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COMMERCIAL-IN-CONFIDENCE

# STATEMENT OF TEST

**CLIENT** Daniamant Limited  
 Unit 3. The Admiral Park  
 Airport Service Road  
 Portsmouth, Hampshire  
 United Kingdom, PO3 5RQ

**DOCUMENT** 75941445 SOT 03 Issue 1  
**CLIENT'S ORDER NUMBER** PC0001837, dated 16.01.2018

**INCOMING RELEASE NOTE** Delivery List, dated 16.01.2018  
**DATE OF RECEIPT** 18 January 2018  
**EQUIPMENT UNDER TEST (EUT)** L162 & L163 Lifebuoy Lights, comprising the following;

	Description	Model	No Tested	Sample Ref No	Test
1	Lifebuoy Light	L162	1	14	Test 1, 2 & 3
2	Lifebuoy Light	L163	1	16	Test 1, 2 & 3

**TEST SPECIFICATION / ISSUE**

- IMO LSA:2010 para 1.2.1, 10.2.2, 10.4.9 & 10.4.10 (Lifebuoy Lights).
- MSC.1-Circ.980:2001. Sections 2.1.2.2, 2.1.2.3 & 2.1.2.3 (Lifebuoy Lights).

**DEVIATIONS FROM THE STANDARD**

- The Thermal Cycling Test cold test level specified as -30°C was altered to be a more severe condition at -52°C.
- The Operation requirement to be floating and immersed in water was rescinded by Daniamant email P.Stubbs/G.Shadbolt(TÜV) dated 08.02.2018.
- The operation period (Test 2) is extended to 15h to satisfy USCG requirements.

**DATE OF TEST** 22 January to 15 March 2018

**TEST(S) DESCRIPTION** Temperature & Light Tests on the L162 And L163 Lifebuoy Lights

The following tests were required by the specification:

Test	Description	Test Parameters	Operation
1	Temperature Cycling	2 units tested for x10 cycles between -52°C to +65°C for 8h at each temperature condition.	The units are switched OFF during the test and are examined and operated before and after the test.
2	Operation at Cold Temperature.	Both units stored for 8h at -52°C and operated at -1°C for 15h. See Deviation 2 above	Stabilise the lights at the test temperature and switch ON all lights. Check the flash rate is between 50-70 flashes per minute. Monitor and record the battery voltage.
3	Light Tests	Each unit tested for Luminous Intensity, Flash Rate/Duration and Chromaticity, at the lowest battery voltage recorded during Test 2.	The test is carried out at the laboratory of OptiConsulting Ltd, Buxton SK17 6UG, UK. . The battery voltages after Test 2 and maintained for the light test were 4.96 V (L162) and 4.92 V (L163).

## RESULT(S) OF TEST

The test requirements were satisfied for all tests, as stated below.

- Thermal Cycling: A visual examination and performance assessment after the test was reported as satisfactory.
- Operation at Temperature: Visual examinations and performance assessments during and after the test were reported as satisfactory. Light flash rates met the requirements and were between 50 to 70 flashes per minute.
- Light Tests: Flash rate/duration, Luminous Intensity ( $\geq 2$  cd) and chromaticity were compliant and satisfactory.

This certificate relates only to the actual item/items tested.

Approved by   
 S Boddison  
 Authorised Signatory



Date 18 April 2018