



PolarBear Series

## LED Explosion proof light

Group II Zone 2



Ex nR II T5 or T6 Gc



**LED Explosion proof light**

## ★ INTRODUCTION



### Features and benefits

1. Energy saving. Reduce the number of luminaires needed, providing excellent luminaires efficacy and 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 efficacy LED drivers are designed to provide reliable operation in even the harshest environments.
6. High strength aluminum alloy housing, can endure 20J impact. IP66, can be used in wet locations, robust construction suitable corrosive applications.
7. Adjusting plate, customer can adjust different angles.
8. 80W,120W,160W,200W 240W available. Optional luminous intensity distribution for different applications.
9. Ambient temperature from -40°C to 55°C.



### Application:

1. Suitable for petroleum, petrochemical Industry.
2. Used for area lighting in oil well sites, petrochemical units, warehouse.
3. Group II Zone 2, Zone 22.

### Executive standard:

- IEC 60079-0:2007 Explosive atmospheres - Part 0: Equipment - General requirements  
IEC 60598-1:2008 Luminaires - Part 1: General requirements and tests





## ★ CHARACTERISTIC DETAILS



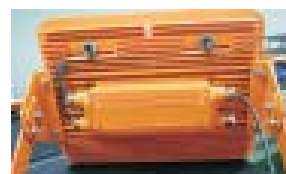
The LED is clung to the enclosure, heat sink fast to make high lumen output and high efficiency.



Distributed Led can improve the anti-glare performance and make various candela distributions.



OSRAM LED source, high efficacy and lumen output.

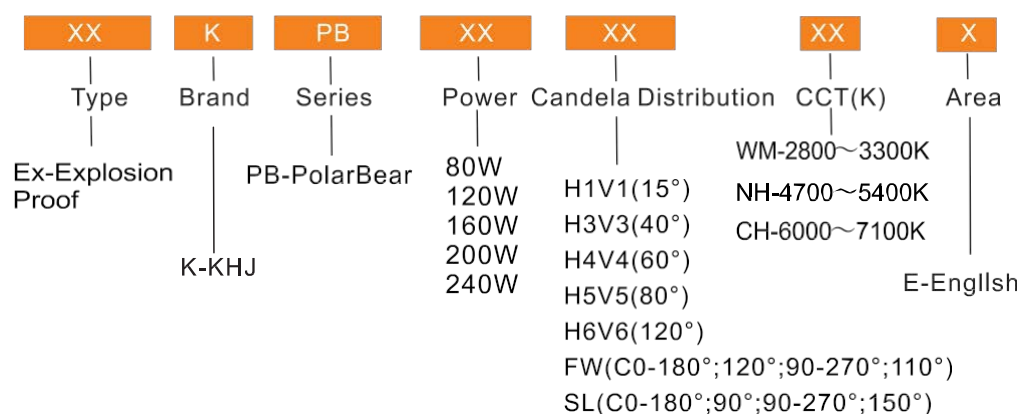


Explosion proof aluminum alloy enclosure, high performance of anti-impact. Can endure 20J impact.

## PERFORMANCE PARAMETER



### Product Definition



### Electrical Parameter

| Product type | Rated input voltage(V AC) | Rated input current(A) | Frequency (Hz) | Rated power (W) | Input current (mA) | PF    |
|--------------|---------------------------|------------------------|----------------|-----------------|--------------------|-------|
| Ex-KPLB80    | 100~ 240V                 | 0.3~ 0.9               | 50/60          | 80              | 600                | >0.98 |
| Ex-KPLB120   | 100~ 240V                 | 0.5~ 1.3               | 50/60          | 120             | 600                | >0.98 |
| Ex-KPLB160   | 220~ 240V                 | 0.6~ 0.8               | 50/60          | 160             | 600                | >0.98 |
|              | 100~ 127V                 | 1.2~1.9                | 50/60          | 160             | 600                | >0.98 |
| Ex-KPLB200   | 100~ 240V                 | 0.9~2.2                | 50/60          | 200             | 600                | >0.98 |
| Ex-KPLB240   | 220~ 240V                 | 1~ 1.2                 | 50/60          | 240             | 600                | >0.98 |
|              | 100~ 127V                 | 1.9~2.8                | 50/60          | 240             | 600                | >0.98 |

