

Interpretation  $rgb \rightarrow rgb^*$  and CIELAB data of a 48 step elementary hue circle  
for a sRGB standard display with the luminance reflection  $L_r=0\%$  compared to the white reference (100%)  
48 step elementary hue circle with hues:  $RJGB: h_{ab,a} = 25.5, 92.3, 162.2, 271.7$ , and  $C^* M^* = 217.0, 328.6$   
comparison with six device hues  $OYL\bar{C}VM: h_{ab,a} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2$   
9 step equidistant grey scale:  $L^* = 0.0, 11.9, 23.9, 35.8, 47.7, 59.6, 71.6, 83.5, 95.4$

| $u^*Ma$ | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     | $u^*Ma$  | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     |
|---------|-----------|-----------------------------------------|-------------------------------|----------|-----------|-----------------------------------------|-------------------------------|
| r00=R   | 30.0      | 50.9 78.3 37.3                          | 86.7 25.5 1.000 0.000 0.000   | c'00b=C' | 210.0     | 79.1 -34.2 -25.7                        | 42.9 217.0 0.000 1.000 1.000  |
| r12j    | 36.6      | 50.7 77.6 52.0                          | 93.4 33.8 1.000 0.125 0.000   | c'12b    | 216.6     | 76.7 -30.5 -29.3                        | 42.5 223.8 0.000 0.875 1.000  |
| r25j    | 43.9      | 52.2 72.0 65.3                          | 97.2 42.2 1.000 0.250 0.000   | c'25b    | 223.9     | 74.5 -27.1 -33.1                        | 43.0 230.7 0.000 0.750 1.000  |
| r37j    | 51.8      | 58.0 55.9 67.9                          | 88.0 50.5 1.000 0.375 0.000   | c'37b    | 231.8     | 72.3 -23.2 -36.6                        | 43.5 237.5 0.000 0.625 1.000  |
| r50j    | 60.0      | 63.1 42.8 70.9                          | 82.8 58.9 1.000 0.500 0.000   | c'50b    | 240.0     | 70.1 -18.9 -39.5                        | 44.0 244.4 0.000 0.500 1.000  |
| r62j    | 68.2      | 67.9 31.1 74.1                          | 80.3 67.2 1.000 0.625 0.000   | c'62b    | 248.2     | 67.6 -14.7 -43.5                        | 44.0 251.2 0.000 0.375 1.000  |
| r75j    | 76.1      | 72.8 19.8 77.3                          | 79.8 75.6 1.000 0.750 0.000   | c'75b    | 256.1     | 64.9 -10.1 -48.0                        | 49.2 258.0 0.000 0.250 1.000  |
| r87j    | 83.4      | 77.9 8.5 80.4                           | 80.8 84.0 1.000 0.875 0.000   | c'87b    | 263.4     | 62.2 -4.6 -52.0                         | 52.3 264.9 0.000 0.125 1.000  |
| j00g=J  | 90.0      | 83.7 -3.3 84.5                          | 84.6 92.3 1.000 1.000 0.000   | b00m'=B  | 270.0     | 59.3 1.7 -56.5                          | 56.6 271.7 0.000 0.000 1.000  |
| j12g    | 96.6      | 91.1 -17.4 89.8                         | 91.5 101.1 0.875 1.000 0.000  | b12m'    | 276.6     | 55.3 9.9 -63.3                          | 64.2 278.8 0.125 0.000 1.000  |
| j25g    | 103.9     | 90.7 -31.7 88.5                         | 94.0 109.8 0.750 1.000 0.000  | b25m'    | 283.9     | 51.0 19.9 -69.6                         | 72.5 286.0 0.250 0.000 1.000  |
| j37g    | 111.8     | 88.3 -46.5 85.6                         | 97.5 118.5 0.625 1.000 0.000  | b37m'    | 291.8     | 45.3 33.7 -79.1                         | 86.1 293.1 0.375 0.000 1.000  |
| j50g    | 120.0     | 86.0 -62.9 82.9                         | 104.1 127.3 0.500 1.000 0.000 | b50m'    | 300.0     | 38.2 52.8 -90.6                         | 105.0 300.2 0.500 0.000 1.000 |
| j62g    | 128.2     | 83.6 -82.7 79.9                         | 115.0 136.0 0.375 1.000 0.000 | b62m'    | 308.2     | 32.1 76.7 -100.6                        | 126.6 307.3 0.625 0.000 1.000 |
| j75g    | 136.1     | 84.1 -76.8 54.3                         | 94.1 144.7 0.250 1.000 0.000  | b75m'    | 316.1     | 42.1 82.1 -83.8                         | 117.4 314.4 0.750 0.000 1.000 |
| j87g    | 143.4     | 84.6 -70.4 35.2                         | 78.8 153.5 0.125 1.000 0.000  | b87m'    | 323.4     | 50.2 88.7 -70.2                         | 112.9 321.5 0.875 0.000 1.000 |
| g00c=G  | 150.0     | 85.2 -64.4 20.7                         | 67.9 162.2 0.000 1.000 0.000  | m'00r=M  | 330.0     | 57.2 94.2 -57.4                         | 110.3 328.6 1.000 0.000 1.000 |
| g12c'   | 156.6     | 85.6 -60.4 11.7                         | 61.6 169.1 0.000 1.000 0.125  | m'12r    | 336.6     | 55.3 89.8 -40.4                         | 98.5 335.7 1.000 0.000 0.875  |
| g25c'   | 163.9     | 85.9 -56.4 4.0                          | 56.7 175.9 0.000 1.000 0.250  | m'25r    | 343.9     | 54.1 86.5 -26.6                         | 90.6 342.8 1.000 0.000 0.750  |
| g37c'   | 171.8     | 86.2 -53.0 -2.5                         | 53.1 182.8 0.000 1.000 0.375  | m'37r    | 351.8     | 53.2 84.3 -14.9                         | 85.6 349.9 1.000 0.000 0.625  |
| g50c'   | 180.0     | 86.6 -49.8 -8.3                         | 50.6 189.6 0.000 1.000 0.500  | m'50r    | 360.0     | 52.0 82.9 -4.2                          | 83.0 357.0 1.000 0.000 0.500  |
| g62c'   | 188.2     | 86.8 -46.0 -13.5                        | 48.1 196.4 0.000 1.000 0.625  | m'62r    | 368.2     | 52.6 81.2 5.9                           | 81.4 4.2 1.000 0.000 0.375    |
| g75c'   | 196.1     | 84.3 -42.5 -18.2                        | 46.4 203.3 0.000 1.000 0.750  | m'75r    | 376.1     | 51.6 80.3 16.0                          | 81.9 11.3 1.000 0.000 0.250   |
| g87c'   | 203.4     | 81.7 -38.5 -22.3                        | 44.6 210.1 0.000 1.000 0.875  | m'87r    | 383.4     | 51.2 79.3 26.3                          | 83.6 18.4 1.000 0.000 0.125   |

