

Colorimetric data of Television Luminous System TLS70a for CIE lightness $L^*_N=70$ of black

System:

TLS70a

Projector:

LCD

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	73.16	14.19	5.84	15.34	22	48.12	45.41	44.03	0.3498	0.3301	0.6114
01 o13y	1.0	0.125	0.0	73.22	14.09	5.91	15.28	23	48.18	45.5	44.05	0.3498	0.3304	0.6126
02 o25y	1.0	0.25	0.0	73.51	13.6	6.33	15.0	25	48.44	45.94	44.12	0.3498	0.3317	0.6185
03 o38y	1.0	0.375	0.0	74.29	11.42	7.49	13.66	33	48.88	47.16	44.28	0.3483	0.3361	0.6349
04 o50y	1.0	0.5	0.0	75.42	10.35	9.1	13.78	41	50.29	48.96	44.6	0.3496	0.3403	0.6591
05 o63y	1.0	0.625	0.0	77.43	7.07	11.98	13.91	59	52.32	52.25	45.12	0.3495	0.3491	0.7035
06 o75y	1.0	0.75	0.0	80.16	2.79	15.85	16.09	80	55.23	56.96	45.87	0.3494	0.3603	0.7668
07 o88y	1.0	0.875	0.0	83.41	-1.7	20.46	20.53	95	59.11	62.94	46.81	0.3501	0.3728	0.8474
08 y00l	1.0	1.0	0.0	89.05	-7.75	28.37	29.42	105	67.03	74.28	48.51	0.3531	0.3913	1.0
09 y13l	0.875	1.0	0.0	88.12	-11.17	26.89	29.12	113	63.72	72.32	48.4	0.3455	0.3921	0.9737
10 y25l	0.75	1.0	0.0	85.29	-13.89	22.68	26.6	122	57.43	66.58	47.76	0.3343	0.3876	0.8964
11 y38l	0.625	1.0	0.0	84.88	-16.3	21.96	27.35	127	55.73	65.76	47.76	0.3293	0.3886	0.8854
12 y50l	0.5	1.0	0.0	84.61	-18.02	21.5	28.06	130	54.59	65.24	47.76	0.3257	0.3893	0.8784
13 y63l	0.375	1.0	0.0	84.45	-19.08	21.23	28.55	132	53.91	64.94	47.76	0.3236	0.3898	0.8743
14 y75l	0.25	1.0	0.0	84.37	-19.63	21.1	28.83	133	53.56	64.79	47.76	0.3224	0.39	0.8722
15 y88l	0.125	1.0	0.0	84.34	-19.87	21.04	28.94	133	53.41	64.72	47.76	0.322	0.3901	0.8714
16 l00c	0.0	1.0	0.0	84.34	-19.91	21.03	28.97	133	53.39	64.71	47.76	0.3219	0.3902	0.8712
17 l13c	0.0	1.0	0.125	84.35	-19.87	20.91	28.85	134	53.43	64.74	47.9	0.3217	0.3898	0.8716
18 l25c	0.0	1.0	0.25	84.4	-19.72	20.33	28.34	134	53.56	64.83	48.52	0.3209	0.3884	0.8728
19 l38c	0.0	1.0	0.375	84.48	-19.38	19.02	27.16	136	53.84	64.99	49.92	0.319	0.3851	0.875
20 l50c	0.0	1.0	0.5	84.65	-18.74	16.69	25.1	138	54.37	65.31	52.51	0.3158	0.3793	0.8793
21 l63c	0.0	1.0	0.625	84.92	-17.71	13.02	21.99	144	55.25	65.86	56.78	0.3106	0.3702	0.8866
22 l75c	0.0	1.0	0.75	85.19	-16.14	7.95	18.0	154	56.34	66.38	62.84	0.3036	0.3577	0.8937
23 l88c	0.0	1.0	0.875	85.85	-14.21	1.52	14.3	174	58.28	67.69	71.81	0.2947	0.3422	0.9113
24 c00v	0.0	1.0	1.0	86.46	-11.98	-5.08	13.03	203	60.3	68.91	81.7	0.2859	0.3267	0.9278
25 c13v	0.0	0.875	1.0	83.12	-7.38	-10.09	12.52	234	56.27	62.39	80.71	0.2822	0.3129	0.84
26 c25v	0.0	0.75	1.0	79.63	-2.34	-15.36	15.55	261	52.34	56.03	79.71	0.2783	0.2979	0.7544
27 c38v	0.0	0.675	1.0	76.66	2.16	-19.9	20.03	276	49.22	50.96	78.93	0.2748	0.2845	0.6861
28 c50v	0.0	0.5	1.0	74.48	5.55	-23.26	23.92	283	47.05	47.45	78.41	0.2721	0.2744	0.6388
