Certificate No:
TAE00004A8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
SL1

Issued to
Luminell Sweden AB
Halmstad, **Sweden**

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Vibration class	**A**
Degree of protection	**IP 66/67**
Temp. class	**D**
Voltage (V)	**24 V DC**
Suitable for Hazardous areas	**No**

Issued at **Høvik** on **2021-06-30**
This Certificate is valid until **2026-06-29**.
DNV local station: **Sweden CMC**

Approval Engineer: **Nicolay Horn**

for **DNV**

Marta Alonso Pontes
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.

Product description

SL1 LED Searchlight

Operating voltage	24 V DC
Max Power consumption	<550W
Operating temperature	-25 ºC to +55 ºC
Light intensity	1.66 / 0,16 MCd (without scattscatter shield)
Ingress protection	IP66/IP67
Housing	Casted, anodized and powder coated seawater resistant Aluminum.
Finish	White RAL 9016 (other colours on request)
CRi	70
CCI	6500K (cool white) 5.000K (neutral white)

Application/Limitation

Type Approval documentation

Tests carried out

Type tests in accordance with IEC 60945 (partly), IMO Res MSC 81(70) (Annex 6 13.4) and DNVGL-CG-0339 / IACS E10 Rev. 8.

Marking of product

Manufacturer's name or trade mark – type designation under which the product is type approved – voltage – maximum current - IP class.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routine Tests (RT) checked
- (if RT- and PST-test reports are not available, tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensure traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment shall be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE