

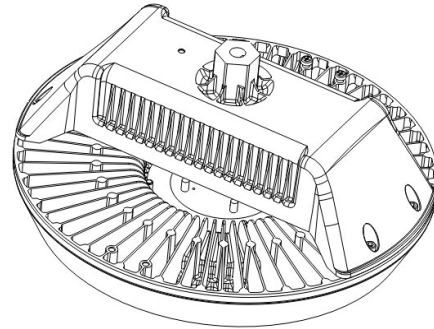
# INSTALLATION INSTRUCTIONS


## MEL2™ SERIES

### LED HIGH BAY

**READ BEFORE INSTALLATION**  
**SAVE THESE INSTRUCTIONS FOR FUTURE USE**

These instructions do not purport to cover all details or variations in luminaire or provide for every possible contingency to be met in connection with installation, operation or maintenance. For more details or special problems outside of this manual, please contact VM5 Lighting Solutions.



 **Warning**

**CAUTION FOR ELECTRIC SHOCK/RISK OF BURN/PROPER INSTALLATION**

- **To be installed by a licensed electrician only.**
- **Please allow the luminaire to cool down prior to performing maintenance.**
- **Please wear safety glasses and other needed protective equipment during the process of installation and maintenance.**

**Model #'s**

- MHB-XX-100-YY-UNV; MHB-XX-100-YY-347/480
- MHB-XX-150-YY-UNV; MHB-XX-150-YY-347/480
- MHB-XX-200-YY-UNV; MHB-XX-200-YY-347/480

Class I IP66 SYSTEM 120-277v/ 347-480v 50/60Hz

## 1. GENERAL

Please read this document before installation and operation to avoid injury. This luminaire is for both indoor and outdoor applications. Please do not use in poorly ventilated or high temperature area. Please follow the below for proper installation and maintenance.

## 2. UNPACKING

The luminaire has been properly packed to avoid damage during transit. Inspect the luminaire to confirm there is no damage. Do not install a damaged luminaire or damaged luminaire components.

This carton consists of:


- Luminaire
- Product manual

## 3. APPLICATION NOTICE

**PLEASE APPLY THE PRODUCT ACCORDING TO THE FOLLOWING STATEMENT**

LED High Bay used for indoor and outdoor lighting and can be installed in workshops, warehouses, underground parking areas, toll stations, gas stations, supermarkets, exhibition halls, gymnasiums, and so on.

## 4. INSTALLATION

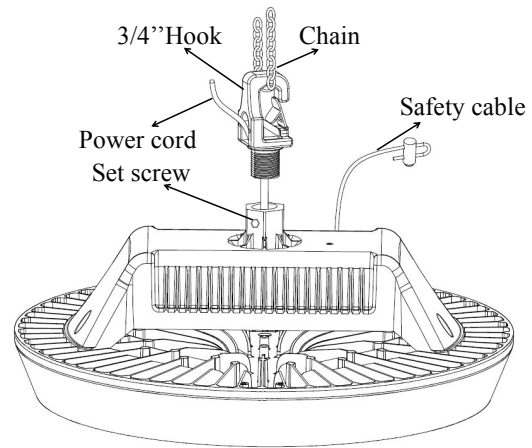
 **WARNING**

- **Ensure this manual is provided to the installers and users**
- **Always switch off the power supply before commencing work**
- **Wrong installation may lead to falling; please follow the manual**
- **Do not touch the light while it is energized**
- **Please change any damaged covers**

The High Bay fixture is threaded with 3/4" NPT. It can offer several mounting options. Please choose proper mounting type and optic lens degree for your application.

