

# VALENTINO LED



## Preserve your heritage with state-of-the-art efficiency

Under its classical and timeless exterior, the VALENTINO LED luminaire incorporates cutting-edge LED technology. It combines the energy efficiency of LEDs with the photometric performance of the LensoFlex® concept developed by Schröder.

The VALENTINO LED luminaire is available in numerous configurations to light urban roads, streets, squares, parks and car parks. It is a stylish tool for efficient lighting and a source of well-being and safety in the public space.



## Concept

With an aluminium body, VALENTINO LED benefits from high-quality recyclable materials. The robust materials used for this traditional lantern, the high IP 66 tightness level of the optical compartment and an LED photometric engine built to last, ensure a long life-cycle and very low maintenance.

VALENTINO LED is available in four versions: with a flat glass protector or with a polycarbonate protector (clear, structured or opal).

Equipped with the performing LensoFlex® LED engine, the VALENTINO LED luminaire offers high performance with energy savings that can exceed 75% compared to luminaires fitted with traditional light sources. This efficiency lowers its payback time and contributes to a responsible use of natural resources.

VALENTINO LED is designed for post-top mounting on a Ø60mm or ¾" gas spigot. A suspended version with a ¾" gas fixation is also available.



Easy access to the gear compartment for maintenance.



VALENTINO LED can be delivered with a pre-fitted electrical supply cable.

## TYPES OF APPLICATION

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

## KEY ADVANTAGES

- Heritage design for maintaining ambiance and identity
- Low energy consumption
- LensoFlex®2 photometric engine with photometry adapted to various applications
- No light pollution: ULOR 0% in flat glass version
- Energy savings of up to 75% compared with traditional light sources
- Connected-ready for your future Smart city requirements



ULOR 0% for flat glass version.



VALENTINO LED is available for post-top or suspended mounting.



## LensoFlex®2

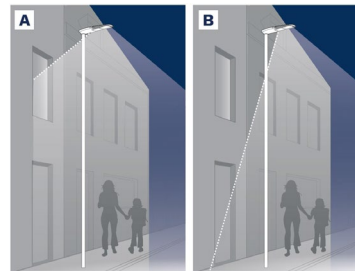
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light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



## 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.



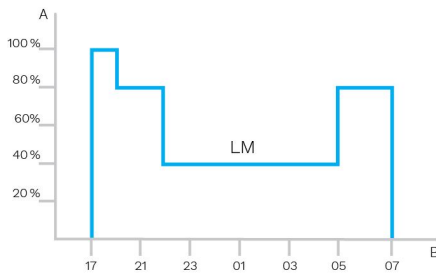
A. Without Back Light control | B. With Back Light control



## 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.

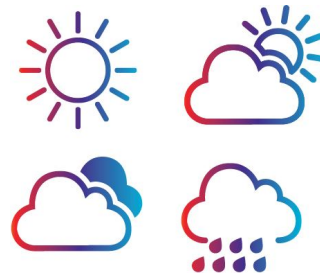


A. Dimming level | B. Time



## 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 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

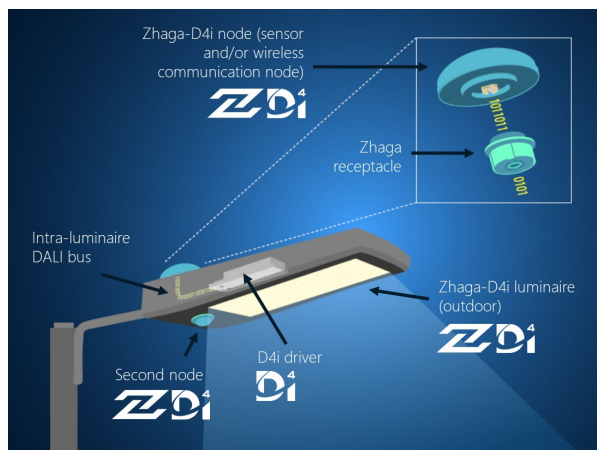
A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

## 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	3m to 5m   10' to 16'
FutureProof	Easy replacement of the photometric engine and electronic assembly
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
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

## HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 08
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	Direct access to the gear compartment by loosening screws on the top cover

· The gear compartment is IP 55.

## OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +50°C / -22°F up to 122°F
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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
Power factor (at full load)	0.9
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 822) 2700K (WW 727) 3000K (WW 730) 3000K (WW 830) 4000K (NW 740)
Colour rendering index (CRI)	>80 (WW 822) >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.

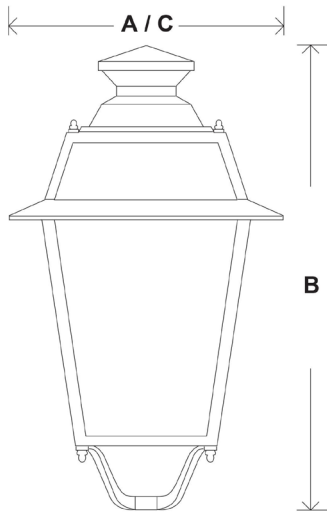
· ULR may be different according to the configuration. Please consult us.

## LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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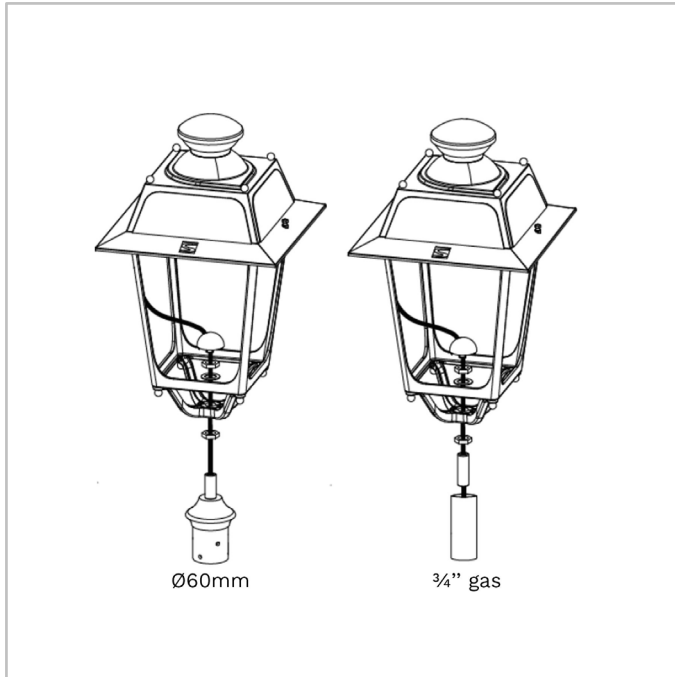
## DIMENSIONS AND MOUNTING

AxBxC (mm   inch)	448x760x448   17.6x29.9x17.6
Weight (kg   lbs)	7   15.4
Aerodynamic resistance (CxS)	0.13
Mounting possibilities	Side-entry slip-over – Ø60mm Post-top ¾" gas male Suspended ¾" gas male Suspended ¾" gas female





VALENTINO LED | Post-top mounting on a  
Ø60mm or ¾" gas spigot



VALENTINO LED | Suspended mounting with  
a ¾" gas fixation





Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 822		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
VALENTINO LED	16	200	700	1100	800	1300	600	900	700	1100	900	1300	10.9	119	
	16	300	1100	1600	1200	1800	900	1300	1100	1600	1300	1900	15.6	122	
	16	400	1400	2100	1600	2400	1100	1700	1400	2100	1600	2400	20.6	117	
	16	500	1700	2600	1900	2900	1400	2000	1700	2600	2000	3000	25.8	116	
	16	600	2000	3000	2200	3300	1600	2300	2000	3000	2300	3400	31	110	
	16	700	2300	3400	2500	3700	1800	2600	2300	3400	2600	3900	35.9	109	
	16	800	2500	3700	2800	4100	2000	2900	2500	3700	2900	4200	41.5	101	
	24	200	1100	1700	1300	1900	900	1300	1100	1700	1300	2000	15.8	127	
	24	300	1700	2500	1900	2800	1300	2000	1700	2500	1900	2900	23	126	
	24	400	2200	3200	2400	3600	1700	2500	2200	3200	2500	3700	30.4	122	
	24	500	2600	3900	2900	4300	2100	3100	2600	3900	3000	4500	38.1	118	
	24	590	3000	4400	3300	4900	2400	3500	3000	4400	3500	5100	44.5	115	
	24	600	3000	4500	3400	5000	2400	3500	3000	4500	3500	5200	45	116	
	24	700	3400	5100	3800	5600	2700	4000	3400	5100	4000	5800	53	109	
	24	800	3800	5600	4200	6200	3000	4400	3800	5600	4300	6400	60.5	106	
	32	200	1500	2300	1700	2600	1200	1800	1500	2300	1800	2600	20.5	127	

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



Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 822		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
VALENTINO LED	32	300	2200	3300	2500	3700	1800	2600	2200	3300	2600	3800	29.8	128	
	32	400	2900	4300	3200	4800	2300	3400	2900	4300	3300	4900	39.5	124	
	32	450	3200	4700	3600	5300	2500	3700	3200	4700	3700	5500	44.5	124	
	32	500	3500	5200	3900	5800	2800	4100	3500	5200	4000	6000	49	122	
	32	600	4100	6000	4500	6700	3200	4700	4100	6000	4700	6900	59.5	116	
	32	700	4600	6800	5100	7500	3600	5300	4600	6800	5300	7800	69.5	112	
	32	800	5000	7400	5600	8300	4000	5900	5000	7400	5800	8500	79	108	
	48	200	2300	3500	2600	3900	1800	2700	2300	3500	2700	4000	30.1	133	
	48	300	3400	5000	3800	5600	2700	4000	3400	5000	3900	5800	44	132	
	48	400	4400	6500	4900	7200	3500	5100	4400	6500	5000	7400	58.5	126	
	48	500	5300	7800	5900	8700	4200	6200	5300	7800	6100	9000	74	122	
	48	550	5700	8400	6400	9400	4500	6700	5700	8400	6600	9700	80	121	
	48	600	6100	9000	6800	10000	4800	7100	6100	9000	7100	10400	89	117	
	48	700	6900	10100	7700	11300	5400	8000	6900	10100	7900	11700	104	112	
	48	800	7600	11100	8400	12400	6000	8800	7600	11100	8700	12800	118	108	

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

