Schréder
Experts in lightability™

DECORATIVE

ZYLINDO

LENSO FLEX™ 2

A classic design integrating the latest technology

With two timeless aesthetic designs, ZYLINDO blends into all kinds of urban environments.

ZYLINDO has been designed to provide an efficient and sustainable lighting solution for various urban applications. With a high tightness level and a very high degree of impact resistance, this luminaire is built to withstand harsh environmental conditions and vandalism to perform over time.

The elegant cylinder shape with a 360° clear protector hosts the latest evolution of the proven LensoFlex®2 photometric engine, providing symmetrical and asymmetrical light distributions.

ZYLINDO is available as a smooth cylinder or with a large canopy.

Both versions are delivered pre-wired. They offer tool free access to the optical unit and gear compartment to facilitate maintenance operations.

IP 66 | IK 10 | 005 certification | RoHS | PLUS 02 | CE | ZD

URBAN & RESIDENTIAL STREETS | BRIDGES | BIKE & PEDESTRIAN PATHS | RAILWAY STATIONS & METROS | CAR PARKS | SQUARES & PEDESTRIAN AREAS

Concept

ZYLINDO is a timeless decorative post-top luminaire designed for mounting at a height of between 3 and 6 meters. The luminaire is composed of three main parts made of high-pressure die cast aluminium; a lower section integrating the gear compartment and the fixation for a Ø60mm or Ø76mm spigot, an upper body part and a top cap.

The large canopy version incorporates a round cover made of aluminium with white paint on the lower half as a flux enhancer.

The 360° protector is made of UV-stabilised polycarbonate. It hosts the photometric engine and two oval rods in extruded aluminium connecting the bottom to the top of the luminaire. The power cable for the LEDs is hidden inside these hollow rods.

ZYLINDO offers tool free access for maintenance. The photometric engine fixed on an extruded aluminium heatsink can be accessed by pinching two stainless steel spring locks.

To facilitate installation, ZYLINDO integrates patented technologies such as the IzyHub compact connection and connectivity module for quick, tool-free and error-proof wiring.

A reusable extruded gasket ensures that the luminaire can be closed in a safe and easy manner after maintenance and guarantees the high tightness level.

Multipole disconnectors enable the gear tray to be easily removed, without any tools, after opening the top cap and pulling out the photometric engine.

ZYLINDO combines the energy efficiency of LED technology with the photometric performance of the LensoFlex®2 engine developed by Schréder. To reduce glare, an internal diffuser is available as an option.

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

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Elegant and robust design with 2 aesthetic versions
- LensoFlex photometrical engines providing asymmetrical and symmetrical lighting distributions
- Optional internal diffusor for high visual comfort
- Designed for mounting on both Ø60mm (with an accessory) and Ø76mm spigots
- Supplied pre-cabled to facilitate its installation
- Connected-ready for your future Smart city requirements
- Based on open and interoperable standards
- Compatible with the Schréder EXEDRA control platform
- Zhaga-D4i certified

ZYLINDO offers tool free access for maintenance.

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

ZYLINDO is delivered pre-wired for mounting on a Ø60mm (with an accessory) or Ø76mm spigot.

The electronics can be serviced without using any tools thanks to a removable gear tray.

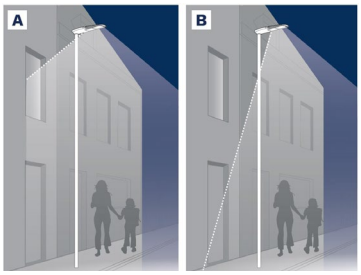
LensoFlex®2

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

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.

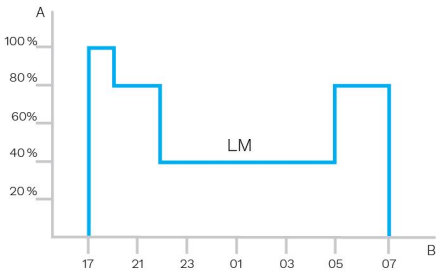


A. Without Back Light control | B. With Back Light control

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.

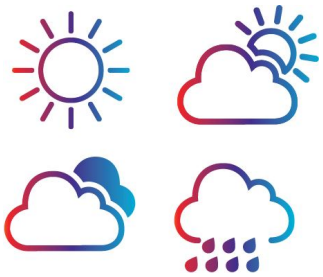
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



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

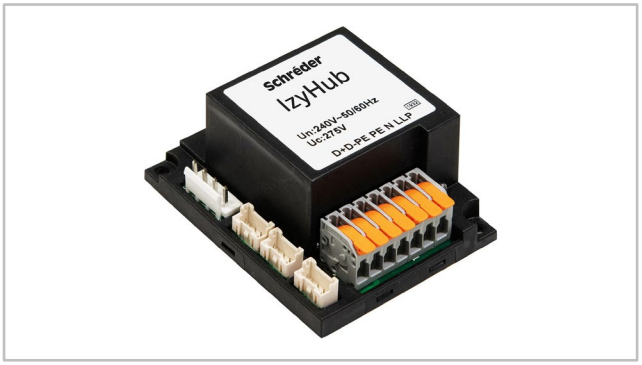
In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

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.

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

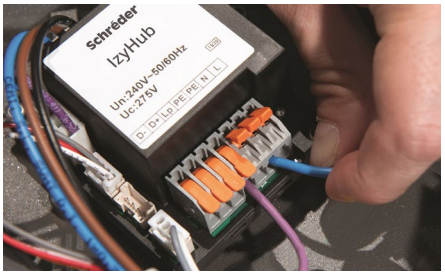
IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life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

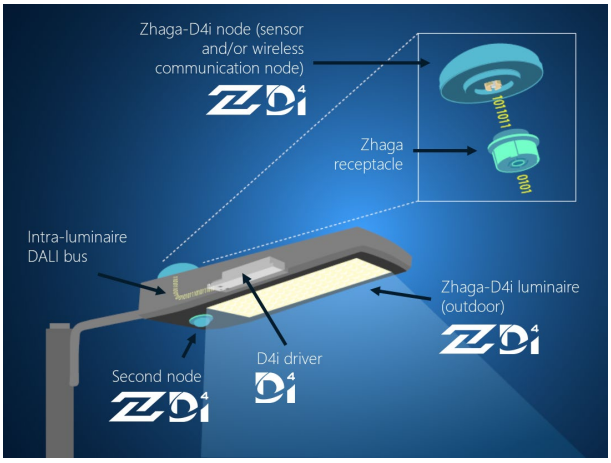
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

Standardisation for interoperable ecosystems

As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire. According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.



Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

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.

