



Horticultural & Greenhouse LED Lighting Solutions

Andromeda™ Grow Luminaires





Introducing

Empyrean Lighting™

Established in 2009, Empyrean Lighting™ is an award winning, Australian based company. We design, manufacture, and supply high quality LED luminaires and control for a variety of niche industries and applications.

Empyrean Lighting™ has purpose designed, in consultation with industry leaders and post-secondary experts, a range of grow luminaires. Our Andromeda™ Grow series provides excellent energy savings, longevity, unprecedented lighting levels and comprehensive control, allowing our clients to achieve significantly reduced energy and maintenance costs, while ensuring impressive yields.

Horticultural & Greenhouse Lighting

Andromeda™ LED Grow Light Luminaires

Andromeda™ Grow luminaires, matched with our proprietary software control allow growers to control the spectra of a single luminaire, a crop area, a greenhouse or an entire facility from a single program.

Further our low lamp circuit power (200W & 400W) and high efficacy (3.0 $\mu\text{mol}/\text{J}$ post optics) means less energy use and higher PPFD values.



Getting the Facts

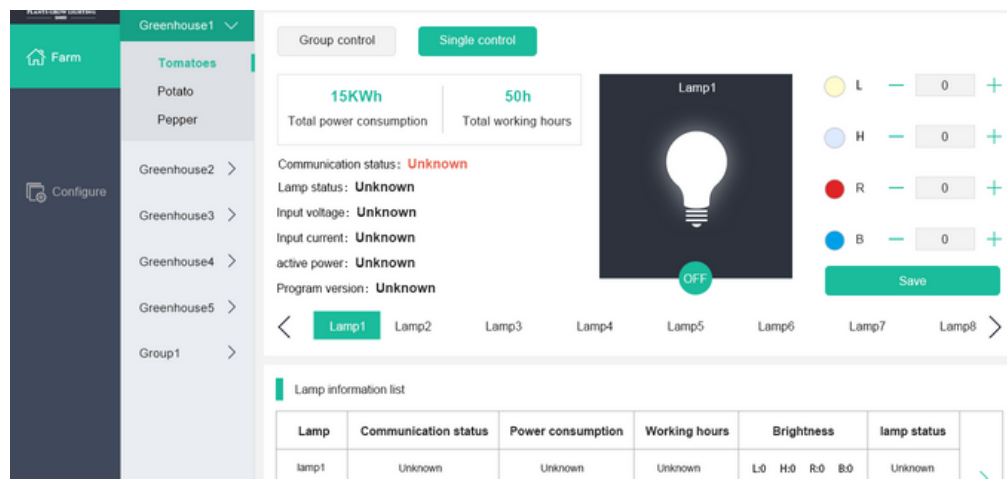
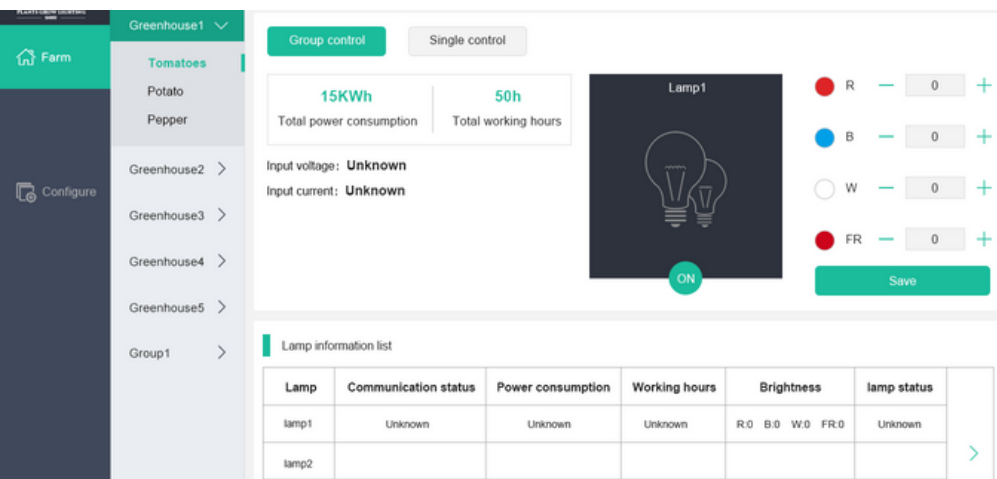
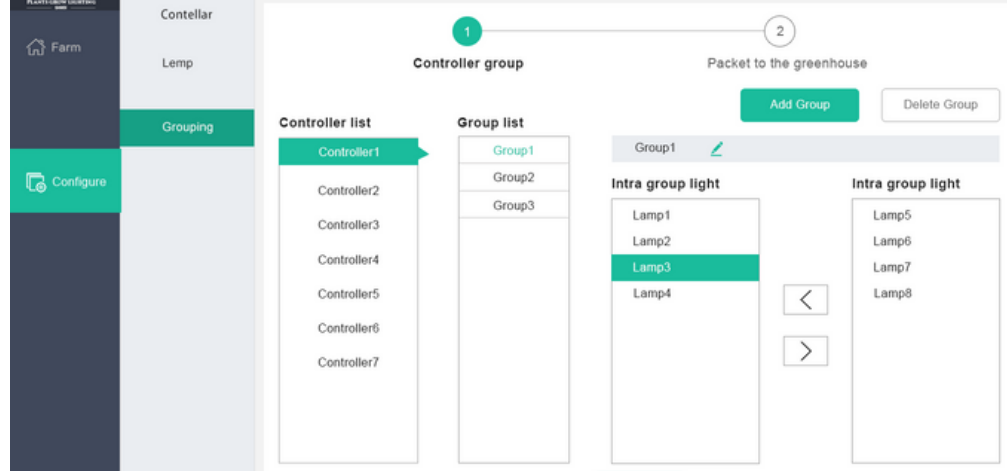
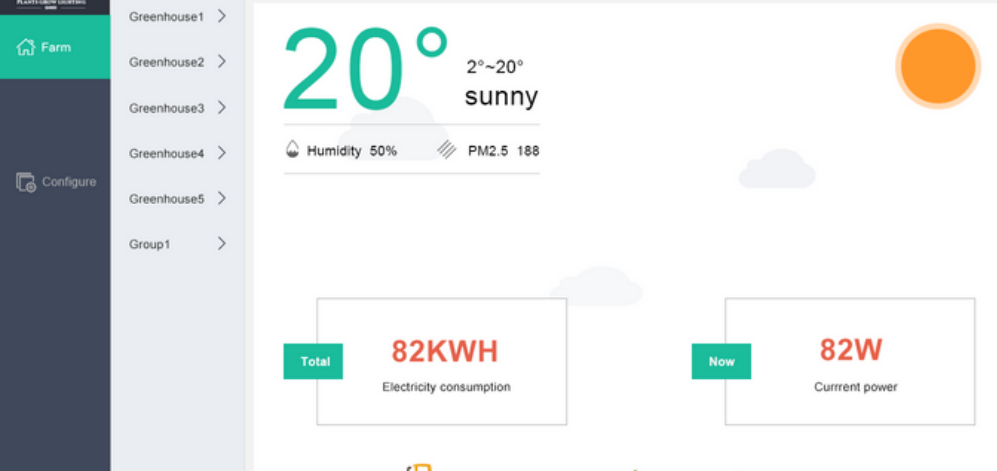
Benefits of Andromeda™ Grow Luminaires

