

| Colorimetric "Standard data": Television Luminous System TLS18 for CIE lightness $L^*_N=18$ of black for illuminant D65 |       |            |            |            |       |        |        |            |          |           |           |           |        |        |         |
|-------------------------------------------------------------------------------------------------------------------------|-------|------------|------------|------------|-------|--------|--------|------------|----------|-----------|-----------|-----------|--------|--------|---------|
| System TLS18                                                                                                            | Color | $r=olv*_1$ | $g=olv*_2$ | $b=olv*_3$ | $L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h_{ab}$ | $X=XYZ_1$ | $Y=XYZ_2$ | $Z=XYZ_3$ | x      | y      | Y/88.59 |
| sRGB system                                                                                                             | O (R) | 1.0        | 0.0        | 0.0        | 52.76 | 71.63  | 49.88  | 87.29      | 35       | 37.89     | 20.83     | 4.41      | 0.6003 | 0.3299 | 0.2351  |
|                                                                                                                         | Y     | 1.0        | 1.0        | 0.0        | 92.74 | -20.03 | 84.97  | 87.3       | 103      | 68.67     | 82.37     | 14.66     | 0.4144 | 0.4971 | 0.9298  |
| D65 reflection:                                                                                                         | L (G) | 0.0        | 1.0        | 0.0        | 84.0  | -78.99 | 73.94  | 108.2      | 137      | 33.17     | 64.07     | 13.0      | 0.3009 | 0.5812 | 0.7231  |
|                                                                                                                         | C     | 0.0        | 1.0        | 1.0        | 87.14 | -44.42 | -13.12 | 46.33      | 196      | 48.71     | 70.29     | 94.77     | 0.2279 | 0.3288 | 0.7934  |
| $Y_N = 2.52$                                                                                                            | V (B) | 0.0        | 0.0        | 1.0        | 31.9  | 24.46  | -37.38 | 44.68      | 303      | 9.36      | 7.04      | 23.5      | 0.2346 | 0.1764 | 0.0795  |
| $L^*_N = 18.01$                                                                                                         | M     | 1.0        | 0.0        | 1.0        | 59.01 | 89.33  | -19.43 | 91.42      | 348      | 53.42     | 27.04     | 44.81     | 0.4265 | 0.2158 | 0.3052  |
|                                                                                                                         | N     | 0.0        | 0.0        | 0.0        | 18.01 | 0.0    | 0.0    | 0.01       | 0        | 2.4       | 2.52      | 2.74      | 0.3127 | 0.329  | 0.0284  |
|                                                                                                                         | W     | 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     |
|                                                                                                                         | N0    | 0.0        | 0.0        | 0.0        | 18.01 | 0.0    | 0.0    | 0.01       | 0        | 2.4       | 2.52      | 2.74      | 0.3127 | 0.329  | 0.0284  |
|                                                                                                                         | W1    | 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 TLS18a for CIE lightness $L^*_N=18$ of black for illuminant D65 |       |            |            |            |         |         |         |              |            |                |                |                |        |        |             |
|-----------------------------------------------------------------------------------------------------------------------------|-------|------------|------------|------------|---------|---------|---------|--------------|------------|----------------|----------------|----------------|--------|--------|-------------|
| System TLS18a                                                                                                               | Color | $r=olv*_1$ | $g=olv*_2$ | $b=olv*_3$ | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h_{ab,a}$ | $X_a=XYZ_{1a}$ | $Y_a=XYZ_{2a}$ | $Z_a=XYZ_{3a}$ | $x_a$  | $y_a$  | $Y_a/88.59$ |
| sRGB system                                                                                                                 | O (R) | 1.0        | 0.0        | 0.0        | 52.76   | 71.63   | 49.88   | 87.29        | 35         | 37.89          | 20.83          | 4.41           | 0.6003 | 0.3299 | 0.2351      |
|                                                                                                                             | Y     | 1.0        | 1.0        | 0.0        | 92.74   | -20.03  | 84.97   | 87.3         | 103        | 68.67          | 82.37          | 14.66          | 0.4144 | 0.4971 | 0.9298      |
| D65 reflection:                                                                                                             | L (G) | 0.0        | 1.0        | 0.0        | 84.0    | -78.99  | 73.94   | 108.2        | 137        | 33.17          | 64.07          | 13.0           | 0.3009 | 0.5812 | 0.7231      |
|                                                                                                                             | C     | 0.0        | 1.0        | 1.0        | 87.14   | -44.42  | -13.12  | 46.33        | 196        | 48.71          | 70.29          | 94.77          | 0.2279 | 0.3288 | 0.7934      |
| $Y_N = 2.52$                                                                                                                | V (B) | 0.0        | 0.0        | 1.0        | 31.9    | 24.46   | -37.38  | 44.68        | 303        | 9.36           | 7.04           | 23.5           | 0.2346 | 0.1764 | 0.0795      |
