

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

System TLS00	Color i	$r^*_{d,i}$	$g^*_{d,i}$	$b^*_{d,i}$	$L^*_{d,i}$	$a^*_{d,i}$	$b^*_{d,i}$	$C^*_{ab,d,i}$	$h_{ab,d,i}$	$X_{d,i}$	$Y_{d,i}$	$Z_{d,i}$	$x_{d,i}$	$y_{d,i}$	$Y_{d,i}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.01$	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	02,1 _d	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67	0.7	0.77	0.3127	0.329	0.0079
	03,2 _d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44	1.52	1.65	0.3127	0.329	0.0171
	04,3 _d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63	2.77	3.01	0.3127	0.329	0.0312
	05,4 _d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33	4.56	4.96	0.3127	0.329	0.0515
	06,5 _d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65	7.0	7.62	0.3127	0.329	0.079
	07,6 _d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67	10.18	11.08	0.3127	0.329	0.1149
	08,7 _d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5	14.2	15.46	0.3127	0.329	0.1603
	09,8 _d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22	19.17	20.88	0.3127	0.329	0.2164
	10,9 _d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93	25.18	27.42	0.3127	0.329	0.2842
	11,A _d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72	32.32	35.19	0.3127	0.329	0.3649
	12,B _d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69	40.71	44.32	0.3127	0.329	0.4595
	13,C _d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92	50.43	54.9	0.3127	0.329	0.5692
	14,D _d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53	61.58	67.05	0.3127	0.329	0.6951
	15,E _d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59	74.27	80.87	0.3127	0.329	0.8383
	16,F _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
	17,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
	18,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	$r^*_{d,i}$	$g^*_{d,i}$	$b^*_{d,i}$	$L^*_{d,i}$	$a^*_{d,i}$	$b^*_{d,i}$	$C^*_{ab,d,i}$	$h_{ab,d,i}$	$X_{a,d,i}$	$Y_{a,d,i}$	$Z_{a,d,i}$	$x_{a,d,i}$	$y_{a,d,i}$	$Y_{a,d,i}/88.59$
D65 reflection: $Y_N = 0.0$ $L^*_N = 0.01$	01,0 _d	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0	0.0	0.0	0.0	0.3127	0.329	0.0
	02,1 _d	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67	0.7	0.77	0.3127	0.329	0.0079
	03,2 _d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44	1.52	1.65	0.3127	0.329	0.0171
	04,3 _d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63	2.77	3.01	0.3127	0.329	0.0312
	05,4 _d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33	4.56	4.96	0.3127	0.329	0.0515
	06,5 _d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65	7.0	7.62	0.3127	0.329	0.079
	07,6 _d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67	10.18	11.08	0.3127	0.329	0.1149
	08,7 _d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5	14.2	15.46	0.3127	0.329	0.1603
	09,8 _d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22	19.17	20.88	0.3127	0.329	0.2164
	10,9 _d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93	25.18	27.42	0.3127	0.329	0.2842
	11,A _d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72	32.32	35.19	0.3127	0.329	0.3649
	12,B _d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69	40.71	44.32	0.3127	0.329	0.4595
	13,C _d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92	50.43	54.9	0.3127	0.329	0.5692
	14,D _d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53	61.58	67.05	0.3127	0.329	0.6951
	15,E _d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59	74.27	80.87	0.3127	0.329	0.8383
