LightScout™ Light Meter

Actual Size

LIGHTSCOUT™ DLI 100 Light Meter

Measure the light "falling" on your plants

- Simple, one button operation
- Displays light intensity levels every 4 seconds for 24 hours
- An affordable, first step in measuring light
- Measure PAR light (Photosynthetically Active Radiation)
- With the push of a button, the meter runs for 24 hours and calculates your Daily Light Integral (DLI)
- Real-time intensity levels are shown every 4 seconds in µmol m^{-2} s^{-1} (or footcandles)
- Packaged in sets of 3 light meters
- Battery included; water resistant

Item 3405 **LightScout DLI 100 Meter (set of 3)**

"Measuring DLI inside the greenhouse can be very revealing, since growers usually rely on their eyes to determine the light levels and the human eye is a terrible light sensor because it is so effective at adjusting to different light environments."

James E. Faust
Associate Professor of Horticulture
Clemson University

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 (500 to 1,000 fc)	Poor quality
Low	5 to 10	200 to 400 (1,000 to 2,000 fc)	Minimum acceptable quality
Medium	10 to 20	400 to 800 (2,000 to 4,000 fc)	Good quality
High	20 to 30	800 to 1,200 (4,000 to 6,000 fc)	Excellent quality
Very High (outdoors)	30 to 60	1,200 to 2,000 (6,000 to 10,000 fc)	Excellent quality

* Micromoles (µmol/m^2 s)
fc = foot candles

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.

Sold in sets of three (3). Position the meters throughout your greenhouse (or in different crops) and outside the greenhouse, too. Compare differences in light levels and the effect on plant growth and quality.

Simple way to monitor shaded or full sun golf greens

FieldScout® Light Meters

Light has economic value!
As the driving force for photosynthesis, light is fundamentally important to crop production. Plant growth and development is significantly influenced by both the quantity and the quality of light. Light energy is relevant to other factors too. The ET calculation (evapotranspiration) for irrigation scheduling uses solar radiation as a key variable. Leaf wetness periods or high humidity, which affect disease pressure, can be mitigated with sunny days versus cloudy days. It is essential that growers understand this important variable in order to efficiently produce quality plants.

Visit www.specmeters.com and view our "Measuring Light" Brochure!

FIELDSCOUT® Red/Far-Red Meter

Plants use the Red/Far-Red light ratio to determine how crowded they are, and grow tall or full accordingly.

- Cost-effective Red/Far-Red measurement
- Displays the Red/Far-Red ratio on the LCD screen
- Press a button to display 660 nm and 730 nm readings

Item 3412 **FieldScout Red/Far-Red Meter**

FIELDSCOUT® UV Meter

- Monitor critical UV radiation (250-400 nm) with this handheld meter
- Determine UV filtering capacity of greenhouse shades and glass barriers
- Range is 0-200.0 µmol m^{-2} s^{-1} (full sunlight)

Item 3414F **FieldScout UV Meter**

FIELDSCOUT® Quantum Meters

Measure the light used for plant growth. PAR is a more valuable measurement than foot-candles as it measures only the light used by plants for photosynthesis.

- Measures photosynthetically active radiation (PAR) from 400-700 nm
- Range of 0-2,000 µmol m^{-2} s^{-1}
- Available in a variety of configurations for your convenience

Item 3415F **FieldScout Quantum Meter**
Item 3415FSE **FieldScout Dual Solar/Electric Quantum Meter**
Item 3415FXSE **FieldScout Dual Solar/Electric Quantum Meter - External Sensor**
Item 3415FQF **FieldScout Quantum and Foot-Candle Meter**

FIELDSCOUT® Foot-Candle Meter

- An affordable light measurement solution
- Displays immediate light level in terms of foot-candles
- Precision photo diode with cosine correction

Item 3413F **FieldScout Foot-Candle Meter**

3414F

3412

3415FXSE

Red/Far-Red Meter

FieldScout® Light Meters

FIELDSCOUT® External Light Sensor Meter

- Read any of Spectrum's light sensors, which come with 6 ft (2 m) cables
- Plug in a sensor, choose it on the LCD display, and start measuring UV, Quantum Light, or Solar Radiation
- Sensors can also be used with WatchDog Weather Stations and Data Loggers

Item 3415FX **FieldScout External Light Sensor Reader**

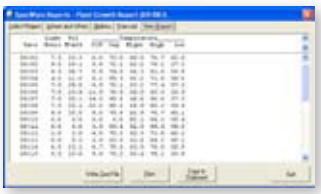
Light sensors sold separately:

Item 3668I	**Quantum Light Sensor (PAR Light)**
Item 3668I3	**Quantum Light 3 Sensor Bar**
Item 3668I6	**Quantum Light 6 Sensor Bar**
Item 3670I	**Silicon Pyranometer Sensor (Solar Radiation)**
Item 3676I	**UV Sensor**

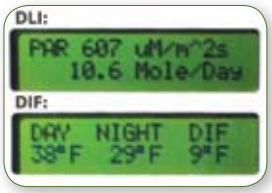
WatchDog® Model 2475 Plant Growth Station

- Measure light intensity, DLI, average temperatures, degree days and more!
- Monitor and record temperature, humidity and light conditions anywhere
- Easily check current and up to 12-months of historical data on the LCD display
- Calculate Daily Light Integral and compare to university guidelines (from your extension or at www.specmeters.com)
- **Requires SpecWare software (page 18)**

Item 3686WD **WatchDog Model 2475 Plant Growth Station**



SpecWare plant growth report



Displays Daily Light Integral and Day/Night Temperature Difference on the LCD

WatchDog® WeatherTracker
Model 305 Greenhouse Growth Tracker

No Computer Needed

- Keep tabs on the conditions affecting your plants
- Temperature sensor tracks degree-days
- Quantum light sensor measures your plants' light exposure over time (in moles/day)
- Comprehensive tool to assess physiological maturity of your plants
- Stand-alone device – see important information on the LCD screen – without a PC
- One-button review of 30-days of values and 12-months of summaries
- LCD display (updates every 20 seconds) with easy-to-use keypad
- 9V battery with 8-month life; memory protection in case of power loss

Item 3501PAR **WeatherTracker Model 305 Greenhouse Growth**