

### Floriculture LED Lighting Solutions













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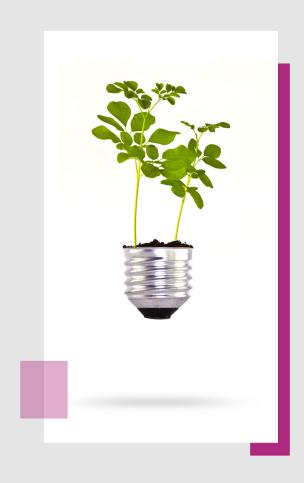






### **About Us**

We provide LED Lighting Solutions for farmers who do In door Farming, Vertical Farming, or Greenhouses Lumesmart's innovative LED products offer selection of colour and wavelength specific lights to promote growth in different produce varieties adjustable illumination intensity and helps to control dust keeping food fresh for longer Our energy-saving products are listed in the Ontario Made, and our DLC-certified products are allowing farmers to earn retrofit from the government.



### **Our Vision**

Making Peace by Saving Nature from the Effects of Global Warming





### Reducing carbon footprint by eco-friendly Lumesmart LED lighting

LumeSmart can help the greenhouse sector by providing energy-efficient and eco-friendly LED products. These solutions enable growers to reduce their carbon footprint and save on energy costs.

### Customized LED lighting solutions

LumeSmart can offer lighting systems custom-suited to the crop-specific needs of their clients, offering better performance compared to HPS lighting solutions of LED lighting systems





### Adjustable and personalized LED lighting solutions

Lumesmart LED systems offer customizable lighting solutions, through adjustable intensity and color spectrum, ideal for custom light formulations commonly known as 'light recipes'

### Government support through grants

The Federal and Provincial governments have both shown general support for the adoption of LED lighting systems as a method to reduce electricity consumption in the greenhouse industry. LumeSmart can leverage these grants to help offset the cost of switching to LED lighting making it a better financial decision for growers



### Best Innovative LED Solutions for Your Horticulture Industry

We are providing the Best innovation solutions for Indoor Framing Greenhouses, Vertical Framing industries Based on our Research partnership with Niagara College Business & Commercialization Innovation Centre

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Professional Engineering Team
After Sale Support



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### HL09 – Horti Sky

Horti-Sky provides periods of reduced intensity, which allows regeneration of the photosynthetic apparatus and ensures better preparation for the efficient use of light of a higher intensity. In this way, energy management within the plant becomes more efficient

System Efficacy

2.46 μmol/J

**IP** Rating

IP45

Dimming

0~10 V Dimming

Certificate

ETL, CE, RoHs

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### Key Features



- Up to 80% higher energy efficiency compared to HPS / MH and up to 50% in comparison to constant LED lighting
- Easy to clean with long lifespan
- IP65 rating make it withstand even the toughest growing environments



Versatile use



IP65





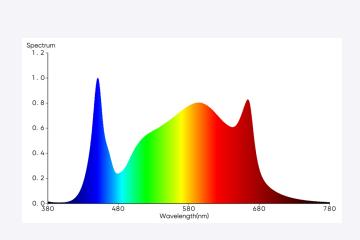


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### **Product Specifications**

Item No	HL09-150
Power	150 W
PAR Output	369 µmol/s
ePAR Output	377 μmol/s
AC Input Voltage	100-240 V AC / 100-277 V AC / 277-480 V AC, 50/60 Hz
Radiation Angle	120°
Net Weight	2.1 kg / 5.1 lbs
Gross Weight	3 kg / 6.6 lbs
Dimensions	1148 x 72 x 60 mm (45.2" x 2.83" x 2.36")





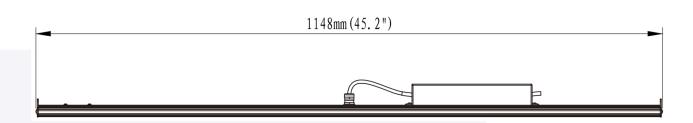
### **Spectrum Solution**

This enhanced full spectrum produces the fastest flowering for plant species grown indoors under artificial lighting. The spectrum most closely mimics the sun and can meet the needs of both high and low DLI crops

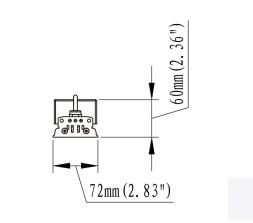








### **Product Dimensions**





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### HL03 - Horti Reina

Horti-Reina is a greenhouse supplemental intercanopy light being angled with respect to the horizontal, that 120° light is only accessible at the highest part of the crop because of the density of the leaves of the plant Intercanopy lighting spreads the light more evenly over the canopy and in the middle part of the crop which increases flower development

