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EMC TEST REPORT

Application No.: SHEMO09070085904

Applicant: ZHANGZHOU JIMEI ELECTRONIC CO.,LTD.

Equipment Under Test (EUT):

NOTE: The following sample(s) submitted was/were identified on behalf of the client as

EUT Name: Weather station transmitter

Model Name: H997

Standards: CFR 47 part 2: 2008

CFR 47 Part 15: 2008

ANSI C63.4: 2003

Date of Receipt: July 30,2009

Date of Test: October 12,2009

Date of Issue: October 13,2009

Test Result : PASS*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Tino Pan

E&E Section Manager SGS-CSTC Co., Ltd.

San Yuan E&E EMC Engineer

San Yuan

SGS-CSTC Co., Ltd

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Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission	CFR 47 Part 15:2008	ANSI C63.4: 2003	Class B	PASS
Conducted Emission	CFR 47 Part 15:2008	ANSI C63.4: 2003	Class B	PASS
150KHz-30MHz	CFR 47 Part 15:2008	AINSI C03.4: 2003	Ciass B	rass

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3 General Information

3.1 Client Information

Applicant: ZHANGZHOU JIMEI ELECTRONIC CO.,LTD.

Address of Applicant: HENGY ROAD, LANTIAN INDUSTRIAL DISTRICT,

ZHANGZHOU, FUJIAN, CHINA

3.2 General Description of E.U.T.

EUT Name: Weather station transmitter

Model No.: H997

Serial No.: Not supplied by the client

3.3 Details of E.U.T.

Power Supply: 5V DC from USB of host PC

Power Cord: N/A

3.4 Description of Support Units

Name / Function	Model No.	Remark	S/N
LCD DISPLAYER	L170	IBM	23FD180
MOUSE	M-UAE119	Lenovo	41U3029
KEYBOARD	KU-0225	Lenovo	0151853
PC	8172	IBM	99L0111
PRINTER	Deskjet 6540	HP	MY4CDZR08G

3.5 Standards Applicable for Testing

The customer requested EMC tests for Weather station transmitter

The standards used were CFR 47 part 2: 2008, CFR 47 Part 15: 2008, ANSI C63.4: 2003

Table 1: Tests Carried Out Under CFR 47 Part 15: 2008:

Standard	Status
FCC Part 15 Subpart B: 2008 Radiated Emission	\checkmark
FCC Part 15 Subpart B: 2008 Conducted Emission	$\sqrt{}$

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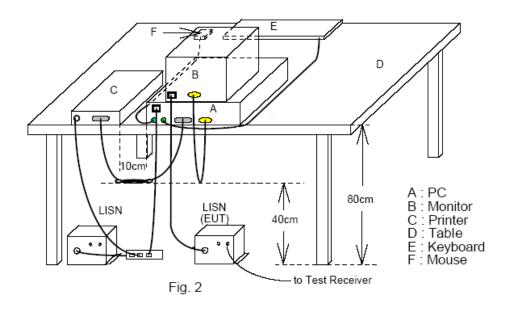
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 \times Indicates that the test is not applicable $\sqrt{}$ Indicates that the test is applicable

3.6 Test Setup (Block Diagram of Configuration)



3.7 Test Procedue

3.7.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 and 13 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

3.7.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 8 and 13 of ANSI C63.4-2003.

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3.8 Test Location

All the tests were performed at SGS E&E EMC lab

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. No.588 West Jindu Road, Songjiang District, Shanghai, China. 201612.

Tel: +86 21 6191 5666 Fax: +86 21 6191 5655

3.9 Test Confident level

The test facility is recognized, certified, or accredited by the following organizations:

CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2011-07-29.

FCC – Registration No.: 402683

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2012-03-17.

Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A. Expiry Date: 2011-09-29.

