

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	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.67	40	112.69	95.43	56.43	23.27	0.0	0.708	0.292	0.2626
	Y_d	1.0	1.0	0.0	93.16	133.13	99	-20.63	131.52	69.24	83.34	2.48	0.4465	0.5375	0.9406
LabC*h _{ab}	C_d	0.0	1.0	0.0	81.88	199.89	146	-165.52	112.06	12.81	60.07	2.48	0.17	0.7971	0.678
D65 reflection:	C_d	0.0	1.0	1.0	85.16	105.74	190	-104.25	-17.67	27.77	66.32	96.48	0.1457	0.348	0.7485
$Y_N = 0.01$	B_d	0.0	0.0	1.0	27.44	142.11	306	82.74	-115.53	14.96	5.25	94.0	0.131	0.046	0.0593
$L^*_d = 0.09$	M_d	1.0	0.0	1.0	60.36	138.47	335	125.38	-58.77	71.39	28.52	94.0	0.3682	0.1471	0.3219
	$N0_d$	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	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.67	40	112.69	95.43	56.43	23.27	0.0	0.708	0.292	0.2626
	Y_d	1.0	1.0	0.0	93.16	133.13	99	-20.63	131.52	69.24	83.34	2.48	0.4465	0.5375	0.9406
LabC*h _{ab}	C_d	0.0	1.0	0.0	81.88	199.89	146	-165.52	112.06	12.81	60.07	2.48	0.17	0.7971	0.678
D65 reflection:	C_d	0.0	1.0	1.0	85.16	105.74	190	-104.25	-17.67	27.77	66.32	96.48	0.1457	0.348	0.7485
$Y_N = 0.01$	B_d	0.0	0.0	1.0	27.44	142.11	306	82.74	-115.53	14.96	5.25	94.0	0.131	0.046	0.0593
$L^*_d = 0.09$	M_d	1.0	0.0	1.0	60.36	138.47	335	125.38	-58.77	71.39	28.52	94.0	0.3682	0.1471	0.3219
	$N0_d$	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	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.67	40	112.69	95.43	56.43(=56.42+0.01)	23.27(=23.26+0.01)	0.0(=0.0+0.01)	0.708	0.292	0.2626
	Y_d	1.0	1.0	0.0	93.16	133.13	99	-20.63	131.52	69.24(=69.23+0.01)	83.34(=83.33+0.01)	2.48(=2.47+0.01)	0.4465	0.5375	0.9406
LabC*h _{ab}	C_d	0.0	1.0	0.0	81.88	199.89	146	-165.52	112.06	12.81(=12.8+0.01)	60.07(=60.06+0.01)	2.48(=2.47+0.01)	0.17	0.7971	0.678
D65 reflection:	C_d	0.0	1.0	1.0	85.16	105.74	190	-104.25	-17.67	27.77(=27.76+0.01)	66.32(=66.31+0.01)	96.48(=96.47+0.01)	0.1457	0.348	0.7485
$Y_N = 0.0$	B_d	0.0	0.0	1.0	27.44	142.11	306	82.74	-115.53	14.96(=14.95+0.01)	5.25(=5.24+0.01)	94.0(=93.99+0.01)	0.131	0.046	0.0593
$L^*_d = 0.0$	M_d	1.0	0.0	1.0	60.36	138.47	335	125.38	-58.77	71.39(=71.38+0.01)	28.52(=28.51+0.01)	94.0(=93.99+0.01)	0.3682	0.1471	0.3219
	$N0_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.67	40	112.69	95.43	56.43(=56.42+0.01)	23.27(=23.26+0.01)	0.0(=0.0+0.01)	0.708	0.292	0.2626
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.16	133.13	99	-20.63	131.52	69.24(=69.23+0.01)	83.34(=83.33+0.01)	2.48(=2.47+0.01)	0.4465	0.5375	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.88	199.79	146	-165.52	112.06	12.81(=12.81+0.01)	60.07(=60.06+0.01)	2.48(=2.47+0.01)	0.17	0.7971	0.678
$Y_N = 0.0$	C_d	0.0	1.0	1.0	85.16	105.74	190	-104.25	-17.67	27.77(=27.76+0.01)	66.32(=66.31+0.01)	96.48(=96.47+0.01)	0.1457	0.348	0.7485
$L^*_N = 0.0$	B_d	0.0	0.0	1.0	27.44	142.11	306	82.74	-115.53	14.96(=14.95+0.01)	5.25(=5.24+0.01)	94.0(=93.99+0.01)	0.131	0.046	0.0593
Normalization:	M_d	1.0	0.0	1.0	60.36	138.47	335	125.38	-58.77	71.39(=71.38+0.01)	28.52(=28.51+0.01)	94.0(=93.99+0.01)	0.3682	0.1471	0.3219
