

Farbmetrische "Norm-Daten": Fernseh-Lichtfarben-System TLS00 für Helligkeit  $L^*=00$  von Schwarz und für Lichtart D65

| System TLS00                  | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $a^*_d$ | $b^*_d$ | $C^*_{ab,d}$ | $h_{ab,d}$ | $X_d$ | $Y_d$ | $Z_d$ | $x_d$  | $y_d$  | $Y_d/88.59$ |
|-------------------------------|--------|-------|-------|-------|---------|---------|---------|--------------|------------|-------|-------|-------|--------|--------|-------------|
| TLS00-System                  | $R_d$  | 1.0   | 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   | 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   | 83.63   | -82.75  | 79.9    | 115.04       | 136        | 31.68 | 63.36 | 10.56 | 0.3    | 0.6    | 0.7152      |
| D65-Reflexion:                | $C_d$  | 0.0   | 1.0   | 1.0   | 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   | 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   | 57.3    | 94.35   | -58.41  | 110.97       | 328        | 52.52 | 25.23 | 85.89 | 0.3209 | 0.1542 | 0.2848      |
| $Y_N = 0.0$<br>$L^*_d = 0.01$ | $N_d$  | 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         |
|                               | $W_d$  | 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         |
|                               | $NO_d$ | 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         |
|                               | $WI_d$ | 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         |

Farbmetrische "Adaptierte Daten (a)": Fernseh-Lichtfarben-System TLS00a für Helligkeit  $L^*=00a$  von Schwarz und für Lichtart D65

| System TLS00a                 | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$ | $Y_{a,d}$ | $Z_{a,d}$ | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|-------------------------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------------|
| TLS00-System                  | $R_d$  | 1.0       | 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       | 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       | 83.63       | -82.75      | 79.9        | 115.04         | 136          | 31.68     | 63.36     | 10.56     | 0.3       | 0.6       | 0.7152          |
| D65-Reflexion:                | $C_d$  | 0.0       | 1.0       | 1.0       | 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       | 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       | 57.3        | 94.35       | -58.41      | 110.97         | 328          | 52.52     | 25.23     | 85.89     | 0.3209    | 0.1542    | 0.2848          |
| $Y_N = 0.0$<br>$L^*_d = 0.01$ | $N_d$  | 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             |
|                               | $W_d$  | 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             |
|                               | $NO_d$ | 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             |
|                               | $WI_d$ | 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             |

Farbmetrische "Adaptierte Daten (b)": Fernseh-Lichtfarben-System TLS00b für Helligkeit  $L^*=00b$  von Schwarz und für Lichtart D65

| System TLS00b                | Farbe  | $r_{b,d}$ | $g_{b,d}$ | $b_{b,d}$ | $L^*_{b,d}$ | $a^*_{b,d}$ | $b^*_{b,d}$ | $C^*_{ab,b,d}$ | $h_{ab,b,d}$ | $X_{b,d}$         | $Y_{b,d}$         | $Z_{b,d}$         | $x_{b,d}$ | $y_{b,d}$ | $Y_{b,d}/88.59$ |
|------------------------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|-------------------|-------------------|-----------|-----------|-----------------|
| TLS00-System                 | $R_d$  | 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          |
| D65-Reflexion:               | $C_d$  | 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          |
|                              | $B_d$  | 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          |
| $Y_N = 0.0$<br>$L^*_d = 0.0$ | $N_d$  | 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             |
|                              | $NO_d$ | 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             |
|                              | $WI_d$ | 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             |

Farbmetrische "Adaptierte Daten (b)": Fernseh-Lichtfarben-System TLS00b für Helligkeit  $L^*=00$  von Schwarz und für Lichtart D65

| System TLS00b  | Farbe  | $r_{b,d}$ | $g_{b,d}$ | $b_{b,d}$ | $L^*_{b,d}$ | $a^*_{b,d}$ | $b^*_{b,d}$ | $C^*_{ab,b,d}$ | $h_{ab,b,d}$ | $X_{b,d}$         | $Y_{b,d}$         | $Z_{b,d}$         | $x_{b,d}$ | $y_{b,d}$ | $Y_{b,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|-------------------|-------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 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(=10.56+0.0) | 0.3       | 0.6       | 0.7152          |
|                | $C_d$  | 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          |
|                | $B_d$  | 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          |
| D65-Reflexion: | $M_d$  | 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          |
|                | $N_d$  | 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             |
|                | $NO_d$ | 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             |
|                | $WI_d$ | 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             |

Berechnete farbmetrische Daten: Fernseh-Lichtfarben-Systeme TLSxxa für Helligkeit  $L^*=00, 06, 11, 18$  von Schwarz und für Lichtart D65

| System TLS00a  | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$         | $Y_{a,d}$         | $Z_{a,d}$         | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|-------------------|-------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 1.0       | 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       | 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(=10.56+0.0) | 0.3       | 0.6       | 0.7152          |
|                | $C_d$  | 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          |
|                | $B_d$  | 0.0       | 0.0       | 1.0       | 30.39       | 76.06       | -103.59     | 128.52         | 306          | 15.99(=15.99+0.0) | 6.4(=6.4+0.0)     | 84.21(=84.21+0.0) | 0.15      | 0.06      | 0.0722          |
| D65-Reflexion: | $M_d$  | 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          |
|                | $N_d$  | 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             |
|                | $W_d$  | 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             |
|                | $NO_d$ | 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             |
|                | $WI_d$ | 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             |

