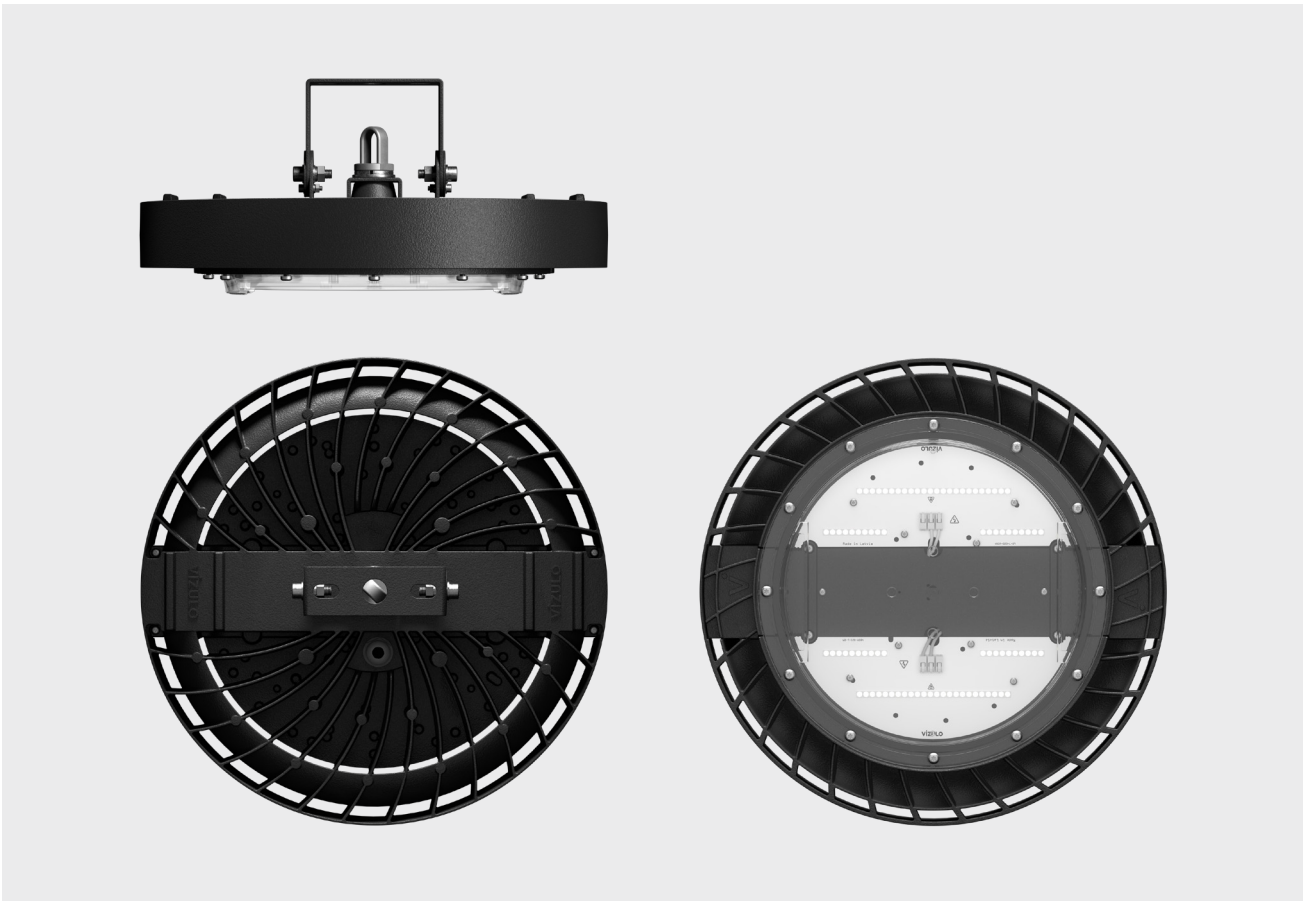

VIZULO
ACORN Gen2
Floodlight

Acorn Gen2

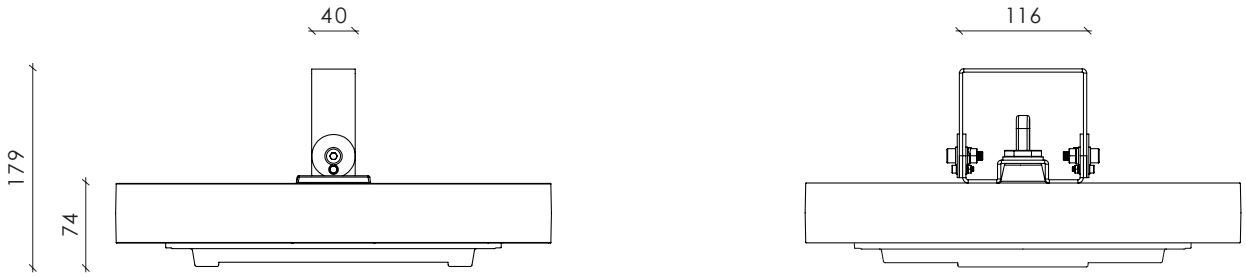
floodlight short

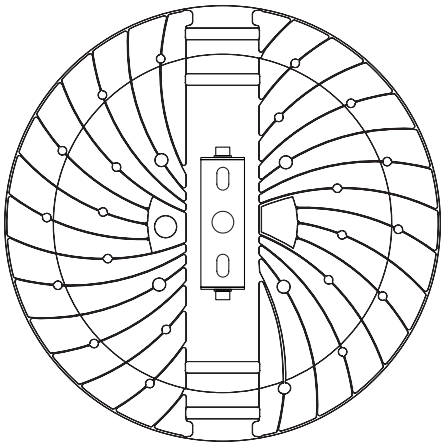


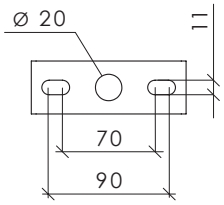


RAL7035 RAL9006 DB703 RAL9005

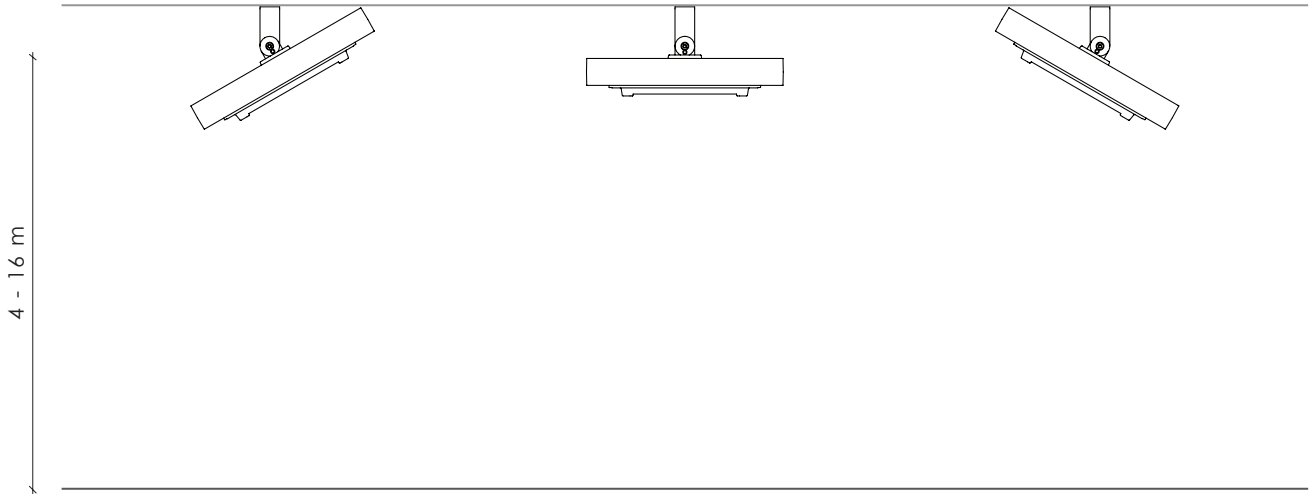
Other colors
available on request







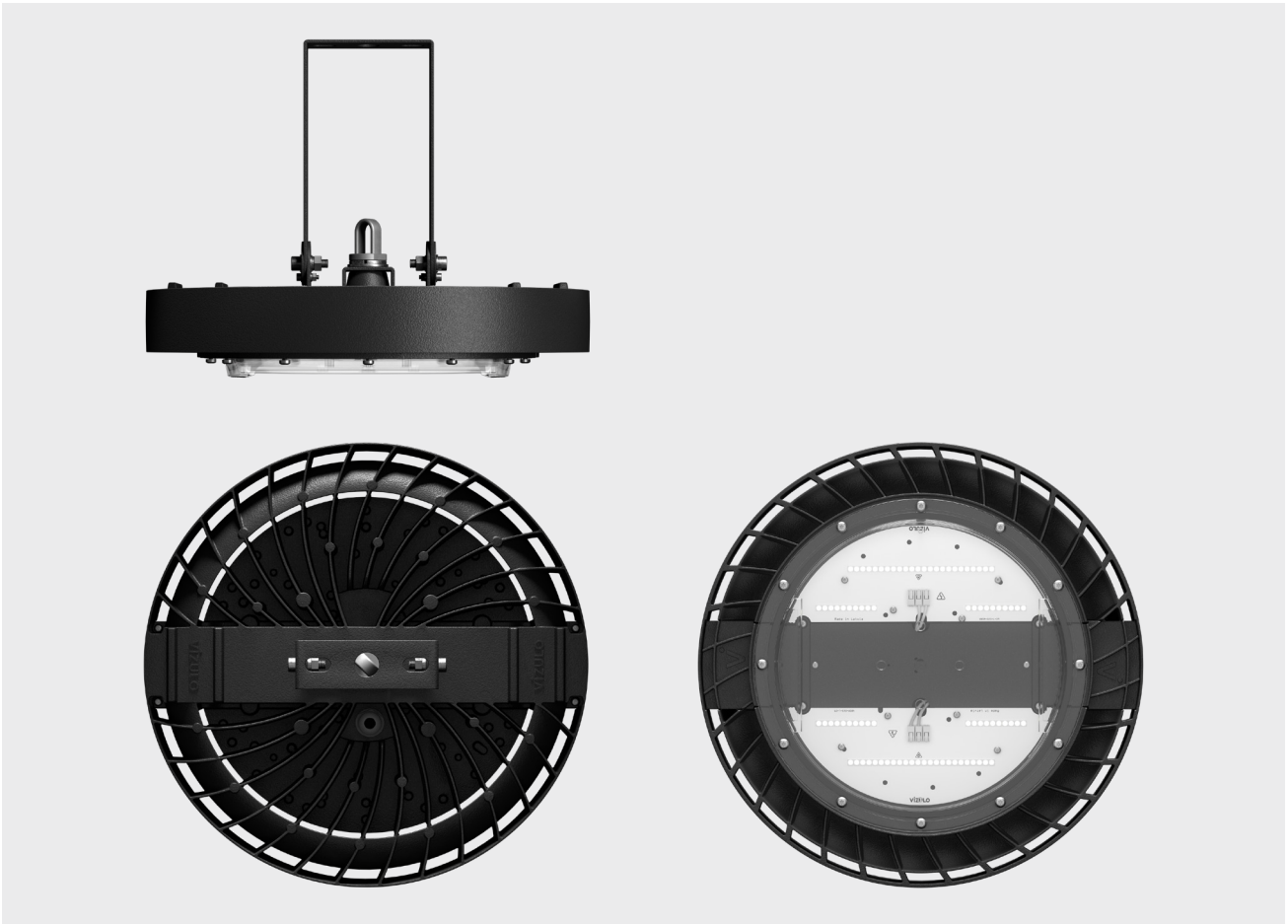
