

FIRE TEST REPORT

2-消防測試報告

iLighting Global Enterprise Co., Ltd.

iLighting certificate series





ILIGHTING 產品證書

理工大學消防測試報告

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共計 8 張

一. 證書說明

1.1 消防測試報告說明

1) 什麼是消防

消防是預防火災和撲救火災的簡稱，是人類在同火災作鬥爭的過程中，逐步形成和發展起來的一項專司防火和滅火、具有社會安全保障性質的工作。

2) 什麼是消防應急照明？

在發生火災電網停電時，為人員安全疏散和有關火災撲救人員繼續工作而設置的照明，統稱為消防應急照明。

火災應急照明分為備用照明、疏散照明、安全照明。即：

- (1) 正常照明失效時，為繼續工作（或暫時繼續工作）而設的備用照明；
- (2) 為使人員在火災情況下能從室內安全撤離至室外（某一安全地區）而設置的疏散照明；
- (3) 正常照明突然中斷時，為確保處於潛在危險之中人員的安全而設置的安全照明。

3) 什麼是 PPA/104（獨立應急照明系統的消防規定）？

照明裝置指用以發放、過濾及轉變由燈泡發出的光的器具，並包括一切用以固定及保護這些燈泡，以及接駁燈泡到電源的所有配件。

獨立應急照明裝置指提供持續或不持續應急照明的照明系統，包括該照明系統內或附近（1 米範圍內）的所有配件，例如電池，燈泡，控制器測試及監控設備等。



二. 理工大學消防測試報告

2.1.1 AA-1224 T5 28W 報告

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

iLighting Product Co Ltd
Rm 1203, 12/F Wang Lung Ind Bldg
11 Lung Tak Street,
Tswuen Wan, N.T.

Our reference No. IL-09-T001

17-Nov-09

The self-contained emergency luminaire supplied by you was tested in our laboratory on 12 and 16 Nov 2009 and the results were presented as follows:

Description of Luminaire: "iLighting" AA Series self contained emergency fluorescent fitting, using 28W T5 fluorescent lamp with adaptor

Completed set model: iCON ML-1336-122 + AA-1224 T5 28W with adaptor

A.C. input: 220V +/- 10%, 50Hz

Battery: Ni-Cd/Ni-MH rechargeable battery 6V/ 2.8Ah

Full Charge period/duration: 12 hours for 2 hours

Test Tube: 28W T5 fluorescent tube

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 the only exposed inflammable parts are the lamp holders and T5 adaptors

Our measurement complied with relevant sections of BS 5266 part 1:2005. The test results complied with relevant parts of BS EN 60598-2-22:2002 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.

Daniel To
Daniel To
Senior Lecturer
Department of Building Services Engineering

2.1.3 ELI-1858-W3H1B Emergency Kit test-ELI1858 消防測試報告

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

Professor W.K. Cheung
Dr. Daniel To, Senior Lecturer
Senior Lecturer of Building Services Engineering
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建築服務工程學系

iLighting Product Co Ltd
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Tswuen Wan, N.T.

Our reference No. IL-11-T002

15-Feb-11

The self-contained emergency luminaire supplied by you was tested in our laboratory on 21 and 27 Jan 2011 and the results were presented as follows:

Description of Luminaire: "iLighting" self contained emergency fluorescent fitting, using T8 600 mm LED tube

Completed set model: ELI-1858W3H1B

A.C. input: 220V +/- 10%, 50Hz

Battery: Ni-Cd/Ni-MH rechargeable battery 6V/ 2.5Ah

Full Charge period: 12 hours

Duration: 2 hours

Test Tube: T8 600 mm LED tube

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 the only exposed inflammable parts are the plastic lamp cap on the LED tube

Our measurement complied with relevant sections of BS 5266 part 1:2005. The test results complied with relevant parts of BS EN 60598-2-22:2002 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.

Daniel To
Daniel To
Senior Lecturer
Department of Building Services Engineering

2.1.2 CBL-P 報告

THE HONG KONG POLYTECHNIC UNIVERSITY
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DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

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Hong Kong

Our reference: ILG-HW-18-T005

Issue date: 7 February 2018

The luminaire supplied by you was tested in our laboratory on 2 February 2018 and the results were presented as follows:

Description of luminaire: "iLighting" LED cabinet light strip

Complete set model: CBL-P

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

Case: The case is made of thermal conductive plastic

Investigations requested: Test on luminaire to comply with part A11 of FSD regulation PPA104 (4th revision) and B3 of FSD regulation PPA 104A (4th revision)

Test results

For the flammable parts of the luminaire, a small piece was cut out. The sample was placed in the hot-wire test chamber to carry out the hot wire test.

The hot wire test equipment we used complies with IEC60695-2-10:2013 and the test was carried out according to the procedures described in IEC60695-2-10:2013 with a hot wire temperature of 850°C.

Test results for flammable parts: The test sample ignited under the hot wire, but when the hot wire withdrew from the sample, the flame extinguished within 30 s. There were no burning drops falling down from the sample.

The luminaire was inspected in our laboratory and it complied with clause 13.3.2 of BS EN 60598-1:2015 and clause 22.16 of BS EN 60598-2-22:2014 and therefore passed part A11 of FSD regulation PPA104 (4th revision) and part B3 of FSD regulation PPA 104A (4th Rev).

