

EXPERIMENT 3

Aim: To find camera's sensitivity to different light intensity levels

★ When night vision / IR is off

| Serial No | Distance (in ft) | Intensity of Light (in lux) | Picture Clarity |
|-----------|---------------------|--------------------------------|-----------------|
| 1 | 17 | 142 | Clear |
| 2 | 17 | 89.8 | Clear |
| 3 | 17 | 19.5 | Clear |
| 4 | 10 | 6.6 | Clear |
| 5 | 10 | 0.7 | Clear |



Fig 1: Light intensity is 142 lux



Fig 2: Light intensity is 89.8 lux



Fig 3: Light intensity is 19.5 lux



Fig 4: Light intensity is 6.6 lux

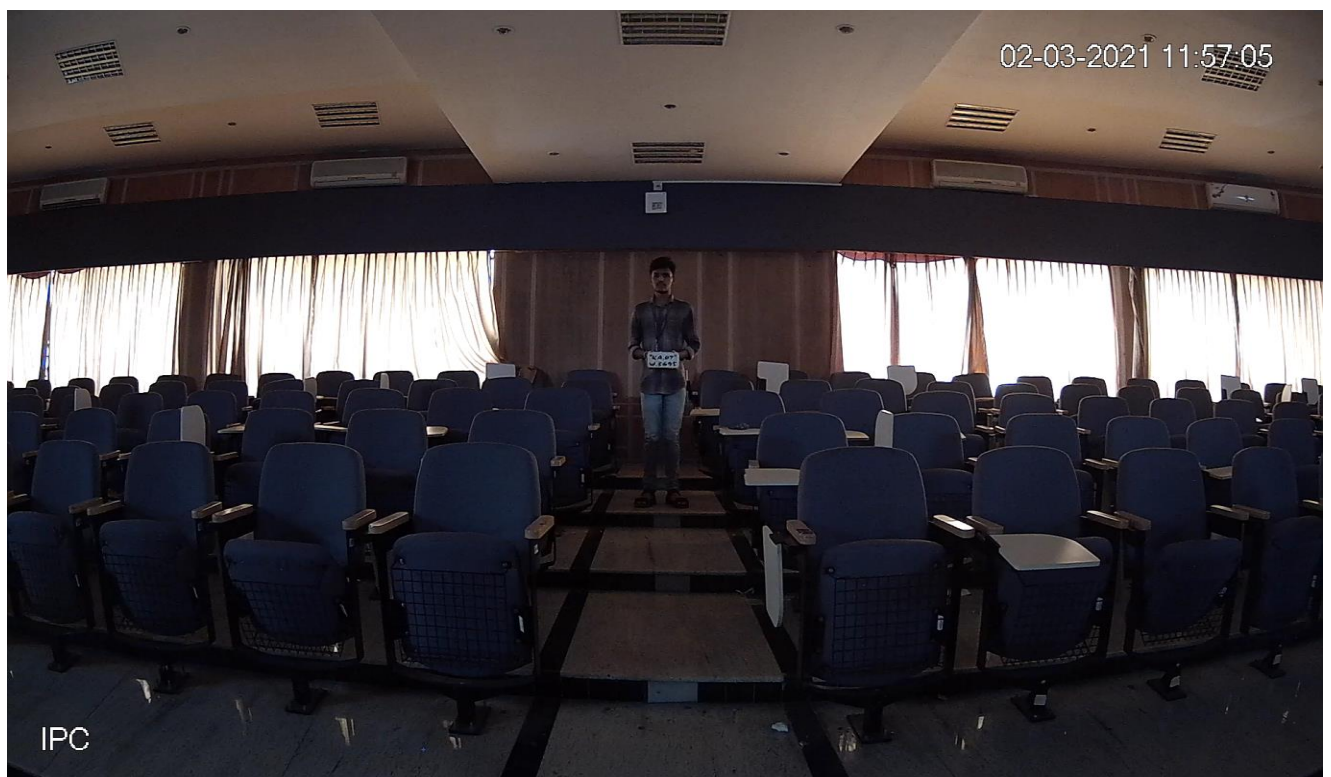


Fig 5: Light intensity is 0.7 lux

★ When night vision / IR is on

| Serial number | Place of the object | Picture Clarity |
|---------------|--|-----------------|
| 1 | At line of sight | Clear |
| 2 | At last point of visibility (left) | Not Clear |
| 3 | At last point of visibility (right) | Not Clear |



Fig 6: Image at Normal Reference Point



Fig 7: At last point of visibility (left)

