緊急照明燈

EMERGENCY LIGHT

Galaxy 緊急照明燈 (LED) 明裝式 (GF-EL02-3)

Galaxy self-contained twin spot LED Luminaire (wall mount type)

特徵 **Feature**

高品質 LED 芯片 High quality LED chips

非持續式 Non-Maintained type

充電指示, 故障指示 Charging indication, Fault indication

轉換時間小於1秒

Change over complete in less than 1 second

鎳鎘充電電池

Ni-Cd rechargeable battery

3 小時備用電池用於緊急照明

3 Hours battery backup for emergency operation

定期維護檢查 測試 按鈕 Provided with TEST button for regular maintenance check

可調節燈頭

Adjustable lamp head





產品規格 Specifications

項目 Item	GF-EL02-3	
功率 Power	1.5 W	
電源輸入 Main Supply	220V +/-10%, AC 50Hz	
光源 Light Source	LED (2x0.5 W)	
燈具類型 Luminaires Type	Non-Maintained Type	
電池類型 Battery Type	4.8V 1.2Ah Sealed Ni-Cd Rechargeable Battery	
應急時間 Emergency Duration	3 Hours	
電池充電時間 Battery Recharge Duration	Less than 12Hours	
LED 壽命 LED Life Spain	> 30,000 Hours	
溫度範圍 Temperature Range	0-45 °c	
防護等級 Waterproof Protection	IP20	
機身尺寸 Body Dimension	L265*H260*W74mm	

- BS5266 Part1 · HK F. S. D Code of Practice (clause 5.9) EN1838 · HK F. S. D PPA/104(A) (4th Revision)
- · EN60598-2-22 · 850°c Non-flammability

CERTIFICATION

Galaxy 緊急照明燈 (LED) 暗裝式 Galaxy self-contained twin spot LED Luminaire (recess mount type)

型號: (GF-EL01-3)



香港九龍尖沙咀東部康莊道1號5樓 消防總部大廈

本處檔號 Our Ref.: (168) in FP(LC) 321/12 Pt.19

來函檔號 Your Ref.: G190015 & G190016 圖文傳真 Fax: 852-2723 2197

電 話 Tel. No.: 852-2733 7592 電子郵件 E-mail: <u>lcpolic2@hkfsd.gov.hk</u>

Galaxy Fire Services Co., Ltd. 20/F, THE BEDFORD 91-93 Bedford Road, Tai Kok Tsui, Kowloon Hong Kong

Dear Sir / Madam,



FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND

FIRE SERVICES HEADQUARTERS BUILDING, 5/F, No. 1 Hong Chong Road, Tsim Sha Tsui East, Kowloon, Hong Kong

20 November 2019

Self-contained Luminaires Emergency Lighting System(s)

It has come to my notice that, according to your submitted documents, the products as listed below were tested by a testing laboratory / organization and in compliance with the specifications of Requirement for Self-contained Luminaires Emergency Lighting Systems [PPA/104(A)(4th Revision)].

Item	Model No.
1.	GF-EL02-3
2.	GF-EL01-3

Your attention is drawn to the fact that the products as listed are not Fire Service Installations and Equipment (FSI) which require approval of Fire Services Department (FSD) in accordance with FSD Circular Letter No. 1/2007 Guidelines on New Arrangement on Product Approval of Fire Service Installations and Equipment. Prior application for product approval / acceptance is not required.

This letter should not be regarded as an approval letter for the products concerned. During application for acceptance inspection/testing of FSI (e.g. in the course of application for food licence), applicants may still be required to present the test certificate/report of the products to Inspecting Officers of FSD for verification upon request.

Should you have any enquiries, please feel free to contact the Policy Division of FSD at 2733 4083.

Yours faithfully,

for Director of Fire Services

(CHEUNG Nga6-tin)

tef. Number and date should be quoted in reference to this letter 凡提及本信時請引述編號及日期

CERTIFICATION

Galaxy 緊急照明燈 (LED) 明裝式
Galaxy self-contained twin spot LED Luminaire
(surface mount type)

型號: (GF-EL02-3)



DEPARTMENT OF BUILDING SERVICES ENGINEERING 思史的領土容易系

銀河消防服務有限公司 Galaxy Fire Services Co.,Ltd. 20/F, THE BEDFORD 91-93 Bedford Road,Tai Kok Tsui Kowloon Hong Kong

Our reference: MH-18-T016

Issue date: 4 October 2018

The self-contained emergency luminaire supplied by you was tested in our laboratory on 27 September 2018 and the results were presented as follows;

Description of luminaire: "Galaxy" self-contained twin spot LED luminaire (wall

mount)

Complete set model: GF-EL02-3

Input: AC 220V +/-10% 50Hz

Battery: Sealed Ni-Cd / Ni-MH rechargeable battery pack

(4.8V 1.2Ah)

