

**Ostwald optimal colours (o) of maximum (m)  $C_{AB}$  for D65,  $Y_w=100$ ,  $Y_m=520.770$**

| $i_1$ | $\lambda_1$ | $i_2$ | $\lambda_2$ | X      | Y      | Z      | x      | y      | z      | $h_{xy}$ | $i_d$ | $i_d$ | $i_d$ | $i_d$ | Code |
|-------|-------------|-------|-------------|--------|--------|--------|--------|--------|--------|----------|-------|-------|-------|-------|------|
| 0     | 405         | 32    | 561         | 32.57  | 58.2   | 108.12 | 0.1637 | 0.2926 | 0.5436 | 193.7    | 16    | 483   | 37    | 589   | Cm   |
| 6     | 435         | 32    | 562         | 29.09  | 58.79  | 88.73  | 0.1647 | 0.3328 | 0.5023 | 178.4    | 17    | 486   | 42    | 610   |      |
| 10    | 450         | 32    | 563         | 22.93  | 59.41  | 52.37  | 0.1702 | 0.441  | 0.3887 | 141.8    | 19    | 496   | -1    | 496c  |      |
| 12    | 460         | 33    | 565         | 20.88  | 60.32  | 34.02  | 0.1812 | 0.5234 | 0.2952 | 124.0    | 21    | 505   | -1    | 505c  |      |
| 12    | 465         | 33    | 567         | 21.95  | 61.66  | 34.03  | 0.1866 | 0.5241 | 0.2892 | 122.8    | 21    | 506   | -1    | 506c  |      |
| 14    | 470         | 33    | 569         | 21.47  | 62.72  | 19.98  | 0.206  | 0.602  | 0.1918 | 111.3    | 24    | 520   | -1    | 520c  |      |
| 15    | 475         | 34    | 573         | 23.76  | 65.29  | 14.91  | 0.2285 | 0.6279 | 0.1434 | 105.6    | 25    | 528   | -1    | 528c  | Gm   |
| 16    | 480         | 36    | 580         | 29.0   | 69.95  | 11.05  | 0.2636 | 0.6358 | 0.1005 | 99.0     | 27    | 537   | -1    | 537c  |      |
| 17    | 485         | 39    | 595         | 42.11  | 78.75  | 8.23   | 0.3261 | 0.6099 | 0.0638 | 87.2     | 29    | 548   | -1    | 548c  |      |
| 18    | 490         | -1    | 490c        | 77.09  | 93.8   | 6.13   | 0.4354 | 0.5298 | 0.0346 | 58.5     | 33    | 565   | 11    | 459   | max  |
| 19    | 495         | -1    | 495c        | 77.04  | 93.2   | 4.52   | 0.4431 | 0.5308 | 0.026  | 57.1     | 33    | 566   | 12    | 462   |      |
| 20    | 500         | -1    | 500c        | 77.02  | 90.42  | 3.27   | 0.4511 | 0.5296 | 0.0191 | 55.3     | 33    | 567   | 12    | 464   |      |
| 22    | 510         | -1    | 510c        | 76.89  | 85.27  | 1.63   | 0.4694 | 0.5205 | 0.01   | 50.7     | 33    | 569   | 13    | 469   |      |
| 23    | 520         | -1    | 519c        | 76.66  | 81.98  | 1.16   | 0.4797 | 0.513  | 0.0072 | 47.7     | 34    | 570   | 14    | 471   | Ym   |
| 25    | 530         | -1    | 529c        | 75.53  | 74.04  | 0.57   | 0.503  | 0.4931 | 0.0038 | 40.7     | 34    | 573   | 15    | 475   |      |
| 27    | 540         | -1    | 539c        | 73.26  | 64.9   | 0.26   | 0.5292 | 0.4688 | 0.0019 | 32.8     | 35    | 577   | 15    | 478   |      |
| 28    | 545         | -1    | 544c        | 71.66  | 60.13  | 0.18   | 0.5429 | 0.4556 | 0.0014 | 28.7     | 35    | 579   | 15    | 479   |      |
| 29    | 550         | -1    | 549c        | 69.7   | 55.26  | 0.13   | 0.5571 | 0.4417 | 0.001  | 24.7     | 36    | 582   | 16    | 480   |      |
| 30    | 555         | -1    | 554c        | 67.4   | 50.4   | 0.09   | 0.5716 | 0.4274 | 0.0008 | 20.8     | 36    | 584   | 16    | 481   |      |
| 32    | 560         | -1    | 560c        | 61.78  | 41.0   | 0.05   | 0.6007 | 0.3987 | 0.0005 | 13.6     | 37    | 589   | 16    | 483   |      |
