

OYO



Designer : Michel Tortel



The perfect match between elegance and performance

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

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

Based on proven LensoFlex® photometrical engines, OYO offers a wide range of light distributions to provide a harmonious compromise between safety, comfort and energy efficiency for various environments.

OYO can be equipped with various control options to optimise the management of urban lighting networks. It can also be equipped with a PIR sensor to create lighting scenarios adapted to any situation and any time of day.



IP 66

IK 10



UK
CA

005
certification



URBAN &
RESIDENTIAL
STREETS



BRIDGES



BIKE &
PEDESTRIAN
PATHS



RAILWAY
STATIONS &
METROS



CAR PARKS



SQUARES &
PEDESTRIAN
AREAS

Concept

The OYO range combines the energy efficiency of LED technology with the photometric performance of the LensoFlex® concept developed by Schröder. Thanks to these photometric technologies, OYO offers the best lighting for your urban applications without compromising on the cost and lifetime of the installation.

The luminaire is composed of a two-piece housing made of painted die-cast aluminium. The polycarbonate protector offers a high tightness level and a high impact resistance. OYO is designed for post-top mounting on a 60mm diameter spigot.

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

This connected-ready urban lighting solution is available with various control and sensor options to achieve maximum performance from lighting networks and generate significant energy and cost savings.



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



OYO offers slip-over mounting onto a 60mm diameter spigot.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Elegant and robust design by Michel Tortel
- State-of-the-art LED technology for low energy consumption
- Supplied pre-cabled to facilitate its installation
- Integrated motion detection sensor (option)
- Connected-ready for your future Smart city requirements
- LensoFlex®
- Zhaga-D4i certified



As an option, OYO can be equipped with a NEMA or a Zhaga socket and complies with the ZD4i standard.



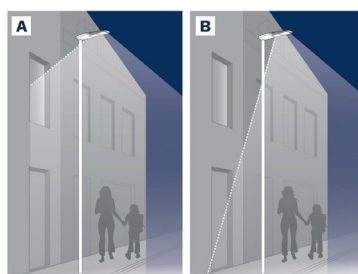
OYO can be equipped with a PIR sensor to create light-on-demand scenarios.



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.

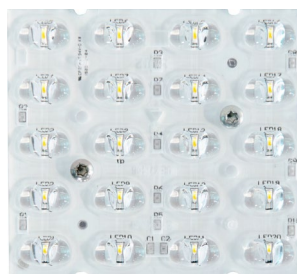


A. Without Back Light control | B. With Back Light control



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.

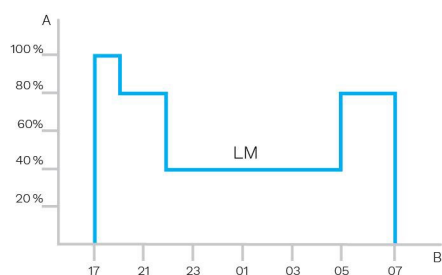




Custom dimming profile

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 parameters such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.





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.

Cost-effective solution

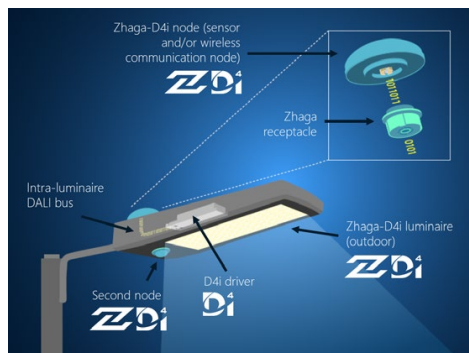
A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

Standardisation for interoperable ecosystems

As a founding member of the Zhaga consortium, Schröder 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.





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



Tailored experience

Schröder 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. Schröder 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

Schröder 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.

Standardisation for interoperable ecosystems

Schröder 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 Schröder EXEDRA system relies on shared and open technologies.

Schröder 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, Schröder 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. Schröder 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.

GENERAL INFORMATION

Recommended installation height	4m to 8m 13' to 26'
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
BE 005 certified	Yes
UKCA marking	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)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	By loosening screws on the top cover

· Any other RAL or AKZO colour upon request

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect
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· 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 protocol(s)	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)	Schröder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

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

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

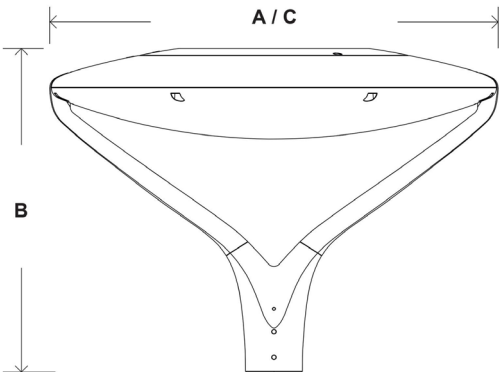
· ULR may be different according to the configuration. Please consult us.