KE880-3N, 1

Interpretation  $rgb \rightarrow rgb^*$  and CIELAB data of a 48 step elementary hue circle  
for a sRGB standard display with the luminance reflection  $L_r=0.6\%$  compared to the white reference (100%)  
48 step elementary hue circle with hues:  $RJGB: h_{ab,a} = 25.5, 92.3, 162.2, 271.7$ , and  $C^* M^* = 217.0, 328.6$   
comparison with six device hues  $OYL\bar{C}VM: h_{ab,a} = 38.3, 103.0, 136.3, 196.4, 305.7, 328.2$   
9 step equidistant grey scale:  $L^* = 5.7, 16.9, 28.1, 39.3, 50.5, 61.8, 73.0, 84.2, 95.4$

| $u^*Ma$ | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     | $u^*Ma$  | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     |
|---------|-----------|-----------------------------------------|-------------------------------|----------|-----------|-----------------------------------------|-------------------------------|
| r00=R   | 30.0      | 51.5 76.8 36.6                          | 85.1 25.5 1.000 0.000 0.000   | c'00b=C' | 210.0     | 79.2 -33.8 -25.4                        | 42.5 217.0 0.000 1.000 1.000  |
| r12j    | 36.6      | 51.2 76.0 50.9                          | 91.5 33.8 1.000 0.125 0.000   | c'12b    | 216.6     | 76.9 -30.2 -29.0                        | 42.0 223.8 0.000 0.875 1.000  |
| r25j    | 43.9      | 53.8 67.8 61.4                          | 91.5 42.2 1.000 0.250 0.000   | c'25b    | 223.9     | 74.7 -26.8 -32.8                        | 42.5 230.7 0.000 0.750 1.000  |
| r37j    | 51.8      | 59.1 53.4 64.9                          | 84.1 50.5 1.000 0.375 0.000   | c'37b    | 231.8     | 72.5 -23.0 -36.2                        | 43.0 237.5 0.000 0.625 1.000  |
| r50j    | 60.0      | 63.9 41.1 68.1                          | 79.5 58.9 1.000 0.500 0.000   | c'50b    | 240.0     | 70.3 -18.7 -39.1                        | 43.5 244.4 0.000 0.500 1.000  |
| r62j    | 68.2      | 68.5 30.0 71.6                          | 77.7 67.2 1.000 0.625 0.000   | c'62b    | 248.2     | 67.9 -14.6 -43.0                        | 45.5 251.2 0.000 0.375 1.000  |
| r75j    | 76.1      | 73.2 19.3 75.1                          | 77.5 75.6 1.000 0.750 0.000   | c'75b    | 256.1     | 65.2 -10.0 -47.5                        | 48.6 258.0 0.000 0.250 1.000  |
| r87j    | 83.4      | 78.1 8.3 78.4                           | 78.9 84.0 1.000 0.875 0.000   | c'87b    | 263.4     | 62.6 -4.5 -51.4                         | 51.8 264.9 0.000 0.125 1.000  |
| j00g=J  | 90.0      | 83.8 -3.2 82.7                          | 82.8 92.3 1.000 1.000 0.000   | b00m'=B  | 270.0     | 59.6 1.7 -55.9                          | 56.0 271.7 0.000 0.000 1.000  |
| j12g    | 96.6      | 91.0 -17.1 88.2                         | 89.9 101.1 0.875 1.000 0.000  | b12m'    | 276.6     | 55.7 9.8 -62.6                          | 63.4 278.8 0.125 0.000 1.000  |