29 c63v	0.0	0.375	1.0	73.12	7.72	-25.36	26.51	287	45.75	45.34	78.08	0.2704	0.268	0.6105
30 c75v	0.0	0.25	1.0	72.37	8.96	-26.53	28.01	289	45.05	44.21	77.92	0.2695	0.2644	0.5952
31 c88v	0.0	0.125	1.0	72.06	9.46	-27.02	28.64	289	44.76	43.75	77.87	0.269	0.2629	0.589
32 v00m	0.0	0.0	1.0	71.99	9.59	-27.14	28.8	289	44.7	43.64	77.87	0.2689	0.2626	0.5875
33 v13m	0.125	0.0	1.0	72.02	9.73	-27.39	29.08	290	44.8	43.69	78.28	0.2686	0.262	0.5883
34 v25m	0.25	0.0	1.0	72.05	9.83	-27.01	28.75	290	44.87	43.73	77.82	0.2696	0.2628	0.5887
35 v38m	0.375	0.0	1.0	72.17	10.33	-26.71	28.65	291	45.24	43.92	77.73	0.2711	0.2632	0.5913
36 v50m	0.5	0.0	1.0	72.42	11.32	-26.29	28.63	293	45.96	44.29	77.74	0.2736	0.2637	0.5963
37 v63m	0.625	0.0	1.0	72.83	12.89	-25.41	28.5	297	47.13	44.9	77.49	0.278	0.2649	0.6045
38 v75m	0.75	0.0	1.0	73.4	15.09	-24.07	28.41	302	48.81	45.77	77.03	0.2844	0.2667	0.6162
39 v88m	0.875	0.0	1.0	74.55	19.13	-23.69	30.45	309	52.18	47.56	79.13	0.2917	0.2659	0.6403
40 m00o	1.0	0.0	1.0	75.77	23.26	-23.22	32.87	315	55.86	49.52	81.32	0.2992	0.2652	0.6667
41 m13o	1.0	0.0	0.875	74.77	19.96	-14.71	24.8	324	52.88	47.92	68.33	0.3127	0.2833	0.6452
42 m25o	1.0	0.0	0.75	74.08	17.64	-7.19	19.05	338	50.85	46.83	58.4	0.3258	0.3	0.6304
43 m38o	1.0	0.0	0.675	73.71	16.27	-2.17	16.41	352	49.75	46.26	52.52	0.3349	0.3114	0.6228
44 m50o	1.0	0.0	0.5	73.46	15.32	1.5	15.39	6	49.0	45.87	48.5	0.3418	0.3199	0.6175
45 m63o	1.0	0.0	0.375	73.31	14.74	3.83	15.23	15	48.54	45.63	46.06	0.3461	0.3254	0.6143
46 m75o	1.0	0.0	0.25	73.22	14.43	5.14	15.32	20	48.3	45.5	44.75	0.3486	0.3284	0.6126
47 m88o	1.0	0.0	0.125	73.19	14.28	5.72	15.39	22	48.19	45.45	44.17	0.3497	0.3298	0.6119
48 o00y	1.0	0.0	0.0	73.16	14.19	5.84	15.34	22	48.12	45.41	44.03	0.3498	0.3301	0.6114
49 n00w	0.0	0.0	0.0	69.7	0.0	0.0	0.01	0	38.32	40.32	43.9	0.3127	0.329	0.5428
50 n13w	0.125	0.125	0.125	69.78	-0.01	-0.02	0.04	238	38.43	40.44	44.06	0.3126	0.329	0.5445
51 n25w	0.25	0.25	0.25	70.17	-0.01	-0.1	0.12	260	38.95	40.99	44.73	0.3124	0.3288	0.5518
52 n38w	0.375	0.375	0.375	71.08	-0.01	-0.22	0.23	264	40.2	42.3	46.27	0.3122	0.3285	0.5695
53 n50w	0.5	0.5	0.5	72.73	-0.01	-0.37	0.38	268	42.53	44.75	49.09	0.3119	0.3282	0.6025
54 n63w	0.625	0.625	0.625	75.36	0.0	-0.54	0.55	270	46.42	48.85	53.75	0.3115	0.3278	0.6576
55 n75w	0.75	0.75	0.75	79.84	-0.05	-0.63	0.64	264	53.58	56.4	62.12	0.3113	0.3277	0.7593
56 n88w	0.875	0.875	0.875	87.96	0.02	-0.01	0.03	324	68.43	71.99	78.4	0.3127	0.329	0.9692
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	1.1927

KE520-7N, 65/66

$n = 88.59 / (88.59 - 0.28) = 1.003$

TUB-test chart KE52; Hue circle and colorimetric data
Measurement of LCD projector and for $L_r = 40\%$

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