FCC Test Report

APPLICANT	:	FUJITSU LIMITED
EQUIPMENT	:	Mobile Phone
BRAND NAME	:	Xi
MODEL NAME	:	F-06E
FCC ID	:	VQK-F06E
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Part 15 Class B Computing Device Peripheral (JBP)

The product was received on Feb. 22, 2013 and completely tested on Mar. 30, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2009 and shown the 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 INC., the test report shall not be reproduced except in full.

Louis Wu

Reviewed by: Louis Wu / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

Testing Laboratory
1190

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FD322231	Rev. 01	Initial issue of report	Apr. 22, 2013

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	7.2.4	AC Conducted Emission	< 15.107 limits < RSS-Gen table 2 limits	PASS	Under limit 6.20 dB at 0.190 MHz
3.2	15.109	7.2.3.2	Radiated Emission	< 15.109 limits or < RSS-Gen table 1 limits (Section 6)	PASS	Under limit 4.03 dB at 479.900 MHz for Quasi-Peak

1. General Description

1.1. Applicant

FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan

1.2. Manufacturer

FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan

1.3. Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	Xi
Model Name	F-06E
FCC ID	VQK-F06E
IMEI Code	355250050009051
EUT supports Radios application	GSM/GPRS/WCDMA/HSPA/ WLAN 11abgn / WLAN 11ac / Bluetooth BR/EDR/LE / RFID / NFC
HW Version	V2.1.0
SW Version	R20.3e
EUT Stage	Pre-Production

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. IEEE 11ac standard is still "Draft" version.

Product Specification subjective to this standard	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz Bluetooth: 2402 MHz ~ 2480 MHz RFID : 13.56 MHz NFC : 13.56 MHz
Rx Frequency Range	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz RFID : 13.56 MHz NFC : 13.56 MHz
Antenna Type	WWAN :λ/4 Monopole Antenna WLAN :λ/4 Monopole Antenna Bluetooth : λ/4 Monopole Antenna RFID : Loop Antenna NFC : Loop Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth 4.0 - LE : GFSK Bluetooth BR(1Mbps) : GFSK Bluetooth EDR (2Mbps) : π/4-DQPSK Bluetooth EDR (3Mbps) : 8-DPSK GPS : BPSK RFID: ASK NFC: ASK

1.4. Test Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	CO05-HY	03CH06-HY	722060/4086B-1

1.5. Applied 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 C63.4-2009

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 C63.4-2009 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)	☒	☒	Note 1
2.	Charging Mode (EUT with cradle and adapter)	☒	☒	Note 1
3.	Data application transferred mode (EUT with notebook)	☒	☒	☒

Abbreviations:

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

Note 1: Testing for this mode is not required or not the worst case.

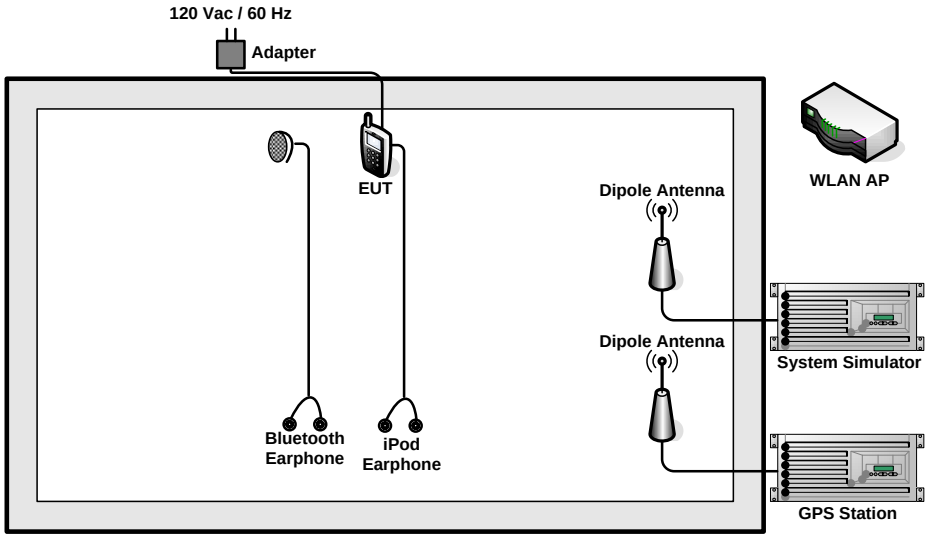
Remark: For signal above 1GHz, the worst case was test item 3.

