# Low Temperature Test TEF2438 Luminaire

### Document No.

TTD5778

### Test date

February 6<sup>th</sup> and 7<sup>th</sup>, 2017.

## **Test location**

Tranberg AS, Strandsvingen 6, N-4032 Stavanger, Norway.

# **Partisipants**

- Torstein Rysstad, Tranberg AS
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### Test standards:

- IEC 60945:2002 8.4.2.6 Low temperature, Method of test (exposed equipment).
- Test report according to DNV-GL Rules for Classification Pt.1, Ch.3, Sec.3. Z262, Report from test at Manufacturer (Jan. 2017).

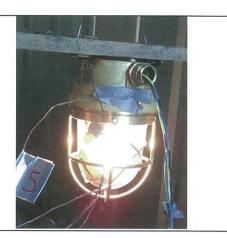
## **Test object:**

- Part No. 2438501, TEF 2438n Luminaire: Clear globe, E27, 230VAC, IP56, Brass/Polyc.
- Fitted with halogen light source, type Philips Eco30 A60 42W E27 230V CL. Tranberg part No. 9400142.

## Test setup:

Test object was fitted with a 42W halogen light bulb. Orientation of test object considered as worst case, globe facing downwards. Temperature sensors mounted as described under "test results" below. Lamp connected to a 230VAC power supply.







### Method of test:

Test was performed according to IEC 60945:2002, 8.4.2.6 – Low temperature, Method of test (exposed equipment).

- Test object placed in chamber at normal room temperature and relative humidity. The temperature was then reduced to and maintained -25°C ±3°C for 16 hours. *Reference: IEC 60945:2002, 8.4.2.2.*
- Navigation light was then switched on and remaining in on position till temperatures was stabilized. Approx 1.5 hours. *Reference: IEC 60945:2002, 8.4.2.2.*
- Temperature at glass lens was recorded.

# Test results:

Ambient temperature: -25.7°C

Temperature sensor 1 Lamp base (brass)	Temperature sensor 2 Lamp Base (brass)	Temperature sensor 3 Globe middle	Temperature sensor 4 Globe middle	Temperature sensor 5 Globe top (end)
-5.8 °C	-4.3 °C	+27.6 °C	+28.4 °C	+4.9 °C

## Conclusion:

The lamp is producing enough power to remain ice free at -25°C ambient temperature. -25°C ambient temperature does not affect performance of light.

Stavanger, February 7<sup>th</sup>, 2017

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