| j25g    | 103.9     | 90.8 -31.2 87.0                         | 92.5 109.8 0.750 1.000 0.000  | b25m'    | 283.9     | 51.5 19.7 -68.9                         | 71.7 286.0 0.250 0.000 1.000  |
| j37g    | 111.8     | 88.4 -45.6 84.2                         | 95.8 118.5 0.625 1.000 0.000  | b37m'    | 291.8     | 45.9 33.3 -78.2                         | 85.1 293.1 0.375 0.000 1.000  |
| j50g    | 120.0     | 86.1 -61.8 81.4                         | 102.3 127.3 0.500 1.000 0.000 | b50m'    | 300.0     | 38.8 52.1 -89.6                         | 103.7 300.2 0.500 0.000 1.000 |
| j62g    | 128.2     | 83.8 -81.1 78.4                         | 112.9 136.0 0.375 1.000 0.000 | b62m'    | 308.2     | 34.1 74.1 -97.3                         | 122.4 307.3 0.625 0.000 1.000 |
| j75g    | 136.1     | 84.2 -76.0 53.8                         | 93.1 144.7 0.250 1.000 0.000  | b75m'    | 316.1     | 43.2 80.3 -82.0                         | 114.8 314.4 0.750 0.000 1.000 |
| j87g    | 143.4     | 84.7 -69.9 34.8                         | 78.0 153.5 0.125 1.000 0.000  | b87m'    | 323.4     | 50.9 86.9 -69.0                         | 111.0 321.5 0.875 0.000 1.000 |
| g00c=G  | 150.0     | 85.2 -63.7 20.5                         | 67.2 162.2 0.000 1.000 0.000  | m'00r=M  | 330.0     | 57.6 92.9 -56.6                         | 108.8 328.6 1.000 0.000 1.000 |
| g12c'   | 156.6     | 85.6 -59.8 11.6                         | 61.0 169.1 0.000 1.000 0.125  | m'12r    | 336.6     | 55.8 88.4 -39.8                         | 97.0 335.7 1.000 0.000 0.875  |
| g25c'   | 163.9     | 86.0 -55.9 4.0                          | 56.1 175.9 0.000 1.000 0.250  | m'25r    | 343.9     | 54.6 85.2 -26.2                         | 89.2 342.8 1.000 0.000 0.750  |
| g37c'   | 171.8     | 86.3 -52.5 -2.4                         | 52.6 182.8 0.000 1.000 0.375  | m'37r    | 351.8     | 53.7 83.0 -14.6                         | 84.3 349.9 1.000 0.000 0.625  |
| g50c'   | 180.0     | 86.6 -49.3 -8.3                         | 50.1 189.6 0.000 1.000 0.500  | m'50r    | 360.0     | 53.1 81.5 -4.1                          | 81.6 357.0 1.000 0.000 0.500  |
| g62c'   | 188.2     | 86.9 -45.6 -13.4                        | 47.7 196.4 0.000 1.000 0.625  | m'62r    | 368.2     | 52.5 79.8 5.8                           | 80.0 4.2 1.000 0.000 0.375    |
| g75c'   | 196.1     | 84.4 -42.1 -18.1                        | 45.9 203.3 0.000 1.000 0.750  | m'75r    | 376.1     | 52.1 78.9 15.7                          | 80.4 11.3 1.000 0.000 0.250   |
| g87c'   | 203.4     | 81.8 -38.1 -22.1                        | 44.2 210.1 0.000 1.000 0.875  | m'87r    | 383.4     | 51.8 77.9 25.9                          | 82.1 18.4 1.000 0.000 0.125   |

