

**Optimal colours (e) RYGBCM of maximum (m) C<sub>AB</sub>: D65, Y<sub>m</sub>=510\_770, CIEXYZ**

| Code                   | X     | Y     | Z      | x      | y      | z      | $h_{xy}$ | $l_d$ | $l_c$ | $l_e$   |
|------------------------|-------|-------|--------|--------|--------|--------|----------|-------|-------|---------|
| R <sub>m</sub> 570_770 | 58.46 | 36.56 | 0.04   | 0.6149 | 0.3845 | 0.0004 | 240.0    | 38    | 592   | 16 484  |
| Y <sub>m</sub> 510_770 | 76.99 | 88.09 | 2.32   | 0.4599 | 0.5262 | 0.0138 | 213.4    | 33    | 568   | 13 467  |
| G <sub>m</sub> 470_570 | 20.96 | 61.5  | 26.32  | 0.1927 | 0.5653 | 0.2419 | 207.4    | 22    | 512   | -1 512c |
| C <sub>m</sub> 380_570 | 36.57 | 63.43 | 108.84 | 0.1751 | 0.3037 | 0.5211 | 212.0    | 16    | 484   | 38 592  |
| B <sub>m</sub> 380_510 | 18.05 | 11.9  | 106.56 | 0.1322 | 0.0872 | 0.7805 | 228.8    | 13    | 467   | 33 568  |
| M <sub>m</sub> 570_470 | 74.07 | 38.49 | 82.56  | 0.3796 | 0.1972 | 0.4231 | 251.1    | -1    | 512c  | 22 512  |
| R <sub>o</sub> 570_440 | 64.22 | 36.81 | 28.16  | 0.497  | 0.2849 | 0.2179 | 243.9    | -1    | 489c  | 17 489  |
| G <sub>o</sub> 520_570 | 18.52 | 51.52 | 2.27   | 0.2561 | 0.1723 | 0.0315 | 212.3    | 27    | 538   | -1 538c |
| W <sub>1</sub> 380_770 | 95.04 | 100.0 | 108.89 | 0.3127 | 0.329  | 0.3582 | 0.0      | -1    | 489c  | -1 538c |

**Optimal colours (e) RYGBCM of maximum (m) C<sub>AB</sub>: D65, Y<sub>m</sub>=510\_770, YAB\_77**

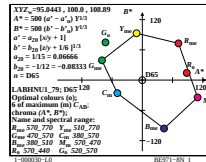
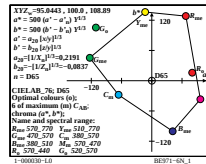
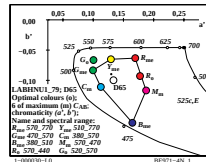
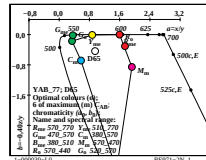
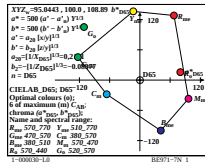
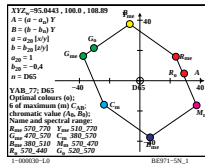
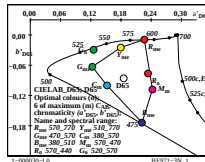
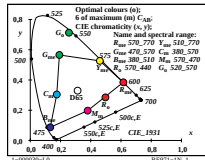
| Code                   | Y     | A      | B      | C <sub>AB</sub> | a      | b       | $h_{AB}$ | $l_d$ | $l_c$ | $l_e$   |
|------------------------|-------|--------|--------|-----------------|--------|---------|----------|-------|-------|---------|
| R <sub>m</sub> 570_770 | 36.56 | 23.71  | 15.9   | 28.55           | 1.5989 | -0.0004 | 33.8     | 38    | 592   | 16 484  |
| Y <sub>m</sub> 510_770 | 88.09 | -6.73  | 37.44  | 38.04           | 0.874  | -0.0105 | 100.1    | 33    | 568   | 14 471  |
| G <sub>m</sub> 470_570 | 61.5  | -37.48 | 16.25  | 40.86           | 0.3408 | -0.1712 | 156.5    | 23    | 515   | -1 515c |
| C <sub>m</sub> 380_570 | 63.43 | -23.71 | -15.9  | 28.55           | 0.5766 | -0.6863 | 213.8    | 16    | 484   | 38 592  |
| B <sub>m</sub> 380_510 | 11.9  | 6.73   | -37.43 | 38.04           | 0.1559 | -3.5796 | 280.1    | 13    | 466   | 33 565  |
| M <sub>m</sub> 570_470 | 38.49 | 37.48  | -16.25 | 40.86           | 1.9242 | -0.8579 | 336.5    | -1    | 504c  | 20 504  |
| R <sub>o</sub> 570_440 | 36.81 | 29.22  | 47.7   | 29.61           | 1.7443 | -0.3059 | 9.2      | -1    | 488c  | 17 488  |
| G <sub>o</sub> 520_570 | 51.52 | -30.44 | 21.53  | 37.29           | 0.3595 | -0.0176 | 144.7    | 27    | 538   | -1 538c |
| W <sub>1</sub> 380_770 | 100.0 | 0.0    | 0.0    | 0.01            | 0.9504 | -0.4355 | 0.0      | 38    | 591   | 16 484  |

