

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

| System TLS00   | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$ | $Y_d$  | $Z_d$ | $x_d$  | $y_d$  | $Y_d/88.59$ |
|----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|-------|--------|-------|--------|--------|-------------|
| WCGa           | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.23      | 34         | 52.94  | 36.37  | 55.29 | 36.99  | 0.67  | 0.5948 | 0.398  | 0.4175      |
|                | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.68      | 92         | -2.93  | 71.62  | 67.94 | 72.65  | 1.13  | 0.4794 | 0.5127 | 0.82        |
| $L^*ABCh_{AB}$ | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.17     | 153        | -89.14 | 45.67  | 21.11 | 57.87  | 13.29 | 0.2288 | 0.6272 | 0.6532      |
| D65-Reflexion: | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.91 | 51.6   | 95.79 | 0.164  | 0.2927 | 0.5824      |
|                | $B_d$  | 0.0   | 0.0   | 1.0   | 46.89   | 71.67      | 272        | 2.94   | -71.6  | 16.27 | 15.94  | 95.34 | 0.1275 | 0.125  | 0.1799      |
| $Y_N = 0.01$   | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.14     | 333        | 89.13  | -45.65 | 63.08 | 30.72  | 83.18 | 0.3564 | 0.1736 | 0.3467      |
| $L^*_d = 0.08$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01  | 0.01   | 0.01  | 0.3321 | 0.3321 | 0.0001      |
| Normierung:    | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21 | 88.6   | 96.49 | 0.3127 | 0.329  | 1.0         |
|                | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01  | 0.01   | 0.01  | 0.3321 | 0.3321 | 0.0001      |
| Weiß $Y_W=89$  | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06 | 100.01 | 108.3 | 0.3133 | 0.3297 | 1.1288      |
|                | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.49   | 0.1        | 83         | 0.01   | 0.1    | 17.11 | 17.99  | 19.49 | 0.3134 | 0.3296 | 0.2031      |

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

| System TLS00a  | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$ | $Y_d$  | $Z_d$ | $x_d$  | $y_d$  | $Y_d/88.59$ |
|----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|-------|--------|-------|--------|--------|-------------|
| WCGa           | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.23      | 34         | 52.94  | 36.37  | 55.29 | 36.99  | 0.67  | 0.5948 | 0.398  | 0.4175      |
|                | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.68      | 92         | -2.93  | 71.62  | 67.94 | 72.65  | 1.13  | 0.4794 | 0.5127 | 0.82        |
| $L^*ABCh_{AB}$ | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.17     | 153        | -89.14 | 45.67  | 21.11 | 57.87  | 13.29 | 0.2288 | 0.6272 | 0.6532      |
| D65-Reflexion: | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.91 | 51.6   | 95.79 | 0.164  | 0.2927 | 0.5824      |
|                | $B_d$  | 0.0   | 0.0   | 1.0   | 46.89   | 71.67      | 272        | 2.94   | -71.6  | 16.27 | 15.94  | 95.34 | 0.1275 | 0.125  | 0.1799      |
| $Y_N = 0.01$   | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.14     | 333        | 89.13  | -45.65 | 63.08 | 30.72  | 83.18 | 0.3564 | 0.1736 | 0.3467      |
| $L^*_d = 0.08$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01  | 0.01   | 0.01  | 0.3321 | 0.3321 | 0.0001      |
| Normierung:    | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21 | 88.6   | 96.49 | 0.3127 | 0.329  | 1.0         |
|                | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01  | 0.01   | 0.01  | 0.3321 | 0.3321 | 0.0001      |
| Weiß $Y_W=89$  | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06 | 100.01 | 108.3 | 0.3133 | 0.3297 | 1.1288      |
|                | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.49   | 0.1        | 83         | 0.01   | 0.1    | 17.11 | 17.99  | 19.49 | 0.3134 | 0.3296 | 0.2031      |

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

| System TLS00b  | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$              | $Y_d$               | $Z_d$               | $x_d$   | $y_d$   | $Y_d/88.59$ |
|----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|--------------------|---------------------|---------------------|---------|---------|-------------|
| WCGa           | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.23      | 34         | 52.94  | 36.37  | 55.29(=55.28+0.01) | 36.99(=36.98+0.01)  | 0.67(=0.66+0.01)    | 55.2864 | 36.9905 | 0.4175      |
|                | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.68      | 92         | -2.93  | 71.62  | 67.94(=67.93+0.01) | 72.65(=72.64+0.01)  | 1.13(=1.11+0.01)    | 67.9385 | 72.652  | 0.82        |
| $L^*ABCh_{AB}$ | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.17     | 153        | -89.14 | 45.67  | 21.11(=21.1+0.01)  | 57.87(=57.86+0.01)  | 13.29(=13.28+0.01)  | 21.1134 | 57.8735 | 0.6532      |
| D65-Reflexion: | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.91(=28.9+0.01)  | 51.6(=51.59+0.01)   | 95.79(=95.78+0.01)  | 28.9102 | 51.6006 | 0.5824      |
|                | $B_d$  | 0.0   | 0.0   | 1.0   | 46.89   | 71.67      | 272        | 2.94   | -71.6  | 16.27(=16.26+0.01) | 15.94(=15.93+0.01)  | 95.34(=95.33+0.01)  | 16.267  | 15.9391 | 0.1799      |
| $Y_N = 0.0$    | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.14     | 333        | 89.13  | -45.65 | 63.08(=63.07+0.01) | 30.72(=30.71+0.01)  | 83.18(=83.17+0.01)  | 63.0832 | 30.7176 | 0.3467      |
| $L^*_d = 0.0$  | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01(=0.0+0.01)    | 0.01(=0.0+0.01)     | 0.01(=0.0+0.01)     | 0.0089  | 0.0089  | 0.0001      |
| Normierung:    | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=84.2+0.01)  | 88.6(=88.59+0.01)   | 96.49(=96.47+0.01)  | 84.2143 | 88.6    | 1.0         |
|                | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01(=0.0+0.01)    | 0.01(=0.0+0.01)     | 0.01(=0.0+0.01)     | 0.0089  | 0.0089  | 0.0001      |
| Weiß $Y_W=89$  | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=95.05+0.01) | 100.01(=100.0+0.01) | 108.3(=108.29+0.01) | 95.0589 | 100.012 | 1.1288      |
|                | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.49   | 0.1        | 83         | 0.01   | 0.1    | 17.11(=17.1+0.01)  | 17.99(=17.98+0.01)  | 19.49(=19.48+0.01)  | 17.1087 | 17.9947 | 0.2031      |

