

functions $q[k(x-u)]$

„achromatic signal”-description

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

$u = \log L_u$ (L_u = surround luminan.)

$$q[k(x-u)] = 1 + 1/[1 + \sqrt{2}e^{k(x-u)}]$$

function values:

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

$$q[k(x-u) = 0] = \sqrt{2}$$

$$q[k(x-u) \rightarrow -\infty] = 2$$