

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	$Y_d/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54	18.84	1.71	0.64	0.33	0.2127
Y_d	1.0	1.0	0.0	0.0	92.66	-20.69	90.75	93.08	103	68.21	82.19	12.27	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68	63.36	10.56	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67	69.76	94.74	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	0.0	30.39	76.06	-103.59	128.52	306	15.99	6.4	84.21	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	0.0	57.3	94.35	-58.41	110.97	328	52.52	25.23	85.89	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54	18.84	1.71	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	1.0	1.0	0.0	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	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54	18.84	1.71	0.64	0.33	0.2127
Y_d	1.0	1.0	0.0	0.0	92.66	-20.69	90.75	93.08	103	68.21	82.19	12.27	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68	63.36	10.56	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67	69.76	94.74	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	0.0	30.39	76.06	-103.59	128.52	306	15.99	6.4	84.21	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	0.0	57.3	94.35	-58.41	110.97	328	52.52	25.23	85.89	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54	18.84	1.71	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	1.0	1.0	0.0	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	$C^*_{ab,d}$	$h_{ab,d}$	$X_{b,d}$	$Y_{b,d}$	$Z_{b,d}$	$x_{b,d}$	$y_{b,d}$	$Y_{b,d}/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
Y_d	1.0	1.0	0.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.55+0.0)	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	0.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.39+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	0.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	1.0	1.0	0.0	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

CEI00-7N00

Test chart CEI0; 8 basic colors $RYGCBMNW_d$ for TLS00, TLS00a & TLS00b
 Calculation of CIE-colour data for sRGB display for 3 reflections

input: rgb
 output: $\rightarrow rgb_{dd}$

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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
Y_d	1.0	1.0	1.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.55+0.0)	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	1.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.39+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	1.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.54+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
Y_d	1.0	1.0	1.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.56+0.0)	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	1.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.4+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	1.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.54+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	51.08	75.55	59.69	96.28	38	36.87(=36.28+0.6)	19.34(=18.71+0.63)	2.39(=1.7+0.69)	0.6293	0.33	0.2183
Y_d	1.0	1.0	1.0	0.0	92.68	-20.53	89.24	91.57	103	68.32(=67.72+0.6)	82.24(=81.61+0.63)	12.87(=12.18+0.69)	0.4181	0.5032	0.9283
G_d	0.0	1.0	0.0	0.0	83.72	-81.8	78.32	113.26	136	32.05(=31.45+0.6)	63.54(=62.91+0.63)	11.17(=10.48+0.69)	0.3002	0.5952	0.7172
C_d	0.0	1.0	1.0	0.0	86.95	-45.72	-13.44	47.67	196	47.93(=47.33+0.6)	69.9(=69.27+0.63)	94.75(=94.07+0.69)	0.2255	0.3288	0.789
B_d	0.0	0.0	1.0	1.0	31.76	72.91	-101.29	124.81	306	16.47(=15.87+0.6)	6.98(=6.35+0.63)	84.3(=83.61+0.69)	0.1529	0.0648	0.0788
M_d	1.0	0.0	1.0	1.0	57.73	93.07	-57.72	109.52	328	52.74(=52.14+0.6)	25.68(=25.05+0.63)	85.97(=85.28+0.69)	0.3208	0.1562	0.2899
R_d	1.0	0.0	0.0	0.0	51.08	75.55	59.69	96.28	38	36.87(=36.28+0.6)	19.34(=18.71+0.63)	2.39(=1.7+0.69)	0.6293	0.33	0.2183
N_d	0.0	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
W_d	1.0	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

CEI00-7N00

Test chart CEI0; 8 basic colors $RYGCBMNW_d$ for TLS00b, TLS00b & TLS06b
 Calculation of CIE-colour data for sRGB display for 3 reflections

