Catalog of Solutions hiLED





High performance lighting solutions

Since our foundation in 2000, our evolution has been based on a constant bet on quality and innovation, investing permanently on the investigation, design and development of new products and solutions. Our main goal is to achieve the maximum satisfaction of our clients, through the most innovative and rentable lightning solutions that allow achieving excellent results in a short amortization period, drastically reducing consumption and maintenance cost, without losing focus on our main target: illuminate.

Nowadays, "hiLED" is directly present in Spain, Portugal, Morocco and China, developing our activity in a global and constantly changing market what requires us to optimize constantly our improvement cycles. Our bet on "I+D+I", on the research of the best energy efficiency, allows us to be in the technical forefront, offering our customers real solutions, with real savings.

hiLED is composed by a team of more than 160 individuals, being that 92 of them are in the engineering department, I+D+I and technical support to customers. The service offered by "Hiled" is the result of the work of a group of professionals who are highly prepared and motivated and follows one and only objective: "the customer".

On an emerging market, where the oldest rules of lighting passed to history, "Hiled" is betting on introducing new technology, which allows getting control of real costs, always optimising the use of our energy solutions.



THE **E.S.E.** AND **REAL** SAVING

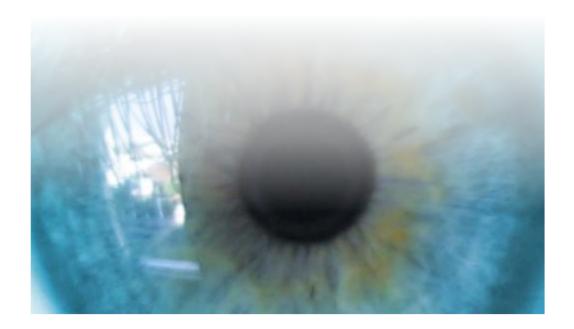
In Hiled, as an associate of ANESE (National Association of Energy Service Companies), we offer our customers the opportunity to change public lighting, through a careful selection of energy service companies. Significantly reducing implementation time, allowing any municipality to improve their public lighting, without any investment, and benefiting from significant reductions in their electricity bill, since the first day.

One of the factors that allow great energy savings is the possibility to modernize the already existent luminaries in the municipality, drastically reducing the investment. All Hiled lamps are complied with the strictest quality standards which are placed very above the minimum set by law.

The modernization of any kind of luminaries with our Hiled systems is a quick, easy and very effective process. After defining the objectives of luminosity: the height of the lamp, lighting area, lux, etc., our engineering department will analyze which is the best solution for a specific luminaire. The highly adaptable Hiled systems as well as its excellent design, allow modernizing any luminaire, even when it was not designed for our technology.

The heat dissipation problems, light emission, and drawing of the reflectors, doesn't exist when we are talking about modernizing a luminaire with the Hiled system. All our systems were designed to work even in the worst conditions of heat dissipation as Hiled System already incorporate its own emission and light reflection systems.

In most cases analyzed by our engineering department, the savings achieved by investing in the modernization of the city public lighting, eliminating the initial luminaries change, reached 40% of the investment. Allowing, this way, a drastic reduction on the amortization time and maximizing the real saving to the municipality.



LIGHT AND HUMAN SIGHT

How people see and is affected psychologically by light has been a research and discussion scheme since long time ago. Describing light as "lumens" and measuring it as "luxes on surface" has been the traditional method of description and definition of how much light is needed to carry out diverse activities.

However, this is being redefined by the results of the researches in visual effects and psychological impacts of the light. The chromatic performance rate and the color of temperature correlationated also start to be part of the description of the quality of any light. With the advance of the lighting technology, with different colors and types of lights, the simply measure of lumens cannot predict the vision quality for a human.

For example, a low pressure sodium lamp can generate a high quantity of lumens, but only can reveal two colors (yellow and grey). With this light, it can only be revealed the shape of an object, without revealing the most important thing, the detail of the object. The human vision is affected by many factors, from lighting intensity, distribution or color, to contrast, reflection, dazzle, aerial quality, position and movement of the object etc. Our eyes use different parts to see the object at high light conditions or low light conditions.

