

**CIE02 tristimulus values, chromatic values, and purities ( $n_1=1.4$ ,  $n_2=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no.   | $\lambda_n$ | tristimulus values and chromaticities |       |       |       | nu-chromatic values |       |        |       |       |           |
|-------|-------------|---------------------------------------|-------|-------|-------|---------------------|-------|--------|-------|-------|-----------|
|       |             | X                                     | Y     | z     | x     | y                   | z     | $A_m$  | $B_m$ | $C_m$ | $P_{ABm}$ |
| 00    | 396         | 31.24                                 | 12.19 | 76.69 | 0.260 | 0.101               | 0.638 | 72.3   | -84.1 | 111.0 | 310       |
| 01    | 396         | 31.25                                 | 33.34 | 78.11 | 0.135 | 0.064               | 0.799 | -20.0  | -89.1 | 91.3  | 282       |
| 02    | 466         | 13.27                                 | 8.01  | 79.21 | 0.132 | 0.079               | 0.788 | 13.4   | -88.4 | 89.4  | 278       |
| 03    | 471         | 13.39                                 | 12.66 | 80.68 | 0.125 | 0.118               | 0.755 | -4.4   | -84.7 | 84.8  | 266       |
| 04    | 475B        | 14.00                                 | 19.21 | 81.44 | 0.122 | 0.167               | 0.710 | -27.6  | -77.9 | 82.7  | 250       |
| 05    | 479         | 15.61                                 | 27.50 | 81.85 | 0.124 | 0.220               | 0.655 | -53.3  | -68.9 | 87.1  | 232       |
| 06    | 481         | 18.42                                 | 36.66 | 82.05 | 0.134 | 0.267               | 0.598 | -77.4  | -58.9 | 97.2  | 217       |
| 07    | 483         | 20.35                                 | 41.45 | 82.11 | 0.141 | 0.288               | 0.570 | -88.1  | -53.6 | 103.1 | 211       |
| 08    | 484         | 22.64                                 | 46.29 | 82.14 | 0.149 | 0.306               | 0.543 | -97.4  | -48.4 | 108.8 | 206       |
| 09    | 485         | 25.29                                 | 51.06 | 82.16 | 0.159 | 0.322               | 0.518 | -105.0 | -43.3 | 113.6 | 202       |
| 10    | 486C        | 29.62                                 | 57.81 | 81.62 | 0.175 | 0.341               | 0.482 | -113.2 | -35.5 | 118.7 | 197       |
| 11    | 490         | 26.32                                 | 58.17 | 83.51 | 0.177 | 0.393               | 0.429 | -126.0 | -12.6 | 126.6 | 185       |
| 12    | 497         | 23.01                                 | 56.66 | 82.48 | 0.185 | 0.472               | 0.342 | -138.9 | 13.8  | 139.6 | 174       |
| 13    | 501         | 22.62                                 | 59.57 | 35.18 | 0.192 | 0.507               | 0.299 | -143.1 | 23.7  | 145.0 | 170       |
| 14    | 506         | 22.26                                 | 60.29 | 28.28 | 0.200 | 0.543               | 0.255 | -146.5 | 33.0  | 150.1 | 167       |
| 15    | 519         | 21.83                                 | 61.02 | 17.06 | 0.218 | 0.610               | 0.170 | -149.6 | 47.4  | 157.0 | 162       |
| 16    | 522G        | 24.04                                 | 63.42 | 17.06 | 0.230 | 0.606               | 0.163 | -149.8 | 49.8  | 157.8 | 161       |
| 17    | 535         | 27.22                                 | 66.19 | 9.71  | 0.263 | 0.641               | 0.094 | -146.3 | 61.3  | 158.7 | 157       |
| 18    | 544         | 35.20                                 | 72.16 | 7.33  | 0.306 | 0.629               | 0.063 | -136.1 | 69.6  | 152.8 | 152       |
| 19    | 561         | 65.07                                 | 87.80 | 5.54  | 0.410 | 0.554               | 0.034 | -72.3  | 84.1  | 111.0 | 310       |
| 20    | 568         | 83.05                                 | 93.65 | 4.13  | 0.459 | 0.517               | 0.022 | -20.0  | 89.1  | 91.3  | 282       |
| 21    | 569         | 83.03                                 | 91.98 | 3.02  | 0.466 | 0.516               | 0.016 | -13.4  | 88.4  | 89.4  | 98        |
| 22    | 571         | 82.92                                 | 83.73 | 1.55  | 0.482 | 0.508               | 0.009 | -4.4   | 84.7  | 84.8  | 86        |
| 23    | 573Y        | 82.30                                 | 80.76 | 0.00  | 0.502 | 0.492               | 0.004 | 27.6   | 77.9  | 82.7  | 70        |
| 24    | 577         | 80.69                                 | 72.49 | 0.38  | 0.525 | 0.472               | 0.002 | 53.3   | 68.9  | 87.1  | 52        |
| 25    | 581         | 77.87                                 | 63.33 | 0.18  | 0.550 | 0.447               | 0.001 | 77.3   | 58.9  | 97.2  | 37        |
| 26    | 583         | 75.96                                 | 58.54 | 0.13  | 0.564 | 0.434               | 0.000 | 88.1   | 53.6  | 103.1 | 31        |
| 27    | 585         | 73.67                                 | 53.70 | 0.09  | 0.577 | 0.421               | 0.000 | 97.4   | 48.4  | 108.8 | 26        |
| 28    | 587         | 71.01                                 | 48.93 | 0.07  | 0.591 | 0.407               | 0.000 | 105.0  | 43.3  | 113.6 | 22        |
| 29    | 592R        | 66.69                                 | 42.18 | 0.61  | 0.609 | 0.385               | 0.005 | 113.3  | 35.5  | 118.7 | 17        |
| 30    | 631         | 69.99                                 | 41.82 | 18.71 | 0.536 | 0.320               | 0.143 | 126.0  | 12.6  | 126.6 | 5         |
| 31    | 702         | 73.30                                 | 41.33 | 39.75 | 0.474 | 0.267               | 0.257 | 138.9  | -13.8 | 139.6 | 354       |
| 32    | 706         | 73.69                                 | 40.41 | 47.04 | 0.457 | 0.250               | 0.291 | 143.1  | -23.7 | 145.1 | 350       |
| 33    | 711         | 74.05                                 | 39.70 | 53.95 | 0.441 | 0.236               | 0.321 | 146.5  | -33.0 | 150.2 | 347       |
| 34    | 724         | 72.26                                 | 36.57 | 65.18 | 0.416 | 0.218               | 0.364 | 149.6  | -47.4 | 157.0 | 342       |
| 35    | 727M        | 72.26                                 | 36.57 | 65.17 | 0.415 | 0.210               | 0.374 | 149.8  | -49.8 | 157.9 | 341       |
| 36    | 740         | 69.08                                 | 33.80 | 72.53 | 0.393 | 0.192               | 0.413 | 146.3  | -61.3 | 158.7 | 337       |
| 37    | 749         | 61.10                                 | 27.83 | 74.91 | 0.372 | 0.169               | 0.457 | 136.0  | -69.6 | 152.8 | 332       |
| 38    | 766         | 31.24                                 | 12.19 | 76.69 | 0.260 | 0.101               | 0.638 | 72.3   | -84.1 | 111.0 | 310       |
| 39    | 828         | 13.25                                 | 6.34  | 78.11 | 0.135 | 0.064               | 0.799 | -20.0  | -89.1 | 91.3  | 282       |
| U=D50 | 500         | 96.31                                 | 99.99 | 98.24 | 0.345 | 0.358               | 0.358 | 0.0    | 0.0   | 0.0   | 0.0       |

U=D50 96.31 99.99 82.24 0.345 0.358 0.358 0.0 0.0 0.0 0.0

$b_{-Pm} = n_1 n_2 n_3 n_4 (b_{21} - b_{22})x + (b_{22} - b_{23})y + b_{23}z = 1.4(3.075x - 2.570y - 0.0960)z$

$b_{-Pm} = n_1 n_2 n_3 n_4 (b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}z = +0.5(1.9906x + 3.8617y - 2.4046)z$

DE730-3N

**CIE02 tristimulus values, chromatic values, and purities ( $n_1=1.4$ ,  $n_2=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no.   | $\lambda_n$ | Y     | n-purities |          |          |          |          | nu-purities |          |          |  |  |
|-------|-------------|-------|------------|----------|----------|----------|----------|-------------|----------|----------|--|--|
|       |             |       | $P_{nn}$   | $P_{nn}$ | $P_{nn}$ | $h_{nn}$ | $P_{nn}$ | $P_{nn}$    | $P_{nn}$ | $h_{nn}$ |  |  |
| 00    | 396         | 12.19 | 6.11       | -7.36    | 9.57     | 309      | 5.93     | -6.90       | 9.10     | 310      |  |  |
| 01    | 463         | 6.34  | 3.32       | -14.51   | 14.89    | 282      | 3.15     | -14.05      | 14.10    | 282      |  |  |
| 02    | 466         | 8.01  | 1.84       | -11.50   | 11.65    | 279      | 1.67     | -11.04      | 11.17    | 278      |  |  |
| 03    | 471         | 12.66 | -0.17      | -7.15    | 7.15     | 268      | -0.35    | -6.69       | 6.70     | 266      |  |  |
| 04    | 475B        | 19.21 | -1.26      | -4.51    | 4.69     | 254      | -1.43    | -4.05       | 4.30     | 250      |  |  |
| 05    | 479         | 27.50 | -1.76      | -2.96    | 3.45     | 239      | -1.93    | -2.50       | 3.17     | 232      |  |  |
| 06    | 481         | 36.66 | -1.93      | -2.06    | 2.83     | 226      | -2.11    | -1.60       | 2.65     | 217      |  |  |
| 07    | 483         | 41.45 | -1.95      | -1.75    | 2.62     | 221      | -2.12    | -1.29       | 2.48     | 211      |  |  |
| 08    | 484         | 46.29 | -1.93      | -1.50    | 2.44     | 217      | -2.10    | -1.04       | 2.35     | 206      |  |  |
| 09    | 485         | 51.06 | -1.88      | -1.30    | 2.29     | 214      | -2.05    | -0.84       | 2.22     | 202      |  |  |
| 10    | 486C        | 57.81 | -1.78      | -1.07    | 2.08     | 211      | -1.95    | -0.61       | 2.05     | 197      |  |  |
| 11    | 490         | 58.17 | -1.59      | -0.67    | 1.90     | 198      | -2.16    | -0.21       | 2.17     | 185      |  |  |
| 12    | 497         | 56.66 | -1.19      | -0.22    | 2.20     | 185      | -2.36    | 0.23        | 2.38     | 174      |  |  |
| 13    | 501         | 59.57 | -2.22      | -0.06    | 2.22     | 181      | -2.40    | 0.39        | 2.43     | 170      |  |  |
| 14    | 506         | 60.29 | -2.25      | 0.08     | 2.25     | 177      | -2.43    | 0.54        | 2.49     | 167      |  |  |
| 15    | 519         | 61.02 | -2.27      | 0.31     | 2.30     | 172      | -2.45    | 0.77        | 2.57     | 162      |  |  |
| 16    | 522G        | 63.42 | -2.18      | 0.32     | 2.21     | 171      | -2.36    | 0.78        | 2.48     | 161      |  |  |
| 17    | 535         | 66.19 | -2.03      | 0.46     | 2.08     | 167      | -2.21    | 0.92        | 2.39     | 157      |  |  |
| 18    | 544         | 72.16 | -1.71      | 0.50     | 1.78     | 163      | -1.88    | 0.96        | 2.11     | 152      |  |  |
| 19    | 561         | 87.80 | -0.64      | 0.49     | 0.81     | 142      | -0.82    | 0.95        | 1.26     | 130      |  |  |
| 20    | 568         | 93.65 | -0.03      | 0.49     | 0.49     | 94       | -0.21    | 0.95        | 0.97     | 102      |  |  |
| 21    | 569         | 91.98 | 0.02       | 0.50     | 0.50     | 86       | -0.14    | 0.96        | 0.97     | 98       |  |  |
| 22    | 571         | 87.33 | 0.22       | 0.51     | 0.55     | 66       | 0.05     | 0.97        | 0.97     | 86       |  |  |
| 23    | 573Y        | 80.76 | 0.51       | 0.50     | 0.72     | 44       | 0.34     | 0.96        | 1.02     | 70       |  |  |
| 24    | 577         | 72.49 | 0.91       | 0.49     | 1.03     | 28       | 0.73     | 0.95        | 1.20     | 52       |  |  |
| 25    | 581         | 63.33 | 1.39       | 0.47     | 1.47     | 18       | 1.22     | 0.93        | 1.53     | 37       |  |  |
| 26    | 583         | 58.54 | 1.67       | 0.45     | 1.74     | 15       | 1.50     | 0.91        | 1.76     | 31       |  |  |
| 27    | 585         | 53.70 | 1.99       | 0.44     | 2.03     | 12       | 1.81     | 0.90        | 2.02     | 26       |  |  |
| 28    | 587         | 48.93 | 2.32       | 0.42     | 2.36     | 10       | 2.14     | 0.88        | 2.32     | 22       |  |  |
| 29    | 592R        | 42.18 | 2.86       | 0.38     | 2.88     | 7        | 2.68     | 0.84        | 2.81     | 17       |  |  |
| 30    | 631         | 41.82 | 3.18       | -0.15    | 3.19     | 357      | 3.01     | 0.30        | 3.02     | 365      |  |  |
| 31    | 702         | 41.33 | 3.53       | -0.79    | 3.62     | 347      | 3.36     | -0.33       | 3.37     | 354      |  |  |
| 32    | 706         | 40.41 | 3.71       | -1.04    | 3.86     | 344      | 3.54     | -0.58       | 3.58     | 350      |  |  |
| 33    | 711         | 39.70 | 3.86       | -1.29    | 4.07     | 341      | 3.69     | -0.83       | 3.78     | 347      |  |  |
| 34    | 724         | 36.97 | 4.01       | -1.67    | 4.35     | 337      | 3.84     | -1.21       | 4.02     | 342      |  |  |
| 35    | 727M        | 36.57 | 4.27       | -1.82    | 4.64     | 336      | 4.09     | -1.36       | 4.31     | 341      |  |  |
| 36    | 740         | 33.80 | 5.06       | -2.27    | 5.04     | 333      | 4.33     | -1.81       | 4.69     | 337      |  |  |
| 37    | 749         | 27.83 | 5.06       | -2.96    | 5.86     | 329      | 4.88     | -2.50       | 5.49     | 332      |  |  |
| 38    | 766         | 12.19 | 6.11       | -7.36    | 9.57     | 309      | 5.93     | -6.90       | 9.10     | 310      |  |  |
| 39    | 828         | 6.34  | 3.32       | -14.51   | 14.89    | 282      | 3.15     | -14.05      | 14.10    | 282      |  |  |
| U=D=0 | 99.99       | 99.99 | 0.174      | -0.459   | 0.491    | 290      | 0.00     | 0.00        | 0.00     | 0.00     |  |  |

