

Ymera



Designer : AF lighting



Aesthetic appeal, comfort and efficiency

The Ymera features a refined design and state-of-the-art LED technology, providing an energy-efficient lighting solution that enhances city streets.

Suited to both roads, public squares and other urban outdoor areas, the Ymera enables high-quality lighting and a lower carbon footprint for towns and cities - creating a safe and attractive environment.

Scandinavian inspired, the Ymera brings elegance to cities through four distinctive versions including an illuminated dome and a decorative skirt.

The Ymera benefits from highly efficient light distributions that are compliant with stringent standards for glare control. This refined luminaire has been specifically developed to reduce disability glare and improve quality of light.

IP 66	IK 10	IK 09



URBAN & RESIDENTIAL STREETS



BRIDGES



BIKE & PEDESTRIAN PATHS



RAILWAY STATIONS & METROS



CAR PARKS



LARGE AREAS



SQUARES & PEDESTRIAN AREAS



ROADS & MOTORWAYS

Concept

The Ymera range combines the energy efficiency of LED technology with the photometric performance of the LensoFlex®2 and LensoFlex®3 engines developed by Schröder. Certain photometric distributions are compliant with G*4 class requirements to restrict glare and discomfort.

Ymera can lower the threshold increment (TI) to less than 6%, ensuring glare free environments. The Ymera luminaire is composed of an aluminium body sealed with a glass protector. Its accessories include an illuminated dome in diffuse polycarbonate with a high-power LED and a decorative skirt that reduces glare. It is a complete range of luminaires with four different designs for a distinctive identity. A flux enhancer is available as an option.

The luminaire is delivered with an universal slip-over 60mm fixation piece for both side-entry and post-top (with an aluminium adapter) mounting. An optional side-entry penetrating fixation piece for a 60mm diameter tube is available to complement the range of installation possibilities. Ymera is supplied pre-wired to facilitate installation as there is no need to open the luminaire. As an option, the luminaire is can be delivered with quick-on IP 68 connectors to accelerate the wiring process.

Optionally, Ymera can be equipped with a standard NEMA 7-pin receptacle, enabling easy entry to the digital era of lighting while ensuring compatibility with advanced lighting features that plan, monitor and control outdoor lighting networks.



Ymera includes an universal Ø60mm slip-over fixation piece.



A penetrating fixation piece for a Ø60mm tube is available as an option for flush mounting.



Ymera is available with an illuminated dome (high-power LED) and a decorative skirt.



As an option to increase the lumen output, a flux enhancer can be placed around the LEDs.

Types of application

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- LARGE AREAS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

Key advantages

- Elegant and robust design with four aesthetic versions
- State-of-the-art LED technology for low energy consumption
- Broad range of lighting distributions
- High visual comfort: glare up to G*4 class, TI <6%
- Designed for side-entry and post-top mounting (depending on accessory)
- Supplied pre-wired to facilitate installation (optional quick-on connectors)
- Designed to incorporate the Owlet range of control solutions

Ymera | basic



Ymera | dome



Ymera | skirt



Ymera | dome+skirt





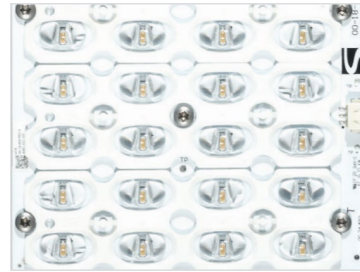
LensoFlex®2

LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. The proven LensoFlex®2 concept includes a glass protector to seal the LEDs and lenses into the luminaire body.



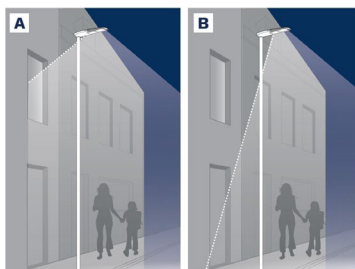
LensoFlex®3

LensoFlex®3 uses lenses made of mouldable and optical-grade silicon offering superior transparency and excellent photothermal stability. This withstands high driving currents and delivers maximised lumen output over time. As silicon offers a higher thermal resistance compared to PMMA, temperature is not as critical for LensoFlex®3 engines. This offers two distinct advantages; LensoFlex®3 ensures enhanced performance in warm climates and enables a high driving current to be used to increase the lumen output and a higher lm/kg ratio. It also does not suffer from yellowing over time.



Back Light control

As an option, the LensoFlex®2 modules can be equipped with a Back Light control system. This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.

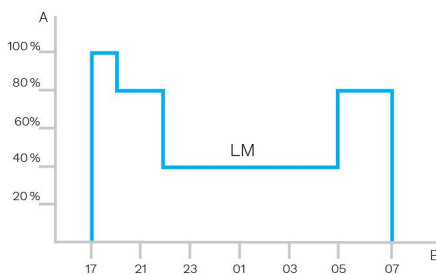


A. Without Back Light control | B. With Back Light control



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.

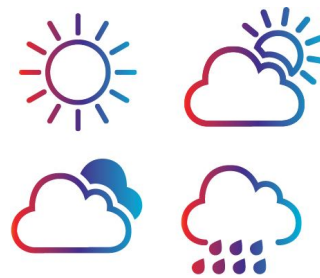


A. Performance | B. Time



Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon 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.



PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area. Each luminaire level can be configured individually with several parameters such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.



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%.



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.



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

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.



With the Dome or Dome+Skirt version of Ymera, a POHO device – with or without an integrated PIR sensor – will be necessary to plug the LUCO P7 CM.

