Born for Industrial Safety

Defender™ (NJZ-FEL-C Series)

Hazardous Location LED Luminaire

NJZ LIGHTING

2020-02-10 V1.0 EN

Defender™

Hazardous Location LED Luminaire

NJZ-FEL-C Series

Product description

The Defender™ NJZ-FEL-C 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-C 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 130 Lm / W
- Universal 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 T6 (CID1)/T4A (CID2, CIID2)
- Shock-and vibration-resistant - Durable LEDs with solder-less board connection
- Copper-free aluminum body and frame -corrosion resistant
- All exposed fasteners with quality stainless steel
- High Temperature silicone gasketing
- Thermal shock and impact resistant glass lens
- Harsh & Hazardous Duty

Compliance

NEC/CEC Standard
UL844
Class I Division 1, Group C, D
Class I Division 2, Group A, B, C, D
Class II Division 2, Group F, G
Class III
UL1598A
CSA C22.2 No.137-M1981
CSA C22.2 No.30-M1986
CSA C22.2 No.25-1966
DLC Premium*
Not all product variations listed on this page are DLC qualified.*
Visit www.designlights.org/search to confirm qualification.
FCC
IP66
IK09
5G
1000hrs salt spray

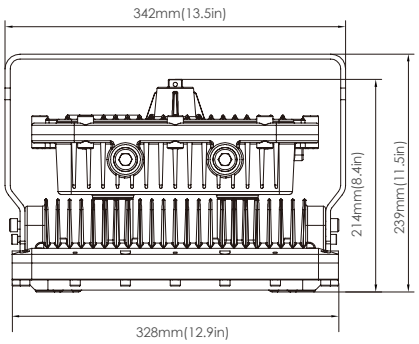
Application

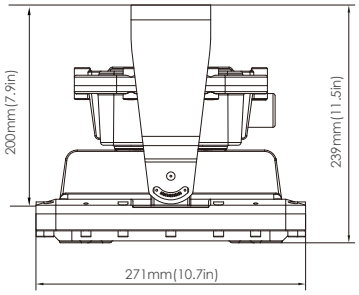
Power Plants / Heavy Industrials Storage
Facility / Paper mills Wastewater Treatment
Plants Loading Docks / Platforms / Shipyards
Chemical Processing Facility Petrochemical
Processing Facility

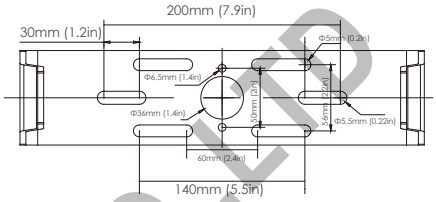
Warranty

5-Year Standard Warranty
LED lumen Maintenance:
L70>170,000 Opreation Hours @ 60°C

Product Dimensions







Model	Net weight	Dimensions (L×W×H)	Gross weight	Dimensions (L×W×H)
NJZ-FEL-C-080	15.2kg/33.5lbs	328×271×176mm 12.9×10.7×6.9in	16.2kg/35.7lbs	412×372×270mm 16.2×14.6×10.6in
NJZ-FEL-C-100	15.3kg/33.7lbs		16.3kg/35.9lbs	
NJZ-FEL-C-150	15.5kg/34.2lbs		16.5kg/36.4lbs	

Mounting

Pole Type

Ceiling Type

Wall Type

Pendant

With glare shield installed

Technical Parameter

Electrical

Specification		NJZ-FEL-C-080	NJZ-FEL-C-100	NJZ-FEL-C-150
Rated Power		80W	100W	150W
Input Voltage		AC120-277, 347-480V		
Input Frequency		50/60Hz		
Input Current	(AC120/277V)	0.63/0.29A	0.82/0.36A	1.7/0.54A
	(AC347/480V)	0.24/0.17A	0.29/0.21A	0.43/0.31A
Power Factor		≥0.95		
Driver Efficiency		≥90%		
Surge Protection		4kv		

Optical

Specification	NJZ-FEL-C-080	NJZ-FEL-C-100	NJZ-FEL-C-150
Lumen Output	10400Lm	13000Lm	19500Lm
Lumens Per Watt	130Lm/W		
Beam Angle	25°/60°/120°		
Correlated Color Temperature (CCT)	3000K/4000K/5000K		
Color Rendering Index (CRI)	Ra>70		

Environmental

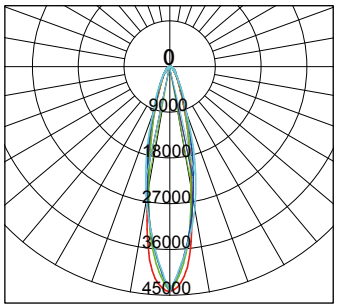
Specification	NJZ-FEL-C-080	NJZ-FEL-C-100	NJZ-FEL-C-150
Ambient Operating Humidity	5%～95% RH		
Ambient Operating Temperature	-40°C ～+60°C/-40°F～+140°F		
Optimal Operating Temperature	25°C (77°F)		
T-Code	CID1: T6 CID2, CIID2: T4A		

Mechanical

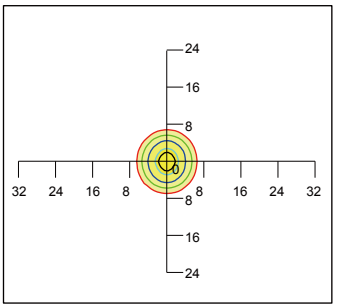
Specification	NJZ-FEL-C-080	NJZ-FEL-C-100	NJZ-FEL-C-150
Housing Material	Copper-free Aluminum		
Lens Material	Tempered glass(Diffused optional)		
Mounting Options	Pole, Ceiling,Wall, Pendant		
IP Rating	IP66		
IK Rating	IK09		