	16,F _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
	17,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
	18,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	$r^*_{d,i}$	$g^*_{d,i}$	$b^*_{d,i}$	$L^*_{d,i}$	$a^*_{d,i}$	$b^*_{d,i}$	$C^*_{ab,d,i}$	$h_{ab,d,i}$	$X_{b,d,i}$	$Y_{b,d,i}$	$Z_{b,d,i}$	$x_{b,d,i}$	$y_{b,d,i}$	$Y_{b,d,i}/88.59$
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	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
	03,2 _d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
	04,3 _d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63(=2.63+0.0)	2.77(=2.76+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05,4 _d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06,5 _d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07,6 _d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08,7 _d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09,8 _d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10,9 _d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.41+0.0)	0.3127	0.329	0.2842
	11,A _d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12,B _d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13,C _d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92(=47.92+0.0)	50.43(=50.42+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14,D _d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15,E _d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.86+0.0)	0.3127	0.329	0.8383
	16,F _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
	17,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
	18,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

CEI30-7N00

Test chart CEI3; 16 grey steps and NW_d for TLS00, TLS00a & TLS00b
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	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
$Y_N = 0.0$	03,2 _d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$L^*_N = 0.0$	04,3 _d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63(=2.63+0.0)	2.77(=2.76+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05,4 _d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06,5 _d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07,6 _d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08,7 _d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09,8 _d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10,9 _d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.41+0.0)	0.3127	0.329	0.2842
	11,A _d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12,B _d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13,C _d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92(=47.92+0.0)	50.43(=50.42+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14,D _d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15,E _d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.86+0.0)	0.3127	0.329	0.8383
	16,F _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
	17,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
	18,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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	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
D65 reflection:	02,1 _d	0.067	0.067	0.067	6.36	0.0	0.0	0.0	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
