

$\log [(Y/\Delta Y) / (Y_u/\Delta Y_u)]$ CIE Y-based sensitivity
normalized to $Y_u/\Delta Y_u$

$$S_r/S_{ru} = (Y/\Delta Y) / (Y_u/\Delta Y_u)$$

Y-based sensitivity according to CIELAB

$$\log[(Y/\Delta Y)/(Y_u/\Delta Y_u)] = \log(Y/Y_u)^{1/3}$$

$$L^*_{ab,u}=50, Y_u=18, dY_u=0,83$$

1 10

$$L^*_{ab,u}=50, Y_u=18, dY_u=0,83, Y_u/dY_u=21$$

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

0 1

application
range

0,1 1 10 $Y_u=18$ 100 Y

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