Schréder
Experts in lightability™

DECORATIVE

RIVARA

Designer : Eclipz

LENSO FLEX™ 2

Refined design and LED technology: the ideal combination for lighting urban landscapes

With its simple but very elegant linear design, RIVARA provides a complete range of luminaires to light diverse landscapes.

The RIVARA luminaire is available with a single or double bracket. A wall bracket is also available to maintain aesthetic consistency in areas where poles cannot be installed.

This winning combination of performance, design and flexibility enables the RIVARA range to light streets, residential areas, parks, bicycle and pedestrian paths with a better quality of light. Furthermore, it generates energy savings and reduces the ecological footprint with a perfect aesthetic integration into the environment.

IP 66 | IK 08

RoHS

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

Concept

Made of painted galvanised steel, the body and the dedicated poles of the RIVARA provide a strong mechanical design while offering elegant and contemporary linear shapes that blend into any urban environment.

The RIVARA luminaire incorporates a glass protector and hosts the second generation LensoFlex®2 photometric engine to provide a wide range of light distributions suited to various typical urban applications such as squares, narrow streets, pedestrian areas and residential districts. The number of LEDs is adapted to meet the photometrical requirements of the specified application.

The photometric engine is IP 66 to prevent the LEDs and the respective lenses coming into contact with the external environment and to maintain performance over time.

The RIVARA has been designed to offer multiple combinations with dedicated poles and single or double brackets. For narrow streets where poles cannot be installed, a wall bracket is proposed to offer a solution that ensures technical and aesthetic consistency. To facilitate installation and maintenance operations, RIVARA integrates patented technologies such as the IzyHub compact connection and connectivity module for quick, tool-free and error-proof wiring.

The pure design of the RIVARA is complemented by the significant advantages of LED technology: low power consumption, a perfect control of the light distribution, a long-lasting performance and a wide range of possibilities in terms of integrated intelligence.

To be as open and interoperable as possible, RIVARA is available with both NEMA and Zhaga sockets and is ZD4i certified.

RIVARA is available with a single or double bracket. A wall bracket is also on offer.

The photometric engine is IP 66 to maintain performance over time.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Pure and simple design
- Elegant and comfortable solution for creating ambiance
- LensoFlex®2 photometric engine with photometry adapted to various applications
- FutureProof: easy replacement of photometric engine and power supply on-site
- Energy savings of up to 75% compared with traditional light sources
- ThermiX® for long lasting performance
- Surge protection 10kV
- Connected-ready for your future Smart cities' requirements
- Based on open and interoperable standards
- Compatible with Schréder EXEDRA control platform
- Zhaga-D4i certified

The RIVARA luminaires can be equipped with standard NEMA 7-pin or Zhaga sockets and are ZD4i certified.

The optical unit can be replaced on-site to take advantage of any future technological developments

RIVARA | On pole - single bracket

RIVARA | On pole - double bracket

RIVARA | On wall

RIVARA | Bollard

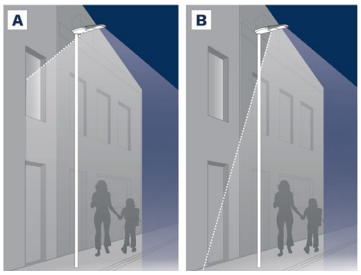
LensoFlex®2

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.

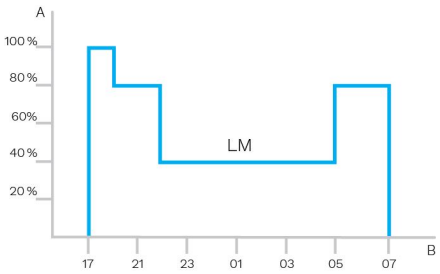


A. Without Back Light control | B. With Back Light control

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.

