

$(Y/\Delta Y)$ und
 $(Y/\Delta Y) / (Y/\Delta Y)_u$

**TUBsRGB-Y-Kontrast
normiert für $(Y/\Delta Y)_u$**

text lightness

$$L^* = s (Y/Y_n)^n - d \quad (Y_n=100, Y_u=18, s=100, n=1/\ln(10), d=0) \quad [1a]$$

$$L^* = r (Y/Y_u)^n - d \quad (r = s (Y_u/Y_n)^n = 47,48, L^*_u = r - d) \quad [1b]$$

text relative lightness

$$Y / dY = Y / \{ [(Y_n / (n s))] (Y / Y_n)^{1-n} \} \quad [4c]$$

text $\log(L^*/L^*_u)$

$$(Y / Y)_u = Y_u / \{ [(Y_n / (n s))] (Y_u / Y_n)^{1-n} \} \quad [4d]$$

text $\ln(L^*/L_u)$

$$(Y / dY) / (Y / dY)_u = (Y / Y_u)^n \quad [4e]$$

text $L^*/L^*_u = e^{**x}$

$$\log [(Y / dY) / (Y / dY)_u] = (n) \log(Y / Y_u) \quad [4f]$$