

# FL100 SUNLIGHT FIXTURE



# The LED fixture replicating the sunlight

### **Highlights**

- Dynamic control of the light intensity
- · Energy saving
- · Generates a minimum of heat
- · Fixtures can be interconnected
- Innovative solution for growing in layers
- Danish designed, developed and manufactured

The FL100 basis fixture can be equipped with a large range of different diodes, and to accommodate an increasing demand from our customers ranging from plant researchers to garden centers, we created a spectrum designed to replicate the light coming from the sun.

The minimalistic design means easy installation using standard connection technology, and with a minimal shadow footprint. This makes it a natural replacement to the conventional mercury and fluorescent systems used today. New legislation for mercury lamps means this is a good time to invest in the updated and energy-friendly solution that the FL100 Sunlight provides.

#### **Controllable**

One of the major benefits of this fixture is the ability for control. Investing in a controllable LED fixture means you

always have the option to change the light to keep up with new research findings, a new culture/culture stage, or simply to dim the fixture when less light is required.

The FL100 Sunlight boasts a spectrum with an almost perfect match of the rays of the sun – hence the name FL100 Sunlight. The FL100 Sunlight is recommended for growth chamber applications where natural light is important or for supplementary lighting where colour recognition is important; for instance, in a garden center.

#### **Control systems**

The light intensity can be customized for individual crops in combination with LCC4 climate control systems. An alternative to the LCC4 climate control system is a small Control Unit which controls up to 49 fixtures. A further alternative is the LED Light Controller, which can be connected with your climate computer from another provider. That way you can maintain the full control of your LED installation.





# SPECIFICATIONS / FL100 SUNLIGHT FIXTURE

#### **Parameters**

Power input	400 V AC / 50/60 Hz (380 - 480 V AC)	
Nominal current	0.4 A	
Power usage	50 - 150 watt	
Light output	Up to 1.3 µmol/s per Watt*	
Net weight	3 kg	
Dimensions L x W x H	1165 x 67 x 90 mm	
Operating temperature	0 - 40° C	
Light intensity decay	At least 70,000 hours at L80B10	
Coverage	Up to 12 m² (depending on light intensity)	
Light modulation range	From 30 - 100 % intensity	
Green / white content	See table below	
	•	

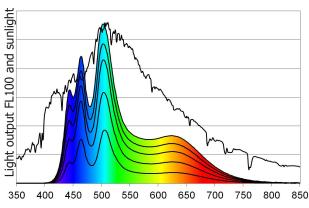
<sup>\*</sup>Depending on light modulation

### % Light in terms of total PAR Light

	Sunlight	FL100 Sunlight
400 - 500 nm	33 %	33 %
500 - 600 nm	41 %	40 %
600 - 700 nm	26 %	27 %

When evaluating possible LED solutions it is important to check on two parameters: Temperature of the LED when the fixture is running and the distribution profile on your plants.

The FL100 Sunlight is designed with an optical lens system that enables a traditional installation plan similar to HPS with homogenous distribution profile on plant level - but with less waste of light.



Spectral distribution of FL100 Sunlight together with a spectral profile of sunlight.

Distributor:

Head office:

Senmatic A/S

Industrivej 8, 5471 Søndersø, Denmark

Phone: +45 64 89 22 11

dgtsales@senmatic.com - www.senmatic.com