

$\log(\Delta Y)$

CIELABu7

tristimulus value difference

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

ΔY
2
100

$$t^*_{\text{CIELABu7}} = 59(Y/Y_u)^{1/2,5} - 9 \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

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

1
10

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

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

0
1

application
range

0,1

1

10

100

$Y_u = 18$

100

Y

-2

-1

0

$Y_N = 3,6$

1

100

$Y_W = 90$

2

$\log(Y)$