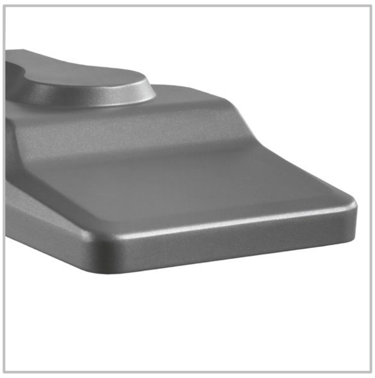
Schréder
Experts in lightability™

ROAD

VITALUM



HI FLEX™ 1&2

HI FLEX™ 2

LENSO FLEX™ 4

Highly energy-efficient luminaire with the best total cost of ownership

Efficacy and functionality were the main concepts behind the design of the VITALUM luminaire.

With VITALUM, get the benefit of an efficient lighting solution in a lightweight, functional housing. VITALUM supports a more streamlined approach to lighting, delivering lumen packages and light distributions that precisely meet the specific requirements of public street lighting applications such as residential areas, bike paths, car parks, and public transportation zones.

Equipped with cutting-edge photometric technology, VITALUM delivers excellent efficiency with the fastest return on investment. VITALUM offers two advanced connectivity options, making this functional luminaire a genuine connected-ready lighting solution.

The perfect combination of a user-friendly design and state-of-the-art LED lighting technology, VITALUM is the ideal choice for your regular road lighting needs.

IP 66 | IK 08

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

Concept

VITALUM endorses more responsible use of raw materials by using minimal yet robust resources. Made of highly recyclable materials (aluminium and glass), with high IP and IK ratings, VITALUM supports the principle of a circular economy. Its components' separability, control options, low energy consumption and smart-ready features make it a truly sustainable lighting solution.

VITALUM rely on advanced photometric technologies to precisely meet the unique demands of lighting projects. The LensoFlex®4 and HiFlex™ platforms offer flexible, energy-efficient photometric solutions that can be tailored to meet the specific lighting needs of any project while maximising savings and providing a quick return on investment.

With VITALUM, you get the exact lighting you need. The luminaire has been designed with an option package specifically developed to meet the requirements of your residential, city street, car park, bike path, public square and public place lighting applications.

An efficient, cost-effective luminaire, VITALUM also offers two connectivity options: NEMA and Zhaga. These features enable remote control and adjustment of lighting levels at any time, helping to reduce power consumption for additional energy savings.

VITALUM features side-entry mounting fixation for Ø42mm to Ø60mm spigots. It can be delivered with a cable gland connector designed to ease and speed up installation.

Functional lightweight design.

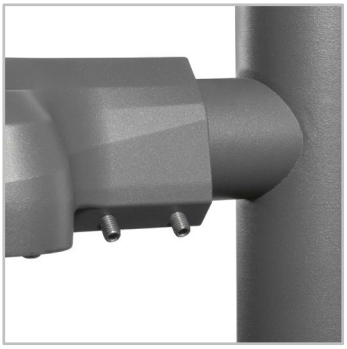
VITALUM offers different photometric platforms with a wide range of light distributions to suit various types of projects.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- HiFlex™ photometric engine designed for optimised energy efficiency
- Easy installation
- High efficiency with low operating costs
- Supplied pre-wired to facilitate installation (optional quick-on connectors)
- Connected-ready for your future Smart city requirements
- LensoFlex®4 versatile solutions for high-end photometries maximising comfort and safety



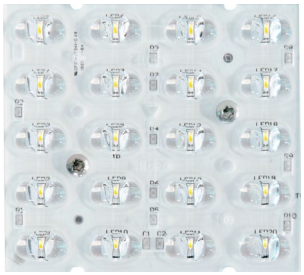
Easy side-entry mounting fixation secured by two screws. A cable gland connector can be optionally delivered to further ease and accelerate installation.

As an option, VITALUM can be equipped with a NEMA or a Zhaga socket.

LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.