Floodlight console



Acorn Gen2

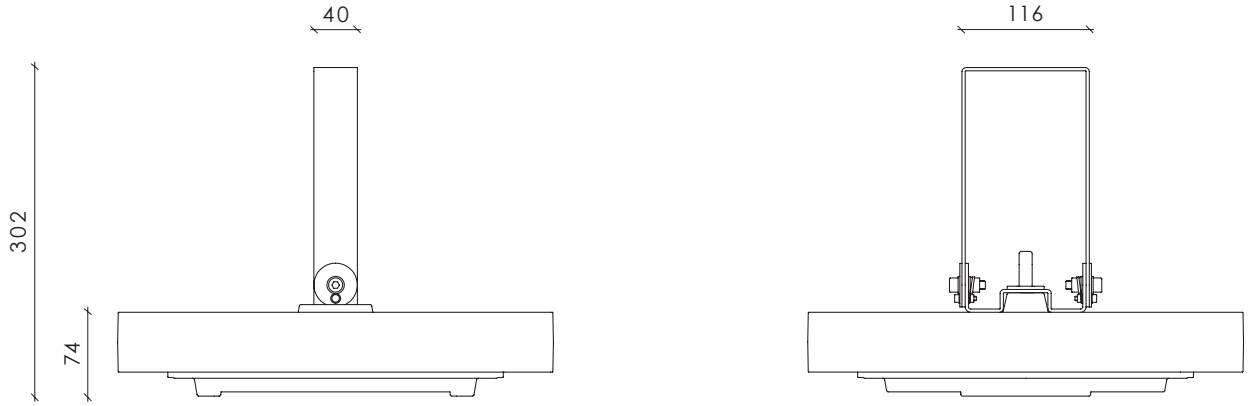
floodlight long

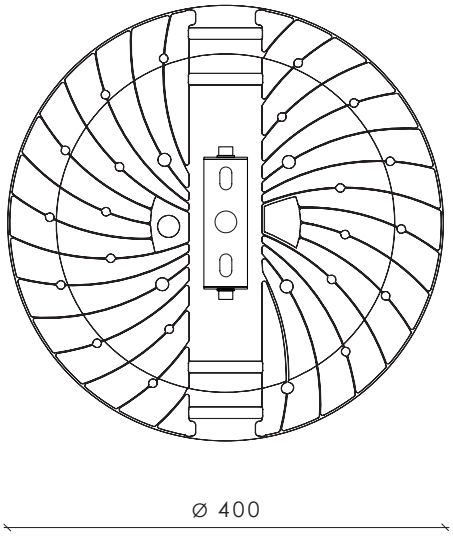


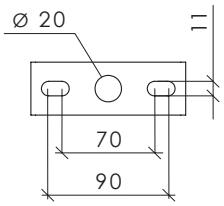


RAL7035 RAL9006 DB703 RAL9005

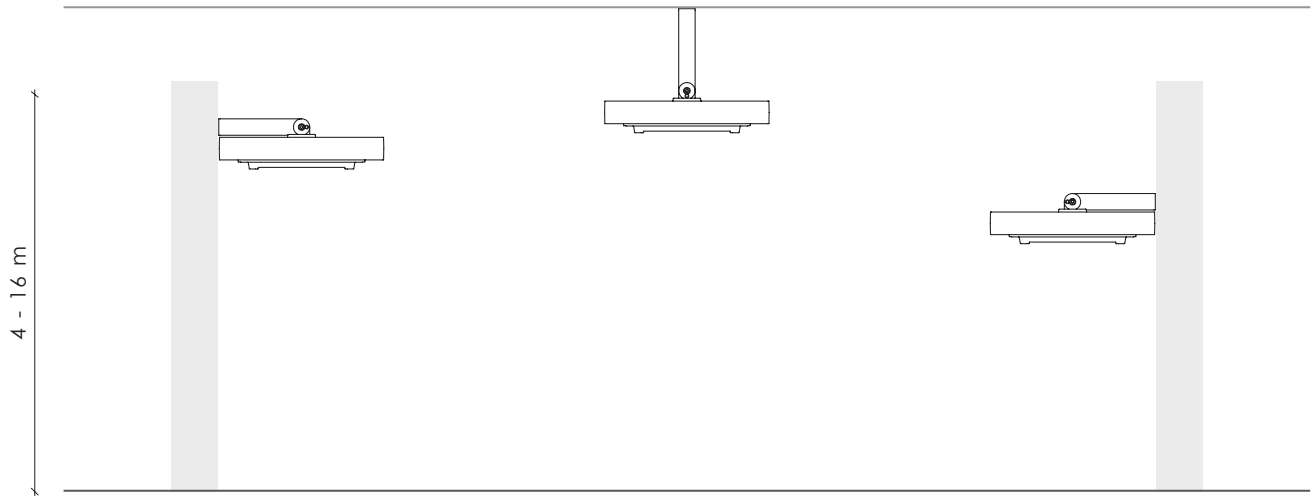
Other colors
available on request







Floodlight console



Features

↘ ACORN GEN2 WITH REFLECTOR



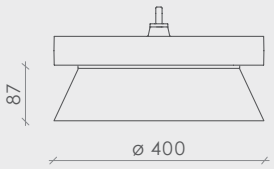
ACORN Gen2 reflector is available in two materials: metal and plastic.*

Metal reflector comes in three standard colors:

- white (RAL 9016)
- light grey (RAL 7035)
- black (RAL 9005)

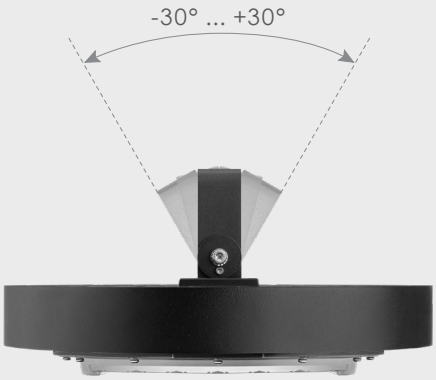
and offers the flexibility to match the luminaire's color, with additional color options available on request.

