

Polarbear Series

# LED Explosion Proof FloodLight



Ex Mark:Ex nR II C T4 or T5 or T6 Gc  
Ex tc III C T130 °C or T95 °C or T80 °C Dc IP 66  
ATEX Certificate No.:LCIE 14 ATEX 1014 X  
IECEx Certificate No.:IECEx CQM 13.0044X

★ KHJ-LED Explosion Proof Lighting

## Features and benefits

1. Energy saving. Reduce the number of luminaires needed, providing excellent luminaries 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:

Typical applications include Gas station, manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

## Executive standard:

- IEC 60079-0:2011
- IEC 60079-15:2010
- IEC 60079-31:2008
- EN 60079-0:2012
- EN 60079-15:2010
- EN 60079-31:2009
- EN 60598-1:2008+A11:2009
- EN 55015:2013
- IEC 62321:2008

## Division:

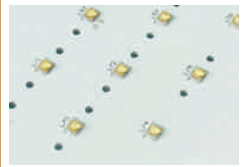
- ATEX Zone 2 & 22
- Class I Divison 2 Groups A、 B、 C、 D
- Class II Divison 2 Groups F、 G
- Class III Divison 2



## Certifications & Ratings:

- Ex nR IIC T4 or T5 or T6 Gc;
- Ex tc IIIC T135°C or T95°C or T80°C Dc IP 66
- ATEX Compliant
- IECEx Compliant
- ABS Compliant
- CE Compliant
- RoHS Compliant
- IP 66 Rated

# ★ CHARACTERISTIC DETAILS



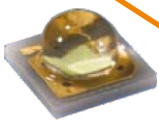
The LED is clung to the enclosure, which can make the heat dissipation very fast. Lower the junction temp.



External constant current driver, easier for maintenance, and better for heat dissipation.



OSRAM LED source, high efficacy and lumen output.

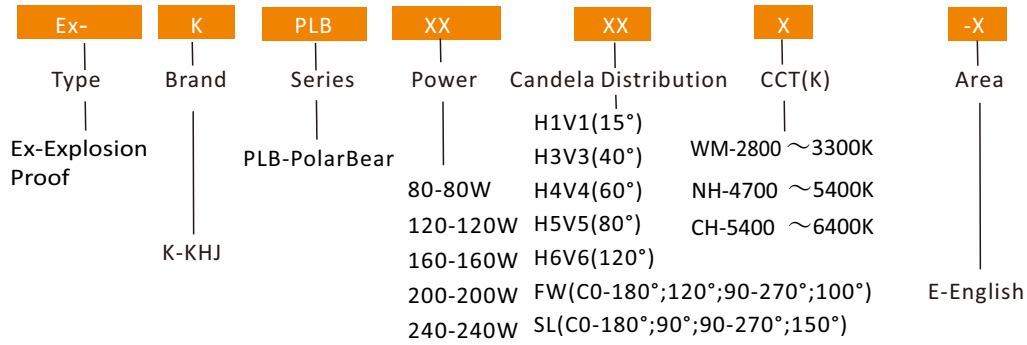


Explosion proof copper free aluminium alloy enclosure, high anti-impact performance can endure 20J impact.

# ★ 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-KPLB80	220 ~ 240	0.36 ~ 0.33	50/60	80	600	>0.98	<10%
	100 ~ 130	0.9 ~ 0.6	50/60	80	600	>0.98	<10%
Ex-KPLB120	220 ~ 240	0.55 ~ 0.5	50/60	120	600	>0.98	<10%
	100 ~ 130	1.3 ~ 0.9	50/60	120	600	>0.98	<10%
Ex-KPLB160	220 ~ 240	0.8 ~ 0.6	50/60	160	600	>0.98	<10%
	100 ~ 130	1.9 ~ 1.2	50/60	160	600	>0.98	<10%
Ex-KPLB200	220 ~ 240	0.91 ~ 0.83	50/60	200	600	>0.98	<10%
	100 ~ 130	2.2 ~ 1.5	50/60	200	600	>0.98	<10%
Ex-KPLB240	220 ~ 240	1.2 ~ 1	50/60	240	600	>0.98	<10%
	100 ~ 130	2.8 ~ 1.9	50/60	240	600	>0.98	<10%

