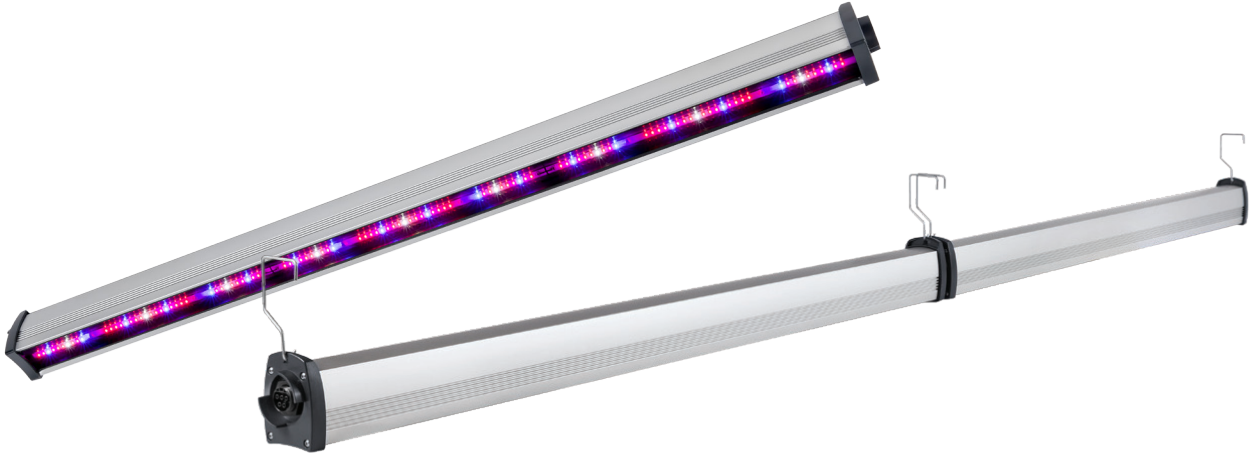




# FL100 GROW FIXTURE



## The LED fixture for modern production greenhouses

### Highlights

- Dynamic control of the light intensity and spectral composition
- Innovative solution for growing in layers
- Energy saving up to 50 %
- Generates a minimum of heat
- Fixtures can be interconnected
- Danish designed, developed and manufactured

The FL100 Grow LED emits light in the photosynthetic active region of the visible light spectrum. Our solutions suit most modern production greenhouses in the world and are designed to withstand the harsh environment of a glass house.

The minimalistic design means easy installation using standard technology, and with a minimal shadow footprint, the FL100 Grow is able to produce good quality plants year round - year after year.

### 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. Simply put, an investment in the FL100 will not leave you with a fixed spectrum but lead to endless possibilities.

The light spectrum can be designed 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.

### Where to use Grow

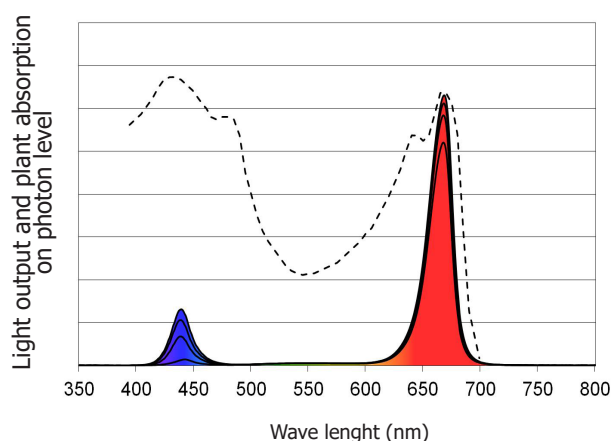
The LED fixture with the Grow spectrum is mainly for open greenhouses. It's big brother FL300 Grow was the first developed LED fixture, and was tested during 4 successive growth seasons at Gartneriet PKM - one of the largest flower growers in Europe. More than 300,000 Campanula were grown under the Grow spectrum, and despite the low electricity consumption the plants were growing very well, and were the same or even on some parameters better than the HPS quality.



## SPECIFICATIONS / FL100 GROW FIXTURE

Parameter	
Power input	400 V AC / 50/60 Hz (380 - 480 V AC)
Nominal current	0.4 A
Power usage	75 - 150 watt
Light output	Up to 2.45 $\mu\text{mol/s}$ per Watt (depending on light modulation)
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 <sup>2</sup> (depending on light intensity)
Light modulation range	From 2 - 14 % blue light of total light
Green / white content	From 1 - 5 % of total light

The FL100 Grow 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 Grow together with a general action spectrum of plants. Spectral distribution for FL100 shown for 2, 6, 10, 14 % blue*

### FL100 Grow - Light Modulation Range

	75W	100W	125W	150W
2 % blue			✓	✓
4 % blue		✓	✓	✓
6 % blue		✓	✓	✓
8 % blue	✓	✓	✓	✓
10 % blue	✓	✓	✓	✓
12 % blue	✓	✓	✓	✓
14 % blue	✓	✓	✓	✓

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