



YMER A



Design ÅF 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 09

IK 10



4/10kV



URBAN ROAD

RESIDENTIAL
ROADNARROW
ROADSQUARE
AND PARK

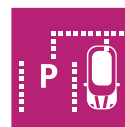
BIKE PATH



ROUNDBOUT



BRIDGE



CAR PARK



TRAIN STATION



CONCEPT

The Ymera range combines the energy efficiency of LED technology with the photometric performance of the LensoFlex®2 and LensoFlex®3 concepts developed by Schröder. Certain available 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 four parts of painted die-cast aluminium. The tempered glass protector is sealed onto the body with an extruded gasket and screwed onto a holder.

Its accessories include an illuminated dome in diffuse polycarbonate with a high-power LED and a decorative skirt reducing the glare when approaching the luminaire. It creates a true range with four different designs characterised by their distinctive identity. A flux enhancer is available as an option.

The luminaire is delivered with a universal 60mm fixation piece for both side-entry and post-top, depending on the accessory, mounting. Ymera is also supplied pre-wired to facilitate installation as there is no need to open the luminaire. As an option, the luminaire is deliverable with quick-on IP 68 connectors to accelerate the wiring process.

As an option, 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 a universal Ø 60mm fixation piece.



Ymera is available with a wide range of LensoFlex®2 and LensoFlex®3 optics.

TYPES OF APPLICATION

- Urban road and street
- Residential street
- Square and pedestrian area
- Roundabout
- Bridge
- Park
- Bike path
- Car park
- Railway station

KEY ADVANTAGES

- Elegant and robust design with four aesthetic versions
- State-of-the-art 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



As an option for more lumen output, a flux enhancer is set around the LEDs.



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

YMER A | **basic**



YMER A | **dome**



YMER A | **skirt**



YMER A | **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.

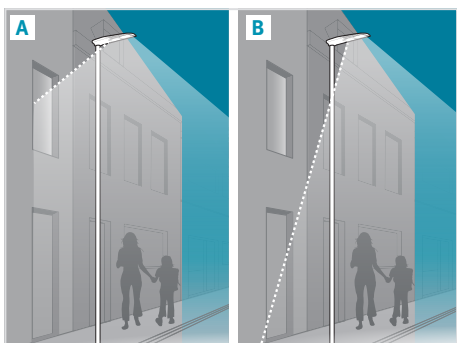
As silicon offers a higher thermal resistance compared to PMMA, temperature is not as critical for LensoFlex®3 engines. This offers two distinct advantages; LensoFlex®3 ensures enhanced performance in warm climates and enables a high driving current to be used to increase the lumen output and a higher 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.

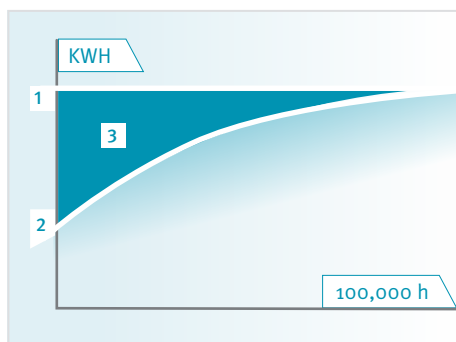


A. Without Back Light control | B. With Back Light control



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.

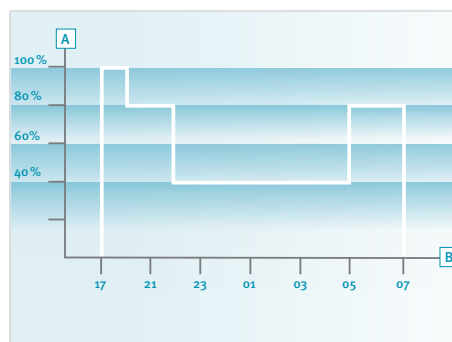


1. Standard lighting level
2. LED lighting consumption with CLO
3. Energy savings



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.

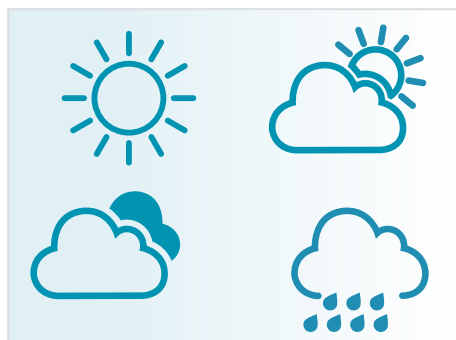


- A. Performance
B. Time



Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon 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%.



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.



