

L^*/L^*_u

IECsRGB-Helligkeit L^* normiert für die Umgebungshelligkeit L^*_u

$$L^* = s (Y/Y_n)^n - d \quad (Y_n=100, Y_u=18, s=100, n=1/2,4, d=0) \quad [1a]$$

$$L^* = r (Y/Y_u)^n - d \quad (r = s (Y_u/Y_n)^n = 48,94, L^*_u = r - d) \quad [1b]$$

$$L^*/L^*_u = (Y/Y_u)^n \quad [1c]$$

$$\log (L^*/L^*_u) = n \log (Y/Y_u) \quad [1d]$$

$$\ln (L^*/L^*_u) = \ln(10) n \log (Y/Y_u) \quad [1e]$$

$$L^*/L^*_u = e^{\ln(10) n \log (Y/Y_u)} \quad [1f]$$