Veka L

KEY ADVANTAGES

- Up to 3 installation methods
- Tool-free access from the top
- Sturdiness: IP66 + IK08.
- Die-cast aluminium (Cu<0.1%)
- Energy Efficient:
  GEN1: 151 lm /W
  GENA: 164 lm/W
- Up to 12 optical distributions
- Smart Ready: Designed to house both in-door and outdoor communications nodes
- Future Proof: Zhaga-compliant
- Life span L90B10 100,000h (Ta) 25ºC
- Night Friendly: ULR Arrêté du 27 décembre 2018
- A presence sensor can be incorporated into the luminaire
- 3G connectivity.
- Optional pre- or post-installation shielding for these luminaires
- 5 years guarantee.

IP66 IK08 CI CII

RAL 9006
Smooth Gloss

Marine finish
(RAL M9006B)

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

DESCRIPTION

Veka is the new family of luminaires by Carandini for public street lighting. Its elegant aesthetics, latest generation LED technology and optical distributions make it a top-quality solution for urban streets, main or secondary roads, motor-ways, dual carriageways and car parks.

Amber CRI>60 | 2200K CRI>70 | 2700K CRI>70 | 3000K CRI>70 | 4000K CRI>70

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:
4.530 - 42.403lm
GENA:
6.569 - 48.626 lm

GEN1:
151 lm /W

GENA:
164 lm/W
Luminary

15 Kg

Tool-free access to control gear

PT: 0,3m²
SE: 0,3m²

-40ºC - +50ºC

0,00% - 0,35%
FHS/ULR

220 - 240V / 100V - 277V
50-60Hz
L90B10 100.000h
Ta 25ºC

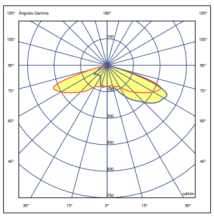
C. & G CARANDINI, S.A.U.
-carandini@carandini.com - www.carandini.com

NOTE: The company reserves the right to make product changes without advanced notice
V1. 11/04/2023

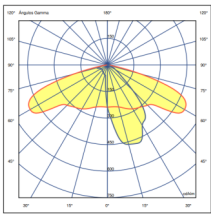
PHOTOMETRIC DISTRIBUTIONS

GEN 1 VERSION

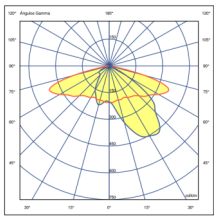
7 photometric configurations are available for use in the various environments where this type of luminaire might be installed, meaning it can be adapted to suit all situations:



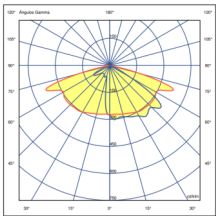
AMA1



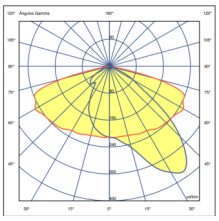
AME1



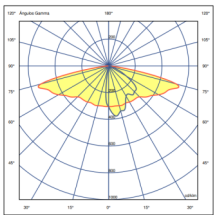
AME2



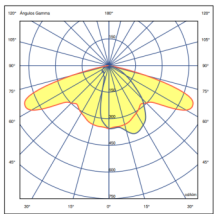
AMM1



AMM2



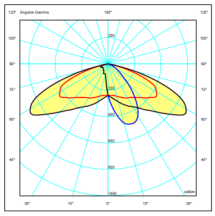
AMM3



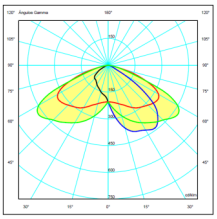
AMM4

GEN A VERSION

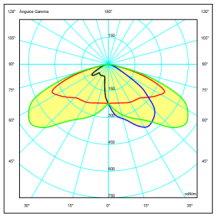
5 photometric configurations are available for use in the various environments where this type of luminaire might be installed, meaning it can be adapted to suit all situations:



