



**BACK-LIT LED PANEL LIGHT**



# BACK-LIT LED PANEL LIGHT

Power&CCT Tunable

APPLICATIONS: Education, healthcare and office.



## PRODUCT SPECIFICATIONS

- Delivering up to 130LPW
- CRI: Ra $\geq$ 80
- CCT Tunable: 3000K / 3500K / 4000K / 5000K / 6500K
- 5 different power tunable
- Dimmable: 0-10V
- Smooth and comfortable light, no glare
- Estimated Lifetime @ 25 °C: > 54,000 hours
- Power Factor: > 0.95
- Total Harmonic Distortion: < 15% at full load
- Limited Warranty: 5 years
- Microwave induction and Bluetooth control are optional
- Operating Temperature Range: -22°F to 104°F (-30 °C to 40 °C)

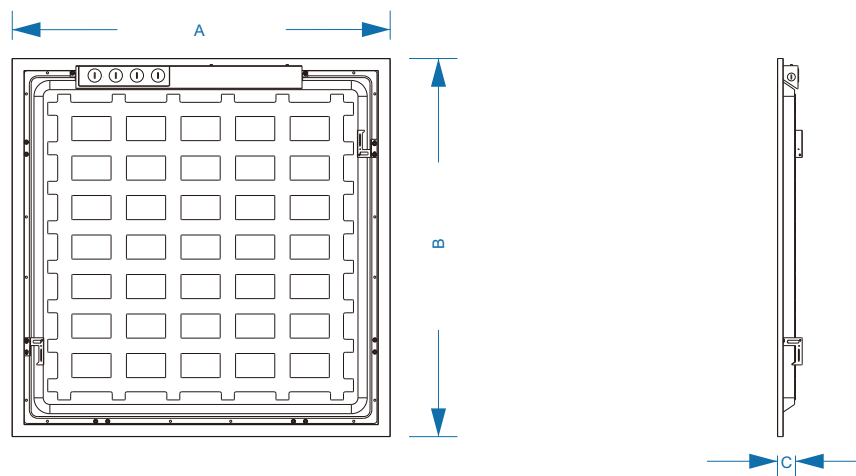
## ORDERING INFORMATION

| MODEL           | SIZE   | INPUT VOLTAGE | POWER (TUNABLE)     | CCT (TUNABLE)                             | CRI     | LUMINOUS EFFICIENCY | DIMMABLE | LIMITED WARRANTY |
|-----------------|--------|---------------|---------------------|-------------------------------------------|---------|---------------------|----------|------------------|
| BPL5-22-40W-L-H | 2x2 FT | 120-277VAC    | 20W/25W/30W/35W/40W | 3000K<br>3500K<br>4000K<br>5000K<br>6500K | Ra > 80 | 130lm/W             | 0-10V    | 5 years          |
| BPL5-14-40W-L-H | 1x4 FT |               | 20W/25W/30W/35W/40W |                                           |         |                     |          |                  |
| BPL5-24-72W-L-H | 2x4 FT |               | 30W/40W/50W/60W/72W |                                           |         |                     |          |                  |

## FIXTURE SPECIFICATIONS

|                 |                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| HOUSING         | White high-strength metal frame, seamlessly                                                                    |
| LENS ASSEMBLY   | PMMA Lens and polystyrene diffuser prevents hot spots, shadows and glare, while providing uniform illumination |
| MOUNTING        | Recessed<br>Installs into conventional grid ceilings                                                           |
| RECOMMENDED USE | Offices / Educational & Retail / Commercial & Institutional                                                    |

## PRODUCT DIMENSIONS

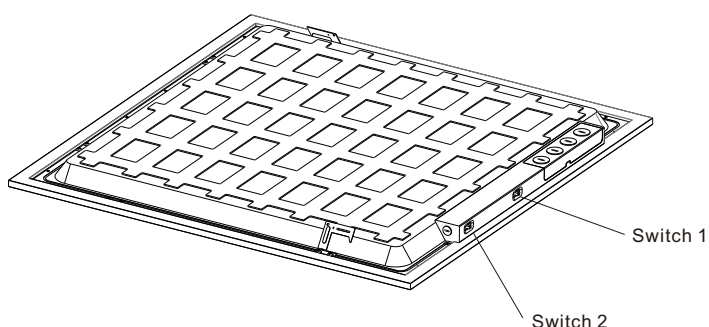


| MODEL           | SIZE   | A(inch)(mm)    | B(inch)(mm)    | C(inch)(mm) |
|-----------------|--------|----------------|----------------|-------------|
| BPL5-22-40W-L-H | 2x2 FT | 23.74"(603mm)  | 23.74"(603mm)  | 1.38"(35mm) |
| BPL5-14-40W-L-H | 1x4 FT | 47.75"(1213mm) | 11.93"(303mm)  | 1.38"(35mm) |
| BPL5-24-72W-L-H | 2x4 FT | 23.74"(603mm)  | 47.75"(1213mm) | 1.38"(35mm) |