Full charge period / Duration: 12 hours / 3 hours

Lamp type: LED lamp

Test button and charging LED: Incorporated

Low voltage cut off: Incorporated

Power cables: No power cables extended outside the enclosure of the

self-contained emergency luminaire

Case: The case is made of metal and glass and there is no

exposed flammable part

MH-18-T016
The Hong Kong Polytechnic University
Hung Hom Kowloon Hong Kong
香港九龍紅磡者港理工场。

F. Pagerning Probyst actuals: 1, (852) 27(

/ Opening Minds + Shaping the Future ◆ 歌遍思維 ◆成就未來

CERTIFICATION

Galaxy 緊急照明燈 (LED) 明裝式 Galaxy self-contained twin spot LED Luminaire (surface mount type)

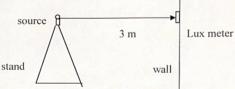
型號: (GF-EL02-3)



DEPARTMENT OF BUILDING SERVICES ENGINEERING 屋宇設備工程學系

Test procedures;

- After 12 hours of charging at 220V 50 Hz AC supply, the emergency luminaire has attained 100% of its rated battery capacity.
- The luminaire is positioned on a stand at 3 meters from a wall as shown below (not to scale);



- The room light is switched off. The normal supply is terminated by pulling the plug and the emergency light is automatically turned on.
- 4. The illuminance at a point on the wall which lies on the central axis of the emergency luminaire is measured at 5 s, 1 min, 30 min and then at 30 min intervals after the emergency light is turned on. The maximum duration of emergency light is noted.

The results are as follows;

Time (min)	Illuminance(lx) at 3 m along the central axis of the emergency luminaire	
5 s	4.5	
1	4.7	
30	4.7	
60	4.7	
90	4.7	
120	4.7	
150	4.7	
180	4.4	

- The total discharge time is 186 minutes at which the batteries were disconnected by the incorporated low voltage cut out device.
- The emergency luminaire passed the resistance to flame and ignition as stipulated in BSEN 60598-2-22:2014 and the external parts passed the 850°C glow wire test detailed in IEC60695-2-10: 2013.

MH-18-T015
The Hong Kong Polytechnic University
Hung Hom Kowloon Hong Kong
帶港九蘇紅電影治理工大學
E beenquiry@polyu-edu.hk T (852) 278

普港ル県紅嶋香港理工大学 E beenquiry@polyu.edu.hk T (852) 2766 5847 F (852) 2765 7198 www.bse.polyu.edu.hk 2

Opening Minds • Shaping the Future • 啟迪思維 • 成就未来

CERTIFICATION

Galaxy 緊急照明燈 (LED) 明裝式 Galaxy self-contained twin spot LED Luminaire (surface mount type)

型號: (GF-EL02-3)



DEPARTMENT OF BUILDING SERVICES ENGINEERING 屋宇設備工程學系

Summary of compliance with PPA/104(A) (4th Revision)

Item	Test Requirement of PPA/104(A) (4 th Revision)	Result- Remark	Verdict
B.3	Emergency lighting luminaires shall comply with the non-flammability (resistance to flame and ignition) provisions specified in BS EN 60598-2-22:2014 and external parts shall also be subjected to the 850°C glowing/hot wire test; any burning parts should self-extinguish within 30 seconds.		pass
B.4	All power cables extended outside the enclosure of a self-contained emergency lighting luminaire, other than the wiring connecting the luminaire to normal supply, shall conform to BS EN 60702-1:2002+A1:2015, BS EN 60702-2:2002+A1:2015 and BS 6207-3:2001 as appropriate or to BS 6387:2013 Cat. CWZ or other international standards acceptable to the Director of Fire Services.		pass
B.5	An automatic trickle charger with a 220-volt input and suitable output and fitted with pilot lights or other indicating device shall be provided for the batteries. The charger shall be capable or recharging the battery to 100% of the rated capacity in not more than 12 hours.		pass
B.6	The self-contained luminaires emergency lighting systems shall be capable of maintaining the stipulated lighting levels for a period of not less than one hour (rated duration).		pass
B.7	Upon failure of the main lighting system or in the event of power failure, the emergency lighting shall automatically light up to at least 90% of the stipulated illumination level within 5 seconds.		pass
B.8	Each unit shall be provided with a properly labeled 'TEST' switch and charge monitor light. A low voltage cut out shall also be provided to disconnect the batteries when fully discharged.		pass

Our measurement complied with relevant sections of BS 5266-1:2016. The test results complied with relevant parts of BS EN1838:2013 and relevant parts of BS EN 60598-2-22:2014 and Regulation PPA / 104 (A) (4^{th} Revision) of Fire Services Department specifications.

Dr Hilda Cheung Hiu Dan

Instructor

Department of Building Services Engineering

MH-18-T016
The Hong Kong Polytechnic University
Hung Hom Kowloon Hong Kong
音泪九龍紅竜音泪理工大學
E beenquin學polyu.edu.hk **T** (852) 2766 5847 F (852) 2765 7198
www.bse.polyu.edu.hk

3

/ Opening Minds • Shaping the Future • 歐迪思維 • 成就未来