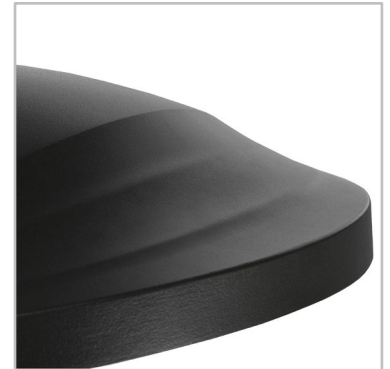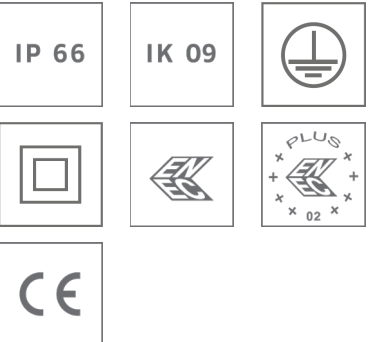# TOPIA

LENSO **FLEX**™ 4

HI **FLEX**™ 1&2

HI **FLEX**™ 2

Optimise your urban space lighting with minimised energy costs

Experience the exceptional efficiency of TOPIA, the ultimate urban lighting solution that provides superior photometric performance in a typically timeless urban design. Seamlessly integrating state-of-the-art lighting technologies, TOPIA perfectly balances efficiency, performance and functionality. This urban luminaire guarantees an outstanding lighting experience with the fastest return on investment.

Its universal fixation system allows for easy switching between post-top and side-entry positions, eliminating the need for disconnection or additional effort, ensuring maximum flexibility and adaptability for any lighting application. A dedicated post-top arm is also available to ensure an elegant and consistent integration into all types of urban spaces. Encounter a new urban lighting approach with TOPIA, the highly efficient, durable and functional luminaire.

IP 66

IK 09

PLUS 02

CE

URBAN & RESIDENTIAL STREETS

BRIDGES

BIKE & PEDESTRIAN PATHS

RAILWAY STATIONS & METROS

CAR PARKS

SQUARES & PEDESTRIAN AREAS

Schréder

Concept

TOPIA is a combination of the latest lighting technologies in a functional urban design, resulting in a powerful yet user-friendly lighting solution.

The luminaire is made of recyclable materials, such as aluminium and glass, and is designed to promote the principles of a circular economy through its accessible and replaceable components. This makes it easy to maintain and prolongs the lifecycle of the product. Its pure and typically timeless urban design allows TOPIA to suit any city landscape.

Whether for residential areas, urban streets, public squares, bike paths, bridges, or parking lots, TOPIA can be tailored to meet any specific lighting needs. It relies on advanced photometric technologies to precisely meet the unique demands of lighting projects and comply with local regulations. The LensoFlex®4 and HiFlexTM platforms offer flexible, energy-efficient photometric solutions that can be tailored to meet the requirements of any lighting project while maximising savings and providing a quick return on investment.

As your partner for urban nightlife, TOPIA is an environmentally-friendly luminaire compatible with the preservation of nighttime flora and fauna.

TOPIA features a universal fixation system, which allows for easy post-top and side-entry installation on a variety of spigot sizes (Ø48-Ø60mm). This system enables TOPIA to be easily repositioned without the need to remove it from the pole, offering unparalleled flexibility in pole and bracket configurations. TOPIA can also be mounted on a post-top arm designed for Ø48-Ø60mm spigots. For added convenience during installation and maintenance, the luminaire offers optional tool-free access to the gear compartment.

TOPIA is a connected-ready luminaire that can be equipped with optional NEMA or Zhaga sockets, enabling it to easily integrate with various connected lighting systems.

TOPIA is an energy-efficient lighting solution that provides optimised total cost of ownership in a timeless urban design.

