Experts in lightability™

# SHUFFLE POST-TOP











#### The perfect addition

Designed to light roads, streets, squares and other places where creating a pleasant atmosphere is a key element, the post-top version of the SHUFFLE is an elegant cylindrical luminaire that blends into any environment.

Based on the 360 LGT module of the SHUFFLE column, it offers the same design, technical characteristics and lighting distributions. SHUFFLE POST-TOP benefits from a wide range of photometries and provides aesthetic consistency in environments lit by both the luminaire and column versions of the SHUFFLE.

The SHUFFLE POST-TOP luminaire is available as a smooth cylinder or with a large canopy. Like the SHUFFLE column, this street lighting solution offers control options for stand-alone, autonomous and interoperable networks (remote management).

































UL 1598 CSA C22.2 No. 250.0

### SHUFFLE POST-TOP | SUMMARY

### Schréder

#### Concept

SHUFFLE POST-TOP is a cost-effective LED lighting solution with a modern design. This street lighting luminaire is composed of a housing in corrosion-free aluminium with a polyester powder coating and a protector in UV resistant polycarbonate. SHUFFLE POST-TOP is designed for mounting on poles with a Ø60mm or Ø76mm (2" or 3") spigot.

Thanks to its flush design, SHUFFLE POST-TOP prevents any accumulation of dirt and sand. It can be equipped with bird spikes to avoid soiling.

Based on the LensoFlex concept developed by Schréder, SHUFFLE POST-TOP proposes a large range of symmetrical or asymmetrical lighting distributions.

A sanded protector and a backlight control system are available as options for enhanced visual comfort.

SHUFFLE POST-TOP is available with various control options, including remote management.



SHUFFLE POST-TOP is Zhaga-D4i certified.



An elegant and refined design to enhance your outdoor spaces

### TYPES OF APPLICATION

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

### KEY ADVANTAGES

- Perfect complement to the SHUFFLE column
- Elegant and robust design with 2 aesthetic versions
- State-of-the-art LED technology for low energy consumption
- LensoFlex photometrical engines providing asymmetrical and symmetrical lighting distributions
- Optional sanded protector for enhanced visual comfort
- Connected-ready for your future Smart city requirements



Compatible with Schréder control solutions thanks to a NEMA or Zhaga socket.



SHUFFLE POST-TOP is available with a large canopy.



LensoFlex®2

LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution.





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

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.





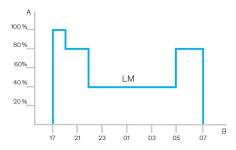
A. Without Back Light control | B. With Back Light control



### 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.











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



#### 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

#### 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.



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 intraluminaire 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.

## SHUFFLE POST-TOP | CHARACTERISTICS

## Schréder

GENERAL INFORMATION							
Recommended installation height	3m to 6m   10' to 20'						
Driver included	Yes						
CE mark	Yes						
ENEC certified	Yes						
UL certified	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						
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)						
HOUSING AND FINISH							
Housing	Aluminium						
Optic	PMMA						
Protector	Polycarbonate PMMA						
Housing finish	Polyester powder coating						
Standard colour(s)	AKZO grey 900 sanded						
Tightness level	IP 66						
Impact resistance	IK 06, IK 10						

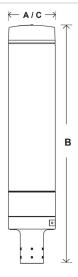
ELECTRICAL INFORMATION						
Electrical class	Class I EU, Class II EU, Class 1 US					
Nominal voltage	120-277V – 50-60Hz 220-240V – 50-60Hz					
Surge protection options (kV)	10 20					
Control protocol(s)	1-10V, DALI					
Control options	Bi-power, Custom dimming profile, Remote management					
Socket	Zhaga (optional) NEMA 7-pin (optional)					
Associated control system(s)	Owlet Nightshift Schréder EXEDRA					
OPTICAL INFORMATION	I					
LED colour temperature	2700K (WW 727) 3000K (WW 730) 3000K (WW 830) 4000K (NW 740)					
Colour rendering index (CRI)	>70 (WW 727) >70 (WW 730) >80 (WW 830) >70 (NW 740)					
ULOR	0%					
ULR	0%					
· ULOR may be different o	according to the configuration. Please consult us.					

### LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95	

<sup>·</sup> ULR may be different according to the configuration. Please consult us.

DIMENSIONS AND MOUNTING	
AxBxC (mm   inch)	194x982x194   7.6x38.7x7.6
Weight (kg   lbs)	8   17.6
Aerodynamic resistance (CxS)	0.21
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm



1														
Ÿ			Luminair flux Warm W	(lm)		re output (lm) /hite 730	Luminair flux Warm W			e output (lm) Vhite 740	Pov consump	wer otion (W)	Luminaire efficacy (lm/W)	•
Luminaire	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	Photometry
	16	350	1500	2200	1600	2400	1600	2300	1600	2400	18.1	18.1	133	LENSO FLEX" 2
	16	500	2000	3000	2200	3300	2200	3200	2200	3300	25.8	25.8	128	LENSO FLEX" 2
Δ.	16	700	2700	4000	3000	4400	2900	4300	3000	4400	36.5	36.5	121	LENSO FLEX" 2
	20	350	-	-	2100	3100	1900	2900	2200	3200	22.5	22.5	142	LENSO FLEX"4
SHUFFLE POST-TOP	20	500	-	-	2800	4200	2700	3900	3000	4400	32.2	32.2	137	LENSO FLEX"4
HUFFLE	20	700	-	-	3700	5500	3500	5100	3900	5800	45.5	45.5	127	LENSO FLEX"4
Ś	24	350	2200	3300	2500	3700	2400	3500	2500	3700	26.6	26.6	139	LENSO FLEX" 2
	24	500	3100	4600	3400	5000	3300	4900	3400	5000	38.1	38.1	131	LENSO FLEX" 2
	24	700	4100	6100	4500	6700	4300	6400	4500	6700	53.5	53.5	125	LENSO FLEX" 2
	24	900	5000	7400	5400	8100	5300	7800	5400	8100	69	69	117	LENSO FLEX" 2

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

