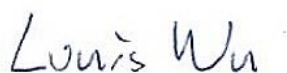


# FCC Test Report

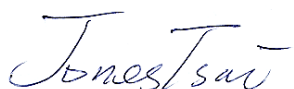
APPLICANT : CT Asia  
EQUIPMENT : Mobile Phone  
BRAND NAME : BLU  
MODEL NAME : VIVO IV  
FCC ID : YHLBLUVIVOIV  
STANDARD : FCC 47 CFR FCC Part 15 Subpart B  
CLASSIFICATION : Certification

The product was received on Apr. 10, 2014 and testing was completed on May 04, 2014. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2003 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.



Reviewed by: Louis Wu / Manager



Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL (SHENZHEN) INC.**

**No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C.**

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## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC441002	Rev. 01	Initial issue of report	May 07, 2014

## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 8.52 dB at 0.170 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 1.17 dB at 468.700 MHz for Quasi-Peak

## 1. General Description

### 1.1. Applicant

**CT Asia**

Unit 01, 15/F, Seaview Centre, 139-141 Hoi bun road, Kwun Tong, Kowloon, Hongkong

### 1.2. Manufacturer

**Gionee Communication Equipment Co., Ltd.**

21/F, Times Technology Building, No. 7028, Shennan Avenue, Futian District, Shenzhen, China

### 1.3. Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	BLU
Model Name	VIVO IV
FCC ID	YHLBLUVIVOIV
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only)/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ Bluetooth v3.0+EDR/ Bluetooth v4.0 LE
HW Version	WBW5702_Mainboard_P2
SW Version	WBW5702_0401_V5152
EUT Stage	Production Unit

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.4. Product Specification of Equipment Under Test

Product Specification subjective to this standard	
<b>Tx Frequency</b>	GSM850 : 824.2 MHz ~ 848.8 MHz GSM1900 : 1850.2 MHz ~ 1909.8MHz WCDMA Band V : 826.4 MHz ~ 846.6 MHz WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
<b>Rx Frequency</b>	GSM850 : 869.2 MHz ~ 893.8 MHz GSM1900 : 1930.2 MHz ~ 1989.8 MHz WCDMA Band V : 871.4 MHz ~ 891.6 MHz WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz
<b>Antenna Type</b>	WWAN : Fixed Internal Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna
<b>Type of Modulation</b>	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM (Downlink Only) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth v4.0 LE : GFSK Bluetooth v3.0 EDR : GFSK, $\pi/4$ -DQPSK, 8-DPSK GPS : BPSK

## 1.5. Modification of EUT

No modifications are made to the EUT during all test items.

## 1.6. Test Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.		
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755- 3320-2398		
Test Site No.	Sporton Site No.		FCC Registration No.
	CO01-SZ	03CH01-SZ	831040

## 1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC 47 CFR FCC Part 15 Subpart B
- ♦ ANSI C63.4-2003

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.

## 2. Test Configuration of Equipment Under Test

### 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following tables are showing the test modes as the worst cases and recorded in this report.

Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	☒	☒	☒
2.	Data application transferred mode (EUT connected with notebook)	☒	☒	☒

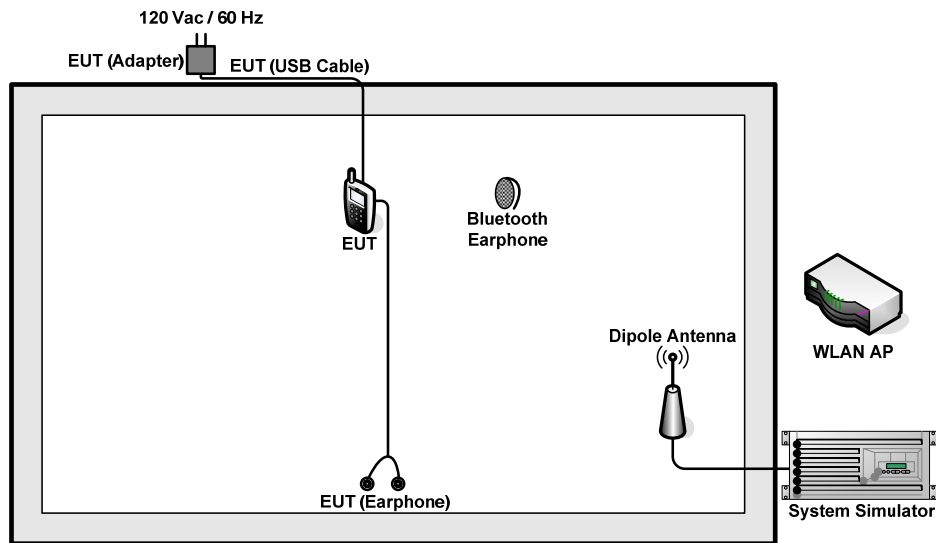
#### Abbreviations:

- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

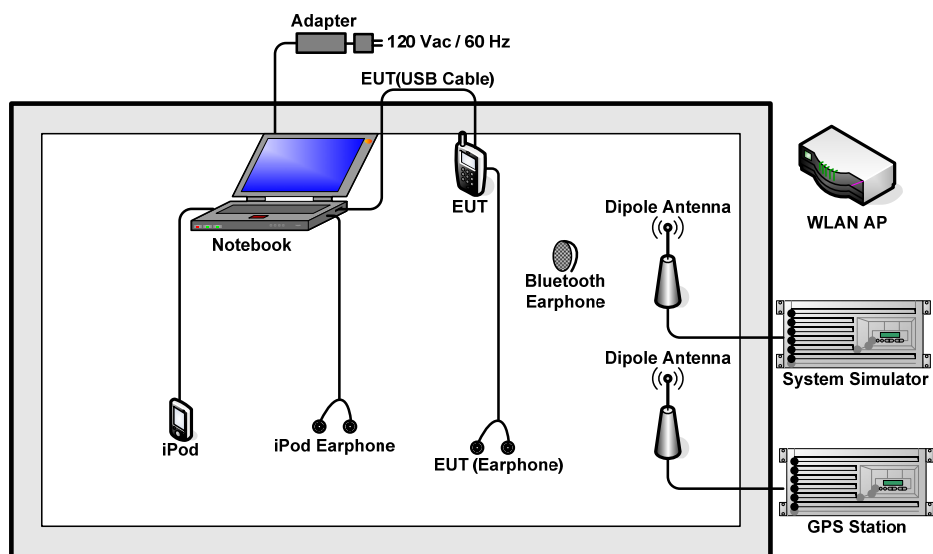


Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera <Fig.1> Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 <Fig.1> Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <Fig.2>
Radiated Emissions < 1GHz	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera <Fig.1> Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 <Fig.1> Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <Fig.2>
Radiated Emissions $\geq$ 1GHz	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera <Fig.1> Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <Fig.2>
<b>Remark:</b> <ol style="list-style-type: none"> <li>The worst case of AC is mode 1, and the USB Link mode of AC is mode 3; the test data of these modes are reported.</li> <li>The worst case of RE &lt; 1G is mode 1, and the USB Link mode of RE is mode 3; the test data of these modes are reported.</li> <li>Link with Notebook means data application transferred mode between EUT and Notebook.</li> </ol>		

## 2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

## 2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMW 500	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-815	KA2IR815A1	N/A	Unshielded, 1.8m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8m
4.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
5.	GPS Station	Welnavigate	GS50	N/A	N/A	Unshielded, 1.8 m
6.	Bluetooth Earphone	Lenovo	LBH301	FCC DoC	N/A	N/A
7.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
8.	Bluetooth Earphone	Hawk	B690	03-HKB690	N/A	N/A
9.	iPod	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2m	N/A
10.	iPod Earphone	Apple	MC690ZP/A	FCC DoC	Unshielded, 1.6m	N/A

## 2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and was in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between notebook and EUT via USB cable.
2. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.
3. Execute "Video player" to play MPEG4 files.
4. Turn on camera to capture images.

### 3. Test Result

#### 3.1. Test of AC Conducted Emission Measurement

##### 3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

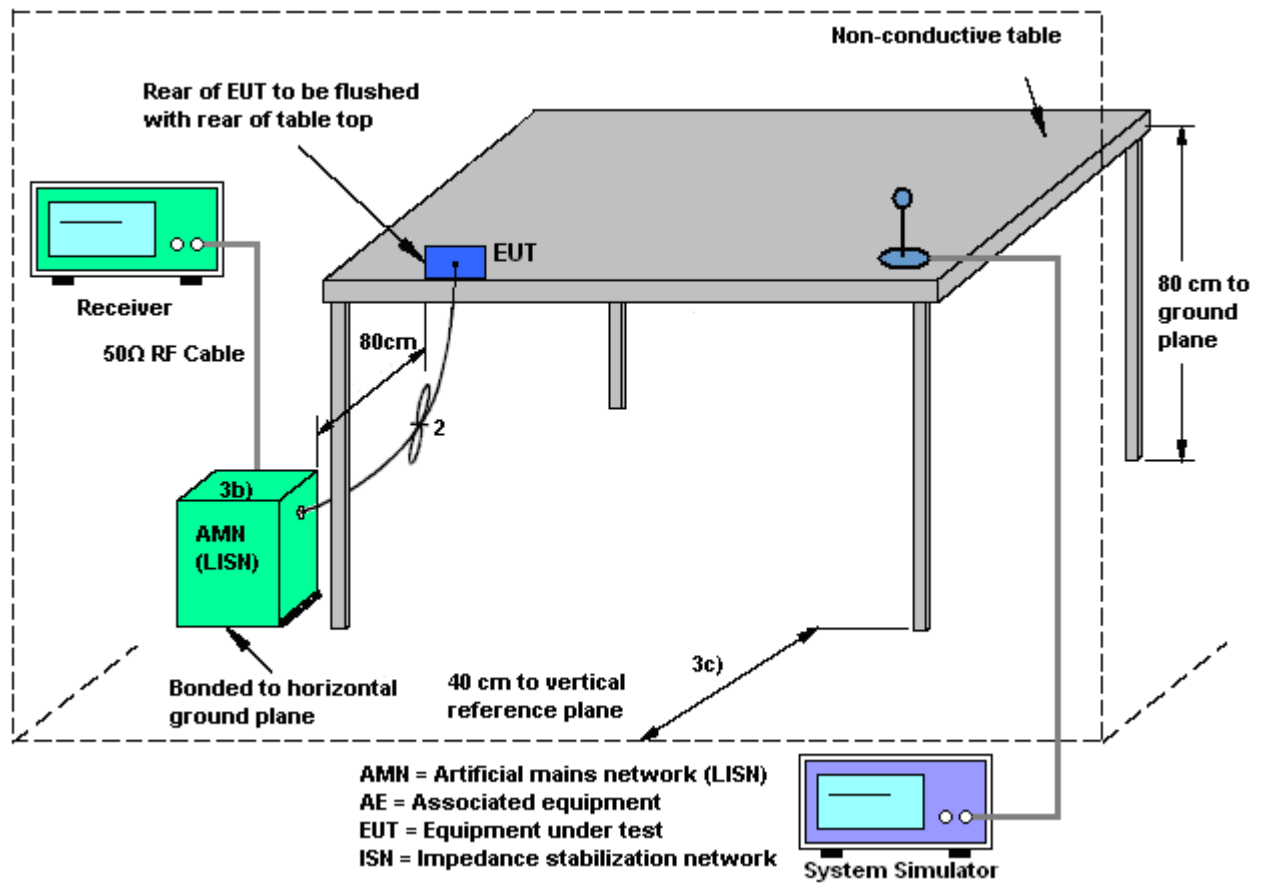
##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

