

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Navigation lights

with type designation(s)

NAVIGATION SINGLE & DOUBLE LIGHT - SIE0309N NLED-S / NLED-D

Issued to

SUNIL ELECOMM CO., LTD.
Gyeongsangbuk-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/6.1. COLREG 72 as amended, Annex I/14, IMO Res. A.694(17), IMO Res. MSC.253(83)

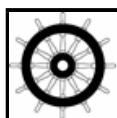
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-05-05**.

Issued at **Høvik** on **2020-05-06**

DNV GL local station:
Ulsan

Approval Engineer:
Frederik Tore Elter



Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

COLREG LED navigation lights for vessels over 50m.

Model	Description	Range
SIE 0309N NLED-DM	MAST HEAD LIGHT (DUAL)	6NM
SIE 0309N NLED-SM	MAST HEAD LIGHT (SINGLE)	6NM
SIE 0309N NLED-DP	PORT SIDE LIGHT (DUAL)	3NM
SIE 0309N NLED-SP	PORT SIDE LIGHT (SINGLE)	3NM
SIE 0309N NLED-DT	STBD SIDE LIGHT (DUAL)	3NM
SIE 0309N NLED-ST	STBD SIDE LIGHT (SINGLE)	3NM
SIE 0309N NLED-DS	STERN LIGHT (DUAL)	3NM
SIE 0309N NLED-SS	STERN LIGHT (SINGLE)	3NM
SIE 0309N NLED-DY	TOWING LIGHT (DUAL)	3NM
SIE 0309N NLED-SY	TOWING LIGHT (SINGLE)	3NM
SIE 0309N NLED-DF-HS	GREEN LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-SF-HS	GREEN LIGHT (HALF SCREEN, SINGLE)	3NM
SIE 0309N NLED-DYA-HS	YELLOW LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-SYA-HS	YELLOW LIGHT (HALF SCREEN, SINGLE)	3NM
SIE 0309N NLED-DA-HS	WHITE LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-SA-HS	WHITE LIGHT (HALF SCREEN, SINGLE)	3NM
SIE 0309N NLED-DU-HS	RED LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-SU-HS	RED LIGHT (HALF SCREEN, SINGLE)	3NM
SIE 0309N NLED-DU/A-HS	HS RED/WHITE LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DA/U-HS	WHITE/RED LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DU/F-HS	RED/GREEN LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DF/A-HS	GREEN/RED LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DA/A-HS	WHITE/GREEN LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DF/A-HS	GREEN/WHITE LIGHT (HALF SCREEN, DUAL)	3NM
SIE 0309N NLED-DF	GREEN LIGHT (DUAL)	3NM
SIE 0309N NLED-DYA	GREEN LIGHT (SINGLE)	3NM
SIE 0309N NLED-SYA	YELLOW LIGHT (DUAL)	3NM
SIE 0309N NLED-DA	YELLOW LIGHT (SINGLE)	3NM
SIE 0309N NLED-SA	WHITE LIGHT (DUAL)	3NM
SIE 0309N NLED-SA	WHITE LIGHT (SINGLE)	3NM
SIE 0309N NLED-DU	RED LIGHT (DUAL)	3NM
SIE 0309N NLED-SU	RED LIGHT (SINGLE)	3NM
SIE 0309N NLED-DU/A	RED/WHITE LIGHT (DUAL)	3NM
SIE 0309N NLED-DA/U	WHITE/RED LIGHT (DUAL)	3NM
SIE 0309N NLED-DA/U	RED/GREEN LIGHT (DUAL)	3NM
SIE 0309N NLED-DF/U	GREEN/RED LIGHT (DUAL)	3NM
SIE 0309N NLED-DA/F	WHITE/GREEN LIGHT (DUAL)	3NM
SIE 0309N NLED-DF/A	GREEN/WHITE LIGHT (DUAL)	3NM
SIE 0309N NLED-SV	MANOEUVRING LIGHT (SINGLE)	5NM
SIE 0309N NLED-DV	MANOEUVRING LIGHT (DOUBLE)	5NM

Note: Standard models listed below may be installed with additional -ICE at end of model code.

Job Id: **344.1-009411-1**
Certificate No: **MEDB00005FG**

Application/Limitation

- Tested for COLREG, CCNR and CEVIN.
- Installation in accordance to manufacturers documentation.
- Lights may be installed as Standard or as ICE-Class Model – model code in above product description table ending with -ICE.
- Lights may be powered by following supply voltages: 24VDC/115VAC/230VAC

Type Examination documentation

Tests carried out

Environmental testing:	IEC 60945 (2002)
Performance testing:	EN 14744 (2005)

Marking of product

In accordance to EN 14744 (2005)