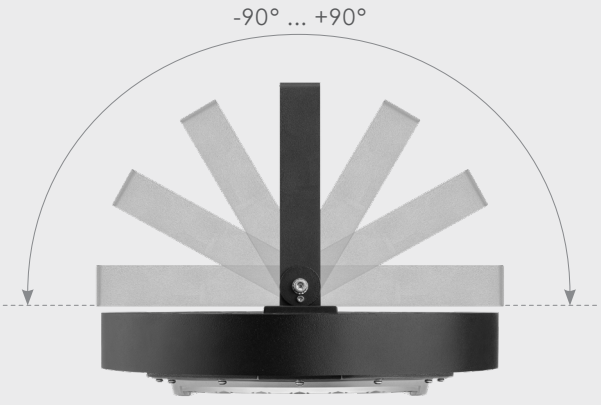
Plastic reflector is available exclusively in white (RAL 9016)!



* See the *Accessories* section below.

↘ POSSIBLE REGULATION ANGLES





Applications



↘ Sports hall



↘ Industrial luminaires

Technical information

V	220 - 240
Hz	50 - 60
W	50 - 270 [1]
	30 - 200 [2]
	30 - 150 [3]
lm	4 902 - 45 172 [4]
lm/W	Up to 167
K	3000 / 4000 [5]
°C	-40 up to +50 [6]
CRI	>70 / >80 / >90 [5]

Body:	Die-cast aluminium
Dimming:	DALI / 1-10 V / Bluetooth / Non dimmable
Sensor:	Microwave / PIR / PIR + Daylight
Initial chromaticity:	MacAdam 5
	MacAdam 3 (on request)
Lifetime:	100 000 h (L80B10) at Ta = 25 °C*
Warranty:	5 years
	2 years (emergency configuration)
Optics:	Symmetrical / Asymmetrical
Mounting:	Floodlight / on bracket / wall / ceiling
Human Centric Lighting:	Available
Neto weight:	Up to 6.12 kg

[1] With optics C01 / C02 / C03

[2] With optics D02 / D03

[3] Emergency configuration

[4] Lumen output indicated at 4000 K, CRI > 70

[5] 1800 / 2200 / 2700 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

[6] Operating temperature differs depending on chosen output wattage

[7] Emergency configuration IP40

[8] Ball proof: tested according to DIN 57710-13

[9] Check SundaHus web page for product assessment results

* This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models with lower power, lower current (and lower junction temperature) will have higher lifetime than standard models. And high power and high current luminaire models may have negative lifetime deviation comparing to standard models. To receive precise value please contact VIZULO export representatives.

Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

Model name principles



Power [W] 030 ... 270

Color rendering index
≥70 - 7
≥80 - 8
≥90 - 9

Color temperature [K] 1800 ... 6500
Standard values:
3000 K - 30
4000 K - 40

Lens
asymmetric round - C01 ... CZ9
symmetric round - D01 ... DZ9

LED module type
type 66 lens - AV
type 254 lens - AW
type 88 lens - AZ

LED quantity 008 ... 124

Color
black (RAL 9005) - CB
silver (RAL 9006) - CS
light grey (RAL 7035) - CJ
asphalt (DB 703) - CA
other colors available on request

Mounting
floodlight short - S
floodlight long - L

Through wiring
no - N
1.5 mm^2 - V

Dimming
non dimmable - N
DALI - D
1-10 V - A
bluetooth - B

Surge protection
1 ... 2 kV integrated in driver - B
2 kV integrated in driver - C
4 kV integrated in driver - E
separate built-in 10 kV/10 kA SPD - H

Insulation
class I - 1
class II - 2

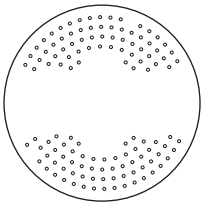
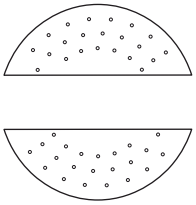
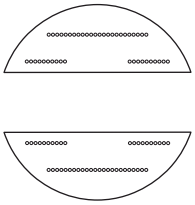
Sensor
no sensor - NS
daylight - DL
microwave (15 m) - MW
PIR Basic (<5 m) - PB
PIR DALI Basic (<5 m) - PL
PIR DALI Basic (5 - 10 m) - PI
PIR DALI Basic (8 - 16 m) - PH
PIR DALI Pro (<5 m) - P1
PIR DALI Pro (5 - 10 m) - P2
PIR DALI Pro (11 - 16 m) - P3

Operation mode
normal - N
slave - S
master - M

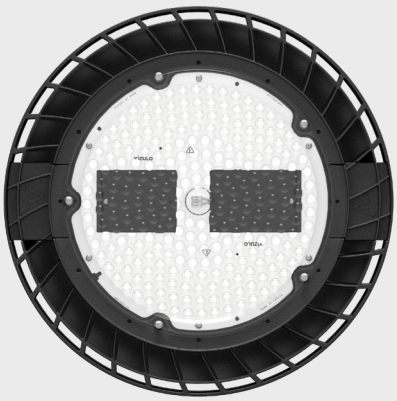
Emergency
no emergency - 0
1 hour - 1
3 hours - 3

EXAMPLE ACE 150 730 DA7 AW124 CBS NNE1 NSN1

LED modules

Type	Min LED QTY per luminaire	Max LED QTY per luminaire	LED step	LED type	Lens type	Layout
AW	44	124	4	Eco	type 254 lens DA7 ... DA8	
AV	8	44	4	Eco	type 66 lens D02 ... D03	
AZ	16	88	8	Eco	type 88 lens C01 ... C03	