Human eyes have cones and rods which have been designed to work in opposite conditions.

CONVERSION FACTOR BETWEEN CONVENTIONAL LUMINOUS FLUX AND PUPIL LUMINOUS FLUX.

Lamp type	Conventional Im/w	Correction factor	Pupil luminous flux (PLm/W)
hiLED Led lamp	125	1,59	199
hiLED Induction lamp	92	1,62	149
Metal Halide	75	1,36	102
Fluorescent Tube 5000K	68	1,48	101
VS High Pressure lamp	115	0,57	66
VS Low Pressure lamp	165	0,38	63
Mercury Steam lamp	45	0,88	40
Tungsten-Halogen Lamp	22	1,32	29 ////
Incandescent usual lamp	15	1,26	19////

Correction factor applies on the conversion of conventional lumen per watt to pupil lumen per watt, which is the method which human eyes see the emitting light. Pupil is more receptive to the blue light in the spectrum edge.

The cones provide the color vision and detail in high light conditions and the rods make it in low light conditions. In high light conditions, our pupils are contracted, observing more details of the object, while the field depth and the brightness also grow. In low light conditions, pupils are dilated to allow more entry of light.

Optical and lighting levels measuring instruments recommended have been calibrated traditionally for daytime seeing, and indoor lighting in general. However, so many researches prove that the theory of vision under high light conditions and

low light conditions is applied more than considered.

In lots of recent references, researchers encourage the lighting designers to specify the reason between high light conditions and low light conditions (Reason F/E) when lamps were chosen to have more design and visual efficiency to the customers.

Sam Berman, member of the Lawrence Berkeley laboratory lighting research group, is one of the researchers who insist in applying the reason F/E in the lamp selection. Applying the reason F/E, he developed a conversion factor which obtained the efficient lumen perceived by human eyes in different conditions of pupil size and visual effects by the exit of the different lamps. Some lamps, like low pressure sodium lamps, lose the main lumen flux exit applying this theory, while in the HiLed lamp, the effect is ideal.

hiLED LED SYSTEM

The high energy efficiency achieved with current technology of light emitting diodes, has allowed to put in a small surface area a large number of emitters of this kind with a high luminous efficiency. High power Led technology incorporating Hiled sytems evolves every day, what allows achieving luminous fluxes that were unimaginable three years ago, with this type of equipment.

The evolution marked by Hiled, not only allowed a substantial increase in emitted light pottency, but has also achieved remarkable reductions in the core temperature of the light source, significantly increasing the effectiveness and the duration of our solutions.

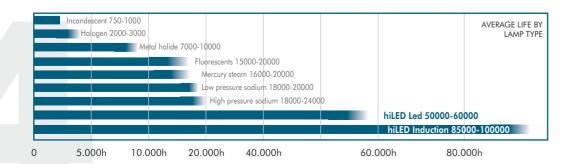
It is important to highlight that the temperature achieved by Hiled's LED system in a 25° ambient temperature, never exceeds the junction temperature of 60°, which guarantees the optimization of its useful life, as supported by our guarantee certificate.

CHARACTERISTICS

- Efficiency: > 125 Lm/W
- Junction Temperature T_i: <60°C (to 25°C room temperature).
- Life: Average life of HiLed system exceeds 50.000 hours.
- Maintenance: It doesn't need it. It does not have any mobile nor adjustable pieces.
- Luminosity lost: Less than 20% in 50.000 hours.
- Power supply efficiency: Over 93%.
- Color Temperature: 3.000K and 4.500K
- Luminous flux: Between -40% and +80% of nominal, without color of temperature change (PWM regulation).
- Luminous flux orientation: 360° x 140°.
- Time for obtaining 100% flux: Less than 1 second.
- Color rendering Index: >85.
- **Reactive Energy:** Generates no additional charge (Φ>0.95).

