

log ΔY CIE tristimulus value Y difference

$$\log(\Delta Y) \quad \Delta Y^* = (t/a) \ln(1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

$$1 \quad 10 \quad dL^*/dY = t / (1 + a \cdot Y) \quad s=0.017 \quad q=0.0058$$

$$dL^*/dY = t / [1 + (a \cdot Y_u)(Y/Y_u)] \quad t=88.23$$

tristimulus value difference

$$\log(dY) = \log[(s + q \cdot Y) / c] \quad c=1.5$$

$$= \log[(1 + a \cdot Y) / t] \quad t=c/s=88.23$$

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

$$= \log[(1 + b \cdot (Y/Y_u)) / t] \quad b=a \cdot Y_u=6.14$$

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

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

application
range