U=D50 99.99 0.174 -0.459 0.491 290 0.0 0.0 0.0 0.0

$a_{-Pm} = n_1 n_2 n_3 n_4 (b_{21} - b_{22})x + (b_{22} - b_{23})y + b_{23}z = 1.4(3.075x - 2.570y - 0.0960)z$

$b_{-Pm} = n_1 n_2 n_3 n_4 (b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}z = +0.5(1.9906x + 3.8617y - 2.4046)z$

DE730-3N

**CIE02 tristimulus values, chromatic values, and purities ( $n_1=1.4$ ,  $n_2=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by hue angle.

| no. | O    | tristimulus values and chromaticities |       |       |       | nu-chromatic values |       |        |           |       |     |
|-----|------|---------------------------------------|-------|-------|-------|---------------------|-------|--------|-----------|-------|-----|
|     |      | $\lambda_n$                           | X     | Y     | z     | $\lambda_m$         | $B_m$ | $C_m$  | $h_{ABm}$ |       |     |
| 00  | 631  | 69.99                                 | 41.82 | 18.71 | 0.536 | 0.320               | 0.143 | 126.0  | 12.6      | 126.6 | 365 |
| 01  | 702  | 73.30                                 | 41.33 | 39.75 | 0.474 | 0.267               | 0.257 | 138.9  | -13.8     | 139.6 | 354 |
| 02  | 706  | 73.69                                 | 40.41 | 47.04 | 0.457 | 0.250               | 0.291 | 143.1  | -23.7     | 145.1 | 350 |
| 03  | 711  | 74.05                                 | 39.70 | 53.95 | 0.441 | 0.236               | 0.321 | 146.5  | -33.0     | 150.2 | 347 |
| 04  | 724  | 74.48                                 | 38.97 | 65.18 | 0.416 | 0.218               | 0.364 | 149.6  | -47.4     | 157.0 | 342 |
| 05  | 727M | 72.26                                 | 36.57 | 65.17 | 0.415 | 0.210               | 0.374 | 149.8  | -49.8     | 157.9 | 341 |
| 06  | 740  | 69.08                                 | 33.80 | 72.53 | 0.393 | 0.192               | 0.413 | 146.3  | -61.3     | 158.7 | 337 |
| 07  | 749  | 61.10                                 | 27.83 | 74.91 | 0.372 | 0.169               | 0.457 | 136.0  | -69.6     | 152.8 | 332 |
| 08  | 396  | 31.24                                 | 12.19 | 76.69 | 0.260 | 0.101               | 0.638 | 72.3   | -84.1     | 111.0 | 310 |
| 09  | 466  | 13.25                                 | 6.34  | 78.11 | 0.135 | 0.064               | 0.799 | -20.0  | -89.1     | 91.3  | 282 |
| 10  | 466  | 13.27                                 | 8.01  | 79.21 | 0.132 | 0.079               | 0.788 | 13.4   | -88.4     | 89.4  | 278 |
| 11  | 471  | 13.39                                 | 12.66 | 80.68 | 0.125 | 0.118               | 0.755 | -4.4   | -88.4     | 89.4  | 266 |
| 12  | 475B | 14.00                                 | 19.21 | 81.44 | 0.122 | 0.167               | 0.710 | -27.6  | -77.9     | 82.7  | 250 |
| 13  | 479  | 15.61                                 | 27.50 | 81.85 | 0.124 | 0.220               | 0.655 | -53.3  | -68.9     | 87.1  | 232 |
| 14  | 481  | 18.42                                 | 36.66 | 82.05 | 0.134 | 0.267               | 0.598 | -77.4  | -58.9     | 97.2  | 217 |
| 15  | 483  | 20.35                                 | 41.45 | 82.11 | 0.141 | 0.288               | 0.570 | -88.1  | -53.6     | 103.1 | 211 |
| 16  | 484  | 22.64                                 | 46.29 | 82.14 | 0.149 | 0.306               | 0.543 | -97.4  | -48.4     | 108.8 | 206 |
| 17  | 485  | 25.29                                 | 51.06 | 82.16 | 0.159 | 0.322               | 0.518 | -105.2 | -43.3     | 113.6 | 202 |
| 18  | 486C | 26.62                                 | 57.81 | 81.62 | 0.175 | 0.341               | 0.482 | -113.2 | -35.5     | 118.7 | 197 |
| 19  | 490  | 26.32                                 | 58.17 | 63.51 | 0.177 | 0.393               | 0.429 | -126.0 | -12.8     | 126.6 | 185 |
| 20  | 497  | 23.01                                 | 58.66 | 42.48 | 0.185 | 0.472               | 0.342 | -138.9 | 13.8      | 139.6 | 174 |
| 21  | 501  | 22.62                                 | 59.57 | 35.18 | 0.192 | 0.507               | 0.299 | -143.1 | 23.7      | 145.0 | 170 |
| 22  | 506  | 22.26                                 | 60.29 | 28.28 | 0.200 | 0.543               | 0.255 | -146.5 | 33.0      | 150.1 | 167 |
| 23  | 519C | 21.83                                 | 61.02 | 17.06 | 0.218 | 0.610               | 0.170 | -149.6 | 47.4      | 157.0 | 162 |
| 24  | 522  | 24.04                                 | 63.42 | 17.06 | 0.230 | 0.606               | 0.163 | -149.8 | 49.8      | 157.8 | 161 |
| 25  | 524  | 26.22                                 | 65.81 | 17.06 | 0.242 | 0.602               | 0.156 | -150.0 | 52.0      | 158.0 | 160 |
| 26  | 544  | 35.20                                 | 72.16 | 7.33  | 0.306 | 0.629               | 0.063 | -136.1 | 69.6      | 152.8 | 152 |
| 27  | 561  | 65.07                                 | 87.80 | 5.54  | 0.410 | 0.554               | 0.034 | -72.3  | 84.1      | 111.0 | 130 |
| 28  | 568  | 83.03                                 | 93.65 | 4.13  | 0.459 | 0.517               | 0.022 | -20.0  | 89.1      | 91.3  | 102 |
| 29  | 569  | 83.03                                 | 91.98 | 3.02  | 0.466 | 0.516               | 0.016 | -13.4  | 88.4      | 89.4  | 98  |
| 30  | 571  | 82.92                                 | 87.33 | 1.55  | 0.482 | 0.508               | 0.009 | 4.4    | 84.7      | 84.8  | 86  |
| 31  | 573  | 82.30                                 | 80.76 | 0.80  | 0.502 | 0.492               | 0.004 | 27.6   | 77.9      | 82.7  | 70  |
| 32  | 577M | 80.69                                 | 72.49 | 0.38  | 0.525 | 0.472               | 0.002 | 53.3   | 68.9      | 87.1  | 52  |
| 33  | 581  | 77.87                                 | 63.23 | 0.18  | 0.550 | 0.447               | 0.001 | 77.3   | 58.9      | 97.2  | 37  |
| 34  | 583  | 75.96                                 | 58.54 | 0.13  | 0.564 | 0.434               | 0.000 | 88.1   | 53.6      | 103.1 | 31  |
| 35  | 585  | 73.67                                 | 53.70 | 0.09  | 0.577 | 0.421               | 0.000 | 97.4   | 48.4      | 108.8 | 26  |
| 36  | 587M | 71.01                                 | 48.93 | 0.07  | 0.591 | 0.407               | 0.000 | 105.0  | 43.3      | 113.6 | 22  |
| 37  | 592  | 66.69                                 | 42.18 | 0.61  | 0.609 | 0.385               | 0.005 | 113.3  | 35.5      | 118.7 | 17  |
| 38  | 598  | 69.99                                 | 41.82 | 0.536 | 0.320 | 0.143               | 0.143 | 126.0  | 12.6      | 126.6 | 5   |
| 39  | 702  | 73.30                                 | 41.33 | 39.75 | 0.474 | 0.267               | 0.257 | 138.9  | -13.8     | 139.6 | -5  |

**CIE10 tristimulus values, chromatic values, and putities ( $n_p=1,4,n_p=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no. | O    | tristimulus values and chromaticities |             |       | nu-chromatic values |       |       |        |
|-----|------|---------------------------------------|-------------|-------|---------------------|-------|-------|--------|
|     |      | $\lambda_n$                           | X           | Y     | Z                   | $x$   | $y$   | $z$    |
|     |      |                                       | $\lambda_n$ | $Y_n$ | $x_n$               | $y_n$ | $z_n$ | $h_n$  |
| 00  | 376  | 55.24                                 | 26.06       | 71.08 | 0.362               | 0.171 | 0.466 | 118.6  |
| 01  | 376  | 55.24                                 | 26.06       | 71.08 | 0.362               | 0.171 | 0.466 | 118.6  |
| 02  | 460  | 13.26                                 | 8.89        | 77.33 | 0.133               | 0.089 | 0.777 | 10.0   |
| 03  | 462  | 13.28                                 | 10.68       | 78.42 | 0.129               | 0.104 | 0.765 | 2.9    |
| 04  | 462B | 13.28                                 | 10.68       | 78.42 | 0.129               | 0.104 | 0.765 | 2.9    |
| 05  | 468  | 13.66                                 | 17.92       | 80.19 | 0.122               | 0.160 | 0.717 | -24.0  |
| 06  | 471  | 14.70                                 | 24.41       | 80.73 | 0.122               | 0.203 | 0.673 | -45.2  |
| 07  | 473  | 15.60                                 | 28.17       | 80.89 | 0.125               | 0.225 | 0.648 | -56.2  |
| 08  | 475  | 18.32                                 | 36.37       | 81.08 | 0.134               | 0.267 | 0.597 | -77.1  |
| 09  | 477  | 22.35                                 | 45.10       | 81.16 | 0.150               | 0.303 | 0.546 | -94.5  |
| 10  | 477C | 22.35                                 | 45.10       | 81.16 | 0.150               | 0.303 | 0.546 | -94.5  |
| 11  | 479  | 27.82                                 | 53.94       | 81.17 | 0.170               | 0.331 | 0.498 | -106.4 |
| 12  | 480  | 30.64                                 | 58.21       | 79.19 | 0.182               | 0.346 | 0.471 | -111.1 |
| 13  | 484  | 25.67                                 | 56.42       | 59.80 | 0.180               | 0.397 | 0.421 | -122.2 |
| 14  | 492  | 22.50                                 | 56.65       | 38.03 | 0.192               | 0.483 | 0.324 | -133.4 |
| 15  | 503  | 21.56                                 | 57.40       | 24.28 | 0.208               | 0.555 | 0.235 | -138.4 |
| 16  | 512G | 22.19                                 | 58.45       | 18.53 | 0.223               | 0.589 | 0.186 | -139.1 |
| 17  | 521  | 24.28                                 | 60.61       | 13.79 | 0.246               | 0.614 | 0.139 | -138.2 |
| 18  | 531  | 29.00                                 | 64.47       | 10.07 | 0.280               | 0.622 | 0.097 | -133.2 |
| 19  | 541  | 41.39                                 | 73.93       | 10.07 | 0.330               | 0.589 | 0.080 | -118.6 |
| 20  | 563  | 83.41                                 | 92.59       | 5.28  | 0.460               | 0.510 | 0.029 | -15.8  |
| 21  | 564  | 83.37                                 | 91.09       | 3.82  | 0.467               | 0.510 | 0.021 | -9.9   |
| 22  | 565  | 83.35                                 | 89.31       | 2.74  | 0.475               | 0.509 | 0.015 | -2.9   |
| 23  | 565Y | 83.35                                 | 89.31       | 2.74  | 0.475               | 0.509 | 0.015 | -2.9   |
| 24  | 568  | 82.96                                 | 82.07       | 0.96  | 0.499               | 0.494 | 0.005 | 24.0   |
| 25  | 571  | 81.93                                 | 75.58       | 0.44  | 0.518               | 0.478 | 0.002 | 45.3   |
| 26  | 573  | 81.03                                 | 71.82       | 0.27  | 0.529               | 0.469 | 0.001 | 56.3   |
| 27  | 577  | 78.31                                 | 63.62       | 0.08  | 0.551               | 0.447 | 0.000 | 71.1   |
| 28  | 581  | 74.28                                 | 54.89       | 0.01  | 0.575               | 0.424 | 0.000 | 94.5   |
| 29  | 581R | 74.28                                 | 54.89       | 0.01  | 0.575               | 0.424 | 0.000 | 94.5   |
| 30  | 587  | 68.81                                 | 46.05       | 0.00  | 0.599               | 0.400 | 0.000 | 106.4  |
| 31  | 589  | 67.60                                 | 44.04       | 0.93  | 0.600               | 0.391 | 0.008 | 109.1  |
| 32  | 692  | 70.96                                 | 43.57       | 21.37 | 0.522               | 0.320 | 0.157 | 122.2  |
| 33  | 697  | 74.12                                 | 43.34       | 43.14 | 0.461               | 0.269 | 0.268 | 133.4  |
| 34  | 708  | 80.07                                 | 42.59       | 62.63 | 0.416               | 0.232 | 0.350 | 138.4  |
| 35  | 717M | 74.44                                 | 41.54       | 62.63 | 0.416               | 0.232 | 0.350 | 139.2  |
| 36  | 726  | 72.35                                 | 39.38       | 67.37 | 0.403               | 0.219 | 0.376 | 138.3  |
| 37  | 736  | 67.62                                 | 35.52       | 71.08 | 0.388               | 0.203 | 0.408 | 133.2  |
| 38  | 746  | 55.24                                 | 26.06       | 71.08 | 0.362               | 0.171 | 0.466 | 118.6  |
| 39  | 823  | 13.22                                 | 7.40        | 75.87 | 0.136               | 0.076 | 0.786 | 15.9   |

