



PHILIPS

Horticulture
LED Solutions

GreenPower TLED



**Improve your
business results** and
save energy

Helping your business to blossom



Philips GreenPower **TLED**

“

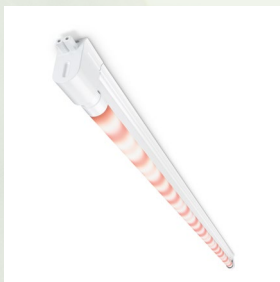
On top of energy savings
these parameters bring more
profit!”

In tissue culture energy can be saved and yield can be improved by upgrading from fluorescent to LED lighting. Philips' GreenPower TLED offers an affordable and convenient way to make the switch to LED.

GreenPower TLED is an effective and efficient alternative to traditional fluorescent lamps, delivering energy savings up to 70% compared to fluorescent lighting.

LED can improve several growth parameters:

- Higher multiplication factor
- Better rooting quality
- Higher survival rate in rooting
- Improved/controlled stretching process
- Accelerate hardening phase
- Improved survival rate in greenhouse due to more hardened plants
- Shortening of the total growth cycle





2-11-15
Do not use with dimmers
This luminaire has been modified and is
only suited for Green Power TLED lamps
Only apply in dry indoor environments

Refer to:
Application
Guide TLED

“

It shortens
the total growth
cycle”



On top of energy savings these parameters bring more profit!”

In tissue culture, having the right level and mix of light in each phase of the process can make all the difference. A number of light-related factors contribute to specific plant growth and development, for instance: light intensity, light color spectrum, and hours of light exposure.

Light Recipes

To improve growth performance dedicated light recipes are needed. GreenPower TLED is available in six different versions, each one featuring a specific light recipe based upon Philips' years of experience in horticultural lighting.

Reliable and safe

GreenPower TLED is a reliable and safe solution for tissue culture growers requiring light levels of up to 100 μmol in relatively low-humidity environments. It comes with the renowned assured quality of the Philips brand, backed up by a solid 3-year warranty. And it is glass-free, which means there are no breakage concerns. GreenPower TLED has a 25,000 hour lifetime which reduces the need for re-lamping.

Less heat

As LEDs produce less heat than conventional lamps, cooling costs go down with GreenPower TLED. Less heat radiation allows tissue culture growers to light closer to the plants, which gives them the option of having more layers on the same surface area.

Upgrade to LED

With GreenPower TLED, switching to LED is easy. Growers replace their existing T5 or T8 fixture with our dedicated batten – and then click the GreenPower TLED light source into place. Direct replacement, without the need for any adjustment.

The perfect light – and more

At Philips, we don't just offer top-quality products – we share our expertise with our customers as well. With our in-depth knowledge of the relationship between light and plants we can advise growers how to optimize their culture with LED. At the same time we can support them with installation guidance and light plans.

Philips GreenPower TLED

An outstanding proposition all round

No matter what light recipe version is chosen, GreenPower TLED's high light uniformity gives tissue culture growers the added reassurance that their plants will receive the same amount of light wherever they are placed on the shelf – in the middle or on the edge – and so ultimately will all be of the same high quality.

**Easy
install**

70%

energy saving compared
to fluorescent
lighting

25,000

hours lifetime
with 70% of initial
photon flux

A complete solution

LED can improve several growth parameters:

- Higher multiplication factor
- Better rooting quality
- Higher survival rate in rooting
- Improved/controlled stretching process
- Accelerate hardening phase
- Improved survival rate in greenhouse due to more hardened plants
- Shortening of the total growth cycle

Specifications and ordering information

Specifications

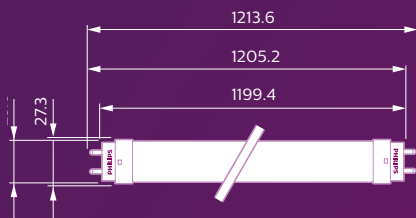
Product	Photon flux (typical)	Power consumption (typical)	Lifetime	Ordering code
	$\mu\text{mol/s}$	W	hours	12NC
White (W)				
GreenPower TLED W 20W MB 220-240V 50/60Hz	24	20	25,000	9290 008 43103
GreenPower TLED W 20W HB 220-240V 50/60Hz	25	20	25,000	9290 008 43203
Deep red/white (DR/W)				
GreenPower TLED DR/W 16W LB 220-240V 50/60Hz	23	16	25,000	9290 008 43303
GreenPower TLED DR/W 18W MB 220-240V 50/60Hz	24	18	25,000	9290 008 43403
Deep red/white/far red (DR/W/FR)				
GreenPower TLED DR/W/FR 15W LB 220-240V 50/60Hz	21	15	25,000	9290 008 43503
GreenPower TLED DR/W/FR 17W MB 220-240V 50/60Hz	22	17	25,000	9290 008 43603

Accessoires	
GreenPower TLED batten	9290 008 71206

Lifetime and maintenance values are given at an ambient temperature of 25 °C, and a photon flux maintenance of 70%.

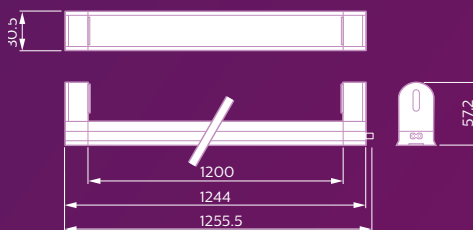
Dimensions

GreenPower TLED



Dimensions in mm

GreenPower TLED batten



Compliances

- IP20
- Approval mark ENEC
- EN 55015
- RoHS-compliant
- Quality standard ISO 9001-2000
- Environmental standard ISO 14001

GreenPower LED offers a choice of six light recipes with differing content of blue, deep red, far red and white:



GreenPower TLED
W 20 W MB



GreenPower TLED
W 20 W HB



GreenPower TLED
DR/W 16 W LB



GreenPower TLED
DR/W 18 W MB



GreenPower TLED
DR/W/FR 15 W LB



GreenPower TLED
DR/W/FR 17 W MB



More than a product, it's a complete solution

The Philips GreenPower TLED 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



© 2015 Royal Philips N.V. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

Document order number: 3222 635 67231
01/2015
Data subject to change

For more information about
Philips horticulture LED Solutions visit:
www.philips.com/horti

Write us an e-mail:
horti.info@philips.com

Or tweet us:
[@PhilipsHorti](https://twitter.com/PhilipsHorti)