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 40'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE mark	Yes
ENEC Plus certified	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	PMMA (LensoFlex®2) Silicon (LensoFlex®3)
Protector	5mm thick tempered glass
Dome and skirt	Anti-UV polycarbonate
Housing finish	Polyester powder coating
Colour	AZO grey 900 sanded Any other RAL or AKZO colour upon request
Tightness level	IP 66
Impact resistance	IK 10 IK 09 with Dome and/or frosted glass
Vibration standard	Compliant with modified IEC 68-2-6
Access for maintenance	Direct access to the gear compartment by unscrewing 6 screws

DIMENSIONS AND MOUNTING

AxBxC (mm inch)	568x116x462 22.4x4.6x18.2
DxExF (mm inch)	573x190x472 22.5x7.5x18.6
Weight (kg lbs)	Ymera Basic – 8 17.6 Ymera Skirt+Dome – 9 19.8
Aerodynamic resistance (CxS - wind 188km/h)	Ymera Basic – 0.18 Ymera Skirt+Dome – 0.21
Standard mounting	Side-entry Ø60mm (2")
Optional mounting	Post-top adaptor Ø60mm (2")

ELECTRICAL INFORMATION

Electrical class	EU class I or II
Nominal voltage	220-240V – 50-60Hz
Power factor	> 90% at full load
Surge protection	4kV (10kV/10kA optional)
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-4-2, -3, -4, -5, -6, -11
Control options	No dimming, custom dimming, CLO, DALI or 0-10V
NEMA socket	7-pin (optional)
Sensor	PIR (optional)

OPTICAL INFORMATION

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

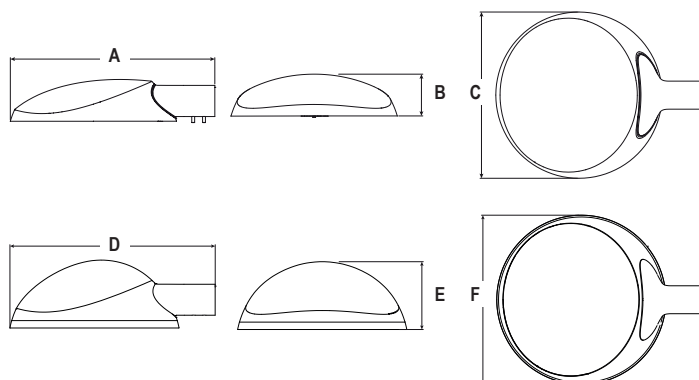
(*) Versions without illuminated dome.

OPERATING CONDITIONS

Operating temperature range (Ta)	-30 °C to +30 °C (*) -22 ° F to 86 ° F (*)
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LIFETIME OF THE LEDS @ TQ 25°C

Up to 700mA	100,000h – L95
From 701mA up to 1A	100,000h – L86





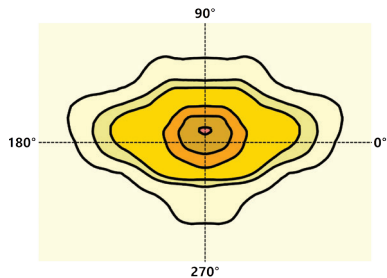
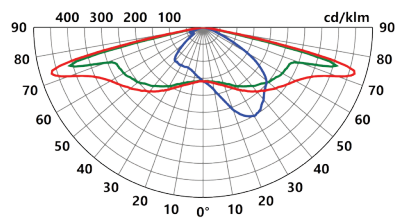
Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Neutral White (4000K) - CRI 70		Luminaire output flux (lm) Warm White (3000K) - CRI 80		Power consumption (W) ^(*)		Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max		
YMER	16	350	2000	2400	1700	2000	18	18	133	
	16	350	2300	2500	2000	2100	17	17	147	
	16	500	2700	3300	2300	2800	26	26	127	
	16	500	3200	3400	2700	2900	25	25	136	
	16	700	3600	4400	3000	3700	37	37	119	
	16	700	4300	4600	3600	3900	36	36	128	
	16	1000	5600	6100	4800	5200	52	52	117	
	24	350	3000	3600	2500	3100	26	26	138	
	24	350	3500	3700	3000	3200	26	26	142	
	24	500	4100	5000	3500	4300	39	39	128	
	24	500	4800	5200	4100	4400	38	38	137	
	24	700	5400	6600	5500	5900	54	54	122	
	24	700	6400	6900	5500	5900	53	53	130	
	24	1000	8500	9100	7300	7800	77	77	118	

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

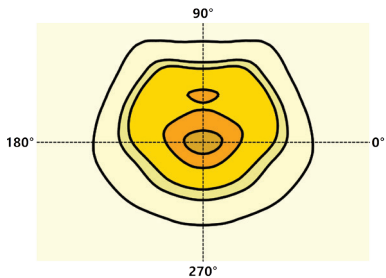
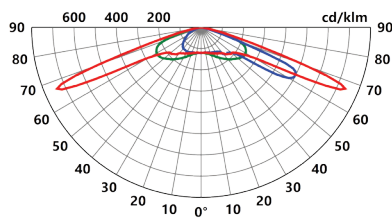
^(*) +1W for versions with illuminated dome.



