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Report No.: LCS200629023BS

TEST REPORT

Client..... : SHENZHEN LEDYI LIGHTING CO., LTD.
Address..... : 3th Floor, 2nd Building, HuiYe Industrial Park, Tangtou Road
Central, Tangtou Community, Shiyan Street, Bao'an District,
Shenzhen, China
Brand Name..... : LEDYi
Manufacturer..... : SHENZHEN LEDYI LIGHTING CO., LTD.
Address..... : 3th Floor, 2nd Building, HuiYe Industrial Park, Tangtou Road
Central, Tangtou Community, Shiyan Street, Bao'an District,
Shenzhen, China
Testing Laboratory.... : Shenzhen Southern LCS Compliance Testing Laboratory Ltd.
Address..... : 101-201, No.39 Building, Xialang Industrial Zone, Heshuikou
Community, Matian Street, Guangming District, Shenzhen, China
Product Description.. : LED Neon Light
Models..... : NP-T1615-W40-10-CC
Rating..... : DC24V
Method..... : IEC 60529:1989+A1:1999+A2:2013
Test Item..... : IP68
Date of Test..... : 2020-06-30~2020-06-30
Date of Issue..... : 2020-07-01
Test Result..... : Pass

Test by:

Sissie Liu

Sissie Liu/ Project Engineer

Check by:

Torres He

Torres He/ Director

Approved by:



Jesse Liu/ Manager

Remark: 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 examination of the product sample submitted by the appliance. A general statement concerning the quality of the products from the series manufacturer cannot be derived therefore.



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General product information:

- All models have similar construction except size are difference.
- Unless otherwise specified, the model NP-T1615-W40-10-CC was chosen as representative model to perform all test.

Model	Rating
NP-T1615-W40-10-CC	DC24V
Remark: NP-X ₁ -X ₂ -X ₃ -X ₄ X ₁ -Section Size: T1615/S1220/T1010/S0612, X ₂ -Light Color: W27/W30/W32/W35/W37/W40/W50/W65/R/G/B/Y /P/TW/RGB/RGBW, X ₃ -Power: 5/10/15, X ₄ -Circuit Design: CC/CV.	

Equipment used during test:

ID Number	Instrument	Model/ Type	Calibration Date
SLCS-S-031	Sand and dust test box	SG-500	2020-05-15
SLCS-S-040	Submersible test unit	X8	2020-05-15
SLCS-S-135	Digital hygrometer thermometer	HTC-1	2020-05-15
SLCS-S-148	Air compressor	OTS-800	/



Test Item:

Dust test for first characteristic numerals 6

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 20°C to 30°C

Relative humidity: 25 %RH to 75 %RH

Test samples:

Clean and new sample were be tested

Test Method:

The test is made using a dust chamber incorporating the basic principles shown in figure 2 whereby the powder circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 μ m and the nominal width of a gap between wires 75 μ m. The amount of talcum powder to be used is 2 kg per cubic metre of the test chamber volume. It shall not have been used for more than 20 tests.

■ Category 1 enclosures:

The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump.

The suction connection shall be made to a hole specially provided for this test. If not otherwise specified in the relevant product standard, this hole shall be in the vicinity of the vulnerable parts. If it is impracticable to make a special hole, the suction connection shall be made to the cable inlet hole. If there are other holes (for example, more cable inlet holes or drain-holes) these shall be treated as intended for normal use on site.

The object of the test is to draw into the enclosure, by means of depression, a volume of air 80 times the volume of the sample enclosure tested without exceeding the extraction rate of 60 volumes per hour. In no event shall the depression exceed 2 kPa (20 mbar) on the manometer shown in figure 2.

If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2 h.

If, with a maximum depression of 2 kPa (20 mbar), the extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes have been drawn through, or a period of 8 h has elapsed.

