



**EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED130122WS**

This is to certify that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Life-Saving appliances requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2021/1158.

<i>MED Item N°</i>	MED/1.2b
<i>USCG Category N°</i>	161.110
<i>Description</i>	Position-indicating lights for life-saving appliances: (b) for lifebuoys
<i>Type</i>	SM-3
<i>Applicant</i>	ACR ELECTRONICS, INC. 5757 RAVENSWOOD ROAD FORT LAUDERDALE 33312 U.S.A.
<i>Testing standards</i>	IMO Res. MSC.81 (70), as amended, EN 60945:2002 incl. IEC 60945 Corr. 1:2008, ISO 24408:2005.
<i>Reference standards</i>	SOLAS 74 Reg.III/7, SOLAS 74 Reg.III/22, SOLAS 74 Reg.III/32, SOLAS 74 Reg.III/34, IMO Res.MSC.36(63)-(1994 HSC Code) 8, IMO Res.MSC.48(66)-(LSA Code) I, IMO Res.MSC.48(66)-(LSA Code) II, IMO Res.MSC.97(73)-(2000 HSC Code) 8.

Issued in SHANGHAI *on*
April 8, 2022

This Certificate is valid until
April 7, 2027

This Certificate consists of this sheet plus an attachment



Smllial
Qiang Sun

RINA Services S.p.A.





**ATTACHMENT TO
CERTIFICATE No. MED130122WS**

Page 1 of 3

Manufacturer

XIAMEN LONAKO INDUSTRY & TRADE CO., LTD

Place of Manufacturer

N307
WEIYE BUILDING
CHINA PIONEERING PARK FOR CHINESE OVERSEAS SCHOLARS
XIAMEN
CHINA

Name & place of Authorised Representative

Mr. Johannes Graf Strachwitz
Walhallastraße 38, 80639 München, Germany
GERMANY

Product Description

Model of Light: SM-3 - Lifebuoy light upright self-igniting.

The above light is manufactured with following characteristics:

- Dimensions of main body : 9.9" (56 mm) Diameter;
2.2" (253 mm) Height.
- Color of upper shell : Transparent
- Color of Body : Orange
- Total Weight : Light excluding batteries and bracket - 0.66 lbs (300 g);
Light including batteries (excluding bracket) - 0.71 lbs (320 g);
Light including batteries and bracket - 0.90 lbs (406 g)
- Flash Rate : 50-70 flashes per minute
- Flash Light Intensity : Minimum of 3 candelas per flash in all directions of upper hemisphere
- Battery : 2 x 1.5 Volt, AA Lithium Batteries (L91) / User replaceable
- Bulb: Ultra-Bright LED
- Operation : Throw overboard or turn upright and strobe light will activate
- Operational Life : 40 hours over 3 cd at 30°C (86°F);
24 hours over 3 cd at -1°C (30°F).

The light is supplied with a clamp for fastening closed to the lifebuoy.

Tests Carried Out

Evaluation and Test Report edit by Wuhan Testing Center of Marine Life-saving Appliances according to IMO Res. MSC.81(70) as amended by Res.MSC.200(80), MSC.226(82) and MSC.323(89) and filed by RINA with No.: SHFP-13465.

Certification Test Report (Ref No.: 21302-1), issued by IMANNA Laboratory, Inc., according to 46 CFR 161.110 and filed by RINA with No.: SHFP-13919.

Additional Evaluation and Test Report (Ref.: No.2022085) edit by Wuhan Testing Center of Marine Life-saving Appliances according to Chapter 8.3, 8.5, 8.6, 8.9 and 11.2 of IEC 60945:2002 incl. IEC 60945 Corr.1 (2008) and filed by RINA with No.: SHFP-19965.

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000



Sullivan





**ATTACHMENT TO
CERTIFICATE No. MED130122WS**

Page 2 of 3

Continued:

Additional Evaluation and Test Report (Ref.: 2022SM3-02) edit by XIAMEN LONAKO INDUSTRY & TRADE CO., LTD according to Chapter 5.4.1, 5.4.3. 5.4.4 and 5.4.5 of ISO 24408:2005 and filed by RINA with No.: SHFP-19988.

Field of Application

Lifebuoy self-igniting light is designed in compliance with MSC.48(66) (LSA Code) with a maximum drop height of 30m.

Reference Documents

Technical drawings and manuals approved and filed by RINA listed on Approval letter No. : SHFP/2019/00360/XZO01.

Note

Previous MED Module B certificate No.: MED171319WS is annulled and replaced accordingly.

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000



San liang

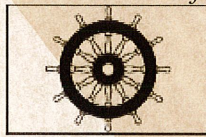




ATTACHMENT TO
CERTIFICATE No. MED130122WS

Page 3 of 3

The mark of conformity may only be affixed to the above type approved 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 a written inspection agreement with a Notified Body



XXXX/YYYY

"WHEELMARK FORMAT"

XXXX Notified Body number undertaking surveillance module

YYYY The year in which the mark is affixed

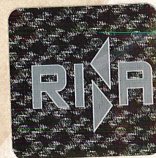
USCG Approval marking

This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment signed February 27th, 2004 and amended by Decision No. 1/2018 dated February 18th, 2019 according to U.S. Coast Guard approval category **161.110**.

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) as allowed by the MED.

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.



Qiang Sun
Qiang Sun

