Y25R	1.0	0.75	0.0	86.27	15.33	28.77	32.6	62	72.17	68.53	43.73	0.3913	0.3716	0.7736
06 Y30R	1.0	0.7	0.0	84.97	17.33	26.57	31.72	57	70.47	65.95	43.69	0.3912	0.3662	0.7444
07 Y35R	1.0	0.65	0.0	83.76	18.82	24.53	30.92	53	68.74	63.6	43.64	0.3906	0.3614	0.7179
08 Y40R	1.0	0.6	0.0	82.65	19.97	22.64	30.18	49	67.08	61.5	43.63	0.3895	0.3571	0.6942
09 Y45R	1.0	0.55	0.0	81.69	21.02	20.93	29.66	45	65.69	59.72	43.67	0.3885	0.3532	0.6741
10 Y50R	1.0	0.5	0.0	80.85	22.15	19.45	29.48	41	64.6	58.21	43.71	0.3879	0.3495	0.657
11 Y55R	1.0	0.45	0.0	80.1	23.4	18.17	29.63	38	63.74	56.87	43.7	0.3879	0.3461	0.6419
12 Y60R	1.0	0.4	0.0	79.41	24.55	17.02	29.88	35	62.94	55.65	43.66	0.3879	0.343	0.6282
13 Y65R	1.0	0.35	0.0	78.76	25.42	15.9	29.98	32	62.09	54.51	43.65	0.3875	0.3401	0.6153
14 Y70R	1.0	0.3	0.0	78.11	26.04	14.76	29.93	30	61.17	53.41	43.68	0.3865	0.3374	0.6028
15 Y75R	1.0	0.25	0.0	77.46	26.49	13.49	29.73	27	60.18	52.31	43.81	0.385	0.3347	0.5905
16 Y80R	1.0	0.2	0.0	76.82	26.65	12.22	29.32	25	59.09	51.23	43.96	0.383	0.3321	0.5783
17 Y85R	1.0	0.25	0.0	76.18	26.46	11.03	28.67	23	57.86	50.17	44.02	0.3805	0.33	0.5663
18 Y90R	1.0	0.1	0.0	75.54	26.1	9.82	27.89	21	56.61	49.15	44.13	0.3777	0.3279	0.5548
19 Y95R	1.0	0.05	0.0	74.95	25.81	8.52	27.18	18	55.46	48.2	44.38	0.3746	0.3256	0.5441
20 R00B	1.0	0.0	0.0	74.42	25.29	7.04	26.25	16	54.36	47.37	44.9	0.3707	0.323	0.5347
21 R05B	1.0	0.0	0.1	74.02	24.82	5.48	25.42	12	53.5	46.73	45.68	0.3666	0.3203	0.5275
22 R10B	1.0	0.0	0.2	73.76	24.94	3.97	25.25	9	53.11	46.33	46.66	0.3635	0.3171	0.523
23 R15B	1.0	0.0	0.3	73.63	25.57	2.37	25.68	5	53.13	46.12	47.94	0.3609	0.3133	0.5207
24 R20B	1.0	0.0	0.4	73.53	26.7	0.39	26.71	1	53.41	45.98	49.68	0.3583	0.3084	0.519
25 R25B	1.0	0.0	0.5	73.44	26.79	−2.16	26.88	355	53.29	45.84	52.04	0.3525	0.3032	0.5174
26 R30B	1.0	0.0	0.6	73.41	27.68	−5.47	28.22	349	53.6	45.8	55.38	0.3463	0.2959	0.517
27 R35B	1.0	0.0	0.7	73.51	30.4	−10.38	32.13	341	54.83	45.95	60.83	0.3393	0.2843	0.5187
