

Born for Industrial Safety



Warrior™ (NJZ-FEL-D Series)
Hazardous Location LED Luminaire



2020-02-10 V1.0 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: AC120-277V , AC347-480V (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

Simultaneous Presence

UL 1598A Marine Outside Type

UL 1598 Wet Locations

UL 8750 LED Safety

CSA C22.2 No. 250.0-08, 250.13

FCC / IP66 / IK08 / IK07 (Drop Lens)

5G / 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

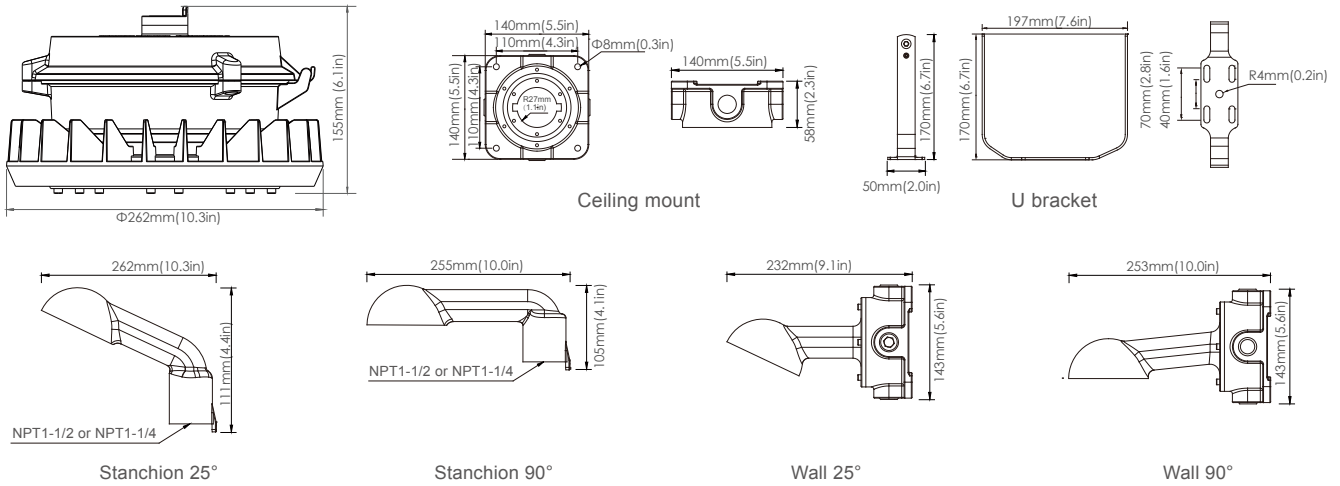
5-Year Standard Warranty

LED lumen Maintenance:

L70 > 150,000 Operation Hours @55°C



Product Dimensions



Model	Net weight	Dimensions (L×W×H)	Gross weight	Dimensions (L×W×H)
NJZ-FEL-D-45	4.2kg/9.26lbs	Φ260×150 mm 10.2×5.9in	4.9kg/10.8lbs	340×310×205 mm 13.4×12.2×8.1in
NJZ-FEL-D-65				

Multi-mount Top



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		AC120-277V		AC347-480V	
Input Frequency		50/60Hz			
Power Factor		≥0.95			
Driver Efficiency		≥90%			
Input Current	(AC100-277V)	0.35/0.15A		0.54/0.24A	
	(AC347-480V)	0.14/0.08A		0.13/0.09A	

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			

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	C1D2	T4A	T4A	T5	T4A
	C2D1	T5			

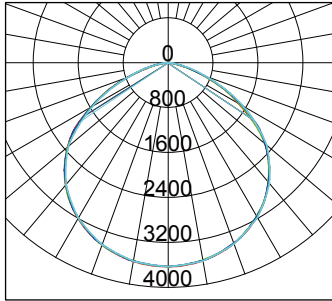
Mechanical

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			
Mounting Options		Ceiling, Wall, Pole, Bracket, Pendant			
IP Rating		IP66			
IK Rating		IK08*			

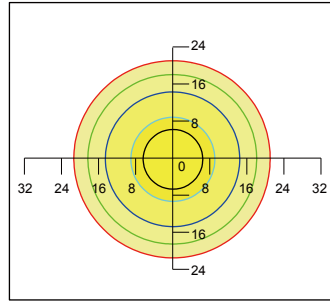
* Flat glass lens only

Photometric

I 110 Degree



- C0/180, 113.0°
- C30/210, 112.9°
- C60/240, 113.6°
- C90/270, 112.9°



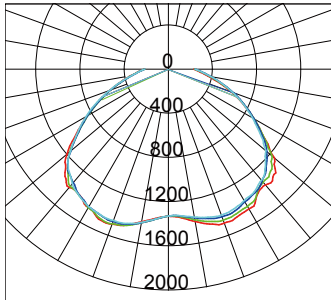
Mounting Height 33'(10m), 0 Tilt

Illumination-110 Degree

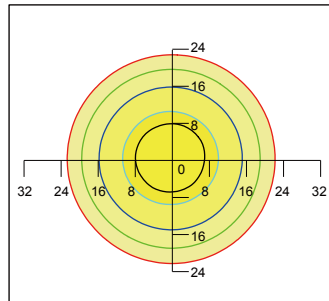
Height	Diameter	Eavg
6m	18m	30.6Lux
8m	24m	17.2Lux
10m	30m	11Lux
12m	36m	7.6Lux
15m	45m	4.9Lux

Flux out: 7901 lm

I 130 Degree for drop lens



- UNIT:cd**
- C0/180, 134.2
 - C30/210, 134.4
 - C60/240, 134.9
 - C90/270, 135.0



Mounting Height 33'(10m), 0 Tilt

Illumination-110 Degree

Height	Diameter	Eavg
6m	28m	37.6Lux
8m	38m	21.6Lux
10m	47m	13.5Lux
12m	56m	9.4Lux
15m	71m	6.0Lux

Flux out: 4586 lm

Ordering Information and Mounting Accessories



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

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= 100-240/277 Vac
V04= 347-480 Vac

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

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 ENCLOSURE

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
SC03=Stainless Steel Safety Cable kit
CA01=3' SJTOW-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 100~277V
SP02=10kv Surge Protector 347~480V



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



SC03

Stainless Steel
Safety Cable kit



CA01

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



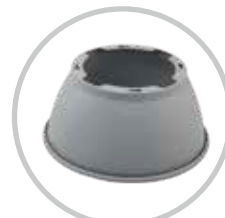
DL01

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.