GENERAL INFORMATION

Recommended installation height	3m to 6m | 10' to 20'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE mark	Yes
ENEC+ certified	Yes
ROHS compliant	Yes
Zhaga-D4i certified	Yes
BE 005 certified	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	DB 703 dark grey
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	Tool-less access to gear compartment

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22° F up to 131°F

· 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)	6 8 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, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2200K (WW 822) 2700K (WW 727) 3000K (WW 730) 3000K (WW 830) 4000K (NW 740)
Colour rendering index (CRI)	>80 (WW 822) >70 (WW 727) >70 (WW 730) >80 (WW 830) >70 (NW 740)
ULOR	<4%
ULR	<6%

· ULOR may be different according to the configuration. Please consult us.
· ULR may be different according to the configuration. Please consult us.

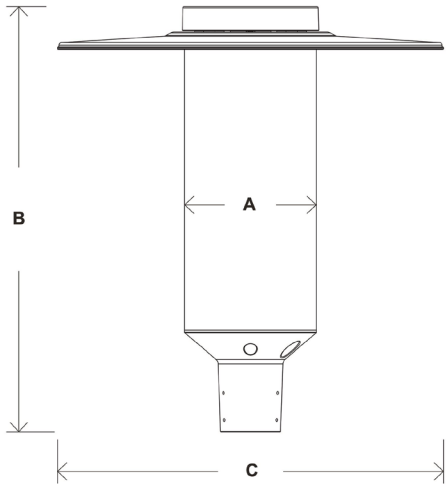
LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90

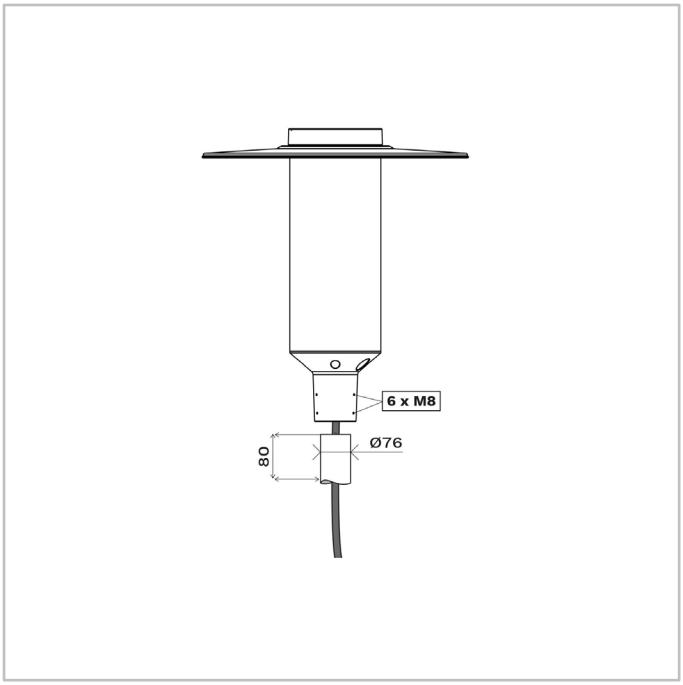
DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	220x708x644 | 8.7x27.9x25.4
Weight (kg | lbs)	9.2 | 20.2
Aerodynamic resistance (CxS)	0.24
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm

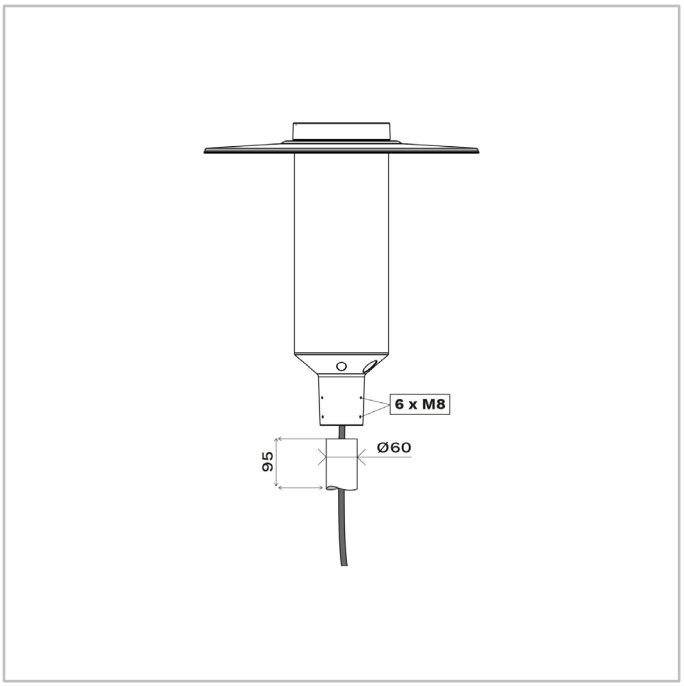
· Zylindo smooth cylinder: different weight (7.8kg/15.4lbs) and CxS (0.027)



ZYLINDO | Post-top on a Ø76 mm with 80mm long spigot - 6XM8 screws



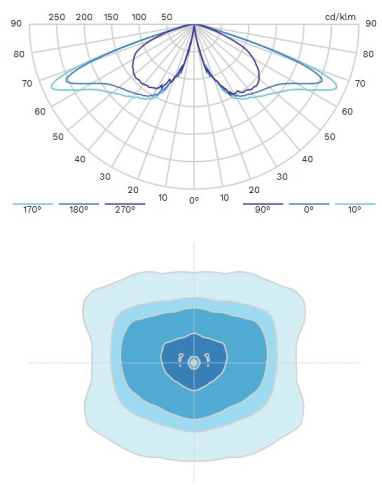
ZYLINDO | Post-top on a Ø60 mm (with an accessory) with 95 mm long spigot - 6XM8 screws



