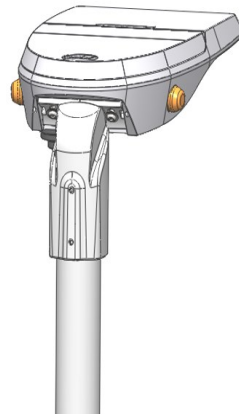


Veka S



Veka S PP
Pedestrian crossing



KEY ADVANTAGES

- Up to 5 fixations.
- Tool-free access from the top
- Durability and sturdiness: IP66 + IK10.
- Die Cast aluminium (Cu<0.1%).
- Energy Efficient:
GEN1: 155lm /W
GENA: 168lm/W
- Up to 17 optical distributions.
- Smart Ready: Designed to house both indoor and outdoor communication nodes.
- Future Proof: Zhaga-compliant.
- Lifetime L90B10 100.000h (T_A^a) 25Å°C.
- Night Friendly: ULR Arr^a du 27/12/ 2018.
- High speed Sensor capability.
- 5 years warranty.



IP66



IK10 Veka S
IK08 Veka S PP



CI



CII



RAL 9006B
Smooth Gloss
Veka S



RAL 9016B
Smooth Gloss
Veka S PP



Marine finish
(RAL M9006B)

Dark-Sky Association certification
≤ 3.000K not available for 4.000K.
Mechanical adjustment: max. + or - 15
degrees to allow leveling in the field.



DESCRIPTION

Veka is the new luminaire family for public street lighting by Carandini. Its elegant design, latest generation LED technology and optical distributions make it a high quality solution for urban streets, secondary roads, motorways, residential streets, car parks and bike lanes.



STANDARDS / CERTIFICATES

- CE
- RoHS
- UNE-EN 60598-1
- UNE-EN 60598-2-3
- UNE-EN 62471:2009
- UNE-EN 61000-3-2
- UNE-EN 61000-3-3
- UNE-EN 55015
- UNE-EN 61547
- UNE-EN 62031
- UNE-EN 61347-2-13
- UNE-EN 62384
- UNE-EN 13032-4
- UNE-EN ISO 9227 NSS: 2017 (1,000 h)



GEN1:
1.252lm - 13.407lm
GENA:
1.548lm - 14.750lm



PT: 0.04006m²
SE: 0.03402m²
FM: 0.03213m²



GEN1:155lm /W
GENA: 168lm/W
Luminaire



-40°C - +55°C



6 Kg



0,0%



Tool-less
access to
control gear

220 - 240V / 100V - 277V
50-60Hz
L90B10 100,000 h
Ta 25 °C

C. & G CARANDINI, S.A.U.

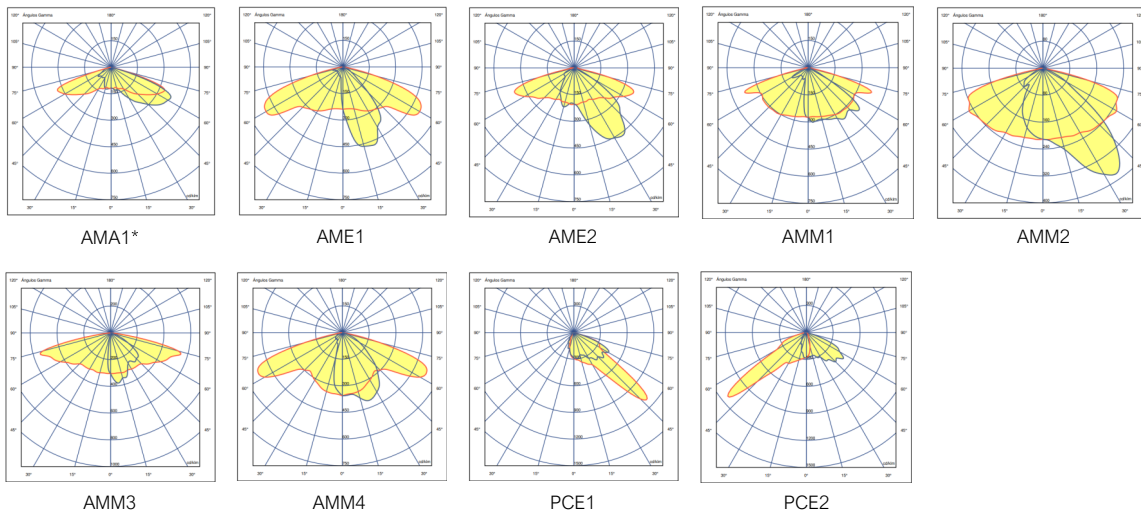
-carandini@carandini.com - www.carandini.com

