FCC 47 CFR PART 15 SUBPART C

Product Type	:	Smartphone
Applicant	:	HTC Corporation
Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Trade Name	:	HTC
Model Number	:	PJ46100
Test Specification	:	FCC 47 CFR PART 15 SUBPART C: Oct., 2010 ANSI C63.4-2009
Application Purpose:	:	Original
Receive Date	:	Jan. 19, 2012
Issue Date	:	Feb. 23, 2012

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade City,
Taoyuan County 334, Taiwan R.O.C.
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Taiwan Accreditation Foundation accreditation number: 1330

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Feb. 23, 2012	Initial Issue	

Verification of Compliance

Issued Date: 2012/02/23

Product Type	:	Smartphone
Applicant	:	HTC Corporation
Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Trade Name	:	HTC
Model Number	:	PJ46100
FCC ID	:	NM8PJ46100
EUT Rated Voltage	:	DC 5.0V, 1.0A
Test Voltage	:	120 Vac / 60 Hz
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C: Oct., 2010 ANSI C63.4-2009
Test Result	:	Complied
Application Purpose	:	Original
Performing Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City, Taoyuan County 334, Taiwan R.O.C. Tel：+886-3-2710188 / Fax：+886-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2009 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.225.
The test results of this report relate only to the tested sample identified in this report.

Approved By	:		Reviewed By	:	
(Manager)		(Murphy Wang)	(Testing Engineer)		(Fly Lu)

TABLE OF CONTENTS

1 General Information

1.1 Summary of Test Result

Reference		Test	Results	Section
47 CFR Part 15.225	RSS 210 Issue 8			
15.207(a)	RSSGen(7.2.2)	Conducted Emissions Voltage	PASS	4.5
15.225 (a), (b), (c), (d) 15.209	RSS210(A2.6) RSS210(A8.5)	Radiated Emission Limits	PASS	5.5
15.225(e)	RSS210(A2.6)	Frequency Stability	PASS	6.5
CFR 47 Part 15.225(2006) / RSS 210 Issue 8 (2010) / ANSI C63.4: 2009 / RSS-Gen Issue 3: 2010				

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.24 dB.

Radiated Emission

The measurement uncertainty of 30 MHz - 1GHz is evaluated as ± 3.072dB.

2 EUT Description

Applicant	:	HTC Corporation
Applicant Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Manufacturer	:	HTC Corporation
Manufacturer Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Product	:	Smartphone
Trade Name	:	HTC
Model Number	:	PJ46100
IMEI Number	:	359188040039208
FCC ID	:	NM8PJ46100
Frequency Range	:	13.56 MHz
Modulation Type	:	ASK
Number of Channels	:	1 Channel
Antenna Type	:	PIFA antenna

3 Test Methodology

3.1. Mode of Operation

The following test mode(s) were scanned during the preliminary test：

Pre-Test Mode
Mode 1: RFID Normal Link Mode
Mode 2: Receiver Mode

After the preliminary scan, the following test mode was found to produce the highest emission level：

Final Test Mode
Mode 1: RFID Normal Link Mode
Mode 2: Receiver Mode

Then, the above highest fundamental level mode of the configuration of the EUT and antenna was chosen for all final test items.

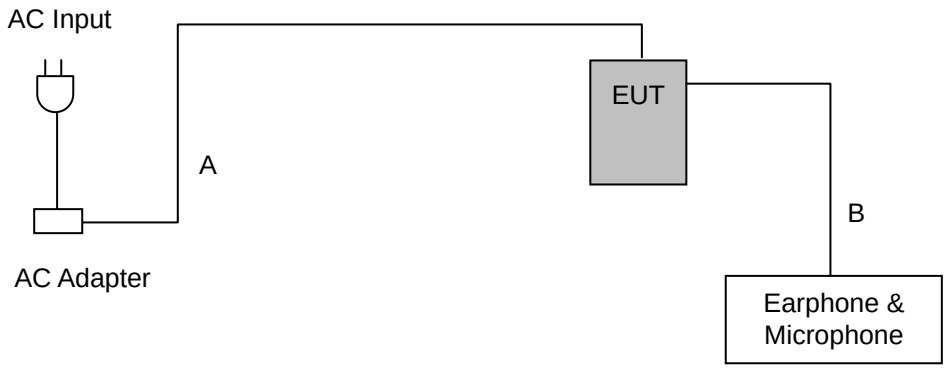
By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that “X axis” position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation.