## LUMINAIRE AND ELECTRICAL PERFORMANCE

| OPERATING TEMPERATURE RANGE    | ESTIMATED LIFETIME<br>@ 25°C (77°F) | POWER FACTOR        | TOTAL HARMONIC<br>DISTORTION | DIMMABLE      |
|--------------------------------|-------------------------------------|---------------------|------------------------------|---------------|
| -22°F to 104°F (-30°C to 40°C) | 54,000 hours                        | > 0.95 at full load | < 15% at full load           | 0-10V Dimming |

## POWER&CCT TUNABLE



### POWER TUNABLE(SWITCH1)

2x2FT / 1x4FT

20W 25W 30W 35W 40W

### POWER TUNABLE(SWITCH1)

2x4FT

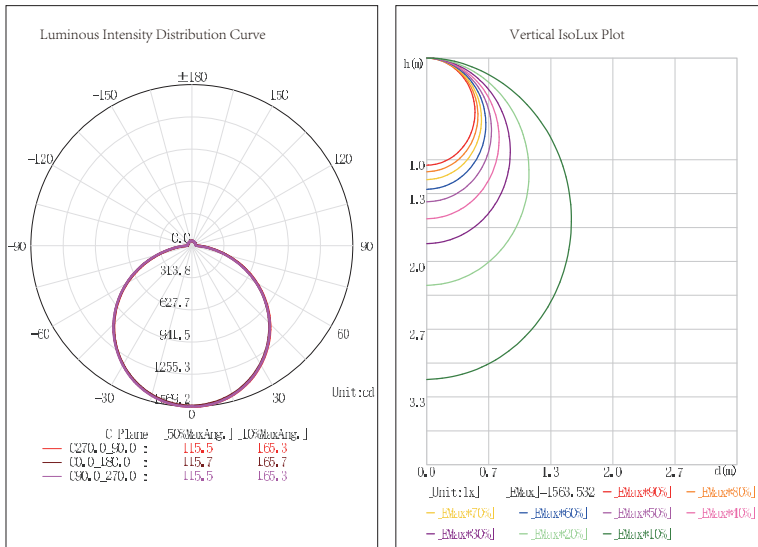
30W 40W 50W 60W 72W

### CCT TUNABLE(SWITCH2)

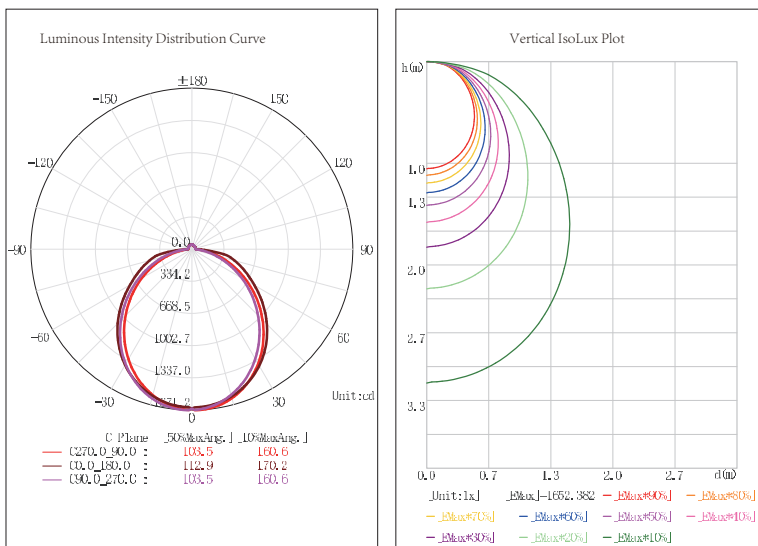
2x2FT / 1x4FT / 2x4FT

3000K 3500K 4000K 5000K 6500K

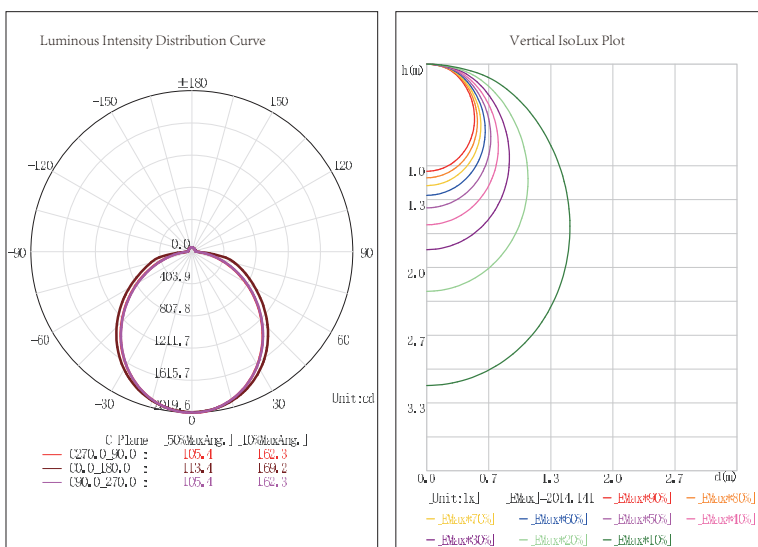
## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(2x2FT)



## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(1x4FT)



## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(2x4FT)



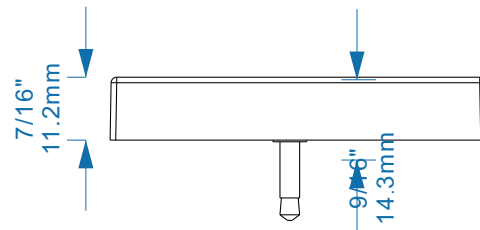
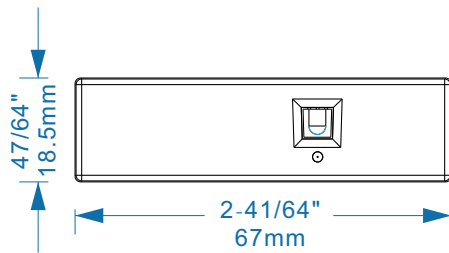
## ACCESSORIES (OPTIONAL)

|                                                                                   |                                                                                                                              |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|  | <b>MICROWAVE MOTION SENSOR   PLUG &amp; PLAY</b><br>Model: HD08VR-MA-1<br><br><b>INFRARED REMOTE CONTROL</b><br>Model: HD05R |
|  | <b>MICROWAVE MOTION SENSOR   PLUG &amp; PLAY</b><br>Model: HD08VR-MB-1 (APP CONTROL)                                         |

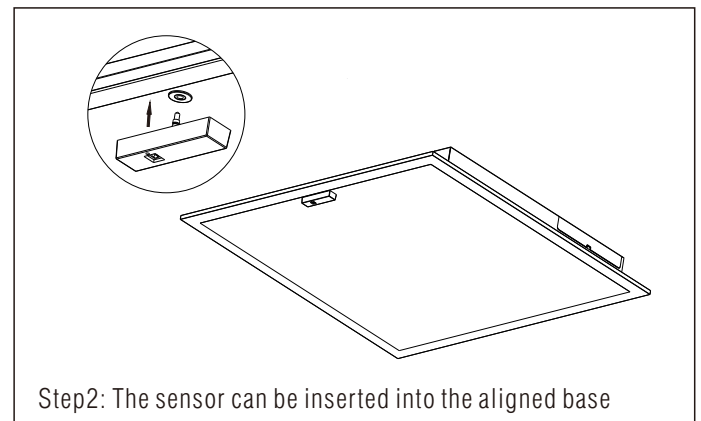
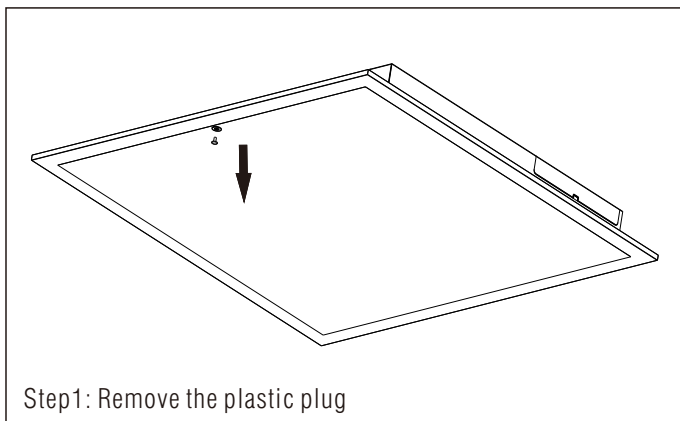
## MICROWAVE MOTION SENSOR PARAMETERS

