

Forest Frog Series



# LED Explosion proof Platform light



EX Mark: Ex d IIC T6 or T5 or T4 Gb  
Ex tb III C T80°C or T95°C or T130°C Db IP66  
IECEX Certificate No.: IECEX CQM 15.0039X

★ KHJ-LED Explosion Proof Lighting

## Features and benefits

1. Energy saving. Reduce the number of luminaires you need, 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 efficiency 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 in marine and wet locations-robust construction suitable for saltwater and corrosive applications.
7. Ambient temperature from -40° C to 55° 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, work over platform, production platform, field tank, manifold center, pumping station, gasoline station, transformer station, coating plant ,warehouse .etc.

### Executive standard:

- IEC 60079-0:2007
- IEC 60079-1:2007
- IEC 61241-0:2004
- IEC 61241-1:2004
- EN 60079-0:2009
- EN 60079-1:2007
- EN 61241-0:2004
- EN 61241-1:2004
- EN 60598-1:2008+A11:2009
- EN 55015:2013
- IEC 62321:2008

### Division:

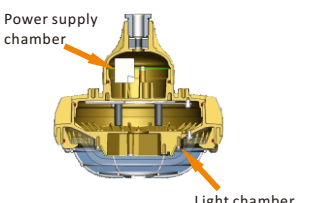
- ATEX Zone 1 & 21 and 2 & 22
- Class I Divison 1&2 Groups A、 B、 C、 D
- Class II Divison 1 Groups E、 F、 G
- Class II Divison 2 Groups F、 G
- Class III Divison 1
- Class III Divison 2



### Certifications & Ratings:

- Ex d II CT6 or T5 or T4 Gb
- Ex tb IIICT80°C or T95°C or T130°C Dc IP66
- ATEX Compliant
- IECEx Compliant
- ABS Compliant
- CE Compliant
- RoHS Compliant
- IP 66 Rated

# ★ CHARACTERISTIC DETAILS



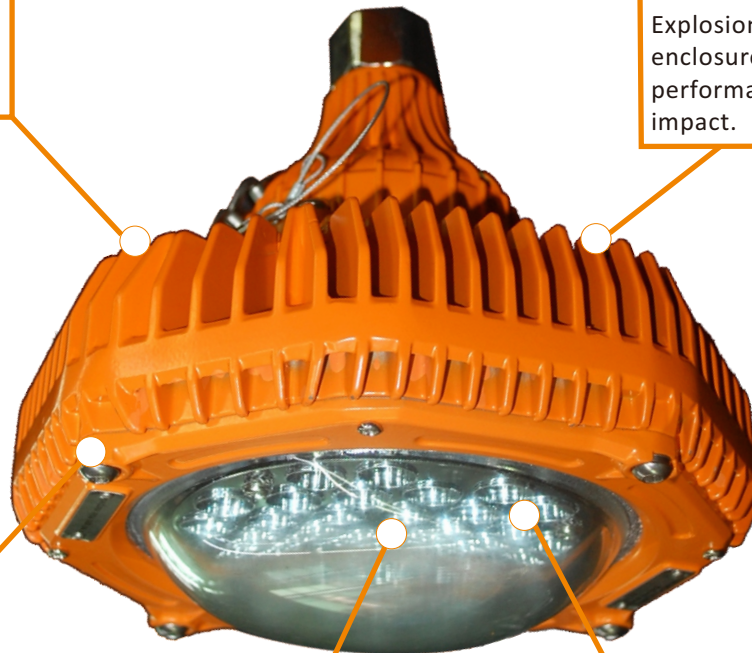
Power supply chamber

Light chamber

Power supply compartment is isolated from the LED source compartment, for better heat dissipation.


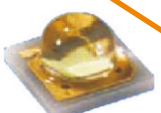


Explosion proof aluminium alloy enclosure, high anti-impact performance. Can endure 20J impact.



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

OSRAM LED source, high efficacy and lumen output.



