

$\log(\Delta Y)$

CIELABu3

tristimulus value difference

$$Y_{nc} = L^* \mathbf{w} \mathbf{R} \mathbf{G} \mathbf{B}_{nc} = 100, \text{52, 87, 31}$$

$$L^*_{\text{CIELABu3}} = 50 (Y/Y_u)^{1/2,0} + 1 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/2, 0) \log[2, 0 (Y_u/49)] + [1 - (1/2, 0)] \log(Y)$$

2
100

1
10

0
1

$$L^*_u = 50, dY_u = 4,06, dY_u/Y_u = 0,2257$$

$$\log(dY) = 4,06, m_u = 0,50$$

application
range

0,1

1

10

100

$Y_u = 18$

$Y_w = 90$

2

Y

$Y_N = 3,6$

1

2

$\log(Y)$