LIFETIME OF THE LEDS @ TQ 25°C

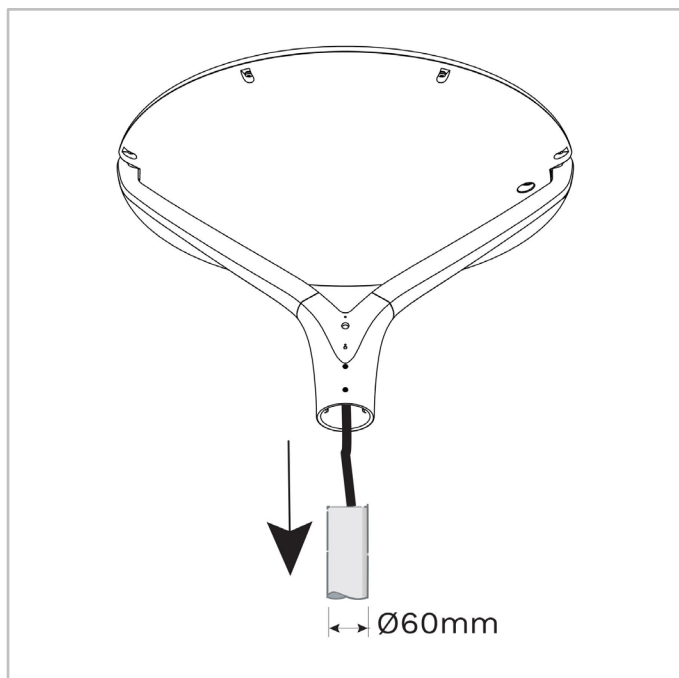
All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm inch)	610x440x610 24.0x17.3x24.0
Weight (kg lbs)	10 22.0
Aerodynamic resistance (CxS)	0.16
Mounting possibilities	Post-top slip-over – Ø60mm



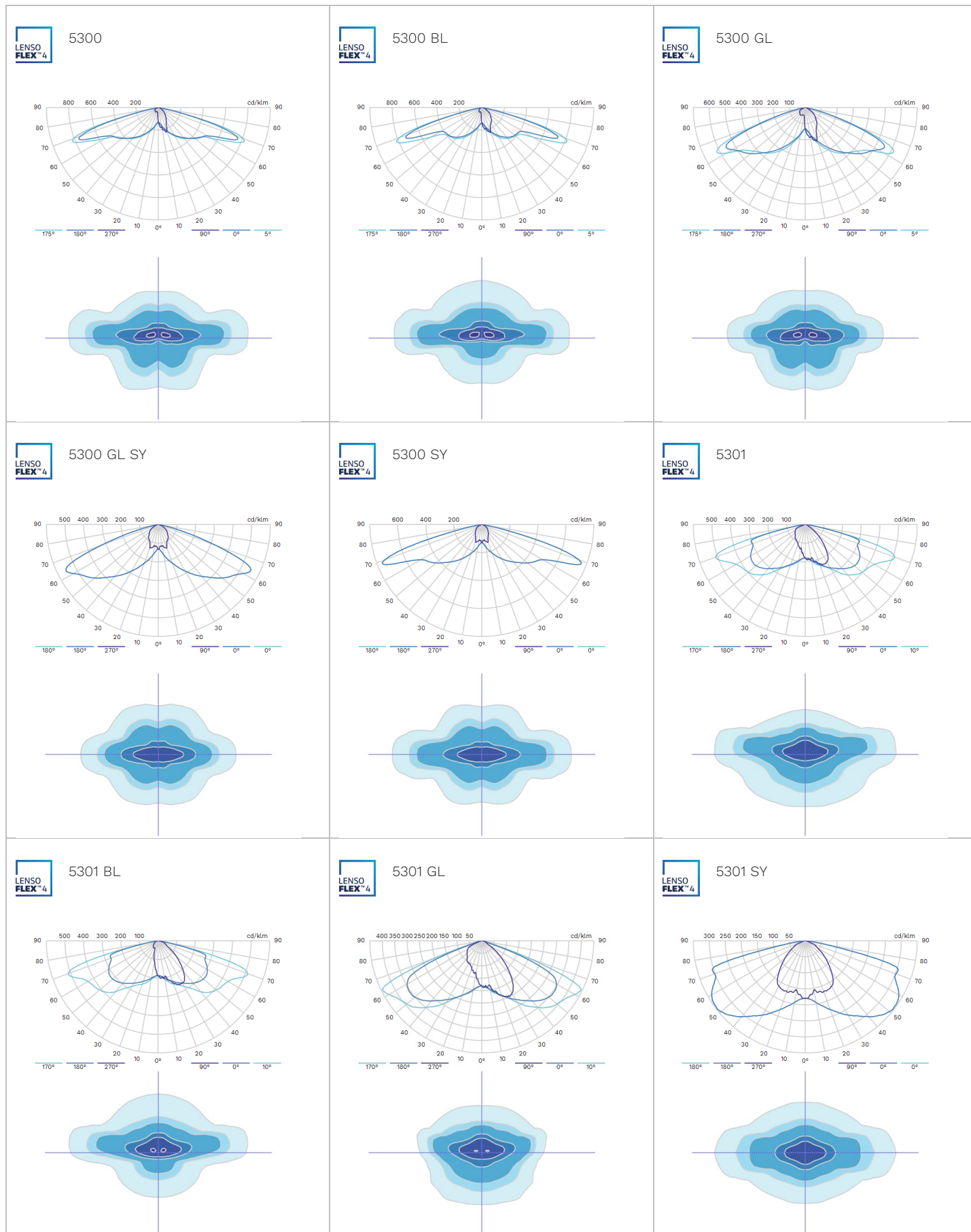
OYO | Slip-over mounting on Ø60mm spigot – 6xM8 screws





