iGuzzini

Twilight Urbaneco

Light First
Social innovation through lighting

Socially engaged

iGuzzini is an international community at the service of architecture and the development of the culture of lighting, for a better society and a better life. It is a centre of excellence for the study of lighting in its various forms; it produces lighting systems in collaboration with leading lighting designers, architects, designers, universities and R&D centres all over the world. **Respect for the environment, biological wellbeing, and sustainable economies:** these are the drivers for the positive development of society on a global scale. Lighting is first and foremost for people, our commitment being to promote a responsible use of energy by public organisations, by the great protagonists of architecture, industry and commerce, supporting town mayors for a real improvement in wellbeing and quality of life.

Lighting innovation

Social innovation means responding to emerging needs with new ways of cooperating, in open networks, producing sustainable ideas and identifying new tools. Lighting can change things. It is at the centre of social change. It is the expression of **new vital energy** running through the city, building architecture, creating wellbeing for people. Lighting speaks about nature. It reveals worlds and relations, communities and mechanisms. iGuzzini works to improve the relation between man and the environment with lighting, through research, manufacturing, technology and knowledge.

iguzzini.com/lightfirst

Intro

Main Features

Twilight


iGuzzini

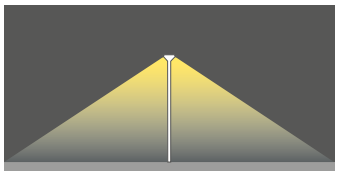
Twilight
Urbaneco.

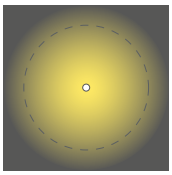
A liveable city is a beautiful city. Twilight gives value to urban ecology. The best light is natural light just before sunset. It is that magical moment we call Twilight. Twilight extends this good light in places where people enjoy walking, like parks and local streets, converting public areas into the ideal setting for urban social relations. It is available in three versions, all of them with an extremely compact and efficient optical assembly. The symmetrical and elliptical optics deliver uniform lighting on horizontal and vertical surfaces, as well as excellent semi-cylindrical illumination to guarantee recognition and safety of pedestrians. Twilight Joburg makes it possible to upgrade existing installations, delivering urban and residential lighting with a low environmental impact. Twilight is enriched by two functional decorative elements: Twilight Bilbao eliminates optical pollution and Twilight Canberra creates 3D lighting to guarantee safety. Customised versions are available to convert Twilight into a cosmopolitan solution. Twilight gives value to urban economy and social wellbeing.

Overview

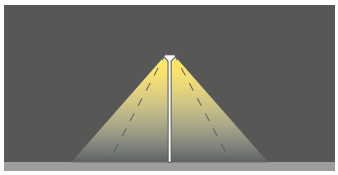
Info box

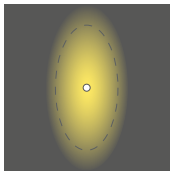
Optics	Dimensions	Flux	Output
Joburg elliptical	Ø 323	2190 lm / 3530 lm	20 W / 31 W
Joburg symmetrical	Ø 323	2290 lm / 3660 lm	20 W / 31 W
Bilbao elliptical	Ø 500	1970 lm / 3170 lm	20 W / 31 W
Bilbao symmetrical	Ø 500	2080 lm / 3260 lm	20 W / 31 W
Canberra elliptical	Ø 650	2160 lm / 3480 lm	20 W / 31 W
Canberra symmetrical	Ø 650	2270 lm / 3570 lm	20 W / 31 W





Symmetrical optic



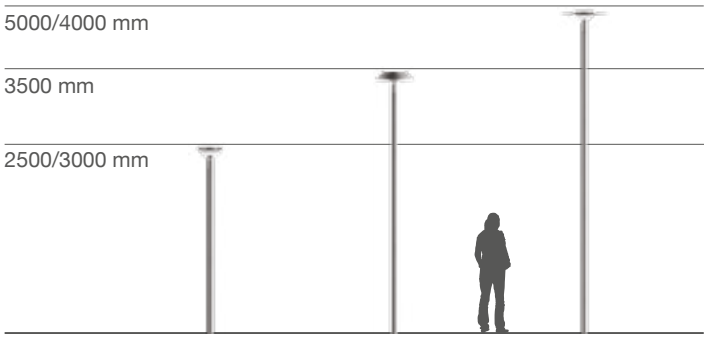


Elliptical optic

03

- DALI, Midnight, On-Off control
- 100.000 h L80 B10 ta 25°C
- Colour temperature 3000K/4000K
- CRI>70
- Pole-top installation on conical and cylindrical poles with ø 60 mm and 76 mm end
- 15 grey finish
- Class II symbol
- IK 10
- IP 66

Twilight Joburg
Pag. 17



products.iguzzini.com/twilight_line

Twilight Canberra
Pag. 21

Twilight Bilbao
Pag. 19

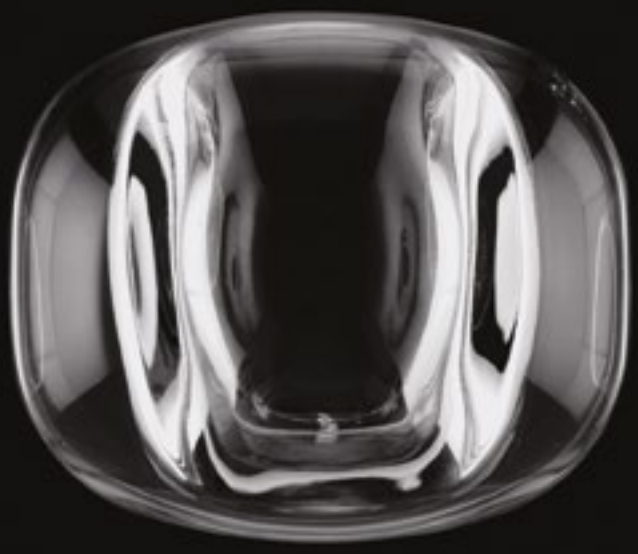
As you like.
Our technology. Your style.