| System TLS06a  | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$         | $Y_{a,d}$          | $Z_{a,d}$          | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|--------------------|--------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 1.0       | 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       | 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       | 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       | 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       | 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          |
| D65-Reflexion: | $M_d$  | 1.0       | 0.0       | 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          |
|                | $N_d$  | 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          |
|                | $W_d$  | 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             |
|                | $NO_d$ | 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          |
|                | $WI_d$ | 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             |

| System TLS11a  | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$         | $Y_{a,d}$          | $Z_{a,d}$          | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|--------------------|--------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 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          |
|                | $G_d$  | 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          |
|                | $C_d$  | 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          |
|                | $B_d$  | 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          |
| D65-Reflexion: | $M_d$  | 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           |
|                | $N_d$  | 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             |
|                | $NO_d$ | 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          |
|                | $WI_d$ | 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             |

| System TLS18a  | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$         | $Y_{a,d}$          | $Z_{a,d}$          | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|--------------------|--------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 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          |
|                | $G_d$  | 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          |
|                | $C_d$  | 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          |
|                | $B_d$  | 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          |
| D65-Reflexion: | $M_d$  | 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          |
|                | $N_d$  | 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             |
|                | $NO_d$ | 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          |
|                | $WI_d$ | 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             |

AG800-7N, Farbmetrische Daten des Fernseh-Lichtfarben-Systems TLS00a für CIE-Normlichtart D65; TLS00 System; Seite: 2/3

Prüfvorlage AG80; 8 Grundfarben RYGBMWN<sub>d</sub> für TLS00..TLS70  
Berechnung von CIE-Daten für sRGB-Display für 8 Reflexionen

Eingabe: rgb/cmy0/000n/w set...  
Ausgabe: ->rgb<sub>dd</sub> setrgbcolor

Farbmetrische "Adaptierte Daten (b)": Fernseh-Lichtfarben-System TLS00b für Helligkeit  $L^*=00$  von Schwarz und für Lichtart D65

| System TLS00b  | Farbe  | $r_{b,d}$ | $g_{b,d}$ | $b_{b,d}$ | $L^*_{b,d}$ | $a^*_{b,d}$ | $b^*_{b,d}$ | $C^*_{ab,b,d}$ | $h_{ab,b,d}$ | $X_{b,d}$         | $Y_{b,d}$         | $Z_{b,d}$         | $x_{b,d}$ | $y_{b,d}$ | $Y_{b,d}/88.59$ |
|----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|-------------------|-------------------|-------------------|-----------|-----------|-----------------|
| TLS00-System   | $R_d$  | 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-Reflexion: | $G_d$  | 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          |
|                | $C_d$  | 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          |
| $Y_N = 0.0$    | $B_d$  | 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          |
| $L^*_N = 0.0$  | $N_d$  | 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             |
|                | $NO_d$ | 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             |
|                | $WI_d$ | 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             |

Berechnete farbmetrische Daten: Fernseh-Lichtfarben-Systeme TLSxxa für Helligkeit  $L^*=27, 33, 52, 70$  von Schwarz und für Lichtart D65

| System TLS27a   | Farbe  | $r_{a,d}$ | $g_{a,d}$ | $b_{a,d}$ | $L^*_{a,d}$ | $a^*_{a,d}$ | $b^*_{a,d}$ | $C^*_{ab,a,d}$ | $h_{ab,a,d}$ | $X_{a,d}$           | $Y_{a,d}$           | $Z_{a,d}$           | $x_{a,d}$ | $y_{a,d}$ | $Y_{a,d}/88.59$ |
|-----------------|--------|-----------|-----------|-----------|-------------|-------------|-------------|----------------|--------------|---------------------|---------------------|---------------------|-----------|-----------|-----------------|
| TLS00-System    | $R_d$  | 1.0       | 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       | 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          |
| D65-Reflexion:  | $G_d$  | 0.0       | 1.0       | 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       | 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          |
| $Y_N = 5.04$    | $B_d$  | 0.0       | 0.0       | 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       | 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          |
| $L^*_N = 26.85$ | $N_d$  | 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          |
|                 | $W_d$  | 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             |
|                 | $NO_d$ | 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          |
|                 | $WI_d$ | 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             |
| System TLS38a   | $R_d$  | 1.0       | 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       | 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           |
| D65-Reflexion:  | $G_d$  | 0.0       | 1.0       | 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       | 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          |
| $Y_N = 10.08$   | $B_d$  | 0.0       | 0.0       | 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       | 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          |
| $L^*_N = 37.99$ | $N_d$  | 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          |
|                 | $W_d$  | 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             |
|                 | $NO_d$ | 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          |
|                 | $WI_d$ | 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             |
| System TLS52a   | $R_d$  | 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          |
| D65-Reflexion:  | $G_d$  | 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            |
|                 | $C_d$  | 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          |
| $Y_N = 20.16$   | $B_d$  | 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          |
| $L^*_N = 52.02$ | $N_d$  | 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             |
|                 | $NO_d$ | 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          |
|                 | $WI_d$ | 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             |
| System TLS70a   | $R_d$  | 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          |
| D65-Reflexion:  | $G_d$  | 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          |
| $Y_N = 40.32$   | $B_d$  | 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          |
| $L^*_N = 69.7$  | $N_d$  | 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             |
|                 | $NO_d$ | 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          |
|                 | $WI_d$ | 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             |

AG800-7N, Farbmetrische Daten des Fernseh-Lichtfarben-Systems TLS00a für CIE-Normlichtart D65; TLS00 System; Seite: 3/3

Prüfvorlage AG80; 8 Grundfarben RYGBMNV<sub>d</sub> für TLS00..TLS70  
Berechnung von CIE-Daten für sRGB-Display für 8 Reflexionen

Eingabe: rgb/cmy0/000n/w set...  
Ausgabe: ->rgbdd setrgbcolor