GENERAL INFORMATION

Recommended installation height	4m to 12m 13' to 39'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE Mark	Yes
ENEC+ certified	Yes
ROHS compliant	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA Silicon
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 09, IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	By loosening screws on the bottom cover

· Any other RAL or AKZO colour upon request

OPERATING CONDITIONS

Operating temperature range (Ta)	-30 °C up to +40 °C / -22 °F up to 104°F with wind effect
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· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	4 10
Electromagnetic compatibility (EMC)	EN 61547 / EN 61000-4-2, -3, -4, -5, -6, -8, -11
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Photocell, Remote management
Socket option(s)	NEMA 7-pin (optional)
Associated control system(s)	Owlet IoT
Sensor	PIR (optional)

OPTICAL INFORMATION

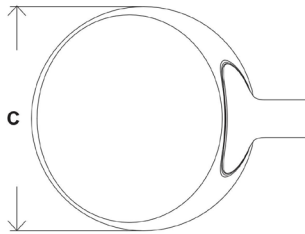
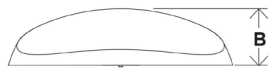
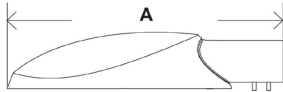
LED colour temperature	2700K (Warm White) 3000K (Warm White) 4000K (Neutral White)
Colour rendering index (CRI)	>70 (Warm White) >80 (Warm White) >70 (Neutral White)
Upward Light Output Ratio (ULOR)	0%

LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm inch)	568x116x462 22.4x4.6x18.2
Weight (kg lbs)	8 17.6
Aerodynamic resistance (CxS)	0.02
Mounting possibilities	Side-entry slip-over – Ø60mm Side-entry penetrating – Ø60mm Post-top slip-over – Ø60mm





	Number of LEDs	Current (mA)	Luminaire output flux (lm) Neutral White 740		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Warm White 727		Power consumption (W)	Luminaire efficacy (lm/W)	Up to	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max				
YMEERA	16	350	1900	2400	1900	2400	1600	2000	1700	2200	18.2	137		
	16	350	2300	2500	-	-	2000	2100	-	-	18.3	137		
	16	350	2400	2600	-	-	2000	2300	-	-	17.7	147		
	16	500	2600	3300	2600	3300	2200	2800	2300	3000	25.7	136		
	16	500	3200	3400	-	-	2700	2900	-	-	25.8	132		
	16	500	3300	3500	-	-	2800	3200	-	-	25	144		
	16	700	3500	4400	3500	4400	2900	3700	3100	3900	36.2	127		
	16	700	4300	4600	-	-	3600	3900	-	-	36.4	126		
	16	700	4400	4700	-	-	3800	4200	-	-	35.3	139		
	16	1000	5600	6100	-	-	4800	5200	-	-	52.5	116		
	16	1000	5800	6300	-	-	5000	5600	-	-	50.5	129		
	24	350	2900	3700	2900	3700	2400	3100	2600	3300	26.8	142		
	24	350	3500	3700	-	-	3000	3200	-	-	26.9	138		
	24	350	3600	3900	-	-	3100	3500	-	-	26.1	153		
	24	500	3900	5000	3900	5000	3300	4300	3500	4500	38.1	139		
	24	500	4800	5200	-	-	4100	4400	-	-	38.2	136		
	24	500	4900	5300	-	-	4300	4800	-	-	36.7	150		
	24	700	5200	6600	5200	6600	4400	5600	4700	5900	55.5	124		
	24	700	6400	6900	-	-	5500	5900	-	-	56	123		
	24	700	6600	7100	-	-	5700	6400	-	-	52.5	139		
24	1000	8500	9100	-	-	7300	7800	-	-	77	118			
24	1000	8800	9500	-	-	7600	8500	-	-	74	131			

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %



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			Min	Max	Min	Max	Min	Max	Min	Max			
YMER A	32	350	3800	4900	3800	4900	3200	4100	3400	4400	35.1	145	
	32	350	4700	5000	-	-	4000	4300	-	-	35.9	139	
	32	350	4800	5200	-	-	4100	4600	-	-	35	151	
	32	500	5300	6700	5300	6700	4500	5700	4700	6000	49	143	
	32	500	6400	6900	-	-	5500	5900	-	-	50	138	
	32	500	6600	7100	-	-	5700	6400	-	-	48.5	151	
	32	700	7000	8900	7000	8900	6000	7600	6300	8000	70	134	
	32	700	8600	9200	-	-	7300	7900	-	-	71	130	
	32	700	8800	9500	-	-	7600	8500	-	-	68	144	
	32	1000	11300	12200	-	-	9700	10500	-	-	105	116	
	32	1000	11700	12600	-	-	10100	11300	-	-	102	127	
	48	350	5800	7400	5800	7400	4900	6200	5200	6600	52.5	147	
	48	350	7000	7500	-	-	6000	6500	-	-	53	142	
	48	350	7200	7800	-	-	6200	7000	-	-	50.5	158	
	48	500	7900	10100	7900	10100	6700	8600	7100	9100	75	141	
	48	500	9600	10300	-	-	8300	8900	-	-	76	136	
	48	500	9900	10700	-	-	8600	9600	-	-	72	153	
	48	700	10500	13300	10500	13300	8900	11300	9400	11900	105	132	
48	700	12900	13900	-	-	11000	11900	-	-	105	132		
48	700	13300	14300	-	-	11500	12800	-	-	102	144		

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