Certificate of Compliance

Certificate: 70039912 **Master Contract:** 261379

Project: 70039912 **Date Issued:** 2015-07-27

Issued to: **Daysun Technology Limited**
No. 1, Alley 2, Lane 110, Sec. 4
Hsi-men Road
North District
Tainan City
704 TAIWAN

Attention: **Mr Kenji Wang**

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only

C US

Issued by: David Holton

PRODUCTS

CLASS 3458 01: PORTABLE LUMINAIRES For Hazardous Locations
CLASS 3458 81: PORTABLE LUMINAIRES For Hazardous Locations - Certified to US Standards

Class I, Divisions 1 and 2, Groups A, B, C, D

Class II, Divisions 1 and 2, Groups E, F and G

Class III

SF-14 flashlight, portable, hand-held, intrinsically safe; battery-powered (four AA size alkaline cells, Energizer type E91 or Duracell type MN1500 or Rayovac type AL-AA (815) or Varta type 4906); IP54; Temperature Code T4; -20ºC ≤ Tamb ≤ +40ºC.

Conditions of applicability

i. No precautions against electrostatic discharge are necessary for portable equipment that has an enclosure made of plastic, metal or a combination of the two, except where a significant static-generating mechanism has been identified. Activities such as placing the item in a pocket or on a belt, operating a keypad or cleaning with a damp cloth, do not present a significant electrostatic risk. However, where a static-generating mechanism is identified, such as repeated brushing against clothing, then suitable precautions shall be taken, e.g. the use of anti-static footwear.

ii. Only the following batteries may be used in the model SF-14 Flashlight:-
   a) Energizer type E91 alkaline.
   b) Duracell type MN1500 alkaline
   c) Rayovac type AL-AA (815) alkaline
   d) Varta type 4906 alkaline

For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 157-92 (R2006)	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CAN/CSA C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements - Third Edition
UL 913 (5th Ed.)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
ANSI/ISA-61010-1 3rd Edition	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements - Third Edition

The equipment additionally complies with the following standards for gas certification only:

CAN/CSA-C22.2 No. 60079-0:11 Ed. 5	Explosive Atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No. 60079-11:14 Ed. 6	Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"
ANSI/UL 60079-0:2013, 6th Ed.	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-11:2013, 6th Ed.	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"

1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 15ATEX2166X** Issue: **0**

4 Equipment: **Flashlight, Model SF-14**

5 Applicant: **Day Sun Technology Ltd.**

6 Address: No. 1, Alley 2
Lane 110
Sec. 4, Hsi-men Rd.
North District, Tainan City 704
Taiwan

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013 EN 60079-11:2012 EN 60079-26:2015

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

I M1
Ex ia I Ma

II 1G
Ex ia IIC T4 Ga

Project Number 70021336

A C Smith
Certification Manager

Sira Certification Service
Unit 6, Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670 900
Fax: +44 (0) 1244 539 301
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org

SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE **Sira 15ATEX2166X**
Issue 0

13 **DESCRIPTION OF EQUIPMENT**

The SF-14 is a portable, hand-held intrinsically safe flashlight for use in hazardous locations and powered by four AA size alkaline batteries. It has high and low mode operating functions that allows users to operate with high brightness or long duration lighting. Externally the device comprises: a body assembly, a tail assembly, a cap assembly and a heatsink. Internally, the device comprises three PCBs (BAT PCB, CON PCB and LED PCB), reflector and heatsink. The assembly meets the ingress protection requirements for IP54.

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

14.2 **Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	29 June 2015	R70021336A	The release of the prime certificate.

15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 No precautions against electrostatic discharge are necessary for portable equipment that has an enclosure made of plastic, metal or a combination of the two, except where a significant static-generating mechanism has been identified. Activities such as placing the item in a pocket or on a belt, operating a keypad or cleaning with a damp cloth, do not present a significant electrostatic risk. However, where a static-generating mechanism is identified, such as repeated brushing against clothing, then suitable precautions shall be taken, e.g. the use of anti-static footwear

15.2 Only the following batteries may be used in the model SF-14 Flashlight:

- Energizer type E91 alkaline.
- Duracell type MN1500 alkaline
- Rayovac type AL-AA (815) alkaline
- Varta type 4906 alkaline

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

Sira Certification Service
Unit 6, Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670 900
Fax: +44 (0) 1244 539 301
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org