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| Test Report Number: | LCZS22100045 | Total Page(s): 6 |
| Applicant Name: | Imminent Teknologies LLC | |
| Applicant Address: | Suite 5, Valley Towers, Valley Road, Birkirkara BKR9022, Malta | |
| Test item: | LED Underwater Light | |
| Model / Type Reference: | BLU-TITAN-R6 | |
| Date of Issue: | 2022-10-12 | |
| Testing Laboratory: | LCTECH Guangdong Testing Services Co., Ltd. 2/F., Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China | |
| Test Specification: | RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE (According to EN IEC 60598-1:2021 Clause 9.2.2 and Clause 9.2.9) | |
| Test Result: | Passed | |
| Compiled by: | Reviewed by: | |
| 2022-10-12 Ricky Wang | 2022-10-12 Shona Chen | |
| <i>Ricky Wang</i> | <i>Shona Chen</i> | |
| Date Name Signature | Date Name Signature | |
| Remark: | N/A | |
| <p>The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of the examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacture cannot be derived therefore.</p> | | |

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| Test item description : Inground light | |
| Trade Mark | |
|  | |
| Manufacturer | |
| Suite 5, Valley Towers, Valley Road, Birkirkara BKR9022, Malta | |
| Model/Type reference | |
| BLU-TITAN-R6 | |
| Ratings | |
| 24Vdc, max. 4W, IP68, Class III | |
| Test item particulars : | |
| Classification of installation and use | |
| LED Underwater Light for underwater application | |
| Supply Connection | |
| Supply wire | |
| Possible test case verdicts: | |
| - test case does not apply to the test object..... : N/A | |
| - test object does meet the requirement : P (Pass) | |
| - test object does not meet the requirement : F (Fail) | |
| Testing..... : | |
| Date of receipt of test item | |
| 2022-10-10 | |
| Date (s) of performance of tests..... | |
| 2022-10-11 | |

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| <p>General remarks:</p> <p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Note: EN Group Differences together with National Differences and Special National Conditions, if any, are in the Appendix to the main body of this TRF. Throughout this report a comma (point) is used as the decimal separator. When determining of test conclusion, measurement uncertainty of test has been considered. The report is quoted the standard EN IEC 60598-1:2021 have been accredited by CNAS (L3337), and the following clauses in the standard EN IEC 60598-1:2021 are restricted by CNAS (L3337). Cl. 9.2 IPX1, IPX2, IPX9</p> <p>General product information:</p> <p>- The product is LED underwater light for underwater application.</p> <p>Summary of testing:</p> <p>Model BLU-TITAN-R6 was performed all the tests. The samples are found to comply with the standard: RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE (According to EN IEC 60598-1:2021 Clause 9.2.2 and Clause 9.2.9)</p> |
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| EN 60598-1 | | | |
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| Cl. | Requirement – Test | Result | Verdict |
| 9 (13.13) | RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE | | P |
| 9.2 | Tests for ingress of dust, solid objects and moisture: | | P |
| | - classification according to IP | IP68 | — |
| | - mounting position during test | As normal use | — |
| | - electric strength test afterwards | Between live parts and metal enclosure: 500V | P |
| 9.2.2 | <p>IP6X test:</p> <p>Dust-proof luminaires (first characteristic Ipn numeral 6) shall be tested in a dust chamber similar to that shown in Figure 6, in which talcum powder is maintained in suspension by an air current. The chamber shall contain 2 kg of powder for every cubic metre of its volume. The talcum powder used shall be able to pass through a square-meshed sieve whose nominal wire diameter is 50 µm and whose nominal free distance between wires is 75 µm. It shall not have been used for more than 20 tests.</p> <p>The test shall proceed as follows:</p> <p>a. The luminaire is suspended outside the dust chamber and operated at rated supply voltage until operating temperature is achieved.</p> <p>b. The luminaire, whilst still operating, is placed with the minimum disturbance in the dust chamber.</p> <p>c. The door of the dust chamber is closed.</p> <p>d. The fan/blower causing the talcum powder to be in suspension is switched on.</p> <p>e. After 1 min, the luminaire is switched off and allowed to cool for 3 h whilst the talcum powder remains in suspension .</p> | No talcum in dust-tight luminaire | P |

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| 9.2.9 | <p>IPX8 test:</p> <p>Pressure watertight luminaires (second characteristic IP numeral 8) are heated either by switching on the lamp or by other suitable means, so that the temperature of the luminaire enclosure exceeds that of the water in the test tank by between 5 °C and 10 °C.</p> <p>The luminaire shall then be switched off and subjected to a water pressure of 1,3 times that pressure which corresponds to the rated maximum immersion depth for a period of 30 min.</p> | Without water inside enclosure | P |
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Photo document



Picture 1: Overview of model BLU-TITAN-R6



Picture 2: IPX8 test view of models BLU-TITAN-R6



Picture 3: IP6X test view of models BLU-TITAN-R6

---End of test report---