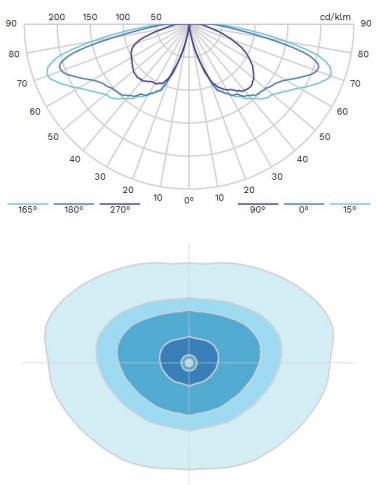
Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 822		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	
ZYLINDO	8	350	700	1000	800	1100	500	800	700	1000	800	1100	9.8	112	LENSO FLEX°2
	8	400	800	1100	900	1200	600	900	800	1100	900	1300	11.1	117	LENSO FLEX°2
	8	470	900	1300	1000	1400	700	1000	900	1300	1000	1500	13.1	115	LENSO FLEX°2
	8	500	900	1300	1000	1500	700	1100	900	1300	1100	1500	13.9	108	LENSO FLEX°2
	8	600	1100	1600	1200	1700	800	1200	1100	1600	1300	1800	16.7	108	LENSO FLEX°2
	8	700	1200	1800	1400	2000	1000	1400	1200	1800	1400	2000	19.6	102	LENSO FLEX°2
	16	350	1400	2000	1600	2200	1100	1600	1400	2000	1600	2300	18.1	127	LENSO FLEX°2
	16	400	1600	2300	1800	2500	1200	1800	1600	2300	1800	2600	20.6	126	LENSO FLEX°2
	16	500	1900	2700	2100	3000	1500	2200	1900	2700	2200	3200	25.8	124	LENSO FLEX°2
	16	600	2200	3200	2500	3500	1700	2500	2200	3200	2600	3600	31	116	LENSO FLEX°2
	16	700	2500	3600	2800	4000	2000	2800	2500	3600	2900	4100	36.5	112	LENSO FLEX°2
	24	350	2100	3000	2400	3400	1700	2400	2100	3000	2400	3500	26.6	132	LENSO FLEX°2
	24	400	2400	3400	2700	3800	1900	2700	2400	3400	2800	3900	30.4	128	LENSO FLEX°2
	24	500	2900	4100	3200	4600	2300	3300	2900	4100	3300	4700	38.1	123	LENSO FLEX°2
	24	590	3300	4700	3700	5200	2600	3700	3300	4700	3800	5400	44.5	121	LENSO FLEX°2
	24	600	3300	4800	3700	5300	2600	3800	3300	4800	3900	5500	45.5	121	LENSO FLEX°2
	24	700	3800	5400	4200	6000	3000	4200	3800	5400	4300	6200	53.5	116	LENSO FLEX°2

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

5068 GL



5068 Sanded diffuser Canopy



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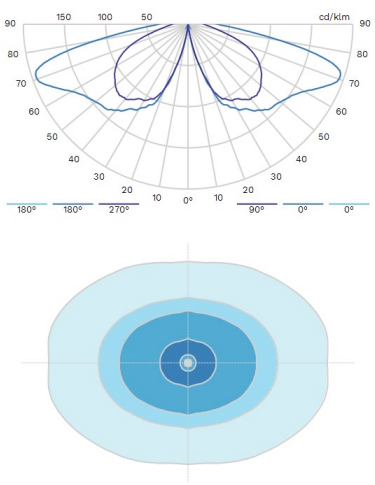

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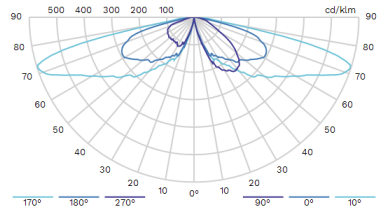

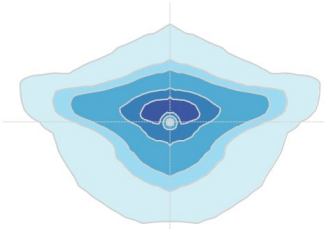

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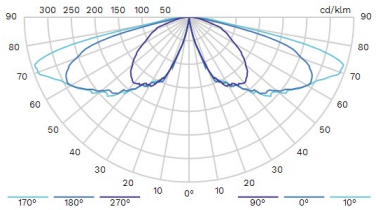

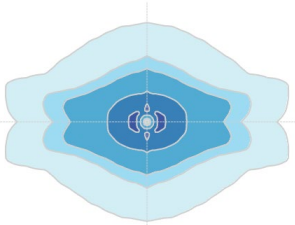

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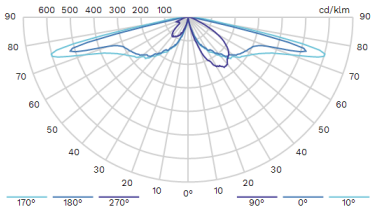

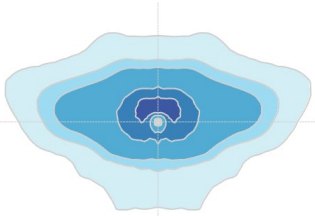

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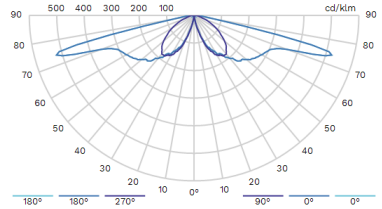

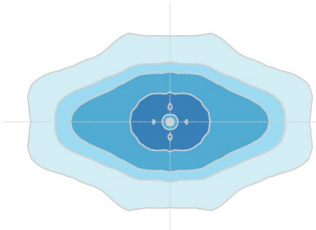

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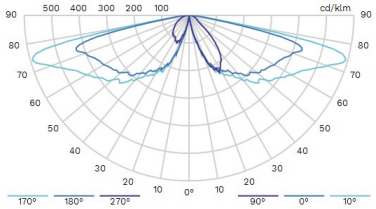

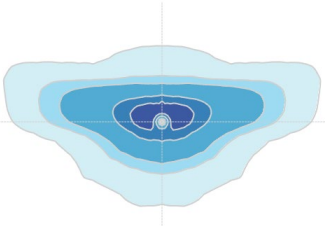

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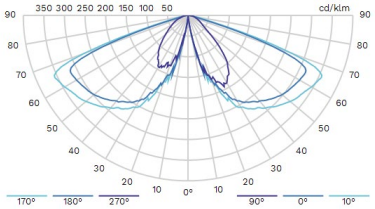
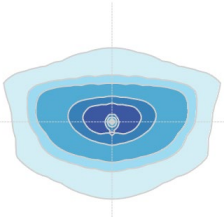
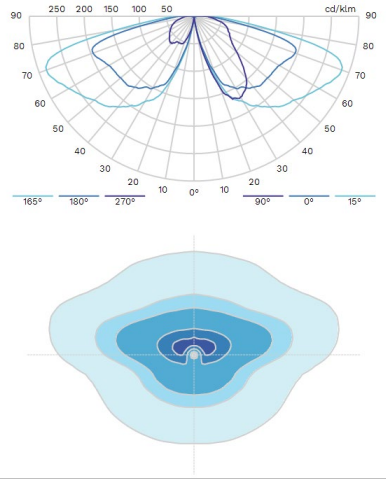