Farbmetrische "Adaptierte Daten (b)": Fernseh-Lichtfarben-System TLS00b für Helligkeit L\*=00 von Schwarz und für CIE-Normlichtart D65

| System TLS00b                        | Farbe                  | <i>r</i> <sub>d</sub> | <i>g</i> <sub>d</sub> | <i>b</i> <sub>d</sub> | <i>L</i> * <sub>d</sub> | <i>C</i> <sub>AB,d</sub> | <i>h</i> <sub>AB,d</sub> | <i>A</i> <sub>d</sub> | <i>B</i> <sub>d</sub> | <i>X</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> | <i>Z</i> <sub>d</sub> | <i>x</i> <sub>d</sub> | <i>y</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> /88.59 |
|--------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| WCGa                                 | <i>R</i> <sub>d</sub>  | 1.0                   | 0.0                   | 0.0                   | 67.27                   | 64.23                    | 34                       | 52.94                 | 36.37                 | 55.29(=55.28+0.01)    | 36.99(=36.98+0.01)    | 0.67(=0.66+0.01)      | 0.5948                | 0.398                 | 0.4175                       |
| <i>L</i> * <i>ABCh</i> <sub>AB</sub> | <i>Y</i> <sub>d</sub>  | 1.0                   | 1.0                   | 0.0                   | 88.28                   | 71.68                    | 92                       | -2.93                 | 71.62                 | 67.94(=67.93+0.01)    | 72.65(=72.64+0.01)    | 1.13(=1.11+0.01)      | 0.4794                | 0.5127                | 0.82                         |
|                                      | <i>G</i> <sub>d</sub>  | 0.0                   | 1.0                   | 0.0                   | 80.67                   | 100.17                   | 153                      | -89.14                | 45.67                 | 21.11(=21.1+0.01)     | 57.87(=57.86+0.01)    | 13.29(=13.28+0.01)    | 0.2288                | 0.6272                | 0.6532                       |
| D65-Reflexion:                       | <i>C</i> <sub>d</sub>  | 0.0                   | 1.0                   | 1.0                   | 77.04                   | 64.24                    | 214                      | -52.95                | -36.35                | 28.91(=28.9+0.01)     | 51.6(=51.59+0.01)     | 95.79(=95.78+0.01)    | 0.164                 | 0.2927                | 0.5824                       |
| <i>Y</i> <sub>N</sub> = 0.0          | <i>B</i> <sub>d</sub>  | 0.0                   | 0.0                   | 1.0                   | 46.89                   | 71.67                    | 272                      | 2.94                  | -71.6                 | 16.27(=16.26+0.01)    | 15.94(=15.93+0.01)    | 95.34(=95.33+0.01)    | 0.1275                | 0.125                 | 0.1799                       |
|                                      | <i>M</i> <sub>d</sub>  | 1.0                   | 0.0                   | 1.0                   | 62.27                   | 100.14                   | 333                      | 89.13                 | -45.65                | 63.08(=63.07+0.01)    | 30.72(=30.71+0.01)    | 83.18(=83.17+0.01)    | 0.3564                | 0.1736                | 0.3467                       |
| <i>L</i> * <i>N</i> = 0.0            | <i>NO</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.08                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.01(=0.0+0.01)       | 0.01(=0.0+0.01)       | 0.01(=0.0+0.01)       | 0.3321                | 0.3321                | 0.0001                       |
|                                      | <i>WO</i> <sub>d</sub> | 1.0                   | 1.0                   | 1.0                   | 95.41                   | 0.0                      | 0                        | 0.0                   | 0.0                   | 84.21(=84.2+0.01)     | 88.6(=88.59+0.01)     | 96.49(=96.47+0.01)    | 0.3127                | 0.329                 | 1.0                          |
| Normierung:                          | <i>NI</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.08                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.01(=0.0+0.01)       | 0.01(=0.0+0.01)       | 0.01(=0.0+0.01)       | 0.3321                | 0.3321                | 0.0001                       |
| Weiß <i>Y</i> <sub>W</sub> =89       | <i>WI</i> <sub>d</sub> | 1.13                  | 1.13                  | 1.13                  | 100.0                   | 0.56                     | 91                       | 0.0                   | 0.56                  | 95.06(=95.05+0.01)    | 100.01(=100.0+0.01)   | 108.3(=108.29+0.01)   | 0.3133                | 0.3297                | 1.1288                       |
|                                      | <i>ZI</i> <sub>d</sub> | 0.18                  | 0.18                  | 0.18                  | 49.49                   | 0.1                      | 83                       | 0.01                  | 0.1                   | 17.11(=17.1+0.01)     | 17.99(=17.98+0.01)    | 19.49(=19.48+0.01)    | 0.3134                | 0.3296                | 0.2031                       |

