

double line element of *Richter*  
 (1987) for the lighting technology with  
 the luminance  $L = F(L_P, M_D, S_T)$

$$F(L) = \int_{-\infty}^L (L / \Delta L) dL \quad (\text{relative } L, M, S?)$$

$$F(L) = i Q(H) \quad H = e^{k(u - u_0)}$$

$$Q(H) = [\ln\{1 + 1/(1 + \sqrt{2}H)\}] / \ln\sqrt{2} - 1$$

Taylor-derivations:

$$\Delta F(L) = \frac{dF}{dL} \Delta L = i \frac{dQ}{dH} \Delta H$$

$$= -i\sqrt{2} \Delta H / [\ln\sqrt{2} (1 + \sqrt{2}H) (2 + \sqrt{2}H)]$$