

# Durable Lighting Made for Industrial Safety



## Hazardous Location LED Luminaire FLF Series

Specsheet-2023-07 EN

**VENAS**  
Venas International Co., Ltd



## Product Description

The FLF Series LED fixture is the ideal choice for marine and hazardous applications requiring a linear design. They can be used in locations where moisture, dirt, dust, corrosion and vibration may be present, or areas where wind, water, snow or high ambient can be expected.

## Features

- Suitable for use in Zone 1
- High luminous efficacy - Up to 120-140 lumens per watt
- 0-10V dimming
- Available in 5 lengths
- Beam angles are optional from 40°, 60°, 90°, and 120°
- Smooth housing for easy cleaning
- Emergency model optional - 1.5 hours emergency time
- Robust design rated with IP66/IK10
- Constructed of non-sparking materials for protection in flammable work sites

## Compliance

UL 844 Hazardous Locations  
Class I Division 2, Group A, B, C, D  
Class I, Zone 2, Group IIC  
UL 924 Emergency Lighting  
CSA C22.2#141-15, Ed.5  
CSA C22.2#137:2018 Ed.2  
ABS  
ETL

ATEX Standard  
II 2 G Ex eb mb IIC T6...T4 Gb  
II 2 D Ex tb IIIC T80°C...T120°C Db

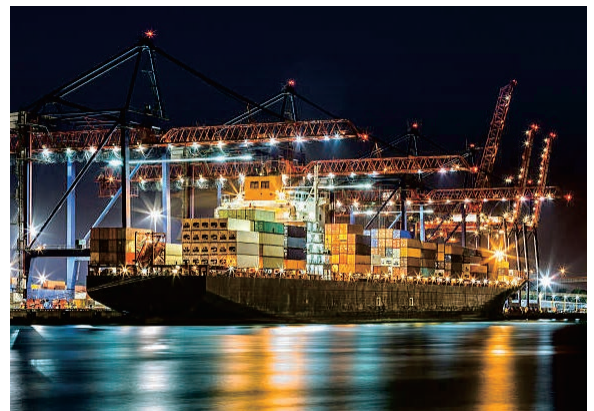
IECEX Standard  
Ex eb mb IIC T6...T4 Gcb  
Ex tb IIIC T80°C...T120°C Db

IP66  
IK10



## Application

- Power Plants
- Heavy Industrials Storage Facility
- Paper mills
- Wastewater Treatment Plants
- Loading Docks Platforms
- Offshore Environments
- Chemical Processing Facility
- Petrochemical Processing Facility
- Metallurgical Industry
- Coal Mine
- Food and Alcohol industry



## Warranty

5-Year Standard Warranty  
LED lumen Maintenance: L70> 150,000 Operation Hours@55°C



## Technical Parameter

### • Electrical

Specification	EX-yyyW FLF1YZD*	EX-yyyW FLF2YZD*	EX-yyyW FLF3YZD*
Rated Power	20W/30W	20W/30W/40W/50W	20W/30W/40W/50W/60W/70W
Input Voltage	AC100-277V	AC100-277V	AC100-277V
Input Frequency	50/60Hz	50/60Hz	50/60Hz
Emergency Time (Optional)	1.5 hours	1.5 hours	1.5 hours

### • Optical

Specification	EX-yyyW FLF1YZD*	EX-yyyW FLF2YZD*	EX-yyyW FLF3YZD*
Lumen Output	2,400lm-4,200lm	2,400lm-7,000lm	2,400lm-9,800lm
Lumens Per Watt	120-140lm/W	120-140lm/W	120-140lm/W
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
CCT	2200K-6500K	2200K-6500K	2200K-6500K
CRI	> 70	> 70	> 70
Dimming	0-10V dimming	0-10V dimming	0-10V dimming

