

**Applicant** : Hong-Chang Electric Heater TECH. Company LTD. Date : Sept.28.2011  
NO.11, Alley53, Lane118, Shuang Lien Sec. 2,  
Min Tzu Rd., Ping-Chen, Taoyuan 32451, Taiwan

**Sample Description**

Sample Name : Heating Jacket  
Model Name : Heating Jacket SD-001 \*2

Date of Received : Sept. 21, 2011  
Date of Testing : Sept. 22, 2011~ Sept. 23, 2011

**Test Required** : As requested by the applicant, please see following sheets in detail.

<b>Conclusion</b>	: Test Information	Page	Test Result
	IP54 Test	2	Please see attached sheets

**Authorized by:**  
**On behalf of World Advance Co., Ltd.**



Casber Lu  
**Manager**



**Notes :**

- This report will be invalid if duplicated or photocopied in part.
- This report refers only to the specimen(s) submitted to test, and is invalid as separately used.

**1. IP54 test**

**Test Equipment :**

Equipment Name: Dust Test Chamber

Model number: ALAB-E-IPS-5600

Date of Calibration: Jan. 10, 2011

Equipment Name: Rain Test System

Model number: ALAB-E-IPS-0034

Date of Calibration: Jan. 10, 2011

**Laboratory Ambience Condition :**

Temperature : 26°C

Humidity : 65%RH

**Reference Document :**

The test was performed with reference to IEC60529:2001

Degrees of protection provide by enclosure (IP Code).

**Test Condition :**

Item	Type of dust	Amount of dust	Under pressure	Duration time
IP5X	talcum powder 50*70 μm	2 kg/m <sup>3</sup>		8 hrs

Item	Oscillating Tube	Water flow rate	Distance	Duration time
IPX4	Spray ±180° from Vertical	0.07 l/min, per hole	max. 200mm	10 min

**Test Result :**

Model Name	PASS	FAIL	No Judgment
Heating Jacket SD-001	V	—	—

Test Criteria:

- After test the UUT still can heating in normal condition.

## Appendix :

Test photo



01 IP5X Before test



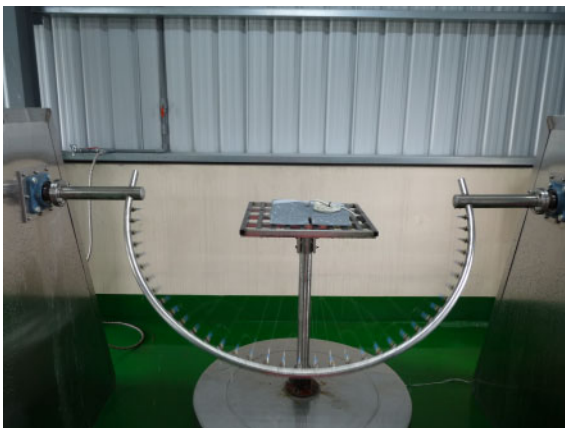
02 After test



03 After test (IP5X)



04 IPX4 Testing



05 IPX4 Testing



06 After test (IPX4)

- The End of Test Report