veka

PHOTOMETRIC DISTRIBUTIONS

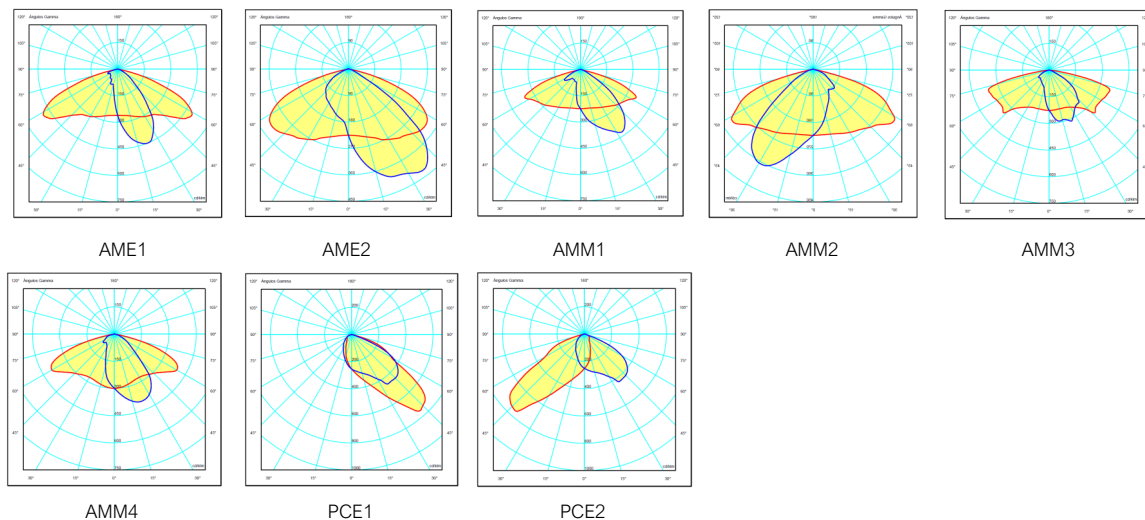
GEN1

It has the 9 photometric distributions used for the environments in which this type of luminaire is installed, allows it to adapt to all needs:



GENA

It has the 8 photometric distributions used for the environments in which this type of luminaire is installed, allows it to adapt to all needs:



APPLICATIONS

Urban streets, secondary roads, residential streets, car parks and bike lanes.



VEKA S CHARACTERISTICS

GENERAL INFORMATION

Sustainability	Valorisation: 99,38% Carbon footprint per use: 0,026677Kg kW/h de CO2
CE mark	Yes
ENEC Certificate	Yes
RoHS-compliant	Yes
Testing standards	LM 79-80 (all measurements at ISO17025 certified laboratory)

GENERAL CHARACTERISTICS

Body and mounting	Die cast aluminum EN AC-44100 with low copper content <0.1%.
Closure	Tempered glass 5mm
Nuts outer and bolts	Stainless steel (AISI304).
Watertightness	IP66 (EN 60598-1 and EN 60529)
Impact protection grade	IK10 (Veka) (EN 62262) IK08 (Veka S PP)
Operating temperature	Ta -40 °C a +50 °C According to luminaire configuration.
Lifetime	L90B10 100,000h at Ta of 25°C. Light maintenance assessments to TM-21 based on LM-80 data.
Cable	Class I/II Cable from 4 to 8 metres Cross-section: 2x1.5 ; 3x1.5 ; 4x1.5 ; 5x1.5; 2x2.5; 3x2.5

