

$\log(Y/\Delta Y)$

CIELABu9

tristimulus value contrast

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

$$C_r = (Y/\Delta Y)$$

2
100

$$t^*_{\text{CIELABu9}} = 37(Y/Y_u)^{1/1,5} + 13 \quad (Y_u=18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(Y/dY) = -\log[1,5(Y_u/36)] + (1/1,5) \log(Y/Y_u)$$

$$= -(1/1,5) \log[1,5(Y_u/36)] + (1/1,5) \log(Y)$$

1
10

$$t^*_{u}=50, dY_u=4,05, Y_u/dY_u=4$$

$$\log(Y/dY)=0,64, m_u=0,66$$

0
-1

$$(Y/dY)_{90}=12,97, \gamma=1,5, 1/\gamma=1/1,5=0,66$$

$$(Y/dY)_{18}=4,43, S_n=36,98, D_n=13,01$$

$$(Y/dY)_{3,6}=1,52, Y_u=18, dY_u=4,05$$

application range

0,1

1

10

1

Y_u=18

100

Y

-1

0

1

Y_W=90

2

log(Y)