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# TEST REPORT

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Report No.: SRMC2009-H024-E0013

Product Name: GSM/GPRS/EDGE Tribands/WCDMA  
Digital Mobile Phone

Product Model: H311A

Applicant: Inventec Appliances (Jiangning) Corporation

Manufacturer: Inventec Appliances (Jiangning)  
Corporation

Specification: FCC Part15B July 10, 2008 (Certification)

FCC ID: UPMW310001

The State Radio Monitoring Center

State Radio Spectrum Monitoring and Testing Center

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-68009202 Fax: 86-10-68009205

## CONTENTS

1. General information .....	3
1.1 Notes of the test report .....	3
1.2 Information about the testing laboratory.....	3
1.3 Applicant's details .....	3
1.4 Manufacturer's details.....	3
1.5 Application details .....	4
1.6 Reference specification.....	4
1.7 Information of EUT .....	4
1.7.1 General information.....	4
1.7.2 EUT details .....	5
1.7.3 Auxiliary equipment details.....	5
2. Test information .....	6
2.1 Summary of the test results.....	6
2.2 Test result.....	7
2.2.1 Conducted Emissions-FCC Part15.107 .....	7
2.2.2 Radiated Emissions-FCC Part15.109 .....	9
2.3. List of test equipments .....	11
Appendix.....	12

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## 1. General information

### 1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

### 1.2 Information about the testing laboratory

Company: The State Radio Monitoring Center  
State Radio Spectrum Monitoring and Testing Center  
Address: No.80 Beilishi Road, Xicheng District, Beijing China  
City: Beijing  
Country or Region: China  
Contacted person: Wang Junfeng  
Tel: +86 10 68009181 +86 10 68009202  
Fax: +86 10 68009195 +86 10 68009205  
Email: Wangjf@srrc.org.cn

### 1.3 Applicant's details

Company: Inventec Appliances (Jiangning) Corporation  
Address 113, Jiangjun Road, Jiangning Economic and Technological Development Zone  
City: Nanjing, Jiangsu  
Country or Region: P.R.China  
Grantee Code: UPM  
Contacted person: William Zhang  
Tel: +86 25 52262313  
Fax: +86 25 52218366  
Email: zhang.william@inventec-inc.com

### 1.4 Manufacturer's details

Company: Inventec Appliances (Jiangning) Corporation  
Address 113, Jiangjun Road, Jiangning Economic and Technological Development Zone  
City: Nanjing, Jiangsu  
Country or Region: P.R.China  
Grantee Code: UPM  
Contacted person: William Zhang  
Tel: +86 25 52262313  
Fax: +86 25 52218366  
Email: zhang.william@inventec-inc.com

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## 1.5 Application details

Date of reception of test sample: 1<sup>st</sup> July 2009

Date of test: 1<sup>st</sup> July 2009 to 5<sup>th</sup> Aug 2009

## 1.6 Reference specification

FCC Part 15B July 10, 2008 (Certification)

## 1.7 Information of EUT

### 1.7.1 General information

Name of EUT	GSM/GPRS/EDGE Tribands /WCDMA Digital Mobile Phone
FCC ID	UPMW310001
Frequency range	Tx:1850~1910MHz Rx:1930~1990MHz
Rated output power	30.0dBm
E.I.R.P.	27.4dBm
Modulation type	GMSK/8PSK
Emission Designator	300KGXW/300KG7W
Duplex mode	FDD
Equipment Class	Class B
Duplex spacing:	80MHz
Antenna type	Integral
Power Supply	Battery or charger
Rated Power Supply Voltage	3.7V
Extreme Temperature	Lowest: -30°C Highest: +50°C
Extreme Voltage	Minimum: 3.6V Maximum: 4.2V
HW Version	5A
SW Version	1.00

### 1.7.2 EUT details

Name	Model	IMEI
GSM/GPRS/EDGE Tribands /WCDMA Digital Mobile Phone	H311A	355753030000004

### 1.7.3 Auxiliary equipment details


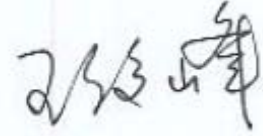
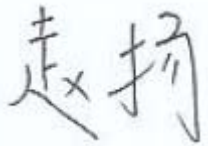
Equipment	Charger
Manufacturer	SHENZHEN ANTHIN POWER SUPPLY CO., LTD.
Model Number	APW305UB-03-06

Equipment	Battery
Manufacturer	Leung's communication & electric products(guangzhou) ltd.
Model Number	PBH311AZ10
Capacity	820mAh
Rated Voltage	3.7V

