

**Born for Industrial Safety**



**Warrior™** (NJZ-FEL-D Series)

**Hazardous Location LED Luminaire**



Specsheet-2021-09A EN

# Warrior™

## Hazardous Location LED Luminaire

### NJZ-FEL-D Series



## Product description

The Warrior™ NJZ-FEL-D Series LED Luminaire is designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambient can be expected.

They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

NJZ-FEL-D Series is ideal for retrofit of existing HPS/MH and offers higher efficacy for increased energy savings, lower maintenance costs and shorter paybacks.

## Features

- High luminous efficacy-Up to 150 Lm/W
- Input Voltage: AC120-277,347-480V (50/60Hz)
- Instant illumination and restrike-no warm-up time required
- Safe and reliable heat transfer-Offering a T-rating of T4A (CID2) / T5 (CIID1)
- Shock and vibration resistant-Durable LEDs with solderless board connection
- Die-cast aluminum body and frame-corrosion resistant
- All exposed fasteners with quality stainless steel
- High Temperature silicone gasketing
- Thermal shock and impact resistant tempered glass
- Light weight and compact design

## Compliance

### NEC/CEC Standard

UL844

Class I Division 2, Group A, B, C, D

Class II Division 1, Group E, F, G

Class II Division 2, Group F, G

Class III, Division 1

Class I, Zone 2, Group IIC

Zone 21, Group IIIC

Simultaneous Presence

UL 1598 Wet Locations

UL 1598A Marine Outside Type (Salt Water)

CSA C22.2 No. 137

CSA C22.2 NO. 250.0

FCC

IP66

IK08/IK07(Drop Lens)

5G vibration

1000hrs salt spray

## Application

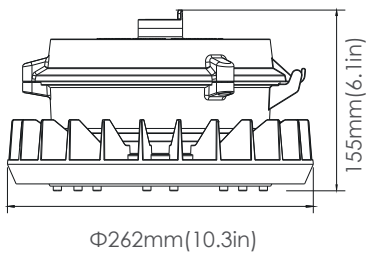
- Power Plants
- Heavy Industrials Storage Facility
- Paper mills
- Wastewater Treatment Plants
- Loading Docks Platforms
- Shipyards
- Chemical Processing Facility
- Petrochemical Processing Facility

## Warranty

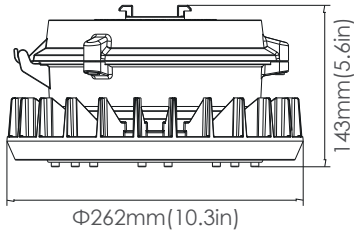
5-Year Standard Warranty

LED lumen Maintenance: L70>150,000 Operation Hours@55°C

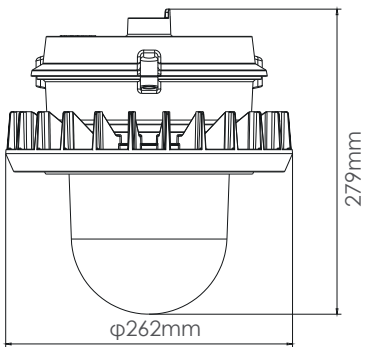
Product Dimensions



ADAPTER P



ADAPTER F



Drop lens without Wire guard

Unit:mm

| Model                     | Net weight    | Dimensions (L×W×H)        | Gross weight  | Dimensions (L×W×H) |
|---------------------------|---------------|---------------------------|---------------|--------------------|
| NJZ-FEL-D<br>(Flat glass) | 4.2kg/9.3lbs  | Φ262×155mm<br>Φ10.3×6.1in | 4.9kg/10.8lbs | 323×295×220mm      |
| NJZ-FEL-D<br>(Drop glass) | 4.8kg/10.6lbs | Φ262×279mm<br>Φ10.3×11in  | 5.6kg/12.3lbs | 323×295×360mm      |

Mounting



Pendant Top



Bracket



Safety cable installed



Multi-mount Top



Ceiling Mount



Stanchion 25°



Stanchion 90°



Wall 25°



Wall 90°



Drop Lens



With glare shield installed-25°



With glare shield installed-90°

## Technical Parameter

### Electrical

| Specification     |              | NJZ-FEL-D-45 | NJZ-FEL-D-65 | NJZ-FEL-D-40 | NJZ-FEL-D-60 |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| Rated Power       |              | 45W          | 65W          | 40W          | 60W          |
| Input Voltage     |              | AC120-277    |              | AC347-480    |              |
| Input Frequency   |              | 50/60Hz      |              |              |              |
| Input Current     | (AC120/277V) | 0.35/0.15A   | 0.54/0.24A   |              |              |
|                   | (AC347/480V) |              |              | 0.12/0.08A   | 0.18/0.13A   |
| Power Factor      |              | ≥0.9         |              |              |              |
| Driver Efficiency |              | ≥90%         |              |              |              |
| Surge Protection  |              | 4Kv          |              |              |              |

