RAYN Growing Systems

Inaro System

Horticultural Lighting Systems

Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Inaro horticultural grow light is a highly configurable lighting solution for grid-light, multi-bar, and linear applications in vertical farms and greenhouses. The heart of the solution is the low-profile light bar designed to connect in a daisy chain and is suitable for pendant, wall, and rack-mounting systems with short distances to the crop canopy. The density of the light bar placement determines the total photosynthetic photon flux density (PPFD) over a shelf, making Inaro suitable for growing phases requiring low to high light levels. Inaro light bars are available as line voltage all-in-one fixtures that can be interconnected, up to 10 units end-to-end.

Inaro light bars are also available in custom configurations including a dimmable variant using an external DC power supply as well as custom power distribution options for rack systems. In addition to the four standard spectrums offered, it is possible to create custom spectrums for Inaro light bars. Contact RAYN Growing Systems to find out more.

Product Features

- Line Voltage Model - up to 10 units may be connected end-to-end
- Dimmable Model - up to 12 units may be connected across four distributed power circuits using an external DC power supply
- 5 year warranty
- Ingress Protection IP65 (damp locations)
- Custom spectrums available

Applications

- Vertical farms
- Greenhouse suppmental

ORDERING INFORMATION

MODEL*	DESCRIPTION
CTF-50-__*	Inaro light bar, 50 W
	Power Input Cord with NEMA Plug

*Note: Specify one of the available spectrums listed below to the model number. For example: CTF-50-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
- R40 - A cost-effective solution for general growing

RAYN GROWING SYSTEMS

SPECIFICATIONS

Electrical

- Input voltage: AC 100–277 VAC (capable), 50/60 Hz
- Input current: 0.42 A @ 120 VAC
- Power (watts)*: 50 W
  - *The power (watts) specification is listed for a single Inaro light. To calculate power draw when daisy-chaining light bars, multiply watts by the number of connected light bars.
- 1.8 m (6 ft) power input cord with NEMA plug (available separately, see ordering information)
  - One power input cord required per up to ten Inaro light bars installed in a daisy chain

Optical

- LED type: LUMILEDS® 2835R
- Photosynthetic Photon Efficacy (PPE) per spectrum is detailed on the following page
- Beam angle: 100°x115°
- Photometric light plans available upon request

Environmental

- Operating temperature and humidity: -20°C to 45°C (-4°F to 113°F), 20%–95% RH, non-condensing
- Storage temperature and humidity: -20°C to 85°C (-4°F to 185°F), 10%–95% RH, non-condensing
- IP65-rated for damp locations

Mechanical

- Housing: Polycarbonate, impact-resistant, IK05
- Lamp Cover: Polycarbonate with integrated LED array
- Seal: Age-resistant silicone
- IP68 locking connectors

Mounting

- Integrated mounting holes on each end for use as direct attachment to the support structure or suspension points for hanging hardware
- Two mounting clip accessories are provided for added mid-span support directly to a support structure

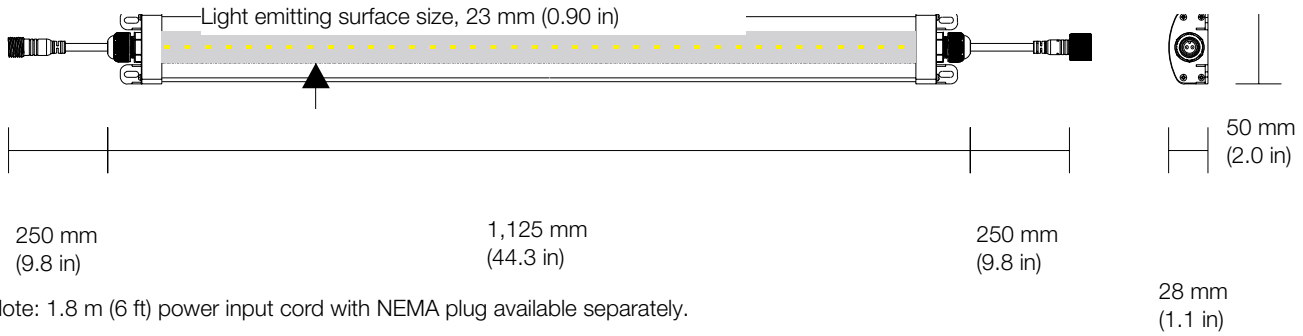
Compliance

- UL 8800 - Standard for Horticultural Lighting Equipment and Systems (pending)
- DesignLights Consortium (DLC) listed (pending)

