



LightScout Red / Far Red Light Meter

Product Images



Short Description

Plants use the Red/Far-Red light ratio to determine how crowded they are which effects growth.

Description

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Additional Information

Brand	Spectrum Technologies
Explanation	<p>Plant leaves filter light allowing more far-red light to pass through than red light. This changes the red to far-red ratio below the canopy. Similarly, a low red to far-red ratio is created when plants are close together. Knowing your red to far-red ratio can help you determine plant spacing and decide when to apply plant growth regulators. Greenhouses with high canopy closure or canopy density may need more applications of plant growth regulators to keep the plants a marketable size.</p> <p>Plants use the Red/Far Red light ratio to determine how crowded they are, and grow tall or full accordingly. Previously, Red/Far Red measurement required expensive spectroradiometers or sensors, and post-measurement computation. The LightScout meter displays the Red/Far Red ratio on the LCD screen, and with the push of a button, the 660nm and 730nm readings.</p> <p>Click here for the Measuring Light brochure for explanation about how various parts of the light spectrum affect plant health and growth.</p> <p>Plants absorb red light (660–680nm) and reflect far-red light (720–740nm). Plants contain phytochromes, photoreceptors that control physiological and developmental reactions to fluctuations levels of red and far-red light. Some responses that are regulated by phytochromes include germination, stem elongation, flowering, gene expression as well as leaf and chloroplast development.</p>
Contents	LightScout Red/Far Red meter and soft-sided storage case
Ideal For	Agronomy
Power	Battery Only
Specification	The Field Scout Red / Far Red Meter is accurate to $\pm 5\%$. Red light is measured at 660nm, 40nm FWHM (± 20 nm). Far Red light is measured at 730nm, 30nm FWHM (± 15 nm)