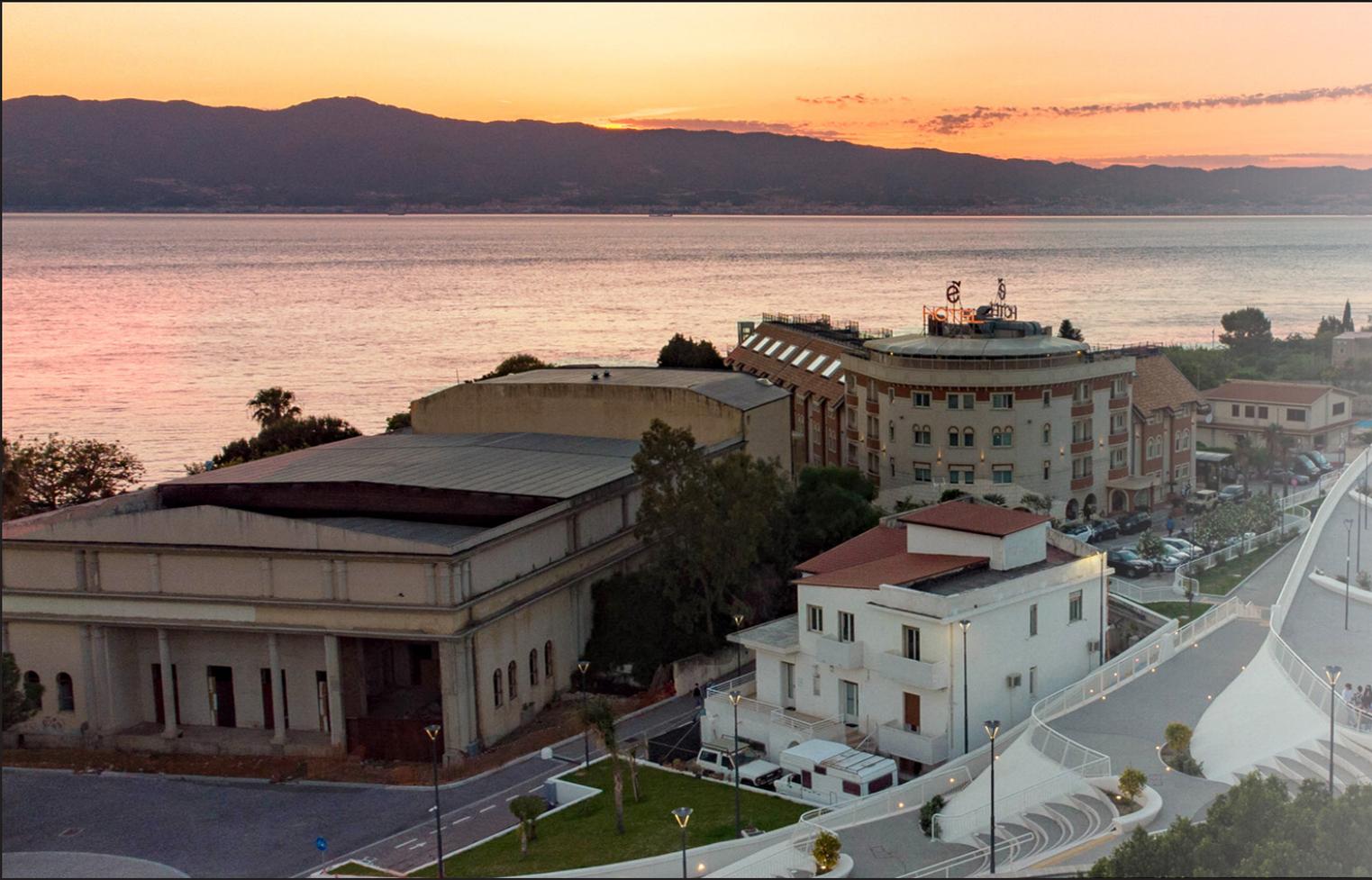
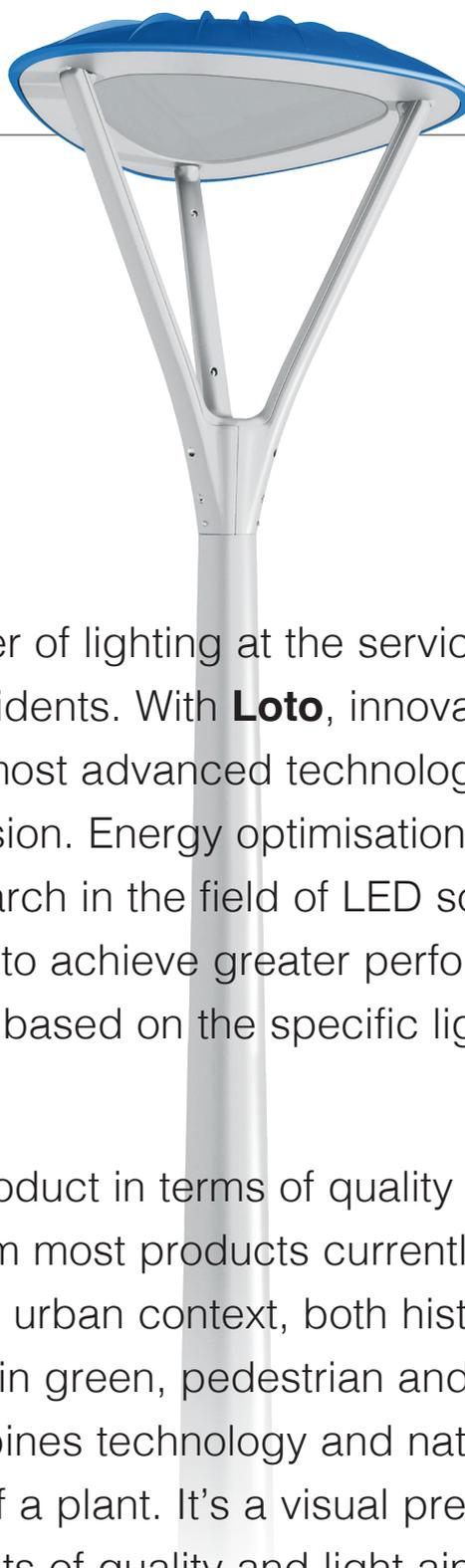


