

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007V8

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV 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)
2 NM and 3 NM light series

Issued to

Lopolight ApS
Humblebaek, Denmark

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

Regulation (EU) 2021/1158,
item No. MED/6.1. COLREG 72 as amended, Annex I/14, IMO Res. A.694(17), IMO Res. MSC.253(83)

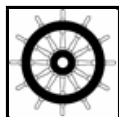
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-03-28**.

Issued at **Hamburg** on **2022-03-29**

DNV local station:
Denmark CMC

Approval Engineer:
Frederik Tore Elter



Notified Body
No.: **0098**

for **DNV SE**

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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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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

LED Navigation lights:

Model	Description	Vessel size
200-012G2	360° all-round white, single, 2NM	<50m
201-012	360° all-round white, single, 2NM	<50m
200-012G2ST	360° all-round white, double, 2NM	<50m
201-012ST	360° all-round white, double, 2NM	<50m
200-014G2	360° all-round red, single, 2NM	<50m
201-014	360° all-round red, single, 2NM	<50m
200-014G2ST	360° all-round red, double, 2NM	<50m
201-014ST	360° all-round red, double, 2NM	<50m
200-015G2	360° all-round green, single, 2NM	<50m
201-015	360° all-round green, single, 2NM	<50m
200-015G2ST	360° all-round green, double, 2NM	<50m
201-015ST	360° all-round green, double, 2NM	<50m
300-112G2	360° all-round white, single, 3NM	>50m
301-112	360° all-round white, single, 3NM	>50m
300-112G2ST	360° all-round white, double, 3NM	>50m
301-112ST	360° all-round white, double, 3NM	>50m
300-114G2	360° all-round red, single, 3NM	>50m
301-114	360° all-round red, single, 3NM	>50m
300-114G2ST	360° all-round red, double, 3NM	>50m
301-114ST	360° all-round red, double, 3NM	>50m
300-115G2	360° all-round green, single, 3NM	>50m
301-115	360° all-round green, single, 3NM	>50m
300-115G2ST	360° all-round green, double, 3NM	>50m
301-115ST	360° all-round green, double, 3NM	>50m

Application/Limitation

- The above navigation lights to be installed in accordance with the Convention on the International Regulations for Preventing Collisions at Sea, 1972 as amended, and maker's instructions.
- Installation for power driven and sailing vessels.
- For compliance with requirements in EN 14744 clause 4.10, an interface navigation light controller fulfilling the following requirements is required:
 - The navigation light controller is to have the ability to correctly present lifespan and status signals from the lights in accordance with MSC.302(87) and MSC.253(83).
 - The navigation light controller must monitor the light current for detection of partial failure and presentation of alerts.
- For monitoring of navigation light lifespan condition the light have to be switched off and back on.

Type Examination documentation

	118-323-193	4. March 2019	Report: Delta, EN 14744: Determination of (x,y) chromatic Colour Coordinates and luminous intensity 3 nm green
	118-323-190	5. March 2019	Report: Delta, EN 14744: Determination of (x,y) chromatic Colour Coordinates and luminous intensity 2 nm green
	118-323-194	8. February 2019	Report: Delta, EN 14744: Determination of (x,y) chromatic Colour Coordinates and luminous intensity 3 nm red

	118-323-191	5, March 2019	Report: Delta, EN 14744: Determination of (x,y) chromatic Colour Coordinates and luminous intensity 2 nm red
		Rev.1	Datasheet: 360 all-round green, double, horizontally mounted, 3 NM, 301-115ST and 300-115G2ST (>50m)
		Rev.1	Datasheet: 360 all-round green, single, horizontally mounted, 3 NM, 301-115 and 300-115G2 (>50m)
		Rev.1	Datasheet: 360 all-round red, double, horizontally mounted, 3 NM, 301-114ST and 300-114G2ST (>50m)
		Rev.1	Datasheet: 360 all-round red, single, horizontally mounted, 3 NM, 301-114 and 300-114G2 (>50m)
		Rev.1	Datasheet: 360 all-round white (anchor light), double, horizontally mounted, 3 NM, 300-112G2ST and 301-112ST (>50m)
		Rev.1	Datasheet: 360 all-round white (anchor light), single, horizontally mounted, 3 NM, 300-112G2 and 301-112 (>50m)
		Rev.1	Datasheet: 360 all-round green, double, horizontally mounted, 2 NM, 201-015ST and 200-015G2ST (<50m)
		Rev.1	Datasheet: 360 all-round green, single, horizontally mounted, 2 NM, 201-015 and 200-015G2 (<50m)
		Rev.1	Datasheet: 360 all-round red, double, horizontally mounted, 2 NM, 201-014ST and 200-014G2ST (<50m)
		Rev.1	Datasheet: 360 all-round red, single, horizontally mounted, 2 NM, 201-014 and 200-014G2 (50m)
		Rev.1	Datasheet: 360 all-round white (anchor light), double, horizontally mounted, 2 NM, 200-012G2ST and 201-012ST (<50m)
		Rev.1	Datasheet: 360 all-round white (anchor light), single, horizontally mounted, 2 NM, 200-012G2 and 201-012 (<50m)
	122-22728-1	Ed. 1.0	Report: Force IEC 60945 Conducted and Radiated EMC. 300-112G2 LED Lamp with one LED driver.

Tests carried out

- Performance: EN 14744 (2005) incl. AC 2006, tested for COLREG Lights
- Environmental: IEC 60945 (2002) incl. IEC 60945 Corr. 1:2008.



Job Id: **344.1-011923-1**
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Marking of product

According to EN14744.