U=D50 96.63,100.00,81.17 0.347 0.359,0.359 0.0 0.0 0.0 0.0

$a^*_{p=nm} = a_p \cdot n_p \cdot n_b \cdot (b_{21} - b_{22}) \cdot x + (b_{22} - b_{23}) \cdot y + 1.4(3.075x - 2.570y - 0.0960)y$

$b^*_{p=nm} = b_p \cdot n_p \cdot n_b \cdot (b_{31} - b_{33}) \cdot x + (b_{32} - b_{33}) \cdot y + 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-3N

**CIE10 tristimulus values, chromatic values, and putities ( $n_p=1,4,n_p=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no. | O    | tristimulus values and chromaticities |             |        | nu-purities |       |       |        |
|-----|------|---------------------------------------|-------------|--------|-------------|-------|-------|--------|
|     |      | $\lambda_n$                           | X           | Y      | Z           | $x$   | $y$   | $z$    |
|     |      |                                       | $\lambda_n$ | $Y_n$  | $x_n$       | $y_n$ | $z_n$ | $h_n$  |
| 00  | 376  | 26.06                                 | 4.74        | -2.98  | 5.60        | 327   | 4.55  | -2.54  |
| 01  | 376  | 26.06                                 | 4.74        | -2.98  | 5.60        | 327   | 4.55  | -2.54  |
| 02  | 460  | 8.89                                  | 1.31        | -10.02 | 10.11       | 277   | 11.2  | -9.58  |
| 03  | 462  | 10.68                                 | 0.46        | -8.35  | 8.36        | 273   | 0.27  | -7.90  |
| 04  | 462B | 10.68                                 | 0.46        | -8.35  | 8.36        | 273   | 0.27  | -7.90  |
| 05  | 468  | 17.92                                 | -1.15       | -4.81  | 4.94        | 256   | -1.34 | -4.36  |
| 06  | 471  | 24.41                                 | -1.66       | -3.37  | 3.76        | 243   | -1.85 | -2.92  |
| 07  | 473  | 28.17                                 | -1.80       | -2.83  | 3.36        | 237   | -1.99 | -2.39  |
| 08  | 475  | 36.37                                 | -1.93       | -2.05  | 2.82        | 226   | -2.12 | -1.60  |
| 09  | 477  | 45.10                                 | -1.90       | -1.53  | 2.44        | 218   | -2.09 | -1.09  |
| 10  | 477C | 45.10                                 | -1.90       | -1.53  | 2.44        | 218   | -2.09 | -1.09  |
| 11  | 479  | 53.94                                 | -1.78       | -1.18  | 2.14        | 213   | -1.97 | -0.74  |
| 12  | 480  | 58.21                                 | -1.71       | -1.01  | 1.99        | 210   | -1.90 | -0.56  |
| 13  | 484  | 56.42                                 | -1.97       | -0.63  | 2.07        | 197   | -2.16 | -0.19  |
| 14  | 492  | 56.65                                 | -2.16       | -0.16  | 2.17        | 184   | -2.35 | 0.28   |
| 15  | 503  | 57.40                                 | -2.22       | 0.14   | 2.22        | 176   | -2.41 | 0.58   |
| 16  | 512G | 58.45                                 | -2.19       | 0.26   | 2.20        | 173   | -2.38 | 0.71   |
| 17  | 521  | 60.61                                 | -2.09       | 0.37   | 2.12        | 169   | -2.28 | 0.81   |
| 18  | 531  | 64.47                                 | -1.87       | 0.44   | 1.92        | 166   | -2.06 | 0.89   |
| 19  | 541  | 73.93                                 | -1.41       | 0.44   | 1.82        | 162   | -1.60 | 0.89   |
| 20  | 563  | 92.59                                 | 0.01        | 0.47   | 0.47        | 87    | -0.17 | 0.92   |
| 21  | 564  | 91.09                                 | 0.07        | 0.48   | 0.49        | 80    | -0.10 | 0.93   |
| 22  | 565  | 91.31                                 | 0.15        | 0.49   | 0.52        | 72    | -0.03 | 0.94   |
| 23  | 565Y | 89.31                                 | 0.15        | 0.49   | 0.52        | 72    | -0.03 | 0.94   |
| 24  | 568  | 82.07                                 | 0.48        | 0.50   | 0.69        | 46    | 0.29  | 0.95   |
| 25  | 571  | 75.58                                 | 0.78        | 0.49   | 0.93        | 32    | 0.59  | 0.94   |
| 26  | 573  | 71.82                                 | 0.97        | 0.49   | 1.09        | 26    | 0.78  | 0.93   |
| 27  | 577  | 63.62                                 | 1.40        | 0.47   | 1.47        | 18    | 1.21  | 0.91   |
| 28  | 581  | 54.89                                 | 1.91        | 0.44   | 1.96        | 13    | 1.72  | 0.89   |
| 29  | 581R | 54.89                                 | 1.91        | 0.44   | 1.96        | 13    | 1.72  | 0.89   |
| 30  | 587  | 46.05                                 | 2.50        | 0.41   | 2.53        | 9     | 2.31  | 0.86   |
| 31  | 589  | 44.04                                 | 2.66        | 0.38   | 2.69        | 8     | 2.47  | 0.83   |
| 32  | 692  | 43.57                                 | 2.99        | -0.19  | 3.00        | 356   | 2.80  | 0.24   |
| 33  | 697  | 43.34                                 | 3.26        | -0.82  | 3.36        | 345   | 3.07  | -0.37  |
| 34  | 708  | 42.59                                 | 4.74        | -1.24  | 3.65        | 340   | 3.25  | -0.79  |
| 35  | 717M | 41.54                                 | 3.54        | -1.45  | 3.82        | 337   | 3.35  | -1.00  |
| 36  | 726  | 39.38                                 | 3.70        | -1.70  | 4.07        | 335   | 3.51  | -1.26  |
| 37  | 736  | 35.52                                 | 3.94        | -2.07  | 4.45        | 342   | 3.75  | -1.62  |
| 38  | 746  | 26.06                                 | 4.74        | -2.98  | 5.60        | 327   | 4.55  | -2.54  |
| 39  | 823  | 7.40                                  | 2.34        | -11.96 | 12.19       | 281   | 2.15  | -11.52 |

U=D50 100.00,0.189 -0.447 0.485 292 0.0 0.0 0.0 0.0

$a^*_{p=nm} = a_p \cdot n_p \cdot n_b \cdot (b_{21} - b_{22}) \cdot x + (b_{22} - b_{23}) \cdot y + 1.4(3.075x - 2.570y - 0.0960)y$

$b^*_{p=nm} = b_p \cdot n_p \cdot n_b \cdot (b_{31} - b_{33}) \cdot x + (b_{32} - b_{33}) \cdot y + 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-5N

**CIE10 tristimulus values, chromatic values, and putities ( $n_p=1,4,n_p=0.5$ ).**

Normalized Ostwald (O) tristimulus values ( $Y_n=100$ ), ordered by hue angle.

| no. | O    | tristimulus values and chromaticities |             |       | nu-chromatic values |       |       |         |
|-----|------|---------------------------------------|-------------|-------|---------------------|-------|-------|---------|
|     |      | $\lambda_n$                           | X           | Y     | Z                   | $x$   | $y$   | $z$     |
|     |      |                                       | $\lambda_n$ | $Y_n$ | $x_n$               | $y_n$ | $z_n$ | $h_n$   |
| 00  | 692  | 70.96                                 | 43.57       | 21.37 | 0.522               | 0.320 | 0.157 | 122.2   |
| 01  | 697  | 74.12                                 | 43.34       | 43.14 | 0.461               | 0.269 | 0.268 | 133.4   |
| 02  | 708  | 80.07                                 | 42.59       | 56.88 | 0.404               | 0.244 | 0.358 | 138.4   |
| 03  | 717  | 74.44                                 | 41.54       | 62.63 | 0.416               | 0.232 | 0.350 | 139.2   |
| 04  | 726  | 72.35                                 | 39.38       | 67.37 | 0.403               | 0.219 | 0.376 | 138.3   |
| 05  | 736M | 67.62                                 | 35.52       | 71.08 | 0.388               | 0.203 | 0.408 | 133.2   |
| 06  | 746  | 55.24                                 | 26.06       | 71.08 | 0.362               | 0.171 | 0.466 | 118.6   |
| 07  | 823  | 13.22                                 | 7.40        | 75.87 | 0.136               | 0.076 | 0.786 | 15.9    |
| 08  | 460  | 13.26                                 | 8.89        | 77.33 | 0.133               | 0.089 | 0.777 | 10.0    |
| 09  | 462  | 13.28                                 | 10.68       | 78.42 | 0.129               | 0.104 | 0.765 | 2.9     |
| 10  | 462B | 13.28                                 | 10.68       | 78.42 | 0.129               | 0.104 | 0.765 | 2.9     |
| 11  | 468  | 13.66                                 | 17.92       | 80.19 | 0.122               | 0.160 | 0.717 | -24.0   |
| 12  | 471B | 14.70                                 | 24.41       | 80.73 | 0.122               | 0.203 | 0.673 | -45.2   |
| 13  | 473  | 15.60                                 | 28.17       | 80.89 | 0.125               | 0.225 | 0.648 | -56.2   |
| 14  | 475  | 18.32                                 | 36.37       | 81.08 | 0.134               | 0.267 | 0.597 | -77.1   |
| 15  | 477  | 22.35                                 | 45.10       | 81.16 | 0.150               | 0.303 | 0.546 | -94.5   |
| 16  | 477  | 22.35                                 | 45.10       | 81.16 | 0.150               | 0.303 | 0.546 | -94.5   |
| 17  | 479  | 27.82                                 | 53.94       | 81.17 | 0.170               | 0.331 | 0.498 | -106.4  |
| 18  | 480  | 30.64                                 | 58.21       | 79.19 | 0.182               | 0.346 | 0.471 | -111.1  |
| 19  | 484  | 25.67                                 | 56.42       | 59.80 | 0.180               | 0.397 | 0.421 | -122.2  |
| 20  | 492  | 22.50                                 | 56.65       | 38.03 | 0.192               | 0.483 | 0.324 | -133.4  |
| 21  | 503  | 21.56                                 | 57.40       | 24.28 | 0.208               | 0.555 | 0.235 | -138.4  |
| 22  | 512  | 22.19                                 | 58.45       | 18.53 | 0.223               | 0.589 | 0.186 | -139.1  |
| 23  | 521G | 24.28                                 | 60.61       | 13.79 | 0.246               | 0.614 | 0.139 | -138.2  |
| 24  | 531  | 29.00                                 | 64.47       | 10.07 | 0.280               | 0.622 | 0.097 | -133.2  |
| 25  | 541  | 41.39                                 | 73.93       | 10.07 | 0.330               | 0.589 | 0.080 | -118.6  |
| 26  | 563  | 83.41                                 | 92.59       | 5.28  | 0.460               | 0.510 | 0.029 | -15.8   |
| 27  | 564  | 83.37                                 | 91.09       | 3.82  | 0.467               | 0.510 | 0.021 | -9.9    |
| 28  | 565  | 83.35                                 | 89.31       | 2.74  | 0.475               | 0.509 | 0.015 | -2.9    |
| 29  | 565Y | 83.35                                 | 89.31       | 2.74  | 0.475               | 0.509 | 0.015 | -2.9    |
| 30  | 568  | 82.96                                 | 82.07       | 0.96  | 0.499               | 0.494 | 0.005 | 24.0    |
| 31  | 571  | 81.93                                 | 75.58       | 0.44  | 0.518               | 0.478 | 0.002 | 45.3    |
| 32  | 573Y | 81.03                                 | 71.82       | 0.27  | 0.529               | 0.469 | 0.001 | 56.3    |
| 33  | 577  | 78.31                                 | 63.62       | 0.08  | 0.551               | 0.447 | 0.000 | 71.1    |
| 34  | 581  | 74.28                                 | 54.89       | 0.01  | 0.575               | 0.424 | 0.000 | 94.5    |
| 35  | 581R | 74.28                                 | 54.89       | 0.01  | 0.575               | 0.424 | 0.000 | 94.5    |
| 36  | 587  | 68.81                                 | 46.05       | 0.00  | 0.599               | 0.400 | 0.000 | 106.4</ |

