

$\log(L^*/L^*_{\text{u}})$

normalized LABJND lightness

$\log(L^*_{85} / L^*_{85,\text{u}})$

normalized CIELAB lightness

$\log(L^*/L^*_{\text{u}})$

LABJND and CIELAB lightness

$$L^*_{85} = (t/a) \ln [1 + b (Y/Y_{\text{u}})]$$

$$a=0,3411 \quad t=88,23 \quad t/a=258,6 \quad b=a \cdot Y_{\text{u}}=6,14$$

$$L^* = 116 (Y/Y_{\text{u}})^{1/3} - 16 \quad (Y_{\text{u}}=100, 1 \leq Y \leq 100)$$

$$L^*_{85,\text{u}}=508, Y_{\text{u}}=18$$

$$\log[(L^*_{85,\text{u}})/(L^*_{85,\text{u}})]=0, m_{\text{u}}=0,43$$

application
range

$$Y_{\text{u}}=18 \quad 100 \quad Y$$