LOTTO







Loto is the new frontier of lighting at the service of modern cities, public places and residents. With **Loto**, innovation is perfectly harmonised with the most advanced technologies in terms of quality and light emission. Energy optimisation of consumption derives from the research in the field of LED sources and their management in order to achieve greater performance in different conditions of use and based on the specific lighting parameters required.

It is a cutting-edge product in terms of quality and shape, with a design that differs from most products currently on the market, enabling to fit into any urban context, both historical and contemporary, as well as in green, pedestrian and vehicular traffic areas. Its design combines technology and nature, making it resemble the shape of a plant. It's a visual presence capable of conveying the concepts of quality and light aimed at the well-being and excellence of the surrounding urban spaces.







Loto is available as **standard** with a **3000K** and **4000K** colour temperature. It is ideal for urban spaces such as public parks, squares, and historic town centres that require an illumination that enhances architectural features while ensuring pedestrian safety, visual comfort, and minimising light pollution.



3000K
4000K **3000K - 4000K:** lamps with white light, instead, is the best choice for lighting up urban areas, streets, residential centres and generally all areas where this type of light guarantees greater safety and visual comfort.

You can make your lighting system **SMART**.

There are many ways to adjust lighting:

- Luminous flux **setting**
- **CLO** (Constant Light Output)
- **1-10V** dimming
- **Power line carrier** remote control
- **Nema** or **Zhaga sockets** integrated into the product

And last but not least, the **Virtual Midnight** feature, offering custom solutions for guaranteed energy savings.

Choose the ideal system that ensures
eco-friendly energy consumption!





PROG (CLD PROG) AVAILABLE FUNCTIONS

Luminous flux setup	This can be done by programming the drive current values requested when ordering/purchasing the fixture
CLO (Constant Light Output)	The lighting fixture maintains a constant light output throughout its entire service life

LIGHTING POINT MANAGEMENT OPTIONS ON REQUEST

possibility to choose different lighting point management systems according to the system's needs:

1-10V dimming ordered with sub-code -12	Adjustment range from 10%-100% with 1-10V	
 Virtual Midnight order with subcode -30	Stand-alone system with automatic luminous flux reduction in 4 steps . To increase energy savings at night when there are fewer people and vehicles around, a lighting fixture can be programmed according to a specific profile (customizable on request). The fixture reduces its luminous flux through a self-learning process which, depending on the previous switching on and off times, will determine a hypothetical "virtual midnight". This is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The "virtual midnight" is the reference point for dimming lights according to the desired profile. The device is integrated in the LED driver and therefore does not require any modification to the system. <i>In order for the system to function correctly, the system must be adjusted by a device that turns the system on and off on a regular basis every day.</i> ATTENTION: original settings and time slots for the "virtual midnight" value can be customized in up to 5 steps upon request.	
Factory settings		
Time		Flux
on ÷ 22:00		100%
22:00 ÷ 23:30	75%	
23:30 ÷ 02:30	50%	
02:30 ÷ 04:00	75%	
04:00 ÷ off	100%	
PLC remote control ordered with sub-code -0078	Point-to-point and system management and diagnosis system	

Luminaire designed for installation on Nema or Zhaga socket:

to monitor and manage public lighting centrally, lighting fixtures will always be more equipped with wireless controls that will allow their integration with the IoT. Today the market offers two solutions: **NEMA** and **ZHAGA**. Both solutions offer an electrical and mechanical connection between the control antenna and the lighting fixture.

