

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)

Single and Double LED Navigation Lights, Lopolight Part Numbers 200-012, 200-014, 200-016, 200-015, 200-018, 200-024, 300-112, 300-114, 300-115

Issued to

**Lopolight ApS
 Humlebæk, Hovedstaden, Denmark**

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2020/1170,

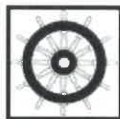
item No. MED/6.1. COLREG 72 as amended, Annex I/14, IMO Res. A.694(17), IMO Res. MSC.253(83)

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



Notified Body
 No.: **0098**

Approval Engineer:
Nicolay Horn



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

Single and Double LED Navigation Lights, Lopolight Part Numbers:
200-012, 200-014, 200-015, 200-016, 200-018, 200-024, 300-112, 300-114 and 300-115

Application/Limitation

The LED navigation lights type Masthead Light 301-011/301-0011KL/301-011KLST 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 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.

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

Maintenance, Operation and Service Manuals:

Part Number	Document Title	Date	Document Number
200-012, 200-014, 200-015	Installation instructions for Lopolight horizontal mount navigation lights.	2016-05-06	600-322, Rev 1.15
200-016, 200-018, 200-024	Installation instructions for Lopolight 2nm 180 degree lights	2012-05-31	Rev 1.01
300-112, 300-114, 300-115	Installation instructions for Lopolight navigation lights for vessels over 50 meters.	29 September 2010	Rev 1.01

Software Functional Description:

Lopolight Degradation Compensating LED Driver for Navigation lights (DCLD) dated 05 November 2008, Software version: 1.50

Product Compliance Schedule revision dated 06 May 2016

Lopolight E mail message dated 06 June 2016 addressing compliance of product 300-112

CB Svendsen statement dated 16 May 2016

CB Svendsen ISO 9001:2008 certificate number DIC402QMS dated 10 May 2014

Job Id: **344.1-011294-1**
Certificate No: **MEDB000079J**

Drawings

Part number	Product	Drawing number
200-012	2nm 360° all-round white	200-012
200-014	2nm 360° all-round red	200-014
200-015	2nm 360° all-round green	200-015
200-016	2nm 180° red	200-016
200-018	2nm 180° green	200-018
200-024	2nm 180° white	200-024
300-112	3nm single, white, all-round	300-112
300-114	3nm single, red, all-round	300-114
300-115	3nm single, green all-round	300-115

Test Reports

QINETIQ Farnborough, Marine Approval and Testing Services report number QINETIQ/D&TS/SS/CR0600363, Issue 1.0, dated December 2005.

QinetiQ/MS/EES/TSTR0801218/1, Issue 1 dated 08 July 2008.

Federal Maritime and Hydrographic Agency Hamburg, report number BSH/4615/6010723/07, Issue XX dated 09 November 2007.

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

Tests carried out

EN60945 (2002) including IEC 60945 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