

# POWERHARVEST®



## Finish

White fixture finish is an electrostatically applied Super-Durable TGIC polyester powder coating. Finish is highly weather and UV resistant and provides superior gloss and color retention. Black heat sink finish is an electrochemical anodizing process that converts the surface of the metal into a long-lasting, high performance aluminum oxide finish that cannot peel or chip.

## Testing and Compliance

- ETL/cETL listed and CE marking compliant
- RoHS compliant
- EMI compliance (FCC Part 15)
- 50,000 hour life to L70
- 5-year warranty
- Rated to 40°C ambient operating temp



## FEATURES & SPECIFICATIONS

### General Description

Available in 500 PPF ( $\mu\text{mol/s}$ ) and 1000 PPF variations, the PowerHarvest® from Illumitex is designed and tested specifically for indoor grow operations, including greenhouses. Scientifically developed and patented horticultural growth spectra and high power LEDs combined with wide distribution optics ensure optimum plant growth and highest yields. The wireless controls option equips growers with the ability to easily control one fixture or thousands of fixtures from a laptop computer, tablet or smart phone. All PowerHarvest® fixtures ship “controls ready.”

### Mechanical Construction

Fixture housing is fabricated from laser cut and formed 5000 series aluminum sheet. Precision-machined die extrusions and stainless steel fasteners protect against corrosion in damp environments.

### Electrical Specifications

Ultra-high efficient (94.5%), constant-current drivers are suitable for wet locations. 6kV input surge suppression. Input voltages options are 120-277VAC (auto-sensing), 347VAC and 480VAC, 50/60Hz. Dimming and on/off control utilized in conjunction with optional wireless controls.

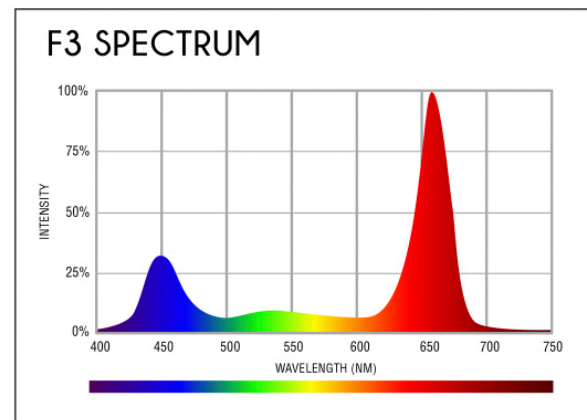
### Thermal Management

LED thermal management is accomplished by means of a custom, extruded aluminum heat sink. Venting slots at either end of the fixture and dual, replaceable, high-efficiency cooling fans provide further cooling. Fan assemblies can be easily removed in the field via tool-less wiring connectors for cleaning or replacement.

### LEDs

High-power, wide angle (120°) multi-chip LED packages combine multiple wavelengths to create a spectrum ideal for various horticulture applications and needs. Highly efficient, AR-coated, tempered-glass lenses protect LEDs while allowing 98% transmission of photons.

## STANDARD SPECTRUM



### BEST FOR GERMINATION THROUGH FLOWERING

The F3 spectrum is the workhorse and most popular spectrum from Illumitex. It produces the fastest germination and drives the best vegetative and flowering results among all of the spectra options. In addition to the blue and red wavelengths, the F3 spectrum contains a small amount of green which is beneficial for the quality assessment of plants. The F3 spectrum is recommended for use in growth chambers as well as controlled environment agriculture operations of any size.

F3 WAVELENGTH MIX	
Blue (400 - 499 nm)	22.4 ± 1.3%
Green (500 - 599 nm)	13.4 ± 0.6%
Red (600 - 699 nm)	63.9 ± 0.8%
Far Red (700 - 780 nm)	0.4 ± 0.1%