Nema Socket order with subcode -40 (sealing cap to be ordered separately)	Mounted directly on the fixture's body, ideal for remote lighting management applications.
Zhaga Socket order with subcode -0054 (complete with sealing cap)	

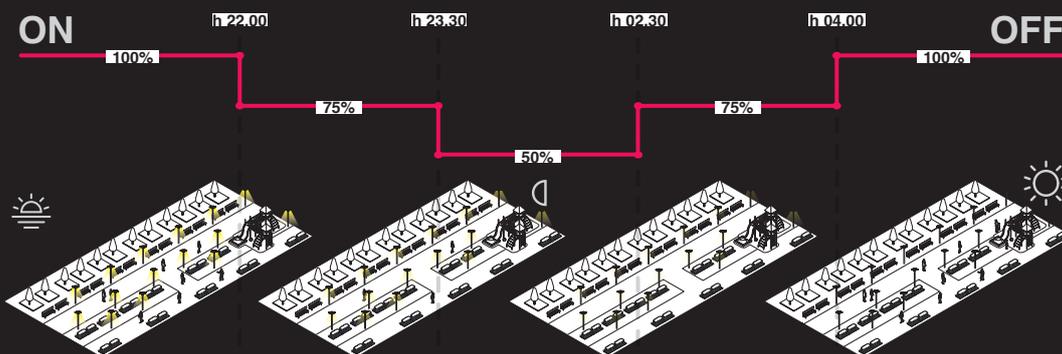


Exemple with Zhaga Socket (subcode -0054)

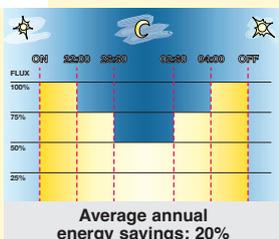
To **increase energy savings** at night when there are fewer people and vehicles around, a lighting fixture can be programmed according to a specific profile (customizable on request). The fixture reduces its luminous flux through a self-learning process which, depending on the previous switching on and off times, will determine a hypothetical “virtual midnight”. This is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The “virtual midnight” is the reference point for dimming lights according to the desired profile.

The device is integrated in the LED driver and therefore does not require any modification to the system.

In order for the system to function correctly, the system must be adjusted by a device that turns the system on and off on a regular basis every day.



For example, in the central hours of the night, in areas where car and pedestrian traffic decreases significantly, a **reduction in luminous flux keeps the light within safety standards, while avoiding waste**. If we multiply this reduction by tens or hundreds of lamps, we get **significant savings**.

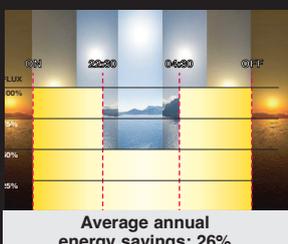


Factory settings	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 23:30	75%
23:30 ÷ 02:30	50%
02:30 ÷ 04:00	75%
04:00 ÷ off	100%

Virtual Midnight subcode -30: fixtures are equipped with a device to reduce flux in **4 steps** based on the calculation of the virtual midnight.

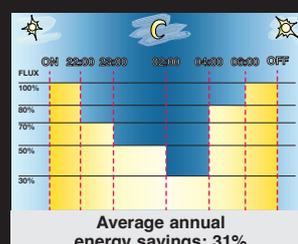
ATTENTION: original settings and time slots for the “virtual midnight” value can be customized in up to 5 steps upon request.

Virtual midnight in 2 steps subcode -35



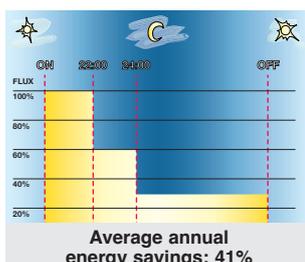
Settings upon request	
Time	Flux
on ÷ 22:30	100%
22:30 ÷ 04:30	50%
04:30 ÷ off	100%

Virtual midnight in 5 steps subcode -32



Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 23:00	70%
23:00 ÷ 02:00	50%
02:00 ÷ 04:00	30%
04:00 ÷ 06:00	80%
06:00 ÷ off	100%

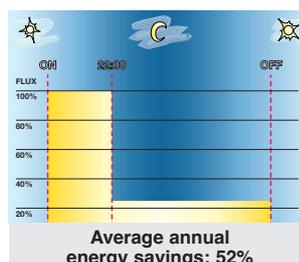
Virtual midnight GREEN AREAS subcode -0001



Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 24:00	60%
24:00 ÷ off	30%

Ideal for green areas and parks, which are closed to the public at specific hours.

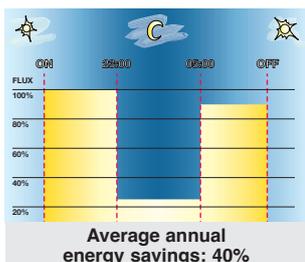
Virtual midnight SAFETY (PRIVATE PROPERTY) subcode -0002



Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ off	25%

Ideal to maintain safety lights at workplaces, in which people/vehicles are not circulating after work hours.

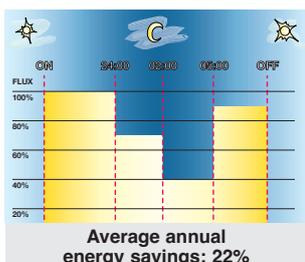
Virtual midnight PRIVATE PROPERTY AND COMMERCIAL subcode -0003



Settings upon request	
Time	Flux
on ÷ 23:00	100%
23:00 ÷ 05:00	25%
05:00 ÷ off	90%

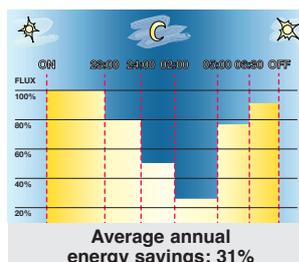
Ideal for private property and commercial areas after work hours.