### Photometric Parameter

| Product type | P / N           | Color temp·   | CRI | CCT(K)    | Luminous flux (lm) |
|--------------|-----------------|---------------|-----|-----------|--------------------|
| Ex-KPLB80    | Ex-KPLB*80CH-E  | Cold white    | 70  | 5700-7100 | 8700               |
|              | Ex-KPLB*80WM-E  | Warm white    | 82  | 2800-3300 | 7475               |
|              | Ex-KPLB*80NH-E  | Natural white | 70  | 4700-5400 | 8700               |
| Ex-KPLB120   | Ex-KPLB*120CH-E | Cold white    | 70  | 5700-7100 | 12420              |
|              | Ex-KPLB*120WM-E | Warm white    | 82  | 2800-3300 | 10680              |
|              | Ex-KPLB*120NH-E | Natural white | 70  | 4700-5400 | 12420              |
| Ex-KPLB160   | Ex-KPLB*160CH-E | Cold white    | 70  | 5700-7100 | 16560              |
|              | Ex-KPLB*160WM-E | Warm white    | 82  | 2800-3300 | 14240              |
|              | Ex-KPLB*160NH-E | Natural white | 70  | 4700-5400 | 16560              |
| Ex-KPLB200   | Ex-KPLB*200CH-E | Cold white    | 70  | 5700-7100 | 20700              |
|              | Ex-KPLB*200WM-E | Warm white    | 82  | 2800-3300 | 17800              |
|              | Ex-KPLB*200NH-E | Natural white | 70  | 4700-5400 | 20700              |
| Ex-KPLB240   | Ex-KPLB*240CH-E | Cold white    | 70  | 5700-7100 | 24800              |
|              | Ex-KPLB*240WM-E | Warm white    | 82  | 2800-3300 | 21360              |
|              | Ex-KPLB*240NH-E | Natural white | 70  | 4700-5400 | 24800              |



# ★ PERFORMANCE PARAMETER



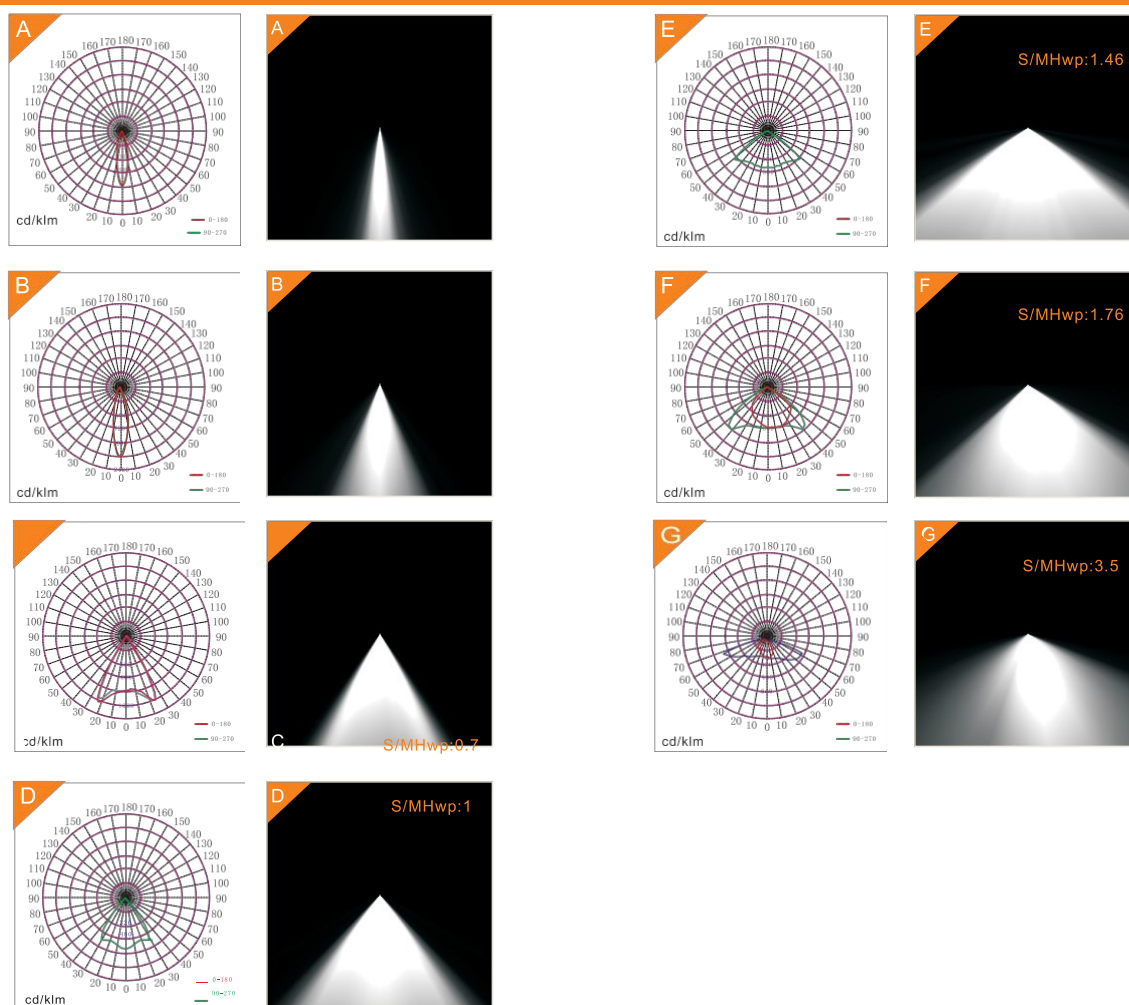
| Type | Beam angle(° )               | Candela distribution |
|------|------------------------------|----------------------|
| H1V1 | 15                           | A                    |
| H3V3 | 40                           | B                    |
| H4V4 | 60                           | C                    |
| H5V5 | 80                           | D                    |
| H6V6 | 120                          | E                    |
| FW   | C0-180° : 120 C90-270° : 110 | F                    |
| SL   | C0-180° : 90 C90-270° : 150  | G                    |

