



## LED Explosion Proof Light

**ATEX & IECEx Certified LED Floodlight/bay light/platform light  
in Hazardous Area.**

### **Forest Frog Series**

- ⚡ II 2 G Ex db IIC T6...T4 Gb
- ⚡ II 2 G Ex db eb IIC T6...T4 Gb
- ⚡ II 2 D Ex tb IIIC T80°C...T130°C Db







## Features And Benefits:

- High efficacy LED Source with long lifespan, L70 > 100,000 hours @ 25°C ambient
- 5-year performance warranty
- Low THD around 10%, Less interference
- 5KV Surge Protection
- Robust aluminium housing and strong tempered glass
- Vibration and shock resistant
- Low maintenance

## Applications:



Oil&Gas Exploration



Drilling



Oil Refinery



Petrochemical Plant



Power Plant



Pharmaceutical Plant



ATEX & IECEx Certified LED Floodlight/bay light/platform light in Hazardous Area.

## LED Floodlight/bay light/platform light

### Standard & Certificate:

|                     |                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ex Mark:            | Gas:  II2 G Ex db IIC T6...T4 Gb<br>II2 G Ex db eb IIC T6...T4 Gb<br>Dust:  II2 D Ex tb IIIC T80°C...T130°C Db                                                                                                                                                                                                                                                           |
| Certificate:        | <ul style="list-style-type: none"><li>• ATEX Certification NO.:EPT 18 ATEX 2977 X</li><li>• IECEx Certification NO.:IECEx CQM 15.0039X</li><li>• CE</li><li>• RoHS</li></ul>                                                                                                                                                                                             |
| Executive Standard: | <ul style="list-style-type: none"><li>• (IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-7,</li><li>• (IEC)EN 60079-28, (IEC)EN 60079-31</li><li>• EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3,</li><li>• EN 60598-1, EN 60598-2-5, EN 62031, EN 62493,</li><li>• IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1,</li><li>• IEC 62321-7-2, IEC 62321-8</li></ul> |
| Classification:     | <ul style="list-style-type: none"><li>• Group II Zone 1 &amp; 21 and 2 &amp; 22</li></ul>                                                                                                                                                                                                                                                                                |

### Electrical & Photometric Features:

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Luminaire Efficacy: | 136.5lm/W                                                |
| Lifespan:           | >100,000 hours                                           |
| Operating Voltage:  | 24-48 VAC/100-277 VAC<br>10-30 VDC/24-48 VDC/141-392 VDC |
| Power(W):           | 30W/45W/60W                                              |
| Frequency:          | 50/60Hz                                                  |
| Power Factor:       | >0.98                                                    |
| THD:                | <10%                                                     |
| CRI:                | >70                                                      |
| Insulation Class:   | I                                                        |
| Surge Protection:   | 5KV                                                      |
| LED Driver:         | Over voltage protection/short circuit protection         |

### Mechanical Features:

|                       |                                       |
|-----------------------|---------------------------------------|
| Weight:               | 3.3Kg                                 |
| Size:                 | φ 220*191mm                           |
| Ambient Temperature:  | -40°C--+55°C                          |
| Connecting Terminals: | 3*1.0-4.0mm <sup>2</sup> (L+N+PE)     |
| Cable Entries:        | 1XNPT 3/4" ( M25*1.5 is optional)     |
| Earthing Protection:  | M4 (Internal & external earth bolts)  |
| IP Code:              | IP66                                  |
| Enclosure Material:   | Die-casting aluminium alloy           |
| Enclosure Colour:     | Orange,RAL2011(optional grey RAL7040) |
| Coating:              | Epoxy powder coating                  |
| Exposed Fastener:     | Stainless steel                       |
| Protective Cover:     | Tempered glass,Stand 7J impact        |



ATEX & IECEx Certified LED Floodlight/bay light/platform light in Hazardous Area.

## Production Definition

| Ex                 | K     | FF            | XX                         | XX                                                   | XX                                   | XX                                                           | -X                                     | -J             | -X         | -X                       |
|--------------------|-------|---------------|----------------------------|------------------------------------------------------|--------------------------------------|--------------------------------------------------------------|----------------------------------------|----------------|------------|--------------------------|
| Type               | Brand | Series        | Power                      | Input Voltage                                        | Candela Distribution                 | CCT(K)                                                       | Type                                   | Junction box   | Area       | Color                    |
| Ex-Explosion Proof |       |               |                            | Default-100-277 VAC<br>A-24-48 VAC/DC<br>B-10-30 VDC |                                      |                                                              | Default-Normal<br>P-Pole mount bracket |                | E- English |                          |
|                    | K-KHJ | FF-ForestFrog | 30-30W<br>45-45W<br>60-60W |                                                      | H1V1(15°)<br>H5V5(80°)<br>H6V6(120°) | WM-3000±300K<br>NH-4000±300K<br>NH-5000±300K<br>CH-5700±300K |                                        | J-Junction box |            | Default-Orange<br>G-Grey |