System Efficacy

2.34 μmol/J 3.0 μmol/J

IP Rating

IP65

**Dimming** 

0~10 V Dimming

Certificate

ETL, CE, RoHs

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### **Key Features**



- Daisy chain design helps save installation time and reduce total installation cost in commercial projects
- IP65 rated makes LED intercanopy operate well in greenhouse indoor or other high humidity environments
- Double-sided lighting design, minimizes light interception and keeps the lower canopy to get optimal and uniform light
- Inverted triangle structure minimizes the shadow on the plant canopy which is caused by the light from the top



Daisy chain



IP65





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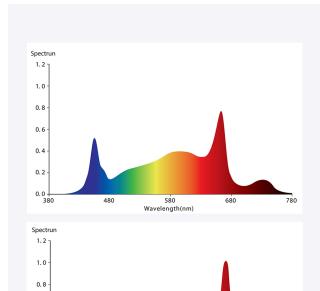


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### **Product Specifications**

Item No	HL03-75	HL03-150
Power	75 W	150 W
PAR Output	176 µmol/s 225 µmol/s	351 µmol/s 450 µmol/s
ePAR Output	194 µmol/s 226 µmol/s	387 μmol/s 452 μmol/s
AC Input Voltage	100-240 V AC	/ 100-277 V AC / 277-480 V AC, 50/60 Hz
Radiation Angle		120°
Net Weight	1.5 kg / 3.3 lbs	2.5 kg / 5.5 lbs
Gross Weight	7.0 kg / 15.4 lbs	12.0 kg / 26.5 lbs 4 pcs per carton
Dimensions	1380 x 65 x 69 mm (54.33" x 2.56" x 2.72")	2500 x 65 x 69 mm (98.43" x 2.56" x 2.72")





580 Wavelength(nm)

0.6

### **Spectrum Solution**

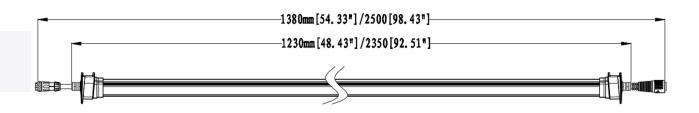
450nm blue light plays an important role in the early stage of plant growth and helps to establish a developed root system. With a peak wavelength of 730nm is designed to boost photosynthetic light levels in flowering stage, far red light will create a competitive response in plants, assisting in the formation of trichomes

HL03-P03-00 features two narrow spectral wavelength that maximize energy efficiency aiming to further reduceenergy cost and operational expense



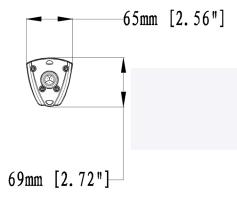






### **Product Dimensions**

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### HL06 - Horti King

Horti-King is a full-cycle top lighting solution for cannabis plants, the simplicity of installation and use make it an ideal solution for achieving high and uniform lighting levels in greenhouse and indoor sole-source applications.

System Efficacy

2.0 μmol/J 2.8 μmol/J

IP Rating

IP65

Dimming

0~10 V Dimming

Certificate

ETL, CE, RoHs

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### **Key Features**



- Designed with tempered glass cover, resistant to all kinds of corrosion from nutrient solutions and pesticide, and resistant to high-pressure water jet cleaning
- Compact design, can minimize shadow effect.
- No additional assembly is required as the fixture is ready for installation and intended use







High PPFD











### **Product Specifications**

Item No	HL06-600
Power	600 W
PAR Output	1148 µmol/s 1806 µmol/s
ePAR Output	1200 μmol/s 1806 μmol/s
AC Input Voltage	100-240 V AC / 100-277 V AC / 277-480 V AC, 50/60 Hz
Radiation Angle	120°
Net Weight	11.6 kg / 25.7 lbs
Gross Weight	12.68 kg / 27.95 lbs
Dimensions	1177 x 145 x 136 mm (46.34" x 5.7" x 5.35")



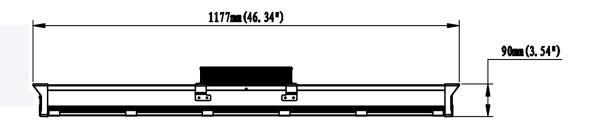
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At the flowering stage of cannabis using full spectrum flowering distribution promotes nutrient growth of cannabis plants, designed with an emphasis on the red and far red range to ensure the quality and quantity of flowering yields With a peak wavelength of 400nm is designed to provide beneficial photomorphogenic responses by creating a mild stress response in plants. Research shows increased THC content in cannabis plants



