

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

normalized LABJND lightness

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

normalized CIELAB lightness

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

LABJND and CIELAB lightness

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

$$a=0,3411 \quad t=88,23 \quad t/a=258,6 \quad b=a \cdot Y_u=6,14$$

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

$$L^*_{85,u}=508, Y_u=18$$

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

application
range

$$Y_u=18 \quad 100 \quad Y$$