**CIEF02 trisimulus values, chromatic values, and putities ( $n_1=1, n_2=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no.  | $\lambda_n$ | C tristimulus values and chromaticities |        |       |       |       | nu-chromatic values |        |           |           |     |
|------|-------------|-----------------------------------------|--------|-------|-------|-------|---------------------|--------|-----------|-----------|-----|
|      |             | X                                       | Y      | Z     | x     | y     | $\lambda_m$         | $R_m$  | $C_{ABm}$ | $P_{ABm}$ |     |
| 00   | 386         | 51.50                                   | 23.94  | 74.68 | 0.343 | 15.9  | 0.497               | 11.1   | -7.20     | 13.24     | 327 |
| 01   | 400         | 12.38                                   | 65.4   | 76.19 | 0.130 | 0.068 | 0.801               | 15.8   | -86.3     | 87.8      | 280 |
| 02   | 465         | 12.41                                   | 9.58   | 78.25 | 0.123 | 0.095 | 0.780               | 3.7    | -85.2     | 85.3      | 272 |
| 03   | 467         | 12.45                                   | 11.64  | 78.87 | 0.120 | 0.113 | 0.766               | -4.2   | -83.5     | 83.6      | 267 |
| 04   | 473B        | 13.31                                   | 20.43  | 79.83 | 0.117 | 0.179 | 0.702               | -35.1  | -74.4     | 82.3      | 244 |
| 05   | 475         | 14.02                                   | 24.19  | 79.97 | 0.118 | 0.204 | 0.676               | -46.9  | -70.3     | 84.5      | 236 |
| 06   | 479         | 17.82                                   | 36.91  | 80.16 | 0.132 | 0.273 | 0.594               | -80.9  | -56.2     | 98.5      | 214 |
| 07   | 479         | 17.82                                   | 36.91  | 80.16 | 0.132 | 0.273 | 0.594               | -80.9  | -56.2     | 98.5      | 214 |
| 08   | 481         | 21.98                                   | 46.03  | 80.19 | 0.148 | 0.310 | 0.541               | -99.2  | -46.2     | 109.4     | 205 |
| 09   | 481         | 21.98                                   | 46.03  | 80.19 | 0.148 | 0.310 | 0.541               | -99.2  | -46.2     | 109.4     | 205 |
| 10   | 483C        | 27.52                                   | 55.03  | 80.21 | 0.169 | 0.338 | 0.492               | -113.1 | -36.7     | 117.2     | 198 |
| 11   | 484         | 28.85                                   | 57.21  | 79.07 | 0.174 | 0.346 | 0.478               | -114.1 | -33.0     | 118.8     | 196 |
| 12   | 489         | 25.36                                   | 57.41  | 57.70 | 0.180 | 0.408 | 0.410               | -126.6 | -6.4      | 126.7     | 182 |
| 13   | 497         | 22.33                                   | 57.50  | 36.81 | 0.191 | 0.492 | 0.315               | -136.8 | 1.94      | 138.1     | 171 |
| 14   | 505         | 21.31                                   | 58.03  | 24.30 | 0.205 | 0.559 | 0.234               | -141.4 | 35.3      | 145.8     | 165 |
| 15   | 512         | 21.41                                   | 58.69  | 18.79 | 0.216 | 0.593 | 0.190               | -142.8 | 42.7      | 149.1     | 163 |
| 16   | 521G        | 24.42                                   | 59.91  | 14.10 | 0.232 | 0.621 | 0.146               | -142.8 | 49.5      | 151.1     | 160 |
| 17   | 524         | 25.32                                   | 62.97  | 14.10 | 0.247 | 0.615 | 0.137               | -142.6 | 52.6      | 152.0     | 159 |
| 18   | 539         | 30.29                                   | 66.55  | 7.57  | 0.290 | 0.637 | 0.072               | -135.0 | 63.6      | 149.3     | 154 |
| 19   | 551         | 44.95                                   | 76.05  | 5.53  | 0.355 | 0.601 | 0.043               | -110.8 | 74.3      | 133.4     | 146 |
| 20   | 568         | 84.08                                   | 93.45  | 4.02  | 0.463 | 0.514 | 0.022               | -15.4  | 88.7      | 90.1      | 99  |
| 21   | 568         | 84.08                                   | 93.45  | 4.02  | 0.463 | 0.514 | 0.022               | -15.4  | 88.7      | 90.1      | 99  |
| 22   | 569         | 84.05                                   | 90.41  | 1.96  | 0.476 | 0.512 | 0.011               | -3.4   | 87.6      | 87.7      | 92  |
| 23   | 570Y        | 84.00                                   | 88.35  | 1.33  | 0.483 | 0.508 | 0.007               | -4.4   | 85.9      | 86.1      | 87  |
| 24   | 573         | 83.15                                   | 79.56  | 0.38  | 0.509 | 0.487 | 0.002               | 35.4   | 76.8      | 84.6      | 65  |
| 25   | 575         | 82.44                                   | 75.80  | 0.24  | 0.520 | 0.478 | 0.001               | 47.2   | 72.7      | 86.7      | 56  |
| 26   | 580         | 78.64                                   | 63.07  | 0.05  | 0.554 | 0.444 | 0.000               | 81.2   | 58.5      | 100.1     | 35  |
| 27   | 580         | 78.64                                   | 63.07  | 0.05  | 0.554 | 0.444 | 0.000               | 81.2   | 58.5      | 100.1     | 35  |
| 28   | 585         | 74.48                                   | 53.96  | 0.02  | 0.579 | 0.420 | 0.000               | 99.5   | 48.6      | 110.7     | 26  |
| 29   | 590R        | 68.94                                   | 44.96  | 0.00  | 0.605 | 0.394 | 0.000               | 111.6  | 39.1      | 118.3     | 19  |
| 30   | 592         | 67.61                                   | 42.78  | 1.14  | 0.606 | 0.383 | 0.010               | 114.4  | 35.4      | 119.8     | 17  |
| 31   | 694         | 71.10                                   | 42.58  | 22.52 | 0.522 | 0.312 | 0.165               | 126.9  | 8.7       | 127.2     | 3   |
| 32   | 702         | 74.12                                   | 42.59  | 43.40 | 0.463 | 0.265 | 0.271               | 137.0  | -17.0     | 138.1     | 352 |
| 33   | 710         | 75.15                                   | 41.96  | 55.91 | 0.434 | 0.242 | 0.323               | 141.7  | -32.9     | 145.5     | 346 |
| 34   | 717         | 75.05                                   | 41.96  | 61.43 | 0.422 | 0.232 | 0.345               | 143.1  | -40.3     | 148.7     | 344 |
| 35   | 726M        | 74.04                                   | 40.08  | 66.11 | 0.410 | 0.222 | 0.366               | 143.1  | -47.1     | 150.7     | 341 |
| 36   | 729         | 71.14                                   | 37.02  | 66.11 | 0.408 | 0.212 | 0.379               | 143.0  | -50.2     | 151.5     | 340 |
| 37   | 744         | 66.16                                   | 33.43  | 72.64 | 0.384 | 0.194 | 0.421               | 135.3  | -61.2     | 148.5     | 335 |
| 38   | 756         | 51.50                                   | 23.94  | 74.68 | 0.343 | 0.159 | 0.497               | 11.1   | -7.20     | 13.24     | 327 |
| 39   | 825         | 12.38                                   | 6.54   | 76.19 | 0.130 | 0.068 | 0.801               | 15.8   | -86.3     | 87.8      | 280 |
| U=50 |             | 96.46                                   | 100.00 | 72.12 | 0.346 | 0.358 | 0.358               | 0      | 0         | 0         | 0   |

U=D50 96.46 100.00 82.22 0.246 0.358 0.358 0.0 0.0 0.0 0.0

$a^* = P_{m0} a_n P_{n0} [(b_{21} - b_{23})x + (b_{22} - b_{23})y + b_{23}]y = 1.4(3.075x - 2.570y - 0.0960)y$

$b^* = P_{m0} a_n P_{n0} [(b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}]y = 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-3N

**CIEF02 trisimulus values, chromatic values, and putities ( $n_1=1, n_2=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_n=100$ ), ordered by wavelength.

| no.   | $\lambda_n$ | n-purities |        |          |          |          | nu-purities |        |          |          |          |
|-------|-------------|------------|--------|----------|----------|----------|-------------|--------|----------|----------|----------|
|       |             | $X$        | $Y$    | $P_{nm}$ | $P_{nn}$ | $h_{nm}$ | $X$         | $Y$    | $P_{nm}$ | $P_{nn}$ | $h_{nm}$ |
| 00    | 386         | 23.94      | 2.82   | -3.46    | 5.93     | 324      | 2.41        | -3.00  | 13.42    | 280      | 0        |
| 01    | 460         | 6.54       | 2.59   | -13.66   | 13.91    | 280      | 2.41        | -13.21 | 13.42    | 280      | 0        |
| 02    | 465         | 9.58       | 0.57   | -9.36    | 9.37     | 273      | 0.39        | -8.90  | 8.90     | 272      | 0        |
| 03    | 467         | 11.64      | -0.18  | -7.64    | 7.64     | 268      | -0.36       | -7.18  | 7.19     | 267      | 0        |
| 04    | 473B        | 20.43      | -1.54  | -4.10    | 4.38     | 249      | -1.72       | -3.64  | 4.03     | 244      | 0        |
| 05    | 475         | 24.19      | -1.75  | -3.36    | 3.79     | 242      | -1.93       | -2.90  | 3.49     | 236      | 0        |
| 06    | 479         | 36.91      | -2.01  | -1.98    | 2.82     | 224      | -2.19       | -1.52  | 2.66     | 214      | 0        |
| 07    | 479         | 36.91      | -2.01  | -1.98    | 2.82     | 224      | -2.19       | -1.52  | 2.66     | 214      | 0        |
| 08    | 481         | 46.03      | -1.97  | -1.46    | 2.45     | 216      | -2.15       | -1.00  | 2.37     | 205      | 0        |
| 09    | 481         | 46.03      | -1.97  | -1.46    | 2.45     | 216      | -2.15       | -1.00  | 2.37     | 205      | 0        |
| 10    | 483C        | 55.03      | -1.84  | -1.12    | 2.15     | 211      | -2.02       | -0.66  | 2.13     | 198      | 0        |
| 11    | 484         | 57.21      | -2.81  | -1.03    | 2.09     | 205      | -1.99       | -0.57  | 2.07     | 196      | 0        |
| 12    | 489         | 57.41      | -2.02  | -0.57    | 2.10     | 195      | -2.20       | -0.11  | 2.20     | 182      | 0        |
| 13    | 497         | 57.50      | -1.19  | -0.12    | 2.20     | 183      | -2.37       | 0.33   | 2.40     | 171      | 0        |
| 14    | 505         | 58.03      | -2.25  | 0.14     | 2.26     | 176      | -2.43       | 0.60   | 2.51     | 165      | 0        |
| 15    | 512         | 58.69      | -2.25  | 0.26     | 2.26     | 173      | -2.43       | 0.72   | 2.54     | 163      | 0        |
| 16    | 521G        | 59.91      | -2.20  | 0.36     | 2.23     | 170      | -2.38       | 0.82   | 2.52     | 160      | 0        |
| 17    | 524         | 62.97      | -2.08  | 0.37     | 2.11     | 169      | -2.26       | 0.83   | 2.41     | 159      | 0        |
| 18    | 539         | 66.55      | -1.84  | 0.49     | 1.91     | 164      | -2.02       | 0.95   | 2.24     | 154      | 0        |
| 19    | 551         | 76.05      | -1.27  | 0.51     | 1.37     | 157      | -1.45       | 0.97   | 1.75     | 146      | 0        |
| 20    | 568         | 93.45      | 0.01   | 0.49     | 0.49     | 88       | -0.16       | 0.95   | 0.96     | 99       | 0        |
| 21    | 568         | 93.45      | 0.01   | 0.49     | 0.49     | 88       | -0.16       | 0.95   | 0.96     | 99       | 0        |
| 22    | 579Y        | 90.41      | 0.14   | 0.51     | 0.52     | 74       | -0.03       | 0.96   | 0.97     | 92       | 0        |
| 23    | 570Y        | 88.35      | 0.23   | 0.51     | 0.56     | 65       | 0.05        | 0.97   | 0.97     | 87       | 0        |
| 24    | 573         | 79.56      | 0.62   | 0.50     | 0.80     | 38       | 0.44        | 0.96   | 1.06     | 65       | 0        |
| 25    | 575         | 75.80      | 0.80   | 0.49     | 0.94     | 31       | 0.62        | 0.95   | 1.14     | 56       | 0        |
| 26    | 580         | 63.07      | 1.46   | 0.46     | 1.54     | 17       | 1.28        | 0.92   | 1.58     | 35       | 0        |
| 27    | 580         | 63.07      | 1.46   | 0.46     | 1.54     | 17       | 1.28        | 0.92   | 1.58     | 35       | 0        |
| 28    | 585         | 53.96      | 2.02   | 0.44     | 2.07     | 12       | 1.84        | 0.90   | 2.05     | 26       | 0        |
| 29    | 590R        | 44.96      | 2.66   | 0.41     | 2.69     | 8        | 2.48        | 0.87   | 2.63     | 19       | 0        |
| 30    | 592         | 42.78      | 2.85   | 0.36     | 2.88     | 7        | 2.67        | 0.82   | 2.80     | 17       | 0        |
| 31    | 694         | 42.58      | 3.16   | -0.25    | 3.17     | 355      | 2.98        | 0.20   | 2.98     | 3        | 0        |
| 32    | 702         | 42.49      | 3.40   | -0.86    | 3.51     | 345      | 3.22        | -0.40  | 3.25     | 352      | 0        |
| 33    | 710         | 41.96      | 3.55   | -1.24    | 3.77     | 340      | 3.37        | -0.78  | 3.46     | 346      | 0        |
| 34    | 717         | 41.30      | 3.64   | -1.43    | 3.92     | 338      | 3.46        | -0.97  | 3.60     | 344      | 0        |
| 35    | 726M        | 40.08      | 3.75   | -1.63    | 4.09     | 336      | 3.57        | -1.17  | 3.76     | 341      | 0        |
| 36    | 729         | 37.02      | 4.04   | -1.81    | 4.43     | 335      | 3.86        | -1.35  | 4.09     | 340      | 0        |
| 37    | 744         | 33.43      | 4.22   | -2.29    | 4.81     | 331      | 4.04        | -1.83  | 4.44     | 335      | 0        |
| 38    | 756         | 23.94      | 4.82   | -3.46    | 5.93     | 324      | 4.64        | -3.00  | 5.53     | 327      | 0        |
| 39    | 825         | 6.54       | 2.59   | -13.66   | 13.91    | 280      | 2.41        | -13.21 | 13.42    | 280      | 0        |
| U=D50 | 100,0       | 0.180      | -0.459 | 0.493    | 291      | 0        | 0           | 0      | 0        | 0        | 0        |

U=D50 100.00 100.00 -0.459 0.493 291 0.0 0.0 0.0 0.0

$a^* = P_{m0} a_n P_{n0} [(b_{21} - b_{23})x + (b_{22} - b_{23})y + b_{23}]y = 1.4(3.075x - 2.570y - 0.0960)y$

$b^* = P_{m0} a_n P_{n0} [(b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}]y = 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-4N

**CIEF02 trisimulus values, chromatic values, and putities ( $n_1=1, n_2=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_n=100$ ), ordered by hue angle.