HiFlex™

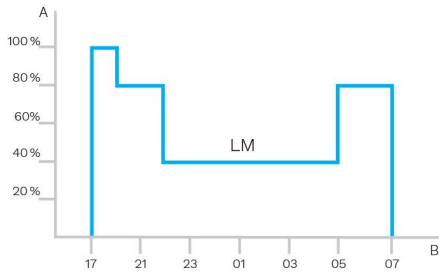
The HiFlex™ platform is expertly designed to optimise energy efficiency. Its photometric engines feature high-power LEDs that deliver exceptional performance while consuming minimal energy, resulting in unmatched efficacy (lm/W).

Ideal for projects that require a streamlined approach to maximising lighting efficacy and achieving swift ROI, HiFlex is available in two versions: HiFlex™1, boasting 24 LEDs and HiFlex™ 2, equipped with 36 LEDs. Both variants are designed with the priorities of compactness, cost-effectiveness and high performance in mind.

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.

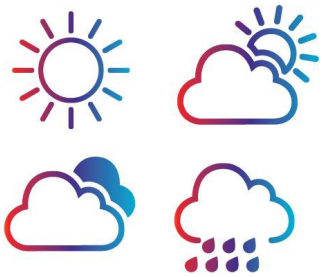
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



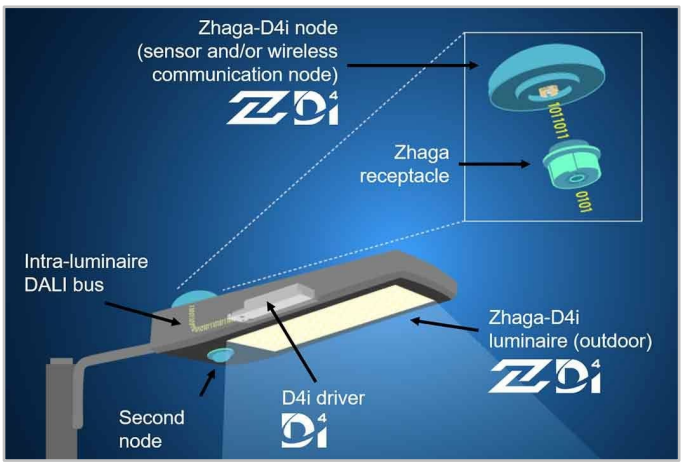
A. Dimming level | B. Time

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.



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

Member of Zhaga

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

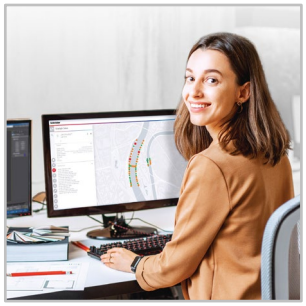
With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- 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. OWLET IV luminaire controllers, optimised for Schréder EXEDRA, operate Schréder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

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

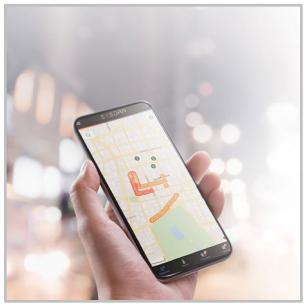
Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

Protected on every side

ISO 27001
BUREAU VERITAS
Certification

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. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

Mobile App: any time, any place, connect to your street lighting



The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

GENERAL INFORMATION

Circle Light label	Score ≥90 - The product fully meets circular economy requirements
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes
Zhaga-D4i certified	Yes
UKCA marking	Yes
Testing standard	EN 60598-1 EN 60598-2-1 EN 62262

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 08
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)

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 61000-3-2 / EN 61000-3-3 / EN 61547
Control options	Custom dimming profile, Photocell, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA

OPTICAL INFORMATION

LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727) 3000K (Warm White WW 730) 3000K (Warm White WW 830) 4000K (Neutral White NW 740)
Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >70 (Warm White WW 730) >80 (Warm White WW 830) >70 (Neutral White NW 740)
ULOR	0%
ULR	0%