Virtual midnight METROPOLI (500.000 population) subcode -0005



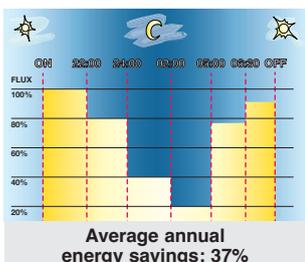
Settings upon request	
Time	Flux
on ÷ 24:00	100%
24:00 ÷ 02:00	70%
02:00 ÷ 05:00	40%
05:00 ÷ off	90%

Virtual midnight BIG CITY (200.000 population) subcode -0006



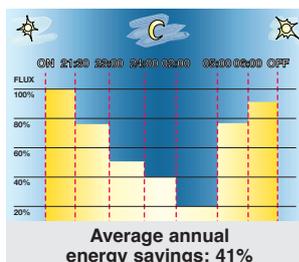
Settings upon request	
Time	Flux
on ÷ 23:00	100%
23:00 ÷ 24:00	80%
24:00 ÷ 02:00	50%
02:00 ÷ 05:00	30%
05:00 ÷ 06:30	75%
06:30 ÷ off	90%

Virtual midnight CITY (50.000 population) subcode -0007



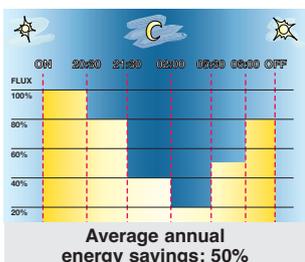
Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 24:00	80%
24:00 ÷ 02:00	40%
02:00 ÷ 05:00	20%
05:00 ÷ 06:30	75%
06:30 ÷ off	90%

Virtual midnight TOWN (5.000 population) subcode -0008



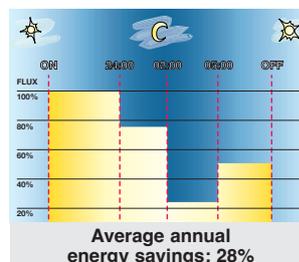
Settings upon request	
Time	Flux
on ÷ 21:30	100%
21:30 ÷ 23:00	75%
23:00 ÷ 24:00	50%
24:00 ÷ 02:00	40%
02:00 ÷ 05:00	20%
05:00 ÷ 06:00	75%
06:00 ÷ off	90%

Virtual midnight VILLAGE (2.000 population) subcode -0009



Settings upon request	
Time	Flux
on ÷ 20:30	100%
20:30 ÷ 21:30	80%
21:30 ÷ 02:00	40%
02:00 ÷ 05:00	20%
05:00 ÷ 06:00	50%
06:00 ÷ off	80%

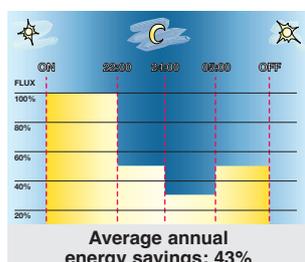
Virtual midnight HIGH SEASONS subcode -0010



Settings upon request	
Time	Flux
on ÷ 24:00	100%
24:00 ÷ 02:00	75%
02:00 ÷ 05:00	25%
05:00 ÷ off	50%

Ideal for tourist resorts during peak season periods (sea-summer; mountain-winter).

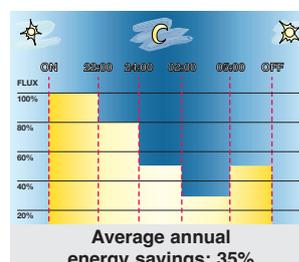
Virtual midnight LOW SEASONS subcode -0011



Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 24:00	50%
24:00 ÷ 05:00	30%
05:00 ÷ off	50%

Ideal for tourist resorts during low season periods.

Virtual midnight FOUR SEASONS subcode -0012



Settings upon request	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 24:00	80%
24:00 ÷ 02:00	50%
02:00 ÷ 05:00	30%
05:00 ÷ off	50%

Ideal for tourist resorts that do not need to reschedule their lighting times (compromise between high and low season).

GENERAL CHARACTERISTICS



Housing and frame: pressed in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Optics: made of PMMA with high temperature resistance and UV rays.

Pole connection: suited for poles with a diameter 60 mm.

Diffuser: extra-clear tempered glass, 4 mm thick, resistant to thermal shocks and impacts (UNI-EN 12150-1: 2001).

Coating: the fully automated powder-coating cycle involves a polyester-based, salt-spray corrosion-resistant and UV-stabilised paint.

Upon request: protective coating recommended for marine environments within 5 km of the sea.

OTHER CHARACTERISTICS



Standard supply: automatic temperature control inside the device with automatic resetting. With dedicated electronic device to protect the LED module.

Equipment: equipped with an air-circulation valve. Complete with waterproof connector for quick installation.

Electronic safety device to protect the LED module and the related ballast compliant with EN 61547.

It works in two modes:

- differential mode: surge between power cables and between the phase and neutral.

- common mode: surge between power, L/N and ground cables or between the fixture's body if it is of class II and installed on a metal pole.

Loto: 6/10 kW.

