

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

CIELABn3 relative
tristimulus value difference

$Y_{nc} = L^*_{wRGBnc} = 100, 52, 87, 31$

$L^*_{CIELABn3} = 100(Y/Y_n)^{1/2,0} + 1 \quad (Y_n = 100, Y_{nc}/100 < Y \leq Y_{nc})$

$\log(dY/dY_u) = [1 - (1/2,0)] \log(Y/Y_u)$

$\Delta Y/\Delta Y_u$

2 100

1 10

0 1

-1

-2

$dY_{90}/dY_u = 2,23, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$

$dY_{18}/dY_u = 1,00, S_n = 99,21, D_n = 0,78$

$dY_{3,6}/dY_u = 0,44, Y_n = 100, dY_n = 4,75$

$L^*_u = 43, dY_u = 4,75, dY_u/Y_u = 0,2639$

$\log[(dY)/(dY)_u] = 0, m_u = 0,49$

application
range

0,1

1

10

$Y_u = 18$

100

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$