## Photometric Parameter

Product type	P/N	Color temp.	CCT (K)	CRI	Luminous flux (lm)
Ex-KPLB80	Ex-KPLB80*WM-E	Warm white	2800-3300	82	6054
	Ex-KPLB80*NH-E	Natural white	4700-5400	70	7568
	Ex-KPLB80*CH-E	Cool white	5400-6400	70	7568
Ex-KPLB120	Ex-KPLB120*WM-E	Warm white	2800-3300	82	9082
	Ex-KPLB120*NH-E	Natural white	4700-5400	70	11352
	Ex-KPLB120*CH-E	Cool white	5400-6400	70	11352
Ex-KPLB160	Ex-KPLB160*WM-E	Warm white	2800-3300	82	12109
	Ex-KPLB160*NH-E	Natural white	4700-5400	70	15136
	Ex-KPLB160*CH-E	Cool white	5400-6400	70	15136
Ex-KPLB200	Ex-KPLB200*WM-E	Warm white	2800-3300	82	15136
	Ex-KPLB200*NH-E	Natural white	4700-5400	70	18920
	Ex-KPLB200*CH-E	Cool white	5400-6400	70	18920
Ex-KPLB240	Ex-KPLB240*WM-E	Warm white	2800-3300	82	18163
	Ex-KPLB240*NH-E	Natural white	4700-5400	70	22704
	Ex-KPLB240*CH-E	Cool white	5400-6400	70	22704

# ★ PERFORMANCE PARAMETER



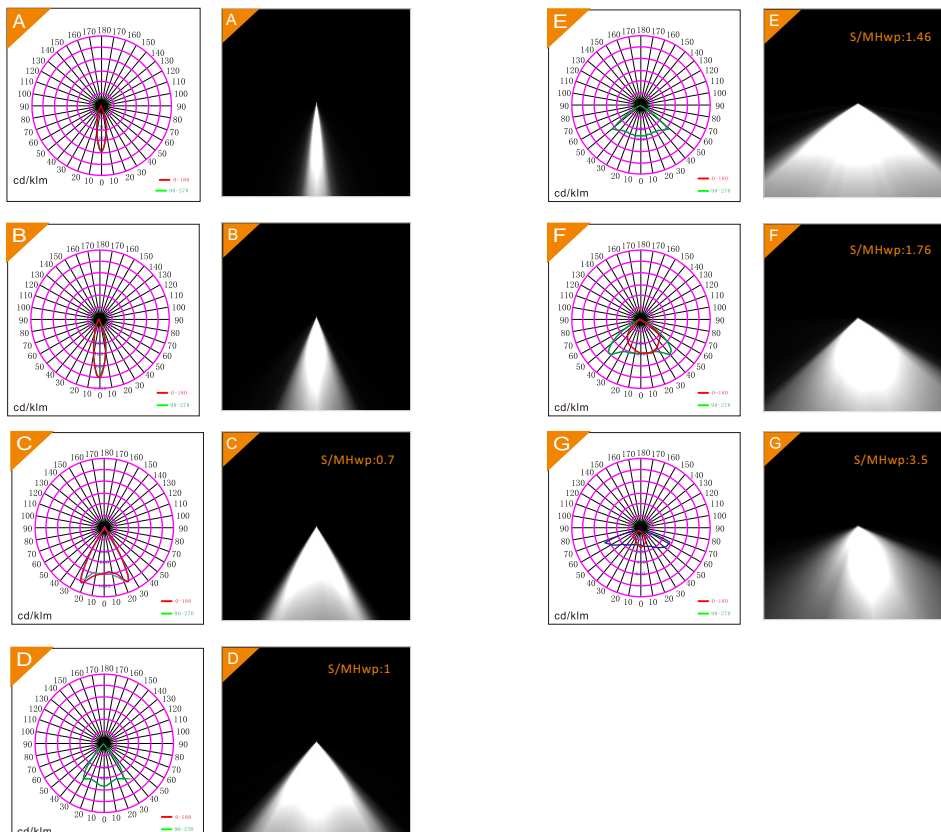
Type	Beam angle ( ° )	Candela distribution
H1V1	15	A
H3V3	40	B
H4V4	60	C
H5V5	80	D
H6V6	120	E
FW	C0-180°:120°;C90-270°:100°	F
SL	C0-180°:90°;C90-270°:150°	G

