Born for Industrial Safety

Warrior™ (NJZ-FEL-D Series)

Hazardous Location LED Luminaire

NJZ LIGHTING

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
Simutaneous 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

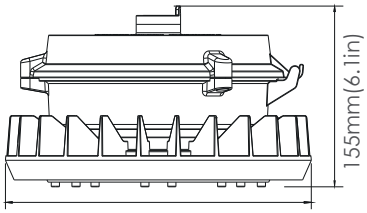
Application

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

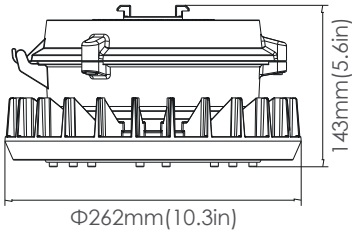
Warranty

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

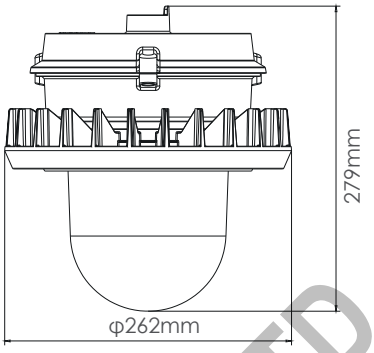
Product Dimensions



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 (Flat glass)	4.2kg/9.3lbs	Φ262×155mm Φ10.3×6.1in	4.9kg/10.8lbs	323×295×220mm
NJZ-FEL-D (Drop glass)	4.8kg/10.6lbs	Φ262×279mm 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			-40°C~+52°C /-40°F~+126°F
T-code	CID2	T4A	T4A	T5	T4A
	CIID1	T5			

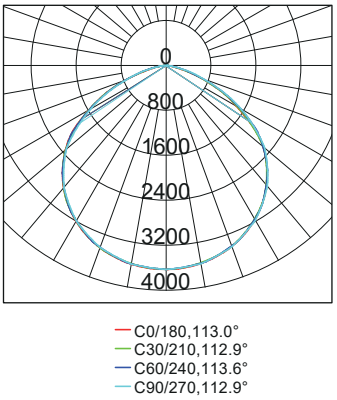
Mechanical

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)			

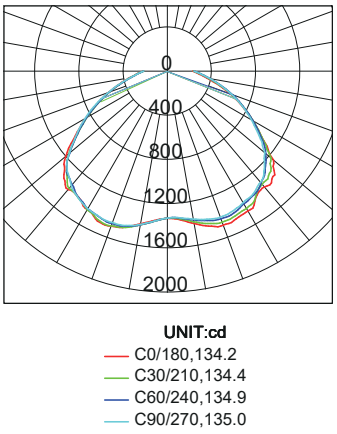
*Flat glass lens only/IK07(Drop Lens)

Photometric

110 Degree



130 Degree for drop lens



Ordering Information and Mounting Accessories

NJZ	–	FEL-D	–	45	–	V04	–	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-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' SEOOW-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 mm² / 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 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' SEOOW-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 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.