

# PRODUCT SPECIFICATIONS

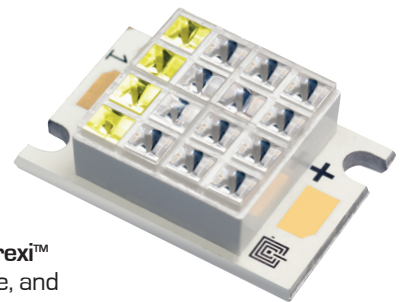
## Surexi™ Horticulture LEDs



## Precision Light. Infinite Possibilities.

### Surexi™ Horticulture LEDs

illumitex has created a patented, breakthrough class of LEDs that is light years ahead of existing products. The **Surexi™ Horticulture LED** package design eliminates the need for secondary optics to control the beam angle while delivering maximum PPF to the targeted plants. While the F1, F3, F6 and F7 Growth Spectra are very effective in spurring photosynthesis, the arrays can be modified to deliver custom spectra to meet your application requirements. The patented package design substantially reduces the total volume of the light engine, thereby allowing luminaire and lamp engineers to create breakthrough lighting solutions with unrivaled optical performance. The **Surexi™ Horticulture LEDs** series also delivers breakthrough uniformity ratios within the specified beam angle, and produces the sharpest cut-offs available. By incorporating illumitex's proprietary Digital Distribution™ beam control technology, **Surexi™** LEDs put more light on the targeted plants than any other LED package.



#### Features

- Revolutionary beam angle control
- Maximum light on plants
- Custom spectra for various species
- Highest delivered PPF per watt
- No need for secondary and tertiary optics
- IP66 wet location rating
- Unrivaled color uniformity
- Lower fixture BOM and assembly costs
- Reduced fixture and lamp size

#### Applications

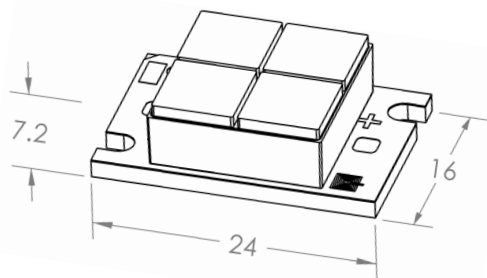
- Greenhouse Lighting
- Vertical Farming
- Indoor Hydroponics
- University R&D
- Pharmacology Development

[www.illumitex.com](http://www.illumitex.com)

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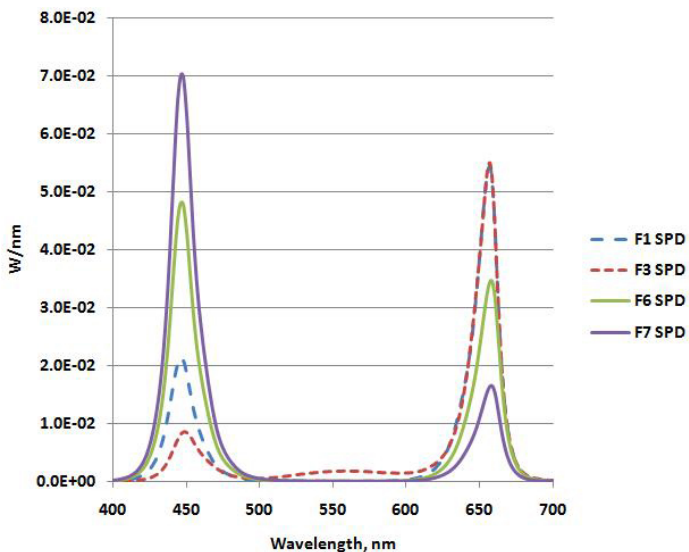
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# Surexi™ Horticulture LEDs

