

Degraded Images: frequency patterns attributed to tasks.

Input



Ground Truth



Smart ISP

Low-light

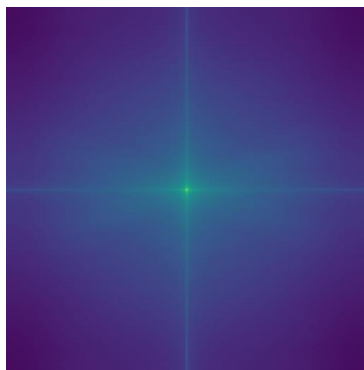
Derain

Deblur

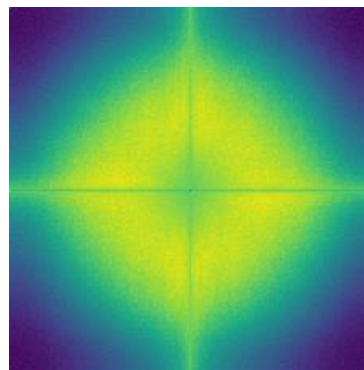
Dehaze

Denoise

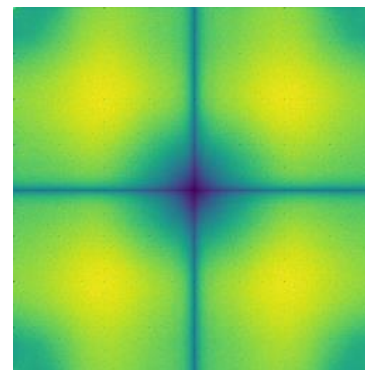
Frequency Patterns



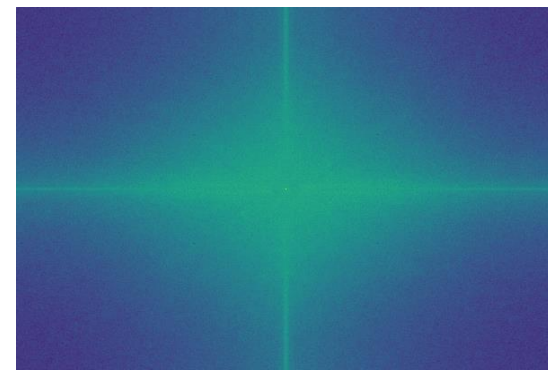
Derain



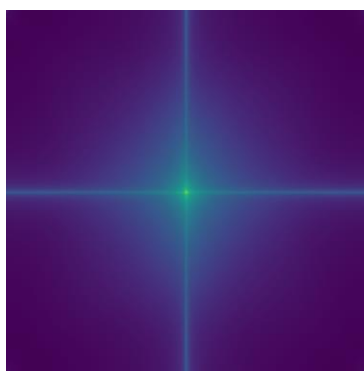
Smart ISP



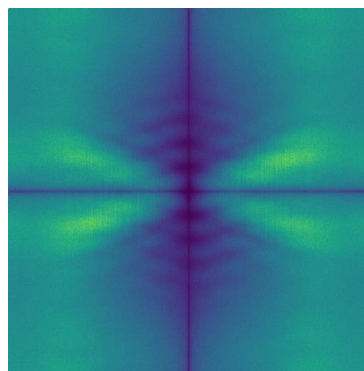
Denoise



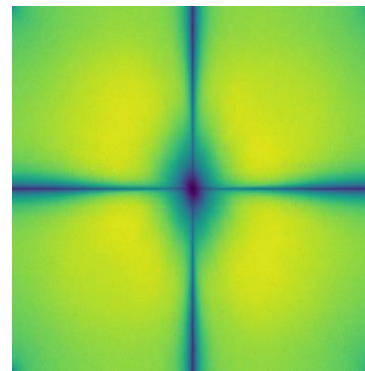
Low-light



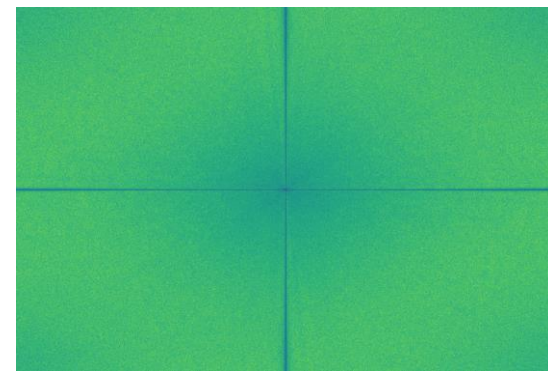
Deblur



Derain



Deblur



Dehaze

$$\mathbb{E}[|\mathcal{F}(X)[i, j]|]$$

$$\mathbb{E}[|\mathcal{F}(C(X) - X)[i, j]|]$$