

Interpretation *rgb* -> *ol\** and CIELAB data of a 48 step device hue circle for photo printer, printer separation *ol\**

48 step device hue circle with six device hues OYLVCVM:  $h_{ab,a} = 34.9, 92.5, 143.1, 226.7, 311.9, 337.2$

Comparison with four elementary hues *RJGB*:  $h_{ab,a} = 25.4, 92.3, 162.2, 271.7$

| Code   | L*   | a*    | b*    | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | <i>rgb</i> -> <i>ol*</i> | Code   | L*   | a*    | b*    | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | <i>rgb</i> -> <i>ol*</i> |
|--------|------|-------|-------|------------------|--------------------------|--------------------------|--------|------|-------|-------|------------------|--------------------------|--------------------------|
| o00y=O | 34.5 | 59.5  | 41.6  | 72.6             | 34.9                     | 1.00 0.00 0.00           | c00v=C | 52.2 | -28.9 | -30.8 | 42.3             | 226.7                    | 0.00 1.00 1.00           |
| o12y   | 42.3 | 52.0  | 50.4  | 72.5             | 44.1                     | 1.00 0.12 0.00           | c12v   | 52.2 | -28.8 | -30.9 | 42.2             | 227.0                    | 0.00 0.87 1.00           |
| o25y   | 50.6 | 41.2  | 60.5  | 73.2             | 55.7                     | 1.00 0.25 0.00           | c25v   | 49.9 | -23.8 | -33.1 | 40.8             | 234.2                    | 0.00 0.75 1.00           |
| o37y   | 58.4 | 30.4  | 70.3  | 76.6             | 66.5                     | 1.00 0.37 0.00           | c37v   | 46.3 | -16.2 | -36.4 | 39.8             | 245.9                    | 0.00 0.62 1.00           |
| o50y   | 66.4 | 19.1  | 81.2  | 83.5             | 76.7                     | 1.00 0.50 0.00           | c50v   | 41.6 | -6.0  | -40.6 | 41.0             | 261.5                    | 0.00 0.50 1.00           |
| o62y   | 73.3 | 9.8   | 90.7  | 91.3             | 83.8                     | 1.00 0.62 0.00           | c62v   | 35.1 | 7.7   | -45.9 | 46.5             | 279.6                    | 0.00 0.37 1.00           |
| o75y   | 79.3 | 1.9   | 99.2  | 99.2             | 88.8                     | 1.00 0.75 0.00           | c75v   | 28.1 | 22.7  | -51.0 | 55.8             | 294.0                    | 0.00 0.25 1.00           |
| o87y   | 84.1 | -4.5  | 106.4 | 106.5            | 92.4                     | 1.00 0.87 0.00           | c87v   | 20.7 | 38.1  | -55.2 | 67.1             | 304.6                    | 0.00 0.12 1.00           |
| y00l=Y | 84.3 | -4.8  | 106.8 | 106.9            | 92.5                     | 1.00 1.00 0.00           | v00m=V | 13.4 | 51.3  | -57.1 | 76.8             | 311.9                    | 0.00 0.00 1.00           |
| y12l   | 83.8 | -5.5  | 106.1 | 106.2            | 93.0                     | 0.87 1.00 0.00           | v12m   | 16.0 | 53.5  | -57.0 | 78.2             | 313.2                    | 0.12 0.00 1.00           |
| y25l   | 79.4 | -15.5 | 99.4  | 100.6            | 98.8                     | 0.75 1.00 0.00           | v25m   | 18.9 | 56.1  | -55.2 | 78.7             | 315.4                    | 0.25 0.00 1.00           |
| y37l   | 72.9 | -27.4 | 89.5  | 93.6             | 107.0                    | 0.62 1.00 0.00           | v37m   | 22.1 | 59.4  | -51.5 | 78.6             | 319.0                    | 0.37 0.00 1.00           |
| y50l   | 66.5 | -37.3 | 79.8  | 88.1             | 115.0                    | 0.50 1.00 0.00           | v50m   | 25.6 | 63.0  | -47.8 | 79.1             | 322.8                    | 0.50 0.00 1.00           |
| y62l   | 61.0 | -45.2 | 71.5  | 84.6             | 122.3                    | 0.37 1.00 0.00           | v62m   | 29.6 | 67.8  | -43.0 | 80.3             | 327.6                    | 0.62 0.00 1.00           |
| y75l   | 56.0 | -52.0 | 64.2  | 82.6             | 129.0                    | 0.25 1.00 0.00           | v75m   | 33.4 | 73.4  | -37.4 | 82.4             | 332.9                    | 0.75 0.00 1.00           |
| y87l   | 49.8 | -58.2 | 55.6  | 80.5             | 136.3                    | 0.12 1.00 0.00           | v87m   | 36.7 | 78.0  | -33.2 | 84.8             | 336.9                    | 0.87 0.00 1.00           |
| l00c=L | 43.6 | -62.5 | 46.9  | 78.2             | 143.1                    | 0.00 1.00 0.00           | m00o=M | 36.9 | 78.4  | -32.8 | 85.0             | 337.2                    | 1.00 0.00 1.00           |
| l12c   | 45.8 | -61.2 | 28.0  | 67.4             | 155.4                    | 0.00 1.00 0.12           | m12o   | 36.9 | 78.3  | -32.6 | 84.8             | 337.4                    | 1.00 0.00 0.87           |
| l25c   | 47.2 | -57.6 | 15.4  | 59.7             | 164.9                    | 0.00 1.00 0.25           | m25o   | 36.9 | 77.0  | -29.8 | 82.6             | 338.8                    | 1.00 0.00 0.75           |
| l37c   | 48.2 | -52.8 | 4.4   | 53.0             | 175.1                    | 0.00 1.00 0.37           | m37o   | 36.6 | 74.4  | -24.2 | 78.3             | 341.9                    | 1.00 0.00 0.62           |
| l50c   | 49.6 | -46.7 | -6.5  | 47.1             | 187.9                    | 0.00 1.00 0.50           | m50o   | 36.3 | 71.2  | -16.0 | 73.0             | 347.3                    | 1.00 0.00 0.50           |
| l62c   | 50.7 | -39.5 | -17.2 | 43.1             | 203.5                    | 0.00 1.00 0.62           | m62o   | 35.8 | 68.1  | -6.4  | 68.4             | 354.6                    | 1.00 0.00 0.37           |
| l75c   | 51.7 | -33.3 | -25.5 | 41.9             | 217.4                    | 0.00 1.00 0.75           | m75o   | 35.5 | 65.2  | 4.5   | 65.4             | 3.9                      | 1.00 0.00 0.25           |
| l87c   | 52.2 | -29.6 | -30.1 | 42.2             | 225.5                    | 0.00 1.00 0.87           | m87o   | 35.0 | 62.5  | 17.9  | 65.0             | 16.0                     | 1.00 0.00 0.12           |