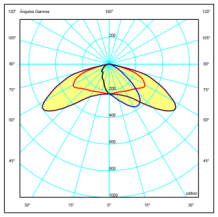
AME1



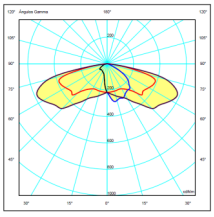
AME2



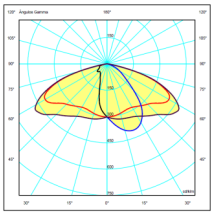
AMM1



AMM2



AMM3



AMM4

APPLICATIONS

Public streets, main or secondary roads, motorways and dual carriageways, and car parks.

VEKA L CHARACTERISTICS

GENERAL INFORMATION

Sustainability	Recyclability: 99,38% Carbon footprint per use: 0,020461kg 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	Pressure die-cast aluminium EN AC-44100 (LM6) with low copper content <0.1%.
Light enclosure	5mm toughened flat glass.
Exterior nuts and bolts	Stainless steel (AISI304).
General ingress protection	IP66 (EN 60598-1 and EN 60529)
Degree of protection against impacts	IK08 (EN 62262)
Operating temperature	Ta -40°C to +50°C According to luminaire configuration.
Estimated life	L90B10 100,000 h at Ta 25°C. Light maintenance values at TM-21 Socketd on LM -80 data.
Cables	Class I/II Cable from 5 to 12 metres Cross-section: 2x1,5 ; 3x1,5 ; 4x1,5 ; 5x1,5 ; 2x2,5 ; 3x2,5

ELECTRICAL CHARACTERISTICS

Electrical class	Class I or Class II
Input voltage	220 V - 240 V / 50 Hz - 60 Hz Optional 100 V- 277 V
Power factor	> 0.9
Hbracketonic distortion	< 10%
Overvoltage protection	Overvoltage 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

Real light package	GEN1: 4.530 - 42.403 lm (42 - 313W) GENA: 6.569 - 48.626 lm (42 - 313W)
LED colour temperature	4,000 K (Neutral White, nw). 3,000 K (Wbracket White, ww). 2,700 K (Wbracket White, ww). 2,200 K (Wbracket White, ww). Amber colour temperature, upon request.
Colour rendering index (CRI)	CRI>70. CRI80 upon request.
LEDs	Includes 64, 80, 96, 128 y 160 LEDs.
ULR/FHS	Entre 0,00% y 0,35%
Optics	Acrylic PMMA lenses especially designed for LEDs.
Photometric configurations	AMA1=> Throw 70º Spread 65º (Type IV) AME1=> Throw 65º Spread 15º (Type I) AME2=> Throw 70º Spread 35º (Type II) AMM1=> Throw 70º Spread 35º/50º (Type III) AMM2=> Throw 60º Spread 35º (Type II) AMM3=> Throw 75º Spread 5º/20º (Type III) AMM4=> Throw 65º Spread 20º (Type II)
LED thermal management	Heat dissipation via conduction, radiation and convection Socketd on a design for LED technology.

FINITIONS

Predefined luminaire colour

RAL 9006	Polyester powder coating inPolyester powder coating in grey RAL 9006

Corrosion protection

SEA SIDE SUITABLE	Marine Finish (1.000h) (Optional)