input: rgb
 output: $\rightarrow rgb_{dd}$

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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{b,d}$	$Y_{b,d}$	$Z_{b,d}$	$x_{b,d}$	$y_{b,d}$	$Y_{b,d}/88.59$
	R_d	1.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
	Y_d	1.0	1.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
D65 reflection:	G_d	0.0	1.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.55+0.0)	0.3	0.6	0.7152
$Y_N = 0.0$	C_d	0.0	1.0	1.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
$L^*_N = 0.0$	B_d	0.0	0.0	1.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.39+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
	M_d	1.0	0.0	1.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
	R_d	1.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
	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
	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	R_d	1.0	0.0	0.0	51.65	74.21	55.83	92.87	37	37.21(=36.02+1.2)	19.83(=18.57+1.26)	3.06(=1.69+1.37)	0.6191	0.33	0.2239
	Y_d	1.0	1.0	0.0	92.7	-20.37	87.77	90.11	103	68.44(=67.24+1.2)	82.28(=81.02+1.26)	13.46(=12.09+1.37)	0.4168	0.5012	0.9288
D65 reflection:	G_d	0.0	1.0	0.0	83.82	-80.86	76.81	111.53	136	32.43(=31.23+1.2)	63.72(=62.46+1.26)	11.78(=10.4+1.37)	0.3005	0.5904	0.7192
$Y_N = 1.26$	C_d	0.0	1.0	1.0	87.01	-45.29	-13.34	47.23	196	48.19(=47.0+1.2)	70.03(=68.77+1.26)	94.77(=93.39+1.37)	0.2263	0.3288	0.7905
$L^*_N = 11.0$	B_d	0.0	0.0	1.0	33.06	70.03	-99.11	121.36	305	16.96(=15.76+1.2)	7.56(=6.3+1.26)	84.38(=83.01+1.37)	0.1557	0.0695	0.0854
	M_d	1.0	0.0	1.0	58.16	91.8	-57.03	108.08	328	52.97(=51.77+1.2)	26.13(=24.87+1.26)	86.04(=84.67+1.37)	0.3207	0.1582	0.295
	R_d	1.0	0.0	0.0	51.65	74.21	55.83	92.87	37	37.21(=36.02+1.2)	19.83(=18.57+1.26)	3.06(=1.69+1.37)	0.6191	0.33	0.2239
	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
	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	R_d	1.0	0.0	0.0	52.76	71.63	49.88	87.29	35	37.89(=35.5+2.4)	20.82(=18.3+2.52)	4.41(=1.66+2.74)	0.6003	0.3299	0.2351
	Y_d	1.0	1.0	0.0	92.74	-20.04	84.97	87.31	103	68.66(=66.27+2.4)	82.38(=79.86+2.52)	14.66(=11.92+2.74)	0.4144	0.4971	0.9298
D65 reflection:	G_d	0.0	1.0	0.0	84.0	-79.0	73.94	108.21	137	33.17(=30.78+2.4)	64.08(=61.56+2.52)	13.0(=10.25+2.74)	0.3009	0.5812	0.7233
$Y_N = 2.52$	C_d	0.0	1.0	1.0	87.14	-44.43	-13.13	46.34	196	48.71(=46.32+2.4)	70.3(=67.78+2.52)	94.79(=92.05+2.74)	0.2278	0.3288	0.7935
$L^*_N = 18.01$	B_d	0.0	0.0	1.0	35.47	64.92	-95.09	115.14	304	17.93(=15.53+2.4)	8.73(=6.21+2.52)	84.56(=81.81+2.74)	0.1612	0.0785	0.0986
	M_d	1.0	0.0	1.0	59.01	89.33	-55.69	105.27	328	53.42(=51.02+2.4)	27.03(=24.51+2.52)	86.19(=83.45+2.74)	0.3205	0.1622	0.3051
	R_d	1.0	0.0	0.0	52.76	71.63	49.88	87.29	35	37.89(=35.5+2.4)	20.82(=18.3+2.52)	4.41(=1.66+2.74)	0.6003	0.3299	0.2351
	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
	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

