

KORNER ^{Base}

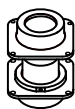
Data sheet



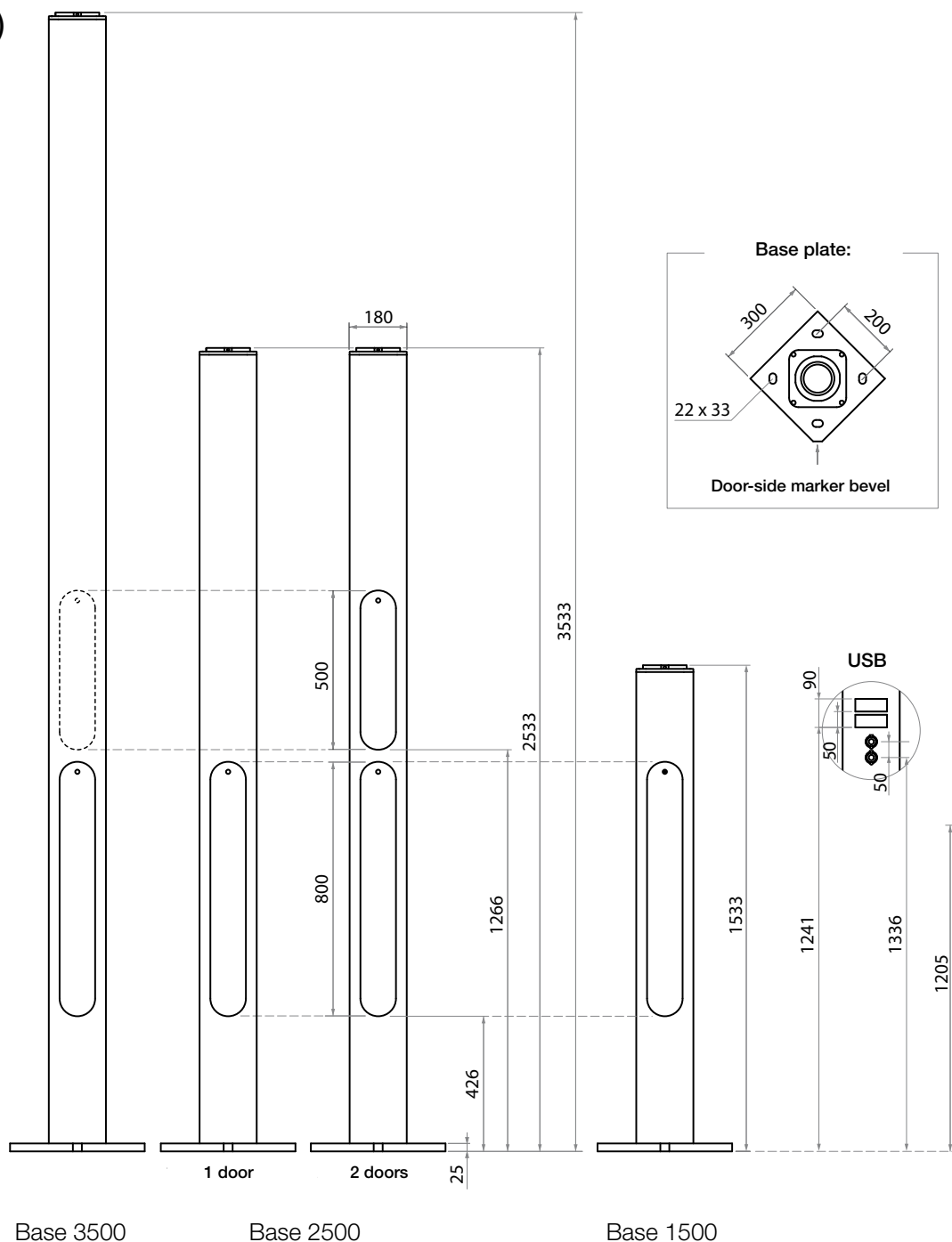
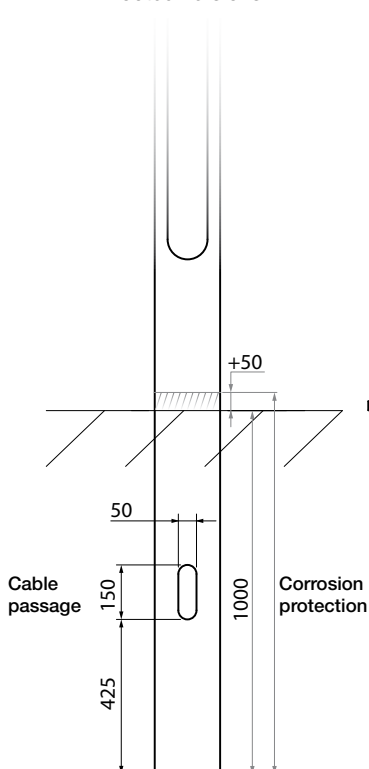
Korner base is available in 3 different heights: 1500, 2500 and 3500 mm and is made of aluminium. It has a square cross-section with rounded corners and can be fixed by means of a flat flange plate or in rooted version. Equipped with USB charging station and soft mobility socket options, the foot is equipped with one or two doors depending on the chosen configuration, and is powder-coated with the colour of your choice.

Dimensions (mm)

Splint



Rooted versions



28/02/2022 - All informations are subject to change without notice.



Concrete base

Location	Base size		Moments and loads at ground levels		
	Sides (m)	Depth (m)	Shear force (daN)	Axial force (daN)	Bending moment (daN.m)
Mainland France	0.4 x 0.4	0.8	216	111	686
DOM / TOM	0.4 x 0.4	1.0	356	111	1132

Calculations carried out on a maximum height of the Korner bollard of 6 m. For any higher height, please consult us.

Mechanical characteristics

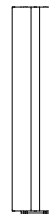
- Weight: 1500: 20 kg - 2500: 30 kg - 3500: 40 kg
- Shock resistance: IK10
- Material: Aluminium.

Options

- 2 x 2 backlit USB ports: Input 24 V DC - Output 5 V 2.1 A max DC.
+ 2 niches for the smartphone
- Soft mobility socket: 250 V - 16 A - 2P + T
Cover with locking ring. When the cover is open, plugged or unplugged, the socket is IP55.
When the cover is closed and the ring locked, the socket is IP66/67.
- Anchor bolts x4: 16/14 x 300
- Reinforced base (for high wind zones)

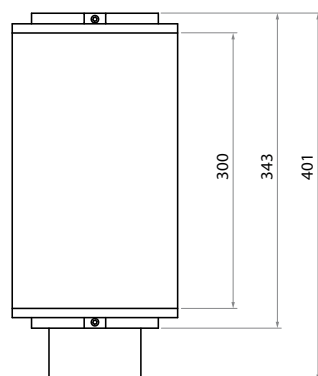
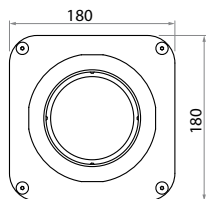
KORNER^{Spacer}

Data sheet

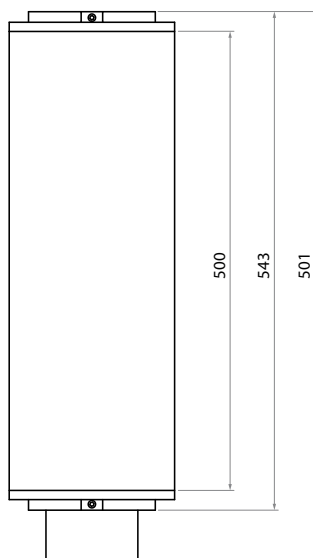


The aluminium spacer is available in 3 sizes: 300, 500 and 1000 mm. It is placed between two modules allowing their spacing and avoiding any technical constraint, or simply for aesthetic purposes.

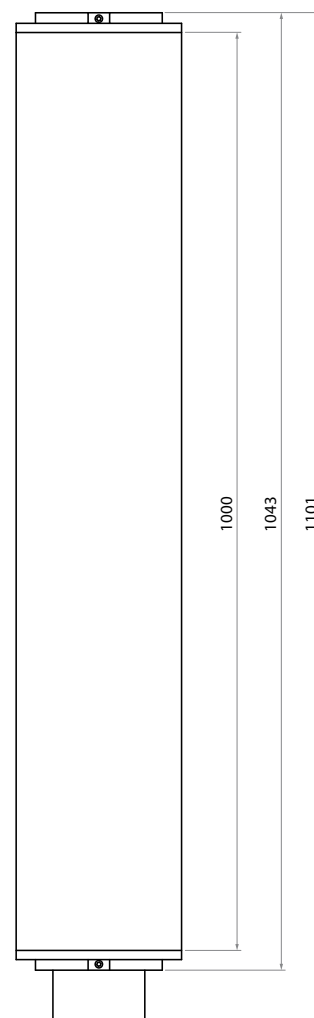
Dimensions (mm)



Spacer 300



Spacer 500



Spacer 1000

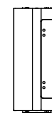
Mechanical characteristics

- Weight: 300: 7 kg - 500: 10 kg - 1000: 14 kg
- Aerodynamic coefficient (CxS): 300: 0.06 m² - 500: 0.1 m² - 1000: 0.2 m²
- Shock resistance: IK10
- Material: Aluminium.

KORNER

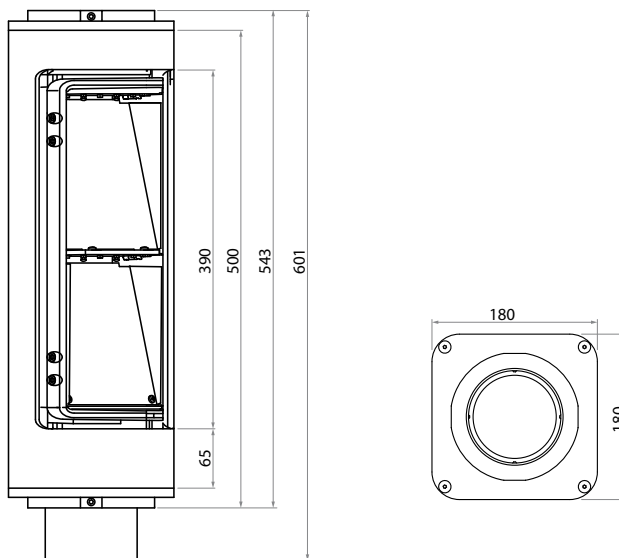
2-sided lighting module

Data sheet



The 2-sided lighting module has been designed for road or pathway lighting. It is equipped with 16 LEDs available in a choice of 4 colour temperatures and 3 asymmetric light distributions. The superposition of several modules allows a great modularity of the lighting distribution.

Dimensions (mm)



Mechanical characteristics

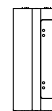
- Weight: 10.5 kg
- Aerodynamic coefficient (CxS): 0.1 m²
- Protection index: Bloc optique / Optical unit IP66
- Shock resistance: IK10
- Materials: Body made of aluminium - Protection made of transparent PC treated with UV protection.

Electrical characteristics

- Power current up to 700 mA.
- Voltage range: From 220 V to 240 V.
- Electrical class: II
- Varistor (protection against surges - offset in the base of the bollard).
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).
- Standard electrical shock resistance: 6/10 kV (diff/comm).

LEDs characteristics

- Type: CMS.
- Luminous flux maintenance: L90 B10 100 000 hrs.
- 3000K/4000K/2700K: CRI >70 - 2200K: CRI >80.