| 32    | 561         | 0     | 405         | 62.46  | 41.79  | 0.76   | 0.5948 | 0.3979 | 0.0072 | 13.7     | 37    | 589   | 16    | 483   | Rm   |
| 32    | 562         | 6     | 435         | 65.95  | 41.2   | 20.15  | 0.518  | 0.3236 | 0.1583 | 358.4    | 42    | 610   | 17    | 486   |      |
| 32    | 563         | 10    | 450         | 72.11  | 40.58  | 56.51  | 0.4261 | 0.2398 | 0.3339 | 321.8    | -1    | 496c  | 19    | 496   |      |
| 33    | 565         | 12    | 460         | 74.16  | 39.67  | 74.86  | 0.393  | 0.2102 | 0.3967 | 304.0    | -1    | 505c  | 21    | 505   |      |
| 33    | 567         | 12    | 465         | 73.08  | 38.33  | 74.86  | 0.3923 | 0.2057 | 0.4018 | 302.9    | -1    | 506c  | 21    | 506   |      |
| 33    | 569         | 14    | 470         | 73.57  | 37.27  | 88.9   | 0.3683 | 0.1865 | 0.445  | 291.3    | -1    | 520c  | 24    | 520   |      |
| 34    | 573         | 15    | 475         | 71.27  | 34.7   | 93.97  | 0.3564 | 0.1735 | 0.4699 | 285.7    | -1    | 528c  | 25    | 528   | Mm   |
| 36    | 580         | 16    | 480         | 66.03  | 30.04  | 97.83  | 0.3405 | 0.1549 | 0.5045 | 279.1    | -1    | 537c  | 27    | 537   |      |
| 39    | 595         | 17    | 485         | 52.92  | 21.24  | 100.65 | 0.3027 | 0.1215 | 0.5757 | 267.2    | -1    | 548c  | 29    | 548   |      |
| -1    | 490         | 18    | 490         | 17.95  | 6.19   | 102.75 | 0.1414 | 0.4087 | 0.8097 | 238.5    | 11    | 459   | 33    | 565   | min  |
| -1    | 495c        | 19    | 495         | 18.0   | 7.69   | 104.36 | 0.1384 | 0.0591 | 0.8024 | 237.1    | 12    | 462   | 33    | 566   |      |
| -1    | 500c        | 20    | 500         | 18.02  | 9.57   | 105.61 | 0.1352 | 0.0719 | 0.7928 | 235.4    | 12    | 464   | 33    | 567   |      |
| -1    | 510c        | 22    | 510         | 18.14  | 14.72  | 107.25 | 0.1295 | 0.105  | 0.7654 | 230.7    | 13    | 469   | 33    | 569   |      |
| -1    | 519c        | 23    | 520         | 18.37  | 18.01  | 107.72 | 0.1275 | 0.1249 | 0.7475 | 227.1    | 14    | 471   | 34    | 570   | Bm   |
| -1    | 529c        | 25    | 530         | 19.5   | 25.95  | 108.31 | 0.1268 | 0.1687 | 0.7043 | 220.7    | 15    | 475   | 34    | 573   |      |
| -1    | 539c        | 27    | 540         | 21.77  | 35.09  | 108.62 | 0.1315 | 0.212  | 0.6563 | 212.8    | 15    | 478   | 35    | 577   |      |
| -1    | 544c        | 28    | 545         | 23.38  | 39.86  | 108.7  | 0.1359 | 0.2318 | 0.6321 | 208.8    | 15    | 479   | 35    | 579   |      |
| -1    | 549c        | 29    | 550         | 25.33  | 44.73  | 108.76 | 0.1416 | 0.2501 | 0.6081 | 204.7    | 16    | 480   | 36    | 582   |      |
| -1    | 554c        | 30    | 555         | 27.63  | 49.59  | 108.79 | 0.1485 | 0.2665 | 0.5848 | 200.8    | 16    | 481   | 36    | 584   |      |
| -1    | 560c        | 32    | 560         | 33.26  | 58.99  | 108.83 | 0.1654 | 0.2933 | 0.5412 | 193.6    | 16    | 483   | 37    | 589   |      |
| 380   | 770         | 95.04 | 100.0       | 108.89 | 0.3127 | 0.329  | 0.3582 | 0.0    |        |          |       |       |       |       |      |

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BE30-TN\_16

TUB-test chart BE30; CIE (x, y) and chromaticities ( $a_1$ ,  $b_1$ )

Ostwald optimal colours for illuminant D65; diagram for illuminant D65,  $Y_w=100$

input: w/rgb/cmyk -> rgb

