„achromatic signal"-description functions $Q_{lm}[k(u-u_0)]$

with $u = \log L$ (L = luminance)

$u_0 = \log L_u$ (L_u = surround luminance)

$$Q_{lm}[k(u-u_0)] = \frac{l}{\ln\sqrt{2}} \ln q[k(u-u_0)] - m$$

function values with $l = m = 1$:

$$Q[k(u-u_0) \to +\infty] = -1$$

$$Q[k(u-u_0) = 0] = 0$$

$$Q[k(u-u_0) \to -\infty] = 1$$