- 2 power options – 200W and 400W
- Full spectrum, using latest grow diode technology; or
- Custom spectrum/spectra as specified by grower.
- Full spectral and intensity control from single luminaire to entire facility.
- Easy to use and intuitive control software; or
- Ability to provide units with compatibility to other control protocol (DALI, DMX512).
- Robust luminaires with a mining pedigree – all units IP66 and IK10, salinity tested and 3G vibration certified.
- Dimming (0%-100%) on all versions.
- Low weight – 5kg for 200W, 10.4kg for 400W
- Our patented ceramic diode seats and pixel rail technology guarantee necessary thermal management, even in high ambient environments.



Photosynthetic Photon Flux Density (PPFD)

Andromeda™ Grow (6 Luminaires @ 400W each)	Andromeda™ Grow (8 Luminaires @ 400W each)	MOUNTING HEIGHT	Competitor (6 Luminaires @ 646W)
1066	1421	1' (0.30m)	1085
1012	1361	1.5' (0.46m)	1040
947	1287	2' (0.61m)	990
880	1204	2.5' (0.76m)	940
823	1130	3' (0.91m)	895
715	987	4' (1.22m)	805
627	864	5' (1.52m)	725
2,400W	3,200W	Total system Power Use	3,876W
3.0 $\mu\text{mol/J}$	3.0 $\mu\text{mol/J}$	Efficacy (post optics)	2.6 $\mu\text{mol/J}$



How we guarantee the best results

Control Software

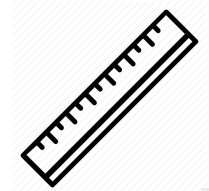
- Control a single luminaire
- Control an entire facility
- Full spectral control
- Pre-sets for entire growing seasons.
- Full reports on energy use, run times, spectra mapping

PRODUCT CODE

PRODUCT IMAGE

DATASHEET | SCHEMATIC

- Andromeda-C-Grow-FW-200W (Full Spectrum)
- Andromeda-C-Grow-RB-200W (Red/Blue)



