



SCIENTIFICALLY
ENGINEERED

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Introducing *Icarus*[™]

The BIOS *Icarus*[™] is the agricultural industry's highest Photosynthetically Active Radiation (PAR) output LED fixture that also boasts the industry's highest PAR photon efficiency. The fixture has an optimized spectrum that maximizes photosynthesis and plant growth as well as providing a broad spectrum that allows for accurate visual assessment of the crop. Engineered for science, this unique truly industrial grade plant growth production instrument fills the market need for high performance, high output, energy efficiency, and competitive cost that is lacking in the LED grow light market today.

- Suitable spectrum for all phases of plant growth and production
- Scientifically engineered for the photosynthetic absorption spectrum
- 40% less energy required to produce an equivalent amount of delivered PAR than 1000W HPS
- Greater than 50% overall system efficiency as compared to 1000W HID
- Up to 70% greater PAR photon efficiency than 1000W HPS
- Passive cooling design eliminates inferior features such as fans, moving parts, and noise
- Sustainable and environmentally friendly mercury-free lighting source compared to HID lighting systems requiring hazardous waste disposal
- 50% more blue radiation than HPS to promote improved plant morphology and quality
- Applications: Indoor crop production, greenhouse, growth chamber, retro-fit existing HID or new construction grow facilities



**Ready to learn more
about optimizing your
commercial crop
production lighting
solution today?**

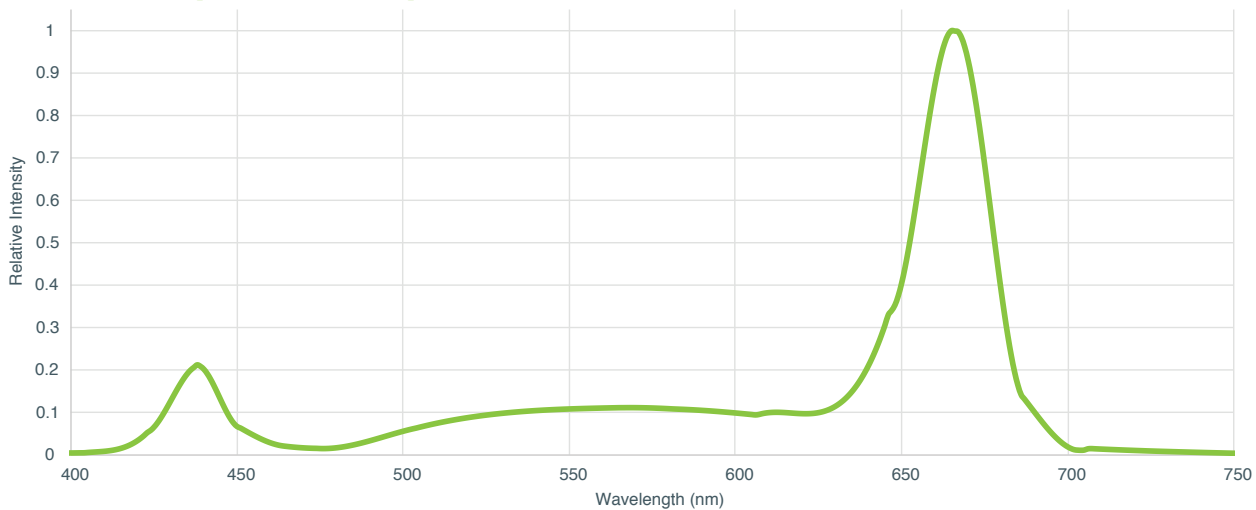
**Contact us at:
info@bioslighting.com**

Icarus™ Specifications



- Fixture Wattage:** 660 Watts
- Voltage:** 100-277 VAC & 200-480 VAC
- Photosynthetic Photon Flux (μmol PAR/s):** 1056 μmol/s
- PAR Photon Efficacy (μmol PAR/J):** 1.6 μmol/J
- Optimal Mounting Height:** 24" (61 cm) above canopy
- Optimal Footprint:** 4' (1.22 m) x 4' (1.22 m), 16 ft² (1.5 m²)
- Average Photosynthetic Photon Flux Density (across 4'x4' area):** ~800 μmol/(m² · s)
- Spectrum:** Broad "White" spectrum (not purple)
- % Blue (400-500 nm):** 9%
- Fixture Dimensions:** 40" (101.6 cm) long x 32" (81.3 cm) wide
- Fixture Weight:** 45 lbs (20.4 kg)
- Housing and Finish:** Extruded Aluminum and Powder Coated
- Mounting:** Y-fit Gripple Hanger
- Dimmability:** 0-10 V
- Rated Power Factor:** >90%
- Warranty:** 5 Year Limited
- Ingress Protection:** Wet location rated
- Certifications:** ETL, RoHS, FCC
- Photometrics:** TÜV SÜD America

Icarus™ Spectral Graph



Typical Layout 8' x 24' (24" mounting height) PAR Map

