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| Ostwald optimal colours (o), maximum (m) $CAB,10$ for D65, $Y_{N,10}=3,6$ , $Y_{W,10}=90$ , $Y_m=520\_770$ |                  |          |          |          |          |          |          |             |                  |                  |         |         |     |
|------------------------------------------------------------------------------------------------------------|------------------|----------|----------|----------|----------|----------|----------|-------------|------------------|------------------|---------|---------|-----|
| $i_1, \lambda_1$                                                                                           | $i_2, \lambda_2$ | $X_{10}$ | $Y_{10}$ | $Z_{10}$ | $x_{10}$ | $y_{10}$ | $z_{10}$ | $h_{xy,10}$ | $i_d, \lambda_d$ | $i_c, \lambda_c$ | Code    |         |     |
| 0                                                                                                          | 405              | 31       | 556      | 27.66    | 47.1     | 86.31    | 0.1717   | 0.2924      | 0.5358           | 195.1            | 15 476  | 37 585  | Cm  |
| 6                                                                                                          | 435              | 31       | 557      | 24.87    | 47.93    | 68.5     | 0.176    | 0.3391      | 0.4847           | 176.5            | 16 480  | 44 621  |     |
| 10                                                                                                         | 450              | 31       | 559      | 20.39    | 48.21    | 39.65    | 0.1883   | 0.4453      | 0.3662           | 137.6            | 18 492  | -1 492c |     |
| 11                                                                                                         | 460              | 32       | 562      | 20.41    | 49.33    | 32.48    | 0.1996   | 0.4825      | 0.3177           | 126.9            | 19 498  | -1 498c |     |
| 12                                                                                                         | 465              | 33       | 565      | 20.63    | 50.4     | 26.01    | 0.2126   | 0.5193      | 0.268            | 118.2            | 21 506  | -1 506c |     |
| 14                                                                                                         | 470              | 34       | 570      | 22.02    | 52.1     | 15.93    | 0.2445   | 0.5785      | 0.1769           | 105.6            | 24 522  | -1 522c |     |
| 15                                                                                                         | 475              | 35       | 579      | 27.8     | 56.8     | 12.45    | 0.2864   | 0.5852      | 0.1282           | 96.1             | 26 534  | -1 534c | Gm  |
| 16                                                                                                         | 480              | 41       | 606      | 44.97    | 66.9     | 9.88     | 0.3693   | 0.5494      | 0.0811           | 75.6             | 30 550  | -1 550c |     |
| 16                                                                                                         | 485              | -1       | 484c     | 62.99    | 75.01    | 9.88     | 0.4259   | 0.5072      | 0.0668           | 57.5             | 32 560  | 10 454  |     |
| 18                                                                                                         | 490              | -1       | 490c     | 62.84    | 72.49    | 6.74     | 0.4423   | 0.5102      | 0.0474           | 54.3             | 32 562  | 11 459  | max |
| 19                                                                                                         | 495              | -1       | 495c     | 62.83    | 70.93    | 5.79     | 0.4502   | 0.5082      | 0.0415           | 52.4             | 32 563  | 12 461  |     |
| 19                                                                                                         | 500              | -1       | 499c     | 62.83    | 70.93    | 5.79     | 0.4502   | 0.5082      | 0.0415           | 52.4             | 32 563  | 12 461  |     |
| 22                                                                                                         | 510              | -1       | 510c     | 62.5     | 64.74    | 4.26     | 0.4752   | 0.4923      | 0.0324           | 44.9             | 33 566  | 13 466  |     |
| 23                                                                                                         | 520              | -1       | 519c     | 62.17    | 62.19    | 4.01     | 0.4842   | 0.4844      | 0.0312           | 41.9             | 33 568  | 13 468  | Ym  |
| 26                                                                                                         | 530              | -1       | 530c     | 59.95    | 53.14    | 3.6      | 0.5137   | 0.4553      | 0.0309           | 31.8             | 34 573  | 14 472  |     |
