

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

CIELABn3 relative
tristimulus value difference

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

$\Delta Y/\Delta Y_u$

2 100

$$l^*_{\text{CIELABn3}} = 100 (Y/Y_u)^{1/2,0} + 1 \quad (Y_n = 100, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY/dY_u) = [1 - (1/2,0)] \log(Y/Y_u)$$

1 10

$$dY_{90}/dY_u = 2,23, \gamma = 2,0, 1/\gamma = 1/2,0 = 0,50$$

$$dY_{18}/dY_u = 1,00, S_n = 99,21, D_n = 0,78$$

$$dY_{3,6}/dY_u = 0,44, Y_n = 100, dY_n = 4,75$$

0 1

$$l^*_u = 43, dY_u = 4,75, dY_u/Y_u = 0,2639$$

$$\log[(dY)/(dY)_u] = 0, m_u = 0,49$$

application
range

-1
-2

0,1

1

10

$Y_u = 18$

100

Y

-2

-1

0

$Y_N = 3,6$

1

$Y_W = 90$

2

$\log(Y)$