Berechnete farbmetrische Daten: Fernseh-Lichtfarben-Systeme TLSxxa für Helligkeit L\*=00, 06, 11, 18 von Schwarz und für CIE-Normlichtart D65

| System TLS00a                        | Farbe                  | <i>r</i> <sub>d</sub> | <i>g</i> <sub>d</sub> | <i>b</i> <sub>d</sub> | <i>L</i> * <sub>d</sub> | <i>C</i> <sub>AB,d</sub> | <i>h</i> <sub>AB,d</sub> | <i>A</i> <sub>d</sub> | <i>B</i> <sub>d</sub> | <i>X</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> | <i>Z</i> <sub>d</sub> | <i>x</i> <sub>d</sub> | <i>y</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> /88.59 |
|--------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| WCGa                                 | <i>R</i> <sub>d</sub>  | 1.0                   | 0.0                   | 0.0                   | 67.27                   | 64.22                    | 34                       | 52.93                 | 36.37                 | 55.29(=55.29+0.0)     | 37.0(=37.0+0.0)       | 0.68(=0.68+0.0)       | 0.5947                | 0.3979                | 0.4176                       |
| <i>L</i> * <i>ABCh</i> <sub>AB</sub> | <i>Y</i> <sub>d</sub>  | 1.0                   | 1.0                   | 0.0                   | 88.28                   | 71.67                    | 92                       | -2.93                 | 71.61                 | 67.94(=67.94+0.0)     | 72.65(=72.65+0.0)     | 1.14(=1.14+0.0)       | 0.4794                | 0.5126                | 0.82                         |
|                                      | <i>G</i> <sub>d</sub>  | 0.0                   | 1.0                   | 0.0                   | 80.67                   | 100.16                   | 153                      | -89.13                | 45.67                 | 21.12(=21.12+0.0)     | 57.88(=57.88+0.0)     | 13.3(=13.3+0.0)       | 0.2288                | 0.6271                | 0.6532                       |
| D65-Reflexion:                       | <i>C</i> <sub>d</sub>  | 0.0                   | 1.0                   | 1.0                   | 77.04                   | 64.24                    | 214                      | -52.95                | -36.35                | 28.92(=28.92+0.0)     | 51.6(=51.6+0.0)       | 95.79(=95.79+0.0)     | 0.164                 | 0.2927                | 0.5824                       |
| <i>Y</i> <sub>N</sub> = 0.0          | <i>B</i> <sub>d</sub>  | 0.0                   | 0.0                   | 1.0                   | 46.91                   | 71.66                    | 272                      | 2.94                  | -71.59                | 16.28(=16.28+0.0)     | 15.95(=15.95+0.0)     | 95.34(=95.34+0.0)     | 0.1276                | 0.125                 | 0.18                         |
|                                      | <i>M</i> <sub>d</sub>  | 1.0                   | 0.0                   | 1.0                   | 62.27                   | 100.13                   | 333                      | 89.12                 | -45.65                | 63.09(=63.09+0.0)     | 30.72(=30.72+0.0)     | 83.18(=83.18+0.0)     | 0.3564                | 0.1736                | 0.3468                       |
| <i>L</i> * <i>N</i> = 0.0            | <i>NO</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(=0.02+0.0)       | 0.02(=0.02+0.0)       | 0.02(=0.02+0.0)       | 0.3327                | 0.3327                | 0.0002                       |
|                                      | <i>WO</i> <sub>d</sub> | 1.0                   | 1.0                   | 1.0                   | 95.41                   | 0.0                      | 0                        | 0.0                   | 0.0                   | 84.21(=84.21+0.0)     | 88.6(=88.6+0.0)       | 96.49(=96.49+0.0)     | 0.3127                | 0.329                 | 1.0                          |
| Normierung:                          | <i>NI</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(=0.02+0.0)       | 0.02(=0.02+0.0)       | 0.02(=0.02+0.0)       | 0.3327                | 0.3327                | 0.0002                       |
| Weiß <i>Y</i> <sub>W</sub> =89       | <i>WI</i> <sub>d</sub> | 1.13                  | 1.13                  | 1.13                  | 100.0                   | 0.56                     | 91                       | 0.0                   | 0.56                  | 95.06(=95.06+0.0)     | 100.01(=100.01+0.0)   | 108.3(=108.3+0.0)     | 0.3133                | 0.3297                | 1.1288                       |
|                                      | <i>ZI</i> <sub>d</sub> | 0.18                  | 0.18                  | 0.18                  | 49.5                    | 0.1                      | 82                       | 0.01                  | 0.1                   | 17.12(=17.12+0.0)     | 18.0(=18.0+0.0)       | 19.5(=19.5+0.0)       | 0.3134                | 0.3296                | 0.2032                       |

| System TLS06a                        | Farbe                  | <i>r</i> <sub>d</sub> | <i>g</i> <sub>d</sub> | <i>b</i> <sub>d</sub> | <i>L</i> * <sub>d</sub> | <i>C</i> <sub>AB,d</sub> | <i>h</i> <sub>AB,d</sub> | <i>A</i> <sub>d</sub> | <i>B</i> <sub>d</sub> | <i>X</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> | <i>Z</i> <sub>d</sub> | <i>x</i> <sub>d</sub> | <i>y</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> /88.59 |
|--------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| WCGa                                 | <i>R</i> <sub>d</sub>  | 1.0                   | 0.0                   | 0.0                   | 67.27                   | 64.22                    | 34                       | 52.93                 | 36.37                 | 55.29(=54.69+0.6)     | 37.0(=36.37+0.63)     | 0.68(=0.0+0.69)       | 0.5947                | 0.3979                | 0.4176                       |
| <i>L</i> * <i>ABCh</i> <sub>AB</sub> | <i>Y</i> <sub>d</sub>  | 1.0                   | 1.0                   | 0.0                   | 88.28                   | 71.67                    | 92                       | -2.93                 | 71.61                 | 67.94(=67.34+0.6)     | 72.65(=72.02+0.63)    | 1.14(=0.45+0.69)      | 0.4794                | 0.5126                | 0.82                         |
|                                      | <i>G</i> <sub>d</sub>  | 0.0                   | 1.0                   | 0.0                   | 80.67                   | 100.16                   | 153                      | -89.13                | 45.67                 | 21.12(=20.52+0.6)     | 57.88(=57.25+0.63)    | 13.3(=12.61+0.69)     | 0.2288                | 0.6271                | 0.6532                       |
| D65-Reflexion:                       | <i>C</i> <sub>d</sub>  | 0.0                   | 1.0                   | 1.0                   | 77.04                   | 64.24                    | 214                      | -52.95                | -36.35                | 28.92(=28.32+0.6)     | 51.6(=50.97+0.63)     | 95.79(=95.11+0.69)    | 0.164                 | 0.2927                | 0.5824                       |
| <i>Y</i> <sub>N</sub> = 0.63         | <i>B</i> <sub>d</sub>  | 0.0                   | 0.0                   | 1.0                   | 46.91                   | 71.66                    | 272                      | 2.94                  | -71.59                | 16.28(=15.68+0.6)     | 15.95(=15.32+0.63)    | 95.34(=94.66+0.69)    | 0.1276                | 0.125                 | 0.18                         |
|                                      | <i>M</i> <sub>d</sub>  | 1.0                   | 0.0                   | 1.0                   | 62.27                   | 100.13                   | 333                      | 89.12                 | -45.65                | 63.09(=62.49+0.6)     | 30.72(=30.09+0.63)    | 83.18(=82.49+0.69)    | 0.3564                | 0.1736                | 0.3468                       |
| <i>L</i> * <i>N</i> = 5.69           | <i>NO</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(= -0.57+0.6)     | 0.02(= -0.66+0.63)    | 0.02(= -0.66+0.69)    | 0.3327                | 0.3327                | 0.0002                       |
|                                      | <i>WO</i> <sub>d</sub> | 1.0                   | 1.0                   | 1.0                   | 95.41                   | 0.0                      | 0                        | 0.0                   | 0.0                   | 84.21(=83.62+0.6)     | 88.6(=87.97+0.63)     | 96.49(=95.8+0.69)     | 0.3127                | 0.329                 | 1.0                          |
| Normierung:                          | <i>NI</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(= -0.57+0.6)     | 0.02(= -0.6+0.63)     | 0.02(= -0.66+0.69)    | 0.3327                | 0.3327                | 0.0002                       |
| Weiß <i>Y</i> <sub>W</sub> =89       | <i>WI</i> <sub>d</sub> | 1.13                  | 1.13                  | 1.13                  | 100.0                   | 0.56                     | 91                       | 0.0                   | 0.56                  | 95.06(=94.46+0.6)     | 100.01(=99.38+0.63)   | 108.3(=107.62+0.69)   | 0.3133                | 0.3297                | 1.1288                       |
|                                      | <i>ZI</i> <sub>d</sub> | 0.18                  | 0.18                  | 0.18                  | 49.5                    | 0.1                      | 82                       | 0.01                  | 0.1                   | 17.12(=16.52+0.6)     | 18.0(=17.37+0.63)     | 19.5(=18.81+0.69)     | 0.3134                | 0.3296                | 0.2032                       |