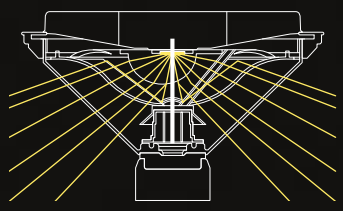
Twilight is technology, compactness and efficiency. These are the core elements on which to build the best solution for the specific needs of each city. Twilight lives in different functional and decorative versions, changing colours, finishes, empty and solid volumes, shapes and inclination angles. Twilight travels around the world and stops in the ideal city to shine with local light.

Each city, each country, each village has its own identity. Global light, multiple citizenship.

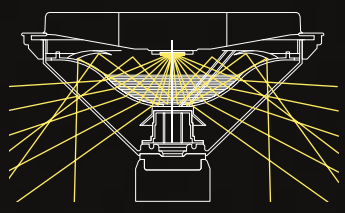
Images refer to potential custom products. For more information please contact your iGuzzini local reference.

We shape our lenses as a sculptor of light. Each optic follows its function and delivers visual and sustainable clarity.





Elliptical optic



Symmetrical optic

Technological density.
Optical skills.

Twilight is compact in size and features a geometry with no waste or exaggerations. A discreet, refined cone with a low dimensional impact delivers uniform light around the pole without projecting shadows. Light is controlled by an optical system made of high-reflecting materials, refractors, diffusers and flux recovery devices to guide illumination on horizontal and vertical surfaces, using all the useful light of the source to obtain the maximum luminous distribution and visual comfort with excellent efficiency values. An elliptical glass lens developed by our Innovation Lab ensures maximum efficiency with a precise elliptical optic. The metallised polycarbonate reflector with variable prismatic finish increases the symmetrical distribution quality and the capacity of the optical system. Both elliptical and symmetrical optics have a multi-layered morphology that can be seen in transparency in the heart of the optical assembly to highlight the technological and aesthetic personality of Twilight.

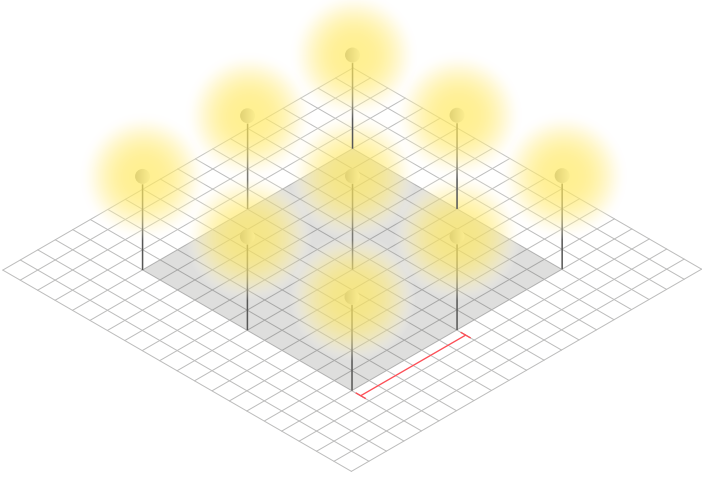
Real efficiency up to
117 lm/W
to 2 times higher than the best sodium luminaires on the market.

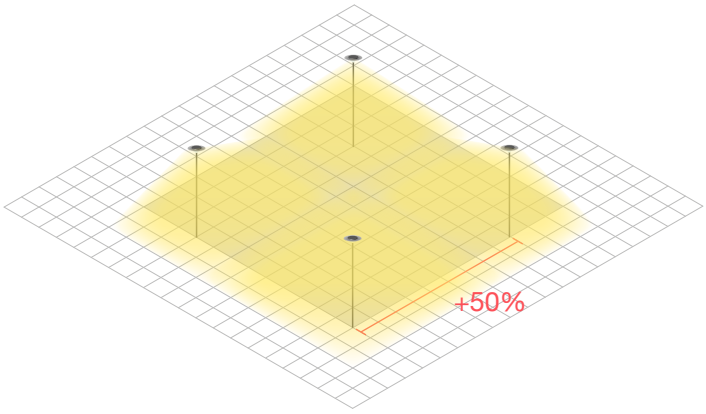
1. Aluminium die-cast heat sink
2. High-reflecting superpure aluminium reflector
3. C.o.B LED
4. Glass lens especially developed for perfect elliptical distribution and very high energy efficiency (Innovation Lab)
5. Opal screen for uniform distribution of comfortable light
6. Flux recovery device to catalyse efficiency
7. Anti-UV polycarbonate external screen with IK 10 anti-vandalism properties (max. 20 J protection against impacts)

Piazza IV Novembre
Sesto Fiorentino, Italy
Photographic processing
Architect: Studio SPIRA srl
Arch. Sara Marrani e Ing Silvio Spadi
Breschi Studio Associati
Arch. Alberto Breschi
Works execution: Zambelli s.r.l. Galeata (FC)
Photo: Multivideo s.a.s.

It’s a system.
Sustainable efficacy.

The efficiency of single elements has a value at system level. The excellent distribution capacity of Twilight optics is translated in larger spacing between luminaires in urban lighting installations, with economic and energy sustainability as direct consequence. Larger spacing allows for using a lower number of luminaires, thus reducing installation and operating costs. In existing installations the optical assembly can be easily replaced to obtain immediate energy saving. The actual efficiency of the luminaire becomes the installation efficacy.
The upper position of the C.o.B LED guarantees excellent thermal dissipation, protecting the performance of the light source and maintaining 80% of the flux after 23 years. Energy sustainability is guaranteed by parameter B10, a proof of declared lifetime and flux values. Finally, we support social sustainability because Twilight was studied to resist acts of vandalism. Twilight creates a system and leaves its natural force to beauty.

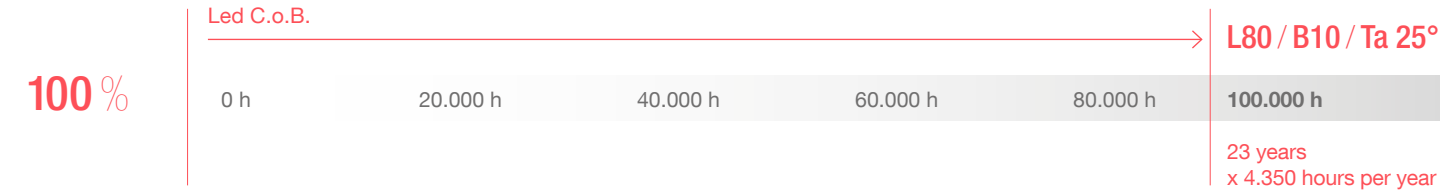




50% larger spacing compared to traditional decorative luminaires with louvers, with the same uniformity.