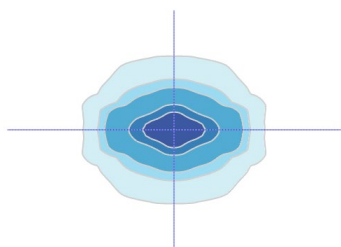
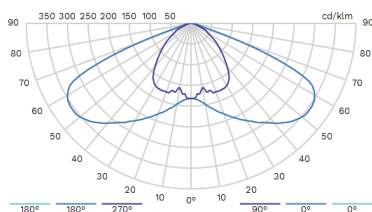
			Luminaire output flux (lm) Warm White 722		Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)		Luminaire efficacy (lm/W)	Photometry
	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	
OYO	10	300	800	900	900	1000	1000	1100	900	1100	1000	1200	10.5	10.5	114	
	10	400	1000	1200	1100	1400	1300	1500	1200	1400	1300	1600	13.8	13.8	116	
	10	500	1200	1400	1400	1600	1500	1800	1400	1700	1600	1900	17.1	17.1	111	
	10	600	1400	1600	1600	1900	1800	2100	1700	2000	1900	2200	20.9	20.9	105	
	10	700	1600	1800	1800	2100	2000	2300	1900	2200	2100	2500	24.9	24.9	100	
	10	800	1700	2000	2000	2300	2200	2600	2000	2400	2300	2700	27.6	27.6	98	
	10	850	1800	2100	2100	2400	2300	2700	2100	2500	2400	2800	29.5	29.5	95	
	20	200	1100	1300	1200	1500	1400	1600	1300	1500	1400	1700	13.2	13.2	129	
	20	300	1600	1800	1800	2100	2000	2300	1900	2200	2100	2500	19.4	19.4	129	
	20	400	2000	2400	2300	2800	2600	3000	2400	2800	2700	3200	25.7	25.7	125	
	20	500	2400	2900	2800	3300	3100	3600	2900	3400	3300	3900	32.2	32.2	121	
	20	600	2800	3300	3300	3800	3600	4200	3400	4000	3800	4500	38.8	38.8	116	
	20	700	3200	3700	3700	4300	4000	4700	3800	4400	4300	5000	45	45	111	
	40	200	2200	2600	2500	3000	2800	3300	2600	3100	2900	3500	25.1	25.1	139	
	40	300	3200	3700	3700	4300	4000	4700	3800	4400	4300	5000	37.2	37.2	134	
	40	400	4100	4800	4700	5600	5200	6100	4900	5700	5500	6500	49.5	49.5	131	
	40	500	4900	5800	5700	6700	6200	7300	5900	6900	6600	7800	62	62	126	
	40	600	5700	6700	6600	7700	7200	8500	6800	8000	7600	9000	75	75	120	
	40	700	6400	7500	7400	8700	8100	9500	7600	8900	8600	10100	89	89	113	

Tolerance on LED flux is $\pm 7\%$ and on total luminaire power $\pm 5\%$

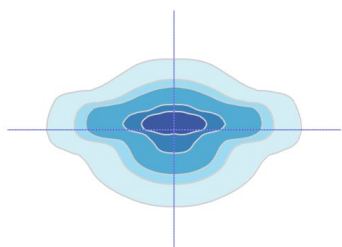
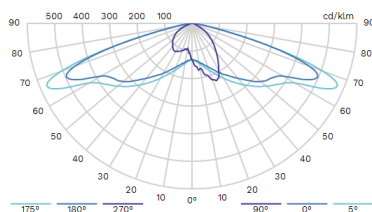




