

OYO



Design: Michel Tortel



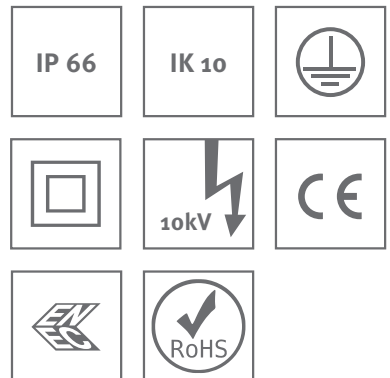
The perfect match between elegance and performance

Oyo follows in the steps of the successful range of post-top luminaires developed by Schröder. This new smart luminaire has been designed to blend into any urban area where its sophisticated outline enhances the environment.

With its arched design on two refined supports and a waved embellishment plate, this new decorative luminaire brings a contemporary touch of elegance to the city.

Based on the proven LensoFlex[®]2 photometrical engine, Oyo offers a wide range of light distributions to provide a harmonious compromise between safety, comfort and energy efficiency for various environments.

As an option, Oyo can be equipped with a 7-pin NEMA socket to be controlled by the Owlet IoT remote management system and to become even more efficient. It can also offer motion detection capabilities through its optional integrated PIR sensor for light-on-demand scenarios.



RESIDENTIAL STREET



SQUARE



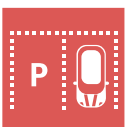
NARROW ROAD



URBAN ROAD



BIKE PATH



CAR PARK



PEDESTRIAN CROSSING

CONCEPT

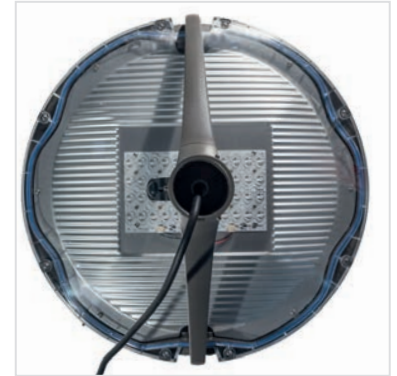
The Oyo range combines the energy efficiency of LED technology with the photometric performance of the LensoFlex®2 concept developed by Schröder. The luminaire is composed of a two-piece housing made of painted die-cast aluminium. The protector in polycarbonate offers a high tightness level and a high impact resistance. Oyo is designed for post-top mounting on a 60mm diameter spigot.

Asymmetrical and symmetrical light distributions

The photometric versatility of the Oyo luminaire which provides both asymmetrical and symmetrical light distributions makes it the perfect tool for various lighting applications: pedestrian areas (parks, squares...), bike paths, residential streets, car parks and urban roads.

Various control options

Oyo proposes a broad range of control options: programmable drivers, photocell, remote management and motion detection features with a PIR sensor. The luminaires can be equipped with a Nema 7-pin socket and the LUCO-P7 or LUCO-P7 CM compatible with the Owllet IoT City Management System.



To facilitate installation, the Oyo luminaire is supplied with a pre-fitted cable.



Oyo offers slip-over mounting onto a 60mm diameter spigot with 6 M8 screws.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Elegant and robust design by Michel Tortel
- State-of-the-art LED technology for low energy consumption
- LensoFlex®2 providing asymmetrical and symmetrical light distributions
- Pre-wired to facilitate installation
- Integrated motion detection sensor (option)
- IoT ready



The optional 7-pin NEMA socket can be equipped with a shorting cap at delivery.



Oyo can be equipped with a PIR sensor to create light-on-demand scenarios.



LensoFlex®2

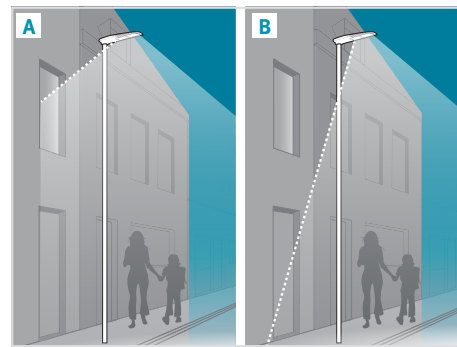
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution.



Back Light control system

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.