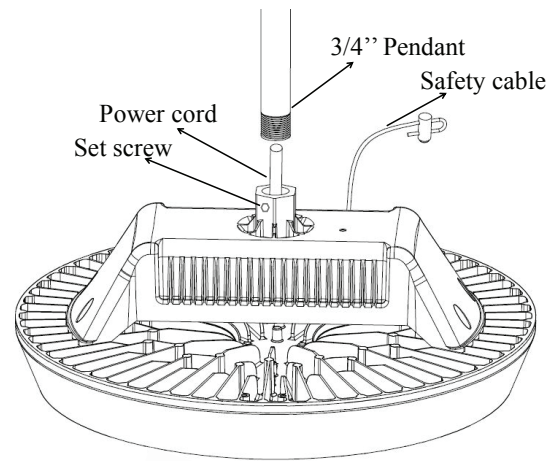
### 3/4" Hook mounting:

1. Feed the power cord through the hook.
2. Thread hook into the driver housing.
3. Mount high bay fixture with the hook to a sturdy ceiling structure, directly or by chain.
4. Connect power cord to supply wires inside a junction box using approved wire connectors.
5. Secure the safety cable to ceiling structure to avoid fixture falling down.
6. Tighten hook with set - screw.



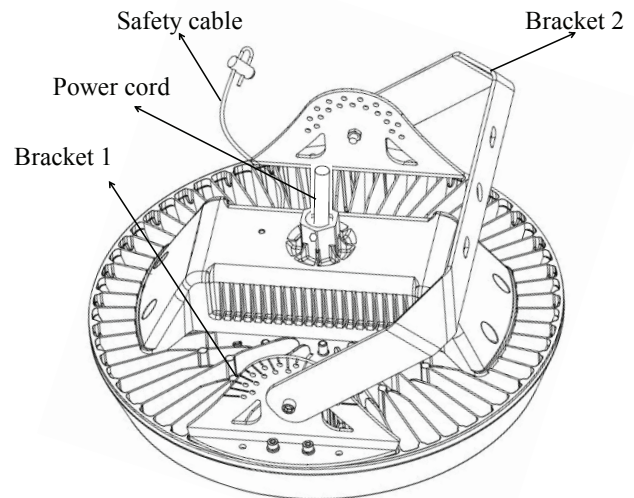
### 3/4" Pendant mounting:

- (3/4" pendant not supplied unless specified otherwise)
1. Choose pendant length and feed power cord through pendant. If longer cord is required, replace the cord with the appropriate length wires.
  2. Screw the pendant to the driver housing
  3. Connect supply wires to fixture cord inside a junction box using approved wire connectors
  4. Secure the safety cable to ceiling structure to avoid fixture falling down
  5. Tighten pendant with set - screw



### Bracket mounting:

- (Bracket is not provided unless specified otherwise)
1. Bracket is pre-installed on fixture at factory.
  2. Mount fixture to a sturdy wall or ceiling structure.
  3. Adjust angle through bracket according to application.
  4. Connect power cord to supply wires inside a junction box using approved wire connectors.
  5. Secure the safety cable to wall or ceiling structure to avoid fixture falling down.



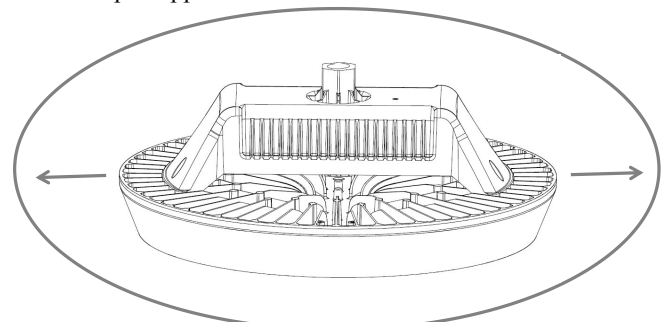
### Optic lens degree options:

1. 100 degree (wide beam)
2. 60 degree (narrow beam)
3. 60x100 degree (aisle beam)

Wide beam and narrow beam application:  
Warehouse, Industrial, Agricultural, Outdoor, etc.