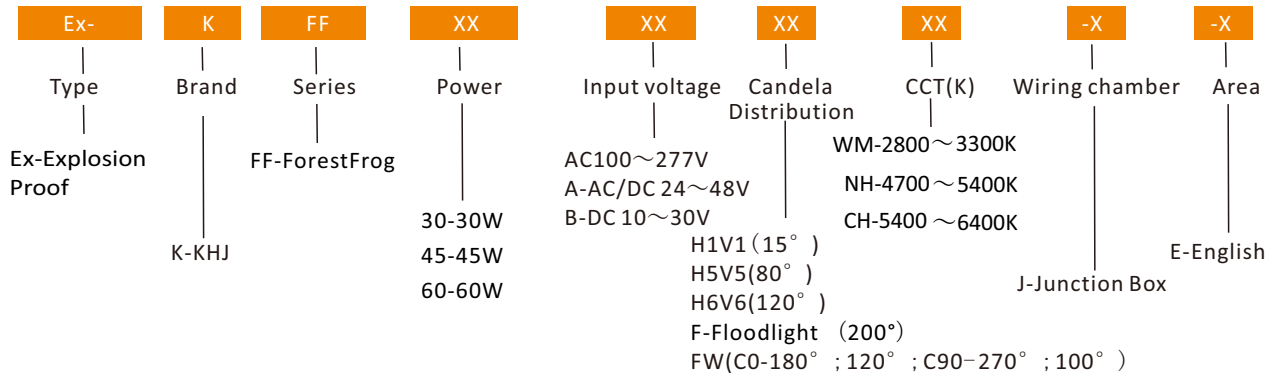
The LED is clung to the enclosure, which can make the heat dissipation very fast. Lower the junction temp.

## Characteristic details

# ★ PERFORMANCE PARAMETER



## Production Definition



## Electrical parameter

Product type	Rated input voltage(V AC)	Rated input voltage(VDC)	Rated input current (A)	Voltage frequency(Hz)	Rated power (W)	LED input current(mA)	PF	THD
Ex-KFF30	100~277	/	0.31~0.11	50/60	30	500	>0.98	<10%
Ex-KFF30A	24~48	24~48	1.3~0.65	50/60	30	500	>0.98	<10%
Ex-KFF30B	/	10~30	3.15~1.05	/	30	500	>0.98	<10%
Ex-KFF45	100~277	/	0.47~0.17	50/60	45	600	>0.98	<10%
Ex-KFF45A	24~48	24~48	1.95~0.98	50/60	45	600	>0.98	<10%
Ex-KFF45B	/	10~30	4.72~1.57	/	45	600	>0.98	<10%
Ex-KFF60	100~277	/	0.63~0.22	50/60	60	600	>0.98	<10%
Ex-KFF60A	24~48	24~48	2.62~1.31	50/60	60	600	>0.98	<10%
Ex-KFF60B	/	10~30	6.3~2.1	/	60	600	>0.98	<10%

## Photometric parameter

Product type	P/N	Color temp	CRI	CCT(K)	Luminous flux(lm)
Ex-KFF30	Ex-KFF30*WM-J-E	Warm white	82	2800-3300	2402
	Ex-KFF30*NH-J-E	Natural white	70	4700-5400	3003
	Ex-KFF30*CH-J-E	Cool white	70	5400-6400	3003
Ex-KFF45	Ex-KFF45*WM-J-E	Warm white	82	2800-3300	3485
	Ex-KFF45*NH-J-E	Natural white	70	4700-5400	4356
	Ex-KFF45*CH-J-E	Cool white	70	5400-6400	4356
Ex-KFF60	Ex-KFF60*WM-J-E	Warm white	82	2800-3300	4541
	Ex-KFF60*NH-J-E	Natural white	70	4700-5400	5676
	Ex-KFF60*CH-J-E	Cool white	70	5400-6400	5676

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

Type	Beam angle (°)	Candela distribution
H1V1	15	A
H5V5	80	B
H6V6	120	C
FW	C0-180°:120°;C90-270°:100°	D
F	200°	E

