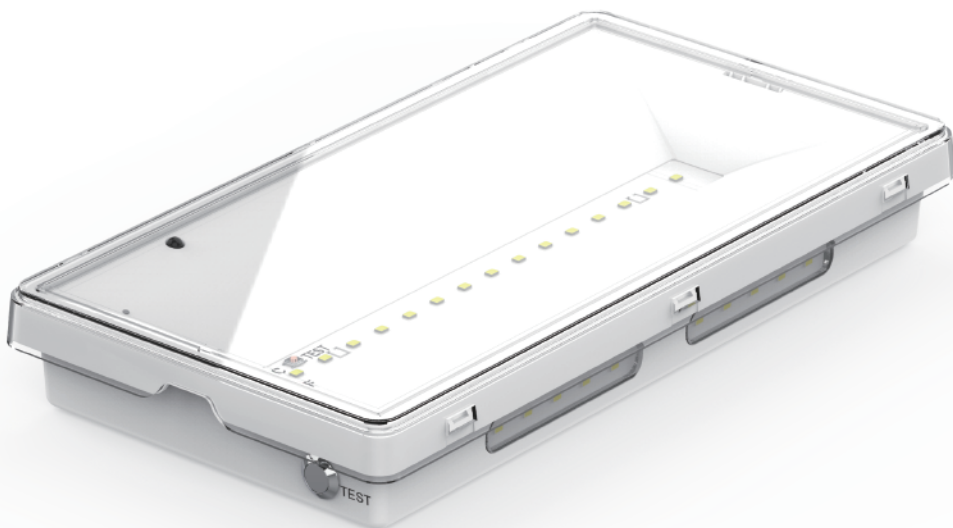


# Smart emergency light IP65

## Usermanual

For serial: OT-HLB5-D-RST  
Remote test and down light



**OTC IND CO., LTD**

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**RoHS**



**Ni-Cd**

Dear partners,

\* Thanks for Choosing OTC emergency facilities for your projects.

OTC always pursue high quality, steady quality products, competitive price and one-stop customer service, and offer enjoyable installation experience.

\* All the OTC emergency lights with 5 years quality guarantee (Battery 2 years) . If any doubts/ questions, please contact OTC project support team directly by email [support@otcind.net](mailto:support@otcind.net) . You will get solutions in 7~24 hours rapidly.

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## 1 Security related information

- Installation should be carried out in accordance with the latest edition of the I.E.E. Wiring regulations and taking into consideration the latest building regulations.
- Ensure that all electrical connections are tight with no loose strands, including factory made connections.
- Ensure there is adequate free air circulation of at least 100mm around the luminaire. It is the installer's responsibility to consider fire risk and take appropriate precautions.

Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations . The guarantee is also invalidated if the luminaire has been I.R. tested. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. We do not accept responsibility for any installation costs associated with the replacement of this product. Your statutory rights are not affected. We reserve the right to alter specifications without prior notice.