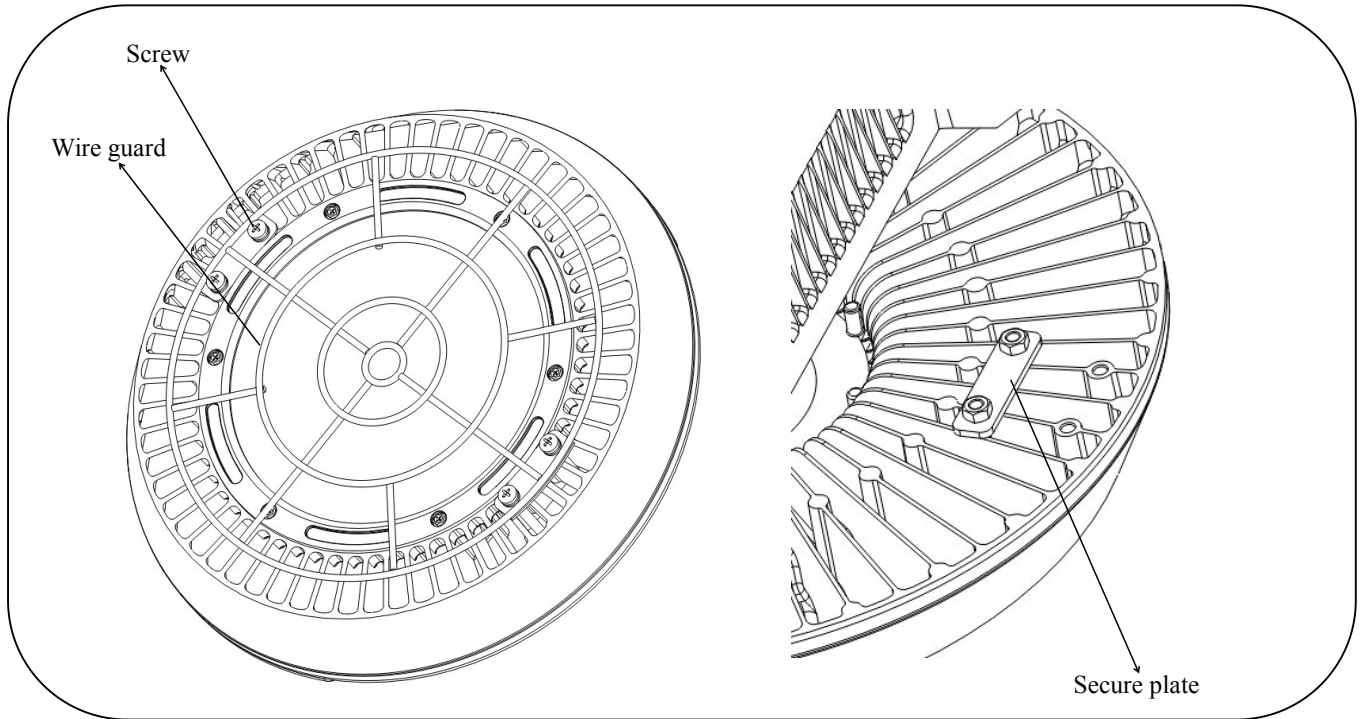
Aisle beam application:  
The aisle optic is specially designed to illuminate aisles in warehouse and industrial applications

Aisle optic application:



The lighting direction is parallel to the driver housing

## 5. WIRE GUARD INSTALLATION



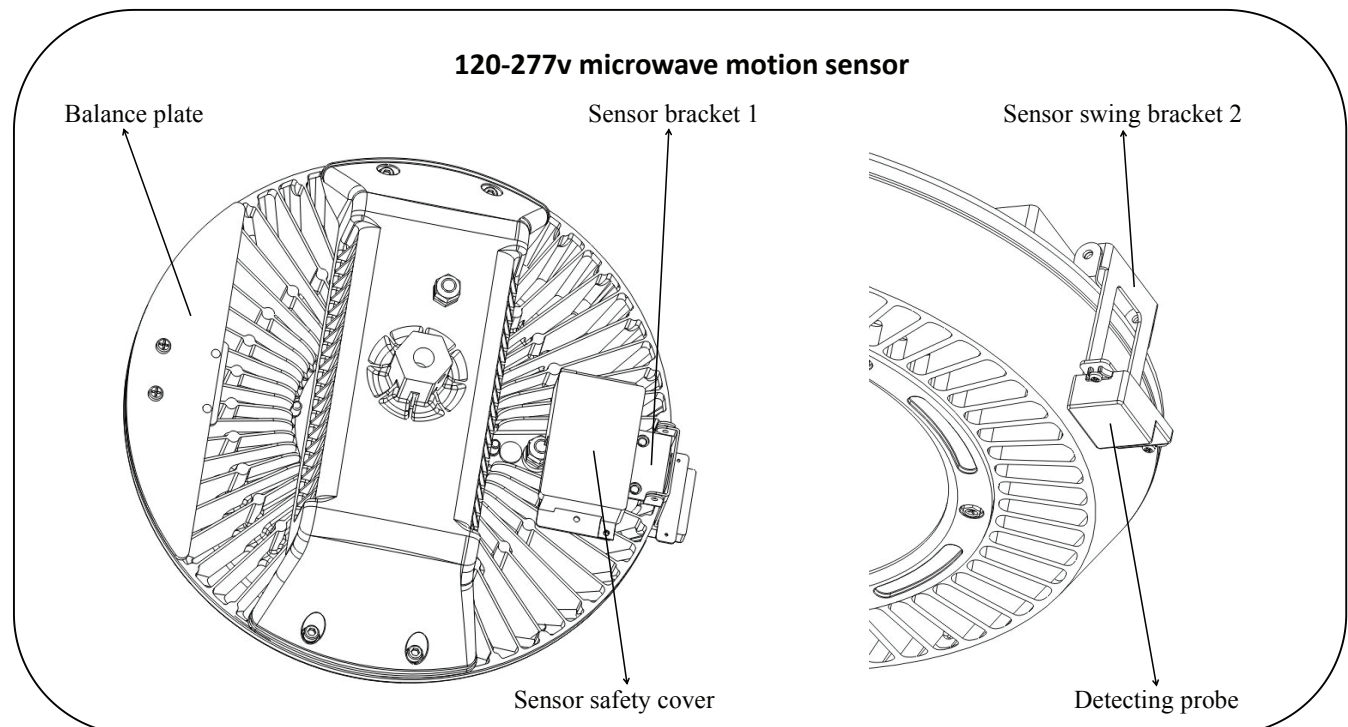
### Step 1:

Put the wire guard on the center of the light cavity, spinning the wire guard position to avoid blocking LEDs

### Step 2:

Insert the screw through the heat fin gap, then secure the wire guard

## 6. SENSOR INSTALLATION AND SETTINGS



**Step 1:**

Secure the balance plate to the fixture by supplied screws

**Note:** Fixture is pre-punched at the back. Balance plate is used for hook and chain mounting solution.

**Step 2:**

Install the sensor bracket 1 on the fixture

**Step 3:**

Install the sensor swing bracket 2 to bracket 1

**Step 4:**

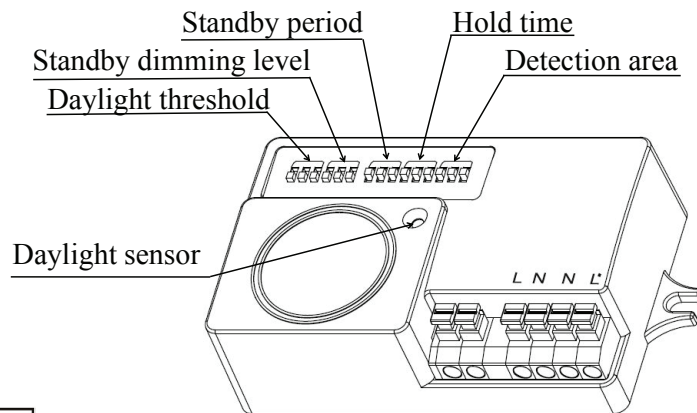
Install sensor on bracket 1 and detecting probe on bracket 2, then do the wiring

