YMERA

Designer : AF lighting

owlet®

LENSO FLEX™ 2

Aesthetic appeal, comfort and efficiency

The YMERA incorporates a refined design and state-of-the art LED technology to provide an energy-efficient lighting solution that enhances city streets.

Perfect for roads, public squares, bike paths and other urban outdoor areas, YMERA delivers a high-quality lighting and lowers the 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 the quality of light.

IP 66 | IK 10

005 certification

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 Schréder. 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 a 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 can be delivered with quick-on IP 68 connectors to accelerate the wiring process.

YMERA also integrates patented technologies such as the IzyHub compact connection and connectivity module for quick, tool-free and error-proof wiring.

This connected-ready luminaire is compatible with standard NEMA 7-pin or Zhaga socket, 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.

YMERA is compatible with standard NEMA 7-pin or Zhaga socket.

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)
- Connected-ready for your future Smart cities' requirements
- Based on open and interoperable standards
- Compatible with Schréder EXEDRA control platform

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YMERA | basic

YMERA | dome

YMERA | skirt

YMERA | dome+skirt

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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.

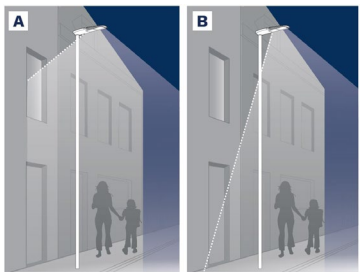
LensoFlex®3

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 and LensoFlex®4 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

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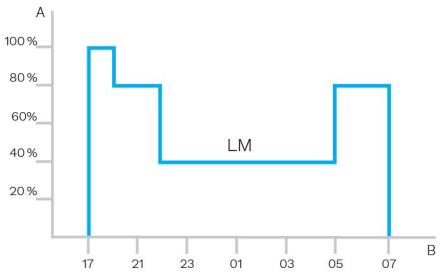
Custom dimming profile

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.

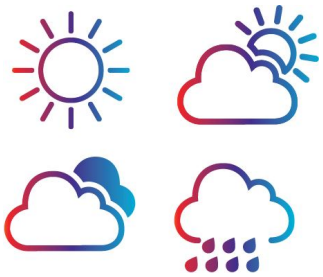
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



A. Dimming level | 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 nightfall 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 parametres 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.

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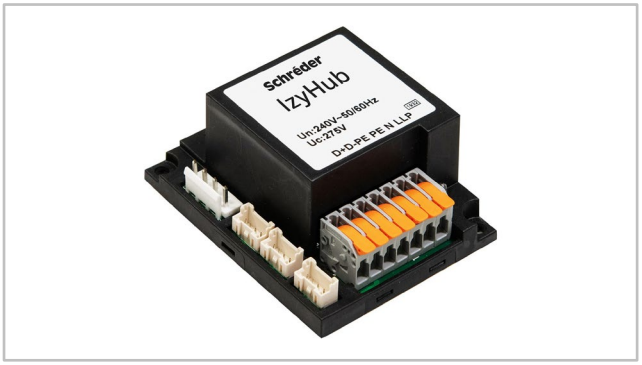
IzyHub

IzyHub is an innovative device that aims to keep luminaire installation and maintenance hassle-free. This single central connection hub distributes electricity and control information to all parts of the luminaire, ensuring that all components work together and offering reliable, long-term performance.

Its compact size and error-proof connections enable smaller and lighter luminaires that are easier to maintain and upgrade.



Surge Protection

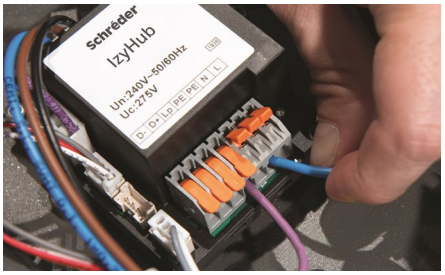
IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life LED warning light, indicating that the luminaire is protected correctly.

User-friendly

Installing a luminaire has never been easier. IzyHub features tool-free connector as the main connection terminal. It enables 30% shorter installation times compared with standard solutions. Lever actuated spring-loaded electrical connectors provide optimal contact throughout the entire life of the product.

Easy maintenance

On the rare occasion that a component needs to be replaced in the luminaire, IzyHub makes sure that operations are carried out quickly and easily. Luminaire component connections are keyed so that mixing up electrical connections is physically impossible. Installers do not need to trace wires individually: plug it in, and it works straight away.



Versions and upgrades

IzyHub has several versions featuring different connectivity options.

IzyHub can include an SPD, can work with external dimming and operate with all type of control sockets. It is also able to provide bi-power control and to include fuse options.

These options provide flexibility for future upgrades by only having to replace the IzyHub to connect the new equipment. No complicated re-wiring needed.

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The Schréder Bluetooth solution consists of 3 main components:

- A Bluetooth dongle plugged into the modular driver of the luminaire (BLE transceiver)
- A Bluetooth antenna fitted on the luminaire
- A smartphone application called Sirius BLE

Easy to use

The Schréder Bluetooth solution is ideal for the on-site configuration of individual outdoor luminaires using Bluetooth. From the ground, the user is able to switch the luminaire on or off, adapt the dimming curve, read diagnostic data and much more. A user-friendly application called Sirius BLE provides an easy and secure access to the control and configuration functions.

Whether you are managing a lighting network in an urban or a residential area, this solution will make it easy to control your outdoor luminaires while simply standing by the pole.

Quick and easy pairing

Get the Sirius App from Schréder. Go to the menu. Press the “SCAN DEVICE (START)” button, to search for the surrounding BLE modules. They will be displayed with a bar graphic (signal intensity) to indicate the closest and the most distant one you can reach. Click on the device you want to connect to and enter your personal access key to control the luminaire.

Defining the settings

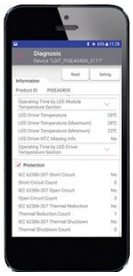
Once you are connected to a luminaire, you can set various parameters such as the maximum output current, minimum dimming level and custom dimming profile.