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=56.41+0.0)	23.27(=23.27+0.0)	0.01(=0.01+0.0)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=69.21+0.0)	83.3(=83.3+0.0)	2.49(=2.49+0.0)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=12.81+0.0)	60.05(=60.05+0.0)	2.49(=2.49+0.0)	0.17	0.7969	0.678
$Y_N = 0.0$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=27.76+0.0)	66.29(=66.29+0.0)	96.44(=96.44+0.0)	0.1457	0.348	0.7486
$L^*_N = 0.0$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=14.96+0.0)	5.26(=5.26+0.0)	93.96(=93.96+0.0)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=71.36+0.0)	28.51(=28.51+0.0)	93.96(=93.96+0.0)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=55.81+0.6)	23.27(=22.64+0.63)	0.01(=-0.67+0.69)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=68.61+0.6)	83.3(=82.67+0.63)	2.49(=1.8+0.69)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=12.21+0.6)	60.05(=59.42+0.63)	2.49(=1.8+0.69)	0.17	0.7969	0.678
$Y_N = 0.63$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=27.17+0.6)	66.29(=65.66+0.63)	96.44(=95.75+0.69)	0.1457	0.348	0.7486
$L^*_N = 5.69$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=14.36+0.6)	5.26(=-4.63+0.63)	93.96(=93.28+0.69)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=70.76+0.6)	28.51(=27.88+0.63)	93.96(=93.28+0.69)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	0.0	0.0	0.0	0.18	0.05	0	0.04	0.03	0.02(=-0.6+0.63)	0.02(=-0.6+0.63)	0.02(=-0.6+0.63)	0.3328	0.3328	0.0002
	$W0_d$	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(=-0.57+0.6)	0.02(=-0.57+0.6)	0.3328	0.3328	0.0002
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=55.21+1.2)	23.27(=22.01+1.26)	0.01(=-1.35+1.37)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=68.01+1.2)	83.3(=82.04+1.26)	2.49(=1.12+1.37)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=11.62+1.2)	60.05(=58.79+1.26)	2.49(=1.12+1.37)	0.17	0.7969	0.678
$Y_N = 1.26$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=26.57+1.2)	66.29(=65.03+1.26)	96.44(=95.07+1.37)	0.1457	0.348	0.7486
$L^*_N = 11.0$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=13.76+1.2)	5.26(=4.0+1.26)	93.96(=92.59+1.37)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=70.16+1.2)	28.51(=27.25+1.26)	93.96(=92.59+1.37)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=54.01+2.4)	23.27(=20.75+2.52)	0.01(=-2.72+2.74)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=66.81+2.4)	83.3(=80.78+2.52)	2.49(=-0.25+2.74)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=10.42+2.4)	60.05(=57.53+2.52)	2.49(=-0.25+2.74)	0.17	0.7969	0.678
$Y_N = 2.52$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=25.37+2.4)	66.29(=63.77+2.52)	96.44(=93.7+2.74)	0.1457	0.348	0.7486
$L^*_N = 18.01$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=12.57+2.4)	5.26(=2.74+2.52)	93.96(=91.22+2.74)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=68.96+2.4)	28.51(=25.99+2.52)	93.96(=91.22+2.74)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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