3.2. EUT Exercise Software

1.	Setup the EUT as shown on 3.3.
2.	Turn on the power of all equipment.
3.	The EUT will start to operate function.

3.3. Configuration of Test System Details



Signal Cable Type		Signal Cable Description
A	USB Cable	Shielded, 0.9 m
B	Earphone & Microphone Cable	Non-Shielded, 1.1 m

3.4. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

4 Conducted Emission Measurement

4.1. Limit

Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

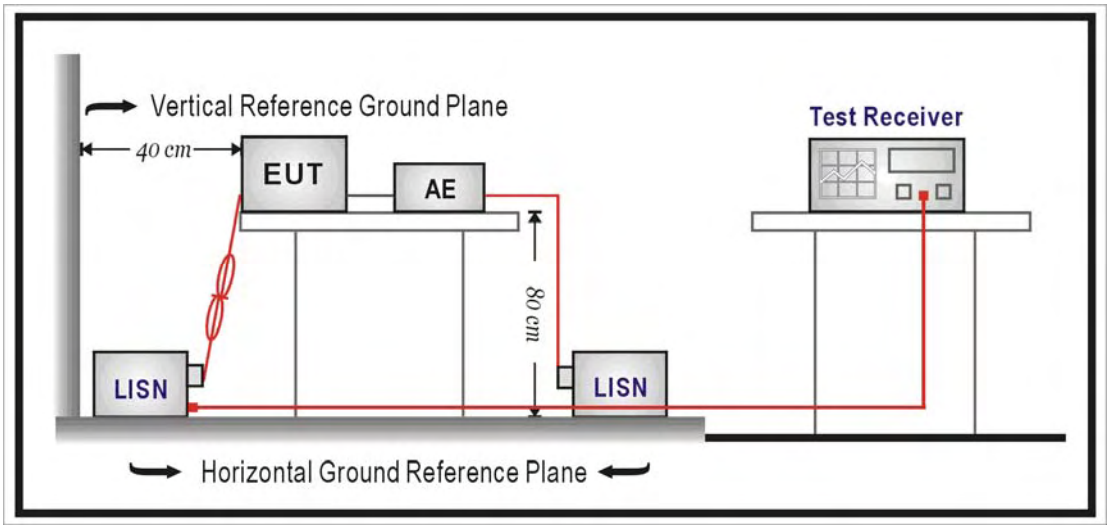
4.2. Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100367	06/30/2011	(1)
LISN	R&S	ENV216	101040	03/04/2014	(1)
LISN	R&S	ENV216	101041	03/04/2014	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