VEKA L CHARACTERISTICS

MAINTENANCE AND ASSEMBLY

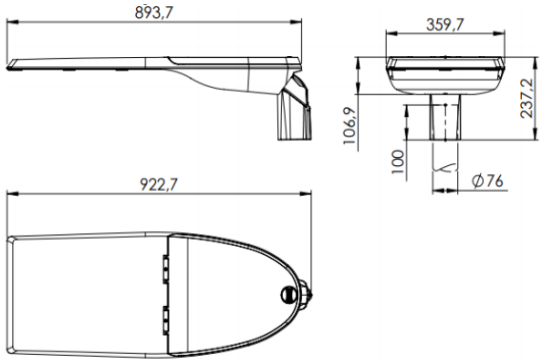
Installation and maintenance	Tool-free luminaire access system designed by Carandini. Access to the driver from the top.
Installation	PT1: Vertical installation ø 76 mm.* SE2: Lateral installation ø 49/60mm * The PT1 fixing shall be supplied horizontally mounted with SE for sustainability.
Mechanical adjustment	Vertical and lateral installations offer an inclination angle range of ±10º for every 2.5º.
Equipped weight	**PT1**: 15,2 Kg **SE2**: 15 Kg
Wind Surf.	**PT**: 0,3m² **SE**: 0,3m²
Pressure equalisation valve	The luminaire is fitted with a valve that balances the pressure in the luminaire to prevent the build-up of condensation, thereby extending the lifetime of the components.
Accessories	External and internal paralumen.

MANAGEMENT AND CONTROL

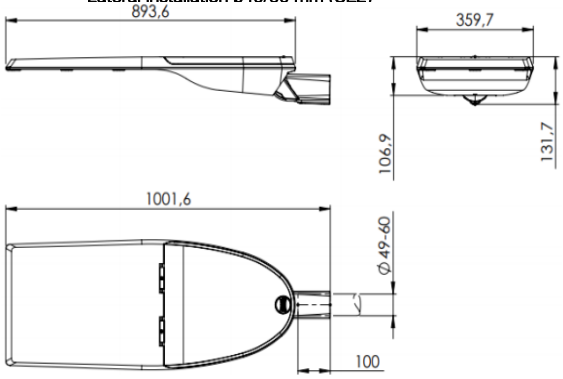
Devices	1N: LED 1 level RC: Adjustable LED in head RD: Adjustable LED Protocol DALI AF: Adjustable LED Protocol 1-10 V RL: Pulse adjustable LED 2N: Dual level SR: Smart Ready D4i
Autonomous regulation	Factory-programmable regulation: 56: 50% from 00:00 to 06:00 66: 60% from 00:00 to 06:00 76: 70% from 00:00 to 06:00
CLO regulation	Percentage flow during product lifetime: 7: 70% luminous flux during luminaire lifetime. 8: 80% luminous flux during luminaire lifetime. 9: 90% luminous flux during luminaire lifetime.
Sockets	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. 4-X: Upper Zhaga socket with/without IP66 cover.
Photocells	1: Photocell for Nema 3, 5 and 7 pin socket (20 lux) 2: Photocell for larger Zhaga socket (20 lux)
Node	ON: Controlux One BS: Controlux Basictrolux One

DIMENSIONS

Vertical installation ø76 mm (PT1)



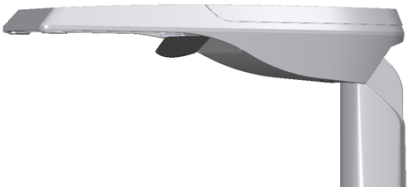
Lateral installation ø49/60 mm (SE2)



ACCESSORIES

Optional pre- or post-installation shielding for these luminaires





VEKA L PHOTOGRAPHS






LOGISTICAL INFORMATION

VEKA L PT

Box size: 900 x 362 x 239 mm

Box weight: 15,2 kg.

Number of boxes: 14 units

American Socket: 1200 x 800 x 1873 mm

Stack height: 7 floors

Area occupied: 67,9%

Volume used: 63,1%

Total gross weight: 233 kg.

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

VEKA L SE

Box size: 1060x 390 x 180 mm

Box weight: 15,2 kg.

Number of boxes: 18 units

American Socket: 1200 x 800 x 1770mm

Stack height: 9 floors

Area occupied: 86%

Volume used: 82%

Total gross weight 293 kg.