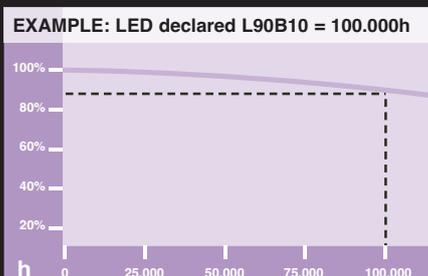
PHOTOBIOLOGICAL SAFETY



We often read about photobiological safety in lighting design. This very important factor is determined by the amount of radiations emitted by all the sources with a wave length ranging between 200 nm and 3000 nm. Excessive radiation exposure can be harmful for human health. The EN62471 standard classifies light sources into risk groups.

Risk Group 0 (RGO Ethr): luminaires are exempt from photobiological risks in compliance with standard EN 62471. If necessary, contact our customer service for the observation distance.

LIFE EXPECTANCY



The decrease of LED flux is defined by the working life and is represented by the L90 mark (see chart), which means that the flux is kept up to 90%. The "B" letter followed by a number ranging between 10 and 50 indicates the quality of the fixture and defines the LED percentage that keeps the declared characteristics when it reaches 100,000 working hours.

LED: power factor: $\geq 0,9$.

Loto:
luminous flux maintenance:
90%: **100.000h (L90B10)**

ENEC is a European Mark that demonstrates that Ischia fixture is compliant with applicable European safety standards and was manufactured by a company that applies a Quality System according to ISO 9000.

CERTIFICATIONS



The IK code indicates the fixture's degree of protection against mechanical impact and determines the degree of protection provided by the electrical equipment's enclosures against these impacts (EN 50102 - NF 20-015).

IK LEVEL OF PROTECTION



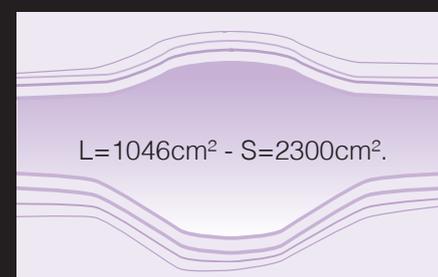
Flicker is a common issue with LED lamps. It can occur at frequencies below 60 Hz and depends on several factors, such as the ripple emitted by drivers. Product with a very low flicker; uniform light for greater eye protection.

LOW FLICKER



The fixture's design is configured to minimise wind exposure surfaces.

SURFACE EXPOSED TO WIND





**BRINGING COLOUR TO A GREENER CITY! SUSTAINABILITY ISN'T JUST GREEN:
IT'S BLUE, YELLOW, RED, WHITE OR EVEN TWO-TONED.**

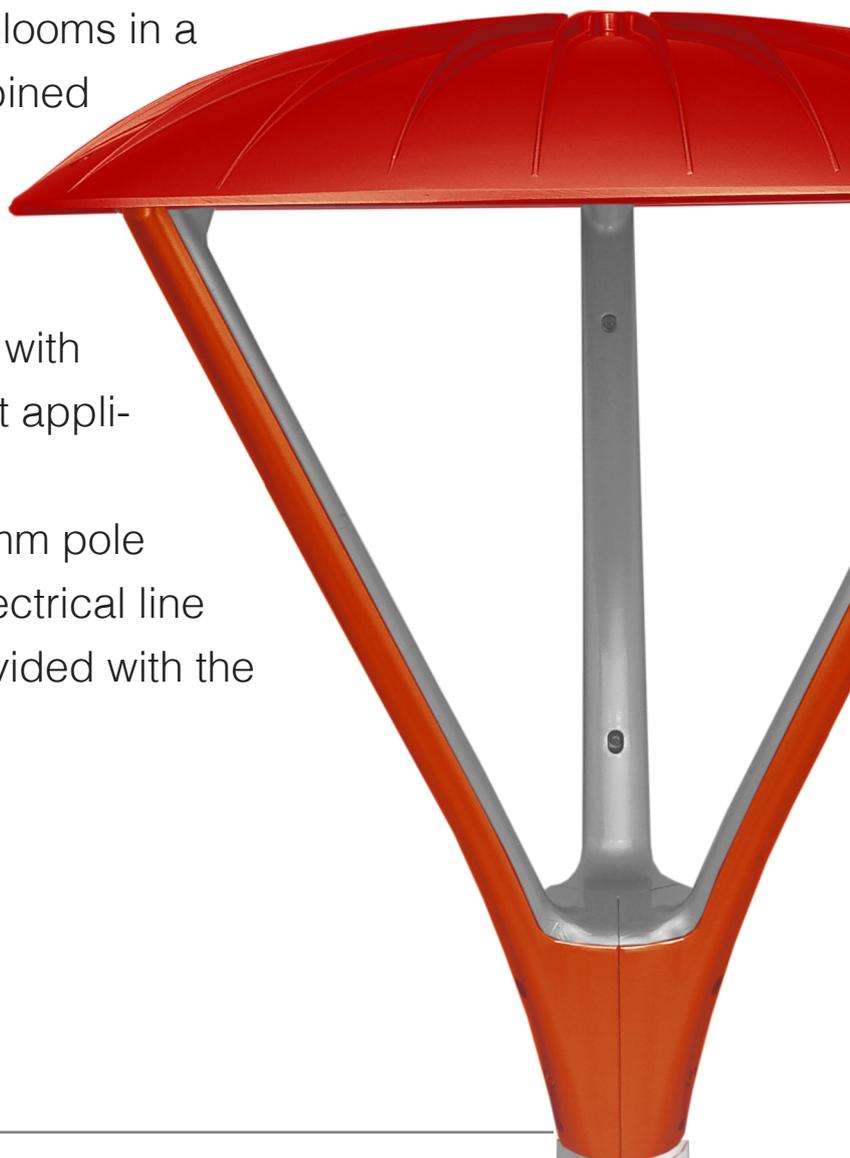
Upon request: versions available in different colours and surface finishes to coordinate with any architectural design.



