

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

System TLS00	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.43	40	76.92	64.57	36.54	18.84	1.71	0.64	0.33	0.2126
	Y_d	1.0	1.0	0.0	97.14	96.92	103	-21.57	94.49	76.99	92.78	13.85	0.4193	0.5053	1.0472
LabC*h _{ab}	C_d	0.0	1.0	0.0	87.74	119.8	136	-86.18	83.21	35.76	71.52	11.91	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.12	50.12	196	-48.07	-14.12	53.81	78.74	106.98	0.2246	0.3287	0.8887
$Y_N = 0.01$	B_d	0.0	0.0	1.0	32.3	133.81	306	79.19	-107.85	18.05	7.22	95.06	0.15	0.06	0.0815
$L^*_d = 0.09$	M_d	1.0	0.0	1.0	60.32	115.54	328	98.23	-60.83	59.28	28.48	96.99	0.3209	0.1542	0.3214
	$N0_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01	0.01	0.01	0.3322	0.3322	0.0001
Normalization:	$W0_d$	1.0	1.0	1.0	95.41	0.01	0	0.0	0.0	84.21	88.6	96.48	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01	0.01	0.01	0.3322	0.3322	0.0001
grey $Y_Z=18$	$W1_d$	1.13	1.13	1.13	100.0	0.0	0	0.0	0.0	95.05	100.0	108.9	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11	18.0	19.6	0.3127	0.329	0.2032

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

System TLS00a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.43	40	76.92	64.57	36.54	18.84	1.71	0.64	0.33	0.2126
	Y_d	1.0	1.0	0.0	97.14	96.92	103	-21.57	94.49	76.99	92.78	13.85	0.4193	0.5053	1.0472
LabC*h _{ab}	C_d	0.0	1.0	0.0	87.74	119.8	136	-86.18	83.21	35.76	71.52	11.91	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.12	50.12	196	-48.07	-14.12	53.81	78.74	106.98	0.2246	0.3287	0.8887
$Y_N = 0.01$	B_d	0.0	0.0	1.0	32.3	133.81	306	79.19	-107.85	18.05	7.22	95.06	0.15	0.06	0.0815
$L^*_d = 0.09$	M_d	1.0	0.0	1.0	60.32	115.54	328	98.23	-60.83	59.28	28.48	96.99	0.3209	0.1542	0.3214
	$N0_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01	0.01	0.01	0.3322	0.3322	0.0001
Normalization:	$W0_d$	1.0	1.0	1.0	95.41	0.01	0	0.0	0.0	84.21	88.6	96.48	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01	0.01	0.01	0.3322	0.3322	0.0001
grey $Y_Z=18$	$W1_d$	1.13	1.13	1.13	100.0	0.0	0	0.0	0.0	95.05	100.0	108.9	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11	18.0	19.6	0.3127	0.329	0.2032

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

System TLS00b	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.43	40	76.92	64.57	36.54(=36.53+0.01)	18.84(=18.83+0.01)	1.71(=1.7+0.01)	0.64	0.33	0.2126
	Y_d	1.0	1.0	0.0	97.14	96.92	103	-21.57	94.49	76.99(=76.98+0.01)	92.78(=92.77+0.01)	13.85(=13.84+0.01)	0.4193	0.5053	1.0472
LabC*h _{ab}	C_d	0.0	1.0	0.0	87.74	119.8	136	-86.18	83.21	35.76(=35.75+0.01)	71.52(=71.51+0.01)	11.91(=11.9+0.01)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.12	50.12	196	-48.07	-14.12	53.81(=53.8+0.01)	78.74(=78.73+0.01)	106.98(=106.97+0.01)	0.2246	0.3287	0.8887
$Y_N = 0.0$	B_d	0.0	0.0	1.0	32.3	133.81	306	79.19	-107.85	18.05(=18.04+0.01)	7.22(=7.21+0.01)	95.06(=95.05+0.01)	0.15	0.06	0.0815
$L^*_d = 0.0$	M_d	1.0	0.0	1.0	60.32	115.54	328	98.23	-60.83	59.28(=59.27+0.01)	28.48(=28.47+0.01)	96.99(=96.98+0.01)	0.3209	0.1542	0.3214
	$N0_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
Normalization:	$W0_d$	1.0	1.0	1.0	95.41	0.01	0	0.0	0.0	84.21(=84.2+0.01)	88.6(=88.59+0.01)	96.48(=96.47+0.01)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
grey $Y_Z=18$	$W1_d$	1.13	1.13	1.13	100.0	0.0	0	0.0	0.0	95.05(=95.04+0.01)	100.0(=99.99+0.01)	108.9(=108.89+0.01)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=17.1+0.01)	18.0(=17.99+0.01)	19.6(=19.59+0.01)	0.3127	0.329	0.2032