Manual dimming control

The App enables you to do a manual override to adapt the dimming levels instantly. Simply tap on the “Dimming” button in the main menu and adjust the dimming using the wheel and button. Predefined dimming levels can be applied immediately. The corresponding value is displayed on the wheel. This enables you to test the ON / OFF and dimming features of the luminaire paired to the smartphone.

On-site diagnostic

When a luminaire is paired, you can access various diagnostic information: total number of power up events, operation time of LED module and driver, total energy consumption of LED driver... etc. You can also track operating events (short circuits, thermal shutdowns...). The diagnostic values may be the current state or values accumulated to date.



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Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.

Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies.

Schréder EXEDRA also relies on Microsoft™ Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

Breaking the silos

With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface.

Tailored experience

Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

A powerful tool for efficiency, rationalisation and decision making

Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

Protected on every side

Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services.

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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
French law of December 27th 2018 - Compliant with application type(s)	a, b, c, d, e, f, g
BE 005 certified	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 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

· 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)	Bluetooth, 1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Sirius BLE Owlet IoT Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2200K (Warm White 822) 2700K (Warm White 727) 3000K (Warm White 730) 3000K (Warm White 830) 4000K (Neutral White 740)
Colour rendering index (CRI)	>80 (Warm White 822) >70 (Warm White 727) >70 (Warm White 730) >80 (Warm White 830) >70 (Neutral White 740)
Upward Light Output Ratio (ULOR)	0%

LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90

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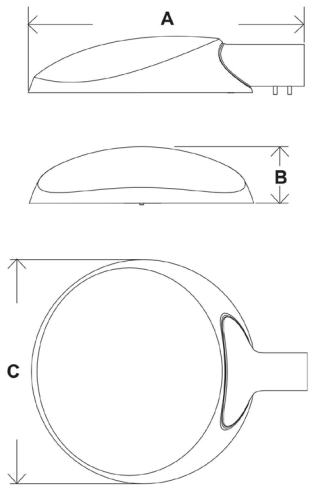
DIMENSIONS AND MOUNTING

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



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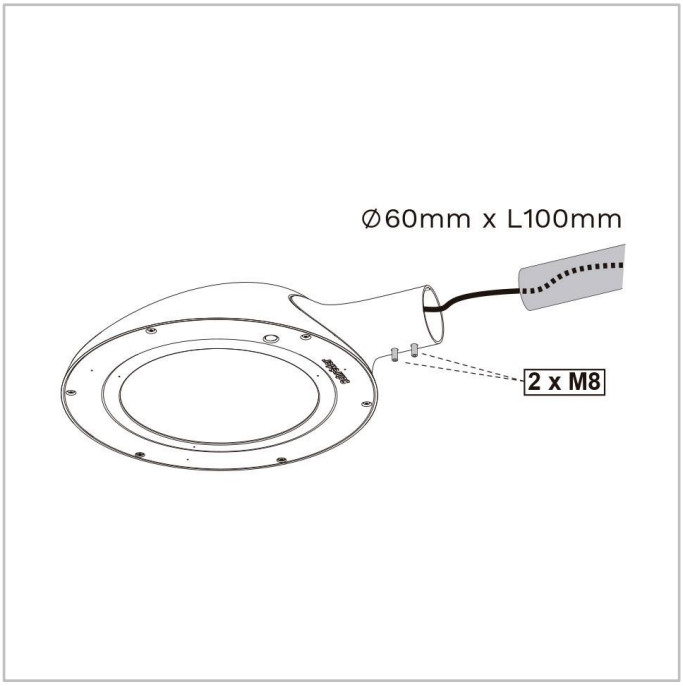
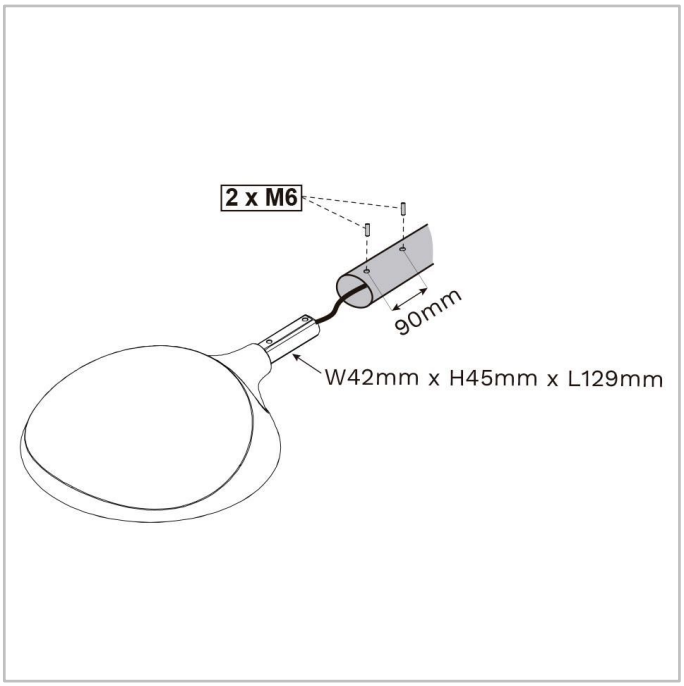
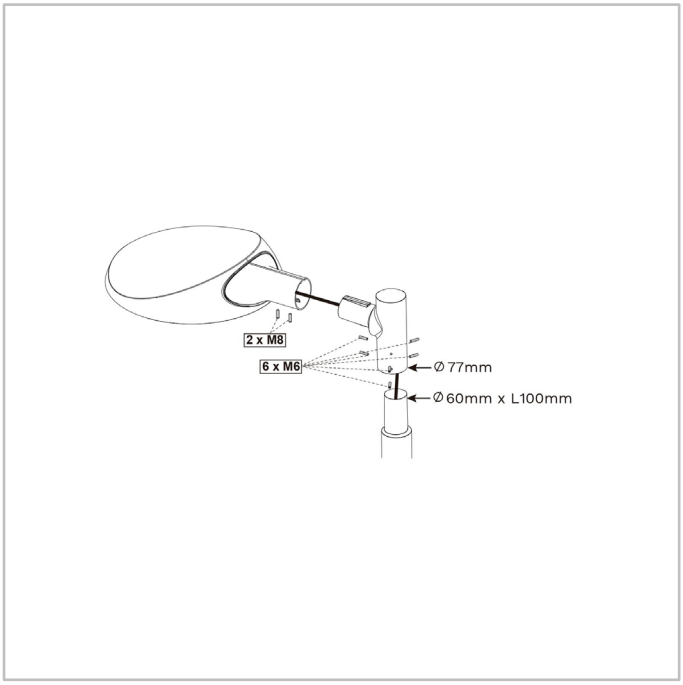
YMERA | Side-entry mounting Ø60 mm - 2xM8 screws



