

$\log(\Delta Y)$

CIELABu1

tristimulus value difference

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

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

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

ΔY

2 100

1 10

0 1

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

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

$dY_{90} = 13,39, \gamma = 3,0, 1/\gamma = 1/3,0 = 0,33$

$dY_{18} = 4,58, S = 65,49, D_n = -15,49$

$dY_{3,6} = 1,56, Y_u = 18, dY_u = 4,58$

application
range

0,1

1

10

100

$Y_u = 18$

$Y_W = 90$

2

$Y_N = 3,6$

1

2

$\log(Y)$