## 2 Packing list



Luminaire \*1

External Test button  
Optional



User manual \*1



The controller  
Optional



Installation pack \*1



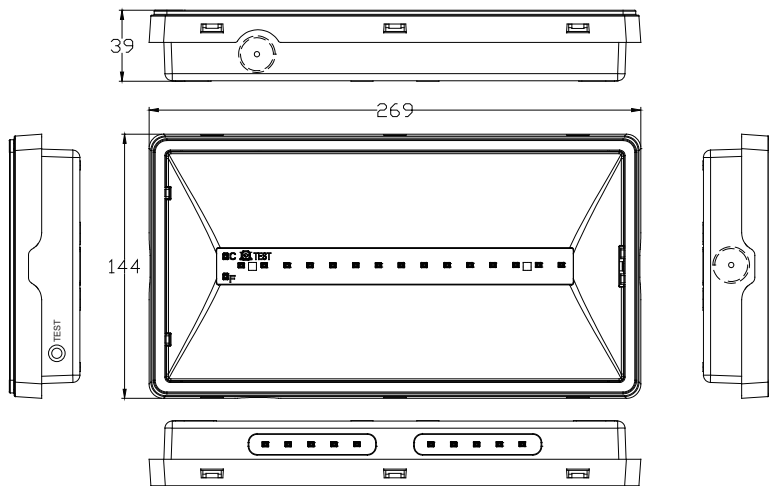
Recess installation pack



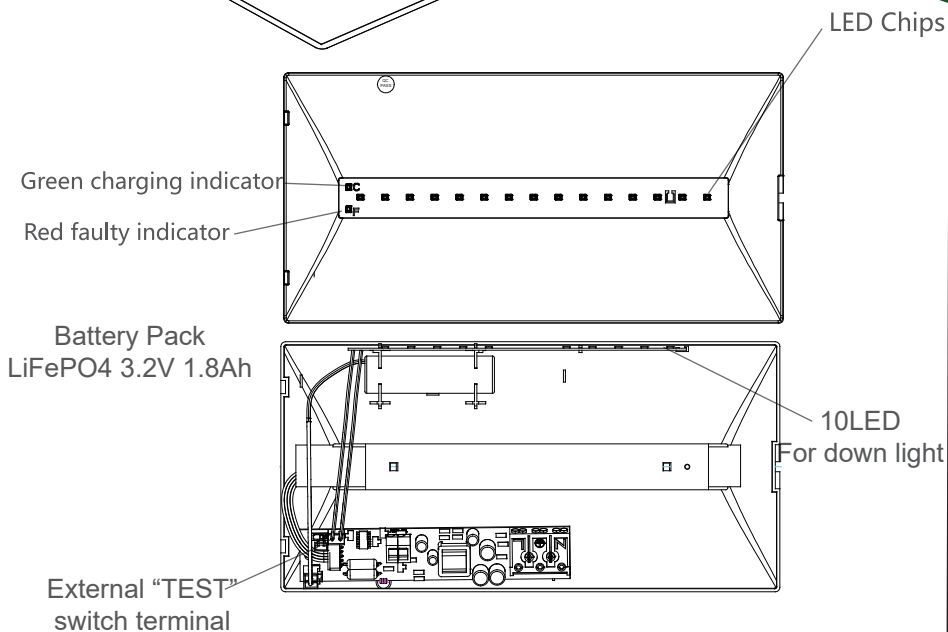
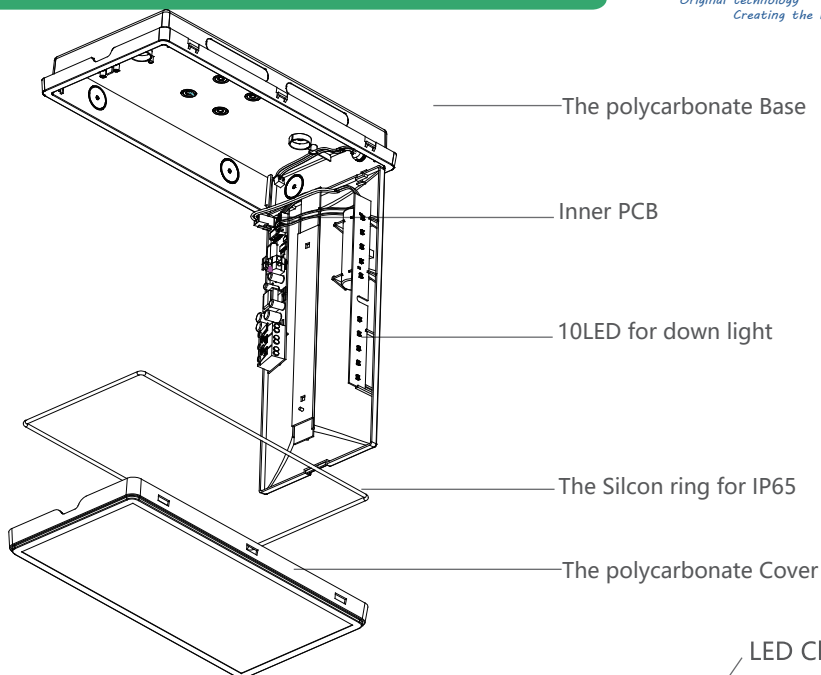
Hanging safety sign  
Optional