AEM40-7N, Colorimetric data of Television Luminous System TLS00a for CIE standard illuminant D65; TLS00-System; Page: 2/3

Test chart AEM4; 8 basic colors RYGBMNW_d for TLS00 .. TLS70 input: rgb/cmy0/000n/w
 Calculation of LabC*h_{ab} data for WCGa display for 8 reflections for normalization grey $Y_Z=18$

N: no 3D-linearization (OL) in file (F) or PS-startup (S)

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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.67	40	112.69	95.43	56.43(=56.42+0.01)	23.27(=23.26+0.01)	0.0(=0.0+0.01)	0.708	0.292	0.2626
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.16	133.13	99	-20.63	131.52	69.24(=69.23+0.01)	83.34(=83.33+0.01)	2.48(=2.47+0.01)	0.4465	0.5375	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.88	199.89	146	-165.52	112.06	12.81(=12.8+0.01)	60.07(=60.06+0.01)	2.48(=2.47+0.01)	0.17	0.7971	0.678
$Y_N = 0.0$	C_d	0.0	1.0	1.0	85.16	105.74	190	-104.25	-17.67	27.77(=27.76+0.01)	66.32(=66.31+0.01)	96.48(=96.47+0.01)	0.1457	0.348	0.7485
$L^*_N = 0.0$	B_d	0.0	0.0	1.0	27.44	142.11	306	82.74	-115.53	14.96(=14.95+0.01)	5.25(=5.24+0.01)	94.0(=93.99+0.01)	0.131	0.046	0.0593
Normalization:	M_d	1.0	0.0	1.0	60.36	138.47	335	125.38	-58.77	71.39(=71.38+0.01)	28.52(=28.51+0.01)	94.0(=93.99+0.01)	0.3682	0.1471	0.3219
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=56.42+4.79)	23.27(=18.23+5.04)	0.01(=-5.47+5.49)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=64.42+4.79)	83.3(=78.26+5.04)	2.49(=-2.99+5.49)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=8.02+4.79)	60.05(=55.01+5.04)	2.49(=-2.99+5.49)	0.17	0.7969	0.678
$Y_N = 5.04$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=22.97+4.79)	66.29(=61.25+5.04)	96.44(=90.95+5.49)	0.1457	0.348	0.7486
$L^*_N = 26.85$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=10.17+4.79)	5.26(=0.22+5.04)	93.96(=88.47+5.49)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=66.57+4.79)	28.51(=23.47+5.04)	93.96(=88.47+5.49)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=46.83+9.58)	23.27(=13.19+10.08)	0.01(=-10.96+10.98)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=59.63+9.58)	83.3(=73.22+10.08)	2.49(=-8.48+10.98)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=3.23+9.58)	60.05(=49.97+10.08)	2.49(=-8.48+10.98)	0.17	0.7969	0.678
$Y_N = 10.08$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=18.18+9.58)	66.29(=56.21+10.08)	96.44(=85.47+10.98)	0.1457	0.348	0.7486
$L^*_N = 37.99$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=5.38+9.58)	5.26(=-4.81+10.08)	93.96(=82.99+10.98)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=61.78+9.58)	28.51(=18.43+10.08)	93.96(=82.99+10.98)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=37.25+19.16)	23.27(=3.11+20.16)	0.01(=-21.93+21.95)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=50.05+19.16)	83.3(=63.14+20.16)	2.49(=-19.45+21.95)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=-6.34+19.16)	60.05(=39.89+20.16)	2.49(=-19.45+21.95)	0.17	0.7969	0.678
$Y_N = 20.16$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=8.6+19.16)	66.29(=46.13+20.16)	96.44(=74.49+21.95)	0.1457	0.348	0.7486
$L^*_N = 52.02$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=-4.19+19.16)	5.26(=-14.89+20.16)	93.96(=72.01+21.95)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=52.2+19.16)	28.51(=8.35+20.16)	93.96(=72.01+21.95)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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	$C^*_{ab,d}$	$h_{ab,d}$	$a^*_{d,0}$	$b^*_{d,0}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
WCGa	R_d	1.0	0.0	0.0	55.35	147.54	40	112.65	95.28	56.41(=18.09+38.32)	23.27(=-17.04+40.32)	0.01(=-43.88+43.9)	0.7079	0.292	0.2627
LabC*h _{ab}	Y_d	1.0	1.0	0.0	93.15	133.04	99	-20.63	131.43	69.21(=30.89+38.32)	83.3(=42.98+40.32)	2.49(=-41.4+43.9)	0.4465	0.5374	0.9406
D65 reflection:	G_d	0.0	1.0	0.0	81.86	199.79	146	-165.45	111.97	12.81(=-25.5+38.32)	60.05(=19.73+40.32)	2.49(=-41.4+43.9)	0.17	0.7969	0.678
$Y_N = 40.32$	C_d	0.0	1.0	1.0	85.15	105.71	190	-104.21	-17.66	27.76(=-10.55+38.32)	66.29(=25.97+40.32)	96.44(=52.54+43.9)	0.1457	0.348	0.7486
$L^*_N = 69.7$	B_d	0.0	0.0	1.0	27.45	142.01	306	82.66	-115.47	14.96(=-23.35+38.32)	5.26(=-35.05+40.32)	93.96(=50.06+43.9)	0.131	0.046	0.0594
Normalization:	M_d	1.0	0.0	1.0	60.35	138.43	335	125.33	-58.75	71.36(=33.04+38.32)	28.51(=-11.8+40.32)	93.96(=50.06+43.9)	0.3681	0.1471	0.322
grey $Y_Z=18$	$N0_d$	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
	$W0_d$	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
	$W1_d$	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

AEM40-7N, Colorimetric data of Television Luminous System TLS00a for CIE standard illuminant D65; TLS00-System; Page: 3/3

Test chart AEM4; 8 basic colors RYGBMNW_d for TLS00 .. TLS70 input: rgb/cmy0/000n/w
 Calculation of LabC*h_{ab} data for WCGa display for 8 reflections for normalization grey $Y_Z=18$