##### 3.1.3 Test Procedure

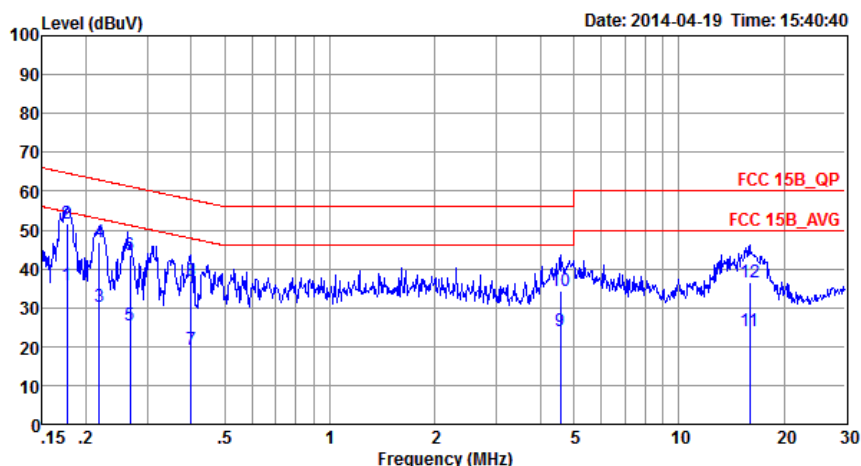
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

### 3.1.4 Test Setup



### 3.1.5 Test Result of AC Conducted Emission

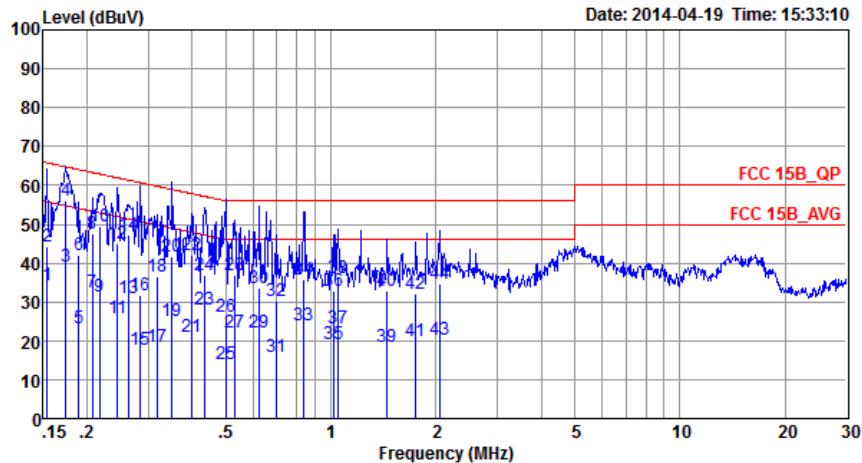
Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Jack Tian	Relative Humidity :	42~43%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera		



Site : C001-SZ  
Condition: FCC 15B\_QP LISN\_L\_20140304 LINE  
Project : (FC)441002  
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.18	35.74	-18.90	54.64	25.20	0.22	10.32	Average
2 *	0.18	51.74	-12.90	64.64	41.20	0.22	10.32	QP
3	0.22	30.40	-22.48	52.88	19.90	0.23	10.27	Average
4	0.22	46.80	-16.08	62.88	36.30	0.23	10.27	QP
5	0.27	25.57	-25.63	51.20	15.09	0.25	10.23	Average
6	0.27	43.57	-17.63	61.20	33.09	0.25	10.23	QP
7	0.40	19.25	-28.61	47.86	8.80	0.28	10.17	Average
8	0.40	36.75	-21.11	57.86	26.30	0.28	10.17	QP
9	4.57	23.94	-22.06	46.00	13.31	0.40	10.23	Average
10	4.57	34.24	-21.76	56.00	23.61	0.40	10.23	QP
11	15.97	24.15	-25.85	50.00	12.10	1.50	10.55	Average
12	15.97	36.55	-23.45	60.00	24.50	1.50	10.55	QP

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	21~22℃
<b>Test Engineer :</b>	Jack Tian	<b>Relative Humidity :</b>	42~43%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Neutral
<b>Function Type :</b>	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera		

