Colorimetric "Standard data": Television Luminous System TLS11 for CIE lightness L^*=11 of black for illuminant D65

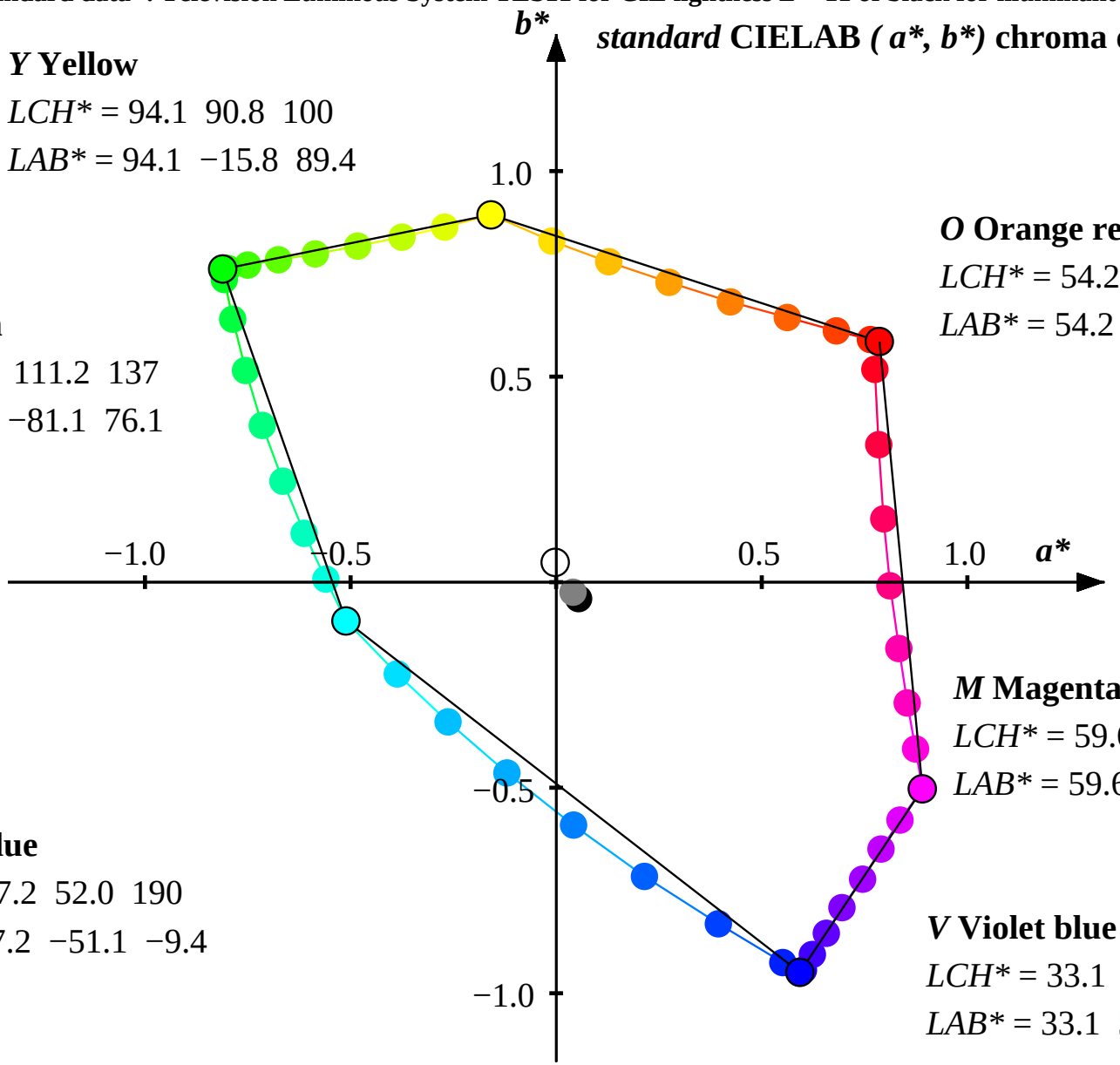
System TLS11

LCD monitor

Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*=LAB^*_1$	$a^*=LAB^*_2$	$b^*=LAB^*_3$	$C^*_{ab}=LAB^*_r$	h_{ab}	$X=XYZ_1$	$Y=XYZ_2$	$Z=XYZ_3$	x	y	$Y/88.59$
00 o00y	1.0	0.0	0.0	54.21	78.64	58.52	98.03	37	42.14	22.17	3.33	0.623	0.3278	0.2503
01 o13y	1.0	0.125	0.0	54.91	76.45	59.02	96.58	38	42.42	22.84	3.44	0.6174	0.3325	0.2579
02 o25y	1.0	0.25	0.0	57.87	68.1	61.12	91.5	42	43.91	25.83	3.96	0.5958	0.3505	0.2916
03 o38y	1.0	0.375	0.0	62.22	56.16	64.44	85.47	49	46.26	30.66	4.75	0.5664	0.3754	0.3461
04 o50y	1.0	0.5	0.0	67.48	42.42	68.19	80.31	58	49.48	37.27	5.91	0.534	0.4022	0.4207
05 o63y	1.0	0.625	0.0	73.63	27.43	72.96	77.94	70	53.85	46.12	7.39	0.5016	0.4296	0.5206
06 o75y	1.0	0.75	0.0	80.08	12.73	77.89	78.93	81	59.14	56.82	9.2	0.4725	0.454	0.6414
07 o88y	1.0	0.875	0.0	86.52	−1.05	82.98	82.99	91	65.14	69.03	11.22	0.448	0.4748	0.7793
08 y00l	1.0	1.0	0.0	94.11	−15.83	89.38	90.77	101	73.43	85.54	13.8	0.425	0.4951	0.9655
09 y13l	0.875	1.0	0.0	92.0	−27.1	86.39	90.55	108	64.07	80.71	13.54	0.4047	0.5098	0.911
10 y25l	0.75	1.0	0.0	90.22	−37.49	83.97	91.96	115	56.47	76.78	13.28	0.3854	0.524	0.8667
11 y38l	0.625	1.0	0.0	88.56	−48.25	81.77	94.94	122	49.55	73.23	13.01	0.3649	0.5393	0.8266
12 y50l	0.5	1.0	0.0	87.07	−58.61	79.85	99.06	128	43.6	70.14	12.75	0.3447	0.5545	0.7917
13 y63l	0.375	1.0	0.0	85.89	−67.53	78.43	103.5	132	39.02	67.76	12.51	0.3271	0.568	0.7649
14 y75l	0.25	1.0	0.0	84.97	−74.95	77.13	107.56	136	35.55	65.95	12.4	0.3121	0.579	0.7444
15 y88l	0.125	1.0	0.0	84.37	−79.89	76.36	110.52	138	33.36	64.77	12.3	0.3021	0.5865	0.7312
16 l00c	0.0	1.0	0.0	84.21	−81.1	76.13	111.24	138	32.83	64.47	12.29	0.2996	0.5883	0.7278
17 l13c	0.0	1.0	0.125	84.25	−80.71	73.57	109.22	139	32.98	64.54	13.31	0.2976	0.5823	0.7285
18 l25c	0.0	1.0	0.25	84.35	−78.62	63.95	101.35	143	33.71	64.74	17.66	0.2903	0.5576	0.7308
19 l38c	0.0	1.0	0.375	84.61	−75.49	51.46	91.37	148	34.93	65.24	24.72	0.2797	0.5224	0.7365
20 l50c	0.0	1.0	0.5	84.97	−71.46	38.14	81.01	154	36.59	65.95	34.2	0.2676	0.4823	0.7444
21 l63c	0.0	1.0	0.625	85.43	−66.43	24.55	70.83	163	38.75	66.85	46.23	0.2552	0.4403	0.7546
22 l75c	0.0	1.0	0.75	85.97	−61.24	11.9	62.39	173	41.15	67.93	59.93	0.2435	0.4019	0.7668
23 l88c	0.0	1.0	0.875	86.54	−56.04	0.7	56.06	183	43.7	69.07	74.31	0.2336	0.3692	0.7796
24 c00v	0.0	1.0	1.0	87.18	−51.1	−9.41	51.97	195	46.37	70.38	89.45	0.2249	0.3413	0.7944
25 c13v	0.0	0.875	1.0	78.68	−38.63	−22.32	44.62	213	38.35	54.38	86.97	0.2134	0.3026	0.6138
26 c25v	0.0	0.75	1.0	71.08	−26.3	−33.97	42.97	233	32.33	42.3	84.93	0.2026	0.2651	0.4775
27 c38v	0.0	0.675	1.0	63.12	−11.97	−46.39	47.92	254	27.09	31.73	83.16	0.1908	0.2235	0.3582
28 c50v	0.0	0.5	1.0	54.95	4.19	−59.11	59.26	272	22.65	22.88	81.29	0.1786	0.1804	0.2582
29 c63v	0.0	0.375	1.0	47.37	21.46	−71.55	74.71	284	19.44	16.3	80.45	0.1673	0.1403	0.184
30 c75v	0.0	0.25	1.0	40.2	39.44	−83.05	91.95	294	16.99	11.37	79.32	0.1578	0.1056	0.1284
31 c88v	0.0	0.125	1.0	34.57	55.15	−92.53	107.73	299	15.49	8.29	79.02	0.1507	0.0806	0.0935
32 v00m	0.0	0.0	1.0	33.09	59.26	−94.9	111.9	301	15.11	7.58	78.79	0.1489	0.0747	0.0856
33 v13m	0.125	0.0	1.0	33.6	60.17	−94.39	111.95	301	15.63	7.82	79.26	0.1522	0.0761	0.0882
34 v25m	0.25	0.0	1.0	35.64	62.25	−90.58	109.92	303	17.57	8.82	78.88	0.1669	0.0838	0.0996
35 v38m	0.375	0.0	1.0	38.78	65.67	−85.41	107.74	306	20.9	10.53	79.21	0.1889	0.0952	0.1189
36 v50m	0.5	0.0	1.0	42.38	69.54	−79.14	105.36	310	25.19	12.75	79.11	0.2152	0.1089	0.1439
37 v63m	0.625	0.0	1.0	46.58	74.48	−72.19	103.73	315	31.01	15.7	79.49	0.2457	0.1244	0.1772
38 v75m	0.75	0.0	1.0	50.83	79.05	−64.9	102.28	320	37.61	19.12	79.55	0.276	0.1403	0.2158
39 v88m	0.875	0.0	1.0	54.98	83.66	−57.89	101.74	324	44.97	22.91	79.74	0.3046	0.1552	0.2586
40 m00o	1.0	0.0	1.0	59.56	89.09	−50.27	102.3	329	54.26	27.64	80.12	0.3349	0.1706	0.312
41 m13o	1.0	0.0	0.875	58.35	87.39	−40.57	96.35	334	51.59	26.33	65.42	0.3599	0.1837	0.2972
42 m25o	1.0	0.0	0.75	57.23	85.38	−29.34	90.29	340	49.04	25.16	51.28	0.3908	0.2005	0.284
43 m38o	1.0	0.0	0.675	56.14	83.38	−16.14	84.93	348	46.62	24.05	37.77	0.4299	0.2218	0.2715
44 m50o	1.0	0.0	0.5	55.19	81.22	−0.89	81.23	359	44.43	23.11	25.72	0.4764	0.2478	0.2609
45 m63o	1.0	0.0	0.375	54.35	79.62	15.44	81.1	11	42.67	22.31	16.14	0.526	0.275	0.2518
46 m75o	1.0	0.0	0.25	53.75	78.41	33.44	85.24	24	41.41	21.74	8.91	0.5747	0.3017	0.2454
47 m88o	1.0	0.0	0.125	53.35	77.5	51.81	93.22	34	40.55	21.37	4.23	0.613	0.323	0.2412
48 o00y	1.0	0.0	0.0	54.21	78.64	58.52	98.03	37	42.14	22.17	3.33	0.623	0.3278	0.2503
49 n00w	0.0	0.0	0.0	10.76	5.51	−3.96	6.79	0	1.34	1.23	1.71	0.3134	0.2867	0.0139
50 n13w	0.125	0.125	0.125	16.56	4.87	−3.31	5.9	169	2.33	2.21	2.86	0.3146	0.2988	0.025
51 n25w	0.25	0.25	0.25	30.75	4.15	−2.76	4.99	269	6.61	6.54	7.89	0.3142	0.311	0.0739
52 n38w	0.375	0.375	0.375	43.53	4.11	−2.65	4.9	292	13.48	13.52	15.89	0.3142	0.3152	0.1526
53 n50w	0.5	0.5	0.5	55.06	4.06	−2.42	4.73	297	22.73	22.99	26.55	0.3145	0.3181	0.2595
54 n63w	0.625	0.625	0.625	66.15	3.69	−1.8	4.11	298	34.83	35.52	40.18	0.3151	0.3214	0.401
55 n75w	0.75	0.75	0.75	76.28	3.24	−0.77	3.34	301	49.03	50.35	55.64	0.3163	0.3248	0.5683
56 n88w	0.875	0.875	0.875	85.51	2.1	0.82	2.26	299	64.62	67.02	71.95	0.3174	0.3292	0.7565
57 n99w	1.0	1.0	1.0	95.41	−0.21	4.78	4.79	0	84.08	88.59	89.43	0.3208	0.338	1.0

Colorimetric "Standard data": Television Luminous System TLS11 for CIE lightness *L=11 of black for illuminant D65**

System TLS11
LCD monitor



standard CIELAB *(a*, b*)* chroma diagram

Y Yellow
*LCH** = 94.1 90.8 100
*LAB** = 94.1 −15.8 89.4

O Orange red
*LCH** = 54.2 98.0 37
*LAB** = 54.2 78.6 58.5

L Leaf green
*LCH** = 84.2 111.2 137
*LAB** = 84.2 −81.1 76.1

M Magenta red
*LCH** = 59.6 102.3 331
*LAB** = 59.6 89.1 −50.3

C Cyan blue
*LCH** = 87.2 52.0 190
*LAB** = 87.2 −51.1 −9.4

V Violet blue
*LCH** = 33.1 111.9 302
*LAB** = 33.1 59.3 −94.9

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

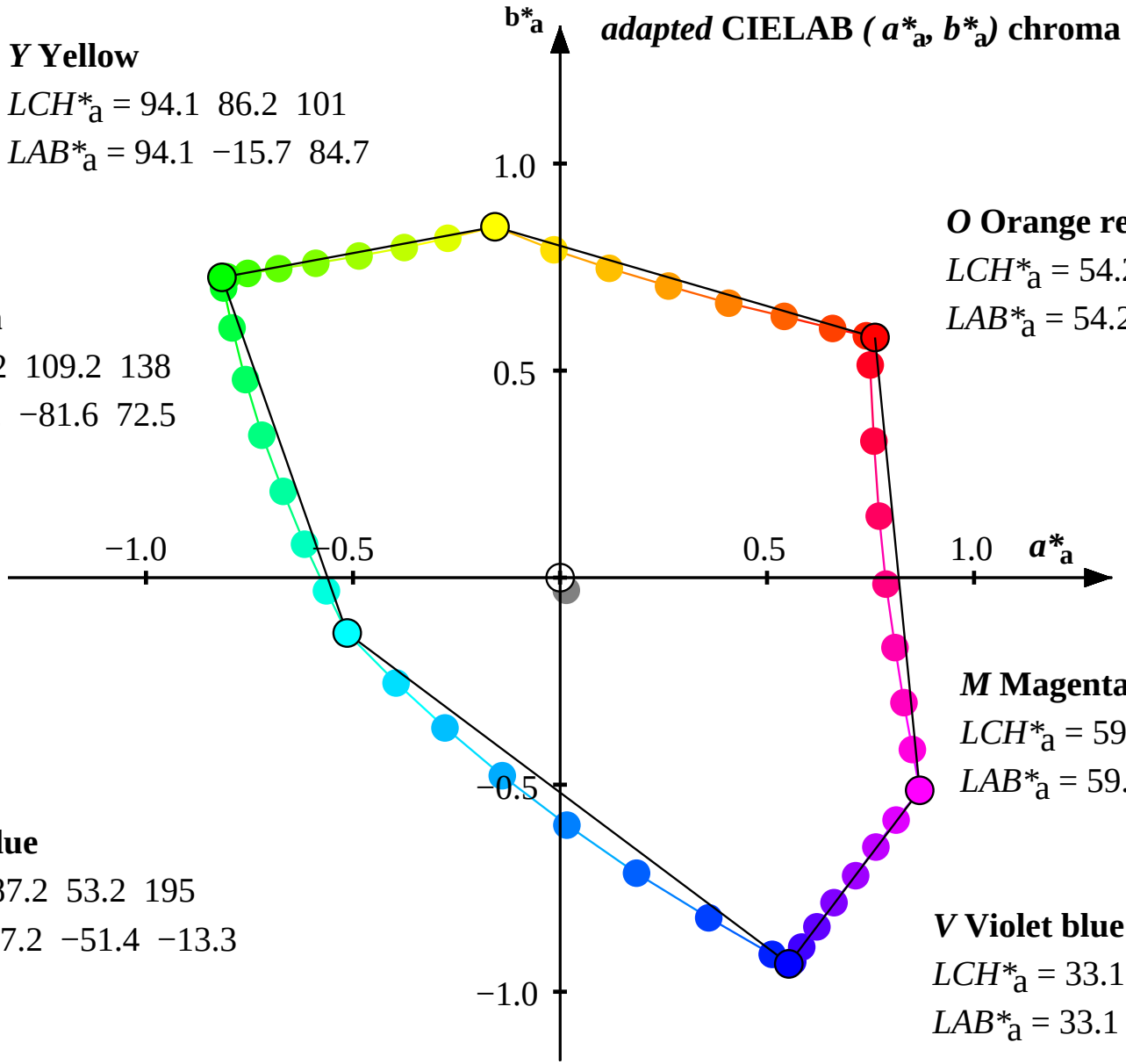
System TLS11a

LCD monitor

Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ra}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	54.21	76.07	58.0	95.66	37	41.29	22.17	3.41	0.6174	0.3315	0.2503
01 o13y	1.0	0.125	0.0	54.91	73.93	58.43	94.23	38	41.58	22.84	3.54	0.6118	0.3361	0.2579
02 o25y	1.0	0.25	0.0	57.87	65.78	60.22	89.18	42	43.12	25.83	4.12	0.5901	0.3535	0.2916
03 o38y	1.0	0.375	0.0	62.22	54.13	63.09	83.13	49	45.55	30.66	5.03	0.5607	0.3774	0.3461
04 o50y	1.0	0.5	0.0	67.48	40.75	66.3	77.82	58	48.87	37.27	6.37	0.5283	0.4029	0.4207
05 o63y	1.0	0.625	0.0	73.63	26.18	70.43	75.13	70	53.36	46.12	8.1	0.496	0.4287	0.5206
06 o75y	1.0	0.75	0.0	80.08	11.91	74.7	75.64	81	58.8	56.82	10.24	0.4672	0.4515	0.6414
07 o88y	1.0	0.875	0.0	86.52	−1.44	79.12	79.13	91	64.97	69.03	12.67	0.4429	0.4707	0.7793
08 y00l	1.0	1.0	0.0	94.11	−15.7	84.73	86.17	101	73.49	85.54	15.81	0.4203	0.4892	0.9655
09 y13l	0.875	1.0	0.0	92.0	−27.11	81.96	86.33	108	64.06	80.71	15.42	0.3999	0.5038	0.911
10 y25l	0.75	1.0	0.0	90.22	−37.62	79.72	88.15	115	56.42	76.78	15.06	0.3806	0.5179	0.8667
11 y38l	0.625	1.0	0.0	88.56	−48.49	77.69	91.59	122	49.46	73.23	14.69	0.36	0.5331	0.8266
12 y50l	0.5	1.0	0.0	87.07	−58.96	75.93	96.14	128	43.48	70.14	14.35	0.3398	0.5481	0.7917
13 y63l	0.375	1.0	0.0	85.89	−67.96	74.63	100.94	132	38.89	67.76	14.04	0.3222	0.5615	0.7649
14 y75l	0.25	1.0	0.0	84.97	−75.44	73.43	105.28	136	35.4	65.95	13.88	0.3072	0.5723	0.7444
15 y88l	0.125	1.0	0.0	84.37	−80.42	72.71	108.42	138	33.21	64.77	13.75	0.2973	0.5797	0.7312
16 l00c	0.0	1.0	0.0	84.21	−81.64	72.51	109.2	138	32.68	64.47	13.72	0.2948	0.5815	0.7278
17 l13c	0.0	1.0	0.125	84.25	−81.25	69.95	107.21	139	32.83	64.54	14.83	0.2926	0.5752	0.7285
18 l25c	0.0	1.0	0.25	84.35	−79.15	60.31	99.51	143	33.55	64.74	19.49	0.2849	0.5497	0.7308
19 l38c	0.0	1.0	0.375	84.61	−76.0	47.79	89.79	148	34.78	65.24	27.01	0.2738	0.5136	0.7365
20 l50c	0.0	1.0	0.5	84.97	−71.95	34.43	79.78	154	36.44	65.95	37.07	0.2613	0.4729	0.7444
21 l63c	0.0	1.0	0.625	85.43	−66.89	20.8	70.06	163	38.61	66.85	49.78	0.2487	0.4306	0.7546
22 l75c	0.0	1.0	0.75	85.97	−61.66	8.09	62.2	173	41.02	67.93	64.21	0.2369	0.3923	0.7668
23 l88c	0.0	1.0	0.875	86.54	−56.43	−3.15	56.52	183	43.57	69.07	79.31	0.227	0.3598	0.7796
24 c00v	0.0	1.0	1.0	87.18	−51.44	−13.34	53.15	195	46.25	70.38	95.2	0.2184	0.3322	0.7944
25 c13v	0.0	0.875	1.0	78.68	−39.54	−25.37	46.99	213	38.06	54.38	91.34	0.2071	0.2959	0.6138
26 c25v	0.0	0.75	1.0	71.08	−27.73	−36.23	45.64	233	31.93	42.3	88.11	0.1967	0.2606	0.4775
27 c38v	0.0	0.675	1.0	63.12	−13.94	−47.83	49.84	254	26.61	31.73	85.14	0.1854	0.2212	0.3582
28 c50v	0.0	0.5	1.0	54.95	1.67	−59.7	59.74	272	22.1	22.88	82.09	0.1739	0.18	0.2582
29 c63v	0.0	0.375	1.0	47.37	18.43	−71.36	73.71	284	18.85	16.3	80.21	0.1634	0.1413	0.184
30 c75v	0.0	0.25	1.0	40.2	35.92	−82.13	89.65	294	16.36	11.37	78.1	0.1546	0.1074	0.1284
31 c88v	0.0	0.125	1.0	34.57	51.25	−91.02	104.47	299	14.84	8.29	77.05	0.1481	0.0827	0.0935
32 v00m	0.0	0.0	1.0	33.09	55.26	−93.24	108.4	301	14.45	7.58	76.63	0.1465	0.0768	0.0856
33 v13m	0.125	0.0	1.0	33.6	56.21	−92.78	108.49	301	14.96	7.82	77.15	0.1497	0.0782	0.0882
34 v25m	0.25	0.0	1.0	35.64	58.43	−89.19	106.63	303	16.87	8.82	77.06	0.1642	0.0859	0.0996
35 v38m	0.375	0.0	1.0	38.78	62.05	−84.34	104.72	306	20.16	10.53	77.8	0.1858	0.0971	0.1189
36 v50m	0.5	0.0	1.0	42.38	66.17	−78.44	102.63	310	24.4	12.75	78.19	0.2116	0.1105	0.1439
37 v63m	0.625	0.0	1.0	46.58	71.39	−71.92	101.35	315	30.18	15.7	79.14	0.2414	0.1256	0.1772
38 v75m	0.75	0.0	1.0	50.83	76.25	−65.07	100.25	320	36.76	19.12	79.78	0.271	0.1409	0.2158
39 v88m	0.875	0.0	1.0	54.98	81.14	−58.49	100.03	324	44.1	22.91	80.55	0.2989	0.1553	0.2586
40 m00o	1.0	0.0	1.0	59.56	86.88	−51.35	100.93	329	53.4	27.64	81.56	0.3284	0.17	0.312
41 m13o	1.0	0.0	0.875	58.35	85.1	−41.52	94.69	334	50.73	26.33	66.53	0.3533	0.1834	0.2972
42 m25o	1.0	0.0	0.75	57.23	83.02	−30.18	88.34	340	48.17	25.16	52.11	0.384	0.2006	0.284
43 m38o	1.0	0.0	0.675	56.14	80.94	−16.86	82.68	348	45.76	24.05	38.35	0.423	0.2224	0.2715
44 m50o	1.0	0.0	0.5	55.19	78.72	−1.52	78.73	359	43.58	23.11	26.11	0.4696	0.249	0.2609
45 m63o	1.0	0.0	0.375	54.35	77.06	14.91	78.48	11	41.82	22.31	16.39	0.5194	0.2771	0.2518
46 m75o	1.0	0.0	0.25	53.75	75.81	32.96	82.67	24	40.56	21.74	9.05	0.5685	0.3047	0.2454
47 m88o	1.0	0.0	0.125	53.35	74.87	51.38	90.8	34	39.71	21.37	4.32	0.6072	0.3268	0.2412
48 o00y	1.0	0.0	0.0	54.21	76.07	58.0	95.66	37	41.29	22.17	3.41	0.6174	0.3315	0.2503
49 n00w	0.0	0.0	0.0	10.76	0.0	0.0	0.01	0	1.17	1.23	1.34	0.3127	0.329	0.0139
50 n13w	0.125	0.125	0.125	16.56	−0.23	0.05	0.25	169	2.09	2.21	2.4	0.3119	0.3299	0.025
51 n25w	0.25	0.25	0.25	30.75	0.0	−0.86	0.87	269	6.22	6.54	7.36	0.3091	0.3252	0.0739
52 n38w	0.375	0.375	0.375	43.53	0.82	−2.07	2.24	292	12.97	13.52	15.63	0.308	0.3209	0.1526
53 n50w	0.5	0.5	0.5	55.06	1.55	−3.03	3.42	297	22.18	22.99	26.95	0.3076	0.3188	0.2595
54 n63w	0.625	0.625	0.625	66.15	1.93	−3.55	4.05	298	34.32	35.52	41.67	0.3077	0.3186	0.401
55 n75w	0.75	0.75	0.75	76.28	2.17	−3.58	4.19	301	48.64	50.35	58.62	0.3086	0.3195	0.5683
56 n88w	0.875	0.875	0.875	85.51	1.65	−2.93	3.37	299	64.42	67.02	76.71	0.3095	0.322	0.7565
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness *L=11 of black for illuminant D65**

System TLS11a
LCD monitor



***Y* Yellow**
*LCH**a = 94.1 86.2 101
*LAB**a = 94.1 −15.7 84.7

***O* Orange red**
*LCH**a = 54.2 95.7 37
*LAB**a = 54.2 76.1 58.0

***L* Leaf green**
*LCH**a = 84.2 109.2 138
*LAB**a = 84.2 −81.6 72.5

***M* Magenta red**
*LCH**a = 59.6 100.9 329
*LAB**a = 59.6 86.9 −51.4

***C* Cyan blue**
*LCH**a = 87.2 53.2 195
*LAB**a = 87.2 −51.4 −13.3

***V* Violet blue**
*LCH**a = 33.1 108.4 301
*LAB**a = 33.1 55.3 −93.3

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness L^*=00 of black for illuminant D65

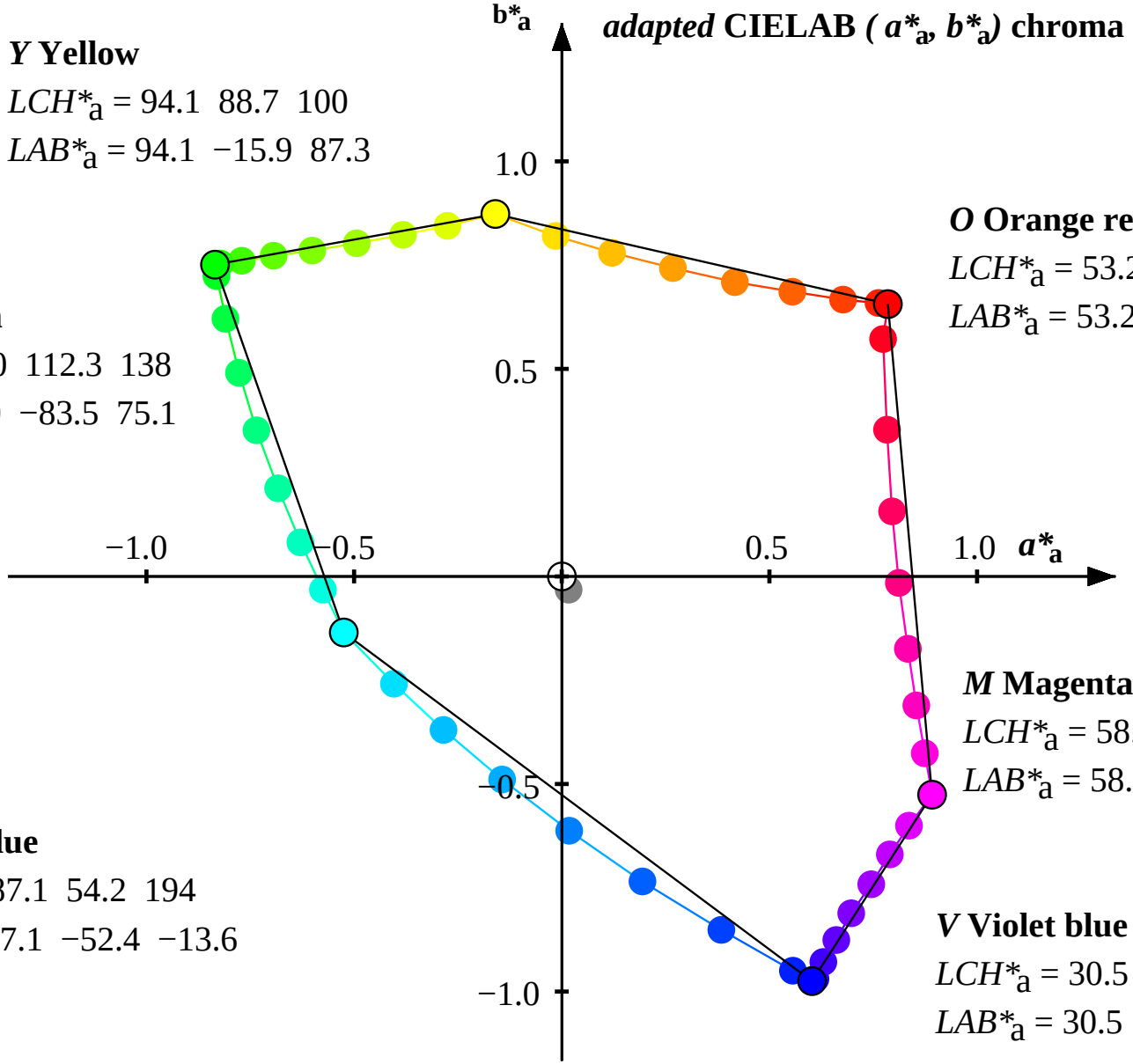
System TLS00a0
LCD monitor

	Color	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	o00y	1.0	0.0	0.0	53.21	78.53	65.65	102.36	40	40.69	21.24	2.1	0.6355	0.3317	0.2484
01	o13y	1.0	0.125	0.0	53.94	76.28	65.83	100.76	41	40.98	21.92	2.23	0.6292	0.3365	0.2564
02	o25y	1.0	0.25	0.0	57.02	67.72	66.71	95.06	45	42.54	24.95	2.82	0.605	0.3548	0.2918
03	o38y	1.0	0.375	0.0	61.52	55.58	68.6	88.29	51	45.0	29.85	3.75	0.5726	0.3797	0.3491
04	o50y	1.0	0.5	0.0	66.94	41.72	70.89	82.26	60	48.37	36.55	5.1	0.5373	0.406	0.4275
05	o63y	1.0	0.625	0.0	73.24	26.73	74.3	78.96	70	52.93	45.53	6.85	0.5026	0.4323	0.5325
06	o75y	1.0	0.75	0.0	79.83	12.13	78.0	78.94	81	58.44	56.38	9.03	0.4719	0.4552	0.6594
07	o88y	1.0	0.875	0.0	86.38	−1.46	82.01	82.02	91	64.7	68.76	11.49	0.4463	0.4744	0.8042
08	y00l	1.0	1.0	0.0	94.1	−15.93	87.27	88.72	100	73.34	85.49	14.68	0.4227	0.4927	1.0
09	y13l	0.875	1.0	0.0	91.95	−27.55	84.51	88.89	108	63.78	80.6	14.28	0.402	0.508	0.9427
10	y25l	0.75	1.0	0.0	90.14	−38.26	82.28	90.74	115	56.03	76.62	13.91	0.3823	0.5228	0.8962
11	y38l	0.625	1.0	0.0	88.45	−49.38	80.26	94.24	122	48.97	73.01	13.54	0.3613	0.5388	0.854
12	y50l	0.5	1.0	0.0	86.94	−60.11	78.52	98.89	127	42.91	69.88	13.19	0.3406	0.5547	0.8174
13	y63l	0.375	1.0	0.0	85.74	−69.36	77.23	103.81	132	38.25	67.47	12.88	0.3225	0.5689	0.7891
14	y75l	0.25	1.0	0.0	84.81	−77.08	76.04	108.28	135	34.72	65.63	12.72	0.3071	0.5804	0.7676
15	y88l	0.125	1.0	0.0	84.19	−82.22	75.33	111.52	138	32.5	64.44	12.58	0.2967	0.5884	0.7537
16	l00c	0.0	1.0	0.0	84.03	−83.48	75.12	112.31	138	31.96	64.13	12.56	0.2941	0.5903	0.7501
17	l13c	0.0	1.0	0.125	84.07	−83.08	72.37	110.19	139	32.11	64.2	13.68	0.2919	0.5837	0.7509
18	l25c	0.0	1.0	0.25	84.18	−80.91	62.13	102.03	142	32.84	64.4	18.41	0.284	0.5569	0.7533
19	l38c	0.0	1.0	0.375	84.44	−77.67	49.03	91.86	148	34.09	64.92	26.04	0.2726	0.5192	0.7593
20	l50c	0.0	1.0	0.5	84.81	−73.5	35.21	81.5	154	35.77	65.63	36.23	0.2599	0.4768	0.7676
21	l63c	0.0	1.0	0.625	85.28	−68.28	21.21	71.51	163	37.96	66.55	49.13	0.2471	0.4331	0.7784
22	l75c	0.0	1.0	0.75	85.82	−62.91	8.24	63.45	173	40.41	67.64	63.75	0.2352	0.3937	0.7911
23	l88c	0.0	1.0	0.875	86.4	−57.53	−3.2	57.63	183	43.0	68.79	79.07	0.2253	0.3604	0.8046
24	c00v	0.0	1.0	1.0	87.06	−52.42	−13.54	54.15	194	45.72	70.12	95.18	0.2167	0.3323	0.8202
25	c13v	0.0	0.875	1.0	78.4	−40.44	−25.8	47.98	213	37.41	53.89	91.26	0.2049	0.2952	0.6304
26	c25v	0.0	0.75	1.0	70.63	−28.48	−36.92	46.64	232	31.2	41.65	87.99	0.194	0.2589	0.4871
27	c38v	0.0	0.675	1.0	62.45	−14.4	−48.87	50.97	254	25.8	30.93	84.99	0.182	0.2183	0.3618
28	c50v	0.0	0.5	1.0	53.98	1.74	−61.22	61.26	272	21.23	21.95	81.89	0.1697	0.1755	0.2568
29	c63v	0.0	0.375	1.0	46.02	19.41	−73.51	76.04	285	17.93	15.29	79.98	0.1584	0.135	0.1788
30	c75v	0.0	0.25	1.0	38.35	38.38	−85.12	93.38	294	15.41	10.29	77.84	0.1488	0.0993	0.1203
31	c88v	0.0	0.125	1.0	32.16	55.61	−94.97	110.06	300	13.86	7.16	76.77	0.1418	0.0732	0.0837
32	v00m	0.0	0.0	1.0	30.5	60.26	−97.5	114.62	302	13.47	6.44	76.35	0.14	0.0669	0.0754
33	v13m	0.125	0.0	1.0	31.07	61.12	−96.93	114.6	302	13.99	6.68	76.88	0.1434	0.0685	0.0781
34	v25m	0.25	0.0	1.0	33.35	62.93	−92.92	112.23	304	15.93	7.7	76.78	0.1586	0.0767	0.0901
35	v38m	0.375	0.0	1.0	36.81	66.05	−87.54	109.67	307	19.26	9.44	77.54	0.1813	0.0888	0.1104
36	v50m	0.5	0.0	1.0	40.7	69.7	−81.13	106.97	311	23.56	11.68	77.94	0.2082	0.1032	0.1366
37	v63m	0.625	0.0	1.0	45.18	74.51	−74.14	105.11	315	29.42	14.67	78.89	0.2392	0.1193	0.1716
38	v75m	0.75	0.0	1.0	49.67	79.02	−66.89	103.54	320	36.09	18.14	79.54	0.2698	0.1356	0.2122
39	v88m	0.875	0.0	1.0	54.01	83.65	−59.99	102.94	324	43.54	21.99	80.32	0.2985	0.1508	0.2572
40	m00o	1.0	0.0	1.0	58.77	89.16	−52.55	103.5	329	52.97	26.78	81.35	0.3288	0.1663	0.3133
41	m13o	1.0	0.0	0.875	57.52	87.43	−42.59	97.26	334	50.26	25.46	66.11	0.3543	0.1795	0.2978
42	m25o	1.0	0.0	0.75	56.35	85.39	−31.06	90.87	340	47.67	24.27	51.49	0.3862	0.1966	0.2838
43	m38o	1.0	0.0	0.675	55.22	83.35	−17.43	85.15	348	45.22	23.14	37.54	0.427	0.2186	0.2707
44	m50o	1.0	0.0	0.5	54.23	81.16	−1.58	81.17	359	43.01	22.19	25.13	0.4761	0.2457	0.2596
45	m63o	1.0	0.0	0.375	53.36	79.52	15.69	81.06	11	41.22	21.38	15.26	0.5294	0.2745	0.25
46	m75o	1.0	0.0	0.25	52.73	78.3	35.35	85.91	24	39.95	20.8	7.82	0.5826	0.3033	0.2433
47	m88o	1.0	0.0	0.125	52.31	77.37	57.23	96.24	36	39.08	20.42	3.02	0.6251	0.3266	0.2389
48	o00y	1.0	0.0	0.0	53.21	78.53	65.65	102.36	40	40.69	21.24	2.1	0.6355	0.3317	0.2484
49	n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	289	0.0	0.0	0.0	0.0	0.0	0.0
50	n13w	0.125	0.125	0.125	8.96	−0.41	0.08	0.43	169	0.94	1.0	1.08	0.3109	0.3309	0.0117
51	n25w	0.25	0.25	0.25	27.82	0.0	−0.99	1.0	269	5.12	5.39	6.11	0.3082	0.3244	0.0631
52	n38w	0.375	0.375	0.375	41.94	0.88	−2.21	2.39	292	11.97	12.46	14.5	0.3075	0.3201	0.1458
53	n50w	0.5	0.5	0.5	54.1	1.61	−3.16	3.56	297	21.31	22.07	25.97	0.3073	0.3182	0.2581
54	n63w	0.625	0.625	0.625	65.58	1.98	−3.65	4.16	298	33.61	34.78	40.9	0.3076	0.3182	0.4068
55	n75w	0.75	0.75	0.75	75.95	2.21	−3.65	4.28	301	48.14	49.81	58.08	0.3085	0.3192	0.5826
56	n88w	0.875	0.875	0.875	85.36	1.68	−2.98	3.43	299	64.14	66.72	76.43	0.3094	0.3219	0.7804
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0362

n = 88.59 / (88.59 − 1.23) = 1.014

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness *L=00 of black for illuminant D65**

System TLS00a0
LCD monitor



Y Yellow
*LCH**a = 94.1 88.7 100
*LAB**a = 94.1 −15.9 87.3

O Orange red
*LCH**a = 53.2 102.4 40
*LAB**a = 53.2 78.5 65.7

L Leaf green
*LCH**a = 84.0 112.3 138
*LAB**a = 84.0 −83.5 75.1

M Magenta red
*LCH**a = 58.8 103.5 329
*LAB**a = 58.8 89.2 −52.6

C Cyan blue
*LCH**a = 87.1 54.2 194
*LAB**a = 87.1 −52.4 −13.6

V Violet blue
*LCH**a = 30.5 114.6 302
*LAB**a = 30.5 60.3 −97.5

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness L^*=00 of black for illuminant D65

System TLS00a

LCD monitor

D65 reflection:

Y_N = 0.0

L^*_N = 0.0

Color	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 o00y	1.0	0.0	0.0	53.21	78.53	65.65	102.36	40	40.69	21.24	2.1	0.6355	0.3317	0.2484
01 o13y	1.0	0.125	0.0	53.94	76.28	65.83	100.76	41	40.98	21.92	2.23	0.6292	0.3365	0.2564
02 o25y	1.0	0.25	0.0	57.02	67.72	66.71	95.06	45	42.54	24.95	2.82	0.605	0.3548	0.2918
03 o38y	1.0	0.375	0.0	61.52	55.58	68.6	88.29	51	45.0	29.85	3.75	0.5726	0.3797	0.3491
04 o50y	1.0	0.5	0.0	66.94	41.72	70.89	82.26	60	48.37	36.55	5.1	0.5373	0.406	0.4275
05 o63y	1.0	0.625	0.0	73.24	26.73	74.3	78.96	70	52.93	45.53	6.85	0.5026	0.4323	0.5325
06 o75y	1.0	0.75	0.0	79.83	12.13	78.0	78.94	81	58.44	56.38	9.03	0.4719	0.4552	0.6594
07 o88y	1.0	0.875	0.0	86.38	−1.46	82.01	82.02	91	64.7	68.76	11.49	0.4463	0.4744	0.8042
08 y00l	1.0	1.0	0.0	94.1	−15.93	87.27	88.72	100	73.34	85.49	14.68	0.4227	0.4927	1.0
09 y13l	0.875	1.0	0.0	91.95	−27.55	84.51	88.89	108	63.78	80.6	14.28	0.402	0.508	0.9427
10 y25l	0.75	1.0	0.0	90.14	−38.26	82.28	90.74	115	56.03	76.62	13.91	0.3823	0.5228	0.8962
11 y38l	0.625	1.0	0.0	88.45	−49.38	80.26	94.24	122	48.97	73.01	13.54	0.3613	0.5388	0.854
12 y50l	0.5	1.0	0.0	86.94	−60.11	78.52	98.89	127	42.91	69.88	13.19	0.3406	0.5547	0.8174
13 y63l	0.375	1.0	0.0	85.74	−69.36	77.23	103.81	132	38.25	67.47	12.88	0.3225	0.5689	0.7891
14 y75l	0.25	1.0	0.0	84.81	−77.08	76.04	108.28	135	34.72	65.63	12.72	0.3071	0.5804	0.7676
15 y88l	0.125	1.0	0.0	84.19	−82.22	75.33	111.52	138	32.5	64.44	12.58	0.2967	0.5884	0.7537
16 l00c	0.0	1.0	0.0	84.03	−83.48	75.12	112.31	138	31.96	64.13	12.56	0.2941	0.5903	0.7501
17 l13c	0.0	1.0	0.125	84.07	−83.08	72.37	110.19	139	32.11	64.2	13.68	0.2919	0.5837	0.7509
18 l25c	0.0	1.0	0.25	84.18	−80.91	62.13	102.03	142	32.84	64.4	18.41	0.284	0.5569	0.7533
19 l38c	0.0	1.0	0.375	84.44	−77.67	49.03	91.86	148	34.09	64.92	26.04	0.2726	0.5192	0.7593
20 l50c	0.0	1.0	0.5	84.81	−73.5	35.21	81.5	154	35.77	65.63	36.23	0.2599	0.4768	0.7676
21 l63c	0.0	1.0	0.625	85.28	−68.28	21.21	71.51	163	37.96	66.55	49.13	0.2471	0.4331	0.7784
22 l75c	0.0	1.0	0.75	85.82	−62.91	8.24	63.45	173	40.41	67.64	63.75	0.2352	0.3937	0.7911
23 l88c	0.0	1.0	0.875	86.4	−57.53	−3.2	57.63	183	43.0	68.79	79.07	0.2253	0.3604	0.8046
24 c00v	0.0	1.0	1.0	87.06	−52.42	−13.54	54.15	194	45.72	70.12	95.18	0.2167	0.3323	0.8202
25 c13v	0.0	0.875	1.0	78.4	−40.44	−25.8	47.98	213	37.41	53.89	91.26	0.2049	0.2952	0.6304
26 c25v	0.0	0.75	1.0	70.63	−28.48	−36.92	46.64	232	31.2	41.65	87.99	0.194	0.2589	0.4871
27 c38v	0.0	0.675	1.0	62.45	−14.4	−48.87	50.97	254	25.8	30.93	84.99	0.182	0.2183	0.3618
28 c50v	0.0	0.5	1.0	53.98	1.74	−61.22	61.26	272	21.23	21.95	81.89	0.1697	0.1755	0.2568
29 c63v	0.0	0.375	1.0	46.02	19.41	−73.51	76.04	285	17.93	15.29	79.98	0.1584	0.135	0.1788
30 c75v	0.0	0.25	1.0	38.35	38.38	−85.12	93.38	294	15.41	10.29	77.84	0.1488	0.0993	0.1203
31 c88v	0.0	0.125	1.0	32.16	55.61	−94.97	110.06	300	13.86	7.16	76.77	0.1418	0.0732	0.0837
32 v00m	0.0	0.0	1.0	30.5	60.26	−97.5	114.62	302	13.47	6.44	76.35	0.14	0.0669	0.0754
33 v13m	0.125	0.0	1.0	31.07	61.12	−96.93	114.6	302	13.99	6.68	76.88	0.1434	0.0685	0.0781
34 v25m	0.25	0.0	1.0	33.35	62.93	−92.92	112.23	304	15.93	7.7	76.78	0.1586	0.0767	0.0901
35 v38m	0.375	0.0	1.0	36.81	66.05	−87.54	109.67	307	19.26	9.44	77.54	0.1813	0.0888	0.1104
36 v50m	0.5	0.0	1.0	40.7	69.7	−81.13	106.97	311	23.56	11.68	77.94	0.2082	0.1032	0.1366
37 v63m	0.625	0.0	1.0	45.18	74.51	−74.14	105.11	315	29.42	14.67	78.89	0.2392	0.1193	0.1716
38 v75m	0.75	0.0	1.0	49.67	79.02	−66.89	103.54	320	36.09	18.14	79.54	0.2698	0.1356	0.2122
39 v88m	0.875	0.0	1.0	54.01	83.65	−59.99	102.94	324	43.54	21.99	80.32	0.2985	0.1508	0.2572
40 m00o	1.0	0.0	1.0	58.77	89.16	−52.55	103.5	329	52.97	26.78	81.35	0.3288	0.1663	0.3133
41 m13o	1.0	0.0	0.875	57.52	87.43	−42.59	97.26	334	50.26	25.46	66.11	0.3543	0.1795	0.2978
42 m25o	1.0	0.0	0.75	56.35	85.39	−31.06	90.87	340	47.67	24.27	51.49	0.3862	0.1966	0.2838
43 m38o	1.0	0.0	0.675	55.22	83.35	−17.43	85.15	348	45.22	23.14	37.54	0.427	0.2186	0.2707
44 m50o	1.0	0.0	0.5	54.23	81.16	−1.58	81.17	359	43.01	22.19	25.13	0.4761	0.2457	0.2596
45 m63o	1.0	0.0	0.375	53.36	79.52	15.69	81.06	11	41.22	21.38	15.26	0.5294	0.2745	0.25
46 m75o	1.0	0.0	0.25	52.73	78.3	35.35	85.91	24	39.95	20.8	7.82	0.5826	0.3033	0.2433
47 m88o	1.0	0.0	0.125	52.31	77.37	57.23	96.24	36	39.08	20.42	3.02	0.6251	0.3266	0.2389
48 o00y	1.0	0.0	0.0	53.21	78.53	65.65	102.36	40	40.69	21.24	2.1	0.6355	0.3317	0.2484
49 n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	289	0.0	0.0	0.0	0.0	0.0	0.0
50 n13w	0.125	0.125	0.125	8.96	−0.41	0.08	0.43	169	0.94	1.0	1.08	0.3109	0.3309	0.0117
51 n25w	0.25	0.25	0.25	27.82	0.0	−0.99	1.0	269	5.12	5.39	6.11	0.3082	0.3244	0.0631
52 n38w	0.375	0.375	0.375	41.94	0.88	−2.21	2.39	292	11.97	12.46	14.5	0.3075	0.3201	0.1458
53 n50w	0.5	0.5	0.5	54.1	1.61	−3.16	3.56	297	21.31	22.07	25.97	0.3073	0.3182	0.2581
54 n63w	0.625	0.625	0.625	65.58	1.98	−3.65	4.16	298	33.61	34.78	40.9	0.3076	0.3182	0.4068
55 n75w	0.75	0.75	0.75	75.95	2.21	−3.65	4.28	301	48.14	49.81	58.08	0.3085	0.3192	0.5826
56 n88w	0.875	0.875	0.875	85.36	1.68	−2.98	3.43	299	64.14	66.72	76.43	0.3094	0.3219	0.7804
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0362

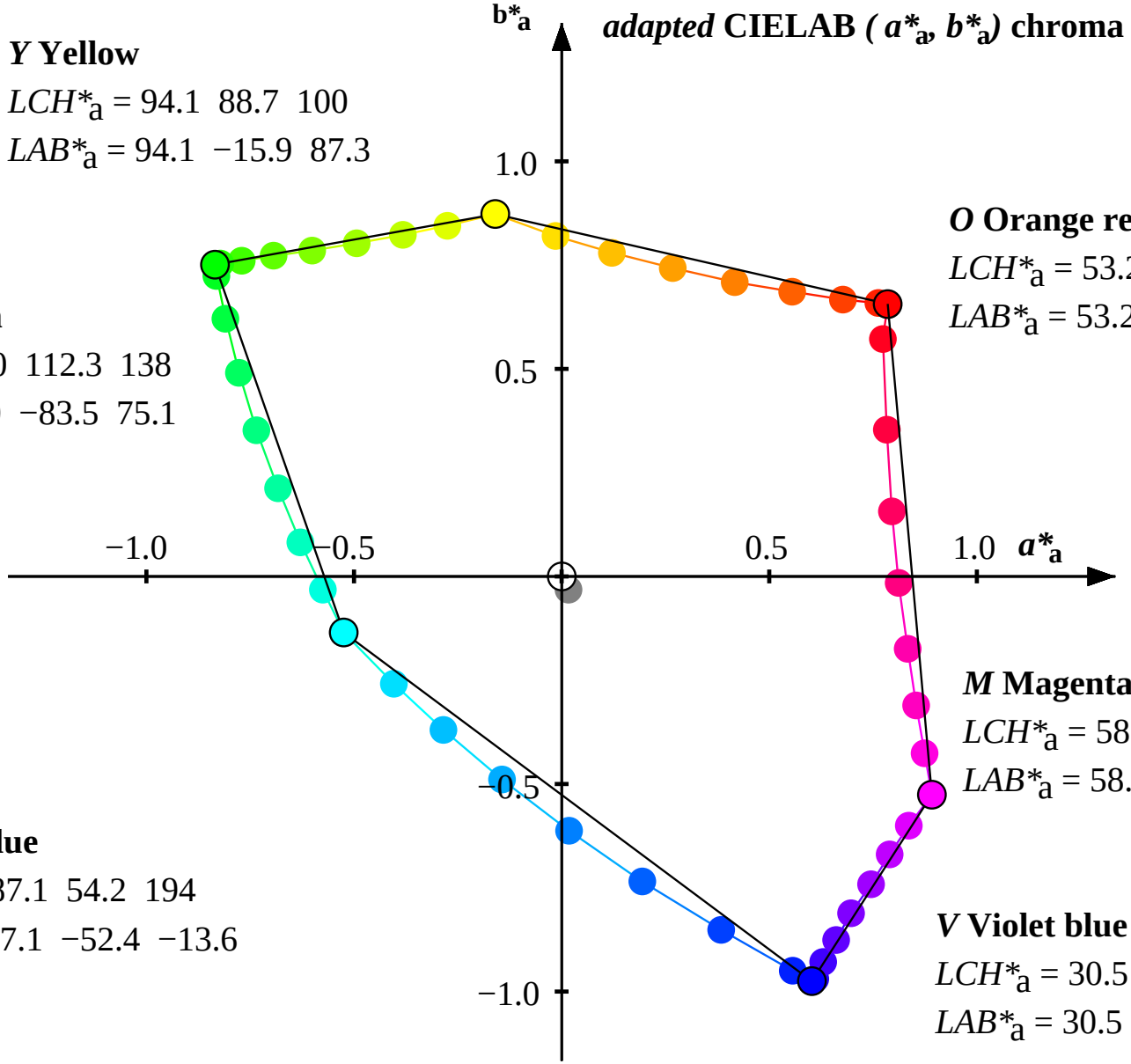
n = 88.59 / (88.59 + 0.0) = 1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness *L=00 of black for illuminant D65**

System TLS00a
LCD monitor

D65 reflection:
Y_N = 0.0
L^*_N = 0.0

adapted CIELAB (a^*_a, b^*_a) chroma diagram



Y Yellow
LCH^*_a = 94.1 88.7 100
LAB^*_a = 94.1 −15.9 87.3

O Orange red
LCH^*_a = 53.2 102.4 40
LAB^*_a = 53.2 78.5 65.7

L Leaf green
LCH^*_a = 84.0 112.3 138
LAB^*_a = 84.0 −83.5 75.1

M Magenta red
LCH^*_a = 58.8 103.5 329
LAB^*_a = 58.8 89.2 −52.6

C Cyan blue
LCH^*_a = 87.1 54.2 194
LAB^*_a = 87.1 −52.4 −13.6

V Violet blue
LCH^*_a = 30.5 114.6 302
LAB^*_a = 30.5 60.3 −97.5

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness L^*=06 of black for illuminant D65