· 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

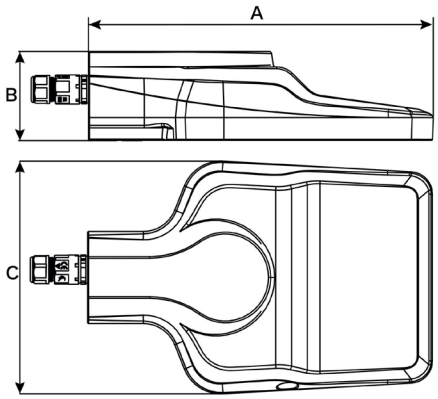
All configurations	100,000h - L95

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

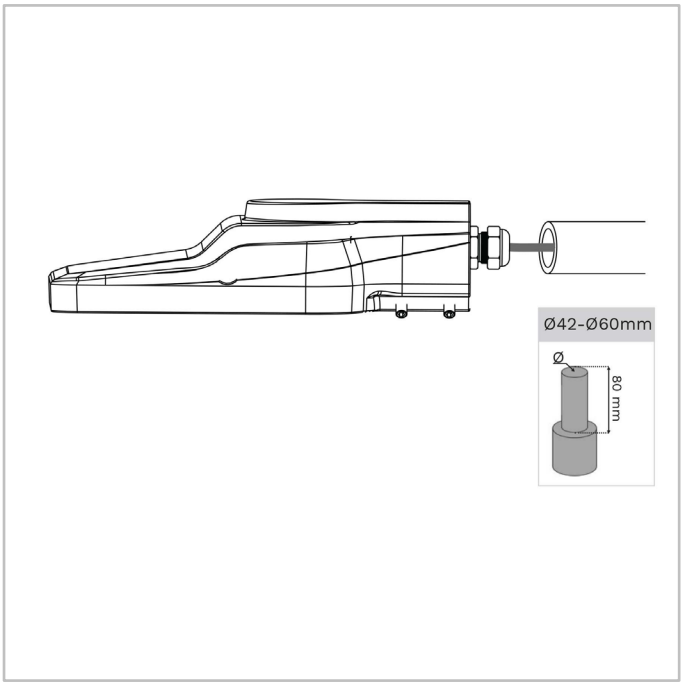
DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	307x80x207 | 12.1x3.1x8.1
Weight (kg | lbs)	2.4-2.9 | 5.3-6.4
Aerodynamic resistance (CxS)	0.04
Mounting possibilities	Side-entry slip-over – Ø42mm Side-entry slip-over – Ø48mm Side-entry slip-over – Ø60mm

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



VITALUM | Side-entry slip-over mounting on Ø42-60mm spigots – 2 x M8 screws



VITALUM 1

Photometry

HI FLEX™ 1&2

	Luminaire output flux (lm)								Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 722		Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
24	1100	5700	1300	6400	1300	6700	1400	7200	11	52	155
36	1700	8600	1900	9700	2000	10100	2200	10900	15	75	165

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

VITALUM 1

Photometry

HI FLEX™ 2

	Luminaire output flux (lm)								Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 722		Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
36	1700	8600	1900	9700	2000	10100	2200	10900	15	75	165

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

VITALUM 1

Photometry

LENSO FLEX™4

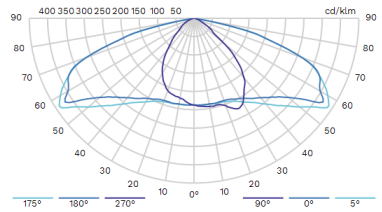
	Luminaire output flux (lm)										Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 722		Warm White WW 727		Warm White WW 730		Warm White WW 830		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
10	400	2700	400	2900	400	3100	400	2900	500	3400	7	27	148
20	800	5400	900	5900	900	6300	900	5900	1000	6900	13	52	160
25	1800	6500	2000	7100	2100	7600	2000	7100	2300	8300	16	64	158

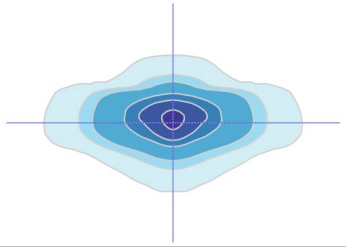
Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

