## TECHNICAL SUPPORT

## Telephone: 01613315700

E-mail: technical@whitecroftlight.com http://www.whitecroftlighting.com

WARNING: TO AVOID INJURY, KEEP FINGERS CLEAR OF SPRINGS WHEN REMOVING RECESSED LUMINAIRE fROM CEILING

## Specification - FLS31/32 EP

Supply Voltage: $230 \mathrm{Vac} \pm 10 \% 50 / 60 \mathrm{~Hz}$ Supply Current: $20 \mathrm{~mA} @ 230 \mathrm{~V}$ ac
Ambient Temperature: $0^{\circ} \mathrm{C}$ to $+35^{\circ} \mathrm{C}$
Conductor size: $0.5-2.5 \mathrm{~mm}^{2}$ Mounting Screws: M4
Weight of Luminaire: 240 g (incl. battery) IP Rating of Luminaire: IP44
Average Lumen output: 2601 m
Battery: $6.4 \mathrm{~V}, 1.5 \mathrm{Ah} 2 \times 18650$
LiFePO4 cells

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Specification - FLS31/32 CB
    Central Supply Voltage: 93-265V dc/ac
        50/60Hz
    Central Supply Current: 20mA @ 230V ac
Central supply output current: 670mA
Ambient Temperature: }\quad\mp@subsup{0}{}{\circ}\textrm{C}\mathrm{ to +35}\mp@subsup{}{}{\circ}\textrm{C
    Conductor size: 0.5-2.5mm
        Weight of Luminaire: 65g
    IP Rating of Luminaire: IP44
    Average output (Lumens) 260 Im
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    For Photometry refer to
    www.whitecroftlighting.com

## Florin E3 <br> Installation Leaflet

## GENERAL INFORMATION

1) A qualified electrician, in accordance with IEE wiring regulations, should carry out connection to wiring
2) Ensure that the rated voltage and frequency requirements are compatible with the available mains supply.
3) Cleaning of lenses should be carried out using clean, soft and lint free cloths and anti-static cleaning fluid
4) Do not carry out high voltage insulation test, i.e. $500 / 1000 \mathrm{v}$ this may damage internal components.

## SAFETY INFORMATION

The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 0.24 m is not expected.

## General Description

Florin E3 is a range of stand-alone LED emergency luminaires incorporating a driver and battery pack in a plastic housing. The luminaire contains a high power white LED and indicator LED for emergency use only.

The LED control gear has reinforced insulation between the supply and the battery circuit, and a battery charger with short circuit protection that will continue to operate when the short is removed.

## Batteries (where applicable)

The luminaire includes a 1.5 Ah rechargeable $\mathrm{iFePO}_{4}$ battery pack for 3 hour operation. When the luminaire no longer meets the 3 hours duration the battery should be replaced

## Relevant Standards

EN 61347-2-7
EN 61347-2-13 Lamp control gear
EN 60598-2-22 Luminaire

## IMPORTANT:

Please ensure that the information contained in this leaflet is passed on to the user/maintenance engineer

Mark the luminaire with the date of commissioning in the space provided on the battery label.

The battery lead should only be connected at the time of commissioning.
When the supplies and battery leads are connected, the white cover should be 'clicked' into place to prevent electric shock.

The LED is non-replaceable. Contact Whitecroft Lighting in the unlikely event of a failure.

## Operation - integrated battery versions

Upon connection of a permanent mains supply the indicator LED lights to show the battery is receiving charge. Following an initial charging period, commissioning test and a subsequent charging period of 24 hours the unit will be capable of providing 3 hours emergency duration.

## Operation - central battery

When power is supplied to the luminaire supply inputs the high-power LED will light.

## nstallation

The luminaire must be installed by a qualified person in accordance with the current building and wiring egulations. Luminaires comply with the EMC directive in both modes of operation, mains and emergency.

The luminaire can either be recessed or surface mounted onto a ceiling. To recess the luminaire a ס127mm hole should be cut in the ceiling prior to installation. This product is suitable for ceiling thicknesses of $10-25 \mathrm{~mm}$. When installing into thin or soft ceiling tiles, an additional pattress may be required to ensure that the luminaire fits securely. This should be a support panel, to be fitted behind the ceiling, cut from suitable sheet material with a hole drilled to match the luminaire installation aperture (by others).

Unpack the fitting, and fit the two springs using the wo screws supplied. The minimum ceiling void is 40 mm based on 10 mm ceiling tile.
For a surface mount installation fit the collar supplied ver the main body of the luminaire

## Automatic Commissioning

(Easytest \& COMEPS versions only)
Please note there is no need to do a manual test on this product.

If in the unlikely event a manual test needs to be undertaken please ensure it has completed the commissioning phase as per the table below.

Do not connect the batteries until there is a reliable permanent mains supply present as a mains interruption will rest the commissioning test clock

The commissioning test will start when the permanent supply and batteries are connected.

Commissioning phase table

| Stage | Hours | Status | LED <br> Indication |
| :---: | :---: | :---: | :---: |
| 1 | upto <br> 24 | Battery <br> charging | Flashing <br> green |
| 2 | 3 | Discharge test | Flashing <br> green |
| 3 | 24 | Battery <br> charging | Flashing <br> green |
| 4 | 0 | Commissioning <br> complete | Constant <br> green |
| Total | 51 |  |  |

Please note: All images shown are for illustration purposes and should be used only for reference.

(i)


For best photometric performance ensure that the long axis of the escape route lens in line (parallel) with the line moulded in the cover plate. These lines should then be positioned along the path of the escape route as shown above.

## TEST

DALI /Self-test luminaire local bi-colour LED indicator status

| Green LED | Permanently on | System OK/mains operation mode |
| :--- | :--- | :--- |
|  | Slow flash | Duration test/commissioning |
|  | Fast flash | Function test |
| Red LED | Permanently on | LED luminaire fault |
|  | Slow flash | Battery/test failure |
|  | Fast flash | Battery charging failure |

Slow flash - a flash every 2 seconds, Fast flash - a flash every 0.5 second

Note that start times of the tests are set automatically to ensure random testing of the units. As a consequence, tests may occur at any time, and caution should be exercised in situations where this may be inconvenient, such as hotels and hospitals.

