

**Born for Industrial Safety**



**Ranger™** (NJZ-FEL-E Series Emergency Battery Backup.)  
**Hazardous Location LED Luminaire**



2021-03-04 V2.0 EN

# Ranger™

## Hazardous Location LED Luminaire

### NJZ-FEL-E Series Emergency



## Product description

The Ranger™ NJZ-FEL-E 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 and IEC.

NJZ-FEL-E Series is ideal for retrofit of existing HPS/MH, and T8 tube-type explosion proof light. It offers higher efficacy for increased energy savings, lower maintenance costs and shorter paybacks.

## Features

- Best-in-class system efficacy - Up to 137 Lm / W
- Charge time 24h, Emergency run time 90 mins, Rated load 12w in emergency mode
- Wide ambient temp. range from 0°C to + 50 °C (32°F ~ + 122°F)
- Safe and reliable heat transfer - Offering a T-rating of T4(CID2) / T6(CIID1)
- Instant on/off operation
- Shock-and vibration-resistant - Durable LEDs with solder-less board connection
- Copper-free aluminum body and corrosion resistant
- All exposed fasteners with quality stainless steel 316
- UV stable and impact resistant clear or diffused PC lens
- Slim and compact design

## Compliance

### NEC/CEC Standard

UL 844

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

Class II Division 1, Group E, F, G

Class III, Division 1

Class I, Zone 2, Group IIC

Zone 21, Group IIIC

UL924

CSA C22.2 No.137

CSA C22.2 No.141-15

## Application

Power Plants / Heavy Industrials

Storage Facility / Paper mills

Wastewater Treatment Plants

Loading Docks / Platforms / Shipyards

Chemical Processing Facility

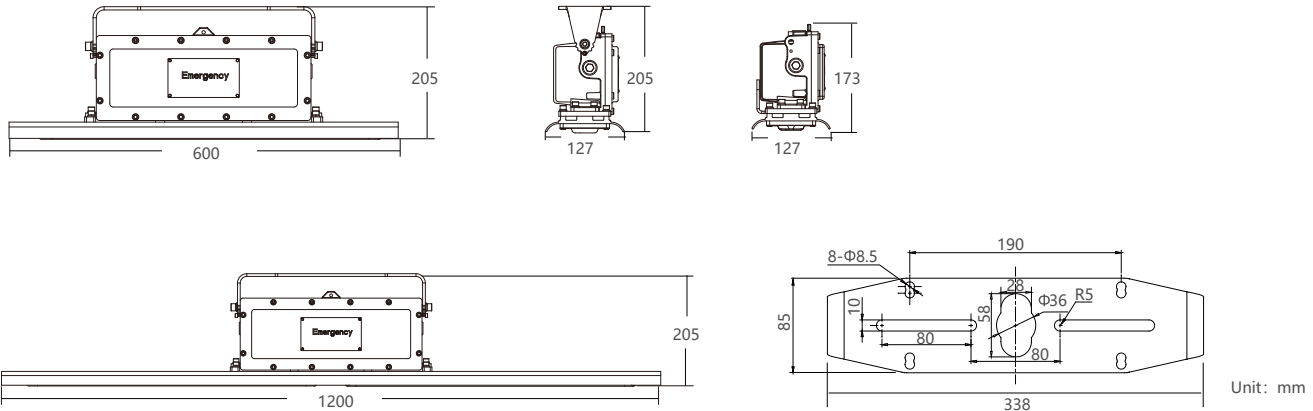
Petrochemical Processing Facility

## Warranty

5-Year Standard Warranty\*  
(Battery not included)

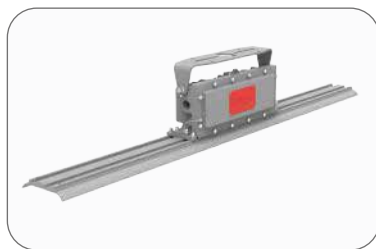


### Product Dimensions

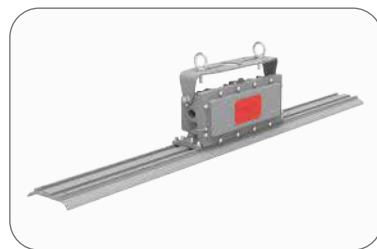


Model	Net weight	Dimensions (L×W×H)	Gross weight	Dimensions (L×W×H)
NJZ-FEL-E-40-/EM	7.5KG / 16.5 lbs	600×127×205 mm 23.6×5.0×8.1in	8.5KG / 18.7 lbs	675×180×230 mm 26.6×7.1×9.1in
NJZ-FEL-E-80-/EM	8.3KG / 18.3 lbs	1200×127×205 mm 47.2×5.0×8.1in	10.3KG / 22.7 lbs	1275×180×230 mm 50.2×7.1×9.1in

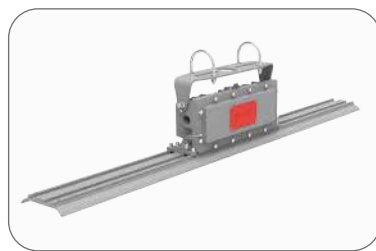
### Mounting Options



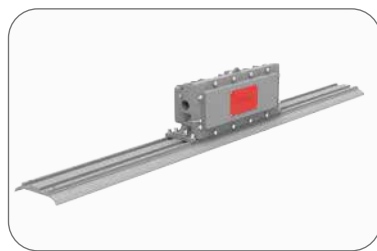
Ceiling&Wall



Hanging Mount



Stanchion



Pendant

### Technical Parameter

#### Electrical

Specification	NJZ-FEL-E-40( Battery backup )	NJZ-FEL-E-80( Battery backup )
Rated Power	40W(12W)	80W(12W)
Input Voltage	AC120-277V only(50/60Hz)	
Battery	LiFePO4	
Expected Battery Life	3-year	
Charge Time	24 hours	
Emergency Run Time	90 mins	
Power Factor	≥0.95	

