## PERIMETER SURVEILLANCE AND ILLUMINATION MEASUREMENT



The following method of measurement is recommended by Raytec:

When measuring visible light designed for the primary purpose of surveillance, it is important to recognise that the most suitable position of measurement is the vertical surface and generally not the horizontal surface.

We generally recommend that both the camera and luminaire are positioned together (taking care to avoid light spill directly into the camera), viewing same direction/subject. This method allows both the camera and illumination to be accurately directed on the target area, which is normally near vertical, resulting in less light wastage/spill.

For CCTV purposes we are primarily concerned with the light reflecting back to the camera from the subject.

Finally it important to recognise that CCTV cameras can work effectively in low illuminance levels and do not need high illuminance levels to obtain effective CCTV images.

Raytec recommend the following addition to the perimeter specification:

- Measurements should be taken on the vertical plane at a 200mm level from the ground (crawling subject) and/ or 1500mm level from the ground (general subject) at 5m to 10m centers along the fence line, with the photocell of the light meter being directed toward the surveillance camera.
- The vertical measurements would normally be measured between 1 m and 2 m from the fence line.
- Vertical readings should provide a minimum of 7 lux \*
- The light meter must be calibrated to read white light LED technology \*\*
- \* Raytec would generally recommend 5 lux minimum, but this is dependant upon camera specification. It is vital to specify the direction that the vertical illuminance is to be measured i.e. towards the camera.
- \*\* Light meters that are not calibrated to measure LED output will be highly inaccurate and there may be between 50 75% difference in readings.