\* Stands for candela distribution, including H1V1, H3V3, H4V4, H5V5, H6V6, FW, SL.

## Other Parameter

| Product type | Size(mm)    | Weight(Kg) | Ambient temp.(°C) | Max. surface temp. (25°C) | Temp. classification | IP code | Insulation |
|--------------|-------------|------------|-------------------|---------------------------|----------------------|---------|------------|
| Ex-KPLB50    | 210*400*155 | 9          | -40~+55           | 85                        | T6                   | IP68    | I          |
| Ex-KPLB120   | 260*400*161 | 11         | -40~+55           | 85                        | T6                   | IP68    | I          |
| Ex-KPLB160   | 400*400*161 | 18         | -40~+55           | 85                        | T6                   | IP68    | I          |
| Ex-KPLB200   | 400*400*165 | 18         | -40~+55           | 85                        | T6                   | IP68    | I          |
| Ex-KPLB240   | 500*400*161 | 21         | -40~+55           | 85                        | T6                   | IP68    | I          |

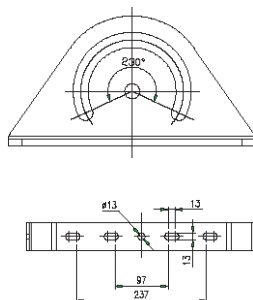
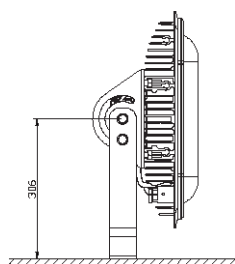
## Candela Distribution



# ★ INSTALLATION METHOD

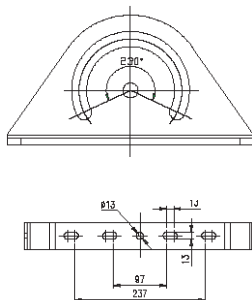
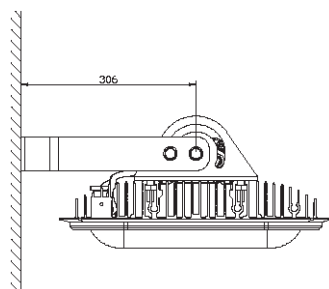


## Installation Method



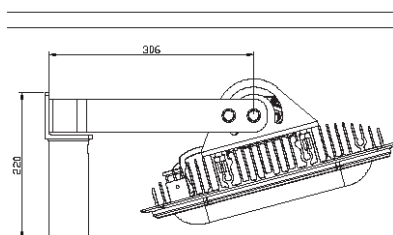
(unit:mm)

Stanchion mount



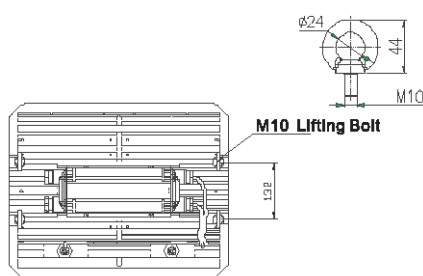
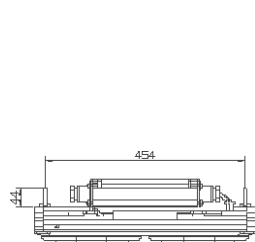
(unit:mm)

