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

System TLS00b

D65 reflection:
Y_N = 0.0
L^*_N = 0.0

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
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 TLS18b for CIE lightness L^*=18 of black and for illuminant D65

D65 reflection:
Y_N = 2.52
L^*_N = 18.01

Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	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
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
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
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
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

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

D65 reflection:
Y_N = 40.32
L^*_N = 69.7

Color i	$r^*_{a,d}$	$g^*_{a,d}$	$b^*_{a,d}$	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
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

Test chart CEI4; 9 grey steps and NW_d for TLS00, TLS00a & TLS00b
Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
output: −>rgb_{dd}