Born for Industrial Safety

Ranger™ (NJZ-FEL-E Series)

Hazardous Location LED Luminaire

NJZ LIGHTING

Specsheet-2021-09A EN

Ranger™

Hazardous Location LED Luminaire

NJZ-FEL-E Series

Product description

The Ranger™ NJZ-FEL-E Series LED Luminaire is designed for installations where moisture, dirt, corrosion and vibration may be present.

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

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

Features

- Best-in-class system efficacy - Up to 137 Lm / W
- Universal Voltage: AC120-277V, AC347-480V (50/60Hz)
- Wide ambient temp. range from - 40°C to +50 °C (-40°F ~ +122°F)
- Safe and reliable heat transfer - Offering a T-rating of T3C (CID2) / T4A (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
- Thermal shock and impact resistant PC lens
- Slim 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 III, Division 1
Class I, Zone 2, Group IIC
Zone 21, Group IIIC
UL 1598 Wet Locations
UL 1598A Marine Outside Type (Salt Water)

CSA C22.2 No.137
CSA C22.2 NO. 250.0
DLC *

Not all product variations listed on this page are DLC qualified.*
Visit www.designlights.org/search to confirm qualification.

FCC
IP66
IK08
5G vibration
1000hrs salt spray

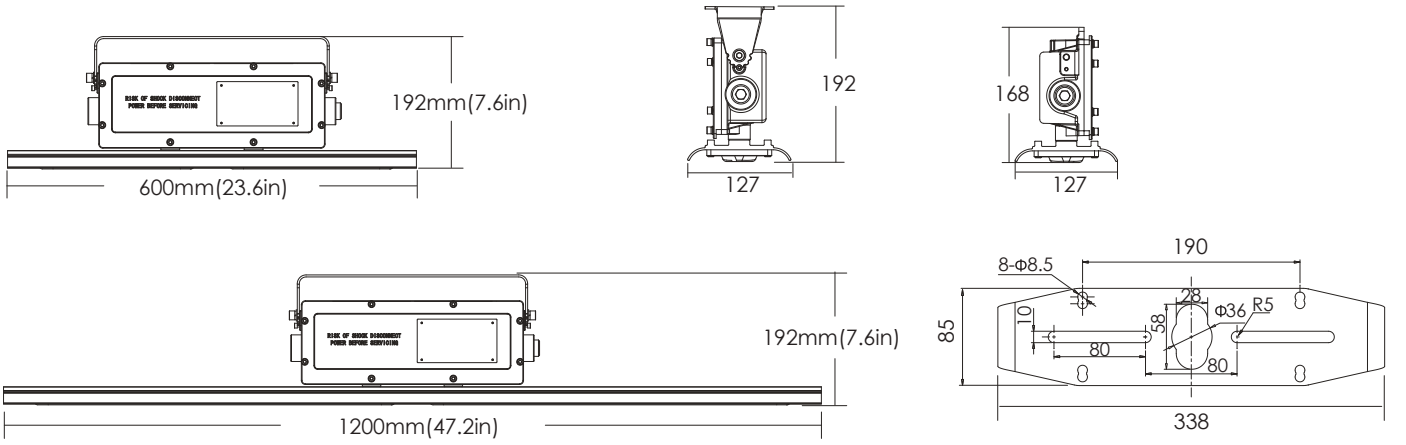
Application

- 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>120,000 Operation Hours@50°C

Product Dimensions

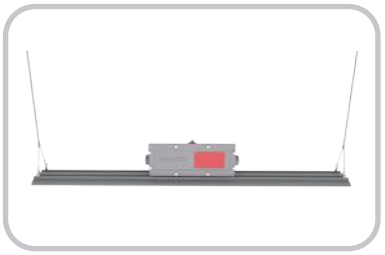


Unit: mm

Model	Net weight	Dimensions (L×W×H)	Gross weight	Dimensions (L×W×H)
NJZ-FEL-E-40	5.5kg/12.1lbs	600×127×168 mm 23.6×5.0×6.6in	6.2kg/13.6lbs	675×180×230 mm 26.6×7.1×9.1in
NJZ-FEL-E-80	7.6kg/16.7lbs	1200×127×168 mm 47.2×5.0×6.6in	8.7kg/19.1lbs	1275×180×230 mm 50.2×7.1×9.1in