100.000 hours
L80 B10

Useful life is a statistic number used to indicate that after 100.000 h the luminous flux is equal to or higher than 80% of the initial flux (L80) for at least 90% of the LEDs (B10).

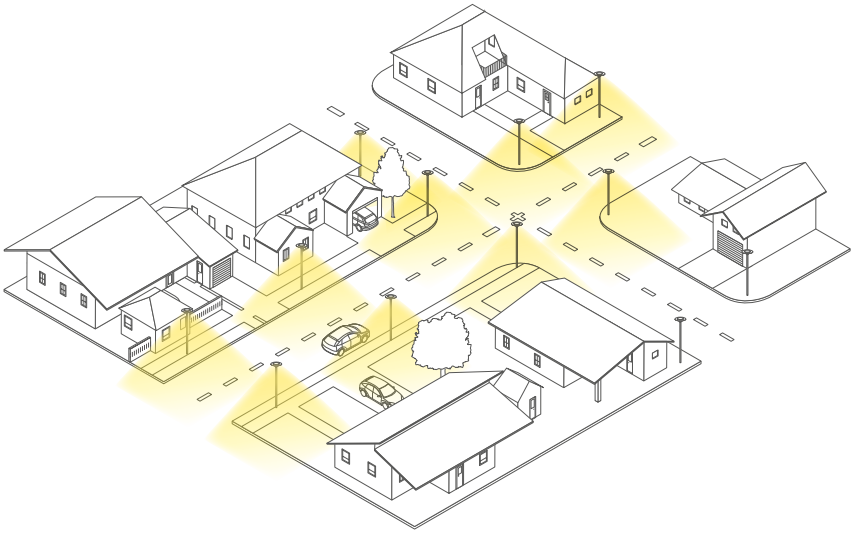


Ideal cities are smart.
Modulable light to meet urban needs.

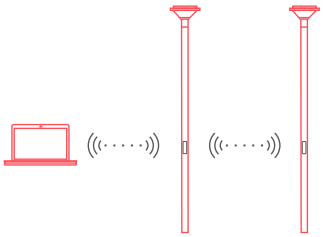
Life in a city follows a different rhythm. Residential neighbourhoods, parks, squares and urban streets have different lighting needs in terms of intensity, time and specific identity. Requirements may include the residential dimension as well as complex integration needs with smart centralised management of the various urban networks. Twilight offers all control possibilities.

From the simple on/off control, which ensures a first urban efficiency increase, to the stand-alone solution, with automatic dimming based on the recognition of the midnight, up to the highest level of management offered by the DALI solution that allows for an accurate control of the luminaire and for the integration with Smart Lighting systems through wireless or powerline devices.

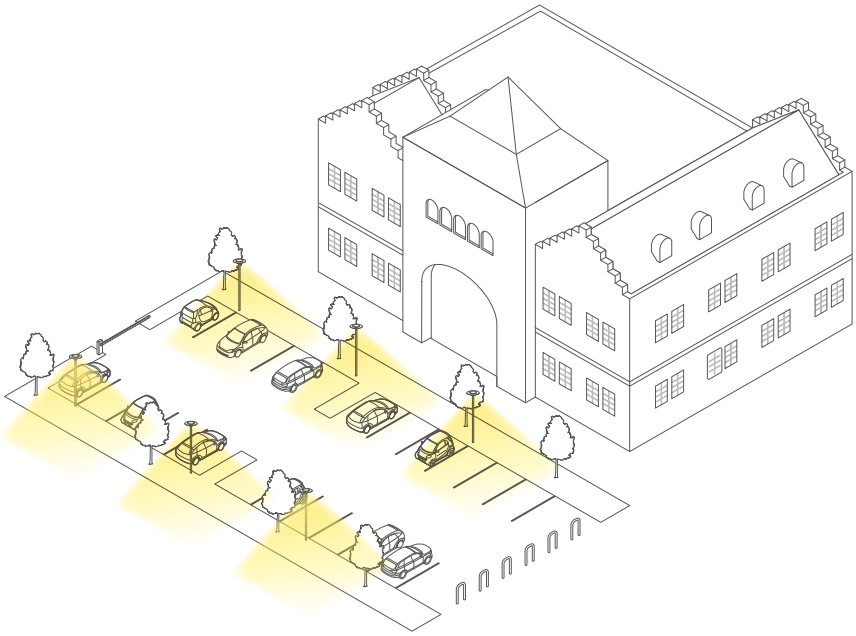
ON - OFF
A simple solution to rapidly increase the efficiency of small private areas.