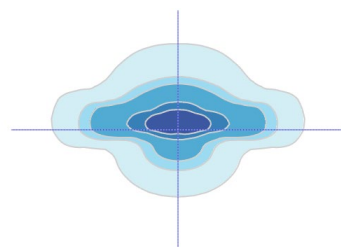
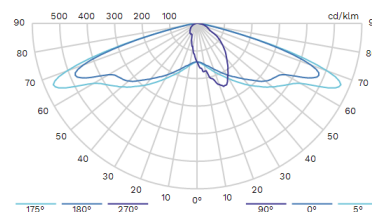
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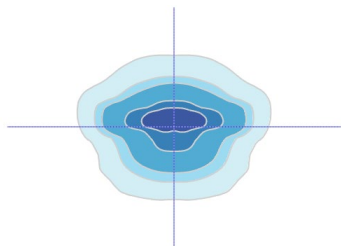
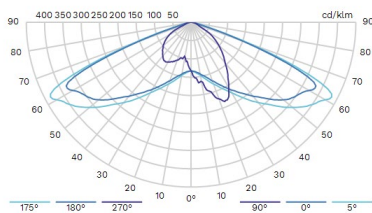
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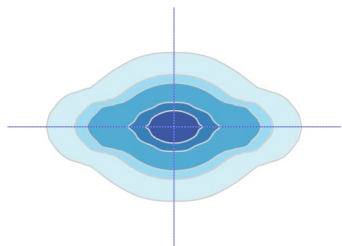
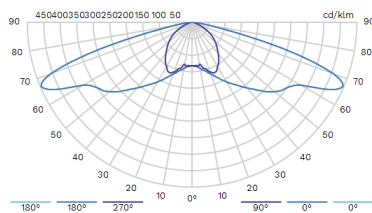
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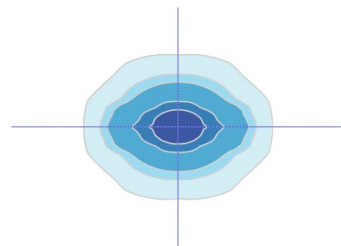
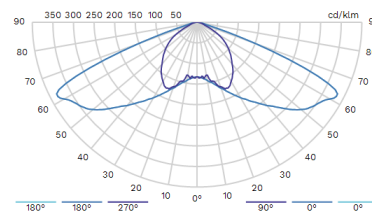
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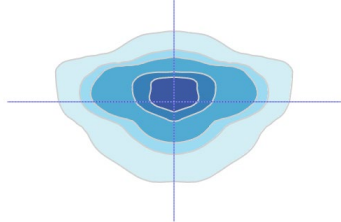
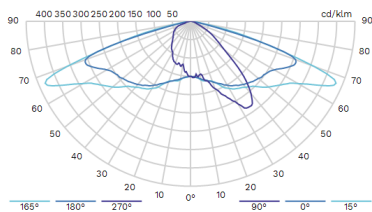
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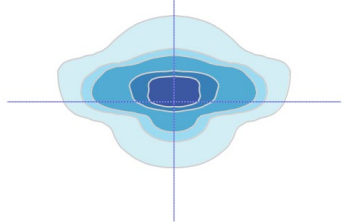
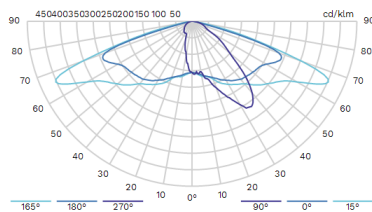
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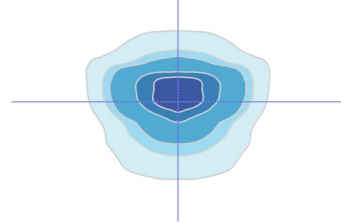
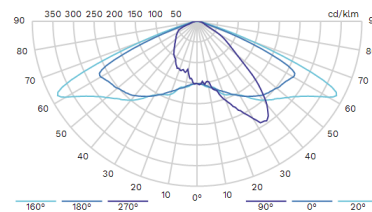
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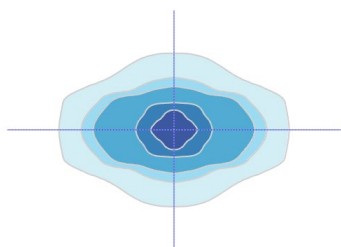
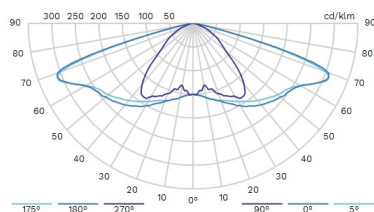


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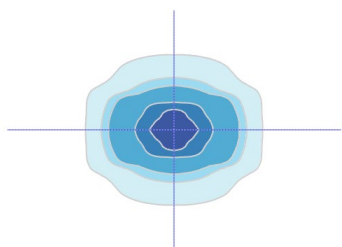
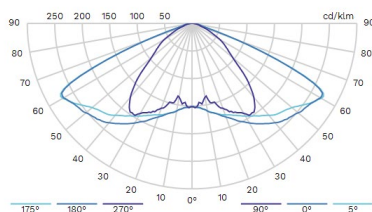
LENSO
FLEX⁴

5303 SY



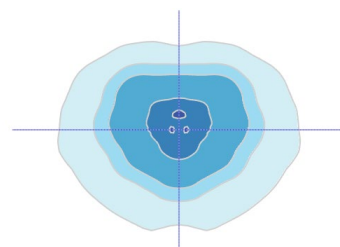
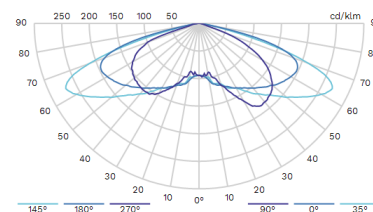
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FLEX⁴

