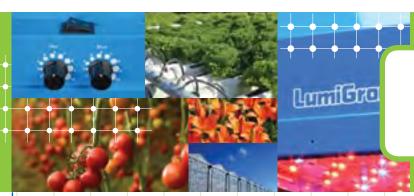


The leader in smart horticultural lighting.





"Not all LED lights are created equal. LumiGrow is the clear winner."

— Crystal Boze Green Winter Farm, Palmer, Alaska



## **LumiGrow ES330**

# The Most Cost-Effective Means of Boosting Crop Yield

Well-designed lighting systems boost crop yield and quality. But conventional lights cost so much to operate that they erode profit margins. Energy-efficient LumiGrow solutions enable growers to achieve the advantages of supplemental lighting without the high operating costs. That's why LumiGrow is the considered choice of Dow AgroSciences, the USDA and growers from Alaska to Florida.

#### **Best for Your Plants**

You'll make the most of your greenhouse or other growing environment because the LumiGrow ES330 provides uniform light distribution without harmful hot spots. In addition, LumiGrow lights run 70% cooler than highintensity discharge (HID) lights, eliminating plant damage and problems related to unmanaged greenhouse temperatures. Hot-running HID lights stress plants as evidenced by high water and nutrient demand. By contrast, plants grow safely at any distance from LumiGrow lights.

## **Lowest Cost of Ownership**

The energy-efficient LumiGrow ES330 typically costs 40% less to operate compared to HID lamps. New sites see dramatically lower infrastructure costs because of reduced electrical requirements. LumiGrow lights also eliminate the need for ballasts and reflectors while they minimize cooling loads, accelerating your payback. Growers see electrical bills trimmed by approximately half, month after month, year after year.

# Remarkably Simple to Install and Operate

The LumiGrow system requires no custom configuration and seamlessly operates alongside conventional lighting. Most growers maximize the yield-boosting and cost-saving benefits of LumiGrow with a full-scale new installation or retrofit; others replace conventional lights as they age. Either way, LumiGrow ES330 lights last up to 10 times longer than HID lights without degradation, which means your investment in LumiGrow will continue to reward you over time.

#### **How It Works**

LumiGrow smart horticultural lighting solutions are engineered exclusively for plants. LumiGrow engineers partner with growers and scientists to develop products that meet commercial demands, from auto-sensing voltage input to shadow-minimizing, compact product design.

Conventional lights squander more than half the energy they consume because they emit broad swaths of the color spectrum that are useless to plants. The LumiGrow ES330 system emits only those portions of the color spectrum that trigger healthy plant responses. In addition to concentrated 450-475nm (blue) and 625-660nm (red) wavelengths, the LumiGrow ES330 delivers spectra throughout the photosynthetically active region (PAR).

## **Applications**

- · Commercial Greenhouses
- Nurseries

- Indoor and Vertical Farms
- Research

### **LumiGrow ES330**



#### **Key Features**

#### Maximum Light Density Delivers Concentrated Growing Power

- · Coverage: 12-16 square feet
- Enhanced spectral output covering full PAR (400-700nm) promote photosynthesis
- More power per Watt than any other horticultural lighting fixture
- 5-Watt super-flux LEDs

# Thermal Management Provides Long-Lasting Performance

- Runs 70% cooler than HID lighting
- · Massive heat sinks keep LEDs running cool
- · Operates safely without high voltage

#### **Energy Efficiency Reduces Your Costs**

- Uses 50% less power than the equivalent 600 Watt HID light
- · Eligible for energy utility rebates

# Make the Environmentally Responsible Choice

- RoHS compliant
- · Mercury free
- Long lasting

#### Gain Control at Your Fingertips

- Individually adjustable Red and Blue balance knobs allow precise 2-channel spectral control
- · Compatible with automated control systems

#### Installs and Operates Simply

 Smart Volt auto-switching and regulating power supply adjusts to appropriate voltage for international use

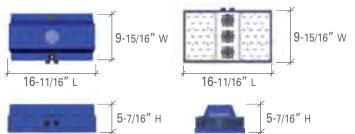
#### **Built to Last**

- Light-weight, yet strong powder-coated aluminum hardware
- · Proprietary constant-current LED controllers
- 5-year warranty
- · Designed and built in USA



### **Technical Specifications**

Operating Voltage	90-264 V <sub>AC</sub> (auto-switching) (5A max/2.5A max)
Operating Frequency	50Hz-60Hz
Typical Energy Consumption	330 Watts
Weight	12 lbs
Operating Temperature	- 4º F to 140º F (- 20º C to 60º C)
Lifespan	50,000 hours
Dimensions	16-11/16"w x 9-15/16"w x 5-7/16"h (smaller than most HID lights)



# Targeted Spectral Output

16-11/16" L

All light emitted by the LumiGrow ES330 triggers healthy plant responses, boosting your yield and reducing your costs.

LUMIGROW ES330
WASTED ENERGY

Excess light from HIDs costs you in high electrical bills.

9-15/16" W

