

OMNI mast

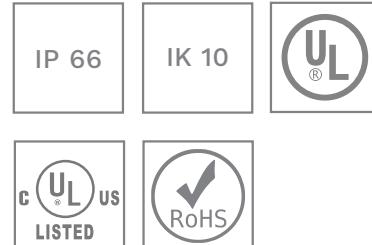


Adaptable high-power luminaire designed for high mast lighting applications

OMNI mast provides an LED alternative to HID luminaires for high mast applications with a minimum total cost of ownership.

OMNI mast provides a beneficial replacement for a full range of HID lighting fixtures in a variety of outdoor applications. This luminaire has been designed to provide an unrivalled combination of performance and flexibility for lighting areas where high lumen packages are needed with the added advantages of an LED solution: low energy consumption, improved visibility with white light, limited maintenance and longer life with the benefit of rotatable optics, allowing for easy lighting retrofits.

The OMNI mast can operate with the Owlet range of control solutions and a Building Management System with the DALI protocol to further maximise energy savings by adapting the lighting levels according to the real needs of the site.

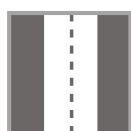


Key advantages

- Maximised savings in energy and maintenance costs
- Lighting distribution types to provide the most accurate solutions for high tasks
- Universal fixation adapted for side-entry
- Site rotatable optics
- IoT ready: optional 7-pin NEMA socket

Applications

- Road and highway
- Roundabout
- Large area
- Airport
- Industrial harbour
- Car park
- Transmodal facility



ROADS &
MOTORWAYS



ROAD AND
MOTORWAY
JUNCTION



TOLL PLAZA



LARGE AREAS

GENERAL INFORMATION

Recommended installation height	up to 45m 147'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
cULus listed	Yes
ROHS compliant	Yes
Testing standard	LM 79-80 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	High-pressure, die-cast aluminium
Optic	PC (Polycarbonate)
Housing finish	Polyester powder coating
Colour	AKZO 150 light grey sanded Any other RAL or AKZO colour upon request
Tightness level	IP 66
Impact resistance	IK 10
Vibration standard	Compliant with ANSI 1.5G and 3G and modified IEC 68-2-6 (0.5G)
Access for maintenance	Tool free access to the gear compartment via two draw latches

ELECTRICAL INFORMATION

Electrical class	Class 1
Nominal voltage	120–277V –50–60Hz 347–480V – 50–60Hz
Power factor	> 95% at full load
Surge protection	10kV, 20kV (option)
THD	< 10%
Control options	No dimming, custom dimming, 0-10V, Owllet
NEMA socket	7-pin (optional)

OPTICAL INFORMATION

Rotation	Field rotatable optics
LED colour temperature	2200K (Warm White 722) 3000K (Warm White 730) 4000K (Neutral White 740)
Colour rendering index (CRI)	> 70
BUG Rating	B5 U0 G5

OPERATING CONDITIONS

Operating temperature range (Ta)	-40°C up to +45 °C ^(*) -40°F up to 113 °F ^(*)
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^(*)Depending on the luminaire configuration. For more details, please contact us.

LIFETIME OF THE LEDS @ TQ 25°C

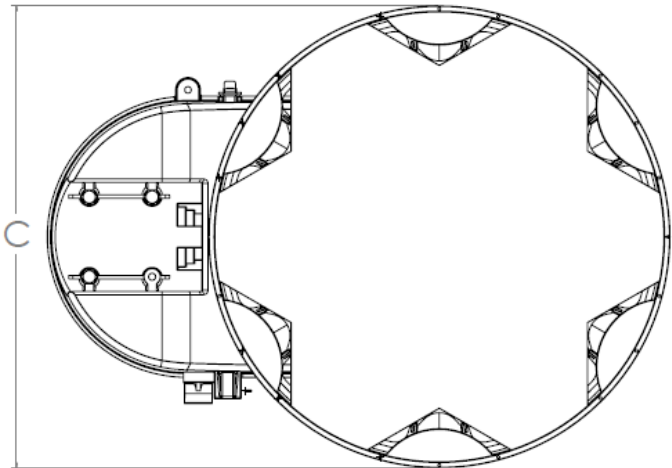
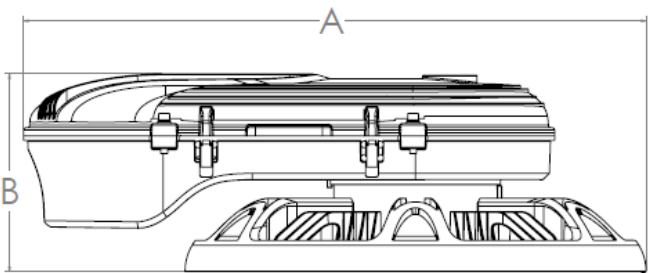
All configurations	100,000h – L79
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Options