System TLS06a
LCD monitor

D65 reflection:
Y_N = 0.63
L^*_N = 5.69

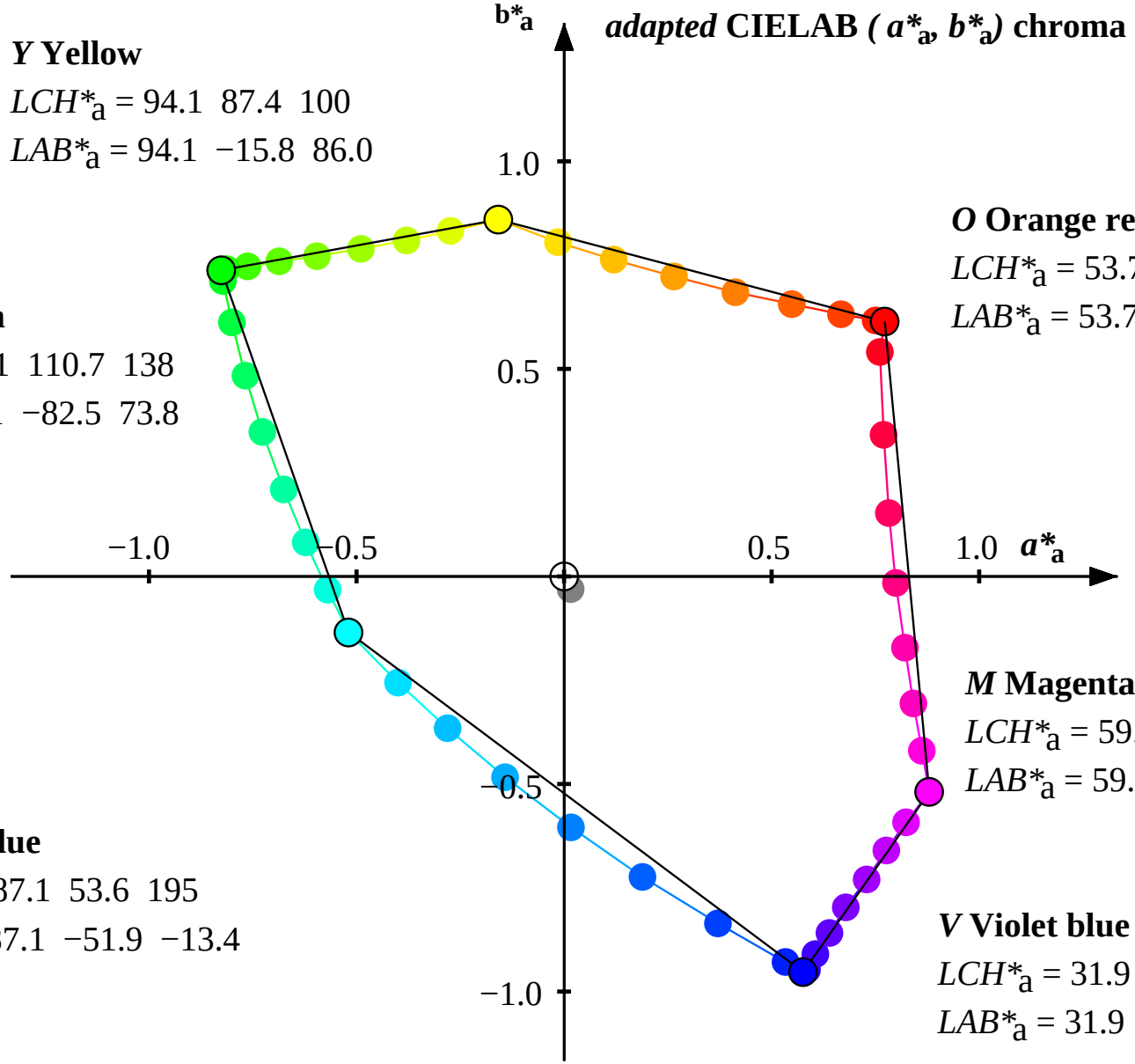
Color	r=olv^*_1	g=olv^*_2	b=olv^*_3	L^*_a=LAB^*_{1a}	a^*_a=LAB^*_{2a}	b^*_a=LAB^*_{3a}	$C^*_{ab,a}$=$LAB^*_{ab,a}$	$h_{ab,a}$	X_a=XYZ_{1a}	Y_a=XYZ_{2a}	Z_a=XYZ_{3a}	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	53.72	77.26	61.39	98.68	38	41.0	21.71	2.77	0.6261	0.3316	0.2539
01 o13y	1.0	0.125	0.0	54.44	75.07	61.72	97.19	39	41.29	22.39	2.9	0.6202	0.3363	0.2618
02 o25y	1.0	0.25	0.0	57.46	66.72	63.16	91.87	43	42.84	25.4	3.48	0.5973	0.3541	0.297
03 o38y	1.0	0.375	0.0	61.88	54.83	65.63	85.52	50	45.28	30.26	4.4	0.5664	0.3785	0.3539
04 o50y	1.0	0.5	0.0	67.21	41.22	68.45	79.91	59	48.62	36.91	5.75	0.5327	0.4044	0.4317
05 o63y	1.0	0.625	0.0	73.44	26.45	72.26	76.95	70	53.15	45.83	7.49	0.4992	0.4305	0.5359
06 o75y	1.0	0.75	0.0	79.96	12.02	76.28	77.22	81	58.62	56.6	9.65	0.4695	0.4533	0.6619
07 o88y	1.0	0.875	0.0	86.45	−1.45	80.51	80.52	91	64.83	68.9	12.09	0.4446	0.4725	0.8057
08 y00l	1.0	1.0	0.0	94.11	−15.81	85.96	87.4	100	73.41	85.52	15.25	0.4215	0.4909	1.0
09 y13l	0.875	1.0	0.0	91.98	−27.33	83.19	87.57	108	63.92	80.65	14.86	0.4009	0.5059	0.9431
10 y25l	0.75	1.0	0.0	90.18	−37.93	80.96	89.41	115	56.23	76.7	14.49	0.3814	0.5203	0.8969
11 y38l	0.625	1.0	0.0	88.51	−48.93	78.93	92.87	122	49.22	73.12	14.13	0.3607	0.5358	0.8551
12 y50l	0.5	1.0	0.0	87.0	−59.52	77.18	97.47	128	43.2	70.01	13.78	0.3402	0.5513	0.8187
13 y63l	0.375	1.0	0.0	85.81	−68.64	75.88	102.33	132	38.57	67.62	13.47	0.3224	0.5651	0.7907
14 y75l	0.25	1.0	0.0	84.89	−76.24	74.69	106.73	136	35.07	65.79	13.31	0.3071	0.5763	0.7693
15 y88l	0.125	1.0	0.0	84.28	−81.3	73.97	109.92	138	32.86	64.61	13.18	0.297	0.5839	0.7555
16 l00c	0.0	1.0	0.0	84.12	−82.54	73.77	110.71	138	32.33	64.31	13.15	0.2945	0.5858	0.752
17 l13c	0.0	1.0	0.125	84.16	−82.14	71.12	108.66	139	32.48	64.37	14.26	0.2923	0.5793	0.7528
18 l25c	0.0	1.0	0.25	84.26	−80.01	61.19	100.74	143	33.2	64.58	18.96	0.2844	0.5532	0.7551
19 l38c	0.0	1.0	0.375	84.53	−76.82	48.4	90.8	148	34.44	65.08	26.53	0.2732	0.5163	0.7611
20 l50c	0.0	1.0	0.5	84.89	−72.71	34.81	80.62	154	36.11	65.79	36.66	0.2606	0.4748	0.7693
21 l63c	0.0	1.0	0.625	85.35	−67.57	21.0	70.77	163	38.29	66.7	49.46	0.2479	0.4319	0.78
22 l75c	0.0	1.0	0.75	85.9	−62.27	8.17	62.81	173	40.72	67.78	63.98	0.2361	0.393	0.7926
23 l88c	0.0	1.0	0.875	86.47	−56.97	−3.18	57.07	183	43.29	68.93	79.19	0.2262	0.3601	0.8061
24 c00v	0.0	1.0	1.0	87.12	−51.92	−13.44	53.64	195	45.99	70.25	95.19	0.2175	0.3323	0.8215
25 c13v	0.0	0.875	1.0	78.54	−39.98	−25.58	47.48	213	37.74	54.14	91.3	0.206	0.2955	0.6331
26 c25v	0.0	0.75	1.0	70.86	−28.09	−36.57	46.13	232	31.57	41.98	88.05	0.1954	0.2598	0.4909
27 c38v	0.0	0.675	1.0	62.79	−14.17	−48.34	50.39	254	26.21	31.34	85.07	0.1838	0.2198	0.3665
28 c50v	0.0	0.5	1.0	54.47	1.71	−60.44	60.48	272	21.67	22.42	82.0	0.1719	0.1778	0.2622
29 c63v	0.0	0.375	1.0	46.72	18.9	−72.4	74.84	285	18.4	15.8	80.1	0.1609	0.1383	0.1848
30 c75v	0.0	0.25	1.0	39.31	37.09	−83.57	91.44	294	15.9	10.84	77.97	0.1518	0.1035	0.1268
31 c88v	0.0	0.125	1.0	33.42	53.3	−92.91	107.12	300	14.36	7.73	76.91	0.145	0.0781	0.0904
32 v00m	0.0	0.0	1.0	31.86	57.6	−95.27	111.34	301	13.97	7.02	76.49	0.1433	0.072	0.0821
33 v13m	0.125	0.0	1.0	32.39	58.51	−94.76	111.38	302	14.49	7.26	77.02	0.1467	0.0735	0.0849
34 v25m	0.25	0.0	1.0	34.54	60.55	−90.97	109.29	304	16.41	8.27	76.92	0.1615	0.0814	0.0967
35 v38m	0.375	0.0	1.0	37.83	63.95	−85.88	107.08	307	19.72	9.99	77.67	0.1836	0.0931	0.1169
36 v50m	0.5	0.0	1.0	41.57	67.86	−79.74	104.71	310	23.99	12.22	78.07	0.2099	0.107	0.1429
37 v63m	0.625	0.0	1.0	45.9	72.89	−72.99	103.16	315	29.81	15.2	79.02	0.2403	0.1225	0.1777
38 v75m	0.75	0.0	1.0	50.26	77.59	−65.96	101.84	320	36.43	18.64	79.66	0.2704	0.1384	0.218
39 v88m	0.875	0.0	1.0	54.51	82.36	−59.22	101.45	324	43.82	22.46	80.44	0.2987	0.1531	0.2626
40 m00o	1.0	0.0	1.0	59.18	87.99	−51.93	102.18	329	53.19	27.22	81.46	0.3286	0.1682	0.3183
41 m13o	1.0	0.0	0.875	57.94	86.24	−42.04	95.94	334	50.49	25.9	66.33	0.3538	0.1815	0.3029
42 m25o	1.0	0.0	0.75	56.8	84.17	−30.61	89.57	340	47.93	24.72	51.81	0.3851	0.1986	0.2891
43 m38o	1.0	0.0	0.675	55.69	82.11	−17.14	83.88	348	45.49	23.61	37.95	0.425	0.2205	0.276
44 m50o	1.0	0.0	0.5	54.72	79.9	−1.55	79.92	359	43.3	22.66	25.63	0.4728	0.2474	0.265
45 m63o	1.0	0.0	0.375	53.87	78.25	15.28	79.73	11	41.52	21.85	15.84	0.5242	0.2758	0.2555
46 m75o	1.0	0.0	0.25	53.25	77.02	34.09	84.22	24	40.26	21.28	8.45	0.5753	0.304	0.2488
47 m88o	1.0	0.0	0.125	52.84	76.08	54.03	93.32	35	39.4	20.9	3.68	0.6158	0.3267	0.2444
48 o00y	1.0	0.0	0.0	53.72	77.26	61.39	98.68	38	41.0	21.71	2.77	0.6261	0.3316	0.2539
49 n00w	0.0	0.0	0.0	5.65	0.0	0.0	0.01	289	0.59	0.63	0.68	0.3127	0.329	0.0073
50 n13w	0.125	0.125	0.125	13.32	−0.29	0.06	0.31	169	1.52	1.62	1.75	0.3116	0.3302	0.0189
51 n25w	0.25	0.25	0.25	29.36	0.0	−0.92	0.93	269	5.68	5.98	6.74	0.3087	0.3249	0.0699
52 n38w	0.375	0.375	0.375	42.76	0.85	−2.14	2.31	292	12.48	13.0	15.08	0.3077	0.3206	0.152
53 n50w	0.5	0.5	0.5	54.59	1.58	−3.09	3.48	297	21.76	22.54	26.47	0.3075	0.3185	0.2636
54 n63w	0.625	0.625	0.625	65.87	1.95	−3.6	4.11	298	33.97	35.16	41.29	0.3076	0.3184	0.4111
55 n75w	0.75	0.75	0.75	76.12	2.19	−3.62	4.24	301	48.39	50.09	58.36	0.3086	0.3194	0.5857
56 n88w	0.875	0.875	0.875	85.44	1.66	−2.95	3.4	299	64.28	66.87	76.57	0.3095	0.3219	0.782
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0359

n = 88.59 / (88.59 + 0.63) = 0.993

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness *L=06 of black for illuminant D65**

System TLS06a
LCD monitor

D65 reflection:
Y_N = 0.63
L^*_N = 5.69



***adapted* CIELAB (a^*_a, b^*_a) chroma diagram**

***Y* Yellow**
*LCH**a = 94.1 87.4 100
*LAB**a = 94.1 −15.8 86.0

***O* Orange red**
*LCH**a = 53.7 98.7 38
*LAB**a = 53.7 77.3 61.4

***L* Leaf green**
*LCH**a = 84.1 110.7 138
*LAB**a = 84.1 −82.5 73.8

***M* Magenta red**
*LCH**a = 59.2 102.2 329
*LAB**a = 59.2 88.0 −51.9

***C* Cyan blue**
*LCH**a = 87.1 53.6 195
*LAB**a = 87.1 −51.9 −13.4

***V* Violet blue**
*LCH**a = 31.9 111.3 301
*LAB**a = 31.9 57.6 −95.3

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

System TLS11a

LCD monitor

D65 reflection:

Y_N = 1.26

L^*_N = 11.0

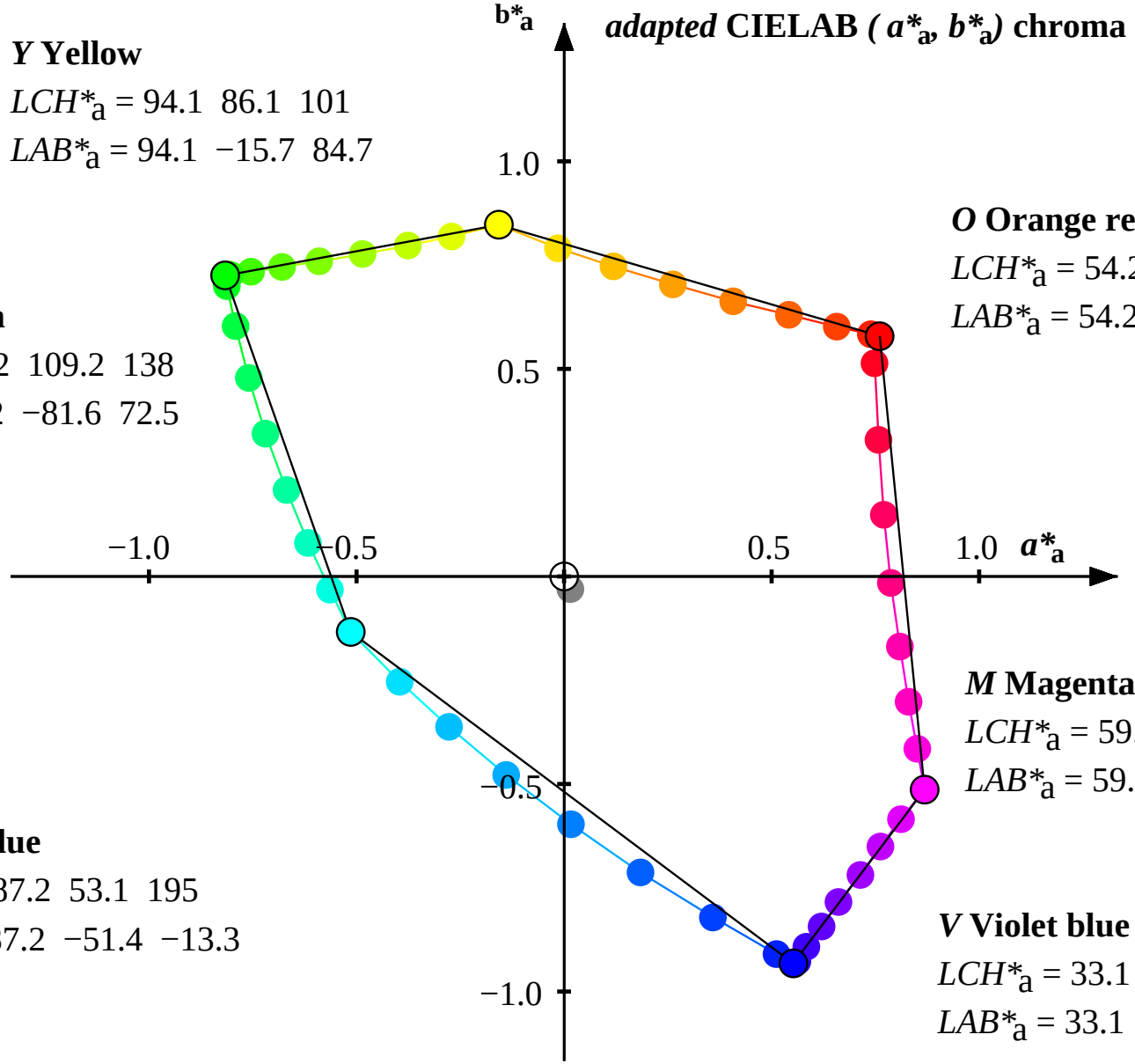
Color	r=olv^*_1	g=olv^*_2	b=olv^*_3	L^*_a=LAB^*_{1a}	a^*_a=LAB^*_{2a}	b^*_a=LAB^*_{3a}	$C^*_{ab,a}$=$LAB^*_{ab,a}$	$h_{ab,a}$	X_a=XYZ_{1a}	Y_a=XYZ_{2a}	Z_a=XYZ_{3a}	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	54.22	76.05	57.92	95.59	37	41.3	22.18	3.43	0.6172	0.3315	0.2593
01 o13y	1.0	0.125	0.0	54.92	73.9	58.35	94.16	38	41.59	22.85	3.56	0.6116	0.3361	0.2672
02 o25y	1.0	0.25	0.0	57.88	65.75	60.15	89.12	42	43.13	25.84	4.14	0.5899	0.3535	0.3021
03 o38y	1.0	0.375	0.0	62.23	54.11	63.03	83.07	49	45.55	30.67	5.05	0.5605	0.3774	0.3585
04 o50y	1.0	0.5	0.0	67.48	40.73	66.25	77.77	58	48.87	37.28	6.38	0.5282	0.4029	0.4358
05 o63y	1.0	0.625	0.0	73.63	26.17	70.38	75.09	70	53.37	46.13	8.11	0.496	0.4287	0.5393
06 o75y	1.0	0.75	0.0	80.08	11.91	74.66	75.6	81	58.8	56.83	10.26	0.4671	0.4514	0.6644
07 o88y	1.0	0.875	0.0	86.52	−1.44	79.08	79.1	91	64.97	69.04	12.68	0.4429	0.4706	0.8071
08 y00l	1.0	1.0	0.0	94.11	−15.69	84.7	86.14	101	73.49	85.54	15.82	0.4203	0.4892	1.0
09 y13l	0.875	1.0	0.0	92.0	−27.11	81.93	86.3	108	64.07	80.71	15.43	0.3999	0.5038	0.9435
10 y25l	0.75	1.0	0.0	90.22	−37.61	79.69	88.12	115	56.42	76.78	15.07	0.3805	0.5178	0.8977
11 y38l	0.625	1.0	0.0	88.56	−48.48	77.66	91.56	122	49.46	73.23	14.7	0.36	0.533	0.8561
12 y50l	0.5	1.0	0.0	87.07	−58.94	75.9	96.11	128	43.49	70.14	14.36	0.3398	0.548	0.82
13 y63l	0.375	1.0	0.0	85.89	−67.94	74.6	100.91	132	38.89	67.76	14.05	0.3222	0.5614	0.7922
14 y75l	0.25	1.0	0.0	84.97	−75.42	73.4	105.25	136	35.41	65.95	13.89	0.3072	0.5722	0.771
15 y88l	0.125	1.0	0.0	84.37	−80.4	72.68	108.39	138	33.22	64.78	13.76	0.2973	0.5796	0.7573
16 l00c	0.0	1.0	0.0	84.21	−81.61	72.48	109.16	138	32.69	64.48	13.73	0.2948	0.5814	0.7538
17 l13c	0.0	1.0	0.125	84.25	−81.22	69.92	107.18	139	32.84	64.54	14.84	0.2926	0.5751	0.7546
18 l25c	0.0	1.0	0.25	84.35	−79.13	60.29	99.48	143	33.56	64.74	19.5	0.2849	0.5496	0.7569
19 l38c	0.0	1.0	0.375	84.61	−75.98	47.78	89.77	148	34.79	65.25	27.02	0.2738	0.5135	0.7628
20 l50c	0.0	1.0	0.5	84.97	−71.94	34.42	79.76	154	36.45	65.95	37.08	0.2613	0.4728	0.771
21 l63c	0.0	1.0	0.625	85.43	−66.87	20.8	70.04	163	38.61	66.86	49.79	0.2487	0.4306	0.7816
22 l75c	0.0	1.0	0.75	85.97	−61.65	8.09	62.18	173	41.02	67.93	64.21	0.2369	0.3923	0.7942
23 l88c	0.0	1.0	0.875	86.54	−56.41	−3.15	56.51	183	43.58	69.07	79.31	0.227	0.3598	0.8075
24 c00v	0.0	1.0	1.0	87.18	−51.43	−13.34	53.14	195	46.26	70.38	95.2	0.2184	0.3322	0.8228
25 c13v	0.0	0.875	1.0	78.68	−39.53	−25.37	46.98	213	38.07	54.38	91.34	0.2071	0.2959	0.6357
26 c25v	0.0	0.75	1.0	71.08	−27.72	−36.22	45.63	233	31.94	42.31	88.11	0.1967	0.2606	0.4946
27 c38v	0.0	0.675	1.0	63.13	−13.93	−47.82	49.82	254	26.62	31.74	85.15	0.1855	0.2212	0.3711
28 c50v	0.0	0.5	1.0	54.96	1.67	−59.69	59.72	272	22.11	22.89	82.1	0.174	0.1801	0.2676
29 c63v	0.0	0.375	1.0	47.38	18.42	−71.34	73.69	284	18.86	16.31	80.21	0.1634	0.1414	0.1907
30 c75v	0.0	0.25	1.0	40.22	35.9	−82.09	89.61	294	16.38	11.38	78.1	0.1547	0.1075	0.1331
31 c88v	0.0	0.125	1.0	34.6	51.21	−90.98	104.41	299	14.85	8.3	77.05	0.1482	0.0828	0.097
32 v00m	0.0	0.0	1.0	33.12	55.21	−93.2	108.33	301	14.46	7.59	76.63	0.1466	0.077	0.0888
33 v13m	0.125	0.0	1.0	33.62	56.16	−92.73	108.42	301	14.97	7.83	77.15	0.1498	0.0783	0.0915
34 v25m	0.25	0.0	1.0	35.67	58.38	−89.14	106.57	303	16.88	8.84	77.06	0.1643	0.086	0.1033
35 v38m	0.375	0.0	1.0	38.8	62.01	−84.3	104.66	306	20.17	10.55	77.8	0.1859	0.0972	0.1233
36 v50m	0.5	0.0	1.0	42.4	66.13	−78.41	102.58	310	24.41	12.76	78.2	0.2116	0.1106	0.1492
37 v63m	0.625	0.0	1.0	46.59	71.36	−71.89	101.3	315	30.19	15.71	79.14	0.2414	0.1256	0.1837
38 v75m	0.75	0.0	1.0	50.84	76.22	−65.05	100.21	320	36.77	19.13	79.78	0.271	0.141	0.2237
39 v88m	0.875	0.0	1.0	54.99	81.11	−58.47	100.0	324	44.11	22.92	80.55	0.2989	0.1553	0.268
40 m00o	1.0	0.0	1.0	59.57	86.86	−51.33	100.9	329	53.4	27.65	81.56	0.3284	0.17	0.3233
41 m13o	1.0	0.0	0.875	58.36	85.07	−41.5	94.66	334	50.73	26.34	66.54	0.3533	0.1834	0.308
42 m25o	1.0	0.0	0.75	57.24	82.99	−30.17	88.31	340	48.18	25.17	52.12	0.384	0.2006	0.2942
43 m38o	1.0	0.0	0.675	56.15	80.91	−16.85	82.65	348	45.76	24.06	38.36	0.423	0.2224	0.2813
44 m50o	1.0	0.0	0.5	55.2	78.69	−1.52	78.71	359	43.59	23.12	26.13	0.4695	0.2491	0.2703
45 m63o	1.0	0.0	0.375	54.36	77.03	14.9	78.45	11	41.82	22.32	16.4	0.5193	0.2771	0.2609
46 m75o	1.0	0.0	0.25	53.76	75.78	32.94	82.63	23	40.57	21.75	9.07	0.5683	0.3047	0.2542
47 m88o	1.0	0.0	0.125	53.36	74.84	51.32	90.75	34	39.72	21.38	4.33	0.607	0.3268	0.2499
48 o00y	1.0	0.0	0.0	54.22	76.05	57.92	95.59	37	41.3	22.18	3.43	0.6172	0.3315	0.2593
49 n00w	0.0	0.0	0.0	10.87	0.0	0.0	0.01	341	1.18	1.24	1.35	0.3127	0.329	0.0145
50 n13w	0.125	0.125	0.125	16.63	−0.23	0.05	0.25	169	2.1	2.23	2.42	0.3119	0.3299	0.026
51 n25w	0.25	0.25	0.25	30.78	0.0	−0.86	0.87	269	6.23	6.56	7.37	0.3091	0.3252	0.0767
52 n38w	0.375	0.375	0.375	43.55	0.82	−2.07	2.24	292	12.98	13.53	15.65	0.308	0.3209	0.1582
53 n50w	0.5	0.5	0.5	55.07	1.55	−3.03	3.41	297	22.19	23.0	26.96	0.3076	0.3188	0.2689
54 n63w	0.625	0.625	0.625	66.16	1.93	−3.55	4.05	298	34.32	35.53	41.68	0.3077	0.3186	0.4154
55 n75w	0.75	0.75	0.75	76.29	2.17	−3.58	4.19	301	48.64	50.36	58.62	0.3086	0.3195	0.5887
56 n88w	0.875	0.875	0.875	85.52	1.65	−2.93	3.37	299	64.42	67.02	76.71	0.3095	0.322	0.7836
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0357

n = 88.59 / (88.59 + 1.26) = 0.986

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness *L=11 of black for illuminant D65**

System TLS11a
LCD monitor

D65 reflection:
Y_N = 1.26
L^*_N = 11.0



***Y* Yellow**
*LCH**a = 94.1 86.1 101
*LAB**a = 94.1 −15.7 84.7

***O* Orange red**
*LCH**a = 54.2 95.6 37
*LAB**a = 54.2 76.0 57.9

***L* Leaf green**
*LCH**a = 84.2 109.2 138
*LAB**a = 84.2 −81.6 72.5

***M* Magenta red**
*LCH**a = 59.6 100.9 329
*LAB**a = 59.6 86.9 −51.3

***C* Cyan blue**
*LCH**a = 87.2 53.1 195
*LAB**a = 87.2 −51.4 −13.3

***V* Violet blue**
*LCH**a = 33.1 108.3 301
*LAB**a = 33.1 55.2 −93.2

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness L^*=18 of black for illuminant D65

System TLS18a
LCD monitor
D65 reflection:
Y_N = 2.52
L^*_N = 18.01

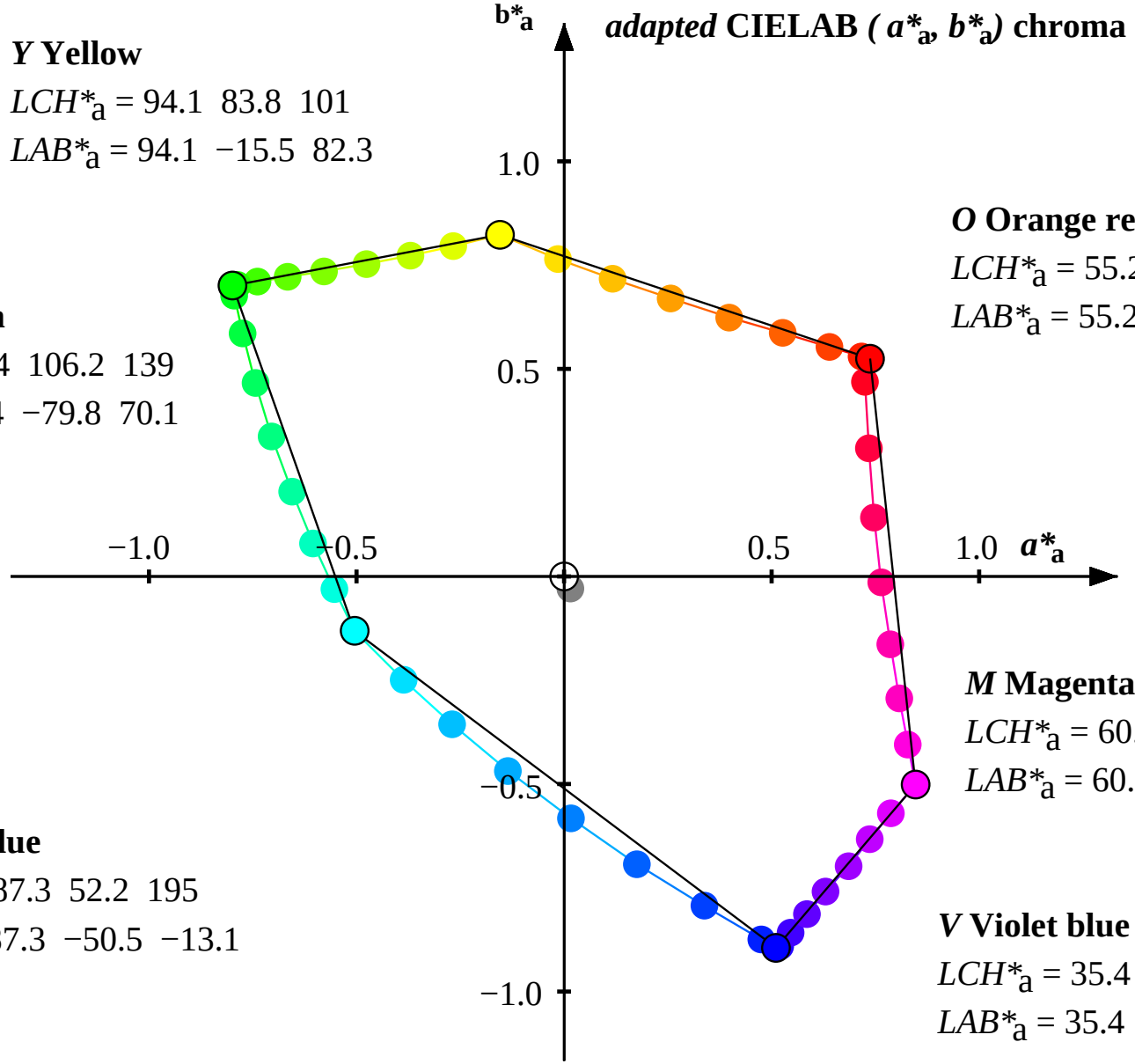
Color	r=olv^*_1	g=olv^*_2	b=olv^*_3	L^*_a=LAB^*_{1a}	a^*_a=LAB^*_{2a}	b^*_a=LAB^*_{3a}	$C^*_{ab,a}$=$LAB^*_{ab,a}$	$h_{ab,a}$	X_a=XYZ_{1a}	Y_a=XYZ_{2a}	Z_a=XYZ_{3a}	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	55.18	73.73	52.49	90.51	35	41.89	23.1	4.71	0.601	0.3314	0.2699
01 o13y	1.0	0.125	0.0	55.85	71.69	53.03	89.17	36	42.18	23.76	4.84	0.5959	0.3357	0.2777
02 o25y	1.0	0.25	0.0	58.7	63.91	55.26	84.48	41	43.69	26.71	5.41	0.5763	0.3523	0.3121
03 o38y	1.0	0.375	0.0	62.9	52.73	58.64	78.86	48	46.09	31.47	6.31	0.5495	0.3752	0.3677
04 o50y	1.0	0.5	0.0	68.01	39.8	62.4	74.01	57	49.36	37.99	7.63	0.5197	0.4	0.4439
05 o63y	1.0	0.625	0.0	74.01	25.63	67.01	71.74	69	53.8	46.72	9.33	0.4897	0.4253	0.5459
06 o75y	1.0	0.75	0.0	80.33	11.69	71.69	72.63	81	59.15	57.27	11.45	0.4626	0.4479	0.6692
07 o88y	1.0	0.875	0.0	86.66	−1.41	76.43	76.44	91	65.24	69.31	13.84	0.4396	0.4671	0.8099
08 y00l	1.0	1.0	0.0	94.13	−15.46	82.32	83.76	101	73.64	85.58	16.94	0.418	0.4858	1.0
09 y13l	0.875	1.0	0.0	92.05	−26.68	79.55	83.91	109	64.34	80.82	16.55	0.3979	0.4998	0.9443
10 y25l	0.75	1.0	0.0	90.3	−36.99	77.3	85.7	116	56.81	76.95	16.19	0.3788	0.5132	0.8991
11 y38l	0.625	1.0	0.0	88.66	−47.62	75.27	89.08	122	49.94	73.44	15.83	0.3587	0.5275	0.8582
12 y50l	0.5	1.0	0.0	87.19	−57.83	73.5	93.53	128	44.05	70.4	15.49	0.339	0.5417	0.8226
13 y63l	0.375	1.0	0.0	86.03	−66.58	72.18	98.21	133	39.52	68.05	15.19	0.3219	0.5543	0.7952
14 y75l	0.25	1.0	0.0	85.13	−73.84	70.99	102.44	136	36.09	66.26	15.04	0.3074	0.5645	0.7743
15 y88l	0.125	1.0	0.0	84.54	−78.65	70.27	105.48	138	33.93	65.11	14.9	0.2978	0.5714	0.7608
16 l00c	0.0	1.0	0.0	84.39	−79.83	70.06	106.23	139	33.4	64.81	14.88	0.2954	0.5731	0.7573
17 l13c	0.0	1.0	0.125	84.42	−79.45	67.67	104.37	140	33.55	64.88	15.97	0.2933	0.5671	0.7581
18 l25c	0.0	1.0	0.25	84.52	−77.42	58.56	97.08	143	34.26	65.07	20.56	0.2858	0.5427	0.7604
19 l38c	0.0	1.0	0.375	84.78	−74.37	46.59	87.77	148	35.47	65.57	27.98	0.2749	0.5082	0.7662
20 l50c	0.0	1.0	0.5	85.13	−70.44	33.67	78.09	154	37.11	66.26	37.9	0.2627	0.469	0.7743
21 l63c	0.0	1.0	0.625	85.58	−65.52	20.4	68.63	163	39.24	67.16	50.44	0.2502	0.4282	0.7847
22 l75c	0.0	1.0	0.75	86.11	−60.44	7.95	60.97	173	41.62	68.22	64.66	0.2385	0.3909	0.7971
23 l88c	0.0	1.0	0.875	86.67	−55.34	−3.1	55.44	183	44.14	69.34	79.55	0.2287	0.3592	0.8102
24 c00v	0.0	1.0	1.0	87.31	−50.48	−13.14	52.17	195	46.79	70.63	95.22	0.22	0.3322	0.8253
25 c13v	0.0	0.875	1.0	78.96	−38.66	−24.94	46.02	213	38.71	54.85	91.41	0.2093	0.2966	0.641
26 c25v	0.0	0.75	1.0	71.52	−27.0	−35.55	44.66	233	32.66	42.95	88.23	0.1994	0.2621	0.5018
27 c38v	0.0	0.675	1.0	63.78	−13.5	−46.82	48.74	254	27.41	32.53	85.3	0.1887	0.224	0.3801
28 c50v	0.0	0.5	1.0	55.88	1.61	−58.23	58.27	272	22.97	23.8	82.3	0.178	0.1844	0.2781
29 c63v	0.0	0.375	1.0	48.65	17.53	−69.32	71.51	284	19.76	17.31	80.44	0.1682	0.1473	0.2023
30 c75v	0.0	0.25	1.0	41.93	33.76	−79.35	86.24	293	17.31	12.45	78.36	0.1601	0.1152	0.1455
31 c88v	0.0	0.125	1.0	36.76	47.56	−87.46	99.56	299	15.81	9.41	77.32	0.1542	0.0918	0.1099
32 v00m	0.0	0.0	1.0	35.43	51.08	−89.43	103.0	300	15.43	8.71	76.9	0.1527	0.0862	0.1018
33 v13m	0.125	0.0	1.0	35.88	52.07	−89.05	103.17	300	15.93	8.95	77.42	0.1557	0.0875	0.1045
34 v25m	0.25	0.0	1.0	37.73	54.55	−85.79	101.67	302	17.81	9.94	77.33	0.1695	0.0946	0.1161
35 v38m	0.375	0.0	1.0	40.61	58.51	−81.38	100.24	306	21.05	11.63	78.06	0.1901	0.105	0.1358
36 v50m	0.5	0.0	1.0	43.96	62.96	−75.91	98.63	310	25.24	13.81	78.45	0.2148	0.1175	0.1613
37 v63m	0.625	0.0	1.0	47.9	68.5	−69.82	97.81	314	30.94	16.72	79.38	0.2435	0.1316	0.1954
38 v75m	0.75	0.0	1.0	51.94	73.63	−63.33	97.12	319	37.42	20.09	80.01	0.2721	0.1461	0.2348
39 v88m	0.875	0.0	1.0	55.92	78.74	−57.04	97.24	324	44.66	23.83	80.77	0.2992	0.1597	0.2784
40 m00o	1.0	0.0	1.0	60.33	84.67	−50.18	98.43	329	53.83	28.49	81.77	0.328	0.1736	0.3329
41 m13o	1.0	0.0	0.875	59.16	82.85	−40.47	92.21	334	51.19	27.2	66.95	0.3522	0.1872	0.3179
42 m25o	1.0	0.0	0.75	58.08	80.74	−29.33	85.9	340	48.68	26.05	52.73	0.3819	0.2044	0.3043
43 m38o	1.0	0.0	0.675	57.03	78.62	−16.31	80.3	348	46.3	24.95	39.17	0.4193	0.226	0.2916
44 m50o	1.0	0.0	0.5	56.12	76.39	−1.46	76.4	359	44.15	24.03	27.1	0.4634	0.2522	0.2808
45 m63o	1.0	0.0	0.375	55.31	74.7	14.19	76.04	11	42.41	23.23	17.51	0.51	0.2794	0.2715
46 m75o	1.0	0.0	0.25	54.73	73.44	30.9	79.67	23	41.17	22.67	10.28	0.5555	0.3059	0.2649
47 m88o	1.0	0.0	0.125	54.35	72.49	46.9	86.34	33	40.33	22.31	5.61	0.591	0.3269	0.2607
48 o00y	1.0	0.0	0.0	55.18	73.73	52.49	90.51	35	41.89	23.1	4.71	0.601	0.3314	0.2699
49 n00w	0.0	0.0	0.0	17.69	0.0	0.0	0.01	0	2.33	2.45	2.67	0.3127	0.329	0.0286
50 n13w	0.125	0.125	0.125	21.65	−0.17	0.04	0.18	169	3.24	3.42	3.72	0.3122	0.3296	0.04
51 n25w	0.25	0.25	0.25	33.33	0.0	−0.76	0.77	269	7.31	7.69	8.61	0.3096	0.3258	0.0899
52 n38w	0.375	0.375	0.375	45.04	0.77	−1.95	2.1	292	13.97	14.57	16.76	0.3083	0.3216	0.1702
53 n50w	0.5	0.5	0.5	56.0	1.49	−2.92	3.28	297	23.05	23.91	27.92	0.3078	0.3193	0.2794
54 n63w	0.625	0.625	0.625	66.72	1.87	−3.46	3.94	298	35.01	36.27	42.44	0.3079	0.3189	0.4238
55 n75w	0.75	0.75	0.75	76.61	2.12	−3.51	4.11	301	49.14	50.88	59.15	0.3087	0.3197	0.5946
56 n88w	0.875	0.875	0.875	85.67	1.62	−2.88	3.31	299	64.7	67.32	76.98	0.3095	0.3221	0.7867
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0352

n = 88.59 / (88.59 + 2.52) = 0.972

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness *L=18 of black for illuminant D65**

System TLS18a
LCD monitor

D65 reflection:
Y_N = 2.52
L^*_N = 18.01



adapted CIELAB (a^*_a, b^*_a) chroma diagram

Y Yellow
LCH^*_a = 94.1 83.8 101
LAB^*_a = 94.1 −15.5 82.3

O Orange red
LCH^*_a = 55.2 90.5 35
LAB^*_a = 55.2 73.7 52.5

L Leaf green
LCH^*_a = 84.4 106.2 139
LAB^*_a = 84.4 −79.8 70.1

M Magenta red
LCH^*_a = 60.3 98.4 329
LAB^*_a = 60.3 84.7 −50.2

C Cyan blue
LCH^*_a = 87.3 52.2 195
LAB^*_a = 87.3 −50.5 −13.1

V Violet blue
LCH^*_a = 35.4 103.0 300
LAB^*_a = 35.4 51.1 −89.4

Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness L^*=27 of black for illuminant D65

System TLS27a

LCD monitor

D65 reflection:

Y_N = 5.04

L^*_N = 26.85

Color	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 o00y	1.0	0.0	0.0	56.94	69.53	44.95	82.8	33	43.03	24.86	7.18	0.5732	0.3312	0.2903
01 o13y	1.0	0.125	0.0	57.57	67.66	45.57	81.58	34	43.31	25.51	7.31	0.5689	0.3351	0.2978
02 o25y	1.0	0.25	0.0	60.22	60.53	48.13	77.34	38	44.78	28.37	7.86	0.5528	0.3502	0.3312
03 o38y	1.0	0.375	0.0	64.17	50.17	51.95	72.22	46	47.11	33.01	8.74	0.5302	0.3715	0.3853
04 o50y	1.0	0.5	0.0	69.0	38.05	56.27	67.92	56	50.3	39.35	10.02	0.5047	0.3948	0.4593
05 o63y	1.0	0.625	0.0	74.73	24.63	61.4	66.16	68	54.61	47.84	11.68	0.4785	0.4192	0.5585
06 o75y	1.0	0.75	0.0	80.8	11.28	66.59	67.54	80	59.83	58.11	13.74	0.4544	0.4413	0.6784
07 o88y	1.0	0.875	0.0	86.91	−1.37	71.75	71.76	91	65.75	69.83	16.07	0.4336	0.4605	0.8151
08 y00l	1.0	1.0	0.0	94.17	−15.02	78.03	79.46	101	73.92	85.66	19.08	0.4138	0.4795	1.0
09 y13l	0.875	1.0	0.0	92.14	−25.87	75.27	79.6	109	64.88	81.03	18.7	0.3941	0.4922	0.9459
10 y25l	0.75	1.0	0.0	90.44	−35.79	73.04	81.34	116	57.55	77.26	18.35	0.3757	0.5044	0.9019
11 y38l	0.625	1.0	0.0	88.85	−45.99	71.0	84.6	123	50.86	73.85	18.0	0.3564	0.5175	0.8621
12 y50l	0.5	1.0	0.0	87.43	−55.72	69.23	88.87	129	45.13	70.89	17.67	0.3376	0.5302	0.8275
13 y63l	0.375	1.0	0.0	86.31	−64.02	67.9	93.33	133	40.72	68.6	17.38	0.3214	0.5414	0.8009
14 y75l	0.25	1.0	0.0	85.44	−70.87	66.72	97.34	137	37.38	66.87	17.23	0.3077	0.5505	0.7806
15 y88l	0.125	1.0	0.0	84.86	−75.4	66.0	100.21	139	35.28	65.74	17.1	0.2987	0.5566	0.7674
16 l00c	0.0	1.0	0.0	84.71	−76.5	65.8	100.91	139	34.77	65.45	17.07	0.2964	0.558	0.764
17 l13c	0.0	1.0	0.125	84.75	−76.15	63.66	99.26	140	34.91	65.51	18.13	0.2945	0.5526	0.7648
18 l25c	0.0	1.0	0.25	84.85	−74.22	55.44	92.65	143	35.61	65.71	22.61	0.2873	0.5302	0.7671
19 l38c	0.0	1.0	0.375	85.09	−71.35	44.41	84.05	148	36.79	66.19	29.83	0.277	0.4984	0.7727
20 l50c	0.0	1.0	0.5	85.44	−67.64	32.28	74.96	154	38.38	66.87	39.48	0.2652	0.462	0.7806
21 l63c	0.0	1.0	0.625	85.87	−62.99	19.64	65.99	163	40.45	67.73	51.67	0.2531	0.4237	0.7907
22 l75c	0.0	1.0	0.75	86.39	−58.16	7.68	58.68	172	42.77	68.76	65.51	0.2416	0.3884	0.8027
23 l88c	0.0	1.0	0.875	86.93	−53.31	−3.0	53.41	183	45.22	69.86	80.0	0.2318	0.3581	0.8155
24 c00v	0.0	1.0	1.0	87.54	−48.68	−12.75	50.33	195	47.79	71.11	95.25	0.2232	0.3321	0.8302
25 c13v	0.0	0.875	1.0	79.48	−37.04	−24.14	44.23	213	39.93	55.76	91.54	0.2133	0.2978	0.651
26 c25v	0.0	0.75	1.0	72.35	−25.67	−34.28	42.84	233	34.05	44.18	88.45	0.2043	0.265	0.5157
27 c38v	0.0	0.675	1.0	64.99	−12.71	−44.94	46.71	254	28.94	34.04	85.6	0.1948	0.2291	0.3973
28 c50v	0.0	0.5	1.0	57.6	1.49	−55.56	55.59	272	24.62	25.54	82.68	0.1853	0.1923	0.2982
29 c63v	0.0	0.375	1.0	50.96	16.02	−65.67	67.6	284	21.49	19.23	80.87	0.1768	0.1582	0.2245
30 c75v	0.0	0.25	1.0	44.94	30.25	−74.51	80.43	292	19.11	14.5	78.85	0.17	0.1289	0.1693
31 c88v	0.0	0.125	1.0	40.48	41.83	−81.45	91.57	297	17.65	11.54	77.83	0.1649	0.1078	0.1347
32 v00m	0.0	0.0	1.0	39.35	44.67	−83.08	94.33	298	17.28	10.86	77.43	0.1637	0.1029	0.1268
33 v13m	0.125	0.0	1.0	39.73	45.69	−82.8	94.58	299	17.77	11.09	77.93	0.1664	0.1038	0.1295
34 v25m	0.25	0.0	1.0	41.3	48.41	−80.02	93.54	301	19.6	12.06	77.84	0.179	0.1101	0.1407
35 v38m	0.375	0.0	1.0	43.79	52.73	−76.27	92.74	305	22.75	13.7	78.55	0.1979	0.1191	0.1599
36 v50m	0.5	0.0	1.0	46.74	57.57	−71.49	91.79	309	26.83	15.82	78.93	0.2207	0.1301	0.1847
37 v63m	0.625	0.0	1.0	50.28	63.49	−66.07	91.64	314	32.37	18.65	79.84	0.2474	0.1425	0.2178
38 v75m	0.75	0.0	1.0	53.96	69.0	−60.18	91.56	319	38.68	21.94	80.45	0.2742	0.1555	0.2561
39 v88m	0.875	0.0	1.0	57.63	74.42	−54.41	92.19	324	45.72	25.57	81.19	0.2999	0.1677	0.2985
40 m00o	1.0	0.0	1.0	61.75	80.64	−48.02	93.87	329	54.65	30.11	82.16	0.3274	0.1804	0.3515
41 m13o	1.0	0.0	0.875	60.65	78.76	−38.57	87.7	334	52.08	28.86	67.75	0.3503	0.1941	0.3369
42 m25o	1.0	0.0	0.75	59.64	76.6	−27.79	81.49	340	49.63	27.73	53.91	0.3781	0.2112	0.3237
43 m38o	1.0	0.0	0.675	58.66	74.45	−15.34	76.01	348	47.32	26.67	40.71	0.4125	0.2325	0.3113
44 m50o	1.0	0.0	0.5	57.81	72.19	−1.35	72.2	359	45.23	25.77	28.97	0.4524	0.2578	0.3008
45 m63o	1.0	0.0	0.375	57.07	70.48	12.99	71.66	10	43.53	24.99	19.63	0.4938	0.2835	0.2918
46 m75o	1.0	0.0	0.25	56.53	69.2	27.61	74.5	22	42.33	24.45	12.59	0.5333	0.308	0.2854
47 m88o	1.0	0.0	0.125	56.18	68.25	40.51	79.36	31	41.51	24.09	8.05	0.5636	0.3271	0.2813
48 o00y	1.0	0.0	0.0	56.94	69.53	44.95	82.8	33	43.03	24.86	7.18	0.5732	0.3312	0.2903
49 n00w	0.0	0.0	0.0	26.07	0.0	0.0	0.01	0	4.53	4.77	5.19	0.3127	0.329	0.0557
50 n13w	0.125	0.125	0.125	28.67	−0.11	0.02	0.13	169	5.42	5.71	6.21	0.3124	0.3293	0.0667
51 n25w	0.25	0.25	0.25	37.61	0.0	−0.63	0.64	269	9.38	9.87	10.97	0.3104	0.3266	0.1152
52 n38w	0.375	0.375	0.375	47.7	0.69	−1.74	1.88	291	15.86	16.56	18.91	0.309	0.3227	0.1933
53 n50w	0.5	0.5	0.5	57.7	1.38	−2.71	3.05	297	24.7	25.65	29.76	0.3083	0.3202	0.2994
54 n63w	0.625	0.625	0.625	67.78	1.78	−3.29	3.74	298	36.34	37.67	43.89	0.3082	0.3195	0.4398
55 n75w	0.75	0.75	0.75	77.22	2.04	−3.37	3.95	301	50.08	51.9	60.15	0.3089	0.3201	0.6059
56 n88w	0.875	0.875	0.875	85.95	1.57	−2.79	3.21	299	65.22	67.9	77.51	0.3097	0.3224	0.7926
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0342

n = 88.59 / (88.59 + 5.04) = 0.946

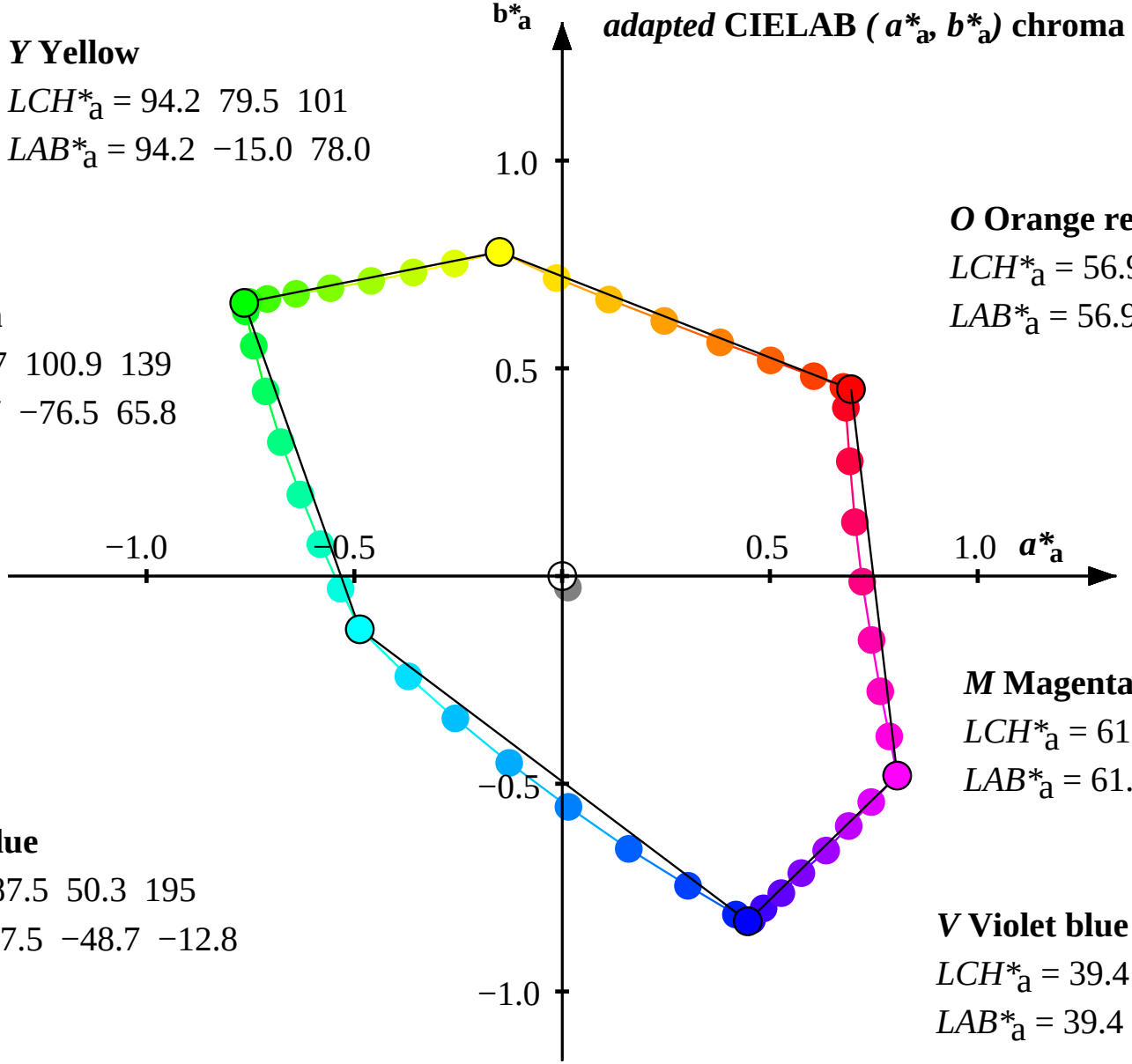
Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness *L=27 of black for illuminant D65**

System TLS27a
LCD monitor

D65 reflection:
Y_N = 5.04
L^*_N = 26.85

Y Yellow
LCH^*_a = 94.2 79.5 101
LAB^*_a = 94.2 −15.0 78.0

adapted CIELAB (a^*_a, b^*_a) chroma diagram



O Orange red
LCH^*_a = 56.9 82.8 33
LAB^*_a = 56.9 69.5 44.9

L Leaf green
LCH^*_a = 84.7 100.9 139
LAB^*_a = 84.7 −76.5 65.8

M Magenta red
LCH^*_a = 61.7 93.9 329
LAB^*_a = 61.7 80.6 −48.0

C Cyan blue
LCH^*_a = 87.5 50.3 195
LAB^*_a = 87.5 −48.7 −12.8

V Violet blue
LCH^*_a = 39.4 94.3 298
LAB^*_a = 39.4 44.7 −83.1

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness L^*=38 of black for illuminant D65