$Y_N = 0.0$	03,2 _d	0.133	0.133	0.133	12.72	0.0	0.0	0.0	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$L^*_N = 0.0$	04,3 _d	0.2	0.2	0.2	19.08	0.0	0.0	0.0	0	2.63(=2.63+0.0)	2.77(=2.77+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05,4 _d	0.267	0.267	0.267	25.44	0.0	0.0	0.0	357	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06,5 _d	0.333	0.333	0.333	31.8	0.0	0.0	0.0	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07,6 _d	0.4	0.4	0.4	38.16	0.0	0.0	0.0	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08,7 _d	0.467	0.467	0.467	44.52	0.0	0.0	0.0	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09,8 _d	0.533	0.533	0.533	50.89	0.0	0.0	0.0	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10,9 _d	0.6	0.6	0.6	57.25	0.0	0.0	0.0	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.42+0.0)	0.3127	0.329	0.2842
	11,A _d	0.667	0.667	0.667	63.61	0.0	0.0	0.0	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12,B _d	0.733	0.733	0.733	69.97	0.0	0.0	0.0	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13,C _d	0.8	0.8	0.8	76.33	0.0	0.0	0.0	0	47.92(=47.92+0.0)	50.43(=50.43+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14,D _d	0.867	0.867	0.867	82.69	0.0	0.0	0.0	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15,E _d	0.933	0.933	0.933	89.05	0.0	0.0	0.0	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.87+0.0)	0.3127	0.329	0.8383
	16,F _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
	17,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
	18,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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	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
D65 reflection:	02,1 _d	0.067	0.067	0.067	11.48	0.0	0.0	0.0	0	1.26(=0.66+0.6)	1.33(=0.7+0.63)	1.45(=0.76+0.69)	0.3127	0.329	0.015
$Y_N = 0.63$	03,2 _d	0.133	0.133	0.133	16.19	0.0	0.0	0.0	0	2.03(=1.43+0.6)	2.14(=1.51+0.63)	2.33(=1.64+0.69)	0.3127	0.329	0.0241
$L^*_N = 5.69$	04,3 _d	0.2	0.2	0.2	21.49	0.0	0.0	0.0	4	3.21(=2.61+0.6)	3.38(=2.75+0.63)	3.68(=2.99+0.69)	0.3127	0.329	0.0381
	05,4 _d	0.267	0.267	0.267	27.18	0.0	0.0	0.0	0	4.9(=4.3+0.6)	5.16(=4.93+0.63)	5.61(=4.93+0.69)	0.3127	0.329	0.0582
	06,5 _d	0.333	0.333	0.333	33.09	0.0	0.0	0.0	4	7.2(=6.6+0.6)	7.58(=6.95+0.63)	8.25(=7.56+0.69)	0.3127	0.329	0.0855
	07,6 _d	0.4	0.4	0.4	39.13	0.0	0.0	0.0	4	10.2(=9.6+0.6)	10.74(=10.11+0.63)	11.69(=11.0+0.69)	0.3127	0.329	0.1212
	08,7 _d	0.467	0.467	0.467	45.26	0.0	0.0	0.0	0	14.0(=13.4+0.6)	14.73(=14.1+0.63)	16.04(=15.35+0.69)	0.3127	0.329	0.1663
	09,8 _d	0.533	0.533	0.533	51.46	0.0	0.0	0.0	0	18.69(=18.09+0.6)	19.67(=19.04+0.63)	21.41(=20.73+0.69)	0.3127	0.329	0.222
	10,9 _d	0.6	0.6	0.6	57.68	0.0	0.0	0.0	0	24.36(=23.76+0.6)	25.63(=25.0+0.63)	27.91(=27.22+0.69)	0.3127	0.329	0.2893
	11,A _d	0.667	0.667	0.667	63.94	0.0	0.0	0.0	0	31.1(=30.5+0.6)	32.72(=32.09+0.63)	35.63(=34.94+0.69)	0.3127	0.329	0.3694
	12,B _d	0.733	0.733	0.733	70.21	0.0	0.0	0.0	10	39.01(=38.41+0.6)	41.05(=40.42+0.63)	44.69(=44.01+0.69)	0.3127	0.329	0.4633
	13,C _d	0.8	0.8	0.8	76.5	0.0	0.0	0.0	10	48.18(=47.58+0.6)	50.7(=50.07+0.63)	55.2(=54.51+0.69)	0.3127	0.329	0.5723
	14,D _d	0.867	0.867	0.867	82.79	0.0	0.0	0.0	0	58.71(=58.11+0.6)	61.77(=61.14+0.63)	67.26(=66.57+0.69)	0.3127	0.329	0.6973
	15,E _d	0.933	0.933	0.933	89.1	0.0	0.0	0.0	0	70.68(=70.08+0.6)	74.37(=73.74+0.63)	80.98(=80.29+0.69)	0.3127	0.329	0.8395
	16,F _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
	17,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
	18,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

CEI30-7N00

Test chart CEI3; 16 grey steps and NW_d for TLS00b, TLS00b & TLS06b
