luminance discrimination possibility $L/\Delta L$ as function of H

with: $L = 10^{u} \quad H = e^{h} = 10^{\log e\, k\,(u - u_0)}$

$dL/du = \ln 10\, L \qquad dH/du = k\, H$

it follows: $L/\Delta L = [k\, H/(dH \ln 10)]$

$$\frac{L}{dL} = \text{const}\; H/[(1+\sqrt{2}H)(2+\sqrt{2}H)]$$

$Q'[k(u-u_0) \to +\infty] = 0$

$Q'[k(u-u_0) = 0] = \text{maximum}$

$Q'[k(u-u_0) \to -\infty] = 0$