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

System TLS00b	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.43	40	76.92	64.57	36.54(=36.53+0.01)	18.84(=18.83+0.01)	1.71(=1.7+0.01)	0.64	0.33	0.2126
	Y_d	1.0	1.0	0.0	97.14	96.92	103	-21.57	94.49	76.96(=76.98+0.01)	92.78(=92.77+0.01)	13.85(=13.84+0.01)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.74	119.8	136	-86.18	83.21	35.76(=35.75+0.01)	71.52(=71.51+0.01)	11.91(=11.9+0.01)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.12	50.12	196	-48.07	-14.12	53.81(=53.8+0.01)	78.74(=78.73+0.01)	106.98(=106.97+0.01)	0.2247	0.3287	0.8887
$Y_N = 0.0$	B_d	0.0	0.0	1.0	32.3	133.81	306	79.19	-107.85	18.05(=18.04+0.01)	7.22(=7.21+0.01)	95.06(=95.05+0.01)	0.15	0.06	0.0815
$L^*_N = 0.0$	M_d	1.0	0.0	1.0	60.32	115.54	328	98.23	-60.83	59.28(=59.27+0.01)	28.48(=28.47+0.01)	96.99(=96.98+0.01)	0.3209	0.1542	0.3214
	$N0_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
Normalization:	$W0_d$	1.0	1.0	1.0	95.41	0.01	0	0.0	0.0	84.21(=84.2+0.01)	88.6(=88.57+0.01)	96.48(=96.47+0.01)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
greyY _Z =18	$W1_d$	1.13	1.13	1.13	100.0	0.0	0	0.0	0.0	95.05(=95.04+0.01)	100.0(=99.99+0.01)	108.9(=108.89+0.01)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=17.1+0.01)	18.0(=17.99+0.01)	19.6(=19.59+0.01)	0.3127	0.329	0.2032

Calculated colorimetric data: Television Luminous Systems TLSxxa for CIE lightness $L^*=00, 06, 11, 18$ of black and for CIE standard illuminant D65