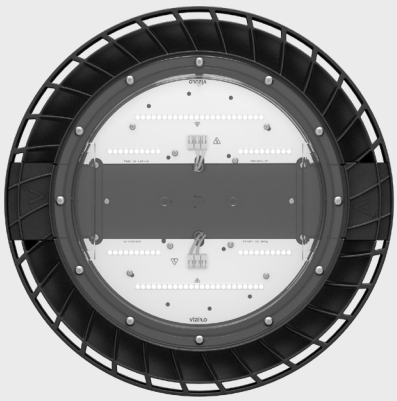
↘ AW type
LED module





↘ AV type
LED module



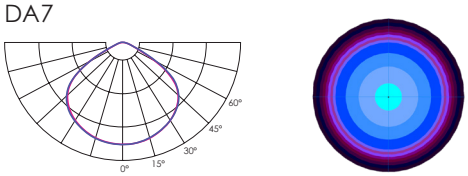


↘ AZ type
LED module

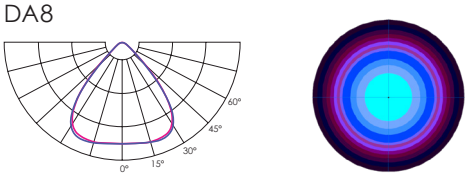
Optics

AW LED module

DA7

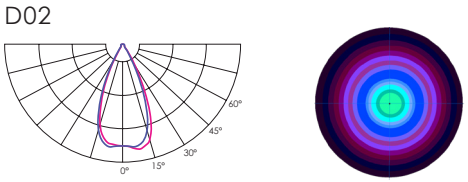


DA8

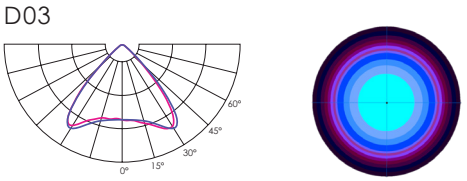


AV LED module

D02

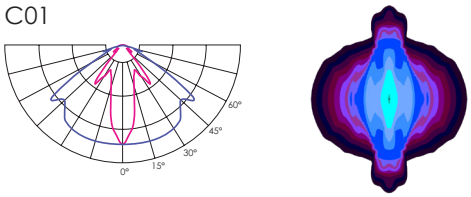


D03

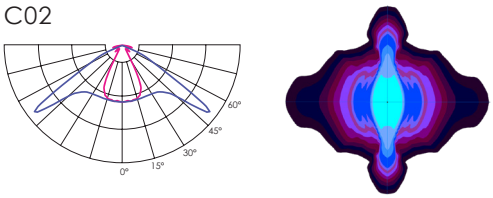


AZ LED module

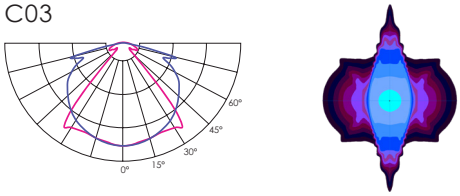
C01



C02



C03



Sensors

MICROWAVE SENSOR (ON-OFF)

Power source:	220 – 240 VAC
Rated load:	800 W
HF system:	5.8 GHz (± 75 MHz)
Hold-time:	2 s ~ 30 min (selectable)
Sensitivity:	10% / 50% / 75% / 100%
Daylight sensor:	2 ~ 500 lux, disable
Detection range (max):	20 m (Ø) / 15 m (H) (adjustable)
Detection angle:	360°
Working temperature:	-20 °C ~ +50 °C *
IP rating:	IP65
Certificates:	Semko, CB, CE, EMC, RED, RCM



MICROWAVE SENSOR (DALI)

Power source:	120 – 277 VAC
Rated load:	max 20 DALI devices
HF system:	5.8 GHz (± 75 MHz)
Hold-time:	2 s ~ 30 min (selectable)
Sensitivity:	10% / 50% / 75% / 100%
Daylight sensor:	2 ~ 500 lux, disable
Stand-by period: (corridor function)	0 s ~ 1 h, +∞ (selectable)
Stand-by dimming level:	10% / 20% / 30% / 50%
Detection range (max):	20 m (Ø) / 15 m (H) (adjustable)
Detection angle:	360°
Working temperature:	-20 °C ~ +50 °C *
IP rating:	IP65
Certificates:	Semko, CB, CE, EMC, RED, RCM



DAYLIGHT SENSOR

Power source:	220 - 240 V
DALI output devices:	10 / 32
DALI output:	2 channels
Type:	light and presence
Max detection area (ø):	7 - 9 m
Max installation height:	5 m
Presence detection angle:	40° - 90° (fixed or adjustable)
Light-control range:	10 - 800 lux
Hold-time:	user-definable
Working temperature:	-20 °C ~ +50 °C *
Remote control (optional):	set and control with IR remote control **



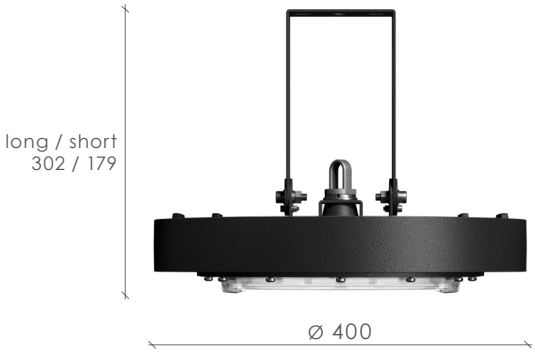
* Minimal luminaire working temperature will be same or higher than for specific sensors (if used)

