

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

CIELABu9 relative
tristimulus value difference

$Y_{nc}=Y_{W\text{RGB}nc}=100, \text{21, 72, 7}$

$t^*_{\text{CIELABu9}}=37(Y/Y_u)^{1/1,5}+13 \quad (Y_u=18, Y_{nc}/100<Y\leq Y_{nc})$

$\log(dY/dY_u) = [1-(1/1,5)] \log(Y/Y_u)$

2
100

$\Delta Y/\Delta Y_u$

1
10

0
1

$t^*_u=50, dY_u=4,05, dY_u/Y_u=0,2253$

$\log[(dY)/(dY)_u]=0, m_u=0,33$

application
range

0,1

-1

1

0

10

1

100

2

$Y_u=18$

$Y_W=90$

Y

$\log(Y)$