System TLS00a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=36.53+0.0)	18.84(=18.84+0.0)	1.72(=1.72+0.0)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=76.96+0.0)	92.74(=92.74+0.0)	13.85(=13.85+0.0)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=35.75+0.0)	71.49(=71.49+0.0)	11.91(=11.91+0.0)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=53.79+0.0)	78.71(=78.71+0.0)	106.94(=106.94+0.0)	0.2247	0.3287	0.8887
$Y_N = 0.0$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=18.05+0.0)	7.23(=7.23+0.0)	95.02(=95.02+0.0)	0.15	0.0601	0.0816
$L^*_N = 0.0$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=59.26+0.0)	28.47(=28.47+0.0)	96.95(=96.95+0.0)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=0.02+0.0)	0.02(=0.02+0.0)	0.02(=0.02+0.0)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=84.17+0.0)	88.56(=88.56+0.0)	96.44(=96.44+0.0)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=0.02+0.0)	0.02(=0.02+0.0)	0.02(=0.02+0.0)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=95.0+0.0)	99.95(=99.95+0.0)	108.85(=108.85+0.0)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=17.11+0.0)	18.0(=18.0+0.0)	19.6(=19.6+0.0)	0.3127	0.329	0.2032
System TLS06a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=35.93+0.6)	18.84(=18.21+0.63)	1.72(=1.03+0.69)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=76.36+0.6)	92.74(=92.11+0.63)	13.85(=13.17+0.69)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=35.15+0.6)	71.49(=70.86+0.63)	11.91(=11.23+0.69)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=53.19+0.6)	78.71(=78.08+0.63)	106.94(=106.25+0.69)	0.2247	0.3287	0.8887
$Y_N = 0.63$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=17.45+0.6)	7.23(=6.6+0.63)	95.02(=94.34+0.69)	0.15	0.0601	0.0816
$L^*_N = 5.69$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=58.66+0.6)	28.47(=27.84+0.63)	96.95(=96.26+0.69)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=0.57+0.6)	0.02(=0.66+0.63)	0.02(=0.66+0.69)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=83.57+0.6)	88.56(=87.93+0.63)	96.44(=95.75+0.69)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=0.57+0.6)	0.02(=0.66+0.63)	0.02(=0.66+0.69)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=94.41+0.6)	99.95(=99.32+0.63)	108.85(=108.17+0.69)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=16.51+0.6)	18.0(=17.37+0.63)	19.6(=18.91+0.69)	0.3127	0.329	0.2032
System TLS11a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=35.33+1.2)	18.84(=17.58+1.26)	1.72(=0.35+1.37)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=75.76+1.2)	92.74(=91.48+1.26)	13.85(=12.48+1.37)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=34.55+1.2)	71.49(=70.23+1.26)	11.91(=10.54+1.37)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=52.59+1.2)	78.71(=77.45+1.26)	106.94(=105.56+1.37)	0.2247	0.3287	0.8887
$Y_N = 1.26$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=16.85+1.2)	7.23(=5.97+1.26)	95.02(=93.65+1.37)	0.15	0.0601	0.0816
$L^*_N = 11.0$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=58.06+1.2)	28.47(=27.21+1.26)	96.95(=95.58+1.37)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=1.17+1.2)	0.02(=1.23+1.26)	0.02(=1.34+1.37)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=82.97+1.2)	88.56(=87.37+1.26)	96.44(=95.07+1.37)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=1.17+1.2)	0.02(=1.23+1.26)	0.02(=1.34+1.37)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=93.81+1.2)	99.95(=98.69+1.26)	108.85(=107.48+1.37)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=15.91+1.2)	18.0(=16.74+1.26)	19.6(=18.23+1.37)	0.3127	0.329	0.2032
System TLS18a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=34.13+2.4)	18.84(=16.32+2.52)	1.72(=1.01+2.74)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=74.56+2.4)	92.74(=90.22+2.52)	13.85(=11.11+2.74)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=33.35+2.4)	71.49(=68.97+2.52)	11.91(=9.17+2.74)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=51.39+2.4)	78.71(=76.19+2.52)	106.94(=104.19+2.74)	0.2247	0.3287	0.8887
$Y_N = 2.52$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=15.65+2.4)	7.23(=4.71+2.52)	95.02(=92.28+2.74)	0.15	0.0601	0.0816
$L^*_N = 18.01$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=56.86+2.4)	28.47(=25.95+2.52)	96.95(=94.21+2.74)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=2.37+2.4)	0.02(=2.49+2.52)	0.02(=2.71+2.74)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=81.78+2.4)	88.56(=86.04+2.52)	96.44(=93.7+2.74)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=2.37+2.4)	0.02(=2.49+2.52)	0.02(=2.71+2.74)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=92.61+2.4)	99.95(=97.43+2.52)	108.85(=106.11+2.74)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=14.71+2.4)	18.0(=15.48+2.52)	19.6(=16.86+2.74)	0.3127	0.329	0.2032

