Schréder
Experts in lightability™

ROAD

IZYLUM EVO

MID FLEX™ LENSO FLEX™ 4

IP 66 IK 10

The innovative powerful street lighting solution

IZYLUM EVO is a robust, powerful road luminaire designed around the concepts of simplicity, high performance and innovation.

This luminaire benefits from the latest photometric technologies, whether fitted with mid-power or high-power LEDs, thus covering many kinds of lighting application.

Its universal fixation system enables it to be switched from a post-top to a side-entry position at any time while eliminating any disconnection and effort constraints, making IZYLUM EVO the most adaptive road lighting solution. Like the luminaire itself, the fixation part is made of robust material, compliant with the most stringent vibrative and corrosive environment standards.

IZYLUM EVO is designed to operate with various control sockets and sensors, enabling significant energy and cost savings.

URBAN & RESIDENTIAL STREETS | BRIDGES | BIKE & PEDESTRIAN PATHS | CAR PARKS | LARGE AREAS | SQUARES & PEDESTRIAN AREAS | ROADS & MOTORWAYS

Concept

IZYLUM EVO is a robust yet compact luminaire, designed with a focus on ease of installation and maintenance. IZYLUM EVO is made of highly corrosion-resistant LM6 aluminium alloy, perfectly suited for harsh environments.

IZYLUM EVO takes advantage of the latest photometric innovations. It uses the LensoFlex®4 and MidFlex™ photometric engines, which have been developed around the concepts of high performance, compactness, versatility and standardisation.

IZYLUM EVO is available with the IZYFIX universal fixation system adapted to post-top and side-entry mounting on any spigot (Ø48mm, Ø60mm and Ø76mm). The IZYFIX system enables it to be switched from one position to another at any time, without removing the luminaire from the pole, offering complete versatility regarding pole and bracket configurations. This fixation system fully complies with the most demanding vibration requirements. To ease any maintenance activities, the luminaire offers tool-free access to the gear compartment.

The luminaire cabling can easily be carried-out via a separate connection compartment to prevent the risk of water ingress inside the luminaire or any cabling error. Connection with different main cables can be carried-out in the separate compartment, allowing usage of various existing types of cables found at the installation site.

IZYLUM EVO is a connected-ready luminaire available with various connectivity and sensor options. The NEMA socket is positioned under the luminaire to provide better protection against direct sunlight while also preventing easy access by birds and other animals.

IZYLUM EVO is made of robust LM6 aluminium alloy material.

The IZYFIX universal fixation system, with switching from a post-top to a side-entry position, facilitates luminaire ordering and installation.

A separate connection compartment limits risk of water ingress due to incorrect installation and significantly speeds-up installation.

TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- CAR PARKS
- LARGE AREAS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

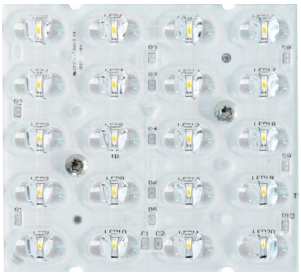
KEY ADVANTAGES

- Maximised savings in energy and maintenance costs
- Robust and recyclable materials
- Zhaga-D4i certified
- On-site adjustment from post-top to side-entry without disconnecting the luminaire from the pole thanks to IzyFix
- Tool-free access with a clear, perceptible click upon closing
- RCM-compliant
- Connected-ready for your future Smart city requirements
- Separate compartment to connect the luminaire
- LensoFlex® and MidFlex™ photometric engines offering high-efficiency lighting, comfort and safety

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.



MidFlex™

The MidFlex™ photometric engine is based on the same principle as LensoFlex®2: each LED is associated with a specific lens that generates the complete photometric distribution of the luminaire. MidFlex™ takes advantage of the maturity of mid-power LEDs for professional applications. The MidFlex™ photometric engines are based on the combination of several modules of 48 mid-power LEDs tightly positioned to maximise the LED density. This concept provides high lumen packages with a limited product footprint. The MidFlex™ photometric engines offers excellent efficiency for a sustainable performance.