 Calculation of CIE-colour data for sRGB display for 3 reflections

input: *rgb*
 output: *->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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	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
D65 reflection:	02, I_d	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
$Y_N = 0.0$	03, 2_d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$L^*_N = 0.0$	04, 3_d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63(=2.63+0.0)	2.77(=2.76+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05, 4_d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06, 5_d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07, 6_d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08, 7_d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09, 8_d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10, 9_d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.41+0.0)	0.3127	0.329	0.2842
	11, A_d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12, B_d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13, C_d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92(=47.92+0.0)	50.43(=50.42+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14, D_d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15, E_d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.86+0.0)	0.3127	0.329	0.8383
	16, F_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
	17, 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
	18, 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, O_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, I_d	0.067	0.067	0.067	15.24	0.0	0.0	0.0	0	1.86(=0.66+1.2)	1.95(=0.69+1.26)	2.13(=0.76+1.37)	0.3127	0.329	0.0221
$Y_N = 1.26$	03, 2_d	0.133	0.133	0.133	19.04	0.0	0.0	0.0	0	2.62(=1.42+1.2)	2.76(=1.5+1.26)	3.0(=1.63+1.37)	0.3127	0.329	0.0311
$L^*_N = 11.0$	04, 3_d	0.2	0.2	0.2	23.63	0.0	0.0	0.0	0	3.79(=2.59+1.2)	3.99(=2.73+1.26)	4.34(=2.97+1.37)	0.3127	0.329	0.045
	05, 4_d	0.267	0.267	0.267	28.78	0.0	0.0	0.0	0	5.47(=4.27+1.2)	5.75(=4.49+1.26)	6.27(=4.89+1.37)	0.3127	0.329	0.065
	06, 5_d	0.333	0.333	0.333	34.31	0.0	0.0	0.0	0	7.75(=6.56+1.2)	8.16(=6.9+1.26)	8.88(=7.51+1.37)	0.3127	0.329	0.0921
	07, 6_d	0.4	0.4	0.4	40.07	0.0	0.0	0.0	0	10.73(=9.54+1.2)	11.29(=10.03+1.26)	12.3(=10.92+1.37)	0.3127	0.329	0.1275
	08, 7_d	0.467	0.467	0.467	45.99	0.0	0.0	0.0	0	14.5(=13.3+1.2)	15.26(=14.0+1.26)	16.61(=15.24+1.37)	0.3127	0.329	0.1722
	09, 8_d	0.533	0.533	0.533	52.02	0.0	0.0	0.0	0	19.16(=17.96+1.2)	20.16(=18.9+1.26)	21.95(=20.58+1.37)	0.3127	0.329	0.2276
	10, 9_d	0.6	0.6	0.6	58.11	0.0	0.0	0.0	0	24.79(=23.59+1.2)	26.08(=24.82+1.26)	28.4(=27.03+1.37)	0.3127	0.329	0.2944
	11, A_d	0.667	0.667	0.667	64.26	0.0	0.0	0.0	0	31.48(=30.28+1.2)	33.12(=31.86+1.26)	36.07(=34.69+1.37)	0.3127	0.329	0.3739
	12, B_d	0.733	0.733	0.733	70.45	0.0	0.0	0.0	0	39.34(=38.14+1.2)	41.39(=40.13+1.26)	45.06(=43.69+1.37)	0.3127	0.329	0.4672
	13, C_d	0.8	0.8	0.8	76.66	0.0	0.0	0.0	0	48.44(=47.24+1.2)	50.97(=49.71+1.26)	55.49(=54.12+1.37)	0.3127	0.329	0.5753
	14, D_d	0.867	0.867	0.867	82.89	0.0	0.0	0.0	355	58.89(=57.69+1.2)	61.97(=60.71+1.26)	67.47(=66.1+1.37)	0.3127	0.329	0.6994
	15, E_d	0.933	0.933	0.933	89.15	0.0	0.0	0.0	0	70.78(=69.58+1.2)	74.47(=73.21+1.26)	81.09(=79.72+1.37)	0.3127	0.329	0.8406
	16, F_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
	17, 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
