

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

System TLS00	Color i	r^*_d	g^*_d	b^*_d	L^*_d	a^*_d	b^*_d	$C^*_{ab,d}$	$h_{ab,d}$	X_d	Y_d	Z_d	x_d	y_d	$Y_d/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.01$	01, O_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	02, I_d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33	1.4	1.52	0.3127	0.329	0.0158
	03, 2_d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85	4.05	4.41	0.3127	0.329	0.0458
	04, 3_d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45	8.89	9.68	0.3127	0.329	0.1004
	05, 4_d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74	16.56	18.03	0.3127	0.329	0.1869
	06, 5_d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34	27.71	30.18	0.3127	0.329	0.3128
	07, 6_d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86	42.99	46.81	0.3127	0.329	0.4853
	08, 7_d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94	63.07	68.67	0.3127	0.329	0.7119
	09, 8_d	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	1.0
	10, N_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	11, W_d	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	1.0

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

System TLS00a	Color i	r^*_d	g^*_d	b^*_d	L^*_d	a^*_d	b^*_d	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.01$	01, O_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	02, I_d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33	1.4	1.52	0.3127	0.329	0.0158
	03, 2_d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85	4.05	4.41	0.3127	0.329	0.0458
	04, 3_d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45	8.89	9.68	0.3127	0.329	0.1004
	05, 4_d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74	16.56	18.03	0.3127	0.329	0.1869
	06, 5_d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34	27.71	30.18	0.3127	0.329	0.3128
	07, 6_d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86	42.99	46.81	0.3127	0.329	0.4853
	08, 7_d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94	63.07	68.67	0.3127	0.329	0.7119
	09, 8_d	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	1.0
	10, N_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	11, W_d	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	1.0

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

System TLS00b	Color i	r^*_d	g^*_d	b^*_d	L^*_d	a^*_d	b^*_d	$C^*_{ab,d}$	$h_{ab,d}$	$X_{b,d}$	$Y_{b,d}$	$Z_{b,d}$	$x_{b,d}$	$y_{b,d}$	$Y_{b,d}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.0$	01, O_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	02, I_d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33(=1.33+0.0)	1.4(=1.39+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
	03, 2_d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
	04, 3_d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05, 4_d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06, 5_d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.17+0.0)	0.3127	0.329	0.3128
	07, 6_d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08, 7_d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09, 8_d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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
	10, N_d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	11, W_d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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

CEI20-7N00

Test chart CEI2; 9 grey steps and NW_d for TLS00, TLS00a & TLS00b
Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
output: $\rightarrow$ *rgb_{ad}*

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

System TLS00b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.0$	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	02,1 _d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33(=1.33+0.0)	1.4(=1.39+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
	03,2 _d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
	04,3 _d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05,4 _d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06,5 _d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.17+0.0)	0.3127	0.329	0.3128
	07,6 _d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08,7 _d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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
	10,N _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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

Calculated colorimetric data (b): Television Luminous Systems TLS00b for CIE lightness $L^*=00$ of black and for illuminant D65

System TLS00b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.0$	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3037	0.3195	0.0
	02,1 _d	0.125	0.125	0.125	11.93	0.0	0.0	0.0	0	1.33(=1.33+0.0)	1.4(=1.4+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
	03,2 _d	0.25	0.25	0.25	23.85	0.0	0.0	0.0	3	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
	04,3 _d	0.375	0.375	0.375	35.78	0.0	0.0	0.0	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05,4 _d	0.5	0.5	0.5	47.7	0.0	0.0	0.0	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06,5 _d	0.625	0.625	0.625	59.63	0.0	0.0	0.0	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.18+0.0)	0.3127	0.329	0.3128
	07,6 _d	0.75	0.75	0.75	71.55	0.0	0.0	0.0	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08,7 _d	0.875	0.875	0.875	83.48	0.0	0.0	0.0	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	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
	10,N _d	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3037	0.3195	0.0
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	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

Calculated colorimetric data (b): Television Luminous Systems TLS06b for CIE lightness $L^*=06$ of black and for illuminant D65

