DNV·GL

Certificate No:
MEDB00003RJ

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)
LENA2

Issued to
WOOSHIN APEC CO.,LTD. (Gimhae Plant)
Gimhae-si, Gyeongsangnam-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
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 **2024-05-14**.

Issued at **Høvik** on **2019-05-15**

DNV GL local station:
Gimhae Station

Approval Engineer:
Geun Young Park

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Job Id: **344.1-007814-1**
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Product description

LED navigation lights, LENA-2, for exposed area.
The LENA-2 comprises of the following models:

Type Designation		Description	Visibility
1	LENA2-DM	Masthead light, White, Dual	6 NM
2	LENA2-DP	Sidelight, Port, Red, Dual	3 NM
3	LENA2-DT	Sidelight, Starboard, Green, Dual	3 NM
4	LENA2-DS	Sternlight, White, Dual	3 NM
5	LENA2-DY	Towing light, Yellow, Dual	3 NM
6	LENA2-DV	Manoeuvring light, White, Dual	5 NM
7	LENA2-DG	All-round light, Red, Flashing light, Dual	3 NM
8	LENA2-DH	All-round light, Green, Flashing light, Dual	3 NM
9	LENA2-DA	All-round light, White, Dual	3 NM
10	LENA2-DU	All-round light, Red, Dual	3 NM
11	LENA2-DF	All-round light, Green, Dual	3 NM
12	LENA2-DC	All-round light, Yellow, Dual	3 NM
13	LENA2-SA/SU	All-round light, White/Red, Dual	3 NM
14	LENA2-SU/SA	All-round light, Red/White, Dual	3 NM
15	LENA2-SA/SF	All-round light, White/Green, Dual	3 NM
16	LENA2-SF/SA	All-round light, Green/White, Dual	3 NM
17	LENA2-SU/SF	All-round light, Red/Green, Dual	3 NM
18	LENA2-SF/SU	All-round light, Green/Red, Dual	3 NM
19	LENA2-DA-HS	All-round light, White light, Dual, With half screen	3 NM
20	LENA2-DU-HS	All-round light, Red light, Dual, With half screen	3 NM
21	LENA2-DF-HS	All-round light, Green light, Dual, With half screen	3 NM
22	LENA2-SA/SU-HS	All-round light, White/Red light, Dual, With half screen	3 NM
23	LENA2-SU/SA-HS	All-round light, Red/White light, Dual, With half screen	3 NM
24	LENA2-SA/SF-HS	All-round light, White/Green light, Dual, With half screen	3 NM
25	LENA2-SF/SA-HS	All-round light, Green/White light, Dual, With half screen	3 NM
26	LENA2-SU/SF-HS	All-round light, Red/Green light, Dual, With half screen	3 NM
27	LENA2-SF/SU-HS	All-round light, Green/Red light, Dual, With half screen	3 NM

Application/Limitation

- The LENA-2 has been approved for power driven vessels (not for sailing vessels) of 20 metres or more in length.
- The LENA-2 has been approved for prehoistable navigation lights and suitable for AC 115V and AC 230V operation.
- The LENA-2 shall be installed in accordance with the Convention on the International Regulations for Preventing Collisions at Sea, 1972 as amended, and maker's instructions.

Type Examination documentation

Tests carried out

- EN14744 (2005 + AC 2006)
- IEC 60945 (2002)

Marking of product

- According to EN14744