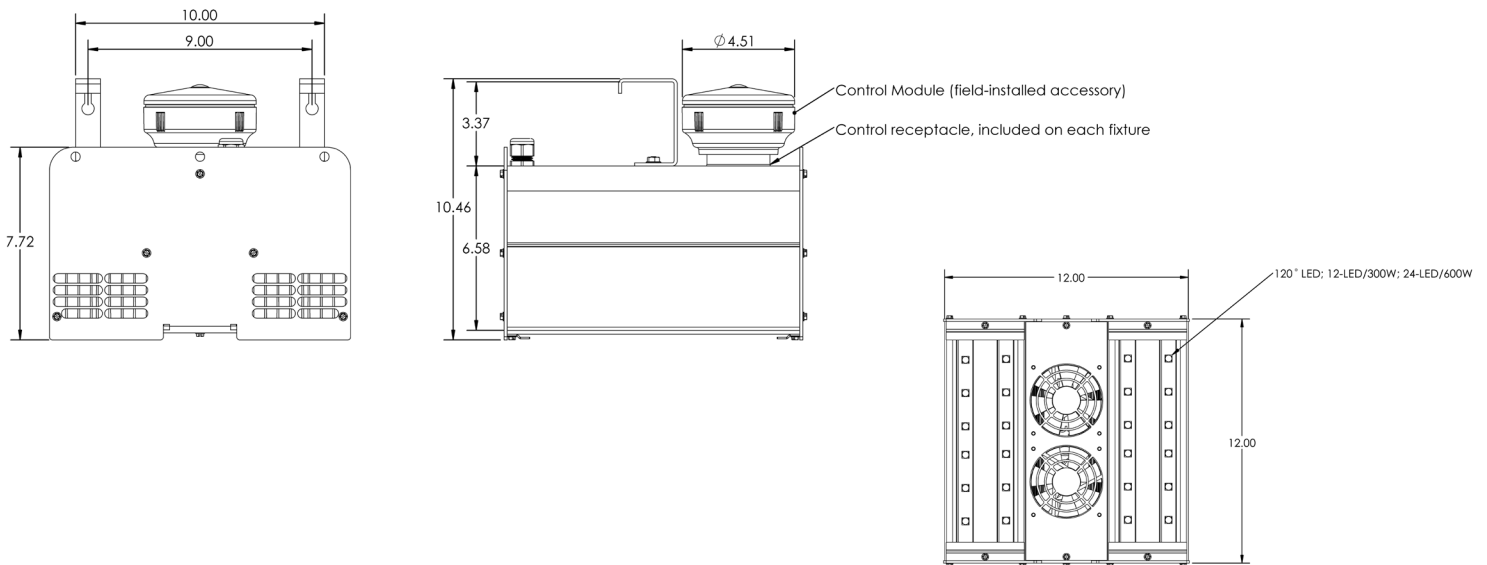
## PART NUMBER ORDERING GUIDE

PowerHarvest®						
SERIES	PPF	LED SPECTRA	INPUT VOLTAGE	CONTROLS	CABLE	PLUG TYPE
PHW = PowerHarvest Series	5 = 500 PPF 10 = 1000 PPF	F3 = F3 spectrum (see spectrum chart)	U = 120-277VAC 3 = 347VAC 4 = 480VAC	R = Wireless Receptacle <sup>1</sup>	C3 = 3-ft cord (3-conductor) C10 = 10-ft cord (3-conductor)	Blank = Flying leads, no plug P120 = 120VAC, 3-prong plug P240 = 240VAC, 3-prong plug P277 = 277VAC, 3-prong plug

Notes: 1. Wireless Receptacle (R) option is standard and includes shorting cap.

PowerHarvest® Specifications				
	PHW5F3	PHW5F3 (High voltage)	PHW10F3	PHW10F3 (High voltage)
Operating Voltage	100-277Vac	277-480Vac	100-277Vac	277-480Vac
Typical Running Current	2.42A @ 120Vac 1.21A @ 240Vac 1.05A @ 277Vac	1.03A @ 277Vac 0.82A @ 347Vac 0.59A @ 480Vac	4.71A @ 120Vac 2.35A @ 240Vac 2.04A @ 277Vac	2.11A @ 277Vac 1.68A @ 347Vac 1.22A @ 480Vac
Operating Frequency	50/60Hz			
Power Consumption	290 Watts	285 Watts	565 Watts	585 Watts
Heat Output	989.5 BTU/hr	972.5 BTU/hr	1927.9 BTU/hr	1996 BTU/hr
Weight	21 Lbs (9.5 Kg)	21 Lbs (9.5 Kg)	25 Lbs (11.1 Kg)	25 Lbs (11.1 Kg)
Efficiency	1.8 PPF/W			
Operating Temperature	4°F to 104°F (-20°C to 40°C)			
Power factor	> 0.90			
Warranty	5 Years			

## DIMENSION LINE DRAWINGS



## MOUNTING

Each PowerHarvest® fixture ships with (2) 3.25" tall C-hooks for mounting to trusses and cross beams. Select either CHK-1 or CHK-2 when placing order.

MOUNTING ACCESSORIES (ordered separately; field installed)	
MODEL	DESCRIPTION
ACH-10	10-ft aircraft cable hangers (2) with captive hook ends
CH-10	10-ft chain hangers (2) with hook ends
CHK-1	C-hook for 1 - 5/8" truss
CHK-2	C-hook for 2 - 1/8" truss

WIRELESS CONTROLS (ordered separately; field installed)	
MODEL	DESCRIPTION
SY-SS420-002	Wireless gateway
SY-TL5-B1	Wireless node (120-277V only)