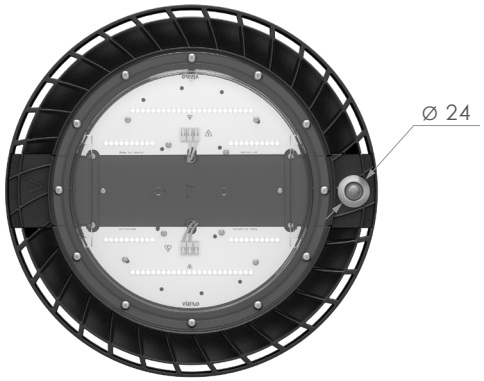
** Remote control can be ordered separately. See the *Accessories* section below

MID-RANGE DALI-2 MULTISENSOR (PIR SENSOR)

Power source:	DALI
Mounting height (H):	5 - 10 m
Detection range for PIR (max):	8 m (@H = 10 m)
Detection angle for PIR:	72° (tagential) / 44° (radial)
Detection angle for light measurement:	30° - 40°
Light-control range:	0.5 - 2000 lux (adjustable)
Working temperature:	-20 °C ~ +50 °C *
Min temperature difference between ambient temperature and detected object:	± 4 °C
Remote control (optional):	set and control with IR remote control **



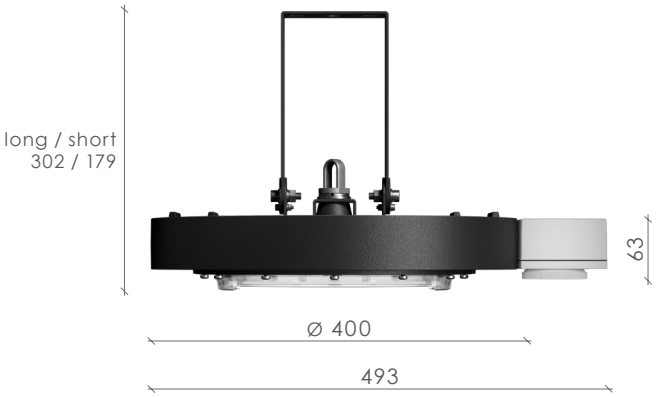


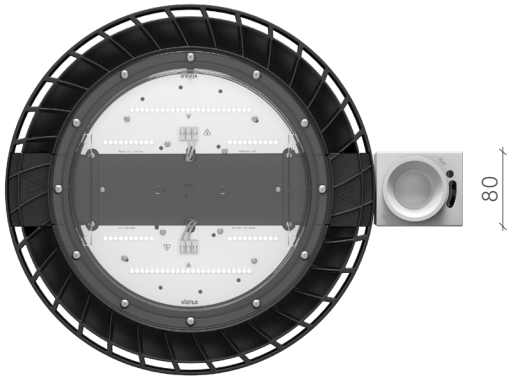


LONG-RANGE DALI-2 MULTISENSOR (PIR SENSOR)

Power source:	DALI
Mounting height (H):	8 - 12 m (range position "low") 12 - 16 m (range position "high")
Detection range for PIR (max):	18 m (@H = 16 m)
Detection angle for PIR detection angle "low":	72°
Detection angle for PIR detection angle "high":	60°
Detection angle for light measurement:	13°
Light-control range:	0.5 - 2000 lux (adjustable)
Working temperature:	-20 °C ~ +50 °C *
Min temperature difference between ambient temperature and detected object:	± 4 °C
Remote control (optional):	set and control with IR remote control **







* Minimal luminaire working temperature will be same or higher than for specific sensors (if used)

** Remote control can be ordered separately. See the *Accessories* section below

Emergency lighting

ACORN Gen2 has an option to have Emergency lighting (up to **150 W**).

Features

- Self contained emergency lighting
- 1 or 3 h rated duration
- Dimmable and non-dimmable versions available
- Constant power output
- Deepdischarge protection

While Mains voltage is present Emergency controller is also charging the connected battery.
Rated emergency duration can be chosen (based on battery capacity) and can be 1 h or 3 h.

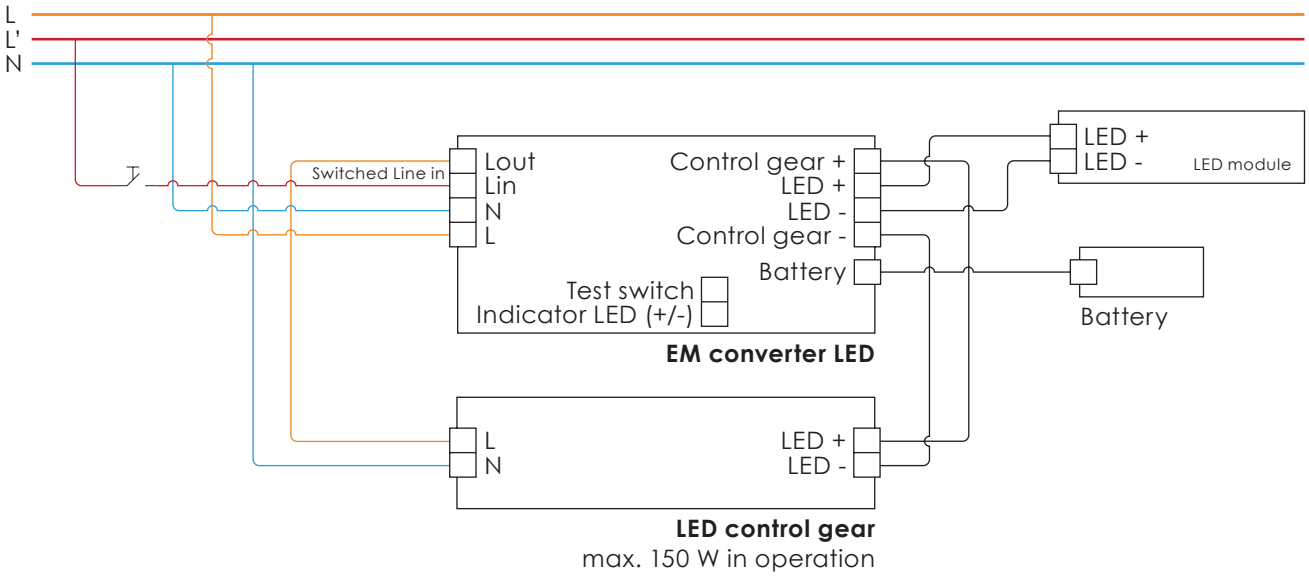
Operation

ACORN Gen2 luminaire which is equiped with Emergency lighting will work in 2 modes based on electrical conditions:

1. If Mains voltage is present, luminaire will work with its programmed power (just like in case without Emergency lighting;

2. If there is outage of Mains voltage, luminaire will work in Emergency mode with little power (about 2.5 W) while feeding from the battery.