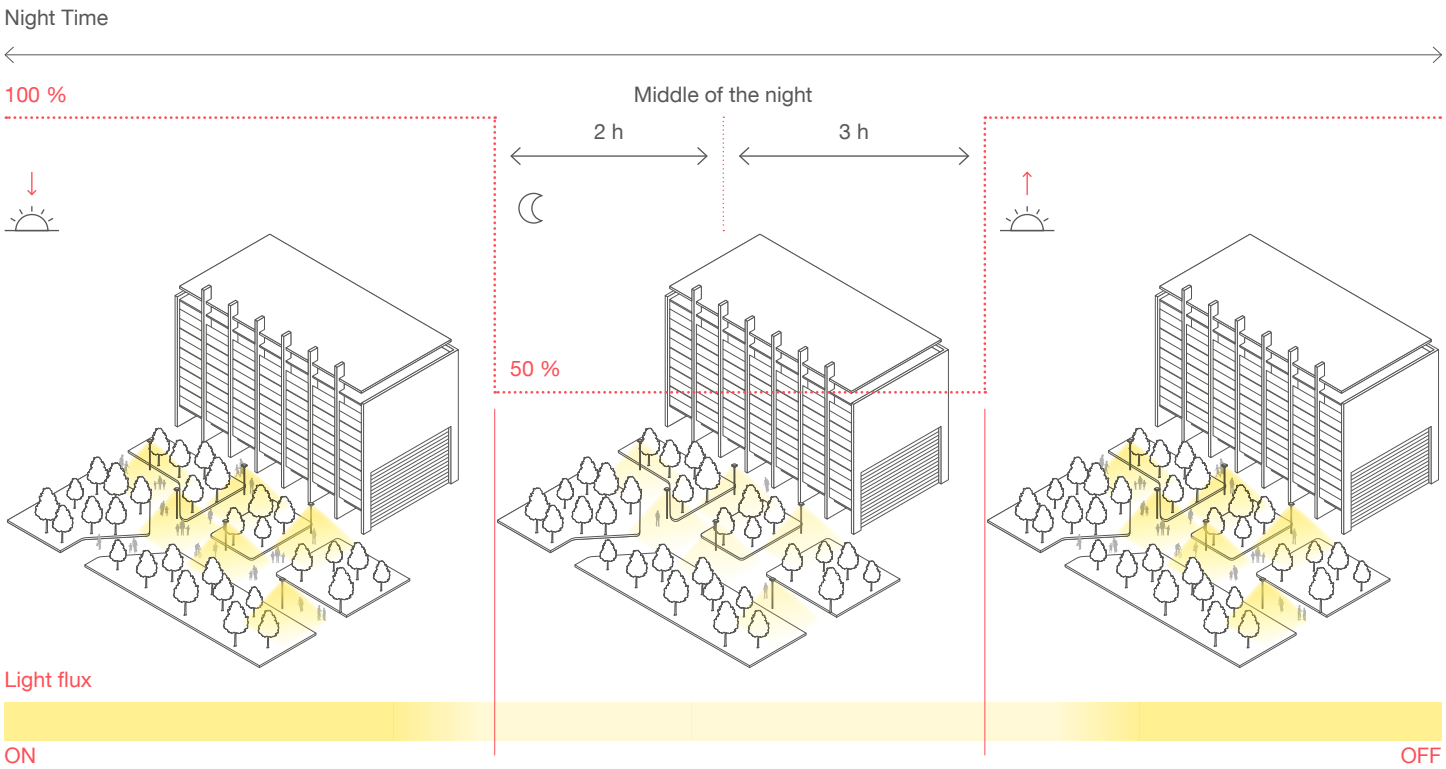
DALI
The luminaires are in communication with a Smart Lighting system through wireless or powerline devices to have a point-to-point control on the system.



Interface
Light Management System.



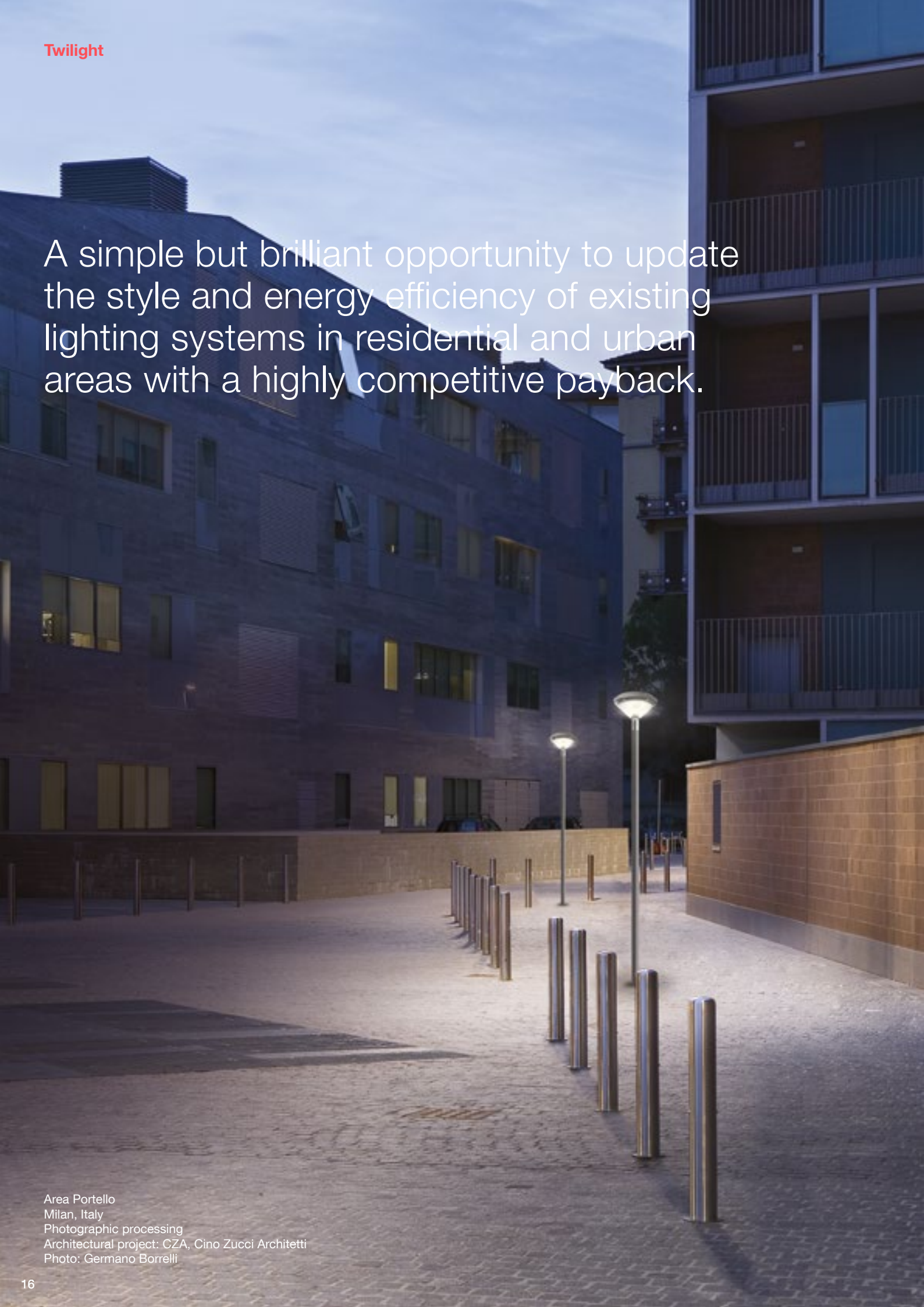
Cities are alive and change continuously in their behaviours. Activities, habits and traditions change over time, modifying places and generating new stimuli. Smart light is a live element that follows the rhythm of the city.



