

Frog Series



## LED Explosion proof Floodlight



EX MARK: Ex d e IIB T5 or T6 Gb  
Extb IICT95°C or T80°C Db IP 66  
ATEX Certificate No.: LCIE 13 ATEX 3023 X  
IECEX Certificate No.: IECEX CQM 13.0003X

★ KHJ-LED Explosion Proof Lighting

## Features and benefits

1. Energy saving. Reduce the number of luminaires needed, providing excellent efficacy more light where you need it.
2. Anti-glare, reduces glare in applications where the user may have direct visual contact with the light source.
3. Shock and vibration resistant tempered glass, reduces the risk of premature failure.
4. OSRAM LED source. High efficacy lumen output and high CRI.
5. Driver module assembly High efficiency LED drivers are designed to provide reliable operation in even the harshest environments.
6. High strength aluminum alloy enclosure, can endure 20J impact. IP66, can be used wet locations robust construction suitable corrosive applications.
7. Adjusting plate, customer can adjust different angles.
8. 120W and 150W available. Optional candela distribution for different applications.
9. Ambient temperature from  $-40^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ .

## Application:

1. Petroleum Industry, Petrochemical Industry, Metallurgical Industry, Power Generation Industry, Power Transmission Industry, Machine Manufacturing. etc.
2. Drilling platform, single point moorings, oil tanks, workover platform, production platform, field tank, manifold center, pumping station, gasoline station, transformer station, coating plant, warehouse .etc.

## Executive Standard:

- IEC 60079-0:2007-10
- IEC 60079-1:2007-04
- IEC 60079-7:2006-07
- IEC 60079-31:2008
- EN 60079-0:2009
- EN 60079-1:2007
- EN 60079-7:2007
- EN 60079-31:2009
- EN 60598-1:2008+A11:2009
- EN 55015:2013
- IEC 62321:2008

## Division:

- ATEX Zone 1 & 21 and 2 & 22
- Class I Division 1&2 Groups C, D
- Class II Division 1 Groups E, F, G
- Class II Division 2 Groups F, G
- Class III Division 1
- Class III Division 2



## Certifications and Ratings:

- Ex de IIB T5 or T6 Gb;
- Ex tb IIIC T95°C or T80°C Db IP 66
- ATEX Compliant
- IECEx Compliant
- ABS Compliant
- CE Compliant
- RoHS Compliant
- IP 66 Rated

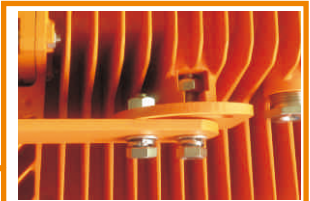
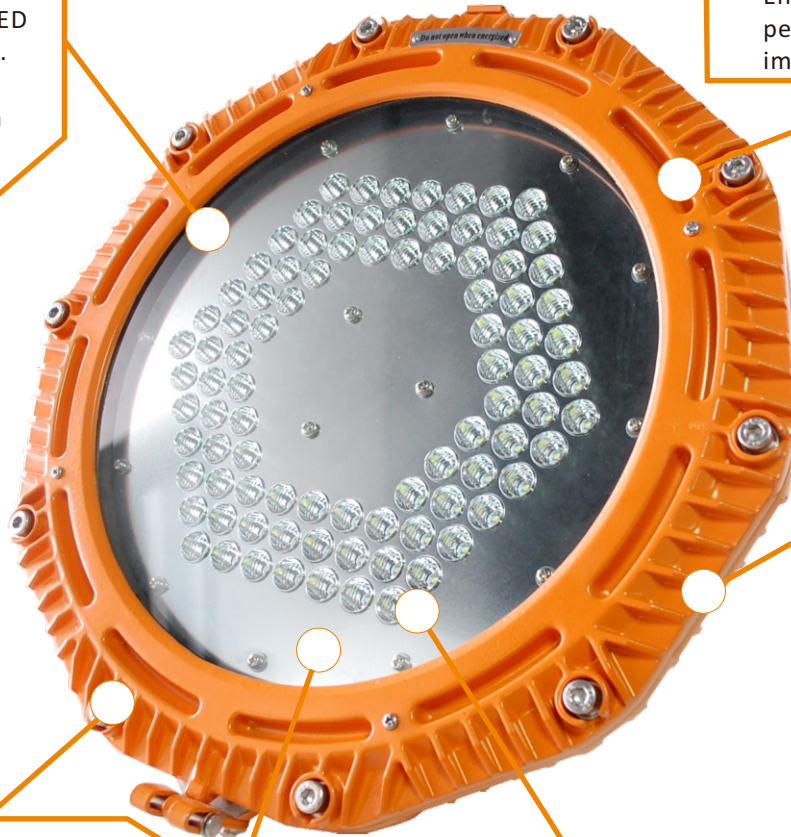
# ★ CHARACTERISTIC DETAILS



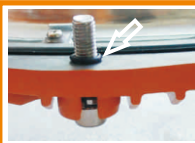
Terminal compartment is isolated from the LED source compartment. Ensure safety. Much easier for connection and maintenance.