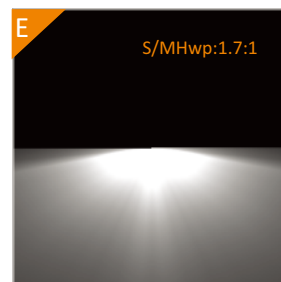
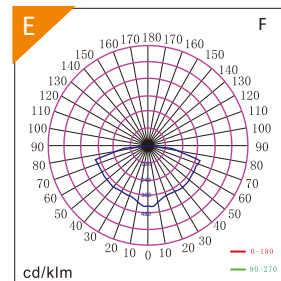
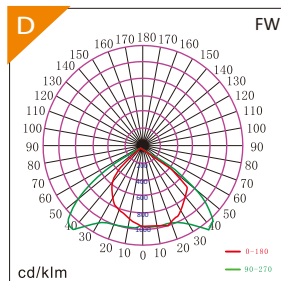
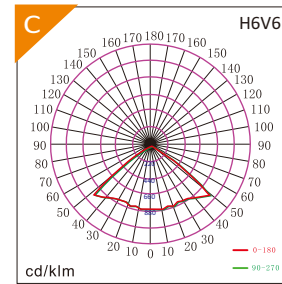
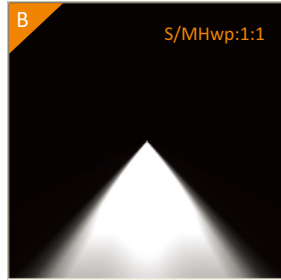
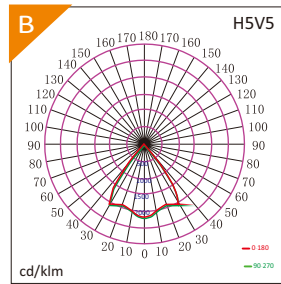
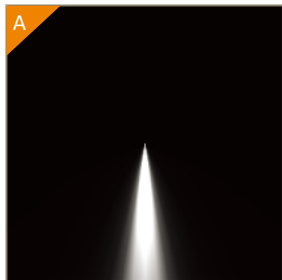
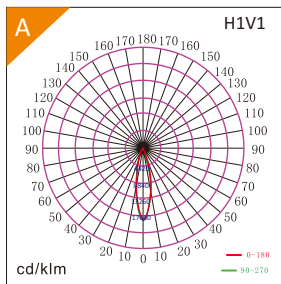
# ★ CANDELA DISTRIBUTION



## Other parameter

Product type	Size (mm)	Weight(kg)	Ambient temp. (°C)	Max.surface temp. test in(25°C)	Temp.classification	IP code	Insulation
Ex - KFF 30	φ 220*220	3.3	-40~+40	36	T6	IP 66	I
			-40~+55	36	T5		
Ex - KFF 45	φ 220*220	3.3	-40~+40	59	T6	IP 66	I
			-40~+55	59	T5		
Ex - KFF 60	φ 220*220	3.3	-40~+40	74	T5	IP 66	I
			-40~+55	74	T4		