Hiflex1&2

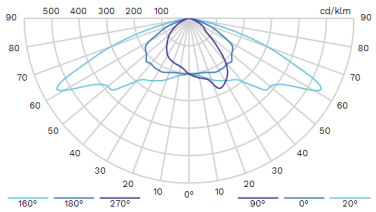
HI FLEX™ 1&2

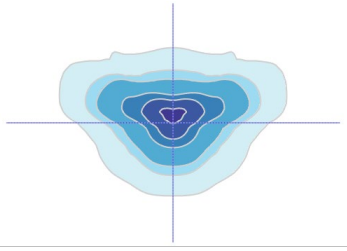
5424 Narrow



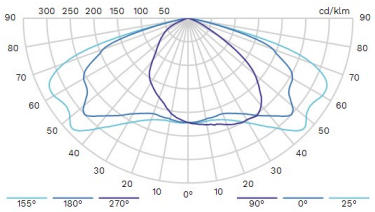


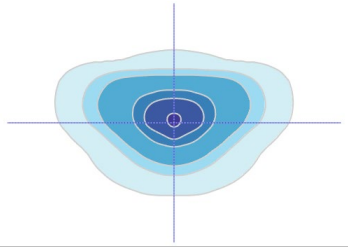
5426 Medium



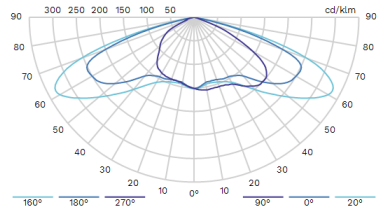


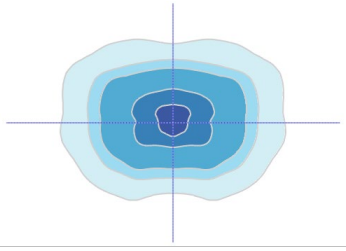
5428 Medium



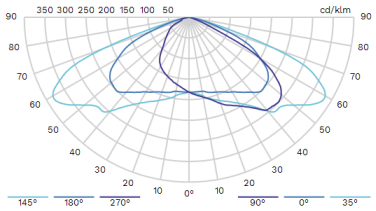


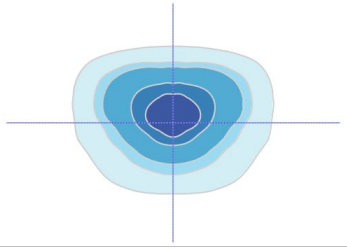
5425 Wide





5427 Extra-Wide

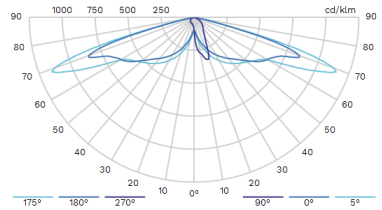


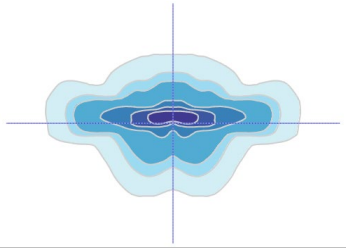


LensoFlex4

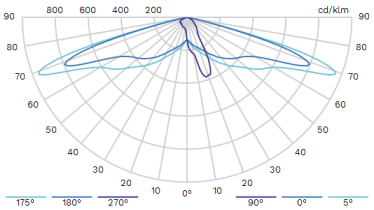
LENSO FLEX™4

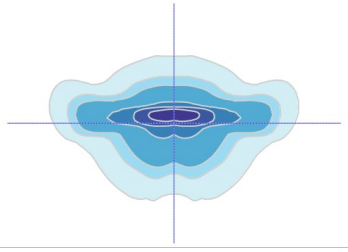