System TLS06b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 0.63$ $L^*_N = 5.69$	01,0 _d	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0	0.6(=0.0+0.6)	0.63(=0.0+0.63)	0.69(=0.0+0.69)	0.3127	0.329	0.0071
	02,1 _d	0.125	0.125	0.125	15.57	0.0	0.0	0.0	0	1.92(=1.32+0.6)	2.02(=1.39+0.63)	2.19(=1.51+0.69)	0.3127	0.329	0.0228
	03,2 _d	0.25	0.25	0.25	25.73	0.0	0.0	0.0	0	4.42(=3.83+0.6)	4.66(=4.03+0.63)	5.07(=4.38+0.69)	0.3127	0.329	0.0525
	04,3 _d	0.375	0.375	0.375	36.86	0.0	0.0	0.0	3	8.99(=8.39+0.6)	9.46(=8.83+0.63)	10.3(=9.62+0.69)	0.3127	0.329	0.1068
	05,4 _d	0.5	0.5	0.5	48.35	0.0	0.0	0.0	0	16.22(=15.63+0.6)	17.07(=16.44+0.63)	18.59(=17.9+0.69)	0.3127	0.329	0.1927
	06,5 _d	0.625	0.625	0.625	60.02	0.0	0.0	0.0	0	26.75(=26.15+0.6)	28.15(=27.52+0.63)	30.65(=29.96+0.69)	0.3127	0.329	0.3177
	07,6 _d	0.75	0.75	0.75	71.77	0.0	0.0	0.0	10	41.17(=40.57+0.6)	43.32(=42.69+0.63)	47.16(=46.48+0.69)	0.3127	0.329	0.4889
	08,7 _d	0.875	0.875	0.875	83.58	0.0	0.0	0.0	10	60.12(=59.52+0.6)	63.25(=62.62+0.63)	68.87(=68.18+0.69)	0.3127	0.329	0.714
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=83.6+0.6)	88.59(=87.96+0.63)	96.46(=95.77+0.69)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0	0.6(=0.0+0.6)	0.63(=0.0+0.63)	0.69(=0.0+0.69)	0.3127	0.329	0.0071
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=83.6+0.6)	88.59(=87.96+0.63)	96.46(=95.77+0.69)	0.3127	0.329	1.0

CEI20-7N00

Test chart CEI2; 9 grey steps and NW_d for TLS00b, TLS00b & TLS06b
Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
output: *->rgbdd*

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

System TLS00b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
D65 reflection:	02,1 _d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33(=1.33+0.0)	1.4(=1.39+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
$Y_N = 0.0$	03,2 _d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
$L^*_N = 0.0$	04,3 _d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05,4 _d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06,5 _d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.17+0.0)	0.3127	0.329	0.3128
	07,6 _d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08,7 _d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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
	10,N _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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

Calculated colorimetric data (b): Television Luminous Systems TLS11b for CIE lightness $L^*=11$ of black and for illuminant D65

