

Colorimetric data of Television Luminous System TLS18a for CIE lightness $L^*_N=18$ of black

System:

TLS18a

Monitor:

LCD

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	55.23	73.6	52.22	90.24	35	41.93	23.16	4.79	0.6001	0.3314	0.2706
01 o13y	1.0	0.125	0.0	55.9	71.56	52.76	88.91	36	42.21	23.82	4.91	0.595	0.3357	0.2783
02 o25y	1.0	0.25	0.0	58.75	63.8	55.0	84.24	41	43.73	26.76	5.49	0.5756	0.3522	0.3126
03 o38y	1.0	0.375	0.0	62.94	52.65	58.41	78.63	48	46.12	31.52	6.38	0.5489	0.3751	0.3683
04 o50y	1.0	0.5	0.0	68.04	39.74	62.19	73.81	57	49.39	38.03	7.7	0.5193	0.3998	0.4443
05 o63y	1.0	0.625	0.0	74.03	25.6	66.82	71.56	69	53.82	46.75	9.4	0.4894	0.4251	0.5463
06 o75y	1.0	0.75	0.0	80.34	11.68	71.52	72.47	81	59.17	57.29	11.52	0.4624	0.4477	0.6695
07 o88y	1.0	0.875	0.0	86.66	-1.41	76.28	76.29	91	65.25	69.32	13.91	0.4395	0.4669	0.81
08 y00l	1.0	1.0	0.0	94.13	-15.45	82.18	83.62	101	73.65	85.58	17.0	0.4179	0.4856	1.0
09 y13l	0.875	1.0	0.0	92.05	-26.66	79.42	83.77	109	64.36	80.82	16.62	0.3978	0.4995	0.9444
10 y25l	0.75	1.0	0.0	90.3	-36.95	77.17	85.56	116	56.83	76.96	16.26	0.3787	0.5129	0.8992
11 y38l	0.625	1.0	0.0	88.66	-47.57	75.14	88.94	122	49.97	73.45	15.9	0.3587	0.5272	0.8583
12 y50l	0.5	1.0	0.0	87.2	-57.76	73.37	93.38	128	44.09	70.41	15.56	0.339	0.5414	0.8228
13 y63l	0.375	1.0	0.0	86.04	-66.5	72.05	98.06	133	39.56	68.07	15.26	0.3219	0.5539	0.7953
14 y75l	0.25	1.0	0.0	85.14	-73.75	70.85	102.28	136	36.13	66.28	15.1	0.3074	0.5641	0.7745
15 y88l	0.125	1.0	0.0	84.55	-78.55	70.13	105.32	138	33.97	65.13	14.97	0.2978	0.571	0.761
16 l00c	0.0	1.0	0.0	84.4	-79.73	69.93	106.06	139	33.44	64.83	14.94	0.2954	0.5726	0.7575
17 l13c	0.0	1.0	0.125	84.43	-79.35	67.54	104.21	140	33.59	64.89	16.03	0.2933	0.5667	0.7583
18 l25c	0.0	1.0	0.25	84.53	-77.32	58.47	96.94	143	34.3	65.09	20.63	0.2858	0.5423	0.7606
19 l38c	0.0	1.0	0.375	84.79	-74.28	46.53	87.66	148	35.51	65.59	28.04	0.275	0.5079	0.7664
20 l50c	0.0	1.0	0.5	85.14	-70.36	33.63	77.99	154	37.15	66.28	37.95	0.2628	0.4688	0.7745
21 l63c	0.0	1.0	0.625	85.59	-65.45	20.37	68.55	163	39.28	67.17	50.47	0.2503	0.4281	0.7849
22 l75c	0.0	1.0	0.75	86.12	-60.37	7.94	60.9	173	41.66	68.23	64.68	0.2386	0.3909	0.7973
23 l88c	0.0	1.0	0.875	86.68	-55.28	-3.1	55.37	183	44.17	69.36	79.56	0.2288	0.3592	0.8104
24 c00v	0.0	1.0	1.0	87.31	-50.42	-13.13	52.11	195	46.82	70.64	95.22	0.2201	0.3322	0.8255
25 c13v	0.0	0.875	1.0	78.97	-38.61	-24.92	45.97	213	38.74	54.88	91.41	0.2094	0.2966	0.6413
26 c25v	0.0	0.75	1.0	71.54	-26.96	-35.51	44.6	233	32.7	42.98	88.23	0.1995	0.2622	0.5022
27 c38v	0.0	0.675	1.0	63.81	-13.47	-46.76	48.68	254	27.46	32.57	85.31	0.1889	0.2241	0.3806
28 c50v	0.0	0.5	1.0	55.94	1.6	-58.15	58.18	272	23.02	23.85	82.31	0.1782	0.1846	0.2787