### • Environmental

Specification	EX-yyyW FLF1YZD*	EX-yyyW FLF2YZD*	EX-yyyW FLF3YZD*
Ambient Operating Temperature	T5: -40°C to +40°C (-40°F to +104°F) T4: -40°C to +55°C (-40°F to +131°F)	T5: -40°C to +40°C (-40°F to +104°F) T4: -40°C to +55°C (-40°F to +131°F)	T5: -40°C to +40°C (-40°F to +104°F) T4: -40°C to +55°C (-40°F to +131°F)

### • Mechanical

Specification	EX-yyyW FLF1YZD*	EX-yyyW FLF2YZD*	EX-yyyW FLF3YZD*
Protection	IP66/IK10	IP66/IK10	IP66/IK10
Mounting	Pole, Hook, Wall	Pole, Hook, Wall	Pole, Hook, Wall

## Technical Parameter

### • Electrical

Specification	EX-yyyW FLF4YZD*	EX-yyyW FLF5YZD*
Rated Power	20W/30W/40W/50W/60W/70W/80W	20W/30W/40W/50W/60W/70W/80W/90W/100W
Input Voltage	AC100-277V	AC100-277V
Input Frequency	50/60Hz	50/60Hz
Emergency Time (Optional)	1.5 hours	1.5 hours

### • Optical

Specification	EX-yyyW FLF4YZD*	EX-yyyW FLF5YZD*
Lumen Output	2,400lm-11,200lm	2,400lm-14,000lm
Lumens Per Watt	120-140lm/W	120-140lm/W
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°
CCT	2200K-6500K	2200K-6500K
CRI	> 70	> 70
Dimming	0-10V dimming	0-10V dimming

### • Environmental

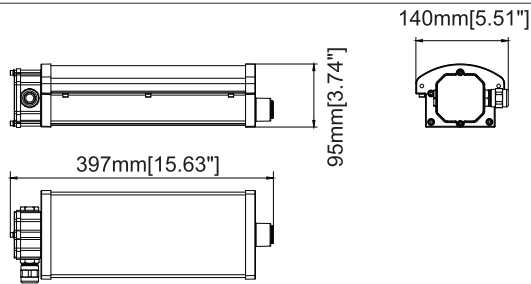
Specification	EX-yyyW FLF4YZD*	EX-yyyW FLF5YZD*
Ambient Operating Temperature	T5: -40°C to +40°C (-40°F to +104°F) T4: -40°C to +55°C (-40°F to +131°F)	T5: -40°C to +40°C (-40°F to +104°F) T4: -40°C to +55°C (-40°F to +131°F)

### • Mechanical

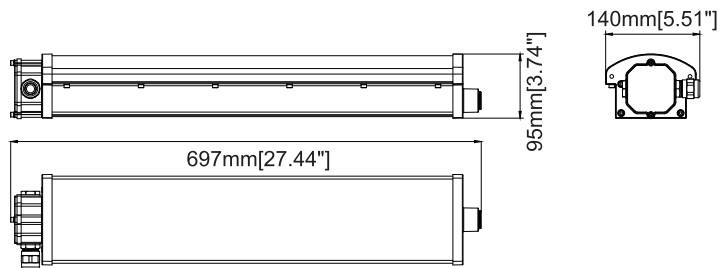
Specification	EX-yyyW FLF4YZD*	EX-yyyW FLF5YZD*
Protection	IP66/IK10	IP66/IK10
Mounting	Pole, Hook, Wall	Pole, Hook, Wall