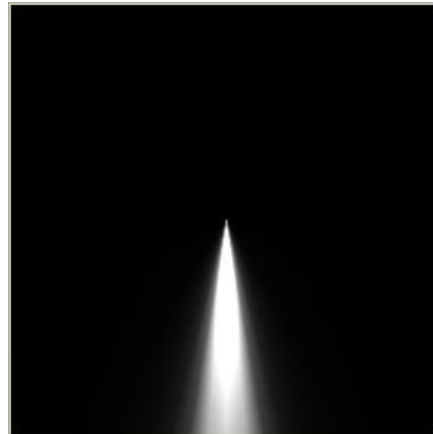
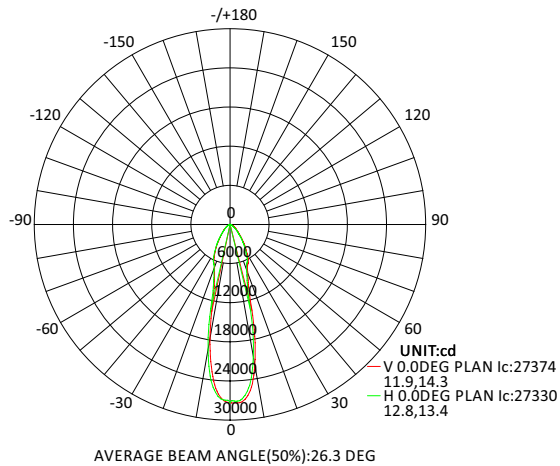
## Ordering information

| P/N             | Operating Voltage(V)       | Luminous Flux(lm) | Power(W) | Color Temp.   | CCT(K)   | Temp. Classification |           |
|-----------------|----------------------------|-------------------|----------|---------------|----------|----------------------|-----------|
|                 |                            |                   |          |               |          | -40℃~+40℃            | -40℃~+55℃ |
| Ex-KFF30*WM-J-E | 100~277 AC<br>(141~392 DC) | 3780              | 30       | Warm white    | 3000±300 | T6                   | T5        |
| Ex-KFF30*NH-J-E |                            | 4095              | 30       | Natural white | 4000±300 | T6                   | T5        |
| Ex-KFF30*NH-J-E |                            | 4095              | 30       | Natural white | 5000±300 | T6                   | T5        |
| Ex-KFF30*CH-J-E |                            | 4095              | 30       | Cool white    | 5700±300 | T6                   | T5        |
| Ex-KFF45*WM-J-E |                            | 5670              | 45       | Warm white    | 3000±300 | T6                   | T5        |
| Ex-KFF45*NH-J-E |                            | 6142              | 45       | Natural white | 4000±300 | T6                   | T5        |
| Ex-KFF45*NH-J-E |                            | 6142              | 45       | Natural white | 5000±300 | T6                   | T5        |
| Ex-KFF45*CH-J-E |                            | 6142              | 45       | Cool white    | 5700±300 | T6                   | T5        |
| Ex-KFF60*WM-J-E |                            | 7560              | 60       | Warm white    | 3000±300 | T5                   | T4        |
| Ex-KFF60*NH-J-E |                            | 8190              | 60       | Natural white | 4000±300 | T5                   | T4        |
| Ex-KFF60*NH-J-E |                            | 8190              | 60       | Natural white | 5000±300 | T5                   | T4        |
| Ex-KFF60*CH-J-E |                            | 8190              | 60       | Cool white    | 5700±300 | T5                   | T4        |

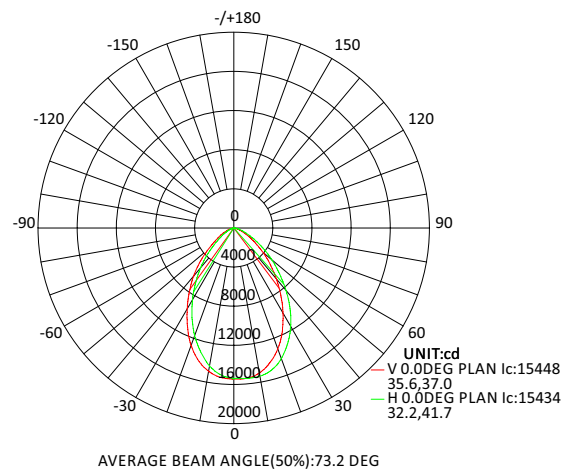
Remarks: 1、\*Stands for candela distribution, including H1V1 / H5V5 / H6V6;  
2、For beam angle H1V1/H5V5,the luminous flux will be 8% less;