### Optical

| Specification                      |  | NJZ-FEL-D-45                      | NJZ-FEL-D-65 | NJZ-FEL-D-40 | NJZ-FEL-D-60 |
|------------------------------------|--|-----------------------------------|--------------|--------------|--------------|
| Lumen Output                       |  | 6750Lm-9750Lm                     |              |              |              |
| Lumens Per Watt                    |  | 150Lm/W* (130Lm/W for Drop lens)* |              |              |              |
| Beam Angle                         |  | 110° (130° for Drop lens)         |              |              |              |
| Correlated Color Temperature (CCT) |  | 3000K/4000K/5000K                 |              |              |              |
| Color Rendering Index (CRI)        |  | Ra>70                             |              |              |              |

\*value calculated based on 5000K ,varies to different spec

### Environmental

| Specification                 |      | NJZ-FEL-D-45             | NJZ-FEL-D-65 | NJZ-FEL-D-40 | NJZ-FEL-D-60 |
|-------------------------------|------|--------------------------|--------------|--------------|--------------|
| Ambient Operating Temperature |      | -40°C~+55°C/-40°F~+131°F |              |              |              |
| T-code                        | CID2 | T4A                      | T4A          | T5           | T4A          |
| CIID1                         |      | T5                       |              |              |              |

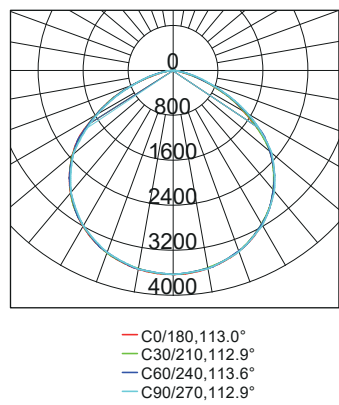
### Mechanical

| Specification    |  | NJZ-FEL-D-45   | NJZ-FEL-D-65 | NJZ-FEL-D-40 | NJZ-FEL-D-60 |
|------------------|--|--|--------------|--------------|--------------|
| Housing Material |  | Copper-free Aluminum                                     |              |              |              |
| Lens Material    |  | Tempered glass   |              |              |              |
| Hardware         |  | Stainless steel 316                                      |              |              |              |
| Color            |  | Dark Grey (RAL7037)                                      |              |              |              |
| Finish           |  | Polyster powder coating for uniform corrosion resistance |              |              |              |
| Protection       |  | IP66/IK08*/5G vibration/1000hrs salt spray               |              |              |              |
| Mounting         |  | Pendant, Bracket, Ceiling, Pole, Wall                    |              |              |              |
| Installation     |  | MIN 90°C SUPPLY CONDUCTORS                               |              |              |              |
| Cable entries    |  | 1 x NPT3/4 (one at pendant top)                          |              |              |              |
| Termination      |  | 3 x WAGO 221-413 (max. 4 mm²,3-conductor,with levers)    |              |              |              |

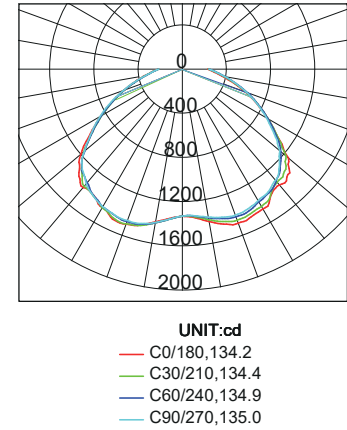
\*Flat glass lens only/IK07(Drop Lens)

Photometric

I 110 Degree



I 130 Degree for drop lens



### Ordering Information and Mounting Accessories



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

#### BRAND

NJZ

#### SERIES

FEL-D

#### WATTAGE

45=45W  
65=65W  
40=40W  
60=60W

Note: 45W & 65W when operating @120-277  
40W & 60W when operating @347-480

#### VOLTAGE

V01= AC100-240/277V  
V04= AC347-480V

#### COLOR TEMP

RN= 3000K (Warm White)  
RL= 4000K (Neutral White)  
RZ= 5000K (Neutral White)

#### BEAM ANGLE

110=110°(Flat Glass)  
130=130° (Glass Globe)

#### HAZLOC

25=CID2,CIID1

#### LENS TYPE

T=Transparent glass  
D=Diffuse flat glass  
DL01=Drop glass globe

#### MOUNT TYPE

P=NPT 3/4 pendant mount  
U=Bracket  
F=Multi-mount  
(Ceiling/Stanchion/Wall)

