



COOLON

BRILLIANT CONNECTED LIGHTS

AELITA2S

LED CONVEYOR / AREA LIGHT
60W / 90W

Consistent lighting performance at scale

Aelita2S is a complementary lighting solution designed to extend the Aelita system across larger sites where consistency, coverage, and cost efficiency are key considerations. It delivers the same trusted performance and design language as Aelita, including the BCL system, enabling seamless integration within mixed deployments while optimising overall project value. Built for flexible site configuration, Aelita2S allows installers to balance premium and standard units across an installation to achieve uniform visual output and functional coverage. This makes it ideal for walkways, corridors, and large-scale infrastructure where consistent illumination is required at scale.

Aelita2S includes a built in RGBW visual warning indicator with the option to enable dual-colour switching where required or operate as a single-colour system depending on application needs.



Mesh Backbone



Visual Warning Indicator



Occupancy Sensor

Wirepas



Designed for use in:

- Conveyors
- General Area Lighting
- Pedestrian Access Ways
- Stacker / Reclaimer
- Stairwells
- Tunnels
- Walkways

DESIGNED & MANUFACTURED IN AUSTRALIA

Increased Situational Awareness

The Aelita2S enables visual propagation of alerts with a built-in RGBW indicator.



Lightning IMMINENT <16km
All personnel to remain in cover until threat has passed

Lightning NEARBY 16km - 30km

Lightning MAY EXIST 30km - 60km

The image shows a tall street light with a large, illuminated rectangular head. The head has a red indicator bar at the bottom. In the background, a city skyline is visible at night under a dark, stormy sky with lightning bolts. The light's indicator is displaying three levels of lightning alerts: 'IMMINENT' (red bar, <16km), 'NEARBY' (yellow bar, 16km-30km), and 'MAY EXIST' (green bar, 30km-60km).

