



# FL300 GROW WHITE FIXTURE

- ✓ Control of spectral composition and light intensity
- ✓ Consistent light on the plants due to a patented optical lens system
- ✓ Minimize the use of Plant Growth Regulation (PGR)
- ✓ Control the height of the plant
- ✓ Control the intensity of the taste of herbs and strawberries
- ✓ Long lifetime with no reduction of the light output
- ✓ Well suited for climate chambers, research, garden centres and greenhouses
- ✓ Danish developed and manufactured since 2005



## The LED fixture for special lighting requirements

### About FL300 Grow White

The FL300 Grow white top-light is a 460 watt fixture emitting light in the photosynthetic active region of the visible light spectrum. The Grow White spectrum was developed by growers with special lighting requirements and offers a full continuous spectrum. It is a combination of the Grow and the Sunlight spectrum, and combines the best of both worlds.

This spectrum is used in production areas where a higher photosynthetic activity is required, or by growers requiring supplementary lighting where colour recognition and rapid, healthy growth are key factors.

- The natural replacement for the conventional HPS systems
- Get a specific lighting plan based on your plant's need for lighting
- Enables easy integration with climate control systems

### Controllable spectrum and light intensity

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 FL300 will not leave you with a fixed spectrum but lead to endless possibilities.

### Documented results

Saatzucht Bauer is one of Germany's leading grain research institutes with a particular focus on wheat. Saatzucht Bauer is pursuing the production of new wheat varieties that offer increased yield, but without compromising stability or quality.

The institute evaluated the FL300 Sunlight solution and liked the spectrum, but they also wanted to increase the production rate with no loss in colour recognition. Saatzucht Bauer naturally chose our FL300 Grow White, which is designed for exactly that purpose.

The FL300 Grow White installed at Saatzucht Bauer, offers the full package – an efficient but eye-friendly spectrum, a compact stable fixture and a dynamic controllable fixture.

The institute is pleased with both the light and the spectrum, and plant quality results already look promising.

### Future-proof solution

With the long lifetime, resource savings, and improved plant growth, LED is a solid and future-proof investment.

We will gladly assist you with further guidance and a light plan, and of course with an offer, to provide you the full overview of upgrading your business.



## SPECIFICATIONS / FL300 GROW WHITE FIXTURE - VERSION 1.2

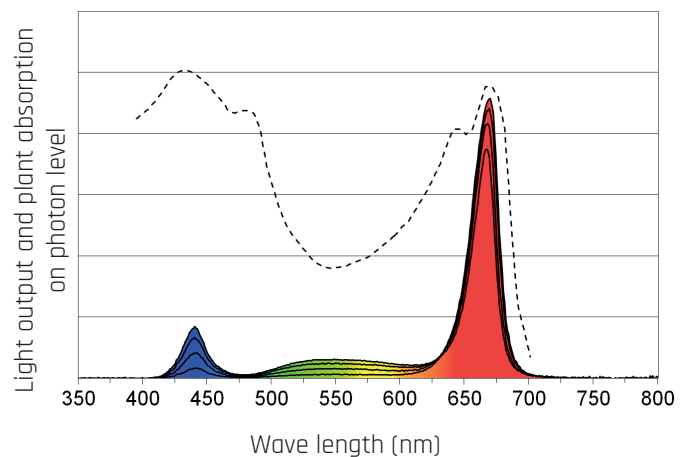
### Technical specifications

Power input:	230V AC / 50/60 Hz
Nominal current:	2.0 A
Power usage:	100 - 460 watt (Adjustable via controller)
Light output from fixture:	2.94 $\mu\text{mol/s}$ per Watt*
PPF:	1352 $\mu\text{mol/s}$
Light output from diodes:	3.23 $\mu\text{mol/j}$
Net weight:	12.4 kg
Dimensions L x W x H:	550 x 230 x 160 mm
Operating temperature:	0 - 40° C
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 3 - 22 % of total light*

\* Depending on the spectral settings

When evaluating possible LED solutions, it is important to check two parameters: Temperature of the LED when the fixture is running and the distribution profile on your plants. The FL300 Grow White is equipped with a patented active cooling system that enables a low LED temperature and therefore a long lifetime that a passive cooled LED fixture does not have.

The FL300 Grow White is designed with a patent pending optical lens system that enables a traditional installation plan similar to HPS with homogeneous distribution profile on plant level - but with less waste of light.



Spectral distribution of FL300 Grow White together with a general action spectrum of plants. Spectral distribution for FL300 shown for 2, 6, 10, 14 % blue.

### FL300 Grow White - Light Modulation Range

	100 W	150 W	200 W	250 W	300 W	350 W	400 W	450 W
2 % blue			✓	✓	✓	✓		
4 % blue			✓	✓	✓	✓	✓	
6 % blue		✓	✓	✓	✓	✓	✓	
8 % blue		✓	✓	✓	✓	✓	✓	✓
10 % blue	✓	✓	✓	✓	✓	✓	✓	✓
12 % blue	✓	✓	✓	✓	✓	✓	✓	✓
14 % blue	✓	✓	✓	✓	✓	✓	✓	

Distributor:

Contact details:

DGT by Senmatic

Phone: +45 64 89 22 11

dgtsales@senmatic.com - www.senmatic.dk

Version: 27092023

Head office:

Senmatic A/S - Industrivej 8 - DK-5471 Sønderød