System TLS38a
LCD monitor
D65 reflection:
Y_N = 10.08
L^*_N = 37.99

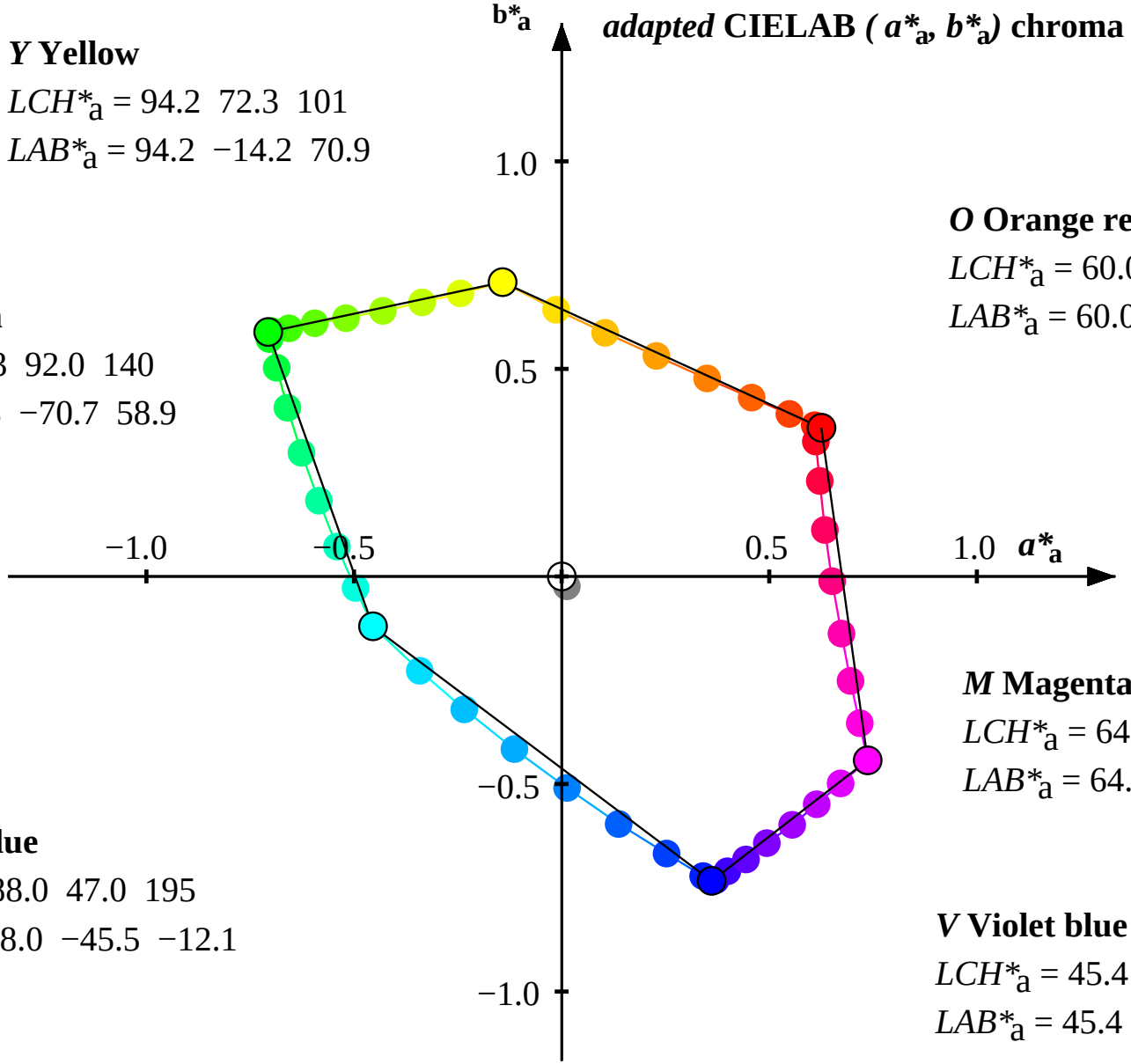
Color	r=olv*$_1$	g=olv*$_2$	b=olv*$_3$	L^*_a=LAB*$_{1a}$	a^*_a=LAB*$_{2a}$	b^*_a=LAB*$_{3a}$	$C^*_{ab,a}$=LAB*$_{ab,a}$	$h_{ab,a}$	X_a=XYZ$_{1a}$	Y_a=XYZ$_{2a}$	Z_a=XYZ$_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	60.0	62.53	35.83	72.06	30	45.14	28.12	11.74	0.531	0.3308	0.3277
01 o13y	1.0	0.125	0.0	60.54	60.93	36.46	71.0	31	45.4	28.73	11.86	0.528	0.3341	0.3348
02 o25y	1.0	0.25	0.0	62.88	54.81	39.09	67.32	35	46.8	31.45	12.39	0.5163	0.347	0.3665
03 o38y	1.0	0.375	0.0	66.4	45.77	43.04	62.83	43	49.01	35.85	13.22	0.4997	0.3655	0.4177
04 o50y	1.0	0.5	0.0	70.78	34.99	47.64	59.11	54	52.03	41.86	14.43	0.4803	0.3865	0.4879
05 o63y	1.0	0.625	0.0	76.02	22.83	53.1	57.81	67	56.13	49.93	16.01	0.4598	0.409	0.5818
06 o75y	1.0	0.75	0.0	81.66	10.53	58.69	59.62	80	61.07	59.67	17.96	0.4403	0.4302	0.6953
07 o88y	1.0	0.875	0.0	87.38	−1.29	64.23	64.24	91	66.69	70.78	20.17	0.423	0.449	0.8249
08 y00l	1.0	1.0	0.0	94.23	−14.21	70.89	72.3	101	74.45	85.81	23.03	0.4062	0.4682	1.0
09 y13l	0.875	1.0	0.0	92.32	−24.39	68.2	72.43	110	65.87	81.41	22.68	0.3875	0.479	0.9487
10 y25l	0.75	1.0	0.0	90.71	−33.63	66.01	74.08	117	58.91	77.84	22.34	0.3703	0.4893	0.9071
11 y38l	0.625	1.0	0.0	89.21	−43.04	64.01	77.14	124	52.57	74.6	22.01	0.3524	0.5001	0.8694
12 y50l	0.5	1.0	0.0	87.87	−51.94	62.26	81.09	130	47.13	71.79	21.7	0.3352	0.5105	0.8366
13 y63l	0.375	1.0	0.0	86.81	−59.47	60.95	85.16	134	42.94	69.62	21.42	0.3205	0.5196	0.8114
14 y75l	0.25	1.0	0.0	85.99	−65.63	59.8	88.79	138	39.77	67.98	21.27	0.3083	0.5269	0.7922
15 y88l	0.125	1.0	0.0	85.46	−69.67	59.09	91.36	140	37.78	66.91	21.15	0.3002	0.5317	0.7797
16 l00c	0.0	1.0	0.0	85.32	−70.65	58.9	91.98	140	37.29	66.63	21.13	0.2982	0.5328	0.7765
17 l13c	0.0	1.0	0.125	85.35	−70.33	57.14	90.62	141	37.43	66.69	22.13	0.2965	0.5282	0.7772
18 l25c	0.0	1.0	0.25	85.44	−68.6	50.22	85.02	144	38.09	66.88	26.38	0.29	0.5092	0.7793
19 l38c	0.0	1.0	0.375	85.67	−66.02	40.64	77.54	148	39.21	67.33	33.23	0.2805	0.4817	0.7847
20 l50c	0.0	1.0	0.5	85.99	−62.68	29.82	69.42	155	40.72	67.98	42.39	0.2695	0.4499	0.7922
21 l63c	0.0	1.0	0.625	86.4	−58.48	18.29	61.28	163	42.69	68.8	53.96	0.258	0.4158	0.8018
22 l75c	0.0	1.0	0.75	86.89	−54.1	7.2	54.59	172	44.88	69.78	67.09	0.2469	0.3839	0.8131
23 l88c	0.0	1.0	0.875	87.4	−49.68	−2.83	49.77	183	47.21	70.82	80.84	0.2374	0.3561	0.8253
24 c00v	0.0	1.0	1.0	87.97	−45.45	−12.05	47.03	195	49.65	72.01	95.31	0.2288	0.3319	0.8391
25 c13v	0.0	0.875	1.0	80.43	−34.19	−22.68	41.04	214	42.19	57.44	91.79	0.2204	0.3001	0.6694
26 c25v	0.0	0.75	1.0	73.83	−23.39	−32.01	39.66	234	36.61	46.44	88.86	0.213	0.2702	0.5412
27 c38v	0.0	0.675	1.0	67.14	−11.39	−41.63	43.17	255	31.76	36.82	86.16	0.2053	0.238	0.4291
28 c50v	0.0	0.5	1.0	60.57	1.31	−50.95	50.98	271	27.66	28.76	83.38	0.1979	0.2057	0.3352
29 c63v	0.0	0.375	1.0	54.84	13.72	−59.57	61.14	283	24.7	22.78	81.66	0.1913	0.1764	0.2654
30 c75v	0.0	0.25	1.0	49.84	25.23	−66.75	71.37	291	22.44	18.29	79.74	0.1863	0.1518	0.2131
31 c88v	0.0	0.125	1.0	46.28	34.06	−72.17	79.81	295	21.05	15.48	78.78	0.1825	0.1342	0.1803
32 v00m	0.0	0.0	1.0	45.41	36.13	−73.38	81.8	296	20.7	14.83	78.4	0.1817	0.1302	0.1729
33 v13m	0.125	0.0	1.0	45.7	37.1	−73.23	82.11	297	21.16	15.05	78.88	0.1839	0.1308	0.1754
34 v25m	0.25	0.0	1.0	46.93	39.89	−71.05	81.5	299	22.9	15.96	78.79	0.1946	0.1357	0.186
35 v38m	0.375	0.0	1.0	48.91	44.34	−68.15	81.31	303	25.89	17.52	79.47	0.2107	0.1426	0.2042
36 v50m	0.5	0.0	1.0	51.31	49.39	−64.28	81.07	308	29.76	19.54	79.83	0.2305	0.1513	0.2277
37 v63m	0.625	0.0	1.0	54.27	55.58	−59.83	81.67	313	35.02	22.23	80.69	0.2539	0.1611	0.259
38 v75m	0.75	0.0	1.0	57.41	61.42	−54.85	82.35	318	41.01	25.34	81.27	0.2778	0.1717	0.2953
39 v88m	0.875	0.0	1.0	60.6	67.16	−49.87	83.66	323	47.69	28.79	81.97	0.301	0.1817	0.3355
40 m00o	1.0	0.0	1.0	64.24	73.7	−44.27	85.98	329	56.16	33.1	82.89	0.3262	0.1923	0.3857
41 m13o	1.0	0.0	0.875	63.27	71.75	−35.29	79.97	334	53.72	31.91	69.21	0.3469	0.2061	0.3718
42 m25o	1.0	0.0	0.75	62.37	69.56	−25.19	73.99	340	51.4	30.84	56.08	0.3716	0.2229	0.3594
43 m38o	1.0	0.0	0.675	61.51	67.39	−13.72	68.77	348	49.2	29.83	43.56	0.4013	0.2433	0.3476
44 m50o	1.0	0.0	0.5	60.76	65.14	−1.19	65.15	359	47.22	28.97	32.41	0.4348	0.2668	0.3377
45 m63o	1.0	0.0	0.375	60.11	63.42	11.15	64.39	10	45.61	28.24	23.56	0.4682	0.2899	0.3291
46 m75o	1.0	0.0	0.25	59.64	62.14	22.97	66.25	20	44.47	27.72	16.88	0.4992	0.3113	0.3231
47 m88o	1.0	0.0	0.125	59.33	61.19	32.51	69.29	28	43.69	27.39	12.57	0.5224	0.3274	0.3192
48 o00y	1.0	0.0	0.0	60.0	62.53	35.83	72.06	30	45.14	28.12	11.74	0.531	0.3308	0.3277
49 n00w	0.0	0.0	0.0	36.08	0.0	0.0	0.01	0	8.6	9.05	9.85	0.3127	0.329	0.1055
50 n13w	0.125	0.125	0.125	37.74	−0.07	0.02	0.08	169	9.44	9.95	10.82	0.3125	0.3292	0.1159
51 n25w	0.25	0.25	0.25	44.08	0.0	−0.47	0.48	269	13.2	13.89	15.34	0.3111	0.3274	0.1619
52 n38w	0.375	0.375	0.375	52.11	0.57	−1.45	1.57	291	19.35	20.24	22.87	0.3098	0.3241	0.2359
53 n50w	0.5	0.5	0.5	60.66	1.21	−2.39	2.69	297	27.74	28.86	33.17	0.309	0.3215	0.3364
54 n63w	0.625	0.625	0.625	69.66	1.61	−2.99	3.41	298	38.78	40.27	46.58	0.3087	0.3206	0.4693
55 n75w	0.75	0.75	0.75	78.33	1.89	−3.13	3.66	301	51.82	53.77	62.0	0.3092	0.3208	0.6267
56 n88w	0.875	0.875	0.875	86.48	1.47	−2.62	3.01	299	66.19	68.95	78.48	0.3099	0.3228	0.8035
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0324

n = 88.59 / (88.59 + 10.08) = 0.898

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness L^*=38 of black for illuminant D65

System TLS38a
LCD monitor

D65 reflection:
Y_N = 10.08
L^*_N = 37.99



Y Yellow
LCH^*_a = 94.2 72.3 101
LAB^*_a = 94.2 −14.2 70.9

O Orange red
LCH^*_a = 60.0 72.1 30
LAB^*_a = 60.0 62.5 35.8

L Leaf green
LCH^*_a = 85.3 92.0 140
LAB^*_a = 85.3 −70.7 58.9

M Magenta red
LCH^*_a = 64.2 86.0 329
LAB^*_a = 64.2 73.7 −44.3

C Cyan blue
LCH^*_a = 88.0 47.0 195
LAB^*_a = 88.0 −45.5 −12.1

V Violet blue
LCH^*_a = 45.4 81.8 296
LAB^*_a = 45.4 36.1 −73.4

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness L^*=52 of black for illuminant D65

System TLS52a
LCD monitor
D65 reflection:
Y_N = 20.16
L^*_N = 52.02

Color	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 o00y	1.0	0.0	0.0	64.74	52.23	26.29	58.48	27	48.76	33.72	19.6	0.4776	0.3304	0.3918
01 o13y	1.0	0.125	0.0	65.18	50.98	26.85	57.62	28	48.99	34.28	19.7	0.4758	0.3329	0.3983
02 o25y	1.0	0.25	0.0	67.09	46.22	29.22	54.68	32	50.26	36.75	20.18	0.4689	0.3428	0.4269
03 o38y	1.0	0.375	0.0	69.99	39.01	32.83	50.98	40	52.27	40.74	20.93	0.4588	0.3575	0.4733
04 o50y	1.0	0.5	0.0	73.67	30.18	37.18	47.89	51	55.01	46.19	22.04	0.4464	0.3748	0.5367
05 o63y	1.0	0.625	0.0	78.17	19.95	42.46	46.91	65	58.73	53.51	23.46	0.4328	0.3943	0.6217
06 o75y	1.0	0.75	0.0	83.1	9.31	48.0	48.9	79	63.22	62.35	25.24	0.4192	0.4134	0.7244
07 o88y	1.0	0.875	0.0	88.18	−1.15	53.59	53.6	91	68.31	72.44	27.24	0.4066	0.4312	0.8416
08 y00l	1.0	1.0	0.0	94.34	−12.83	60.34	61.69	102	75.35	86.07	29.84	0.394	0.45	1.0
09 y13l	0.875	1.0	0.0	92.61	−21.89	57.82	61.83	111	67.56	82.08	29.51	0.3771	0.4581	0.9536
10 y25l	0.75	1.0	0.0	91.16	−30.0	55.76	63.32	118	61.25	78.84	29.21	0.3618	0.4657	0.916
11 y38l	0.625	1.0	0.0	89.81	−38.16	53.89	66.03	125	55.5	75.9	28.91	0.3462	0.4735	0.8818
12 y50l	0.5	1.0	0.0	88.61	−45.76	52.24	69.46	131	50.57	73.35	28.63	0.3315	0.4808	0.8522
13 y63l	0.375	1.0	0.0	87.67	−52.1	50.99	72.91	136	46.77	71.38	28.37	0.3192	0.4872	0.8294
14 y75l	0.25	1.0	0.0	86.94	−57.22	49.93	75.95	139	43.89	69.89	28.24	0.309	0.4921	0.812
15 y88l	0.125	1.0	0.0	86.46	−60.55	49.28	78.07	141	42.08	68.92	28.13	0.3025	0.4953	0.8007
16 l00c	0.0	1.0	0.0	86.34	−61.34	49.09	78.58	141	41.64	68.67	28.11	0.3008	0.4961	0.7978
17 l13c	0.0	1.0	0.125	86.37	−61.08	47.78	77.56	142	41.77	68.72	29.02	0.2994	0.4926	0.7985
18 l25c	0.0	1.0	0.25	86.45	−59.64	42.46	73.22	145	42.36	68.89	32.87	0.2939	0.478	0.8004
19 l38c	0.0	1.0	0.375	86.65	−57.5	34.84	67.24	149	43.38	69.3	39.09	0.2858	0.4566	0.8052
20 l50c	0.0	1.0	0.5	86.94	−54.72	25.91	60.55	155	44.75	69.89	47.4	0.2762	0.4313	0.812
21 l63c	0.0	1.0	0.625	87.31	−51.19	16.08	53.67	163	46.53	70.63	57.9	0.2658	0.4035	0.8207
22 l75c	0.0	1.0	0.75	87.74	−47.5	6.39	47.94	172	48.53	71.52	69.82	0.2556	0.3767	0.831
23 l88c	0.0	1.0	0.875	88.19	−43.75	−2.53	43.83	183	50.64	72.46	82.29	0.2465	0.3528	0.8419
24 c00v	0.0	1.0	1.0	88.71	−40.14	−10.86	41.59	195	52.85	73.54	95.42	0.2383	0.3316	0.8545
25 c13v	0.0	0.875	1.0	82.02	−29.65	−20.23	35.91	214	46.09	60.33	92.23	0.232	0.3037	0.7009
26 c25v	0.0	0.75	1.0	76.28	−19.9	−28.27	34.59	235	41.02	50.35	89.56	0.2267	0.2783	0.585
27 c38v	0.0	0.675	1.0	70.61	−9.46	−36.33	37.56	255	36.62	41.62	87.11	0.2215	0.2517	0.4836
28 c50v	0.0	0.5	1.0	65.21	1.06	−43.84	43.87	271	32.9	34.31	84.59	0.2167	0.226	0.3986
29 c63v	0.0	0.375	1.0	60.67	10.76	−50.52	51.67	282	30.21	28.88	83.03	0.2126	0.2032	0.3355
30 c75v	0.0	0.25	1.0	56.88	19.19	−55.77	58.99	289	28.16	24.8	81.29	0.2098	0.1847	0.2882
31 c88v	0.0	0.125	1.0	54.29	25.3	−59.58	64.74	293	26.9	22.25	80.42	0.2076	0.1717	0.2585
32 v00m	0.0	0.0	1.0	53.68	26.66	−60.39	66.02	294	26.58	21.67	80.08	0.2071	0.1689	0.2518
33 v13m	0.125	0.0	1.0	53.88	27.49	−60.35	66.33	294	27.0	21.86	80.51	0.2087	0.169	0.254
34 v25m	0.25	0.0	1.0	54.76	30.0	−58.79	66.01	297	28.58	22.7	80.43	0.217	0.1723	0.2637
35 v38m	0.375	0.0	1.0	56.2	34.08	−56.77	66.22	301	31.3	24.11	81.04	0.2294	0.1767	0.2801
36 v50m	0.5	0.0	1.0	57.98	38.85	−53.94	66.48	306	34.8	25.94	81.37	0.2449	0.1825	0.3014
37 v63m	0.625	0.0	1.0	60.23	44.8	−50.64	67.62	311	39.57	28.38	82.15	0.2637	0.1891	0.3297
38 v75m	0.75	0.0	1.0	62.68	50.61	−46.8	68.94	317	45.01	31.2	82.68	0.2833	0.1964	0.3625
39 v88m	0.875	0.0	1.0	65.23	56.39	−42.87	70.84	323	51.07	34.33	83.31	0.3027	0.2035	0.3989
40 m00o	1.0	0.0	1.0	68.2	63.02	−38.36	73.78	329	58.76	38.24	84.15	0.3244	0.2111	0.4443
41 m13o	1.0	0.0	0.875	67.4	61.07	−30.23	68.14	334	56.55	37.16	71.74	0.3418	0.2246	0.4318
42 m25o	1.0	0.0	0.75	66.67	58.93	−21.27	62.65	340	54.44	36.19	59.82	0.3618	0.2405	0.4205
43 m38o	1.0	0.0	0.675	65.96	56.82	−11.37	57.95	349	52.44	35.28	48.46	0.3851	0.259	0.4099
44 m50o	1.0	0.0	0.5	65.36	54.68	−0.96	54.69	359	50.64	34.5	38.35	0.4101	0.2794	0.4009
45 m63o	1.0	0.0	0.375	64.83	53.03	8.77	53.75	9	49.19	33.84	30.32	0.434	0.2985	0.3931
46 m75o	1.0	0.0	0.25	64.45	51.8	17.48	54.67	19	48.15	33.36	24.25	0.4552	0.3155	0.3877
47 m88o	1.0	0.0	0.125	64.21	50.92	23.96	56.27	25	47.45	33.06	20.34	0.4705	0.3278	0.3841
48 o00y	1.0	0.0	0.0	64.74	52.23	26.29	58.48	27	48.76	33.72	19.6	0.4776	0.3304	0.3918
49 n00w	0.0	0.0	0.0	47.52	0.0	0.0	0.01	0	15.61	16.42	17.88	0.3127	0.329	0.1908
50 n13w	0.125	0.125	0.125	48.55	−0.04	0.01	0.05	169	16.37	17.23	18.76	0.3126	0.3291	0.2002
51 n25w	0.25	0.25	0.25	52.75	0.0	−0.32	0.34	269	19.78	20.81	22.86	0.3118	0.328	0.2418
52 n38w	0.375	0.375	0.375	58.58	0.43	−1.1	1.19	291	25.36	26.58	29.69	0.3107	0.3256	0.3088
53 n50w	0.5	0.5	0.5	65.28	0.98	−1.93	2.18	297	32.97	34.4	39.04	0.3098	0.3233	0.3997
54 n63w	0.625	0.625	0.625	72.73	1.37	−2.54	2.89	298	42.99	44.75	51.2	0.3094	0.3221	0.52
55 n75w	0.75	0.75	0.75	80.18	1.65	−2.74	3.2	301	54.82	57.0	65.2	0.3097	0.322	0.6623
56 n88w	0.875	0.875	0.875	87.37	1.31	−2.34	2.69	299	67.86	70.77	80.14	0.3102	0.3235	0.8223
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	275	84.2	88.59	96.46	0.3127	0.329	1.0293

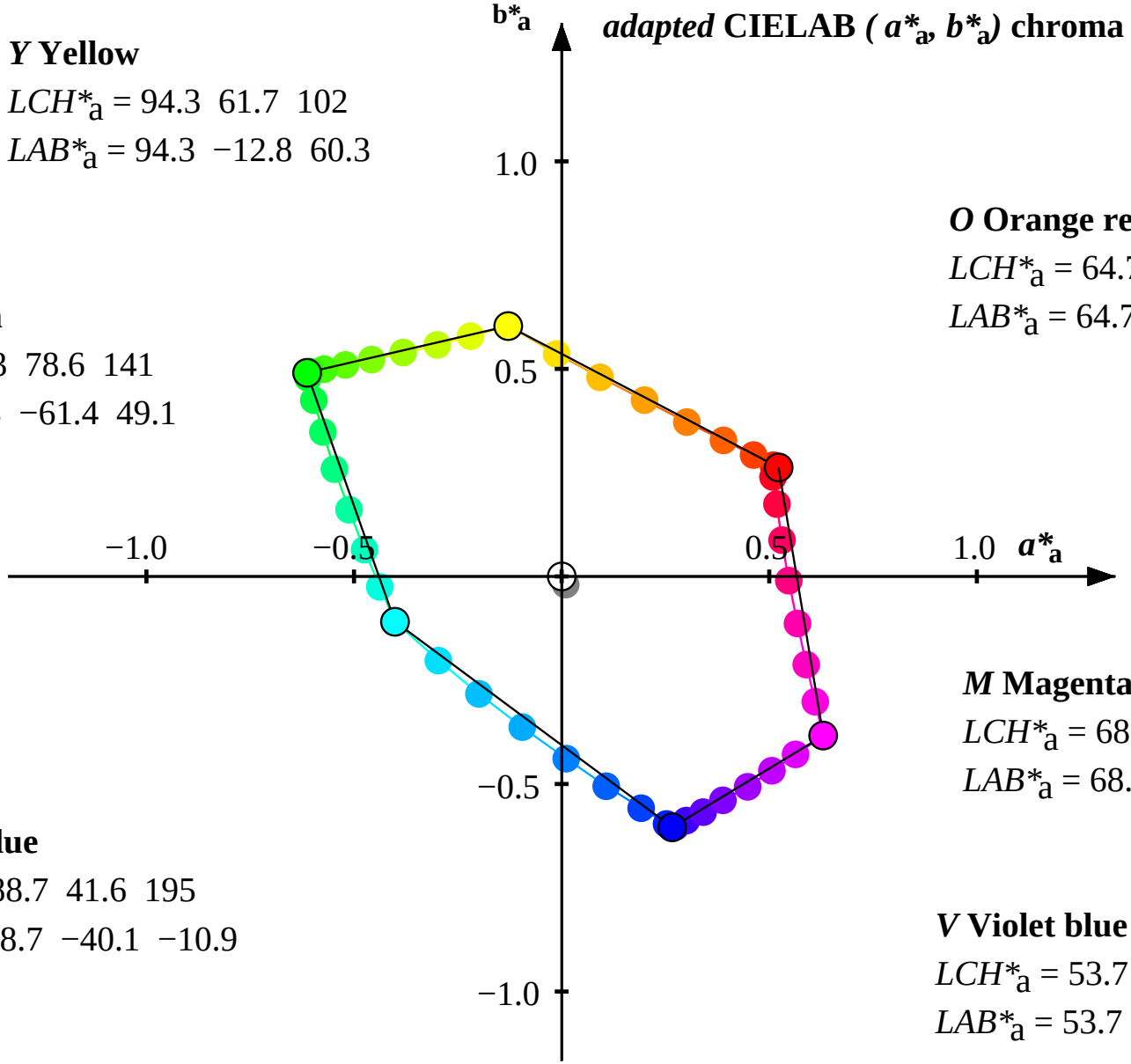
n = 88.59 / (88.59 + 20.16) = 0.815

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness *L=52 of black for illuminant D65**

System TLS52a
LCD monitor

D65 reflection:
Y_N = 20.16
L^*_N = 52.02

adapted CIELAB (a^*_a, b^*_a) chroma diagram



Y Yellow
LCH^*_a = 94.3 61.7 102
LAB^*_a = 94.3 −12.8 60.3

O Orange red
LCH^*_a = 64.7 58.5 27
LAB^*_a = 64.7 52.2 26.3

L Leaf green
LCH^*_a = 86.3 78.6 141
LAB^*_a = 86.3 −61.4 49.1

M Magenta red
LCH^*_a = 68.2 73.8 329
LAB^*_a = 68.2 63.0 −38.4

C Cyan blue
LCH^*_a = 88.7 41.6 195
LAB^*_a = 88.7 −40.1 −10.9

V Violet blue
LCH^*_a = 53.7 66.0 294
LAB^*_a = 53.7 26.7 −60.4

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness L^*=70 of black for illuminant D65

System TLS70a
LCD monitor
D65 reflection:
Y_N = 40.32
L^*_N = 69.7

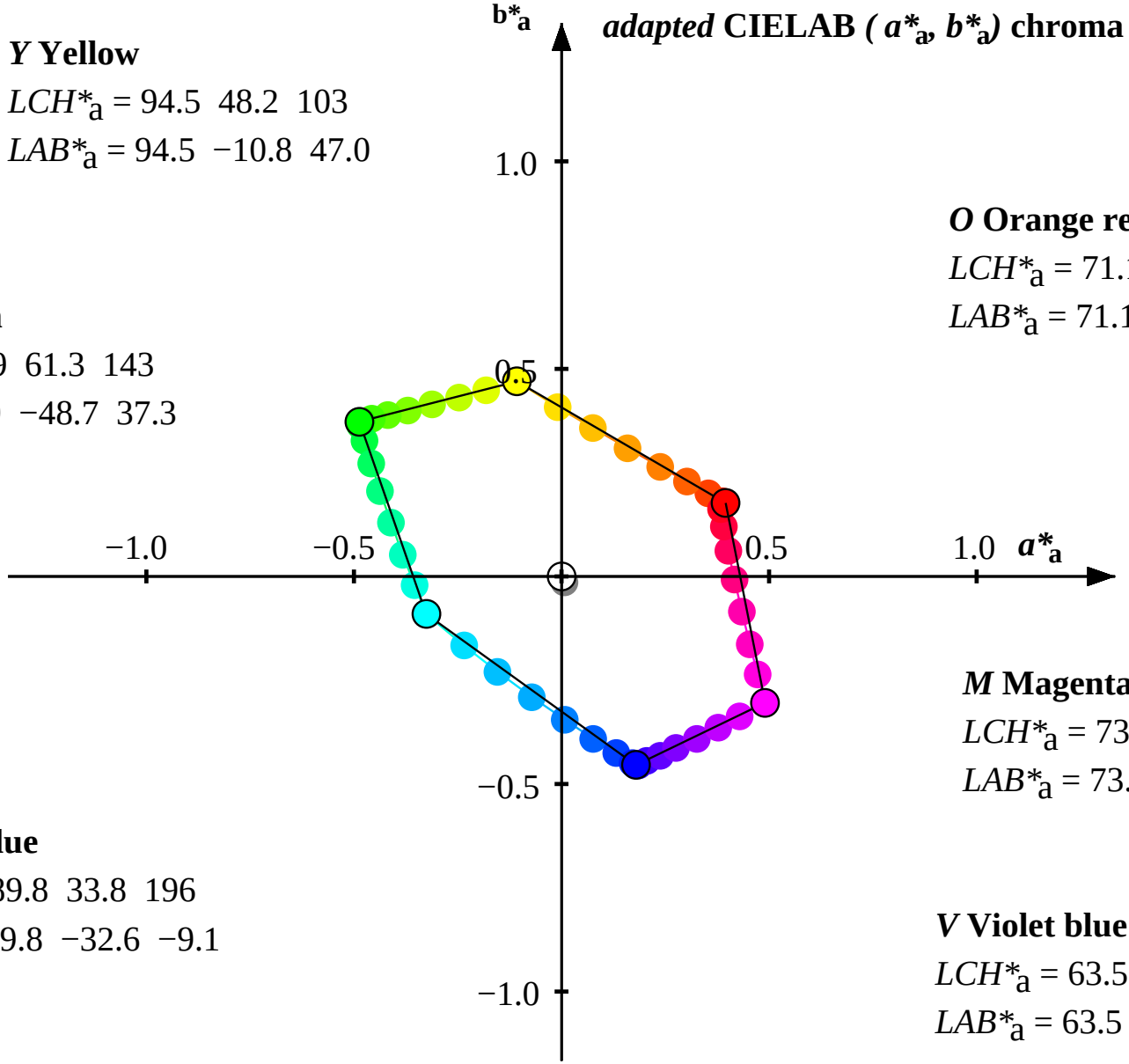
Color		r=olv*$_1$	g=olv*$_2$	b=olv*$_3$	L^*_a=LAB*$_{1a}$	a^*_a=LAB*$_{2a}$	b^*_a=LAB*$_{3a}$	$C^*_{ab,a}$=LAB*$_{ab,a}$	$h_{ab,a}$	X_a=XYZ$_{1a}$	Y_a=XYZ$_{2a}$	Z_a=XYZ$_{3a}$	x_a	y_a	Y_a/88.59
00	o00y	1.0	0.0	0.0	71.08	39.54	17.7	43.32	24	54.3	42.31	31.62	0.4235	0.3299	0.4893
01	o13y	1.0	0.125	0.0	71.4	38.67	18.13	42.71	25	54.5	42.77	31.7	0.4226	0.3316	0.4947
02	o25y	1.0	0.25	0.0	72.8	35.37	19.97	40.61	29	55.57	44.85	32.11	0.4193	0.3384	0.5188
03	o38y	1.0	0.375	0.0	74.96	30.22	22.84	37.88	37	57.26	48.22	32.74	0.4143	0.3488	0.5577
04	o50y	1.0	0.5	0.0	77.77	23.73	26.42	35.51	48	59.57	52.82	33.67	0.4078	0.3616	0.6109
05	o63y	1.0	0.625	0.0	81.29	15.94	30.89	34.76	63	62.71	59.0	34.88	0.4005	0.3768	0.6823
06	o75y	1.0	0.75	0.0	85.23	7.56	35.75	36.54	78	66.5	66.45	36.38	0.3927	0.3925	0.7686
07	o88y	1.0	0.875	0.0	89.38	−0.94	40.79	40.8	91	70.8	74.96	38.07	0.3851	0.4078	0.867
08	y00l	1.0	1.0	0.0	94.51	−10.74	46.99	48.2	103	76.73	86.46	40.26	0.3772	0.425	1.0
09	y13l	0.875	1.0	0.0	93.06	−18.16	44.81	48.35	112	70.17	83.1	39.98	0.3631	0.43	0.9611
10	y25l	0.75	1.0	0.0	91.85	−24.68	43.03	49.61	120	64.84	80.36	39.73	0.3506	0.4346	0.9294
11	y38l	0.625	1.0	0.0	90.73	−31.12	41.4	51.8	127	59.99	77.88	39.47	0.3382	0.4392	0.9008
12	y50l	0.5	1.0	0.0	89.74	−37.01	39.98	54.48	133	55.83	75.73	39.23	0.3269	0.4434	0.8759
13	y63l	0.375	1.0	0.0	88.96	−41.82	38.9	57.12	137	52.62	74.07	39.02	0.3175	0.447	0.8567
14	y75l	0.25	1.0	0.0	88.36	−45.65	38.0	59.4	140	50.19	72.81	38.91	0.31	0.4497	0.8421
15	y88l	0.125	1.0	0.0	87.97	−48.1	37.44	60.96	142	48.67	71.99	38.82	0.3052	0.4514	0.8326
16	l00c	0.0	1.0	0.0	87.86	−48.68	37.28	61.32	143	48.3	71.78	38.8	0.304	0.4518	0.8302
17	l13c	0.0	1.0	0.125	87.89	−48.49	36.39	60.63	143	48.4	71.83	39.57	0.3029	0.4495	0.8308
18	l25c	0.0	1.0	0.25	87.95	−47.4	32.7	57.59	145	48.9	71.97	42.82	0.2988	0.4397	0.8324
19	l38c	0.0	1.0	0.375	88.12	−45.8	27.24	53.3	149	49.76	72.32	48.06	0.2925	0.4251	0.8364
20	l50c	0.0	1.0	0.5	88.36	−43.71	20.58	48.32	155	50.92	72.81	55.07	0.2848	0.4072	0.8421
21	l63c	0.0	1.0	0.625	88.66	−41.04	12.97	43.05	162	52.42	73.44	63.93	0.2762	0.387	0.8494
22	l75c	0.0	1.0	0.75	89.01	−38.23	5.23	38.6	172	54.11	74.19	73.98	0.2675	0.3668	0.8581
23	l88c	0.0	1.0	0.875	89.39	−35.35	−2.09	35.42	183	55.88	74.99	84.51	0.2595	0.3482	0.8673
24	c00v	0.0	1.0	1.0	89.81	−32.56	−9.06	33.81	196	57.76	75.9	95.58	0.2519	0.3311	0.8778
25	c13v	0.0	0.875	1.0	84.35	−23.47	−16.65	28.8	215	52.05	64.75	92.89	0.2482	0.3088	0.7488
26	c25v	0.0	0.75	1.0	79.8	−15.37	−22.96	27.64	236	47.77	56.33	90.64	0.2453	0.2893	0.6515
27	c38v	0.0	0.675	1.0	75.43	−7.1	−29.05	29.92	256	44.06	48.97	88.57	0.2426	0.2696	0.5663
28	c50v	0.0	0.5	1.0	71.42	0.77	−34.47	34.49	271	40.92	42.8	86.45	0.2405	0.2515	0.495
29	c63v	0.0	0.375	1.0	68.18	7.62	−39.11	39.85	281	38.65	38.21	85.13	0.2386	0.2359	0.442
30	c75v	0.0	0.25	1.0	65.58	13.23	−42.53	44.55	287	36.93	34.78	83.67	0.2377	0.2238	0.4022
31	c88v	0.0	0.125	1.0	63.86	17.09	−44.95	48.1	291	35.86	32.63	82.93	0.2368	0.2155	0.3774
32	v00m	0.0	0.0	1.0	63.46	17.92	−45.43	48.85	292	35.59	32.14	82.64	0.2367	0.2137	0.3717
33	v13m	0.125	0.0	1.0	63.59	18.54	−45.47	49.11	292	35.95	32.3	83.0	0.2377	0.2136	0.3736
34	v25m	0.25	0.0	1.0	64.16	20.48	−44.43	48.94	295	37.28	33.0	82.94	0.2433	0.2154	0.3817
35	v38m	0.375	0.0	1.0	65.12	23.72	−43.17	49.26	299	39.57	34.19	83.45	0.2517	0.2175	0.3955
36	v50m	0.5	0.0	1.0	66.32	27.62	−41.3	49.69	304	42.53	35.74	83.73	0.2625	0.2206	0.4133
37	v63m	0.625	0.0	1.0	67.87	32.64	−39.1	50.94	310	46.55	37.79	84.39	0.2759	0.224	0.4371
38	v75m	0.75	0.0	1.0	69.6	37.73	−36.45	52.47	316	51.14	40.18	84.83	0.2903	0.2281	0.4647
39	v88m	0.875	0.0	1.0	71.43	42.95	−33.67	54.58	322	56.25	42.82	85.37	0.305	0.2322	0.4952
40	m00o	1.0	0.0	1.0	73.62	49.05	−30.4	57.71	328	62.73	46.12	86.07	0.3218	0.2366	0.5334
41	m13o	1.0	0.0	0.875	73.03	47.26	−23.6	52.83	333	60.87	45.2	75.6	0.335	0.2488	0.5228
42	m25o	1.0	0.0	0.75	72.49	45.35	−16.31	48.2	340	59.09	44.39	65.55	0.3496	0.2626	0.5133
43	m38o	1.0	0.0	0.675	71.97	43.48	−8.53	44.31	349	57.41	43.61	55.97	0.3657	0.2778	0.5044
44	m50o	1.0	0.0	0.5	71.53	41.63	−0.7	41.64	359	55.89	42.96	47.44	0.3821	0.2937	0.4969
45	m63o	1.0	0.0	0.375	71.14	40.19	6.23	40.67	9	54.66	42.4	40.66	0.3969	0.3079	0.4904
46	m75o	1.0	0.0	0.25	70.87	39.13	12.07	40.95	17	53.79	42.0	35.55	0.4095	0.3198	0.4858
47	m88o	1.0	0.0	0.125	70.69	38.37	16.16	41.64	23	53.19	41.74	32.25	0.4182	0.3282	0.4828
48	o00y	1.0	0.0	0.0	71.08	39.54	17.7	43.32	24	54.3	42.31	31.62	0.4235	0.3299	0.4893
49	n00w	0.0	0.0	0.0	59.62	0.0	0.0	0.01	158	26.33	27.71	30.17	0.3127	0.329	0.3205
50	n13w	0.125	0.125	0.125	60.24	−0.02	0.01	0.03	169	26.98	28.39	30.91	0.3127	0.3291	0.3284
51	n25w	0.25	0.25	0.25	62.86	0.0	−0.21	0.22	269	29.86	31.41	34.37	0.3122	0.3285	0.3633
52	n38w	0.375	0.375	0.375	66.73	0.3	−0.75	0.82	291	34.56	36.27	40.13	0.3115	0.3269	0.4195
53	n50w	0.5	0.5	0.5	71.47	0.71	−1.41	1.59	297	40.98	42.88	48.02	0.3108	0.3251	0.4959
54	n63w	0.625	0.625	0.625	77.05	1.05	−1.95	2.22	298	49.43	51.61	58.28	0.3103	0.3239	0.5969
55	n75w	0.75	0.75	0.75	82.88	1.32	−2.19	2.56	301	59.42	61.94	70.09	0.3104	0.3235	0.7164
56	n88w	0.875	0.875	0.875	88.71	1.08	−1.93	2.22	299	70.41	73.56	82.69	0.3106	0.3245	0.8508
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0246

n = 88.59 / (88.59 + 40.32) = 0.687

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness L^*=70 of black for illuminant D65

System TLS70a
LCD monitor

D65 reflection:
Y_N = 40.32
L^*_N = 69.7



***Y* Yellow**
LCH^*_a = 94.5 48.2 103
LAB^*_a = 94.5 −10.8 47.0

***O* Orange red**
LCH^*_a = 71.1 43.3 24
LAB^*_a = 71.1 39.5 17.7

***L* Leaf green**
LCH^*_a = 87.9 61.3 143
LAB^*_a = 87.9 −48.7 37.3

***M* Magenta red**
LCH^*_a = 73.6 57.7 328
LAB^*_a = 73.6 49.1 −30.4

***C* Cyan blue**
LCH^*_a = 89.8 33.8 196
LAB^*_a = 89.8 −32.6 −9.1

***V* Violet blue**
LCH^*_a = 63.5 48.8 292
LAB^*_a = 63.5 17.9 −45.4

Colorimetric "Standard data": Television Luminous System TLS00 for CIE lightness *L**=00 of black for illuminant D65

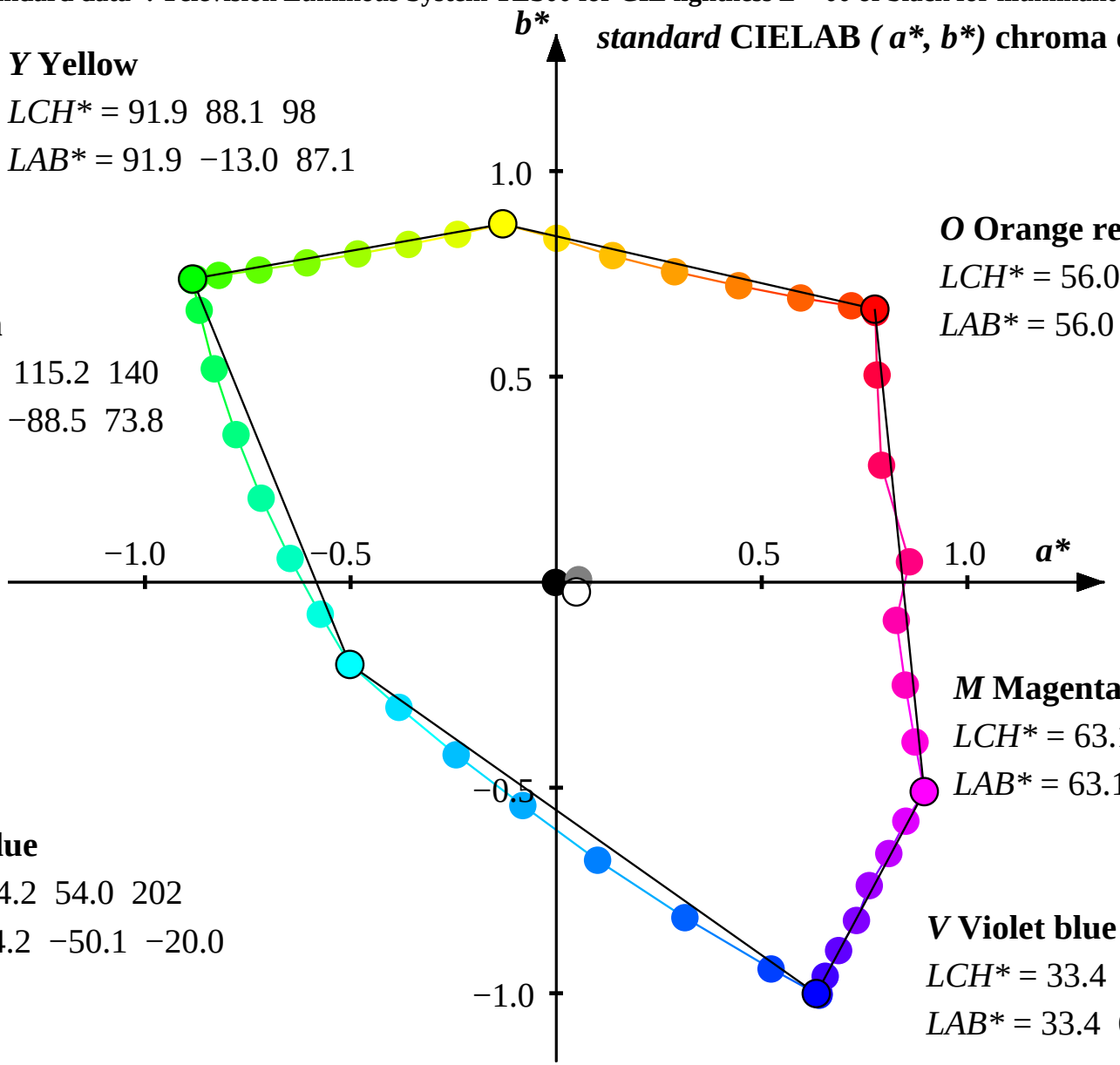
System TLS00

CRT monitor

	Color	*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	o00y	1.0	0.0	0.0	56.02	77.48	66.45	102.07	42	44.38	23.93	2.62	0.6257	0.3374	0.2701
01	o13y	1.0	0.125	0.0	56.02	77.28	66.41	101.9	42	44.31	23.93	2.62	0.6253	0.3377	0.2701
02	o25y	1.0	0.25	0.0	57.92	71.8	67.19	98.34	45	45.26	25.88	2.98	0.6106	0.3492	0.2921
03	o38y	1.0	0.375	0.0	62.19	59.5	69.13	91.21	51	47.4	30.62	3.86	0.5789	0.374	0.3457
04	o50y	1.0	0.5	0.0	67.72	44.39	72.09	84.66	61	50.6	37.59	5.13	0.5422	0.4028	0.4243
05	o63y	1.0	0.625	0.0	73.76	28.82	75.54	80.86	72	54.63	46.33	6.76	0.5071	0.4301	0.523
06	o75y	1.0	0.75	0.0	79.96	13.76	79.39	80.57	83	59.35	56.61	8.67	0.4762	0.4542	0.639
07	o88y	1.0	0.875	0.0	86.01	0.2	83.63	83.63	93	64.73	68.01	10.69	0.4513	0.4742	0.7677
08	y00l	1.0	1.0	0.0	91.93	−12.99	87.13	88.09	101	70.31	80.55	13.19	0.4286	0.491	0.9092
09	y13l	0.875	1.0	0.0	89.64	−24.0	84.58	87.92	108	61.01	75.52	12.63	0.409	0.5063	0.8525
10	y25l	0.75	1.0	0.0	87.47	−35.92	82.12	89.64	116	52.43	70.97	12.15	0.3868	0.5236	0.8011
11	y38l	0.625	1.0	0.0	85.44	−48.24	79.84	93.29	123	44.75	66.87	11.69	0.3629	0.5423	0.7548
12	y50l	0.5	1.0	0.0	83.56	−60.65	77.73	98.6	129	38.03	63.22	11.28	0.338	0.5618	0.7136
13	y63l	0.375	1.0	0.0	82.02	−72.3	75.94	104.86	134	32.65	60.33	10.97	0.3141	0.5804	0.681
14	y75l	0.25	1.0	0.0	80.88	−82.0	74.62	110.88	138	28.73	58.25	10.74	0.294	0.5961	0.6575
15	y88l	0.125	1.0	0.0	80.25	−87.72	73.89	114.7	140	26.61	57.12	10.61	0.2821	0.6054	0.6447
16	l00c	0.0	1.0	0.0	80.17	−88.48	73.79	115.22	141	26.35	56.98	10.61	0.2805	0.6066	0.6432
17	l13c	0.0	1.0	0.125	80.16	−88.43	73.41	114.94	141	26.35	56.96	10.73	0.2802	0.6057	0.643
18	l25c	0.0	1.0	0.25	80.28	−86.86	66.19	109.21	143	26.86	57.18	13.53	0.2753	0.586	0.6454
19	l38c	0.0	1.0	0.375	80.6	−83.19	51.95	98.09	148	28.12	57.74	20.48	0.2644	0.543	0.6518
20	l50c	0.0	1.0	0.5	81.07	−77.87	35.94	85.77	155	30.02	58.59	30.89	0.2512	0.4903	0.6614
21	l63c	0.0	1.0	0.625	81.71	−71.7	20.47	74.58	163	32.45	59.76	44.11	0.238	0.4384	0.6746
22	l75c	0.0	1.0	0.75	82.43	−64.7	5.72	64.96	174	35.34	61.1	60.02	0.2259	0.3905	0.6897
23	l88c	0.0	1.0	0.875	83.26	−57.4	−7.78	57.93	185	38.65	62.66	77.97	0.2156	0.3495	0.7073
24	c00v	0.0	1.0	1.0	84.22	−50.12	−20.03	53.99	198	42.33	64.49	97.58	0.2071	0.3155	0.728
25	c13v	0.0	0.875	1.0	77.24	−38.2	−30.47	48.88	214	36.57	51.93	95.19	0.1991	0.2827	0.5862
26	c25v	0.0	0.75	1.0	69.81	−24.32	−41.97	48.52	235	31.36	40.48	93.23	0.19	0.2452	0.4569
27	c38v	0.0	0.675	1.0	61.76	−8.13	−54.27	54.89	258	26.59	30.12	90.95	0.1801	0.204	0.34
28	c50v	0.0	0.5	1.0	53.37	10.02	−67.62	68.37	276	22.44	21.38	89.33	0.1685	0.1606	0.2414
29	c63v	0.0	0.375	1.0	44.84	31.31	−81.6	87.41	290	19.23	14.43	88.29	0.1577	0.1183	0.1628
30	c75v	0.0	0.25	1.0	37.25	52.3	−94.04	107.62	298	17.02	9.67	87.38	0.1492	0.0848	0.1092
31	c88v	0.0	0.125	1.0	33.58	63.94	−100.42	119.06	302	16.27	7.81	87.45	0.1459	0.07	0.0881
32	v00m	0.0	0.0	1.0	33.4	63.27	−100.11	118.43	302	16.02	7.72	86.57	0.1452	0.07	0.0872
33	v13m	0.125	0.0	1.0	33.76	63.95	−100.02	118.72	302	16.41	7.89	87.32	0.147	0.0707	0.0891
34	v25m	0.25	0.0	1.0	36.14	65.42	−95.89	116.09	304	18.57	9.08	87.28	0.1616	0.079	0.1025
35	v38m	0.375	0.0	1.0	39.92	68.67	−89.58	112.88	307	22.58	11.2	87.57	0.1861	0.0923	0.1264
36	v50m	0.5	0.0	1.0	44.48	73.01	−82.23	109.98	311	28.25	14.17	88.31	0.2161	0.1084	0.16
37	v63m	0.625	0.0	1.0	49.17	76.2	−73.8	106.09	315	34.63	17.73	87.83	0.247	0.1265	0.2002
38	v75m	0.75	0.0	1.0	54.0	80.89	−66.0	104.41	320	42.59	21.98	88.59	0.2781	0.1435	0.2481
39	v88m	0.875	0.0	1.0	58.64	85.03	−58.09	102.99	325	51.17	26.64	88.71	0.3073	0.16	0.3008
40	m00o	1.0	0.0	1.0	63.05	89.51	−50.96	103.0	330	60.56	31.65	89.38	0.3335	0.1743	0.3573
41	m13o	1.0	0.0	0.875	61.53	87.25	−38.83	95.5	336	56.9	29.85	69.87	0.3633	0.1906	0.337
42	m25o	1.0	0.0	0.75	60.16	84.9	−25.02	88.51	344	53.63	28.3	52.01	0.4004	0.2113	0.3194
43	m38o	1.0	0.0	0.675	58.9	82.72	−9.32	83.25	354	50.72	26.92	36.13	0.4458	0.2366	0.3038
44	m50o	1.0	0.0	0.5	57.81	85.9	4.99	86.05	4	50.15	25.76	24.88	0.4976	0.2556	0.2908
45	m63o	1.0	0.0	0.375	56.92	79.09	28.43	84.05	21	46.29	24.84	12.53	0.5533	0.2969	0.2804
46	m75o	1.0	0.0	0.25	56.33	78.02	50.44	92.9	35	45.03	24.24	5.58	0.6016	0.3239	0.2737
47	m88o	1.0	0.0	0.125	56.09	77.63	65.6	101.63	42	44.54	24.01	2.75	0.6247	0.3367	0.271
48	o00y	1.0	0.0	0.0	56.02	77.48	66.45	102.07	42	44.38	23.93	2.62	0.6257	0.3374	0.2701
49	n00w	0.0	0.0	0.0	0.46	−0.16	−0.09	0.2	0	0.04	0.05	0.06	0.2802	0.323	0.0006
50	n13w	0.125	0.125	0.125	2.38	4.33	1.25	4.5	18	0.36	0.26	0.2	0.435	0.3218	0.003
51	n25w	0.25	0.25	0.25	22.26	7.95	2.57	8.36	25	3.93	3.59	3.47	0.3576	0.3267	0.0405
52	n38w	0.375	0.375	0.375	39.92	6.15	1.68	6.38	33	11.48	11.2	11.57	0.3352	0.327	0.1264
53	n50w	0.5	0.5	0.5	54.11	5.42	0.6	5.45	37	22.13	22.08	23.68	0.326	0.3252	0.2492
54	n63w	0.625	0.625	0.625	66.29	5.06	−0.08	5.06	44	35.4	35.7	38.95	0.3217	0.3244	0.403
55	n75w	0.75	0.75	0.75	77.06	4.96	−1.02	5.06	43	50.91	51.63	57.3	0.3185	0.323	0.5828
56	n88w	0.875	0.875	0.875	86.67	5.13	−1.86	5.46	27	68.21	69.33	77.9	0.3166	0.3218	0.7826
57	n99w	1.0	1.0	1.0	95.41	4.95	−2.4	5.51	0	86.83	88.59	100.14	0.3151	0.3215	1.0

Colorimetric "Standard data": Television Luminous System TLS00 for CIE lightness *L=00 of black for illuminant D65**

System TLS00
CRT monitor



***Y* Yellow**
*LCH** = 91.9 88.1 98
*LAB** = 91.9 −13.0 87.1

***O* Orange red**
*LCH** = 56.0 102.1 41
*LAB** = 56.0 77.5 66.4

***L* Leaf green**
*LCH** = 80.2 115.2 140
*LAB** = 80.2 −88.5 73.8

***M* Magenta red**
*LCH** = 63.1 103.0 330
*LAB** = 63.1 89.5 −51.0

***C* Cyan blue**
*LCH** = 84.2 54.0 202
*LAB** = 84.2 −50.1 −20.0

***V* Violet blue**
*LCH** = 33.4 118.4 302
*LAB** = 33.4 63.3 −100.1

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness L^*=00 of black for illuminant D65

