Schréder
Experts in lightability™

ROAD

HESTIA GEN2

LENSO FLEX™4

Elegant solution with cutting-edge technology

HESTIA GEN2 is a fluid, light and elegant LED luminaire designed to bring a touch of refinement to your urban spaces while helping you benefit from the advantages of the latest lighting innovations.

HESTIA GEN2 offers an economical lighting solution based on state-of-the-art photometric technologies. This luminaire is available with different lumen packages, all characterised by low energy consumption for high-quality photometric performance.

Available in 2 sizes (Mini and Midi), this outdoor LED lighting adapts to any kind of urban space. HESTIA GEN2 is a connected-ready luminaire that can be fitted with various remote control technologies to enable perfectly optimised urban lighting management. Create elegant, comfortable and safe environments in your city, thanks to HESTIA GEN2!

IP 65 | IK 08 | UL 1598 CSA C22.2 No. 250.0

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

Concept

HESTIA GEN2 luminaires are composed of durable, recyclable materials. The luminaire body and lower frame are made of painted die-cast aluminium, while the protector is made of glass. The protector is available in two versions - flat or curved. The flat glass protector allows a ULOR of 0%.

HESTIA GEN2 luminaires are equipped with the lastest LensoFlex® photometric engines that have been specifically developed for lighting spaces where the well-being and safety of people using the environment are essential.

This luminaire is available in two sizes - Mini and Midi - with different lumen packages, all characterised by low energy consumption for high-quality photometric performance.

HESTIA GEN2 is a connected-ready luminaire. As an option, it can be fitted with a NEMA or a Zhaga socket, allowing various remote control solutions for perfectly optimised lighting installation management. A PIR motion sensor can also be added to generate light only when it is necessary, thus creating significant energy savings.

HESTIA GEN2 can be installed using a side-entry fixation on a Ø34mm bracket.

HESTIA GEN2 offers a sophisticated, economical lighting solution.

HESTIA GEN2 is available with various control solutions for optimising lighting management and creating significant savings.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Elegant design incorporating the advantages of LED technology
- Low energy consumption
- True range with two sizes and numerous lumen packages
- Proven LensoFlex®4 photometrical engines
- Connected-ready for your future Smart city requirements
- Compatible with the Schréder EXEDRA control platform
- Zhaga-D4i certified

The LensoFlex® photometric engines provide the highest efficiency.

HESTIA GEN2 features a toolless opening system, providing easy access for maintenance.

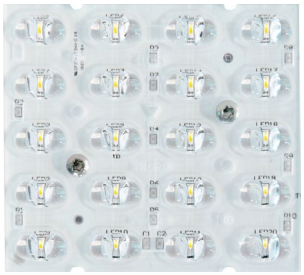
HESTIA GEN2 | Flat glass protector

HESTIA GEN2 | Curved glass protector

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.

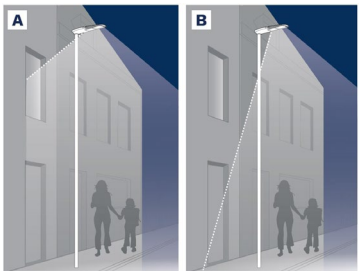
LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.



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.

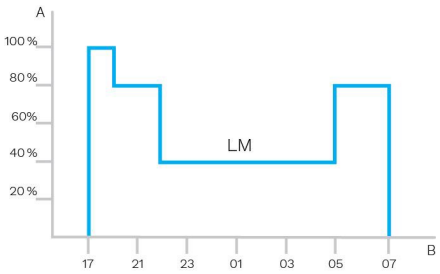


A. Without Back Light control | B. With Back Light control

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.

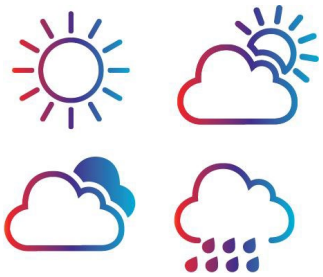
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



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.

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.

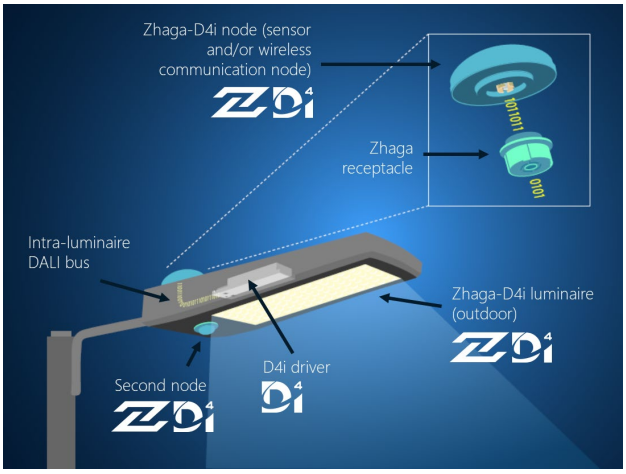
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

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.

