

# FULL SPECTRUM PAR LIGHT



## Consistent Plant Quality Starts With Light Why Measure Light?

*Improve growth and quality of your plants. Shade cloths and hanging baskets reduce plant light more than you know!*

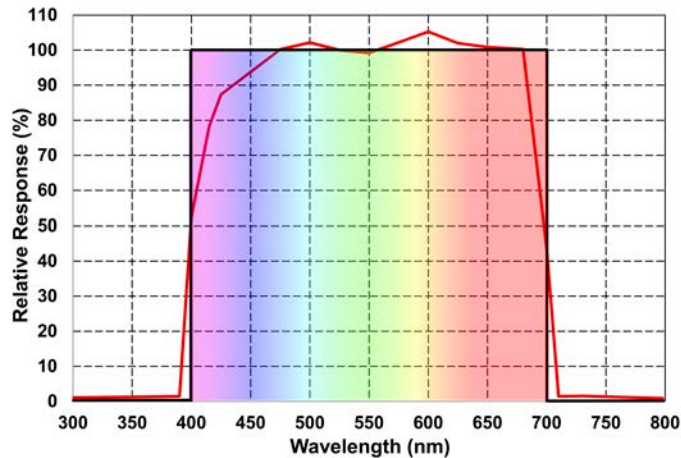
Position sensors throughout your greenhouse to compare light levels and the effect those changes have on plant quality. You can also use multiple sensors simultaneously to compare light levels and the impact on turf health, quality and aesthetics.

### Full Spectrum Quantum PAR Light Sensor

The full spectrum sensor can accurately measure light intensity across the full PAR spectrum – including from LED lights

- Integrates multiple optical detector elements to accurately measure light across the entire PAR spectrum, from all light sources - including narrowband LED
- Perfect for all artificial light installations, as well as locations supplementing natural light with LEDs
- Use with the WatchDog 2000 and 3000 Series Weather Stations, Pups, and the External Light Sensor Meter (Page 26)

### 3668A LightScout Full Spectrum Quantum (PAR) Light Sensor



### Quantum PAR/DLI Light Meter

Grow healthier, greener plants by measuring their precise light intake

#### Provides accurate PAR light readings from ANY light source

- Full sun to full shade indoors or outdoors
- Artificial light sources (LED, High Pressure Sodium, Metal Halide, Fluorescent, Halogen, etc)

#### Three modes of operation:

- Instant spot measurement mode for PAR light readings
- Scan mode for quickly averaging PAR over an area
- DLI mode shows Daily Light Integral on the LCD (*no computer needed*)

Integral mounting plate for stand, stake, lanyard hanger hole and magnet mounts

1/4" - 20" threaded hole for mounting on camera tripods and stands

Includes sensor cover and soft-sided case



#### GENERALIZED PLANT RESPONSES TO DIFFERENT LIGHT LEVELS

| Relative Light Level | DLI* - Daily Light Integral | Light Intensity** at Noon | Generalized Plant Growth Response |
|----------------------|-----------------------------|---------------------------|-----------------------------------|
| Very Low             | 2 to 5                      | 100 to 200                | Poor Quality                      |
| Low                  | 5 to 10                     | 200 to 400                | Minimum Acceptable                |
| Medium               | 10 to 20                    | 400 to 800                | Good Quality                      |
| High                 | 20 to 30                    | 800 to 1,200              | Excellent Quality                 |
| Very High            | 30 to 60                    | 1,200 to 2,000            | Excellent Quality                 |

\* Moles  
\*\* Micromoles ( $\mu\text{mol}/\text{m}^2\cdot\text{s}$ )

Note: It is not possible to make a direct conversion between an instantaneous light measurement and the Daily Light Integral. Also, temperature is a key factor in plant quality and growth. Source: Hamrick, Debbie, ed. *Ball Red Book*, Batavia, IL: Ball Publishing, 2003

### 3415A LightScout Quantum PAR/DLI Light Meter