System TLS11b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0	1.2(=0.0+1.2)	1.26(=0.0+1.26)	1.37(=0.0+1.37)	0.3127	0.329	0.0142
D65 reflection:	02,1 _d	0.125	0.125	0.125	18.52	0.0	0.0	0.0	0	2.51(=1.31+1.2)	2.64(=1.38+1.26)	2.87(=1.5+1.37)	0.3127	0.329	0.0298
$Y_N = 1.26$	03,2 _d	0.25	0.25	0.25	27.45	0.0	0.0	0.0	0	5.0(=3.8+1.2)	5.26(=4.0+1.26)	5.72(=4.35+1.37)	0.3127	0.329	0.0593
$L^*_N = 11.0$	04,3 _d	0.375	0.375	0.375	37.89	0.0	0.0	0.0	3	9.53(=8.33+1.2)	10.03(=8.77+1.26)	10.92(=9.55+1.37)	0.3127	0.329	0.1132
	05,4 _d	0.5	0.5	0.5	48.99	0.0	0.0	0.0	7	16.71(=15.51+1.2)	17.58(=16.32+1.26)	19.15(=17.77+1.37)	0.3127	0.329	0.1985
	06,5 _d	0.625	0.625	0.625	60.41	0.0	0.0	0.0	0	27.16(=25.97+1.2)	28.58(=27.32+1.26)	31.12(=29.75+1.37)	0.3127	0.329	0.3226
	07,6 _d	0.75	0.75	0.75	71.99	0.0	0.0	0.0	0	41.48(=40.28+1.2)	43.64(=42.38+1.26)	47.52(=46.14+1.37)	0.3127	0.329	0.4926
	08,7 _d	0.875	0.875	0.875	83.67	0.0	0.0	0.0	7	60.29(=59.09+1.2)	63.43(=62.17+1.26)	69.07(=67.7+1.37)	0.3127	0.329	0.716
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=83.0+1.2)	88.59(=87.33+1.26)	96.46(=95.09+1.37)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0	1.2(=0.0+1.2)	1.26(=0.0+1.26)	1.37(=0.0+1.37)	0.3127	0.329	0.0142
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=83.0+1.2)	88.59(=87.33+1.26)	96.46(=95.09+1.37)	0.3127	0.329	1.0

Calculated colorimetric data (b): Television Luminous Systems TLS18b for CIE lightness $L^*=18$ of black and for illuminant D65

System TLS18b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0	2.4(=0.0+2.4)	2.52(=0.0+2.52)	2.74(=0.0+2.74)	0.3127	0.329	0.0285
D65 reflection:	02,1 _d	0.125	0.125	0.125	23.26	0.0	0.0	0.0	0	3.68(=1.29+2.4)	3.88(=1.36+2.52)	4.22(=1.48+2.74)	0.3127	0.329	0.0438
$Y_N = 2.52$	03,2 _d	0.25	0.25	0.25	30.54	0.0	0.0	0.0	0	6.14(=3.74+2.4)	6.46(=3.94+2.52)	7.03(=4.29+2.74)	0.3127	0.329	0.0729
$L^*_N = 18.01$	04,3 _d	0.375	0.375	0.375	39.85	0.0	0.0	0.0	3	10.61(=8.21+2.4)	11.16(=8.64+2.52)	12.15(=9.41+2.74)	0.3127	0.329	0.126
	05,4 _d	0.5	0.5	0.5	50.23	0.0	0.0	0.0	0	17.69(=15.29+2.4)	18.61(=16.09+2.52)	20.26(=17.52+2.74)	0.3127	0.329	0.21
	06,5 _d	0.625	0.625	0.625	61.17	0.0	0.0	0.0	7	27.99(=25.59+2.4)	29.45(=26.93+2.52)	32.06(=29.32+2.74)	0.3127	0.329	0.3324
	07,6 _d	0.75	0.75	0.75	72.42	0.0	0.0	0.0	0	42.09(=39.7+2.4)	44.29(=41.77+2.52)	48.22(=45.48+2.74)	0.3127	0.329	0.4999
	08,7 _d	0.875	0.875	0.875	83.86	0.0	0.0	0.0	0	60.63(=58.24+2.4)	63.8(=61.28+2.52)	69.46(=66.72+2.74)	0.3127	0.329	0.7201
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=81.8+2.4)	88.59(=86.07+2.52)	96.46(=93.72+2.74)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0	2.4(=0.0+2.4)	2.52(=0.0+2.52)	2.74(=0.0+2.74)	0.3127	0.329	0.0285
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=81.8+2.4)	88.59(=86.07+2.52)	96.46(=93.72+2.74)	0.3127	0.329	1.0

CEI20-7N00

Test chart CEI2; 9 grey steps and NW_d for TLS00b, TLS11b & TLS18b
 Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
 output: *->rgbdd*

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

System TLS00b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
D65 reflection:	02,1 _d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33(=1.33+0.0)	1.4(=1.39+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
$Y_N = 0.0$	03,2 _d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
$L^*_N = 0.0$	04,3 _d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05,4 _d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06,5 _d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.17+0.0)	0.3127	0.329	0.3128
	07,6 _d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08,7 _d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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
	10,N _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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