| 27                                                                                                         | 540              | -1       | 539c     | 58.76    | 49.82    | 3.54     | 0.524    | 0.4443      | 0.0316           | 28.3             | 35 576  | 14 473  |     |
| 28                                                                                                         | 545              | -1       | 544c     | 57.31    | 46.42    | 3.5      | 0.5343   | 0.4328      | 0.0327           | 24.7             | 35 578  | 14 474  |     |
| 29                                                                                                         | 550              | -1       | 549c     | 55.6     | 42.99    | 3.48     | 0.5447   | 0.4211      | 0.0341           | 21.3             | 36 580  | 15 475  |     |
| 31                                                                                                         | 555              | -1       | 555c     | 51.4     | 36.18    | 3.47     | 0.5644   | 0.3973      | 0.0381           | 14.8             | 37 586  | 15 476  |     |
| 32                                                                                                         | 560              | 10       | 451      | 57.83    | 34.36    | 48.64    | 0.4106   | 0.2439      | 0.3453           | 318.1            | -1 491c | 18 491  |     |
| 31                                                                                                         | 556              | 0        | 405      | 57.66    | 42.89    | 10.28    | 0.5202   | 0.3869      | 0.0927           | 15.1             | 37 585  | 15 476  | Rm  |
| 31                                                                                                         | 557              | 6        | 435      | 60.45    | 42.06    | 28.09    | 0.4628   | 0.322       | 0.215            | 356.5            | 44 621  | 16 480  |     |
| 31                                                                                                         | 559              | 10       | 450      | 64.93    | 41.78    | 56.94    | 0.3967   | 0.2553      | 0.3479           | 317.6            | -1 492c | 18 492  |     |
| 32                                                                                                         | 562              | 11       | 460      | 64.91    | 40.66    | 64.11    | 0.3825   | 0.2396      | 0.3778           | 307.0            | -1 498c | 19 498  |     |
| 33                                                                                                         | 565              | 12       | 465      | 64.69    | 39.59    | 70.58    | 0.3699   | 0.2264      | 0.4036           | 298.2            | -1 506c | 21 506  |     |
| 34                                                                                                         | 570              | 14       | 470      | 63.31    | 37.89    | 80.66    | 0.348    | 0.2083      | 0.4435           | 285.6            | -1 522c | 24 522  |     |
| 35                                                                                                         | 579              | 15       | 475      | 57.52    | 33.19    | 84.15    | 0.3289   | 0.1898      | 0.4812           | 276.1            | -1 534c | 26 534  | Mm  |
| 41                                                                                                         | 606              | 16       | 480      | 40.35    | 23.09    | 86.71    | 0.2687   | 0.1537      | 0.5774           | 255.7            | -1 550c | 30 550  |     |
| -1                                                                                                         | 484c             | 16       | 485      | 22.33    | 14.98    | 86.71    | 0.18     | 0.1208      | 0.699            | 237.5            | 10 454  | 32 560  | min |
| -1                                                                                                         | 490c             | 18       | 490      | 22.48    | 17.5     | 89.85    | 0.1731   | 0.1348      | 0.692            | 234.3            | 11 459  | 32 562  |     |
| -1                                                                                                         | 495c             | 19       | 495      | 22.5     | 19.06    | 90.8     | 0.1699   | 0.144       | 0.6859           | 232.4            | 12 461  | 32 563  |     |
| -1                                                                                                         | 499c             | 19       | 500      | 22.5     | 19.06    | 90.8     | 0.1699   | 0.144       | 0.6859           | 232.4            | 12 461  | 32 563  |     |
| -1                                                                                                         | 510c             | 22       | 510      | 22.82    | 25.25    | 92.33    | 0.1625   | 0.1798      | 0.6576           | 225.0            | 13 466  | 33 566  |     |
| -1                                                                                                         | 519c             | 23       | 520      | 23.15    | 27.8     | 92.58    | 0.1613   | 0.1936      | 0.6449           | 222.0            | 13 468  | 33 568  | Bm  |