| $L^*_N = 18.01$                                                                                                             | M     | 1.0        | 0.0        | 1.0        | 59.01   | 89.33   | -19.43  | 91.42        | 348        | 53.42          | 27.04          | 44.81          | 0.4265 | 0.2158 | 0.3052      |
|                                                                                                                             | N     | 0.0        | 0.0        | 0.0        | 18.01   | 0.0     | 0.0     | 0.01         | 0          | 2.4            | 2.52           | 2.74           | 0.3127 | 0.329  | 0.0284      |
|                                                                                                                             | W     | 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         |
|                                                                                                                             | N0    | 0.0        | 0.0        | 0.0        | 18.01   | 0.0     | 0.0     | 0.01         | 0          | 2.4            | 2.52           | 2.74           | 0.3127 | 0.329  | 0.0284      |
|                                                                                                                             | W1    | 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 (a0)": Television Luminous System TLS00a0 for CIE lightness $L^*_N=00$ of black for illuminant D65 |       |            |            |            |            |            |            |               |             |                      |                       |                       |          |          |                |
|-------------------------------------------------------------------------------------------------------------------------------|-------|------------|------------|------------|------------|------------|------------|---------------|-------------|----------------------|-----------------------|-----------------------|----------|----------|----------------|
| System TLS00a0                                                                                                                | Color | $r=olv*_1$ | $g=olv*_2$ | $b=olv*_3$ | $L^*_{a0}$ | $a^*_{a0}$ | $b^*_{a0}$ | $C^*_{ab,a0}$ | $h_{ab,a0}$ | $X_{a0}=XYZ_{1a0}$   | $Y_{a0}=XYZ_{2a0}$    | $Z_{a0}=XYZ_{3a0}$    | $x_{a0}$ | $y_{a0}$ | $Y_{a0}/88.59$ |
| sRGB system                                                                                                                   | O (R) | 1.0        | 0.0        | 0.0        | 50.5       | 76.92      | 64.55      | 100.42        | 40          | $36.54=k(37.89-2.4)$ | $18.84=k(20.83-2.52)$ | $1.71=k(4.41-2.74)$   | 0.64     | 0.33     | 0.2127         |
|                                                                                                                               | Y     | 1.0        | 1.0        | 0.0        | 92.66      | -20.68     | 90.75      | 93.08         | 103         | $68.22=k(68.67-2.4)$ | $82.19=k(82.37-2.52)$ | $12.27=k(14.66-2.74)$ | 0.4193   | 0.5053   | 0.9278         |
| D65 reflection:                                                                                                               | L (G) | 0.0        | 1.0        | 0.0        | 83.62      | -82.74     | 79.9       | 115.03        | 136         | $31.68=k(33.17-2.4)$ | $63.35=k(64.07-2.52)$ | $10.55=k(13.0-2.74)$  | 0.3      | 0.6      | 0.715          |
|                                                                                                                               | C     | 0.0        | 1.0        | 1.0        | 86.88      | -46.15     | -13.54     | 48.11         | 196         | $47.67=k(48.71-2.4)$ | $69.76=k(70.29-2.52)$ | $94.72=k(94.77-2.74)$ | 0.2247   | 0.3288   | 0.7874         |
| $Y_N = 0.0$                                                                                                                   | V (B) | 0.0        | 0.0        | 1.0        | 25.72      | 31.45      | -44.28     | 54.32         | 305         | $7.17=k(9.36-2.4)$   | $4.65=k(7.04-2.52)$   | $21.37=k(23.5-2.74)$  | 0.2161   | 0.1402   | 0.0525         |
| $L^*_N = 0.0$                                                                                                                 | M     | 1.0        | 0.0        | 1.0        | 57.3       | 94.35      | -20.68     | 96.59         | 348         | $52.52=k(53.42-2.4)$ | $25.24=k(27.04-2.52)$ | $43.3=k(44.81-2.74)$  | 0.4339   | 0.2085   | 0.2849         |
|                                                                                                                               | N     | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.01          | 358         | $0.0=k(2.4-2.4)$     | $0.0=k(2.52-2.52)$    | $0.0=k(2.74-2.74)$    | 0.0      | 0.0      | 0.0            |
| $k = 88.59 / ( 88.59 - 2.52 )$<br>$= 1.029$                                                                                   | W     | 1.0        | 1.0        | 1.0        | 95.41      | 0.0        | 0.0        | 0.01          | 0           | $84.2=k(84.2-2.4)$   | $88.59=k(88.59-2.52)$ | $96.46=k(96.46-2.74)$ | 0.3127   | 0.329    | 1.0            |
|                                                                                                                               | N0    | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.01          | 358         | $0.0=k(2.4-2.4)$     | $0.0=k(2.52-2.52)$    | $0.0=k(2.74-2.74)$    | 0.0      | 0.0      | 0.0            |
|                                                                                                                               | W1    | 1.0        | 1.0        | 1.0        | 95.41      | 0.0        | 0.0        | 0.01          | 0           | $84.2=k(84.2-2.4)$   | $88.59=k(88.59-2.52)$ | $96.46=k(96.46-2.74)$ | 0.3127   | 0.329    | 1.0            |