KE190-3N, Page 1/1, %BEG 'KK0X'GE27\_22.TXT

Interpretation *rgb* -> *ol\** and CIELAB data of a 48 step device hue circle for offset print, model separation *cmyn6*\*

48 step device hue circle with six device hues OYLVCVM:  $h_{ab,a} = 31.3, 96.2, 152.5, 233.9, 298.7, 353.0$

Comparison with four elementary hues *RJGB*:  $h_{ab,a} = 25.4, 92.3, 162.2, 271.7$

| Code   | L*   | a*    | b*    | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | <i>rgb</i> -> <i>ol*</i> | Code   | L*   | a*    | b*    | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | <i>rgb</i> -> <i>ol*</i> |
|--------|------|-------|-------|------------------|--------------------------|--------------------------|--------|------|-------|-------|------------------|--------------------------|--------------------------|
| o00y=O | 48.4 | 66.2  | 40.3  | 77.5             | 31.3                     | 1.00 0.00 0.00           | c00v=C | 63.0 | -30.5 | -41.9 | 51.8             | 233.9                    | 0.00 1.00 1.00           |
| o12y   | 52.8 | 56.7  | 45.9  | 72.9             | 38.9                     | 1.00 0.12 0.00           | c12v   | 59.1 | -24.9 | -42.6 | 49.4             | 239.6                    | 0.00 0.87 1.00           |
| o25y   | 57.4 | 46.7  | 51.2  | 69.4             | 47.6                     | 1.00 0.25 0.00           | c25v   | 55.3 | -19.6 | -43.1 | 47.4             | 245.5                    | 0.00 0.75 1.00           |
| o37y   | 62.8 | 35.8  | 57.6  | 67.8             | 58.1                     | 1.00 0.37 0.00           | c37v   | 50.4 | -12.9 | -43.9 | 45.7             | 253.6                    | 0.00 0.62 1.00           |
| o50y   | 68.6 | 25.0  | 64.1  | 68.8             | 68.6                     | 1.00 0.50 0.00           | c50v   | 45.7 | -5.7  | -44.6 | 44.9             | 262.6                    | 0.00 0.50 1.00           |
| o62y   | 74.5 | 14.6  | 70.8  | 72.3             | 78.2                     | 1.00 0.62 0.00           | c62v   | 40.7 | 2.2   | -45.0 | 45.1             | 272.8                    | 0.00 0.37 1.00           |
| o75y   | 80.0 | 5.8   | 76.6  | 76.8             | 85.6                     | 1.00 0.75 0.00           | c75v   | 36.6 | 9.2   | -45.9 | 46.8             | 281.3                    | 0.00 0.25 1.00           |
| o87y   | 85.1 | -2.0  | 82.0  | 82.0             | 91.4                     | 1.00 0.87 0.00           | c87v   | 32.4 | 16.8  | -46.6 | 49.5             | 289.8                    | 0.00 0.12 1.00           |
| y00l=Y | 90.2 | -9.6  | 88.3  | 88.8             | 96.2                     | 1.00 1.00 0.00           | v00m=V | 27.5 | 26.0  | -47.3 | 54.0             | 298.7                    | 0.00 0.00 1.00           |
| y12l   | 86.4 | -14.5 | 83.3  | 84.5             | 99.9                     | 0.87 1.00 0.00           | v12m   | 29.6 | 34.0  | -42.7 | 54.6             | 308.4                    | 0.12 0.00 1.00           |
