



EC Type Examination Certificate

Notified Body 0729

This is to certify that ABS Europe Ltd., as a Notified Body under the authorization of UK MCA by Merchant Shipping Regulations 2016, S.I. 2016 Number 1025 and MSN 1874 (M+F), as amended, did undertake the relevant type approval procedures for the equipment identified below and same was found to be in compliance with the provisions of these Regulations and EU Marine Equipment Directive 2014/90/EU of 18th September 2016.

ITEM NUMBER: MED/1.2c

IMPLEMENTING REGULATIONS (EU) 2019/1397

CERTIFICATE NUMBER: 15-HS1376231-1-EC

APPLICANT: ACR Electronics Inc.

APPLICANT'S LOCATION: Fort Lauderdale, Florida, USA

PORT OFFICE: Fort Lauderdale, Florida, USA

PRODUCT DESIGNATION: Position-indicating lights for life-saving appliances: (c) for lifejackets.
Model: Firefly Pro and Firefly Pro Waterbug (MS-2000 Series) – manually or water activated

STANDARDS AND REGULATIONS: SOLAS 1974 as amended. Regulations X/3, III/4, 7, 22, 26, 32 & 34;
IMO Resolution MSC.36 (63)-(1994 HSC Code) Section 8;
IMO Resolution MSC.48 (66)- (LSA Code) I, II;

IMO Resolution MSC.97 (73)-(2000 HSC Code) Section 8;
IMO Resolution MSC.81 (70) Part 1, Section 10

EN 60945:2002 incl. IEC 60945 Corr. 1 (2008).

THIS CERTIFICATE IS ISSUED IN COMPLIANCE WITH CONFORMITY ASSESSMENT **MODULE B** OF THE REGULATIONS AND DIRECTIVES LISTED ABOVE.

ISSUE DATE: 17 January 2020

EXPIRATION DATE: 17 November 2024

SIGNATURE: N. Tyagi

Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to being placed on board vessels to which the amended regulations or standards apply.

This "Mark of Conformity" may only be affixed to the above equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase Module (D, E or F) of Annex II of the Directive is fully complied with and controlled by a written agreement with a Notified Body.

The attached document list forms part of this Certificate.

Certificate No.: 15-HS1376231-1-EC

Entry Date: 17 January 2020

**Name of Equipment/
Component Manufacturer:** ACR Electronics, Inc.
5757 Ravenswood Road
Fort Lauderdale
Florida 33312
United States of America

Tel: +1 954 981 3333
Fax: +1 954 983 5087
Email: info@acrartex.com
Website: www.acrartex.com

Authorized Representative: Ocean Signal
Unit 4, Ocivan Way, Margate, Kent
CT9 4NN United Kingdom
Tel.: +44-1843-282-930

Equipment/Component: Position-indicating lights for life-saving appliances: (c)
for lifejackets

Model: FireFly Pro lifejacket light –Manually activated;
FireFly Pro Waterbug lifejacket light – Water activated

Description: High intensity LED strobe light for use with marine
lifejackets

Visibility: 1 miles (1.6 km) to 2
mile (3.2 km)

Flash rate: 60 + 10 per minute

Luminous intensity: not less than 0.75 cd

Continuous operation: 8 hours minimum

Intended Service: For use with SOLAS approved marine lifejackets

Ratings: IMO LSA Code compliant position indicating lights
for Lifejacket

Standards: Approved in accordance with the requirements for
Upholstered furniture, item MED/1.2c of the European
Union Marine Equipment Directive 2014/90/EU &
Commission Implementing Regulation (EU) 2019/1397.
SOLAS 1974 as amended. Regulations X/3, III/4, 7, 22,
26, 32 & 34;
IMO Resolution MSC.36 (63)-(1994 HSC Code) Section
8; IMO Resolution MSC.97 (73)-(2000 HSC Code)
Section 8;
IMO Resolution MSC.48 (66) - (LSA Code) I, II;
IMO Resolution MSC.81 (70) Part 1, Section 10
EN 60945:2002 incl. IEC 60945 Corr. 1 (2008).

Service Restriction: The light has not been drop-tested with an immersion
suit. As such, the light is approved for use with
lifejackets only.



Comments:

If there are any changes to the basic product or treatment procedure, final product needs to be re-tested and re-certified.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the Notified Body named on this certificate.

Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to being placed on board vessels to which the amended regulations or standards apply.

The “Mark of Conformity” may only be affixed to the above equipment and a Manufacturer’s Declaration of Conformity issued when the production-control phase module (D, E or F) of Annex II of the Directive is fully complied with and controlled by a written agreement with a Notified Body.

A Manufacturer’s Declaration of Conformity shall be compiled and distributed in line with the requirements of Directive 2014/90/EU Article 16.

Revision:

Certificate No. 15-HS1376231-1-EC, Dated: 17 January 2020, replaces Certificate 15-HS1376231-EC

Drawing Schedule:

Drawing No	Description
19-HS1920478-PDA	PRODUCT DESIGN ASSESSMENT
19833-2, 19833-2B	IMANNA INC. CERTIFICATION TEST REPORT
19833-3, 19833-3B	IMANNA INC. CERTIFICATION TEST REPORT
16437-1	IMANNA INC. CERTIFICATION TEST REPORT
16591.1	IMANNA INC. CERTIFICATION TEST REPORT
A3-06-2806 Rev D	FINAL ASSEMBLY DRAWING
A1-20-1734 Rev J	Decal Artwork, Back Side Housing, MS2000 LED
A1-20-1755 Rev B	Label, Firefly Pro Approvals
CGHQ-10030	Certificate of Approval 161.112/92/0 United States Coast Guard
05/14	BROCHURE; FIREFLY PRO SERIES SOLAS AND WATERBUG SOLAS
Letter dated 27 Dec 2019	Declaration of Risk Assessment
Letter dated 27 Dec 2019	Declaration of similarity between Firefly 3 and Firefly Pro series

