

Manufacturing for Manufacturers



# Hammer (NJZ-FEL-H Series) Hazardous Location LED Luminaire



2020-02-10 V1.0 EN

# Hammer

## Hazardous Location LED Luminaire

### NJZ-FEL-H Series

## Product description

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



CID1 Model



CID2 Model

## Features

- Best-in-class system efficacy - Up to 150 Lm / W
- Universal Voltage: AC120-277, 347-480V (50/60Hz)
- Instant illumination and restrike - no warm-up time required
- Ambient range -40°C-+65°C (-40°F-+ 149°F)
- Safe and reliable heat transfer - Offering a T-rating of T6 ( CID1 ) / T4A ( C1D2 ) / T6 ( CII D1 )
- Shock-and vibration-resistant - Durable LEDs with solder-less board connection
- Anti-corrosion housing tested 1000hrs to standard ASTM"B117-11"
- All exposed fasteners with quality stainless steel
- High Temperature silicone gasketing
- Thermal shock and impact resistant tempered glass lens for CID1, PC Lens for C1D2 models
- Harsh & Hazardous Duty

## Compliance

### NEC/CEC Standard

UL 844

Class I Division 1, Group B, C, D

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

Class II Division 1, Group E, F, G

Class III

UL 1598/UL 1598A Marine

FCC

IP66 & IP67

IK10 (PC) / IK08 (Glass)

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

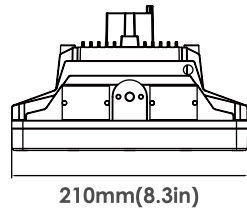
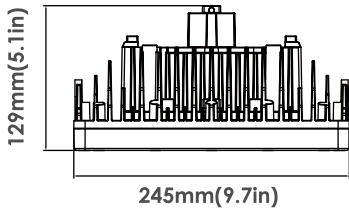
5-Year Standard Warranty

LED lumen Maintenance:

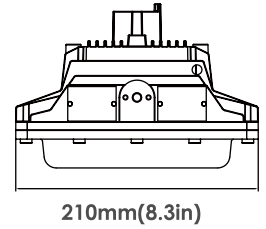
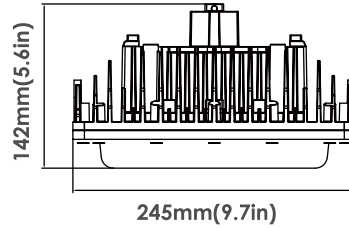
L70>130,000 Operation Hours @ 65°C



## Product Dimensions



CID1 Model



CID2 Model

Model	Net weight C1D1 (Glass)	Net weight C1D2 (PC)	Product Dimensions (L×W×H)	Gross weight C1D1 (Glass)	Gross weight C1D2 (PC)	Package Dimensions (L×W×H)
NJZ-FEL-H-21	4.8kg/10.5lbs	3.3kg/7.3lbs	245×210×129mm 9.7×8.3×5.1in <b>C1D1 (Glass)</b>	5.8kg/12.8lbs	4.3kg/9.5lbs	296*286*192 11.7×11.3×7.6in
NJZ-FEL-H-40	4.9kg/10.8lbs	3.4kg/7.5lbs		5.9kg/13.0lbs	4.4kg/9.7lbs	
NJZ-FEL-H-50	5.3kg/11.7lbs	3.8kg/8.4lbs	245×210×142mm 9.7×8.3×5.6in <b>C1D2 (PC)</b>	6.3kg/13.9lbs	4.8kg/10.6lbs	
NJZ-FEL-H-60	5.3kg/11.7lbs	3.8kg/8.4lbs		6.3kg/13.9lbs	4.8kg/10.6lbs	

## Mounting



Pendant



Bracket



Ceiling



Pole

CID1 Model

CID2 Model



Stanchion 25°



Stanchion 90°



Wall 25°



Wall 90°

CID2 Model

### Technical Parameter

#### Electrical

Specification	NJZ-FEL-H-21	NJZ-FEL-H-40	NJZ-FEL-H-50	NJZ-FEL-H-60
Rated Power	21W	40W	50W	60W
Input Voltage	AC120-277	AC120-277	AC347-480	AC120-277
Input Frequency	50/60Hz			
Input Current	(AC120/277V)	0.18/0.09A	0.34/0.16A	N.A
	(AC347/480V)	N.A	N.A	0.15/0.1A
Power Factor	≥0.95			
Driver Efficiency	≥90%			
Surge Protection	4kv			

#### Optical

Specification	NJZ-FEL-H-21	NJZ-FEL-H-40	NJZ-FEL-H-50	NJZ-FEL-H-60
Lumen Output	4200Lm	6499Lm	7179Lm	8514Lm
System Efficacy	150Lm/W*			
Beam Angle	T2/T3/T5			
Correlated Color Temperature (CCT)	2700K/4000K/5000K			
Color Rendering Index (CRI)	Ra>75			