GENERAL INFORMATION

Recommended installation height	4m to 12m | 13' to 39'
Circle Light label	Score between 60 and 90 - The product meets most of circular economy requirements
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
UL certified	Yes
Zhaga-D4i certified	Yes
UKCA marking	Yes

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Tightness level	IP 65
Impact resistance	IK 08
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 +35°C / -22°F up to 95°F

· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class 1 US, Class I EU, Class II EU
Nominal voltage	120-277V – 50-60Hz 220-240V – 50-60Hz 347V - 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, 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 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 0%: only for flat glass version.

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

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

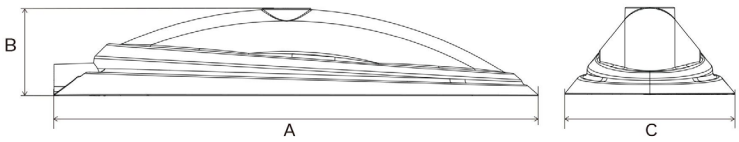
LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90

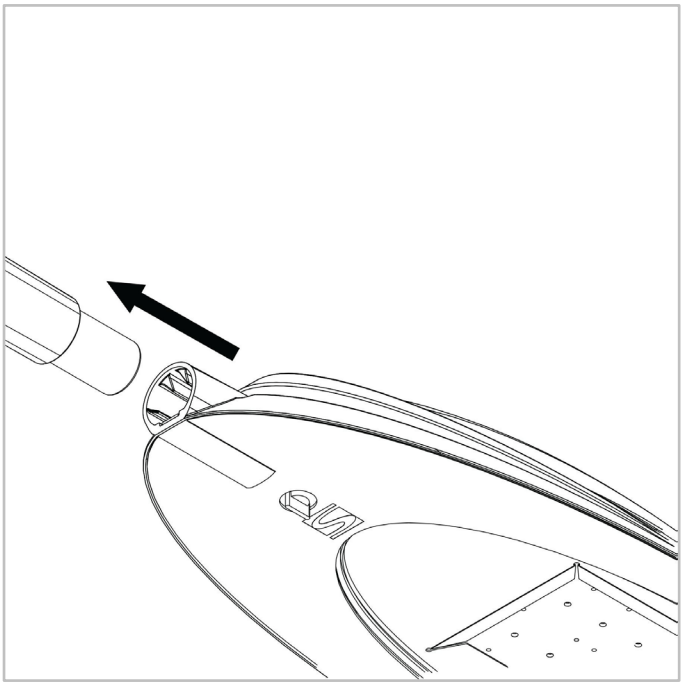
· Lifetime may be different according to the size/configurations. Please consult us.

DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	HESTIA GEN2 MINI : 780x139x266 | 30.7x5.5x10.5 HESTIA GEN2 MIDI : 925x166x324 | 36.4x6.5x12.8
Weight (kg | lbs)	HESTIA GEN2 MINI : 7 | 15.4 HESTIA GEN2 MIDI : 10 | 22.0
Aerodynamic resistance (CxS)	HESTIA GEN2 MINI : 0.07 HESTIA GEN2 MIDI : 0.08
Mounting possibilities	Side-entry slip-over – Ø34mm



HESTIA GEN2 | Side-entry mounting on a Ø34mm bracket – 2 x M8 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)	
Luminaire	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	Photometry
HESTIA GEN2 MINI	10	300	900	1000	1000	1200	1100	1300	1100	1200	1200	1400	10.5	133	LENSO FLEX 4
	10	400	1200	1400	1300	1600	1500	1700	1400	1600	1600	1800	13.8	130	LENSO FLEX 4
	10	500	1400	1600	1600	1900	1800	2000	1600	1900	1900	2200	17.1	129	LENSO FLEX 4
	10	600	1600	1800	1800	2100	2000	2300	1900	2200	2100	2500	20.9	120	LENSO FLEX 4
	10	700	1800	2000	2000	2400	2200	2600	2100	2400	2400	2700	24	112	LENSO FLEX 4
	10	800	1900	2200	2200	2500	2400	2700	2200	2600	2500	2900	27.6	105	LENSO FLEX 4
	10	900	1900	2300	2200	2600	2500	2900	2300	2700	2600	3000	31.4	96	LENSO FLEX 4
	20	200	1300	1500	1500	1700	1600	1900	1500	1700	1700	2000	13.2	152	LENSO FLEX 4
	20	300	1800	2100	2100	2500	2300	2700	2200	2500	2500	2900	19.4	149	LENSO FLEX 4
	20	350	2100	2400	2400	2800	2700	3100	2500	2900	2800	3300	22.5	147	LENSO FLEX 4
	20	400	2400	2800	2700	3200	3000	3500	2800	3300	3200	3700	25.7	144	LENSO FLEX 4
	20	500	2800	3300	3200	3800	3600	4100	3300	3900	3800	4400	32.2	137	LENSO FLEX 4
	20	600	3200	3700	3700	4300	4100	4700	3800	4400	4300	5000	38.8	129	LENSO FLEX 4
	20	700	3600	4100	4100	4800	4500	5200	4200	4900	4800	5500	45	122	LENSO FLEX 4
	20	800	3800	4400	4400	5000	4800	5500	4500	5200	5100	5900	51.5	115	LENSO FLEX 4
	20	900	3900	4600	4500	5300	5000	5800	4700	5400	5300	6100	58.5	104	LENSO FLEX 4
	30	200	1900	2200	2200	2600	2400	2800	2300	2600	2600	3000	19.1	157	LENSO FLEX 4
	30	300	2800	3200	3200	3700	3500	4100	3300	3800	3700	4300	28.3	152	LENSO FLEX 4
	30	350	3200	3700	3700	4200	4000	4600	3800	4400	4200	4900	32.9	149	LENSO FLEX 4
	30	400	3600	4200	4100	4800	4500	5200	4300	4900	4800	5600	37.4	150	LENSO FLEX 4
	30	500	4300	4900	4900	5700	5400	6200	5000	5800	5700	6600	47	140	LENSO FLEX 4
	40	200	2600	3000	3000	3400	3300	3800	3100	3500	3400	4000	25.1	159	LENSO FLEX 4
	40	300	3700	4300	4300	5000	4700	5500	4400	5100	5000	5800	37.2	156	LENSO FLEX 4
	40	350	4200	4900	4900	5700	5400	6200	5000	5800	5700	6600	43.5	152	LENSO FLEX 4
	40	400	4800	5600	5500	6400	6100	7000	5700	6600	6400	7400	49.5	149	LENSO FLEX 4
	40	500	5700	6600	6500	7600	7200	8300	6700	7800	7600	8800	62	142	LENSO FLEX 4