Data sheet

Powers and luminous intensities

2200K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
16	3920	144	19	1642	87	26	2252	87	36	3058	85	E

2700K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
16	4550	165	19	1906	101	26	2614	101	36	3549	99	D

3000K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
16	4720	174	19	2005	106	26	2746	106	36	3682	103	D

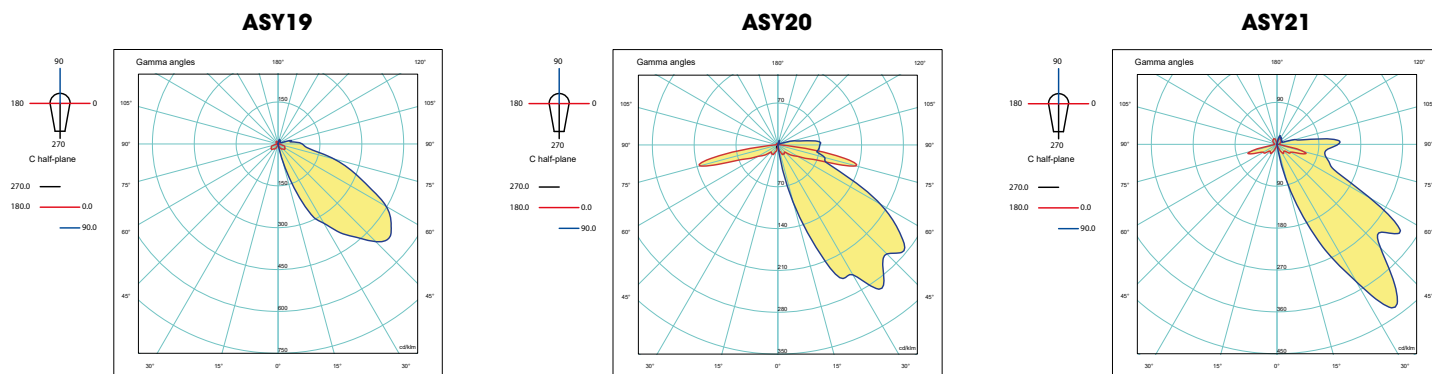
4000K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
16	4980	185	19	2114	112	26	2902	112	36	3884	108	D

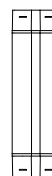
(1) Maximum LED flux at operating temperature including driver consumption.

(2) Actual luminaire output data at operating temperature including driver consumption, optical accessories. A tolerance on the data is allowed in accordance with IEC 62717 and IEC 62722.

Photometric distributions

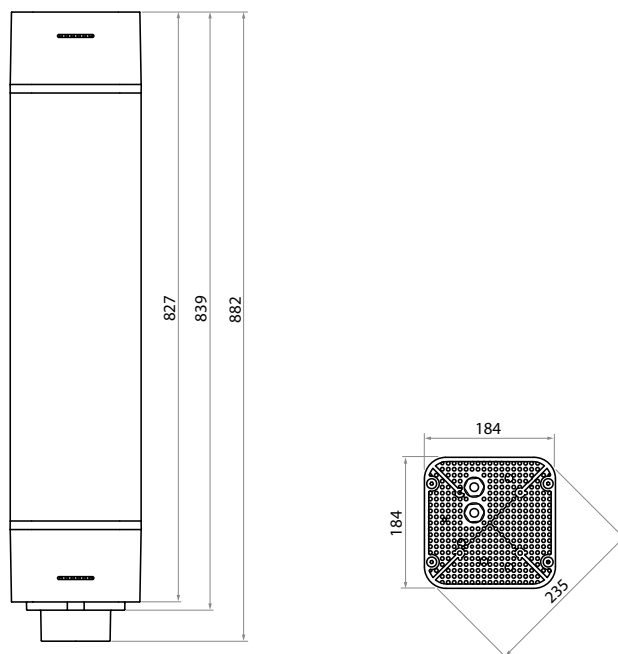
ASYMMETRICAL ROAD LIGHTING





The 4-sided lighting module allows circular, asymmetrical or pedestrian crossing lighting. It can be equipped with 16 with 24 LEDs, combined with 4 colour temperatures and 10 lighting distributions. Between a base and a aluminium head, the 4-sided transparent central part gives the LED module a floating appearance.

Dimensions (mm)



Mechanical characteristics

- Weight: 11 kg
- Aerodynamic coefficient (CxS): 0.16 m²
- Protection index: Optical unit IP66
- Shock resistance: IK09
- Materials: Body made of aluminium - Protection made of transparent PC treated with UV protection.

Configuration constraints

- A module (of your choice) is required between a decorative module and a 4-sided lighting module.
- Above a 4-sided module, only one of these modules can be added: loudspeaker, communication, detection, light marker, camera, wifi or 300 spacer.

Electrical characteristics

- Power current up to 700 mA.
- Voltage range: From 220 V to 240 V.
- Electrical class: II
- Varistor (protection against surges - offset in the base of the bollard).
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).
- Standard electrical shock resistance: 6/10 kV (diff/comm).

LEDs characteristics

- Type: CMS.
- Luminous flux maintenance: L90 B10 100 000 hrs.
- 3000K/4000K/2700K: CRI >70 - 2200K: CRI >80.
- ULR <1% (ULR: Upward Light Ratio).
- In accordance with the order dated 27/12/2018 concerning the prevention, reduction and limitation of light pollution (product configuration to be defined based on the nature of the project).