\*Typical value evaluated to T5 optic/5000k(clear glass),varies for different models

#### Environmental

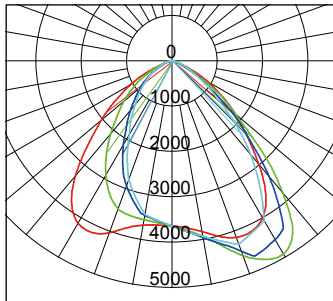
Specification	NJZ-FEL-H-21	NJZ-FEL-H-40	NJZ-FEL-H-50	NJZ-FEL-H-60
Ambient Operating Temperature	-40°C ~ +65°C/-40°F ~ +149°F			60W only 64°C
Optimal Operating Temperature	25°C (77°F)			
T-Code	CID1	T6	T6	T5
	CID2	T4A	T4	T4
	CIID1	T6	T6	T5

#### Mechanical

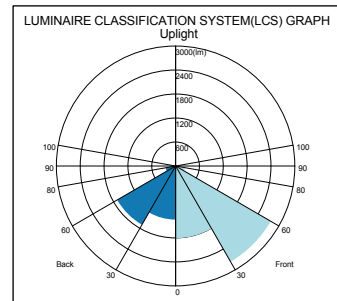
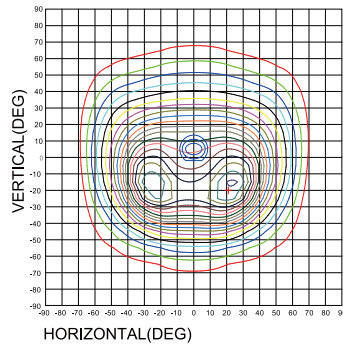
Specification	NJZ-FEL-H-21	NJZ-FEL-H-40	NJZ-FEL-H-50	NJZ-FEL-H-60
Housing Material	Copper-free Aluminum			
Lens Material	Tempered glass (Clear/frosted)/PC (Diffused only)			
Mounting Options	Bracket, Pendant, Pole, Ceiling, Wall 25°/90°, Stanchion 25°/90°			
IP Rating	IP66			
IK Rating	IK08 (Tempered Glass) / IK10 (PC Lens)			

### Photometric

#### Type II

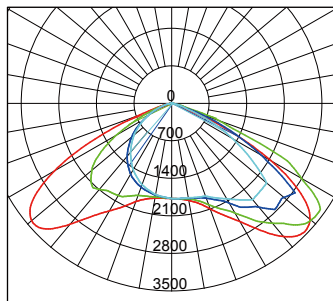


- C0/180,102.1
- C30/210,82.2
- C60/240,73.0
- C90/270,70.9

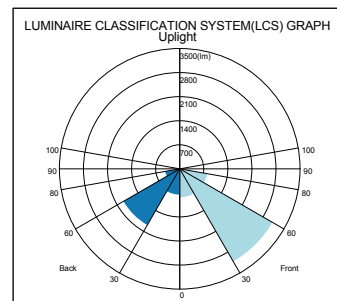
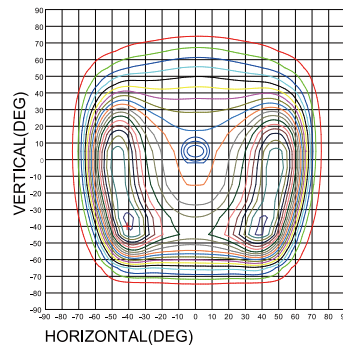


BUG (Back, Up, Glare) Rating: B3-U0-G0

#### Type III

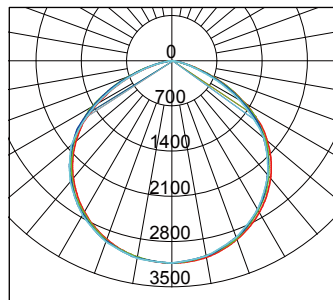


- C0/180,134.6
- C30/210,133.3
- C60/240,98.3
- C90/270,102.0

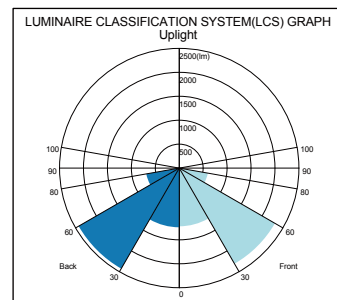
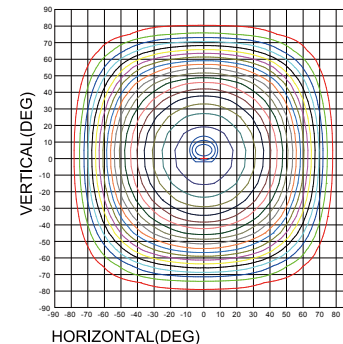