## 2. Test information

### 2.1 Summary of the test results

No.	Test case	FCC reference	Verdict
1	Conducted emissions	15.107	Pass
2	Radiated emissions	15.109	Pass

This Test Report Is Issued by: Mr. Song Qizhu, Director of the test lab 	Checked by: 
Tested by: 	Issued date: <b>2009.8.27</b>

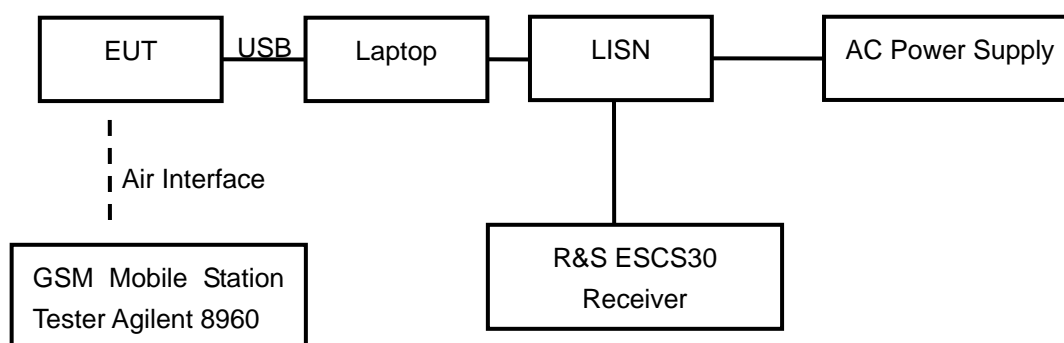
## 2.2 Test result

### 2.2.1 Conducted Emissions-FCC Part15.107

Ambient condition:

Temperature	Relative humidity	Pressure
24°C	56%	101.4kPa

Test Setup:



Test Procedure:

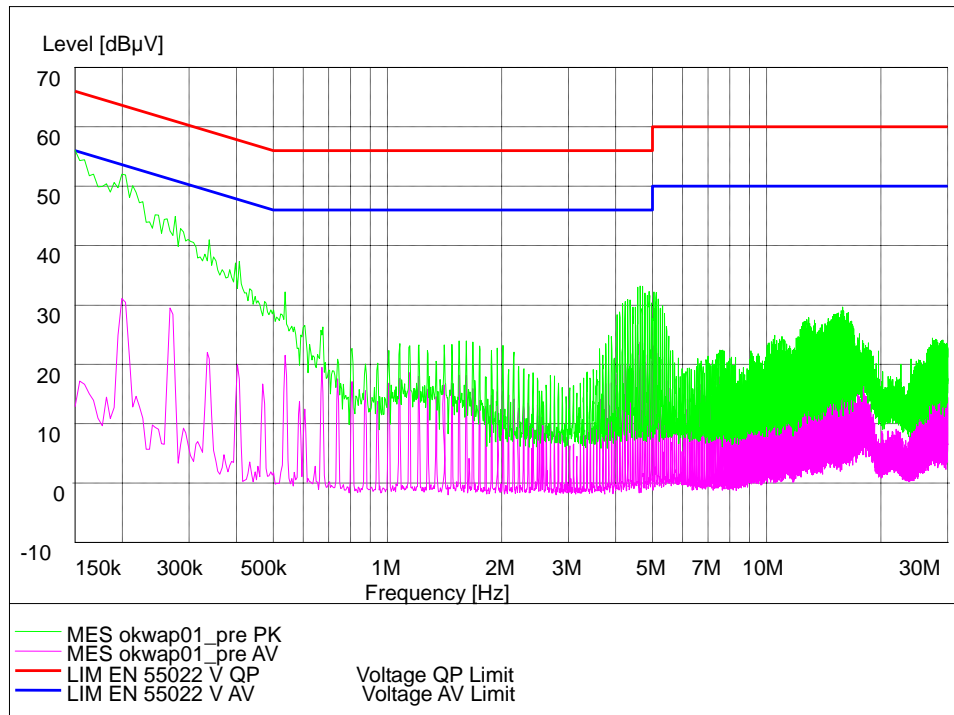
The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The EUT connect with a laptop via the USB cable. The accessories of the EUT are connected with the EUT such as headset etc. During the test the data transferring via USB cable between EUT and laptop is maintained. The AC main power supply of the laptop is connected to LISN and LISN is connected to the reference ground. The test set-up and the test methods are performed according to ANSI C63.4:2003. The measurement should be done for both L line and N line. The receiver uses both average detector and Quasi-peak detector. The EUT is working in idle mode.