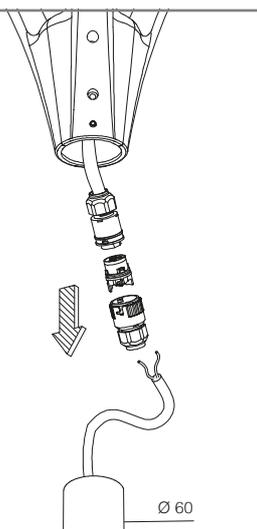
Elegant by nature, like a flower, it blooms in a variety of colours that can be combined in endless ways (upon request).

Whether in playgrounds, school yards, public parks or holiday resorts, colour integrates seamlessly with any design, allowing many different applications.

It can be easily mounted on \varnothing 60 mm pole tops, and connects easily to the electrical line using the watertight connector provided with the product.



As standard, all **Loto** lamps are equipped with a waterproof connector to ensure quick and safe connection to the power line.



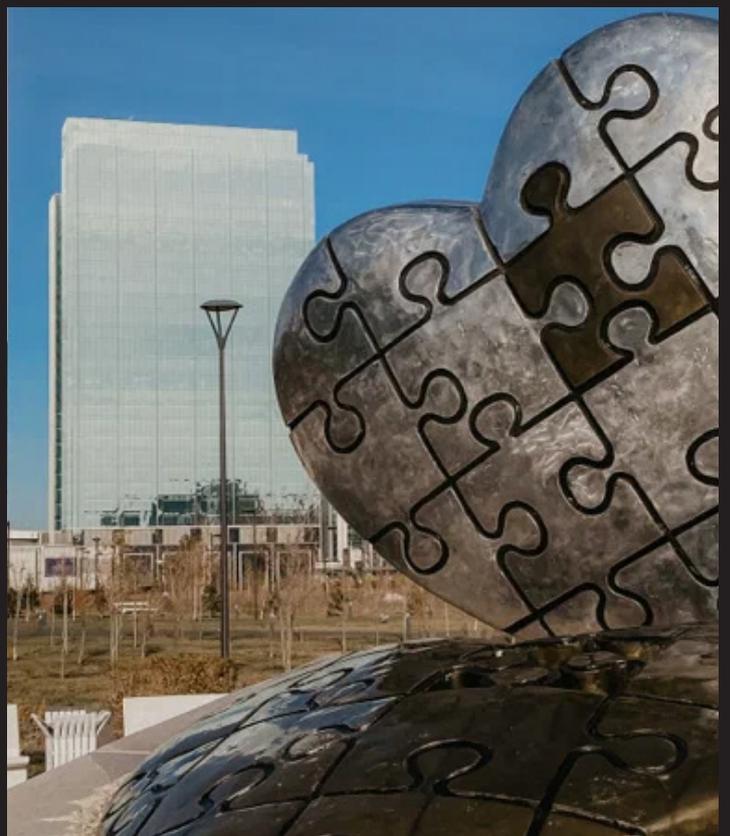
GREEN
RAL 6024

BLUE
RAL 5005

YELLOW
RAL 1021

RED
RAL 3001



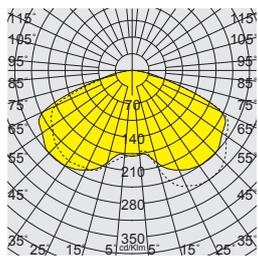


Precision optics allowing great design flexibility and high-quality light distribution.

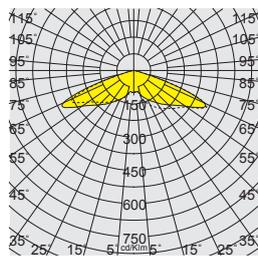
In PMMA, highly resistant to temperature and UV radiation.



