

9stufige Grauskalierung zwischen $L^*_{0aN}=20.0$ und $L^*_{0aW}=103.0$, $Y_{0ref}=108.0$, Normierung Grau U

$L^*_{0aN}=20.0$, $L^*_{0aU}=61.5$, $L^*_{0aW}=103.0$, $Y_{0aN}=3.0$, $Y_{0aU}=29.8$, $Y_{0aW}=108.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$
 $L^*_{taN}=56.1$, $L^*_{taU}=61.5$, $L^*_{taW}=74.0$, $Y_{taN}=24.0$, $Y_{taU}=29.8$, $Y_{taW}=46.8$, $C_{taY}=Y_{taW}:Y_{taN}=1.9$

Regularitätsindex nach ISO/IEC 15775:2022, Anhang G für 5 und 9 Stufen

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ mit $Y \geq 0,882$, $Y_n=100$

$g^*_5 = 100$, $g^*_9 = 99$

$g^*_5 = 25$, $g^*_9 = 19$

$g^*_5 = 89$, $g^*_9 = 73$

| L^*_{CIELAB} | n0. i | angestrebte Ausgabe | | | | reale Ausgabe | | | | linearisierte Ausgabe | | |
|----------------|-------|---------------------|------------|----------|----------|---------------|-------------------|------------|----------|-----------------------|------------|-------------------|
| | | L^*_{0a} | L^*_{0r} | Y_{0a} | Y_{0r} | L^*_{ta} | ΔL^*_{ta} | L^*_{tr} | Y_{ta} | $(L^*_{tr})^{1/1.68}$ | L^*_{la} | ΔL^*_{la} |
| 100 | 9 | 103.0 | 1.0 | 108.0 | 1.0 | 74.0 | | 1.0 | 46.8 | 1.0 | 74.0 | |
| | 8 | 92.6 | 0.875 | 82.1 | 0.754 | 70.3 | 3.7 | 0.791 | 41.2 | 0.87 | 71.7 | 2.3 |
| | 7 | 82.3 | 0.75 | 60.8 | 0.55 | 66.9 | 3.3 | 0.603 | 36.5 | 0.741 | 69.4 | 2.3 |
| 75 | 6 | 71.9 | 0.625 | 43.5 | 0.386 | 64.0 | 2.9 | 0.44 | 32.8 | 0.613 | 67.1 | 2.3 |
| | 5 | 61.5 | 0.5 | 29.8 | 0.256 | 61.5 | 2.5 | 0.301 | 29.8 | 0.49 | 64.9 | 2.2 |
| | 4 | 51.2 | 0.375 | 19.4 | 0.156 | 59.5 | 2.0 | 0.189 | 27.6 | 0.371 | 62.8 | 2.1 |
| 50 | 3 | 40.8 | 0.25 | 11.7 | 0.083 | 58.0 | 1.5 | 0.103 | 25.9 | 0.258 | 60.8 | 2.0 |
| | 2 | 30.4 | 0.125 | 6.4 | 0.032 | 56.9 | 1.1 | 0.041 | 24.8 | 0.149 | 58.8 | 2.0 |
| 25 | 1 | 20.0 | 0.0 | 3.0 | 0.0 | 56.1 | 0.7 | 0.0 | 24.0 | 0.0 | 56.1 | 2.7 |

$\Delta L^*_{0a} = 10.4$ (i=1,2,...,8)

Normierung: $Y_{taiU} = Y_{0aU} \frac{Y_{0ai} + Y_{0ref}}{Y_{0aU} + Y_{0ref}}$