

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**:

$$\begin{aligned} &Q[k(\log P - \log L_u)] \\ &= Q[k(\log L - \log L_u + \log P - \log L)] \end{aligned}$$

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

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