

urban-gro®



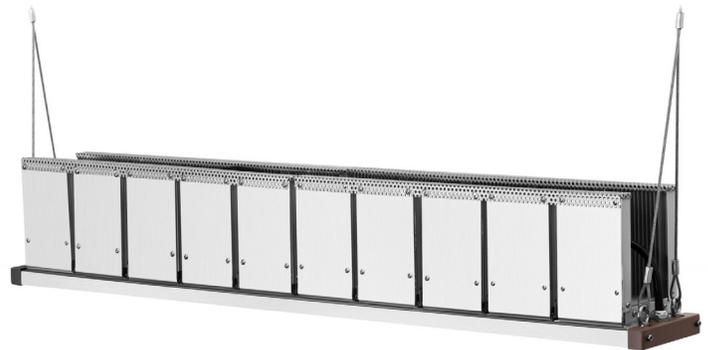
SCIENTIFICALLY
ENGINEERED

BIOS Icarus Ti

- ✓ Lights Plans Designed by urban-gro
- ✓ Product Provided by urban-gro
- ✓ Soleil® Wireless Controls Offered by urban-gro

Features And Benefits

- Fully assembled, industrial grade construction and durability
- Optimized spectrum for all phases of plant growth and production
- Scientifically engineered spectrum to maximize photosynthesis, growth, yield, and quality
- 40% less energy required and heat generated than 1000W HPS to produce an equivalent amount of delivered PAR
- Superior delivered PAR output and PAR photon efficacy as compared to 1000W HPS
- Superior lighting uniformity across the plant canopy
- Unique heat pipe thermal design allows for passive cooling, which eliminates inferior features such as fans, moving parts, and noise
- Sustainable and environmentally friendly mercury-free lighting source compared to traditional technologies (HID and fluorescent) which require hazardous waste disposal
- Wet-rated with tempered glass optics to protect sensitive electronics from grow environment
- Easily cleaned for optimal (maximum) light output over time
- Applications: Indoor crop production, greenhouses, growth chambers, retro-fit existing HID or new construction controlled environment grow facilities
- On-board power supply (LED driver) for ease of installation



Bios Icarus Ti Led Grow Light

The BIOS Icarus™ Ti LED Grow Light is the controlled environmental agricultural industry's superior choice for commercial crop production. The thoughtfully inspired Icarus Ti LED Grow Light has superior Photosynthetically Active Radiation (PAR) output and PAR photon efficacy in an LED fixture specifically designed for top lighting applications.

The Icarus Ti LED Grow Light has an optimized broad spectrum that maximizes photosynthesis and plant growth while also providing the ideal conditions for a very comfortable visual experience and crop assessment.

Engineered for science, this unique industrial grade fixture fills the need for a small footprint, high output, energy efficient, and cost competitive option for either sole-source lighting for indoor farms or sunlight supplementation for greenhouse production.

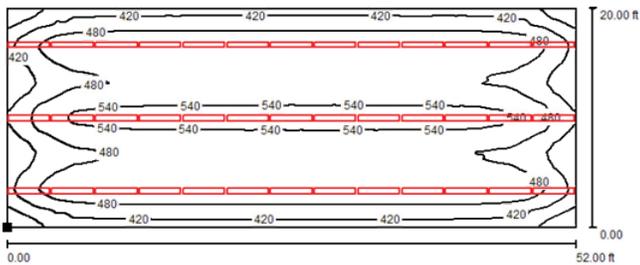
Icarus Ti Preliminary Specifications

Fixture Wattage:	545 Watts
Voltage:	100-277VAC & 277-480VAC
Photosynthetic Photon Flux (μmol PAR/s):	1255 μmol/s
PAR Photon Efficacy (μmol PAR/⓵):	2.3 μmol/⓵
Optimal Mounting Height:	36"- 96" (91.44 cm - 243.8 cm) above the plant canopy
Optimal Footprint:	4' x 4' (1.2 m x 1.2 m)
Average Photosynthetic Photon Flux Density:	>1000 μmol/(m ² · s)
Spectrum:	Broad horticulturally optimized spectrum

Fixture Dimensions:	45.5" long x 6.7" wide (115.5 cm x 17 cm)
Fixture Weight:	13 lbs (5.3 kg) with on-board LED driver
Housing and Finish:	Anodized clear
Mounting:	Y-fit Gripple Hangers
Dimmability:	0-10 V
Rated Power Factor:	>90%
Warranty:	5 Year Limited
Ingress Protection:	IP65
Certifications:	UL1598 wet location rated, UL 8750, RoHS, FCC
Photometrics:	Leading Testing Laboratories

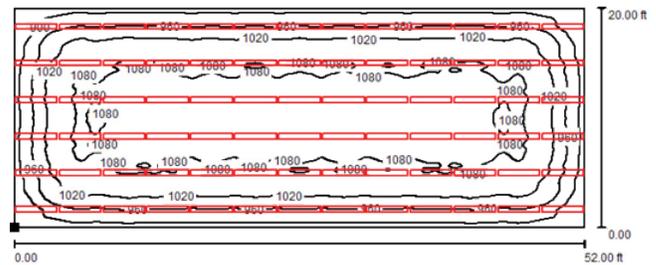
Typical PPFD Intensity

Greenhouse Supplemental



Average 483 min=309 max=561 min/max 0.551
Mounting height=48" above canopy

Sole Source Indoor



Average 1024 min=779 max=1100 min/max 0.708
Mounting height=36" above canopy

Icarus Ti Spectral Graph