| -1                                                                                                         | 530c             | 26       | 530      | 25.37    | 36.85    | 92.99    | 0.1634   | 0.2374      | 0.599            | 211.8            | 14 472  | 34 573  |     |
| -1                                                                                                         | 539c             | 27       | 540      | 26.57    | 40.17    | 93.05    | 0.1662   | 0.2514      | 0.5823           | 208.3            | 14 473  | 35 576  |     |
| -1                                                                                                         | 544c             | 28       | 545      | 28.01    | 43.57    | 93.09    | 0.1701   | 0.2645      | 0.5652           | 204.8            | 14 474  | 35 578  |     |
| -1                                                                                                         | 549c             | 29       | 550      | 29.72    | 47.0     | 93.11    | 0.175    | 0.2767      | 0.5482           | 201.3            | 15 475  | 36 580  |     |
| -1                                                                                                         | 555c             | 31       | 555      | 33.92    | 53.81    | 93.12    | 0.1875   | 0.2975      | 0.5148           | 194.8            | 15 476  | 37 586  |     |
| 10                                                                                                         | 451              | 32       | 560      | 27.49    | 55.63    | 47.96    | 0.2097   | 0.4244      | 0.3658           | 138.0            | 18 491  | -1 491c |     |
| W0                                                                                                         | 380              | 770      | 85.33    | 90.0     | 96.6     | 0.3137   | 0.3309   | 0.3552      | 0.0              |                  |         |         |     |
| N0                                                                                                         | 380              | 770      | 3.41     | 3.6      | 3.86     | 0.3137   | 0.3309   | 0.3552      | 0.0              |                  |         |         |     |

DEJ10-7N

TUB-test chart DEJ1; Ostwald optimal colours,  $Y_{N,10}=3,6$ ,  $Y_{W,10}=90$ , illuminant D65, CIE-10-degree  
Table data:  $XYZ_{10}$  and  $[YABCABh_{AB}]_{10}$  with different wavelength ranges

| Ostwald optimal colours (o), maximum (m) $CAB,10$ for D65, $Y_{N,10}=3,6$ , $Y_{W,10}=90$ , $Y_m=520\_770$ |                  |          |          |          |          |          |          |             |                  |                  |             |         |     |
|------------------------------------------------------------------------------------------------------------|------------------|----------|----------|----------|----------|----------|----------|-------------|------------------|------------------|-------------|---------|-----|
| $i_1, \lambda_1$                                                                                           | $i_2, \lambda_2$ | $Y_{10}$ | $A_{10}$ | $B_{10}$ | $CAB,10$ | $a_{10}$ | $b_{10}$ | $h_{xy,10}$ | $i_d, \lambda_d$ | $i_c, \lambda_c$ | Code        |         |     |
| 0                                                                                                          | 405              | 31       | 556      | 47.1     | -42.46   | -35.74   | 55.5     | 0.5872      | -0.7327          | 220.0            | 15 476      | 37 585  | Cm  |
| 6                                                                                                          | 435              | 31       | 557      | 47.93    | -51.41   | -17.05   | 54.16    | 0.5188      | -0.5715          | 198.3            | 16 480      | 44 621  |     |
| 10                                                                                                         | 450              | 31       | 559      | 48.21    | -63.27   | 12.08    | 64.41    | 0.4229      | -0.3289          | 169.1            | 18 492      | -1 492c |     |
| 11                                                                                                         | 460              | 32       | 562      | 49.33    | -65.88   | 20.46    | 68.99    | 0.4136      | -0.2632          | 162.7            | 19 498      | -1 498c |     |
| 12                                                                                                         | 465              | 33       | 565      | 50.4     | -67.86   | 28.07    | 73.44    | 0.4093      | -0.2064          | 157.5            | 21 506      | -1 506c |     |
| 14                                                                                                         | 470              | 34       | 570      | 52.1     | -68.41   | 39.97    | 79.23    | 0.4226      | -0.1223          | 149.7            | 24 522      | -1 522c |     |