| System TLS11a                        | Farbe                  | <i>r</i> <sub>d</sub> | <i>g</i> <sub>d</sub> | <i>b</i> <sub>d</sub> | <i>L</i> * <sub>d</sub> | <i>C</i> <sub>AB,d</sub> | <i>h</i> <sub>AB,d</sub> | <i>A</i> <sub>d</sub> | <i>B</i> <sub>d</sub> | <i>X</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> | <i>Z</i> <sub>d</sub> | <i>x</i> <sub>d</sub> | <i>y</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> /88.59 |
|--------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| WCGa                                 | <i>R</i> <sub>d</sub>  | 1.0                   | 0.0                   | 0.0                   | 67.27                   | 64.22                    | 34                       | 52.93                 | 36.37                 | 55.29(=54.09+1.2)     | 37.0(=35.74+1.26)     | 0.68(= -0.68+1.37)    | 0.5947                | 0.3979                | 0.4176                       |
| <i>L</i> * <i>ABCh</i> <sub>AB</sub> | <i>Y</i> <sub>d</sub>  | 1.0                   | 1.0                   | 0.0                   | 88.28                   | 71.67                    | 92                       | -2.93                 | 71.61                 | 67.94(=66.74+1.2)     | 72.65(=71.39+1.26)    | 1.14(= -0.23+1.37)    | 0.4794                | 0.5126                | 0.82                         |
|                                      | <i>G</i> <sub>d</sub>  | 0.0                   | 1.0                   | 0.0                   | 80.67                   | 100.16                   | 153                      | -89.13                | 45.67                 | 21.12(=19.92+1.2)     | 57.88(=56.62+1.26)    | 13.3(=11.93+1.37)     | 0.2288                | 0.6271                | 0.6532                       |
| D65-Reflexion:                       | <i>C</i> <sub>d</sub>  | 0.0                   | 1.0                   | 1.0                   | 77.04                   | 64.24                    | 214                      | -52.95                | -36.35                | 28.92(=27.72+1.2)     | 51.6(=50.34+1.26)     | 95.79(=94.42+1.37)    | 0.164                 | 0.2927                | 0.5824                       |
| <i>Y</i> <sub>N</sub> = 1.26         | <i>B</i> <sub>d</sub>  | 0.0                   | 0.0                   | 1.0                   | 46.91                   | 71.66                    | 272                      | 2.94                  | -71.59                | 16.28(=15.08+1.2)     | 15.95(=14.69+1.26)    | 95.34(=93.97+1.37)    | 0.1276                | 0.125                 | 0.18                         |
|                                      | <i>M</i> <sub>d</sub>  | 1.0                   | 0.0                   | 1.0                   | 62.27                   | 100.13                   | 333                      | 89.12                 | -45.65                | 63.09(=61.89+1.2)     | 30.72(=29.46+1.26)    | 83.18(=81.81+1.37)    | 0.3564                | 0.1736                | 0.3468                       |
| <i>L</i> * <i>N</i> = 11.0           | <i>NO</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(= -1.17+1.2)     | 0.02(= -1.23+1.26)    | 0.02(= -1.34+1.37)    | 0.3327                | 0.3327                | 0.0002                       |
|                                      | <i>WO</i> <sub>d</sub> | 1.0                   | 1.0                   | 1.0                   | 95.41                   | 0.0                      | 0                        | 0.0                   | 0.0                   | 84.21(=83.02+1.2)     | 88.6(=87.34+1.26)     | 96.49(=95.11+1.37)    | 0.3127                | 0.329                 | 1.0                          |
| Normierung:                          | <i>NI</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(= -1.17+1.2)     | 0.02(= -1.23+1.26)    | 0.02(= -1.34+1.37)    | 0.3327                | 0.3327                | 0.0002                       |
| Weiß <i>Y</i> <sub>W</sub> =89       | <i>WI</i> <sub>d</sub> | 1.13                  | 1.13                  | 1.13                  | 100.0                   | 0.56                     | 91                       | 0.0                   | 0.56                  | 95.06(=93.86+1.2)     | 100.01(=98.75+1.26)   | 108.3(=106.93+1.37)   | 0.3133                | 0.3297                | 1.1288                       |
|                                      | <i>ZI</i> <sub>d</sub> | 0.18                  | 0.18                  | 0.18                  | 49.5                    | 0.1                      | 82                       | 0.01                  | 0.1                   | 17.12(=15.92+1.2)     | 18.0(=16.74+1.26)     | 19.5(=18.13+1.37)     | 0.3134                | 0.3296                | 0.2032                       |

| System TLS18a                        | Farbe                  | <i>r</i> <sub>d</sub> | <i>g</i> <sub>d</sub> | <i>b</i> <sub>d</sub> | <i>L</i> * <sub>d</sub> | <i>C</i> <sub>AB,d</sub> | <i>h</i> <sub>AB,d</sub> | <i>A</i> <sub>d</sub> | <i>B</i> <sub>d</sub> | <i>X</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> | <i>Z</i> <sub>d</sub> | <i>x</i> <sub>d</sub> | <i>y</i> <sub>d</sub> | <i>Y</i> <sub>d</sub> /88.59 |
|--------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| WCGa                                 | <i>R</i> <sub>d</sub>  | 1.0                   | 0.0                   | 0.0                   | 67.27                   | 64.22                    | 34                       | 52.93                 | 36.37                 | 55.29(=52.89+2.4)     | 37.0(=34.48+2.52)     | 0.68(=-2.05+2.74)     | 0.5947                | 0.3979                | 0.4176                       |
| <i>L</i> * <i>ABCh</i> <sub>AB</sub> | <i>Y</i> <sub>d</sub>  | 1.0                   | 1.0                   | 0.0                   | 88.28                   | 71.67                    | 92                       | -2.93                 | 71.61                 | 67.94(=65.55+2.4)     | 72.65(=70.13+2.52)    | 1.14(=-1.6+2.74)      | 0.4794                | 0.5126                | 0.82                         |
|                                      | <i>G</i> <sub>d</sub>  | 0.0                   | 1.0                   | 0.0                   | 80.67                   | 100.16                   | 153                      | -89.13                | 45.67                 | 21.12(=18.73+2.4)     | 57.88(=55.36+2.52)    | 13.3(=10.55+2.74)     | 0.2288                | 0.6271                | 0.6532                       |
| D65-Reflexion:                       | <i>C</i> <sub>d</sub>  | 0.0                   | 1.0                   | 1.0                   | 77.04                   | 64.24                    | 214                      | -52.95                | -36.35                | 28.92(=26.52+2.4)     | 51.6(=49.08+2.52)     | 95.79(=93.05+2.74)    | 0.164                 | 0.2927                | 0.5824                       |
|                                      | <i>B</i> <sub>d</sub>  | 0.0                   | 0.0                   | 1.0                   | 46.91                   | 71.66                    | 272                      | 2.94                  | -71.59                | 16.28(=13.88+2.4)     | 15.95(=13.43+2.52)    | 95.34(=92.6+2.74)     | 0.1276                | 0.125                 | 0.18                         |
| <i>Y</i> <sub>N</sub> = 2.52         | <i>M</i> <sub>d</sub>  | 1.0                   | 0.0                   | 1.0                   | 62.27                   | 100.13                   | 333                      | 89.12                 | -45.65                | 63.09(=60.69+2.4)     | 30.72(=28.2+2.52)     | 83.18(=80.44+2.74)    | 0.3564                | 0.1736                | 0.3468                       |
| <i>L</i> * <i>N</i> = 18.01          | <i>NO</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(=-2.37+2.4)      | 0.02(=-2.49+2.52)     | 0.02(=-2.71+2.74)     | 0.3327                | 0.3327                | 0.0002                       |
|                                      | <i>WO</i> <sub>d</sub> | 1.0                   | 1.0                   | 1.0                   | 95.41                   | 0.0                      | 0                        | 0.0                   | 0.0                   | 84.21(=81.82+2.4)     | 88.6(=86.08+2.52)     | 96.49(=93.74+2.74)    | 0.3127                | 0.329                 | 1.0                          |
| Normierung:                          | <i>NI</i> <sub>d</sub> | 0.0                   | 0.0                   | 0.0                   | 0.17                    | 0.0                      | 0                        | 0.0                   | 0.0                   | 0.02(=-2.37+2.4)      | 0.02(=-2.49+2.52)     | 0.02(=-2.71+2.74)     | 0.3327                | 0.3327                | 0.0002                       |
| Weiß <i>Y</i> <sub>W</sub> =89       | <i>WI</i> <sub>d</sub> | 1.13                  | 1.13                  | 1.13                  | 100.0                   | 0.56                     | 91                       | 0.0                   | 0.56                  | 95.06(=92.66+2.4)     | 100.01(=97.49+2.52)   | 108.3(=105.56+2.74)   | 0.3133                | 0.3297                | 1.1288                       |
|                                      | <i>ZI</i> <sub>d</sub> | 0.18                  | 0.18                  | 0.18                  | 49.5                    | 0.1                      | 82                       | 0.01                  | 0.1                   | 17.12(=14.72+2.4)     | 18.0(=15.48+2.52)     | 19.5(=16.76+2.74)     | 0.3134                | 0.3296                | 0.2032                       |