28 R40B	1.0	0.0	0.8	73.67	32.87	−16.38	36.73	333	56.09	46.2	68.06	0.3293	0.2712	0.5215
29 R45B	1.0	0.0	0.9	73.84	34.5	−22.59	41.24	327	57.03	46.45	76.1	0.3176	0.2587	0.5243
30 R50B	1.0	0.0	1.0	74.02	34.85	−28.7	45.15	321	57.48	46.73	84.66	0.3044	0.2474	0.5275
31 R55B	0.9	0.0	1.0	74.21	32.8	−34.12	47.34	314	57.0	47.04	92.87	0.2895	0.2389	0.531
32 R60B	0.8	0.0	1.0	74.44	28.8	−38.19	47.84	307	55.77	47.39	99.57	0.2751	0.2337	0.5349
33 R65B	0.7	0.0	1.0	74.65	23.07	−38.93	45.26	301	53.88	47.73	101.29	0.2655	0.2352	0.5387
34 R70B	0.6	0.0	1.0	74.89	18.16	−38.88	42.92	295	52.38	48.11	101.85	0.2589	0.2378	0.543
35 R75B	0.5	0.0	1.0	75.14	13.86	−38.94	41.34	290	51.15	48.5	102.61	0.2529	0.2398	0.5475
36 R80B	0.4	0.0	1.0	75.37	9.6	−38.6	39.78	284	49.93	48.88	102.71	0.2478	0.2425	0.5517
37 R85B	0.3	0.0	1.0	75.6	5.1	−37.05	37.41	278	48.64	49.24	100.92	0.2447	0.2477	0.5558
38 R90B	0.2	0.0	1.0	75.91	0.66	−34.53	34.55	271	47.51	49.74	97.85	0.2435	0.2549	0.5614
39 R95B	0.1	0.0	1.0	76.31	−3.47	−31.52	31.72	264	46.65	50.4	94.36	0.2437	0.2633	0.5689
40 B00G	0.0	0.0	1.0	76.75	−7.35	−28.61	29.55	256	45.95	51.11	91.2	0.2441	0.2715	0.577
41 B05G	0.0	0.1	1.0	77.16	−10.9	−25.64	27.87	247	45.32	51.8	87.96	0.2449	0.2799	0.5847
42 B10G	0.0	0.2	1.0	77.55	−14.18	−23.29	27.28	239	44.77	52.45	85.6	0.2449	0.2869	0.592
43 B15G	0.0	0.3	1.0	77.91	−16.82	−21.11	27.01	231	44.39	53.05	83.45	0.2454	0.2933	0.5989
44 B20G	0.0	0.4	1.0	78.25	−19.0	−19.04	26.91	225	44.15	53.63	81.43	0.2463	0.2993	0.6054
45 B25G	0.0	0.5	1.0	78.56	−20.97	−17.06	27.05	219	43.94	54.17	79.52	0.2474	0.305	0.6115
46 B30G	0.0	0.6	1.0	78.85	−22.81	−15.28	27.46	214	43.73	54.66	77.82	0.2482	0.3102	0.617
47 B35G	0.0	0.7	1.0	79.11	−24.49	−13.68	28.06	209	43.54	55.12	76.33	0.2488	0.315	0.6221
48 B40G	0.0	0.8	1.0	79.35	−26.1	−12.14	28.8	205	43.35	55.54	74.9	0.2495	0.3196	0.6269
49 B45G	0.0	0.9	1.0	79.58	−27.74	−10.54	29.69	201	43.13	55.94	73.37	0.2501	0.3244	0.6315