### 3 Basic Parameters

| Model                    | Art Nr. OT-HLB5 Self-test With down light                                       |
|--------------------------|---------------------------------------------------------------------------------|
|                          | RST                                                                             |
| EM Working mode          | Non-maintained and Maintained in one design                                     |
| Material                 | 100% polycarbonate                                                              |
| LED Chips                | 15pcs 2835                                                                      |
| LED Chips Down           | 10pcs 2835                                                                      |
| Input If AC              | AC200-240V 50/60HZ                                                              |
| Total Input Power        | Non-maintained mode: 1.5W / Maintained mode:4.0W                                |
| Luminous Flux In AC mode | Non-maintained mode: 0LM<br>Maintained mode: 100LM + 50LM for paninc down light |
| Luminous Flux In EM mode | 150LM + 75Lm for paninc down light                                              |
| Color Rendering Index    | >80                                                                             |
| CCT                      | 6000K                                                                           |
| Battery pack             | 3.2V 1800mAh LiFePO4 pack                                                       |
| Degree of prtction       | IP65                                                                            |
| Power factor             | 0.5                                                                             |
| Warm up time             | <1S                                                                             |
| LED lifespan             | 50,000 hrs                                                                      |
| Bean angle               | 120°                                                                            |
| Standard                 | 60598-2-22:2021 & IEC 61347-2-7                                                 |
| TEST                     | Manual + self test                                                              |
| Telemando Control        | ± 12V                                                                           |
| Charging indicator       | Green                                                                           |
| Faulty indicator         | RED                                                                             |
| Guarantee                | 5 Years (Battery 2 years)                                                       |



## 4 General Construction



## 5 Self & remote test system

### 5.1 Testing (If no failure)

#### 5.1.1. Manual function test.

Active the ④ test button.  
or press “TEST” switch on controller.

- a) The ② Charging indicator OFF;
- b) The Emergency function ON;
- c) The test will cut off the mains.

#### 5.1.2 Monthly test.

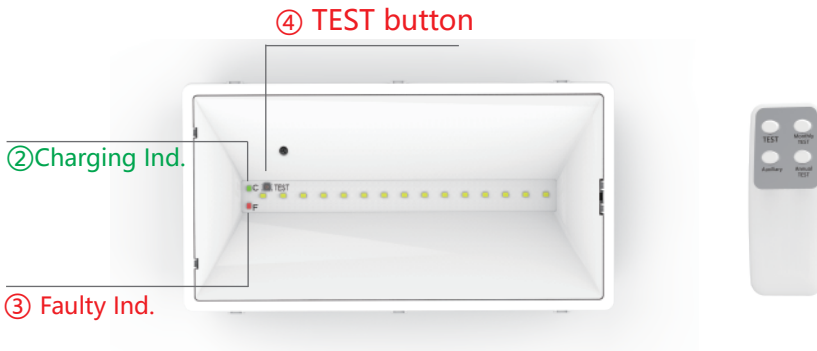
Active the ④ test button for 5 second;  
or press the “Monthly TEST” switch on controller;  
or the lamp installed every 30 days.

- a) The ② Charging indicator will flash in 1Hz for 128s;
- b) The Emergency function ON;
- c) The test finished and back to standby mode.

#### 5.1.3 Annual test.

Active the ④ test button for 7 second;  
or press the “Annual TEST switch on controller;  
or the lamp installed every 180 days.

- a) The ② Charging indicator will flash in 2Hz for 3hours;
- b) The charging will be cut off & emergency function ON 3hours;
- c) The lamp back to standby mode after test.



## 5.2 Testing (If any failure)

5.2.1 Battery failure:   
Monitored constantly. The ③ faulty indicator will flash in 1 Hz if the battery failure any time.

5.2.2 LED load failure:   
If press test button, or the luminary self-monthly test. The ③ faulty indicator will flash in 2 Hz if LED load failure.

