

$\log(\Delta Y/\Delta Y_u)$

CIELABu8 relative
tristimulus value difference
 $Y_{nc}=Y_W$ **RGB_{nc}=100, 21, 72, 7**

$\Delta Y/\Delta Y_u$

2 100

$$t^*_{\text{CIELABu8}} = 50(Y/Y_u)^{1/2,0} + 1 \quad (Y_u=18, Y_{nc}/100 < Y \leq Y_{nc})$$

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

1 10

$$dY_{90}/dY_u = 2,23, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$$

$$dY_{18}/dY_u = 1,00, S_n = 49,21, D_n = 0,78$$

$$dY_{3,6}/dY_u = 0,44, Y_u = 18, dY_u = 4,06$$

0 -1

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

$$\log[(dY)/(dY)_u] = 0, m_u = 0,50$$

application range

-1 0,1

1

10

$Y_u=18$

100

$Y_N=3,6$

1

2

$Y_W=90$

log(Y)