| no.    | $\lambda_n$ | C tristimulus values and chromaticities |       |       | nu-chromatic values |             |       |           |           |       |     |
|--------|-------------|-----------------------------------------|-------|-------|---------------------|-------------|-------|-----------|-----------|-------|-----|
|        |             | X                                       | Y     | Z     | x                   | $\lambda_m$ | $R_m$ | $C_{ABm}$ | $P_{ABm}$ |       |     |
| 00     | 592         | 67.61                                   | 42.78 | 1.14  | 0.606               | 0.383       | 0.010 | 114.4     | 35.4      | 119.8 | 377 |
| 01     | 694         | 71.10                                   | 42.58 | 22.52 | 0.522               | 0.312       | 0.165 | 126.9     | 8.7       | 127.2 | 363 |
| 02     | 702         | 74.12                                   | 42.59 | 43.40 | 0.463               | 0.265       | 0.271 | 137.0     | -17.0     | 138.1 | 352 |
| 03     | 710         | 75.15                                   | 41.96 | 55.91 | 0.434               | 0.242       | 0.323 | 141.7     | -32.9     | 145.5 | 346 |
| 04     | 717         | 75.05                                   | 41.30 | 61.43 | 0.422               | 0.232       | 0.345 | 143.1     | -40.3     | 148.7 | 344 |
| 05     | 726M        | 74.04                                   | 40.08 | 66.11 | 0.410               | 0.222       | 0.366 | 143.1     | -47.1     | 150.7 | 341 |
| 06     | 729         | 71.14                                   | 37.02 | 66.11 | 0.408               | 0.212       | 0.379 | 143.0     | -50.2     | 151.5 | 340 |
| 07     | 744         | 66.16                                   | 33.43 | 72.64 | 0.384               | 0.194       | 0.421 | 135.3     | -61.2     | 148.5 | 335 |
| 08     | 756         | 51.50                                   | 23.94 | 74.68 | 0.343               | 0.159       | 0.497 | 11.1      | -7.20     | 13.24 | 327 |
| 09     | 825         | 12.38                                   | 6.54  | 76.19 | 0.130               | 0.068       | 0.801 | 15.8      | -86.3     | 87.8  | 280 |
| 10     | 465         | 12.41                                   | 9.58  | 78.25 | 0.123               | 0.095       | 0.780 | 37        | -85.2     | 85.3  | 272 |
| 11     | 467         | 12.45                                   | 11.64 | 78.87 | 0.120               | 0.113       | 0.766 | -4.2      | -83.5     | 83.5  | 267 |
| 12     | 473B        | 13.31                                   | 20.43 | 79.83 | 0.117               | 0.179       | 0.702 | -35.1     | -74.4     | 82.3  | 244 |
| 13     | 475         | 14.02                                   | 24.19 | 79.97 | 0.118               | 0.204       | 0.676 | -46.9     | -70.3     | 84.5  | 236 |
| 14     | 479         | 17.82                                   | 36.91 | 80.16 | 0.132               | 0.273       | 0.594 | -80.9     | -56.2     | 98.5  | 214 |
| 15     | 479         | 17.82                                   | 36.91 | 80.16 | 0.132               | 0.273       | 0.594 | -80.9     | -56.2     | 98.5  | 214 |
| 16     | 481         | 21.98                                   | 46.03 | 80.19 | 0.148               | 0.310       | 0.541 | -99.2     | -46.2     | 109.4 | 205 |
| 17     | 481         | 21.98                                   | 46.03 | 80.19 | 0.148               | 0.310       | 0.541 | -99.2     | -46.2     | 109.4 | 205 |
| 18     | 482         | 21.98                                   | 46.03 | 80.19 | 0.148               | 0.310       | 0.541 | -99.2     | -46.2     | 109.4 | 205 |
| 19     | 484         | 28.85                                   | 57.21 | 79.07 | 0.174               | 0.346       | 0.478 | -114.1    | -33.0     | 118.8 | 196 |
| 20     | 489         | 25.36                                   | 57.41 | 57.70 | 0.180               | 0.408       | 0.410 | -126.6    | -6.4      | 126.7 | 182 |
| 21     | 497         | 22.33                                   | 57.50 | 36.81 | 0.191               | 0.492       | 0.315 | -136.8    | 19.4      | 138.1 | 171 |
| 22     | 505         | 21.31                                   | 58.03 | 24.30 | 0.205               | 0.559       | 0.234 | -141.4    | 35.3      | 145.8 | 165 |
| 23     | 512G        | 21.41                                   | 58.69 | 18.79 | 0.216               | 0.593       | 0.190 | -142.8    | 49.7      | 149.1 | 163 |
| 24     | 521         | 22.42                                   | 59.91 | 14.10 | 0.232               | 0.621       | 0.146 | -148.8    | 42.5      | 151.1 | 160 |
| 25     | 524         | 25.32                                   | 62.97 | 14.10 | 0.247               | 0.615       | 0.137 | -148.0    | 62.6      | 152.0 | 159 |
| 26     | 539         | 30.29                                   | 66.55 | 7.57  | 0.290               | 0.637       | 0.072 | -135.6    | 53.6      | 149.3 | 154 |
| 27     | 545         | 30.29                                   | 66.55 | 5.33  | 0.290               | 0.637       | 0.072 | -135.6    | 53.6      | 149.3 | 154 |
| 28     | 568         | 84.08                                   | 93.45 | 0.02  | 0.463               | 0.514       | 0.022 | -15.4     | 88.7      | 90.1  | 99  |
| 29     | 568         | 84.08                                   | 93.45 | 0.02  | 0.463               | 0.514       | 0.022 | -15.4     | 88.7      | 90.1  | 99  |
| 30     | 569         | 84.05                                   | 90.41 | 1.96  | 0.464               | 0.512       | 0.011 | -3.4      | 87.6      | 87.7  | 92  |
| 31     | 570         | 84.00                                   | 88.35 | 1.33  | 0.483               | 0.508       | 0.007 | -4        | 85.9      | 86.1  | 87  |
| 32     | 573Y        | 83.15                                   | 79.56 | 0.38  | 0.509               | 0.487       | 0.002 | 35.4      | 76.8      | 84.6  | 65  |
| 33     | 575         | 82.44                                   | 75.80 | 0.24  | 0.520               | 0.478       | 0.001 | 47.2      | 72.7      | 86.7  | 56  |
| 34     | 580         | 78.64                                   | 63.07 | 0.05  | 0.554               | 0.444       | 0.000 | 81.2      | 58.5      | 100.1 | 35  |
| 35     | 580         | 78.64                                   | 63.07 | 0.05  | 0.554               | 0.444       | 0.000 | 81.2      | 58.5      | 100.1 | 35  |
| 36     | 585R        | 58.38                                   | 33.66 | 0.00  | 0.420               | 0.300       | 0.000 | 15.5      | 59.6      | 116.1 | 26  |
| 37     | 595         | 69.34                                   | 39.96 | 0.00  | 0.605               | 0.383       | 0.000 | 11.6      | 39.9      | 118.3 | 39  |
| 38     | 692         | 57.61                                   | 42.78 | 1.14  | 0.606               | 0.383       | 0.010 | 114.4     | 35.4      | 119.8 | 17  |
| 39     | 694         | 71.10                                   | 42.58 | 22.52 | 0.522               | 0.312       | 0.165 | 126.9     | 8.7       | 127.2 | 3   |
| 11=050 | 96.46       | 100.00                                  | 82.22 | 0.346 | 0.358               | 0.358       | 0.0   | 0.0       | 0.0       | 0.0   | 0   |

**CIEF10 tristimulus values, chromatic values, and purities ( $n_r=1.4$ ,  $n_b=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_w=100$ ), ordered by wavelength.

| no.   | O    | C tristimulus values and chromaticities |        |       |       | nu-chromatic values and chromaticities |       |             |                |                  |                  |
|-------|------|-----------------------------------------|--------|-------|-------|----------------------------------------|-------|-------------|----------------|------------------|------------------|
|       |      | $\lambda_n$                             | X      | Y     | Z     | x                                      | y     | $\lambda_m$ | R <sub>m</sub> | C <sub>ABm</sub> | P <sub>ABm</sub> |
| 00    | 380  | 52.92                                   | 25.78  | 74.65 | 0.345 | 0.168                                  | 0.486 | 109.4       | -70.4          | 130.1            | 327              |
| 01    | 385  | 13.14                                   | 6.61   | 74.65 | 0.139 | 0.070                                  | 0.790 | 18.8        | -84.7          | 86.7             | 282              |
| 02    | 460  | 13.28                                   | 9.49   | 77.94 | 0.131 | 0.094                                  | 0.773 | 7.6         | -85.3          | 85.6             | 275              |
| 03    | 462  | 13.30                                   | 11.32  | 78.97 | 0.128 | 0.109                                  | 0.762 | 0.4         | -84.4          | 84.4             | 270              |
| 04    | 464B | 13.34                                   | 13.45  | 79.69 | 0.125 | 0.126                                  | 0.748 | -7.8        | -82.7          | 83.1             | 264              |
| 05    | 468  | 13.69                                   | 18.67  | 80.47 | 0.121 | 0.165                                  | 0.713 | -27.0       | -77.6          | 82.2             | 250              |
| 06    | 471  | 14.73                                   | 25.21  | 80.80 | 0.121 | 0.208                                  | 0.669 | -48.4       | -70.5          | 85.5             | 235              |
| 07    | 472  | 15.63                                   | 28.96  | 80.89 | 0.124 | 0.230                                  | 0.644 | -59.3       | -66.4          | 89.1             | 228              |
| 08    | 475  | 18.33                                   | 37.06  | 80.98 | 0.134 | 0.271                                  | 0.593 | -79.9       | -57.6          | 98.5             | 215              |
| 09    | 477  | 22.39                                   | 45.70  | 81.01 | 0.150 | 0.306                                  | 0.543 | -96.9       | -48.3          | 108.3            | 206              |
| 10    | 477C | 24.94                                   | 50.08  | 81.01 | 0.159 | 0.320                                  | 0.519 | -103.4      | -43.7          | 112.3            | 202              |
| 11    | 479  | 25.98                                   | 58.60  | 78.68 | 0.182 | 0.349                                  | 0.468 | -113.1      | -32.1          | 117.5            | 195              |
| 12    | 479  | 29.07                                   | 65.88  | 80.12 | 0.175 | 0.340                                  | 0.483 | -110.9      | -36.1          | 116.6            | 198              |
| 13    | 484  | 25.63                                   | 56.72  | 59.32 | 0.180 | 0.400                                  | 0.418 | -123.7      | -10.1          | 124.1            | 184              |
| 14    | 492  | 22.37                                   | 56.85  | 36.73 | 0.192 | 0.490                                  | 0.316 | -134.8      | 17.9           | 136.0            | 172              |
| 15    | 503  | 21.57                                   | 57.63  | 22.95 | 0.211 | 0.564                                  | 0.224 | -139.3      | 35.6           | 143.8            | 165              |
| 16    | 511G | 22.30                                   | 58.68  | 17.25 | 0.227 | 0.597                                  | 0.175 | -139.7      | 43.5           | 146.3            | 162              |
| 17    | 521  | 24.56                                   | 60.88  | 12.62 | 0.250 | 0.620                                  | 0.128 | -138.2      | 51.2           | 147.4            | 159              |
| 18    | 532  | 29.89                                   | 65.12  | 9.04  | 0.287 | 0.625                                  | 0.086 | -132.2      | 59.4           | 145.0            | 155              |
| 19    | 545  | 43.82                                   | 74.21  | 6.37  | 0.352 | 0.596                                  | 0.051 | -109.4      | 70.1           | 130.1            | 147              |
| 20    | 563  | 83.59                                   | 93.38  | 6.37  | 0.455 | 0.509                                  | 0.034 | -18.8       | 84.6           | 86.7             | 102              |
| 21    | 563  | 83.45                                   | 90.50  | 3.08  | 0.471 | 0.511                                  | 0.017 | -7.6        | 85.3           | 85.6             | 95               |
| 22    | 565  | 83.43                                   | 88.67  | 2.06  | 0.479 | 0.509                                  | 0.011 | -0.4        | 84.3           | 84.3             | 90               |
| 23    | 566Y | 83.39                                   | 86.54  | 1.34  | 0.486 | 0.505                                  | 0.007 | 7.8         | 82.7           | 83.1             | 84               |
| 24    | 568  | 83.04                                   | 81.32  | 0.56  | 0.503 | 0.493                                  | 0.003 | 27.0        | 77.6           | 82.2             | 70               |
| 25    | 571  | 82.00                                   | 74.78  | 0.23  | 0.522 | 0.476                                  | 0.001 | 48.4        | 70.5           | 85.5             | 55               |
| 26    | 573  | 81.10                                   | 71.03  | 0.14  | 0.532 | 0.466                                  | 0.000 | 59.3        | 66.4           | 89.1             | 48               |
| 27    | 577  | 78.40                                   | 62.93  | 0.05  | 0.554 | 0.445                                  | 0.000 | 79.9        | 57.6           | 98.5             | 35               |
| 28    | 581  | 74.33                                   | 54.29  | 0.02  | 0.577 | 0.421                                  | 0.000 | 96.9        | 48.3           | 108.3            | 26               |
| 29    | 584R | 71.79                                   | 49.91  | 0.01  | 0.589 | 0.410                                  | 0.000 | 103.4       | 43.7           | 112.3            | 22               |
| 30    | 591  | 66.15                                   | 41.39  | 2.33  | 0.602 | 0.376                                  | 0.021 | 113.1       | 32.1           | 117.5            | 15               |
| 31    | 588  | 67.67                                   | 43.61  | 0.91  | 0.603 | 0.388                                  | 0.008 | 110.9       | 36.1           | 116.6            | 18               |
| 32    | 689  | 71.10                                   | 43.27  | 21.71 | 0.522 | 0.317                                  | 0.159 | 123.7       | 9.9            | 124.1            | 4                |
| 33    | 697  | 74.36                                   | 43.14  | 44.30 | 0.459 | 0.266                                  | 0.273 | 134.8       | -17.9          | 136.0            | 352              |
| 34    | 708  | 75.16                                   | 42.36  | 58.08 | 0.428 | 0.241                                  | 0.330 | 139.3       | -35.6          | 143.8            | 345              |
| 35    | 716M | 74.43                                   | 41.31  | 63.78 | 0.414 | 0.230                                  | 0.355 | 139.7       | -43.5          | 146.3            | 342              |
| 36    | 726  | 72.17                                   | 39.11  | 68.41 | 0.401 | 0.217                                  | 0.380 | 138.2       | -51.2          | 147.4            | 335              |
| 37    | 737  | 66.83                                   | 34.86  | 71.99 | 0.384 | 0.200                                  | 0.414 | 132.2       | -59.4          | 145.0            | 339              |
| 38    | 750  | 52.92                                   | 25.78  | 74.65 | 0.345 | 0.168                                  | 0.486 | 109.4       | -70.4          | 130.1            | 327              |
| 39    | 820  | 13.14                                   | 6.61   | 74.65 | 0.139 | 0.070                                  | 0.790 | 18.8        | -84.7          | 86.7             | 282              |
| U=500 |      | 96.74                                   | 100.00 | 81.03 | 0.348 | 0.360                                  | 0.360 | 0           | 0              | 0                | 0                |