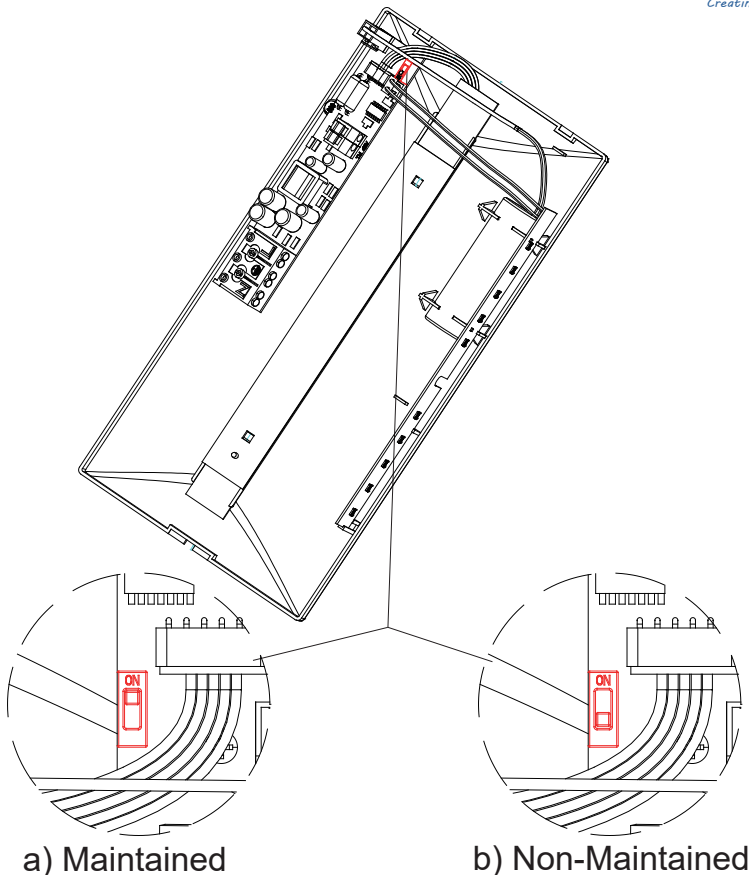
5.2.3 Duration failure:   
Only in Annual self-test. The ③ faulty indicator will turn on constantly if the Battery can not last 3 hours

## 6 Emergency control logic

### The emergency function control logic

| Operation               | Charging indicator                                                                |                                                                                   | Faulty Indicator (RED)                                                            |                                                                                   | Emergency LED Maintained mode |     | Emergency LED Non-Maintained |     |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------|-----|------------------------------|-----|
|                         | 1 S                                                                               | 1 S                                                                               | 1 S                                                                               | 1 S                                                                               | 1 S                           | 1 S | 1 S                          | 1 S |
| Time line (Second)      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                               |     |                              |     |
| Normal charging         |  |                                                                                   | OFF                                                                               |                                                                                   | Constantly on                 |     | OFF                          |     |
| Normal full charged     | Constantly on                                                                     |                                                                                   | OFF                                                                               |                                                                                   | Constantly on                 |     | OFF                          |     |
| Normal AC Failure       | OFF                                                                               |                                                                                   | OFF                                                                               |                                                                                   | Constantly on                 |     | Constantly on                |     |
| Manual test             | OFF                                                                               |                                                                                   | OFF                                                                               |                                                                                   | Constantly on                 |     | Constantly on                |     |
| Monthly self-test       |  |  | OFF                                                                               |                                                                                   | Constantly on                 |     | Constantly on                |     |
| Annual self-test        |  |  |  |  | OFF                           |     | Constantly on                |     |
| Battery circuit failure | OFF                                                                               |                                                                                   |  |  | Constantly on                 |     | OFF                          |     |
| Light source failure    | Constantly on                                                                     |                                                                                   |  |  | OFF                           |     | OFF                          |     |
| Duration test failure   | Constantly on                                                                     |                                                                                   | Constantly on                                                                     |                                                                                   | Constantly on                 |     | OFF                          |     |

## 7 Maintained and non-maintained changeover



### Maintained & Non-maintained work mode

The OT-HLB5 series can work both in maintained and non-maintained mode.



a) Dip switch ON. It works in maintained mode;



b) Or it works in non-maintained mode.