YMERA | Penetrating fixation Ø42 mm



YMERA | Post-top adaptor for a vertical mounting on a Ø76 mm pole



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Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 822		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)		Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	
YMERA	16	350	1700	2100	1900	2400	1300	1700	1700	2100	2000	2500	18.1	18.1	138	LENSO FLEX°2
	16	400	1900	2400	2100	2700	1500	1900	1900	2400	2200	2800	20.6	20.6	136	LENSO FLEX°2
	16	500	2300	2900	2600	3300	1800	2300	2300	2900	2700	3400	25.8	25.8	132	LENSO FLEX°2
	16	600	2700	3400	3000	3800	2100	2700	2700	3400	3100	4000	31	31	129	LENSO FLEX°2
	16	700	3000	3800	3400	4300	2400	3000	3000	3800	3500	4500	35.9	35.9	125	LENSO FLEX°2
	24	350	2500	3200	2800	3600	2000	2600	2500	3200	3000	3800	26.6	26.6	143	LENSO FLEX°2
	24	400	2900	3600	3200	4100	2300	2900	2900	3600	3300	4300	30.4	30.4	141	LENSO FLEX°2
	24	500	3500	4400	3900	4900	2700	3500	3500	4400	4000	5100	38.1	38.1	134	LENSO FLEX°2
	24	590	4000	5100	4400	5600	3100	4000	4000	5100	4600	5900	44.5	44.5	133	LENSO FLEX°2
	24	600	4000	5100	4500	5700	3200	4100	4000	5100	4700	6000	45	45	133	LENSO FLEX°2
	24	700	4600	5800	5100	6500	3600	4600	4600	5800	5300	6800	53	53	128	LENSO FLEX°2
	32	350	3400	4300	3800	4800	2700	3400	3400	4300	4000	5100	34.6	34.6	147	LENSO FLEX°2
	32	400	3800	4900	4300	5400	3000	3900	3800	4900	4500	5700	39.5	39.5	144	LENSO FLEX°2
	32	430	4100	5200	4600	5800	3200	4100	4100	5200	4800	6000	42.5	42.5	141	LENSO FLEX°2
	32	500	4600	5900	5200	6600	3700	4700	4600	5900	5400	6900	49	49	141	LENSO FLEX°2
	32	600	5400	6900	6000	7600	4300	5400	5400	6900	6300	8000	59.5	59.5	134	LENSO FLEX°2
	32	700	6100	7700	6800	8600	4800	6100	6100	7700	7100	9000	69.5	69.5	129	LENSO FLEX°2
	48	350	5100	6500	5700	7300	4100	5200	5100	6500	6000	7600	51.5	51.5	148	LENSO FLEX°2
	48	400	5800	7300	6400	8200	4600	5800	5800	7300	6700	8600	58.5	58.5	147	LENSO FLEX°2
	48	500	7000	8900	7800	9900	5500	7000	7000	8900	8100	10300	74	74	139	LENSO FLEX°2
	48	550	7600	9600	8400	10700	6000	7600	7600	9600	8800	11200	80	80	140	LENSO FLEX°2
	48	600	8100	10300	9100	11500	6400	8200	8100	10300	9500	12000	89	89	135	LENSO FLEX°2
	48	700	9200	11600	10200	13000	7300	9200	9200	11600	10700	13600	104	104	131	LENSO FLEX°2

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

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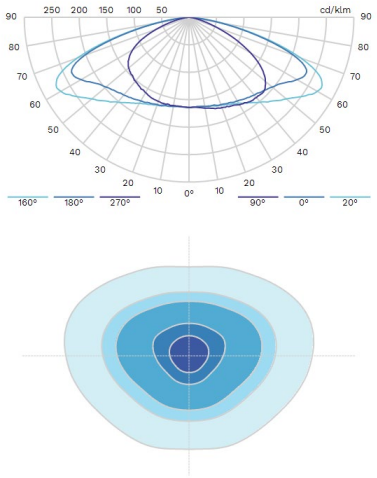
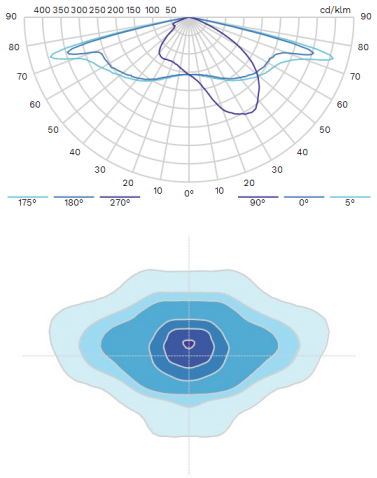
LENSO FLEX 2

