

Low Temperature Test TEF2438 Luminaire

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Test date

February 6th and 7th, 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 $-25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 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	$+27.6^{\circ}\text{C}$	$+28.4^{\circ}\text{C}$	$+4.9^{\circ}\text{C}$

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 7th, 2017



Torstein Rysstad

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