Data sheet

Powers and luminous intensities

2200K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
8	1960	120	10	926	93	14	1270	91	19	1725	91	E
16	3920	126	19	1852	98	26	2541	98	36	3450	96	E
24	5880	133	27	2778	103	38	3810	101	52	5174	100	E

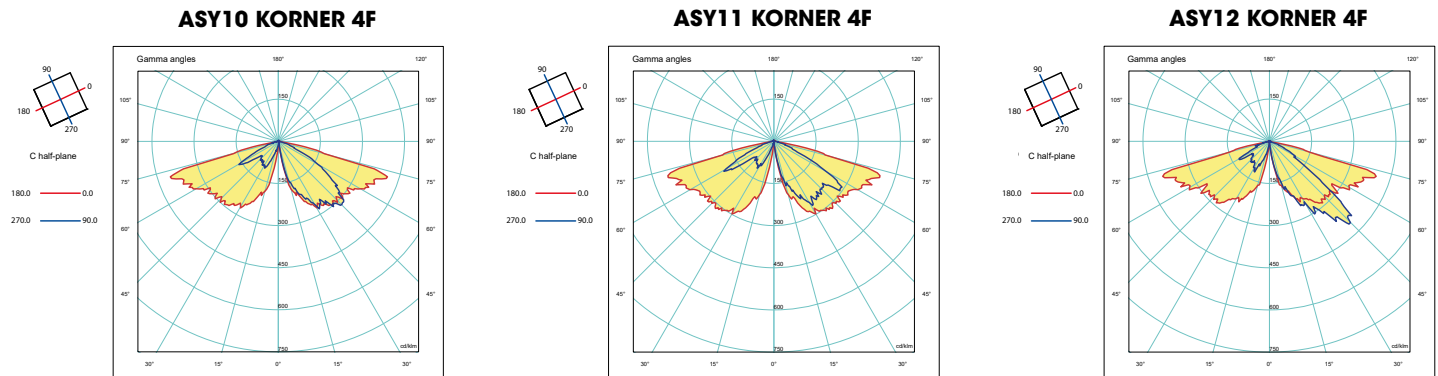
2700K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
8	2275	140	10	1074	108	14	1474	106	19	2002	106	D
16	4550	148	19	2150	114	26	2949	114	36	4004	112	D
24	6825	155	27	3224	120	38	4423	117	52	6006	116	D

3000K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
8	2360	148	10	1131	114	14	1549	111	19	2077	110	D
16	4720	155	19	2262	120	26	3098	120	36	4154	116	D
24	7080	163	27	3392	126	38	4646	123	52	6230	120	D

4000K Number of LED	Nominal flux ⁽¹⁾ (lm)	Nominal eff. ⁽¹⁾ (lm/W)	350 mA			500 mA			700 mA			Energy efficiency class
			P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	P _t (W) ⁽²⁾	Φ (lm) ⁽²⁾	(lm/W) ⁽²⁾	
8	2490	155	10	1192	120	14	1637	117	19	2191	116	D
16	4980	163	19	2385	126	26	3274	126	36	4382	122	D
24	7470	172	27	3577	133	38	4910	130	52	6574	127	D

(1) Maximum LED flux at operating temperature including driver consumption.
(2) Actual luminaire output data at operating temperature including driver consumption, optical accessories. A tolerance on the data is allowed in accordance with IEC 62717 and IEC 62722.