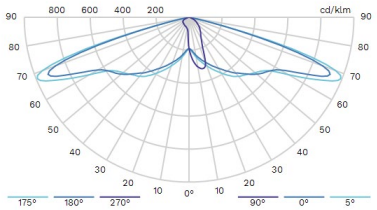
Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

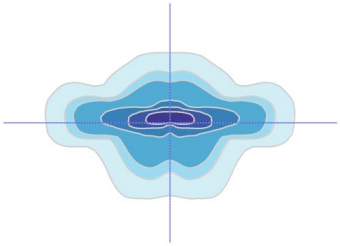
			Luminaire output flux (lm) Warm White 722		Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)	Luminaire efficacy (lm/W)	
Luminaire	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	Photometry
HESTIA GEN2 MIDI	40	200	2600	3000	2900	3400	3200	3700	3000	3500	3400	4000	25.1	159	LENSO FLEX 4
	40	300	3700	4300	4300	4900	4700	5400	4400	5100	5000	5700	37.2	153	LENSO FLEX 4
	40	350	4200	4900	4900	5700	5400	6200	5000	5800	5700	6600	43.5	152	LENSO FLEX 4
	40	400	4800	5500	5500	6400	6000	7000	5700	6500	6400	7400	49.5	149	LENSO FLEX 4
	40	500	5700	6600	6600	7600	7200	8300	6800	7800	7600	8800	62	142	LENSO FLEX 4
	40	600	6500	7600	7500	8700	8300	9600	7800	9000	8700	10100	75	135	LENSO FLEX 4
	40	700	7300	8400	8400	9700	9200	10600	8600	10000	9700	11200	89	126	LENSO FLEX 4
	40	750	7400	8500	8500	9800	9300	10800	8700	10100	9900	11400	95	120	LENSO FLEX 4
	50	200	3200	3700	3700	4300	4000	4700	3800	4400	4300	5000	30.6	163	LENSO FLEX 4
	50	300	4700	5400	5400	6200	5900	6800	5500	6400	6200	7200	46	157	LENSO FLEX 4
	50	350	5300	6200	6100	7100	6700	7800	6300	7300	7100	8200	54	152	LENSO FLEX 4
	50	400	6500	7500	7400	8600	8100	9400	7600	8800	8600	10000	61.5	163	LENSO FLEX 4
	50	500	7200	8300	8200	9500	9000	10400	8500	9800	9600	11100	77	144	LENSO FLEX 4
	50	550	7700	8900	8800	10200	9700	11200	9100	10500	10200	11800	85	139	LENSO FLEX 4
	60	200	3900	4500	4400	5100	4900	5600	4600	5300	5200	6000	36.5	164	LENSO FLEX 4
	60	300	5600	6500	6400	7400	7100	8200	6600	7700	7500	8600	54.5	158	LENSO FLEX 4
	60	350	6400	7400	7400	8500	8100	9300	7600	8800	8500	9900	64	155	LENSO FLEX 4
	60	400	7200	8300	8300	9600	9000	10500	8500	9800	9600	11100	73	152	LENSO FLEX 4
	60	500	8600	9900	9900	11400	10800	12500	10200	11800	11500	13300	92	145	LENSO FLEX 4
	60	550	9200	10700	10600	12300	11600	13400	10900	12600	12300	14200	102	139	LENSO FLEX 4

