

Avero® Solar Lighting System

Stand-alone overhead path & area LED lighting



Product Overview

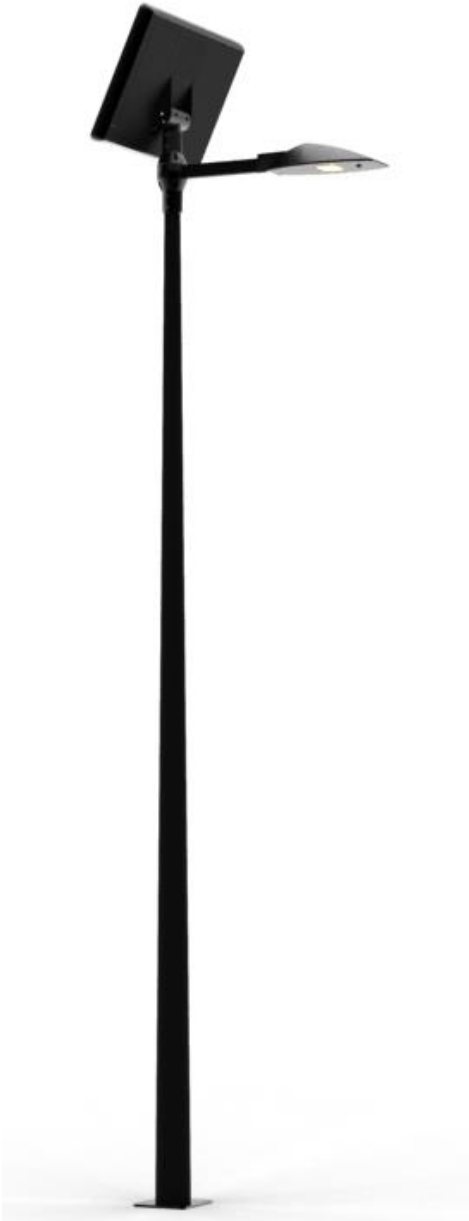
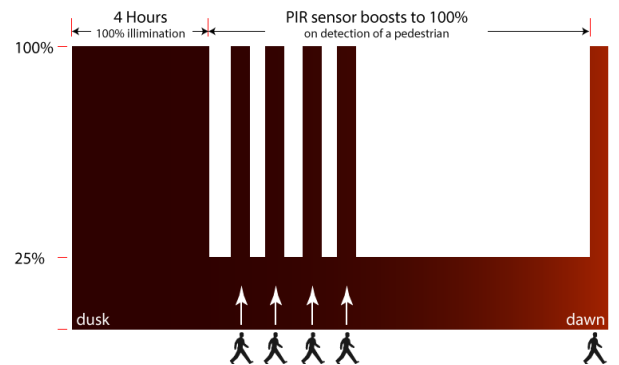
Overhead pedestrian scale lighting architecturally designed to enhance upmarket public spaces whilst providing reliability and performance.

The Avero® solar lighting system comprises the Avero luminaire, utilising Philips LED technology, and housing the lighting controller and PIR sensor.

The pole top solar engine securely houses the lithium LiFEPO4 battery and solar panel, with the option of a second luminaire via the lightjunction™

Lighting profile options

- 1) Constant light levels all night.
- 2) 100% for first 4 hours, power saver mode rest of night until PIR detects pedestrian, boosting to 100% for 30 seconds or until area is vacated.