Photometric distributions
ASYMMETRICAL ROAD LIGHTING

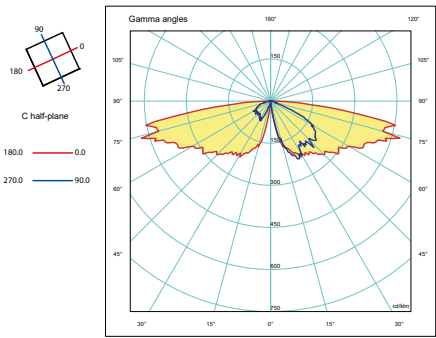




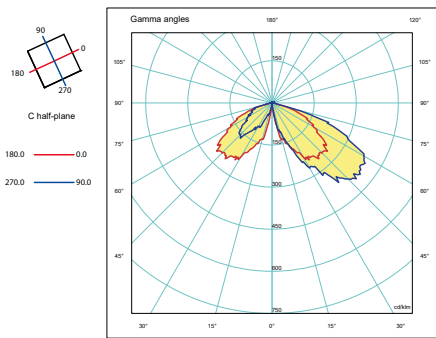
Photometric distributions

ASYMMETRICAL ROAD LIGHTING

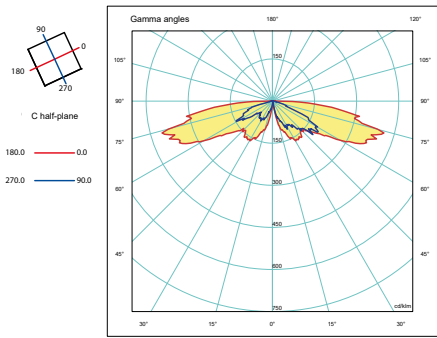
ASY13 KORNER 4F



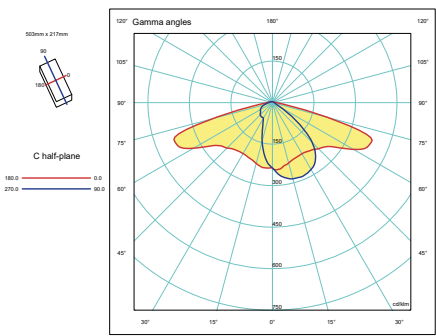
ASY14 KORNER 4F



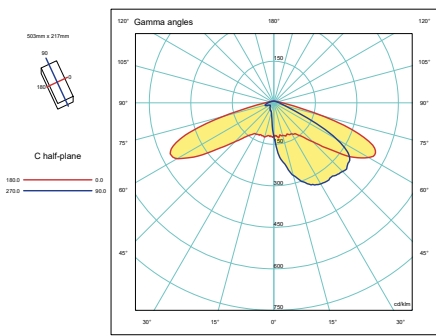
ASY17 KORNER 4F



ASY26

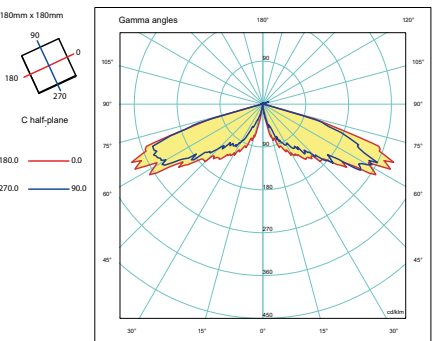


ASY27



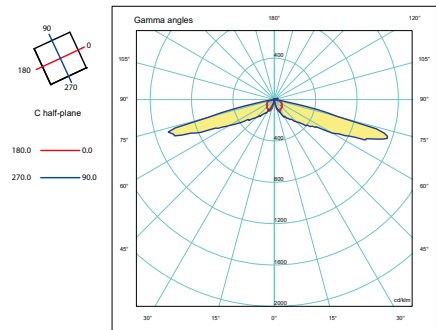
CIRCULAR

CIR06 KORNER 4F



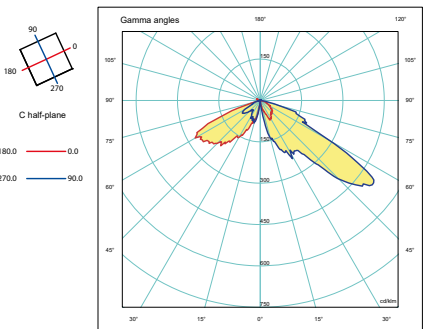
SYMMETRICAL

SYM02 KORNER 4F

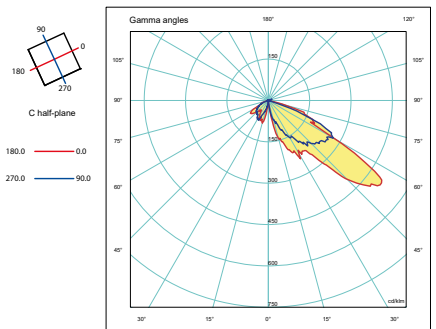


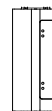
PEDESTRIAN CROSSING

PC02 45G KORNER 4F



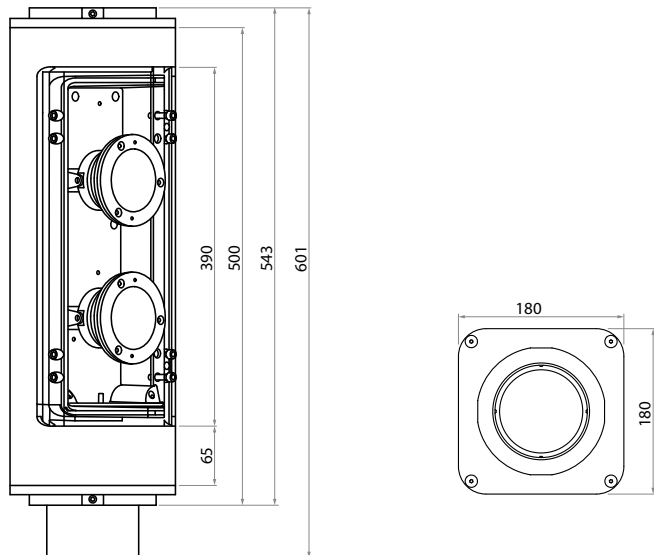
PC02 45D KORNER 4F





Real enhancement tool with fixed color lighting or RGBW with DMX dynamic control and dual orientation on 2 axes, these spotlights are intended for architectural lighting or festive with active lighting scenarios. IP66 double module (spotlights + block) made of transparent PC treated with UV protection.

Dimensions (mm)



Floodlight orientation

	Front view	Side view
Mechanical limits	360°	+90° / -90°
Limits inside the module	+90° / -90° 0° 180°	40° 30° 40°

Mechanical characteristics

- Weight: 15 kg
- Aerodynamic coefficient (CxS): 0.1 m²
- Protection index: Bloc optique / Optical unit IP66
- Shock resistance: IK10
- Body made of aluminium - Protection made of transparent PC treated with UV protection.

Electrical characteristics

- Power current: 700 mA
- Voltage: 24 V
- Electrical class: III
- Varistor (protection against surges - offset in the base of the bollard).
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).

LEDs characteristics

- from 7 to 9 LED per spotlight, fixed color or RGBW.
- Assigned LED's life cycle: 60 000 hours B10.
- Luminous flux lifetime, ex: L90 60 000 hrs, 90% of the luminous flux at 60 000 hrs @ 350mA.
- Lighting beams: 10°, 25°, 40°, 115°

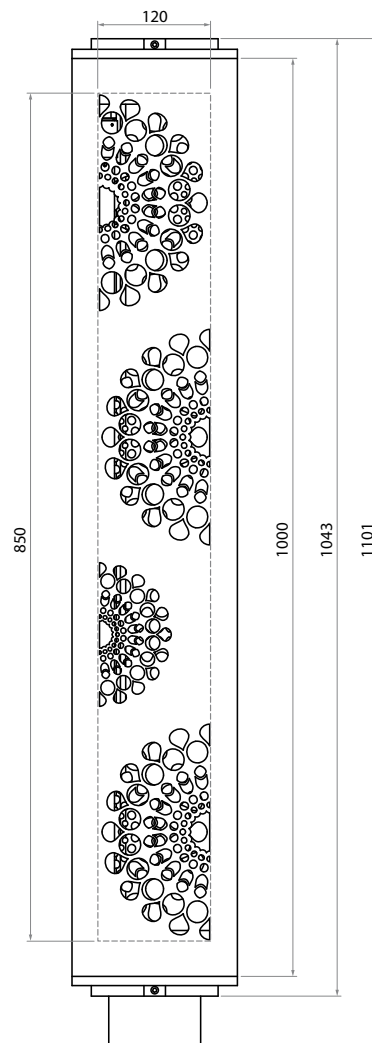
Option

- DMX control (unlimited color variations).



The decorative module has been designed to create a dynamic and personalised lighting atmosphere. 3 cutting patterns are available as standard: Rosace, Stones, Nature or a customised pattern subject to a feasibility study in order to maintain optimal mechanical resistance and obtain a customised rendering thanks to the synchronisation of the fixed colour or RGBW backlighting with all the lighting elements.

Dimensions (mm)

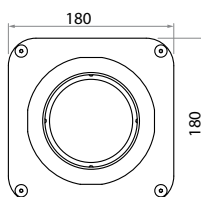


Mechanical characteristics

- Weight: 12 kg
- Aerodynamic coefficient (CxS): 0.2 m²
- Protection index: Floodlight IP66
- Shock resistance: IK10
- Material: Aluminium.