Limit:

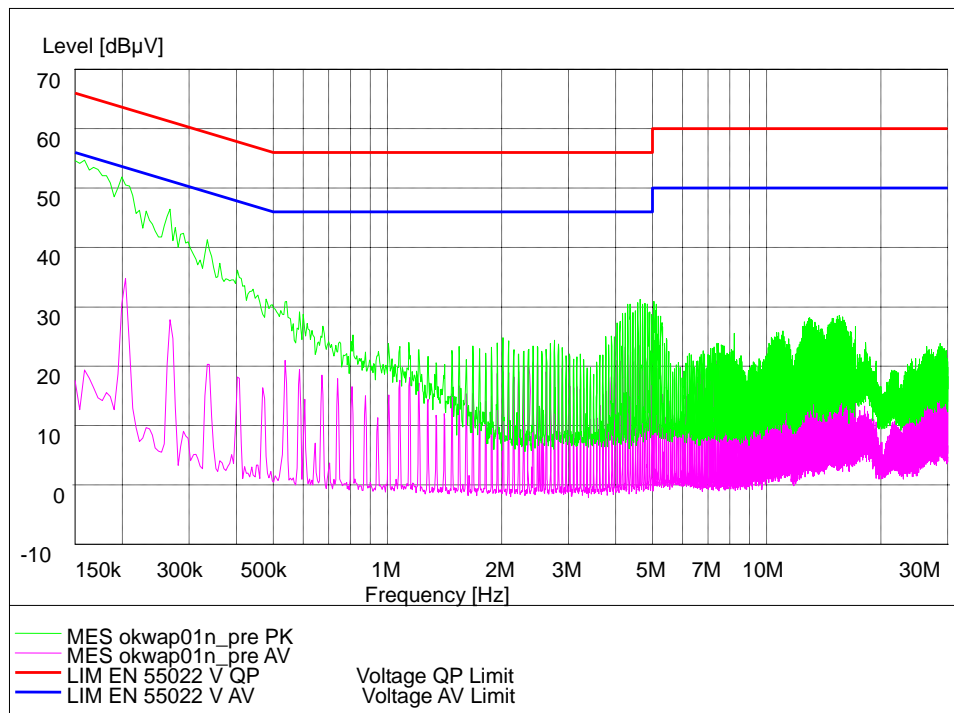
Frequency of Emission(MHz)	Limits(dB $\mu$ V)	
	Quasi-peak	Average
0.15~0.5	66 to 56*	56 to 46*
0.5~5	56	46
5~30	60	50

Note: \* Decreases with the logarithm of the frequency

Test result:  
Refer to the following figures.



L Line



N Line

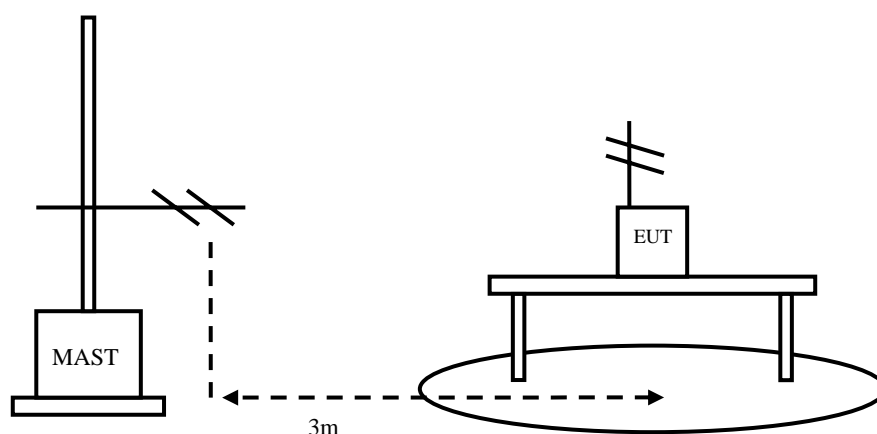


## 2.2.2 Radiated Emissions-FCC Part15.109

Ambient condition:

Temperature	Relative humidity	Pressure
24°C	56%	101.4kPa

Test Setup:



Test Procedure:

The EUT should be placed on a non-metallic table 80cm above the ground plane. The receive antennas shall be moved from 1 to 4 meters. The distance between EUT and receive antenna should be 3 meters.

The accessories of the EUT are connected with the EUT such as headset etc. During the test the data transferring via USB cable between EUT and laptop is maintained. The test set-up and the test methods are performed according to ANSI C63.4:2003.

Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz, using receive log period antenna HL562.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna.