ELECTRICAL CHARACTERISTICS


Electrical class	Class I o Class II
Voltage / Frequency	220V - 240V / 50Hz - 60Hz Optional 120V - 277V
Power factor	> 0,9
Harmonic distortion	< 15%
Surge protector	Surge protection (1.2 / 50) 10 kV. Maximum current (8/20) 10kA. Maximum voltage (L-N) 320 V. Maximum voltage (L / N-GND) 400 V. Optional overvoltage protection: 20kA, 20kV

LIGHTING CHARACTERISTICS


Package real light	GEN 1: 1,578 lm to 13,958 lm (12 - 112W) 155lm /W GENA: 1.500lm to 16.000lm (12 - 112W) 168lm/W
LED colour temperature	4,000K (Neutral White, nw). 3,000K (Warm White, ww). 2,700K (Warm White, ww). 2,200K (Warm White, ww). Optionally amber color temperature.
Index of reproduction chromatic (CRI)	CRI>70. Optional CRI80.
LEDs	Includes 16, 24, 36 and 48 LEDs.
FHS/ULR	0,0%
Optics	PMMA polymethylmethacrylate.
Photometric distributions	AMA1=> Throw 70° Spread 65° (Type IV) AME1=> Throw 65° Spread 15° (Type I) AME2=> Throw 70° Spread 35° (Type II) AMM1=> Throw 70° Spread 35°/50° (Type III) AMM2=> Throw 60° Spread 35° (Type II) AMM3=> Throw 75° Spread 5°/20° (Type III) AMM4=> Throw 65° Spread 20° (Type II) PCE1=> Throw 50° Spread 55°/60° (Type III) PCE2=> Throw 50° Spread 45°/55° (Type II)
LED thermal control	Heat dissipation by conduction through the specific design for this luminaire, since it has been specifically designed for LED technology. (Heatsink).

FINISHES

PREDEFINED COLOUR OF THE LUMINAIRE

 RAL 9006	Grey polyester powder coat paint RAL 9006 Smooth Gloss (9006B).
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Corrosion protection

 SEA SIDE SOFTABLE	Marine Finish (1.000h)
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VEKA S CHARACTERISTICS

MAINTENANCE AND ASSEMBLY

Installation and maintenance	Tool-free luminaire access system designed by Carandini. Access to the driver from the top.
Fixation	PT1: Vertical fixation \varnothing 76mm.* SE1: Lateral fixation \varnothing 34/42mm. SE2: Lateral fixation \varnothing 49/60mm. FM1: Wall fixation . Includes bracket for direct installation on wall. FT1: Ceiling fixation. Incorporates bracket for direct ceiling mounting. * The PT1 fixation shall be supplied horizontally mounted with SE for sustainability. *The FT1 fixation will be supplied semi-assembled.
Mechanical adjustment	Vertical and lateral fixation offers an angle of inclination range of $\pm 10^\circ$ every 2.5° . The bracket for wall installation offers a range of inclination of $\pm 40^\circ$ every 2.5° .
Equipped weight	PT1: 6,2 Kg SE1: 5,7 Kg / SE2: 6 Kg FM1: 5,9 Kg
Wind Surf.	PT: 0,1m ² SE: 0,11m ² FM: 0,1m ² FT: 0,1m ²
Pressure compensation valve	The integration of the valve extends the projected life of the joints and internal parts by reducing the pressure that is exerted on them and prevents moisture from entering the interior that can cause condensation.