	18, 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, O_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, I_d	0.067	0.067	0.067	20.84	0.0	0.0	0.0	0	3.05(=0.65+2.4)	3.2(=0.68+2.52)	3.49(=0.74+2.74)	0.3127	0.329	0.0362
$Y_N = 2.52$	03, 2_d	0.133	0.133	0.133	23.65	0.0	0.0	0.0	0	3.8(=1.4+2.4)	3.99(=1.47+2.52)	4.35(=1.61+2.74)	0.3127	0.329	0.0451
$L^*_N = 18.01$	04, 3_d	0.2	0.2	0.2	27.32	0.0	0.0	0.0	0	4.95(=2.55+2.4)	5.21(=2.69+2.52)	5.67(=2.93+2.74)	0.3127	0.329	0.0588
	05, 4_d	0.267	0.267	0.267	31.69	0.0	0.0	0.0	3	6.6(=4.21+2.4)	6.95(=4.43+2.52)	7.57(=4.82+2.74)	0.3127	0.329	0.0784
	06, 5_d	0.333	0.333	0.333	36.59	0.0	0.0	0.0	0	8.86(=6.46+2.4)	9.32(=6.8+2.52)	10.15(=7.4+2.74)	0.3127	0.329	0.1052
	07, 6_d	0.4	0.4	0.4	41.86	0.0	0.0	0.0	0	11.79(=9.4+2.4)	12.41(=9.89+2.52)	13.51(=10.77+2.74)	0.3127	0.329	0.1401
	08, 7_d	0.467	0.467	0.467	47.39	0.0	0.0	0.0	353	15.51(=13.11+2.4)	16.32(=13.8+2.52)	17.77(=15.02+2.74)	0.3127	0.329	0.1842
	09, 8_d	0.533	0.533	0.533	53.11	0.0	0.0	0.0	0	20.1(=17.7+2.4)	21.15(=18.63+2.52)	23.03(=20.28+2.74)	0.3127	0.329	0.2387
	10, 9_d	0.6	0.6	0.6	58.96	0.0	0.0	0.0	0	25.65(=23.25+2.4)	26.98(=24.46+2.52)	29.38(=26.64+2.74)	0.3127	0.329	0.3046
	11, A_d	0.667	0.667	0.667	64.9	0.0	0.0	0.0	0	32.24(=29.85+2.4)	33.92(=31.4+2.52)	36.94(=34.19+2.74)	0.3127	0.329	0.3829
	12, B_d	0.733	0.733	0.733	70.92	0.0	0.0	0.0	0	39.98(=37.59+2.4)	42.07(=39.55+2.52)	45.8(=43.06+2.74)	0.3127	0.329	0.4749
	13, C_d	0.8	0.8	0.8	76.99	0.0	0.0	0.0	0	48.96(=46.56+2.4)	51.51(=48.99+2.52)	56.09(=53.34+2.74)	0.3127	0.329	0.5814
	14, D_d	0.867	0.867	0.867	83.1	0.0	0.0	0.0	0	59.26(=56.86+2.4)	62.35(=59.83+2.52)	67.89(=65.14+2.74)	0.3127	0.329	0.7038
	15, E_d	0.933	0.933	0.933	89.24	0.0	0.0	0.0	0	70.97(=68.58+2.4)	74.68(=72.16+2.52)	81.31(=78.57+2.74)	0.3127	0.329	0.8429
	16, F_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
	17, 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
	18, 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

CEI30-7N00

Test chart CEI3; 16 grey steps and NW_d for TLS00b, TLS11b & TLS18b
 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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	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
D65 reflection:	02, I_d	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
$Y_N = 0.0$	03, 2_d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$L^*_N = 0.0$	04, 3_d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63(=2.63+0.0)	2.77(=2.76+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05, 4_d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06, 5_d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07, 6_d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08, 7_d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09, 8_d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10, 9_d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.41+0.0)	0.3127	0.329	0.2842
	11, A_d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12, B_d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13, C_d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92(=47.92+0.0)	50.43(=50.42+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14, D_d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15, E_d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.86+0.0)	0.3127	0.329	0.8383
	16, F_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
	17, 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
