

log (L*) LABJND Musterhelligkeit

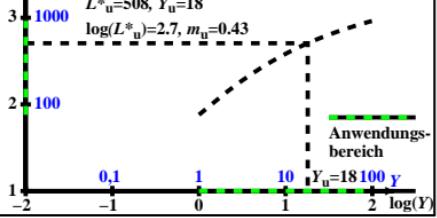
L*

$$L^* = (t/a) \ln (1 + a \cdot Y)$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

1000 $L_u^*=508, Y_u=18$

$$\log(L^*)=2.7, m_u=0.43$$



log ΔY CIE-Normfarbwertdifferenz ΔY

ΔY

$$\Delta Y = (t/a) \ln (1 + a \cdot Y)$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

Normfarbwert-Y-Differenz

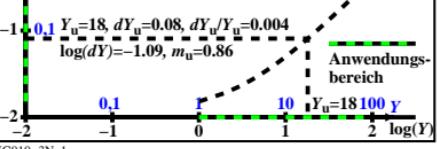
$$\log(dY) = \log [(s + q \cdot Y) / c]$$

$$= \log [(1 + a \cdot Y) / t]$$

$$s=0.017 \quad q=-0.0058 \quad c=1.5$$

1000 $Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$

$$\log(dY)= -1.09, m_u=0.86$$



log (ΔY/Y) CIE Y-basierter Kontrast

$C_r=(\Delta Y/Y)$

$$L^* = (t/a) \ln (1 + a \cdot Y)$$

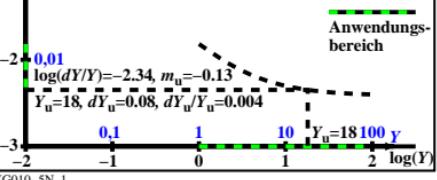
$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

relativer Hellbezugswert-Y-Kontrast

$$\log(dY/Y) = \log [(1 + a \cdot Y) / (t \cdot Y)]$$

1000 $Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$

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



log (Y/ΔY) CIE Y-basierte Empfindlichkeit

$S_r=(Y/\Delta Y)$

$$L^* = (t/a) \ln (1 + a \cdot Y)$$

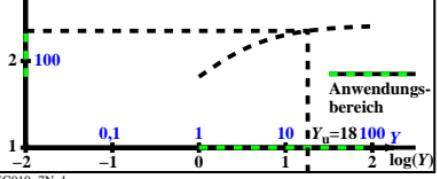
$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

relative Hellbezugswert-Y-Empfindlichkeit

$$\log(Y/dY) = \log [(1 + a \cdot Y) / (t \cdot Y)]$$

1000 $Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$

$$\log(Y/dY)=2.7, m_u=0.43$$



log (L*/L*) LABJND Musterhelligkeit L^* normiert für die Umgebungshelligkeit L^*_u

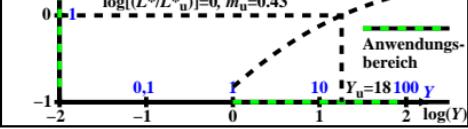
LABJND Musterhelligkeit L^* normiert für die Umgebungshelligkeit L^*_u

$L^*/L^*_u = (t/a) \{ \ln (1 + a \cdot Y) - \ln (1 + a \cdot Y_u) \}$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

1000 $L^*_u=508, Y_u=18$

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



log(ΔY/ΔY_u) CIE-Normfarbwertdifferenz ΔY normiert für ΔY_u

$\Delta Y/L^*_u$ CIE-Normfarbwertdifferenz ΔY normiert für ΔY_u

$L^*/L^*_u = (t/a) \{ \ln (1 + a \cdot Y) - \ln (1 + a \cdot Y_u) \}$

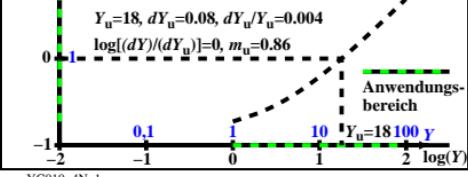
$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

relative Normfarbwert-Y-Differenz

$$\log(dY/dY_u) = \log [(1 + a \cdot Y) / (1 + a \cdot Y_u)]$$

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

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



log [(ΔY/Y) / (ΔY_u/Y_u)] CIE Y-Kontrast

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

$L^*/L^*_u = (t/a) \{ \ln (1 + a \cdot Y) - \ln (1 + a \cdot Y_u) \}$

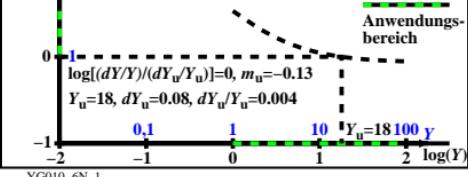
$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

Hellbezugswert-Y-Kontrast

$$\log(dY/Y)/(dY_u/Y_u) = \log [(1 + a \cdot Y) / (t \cdot Y)] - \log [(1 + a \cdot Y_u) / (t \cdot Y_u)]$$

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

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



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

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

$L^*/L^*_u = (t/a) \{ \ln (1 + a \cdot Y) - \ln (1 + a \cdot Y_u) \}$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6$$

relative Hellbezugswert-Y-Empfindlichkeit

$$\log(Y/dY)/(Y_u/dY_u) = \log [(1 + a \cdot Y) / (t \cdot Y)] - \log [(1 + a \cdot Y_u) / (t \cdot Y_u)]$$

$$L^*_u=508, Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

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

