

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

CIE LABu1 relative
tistimulus value sensitivity

$$Y_{nc}=Y_W \text{RGB}_{nc}=100, 21, 72, 7$$

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

2 100

$$l^*_{\text{CIE LABu1}}=66(Y/Y_u)^{1/3,0}-16 \quad (Y_u=18, Y_{nc}/100 < Y \leq Y_{nc})$$

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

1 10

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

$$(dY/Y)_{10}/(dY/Y)_u=1,00, S_n=65,49, D_n=-15,49$$

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

application
range

0 1

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

$$l^*_u=50, dY_u=4,58, dY_u/Y_u=0,2544$$

0,1

1

10

100

$Y_u=18$

Y

-1

0

1

2

$Y_N=3,6$ $Y_W=90$ $\log(Y)$