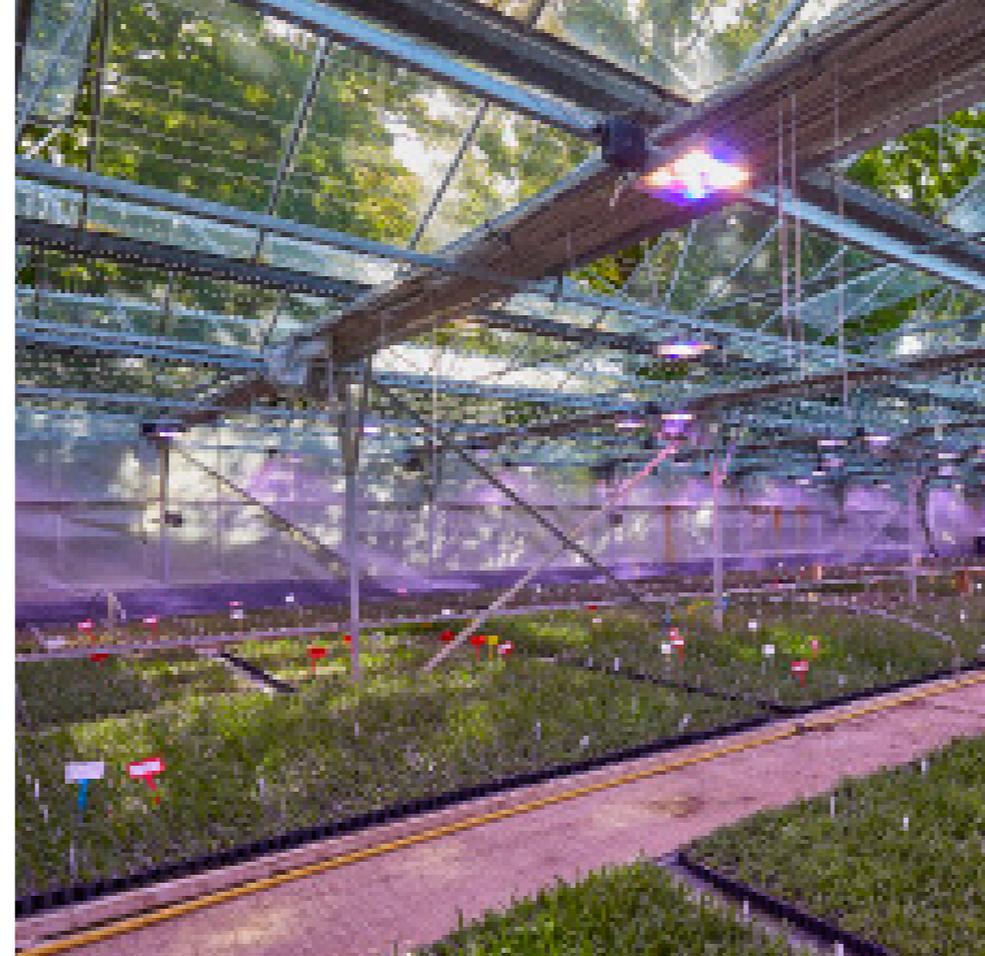


**Broad**  
Spectrum  
LED Grow  
Lights

**1-for-1**  
Toplighting  
Replacement

**250,000**  
Hours Lifetime  
Maintenance-free



## Grow with INDO

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info@indolighting.com

INDO Lighting Ltd  
Units 18-19 Chancerygate  
Business Centre  
Southampton SO15 0AE  
United Kingdom



**INDO**  
fresh thinking  
trusted technology

## INDO ELEMENT

Save more, grow more, pay less  
Europe's first Direct Drive® LED Grow Light

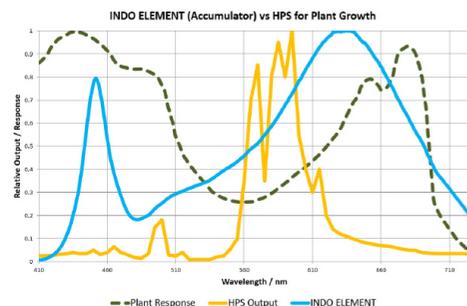
**INDO**

[www.indolighting.com/grow](http://www.indolighting.com/grow)