LAMP'S CHARACTERISTICS COMPARATIVE

	VS High Pressure	Mercury Steam	Halide Metal	hiLED Led	hiLED Inducción
Using life	18.000~24.000h	16.000~20.000h	7.000~10.000h	+50.000h	+100.000h
Color Temperature	2.000K~2.200K	3.000K~4.000K	3.000K~6.000K	3.000K & 4.500K	3.000K & 4.500K
Performance	100~130 Lm/W	45~65 Lm/W	70~90 Lm/W	>125 Lm/W	>92 Lm/W
Switching on Speed	720 to 900 seg.	300 to 360 seg.	600 to 720 seg.	<0,5 seg.	<240 seg.
CRI	20 to 25	45 to 50	65 to 80	>85	>83



hiLED INDUCTION SYSTEM

hiLED induction lamps allow power savings of up to 70%. With our technology, lighting is a new element in a power saving and efficiency increase strategy. High quality lighting increases user satisfaction, remarkably increasing eyesight quality.

hiLED induction lamps include a lifetime of up to 100.000 hours, high lighting efficiency with a chromatic reproduction rate above 83, and high reliability, besides allowing a instant relighting.

The operation principle of induction hiLED lamps improves and enhances the standards of low consumption lamps and conventional fluorescents. In hiLED induction lamps, the discharge to generate light doesn't take place between the electrodes but through the electromagnets, having no communication between the inside and the outside of the lamp, as opposite to conventional lamps. The energy is injected through ferrite rings from the outside of the lamp using electromagnetic fields.

As the biggest advantages induction hiLED lamps have, we can highlight:

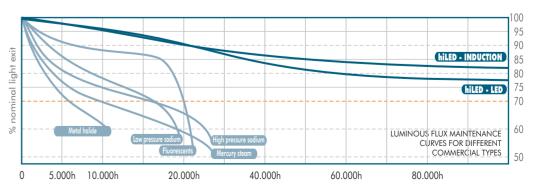
- Lifetime of more than 100.000 hours.
- High lighting flux, above 90 lumens per watt.
- Instant light up and relighting without flickering.
- High lighting efficiency with superior light quality having a IRC above 83.
- Supports extreme working temperatures, from -20°C to 60°C.
- Solid state mercury content inferior to 5mg.

CHARACTERISTICS

- INDUCTION

hiLED

- Efficiency: >92 Lm/W
- Life: Average life of HiLed system exceeds 100.000 hours.
- Maintenance: It doesn't need it. It does not have any mobile nor adjustable pieces.
- Luminosity lost: Less than 20% in 100.000 hours.
- Power supply efficiency: Under 20% in 100.000 hours.
- Color Temperature: 3.000K and 5.000K
- Time for obtaining 80% flux: Less than 1 second.
- Time for obtaining 100% flux: Around 240 seconds.
- Color rendering index: >83
- **Reactive energy:** Low consumption ($\phi > 0.95$).



hiLED DAVID 7

DAVID 7 high efficiency lamp family, supported by High Power Led technology, were designed to have in a single solution, high lighting performance with low consumption and excellent lifetime expectancy. Our patented thermal dissipation design along with the most strict manufacturing process, allows us to offer a extremely efficient and lasting product for outside lighting solutions.

The range of patented reflectors used in hiLED DAVID 7 lamps, along with potency regulation possibility, allows us to adapt our product to the specific needs of each lighting point within a installation.

DAVID 7 family of lamps are manufactured in a brushed specular aluminium reflector, high power heat transmission injected aliminium body and optic cover in polycarbonate.

hiLED DAVID 7 lamps include also several protections against overcurrent and overheating, a series of operation modes that allow to adjust precisely the night time behavior of the lamp, allowing power saying of up to 50%, during a certain amount of time optimizing consumption and amortization rate.