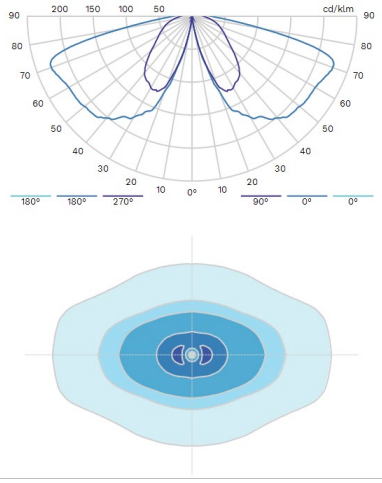
LENSO FLEX 2

5102 Sanded diffuser Canopy BL



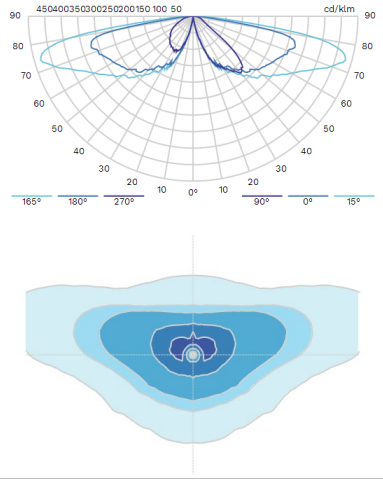
LENSO FLEX 2

5102 Sanded diffuser SY



LENSO FLEX 2

5103 Canopy



LENSO FLEX 2

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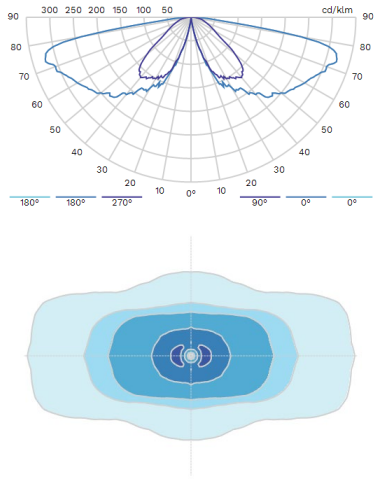
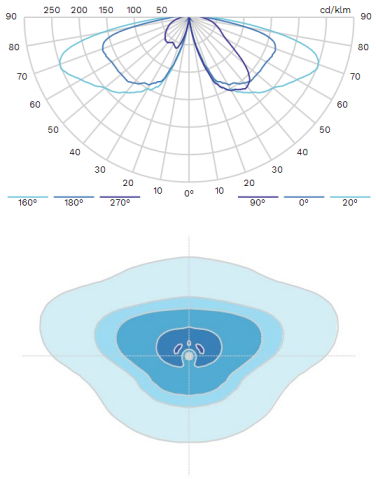


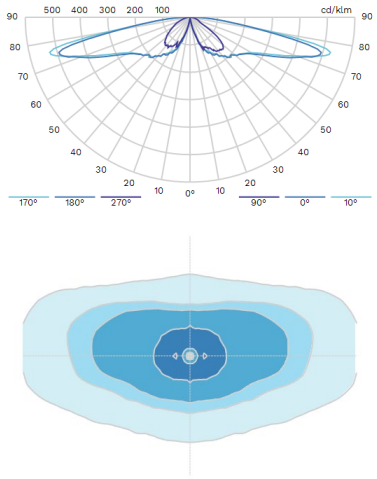
LENSO FLEX 2

5103 Sanded diffuser BL



LENSO FLEX 2

5112



LENSO FLEX 2

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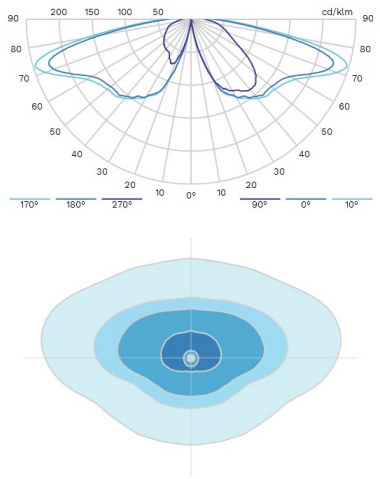
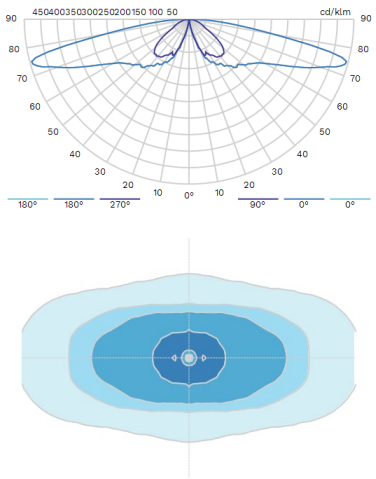


LENSO FLEX 2

5112 SY



LENSO FLEX 2

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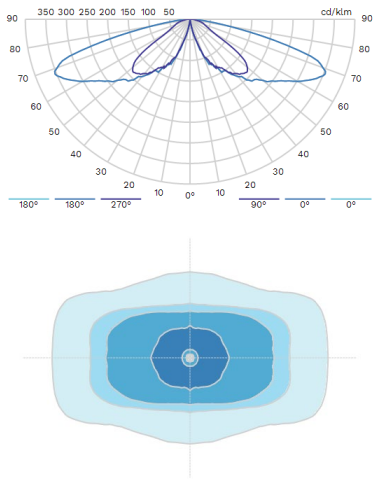

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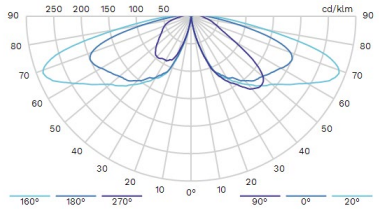

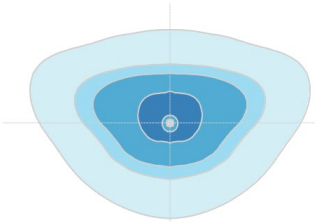

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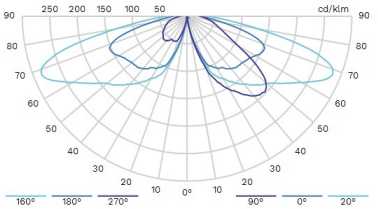

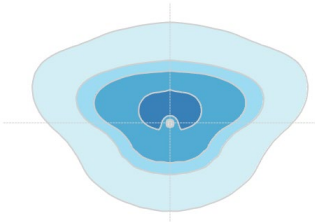

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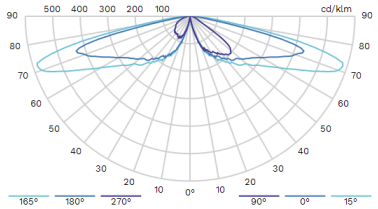
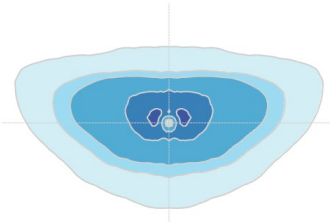
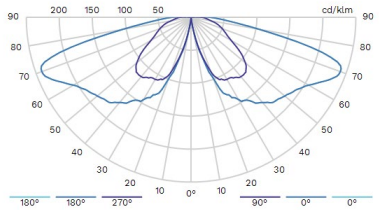
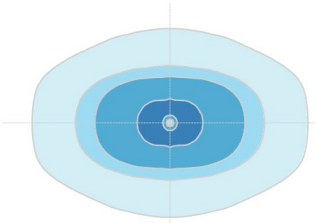