U=D50 96.74 100.00 0.193 -0.445 0.486 0.360 0.0 0.0 0.0 0.0

$a^* = P_{m0} a_r P_{b0} n_{r1} [(b_{21} - b_{22})x + (b_{22} - b_{23})y + b_{23}]y = 1.4(3.075x - 2.570y - 0.0960)y$

$b^* = P_{m0} a_r P_{b0} n_{r1} [(b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}]y = 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-3N

**CIEF10 tristimulus values, chromatic values, and purities ( $n_r=1.4$ ,  $n_b=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_w=100$ ), ordered by wavelength.

| no.   | O    | $\lambda_n$ | n-purities |        |          |          |           | nu-purities |          |          |           |  |
|-------|------|-------------|------------|--------|----------|----------|-----------|-------------|----------|----------|-----------|--|
|       |      |             | Y          | $P_m$  | $P_{m0}$ | $P_{m1}$ | $h_{abn}$ | $P_m$       | $P_{m0}$ | $P_{m1}$ | $h_{abn}$ |  |
| 00    | 380  | 25.78       | 4.44       | -3.17  | 5.46     | 324      | 2.84      | -2.73       | 5.05     | 327      | 0.1       |  |
| 01    | 385  | 61.01       | 25.78      | -13.26 | 13.26    | 282      | 2.89      | -12.81      | 13.12    | 282      | 0.2       |  |
| 02    | 460  | 9.49        | 1.00       | -9.43  | 9.48     | 276      | 0.80      | -8.99       | 9.02     | 275      | 0.1       |  |
| 03    | 462  | 11.32       | 20.23      | -7.90  | 7.90     | 271      | 0.03      | -7.45       | 7.45     | 270      | 0.1       |  |
| 04    | 464B | 13.45       | -0.39      | -6.60  | 6.61     | 266      | -0.58     | -6.15       | 6.18     | 264      | 0.2       |  |
| 05    | 468  | 18.67       | -1.25      | -4.60  | 4.67     | 254      | -1.44     | -4.15       | 4.40     | 250      | 0.2       |  |
| 06    | 471  | 25.21       | -1.72      | -3.24  | 3.67     | 241      | -1.91     | -2.80       | 3.39     | 235      | 0.1       |  |
| 07    | 472  | 28.96       | -1.85      | -2.74  | 3.31     | 235      | -2.05     | -2.29       | 3.07     | 228      | 0.1       |  |
| 08    | 475  | 37.06       | -1.96      | -2.00  | 2.80     | 225      | -2.15     | -1.55       | 2.65     | 215      | 0.1       |  |
| 09    | 477  | 45.70       | -1.92      | -1.50  | 2.44     | 217      | -2.12     | -1.05       | 2.37     | 206      | 0.1       |  |
| 10    | 477C | 50.08       | -1.87      | -1.31  | 2.29     | 215      | -2.06     | -0.87       | 2.24     | 202      | 0.1       |  |
| 11    | 479  | 58.60       | -1.73      | -0.99  | 2.00     | 209      | -1.93     | -0.54       | 2.00     | 195      | 0.1       |  |
| 12    | 479  | 56.38       | -1.77      | -1.08  | 2.07     | 211      | -1.96     | -0.64       | 2.06     | 198      | 0.1       |  |
| 13    | 484  | 56.72       | -1.98      | -0.62  | 2.08     | 197      | -2.18     | -0.17       | 2.18     | 184      | 0.1       |  |
| 14    | 492  | 56.85       | -2.17      | -0.12  | 2.18     | 183      | -2.37     | 0.31        | 2.39     | 172      | 0.1       |  |
| 15    | 503  | 57.63       | -2.22      | 0.17   | 2.23     | 175      | -2.41     | 0.61        | 2.49     | 165      | 0.1       |  |
| 16    | 511G | 58.68       | -2.18      | 0.29   | 2.20     | 172      | -2.38     | 0.74        | 2.49     | 162      | 0.1       |  |
| 17    | 521  | 60.88       | -2.07      | 0.39   | 2.11     | 169      | -2.27     | 0.84        | 2.42     | 159      | 0.1       |  |
| 18    | 532  | 65.12       | -1.83      | 0.46   | 1.89     | 165      | -2.03     | 0.91        | 2.22     | 155      | 0.1       |  |
| 19    | 545  | 74.21       | -1.28      | 0.50   | 1.37     | 158      | -1.47     | 0.94        | 1.75     | 147      | 0.1       |  |
| 20    | 563  | 93.38       | -0.00      | 0.46   | 0.46     | 90       | -0.20     | 0.90        | 0.92     | 102      | 0.1       |  |
| 21    | 564  | 90.50       | 0.00       | 0.46   | 0.50     | 77       | -0.08     | 0.94        | 0.94     | 95       | 0.1       |  |
| 22    | 565  | 88.67       | 0.18       | 0.50   | 0.54     | 69       | -0.00     | 0.95        | 0.95     | 95       | 0.1       |  |
| 23    | 566Y | 86.54       | 0.28       | 0.51   | 0.58     | 60       | 0.09      | 0.95        | 0.96     | 84       | 0.1       |  |
| 24    | 568  | 81.32       | 0.52       | 0.50   | 0.73     | 44       | 0.33      | 0.95        | 1.01     | 70       | 0.1       |  |
| 25    | 571  | 74.78       | 0.84       | 0.49   | 0.97     | 30       | 0.64      | 0.94        | 1.14     | 55       | 0.1       |  |
| 26    | 573  | 71.03       | 1.03       | 0.48   | 1.14     | 25       | 0.83      | 0.93        | 1.25     | 48       | 0.1       |  |
| 27    | 577  | 62.93       | 1.46       | 0.46   | 1.53     | 17       | 1.27      | 0.91        | 1.56     | 35       | 0.1       |  |
| 28    | 581  | 54.29       | 1.97       | 0.44   | 2.02     | 12       | 1.78      | 0.89        | 1.99     | 26       | 0.1       |  |
| 29    | 584R | 49.91       | 2.26       | 0.43   | 2.30     | 10       | 2.07      | 0.87        | 2.25     | 22       | 0.1       |  |
| 30    | 591  | 41.39       | 2.92       | 0.32   | 2.94     | 6        | 2.73      | 0.77        | 2.84     | 15       | 0.1       |  |
| 31    | 588  | 43.61       | 2.73       | 0.38   | 2.76     | 7        | 2.54      | 0.82        | 2.67     | 18       | 0.1       |  |
| 32    | 689  | 43.27       | 0.05       | -0.21  | 3.06     | 355      | 2.86      | 0.23        | 2.86     | 4        | 0.1       |  |
| 33    | 697  | 43.14       | 3.31       | -0.86  | 3.43     | 345      | 3.12      | -0.41       | 3.15     | 352      | 0.1       |  |
| 34    | 708  | 42.36       | 3.48       | -1.28  | 3.71     | 339      | 3.29      | -0.84       | 3.39     | 345      | 0.1       |  |
| 35    | 716M | 41.31       | 3.57       | -1.50  | 3.87     | 337      | 3.38      | -1.05       | 3.54     | 342      | 0.1       |  |
| 36    | 726  | 39.11       | 3.73       | -1.75  | 4.12     | 334      | 3.53      | -1.31       | 3.77     | 339      | 0.1       |  |
| 37    | 737  | 34.86       | 3.98       | -2.15  | 4.53     | 331      | 3.79      | -1.70       | 4.15     | 335      | 0.1       |  |
| 38    | 750  | 25.78       | 4.44       | -3.17  | 5.46     | 324      | 4.24      | -2.73       | 5.05     | 327      | 0.1       |  |
| 39    | 820  | 6.61        | 3.04       | -13.26 | 13.60    | 282      | 2.84      | -12.81      | 13.12    | 282      | 0.1       |  |
| X=D50 |      | 100.00      | 0.193      | -0.445 | 0.486    | 293      | 0.0       | 0.0         | 0.0      | 0        | 0         |  |

U=D50 100.00 0.193 -0.445 0.486 0.360 0.0 0.0 0.0 0.0

$a^* = P_{m0} a_r P_{b0} n_{r1} [(b_{21} - b_{22})x + (b_{22} - b_{23})y + b_{23}]y = 1.4(3.075x - 2.570y - 0.0960)y$

$b^* = P_{m0} a_r P_{b0} n_{r1} [(b_{31} - b_{33})x + (b_{32} - b_{33})y + b_{33}]y = 0.5(1.9906x + 3.8617y - 2.4046)y$

DE730-4N

**CIEF10 tristimulus values, chromatic values, and purities ( $n_r=1.4$ ,  $n_b=0.5$ ).**

Normalized Ostwald ( $O$ ) tristimulus values ( $Y_w=100$ ), ordered by hue angle.

| no.   | $\lambda_n$ | C tristimulus values and chromaticities |       |       | nu-chromatic values and chromaticities |       |             |        |           |           |     |
|-------|-------------|-----------------------------------------|-------|-------|----------------------------------------|-------|-------------|--------|-----------|-----------|-----|
|       |             | $X$                                     | $Y$   | $Z$   | $x$                                    | $y$   | $\lambda_m$ | $R_m$  | $C_{ABm}$ | $P_{ABm}$ |     |
| 00    | 588         | 67.67                                   | 43.61 | 0.91  | 0.603                                  | 0.388 | 0.008       | 110.9  | 36.1      | 116.6     | 378 |
| 01    | 689         | 71.10                                   | 43.27 | 21.71 | 0.522                                  | 0.317 | 0.159       | 123.7  | 9.9       | 124.1     | 364 |
| 02    | 697         | 74.36                                   | 43.14 | 44.30 | 0.459                                  | 0.266 | 0.273       | 134.8  | -17.9     | 136.0     | 352 |
| 03    | 708         | 75.16                                   | 42.36 | 58.08 | 0.428                                  | 0.241 | 0.330       | 139.3  | -35.6     | 143.8     | 345 |
| 04    | 716         | 74.43                                   | 41.31 | 63.78 | 0.414                                  | 0.230 | 0.355       | 139.7  | -43.5     | 146.3     | 342 |
| 05    | 726M        | 72.17                                   | 39.11 | 68.41 | 0.401                                  | 0.217 | 0.380       | 138.2  | -51.2     | 147.4     | 339 |
| 06    | 737         | 66.83                                   | 34.86 | 71.99 | 0.384                                  | 0.200 | 0.414       | 132.2  | -59.4     | 145.0     | 335 |
| 07    | 380         | 52.92                                   | 25.78 | 74.65 | 0.345                                  | 0.168 | 0.486       | 109.4  | -70.4     | 130.1     | 327 |
| 08    | 440         | 9.49                                    | 10.00 | 77.94 | 0.131                                  | 0.094 | 0.773       | 7.6    | -85.3     | 85.6      | 282 |
| 09    | 462         | 13.30                                   | 11.32 | 78.97 | 0.128                                  | 0.109 | 0.762       | 0.4    | -84.4     | 84.4      | 270 |
| 10    | 464         | 13.34                                   | 13.45 | 79.69 | 0.125                                  | 0.126 | 0.748       | -7.8   | -82.7     | 83.1      | 264 |
| 11    | 468B        | 13.69                                   | 18.67 | 80.47 | 0.121                                  | 0.165 | 0.713       | -27.0  | -77.6     | 82.2      | 250 |
| 12    | 471         | 14.73                                   | 25.21 | 80.80 | 0.121                                  | 0.208 | 0.669       | -48.4  | -70.5     | 85.5      | 235 |
| 14    | 472         | 15.63                                   | 28.96 | 80.89 | 0.124                                  | 0.230 | 0.644       | -59.3  | -66.4     | 89.1      | 228 |
| 15    | 475         | 18.33                                   | 37.06 | 80.98 | 0.134                                  | 0.271 | 0.593       | -79.9  | -57.6     | 98.5      | 215 |
| 16    | 477         | 22.39                                   | 45.07 | 81.01 | 0.150                                  | 0.306 | 0.543       | -96.9  | -48.3     | 108.3     | 206 |
| 17    | 484         | 24.94                                   | 50.08 | 81.01 | 0.159                                  | 0.320 | 0.518       | -103.4 | -43.7     | 112.3     | 202 |
| 18    | 479C        | 33.68                                   | 60.00 | 80.98 | 0.179                                  | 0.368 | 0.468       | -110.8 | -36.1     | 116.6     | 198 |
| 19    | 479         | 20.97                                   | 56.38 | 80.12 | 0.175                                  | 0.340 | 0.483       | -110.8 | -36.1     | 116.6     | 198 |
| 20    | 484         | 25.63                                   | 56.72 | 59.32 | 0.180                                  | 0.400 | 0.418       | -123.7 | -10.0     | 124.1     | 184 |
| 21    | 492         | 22.37                                   | 56.85 | 36.73 | 0.192                                  | 0.490 | 0.316       | -134.8 | -17.9     | 136.0     | 172 |
| 22    | 503         | 21.57                                   | 57.63 | 22.95 | 0.211                                  | 0.564 | 0.224       | -139.3 | 35.6      | 143.8     | 165 |
| 23    | 511E        | 22.30                                   | 58.68 | 17.25 | 0.227                                  | 0.597 | 0.175       | -139.7 | 43.5      | 146.3     | 162 |
| 24    | 512C        | 24.56                                   | 60.88 | 12.62 | 0.250                                  | 0.620 | 0.128       | -138.2 | 51.2      | 147.4     | 159 |
| 25    | 532         | 29.89                                   | 65.12 | 9.04  | 0.287                                  | 0.625 | 0.086       | -132.2 | 59.4      | 145.0     | 155 |
| 26    | 545         | 43.82                                   | 74.21 | 6.37  | 0.352                                  | 0.596 | 0.051       | -109.4 | 70.4      | 130.1     | 147 |
| 27    | 549         | 49.38                                   | 79.38 | 4.93  | 0.387                                  | 0.628 | 0.037       | -109.4 | 70.4      | 130.1     | 147 |
| 28    | 564         | 83.45                                   | 90.50 | 3.08  | 0.471                                  | 0.511 | 0.017       | -7.6   | 85.3      | 85.6      | 95  |
| 29    | 565         | 83.43                                   | 88.67 | 0.06  | 0.479                                  | 0.509 | 0.011       | -0.4   | 84.3      | 84.3      | 90  |
| 30    | 566         | 83.39                                   | 86.54 | 1.34  | 0.486                                  | 0.505 | 0.007       | 7.8    | 82.7      | 83.1      | 84  |
| 31    | 568         | 83.04                                   | 81.32 | 0.56  | 0.503                                  | 0.493 | 0.003       | 27.0   | 77.6      | 82.2      | 70  |
| 32    | 571Y        | 82.00                                   | 74.08 | 0.23  | 0.522                                  | 0.476 | 0.001       | 48.4   | 70.5      | 85.5      | 55  |
| 33    | 573         | 81.10                                   | 71.73 | 0.14  | 0.532                                  | 0.466 | 0.000       | 59.3   | 66.4      | 89.1      | 48  |
| 34    | 578         | 74.40                                   | 62.93 | 0.05  | 0.554                                  | 0.445 | 0.000       | 79.9   | 57.6      | 98.5      | 35  |
| 35    | 581         | 74.33                                   | 54.29 | 0.02  | 0.577                                  | 0.421 | 0.000       | 96.9   | 48.3      | 108.3     | 26  |
| 36    | 581         | 71.79                                   | 49.29 | 0.01  | 0.589                                  | 0.397 | 0.000       | 110.9  | 36.1      | 116.6     | 22  |
| 37    | 591         | 66.15                                   | 41.39 | 0.33  | 0.602                                  | 0.376 | 0.021       | 113.3  | 32.1      | 117.5     | 35  |
| 38    | 598         | 67.67                                   | 43.61 | 0.91  | 0.603                                  | 0.388 | 0.008       | 110.9  | 36.1      | 116.6     | 378 |
| 39    | 689         | 71.10                                   | 43.27 | 21.71 | 0.522                                  | 0.317 | 0.159       | 123.7  | 9.9       | 124.1     | 364 |
| 11=50 | 96.74       | 100.00                                  | 81.03 | 0.348 | 0.360                                  | 0.360 | 0.000       | 0.0    | 0.0       | 0.0       | 0.0 |

