Durable Lighting Made for Industrial Safety

Hazardous Location LED Luminaire

R Series (ATEX or IECEx Version)

VENAS

Venas International Co., Ltd

Versions

R2 with diffuse PC cover

R2 with clear PC cover

R4 with diffuse PC cover

R4 with clear PC cover

Product Description

The R series LED explosion proof light is designed for use in hazardous locations where flammable gases, vapors, or liquids may be present during normal facility operations. The combination of the style and design of new LED technology with the ruggedness and durability of a hazardous location fixture makes it ideal for retrofit of existing HPS/MH, offering higher efficacy for energy savings, lower maintenance costs and shorter payback. The optional battery backup system provides a minimum of 180 minutes operation after AC power is lost during an emergency.

Features

- UV stabilized, impact-resistant fiberglass reinforced polycarbontae lens
- Available in two and four foot lengths
- Ceiling, rope and pole mount
- Suitable for dead end, through feed or single-ended "T" wiring
- Maximum total wattage for interconnection is 150W
- Flexible mounting solution, quick release for easy maintenance
- Excellent quality optics, longer distance between luminaires
- LED light strip replaceable
- Optional emergency battery back-up

VENAS

Compliance

ATEX Standard:

⟨Ex⟩ II 2 G Ex db eb mb IIC T6/T5 Gb
　　II 2 D Ex tb IIIC T80°C/T95°C Db IP66

IECEx Standard:
Ex db eb mb IIC T6/T5 Gb
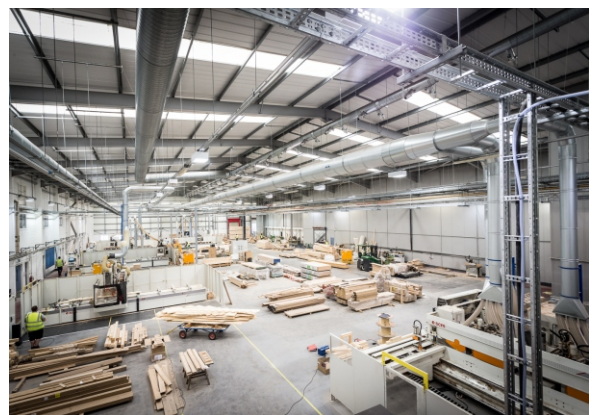Ex tb IIIC T80°C/T95°C Db IP66

1200 hours salt spray
IK10
3G vibration

Application

- Locations requiring continuous and consistent light levels
- Marine applications, like engine rooms, decks and walkways
- Pulp and paper production facilities
- Water/wastewater treatment facilities
- Petrochemical facilities
- Offshore environments

Warranty

50,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

VENAS

Technical Parameter

Note: All values are typical (tolerance +/- 10%)

● Electrical

Specification	EX-20W R2	EX-30W R2	EX-30W R4	EX-40W R4	EX-50W R4
Power Consumption	20W	30W	30W	40W	50W
Input Voltage	AC100-277V				
Input Frequency	50/60Hz				
Power Factor	> 0.9				
Emergency	Optional				
Dimming	Driver includes dimming control wiring for 0-10V dimming systems Requires separate 0-10V DC dimming circuit				

● Optical

Specification	EX-20W R2	EX-30W R2	EX-30W R4	EX-40W R4	EX-50W R4
Lumen Output	2300lm	3450lm	3450lm	4600lm	5750lm
Lumens Per Watt	115Lm/W				
Beam Angle	120°				
Correlated Colour Temperature	2700K/4000K/5000K				
Colour Rendering Index	Ra > 80				

● Mechanical

Specification	EX-20W R2	EX-30W R2	EX-30W R4	EX-40W R4	EX-50W R4
Housing Material	SUS 304 stainless steel				
Lens Material	Clear fiberglass-reinforced polycarbonate (standard) Diffuse fiberglass-reinforced polycarbonate (optional)				
Gasket	Silicone rubber				
Latches/Clips	Stainless steel				
Color	Milky white				
Finish	Epoxy powder coating				
Protection	IP66/IK10/3G vibration/1200 hours salt spray				
Mounting	Ceiling, rope, pole				
Cable entries	Standard: 4 x M20 (Side x1 with cable gland, Side x3 with stopping plugs) With emergency: 4 x M20 (Side x1 with cable gland, Side x3 with stopping plugs)				