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

LENSO FLEX 4

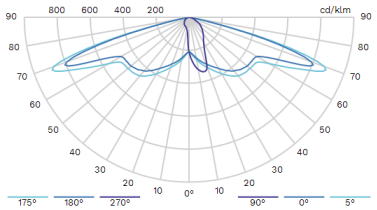
5300

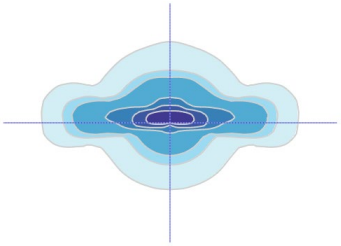




LENSO FLEX 4

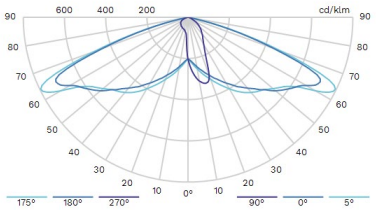
5300 BL

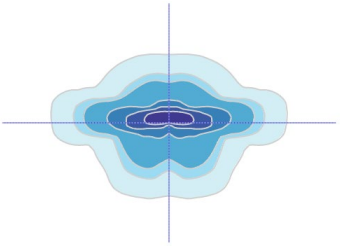




LENSO FLEX 4

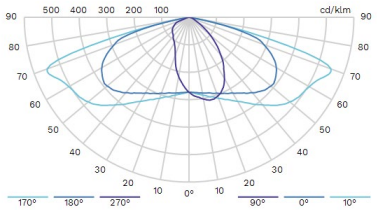
5300 GL

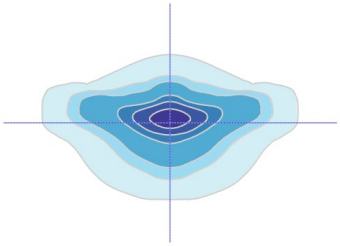




LENSO FLEX 4

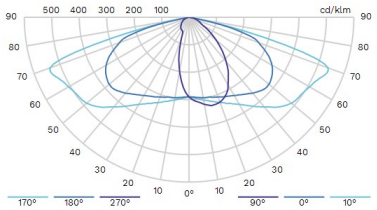
5301

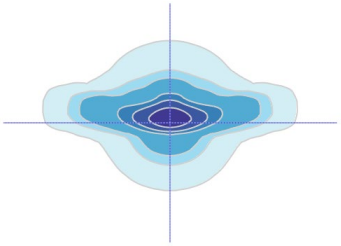




LENSO FLEX 4

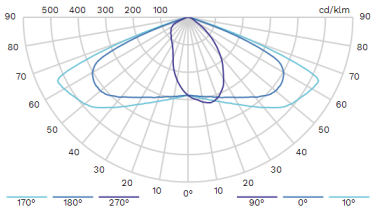
5301 BL

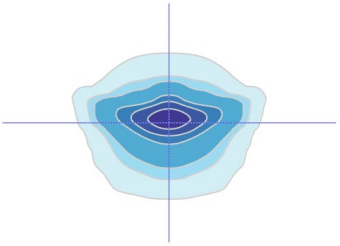




LENSO FLEX 4

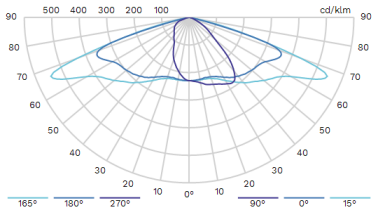
5301 GL

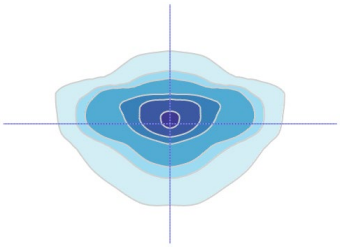




LENSO FLEX 4

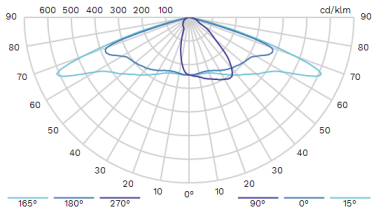
5303

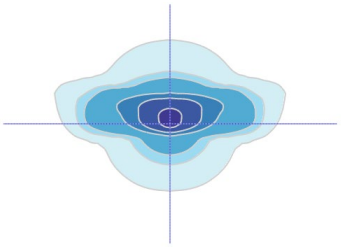




LENSO FLEX 4

5303 BL





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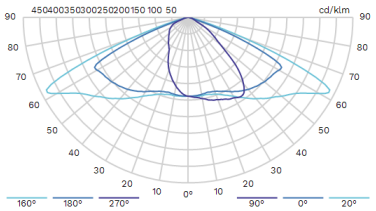