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2/3	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN (2.4G) Idle + GPS Rx + Earphone + Battery + Adapter <Fig. 1> Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + Camera + Earphone + Battery + Adapter <Fig. 2> Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4 + Earphone + Battery + Adapter <Fig. 2> Mode 4: WCDMA Band V Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook) <Fig. 3> Mode 5: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4G) Idle + GPS Rx + Earphone + Battery + Cradle + Adapter <Fig. 4>
Radiated Emissions < 1GHz	1/2/3	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN (2.4G) Idle + GPS Rx + Earphone + Battery + Adapter <Fig. 1> Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + Camera + Earphone + Battery + Adapter <Fig. 2> Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4 + Earphone + Battery + Adapter <Fig. 2> Mode 4: GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook) <Fig. 3> Mode 5: GSM1900 Idle + Bluetooth Idle + WLAN (2.4G) Idle + GPS Rx + Earphone + Battery + Cradle + Adapter <Fig. 4>
Radiated Emissions ≥ 1GHz	3	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook) <Fig. 3>

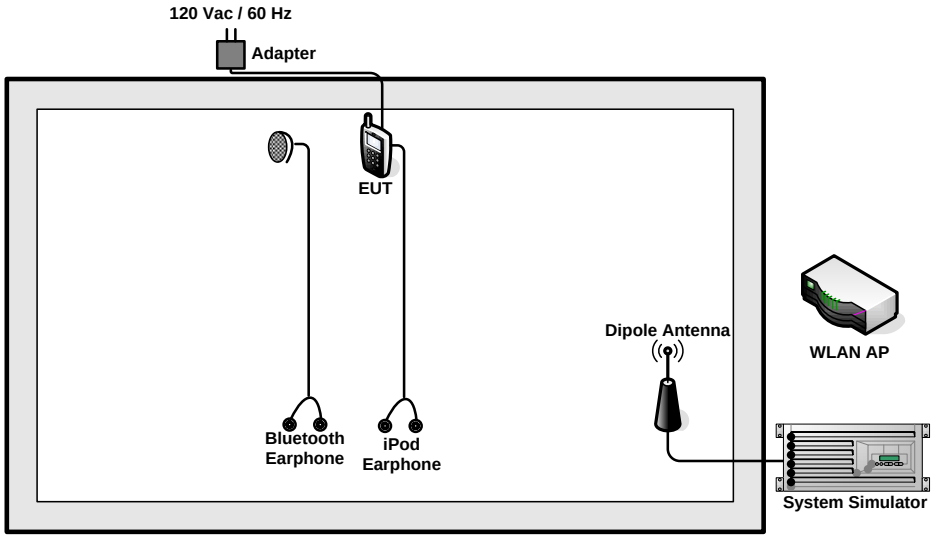
Remark:

1. The worst case of AC is mode 4; only the test data of this mode was reported.
2. The worst case of RE < 1G is mode 4; only the test data of this mode was reported.
3. Link with Notebook means data application transferred mode between EUT and Notebook.

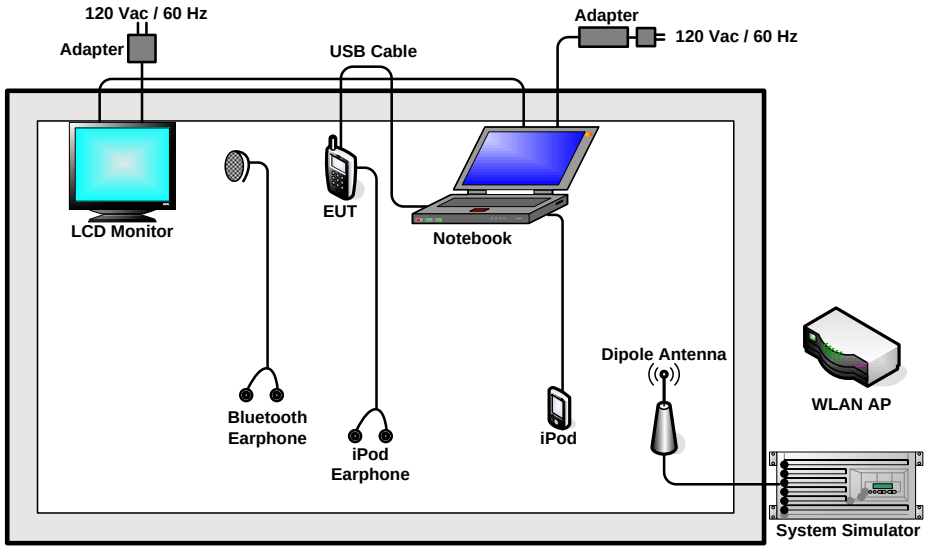
2.2. Connection Diagram of Test System



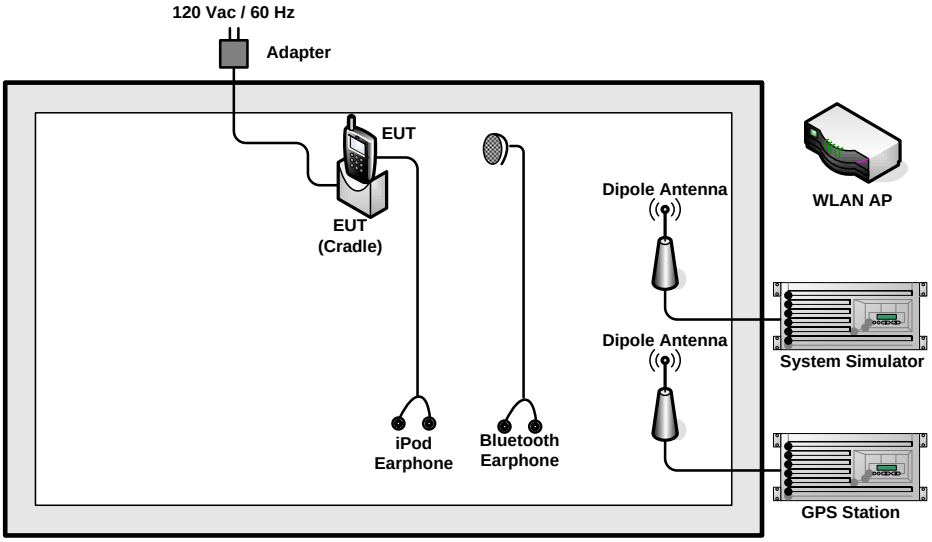
<Fig. 1>



<Fig. 2>


120 Vac / 60 Hz
Adapter
USB Cable
Adapter
120 Vac / 60 Hz
LCD Monitor
EUT
Notebook
Bluetooth Earphone
iPod Earphone
iPod
Dipole Antenna
WLAN AP
System Simulator

<Fig. 3>


120 Vac / 60 Hz
Adapter
EUT
EUT (Cradle)
Dipole Antenna
WLAN AP
Dipole Antenna
System Simulator
iPod Earphone
Bluetooth Earphone
GPS Station

<Fig. 4>

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	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
4.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
6.	Notebook	DELL	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
8.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
9.	iPod Earphone	Apple	N/A	FCC DoC	Unshielded, 1.0 m	N/A
10.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
11.	MicroSD Card	SanDisk	4G class 10	FCC DoC	N/A	N/A
12.	Adapter	NTT docomo	AC Adapter 04	FCC DoC	N/A	Unshielded, 1.0 m
13.	USB Cable	N/A	N/A	N/A	N/A	Unshielded, 1.2 m

2.4. EUT accessory used in test configuration and system

Item	Equipment	Trade Name	Model Name	Spec.
1.	Cradle	Fujitsu limited	CA50601-1791	5.0Vdc, 1.5A
2.	Battery	Fujitsu limited	CA54310-0046	3.8V, 3,020mA Li-ion

2.5. Test Software

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

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 Laptop, SD Card, 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.