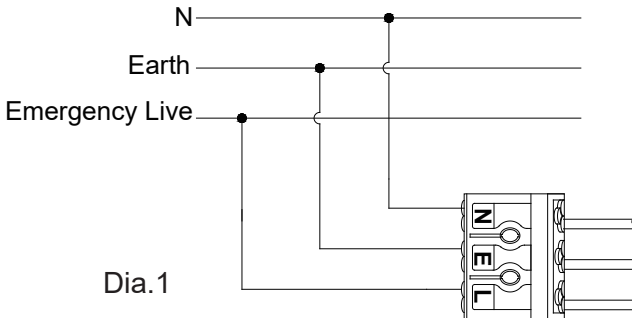
## 8 Test before installation

### ADDITIONAL INFORMATION - COMPONENT REPLACEMENT

- The luminaire contains no user replaceable components other than the battery pack contained in emergency versions.
- The battery has a 4 year service life provided it is operated and maintained by regular testing, as detailed in this User manual. Failure to maintain or change the battery may result in reduced duration in emergency mode.

### Emergency function test before installation

1. Connect the AC cable according to the Dia 1.  
Keep battery plugged on.  
Set Maintained /non-maintained mode according Page 7.
2. AC Supply on  
The Charging Indicator On, The faulty Indicator Off  
The EM LED On if set maintained mode in step 1 .  
OFF if set Non-maintained mode in step 1 .
3. Press the test button, The charging indicator off, and EM LED on.
4. Unplugged the battery, and then press the test button  
Charging indicator OFF,  
Faulty indicator flash in 1Hz.



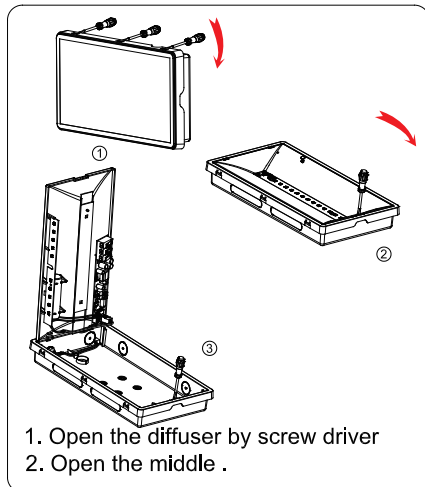
## 9 Installation guide



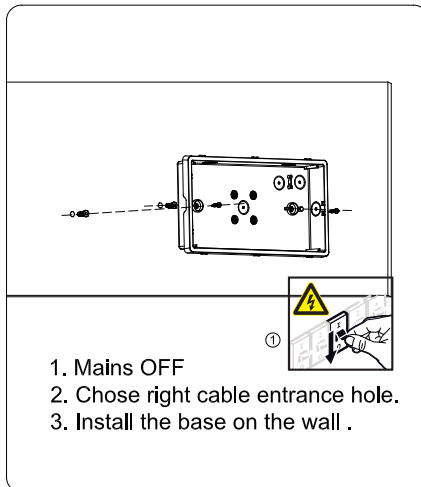
**Caution**

1. All OTC emergency devices are designed for projects. Only qualified electrician can install or maintain them.
2. The mains have to be off during the installation or maintenance.