29 c63v	0.0	0.375	1.0	48.73	17.48	-69.2	71.39	284	19.81	17.37	80.45	0.1684	0.1477	0.203
30 c75v	0.0	0.25	1.0	42.02	33.64	-79.19	86.05	293	17.37	12.51	78.37	0.1604	0.1156	0.1462
31 c88v	0.0	0.125	1.0	36.88	47.37	-87.26	99.3	298	15.86	9.47	77.33	0.1545	0.0923	0.1107
32 v00m	0.0	0.0	1.0	35.56	50.86	-89.23	102.71	300	15.48	8.78	76.92	0.153	0.0868	0.1026
33 v13m	0.125	0.0	1.0	36.0	51.85	-88.85	102.88	300	15.99	9.01	77.43	0.1561	0.088	0.1053
34 v25m	0.25	0.0	1.0	37.85	54.34	-85.6	101.4	302	17.87	10.0	77.34	0.1698	0.0951	0.1169
35 v38m	0.375	0.0	1.0	40.72	58.32	-81.22	100.0	306	21.11	11.69	78.07	0.1904	0.1054	0.1366
36 v50m	0.5	0.0	1.0	44.04	62.79	-75.77	98.42	310	25.29	13.87	78.46	0.215	0.1179	0.162
37 v63m	0.625	0.0	1.0	47.98	68.34	-69.7	97.62	314	30.98	16.78	79.39	0.2436	0.1319	0.196
38 v75m	0.75	0.0	1.0	52.0	73.48	-63.23	96.95	319	37.46	20.15	80.02	0.2722	0.1464	0.2354
39 v88m	0.875	0.0	1.0	55.97	78.6	-56.96	97.08	324	44.69	23.88	80.78	0.2992	0.1599	0.2791
40 m00o	1.0	0.0	1.0	60.38	84.55	-50.11	98.29	329	53.85	28.54	81.78	0.328	0.1739	0.3335
41 m13o	1.0	0.0	0.875	59.21	82.72	-40.41	92.07	334	51.22	27.25	66.98	0.3522	0.1874	0.3184
42 m25o	1.0	0.0	0.75	58.13	80.61	-29.28	85.76	340	48.71	26.1	52.77	0.3818	0.2046	0.3049
43 m38o	1.0	0.0	0.675	57.08	78.49	-16.28	80.17	348	46.33	25.01	39.21	0.4191	0.2262	0.2922
44 m50o	1.0	0.0	0.5	56.17	76.25	-1.45	76.27	359	44.18	24.08	27.16	0.463	0.2524	0.2814
45 m63o	1.0	0.0	0.375	55.37	74.57	14.15	75.9	11	42.44	23.29	17.57	0.5095	0.2795	0.2721
46 m75o	1.0	0.0	0.25	54.79	73.31	30.79	79.51	23	41.2	22.73	10.34	0.5548	0.306	0.2655
47 m88o	1.0	0.0	0.125	54.41	72.36	46.67	86.1	33	40.37	22.36	5.68	0.5901	0.3269	0.2613
48 o00y	1.0	0.0	0.0	55.23	73.6	52.22	90.24	35	41.93	23.16	4.79	0.6001	0.3314	0.2706
49 n00w	0.0	0.0	0.0	18.01	0.0	0.0	0.01	0	2.4	2.52	2.74	0.3127	0.329	0.0294
50 n13w	0.125	0.125	0.125	21.9	-0.17	0.04	0.18	169	3.3	3.49	3.79	0.3122	0.3296	0.0408
51 n25w	0.25	0.25	0.25	33.47	0.0	-0.76	0.77	269	7.37	7.76	8.68	0.3097	0.3259	0.0907
52 n38w	0.375	0.375	0.375	45.12	0.77	-1.94	2.09	292	14.03	14.63	16.83	0.3084	0.3216	0.1709
53 n50w	0.5	0.5	0.5	56.05	1.48	-2.91	3.28	297	23.1	23.96	27.97	0.3079	0.3193	0.28
54 n63w	0.625	0.625	0.625	66.75	1.87	-3.45	3.94	298	35.05	36.31	42.48	0.3079	0.3189	0.4242
55 n75w	0.75	0.75	0.75	76.63	2.12	-3.5	4.1	301	49.16	50.92	59.18	0.3087	0.3197	0.5949
56 n88w	0.875	0.875	0.875	85.68	1.62	-2.88	3.31	299	64.71	67.34	77.0	0.3095	0.3221	0.7868
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	1.0351

 $n = 88.59 / (88.59 - 1.23) = 1.014$ TUB-test chart KE43; Hue circle and colorimetric data
Measurement of LCD display and for $L_r = 2,5\%$ input: $olv^* setrgbcolor$
output: no change compared to input