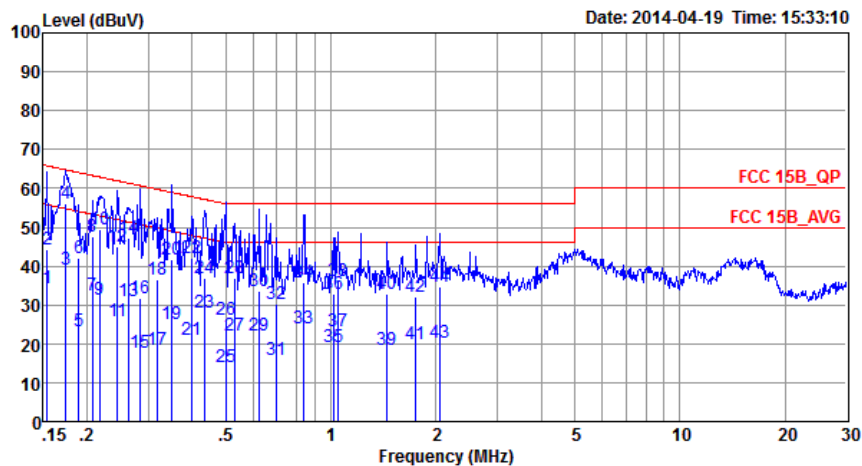


Site : C001-SZ  
Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL  
Project : (FC)441002  
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	34.18	-21.60	55.78	23.50	0.33	10.35	Average
2	0.15	44.28	-21.50	65.78	33.60	0.33	10.35	QP
3	0.17	38.95	-15.82	54.77	28.30	0.32	10.33	Average
4 *	0.17	56.25	-8.52	64.77	45.60	0.32	10.33	QP
5	0.19	23.23	-30.83	54.06	12.60	0.32	10.31	Average
6	0.19	42.13	-21.93	64.06	31.50	0.32	10.31	QP
7	0.21	32.41	-20.91	53.32	21.80	0.32	10.29	Average
8	0.21	47.61	-15.71	63.32	37.00	0.32	10.29	QP
9	0.22	31.20	-21.72	52.92	20.60	0.33	10.27	Average
10	0.22	49.60	-13.32	62.92	39.00	0.33	10.27	QP
11	0.24	25.99	-25.96	51.95	15.40	0.34	10.25	Average
12	0.24	44.99	-16.96	61.95	34.40	0.34	10.25	QP
13	0.26	30.98	-20.36	51.34	20.40	0.35	10.23	Average
14	0.26	47.38	-13.96	61.34	36.80	0.35	10.23	QP
15	0.28	17.57	-33.11	50.68	7.00	0.36	10.21	Average
16	0.28	31.57	-29.11	60.68	21.00	0.36	10.21	QP
17	0.32	18.56	-31.24	49.80	8.00	0.37	10.19	Average
18	0.32	36.46	-23.34	59.80	25.90	0.37	10.19	QP
19	0.35	25.16	-23.80	48.96	14.61	0.37	10.18	Average
20	0.35	41.56	-17.40	58.96	31.01	0.37	10.18	QP
21	0.40	20.86	-27.04	47.90	10.30	0.39	10.17	Average
22	0.40	42.16	-15.74	57.90	31.60	0.39	10.17	QP
23	0.44	27.96	-19.19	47.15	17.40	0.40	10.16	Average
24	0.44	36.96	-20.19	57.15	26.40	0.40	10.16	QP
25	0.50	14.16	-31.84	46.00	3.59	0.41	10.16	Average
26	0.50	26.16	-29.84	56.00	15.59	0.41	10.16	QP
27	0.53	22.03	-23.97	46.00	11.50	0.38	10.15	Average
28	0.53	37.03	-18.97	56.00	26.50	0.38	10.15	QP
29	0.62	22.25	-23.75	46.00	11.80	0.30	10.15	Average



Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Jack Tian	Relative Humidity :	42~43%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera		

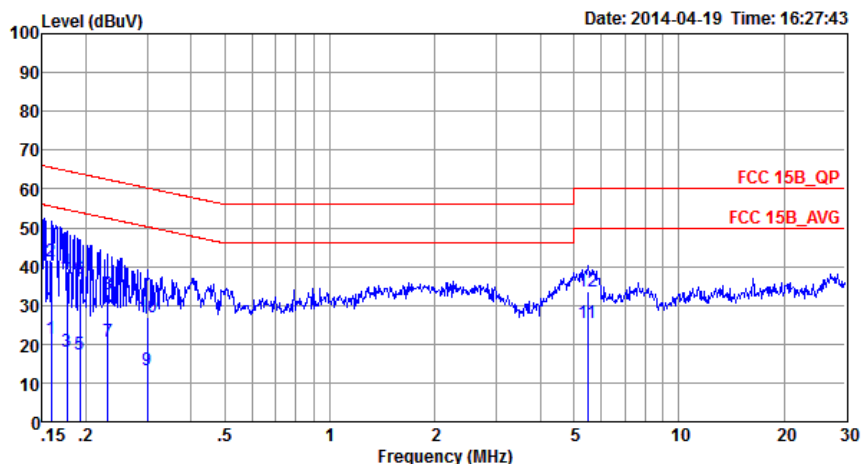


Site : C001-SZ  
Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL  
Project : (FC)441002  
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
30	0.62	33.45	-22.55	56.00	23.00	0.30	10.15	QP
31	0.70	15.80	-30.20	46.00	5.40	0.25	10.15	Average
32	0.70	30.30	-25.70	56.00	19.90	0.25	10.15	QP
33	0.83	23.94	-22.06	46.00	13.50	0.29	10.15	Average
34	0.83	35.74	-20.26	56.00	25.30	0.29	10.15	QP
35	1.02	19.08	-26.92	46.00	8.60	0.33	10.15	Average
36	1.02	32.78	-23.22	56.00	22.30	0.33	10.15	QP
37	1.05	23.29	-22.71	46.00	12.81	0.33	10.15	Average
38	1.05	36.09	-19.91	56.00	25.61	0.33	10.15	QP
39	1.45	18.62	-27.38	46.00	8.10	0.35	10.17	Average
40	1.45	32.82	-23.18	56.00	22.30	0.35	10.17	QP
41	1.75	20.04	-25.96	46.00	9.50	0.36	10.18	Average
42	1.75	31.94	-24.06	56.00	21.40	0.36	10.18	QP
43	2.04	20.36	-25.64	46.00	9.80	0.37	10.19	Average
44	2.04	34.76	-21.24	56.00	24.20	0.37	10.19	QP



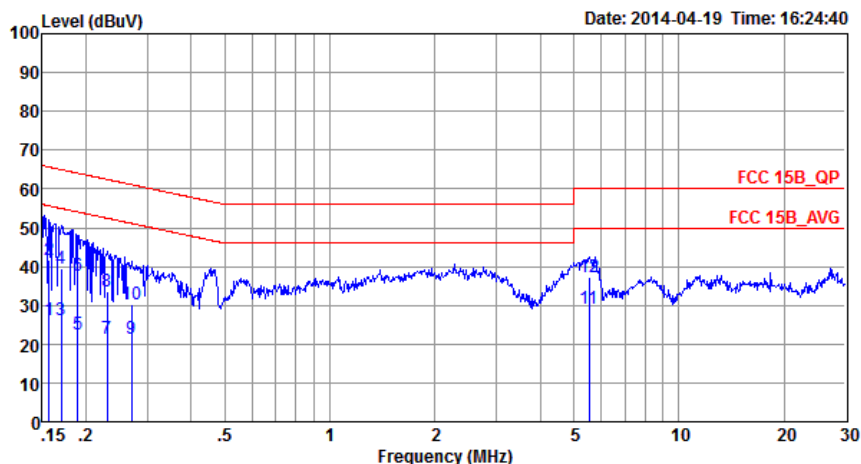
<b>Test Mode :</b>	Mode 3	<b>Temperature :</b>	21~22℃
<b>Test Engineer :</b>	Jack Tian	<b>Relative Humidity :</b>	42~43%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Line
<b>Function Type :</b>	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : CO01-SZ  
 Condition: FCC 15B\_QP LISN\_L 20140304 LINE  
 Project : (FC)441002  
 Mode : Mode 3