Electrical characteristics

- Power current: 700 mA
- Voltage: 24 V
- Electrical class: III
- Varistor (protection against surges - offset in the base of the bollard).
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).



Backlighting

- Backlighting: Green - Red - Blue - RGBW - Amber - 4000 K - 3000 K

Option

- DMX control.
- Customized cutting.

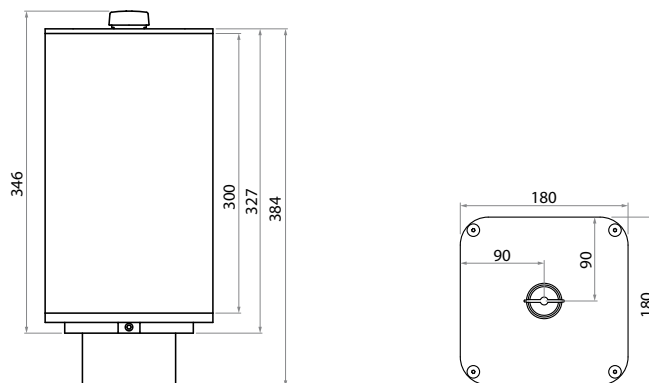
Configuration constraints

- Customization surface: 850 x 120 mm.
- Standard cutting on 4 sides or optionally: on 1, 2 (at 90° or 180°) or 3 sides.
- Two decorative modules can be stacked as long as they are not backlit.



The communication module is installed on top of the Korner. It is equipped with either a Zhaga Socket connector (Zhaga book 18) or a Nema Socket and allows the integration of an intelligent communication and management system.

Dimensions (mm)



Mechanical characteristics

- Weight: 6 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Shock resistance: IK10
- Material: Aluminium.

Socket types

- SR (Zhaga) Socket 4 pins + sealing cap
- Nema Socket 5 pins + sealing cap
- Nema Socket 7 pins + sealing cap

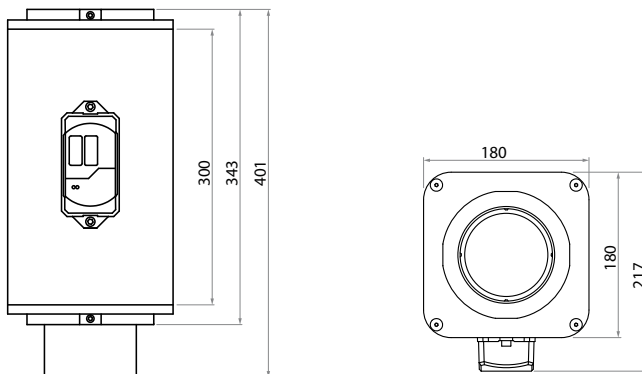
Configuration constraints

- Always in last position.



The Wi-Fi module allows wireless internet access and adds an additional access solution to the existing network.

Dimensions (mm)



Mechanical characteristics

- Weight: 8 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Protection index: WIFI device IP66
- Material: Aluminium.

Electrical and electronical characteristics

- Client with two internal antennas (MIMO).
- IEEE 802.11 a/b/g/n 2.4 GHz and 5 GHz up to 300 MBit/s
- RJ45: LAN, Web, http/https.
- Transmission speed: 10/100 MBit/s
- Functions: Access point - client adapter - repeater.
- TVoltage: 24 VDC (SELV)
- Electrical class: I
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).

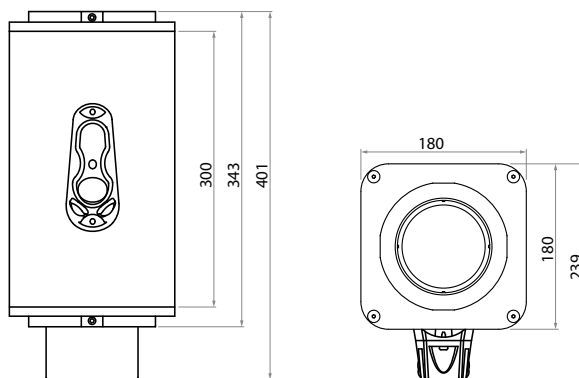
Configuration constraints

- Positioning at least 2 m 50.



The detection module is equipped with 1 or 2 devices based on motion sensors for pedestrians and cyclists. Covering a 180° ground area with a modular radius of 10 m around the sensor, it's a lighting management tool allowing programmed dimming scenarios and the sending of detection information by radio to light points equipped with sensors, NOD receivers or VIA relays.

Dimensions (mm)



Mechanical characteristics

- Weight: 8 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Protection index: Sensor IP54
- Shock resistance: Sensor IK08
- Material: Aluminium.

Sensor characteristics

- Driver control according to DALI protocol.
- Voltage range: 220-240 VAC / 50-60 Hz
- Electrical class: II
- Varistor (protection against surges - offset in the base of the bollard).
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).
- Sensor datasheet: https://www.lacroix-city.com/wp-content/uploads/sites/7//2019/10/LACROIXCity_SensyCity_SIR-Wireless_EN.pdf

Option

- Number of detector: 1 or 2 (180° positioning).

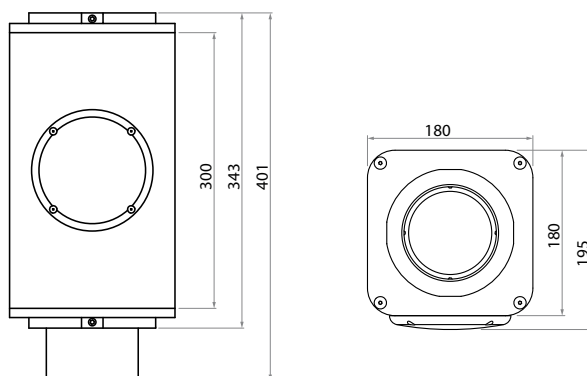
Configuration constraints

- Must be positioned between 3 m and 4 m 50.