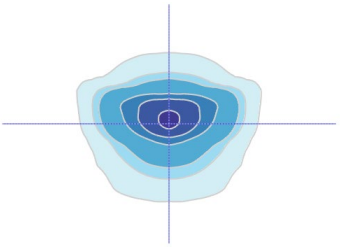

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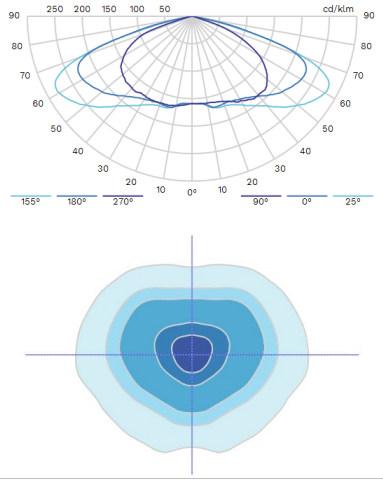

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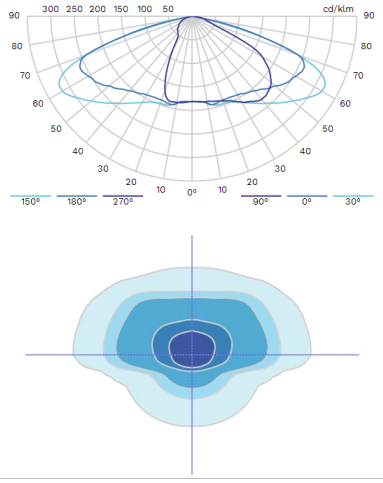

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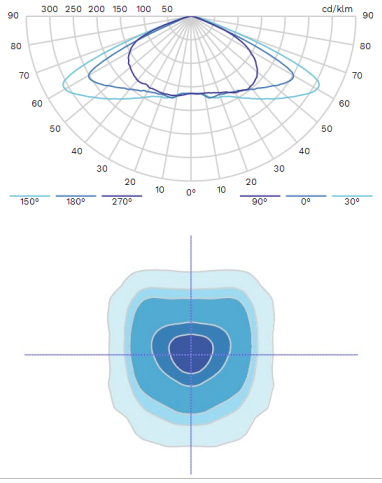

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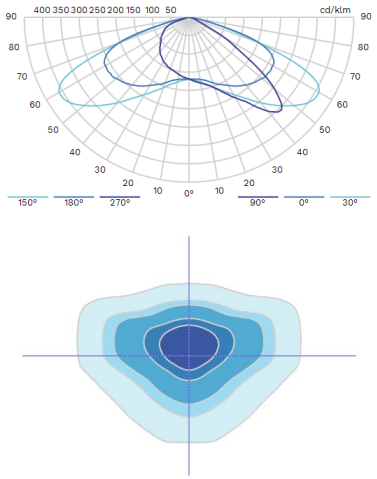

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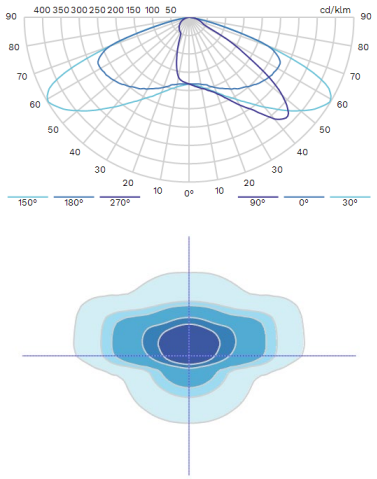

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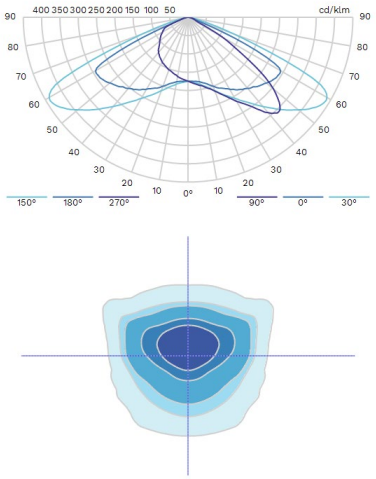

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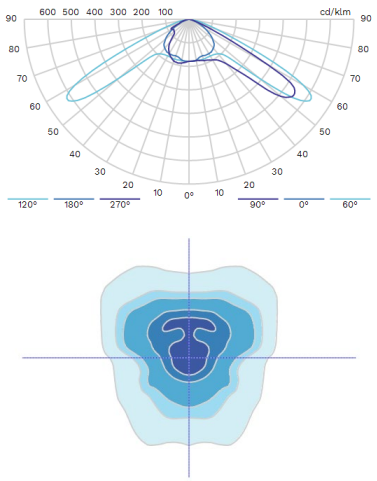

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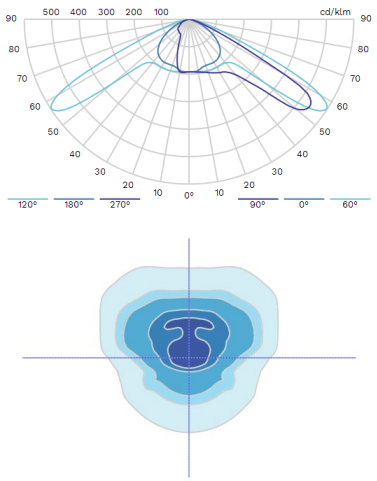