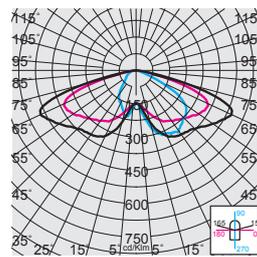
Loto



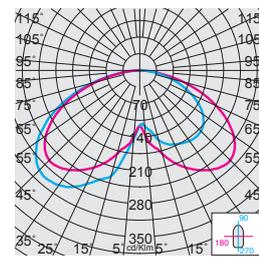
**WIDE BEAM
MATT**



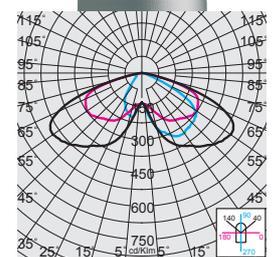
**WIDE BEAM
TRANSPARENT**



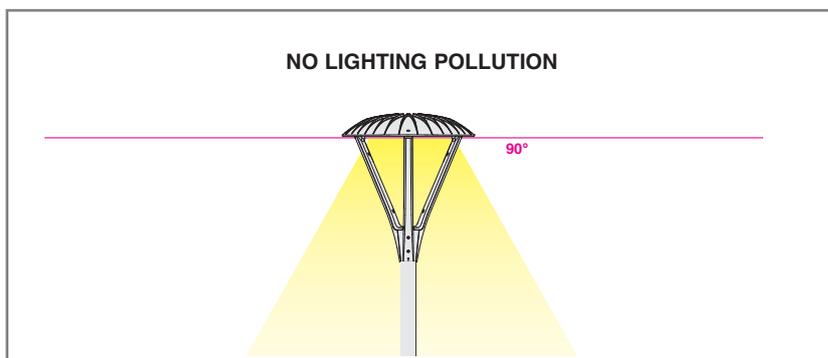
ASYMMETRIC



WIDE BEAM



CYCLEWAYS





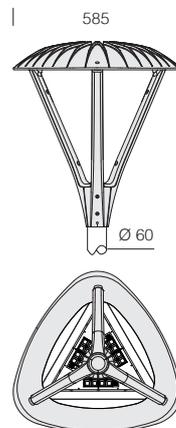
3340 Loto 2 - wide beam - matt

		CLD PROG		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	grey	12.50	330214-00	24	4000K - 2900lm - CRI 70
	graphite		330215-00		

Upon request:
subcode -39

LED	3000K - CRI 70
-----	----------------

IP66IK09



3340 Loto 1 - wide beam - transparent

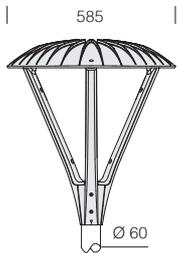
		CLD PROG		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	grey	12.50	330210-00	24	4000K - 3730lm - CRI 70
	graphite		330211-00		
LED	grey	12.50	330210-39	24	3000K - 3510lm - CRI 70
	graphite		330211-39		
LED	grey	12.80	330212-00	52	4000K - 7170lm - CRI 70
	graphite		330213-00		
LED	grey	12.80	330212-39	52	3000K - 6740lm - CRI 70
	graphite		330213-39		

Example	Power supply	n.LED	W tot	K	ølm	K	ølm
upon request	220mA	24	15	4000K	2420lm	3000K	2270lm

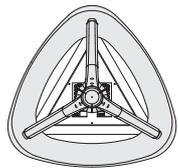
Example	Power supply	n.LED	W tot	K	ølm	K	ølm
upon request	460mA	24	33	4000K	4910lm	3000K	4620lm



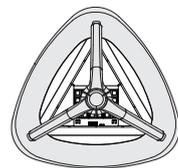
IP66IK09



650



565



565

3342 Loto 3 - T2 - cycleways

LED	colour	CLD PROG		W tot	LUMEN OUTPUT (tq= 25 °C)
		weight	code		K - ølm - CRI
LED	grey	12.50	330230-00	24	4000K - 3650lm - CRI 70
	graphite		330231-00		
LED	grey	12.50	330230-39	24	3000K - 3431lm - CRI 70
	graphite		330231-39		
LED	grey	12.80	330232-00	52	4000K - 7080lm - CRI 70
	graphite		330233-00		
LED	grey	12.80	330232-39	52	3000K - 6650lm - CRI 70
	graphite		330233-39		

3343 Loto 4 - T3 - asymmetric

LED	colour	CLD PROG		W tot	LUMEN OUTPUT (tq= 25 °C)
		weight	code		K - ølm - CRI
LED	grey	12.50	330240-00	24	4000K - 3650lm - CRI 70
	graphite		330241-00		
LED	grey	12.50	330240-39	24	3000K - 3431lm - CRI 70
	graphite		330241-39		
LED	grey	12.80	330242-00	52	4000K - 7080lm - CRI 70
	graphite		330243-00		
LED	grey	12.80	330242-39	52	3000K - 6650lm - CRI 70
	graphite		330243-39		

Example	Power supply	n.LED	W tot	K	ølm	K	ølm
upon request	220mA	24	15	4000K	2400lm	3000K	2260lm

Example	Power supply	n.LED	W tot	K	ølm	K	ølm
upon request	460mA	24	33	4000K	4880lm	3000K	4590lm

3344 Loto 5 - wide beam

LED	colour	CLD PROG		W tot	LUMEN OUTPUT (tq= 25 °C)
		weight	code		K - ølm 530mA - CRI
LED	grey	12.50	330250-00	26	4000K - 2930lm - CRI 70
	graphite		330251-00		