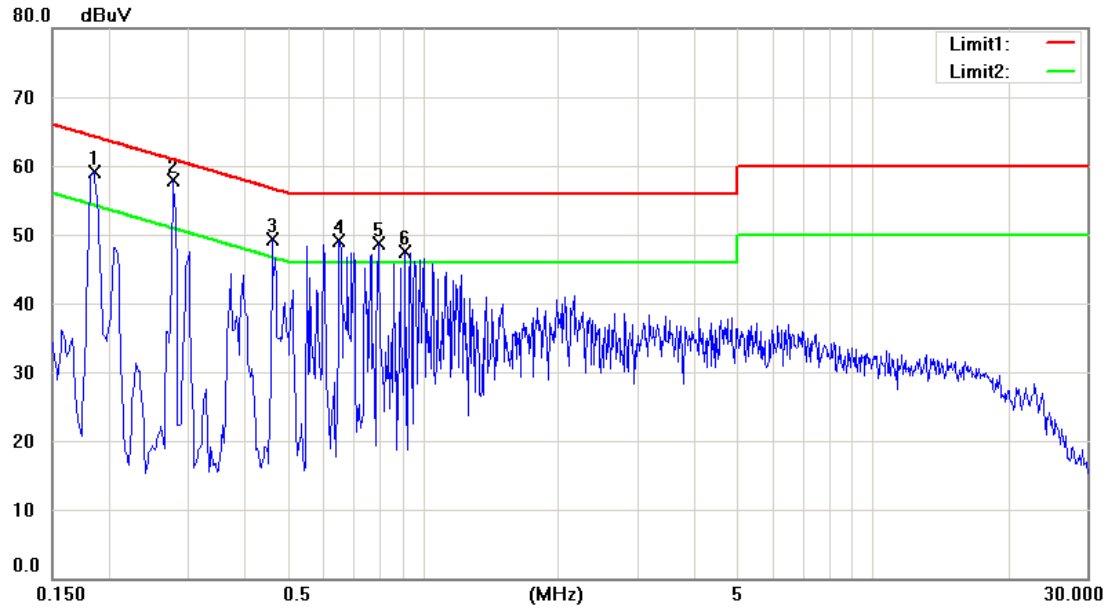
The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

Spectrum Analyzer Settings

Measurement Frequency	Preliminary Peak Scan		Final Detection	
	Resolution Bandwidth	Video Bandwidth	Quasi-Peak Bandwidth	Average Video Bandwidth
9kHz to 150kHz	10kHz	10kHz	200Hz	10Hz
150kHz to 30MHz	100kHz	100kHz	9kHz	10Hz