Warranty

- 5 year warranty

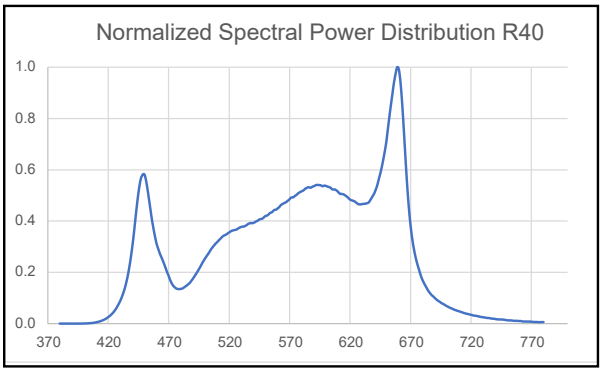
Physical



Note: 1.8 m (6 ft) power input cord with NEMA plug available separately.

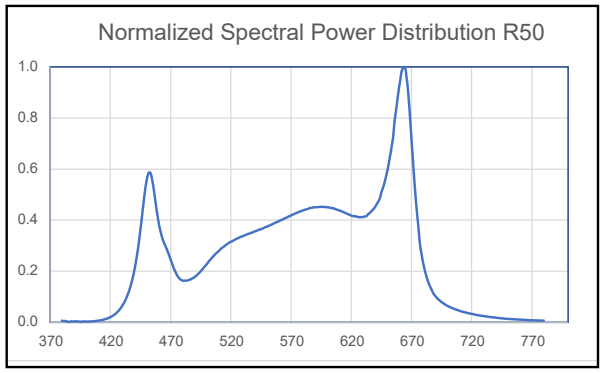
SPECTRUM INFORMATION

R40



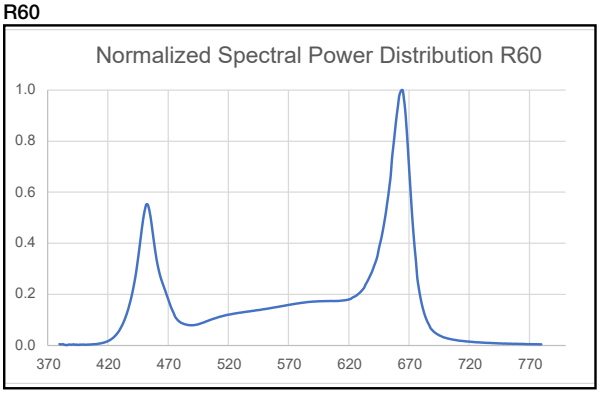
DC PPE: 3.09 µmol/j / AC PPE 2.68 µmol/j

R50



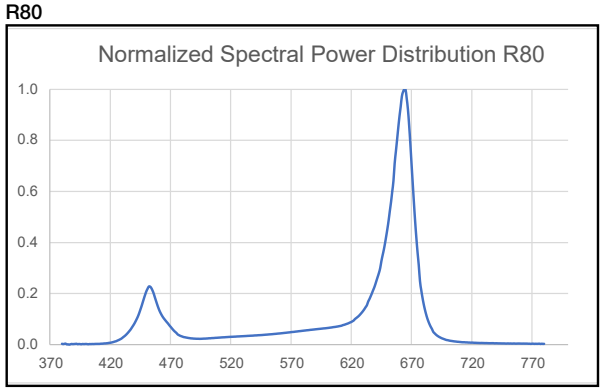
DC PPE: 3.11 µmol/j / AC PPE 2.63 µmol/j

R60



DC PPE: 3.20 µmol/j / AC PPE 2.78 µmol/j

R80



DC PPE: 3.51 µmol/j / AC PPE 2.95 µmol/j

RAYN Growing Systems
3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 | Phone 844 907 RAYN

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raynrowingsystems.com