

## Epsilon Photography

### Object

A Moving object: a rotating ceiling fan

### Fixed parameters

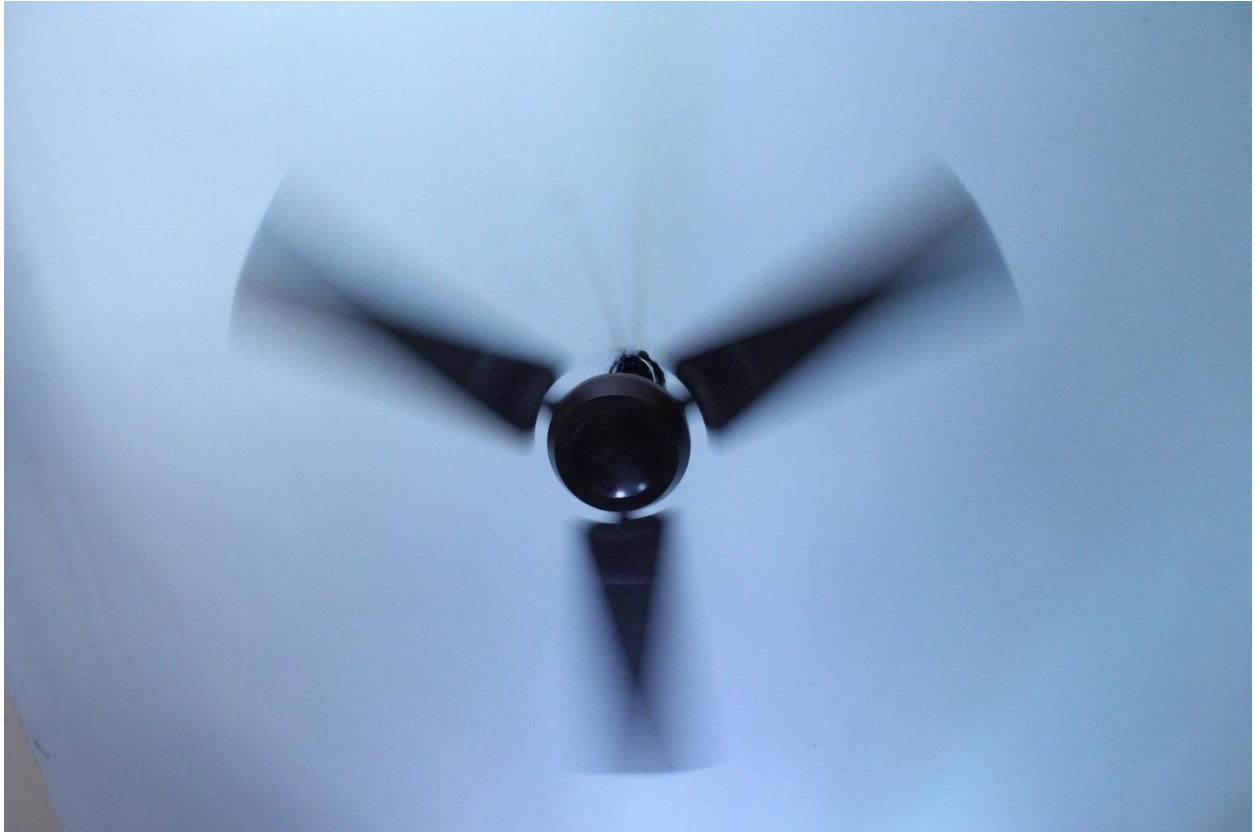
- Camera position (with Canon EOS Rebel T3)
- Focal length
- ISO
- Aperture (f/5.6)
- Light source (daylight)
- Scene setting

### Parameter Varied:

Shutter Speed (from 1/25 to 1/500)



With Shutter Speed 1/25



**With Shutter Speed 1/100**

As observed, the motional blurring decreases as the shutter speed is increased from 1/25 to 1/100, as we can see the blades can be seen more clearly.



**With Shutter Speed 1/200**

As can be seen, since the increase in shutter speed allows lesser and lesser amounts of light from the moving object to sensor, the images get darker and darker, with all the other parameters fixed.

Hence, consolidating, epsilon increase in shutter speed results in

1. **Decrease** in **motional blurring**.
2. **Reduction** in **overall brightness** of the image.



**With Shutter Speed 1/500**