

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

CIELABu4 relative
tristimulus value difference

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

$l^*_{\text{CIELABu4}}=37(Y/Y_u)^{1/1,5}+13 \quad (Y_u=18, Y_{nc}/100<Y\leq Y_{nc})$

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

$\Delta Y/\Delta Y_u$

2 100

1 10

0 1

-1

-2

$dY_{90}/dY_u=1,70, \gamma=1,5, 1/\gamma=1/1,5=0,66$

$dY_{18}/dY_u=1,00, S_n=36,98, D_n=13,01$

$dY_{3,6}/dY_u=0,58, Y_u=18, dY_u=4,05$

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

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

application
range

0,1

1

10

100

$Y_u=18$

100

Y

$Y_N=3,6$

1

$Y_W=90$

2

$\log(Y)$