TOPIA provides eco-friendly lighting compatible with the preservation of nighttime flora and fauna.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Cost-effective and efficient lighting solution for a fast return on investment
- HiFlex™ photometric engine designed for optimised energy efficiency
- LensoFlex®4 versatile solutions for high-end photometries maximising comfort and safety
- Connected-ready
- Post-top mounting with a dedicated bracket
- On-site adjustment from post-top to side-entry without disconnecting the luminaire from the pole

This urban luminaire offers a connected-ready lighting solution compatible with a NEMA or a Zhaga socket.

Its universal fixation system allows for easy switching between post-top and side-entry positions, simplifying the ordering and installation process.

TOPIA | Universal slip-over mounting for Ø48-60mm spigots - 2xM8 screws

Ø48-Ø60mm

≥100 mm
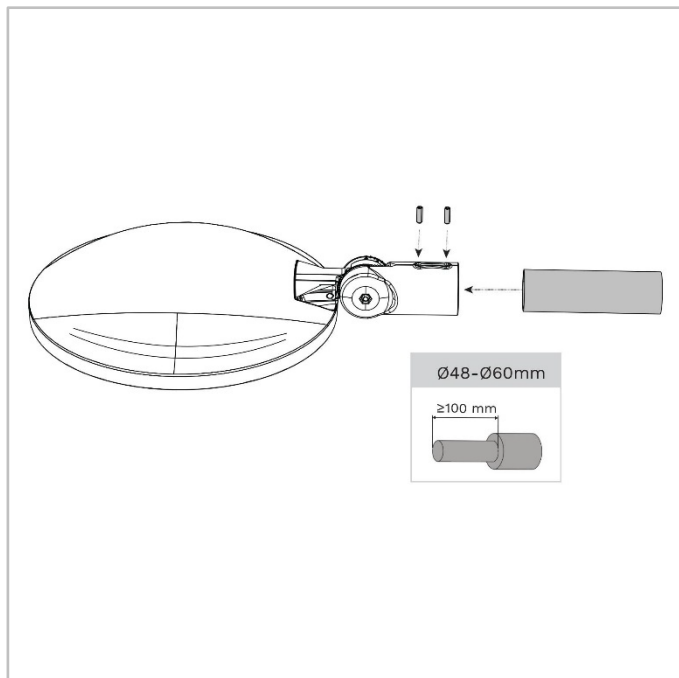
TOPIA | Dedicated bracket for post-top mounting on Ø48-Ø60mm spigots - 2XM8 screws


Ø48-Ø60mm

≥100 mm

Ø48-Ø60mm
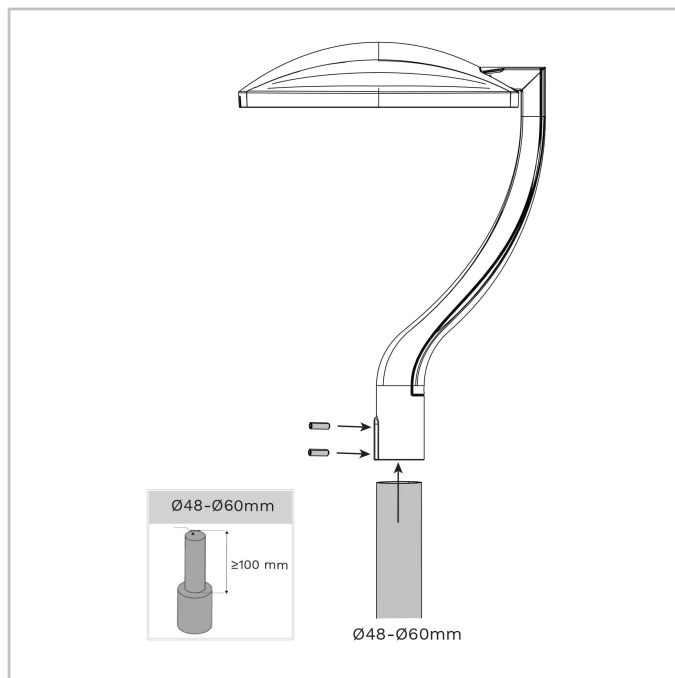
LensoFlex®4

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.
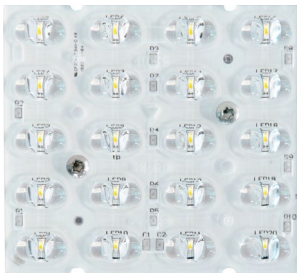
HiFlex™