BUG (Back, Up, Glare) Rating: B2-U0-G1

#### Type V

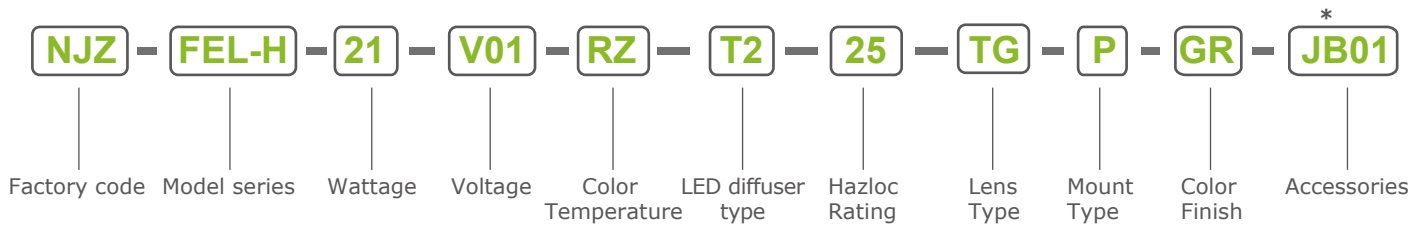


- C0/180,112.5
- C30/210,113.7
- C60/240,112.9
- C90/270,111.4



BUG (Back, Up, Glare) Rating: B3-U0-G1

## Ordering Information and Mounting Accessories



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

FACTORY CODE

NJZ

MODEL SERIES

FEL-H

WATTAGE

21=21W  
40=40W  
50=50W  
60=60W

VOLTAGE

V01= AC120-277V  
V04= AC347-480V  
(50W only)

COLOR TEMPERATURE

RD= 2700K (Warm White)  
RL= 4000K (Neutral White)  
RZ= 5000K (Neutral White)

LED DIFFUSER TYPE

T2=Type II LED diffuser  
T3=Type III LED diffuser  
T5=110° (No LED diffuser)

HAZLOC RATING

1=CID1,CID2,CIID1\*  
25=CID2,CIID1#  
(\*Glass lens ver.  
#PC lens ver.)

LENS TYPE

TG = Clear glass  
FG = Frosted glass  
FP = Frosted PC(Drop lens)

MOUNT TYPE

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

COLOR FINISH

GR = "gray"  
BL= "black"

ACCESSORIES

JB01=Junction Box NPT 3/4"  
PB02= 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")  
WG04=Stainless Steel Wire guard for Flat Lens  
WG05=Stainless Steel Wire guard for Drop Lens  
SC04=Stainless Steel Safety Cable kit  
CA01=3' SJTOW-18/3 Cord (Factory installed)  
CA-X=Cable, order upon request  
AD01=Adapter for mounting parts "JB01" "WL25" "WL90" "SN2501 & SN2502" "SN2501 & SN2502"  
PC01=Pipe Clamp (M8\*48mm) for pole φ 1 7/8" (48mm)  
PC02=Pipe Clamp (M8\*60mm) for pole φ 2 3/8" (60mm)  
SP03=10kv Surge Protector for 120-277V  
SP04=10kv Surge Protector for 347-480V



Not all product variations listed on this page are DLC qualified.\*  
Visit [www.designlights.org/search](http://www.designlights.org/search) to confirm qualification.



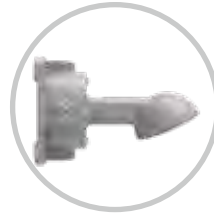
### JB01

Ceiling  
Junction Box NPT 3/4"  
Grey Painted A356 Aluminum AL



### PB02

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

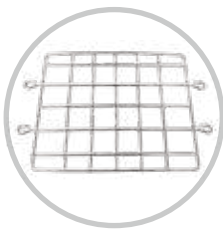


### SN9001

Stanchion-90°,  
NPT 1.25"(1.660"Pole OD)  
slip-fit stanchion mount

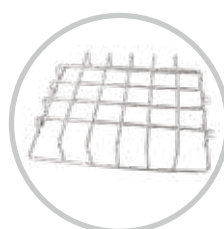
### SN9002

Stanchion-90°,  
NPT 1.50"(1.900"Pole OD)  
slip-fit stanchion mount



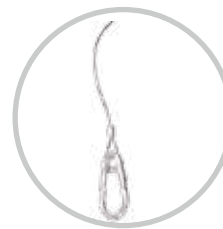
### WG04

Stainless Steel  
Wire guard



### WG05

Stainless Steel  
Wire guard



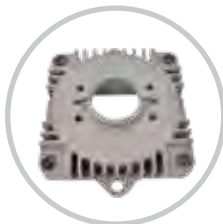
### SC04

Stainless Steel  
Safety Cable kit



### CA01

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



### AD01

Adapter for  
mounting parts



### PC01

Stanchion mount  
Pipe clamp\_one pair



### PC02

Stanchion mount  
Pipe clamp\_one pair

### 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.