MANAGEMENT AND CONTROL

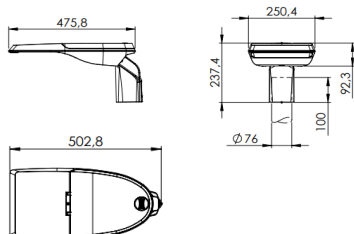
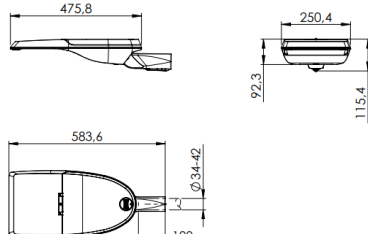
Equipment	1N: 1 Level RC: Controller dimmed RD: DALI AF: 1 - 10 V RL: Pulse adjustable LED 2N: 2 Level SR: Smart Ready (D4i)
Autonomous regulation	Regulations programmed from the factory: 56: 50% of the 24: 00h at 6: 00h. 66: 60% of the 24: 00h at 6: 00h. 76: 70% of the 24: 00h at 6: 00h. SC: Programming according to client.
CLO regulation	Flow rate during the life of the product: 7: 70% luminous flux throughout the life of the luminaire. 8: 80% luminous flux throughout the life of the luminaire. 9: 90% luminous flux throughout the life of the luminaire.
Socket connection	3-U: NEMA 3 pin socket with/without IP66 cover. 5-V: NEMA 5 pin socket with/without IP66 cover. 7-W: NEMA 7 pin socket with/without IP66 cover. X: Larger Zhaga socket with/without IP66 cover. O-Y: Smaller Zhaga socket with/without IP66 cover. P-Q: Smaller/larger Zhaga socket with/without IP66 cover.
Sensor	1: Photocell for NEMA 3, 5 and 7 pin socket (20 lux) 2: Photocell for larger Zhaga socket (20 lux) 3: Motion sensor for smaller Zhaga socket. 4: Photocell for larger Zhaga socket (20 lux) and motion sensor for smaller Zhaga socket.
Node	ON: Controlux One BS: Controlux Basic Pedestrian crossing: Controlux Sense

ACCESSORIES

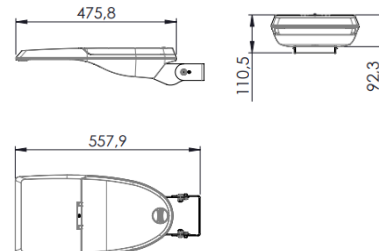
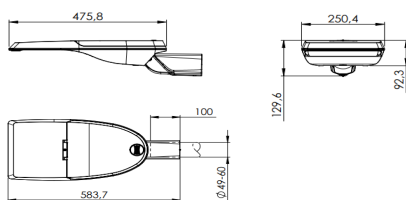
Optional pre- or post-installation shielding for these luminaires



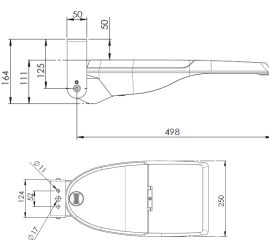
DIMENSIONS

Vertical fixation \varnothing 76 mm (PT1)Lateral fixation \varnothing 34/42 mm (SE1)

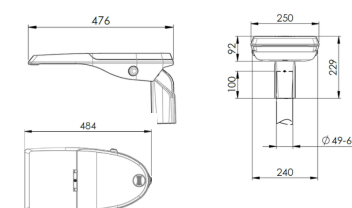
Wall fixation. Bracket included (FM1)

Lateral fixation \varnothing 49/60 mm (SE2)

Ceiling fixation. Includes bracket for direct installation on wall. (FT1)



Pedestrian crossings



C. & G CARANDINI, S.A.U.

-carandini@carandini.com - www.carandini.com

LOGISTICAL INFORMATION

PT

Box dimensions: 515 x 260 x 275 mm

Box weight: 6.2 kg

Number of boxes: 36 units

American pallet: 1200 x 800 x 1850 mm

Number of levels: 6 levels

Surface area used: 83.7%

Volume used: 76.7%

Total gross weight: 243 kg

NOTE: By sustainability reasons PT1 & PT2 fixing accessories will be supplied assembled by side entry (SE)