| 15                                                                                                         | 475              | 35       | 579      | 56.8     | -65.1    | 48.5     | 81.18    | 0.4894      | -0.0876          | 143.3            | 26 534      | -1 534c | Gm  |
| 16                                                                                                         | 480              | 41       | 606      | 66.9     | -46.11   | 61.91    | 77.19    | 0.6721      | -0.059           | 126.6            | 30 550      | -1 550c |     |
| 16                                                                                                         | 485              | -1       | 484c     | 75.01    | -20.3    | 70.61    | 73.47    | 0.8395      | -0.0526          | 106.0            | 32 560      | 10 454  |     |
| 18                                                                                                         | 490              | -1       | 490c     | 72.49    | -14.7    | 71.04    | 72.55    | 0.8667      | -0.0372          | 101.6            | 32 562      | 11 459  | max |
| 19                                                                                                         | 495              | -1       | 495c     | 70.93    | -11.03   | 70.31    | 71.17    | 0.8856      | -0.0326          | 98.9             | 32 563      | 12 461  |     |
| 19                                                                                                         | 500              | -1       | 499c     | 70.93    | -11.03   | 70.31    | 71.17    | 0.8856      | -0.0326          | 98.9             | 32 563      | 12 461  |     |
| 22                                                                                                         | 510              | -1       | 510c     | 64.74    | 2.8      | 65.21    | 65.27    | 0.9651      | -0.0263          | 87.5             | 33 566      | 13 466  |     |
| 23                                                                                                         | 520              | -1       | 519c     | 62.19    | 8.02     | 62.72    | 63.23    | 0.9994      | -0.0258          | 82.7             | 33 568      | 13 468  | Ym  |
| 26                                                                                                         | 530              | -1       | 530c     | 53.14    | 23.94    | 53.41    | 58.53    | 1.128       | -0.0271          | 65.8             | 34 573      | 14 472  |     |
| 27                                                                                                         | 540              | -1       | 539c     | 49.82    | 28.81    | 49.91    | 57.63    | 1.1791      | -0.0284          | 60.0             | 35 576      | 14 473  |     |
| 28                                                                                                         | 545              | -1       | 544c     | 46.42    | 33.23    | 46.31    | 57.0     | 1.2341      | -0.0302          | 54.3             | 35 578      | 14 474  |     |
| 29                                                                                                         | 550              | -1       | 549c     | 42.99    | 37.11    | 42.64    | 56.53    | 1.2931      | -0.0324          | 48.9             | 36 580      | 15 475  |     |
| 31                                                                                                         | 555              | -1       | 555c     | 36.18    | 42.72    | 35.35    | 55.45    | 1.42        | -0.0384          | 39.6             | 37 586      | 15 476  |     |
| 32                                                                                                         | 560              | 10       | 451      | 34.36    | 63.1     | -11.75   | 64.19    | 1.6825      | -0.566           | 349.4            | -1 491c     | 18 491  |     |
| 31                                                                                                         | 556              | 0        | 405      | 42.89    | 42.47    | 35.74    | 55.51    | 1.3439      | -0.0958          | 40.0             | 37 585      | 15 476  | Rm  |
| 31                                                                                                         | 557              | 6        | 435      | 42.06    | 51.41    | 17.05    | 54.16    | 1.4367      | -0.267           | 18.3             | 44 621      | 16 480  |     |
| 31                                                                                                         | 559              | 10       | 450      | 41.78    | 63.26    | -12.08   | 64.4     | 1.5533      | -0.5448          | 349.1            | -1 492c     | 18 492  |     |
| 32                                                                                                         | 562              | 11       | 460      | 40.66    | 65.87    | -20.46   | 68.97    | 1.5958      | -0.6304          | 342.7            | -1 498c     | 19 498  |     |
