PHILIPS

Horticulture LED Solutions

GreenPower LED toplighting compact

The easy switch to LED toplighting

As a grower, you are probably familiar with the benefits of using LED lighting in greenhouses. It will bring you higher yield, better quality crop and improved predictability. The Philips GreenPower LED toplighting compact allows you to easily switch to LED lighting, replacing your existing HPS set-up, or when you are building a new installation.

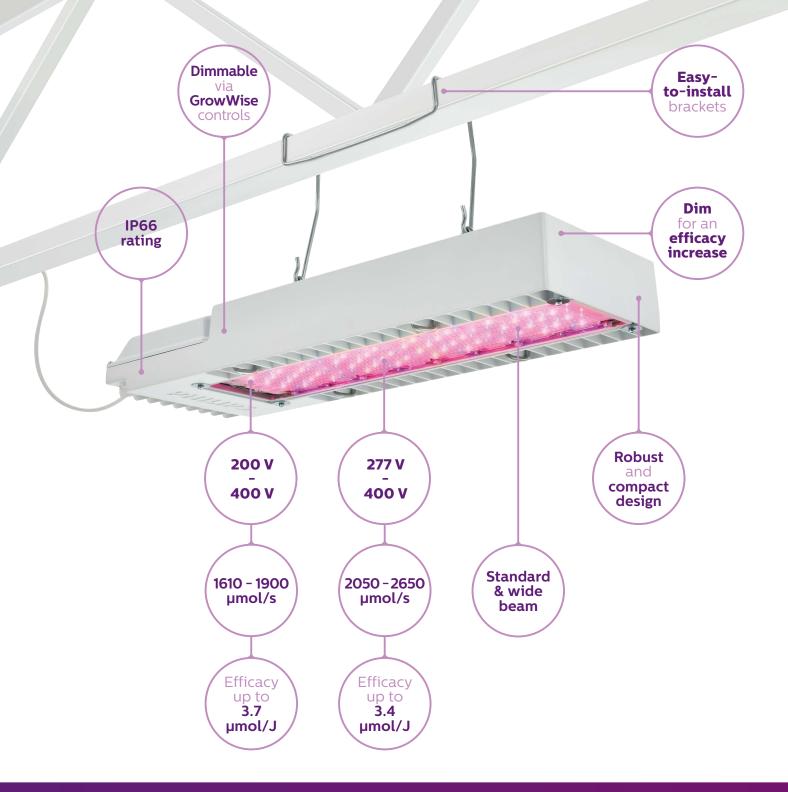
The high light output of up to 2650 μ mol/s or high efficacy of up to 3.7 μ mol/J helps you effectively optimize crop growth, enhance crop quality and cut operational costs. With a wide beam or standard beam you can cater for any greenhouse height and the dimming possibility allows you to dim the grow lights to 10% of its maximum output to increase flexibility.

The capabilities of the Philips GreenPower LED toplighting compact bring benefits to growers in many different segments:

- Vegetables and fruits like tomatoes, cucumbers, lettuce and strawberries
- Cut flowers and potted plants like roses, chrysanthemums and orchids
- Medicinal cannabis

Key benefits

- Go-to product for an easy HPS 1-to-1 LED replacement with a plug and play installation to save time and money
- Light output up to 2650 µmol/s
- Efficacy up to 3.7 µmol/J to save overall energy costs
- Dimmable; reach 4.0 µmol/J efficiency when dimming to 50%
- Two beam shapes for desired uniformity or optimal efficacy
- The range comes in 200-400V (520W) and 277-400V (645-800W) light recipes





Use Philips GreenPower LED toplighting compact for:

- Tomatoes
- Cucumbers
- Lettuce
- Leafy greens
- Strawberries
- Medicinal cannabis

Product specifications

Philips GreenPower LED toplighting compact 200-400V

Beam	Spectral version Spectral code		Deep Red/Blue types	Deep Red/White type	Deep Red/White/Far Red types ¹			
			LB	LB	МВ	VSN2	FR_1	FR_RSE
Standard beam	Typical photon flux	µmol/s	1900	1800	1750	1610	1650	1650
	Power consumption (max)	W	520	520	520	600	520	520
	Efficacy	µmol/J	3.7	3.5	3.4	2.7	3.2	3.2
	Efficacy at 50% (dimmed)	µmol/J	4.0	3.8	3.7	3.0	3.5	3.5
Wide beam	Typical photon flux	µmol/s	1800	1700	1650		1600	
	Power consumption (max)	W	520	520	520		520	
	Efficacy	µmol/J	3.5	3.3	3.2		3.1	
	Efficacy at 50% (dimmed)	µmol/J	3.8	3.6	3.5		3.4	