● Environmental

Specification	EX-20W R2	EX-30W R2	EX-30W R4	EX-40W R4	EX-50W R4
Ambient Temperature	Normal: -40°C to +60°C (T6/T80°C) Emergency: -10°C to +60°C (T6/T80°C)				

Product Dimensions

Unit: mm

R2

698
480
185
225
9.8
133.5
133.5

R4

700
185
225
9.8
149.5
1302
149.5
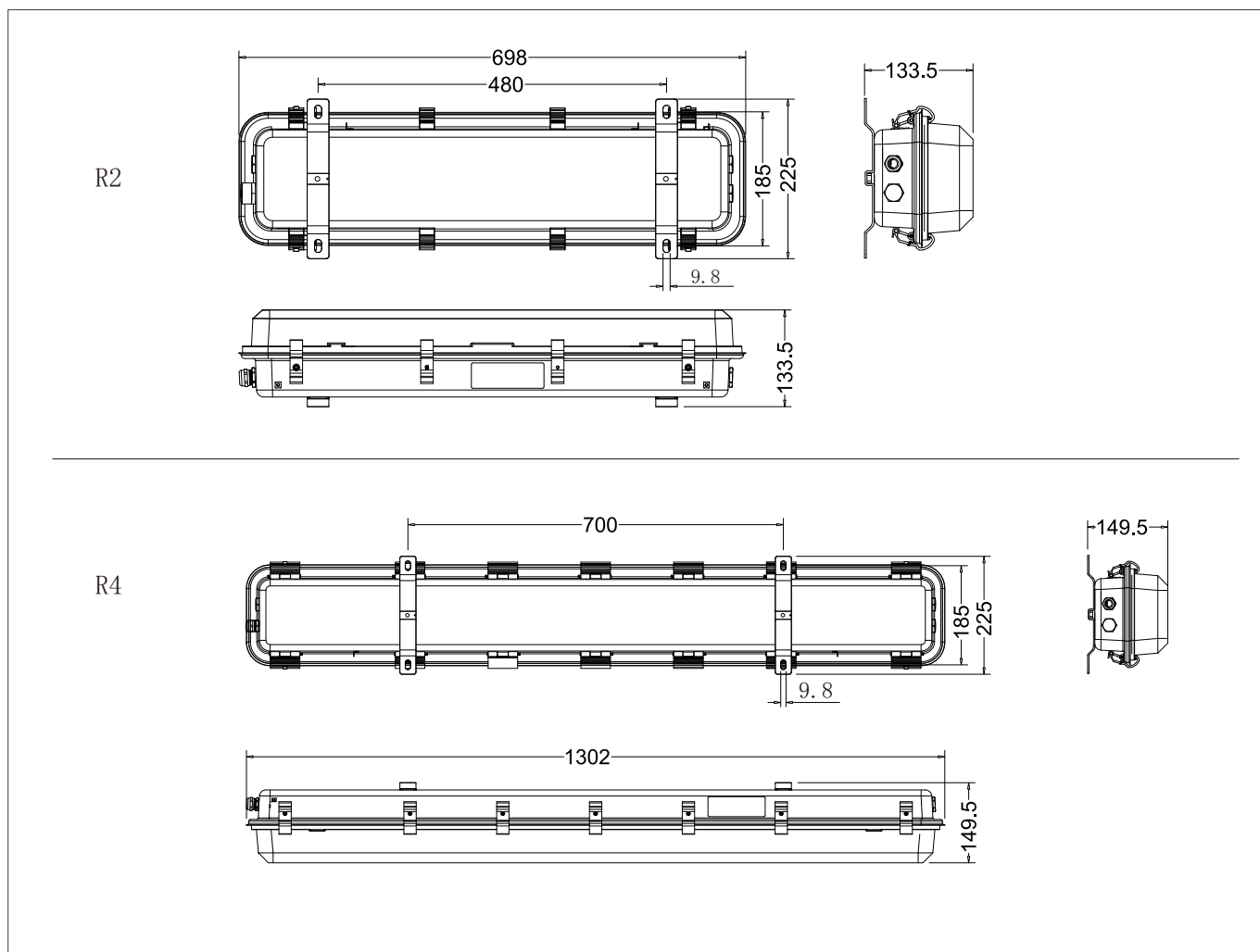
●Packing Information

Model	Net Weight (Product)	Product Dimensions (LxWxH)	Quantity/ Carton	Gross Weight*	Package Dimensions (LxWxH)
R2	5.27kg	698x220x133mm	1 pc	6.55kg	800x250x175mm
R2 with emergency	6.5kg	698x220x133mm	1 pc	7.43kg	800x250x175mm
R4	8.92kg	1302x220x149mm	1 pc	11.2kg	1400x250x175mm
R4 with emergency	10.2kg	1302x220x149mm	1 pc	11.54kg	1400x250x175mm

The gross weights are estimated values.