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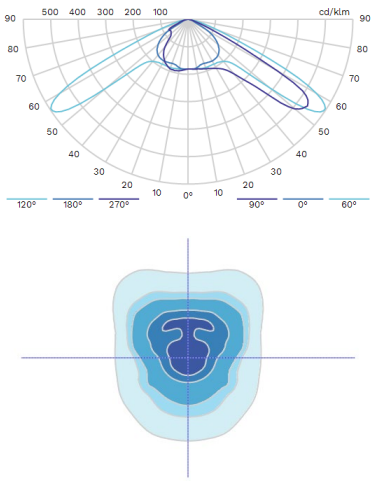

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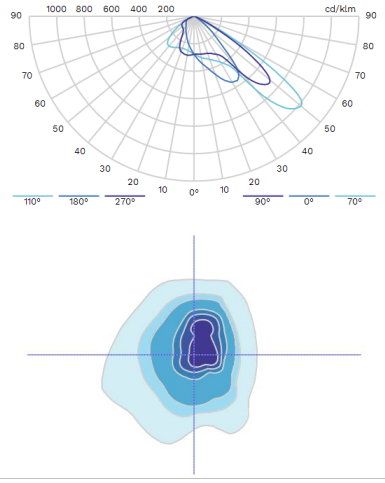

LENSO FLEX 4

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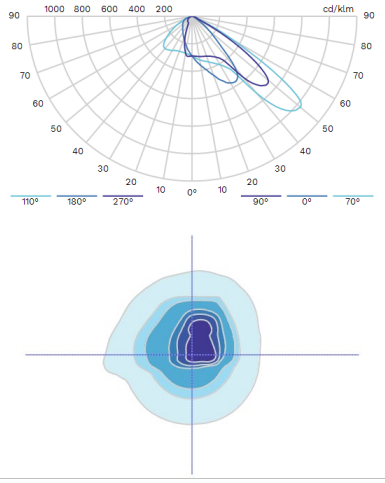

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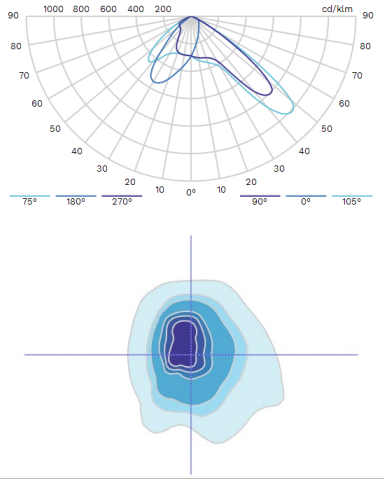

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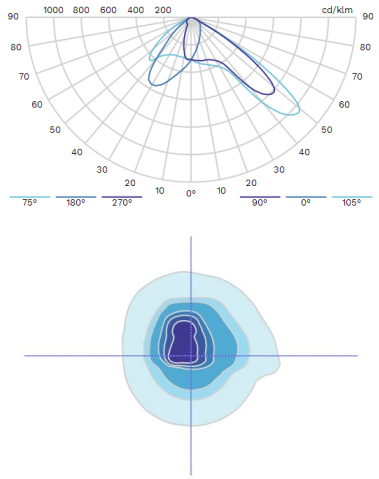

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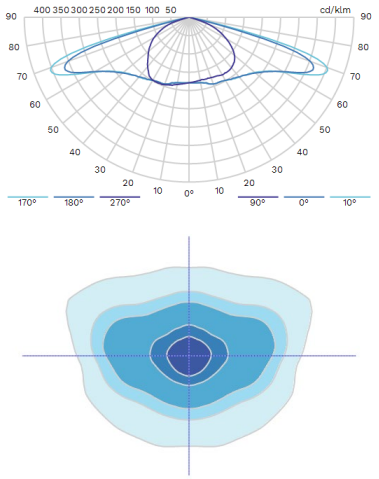

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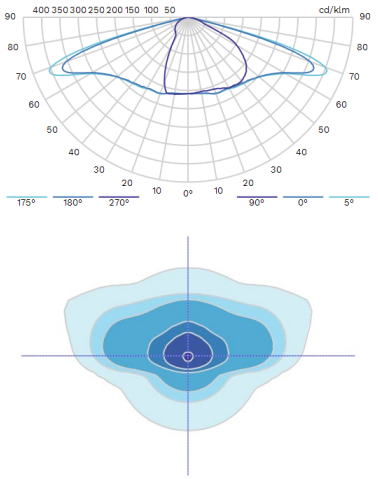

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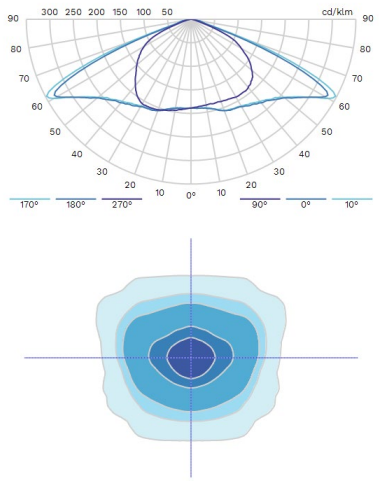