LENSO FLEX 2

5118 Canopy Sanded diffuser SY





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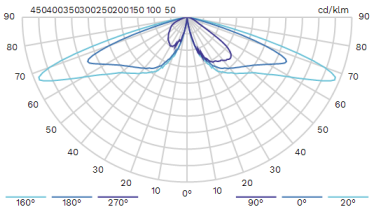

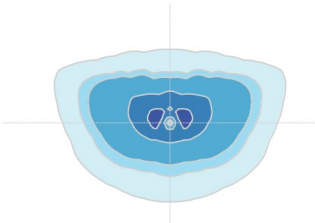

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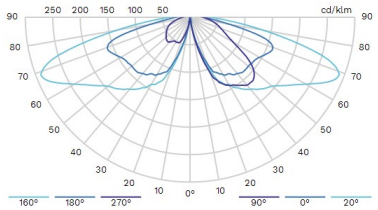

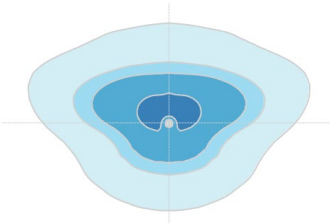

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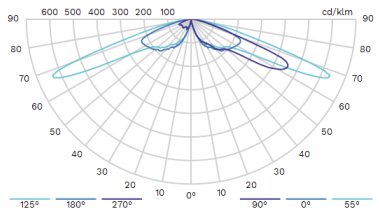

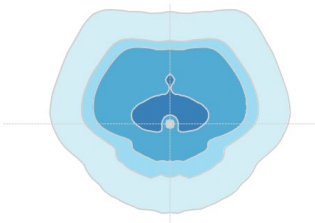

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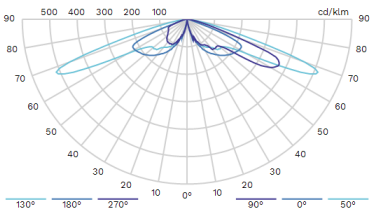

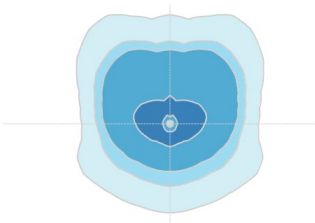

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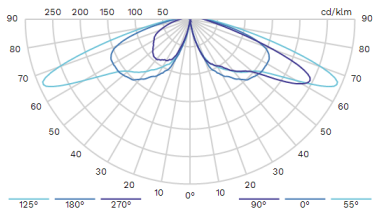

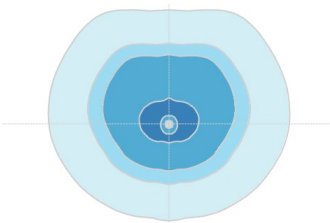

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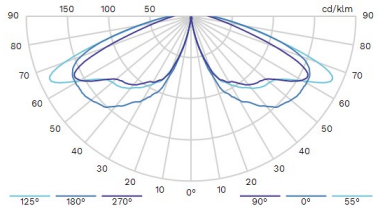

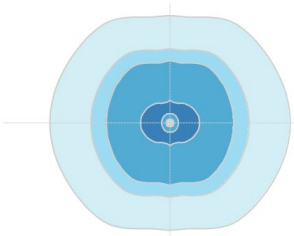

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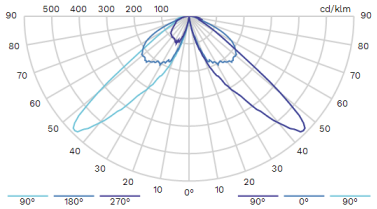

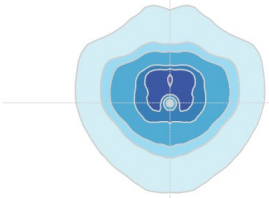

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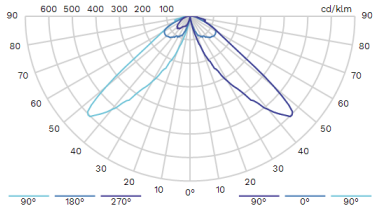

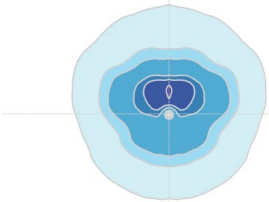

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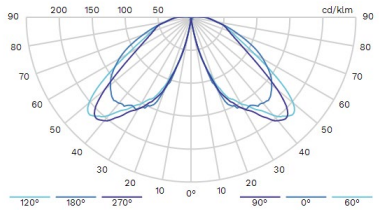

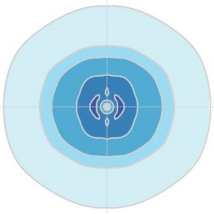

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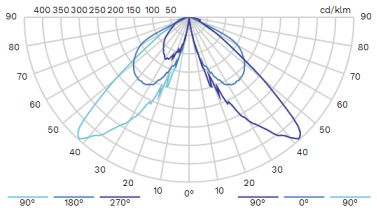

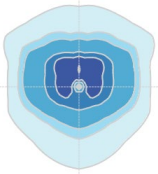

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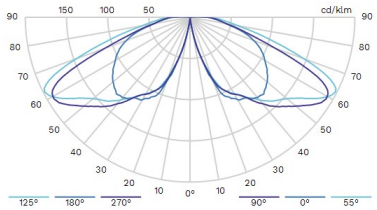

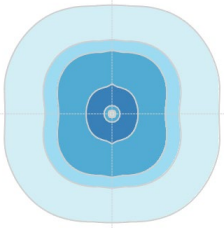

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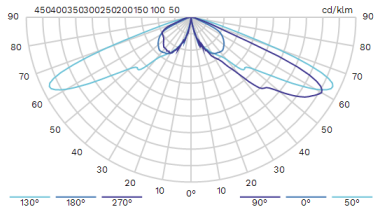

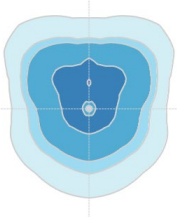

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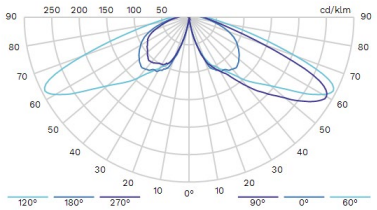

