

9stufige Grauskalierung zwischen $L^*_{0aN}=30$ & $L^*_{0aW}=80.1$, $Y_{0ref}=4$, Normierung Weiß W

$L^*_{0aN}=30.8$, $L^*_{0aU}=55.5$, $L^*_{0aW}=80.1$, $Y_{0aN}=6.7$, $Y_{0aU}=25.7$, $Y_{0aW}=60.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=9.0$

$L^*_{taN}=36.8$, $L^*_{taU}=57.4$, $L^*_{taW}=80.1$, $Y_{taN}=10.0$, $Y_{taU}=27.9$, $Y_{taW}=60.0$, $C_{taY}=Y_{taW}:Y_{taN}=6.0$

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

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

$$g^*_5=99, g^*_9=99 \quad g^*_5=86, g^*_9=83 \quad g^*_5=87, g^*_9=82$$

$L^*_{TUBsRGB,W}$ angestrebte Ausgabe

n0. i L^*_{0a} L^*_{0r} Y_{0a} Y_{0r}

reale Ausgabe

L^*_{ta} ΔL^*_{ta} L^*_{tr} Y_{ta} $(L^*_{tr})^{1/1.13}$

linearisierte Ausgabe

L^*_{la} ΔL^*_{la}

	9	80.1	1.0	60.0	1.0	80.1	5.7	1.0	60.0	1.0	80.1	5.1
8	73.9	0.875	49.9	0.811	74.3	5.7	0.867	50.5	0.882	75.0	5.1	5.2
7	67.8	0.75	40.8	0.641	68.6	5.6	0.735	42.0	0.762	69.8	5.2	5.2
6	61.6	0.625	32.8	0.49	63.0	5.6	0.605	34.5	0.642	64.6	5.3	5.3
5	55.5	0.5	25.7	0.358	57.4	5.4	0.477	27.9	0.52	59.3	5.3	5.3
4	49.3	0.375	19.6	0.243	52.0	5.3	0.351	22.2	0.397	54.0	5.4	5.4
3	43.2	0.25	14.4	0.146	46.7	5.1	0.228	17.3	0.271	48.5	5.5	5.5
2	37.0	0.125	10.1	0.065	41.6	4.8	0.11	13.2	0.143	43.0	6.2	6.2
1	30.8	0.0	6.7	0.0	36.8	4.8	0.0	10.0	0.0	36.8		

0
25
50
75
100

$\Delta L^*_{0a}=6.1$

(i=1,2,...,8)

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