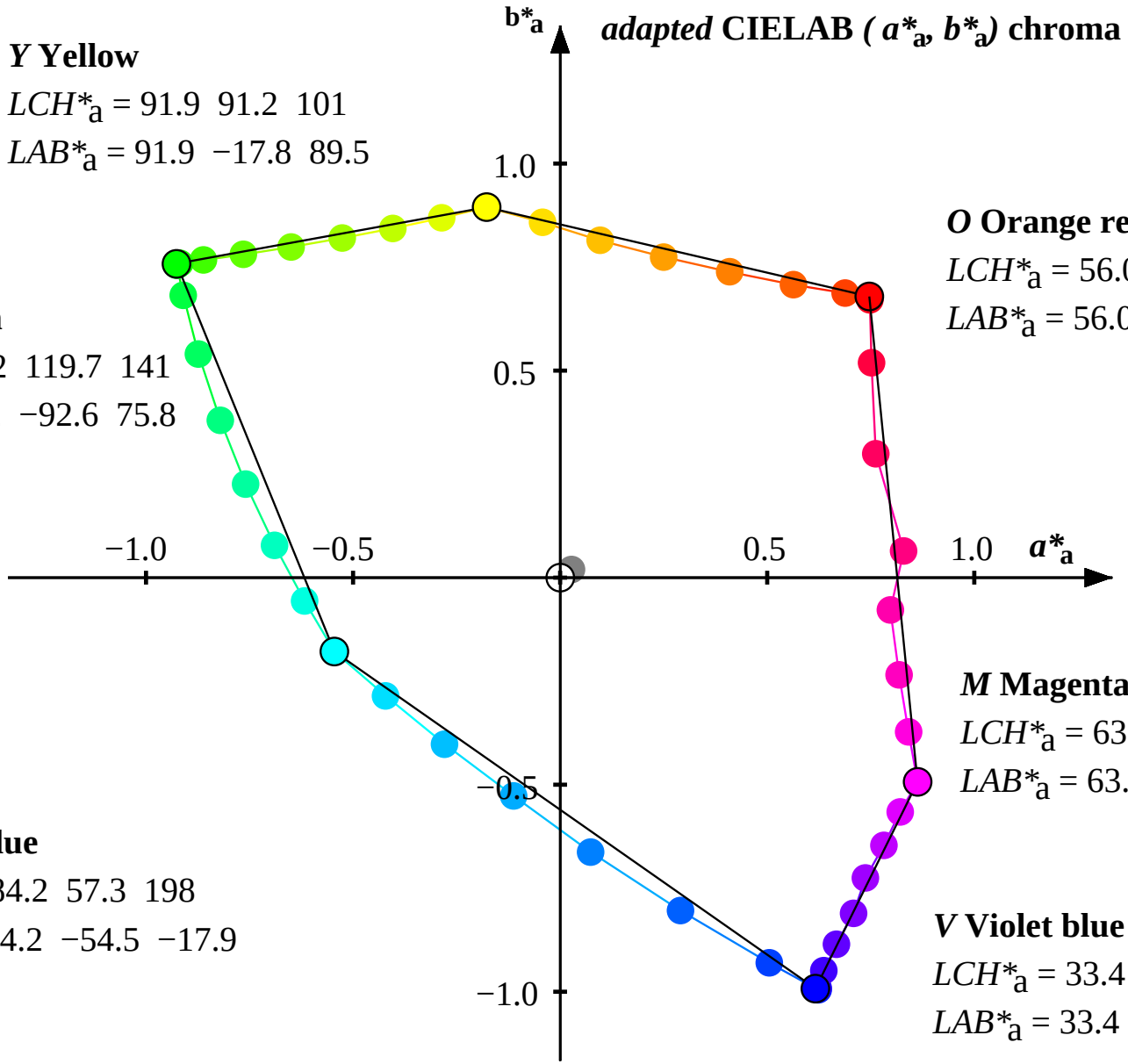
System TLS00a

CRT monitor

Color	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 o00y	1.0	0.0	0.0	56.02	74.66	67.9	100.92	42	43.41	23.93	2.42	0.6223	0.343	0.2701
01 o13y	1.0	0.125	0.0	56.02	74.46	67.87	100.75	42	43.35	23.93	2.43	0.6219	0.3433	0.2701
02 o25y	1.0	0.25	0.0	57.92	68.88	68.69	97.27	45	44.24	25.88	2.76	0.607	0.3551	0.2921
03 o38y	1.0	0.375	0.0	62.19	56.34	70.73	90.43	51	46.28	30.62	3.58	0.575	0.3805	0.3457
04 o50y	1.0	0.5	0.0	67.72	40.94	73.83	84.42	61	49.32	37.59	4.77	0.5379	0.41	0.4243
05 o63y	1.0	0.625	0.0	73.76	25.04	77.43	81.38	72	53.15	46.33	6.29	0.5025	0.438	0.523
06 o75y	1.0	0.75	0.0	79.96	9.64	81.42	81.99	83	57.65	56.61	8.07	0.4713	0.4627	0.639
07 o88y	1.0	0.875	0.0	86.01	−4.23	85.82	85.92	93	62.79	68.01	9.94	0.4461	0.4832	0.7677
08 y00l	1.0	1.0	0.0	91.93	−17.76	89.45	91.2	101	68.11	80.55	12.28	0.4232	0.5005	0.9092
09 y13l	0.875	1.0	0.0	89.64	−28.64	86.85	91.46	108	59.06	75.52	11.77	0.4035	0.516	0.8525
10 y25l	0.75	1.0	0.0	87.47	−40.44	84.34	93.54	116	50.72	70.97	11.32	0.3813	0.5336	0.8011
11 y38l	0.625	1.0	0.0	85.44	−52.65	82.01	97.46	123	43.24	66.87	10.91	0.3573	0.5526	0.7548
12 y50l	0.5	1.0	0.0	83.56	−64.96	79.85	102.95	129	36.72	63.22	10.53	0.3324	0.5723	0.7136
13 y63l	0.375	1.0	0.0	82.02	−76.53	78.03	109.3	134	31.48	60.33	10.25	0.3085	0.5911	0.681
14 y75l	0.25	1.0	0.0	80.88	−86.16	76.68	115.35	138	27.67	58.25	10.04	0.2884	0.607	0.6575
15 y88l	0.125	1.0	0.0	80.25	−91.85	75.94	119.18	140	25.62	57.12	9.92	0.2765	0.6164	0.6447
16 l00c	0.0	1.0	0.0	80.17	−92.61	75.83	119.7	141	25.36	56.98	9.92	0.2749	0.6176	0.6432
17 l13c	0.0	1.0	0.125	80.16	−92.56	75.45	119.42	141	25.36	56.96	10.04	0.2746	0.6167	0.643
18 l25c	0.0	1.0	0.25	80.28	−90.99	68.23	113.74	143	25.86	57.18	12.72	0.2701	0.5971	0.6454
19 l38c	0.0	1.0	0.375	80.6	−87.34	54.0	102.7	148	27.08	57.74	19.4	0.2598	0.554	0.6518
20 l50c	0.0	1.0	0.5	81.07	−82.05	38.0	90.43	155	28.93	58.59	29.46	0.2473	0.5009	0.6614
21 l63c	0.0	1.0	0.625	81.71	−75.92	22.55	79.2	163	31.29	59.76	42.28	0.2346	0.4482	0.6746
22 l75c	0.0	1.0	0.75	82.43	−68.95	7.82	69.4	174	34.11	61.1	57.75	0.223	0.3995	0.6897
23 l88c	0.0	1.0	0.875	83.26	−61.69	−5.66	61.96	185	37.32	62.66	75.23	0.213	0.3576	0.7073
24 c00v	0.0	1.0	1.0	84.22	−54.47	−17.89	57.34	198	40.9	64.49	94.37	0.2048	0.3228	0.728
25 c13v	0.0	0.875	1.0	77.24	−42.17	−28.5	50.91	214	35.39	51.93	92.28	0.197	0.2891	0.5862
26 c25v	0.0	0.75	1.0	69.81	−27.89	−40.18	48.93	235	30.4	40.48	90.62	0.1882	0.2506	0.4569
27 c38v	0.0	0.675	1.0	61.76	−11.26	−52.68	53.88	258	25.84	30.12	88.66	0.1787	0.2083	0.34
28 c50v	0.0	0.5	1.0	53.37	7.34	−66.23	66.65	276	21.86	21.38	87.36	0.1674	0.1637	0.2414
29 c63v	0.0	0.375	1.0	44.84	29.09	−80.42	85.52	290	18.8	14.43	86.62	0.1568	0.1204	0.1628
30 c75v	0.0	0.25	1.0	37.25	50.49	−93.04	105.87	298	16.69	9.67	85.98	0.1486	0.0861	0.1092
31 c88v	0.0	0.125	1.0	33.58	62.33	−99.51	117.43	302	15.99	7.81	86.17	0.1454	0.071	0.0881
32 v00m	0.0	0.0	1.0	33.4	61.66	−99.21	116.82	302	15.74	7.72	85.31	0.1447	0.071	0.0872
33 v13m	0.125	0.0	1.0	33.76	62.32	−99.11	117.08	302	16.12	7.89	86.04	0.1465	0.0717	0.0891
34 v25m	0.25	0.0	1.0	36.14	63.67	−94.92	114.3	304	18.24	9.08	85.92	0.1611	0.0802	0.1025
35 v38m	0.375	0.0	1.0	39.92	66.72	−88.51	110.85	307	22.16	11.2	86.08	0.1855	0.0938	0.1264
36 v50m	0.5	0.0	1.0	44.48	70.81	−81.06	107.64	311	27.69	14.17	86.65	0.2155	0.1103	0.16
37 v63m	0.625	0.0	1.0	49.17	73.75	−72.52	103.43	315	33.92	17.73	86.03	0.2464	0.1288	0.2002
38 v75m	0.75	0.0	1.0	54.0	78.18	−64.6	101.42	320	41.69	21.98	86.6	0.2774	0.1463	0.2481
39 v88m	0.875	0.0	1.0	58.64	82.07	−56.57	99.68	325	50.06	26.64	86.57	0.3066	0.1632	0.3008
40 m00o	1.0	0.0	1.0	63.05	86.31	−49.33	99.42	330	59.22	31.65	87.07	0.3328	0.1779	0.3573
41 m13o	1.0	0.0	0.875	61.53	84.13	−37.24	92.0	336	55.65	29.85	67.96	0.3626	0.1945	0.337
42 m25o	1.0	0.0	0.75	60.16	81.85	−23.47	85.15	344	52.45	28.3	50.47	0.3997	0.2157	0.3194
43 m38o	1.0	0.0	0.675	58.9	79.74	−7.8	80.12	354	49.61	26.92	34.95	0.445	0.2415	0.3038
44 m50o	1.0	0.0	0.5	57.81	82.98	6.49	83.23	4	49.07	25.76	23.97	0.4967	0.2607	0.2908
45 m63o	1.0	0.0	0.375	56.92	76.22	29.91	81.88	21	45.28	24.84	11.97	0.5516	0.3026	0.2804
46 m75o	1.0	0.0	0.25	56.33	75.18	51.9	91.35	35	44.05	24.24	5.25	0.5989	0.3296	0.2737
47 m88o	1.0	0.0	0.125	56.09	74.8	67.06	100.46	42	43.57	24.01	2.55	0.6213	0.3423	0.271
48 o00y	1.0	0.0	0.0	56.02	74.66	67.9	100.92	42	43.41	23.93	2.42	0.6223	0.343	0.2701
49 n00w	0.0	0.0	0.0	0.46	0.0	0.0	0.01	0	0.05	0.05	0.06	0.3127	0.329	0.0006
50 n13w	0.125	0.125	0.125	2.38	4.39	1.4	4.61	18	0.36	0.26	0.19	0.4418	0.3253	0.003
51 n25w	0.25	0.25	0.25	22.26	6.95	3.2	7.65	25	3.86	3.59	3.37	0.357	0.3319	0.0405
52 n38w	0.375	0.375	0.375	39.92	4.2	2.74	5.01	33	11.21	11.2	11.19	0.3337	0.3334	0.1264
53 n50w	0.5	0.5	0.5	54.11	2.7	2.01	3.37	37	21.55	22.08	22.86	0.3241	0.3321	0.2492
54 n63w	0.625	0.625	0.625	66.29	1.68	1.61	2.33	44	34.41	35.7	37.56	0.3196	0.3315	0.403
55 n75w	0.75	0.75	0.75	77.06	1.0	0.93	1.37	43	49.43	51.63	55.23	0.3163	0.3303	0.5828
56 n88w	0.875	0.875	0.875	86.67	0.65	0.33	0.73	27	66.18	69.33	75.06	0.3143	0.3292	0.7826
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness *L=00 of black for illuminant D65**

System TLS00a
CRT monitor



***Y* Yellow**
*LCH**a = 91.9 91.2 101
*LAB**a = 91.9 −17.8 89.5

***O* Orange red**
*LCH**a = 56.0 100.9 42
*LAB**a = 56.0 74.7 67.9

***L* Leaf green**
*LCH**a = 80.2 119.7 141
*LAB**a = 80.2 −92.6 75.8

***M* Magenta red**
*LCH**a = 63.1 99.4 330
*LAB**a = 63.1 86.3 −49.3

***C* Cyan blue**
*LCH**a = 84.2 57.3 198
*LAB**a = 84.2 −54.5 −17.9

***V* Violet blue**
*LCH**a = 33.4 116.8 302
*LAB**a = 33.4 61.7 −99.2

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness L^*=00 of black for illuminant D65

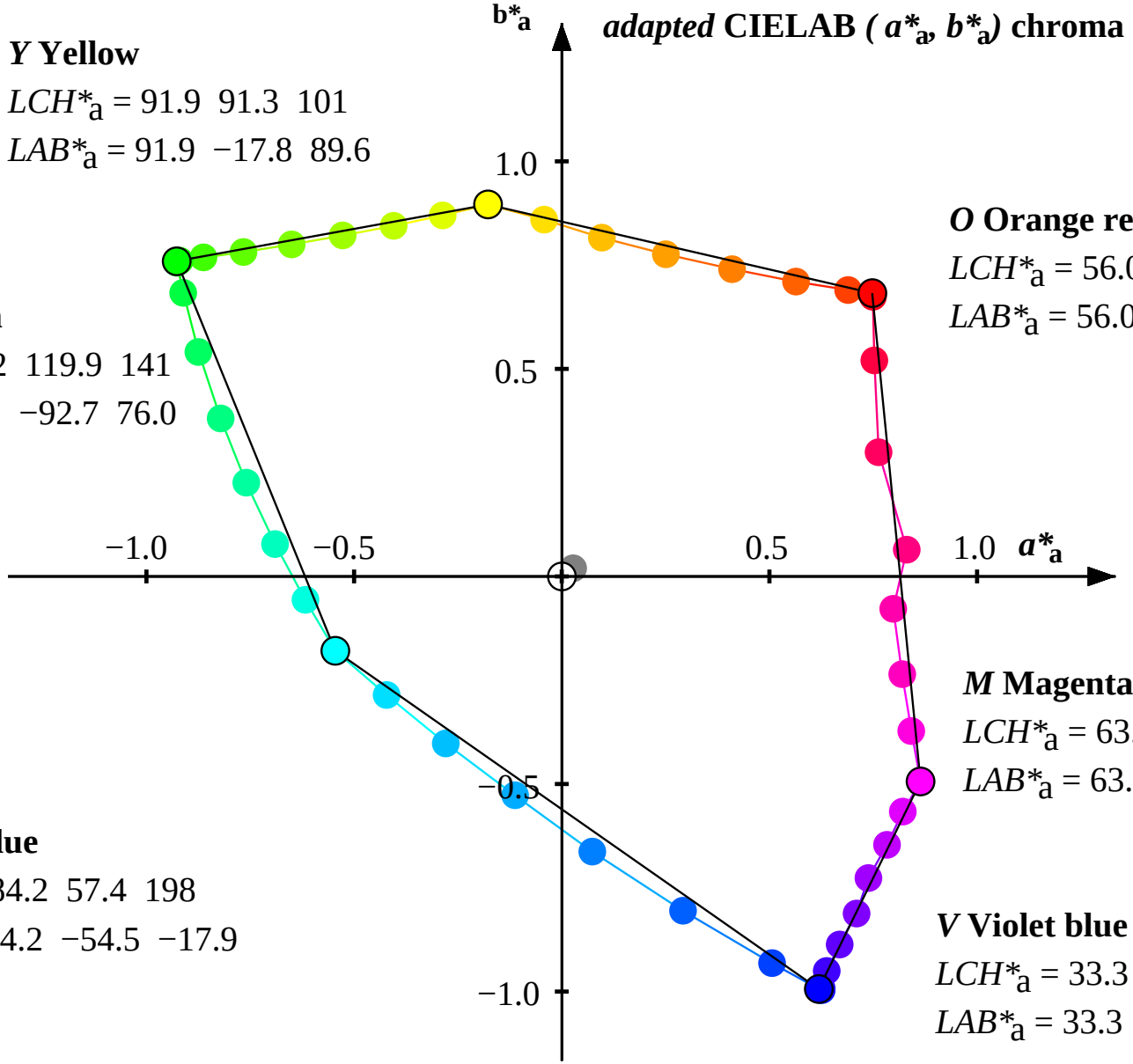
System TLS00a0
CRT monitor

	Color	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	o00y	1.0	0.0	0.0	55.98	74.75	68.26	101.23	42	43.39	23.89	2.37	0.623	0.343	0.2966
01	o13y	1.0	0.125	0.0	55.98	74.55	68.22	101.06	42	43.32	23.89	2.37	0.6226	0.3433	0.2966
02	o25y	1.0	0.25	0.0	57.89	68.96	69.01	97.56	45	44.22	25.85	2.71	0.6076	0.3551	0.3209
03	o38y	1.0	0.375	0.0	62.16	56.4	71.0	90.68	52	46.26	30.59	3.53	0.5755	0.3806	0.3798
04	o50y	1.0	0.5	0.0	67.7	40.98	74.05	84.63	61	49.3	37.56	4.72	0.5383	0.4102	0.4664
05	o63y	1.0	0.625	0.0	73.74	25.06	77.62	81.56	72	53.13	46.31	6.24	0.5028	0.4382	0.575
06	o75y	1.0	0.75	0.0	79.95	9.65	81.58	82.15	83	57.64	56.59	8.02	0.4715	0.4629	0.7026
07	o88y	1.0	0.875	0.0	86.01	−4.23	85.96	86.06	93	62.77	68.0	9.89	0.4463	0.4834	0.8443
08	y00l	1.0	1.0	0.0	91.93	−17.77	89.58	91.32	101	68.1	80.54	12.23	0.4233	0.5006	1.0
09	y13l	0.875	1.0	0.0	89.63	−28.66	86.98	91.58	108	59.05	75.51	11.72	0.4036	0.5162	0.9376
10	y25l	0.75	1.0	0.0	87.47	−40.47	84.47	93.67	116	50.7	70.96	11.28	0.3814	0.5338	0.8811
11	y38l	0.625	1.0	0.0	85.43	−52.7	82.13	97.59	123	43.22	66.85	10.86	0.3574	0.5528	0.8301
12	y50l	0.5	1.0	0.0	83.55	−65.02	79.98	103.08	129	36.69	63.2	10.48	0.3324	0.5727	0.7847
13	y63l	0.375	1.0	0.0	82.01	−76.6	78.16	109.44	134	31.45	60.32	10.2	0.3085	0.5915	0.7489
14	y75l	0.25	1.0	0.0	80.87	−86.25	76.81	115.5	138	27.64	58.23	9.99	0.2883	0.6075	0.723
15	y88l	0.125	1.0	0.0	80.24	−91.95	76.07	119.34	140	25.59	57.1	9.87	0.2764	0.6169	0.7089
16	l00c	0.0	1.0	0.0	80.16	−92.71	75.96	119.86	141	25.33	56.96	9.87	0.2748	0.6181	0.7073
17	l13c	0.0	1.0	0.125	80.15	−92.66	75.58	119.58	141	25.33	56.95	9.99	0.2745	0.6172	0.707
18	l25c	0.0	1.0	0.25	80.27	−91.09	68.34	113.88	143	25.83	57.16	12.67	0.27	0.5976	0.7097
19	l38c	0.0	1.0	0.375	80.59	−87.43	54.07	102.81	148	27.05	57.73	19.36	0.2597	0.5544	0.7167
20	l50c	0.0	1.0	0.5	81.06	−82.13	38.04	90.52	155	28.9	58.58	29.42	0.2472	0.5011	0.7273
21	l63c	0.0	1.0	0.625	81.7	−75.99	22.57	79.28	163	31.26	59.75	42.25	0.2346	0.4484	0.7418
22	l75c	0.0	1.0	0.75	82.42	−69.01	7.82	69.46	174	34.08	61.08	57.72	0.2229	0.3995	0.7584
23	l88c	0.0	1.0	0.875	83.25	−61.74	−5.67	62.02	185	37.3	62.64	75.22	0.2129	0.3576	0.7778
24	c00v	0.0	1.0	1.0	84.21	−54.52	−17.9	57.39	198	40.88	64.48	94.37	0.2047	0.3228	0.8005
25	c13v	0.0	0.875	1.0	77.23	−42.21	−28.52	50.96	214	35.36	51.91	92.28	0.1969	0.2891	0.6445
26	c25v	0.0	0.75	1.0	69.79	−27.93	−40.21	48.97	235	30.37	40.45	90.62	0.1881	0.2505	0.5022
27	c38v	0.0	0.675	1.0	61.73	−11.28	−52.73	53.93	258	25.8	30.09	88.66	0.1785	0.2082	0.3736
28	c50v	0.0	0.5	1.0	53.33	7.35	−66.3	66.72	276	21.82	21.35	87.35	0.1672	0.1635	0.265
29	c63v	0.0	0.375	1.0	44.78	29.15	−80.52	85.64	290	18.76	14.38	86.61	0.1566	0.1201	0.1786
30	c75v	0.0	0.25	1.0	37.17	50.63	−93.18	106.06	299	16.66	9.63	85.98	0.1484	0.0858	0.1195
31	c88v	0.0	0.125	1.0	33.48	62.53	−99.68	117.67	302	15.95	7.76	86.17	0.1452	0.0706	0.0964
32	v00m	0.0	0.0	1.0	33.3	61.86	−99.37	117.06	302	15.7	7.68	85.31	0.1445	0.0706	0.0953
33	v13m	0.125	0.0	1.0	33.66	62.52	−99.27	117.33	302	16.08	7.85	86.04	0.1463	0.0713	0.0974
34	v25m	0.25	0.0	1.0	36.05	63.85	−95.06	114.52	304	18.2	9.03	85.91	0.1609	0.0798	0.1122
35	v38m	0.375	0.0	1.0	39.84	66.87	−88.64	111.04	307	22.12	11.16	86.07	0.1854	0.0935	0.1385
36	v50m	0.5	0.0	1.0	44.42	70.94	−81.16	107.8	311	27.66	14.13	86.65	0.2154	0.11	0.1754
37	v63m	0.625	0.0	1.0	49.12	73.86	−72.6	103.57	315	33.89	17.69	86.02	0.2463	0.1286	0.2197
38	v75m	0.75	0.0	1.0	53.96	78.28	−64.67	101.54	320	41.67	21.94	86.6	0.2774	0.1461	0.2724
39	v88m	0.875	0.0	1.0	58.61	82.16	−56.63	99.79	325	50.04	26.61	86.56	0.3066	0.163	0.3304
40	m00o	1.0	0.0	1.0	63.03	86.39	−49.38	99.51	330	59.2	31.62	87.07	0.3328	0.1777	0.3926
41	m13o	1.0	0.0	0.875	61.5	84.21	−37.28	92.1	336	55.63	29.82	67.94	0.3627	0.1944	0.3702
42	m25o	1.0	0.0	0.75	60.13	81.94	−23.49	85.24	344	52.43	28.26	50.44	0.3998	0.2155	0.3509
43	m38o	1.0	0.0	0.675	58.86	79.83	−7.81	80.21	354	49.59	26.88	34.92	0.4452	0.2413	0.3338
44	m50o	1.0	0.0	0.5	57.78	83.07	6.5	83.33	4	49.05	25.73	23.93	0.4969	0.2606	0.3194
45	m63o	1.0	0.0	0.375	56.88	76.31	29.98	81.98	21	45.26	24.8	11.92	0.5521	0.3025	0.3079
46	m75o	1.0	0.0	0.25	56.29	75.27	52.08	91.53	35	44.03	24.21	5.2	0.5995	0.3296	0.3005
47	m88o	1.0	0.0	0.125	56.06	74.89	67.4	100.75	42	43.55	23.97	2.5	0.622	0.3423	0.2976
48	o00y	1.0	0.0	0.0	55.98	74.75	68.26	101.23	42	43.39	23.89	2.37	0.623	0.343	0.2966
49	n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
50	n13w	0.125	0.125	0.125	1.92	4.4	1.4	4.62	18	0.31	0.21	0.13	0.4723	0.3244	0.0026
51	n25w	0.25	0.25	0.25	22.09	7.01	3.24	7.72	25	3.81	3.54	3.31	0.3576	0.3319	0.044
52	n38w	0.375	0.375	0.375	39.84	4.21	2.75	5.03	33	11.17	11.16	11.14	0.3338	0.3334	0.1385
53	n50w	0.5	0.5	0.5	54.07	2.7	2.01	3.37	37	21.52	22.04	22.82	0.3242	0.3321	0.2737
54	n63w	0.625	0.625	0.625	66.27	1.69	1.61	2.33	44	34.39	35.67	37.53	0.3196	0.3316	0.4429
55	n75w	0.75	0.75	0.75	77.04	1.0	0.94	1.37	43	49.41	51.61	55.21	0.3163	0.3303	0.6407
56	n88w	0.875	0.875	0.875	86.66	0.65	0.33	0.73	27	66.17	69.32	75.05	0.3143	0.3292	0.8606
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0999

n = 88.59 / (88.59 − 0.05) = 1.001

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness *L=00 of black for illuminant D65**

System TLS00a0
CRT monitor



***Y* Yellow**
*LCH**a = 91.9 91.3 101
*LAB**a = 91.9 −17.8 89.6

***O* Orange red**
*LCH**a = 56.0 101.2 42
*LAB**a = 56.0 74.7 68.3

***L* Leaf green**
*LCH**a = 80.2 119.9 141
*LAB**a = 80.2 −92.7 76.0

***M* Magenta red**
*LCH**a = 63.0 99.5 330
*LAB**a = 63.0 86.4 −49.4

***C* Cyan blue**
*LCH**a = 84.2 57.4 198
*LAB**a = 84.2 −54.5 −17.9

***V* Violet blue**
*LCH**a = 33.3 117.1 302
*LAB**a = 33.3 61.9 −99.4

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness L^*=00 of black for illuminant D65

System TLS00a

CRT monitor

D65 reflection:

Y_N = 0.0

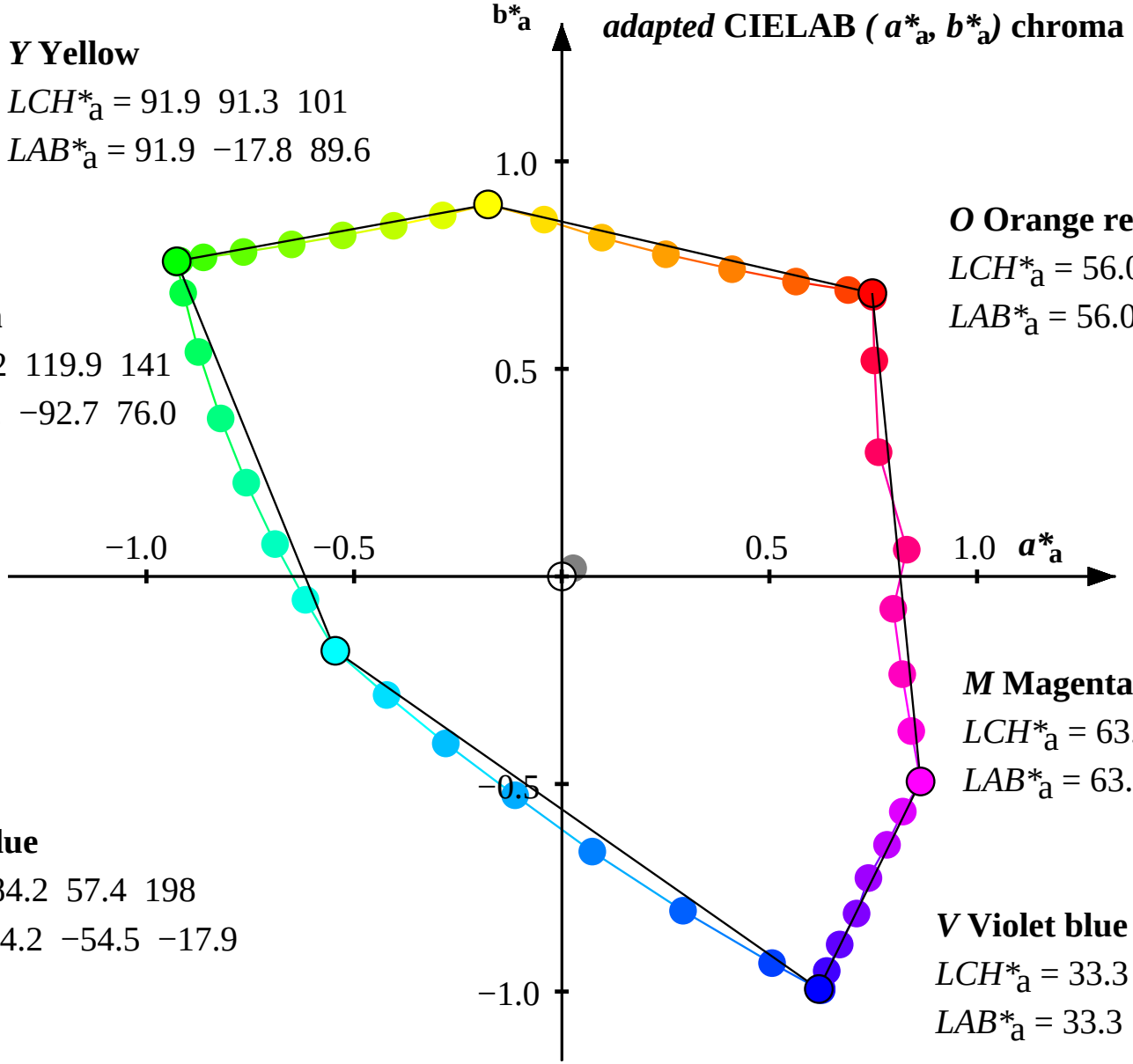
L^*_N = 0.0

Color		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	o00y	1.0	0.0	0.0	55.98	74.75	68.26	101.23	42	43.39	23.89	2.37	0.623	0.343	0.2966
01	o13y	1.0	0.125	0.0	55.98	74.55	68.22	101.06	42	43.32	23.89	2.37	0.6226	0.3433	0.2966
02	o25y	1.0	0.25	0.0	57.89	68.96	69.01	97.56	45	44.22	25.85	2.71	0.6076	0.3551	0.3209
03	o38y	1.0	0.375	0.0	62.16	56.4	71.0	90.68	52	46.26	30.59	3.53	0.5755	0.3806	0.3798
04	o50y	1.0	0.5	0.0	67.7	40.98	74.05	84.63	61	49.3	37.56	4.72	0.5383	0.4102	0.4664
05	o63y	1.0	0.625	0.0	73.74	25.06	77.62	81.56	72	53.13	46.31	6.24	0.5028	0.4382	0.575
06	o75y	1.0	0.75	0.0	79.95	9.65	81.58	82.15	83	57.64	56.59	8.02	0.4715	0.4629	0.7026
07	o88y	1.0	0.875	0.0	86.01	−4.23	85.96	86.06	93	62.77	68.0	9.89	0.4463	0.4834	0.8443
08	y00l	1.0	1.0	0.0	91.93	−17.77	89.58	91.32	101	68.1	80.54	12.23	0.4233	0.5006	1.0
09	y13l	0.875	1.0	0.0	89.63	−28.66	86.98	91.58	108	59.05	75.51	11.72	0.4036	0.5162	0.9376
10	y25l	0.75	1.0	0.0	87.47	−40.47	84.47	93.67	116	50.7	70.96	11.28	0.3814	0.5338	0.8811
11	y38l	0.625	1.0	0.0	85.43	−52.7	82.13	97.59	123	43.22	66.85	10.86	0.3574	0.5528	0.8301
12	y50l	0.5	1.0	0.0	83.55	−65.02	79.98	103.08	129	36.69	63.2	10.48	0.3324	0.5727	0.7847
13	y63l	0.375	1.0	0.0	82.01	−76.6	78.16	109.44	134	31.45	60.32	10.2	0.3085	0.5915	0.7489
14	y75l	0.25	1.0	0.0	80.87	−86.25	76.81	115.5	138	27.64	58.23	9.99	0.2883	0.6075	0.723
15	y88l	0.125	1.0	0.0	80.24	−91.95	76.07	119.34	140	25.59	57.1	9.87	0.2764	0.6169	0.7089
16	l00c	0.0	1.0	0.0	80.16	−92.71	75.96	119.86	141	25.33	56.96	9.87	0.2748	0.6181	0.7073
17	l13c	0.0	1.0	0.125	80.15	−92.66	75.58	119.58	141	25.33	56.95	9.99	0.2745	0.6172	0.707
18	l25c	0.0	1.0	0.25	80.27	−91.09	68.34	113.88	143	25.83	57.16	12.67	0.27	0.5976	0.7097
19	l38c	0.0	1.0	0.375	80.59	−87.43	54.07	102.81	148	27.05	57.73	19.36	0.2597	0.5544	0.7167
20	l50c	0.0	1.0	0.5	81.06	−82.13	38.04	90.52	155	28.9	58.58	29.42	0.2472	0.5011	0.7273
21	l63c	0.0	1.0	0.625	81.7	−75.99	22.57	79.28	163	31.26	59.75	42.25	0.2346	0.4484	0.7418
22	l75c	0.0	1.0	0.75	82.42	−69.01	7.82	69.46	174	34.08	61.08	57.72	0.2229	0.3995	0.7584
23	l88c	0.0	1.0	0.875	83.25	−61.74	−5.67	62.02	185	37.3	62.64	75.22	0.2129	0.3576	0.7778
24	c00v	0.0	1.0	1.0	84.21	−54.52	−17.9	57.39	198	40.88	64.48	94.37	0.2047	0.3228	0.8005
25	c13v	0.0	0.875	1.0	77.23	−42.21	−28.52	50.96	214	35.36	51.91	92.28	0.1969	0.2891	0.6445
26	c25v	0.0	0.75	1.0	69.79	−27.93	−40.21	48.97	235	30.37	40.45	90.62	0.1881	0.2505	0.5022
27	c38v	0.0	0.675	1.0	61.73	−11.28	−52.73	53.93	258	25.8	30.09	88.66	0.1785	0.2082	0.3736
28	c50v	0.0	0.5	1.0	53.33	7.35	−66.3	66.72	276	21.82	21.35	87.35	0.1672	0.1635	0.265
29	c63v	0.0	0.375	1.0	44.78	29.15	−80.52	85.64	290	18.76	14.38	86.61	0.1566	0.1201	0.1786
30	c75v	0.0	0.25	1.0	37.17	50.63	−93.18	106.06	299	16.66	9.63	85.98	0.1484	0.0858	0.1195
31	c88v	0.0	0.125	1.0	33.48	62.53	−99.68	117.67	302	15.95	7.76	86.17	0.1452	0.0706	0.0964
32	v00m	0.0	0.0	1.0	33.3	61.86	−99.37	117.06	302	15.7	7.68	85.31	0.1445	0.0706	0.0953
33	v13m	0.125	0.0	1.0	33.66	62.52	−99.27	117.33	302	16.08	7.85	86.04	0.1463	0.0713	0.0974
34	v25m	0.25	0.0	1.0	36.05	63.85	−95.06	114.52	304	18.2	9.03	85.91	0.1609	0.0798	0.1122
35	v38m	0.375	0.0	1.0	39.84	66.87	−88.64	111.04	307	22.12	11.16	86.07	0.1854	0.0935	0.1385
36	v50m	0.5	0.0	1.0	44.42	70.94	−81.16	107.8	311	27.66	14.13	86.65	0.2154	0.11	0.1754
37	v63m	0.625	0.0	1.0	49.12	73.86	−72.6	103.57	315	33.89	17.69	86.02	0.2463	0.1286	0.2197
38	v75m	0.75	0.0	1.0	53.96	78.28	−64.67	101.54	320	41.67	21.94	86.6	0.2774	0.1461	0.2724
39	v88m	0.875	0.0	1.0	58.61	82.16	−56.63	99.79	325	50.04	26.61	86.56	0.3066	0.163	0.3304
40	m00o	1.0	0.0	1.0	63.03	86.39	−49.38	99.51	330	59.2	31.62	87.07	0.3328	0.1777	0.3926
41	m13o	1.0	0.0	0.875	61.5	84.21	−37.28	92.1	336	55.63	29.82	67.94	0.3627	0.1944	0.3702
42	m25o	1.0	0.0	0.75	60.13	81.94	−23.49	85.24	344	52.43	28.26	50.44	0.3998	0.2155	0.3509
43	m38o	1.0	0.0	0.675	58.86	79.83	−7.81	80.21	354	49.59	26.88	34.92	0.4452	0.2413	0.3338
44	m50o	1.0	0.0	0.5	57.78	83.07	6.5	83.33	4	49.05	25.73	23.93	0.4969	0.2606	0.3194
45	m63o	1.0	0.0	0.375	56.88	76.31	29.98	81.98	21	45.26	24.8	11.92	0.5521	0.3025	0.3079
46	m75o	1.0	0.0	0.25	56.29	75.27	52.08	91.53	35	44.03	24.21	5.2	0.5995	0.3296	0.3005
47	m88o	1.0	0.0	0.125	56.06	74.89	67.4	100.75	42	43.55	23.97	2.5	0.622	0.3423	0.2976
48	o00y	1.0	0.0	0.0	55.98	74.75	68.26	101.23	42	43.39	23.89	2.37	0.623	0.343	0.2966
49	n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
50	n13w	0.125	0.125	0.125	1.92	4.4	1.4	4.62	18	0.31	0.21	0.13	0.4723	0.3244	0.0026
51	n25w	0.25	0.25	0.25	22.09	7.01	3.24	7.72	25	3.81	3.54	3.31	0.3576	0.3319	0.044
52	n38w	0.375	0.375	0.375	39.84	4.21	2.75	5.03	33	11.17	11.16	11.14	0.3338	0.3334	0.1385
53	n50w	0.5	0.5	0.5	54.07	2.7	2.01	3.37	37	21.52	22.04	22.82	0.3242	0.3321	0.2737
54	n63w	0.625	0.625	0.625	66.27	1.69	1.61	2.33	44	34.39	35.67	37.53	0.3196	0.3316	0.4429
55	n75w	0.75	0.75	0.75	77.04	1.0	0.94	1.37	43	49.41	51.61	55.21	0.3163	0.3303	0.6407
56	n88w	0.875	0.875	0.875	86.66	0.65	0.33	0.73	27	66.17	69.32	75.05	0.3143	0.3292	0.8606
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0999

n = 88.59 / (88.59 + 0.0) = 1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness *L=00 of black for illuminant D65**

System TLS00a
CRT monitor
D65 reflection:
Y_N = 0.0
***L**$_N$ = 0.0**



***Y* Yellow**
*LCH**$_a$ = 91.9 91.3 101
*LAB**$_a$ = 91.9 −17.8 89.6

***O* Orange red**
*LCH**$_a$ = 56.0 101.2 42
*LAB**$_a$ = 56.0 74.7 68.3

***L* Leaf green**
*LCH**$_a$ = 80.2 119.9 141
*LAB**$_a$ = 80.2 −92.7 76.0

***M* Magenta red**
*LCH**$_a$ = 63.0 99.5 330
*LAB**$_a$ = 63.0 86.4 −49.4

***C* Cyan blue**
*LCH**$_a$ = 84.2 57.4 198
*LAB**$_a$ = 84.2 −54.5 −17.9

***V* Violet blue**
*LCH**$_a$ = 33.3 117.1 302
*LAB**$_a$ = 33.3 61.9 −99.4

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness L^*=06 of black for illuminant D65

System TLS06a

CRT monitor

D65 reflection:

Y_N = 0.63

L^*_N = 5.69

Color	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 o00y	1.0	0.0	0.0	56.44	73.63	64.25	97.72	41	43.68	24.35	3.03	0.6147	0.3426	0.3021
01 o13y	1.0	0.125	0.0	56.44	73.44	64.22	97.56	41	43.61	24.35	3.04	0.6143	0.3429	0.3021
02 o25y	1.0	0.25	0.0	58.31	67.97	65.32	94.27	44	44.5	26.29	3.37	0.6001	0.3545	0.3262
03 o38y	1.0	0.375	0.0	62.51	55.66	67.87	87.78	51	46.53	31.0	4.18	0.5694	0.3794	0.3846
04 o50y	1.0	0.5	0.0	67.96	40.49	71.44	82.11	60	49.54	37.92	5.37	0.5337	0.4085	0.4705
05 o63y	1.0	0.625	0.0	73.94	24.8	75.41	79.38	72	53.35	46.61	6.88	0.4994	0.4362	0.5783
06 o75y	1.0	0.75	0.0	80.08	9.56	79.68	80.25	83	57.82	56.82	8.65	0.469	0.4608	0.7049
07 o88y	1.0	0.875	0.0	86.08	−4.2	84.27	84.37	93	62.93	68.15	10.51	0.4445	0.4813	0.8455
08 y00l	1.0	1.0	0.0	91.95	−17.63	88.08	89.83	101	68.22	80.6	12.83	0.422	0.4986	1.0
09 y13l	0.875	1.0	0.0	89.68	−28.42	85.46	90.07	108	59.22	75.61	12.32	0.4025	0.5138	0.9381
10 y25l	0.75	1.0	0.0	87.53	−40.1	82.93	92.12	116	50.93	71.09	11.88	0.3804	0.5309	0.882
11 y38l	0.625	1.0	0.0	85.51	−52.18	80.58	96.0	123	43.51	67.01	11.46	0.3567	0.5493	0.8314
12 y50l	0.5	1.0	0.0	83.64	−64.32	78.41	101.42	129	37.02	63.38	11.09	0.3321	0.5685	0.7864
13 y63l	0.375	1.0	0.0	82.12	−75.7	76.57	107.69	135	31.82	60.52	10.81	0.3085	0.5867	0.7508
14 y75l	0.25	1.0	0.0	80.98	−85.18	75.21	113.64	139	28.04	58.44	10.6	0.2888	0.602	0.7251
15 y88l	0.125	1.0	0.0	80.36	−90.75	74.47	117.4	141	26.0	57.32	10.48	0.2772	0.6111	0.7112
16 l00c	0.0	1.0	0.0	80.28	−91.5	74.36	117.91	141	25.74	57.19	10.48	0.2756	0.6122	0.7095
17 l13c	0.0	1.0	0.125	80.27	−91.45	74.0	117.64	141	25.75	57.17	10.6	0.2753	0.6114	0.7093
18 l25c	0.0	1.0	0.25	80.39	−89.91	67.05	112.17	143	26.24	57.38	13.26	0.2708	0.5923	0.7119
19 l38c	0.0	1.0	0.375	80.71	−86.33	53.23	101.43	148	27.45	57.94	19.9	0.2607	0.5503	0.7189
20 l50c	0.0	1.0	0.5	81.17	−81.12	37.55	89.4	155	29.29	58.79	29.89	0.2483	0.4983	0.7294
21 l63c	0.0	1.0	0.625	81.81	−75.1	22.32	78.35	163	31.63	59.95	42.63	0.2357	0.4467	0.7438
22 l75c	0.0	1.0	0.75	82.53	−68.24	7.75	68.68	174	34.43	61.27	58.0	0.224	0.3987	0.7603
23 l88c	0.0	1.0	0.875	83.35	−61.08	−5.62	61.35	185	37.63	62.83	75.37	0.214	0.3573	0.7795
24 c00v	0.0	1.0	1.0	84.3	−53.96	−17.76	56.82	198	41.18	64.65	94.39	0.2057	0.3229	0.8021
25 c13v	0.0	0.875	1.0	77.38	−41.71	−28.28	50.41	214	35.71	52.17	92.31	0.1982	0.2895	0.6473
26 c25v	0.0	0.75	1.0	70.03	−27.54	−39.82	48.43	235	30.75	40.79	90.66	0.1896	0.2515	0.5061
27 c38v	0.0	0.675	1.0	62.09	−11.09	−52.16	53.33	258	26.22	30.5	88.71	0.1803	0.2097	0.3785
28 c50v	0.0	0.5	1.0	53.84	7.2	−65.47	65.87	276	22.26	21.82	87.42	0.1693	0.1659	0.2707
29 c63v	0.0	0.375	1.0	45.51	28.38	−79.31	84.24	290	19.22	14.91	86.68	0.1591	0.1234	0.185
30 c75v	0.0	0.25	1.0	38.17	48.94	−91.5	103.77	298	17.13	10.19	86.05	0.1511	0.0898	0.1264
31 c88v	0.0	0.125	1.0	34.66	60.17	−97.69	114.74	302	16.43	8.33	86.24	0.148	0.0751	0.1034
32 v00m	0.0	0.0	1.0	34.49	59.5	−97.37	114.12	301	16.18	8.25	85.39	0.1474	0.0751	0.1023
33 v13m	0.125	0.0	1.0	34.83	60.19	−97.3	114.42	302	16.56	8.42	86.11	0.1491	0.0758	0.1044
34 v25m	0.25	0.0	1.0	37.11	61.73	−93.29	111.88	303	18.67	9.6	85.99	0.1634	0.084	0.1191
35 v38m	0.375	0.0	1.0	40.74	65.02	−87.14	108.73	307	22.56	11.7	86.15	0.1874	0.0972	0.1452
36 v50m	0.5	0.0	1.0	45.16	69.34	−79.94	105.83	311	28.06	14.65	86.72	0.2168	0.1132	0.1818
37 v63m	0.625	0.0	1.0	49.73	72.47	−71.6	101.88	315	34.25	18.19	86.09	0.2472	0.1313	0.2257
38 v75m	0.75	0.0	1.0	54.46	77.05	−63.86	100.08	320	41.97	22.41	86.67	0.2779	0.1484	0.278
39 v88m	0.875	0.0	1.0	59.02	81.05	−55.98	98.51	325	50.28	27.05	86.63	0.3067	0.165	0.3356
40 m00o	1.0	0.0	1.0	63.36	85.38	−48.85	98.37	330	59.38	32.02	87.13	0.3326	0.1794	0.3973
41 m13o	1.0	0.0	0.875	61.86	83.17	−36.83	90.97	336	55.83	30.23	68.14	0.3621	0.1961	0.3751
42 m25o	1.0	0.0	0.75	60.51	80.88	−23.17	84.14	344	52.65	28.69	50.77	0.3986	0.2172	0.356
43 m38o	1.0	0.0	0.675	59.27	78.76	−7.68	79.13	354	49.83	27.32	35.35	0.4429	0.2428	0.3389
44 m50o	1.0	0.0	0.5	58.2	81.93	6.37	82.18	4	49.3	26.17	24.44	0.4934	0.2619	0.3247
45 m63o	1.0	0.0	0.375	57.32	75.21	29.16	80.66	21	45.53	25.25	12.52	0.5466	0.3031	0.3133
46 m75o	1.0	0.0	0.25	56.74	74.16	49.97	89.43	34	44.31	24.66	5.85	0.5923	0.3296	0.306
47 m88o	1.0	0.0	0.125	56.51	73.77	63.54	97.37	41	43.84	24.43	3.16	0.6138	0.342	0.303
48 o00y	1.0	0.0	0.0	56.44	73.63	64.25	97.72	41	43.68	24.35	3.03	0.6147	0.3426	0.3021
49 n00w	0.0	0.0	0.0	5.65	0.0	0.0	0.01	0	0.59	0.63	0.68	0.3127	0.329	0.0078
50 n13w	0.125	0.125	0.125	7.55	4.31	1.39	4.53	18	0.9	0.84	0.81	0.3534	0.3278	0.0104
51 n25w	0.25	0.25	0.25	24.13	6.31	2.87	6.93	24	4.38	4.14	3.97	0.3508	0.3315	0.0514
52 n38w	0.375	0.375	0.375	40.74	4.05	2.64	4.84	33	11.69	11.7	11.74	0.3326	0.3332	0.1452
53 n50w	0.5	0.5	0.5	54.57	2.65	1.97	3.3	37	21.96	22.51	23.34	0.3238	0.332	0.2793
54 n63w	0.625	0.625	0.625	66.55	1.66	1.59	2.3	44	34.74	36.04	37.94	0.3195	0.3315	0.4472
55 n75w	0.75	0.75	0.75	77.2	0.99	0.93	1.35	43	49.66	51.87	55.5	0.3162	0.3303	0.6435
56 n88w	0.875	0.875	0.875	86.73	0.65	0.33	0.72	27	66.3	69.45	75.2	0.3143	0.3292	0.8617
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0992

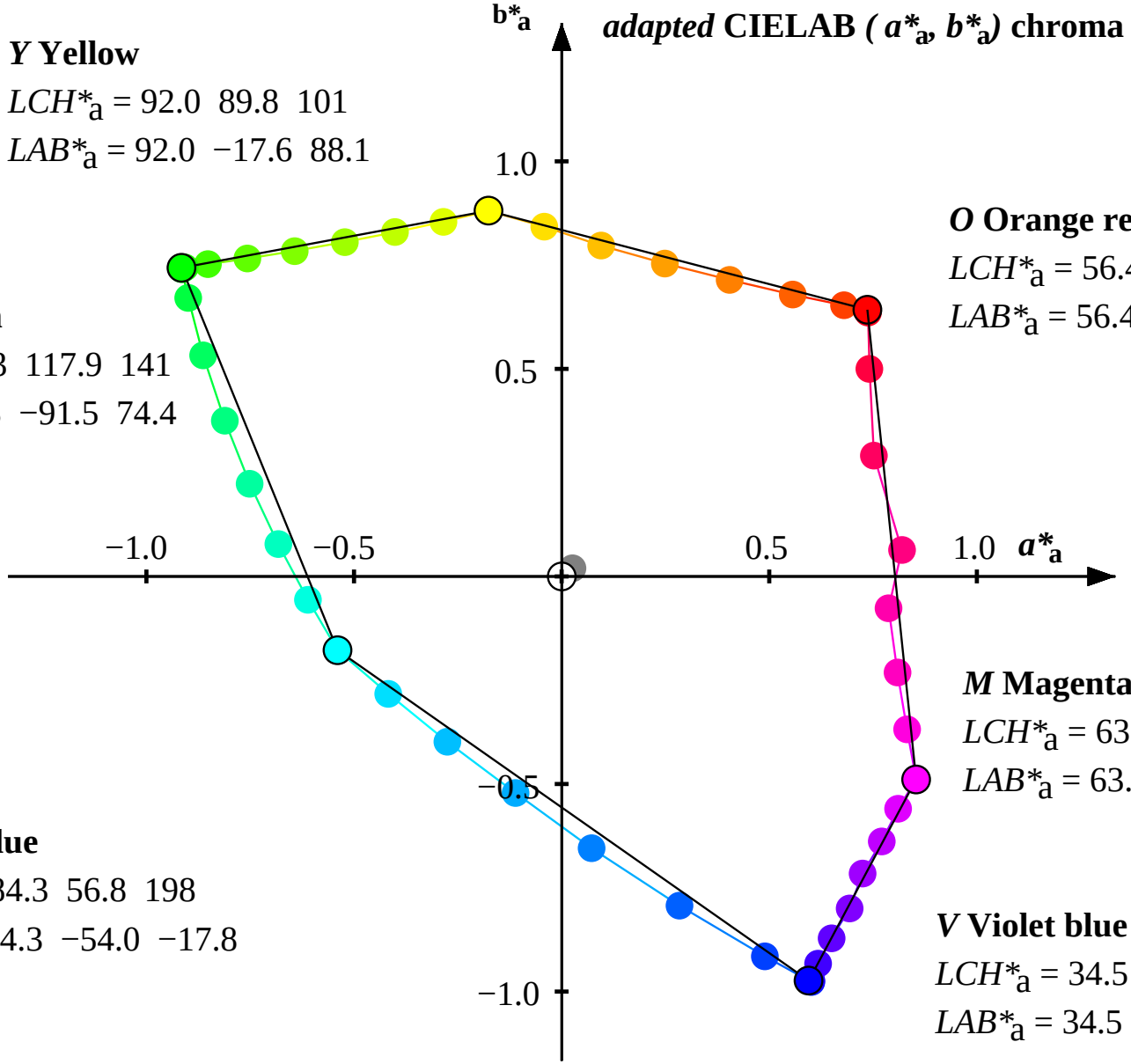
n = 88.59 / (88.59 + 0.63) = 0.993

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness *L=06 of black for illuminant D65**

System TLS06a
CRT monitor

D65 reflection:
Y_N = 0.63
L^*_N = 5.69

adapted CIELAB (a^*_a, b^*_a) chroma diagram



Y Yellow
LCH^*_a = 92.0 89.8 101
LAB^*_a = 92.0 −17.6 88.1

O Orange red
LCH^*_a = 56.4 97.7 41
LAB^*_a = 56.4 73.6 64.3

L Leaf green
LCH^*_a = 80.3 117.9 141
LAB^*_a = 80.3 −91.5 74.4

M Magenta red
LCH^*_a = 63.4 98.4 330
LAB^*_a = 63.4 85.4 −48.9

C Cyan blue
LCH^*_a = 84.3 56.8 198
LAB^*_a = 84.3 −54.0 −17.8

V Violet blue
LCH^*_a = 34.5 114.1 301
LAB^*_a = 34.5 59.5 −97.4

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

System TLS11a

CRT monitor

D65 reflection:

Y_N = 1.26

L^*_N = 11.0

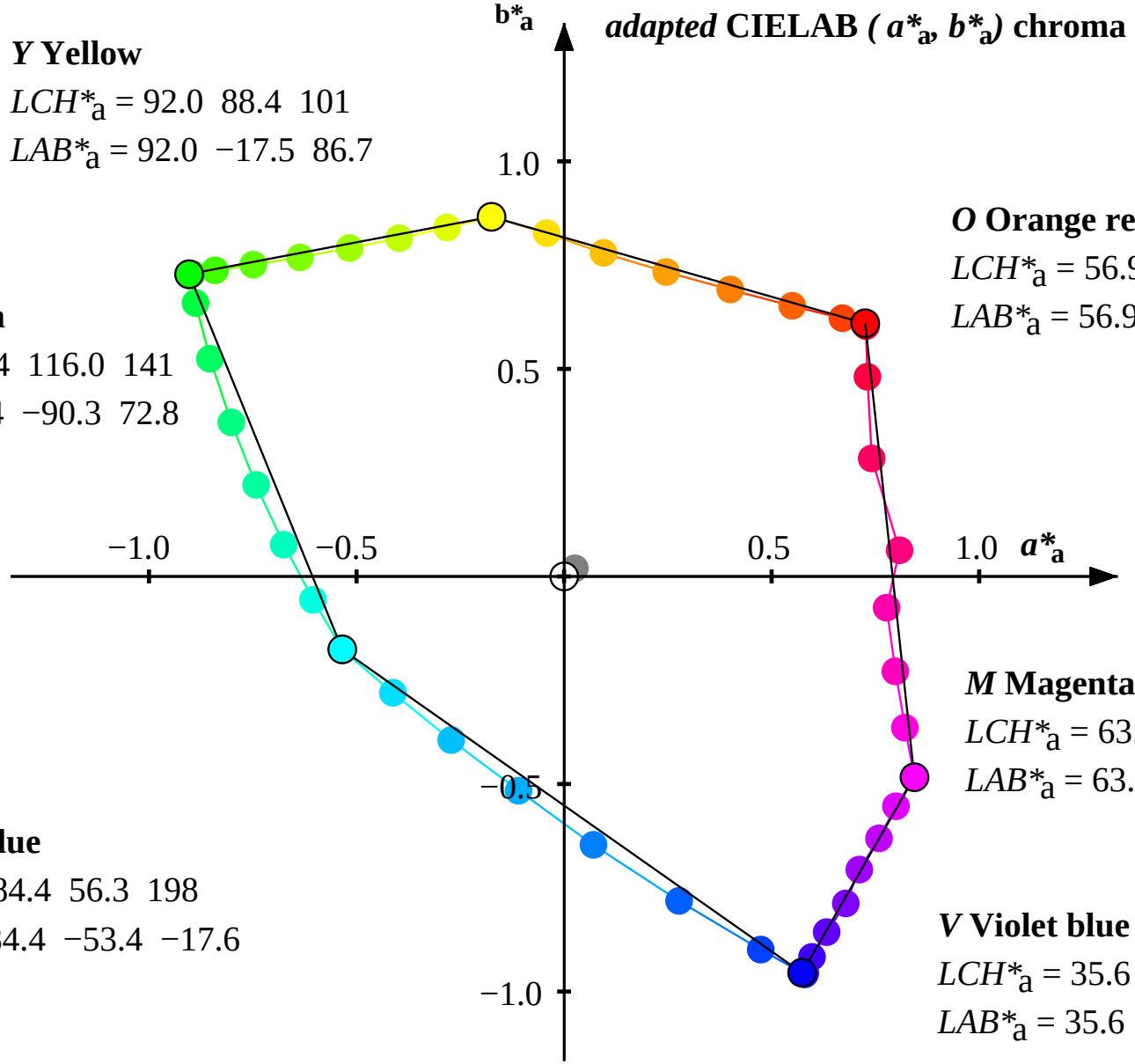
Color		r=olv*$_1$	g=olv*$_2$	b=olv*$_3$	L^*_a=LAB*$_{1a}$	a^*_a=LAB*$_{2a}$	b^*_a=LAB*$_{3a}$	$C^*_{ab,a}$=LAB*$_{ab,a}$	$h_{ab,a}$	X_a=XYZ$_{1a}$	Y_a=XYZ$_{2a}$	Z_a=XYZ$_{3a}$	x_a	y_a	Y_a/88.59
00	o00y	1.0	0.0	0.0	56.88	72.55	60.93	94.75	40	43.96	24.8	3.69	0.6068	0.3423	0.3075
01	o13y	1.0	0.125	0.0	56.88	72.36	60.91	94.58	40	43.9	24.8	3.69	0.6064	0.3426	0.3075
02	o25y	1.0	0.25	0.0	58.72	67.01	62.21	91.44	43	44.78	26.73	4.02	0.5929	0.3538	0.3314
03	o38y	1.0	0.375	0.0	62.85	54.95	65.14	85.22	50	46.79	31.4	4.83	0.5636	0.3783	0.3894
04	o50y	1.0	0.5	0.0	68.22	40.02	69.09	79.84	60	49.79	38.28	6.01	0.5293	0.4069	0.4746
05	o63y	1.0	0.625	0.0	74.13	24.54	73.38	77.38	72	53.57	46.9	7.51	0.4961	0.4344	0.5815
06	o75y	1.0	0.75	0.0	80.2	9.47	77.9	78.48	83	58.01	57.04	9.26	0.4666	0.4588	0.7072
07	o88y	1.0	0.875	0.0	86.15	−4.16	82.67	82.77	93	63.07	68.29	11.11	0.4427	0.4793	0.8467
08	y00l	1.0	1.0	0.0	91.98	−17.49	86.65	88.4	101	68.33	80.65	13.41	0.4208	0.4967	1.0
09	y13l	0.875	1.0	0.0	89.72	−28.18	84.01	88.62	109	59.4	75.7	12.91	0.4013	0.5114	0.9386
10	y25l	0.75	1.0	0.0	87.59	−39.74	81.47	90.65	116	51.17	71.21	12.47	0.3794	0.5281	0.8829
11	y38l	0.625	1.0	0.0	85.58	−51.66	79.1	94.48	123	43.79	67.16	12.06	0.356	0.546	0.8327
12	y50l	0.5	1.0	0.0	83.74	−63.63	76.92	99.83	130	37.35	63.56	11.68	0.3317	0.5645	0.7881
13	y63l	0.375	1.0	0.0	82.22	−74.83	75.07	106.01	135	32.19	60.71	11.41	0.3086	0.582	0.7528
14	y75l	0.25	1.0	0.0	81.1	−84.13	73.71	111.86	139	28.43	58.65	11.2	0.2893	0.5968	0.7272
15	y88l	0.125	1.0	0.0	80.48	−89.59	72.95	115.55	141	26.41	57.54	11.09	0.2779	0.6055	0.7134
16	l00c	0.0	1.0	0.0	80.41	−90.32	72.85	116.05	141	26.15	57.41	11.08	0.2763	0.6066	0.7118
17	l13c	0.0	1.0	0.125	80.4	−90.27	72.5	115.79	141	26.16	57.39	11.2	0.2761	0.6057	0.7116
18	l25c	0.0	1.0	0.25	80.52	−88.76	65.83	110.52	143	26.64	57.6	13.85	0.2716	0.5872	0.7141
19	l38c	0.0	1.0	0.375	80.83	−85.25	52.43	100.09	148	27.85	58.16	20.44	0.2616	0.5464	0.7211
20	l50c	0.0	1.0	0.5	81.29	−80.15	37.08	88.32	155	29.67	59.0	30.36	0.2493	0.4956	0.7315
21	l63c	0.0	1.0	0.625	81.92	−74.23	22.08	77.45	163	32.0	60.15	43.01	0.2367	0.445	0.7458
22	l75c	0.0	1.0	0.75	82.63	−67.48	7.67	67.92	174	34.78	61.47	58.27	0.2251	0.3978	0.7621
23	l88c	0.0	1.0	0.875	83.45	−60.43	−5.57	60.7	185	37.95	63.01	75.52	0.2151	0.357	0.7812
24	c00v	0.0	1.0	1.0	84.39	−53.41	−17.62	56.25	198	41.49	64.82	94.4	0.2067	0.3229	0.8036
25	c13v	0.0	0.875	1.0	77.53	−41.23	−28.03	49.87	214	36.05	52.43	92.34	0.1994	0.2899	0.65
26	c25v	0.0	0.75	1.0	70.26	−27.16	−39.45	47.91	235	31.13	41.12	90.7	0.191	0.2524	0.5099
27	c38v	0.0	0.675	1.0	62.43	−10.91	−51.6	52.75	258	26.62	30.91	88.76	0.182	0.2113	0.3833
28	c50v	0.0	0.5	1.0	54.33	7.05	−64.66	65.05	276	22.7	22.29	87.48	0.1713	0.1683	0.2763
29	c63v	0.0	0.375	1.0	46.21	27.65	−78.15	82.9	289	19.68	15.42	86.75	0.1615	0.1266	0.1912
30	c75v	0.0	0.25	1.0	39.13	47.37	−89.9	101.63	298	17.6	10.74	86.12	0.1538	0.0938	0.1331
31	c88v	0.0	0.125	1.0	35.78	58.02	−95.81	112.02	301	16.91	8.89	86.31	0.1508	0.0793	0.1103
32	v00m	0.0	0.0	1.0	35.62	57.35	−95.49	111.4	301	16.66	8.81	85.46	0.1502	0.0794	0.1092
33	v13m	0.125	0.0	1.0	35.94	58.05	−95.44	111.72	301	17.04	8.98	86.18	0.1519	0.08	0.1113
34	v25m	0.25	0.0	1.0	38.11	59.78	−91.62	109.4	303	19.13	10.15	86.06	0.1658	0.088	0.1258
35	v38m	0.375	0.0	1.0	41.6	63.29	−85.71	106.55	306	22.99	12.24	86.22	0.1893	0.1008	0.1518
36	v50m	0.5	0.0	1.0	45.87	67.82	−78.75	103.94	311	28.46	15.17	86.78	0.2182	0.1163	0.1881
37	v63m	0.625	0.0	1.0	50.32	71.14	−70.64	100.26	315	34.6	18.69	86.17	0.2481	0.134	0.2317
38	v75m	0.75	0.0	1.0	54.94	75.86	−63.08	98.66	320	42.26	22.87	86.73	0.2783	0.1506	0.2836
39	v88m	0.875	0.0	1.0	59.41	79.98	−55.34	97.26	325	50.52	27.48	86.7	0.3068	0.1668	0.3407
40	m00o	1.0	0.0	1.0	63.69	84.39	−48.33	97.25	330	59.55	32.42	87.2	0.3324	0.1809	0.4019
41	m13o	1.0	0.0	0.875	62.2	82.16	−36.4	89.87	336	56.03	30.64	68.34	0.3614	0.1977	0.3799
42	m25o	1.0	0.0	0.75	60.88	79.85	−22.85	83.06	344	52.88	29.11	51.09	0.3973	0.2188	0.3609
43	m38o	1.0	0.0	0.675	59.66	77.71	−7.56	78.08	354	50.07	27.75	35.78	0.4408	0.2443	0.344
44	m50o	1.0	0.0	0.5	58.61	80.82	6.25	81.06	4	49.55	26.61	24.95	0.4901	0.2632	0.3299
45	m63o	1.0	0.0	0.375	57.75	74.14	28.4	79.39	21	45.8	25.7	13.11	0.5414	0.3037	0.3186
46	m75o	1.0	0.0	0.25	57.18	73.09	48.09	87.49	33	44.59	25.11	6.48	0.5853	0.3296	0.3113
47	m88o	1.0	0.0	0.125	56.95	72.7	60.33	94.47	40	44.12	24.87	3.82	0.606	0.3416	0.3084
48	o00y	1.0	0.0	0.0	56.88	72.55	60.93	94.75	40	43.96	24.8	3.69	0.6068	0.3423	0.3075
49	n00w	0.0	0.0	0.0	10.87	0.0	0.0	0.01	341	1.18	1.24	1.35	0.3127	0.329	0.0154
50	n13w	0.125	0.125	0.125	12.3	3.04	1.02	3.21	18	1.49	1.45	1.48	0.336	0.3284	0.018
51	n25w	0.25	0.25	0.25	25.96	5.76	2.6	6.32	24	4.94	4.73	4.62	0.3457	0.3311	0.0587
52	n38w	0.375	0.375	0.375	41.6	3.91	2.54	4.66	33	12.19	12.24	12.33	0.3316	0.3329	0.1518
53	n50w	0.5	0.5	0.5	55.05	2.59	1.93	3.23	37	22.39	22.97	23.85	0.3235	0.3319	0.2849
54	n63w	0.625	0.625	0.625	66.83	1.64	1.57	2.27	44	35.08	36.41	38.35	0.3194	0.3315	0.4514
55	n75w	0.75	0.75	0.75	77.35	0.98	0.92	1.34	43	49.9	52.12	55.79	0.3162	0.3303	0.6463
56	n88w	0.875	0.875	0.875	86.79	0.64	0.32	0.72	27	66.42	69.59	75.35	0.3143	0.3292	0.8628
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0984

n = 88.59 / (88.59 + 1.26) = 0.986

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

System TLS11a
CRT monitor

D65 reflection:
Y_N = 1.26
L^*_N = 11.0



***Y* Yellow**
LCH^*_a = 92.0 88.4 101
LAB^*_a = 92.0 −17.5 86.7

***O* Orange red**
LCH^*_a = 56.9 94.7 40
LAB^*_a = 56.9 72.6 60.9

***L* Leaf green**
LCH^*_a = 80.4 116.0 141
LAB^*_a = 80.4 −90.3 72.8

***M* Magenta red**
LCH^*_a = 63.7 97.3 330
LAB^*_a = 63.7 84.4 −48.3

***C* Cyan blue**
LCH^*_a = 84.4 56.3 198
LAB^*_a = 84.4 −53.4 −17.6

***V* Violet blue**
LCH^*_a = 35.6 111.4 301
LAB^*_a = 35.6 57.4 −95.5

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness L^*=18 of black for illuminant D65

