

$\log(\Delta Y)$

CIELABu2

tristimulus value difference

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

$\Delta Y$

2 100

$$l^*_{\text{CIELABu2}} = 59(Y/Y_u)^{1/2,5} - 9 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/2,5) \log[2,5(Y_u/58)] + [1 - (1/2,5)] \log(Y)$$

1 10

$$l^*_u = 50, dY_u = 4,27, dY_u/Y_u = 0,2377$$

$$\log(dY) = 4,27, m_u = 0,59$$

0 1

application range

-1 0 1 10 100  $Y_u = 18$  100  $Y$

$Y_N = 3,6$  1

$Y_W = 90$  2

$\log(Y)$