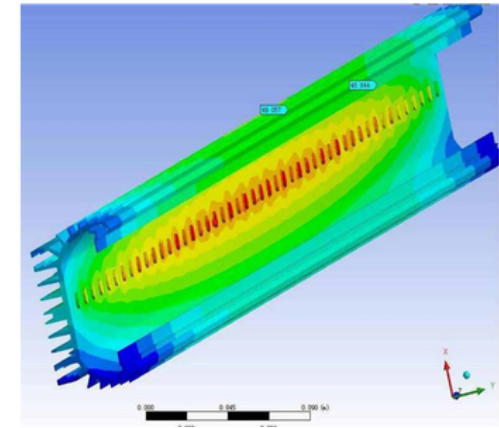
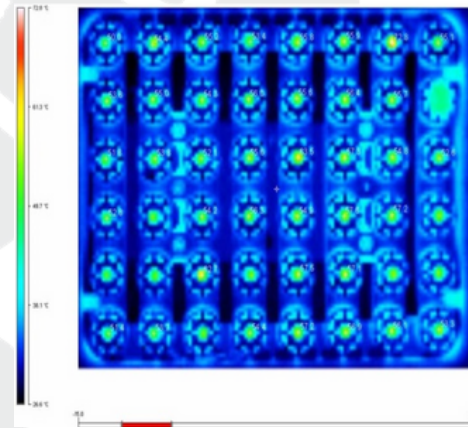
- Andromeda-C-Grow-FW-400W (Full Spectrum)
- Andromeda-C-Grow-RB-400W (Red/Blue)



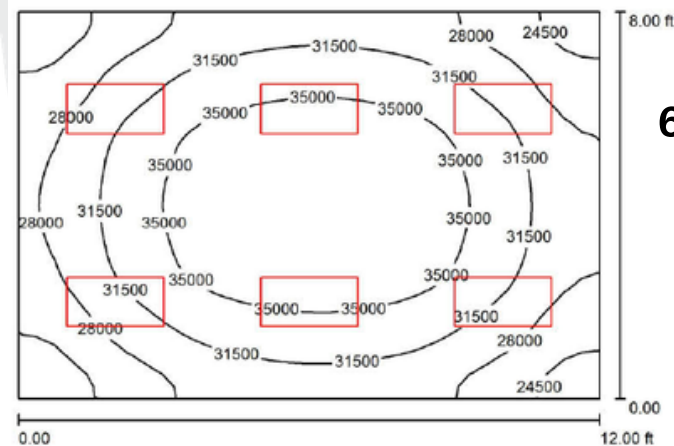
DIALux Lighting Design

Heat Distribution

Andromeda Grow vs Other LED Luminaires



Our patented ceramic diode seats and pixel rail technology guarantees effective and uniform thermal management.

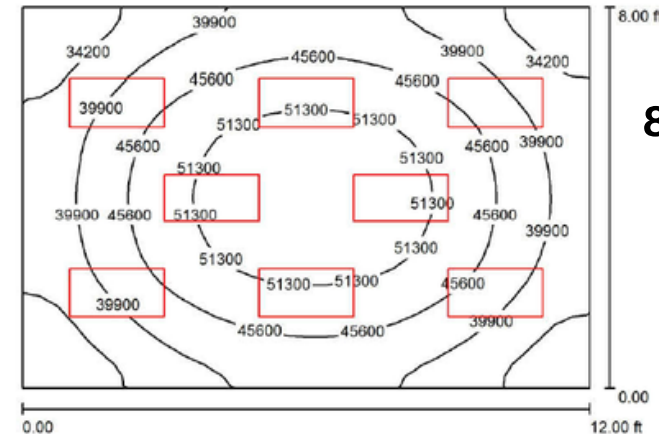


**6 x Andromeda™
Grow
Luminaires in
Room**

Height of Room: 9.000 ft, Mounting Height: 9.000 ft, Light loss factor: 1.00

Values in Lux, Scale 1:32

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$
Workplane	/	31489	21111	38283	0.670
Floor	10	22398	16384	26472	0.732
Ceiling	70	8311	5630	9351	0.677
Walls (4)	50	18933	7014	40889	/



**8 x Andromeda™
Grow
Luminaires in
Room**

Height of Room: 9.000 ft, Mounting Height: 9.000 ft, Maintenance factor: 1.00

Values in Lux, Scale 1:32

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$
Workplane	/	43305	27332	55442	0.631
Floor	10	30597	21803	36772	0.713
Ceiling	70	10741	7302	11832	0.680
Walls (4)	50	24938	8783	45726	/



Contact Us

Get in touch to discuss your lighting requirements further!

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