

CES

**PHOTODIODE SENSOR
WITH MULTIPLE VOLTAGE OUTPUT
3 Wire, External Power, Multiple Voltage Output**

PROJECT
LOCATION

Part 1 - General

1.01 PHOTODIODE SENSOR

The photodiode sensor shall be a Class 2, low voltage, ambient light sensor designed to interface directly with the analog input of the Energy Management System. The sensor shall supply an analog signal to the EMS system proportional to the light measured. The sensor output shall provide for zero or offset based signal. The sensor shall be capable of a fully adjustable response in the range between 0 and 10,000 footcandles with a +/-1% accuracy at 70°F (21°C).

The sensitivity adjustment shall be at the sensor body, and outside of the sensor's viewing angle. The sensor housing shall be constructed from GE Cyclocac ® ABS, shall be flame retardant and meet UL 94 HB standards.

1.02 INDOOR

Indoor sensors shall have a Fresnel lens, with a 60 degree cone of response. Indoor sensors shall only require a penetration hole in the ceiling of 3/8" dia. and the sensor shall mount to the ceiling using adhesive tape. The indoor sensor range shall be between 0 and 750fc The indoor sensor shall be a PLCSensors CES/II sensor.

Low Range sensor selectable 20 or 40fc range. The sensor shall be a PLCSensors CES/IL sensor.

1.03 OUTDOOR

Outdoor models shall have a hood over the aperture to shield the sensor from direct sunlight. The outdoor sensor circuitry shall be completely encased in an optically clear epoxy resin. Outdoor sensors shall mount to a standard threaded 1/2" conduit or fit a 1/2" knockout. The outdoor sensor shall have two ranges: between 0 and 750fc. The outdoor sensor shall be a PLCSensors CES/O sensor.

1.04 ATRIUM or SKYLIGHT

The Atrium or Skylight sensors shall have a translucent dome with a 180 degree field of view. Atrium or Sky light sensors shall mount to standard threaded 1/2" conduit or fit a 1/2" knockout. Atrium sensor range shall be from 2 to 2,500fc. Skylight sensor range shall be between 10 and 7,500fc. The Atrium or Skylight sensors shall be a PLCSensors CES/IA or CES/IS sensor.