

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

CIE LABu3 relative
tistimulus value sensitivity

$Y_{nc} = Y_{WRGBnc} = 100, 21, 72, 7$

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

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

0
1

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

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

application
range

0,1

1

10

100

$Y_u = 18$

100

Y

-2

-1

0

$Y_N = 3,6$

1

10

100

$Y_W = 90$

2

$\log(Y)$