

$\log [(\Delta Y/Y) / (\Delta Y/Y)_u]$

CIE LABu3 relative
tistimulus value sensitivity

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

$S_r/S_{ru} = (\Delta Y/Y) / (\Delta Y/Y)_u$

2 100

$L^*_{CIE LABu3} = 50 (Y/Y_u)^{1/2,0} + 1 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$

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

1 10

$(dY/Y)_{90}/(dY/Y)_u = 0,44, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$

$(dY/Y)_{18}/(dY/Y)_u = 1,00, S_n = 49,21, D_n = 0,78$

$(dY/Y)_{3,6}/(dY/Y)_u = 2,23, Y_u = 18, dY_u = 4,06$

application
range

0 1

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

$L^*_u = 50, dY_u = 4,06, dY_u/Y_u = 0,2257$

0,1

1

10

100

$Y_u = 18$

Y

-1

0

1

2

$Y_N = 3,6$

$Y_W = 90$

$\log(Y)$