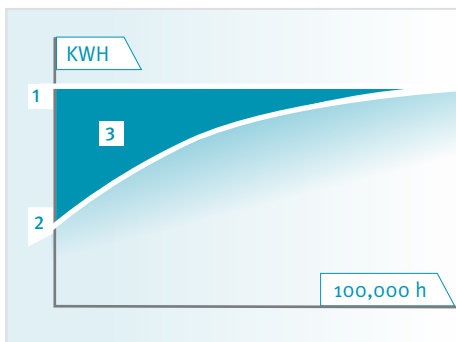


A. Without Back Light control | B. With Back Light control



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. The luminous depreciation that takes place 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, one can control the energy needed to reach the required level - no more, and no less - throughout the luminaire's life.

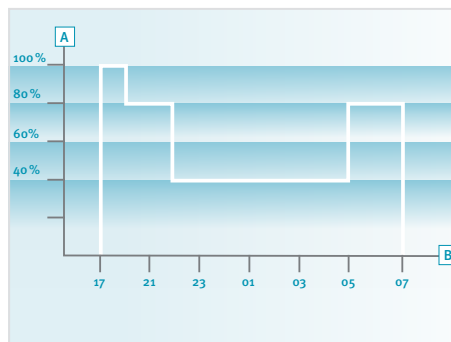


- 1. Standard lighting level
- 2. LED lighting consumption with CLO
- 3. Energy savings



Custom dimming profile

Intelligent luminaire drivers can be programmed in the factory with complex dimming profiles. Up to 5 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.

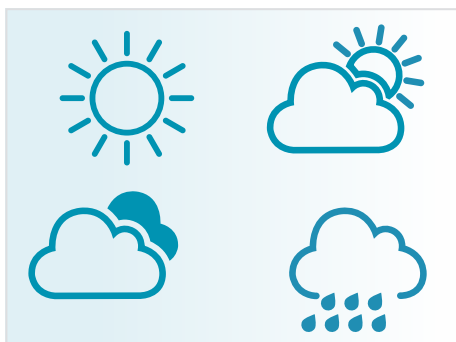


- A. Performance
- B. Time



Daylight sensor / photocell

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



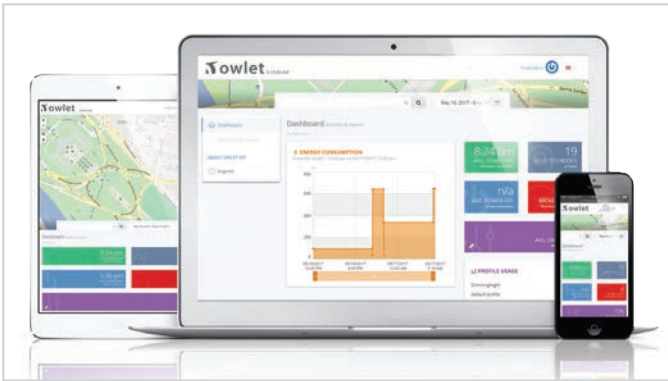
PIR sensor: motion detection

In places with little nocturnal activity, the 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 an 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 an automatic detection of the luminaire features, the 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. Each user 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 between the luminaires for instant reactions on-site combined with a remote control system utilising the cloud to ensure smooth data transfer 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, the lighting scenarios can be easily adapted to cope with live events, thus 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 that maintenance is optimised.

When LED luminaires are switched on, the massive 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.

GENERAL INFORMATION

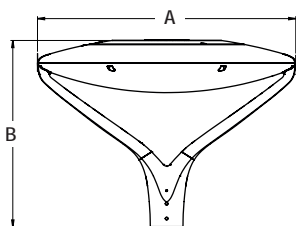
Recommended installation height	4m to 8m 13' to 26'
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
ROHS compliant	Yes
Testing standard	LM 79-80 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	High-pressure die-cast aluminium
Optic	PMMA
Protector	Polycarbonate
Housing finish	Polyester powder coating
Colour	AKZO grey 900 sanded Any other RAL or AKZO colour upon request
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6
Access for maintenance	By unscrewing 3 M5 screws on the top cover

DIMENSIONS AND MOUNTING

AxB (mm inch)	610x440 24x17.3
Weight (kg lbs)	10 22
Standard mounting	Post-top on a Ø60mm (2") with 80mm (3") long spigot. Fixation with 6 M8 screws.



