

log(L*) LABJND2 lightness

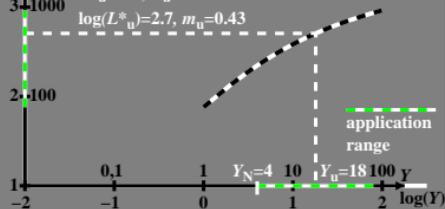
log(L*)
L*

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$L^*_{\text{u}}=508, Y_u=18$$

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



BET21-1A

log ΔY LABJND2-tristimulus value difference

log(ΔY)
ΔY

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

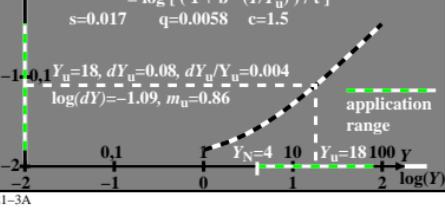
$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{tristimulus value difference}$$

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

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

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



BET21-3A

log(ΔY/Y)
log(C_r)
 $C_r=(ΔY/Y)$

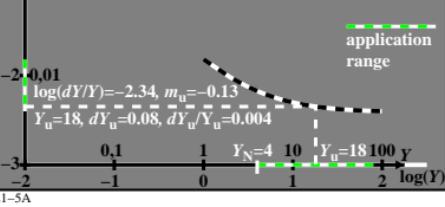
LABJND2-tristimulus value sensitivity

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{tristimulus value sensitivity}$$

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



BET21-5A

log(Y/ΔY)
log(S_r)
 $S_r=(Y/ΔY)$

LABJND2-tristimulus value contrast

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

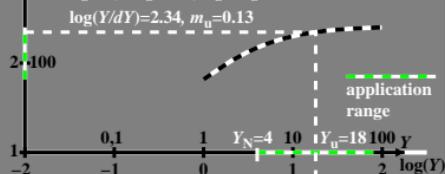
$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{tristimulus value contrast}$$

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

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

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



BET21-7A

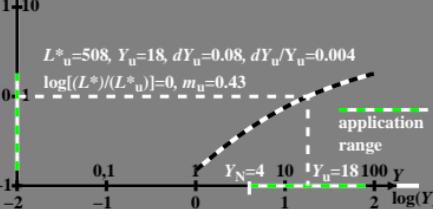
log(L*/L*_u) relative LABJND2 lightness

L^*/L^*_u

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

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



BET21-2A

log(ΔY/ΔY_u) relative LABJND2-tristimulus value difference

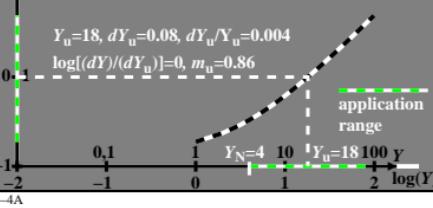
$\Delta Y/\Delta Y_u$

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{relative tristimulus value difference}$$

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



BET21-4A

log [(ΔY/Y) / (ΔY_u/Y_u)] relative LABJND2-tristimulus value sensitivity

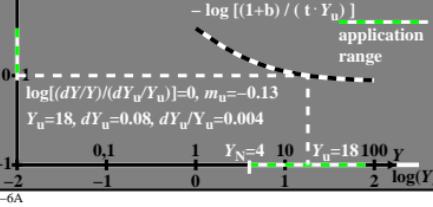
$C_r/C_{ru}=(ΔY/Y)/(ΔY_u/Y_u)$

$$L^*_{\text{LABJND2}} = (t/a) \ln [1 + b \cdot (Y/Y_u)]$$

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{relative tristimulus value sensitivity}$$

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



BET21-6A

log [(Y/ΔY) / (Y_u/ΔY_u)] relative LABJND2-tristimulus value contrast

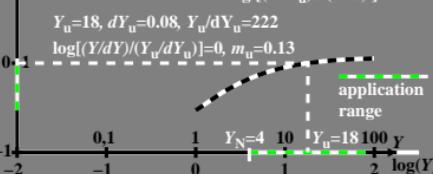
$S_r/S_{ru}=(Y/ΔY)/(Y_u/ΔY_u)$

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

$$a=0.3411 \quad t=88.23 \quad t/a=258.6 \quad b=a \cdot Y_u=6.14$$

$$\text{tristimulus value contrast}$$

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



BET21-8A

BET20-7N