Performance Overview

Designed and Assembled in Australia

Autonomy: 4-5 Days

Lumen Output: Up to 1908 Lumens

Luminaire Efficacy: Up to 127 LPW

Colour Rendering Index: Minimum 70 CRI

Colour Temperature: 3000K

Warranty: 5 Year Limited Warranty with Performance Guarantee

Specification Criteria

Product	Arrangement	Power	Autonomy	Optic	CCT	Height	Footing	Finish	Power Profile	
Avero®	Single	15W	3 Days	Type 2 Long	40K	4m	Cage	Powder coat	Constant	
	Double	12W	4 Days		30K	5m			Block	4hr/power save
	Single & Slave Pole	6W	5 Days		6m					
	Double & Slave Pole	3W								

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Recommended Avero Philips Lumen Maintenance Factors (LMF)

Ambient	Init. LMF	50k hr (1)	100k hr (2)
15°C	1.02	0.92	0.87
20°C	1.01	0.91	0.86
25°C	1.00	0.90	0.85

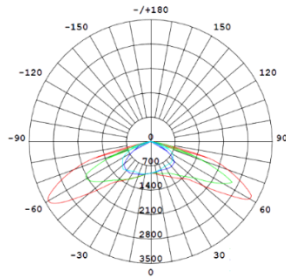
Lumen maintenance values are calculated per TM-21 based on IESNA LM-80 data collected in an ISO 17025:2005 accredited test facility.

(1) Projected Value represents interpolated value based on the time duration which is within six times the IESNA LM-80-08 total test duration (in hours) for the packaged LED chip

(2) In accordance with IESNA TM-21-11, Calculated Value represented is for a time duration that exceeds six times (6X) the IESNA LM-80-08 total test duration for the packaged LED chip

It is recommended that additional maintenance factors shall be applied for consideration of dirt depreciation and where luminaires are to be installed in higher ambient temperature environments

Type 2



Luminaire:

- Die cast aluminium housing.
- Double powder coated finish.
- High output Philips Lumileds LEDs >95Lm/W at 3000K

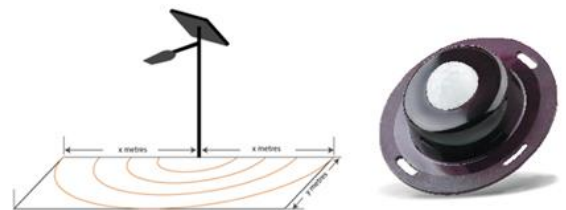
Type 2 Distribution

Power Input	3000K Initial Lumens*	4000K Initial Lumens*
15W (High Level)	1,444	1,617
4W (Low Level)	361	404
6W (Dusk-Dawn)	570	638

Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

PIR Sensor

The advanced PIR sensor detects pedestrians through heat/movement from approximately six meters away.



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System design

Avero® solar lighting systems are designed to suit all locations in Mainland Australia, the Pacific Islands and locations in New Zealand North of 40-degree latitude. (Excluding region D due to potential wind speeds).



Construction	Aluminium alloy
Colour	Double powder coated black or other colours to order
Light source	Philips 15w batwing (type 2) optic 3000k
Solar panel	60w monocrystalline with 25 year performance guarantee
Battery	12v LiFePO4 30AH
Motion Sensor	Passive infrared
Operating profile	Constant illumination all night or 100% for first four hours of evening, 20% for rest of night until PIR boots to 100% for 30 seconds or area is vacated
Mounting	4-6m height. Mounts to 60.3 mm OD pipe section (50 nominal bore) x 108mm long
Weight & dimensions	Product 26kg, product & packaging 30kg, one Avero per carton, 925mm x 400mm x 735mm
Wind Rating	Region A, B and C. 60m/s (Beaufort scale 17 wind speed)
Warranty	5 year limited warranty. Refer full warranty terms and conditions

Pole recommendation

The Avero® should be mounted on a pole thicker than the 60.3 OD spigot to attach the Avero, to reduce or eliminate vibration from high winds. Pole available specifically designed for the Avero® solar lighting systems, six metre fixed tapered round black powder coat pole and optional cage footing – please contact Orca Solar Lighting.

Compliance

Avero® solar lighting systems provide a minimum of 30% solar panel oversupply co efficient as an extra reliability measure in accordance with AS4509.2 (Australian standards for standalone power systems),

Powder coated steel poles and cage footings designed in accordance with AS4100, AS3679, AS1163 and AS1154