Enclosure, high anti-impact performance . Can endure 20J impact.

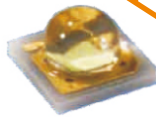


Adjusting plate, customer can adjust different mounting angles.

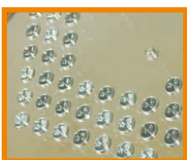


Anti-off designed screw to reduce the time for installation and maintenance.

OSRAM LED source ,high efficacy and lumen output.



The LED is clung to the enclosure, which can make the heat dissipation very fast . Lower the junction temp.



H3V3



H4V4



H5V5



H6V6



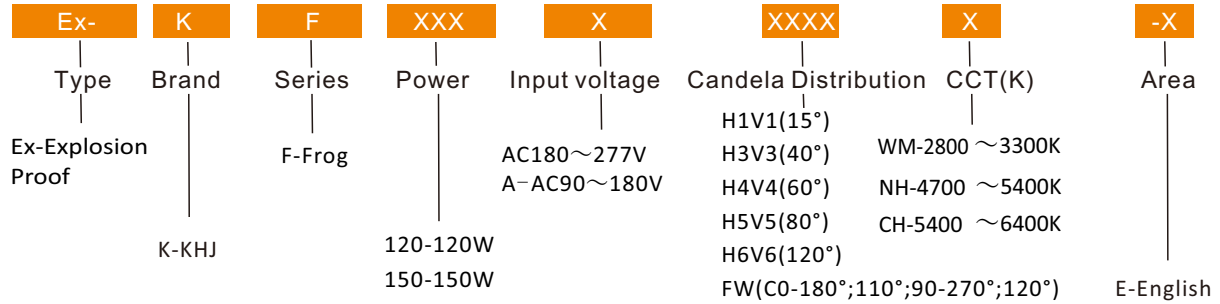
FW

## Characteristic details

# ★ PERFORMANCE PARAMETER



## Product Definition



## Electrical Parameter

Product type	Rated input voltage (V AC)	Rated input current (A)	Voltage frequency (Hz)	Rated power (W)	LED Input current (mA)	PF	THD
Ex -KF120	180~277	0.7~0.4	50/60	120	400	>0.98	<10%
Ex -KF120A	90~180	1.4~0.6	50/60	120	400	>0.98	<10%
Ex -KF150	180~277	0.9~0.5	50/60	150	510	>0.98	<10%
Ex -KF150A	90~180	1.7~0.8	50/60	150	510	>0.98	<10%

## Photometric parameter

Product type	P/N	Color temp.	CCT (K)	CRI	Luminous flux (lm)
Ex -KF120	Ex -KF120*WM-E	Warm white	2800 -3300	82	9821
	Ex -KF120*NH-E	Natural white	4700 -5400	70	12276
	Ex -KF120*CH-E	Cool white	5400 -6400	70	12276
Ex -KF120A	Ex -KF120A*WM-E	Warm white	2800 -3300	82	9821
	Ex -KF120A*NH-E	Natural white	4700 -5400	70	12276
	Ex -KF120A*CH-E	Cool white	5400 -6400	70	12276
Ex -KF150	Ex -KF150*WM-E	Warm white	2800 -3300	82	11880
	Ex -KF150*NH-E	Natural white	4700 -5400	70	14850
	Ex -KF150*CH-E	Cool white	5400 -6400	70	14850
Ex -KF150A	Ex -KF150A*WM-E	Warm white	2800 -3300	82	11880
	Ex -KF150A*NH-E	Natural white	4700 -5400	70	14850
	Ex -KF150A*CH-E	Cool white	5400 -6400	70	14850

Remarks: \*Stands for candela distribution, including H1V1/H3V3 / H4V4 / H5V5 / H6V6 / FW.