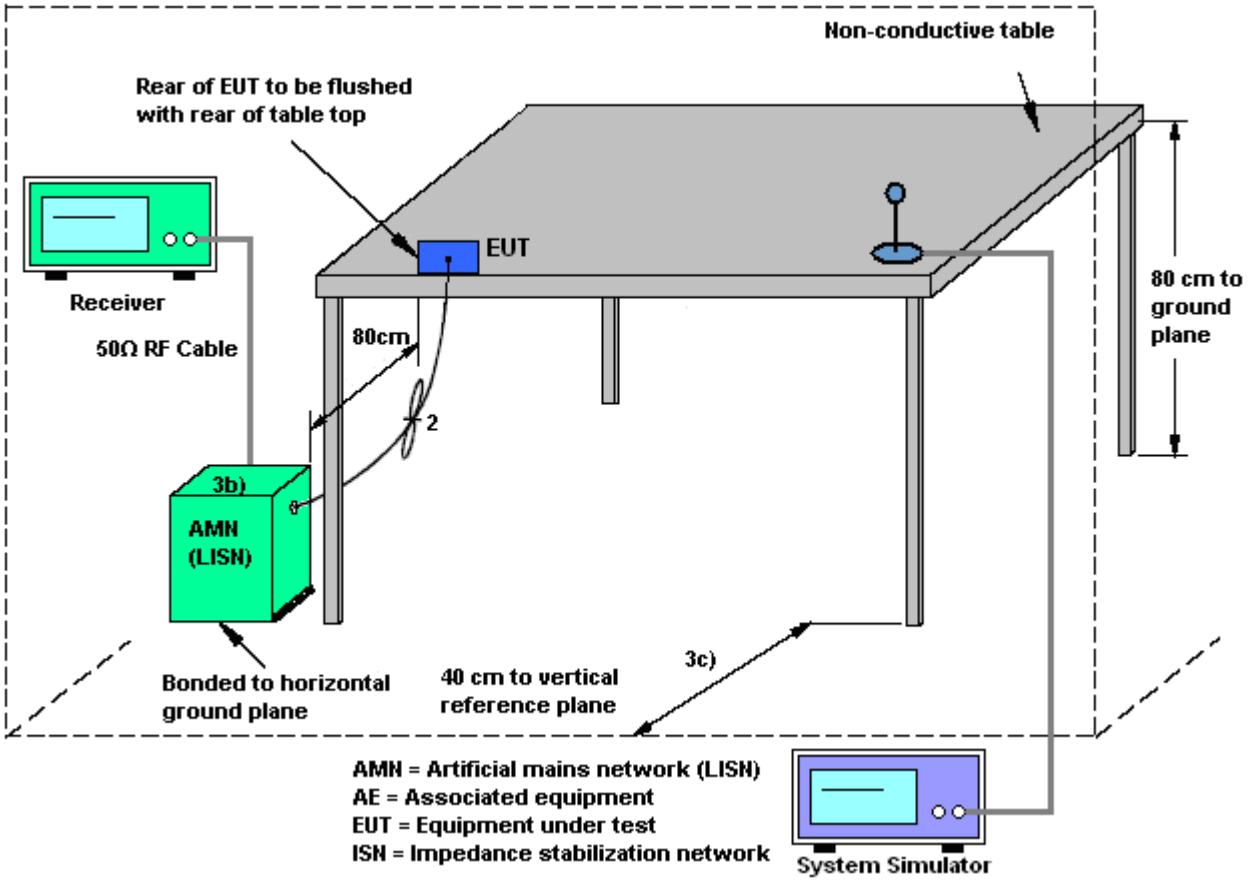
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedure

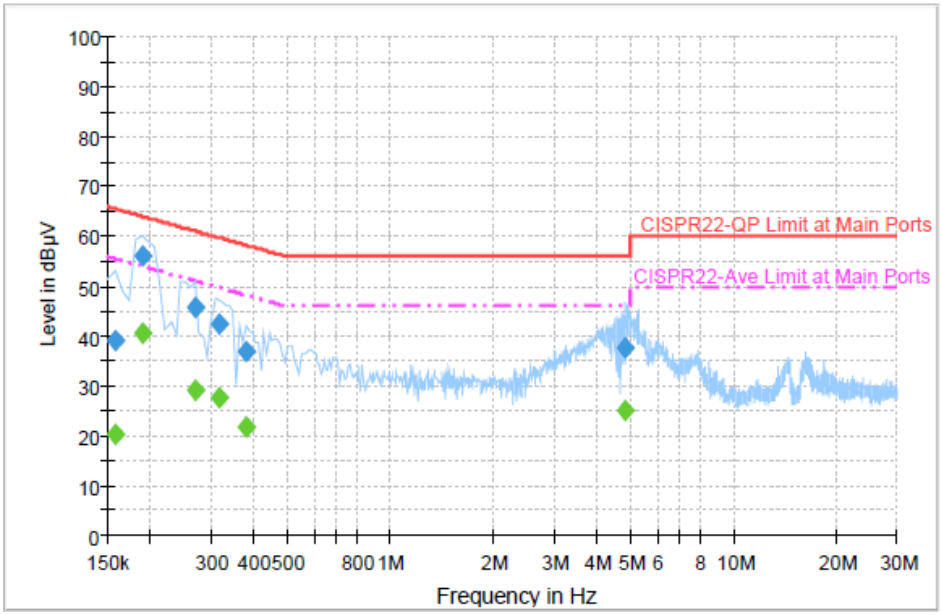
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 4	**Temperature :**	20~22℃
Test Engineer :	Slash Huang	**Relative Humidity :**	45~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook)		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



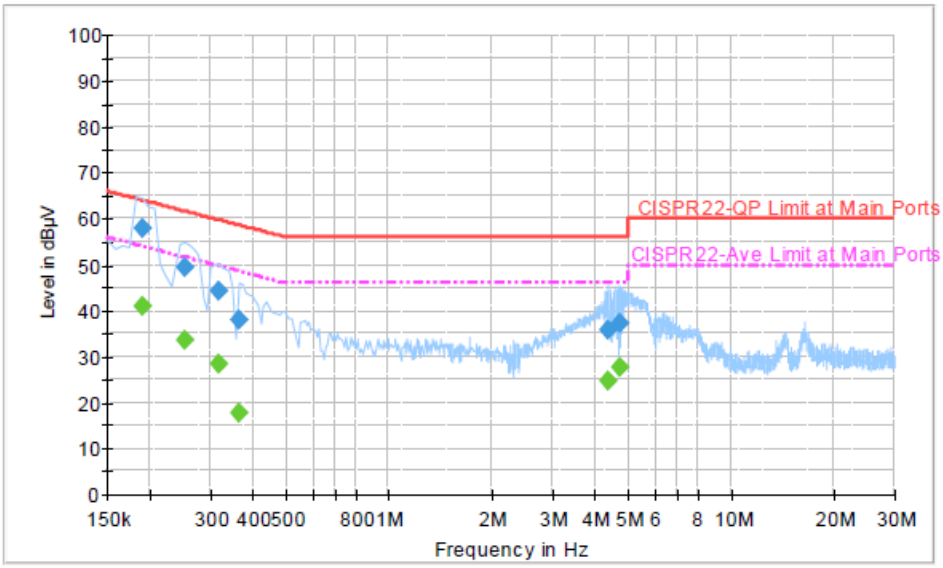
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	39.2	Off	L1	19.4	26.4	65.6
0.190000	56.1	Off	L1	19.4	7.9	64.0
0.270000	45.8	Off	L1	19.3	15.3	61.1
0.318000	42.6	Off	L1	19.3	17.2	59.8
0.382000	36.9	Off	L1	19.4	21.3	58.2
4.854000	37.7	Off	L1	19.7	18.3	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	20.3	Off	L1	19.4	35.3	55.6
0.190000	40.5	Off	L1	19.4	13.5	54.0
0.270000	29.1	Off	L1	19.3	22.0	51.1
0.318000	27.8	Off	L1	19.3	22.0	49.8
0.382000	21.7	Off	L1	19.4	26.5	48.2
4.854000	25.1	Off	L1	19.7	20.9	46.0