Calculated colorimetric data (b): Television Luminous Systems TLS27b for CIE lightness $L^*=27$ of black and for illuminant D65

System TLS27b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0	4.79(=0.0+4.79)	5.04(=0.0+5.04)	5.49(=0.0+5.49)	0.3127	0.329	0.0569
D65 reflection:	02,1 _d	0.125	0.125	0.125	30.29	0.0	0.0	0.0	0	6.04(=1.25+4.79)	6.36(=1.32+5.04)	6.92(=1.43+5.49)	0.3127	0.329	0.0717
$Y_N = 5.04$	03,2 _d	0.25	0.25	0.25	35.72	0.0	0.0	0.0	0	8.42(=3.63+4.79)	8.86(=3.82+5.04)	9.65(=4.16+5.49)	0.3127	0.329	0.1
$L^*_N = 26.85$	04,3 _d	0.375	0.375	0.375	43.4	0.0	0.0	0.0	0	12.76(=7.97+4.79)	13.43(=8.39+5.04)	14.62(=9.13+5.49)	0.3127	0.329	0.1516
	05,4 _d	0.5	0.5	0.5	52.57	0.0	0.0	0.0	0	19.63(=14.84+4.79)	20.66(=15.62+5.04)	22.49(=17.0+5.49)	0.3127	0.329	0.2332
	06,5 _d	0.625	0.625	0.625	62.66	0.0	0.0	0.0	0	29.63(=24.84+4.79)	31.18(=26.14+5.04)	33.95(=28.46+5.49)	0.3127	0.329	0.3519
	07,6 _d	0.75	0.75	0.75	73.28	0.0	0.0	0.0	0	43.33(=38.54+4.79)	45.59(=40.55+5.04)	49.63(=44.15+5.49)	0.3127	0.329	0.5146
	08,7 _d	0.875	0.875	0.875	84.24	0.0	0.0	0.0	0	61.32(=56.53+4.79)	64.52(=59.48+5.04)	70.25(=64.77+5.49)	0.3127	0.329	0.7283
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=79.41+4.79)	88.59(=83.55+5.04)	96.46(=90.97+5.49)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0	4.79(=0.0+4.79)	5.04(=0.0+5.04)	5.49(=0.0+5.49)	0.3127	0.329	0.0569
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=79.41+4.79)	88.59(=83.55+5.04)	96.46(=90.97+5.49)	0.3127	0.329	1.0

Calculated colorimetric data (b): Television Luminous Systems TLS38b for CIE lightness $L^*=38$ of black and for illuminant D65

System TLS38b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01,0 _d	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0	9.58(=0.0+9.58)	10.08(=0.0+10.08)	10.98(=0.0+10.98)	0.3127	0.329	0.1138
D65 reflection:	02,1 _d	0.125	0.125	0.125	40.11	0.0	0.0	0.0	0	10.76(=1.18+9.58)	11.32(=1.24+10.08)	12.32(=1.35+10.98)	0.3127	0.329	0.1277
$Y_N = 10.08$	03,2 _d	0.25	0.25	0.25	43.76	0.0	0.0	0.0	0	12.99(=3.41+9.58)	13.67(=3.59+10.08)	14.89(=3.91+10.98)	0.3127	0.329	0.1543
$L^*_N = 37.99$	04,3 _d	0.375	0.375	0.375	49.45	0.0	0.0	0.0	355	17.07(=7.49+9.58)	17.96(=7.88+10.08)	19.56(=8.58+10.98)	0.3127	0.329	0.2028
	05,4 _d	0.5	0.5	0.5	56.84	0.0	0.0	0.0	0	23.53(=13.95+9.58)	24.76(=14.68+10.08)	26.95(=15.98+10.98)	0.3127	0.329	0.2794
	06,5 _d	0.625	0.625	0.625	65.47	0.0	0.0	0.0	0	32.92(=23.34+9.58)	34.64(=24.56+10.08)	37.72(=26.74+10.98)	0.3127	0.329	0.391
	07,6 _d	0.75	0.75	0.75	74.94	0.0	0.0	0.0	0	45.79(=36.21+9.58)	48.18(=38.1+10.08)	52.46(=41.48+10.98)	0.3127	0.329	0.5438
	08,7 _d	0.875	0.875	0.875	84.98	0.0	0.0	0.0	0	62.7(=53.12+9.58)	65.98(=55.9+10.08)	71.83(=60.86+10.98)	0.3127	0.329	0.7447
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=74.62+9.58)	88.59(=78.51+10.08)	96.46(=85.48+10.98)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0	9.58(=0.0+9.58)	10.08(=0.0+10.08)	10.98(=0.0+10.98)	0.3127	0.329	0.1138
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=74.62+9.58)	88.59(=78.51+10.08)	96.46(=85.48+10.98)	0.3127	0.329	1.0

