

$\log(\Delta Y/\Delta Y_u)$

CIELABu4 relative
tristimulus value difference

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

$\Delta Y/\Delta Y_u$

2 100

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

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

1 10

0 1

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

$$\log[(dY)/(dY)_u] = 0, m_u = 0,33$$

application
range

0,1 1 10

$Y_u = 18$ 100 Y

-2 -1 0

$Y_N = 3,6$ 1 $Y_W = 90$ 2 $\log(Y)$