



EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED316824WS/003

***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) 2023/1667.*

<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>	LNK-LB-01B; LNK-LB-02B
<i>Applicant</i>	XIAMEN LONAKO Inc. XIAMEN, CHINA
<i>Testing standards</i>	IMO Res. MSC.81 (70), as amended, IEC 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, IMO MSC.1/Circ.1628.

Issued in **SHANGHAI** *on*
June 28, 2024

This Certificate is valid until
June 27, 2029

This Certificate consists of this sheet plus an attachment



Qiang Sun

RINA Services S.p.A.



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Manufacturer

XIAMEN LONAKO Inc.

Place of Manufacturer

**XIAMEN
CHINA**

Name & place of Authorised Representative

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

Product Description

Model of light:

LNK-LB-01B - Lifebuoy self-igniting light automatically activated by water sensor.

LNK-LB-02B - Lifebuoy self-igniting light automatically activated on when upward / off when downward.

Main characteristics for above lights:

Items	Characteristics of the lights	
	LNK-LB-01B	LNK-LB-02B
Dimension of the main body	Ø 90*124 mm	Ø 60*144 mm
Color of upper shell	Transparent	
Color of body	Red	
Total Weight	Light 180g, Clip 36g, one unit light 228g (including instructions)	114g (Including clip)
Flash rate	about 50~70 flashes per minute	
Luminous Intensity	≥2.0cd	
Operation Life	≥2h	
Environmental Temperature	-30°C~ +65°C	
Working Temperature	-1°C~ +30°C	
Battery	1 x 3.0 Volt, 1200mAh, model CR123A lithium	2 x 1.5 Volt, Alkaline type LR6
Bulb	White LED, 0.5W, 50mA	

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

Tests Carried Out

LNK-LB-01B:

- Evaluation and Test Report edit by RINA Shanghai Office 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.: CSST-7173;
- Entrusting Inspection Report (Ref. No.: 2010YW149) issued by The National Supervision and Testing Center of Fishery Machinery and Instrument and filed by RINA with No.: SHFP-17769;
- Test Report (Ref. No.: 2010YW035) issued by The National Supervision and Testing Center of Fishery Machinery and Instrument and filed by RINA with No.: CSST-7174;

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- Test Report (Ref. No.: 2010YW036) issued by The National Supervision and Testing Center of Fishery Machinery and Instrument and filed by RINA with No.: CSST-7175;
- EMC Test Report (Ref. No.: 2020EC-WJ0055) edit by Xiamen Products Quality Supervision & Inspection Institute according to REG. 9.3, 10.4 and 10.9 of IEC 60945:2002 incl. IEC 60945 Corr.1 (2008) and filed by RINA with No.: SHFP-17771;
- Additional Evaluation and Test Report (Ref. No.: 2021LB-01B) edit by Xiamen Lonoko Industry & Trade Co., Ltd. according to REG. 8.3, 8.5, 8.6, 8.9 and 11.2 of IEC 60945:2002 incl. IEC 60945 Corr.1 (2008) witnessed by RINA dated on 23.03.2021~24.03.2021 and filed by RINA with No.: SHFP-17770;
- Routine Test Report issued by XIAMEN LONAKO Inc. and filed with No.: SHFP-27398.

LNK-LB-02B:

- Evaluation and Test Report edit by RINA Shanghai Office in accordance with IMO Res. MSC.81(70) as amended by Res. MSC.226(82) and filed by RINA with No.: CSST-8907;
- Inspection Report (Ref.: No.2010YW036 and No. 2012YW033) edit by National Supervision and Testing Center of Fishery Machinery and Instrument and filed by RINA with No.: CSST 8908 and SHFP-20203 (including tests of ISO 24408:2005);
- Tet Report (Ref.: No.2009227) edit by Center of Analysis & Measurement of Shanghai Institute of Industrial Microbiology and file db by RINA with No.: CSST-8910;
- Additional Evaluation and Test Report (Ref.: No.2022LB-02B) edit by XIAMEN LONAKO INDUSTRY & TRADE CO., LTD 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-20204;
- Routine Test Report issued by XIAMEN LONAKO Inc. and filed with No.: SHFP-27399.

Reference Documents

LNK-LB-01B:

- Booklet of Technical Drawings approved by RINA with No.: SHFP-9100;
- Lifebuoy Light Modification Statement filed by RINA with No.: SHFP-9101;
- Updated Technical Specification approved by RINA with No.: SHFP-17933;
- Labeling approved by RINA with No.: SHFP-17774.

LNK-LB-02B:

- Booklet of Technical Drawings approved by RINA with No.: CSST-8903;
- Technical Specifications approved by RINA with No.: SHFP- 20217;
- Operation and Maintenance Instructions approved by RINA with No.: CSST-8904.

Field of Application

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

Marking of Product

The product is to be indelibly marked as per IMO Res. MSC.48(66)-(LSA Code), item 1.2.2.9, clause 4.9 of IEC 60945:2002 incl. IEC 60945 Corr.1:2008 and clause 4.3 of ISO 24408: 2005.

Notes

This certificate annuls and replaces the below certificates due to client requests:

- MED086721WS for LNK-LB-01B dated May 6, 2021 and valid until May 5, 2026;
- MED161922WS/001 for LNK-LB-02B dated April 15, 2022 and valid until April 14, 2027.

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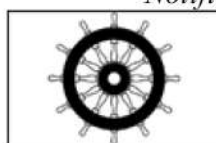




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The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written 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 not 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.



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