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

| System TLS00b  | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$              | $Y_d$               | $Z_d$               | $x_d$  | $y_d$  | $Y_d/88.59$ |
|----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|--------------------|---------------------|---------------------|--------|--------|-------------|
| WCGa           | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.23      | 34         | 52.94  | 36.37  | 55.29(=55.28+0.01) | 36.99(=36.98+0.01)  | 0.67(=0.66+0.01)    | 0.5948 | 0.398  | 0.4175      |
| $L^*ABCh_{AB}$ | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.68      | 92         | -2.93  | 71.62  | 67.94(=67.93+0.01) | 72.65(=72.64+0.01)  | 1.13(=1.11+0.01)    | 0.4794 | 0.5127 | 0.82        |
|                | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.17     | 153        | -89.14 | 45.67  | 21.11(=21.1+0.01)  | 57.87(=57.86+0.01)  | 13.29(=13.28+0.01)  | 0.2288 | 0.6272 | 0.6532      |
| D65-Reflexion: | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.91(=28.9+0.01)  | 51.6(=51.59+0.01)   | 95.79(=95.78+0.01)  | 0.164  | 0.2927 | 0.5824      |
| $Y_N = 0.0$    | $B_d$  | 0.0   | 0.0   | 1.0   | 46.89   | 71.67      | 272        | 2.94   | -71.6  | 16.27(=16.26+0.01) | 15.94(=15.93+0.01)  | 95.34(=95.33+0.01)  | 0.1275 | 0.125  | 0.1799      |
|                | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.14     | 333        | 89.13  | -45.65 | 63.08(=63.07+0.01) | 30.72(=30.71+0.01)  | 83.18(=83.17+0.01)  | 0.3564 | 0.1736 | 0.3467      |
| $L^*_N = 0.0$  | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01(=0.0+0.01)    | 0.01(=0.0+0.01)     | 0.01(=0.0+0.01)     | 0.3321 | 0.3321 | 0.0001      |
|                | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=84.2+0.01)  | 88.6(=88.59+0.01)   | 96.49(=96.47+0.01)  | 0.3127 | 0.329  | 1.0         |
| Normierung:    | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.08    | 0.0        | 0          | 0.0    | 0.0    | 0.01(=0.0+0.01)    | 0.01(=0.0+0.01)     | 0.01(=0.0+0.01)     | 0.3321 | 0.3321 | 0.0001      |
| Weiß $Y_W=89$  | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=95.05+0.01) | 100.01(=100.0+0.01) | 108.3(=108.29+0.01) | 0.3133 | 0.3297 | 1.1288      |
|                | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.49   | 0.1        | 83         | 0.01   | 0.1    | 17.11(=17.1+0.01)  | 17.99(=17.98+0.01)  | 19.49(=19.48+0.01)  | 0.3134 | 0.3296 | 0.2031      |

