

$Y/\Delta Y$ $Y_{\text{CIELAB contrast}}$

$$L^* = 116 (Y/Y_n)^{1/3} - 16, \quad Y_n=100, Y_u=18, 1 \leq Y \leq 100 \quad [1g]$$

$$L^* = k_u (Y/Y_u)^{1/3} - 16, \quad k_u=116 [Y_u/Y_n]^{1/3} = 65,50 \quad [2g]$$

$$Y/dY = (3/116) \cdot Y_n^{1/3} Y^{2/3} \quad [3g]$$

$$Y/dY = e \cdot (Y/Y_n)^{1/3} = f \cdot (Y/Y_u)^{1/3} \quad [4g]$$

