

$\log[\Delta Y/\Delta Y_u]$ ΔY_{TUBJND} tristimulus-value difference
 normalized to $\Delta Y_{TUBJND,u}$

$100L^*_{TUBJND} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$ [1d]

$a=0,3411 \quad t=88,23 \quad t/a=258,6 \quad b=6,141 \quad Y_u=18$ [2d]

$dY/dY_u = (1 + a \cdot Y) / (1 + a \cdot Y_u)$ [3d]

$dY/dY_u = (1 + b \cdot Y/Y_u) / (1 + b)$ [4d]

10

$Y_u=18, dY_u=0,08, dY_u/Y_u=0,004$

$\log[(dY_u)/(dY_u)]=0, m_u=0,86$

application
 range

N threshold

0,1

1

10

$Y_u=18$ 100

1000 Y

-2 -1 0 1 2 3 $\log Y$