n = 28.67 / (28.67 + 40.32) = 0.416

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS70a für Helligkeit *L**=70 von Schwarz für D65

System NLS70a
NCS system

D65-Reflexion:
Y_N = 40.32
L^*_N = 69.7

	Farbe	*r=olv*1*	*g=olv*2*	*b=olv*3*	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
50	B50G	0.0	1.0	1.0	79.78	−29.07	−8.95	30.42	197	42.97	56.29	71.81	0.2512	0.329	0.6354
51	B55G	0.0	1.0	0.9	79.92	−29.91	−7.47	30.84	194	42.89	56.53	70.29	0.2527	0.3331	0.6382
52	B60G	0.0	1.0	0.8	80.01	−30.66	−6.1	31.28	191	42.78	56.71	68.83	0.2541	0.3369	0.6401
53	B65G	0.0	1.0	0.7	80.08	−31.76	−4.73	32.12	188	42.5	56.82	67.33	0.255	0.3409	0.6413
54	B70G	0.0	1.0	0.6	80.13	−32.98	−3.28	33.16	186	42.18	56.92	65.74	0.2559	0.3453	0.6425
55	B75G	0.0	1.0	0.5	80.19	−33.95	−1.74	34.01	183	41.94	57.02	64.08	0.2572	0.3498	0.6437
56	B80G	0.0	1.0	0.4	80.25	−34.83	−0.19	34.84	180	41.74	57.13	62.43	0.2588	0.3542	0.6449
57	B85G	0.0	1.0	0.3	80.31	−35.54	1.4	35.58	178	41.57	57.22	60.74	0.2606	0.3587	0.6459
58	B90G	0.0	1.0	0.2	80.38	−36.21	3.66	36.41	174	41.45	57.35	58.41	0.2637	0.3648	0.6474
59	B95G	0.0	1.0	0.1	80.52	−36.7	7.08	37.39	169	41.5	57.61	55.06	0.2692	0.3737	0.6503
60	G00Y	0.0	1.0	0.0	80.73	−37.18	11.14	38.82	163	41.63	57.98	51.3	0.2759	0.3842	0.6544
61	G05Y	0.05	1.0	0.0	80.97	−35.25	14.15	37.99	158	42.62	58.41	48.78	0.2845	0.3899	0.6594
62	G10Y	0.1	1.0	0.0	81.26	−32.72	16.43	36.62	153	43.89	58.93	47.1	0.2928	0.3931	0.6652
63	G15Y	0.15	1.0	0.0	81.61	−30.32	18.61	35.58	148	45.25	59.59	45.65	0.3007	0.396	0.6726
64	G20Y	0.2	1.0	0.0	82.05	−27.66	20.39	34.37	144	46.85	60.4	44.72	0.3083	0.3974	0.6818
65	G25Y	0.25	1.0	0.0	82.61	−25.11	21.81	33.27	139	48.63	61.43	44.31	0.315	0.3979	0.6934
66	G30Y	0.3	1.0	0.0	83.29	−23.03	23.38	32.82	135	50.48	62.71	43.95	0.3213	0.3991	0.7079
67	G35Y	0.35	1.0	0.0	84.09	−20.98	24.89	32.56	130	52.58	64.25	43.84	0.3272	0.3999	0.7252
68	G40Y	0.4	1.0	0.0	85.02	−19.21	26.57	32.8	126	54.82	66.05	43.76	0.333	0.4012	0.7456
69	G45Y	0.45	1.0	0.0	86.06	−17.78	28.4	33.51	122	57.19	68.11	43.74	0.3383	0.4029	0.7688
70	G50Y	0.5	1.0	0.0	87.16	−16.63	30.26	34.54	119	59.61	70.33	43.76	0.3432	0.4049	0.7938
71	G55Y	0.55	1.0	0.0	88.25	−15.67	32.08	35.71	116	62.0	72.58	43.81	0.3476	0.4068	0.8192
72	G60Y	0.6	1.0	0.0	89.24	−14.76	33.74	36.83	114	64.25	74.67	43.86	0.3515	0.4085	0.8428
