

9stufige Grauskalierung zwischen $L^*_{0aN}=14.4$ und $L^*_{0aW}=95.9$, $Y_{0ref}=0.4$, Normierung Grau U

$L^*_{0aN}=14.4$, $L^*_{0aU}=55.2$, $L^*_{0aW}=96.0$, $Y_{0aN}=1.8$, $Y_{0aU}=23.1$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=50.0$

$L^*_{taN}=16.3$, $L^*_{taU}=55.2$, $L^*_{taW}=95.5$, $Y_{taN}=2.2$, $Y_{taU}=23.1$, $Y_{taW}=88.9$, $C_{taY}=Y_{taW}:Y_{taN}=41.1$

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 $Y \geq 0,882$, $Y_n=100$

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

$g^*_5 = 93$, $g^*_9 = 91$

$g^*_5 = 98$, $g^*_9 = 98$

$L^*_{CIE LAB}$ angestrebte Ausgabe reale Ausgabe linearisierte Ausgabe

| n0. i | L^*_{0a} | L^*_{0r} | Y_{0a} | Y_{0r} | L^*_{ta} | ΔL^*_{ta} | L^*_{tr} | Y_{ta} | $(L^*_{tr})^{1/1.03}$ | L^*_{la} | ΔL^*_{la} |
|-------|------------|------------|----------|----------|------------|-------------------|------------|----------|-----------------------|------------|-------------------|
| 9 | 96.0 | 1.0 | 90.0 | 1.0 | 95.5 | | 1.0 | 88.9 | 1.0 | 95.5 | |
| 8 | 85.8 | 0.875 | 67.6 | 0.746 | 85.4 | 10.1 | 0.872 | 66.8 | 0.875 | 85.6 | 9.9 |
| 7 | 75.6 | 0.75 | 49.2 | 0.538 | 75.3 | 10.1 | 0.745 | 48.8 | 0.75 | 75.8 | 9.9 |
| 6 | 65.4 | 0.625 | 34.5 | 0.371 | 65.2 | 10.1 | 0.618 | 34.3 | 0.625 | 65.8 | 9.9 |
| 5 | 55.2 | 0.5 | 23.1 | 0.242 | 55.2 | 10.0 | 0.491 | 23.1 | 0.5 | 55.9 | 9.9 |
| 4 | 45.0 | 0.375 | 14.5 | 0.144 | 45.2 | 10.0 | 0.365 | 14.7 | 0.374 | 46.0 | 9.9 |
| 3 | 34.8 | 0.25 | 8.4 | 0.075 | 35.3 | 9.9 | 0.24 | 8.6 | 0.248 | 36.0 | 9.9 |
| 2 | 24.6 | 0.125 | 4.3 | 0.028 | 25.6 | 9.7 | 0.117 | 4.6 | 0.124 | 26.1 | 9.9 |
| 1 | 14.4 | 0.0 | 1.8 | 0.0 | 16.3 | 9.3 | 0.0 | 2.2 | 0.0 | 16.3 | 9.8 |

$\Delta L^*_{0a}=10.2$ (i=1,2,...,8)

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