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

| System TLS27a   | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$              | $Y_d$               | $Z_d$               | $x_d$  | $y_d$  | $Y_d/88.59$ |
|-----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|--------------------|---------------------|---------------------|--------|--------|-------------|
| WCGa            | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.22      | 34         | 52.93  | 36.37  | 55.29(=50.5+4.79)  | 37.0(=31.96+5.04)   | 0.68(=-4.79+5.49)   | 0.5947 | 0.3979 | 0.4176      |
| $L^*ABCh_{AB}$  | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.67      | 92         | -2.93  | 71.61  | 67.94(=63.15+4.79) | 72.65(=67.61+5.04)  | 1.14(=-4.34+5.49)   | 0.4794 | 0.5126 | 0.82        |
|                 | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.16     | 153        | -89.13 | 45.67  | 21.12(=16.33+4.79) | 57.88(=52.84+5.04)  | 13.3(=-7.81+5.49)   | 0.2288 | 0.6271 | 0.6532      |
| D65-Reflexion:  | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.92(=24.13+4.79) | 51.6(=46.56+5.04)   | 95.79(=90.31+5.49)  | 0.164  | 0.2927 | 0.5824      |
| $Y_N = 5.04$    | $B_d$  | 0.0   | 0.0   | 1.0   | 46.91   | 71.66      | 272        | 2.94   | -71.59 | 16.28(=11.49+4.79) | 15.95(=10.91+5.04)  | 95.34(=89.86+5.49)  | 0.1276 | 0.125  | 0.18        |
|                 | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.13     | 333        | 89.12  | -45.65 | 63.09(=58.3+4.79)  | 30.72(=25.68+5.04)  | 83.18(=77.69+5.49)  | 0.3564 | 0.1736 | 0.3468      |
| $L^*_N = 26.85$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-4.76+4.79)  | 0.02(=-5.01+5.04)   | 0.02(=-5.46+5.49)   | 0.3327 | 0.3327 | 0.0002      |
|                 | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=79.42+4.79) | 88.6(=83.56+5.04)   | 96.49(=91.0+5.49)   | 0.3127 | 0.329  | 1.0         |
| Normierung:     | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-4.76+4.79)  | 0.02(=-5.01+5.04)   | 0.02(=-5.46+5.49)   | 0.3327 | 0.3327 | 0.0002      |
| Weiß $Y_W=89$   | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=90.27+4.79) | 100.01(=94.97+5.04) | 108.3(=102.82+5.49) | 0.3133 | 0.3297 | 1.1288      |
|                 | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.5    | 0.1        | 82         | 0.01   | 0.1    | 17.12(=12.33+4.79) | 18.0(=12.96+5.04)   | 19.5(=14.01+5.49)   | 0.3134 | 0.3296 | 0.2032      |

| System TLS38a   | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$              | $Y_d$                | $Z_d$               | $x_d$  | $y_d$  | $Y_d/88.59$ |
|-----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|--------------------|----------------------|---------------------|--------|--------|-------------|
| WCGa            | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.22      | 34         | 52.93  | 36.37  | 55.29(=45.71+9.58) | 37.0(=26.92+10.08)   | 0.68(=-10.28+10.98) | 0.5947 | 0.3979 | 0.4176      |
| $L^*ABCh_{AB}$  | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.67      | 92         | -2.93  | 71.61  | 67.94(=58.36+9.58) | 72.65(=62.57+10.08)  | 1.14(=-9.83+10.98)  | 0.4794 | 0.5126 | 0.82        |
|                 | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.16     | 153        | -89.13 | 45.67  | 21.12(=11.54+9.58) | 57.88(=47.8+10.08)   | 13.3(=-2.32+10.98)  | 0.2288 | 0.6271 | 0.6532      |
| D65-Reflexion:  | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.92(=19.34+9.58) | 51.6(=41.52+10.08)   | 95.79(=84.82+10.98) | 0.164  | 0.2927 | 0.5824      |
| $Y_N = 10.08$   | $B_d$  | 0.0   | 0.0   | 1.0   | 46.91   | 71.66      | 272        | 2.94   | -71.59 | 16.28(=6.69+9.58)  | 15.95(=5.87+10.08)   | 95.34(=84.37+10.98) | 0.1276 | 0.125  | 0.18        |
|                 | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.13     | 333        | 89.12  | -45.65 | 63.09(=53.51+9.58) | 30.72(=20.64+10.08)  | 83.18(=72.2+10.98)  | 0.3564 | 0.1736 | 0.3468      |
| $L^*_N = 37.99$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-9.55+9.58)  | 0.02(=-10.95+10.08)  | 0.02(=-10.95+10.98) | 0.3327 | 0.3327 | 0.0002      |
|                 | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=74.63+9.58) | 88.6(=78.52+10.08)   | 96.49(=85.51+10.98) | 0.3127 | 0.329  | 1.0         |
| Normierung:     | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-9.55+9.58)  | 0.02(=-10.95+10.08)  | 0.02(=-10.95+10.98) | 0.3327 | 0.3327 | 0.0002      |
| Weiß $Y_W=89$   | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=85.48+9.58) | 100.01(=89.93+10.08) | 108.3(=97.33+10.98) | 0.3133 | 0.3297 | 1.1288      |
|                 | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.5    | 0.1        | 82         | 0.01   | 0.1    | 17.12(=7.54+9.58)  | 18.0(=7.92+10.08)    | 19.5(=8.52+10.98)   | 0.3134 | 0.3296 | 0.2032      |