*If the luminaire includes a cable, please consult dimensions Box

LUMINAIRE ADJUSTMENT

By programming the driver

Programming profile

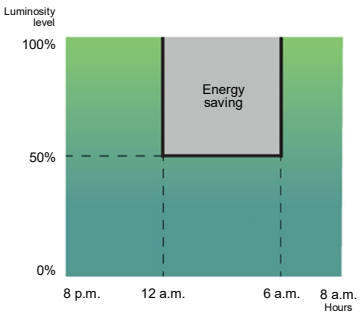
The driver can be programmed in such a way that, during less busy hours of the night, the luminaire reduces the luminous flux, while remaining in compliance with the required lighting and uniformity levels.

Programming profile 56

Between midnight and 6 am, the brightness of the luminaire is reduced by 50%.

Up to

26% savings



Via 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

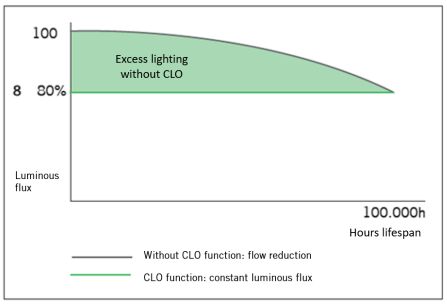
Luminaire luminous flux at 80% to maintain light levels throughout its service life.

Up to

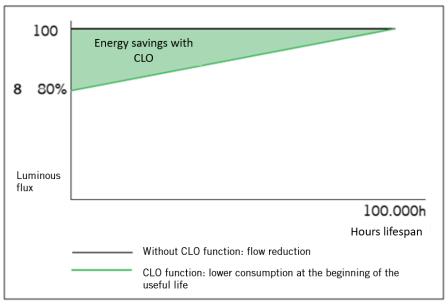
10% savings

and increase in luminaire service life

Luminous flux chart



Consumption graph

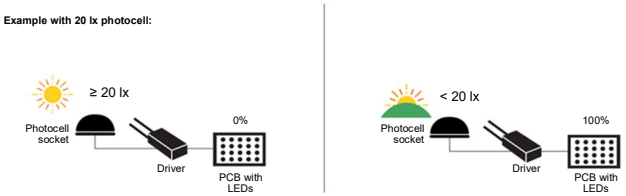


By adding an extra element

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.



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 - 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 Dii4's D4i specifications for intra-luminaire DALI.

BOOKS PER APPLICATION. A COST-EFFECTIVE SOLUTION.

Book 1-25
Overview by application

	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

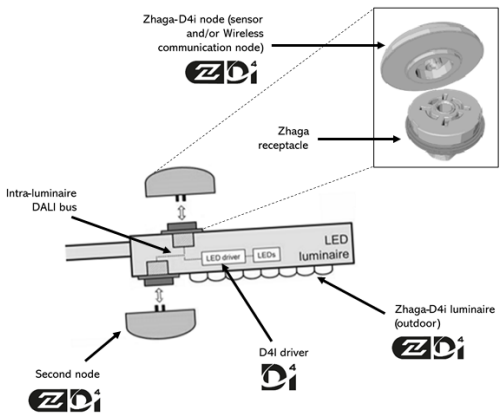
Zhaga-D4i certification covers all the essential characteristics, including automatic adjustment, digital communication, data reporting and power requirements in any single luminaire, ensuring plug-and-play interoperability for luminaires (drivers) and peripherals, such as connectivity nodes.

STANDARDISATION AS A MEANS TO ACHIEVE SUSTAINABILITY

The **Veka M** luminaire has been designed to function with the latest available market-proven technology Socketd 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 Socketd 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” Socketd on market driver dimensions, or any LED module compliant with Zhaga “Book 15” Socketd 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 2 W and 1 W.

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 sockets compliant with the Zhaga “Book 18” & Zhaga-D4i standard on sensor and communication node interoperability.