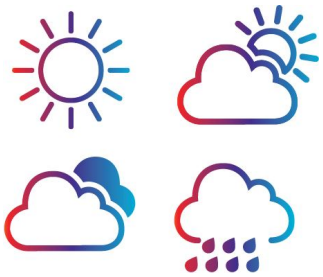
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



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

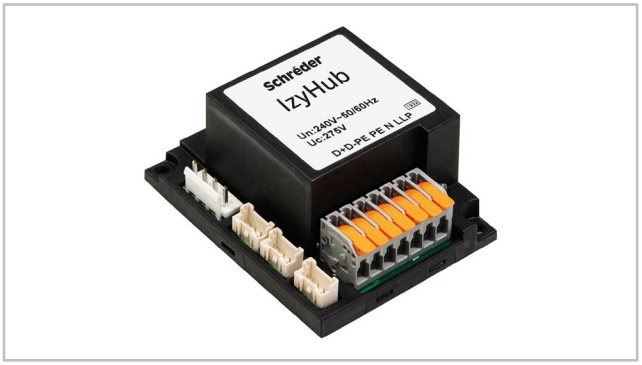
In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

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

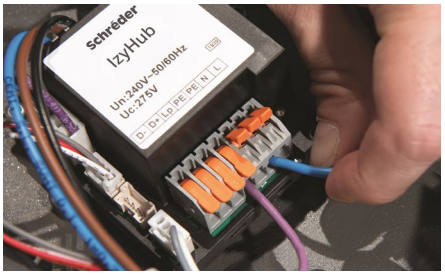
IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life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

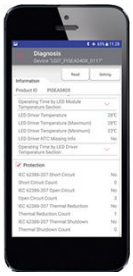
Once you are connected to a luminaire, you can set various parameters such as the maximum output current, minimum dimming level and custom dimming profile.

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.



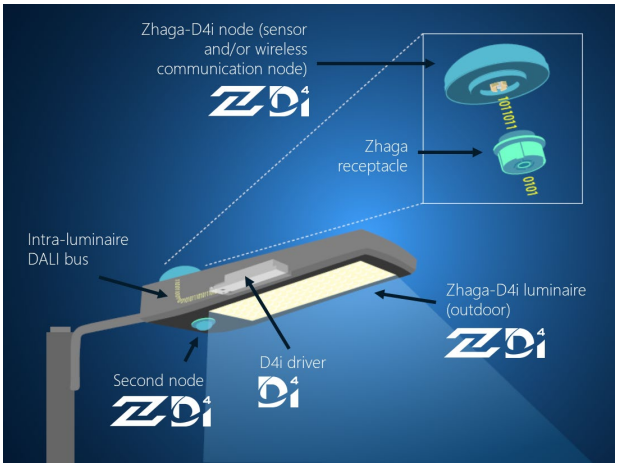
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

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.

2 sockets: top and bottom

The Zhaga socket is small and suited to applications where aesthetics is essential. The architecture of Zhaga-D4i also foresees the possibility of putting two sockets on one luminaire, allowing for instance, the combination of a detection sensor and a control node. This also has the added value of standardising certain detection sensor communications with the D4i protocol.

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	4m to 6m | 13' 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
French law of December 27th 2018 - Compliant with application type(s)	a, b, c, d, e, f, g
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Galvanised steel
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	RAL 7040 window grey
Tightness level	IP 66
Impact resistance	IK 08

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°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
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-4-5
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 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

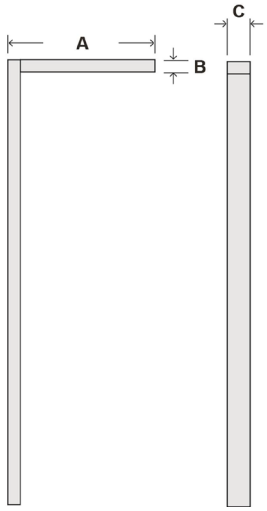
All configurations	100,000h - L90

· Lifetime may be different according to the size/configurations. Please consult us.