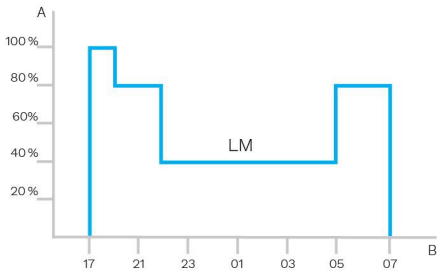
Embellishment plate

This accessory not only provides a more aesthetic solution as it covers the wires supplying the PCBA's with power, it also increases the lumen output thanks to its extra bright surface that reflects light out of the optical unit. Depending on the configuration, the embellishment plate can increase the lumen output by 2 to 3%.

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.

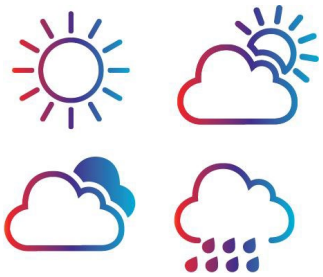
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



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.

IzyFix

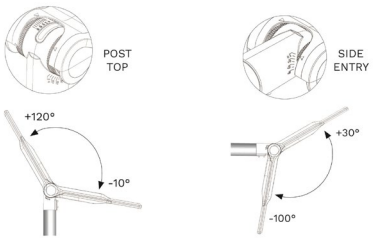
The Schréder IzyFix patented high-pressure die-casted aluminium universal fixation system is an integral part of the luminaire mounted in the factory. The IzyFix system aims to fit needs worldwide by meeting IEC and ANSI 3G testing requirements. It is intended to simplify life for customers and installers in the process of purchasing and installing luminaires for various applications.

From post-top to side-entry in one movement

The innovative design allows changing from a side-entry to a post-top position – even with luminaires ordered with factory pre-cabling – without any switching work on the fixation or disconnection from the pole. Therefore the type of mounting (horizontal or vertical) does not have to be considered when ordering. This unique feature also eases installation. After setting the correct position, an accessory is provided to cover the resulting space and ensure further protection of the luminaire.

Best-in-class tilting range

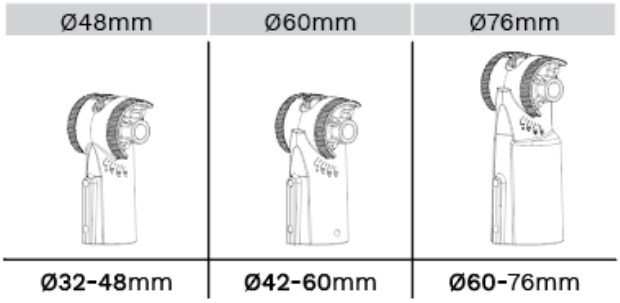
The IzyFix universal fixation system enables a best-in-class range of mounting angle of 130°, to ensure maximum lighting performance for all kinds of road scenarios and offer the possibility of installing the luminaire in extreme situations as well. With a setting mark on the body and angles on the spigot, adjusting is carried out in 5° increments by loosening two screws. The wide tilting range enables more comfortable access to the gear compartment during field maintenance.



Variation for all poles

Due to the many different applications used worldwide, Schréder has created a range of fixation systems and reducers to satisfy all needs that might come up on the market.