	Freq	Level	Over Limit	Read	LISN	Cable	
	MHz	dBuV	dB	Level	Factor	Loss	Remark
				dBuV	dB	dB	
1	0.16	21.47	-34.05	55.52	10.90	0.22	10.35 Average
2 *	0.16	41.17	-24.35	65.52	30.60	0.22	10.35 QP
3	0.18	17.94	-36.70	54.64	7.40	0.22	10.32 Average
4	0.18	38.64	-26.00	64.64	28.10	0.22	10.32 QP
5	0.19	17.32	-36.61	53.93	6.80	0.22	10.30 Average
6	0.19	36.92	-27.01	63.93	26.40	0.22	10.30 QP
7	0.23	20.69	-31.70	52.39	10.20	0.23	10.26 Average
8	0.23	32.79	-29.60	62.39	22.30	0.23	10.26 QP
9	0.30	13.36	-36.88	50.24	2.90	0.26	10.20 Average
10	0.30	26.96	-33.28	60.24	16.50	0.26	10.20 QP
11	5.48	25.56	-24.44	50.00	14.90	0.41	10.25 Average
12	5.48	33.66	-26.34	60.00	23.00	0.41	10.25 QP

<b>Test Mode :</b>	Mode 3	<b>Temperature :</b>	21~22℃
<b>Test Engineer :</b>	Jack Tian	<b>Relative Humidity :</b>	42~43%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Neutral
<b>Function Type :</b>	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : CO01-SZ  
 Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL  
 Project : (FC)441002  
 Mode : Mode 3

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.16	26.08	-29.57	55.65	15.40	0.33	10.35	Average
2	0.16	41.58	-24.07	65.65	30.90	0.33	10.35	QP
3	0.17	26.26	-28.68	54.94	15.60	0.33	10.33	Average
4	0.17	39.66	-25.28	64.94	29.00	0.33	10.33	QP
5	0.19	22.43	-31.63	54.06	11.80	0.32	10.31	Average
6	0.19	37.63	-26.43	64.06	27.00	0.32	10.31	QP
7	0.23	21.50	-30.94	52.44	10.91	0.33	10.26	Average
8	0.23	33.50	-28.94	62.44	22.91	0.33	10.26	QP
9	0.27	21.37	-29.75	51.12	10.80	0.35	10.22	Average
10	0.27	30.37	-30.75	61.12	19.80	0.35	10.22	QP
11 *	5.53	29.23	-20.77	50.00	18.51	0.47	10.25	Average
12	5.53	37.23	-22.77	60.00	26.51	0.47	10.25	QP

## 3.2. Test of Radiated Emission Measurement

### 3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

### 3.2.2. Measuring Instruments

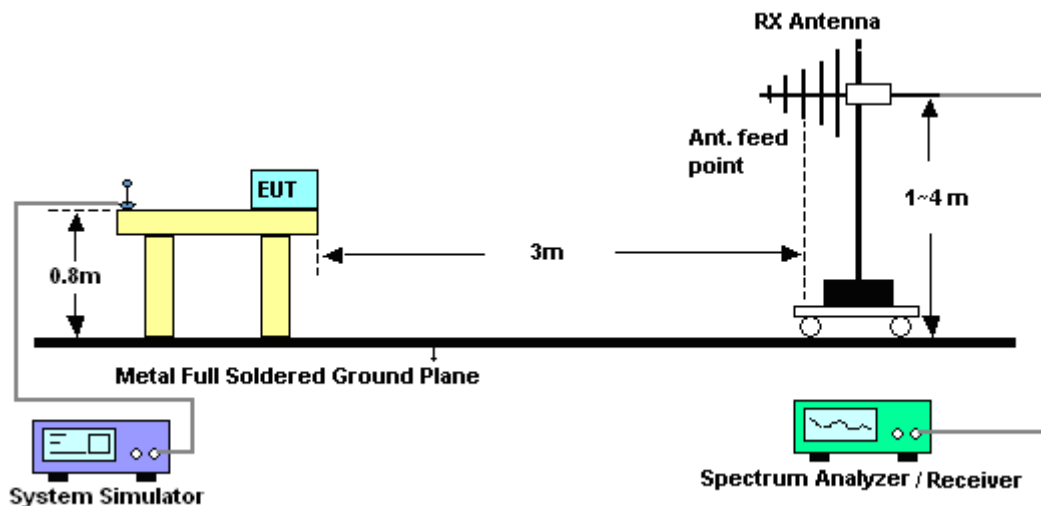
The measuring equipment is listed in the section 4 of this test report.

### 3.2.3. Test Procedures

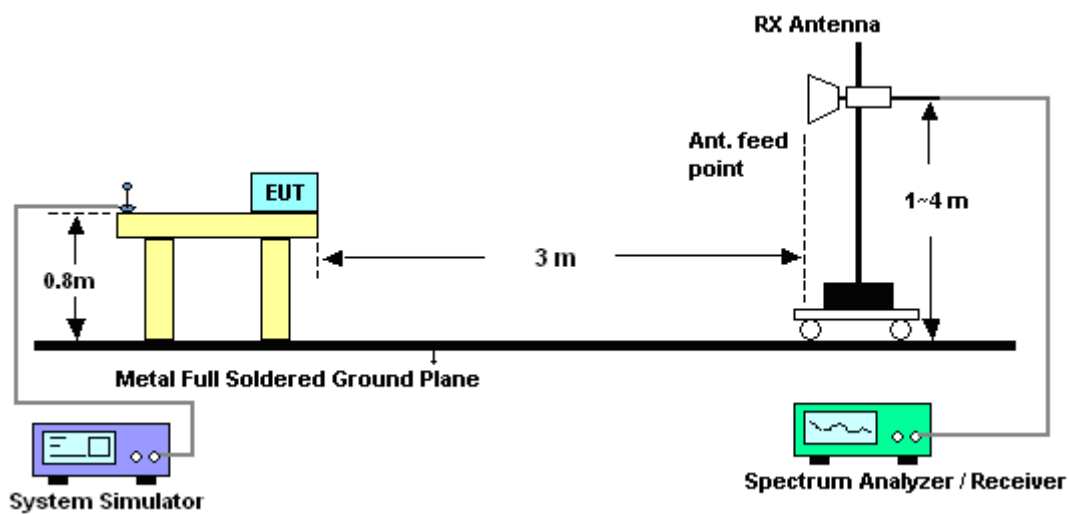
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