|                                    |                                                                                                                                                                                                             |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FREQUENCY</b>                   | 5.8GHz±75MHz                                                                                                                                                                                                |
| <b>MICROWAVE POWER</b>             | <0.3mW                                                                                                                                                                                                      |
| <b>INSTALLATION HEIGHT</b>         | 6m/19.68ft Max                                                                                                                                                                                              |
| <b>DETECTION DISTANCE</b>          | ≥3m/9ft                                                                                                                                                                                                     |
| <b>DETECTION ANGLE</b>             | 30-150°                                                                                                                                                                                                     |
| <b>DETECTION AREA</b>              | 25% / 50% / 75% / 100%                                                                                                                                                                                      |
| <b>HOLDTIME</b>                    | <i>Remote control Options: 5s/ 30s/ 1min/ 3min/ 5min/ 10min/ 20min/ 30min</i><br><i>APP Control Options: 5s/ 30s/ 1min/ 2min/ 3min/ 5min/ 10min/ 15min/ 20min/25min/ 30min/ 45min/ 60min/ 90min/ 120min</i> |
| <b>DAYLIGHT THRESHOLD</b>          | Disable/400Lux/350Lux/300Lux/250Lux/200Lux/120Lux/80Lux/50Lux/30Lux/10Lux/2Lux                                                                                                                              |
| <b>STANDBY DIMMING LEVEL</b>       | 10% / 20% / 30% / 50%                                                                                                                                                                                       |
| <b>STANDBY PERIOD</b>              | <i>Remote control Options: 0s/ 10s/ 30s/ 1min/ 5min/ 10min/ 30min/ 60min/ +</i><br><i>APP Control Options: 0s/5s/30s/1min/2min/3min/5min/10min/15min/20min/25min/ 30min/45min/60min/ + ∞</i>                |
| <b>DUSK/DAWN SENSING/PHOTOCELL</b> | Daylight threshold as 30lux/50lux/80lux/120lux/200Lux/250Lux/300Lux/350Lux/400Lux                                                                                                                           |
|                                    | Standby period as + ∞                                                                                                                                                                                       |
|                                    | Standby dimming level as 10% / 20% / 30%                                                                                                                                                                    |
| <b>DUSK/DAWN SENSING/PHOTOCELL</b> | 1. Adjust "daylight" value higher than 50lux                                                                                                                                                                |
|                                    | 2. Preset "standby period" 0S                                                                                                                                                                               |
|                                    | 3. press MW/PIR button 3 times till MW/PIR icons both blickingon LCD screen, daylight harvesting function enabled.(With BLE verison, press DH button, daylight harvesting function enabled.)                |
| <b>WIRELESS CONTROL RANGE</b>      | >20m/65ft(bluetooth)                                                                                                                                                                                        |
| <b>APP DOWNLOAD</b>                | Supported in both APP Store and Google play market                                                                                                                                                          |
| <b>WORKING TEMPREATURE</b>         | -40°F~140°F(-40℃~60℃)                                                                                                                                                                                       |
| <b>STORAGE TEMPREATURE</b>         | -40°F~176°F(-40℃~80℃) Humidity:85%(non-condensation)                                                                                                                                                        |

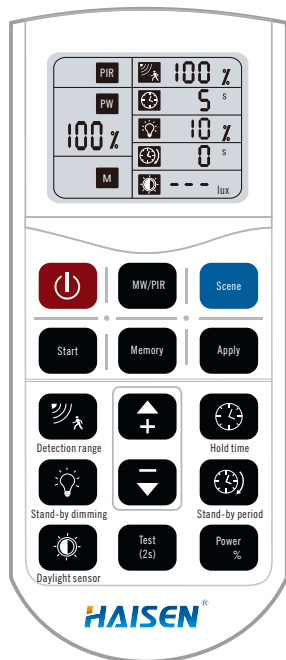
## MICROWAVE MOTION SENSOR DIMENSIONS



## MICROWAVE MOTION SENSOR INSTALLATION



## REMOTE CONTROL BUTTON FUNCTION INTRODUCTION



**ON/OFF**

Turn ON or OFF the sensor

**NW/PIR**

Exchange from Microwave detection to PIR detection, for future use

**Reset**

Press it to start detection programming; before pressing any other buttons, the screen shows default programming (Detection Area 100%, Holdtime 5S, Daylight Disable, Standby Dimming 10%, Standby Period 0S)

**Start**

Press it before you try to memorize program into the remote; After pressing it, S on the screen will blink and keeping blinking while making the program

**Memory**

Press it after programming, the blinking S will become a solid M, that means the program has been well memorized

