



EC TYPE EXAMINATION (MODULE B) CERTIFICATE


This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Life Saving Appliance requirements of Marine Equipment Directive (MED) 2014/90/EU subject to any conditions in the Design Appraisal Document attached hereto.

| | |
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| Manufacturer (Applicant) Address | Daniamant Limited Unit 3, The Admiral Park Airport Service Road Hilsea Portsmouth Hampshire PO3 5RQ United Kingdom |
| Reference/Regulation Item (No & Item designation) | Annex A.1/1.2 Position-indicating lights for life saving appliances: (a) For survival craft and rescue boats |
| Product Type | Manually controlled flashing position indicating lights for survival craft – Type "RL5 (Daniamant)" |
| Product Description | LIFERAFT LIGHTS |
| Specified Standard | IMO Resolution MSC.81(70), Part 1, as amended |

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

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|-----------------|---------------|-------------|---|
| Date of issue | 24 March 2017 | Expiry date | 23 March 2022 |
| Certificate No. | MED 1750055 | Signed |  |
| Sheet No. | 1 of 3 | Name | L. Thomas For and on behalf of Lloyd's Register Verification LRV EC Distinguishing No. 0038 |

Note:

This certificate is issued under the authority of the MCA.

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

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Lloyd's
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| Document number MED 1750055 |
| Issue number 1 |

DESIGN APPRAISAL DOCUMENT

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|-----------------------|---|
| Date 24 March 2017 | Quote this reference on all future communications SOUTSO/SFS/TA/LT/MM/WP27423868 |
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1750055

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

| <u>Plan/Doc No.:</u> | <u>Revision</u> | <u>Title or Description</u> |
|----------------------|-----------------|-----------------------------|
| TF--011 | 05 | Technical File |

Installation and Maintenance Instruction, RL5 Liferaft Light, 48-135, Issue 05 (C6495)

TEST REPORTS

RL5 Evaluation and Test Report, Document No 010-06, Dated 15/05/2006

RL5 Tested to meet the requirement of MSC.226(82), Document No: 08-10, Dated 26/03/2008

RL5 with Modified 8 LED External Light Assembly, Document No: 11-01, Dated 16/03/2011

Environmental Testing to BS EN 60945:2002 (as required by amendment to MSC.81(70) - MSC.323(89)., Document No: 75917538, Issue 1, Dated April 2012

Thermal Cycling test, flash rate test and luminous intensity test, Document No: 75932844 THC 02, Dated 21/07/2016

Optical Testing of Survivor Locator Lights Daniamant 'Type RL5' (Report to support 75934744), Document OC-0599-01, Dated 11/06/2016

Environmental Testing of the RL5 Light for the use of alternative LED, Document No: 75936166, 24/11/2016

Optical Testing of Survivor Locator Lights Daniamant 'Type RL5', Report to support 75936166, Document No: OC-0654, Dated 04/11/2016

Mould Growth Test, Document No:15256-2, Dated 15/02/2012

Optical Testing of Survivor Locator Lights Daniamant 'Type RL5' for the use of alternative LED, Document No OC-0576-01, Dated 18/02/2016

Type Approval testing for the acceptance of laser marking of the lights , Visual Inspection, Corrosion, Oil resistance and Solar Radiation of M2 and M3 lights , Test report Danak-19/13095, Dated 15 May 2013.

Temperature cycling and Chromaticity test 'Type RL5', Document 75934744 THC 01 Issue 1, Dated 28/04/2016

CONDITIONS OF CERTIFICATION

1. Lights powered by batteries shall be marked with a means of determining their age or the date by which they are to be replaced
2. Each light is to be marked with the information required by the LSA Code Paragraph 1.2.2.9 and 1.2.3
3. For compliance with SOLAS Regulation III/35 and III/36, fully detailed operations and maintenance manuals shall be supplied with each light



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DESIGN APPRAISAL DOCUMENT

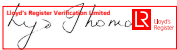
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4. The arrangements and installation of the lights on survival crafts are not part of this design appraisal or certificate and are to be to the satisfaction of the Surveyors attending on board
5. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
6. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). **The wheelmark cannot be affixed to the product until a conformity assessment module is in place**
7. Production tests are to be conducted to ensure compliance with SOLAS Chapter III Regulation 5 and recorded by the manufacturer in accordance with either the approved Production Quality Assurance system (Module D), or Product Quality Assurance (Module E), or witnessed by the Notified Body (LRV) as required by the Product Verification (Module F) of the Marine Equipment Directive. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration
8. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place
9. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This certificate will require to be updated for Approval to be maintained

PLACES OF PRODUCTION

| | | |
|---|-----|---|
| Daniamant Limited Unit 3, The Admiral Park Airport Service Road Hilsea Portsmouth Hampshire PO3 5RQ United Kingdom | and | Daniamant ApS Industrivej 24C 3550 Slangerup Denmark |
|---|-----|---|



Lijo Thomas
Senior Specialist
Statutory Fire & Safety
Southampton Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038