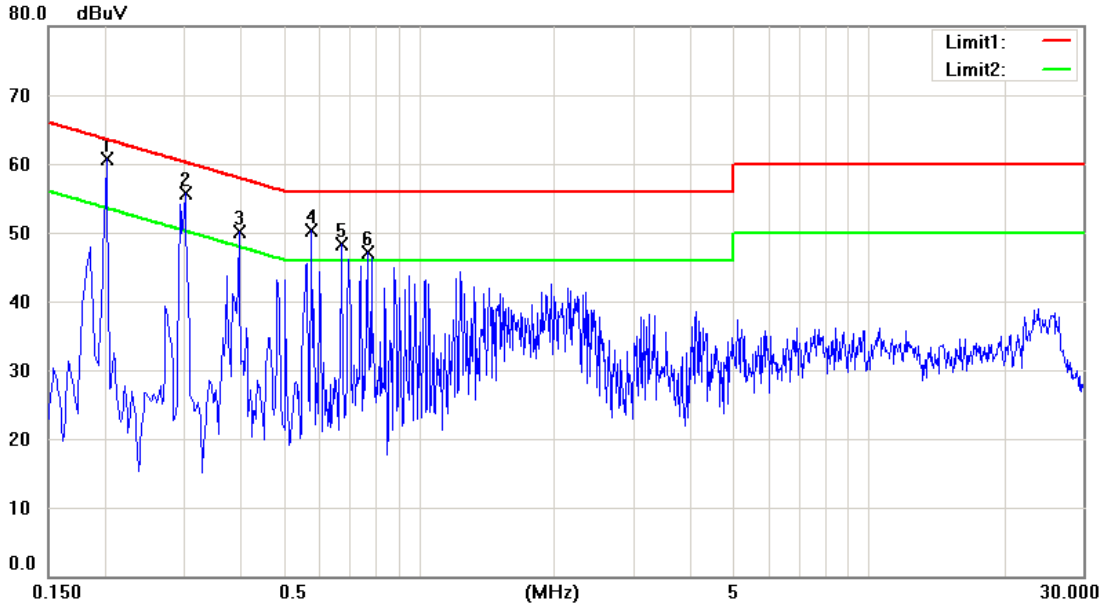
4.5. Test Result

Standard:	FCC Part 15C	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	18(℃)/50%RH
Mode:	Mode 1	Date:	02/10/2012
		Test By:	Fly Lu
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1860	50.40	29.57	9.59	59.99	39.16	64.21	54.21	-4.22	-15.05	Pass
2	0.2780	42.33	18.13	9.59	51.92	27.72	60.88	50.88	-8.96	-23.16	Pass
3	0.4620	34.77	12.53	9.59	44.36	22.12	56.66	46.66	-12.30	-24.54	Pass
4	0.6540	35.13	16.90	9.60	44.73	26.50	56.00	46.00	-11.27	-19.50	Pass
5	0.7980	36.39	16.70	9.62	46.01	26.32	56.00	46.00	-9.99	-19.68	Pass
6	0.9140	35.05	15.02	9.62	44.67	24.64	56.00	46.00	-11.33	-21.36	Pass

Standard:	FCC Part 15C	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	18(℃)/50%RH
Mode:	Mode 1	Date:	02/10/2012
		Test By:	Fly Lu
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.2020	47.89	26.93	9.67	57.56	36.60	63.53	53.53	-5.97	-16.93	Pass
2	0.3020	41.38	18.32	9.67	51.05	27.99	60.19	50.19	-9.14	-22.20	Pass
3	0.3980	37.50	18.20	9.67	47.17	27.87	57.90	47.90	-10.73	-20.03	Pass
4	0.5780	36.39	14.80	9.67	46.06	24.47	56.00	46.00	-9.94	-21.53	Pass
5	0.6740	35.43	15.85	9.68	45.11	25.53	56.00	46.00	-10.89	-20.47	Pass
6	0.7700	35.48	16.22	9.69	45.17	25.91	56.00	46.00	-10.83	-20.09	Pass

5 Radiated Emissions Measurement

5.1. Limit

According to §15.225,

(a) The field strength of any emissions within the band 13.553 – 13.567 MHz shall not exceed 15,848 microvolt / meter at 30 meters.

(b) Within the bands 13.410 – 13.553 MHz and 13.567 -13.710 MHz, the field strength of any emissions shall not exceed 334 microvolt / meter at 30 meters.

(c) Within the bands 13.110 – 13.410 MHz and 13.710 – 14.010 MHz the field strength of any emissions shall not exceed 106 microvolt / meter at 30 meters.

(d) The field strength of any emissions appearing outside of the 13.110 – 14.010 MHz and shall not exceed the general radiated emission limits in §15.209.

According to §15.225(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m at meter)	Measurement Distance (meter)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 - 88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

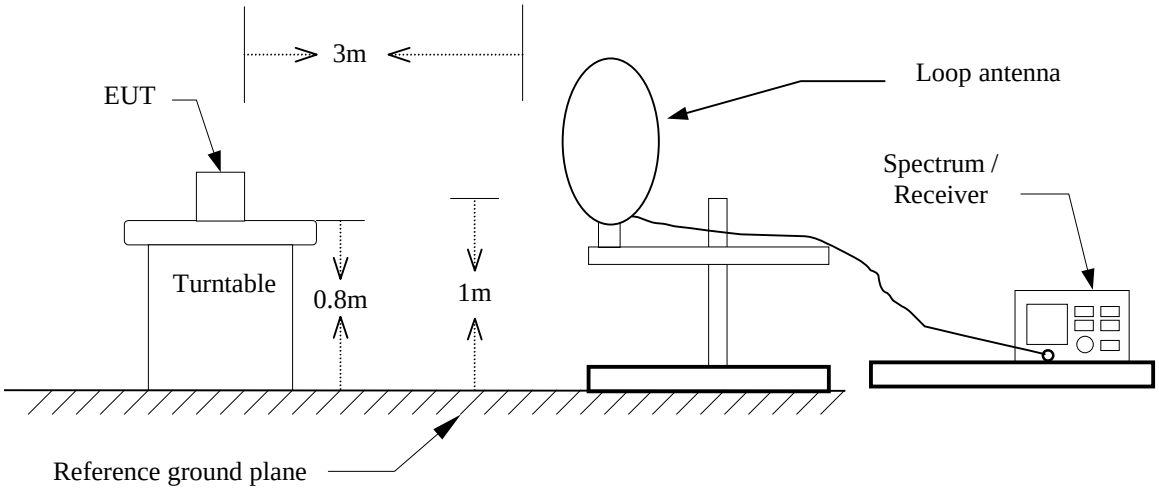
5.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/16/2012	(1)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/16/2012	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/23/2011	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/23/2011	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/29/2011	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/29/2011	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/28/2011	(1)
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	08/14/2009	(3)
Test Site	ATL	TE01	888001	12/20/2011	(1)

