

$\log (\Delta Y/Y)$

CIELABu3

tristimulus value sensitivity

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

$S_r=(\Delta Y/Y)$

2-100

$L^*_{CIELABu3}=50(Y/Y_u)^{1/2,0}+1 \quad (Y_u=18, Y_{nc}/100<Y\leq Y_{nc})$

$\log(dY/Y) = \log[2,0(Y_u/49)] - (1/2,0) \log(Y/Y_u)$
 $= (1/2,0) \log[2,0(Y_u/49)] - (1/2,0) \log(Y)$

1-10

$\log(dY/Y)=-0,64, m_u=-0,49$

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

application
range

0-1

0,1

1

10

100

$Y_u=18$

Y

-2

-1

0

$Y_N=3,6$

1

10

100

2

$Y_W=90$

$\log(Y)$