System TLS18a

CRT monitor

D65 reflection:

Y_N = 2.52

L^*_N = 18.01

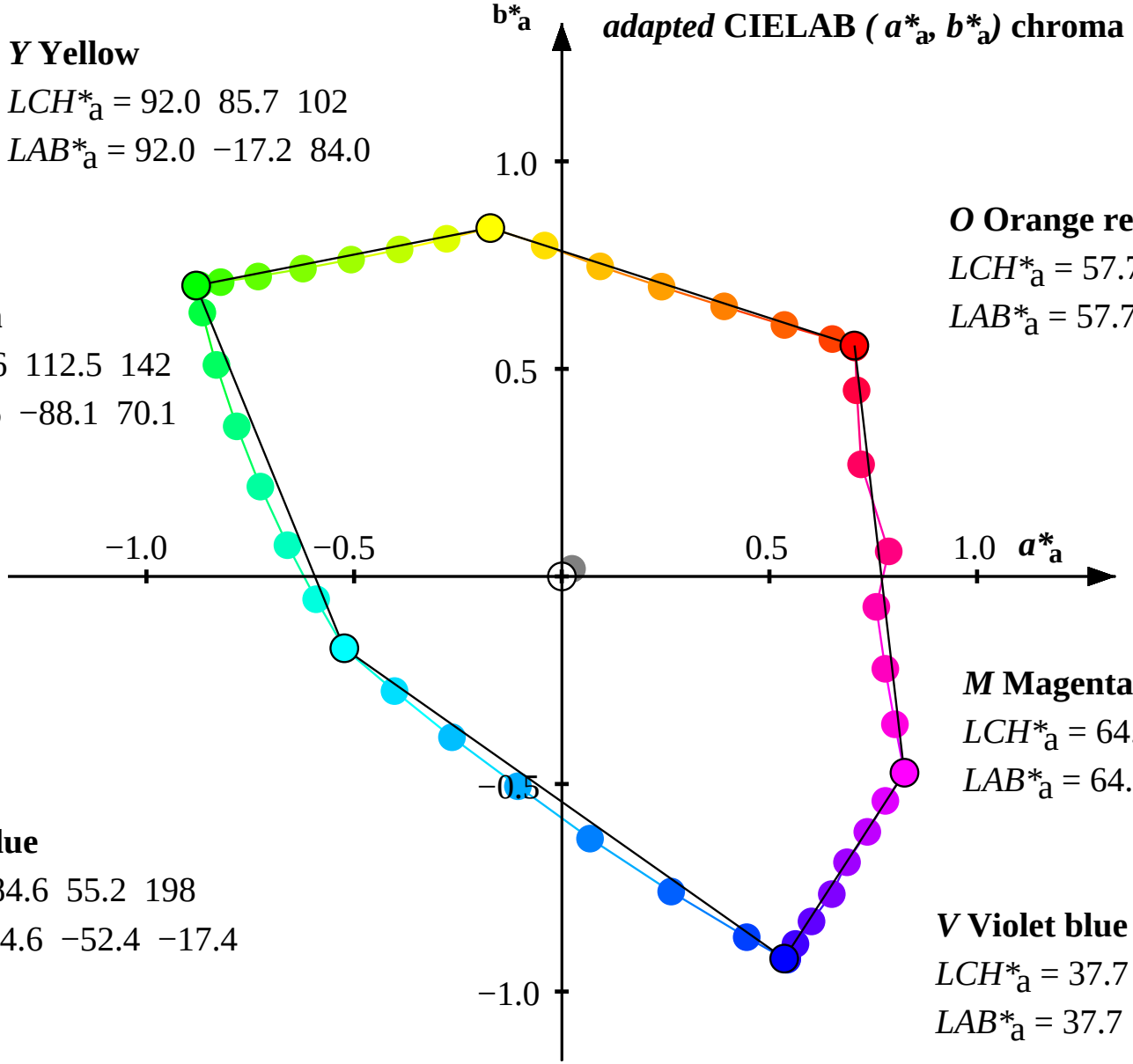
Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	57.73	70.5	55.64	89.81	38	44.52	25.68	4.97	0.5922	0.3416	0.318
01 o13y	1.0	0.125	0.0	57.73	70.31	55.62	89.65	38	44.45	25.68	4.98	0.5918	0.3419	0.318
02 o25y	1.0	0.25	0.0	59.51	65.19	57.15	86.69	41	45.33	27.58	5.3	0.5796	0.3526	0.3415
03 o38y	1.0	0.375	0.0	63.5	53.57	60.56	80.85	49	47.31	32.2	6.1	0.5526	0.3761	0.3986
04 o50y	1.0	0.5	0.0	68.73	39.12	65.0	75.87	59	50.26	38.97	7.26	0.5209	0.4039	0.4826
05 o63y	1.0	0.625	0.0	74.49	24.04	69.76	73.79	71	53.99	47.48	8.74	0.4899	0.4308	0.5878
06 o75y	1.0	0.75	0.0	80.45	9.3	74.66	75.24	83	58.37	57.47	10.47	0.4621	0.455	0.7116
07 o88y	1.0	0.875	0.0	86.29	−4.09	79.71	79.82	93	63.37	68.57	12.29	0.4394	0.4754	0.849
08 y00l	1.0	1.0	0.0	92.03	−17.22	83.97	85.72	102	68.55	80.76	14.56	0.4183	0.4928	1.0
09 y13l	0.875	1.0	0.0	89.8	−27.72	81.31	85.91	109	59.74	75.88	14.07	0.3991	0.5069	0.9395
10 y25l	0.75	1.0	0.0	87.7	−39.03	78.75	87.89	116	51.62	71.45	13.63	0.3776	0.5227	0.8847
11 y38l	0.625	1.0	0.0	85.73	−50.67	76.35	91.64	124	44.35	67.46	13.23	0.3547	0.5395	0.8352
12 y50l	0.5	1.0	0.0	83.92	−62.31	74.15	96.86	130	38.0	63.91	12.86	0.3311	0.5568	0.7913
13 y63l	0.375	1.0	0.0	82.43	−73.15	72.29	102.85	135	32.91	61.1	12.58	0.3088	0.5732	0.7565
14 y75l	0.25	1.0	0.0	81.33	−82.12	70.92	108.51	139	29.2	59.07	12.38	0.2901	0.5869	0.7314
15 y88l	0.125	1.0	0.0	80.72	−87.37	70.16	112.06	141	27.21	57.97	12.27	0.2792	0.5949	0.7178
16 l00c	0.0	1.0	0.0	80.65	−88.07	70.06	112.54	142	26.96	57.84	12.26	0.2777	0.5959	0.7161
17 l13c	0.0	1.0	0.125	80.64	−88.02	69.73	112.3	142	26.96	57.82	12.38	0.2775	0.5951	0.7159
18 l25c	0.0	1.0	0.25	80.75	−86.57	63.55	107.4	144	27.44	58.03	14.99	0.2732	0.5776	0.7185
19 l38c	0.0	1.0	0.375	81.06	−83.19	50.9	97.53	149	28.63	58.58	21.49	0.2634	0.5389	0.7253
20 l50c	0.0	1.0	0.5	81.51	−78.26	36.17	86.23	155	30.43	59.41	31.28	0.2512	0.4905	0.7356
21 l63c	0.0	1.0	0.625	82.13	−72.55	21.61	75.71	163	32.72	60.55	43.75	0.2388	0.4419	0.7497
22 l75c	0.0	1.0	0.75	82.83	−66.01	7.53	66.45	173	35.46	61.84	58.79	0.2272	0.3962	0.7657
23 l88c	0.0	1.0	0.875	83.63	−59.18	−5.48	59.44	185	38.59	63.36	75.81	0.2171	0.3564	0.7845
24 c00v	0.0	1.0	1.0	84.56	−52.35	−17.34	55.16	198	42.08	65.14	94.43	0.2087	0.3231	0.8066
25 c13v	0.0	0.875	1.0	77.83	−40.29	−27.56	48.83	214	36.71	52.93	92.4	0.2017	0.2907	0.6553
26 c25v	0.0	0.75	1.0	70.72	−26.44	−38.72	46.9	236	31.86	41.78	90.78	0.1938	0.2541	0.5173
27 c38v	0.0	0.675	1.0	63.1	−10.56	−50.52	51.62	258	27.42	31.71	88.87	0.1853	0.2142	0.3926
28 c50v	0.0	0.5	1.0	55.28	6.78	−63.11	63.48	276	23.55	23.21	87.6	0.1753	0.1727	0.2873
29 c63v	0.0	0.375	1.0	47.54	26.31	−75.94	80.38	289	20.57	16.44	86.88	0.166	0.1327	0.2035
30 c75v	0.0	0.25	1.0	40.92	44.57	−86.93	97.69	297	18.52	11.81	86.27	0.1589	0.1013	0.1463
31 c88v	0.0	0.125	1.0	37.84	54.23	−92.37	107.12	300	17.84	10.0	86.45	0.1561	0.0875	0.1238
32 v00m	0.0	0.0	1.0	37.69	53.56	−92.03	106.49	300	17.6	9.91	85.62	0.1555	0.0876	0.1227
33 v13m	0.125	0.0	1.0	37.98	54.28	−92.02	106.85	301	17.97	10.08	86.32	0.1571	0.0881	0.1248
34 v25m	0.25	0.0	1.0	39.97	56.27	−88.51	104.89	302	20.03	11.23	86.21	0.1705	0.0956	0.1391
35 v38m	0.375	0.0	1.0	43.21	60.12	−83.04	102.53	306	23.84	13.3	86.36	0.193	0.1077	0.1647
36 v50m	0.5	0.0	1.0	47.22	64.99	−76.52	100.4	310	29.23	16.19	86.92	0.2209	0.1223	0.2004
37 v63m	0.625	0.0	1.0	51.45	68.64	−68.8	97.19	315	35.28	19.66	86.31	0.2498	0.1392	0.2434
38 v75m	0.75	0.0	1.0	55.87	73.6	−61.57	95.96	320	42.84	23.78	86.87	0.2791	0.1549	0.2945
39 v88m	0.875	0.0	1.0	60.18	77.92	−54.12	94.87	325	50.99	28.32	86.83	0.3069	0.1705	0.3507
40 m00o	1.0	0.0	1.0	64.32	82.48	−47.33	95.1	330	59.89	33.19	87.33	0.332	0.184	0.411
41 m13o	1.0	0.0	0.875	62.88	80.22	−35.55	87.75	336	56.42	31.44	68.73	0.3603	0.2008	0.3893
42 m25o	1.0	0.0	0.75	61.6	77.88	−22.25	81.0	344	53.31	29.93	51.72	0.395	0.2218	0.3706
43 m38o	1.0	0.0	0.675	60.42	75.71	−7.32	76.07	354	50.54	28.59	36.62	0.4367	0.247	0.354
44 m50o	1.0	0.0	0.5	59.4	78.7	6.02	78.93	4	50.03	27.46	25.94	0.4837	0.2655	0.3401
45 m63o	1.0	0.0	0.375	58.57	72.1	27.0	76.99	21	46.33	26.57	14.26	0.5316	0.3048	0.3289
46 m75o	1.0	0.0	0.25	58.02	71.04	44.83	84.0	32	45.14	25.99	7.73	0.5725	0.3296	0.3218
47 m88o	1.0	0.0	0.125	57.8	70.64	55.17	89.63	38	44.67	25.76	5.1	0.5915	0.341	0.3189
48 o00y	1.0	0.0	0.0	57.73	70.5	55.64	89.81	38	44.52	25.68	4.97	0.5922	0.3416	0.318
49 n00w	0.0	0.0	0.0	17.69	0.0	0.0	0.01	0	2.33	2.45	2.67	0.3127	0.329	0.0303
50 n13w	0.125	0.125	0.125	18.61	2.03	0.66	2.13	18	2.63	2.66	2.8	0.3253	0.3287	0.0329
51 n25w	0.25	0.25	0.25	29.14	4.94	2.19	5.4	24	6.04	5.89	5.89	0.3388	0.3307	0.073
52 n38w	0.375	0.375	0.375	43.21	3.65	2.36	4.35	33	13.19	13.3	13.5	0.3299	0.3326	0.1647
53 n50w	0.5	0.5	0.5	55.97	2.49	1.85	3.11	37	23.25	23.88	24.86	0.323	0.3318	0.2957
54 n63w	0.625	0.625	0.625	67.38	1.6	1.53	2.21	44	35.76	37.13	39.16	0.3192	0.3314	0.4598
55 n75w	0.75	0.75	0.75	77.66	0.96	0.9	1.31	43	50.37	52.63	56.35	0.3161	0.3303	0.6516
56 n88w	0.875	0.875	0.875	86.92	0.63	0.32	0.71	27	66.67	69.85	75.64	0.3142	0.3292	0.8649
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	158	84.2	88.59	96.46	0.3127	0.329	1.0969

n = 88.59 / (88.59 + 2.52) = 0.972

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness L^*=18 of black for illuminant D65

System TLS18a
CRT monitor

D65 reflection:
Y_N = 2.52
L^*_N = 18.01



***Y* Yellow**
LCH^*_a = 92.0 85.7 102
LAB^*_a = 92.0 −17.2 84.0

***O* Orange red**
LCH^*_a = 57.7 89.8 38
LAB^*_a = 57.7 70.5 55.6

***L* Leaf green**
LCH^*_a = 80.6 112.5 142
LAB^*_a = 80.6 −88.1 70.1

***M* Magenta red**
LCH^*_a = 64.3 95.1 330
LAB^*_a = 64.3 82.5 −47.3

***C* Cyan blue**
LCH^*_a = 84.6 55.2 198
LAB^*_a = 84.6 −52.4 −17.4

***V* Violet blue**
LCH^*_a = 37.7 106.5 300
LAB^*_a = 37.7 53.6 −92.0

Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness L^*=27 of black for illuminant D65

System TLS27a

CRT monitor

D65 reflection:

Y_N = 5.04

L^*_N = 26.85

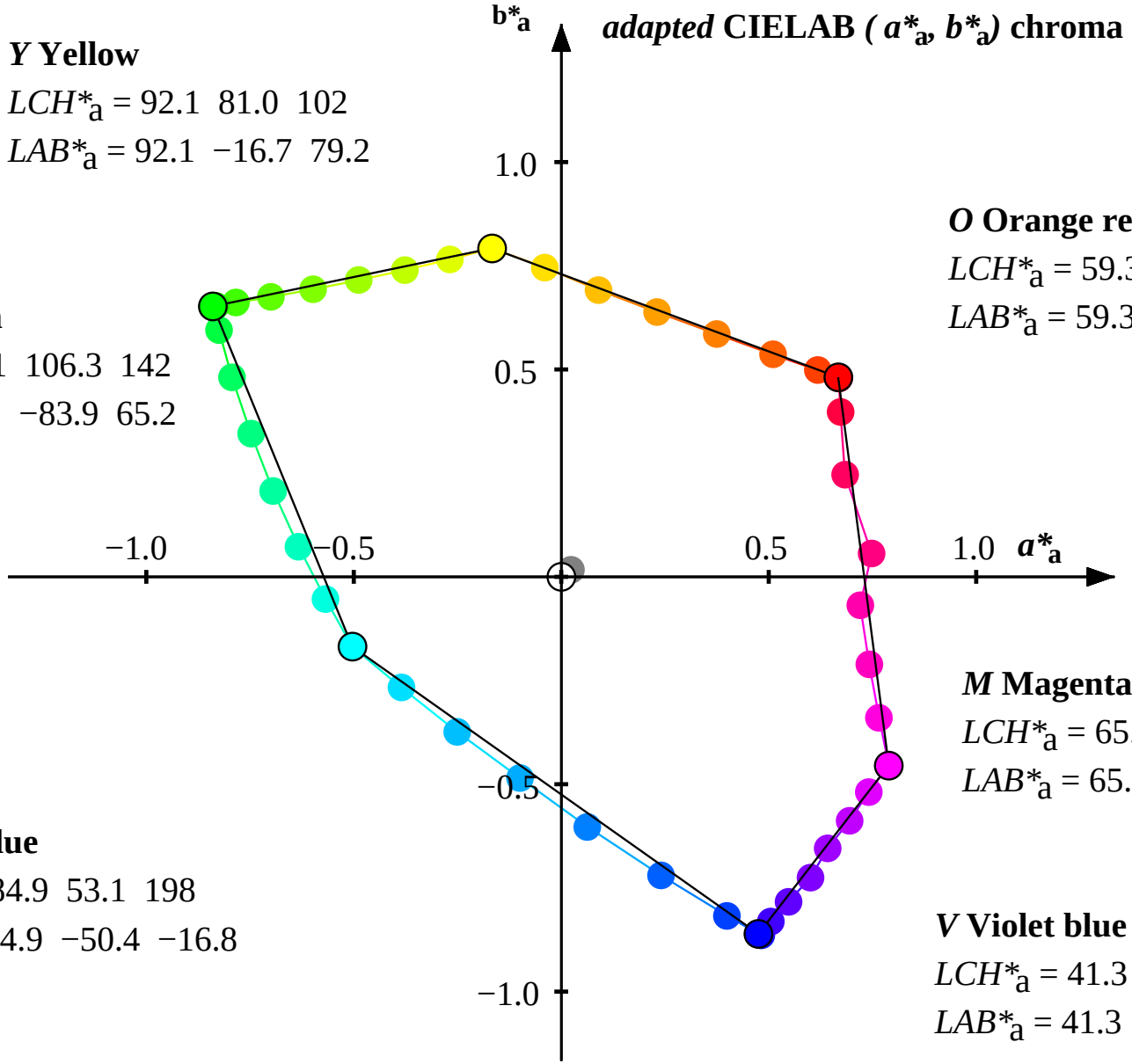
Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	59.32	66.74	48.11	82.28	36	45.59	27.37	7.43	0.567	0.3405	0.3381
01 o13y	1.0	0.125	0.0	59.32	66.56	48.1	82.12	36	45.52	27.37	7.44	0.5667	0.3407	0.3381
02 o25y	1.0	0.25	0.0	60.98	61.83	49.82	79.4	39	46.37	29.22	7.76	0.5564	0.3506	0.3609
03 o38y	1.0	0.375	0.0	64.73	51.02	53.62	74.01	46	48.3	33.71	8.53	0.5334	0.3723	0.4163
04 o50y	1.0	0.5	0.0	69.69	37.43	58.55	69.49	57	51.18	40.31	9.66	0.506	0.3985	0.4978
05 o63y	1.0	0.625	0.0	75.19	23.1	63.8	67.86	70	54.8	48.58	11.1	0.4787	0.4244	0.6
06 o75y	1.0	0.75	0.0	80.91	8.97	69.16	69.74	83	59.07	58.31	12.78	0.4538	0.448	0.7201
07 o88y	1.0	0.875	0.0	86.56	−3.96	74.56	74.67	93	63.93	69.11	14.55	0.4331	0.4682	0.8535
08 y00l	1.0	1.0	0.0	92.12	−16.71	79.22	80.96	102	68.97	80.97	16.77	0.4137	0.4857	1.0
09 y13l	0.875	1.0	0.0	89.96	−26.84	76.53	81.1	109	60.4	76.22	16.28	0.395	0.4985	0.9413
10 y25l	0.75	1.0	0.0	87.93	−37.7	73.95	83.01	117	52.5	71.91	15.86	0.3743	0.5127	0.8881
11 y38l	0.625	1.0	0.0	86.02	−48.8	71.54	86.61	124	45.42	68.02	15.47	0.3524	0.5277	0.8401
12 y50l	0.5	1.0	0.0	84.26	−59.82	69.33	91.57	131	39.25	64.57	15.11	0.33	0.543	0.7974
13 y63l	0.375	1.0	0.0	82.83	−70.01	67.47	97.24	136	34.29	61.84	14.84	0.309	0.5573	0.7637
14 y75l	0.25	1.0	0.0	81.76	−78.38	66.09	102.53	140	30.68	59.86	14.64	0.2917	0.5691	0.7393
15 y88l	0.125	1.0	0.0	81.18	−83.25	65.34	105.84	142	28.74	58.79	14.53	0.2816	0.576	0.7261
16 l00c	0.0	1.0	0.0	81.11	−83.9	65.23	106.28	142	28.5	58.67	14.53	0.2802	0.5769	0.7245
17 l13c	0.0	1.0	0.125	81.1	−83.85	64.95	106.07	142	28.5	58.65	14.64	0.28	0.5762	0.7243
18 l25c	0.0	1.0	0.25	81.21	−82.51	59.53	101.75	144	28.97	58.85	17.18	0.2759	0.5605	0.7268
19 l38c	0.0	1.0	0.375	81.5	−79.36	48.13	92.83	149	30.12	59.39	23.51	0.2665	0.5255	0.7334
20 l50c	0.0	1.0	0.5	81.94	−74.77	34.48	82.35	155	31.87	60.19	33.03	0.2548	0.4812	0.7433
21 l63c	0.0	1.0	0.625	82.54	−69.42	20.73	72.46	163	34.11	61.3	45.17	0.2426	0.4361	0.757
22 l75c	0.0	1.0	0.75	83.21	−63.28	7.26	63.7	173	36.77	62.56	59.81	0.2311	0.3931	0.7726
23 l88c	0.0	1.0	0.875	83.99	−56.82	−5.3	57.08	185	39.82	64.04	76.37	0.221	0.3553	0.7909
24 c00v	0.0	1.0	1.0	84.88	−50.35	−16.82	53.1	198	43.21	65.77	94.48	0.2124	0.3233	0.8123
25 c13v	0.0	0.875	1.0	78.39	−38.54	−26.66	46.88	215	37.99	53.89	92.5	0.206	0.2923	0.6655
26 c25v	0.0	0.75	1.0	71.58	−25.12	−37.33	45.01	236	33.27	43.04	90.94	0.1989	0.2573	0.5315
27 c38v	0.0	0.675	1.0	64.35	−9.93	−48.5	49.52	258	28.95	33.24	89.08	0.1914	0.2197	0.4105
28 c50v	0.0	0.5	1.0	57.04	6.29	−60.24	60.58	276	25.18	24.96	87.84	0.1825	0.1809	0.3083
29 c63v	0.0	0.375	1.0	49.95	24.04	−71.97	75.89	288	22.28	18.38	87.14	0.1743	0.1438	0.227
30 c75v	0.0	0.25	1.0	44.06	39.96	−81.7	90.96	296	20.29	13.88	86.54	0.1681	0.115	0.1714
31 c88v	0.0	0.125	1.0	41.39	48.14	−86.43	98.94	299	19.62	12.11	86.72	0.1657	0.1022	0.1496
32 v00m	0.0	0.0	1.0	41.27	47.5	−86.07	98.31	299	19.39	12.03	85.91	0.1652	0.1025	0.1486
33 v13m	0.125	0.0	1.0	41.52	48.23	−86.12	98.72	299	19.75	12.19	86.6	0.1666	0.1028	0.1506
34 v25m	0.25	0.0	1.0	43.24	50.52	−83.08	97.24	301	21.75	13.32	86.48	0.179	0.1096	0.1645
35 v38m	0.375	0.0	1.0	46.08	54.77	−78.29	95.56	305	25.46	15.32	86.63	0.1998	0.1203	0.1893
36 v50m	0.5	0.0	1.0	49.66	60.07	−72.49	94.15	310	30.71	18.14	87.17	0.2257	0.1333	0.224
37 v63m	0.625	0.0	1.0	53.5	64.18	−65.45	91.67	314	36.6	21.51	86.58	0.2529	0.1487	0.2656
38 v75m	0.75	0.0	1.0	57.59	69.49	−58.8	91.04	320	43.96	25.53	87.13	0.2807	0.163	0.3153
39 v88m	0.875	0.0	1.0	61.61	74.13	−51.84	90.46	325	51.88	29.95	87.09	0.3071	0.1773	0.3698
40 m00o	1.0	0.0	1.0	65.5	78.93	−45.46	91.09	330	60.55	34.69	87.57	0.3312	0.1897	0.4284
41 m13o	1.0	0.0	0.875	64.15	76.61	−33.99	83.82	336	57.17	32.98	69.48	0.3581	0.2066	0.4073
42 m25o	1.0	0.0	0.75	62.94	74.23	−21.14	77.19	344	54.14	31.51	52.92	0.3907	0.2274	0.3892
43 m38o	1.0	0.0	0.675	61.83	72.03	−6.9	72.36	355	51.45	30.2	38.23	0.4292	0.2519	0.373
44 m50o	1.0	0.0	0.5	60.88	74.79	5.62	75.0	4	50.95	29.11	27.84	0.4722	0.2698	0.3595
45 m63o	1.0	0.0	0.375	60.1	68.37	24.64	72.67	20	47.35	28.23	16.47	0.5144	0.3067	0.3487
46 m75o	1.0	0.0	0.25	59.59	67.29	39.75	78.16	31	46.19	27.67	10.11	0.55	0.3295	0.3417
47 m88o	1.0	0.0	0.125	59.39	66.89	47.79	82.2	36	45.74	27.45	7.56	0.5665	0.3399	0.339
48 o00y	1.0	0.0	0.0	59.32	66.74	48.11	82.28	36	45.59	27.37	7.43	0.567	0.3405	0.3381
49 n00w	0.0	0.0	0.0	26.07	0.0	0.0	0.01	0	4.53	4.77	5.19	0.3127	0.329	0.0589
50 n13w	0.125	0.125	0.125	26.65	1.31	0.42	1.37	18	4.82	4.97	5.32	0.3193	0.3288	0.0614
51 n25w	0.25	0.25	0.25	34.23	3.91	1.71	4.27	24	8.14	8.12	8.33	0.3311	0.3302	0.1003
52 n38w	0.375	0.375	0.375	46.08	3.24	2.08	3.85	33	15.1	15.32	15.73	0.3272	0.332	0.1893
53 n50w	0.5	0.5	0.5	57.68	2.32	1.72	2.88	37	24.89	25.62	26.78	0.322	0.3315	0.3164
54 n63w	0.625	0.625	0.625	68.4	1.52	1.45	2.1	44	37.07	38.52	40.7	0.3188	0.3312	0.4757
55 n75w	0.75	0.75	0.75	78.23	0.92	0.86	1.26	43	51.28	53.6	57.43	0.316	0.3302	0.6619
56 n88w	0.875	0.875	0.875	87.17	0.61	0.31	0.68	27	67.14	70.35	76.2	0.3142	0.3292	0.8688
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0941

n = 88.59 / (88.59 + 5.04) = 0.946

Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness *L=27 of black for illuminant D65**

System TLS27a
CRT monitor

D65 reflection:
Y_N = 5.04
L^*_N = 26.85



***Y* Yellow**
*LCH**a = 92.1 81.0 102
*LAB**a = 92.1 −16.7 79.2

***O* Orange red**
*LCH**a = 59.3 82.3 36
*LAB**a = 59.3 66.7 48.1

***L* Leaf green**
*LCH**a = 81.1 106.3 142
*LAB**a = 81.1 −83.9 65.2

***M* Magenta red**
*LCH**a = 65.5 91.1 330
*LAB**a = 65.5 78.9 −45.5

***C* Cyan blue**
*LCH**a = 84.9 53.1 198
*LAB**a = 84.9 −50.4 −16.8

***V* Violet blue**
*LCH**a = 41.3 98.3 299
*LAB**a = 41.3 47.5 −86.1

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness L^*=38 of black for illuminant D65

System TLS38a

CRT monitor

D65 reflection:

Y_N = 10.08

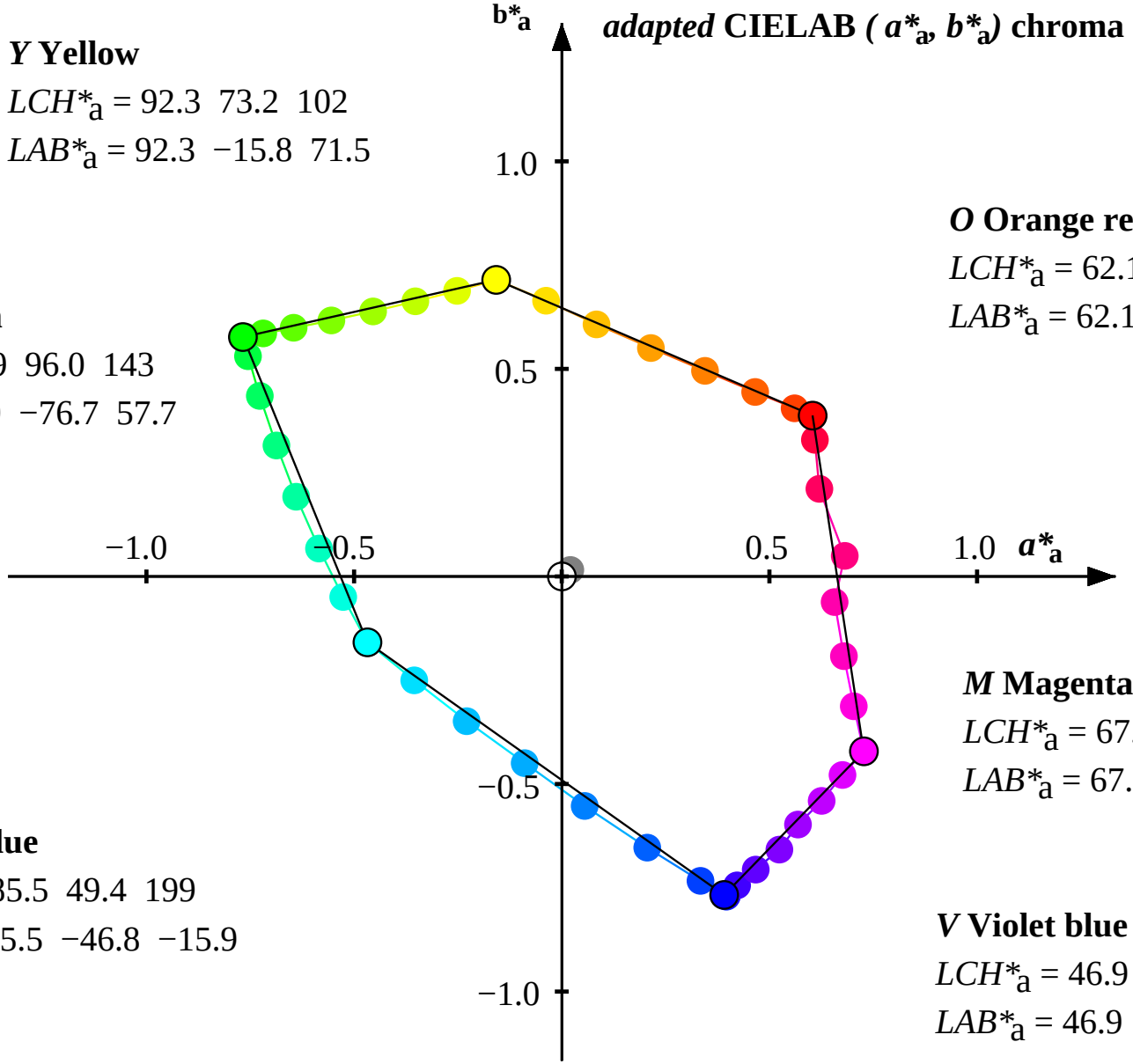
L^*_N = 37.99

Color	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 o00y	1.0	0.0	0.0	62.08	60.39	38.79	71.77	33	47.56	30.5	11.98	0.5282	0.3387	0.3749
01 o13y	1.0	0.125	0.0	62.08	60.22	38.78	71.62	33	47.5	30.5	11.99	0.5278	0.339	0.3749
02 o25y	1.0	0.25	0.0	63.55	56.12	40.51	69.22	36	48.31	32.26	12.29	0.5203	0.3474	0.3964
03 o38y	1.0	0.375	0.0	66.91	46.61	44.42	64.39	44	50.13	36.52	13.02	0.503	0.3664	0.4488
04 o50y	1.0	0.5	0.0	71.4	34.46	49.53	60.34	55	52.86	42.77	14.09	0.4818	0.3898	0.5257
05 o63y	1.0	0.625	0.0	76.45	21.43	55.07	59.09	69	56.3	50.63	15.46	0.46	0.4137	0.6222
06 o75y	1.0	0.75	0.0	81.76	8.37	60.74	61.31	82	60.35	59.86	17.06	0.4397	0.4361	0.7357
07 o88y	1.0	0.875	0.0	87.05	−3.72	66.42	66.53	93	64.96	70.1	18.74	0.4224	0.4558	0.8616
08 y00l	1.0	1.0	0.0	92.29	−15.77	71.46	73.18	102	69.75	81.36	20.84	0.4056	0.4732	1.0
09 y13l	0.875	1.0	0.0	90.25	−25.23	68.79	73.27	110	61.62	76.85	20.38	0.3879	0.4838	0.9445
10 y25l	0.75	1.0	0.0	88.34	−35.28	66.24	75.06	118	54.12	72.76	19.98	0.3685	0.4955	0.8943
11 y38l	0.625	1.0	0.0	86.54	−45.45	63.86	78.39	125	47.4	69.07	19.6	0.3483	0.5076	0.849
12 y50l	0.5	1.0	0.0	84.89	−55.42	61.68	82.92	132	41.54	65.8	19.26	0.3281	0.5197	0.8087
13 y63l	0.375	1.0	0.0	83.55	−64.52	59.86	88.02	137	36.84	63.2	19.01	0.3094	0.5309	0.7768
14 y75l	0.25	1.0	0.0	82.56	−71.9	58.51	92.71	141	33.42	61.33	18.82	0.2942	0.54	0.7538
15 y88l	0.125	1.0	0.0	82.01	−76.16	57.77	95.6	143	31.57	60.32	18.72	0.2855	0.5453	0.7413
16 l00c	0.0	1.0	0.0	81.94	−76.72	57.67	95.99	143	31.34	60.19	18.71	0.2843	0.546	0.7398
17 l13c	0.0	1.0	0.125	81.94	−76.68	57.45	95.82	143	31.34	60.18	18.82	0.2841	0.5454	0.7396
18 l25c	0.0	1.0	0.25	82.04	−75.49	53.06	92.28	145	31.79	60.37	21.23	0.2804	0.5324	0.742
19 l38c	0.0	1.0	0.375	82.31	−72.74	43.49	84.76	149	32.88	60.88	27.23	0.2718	0.5031	0.7482
20 l50c	0.0	1.0	0.5	82.72	−68.68	31.57	75.6	155	34.55	61.64	36.27	0.2608	0.4654	0.7576
21 l63c	0.0	1.0	0.625	83.28	−63.94	19.18	66.77	163	36.66	62.69	47.79	0.2492	0.4261	0.7705
22 l75c	0.0	1.0	0.75	83.91	−58.45	6.77	58.86	173	39.2	63.89	61.68	0.2379	0.3878	0.7853
23 l88c	0.0	1.0	0.875	84.63	−52.65	−4.97	52.89	185	42.09	65.29	77.39	0.2278	0.3534	0.8025
24 c00v	0.0	1.0	1.0	85.47	−46.79	−15.87	49.42	199	45.3	66.94	94.58	0.219	0.3237	0.8227
25 c13v	0.0	0.875	1.0	79.42	−35.48	−25.04	43.44	215	40.35	55.66	92.71	0.2138	0.2949	0.6841
26 c25v	0.0	0.75	1.0	73.13	−22.85	−34.85	41.69	237	35.87	45.37	91.22	0.208	0.2631	0.5576
27 c38v	0.0	0.675	1.0	66.57	−8.89	−44.94	45.83	259	31.77	36.07	89.45	0.202	0.2293	0.4433
28 c50v	0.0	0.5	1.0	60.08	5.52	−55.31	55.6	276	28.19	28.21	88.28	0.1949	0.195	0.3468
29 c63v	0.0	0.375	1.0	53.99	20.58	−65.35	68.52	287	25.44	21.96	87.62	0.1884	0.1627	0.2699
30 c75v	0.0	0.25	1.0	49.12	33.37	−73.33	80.57	294	23.55	17.69	87.05	0.1836	0.1379	0.2175
31 c88v	0.0	0.125	1.0	47.0	39.69	−77.12	86.74	297	22.92	16.02	87.22	0.1817	0.127	0.1969
32 v00m	0.0	0.0	1.0	46.9	39.1	−76.74	86.14	297	22.7	15.94	86.45	0.1815	0.1274	0.1959
33 v13m	0.125	0.0	1.0	47.1	39.8	−76.86	86.57	297	23.04	16.09	87.1	0.1825	0.1275	0.1978
34 v25m	0.25	0.0	1.0	48.46	42.27	−74.43	85.6	300	24.94	17.16	86.99	0.1932	0.1329	0.2109
35 v38m	0.375	0.0	1.0	50.77	46.75	−70.56	84.65	304	28.46	19.07	87.13	0.2114	0.1416	0.2343
36 v50m	0.5	0.0	1.0	53.74	52.35	−65.79	84.09	309	33.44	21.74	87.65	0.2341	0.1522	0.2671
37 v63m	0.625	0.0	1.0	57.01	56.93	−59.75	82.54	314	39.03	24.94	87.09	0.2584	0.1651	0.3065
38 v75m	0.75	0.0	1.0	60.56	62.61	−54.01	82.69	319	46.01	28.75	87.6	0.2834	0.1771	0.3533
39 v88m	0.875	0.0	1.0	64.11	67.61	−47.86	82.84	325	53.53	32.94	87.57	0.3076	0.1893	0.4049
40 m00o	1.0	0.0	1.0	67.6	72.71	−42.16	84.05	330	61.76	37.44	88.03	0.3299	0.2	0.4601
41 m13o	1.0	0.0	0.875	66.38	70.34	−31.26	76.98	336	58.55	35.82	70.86	0.3544	0.2168	0.4403
42 m25o	1.0	0.0	0.75	65.3	67.93	−19.24	70.6	344	55.67	34.43	55.14	0.3833	0.237	0.4231
43 m38o	1.0	0.0	0.675	64.31	65.7	−6.19	65.99	355	53.12	33.19	41.2	0.4166	0.2603	0.4079
44 m50o	1.0	0.0	0.5	63.47	68.11	4.96	68.29	4	52.64	32.15	31.34	0.4533	0.2768	0.3951
45 m63o	1.0	0.0	0.375	62.77	62.02	21.08	65.51	19	49.24	31.32	20.56	0.4869	0.3097	0.3849
46 m75o	1.0	0.0	0.25	62.32	60.94	32.85	69.23	28	48.13	30.78	14.52	0.5151	0.3295	0.3784
47 m88o	1.0	0.0	0.125	62.14	60.53	38.58	71.78	33	47.7	30.57	12.1	0.5279	0.3383	0.3757
48 o00y	1.0	0.0	0.0	62.08	60.39	38.79	71.77	33	47.56	30.5	11.98	0.5282	0.3387	0.3749
49 n00w	0.0	0.0	0.0	36.08	0.0	0.0	0.01	0	8.6	9.05	9.85	0.3127	0.329	0.1112
50 n13w	0.125	0.125	0.125	36.44	0.82	0.26	0.87	18	8.88	9.24	9.97	0.3161	0.3289	0.1136
51 n25w	0.25	0.25	0.25	41.58	2.84	1.23	3.09	23	12.03	12.23	12.83	0.3243	0.3298	0.1503
52 n38w	0.375	0.375	0.375	50.77	2.67	1.7	3.16	33	18.63	19.07	19.85	0.3237	0.3313	0.2343
53 n50w	0.5	0.5	0.5	60.64	2.03	1.5	2.53	36	27.92	28.84	30.34	0.3205	0.3311	0.3545
54 n63w	0.625	0.625	0.625	70.23	1.38	1.31	1.9	44	39.47	41.08	43.55	0.3181	0.331	0.5048
55 n75w	0.75	0.75	0.75	79.26	0.85	0.8	1.17	43	52.97	55.38	59.42	0.3157	0.3301	0.6807
56 n88w	0.875	0.875	0.875	87.62	0.58	0.29	0.64	27	68.01	71.29	77.24	0.3141	0.3292	0.8761
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0888

n = 88.59 / (88.59 + 10.08) = 0.898

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness *L=38 of black for illuminant D65**

System TLS38a
CRT monitor
D65 reflection:
Y_N = 10.08
L^*_N = 37.99



***Y* Yellow**
*LCH**a = 92.3 73.2 102
*LAB**a = 92.3 −15.8 71.5

***O* Orange red**
*LCH**a = 62.1 71.8 33
*LAB**a = 62.1 60.4 38.8

***L* Leaf green**
*LCH**a = 81.9 96.0 143
*LAB**a = 81.9 −76.7 57.7

***M* Magenta red**
*LCH**a = 67.6 84.1 330
*LAB**a = 67.6 72.7 −42.2

***C* Cyan blue**
*LCH**a = 85.5 49.4 199
*LAB**a = 85.5 −46.8 −15.9

***V* Violet blue**
*LCH**a = 46.9 86.1 297
*LAB**a = 46.9 39.1 −76.8

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness L^*=52 of black for illuminant D65

System TLS52a

CRT monitor

D65 reflection:

Y_N = 20.16

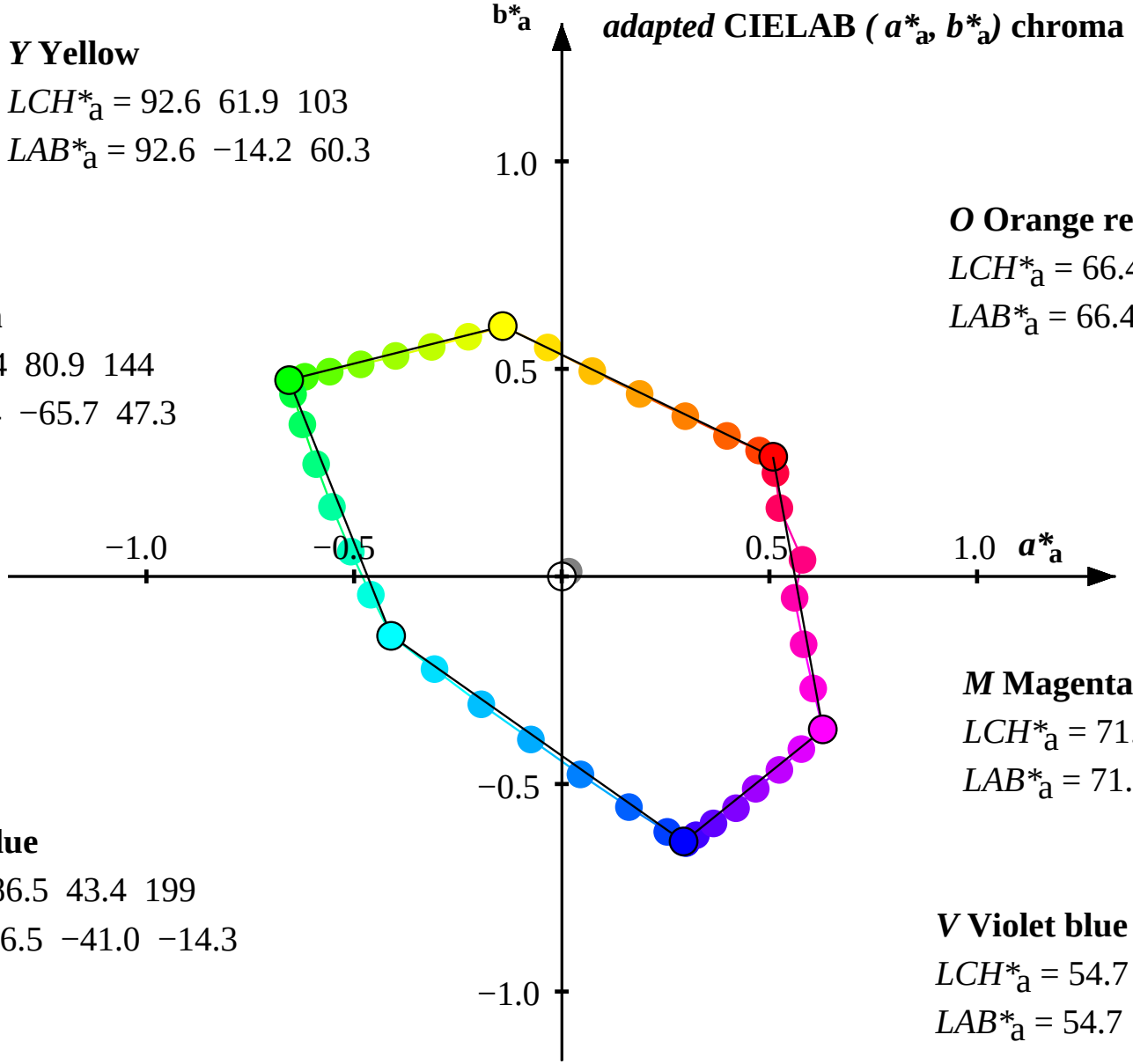
L^*_N = 52.02

Color	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 o00y	1.0	0.0	0.0	66.43	50.88	28.79	58.46	30	50.96	35.89	19.81	0.4778	0.3365	0.4375
01 o13y	1.0	0.125	0.0	66.43	50.73	28.79	58.33	30	50.9	35.89	19.82	0.4775	0.3366	0.4375
02 o25y	1.0	0.25	0.0	67.63	47.49	30.34	56.36	33	51.63	37.48	20.09	0.4728	0.3432	0.4568
03 o38y	1.0	0.375	0.0	70.42	39.82	33.89	52.29	40	53.29	41.34	20.75	0.4618	0.3583	0.504
04 o50y	1.0	0.5	0.0	74.2	29.79	38.65	48.8	52	55.77	47.02	21.72	0.4479	0.3776	0.5732
05 o63y	1.0	0.625	0.0	78.55	18.74	43.96	47.79	67	58.89	54.15	22.97	0.433	0.3981	0.66
06 o75y	1.0	0.75	0.0	83.19	7.4	49.51	50.06	81	62.56	62.52	24.42	0.4185	0.4182	0.7622
07 o88y	1.0	0.875	0.0	87.88	−3.32	55.12	55.22	93	66.75	71.82	25.94	0.4057	0.4366	0.8755
08 y00l	1.0	1.0	0.0	92.59	−14.18	60.27	61.92	103	71.09	82.03	27.85	0.3928	0.4533	1.0
09 y13l	0.875	1.0	0.0	90.75	−22.54	57.74	61.98	111	63.71	77.94	27.43	0.3768	0.461	0.9501
10 y25l	0.75	1.0	0.0	89.03	−31.29	55.33	63.57	119	56.91	74.23	27.07	0.3597	0.4692	0.9049
11 y38l	0.625	1.0	0.0	87.43	−39.99	53.1	66.48	127	50.81	70.88	26.73	0.3424	0.4776	0.8641
12 y50l	0.5	1.0	0.0	85.96	−48.35	51.05	70.32	133	45.49	67.91	26.42	0.3254	0.4857	0.8278
13 y63l	0.375	1.0	0.0	84.77	−55.84	49.36	74.54	139	41.23	65.56	26.19	0.3101	0.493	0.7992
14 y75l	0.25	1.0	0.0	83.89	−61.81	48.12	78.34	142	38.12	63.86	26.02	0.2978	0.4989	0.7784
15 y88l	0.125	1.0	0.0	83.41	−65.2	47.44	80.64	144	36.45	62.94	25.92	0.2909	0.5022	0.7672
16 l00c	0.0	1.0	0.0	83.35	−65.65	47.34	80.95	144	36.24	62.83	25.92	0.29	0.5027	0.7659
17 l13c	0.0	1.0	0.125	83.34	−65.61	47.18	80.82	144	36.24	62.81	26.02	0.2898	0.5022	0.7657
18 l25c	0.0	1.0	0.25	83.43	−64.66	43.95	78.19	146	36.65	62.98	28.2	0.2867	0.4927	0.7678
19 l38c	0.0	1.0	0.375	83.68	−62.45	36.64	72.41	150	37.64	63.45	33.65	0.2794	0.4709	0.7734
20 l50c	0.0	1.0	0.5	84.04	−59.17	27.07	65.07	155	39.15	64.14	41.85	0.2697	0.4419	0.7819
21 l63c	0.0	1.0	0.625	84.53	−55.3	16.7	57.78	163	41.07	65.09	52.3	0.2592	0.4108	0.7935
22 l75c	0.0	1.0	0.75	85.09	−50.78	5.97	51.14	173	43.37	66.18	64.9	0.2486	0.3794	0.8068
23 l88c	0.0	1.0	0.875	85.73	−45.94	−4.43	46.17	186	45.99	67.45	79.16	0.2388	0.3502	0.8223
24 c00v	0.0	1.0	1.0	86.48	−41.02	−14.25	43.44	199	48.91	68.95	94.76	0.23	0.3243	0.8405
25 c13v	0.0	0.875	1.0	81.13	−30.65	−22.32	37.93	216	44.41	58.71	93.05	0.2264	0.2993	0.7157
26 c25v	0.0	0.75	1.0	75.68	−19.38	−30.79	36.4	238	40.35	49.37	91.7	0.2224	0.2721	0.6019
27 c38v	0.0	0.675	1.0	70.13	−7.38	−39.26	39.96	259	36.63	40.93	90.1	0.2185	0.2441	0.499
28 c50v	0.0	0.5	1.0	64.81	4.46	−47.69	47.91	275	33.38	33.81	89.04	0.2137	0.2164	0.4122
29 c63v	0.0	0.375	1.0	60.01	16.13	−55.54	57.84	286	30.89	28.14	88.44	0.2095	0.1908	0.343
30 c75v	0.0	0.25	1.0	56.35	25.43	−61.48	66.54	292	29.18	24.27	87.92	0.2064	0.1717	0.2958
31 c88v	0.0	0.125	1.0	54.81	29.86	−64.26	70.87	295	28.6	22.74	88.07	0.2051	0.1631	0.2773
32 v00m	0.0	0.0	1.0	54.74	29.37	−63.89	70.32	295	28.4	22.68	87.37	0.2051	0.1638	0.2764
33 v13m	0.125	0.0	1.0	54.88	29.97	−64.06	70.73	295	28.71	22.81	87.97	0.2058	0.1635	0.2781
34 v25m	0.25	0.0	1.0	55.87	32.3	−62.28	70.17	297	30.43	23.78	87.87	0.2142	0.1674	0.2899
35 v38m	0.375	0.0	1.0	57.57	36.54	−59.44	69.78	302	33.63	25.51	88.0	0.2286	0.1734	0.311
36 v50m	0.5	0.0	1.0	59.83	41.97	−55.88	69.89	307	38.14	27.93	88.47	0.2468	0.1807	0.3405
37 v63m	0.625	0.0	1.0	62.37	46.69	−51.14	69.25	312	43.22	30.84	87.95	0.2668	0.1903	0.3759
38 v75m	0.75	0.0	1.0	65.2	52.44	−46.59	70.16	318	49.55	34.3	88.42	0.2876	0.1991	0.4181
39 v88m	0.875	0.0	1.0	68.09	57.64	−41.58	71.07	324	56.37	38.1	88.4	0.3083	0.2083	0.4644
40 m00o	1.0	0.0	1.0	70.99	62.9	−36.87	72.92	330	63.84	42.18	88.81	0.3277	0.2165	0.5142
41 m13o	1.0	0.0	0.875	69.97	60.54	−26.99	66.29	336	60.93	40.71	73.23	0.3484	0.2328	0.4963
42 m25o	1.0	0.0	0.75	69.07	58.18	−16.34	60.44	344	58.32	39.45	58.97	0.3721	0.2517	0.4809
43 m38o	1.0	0.0	0.675	68.26	56.01	−5.15	56.25	355	56.0	38.32	46.32	0.3982	0.2725	0.4671
44 m50o	1.0	0.0	0.5	67.56	57.92	4.03	58.06	4	55.57	37.38	37.38	0.4264	0.2868	0.4557
45 m63o	1.0	0.0	0.375	67.0	52.45	16.53	55.0	17	52.48	36.63	27.59	0.4497	0.3139	0.4465
46 m75o	1.0	0.0	0.25	66.63	51.41	24.89	57.12	26	51.47	36.14	22.12	0.4691	0.3294	0.4406
47 m88o	1.0	0.0	0.125	66.48	51.02	28.68	58.52	29	51.08	35.95	19.92	0.4777	0.3361	0.4382
48 o00y	1.0	0.0	0.0	66.43	50.88	28.79	58.46	30	50.96	35.89	19.81	0.4778	0.3365	0.4375
49 n00w	0.0	0.0	0.0	47.52	0.0	0.0	0.01	0	15.61	16.42	17.88	0.3127	0.329	0.2002
50 n13w	0.125	0.125	0.125	47.75	0.51	0.16	0.53	18	15.86	16.6	17.99	0.3144	0.329	0.2023
51 n25w	0.25	0.25	0.25	51.04	1.91	0.82	2.08	23	18.72	19.31	20.58	0.3194	0.3295	0.2354
52 n38w	0.375	0.375	0.375	57.57	2.0	1.26	2.37	32	24.71	25.51	26.95	0.3202	0.3306	0.311
53 n50w	0.5	0.5	0.5	65.26	1.64	1.21	2.04	36	33.14	34.38	36.47	0.3187	0.3306	0.4191
54 n63w	0.625	0.625	0.625	73.21	1.17	1.11	1.61	44	43.62	45.48	48.45	0.3171	0.3306	0.5544
55 n75w	0.75	0.75	0.75	80.99	0.75	0.7	1.02	43	55.86	58.46	62.86	0.3153	0.33	0.7127
56 n88w	0.875	0.875	0.875	88.39	0.51	0.26	0.58	27	69.51	72.89	79.02	0.3139	0.3292	0.8885
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0799

n = 88.59 / (88.59 + 20.16) = 0.815

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness L^*=52 of black for illuminant D65