IzyFix - suitable for:
- Ø48mm spigot
- Ø60mm spigot
- Ø76mm spigot



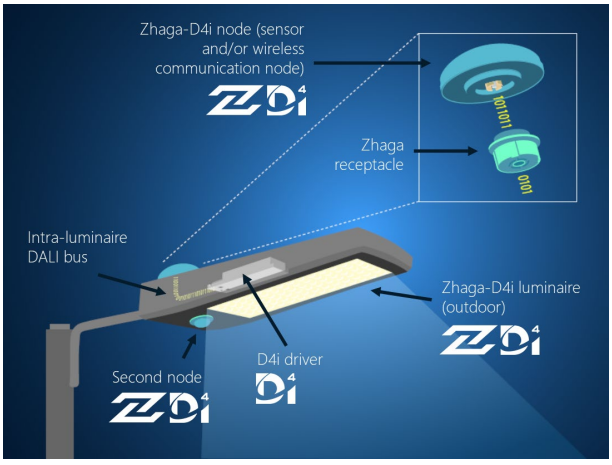
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

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 15m | 13' to 49'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
CE mark	Yes
Zhaga-D4i certified	Yes
RCM mark	Yes

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Natural or Polyester powder coating (optional)
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with AUS 3Hz vibration requirements 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 +50°C / -22°F up to 122°F with wind effect

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

ELECTRICAL INFORMATION

Electrical class	I, II
Nominal voltage	220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10 20
Electromagnetic compatibility (EMC)	AS/NZS CISPR 15
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	4000K (Neutral White 740) 3000K (Warm White 730) 2700K (Warm White 727) 2200K (Warm White 722)
Colour rendering index (CRI)	>70 >80 (Optional)
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.

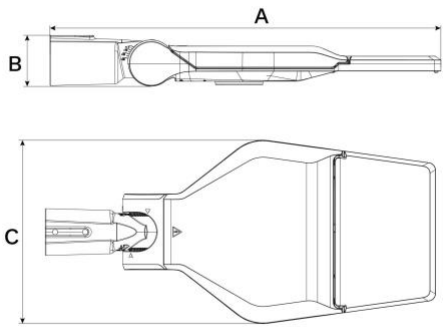
LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95

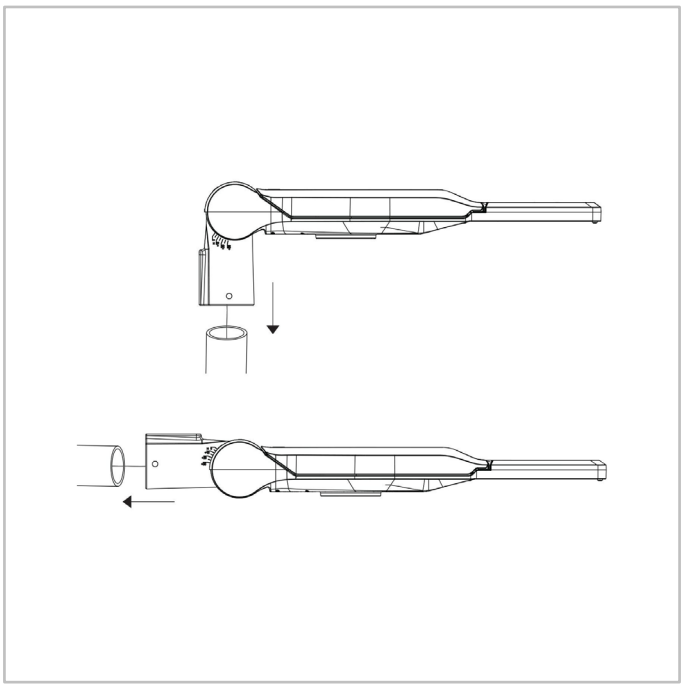
· Lifetime may be different according to the size/configurations. Please consult us.