5300 Ultra-Narrow



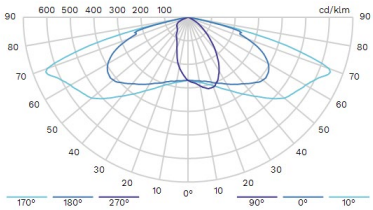


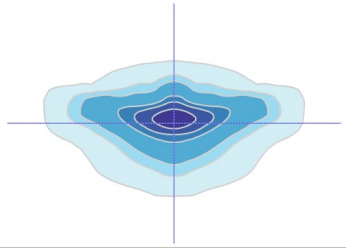
5390 Ultra-Narrow



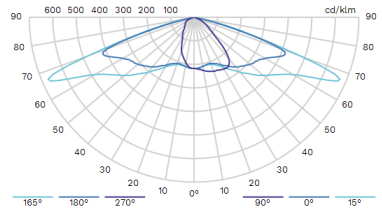


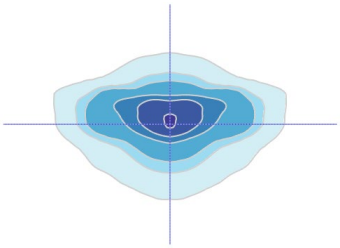
5301 Narrow





5303 Medium





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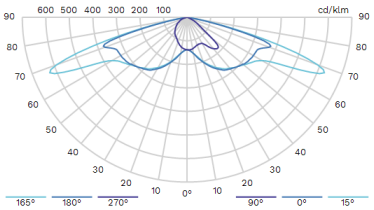

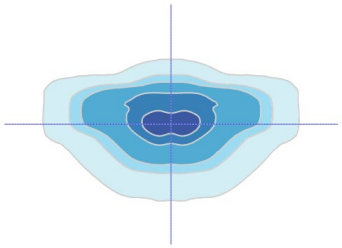

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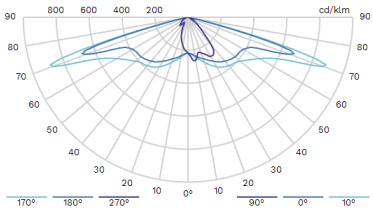
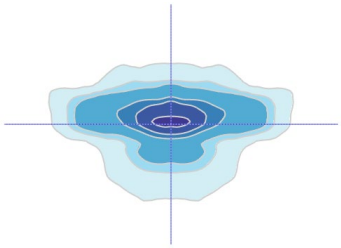
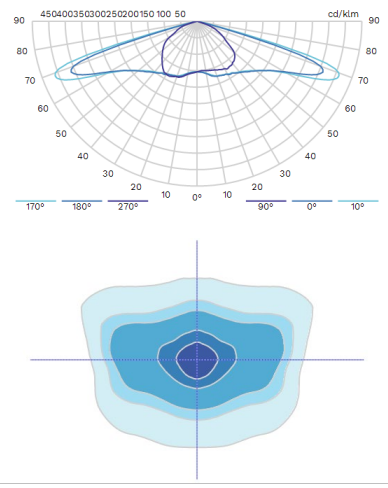
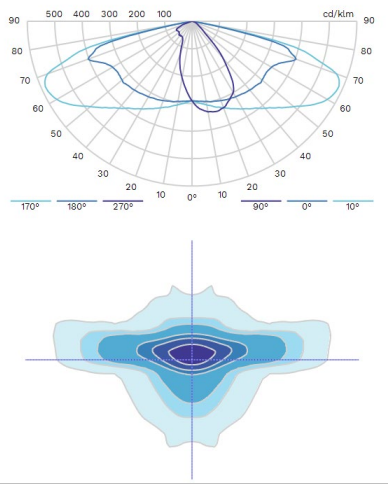