CEI00-7N00

Test chart CEI0; 8 basic colors $RYGCBMNW_d$ for TLS00b, TLS11b & TLS18b

Calculation of CIE-colour data for sRGB display for 3 reflections

input: rgb output: $\rightarrow rgb_{dd}$

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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
Y_d	1.0	1.0	1.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
G_d	0.0	1.0	0.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.55+0.0)	0.3	0.6	0.7152
C_d	0.0	1.0	1.0	0.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
B_d	0.0	0.0	1.0	1.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.39+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
M_d	1.0	0.0	1.0	1.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
R_d	1.0	0.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
N_d	0.0	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
W_d	1.0	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	54.87	66.84	41.69	78.78	32	39.25(=34.46+4.79)	22.81(=17.77+5.04)	7.1(=1.61+5.49)	0.5675	0.3298	0.2575
Y_d	1.0	1.0	1.0	0.0	92.82	-19.4	79.81	82.13	104	69.12(=64.33+4.79)	82.56(=77.52+5.04)	17.06(=11.57+5.49)	0.4096	0.4893	0.9319
G_d	0.0	1.0	0.0	0.0	84.38	-75.4	68.76	102.05	138	34.67(=29.88+4.79)	64.79(=59.75+5.04)	15.44(=9.95+5.49)	0.3017	0.5639	0.7314
C_d	0.0	1.0	1.0	0.0	87.4	-42.73	-12.71	44.59	197	49.75(=44.96+4.79)	70.83(=65.79+5.04)	94.84(=89.35+5.49)	0.2309	0.3288	0.7995
B_d	0.0	0.0	1.0	1.0	39.7	56.66	-88.04	104.7	303	19.87(=15.08+4.79)	11.07(=6.03+5.04)	84.91(=79.42+5.49)	0.1715	0.0956	0.125
M_d	1.0	0.0	1.0	1.0	60.64	84.61	-53.09	99.89	328	54.32(=49.53+4.79)	28.84(=23.8+5.04)	86.49(=81.01+5.49)	0.3202	0.17	0.3255
R_d	1.0	0.0	0.0	0.0	54.87	66.84	41.69	78.78	32	39.25(=34.46+4.79)	22.81(=17.77+5.04)	7.1(=1.61+5.49)	0.5675	0.3298	0.2575
N_d	0.0	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
W_d	1.0	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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
R_d	1.0	0.0	0.0	0.0	58.77	58.45	31.72	66.5	28	41.96(=32.38+9.58)	26.78(=16.7+10.08)	12.49(=1.52+10.98)	0.5166	0.3297	0.3022
Y_d	1.0	1.0	1.0	0.0	92.98	-18.12	70.81	73.1	104	70.03(=60.45+9.58)	82.92(=72.84+10.08)	21.85(=10.87+10.98)	0.4006	0.4744	0.936
G_d	0.0	1.0	0.0	0.0	85.11	-68.59	60.02	91.15	139	37.66(=28.08+9.58)	66.23(=56.15+10.08)	20.33(=9.35+10.98)	0.3032	0.5332	0.7476
C_d	0.0	1.0	1.0	0.0	87.92	-39.43	-11.88	41.19	197	51.83(=42.25+9.58)	71.9(=61.82+10.08)	94.94(=83.96+10.98)	0.237	0.3288	0.8116
B_d	0.0	0.0	1.0	1.0	46.64	44.92	-76.58	88.79	300	23.75(=14.17+9.58)	15.75(=5.67+10.08)	85.6(=74.63+10.98)	0.1898	0.1259	0.1778
M_d	1.0	0.0	1.0	1.0	63.71	75.92	-48.22	89.95	328	56.12(=46.54+9.58)	32.44(=22.36+10.08)	87.1(=76.12+10.98)	0.3195	0.1847	0.3662
R_d	1.0	0.0	0.0	0.0	58.77	58.45	31.72	66.5	28	41.96(=32.38+9.58)	26.78(=16.7+10.08)	12.49(=1.52+10.98)	0.5166	0.3297	0.3022
N_d	0.0	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
W_d	1.0	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

