

$\log(\Delta Y)$

CIELABu9

tristimulus value difference

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

$\Delta Y$   
2-100

$$t^*_{\text{CIELABu9}} = 37 (Y/Y_u)^{1/1,5} + 13 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

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

1-10

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

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

0-1

application range

-1 0,1 1 10 100  $Y_u = 18$  100  $Y$   
-2 -1 0  $Y_N = 3,6$  1  $Y_W = 90$  2  $\log(Y)$