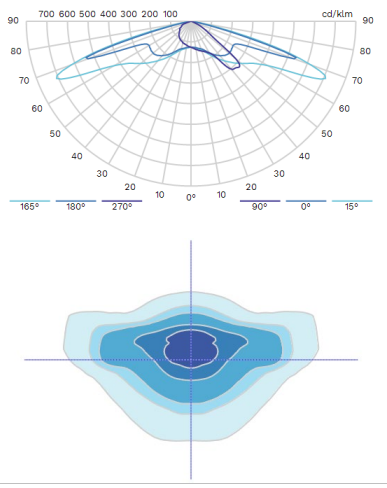
LENSO FLEX 4 5392 Medium



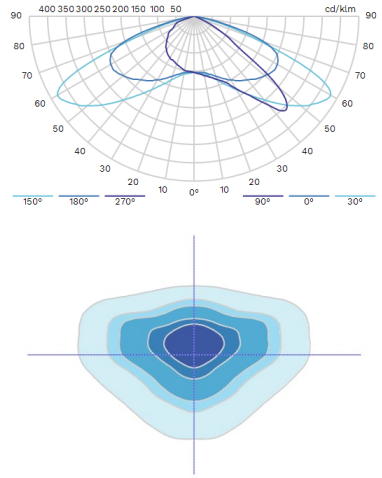
LENSO FLEX 4 5399 Medium



LENSO FLEX 4 5307 Wide



LENSO FLEX 4 5308 Wide



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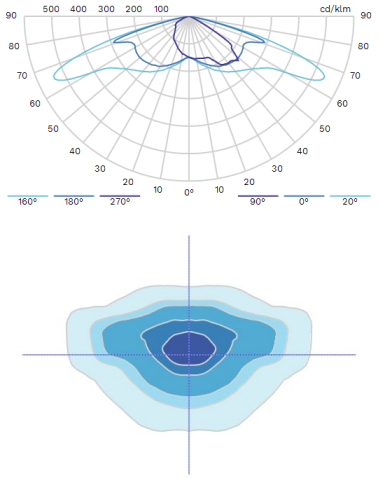
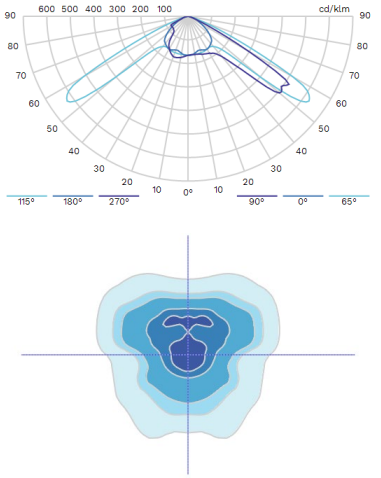
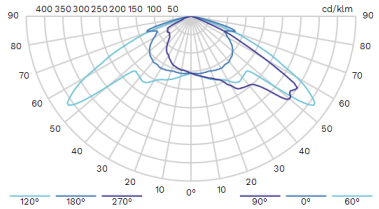


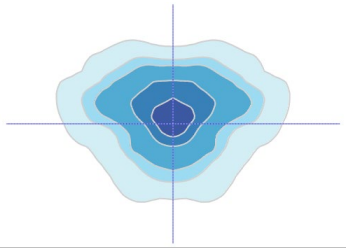
LENSO FLEX 4 5366 Extra-Wide



LENSO FLEX 4

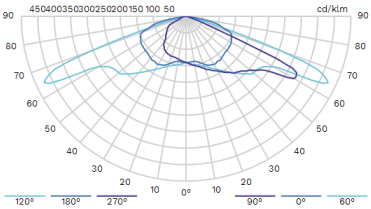
50010 Extra-Wide

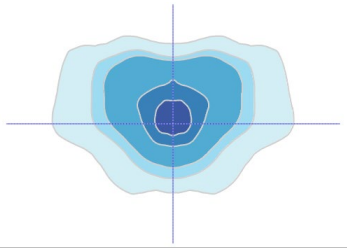




LENSO FLEX 4

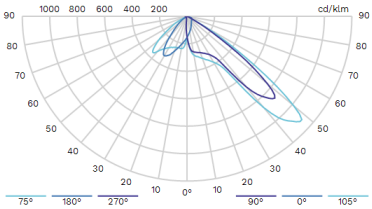
5393 Ultra-Wide

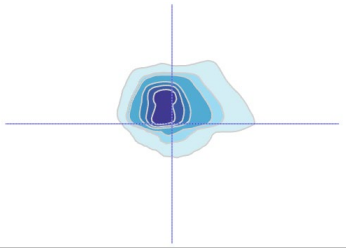




LENSO FLEX 4

5370 Zebra Left





LENSO FLEX 4

5369 Zebra Right