SE

Box dimensions: 630 x 290 x 170 mm

Box weight: 6.2 kg

Number of boxes: 36 units

American pallet: 1200 x 800 x 1500 mm

Number of levels: 7 levels

Surface area used: 76%

Volume used: 73%

Total gross weight: 210 kg

VEKA S PP OPTION (PEDESTRIAN CROSSINGS)

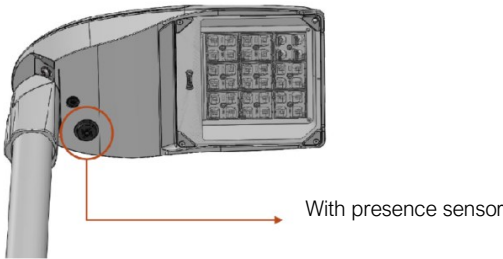
The Veka S PP luminaire has a simple, elegant design that harmoniously blends into the road and offers lighting that attracts the driver's attention, increasing the pedestrian's horizontal and vertical field of vision.

It has cutting-edge LED technology and its optics create a feeling of safety on streets and roads at night time, directing light where it is needed.

Veka S PP is the evolution of new technologies in accordance with the new lighting level and energy regulation. What's more, there is now the possibility of including not only flashing lights but also motion sensors that either operate independently or are integrated into city control systems (Controlux)

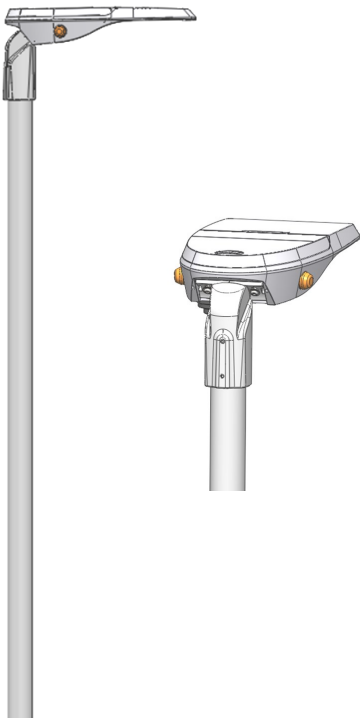
KEY BENEFITS

- Flashing pedestrian presence warning light.
- Increased pedestrian visibility.
- Specific optics for pedestrians (PCE1 and PCE2).
- Optional built-in presence sensor.
- Improved LED technology and materials.
- Maintenance from the top.

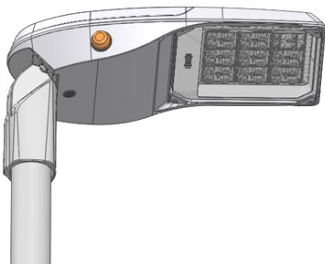


IMAGES

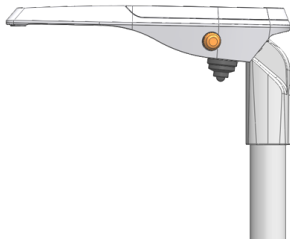
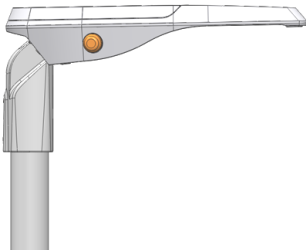
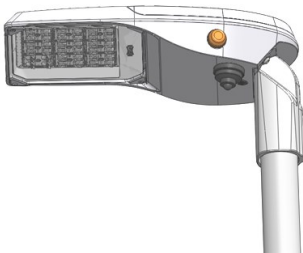
Veka S PP



No presence sensor



With presence sensor



MOTION SENSOR

The FDP sensor series allows your fixture to participate in the internet-of-things (IoT) revolution. This sensor family features bi-directional communication between sensor and driver, enabling connected systems for smarter, more energy efficient and data-driven applications. The FDP sensor series is compatible with various intelligent drivers. By connecting to an intelligent driver, the FDP sensor series does not need its own power supply which will save cost and space inside the luminaire.

