EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00002G8
Revision No:
1

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 AS under the authority of the Government of Norway.

This is to certify:

That the Low-Location Lighting Systems (components only)

with type designation(s)
AS-41 DURA-PLATE, AS-42/C Photoluminescent Plate, AS-42/D Photoluminescent Plate, AS-42/F Photoluminescent Plate, AS-43/C Photoluminescent Plate, AS-44/C Photoluminescent Foil, AS-44/D Photoluminescent Foil

Issued to
A-SPE Europe Spolka Jawna
Gronowo Górne, Elbląg 2, Poland

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157,**
item No. MED/3.40. SOLAS 74 as amended, Regulation II-2/13, FSS Code 11, IMO Res.A.752(18)

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

This Certificate is valid until **2027-11-28**.

Issued at **Høvik** on **2022-11-29**

DNV local station:
Gdansk CMC

Approval Engineer:
Marcin Tobiasz

Notified Body
No.: **0575**

for **DNV AS**
Digitally Signed By: Øyvind Hoff
Location: DNV Høvik, Norway
on behalf of

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

Product description

"AS-41 DURA-PLATE", "AS-42/C Photoluminescent Plate", "AS-42/D Photoluminescent Plate", "AS-42/F Photoluminescent Plate", "AS-43/C Photoluminescent Plate", "AS-44/C Photoluminescent Foil", "AS-44/D Photoluminescent Foil"
are multilayer photoluminescent materials for Low-Location Lighting Systems made of PVC or aluminium.

Name:	Nominal thickness:	Base material:
AS-41 DURA-PLATE	1.6 mm	PVC sheet with a photoluminescent foil and foam
AS-42/C Photoluminescent Plate	1.1 mm	Applying liquid laminate on a photoluminescent board
AS-42/D Photoluminescent Plate	1.1 mm	Applying liquid laminate on a photoluminescent board
AS-42/F Photoluminescent Plate	1.1 mm	Applying liquid laminate on a photoluminescent board
AS-43/C Photoluminescent Plate	1.1 mm	Applying liquid laminate on a aluminium photoluminescent board
AS-44/C Photoluminescent Foil	0.38 mm	PVC foil with adhesive
AS-44/D Photoluminescent Foil	0.38 mm	PVC foil with adhesive

Application/Limitation

Approved for use as Low-Location Lighting System, escape route signs and fire equipment location marking.

Extent of arrangement, placing, width and luminance of the photoluminescent strips based on the ambient light are to be in accordance with IMO Res.A.752(18) or ISO 15370:2021 and is to be approved by the administration or competent authority in each case/project.

Photoluminescent strips having a width less than 75 mm shall only be used if the luminance is increased to compensate for the reduced width in accordance with Ch. 7.1 of IMO Res. A.752 (18) or Ch. 4.2.2 & Annex D of ISO 15370:2021.

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

Type Examination documentation

Test Report No. TZ/PN60092-101a/074/2022 dated 2 August 2022 from West Pomeranian University of Technology in Szczecin, Szczecin, Poland
Test Report No. TZ/PN60092-101a/075/2022 dated 2 August 2022 from West Pomeranian University of Technology in Szczecin, Szczecin, Poland
Test Report No. TZ/PN60092-101a/076/2022 dated 2 August 2022 from West Pomeranian University of Technology in Szczecin, Szczecin, Poland
Test Report No. TZ/PN60092-101a/081/2022 dated 23 August 2022 from West Pomeranian University of Technology in Szczecin, Szczecin, Poland

Certificates of Calibration No. Z4-Z46.4180.150.2022.1843.1 dated 18 July 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.150.2022.1843.2 dated 18 July 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.150.2022.1843.3 dated 18 July 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.150.2022.1843.4 dated 18 July 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.217.2022.2503.1 dated 26 September 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.217.2022.2503.2 dated 26 September 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.
Certificates of Calibration No. Z4-Z46.4180.217.2022.2503.3 dated 26 September 2022 from Laboratory of Photometry and Radiometry, Warsaw, Poland.

Tests carried out

Tested according to ISO 15370:2010 and IEC 60092-101.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation and the MED Mark of Conformity (see first page).