CHARACTERISTICS DAVID 7

Lamp dimensions: 320 x 320 x 125 mm Lamp weight: 2 Kg

> Input voltage: 170~265 VAC Power factor: >0.95

Emission the upper hemisphere: 0%

Lamp Efficiency: >125 Lm/W Color temperature: 3.000K and 4.500K

Color rendering index: Ra>85 Orientation flux luminous: 360° x 140°

Obtain 100% flux: <1 sea. Working temperature: -30°C a 85°C

Junction temperature Tj: <60°C (T_{amb} = 25°C) Working humidity: 10% a 95% RH

Electric shock protection: Class I Average life: >50.000 h Protection levels: IP 66 / IK 07

REFERENCES

Code	Description
HI 3151	David 7, 20w to 50W, 4 sides.
HI 3158	David 7, 20w to 50W, 3 sides + wall.
HI 3159	David 7, 20w to 50W, 2 sides + wall.
HI 3181	David 7, 20w to 80W, 4 sides.
HI 3188	David 7, 20w to 80W, 3 sides + wall.
HI 3189	David 7, 20w to 80W, 2 sides + wall.
HI 3190	David 7, 20w to 80W, PS2C.
HI 0110	Villa luminarie with methacrylate honeycomb savers

The same code ending in "C" indicates that the color temperature is warm



CHARACTERISTIC URBAN VILLA

Light source: David 7 Lamp weight: 10 Kg.

Luminaire dimensions: 730 x 440 x 440 mm. Protection levels: IP 66 / IK 08

Luminaire performance: 82% Emission the upper hemisphere: <2%



REFERENCES

Code	Description
HI 0151	Urban Villa David7 luminaire 4S, 20W to 50W.
HI 0158	Urban Villa David7 luminaire 3S+W, 20W to 50W.
HI 0159	Urban Villa David7 luminaire 2S+W, 20W to 50W.
HI 0181	Urban Villa David7 luminaire 4S, 20W to 80W.
HI 0188	Urban Villa David7 luminaire 3S+W, 20W to 80W.
HI 0189	Urban Villa David7 luminaire 2S+W, 20W to 80W.
HI 0190	Urban Villa David7 luminaire PS2S, 20W to 80W.

The same code ending in "C" indicates that the color temperature is warr

VIALES hiLED VL

VIALES hiLED VL lamp holders include last generation "High Power Led" systems, adapting a series of high purity (96%) glass lens with very low absorption (5%). Our lamp holders VIALES hiLED VL present a diverging asymmetric geometry generating a wider and uniform light beam, allowing to reach excellent homogeneity rates, even at high distances.

The case of the VILES hiLED lamp holder is totally manufactured in aluminium. Its lens are small and are applied in the bottom surface of the lamp holder, and thanks to its protective design allows larger cleaning cycles, significantly reducing maintenance costs.

We include the best power systems with special protection against overcurrent, usual in public power distribution networks. Thanks to these systems, VIALES hiLED VL lamp holders allow power consumption optimization by including a system that enables increasing or reducing the working power, adapting to its illumination zone.

All our hiLED led systems include additional different protections against overcurrent and overheating, a series of operation modes that allow to adjust precisely the night time behavior of the lamp, allowing power sayings of up to 50%, during a certain amount of time optimizing consumptions and amortization rate.

CHARACTERISTICS

Luminaire weight: 12 Kg.

Luminaire dimensions: 800 x 330 x 150 mm.

Input voltage: 170~265 VAC

Powerfactor: >0.95

Lamp Efficiency: >125 Lm/W

Color temperature: 3.000K and 4.500K

Color rendering index: Ra>85 Obtain 100% flux: <1 seq.