5068



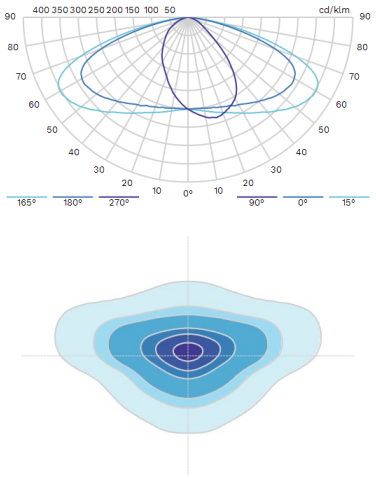
LENSO FLEX 2

5098



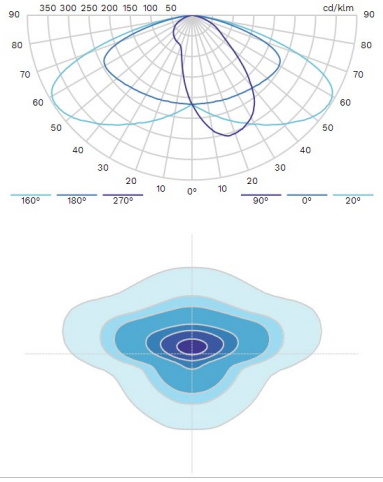
LENSO FLEX 2

5102



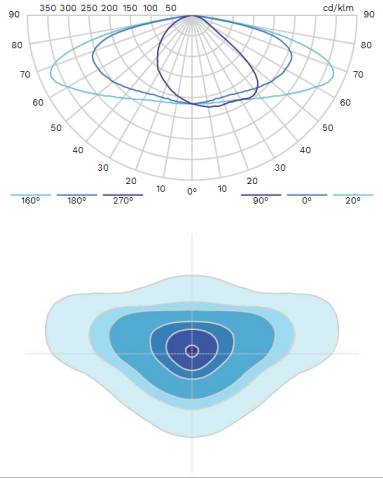
LENSO FLEX 2

5102 - BL



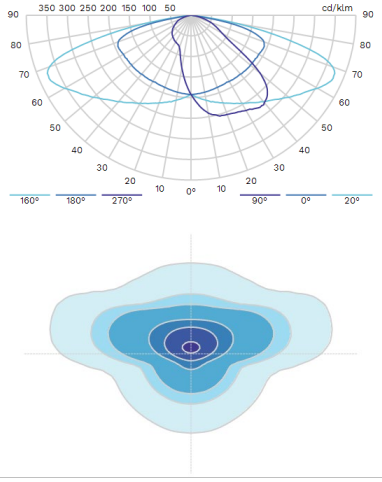
LENSO FLEX 2

5103



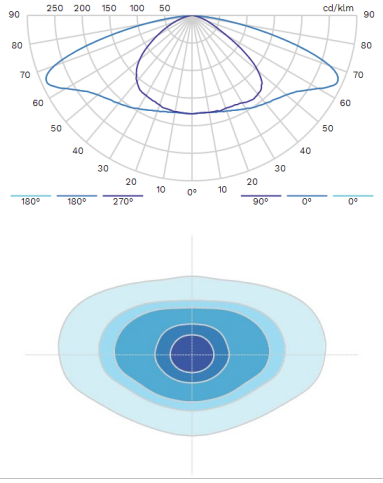
LENSO FLEX 2

5103 - BL



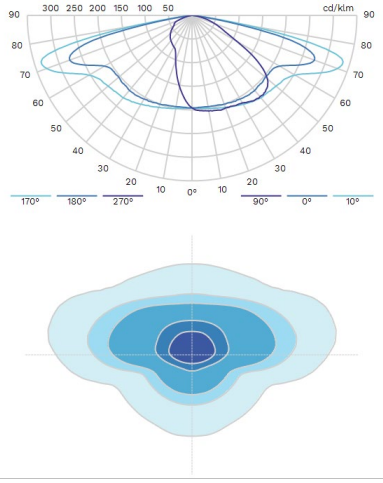
LENSO FLEX 2

5112



LENSO FLEX 2

5112 - BL



LENSO FLEX 2

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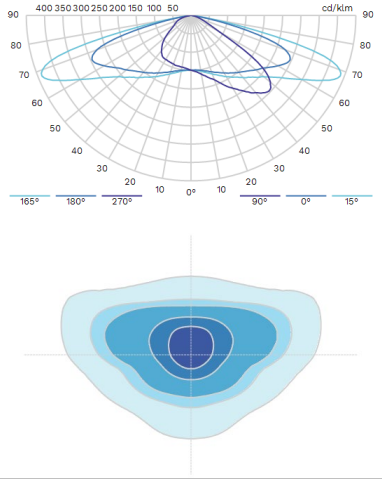

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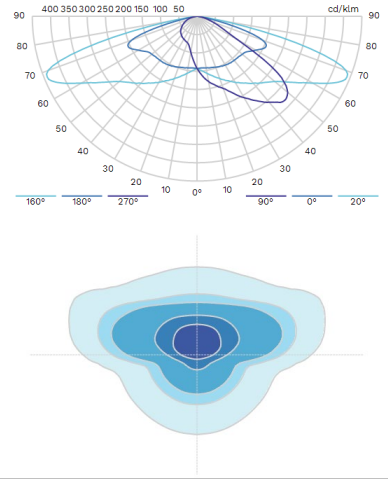
LENSO FLEX 2

5117 - BL



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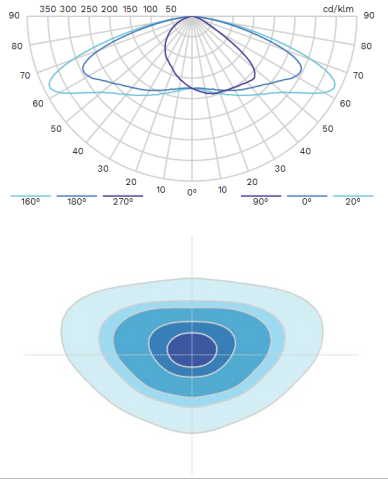

LENSO FLEX 2

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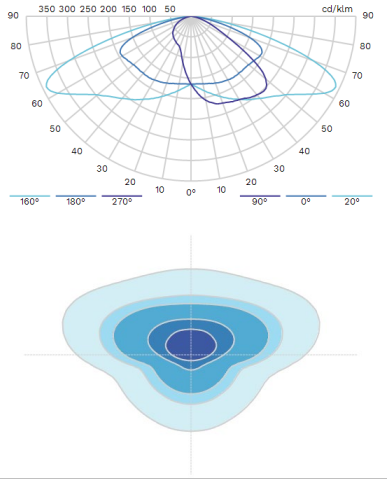