| R17M tristimulus values, chromatic values, and putities ( $n_e=1.4$ , $n_o=0.5$ ).<br>Normalized Ostwald (O) tristimulus values ( $Y_e=100$ ), ordered by wavelength. |      |                                       |       |       |       |       |       |                     |       |       |          |          |          |      |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------|-------|-------|-------|-------|-------|---------------------|-------|-------|----------|----------|----------|------|-----|
| no.                                                                                                                                                                   | O    | tristimulus values and chromaticities |       |       |       |       |       | nu-chromatic values |       |       |          |          |          |      |     |
|                                                                                                                                                                       |      | $\lambda_n$                           | X     | Y     | Z     | x     | y     | $\lambda_m$         | $B_m$ | $C_m$ | $A_{Bm}$ | $P_{Bm}$ | $A_{Bm}$ |      |     |
| 00                                                                                                                                                                    | 373  | 50.84                                 | 23.58 | 64.46 | 0.366 | 0.169 | 0.464 | 113.4               | -60.5 | 126.6 | 331      | 4.81     | -2.56    | 5.45 | 331 |
| 01                                                                                                                                                                    | 450  | 26.22                                 | 10.37 | 70.14 | 0.245 | 0.097 | 0.657 | 60.4                | -77.6 | 98.3  | 307      | 5.82     | -7.49    | 9.48 | 307 |
| 02                                                                                                                                                                    | 463  | 19.81                                 | 9.03  | 72.37 | 0.195 | 0.089 | 0.715 | 38.4                | -80.5 | 89.3  | 295      | 4.26     | -8.92    | 9.88 | 295 |
| 03                                                                                                                                                                    | 465  | 19.87                                 | 11.18 | 74.25 | 0.188 | 0.106 | 0.705 | 30.2                | -80.3 | 85.8  | 290      | 2.70     | -7.18    | 7.67 | 290 |
| 04                                                                                                                                                                    | 470B | 20.04                                 | 16.46 | 77.00 | 0.176 | 0.145 | 0.678 | 10.4                | -77.5 | 78.2  | 277      | 0.63     | -4.70    | 4.74 | 277 |
| 05                                                                                                                                                                    | 474  | 20.76                                 | 23.15 | 78.71 | 0.169 | 0.188 | 0.641 | -12.2               | -71.9 | 72.9  | 260      | -0.52    | -3.10    | 3.15 | 260 |
| 06                                                                                                                                                                    | 477  | 22.69                                 | 31.32 | 79.75 | 0.169 | 0.234 | 0.596 | -35.5               | -64.0 | 73.2  | 240      | -1.13    | -2.04    | 2.33 | 240 |
| 07                                                                                                                                                                    | 479  | 24.27                                 | 35.77 | 80.07 | 0.173 | 0.255 | 0.571 | -45.9               | -59.5 | 75.2  | 232      | -1.38    | -1.66    | 2.10 | 232 |
| 08                                                                                                                                                                    | 481  | 28.86                                 | 45.22 | 80.48 | 0.186 | 0.292 | 0.520 | -62.8               | -49.9 | 80.3  | 218      | -1.29    | -1.10    | 1.77 | 218 |
| 09                                                                                                                                                                    | 482  | 30.21                                 | 48.30 | 79.14 | 0.191 | 0.306 | 0.501 | -68.8               | -45.0 | 82.2  | 213      | -1.42    | -0.93    | 1.70 | 213 |
| 10                                                                                                                                                                    | 487C | 26.13                                 | 48.90 | 65.44 | 0.186 | 0.348 | 0.465 | -86.2               | -27.0 | 90.4  | 197      | -1.76    | -0.55    | 1.84 | 197 |
| 11                                                                                                                                                                    | 496  | 20.48                                 | 50.06 | 44.06 | 0.178 | 0.436 | 0.384 | -114.1              | 1.1   | 114.1 | 179      | -2.22    | 0.02     | 2.22 | 179 |
| 12                                                                                                                                                                    | 500  | 20.60                                 | 52.31 | 38.55 | 0.184 | 0.469 | 0.345 | -118.7              | 10.4  | 119.2 | 174      | -2.27    | 0.19     | 2.27 | 174 |
| 13                                                                                                                                                                    | 509  | 19.40                                 | 53.50 | 28.42 | 0.191 | 0.528 | 0.280 | -126.9              | 24.2  | 129.2 | 169      | -2.37    | 0.45     | 2.41 | 169 |
| 14                                                                                                                                                                    | 511  | 21.83                                 | 56.54 | 28.46 | 0.204 | 0.529 | 0.266 | -128.3              | 27.2  | 131.2 | 168      | -2.27    | 0.48     | 2.32 | 168 |
| 15                                                                                                                                                                    | 518  | 24.65                                 | 60.36 | 24.01 | 0.226 | 0.553 | 0.220 | -130.6              | 36.4  | 135.5 | 164      | -2.16    | 0.60     | 2.24 | 164 |
| 16                                                                                                                                                                    | 530G | 29.99                                 | 65.40 | 16.35 | 0.268 | 0.585 | 0.146 | -126.5              | 50.4  | 136.1 | 158      | -1.93    | 0.77     | 2.08 | 158 |
| 17                                                                                                                                                                    | 538  | 43.18                                 | 76.41 | 16.37 | 0.317 | 0.562 | 0.120 | -113.4              | 60.5  | 128.6 | 151      | -1.48    | 0.79     | 1.68 | 151 |
| 18                                                                                                                                                                    | 553  | 67.80                                 | 89.62 | 10.69 | 0.403 | 0.533 | 0.063 | -60.4               | 77.6  | 98.3  | 127      | -0.67    | 0.86     | 1.09 | 127 |
| 19                                                                                                                                                                    | 557  | 74.22                                 | 90.96 | 8.45  | 0.427 | 0.523 | 0.038 | -38.4               | 80.5  | 89.2  | 115      | -0.42    | 0.88     | 0.98 | 115 |
| 20                                                                                                                                                                    | 558  | 74.15                                 | 88.81 | 6.58  | 0.437 | 0.523 | 0.038 | -30.2               | 80.3  | 85.8  | 110      | -0.34    | 0.90     | 0.96 | 110 |
| 21                                                                                                                                                                    | 561  | 73.98                                 | 83.52 | 3.84  | 0.458 | 0.517 | 0.023 | -10.4               | 77.4  | 78.1  | 97       | -0.12    | 0.92     | 0.93 | 97  |
| 22                                                                                                                                                                    | 565  | 73.26                                 | 76.83 | 2.11  | 0.481 | 0.504 | 0.013 | -12.3               | 77.5  | 72.2  | 80       | 0.16     | 0.78     | 0.94 | 80  |
| 23                                                                                                                                                                    | 570Y | 71.33                                 | 68.67 | 1.09  | 0.505 | 0.486 | 0.007 | 35.5                | 64.0  | 73.2  | 60       | 0.51     | 0.93     | 1.06 | 60  |
| 24                                                                                                                                                                    | 572  | 69.75                                 | 64.22 | 0.76  | 0.517 | 0.476 | 0.005 | 45.9                | 59.5  | 75.2  | 52       | 0.71     | 0.92     | 1.17 | 52  |
| 25                                                                                                                                                                    | 578  | 65.16                                 | 54.77 | 0.35  | 0.541 | 0.455 | 0.002 | 62.8                | 49.9  | 80.3  | 38       | 1.14     | 0.91     | 1.46 | 38  |
| 26                                                                                                                                                                    | 581  | 63.81                                 | 51.69 | 1.69  | 0.544 | 0.441 | 0.014 | 68.8                | 45.0  | 82.2  | 33       | 0.33     | 0.87     | 1.59 | 33  |
| 27                                                                                                                                                                    | 600  | 67.89                                 | 51.09 | 15.38 | 0.505 | 0.380 | 0.114 | 86.2                | 27.0  | 90.4  | 17       | 2.68     | 0.52     | 1.77 | 17  |
| 28                                                                                                                                                                    | 705  | 73.42                                 | 47.68 | 42.28 | 0.449 | 0.291 | 0.258 | 118.7               | -10.4 | 119.2 | 354      | 2.49     | -0.21    | 2.50 | 354 |
| 29                                                                                                                                                                    | 714R | 74.62                                 | 46.49 | 52.41 | 0.430 | 0.267 | 0.302 | 126.9               | -24.2 | 129.2 | 349      | 2.73     | -0.52    | 2.77 | 349 |
| 30                                                                                                                                                                    | 716  | 72.19                                 | 43.45 | 52.37 | 0.429 | 0.258 | 0.311 | 128.3               | -27.2 | 131.2 | 348      | 2.95     | -0.62    | 3.02 | 348 |
| 31                                                                                                                                                                    | 723  | 69.37                                 | 39.63 | 56.82 | 0.418 | 0.238 | 0.342 | 130.6               | -36.4 | 135.5 | 344      | 3.29     | -0.91    | 3.42 | 344 |
| 32                                                                                                                                                                    | 735  | 64.03                                 | 34.59 | 64.49 | 0.392 | 0.212 | 0.395 | 126.5               | -50.4 | 136.2 | 338      | 3.65     | -1.45    | 3.93 | 338 |
| 33                                                                                                                                                                    | 743  | 50.84                                 | 23.58 | 64.46 | 0.366 | 0.169 | 0.464 | 113.4               | -60.5 | 126.6 | 331      | 4.81     | -2.56    | 5.45 | 331 |
| 34                                                                                                                                                                    | 815  | 26.22                                 | 10.37 | 70.14 | 0.245 | 0.097 | 0.657 | 60.4                | -77.6 | 98.3  | 307      | 5.82     | -7.48    | 9.48 | 307 |
| U=D50 94.03 100.00 80.83 0.342 0.363 0.363 0.0 0.0 0.0 0                                                                                                              |      |                                       |       |       |       |       |       |                     |       |       |          |          |          |      |     |

