

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

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

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

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

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

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

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

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