



University of Idaho
Extension

PAR METER

PHOTOSYNTHETICALLY

ACTIVE

RADIATION

METER

JENNIFER JENSEN

UI EXTENSION, BONNER COUNTY

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PHOTOSYNTHETICALLY ACTIVE RADIATION

- *Light with a wavelength between 400 to 700 nanometers (nm)*
- *Increasing energy in the PAR range increases plant photosynthesis*

WHY IS IT IMPORTANT?

- Optimal light intensity maximizes photosynthesis and plant growth.
- For growers using additional lighting, it can help determine requirements so there are not any wasted expenses keeping the light on.
- Growers may also be interested in measuring light intensity through greenhouse plastics.

PAR METERS

- LI-COR Quantum Photometer
 - LI-250 Light Meter
- Apogee Quantum Meter
 - MQ-500



MEASUREMENTS



	Apogee $\mu\text{mol m}^{-2} \text{s}^{-1}$	LI-COR $\mu\text{mol m}^{-2} \text{s}^{-1}$
Desk top	8	8.99
10 cm from Fluorescent Bulb	122	121.05
Outside Sunlight	797	696.3
Outside Sunlight	765	671.6
Outside Sunlight	997	791.6
Outside Sunlight	984	784.5



APOGEE INSTRUMENTS

BEN CRABB, TECHNICAL SALES & SUPPORT