CHARACTERISTICS

- SR-certified by Philips (FDP-301SR only)*
- 4 pin connector (for Zhaga book 18 socket installation)
- DALI 103 and 303* compatible (FDP-301 only)
- High or low trim fully adjustable from 1 to 10V
- Time delay from 30 seconds to 30 minutes
- Optional cut off delay
- Ramp up and fade down times (2 seconds; 10 seconds)
- 2 lens configurations for 8°-15 ft or 40 ft
- Bluetooth Commissioning utilizing the Wattstopper Configuration App
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable UL244A and UL508; IP66 rated (when fully assembled and installed) for use in wet locations
- This product meets the materials restrictions of RoHS.



OPERATION

Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

For more information see product data sheet.

INTELLIGENT PEDESTRIAN CROSSINGS/ CONTROLUX SENSE

CONTROLUX
sense

Controlux Sense **allows installations to interact with users, ensuring the right lighting levels anytime.**

Presence sensors are ideal for streets, parks, pedestrian crossings and cycle lanes, providing adaptive lighting for the urban environment. The installation's light flows are time-controlled, based on real-time user traffic. **The lighting is optimal for users' needs while generating significant energy savings.**

LUMINAIRE DIMMING

By programming the driver

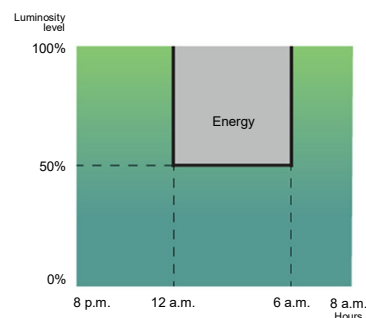
Smart luminaires drivers can be programmed in the factory without needing a control system, additional wiring or maintenance costs. A schedule is pre-programmed for light flow to be automatically reduced at quieter times of the night while respecting light levels and uniformity.

Programming profile 56

From 00:00 to 06:00 the luminaire reduces its initial intensity by 50%.

Up to
26%
savings

NOTE: Programming the Dynadimmer using the multitone scheduling tool is done for wintertime. In summer everything is delayed by an hour.



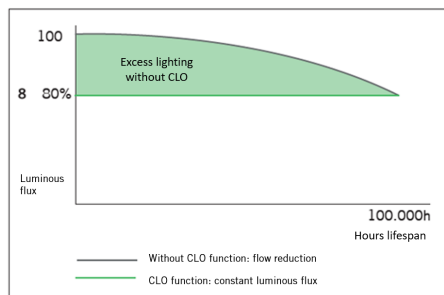
Using the CLO function

Taking into account lighting depreciation over the years, the driver is programmed to start at a reduced level and gradually increase power over the lifetime of the luminaire, which saves energy and increases the service life of the system. In addition, the level of illumination of the area in which it is located is always kept constant.

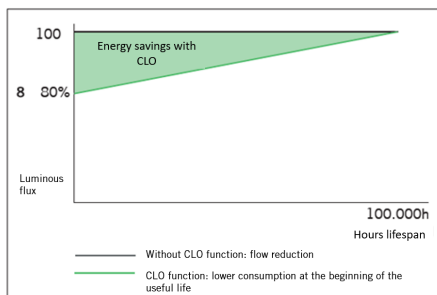
Constant luminous flux 8

Luminaire luminous flux at 80% to maintain light levels throughout its service life.

Luminous flux chart



Consumption graph



Up to
10%
savings
and increase in luminaire
service life

By adding an extra element

Photocell

The photocell allows the luminaire to be switched on or off depending on the intensity of the sunlight it captures.

This is very useful, to avoid having luminaires on at times when there is still enough natural light.