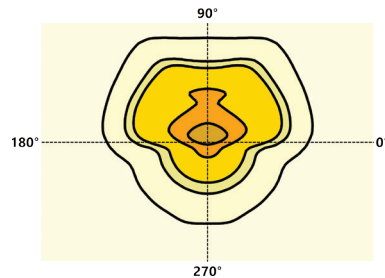
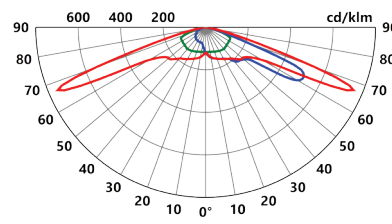
5098 ASY



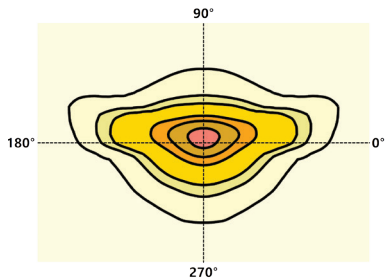
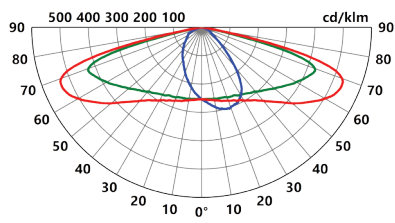
5119 ASY



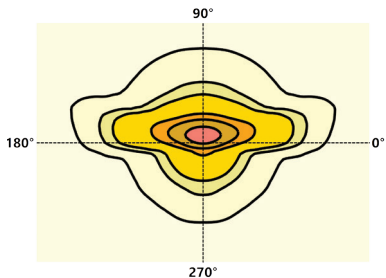
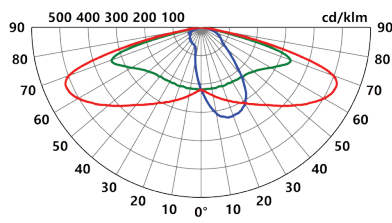
5119 ASY | Backlight



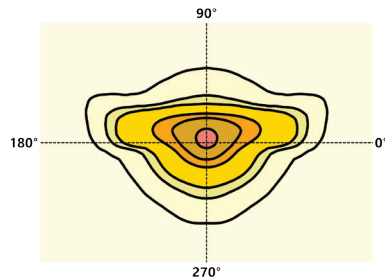
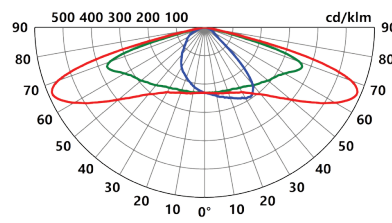
5137 ASY



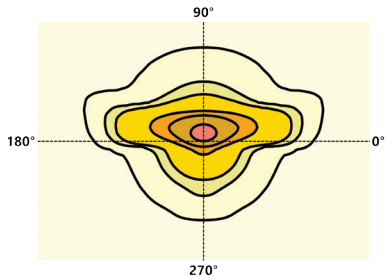
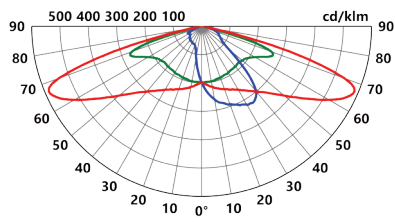
5137 ASY | Backlight



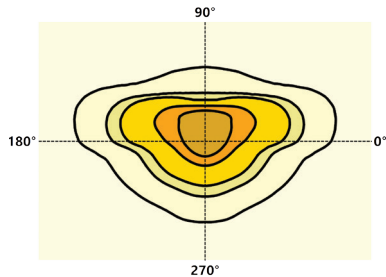
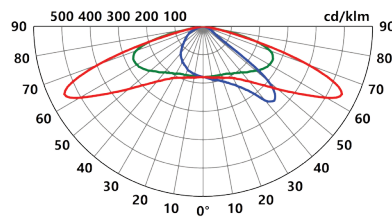
5138 ASY



5138 ASY | Backlight



5139 ASY



5139 ASY | Backlight