**Apply**

Press it to deliver the preset program to the specific sensors; every press will make the whole screen blink gently

**Detection area**

Also known as "sensitivity", 100% means the highest sensitivity and longest distance. Press it, specific icon on the screen will blink and press the + - buttons to adjust

**Hold time**

The period that light will stay illuminated 100% after no motion is detected; Press it, specific icon on the screen will blink and press the + - buttons to adjust

**Daylight Threshold**

The preset lux level to compare with ambient brightness when motion gets detected; Press it, specific icon on the screen will blink and press the + - buttons to adjust

**Stand-by period**

The period after holdtime, during which the light keeps standby dimming level; Press it, specific icon on the screen will blink and press the + - buttons to adjust

**Stand-by dimming level**

After holdtime, the light will dim from 100% to optional standby dimming levels; Press it, specific icon on the screen will blink and press the + - buttons to adjust

**UP**

The main functional buttons to adjust the factors to wanted level

**DOWN**

**POWER**

Supports to manually change dimming output in detection mode; Press it, specific icon on the screen will blink and press the + - buttons to adjust

**Test mode**

Supports to check if the sensor works correctly with a short 2S holdtime; Press it and the holdtime will change to 2S, and it can't be memorized

## APP OPERATION INSTRUCTION OF SMART SENSOR

### APP DOWNLOAD

Our app HAISEN BLUE has been uploaded onto APP Store & Google Market

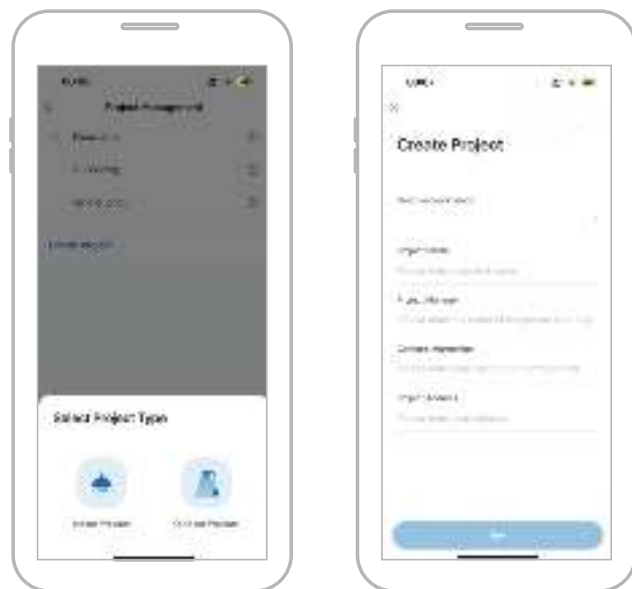


### SIGN UP/LOG IN

Please select the region as US (because the server is located in the US.)  
if you signing up with phone number; or with mail address without region restriction.

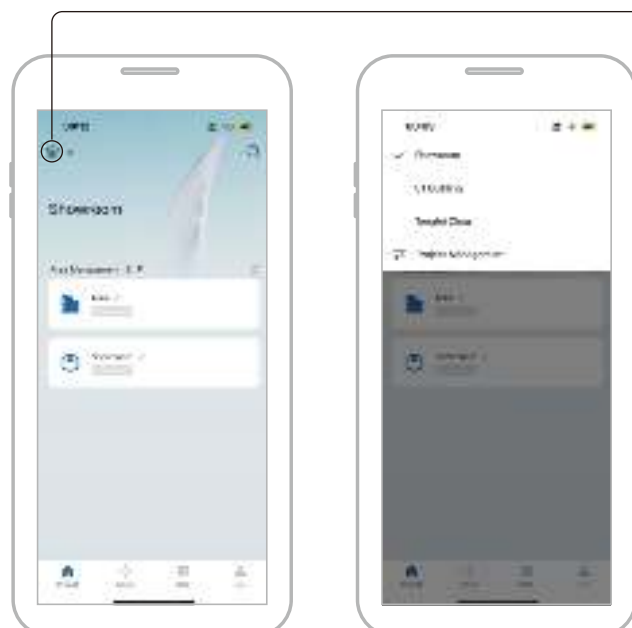
Log in if you already have account.

### PROJECT MANAGEMENT



#### **CREATE PROJECT**

The app is specially designed for industrial project application, not only to control the SMART SENSORS but also HAISEN's Emergency Driver. It requires you to start a new project first before going on add or control devices.



#### **MANAGE PROJECT**

Press the left top icon, all the projects will be shown, you can select or manage them.