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4 Equipment Used during Test

Radiated Emission

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
1	EMI test receiver	Rohde & Schwarz	ESU40	100109	2009-06-04	2010-06-03
2	Antenna	SCHWARZBECK	VULB9168	9168-313	2009-06-04	2010-06-03
3	CONTROLLER	INNCO	CO200	474	/	/
4	Antenna	SCHWARZBECK	BBHA9120D	9120D-679	2009-06-04	2010-06-03
5	Antenna	SCHWARZBECK		9170-373	2009-06-04	2010-06-03

Conducted Emission

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
1	EMI test receiver	Rohde & Schwarz	ESCS30	100086	2009-06-04	2010-06-03
2	Line impedance stabilization network	SCHWARZBECK	NSLK8127	8127-490	2009-05-08	2010-05-07
3	Line impedance stabilization network	ETS	3816/2	00034161	2009-07-30	2010-07-29

General Equipment

	Scheral Equipment					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal.Due date
1	Atmosphere pressure meter	Shanghai ZhongXuan Electronic Co;Ltd	BY-2003P	1	2008-10-15	2009-10-14
2	CLAMP METER	FLUKE	316	86080010	2009-04-27	2010-04-26
3	Thermo-Hygrometer	ZHICHEN	ZC1-2	01050033	2008-10-21	2009-10-20
4	Digital illuminance meter	TES electrical electronic Corp.	TES-1330A	050602219	2008-10-16	2009-10-15

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5 Emission Test Results

5.1 Radiated Emissions

Test Requirement: CFR 47 Part 15:2008

Test Method: ANSI C63.4:2003, CISPR 22:2006

Test Date:: October 12,2009

Measurement Distance: 3m Class: B

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Result: PASS

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0°C Humidity: 55 % RH Atmospheric Pressure: 1014 mbar

EUT Operation: The EUT is in representative work mode.

5.1.2 Measurement Procedure:

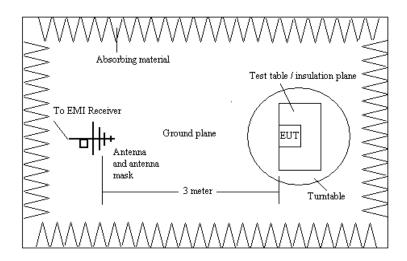
- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emission to ensure EUT compliance.
- 3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4. Repeat above procedures until all frequency measured were complete.

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5.1.3 Test setup:



5.1.4 Test Data:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Safe Margin (dB)	Ant.Pol (H/V)
41.78	18.4	14.8	0.1	33.3	40.0	6.7	Н
62.25	9.6	13.0	0.1	22.7	40.0	17.3	Н
64.06	14.6	12.5	0.1	27.2	40.0	12.8	Н
72.08	15.6	11.0	0.1	26.7	40.0	13.3	Н
168.22	12.2	15.1	0.2	27.5	43.5	16.0	Н
609.40	12.7	20.7	0.4	33.8	46.0	12.2	Н
37.31	13.2	14.2	0.1	27.5	40.0	12.5	V
41.44	14.9	14.8	0.1	29.8	40.0	10.2	V
63.72	14.4	13.0	0.1	27.5	40.0	12.5	V
168.23	17.3	15.1	0.2	32.6	43.5	10.9	V
609.41	17.9	20.7	0.4	39.0	46.0	7.0	V
880.25	8.7	23.2	0.4	32.3	46.0	13.7	V

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5.2 Conducted Emissions

Test Requirement: CFR 47 Part 15:2008

Test Method: ANSI C63.4:2003, CISPR 22:2006

Test Date:: October 12,2009

Class: B

Detector: Peak for pre-scan (9kHz Resolution Bandwidth for 0.15-30MHz)

Result: PASS

5.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0°C Humidity: 55 % RH Atmospheric Pressure: 1014 mbar

EUT Operation: The EUT is in representative work mode.