Wall mount



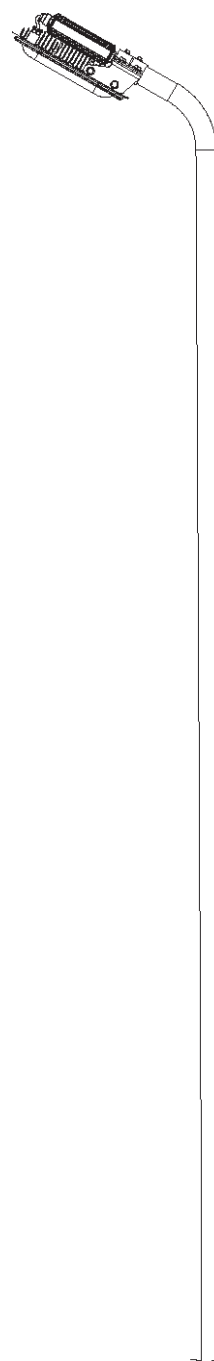
(unit:mm)

Pole mount



(unit:mm)

Pendant mount

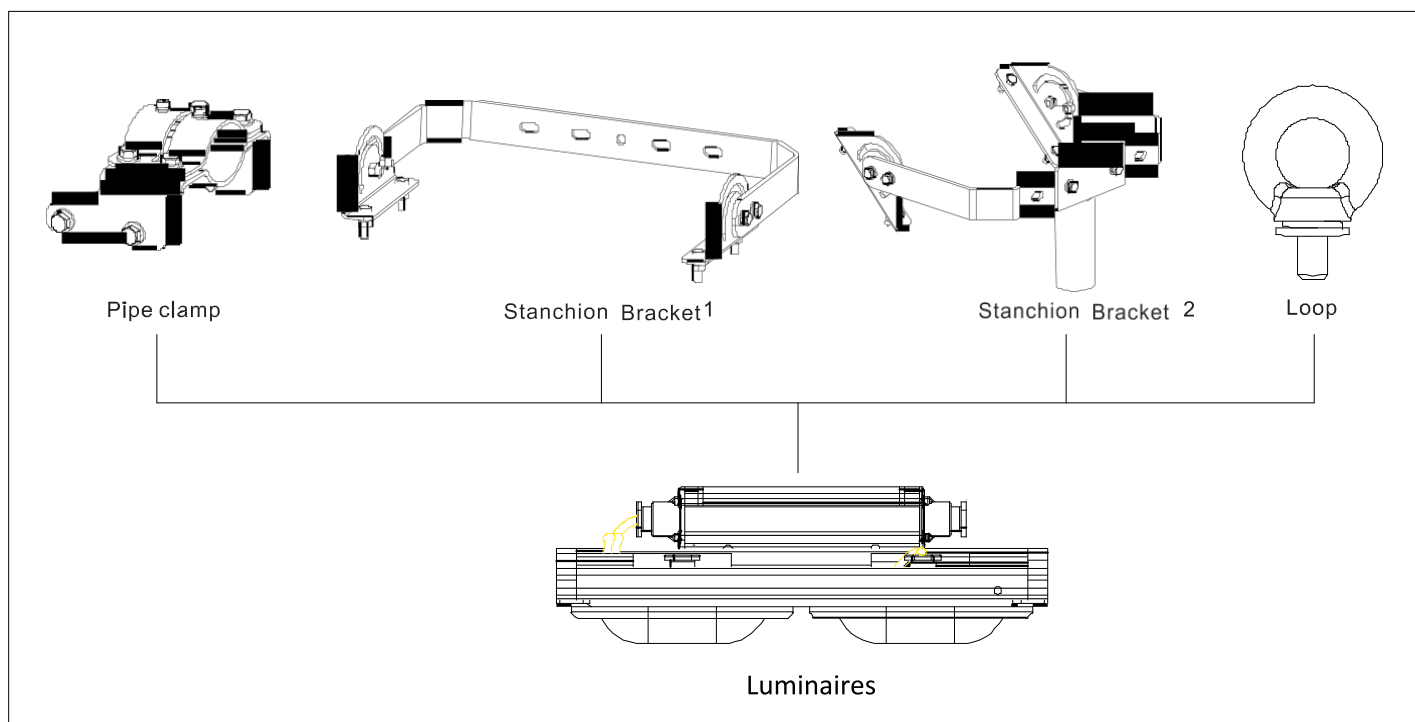


Pipe clamp

## ★ ACCESSORIES



### Optional Parts

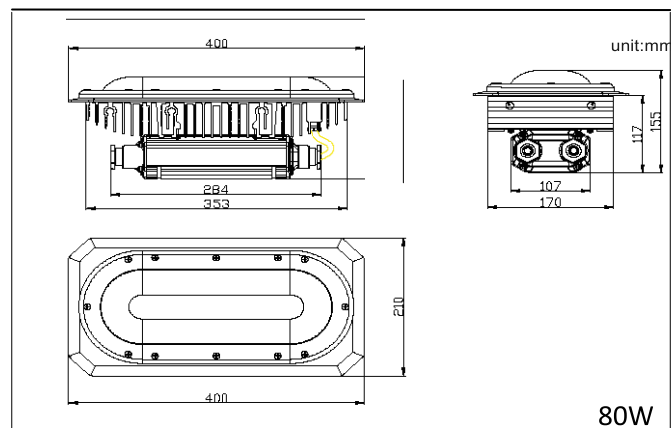
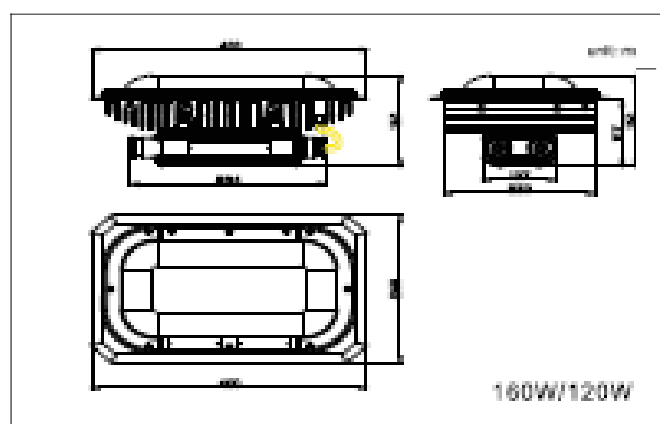
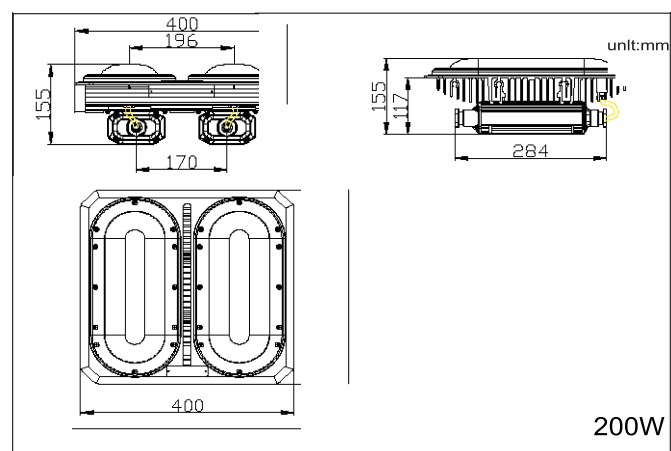
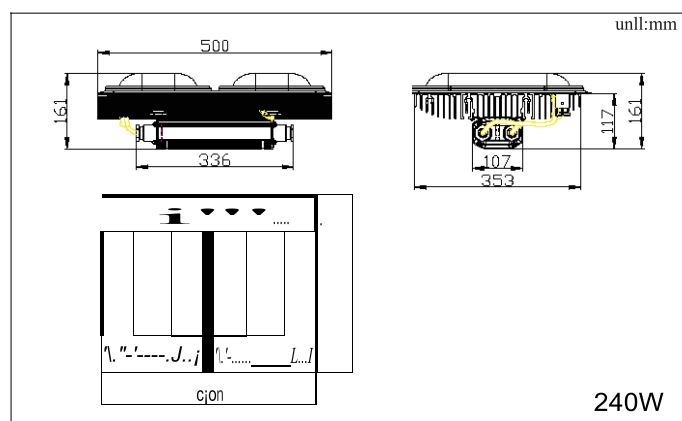


| NO. | Installation<br>accessories | Picture                                                                             | Material | Weight (Kg) | QTY | Remarks |
|-----|-----------------------------|-------------------------------------------------------------------------------------|----------|-------------|-----|---------|
| 1   | Pipe clamp                  |  | Q235     | 2.1         | 1   | /       |
| 2   | Loop                        |  | 45#      | 0.2         | 4   | /       |
| 3   | Stanchlon<br>Bracket 1      |  | Q235     | 4.2         | 1   | /       |
| 4   | Stanchlon<br>Bracket 2      |  | Q235     | 1.63        | 1   | /       |
|     |                             |  | Q235     | 4.2         | 1   | /       |

# ★ SIZE



## Size





## ★ SERVICE



### 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

Keep 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

WP Traders SAC

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