## APP OPERATION INSTRUCTION OF SMART SENSOR

### ADDING



#### CREATE PROJECT

Adding New Device New Group/Scenes.



#### ADDING NEW DEVICE

The app will automatically search the ready sensors in the connection area, list them and wait for your confirmation on adding.



#### ADDING NEW GROUP

The app will show all the devices that can be added into a group.

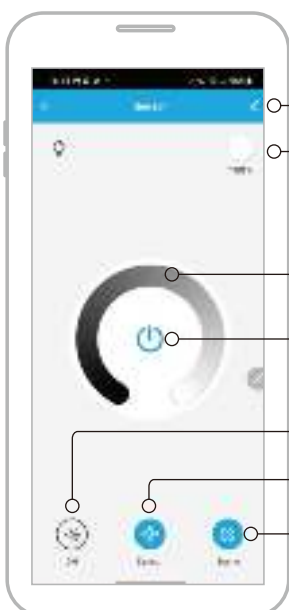


#### ADDING SCENES

The app will lead you to edit a scene with required task and save it as a new name.

### CONTROL

Select the sensor or group to control it



- Edit area, rename it or delete it
- Brightness Showing Part
- Brightness Changing
- ON/OFF Button
- Daylight Harvesting Button
- Sensor Setting Button
- Scene Setting Button

#### CONTROL PAGE -1



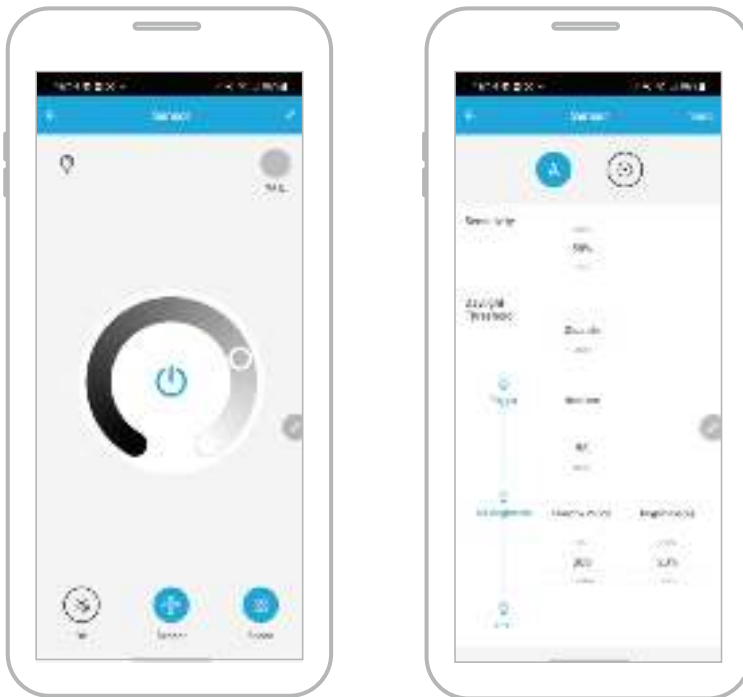
- Send after programming
- Auto mode
- Reset
- Sensitivity Setting
- Daylight Threshold Setting
- Holdtime Setting
- Standby Period Setting
- Standby Brightness Setting

#### CONTROL PAGE -2

## APP OPERATION INSTRUCTION OF SMART SENSOR

### HIGH-END TRIM

High-end Trimming is a very practical function for customers who prefer to have less than 100% brightness everytime the sensor detects motion, and our steps to approach it is very easy.



#### STEPS

- Dim the light to a level, for example 76%, simply by moving the block
- Press "sensor" at the bottom center and start making a program
- Then press "A" means running automation
- After setting, the sensor works as dimming to only 76% everytime it detects motion

### DAYLIGHT HARVESTING

Daylight Harvesting function offers the possibility to dim the light brightness along with the change of natural brightness; when outside gets darker, indoor environment should become brighter.