System TLS52a
CRT monitor
D65 reflection:
Y_N = 20.16
L^*_N = 52.02



***Y* Yellow**
LCH^*_a = 92.6 61.9 103
LAB^*_a = 92.6 −14.2 60.3

***O* Orange red**
LCH^*_a = 66.4 58.5 30
LAB^*_a = 66.4 50.9 28.8

***L* Leaf green**
LCH^*_a = 83.4 80.9 144
LAB^*_a = 83.4 −65.7 47.3

***M* Magenta red**
LCH^*_a = 71.0 72.9 330
LAB^*_a = 71.0 62.9 −36.9

***C* Cyan blue**
LCH^*_a = 86.5 43.4 199
LAB^*_a = 86.5 −41.0 −14.3

***V* Violet blue**
LCH^*_a = 54.7 70.3 295
LAB^*_a = 54.7 29.4 −63.9

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness L^*=70 of black for illuminant D65

System TLS70a

CRT monitor

D65 reflection:

Y_N = 40.32

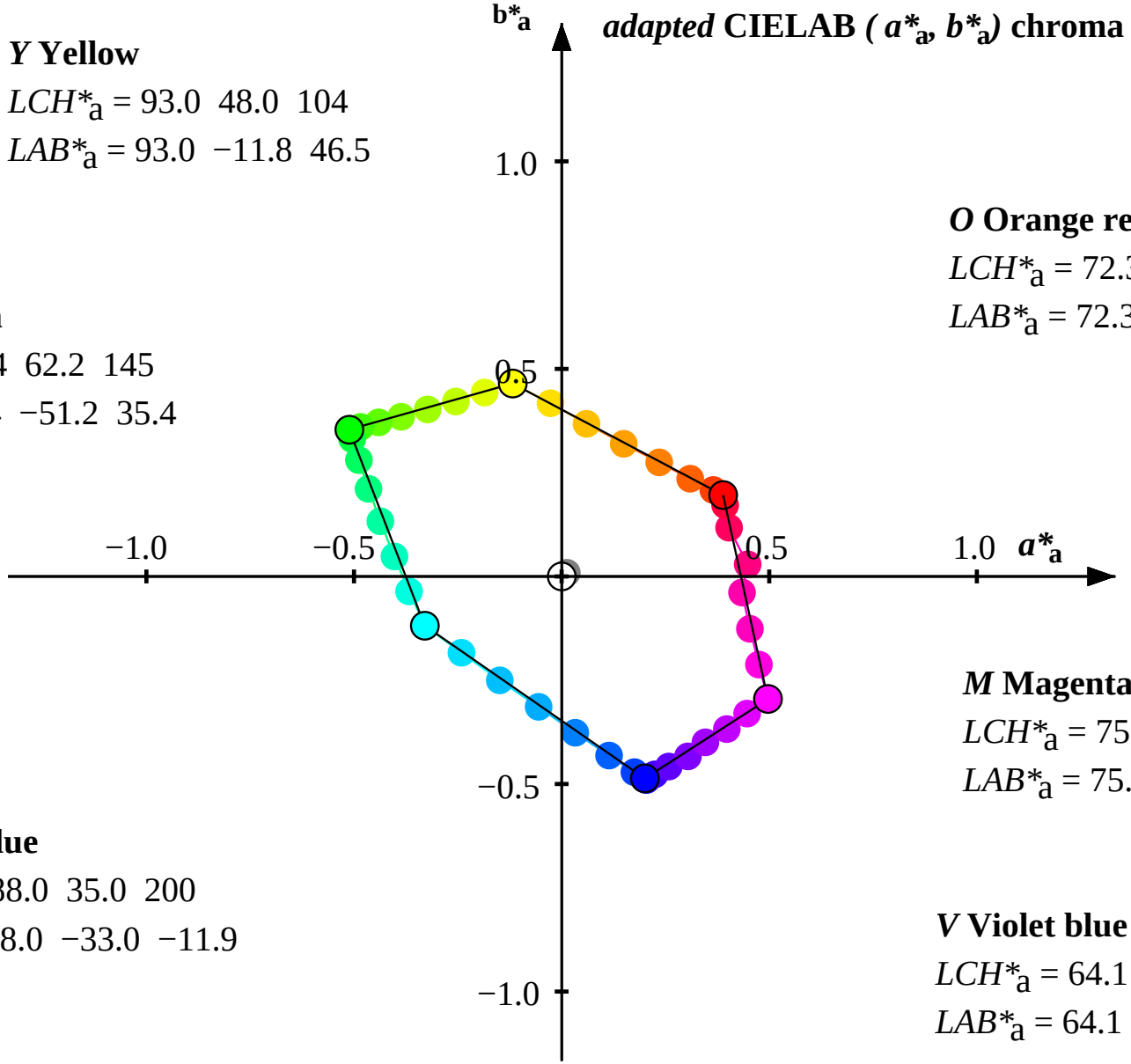
L^*_N = 69.7

Color		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	o00y	1.0	0.0	0.0	72.31	38.9	19.57	43.54	27	56.15	44.13	31.8	0.4251	0.3341	0.5313
01	o13y	1.0	0.125	0.0	72.31	38.78	19.57	43.44	27	56.11	44.13	31.8	0.4249	0.3342	0.5313
02	o25y	1.0	0.25	0.0	73.2	36.49	20.78	41.99	30	56.72	45.47	32.03	0.4226	0.3388	0.5474
03	o38y	1.0	0.375	0.0	75.28	30.94	23.6	38.91	37	58.12	48.73	32.59	0.4168	0.3495	0.5867
04	o50y	1.0	0.5	0.0	78.18	23.48	27.48	36.14	49	60.21	53.52	33.41	0.4092	0.3637	0.6444
05	o63y	1.0	0.625	0.0	81.58	14.99	31.95	35.29	65	62.85	59.53	34.46	0.4007	0.3796	0.7168
06	o75y	1.0	0.75	0.0	85.3	6.01	36.77	37.25	81	65.94	66.6	35.68	0.392	0.3959	0.8018
07	o88y	1.0	0.875	0.0	89.13	−2.73	41.73	41.82	94	69.47	74.44	36.97	0.3841	0.4115	0.8962
08	y00l	1.0	1.0	0.0	93.04	−11.8	46.48	47.96	104	73.14	83.06	38.58	0.3755	0.4264	1.0
09	y13l	0.875	1.0	0.0	91.51	−18.58	44.27	48.01	113	66.91	79.6	38.23	0.3622	0.4309	0.9584
10	y25l	0.75	1.0	0.0	90.08	−25.52	42.19	49.31	121	61.17	76.48	37.92	0.3484	0.4356	0.9208
11	y38l	0.625	1.0	0.0	88.76	−32.27	40.26	51.6	129	56.03	73.65	37.63	0.3349	0.4402	0.8868
12	y50l	0.5	1.0	0.0	87.55	−38.59	38.51	54.53	135	51.55	71.14	37.37	0.322	0.4445	0.8565
13	y63l	0.375	1.0	0.0	86.58	−44.12	37.08	57.64	140	47.95	69.16	37.18	0.3108	0.4483	0.8327
14	y75l	0.25	1.0	0.0	85.87	−48.43	36.03	60.37	143	45.33	67.72	37.03	0.302	0.4512	0.8154
15	y88l	0.125	1.0	0.0	85.48	−50.84	35.45	61.99	145	43.92	66.95	36.95	0.2971	0.4529	0.806
16	l00c	0.0	1.0	0.0	85.43	−51.16	35.38	62.21	145	43.74	66.86	36.95	0.2965	0.4531	0.8049
17	l13c	0.0	1.0	0.125	85.42	−51.12	35.26	62.12	145	43.74	66.84	37.03	0.2963	0.4528	0.8048
18	l25c	0.0	1.0	0.25	85.5	−50.44	33.11	60.35	147	44.08	66.99	38.88	0.294	0.4467	0.8065
19	l38c	0.0	1.0	0.375	85.7	−48.85	28.07	56.35	150	44.92	67.38	43.47	0.2884	0.4326	0.8112
20	l50c	0.0	1.0	0.5	85.99	−46.47	21.14	51.07	156	46.19	67.96	50.39	0.2807	0.413	0.8183
21	l63c	0.0	1.0	0.625	86.39	−43.66	13.29	45.64	163	47.81	68.77	59.21	0.272	0.3912	0.828
22	l75c	0.0	1.0	0.75	86.84	−40.3	4.83	40.6	173	49.75	69.68	69.84	0.2629	0.3682	0.839
23	l88c	0.0	1.0	0.875	87.37	−36.68	−3.63	36.87	186	51.97	70.76	81.86	0.254	0.3459	0.8519
24	c00v	0.0	1.0	1.0	87.98	−32.95	−11.85	35.03	200	54.43	72.02	95.02	0.2458	0.3252	0.8671
25	c13v	0.0	0.875	1.0	83.64	−24.15	−18.35	30.34	217	50.64	63.38	93.59	0.2439	0.3053	0.7631
26	c25v	0.0	0.75	1.0	79.33	−14.93	−25.01	29.14	239	47.21	55.51	92.45	0.2419	0.2844	0.6683
27	c38v	0.0	0.675	1.0	75.07	−5.53	−31.43	31.93	260	44.07	48.39	91.1	0.2401	0.2636	0.5826
28	c50v	0.0	0.5	1.0	71.13	3.25	−37.6	37.75	275	41.33	42.38	90.2	0.2377	0.2437	0.5102
29	c63v	0.0	0.375	1.0	67.72	11.41	−43.13	44.62	285	39.23	37.59	89.69	0.2356	0.2258	0.4526
30	c75v	0.0	0.25	1.0	65.22	17.55	−47.13	50.31	290	37.78	34.33	89.26	0.2341	0.2127	0.4133
31	c88v	0.0	0.125	1.0	64.19	20.39	−48.99	53.08	293	37.3	33.04	89.39	0.2335	0.2069	0.3978
32	v00m	0.0	0.0	1.0	64.15	20.04	−48.66	52.63	292	37.12	32.98	88.79	0.2336	0.2076	0.3971
33	v13m	0.125	0.0	1.0	64.24	20.49	−48.85	52.98	293	37.39	33.1	89.3	0.234	0.2072	0.3985
34	v25m	0.25	0.0	1.0	64.9	22.36	−47.66	52.66	295	38.84	33.92	89.21	0.2398	0.2094	0.4084
35	v38m	0.375	0.0	1.0	66.04	25.82	−45.77	52.56	299	41.54	35.38	89.32	0.2499	0.2128	0.4259
36	v50m	0.5	0.0	1.0	67.59	30.4	−43.37	52.97	305	45.34	37.42	89.72	0.2629	0.2169	0.4505
37	v63m	0.625	0.0	1.0	69.38	34.63	−39.99	52.9	311	49.62	39.87	89.28	0.2776	0.223	0.48
38	v75m	0.75	0.0	1.0	71.41	39.82	−36.76	54.2	317	54.97	42.79	89.68	0.2933	0.2283	0.5151
39	v88m	0.875	0.0	1.0	73.54	44.69	−33.07	55.6	323	60.73	46.0	89.66	0.3092	0.2342	0.5538
40	m00o	1.0	0.0	1.0	75.72	49.69	−29.55	57.81	329	67.02	49.44	90.0	0.3246	0.2395	0.5952
41	m13o	1.0	0.0	0.875	74.95	47.51	−21.26	52.05	336	64.56	48.2	76.86	0.3405	0.2542	0.5803
42	m25o	1.0	0.0	0.75	74.27	45.38	−12.61	47.1	344	62.37	47.13	64.84	0.3577	0.2704	0.5675
43	m38o	1.0	0.0	0.675	73.66	43.43	−3.87	43.6	355	60.41	46.18	54.16	0.3758	0.2873	0.556
44	m50o	1.0	0.0	0.5	73.15	44.78	2.96	44.88	4	60.05	45.39	46.62	0.3949	0.2985	0.5465
45	m63o	1.0	0.0	0.375	72.73	40.28	11.72	41.95	16	57.44	44.75	38.36	0.4087	0.3184	0.5388
46	m75o	1.0	0.0	0.25	72.46	39.36	17.17	42.94	24	56.59	44.34	33.74	0.4202	0.3293	0.5339
47	m88o	1.0	0.0	0.125	72.35	39.02	19.51	43.62	27	56.26	44.18	31.89	0.4252	0.3339	0.5319
48	o00y	1.0	0.0	0.0	72.31	38.9	19.57	43.54	27	56.15	44.13	31.8	0.4251	0.3341	0.5313
49	n00w	0.0	0.0	0.0	59.62	0.0	0.0	0.01	158	26.33	27.71	30.17	0.3127	0.329	0.3336
50	n13w	0.125	0.125	0.125	59.76	0.3	0.1	0.32	18	26.55	27.85	30.26	0.3136	0.329	0.3354
51	n25w	0.25	0.25	0.25	61.78	1.2	0.51	1.31	23	28.96	30.14	32.45	0.3163	0.3293	0.3629
52	n38w	0.375	0.375	0.375	66.04	1.36	0.85	1.61	32	34.01	35.38	37.82	0.3172	0.33	0.4259
53	n50w	0.5	0.5	0.5	71.46	1.2	0.88	1.49	36	41.12	42.86	45.85	0.3167	0.3301	0.516
54	n63w	0.625	0.625	0.625	77.41	0.9	0.85	1.24	43	49.96	52.22	55.96	0.3159	0.3302	0.6287
55	n75w	0.75	0.75	0.75	83.53	0.6	0.56	0.82	43	60.29	63.17	68.11	0.3147	0.3298	0.7606
56	n88w	0.875	0.875	0.875	89.55	0.42	0.21	0.48	27	71.81	75.34	81.75	0.3137	0.3292	0.9071
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	85	84.2	88.59	96.46	0.3127	0.329	1.0666

n = 88.59 / (88.59 + 40.32) = 0.687

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness *L=70 of black for illuminant D65**

System TLS70a
CRT monitor
D65 reflection:
Y_N = 40.32
L^*_N = 69.7



***Y* Yellow**
*LCH**a = 93.0 48.0 104
*LAB**a = 93.0 −11.8 46.5

***O* Orange red**
*LCH**a = 72.3 43.5 27
*LAB**a = 72.3 38.9 19.6

***L* Leaf green**
*LCH**a = 85.4 62.2 145
*LAB**a = 85.4 −51.2 35.4

***M* Magenta red**
*LCH**a = 75.7 57.8 329
*LAB**a = 75.7 49.7 −29.6

***C* Cyan blue**
*LCH**a = 88.0 35.0 200
*LAB**a = 88.0 −33.0 −11.9

***V* Violet blue**
*LCH**a = 64.1 52.6 292
*LAB**a = 64.1 20.0 −48.7

Colorimetric "Standard data": Television Luminous System TLS03 for CIE lightness L^*=03 of black for illuminant D65

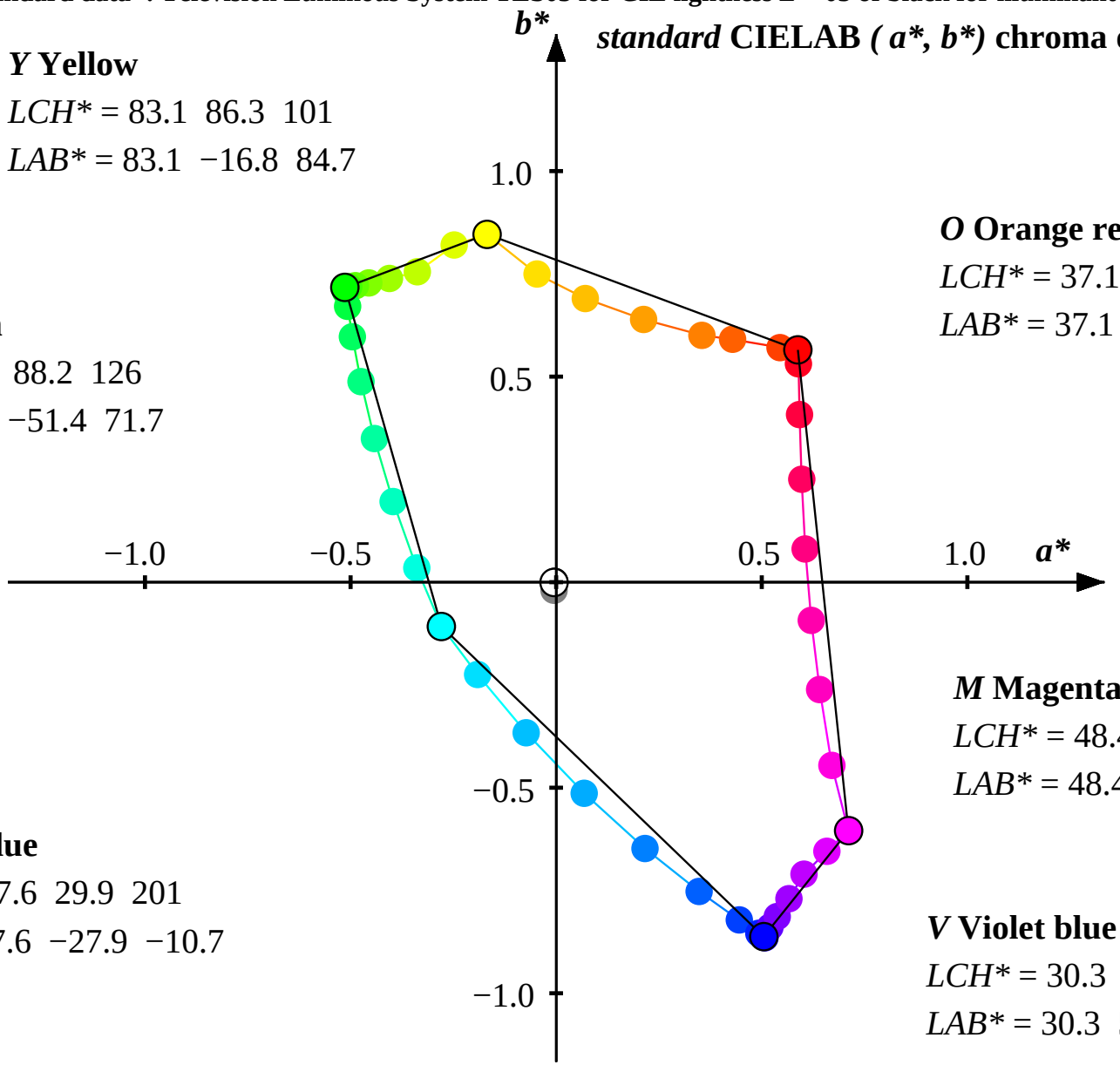
System TLS03
LCD projector

	Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*=LAB^*_1$	$a^*=LAB^*_2$	$b^*=LAB^*_3$	$C^*_{ab}=LAB^*_r$	h_{ab}	$X=XYZ_1$	$Y=XYZ_2$	$Z=XYZ_3$	x	y	$Y/88.59$
00	o00y	1.0	0.0	0.0	37.1	58.78	56.51	81.54	44	18.1	9.59	0.52	0.6415	0.34	0.1083
01	o13y	1.0	0.125	0.0	37.41	58.02	56.42	80.93	44	18.21	9.76	0.57	0.6381	0.3421	0.1102
02	o25y	1.0	0.25	0.0	38.83	54.44	57.1	78.89	46	18.69	10.56	0.69	0.6243	0.3527	0.1192
03	o38y	1.0	0.375	0.0	42.44	42.95	59.04	73.01	54	19.48	12.78	0.99	0.5859	0.3844	0.1443
04	o50y	1.0	0.5	0.0	47.08	35.41	60.09	69.75	59	22.06	16.08	1.57	0.5556	0.4049	0.1815
05	o63y	1.0	0.625	0.0	54.15	21.26	63.91	67.35	71	25.77	22.11	2.53	0.5112	0.4387	0.2496
06	o75y	1.0	0.75	0.0	62.27	7.09	69.0	69.37	84	31.07	30.71	3.9	0.473	0.4676	0.3467
07	o88y	1.0	0.875	0.0	70.64	−4.64	74.95	75.09	93	38.14	41.66	5.61	0.4465	0.4878	0.4703
08	y00l	1.0	1.0	0.0	83.13	−16.8	84.65	86.31	101	52.58	62.4	8.73	0.425	0.5044	0.7044
09	y13l	0.875	1.0	0.0	81.19	−24.79	81.99	85.66	106	46.56	58.82	8.53	0.4087	0.5164	0.664
10	y25l	0.75	1.0	0.0	75.03	−33.74	75.48	82.68	114	35.07	48.33	7.36	0.3864	0.5325	0.5455
11	y38l	0.625	1.0	0.0	74.08	−40.51	73.85	84.23	118	31.97	46.83	7.36	0.3711	0.5435	0.5286
12	y50l	0.5	1.0	0.0	73.46	−45.58	72.79	85.89	122	29.89	45.87	7.36	0.3596	0.5519	0.5178
13	y63l	0.375	1.0	0.0	73.1	−48.78	72.15	87.1	124	28.66	45.32	7.36	0.3523	0.5572	0.5116
14	y75l	0.25	1.0	0.0	72.92	−50.49	71.84	87.82	125	28.02	45.04	7.36	0.3484	0.5601	0.5084
15	y88l	0.125	1.0	0.0	72.84	−51.23	71.69	88.12	125	27.75	44.92	7.36	0.3467	0.5613	0.5071
16	l00c	0.0	1.0	0.0	72.83	−51.36	71.66	88.17	125	27.7	44.91	7.37	0.3464	0.5615	0.5069
17	l13c	0.0	1.0	0.125	72.87	−51.21	70.8	87.39	126	27.78	44.96	7.62	0.3457	0.5595	0.5075
18	l25c	0.0	1.0	0.25	72.97	−50.7	67.1	84.11	127	28.02	45.12	8.75	0.3422	0.551	0.5093
19	l38c	0.0	1.0	0.375	73.17	−49.55	59.71	77.6	129	28.53	45.42	11.31	0.3346	0.5327	0.5127
20	l50c	0.0	1.0	0.5	73.55	−47.47	48.77	68.07	134	29.49	46.01	16.04	0.3222	0.5026	0.5193
21	l63c	0.0	1.0	0.625	74.19	−44.2	34.93	56.34	141	31.09	47.0	23.86	0.305	0.461	0.5305
22	l75c	0.0	1.0	0.75	74.8	−39.66	19.62	44.25	153	33.08	47.96	34.95	0.2852	0.4135	0.5414
23	l88c	0.0	1.0	0.875	76.29	−33.9	3.44	34.08	174	36.63	50.36	51.35	0.2648	0.364	0.5684
24	c00v	0.0	1.0	1.0	77.63	−27.89	−10.73	29.9	201	40.31	52.59	69.46	0.2483	0.3239	0.5936
25	c13v	0.0	0.875	1.0	69.94	−19.11	−22.45	29.5	230	32.97	40.66	67.61	0.2334	0.2879	0.459
26	c25v	0.0	0.75	1.0	60.8	−7.27	−36.62	37.35	260	25.8	29.02	65.75	0.214	0.2407	0.3276
27	c38v	0.0	0.675	1.0	51.55	6.79	−51.31	51.77	278	20.11	19.75	64.29	0.1931	0.1896	0.2229
28	c50v	0.0	0.5	1.0	43.25	21.59	−64.77	68.28	289	16.15	13.32	63.31	0.1741	0.1436	0.1504
29	c63v	0.0	0.375	1.0	36.87	34.74	−75.21	82.86	295	13.78	9.47	62.69	0.1603	0.1102	0.1069
30	c75v	0.0	0.25	1.0	32.68	44.51	−82.18	93.47	299	12.51	7.39	62.38	0.152	0.0898	0.0834
31	c88v	0.0	0.125	1.0	30.75	49.23	−85.41	98.59	300	11.99	6.55	62.29	0.1483	0.081	0.0739
32	v00m	0.0	0.0	1.0	30.28	50.46	−86.21	99.9	301	11.87	6.35	62.28	0.1475	0.0789	0.0717
33	v13m	0.125	0.0	1.0	30.52	50.74	−86.47	100.26	301	12.06	6.45	63.03	0.1479	0.0791	0.0728
34	v25m	0.25	0.0	1.0	30.67	50.94	−85.47	99.51	301	12.18	6.51	62.19	0.1506	0.0805	0.0735
35	v38m	0.375	0.0	1.0	31.48	51.96	−83.92	98.71	302	12.85	6.86	62.02	0.1572	0.0839	0.0774
36	v50m	0.5	0.0	1.0	33.02	53.8	−81.29	97.49	304	14.17	7.55	62.06	0.1691	0.0901	0.0852
37	v63m	0.625	0.0	1.0	35.31	56.61	−76.94	95.53	307	16.3	8.66	61.6	0.1883	0.1	0.0977
38	v75m	0.75	0.0	1.0	38.29	60.25	−71.06	93.17	310	19.37	10.25	60.77	0.2143	0.1134	0.1157
39	v88m	0.875	0.0	1.0	43.55	65.86	−65.4	92.82	315	25.51	13.53	64.62	0.2461	0.1305	0.1527
40	m00o	1.0	0.0	1.0	48.39	71.08	−60.47	93.32	320	32.22	17.11	68.65	0.2731	0.145	0.1931
41	m13o	1.0	0.0	0.875	44.49	67.04	−44.55	80.49	327	26.78	14.18	44.89	0.3119	0.1652	0.1601
42	m25o	1.0	0.0	0.75	41.5	64.08	−26.13	69.21	338	23.08	12.18	26.76	0.3721	0.1964	0.1375
43	m38o	1.0	0.0	0.675	39.82	62.04	−9.33	62.74	351	21.08	11.14	16.02	0.4369	0.231	0.1258
44	m50o	1.0	0.0	0.5	38.6	60.58	8.07	61.11	7	19.7	10.43	8.68	0.5077	0.2687	0.1177
45	m63o	1.0	0.0	0.375	37.83	59.69	25.05	64.73	23	18.87	9.99	4.23	0.5702	0.3019	0.1128
46	m75o	1.0	0.0	0.25	37.41	59.19	40.82	71.9	34	18.43	9.76	1.83	0.6138	0.3251	0.1102
47	m88o	1.0	0.0	0.125	37.23	58.94	53.08	79.32	42	18.24	9.67	0.78	0.6359	0.337	0.1091
48	o00y	1.0	0.0	0.0	37.1	58.78	56.51	81.54	44	18.1	9.59	0.52	0.6415	0.34	0.1083
49	n00w	0.0	0.0	0.0	2.5	−0.41	0.23	0.48	0	0.25	0.28	0.29	0.3103	0.3398	0.0031
50	n13w	0.125	0.125	0.125	4.56	−0.87	−0.48	1.01	238	0.46	0.5	0.58	0.2962	0.3263	0.0057
51	n25w	0.25	0.25	0.25	12.6	−0.76	−1.6	1.79	260	1.4	1.5	1.8	0.2978	0.3193	0.0169
52	n38w	0.375	0.375	0.375	23.36	−0.66	−1.79	1.92	264	3.67	3.91	4.6	0.3013	0.3208	0.0441
53	n50w	0.5	0.5	0.5	34.78	−0.55	−1.92	2.01	267	7.91	8.39	9.75	0.3037	0.322	0.0947
54	n63w	0.625	0.625	0.625	46.81	−0.46	−2.0	2.06	270	15.01	15.88	18.26	0.3054	0.323	0.1792
55	n75w	0.75	0.75	0.75	61.39	−0.67	−1.71	1.84	264	28.05	29.7	33.6	0.3071	0.3251	0.3352
56	n88w	0.875	0.875	0.875	80.86	−0.46	−0.03	0.48	324	55.14	58.21	63.43	0.3119	0.3293	0.6571
57	n99w	1.0	1.0	1.0	95.41	−0.54	−0.04	0.55	0	83.91	88.59	96.53	0.3119	0.3293	1.0

Colorimetric "Standard data": Television Luminous System TLS03 for CIE lightness *L=03 of black for illuminant D65**

System TLS03

LCD projector



***standard* CIELAB *(a*, b*)* chroma diagram**

***Y* Yellow**

*LCH** = 83.1 86.3 101

*LAB** = 83.1 −16.8 84.7

***O* Orange red**

*LCH** = 37.1 81.5 44

*LAB** = 37.1 58.8 56.5

***L* Leaf green**

*LCH** = 72.8 88.2 126

*LAB** = 72.8 −51.4 71.7

***M* Magenta red**

*LCH** = 48.4 93.3 320

*LAB** = 48.4 71.1 −60.5

***C* Cyan blue**

*LCH** = 77.6 29.9 201

*LAB** = 77.6 −27.9 −10.7

***V* Violet blue**

*LCH** = 30.3 99.9 300

*LAB** = 30.3 50.5 −86.2

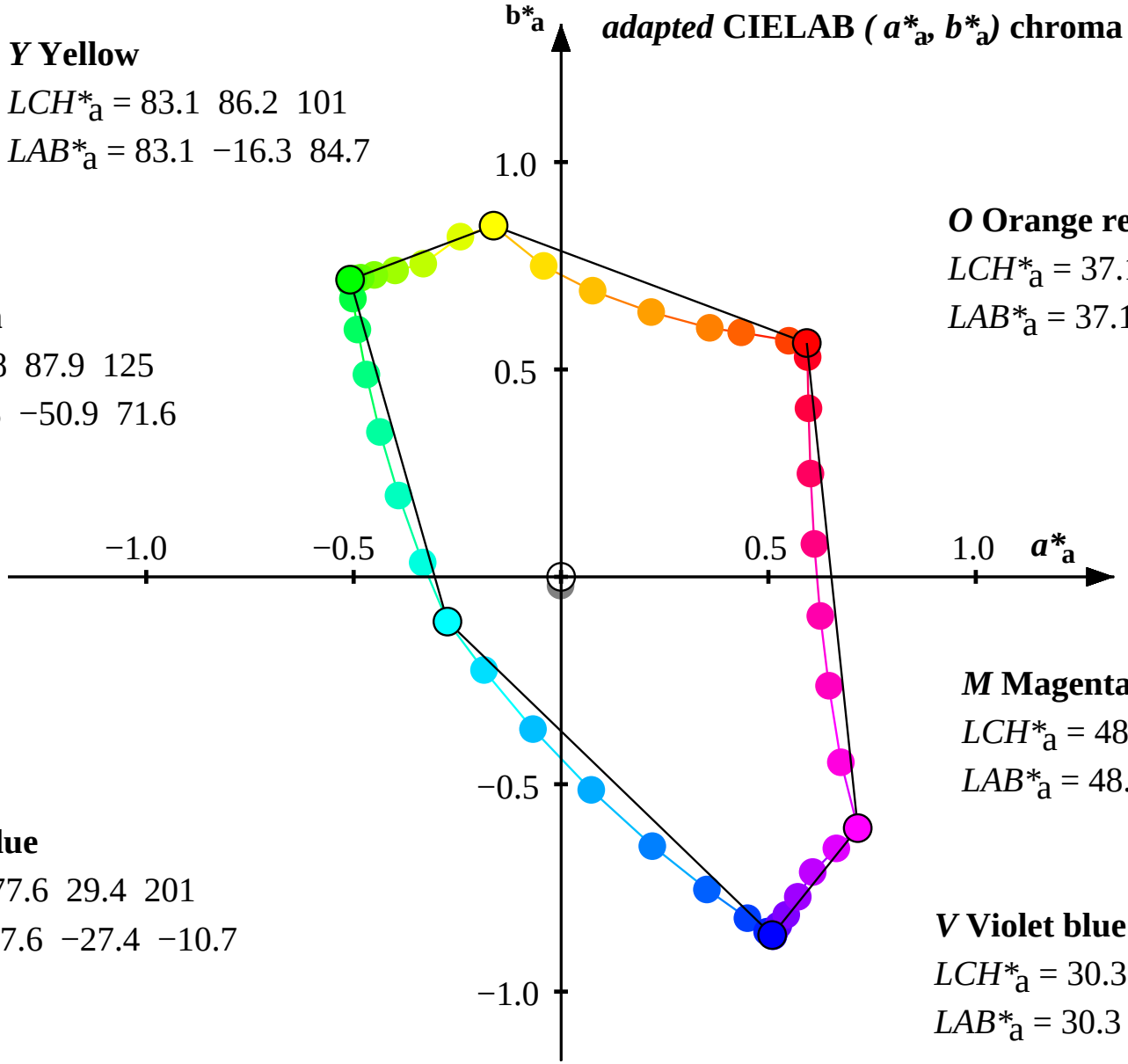
Colorimetric "Adapted data (a)": Television Luminous System TLS03a for CIE lightness L^*=03 of black for illuminant D65

System TLS03a
LCD projector

Color	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 o00y	1.0	0.0	0.0	37.1	59.25	56.38	81.79	44	18.19	9.59	0.53	0.6424	0.3388	0.1083
01 o13y	1.0	0.125	0.0	37.41	58.49	56.29	81.18	44	18.3	9.76	0.57	0.639	0.3409	0.1102
02 o25y	1.0	0.25	0.0	38.83	54.91	56.97	79.13	46	18.78	10.56	0.7	0.6253	0.3515	0.1192
03 o38y	1.0	0.375	0.0	42.44	43.43	58.93	73.2	54	19.58	12.78	1.0	0.5869	0.3832	0.1443
04 o50y	1.0	0.5	0.0	47.08	35.89	59.99	69.91	59	22.17	16.08	1.58	0.5566	0.4037	0.1815
05 o63y	1.0	0.625	0.0	54.15	21.75	63.83	67.43	71	25.88	22.11	2.54	0.5122	0.4376	0.2496
06 o75y	1.0	0.75	0.0	62.27	7.59	68.95	69.37	84	31.21	30.71	3.91	0.474	0.4666	0.3467
07 o88y	1.0	0.875	0.0	70.64	−4.13	74.92	75.03	93	38.3	41.66	5.62	0.4475	0.4869	0.4703
08 y00l	1.0	1.0	0.0	83.13	−16.27	84.66	86.21	101	52.78	62.4	8.73	0.426	0.5036	0.7044
09 y13l	0.875	1.0	0.0	81.19	−24.26	82.0	85.51	106	46.74	58.82	8.53	0.4097	0.5156	0.664
10 y25l	0.75	1.0	0.0	75.03	−33.22	75.46	82.45	114	35.22	48.33	7.36	0.3874	0.5316	0.5455
11 y38l	0.625	1.0	0.0	74.08	−40.0	73.83	83.97	118	32.12	46.83	7.36	0.3721	0.5426	0.5286
12 y50l	0.5	1.0	0.0	73.46	−45.07	72.77	85.6	122	30.03	45.87	7.36	0.3606	0.551	0.5178
13 y63l	0.375	1.0	0.0	73.1	−48.26	72.13	86.79	124	28.79	45.32	7.37	0.3533	0.5563	0.5116
14 y75l	0.25	1.0	0.0	72.92	−49.98	71.82	87.5	125	28.15	45.04	7.36	0.3494	0.5592	0.5084
15 y88l	0.125	1.0	0.0	72.84	−50.71	71.67	87.8	125	27.88	44.92	7.37	0.3477	0.5603	0.5071
16 l00c	0.0	1.0	0.0	72.83	−50.84	71.64	87.85	125	27.83	44.91	7.37	0.3474	0.5605	0.5069
17 l13c	0.0	1.0	0.125	72.87	−50.69	70.78	87.07	126	27.91	44.96	7.62	0.3467	0.5586	0.5075
18 l25c	0.0	1.0	0.25	72.97	−50.18	67.08	83.78	127	28.15	45.12	8.75	0.3432	0.5501	0.5093
19 l38c	0.0	1.0	0.375	73.17	−49.03	59.69	77.25	129	28.66	45.42	11.32	0.3356	0.5318	0.5127
20 l50c	0.0	1.0	0.5	73.55	−46.95	48.75	67.69	134	29.63	46.01	16.05	0.3232	0.5018	0.5193
21 l63c	0.0	1.0	0.625	74.19	−43.69	34.91	55.93	141	31.23	47.0	23.87	0.3059	0.4603	0.5305
22 l75c	0.0	1.0	0.75	74.8	−39.14	19.6	43.78	153	33.23	47.96	34.96	0.2861	0.4129	0.5414
23 l88c	0.0	1.0	0.875	76.29	−33.38	3.42	33.56	174	36.79	50.36	51.36	0.2656	0.3636	0.5684
24 c00v	0.0	1.0	1.0	77.63	−27.37	−10.73	29.41	201	40.48	52.59	69.47	0.2491	0.3235	0.5936
25 c13v	0.0	0.875	1.0	69.94	−18.6	−22.48	29.19	230	33.11	40.66	67.65	0.2341	0.2875	0.459
26 c25v	0.0	0.75	1.0	60.8	−6.77	−36.68	37.31	260	25.92	29.02	65.82	0.2147	0.2403	0.3276
27 c38v	0.0	0.675	1.0	51.55	7.28	−51.4	51.92	278	20.21	19.75	64.39	0.1937	0.1892	0.2229
28 c50v	0.0	0.5	1.0	43.25	22.07	−64.88	68.54	289	16.24	13.32	63.43	0.1746	0.1433	0.1504
29 c63v	0.0	0.375	1.0	36.87	35.21	−75.34	83.17	295	13.85	9.47	62.84	0.1607	0.1099	0.1069
30 c75v	0.0	0.25	1.0	32.68	44.97	−82.32	93.81	299	12.57	7.39	62.54	0.1524	0.0895	0.0834
31 c88v	0.0	0.125	1.0	30.75	49.69	−85.56	98.95	300	12.05	6.55	62.46	0.1487	0.0808	0.0739
32 v00m	0.0	0.0	1.0	30.28	50.92	−86.36	100.27	301	11.94	6.35	62.45	0.1479	0.0787	0.0717
33 v13m	0.125	0.0	1.0	30.52	51.2	−86.62	100.62	301	12.13	6.45	63.2	0.1483	0.0789	0.0728
34 v25m	0.25	0.0	1.0	30.67	51.4	−85.62	99.88	301	12.25	6.51	62.36	0.151	0.0803	0.0735
35 v38m	0.375	0.0	1.0	31.48	52.42	−84.07	99.08	302	12.92	6.86	62.19	0.1576	0.0837	0.0774
36 v50m	0.5	0.0	1.0	33.02	54.26	−81.43	97.86	304	14.24	7.55	62.22	0.1695	0.0898	0.0852
37 v63m	0.625	0.0	1.0	35.31	57.08	−77.07	95.92	307	16.38	8.66	61.75	0.1887	0.0997	0.0977
38 v75m	0.75	0.0	1.0	38.29	60.72	−71.18	93.57	310	19.46	10.25	60.91	0.2148	0.1131	0.1157
39 v88m	0.875	0.0	1.0	43.55	66.34	−65.51	93.24	315	25.62	13.53	64.75	0.2466	0.1302	0.1527
40 m00o	1.0	0.0	1.0	48.39	71.56	−60.56	93.75	320	32.35	17.11	68.77	0.2737	0.1447	0.1931
41 m13o	1.0	0.0	0.875	44.49	67.52	−44.66	80.95	327	26.9	14.18	44.99	0.3125	0.1648	0.1601
42 m25o	1.0	0.0	0.75	41.5	64.56	−26.25	69.69	338	23.18	12.18	26.84	0.3727	0.1958	0.1375
43 m38o	1.0	0.0	0.675	39.82	62.51	−9.45	63.22	351	21.18	11.14	16.08	0.4375	0.2303	0.1258
44 m50o	1.0	0.0	0.5	38.6	61.05	7.94	61.56	7	19.8	10.43	8.71	0.5084	0.2678	0.1177
45 m63o	1.0	0.0	0.375	37.83	60.16	24.93	65.12	23	18.97	9.99	4.26	0.571	0.3009	0.1128
46 m75o	1.0	0.0	0.25	37.41	59.66	40.69	72.21	34	18.52	9.76	1.85	0.6147	0.324	0.1102
47 m88o	1.0	0.0	0.125	37.23	59.41	52.95	79.58	42	18.33	9.67	0.79	0.6368	0.3359	0.1091
48 o00y	1.0	0.0	0.0	37.1	59.25	56.38	81.79	44	18.19	9.59	0.53	0.6424	0.3388	0.1083
49 n00w	0.0	0.0	0.0	2.5	0.0	0.0	0.01	0	0.26	0.28	0.3	0.3127	0.329	0.0031
50 n13w	0.125	0.125	0.125	4.56	−0.45	−0.71	0.85	238	0.47	0.5	0.6	0.2978	0.3208	0.0057
51 n25w	0.25	0.25	0.25	12.6	−0.33	−1.81	1.85	260	1.41	1.5	1.82	0.2987	0.3168	0.0169
52 n38w	0.375	0.375	0.375	23.36	−0.21	−1.97	1.99	264	3.7	3.91	4.64	0.3021	0.3191	0.0441
53 n50w	0.5	0.5	0.5	34.78	−0.08	−2.06	2.07	267	7.96	8.39	9.8	0.3045	0.3208	0.0947
54 n63w	0.625	0.625	0.625	46.81	0.02	−2.1	2.11	270	15.09	15.88	18.31	0.3062	0.3221	0.1792
55 n75w	0.75	0.75	0.75	61.39	−0.17	−1.76	1.78	264	28.18	29.7	33.64	0.3079	0.3245	0.3352
56 n88w	0.875	0.875	0.875	80.86	0.05	−0.03	0.07	324	55.35	58.21	63.43	0.3127	0.3289	0.6571
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS03a for CIE lightness *L=03 of black for illuminant D65**

System TLS03a
LCD projector



***Y* Yellow**
*LCH**a = 83.1 86.2 101
*LAB**a = 83.1 −16.3 84.7

***O* Orange red**
*LCH**a = 37.1 81.8 44
*LAB**a = 37.1 59.3 56.4

***L* Leaf green**
*LCH**a = 72.8 87.9 125
*LAB**a = 72.8 −50.9 71.6

***M* Magenta red**
*LCH**a = 48.4 93.8 320
*LAB**a = 48.4 71.6 −60.6

***C* Cyan blue**
*LCH**a = 77.6 29.4 201
*LAB**a = 77.6 −27.4 −10.7

***V* Violet blue**
*LCH**a = 30.3 100.3 301
*LAB**a = 30.3 50.9 −86.4

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness L^*=00 of black for illuminant D65

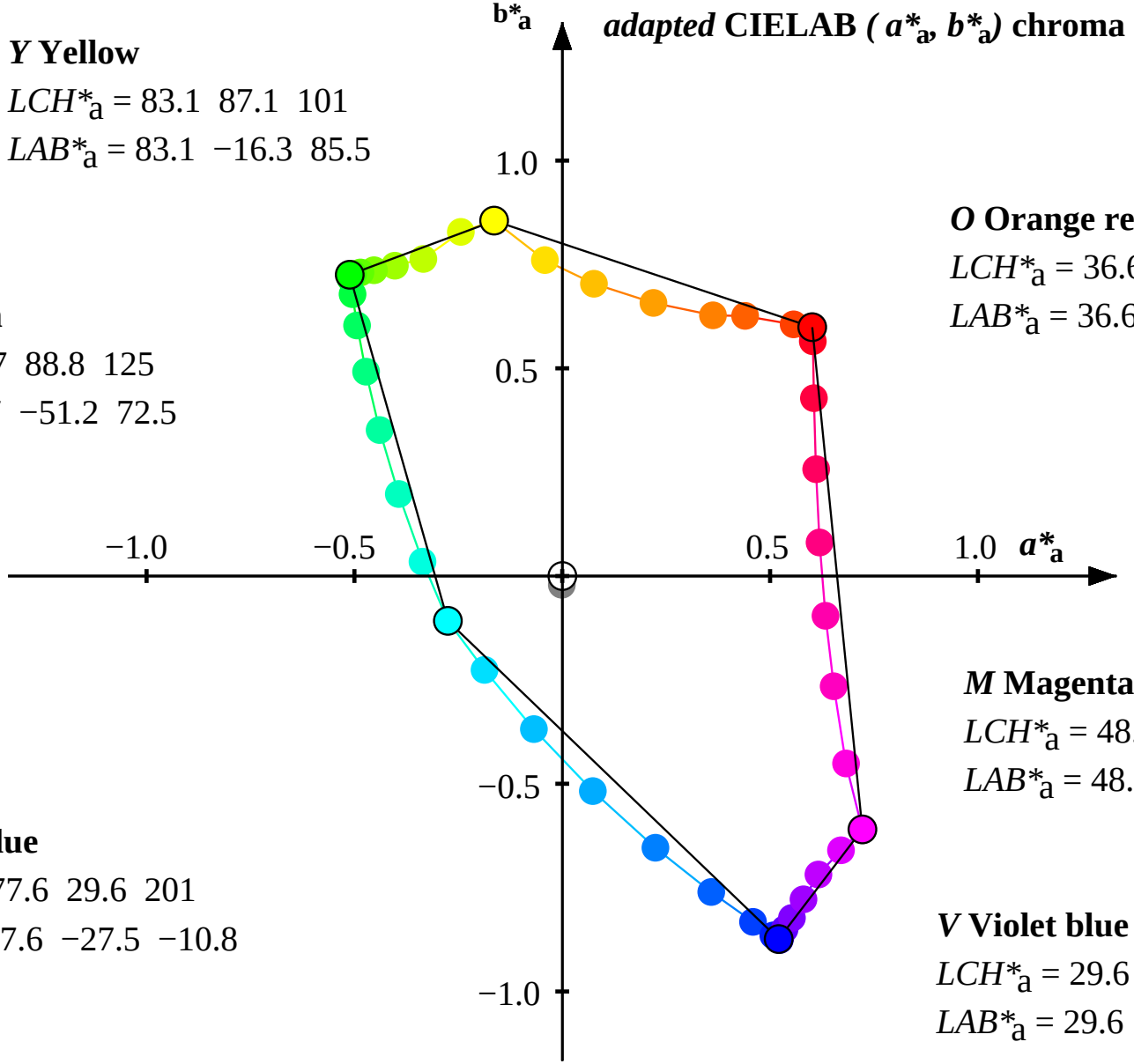
System TLS00a0
LCD projector

	Color	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	o00y	1.0	0.0	0.0	36.64	60.14	59.89	84.88	45	17.98	9.35	0.23	0.6525	0.3391	0.15
01	o13y	1.0	0.125	0.0	36.96	59.36	59.82	84.27	45	18.09	9.52	0.27	0.6489	0.3413	0.1527
02	o25y	1.0	0.25	0.0	38.4	55.69	60.54	82.25	47	18.58	10.32	0.4	0.6343	0.3522	0.1655
03	o38y	1.0	0.375	0.0	42.07	43.97	62.58	76.48	55	19.38	12.55	0.7	0.594	0.3846	0.2013
04	o50y	1.0	0.5	0.0	46.78	36.28	62.76	72.49	60	21.97	15.85	1.28	0.5619	0.4054	0.2544
05	o63y	1.0	0.625	0.0	53.92	21.94	65.75	69.31	72	25.7	21.9	2.24	0.5156	0.4394	0.3515
06	o75y	1.0	0.75	0.0	62.11	7.64	70.36	70.77	84	31.04	30.53	3.62	0.4761	0.4683	0.4899
07	o88y	1.0	0.875	0.0	70.54	−4.15	76.03	76.14	93	38.15	41.52	5.33	0.4488	0.4884	0.6662
08	y00l	1.0	1.0	0.0	83.08	−16.34	85.5	87.05	101	52.69	62.32	8.46	0.4267	0.5048	1.0
09	y13l	0.875	1.0	0.0	81.14	−24.37	82.84	86.35	106	46.63	58.73	8.26	0.4104	0.5169	0.9424
10	y25l	0.75	1.0	0.0	74.95	−33.4	76.37	83.36	114	35.07	48.2	7.08	0.3881	0.5335	0.7734
11	y38l	0.625	1.0	0.0	74.0	−40.23	74.73	84.87	118	31.95	46.7	7.08	0.3727	0.5447	0.7493
12	y50l	0.5	1.0	0.0	73.38	−45.34	73.66	86.5	122	29.86	45.74	7.08	0.3611	0.5532	0.7339
13	y63l	0.375	1.0	0.0	73.02	−48.56	73.02	87.7	124	28.62	45.19	7.09	0.3538	0.5586	0.7251
14	y75l	0.25	1.0	0.0	72.83	−50.28	72.71	88.41	125	27.97	44.9	7.08	0.3498	0.5616	0.7205
15	y88l	0.125	1.0	0.0	72.75	−51.03	72.56	88.71	125	27.7	44.79	7.09	0.3481	0.5628	0.7187
16	l00c	0.0	1.0	0.0	72.74	−51.16	72.53	88.76	125	27.66	44.77	7.09	0.3478	0.563	0.7184
17	l13c	0.0	1.0	0.125	72.78	−51.0	71.64	87.95	125	27.73	44.82	7.35	0.3471	0.561	0.7192
18	l25c	0.0	1.0	0.25	72.88	−50.49	67.84	84.57	127	27.98	44.98	8.48	0.3435	0.5524	0.7218
19	l38c	0.0	1.0	0.375	73.08	−49.33	60.28	77.9	129	28.49	45.29	11.05	0.3358	0.5338	0.7266
20	l50c	0.0	1.0	0.5	73.46	−47.23	49.16	68.18	134	29.46	45.87	15.79	0.3233	0.5034	0.736
21	l63c	0.0	1.0	0.625	74.1	−43.94	35.15	56.27	141	31.07	46.87	23.64	0.3059	0.4614	0.752
22	l75c	0.0	1.0	0.75	74.72	−39.36	19.71	44.03	153	33.07	47.84	34.77	0.2859	0.4135	0.7676
23	l88c	0.0	1.0	0.875	76.21	−33.56	3.44	33.74	174	36.64	50.24	51.22	0.2653	0.3638	0.8061
24	c00v	0.0	1.0	1.0	77.56	−27.51	−10.78	29.55	201	40.34	52.47	69.38	0.2487	0.3235	0.842
25	c13v	0.0	0.875	1.0	69.83	−18.71	−22.59	29.34	230	32.95	40.51	67.56	0.2337	0.2873	0.6501
26	c25v	0.0	0.75	1.0	60.64	−6.82	−36.88	37.52	260	25.74	28.84	65.72	0.214	0.2397	0.4627
27	c38v	0.0	0.675	1.0	51.3	7.35	−51.74	52.27	278	20.01	19.53	64.29	0.1927	0.1881	0.3134
28	c50v	0.0	0.5	1.0	42.9	22.36	−65.4	69.12	289	16.02	13.09	63.33	0.1733	0.1416	0.21
29	c63v	0.0	0.375	1.0	36.41	35.81	−76.05	84.07	295	13.63	9.22	62.73	0.1592	0.1078	0.148
30	c75v	0.0	0.25	1.0	32.11	45.89	−83.2	95.03	299	12.35	7.13	62.44	0.1508	0.0871	0.1145
31	c88v	0.0	0.125	1.0	30.13	50.78	−86.54	100.35	300	11.83	6.29	62.35	0.147	0.0782	0.1009
32	v00m	0.0	0.0	1.0	29.65	52.07	−87.36	101.71	301	11.71	6.09	62.34	0.1461	0.076	0.0978
33	v13m	0.125	0.0	1.0	29.89	52.33	−87.61	102.06	301	11.9	6.19	63.09	0.1466	0.0763	0.0993
34	v25m	0.25	0.0	1.0	30.04	52.53	−86.6	101.3	301	12.02	6.25	62.26	0.1493	0.0777	0.1003
35	v38m	0.375	0.0	1.0	30.88	53.51	−85.01	100.46	302	12.69	6.6	62.08	0.156	0.0811	0.1059
36	v50m	0.5	0.0	1.0	32.47	55.29	−82.3	99.16	304	14.02	7.29	62.11	0.1681	0.0874	0.117
37	v63m	0.625	0.0	1.0	34.81	58.03	−77.84	97.1	307	16.17	8.4	61.64	0.1875	0.0975	0.1349
38	v75m	0.75	0.0	1.0	37.85	61.58	−71.84	94.62	311	19.26	10.0	60.8	0.2139	0.1111	0.1605
39	v88m	0.875	0.0	1.0	43.2	67.07	−66.02	94.12	315	25.44	13.29	64.65	0.2461	0.1286	0.2133
40	m00o	1.0	0.0	1.0	48.11	72.19	−60.98	94.51	320	32.19	16.88	68.68	0.2734	0.1434	0.2709
41	m13o	1.0	0.0	0.875	44.16	68.22	−45.05	81.76	327	26.72	13.95	44.83	0.3125	0.1632	0.2238
42	m25o	1.0	0.0	0.75	41.12	65.33	−26.56	70.53	338	22.99	11.94	26.62	0.3735	0.194	0.1916
43	m38o	1.0	0.0	0.675	39.41	63.33	−9.6	64.05	351	20.98	10.9	15.83	0.4398	0.2285	0.1749
44	m50o	1.0	0.0	0.5	38.17	61.9	8.12	62.43	7	19.59	10.18	8.44	0.5127	0.2664	0.1634
45	m63o	1.0	0.0	0.375	37.38	61.03	25.73	66.23	23	18.76	9.75	3.97	0.5777	0.3001	0.1564
46	m75o	1.0	0.0	0.25	36.96	60.54	42.82	74.15	35	18.32	9.52	1.55	0.6234	0.3238	0.1527
47	m88o	1.0	0.0	0.125	36.78	60.29	56.46	82.6	43	18.12	9.42	0.49	0.6466	0.3361	0.1511
48	o00y	1.0	0.0	0.0	36.64	60.14	59.89	84.88	45	17.98	9.35	0.23	0.6525	0.3391	0.15
49	n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
50	n13w	0.125	0.125	0.125	2.06	−0.45	−0.71	0.86	238	0.21	0.23	0.3	0.2807	0.3114	0.0037
51	n25w	0.25	0.25	0.25	10.74	−0.38	−2.06	2.1	259	1.15	1.23	1.52	0.2956	0.3142	0.0197
52	n38w	0.375	0.375	0.375	22.45	−0.22	−2.06	2.09	264	3.45	3.64	4.35	0.3014	0.3184	0.0584
53	n50w	0.5	0.5	0.5	34.27	−0.08	−2.1	2.12	267	7.72	8.14	9.52	0.3043	0.3205	0.1306
54	n63w	0.625	0.625	0.625	46.51	0.02	−2.12	2.13	270	14.87	15.65	18.07	0.3061	0.322	0.2511
55	n75w	0.75	0.75	0.75	61.23	−0.17	−1.78	1.79	264	28.0	29.51	33.44	0.3079	0.3245	0.4735
56	n88w	0.875	0.875	0.875	80.8	0.05	−0.03	0.07	324	55.26	58.12	63.32	0.3127	0.3289	0.9326
57	n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.4215

n = 88.59 / (88.59 − 0.28) = 1.003

Colorimetric "Adapted data (a0)": Television Luminous System TLS00a0 for CIE lightness *L=00 of black for illuminant D65**

