

### log(L\*) LABJND lightness

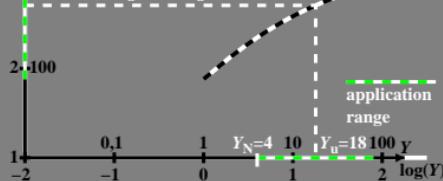
log(L\*)  $\Delta L^*$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

$$L^*_{u}=508, Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log(L^*_{u})=2.7, m_u=0.43$$



BET41-1A

### log $\Delta Y$ LABJND-tristimulus value difference

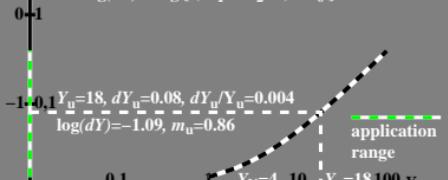
log( $\Delta Y$ )  $\Delta Y$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

tristimulus value difference

$$\log(dY) = \log [(A_1 + A_2 \cdot Y) / A_0]$$



BET41-3A

### log( $\Delta Y/Y$ ) LABJND-tristimulus value sensitivity

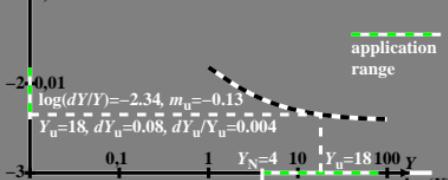
log( $C_r$ )  $C_r=(\Delta Y/Y)$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

LABJND-tristimulus value sensitivity

$$\log(dY/Y) = \log [(A_1 + A_2 \cdot Y) / (A_0 \cdot Y)]$$



BET41-5A

### log( $Y/\Delta Y$ ) LABJND-tristimulus value contrast

log( $S_r$ )  $S_r=(Y/\Delta Y)$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

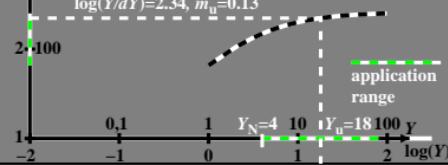
$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

LABJND-tristimulus value contrast

$$\log(Y/dY) = \log [(A_1 + A_2 \cdot Y) / (A_0 \cdot Y)]$$

$$Y_u=18, dY_u=0.08, Y_u/dY_u=222$$

$$\log(Y/dY)=2.34, m_u=0.13$$



BET41-7A

BET41-7N

### log( $L^*/L^*_{u}$ ) relative LABJND lightness

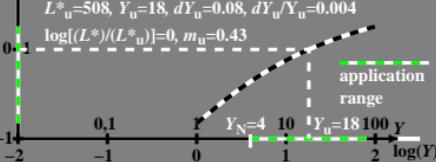
$L^*/L^*_{u}$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

$$L^*_{u}=508, Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log[(L^*)/(L^*_{u})]=0, m_u=0.43$$



BET41-2A

### log( $\Delta Y/\Delta Y_u$ ) relative LABJND-tristimulus value difference

$\Delta Y/\Delta Y_u$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

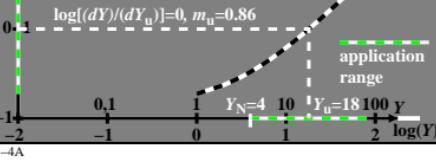
$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

relative tristimulus value difference

$$\log(dY/dY_u) = \log (A_1 + A_2 \cdot Y) - \log (A_1 + A_2 \cdot Y_u)$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log[(dY)/(dY_u)]=0, m_u=0.86$$



BET41-4A

### log [ $(\Delta Y/Y) / (\Delta Y_u/Y_u)$ ] relative LABJND-tristimulus value sensitivity

$C_r/C_{ru}=(\Delta Y/Y)/(\Delta Y_u/Y_u)$

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

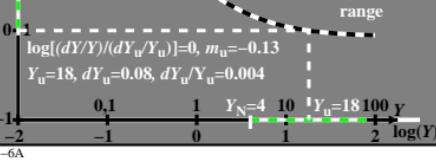
$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

relative LABJND-tristimulus value sensitivity

$$\log[(dY/Y)/(dY_u/Y_u)] = \log [(A_1 + A_2 \cdot Y) / Y] - \log [(A_1 + A_2 \cdot Y_u) / Y_u]$$

$$\log[(dY/Y)/(dY_u/Y_u)]=0, m_u=-0.13$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$



BET41-6A

### log [ $(Y/\Delta Y) / (Y_u/\Delta Y_u)$ ] relative LABJND-tristimulus value contrast

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

$$L^*_{\text{LABJND}} = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

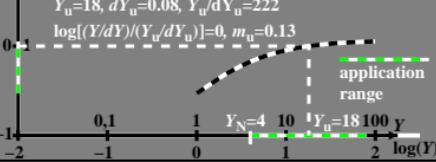
$$A_0=1,50 \quad A_1=0,0170 \quad A_2=0,0058$$

relative LABJND-tristimulus value contrast

$$\log[(Y/dY)/(Y_u/dY_u)] = \log [Y / (A_1 + A_2 \cdot Y)] - \log [Y_u / (A_1 + A_2 \cdot Y_u)]$$

$$Y_u=18, dY_u=0.08, Y_u/dY_u=222$$

$$\log[(Y/dY)/(Y_u/dY_u)]=0, m_u=0.13$$



BET41-8A