

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

CIELABu0 relative
tistimulus value sensitivity

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

$$Y_{nc} = L^*_{WRGBnc} = 100, \textcolor{red}{52}, \textcolor{green}{87}, \textcolor{blue}{31}$$

2
100

$$L^*_{CIELABu0} = 66(Y/Y_u)^{1/3,0} - 16 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log[(dY/Y)/(dY/Y)_u] = - (1/3,0) \log(Y/Y_u)$$

1
10

$$(dY/Y)_{90}/(dY/Y)_u = 0,58, \gamma = 3,0, 1/\gamma = 1/3,0 = 0,33$$

$$(dY/Y)_{18}/(dY/Y)_u = 1,00, S_n = 65,49, D_n = -15,49$$

$$(dY/Y)_{3,6}/(dY/Y)_u = 1,70, Y_u = 18, dY_u = 4,58$$

application
range

0
1

$$\log[(dY/Y)/(dY/Y)_u] = 0, m_u = -0,33$$

$$L^*_{u0} = 50, dY_u = 4,58, dY_u/Y_u = 0,2544$$

0,1

1

10

100

-2

-1

0

1

10

100

Y

Y_N=3,6

Y_u=18

Y_W=90

2

log(Y)