

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

CIELABu8 relative
tistimulus value sensitivity

$Y_{nc} = L^* \mathbf{w} \mathbf{RGB}_{nc} = 100, \mathbf{52}, \mathbf{87}, \mathbf{31}$

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

$T^*_{\text{CIELABu8}} = 50 (Y/Y_u)^{1/2,0} + 1 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$

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

2 100

1 10

0 1

-1

-2

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

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

$(dY/Y)_{3,6}/(dY/Y)_u = 0,23, Y_u = 18, dY_u = 4,06$

application
range

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

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

0,1

1

10

100

$Y_u = 18$

$Y_{nc} = 100$

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$