CEI00-7N00

Test chart CEI0; 8 basic colors $RYGCBMNW_d$ 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:	R_d	1.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
	Y_d	1.0	1.0	0.0	92.66	-20.69	90.75	93.08	103	68.21(=68.21+0.0)	82.19(=82.19+0.0)	12.27(=12.27+0.0)	0.4193	0.5053	0.9278
	G_d	0.0	1.0	0.0	83.63	-82.75	79.9	115.04	136	31.68(=31.68+0.0)	63.36(=63.36+0.0)	10.56(=10.55+0.0)	0.3	0.6	0.7152
$Y_N = 0.0$	C_d	0.0	1.0	1.0	86.88	-46.16	-13.55	48.12	196	47.67(=47.67+0.0)	69.76(=69.76+0.0)	94.74(=94.74+0.0)	0.2247	0.3288	0.7874
$L^*_N = 0.0$	B_d	0.0	0.0	1.0	30.39	76.06	-103.59	128.52	306	15.99(=15.99+0.0)	6.4(=6.39+0.0)	84.21(=84.21+0.0)	0.15	0.06	0.0722
	M_d	1.0	0.0	1.0	57.3	94.35	-58.41	110.97	328	52.52(=52.52+0.0)	25.23(=25.23+0.0)	85.89(=85.89+0.0)	0.3209	0.1542	0.2848
	R_d	1.0	0.0	0.0	50.5	76.92	64.55	100.42	40	36.54(=36.53+0.0)	18.84(=18.84+0.0)	1.71(=1.71+0.0)	0.64	0.33	0.2127
	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
	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:	R_d	1.0	0.0	0.0	65.52	45.07	20.98	49.71	25	47.38(=28.22+19.16)	34.71(=14.55+20.16)	23.27(=1.32+21.95)	0.4497	0.3294	0.3918
	Y_d	1.0	1.0	0.0	93.3	-15.62	56.27	58.4	106	71.85(=52.69+19.16)	83.65(=63.49+20.16)	31.43(=9.48+21.95)	0.3844	0.4475	0.9442
	G_d	0.0	1.0	0.0	86.55	-56.32	46.52	73.06	140	43.63(=24.47+19.16)	69.1(=48.94+20.16)	30.1(=8.15+21.95)	0.3055	0.4838	0.78
$Y_N = 20.16$	C_d	0.0	1.0	1.0	88.94	-33.2	-10.25	34.76	197	55.99(=36.83+19.16)	74.05(=53.89+20.16)	95.13(=73.18+21.95)	0.2486	0.3289	0.8358
$L^*_N = 52.02$	B_d	0.0	0.0	1.0	57.17	30.66	-59.42	66.87	297	31.51(=12.35+19.16)	25.1(=4.94+20.16)	87.0(=65.05+21.95)	0.2194	0.1748	0.2833
	M_d	1.0	0.0	1.0	69.22	60.95	-39.57	72.67	327	59.73(=40.57+19.16)	39.65(=19.49+20.16)	88.3(=66.35+21.95)	0.3182	0.2113	0.4475
	R_d	1.0	0.0	0.0	65.52	45.07	20.98	49.71	25	47.38(=28.22+19.16)	34.71(=14.55+20.16)	23.27(=1.32+21.95)	0.4497	0.3294	0.3918
	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
	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:	R_d	1.0	0.0	0.0	76.43	26.27	10.57	28.31	22	58.23(=19.91+38.32)	50.59(=10.27+40.32)	44.83(=0.93+43.9)	0.379	0.3292	0.571
	Y_d	1.0	1.0	0.0	93.93	-10.77	34.63	36.27	107	75.49(=37.17+38.32)	85.11(=44.79+40.32)	50.58(=6.68+43.9)	0.3575	0.403	0.9606
	G_d	0.0	1.0	0.0	89.32	-35.82	27.64	45.25	142	55.58(=17.26+38.32)	74.84(=34.52+40.32)	49.65(=5.75+43.9)	0.3087	0.4156	0.8448
	C_d	0.0	1.0	1.0	90.93	-21.97	-7.09	23.1	198	64.3(=25.98+38.32)	78.33(=38.01+40.32)	95.52(=51.62+43.9)	0.27	0.3289	0.8842
	B_d	0.0	0.0	1.0	72.1	15.75	-35.65	38.98	294	47.03(=8.71+38.32)	43.81(=3.49+40.32)	89.78(=45.88+43.9)	0.2604	0.2425	0.4945
	M_d	1.0	0.0	1.0	78.5	37.52	-25.24	45.23	326	66.94(=28.62+38.32)	54.07(=13.75+40.32)	90.7(=46.8+43.9)	0.3162	0.2554	0.6103
	R_d	1.0	0.0	0.0	76.43	26.27	10.57	28.31	22	58.23(=19.91+38.32)	50.59(=10.27+40.32)	44.83(=0.93+43.9)	0.379	0.3292	0.571
	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
	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

CEI00-7N00

Test chart CEI0; 8 basic colors $RYGCBMNW_d$ for TLS00b, TLS52b & TLS70b
 Calculation of CIE-colour data for sRGB display for 3 reflections

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

see similar files: <http://farbe.li.tu-berlin.de/CEI0/CEI0L0NA.PDF> / .PS
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20211101-CEI0/CEI0L0NP.PDF /.PS
 application for measurement or viewing of display output

TUB material: code=rha4ta