### 3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

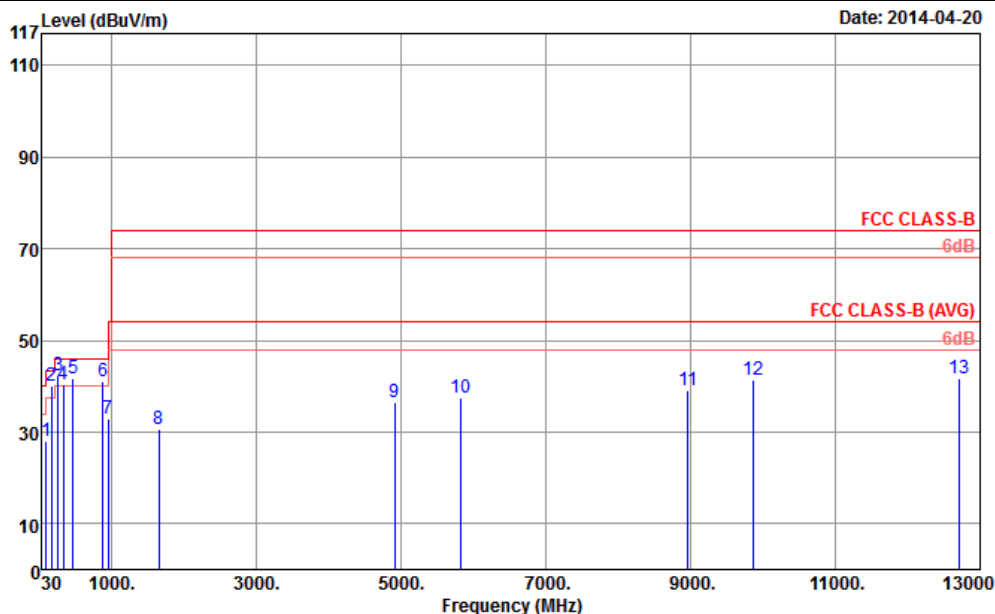


For radiated emissions above 1GHz



**3.2.5. Test Result of Radiated Emission**

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	23~25°C
<b>Test Engineer :</b>	Kaer Huang	<b>Relative Humidity :</b>	48~52%
<b>Test Distance :</b>	3m	<b>Polarization :</b>	Horizontal
<b>Function Type :</b>	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera		

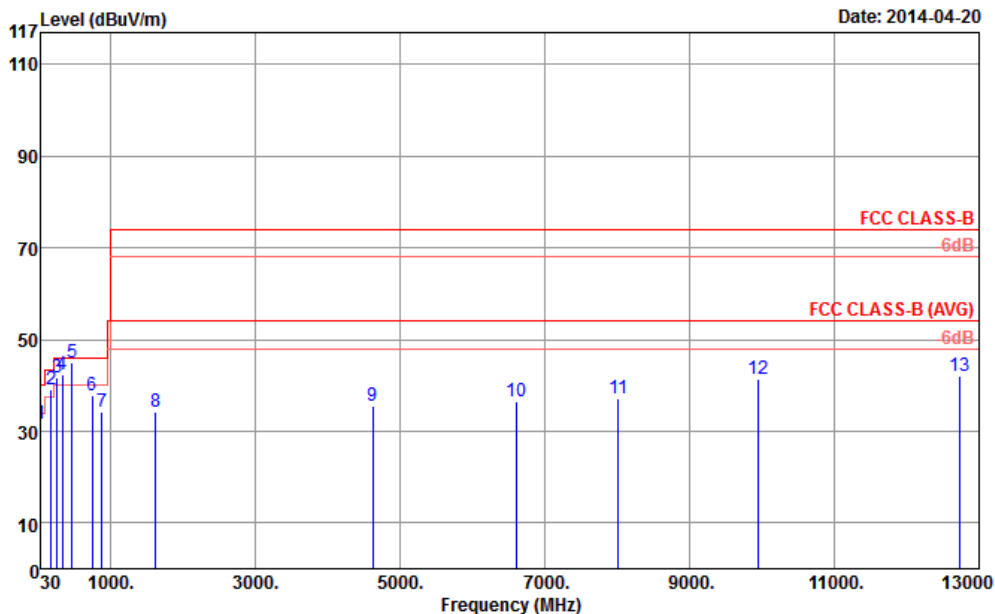


Site : 03CH01-SZ  
 Condition : FCC CLASS-B 3m LF\_ANT\_131026 HORIZONTAL  
 Project : (FC)441002  
 Mode : Mode 1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	cm	deg	
1	96.69	27.87	-15.63	43.50	45.94	10.63	1.24	29.94	---	Peak
2 P	172.56	39.99	-3.51	43.50	60.04	8.31	1.58	29.94	---	Peak
3 Q	259.77	42.21	-3.79	46.00	57.65	12.60	1.89	29.93	100	56 QP
4 !	338.50	40.54	-5.46	46.00	54.15	14.20	2.12	29.93	---	Peak
5 !	465.90	41.58	-4.42	46.00	52.32	16.74	2.44	29.92	100	156 QP
6 !	881.00	41.15	-4.85	46.00	47.23	20.58	3.28	29.94	---	Peak
7	953.10	32.76	-13.24	46.00	38.04	21.24	3.42	29.94	---	Peak
8	1652.00	30.52	-43.48	74.00	54.94	28.04	4.61	57.07	---	Peak
9	4914.00	36.46	-37.54	74.00	51.12	34.01	8.44	57.11	---	Peak
10	5822.00	37.39	-36.61	74.00	50.24	34.00	9.17	56.02	---	Peak
11	8960.00	38.96	-35.04	74.00	46.69	36.34	11.11	55.18	---	Peak
12	9860.00	41.50	-32.50	74.00	49.02	36.81	12.41	56.74	---	Peak
13	12708.00	41.84	-32.16	74.00	45.43	38.29	14.27	56.15	100	231 Peak



