

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:

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

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

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