

$\log(L^*/L_{\text{u}}^*)$

L^*/L_{u}^*

TUBsRGB-Helligkeit L^* normiert
für die UmgebungsHelligkeit L_{u}^*

$$2 \uparrow \quad 100 L^* = s(Y/Y_{\text{n}})^n - d \quad (Y_{\text{n}}=100, Y_{\text{u}}=18, s=100, n=1/\ln(10), d=0) \quad [1a]$$

$$L^* = r(Y/Y_{\text{u}})^n - d \quad (r = s(Y_{\text{u}}/Y_{\text{n}})^n = 47,48, L_{\text{u}}^* = r - d) \quad [1b]$$

$$L^*/L_{\text{u}}^* = (Y/Y_{\text{u}})^{1/\ln(10)} \quad (\ln(x)=\ln(10) \log(x)) \quad [1c]$$

$$\log(L^*/L_{\text{u}}^*) = (1/\ln(10)) \log(Y/Y_{\text{u}}) \quad [1d]$$

$$10 \quad \ln(L^*/L_{\text{u}}^*) = \log(Y/Y_{\text{u}}) \quad [1e]$$

$$L^*/L_{\text{u}}^* = e^{\log(Y/Y_{\text{u}})} \quad [1f]$$