73	G65Y	0.65	1.0	0.0	90.07	−13.71	35.17	37.75	111	66.32	76.46	43.87	0.3553	0.4096	0.8631
74	G70Y	0.7	1.0	0.0	90.77	−12.55	36.39	38.49	109	68.21	77.99	43.86	0.3589	0.4103	0.8803
75	G75Y	0.75	1.0	0.0	91.36	−11.22	37.43	39.08	107	70.0	79.29	43.84	0.3625	0.4105	0.895
76	G80Y	0.8	1.0	0.0	91.84	−9.7	38.26	39.47	104	71.69	80.36	43.83	0.366	0.4102	0.9071
77	G85Y	0.85	1.0	0.0	92.21	−7.93	38.9	39.71	102	73.27	81.17	43.82	0.3696	0.4094	0.9162
78	G90Y	0.9	1.0	0.0	92.52	−5.88	39.45	39.88	98	74.92	81.88	43.82	0.3734	0.4081	0.9243
79	G95Y	0.95	1.0	0.0	92.82	−3.42	39.87	40.02	95	76.75	82.55	43.89	0.3777	0.4063	0.9318
80	Y00R	0.0	1.0	0.0	92.85	−0.44	39.85	39.85	91	78.3	82.62	43.97	0.3822	0.4033	0.9327
81	9500	1.0	1.0	1.0	69.7	0.0	0.0	0.01	0	38.32	40.32	43.9	0.3127	0.329	0.4551
82	9000	0.944	0.944	0.944	70.45	0.0	0.0	0.01	0	39.34	41.39	45.07	0.3127	0.329	0.4673
83	8500	0.889	0.889	0.889	71.25	0.0	0.0	0.01	0	40.44	42.55	46.33	0.3127	0.329	0.4803
84	8000	0.833	0.833	0.833	72.09	0.0	0.0	0.01	0	41.62	43.79	47.68	0.3127	0.329	0.4943
85	7500	0.778	0.778	0.778	72.97	0.0	0.0	0.01	0	42.89	45.13	49.13	0.3127	0.329	0.5094
86	7000	0.722	0.722	0.722	73.92	0.0	0.0	0.01	0	44.26	46.57	50.71	0.3127	0.329	0.5257
87	6500	0.667	0.667	0.667	74.91	0.0	0.0	0.01	0	45.75	48.14	52.41	0.3127	0.329	0.5434
88	6000	0.611	0.611	0.611	75.98	0.0	0.0	0.01	85	47.38	49.85	54.28	0.3127	0.329	0.5627
89	5500	0.556	0.556	0.556	77.11	0.0	0.0	0.01	0	49.16	51.72	56.32	0.3127	0.329	0.5838
90	5000	0.5	0.5	0.5	78.33	0.0	0.0	0.01	0	51.11	53.77	58.55	0.3127	0.329	0.607
91	4500	0.444	0.444	0.444	79.64	0.0	0.0	0.01	85	53.26	56.04	61.02	0.3127	0.329	0.6326
92	4000	0.389	0.389	0.389	81.05	0.0	0.0	0.01	158	55.65	58.56	63.76	0.3127	0.329	0.661
93	3500	0.333	0.333	0.333	82.57	0.0	0.0	0.01	85	58.31	61.36	66.81	0.3127	0.329	0.6926
94	3000	0.278	0.278	0.278	84.23	0.0	0.0	0.01	0	61.3	64.5	70.23	0.3127	0.329	0.7281
95	2500	0.222	0.222	0.222	86.04	0.0	0.0	0.01	85	64.68	68.06	74.1	0.3127	0.329	0.7682
96	2000	0.167	0.167	0.167	88.02	0.0	0.0	0.01	158	68.54	72.12	78.52	0.3127	0.329	0.8141
97	1500	0.111	0.111	0.111	90.22	0.0	0.0	0.01	158	72.97	76.78	83.6	0.3127	0.329	0.8667
98	1000	0.056	0.056	0.056	92.67	0.0	0.0	0.01	0	78.13	82.21	89.51	0.3127	0.329	0.9279
99	0500	0.0	0.0	0.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