**Optimal colours (e) RYGBCM of maximum (m) C<sub>AB</sub>: D65, Y<sub>m</sub>=510\_770, CIELAB\_76**

| Code                   | L*    | a*         | b*      | C <sub>AB</sub> | a*     | b*      | $h_{ab}$ | $l_d$ | $l_c$ | $l_e$   |
|------------------------|-------|------------|---------|-----------------|--------|---------|----------|-------|-------|---------|
| R <sub>m</sub> 570_770 | 66.95 | 67.68      | 114.73  | 133.21          | 0.2562 | -0.009  | 59.4     | 39    | 595   | 15 476  |
| Y <sub>m</sub> 510_770 | 95.2  | -13.32     | 136.16  | 136.8           | 0.2095 | -0.0249 | 95.5     | 33    | 567   | 14 471  |
| G <sub>m</sub> 470_570 | 82.65 | -123.0745  | 48      | 131.21          | 0.153  | -0.0631 | 159.7    | 22    | 514   | -1 514c |
| C <sub>m</sub> 380_570 | 83.67 | -65.91     | -28.12  | 71.66           | 0.1824 | -0.1002 | 203.1    | 16    | 482   | -1 482c |
| B <sub>m</sub> 380_510 | 41.08 | 14.4       | -100.15 | 108.37          | 0.2517 | -0.1739 | 292.4    | 13    | 467   | 31 555  |
| M <sub>m</sub> 570_470 | 68.39 | 36.4       | -35.87  | 103.21          | 0.2725 | -0.108  | 339.0    | -1    | 514c  | 22 514  |
| R <sub>o</sub> 570_440 | 67.14 | 80.38      | 19.51   | 81.94           | 0.2638 | -0.0766 | 11.2     | -1    | 485c  | 17 485  |
| G <sub>o</sub> 520_570 | 77.0  | -110.92105 | 14      | 152.83          | 0.1558 | -0.0296 | 136.5    | 27    | 535   | 9 448   |
| W <sub>1</sub> 380_770 | 100.0 | 0.0        | 0.0     | 0.0             | 0.2154 | -0.0861 | 0.0      | -1    | 448c  | -1 535c |

**Optimal colours (e) RYGBCM of maximum (m) C<sub>AB</sub>: D65, Y<sub>m</sub>=510\_770, LABHNU1\_79**

| Code                   | L*    | A*     | B*     | C <sub>AB</sub> | a*     | b*      | $h_{ab}$ | $l_d$ | $l_c$ | $l_e$   |
|------------------------|-------|--------|--------|-----------------|--------|---------|----------|-------|-------|---------|
| R <sub>m</sub> 570_770 | 66.95 | 71.73  | 72.88  | 102.27          | 0.1732 | -0.0459 | 45.4     | 38    | 592   | 15 479  |
| Y <sub>m</sub> 510_770 | 95.2  | -11.33 | 92.83  | 93.52           | 0.1249 | -0.0481 | 96.9     | 33    | 567   | 14 471  |
| G <sub>m</sub> 470_570 | 82.65 | -80.19 | 39.11  | 89.22           | 0.0893 | -0.07   | 153.9    | 21    | 508   | 9 449   |
| C <sub>m</sub> 380_570 | 83.67 | -49.69 | -25.9  | 56.03           | 0.1051 | -0.1028 | 207.5    | 16    | 483   | 42 613  |
| B <sub>m</sub> 380_510 | 41.08 | 43.03  | -96.09 | 105.29          | 0.1677 | -0.174  | 294.1    | 13    | 467   | 31 558  |
| M <sub>m</sub> 570_470 | 68.39 | 109.59 | -34.23 | 114.81          | 0.1949 | -0.1101 | 342.6    | 7     | 438   | 20 501  |
| R <sub>o</sub> 570_440 | 67.14 | 88.02  | 14.15  | 89.15           | 0.1829 | -0.0813 | 9.1      | -1    | 488c  | 17 488  |
| G <sub>o</sub> 520_570 | 77.0  | -73.28 | 74.96  | 104.83          | 0.0906 | -0.0496 | 134.3    | 27    | 536   | 12 462  |
| W <sub>1</sub> 380_770 | 100.0 | 0.0    | 0.0    | 0.0             | 0.13   | -0.0899 | 0.0      | -1    | 462c  | -1 536c |



TUB-test chart BE97; Colorimetry of Ostwald optimal colours; K>256:1 input: w/rgb/cmyk->rgb  
colour spaces CIEXYZ, YAB\_77, CIELAB, LABHNU1\_79; 8 illuminants Dxx; CIE 2 degree