KE880-7N, 1

Interpretation  $rgb \rightarrow rgb^*$  and CIELAB data of a 48 step elementary hue circle  
for a sRGB standard display with the luminance reflection  $L_r=1.2\%$  compared to the white reference (100%)  
48 step elementary hue circle with hues:  $RJGB: h_{ab,a} = 25.5, 92.3, 162.2, 271.7$ , and  $C^* M^* = 217.0, 328.6$   
comparison with six device hues  $OYL\bar{C}VM: h_{ab,a} = 37.0, 103.1, 136.5, 196.4, 305.2, 328.1$   
9 step equidistant grey scale:  $L^* = 11.0, 21.5, 32.1, 42.6, 53.2, 63.8, 74.3, 84.9, 95.4$

| $u^*Ma$ | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     | $u^*Ma$  | $h_{rgb}$ | $[L^*, a^*, b^*, C^*_{ab}, h_{ab}Ma_e]$ | $rgb \rightarrow rgb^*Ma$     |
|---------|-----------|-----------------------------------------|-------------------------------|----------|-----------|-----------------------------------------|-------------------------------|
| r00=R   | 30.0      | 52.0 75.3 35.9                          | 83.4 25.5 1.000 0.000 0.000   | c'00b=C' | 210.0     | 79.4 -33.5 -25.2                        | 42.1 217.0 0.000 1.000 1.000  |
| r12j    | 36.6      | 51.7 74.5 49.9                          | 89.7 33.8 1.000 0.125 0.000   | c'12b    | 216.6     | 77.1 -29.9 -28.7                        | 41.6 223.8 0.000 0.875 1.000  |
| r25j    | 43.9      | 55.1 64.5 58.5                          | 87.0 42.2 1.000 0.250 0.000   | c'25b    | 223.9     | 74.9 -26.6 -32.4                        | 42.1 230.7 0.000 0.750 1.000  |
| r37j    | 51.8      | 60.0 51.4 62.4                          | 80.8 50.5 1.000 0.375 0.000   | c'37b    | 231.8     | 72.7 -22.8 -35.8                        | 42.6 237.5 0.000 0.625 1.000  |
| r50j    | 60.0      | 64.6 39.7 65.8                          | 76.8 58.9 1.000 0.500 0.000   | c'50b    | 240.0     | 70.6 -18.5 -38.7                        | 43.1 244.4 0.000 0.500 1.000  |
| r62j    | 68.2      | 69.0 29.1 65.9                          | 75.3 67.2 1.000 0.625 0.000   | c'62b    | 248.2     | 68.2 -14.4 -42.5                        | 45.0 251.2 0.000 0.375 1.000  |
| r75j    | 76.1      | 73.6 18.8 73.1                          | 75.5 75.6 1.000 0.750 0.000   | c'75b    | 256.1     | 65.6 -9.9 -46.9                         | 48.1 258.0 0.000 0.250 1.000  |
| r87j    | 83.4      | 78.4 8.1 76.6                           | 77.0 84.0 1.000 0.875 0.000   | c'87b    | 263.4     | 63.0 -4.5 -50.9                         | 51.2 264.9 0.000 0.125 1.000  |
| j00g=J  | 90.0      | 83.9 -3.2 81.0                          | 81.1 92.3 1.000 1.000 0.000   | b00m'=B  | 270.0     | 60.0 1.7 -55.2                          | 55.4 271.7 0.000 0.000 1.000  |
| j12g    | 96.6      | 91.0 -16.8 86.6                         | 88.3 101.1 0.875 1.000 0.000  | b12m'    | 276.6     | 56.1 9.6 -61.8                          | 62.7 278.8 0.125 0.000 1.000  |
| j25g    | 103.9     | 90.8 -30.7 85.6                         | 91.0 109.8 0.750 1.000 0.000  | b25m'    | 283.9     | 52.0 19.5 -68.1                         | 71.0 286.0 0.250 0.000 1.000  |
