High Bay Lens

The High-Bay lens is designed for indoor passive infra-red (PIR) detection in applications where the detector is mounted relatively high on the ceiling, typically warehouses, workshops, retail and atrium areas.

The lens has a 1:1 aspect ratio, therefore when mounted at 12m height, the lens projects 43 zones into a 24m diameter floorspace. Maximum recommended mounting height 14m.

Applications

- PIR detection for warehouses, shops, offices, workshops and home
- Lighting control
- Alarm control
- Fan control
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 zero 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.