Thanks to its module that can accommodate 1 to 4 loudspeakers, the Korner terminal offers a sound diffusion from 45° to 360° depending on the selected option. This function allows direct and efficient communication of an informative nature between users and the city, or the creation of a musical atmosphere.

Dimensions (mm)



Mechanical characteristics

- Weight: 8 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Protection index: loudspeaker IP65
- Material: Aluminium.

Loudspeaker characteristics

- Maximum power: 50 W
- Nominal impedance: 4 Ohm
- Frequency response : 90 - 19000 Hz
- Main sound pressure level: 90 dB (1 W / 1 m)

Option

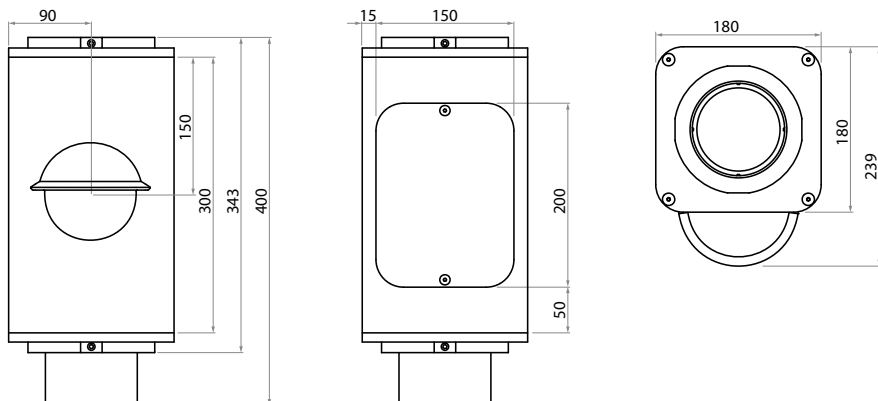
- Number of loudspeaker: 1, 2 (90° or 180° positioning), 3 or 4.

Configuration constraints

- Limit number of loudspeaker up to 4 per bollard.
- If 1 horizontal and vertical vision camera, 2 loudspeakers maximum per bollard.
- If 2 horizontal and vertical vision cameras, no loudspeaker is possible.



Dimensions (mm)



Mechanical characteristics

- Weight: 9 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Protection index: IP66 Camera
- Shock resistance: IK10
- Material: Aluminium.

Camera characteristics

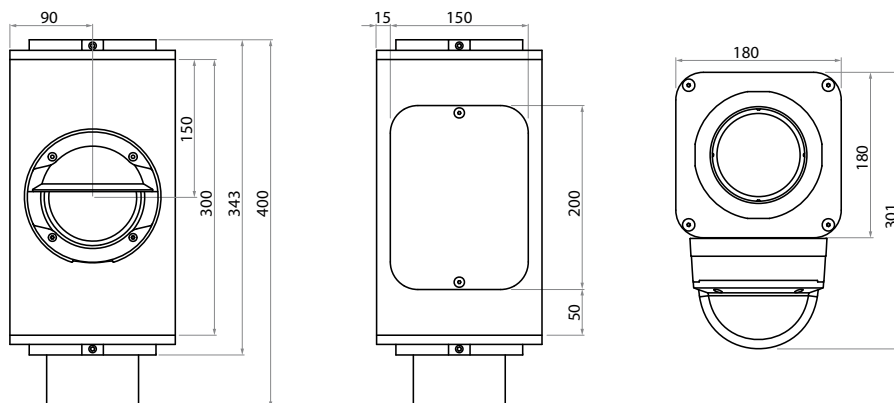
- HDTV 1080p
- Zoom and remote focus.
- Horizontal field of view: 92° - 34°, vertical: 50° - 20°
- High light sensitivity.
- Manages scenes with high light variation (WDR-Forensic Capture).
- Lightweight storage with video compression.

Configuration constraints

- Minimum positioning at 2 m 50.
- Limit of 2 horizontal and vertical vision cameras per bollard.
- If 1 horizontal and vertical vision camera, 2 loudspeakers maximum per bollard.
- If 2 horizontal and vertical vision cameras, no loudspeaker is possible.



Dimensions (mm)



Mechanical characteristics

- Weight: 9 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- IPProtection index: IP66 Camera
- Shock resistance: IK10
- Material: Module Aluminium.

Camera characteristics

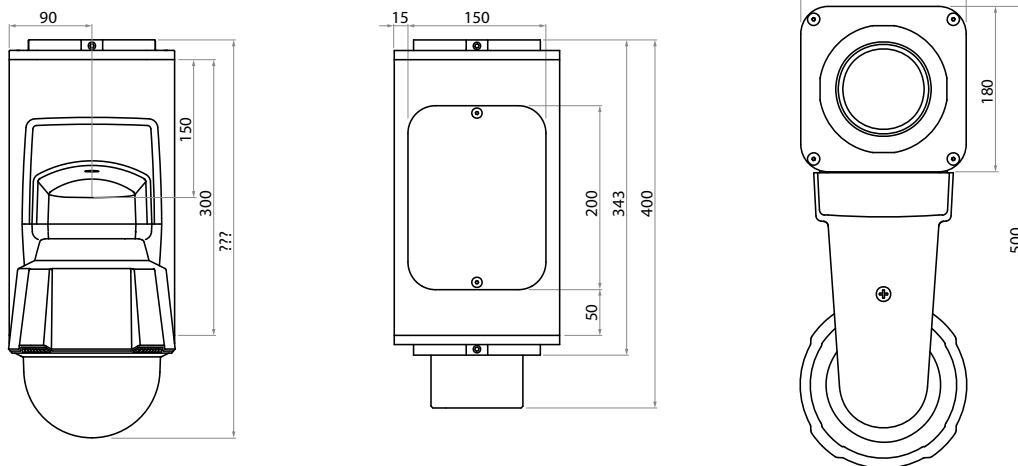
- HDTV 1080p
- Zoom and remote focus.
- Horizontal field of view: 92° - 34°, vertical: 50° - 20°
- High light sensitivity.
- Manages scenes with high light variation (WDR-Forensic Capture).
- Lightweight storage with video compression.