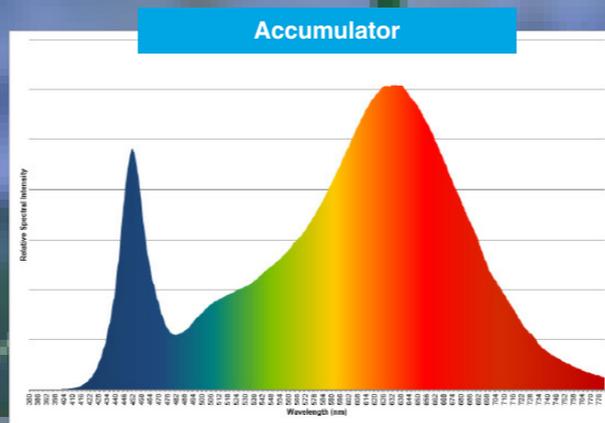
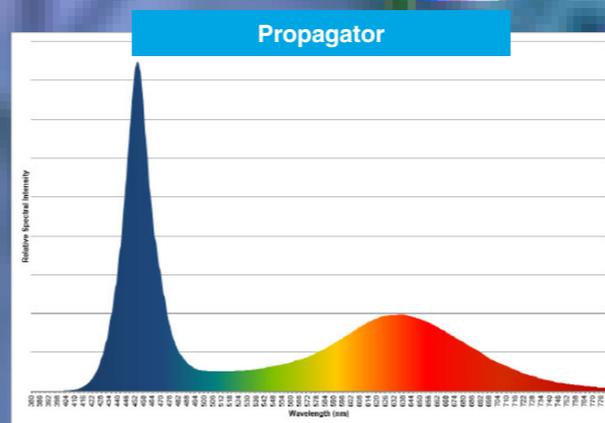
[www.indolighting.com/grow](http://www.indolighting.com/grow)

# Key Features & Benefits

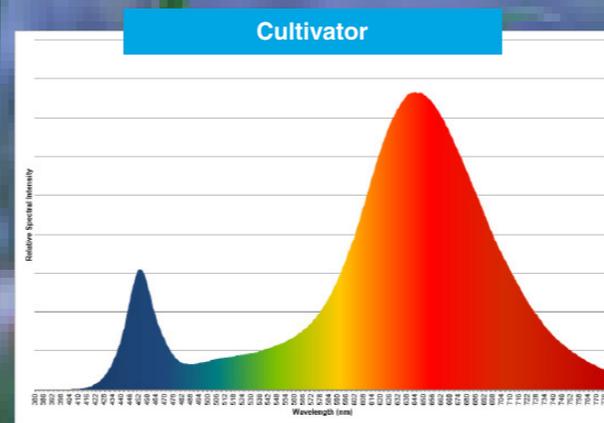
- 1 Award-winning Direct Drive® LED technology delivers market-leading lifetime and reliability
- 2 Up to 250,000 hours, maintenance-free operation
- 3 Reliable, phosphor-converted LED technology guarantees consistent colour spectrum throughout product life
- 4 Easy to install, 1-for-1 toplighting replacement of HPS lanterns



- 5 Carefully tailored, broad spectra optimised for photobiological response and a better match to plant requirements than High Pressure Sodium (HPS) and traditional LED technology. See graph (below left)
- 6 50% energy saving compared with HPS
- 7 Passively cooled, ultra-lightweight fitting (from just 3kg)
- 8 Fully dimmable to meet Photosynthetic Photon Flux Density (PPFD) requirements
- 9 Low profile, utilitarian product form reduces natural light obstruction
- 10 Inherently low inrush current enables single switch control and no nuisance tripping



	150 - 215W	300 - 430W	465 - 645W
Equivalent HPS	up to 400W	up to 600W	up to 1000W
PPF light output (µmol/s)	304 - 512	608 - 1025	912 - 1535
YPF weighted light output (µmol/s)	279 - 457	560 - 913	840 - 1367
Efficiency (µmol/j)	up to 2.38		
Input voltage	220-240 VAC		
IP Rating	IP66		
Dimmable range (DALI compatible)	10-100%		
Lifetime	100,000+		



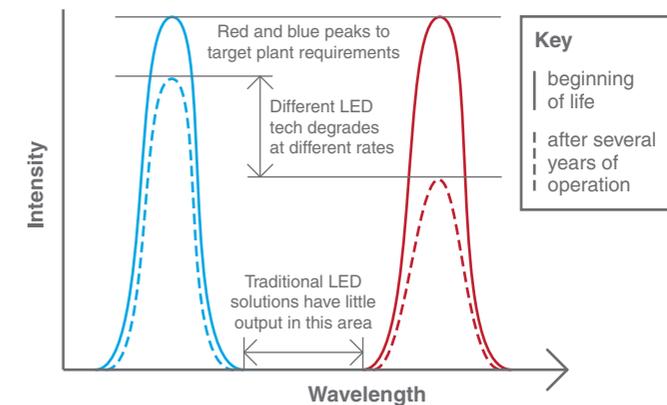
# What makes the INDO ELEMENT unique?

## Improved reliability

Traditional LED grow lights (like most LED units) contain a driver that typically fails after 4-6 years, possibly earlier in high temperature environments, such as glasshouses. By contrast, INDO ELEMENT is Direct Drive®, meaning no driver is required. A range of benefits such as superior thermal management, lighter weight fixtures and rock-solid reliability all result from this award-winning LED technology

## Broad spectrum, long-term consistency

ELEMENT uses only blue LEDs with a special phosphor coating to create a broad-spectrum output. Our light mixes are carefully developed to induce optimum crop response. Other, tuneable based fixtures use a mixture of red and blue LED chips that offer narrow peaked spectrums and degrade at different rates over time – negatively impacting long term crop yields and plant response. See graph (above right)



## Market-leading lifetime

Combined with rigorous technical design and component quality, these product features work together to give growers an LED investment that performs consistently for up to 250,000 hours, largely maintenance free and without any hidden costs.