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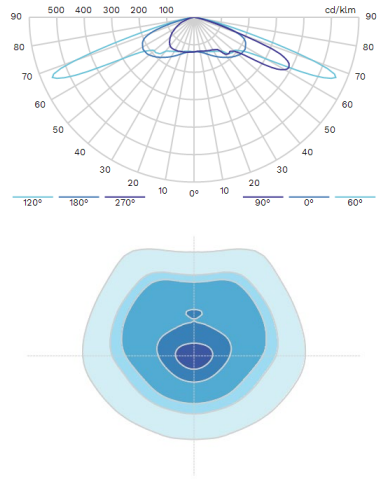

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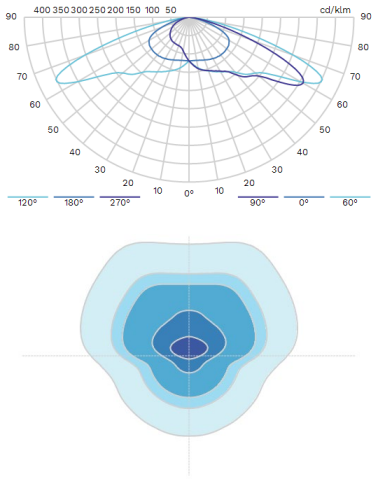

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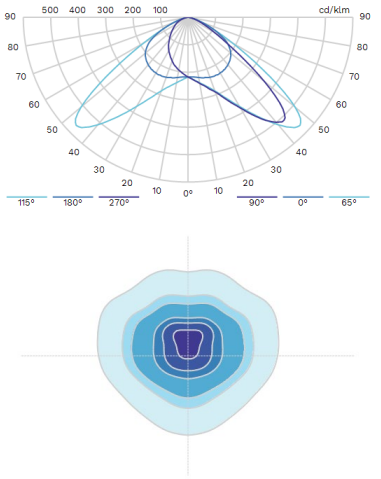

LENSO FLEX 2

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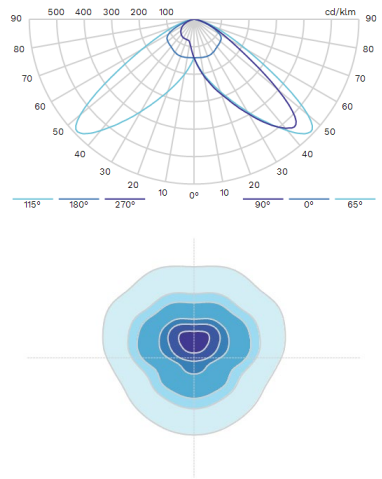

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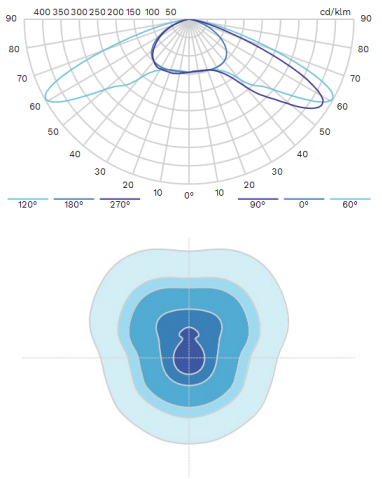

LENSO FLEX 2

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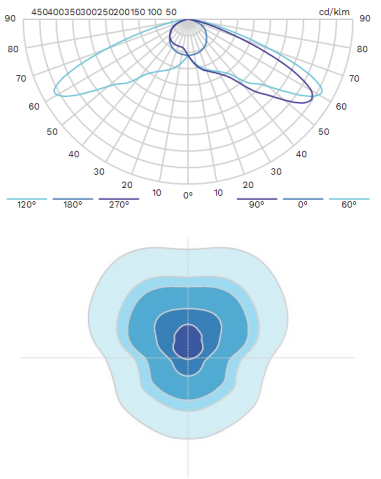

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LENSO FLEX 2

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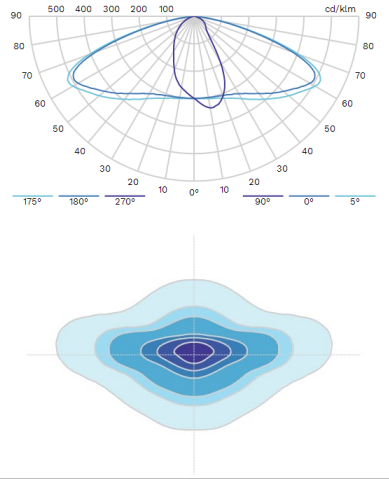

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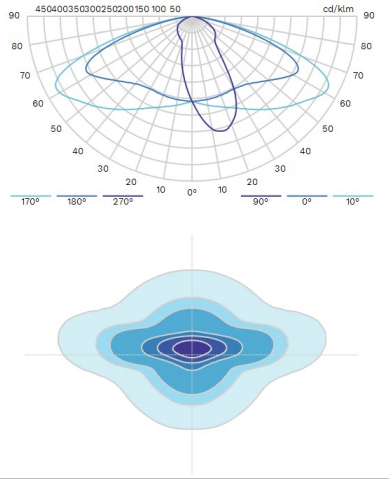

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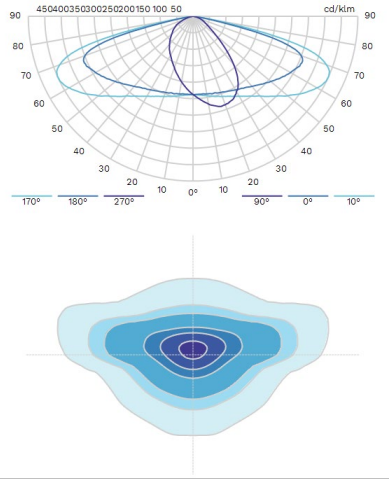

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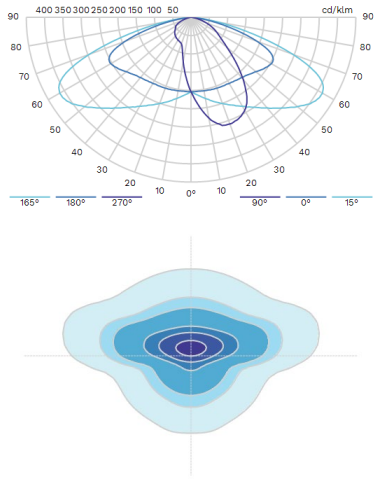