	18, 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, O_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, I_d	0.067	0.067	0.067	28.65	0.0	0.0	0.0	0	5.42(=0.63+4.79)	5.7(=0.66+5.04)	6.21(=0.72+5.49)	0.3127	0.329	0.0644
$Y_N = 5.04$	03, 2_d	0.133	0.133	0.133	30.57	0.0	0.0	0.0	0	6.15(=1.36+4.79)	6.47(=1.43+5.04)	7.05(=1.56+5.49)	0.3127	0.329	0.073
$L^*_N = 26.85$	04, 3_d	0.2	0.2	0.2	33.24	0.0	0.0	0.0	0	7.27(=2.48+4.79)	7.65(=2.61+5.04)	8.33(=2.84+5.49)	0.3127	0.329	0.0863
	05, 4_d	0.267	0.267	0.267	36.63	0.0	0.0	0.0	357	8.88(=4.09+4.79)	9.34(=4.3+5.04)	10.17(=4.68+5.49)	0.3127	0.329	0.1054
	06, 5_d	0.333	0.333	0.333	40.64	0.0	0.0	0.0	3	11.06(=6.27+4.79)	11.64(=6.6+5.04)	12.67(=7.18+5.49)	0.3127	0.329	0.1314
	07, 6_d	0.4	0.4	0.4	45.14	0.0	0.0	0.0	0	13.91(=9.12+4.79)	14.64(=9.6+5.04)	15.94(=10.45+5.49)	0.3127	0.329	0.1652
	08, 7_d	0.467	0.467	0.467	50.02	0.0	0.0	0.0	355	17.52(=12.73+4.79)	18.43(=13.39+5.04)	20.07(=14.58+5.49)	0.3127	0.329	0.2081
	09, 8_d	0.533	0.533	0.533	55.2	0.0	0.0	0.0	0	21.98(=17.19+4.79)	23.12(=18.08+5.04)	25.18(=19.69+5.49)	0.3127	0.329	0.261
	10, 9_d	0.6	0.6	0.6	60.59	0.0	0.0	0.0	0	27.36(=22.57+4.79)	28.79(=23.75+5.04)	31.34(=25.86+5.49)	0.3127	0.329	0.3249
	11, A_d	0.667	0.667	0.667	66.16	0.0	0.0	0.0	0	33.76(=28.97+4.79)	35.53(=30.49+5.04)	38.68(=33.19+5.49)	0.3127	0.329	0.401
	12, B_d	0.733	0.733	0.733	71.85	0.0	0.0	0.0	10	41.28(=36.49+4.79)	43.43(=38.39+5.04)	47.29(=41.8+5.49)	0.3127	0.329	0.4902
	13, C_d	0.8	0.8	0.8	77.64	0.0	0.0	0.0	0	49.99(=45.2+4.79)	52.6(=47.56+5.04)	57.27(=51.78+5.49)	0.3127	0.329	0.5937
	14, D_d	0.867	0.867	0.867	83.5	0.0	0.0	0.0	0	59.99(=55.2+4.79)	63.12(=58.08+5.04)	68.72(=63.23+5.49)	0.3127	0.329	0.7124
	15, E_d	0.933	0.933	0.933	89.43	0.0	0.0	0.0	7	71.36(=66.57+4.79)	75.08(=70.04+5.04)	81.75(=76.26+5.49)	0.3127	0.329	0.8475
	16, F_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
	17, 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
	18, 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, O_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, I_d	0.067	0.067	0.067	39.08	0.0	0.0	0.0	3	10.17(=0.59+9.58)	10.7(=0.62+10.08)	11.65(=0.68+10.98)	0.3127	0.329	0.1208
$Y_N = 10.08$	03, 2_d	0.133	0.133	0.133	40.29	0.0	0.0	0.0	0	10.86(=1.28+9.58)	11.42(=1.34+10.08)	12.44(=1.46+10.98)	0.3127	0.329	0.129
$L^*_N = 37.99$	04, 3_d	0.2	0.2	0.2	42.05	0.0	0.0	0.0	0	11.91(=2.33+9.58)	12.53(=2.45+10.08)	13.64(=2.67+10.98)	0.3127	0.329	0.1414
	05, 4_d	0.267	0.267	0.267	44.41	0.0	0.0	0.0	0	13.42(=3.84+9.58)	14.12(=4.04+10.08)	15.37(=4.4+10.98)	0.3127	0.329	0.1594
	06, 5_d	0.333	0.333	0.333	47.34	0.0	0.0	0.0	0	15.47(=5.89+9.58)	16.28(=6.2+10.08)	17.73(=6.75+10.98)	0.3127	0.329	0.1838
	07, 6_d	0.4	0.4	0.4	50.8	0.0	0.0	0.0	0	18.15(=8.57+9.58)	19.1(=9.02+10.08)	20.8(=9.82+10.98)	0.3127	0.329	0.2156
	08, 7_d	0.467	0.467	0.467	54.73	0.0	0.0	0.0	353	21.54(=11.96+9.58)	22.67(=12.59+10.08)	24.68(=13.7+10.98)	0.3127	0.329	0.2558
	09, 8_d	0.533	0.533	0.533	59.04	0.0	0.0	0.0	0	25.73(=16.15+9.58)	27.07(=16.99+10.08)	29.48(=18.5+10.98)	0.3127	0.329	0.3056
	10, 9_d	0.6	0.6	0.6	63.67	0.0	0.0	0.0	355	30.79(=21.21+9.58)	32.39(=22.31+10.08)	35.27(=24.3+10.98)	0.3127	0.329	0.3657
	11, A_d	0.667	0.667	0.667	68.55	0.0	0.0	0.0	0	36.81(=27.23+9.58)	38.73(=28.65+10.08)	42.17(=31.19+10.98)	0.3127	0.329	0.4371
	12, B_d	0.733	0.733	0.733	73.65	0.0	0.0	0.0	0	43.87(=34.29+9.58)	46.16(=36.08+10.08)	50.25(=39.28+10.98)	0.3127	0.329	0.521
	13, C_d	0.8	0.8	0.8	78.91	0.0	0.0	0.0	353	52.05(=42.47+9.58)	54.77(=44.69+10.08)	59.63(=48.66+10.98)	0.3127	0.329	0.6182