| R17M tristimulus values, chromatic values, and putities ( $n_e=1.4$ , $n_o=0.5$ ).<br>Normalized Ostwald (O) tristimulus values ( $Y_e=100$ ), ordered by hue angle. |      |                                         |       |       |       |       |       |                     |       |       |          |          |          |      |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------|-------|-------|-------|-------|-------|---------------------|-------|-------|----------|----------|----------|------|-----|
| no.                                                                                                                                                                  | O    | C tristimulus values and chromaticities |       |       |       |       |       | nu-chromatic values |       |       |          |          |          |      |     |
|                                                                                                                                                                      |      | $\lambda_n$                             | X     | Y     | Z     | x     | y     | $\lambda_m$         | $B_m$ | $C_m$ | $A_{Bm}$ | $P_{Bm}$ | $A_{Bm}$ |      |     |
| 00                                                                                                                                                                   | 600  | 67.89                                   | 51.09 | 15.38 | 0.505 | 0.380 | 0.114 | 86.2                | 27.0  | 90.4  | 17       | 2.68     | 0.52     | 1.77 | 377 |
| 01                                                                                                                                                                   | 705  | 73.42                                   | 47.68 | 42.28 | 0.449 | 0.291 | 0.258 | 118.7               | -10.4 | 119.2 | 354      | 2.49     | -0.21    | 2.50 | 354 |
| 02                                                                                                                                                                   | 714  | 74.62                                   | 46.49 | 52.41 | 0.430 | 0.267 | 0.302 | 126.9               | -24.2 | 129.2 | 349      | 2.73     | -0.52    | 2.77 | 349 |
| 03                                                                                                                                                                   | 716  | 72.19                                   | 43.45 | 52.37 | 0.429 | 0.258 | 0.311 | 128.3               | -27.2 | 131.2 | 348      | 2.95     | -0.62    | 3.02 | 348 |
| 04                                                                                                                                                                   | 723  | 69.37                                   | 39.63 | 56.82 | 0.418 | 0.238 | 0.342 | 130.6               | -36.4 | 135.5 | 344      | 3.29     | -0.91    | 3.42 | 344 |
| 05                                                                                                                                                                   | 735G | 64.03                                   | 34.59 | 64.49 | 0.392 | 0.212 | 0.395 | 126.5               | -50.4 | 136.2 | 338      | 3.65     | -1.45    | 3.93 | 338 |
| 06                                                                                                                                                                   | 743  | 50.84                                   | 23.58 | 64.46 | 0.366 | 0.169 | 0.464 | 113.4               | -60.5 | 126.6 | 331      | 4.81     | -2.56    | 5.45 | 331 |
| 07                                                                                                                                                                   | 450  | 26.22                                   | 10.37 | 70.14 | 0.245 | 0.097 | 0.657 | 60.4                | -77.6 | 98.3  | 307      | 5.82     | -7.48    | 9.48 | 307 |
| 08                                                                                                                                                                   | 463  | 19.81                                   | 9.03  | 72.37 | 0.195 | 0.089 | 0.715 | 38.4                | -80.5 | 89.3  | 295      | 4.26     | -8.92    | 9.88 | 295 |
| 09                                                                                                                                                                   | 465  | 19.87                                   | 11.18 | 74.25 | 0.188 | 0.106 | 0.705 | 30.2                | -80.3 | 85.8  | 290      | 2.70     | -7.18    | 7.67 | 290 |
| 10                                                                                                                                                                   | 470  | 20.04                                   | 16.46 | 77.00 | 0.176 | 0.145 | 0.678 | 10.4                | -77.5 | 78.2  | 277      | 0.63     | -4.70    | 4.74 | 277 |
| 11                                                                                                                                                                   | 474  | 20.76                                   | 23.15 | 78.71 | 0.169 | 0.188 | 0.641 | -12.2               | -71.9 | 72.9  | 260      | -0.52    | -3.10    | 3.15 | 260 |
| 12                                                                                                                                                                   | 477B | 22.69                                   | 31.32 | 79.75 | 0.169 | 0.234 | 0.596 | -35.5               | -64.0 | 73.2  | 240      | -1.13    | -2.04    | 2.33 | 240 |
| 13                                                                                                                                                                   | 479  | 24.27                                   | 35.77 | 80.07 | 0.173 | 0.255 | 0.571 | -45.9               | -59.5 | 75.2  | 232      | -1.38    | -1.66    | 2.10 | 232 |
| 14                                                                                                                                                                   | 481  | 28.86                                   | 45.22 | 80.48 | 0.186 | 0.292 | 0.520 | -62.8               | -49.9 | 80.3  | 218      | -1.29    | -1.10    | 1.77 | 218 |
| 15                                                                                                                                                                   | 482  | 30.21                                   | 48.30 | 79.14 | 0.191 | 0.306 | 0.501 | -68.8               | -45.0 | 82.2  | 213      | -1.42    | -0.93    | 1.70 | 213 |
| 16                                                                                                                                                                   | 487  | 26.13                                   | 48.90 | 65.44 | 0.186 | 0.348 | 0.465 | -86.2               | -27.0 | 90.4  | 197      | -1.76    | -0.55    | 1.84 | 197 |
| 17                                                                                                                                                                   | 496  | 20.48                                   | 50.06 | 44.06 | 0.178 | 0.436 | 0.384 | -114.1              | 1.1   | 114.1 | 179      | -2.22    | 0.02     | 2.22 | 179 |
| 18                                                                                                                                                                   | 500C | 20.60                                   | 52.31 | 38.55 | 0.184 | 0.469 | 0.345 | -118.7              | 10.4  | 119.2 | 174      | -2.27    | 0.19     | 2.27 | 174 |
| 19                                                                                                                                                                   | 509  | 19.40                                   | 53.50 | 28.42 | 0.191 | 0.528 | 0.280 | -126.9              | 24.2  | 129.2 | 169      | -2.37    | 0.45     | 2.41 | 169 |
| 20                                                                                                                                                                   | 511  | 21.83                                   | 56.54 | 28.46 | 0.204 | 0.529 | 0.266 | -128.3              | 27.2  | 131.2 | 168      | -2.27    | 0.48     | 2.32 | 168 |
| 21                                                                                                                                                                   | 518  | 24.65                                   | 60.36 | 24.01 | 0.226 | 0.553 | 0.220 | -130.6              | 36.4  | 135.5 | 164      | -2.16    | 0.60     | 2.24 | 164 |
| 22                                                                                                                                                                   | 530  | 29.99                                   | 65.40 | 16.35 | 0.268 | 0.585 | 0.146 | -126.5              | 50.4  | 136.1 | 158      | -1.93    | 0.77     | 2.08 | 158 |
| 23                                                                                                                                                                   | 538G | 43.18                                   | 76.41 | 16.37 | 0.317 | 0.562 | 0.120 | -113.4              | 60.5  | 128.6 | 151      | -1.48    | 0.79     | 1.68 | 151 |
| 24                                                                                                                                                                   | 553  | 67.80                                   | 89.62 | 10.69 | 0.403 | 0.533 | 0.063 | -60.4               | 77.6  | 98.3  | 127      | -0.67    | 0.86     | 1.09 | 127 |
| 25                                                                                                                                                                   | 557  | 74.22                                   | 90.96 | 8.45  | 0.427 | 0.523 | 0.038 | -38.4               | 80.5  | 89.2  | 115      | -0.42    | 0.88     | 0.98 | 115 |
| 26                                                                                                                                                                   | 558  | 74.15                                   | 88.81 | 6.58  | 0.437 | 0.523 | 0.038 | -30.2               | 80.3  | 85.8  | 110      | -0.34    | 0.90     | 0.96 | 110 |
| 27                                                                                                                                                                   | 561  | 73.98                                   | 83.52 | 3.84  | 0.458 | 0.517 | 0.023 | -10.4               | 77.4  | 78.1  | 97       | -0.12    | 0.92     | 0.93 | 97  |
| 28                                                                                                                                                                   | 565  | 73.26                                   | 76.83 | 2.11  | 0.481 | 0.504 | 0.013 | -12.3               | 77.5  | 72.2  | 80       | 0.16     | 0.78     | 0.94 | 80  |
| 29                                                                                                                                                                   | 570Y | 71.33                                   | 68.67 | 1.09  | 0.505 | 0.486 | 0.007 | 35.5                | 64.0  | 73.2  | 60       | 0.51     | 0.93     | 1.06 | 60  |
| 30                                                                                                                                                                   | 572  | 69.75                                   | 64.22 | 0.76  | 0.517 | 0.476 | 0.005 | 45.9                | 59.5  | 75.2  | 52       | 0.71     | 0.92     | 1.17 | 52  |
| 31                                                                                                                                                                   | 578  | 65.16                                   | 54.77 | 0.35  | 0.541 | 0.455 | 0.002 | 62.8                | 49.9  | 80.3  | 38       | 1.14     | 0.91     | 1.46 | 38  |
| 32                                                                                                                                                                   | 581Y | 63.81                                   | 51.69 | 1.69  | 0.544 | 0.441 | 0.014 | 68.8                | 45.0  | 82.2  | 33       | 0.33     | 0.87     | 1.59 | 33  |
| 33                                                                                                                                                                   | 600  | 67.89                                   | 51.09 | 15.38 | 0.505 | 0.380 | 0.114 | 86.2                | 27.0  | 90.4  | 17       | 2.68     | 0.52     | 1.77 | 17  |
| 34                                                                                                                                                                   | 705  | 73.42                                   | 47.68 | 42.28 | 0.449 | 0.291 | 0.258 | 118.7               | -10.4 | 119.2 | 354      | 2.49     | -0.21    | 2.50 | 354 |
| U=D50 94.03 100.00 80.83 0.342 0.363 0.363 0.0 0.0 0.0 0                                                                                                             |      |                                         |       |       |       |       |       |                     |       |       |          |          |          |      |     |

| R17M tristimulus values, chromatic values, and putities ( $n_e=1.4$ , $n_o=0.5$ ).<br>Normalized Ostwald (O) tristimulus values ( $Y_e=100$ ), ordered by wavelength. |      |        |             |          |          |          |          |              |              |              |              |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-------------|----------|----------|----------|----------|--------------|--------------|--------------|--------------|--|--|
| no.                                                                                                                                                                   | O    | C      | n-purities  |          |          |          |          | nu-purities  |              |              |              |  |  |
|                                                                                                                                                                       |      |        | $\lambda_n$ | $P_{an}$ | $P_{bn}$ | $P_{rn}$ | $h_{bn}$ | $P_{\nu an}$ | $P_{\nu bn}$ | $P_{\nu rn}$ | $h_{\nu bn}$ |  |  |
| 00                                                                                                                                                                    | 373  | 23.58  | 4.89        | -3.00    | 5.74     | 328      | 4.81     | -2.56        | 5.45         | 331          |              |  |  |
| 01                                                                                                                                                                    | 450  | 10.37  | 5.90        | -7.92    | 9.88     | 306      | 5.82     | -7.48        | 9.48         | 307          |              |  |  |
| 02                                                                                                                                                                    | 455  | 10.37  | 5.90        | -7.92    | 9.88     | 324      | 5.82     | -7.48        | 9.48         | 325          |              |  |  |
| 03                                                                                                                                                                    | 465  | 11.18  | 2.78        | -6.24    | 8.11     | 290      | 2.70     | -7.18        | 6.77         | 290          |              |  |  |
| 04                                                                                                                                                                    | 470B | 16.46  | 0.71        | -5.14    | 5.19     | 277      | 0.63     | -4.70        | 4.74         | 277          |              |  |  |
| 05                                                                                                                                                                    | 474  | 23.15  | -0.44       | -3.54    | 3.57     | 262      | -0.52    | -3.10        | 3.15         | 260          |              |  |  |
| 06                                                                                                                                                                    | 477  | 31.32  | -1.05       | -2.48    | 2.69     | 247      | -1.13    | -2.04        | 2.33         | 240          |              |  |  |
| 07                                                                                                                                                                    | 479  | 35.77  | -1.20       | -2.10    | 2.42     | 240      | -1.28    | -1.66        | 2.10         | 232          |              |  |  |
| 08                                                                                                                                                                    | 481  | 45.22  | -1.30       | -1.54    | 2.02     | 229      | -1.39    | -1.10        | 1.77         | 218          |              |  |  |
| 09                                                                                                                                                                    | 482  | 48.30  | -1.34       | -1.37    | 1.91     | 225      | -1.42    | -0.93        | 1.70         | 213          |              |  |  |
| 10                                                                                                                                                                    | 487C | 48.90  | -1.68       | -0.99    | 1.95     | 210      | -1.76    | -0.55        | 1.84         | 197          |              |  |  |
| 11                                                                                                                                                                    | 496  | 50.06  | -2.14       | -0.41    | 2.18     | 190      | -2.22    | 0.02         | 2.22         | 179          |              |  |  |
| 12                                                                                                                                                                    | 500  | 52.31  | -2.18       | -0.23    | 2.20     | 186      | -2.27    | 0.19         | 2.27         | 174          |              |  |  |
| 13                                                                                                                                                                    | 509  | 53.50  | -2.29       | 0.01     | 2.29     | 179      | -2.37    | 0.45         | 2.41         | 169          |              |  |  |
| 14                                                                                                                                                                    | 511  | 56.54  | -2.18       | 0.04     | 2.19     | 178      | -2.27    | 0.48         | 2.32         | 168          |              |  |  |
| 15                                                                                                                                                                    | 515  | 60.54  | -2.08       | 0.16     | 2.08     | 170      | -2.17    | 0.78         | 2.44         | 158          |              |  |  |
| 16                                                                                                                                                                    | 530G | 65.40  | -1.85       | 0.33     | 1.88     | 169      | -1.93    | 0.77         | 2.08         | 154          |              |  |  |
| 17                                                                                                                                                                    | 538  | 76.41  | -1.40       | 0.35     | 1.44     | 165      | -1.48    | 0.79         | 1.68         | 151          |              |  |  |
| 18                                                                                                                                                                    | 553  | 89.62  | -0.59       | 0.42     | 0.73     | 144      | -0.67    | 0.86         | 0.99         | 127          |              |  |  |
| 19                                                                                                                                                                    | 557  | 90.96  | -0.34       | 0.44     | 0.56     | 127      | -0.42    | 0.88         | 0.98         | 115          |              |  |  |
| 20                                                                                                                                                                    | 558  | 88.81  | -0.25       | 0.46     | 0.53     | 119      | -0.34    | 0.90         | 0.96         | 110          |              |  |  |
| 21                                                                                                                                                                    | 561  | 83.52  | -0.04       | 0.48     | 0.49     | 95       | -0.12    | 0.92         | 0.93         | 97           |              |  |  |
| 22                                                                                                                                                                    | 565  | 76.83  | 0.24        | 0.49     | 0.54     | 64       | 0.16     | 0.93         | 0.94         | 80           |              |  |  |
| 23                                                                                                                                                                    | 570Y | 68.67  | 0.59        | 0.49     | 0.77     | 39       | 0.51     | 0.93         | 1.06         | 60           |              |  |  |
| 24                                                                                                                                                                    | 572  | 64.22  | 0.79        | 0.48     | 0.93     | 31       | 0.71     | 0.92         | 1.17         | 52           |              |  |  |
| 25                                                                                                                                                                    | 578  | 54.77  | 1.22        | 0.47     | 1.31     | 21       | 1.14     | 0.91         | 1.46         | 38           |              |  |  |
| 26                                                                                                                                                                    | 581  | 51.69  | 1.41        | 0.43     | 1.47     | 17       | 1.33     | 0.87         | 1.59         | 33           |              |  |  |
| 27                                                                                                                                                                    | 583  | 51.00  | 0.77        | 0.09     | 1.77     | 7        | 1.68     | 0.52         | 1.77         | 17           |              |  |  |
| 28                                                                                                                                                                    | 585  | 46.68  | 0.57        | -0.65    | 2.65     | 345      | 2.65     | -0.65        | 2.65         | 354          |              |  |  |
| 29                                                                                                                                                                    | 614R | 46.49  | 2.81        | 0.95     | 2.97     | 341      | 2.73     | -0.52        | 2.77         | 349          |              |  |  |
| 30                                                                                                                                                                    | 716  | 43.45  | 3.03        | -1.06    | 3.24     | 340      | 2.95     | -0.62        | 3.02         | 348          |              |  |  |
| 31                                                                                                                                                                    | 723  | 39.63  | 3.37        | -1.35    | 3.63     | 338      | 3.29     | -0.91        | 3.42         | 344          |              |  |  |
| 32                                                                                                                                                                    | 735  | 34.59  | 3.73        | -1.89    | 4.19     | 333      | 3.65     | -1.45        | 3.93         | 338          |              |  |  |
| 33                                                                                                                                                                    | 743  | 23.58  | 4.89        | -3.00    | 5.74     | 328      | 4.81     | -2.56        | 5.45         | 331          |              |  |  |
| 34                                                                                                                                                                    | 815  | 10.37  | 5.90        | -7.92    | 9.88     | 306      | 5.82     | -7.48        | 9.48         | 307          |              |  |  |
| U=50                                                                                                                                                                  |      | 100.00 | 0.081       | -0.437   | 0.445    | 280      | 0.0      | 0.0          | 0.0          | 0            |              |  |  |