Remarks: \*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. (test in 25 °C)	Temp. classification	IP Code	Insulation
Ex-KPLB80	210×400×161	7.3	-40~+40	52	T6	IP66	I
			-40~+55	52	T5		
Ex-KPLB120	260×400×161	11	-40~+40	51	T6	IP66	I
			-40~+55	51	T5		
Ex-KPLB160	260×400×161	11	-40~+40	55	T6	IP66	I
			-40~+55	55	T5		
Ex-KPLB200	500×400×161	18.4	-40~+40	63	T6	IP66	I
			-40~+55	63	T5		
Ex-KPLB240	500×400×161	18.4	-40~+40	72	T5	IP66	I
			-40~+55	72	T4		

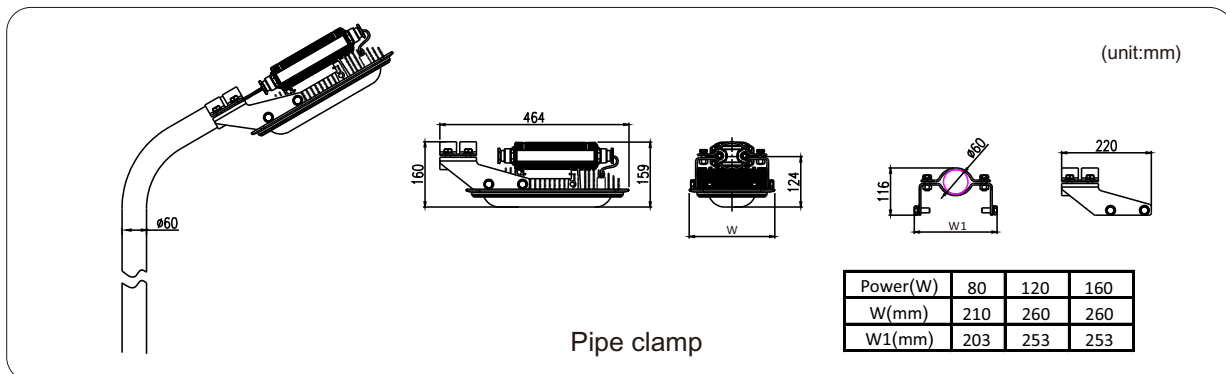
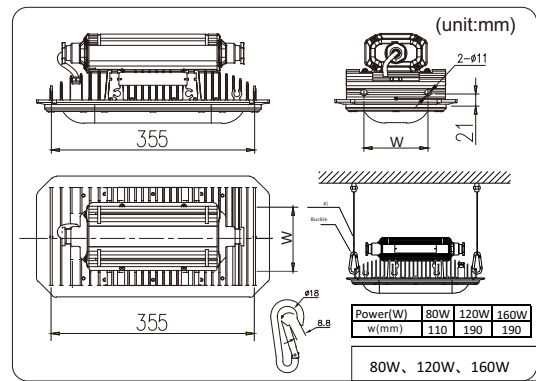
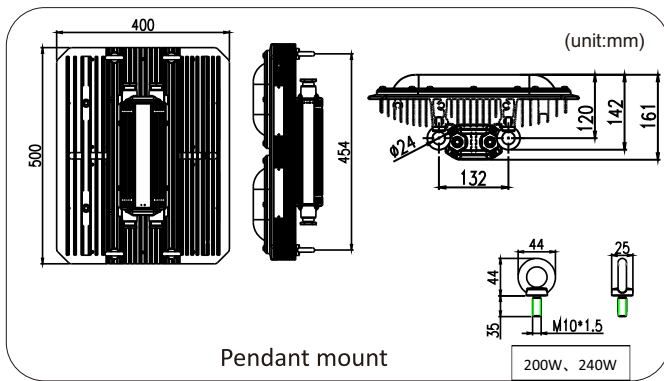
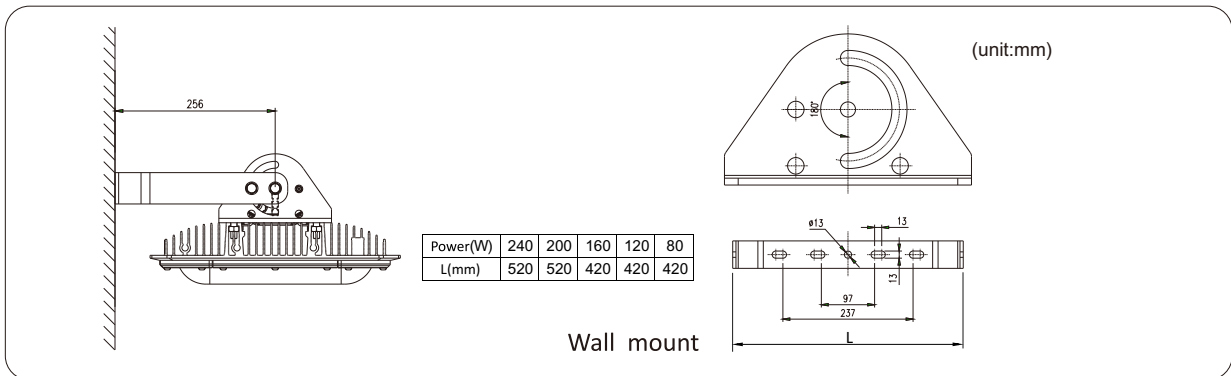
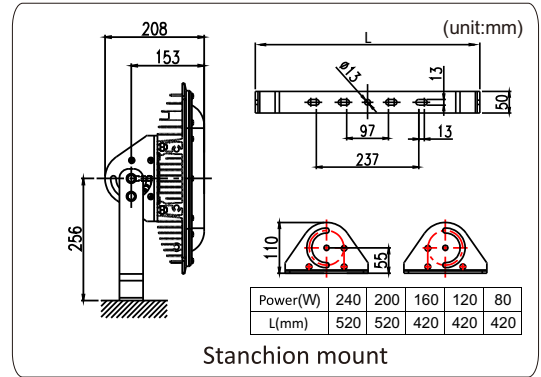
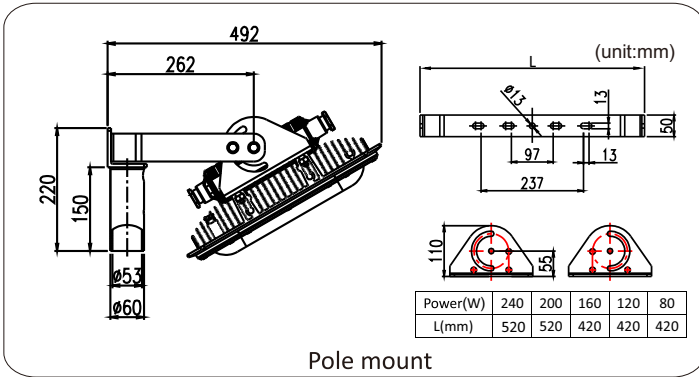
## Candela Distribution