Simple wiring diagram



Additional Test switch
For connection to the emergency
For checking the device function



Status indication LED
Two-colour status display LED (bi-color)
Green: system OK, Red: fault

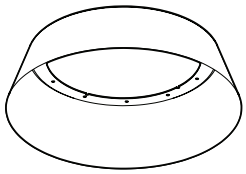


Accessories

ACORN Gen2 reflector from metal

white (RAL 9016) ..... *Art. 70058047*
light grey (RAL 7035) ..... *Art. 70058044*
black (RAL 9005) ..... *Art. 70058043*

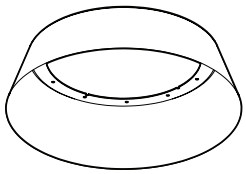
Other colors available on request



ACORN Gen2 reflector from plastic

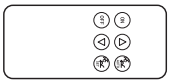
white (RAL 9016) ..... *Art. 70058028*

Other colors are NOT available for plastic version!



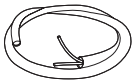
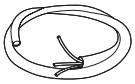
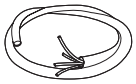
Remote control ..... *Art. 70000670*

Available only in combination with a luminaire equiped with PIR function



Cable order information*

* Custom cable lengths available on request


Cable length [m]	2 x 1.5 mm²	3 x 1.5 mm²	4 x 1.5 mm²	5 x 1.5 mm²
0.5	*Art. 70100184*	*Art. 70100179*	*Art. 70100402*	*Art. 70100409*
1	*Art. 70100156*	*Art. 70100193*	*Art. 70000527*	*Art. 70100220*
1.5	*Art. 70100391*	*Art. 70100258*	*Art. 70100403*	*Art. 70100410*
2	*Art. 70100202*	*Art. 70100177*	*Art. 70000515*	*Art. 70100262*
2.5	*Art. 70100392*	*Art. 70100213*	*Art. 70100404*	*Art. 70100411*
3	*Art. 70100166*	*Art. 70100178*	*Art. 70000529*	*Art. 70100217*
4	*Art. 70100172*	*Art. 70100144*	*Art. 70000530*	*Art. 70100189*
5	*Art. 70100173*	*Art. 70100146*	*Art. 70000531*	*Art. 70100185*
6	*Art. 70100099*	*Art. 70000512*	*Art. 70000532*	*Art. 70000370*
7	*Art. 70100174*	*Art. 70100182*	*Art. 70000533*	*Art. 70100201*
8	*Art. 70100152*	*Art. 70000630*	*Art. 70000534*	*Art. 70100212*
9	*Art. 70100176*	*Art. 70000381*	*Art. 70000535*	*Art. 70100192*
10	*Art. 70100153*	*Art. 70000631*	*Art. 70000536*	*Art. 70000387*
11	*Art. 70100191*	*Art. 70100143*	*Art. 70000537*	*Art. 70000388*
12	*Art. 70100167*	*Art. 70100147*	*Art. 70000538*	*Art. 70100200*
13	*Art. 70100186*	*Art. 70100187*	*Art. 70000539*	*Art. 70100412*
14	*Art. 70100204*	*Art. 70100164*	*Art. 70000540*	*Art. 70100165*
15	*Art. 70100380*	*Art. 70100030*	*Art. 70000541*	*Art. 70100183*
20	*Art. 70100393*	*Art. 70100397*	*Art. 70100405*	*Art. 70100413*
25	*Art. 70100276*	*Art. 70100398*	*Art. 70100406*	*Art. 70100414*

Certification

CE – conformity with European Union's health, safety and environmental protection standards

The CE mark is placed on products to state conformity with the relevant EU health, safety and environmental protection standards. In case of electronic products, the standards are, for example, the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive, Waste Electrical and Electronic Equipment (WEEE) directive, the Electromagnetic Compatibility (EMC) directive etc. The mark ensures that the product can be sold anywhere in the European Economic Area (EEA).

UKCA - conformity with the relevant essential requirements of Great Britain

UKCA is a product mark intended to demonstrate compliance with the directives set by Great Britain (England, Scotland and Wales). It is analogous to the European Union's CE marking, meaning that depending on the type of product the applicable regulations are different. In case of LED lighting, the relevant requirements are compliance with the Electromagnetic Compatibility Regulations, the Electrical Equipment (Safety) Regulations, the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations and the Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations.

RoHS – compliance with European Union's RoHS directive

The RoHS (Restriction of Hazardous Substances in Electrical and Electronic Equipment) directive restricts (with exceptions) the use of ten hazardous materials in the manufacture of various types of electronic and electrical equipment. The aim of the directive is to prevent the risks posed to human health and the environment related to the management of electronic and electrical waste.

Byggvarubedömningen – product chemical content and life cycle assessment

Byggvarubedömningen is a non-profit organization owned by large constructors and property owners in Sweden. The organization conducts assessments of various construction products based on chemical content and sustainaility criteria. The consituent substances and product life cycle are evaluated and the product is assigned one of three levels:

Recommended (green) Accepted (yellow) To be avoided (red)

Note! *The Recommended level assessment is unavailable for electronic products since it is assumed that all electronic products contain brominated flame retardants.*

Ball-proof – compliance with the requirements of the DIN 57710-13 testing standard

The ball-proof test is described in the standard DIN 57710-13 (Luminaires with operating voltages below 1000 V; luminaires safety to ball throwing). The standard defines the requirements set for impact resistance of luminaires meant for use in indoor sports facilities. It states that a luminaire struck by a ball must withstand any damage that could cause parts of the luminaire to fall to the ground.