**Step 5:**

Install the sensor safety cover

**Notes: Detection zone: Max. (DxH):16m x 8m**

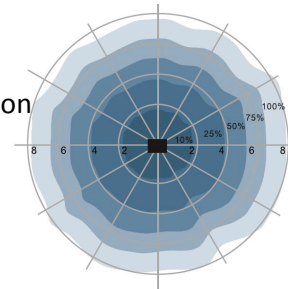
**Microwave Motion Sensor Settings**



ON		1	2	3	
<input checked="" type="checkbox"/>	I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%
<input type="checkbox"/>	II	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	75%
<input type="checkbox"/>	III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	50%
<input type="checkbox"/>	IV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	25%
OFF	V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10%

**Detection area**

Detection area can be reduced by selecting the combination on the DIP switches to precisely fit each application



ON		1	2	3	
<input checked="" type="checkbox"/>	I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10s
<input type="checkbox"/>	II	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30s
<input type="checkbox"/>	III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90s
<input type="checkbox"/>	IV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3min
<input type="checkbox"/>	V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20min
OFF	VI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30min

**Hold time**

Refers to the time period the lamp remains at 100% illumination after no motion detected

ON		1	2	3	
<input checked="" type="checkbox"/>	I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Disable
<input type="checkbox"/>	II	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1h
<input type="checkbox"/>	III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30min
<input type="checkbox"/>	IV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10min
<input type="checkbox"/>	V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5min
OFF	VI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5s

**Stand-by period**

Refers to the time period the lamp remains at a low light level before it is completely switched off in the long absence of motion. When set to Disable mode, the low light is maintained until motion is detected