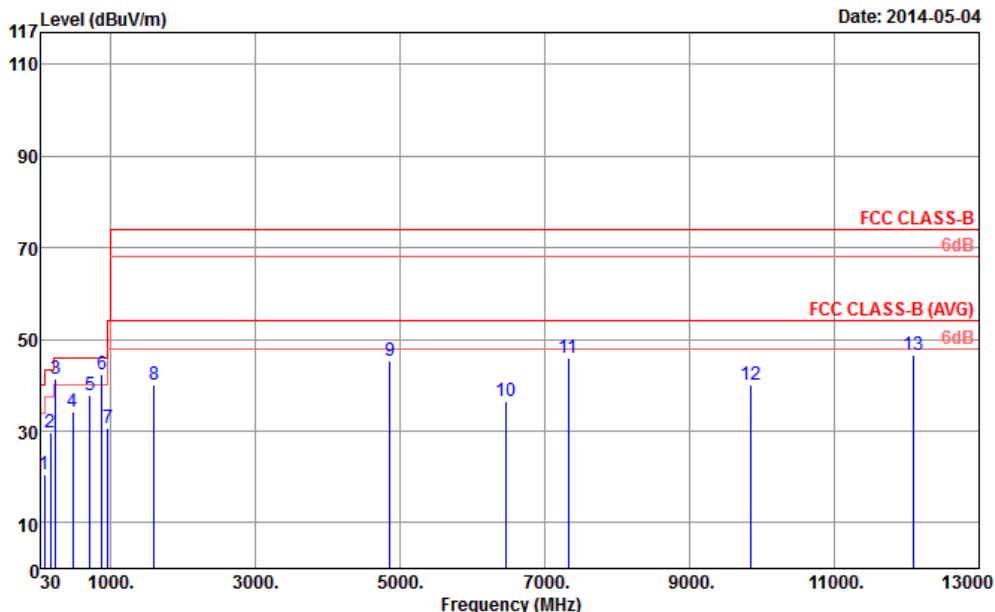
Test Mode :	Mode 1	Temperature :	23~25°C
Test Engineer :	Kaer Huang	Relative Humidity :	48~52%
Test Distance :	3m	Polarization :	Vertical
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera		



Site : 03CH01-SZ  
Condition : FCC CLASS-B 3m LF\_ANT\_131026 VERTICAL  
Project : (FC)441002  
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	36.21	31.72	-8.28	40.00	45.34	15.50	0.81	29.93	---	---	Peak
2 P	175.53	39.16	-4.34	43.50	59.38	8.12	1.60	29.94	---	---	Peak
3 I	260.58	41.76	-4.24	46.00	57.25	12.55	1.89	29.93	100	156	QP
4 I	338.50	42.52	-3.48	46.00	56.13	14.20	2.12	29.93	125	56	QP
5 Q	468.70	44.83	-1.17	46.00	55.35	16.95	2.45	29.92	100	26	QP
6	748.00	37.78	-8.22	46.00	44.11	20.54	3.06	29.93	---	---	Peak
7	881.70	34.23	-11.77	46.00	40.32	20.56	3.29	29.94	---	---	Peak
8	1618.00	34.21	-39.79	74.00	58.95	27.85	4.53	57.12	---	---	Peak
9	4618.00	35.53	-38.47	74.00	51.63	33.37	8.15	57.62	---	---	Peak
10	6614.00	36.39	-37.61	74.00	49.47	33.94	9.85	56.87	---	---	Peak
11	8010.00	37.20	-36.80	74.00	47.87	34.90	10.72	56.29	---	---	Peak
12	9942.00	41.30	-32.70	74.00	48.69	36.93	12.58	56.90	---	---	Peak
13	12726.00	42.15	-31.85	74.00	45.70	38.32	14.28	56.15	100	0	Peak