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.
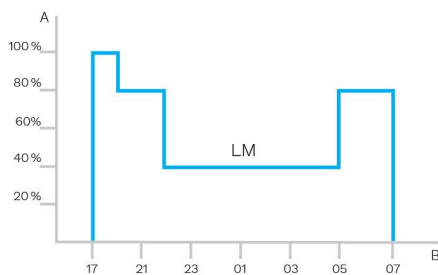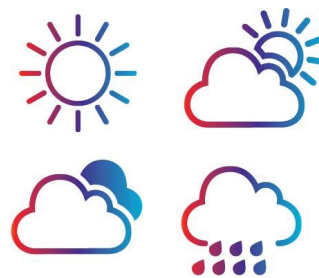
A. Dimming level | B. Time

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.

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
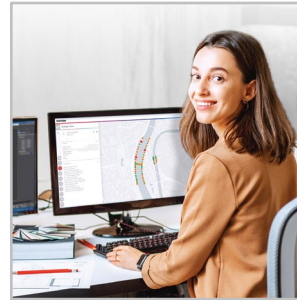
Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable 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
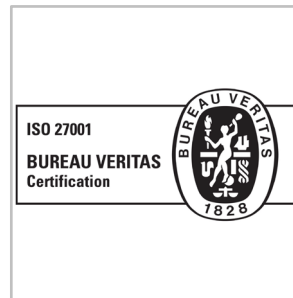
Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

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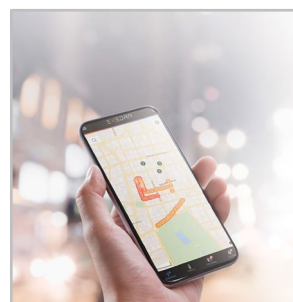
The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

With the PureNight concept, Schréder offers the ultimate solution for restoring the night sky without switching off cities, while maintaining safety and well-being for people and preserving wildlife. The PureNight concept guarantees that your Schréder lighting solution satisfies environmental laws and requirements. Well-designed LED lighting has the potential to improve the environment in all respects.
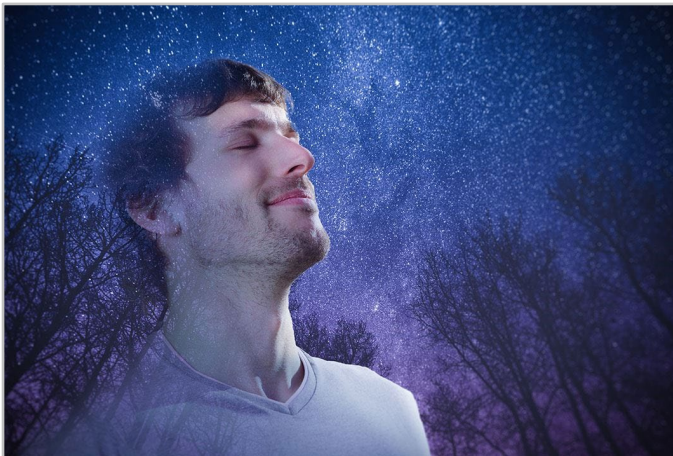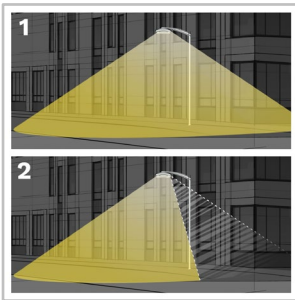

Direct the light only where it is wanted and needed

Schréder is renowned for its expertise in photometry. Our optics direct light only where it is wanted and needed. However, light trespass behind the luminaire might be a key concern when it comes to protecting a sensitive wildlife habitat or avoiding intrusive lighting towards buildings. Our fully integrated backlight solutions easily address this potential risk.

