

$\log(\Delta Y)$

CIELABu4

tristimulus value difference

$$Y_{nc} = L^*_{wRGBnc} = 100, 52, 87, 31$$

$$L^*_{CIELABu4} = 37(Y/Y_u)^{1/1,5} + 13 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/1,5) \log[1,5(Y_u/36)] + [1 - (1/1,5)] \log(Y)$$

ΔY

2 100

1 10

0 1

-1

-2

$$L^*_u = 50, dY_u = 4,05, dY_u/Y_u = 0,2253$$

$$\log(dY) = 4,05, m_u = 0,33$$

$$dY_{90} = 6,93, \gamma = 1,5, 1/\gamma = 1/1,5 = 0,66$$

$$dY_{18} = 4,05, S_n = 36,98, D_n = 13,01$$

$$dY_{3,6} = 2,36, Y_u = 18, dY_u = 4,05$$

application
range

0,1

1

10

100

$Y_u = 18$

100

Y

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$