| j37g    | 111.8     | 88.5 -44.9 82.7                         | 94.1 118.5 0.625 1.000 0.000  | b37m'    | 291.8     | 46.4 32.9 -77.2                         | 84.0 293.1 0.375 0.000 1.000  |
| j50g    | 120.0     | 86.3 -60.7 80.0                         | 100.5 127.3 0.500 1.000 0.000 | b50m'    | 300.0     | 39.4 51.5 -88.5                         | 102.5 300.2 0.500 0.000 1.000 |
| j62g    | 128.2     | 83.9 -79.6 77.0                         | 110.8 136.0 0.375 1.000 0.000 | b62m'    | 308.2     | 35.8 71.9 -94.4                         | 118.8 307.3 0.625 0.000 1.000 |
| j75g    | 136.1     | 84.3 -75.2 53.2                         | 92.2 144.7 0.250 1.000 0.000  | b75m'    | 316.1     | 44.2 78.7 -80.2                         | 112.4 314.4 0.750 0.000 1.000 |
| j87g    | 143.4     | 84.8 -69.0 34.5                         | 77.2 153.5 0.125 1.000 0.000  | b87m'    | 323.4     | 51.6 85.5 -69.7                         | 109.3 321.5 0.875 0.000 1.000 |
| g00c=G  | 150.0     | 85.3 -63.2 20.3                         | 66.5 162.2 0.000 1.000 0.000  | m'00r=M  | 330.0     | 58.0 91.6 -55.8                         | 107.3 328.6 1.000 0.000 1.000 |
| g12c'   | 156.6     | 85.7 -59.2 11.4                         | 60.3 169.1 0.000 1.000 0.125  | m'12r    | 336.6     | 56.3 87.1 -39.2                         | 95.6 335.7 1.000 0.000 0.875  |
| g25c'   | 163.9     | 86.0 -55.0 4.0                          | 55.6 175.9 0.000 1.000 0.250  | m'25r    | 343.9     | 55.1 83.9 -25.8                         | 87.8 342.8 1.000 0.000 0.750  |
| g37c'   | 171.8     | 86.4 -52.0 -2.4                         | 52.1 182.8 0.000 1.000 0.375  | m'37r    | 351.8     | 54.2 81.7 -14.4                         | 83.0 349.9 1.000 0.000 0.625  |
| g50c'   | 180.0     | 86.7 -48.9 -8.2                         | 49.7 189.6 0.000 1.000 0.500  | m'50r    | 360.0     | 53.6 80.2 -4.0                          | 80.3 357.0 1.000 0.000 0.500  |
| g62c'   | 188.2     | 87.0 -45.2 -13.3                        | 47.2 196.4 0.000 1.000 0.625  | m'62r    | 368.2     | 53.1 78.5 5.7                           | 78.7 4.2 1.000 0.000 0.375    |
| g75c'   | 196.1     | 84.5 -41.7 -17.9                        | 45.5 203.3 0.000 1.000 0.750  | m'75r    | 376.1     | 52.7 77.5 15.4                          | 79.0 11.3 1.000 0.000 0.250   |
| g87c'   | 203.4     | 81.9 -37.8 -21.9                        | 43.8 210.1 0.000 1.000 0.875  | m'87r    | 383.4     | 52.3 76.5 25.4                          | 80.6 18.4 1.000 0.000 0.125   |

KE881-3N, 1

Interpretation  $rgb \rightarrow rgb^*$  and CIELAB data of a 48 step elementary hue circle  
for a sRGB standard display with the luminance reflection  $L_r=2.5\%$  compared to the white reference (100%)  
48 step elementary hue circle with hues:  $RJGB: h_{ab,a} = 25.5, 92.3, 162.2, 271.7$ , and  $C^* M^* = 217.0, 328.6$   
comparison with six device hues  $OYL\bar{C}VM: h_{ab,a} = 34.8, 103.3, 136.9, 196.5, 304.3, 328.1$   
9 step equidistant grey scale:  $L^* = 18.0, 27.7, 37.4, 47.0, 56.7, 66.4, 76$