

$\log[(\Delta Y/Y) / (\Delta Y_u/Y_u)]$ Y_{CIELAB} sensitivity
 normalized to $[\Delta Y/Y]_{\text{CIELAB},u}$

100 $L^* = 116 (Y/Y_u)^{1/3} - 16, \quad Y_n=100, Y_u=18, 1 \leq Y \leq 100$ [1f]

$L^* = k_u (Y/Y_u)^{1/3} - 16, \quad k_u = 116 [Y_u/Y_n]^{1/3} = 65,50$ [2f]

$(dY/Y) / (dY/Y)_u = (Y/Y_u)^{-1/3}$ [3f]

10

0

-1

N threshold

$\log[(dY_u/Y_u)/(dY_u/Y_u)] = 0, m_u = 0,33$

$Y_u=18, dY_u=0,83, dY_u/Y_u=0,045$

application range

0,1

1

10

100

1000

Y

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