Photometric

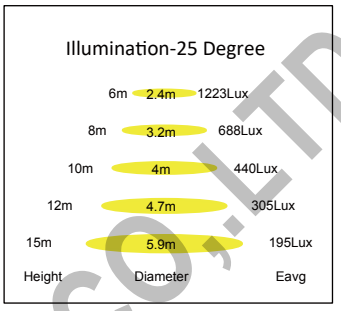
25 Degree



C0/180,22.4
C30/210,21.5
C60/240,23.7
C90/270,25.8

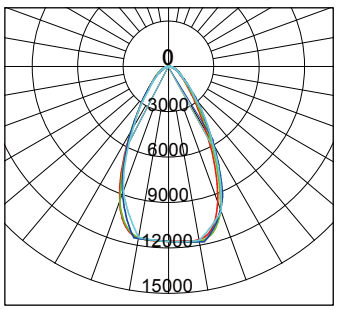


Mounting Height 33'(10m), 0 Tilt



Flux out: 5727 lm

60 Degree



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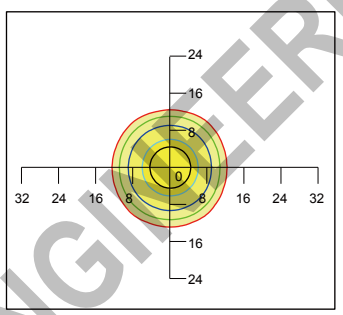
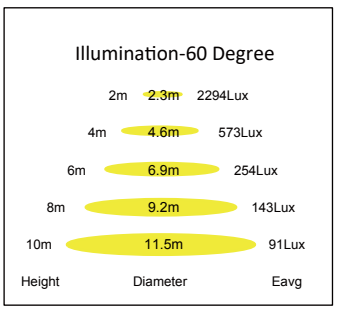
C30/210,56.7
C60/240,58.4
C90/270,56.9

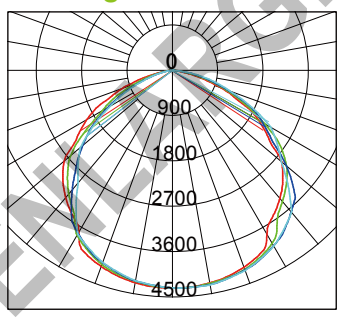


Mounting Height 33'(10m), 0 Tilt

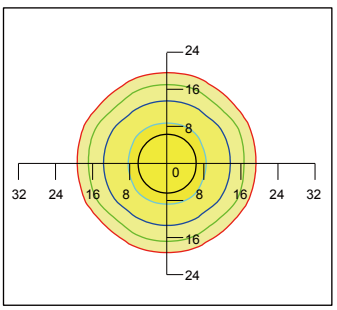


Flux out: 9609 lm

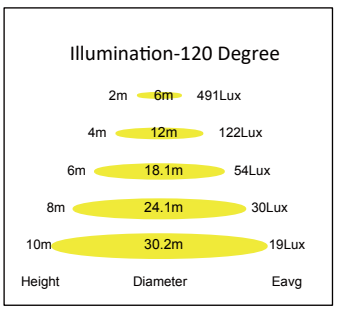
120 Degree



C0/180,114.5
C30/210,114.1
C60/240,110.6
C90/270,113.2



Mounting Height 33'(10m), 0 Tilt



Flux out: 14639 lm

Ordering Information and Mounting Accessories

NJZ	FEL-C	100	V04	RN	25	26	T	P	GR	1	XX*
Brand	Series	Power	Voltage	Color Temp	Beam Angle	Hazloc	Lens	Mount Type	Color	LED Manufacturer	Accessories

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

BRAND
NJZ

SERIES
FEL-C

POWER
080=80W
100=100W
150=150W

VOLTAGE
V01= AC120-277V
V04= AC347-480V

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

BEAM ANGLE
25°=25°
60°=60°
120°=120°

HAZLOC
1=CID1
26=CID2,CIID2

LENS
T=Transparent glass
D=Diffuse glass

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

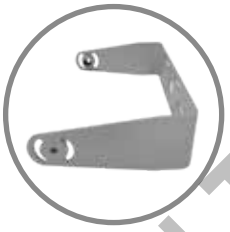
COLOR OF FINISH
GR=Gray
BL=Black
WT=White
BZ=Bronze

LED MANUFACTURER
0= CREE XPG-3
1= OSRAM OSLON SQUARE M2

ACCESSORIES
UB01=Stainless steel U-Bracket
UB03=Anti-vibration U-bracket
UB04=360Deg rotation U-bracket
SN01=Stanchion
SP01=10kv Surge Protector 100~277V
SP02=10kv Surge Protector 347~480V
WG01=Stainless Steel Wire guard
SC01=Stainless Steel Safety Cable kit
LS05=Glare Shield

UB01
Ceiling/Wall Type
Stainless steel U-Bracket

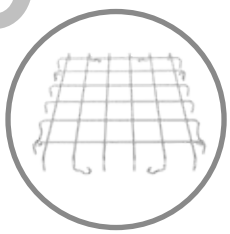
UB03
Anti-vibration
U-bracket



UB04
360Deg rotation
U-bracket

SN01
Pole Type
Stanchion

SP01/SP02
10KV Surge Protector



WG01
Stainless Steel
Wire guard

SC01
Stainless Steel
Safety Cable kit

LS05
Glare Shield
Stainless Steel SUS304

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.