Configuration constraints

- Minimum positioning at 2 m 50.
- Limit of 2 horizontal and vertical vision cameras per bollard.
- If 1 horizontal and vertical vision camera, 2 loudspeakers maximum per bollard.
- If 2 horizontal and vertical vision cameras, no loudspeaker is possible.



Dimensions (mm)



Mechanical characteristics

- Weight: 11.4 kg
- Aerodynamic coefficient (CxS): 0.11 m²
- Protection index: IP66 Camera
- Shock resistance: IK10
- Material: Module Aluminium.

Camera characteristics

- HDTV 720p
- Zoom and remote focus
- Coverage angle: 360° continuous pan.
- Light sensitivity: Excellent (all types of lighting)
- Video analysis: Video motion detection - Predefined object detection
- Lightweight storage with video compression.

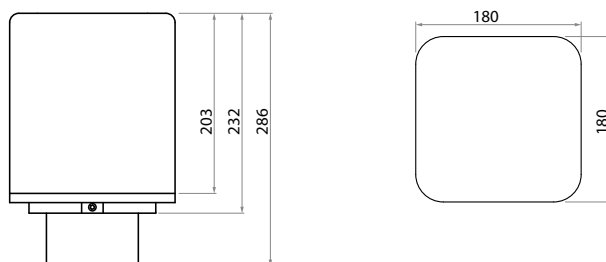
Configuration constraints

- Minimum positioning at 2 m 50.
- Base 1500 not available.
- Mandatory double door for 2500 or 3500 base.
- USB option not available.



The light marking module provides a visual landmark point at night. It offers the possibility of synchronized control with the other modules and numerous colour variations thanks to the RGBW with DMX control or fixed colour LEDs.

Dimensions (mm)



Mechanical characteristics

- Weight: 3 kg
- Aerodynamic coefficient (CxS): 0.06 m²
- Protection index: IP66 floodlight
- Shock resistance: IK10
- Materials: Body made of aluminium and opal polyethylene diffuser.

Electrical characteristics

- Voltage: 24 V
- Electrical class: III
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).

Backlighting

- Backlighting: Green - Red - Blue - RGBW - Amber - 4000 K

Option

- DMX control.

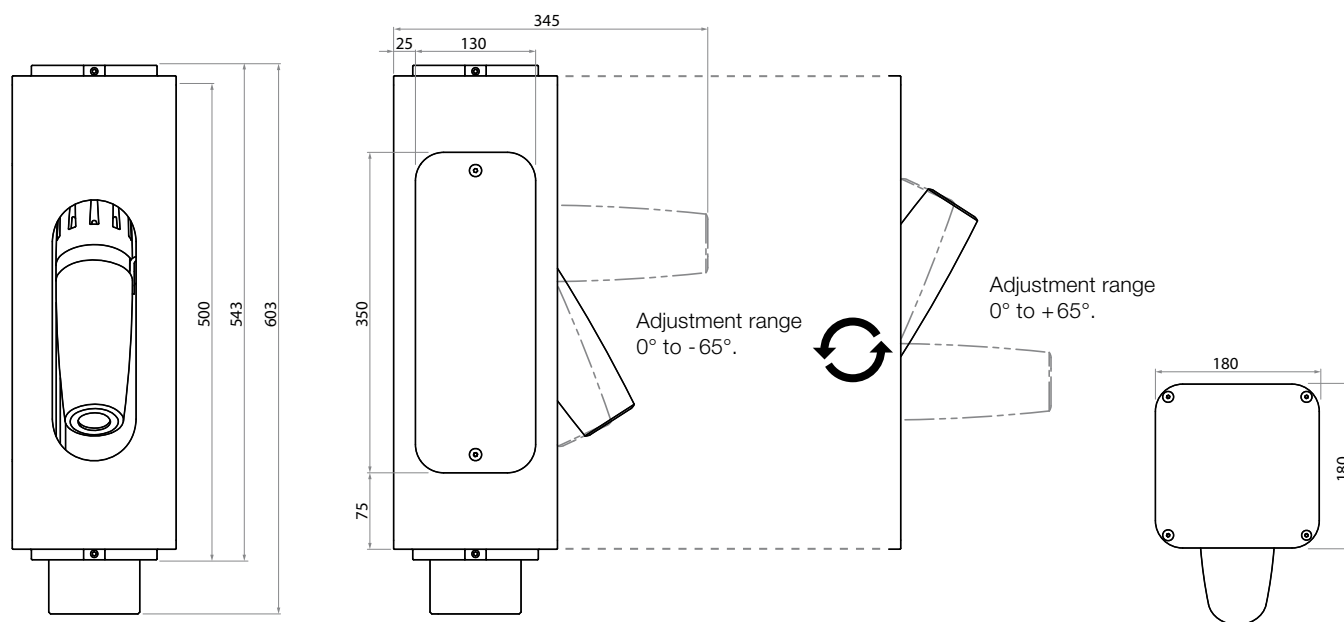
Configuration constraints

- Always in last position.



Choose KORNER equipped with an integrated GOBO module for striking visual effects. Customize your projections with ease to create the perfect ambiance for your events as well as adding information on floors and walls. Transform any space into a dynamic and captivating light show. Enjoy a versatile and user-friendly solution to illuminate your evenings.

Dimensions (mm)



Mechanical characteristics

- Weight: 9 kg
- Aerodynamic coefficient (CxS): 0,103 m²
- Protection index: IP64 floodlight
- Shock resistance: IK10
- Materials: Aluminium

Electrical characteristics

- Voltage: 220 - 240V AC, 50/60 Hz
- Electrical class: I
- Optional surge protector or over/under voltage protection systems (offset in the base of the bollard).

Configuration constraints

- Between 4 and 6 m.