

ΔY and **TUBsRGB tristimulus value difference**
 $\Delta Y / \Delta Y_u$ **ΔY normalized to ΔY_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

$$dY = [Y_n / (n s)] (Y / Y_n)^{1-n} \quad [2c]$$

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

$$dY_u = [Y_n / (n s)] (Y_u / Y_n)^{1-n} = 1,0934 \quad [2d]$$

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

$$dY / dY_u = (Y / Y_u)^{1-n} \quad [2e]$$

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

$$\log(dY / dY_u) = (1-n) \log(Y / Y_u) \quad [2f]$$