29 %
Energy saving

Device with recognition of the middle of the night during the nocturnal switch-on time
A stand-alone solution for dimming the light flux automatically, without the need for any additional components, suitable for parks and public areas where saving is to be obtained without any additional management systems.

Apothecary Street
London, United Kingdom
Client: City of London
Photo: James Newton



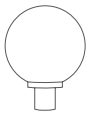
A simple but brilliant opportunity to update the style and energy efficiency of existing lighting systems in residential and urban areas with a highly competitive payback.

Area Portello
Milan, Italy
Photographic processing
Architectural project: CZA, Cino Zucci Architetti
Photo: Germano Borrelli

Twilight Joburg.
Subtraction adds value.

A compact, discreet cone used to replace the technology of existing luminaires equipped with traditional sources, in residential and urban areas at a very low cost.
It totally renews the concept of the luminaire itself and its contextualization. The aesthetic impact is halved, optics are dimensioned, light is conveyed downwards, the efficiency of light source and luminaire is multiplied, and the chromatic quality of the emitted light is improved. An example of saving that delivers a real gain in liveability and sustainability. This is Twilight Joburg: a simple but brilliant opportunity for an aesthetic and energy upgrade with a highly competitive payback.

Mercury



For 50 luminaires	144 W*
Energy consumption (per year)	28800 kW/h
Relamping and/or cleaning costs	Light source + cleaning cost

Twilight

For 50 luminaires	32 W*
Energy consumption	Symmetrical optic 6400 kW/h
Relamping and/or cleaning costs	Only external cleaning

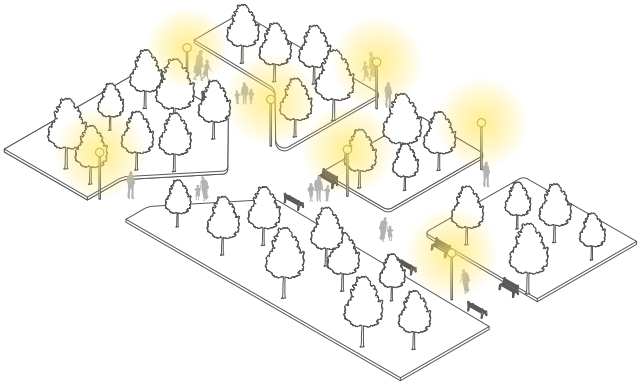
-77%
Energy costs

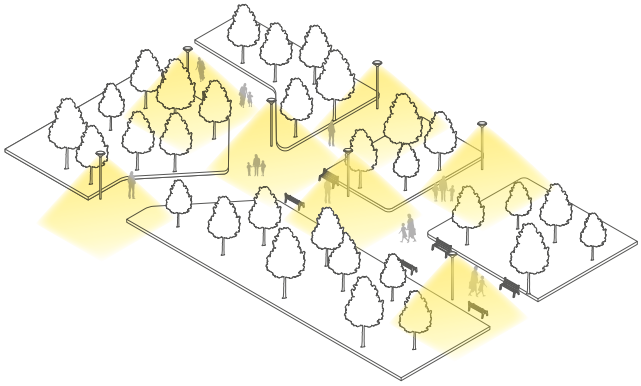
-80%
Maintenance costs

24 months
Payback

Decorative mercury installations (before):
- Lighting pollution and energy waste: light is dispersed downwards with low efficiency of light source
- Poor chromatic quality
- Poor installation efficacy
- From 2015 to 2017: mercury lamps are banned in compliance with EC245/2009 and EC347/2010

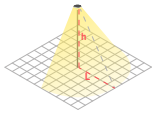
Installations with Twilight Joburg (after):
- Less lighting pollution and more energy saving; light is concentrated downwards with high efficiency of light source
- High chromatic quality
- High installation efficacy
- Minimal aesthetic impact

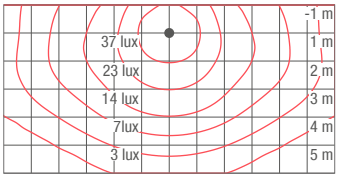




General features

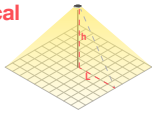
Joburg elliptical
Ø 323 mm
2190lm / 3530 lm
20 W / 31 W

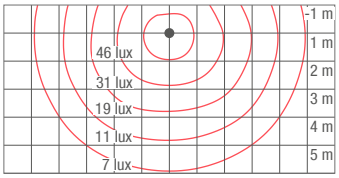




d = 2 (L/h)
h = 2,5 m (Installation height)
L = 5 m (Width of illuminated area)

