

$\log(\Delta Y)$

CIELABn5

tristimulus value difference

$$Y_{nc} = L^* W_{RGBnc} = 100, 52, 87, 31$$

$$T^*_{CIELABn5} = 116(Y/Y_n)^{1/3,0} - 16 \quad (Y_n = 100, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/3,0) \log[3,0(Y_u/115)] + [1 - (1/3,0)] \log(Y)$$

$\Delta Y$

2 100

1 10

0 1

$$T^*_u = 50, dY_u = 4,60, dY_u/Y_u = 0,2555$$

$$\log(dY) = 4,60, m_u = 0,66$$

$$dY_{90} = 13,45, \gamma = 3,0 \quad \gamma = 1/3,0 = 0,33$$

$$dY_{18} = 4,60, S_n = 15,49, D_n = -15,49$$

$$dY_{3,6} = 1,56, Y_n = 100, dY_n = 4,60$$

application range

0,1

1

10

100

$Y_u = 18$

$Y$

$Y_N = 3,6$

1

10

100

$Y_W = 90$

2

$\log(Y)$