Type	Beam angle (°)	Candela distribution
H1V1	15	A
H3V3	40	B
H4V4	60	C
H5V5	80	D
H6V6	120	E
FW	C0-180°;110°;C90-270°;120°	F

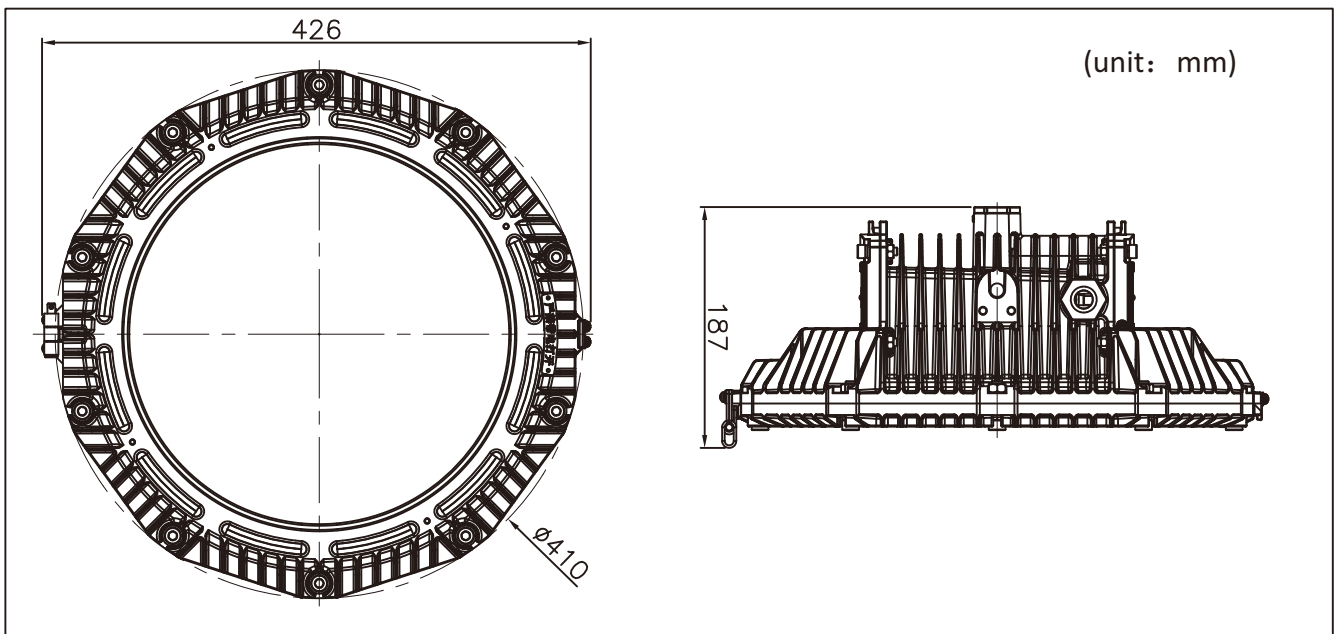
# ★ PERFORMANCE PARAMETER



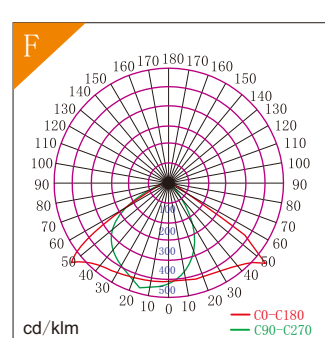
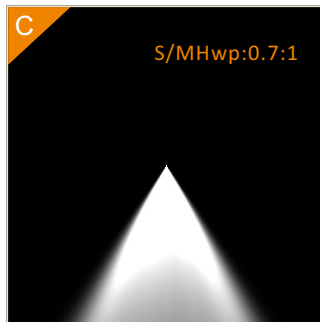
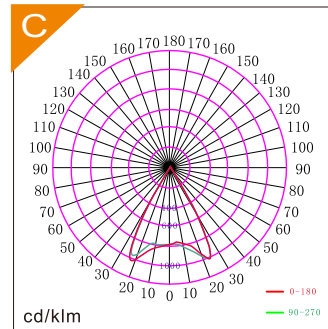
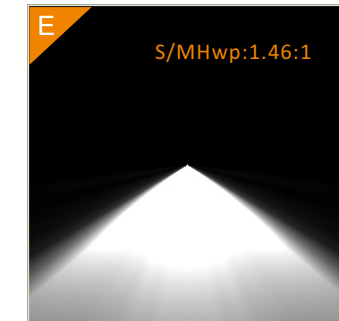
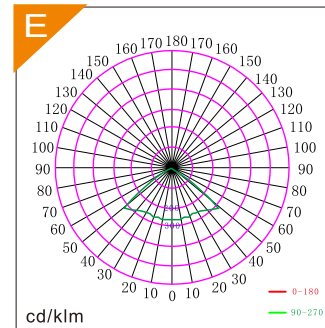
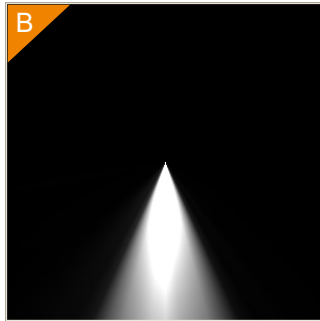
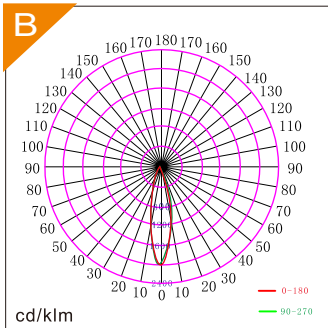