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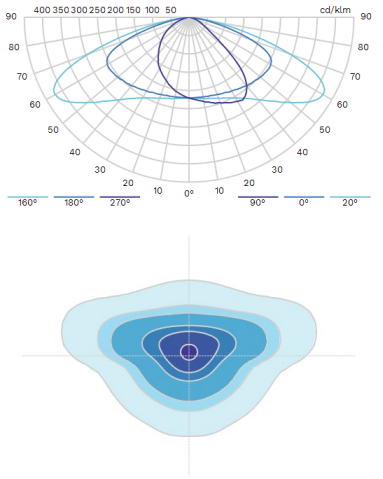

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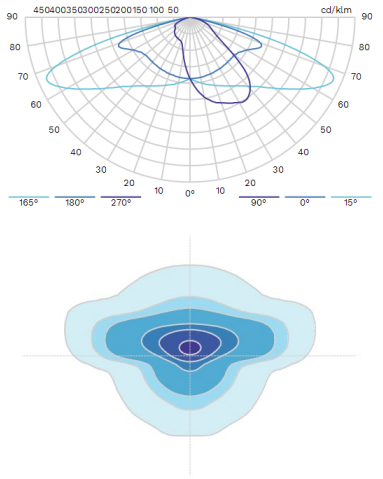

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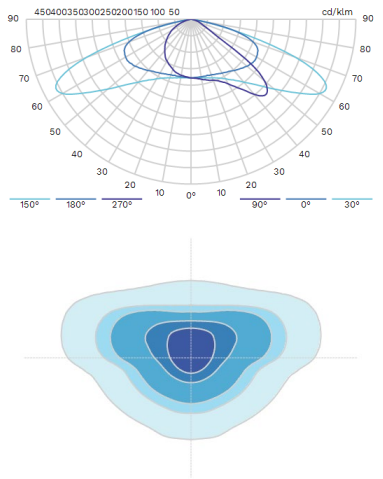

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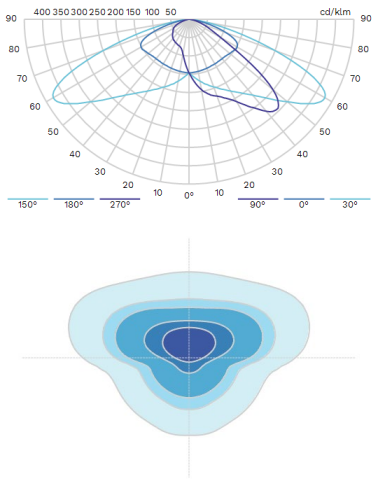

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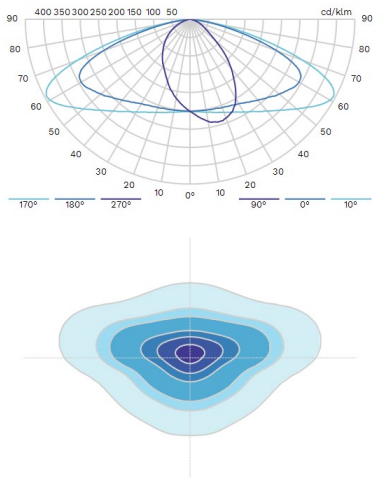

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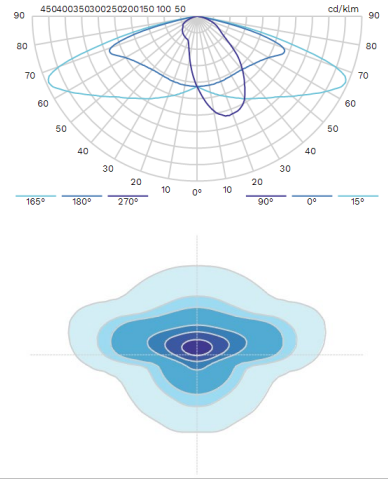
LENSO FLEX 2

5140 - BL



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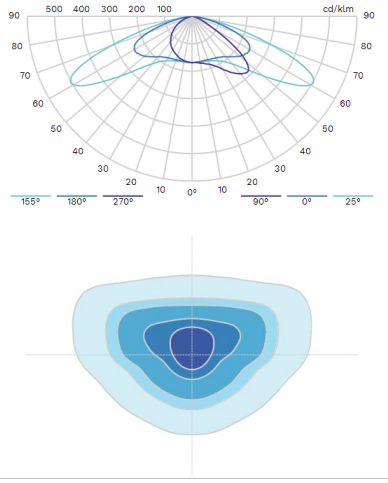

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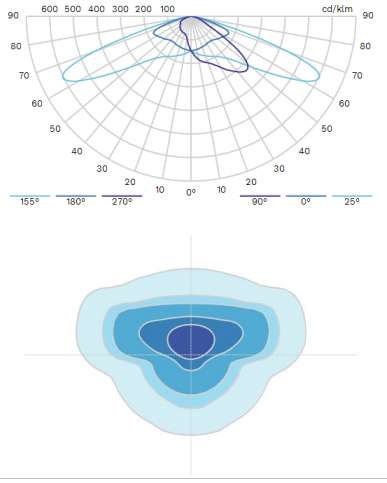
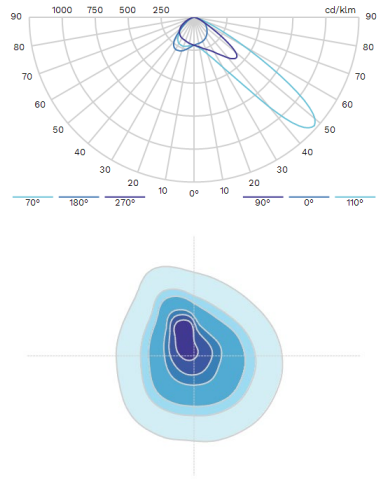


