

# Growing value

Philips GreenPower LED flowering lamp: the energysaving alternative for extending day length when cultivating e.g. strawberries and bedding plants or producing cuttings from chrysanthemums and kalanchoes.

The optimal lighting solution is different for every crop. Based on successful tests in the field, Philips have been developed three different lamps with specific light recipes for different plants.

This lamp is based on advanced LED technology and has been specially developed as a replacement for the incandescent lamp to extend day length to control flowering or to break the winter dormancy of plants such as chrysanthemums and strawberries. With the Philips GreenPower LED flowering lamp you can save over 80% on energy costs.



## Growing value

### **Appropriate light**

Based on successful tests carried out in the field, three different lamps have been developed, each offering a specific light recipe for different plants: 100% far red (FR), a combination of deep red and white (DR/W) and a combination of deep red/white/far red (DR/W/ FR). The white color in the lamp creates a pleasant working light, which also enables us to examine the plants effectively when the lamps are switched on. For optimum control, a specific spectrum of light is required for each plant type. Please contact us if you require help choosing the right type of lamp for your plants.





#### **Higher output**

The Philips GreenPower LED flowering lamp combines an optimum spectrum with a low energy consumption. In contrast with the incandescent lamp, the spectrum and light level of the lamps in this range are geared to the specific light requirements of the plant. As a result, you can save more than 80% on energy consumption compared with an incandescent lamp.

#### Flexibility and convenience

Thanks to the different versions available, the GreenPower LED flowering lamp offers the best possible freedom of installation.

The lamps have a standard E27 fitting and are suitable for direct replacement of the lamps in your existing installation, without the need for any modifications to the installation.

## Proven in practice

Given that light is an important production resource for growers and also represents an important factor in plant research, Philips has been carrying out various practical tests in conjunction with horticultural companies and research experts. These tests provide valuable information that can be used in product design. They also highlight the versatility of LED solutions and the cost-effective opportunities they offer for ensuring optimum yield and plant quality.

## Kwekerij Van oers B.V.

"I have noticed favorable developments in LED lighting for strawberry cultivation through the test with the Philips GreenPower LED flowering lamp. Stem elongation began well or perhaps even better under the DR/W/FR type, which meant that we used light on fewer days. This of course leads to a saving on energy, but what is more important in my opinion is the effect on the plants. We find that the exposure to light is really quite critical. It is no good if you don't have enough light, but at the same time you don't want too much light either. The new lamp enabled us to control the light really effectively and we are now picking the most wonderful first-class strawberries."

Joost van Oers

## Fides B.V.

"Reliable lamps are absolutely essential for producing chrysanthemum cuttings reliably in Uganda in order to keep the stock plant in a vegetative phase. This is particularly important in a country like Uganda where there is a huge shortage of electricity. It is a great advantage that the same effect can be achieved with a lower energy consumption. In addition, the Philips GreenPower LED flowering lamps have proven to be very resilient to the unstable nature of the electricity supply."

John Rutten

## Proefcentrum Hoogstraten

"Here at the Hoogstraten Test Center we carry out a lot of research into the cultivation of strawberries. Over the past year we have been testing the new Philips Green Power LED flowering lamp, and our research shows clearly that the DR/W/FR type can be used as an effective and energy-efficient replacement for the traditional incandescent lamp in the cultivation of strawberries. In our new greenhouse we have decided to use this lamp to light our strawberries and plan to continue our research with it. Over the coming year we will be looking specifically at ways to further optimize the lighting strategy with this lamp."

Tom van Delm





## Specifications for GreenPower LED flowering lamps

Lamp type	Photon flux	Useful life time	Ingress	Energy	Power
		hrs	protection	consumption	factor
	[µmol/s]	90% *	rating	W	cos φ
GreenPower LED flowering DR/W	22	10,000	IP44	18	0.9 ± 00.2
GreenPower LED flowering DR/W/FR	15	7,000	IP44	18	0.9 ± 00.2
GreenPower LED flowering FR	12	6,000	IP44	16	0.9 ± 00.2

The values for service life and photon flux maintenance are valid for an ambient temperature of 25° C and a maximum of 15 switches per day.

\* Lifetime and maintenance values are given at an ambient temperature of 25° C, and a photon flux maintenance of 90%.

## Dimensions of GreenPower LED flowering lamps

<b>→</b>		Product names	Dimensions (in mm)		Lamp	12 NC	EOC
	Ť		Α	В	fitting		8727900
	A	GreenPower LED flowering DR/W	130	95	E27	9290 006 13301	909265 00
		GreenPower LED flowering DR/W/FR	130	95	E27	9290 006 13401	909272 00
		GreenPower LED flowering FR	130	95	E27	9290 006 13201	909258 00

### Certification

Complies with RoHS Quality standard ISO 9001-2000 Environmental standard ISO 14001



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