



Description – Raven 3W 6500K LED Emergency Downlight - Self Test



# Installation Instructions

Luminaire Code(s) – ARALED/ER/3NM/ST / ARALED/OA/3NM/ST

## General Installation Instructions

**These instructions should be read carefully prior to any installation and retained after completion for further reference and maintenance. Please give these instructions to the building owner/occupier after installation.**

### Important Safety

1. Before installation, maintenance or lamp replacement, ensure that the mains supply to the luminaire is switched off and the circuit supply fuses are removed or the circuit breaker is turned off.
2. It is recommended that only a qualified electrical contractor carries out the installation of this luminaire and that the luminaire is installed in compliance with the current edition of the IEE Wiring Regulations.
3. The person carrying out the installation is to check and verify that the total load on the circuit, including that of this luminaire does not exceed the rating of the circuit cable, fuse or circuit breaker.
4. Where a luminaire incorporates discharge control gear (inductive load), the circuit capacity and ratings require careful sizing to avoid nuisance tripping of the protective device used in the installation.
5. Where applicable, careful consideration should be taken during installation to ensure that all fixings and/or suspensions are of a suitable size for the luminaire being installed.

### Ratings

1. All luminaires are manufactured & tested in compliance with the requirement contained within BS EN 60598 and are CE marked.
2. All luminaires that are of Class 1 construction and that are marked accordingly, MUST be earthed.
3. All luminaires are designed to operate at 230Volts AC -6%/+10% = 216Volts to 252Volts. Do not operate outside these voltages.
4. All luminaires are only suitable for applications within their rated Ingress Protection limits as stated

### Exclusions to Warranty

**Please Note** - The limited warranty shall be null and void in the following circumstances:-

Failure by the installer, end user or any third party to exercise caution to protect any covered product or part from outside damage, adverse temperature (normal operating ambient temperature 0 - 25°C), humidity conditions, fluctuations in the electrical system or physical abuse as well as failure related to workmanship in the installation of the products or parts.

## INSTALLATION

- Select a suitable mounting location to install the luminaire. Care should be given to ensure adequate ventilation for luminaire. Check that there is sufficient depth available in the ceiling void and there is adequate free air ventilation around the luminaire.
- Ensure the luminaire is not located in close proximity to ceiling joists, electrical cables, pipe work or insulation materials. Luminaires should not be installed where the illuminated surface is within 0.5m from the front of the fitting.
- Cut a 95mm diameter round hole in the ceiling material. The fitting is designed to be installed into a ceiling thickness of no greater than 10mm.
- Bring through supply cable and connect to the Emergency Pack ensuring correct polarity is observed.

Connect as follows:-

PERMANENT LIVE	(L)	RED / BROWN (continuous)
EARTH	⊕	GREEN / YELLOW
NEUTRAL	(N)	BLUE / BLACK

- Insert the emergency pack into the ceiling. It must not be mounted near any heat source or where the ambient temperature normally exceeds 25° C.
- Do not install the luminaire onto new plaster or wet paint.
- Energise the permanent (unswitched) mains supply and check the status indicator illuminates green showing the supply is healthy.
- Allow the unit to charge for a least one hour before isolating the permanent mains supply to the unit to briefly check the operation of the Unit in the emergency mode.
- If installing the ARALED/ER/3NM/ST (Escape Route) be sure to install in the correct orientation so the output of the LED provides the escape route emergency output pathway required.

### **Note**

- Switch on the mains supply. Check the unit operates correctly.
- Check the LED indicator is ON and GREEN.
- The unit requires 24 hours to fully charge the battery and achieve 3 hours emergency operation.
- **DO NOT deep discharge the batteries pack in emergency output for over a period of 48hrs as this will cause irreparable damage to the battery.**



## Self Test

### Operating and recommended Routine Test Procedure

#### **Please refer to the literature below as to the functionality of Self Test Emergency.**

Read these instructions carefully to ensure safe and reliable operation of this emergency luminaire. The following operations are designed to ensure the continued protection of your premises and occupants, in the event of the possibility of a failure of the normal lighting supply.

- The self test unit inside this product is designed to test the fitting in accordance with current legislation BS EN 62034:2012.
- When the unit is first installed the fitting will randomly select a test date of between 200 and 365 Days.
- Once this date is set it will continue to test at the same time every year for a full 3 hour test.
- Once the product has been on charge for 24hrs, the luminaire will discharge for 5 seconds for test purposes.
- Every 30 days the installation will be tested for 10 minutes.
- The luminaire will show a constant Green LED in normal condition.

Using the "reset" button you can press for 1 second and you can reset the random testing or press for 3 seconds to simulate a 5 minute emergency test.

During the emergency testing the luminaire will test the following:

- The battery connection
- Emergency operation time
- Lamp / LED operation

Should a fault occur then the following can be observed:

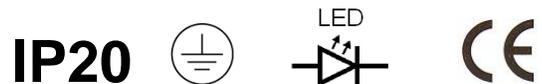
- If there is a failure of the battery such that it becomes disconnected then there will be a continuous red LED.
- If the system fails the 10minute / 3 hour duration test then the red LED will flash slowly
- If the lamp / LED's fail the red LED will flash quickly.

If there is a fault indicated as per any of the above and the luminaire is repairable, the indicated fault will not cease until the repair has been completed and the supply is reinitiated.

Should there be a supply failure to the luminaire the emergency mode will activate. When the supply is reinitiated, the luminaire will continue with the same testing period as before. The self test date will be stored within the luminaire for 7 Days.

### Warning

- Disconnect the mains supply and unplug the battery leads before working on the unit.
- Failure to comply with these instructions may result in irreparable damage to the emergency control gear.
- This product must not be modified in any way as this will negate any Safety approvals, and may render the product inoperable or unsafe. The product must be installed in accordance with the instructions.



1. This luminaire contains no serviceable parts.
2. The emergency battery pack will need to be replaced after 3-4 years of use. Replace the battery with one of the same size and with the following specification :- Lithium 3.7V 2.6Ah



#### **Disposal of Electronic Equipment WEEE Directive 2002/96/EC**

This product falls within the scope of the Waste Electrical & Electronic Equipment Directive (WEEE), which means the product should not be disposed of as normal household waste. Ensure that this luminaire and lamp is disposed of in accordance with the WEEE Directive. Contact a local Council Waste Dept. Local Amenity Site, or the Environment Agency for further information. **RoHS** - All components and materials used in this product are **RoHS** 2002/95/EC compliant.