Junction temperature Ti: <60°C (T_{cmb} = 25°C)

Working humidity: 10% a 95% RH Working temperature: -20°C a 80°C

Life: >50.000 h

Protection levels: IP 66 / IK 08

Luminaire performance: 95% Emission the upper hemisphere: 0%

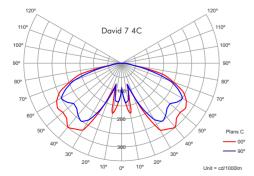
Electric shock protection: Class I

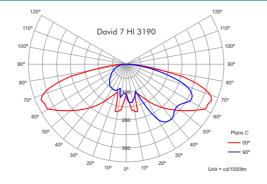


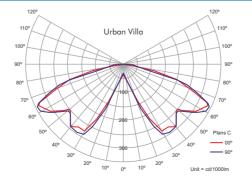
REFERENCES

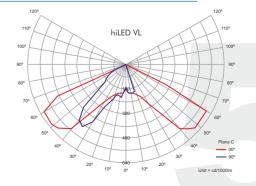
Code	Description	Color temperature
VL 9010 VL 9020	Vial hiLED VL Luminaire adjustable power 20 to 100W Vial hiLED VL Luminaire adjustable power 40 to 200W	4500 K 4500 K

The same code ending in "C" indicates that the color temperature is wan









hiLED SFERA

High efficiency lamp hiLED SFERA is designed to be used in any Globe type lamp holder in the market.

hiLED SFERA's design and its patented reflection system were designed with the purpose of generating an optimal light field and avoid lighting contamination, delivering the maximum available lighting with the biggest power efficiency at the installation.

hiLED SFERA family of lamps are manufactured in a brushed specular aluminium reflector, high power heat transmission injected aliminium body and high resistance optic cover in polycarbonate.

CHARACTERISTICS

Lamp weight: 2 Kg

Input voltage: 170~265 VAC

Power factor: >0.95

Emission the upper hemisphere: 0%

Lamp Efficiency: >125 Lm/W

Power supply efficiency: >0.93

Color temperature: 3.000K and 4.500K

Color rendering index: Ra>85 Obtain 100% flux: <1 seg.

Working temperature: -30°C a 85°C

Junction temperature T_i : <60°C (T_{amb} = 25°C) Working humidity: 10% a 95% RH

> Average life: >50.000 h Protection levels: IP 66 / IK 08

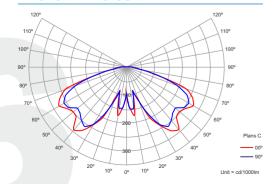


REFERENCES

Code	Description
HI 3250	Sfera lamp for spherical luminaries, adjustable up to 50W
HI 3280	Sfera lamp for spherical luminaries, adjustable up to 80W
HI 0120	Spherical luminarie

The same code ending in "C" indicates that the color temperature is warm

PHOTOMETRIC CURVE





hiLED CYRUS

High efficiency lamp hiLED CYRUS for lamp holders "Fernandina" type, is designed to be used in any "Fernandina" type lamp holder in the market, thus modernizing one of the most classic and historical lamp holders, adapting it to the new generation of urban lighting elements.

It's design and patented reflection system, adapts to different lamp holder supports and situations, creating a homogenous light field. Minimizes light projection to the top hemisphere, avoiding lighting contamination. They are manufactured in a brushed specular aluminium reflector, high power heat transmission injected aliminium body and optic cover in high resistance ANTI-UVA polycarbonate.

All of our hiLED led systems, include different protections against overcurrent and overheating, and a series of operation modes that allow to adjust precisely the night time behavior of the lamp, allowing power saving of up to 50%, during a certain amount of time optimizing consumption and amortization rate.

CHARACTERISTICS

Lamp weight: 2 Kg

Input voltage: 170~265 VAC

Powerfactor: >0.95

Emission the upper hemisphere: 0%

Lamp Efficiency: >125 Lm/W

Power supply efficiency: >0.93

Color temperature: 3.000K and 4.500K

Color rendering index: Ra>85

Obtain 100% flux: <1 seg.