#### Optical

Specification	NJZ-FEL-E-40( Battery backup )	NJZ-FEL-E-80( Battery backup )
Lumen Output	5480Lm(2200Lm)	10960Lm(2200Lm)
Lumens Per Watt	137Lm/W*	
Beam Angle	110°	
Correlated Color Temperature (CCT)	3000K/4000K/5000K	
Color Rendering Index (CRI)	Ra>70	

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

#### Environmental

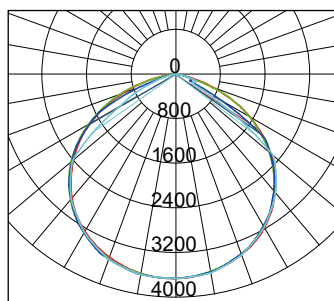
Specification	NJZ-FEL-E-40( Battery backup )	NJZ-FEL-E-80( Battery backup )
Ambient Operating Humidity	10%~90% RH	
Ambient Operating Temperature	0°C to + 50 °C ( 32°F ~ + 122°F)	
Optimal Operating Temperature	25°C (77°F)	
T-Code	CID2 : T4A / CIID1 : T6	CID2 : T4 / CIID1 : T6
Max Mounting Height	30ft ( 9m )	

#### Mechanical

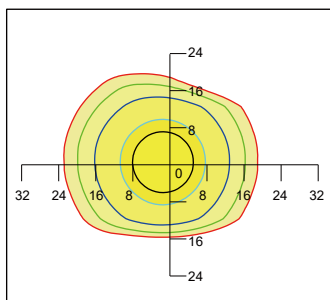
Specification	NJZ-FEL-E-40( Battery backup )	NJZ-FEL-E-80( Battery backup )
Housing Material	Copper-free Aluminum	
Lens Material	Polycarbonate	
Hardware	Stainless steel 316	
Color	Dark Grey (RAL7037)	
Finish	Polyster powder coating for uniform corrosion resistance	
Protection	IP66 / IK08 / 5G vibration / 1000hrs salt spray	
Cable entries	3 x NPT3/4 (one top, two rear)	
Termination	4 x WAGO 221-413 (max. 4 mm²,3-conductor,with levers)	
Mounting	Ceiling, Wall, Hanging Mount, Stanchion, Pendant	
Installation	MIN 90°C SUPPLY CONDUCTORS	

### Photometric

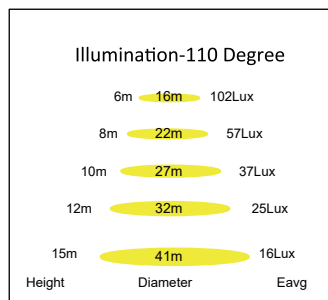
#### 110 Degree



— C0/180, 115.0  
 — C30/210, 115.0  
 — C60/240, 114.0  
 — C90/270, 107.0



Mounting Height 33'(10m), 0 Tilt



#### Illumination-110 Degree

6m	16m	102Lux
8m	22m	57Lux
10m	27m	37Lux
12m	32m	25Lux
15m	41m	16Lux
Height	Diameter	Eavg

Flux out: 7550 lm

### Ordering Information and Mounting Accessories

<b>NJZ</b>	<b>FEL-E</b>	<b>40</b>	<b>V01</b>	<b>RL</b>	<b>110</b>	<b>25</b>	<b>T</b>	<b>P</b>	<b>GR</b>	<b>/EM</b>	<b>XX</b>
Brand	Series	Power	Voltage	Color Temp	Beam Angle	Hazloc	Lens	Mount type	Color of enclosure	Emergency mode	Accessories
*: Suffix not within nomenclature as per Certification, for marketing purpose only											

#### BRAND

NJZ

#### SERIES

FEL-E

#### POWER

40=40W  
80=80W

#### VOLTAGE

V01= AC 120-277V

#### COLOR TEMP

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

#### BEAM ANGLE

110=110°

#### MODEL SERIES

25=CID2, CIID1

#### LENS

T=Transparent PC  
F=Diffuse PC

#### MOUNT TYPE

P=NPT 3/4 pendant mount  
U=NPT 3/4 pendant+U-bracket

#### ACCESSORIES

UB02=Stainless steel U-Bracket  
HK04=Hanging Ring one pair  
PC01=Pipe clamp one pair (M8\*48mm)  
for Round pole φ 1 7/8" (48mm)  
PC02=Pipe clamp one pair (M8\*60mm)  
for Round pole φ 2 3/8" (60mm)  
LS06=Glare Shield one pair  
SC02=Stainless Steel Safety Cable kit  
SP03=10kv Surge Protector 100~277V

#### COLOR OF ENCLOSURE

GR=Gray

#### EMERGENCY MODE

/EM=90mins



#### UB02

Ceiling/Wall mount  
Stainless steel U-Bracket



#### HK04

Hanging Mount-B  
Hanging Ring  
M10 Eyebolt SUS316



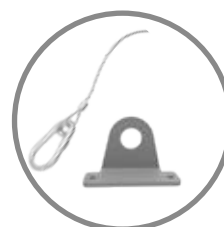
#### PC01/PC02

Stanchion mount  
Pipe clamp



#### LS06

Glare Shield  
Stainless Steel SUS304



#### SC02

Stainless Steel  
Safety Cable kit

#### INSTALLATION TIPS

##### 1. Termination

4x WAGO 5-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 & Side x2)  
Side x1 open, Top & Side with stopping plugs

##### 3. Dimming

Unavailable

### 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.