

$\log(Y/\Delta Y)$

CIELABu1

tristimulus value contrast

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

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

2
100

$$l^*_{\text{CIELABu1}} = 66(Y/Y_u)^{1/3,0} - 16 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\begin{aligned}\log(Y/dY) &= -\log[3,0(Y_u/65)] + (1/3,0) \log(Y/Y_u) \\ &= -(1/3,0) \log[3,0(Y_u/65)] + (1/3,0) \log(Y)\end{aligned}$$

1
10

$$l^*_u = 50, dY_u = 4,58, Y_u/dY_u = 3$$

$$\log(Y/dY) = 0,59, m_u = 0,33$$

0
-1

$$(Y/dY)_{90} = 6,71, \gamma = 3,0, 1/\gamma = 1/3,0 = 0,33$$

$$(Y/dY)_{18} = 3,92, S_n = 65,49, D_n = -15,49$$

$$(Y/dY)_{3,6} = 2,30, Y_u = 18, dY_u = 4,58$$

application range

0,1

1

10

$Y_u = 18$

100

$Y_u = 100$

-1

0

1

1

1

1

2

2

2

2

2