

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

System TLS00	Color i	r^*_{ad}	g^*_{ad}	b^*_{ad}	L^*_{red}	ΔL^*_{red}	L^*_{id}	ΔL^*_{id}	w_d	x_d	y_d	z_d	x_{ad}	y_{ad}	$y_{ad}/88.59$
D65 reflection:	01.0_0	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0	0.0	0.0	0.3127	0.329	0.0
	02.1_d	0.067	0.067	0.067	6.36	6.36	6.37	6.36	0.067	0.67	0.7	0.77	0.3127	0.329	0.0079
	03.2_a	0.133	0.133	0.133	12.72	6.36	12.73	6.36	0.133	1.44	1.65	1.65	0.3127	0.329	0.0171
$Y_N = 0.0$	04.3_0	0.2	0.2	0.2	19.08	6.36	19.09	6.36	0.2	2.63	3.01	3.01	0.3127	0.329	0.0312
$L^*_N = 0.01$	05.4_a	0.267	0.267	0.267	25.44	6.36	25.45	6.36	0.267	4.33	4.56	4.96	0.3127	0.329	0.0515
	06.5_a	0.333	0.333	0.333	31.8	6.36	31.81	6.36	0.333	6.65	7.0	7.62	0.3127	0.329	0.079
	07.6_a	0.4	0.4	0.4	38.16	6.36	38.17	6.36	0.4	9.67	10.18	11.08	0.3127	0.329	0.1149
	08.7_a	0.467	0.467	0.467	44.52	6.37	44.53	6.36	0.467	13.5	14.2	15.46	0.3127	0.329	0.1603
	09.8_a	0.533	0.533	0.533	50.89	6.36	50.89	6.36	0.533	18.22	19.17	20.88	0.3127	0.329	0.2164
	10.9_a	0.6	0.6	0.6	57.25	6.36	57.25	6.36	0.6	23.93	25.18	27.42	0.3127	0.329	0.2842
	11.1_a	0.667	0.667	0.667	63.61	6.36	63.61	6.36	0.667	30.72	32.32	35.19	0.3127	0.329	0.3649
	12.2_a	0.733	0.733	0.733	69.97	6.36	69.97	6.36	0.733	38.69	40.71	44.32	0.3127	0.329	0.4595
	13.3_a	0.8	0.8	0.8	76.33	6.36	76.33	6.36	0.8	47.92	50.43	54.9	0.3127	0.329	0.5692
	14.4_d	0.867	0.867	0.867	82.69	6.36	82.69	6.36	0.867	58.53	61.58	67.05	0.3127	0.329	0.6951
	15.5_a	0.933	0.933	0.933	89.05	6.36	89.05	6.36	0.933	70.59	74.27	80.87	0.3127	0.329	0.8383
	16.6_F	1.0	1.0	1.0	95.41	6.36	95.41	6.36	1.0	84.2	88.59	96.46	0.3127	0.329	1.0
	17.7_N	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0	0.0	0.0	0.3127	0.329	0.0
	18.8_W	1.0	1.0	1.0	95.41	95.4	95.41	95.4	84.2	84.2	88.59	96.46	0.3127	0.329	1.0