Working temperature: -30°C a 85°C

Junction temperature Tj: $<60^{\circ}$ C ($T_{amb}=25^{\circ}$ C)

Working humidity: 10% a 95% RH

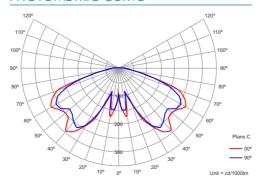
Average life: >50.000 h

Protection levels: IP 66 / IK 08

REFERENCES

Code	Description
HI 3350	Sfera lamp for spherical luminaries, adjustable up to 50W IP66
HI 3380	Sfera lamp for spherical luminaries, adjustable up to 80W IP66
HI 0130	Fernandina luminaire with murano methacrylate protectors

The same code ending in "C" indicates that the color temperature is warm





hiLED TORNADO

The TORNADO luminaries are made of aluminum and polycarbonate translucent diffuser with fixing base for anodized aluminum column and with 60-76mm of diameters.

Thanks to its outer casing and internal reflection assembly prevents light pollution of the night sky, creating a natural and pleasant environment.

The TORNADO luminaire is supplied with hILED Magnetic Induction lamp, in powers ranging from 40 W to 100 W.

CHARACTERISTICS

Weight: 5,5 Kg External diameter: Ø 600 mm

Height: 460 mm
Assembly Height: 3 to 5 meters
Input voltage: 150~265 V AC

Power factor: >0.95 Lamp Efficiency: >92 Lm/W Power supply efficiency: >0.93

Color temperature: 3.000K and 4.500K

Color rendering index: Ra>83
Obtain 80% flux: <1 seg.
Obtain 100% flux: <240 seg.
Working temperature: -20°C a 60°C
Working humidity: 10% to 90% RH
Average life: >100.000 h
Protection levels: IP54 / IK08

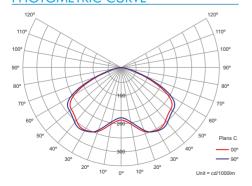
Electric shock protection: Class I

REFERENCES

Code	Description
HI 4740	Tornado luminarie with 40W HiLED Magnetic Induction lamp
HI 4755	Tornado luminarie with 50W HiLED Magnetic Induction lamp E27 screw
HI 4760	Tornado luminarie with 60W HiLED Magnetic Induction lamp
HI 4780	Tornado luminarie with 80W HiLED Magnetic Induction lamp
HI 4700	Tornado luminarie with 100W HiLED Magnetic Induction lamp
HI 0170	Tornado luminarie

The same code ending in "C" indicates that the color temperature is warm

PHOTOMETRIC CURVE





hiLED INDUSTRY

Luminaries with industrial design made of premium aluminum, with high pressure and closing tempered glass optics and with magnetic induction lamp with bulkhead deck and tempered glass lens.

Specially designed for installation in placement like sport centers low ceilings, industrial buildings, warehouses, supermarkets, etc.

The hILED Industry luminaries is made in compliance with all European quality and safety standards of both fixtures, Luminaries and Lamps.

CHARACTERISTICS

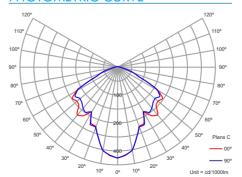
Weight: 6 Kg External diameter: Ø 524 mm Height: 491 mm Assembly Height: 5 to 12 meters Input voltage: 85 ~ 265 VAC Power factor: >0.95 Lamp Efficiency: >92 Lm/W Power supply efficiency: >0.93 Color temperature: 4.500K Color rendering index: Ra>83 Orientation flux luminous: 360° x 120° Obtain 80% flux: <1 seq. Obtain 100% flux: <240 seg. Working temperature: -20°C to 60°C Working humidity: 10% to 90% RH Average life: >100.000 h Protection levels: IP40 / IK09

Electric shock protection: Class I

REFERENCES

Code	Description
111 41 0 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HI 4104	Industry luminarie with 40W hiLED Magnetic Induction lamp
HI 4106	Industry luminarie with 60W hiLED Magnetic Induction lamp
HI 4108	Industry luminarie with 80W hiLED Magnetic Induction lamp
HI 4112	Industry luminarie with 120W hiLED Magnetic Induction lamp
HI 4115	Industry luminarie with 150W hiLED Magnetic Induction lamp
HI 4120	Industry luminarie with 200W hiLED Magnetic Induction lamp
HI 4130	Industry luminarie with 300W hiLED Magnetic Induction lamp

The same code ending in "C" indicates that the color temperature is warm





hiLED VIALES INDUCTION

The family of lighting luminaries are designed to meet many lighting applications, from major and minor urban roads to pedestrian spaces, under the strictest quality standards.