1. Without backlight
2. With backlight

Offer maximum visual comfort to people

Because of the lower installation height compared to road lighting, visual comfort is an essential aspect of urban lighting. Schréder designs lenses and accessories to minimise any type of glare (distracting, discomforting, disabling glare and blinding glare). Our design offices harness a range of possibilities to find the best solutions for each project and ensure that we provide a gentle light that delivers the best night-time experience.

Protect wildlife

If not well designed, artificial lighting can badly affect wildlife. Blue light and excessive intensity can have a damaging effect on all types of life. Blue light radiation has the ability to suppress the production of melatonin, the hormone that contributes to the regulation of the circadian rhythm. It can also alter the behavioural patterns of animals including bats and moths, as it can change their movements towards or away from light sources. Schréder favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna and flora.

Get the starry sky back
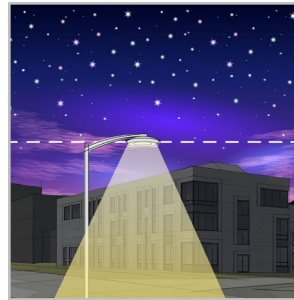
The Upward Light Ratio (ULR) and Upward Light Output Ratio (ULOR), the latter taking the flux from the luminaire into account, provide information on the percentage of light emitted towards the sky. This Schréder range of luminaires minimises or eliminates (depending on the options) upward-directed light flux. It complies with strict international and local requirements.

GENERAL INFORMATION

Recommended installation height	6m to 10m | 20' to 33'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes

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 09
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	By loosening screws on the bottom cover Tool-less access to gear compartment (option)

· 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

· 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
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)	Schréder EXEDRA

OPTICAL INFORMATION

LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727) 3000K (Warm White WW 730) 4000K (Neutral White NW 740)
Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >70 (Warm White WW 730) >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)	450x105x450 | 17.7x4.1x17.7
Weight (kg | lbs)	5.5-6.2 | 12.1-13.6
Aerodynamic resistance (CxS)	0.04
Mounting possibilities	On a dedicated post-top arm for Ø48-Ø60mm spigots
	Side-entry slip-over – Ø48mm
	Side-entry slip-over – Ø60mm
	Post-top slip-over – Ø48mm
	Post-top slip-over – Ø60mm

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

· Dimensions given with Ø60mm spigot (side-entry mounting)

TOPIA MIDI — Photometry — HI FLEX™ 2

| Number of LEDs | 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 | | | | |
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
36	2000	5400	2300	6100	2300	6400	2500	6900	23	52	142
72	4000	9900	4600	11200	4700	11700	5100	12600	43	86	149

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

TOPIA MIDI — Photometry — HI FLEX™ 1&2

| Number of LEDs | 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 | | | | |
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
24	1600	4900	1800	5500	1900	5700	2000	6200	16	52	142
48	3300	8700	3700	9800	3800	10200	4100	11000	29	83	149

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

TOPIA MIDI

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		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
10	600	1900	600	2000	700	2200	700	2300	7	22	134
20	1200	4100	1200	4200	1400	4600	1500	4900	14	46	136
30	1800	5900	1900	6100	2100	6700	2200	7100	20	62	138
40	2500	7100	2500	7300	2800	8000	3000	8500	25	69	146

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

5300

5300 BL

5301

5301 BL

5303

5303 BL

5304

5304 BL

5305

5305 BL

LENSO FLEX™4

5308

LENSO FLEX™4

5308 BL

LENSO FLEX™4

5366

LENSO FLEX™4

5366 BL

LENSO FLEX™4

5369 ZR

LENSO FLEX™4

5369 ZR BL

LENSO FLEX™4

5370 ZL

LENSO FLEX™4

5370 ZL BL

LENSO FLEX™4

5392

5392 BL

5393

5393 BL

5424

5425

5426

5427

5428

5439

HI FLEX™ 2

50004

LENSO FLEX™ 4