



FL100 SUNLIGHT FIXTURE



The LED fixture replicating the sunlight - mainly for vertical farming, climate chambers, garden centers & indoor planting

Highlights

- Dynamic control of the light intensity
- Consistent light on the plants due to an optical lens system (patent pending)
- Spectral distribution similar to the sun
- Innovative solution for growing in layers for vertical farming
- Better plant quality and higher output
- Long lifetime with no reduction of the light output
- Get a specific lighting plan based on your need for lighting
- Consistent light on the plants due to an optical lens system (patent pending)
- The natural replacement for the conventional HPS systems

About FL100 Sunlight

The FL100 basic 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 minimalist design means easy installation using standard connection technology, and with a minimal shadow footprint. This makes it a natural replacement to the conventional HPS systems.

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 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 $\mu\text{mol/s}$ 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 m ² (depending on light intensity)
Light modulation range	From 30 - 100 % intensity
Green / white content	See table below

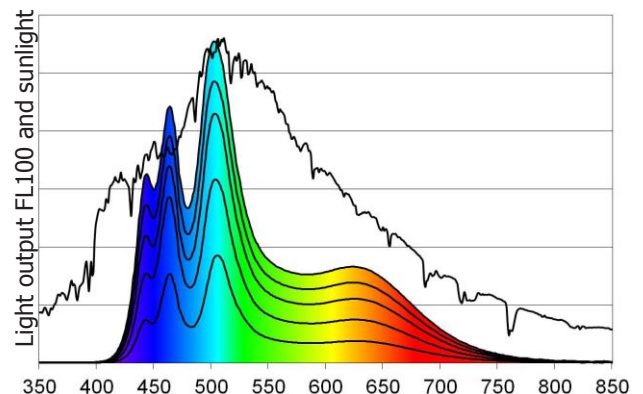
*Depending on light modulation

% 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.

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