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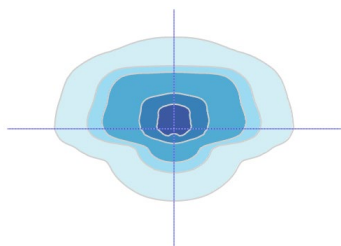
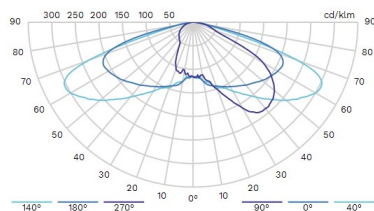
LENSO
FLEX⁴

5304



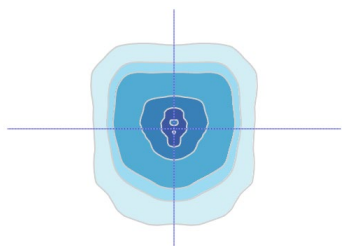
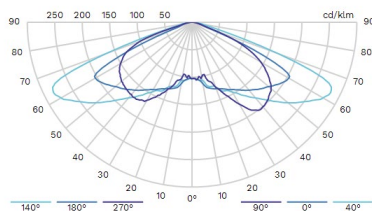
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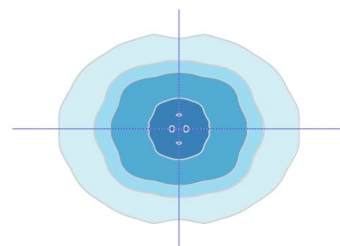
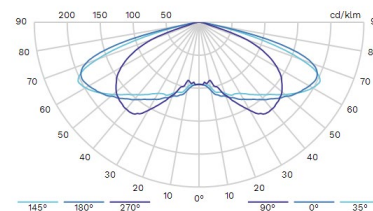
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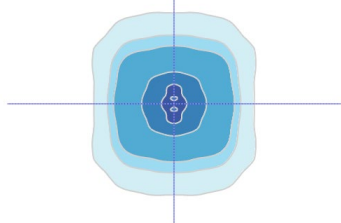
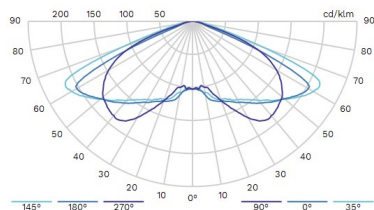
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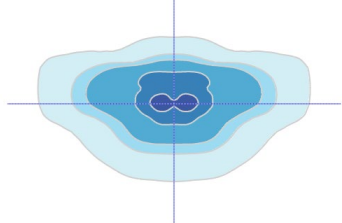
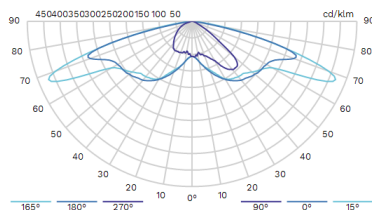
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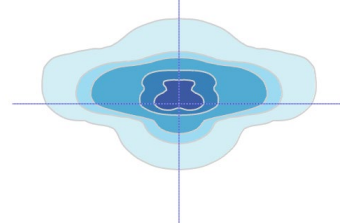
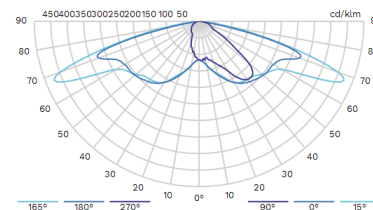
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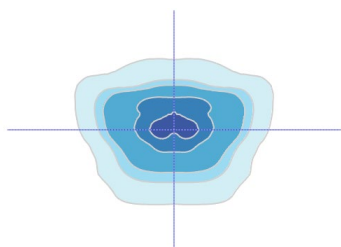
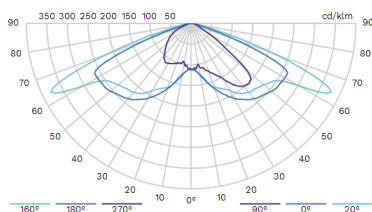
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FLEX⁴

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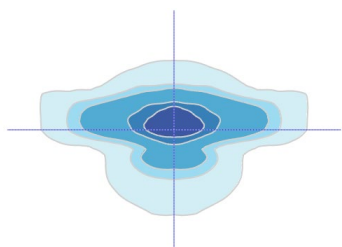
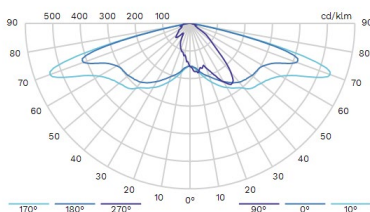