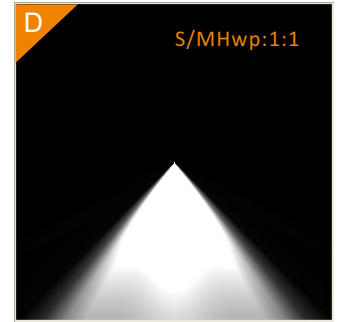
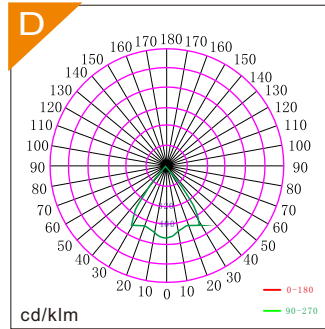
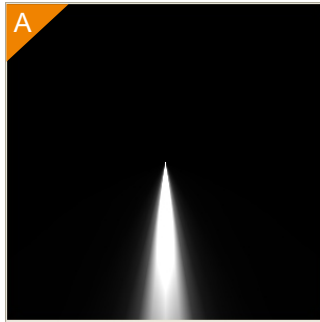
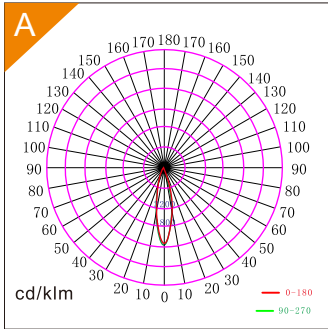
## Other Parameter

Product type	Size (mm)	Weight (Kg)	Ambient temp. (°C)	Max. surface temp. (test in 25 °C)	Temp. classification	IP Code	Insulation
Ex-KF120	426×410×187	13.9	-40 ~ +55	47	T6	IP66	I
Ex-KF120A	426×410×187	13.9	-40 ~ +55	47	T6	IP66	I
Ex-KF150	426×410×187	13.9	-40 ~ +55	64	T5	IP66	I
Ex-KF150A	426×410×187	13.9	-40 ~ +55	64	T5	IP66	I