DIMENSIONS AND MOUNTING	
AxBxC (mm)	IZYLUM EVO 3 : 737x97x372 IZYLUM EVO 5 : 896x98x396
Weight (kg)	IZYLUM EVO 3 : 8.4 IZYLUM EVO 5 : 12.6
Aerodynamic resistance (CxS)	IZYLUM EVO 3 : 0.03 IZYLUM EVO 5 : 0.04
Mounting possibilities	Side-entry slip-over – Ø32mm Side-entry slip-over – Ø48mm Side-entry slip-over – Ø60mm Side-entry slip-over – Ø76mm Post-top slip-over – Ø48mm Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm

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



IZYLUM EVO | Slip-over mounting on Ø48mm, Ø60mm and Ø76mm spigots – 2xM8 screws or 2xM10 screws



Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 722 Min	Max	Luminaire output flux (lm) Warm White 727 Min	Max	Luminaire output flux (lm) Warm White 730 Min	Max	Luminaire output flux (lm) Warm White 830 Min	Max	Luminaire output flux (lm) Neutral White 740 Min	Max	Luminaire output flux (lm) Cool White 757 Min	Max	Power consumption (W)	Luminaire efficacy (lm/W) Up to	Photometry
IZYLUM EVO 3	30	200	2000	2200	2300	2600	2500	2800	2300	2600	2600	3000	2600	2900	19.1	157	LENSO FLEX 4
	30	300	2900	3300	3300	3700	3600	4100	3300	3700	3800	4400	3700	4200	28.3	155	LENSO FLEX 4
	30	350	3300	3700	3800	4300	4100	4700	3800	4300	4400	5000	4300	4900	32.9	152	LENSO FLEX 4
	30	400	3700	4200	4200	4800	4600	5300	4200	4800	4900	5600	4800	5400	37.5	149	LENSO FLEX 4
	30	500	4400	5000	5000	5700	5500	6300	5000	5700	5900	6700	5700	6500	47	143	LENSO FLEX 4
	30	600	5000	5700	5800	6600	6300	7200	5800	6600	6700	7700	6600	7500	57	135	LENSO FLEX 4
	30	670	5400	6200	6300	7100	6900	7800	6300	7100	7300	8300	7100	8100	64	130	LENSO FLEX 4
	40	200	2600	3000	3000	3500	3300	3800	3000	3500	3500	4000	3400	3900	25.1	159	LENSO FLEX 4
	40	300	3800	4400	4400	5000	4800	5500	4400	5000	5100	5800	5000	5700	37.2	156	LENSO FLEX 4
	40	350	4400	5000	5000	5700	5500	6300	5000	5700	5800	6700	5700	6500	43.5	154	LENSO FLEX 4
	40	400	4900	5600	5600	6400	6200	7000	5600	6400	6500	7400	6400	7200	49.5	149	LENSO FLEX 4
	40	500	5900	6700	6700	7700	7400	8400	6700	7700	7800	8900	7600	8700	62	144	LENSO FLEX 4
	40	600	6700	7700	7700	8800	8500	9700	7700	8800	9000	10200	8800	10000	75	136	LENSO FLEX 4
	40	670	7300	8300	8400	9500	9200	10400	8400	9500	9700	11100	9500	10800	85	131	LENSO FLEX 4
	50	200	3300	3800	3800	4400	4200	4800	3800	4400	4400	5100	4300	4900	31.3	163	LENSO FLEX 4
	50	300	4800	5500	5500	6300	6000	6900	5500	6300	6400	7300	6200	7100	46.5	157	LENSO FLEX 4
	50	350	5500	6300	6300	7200	6900	7900	6300	7200	7300	8400	7100	8100	54	156	LENSO FLEX 4
	50	400	6100	7000	7000	8000	7700	8800	7000	8000	8200	9300	8000	9100	62	150	LENSO FLEX 4