Hilda Cheung
Dr Hilda Cheung Hiu Dan
Instructor
Department of Building Services Engineering

2.1.4 IPL-L05 報告

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

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Our reference No. IL-12-T003

20-Nov-12

The self-contained emergency luminaire supplied by you was tested in our laboratory between 14-20 November 2012 and the results were presented as follows:

Description of Luminaire: "iLighting" self contained emergency down light, using LED light

Completed set model: CC-PL-13-K3 + THORN CDHS213S-EX-6 + iLighting IPL-L05 LED PLC tube

A.C. input: 220V +/- 10%, 50Hz

Battery: Ni-Cd/Ni-MH rechargeable battery 9.6V/ 4Ah

Full Charge period: 12 hours

Duration: 3 hours

Test Tube: 5W LED PLC tube

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 the only exposed inflammable parts are the plastic components in the LED PLC tube

Our measurement complied with relevant sections of BS 5266 part 1:2005. The test results complied with relevant parts of BS EN 60598-2-22:2002 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.

Daniel To
Daniel To
Senior Lecturer
Department of Building Services Engineering

2.1.5 LT-I0609 報告

**THE HONG KONG
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DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

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Hong Kong

Our reference No. ILG-16-T001

15-Apr-16

The self-contained emergency luminaire supplied by you was tested in our laboratory on 14 April 2016 and the results were presented as follows:

Description of Luminaire : "iLighting" self-contained emergency LED tube

Completed set model : CC-20-K2+2 feet LT-I0609 / LT-I0609 wide angle 9W LED Tube

A.C. input : 220V +/- 10%, 50Hz

Battery : Sealed Ni-MH rechargeable battery pack, 9.6V 2.2Ah

Full Charge period : 12 hours/ 3 hours

Lamp type : 9W LED tube



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 the only exposed flammable parts are the plastic parts in the LED tube

Our measurement complied with relevant sections of BS 5266 part 1:2011. The test results complied with relevant parts of BS EN 60598-2-22:2008 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.



Daniel To
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2.1.7 LT-I1522 報告

**THE HONG KONG
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DEPARTMENT OF BUILDING SERVICES ENGINEERING
建築服務工程學系

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Our reference No. ILG-16-T003

31-Apr-16

The self-contained emergency luminaire supplied by you was tested in our laboratory on 16 May 2016 and the results were presented as follows:

Description of Luminaire : "iLighting" self-contained emergency LED tube

Completed set model : CC-65-K3 + 5 feet LT-I1522 / LT-I1522 wide angle 22W LED Tube

A.C. input : 220V +/- 10%, 50Hz

Battery : Sealed Ni-MH rechargeable battery pack, 12V 2.2Ah

Full Charge period : 12 hours/ 3 hours

Lamp type : 22W LED tube

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 the only exposed flammable parts are the plastic parts in the LED tube

Our measurement complied with relevant sections of BS 5266 part 1:2011. The test results complied with relevant parts of BS EN 60598-2-22:2008 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.



Daniel To
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2.1.6 LT-I1218 報告

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Our reference No. ILG-16-T002

15-Apr-16

The self-contained emergency luminaire supplied by you was tested in our laboratory on 14 April 2016 and the results were presented as follows:

Description of Luminaire : "iLighting" self-contained emergency LED tube

Completed set model : CC-40-K2+4 feet LT-I1218 / LT-I1218 wide angle 18W LED Tube

A.C. input : 220V +/- 10%, 50Hz

Battery : Sealed Ni-MH rechargeable battery pack, 9.6V 2.2Ah

Full Charge period : 12 hours/ 3 hours

Lamp type : 18W LED tube



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 the only exposed flammable parts are the plastic parts in the LED tube

Our measurement complied with relevant sections of BS 5266 part 1:2011. The test results complied with relevant parts of BS EN 60598-2-22:2008 and Regulation PPA / 104 (A) (4th Revision) of Fire Services Department specifications.



Daniel To
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2.1.8 PL-PN6060-E 報告

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Our reference: ILG-HW-18-T004

Issue date: 25 January 2018

The luminaire supplied by you was tested in our laboratory on 24 January 2018 and the results were presented as follows:

Description of luminaire : LED Panel Light with polycarbonate diffuser

Complete set model : PL-PN6060-E

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

Case : The case is made of metal housing with polycarbonate diffuser

Investigations requested : Test on luminaire to comply with part A11 of FSD regulation PPA104 (4th revision) and B3 of FSD regulation PPA 104A (4th revision)


Test results

For the flammable parts of the luminaire, a small piece was cut out. The sample was placed in the hot-wire test chamber to carry out the hot wire test.

The hot wire test equipment we used complies with IEC60695-2-10:2013 and the test was carried out according to the procedures described in IEC60695-2-10:2013 with a hot wire temperature of 850°C.

Test results for flammable parts: The test sample ignited under the hot wire, but when the hot wire withdrew from the sample, the flame extinguished within 30 s. There were no burning drops falling down from the sample.

The luminaire was inspected in our laboratory and it complied with clause 13.3.2 of BS EN 60598-1:2015 and clause 22.16 of BS EN 60598-2-22:2014 and therefore passed part A11 of FSD regulation PPA104 (4th revision) and part B3 of FSD regulation PPA 104A (4th Rev).



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