Joburg symmetrical
Ø 323 mm
2190 lm / 3530 lm
20 W / 31 W

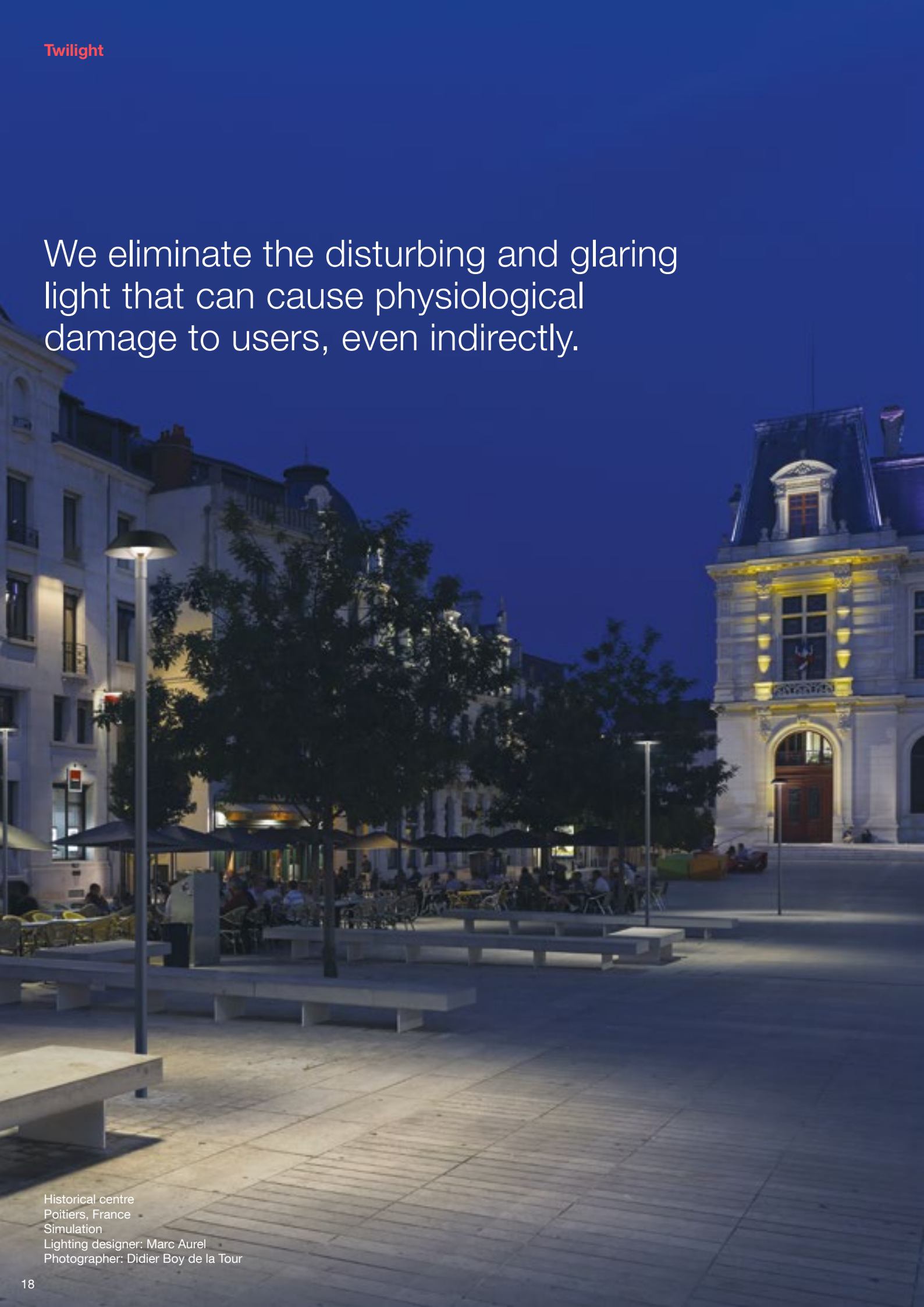




d = 2 (L/h)
h = 2,5 m (Installation height)
L = 5 m (Width of illuminated area)

* The value refers to the actual product power.

We eliminate the disturbing and glaring light that can cause physiological damage to users, even indirectly.



Historical centre
Poitiers, France
Simulation
Lighting designer: Marc Aurel
Photographer: Didier Boy de la Tour

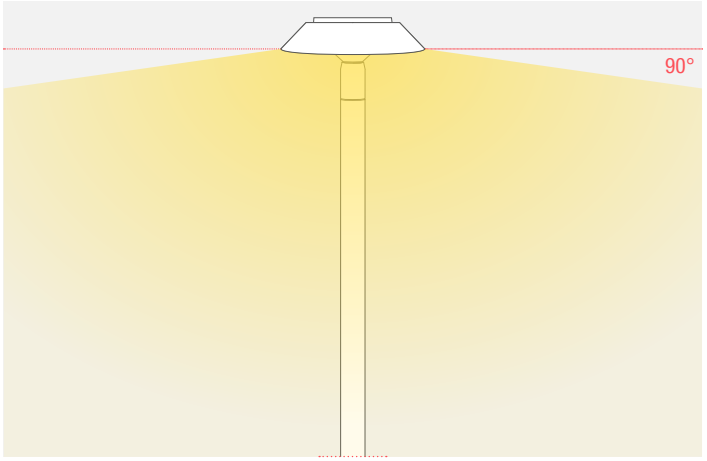
Twilight Bilbao.
Good light only.

Light should go only where needed.
Twilight Bilbao eliminates optical pollution, cancelling useless light, meaning intrusive light that penetrates our houses or light that is dispersed upwards, outshining the stars. A compact truncated conical screen only generates a downward emission, complying with the strictest standards of lighting pollution and favouring energy saving.

Visual comfort* is excellent with G6 (intensity is null at 90°) and D6 values, eliminating all physiological and psychological glare. It also eliminates the disturbing intrusive light, which is a real source of pollution and a cause of sleep disorders. Twilight Bilbao is focused on good, useful and efficient light.

Elimination of light pollution and energy saving

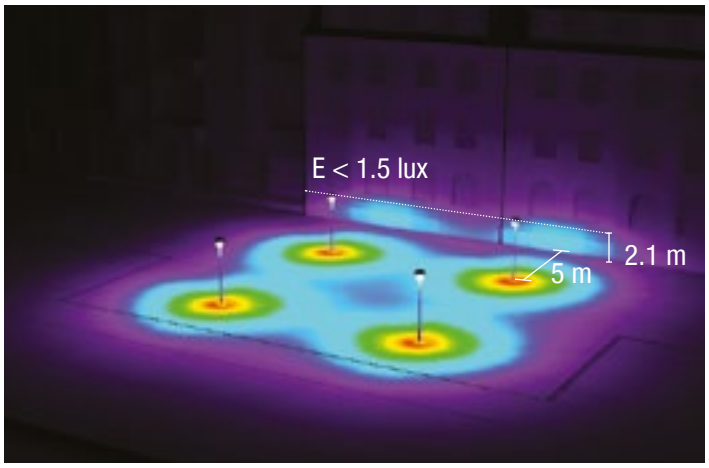
Luminous intensity
≤ 0,49 cd/klm for γ ≥ 90°



Maximum visual comfort

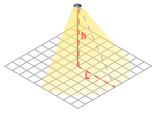
G6 no intrusive light is produced in housings.