# ★ INSTALLATION METHOD



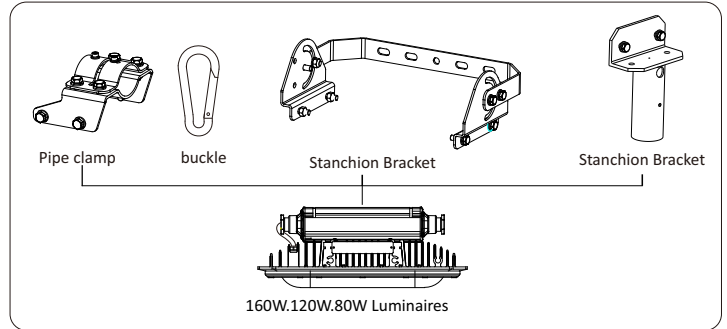
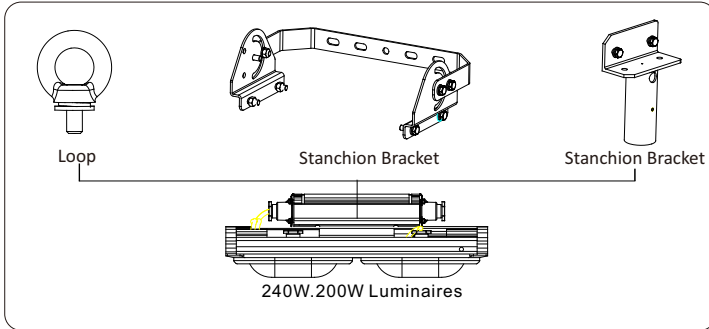
## Installation Method