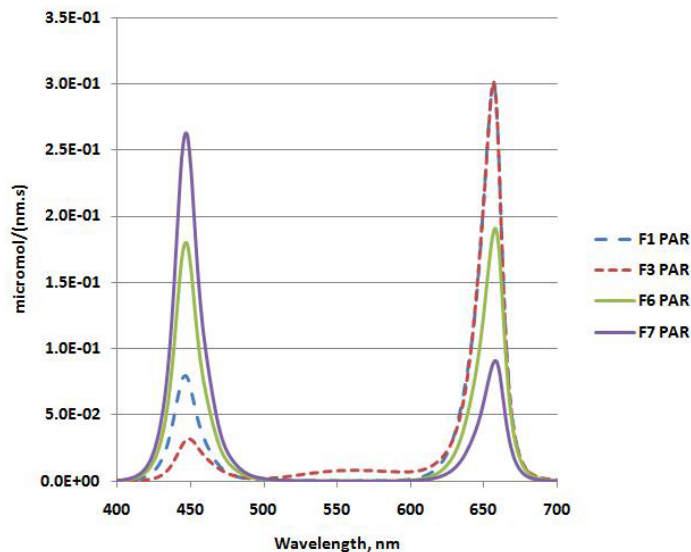


	Surexi F1	Surexi F3	Surexi F6	Surexi F7
Beam Angle (°)	50	50	50	50
Digital Distribution	65	65	65	65
Radiometric Power (W)	1.7	1.6	2.0	2.1
Photosynthetic Photon Flux (μmol/s)	8.5	8.2	8.7	8.5
PPF/W Electrical (μmol/J)	1.7	1.6	1.6	1.4
Forward Voltage (V)	Typical	10	10	11
	Max	11	11	12
Forward Current (mA)	Typical	500	500	500
	Max	600	600	600
Maximum Junction Temperature (°C)	115	115	115	115
Operating Case Temperature (°C)	-40 to 110	-40 to 110	-40 to 110	-40 to 110
Thermal Resistance (°C/W)	2	2	2	2

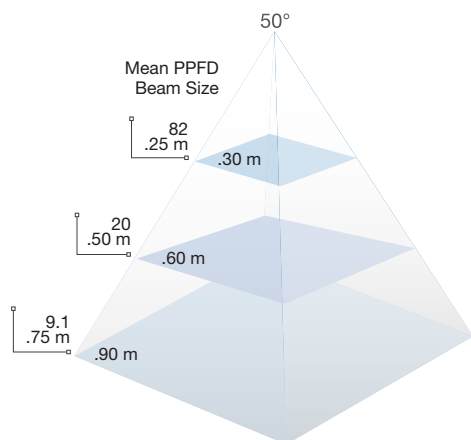
### Spectral Power Distribution



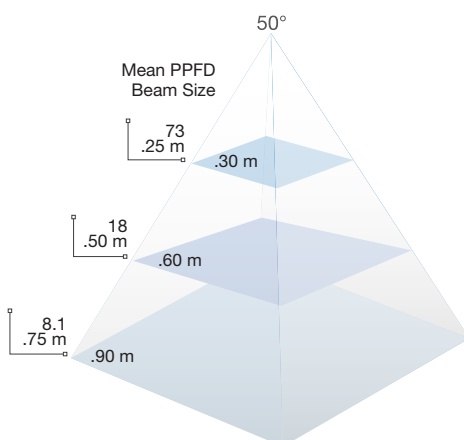
### Spectral Photon Flux Distribution



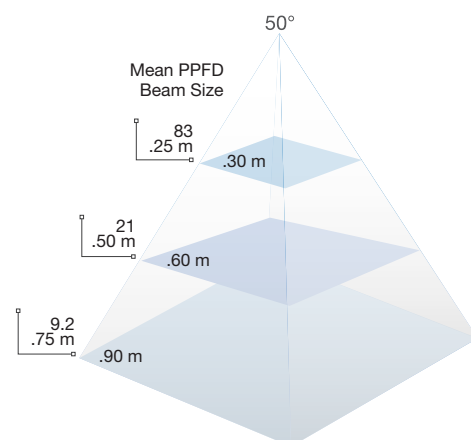
### Surexi™ F1, F7



### Surexi™ F3



### Surexi™ F6



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