

$\log(\Delta Y)$

CIELABu1

tristimulus value difference

$$Y_{nc} = L^* \cdot W_{RGB} \cdot B_{nc} = 100, 52, 87, 31$$

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

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

2
1
0
-1

ΔY

100
10
1
0
-1

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

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

application
range

0,1

1

10

$Y_u = 18$

100

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$