Horticultural Lighting Systems

Date



GENERAL INFORMATION

Fotono is a full spectrum LED luminaire that directly replaces HPS luminaires in horticultural environments. Fotono fully qualifies for energy rebate programs while delivering instant energy savings, reduced maintenance needs, and advanced capabilities, like multi-spectral control and dimming.

Fotono luminaires feature advanced spectral LED technology in a lightweight, compact design, minimizing structural burden on greenhouses and shading on crops. With high output and stepless dimming from 0 to 100 percent, Fotono prioritizes quality of light for growers.

Product Features

- Ideally suited for supplemental lighting as a daylight analog in greenhouse applications
- Industry-leading performance
- Replaces a 1000 W DE HPS luminaire
- Patented tunable spectrum
- Custom spectrum available
- · Powder coated aluminum housing

Applications

- Indoor Sole Source
- Greenhouse Supplemental

ORDERING INFORMATION

MODEL	DESCRIPTION
CT141*	Fotono luminaire with driver

*Note: Specify one of the available spectrums listed below to the model number. For example, CT141-R80.

Available Spectrums:

- · R80 An optimal and efficient spectrum, designed for supplemental lighting in greenhouse applications
- R60 A versatile spectrum designed for both Indoor and greenhouse applications for a wide-ranging number of crops with different growing methodologies
- R50 A full spectrum designed for both indoor and greenhouse applications with broad photosynthetic active radiation (PAR) coverage, for maximizing plant expressions and morphology
- R20 A cost-effective solution for general growing



RAYN Growing Systems

Fotono

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SPECIFICATIONS

Electrical

• Input voltage: 120-277 VAC, 50/60 Hz

• Input current: 5 A @ 120 VAC

Power: 590–625 W
Efficacy: 2.2–3.5 µmol/J
PPF: >1,250–2100 µmol/s

• Bare-end electrical supply cable provided (black, white, and earth ground conductors)

• Dimming compatible: 0–10 V (optional)

Optical

- Patented tunable white LED spectrum
- Custom spectrum available
- Photosynthetic Photon Efficacy (PPE) per spectrum is detailed on the following page
- Lifetime per TM21: L70: 80,000 hours, L90: 50,000 hours

Environmental

- Ambient temperature: 0°C-40°C (32°F-104°F)
- 0%–95% relative humidity, non-condensing
- UL-Certified for damp locations with a patented IP68 active cooling system

Mechanical

Powder coated aluminum housing

Mounting

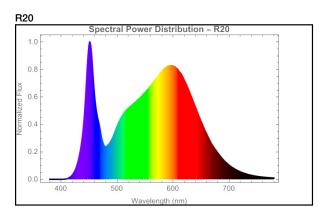
- V-hooks are shipped with the product for mounting purposes. The V-hooks are used to hold the fixture and provide a means to connect to suspension chain or cabling (by others).
- Optimal mounting height: > 915 mm (36 in) from the plant canopy

Compliance

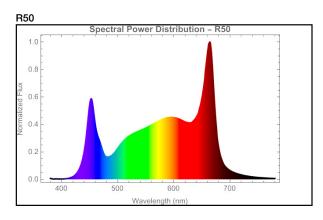
- CSA C22.2 NO 250.0-08 Luminaires
- UL 1598 Luminaires
- UL 8800 Outline for Horticultural Lighting Equipment
- UL 8750 Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products
- CSA C22.2 NO. 250.13-14 Light Emitting Diode (LED) Equipment for Lighting Applications

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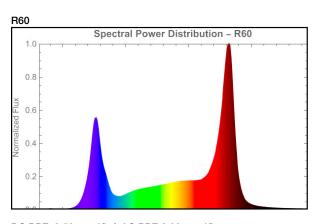
SPECTRUM INFORMATION



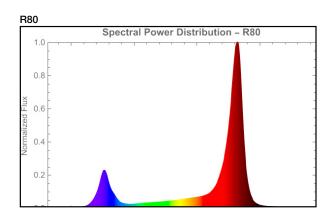
DC PPE: $2.55 \mu mol/j$ / AC PPE $2.20 \mu mol/j$



DC PPE: $3.12 \mu mol/j$ / AC PPE $2.68 \mu mol/j$



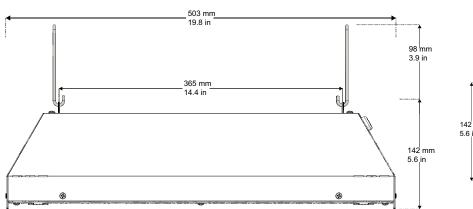
DC PPE: $3.53 \mu mol/j$ / AC PPE $3.03 \mu mol/j$

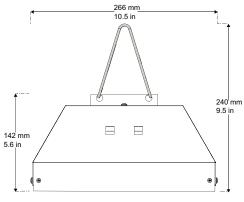


DC PPE: 3.91 μ mol/j / AC PPE 3.37 μ mol/j

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PHYSICAL





- Overall dimensions: 503x266x142 mm (19.8x10.5x5.6 in)
 - Add 98 mm (3.9 in) to the luminaire height when installed with the provided mounting hooks
- Weight: 5.5 kg (12 lb)