ON		1	2	3	
●	I	●	●	●	50%
▲	II	○	●	●	40%
■	III	●	○	●	30%
▼	IV	●	●	○	20%
○	V	○	○	○	10%
OFF					

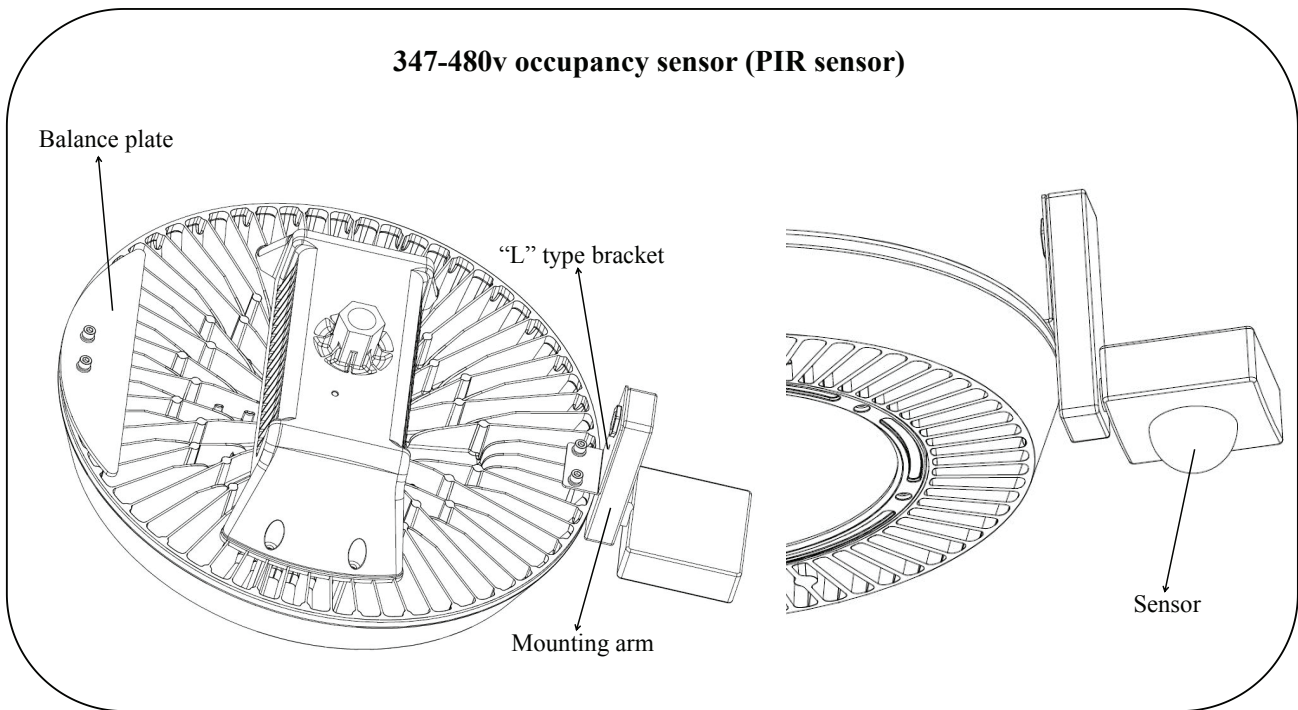
### Stand-by dimming level

The low light you would like to have after hold time in the long absence of motion

ON		1	2	3	
●	I	●	●	●	Disable
▲	II	●	●	○	50lux
■	III	○	●	○	30lux
▼	IV	●	○	○	10lux
○	V	○	○	○	5lux
OFF					

### Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. When set to Disable mode, the daylight will switch on the lamp when motion is detected regardless of ambient light  
 Level 50lux, 30lux: twilight operation, 10lux, 5lux: darkness operation only.  
 Note that daylight sensor is active only when lamp is totally switched off



#### Step 1:

Secure the balance plate to the fixture by supplied screws

**Note:** Fixture is pre-punched at the back. Balance plate is used for hook and chain mounting solution.

#### Step 2:

Install the sensor to its mounting arm

#### Step 3:

Install the mounting arm to the "L" type bracket

#### Step 4:

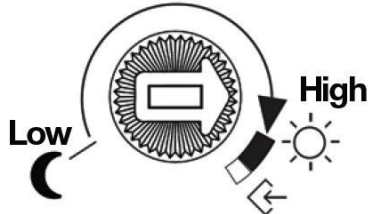
Install the "L" type bracket on the fixture

**Notes: Detection zone: Max. (DxH):13m x 12m**

## Occ Sensor Settings

### Light level


The light level feature allows lighting to remain OFF during daylight, regardless of occupancy. Daytime operation is at 200 footcandles(factory Setting). Nighttime operation is at 2 footcandles



Light level: .2 (night) to 200 (day) footcandles

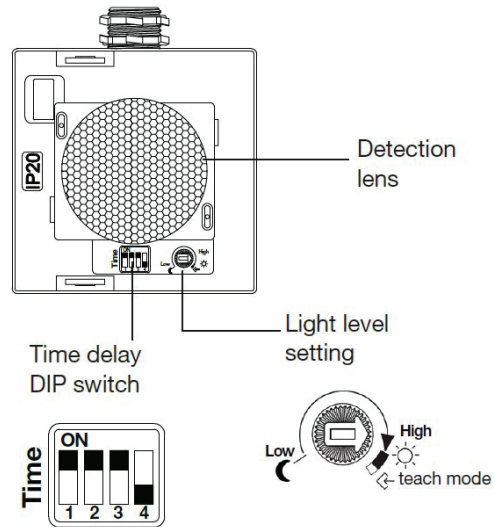
### Light level teach mode

The light level teach mode reads the ambient light level in the space and selects this amount for the light level setting.

- Turn the light level setting to 
- After 10 seconds, the value of the ambient brightness is saved
- This value is also available after a power failure if the potentiometer is set to teach mode at power up.

### Time delay

Time delay is the period of time lights remain on after the last detection. Adjustment ranges from 15 seconds to 30 minutes.



