

# AxlenGro 2' x 2' LED Horticulture Fixture (Preliminary)



Axlen's 2' x 2' spectrum tunable LED fixture enables you to maximize effective PPFD while minimizing energy usage within your operation. Featuring a patented waveguide, passive heat sink, and 2" thick aluminum alloy frame, this fully controllable fixture is designed specifically for use in single and multiple tiered grow facilities.

## SUMMARY OF FEATURES

- Optimized spectrum selection for photosynthesis and photoperiodism
- Four spectrum channels that can be adjusted independently, from 0% to 100%
- Two light distribution configurations available: a patented, 50° photon beam and a 110° photon beam
- High photosynthetic photon flux density for natural growth, up to  $1,150 \mu\text{mol m}^{-2} \text{s}^{-1}$
- Unique high PPFD for supplemental photon applications and higher PPFD for vertical grow applications
- Uniformly distributed photon output for even growth and minimal glare
- Elegant thin profile to save space
- Optional intelligent control capability
- Minimal heat generated to allow plants to grow as close to the fixture as possible
- Extremely efficient: no cooling fan and up to 70% energy saving to replace HID and fluorescent fixtures
- Mercury-free and RoHS compliant
- Detachable integral power supply, power factor > 0.9
- Industry compliance - UL/cUL, FCC, CE
- 10-year warranty

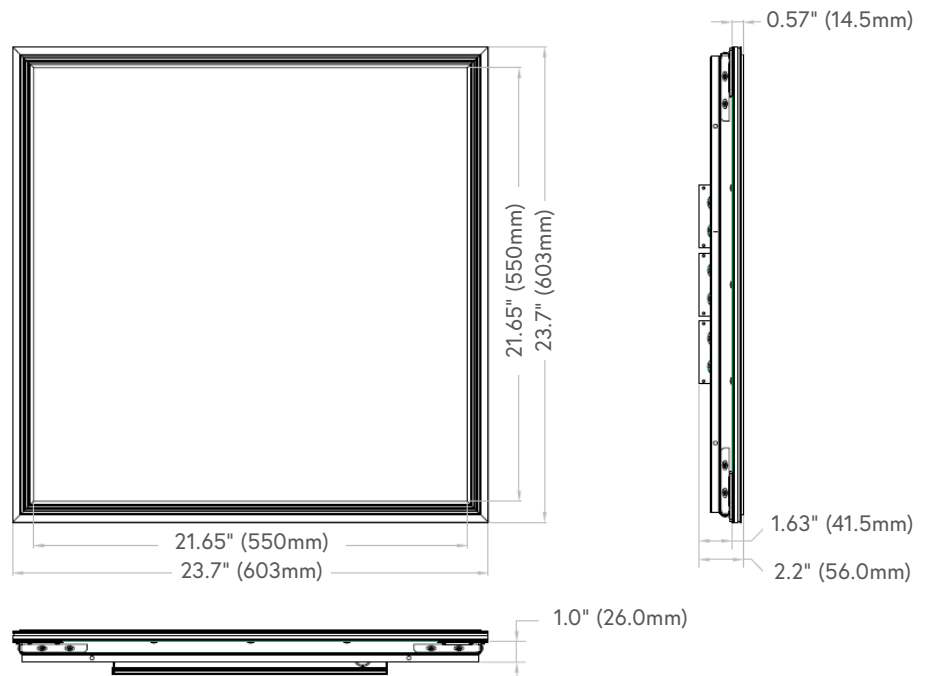
# AxlenGro 2' x 2' LED Horticulture Fixture

## TECHNICAL SPECIFICATIONS

	AXHB-GRO2-200W-D	AXHB-GRO2-200W
LIGHT DISTRIBUTION	50° Directional	110° Diffused
INPUT POWER	194 Watt	194 Watt
INPUT VOLTAGE	100–277 Vac	100–277 Vac
EFFICACY	2.15 $\mu\text{mol}/\text{J}$	2.45 $\mu\text{mol}/\text{J}$
TOTAL PHOTON FLUX	420 $\mu\text{mol}/\text{s}$	460 $\mu\text{mol}/\text{s}$
BLUE PHOTON FLUX	80 $\mu\text{mol}/\text{s}$	90 $\mu\text{mol}/\text{s}$
WHITE PHOTON FLUX	150 $\mu\text{mol}/\text{s}$	165 $\mu\text{mol}/\text{s}$
DEEP RED PHOTON FLUX	160 $\mu\text{mol}/\text{s}$	170 $\mu\text{mol}/\text{s}$
FAR RED PHOTON FLUX	30 $\mu\text{mol}/\text{s}$	35 $\mu\text{mol}/\text{s}$
PPFD MAX ( $\mu\text{mol m}^{-2}\text{s}^{-1}$ )	1,150 at 3 inches 1,000 at 1 foot 530 at 2 feet	1,100 at 3 inches 405 at 1 foot 250 at 2 feet
COVERAGE AREA (single fixture)	5 square feet at 3 inches 9 square feet at 1 foot 16 square feet at 2 feet	5.5 square feet at 3 inches 24 square feet at 1 foot 40 square feet at 2 feet
THERMAL MANAGEMENT	Passive heat sink	Passive heat sink
LIFETIME	Q90 > 44,000 hours Q70 > 160,000 hours	Q90 > 44,000 hours Q70 > 160,000 hours
WARRANTY	10 years	10 years

