

$\log(\Delta Y/Y)$

CIE LABn3

tristimulus value sensitivity

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

$S_r = (\Delta Y/Y)$

2-100

$L^*_{CIE LABn3} = 100(Y/Y_n)^{1/2,0} + 1 \quad (Y_n = 100, Y_{nc}/100 < Y \leq Y_{nc})$

$\log(dY/Y) = \log[2,0(Y_u/99)] - (1/2,0) \log(Y/Y_u)$

$= (1/2,0) \log[2,0(Y_u/99)] - (1/2,0) \log(Y)$

1-10

$\log(dY/Y) = -0,57, m_u = -0,50$

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

application range

0-1

$(dY/Y)_{90} = 0,1180, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$

$(dY/Y)_{18} = 0,2639, S_n = 99,21, D_n = 0,78$

$(dY/Y)_{3,6} = 0,5888, Y_n = 100, dY_n = 4,75$

0,1

1

10

100

$Y_u = 18$

100

Y

-1

-2

-1

0

$Y_N = 3,6$

1

10

100

$Y_w = 90$

2

$\log(Y)$