

The RainWise SOLAR RADIATION SENSOR- Luminosity

The RainWise Luminosity Sensor is a photometric sensor designed for measurements of lighting conditions when the eye is the primary receiver. Applications include measurement of light in work areas, and from television screens.

The sensor uses a filtered silicon photodiode to provide a spectral response that matches the CIE curve within $\pm 5\%$ under most light sources. This photodiode and filter combination is placed within a fully cosine-corrected sensor head to provide the proper response to radiation at various angles of incidence.

The Luminosity Sensor is mounted on a leveling base and is available with either a flat base or plug-in mount to fit the RainWise Quadpod or Monopod mounting systems. It is manufactured of high stability silicon (detector), aluminum, stainless steel and PVC (base for RainWise Mount).

The RainWise Luminosity Solar Sensor is guaranteed by the manufacturer Licor for one year. It is important to plan for recalibration of the instrument on an annual basis. Recalibration is not covered under the unit's warranty.

SPECIFICATIONS

Range:	Wavelengths of from 400-700 nm
Accuracy:	Maximum $\pm 5\%$
Sensitivity:	Typical 30 μA per 100 klux
Linearity:	Maximum deviation of 1% up to 100 klux
Stability:	$< \pm 2\%$ change over a 1 year period
Response Time:	10 μs
Temperature Dependence:	$\pm 0.15\%$ per $^{\circ}\text{C}$ maximum
Cosine Correction:	Cosine corrected up to 80° angle of incidence
Azimuth:	$< \pm 1\%$ error over 360° at 45° elevation
Operating Temperature:	-20°C to $+65^{\circ}\text{C}$
Operating Humidity:	0 to 100%