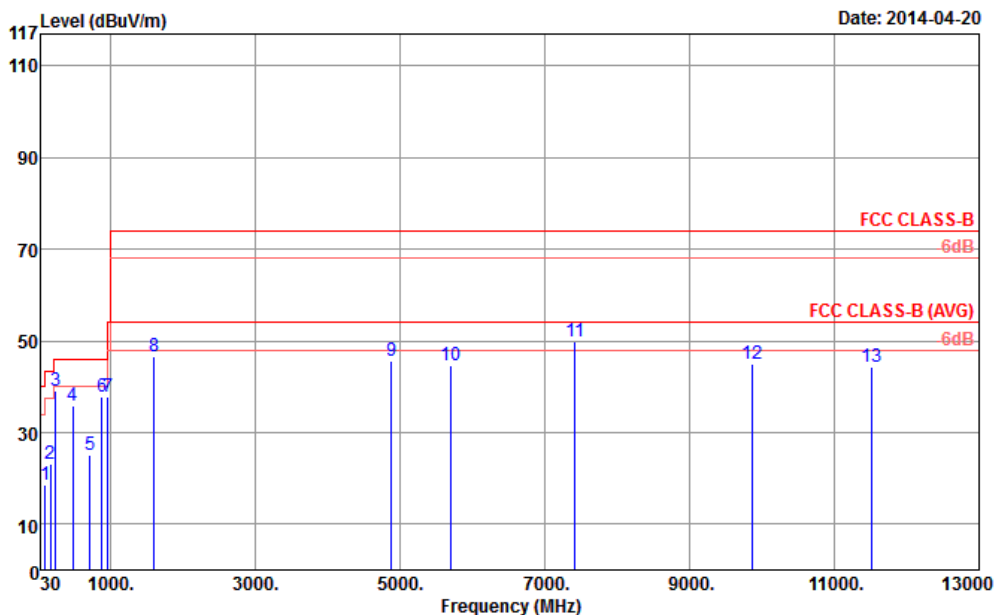
<b>Test Mode :</b>	Mode 3	<b>Temperature :</b>	23~25°C
<b>Test Engineer :</b>	Kaer Huang	<b>Relative Humidity :</b>	48~52%
<b>Test Distance :</b>	3m	<b>Polarization :</b>	Horizontal
<b>Function Type :</b>	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : 03CH01-SZ  
 Condition : FCC CLASS-B 3m LF\_ANT\_131026 HORIZONTAL  
 Project : (FC)441002  
 Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	90.21	20.49	-23.01	43.50	39.93	9.30	1.20	29.94	---	---	Peak
2	166.08	29.67	-13.83	43.50	49.39	8.66	1.56	29.94	---	---	Peak
3	240.06	41.27	-4.73	46.00	58.03	11.35	1.82	29.93	100	40	Peak
4	479.90	34.37	-11.63	46.00	44.41	17.40	2.48	29.92	---	---	Peak
5	720.00	37.68	-8.32	46.00	45.32	19.30	2.99	29.93	---	---	Peak
6	881.00	42.49	-3.51	46.00	48.57	20.58	3.28	29.94	---	---	Peak
7	960.10	30.54	-23.46	54.00	35.75	21.30	3.43	29.94	---	---	Peak
8	1598.00	40.02	-33.98	74.00	64.91	27.76	4.49	57.14	---	---	Peak
9	4864.00	45.20	-28.80	74.00	60.09	33.90	8.41	57.20	---	---	Peak
10	6462.00	36.36	-37.64	74.00	49.19	34.00	9.78	56.61	---	---	Peak
11	7324.00	45.91	-28.09	74.00	59.15	33.90	10.00	57.14	---	---	Peak
12	9850.00	40.10	-33.90	74.00	47.62	36.81	12.41	56.74	---	---	Peak
13	12086.00	46.67	-27.33	74.00	50.98	38.15	13.62	56.08	100	52	Peak

<b>Test Mode :</b>	Mode 3	<b>Temperature :</b>	23~25°C
<b>Test Engineer :</b>	Kaer Huang	<b>Relative Humidity :</b>	48~52%
<b>Test Distance :</b>	3m	<b>Polarization :</b>	Vertical
<b>Function Type :</b>	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : 03CH01-SZ  
 Condition : FCC CLASS-B 3m LF\_ANT\_131026 VERTICAL  
 Project : (FC)441002  
 Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	99.93	18.50	-25.00	43.50	35.98	11.20	1.26	29.94	---	---	Peak
2	168.24	22.99	-20.51	43.50	42.82	8.54	1.57	29.94	---	---	Peak
3 P	239.79	38.99	-7.01	46.00	55.80	11.30	1.82	29.93	150	156	Peak
4	479.90	35.84	-10.16	46.00	45.88	17.40	2.48	29.92	---	---	Peak
5	720.00	24.95	-21.05	46.00	32.59	19.30	2.99	29.93	---	---	Peak
6	881.00	37.89	-8.11	46.00	43.97	20.58	3.28	29.94	---	---	Peak
7	960.10	37.67	-16.33	54.00	42.88	21.30	3.43	29.94	---	---	Peak
8	1600.00	46.52	-27.48	74.00	71.37	27.76	4.53	57.14	---	---	Peak
9	4876.00	45.49	-28.51	74.00	60.32	33.93	8.41	57.17	---	---	Peak
10	5710.00	44.66	-29.34	74.00	57.69	34.00	9.13	56.16	---	---	Peak
11	7416.00	49.98	-24.02	74.00	63.03	33.95	10.03	57.03	120	100	Peak
12	9876.00	44.89	-29.11	74.00	52.38	36.83	12.45	56.77	---	---	Peak
13	11524.00	44.32	-29.68	74.00	49.50	37.81	13.40	56.39	---	---	Peak



## 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
ESCIO TEST Receiver	R&S	ESCI	100724	9kHz~3GHz	Feb. 21, 2014	Apr. 19, 2014	Feb. 20, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 04, 2014	Apr. 19, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 04, 2014	Apr. 19, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Dec. 17, 2013	Apr. 19, 2014	Dec. 16, 2014	Conduction (CO01-SZ)
Signal Analyzer	R&S	FSV40	101078	10Hz~40GHz	Jun. 17, 2013	Apr. 20, 2014~ May 04, 2014	Jun. 16, 2014	Radiation (03CH01-SZ)
Bilog Antenna	TESEQ	CBL 6112D	23188	30MHz~2GHz	Oct. 26, 2013	Apr. 20, 2014~ May 04, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 26, 2013	Apr. 20, 2014~ May 04, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz	Feb. 21, 2014	Apr. 20, 2014~ May 04, 2014	Feb. 20, 2015	Radiation (03CH01-SZ)
Amplifier	Agilent	83017A	MY39501302	3Hz~26.5GHz	Mar. 03, 2014	Apr. 20, 2014~ May 04, 2014	Mar. 02, 2015	Radiation (03CH01-SZ)
Turn Table	EM Electronics	EM 1000	N/A	0~360 degree	NCR	Apr. 20, 2014~ May 04, 2014	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM Electronics	EM 1000	N/A	1 m~4 m	NCR	Apr. 20, 2014~ May 04, 2014	NCR	Radiation (03CH01-SZ)

## 5. Uncertainty of Evaluation

### Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2U_c(y)$ )	2.31
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2U_c(y)$ )	3.90
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