# **TECHNICAL SUPPORT**

Telephone: 0161 331 5700 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/EP

Supply Voltage: 230Vac ± 10% 50/60 Hz Supply Current: 20mA @ 230V ac Ambient Temperature: 0°C to +35°C Conductor size: 0.5 - 2.5mm<sup>2</sup> Mounting Screws: M4 Weight of Luminaire: 240g (incl. battery)

IP Rating of Luminaire: IP44 Average Lumen output: 260lm

Battery: 6.4V, 1.5Ah 2 x 18650

LiFePO₄ cells

# Specification - FLS31/CB

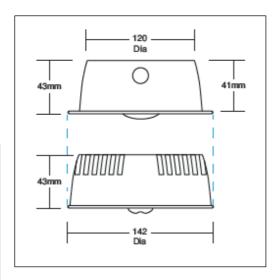
Central Supply Voltage: 93-265V dc/ac 50/60Hz

Central Supply Current: 20mA @ 230V ac Central supply output current: 670mA

Ambient Temperature: 0°C to +35°C

Conductor size: 0.5 – 2.5mm<sup>2</sup> Weight of Luminaire: 65g

IP Rating of Luminaire: IP44 Average output (Lumens) 260 lm



# **GENERAL INFORMATION**

- 1) A qualified electrician, in accordance with IEE wiring regulations, should carry out connection to mains wiring.
- 2) Ensure that the rated voltage and frequency requirements are compatible with the available mains supply.
- 3) Cleaning of reflectors and 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. 500/1000v this may damage internal components.

# SAFETY INFORMATION

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

For Photometry refer to www.whitecroftlighting.com





Registered Office: As above

### **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 1.5Ah rechargeable LiFePO<sub>4</sub> 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 Lamp control gear EN 61347-2-13 LED 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.

#### Installation

The luminaire must be installed by a qualified person in accordance with the current building and wiring regulations. 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 Ø127mm hole should be cut in the ceiling prior to installation. This product is suitable for ceiling thicknesses of 10-25mm. 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 two screws supplied. The minimum ceiling void is 40mm based on 10mm ceiling tile.

For a surface mount installation fit the collar supplied over 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.

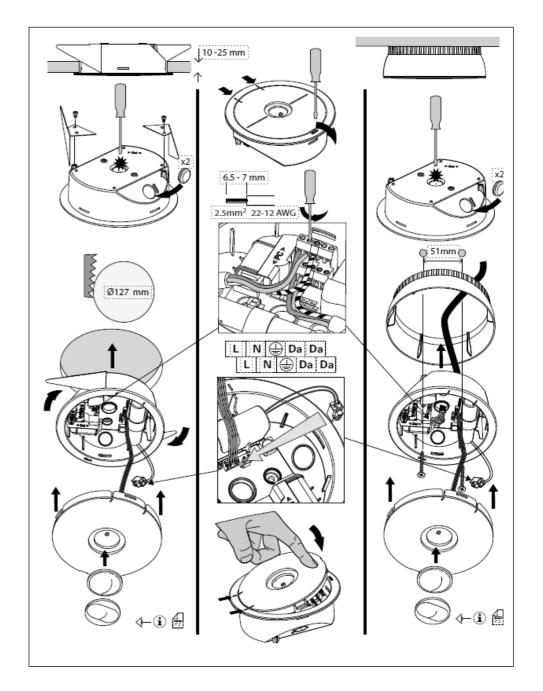
Do not connect the batteries until there is a **reliable** permanent mains supply present as a mains interruption will rest the commissioning test clock.

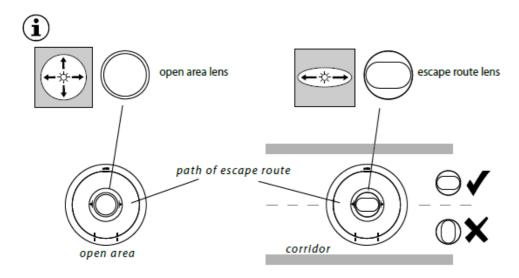
The commissioning test will start when the permanent supply and batteries are connected.

# Commissioning phase table

Stage	Hours	Status	LED Indication
1	upto	Battery	Flashing
	24	charging	green
2	3	Discharge test	Flashing green
3	24	Battery charging	Flashing green
4	0	Commissioning complete	Constant green
Total	51		

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





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.