Enables digitisation

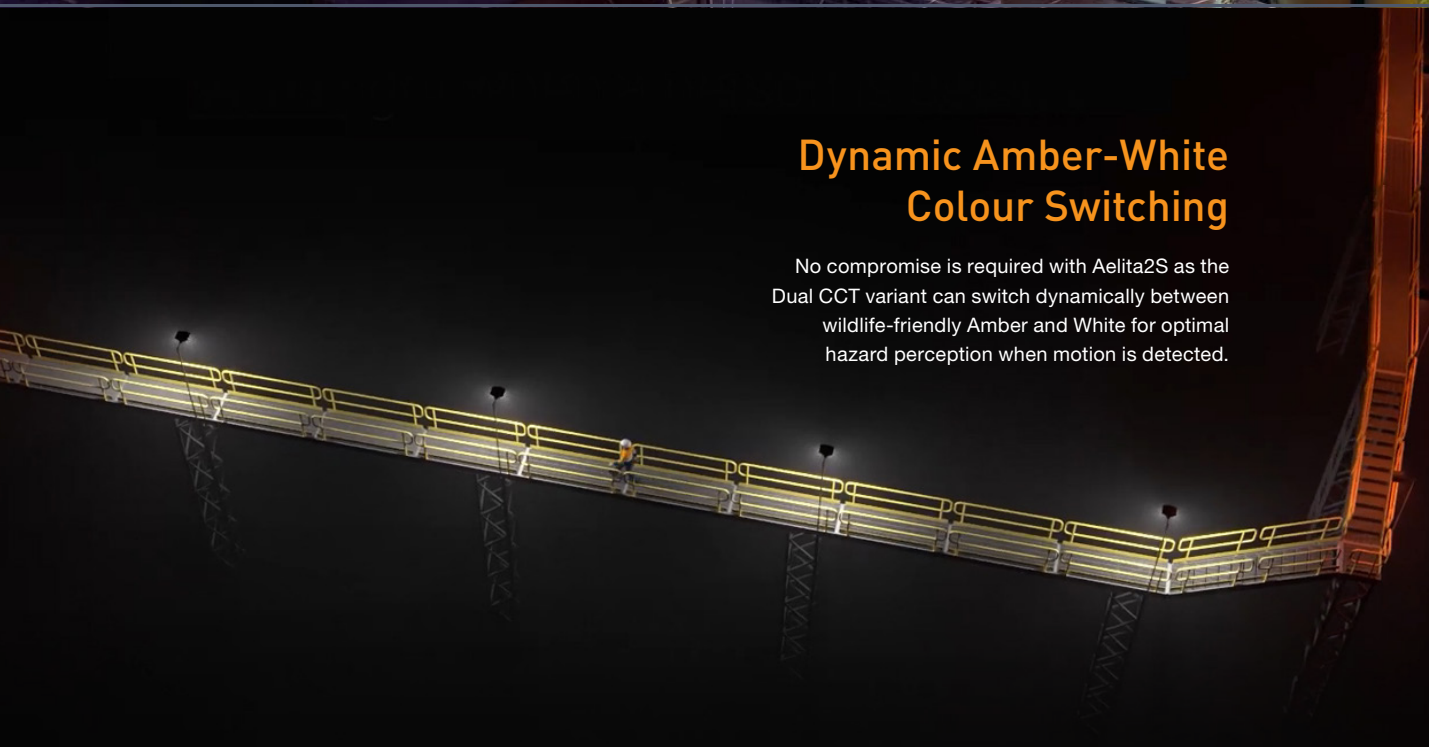


Lights automatically mesh together forming a site-wide wireless network enabling the effortless deployment of a wide range of IoT based sensors and services from third-party providers:

- Asset Tracking
- Personnel Locating
- Machine Condition Monitoring
- ... and many more!

Dynamic Amber-White Colour Switching

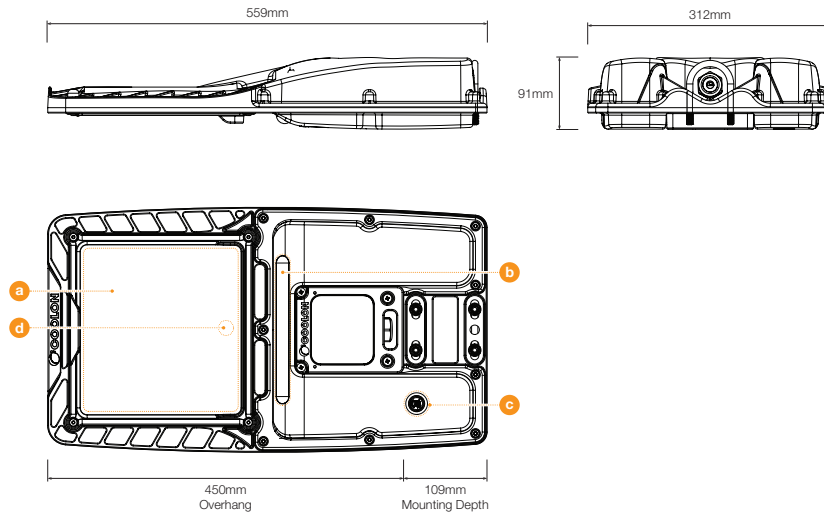
No compromise is required with Aelita2S as the Dual CCT variant can switch dynamically between wildlife-friendly Amber and White for optimal hazard perception when motion is detected.



DIMENSIONS

Aelita2S Luminaire

- a. Main LEDs
- b. Configurable RGBW Indicator
- c. GORE PolyVent
- d. AC Mains Indicator