## PHYSICAL SPECIFICATIONS

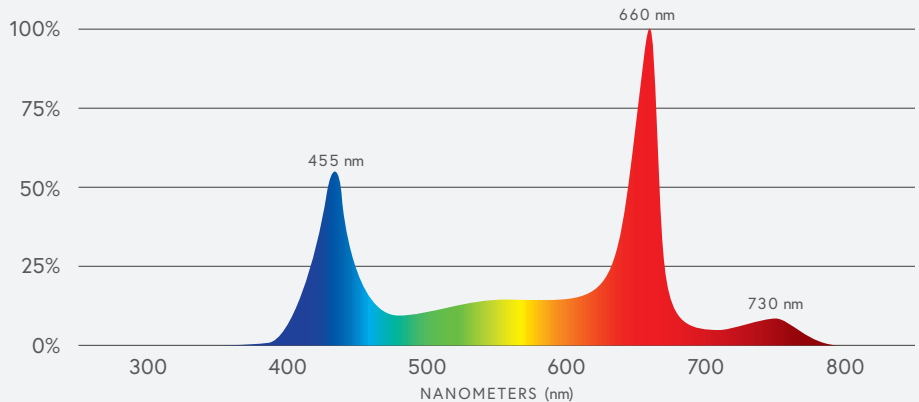
PANEL WEIGHT: 23.1 lb / 10.5 kg  
(Dimensions in inches/mm)



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## SPECTRAL INTENSITY DISTRIBUTION

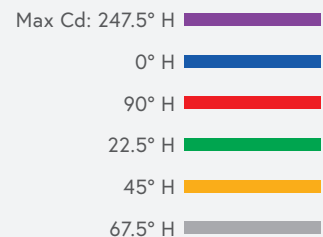
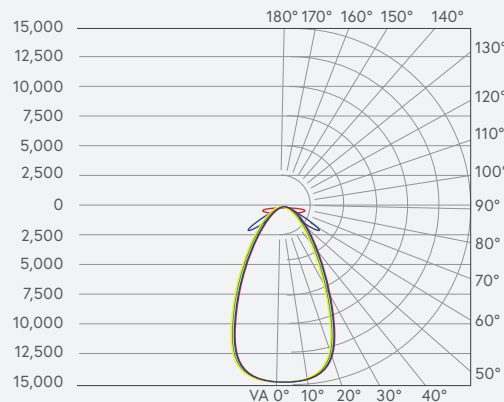
Traditional horticultural lighting solutions generate significant quantities of light at unusable wavelengths. Axlen fixtures generate plant-usable, tunable wavelengths to enhance photosynthesis and decrease energy consumption.



## POLAR INTENSITY DISTRIBUTION

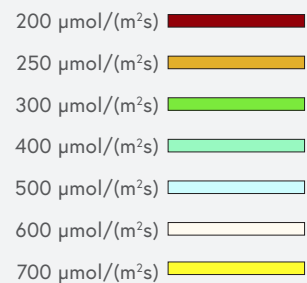
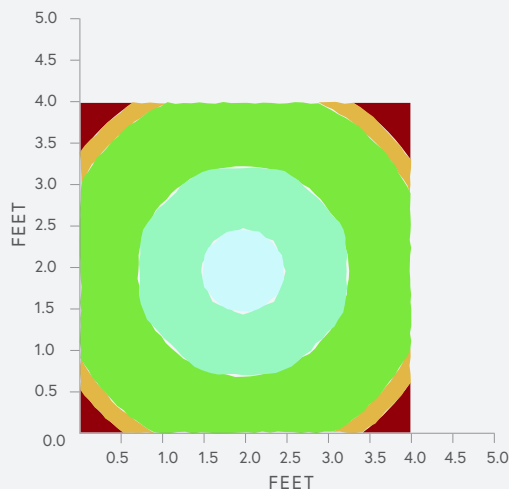
Axlen fixtures use patented technology to generate a spatially-uniform, 50° photon beam. This directs photons deep into the plant canopy and reduces energy loss. A 110° configuration is also available.

Panel photometry data is taken from an accredited testing laboratory in accordance with IESNA LM-79-08.



## PPFD AT PLANT CANOPY

Spatial uniformity of PPFD is enhanced through the use of patented waveguide technology. At a hanging height of two feet, the fixture provides high PPFD to 16 square feet of grow area when utilizing the 50° photon beam configuration.



# Accessories



All AxlenGro fixtures can be easily controlled by Axlen's wired or wireless system. A proprietary wireless control system provides intelligent control of photon intensity and spectrum. Contact Axlen sales for details.



The wavelength extension module attaches directly to the LED horticulture fixture, enabling the generation of UVA, UVB, and green wavelengths. UV wavelengths can be used as a plant stressor during key growth stages and organic pest control.



Suspension kits, SK-44, are available for use in single or multiple tiered grow facilities. Contact Axlen for details on the accessories shown and installation guidance.

## CONTACT

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