□ Category 2 enclosures

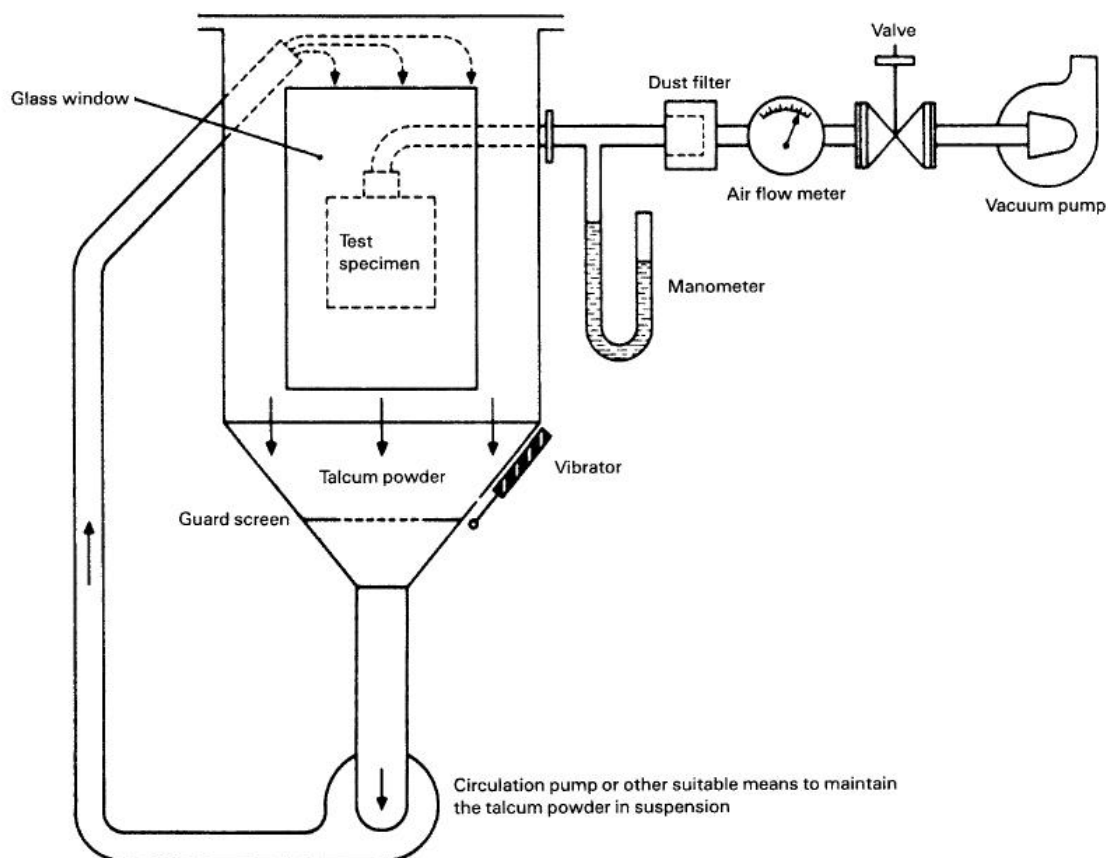
The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8 h

Acceptance Conditions:

The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test

Test Result:

☒ Pass ☐ Fail



IEC 280/01

NOTE See IEC 60068-2-68, figure 2 valid for La2 only.

Figure 2 – Test device to verify protection against dust (dust chamber)



Test Item:

Test for second characteristic numeral 8: continuous immersion subject to agreement

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 20°C to 30°C

Relative humidity: 25 %RH to 75 %RH

Test samples:

Clean and new sample were be tested

Test Method:

The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer so that the following conditions are satisfied:

- a) the lowest point of enclosures with a height less than 850mm is located 1 000mm below the surface of the water;
- b) the highest point of enclosures with a height equal to or greater than 850mm is located 150mm below the surface of the water;
- c) the duration of the test is 30 min;
- d) the water temperature does not differ from that of the equipment by more than 5 K.

However, a modified requirement may be specified in the relevant product standard if the tests are to be made when the equipment is energized and/or its parts in motion.

Unless there is a relevant product standard, the test conditions are subject to agreement between manufacturer and user, but they shall be more severe than those prescribed in 14.2.7 and they shall take account of the condition that the enclosure will be continuously immersed in actual use

Test Result:

☒ Pass ☐ Fail



Photo Documentation:

Photo 1: Overall view of model NP-T1615-W40-10-CC



Photo 2: IP6X test of model NP-T1615-W40-10-CC





Photo Documentation:

Photo 3: IPX8 test of model NP-T1615-W40-10-CC



Photo 4: After IP6X and IPX8 test of model NP-T1615-W40-10-CC



----- End of Test Report-----