System TLS00a0
LCD projector



***Y* Yellow**
*LCH**a = 83.1 87.1 101
*LAB**a = 83.1 −16.3 85.5

***O* Orange red**
*LCH**a = 36.6 84.9 45
*LAB**a = 36.6 60.1 59.9

***L* Leaf green**
*LCH**a = 72.7 88.8 125
*LAB**a = 72.7 −51.2 72.5

***M* Magenta red**
*LCH**a = 48.1 94.5 320
*LAB**a = 48.1 72.2 −61.0

***C* Cyan blue**
*LCH**a = 77.6 29.6 201
*LAB**a = 77.6 −27.5 −10.8

***V* Violet blue**
*LCH**a = 29.6 101.7 301
*LAB**a = 29.6 52.1 −87.4

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness L^*=00 of black for illuminant D65

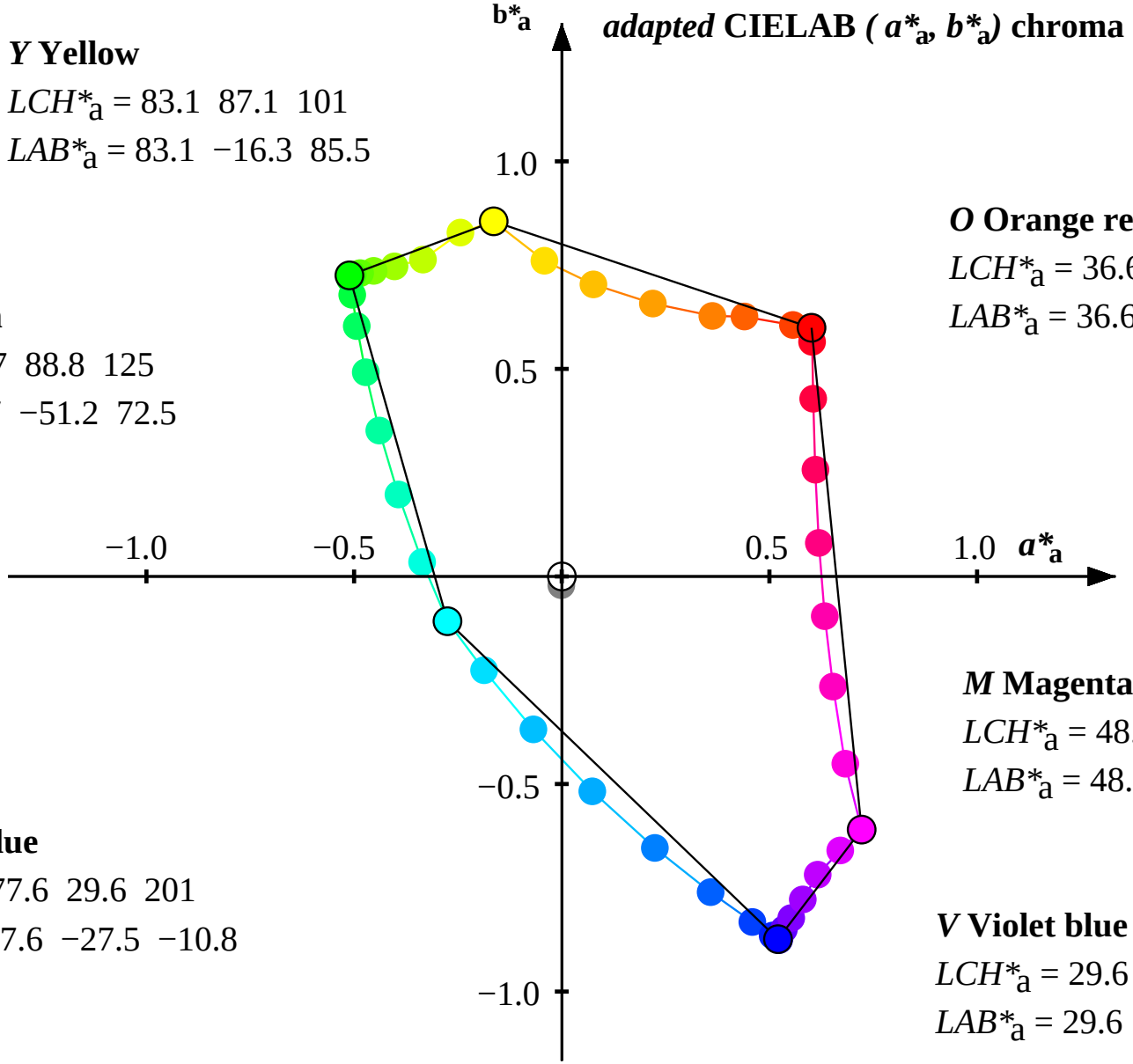
System TLS00a
LCD projector
D65 reflection:
Y_N = 0.0
L^*_N = 0.0

Color	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 o00y	1.0	0.0	0.0	36.64	60.14	59.89	84.88	45	17.98	9.35	0.23	0.6525	0.3391	0.15
01 o13y	1.0	0.125	0.0	36.96	59.36	59.82	84.27	45	18.09	9.52	0.27	0.6489	0.3413	0.1527
02 o25y	1.0	0.25	0.0	38.4	55.69	60.54	82.25	47	18.58	10.32	0.4	0.6343	0.3522	0.1655
03 o38y	1.0	0.375	0.0	42.07	43.97	62.58	76.48	55	19.38	12.55	0.7	0.594	0.3846	0.2013
04 o50y	1.0	0.5	0.0	46.78	36.28	62.76	72.49	60	21.97	15.85	1.28	0.5619	0.4054	0.2544
05 o63y	1.0	0.625	0.0	53.92	21.94	65.75	69.31	72	25.7	21.9	2.24	0.5156	0.4394	0.3515
06 o75y	1.0	0.75	0.0	62.11	7.64	70.36	70.77	84	31.04	30.53	3.62	0.4761	0.4683	0.4899
07 o88y	1.0	0.875	0.0	70.54	−4.15	76.03	76.14	93	38.15	41.52	5.33	0.4488	0.4884	0.6662
08 y00l	1.0	1.0	0.0	83.08	−16.34	85.5	87.05	101	52.69	62.32	8.46	0.4267	0.5048	1.0
09 y13l	0.875	1.0	0.0	81.14	−24.37	82.84	86.35	106	46.63	58.73	8.26	0.4104	0.5169	0.9424
10 y25l	0.75	1.0	0.0	74.95	−33.4	76.37	83.36	114	35.07	48.2	7.08	0.3881	0.5335	0.7734
11 y38l	0.625	1.0	0.0	74.0	−40.23	74.73	84.87	118	31.95	46.7	7.08	0.3727	0.5447	0.7493
12 y50l	0.5	1.0	0.0	73.38	−45.34	73.66	86.5	122	29.86	45.74	7.08	0.3611	0.5532	0.7339
13 y63l	0.375	1.0	0.0	73.02	−48.56	73.02	87.7	124	28.62	45.19	7.09	0.3538	0.5586	0.7251
14 y75l	0.25	1.0	0.0	72.83	−50.28	72.71	88.41	125	27.97	44.9	7.08	0.3498	0.5616	0.7205
15 y88l	0.125	1.0	0.0	72.75	−51.03	72.56	88.71	125	27.7	44.79	7.09	0.3481	0.5628	0.7187
16 l00c	0.0	1.0	0.0	72.74	−51.16	72.53	88.76	125	27.66	44.77	7.09	0.3478	0.563	0.7184
17 l13c	0.0	1.0	0.125	72.78	−51.0	71.64	87.95	125	27.73	44.82	7.35	0.3471	0.561	0.7192
18 l25c	0.0	1.0	0.25	72.88	−50.49	67.84	84.57	127	27.98	44.98	8.48	0.3435	0.5524	0.7218
19 l38c	0.0	1.0	0.375	73.08	−49.33	60.28	77.9	129	28.49	45.29	11.05	0.3358	0.5338	0.7266
20 l50c	0.0	1.0	0.5	73.46	−47.23	49.16	68.18	134	29.46	45.87	15.79	0.3233	0.5034	0.736
21 l63c	0.0	1.0	0.625	74.1	−43.94	35.15	56.27	141	31.07	46.87	23.64	0.3059	0.4614	0.752
22 l75c	0.0	1.0	0.75	74.72	−39.36	19.71	44.03	153	33.07	47.84	34.77	0.2859	0.4135	0.7676
23 l88c	0.0	1.0	0.875	76.21	−33.56	3.44	33.74	174	36.64	50.24	51.22	0.2653	0.3638	0.8061
24 c00v	0.0	1.0	1.0	77.56	−27.51	−10.78	29.55	201	40.34	52.47	69.38	0.2487	0.3235	0.842
25 c13v	0.0	0.875	1.0	69.83	−18.71	−22.59	29.34	230	32.95	40.51	67.56	0.2337	0.2873	0.6501
26 c25v	0.0	0.75	1.0	60.64	−6.82	−36.88	37.52	260	25.74	28.84	65.72	0.214	0.2397	0.4627
27 c38v	0.0	0.675	1.0	51.3	7.35	−51.74	52.27	278	20.01	19.53	64.29	0.1927	0.1881	0.3134
28 c50v	0.0	0.5	1.0	42.9	22.36	−65.4	69.12	289	16.02	13.09	63.33	0.1733	0.1416	0.21
29 c63v	0.0	0.375	1.0	36.41	35.81	−76.05	84.07	295	13.63	9.22	62.73	0.1592	0.1078	0.148
30 c75v	0.0	0.25	1.0	32.11	45.89	−83.2	95.03	299	12.35	7.13	62.44	0.1508	0.0871	0.1145
31 c88v	0.0	0.125	1.0	30.13	50.78	−86.54	100.35	300	11.83	6.29	62.35	0.147	0.0782	0.1009
32 v00m	0.0	0.0	1.0	29.65	52.07	−87.36	101.71	301	11.71	6.09	62.34	0.1461	0.076	0.0978
33 v13m	0.125	0.0	1.0	29.89	52.33	−87.61	102.06	301	11.9	6.19	63.09	0.1466	0.0763	0.0993
34 v25m	0.25	0.0	1.0	30.04	52.53	−86.6	101.3	301	12.02	6.25	62.26	0.1493	0.0777	0.1003
35 v38m	0.375	0.0	1.0	30.88	53.51	−85.01	100.46	302	12.69	6.6	62.08	0.156	0.0811	0.1059
36 v50m	0.5	0.0	1.0	32.47	55.29	−82.3	99.16	304	14.02	7.29	62.11	0.1681	0.0874	0.117
37 v63m	0.625	0.0	1.0	34.81	58.03	−77.84	97.1	307	16.17	8.4	61.64	0.1875	0.0975	0.1349
38 v75m	0.75	0.0	1.0	37.85	61.58	−71.84	94.62	311	19.26	10.0	60.8	0.2139	0.1111	0.1605
39 v88m	0.875	0.0	1.0	43.2	67.07	−66.02	94.12	315	25.44	13.29	64.65	0.2461	0.1286	0.2133
40 m00o	1.0	0.0	1.0	48.11	72.19	−60.98	94.51	320	32.19	16.88	68.68	0.2734	0.1434	0.2709
41 m13o	1.0	0.0	0.875	44.16	68.22	−45.05	81.76	327	26.72	13.95	44.83	0.3125	0.1632	0.2238
42 m25o	1.0	0.0	0.75	41.12	65.33	−26.56	70.53	338	22.99	11.94	26.62	0.3735	0.194	0.1916
43 m38o	1.0	0.0	0.675	39.41	63.33	−9.6	64.05	351	20.98	10.9	15.83	0.4398	0.2285	0.1749
44 m50o	1.0	0.0	0.5	38.17	61.9	8.12	62.43	7	19.59	10.18	8.44	0.5127	0.2664	0.1634
45 m63o	1.0	0.0	0.375	37.38	61.03	25.73	66.23	23	18.76	9.75	3.97	0.5777	0.3001	0.1564
46 m75o	1.0	0.0	0.25	36.96	60.54	42.82	74.15	35	18.32	9.52	1.55	0.6234	0.3238	0.1527
47 m88o	1.0	0.0	0.125	36.78	60.29	56.46	82.6	43	18.12	9.42	0.49	0.6466	0.3361	0.1511
48 o00y	1.0	0.0	0.0	36.64	60.14	59.89	84.88	45	17.98	9.35	0.23	0.6525	0.3391	0.15
49 n00w	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0	0.0	0.0	0.0	0.0	0.0	0.0
50 n13w	0.125	0.125	0.125	2.06	−0.45	−0.71	0.86	238	0.21	0.23	0.3	0.2807	0.3114	0.0037
51 n25w	0.25	0.25	0.25	10.74	−0.38	−2.06	2.1	259	1.15	1.23	1.52	0.2956	0.3142	0.0197
52 n38w	0.375	0.375	0.375	22.45	−0.22	−2.06	2.09	264	3.45	3.64	4.35	0.3014	0.3184	0.0584
53 n50w	0.5	0.5	0.5	34.27	−0.08	−2.1	2.12	267	7.72	8.14	9.52	0.3043	0.3205	0.1306
54 n63w	0.625	0.625	0.625	46.51	0.02	−2.12	2.13	270	14.87	15.65	18.07	0.3061	0.322	0.2511
55 n75w	0.75	0.75	0.75	61.23	−0.17	−1.78	1.79	264	28.0	29.51	33.44	0.3079	0.3245	0.4735
56 n88w	0.875	0.875	0.875	80.8	0.05	−0.03	0.07	324	55.26	58.12	63.32	0.3127	0.3289	0.9326
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.4215

n = 88.59 / (88.59 + 0.0) = 1.0

Colorimetric "Adapted data (a)": Television Luminous System TLS00a for CIE lightness *L=00 of black for illuminant D65**

System TLS00a
LCD projector
D65 reflection:
Y_N = 0.0
L^*_N = 0.0



adapted CIELAB (a^*_a, b^*_a) chroma diagram

Y Yellow
LCH^*_a = 83.1 87.1 101
LAB^*_a = 83.1 −16.3 85.5

O Orange red
LCH^*_a = 36.6 84.9 45
LAB^*_a = 36.6 60.1 59.9

L Leaf green
LCH^*_a = 72.7 88.8 125
LAB^*_a = 72.7 −51.2 72.5

M Magenta red
LCH^*_a = 48.1 94.5 320
LAB^*_a = 48.1 72.2 −61.0

C Cyan blue
LCH^*_a = 77.6 29.6 201
LAB^*_a = 77.6 −27.5 −10.8

V Violet blue
LCH^*_a = 29.6 101.7 301
LAB^*_a = 29.6 52.1 −87.4

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness L^*=06 of black for illuminant D65

System TLS06a
LCD projector

D65 reflection:
Y_N = 0.63
L^*_N = 5.69

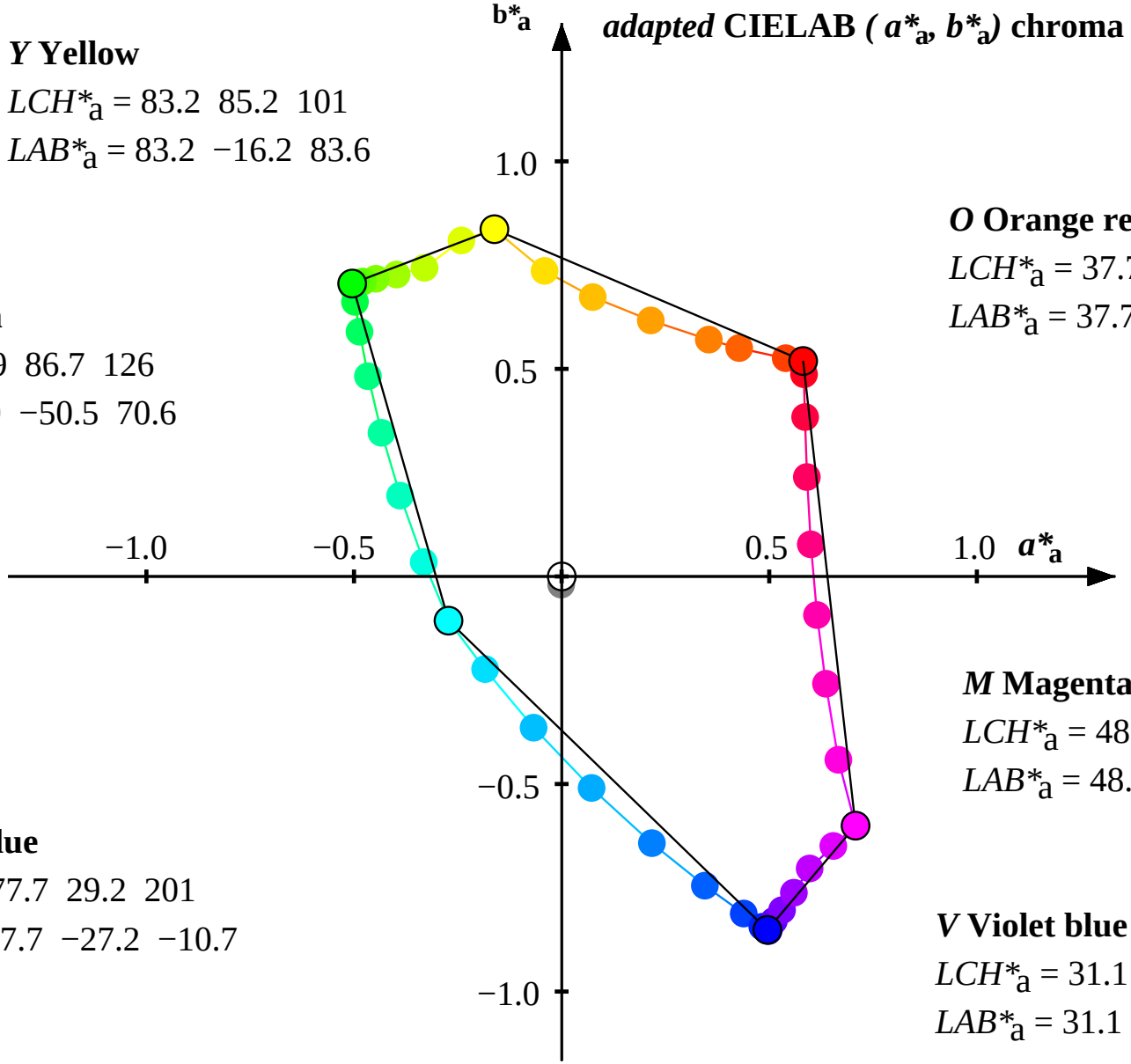
Color	r=olv*$_1$	g=olv*$_2$	b=olv*$_3$	L^*_a=LAB*$_{1a}$	a^*_a=LAB*$_{2a}$	b^*_a=LAB*$_{3a}$	$C^*_{ab,a}$=LAB*$_{ab,a}$	$h_{ab,a}$	X_a=XYZ$_{1a}$	Y_a=XYZ$_{2a}$	Z_a=XYZ$_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	37.67	58.17	51.95	77.99	42	18.45	9.91	0.91	0.6305	0.3385	0.1585
01 o13y	1.0	0.125	0.0	37.97	57.43	51.85	77.38	42	18.56	10.07	0.95	0.6273	0.3405	0.1612
02 o25y	1.0	0.25	0.0	39.36	53.96	52.54	75.31	44	19.04	10.87	1.07	0.6145	0.3508	0.1739
03 o38y	1.0	0.375	0.0	42.89	42.75	54.99	69.65	52	19.83	13.08	1.37	0.5784	0.3815	0.2093
04 o50y	1.0	0.5	0.0	47.45	35.42	57.05	67.15	58	22.41	16.37	1.95	0.5503	0.4018	0.2618
05 o63y	1.0	0.625	0.0	54.42	21.51	61.65	65.29	71	26.11	22.37	2.91	0.5081	0.4353	0.358
06 o75y	1.0	0.75	0.0	62.46	7.52	67.29	67.71	84	31.41	30.94	4.28	0.4715	0.4644	0.495
07 o88y	1.0	0.875	0.0	70.77	−4.1	73.59	73.7	93	38.48	41.85	5.98	0.4458	0.4849	0.6695
08 y00l	1.0	1.0	0.0	83.18	−16.18	83.63	85.19	101	52.91	62.51	9.08	0.425	0.5021	1.0
09 y13l	0.875	1.0	0.0	81.26	−24.12	80.96	84.48	107	46.89	58.94	8.88	0.4088	0.5138	0.943
10 y25l	0.75	1.0	0.0	75.13	−33.0	74.36	81.35	114	35.41	48.49	7.72	0.3865	0.5292	0.7757
11 y38l	0.625	1.0	0.0	74.19	−39.71	72.73	82.87	119	32.32	46.99	7.71	0.3714	0.54	0.7518
12 y50l	0.5	1.0	0.0	73.57	−44.73	71.68	84.5	122	30.24	46.04	7.71	0.36	0.5482	0.7366
13 y63l	0.375	1.0	0.0	73.22	−47.9	71.05	85.69	124	29.01	45.49	7.72	0.3528	0.5533	0.7278
14 y75l	0.25	1.0	0.0	73.03	−49.59	70.74	86.4	125	28.37	45.21	7.72	0.349	0.5561	0.7233
15 y88l	0.125	1.0	0.0	72.96	−50.32	70.59	86.7	125	28.1	45.1	7.72	0.3473	0.5573	0.7215
16 l00c	0.0	1.0	0.0	72.94	−50.45	70.56	86.75	126	28.06	45.08	7.72	0.347	0.5575	0.7212
17 l13c	0.0	1.0	0.125	72.98	−50.3	69.73	85.99	126	28.13	45.13	7.97	0.3463	0.5556	0.722
18 l25c	0.0	1.0	0.25	73.08	−49.8	66.15	82.81	127	28.37	45.29	9.1	0.3428	0.5472	0.7246
19 l38c	0.0	1.0	0.375	73.28	−48.66	58.96	76.45	130	28.88	45.59	11.66	0.3353	0.5293	0.7294
20 l50c	0.0	1.0	0.5	73.66	−46.6	48.25	67.09	134	29.84	46.17	16.36	0.323	0.4998	0.7387
21 l63c	0.0	1.0	0.625	74.29	−43.37	34.61	55.49	141	31.44	47.16	24.15	0.306	0.459	0.7545
22 l75c	0.0	1.0	0.75	74.9	−38.87	19.46	43.47	153	33.43	48.12	35.2	0.2863	0.4122	0.7699
23 l88c	0.0	1.0	0.875	76.38	−33.16	3.4	33.34	174	36.98	50.51	51.54	0.266	0.3633	0.808
24 c00v	0.0	1.0	1.0	77.72	−27.2	−10.68	29.23	201	40.65	52.73	69.57	0.2495	0.3236	0.8436
25 c13v	0.0	0.875	1.0	70.07	−18.46	−22.35	29.0	230	33.31	40.85	67.76	0.2347	0.2878	0.6536
26 c25v	0.0	0.75	1.0	61.01	−6.7	−36.43	37.05	260	26.15	29.26	65.94	0.2155	0.2411	0.4681
27 c38v	0.0	0.675	1.0	51.86	7.19	−50.98	51.49	278	20.46	20.02	64.52	0.1949	0.1907	0.3203
28 c50v	0.0	0.5	1.0	43.68	21.7	−64.24	67.82	289	16.51	13.62	63.56	0.1762	0.1454	0.2179
29 c63v	0.0	0.375	1.0	37.45	34.48	−74.47	82.07	295	14.13	9.78	62.97	0.1626	0.1126	0.1565
30 c75v	0.0	0.25	1.0	33.37	43.88	−81.25	92.35	298	12.86	7.71	62.68	0.1545	0.0926	0.1233
31 c88v	0.0	0.125	1.0	31.51	48.38	−84.38	97.27	300	12.34	6.87	62.59	0.1508	0.084	0.1099
32 v00m	0.0	0.0	1.0	31.06	49.56	−85.15	98.53	300	12.23	6.68	62.58	0.15	0.0819	0.1068
33 v13m	0.125	0.0	1.0	31.29	49.85	−85.41	98.9	300	12.41	6.77	63.33	0.1504	0.0821	0.1084
34 v25m	0.25	0.0	1.0	31.43	50.06	−84.43	98.16	301	12.53	6.84	62.5	0.1531	0.0835	0.1093
35 v38m	0.375	0.0	1.0	32.21	51.11	−82.93	97.42	302	13.2	7.18	62.32	0.1596	0.0868	0.1149
36 v50m	0.5	0.0	1.0	33.71	53.02	−80.38	96.3	303	14.52	7.87	62.35	0.1713	0.0928	0.1259
37 v63m	0.625	0.0	1.0	35.93	55.93	−76.13	94.48	306	16.65	8.97	61.89	0.1902	0.1025	0.1435
38 v75m	0.75	0.0	1.0	38.83	59.68	−70.38	92.28	310	19.72	10.56	61.05	0.2159	0.1156	0.1689
39 v88m	0.875	0.0	1.0	43.98	65.45	−64.87	92.16	315	25.86	13.82	64.88	0.2473	0.1322	0.2212
40 m00o	1.0	0.0	1.0	48.75	70.78	−60.05	92.82	320	32.56	17.39	68.88	0.274	0.1463	0.2782
41 m13o	1.0	0.0	0.875	44.91	66.65	−44.17	79.96	326	27.12	14.48	45.19	0.3125	0.1668	0.2316
42 m25o	1.0	0.0	0.75	41.97	63.61	−25.86	68.67	338	23.42	12.48	27.11	0.3717	0.1981	0.1997
43 m38o	1.0	0.0	0.675	40.33	61.51	−9.27	62.21	351	21.43	11.45	16.39	0.4349	0.2324	0.1832
44 m50o	1.0	0.0	0.5	39.13	60.02	7.74	60.51	7	20.05	10.74	9.06	0.5032	0.2694	0.1717
45 m63o	1.0	0.0	0.375	38.38	59.1	24.0	63.78	22	19.22	10.3	4.62	0.5629	0.3017	0.1648
46 m75o	1.0	0.0	0.25	37.97	58.59	38.41	70.05	33	18.78	10.07	2.22	0.6044	0.3242	0.1612
47 m88o	1.0	0.0	0.125	37.8	58.33	48.71	75.99	40	18.59	9.98	1.16	0.6253	0.3356	0.1596
48 o00y	1.0	0.0	0.0	37.67	58.17	51.95	77.99	42	18.45	9.91	0.91	0.6305	0.3385	0.1585
49 n00w	0.0	0.0	0.0	5.65	0.0	0.0	0.01	0	0.59	0.63	0.68	0.3127	0.329	0.01
50 n13w	0.125	0.125	0.125	7.7	−0.44	−0.71	0.85	238	0.8	0.85	0.98	0.3038	0.3241	0.0136
51 n25w	0.25	0.25	0.25	14.64	−0.28	−1.58	1.61	260	1.74	1.84	2.19	0.3012	0.3191	0.0295
52 n38w	0.375	0.375	0.375	24.45	−0.2	−1.86	1.88	264	4.02	4.24	5.0	0.303	0.3199	0.0679
53 n50w	0.5	0.5	0.5	35.41	−0.08	−2.0	2.01	267	8.26	8.71	10.14	0.3049	0.3211	0.1393
54 n63w	0.625	0.625	0.625	47.19	0.02	−2.07	2.08	270	15.36	16.16	18.62	0.3064	0.3223	0.2586
55 n75w	0.75	0.75	0.75	61.59	−0.16	−1.75	1.77	264	28.4	29.93	33.89	0.308	0.3246	0.4788
56 n88w	0.875	0.875	0.875	80.92	0.05	−0.03	0.06	324	55.46	58.33	63.56	0.3127	0.3289	0.9332
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.4173

n = 88.59 / (88.59 + 0.63) = 0.993

Colorimetric "Adapted data (a)": Television Luminous System TLS06a for CIE lightness *L=06 of black for illuminant D65**

System TLS06a
LCD projector
D65 reflection:
Y_N = 0.63
L^*_N = 5.69

adapted CIELAB (a^*_a, b^*_a) chroma diagram



Y Yellow
LCH^*_a = 83.2 85.2 101
LAB^*_a = 83.2 −16.2 83.6

O Orange red
LCH^*_a = 37.7 78.0 42
LAB^*_a = 37.7 58.2 51.9

L Leaf green
LCH^*_a = 72.9 86.7 126
LAB^*_a = 72.9 −50.5 70.6

M Magenta red
LCH^*_a = 48.7 92.8 320
LAB^*_a = 48.7 70.8 −60.1

C Cyan blue
LCH^*_a = 77.7 29.2 201
LAB^*_a = 77.7 −27.2 −10.7

V Violet blue
LCH^*_a = 31.1 98.5 300
LAB^*_a = 31.1 49.6 −85.2

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

System TLS11a
LCD projector

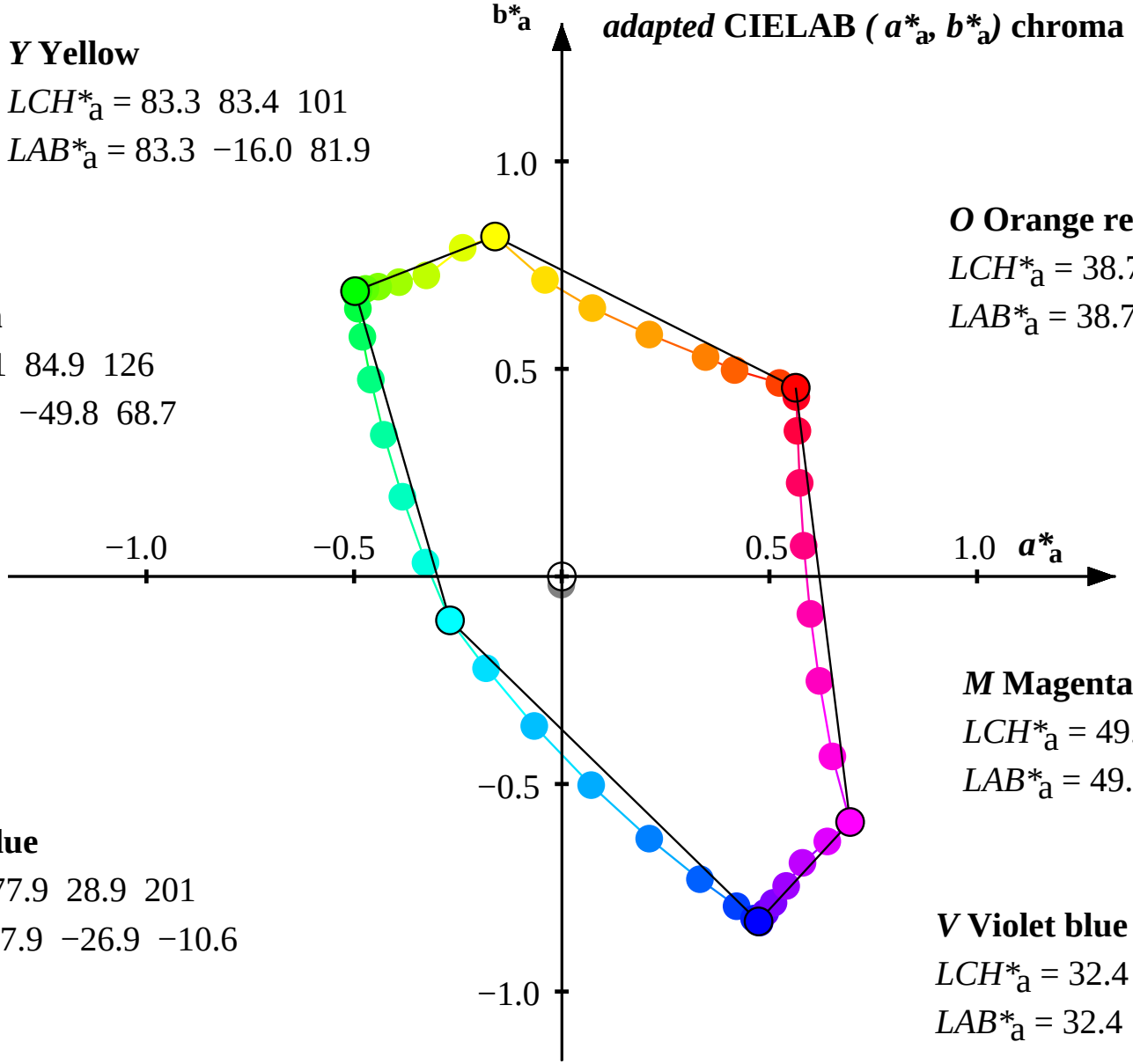
D65 reflection:
Y_N = 1.26
L^*_N = 11.0

Color	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 o00y	1.0	0.0	0.0	38.65	56.34	45.45	72.39	39	18.91	10.46	1.58	0.6111	0.3379	0.1668
01 o13y	1.0	0.125	0.0	38.94	55.65	45.51	71.89	39	19.02	10.62	1.62	0.6083	0.3398	0.1695
02 o25y	1.0	0.25	0.0	40.27	52.36	46.6	70.09	42	19.5	11.41	1.74	0.5971	0.3495	0.1821
03 o38y	1.0	0.375	0.0	43.67	41.61	49.77	64.87	50	20.29	13.61	2.04	0.5645	0.3788	0.2171
04 o50y	1.0	0.5	0.0	48.1	34.6	52.81	63.14	57	22.85	16.87	2.62	0.5397	0.3986	0.2691
05 o63y	1.0	0.625	0.0	54.91	21.11	58.29	61.99	70	26.52	22.84	3.56	0.5011	0.4316	0.3643
06 o75y	1.0	0.75	0.0	62.8	7.41	64.61	65.04	83	31.78	31.35	4.92	0.467	0.4606	0.5
07 o88y	1.0	0.875	0.0	70.99	−4.05	71.38	71.5	93	38.8	42.18	6.61	0.443	0.4816	0.6728
08 y00l	1.0	1.0	0.0	83.28	−16.03	81.88	83.43	101	53.13	62.69	9.69	0.4233	0.4995	1.0
09 y13l	0.875	1.0	0.0	81.37	−23.88	79.2	82.73	107	47.15	59.15	9.49	0.4072	0.5108	0.9435
10 y25l	0.75	1.0	0.0	75.31	−32.6	72.49	79.49	114	35.75	48.77	8.34	0.385	0.5252	0.7779
11 y38l	0.625	1.0	0.0	74.37	−39.21	70.89	81.01	119	32.69	47.29	8.34	0.3701	0.5355	0.7543
12 y50l	0.5	1.0	0.0	73.77	−44.15	69.85	82.63	122	30.62	46.34	8.33	0.359	0.5433	0.7392
13 y63l	0.375	1.0	0.0	73.41	−47.26	69.22	83.82	124	29.39	45.8	8.34	0.3519	0.5483	0.7305
14 y75l	0.25	1.0	0.0	73.23	−48.92	68.92	84.52	125	28.76	45.52	8.34	0.3481	0.551	0.726
15 y88l	0.125	1.0	0.0	73.16	−49.64	68.77	84.82	126	28.49	45.4	8.34	0.3465	0.5521	0.7242
16 l00c	0.0	1.0	0.0	73.14	−49.76	68.74	84.87	126	28.45	45.38	8.35	0.3462	0.5523	0.7239
17 l13c	0.0	1.0	0.125	73.18	−49.61	67.96	84.15	126	28.52	45.44	8.59	0.3455	0.5504	0.7248
18 l25c	0.0	1.0	0.25	73.28	−49.12	64.58	81.14	127	28.76	45.59	9.71	0.3422	0.5423	0.7273
19 l38c	0.0	1.0	0.375	73.48	−48.01	57.71	75.07	130	29.27	45.89	12.25	0.3348	0.525	0.7321
20 l50c	0.0	1.0	0.5	73.85	−45.99	47.38	66.03	134	30.22	46.47	16.92	0.3228	0.4964	0.7413
21 l63c	0.0	1.0	0.625	74.48	−42.82	34.09	54.73	141	31.81	47.45	24.66	0.3061	0.4566	0.7569
22 l75c	0.0	1.0	0.75	75.08	−38.39	19.21	42.93	153	33.78	48.41	35.63	0.2867	0.4108	0.7722
23 l88c	0.0	1.0	0.875	76.54	−32.77	3.37	32.96	174	37.31	50.77	51.86	0.2666	0.3628	0.8099
24 c00v	0.0	1.0	1.0	77.86	−26.9	−10.57	28.92	201	40.96	52.98	69.76	0.2502	0.3236	0.8451
25 c13v	0.0	0.875	1.0	70.31	−18.21	−22.11	28.66	231	33.67	41.19	67.96	0.2357	0.2884	0.657
26 c25v	0.0	0.75	1.0	61.37	−6.59	−35.98	36.59	260	26.56	29.67	66.15	0.217	0.2425	0.4733
27 c38v	0.0	0.675	1.0	52.4	7.03	−50.24	50.74	278	20.91	20.5	64.74	0.197	0.1931	0.327
28 c50v	0.0	0.5	1.0	44.44	21.08	−63.14	66.57	288	16.98	14.15	63.8	0.1789	0.149	0.2257
29 c63v	0.0	0.375	1.0	38.44	33.25	−72.97	80.2	294	14.62	10.33	63.21	0.1658	0.1172	0.1649
30 c75v	0.0	0.25	1.0	34.55	42.07	−79.42	89.88	298	13.36	8.28	62.91	0.158	0.0979	0.132
31 c88v	0.0	0.125	1.0	32.8	46.24	−82.37	94.47	299	12.84	7.44	62.83	0.1545	0.0896	0.1187
32 v00m	0.0	0.0	1.0	32.37	47.33	−83.09	95.64	300	12.73	7.25	62.82	0.1537	0.0876	0.1157
33 v13m	0.125	0.0	1.0	32.58	47.63	−83.38	96.03	300	12.91	7.35	63.56	0.1541	0.0877	0.1172
34 v25m	0.25	0.0	1.0	32.72	47.85	−82.42	95.31	300	13.03	7.41	62.73	0.1567	0.0891	0.1182
35 v38m	0.375	0.0	1.0	33.46	48.96	−80.99	94.65	301	13.7	7.75	62.56	0.163	0.0923	0.1236
36 v50m	0.5	0.0	1.0	34.87	50.97	−78.58	93.67	303	15.0	8.43	62.59	0.1744	0.098	0.1345
37 v63m	0.625	0.0	1.0	36.98	54.01	−74.53	92.05	306	17.12	9.53	62.13	0.1928	0.1073	0.152
38 v75m	0.75	0.0	1.0	39.76	57.91	−69.0	90.08	310	20.17	11.11	61.3	0.2179	0.12	0.1772
39 v88m	0.875	0.0	1.0	44.73	63.92	−63.77	90.3	315	26.26	14.35	65.1	0.2485	0.1357	0.2289
40 m00o	1.0	0.0	1.0	49.36	69.42	−59.15	91.21	320	32.92	17.89	69.07	0.2746	0.1492	0.2853
41 m13o	1.0	0.0	0.875	45.63	65.15	−43.32	78.24	326	27.52	15.0	45.55	0.3125	0.1703	0.2392
42 m25o	1.0	0.0	0.75	42.79	61.99	−25.21	66.92	338	23.85	13.02	27.6	0.37	0.2019	0.2076
43 m38o	1.0	0.0	0.675	41.2	59.82	−8.97	60.49	351	21.87	11.99	16.96	0.4303	0.236	0.1913
44 m50o	1.0	0.0	0.5	40.05	58.26	7.39	58.73	7	20.5	11.28	9.67	0.4945	0.2721	0.18
45 m63o	1.0	0.0	0.375	39.33	57.31	22.53	61.58	21	19.68	10.85	5.27	0.5497	0.3032	0.1731
46 m75o	1.0	0.0	0.25	38.94	56.78	35.12	66.76	32	19.24	10.62	2.88	0.5875	0.3244	0.1695
47 m88o	1.0	0.0	0.125	38.77	56.51	43.19	71.12	37	19.05	10.53	1.83	0.6065	0.3352	0.1679
48 o00y	1.0	0.0	0.0	38.65	56.34	45.45	72.39	39	18.91	10.46	1.58	0.6111	0.3379	0.1668
49 n00w	0.0	0.0	0.0	10.87	0.0	0.0	0.01	341	1.18	1.24	1.35	0.3127	0.329	0.0198
50 n13w	0.125	0.125	0.125	12.4	−0.31	−0.49	0.6	237	1.38	1.47	1.65	0.3076	0.3262	0.0234
51 n25w	0.25	0.25	0.25	17.69	−0.23	−1.3	1.33	260	2.32	2.45	2.85	0.3041	0.3215	0.0391
52 n38w	0.375	0.375	0.375	26.25	−0.18	−1.7	1.72	264	4.58	4.83	5.64	0.3042	0.3211	0.0771
53 n50w	0.5	0.5	0.5	36.49	−0.07	−1.91	1.92	267	8.8	9.27	10.74	0.3054	0.3217	0.1478
54 n63w	0.625	0.625	0.625	47.84	0.02	−2.01	2.02	270	15.85	16.67	19.17	0.3066	0.3225	0.2659
55 n75w	0.75	0.75	0.75	61.95	−0.16	−1.72	1.74	264	28.79	30.34	34.32	0.3081	0.3246	0.484
56 n88w	0.875	0.875	0.875	81.04	0.05	−0.03	0.06	324	55.66	58.55	63.79	0.3127	0.3289	0.9339
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.4132

n = 88.59 / (88.59 + 1.26) = 0.986

Colorimetric "Adapted data (a)": Television Luminous System TLS11a for CIE lightness L^*=11 of black for illuminant D65

System TLS11a
LCD projector
D65 reflection:
Y_N = 1.26
L^*_N = 11.0



***Y* Yellow**
LCH^*_a = 83.3 83.4 101
LAB^*_a = 83.3 −16.0 81.9

***O* Orange red**
LCH^*_a = 38.7 72.4 39
LAB^*_a = 38.7 56.3 45.5

***L* Leaf green**
LCH^*_a = 73.1 84.9 126
LAB^*_a = 73.1 −49.8 68.7

***M* Magenta red**
LCH^*_a = 49.4 91.2 320
LAB^*_a = 49.4 69.4 −59.2

***C* Cyan blue**
LCH^*_a = 77.9 28.9 201
LAB^*_a = 77.9 −26.9 −10.6

***V* Violet blue**
LCH^*_a = 32.4 95.6 300
LAB^*_a = 32.4 47.3 −83.1

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness L^*=18 of black for illuminant D65

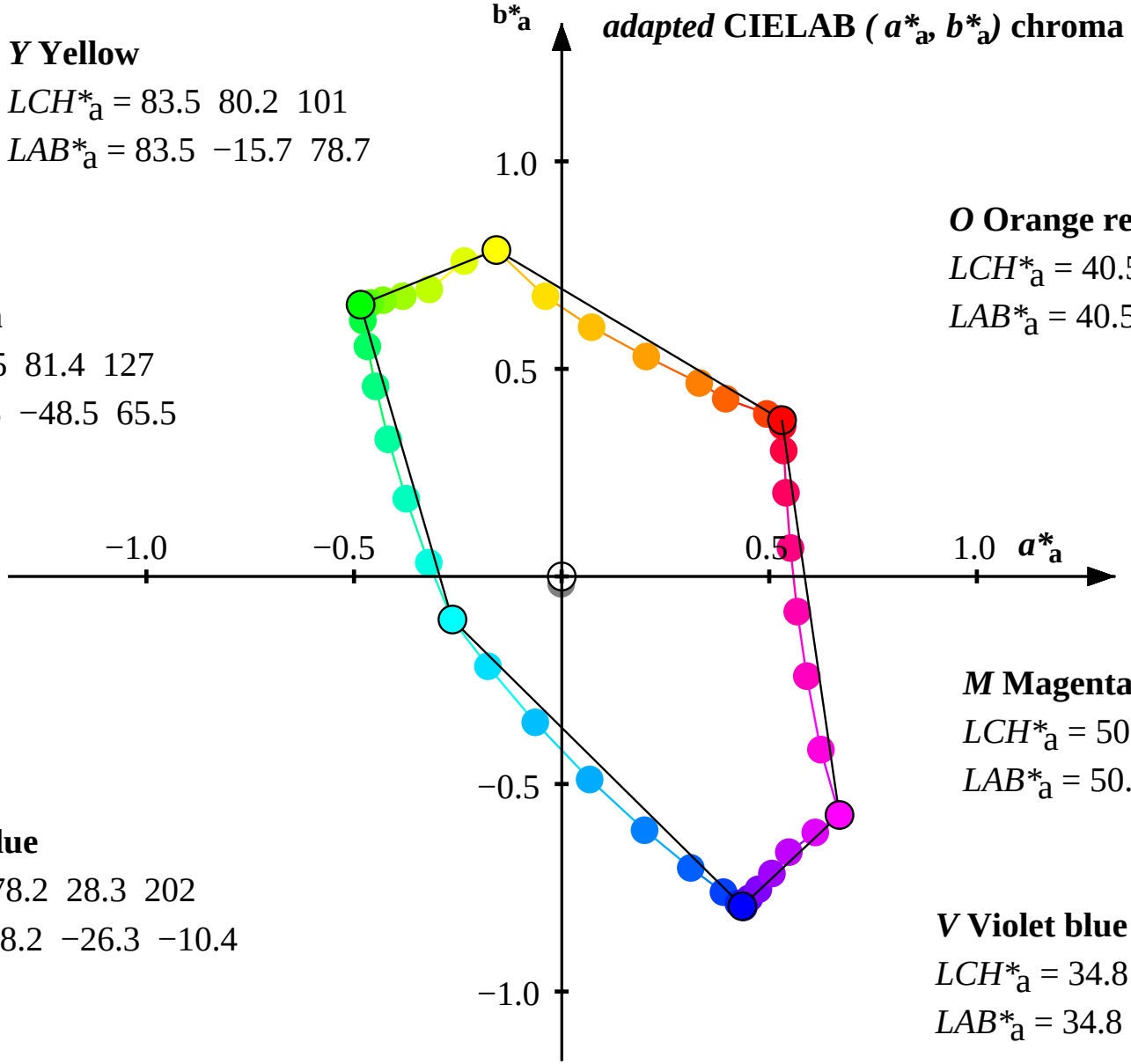
System TLS18a
LCD projector
D65 reflection:
Y_N = 2.52
L^*_N = 18.01

Color	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 o00y	1.0	0.0	0.0	40.47	53.07	37.7	65.09	35	19.82	11.54	2.89	0.5786	0.3369	0.183
01 o13y	1.0	0.125	0.0	40.74	52.44	37.87	64.69	36	19.92	11.7	2.93	0.5765	0.3386	0.1856
02 o25y	1.0	0.25	0.0	41.97	49.47	39.18	63.11	38	20.39	12.48	3.05	0.5676	0.3474	0.1979
03 o38y	1.0	0.375	0.0	45.15	39.51	42.79	58.25	47	21.17	14.65	3.34	0.5405	0.3741	0.2323
04 o50y	1.0	0.5	0.0	49.33	33.09	46.64	57.19	55	23.69	17.86	3.91	0.5211	0.3929	0.2833
05 o63y	1.0	0.625	0.0	55.83	20.35	52.97	56.75	69	27.32	23.75	4.85	0.4886	0.4247	0.3767
06 o75y	1.0	0.75	0.0	63.46	7.19	60.1	60.53	83	32.51	32.14	6.19	0.4589	0.4537	0.5097
07 o88y	1.0	0.875	0.0	71.43	−3.95	67.49	67.61	93	39.43	42.82	7.85	0.4376	0.4752	0.6792
08 y00l	1.0	1.0	0.0	83.47	−15.74	78.66	80.22	101	53.56	63.05	10.89	0.4201	0.4945	1.0
09 y13l	0.875	1.0	0.0	81.6	−23.41	75.99	79.52	107	47.66	59.56	10.69	0.4042	0.5051	0.9446
10 y25l	0.75	1.0	0.0	75.65	−31.84	69.13	76.11	115	36.42	49.32	9.56	0.3822	0.5175	0.7822
11 y38l	0.625	1.0	0.0	74.73	−38.24	67.56	77.64	120	33.4	47.86	9.56	0.3678	0.527	0.7591
12 y50l	0.5	1.0	0.0	74.14	−43.02	66.54	79.25	123	31.36	46.92	9.55	0.357	0.5342	0.7443
13 y63l	0.375	1.0	0.0	73.8	−46.03	65.93	80.41	125	30.15	46.39	9.56	0.3502	0.5388	0.7358
14 y75l	0.25	1.0	0.0	73.62	−47.64	65.63	81.1	126	29.53	46.11	9.56	0.3466	0.5413	0.7314
15 y88l	0.125	1.0	0.0	73.54	−48.32	65.49	81.4	126	29.26	46.0	9.56	0.345	0.5423	0.7296
16 l00c	0.0	1.0	0.0	73.53	−48.45	65.46	81.45	127	29.22	45.98	9.56	0.3447	0.5425	0.7293
17 l13c	0.0	1.0	0.125	73.57	−48.31	64.77	80.8	127	29.29	46.03	9.81	0.3441	0.5407	0.7301
18 l25c	0.0	1.0	0.25	73.67	−47.83	61.71	78.08	128	29.53	46.19	10.91	0.3409	0.5332	0.7326
19 l38c	0.0	1.0	0.375	73.86	−46.76	55.4	72.5	130	30.03	46.48	13.42	0.3339	0.5169	0.7373
20 l50c	0.0	1.0	0.5	74.22	−44.81	45.74	64.04	134	30.97	47.05	18.02	0.3224	0.4899	0.7463
21 l63c	0.0	1.0	0.625	74.84	−41.75	33.09	53.28	142	32.54	48.02	25.65	0.3063	0.4521	0.7617
22 l75c	0.0	1.0	0.75	75.43	−37.46	18.73	41.89	153	34.48	48.96	36.47	0.2875	0.4083	0.7766
23 l88c	0.0	1.0	0.875	76.86	−32.03	3.3	32.21	174	37.96	51.3	52.47	0.2678	0.3619	0.8136
24 c00v	0.0	1.0	1.0	78.15	−26.32	−10.38	28.31	202	41.56	53.47	70.13	0.2516	0.3238	0.8481
25 c13v	0.0	0.875	1.0	70.76	−17.75	−21.65	28.01	231	34.37	41.84	68.36	0.2377	0.2894	0.6637
26 c25v	0.0	0.75	1.0	62.07	−6.38	−35.13	35.72	260	27.36	30.49	66.57	0.2199	0.245	0.4836
27 c38v	0.0	0.675	1.0	53.43	6.74	−48.84	49.32	278	21.78	21.44	65.18	0.201	0.1978	0.3401
28 c50v	0.0	0.5	1.0	45.87	19.96	−61.06	64.25	288	17.91	15.18	64.25	0.184	0.1559	0.2407
29 c63v	0.0	0.375	1.0	40.27	31.09	−70.21	76.79	294	15.58	11.42	63.67	0.1718	0.1259	0.1811
30 c75v	0.0	0.25	1.0	36.72	38.93	−76.09	85.48	297	14.34	9.39	63.38	0.1646	0.1078	0.1489
31 c88v	0.0	0.125	1.0	35.13	42.57	−78.75	89.53	298	13.83	8.57	63.3	0.1614	0.1	0.1359
32 v00m	0.0	0.0	1.0	34.75	43.52	−79.4	90.55	299	13.72	8.38	63.29	0.1607	0.0981	0.1328
33 v13m	0.125	0.0	1.0	34.94	43.84	−79.7	90.97	299	13.9	8.47	64.01	0.1609	0.0981	0.1344
34 v25m	0.25	0.0	1.0	35.07	44.07	−78.78	90.28	299	14.02	8.53	63.2	0.1635	0.0995	0.1353
35 v38m	0.375	0.0	1.0	35.73	45.25	−77.49	89.74	300	14.67	8.87	63.03	0.1695	0.1024	0.1407
36 v50m	0.5	0.0	1.0	37.01	47.38	−75.31	88.98	302	15.96	9.54	63.06	0.1802	0.1077	0.1513
37 v63m	0.625	0.0	1.0	38.94	50.6	−71.58	87.67	305	18.05	10.62	62.61	0.1977	0.1164	0.1685
38 v75m	0.75	0.0	1.0	41.5	54.71	−66.44	86.07	309	21.06	12.18	61.78	0.2216	0.1282	0.1931
39 v88m	0.875	0.0	1.0	46.14	61.1	−61.71	86.85	315	27.07	15.37	65.53	0.2507	0.1424	0.2439
40 m00o	1.0	0.0	1.0	50.53	66.89	−57.44	88.17	319	33.63	18.87	69.45	0.2758	0.1547	0.2992
41 m13o	1.0	0.0	0.875	46.99	62.39	−41.73	75.06	326	28.31	16.01	46.26	0.3125	0.1768	0.254
42 m25o	1.0	0.0	0.75	44.32	59.01	−24.0	63.71	338	24.69	14.06	28.55	0.3668	0.2089	0.223
43 m38o	1.0	0.0	0.675	42.84	56.74	−8.42	57.36	352	22.73	13.05	18.06	0.4222	0.2424	0.207
44 m50o	1.0	0.0	0.5	41.77	55.09	6.81	55.51	7	21.38	12.35	10.87	0.4793	0.2769	0.1959
45 m63o	1.0	0.0	0.375	41.1	54.08	20.18	57.72	20	20.57	11.93	6.53	0.5271	0.3056	0.1892
46 m75o	1.0	0.0	0.25	40.74	53.52	30.37	61.54	30	20.14	11.7	4.18	0.5591	0.3249	0.1856
47 m88o	1.0	0.0	0.125	40.59	53.24	36.23	64.4	34	19.95	11.61	3.14	0.5749	0.3345	0.1841
48 o00y	1.0	0.0	0.0	40.47	53.07	37.7	65.09	35	19.82	11.54	2.89	0.5786	0.3369	0.183
49 n00w	0.0	0.0	0.0	17.69	0.0	0.0	0.01	0	2.33	2.45	2.67	0.3127	0.329	0.0389
50 n13w	0.125	0.125	0.125	18.68	−0.2	−0.32	0.4	237	2.53	2.67	2.96	0.3099	0.3275	0.0424
51 n25w	0.25	0.25	0.25	22.45	−0.17	−0.99	1.02	260	3.45	3.64	4.15	0.3069	0.324	0.0578
52 n38w	0.375	0.375	0.375	29.39	−0.15	−1.45	1.47	264	5.68	5.99	6.9	0.3059	0.3227	0.095
53 n50w	0.5	0.5	0.5	38.49	−0.07	−1.75	1.76	267	9.84	10.36	11.93	0.3062	0.3225	0.1644
54 n63w	0.625	0.625	0.625	49.09	0.02	−1.91	1.92	270	16.79	17.66	20.24	0.307	0.323	0.2802
55 n75w	0.75	0.75	0.75	62.63	−0.16	−1.67	1.68	264	29.56	31.14	35.18	0.3083	0.3248	0.494
56 n88w	0.875	0.875	0.875	81.27	0.05	−0.03	0.06	324	56.06	58.96	64.24	0.3127	0.3289	0.9352
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.4051

n = 88.59 / (88.59 + 2.52) = 0.972

Colorimetric "Adapted data (a)": Television Luminous System TLS18a for CIE lightness L^*=18 of black for illuminant D65