| y25l   | 82.7 | -18.9 | 79.6  | 81.8             | 103.4                    | 0.75 1.00 0.00           | v25m   | 31.3 | 40.8  | -37.8 | 55.6             | 317.1                    | 0.25 0.00 1.00           |
| y37l   | 77.5 | -25.5 | 69.0  | 73.5             | 110.2                    | 0.62 1.00 0.00           | v37m   | 35.4 | 44.8  | -34.5 | 56.6             | 322.4                    | 0.37 0.00 1.00           |
| y50l   | 73.3 | -31.7 | 62.8  | 70.4             | 116.8                    | 0.50 1.00 0.00           | v50m   | 38.3 | 52.7  | -28.5 | 59.9             | 331.5                    | 0.50 0.00 1.00           |
| y62l   | 68.7 | -38.7 | 56.8  | 68.8             | 124.3                    | 0.37 1.00 0.00           | v62m   | 40.9 | 59.1  | -22.2 | 63.1             | 339.4                    | 0.62 0.00 1.00           |
| y75l   | 62.4 | -48.6 | 43.9  | 65.5             | 137.9                    | 0.25 1.00 0.00           | v75m   | 44.9 | 63.2  | -18.7 | 65.9             | 343.4                    | 0.75 0.00 1.00           |
| y87l   | 59.3 | -56.5 | 38.9  | 68.6             | 145.4                    | 0.12 1.00 0.00           | v87m   | 47.4 | 68.2  | -14.0 | 69.7             | 348.3                    | 0.87 0.00 1.00           |
| l00c=L | 55.8 | -65.2 | 33.9  | 73.5             | 152.5                    | 0.00 1.00 0.00           | m00o=M | 49.5 | 73.5  | -8.9  | 74.1             | 353.0                    | 1.00 0.00 1.00           |
| l12c   | 56.7 | -62.6 | 23.5  | 66.9             | 159.4                    | 0.00 1.00 0.12           | m12o   | 49.4 | 72.3  | -3.6  | 72.4             | 357.1                    | 1.00 0.00 0.87           |
| l25c   | 57.5 | -59.1 | 12.7  | 60.5             | 167.8                    | 0.00 1.00 0.25           | m25o   | 49.2 | 71.2  | 1.1   | 71.3             | 0.8                      | 1.00 0.00 0.75           |
| l37c   | 58.5 | -54.5 | 0.8   | 54.5             | 179.0                    | 0.00 1.00 0.37           | m37o   | 49.3 | 69.7  | 7.0   | 70.0             | 5.8                      | 1.00 0.00 0.62           |
| l50c   | 59.3 | -50.3 | -8.9  | 51.1             | 190.1                    | 0.00 1.00 0.50           | m50o   | 48.9 | 69.3  | 13.0  | 70.5             | 10.6                     | 1.00 0.00 0.50           |
| l62c   | 60.1 | -45.8 | -18.0 | 49.3             | 201.4                    | 0.00 1.00 0.62           | m62o   | 48.9 | 68.2  | 19.2  | 70.9             | 15.7                     | 1.00 0.00 0.37           |
| l75c   | 61.0 | -40.8 | -26.7 | 48.8             | 213.2                    | 0.00 1.00 0.75           | m75o   | 48.8 | 67.1  | 27.1  | 72.4             | 22.0                     | 1.00 0.00 0.25           |
| l87c   | 61.9 | -36.1 | -34.0 | 49.6             | 223.3                    | 0.00 1.00 0.87           | m87o   | 48.6 | 66.5  | 33.8  | 74.6             | 26.9                     | 1.00 0.00 0.12           |

