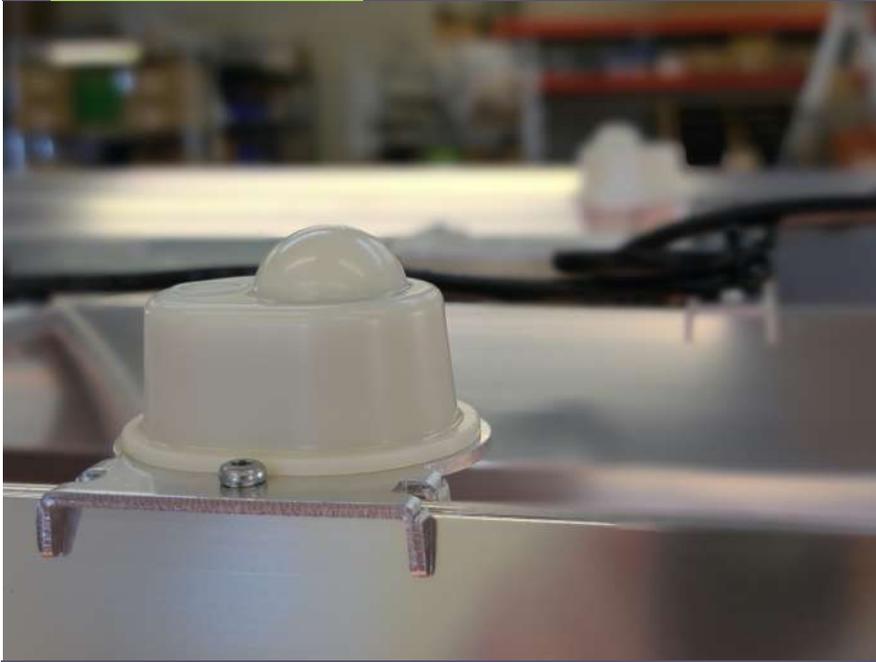




# Adaptive Light Sensor

---





**The very first self-contained, Adaptive Light Sensor and Controller (patent-pending) for optimizing light levels in greenhouses** to provide the perfect amount of supplemental lighting. We do this without wasting an extra penny on electricity beyond what is needed for fastest and most healthy plant growth!

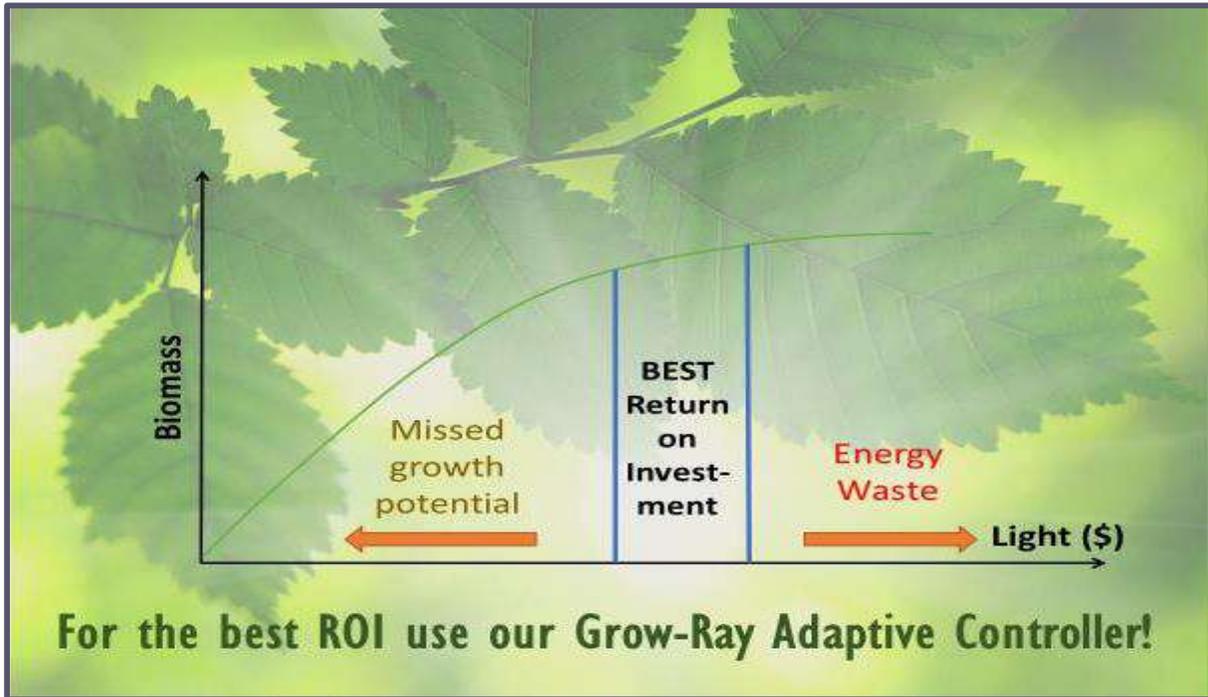
## Grow-Ray Adaptive Light Sensor for Greenhouse Lighting

Proven to save up to 80% on an Oregon cannabis grower's electric bill while providing an extra 15+ % product! Even more dramatic results were obtained in conventional greenhouse grows of Roses and Yucca.

How does it work? If the sun is brighter than a predetermined threshold, your Grow-Ray LED lights are turned off. Below this threshold, your lights are turned on in a linear fashion, from just a little for a passing cloud, to full on for a rainy day, or winter weather. This threshold is factory set for 200 to 600 PAR, depending on the plant, or may be user modified. Our sensors work with our LED lights to provide you with the correct DLI (Daylight Integral) for best growing results.

These sensors are extremely economical, so we attach one per light and then every light has its very own "light meter". If a particular section of your greenhouse is shaded from early morning sun for example, these lights will come on, while the eastern side lighting will already be dimmed or off.

Whatever kind of greenhouse crop you grow, our LS-01 sensor/controller will give you the best results when used with Grow-Ray high intensity LED lights!



**James greenhouses**  
perennial plugs | specialty propagation

**Roses**

- +56% Biomass Increase
- +32% Root Development
- +1.3M/acre** Annual Revenue Increase

**James greenhouses**  
perennial plugs | specialty propagation

**Yucca**

- +59% Biomass Increase
- +64% Root Development
- +1.9M/acre** Annual Revenue Increase

**Specifications: LS-01 Adaptive Light Sensor (with incident light measurement)**

**Grow-Ray Linear sensors** are temperature compensated for accurate operations from 0°C to 50°C (32°F to 122°F, +/- 5% **Factory stock settings:** 200, 300, 400, 500, 600 PPF (please state when ordering), or custom. 1000 PAR max.

**Will work with any 0-10V dimming** LED controller that also supplies 12VDC at 10mA or greater.

**Dimming is linear** from 10 to 90% of LED light output, LED driver is the limiting factor. Our drivers automatically shut off below about 8%. Warranty is for 5 years, replacement or repair if not subjected to abuse; we pay return ground freight.

*(Subject to change in the interest of product improvement.)*



# GROWRAY

LIGHTING TECHNOLOGIES