| System TLS52a   | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$               | $Y_d$                | $Z_d$               | $x_d$  | $y_d$  | $Y_d/88.59$ |
|-----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|---------------------|----------------------|---------------------|--------|--------|-------------|
| WCGa            | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.22      | 34         | 52.93  | 36.37  | 55.29(=36.13+19.16) | 37.0(=16.84+20.16)   | 0.68(=-21.26+21.95) | 0.5947 | 0.3979 | 0.4176      |
| $L^*ABCh_{AB}$  | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.67      | 92         | -2.93  | 71.61  | 67.94(=48.78+19.16) | 72.65(=52.49+20.16)  | 1.14(=-20.81+21.95) | 0.4794 | 0.5126 | 0.82        |
|                 | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.16     | 153        | -89.13 | 45.67  | 21.12(=1.96+19.16)  | 57.88(=37.72+20.16)  | 13.3(=-8.64+21.95)  | 0.2288 | 0.6271 | 0.6532      |
| D65-Reflexion:  | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.92(=9.76+19.16)  | 51.6(=31.44+20.16)   | 95.79(=73.84+21.95) | 0.164  | 0.2927 | 0.5824      |
| $Y_N = 20.16$   | $B_d$  | 0.0   | 0.0   | 1.0   | 46.91   | 71.66      | 272        | 2.94   | -71.59 | 16.28(=-2.88+19.16) | 15.95(=-4.2+20.16)   | 95.34(=73.39+21.95) | 0.1276 | 0.125  | 0.18        |
|                 | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.13     | 333        | 89.12  | -45.65 | 63.09(=43.93+19.16) | 30.72(=10.56+20.16)  | 83.18(=61.23+21.95) | 0.3564 | 0.1736 | 0.3468      |
| $L^*_N = 52.02$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-19.13+19.16) | 0.02(=-20.13+20.16)  | 0.02(=-21.92+21.95) | 0.3327 | 0.3327 | 0.0002      |
|                 | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=65.05+19.16) | 88.6(=68.44+20.16)   | 96.49(=74.54+21.95) | 0.3127 | 0.329  | 1.0         |
| Normierung:     | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-19.13+19.16) | 0.02(=-20.13+20.16)  | 0.02(=-21.92+21.95) | 0.3327 | 0.3327 | 0.0002      |
| Weiß $Y_W=89$   | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=75.9+19.16)  | 100.01(=79.85+20.16) | 108.3(=86.35+21.95) | 0.3133 | 0.3297 | 1.1288      |
|                 | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.5    | 0.1        | 82         | 0.01   | 0.1    | 17.12(=-2.03+19.16) | 18.0(=-2.15+20.16)   | 19.5(=-2.44+21.95)  | 0.3134 | 0.3296 | 0.2032      |

| System TLS70a  | Farbe  | $r_d$ | $g_d$ | $b_d$ | $L^*_d$ | $C_{AB,d}$ | $h_{AB,d}$ | $A_d$  | $B_d$  | $X_d$                | $Y_d$                | $Z_d$              | $x_d$  | $y_d$  | $Y_d/88.59$ |
|----------------|--------|-------|-------|-------|---------|------------|------------|--------|--------|----------------------|----------------------|--------------------|--------|--------|-------------|
| WCGa           | $R_d$  | 1.0   | 0.0   | 0.0   | 67.27   | 64.22      | 34         | 52.93  | 36.37  | 55.29(=16.97+38.32)  | 37.0(=-3.31+40.32)   | 0.68(=-43.21+43.9) | 0.5947 | 0.3979 | 0.4176      |
| $L^*ABCh_{AB}$ | $Y_d$  | 1.0   | 1.0   | 0.0   | 88.28   | 71.67      | 92         | -2.93  | 71.61  | 67.94(=29.62+38.32)  | 72.65(=32.33+40.32)  | 1.14(=-42.76+43.9) | 0.4794 | 0.5126 | 0.82        |
|                | $G_d$  | 0.0   | 1.0   | 0.0   | 80.67   | 100.16     | 153        | -89.13 | 45.67  | 21.12(=-17.19+38.32) | 57.88(=17.56+40.32)  | 13.3(=-30.59+43.9) | 0.2288 | 0.6271 | 0.6532      |
| D65-Reflexion: | $C_d$  | 0.0   | 1.0   | 1.0   | 77.04   | 64.24      | 214        | -52.95 | -36.35 | 28.92(=-9.39+38.32)  | 51.6(=11.28+40.32)   | 95.79(=51.89+43.9) | 0.164  | 0.2927 | 0.5824      |
| $Y_N = 40.32$  | $B_d$  | 0.0   | 0.0   | 1.0   | 46.91   | 71.66      | 272        | 2.94   | -71.59 | 16.28(=-22.04+38.32) | 15.95(=-24.36+40.32) | 95.34(=51.44+43.9) | 0.1276 | 0.125  | 0.18        |
|                | $M_d$  | 1.0   | 0.0   | 1.0   | 62.27   | 100.13     | 333        | 89.12  | -45.65 | 63.09(=24.77+38.32)  | 30.72(=-9.59+40.32)  | 83.18(=39.28+43.9) | 0.3564 | 0.1736 | 0.3468      |
| $L^*_N = 69.7$ | $NO_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-38.29+38.32)  | 0.02(=-40.29+40.32)  | 0.02(=-43.87+43.9) | 0.3327 | 0.3327 | 0.0002      |
|                | $WO_d$ | 1.0   | 1.0   | 1.0   | 95.41   | 0.0        | 0          | 0.0    | 0.0    | 84.21(=45.89+38.32)  | 88.6(=48.28+40.32)   | 96.49(=52.58+43.9) | 0.3127 | 0.329  | 1.0         |
| Normierung:    | $NI_d$ | 0.0   | 0.0   | 0.0   | 0.17    | 0.0        | 0          | 0.0    | 0.0    | 0.02(=-38.29+38.32)  | 0.02(=-40.29+40.32)  | 0.02(=-43.87+43.9) | 0.3327 | 0.3327 | 0.0002      |
| Weiß $Y_W=89$  | $WI_d$ | 1.13  | 1.13  | 1.13  | 100.0   | 0.56       | 91         | 0.0    | 0.56   | 95.06(=56.74+38.32)  | 100.01(=59.69+40.32) | 108.3(=64.4+43.9)  | 0.3133 | 0.3297 | 1.1288      |
|                | $ZI_d$ | 0.18  | 0.18  | 0.18  | 49.5    | 0.1        | 82         | 0.01   | 0.1    | 17.12(=-21.19+38.32) | 18.0(=-22.31+40.32)  | 19.5(=-24.39+43.9) | 0.3134 | 0.3296 | 0.2032      |