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

System TLS00b	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.43	40	76.92	64.57	36.54(=36.53+0.01)	18.84(=18.83+0.01)	1.71(=1.7+0.01)	0.64	0.33	0.2126
	Y_d	1.0	1.0	0.0	97.14	96.92	103	-21.57	94.49	76.99(=76.98+0.01)	92.78(=92.77+0.01)	13.85(=13.84+0.01)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.74	119.8	136	-86.18	83.21	35.76(=35.75+0.01)	71.52(=71.51+0.01)	11.91(=11.9+0.01)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.12	50.12	196	-48.07	-14.12	53.81(=53.8+0.01)	78.74(=78.73+0.01)	106.98(=106.97+0.01)	0.2246	0.3287	0.8887
$Y_N = 0.0$	B_d	0.0	0.0	1.0	32.3	133.81	306	79.19	-107.85	18.05(=18.04+0.01)	7.22(=7.21+0.01)	95.06(=95.05+0.01)	0.15	0.06	0.0815
$L^*_N = 0.0$	M_d	1.0	0.0	1.0	60.32	115.54	328	98.23	-60.83	59.28(=59.27+0.01)	28.48(=28.47+0.01)	96.99(=96.98+0.01)	0.3209	0.1542	0.3214
	$N0_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
Normalization:	$W0_d$	1.0	1.0	1.0	95.41	0.01	0	0.0	0.0	84.21(=84.2+0.01)	88.6(=88.59+0.01)	96.48(=96.47+0.01)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.09	0.02	0	0.02	0.01	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.01(=0.0+0.01)	0.3322	0.3322	0.0001
greyY _Z =18	$W1_d$	1.13	1.13	1.13	100.0	0.0	0	0.0	0.0	95.05(=95.04+0.01)	100.0(=99.99+0.01)	108.9(=108.89+0.01)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=17.1+0.01)	18.0(=17.99+0.01)	19.6(=19.59+0.01)	0.3127	0.329	0.2032

Calculated colorimetric data: Television Luminous Systems TLSxxa for CIE lightness $L^*=27, 33, 52, 70$ of black and for CIE standard illuminant D65

