

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

CIELABu8 relative  
tistimulus value sensitivity

$$S_r/S_{ru} = (\Delta Y/Y) / (\Delta Y/Y)_u \quad Y_{nc} = Y_W \text{RGB}_{nc} = 100, 21, 72, 7$$
$$f^*_{\text{CIELABu8}} = 50(Y/Y_u)^{1/2,0} + 1 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$
$$\log[(dY/Y)/(dY/Y)_u] = - (1/2,0) \log(Y/Y_u)$$

1·10

$$(dY/Y)_{90}/(dY/Y)_u = 0,44, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$$

$$(dY/Y)_{18}/(dY/Y)_u = 1,00, S_n = 49,21, D_n = 0,78$$

$$(dY/Y)_{21}/(dY/Y)_u = 2,23, Y_u = 18, dY_u = 4,06$$

application  
range

0·1

$$\log[(dY/Y)/(dY/Y)_u] = 0, m_u = -0,43$$

$$f^*_{u8} = 50, dY_u = 4,06, dY_u/Y_u = 0,2257$$

0,1

1

10

Y<sub>u</sub>=18

100

Y

-1

-1

0

Y<sub>N</sub>=3,6

1

2

Y<sub>W</sub>=90

log(Y)