

AMBIENT LIGHT INTERFERENCE

The Problem

Noise pickup from overhead lighting interferes with sensor measurements.

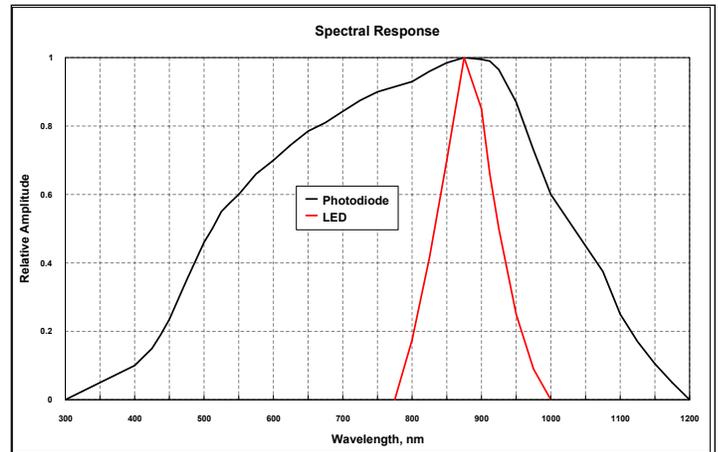
The Solution

Philtec's Option R1 added to your sensor can reduce or eliminate ambient light interference.

Philtec's standard LEDs emit light with a narrow spectrum of energy centered at 850 nm.

Standard Philtec photodiodes have a broad spectral response, which includes the entire visible light spectrum as shown below.

Common light sources such as white LEDs, mercury vapor lamps, bar code scanning lasers and flourescent lights operate at wavelengths less than 700nm, and they can interfere with displacement sensor measurements.



OPTION R1

With Philtec's Option R1, a 850 nm x 45 nm wide filter blocks incoming light to the standard broadband detectors. These detectors are virtually insensitive to any wavelength less than 800 nm, effectively eliminating light interference from those common light sources.