#### STEPS

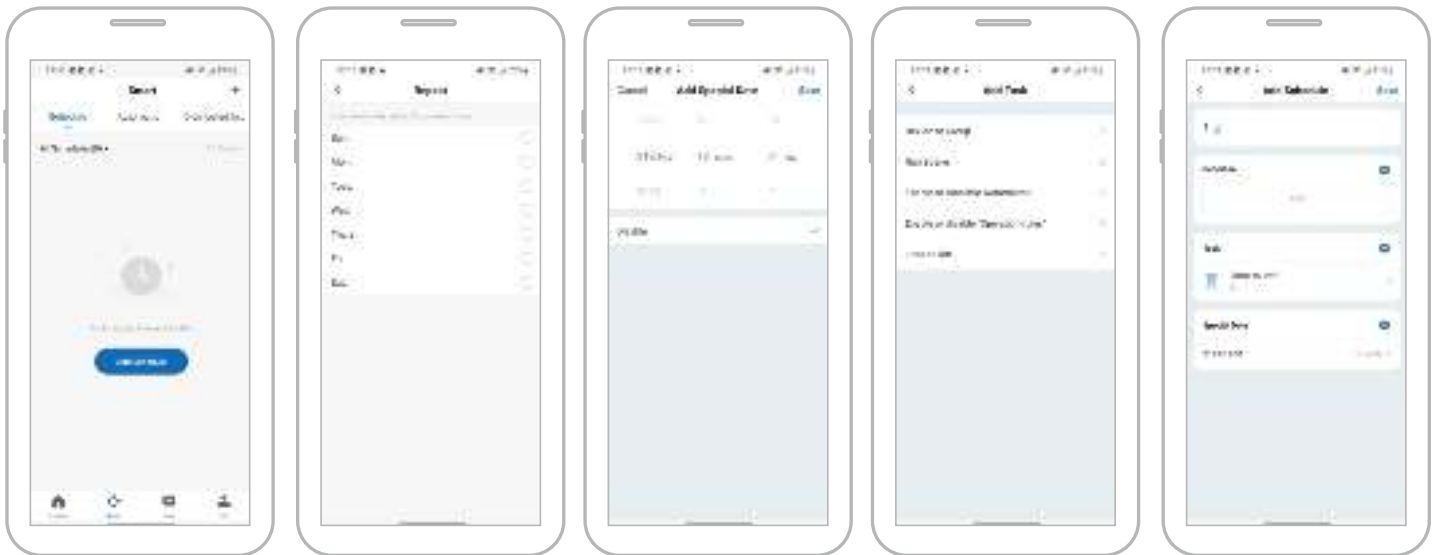
- Press "sensor" at the bottom center and start making a program, daylight must be chosen higher than 50lux, meanwhile the standby period should be 0s
- After setting, the sensor works as dimming to only 76% everytime it detects motion

## APP OPERATION INSTRUCTION OF SMART SENSOR

### SMART

This app allows customer to make different schedules, set necessary working conditions and work it automatically.

*Please follow below steps.*



### ENERGY MONITORING

This app supports to monitor energy consumption and automatically generates data in "DATA" area.

*Please follow below steps.*



## INSTALLATION INSTRUCTIONS



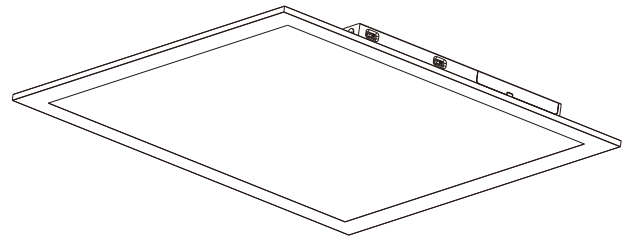
### CAUTIONS

### IMPORTANT SAFEGUARDS

When working with electrical equipment, basic safety precautions should always be followed, including the following:

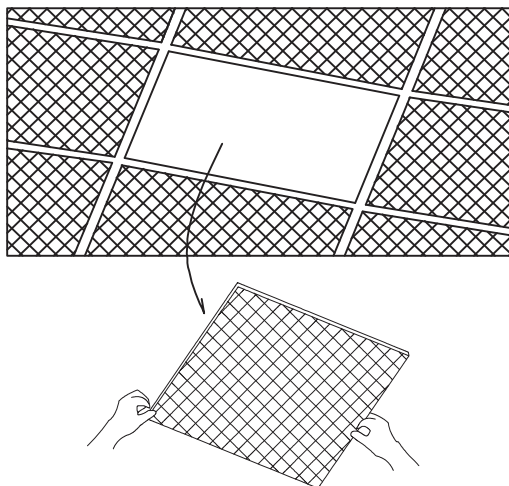
### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. DANGER- Risk of shock- Disconnect power before installation.
2. This luminaire must be installed by the NEC or your local electrical code.  
If you are not familiar with these codes and requirements, please consult a qualified electrician.
3. Suitable for conventional grid ceilings.
4. Make certain power is OFF before starting installation or attempting any maintenance.
5. Do not touch the LEDs or wires coming from the circuit board during the installation process. Damage may occur.