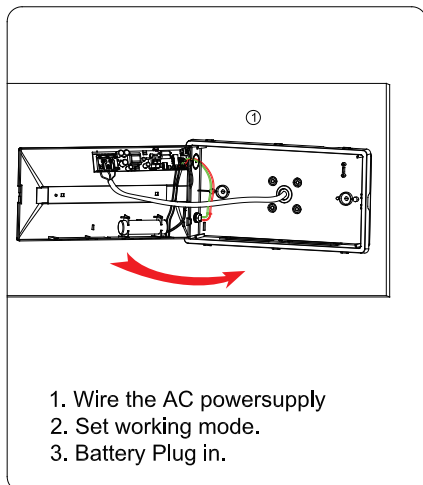
### 9.1 Ceiling / wall mounting



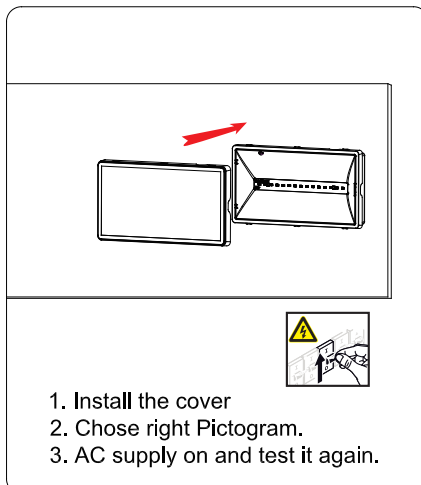
**Step 1**



**Step 2**

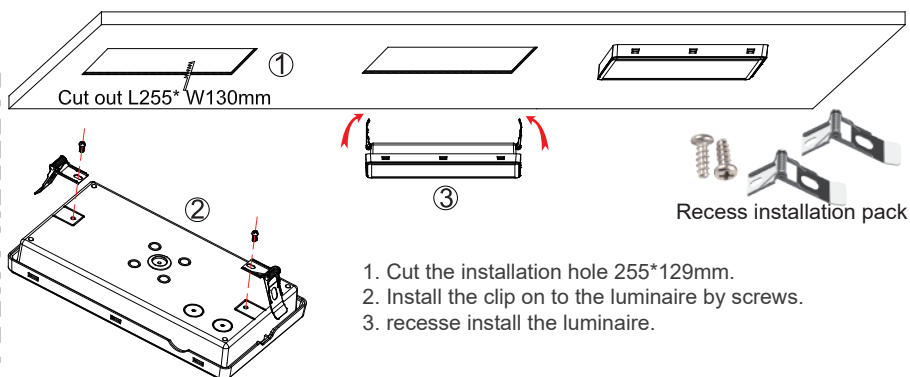


**Step 3**



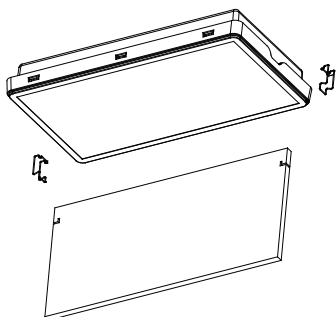
**Step 4**

## 9.2 Recessed mounting

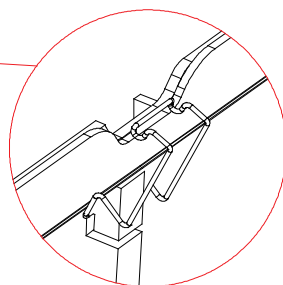
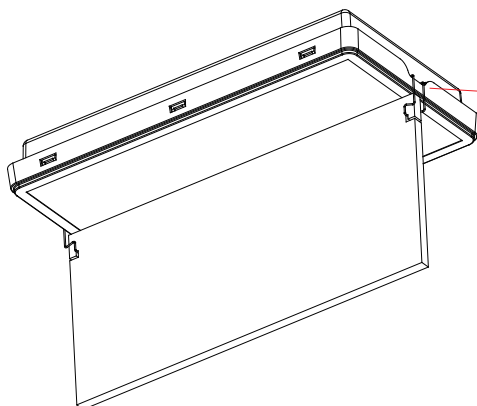


1. Cut the installation hole 255\*129mm.
2. Install the clip on to the luminaire by screws.
3. recess install the luminaire.

## 10.3 Install as exit sign



Hanging safety sign  
Accessories



## Luminaire emergency inspection record

| month | Test       | First Year |      | Second Year |      | Third Year |      | Fourth Year |      | Fifth Year |      |
|-------|------------|------------|------|-------------|------|------------|------|-------------|------|------------|------|
|       |            | Signed     | Date | Signed      | Date | Signed     | Date | Signed      | Date | Signed     | Date |
| 1     | Functional |            |      |             |      |            |      |             |      |            |      |
| 2     | Functional |            |      |             |      |            |      |             |      |            |      |
| 3     | Functional |            |      |             |      |            |      |             |      |            |      |
| 4     | Functional |            |      |             |      |            |      |             |      |            |      |
| 5     | Functional |            |      |             |      |            |      |             |      |            |      |
| 6     | 1 hour     |            |      |             |      |            |      |             |      |            |      |
| 7     | Functional |            |      |             |      |            |      |             |      |            |      |
| 8     | Functional |            |      |             |      |            |      |             |      |            |      |
| 9     | Functional |            |      |             |      |            |      |             |      |            |      |
| 10    | Functional |            |      |             |      |            |      |             |      |            |      |
| 11    | Functional |            |      |             |      |            |      |             |      |            |      |
| 12    | 3 hours    |            |      |             |      |            |      |             |      |            |      |

Installed By:

Installed Date:

Luminaire NO.:

Luminaire Location:

Contact details:

