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Report No.: LCS200810058BS

TEST REPORT

Client..... : DIMON Technology Limited
Address..... : Suite 14, 11/F Cheung Hing Industrial Building, 23 Tai Yip Street,
Kwun Tong, Kowloon, Hong Kong.
Brand Name..... : **DIMON**
TECHNOLOGY
Manufacturer..... : DIMON Technology Limited
Address..... : Suite 14, 11/F Cheung Hing Industrial Building, 23 Tai Yip Street,
Kwun Tong, Kowloon, Hong Kong.
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 Ceiling Light -IP54
Models..... : See model list on page 2
Rating..... : AC100-240V, 50/60Hz
Method..... : IEC 60529:1989+A1:1999+A2:2013(CSV/COR2:2015)
Test Item..... : IP54
Date of Test..... : 2020-08-24
Date of Issue..... : 2020-08-28
Test Result..... : Pass

Test by:

Lydia Luo

Lydia Luo/ Project Engineer

Check by:

Torres He

Torres He/ Director



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General product information:

- All models have similar appearance but different power.
- Unless otherwise specified, the model CHELA-26W was chosen as representative model to perform all test.

Model name	Rating
CHELA-7W	AC100-240V, 50/60Hz, 7W
CHELA-8W	AC100-240V, 50/60Hz, 8W
CHELA-9W	AC100-240V, 50/60Hz, 9W
CHELA-10W	AC100-240V, 50/60Hz, 10W
CHELA-11W	AC100-240V, 50/60Hz, 11W
CHELA-12W	AC100-240V, 50/60Hz, 12W
CHELA-13W	AC100-240V, 50/60Hz, 13W
CHELA-14W	AC100-240V, 50/60Hz, 14W
CHELA-15W	AC100-240V, 50/60Hz, 15W
CHELA-16W	AC100-240V, 50/60Hz, 16W
CHELA-17W	AC100-240V, 50/60Hz, 17W
CHELA-18W	AC100-240V, 50/60Hz, 18W
CHELA-19W	AC100-240V, 50/60Hz, 19W
CHELA-20W	AC100-240V, 50/60Hz, 20W
CHELA-21W	AC100-240V, 50/60Hz, 21W
CHELA-22W	AC100-240V, 50/60Hz, 22W
CHELA-23W	AC100-240V, 50/60Hz, 23W
CHELA-24W	AC100-240V, 50/60Hz, 24W
CHELA-25W	AC100-240V, 50/60Hz, 25W
CHELA-26W	AC100-240V, 50/60Hz, 26W
CHELA-27W	AC100-240V, 50/60Hz, 27W
CHELA-28W	AC100-240V, 50/60Hz, 28W
CHELA-29W	AC100-240V, 50/60Hz, 29W
CHELA-30W	AC100-240V, 50/60Hz, 30W

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-033	Spatter/rush showering equipment	BL	2020-05-15
SLCS-S-135	Digital hygrometer thermometer	HTC-1	2020-05-15



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: 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 μm and the nominal width of a gap between wires 75 μm . 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

The enclosure shall be deemed category 1 unless the relevant product standard for the equipment specifies that the enclosure is category 2

Acceptance Conditions:

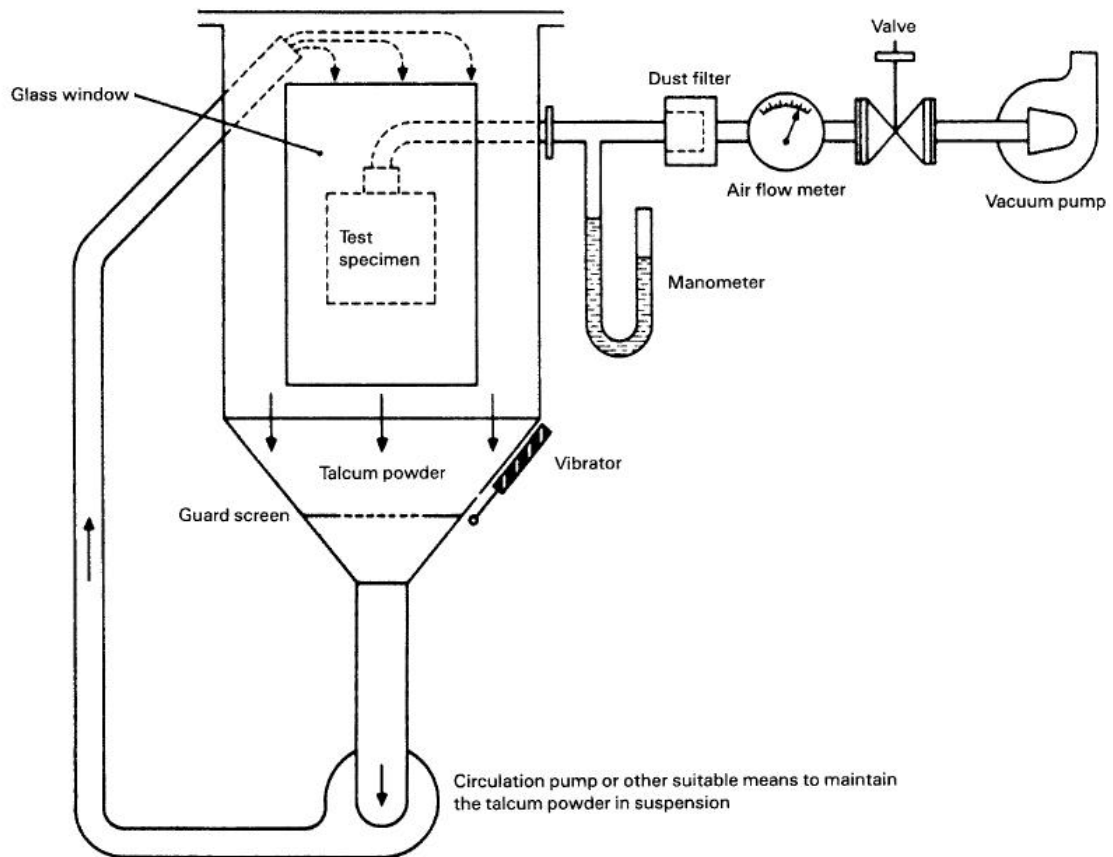
The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct



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



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 4 with oscillating tube or spray nozzle

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 one of the two test devices described in figure 4 and in figure 5 in accordance with the relevant product standard.

a) Conditions when using the test device as in figure 4 (oscillating tube): The oscillating tube has spray holes over the whole 180° of the semicircle. The total flow rate is adjusted as specified in table 9 and is measured with a flow meter. The tube is caused to oscillate through an angle of almost 360°, 180° on either side of the vertical, the time for one complete oscillation (2 × 360°) being about 12 s. The duration of the test is 10 min.

If not specified otherwise in the relevant product standard, the support for the enclosure under test is perforated so as to avoid acting as a baffle and the enclosure is sprayed from every direction by oscillating the tube to the limit of its travel in each direction.

b) Conditions when using the test device as in figure 5 (spray nozzle):

The counterbalanced shield is removed from the spray nozzle and the enclosure is sprayed from all practicable directions.

The rate of water flow and the spraying time per unit area are as specified in 14.2.3.

Test Result:

Pass Fail



Photo Documentation:

Photo 1: Overall view of model CHELA-26W



Photo 2: Overall view of model CHELA-26W





Photo Documentation:

Photo 3: IP5X test of model CHELA-26W



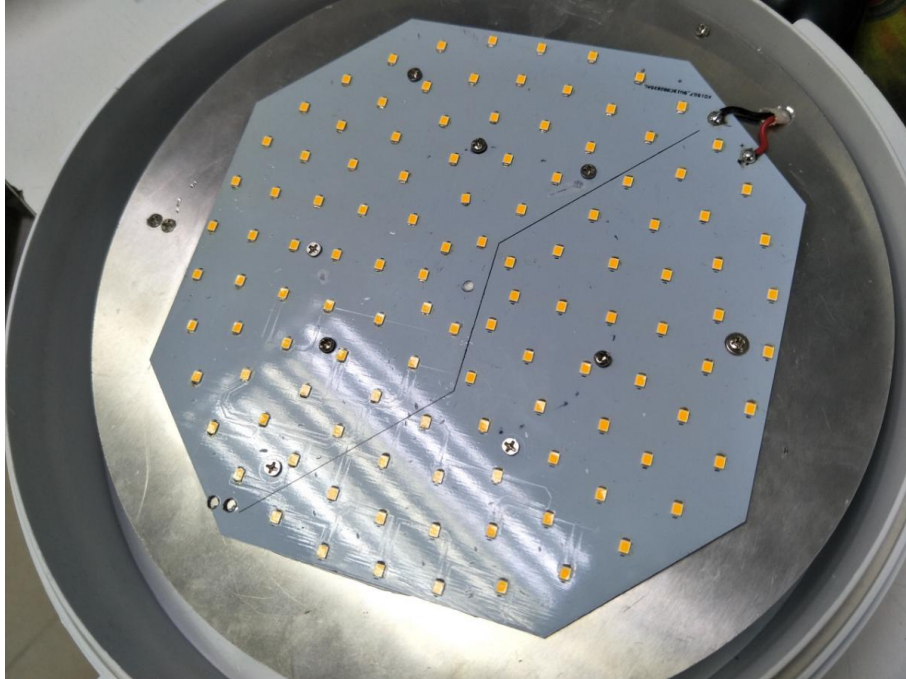
Photo 4: IPX4 test of model CHELA-26W





Photo Documentation:

Photo 5: Test result after IP5X and IPX4 test



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