

$\log(\Delta Y)$

CIELABu5

tristimulus value difference

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

$$t^*_{\text{CIELABu5}} = 66 (Y/Y_u)^{1/3,0} - 16 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/3,0) \log[3,0(Y_u/65)] + [1 - (1/3,0)] \log(Y)$$

2
100
1
10
0
1
-1

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

$$\log(dY) = 4,58, m_u = 0,66$$

application
range

0,1

1

10

$Y_u = 18$

100

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$