CEI20-7N00

Test chart CEI2; 9 grey steps and NW_d for TLS00b, TLS27b & TLS38b
 Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
 output: *->rgb_{dd}*

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

System TLS00b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.0$	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	02,1 _d	0.125	0.125	0.125	11.93	0.0	0.0	0.01	0	1.33(=1.33+0.0)	1.4(=1.39+0.0)	1.52(=1.52+0.0)	0.3127	0.329	0.0158
	03,2 _d	0.25	0.25	0.25	23.85	0.0	0.0	0.01	0	3.85(=3.85+0.0)	4.05(=4.05+0.0)	4.41(=4.41+0.0)	0.3127	0.329	0.0458
	04,3 _d	0.375	0.375	0.375	35.78	0.0	0.0	0.01	0	8.45(=8.45+0.0)	8.89(=8.89+0.0)	9.68(=9.68+0.0)	0.3127	0.329	0.1004
	05,4 _d	0.5	0.5	0.5	47.7	0.0	0.0	0.01	0	15.74(=15.74+0.0)	16.56(=16.56+0.0)	18.03(=18.03+0.0)	0.3127	0.329	0.1869
	06,5 _d	0.625	0.625	0.625	59.63	0.0	0.0	0.01	0	26.34(=26.34+0.0)	27.71(=27.71+0.0)	30.18(=30.17+0.0)	0.3127	0.329	0.3128
	07,6 _d	0.75	0.75	0.75	71.55	0.0	0.0	0.01	0	40.86(=40.86+0.0)	42.99(=42.99+0.0)	46.81(=46.81+0.0)	0.3127	0.329	0.4853
	08,7 _d	0.875	0.875	0.875	83.48	0.0	0.0	0.01	0	59.94(=59.94+0.0)	63.07(=63.07+0.0)	68.67(=68.67+0.0)	0.3127	0.329	0.7119
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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
	10,N _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.0(=0.0+0.0)	0.3118	0.3281	0.0
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.01	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

Calculated colorimetric data (b): Television Luminous Systems TLS52b for CIE lightness $L^*=52$ of black and for illuminant D65