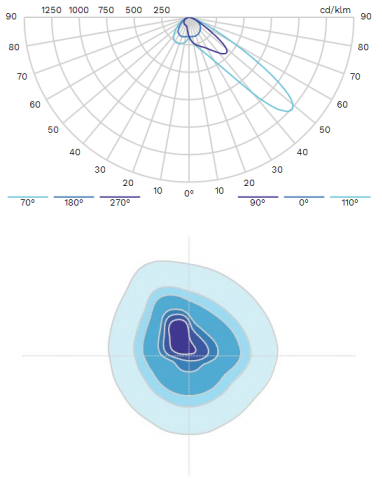
LENSO FLEX 2

5144 Zebra left



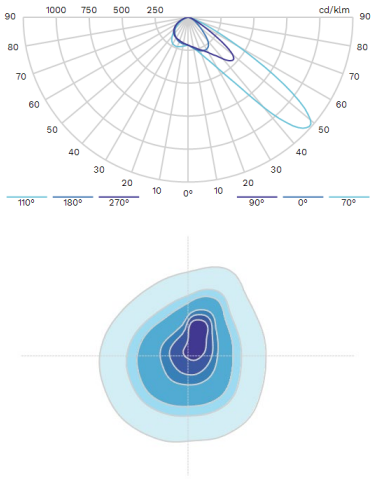
LENSO FLEX 2

5144 Zebra left BL



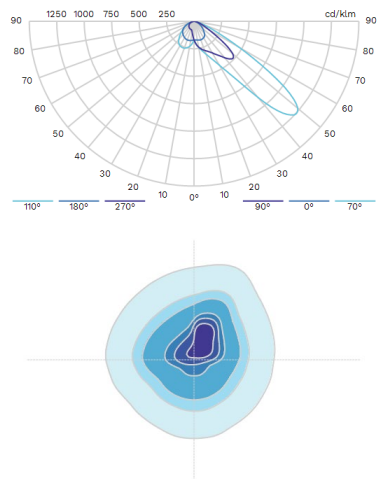
LENSO FLEX 2

5145 Zebra right



LENSO FLEX 2

5145 Zebra right BL



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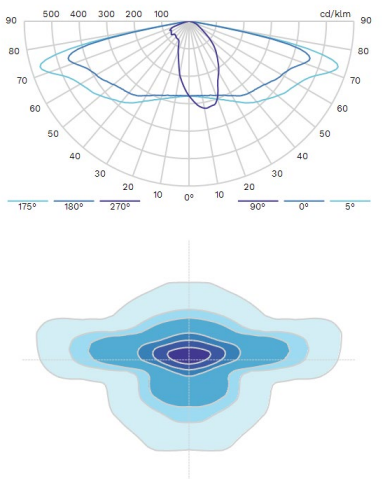
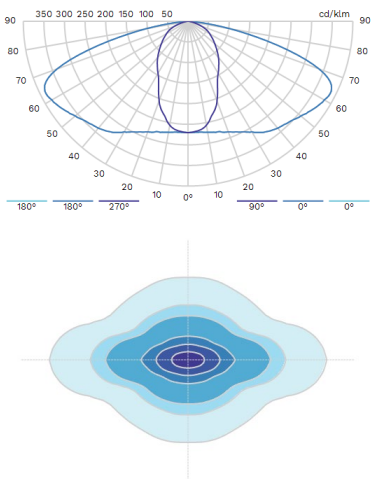


LENSO FLEX 2

5244 SY



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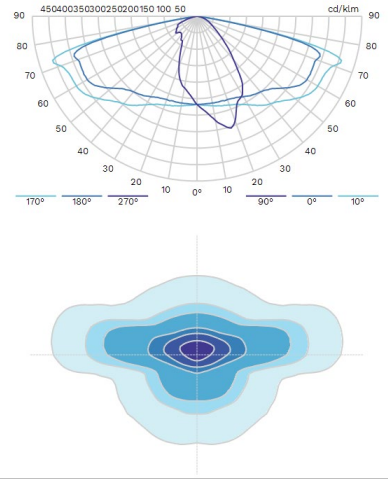
LENSO FLEX 2

5245



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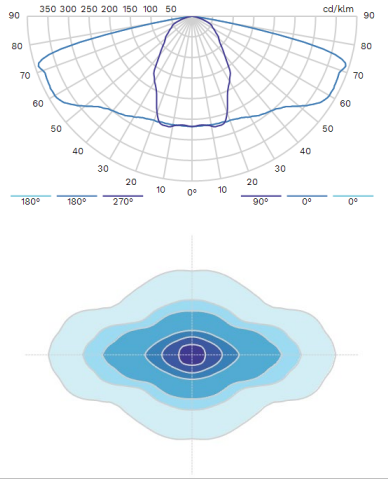

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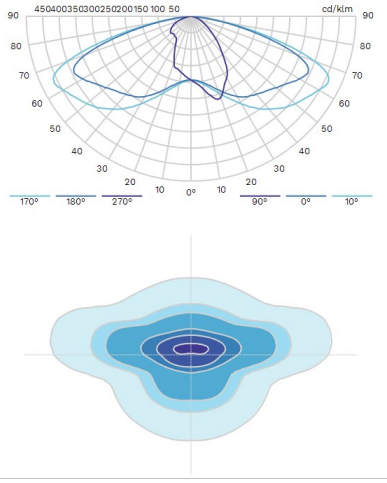

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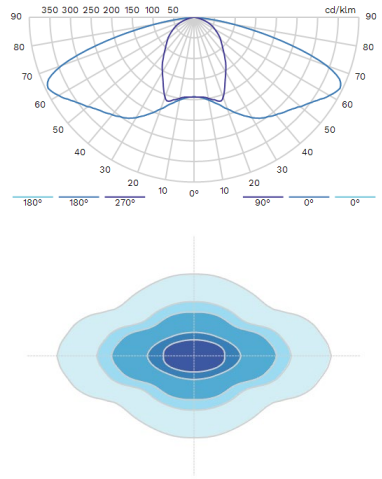

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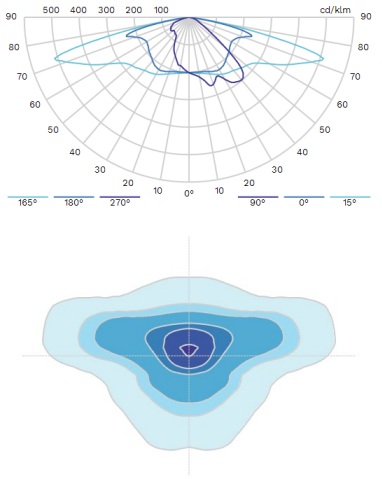