Glare shields	90, 120 and 180 degrees
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DIMENSIONS ET FIXATION

AxBxC (mm inches)	700x220x500 27.6x8.7x19.7
Weight (kg lbs)	22.7 50.1
EPA (sq.ft)	1.67
Mounting options	Lateral side-entry - Ø60mm





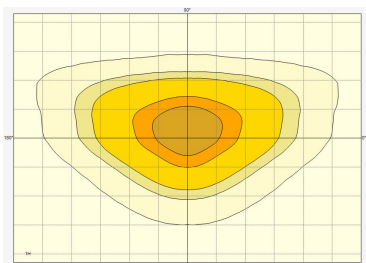
IES Classification		Colour code temperature	Luminaire power (W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)
Ambient temp = 25°					
Type II	Medium	WW / NW	210 – 750	32000 – 113000	152.4 – 150.7
Type III	Short	WW / NW	210 – 750	32500 – 114500	154.8 – 152.7
Type IV	Medium	WW / NW	210 – 750	32000 – 112000	152.4 – 149.3
Type V	Short	WW / NW	210 – 750	33000 – 115000	157.1 – 153.3

Tolerance on LED flux is $\pm 7\%$ and on total luminaire power $\pm 5\%$

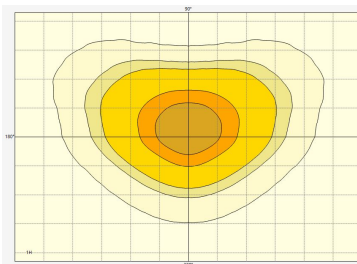
LIGHT DISTRIBUTIONS



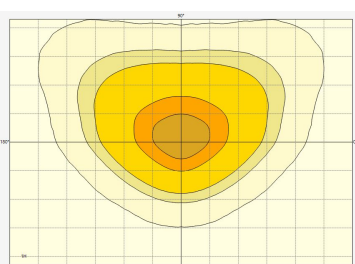
Type II Medium



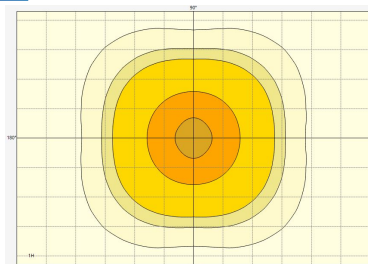
Type III Short



Type IV Medium



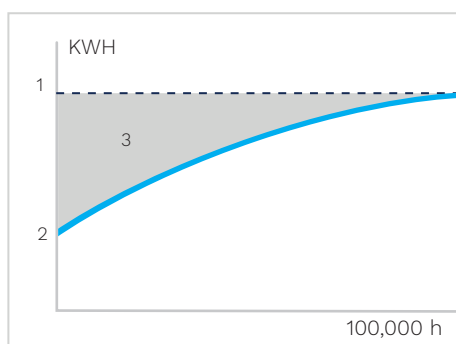
Type V Short





Constant Light Output (CLO)

This system compensates for the depreciation of luminous flux to avoid excess lighting at the beginning of the installation's service life. Luminous depreciation over time must be taken into account to ensure a predefined lighting level during the luminaire's useful life. Without a CLO feature, this simply means increasing the initial power upon installation in order to make up for luminous depreciation. By precisely controlling the luminous flux, the energy needed to reach the required level can be maintained throughout the luminaire's life.