KE190-7N, Page 1/1, %BEG 'KK0X'REM\_OFFS04\_080929\_3.TXT

TUB-test chart KE19; *rgb*\* and CIE data of 4 printer devices  
16 steps of elementary hue circle and 5 grey steps

Interpretation *rgb* -> *ol\** and CIELAB data of a 48 step device hue circle for laser printer, printer separation *ol\**

48 step device hue circle with six device hues OYLVCVM:  $h_{ab,a} = 33.0, 100.4, 143.3, 206.6, 264.0, 351.1$

Comparison with four elementary hues *RJGB*:  $h_{ab,a} = 25.4, 92.3, 162.2, 271.7$

| Code   | L*   | a*    | b*   | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | rgb → olv*     | Code   | L*   | a*    | b*    | C* <sub>ab</sub> | <i>h</i> <sub>ab,a</sub> | rgb → olv*     |
|--------|------|-------|------|------------------|--------------------------|----------------|--------|------|-------|-------|------------------|--------------------------|----------------|
| o00y=O | 48.1 | 64.4  | 41.8 | 76.8             | 33.0                     | 1.00 0.00 0.00 | c00v=C | 56.3 | -40.9 | -20.5 | 45.8             | 206.6                    | 0.00 1.00 1.00 |
| o12y   | 48.9 | 63.2  | 42.5 | 76.1             | 33.9                     | 1.00 0.12 0.00 | c12v   | 52.4 | -36.0 | -35.4 | 50.5             | 224.4                    | 0.00 0.87 1.00 |
| o25y   | 49.8 | 61.3  | 49.2 | 78.6             | 38.7                     | 1.00 0.25 0.00 | c25v   | 51.2 | -25.4 | -48.1 | 54.4             | 242.1                    | 0.00 0.75 1.00 |
| o37y   | 54.8 | 51.5  | 55.1 | 75.5             | 46.9                     | 1.00 0.37 0.00 | c37v   | 48.1 | -19.1 | -48.1 | 51.7             | 248.3                    | 0.00 0.62 1.00 |
| o50y   | 63.0 | 35.4  | 63.1 | 72.4             | 60.6                     | 1.00 0.50 0.00 | c50v   | 45.4 | -14.6 | -48.1 | 50.3             | 253.0                    | 0.00 0.50 1.00 |
| o62y   | 72.0 | 18.5  | 72.0 | 74.3             | 75.5                     | 1.00 0.62 0.00 | c62v   | 43.0 | -10.6 | -47.9 | 49.1             | 257.5                    | 0.00 0.37 1.00 |
| o75y   | 80.7 | 3.2   | 81.1 | 81.1             | 87.7                     | 1.00 0.75 0.00 | c75v   | 41.1 | -6.4  | -47.7 | 48.1             | 262.2                    | 0.00 0.25 1.00 |
| o87y   | 88.8 | -10.0 | 90.8 | 91.3             | 96.3                     | 1.00 0.87 0.00 | c87v   | 39.8 | -4.3  | -47.4 | 47.6             | 264.7                    | 0.00 0.12 1.00 |
| y00l=Y | 93.5 | -17.5 | 95.4 | 97.0             | 100.4                    | 1.00 1.00 0.00 | v00m=V | 38.6 | -4.8  | -46.2 | 46.5             | 264.0                    | 0.00 0.00 1.00 |
| y12l   | 82.3 | -29.6 | 77.5 | 83.0             | 110.9                    | 0.87 1.00 0.00 | v12m   | 39.2 | -4.0  | -47.3 | 47.5             | 265.1                    | 0.12 0.00 1.00 |