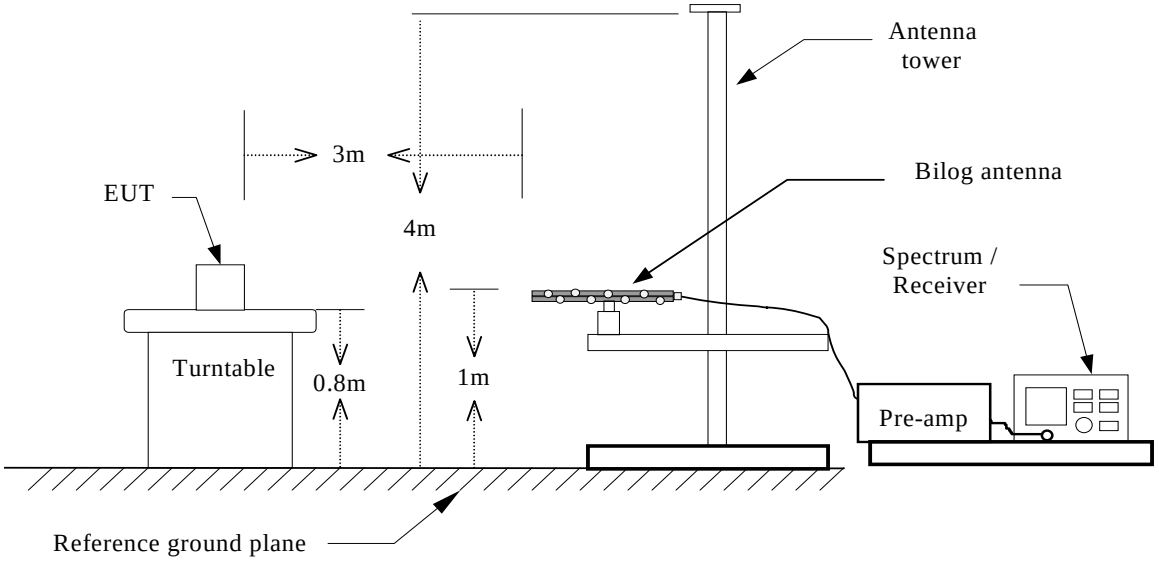
Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.
NOTE: N.C.R. = No Calibration Request.

5.3. Setup

9kHz ~ 30MHz



30MHz ~ 1 GHz



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in microvolt pre-meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in microvolt per-meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

5.5. Test Result

Fundamental Test Result:

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	02/18/2012
Ant.Polar.:	Horizontal	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13.5608	-29.70	13.42	-16.28	84.00	-100.28	peak

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	02/18/2012
Ant.Polar.:	Vertical	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13.5608	-29.33	13.42	-15.91	84.00	-99.91	peak

Note: The level is measured at 1 meter and is converted into result at 30 meter.

