

$$\log(\Delta L_r) = \log(|L_{r2} - L_{r1}|)$$

Adaptation to constant background luminance L_b

Samples:
adjacent

Samples:
separated

$$L_w = 4,5 L_b$$

w = white border

b = background

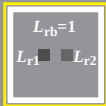
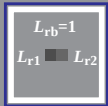
$$L_r = L / L_b$$

$$L_b = 50 \text{ cd/m}^2$$

combine laws:

$$\log L_{aw} = 1,0 \log L_r$$

$$\log L_{as} = 0,5 \log L_r$$



Weber law:

Stevens law:

$$\log(\Delta L_{rw}) = \log L_r$$

$$\log(\Delta L_{rs}) = 0,5 \log L_r$$

$$\Delta L_{rw} / L_{aw} = \text{const}$$

$$\Delta L_{rs} / L_{as} = \text{const}$$

$L_{rb} = 1$ x_0 Office luminance range