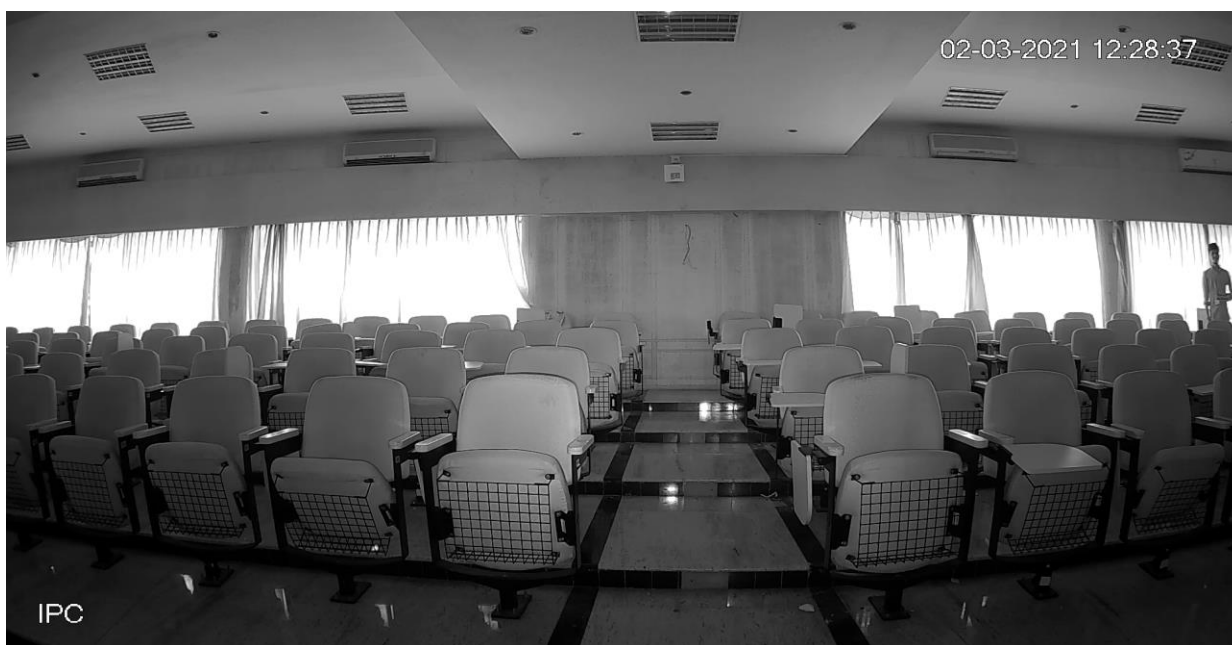


Fig 8: At last point of visibility (right)

★ Varying the distance of the object from the camera at 0.7 lux

| Serial number | Distance (in ft) | Picture Clarity |
|---------------|---------------------|-----------------|
| 1 | 6.541 | Clear |
| 2 | 15.53 | Clear |
| 3 | 21.67 | Partially Clear |



Fig 9: Clear image at a distance of 6.541 ft



Fig 10: Clear image at a distance of 15.53 ft

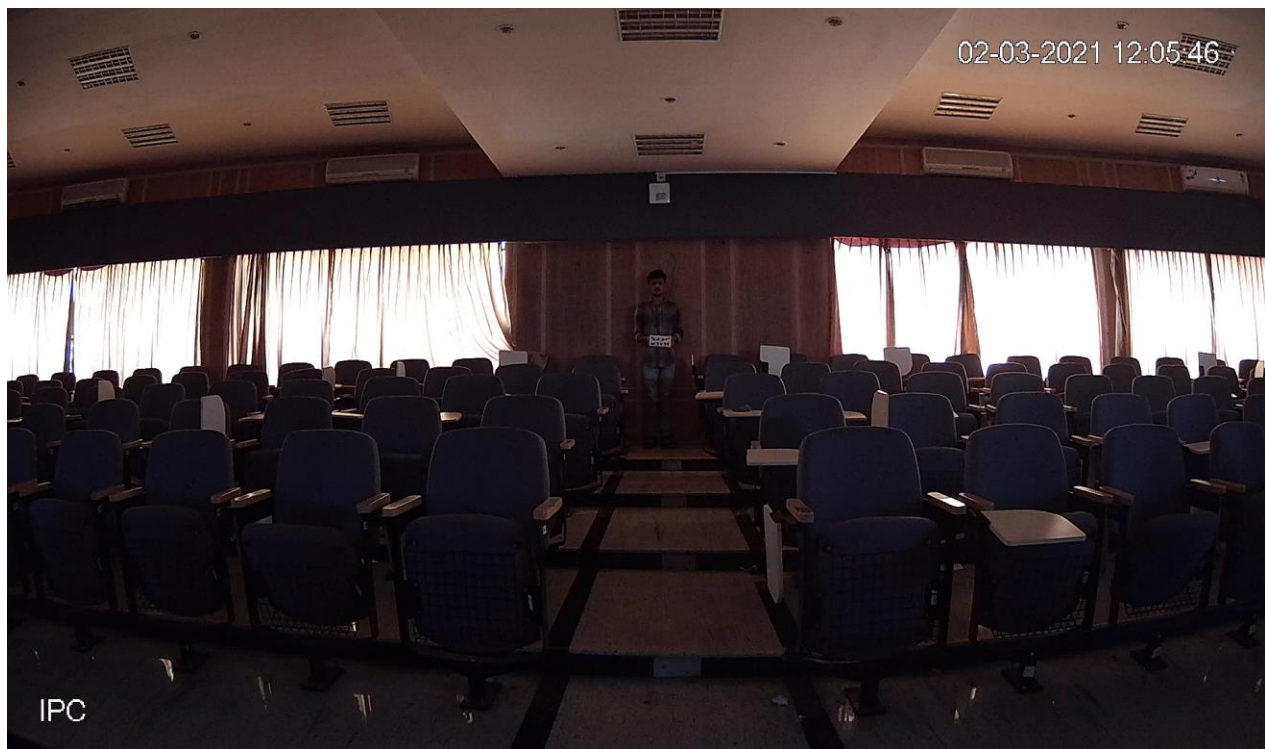


Fig 11: Partially clear image at a distance of 21.67 ft