D6 No psychological glare



General features

Bilbao elliptical
Ø 500 mm
1970 lm / 3170 lm
20 W / 31 W



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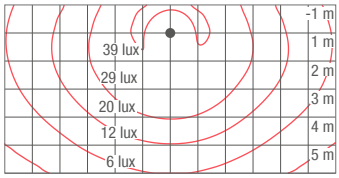
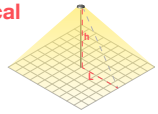
h = 3,5 m (Installation height)
L = 5 m (Width of illuminated area)



Bilbao symmetrical
Ø 500 mm
2080 lm / 3260 lm
20 W / 31 W



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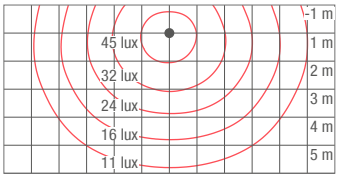
L = 5 m (Width of illuminated area)



* In urban (not street) lighting disability glare is measured with parameter G and discomfort glare with indicator D.

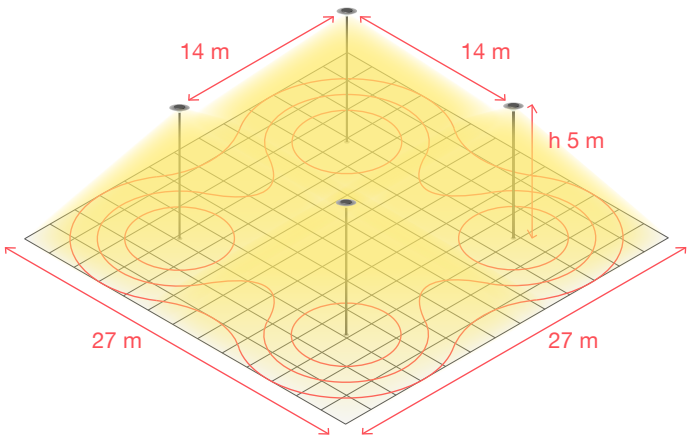
Excellent balance between vertical, horizontal and semi-cylindrical illumination: light becomes an ally of urban sociality.

Pereda Gardens
Santander, Spain
Photographic processing
Photo: Luz y Arquitectura, Gala Martinez

Twilight Canberra.
Balance generates safety.

The main requirement of outdoor lighting is the possibility of enjoying urban spaces at night in the same way as during the day. It is therefore crucial to increase public safety, i.e. the physical and psychological safety of people and the protection of places in order to avoid crime or vandalism acts. Twilight Canberra illuminates people from a distance that generates safety. A flat, high static load-resistant disc increases the perceived volume, leaving the product free to float in space. It controls light pollution and delivers excellent semi-cylindrical distribution, which is crucial for identifying people and guaranteeing real psychological safety. Peripheral town areas are repopulated when light becomes an ally of urban sociality. Twilight Canberra is a versatile tool that gives the best answer to the most common urban requirements.

Simulation of an urban space
The E_{sc} value of the considered area is 8 lux in class P2 (the EN13201 standard requires a min E_{sc} value of 2 lx).



3460 lm 31,2W
Class P2
in compliance with EN 13201
E_{med} 10.1 lux Emin 2.5 lux
E_{sc} 8.0 lux Ev 8.0 lux

PDI (Power density index)
< 0.02 W/lx/m²

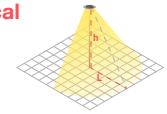
Proxemics and safety
Compliance with semi-cylindrical illumination values (Esc) guarantees interpersonal recognition from a minimum distance of 4m, allowing a normally alert person to take evasive or defensive actions. Lower distances will impair the execution of the reactive behaviour.

Low semi-cylindrical illumination level.

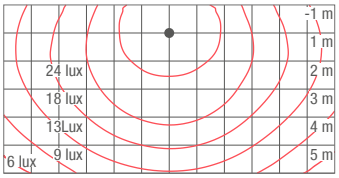
High semi-cylindrical illumination level.

Caratteristiche generali

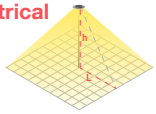
Canberra elliptical
Ø 650 mm
2270 lm / 3480 lm
20 W / 31 W



d = 1,4 (L/h)
h = 3,5 m (Installation height)
L = 5 m (Width of illuminated area)



Canberra symmetrical
Ø 650 mm
2270 lm / 3570 lm
20 W / 31 W



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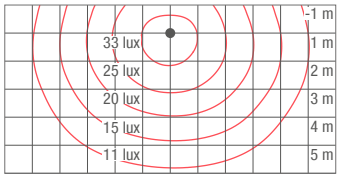

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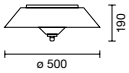
GREY