Philips GreenPower LED toplighting compact 277-400V

Beam	Spectral version		Deep Red/Blue types			Deep Red/White types					Deep Red/	Deep Red/White/Far Red types ¹		
	Spectral code		LB		LB		МВ			FR_1		FR_RSE		
Standard beam	Typical photon flux	µmol/s	2650	2400	2200	2600	2350	2150	2550	2350	2100	2250	2050	2250
	Power consumption (max)	w	780	700	645	770	720	645	780	730	645	710	660	710
	Efficacy	µmol/J	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.2	3.3	3.2	3.1	3.2
	Efficacy at 50% (dimmed)	µmol/J	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.5	3.6	3.5	3.4	3.5
	Typical photon flux	µmol/s	2250			2100			2075			1900		
Wide	Power consumption (max)	W	710			680			675			635		
	Efficacy	µmol/J	3.2			3.1			3.1			3.0		
	Efficacy at 50% (dimmed)	µmol/J	3.5			3.4			3.4			3.3		

Light distribution		Standard Beam: beam angle 120°	Power factor		0.98	
		Wide Beam: beam angle 150°	Total Harmonic Distortion	%	< 15	
Dimmable ²		10% - 100%	Rated Average Lifetime ³	hrs	36.000 - L95	
Input voltage (50-60 Hz) VAC		200 - 400V 277 - 400V	Ingress protection rating		IP66	
		,	Cooling		Passively cooled	
Dimensions	cm	Length: 72 Width : 24 Height :9	Approval marks		CE, ENEC, RoHS, UL/CSA, EAC, RCM, PSE	
Weight	kg	10.5 (incl. module brackets)	Connector		Wieland RST20i3 Green	

Notes

¹The published value represents the total photon flux from 400-800nm

² All products are dimmable to 10% of the photon flux/power consumption when combined with a GrowWise control system.
³ Lifetime and maintenance values are given at ambient temperature of 25°C / 77°F.

All measured lifetimes are industry standard measurements indicating average length of operation and not a performance claim specific to any individual product.

Legend

DR = Deep Red

B = Blue W = White

FR = Far Red

LB = Low Blue

MB = Medium Blue

VSN2 = Vision - broad spectrum

RSE = Rose Module



- ...and:
- Chrysanthemums
- Cut roses
- Potted roses
- Lysianthus
- Orchids

More light, less heat, **better control**

New greenhouse or renovation

Due to our broad assortment and dimming opportunities, you will be able to install any light level in a new greenhouse connecting 2, 3, or 4 Philips GreenPower LED toplighting compact on a trellis or use C-profiles instead. You can opt for a 645 to 780W grow light with an optimized performance, balancing light output and efficacy. Or you can choose one of our 520W solutions, utilizing half the power consumption of an HPS system.

Philips GreenPower LED toplighting compact has been designed for easy installation. Specific snap brackets are available for safe operation distance from your screens. Philips GreenPower LED toplighting compact has no inrush current when switched on, this simplifies installation of the electrical cabinet. The high powerfactor of 0.98 reduces the load on cabling and transformers.

1-to-1 HPS replacement

Philips GreenPower LED toplighting compact fits seamlessly in existing HPS infrastructure and trellis constructions; even between sprinklers. There are two smart options: either you choose to replace your existing HPS installation with a similar light output and consume 50% less power, or you choose to utilize the maximum CHP power available and increase your light output to 150% compared to current light level. In all cases you can make the easy switch to full LED toplighting or create a hybrid LED and HPS lighting system on your current set-up. Philips GreenPower LED toplighting compact comes in a standard and wide beam. It provides optimal efficacy and excellent light distribution and uniformity in most greenhouse configurations including high wire-crops. The passively cooled grow light produces much less radiant heat, putting you in control over your greenhouse climate. The compact, white housing intercepts little sunlight and comes with an IP66 ingress protection rating.

GrowWise Control System enables dimming

Philips GreenPower LED toplighting compact can be dimmed to 10% of its maximal photosynthetic photonflux in combination with the GrowWise Control System to improve the efficacy. This allows growers to dim the lighting for reasons of additional energy saving during peak hours or to mimic the dusk to dawn interval and enhance results for specific crops.

Dimming will work reliable without the need of specific control cables. The GrowWise Control System can be used standalone or can be connected and controlled via your climate computer.



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