Test Mode :	Mode 4	**Temperature :**	20~22℃
Test Engineer :	Slash Huang	**Relative Humidity :**	45~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook)		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	57.8	Off	N	19.4	6.2	64.0
0.254000	49.4	Off	N	19.4	12.2	61.6
0.318000	44.3	Off	N	19.4	15.5	59.8
0.366000	38.0	Off	N	19.4	20.6	58.6
4.390000	35.8	Off	N	19.7	20.2	56.0
4.758000	37.1	Off	N	19.6	18.9	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	41.1	Off	N	19.4	12.9	54.0
0.254000	33.5	Off	N	19.4	18.1	51.6
0.318000	28.6	Off	N	19.4	21.2	49.8
0.366000	17.8	Off	N	19.4	30.8	48.6
4.390000	24.8	Off	N	19.7	21.2	46.0
4.758000	27.5	Off	N	19.6	18.5	46.0

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

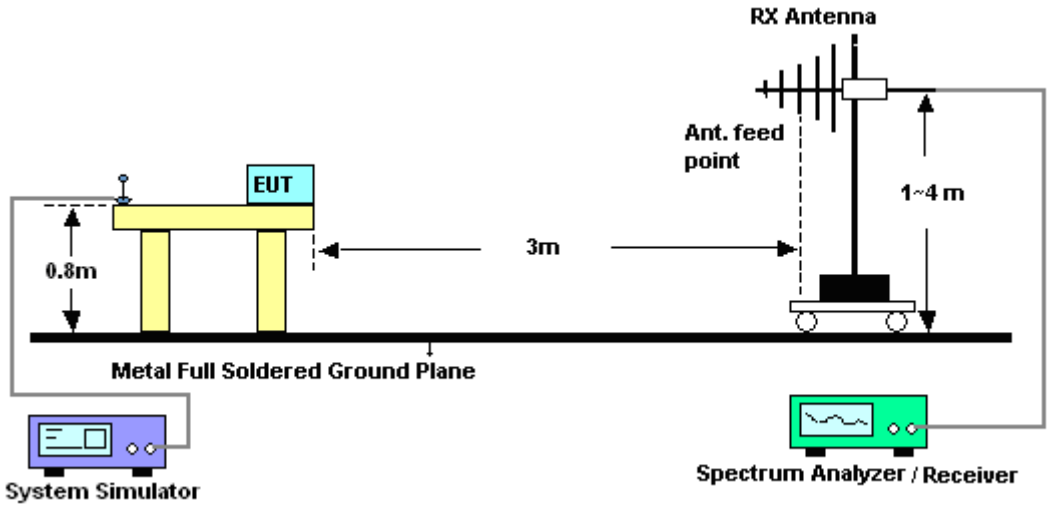
See list of measuring instruments of this test report.

3.2.3. Test Procedures

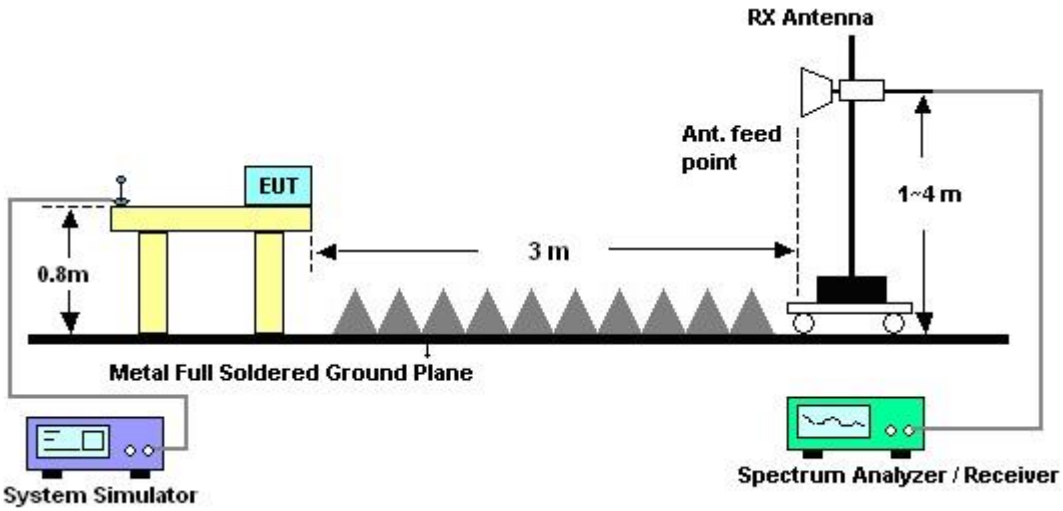
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its 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 (dBuV/m) = 20 log Emission level (uV/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