	14, D_d	0.867	0.867	0.867	84.31	0.0	0.0	0.0	355	61.45(=51.87+9.58)	64.65(=54.57+10.08)	70.4(=59.42+10.98)	0.3127	0.329	0.7298
	15, E_d	0.933	0.933	0.933	89.81	0.0	0.0	0.0	0	72.14(=62.56+9.58)	75.9(=65.82+10.08)	82.64(=71.66+10.98)	0.3127	0.329	0.8567
	16, F_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
	17, 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
	18, 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

CEI30-7N00

Test chart CEI3; 16 grey steps and NW_d for TLS00b, TLS27b & TLS38b
 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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	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
D65 reflection:	02, I_d	0.067	0.067	0.067	6.36	0.0	0.0	0.01	0	0.67(=0.67+0.0)	0.7(=0.7+0.0)	0.77(=0.77+0.0)	0.3127	0.329	0.0079
$Y_N = 0.0$	03, 2_d	0.133	0.133	0.133	12.72	0.0	0.0	0.01	0	1.44(=1.44+0.0)	1.52(=1.52+0.0)	1.65(=1.65+0.0)	0.3127	0.329	0.0171
$L^*_N = 0.0$	04, 3_d	0.2	0.2	0.2	19.08	0.0	0.0	0.01	0	2.63(=2.63+0.0)	2.77(=2.76+0.0)	3.01(=3.01+0.0)	0.3127	0.329	0.0312
	05, 4_d	0.267	0.267	0.267	25.44	0.0	0.0	0.01	0	4.33(=4.33+0.0)	4.56(=4.56+0.0)	4.96(=4.96+0.0)	0.3127	0.329	0.0515
	06, 5_d	0.333	0.333	0.333	31.8	0.0	0.0	0.01	0	6.65(=6.65+0.0)	7.0(=7.0+0.0)	7.62(=7.62+0.0)	0.3127	0.329	0.079
	07, 6_d	0.4	0.4	0.4	38.16	0.0	0.0	0.01	0	9.67(=9.67+0.0)	10.18(=10.18+0.0)	11.08(=11.08+0.0)	0.3127	0.329	0.1149
	08, 7_d	0.467	0.467	0.467	44.52	0.0	0.0	0.01	0	13.5(=13.5+0.0)	14.2(=14.2+0.0)	15.46(=15.46+0.0)	0.3127	0.329	0.1603
	09, 8_d	0.533	0.533	0.533	50.89	0.0	0.0	0.01	0	18.22(=18.22+0.0)	19.17(=19.17+0.0)	20.88(=20.88+0.0)	0.3127	0.329	0.2164
	10, 9_d	0.6	0.6	0.6	57.25	0.0	0.0	0.01	0	23.93(=23.93+0.0)	25.18(=25.18+0.0)	27.42(=27.41+0.0)	0.3127	0.329	0.2842
	11, A_d	0.667	0.667	0.667	63.61	0.0	0.0	0.01	0	30.72(=30.72+0.0)	32.32(=32.32+0.0)	35.19(=35.19+0.0)	0.3127	0.329	0.3649
	12, B_d	0.733	0.733	0.733	69.97	0.0	0.0	0.01	0	38.69(=38.69+0.0)	40.71(=40.71+0.0)	44.32(=44.32+0.0)	0.3127	0.329	0.4595
	13, C_d	0.8	0.8	0.8	76.33	0.0	0.0	0.01	0	47.92(=47.92+0.0)	50.43(=50.42+0.0)	54.9(=54.9+0.0)	0.3127	0.329	0.5692
	14, D_d	0.867	0.867	0.867	82.69	0.0	0.0	0.01	0	58.53(=58.53+0.0)	61.58(=61.58+0.0)	67.05(=67.05+0.0)	0.3127	0.329	0.6951
	15, E_d	0.933	0.933	0.933	89.05	0.0	0.0	0.01	0	70.59(=70.59+0.0)	74.27(=74.27+0.0)	80.87(=80.86+0.0)	0.3127	0.329	0.8383
	16, F_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
	17, 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
	18, 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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01, O_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
D65 reflection:	02, I_d	0.067	0.067	0.067	52.62	0.0	0.0	0.0	0	19.68(=0.52+19.16)	20.7(=0.54+20.16)	22.54(=0.59+21.95)	0.3127	0.329	0.2337
$Y_N = 20.16$	03, 2_d	0.133	0.133	0.133	53.31	0.0	0.0	0.0	0	20.27(=1.11+19.16)	21.33(=1.17+20.16)	23.23(=1.28+21.95)	0.3127	0.329	0.2408
$L^*_N = 52.02$	04, 3_d	0.2	0.2	0.2	54.34	0.0	0.0	0.0	0	21.19(=2.03+19.16)	22.3(=2.14+20.16)	24.28(=2.33+21.95)	0.3127	0.329	0.2517
	05, 4_d	0.267	0.267	0.267	55.77	0.0	0.0	0.0	0	22.51(=3.35+19.16)	23.68(=3.52+20.16)	25.78(=3.83+21.95)	0.3127	0.329	0.2673
	06, 5_d	0.333	0.333	0.333	57.62	0.0	0.0	0.0	0	24.3(=5.14+19.16)	25.56(=5.4+20.16)	27.83(=5.88+21.95)	0.3127	0.329	0.2886
	07, 6_d	0.4	0.4	0.4	59.91	0.0	0.0	0.0	0	26.63(=7.47+19.16)	28.02(=8.56+20.16)	30.51(=8.56+21.95)	0.3127	0.329	0.3163
