

9stufige Grauskalierung zwischen $L^*_{0aN}=3.6$ und $L^*_{0aW}=95.9$, $Y_{0ref}=2.5$, Normierung Grau U

$L^*_{0aN}=3.6$, $L^*_{0aU}=49.8$, $L^*_{0aW}=96.0$, $Y_{0aN}=0.4$, $Y_{0aU}=18.2$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$

$L^*_{taN}=18.1$, $L^*_{taU}=49.8$, $L^*_{taW}=92.3$, $Y_{taN}=2.5$, $Y_{taU}=18.2$, $Y_{taW}=81.3$, $C_{taY}=Y_{taW}:Y_{taN}=31.9$

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

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

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

$g^*_5 = 58$, $g^*_9 = 48$

$g^*_5 = 91$, $g^*_9 = 89$

| $L^*_{CIE LAB}$ | n0. i | angestrebte Ausgabe | | | | reale Ausgabe | | | | | linearisierte Ausgabe | |
|-----------------|-------|---------------------|------------|----------|----------|---------------|-------------------|------------|----------|-----------------------|-----------------------|-------------------|
| | | L^*_{0a} | L^*_{0r} | Y_{0a} | Y_{0r} | L^*_{ta} | ΔL^*_{ta} | L^*_{tr} | Y_{ta} | $(L^*_{tr})^{1/1.24}$ | L^*_{la} | ΔL^*_{la} |
| 100 | ○ 9 | 96.0 | 1.0 | 90.0 | 1.0 | 92.3 | | 1.0 | 81.3 | 1.0 | 92.3 | |
| | ● 8 | 84.4 | 0.875 | 64.9 | 0.72 | 81.5 | 10.8 | 0.854 | 59.3 | 0.88 | 83.4 | 8.8 |
| 75 | ● 7 | 72.9 | 0.75 | 45.0 | 0.498 | 70.7 | 10.7 | 0.709 | 41.8 | 0.758 | 74.3 | 9.1 |
| | ● 6 | 61.3 | 0.625 | 29.6 | 0.326 | 60.1 | 10.6 | 0.566 | 28.3 | 0.632 | 65.0 | 9.3 |
| 50 | ● 5 | 49.8 | 0.5 | 18.2 | 0.199 | 49.8 | 10.3 | 0.427 | 18.2 | 0.504 | 55.5 | 9.5 |
| | ● 4 | 38.2 | 0.375 | 10.2 | 0.11 | 39.9 | 9.9 | 0.293 | 11.2 | 0.372 | 45.7 | 9.7 |
| | ● 3 | 26.7 | 0.25 | 5.0 | 0.051 | 30.8 | 9.1 | 0.171 | 6.6 | 0.241 | 36.0 | 9.7 |
| 25 | ● 2 | 15.2 | 0.125 | 1.9 | 0.017 | 23.3 | 7.5 | 0.07 | 3.9 | 0.117 | 26.9 | 9.2 |
| | ● 1 | 3.6 | 0.0 | 0.4 | 0.0 | 18.1 | 5.2 | 0.0 | 2.5 | 0.0 | 18.1 | 8.7 |

$\Delta L^*_{0a} = 11.5$ (i=1,2,...,8)

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