

中国认可
国际互认
Report No.: LCS210621023BS
TESTING
CNAS L10180

TEST REPORT

Kunde: <i>Client:</i>	Shenzhen Sonoff Technologies Co., Ltd.
Adresse: <i>Address:</i>	1001, BLDG8, Lianhua Industrial Park, Shenzhen, GD, China
Hersteller: <i>Manufacturer:</i>	Shenzhen Sonoff Technologies Co., Ltd.
Adresse: <i>Address:</i>	1001, BLDG8, Lianhua Industrial Park, Shenzhen, GD, China
Name der Marke: <i>Brand Name:</i>	SONOFF
Beschreibung des Produkts: <i>Product Description:</i>	Soil Moisture Sensor
Modelle: <i>Models:</i>	MS01
Bewertung: <i>Rating:</i>	N/A
Verfahren: <i>Method:</i>	IEC 60529:1989+A1:1999+A2:2013
Prüfergebnis*: <i>Test result*:</i>	Pass

Datum der Prüfung: <i>Date of Test:</i>	Datum der Emission: <i>Date of Issue:</i>	Klassifizierung: <i>Classification:</i>	Gegenstand der Prüfung: <i>Test item:</i>
2021-06-24	2021-06-24	Commission Test	IP55 Test

Prüflabor (Testlabor) / Testing Laboratory:
Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

Test von/Test by: <i>Rebecca Qin</i> Rebecca Qin/ Project Engineer	Check von/Check by: <i>Torres He</i> Torres He/ Director	Genehmigt von/Approved by: <i>Jesse Liu</i> Jesse Liu/ Manager
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Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

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.

**Equipment used during test:**

ID Number	Instrument	Model/ Type	Calibration Date
SLCS-S-031	Sand and dust test box	SG-500	2021/5/13
SLCS-S-034	IPX5, IPX6 waterproof equipment	JL-1/2	2021/5/13
SLCS-S-135	Digital hygrometer thermometer	HTC-1	2021/5/14

Test Item:

Dust test for first characteristic numerals 5

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 15°C to 35°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 um and the nominal width of a gap between wires 75 um. 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.

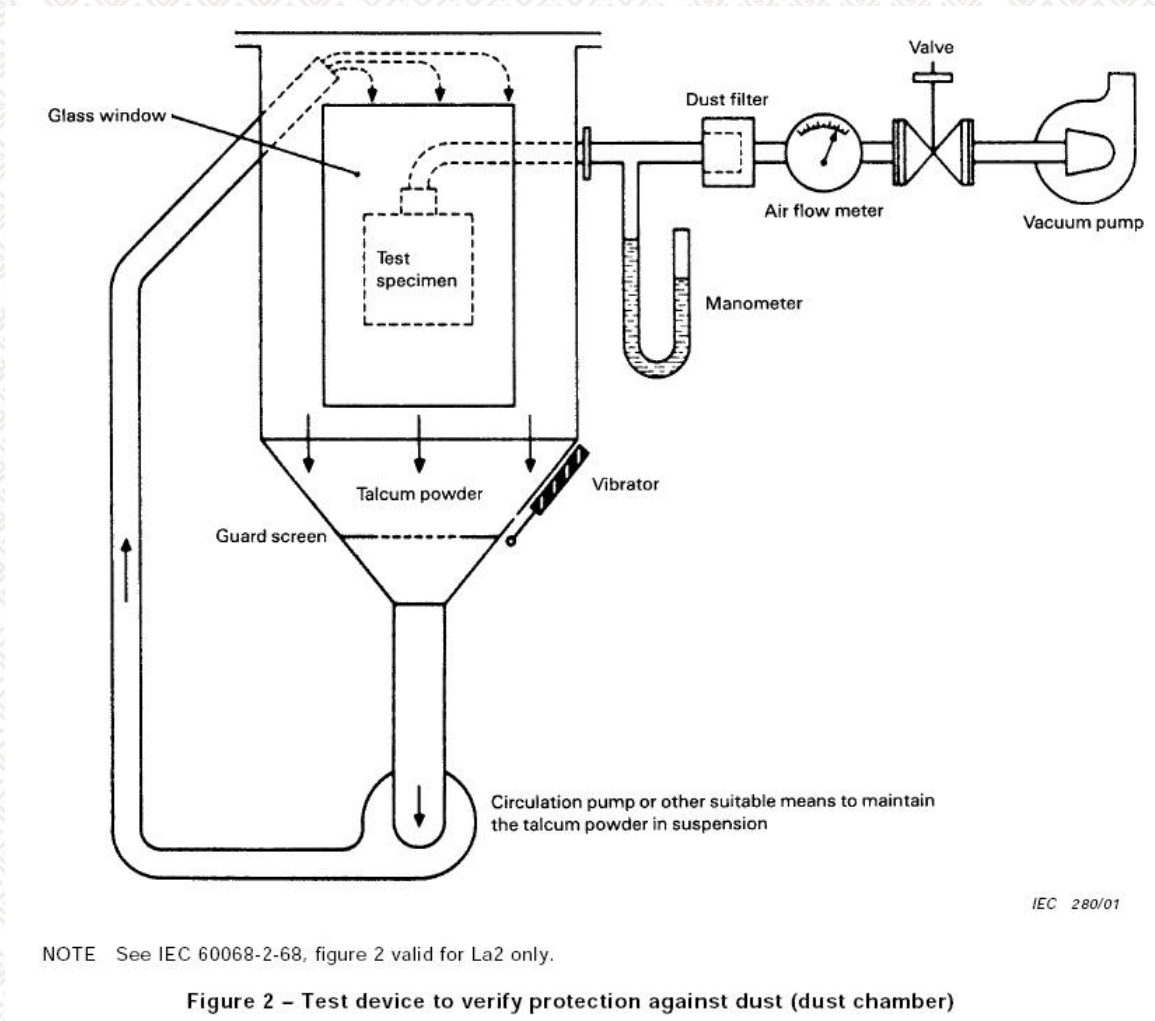
The test shall be continued for a period of 8 h