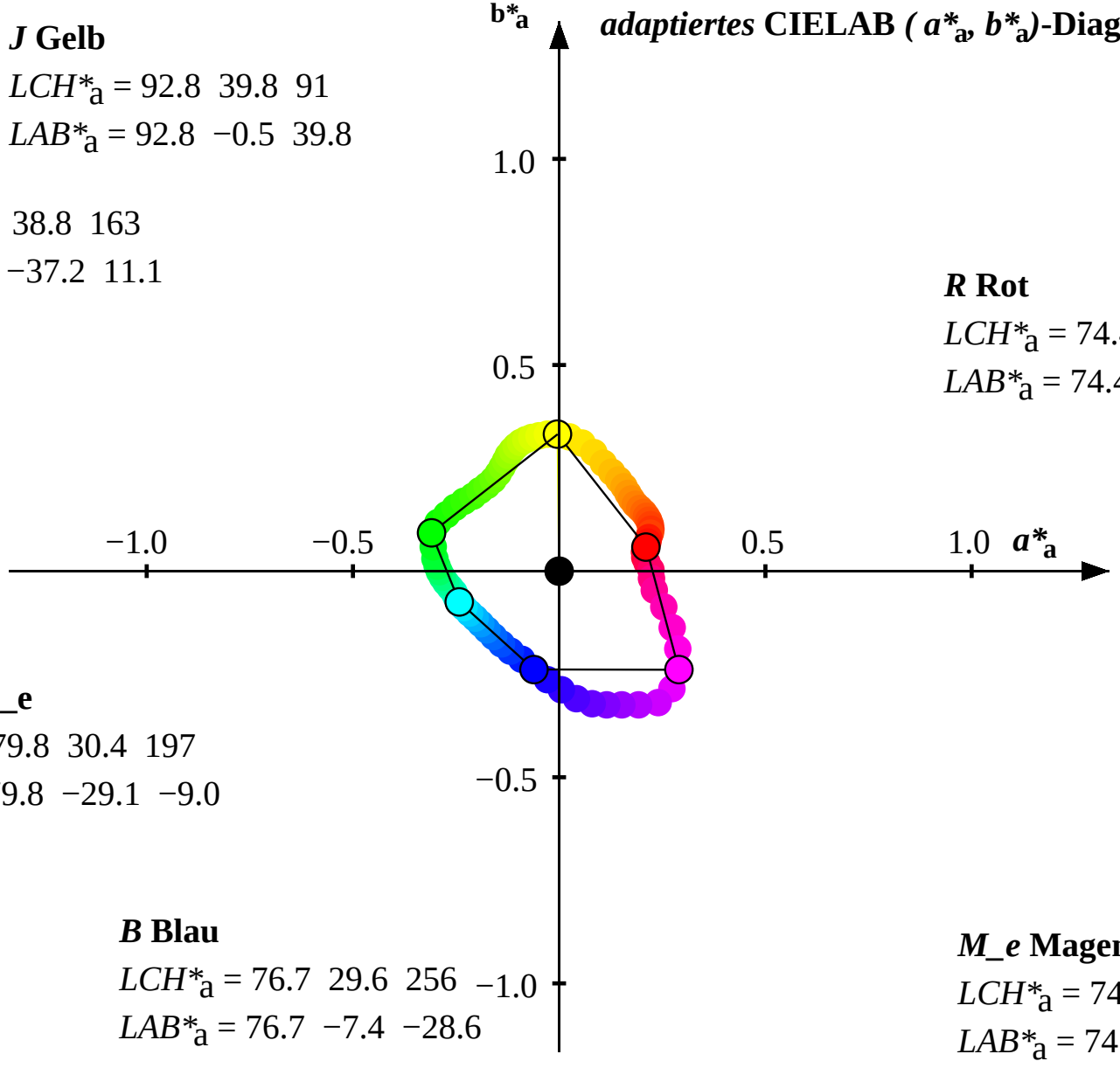
n = 88.59 / (88.59 + 40.32) = 0.687

Farbmetrische "Adaptierte Daten (a)": Farbmetrische Daten des Natürliches-Lichtfarbensystem NLS70a für Helligkeit *L=70 von Schwarz für D65**

System NLS70a
NCS system

D65-Reflexion:
Y_N = 40.32
***L**$_N$ = 69.7**

***adaptiertes* CIELAB (*a**$_a$, *b**$_a$)-Diagramm**



***J* Gelb**
*LCH**$_a$ = 92.8 39.8 91
*LAB**$_a$ = 92.8 −0.5 39.8

***G* Grün**
*LCH**$_a$ = 80.7 38.8 163
*LAB**$_a$ = 80.7 −37.2 11.1

***R* Rot**
*LCH**$_a$ = 74.4 26.2 16
*LAB**$_a$ = 74.4 25.3 7.0

***C_e* Cyan_e**
*LCH**$_a$ = 79.8 30.4 197
*LAB**$_a$ = 79.8 −29.1 −9.0

***B* Blau**
*LCH**$_a$ = 76.7 29.6 256
*LAB**$_a$ = 76.7 −7.4 −28.6

***M_e* Magenta_e**
*LCH**$_a$ = 74.0 45.2 321
*LAB**$_a$ = 74.0 34.9 −28.7