## SIZE



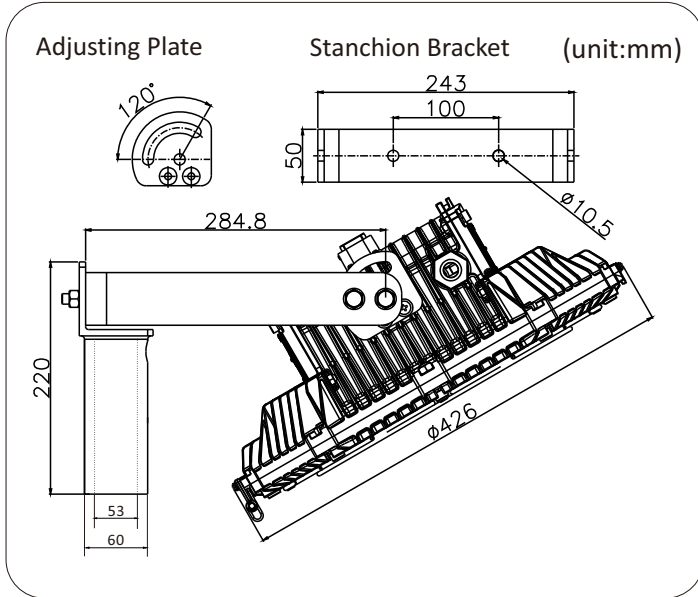
# ★ CANDELA DISTRIBUTION



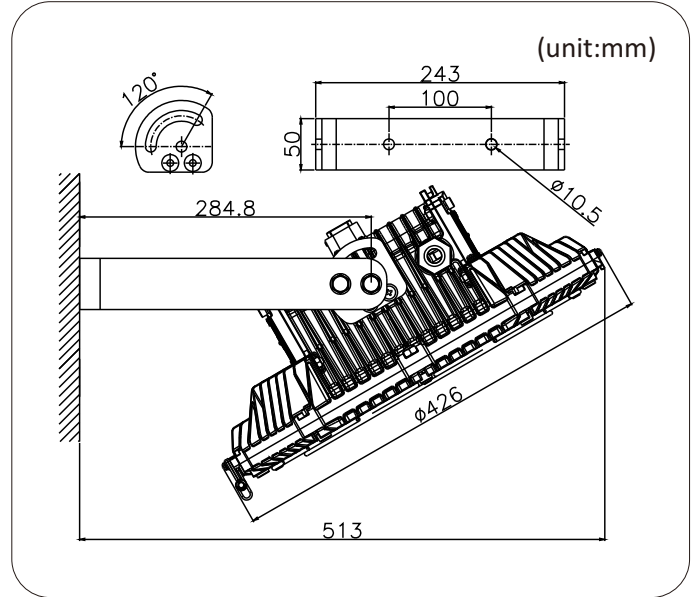
# ★ INSTALLATION METHOD



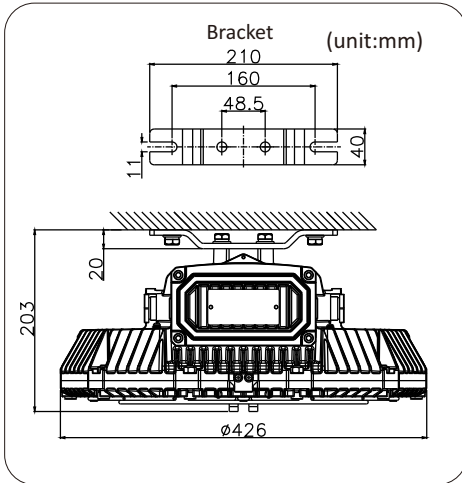
## Installation method



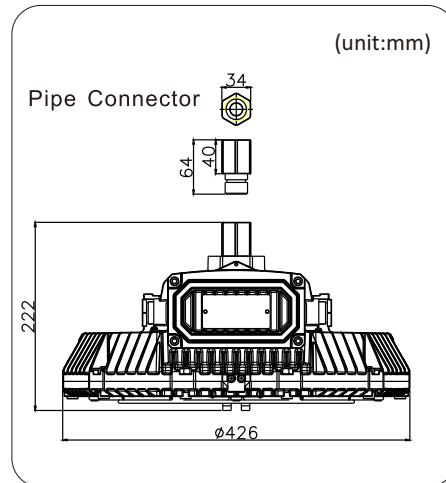
Pole mount



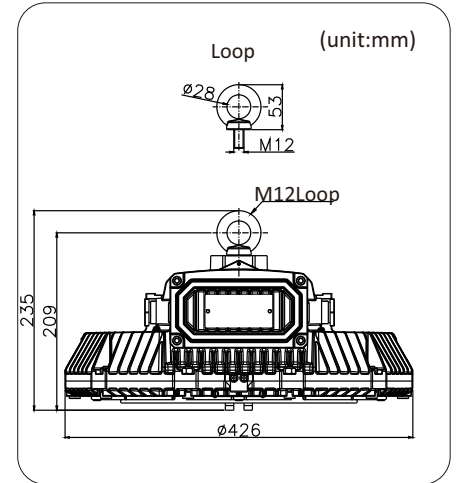
Wall mount



Ceiling Mount



Pipe mount






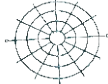


Pendant Mount

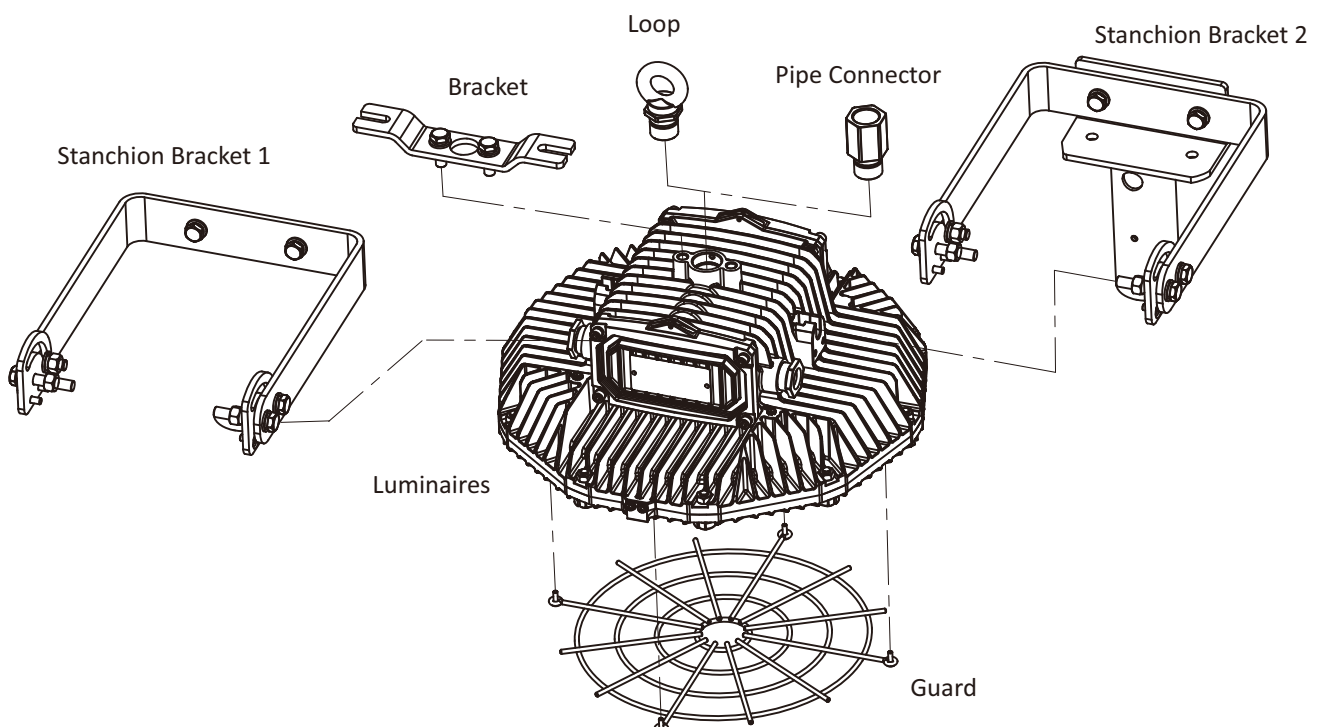
# ★ ACCESSORIES



## Optional parts

No.	Installation accessories	Picture	Material	Weight (Unit: Kg)	QTY
1	Bracket		spcc	0.4	1
2	Stanchion Bracket 1		spcc+6063	1.63	1
3	Stanchion Bracket 2		Q235	2.26	1
4	Stanchion Bracket 3		Q235	3.89	1
5	Loop		45#+SUS304	0.26	1
6	Pipe connector		SUS304	0.26	1
7	Guard		SUS304	0.38	1

## Accessories





## ⚠ Caution

- 1.To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.
- 2.To avoid electric shock:  
Be certain electrical power is OFF before and during installation and maintenance.  
Luminaire must be supplied by a wiring system with an equipment grounding conductor.
- 3.To avoid burning hands:  
Make sure lens and housing are cool when performing maintenance.
- 4.To avoid explosion:
  - 1)Make sure the supply voltage is the same as the luminaire voltage.
  - 2)Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.
  - 3)Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
  - 4)All gasket seals must be clean.
  - 5)Before opening, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.

## Package Check

- 1.Check the carton and all the components according to the packing list.
- 2.Make sure the product is in good conditions.

## Transportation

Please keep this product from heavy mechanical shock, exposure to strong sunshine, throwing, rolling and stress during transport.

## Storage

Kept in dry, clean and well-ventilated, non-corrosive medium warehouse, the ambient temperature should be -40°C to 55°C.

## After-sales service

Installation and maintenance must be according to the instruction.  
If customer can not deal with it by themselves, please contact with sales department.

## Contact

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