Example with 20 lx photocell:



INNOVATIVE AND UPDATABLE OVER TIME (Zhaga/ ZD4i)

"All luminaires incorporating Nema Sockets or Zhaga Sockets, where the control system is not the responsibility of Carandini, must always incorporate IP 66 covers in order to ensure the correct safety and operation of the product.

The sale of luminaires with Nema or Zhaga Sockets without the IP 66 cover will only be permitted upon receipt of a written assurance from the customer that the control system using NEMA or ZHAGA Nodes will be installed by the customer at the same time as the luminaires".

Zhaga

Zhaga - Future Proof

Zhaga is an industry-wide consortium that aims to standardise specifications for interfaces between LED luminaires and light sources. The aim is to achieve interchangeability between products made by different manufacturers. Zhaga defines test procedures for luminaire and LED light sources so that the luminaire can receive the LED source.



Zhaga D4i - Sensor Ready

The Zhaga consortium joined up with DiiA to create a unique Zhaga-D4i certification that combines Zhaga's Book 18 version 2 outdoor connectivity specifications with DiiA's D4i specifications for intra-luminaire DALI.

BOOKS PER APPLICATION. A COST-EFFECTIVE SOLUTION.



	Office & Industry	Retail & Hospitality	Outdoor
Integrated LED light engines	14 2,8	17 16	
LED modules (non-integrated)	7 21 14	12 9 5 3,10	4 15 19
Drivers	13	LED set 22,23	24,25
Sensor and communication modules		20	18

The specifications that mark a component as Zhaga-compliant are contained in a series of books, available only to consortium members, that allow you to design to the marked standard. The benefits for society are evident since, apart from reducing the consumption of materials, it favours the reuse of luminaires, aiming towards a circular economy.

CERTIFICATION PROGRAMME

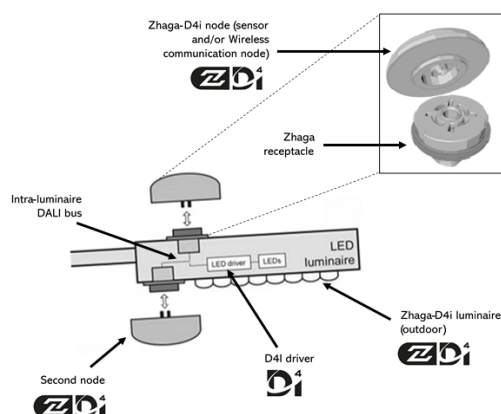
Zhaga-D4i certification covers all the essential characteristics, including automatic adjustment, digital communication, data reporting and power requirements in any single luminaire, ensuring plug-and-play interoperability for luminaires (drivers) and peripherals, such as connectivity nodes.

STANDARDISATION AS A MEANS TO ACHIEVE SUSTAINABILITY

The Veka S luminaire has been designed to function with the latest available market-proven technology based on standards. This also enables it to meet the CARANDINI sustainability requirements and become a product ready for maintenance in the future under better guarantees while respecting the environment and society.

The luminaires marked as Zhaga are a "Future Proof" design, meaning it is based on and designed around standard Zhaga components. These components are mainly the LED modules and the drivers. The electric compartment and dissipation area for LED modules has space and additional mountings to include any driver compliant with Zhaga "Book 13" based on market driver dimensions, or any LED module compliant with Zhaga "Book 15" based on LED controller interface specifications.

This makes it possible to have a sustainable product that can be updated over time.



CONNECTIVITY

D4i specifications take the best of the standard DALI2 protocol and adapt it to an interconnected lighting environment, but with certain limitations. Only the control devices installed in the luminaires can be combined with a Zhaga-D4i luminaire. According to the specifications, the control devices are respectively limited to an average power consumption of 2W and 1W.

SMART CITY

Luminaires marked ZD4i are a "Smart Ready" design, which means they are designed to house both indoor and outdoor communication nodes through connection bases compliant with the Zhaga "Book 18" & Zhaga-D4i standard on sensor and communication node interoperability.