Catalog Number: Date: Project:

intelligent lighting controls

A **Cooper Lighting Solutions** business

DAYLIGHT HARVESTING & ON/OFF PHOTOCELL SENSORS

CEILING MOUNT • LINE VOLTAGE

OVERVIEW

INTELLIGENT LIGHTING CONTROLS line voltage photocell and daylight harvesting sensors provide a compact control solution without requiring a powerpack. Basic on/off units are capable of directly switching lights off when ambient levels are high enough that desired overall light levels will be still be maintained. Lights will be switched back on once ambient level falls below the desired setpoint.

Units with the daylight harvesting (dimming) option track a space's overall illumination and dim connected lighting to achieve energy savings. During times of high daylight contribution to a space, controlled artificial lighting will be gradually dimmed to a minimum dimmed level. During times of no or low daylight contribution, controlled artificial lighting will increase back up to its maximum level. The sensor can also be configured to switch lighting off completely in maintained high daylight conditions. Additional configurable parameters include high & low trim levels and fade rates.

All photocells provide the option of selecting the ambient light threshold (e.g., setpoint) from a range of preset values or running an auto-selection mode where the unit will determine the setpoint based on the measured amount of light it is controlling.

BAA COMPLIANT · TAA COMPLIANT · MADE IN THE USA · LEAD FREE RoHS COMPLIANT · TITLE 20 LISTED TITLE 24 COMPLIANT

FEATURES

- **Auto-Setpoint Selection Mode**
- **On/Off Control and/or Daylight Harvesting (Dimming)**
- **Adjustable High & Low Dimming Trim Level**
- **Electronically Timed Switching Designed for LED Fixture Control**
- **Compact Size and Matte Finish**

SPECIFICATIONS

ELECTRICAL

OPERATING VOLTAGE
MVOLT (120-277 VAC)

LOAD RATINGS
800W @ 120 VAC
1200W @ 277 VAC

LOAD TYPES
LED Driver/Lamps
CFL, Electronic/Magnetic Ballasts (Fluorescent)
Tungsten (Incandescent)

DIMMING CAPACITY
50mA

DIMMING COMPATIBILITY
0-10 VDC Ballasts or Drivers
Compliant with IEC 60929 Annex E.2

ENVIRONMENTAL

OPERATING TEMP
32° to 122°F (0° to 50°C)

RELATIVE HUMIDITY
0-95% Non-Condensing, Indoor Use Only

PHYSICAL

SIZE
4.00" Diameter x 1.25" H (10.16 x 3.17 cm)

WEIGHT
4.75 oz

COLOR
White

MOUNTING STYLE
Mud Ring w/ 2.75" Spaced Ears
3.5" Trade Size Octagon Box

OPERATION

Daylight Harvesting to Low Trim
Daylight Harvesting to Off
Photocell Override (On/ Off)

CODE COMPLIANCE

Sensors can be used to meet ASHRAE 90.1, IECC, & Title 24 energy code requirements

c UL US LISTED

ORDERING INFO

SAMPLE MODEL # ILC-SWX-250-2-D

	PRODUCT DESCRIPTION		VOLTAGE		OPTIONS	
ILC-SWX	Ceiling Mount Ambient Daylight Photocell	**250**	Line Voltage	**2**	Dimming / Daylight Harvesting (0-10V)	**D**

ACCESSORY	DESCRIPTION
ILC -SWX-299	Ceiling Sensor Trim Ring for Single Gang Mudring, Handy Box, or 4" Octagon Box

APPLICATIONS

There are two types of photocell operation; ON/OFF PHOTOCELL CONTROL and DAYLIGHT HARVESTING CONTROL (see descriptions below).