SundaHus – product material data assessment

SundaHus i Linköping AB (publ) is a consulting company for the improvement of indoor environmental quality. The company conducts health and environmental assessments of building materials and assigns each product a letter evaluation:

- **A** products that provide minimal health risks
- **B** products that do no qualify for A, but do not match the criteria for C+, C- or D
- **C+** products that risk exposure to substances of very high concern
- **C-** products that risk exposure to toxic or volatile substances, as well as negatively impact the environment
- **D** products that cannot be assessed due to insufficient data

LED module replaceable by a professional

This pictogram shows that the LED modules included in the luminaire are only replaceable by a professional. This labeling is a requirement folowing the introdution of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.

LED driver replaceable by a professional

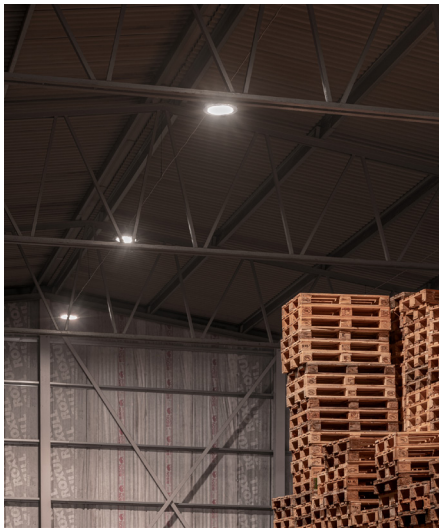
This pictogram shows that the LED driver included in the luminaire is only replaceable by a professional. This labeling is a requirement folowing the introdution of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.

References

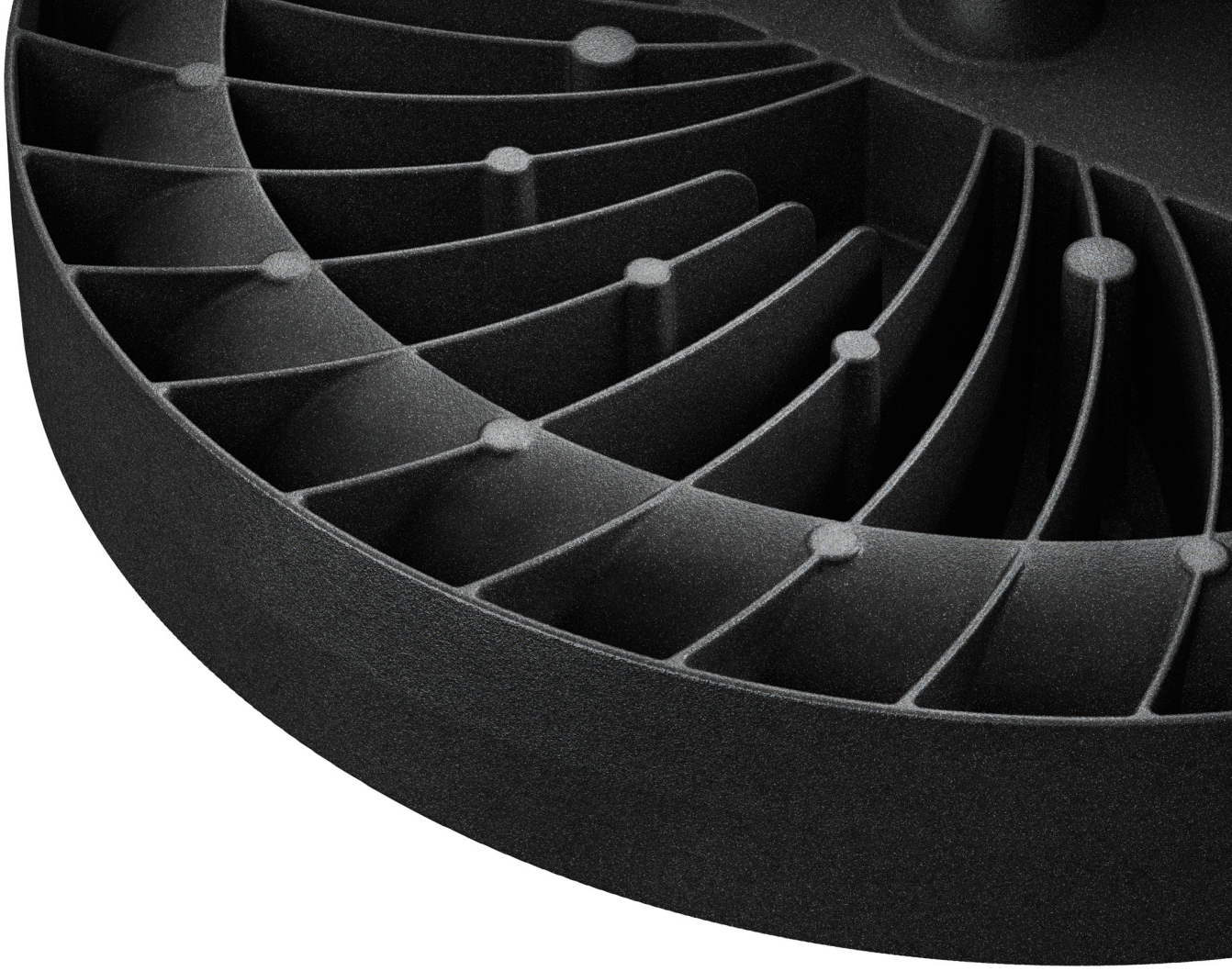


↘ Hestheimar horse farm,
Iceland





↘
Warehouse in Halmstad,
Sweden



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