	50	500	7300	8400	8400	9600	9200	10600	8400	9600	9800	11200	9500	10900	77	145	LENSO FLEX 4
	50	600	8400	9600	9700	11100	10600	12100	9700	11100	11200	12800	10900	12500	93	138	LENSO FLEX 4
	50	670	9100	10400	10500	12000	11500	13100	10500	12000	12100	13900	11800	13500	105	132	LENSO FLEX 4
	60	200	4000	4600	4600	5200	5000	5700	4600	5200	5300	6100	5200	5900	36.5	167	LENSO FLEX 4
	60	300	5700	6600	6600	7600	7200	8300	6600	7600	7700	8800	7500	8500	54.5	161	LENSO FLEX 4
	60	350	6600	7500	7600	8600	8300	9500	7600	8600	8800	10000	8600	9800	64	156	LENSO FLEX 4
	60	400	7400	8400	8500	9700	9300	10600	8500	9700	9800	11200	9600	10900	73	153	LENSO FLEX 4
	60	500	8800	10100	10100	11600	11100	12700	10100	11600	11800	13400	11500	13100	92	146	LENSO FLEX 4
	60	600	10100	11500	11600	13300	12700	14500	11600	13300	13500	15400	13100	15000	111	139	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		Luminaire output flux (lm) Cool White 757		Power consumption (W)	Luminaire efficacy (lm/W)	
Luminaire	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	Photometry
IZYLUM EVO 3	60	670	10900	12500	12600	14400	13800	15700	12600	14400	14600	16700	14200	16200	124	135	LENSO FLEX 4
	70	200	4700	5300	5400	6100	5900	6700	5400	6100	6200	7100	6100	6900	42.5	167	LENSO FLEX 4
	70	300	6700	7700	7700	8800	8500	9700	7700	8800	9000	10200	8700	10000	63.5	161	LENSO FLEX 4
	70	350	7700	8800	8800	10100	9700	11100	8800	10100	10300	11700	10000	11400	74	158	LENSO FLEX 4
	70	400	8600	9800	9900	11300	10800	12400	9900	11300	11500	13100	11200	12800	85	154	LENSO FLEX 4
	70	500	10300	11700	11800	13500	13000	14800	11800	13500	13700	15700	13400	15300	107	147	LENSO FLEX 4
	70	600	11800	13500	13600	15500	14900	17000	13600	15500	15700	18000	15300	17500	129	140	LENSO FLEX 4
	70	670	12800	14600	14700	16800	16100	18300	14700	16800	17000	19400	16600	18900	144	135	LENSO FLEX 4
	80	200	5300	6100	6100	7000	6700	7700	6100	7000	7100	8100	6900	7900	46.5	174	LENSO FLEX 4
	80	300	7700	8800	8800	10100	9700	11100	8800	10100	10300	11700	10000	11400	71	165	LENSO FLEX 4
	80	350	8800	10000	10100	11500	11100	12600	10100	11500	11700	13400	11400	13100	84	160	LENSO FLEX 4
	80	400	9800	11200	11300	12900	12400	14100	11300	12900	13100	15000	12800	14600	96	156	LENSO FLEX 4
	80	500	11800	13400	13500	15400	14800	16900	13500	15400	15700	17900	15300	17500	122	147	LENSO FLEX 4
	80	600	13500	15400	15500	17700	17000	19400	15500	17700	18000	20600	17500	20000	148	139	LENSO FLEX 4
	80	670	14600	16700	16800	19200	18400	21000	16800	19200	19500	22200	19000	21700	167	133	LENSO FLEX 4