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

System TLS00a	Color i	r^*_{ad}	g^*_{ad}	b^*_{ad}	L^*_{red}	ΔL^*_{red}	L^*_{id}	ΔL^*_{id}	w_d	x_d	y_d	z_d	x_{ad}	y_{ad}	$y_{ad}/88.59$
D65 reflection:	01.0_0	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0	0.0	0.0	0.3127	0.329	0.0
	02.1_d	0.067	0.067	0.067	6.36	6.36	6.37	6.36	0.067	0.67	0.7	0.77	0.3127	0.329	0.0079
	03.2_a	0.133	0.133	0.133	12.72	6.36	12.73	6.36	0.133	1.44	1.52	1.65	0.3127	0.329	0.0171
$Y_N = 0.0$	04.3_0	0.2	0.2	0.2	19.08	6.36	19.09	6.36	0.2	2.63	2.77	3.01	0.3127	0.329	0.0312
$L^*_N = 0.01$	05.4_a	0.267	0.267	0.267	25.44	6.36	25.45	6.36	0.267	4.33	4.56	4.96	0.3127	0.329	0.0515
	06.5_a	0.333	0.333	0.333	31.8	6.36	31.81	6.36	0.333	6.65	7.0	7.62	0.3127	0.329	0.079
	07.6_a	0.4	0.4	0.4	38.16	6.36	38.17	6.36	0.4	9.67	10.18	11.08	0.3127	0.329	0.1149
	08.7_a	0.467	0.467	0.467	44.52	6.37	44.53	6.36	0.467	13.5	14.2	15.46	0.3127	0.329	0.1603
	09.8_a	0.533	0.533	0.533	50.89	6.36	50.89	6.36	0.533	18.22	19.17	20.88	0.3127	0.329	0.2164
	10.9_a	0.6	0.6	0.6	57.25	6.36	57.25	6.36	0.6	23.93	25.18	27.42	0.3127	0.329	0.2842
	11.1_a	0.667	0.667	0.667	63.61	6.36	63.61	6.36	0.667	30.72	32.32	35.19	0.3127	0.329	0.3649
	12.2_a	0.733	0.733	0.733	69.97	6.36	69.97	6.36	0.733	38.69	40.71	44.32	0.3127	0.329	0.4595
	13.3_a	0.8	0.8	0.8	76.33	6.36	76.33	6.36	0.8	47.92	50.43	54.9	0.3127	0.329	0.5692
	14.4_d	0.867	0.867	0.867	82.69	6.36	82.69	6.36	0.867	58.53	61.58	67.05	0.3127	0.329	0.6951
	15.5_a	0.933	0.933	0.933	89.05	6.36	89.05	6.36	0.933	70.59	74.27	80.87	0.3127	0.329	0.8383
	16.6_F	1.0	1.0	1.0	95.41	6.36	95.41	6.36	1.0	84.2	88.59	96.46	0.3127	0.329	1.0
	17.7_N	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0	0.0	0.0	0.3127	0.329	0.0
	18.8_W	1.0	1.0	1.0	95.41	95.4	95.41	95.4	84.2	84.2	88.59	96.46	0.3127	0.329	1.0

Colorimetric "Adapted data (b)": Television Luminous System TLS00b for CIE lightness $L^*=00b$ of black and for illuminant D65

System TLS00b	Color i	r^*_{ad}	g^*_{ad}	b^*_{ad}	L^*_{red}	ΔL^*_{red}	L^*_{id}	ΔL^*_{id}	w_d	x_d	y_d	z_d	x_{ad}	y_{ad}	$y_{ad}/88.59$
D65 reflection:	01.0_0	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3127	0.329	0.0
	02.1_d	0.067	0.067	0.067	6.36	6.36	6.37	6.36	0.067	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
	03.2_a	0.133	0.133	0.133	12.72	6.36	12.73	6.36	0.133	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$Y_N = 0.0$	04.3_0	0.2	0.2	0.2	19.08	6.36	19.09	6.36	0.2	2.63(=2.63+0.0)	2.77(=2.77+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
$L^*_N = 0.0$	05.4_a	0.267	0.267	0.267	25.44	6.36	25.45	6.36	0.267	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06.5_a	0.333	0.333	0.333	31.8	6.36	31.81	6.36	0.333	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07.6_a	0.4	0.4	0.4	38.16	6.36	38.17	6.36	0.4	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08.7_a	0.467	0.467	0.467	44.52	6.36	44.53	6.36	0.467	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09.8_a	0.533	0.533	0.533	50.89	6.36	50.89	6.36	0.533	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10.9_a	0.6	0.6	0.6	57.25	6.36	57.25	6.36	0.6	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.42+0.0)	0.3127	0.329	0.2842
	11.1_a	0.667	0.667	0.667	63.61	6.36	63.61	6.36	0.667	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12.2_a	0.733	0.733	0.733	69.97	6.36	69.97	6.36	0.733	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13.3_a	0.8	0.8	0.8	76.33	6.36	76.33	6.36	0.8	47.92(=47.92+0.0)	50.43(=50.43+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14.4_d	0.867	0.867	0.867	82.69	6.36	82.69	6.36	0.867	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15.5_a	0.933	0.933	0.933	89.05	6.36	89.05	6.36	0.933	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.87+0.0)	0.3127	0.329	0.8383
	16.6_F	1.0	1.0	1.0	95.41	6.36	95.41	6.36	1.0	84.2(=84.2+0.0)	88.59(=88.59+0.0)	96.46(=96.46+0.0)	0.3127	0.329	1.0
	17.7_N	0.0	0.0	0.0	0.01	6.35	0.01	6.36	0.0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3127	0.329	0.0
	18.8_W	1.0	1.0	1.0	95.41	95.4	95.41	95.4	84.2	84.2(=84.2+0.0)	88.59(=88.59+0.0)	96.46(=96.46+0.0)	0.3127	0.329	1.0

CEI70-7N00

Test chart CEI7; 16 grey steps and NWd for TLS00, TLS00a & TLS00b
Calculation of CIE-colour data for sRGB display for 3 reflections

input: rgb
output: ->rgb_{ad}