

**rgb\* and CIE data of a elementary hue circle according to CIE R1-47:2009 for sRGB display  $L_r=20\%$** **16 step elementary hue circle with intended elementary hues:  $h_{ab,a} = 25.4, 92.3, 162.2, 271.7$** 

| <b>Code</b>   | <b>X</b> | <b>Y</b> | <b>Z</b> | <b>x</b> | <b>y</b> | <b>L*</b> | <b>a*</b> | <b>b*</b> | <b>L*_a</b> | <b>a*_a</b> | <b>b*_a</b> | <b>C*<sub>ab,a</sub></b> | <b>h<sub>ab,a</sub></b> | <b>rgb -&gt; rgb*</b> |
|---------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-------------|-------------|-------------|--------------------------|-------------------------|-----------------------|
| <b>r00j=R</b> | 47.4     | 34.9     | 23.2     | 0.449    | 0.33     | 65.6      | 44.6      | 21.2      | 65.6        | 44.6        | 21.2        | 49.4                     | 25.4                    | 1.00 0.00 0.00        |
| <b>r25j</b>   | 51.1     | 42.3     | 24.5     | 0.433    | 0.358    | 71.1      | 31.3      | 28.4      | 71.1        | 31.3        | 28.4        | 42.3                     | 42.2                    | 1.00 0.25 0.00        |
| <b>r50j</b>   | 54.7     | 49.3     | 25.7     | 0.421    | 0.38     | 75.6      | 20.7      | 34.4      | 75.6        | 20.7        | 34.4        | 40.2                     | 58.9                    | 1.00 0.50 0.00        |
| <b>r75j</b>   | 58.7     | 57.3     | 27.0     | 0.41     | 0.4      | 80.3      | 10.3      | 40.4      | 80.3        | 10.3        | 40.4        | 41.7                     | 75.6                    | 1.00 0.75 0.00        |
| <b>j00g=J</b> | 64.3     | 68.5     | 28.9     | 0.397    | 0.423    | 86.2      | -1.9      | 47.8      | 86.2        | -1.9        | 47.8        | 47.8                     | 92.3                    | 1.00 1.00 0.00        |
| <b>j25g</b>   | 69.1     | 82.8     | 31.4     | 0.376    | 0.451    | 92.9      | -20.0     | 55.7      | 92.9        | -20.0       | 55.7        | 59.2                     | 109.7                   | 0.75 1.00 0.00        |
| <b>j50g</b>   | 54.4     | 74.6     | 30.6     | 0.34     | 0.467    | 89.2      | -38.3     | 50.4      | 89.2        | -38.3       | 50.4        | 63.3                     | 127.2                   | 0.50 1.00 0.00        |
| <b>j75g</b>   | 44.8     | 69.6     | 36.7     | 0.296    | 0.46     | 86.8      | -53.7     | 37.9      | 86.8        | -53.7       | 37.9        | 65.7                     | 144.7                   | 0.25 1.00 0.00        |
| <b>g00b=G</b> | 49.3     | 71.4     | 60.3     | 0.272    | 0.394    | 87.6      | -44.9     | 14.4      | 87.6        | -44.9       | 14.4        | 47.1                     | 162.1                   | 0.00 1.00 0.00        |
| <b>g25b</b>   | 55.3     | 74.4     | 89.4     | 0.252    | 0.339    | 89.1      | -35.7     | -6.0      | 89.1        | -35.7       | -6.0        | 36.2                     | 189.6                   | 0.00 1.00 0.50        |
| <b>g50b</b>   | 50.9     | 63.7     | 93.9     | 0.244    | 0.305    | 83.8      | -24.2     | -18.2     | 83.8        | -24.2       | -18.2       | 30.3                     | 217.0                   | 0.00 1.00 1.00        |
| <b>g75b</b>   | 45.2     | 52.6     | 91.5     | 0.238    | 0.277    | 77.6      | -13.1     | -27.3     | 77.6        | -13.1       | -27.3       | 30.3                     | 244.2                   | 0.00 0.50 1.00        |
| <b>b00r=B</b> | 39.5     | 41.2     | 89.6     | 0.232    | 0.241    | 70.3      | 1.1       | -38.5     | 70.3        | 1.1         | -38.5       | 38.6                     | 271.7                   | 0.00 0.00 1.00        |
| <b>b25r</b>   | 33.5     | 26.1     | 87.0     | 0.228    | 0.178    | 58.1      | 33.5      | -57.7     | 58.1        | 33.5        | -57.7       | 66.8                     | 300.1                   | 0.50 0.00 1.00        |
| <b>b50r</b>   | 59.4     | 39.5     | 84.4     | 0.323    | 0.215    | 69.1      | 60.4      | -36.9     | 69.1        | 60.4        | -36.9       | 70.8                     | 328.5                   | 1.00 0.00 1.00        |
| <b>b75r</b>   | 50.8     | 36.0     | 41.4     | 0.395    | 0.281    | 66.5      | 49.8      | -2.6      | 66.5        | 49.8        | -2.6        | 49.9                     | 357.0                   | 1.00 0.00 0.50        |

**5 step equidistant grey scale with intended lightness:  $L^* = 52.0, 62.8, 73.7, 84.5, 95.4$** 

| <b>Code</b>    | <b>X</b> | <b>Y</b> | <b>Z</b> | <b>x</b> | <b>y</b> | <b>L*</b> | <b>a*</b> | <b>b*</b> | <b>L*_a</b> | <b>a*_a</b> | <b>b*_a</b> | <b>C*<sub>ab,a</sub></b> | <b>h<sub>ab,a</sub></b> | <b>rgb -&gt; rgb*</b> |
|----------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-------------|-------------|-------------|--------------------------|-------------------------|-----------------------|
| <b>n000w=N</b> | 19.1     | 20.1     | 21.9     | 0.312    | 0.329    | 52.0      | 0.0       | 0.0       | 52.0        | 0.0         | 0.0         | 0.0                      | 0.0                     | 0.00 0.00 0.00        |
| <b>n025w</b>   | 29.8     | 31.4     | 34.2     | 0.312    | 0.329    | 62.8      | 0.0       | 0.0       | 62.8        | 0.0         | 0.0         | 0.0                      | 325.1                   | 0.25 0.25 0.25        |
| <b>n050w</b>   | 44.0     | 46.3     | 50.4     | 0.312    | 0.329    | 73.7      | 0.0       | 0.0       | 73.7        | 0.0         | 0.0         | 0.0                      | 324.7                   | 0.50 0.50 0.50        |
| <b>n075w</b>   | 61.9     | 65.1     | 70.9     | 0.312    | 0.329    | 84.5      | 0.0       | 0.0       | 84.5        | 0.0         | 0.0         | 0.0                      | 323.8                   | 0.75 0.75 0.75        |
| <b>n100w=W</b> | 84.1     | 88.5     | 96.4     | 0.312    | 0.329    | 95.4      | 0.0       | 0.0       | 95.4        | 0.0         | 0.0         | 0.0                      | 0.0                     | 1.00 1.00 1.00        |