System TLS52b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 20.16$ $L^*_N = 52.02$	01,0 _d	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0	19.16(=0.0+19.16)	20.16(=0.0+20.16)	21.95(=0.0+21.95)	0.3127	0.329	0.2276
	02,1 _d	0.125	0.125	0.125	53.21	0.0	0.0	0.0	0	20.18(=1.02+19.16)	21.24(=1.08+20.16)	23.12(=1.17+21.95)	0.3127	0.329	0.2397
	03,2 _d	0.25	0.25	0.25	55.37	0.0	0.0	0.0	0	22.14(=2.98+19.16)	23.29(=3.13+20.16)	25.36(=3.41+21.95)	0.3127	0.329	0.2629
	04,3 _d	0.375	0.375	0.375	59.0	0.0	0.0	0.0	0	25.69(=6.53+19.16)	27.03(=7.48+20.16)	29.43(=7.48+21.95)	0.3127	0.329	0.3051
	05,4 _d	0.5	0.5	0.5	64.12	0.0	0.0	0.0	0	31.32(=12.16+19.16)	32.95(=12.79+20.16)	35.88(=13.93+21.95)	0.3127	0.329	0.3719
	06,5 _d	0.625	0.625	0.625	70.57	0.0	0.0	0.0	0	39.51(=20.35+19.16)	41.57(=21.41+20.16)	45.26(=23.31+21.95)	0.3127	0.329	0.4692
	07,6 _d	0.75	0.75	0.75	78.09	0.0	0.0	0.0	0	50.72(=31.56+19.16)	53.37(=33.21+20.16)	58.11(=36.16+21.95)	0.3127	0.329	0.6024
	08,7 _d	0.875	0.875	0.875	86.44	0.0	0.0	0.0	10	65.46(=46.3+19.16)	68.88(=48.72+20.16)	75.0(=53.05+21.95)	0.3127	0.329	0.7775
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=65.04+19.16)	88.59(=68.43+20.16)	96.46(=74.51+21.95)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0	19.16(=0.0+19.16)	20.16(=0.0+20.16)	21.95(=0.0+21.95)	0.3127	0.329	0.2276
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=65.04+19.16)	88.59(=68.43+20.16)	96.46(=74.51+21.95)	0.3127	0.329	1.0

Calculated colorimetric data (b): Television Luminous Systems TLS70b for CIE lightness $L^*=70$ of black and for illuminant D65

System TLS70b	Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	L^*_d	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
D65 reflection: $Y_N = 40.32$ $L^*_N = 69.7$	01,0 _d	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0	38.32(=0.0+38.32)	40.32(=0.0+40.32)	43.9(=0.0+43.9)	0.3127	0.329	0.4551
	02,1 _d	0.125	0.125	0.125	70.23	0.0	0.0	0.0	0	39.04(=0.72+38.32)	41.08(=0.76+40.32)	44.73(=0.83+43.9)	0.3127	0.329	0.4637
	03,2 _d	0.25	0.25	0.25	71.23	0.0	0.0	0.0	0	40.42(=2.1+38.32)	42.53(=2.21+40.32)	46.31(=2.41+43.9)	0.3127	0.329	0.4801
	04,3 _d	0.375	0.375	0.375	73.0	0.0	0.0	0.0	0	42.93(=4.61+38.32)	45.17(=4.85+40.32)	49.18(=5.28+43.9)	0.3127	0.329	0.5098
	05,4 _d	0.5	0.5	0.5	75.66	0.0	0.0	0.0	0	46.9(=8.58+38.32)	49.34(=9.02+40.32)	53.72(=9.82+43.9)	0.3127	0.329	0.557
	06,5 _d	0.625	0.625	0.625	79.28	0.0	0.0	0.0	0	52.67(=14.35+38.32)	55.42(=15.1+40.32)	60.34(=16.44+43.9)	0.3127	0.329	0.6256
	07,6 _d	0.75	0.75	0.75	83.83	0.0	0.0	0.0	10	60.58(=22.26+38.32)	63.75(=23.43+40.32)	69.41(=25.51+43.9)	0.3127	0.329	0.7195
	08,7 _d	0.875	0.875	0.875	89.25	0.0	0.0	0.0	353	70.98(=32.66+38.32)	74.69(=34.37+40.32)	81.32(=37.42+43.9)	0.3127	0.329	0.843
	09,8 _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=45.88+38.32)	88.59(=48.27+40.32)	96.46(=52.56+43.9)	0.3127	0.329	1.0
	10,N _d	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0	38.32(=0.0+38.32)	40.32(=0.0+40.32)	43.9(=0.0+43.9)	0.3127	0.329	0.4551
	11,W _d	1.0	1.0	1.0	95.41	0.0	0.0	0.0	0	84.2(=45.88+38.32)	88.59(=48.27+40.32)	96.46(=52.56+43.9)	0.3127	0.329	1.0

CEI20-7N00

Test chart CEI2; 9 grey steps and NW_d for TLS00b, TLS52b & TLS70b
Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
output: *->rgb_{dd}*