## Product Dimensions

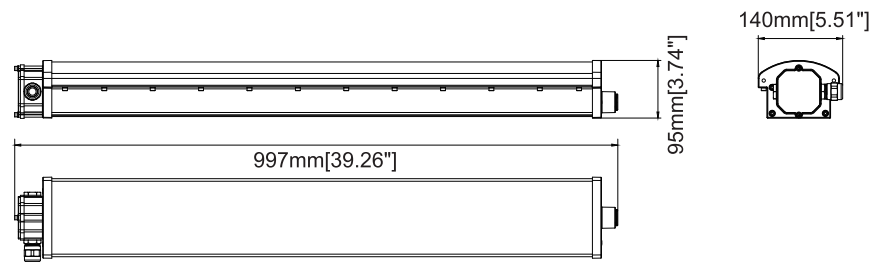
FLF1



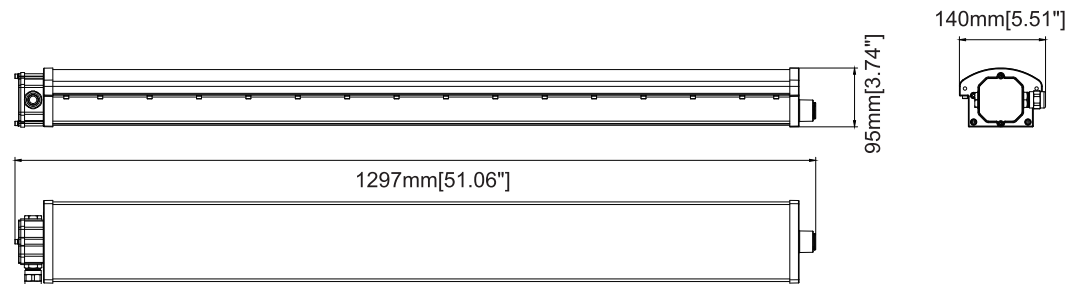
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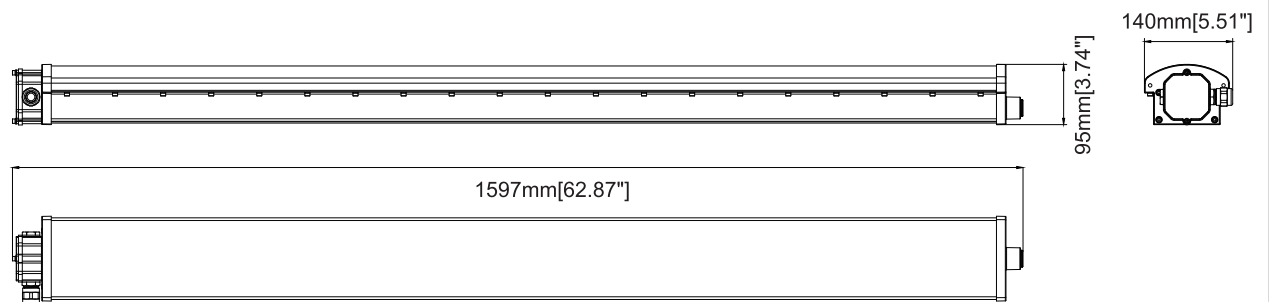
FLF3