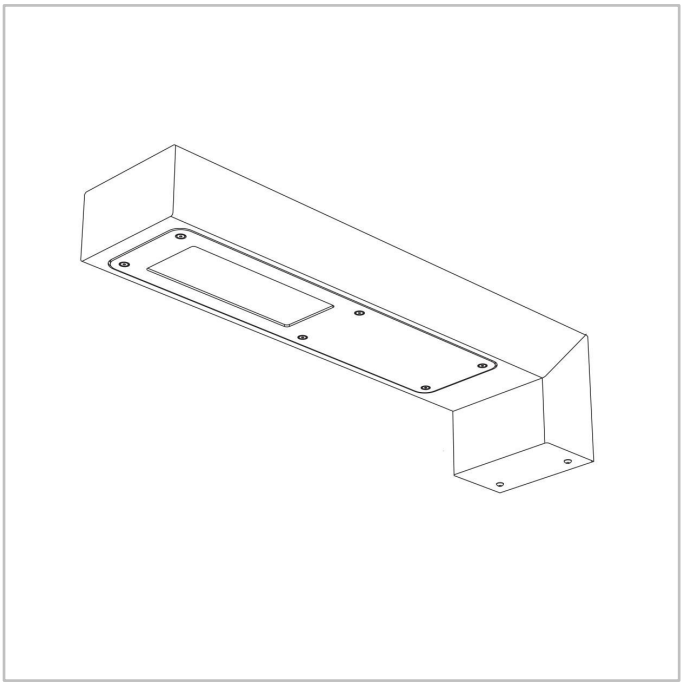
DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	RIVARA BOLLARD - 350x100x180 | 13.8x3.9x7.1 RIVARA - 1100x100x180 | 43.3x3.9x7.1
Weight (kg | lbs)	RIVARA BOLLARD - 23.5 | 51.7 RIVARA - 16 | 35.2
Aerodynamic resistance (CxS)	RIVARA - 0.22
Mounting possibilities	On a dedicated range of poles/brackets

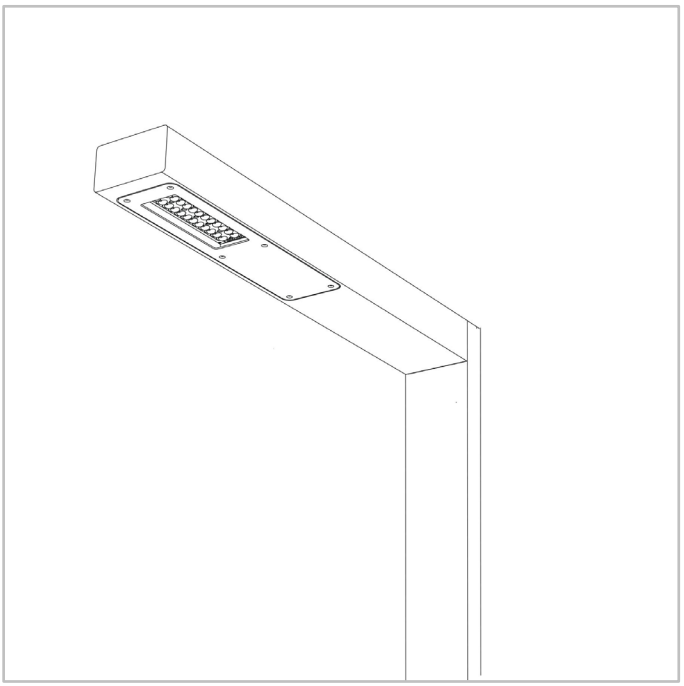
· For more information about mounting possibilities, please consult the installation sheet.



RIVARA | Wall mounting



RIVARA | Pole mounting (single or double bracket available)



			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		W	lm/W	
	Number of LEDs	mA	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	Photometry
RIVARA BOLLARD	8	350	-	-	900	1000	-	-	800	900	900	1100	9.7	113	LENSO FLEX 2
	8	500	-	-	1200	1400	-	-	1100	1300	1300	1500	13.6	110	LENSO FLEX 2
	8	700	-	-	1600	1900	-	-	1500	1700	1700	2000	19.1	105	LENSO FLEX 2
	8	1000	-	-	2100	2400	-	-	1900	2200	2200	2500	28	89	LENSO FLEX 2
RIVARA	16	350	1900	2000	2100	2300	1500	1600	1900	2000	2200	2400	18.1	133	LENSO FLEX 2
	16	380	2000	2200	2200	2500	1600	1700	2000	2200	2300	2500	19.6	128	LENSO FLEX 2
	16	400	2100	2300	2300	2600	1700	1800	2100	2300	2400	2600	20.6	126	LENSO FLEX 2
	16	500	2500	2800	2800	3100	2000	2200	2500	2800	2900	3200	25.8	124	LENSO FLEX 2
	16	600	2900	3200	3200	3500	2300	2500	2900	3200	3400	3700	31	119	LENSO FLEX 2
	16	700	3300	3600	3600	4000	2600	2800	3300	3600	3800	4100	36.5	112	LENSO FLEX 2
	24	350	2800	3100	3200	3400	2200	2400	2800	3100	3300	3600	26.5	136	LENSO FLEX 2
	24	400	3200	3500	3500	3900	2500	2700	3200	3500	3700	4000	30.2	132	LENSO FLEX 2
	24	500	3800	4200	4300	4600	3000	3300	3800	4200	4400	4800	37.7	127	LENSO FLEX 2
	24	590	4300	4700	4800	5300	3400	3700	4300	4700	5000	5500	44.5	124	LENSO FLEX 2
	24	600	4400	4800	4900	5300	3500	3800	4400	4800	5100	5500	45	122	LENSO FLEX 2
	24	700	4900	5400	5500	6000	3900	4200	4900	5400	5700	6200	53	117	LENSO FLEX 2