System TLS18a
LCD projector
D65 reflection:
Y_N = 2.52
L^*_N = 18.01



***Y* Yellow**
LCH^*_a = 83.5 80.2 101
LAB^*_a = 83.5 −15.7 78.7

***O* Orange red**
LCH^*_a = 40.5 65.1 35
LAB^*_a = 40.5 53.1 37.7

***L* Leaf green**
LCH^*_a = 73.5 81.4 127
LAB^*_a = 73.5 −48.5 65.5

***M* Magenta red**
LCH^*_a = 50.5 88.2 319
LAB^*_a = 50.5 66.9 −57.5

***C* Cyan blue**
LCH^*_a = 78.2 28.3 202
LAB^*_a = 78.2 −26.3 −10.4

***V* Violet blue**
LCH^*_a = 34.8 90.5 299
LAB^*_a = 34.8 43.5 −79.4

Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness L^*=27 of black for illuminant D65

System TLS27a
LCD projector

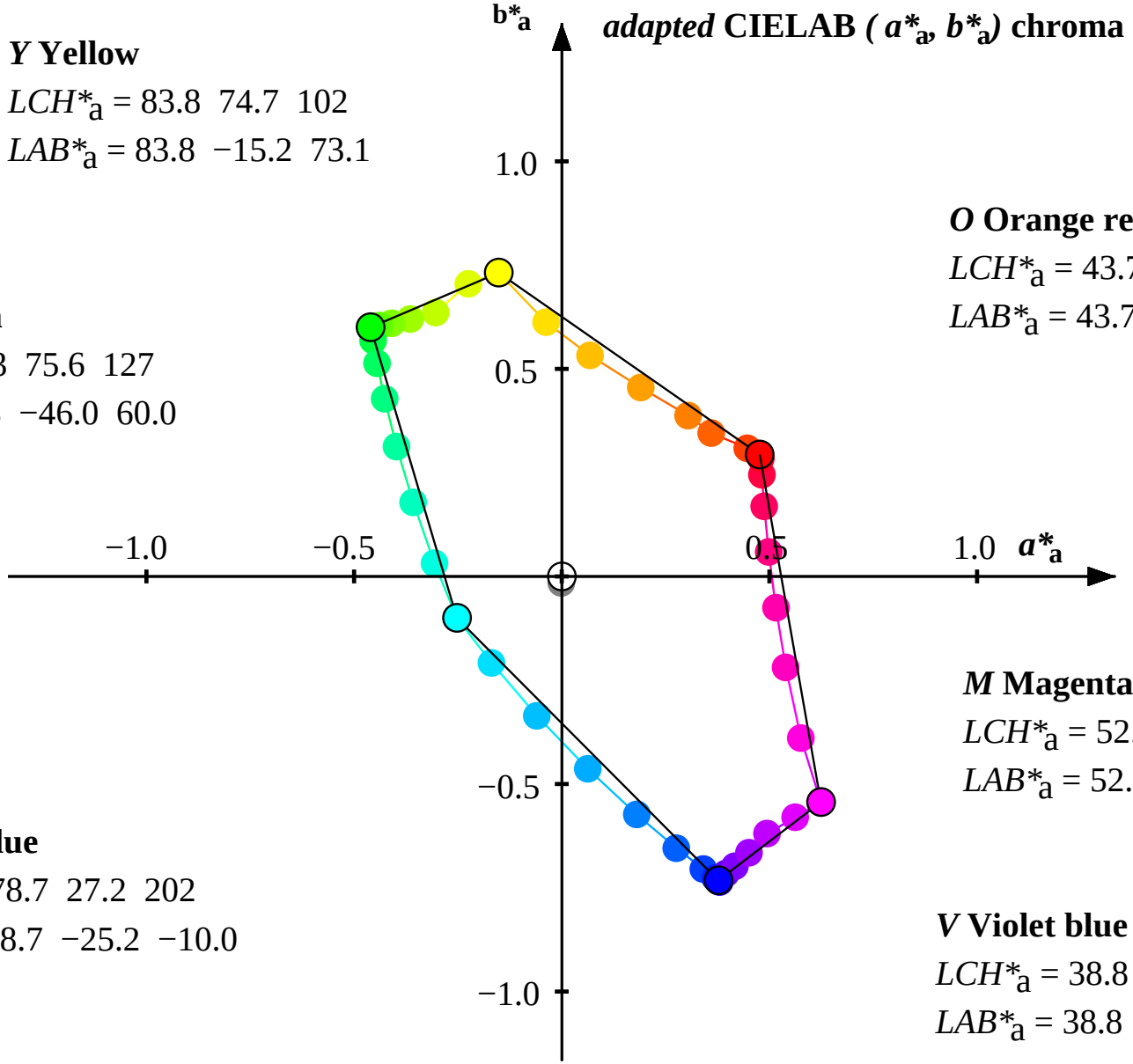
D65 reflection:
Y_N = 5.04
L^*_N = 26.85

Color	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 o00y	1.0	0.0	0.0	43.67	47.68	29.36	55.99	32	21.55	13.61	5.41	0.5311	0.3355	0.2136
01 o13y	1.0	0.125	0.0	43.9	47.16	29.57	55.67	32	21.65	13.77	5.45	0.5297	0.3369	0.2161
02 o25y	1.0	0.25	0.0	44.98	44.66	30.91	54.31	35	22.11	14.53	5.57	0.5239	0.3442	0.228
03 o38y	1.0	0.375	0.0	47.8	35.97	34.53	49.86	44	22.87	16.64	5.85	0.5041	0.3669	0.2611
04 o50y	1.0	0.5	0.0	51.57	30.48	38.73	49.28	52	25.32	19.77	6.4	0.4918	0.3839	0.3101
05 o63y	1.0	0.625	0.0	57.55	18.99	45.52	49.32	67	28.85	25.49	7.31	0.4679	0.4135	0.4
06 o75y	1.0	0.75	0.0	64.69	6.8	53.25	53.68	83	33.9	33.66	8.62	0.445	0.4418	0.5281
07 o88y	1.0	0.875	0.0	72.26	−3.77	61.23	61.35	94	40.63	44.05	10.24	0.4281	0.4641	0.6912
08 y00l	1.0	1.0	0.0	83.83	−15.18	73.15	74.71	102	54.38	63.74	13.19	0.4141	0.4854	1.0
09 y13l	0.875	1.0	0.0	82.02	−22.53	70.51	74.03	108	48.65	60.34	13.0	0.3988	0.4946	0.9467
10 y25l	0.75	1.0	0.0	76.3	−30.41	63.52	70.43	116	37.71	50.37	11.9	0.3772	0.5038	0.7904
11 y38l	0.625	1.0	0.0	75.42	−36.46	62.02	71.94	120	34.77	48.95	11.89	0.3636	0.512	0.7681
12 y50l	0.5	1.0	0.0	74.85	−40.95	61.04	73.51	124	32.78	48.04	11.89	0.3536	0.5182	0.7538
13 y63l	0.375	1.0	0.0	74.52	−43.76	60.46	74.64	126	31.61	47.52	11.9	0.3472	0.5221	0.7456
14 y75l	0.25	1.0	0.0	74.35	−45.27	60.17	75.3	127	31.0	47.25	11.89	0.3439	0.5242	0.7414
15 y88l	0.125	1.0	0.0	74.28	−45.91	60.04	75.59	127	30.74	47.15	11.9	0.3424	0.5251	0.7397
16 l00c	0.0	1.0	0.0	74.27	−46.02	60.01	75.63	127	30.7	47.13	11.9	0.3421	0.5252	0.7394
17 l13c	0.0	1.0	0.125	74.3	−45.9	59.43	75.09	128	30.77	47.18	12.14	0.3416	0.5237	0.7402
18 l25c	0.0	1.0	0.25	74.4	−45.46	56.85	72.79	129	31.0	47.33	13.21	0.3387	0.517	0.7426
19 l38c	0.0	1.0	0.375	74.58	−44.46	51.41	67.97	131	31.49	47.62	15.65	0.3323	0.5025	0.7471
20 l50c	0.0	1.0	0.5	74.93	−42.64	42.83	60.45	135	32.4	48.17	20.14	0.3217	0.4783	0.7558
21 l63c	0.0	1.0	0.625	75.52	−39.79	31.28	50.62	142	33.93	49.11	27.56	0.3068	0.4441	0.7706
22 l75c	0.0	1.0	0.75	76.09	−35.75	17.85	39.97	153	35.82	50.03	38.09	0.289	0.4037	0.785
23 l88c	0.0	1.0	0.875	77.46	−30.64	3.16	30.82	174	39.2	52.3	53.66	0.2701	0.3603	0.8206
24 c00v	0.0	1.0	1.0	78.71	−25.24	−10.01	27.16	202	42.71	54.42	70.84	0.2543	0.324	0.8538
25 c13v	0.0	0.875	1.0	71.62	−16.88	−20.8	26.8	231	35.71	43.1	69.11	0.2414	0.2914	0.6762
26 c25v	0.0	0.75	1.0	63.39	−5.99	−33.55	34.09	260	28.89	32.05	67.38	0.2251	0.2498	0.5029
27 c38v	0.0	0.675	1.0	55.33	6.23	−46.29	46.72	278	23.46	23.25	66.02	0.2081	0.2062	0.3648
28 c50v	0.0	0.5	1.0	48.45	18.07	−57.37	60.16	287	19.69	17.15	65.11	0.1932	0.1682	0.2691
29 c63v	0.0	0.375	1.0	43.5	27.6	−65.42	71.01	293	17.43	13.49	64.55	0.1825	0.1413	0.2117
30 c75v	0.0	0.25	1.0	40.44	34.05	−70.45	78.26	296	16.22	11.52	64.27	0.1763	0.1252	0.1807
31 c88v	0.0	0.125	1.0	39.1	36.96	−72.68	81.55	297	15.72	10.72	64.19	0.1735	0.1183	0.1682
32 v00m	0.0	0.0	1.0	38.79	37.71	−73.22	82.37	297	15.62	10.53	64.18	0.1729	0.1166	0.1653
33 v13m	0.125	0.0	1.0	38.94	38.04	−73.56	82.83	297	15.79	10.63	64.89	0.1729	0.1164	0.1667
34 v25m	0.25	0.0	1.0	39.05	38.28	−72.7	82.18	298	15.91	10.69	64.1	0.1754	0.1178	0.1677
35 v38m	0.375	0.0	1.0	39.6	39.5	−71.6	81.78	299	16.54	11.01	63.93	0.1808	0.1204	0.1728
36 v50m	0.5	0.0	1.0	40.69	41.73	−69.76	81.29	301	17.8	11.67	63.96	0.1905	0.1249	0.1831
37 v63m	0.625	0.0	1.0	42.34	45.09	−66.52	80.37	304	19.83	12.72	63.52	0.2064	0.1324	0.1996
38 v75m	0.75	0.0	1.0	44.57	49.41	−61.97	79.27	309	22.76	14.23	62.72	0.2282	0.1428	0.2233
39 v88m	0.875	0.0	1.0	48.69	56.23	−58.02	80.81	314	28.6	17.35	66.36	0.2547	0.1544	0.2721
40 m00o	1.0	0.0	1.0	52.67	62.38	−54.36	82.75	319	34.99	20.74	70.18	0.2779	0.1647	0.3254
41 m13o	1.0	0.0	0.875	49.46	57.58	−38.94	69.51	326	29.81	17.97	47.61	0.3125	0.1884	0.2819
42 m25o	1.0	0.0	0.75	47.06	53.95	−21.95	58.25	338	26.29	16.07	30.38	0.3614	0.2209	0.2521
43 m38o	1.0	0.0	0.675	45.75	51.55	−7.53	52.1	352	24.38	15.08	20.17	0.4089	0.2529	0.2367
44 m50o	1.0	0.0	0.5	44.8	49.82	5.91	50.17	7	23.07	14.4	13.18	0.4555	0.2843	0.226
45 m63o	1.0	0.0	0.375	44.22	48.75	16.88	51.59	19	22.28	13.99	8.95	0.4928	0.3094	0.2195
46 m75o	1.0	0.0	0.25	43.9	48.15	24.48	54.02	27	21.86	13.77	6.66	0.5169	0.3256	0.2161
47 m88o	1.0	0.0	0.125	43.77	47.87	28.44	55.68	31	21.68	13.68	5.65	0.5286	0.3336	0.2146
48 o00y	1.0	0.0	0.0	43.67	47.68	29.36	55.99	32	21.55	13.61	5.41	0.5311	0.3355	0.2136
49 n00w	0.0	0.0	0.0	26.07	0.0	0.0	0.01	0	4.53	4.77	5.19	0.3127	0.329	0.0748
50 n13w	0.125	0.125	0.125	26.69	−0.13	−0.21	0.26	238	4.73	4.98	5.48	0.3113	0.3282	0.0782
51 n25w	0.25	0.25	0.25	29.23	−0.12	−0.7	0.72	260	5.62	5.93	6.63	0.3092	0.326	0.093
52 n38w	0.375	0.375	0.375	34.43	−0.12	−1.15	1.17	264	7.79	8.21	9.31	0.3079	0.3245	0.1289
53 n50w	0.5	0.5	0.5	41.95	−0.06	−1.51	1.52	268	11.84	12.47	14.2	0.3074	0.3237	0.1956
54 n63w	0.625	0.625	0.625	51.35	0.01	−1.74	1.75	270	18.61	19.57	22.29	0.3077	0.3237	0.3071
55 n75w	0.75	0.75	0.75	63.91	−0.15	−1.57	1.59	264	31.03	32.69	36.83	0.3086	0.3251	0.5129
56 n88w	0.875	0.875	0.875	81.71	0.05	−0.03	0.06	324	56.81	59.76	65.11	0.3127	0.3289	0.9376
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.39

n = 88.59 / (88.59 + 5.04) = 0.946

Colorimetric "Adapted data (a)": Television Luminous System TLS27a for CIE lightness L^*=27 of black for illuminant D65

System TLS27a
LCD projector
D65 reflection:
Y_N = 5.04
L^*_N = 26.85



***Y* Yellow**
LCH^*_a = 83.8 74.7 102
LAB^*_a = 83.8 −15.2 73.1

***O* Orange red**
LCH^*_a = 43.7 56.0 32
LAB^*_a = 43.7 47.7 29.4

***L* Leaf green**
LCH^*_a = 74.3 75.6 127
LAB^*_a = 74.3 −46.0 60.0

***M* Magenta red**
LCH^*_a = 52.7 82.8 319
LAB^*_a = 52.7 62.4 −54.4

***C* Cyan blue**
LCH^*_a = 78.7 27.2 202
LAB^*_a = 78.7 −25.2 −10.0

***V* Violet blue**
LCH^*_a = 38.8 82.4 297
LAB^*_a = 38.8 37.7 −73.2

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness L^*=38 of black for illuminant D65

System TLS38a
LCD projector

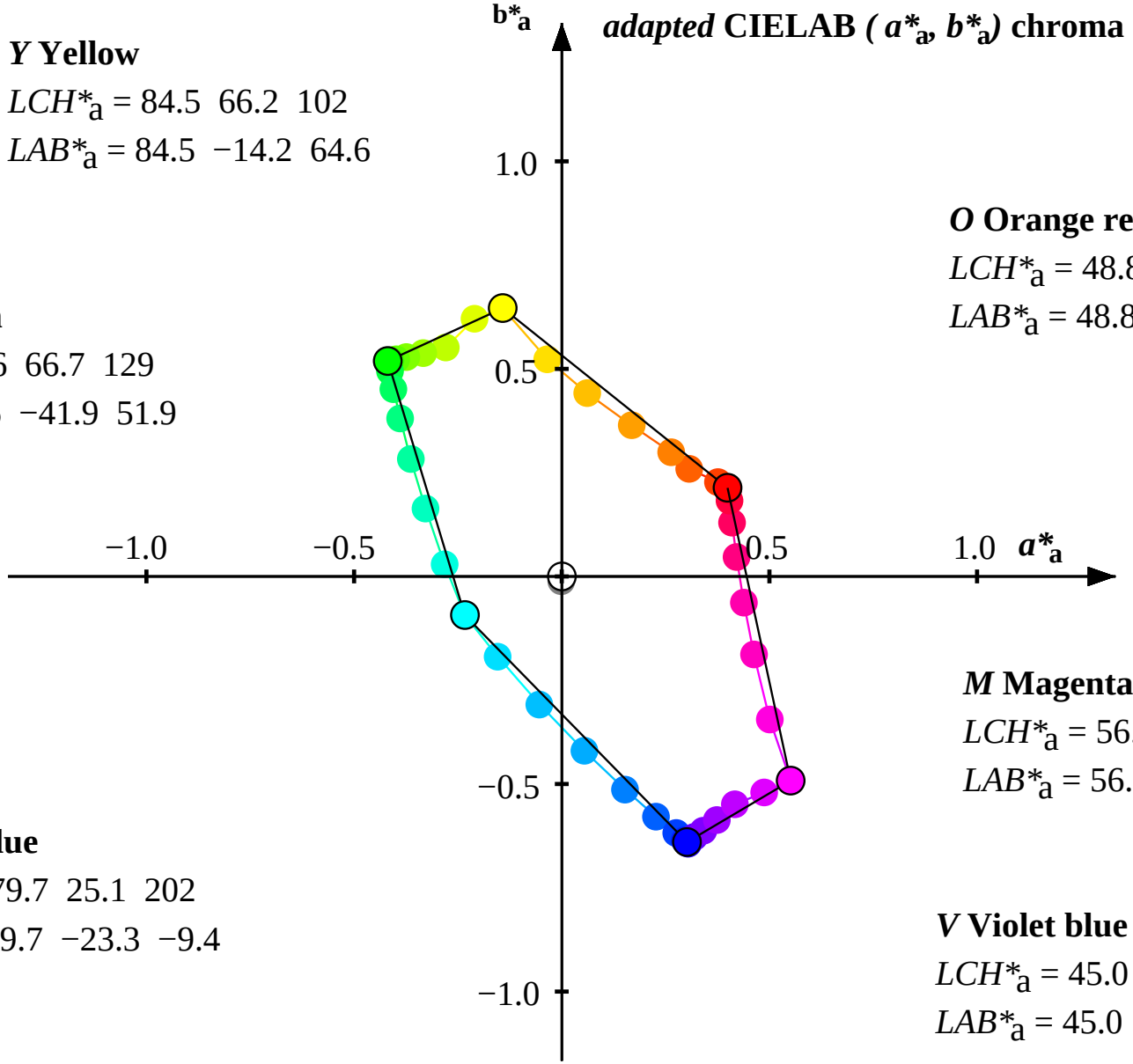
D65 reflection:
Y_N = 10.08
L^*_N = 37.99

Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	48.81	39.92	21.33	45.26	28	24.75	17.44	10.06	0.4736	0.3338	0.2683
01 o13y	1.0	0.125	0.0	49.0	39.54	21.53	45.02	29	24.85	17.59	10.1	0.4729	0.3349	0.2706
02 o25y	1.0	0.25	0.0	49.87	37.63	22.71	43.95	31	25.28	18.31	10.21	0.4699	0.3403	0.2817
03 o38y	1.0	0.375	0.0	52.19	30.65	25.92	40.14	40	26.0	20.31	10.48	0.4578	0.3577	0.3125
04 o50y	1.0	0.5	0.0	55.36	26.41	29.88	39.88	49	28.33	23.28	11.0	0.4524	0.3718	0.3582
05 o63y	1.0	0.625	0.0	60.53	16.8	36.42	40.1	65	31.68	28.72	11.87	0.4384	0.3974	0.4418
06 o75y	1.0	0.75	0.0	66.87	6.13	44.14	44.56	82	36.47	36.46	13.1	0.4239	0.4238	0.5609
07 o88y	1.0	0.875	0.0	73.76	−3.45	52.29	52.4	94	42.86	46.33	14.64	0.4128	0.4462	0.7127
08 y00l	1.0	1.0	0.0	84.49	−14.18	64.62	66.16	102	55.9	65.0	17.45	0.4041	0.4698	1.0
09 y13l	0.875	1.0	0.0	82.8	−20.96	62.09	65.53	109	50.46	61.78	17.27	0.3896	0.477	0.9504
10 y25l	0.75	1.0	0.0	77.48	−27.93	55.15	61.83	117	40.09	52.33	16.21	0.369	0.4817	0.805
11 y38l	0.625	1.0	0.0	76.67	−33.36	53.76	63.28	122	37.29	50.98	16.21	0.3569	0.4879	0.7842
12 y50l	0.5	1.0	0.0	76.14	−37.37	52.86	64.74	125	35.41	50.12	16.21	0.348	0.4926	0.771
13 y63l	0.375	1.0	0.0	75.84	−39.87	52.32	65.79	127	34.29	49.62	16.22	0.3425	0.4956	0.7633
14 y75l	0.25	1.0	0.0	75.68	−41.21	52.06	66.4	128	33.71	49.37	16.21	0.3395	0.4972	0.7594
15 y88l	0.125	1.0	0.0	75.61	−41.78	51.93	66.66	129	33.47	49.26	16.22	0.3383	0.4978	0.7578
16 l00c	0.0	1.0	0.0	75.6	−41.88	51.91	66.7	129	33.43	49.25	16.22	0.338	0.4979	0.7576
17 l13c	0.0	1.0	0.125	75.63	−41.76	51.47	66.29	129	33.5	49.29	16.45	0.3376	0.4967	0.7583
18 l25c	0.0	1.0	0.25	75.72	−41.38	49.48	64.51	130	33.72	49.44	17.46	0.3351	0.4913	0.7605
19 l38c	0.0	1.0	0.375	75.89	−40.5	45.16	60.67	132	34.18	49.71	19.78	0.3297	0.4795	0.7647
20 l50c	0.0	1.0	0.5	76.21	−38.91	38.12	54.47	136	35.05	50.24	24.03	0.3206	0.4595	0.7728
21 l63c	0.0	1.0	0.625	76.76	−36.38	28.24	46.07	142	36.5	51.13	31.08	0.3075	0.4307	0.7865
22 l75c	0.0	1.0	0.75	77.28	−32.77	16.32	36.62	154	38.29	52.0	41.07	0.2915	0.3959	0.7999
23 l88c	0.0	1.0	0.875	78.55	−28.21	2.93	28.37	174	41.5	54.15	55.84	0.2739	0.3575	0.8331
24 c00v	0.0	1.0	1.0	79.71	−23.32	−9.34	25.13	202	44.82	56.16	72.15	0.2589	0.3244	0.864
25 c13v	0.0	0.875	1.0	73.17	−15.4	−19.28	24.69	231	38.18	45.42	70.51	0.2478	0.2947	0.6988
26 c25v	0.0	0.75	1.0	65.7	−5.36	−30.8	31.27	260	31.71	34.94	68.86	0.234	0.2578	0.5375
27 c38v	0.0	0.675	1.0	58.59	5.42	−41.99	42.35	277	26.57	26.59	67.58	0.2201	0.2202	0.409
28 c50v	0.0	0.5	1.0	52.73	15.28	−51.36	53.59	287	22.99	20.8	66.72	0.208	0.1882	0.32
29 c63v	0.0	0.375	1.0	48.67	22.73	−57.9	62.21	291	20.84	17.33	66.18	0.1997	0.1661	0.2666
30 c75v	0.0	0.25	1.0	46.25	27.53	−61.85	67.71	294	19.69	15.46	65.91	0.1948	0.1529	0.2378
31 c88v	0.0	0.125	1.0	45.22	29.62	−63.57	70.14	295	19.22	14.7	65.84	0.1927	0.1473	0.2261
32 v00m	0.0	0.0	1.0	44.97	30.16	−63.98	70.74	295	19.12	14.52	65.83	0.1922	0.146	0.2234
33 v13m	0.125	0.0	1.0	45.09	30.48	−64.34	71.21	295	19.28	14.61	66.5	0.1921	0.1455	0.2247
34 v25m	0.25	0.0	1.0	45.17	30.7	−63.57	70.6	296	19.4	14.67	65.75	0.1943	0.1469	0.2256
35 v38m	0.375	0.0	1.0	45.6	31.87	−62.69	70.34	297	20.0	14.98	65.59	0.1989	0.1489	0.2304
36 v50m	0.5	0.0	1.0	46.44	34.03	−61.27	70.09	299	21.19	15.6	65.62	0.2069	0.1523	0.24
37 v63m	0.625	0.0	1.0	47.75	37.34	−58.66	69.54	302	23.12	16.6	65.2	0.2203	0.1582	0.2553
38 v75m	0.75	0.0	1.0	49.54	41.66	−54.92	68.94	307	25.89	18.03	64.44	0.2389	0.1664	0.2774
39 v88m	0.875	0.0	1.0	52.93	48.69	−52.01	71.25	313	31.44	20.98	67.9	0.2613	0.1744	0.3228
40 m00o	1.0	0.0	1.0	56.3	55.12	−49.2	73.89	318	37.5	24.21	71.52	0.2815	0.1817	0.3724
41 m13o	1.0	0.0	0.875	53.57	50.08	−34.45	60.79	325	32.59	21.57	50.1	0.3125	0.2069	0.3319
42 m25o	1.0	0.0	0.75	51.58	46.28	−18.84	49.97	338	29.25	19.77	33.75	0.3533	0.2389	0.3042
43 m38o	1.0	0.0	0.675	50.5	43.83	−6.26	44.28	352	27.44	18.84	24.06	0.3901	0.2678	0.2898
44 m50o	1.0	0.0	0.5	49.73	42.08	4.73	42.34	6	26.19	18.19	17.43	0.4237	0.2943	0.2799
45 m63o	1.0	0.0	0.375	49.25	40.99	12.98	43.0	18	25.45	17.8	13.42	0.4491	0.3142	0.2738
46 m75o	1.0	0.0	0.25	49.0	40.4	18.23	44.32	24	25.05	17.59	11.25	0.4648	0.3265	0.2706
47 m88o	1.0	0.0	0.125	48.89	40.11	20.78	45.17	27	24.87	17.51	10.29	0.4722	0.3324	0.2693
48 o00y	1.0	0.0	0.0	48.81	39.92	21.33	45.26	28	24.75	17.44	10.06	0.4736	0.3338	0.2683
49 n00w	0.0	0.0	0.0	36.08	0.0	0.0	0.01	0	8.6	9.05	9.85	0.3127	0.329	0.1392
50 n13w	0.125	0.125	0.125	36.47	−0.08	−0.13	0.16	238	8.79	9.26	10.12	0.312	0.3286	0.1424
51 n25w	0.25	0.25	0.25	38.11	−0.07	−0.46	0.48	260	9.64	10.15	11.22	0.3108	0.3274	0.1562
52 n38w	0.375	0.375	0.375	41.72	−0.08	−0.83	0.85	264	11.7	12.32	13.76	0.3096	0.3261	0.1895
53 n50w	0.5	0.5	0.5	47.44	−0.04	−1.2	1.21	268	15.54	16.36	18.41	0.3089	0.3252	0.2516
54 n63w	0.625	0.625	0.625	55.17	0.01	−1.48	1.49	270	21.96	23.1	26.08	0.3087	0.3247	0.3553
55 n75w	0.75	0.75	0.75	66.17	−0.13	−1.41	1.43	264	33.74	35.55	39.88	0.3091	0.3256	0.5468
56 n88w	0.875	0.875	0.875	82.5	0.05	−0.02	0.06	324	58.21	61.23	66.71	0.3127	0.3289	0.9419
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.3628

n = 88.59 / (88.59 + 10.08) = 0.898

Colorimetric "Adapted data (a)": Television Luminous System TLS38a for CIE lightness *L=38 of black for illuminant D65**

System TLS38a
LCD projector
D65 reflection:
Y_N = 10.08
L^*_N = 37.99



***Y* Yellow**
*LCH**a = 84.5 66.2 102
*LAB**a = 84.5 −14.2 64.6

***O* Orange red**
*LCH**a = 48.8 45.3 28
*LAB**a = 48.8 39.9 21.3

***L* Leaf green**
*LCH**a = 75.6 66.7 129
*LAB**a = 75.6 −41.9 51.9

***M* Magenta red**
*LCH**a = 56.3 73.9 318
*LAB**a = 56.3 55.1 −49.2

***C* Cyan blue**
*LCH**a = 79.7 25.1 202
*LAB**a = 79.7 −23.3 −9.4

***V* Violet blue**
*LCH**a = 45.0 70.7 295
*LAB**a = 45.0 30.2 −64.0

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness L^*=52 of black for illuminant D65

System TLS52a
LCD projector

D65 reflection:
Y_N = 20.16
L^*_N = 52.02

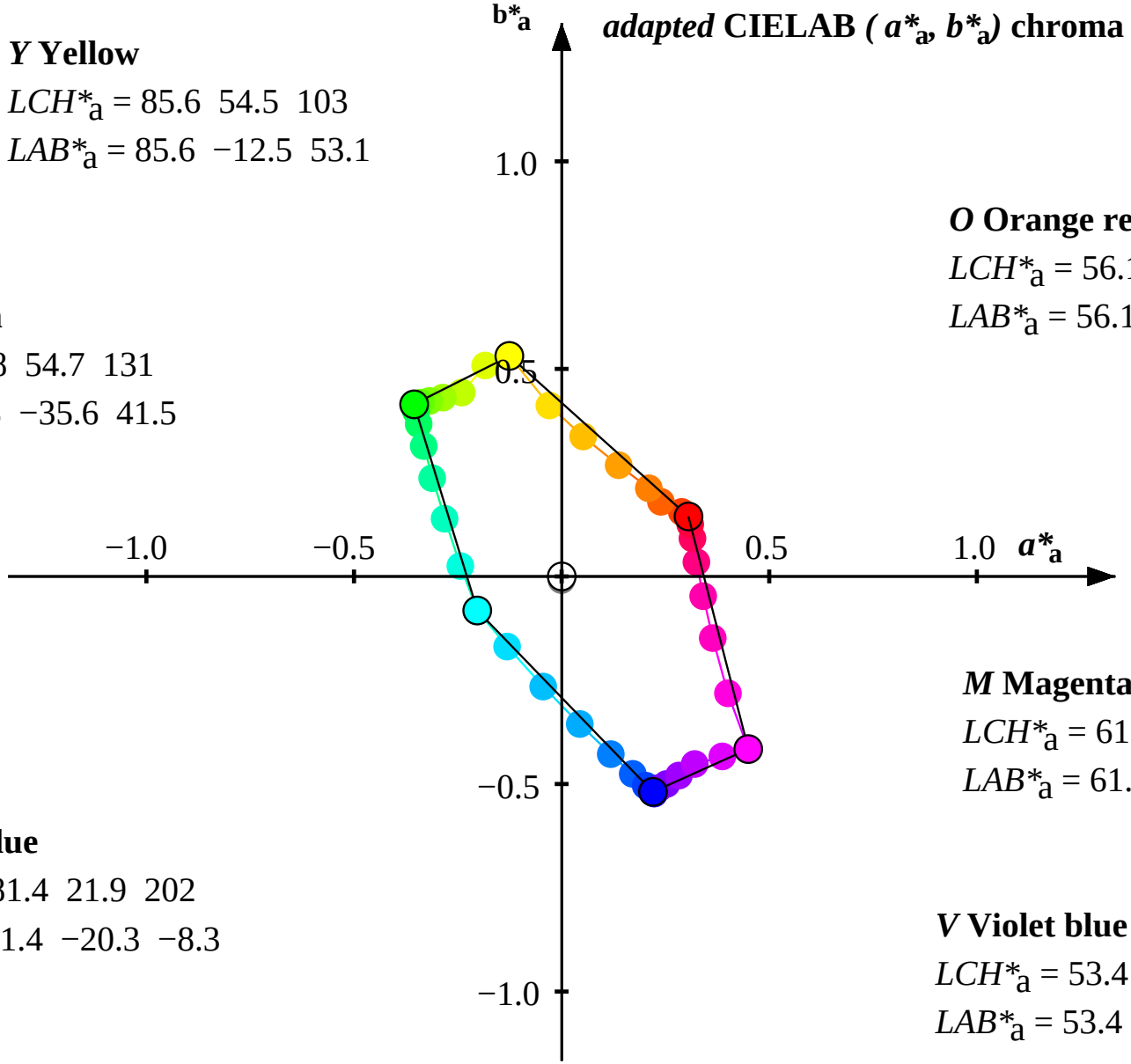
Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	56.12	30.53	14.45	33.78	25	30.26	24.04	18.07	0.4181	0.3322	0.3577
01 o13y	1.0	0.125	0.0	56.26	30.27	14.61	33.62	26	30.35	24.17	18.1	0.4179	0.3329	0.3598
02 o25y	1.0	0.25	0.0	56.91	28.98	15.52	32.87	28	30.74	24.83	18.2	0.4167	0.3365	0.3695
03 o38y	1.0	0.375	0.0	58.64	23.9	18.02	29.93	37	31.39	26.64	18.45	0.4104	0.3483	0.3965
04 o50y	1.0	0.5	0.0	61.08	21.0	21.28	29.89	45	33.51	29.34	18.92	0.4098	0.3588	0.4366
05 o63y	1.0	0.625	0.0	65.17	13.7	26.82	30.12	63	36.54	34.27	19.71	0.4037	0.3786	0.51
06 o75y	1.0	0.75	0.0	70.38	5.13	33.69	34.08	81	40.89	41.3	20.83	0.3969	0.4009	0.6146
07 o88y	1.0	0.875	0.0	76.22	−2.96	41.24	41.34	94	46.69	50.24	22.23	0.3918	0.4217	0.7478
08 y00l	1.0	1.0	0.0	85.6	−12.53	53.08	54.54	103	58.53	67.19	24.77	0.3889	0.4465	1.0
09 y13l	0.875	1.0	0.0	84.1	−18.4	50.77	54.01	110	53.59	64.27	24.61	0.3762	0.4511	0.9565
10 y25l	0.75	1.0	0.0	79.44	−24.04	44.32	50.42	118	44.17	55.69	23.65	0.3576	0.4509	0.8288
11 y38l	0.625	1.0	0.0	78.73	−28.56	43.1	51.71	124	41.64	54.46	23.65	0.3477	0.4548	0.8106
12 y50l	0.5	1.0	0.0	78.28	−31.87	42.32	52.99	127	39.93	53.68	23.65	0.3405	0.4578	0.7989
13 y63l	0.375	1.0	0.0	78.01	−33.92	41.86	53.88	129	38.92	53.23	23.65	0.3361	0.4597	0.7923
14 y75l	0.25	1.0	0.0	77.88	−35.01	41.63	54.4	130	38.39	53.0	23.65	0.3337	0.4607	0.7888
15 y88l	0.125	1.0	0.0	77.82	−35.47	41.52	54.62	131	38.17	52.91	23.66	0.3327	0.4611	0.7874
16 l00c	0.0	1.0	0.0	77.81	−35.56	41.51	54.66	131	38.14	52.89	23.66	0.3325	0.4612	0.7872
17 l13c	0.0	1.0	0.125	77.84	−35.47	41.2	54.37	131	38.2	52.94	23.86	0.3322	0.4603	0.7879
18 l25c	0.0	1.0	0.25	77.91	−35.16	39.8	53.11	131	38.4	53.07	24.79	0.3303	0.4565	0.7898
19 l38c	0.0	1.0	0.375	78.06	−34.45	36.7	50.34	133	38.81	53.31	26.89	0.3261	0.448	0.7935
20 l50c	0.0	1.0	0.5	78.34	−33.16	31.44	45.7	137	39.6	53.79	30.75	0.319	0.4333	0.8006
21 l63c	0.0	1.0	0.625	78.81	−31.11	23.73	39.14	143	40.92	54.6	37.14	0.3084	0.4116	0.8126
22 l75c	0.0	1.0	0.75	79.27	−28.13	13.96	31.41	154	42.55	55.39	46.2	0.2952	0.3843	0.8244
23 l88c	0.0	1.0	0.875	80.37	−24.37	2.55	24.52	174	45.46	57.35	59.61	0.2799	0.3531	0.8535
24 c00v	0.0	1.0	1.0	81.38	−20.26	−8.24	21.89	202	48.47	59.17	74.4	0.2663	0.325	0.8806
25 c13v	0.0	0.875	1.0	75.72	−13.11	−16.84	21.36	232	42.45	49.43	72.92	0.2576	0.2999	0.7356
26 c25v	0.0	0.75	1.0	69.41	−4.43	−26.51	26.89	260	36.58	39.91	71.42	0.2473	0.2698	0.594
27 c38v	0.0	0.675	1.0	63.62	4.33	−35.54	35.82	277	31.91	32.33	70.25	0.2372	0.2404	0.4812
28 c50v	0.0	0.5	1.0	59.05	11.8	−42.77	44.38	285	28.66	27.08	69.47	0.2289	0.2163	0.4031
29 c63v	0.0	0.375	1.0	56.02	17.07	−47.59	50.57	290	26.71	23.94	68.99	0.2233	0.2001	0.3562
30 c75v	0.0	0.25	1.0	54.27	20.29	−50.4	54.34	292	25.67	22.23	68.74	0.2201	0.1906	0.3309
31 c88v	0.0	0.125	1.0	53.54	21.65	−51.61	55.97	293	25.24	21.55	68.68	0.2186	0.1866	0.3207
32 v00m	0.0	0.0	1.0	53.37	22.0	−51.9	56.38	293	25.15	21.39	68.67	0.2183	0.1856	0.3183
33 v13m	0.125	0.0	1.0	53.46	22.27	−52.26	56.81	293	25.3	21.47	69.28	0.218	0.185	0.3195
34 v25m	0.25	0.0	1.0	53.51	22.46	−51.6	56.28	294	25.4	21.52	68.6	0.2199	0.1863	0.3202
35 v38m	0.375	0.0	1.0	53.81	23.45	−50.96	56.1	295	25.95	21.8	68.45	0.2233	0.1876	0.3244
36 v50m	0.5	0.0	1.0	54.41	25.32	−49.95	56.01	297	27.03	22.36	68.48	0.2293	0.1897	0.3328
37 v63m	0.625	0.0	1.0	55.35	28.22	−48.01	55.7	300	28.78	23.27	68.1	0.2395	0.1937	0.3463
38 v75m	0.75	0.0	1.0	56.66	32.11	−45.18	55.43	305	31.3	24.57	67.41	0.2539	0.1993	0.3657
39 v88m	0.875	0.0	1.0	59.21	38.72	−43.39	58.16	312	36.33	27.25	70.55	0.2709	0.2032	0.4056
40 m00o	1.0	0.0	1.0	61.81	44.97	−41.55	61.23	317	41.83	30.18	73.83	0.2868	0.2069	0.4491
41 m13o	1.0	0.0	0.875	59.7	40.04	−28.18	48.97	325	37.37	27.79	54.4	0.3126	0.2324	0.4135
42 m25o	1.0	0.0	0.75	58.18	36.38	−14.81	39.28	338	34.34	26.15	39.57	0.3432	0.2614	0.3892
43 m38o	1.0	0.0	0.675	57.37	34.11	−4.74	34.44	352	32.7	25.3	30.77	0.3683	0.285	0.3766
44 m50o	1.0	0.0	0.5	56.8	32.49	3.45	32.67	6	31.57	24.72	24.76	0.3895	0.305	0.3679
45 m63o	1.0	0.0	0.375	56.45	31.5	9.15	32.8	16	30.89	24.36	21.11	0.4045	0.319	0.3626
46 m75o	1.0	0.0	0.25	56.26	30.96	12.54	33.4	22	30.53	24.17	19.15	0.4134	0.3273	0.3598
47 m88o	1.0	0.0	0.125	56.18	30.7	14.13	33.8	25	30.37	24.09	18.28	0.4175	0.3312	0.3586
48 o00y	1.0	0.0	0.0	56.12	30.53	14.45	33.78	25	30.26	24.04	18.07	0.4181	0.3322	0.3577
49 n00w	0.0	0.0	0.0	47.52	0.0	0.0	0.01	0	15.61	16.42	17.88	0.3127	0.329	0.2444
50 n13w	0.125	0.125	0.125	47.76	−0.04	−0.07	0.1	238	15.78	16.61	18.12	0.3123	0.3288	0.2472
51 n25w	0.25	0.25	0.25	48.79	−0.04	−0.29	0.3	260	16.55	17.42	19.12	0.3117	0.3281	0.2593
52 n38w	0.375	0.375	0.375	51.14	−0.05	−0.56	0.57	264	18.42	19.39	21.42	0.3109	0.3274	0.2886
53 n50w	0.5	0.5	0.5	55.13	−0.03	−0.87	0.88	268	21.9	23.05	25.64	0.3102	0.3265	0.3431
54 n63w	0.625	0.625	0.625	60.93	0.01	−1.15	1.16	270	27.72	29.17	32.6	0.3098	0.3259	0.4341
55 n75w	0.75	0.75	0.75	69.8	−0.11	−1.17	1.19	264	38.42	40.46	45.12	0.3098	0.3263	0.6022
56 n88w	0.875	0.875	0.875	83.84	0.04	−0.02	0.05	324	60.62	63.77	69.46	0.3127	0.3289	0.949
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	275	84.2	88.59	96.46	0.3127	0.329	1.3185

n = 88.59 / (88.59 + 20.16) = 0.815

Colorimetric "Adapted data (a)": Television Luminous System TLS52a for CIE lightness *L=52 of black for illuminant D65**

System TLS52a
LCD projector
D65 reflection:
Y_N = 20.16
L^*_N = 52.02

adapted CIELAB (a^*_a, b^*_a) chroma diagram



Y Yellow
LCH^*_a = 85.6 54.5 103
LAB^*_a = 85.6 −12.5 53.1

O Orange red
LCH^*_a = 56.1 33.8 25
LAB^*_a = 56.1 30.5 14.4

L Leaf green
LCH^*_a = 77.8 54.7 131
LAB^*_a = 77.8 −35.6 41.5

M Magenta red
LCH^*_a = 61.8 61.2 317
LAB^*_a = 61.8 45.0 −41.6

C Cyan blue
LCH^*_a = 81.4 21.9 202
LAB^*_a = 81.4 −20.3 −8.3

V Violet blue
LCH^*_a = 53.4 56.4 293
LAB^*_a = 53.4 22.0 −51.9

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness L^*=70 of black for illuminant D65

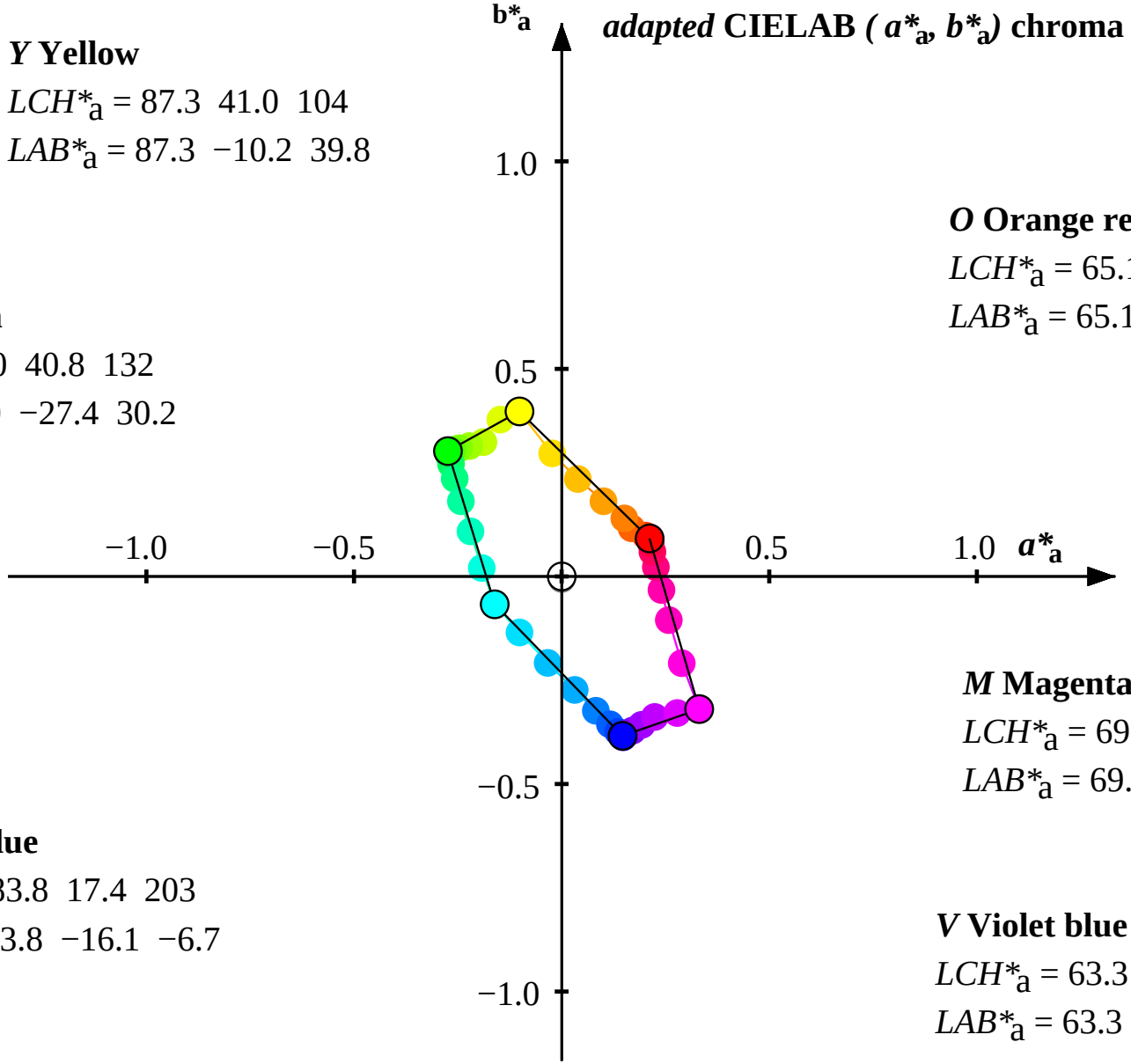
System TLS70a
LCD projector
D65 reflection:
Y_N = 40.32
L^*_N = 69.7

Color	$r=olv^*_1$	$g=olv^*_2$	$b=olv^*_3$	$L^*_a=LAB^*_{1a}$	$a^*_a=LAB^*_{2a}$	$b^*_a=LAB^*_{3a}$	$C^*_{ab,a}=LAB^*_{ab,a}$	$h_{ab,a}$	$X_a=XYZ_{1a}$	$Y_a=XYZ_{2a}$	$Z_a=XYZ_{3a}$	x_a	y_a	Y_a/88.59
00 o00y	1.0	0.0	0.0	65.07	21.15	9.16	23.05	23	38.69	34.13	30.33	0.3751	0.3309	0.4839
01 o13y	1.0	0.125	0.0	65.16	20.99	9.27	22.95	24	38.77	34.25	30.36	0.375	0.3313	0.4855
02 o25y	1.0	0.25	0.0	65.59	20.19	9.89	22.49	26	39.1	34.8	30.44	0.3747	0.3335	0.4933
03 o38y	1.0	0.375	0.0	66.77	16.83	11.64	20.46	35	39.65	36.33	30.65	0.3719	0.3407	0.5151
04 o50y	1.0	0.5	0.0	68.46	15.07	13.98	20.56	43	41.43	38.6	31.05	0.373	0.3475	0.5473
05 o63y	1.0	0.625	0.0	71.39	10.1	18.11	20.73	61	44.0	42.76	31.71	0.3714	0.361	0.6062
06 o75y	1.0	0.75	0.0	75.26	3.9	23.47	23.79	81	47.67	48.69	32.66	0.3695	0.3774	0.6903
07 o88y	1.0	0.875	0.0	79.75	−2.31	29.62	29.71	94	52.55	56.24	33.83	0.3685	0.3943	0.7973
08 y00l	1.0	1.0	0.0	87.26	−10.17	39.76	41.04	104	62.54	70.54	35.98	0.3699	0.4172	1.0
09 y13l	0.875	1.0	0.0	86.04	−14.8	37.84	40.63	111	58.38	68.07	35.84	0.3597	0.4194	0.965
10 y25l	0.75	1.0	0.0	82.29	−18.85	32.41	37.5	120	50.43	60.83	35.04	0.3447	0.4158	0.8624
11 y38l	0.625	1.0	0.0	81.73	−22.25	31.45	38.52	125	48.29	59.8	35.04	0.3374	0.4178	0.8478
12 y50l	0.5	1.0	0.0	81.37	−24.7	30.83	39.51	129	46.85	59.14	35.04	0.3322	0.4194	0.8384
13 y63l	0.375	1.0	0.0	81.16	−26.22	30.46	40.2	131	46.0	58.76	35.04	0.329	0.4203	0.8331
14 y75l	0.25	1.0	0.0	81.05	−27.01	30.28	40.58	132	45.56	58.57	35.04	0.3274	0.4209	0.8303
15 y88l	0.125	1.0	0.0	81.01	−27.36	30.2	40.75	132	45.37	58.49	35.04	0.3266	0.4211	0.8292
16 l00c	0.0	1.0	0.0	81.0	−27.42	30.18	40.78	132	45.34	58.48	35.04	0.3265	0.4211	0.829
17 l13c	0.0	1.0	0.125	81.02	−27.35	29.99	40.6	132	45.39	58.51	35.22	0.3263	0.4206	0.8295
18 l25c	0.0	1.0	0.25	81.08	−27.13	29.09	39.79	133	45.56	58.62	35.99	0.325	0.4182	0.8311
19 l38c	0.0	1.0	0.375	81.2	−26.62	27.06	37.97	135	45.91	58.83	37.77	0.3222	0.4128	0.834
20 l50c	0.0	1.0	0.5	81.42	−25.69	23.51	34.83	138	46.58	59.23	41.02	0.3172	0.4034	0.8397
21 l63c	0.0	1.0	0.625	81.79	−24.2	18.09	30.22	143	47.69	59.92	46.41	0.3096	0.389	0.8494
22 l75c	0.0	1.0	0.75	82.15	−21.98	10.86	24.52	154	49.06	60.58	54.06	0.2997	0.3701	0.8589
23 l88c	0.0	1.0	0.875	83.04	−19.2	2.03	19.32	174	51.51	62.23	65.37	0.2876	0.3474	0.8822
24 c00v	0.0	1.0	1.0	83.85	−16.08	−6.68	17.43	203	54.06	63.77	77.85	0.2763	0.3259	0.9041
25 c13v	0.0	0.875	1.0	79.36	−10.14	−13.46	16.87	233	48.98	55.55	76.6	0.2704	0.3067	0.7875
26 c25v	0.0	0.75	1.0	74.52	−3.31	−20.81	21.08	261	44.02	47.53	75.33	0.2638	0.2848	0.6738
27 c38v	0.0	0.675	1.0	70.27	3.13	−27.37	27.56	277	40.09	41.13	74.35	0.2577	0.2644	0.5831
28 c50v	0.0	0.5	1.0	67.05	8.24	−32.39	33.43	284	37.35	36.7	73.69	0.2528	0.2484	0.5203
29 c63v	0.0	0.375	1.0	65.0	11.63	−35.61	37.47	288	35.7	34.05	73.28	0.2496	0.238	0.4827
30 c75v	0.0	0.25	1.0	63.84	13.62	−37.44	39.85	290	34.82	32.61	73.08	0.2478	0.2321	0.4623
31 c88v	0.0	0.125	1.0	63.37	14.44	−38.21	40.86	291	34.46	32.03	73.02	0.247	0.2296	0.4541
32 v00m	0.0	0.0	1.0	63.26	14.65	−38.4	41.11	291	34.38	31.9	73.01	0.2468	0.229	0.4522
33 v13m	0.125	0.0	1.0	63.31	14.85	−38.71	41.47	291	34.51	31.96	73.53	0.2465	0.2283	0.4531
34 v25m	0.25	0.0	1.0	63.35	14.99	−38.19	41.04	291	34.6	32.01	72.95	0.2479	0.2293	0.4538
35 v38m	0.375	0.0	1.0	63.54	15.72	−37.76	40.91	293	35.06	32.24	72.83	0.2502	0.2301	0.4571
36 v50m	0.5	0.0	1.0	63.93	17.13	−37.1	40.87	295	35.97	32.72	72.85	0.2541	0.2312	0.4639
37 v63m	0.625	0.0	1.0	64.55	19.35	−35.78	40.68	298	37.45	33.48	72.53	0.261	0.2334	0.4747
38 v75m	0.75	0.0	1.0	65.42	22.39	−33.81	40.56	304	39.57	34.58	71.95	0.2708	0.2367	0.4903
39 v88m	0.875	0.0	1.0	67.16	27.82	−32.93	43.11	310	43.82	36.84	74.6	0.2822	0.2373	0.5223
40 m00o	1.0	0.0	1.0	68.98	33.17	−31.95	46.06	316	48.46	39.31	77.37	0.2934	0.2381	0.5573
41 m13o	1.0	0.0	0.875	67.5	28.92	−20.88	35.68	324	44.69	37.3	60.98	0.3126	0.2609	0.5287
42 m25o	1.0	0.0	0.75	66.46	25.85	−10.53	27.91	338	42.14	35.92	48.46	0.3331	0.2839	0.5092
43 m38o	1.0	0.0	0.675	65.9	24.0	−3.25	24.22	352	40.75	35.2	41.05	0.3483	0.3009	0.499
44 m50o	1.0	0.0	0.5	65.52	22.7	2.29	22.82	6	39.8	34.71	35.97	0.3603	0.3142	0.492
45 m63o	1.0	0.0	0.375	65.28	21.91	5.94	22.7	15	39.23	34.41	32.9	0.3682	0.323	0.4878
46 m75o	1.0	0.0	0.25	65.16	21.48	8.02	22.93	20	38.92	34.25	31.24	0.3728	0.328	0.4855
47 m88o	1.0	0.0	0.125	65.11	21.28	8.97	23.1	23	38.79	34.18	30.5	0.3749	0.3303	0.4846
48 o00y	1.0	0.0	0.0	65.07	21.15	9.16	23.05	23	38.69	34.13	30.33	0.3751	0.3309	0.4839
49 n00w	0.0	0.0	0.0	59.62	0.0	0.0	0.01	158	26.33	27.71	30.17	0.3127	0.329	0.3928
50 n13w	0.125	0.125	0.125	59.77	−0.02	−0.04	0.06	238	26.48	27.87	30.38	0.3125	0.3289	0.395
51 n25w	0.25	0.25	0.25	60.38	−0.02	−0.17	0.19	260	27.13	28.55	31.22	0.3122	0.3286	0.4048
52 n38w	0.375	0.375	0.375	61.84	−0.03	−0.35	0.36	264	28.7	30.21	33.16	0.3117	0.3281	0.4283
53 n50w	0.5	0.5	0.5	64.4	−0.02	−0.57	0.58	268	31.64	33.3	36.72	0.3113	0.3276	0.4721
54 n63w	0.625	0.625	0.625	68.36	0.01	−0.81	0.82	270	36.56	38.46	42.59	0.3108	0.327	0.5453
55 n75w	0.75	0.75	0.75	74.82	−0.08	−0.88	0.9	264	45.58	47.99	53.15	0.3107	0.3271	0.6803
56 n88w	0.875	0.875	0.875	85.83	0.03	−0.01	0.04	324	64.31	67.65	73.69	0.3127	0.329	0.959
57 n99w	1.0	1.0	1.0	95.41	0.0	0.0	0.01	0	84.2	88.59	96.46	0.3127	0.329	1.2559

n = 88.59 / (88.59 + 40.32) = 0.687

Colorimetric "Adapted data (a)": Television Luminous System TLS70a for CIE lightness L^*=70 of black for illuminant D65

System TLS70a
LCD projector
D65 reflection:
Y_N = 40.32
L^*_N = 69.7



***Y* Yellow**
LCH^*_a = 87.3 41.0 104
LAB^*_a = 87.3 −10.2 39.8

***O* Orange red**
LCH^*_a = 65.1 23.0 23
LAB^*_a = 65.1 21.2 9.2

***L* Leaf green**
LCH^*_a = 81.0 40.8 132
LAB^*_a = 81.0 −27.4 30.2

***M* Magenta red**
LCH^*_a = 69.0 46.1 316
LAB^*_a = 69.0 33.2 −32.0

***C* Cyan blue**
LCH^*_a = 83.8 17.4 203
LAB^*_a = 83.8 −16.1 −6.7

***V* Violet blue**
LCH^*_a = 63.3 41.1 291
LAB^*_a = 63.3 14.7 −38.4