

# Photocell

## ADVANCED OPERATION GUIDE

### General Operation:

1. The photocell is continuously monitoring its environment, regardless of the state of the occupancy portion of the sensor.
2. The photocell will only hold the lights off when the light level has been substantially over its setpoint for several iterations of the time delay. This allows for stable operation of the sensor and no flicker effects.
3. The sensor when turning On from an Off state due to an occupancy signal will look at the photocell logic first. Once the sensor finishes that logic it will either hold off the lights or move on to the occupancy logic.
4. While the sensor occupancy logic has the lights On, the photocell will continue to monitor the light that it is seeing. The sensor will not shut the lights off due to the photocell when the lights were already on and occupant is still present. The occupancy time delay will need to run out and the lights will need to shutoff. Then the photocell will hold the lights Off upon the next occupancy trigger.
5. When using a sensor in OSLA, the photocell will turn the lights to off after the occupancy time delay has expired and the lights have been lowered to their lower output setting. This process works the same as all settings. The only difference is that the unoccupied state is a low light level setting instead of a light off setting.
6. It is important to remember that the photocell while always monitoring its environment will only make changes to the lightings state after the light has been substantially above, or below, the set level for a period of time per its internal logic and only when triggered by an occupancy signal coming out of an unoccupied state.

### Important Notes:

1. The photocell looks down and not up. While your eye may see what you perceive to be enough light, the photocell itself will not be seeing the same amount of light.
2. The objects, material, and coating of what lies below the photocell will play a role in what amount of light a photocell sees. For example, in a parking garage a photocell above a light color car will see less light than a photocell above a dark color car. Dark cars transition the light better than light cars.
3. Two photocells a few feet apart can see very different light levels, don't assume that every photocell sees the same levels.
4. As seasons change the angle if the light will change. As a result, the amount of light present will change. Fixtures that were off in the summer may not be off in the winter at the same time of day.
5. The fixture itself can play a role in how the photocell sees light. Always check the fixture to see if it is creating shadows on the photocell.
6. The photocell is a small sensor. It is not the same size as a photometer sensor, example pictured to the right. To use a photometer, you should place it at the same level as photocell you are checking. We recommend punching a hole in the cover as picture below. This will give a more accurate comparison.
7. The best method for determining light levels is to use the IR-TEC SRP remote to download what light level the sensor is seeing currently while the fixture is in an off state.

