

$Q$ -function changes; transition  
from light- to color metrics

scaling function of **light metrics**:

$$Q [k(x - u)] = Q[k(\log L - \log L_u)]$$

$\log L \rightarrow \log P$  for **color metrics**:

$$Q[k(\log P - \log L_u)] \\ = Q[k(\log L - \log L_u + \log P - \log L)]$$

with saturation  $p = \log P - \log L$

for **color metrics**:  $Q [k(x - u + p)]$