The hILED families of Vials luminaries are manufactured from injected aluminum, anodized aluminum reflector and the refractor closing is in prismatic glass with seal silicone rubber.

Inside the luminaries it's incorporated a hILED lamp, with magnetic induction and powers ranging from 40 W to 100 W.

LUMINAIRE CHARACTERISTIC

	VIALI	VIALII	VIALIII	VIAL IV
Weight:	5,5 Kg	6,2 Kg	7,5 Kg	8,2 Kg
Dimensions in c.m.:	53x23,8x20,7	56x27x20	67x33,5x28	71x34x23
Coupling type:	Horiz.	Vert./Horiz.	Horiz.	Vert./Horiz.
Column diameter engages in m.m.:	48	60	48-60	60 - 76
Assembly Height in meters:	6 to 9	6 to 12	8 to 10	9 to 14
Optical block:		Set Induc	tion hiLED	
Power supply:		Elect	ronics	
Emission the upper hemisphere:	<5%	<1%	<5%	<0%
Optical block protection levels:	IP55 / IK07	IP65/IK07	IP54/IK07	IP65/IK07
Electric shock protection:		Clo	ass I	
Intake system:	40~60W	40~80W	60~80W	80~100W

LIGHT SOURCE CHARACTERISTICS

Input voltage: 150-265 VAC Power factor: > 0.95

Lamp Efficiency: >92 lm/W

Color temperature: 3.000K and 4.500K Color rendering index: Ra > 83 Obtain 80% flux: < 1 seg

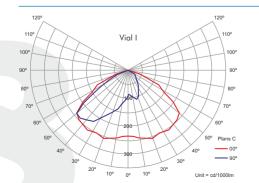
Obtain 100% flux: < 240 seg
Working temperature: -20° to 60°
Working humidity: 10% to 90% RH
Average life: > 100.000 h

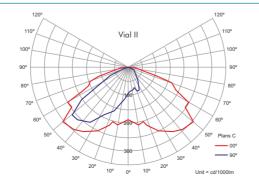
REFERENCES

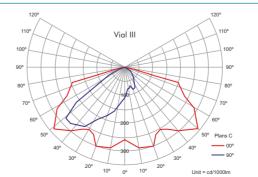
Description
Vial I hiLED luminarie 40W Induction
Vial I hiLED luminarie 60W Induction
Vial II hiLED luminarie 40W Induction
Vial II hiLED luminarie 60W Induction
Vial II hiLED luminarie 80W Induction
Vial III hiLED luminarie 80W Induction
Vial IV hiLED luminarie 100W Induction

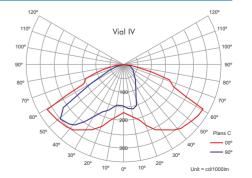
The same code ending in "C" indicates that the color temperature is warm











hiLED INDUCTION

The structure of the hiLED sets with magnetic induction, with or without built-E40, is an excellent and easy solution for a rapid replacement of outdoor lighting fixtures and industrial

The magnetic induction hiLED lamps are made meeting all quality standards and European safety.

Our engineering department is available to optimize any hiLED solutions to their particular situation.

hiLED TUBOS LED

The last generation hiLED Tubes are made of aluminum and polycarbonate and designed to immediately replace the older and simple fluorescent tubes. His long life and high light output tubes make the hiLED a profitable investment, for interior lighting and an excellent solution from the point of view of energy saving.

The hiLED Tubes are manufactured, meeting all quality standards and European security. Available in different sizes, with color cold temperature and acid coating.