# ★ ACCESSORIES



## Optional Parts



## Optional Parts

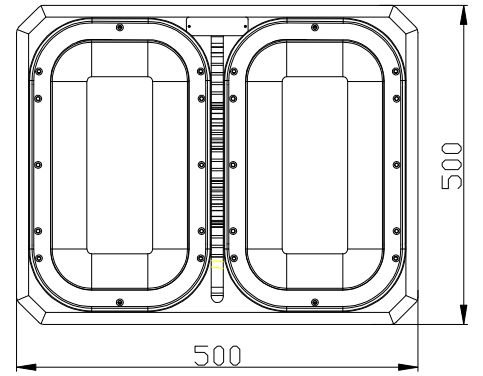
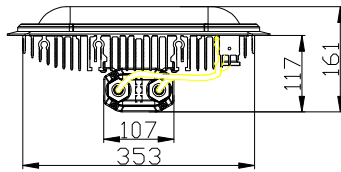
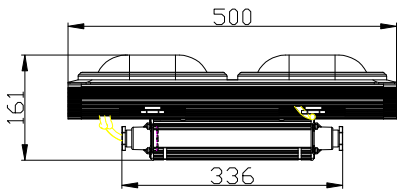
No.	Installation accessories	Picture	Material	Weight(Kg)	QTY	Remarks (Apply to)
1	Pipe clamp		Q235	2.1	1	80W
2	Pipe clamp		Q235	2.3	1	120W
3	Loop		45#	0.2	4	200W/240W
4	Buckle		45#	0.1	4	80W/120W/160W
5	Stanchion Bracket-1		Q235	4	1	80W/120W/160W
6	Stanchion Bracket-2		Q235	4.2	1	200W/240W
7	Stanchion Bracket-3		Q235	1.63	1	80W/120W/160W 200W/240W
8	Guard-1		SUS304	0.3	1	80W
9	Guard-2		SUS304	0.35	1	120W/160W
					2	200W/240W

★ SIZE



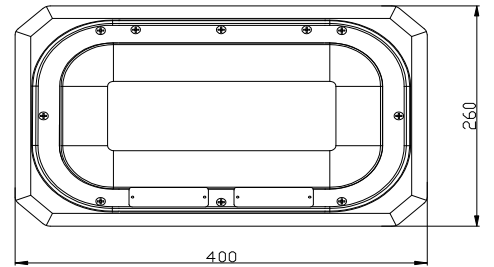
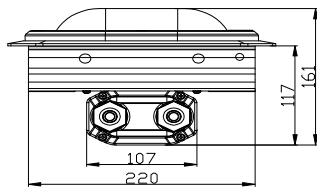
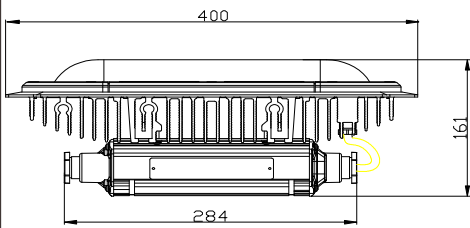
Size

unit:mm



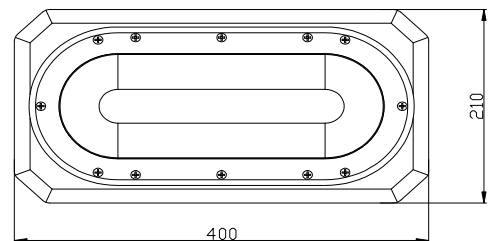
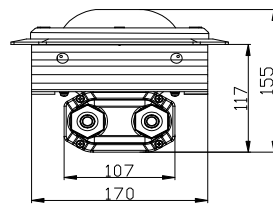
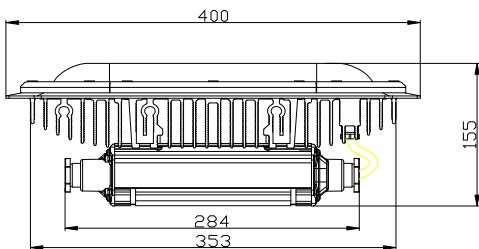
200W, 240W

unit:mm



120W, 160W

unit:mm



80W



 **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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