

# Comlight Eagle Eye Zhaga datasheet

Comlight Eagle Eye Zhaga is a motion detection light controller for luminaires complying with Zhaga Book 18 specification and SR (System Ready) concept. The sensor is designed according to Dali-2 (IEC62386), part 303 Occupancy sensor as a D4i Type B device, in addition to taking role as a Type A controller device if no other controller is present.

The sensor detects pedestrians, cyclists and vehicles using an advanced doppler radar motion detector. Commissioned in a network of several sensor, the system provides light-ahead functionality, lighting up the path, street or road ahead. The product has an adjustable sensor housing, making it possible to fine-tune the detection area for every use-case.

## Technical data

### Electrical

- Supply voltage: 24 VDC from LED driver
- Electrical class III (SELV)
- Power consumption standard version: < 1 W

### RF Communication

- Frequency: 868.35 MHz
- Output Power: ≤16 dBm (39.81 mW)

### K-Band Doppler Radar (movement detector)

- Frequency: 24.050-24.250 GHz
- Output Power: ≤12 dBm (15.85 mW)

### Mechanical

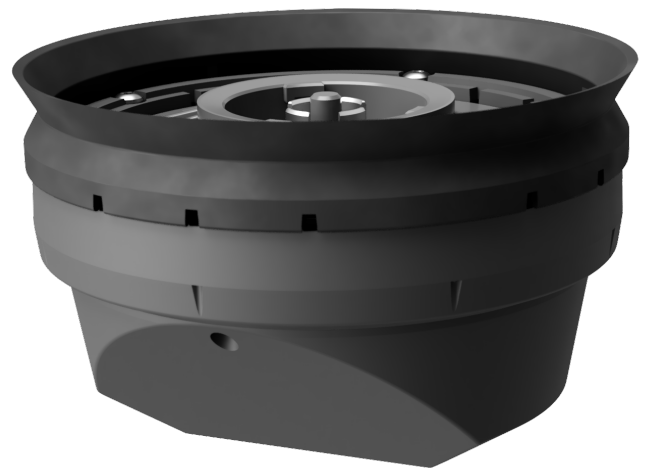
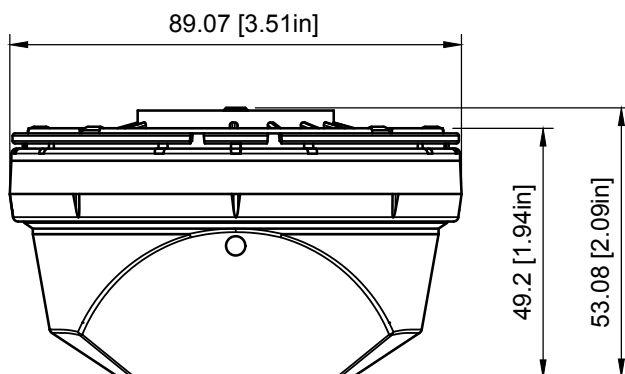
- Temperature range: -30 to +60°C
- Protection Type: IP66
- Housing Material: Luran (PC and ASA blend)
- Color: RAL7016 Anthracite grey
- Dimensions: 89 x 89 x 53 (plus rubber skirt)
- Weight: 125 g

### Gateway Options

- A: (LTE Cat-1, UMTS/HSPA, GSM / GPRS / EDGE)
- B: (LTE Cat-M1, NB-IoT, GSM / GPRS / EDGE)

### System Requirements

- Luminaire must support instant dimming and light level commands must be able to overrule any pre-programmed scheduled dimming profiles.
- Comlight Zhaga can only be mounted on luminaires with downward Zhaga connector, and where connector is mounted on the luminaire according to Zhaga Book 18 recommendations.



## Standards

Product is labelled with CE mark and has been tested according to the following standards:

### RoHS & WEEE

Directive 2011/65/EU  
Directive 2012/19/EU  
Directive 2009/125/EC

### Safety

IEC 61347-2-11 (First Edition):2001 Used in conjunction with IEC 61347-1:2015 (Third Edition) Luminaires - Part 1: General requirements and tests

### EMC

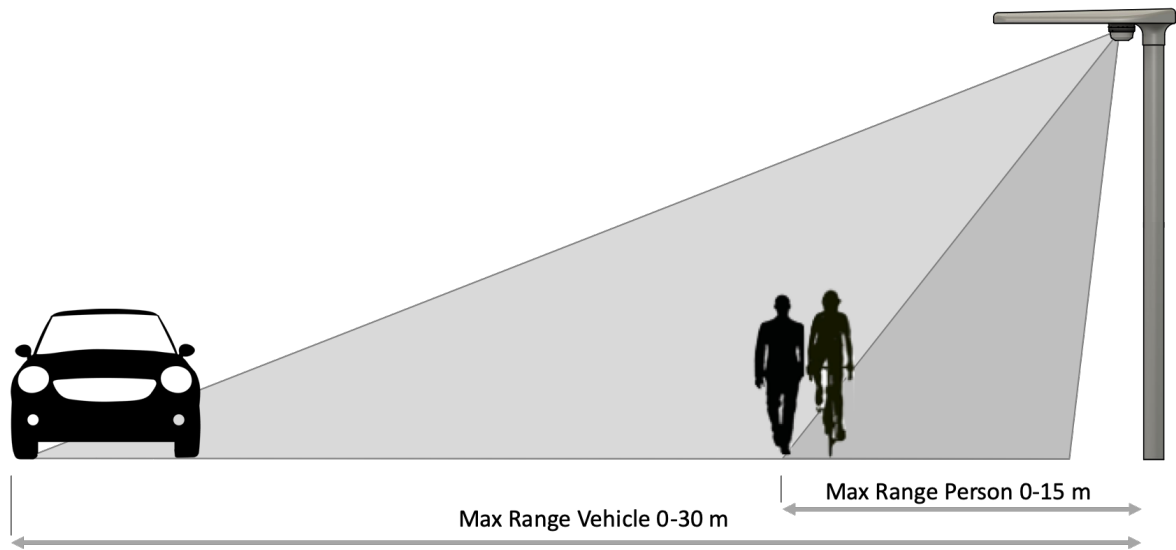
Final draft ETSI EN 301 489-01:V2.2.2  
ETSI EN 301 489-03:V2.1.1  
ETSI EN 301 489-51:V2.1.1  
ETSI EN 301 489-52:V1.1.0  
ETSI EN 300 220-1:V3.1.1  
ETSI EN 300 220-2:V3.2.1 (Transmitter Spurious Emissions)  
ETSI EN 301 908-01:V11.1.1 (Transmitter Spurious Emissions)  
ETSI EN 301 908-13:V11.1.2 (Transmitter Spurious Emissions)  
ETSI EN 300 440:V2.1.1 (Output power and Spurious Emissions)

### Radio

ETSI EN 300 220-1 V3.1.1 (2017-02)  
ETSI EN 300 220-2 V3.1.1 (2017-02)

Comlight radar detectors are defined as Short Range Devices according to CEPT/ECC ERC recommendation 70-03, edition of February 2014.

## Detection capabilities



### Horizontal range in meters at 45° radar angle

Mounting height	High sensitivity (default)		Medium sensitivity		Low sensitivity	
	Range Person	Range Vehicle	Range Person	Range Vehicle	Range Person	Range Vehicle
4 m	6 m	8 m	6 m	8 m	6 m	7 m
6 m	7 m	12 m	6 m	10 m	6 m	9 m
8 m	4 m	16 m	4 m	13 m	2 m	12 m
10 m		20 m		14 m		13 m

Vegetation in front of the sensor should be avoided to minimize risk of false detections.

