**9stufige Grauskalierung zwischen $L^*_{0aN}$=23 & $L^*_{0aW}$=104.2, $Y_{0ref}$=110, Normierung Weiß *W***

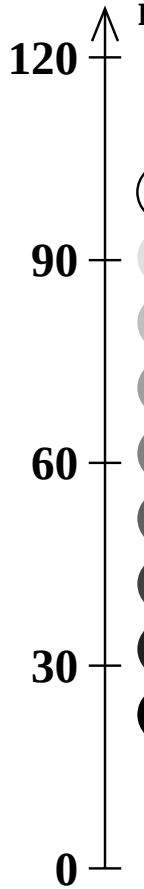
$L^*_{0aN}$=23.7, $L^*_{0aU}$=64.0, $L^*_{0aW}$=104.2, $Y_{0aN}$=3.6, $Y_{0aU}$=35.7, $Y_{0aW}$=110.0, $C_{0aY}=Y_{0aW}:Y_{0aN}$=30.2

$L^*_{taN}$=78.2, $L^*_{taU}$=87.2, $L^*_{taW}$=104.2, $Y_{taN}$=56.8, $Y_{taU}$=72.9, $Y_{taW}$=110.0, $C_{taY}=Y_{taW}:Y_{taN}$=1.9

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

**$g^* = 100\ [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{TUBsRGB,W} = 100\ [Y/Y_n]^{1/ln(10)}$ mit $Y$ >= 0,39 = 100/255, $Y_n$=100**

**$g^*_5$= 99, $g^*_9$= 99** | **$g^*_5$= 35, $g^*_9$= 27** | **$g^*_5$= 48, $g^*_9$= 36**




| $L^*_{TUBsRGB,W}$ | angestrebte Ausgabe | | | | reale Ausgabe | | | | | linearisierte Ausgabe | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n0. i | L*0a | L*0r | Y0a | Y0r | L*ta | ΔL*ta | L*tr | Yta | $(L^*tr)^{1/2.15}$ | L*la | ΔL*la |
| 9 | 104.2 | 1.0 | 110.0 | 1.0 | 104.2 | | 1.0 | 110.0 | 1.0 | 104.2 | |
| | | | | | | 4.9 | | | | | 2.4 |
| 8 | 94.2 | 0.875 | 87.1 | 0.784 | 99.4 | | 0.813 | 98.5 | 0.908 | 101.8 | |
| | | | | | | 4.5 | | | | | 2.5 |
| 7 | 84.1 | 0.75 | 67.1 | 0.597 | 94.8 | | 0.64 | 88.5 | 0.812 | 99.3 | |
| | | | | | | 4.1 | | | | | 2.6 |
| 6 | 74.0 | 0.625 | 50.0 | 0.436 | 90.8 | | 0.482 | 80.0 | 0.713 | 96.7 | |
| | | | | | | 3.6 | | | | | 2.7 |
| 5 | 64.0 | 0.5 | 35.7 | 0.302 | 87.2 | | 0.343 | 72.9 | 0.608 | 94.0 | |
| | | | | | | 3.1 | | | | | 2.8 |
| 4 | 53.9 | 0.375 | 24.1 | 0.192 | 84.1 | | 0.224 | 67.0 | 0.499 | 91.2 | |
| | | | | | | 2.5 | | | | | 3.0 |
| 3 | 43.8 | 0.25 | 15.0 | 0.107 | 81.5 | | 0.127 | 62.5 | 0.383 | 88.2 | |
| | | | | | | 1.9 | | | | | 3.4 |
| 2 | 33.8 | 0.125 | 8.2 | 0.043 | 79.6 | | 0.052 | 59.1 | 0.253 | 84.8 | |
| | | | | | | 1.3 | | | | | 6.6 |
| 1 | 23.7 | 0.0 | 3.6 | 0.0 | 78.2 | | 0.0 | 56.8 | 0.0 | 78.2 | |

**$\Delta L^*_{0a}$=10.1 (i=1,2,...,8)**

**Normierung: $Y_{taiW}=Y_{0aW}\ \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$**