| 33                                                                                                         | 565              | 12       | 465      | 39.59    | 67.84    | -28.07   | 73.42    | 1.6333      | -0.7128          | 337.5            | -1 506c     | 21 506  |     |
| 34                                                                                                         | 570              | 14       | 470      | 37.89    | 68.39    | -39.95   | 79.21    | 1.6696      | -0.8509          | 329.7            | -1 522c     | 24 522  |     |
| 35                                                                                                         | 579              | 15       | 475      | 33.19    | 65.07    | -48.49   | 81.15    | 1.7321      | -1.0135          | 323.3            | -1 534c     | 26 534  | Mm  |
| 41                                                                                                         | 606              | 16       | 480      | 23.09    | 46.08    | -61.88   | 77.15    | 1.7461      | -1.5009          | 306.6            | -1 550c     | 30 550  |     |
| -1                                                                                                         | 484c             | 16       | 485      | 14.98    | 20.28    | -70.56   | 73.42    | 1.4893      | -2.3126          | 286.0            | 10 454      | 32 560  | min |
| -1                                                                                                         | 490c             | 18       | 490      | 17.5     | 14.69    | -71.0    | 72.51    | 1.2836      | -2.0519          | 281.6            | 11 459      | 32 562  |     |
| -1                                                                                                         | 495c             | 19       | 495      | 19.06    | 11.03    | -70.28   | 71.14    | 1.1792      | -1.9035          | 278.9            | 12 461      | 32 563  |     |
| -1                                                                                                         | 499c             | 19       | 500      | 19.06    | 11.03    | -70.28   | 71.14    | 1.1792      | -1.9035          | 278.9            | 12 461      | 32 563  |     |
| -1                                                                                                         | 510c             | 22       | 510      | 25.25    | -2.79    | -65.19   | 65.25    | 0.9035      | -1.4619          | 267.5            | 13 466      | 33 566  |     |
| -1                                                                                                         | 519c             | 23       | 520      | 27.8     | -8.01    | -62.7    | 63.21    | 0.8324      | -1.3312          | 262.7            | 13 468      | 33 568  | Bm  |
| -1                                                                                                         | 530c             | 26       | 530      | 36.85    | -23.93   | -53.4    | 58.52    | 0.688       | -1.0087          | 245.8            | 14 472      | 34 573  |     |
| -1                                                                                                         | 539c             | 27       | 540      | 40.17    | -28.8    | -49.9    | 57.62    | 0.661       | -0.926           | 240.0            | 14 473      | 35 576  |     |
| -1                                                                                                         | 544c             | 28       | 545      | 43.57    | -33.23   | -46.3    | 56.99    | 0.6427      | -0.8543          | 234.3            | 14 474      | 35 578  |     |
| -1                                                                                                         | 549c             | 29       | 550      | 47.0     | -37.1    | -42.63   | 56.52    | 0.6321      | -0.792           | 228.9            | 15 475      | 36 580  |     |
| -1                                                                                                         | 555c             | 31       | 555      | 53.81    | -42.72   | -35.35   | 55.45    | 0.6302      | -0.6919          | 219.6            | 15 476      | 37 586  |     |
| 10                                                                                                         | 451              | 32       | 560      | 55.63    | -63.12   | 11.75    | 64.2     | 0.494       | -0.3447          | 169.4            | 18 491      | -1 491c |     |
| W0                                                                                                         | 380              | 770      | 90.0     | 0.0      | 0.0      | 0.0      | 0.9478   | -0.4292     | 0.0              |                  | $B_c=1,000$ |         |     |
| N0                                                                                                         | 380              | 770      | 3.6      | 0.0      | 0.0      | 0.0      | 0.9478   | -0.4292     | 0.0              |                  | $x_c=0,000$ |         |     |

DEJ11-7N

TUB registration: 20221101-DEJ1/DEJ1L0NA.TXT /PS  
application for evaluation and measurement of display or print output

TUB material: code=rha4ta