

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

with $x = \log L$ (L = luminance)
 $u = \log L_u$ (L_u = surround luminan.)

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

function values with $l = m = 1$:

$$Q[k(x-u) \rightarrow +\infty] = 1$$

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

$$Q[k(x-u) \rightarrow -\infty] = -1$$