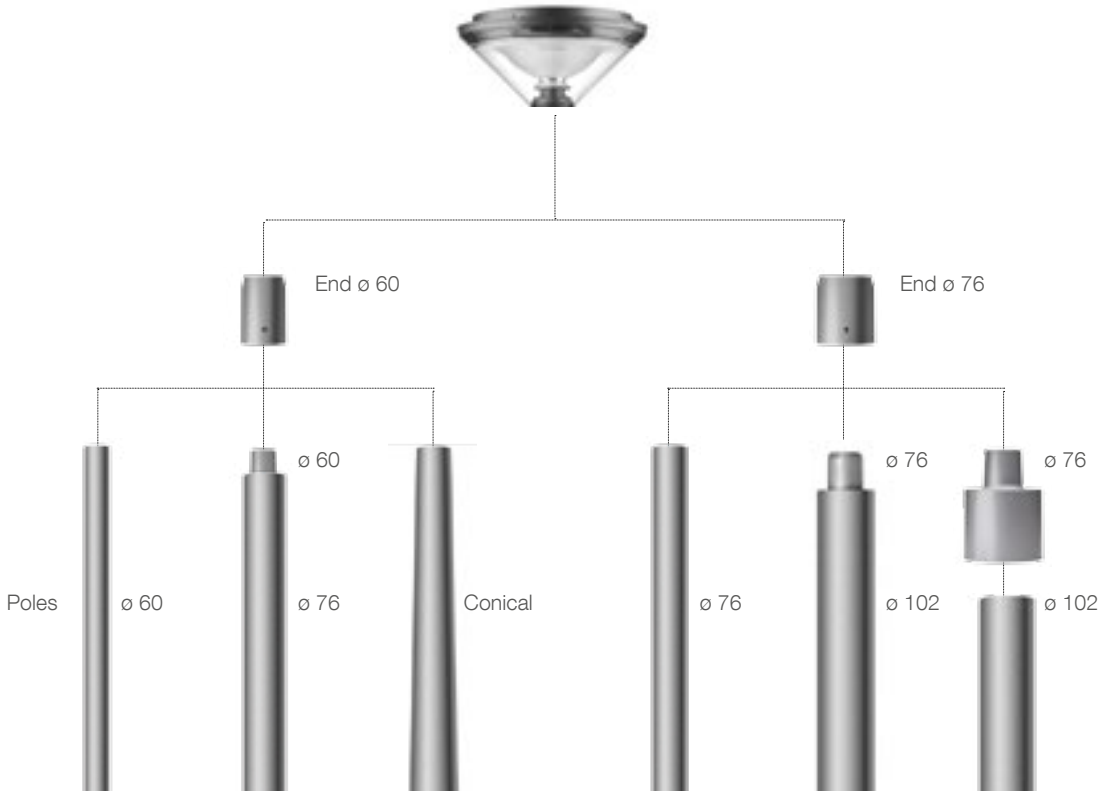
Joburg

Light source	W*	lm	optical	code	colour
LED	4000K - CRI 70				
	20 W	2290	SM	BY76	15
	20 W	2190	E	BY78	15
	31 W	3660	SM	BY88	15
	31 W	3530	E	BY90	15
	4000K - CRI 70 - DALI				
	21 W	2290	SM	E000	15
	21 W	2190	E	E002	15
	32 W	3660	SM	E012	15
	32 W	3530	E	E014	15
	4000K - CRI 70 - Midnight				
	21 W	2290	SM	E024	15
	21 W	2190	E	E026	15
	31 W	3460	SM	E036	15
	31 W	3340	E	E038	15
	3000K - CRI 70				
	20 W	2220	SM	BY77	15
	20 W	2120	E	BY79	15
	31 W	3540	SM	BY89	15
	31 W	3420	E	BY91	15
	3000K - CRI 70 - DALI				
	21 W	2220	SM	E001	15
	21 W	2120	E	E003	15
	32 W	3540	SM	E013	15
	32 W	3420	E	E015	15
	3000K - CRI 70 - Midnight				
	21 W	2220	SM	E025	15
	21 W	2120	E	E027	15
	31 W	3350	SM	E037	15
	31 W	3230	E	E039	15

Bilbao

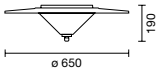


Light source	W*	lm	optical	code	colour
LED	4000K - CRI 70				
	20 W	2280	SM	BY80	15
	20 W	1970	E	BY82	15
	31 W	3260	SM	BY92	15
	31 W	3170	E	BY94	15
	4000K - CRI 70 - DALI				
	21 W	2080	SM	E004	15
	21 W	1970	E	E006	15
	32 W	3260	SM	E016	15
	32 W	3170	E	E018	15
	4000K - CRI 70 - Midnight				
	21 W	2080	SM	E028	15
	21 W	1970	E	E030	15
	31 W	3090	SM	E040	15
	31 W	3000	E	E042	15
	3000K - CRI 70				
	20 W	2010	SM	BY81	15
	20 W	1910	E	BY83	15
	31 W	3160	SM	BY93	15
	31 W	3070	E	BY95	15
	3000K - CRI 70 - DALI				
	21 W	2010	SM	E005	15
	21 W	1910	E	E007	15
	32 W	3160	SM	E017	15
	32 W	3070	E	E019	15
	3000K - CRI 70 - Midnight				
	21 W	2010	SM	E029	15
	21 W	1910	E	E031	15
	31 W	2990	SM	E041	15
	31 W	2910	E	E043	15



15
GREY

Canberra



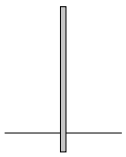
Sorgente	W*	lm	optical	code	colour
LED	4000K - CRI 70				
	20 W	2270	SM	BY84	15
	20 W	2160	E	BY86	15
	31 W	3570	SM	BY96	15
	31 W	3480	E	BY98	15
	4000K - CRI 70 - DALI				
	21 W	2270	SM	E008	15
	21 W	2160	E	E010	15
	32 W	3570	SM	E020	15
	32 W	3480	E	E022	15
	4000K - CRI 70 - Midnight				
	21 W	2270	SM	E032	15
	21 W	2160	E	E034	15
	31 W	3380	SM	E044	15
	31 W	3290	E	E046	15
	3000K - CRI 70				
	20 W	2200	SM	BY85	15
	20 W	2090	E	BY87	15
	31 W	3460	SM	BY97	15
	31 W	3370	E	BY99	15
	3000K - CRI 70 - DALI				
	21 W	2200	SM	E009	15
	21 W	2090	E	E011	15
	32 W	3460	SM	E021	15
	32 W	3370	E	E023	15
	3000K - CRI 70 - Midnight				
	21 W	2200	SM	E033	15
	21 W	2090	E	E035	15
	31 W	3270	SM	E045	15
	31 W	3190	E	E047	15

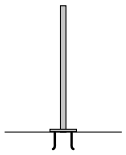
Installation systems and components

		code	colour
	**Adapter needed for pole installation** To be ordered together with the optical assembly		
	for ø 60 end	X102	15
	for ø 76 end	X126	15
	Pole adapter from ø 102 to ø 76	6134	15
	2-way connector with 2-pole terminal block IP68 Suitable for 2x2,5 mm² cables	BZK6	00

Cylindrical poles

	h off ground	ø pole	ø shank	code	colour
buried	2500	60		E062	15
	3500	60		E063	15
	4000	76	60	E064	15
	4000	76		1271	15
with plate	4000	76		1272	15

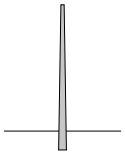


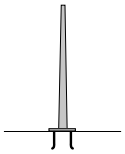


The technical features of poles are illustrated in the Product Book 2016 on page 457.

Conical poles

	h off ground	ø pole	code	colour
buried	4000	106-60	1275	15
with plate	4000	100-60	1278	15





Technical data may vary with technological evolution.
For updated data please refer to our on-line catalogue.

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For information and updates on the compatibility of the light sources available for the luminaires illustrated in this document, please refer to the instructions sheets available in the download area of the e-catalogue at www.iguzzini.com

These terms and conditions are valid as of 01.01.2016

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In any case iGuzzini will recognise customer's statutory rights.

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Notes

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