Acceptance Conditions:

The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct operation of the equipment or impair safety. Except for special cases to be clearly specified in the relevant product standard, no dust shall deposit where it could lead to tracking along the creepage distances.

Test Result:

Pass Fail



Test Item:

Test for second characteristic numeral 5 with the 6,3 mm nozzle

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 15°C to 35°C

Relative humidity: 25 %RH to 75 %RH

Test samples:

Clean and new sample were be tested

Test Method:

The test is made by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as shown in figure 6.

The conditions to be observed are as follows:

- internal diameter of the nozzle: 6,3 mm;
- delivery rate: 12,5 l/min \pm 5 %;
- water pressure: to be adjusted to achieve the specified delivery rate;
- core of the substantial stream: circle of approximately 40 mm diameter at 2,5 m distance from nozzle;
- test duration per square metre of enclosure surface area likely to be sprayed: 1 min;
- minimum test duration: 3 min;
- distance from nozzle to enclosure surface: between 2,5 m and 3 m.

Test Result:

Pass Fail

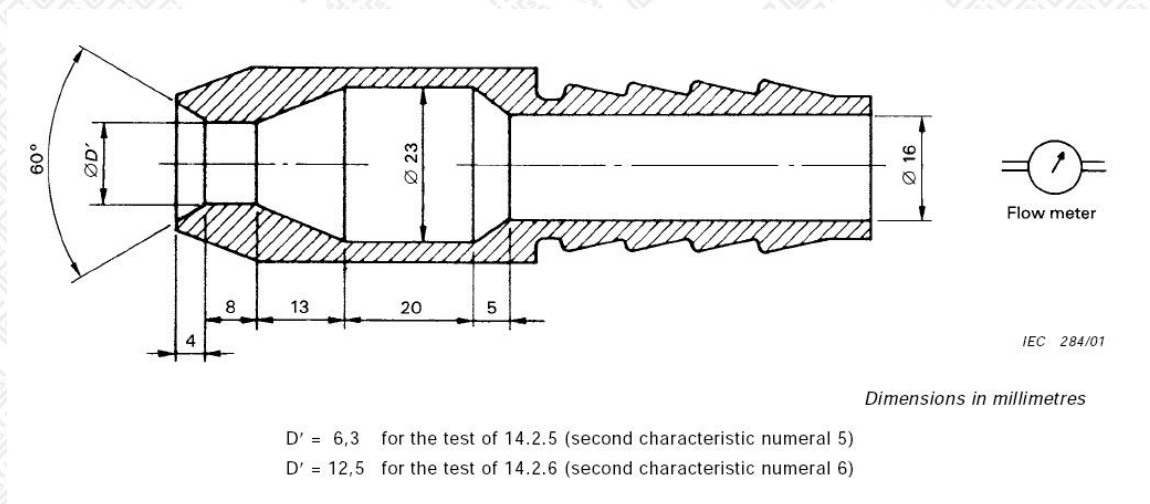


Figure 6 – Test device to verify protection against water jets (hose nozzle)