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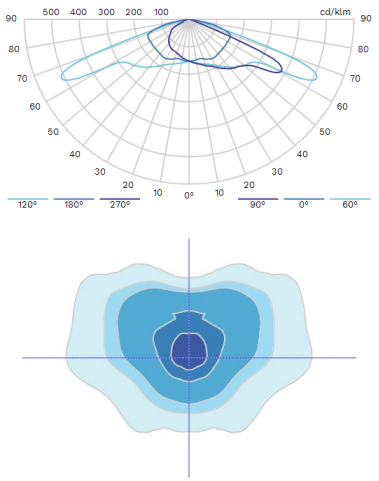

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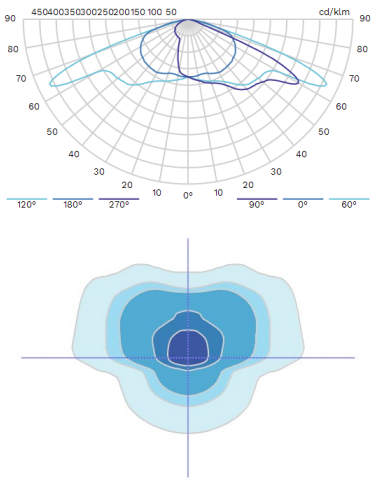

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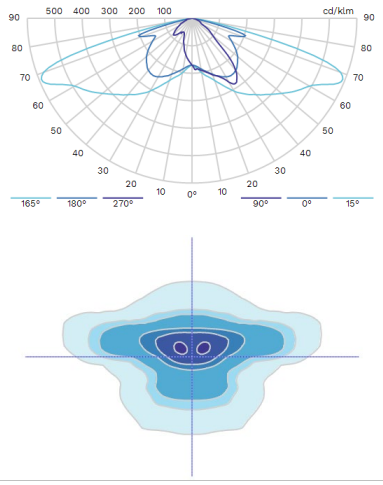

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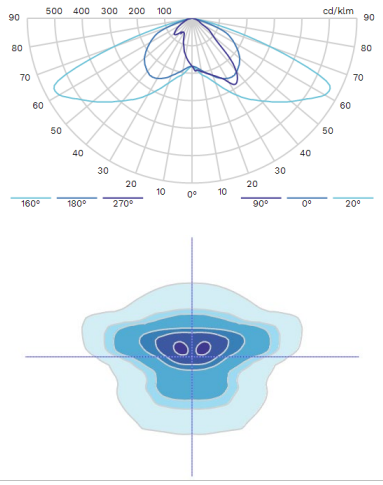

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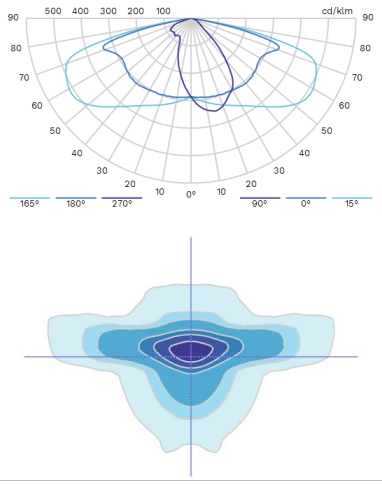

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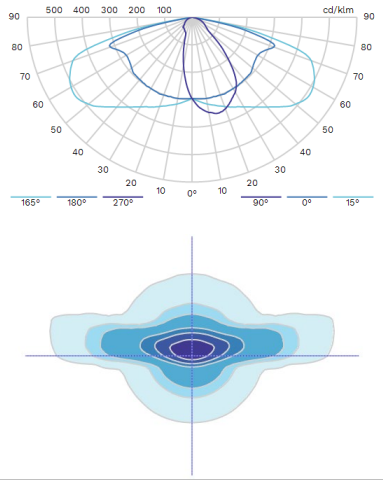

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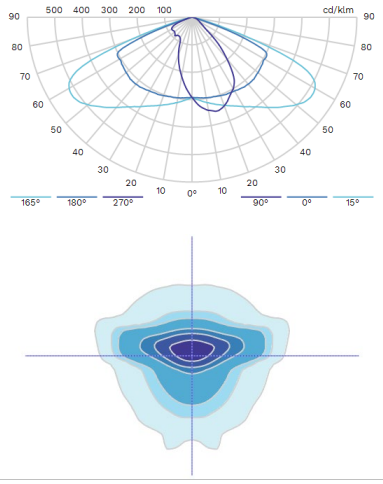