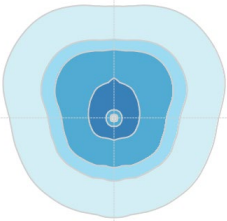

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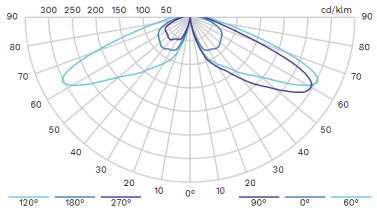

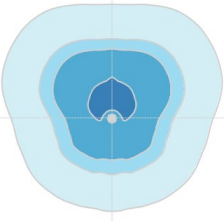

LENSO FLEX 2

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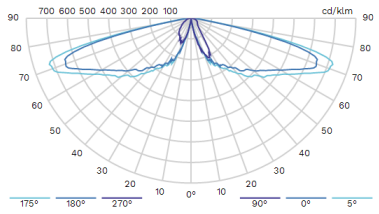
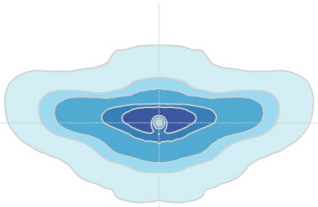
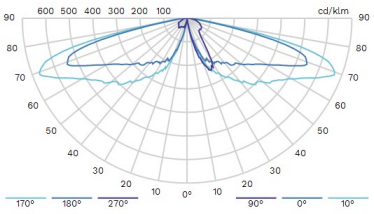
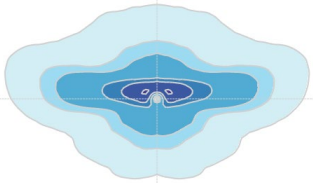




LENSO FLEX 2

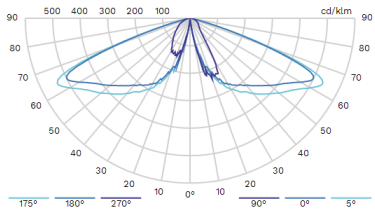
5136 Canopy BL

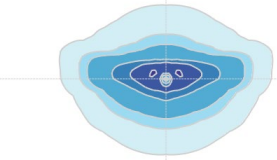




LENSO FLEX 2

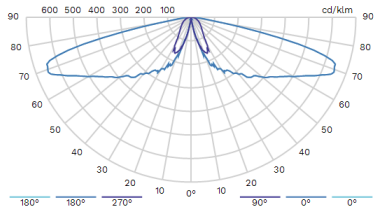
5136 GL

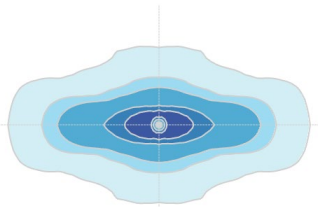




LENSO FLEX 2

5136 SY





LENSO FLEX 2

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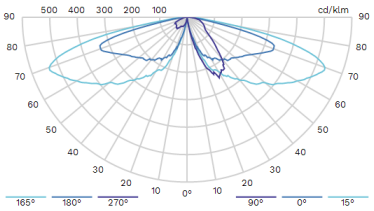
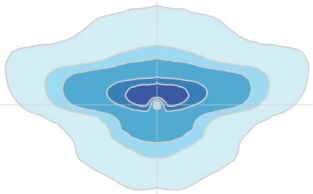
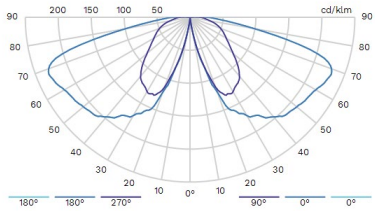
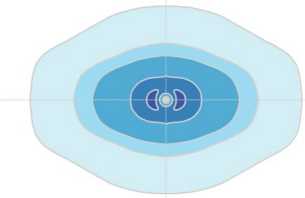




LENSO FLEX 2

5137 Canopy Sanded diffuser SY





LENSO FLEX 2

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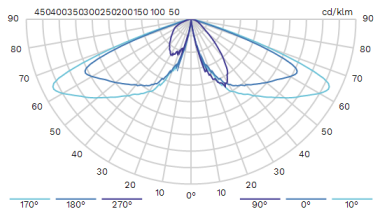

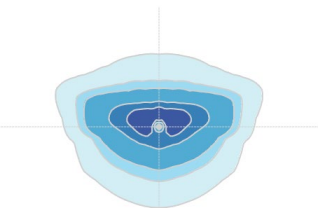

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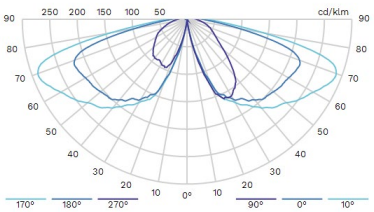

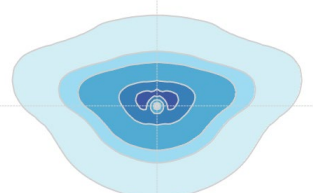

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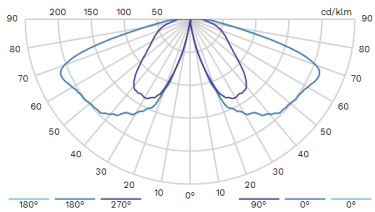
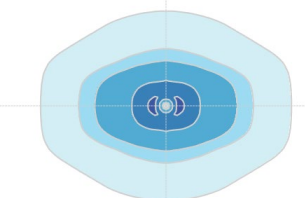
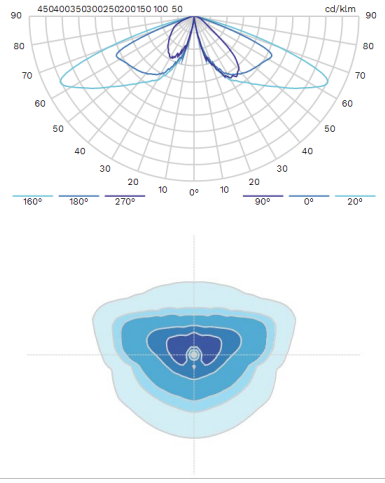




5138 GL



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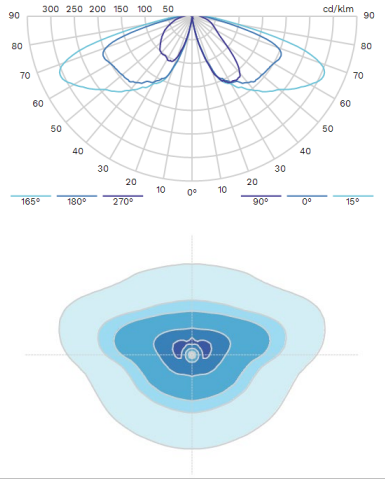