	08, 7_d	0.467	0.467	0.467	62.62	0.0	0.0	0.0	0	29.59(=10.43+19.16)	31.13(=10.97+20.16)	33.89(=11.94+21.95)	0.3127	0.329	0.3514
	09, 8_d	0.533	0.533	0.533	65.73	0.0	0.0	0.0	0	33.24(=14.08+19.16)	34.97(=14.81+20.16)	38.08(=16.13+21.95)	0.3127	0.329	0.3947
	10, 9_d	0.6	0.6	0.6	69.19	0.0	0.0	0.0	0	37.65(=18.49+19.16)	39.61(=19.45+20.16)	43.13(=21.18+21.95)	0.3127	0.329	0.4471
	11, A_d	0.667	0.667	0.667	72.98	0.0	0.0	0.0	0	42.89(=23.73+19.16)	45.13(=24.97+20.16)	49.14(=27.19+21.95)	0.3127	0.329	0.5094
	12, B_d	0.733	0.733	0.733	77.04	0.0	0.0	0.0	0	49.04(=29.88+19.16)	51.6(=31.44+20.16)	56.19(=34.24+21.95)	0.3127	0.329	0.5825
	13, C_d	0.8	0.8	0.8	81.35	0.0	0.0	0.0	10	56.18(=37.02+19.16)	59.11(=38.95+20.16)	64.36(=42.41+21.95)	0.3127	0.329	0.6672
	14, D_d	0.867	0.867	0.867	85.87	0.0	0.0	0.0	0	64.37(=45.21+19.16)	67.73(=47.57+20.16)	73.74(=51.79+21.95)	0.3127	0.329	0.7645
	15, E_d	0.933	0.933	0.933	90.56	0.0	0.0	0.0	10	73.68(=54.52+19.16)	77.53(=57.37+20.16)	84.41(=62.46+21.95)	0.3127	0.329	0.8751
	16, F_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
	17, 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
	18, 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	$a^*_{a,d}$	$b^*_{a,d}$	$C^*_{ab,d}$	$h_{ab,d}$	$X_{a,d}$	$Y_{a,d}$	$Z_{a,d}$	$x_{a,d}$	$y_{a,d}$	$Y_{a,d}/88.59$
	01, O_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
D65 reflection:	02, I_d	0.067	0.067	0.067	69.97	0.0	0.0	0.0	0	38.68(=0.36+38.32)	40.7(=0.38+40.32)	44.32(=0.42+43.9)	0.3127	0.329	0.4594
$Y_N = 40.32$	03, 2_d	0.133	0.133	0.133	70.28	0.0	0.0	0.0	0	39.11(=0.79+38.32)	41.15(=0.83+40.32)	44.8(=0.9+43.9)	0.3127	0.329	0.4644
$L^*_N = 69.7$	04, 3_d	0.2	0.2	0.2	70.75	0.0	0.0	0.0	0	39.75(=1.43+38.32)	41.83(=1.51+40.32)	45.54(=1.64+43.9)	0.3127	0.329	0.4721
	05, 4_d	0.267	0.267	0.267	71.42	0.0	0.0	0.0	0	40.68(=2.36+38.32)	42.8(=2.48+40.32)	46.61(=2.7+43.9)	0.3127	0.329	0.4832
	06, 5_d	0.333	0.333	0.333	72.32	0.0	0.0	0.0	0	41.94(=3.62+38.32)	44.13(=3.81+40.32)	48.05(=4.15+43.9)	0.3127	0.329	0.4981
	07, 6_d	0.4	0.4	0.4	73.46	0.0	0.0	0.0	0	43.59(=5.27+38.32)	45.87(=5.55+40.32)	49.94(=6.04+43.9)	0.3127	0.329	0.5177
	08, 7_d	0.467	0.467	0.467	74.86	0.0	0.0	0.0	0	45.67(=7.35+38.32)	48.06(=7.74+40.32)	52.33(=8.43+43.9)	0.3127	0.329	0.5425
	09, 8_d	0.533	0.533	0.533	76.54	0.0	0.0	0.0	0	48.25(=9.93+38.32)	50.77(=10.45+40.32)	55.28(=11.38+43.9)	0.3127	0.329	0.573
	10, 9_d	0.6	0.6	0.6	78.49	0.0	0.0	0.0	0	51.36(=13.04+38.32)	54.04(=13.72+40.32)	58.84(=14.94+43.9)	0.3127	0.329	0.61
	11, A_d	0.667	0.667	0.667	80.7	0.0	0.0	0.0	0	55.06(=16.74+38.32)	57.93(=17.61+40.32)	63.08(=19.18+43.9)	0.3127	0.329	0.6539
	12, B_d	0.733	0.733	0.733	83.18	0.0	0.0	0.0	0	59.4(=21.08+38.32)	62.5(=22.18+40.32)	68.05(=24.15+43.9)	0.3127	0.329	0.7055
	13, C_d	0.8	0.8	0.8	85.9	0.0	0.0	0.0	0	64.43(=26.11+38.32)	67.8(=27.48+40.32)	73.82(=29.92+43.9)	0.3127	0.329	0.7653
	14, D_d	0.867	0.867	0.867	88.86	0.0	0.0	0.0	0	70.21(=31.89+38.32)	73.87(=33.55+40.32)	80.43(=36.53+43.9)	0.3127	0.329	0.8339
	15, E_d	0.933	0.933	0.933	92.04	0.0	0.0	0.0	0	76.78(=38.46+38.32)	80.79(=40.47+40.32)	87.96(=44.06+43.9)	0.3127	0.329	0.9119
	16, F_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
	17, 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
	18, 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

CEI30-7N00

Test chart CEI3; 16 grey steps and NW_d for TLS00b, TLS52b & TLS70b
 Calculation of CIE-colour data for sRGB display for 3 reflections

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