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

LENSO FLEX 2

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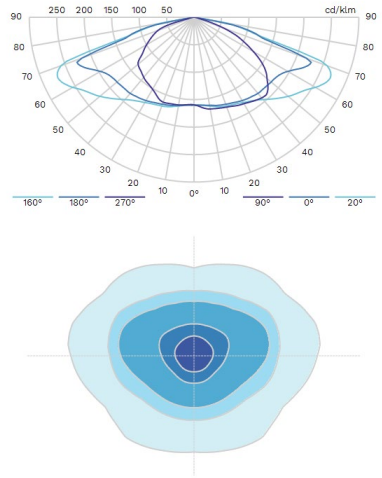

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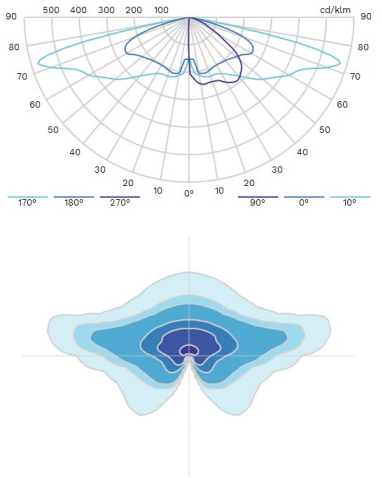

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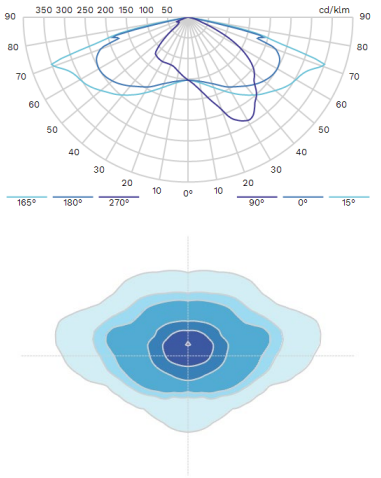

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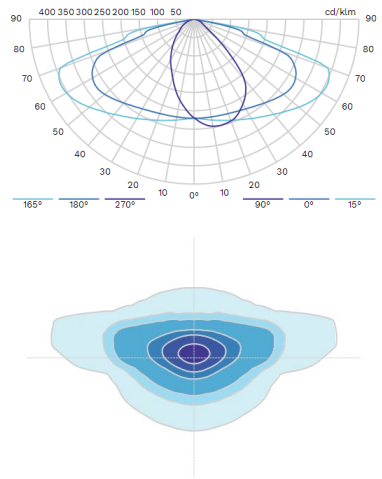

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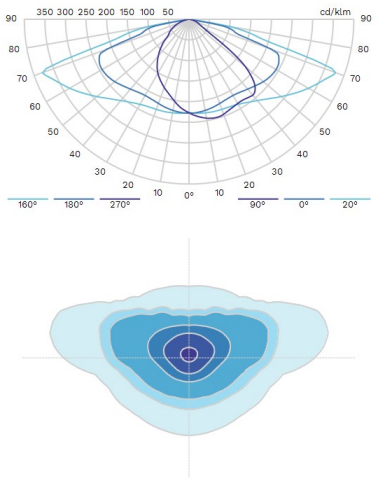

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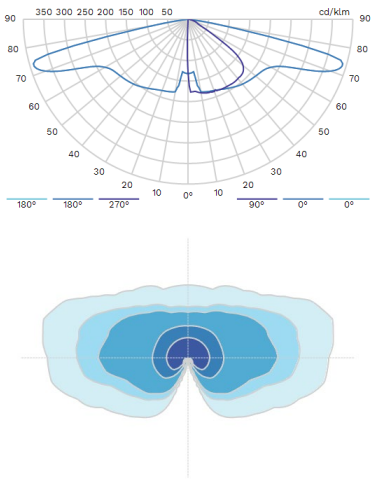