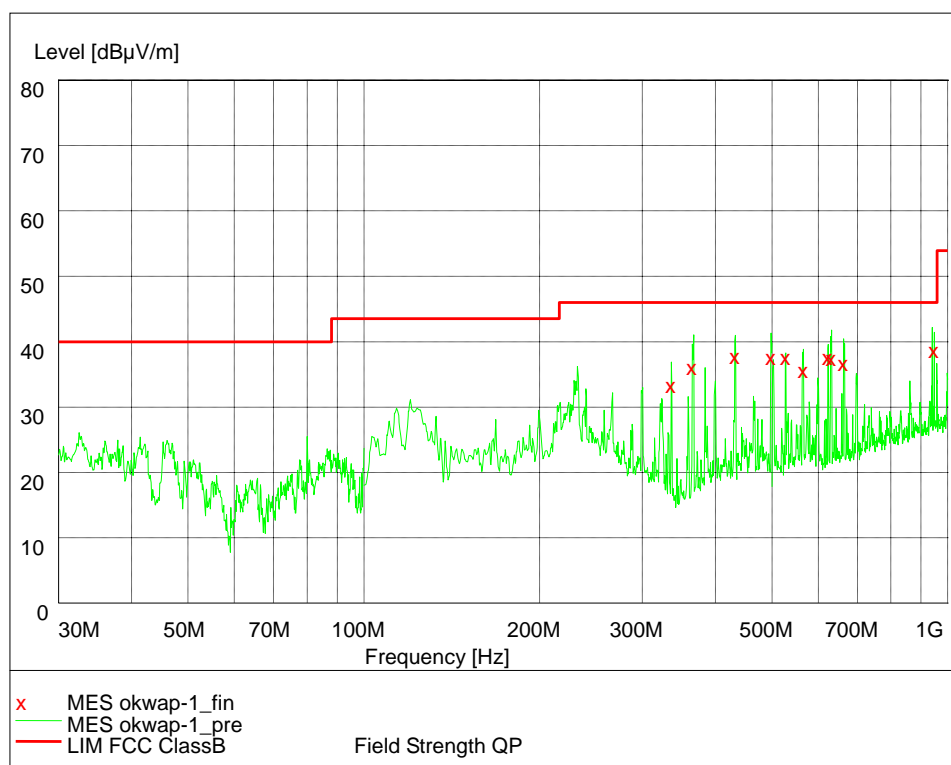
The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Limit:

Frequency of Emission(MHz)	Limits	
	Detector	Unit (dB $\mu$ V/m)
30~88	Quasi-peak	40
88~216	Quasi-peak	43.5
216~960	Quasi-peak	46
960~1000	Quasi-peak	54
1000~5th harmonic of the highest frequency or 40GHz, whichever is lower	Average	54
	Peak	74

Test result:

Refer to the following figures.



Note: For measurement above 1GHz, all emissions level measured were more than 10dB below the limit.

### 2.3. List of test equipments

No.	Name/Model	Manufacturer	S/N	Calibration Due Date
1	23.18m×16.88m×9.60m Semi-Anechoic Chamber	FRANKONIA	-----	19 <sup>th</sup> Aug. 2009
2	ESI 40 EMI test receiver	R&S	100015	19 <sup>th</sup> Aug. 2009
3	E5515C(8960) Mobile Station Tester	Agilent	GB44050904	19 <sup>th</sup> Aug. 2009
4	9.080m×5.255m×3.525m Shielding room	FRANKONIA	-----	19 <sup>th</sup> Aug. 2009
5	ESCS30 EMI test receiver	R&S	100029	19 <sup>th</sup> Aug. 2009
6	HL562 Ultra log test antenna	R&S	100016	19 <sup>th</sup> Aug. 2009
7	ESH3-Z2 Pulse limiter	R&S	10002	19 <sup>th</sup> Aug. 2009
8	ESH3-Z5 Attenuator	R&S	100020	19 <sup>th</sup> Aug. 2009
9	ESH2Z11 LISN	R&S	50FH-020-10	19 <sup>th</sup> Aug. 2009
10	HF 906 Double-Ridged Waveguide Horn Antenna	R&S	100030	19 <sup>th</sup> Aug. 2009
11	HF 906 Double-Ridged Waveguide Horn Antenna	R&S	100029	19 <sup>th</sup> Aug. 2009
12	PS2000 Turn Table	FRANKONIA	-----	19 <sup>th</sup> Aug. 2009
13	MA260 Antenna Master	FRANKONIA	-----	19 <sup>th</sup> Aug. 2009
14	ES-K1EMI test software	R&S	-----	19 <sup>th</sup> Aug. 2009
15	HL562 Receive antenna	R&S	100167	19 <sup>th</sup> Aug. 2009

## Appendix