System TLS27a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=31.74+4.79)	18.84(=13.8+5.04)	1.72(=-3.76+5.49)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=72.17+4.79)	92.74(=87.7+5.04)	13.85(=8.37+5.49)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=30.96+4.79)	71.49(=66.45+5.04)	11.91(=6.43+5.49)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=49.0+4.79)	78.71(=73.67+5.04)	106.94(=101.45+5.49)	0.2247	0.3287	0.8887
$Y_N = 5.04$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=13.26+4.79)	7.23(=2.19+5.04)	95.02(=89.53+5.49)	0.15	0.0601	0.0816
$L^*_N = 26.85$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=54.47+4.79)	28.47(=23.43+5.04)	96.95(=91.46+5.49)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-4.76+4.79)	0.02(=-5.01+5.04)	0.02(=-5.46+5.49)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=79.38+4.79)	88.56(=83.52+5.04)	96.44(=90.95+5.49)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-4.76+4.79)	0.02(=-5.01+5.04)	0.02(=-5.46+5.49)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=90.21+4.79)	99.95(=94.91+5.04)	108.85(=103.37+5.49)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=12.32+4.79)	18.0(=12.96+5.04)	19.6(=14.11+5.49)	0.3127	0.329	0.2032
System TLS38a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=26.95+9.58)	18.84(=8.76+10.08)	1.72(=-9.25+10.98)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=67.37+9.58)	92.74(=82.66+10.08)	13.85(=2.88+10.98)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=26.17+9.58)	71.49(=61.41+10.08)	11.91(=0.94+10.98)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=44.21+9.58)	78.71(=68.63+10.08)	106.94(=95.96+10.98)	0.2247	0.3287	0.8887
$Y_N = 10.08$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=8.47+9.58)	7.23(=-2.84+10.08)	95.02(=84.05+10.98)	0.15	0.0601	0.0816
$L^*_N = 37.99$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=49.68+9.58)	28.47(=18.39+10.08)	96.95(=85.98+10.98)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-9.55+9.58)	0.02(=-10.95+10.98)	0.02(=-10.95+10.98)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=74.59+9.58)	88.56(=78.48+10.08)	96.44(=85.47+10.98)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-9.55+9.58)	0.02(=-10.95+10.98)	0.02(=-10.95+10.98)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=85.42+9.58)	99.95(=89.87+10.08)	108.85(=97.88+10.98)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=7.53+9.58)	18.0(=7.92+10.08)	19.6(=8.62+10.98)	0.3127	0.329	0.2032
System TLS52a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=17.37+19.16)	18.84(=-1.31+20.16)	1.72(=-20.22+21.95)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=57.79+19.16)	92.74(=72.58+20.16)	13.85(=-8.09+21.95)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=16.59+19.16)	71.49(=51.33+20.16)	11.91(=-10.03+21.95)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=34.63+19.16)	78.71(=58.55+20.16)	106.94(=84.99+21.95)	0.2247	0.3287	0.8887
$Y_N = 20.16$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=-1.1+19.16)	7.23(=-12.92+20.16)	95.02(=73.07+21.95)	0.15	0.0601	0.0816
$L^*_N = 52.02$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=40.1+19.16)	28.47(=8.31+21.95)	96.95(=75.0+21.95)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-19.13+19.16)	0.02(=-20.13+20.16)	0.02(=-21.92+21.95)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=65.01+19.16)	88.56(=68.4+20.16)	96.44(=74.49+21.95)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-19.13+19.16)	0.02(=-20.13+20.16)	0.02(=-21.92+21.95)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=75.84+19.16)	99.95(=79.79+20.16)	108.85(=86.9+21.95)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=-2.04+19.16)	18.0(=-2.15+20.16)	19.6(=-2.34+21.95)	0.3127	0.329	0.2032
System TLS70a	Colour	r_d	g_d	b_d	L^*_d	$C^*_{ab,d}$	$h_{ab,d}$	a^*_d	b^*_d	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
sRGB	R_d	1.0	0.0	0.0	50.5	100.35	40	76.89	64.48	36.53(=-1.78+38.32)	18.84(=-21.47+40.32)	1.72(=-42.17+43.9)	0.6399	0.33	0.2127
	Y_d	1.0	1.0	0.0	97.12	96.89	103	-21.57	94.45	76.96(=38.63+38.32)	92.74(=52.42+40.32)	13.85(=-30.04+43.9)	0.4193	0.5053	1.0472
LabC*h _{ab}	G_d	0.0	1.0	0.0	87.72	119.76	136	-86.15	83.18	35.75(=-2.56+38.32)	71.49(=31.17+40.32)	11.91(=-31.98+43.9)	0.3	0.6	0.8072
D65 reflection:	C_d	0.0	1.0	1.0	91.1	50.11	196	-48.06	-14.12	53.79(=15.47+38.32)	78.71(=38.39+40.32)	106.94(=63.04+43.9)	0.2247	0.3287	0.8887
$Y_N = 40.32$	B_d	0.0	0.0	1.0	32.32	133.74	306	79.13	-107.8	18.05(=-20.26+38.32)	7.23(=-33.08+40.32)	95.02(=51.12+43.9)	0.15	0.0601	0.0816
$L^*_N = 69.7$	M_d	1.0	0.0	1.0	60.31	115.5	328	98.19	-60.81	59.26(=20.94+38.32)	28.47(=-11.84+40.32)	96.95(=53.05+43.9)	0.3209	0.1542	0.3215
	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-38.29+38.32)	0.02(=-40.29+40.32)	0.02(=-43.87+43.9)	0.3328	0.3328	0.0002
Normalization:	$W0_d$	1.0	1.0	1.0	95.4	0.01	0	0.0	0.0	84.17(=45.85+38.32)	88.56(=48.24+40.32)	96.44(=52.54+43.9)	0.3127	0.329	1.0
	$N1_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-38.29+38.32)	0.02(=-40.29+40.32)	0.02(=-43.87+43.9)	0.3328	0.3328	0.0002
greyY _Z =18	$W1_d$	1.13	1.13	1.13	99.98	0.0	0	0.0	0.0	95.0(=56.68+38.32)	99.95(=59.63+40.32)	108.85(=64.95+43.9)	0.3127	0.329	1.1287
	$Z1_d$	0.18	0.18	0.18	49.5	0.01	0	0.01	0.0	17.11(=-21.2+38.32)	18.0(=-22.31+40.32)	19.6(=-24.29+43.9)	0.3127	0.329	0.2032