| y25l   | 74.0 | -39.4 | 64.2 | 75.3             | 121.5                    | 0.75 1.00 0.00 | v25m   | 38.9 | -2.6  | -47.4 | 47.4             | 266.8                    | 0.25 0.00 1.00 |
| y37l   | 67.1 | -45.9 | 51.2 | 68.7             | 131.8                    | 0.62 1.00 0.00 | v37m   | 37.2 | -0.2  | -48.6 | 48.6             | 269.7                    | 0.37 0.00 1.00 |
| y50l   | 62.0 | -53.2 | 45.1 | 69.8             | 139.7                    | 0.50 1.00 0.00 | v50m   | 36.1 | 8.3   | -46.3 | 47.0             | 280.1                    | 0.50 0.00 1.00 |
| y62l   | 61.1 | -55.1 | 43.6 | 70.3             | 141.6                    | 0.37 1.00 0.00 | v62m   | 36.8 | 21.3  | -41.1 | 46.3             | 297.4                    | 0.62 0.00 1.00 |
| y75l   | 60.0 | -59.0 | 43.3 | 73.2             | 143.6                    | 0.25 1.00 0.00 | v75m   | 38.9 | 36.9  | -35.2 | 51.0             | 316.3                    | 0.75 0.00 1.00 |
| y87l   | 59.6 | -59.8 | 43.4 | 73.9             | 144.0                    | 0.12 1.00 0.00 | v87m   | 41.9 | 51.3  | -26.9 | 58.0             | 332.3                    | 0.87 0.00 1.00 |
| l00c=L | 60.2 | -59.3 | 44.2 | 74.0             | 143.3                    | 0.00 1.00 0.00 | m00o=M | 48.2 | 72.1  | -11.2 | 73.0             | 351.1                    | 1.00 0.00 1.00 |
| l12c   | 59.6 | -60.0 | 43.6 | 74.2             | 143.9                    | 0.00 1.00 0.12 | m12o   | 48.2 | 75.4  | -6.6  | 75.7             | 354.9                    | 1.00 0.00 0.87 |
| l25c   | 59.6 | -59.5 | 42.4 | 73.1             | 144.4                    | 0.00 1.00 0.25 | m25o   | 47.8 | 73.7  | -0.5  | 73.7             | 359.6                    | 1.00 0.00 0.75 |
| l37c   | 58.6 | -60.3 | 39.1 | 71.9             | 147.0                    | 0.00 1.00 0.37 | m37o   | 48.0 | 71.1  | 7.2   | 71.4             | 5.8                      | 1.00 0.00 0.62 |
| l50c   | 58.2 | -59.5 | 33.9 | 68.5             | 150.3                    | 0.00 1.00 0.50 | m50o   | 48.2 | 69.3  | 12.9  | 70.5             | 10.6                     | 1.00 0.00 0.50 |
| l62c   | 57.5 | -59.3 | 28.4 | 65.8             | 154.4                    | 0.00 1.00 0.62 | m62o   | 47.9 | 67.3  | 20.1  | 70.2             | 16.6                     | 1.00 0.00 0.37 |
| l75c   | 58.0 | -54.6 | 15.6 | 56.8             | 164.0                    | 0.00 1.00 0.75 | m75o   | 48.1 | 65.5  | 28.5  | 71.5             | 23.5                     | 1.00 0.00 0.25 |
| l87c   | 59.7 | -46.3 | -0.9 | 46.3             | 181.2                    | 0.00 1.00 0.87 | m87o   | 48.3 | 64.8  | 36.7  | 74.5             | 29.5                     | 1.00 0.00 0.12 |