

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

CIELABu7 relative

tristimulus value difference

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

$\Delta Y/\Delta Y_u$

2 100

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

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

1 10

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

$\log[(dY)/(dY)_u] = 0, m_u = 0,60$

application
range

0,1

10 $Y_u = 18$ 100 Y

-1 -2 -1 0 1 2 $\log(Y)$

$Y_N = 3,6$ 1

$Y_W = 90$ 2