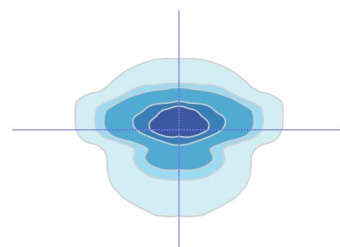
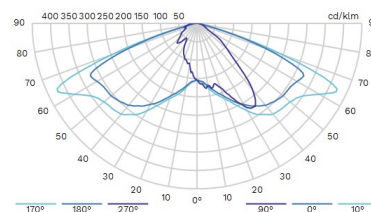
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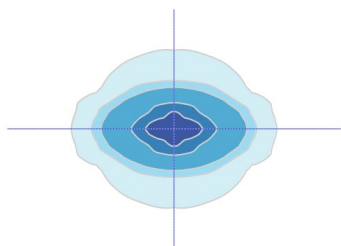
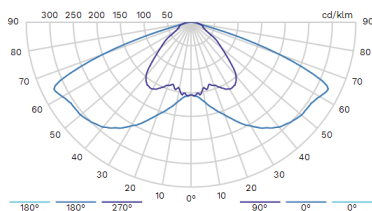
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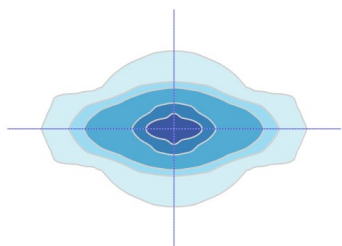
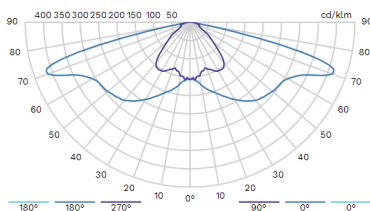
5306 GL



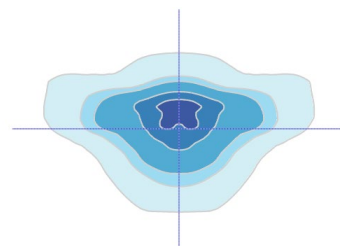
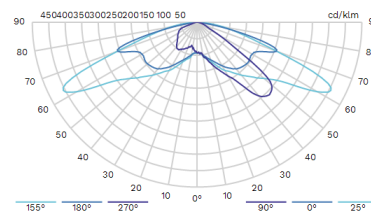
5306 GL SY



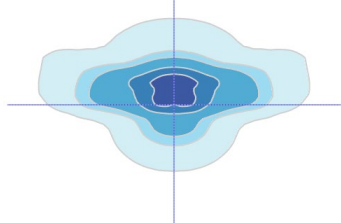
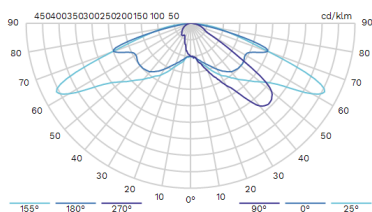
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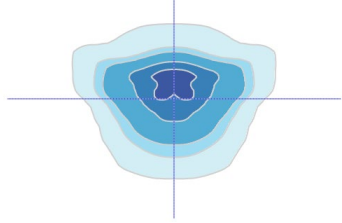
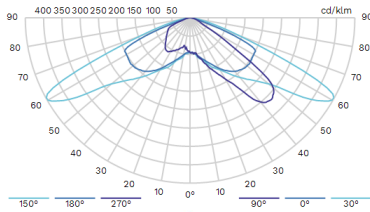
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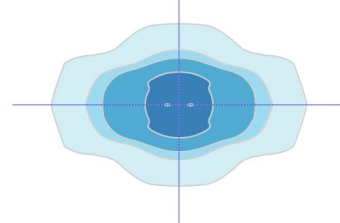
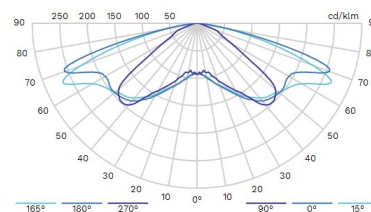
5307 BL