The converted formula listed below:

Measure result (1 meter distance): a

Compute result (30 meter distance): A

A = a + (40*log(1/30))

ex. a = 29.38 dBuV, A= 29.38 + (40*log(1/30)) = -29.70 dBuV

Below 1 GHz Test Results:

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1 (Transmitter mode)	Date:	02/18/2012
Ant.Polar.:	Horizontal	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0090	-52.96	17.00	-35.96	48.52	-84.48	QP
2	3.3980	-64.80	14.77	-50.03	29.54	-79.57	QP
3	12.0354	-70.12	13.68	-56.44	29.54	-85.98	QP
4	18.9033	-67.91	14.00	-53.91	29.54	-83.45	QP
5	23.8518	-66.55	12.44	-54.11	29.54	-83.65	QP
6	28.8603	-61.30	11.84	-49.46	29.54	-79.00	QP

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1 (Transmitter mode)	Date:	02/18/2012
Ant.Polar.:	Vertical	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0390	-49.64	14.28	-35.36	35.78	-71.14	QP
2	2.5282	-63.12	14.92	-48.20	29.54	-77.74	QP
3	5.9172	-69.40	15.40	-54.00	29.54	-83.54	QP
4	11.1657	-71.03	13.85	-57.18	29.54	-86.72	QP
5	23.6120	-70.04	12.55	-57.49	29.54	-87.03	QP
6	28.0806	-70.31	11.84	-58.47	29.54	-88.01	QP

Note: The level is measured at 1 meter and is converted into result at 300 or 30 meter.

The converted formula listed below:

Measure result (1 meter distance): a

Compute result (30 or 300 meter distance): A

A = a + (40*log(1/300 or 1/30))

ex. a (0.0090 MHz) = 46.12 dBuV, A= 46.12 + (40*log(1/300)) = -52.96 dBuV

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1 (Transmitter mode)	Date:	02/18/2012
Ant.Polar.:	Horizontal	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	58.0000	43.21	-12.28	30.93	40.00	-9.07	QP
2	92.5000	40.46	-15.36	25.10	43.50	-18.40	QP
3	364.5000	24.75	-8.74	16.01	46.00	-29.99	QP
4	677.5000	26.30	-3.76	22.54	46.00	-23.46	QP
5	842.5000	26.52	-1.00	25.52	46.00	-20.48	QP
6	947.5000	24.95	0.89	25.84	46.00	-20.16	QP

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1 (Transmitter mode)	Date:	02/18/2012
Ant.Polar.:	Vertical	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.0000	39.47	-13.74	25.73	40.00	-14.27	QP
2	60.0000	35.30	-12.41	22.89	40.00	-17.11	QP
3	92.5000	42.68	-15.36	27.32	43.50	-16.18	QP
4	299.0000	25.52	-10.56	14.96	46.00	-31.04	QP
5	601.0000	26.21	-4.93	21.28	46.00	-24.72	QP
6	941.0000	25.38	0.81	26.19	46.00	-19.81	QP

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2 (Receiver mode)	Date:	02/18/2012
Ant.Polar.:	Horizontal	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1590	-59.02	12.07	-46.95	23.58	-70.53	QP
2	0.3090	-66.87	13.82	-53.05	17.81	-70.86	QP
3	5.0475	-67.12	15.63	-51.49	29.54	-81.03	QP
4	13.5647	-71.36	13.42	-57.94	29.54	-87.48	QP
5	20.4926	-70.65	13.99	-56.66	29.54	-86.20	QP
6	27.2105	-66.16	11.86	-54.30	29.54	-83.84	QP

Standard:	FCC Part 15C	Test Distance:	1m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2 (Receiver mode)	Date:	02/18/2012
Ant.Polar.:	Vertical	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.4586	-66.77	13.64	-53.13	14.38	-67.51	QP
2	1.4485	-57.90	15.00	-42.90	29.54	-72.44	QP
3	12.7250	-67.70	13.56	-54.14	29.54	-83.68	QP
4	16.5640	-69.25	13.50	-55.75	29.54	-85.29	QP
5	22.8621	-69.42	12.90	-56.52	29.54	-86.06	QP
6	28.0806	-70.31	11.84	-58.47	29.54	-88.01	QP

