HYPERION

Grow Lights

The World's most productive LED grow light

Specifically designed to deliver greater returns for commercial growers

HYPERION™
1750

KEY FEATURES:

- Up to 1800 µmol/s and 1000 µmol/s light output options
- Equivalent to 1000w and 600w sodium grow lights
- Up to 40% energy saving v sodium
- Up to 3.0 µmol/ joule efficacy (after driver and optical losses)
- Low shading and installation costs
- 100% LED or hybrid with HPS installation
- IP66 rated for full pressure power wash cleaning
- IP68 rated fan on Hyperion 1750. Dust tight and prolonged immersion
- Range of proven spectrums for different applications
- Tailor-made spectrum to suit grower requirement
- 5 year guarantee/ 25,000 hours
- Leasing options

OPTIONS:

- Reflector accessory to ensure uniformity at the edge of installations

Hybrid HPS + LED

ONE FOR ONE EQUIVALENT WITH 1000W AND 600W SODIUM GROW LIGHTS

Being 1:1 equivalent with existing 1000w and 600w sodium grow lights makes the Hyperion easy to install and to use for growers, installers and greenhouse builders.

BENEFITS:

- Fewer units per install than competitor LED fixtures
- Less overall shading than competitor LED fixtures
- Lower installation costs
- Install on existing trellis to avoid c-profile cost and shading
- Greater flexibility for lighting design and positioning
- Even light distribution possible between 5m poles

100% LED

HOW MANY UNITS?

Additional light per m²	Hyperion 1750 units	Hyperion 1000 units
µmol	Per Ha	Per Ha
50	285	500
100	570	1000
150	855	1500

HYBRID LIGHTING TRIALS

Increasingly, growers are experimenting with LED lighting, which provides light wavelengths that are better attuned to plant growth, produce less heat and uses less energy than HPS.

Even so, concerns over the cost and performance of LED lighting and the risk of replacing all HPS continue to hold back some growers from investing.

The main concern has been around whether it is economical to invest in LED lights, and what return on the investment can be delivered. One approach is to adopt a hybrid solution, where LED grow lights are added to existing HPS to increase light intensity and give the benefits of both technologies. Now, trials with multiple growers have clearly demonstrated the return on investment when supplementing HPS with LED.
In some cases, yields have increased by as much as 35%

TRIALS AND RESEARCH

In 2016, Plessey conducted a major trial of LED grow light technology, with four of the Netherlands' leading growers. The trial, managed by Plessey's Head Agronomist Maarten Klien, ran from November 2016 to June 2017 and looked at plants grown under HPS lights alone compared to those grown under a mixture of HPS and LED. This 'hybrid' installation is potentially an attractive choice for growers who want the benefit of extra light but don't want to completely replace their existing HPS lights.

The growers involved in the trial were Gerb. Koot (part of the Prominent Tomato Growers association), Slijkerman Kalanchoe, Villa Gerbera and Together2Grow. The four companies trialled Plessey LED lighting alongside their existing HPS lighting systems for growing their respective crops of tomatoes, cut flowers and ornamental pot plants.

Full details of the Plessey LED grow light trials can be found by visiting:
www.plesseysemi.com/documents/led-grow-light-white-paper/

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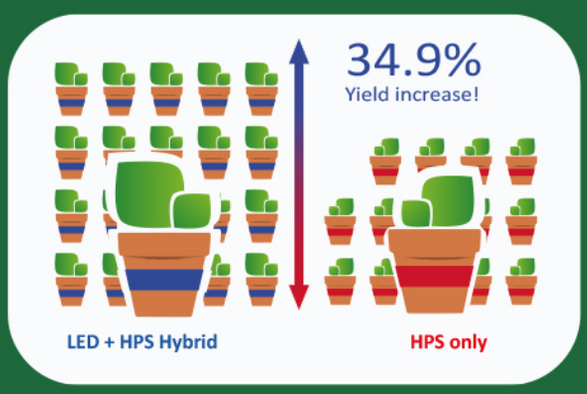
Maarten Klein – Plessey's Head Agronomist inspecting a tomato crop.

Fedor Van Veen & Bernard Zuidgeest – Together2Grow owners

Geert Koot- Member of the Prominent Tomato Growers Association



Comparison: LED + HPS Hybrid vs HPS only

plessey