Time Delay DIP Switch

1	2	3	4	Time
ON	ON	ON	OFF	15 sec
ON	OFF	OFF	OFF	1 min
OFF	ON	ON	OFF	5 min
ON	OFF	ON	OFF	10 min
ON	ON	OFF	OFF	15 min
OFF	ON	OFF	OFF	20 min
OFF	OFF	ON	OFF	25 min
OFF	OFF	OFF	OFF	30 min
N/A	N/A	N/A	ON	override

Factory setting is 15 minutes.

## 7. PRODUCT SPECIFICATIONS

Weatherproof ratio: IP66

Anti-shock Protection rate: Class I

Operation voltage : 120-277Vac / 347-480Vac (50/60Hz)

Declared wattage :110W / 145W / 210W

Standard Kelvin color: 4000K / 5000K

Light efficiency : upto 110 lm/w

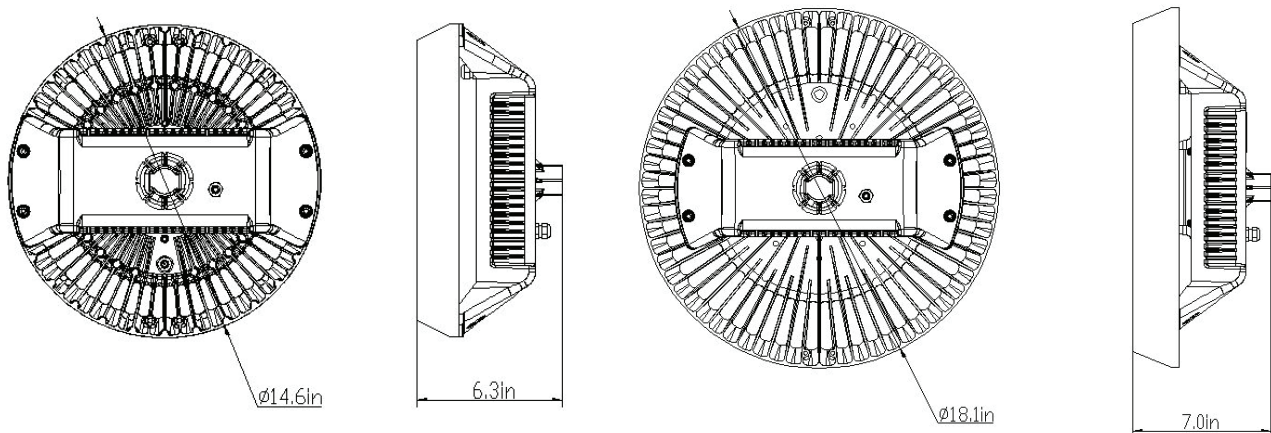
Power factor: >0.95

THD: <10%

Operation temperature: -25°C - +55°C

Lens type: Aisle beam ( 60x100°), Wide beam ( 100°), Narrow beam ( 60°)

### Product measurement



110w 120-277v: MHB-XX-100-YY-UNV  
110w 347-480v: MHB-XX-100-YY-347/480

145w 120-277v: MHB-XX-150-YY-UNV  
145w 347-480v: MHB-XX-150-YY-347/480  
210w 120-277v: MHB-XX-200-YY-UNV  
210w 347-480v: MHB-XX-200-YY-347/480

## 8. MAINTENANCE

Warning! Be cautious of electric shock and burns. Any operation should be conducted after power is turned off and fixture has cooled down.

1. The safety of the product is not guaranteed unless all procedures are followed according to the vendor's manual. Be aware of all improper installation to avoid electric shock, fire or any other possible accidents.
2. Avoid the product being used in a corrosive, explosive, flammable or dust surrounded environment.
3. Avoid violent vibration and impact.
4. Turn off the power to prevent electric shock and cool off the light for 15 minutes minimum before maintaining. In order to keep the transmittance of the cover, a regular cleaning is required upon user's condition. Clean cover and fixture with non-abrasive cleaning solution.