TECHNICAL SPECIFICATIONS

Product	Aelita2S LED Conveyor / Area Light	
Mode	Mode Mains Powered (MP)	
Power	60W	90W
Optical Characteristics		
Luminous Flux (Photometered) ¹	9,600 lm (Single colour) 9,000 lm (Dual colour)	14,500 lm (Single colour) 13,600 lm (Dual colour)
CCT Single	AMB / WWT / NWT / CWT	AMB / WWT / NWT / CWT
CCT Dual	CWT/AMB NWT/AMB WWT/AMB	CWT/AMB NWT/AMB WWT/AMB
CRI	Ra >70	Ra >70
Electrical Characteristics ²		
Typ Power Consumption	60W	90W
Max Power Consumption (Cold Start)	65W	95W
Nominal Voltage	230VAC	
Voltage Range	90-305VAC	
Frequency	50Hz/60Hz	
Power Factor (minimum)	>0.9 typical @ 230VAC	
Inrush and Leakage Currents ³		
Peak Inrush Current (A) @230V	4.88	5.52
Duration - t_{width} (ms)	0.001	0.001
I²t (A²S)	0	0
Leakage Current (mA)	<0.75mA / 277VAC	<0.75mA / 277VAC
Maximum number of luminaires per RCBO @ 230VAC ⁴		
B16	32	23
C16	37	27
D16	40	31
Lighting Control ⁵		
Dimming	15 – 100% including OFF	
Motion Detection Behaviour	Dimming level, ON/OFF, CCT (if dual CCT)	
RGBW Indicator Mode	Colour, frequency	
Control Modes	Grouping	
Main Light	ON/OFF	
Wireless Communication ^{6,7}		
Protocol	Wirepas	
Operating Band	2.4 GHz, 40 Channels	
Typical Range	up to 50 metres line of sight	
Data Encryption	AES-128	
Occupancy Sensor		
Sensor	Microwave Radar Motion Sensor	

Environmental	
IP Rating	IP66
Impact Rating	IK09
Vibration	1.5 G
Salt Spray Tested	Yes
Operating Temp. Range	-20°C to +50°C
Thermal Management Type	Active / Continuous
Expected Lifespan	50,000 Hours to 70% Brightness
Material Composition (Body)	Aluminium
Material Composition (Cover)	Polycarbonate and tempered glass
Mounting/Bracket Type	U-Bolt Spigot Mount OD 32 – 44 mm (NB25 - NB32)
Cable Type	3-core Mains cable
Cable Gland	M25 x 1.5 SS304
Cable Ø Entry Range ⁸	8 – 10mm and 13 – 18mm

Weight/Packaging	
Luminaire Weight	6.5kg
Packaging Dimensions	600 x 400 x 150mm
Packaged Weight	7.5kg

Compliance (Safety Standards)	
AS/NZS 60598.1	Luminaires - General Requirements and Tests.
AS/NZS 60598.2.1	Luminaires - Particular requirements - Fixed general purpose luminaires
ANSI C136.31	Roadway and Area Lighting Equipment - Luminaire Vibration

Compliance (EMC)	
AS/NZS CISPR15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.
AS/NZS 4268	Radio equipment and systems - Short range devices - Limits and methods of measurement.

Warranty	
Warranty	5 years warranty as standard

¹ Optical and electrical characteristics are measured using Neutral White LEDs (NWT)

² Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behaviour may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior to commissioning.

³ Note: At 230VAC input, 25°C cold start, 10%lpk-10%lpk.

⁴ Number of Luminaires is subject to relative RCBO properties, assuming a 30mA leakage current limit and RCBO steady state current load not exceeding 60%, 70% and 80% for the B, C, D type RCBO respectively.

⁵ Lighting Control via BitCortex. Gateway is required.

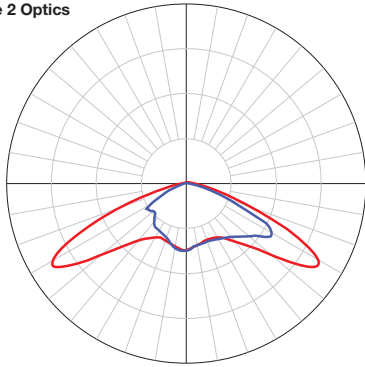
⁶ Wireless range might significantly vary depending on the elevation above the ground, presence of metal obstacles and environmental conditions.

⁷ Wireless coverage could be optimised with increased number of devices forming mesh network.

⁸ Always use the correct gland rubber seal size for the cable diameter. Using a larger seal on a smaller cable or a smaller seal on a larger cable can compromise the IP rating, cause cable damage, or result in improper installation.