TECHNICAL DATA

Input voltage: 150~265 VAC Power factor: >0.95 Lamp Efficiency: >92 Lm/W Color temperature: 3.000K y 4.500K Color rendering index: Ra>83

Obtención 80% del flujo: <1 seg. Obtain 100% flux: <240 seg. Working room temperature: -20°C a 60°C Working humidity: 10% a 90% RH

Average life: >100.000 h Available powers: 40W ~ 300W

REFERENCES

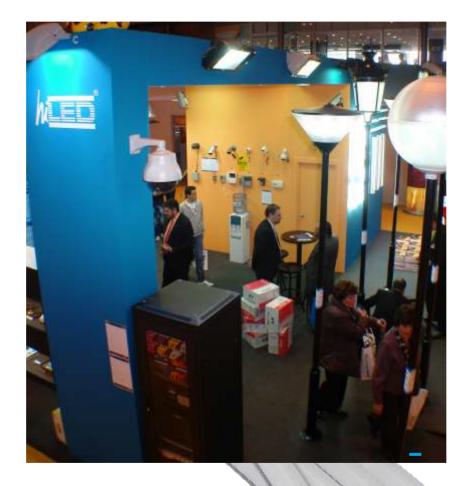
Code	Description induction rectangular
HI 7204	Rectangular set hiLED Magnetic Induction 40W
HI 7206	Rectangular set hiLED Magnetic Induction 60W
HI 7208	Rectangular set hiLED Magnetic Induction 80W
HI 7210	Rectangular set hiLED Magnetic Induction 100W
HI 7212	Rectangular set hiLED Magnetic Induction 120W
HI 7215	Rectangular set hiLED Magnetic Induction 150W
HI 7220	Rectangular set hiLED Magnetic Induction 200W
HI 7225	Rectangular set hiLED Magnetic Induction 250W
HI 7230	Rectangular set hiLED Magnetic Induction 300W
The same code endin	g in "C" indicates that the color temperature is warm

Code	Description induction Circular				
HI 7804	Circular set hiLED Magnetic Induction 40W, E40				
HI 7806	Circular set hiLED Magnetic Induction 60W, E40				
HI 7808	Circular set hiLED Magnetic Induction 80W, E40				
HI 7810	Circular set hiLED Magnetic Induction 100W, E40				
HI 7812	Circular set hiLED Magnetic Induction 120W, E40				
HI 7815	Circular set hiLED Magnetic Induction 150W, E40				
HI 7820	Circular set hiLED Magnetic Induction 200W, E40				
HI 7825	Circular set hiLED Magnetic Induction 250W, E40				
HI 7830	Circular set hiLED Magnetic Induction 300W, E40				

The same code ending in "C" indicates that the color temperature is warm







TECHNICAL DATA

Diameter: T8

Length: 900, 1200 y 1500 mm.

Case type: acid

Input voltage: 170~265 VAC Frequency: 50~60 Hz

Power factor: >0.95

Color temperaturer: 5.700 K Color rendering index: Ra>85

Obtain 100% flux: <1 sea. Working temperature: -30°C a 85°C

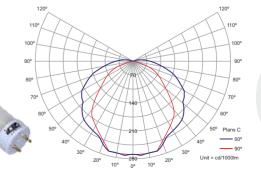
Working humidity: 10% a 95% RH Average life: >50.000 h

Efficiency: 83-90 Lm/W

Range of available powers: 10W-12W-14W-18W-22W

REFERENCES

Code	Length	Power	Luminous flux	Efficiency	Built
HI 9101	600 mm	10 W	900 lm	90 lm/w	G13
HI 9110	900 mm	12 W	995 lm	83 lm/w	G13
HI 9120	1200 mm	14 W	1210 lm	86 lm/w	G13
HI 9125	1200 mm	18 W	1590 lm	88 lm/w	G13
HI 9130	1500 mm	22 W	1985 lm	90 lm/w	G13











The logos and trademarks used are copyright of their respective owners. The images are approximate and may vary without notice.