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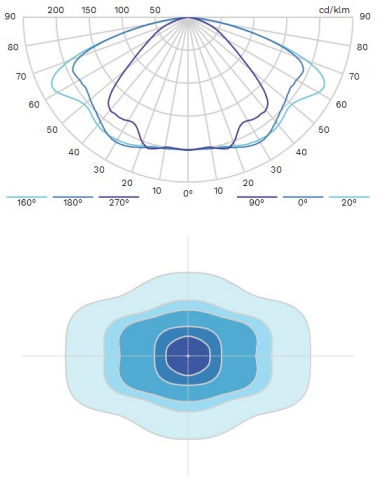

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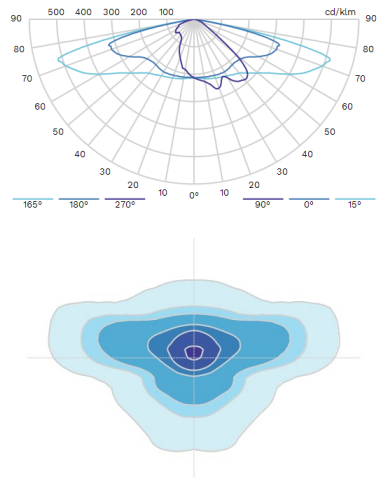

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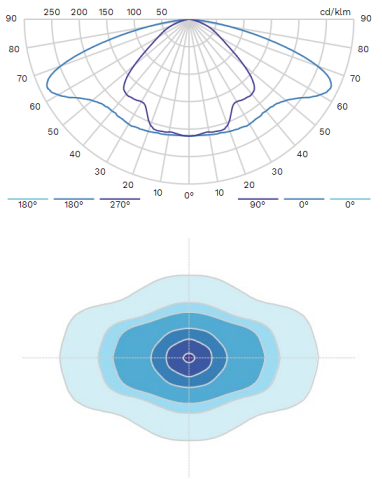

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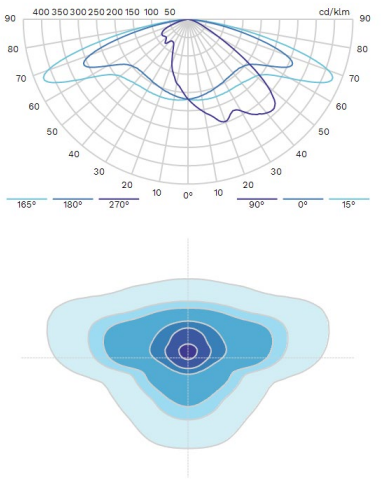

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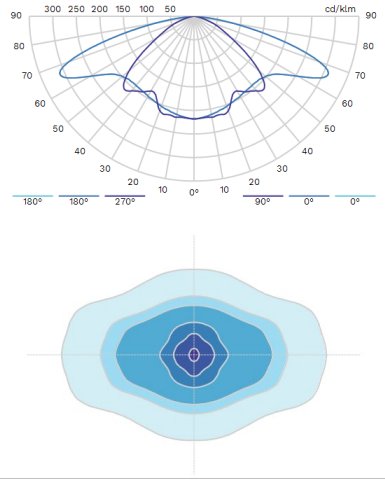
LENSO FLEX 2

5249 SY



LENSO FLEX 2

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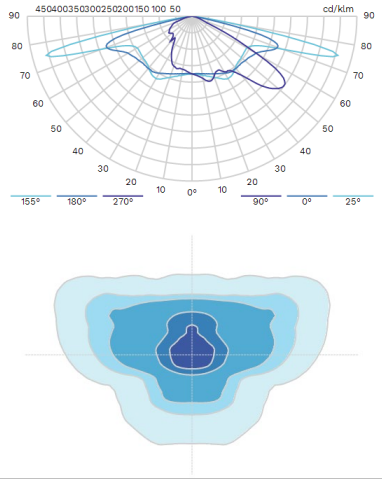

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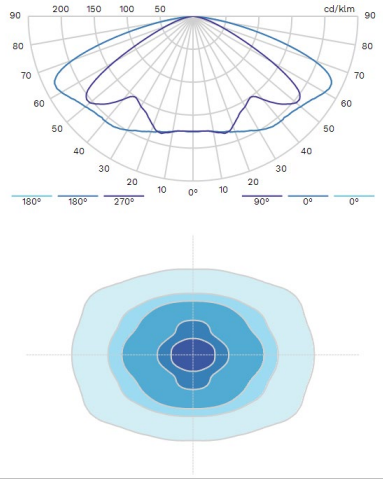

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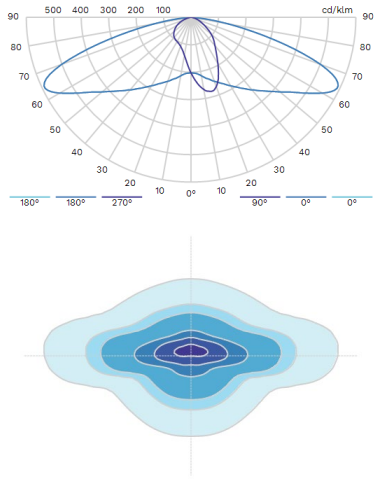

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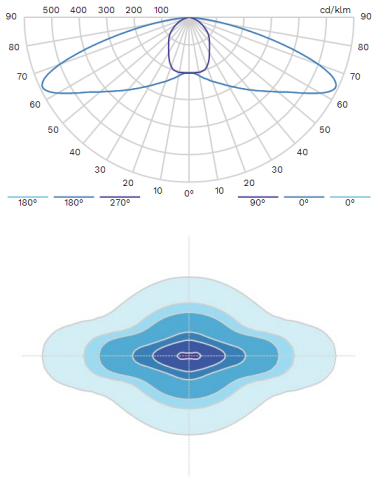

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