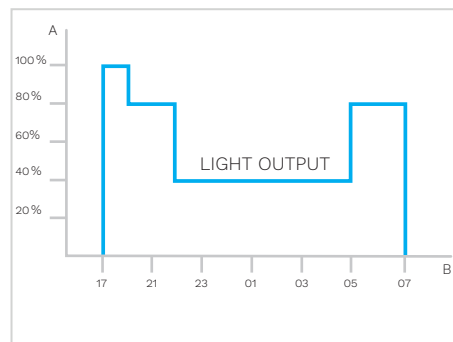


1. Standard lighting level
2. LED lighting consumption with CLO
3. Energy savings



Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring. The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night

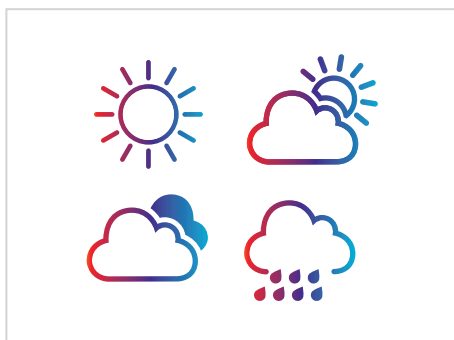


- A. Performance
- B. Time



Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon as natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at night fall so as to provide safety and comfort in public spaces.



Owlet IoT

Owlet IoT remotely controls luminaires in a lighting network, creating opportunities for improved efficiency, accurate real-time data and energy savings of up to 85%.



Plugging the LUCO P7 CM controller onto the 7-pin NEMA socket

All-in-one

The LUCO P7 CM controller includes the most advanced features for optimised asset management. It also provides an integrated photocell and operates with an astronomical clock for seasonal dimming profile adaptations.

Easy to deploy

Thanks to wireless communication, no cabling is needed. The network is not subject to physical constraints or limitations. From a single control unit to an unlimited network, you can expand your lighting scheme at any time. With real-time geolocation and automatic detection of luminaire features, commissioning is quick and easy.

User-friendly

Once a controller is installed on a luminaire, the luminaire automatically appears with its GPS coordinates on a web-based map. An easy-to-use dashboard enables each user to organise and customise screens, statistics and reports. Users can gain relevant, real-time insights.

The Owlet IoT web application can be accessed at all times from anywhere in the world with a device connected to the Internet. The application adapts to the device to offer an intuitive and user-friendly experience.

Real-time notifications can be pre-programmed to monitor the most important elements of the lighting scheme.

Secure

The Owlet IoT system uses a local wireless mesh communication networks to control the on-site luminaires combined with a remote control system utilising the cloud to ensure smooth data transfers to and from the central management system.

The system uses encrypted IP V6 communication to protect data transmission in both directions. Using a secure APN, Owlet IoT ensures a high level of protection.

In the exceptional case of a communication failure, the built-in astronomical clock and photocell will take over to switch the luminaires on and off, thus avoiding a complete blackout at night.

Efficient

Thanks to sensors and/or pre-programmed settings, lighting scenarios can be easily adapted to cope with live events, providing the right lighting levels at the right time and in the right place.

The integrated utility grade meter offers the highest accuracy available on the market today, enabling decisions based on real figures.

Accurate real-time feedback and clear reporting ensures that the network operates efficiently and maintenance is optimised.

When LED luminaires are switched on, the inrush current can create problems for the electricity grid. Owlet IoT incorporates an algorithm to preserve the grid at all times.

Open

The LUCO P7 CM controller can be plugged onto the standard 7 pin NEMA socket and operates through either a DALI or 1-10V interface to control the luminaire.

Owlet IoT is based on the IPv6 protocol. This method for addressing devices can generate an almost unlimited number of unique combinations to connect non-traditional components to the Internet or computer network.

Through open APIs, Owlet IoT can be integrated into existing or future global management systems.