

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

relative CIELAB-
tristimulus value difference

$\Delta Y/\Delta Y_u$

2 100

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

relative CIELAB-tristimulus value difference

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

1 10

0 1

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

$\log[(dY)/(dY_u)]=0, m_u=0,66$

application
range

0,1

$Y_N=4$

10

$Y_u=18$

100

Y

-1

-2

-1

0

1

2

$\log(Y)$