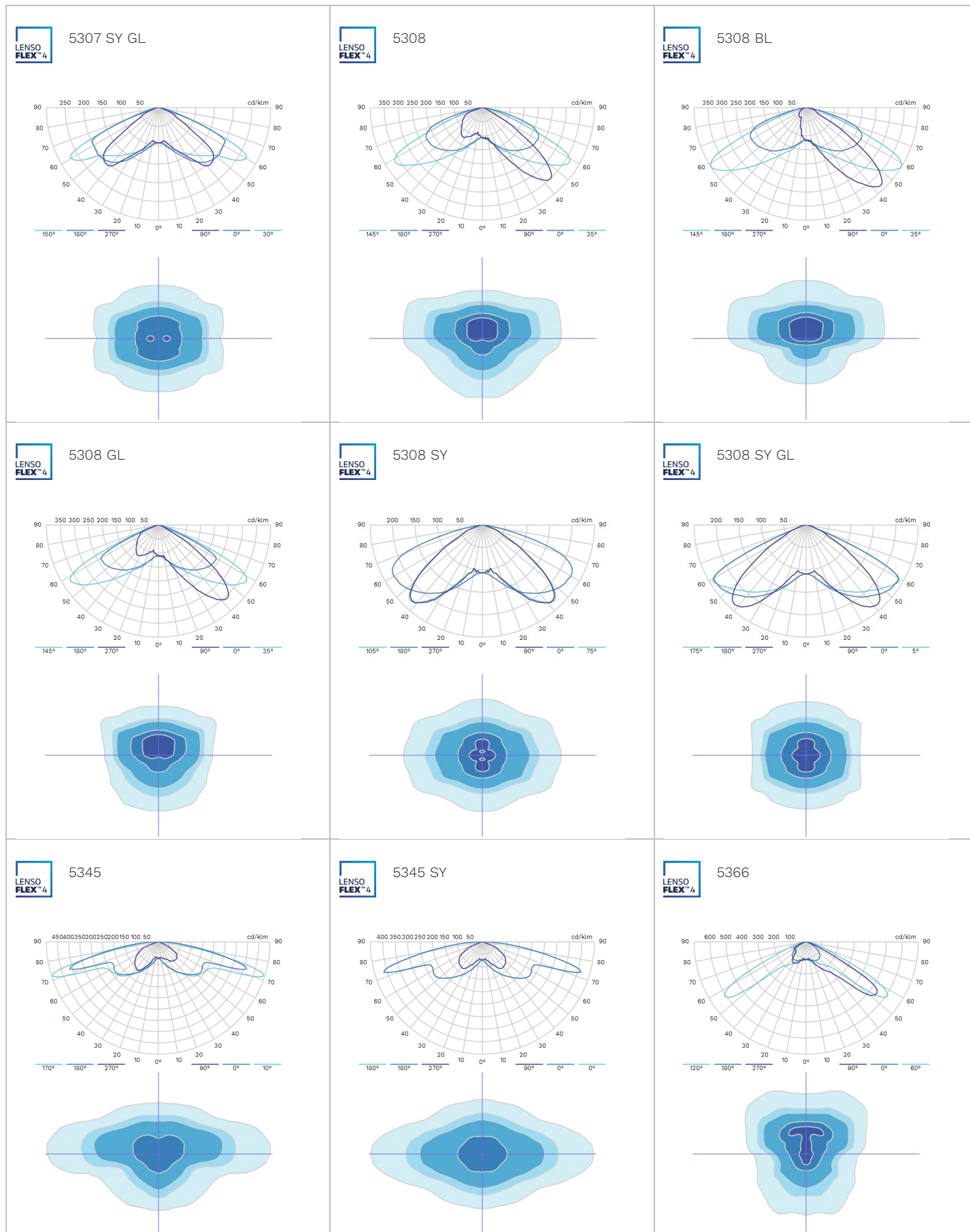


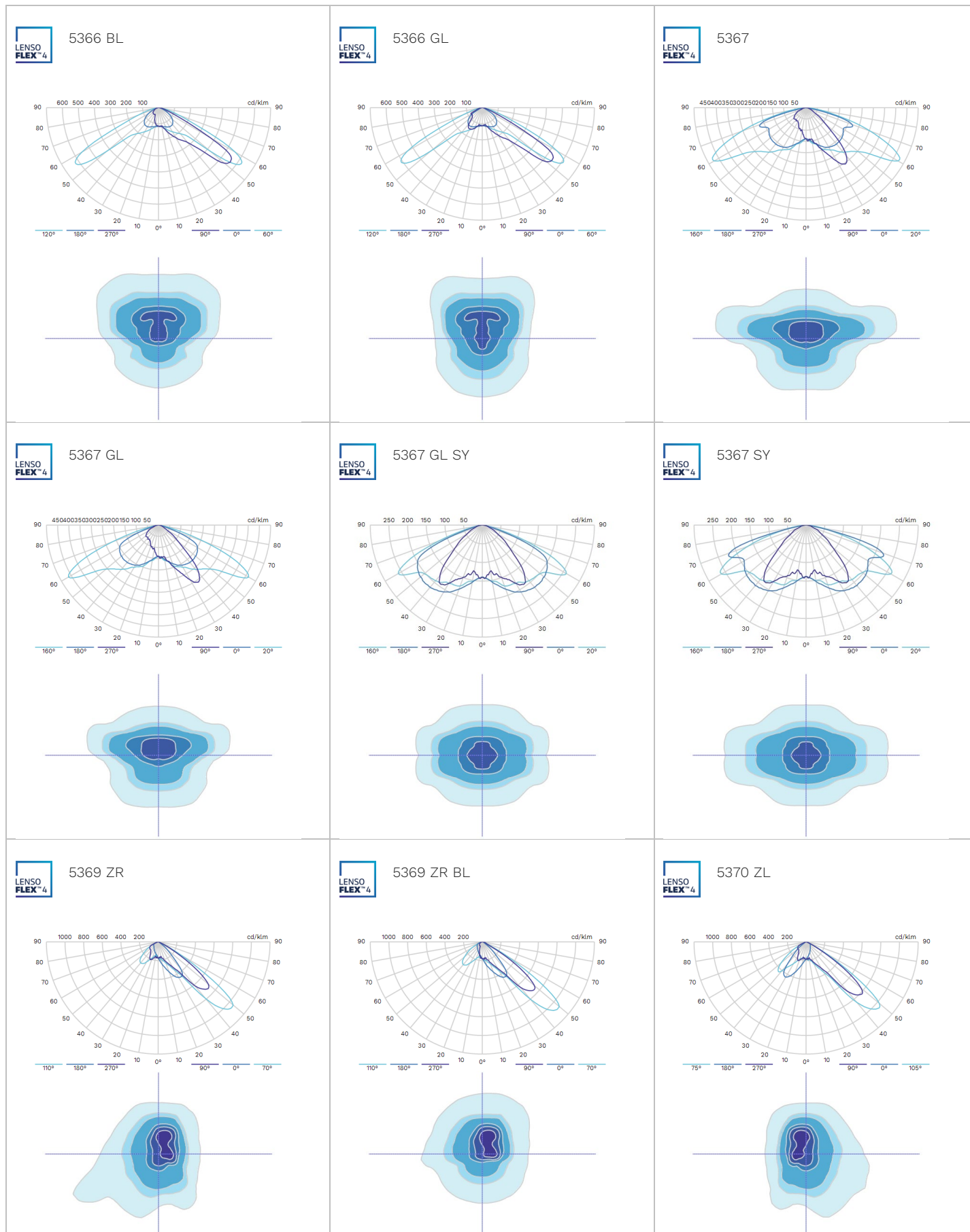
5307 GL



5307 SY

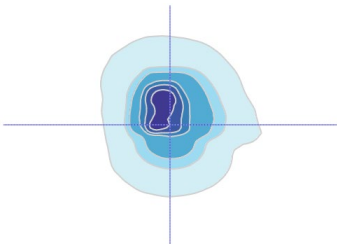
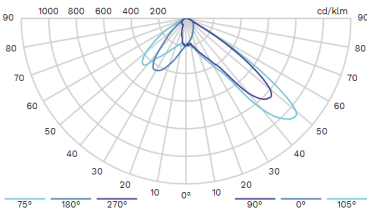




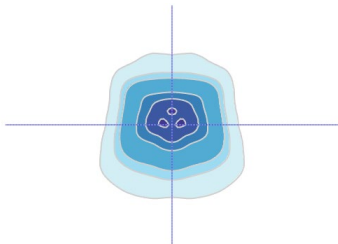
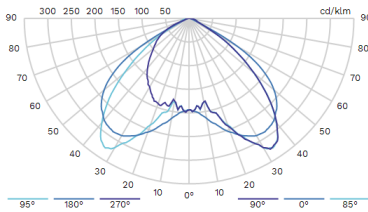




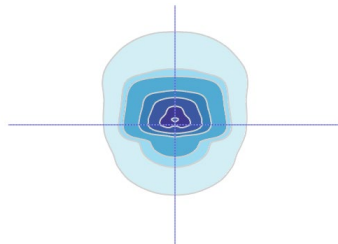