Note: We have performed all status and we just choose the worse case in this report,

5.2.2 Measurement Procedure:

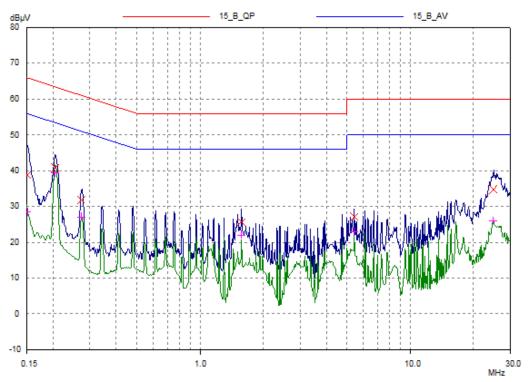
- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2.Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all frequency measured were complete.

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L Line:



Final Measurement Results

Frequency	QP Level	QP Limit	QP Delta
MHz	dΒμV	dΒμV	dB
0.1512	38.69	65.93	27.24
0.20466	40.81	63.42	22.61
0.27266	31.86	61.04	29.18
1.57379	25.65	56.00	30.35
5.41166	27.12	60.00	32.88
24.7909	34.79	60.00	25.21
Frequency	AV Level	AV Limit	AV Delta
MHz	dΒμV	dΒμV	dB
0.1512	28.43	55.93	27.50
0.20466	39.28	53.42	14.14
0.27266	27.11	51.04	23.93
1.57379	22.02	46.00	23.98
5.41166	22.94	50.00	27.06
5.41166 24.7909			27.06 23.96

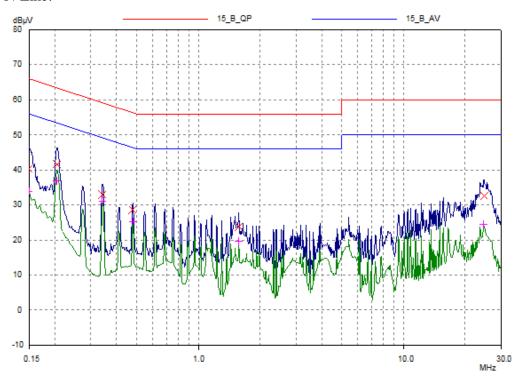
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N Line:

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Final Measurement Results

Frequency	QP Level	QP Limit	QP Delta
MHz	dΒμV	dΒμV	dB
0.15	40.33	66.00	25.67
0.20466	41.62	63.42	21.80
0.34082	33.01	59.18	26.17
0.48009	28.62	56.34	27.72
1.57379	23.84	56.00	32.16
24.59414	32.57	60.00	27.43
Frequency	AV Level	AV Limit	AV Delta
Frequency MHz	AV Level dΒμV	AV Limit dΒμV	AV Delta dB
MHz	dΒμV	dΒμV	dB
MHz 0.15	dΒμV 33.87	dΒμV 56.00	dB 22.13
MHz 0.15 0.20488	dBµV 33.87 36.85	dBμV 56.00 53.42	dB 22.13 16.57
MHz 0.15 0.20466 0.34082	dBμV 33.87 36.85 30.93	dBμV 56.00 53.42 49.18	dB 22.13 16.57 18.25
MHz 0.15 0.20466 0.34082 0.48009	dBμV 33.87 36.85 30.93 25.29	dBμV 56.00 53.42 49.18 46.34	dB 22.13 16.57 18.25 21.05

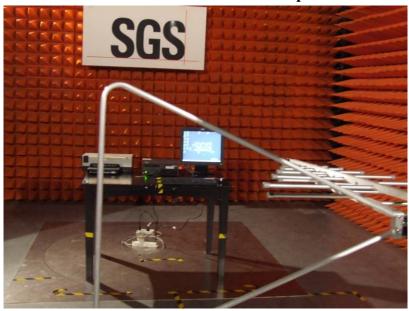
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6 EQUIPMENT UNDER TEST PICTURES

6.1.1 Radiated Emission Test Setup



6.1.2 Conducted Emission Test Setup



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6.1.3 EUT Constructional Details





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THE END OF REPORT