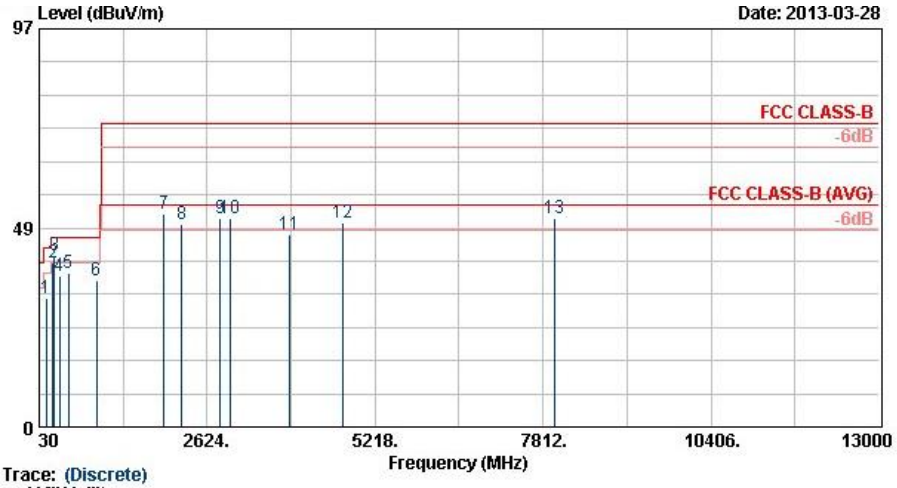


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 4	Temperature :	22~23°C
Test Engineer :	Marlboro Hsu	Relative Humidity :	43~44%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook)		
Remark :	#7 is system simulator signal which can be ignored.		

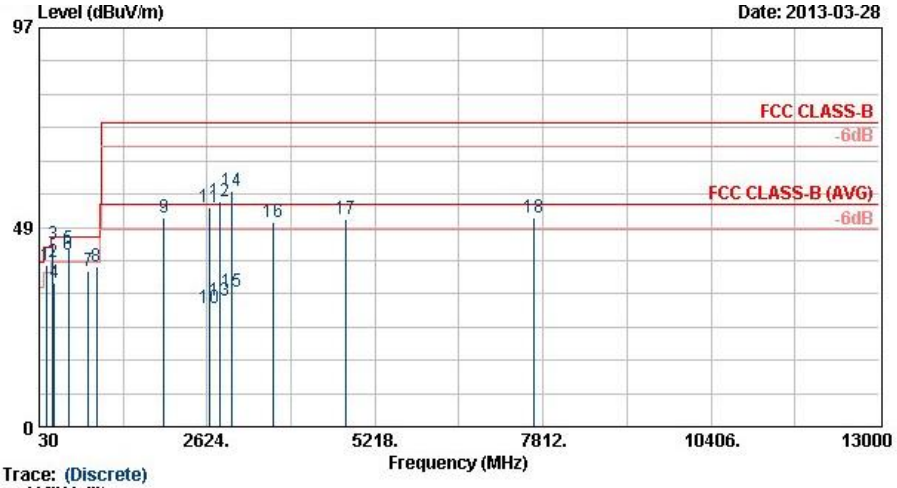


Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B HF-ANT_120801 HORIZONTAL
Project : FD 322231
Mode : Mode 4
Power : From System

