

## POL Part No.483

### FF3I - Flat Profile Passive Infrared Ceiling Lens

POL's patented free-form Fresnel technology enables the FF3I lens to have a flat profile while still giving equivalent performance to lenses with a 3D form.

This lens is available in various color options and can be cropped to give a variety of custom flange shapes.



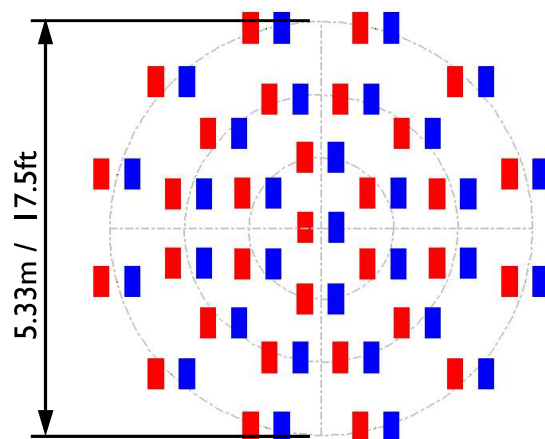
Similar '3D' lens mounted in ceiling detector assembly



New POL FF3I lens mounted in ceiling detector assembly

#### Applications

- Office security and lighting control
- Washroom and cloakroom lighting control
- Warehouse security and lighting control
- Intruder detection
- Fan control



Theoretical zone plot for FF3I

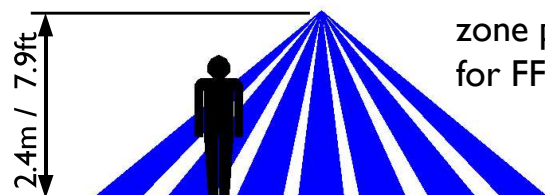
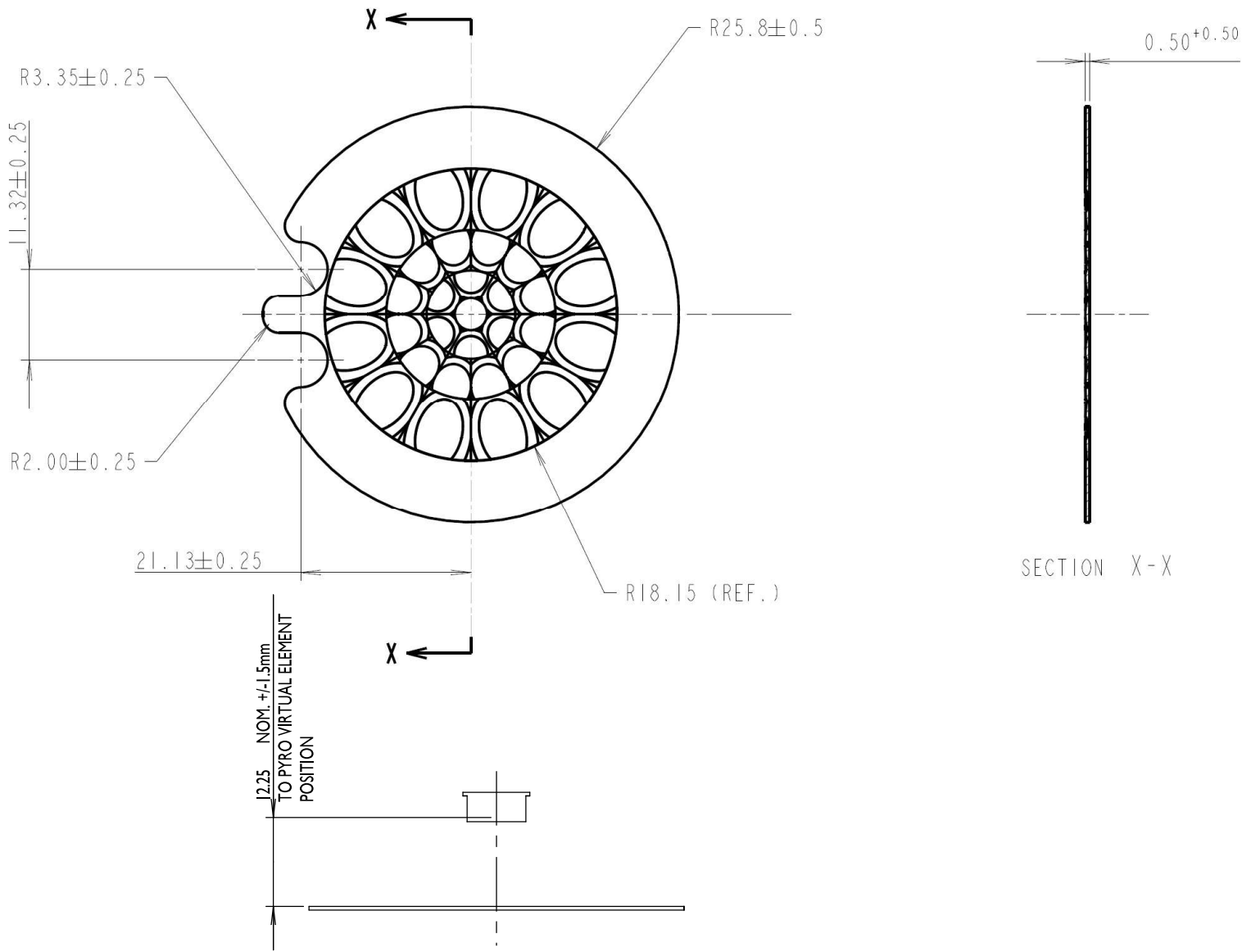


Diagram shows detector mounted at office ceiling level. Mounting height can be up to 6m if required.

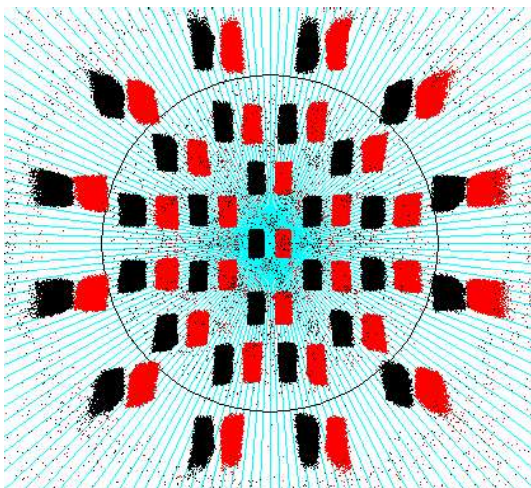


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All of our lenses are designed using 3D ray-tracing software where we can optimise the performance and minimise optical distortion. For the simulation on the left we have traced rays from the detector to the room and this allows us to analyse the zone shape. It is important to ensure there is minimal zone distortion and zone overlap.

For the simulation on the right we have traced rays from the room to the detector so that we can analyse the signal response. Here it is important to ensure that the signal is reasonably uniform across all the zones.



PF31 (freeform) - Walk test simulation