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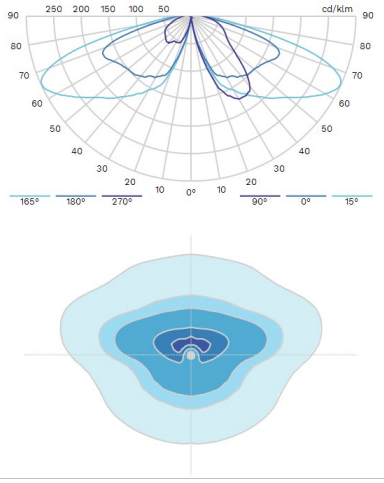

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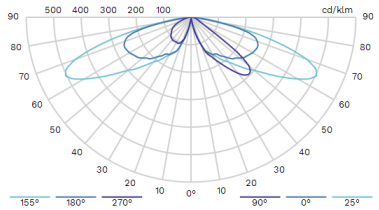

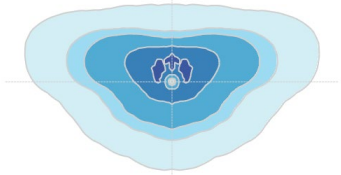

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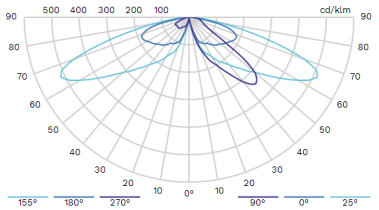

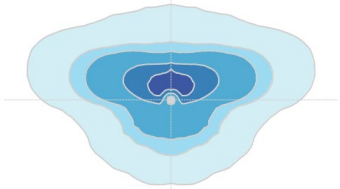

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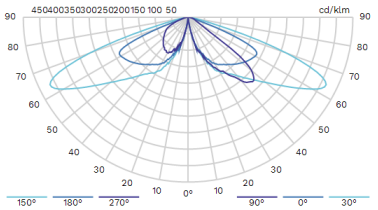

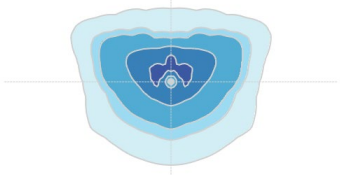

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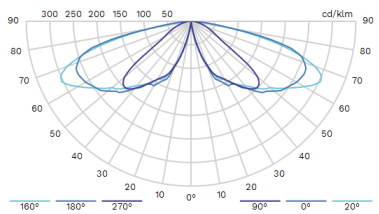

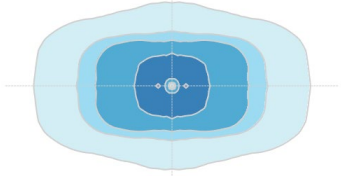

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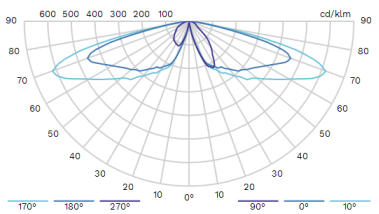
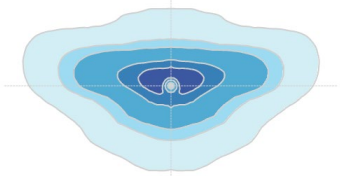
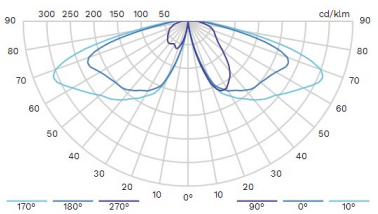
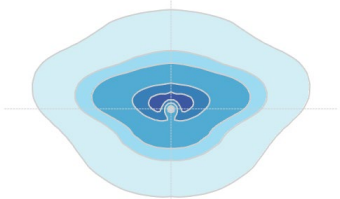




5140 Canopy Sanded diffuser BL





LENSO FLEX 2

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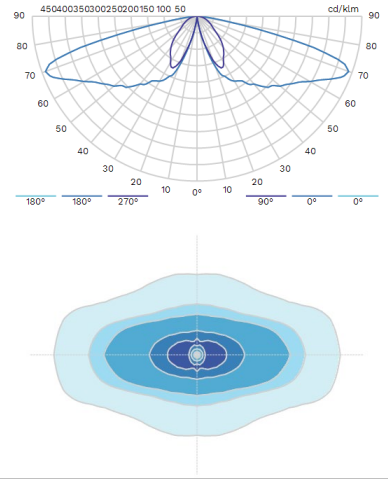

LENSO FLEX 2

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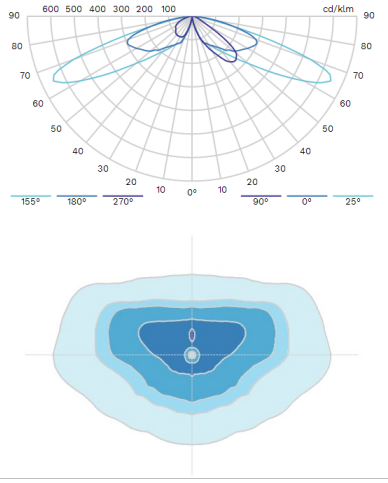

LENSO FLEX 2

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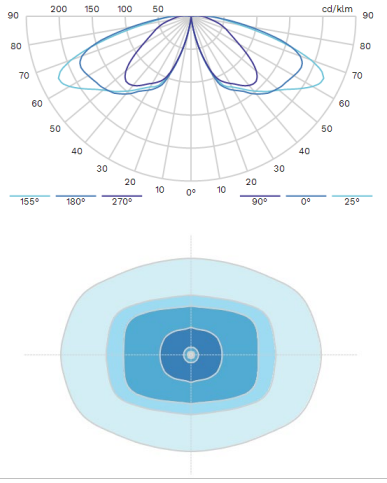
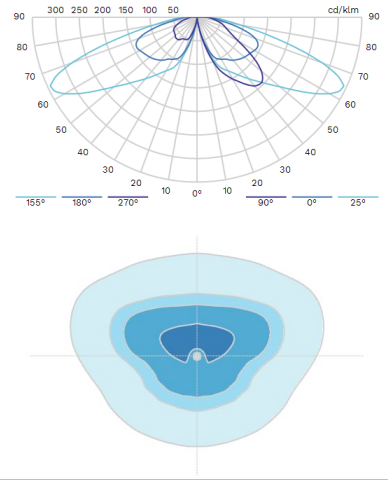


