

# LI-210R Photometric Sensor

The LI-210R Photometric Sensor measures light with the same sensitivity as a typical human eye. The photometric sensor is ideal for evaluating illumination in work areas, exhibits, interior lighting, and in public spaces. Measurement units are lux or klux.

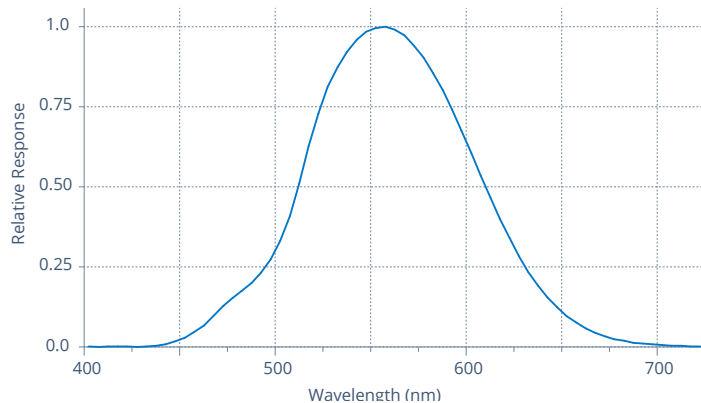


## Why choose the LI-210R?

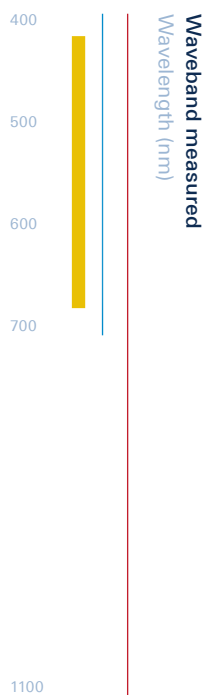
- Spectral response closely matches the CIE Standard Observer Curve
- Excellent cosine response—sensitive to light from all directions up to an 82° angle of incidence
- Detachable sensor simplifies installation and removal, making it ideal for platforms with complex cabling

## How does it work?

The LI-210R measures light with a precision filtered silicon photodiode that is sensitive to light in the visible spectrum.



Typical spectral response of the LI-210R Photometric Sensor.



### LI-210R Specifications

- Absolute Calibration:  $\pm 5\%$  traceable to the U.S. National Institute of Standards and Technology (NIST)
- Sensitivity: Typically 30  $\mu\text{A}$  per 100 klux
- Linearity: Maximum deviation of 1% up to 100 klux
- Stability:  $< \pm 2\%$  change over a 1 year period
- Response Time: Less than 1  $\mu\text{s}$  (2 m cable terminated into a 604 Ohm load)
- Temperature Dependence:  $\pm 0.15\%$  per  $^{\circ}\text{C}$  maximum
- Cosine Correction: Cosine corrected up to 82° angle of incidence
- Azimuth:  $< \pm 1\%$  error over 360° at 45° elevation
- Tilt: No error induced from orientation
- Operating Temperature Range:  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$
- Relative Humidity Range: 0% to 95% RH, Non-Condensing
- Detector: High stability silicon photovoltaic detector (blue enhanced)
- Sensor Housing: Weatherproof anodized aluminum housing with acrylic diffuser and stainless steel hardware; O-ring seal on the sensor base
- Size: 2.36 cm diameter x 3.63 cm (0.93" x 1.43")
- Weight: 24 g head; 60 g base and cable assembly (2 m) with screws
- Cable Length: 2 m, 5 m, 15 m, 50 m (6.5', 16.4', 49.2', 164')

Specifications subject to change without notice