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2 (Receiver mode)	Date:	02/18/2012
Ant.Polar.:	Horizontal	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	92.5000	41.45	-15.36	26.09	43.50	-17.41	QP
2	272.5000	24.07	-11.39	12.68	46.00	-33.32	QP
3	430.5000	25.33	-8.31	17.02	46.00	-28.98	QP
4	609.5000	25.91	-4.78	21.13	46.00	-24.87	QP
5	734.0000	26.78	-2.66	24.12	46.00	-21.88	QP
6	916.0000	24.80	0.50	25.30	46.00	-20.70	QP

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	PJ46100	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2 (Receiver mode)	Date:	02/18/2012
Ant.Polar.:	Vertical	Test By:	Fly Lu

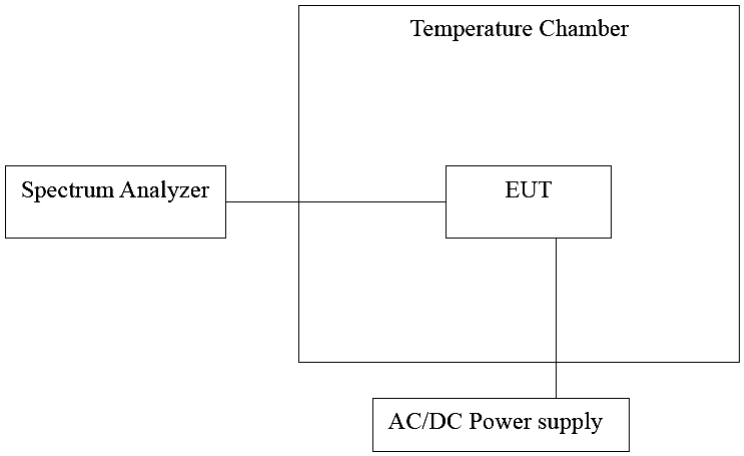
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	60.0000	36.40	-12.41	23.99	40.00	-16.01	QP
2	92.5000	44.41	-15.36	29.05	43.50	-14.45	QP
3	281.0000	24.73	-11.13	13.60	46.00	-32.40	QP
4	647.5000	25.88	-4.20	21.68	46.00	-24.32	QP
5	767.0000	26.22	-2.03	24.19	46.00	-21.81	QP
6	978.5000	26.58	1.43	28.01	54.00	-25.99	QP

6 Frequency Stability Measurement

6.1. Limit

According to §15.207(e), the frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of –20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

6.2. Test Setup



6.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4408B	MY45107753	07/07/2011	(1)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/24/2011	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

6.4. Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the environment into appropriate environment.
4. Set the spectrum analyzer as RBW=1kHz, VBW = RBW, Span = 200kHz, Sweep = auto.
5. Mark the peak frequency and measure the frequency tolerance using frequency counter function.
6. Repeat until all the results are investigated.

6.5. Test Result

Temperature Variations

Model Number	PJ46100					
Mode	Mode 1					
Date of Test	02/15/2012			Test Site	TE02	
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (%)	Limit (±%)	Result (Pass/Fail)
-20	120	13.56038	375.0000	0.0028	±0.01	Pass
-10		13.56065	650.0000	0.0048	±0.01	Pass
0		13.56038	375.0000	0.0028	±0.01	Pass
10		13.56105	1050.0000	0.0077	±0.01	Pass
20		13.56055	550.0000	0.0041	±0.01	Pass
30		13.56028	275.0000	0.0020	±0.01	Pass
40		13.56087	865.0000	0.0064	±0.01	Pass
50		13.56045	450.0000	0.0033	±0.01	Pass

Voltage Variations

Model Number	PJ46100					
Mode	Mode 1					
Date of Test	02/15/2012			Test Site	TE02	
Temp. (°(°C))	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (%)	Limit (±%)	Result (Pass/Fail)
20	102	13.56088	875.0000	0.0065	±0.01	Pass
	120	13.56055	550.0000	0.0041	±0.01	Pass
	138	13.56075	750.0000	0.0055	±0.01	Pass