## Candela Distribution

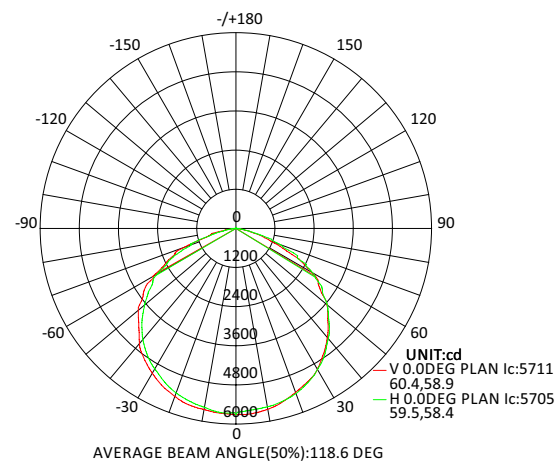
H1V1(15°)/High efficacy LED Source



H5V5(80°)/High efficacy LED Source



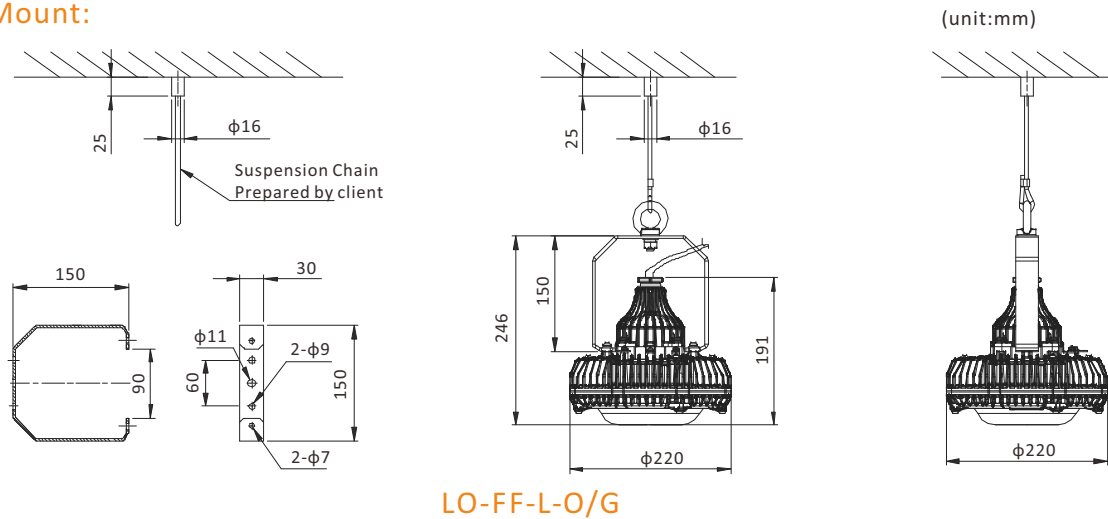
H6V6(120°)/High efficacy LED Source



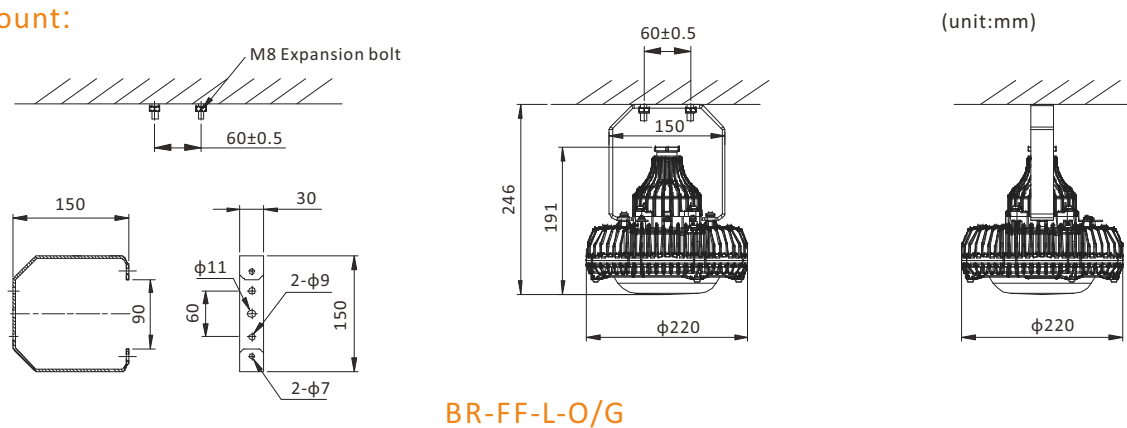


## Installation Method

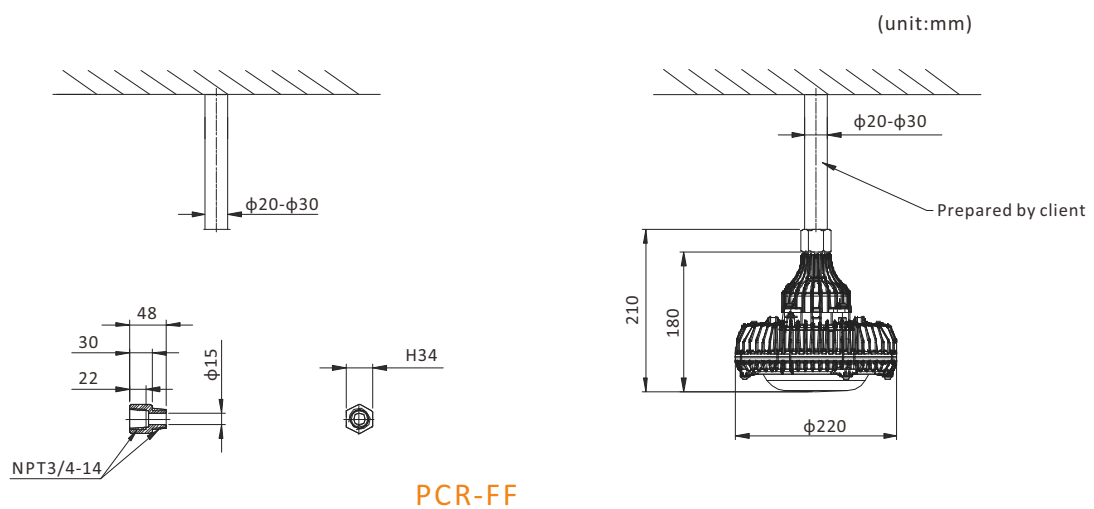
### Pendant Mount:



### Ceiling Mount:

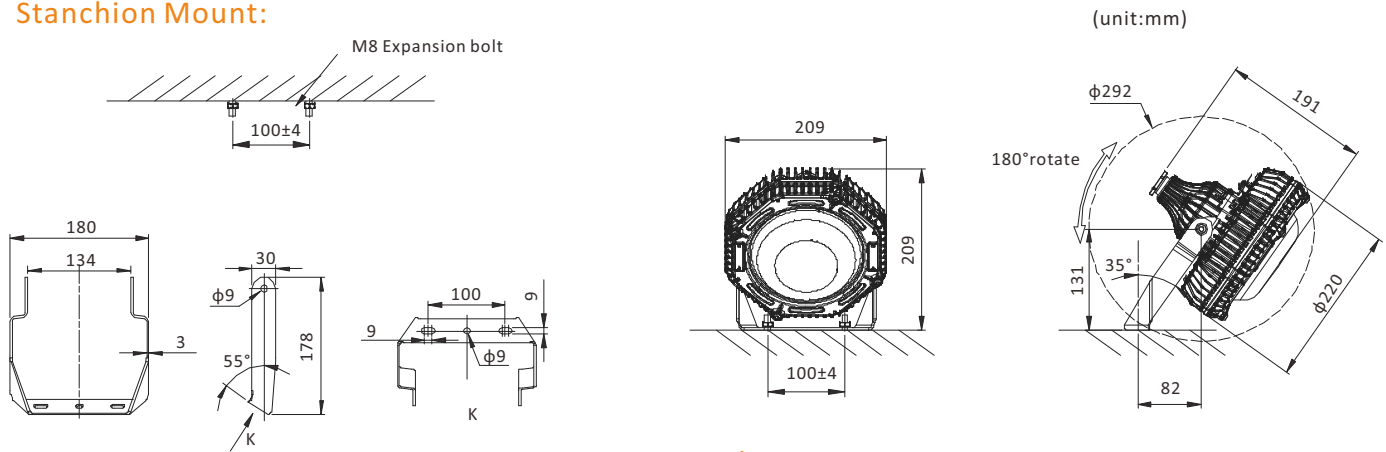


### Pipe Mount:

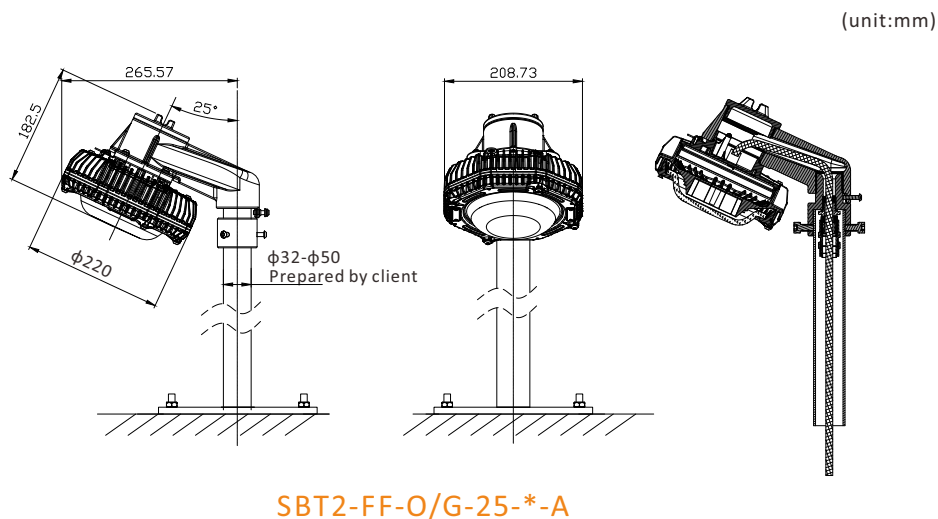


## Installation Method

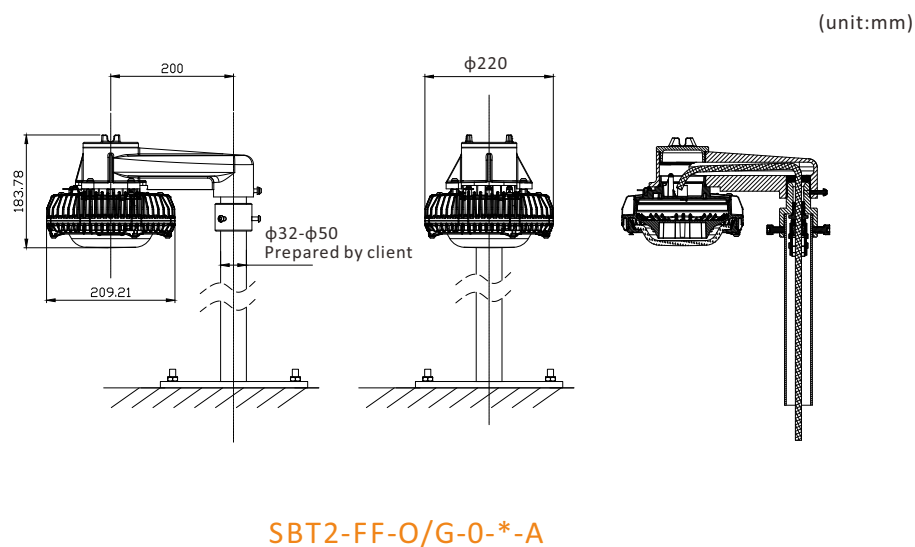
### Stanchion Mount:



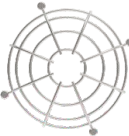
### Pole Mount:



### Pole Mount:



## Optional Parts

| No. | Installation accessories | Part No.             | Picture                                                                             | Material | Weight(Kg) | QTY | Remark          |
|-----|--------------------------|----------------------|-------------------------------------------------------------------------------------|----------|------------|-----|-----------------|
| 1   | Bracket                  | BR-FF-L-O/G          |    | Q235     | 0.24       | 1   | Ceiling mount   |
| 2   | Loop                     | LO-FF-L-O/G          |    | Q235     | 0.36       | 1   | pendant mount   |
| 3   | Stanchion bracket        | SBT-FF-O/G           |    | Q235     | 0.47       | 1   | Stanchion mount |
| 4   | Pipe connector           | PCR-FF-N<br>PCR-FF-M |    | SUS304   | 0.28       | 1   | Pipe mount      |
| 5   | Guard                    | GU-FF                |   | SUS304   | 0.13       | 1   | /               |
| 6   | 25°Pole mount bracket    | SBT2-FF-O/G-25°-A    |  | ADC12    | 1.14       | 1   | Pole mount      |
| 7   | 0°Pole mount bracket     | SBT2-FF-O/G-0°-A     |  | ADC12    | 1.34       | 1   | Pole mount      |

Remark:\* Stands for pole threads, including G1-1/4、M42、NPT1-1/4、NPT1-1/2、60mm.