Photo Documentation:

Photo 1: Overall view of model MS01



Photo 2: Overall view of model MS01



Photo Documentation:

Photo 3: IP5X test of model MS01



Photo 4: IPX5 test of model MS01





Photo Documentation:

Photo 5: Test result of IP5Xand IPX5 test

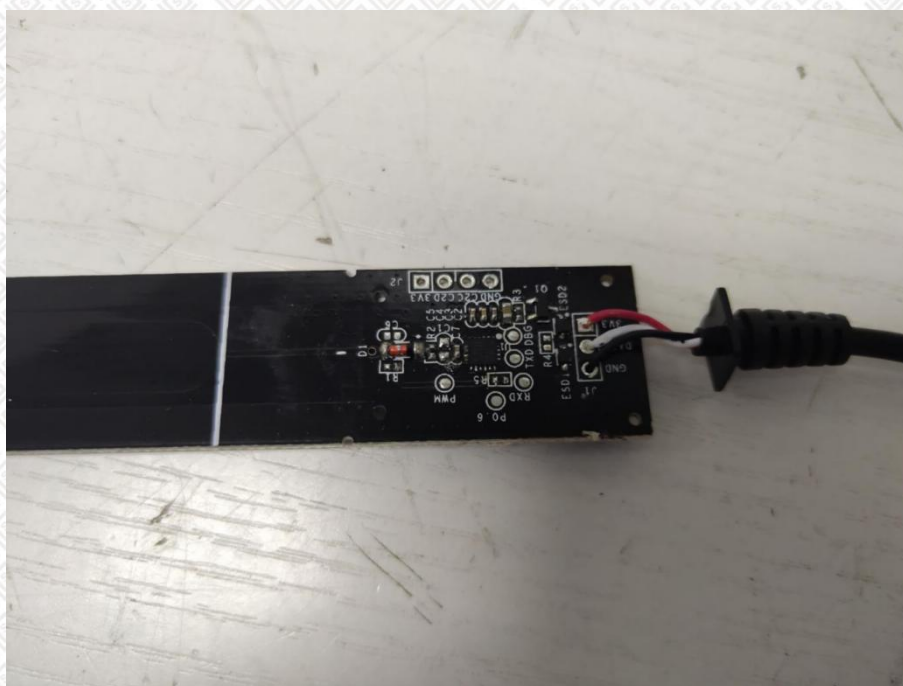
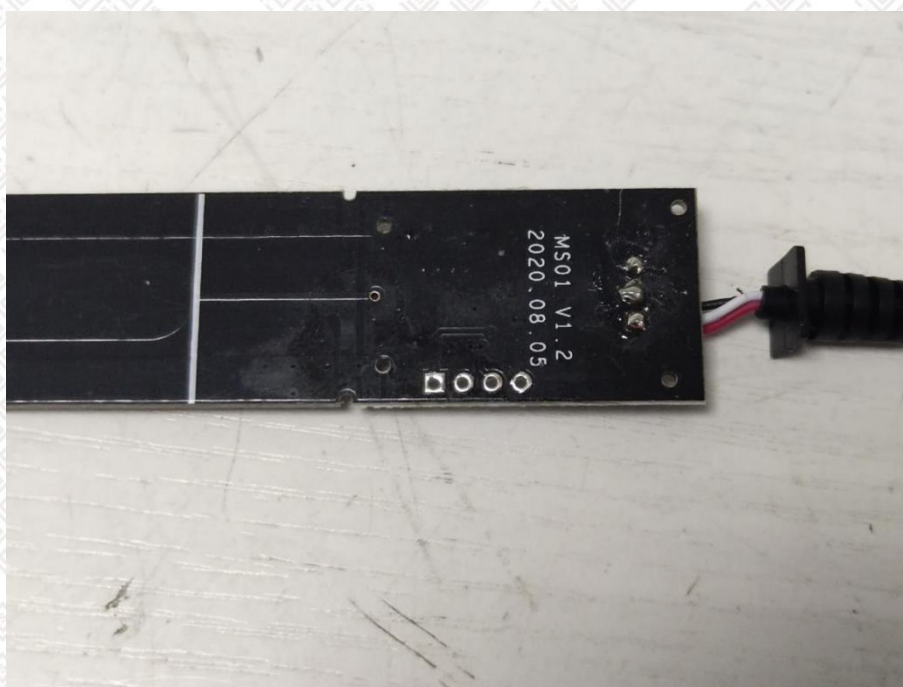


Photo 6: Test result of IP5Xand IPX5 test



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