



## Growing value

**Philips GreenPower LED flowering lamp:** the energy-saving 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.



# PHILIPS

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## 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.

## Florensis Kenya Ltd.

“Two years ago we did a trial with the Philips GreenPower LED flowering lamps in Naivasha, Kenya. At first we were surprised by the colour of the light, but soon we were also impressed with the results. No flower induction and an extreme reduction in energy costs. At the moment we are also rolling it out in other motherstock plants, to improve our cutting quality even more, and reduce in electricity costs.”

Eddy Verbeek

## Fides B.V.

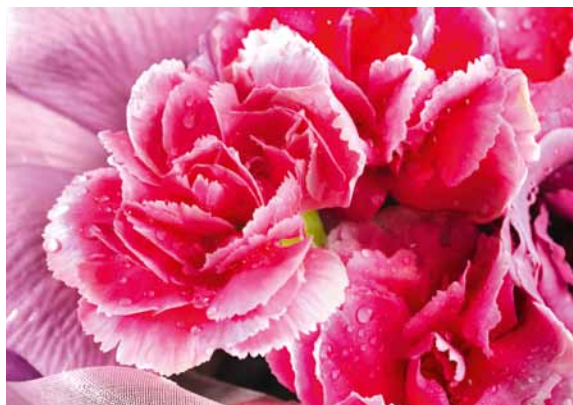
“Reliable lamps are absolutely essential for producing chrysanthemum cuttings reliably in Uganda in order to keep the stock plant in a vegetative phase. This is particularly important in a country like Uganda where there is a huge shortage of electricity. It is a great advantage that the same effect 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



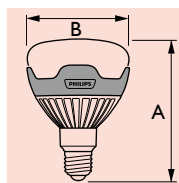
### Specifications for GreenPower LED flowering lamps

Lamp type	Photon flux [ $\mu\text{mol/s}$ ]	Useful life time hrs 90% *	Ingress protection rating	Energy consumption W	Power factor $\cos \phi$
GreenPower LED flowering DR/W	22	15,000	IP44	18	0.9 $\pm$ 0.2
GreenPower LED flowering DR/W/FR	15	15,000	IP44	18	0.9 $\pm$ 0.2
GreenPower LED flowering FR	12	10,000	IP44	16	0.9 $\pm$ 0.2

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



Product names	Dimensions (in mm)		Lamp fitting	12 NC	EOC
	A	B			
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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