LENSO FLEX 2

5141 Sanded diffuser Canopy BL



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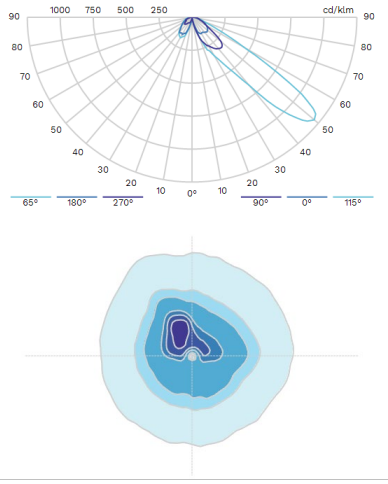
5144 BL ZL



LENSO FLEX 2

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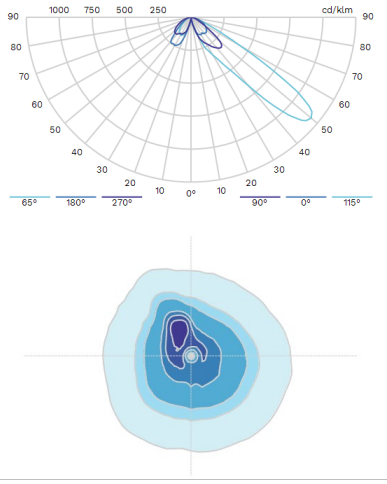

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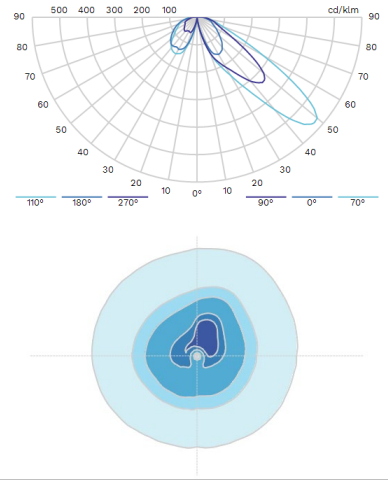

LENSO FLEX 2

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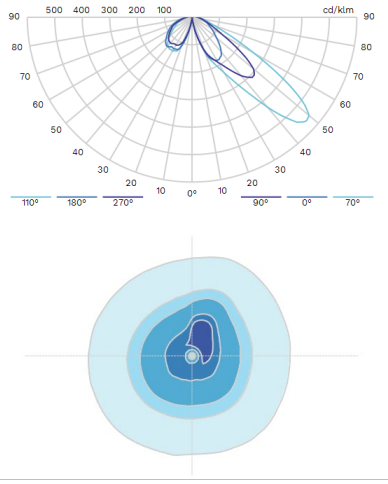

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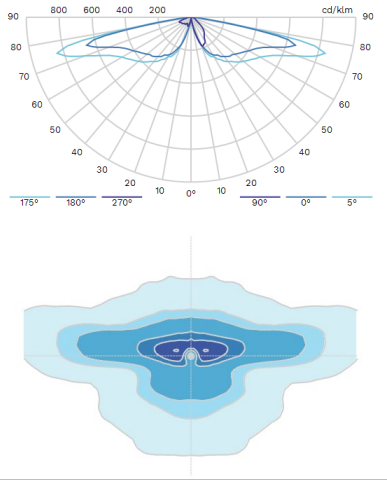

LENSO FLEX 2

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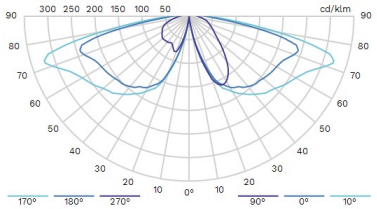

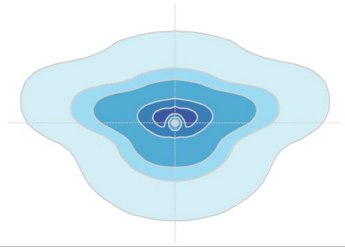

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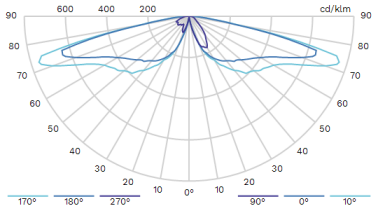
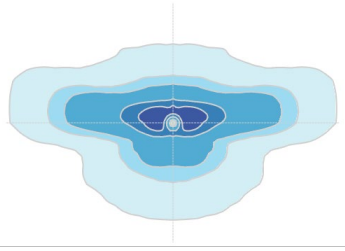
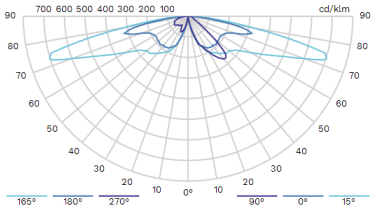
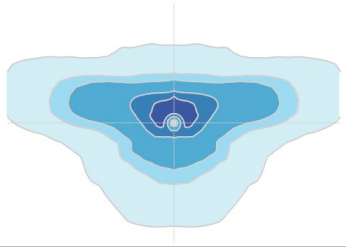




LENSO FLEX 2

5247 Canopy





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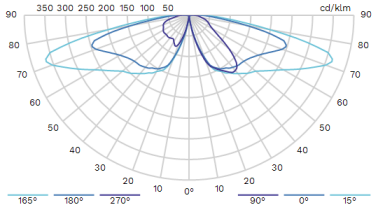

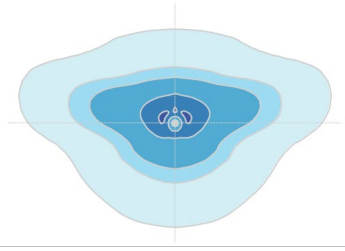

LENSO FLEX 2

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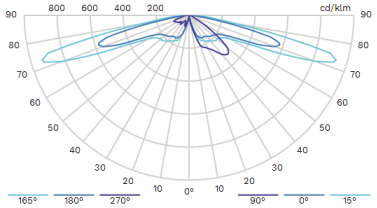

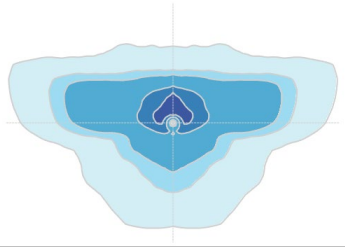

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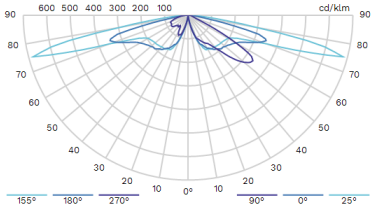

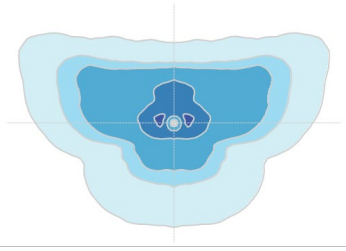

LENSO FLEX 2

5283