

$\log(\Delta Y/\Delta Y_u)$

relative CIELAB-
tristimulus value difference

($s=66, Y_u=18, 1/255 < Y < 7$)

$$L^*_{\text{CIELAB}} = s(Y/Y_u)^{1/3} - 16 \quad (s=66, Y_u=18, 1 < Y \leq 100)$$

relative CIELAB-tristimulus value difference

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

