

Certificate No: MEDB000079H

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Navigation lights

with type designation(s) P/N 300-036/300-037/300-038/300-039/300-136/300-137/300-138/300-139

Issued to

Lopolight ApS

Humlebæk, Hovedstaden, Denmark

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2020/1170,

item No. MED/6.1. COLREG 72 as amended, Annex I/14, IMO Res. A.694(17), IMO Res. MSC.253(83)

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until 2026-02-09.

Issued at Hamburg on 2021-02-10

DNV GL local station: **Denmark CMC**

Approval Engineer: Nicolay Horn



Notified Body



for DNV GL SE

Digitally Signed By: Mydlak-Röder, Christine

Location: DNVGL SE Hamburg

Christine Mydlak-Roeder Head of Notified Body

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Form code: MED 201.DEU

Revision: 2020-01

www.dnvgl.com

Page 1 of 3

Job Id: **344.1-011293-1**Certificate No: **MEDB000079H**

Product description

Single and Duplex LED Masthead Navigation Lights - Types: "P/N 300-036/300-037/300-038/300-039/300-136/300-137/300-138/300-139"

Application/Limitation

The LED navigation lights type Masthead Light 300-036/300-037/300-038/300-039 may only be fitted to vessels of 12 metres or more in length but less than 50 metres as per COLREGSs Rule 22 as amended and IMO Res.MSC.253 (83).

The LED navigation lights type Masthead Light 300-136,300-137,300-138 & 300-139 may only be fitted to vessels of 50 metres or more in length as per 72 COLREGs Rule 22 as amended and IMO es.MSC.253 (83).

The LED navigation light shall be delivered complete with their technical documentation and User's manual accordingly to the requirements of Resolution A.694 (17) and Resolution MSC.253 (83)

The navigational light controller does not form a part of this design appraisal document. The lights certified herein are to be used in conjunction with an appropriate navigation light controller approved in accordance with MSC.253 (83)

Installation on board: The arrangements and installation of the light on board the vessel is not part of this design appraisal or certificate. All such arrangements are to be to the satisfaction of the Surveyors attending on board; the fitting of the light to be in accordance with the manufacturer's instructions and the requirements of COLREGS 72, as amended, and any additional requirement of the State whose flag the vessel is entitled to fly.

Instructions for installation, use and maintenance of the product are to be supplied to each purchaser.

LEDs should only be used within the lifespan specified by the manufacturer to maintain the necessary luminous intensity of LEDs. The lifespan of LEDs should be determined and clearly notified to the manufacturer based on the appropriate test results on the decrease of luminous intensity of the LEDs under various temperature conditions of LEDs in the light during operation, taking the appropriate margin into the account.

Each item, batch or lot of the equipment is to have the "Mark of Conformity" affixed and be issued with a "Declaration of Conformity".

Type Examination documentation

User manual Reference No. 300-036/300-037/300-038/300-039/300-138 & 300-139, Rev. No 1, dated 29.01.2013.

Installation instructions for Lopolight navigation lights 300-136 6nm masthead, horizontal mount, Part No 300-136, Rev 1.00 / 24. August 2016 (P/N 601-505)

Installation instructions for Lopolight navigation lights 300-137 6nm masthead, vertical mount, Part No 300-137, Rev 1.00 / 24. August 2016 (P/N 601-506)

Drawings

Drawing No.	Drawing Title
300-036	300-036 5nm Masthead Horizontal mount
300-037	300-037 5nm Masthead Single, Vertical mount
300-038	300-038 5nm Masthead Double, Horizontal mount
300-039	300-039 5nm Masthead, Vertical mount
300-136	300-136 6nm Masthead Single, Horizontal mount
300-137	300-137 6nm Masthead Single, Vertical mount
300-138	300-138 6nm Masthead, Horizontal mount
300-139	300-139 6nm Masthead Vertical mount, Double W cable aft

Form code: MED 201.DEU Revision: 2020-01 www.dnvgl.com Page 2 of 3

Job Id: **344.1-011293-1** Certificate No: **MEDB000079H**

Test Reports

Test Report performed at Delta Danak, Doc. No DANAK -19/12702 Rev.1 Delta-T203286 and dated 21st December 2012.

Determination of the luminous intensity distribution and colour coordinates from navigation light model 300-138, Test Report performed at Delta Danak, Doc. No Delta-L102542-3909 and dated 6th July 2012.

CB Svendsen A/S report Revision 1, dated 4th June 2013 for the bespoke software in accordance with EN60945.

Assessment sheet no. 1713, for the acceptance of navigation lights 300-136 based on comparative assessment against model 300-138 by Force Technology, dated 07/05/2018.

Assessment sheet no. 1721, for the acceptance of navigation lights 300-137 based on comparative assessment against model 300-138 by Force Technology, dated 04/07/2018.

Tests carried out

72 COLREGS – International Regulations for Preventing Collisions at Sea amended by IMO Resolution A.1004 (25) Annex I/14.

EN60945 (2002) including Corrigendum 1 (2008) and EN14744 (2005) including AC (2006)

Marking of product

The LED navigation light shall be marked externally accordingly to the requirements of Resolution A.694 (17) and Resolution MSC.253 (83)

END OF CERTIFICATE

Form code: MED 201.DEU Revision: 2020-01 www.dnvgl.com Page 3 of 3