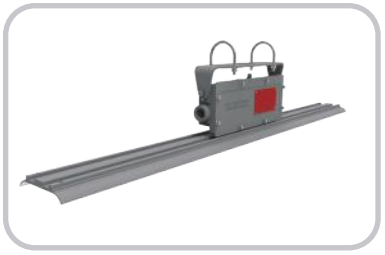
Mounting

Ceiling&Wall

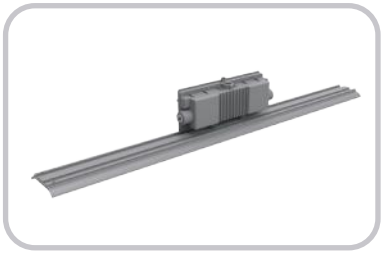


Hanging Mount-A

Hanging Mount-B

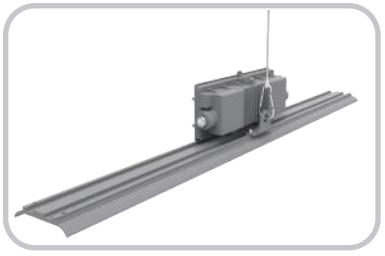


Stanchion



Pendant

Glare shield installed



Safety cable installed

Technical Parameter

Electrical

Specification		NJZ-FEL-E-40	NJZ-FEL-E-80
Rated Power		40W	80W
Input Voltage		AC120-277, 347-480V	
Input Frequency		50/60Hz	
Input Current	(AC120/277V)	0.34/0.16A	0.67/0.32A
	(AC347/480V)	0.13/0.09A	0.25/0.18A
Power Factor		>0.9	
Driver Efficiency		≥90%	
Surge Protection		4Kv	

Optical

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

*value calculated based on 5000K ,varies to differrent spec

Environmental

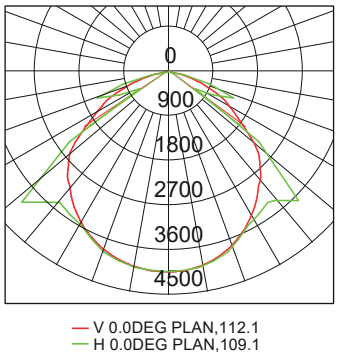
Specification	NJZ-FEL-E-40	NJZ-FEL-E-80
Ambient Operating Humidity	5%~95% RH	
Ambient Operating Temperature	-40°C~+50°C (-40°F~+122°F)	
Optimal Operating Temperature	25°C (77°F)	
T-Code	ClassI Div2: T3C ClassII Div1: T4A	

Mechanical

Specification	NJZ-FEL-E-40	NJZ-FEL-E-80
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	
Mounting	Ceiling,Wall, Stanchion, Hanging Mount, Pendant	
Installation	MIN 90°C SUPPLY CONDUCTORS	
Cable entries	3 x NPT3/4 (one top, two rear)	
Termination	3 x WAGO 221-415 (max. 4 mm²,5-conductor,with levers)	

Photometric

110 Degree



Ordering Information and Mounting Accessories

NJZ	–	FEL-E	–	40	–	V01	–	RL	–	110	–	25	–	T	–	P	–	GR	* XX
Brand		Series		Wattage		Voltage		Color Temp		Beam Angle		Hazloc		Lens Type		Mount Type		Color	Accessories

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

BRAND
NJZ

SERIES
FEL-E

WATTAGE
40=40W
80=80W

VOLTAGE
V01= AC100-240/277V
V04= AC200-480V

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

BEAM ANGLE
110=110°

HAZLOC
25=CID2,CIID1

LENS TYPE
T=Transparent PC
F=Diffuse PC

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

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

ACCESSORIES
UB02=Stainless steel U-Bracket
HC01=Hanging Chain
HK04=Hanging Ring
LS06=Glare Shield
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)
SC02=Stainless Steel Safety Cable kit
CA01=3' SEOOW-18/3 Cord(Factory installed)
CA-X=Cable, order upon request
SP03=10Kv Surge Protector 100~277V
SP04=10Kv Surge Protector 347~480V

INSTALLATION TIPS

1. Termination
3x WAGO 5-conductor for L, N, G connection
Conductor range: 0,2 … 4 mm² / 24 … 12 AWG
Rated voltage UL: 600 V
Rated current UL: 20A

2.Cable Entries
3/4" NPT (Top x1 & Sidex2)
Side x1 open, Top & Side with stopping plugs

3.Dimming
Unavailable

Not all product variations listed on this page are DLC qualified.*
Visit www.designlights.org/search to confirm qualification.

UB02
Ceiling/Wall mount
Stainless steel U-Bracket

HC01
Hanging Mount-A
Hanging Chain

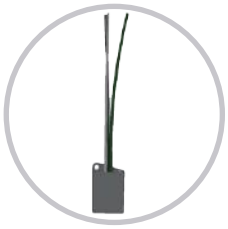
HK04
Hanging Mount-B
Hanging Ring
M10 Eyebolt SUS316

PC01/PC02
Stanchion mount
Pipe clamp

LS06
Glare Shield
Stainless Steel SUS304

SC02
Stainless Steel
Safety Cable kit

CA01
3' SEOOW-18/3 Cord
(Factory installed)



SP03
10KV Surge
Protector 100~277V

SP04
10KV Surge
Protector 347~480V

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 of 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.