

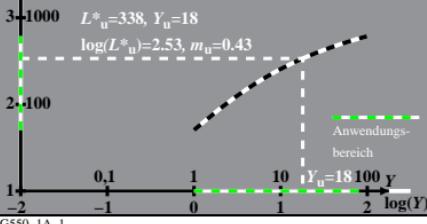
log (L*) LABJND Schwellen-Helligkeit

$$\log(L^*) = L^* \quad L^* = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

$$L^*_u=338, Y_u=18$$

$$\log(L^*_u)=2.53, m_u=0.43$$



log ΔY CIE-Y-Normfarbwertdifferenz

$$\log(\Delta Y) \Delta Y = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

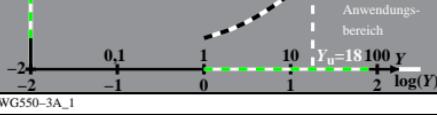
$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

Normfarbwert-Y-Differenz

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

$$Y_u=18, dY_u=-0.12, dY_u/Y_u=0.006$$

$$\log(dY)=-0.91, m_u=-0.86$$



log (ΔY/Y) CIE-Normfarb-Y-wert-kontrast

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

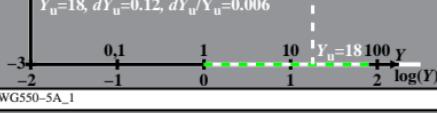
$$L^r=(A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

relativer Hellbezugswert-Kontrast

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

$$Y_u=18, dY_u=-0.12, dY_u/Y_u=0.006$$



log (Y/ΔY) CIE-Normfarb-

$$S_r=(Y/ΔY)$$

$$Y \text{ Wert-Empfindlichkeit}$$

$$L^r=10000 L^r=(A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

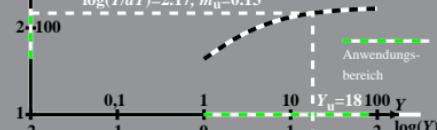
$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

relativer Hellbezugswert-Empfindlichkeit

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

$$L^*_u=338, Y_u=18, dY_u=0.12, Y_u/dY_u=148$$

$$\log(Y/dY)=2.17, m_u=0.13$$



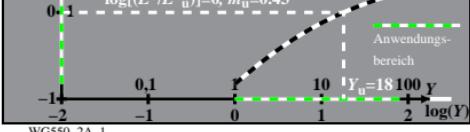
log (L*/L*_u) Relative LABJND Schwellen-Helligkeit

$$L^*/L^*_u = \ln (A_1 + A_2 \cdot Y) - \ln (A_1 + A_2 \cdot Y_u)$$

$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

$$L^*_u=338, Y_u=18$$

$$\log(L^*/L^*_u)=0, m_u=0.43$$



log(ΔY/ΔY_u) Relative CIE-Y-Normfarb-Y-wertdifferenz

$$\Delta Y/\Delta Y_u = (A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

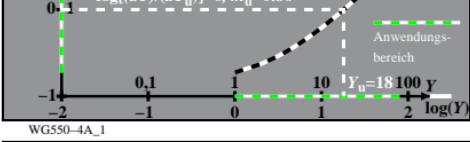
$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

relative Normfarbwert-Y-Differenz

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

$$Y_u=18, dY_u=0.12, dY_u/Y_u=0.006$$

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



log [(ΔY/Y) / (ΔY_u/Y_u)] Relativer CIE-Normfarb-Y farbwert-kontrast

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

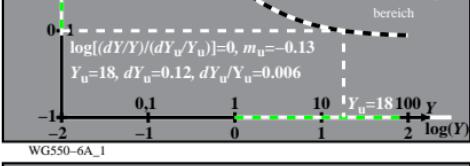
$$L^r=(A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

Hellbezugswert-Kontrast

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

$$Y_u=18, dY_u=0.12, dY_u/Y_u=0.006$$



log [(Y/ΔY) / (Y_u/ΔY_u)] Relative CIE-Normfarb-Y-wert-Empfindlichkeit

$$S_r/S_{ru}=(Y/ΔY)/(Y_u/ΔY_u)$$

$$Y \text{ Wert-Empfindlichkeit}$$

$$L^r=10000 L^r=(A_0/A_2) \ln (A_1 + A_2 \cdot Y)$$

$$A_0=1.0 \quad A_1=0.017 \quad A_2=0.0058$$

relative Hellbezugswert-Empfindlichkeit

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

$$L^*_u=338, Y_u=18, dY_u=0.12, Y_u/dY_u=148$$

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