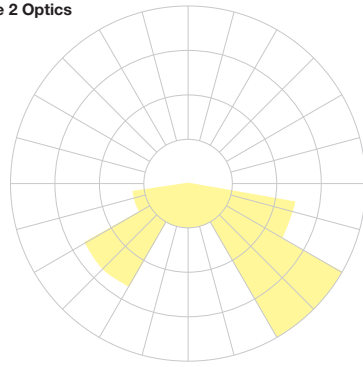
POLAR DISTRIBUTION

Type 2 Optics

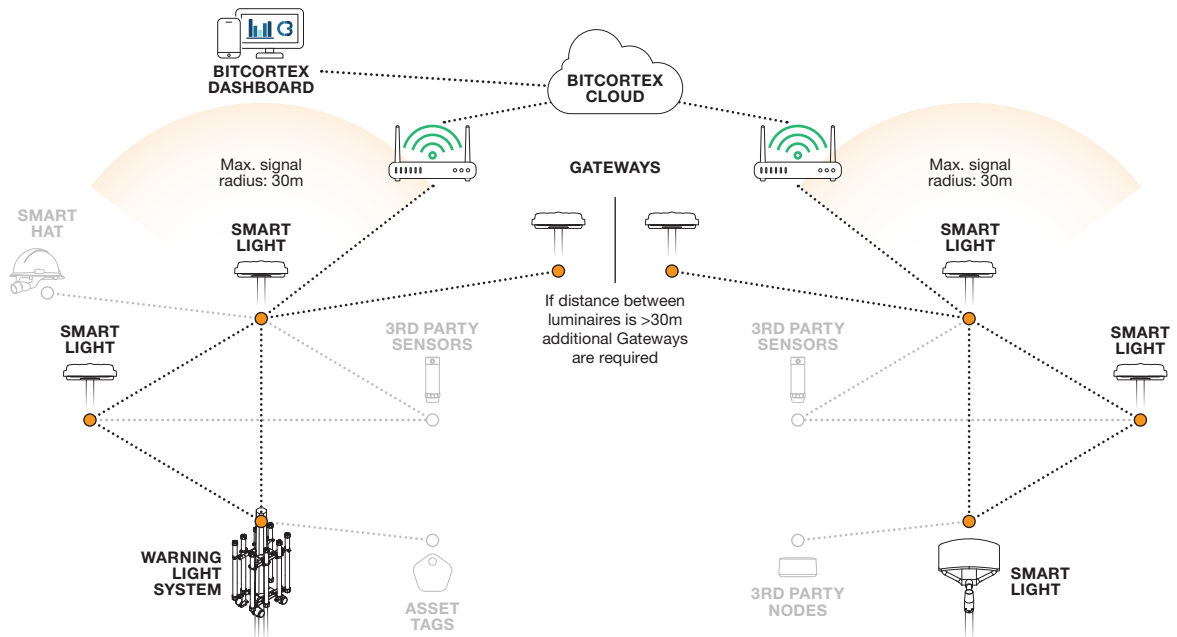


LCS GRAPH

Type 2 Optics



MESH NETWORK



A web based platform to manage and control smart wireless devices. Accessible anywhere through an internet connected browser. For more information on Coolon smart lighting range please visit: www.bitcortex.net



WIREPAS MASSIVE ENABLED

Wirepas is a leading IoT company on mission to democratise enterprise IoT. The Wirepas Massive self-healing network optimises itself by local decision-making to reach unlimited scalability, coverage and density while using the available radio spectrum as efficiently as possible.

AELITA ORDERING EXAMPLE

AELITA2S - 60 - NWTAMB - T2 - MP

PRODUCT POWER COLOUR TEMPERATURE OPTICS SUPPLY OPTION

PRODUCT	POWER	COLOUR TEMPERATURE	OPTICS	SUPPLY OPTION
Aelita2S	60 60W	CWT Cool White	T2 Type 2 Optics	MP Mains Powered
	90 90W	NWT Neutral White		
		WWT Warm White		
		AMB Amber		
		CWTAMB Cool White / Amber		
		NWTAMB Neutral White / Amber		
		WWTAMB Warm White / Amber		