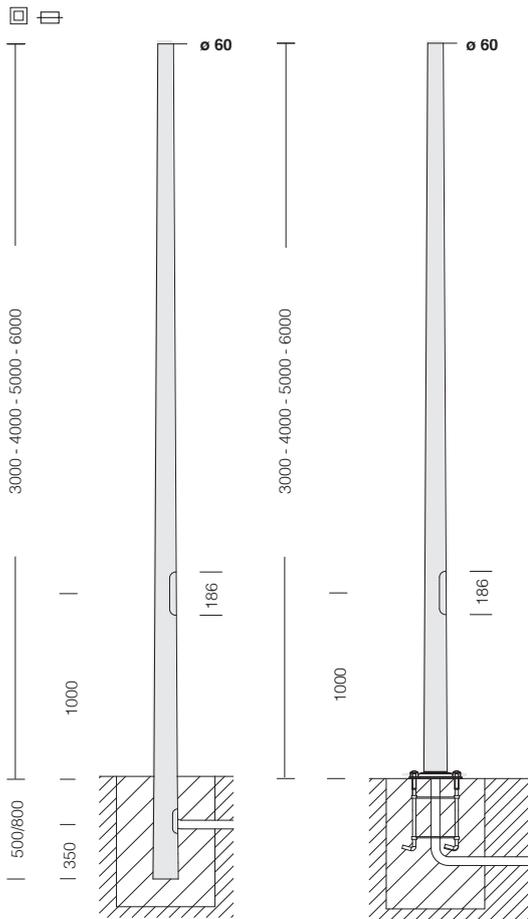
Example	Power supply	n.LED	W tot	ølm
upon request	700mA	16	35	3868lm





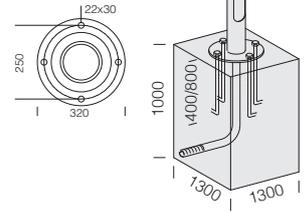
Steel cone-shaped pole

Pole Urban



ON REQUEST
Possibility of supplying poles with the following
colour paint finishes:
RAL 1021, 3001, 5005, 6024, 9003.

Concrete base dimensions
(subject to soil variations).



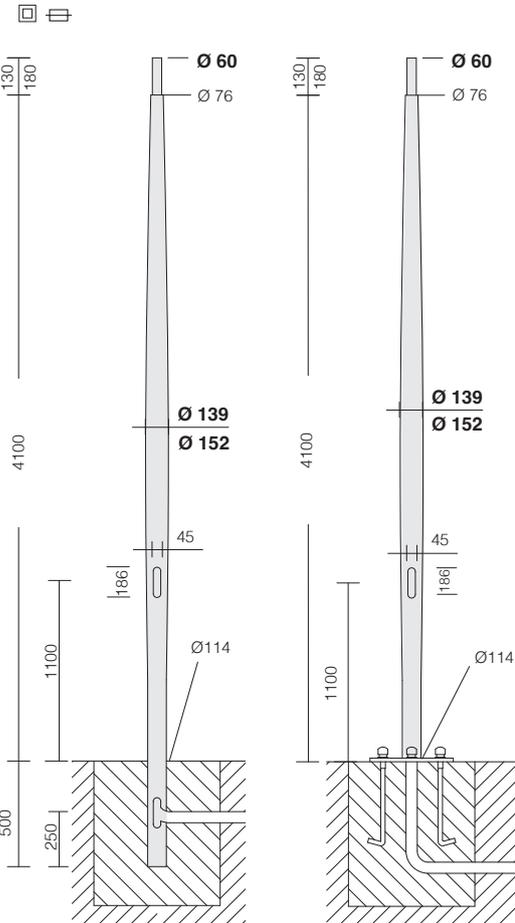
acc. 1481 - steel cone-shaped to be buried

colour	code								
RAL 9006	425150-00	3500	3000	500	1000	186	45	Ø 89	Ø 60
RAL 9006	425151-00	4500	4000	500					
RAL 9006	425152-00	5500	5000	500					
RAL 9006	425153-00	6800	6000	800					
graphite	425154-00	3500	3000	500					
graphite	425155-00	4500	4000	500					
graphite	425156-00	5500	5000	500					
graphite	425157-00	6800	6000	800					

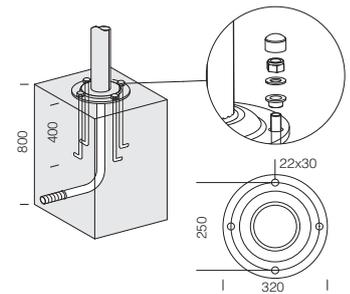
acc. 1480 - steel cone-shaped with base

colour	code								
RAL 9006	425050-00	3000	1000	186	45	Ø 89	Ø 60	Ø 320	foro Ø 22x30
RAL 9006	425051-00	4000							
RAL 9006	425052-00	5000							
RAL 9006	425053-00	6000							
graphite	425054-00	3000							
graphite	425055-00	4000							
graphite	425056-00	5000							
graphite	425057-00	6000							

Log bolts are to be bought separately acc. 299. RAL 9006= grey.



Concrete base dimensions
(subject to soil variations).



acc. 1478 - pole Urban to be buried

colour	code								
RAL 9006	425370-00	4600	4100	500	1100	186	45	Ø 114	Ø 60
graphite	425371-00	4600	4100	500					
RAL 9006	425373-00	6500	6000	500					
graphite	425374-00	6500	6000	500					

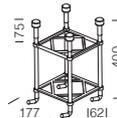
acc. 1477 - pole Urban with base

colour	code								
RAL 9006	425360-00	4100	1100	186	45	Ø 114	Ø 60	Ø 320	22x30
graphite	425361-00	4100							
RAL 9006	425363-00	6000							
graphite	425364-00	6000							

Log bolts are to be bought separately acc. 299. RAL 9006= grey.

acc. 299 log bolts

991396-00
Log bolts are to be always
used with the pole 1477.





LOTO

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illuminazione

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