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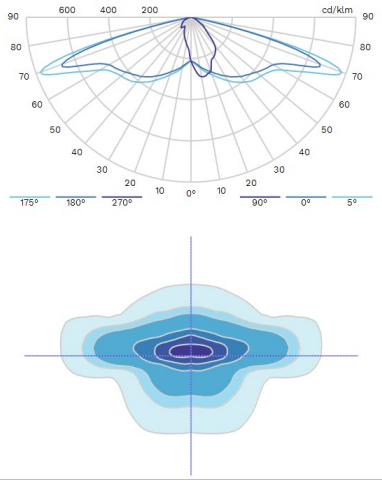

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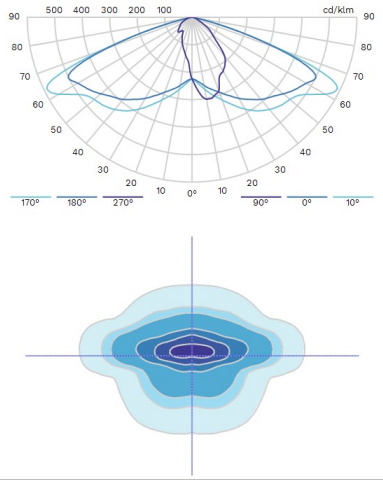

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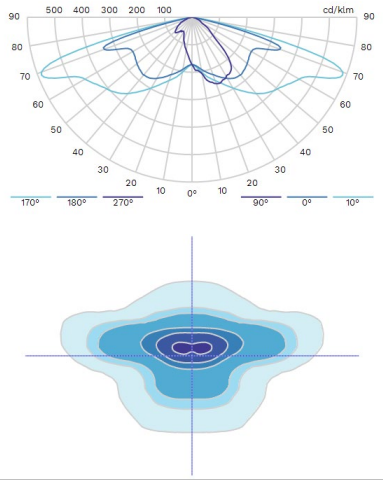

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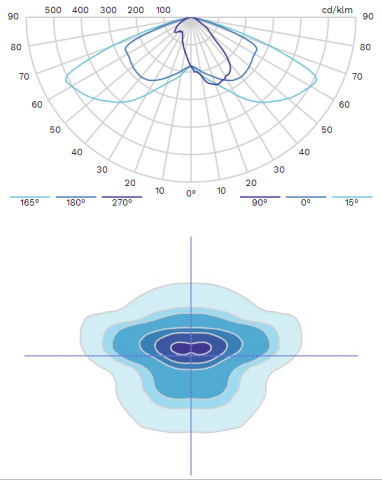

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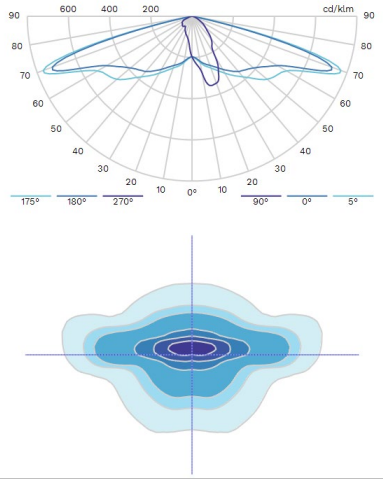

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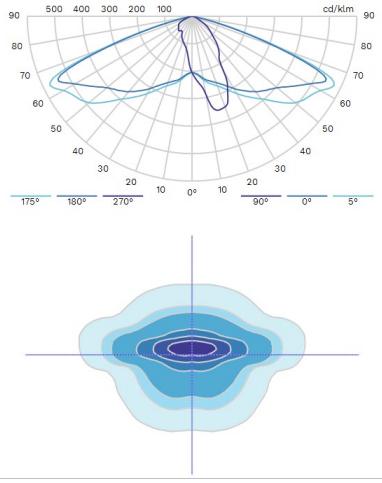

LENSO FLEX 4

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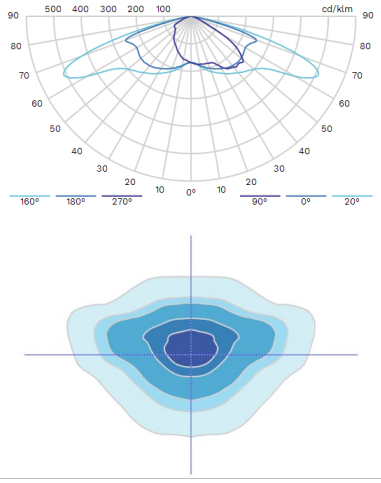

LENSO FLEX 4

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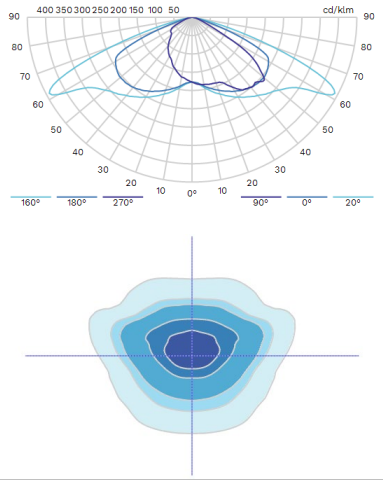

LENSO FLEX 4

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