ON/OFF PHOTOCELL CONTROL

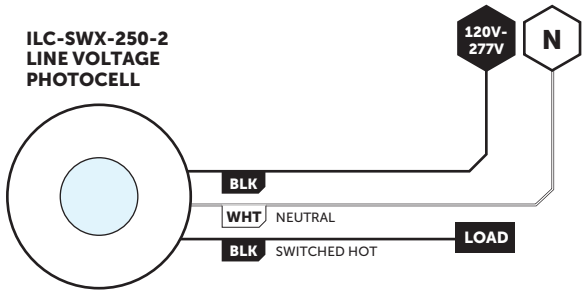
- Recommended for public spaces (hallways, entryways, etc) where fully switching lighting off/on will not be noticed .
- Photocell will switch lights off if ambient light level surpasses threshold and back on if level drops.
- To prevent cycling of lights back on after lighting is turned off, a "deadband" level equal to the measured level of light being controlled is continuously maintained in the unit. For lighting to turn off the ambient light level must be higher than the sum of the setpoint and the deadband.

DAYLIGHT HARVESTING CONTROL

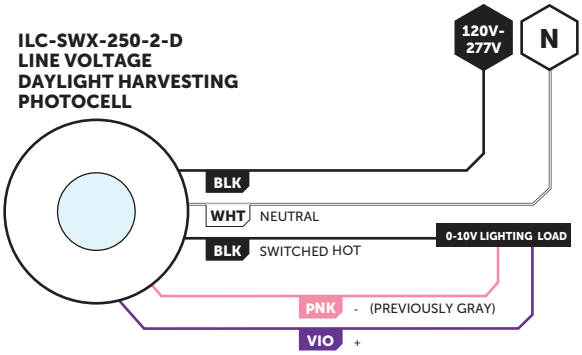
- Recommended for spaces where it is important to not distract occupants (e.g., offices, classrooms).
- Unit will gradually dim lighting in order to maximize energy savings while maintaining desired overall lighting level.
- After dimming to low trim level, unit can optionally be enabled to turn off lights completely.

WIRING

ON/OFF PHOTOCELL APPLICATION

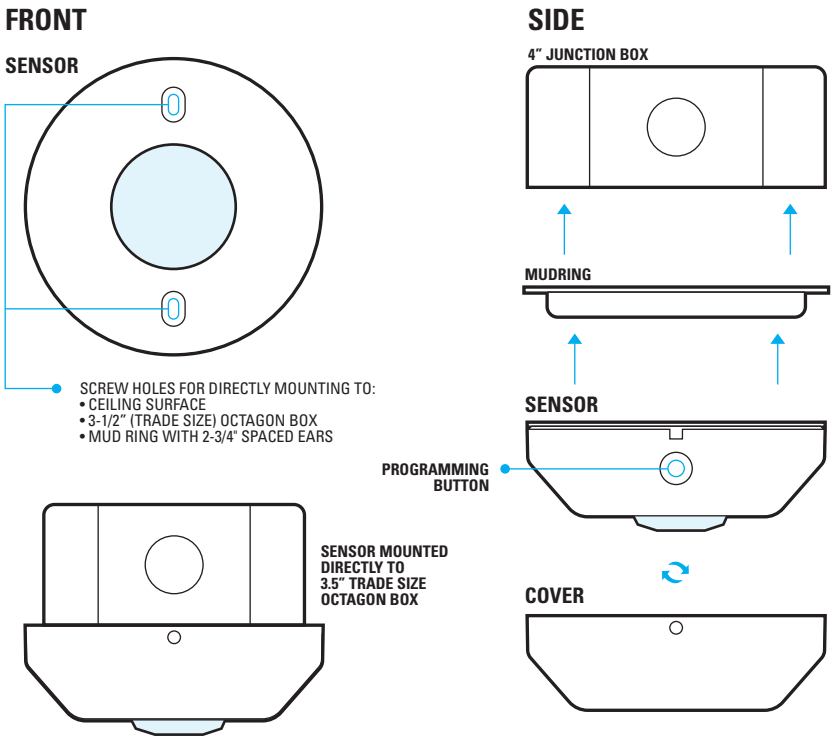


DAYLIGHT HARVESTING APPLICATION



INSTALLATION OPTIONS

BASIC MOUNTING OPTIONS



ADDITIONAL MOUNTING OPTIONS USING ILC-SWX-299 TRIM RING