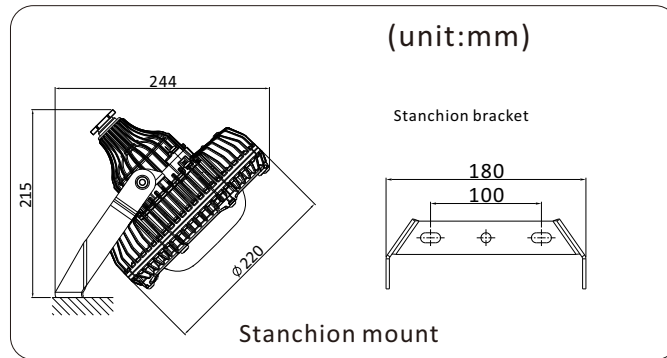
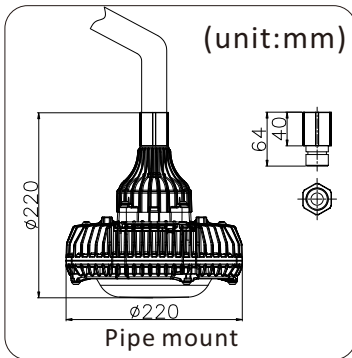
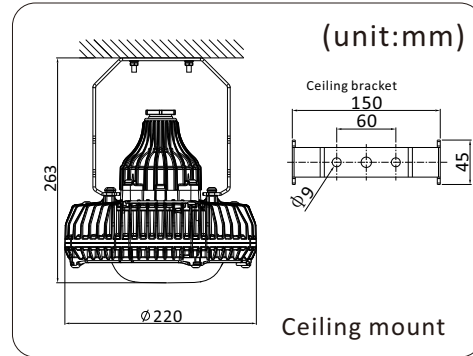
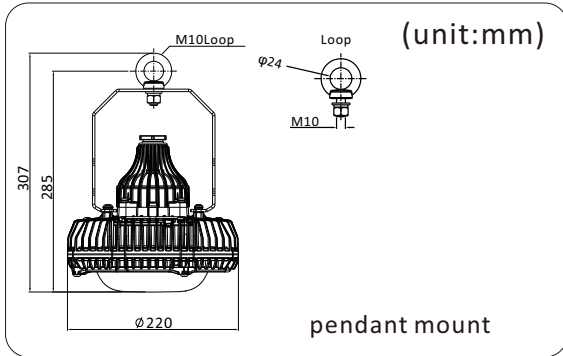
## Candela Distribution



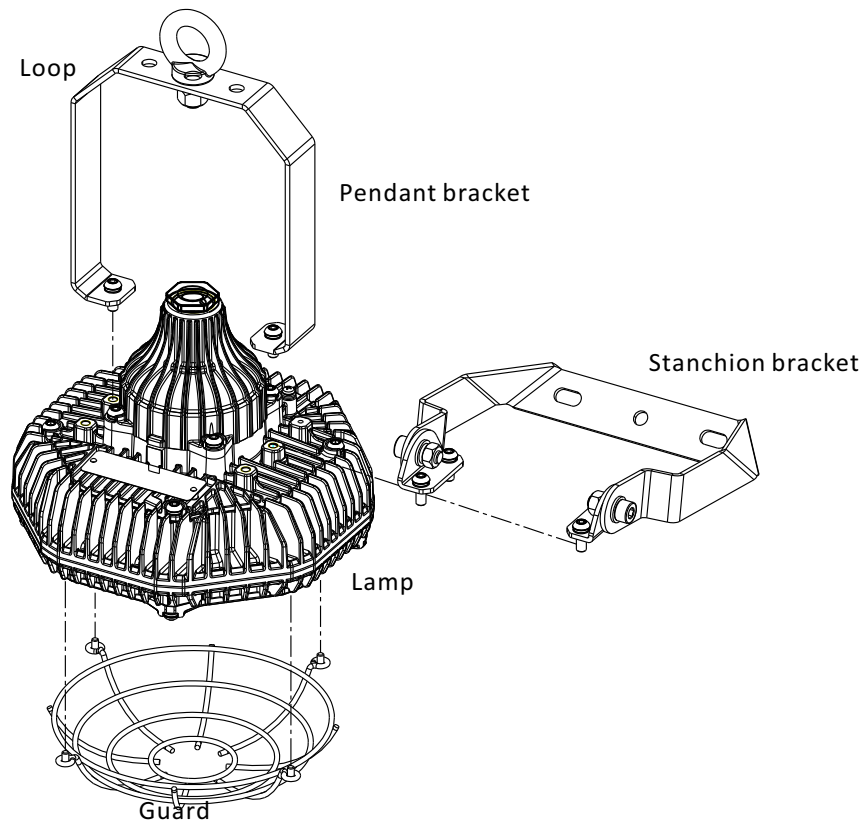
# ★ Installation method



## Installation method








## Installation parts





Option parts

NO.	Installtion accessories	Picture	Material	Weight (Kg)	QTY	Remarks
1	Bracket		Q235	0.24	1	
2	Loop		Q235	0.36	1	
3	Stanchion bracket		Q235	0.47	1	
4	Pipe connector		SUS304	0.28	1	
5	Guard		SUS304	0.13	1	

 **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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