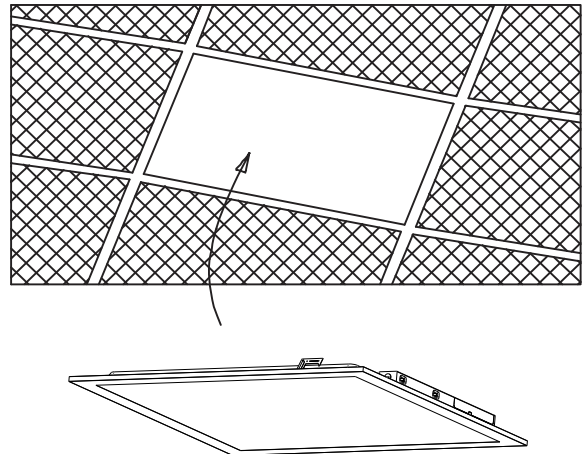


### Installation Procedure

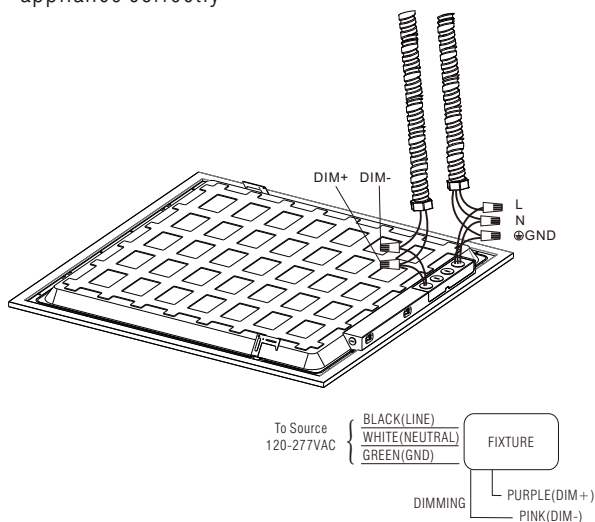
Step1: Remove 2x2 or 2x4 or 1x4 the from ceiling



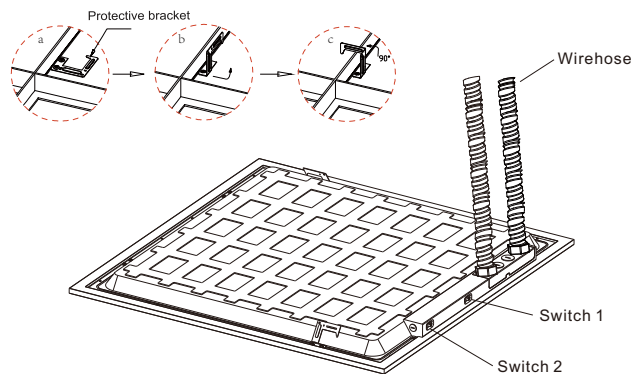
Step2: Place fixture into ceiling grid



Step3: Follow the luminaire wiring diagram to wire the appliance correctly



Step4: Pull the switch to the appropriate gear, Fixed wire hose on the panel, Then installation is completed



Watt Tunable: Switch 1  
5 different power:  
2\*2FT: 20W-25W-30W-35W-40W  
1\*4FT: 20W-25W-30W-35W-40W  
2\*4FT: 30W-40W-50W-60W-72W

CCT Tunable: Switch 2  
3000K-3500K-4000K-5000K-6500K

## PACKAGING INFORMATION

### PACKAGING/WEIGHT

| PART NO.        | SIZE  | OUTER CARTON SIZE<br>(L*W*H)         | QTY/CARTON<br>(PCS) | NET WEIGHT<br>(KG)(LBS) | GROSS WEIGHT<br>(KG)(LBS) | 20GP<br>(PCS) | 40HQ<br>(PCS) |
|-----------------|-------|--------------------------------------|---------------------|-------------------------|---------------------------|---------------|---------------|
| BPL5-22-40W-L-H | 2x2FT | 613*170*625mm<br>24.13"*6.7"*24.6"   | 4 pcs               | 1.8kg<br>3.96lbs        | 9.5kg<br>20.9lbs          | 1648          | 3920          |
| BPL5-14-40W-L-H | 1x4FT | 1223*170*325mm<br>48.15"*6.7"*12.79" | 4 pcs               | 2.0kg<br>4.4lbs         | 9.5kg<br>20.9lbs          | 1680          | 3904          |
| BPL5-24-72W-L-H | 2x4FT | 1223*170*625mm<br>48.15"*6.7"*24.6"  | 4 pcs               | 4.0kg<br>8.8lbs         | 17.8kg<br>39.16lbs        | 864           | 2036          |

### PACKAGING