Emergency (Optional)

CAUTION: Sealed unit. Battery not replaceable. Replace entire unit when necessary.

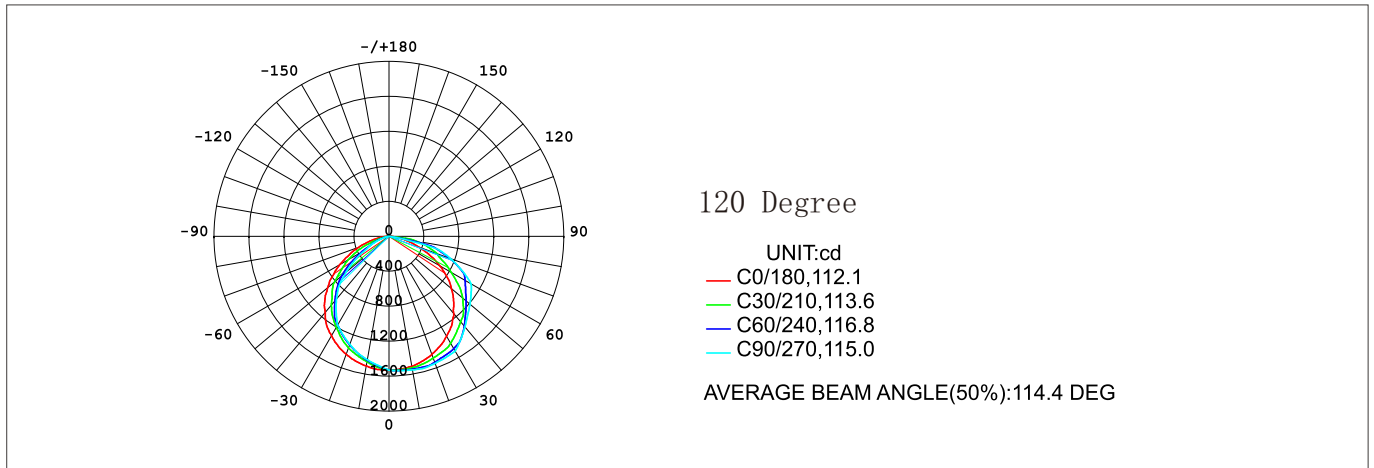| Input Rating	Input Voltage: AC120-270V; 50/60Hz THD: ≤ 20% PF: ≥ 0.9 Input Current: 0.6A Max.
Input Power	10-50W
Output Rating	Output Voltage: DC28-50V
Emergency Power	8W
Battery	Lithium
Emergency Time	3 hours
Response Time	≤ 1 second
Charge Time	≥ 24 hours
Battery Life Expectancy	5 years
Ambient Temperature	-10°C to +60°C

Ordering Guide

EX – **W R* Y Z D* A
1   2   3 4 5 6 7

1. Explosive-proof Series	2. Rated Power	3. Design No	4.Dimming function
EX	20W/30W/40W/50W	R2: 2 feet R4: 4 feet	Y: Dimming Y: Non-dimming

5. Color Temperature	6. Beam Angle	7. Type of Glass
27=2700K 40=4000K 50=5000K	D120=120°	Blank = Transparent PC F = Diffuse PC

Photometric

120 Degree

UNIT:cd
— C0/180,112.1
— C30/210,113.6
— C60/240,116.8
— C90/270,115.0

AVERAGE BEAM ANGLE(50%):114.4 DEG

Mounting

Options	Description	Kit (mm)	Installed
Ceiling Mount	Provided with two stainless steel mounting kits welded at the back of Housing	Standard Mounting Kit (Included)	4-M8✕0
Rope Mount	Provided with two stainless steel wire. Measured 1 mm diameter.	22.5 ⌀4.2 ⌀1.5 1500	
Pole Mount	(1) 155° Pipe (2) Pipe Clamp bracket	683.3 622.2 155° 4xM8 50 102 110 44 683.3 155°Pipe X1 M8 Pipe Clamp Bracket X2	⌀40-⌀60 183.0 155° 4-M8*25mm 50-70

*Mounting screws not provided.
**Ordered separately, field installed.