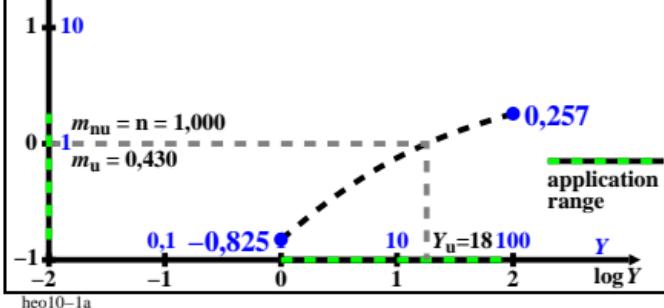


$\log(L^*_{85,2}/L^*_{85,2,u})$  LABJND lightness  $L^*_{85,2}$  normalized to the background lightness  $L^*_{85,2,u}$

$$\frac{L^*/L^*_{85,2,u}}{\Delta Y/\Delta Y_u} = (t/a) \{ \ln(1 + a \cdot Y) - \ln(1 + a \cdot Y_u) \} \quad [1a]$$

$$L^*/L^*_{85,2,u} = (t/a) \{ \ln[1 + b \cdot (Y/Y_u)] - \ln(1 + b) \} \quad [1b]$$

$$a=0,3411 \quad t=88,23 \quad t/a=258,6 \quad b=6,141 \quad [1c]$$

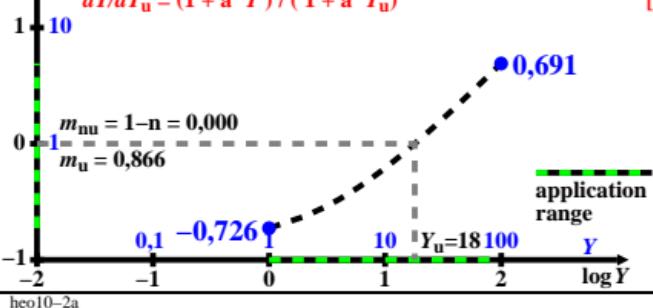


$\log(\Delta Y/\Delta Y_u)$  LABJND tristimulus value difference  $\Delta Y$  normalized to  $\Delta Y_u$

$$\frac{\Delta Y/\Delta Y_u}{\Delta Y/\Delta Y_u} = (t/a) \{ \ln(1 + a \cdot Y) - \ln(1 + a \cdot Y_u) \} \quad [1a]$$

$$L^*/L^*_{85,2,u} = (t/a) \{ \ln[1 + b \cdot (Y/Y_u)] - \ln(1 + b) \} \quad [1b]$$

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



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

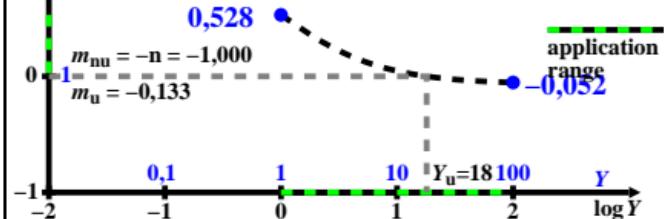
$$\frac{S_r/S_{ru}}{S_r/S_{ru}} = (\Delta Y/Y)/(\Delta Y/Y_u) \quad [1a]$$

$$100 \frac{L^*/L^*_{85,2,u}}{L^*/L^*_{85,2,u}} = (t/a) \{ \ln(1 + a \cdot Y) - \ln(1 + a \cdot Y_u) \} \quad [1b]$$

$$L^*/L^*_{85,2,u} = (t/a) \{ \ln[1 + b \cdot (Y/Y_u)] - \ln(1 + b) \} \quad [1b]$$

tristimulus value  $Y$  sensitivity  
 $(dY/Y) / (dY_u/Y_u)$

$$= [(1 + a \cdot Y) / Y] / [(1 + a \cdot Y_u) / Y_u] \quad [3f]$$



$\log[(Y/\Delta Y) / (Y/\Delta Y_u)]$  LABJND-Y contrast normalized to  $(Y/\Delta Y_u)$

$$\frac{C_r/C_{ru}}{C_r/C_{ru}} = (Y/\Delta Y)/(Y/\Delta Y_u) \quad [1a]$$

$$100 \frac{L^*/L^*_{85,2,u}}{L^*/L^*_{85,2,u}} = (t/a) \{ \ln(1 + a \cdot Y) - \ln(1 + a \cdot Y_u) \} \quad [1b]$$

$$L^*/L^*_{85,2,u} = (t/a) \{ \ln[1 + b \cdot (Y/Y_u)] - \ln(1 + b) \} \quad [1b]$$

tristimulus value  $Y$  contrast  
 $(Y/dY) / (Y_u dY_u)$

$$= [Y / (1 + a \cdot Y)] / [Y_u / (1 + a \cdot Y_u)] \quad [4h]$$