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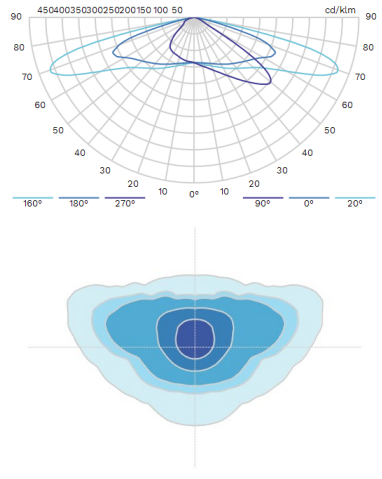

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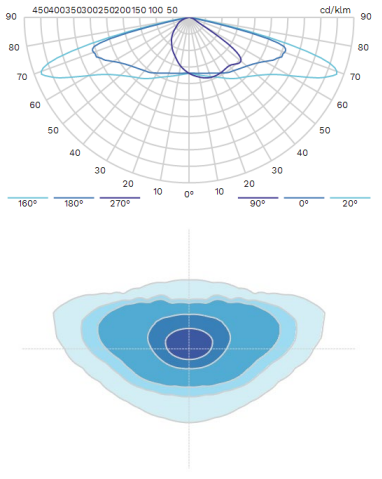

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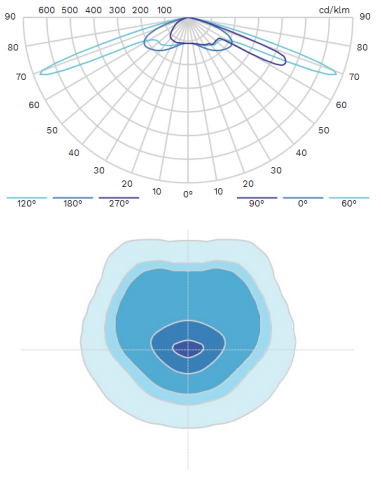

LENSO FLEX™2

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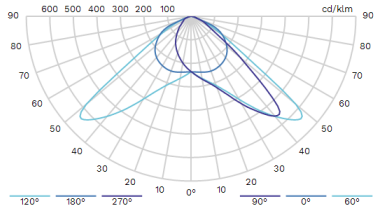

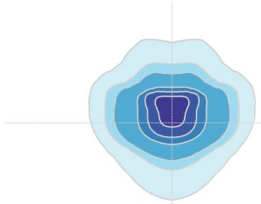

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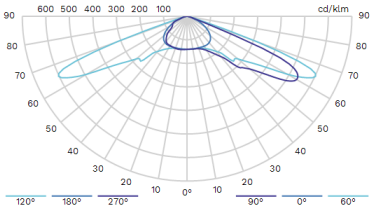

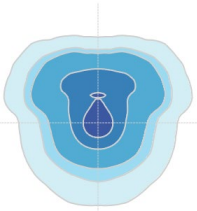

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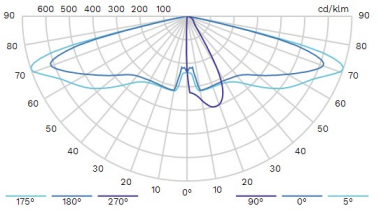

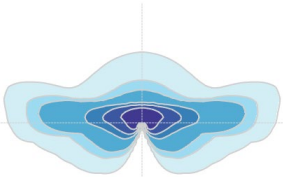

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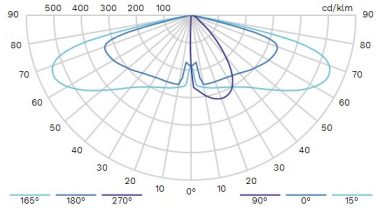

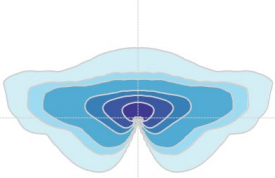

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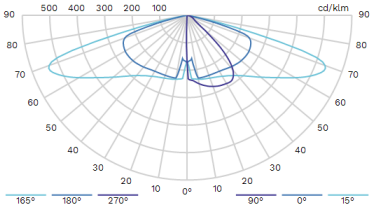

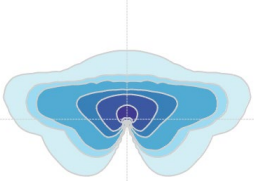

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