ELECTRICAL INFORMATION

Electrical class	EU class I or II
Nominal voltage	200-240V – 50-60Hz
Power factor	> 90% at full load
Surge protection	10kV
Electromagnetic compatibility (EMC)	IEC 55015 / 61000-3-2 / 61000-3-3 / 61547
Control options	No dimming, Bi-Power, custom dimming, CLO, DALI
NEMA socket	7-pin (optional)
Sensor	PIR (optional)

OPTICAL INFORMATION

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

OPERATING CONDITIONS













Operating temperature range (Ta)	-30 °C up to +45 °C (*) -22 °F up to 113 °F (*)
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(*) Depending on the luminaire configuration. For more details, please contact us.

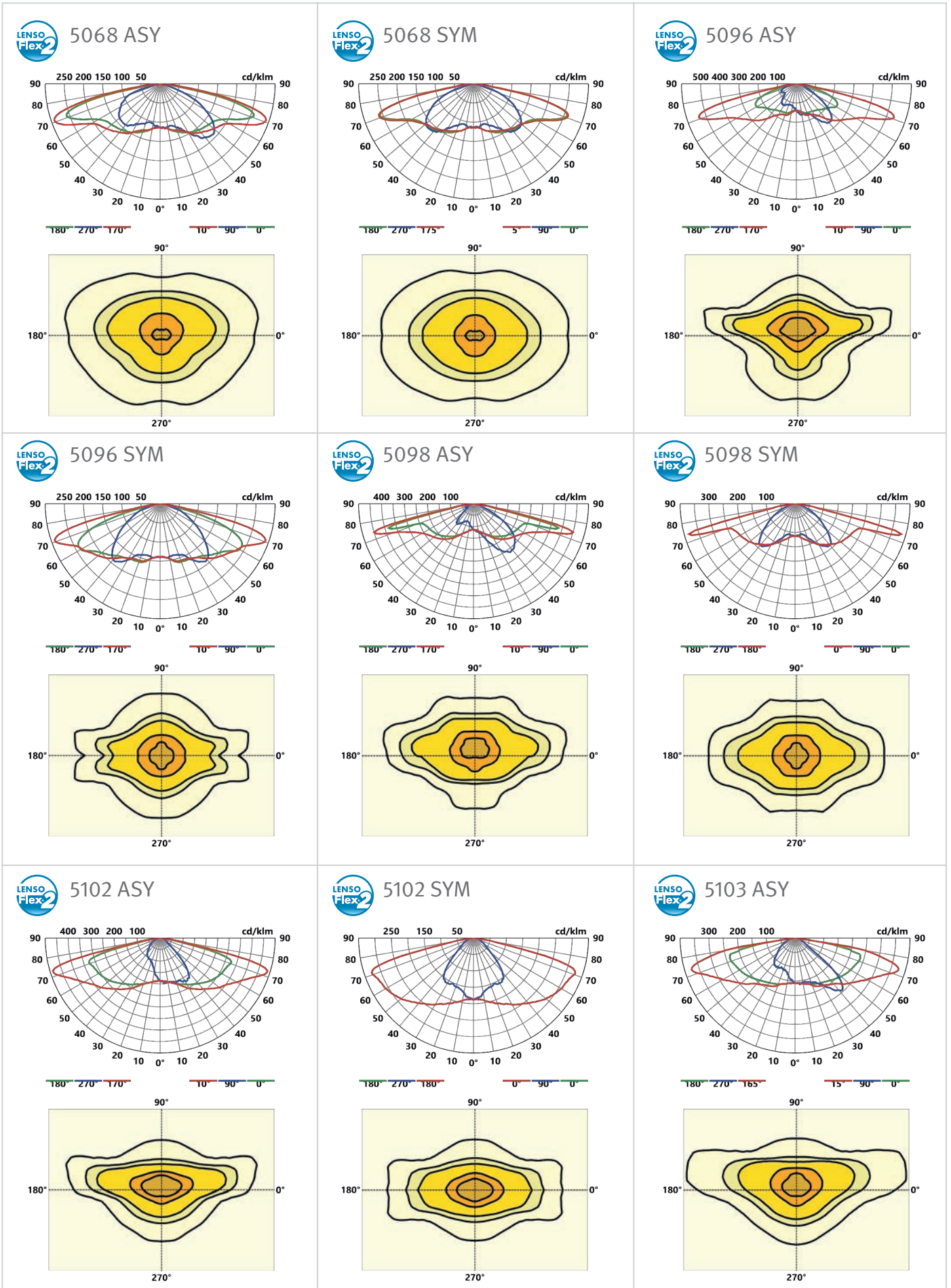
LIFETIME OF THE LEDS @ TQ 25°C

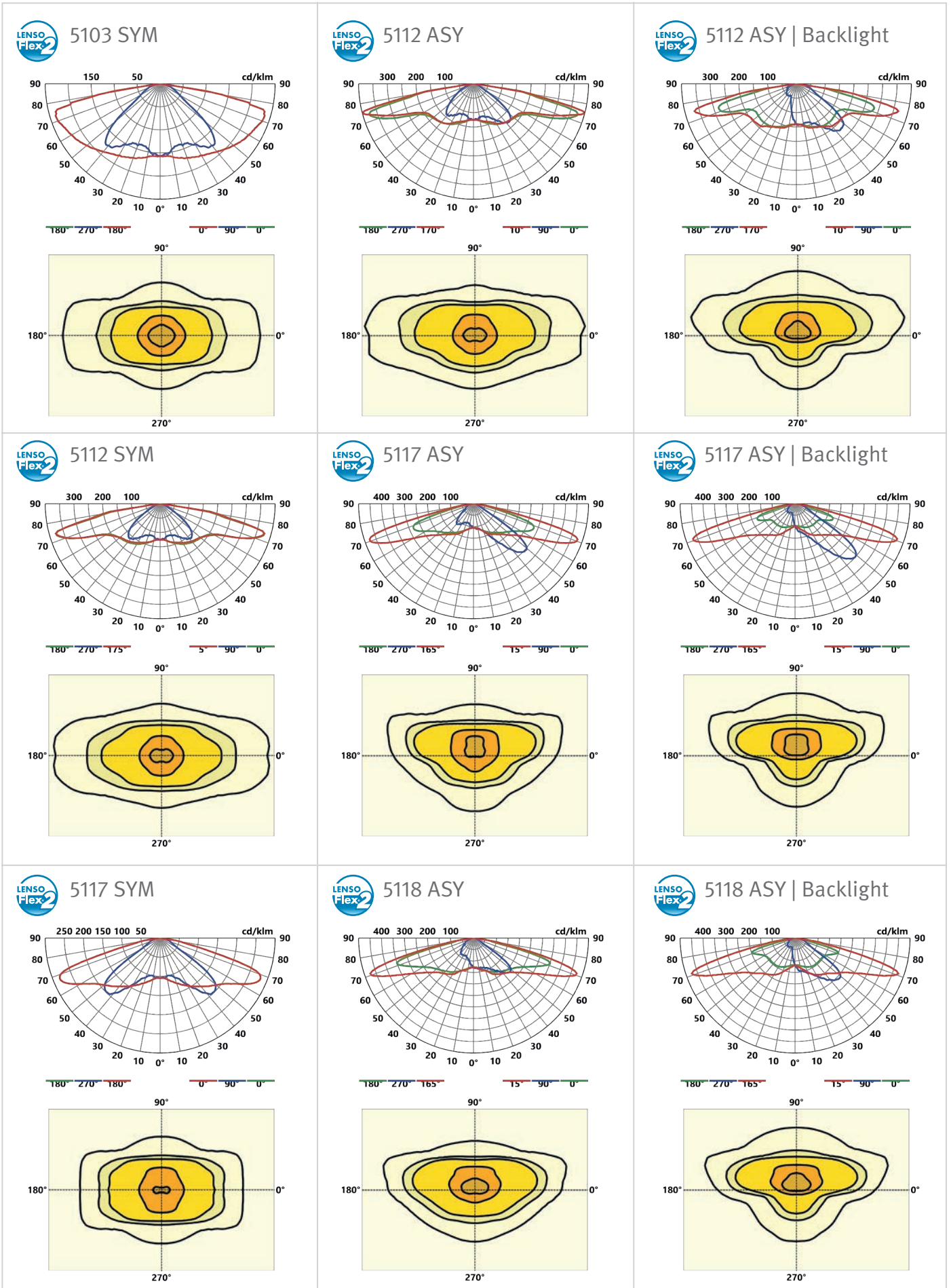
For all configurations	100,000h – L90B10
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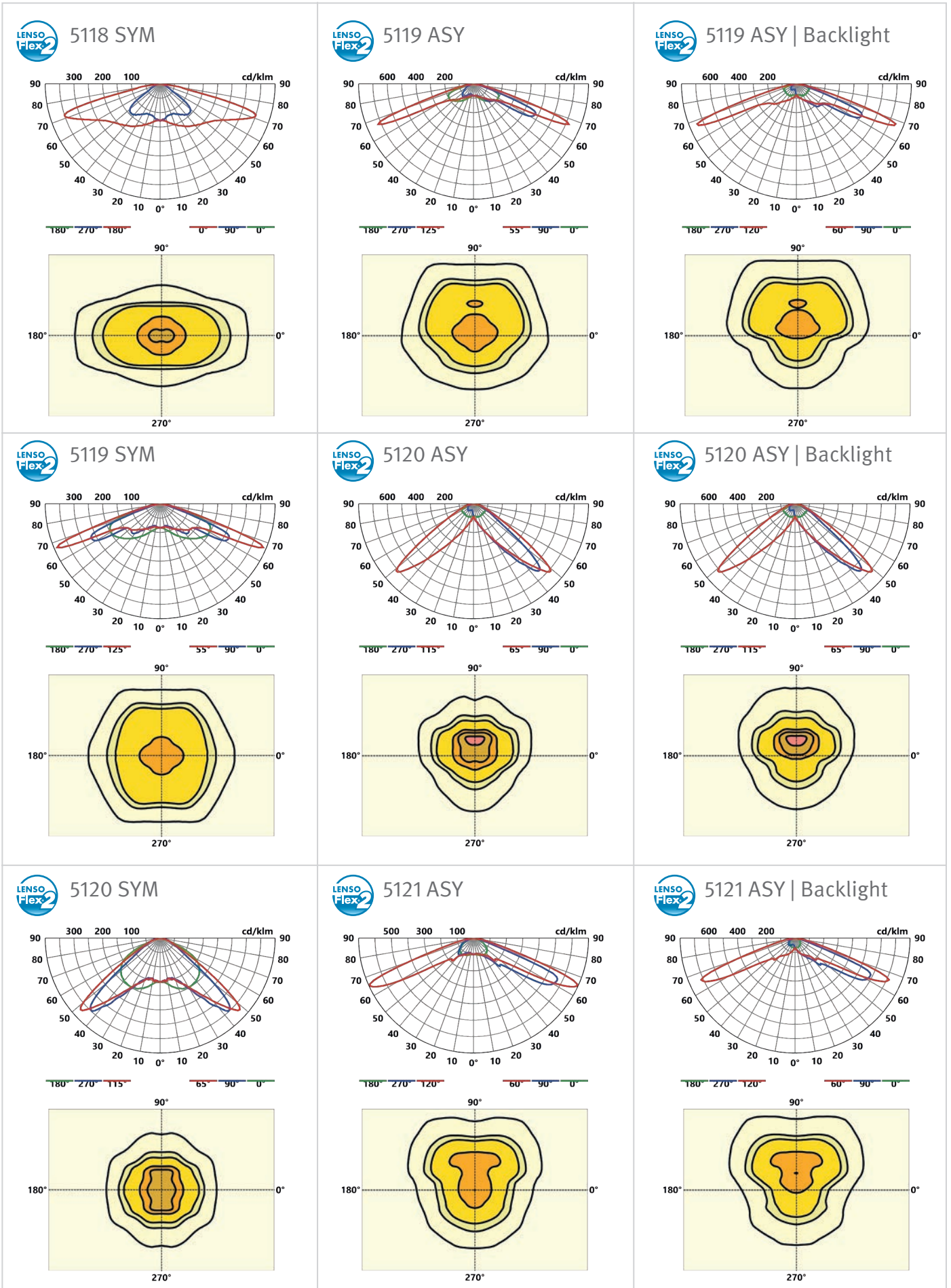


Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Neutral White (4000K) - CRI 70		Luminaire output flux (lm) Warm White (3000K) - CRI 80		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max			
OYO	16	350	1700	1900	1500	1700	18.5	106	
	16	500	2300	2600	2000	2300	26.3	101	
	16	700	3000	3400	2700	3100	37.2	94	
	24	350	2500	2900	2300	2650	27.3	107	
	24	500	3400	3900	3100	3500	38.9	102	
	24	700	4500	5200	4100	4700	55	95	
	32	500	4600	5200	4100	4700	51	104	
	32	700	6000	6900	5400	6200	72	97	
	40	350	4200	4800	3800	4400	43.5	112	
	40	500	5700	6600	5100	5900	63	105	
	48	350	5000	5800	4600	5300	52.5	112	
	48	500	6900	7900	6200	7100	75	106	

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









5121 SYM

