

$\log \Delta Y$ CIE tristimulus value Y difference

$\log(\Delta Y)$ ΔY

2-100

$$L^* = 116 (Y/Y_n)^{1/3} - 16$$

tristimulus value difference according to CIELAB

1-10

$$\begin{aligned}\log(dY) &= \log(3 (Y_n/116)) + (2/3) \log(Y/Y_n) \\ &= \log(3(Y_n^{1/3})/116) + (2/3) \log(Y)\end{aligned}$$

0-1

$$Y_u=18, dY_u=0,83, dY_u/Y_u=0,0454$$

$$\log(dY)=0,82, m_u=0,66$$

application
range