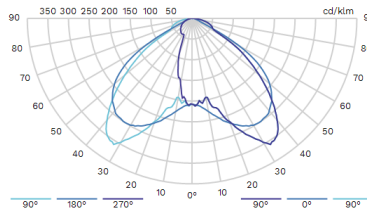
5370 ZL BL



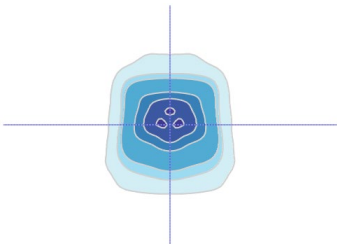
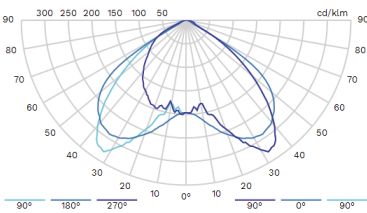
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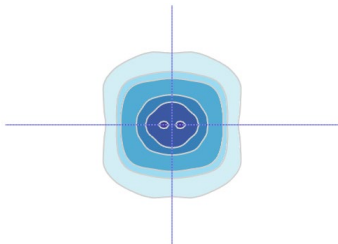
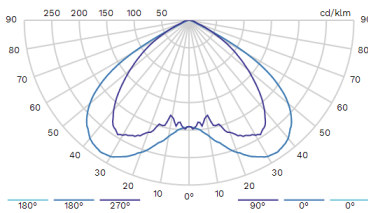
5388 BL



5388 GL



5388 SY



5388 SY GL