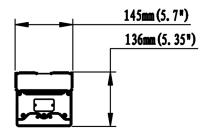


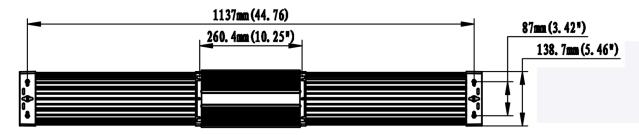




### **Product Dimensions**

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### HL16 - Horti Mars

Horti-Mars commercial LED grow light specializes in all grow stages including propagation, vegetation and flowering. It is an ideal lighting solution for commercial cannabis growing racks

System Efficacy

2.6 µmol/J

**IP Rating** 

IP65

Dimming

0~10 V Dimming

Certificate

ETL, CE, RoHs



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### Key Features



- Slim design and foldable 180 degrees, making it small, compact and very easy to install
- Large luminous area and uniform PPFD distribution
- Super fast heat dissipation and cooling, less light decaying makes long efficiency and lifespan
- Large luminous area and uniform PPFD distribution



High PPFD



IP65







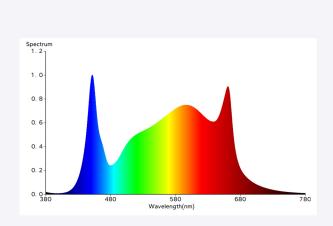




### **Product Specifications**

Item No	HL16-400	HL16-600	HL16-800	HL16-1000
Power	400 W	600 W	800 W	1000 W
PAR Output	1033 µmol/s	1560 µmol/s	2080 µmol/s	2600 µmol/s
ePAR Output	1056 μmol/s	$1584 \mu mol/s$	$2112 \mu mol/s$	$2640 \mu mol/s$
AC Input Voltage	<b>e</b> 10	00-240 V AC / 100-277 V	AC / 277-480 V AC, 50/6	00 Hz
Radiation Angle		1	20°	
Net Weight	4.74 kg / 10.38 lbs	7.2 kg / 15.87 lbs	8.24 kg / 18.17 lbs	10.4 kg / 20.8 lbs
<b>Gross Weight</b>	6.9 kg / 15.18 lbs	10.22 kg / 22.48 lbs	11.34 kg / 24.95 lbs	13.3 kg / 26.6 lbs
Dimensions	586 x 1033 x 62 mm (23.07" x 40.67" x 2.44")	1073 x 1033 x 62 mm (42.24" x 40.67" x 2.44")	1187 x 1033 x 62 mm (46.73" x 40.67" x 2.44")	1187 x 1033 x 62 mm (46.73" x 40.67" x 2.44")



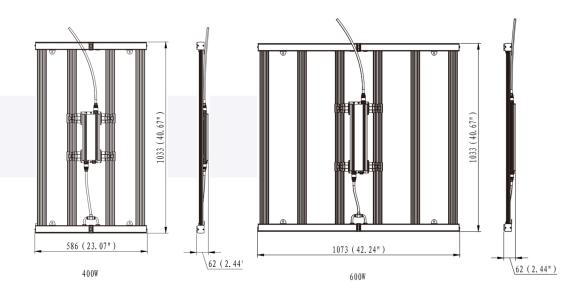


### **Spectrum Solution**

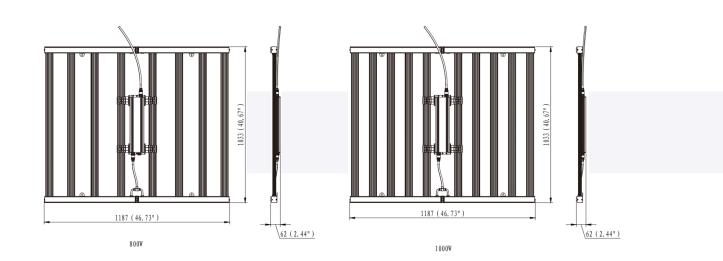
This spectrum offers photon emission across the PAR 400-700nm continuous wavelength range, balancing energy efficiency with quality of light for desired plant response and human work environment







### **Product Dimensions**







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## CONTACT US

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Project	Research	Execute	Make it	
Planning	Analysis	Project	Happen	

We Ensure Quality, Schedule and that We're All Working toward Same Goal