#### COLOR OF FINISH

GR=Gray(Standard)  
BL=Black  
WT=White  
BZ=Bronze

#### ACCESSORIES

JB01=Junction Box NPT 3/4"  
PB01= U-Bracket (SUS 304)  
WL25=Wall mount-25°  
WL90=Wall mount-90°  
SN2501=Stanchion-25°(NPT 1.25")  
SN2502=Stanchion-25°(NPT 1.50")  
SN9001=Stanchion-90°(NPT 1.25")  
SN9002=Stanchion-90°(NPT 1.50")  
WG02=Stainless Steel Wire guard for Flat Lens  
WG03=Stainless Steel Wire guard for Drop Lens  
SC04=Stainless Steel Safety Cable  
CA01=3' SEOWW-18/3 Cord (Factory installed)  
CA-X=Cable, order upon request  
DL01=Drop Lens  
LS03=Glare Shield -25°  
LS04=Glare Shield -90°  
SP01=10kv Surge Protector for 100-277V  
SP02=10kv Surge Protector for 347-480V

#### INSTALLATION TIPS

##### 1. Termination

3x WAGO 3-conductor for L, N, G connection  
Conductor range: 0,2 ... 4 mm<sup>2</sup> / 24 ... 12 AWG  
Rated voltage UL: 600 V  
Rated current UL: 20A

##### 2. Cable Entries

3/4" NPT (Top x1 open )

##### 3. Dimming

Unavailable



Not all product variations listed on this page are DLC qualified.\*  
Visit [www.designlights.org/search](http://www.designlights.org/search) to confirm qualification.





### JB01

Ceiling  
Junction Box NPT 3/4"  
Grey Painted A356 Aluminum AL



### PB01

Wall/Pipe  
U-Bracket (SUS 304)  
Stainless steel bracket



### WL25

Wall mount-25°  
NPT 3/4" Grey Painted  
A356 Aluminum AL



### WL90

Wall mount-90°  
NPT 3/4" Grey Painted  
A356 Aluminum AL



### SN2501

Stanchion-25°,  
NPT 1.25"(1.660"Pole OD)  
slip-fit stanchion mount

### SN2502

Stanchion-25°,  
NPT 1.50"(1.900"Pole OD)  
slip-fit stanchion mount



### SN9001

Stanchion-90°,  
NPT 1.25"(1.660"Pole OD)  
slip-fit stanchion mount

### SN9002

Stanchion-90°,  
NPT 1.50"(1.900"Pole OD)  
slip-fit stanchion mount



### WG02

Stainless Steel  
Wire guard



### WG03

Stainless Steel  
Wire guard



### SC04

Stainless Steel  
Safety Cable



### CA01

3' SEOWW-18/3 Cord  
(Factory installed)



### DL01

Drop Lens  
Tempered Glass



### LS03

Glare Shield-25°  
Aluminium alloy



### LS04

Glare Shield-90°  
Aluminium alloy



### SP01/SP02

10KV Surge Protector

## Class I Locations

Class I locations are those in which inflammable gases or vapors are or may be present in sufficient quantities to produce explosive or flammable mixtures.

### CLASS I, DIVISION 1

Class I, Division 1 locations are where hazardous atmosphere may be present during normal operations. It may be present continuously, intermittently, periodically or during normal repair or maintenance operations, or those areas where a breakdown in processing equipment releases hazardous vapors with the simultaneous failure of electrical equipment.

### CLASS I, DIVISION 2

Class I, Division 2 locations are those in which volatile flammable liquids or gases are handled, processed or used. Normally they will be confined within closed containers or in closed systems from which they can escape only in the case of rupture or deterioration of the containers or systems.

## Class II Locations

Class II locations are those that are hazardous because of the presence of combustible dust.

### CLASS II, DIVISION 1

Class II, Division 1 locations include areas where combustible dust may be in suspension in the air under normal conditions in sufficient quantities to produce explosive or ignitable mixtures (Dust may be emitted into the air continuously, intermittently or periodically), or where failure or malfunction of equipment might cause a hazardous location to exist and provide an ignition source with the simultaneous failure of electrical equipment, included also are locations in which combustible dust of an electrically conductive nature may be present.

### CLASS II, DIVISION 2

Class II, Division 2 locations are those in which combustible dust will not normally be in suspension nor will normal operations put dust in suspension, but where accumulation of dust may interfere with heat dissipation from electrical equipment or where accumulations near electrical equipment may be ignited.

## Class III Locations

Class III locations are those considered hazardous due to the presence of easily ignitable fibers or flyings, which are in quantities sufficient to produce ignitable mixtures.

### CLASS III, DIVISION 1

Locations in which easily ignitable fibers or materials producing combustible flyings are handled, manufactured or used.

### CLASS III, DIVISION 2

Locations where easily ignitable fibers are stored or handled.