

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

CIELABu1 relative
tristimulus value difference

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

$l^*_{\text{CIELABu1}} = 66(Y/Y_u)^{1/3,0} - 16 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$

$\log(dY/dY_u) = [1 - (1/3,0)] \log(Y/Y_u)$

2
1
0
-1
-2

100
10
1

$dY_{90}/dY_u = 2,92, \gamma = 3,0, 1/\gamma = 1/3,0 = 0,33$

$dY_{18}/dY_u = 1,00, S_n = 65,49, D_n = -15,49$

$dY_{3,6}/dY_u = 0,34, Y_u = 18, dY_u = 4,58$

$l^*_u = 50, dY_u = 4,58, dY_u/Y_u = 0,2544$

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

application
range

0,1

10

1

$Y_u = 18$

100

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$