

A man with glasses and a dark jacket is shown in profile, looking at a cluster of strawberries in a greenhouse. The background is filled with green foliage and more strawberries.

**PHILIPS**

Horticulture  
LED Solutions

GreenPower LED  
flowering lamp



# The energy-saving alternative for extending day length

Helping your business to blossom





# Philips GreenPower LED flowering lamp

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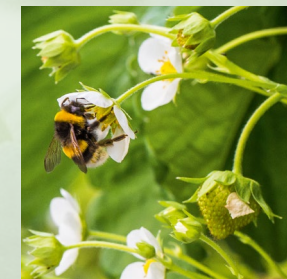
**Energy-saving replacement  
for the incandescent lamp**  
to extend day length and to  
break the winter dormancy.”

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.





“

We are now  
consistently producing  
**more uniform and  
stronger plants.**”

#### 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 enables you 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.**  
(Bedding plants)

“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



**Esmeralda Farms**  
(Cut flowers)

“After four months working with the LED flowering lamps, an outstanding 91% reduction in energy costs, amounting to a total of US\$ 18,000, was achieved. This is equivalent to an energy saving of US\$ 16.50/hour/hectare. It is estimated that the investment will be recouped within the space of 11 months. The long lifetime and improved water resistance of the LED flowering lamps resulted in reduced labor costs, because now there is no need for the lamps to be replaced every day.”

Ruben Orozco



**Brookberries**  
(Strawberries)

“One of the most important advantages of LED lighting compared with incandescent lamps is the spectacular reduction in energy consumption. This was confirmed by the energy savings of 88%. This means a major improvement for our business operations and meets our express wish to grow crops with the environment in mind. The LED flowering lamp with far red light can match the incandescent lamp with even better results. The plants respond well and, for instance, show improved elongation, making early and increased production possible. We are so pleased with the results that a winter crop of the Sonata variety is planned for the coming season.”

Tom van Delm



# Philips GreenPower LED flowering lamp

**Our energy-saving replacement for the incandescent lamp**  
We developed three different LED flowering lamps, each offering a specific spectrum. This to make different light recipes possible, for different plants or different working environments.

### The three different spectra from which you can choose:

- 1) 100% far red **(FR)**.
- 2) A combination of deep red and white **(DR/W)**.
- 3) A combination of deep red/white/far red **(DR/W/FR)**.

The white color in the lamp creates a pleasant working light, which enables you us to examine the plants effectively when the lamps are switched on.

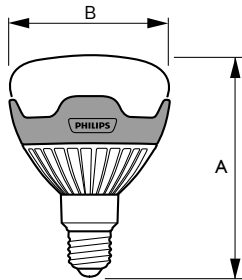
**Ingress protection rating:** IP44  
**Power factor:** cos ϕ 0.9 ± 0.2

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

### Specifications and ordering information for GreenPower LED flowering lamps

Lamp type	Photon flux	Useful life time 90% *	Energy consumption	Dimensions (in mm)		12 NC	EOC
	μmol/s	hours	W	A	B	9290 006	8727900
GreenPower LED flowering DR/W	22	15,000	18	130	95	13301	909265 00
GreenPower LED flowering DR/W/FR	15	15,000	18	130	95	13401	909272 00
GreenPower LED flowering FR	12	10,000	16	130	95	13201	909258 00

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%.







## More than a product, it's a complete solution

The Philips GreenPower LED flowering lamp offers all the proven benefits of LED technology and – as a complete solution – much more besides.

- Quick and easy installation
- Support and advice from technical experts
- Advice on which lighting strategies are best for your situation



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Document order number: 3222 635 68750  
01/2015  
Data subject to change

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