

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

CIELABu2 relative
tristimulus value difference

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

$l^*_{\text{CIELABu2}}=59(Y/Y_u)^{1/2,5}-9 \quad (Y_u=18, Y_{nc}/100<Y\leq Y_{nc})$

$\log(dY/dY_u) = [1-(1/2,5)] \log(Y/Y_u)$

2
1
0
-1
-2

100
10
1
0
-1
-2

$dY_{90}/dY_u=2,62, \gamma=2,5, 1/\gamma=1/2,5=0,40$

$dY_{18}/dY_u=1,00, S_n=58,42, D_n=-8,42$

$dY_{3,6}/dY_u=0,37, Y_u=18, dY_u=4,27$

$l^*_u=50, dY_u=4,27, dY_u/Y_u=0,2377$

$\log[(dY)/(dY)_u]=0, m_u=0,60$

application
range

0,1

-1

0

10

1

100

2

$Y_u=18$

$Y_N=3,6$

$Y_W=90$

$\log(Y)$