



Certificate No:
TAF00001M1

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **Class B Recesses for Light Fittings, Ventilation Units and similar**

with type designation(s)
LEDCD120N, LEDCD140N, LEDCW120N, LEDCW140N and LEDDL

Issued to

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

is found to comply with

DNV rules for classification – Ships

DNV offshore standards

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021

Application :

Approved as light fixtures for use in B-0 class ceilings.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2021-09-30**

This Certificate is valid until **2026-09-29**.

for **DNV**

DNV local station: **Ulsan**

Approval Engineer: **Thorvald Furuseth**

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Helene David-Andersen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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.



Form code: TA 251

Revision: 2021-03

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Product description

LEDCD120N, LEDCD140N, LEDCW120N, LEDCW140N and LEDDL,
 Light fixtures installed in cut-outs in B-0 ceilings. The light fixtures are composed of 0.8 mm galvanized steel body fastened to the ceilings by means of bolting and insert between ceiling panel.

For further details, see drawings listed under Type Approval documentation below.

Application/Limitation

Type	Max size (L x W x H) [mm]	Max weight [Kg]
LEDCD120N	775 x 325 x 85	8
LEDCD140N	1400 x 325 x 85	15
LEDCW120N	684 x 282 x 101	8
LEDCW140N	1292 x 282 x 101	15
LEDDL	335 x Ø188 x 93	2.5

The light fixtures are approved for use in approved B-0 class ceilings consisting of panels constructed by not less than 0.6 mm thick galvanized steel sheets covered by minimum 25 mm thickness insulation (density 80 kg/m³) on unexposed side.

Maximum width of panels: 300 mm

Minimum distance between the recesses should not be less than 200 mm.

The manufacturer of ceiling is responsible to document that the structural and thermal integrity is maintained after fitting the light fixtures into the ceiling. The arrangement is subject for approval in each case.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Test report No. KOMERI-0402-21T1467(E) dated 1 June 2021 from KOMERI, Pusan, Korea.

Test report No. KOMERI-0402-21T0841(E) dated 6 May 2020 from KOMERI, Pusan, Korea.

Drawing No. BO GAP LEDC 01-03 Rev.01 (3 sheets) dated 15 February 2021 from manufacturer.

Drawing No. LEDCD120N-005 Rev. 02 dated 15 March 2021 from manufacturer.

Drawing No. LEDCD140N-005 Rev. 02 dated 15 March 2021 from manufacturer.

Drawing No. LEDDL-005 Rev. 00 dated 15 February 2021 from manufacturer.

Drawing No. BO NO GAP LEDC 01 - 03 Rev.00 (3 sheets) dated 9 April 2021 from manufacturer.

Drawing No. LEDCW120N-005 Rev. 00 dated 15 March 2021 from manufacturer.

Drawing No. LEDCW140N-005 Rev. 00 dated 15 March 2021 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating.

Periodical assessment

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4.