FLF4



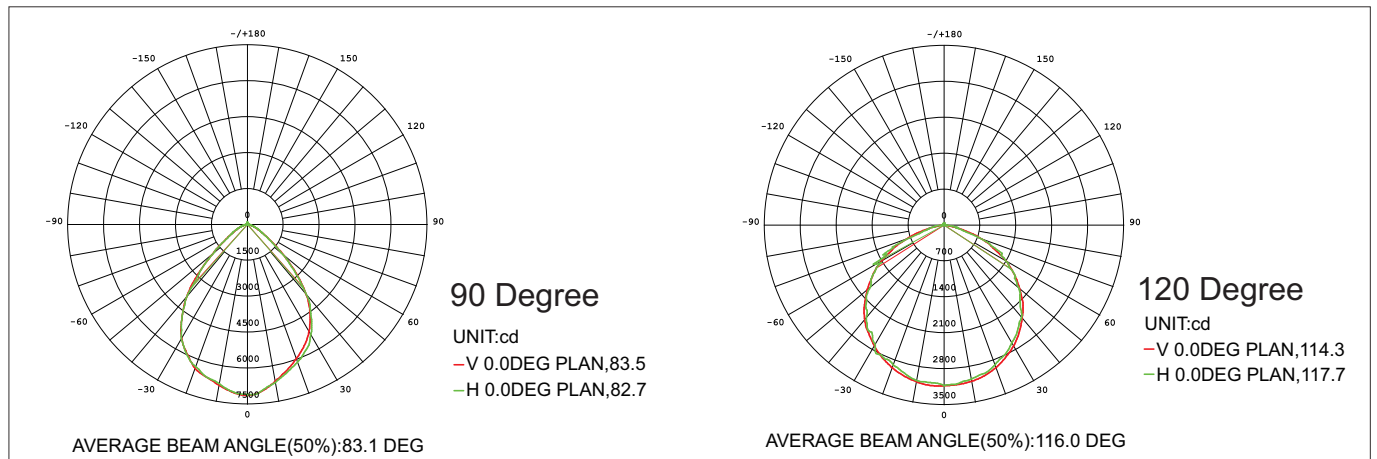
FLF5



● Packing Information

Model	Net Weight (Product)	Product Dimensions (LxWxH)	Quantity/ Carton	Gross Weight	Package Dimensions (LxWxH)
EX-xxxW-FLF2 AZDA	-	697x140x95mm/ 27.44x5.51x3.74inch	1 pc	5.8kg/12.78lb	710x210x150mm/ 27.95x8.26x5.91inch
EX-xxxW-FLF4 AZDA	7.23kg/15.94lb	1297x140x95mm/ 51.06x5.51x3.74inch	1 pc	8.03kg/17.70lb	1330x187x151mm/ 52.36x7.36x5.94inch
EX-xxxW-FLF5 AZDA	-	1597x140x95mm/ 62.87x5.51x3.74inch	1 pc	-	1610x210x150mm/ 63.38x8.27x5.91inch

Photometric



Ordering Guide

EX - 
 yyyW
FLFi
Y
Z
D
\*

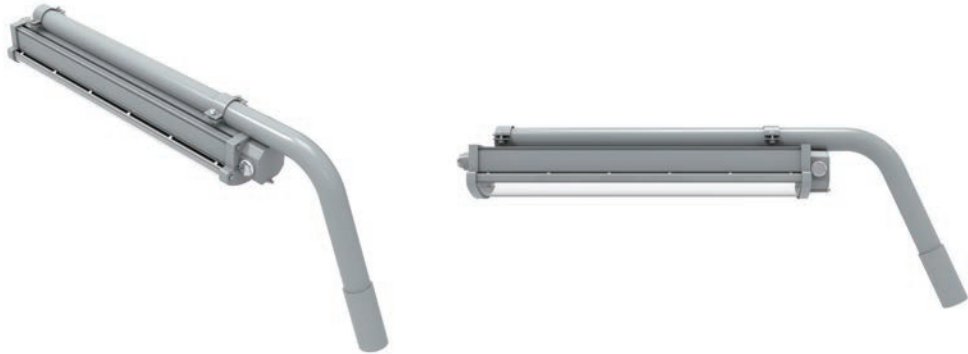
1
2
3
4
5
6
7\*

1. Product Categories	2. Wattage	3. Shell Shape Series	4. Dimming or Not
Explosion Proof Light	FLF1: 20/30W FLF2: 20/30/40/50W FLF3: 20/30/40/50/60/70W FLF4: 20/30/40/50W60/70/80W FLF5: 20/30/40/50/60/70/80/90/100W	Can be: FLF1/FLF2/FLF3/ FLF4/FLF5	"Y" Can be: D: dimmable N: non-dimmable
5. Color Temperature	6. Beam Angle	7. Emergency Function Optional	
"Z" can be 27 to 70 denotes 2700K to 7000K, and each 100K gradually increase, max 7000K	"D" can be: D40: 40° D60: 60° D90: 90° D120: 120°	-EM: with emergency function (optional) Blank: without emergency function (standard)	

\*: Suffix not within nomenclature as per Certification, for marketing purpose only.

## Mounting Methods

- Pole Mounting



- Hook Mounting



- Wall Mounting