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

Luminaire	Number of LEDs	Current (mA)	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		Luminaire output flux (lm) Cool White 757		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		Up to	
IZYLUM EVO 5	80	200	5200	6400	5900	7400	6500	8100	5900	7400	6900	8600	6700	8400	46.5	185	
	80	300	7500	9300	8600	10700	9500	11800	8600	10700	10000	12500	9800	12100	71	176	
	80	350	8600	10700	9900	12300	10900	13500	9900	12300	11500	14300	11200	13900	84	170	
	80	400	9700	12100	11100	13900	12200	15200	11100	13900	12900	16100	12600	15700	96	168	
	80	500	11700	14600	13500	16800	14800	18400	13500	16800	15600	19400	15200	18900	122	159	
	80	600	13600	16900	15600	19400	17100	21300	15600	19400	18100	22600	17700	22000	148	153	
	80	700	15300	19100	17600	21900	19300	24000	17600	21900	20400	25400	19900	24800	178	143	
	80	800	16900	21000	19400	24100	21300	26400	19400	24100	22500	28000	21900	27300	201	139	
	80	830	17300	21500	19900	24800	21800	27100	19900	24800	23100	28700	22500	28000	209	137	
	100	200	6500	8100	7400	9300	8200	10100	7400	9300	8600	10800	8400	10500	60	189	
	100	300	9400	11700	10800	13400	11800	14700	10800	13400	12500	15600	12200	15200	88	177	
	100	350	10800	13400	12400	15400	13600	16900	12400	15400	14400	17900	14000	17400	106	174	
	100	400	12100	15100	13900	17300	15300	19000	13900	17300	16200	20100	15800	19600	119	169	
	100	500	14700	18200	16900	21000	18500	23000	16900	21000	19600	24300	19100	23700	155	161	
	100	600	17000	21100	19600	24300	21400	26600	19600	24300	22700	28200	22100	27500	187	152	
	100	700	19200	23800	22000	27400	24100	30000	22000	27400	25600	31800	24900	31000	220	146	
	100	800	21100	26200	24300	30200	26600	33000	24300	30200	28200	35000	27400	34100	252	139	
	100	830	21700	26900	24900	31000	27300	33900	24900	31000	28900	35900	28200	35000	262	137	
	120	200	7700	9600	8900	11100	9800	12100	8900	11100	10300	12900	10100	12500	73	177	
	120	300	11300	14000	13000	16200	14200	17700	13000	16200	15100	18700	14700	18300	109	172	
	120	350	12900	16100	14900	18500	16300	20300	14900	18500	17300	21500	16800	20900	128	168	
	120	400	14600	18100	16700	20800	18300	22800	16700	20800	19400	24200	18900	23500	146	166	
	120	500	17600	21800	20200	25100	22100	27500	20200	25100	23400	29100	22800	28400	184	158	
	120	600	20300	25300	23400	29000	25600	31800	23400	29000	27100	33700	26400	32800	222	152	

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

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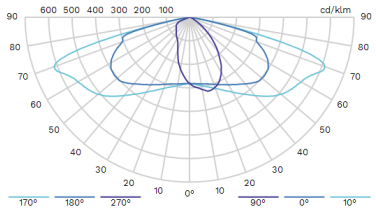
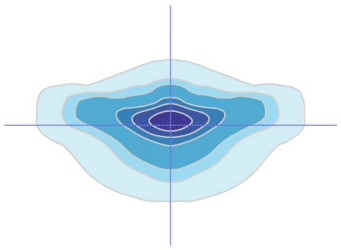
5301





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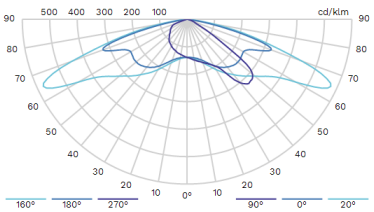
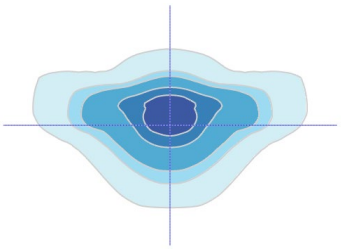
5307





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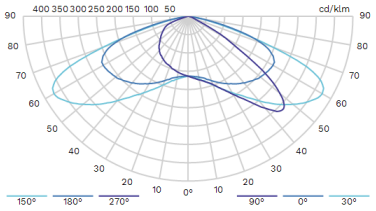
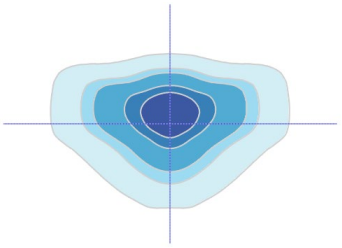
5308





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5304