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		136.38	31.28	-12.22	43.50	50.07	11.20	31.29	1.30	---	---	Peak
2		239.79	39.90	-6.10	46.00	57.99	11.30	31.08	1.69	---	---	Peak
3	!	264.09	41.95	-4.05	46.00	57.91	13.38	31.13	1.80	100	89	Peak
4		348.30	36.96	-9.04	46.00	51.71	14.20	31.00	2.05	---	---	Peak
5		479.90	37.46	-8.54	46.00	48.61	17.40	30.85	2.30	---	---	Peak
6		911.80	35.77	-10.23	46.00	42.92	20.62	31.14	3.37	---	---	Peak
7		1960.00	51.77			68.57	31.40	53.99	5.79	---	---	Peak
8		2234.00	49.40	-24.60	74.00	65.00	32.14	53.95	6.21	---	---	Peak
9		2832.00	50.82	-23.18	74.00	64.63	32.90	53.97	7.26	---	---	Peak
10		2990.00	50.87	-23.13	74.00	64.20	33.08	54.00	7.59	100	13	Peak
11		3902.00	46.88	-27.12	74.00	59.20	33.68	54.76	8.76	---	---	Peak
12		4716.00	49.64	-24.36	74.00	60.00	34.91	55.40	10.13	---	---	Peak
13		8000.00	50.82	-23.18	74.00	59.43	36.10	55.70	10.99	---	---	Peak

Test Mode :	Mode 4	Temperature :	22~23°C
Test Engineer :	Marlboro Hsu	Relative Humidity :	43~44%
Test Distance :	3m	Polarization :	Vertical
Function Type :	GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + SD Card R/W + Earphone + Battery + USB Cable (Data Link with Notebook)		
Remark :	#9 is system simulator signal which can be ignored.		



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B HF-ANT_120801 VERTICAL
Project : FD 322231
Mode : Mode 4
Power : From System

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	!	137.73	39.31	-4.19	43.50	58.20	11.10	31.29	1.30	---	---	Peak
2	!	239.79	40.04	-5.96	46.00	58.13	11.30	31.08	1.69	100	64	QP
3	@	239.79	44.19	-1.81	46.00	62.28	11.30	31.08	1.69	100	64	Peak
4		264.09	34.83	-11.17	46.00	50.78	13.38	31.13	1.80	---	---	Peak
5	!	479.90	43.38	-2.62	46.00	54.53	17.40	30.85	2.30	100	344	Peak
6	!	479.90	41.97	-4.03	46.00	53.12	17.40	30.85	2.30	100	344	QP
7		791.40	37.89	-8.11	46.00	46.79	19.80	31.77	3.06	---	---	Peak
8		911.80	39.09	-6.91	46.00	46.25	20.62	31.14	3.37	---	---	Peak
9		1960.00	50.89			67.69	31.40	53.99	5.79	---	---	Peak
10		2652.00	28.67	-25.33	54.00	43.00	32.68	53.93	6.92	100	326	Average
11		2652.00	53.54	-20.46	74.00	67.87	32.68	53.93	6.92	100	326	Peak
12		2828.00	54.83	-19.17	74.00	68.64	32.90	53.97	7.26	100	309	Peak
13		2828.00	30.49	-23.51	54.00	44.30	32.90	53.97	7.26	100	309	Average
14		2996.00	57.18	-16.82	74.00	70.51	33.08	54.00	7.59	105	298	Peak
15		2996.00	32.97	-21.03	54.00	46.30	33.08	54.00	7.59	105	298	Average
16		3646.00	49.75	-24.25	74.00	62.49	33.32	54.35	8.29	---	---	Peak
17		4774.00	50.41	-23.59	74.00	60.87	34.89	55.50	10.15	---	---	Peak
18		7660.00	50.98	-23.02	74.00	59.80	36.10	55.83	10.92	---	---	Peak

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9KHz – 2.75GHz	Nov. 13, 2012	Mar. 16, 2013 ~ Mar. 30, 2013	Nov. 12, 2013	Conduction (CO05-HY)
Two-LISN	Rohde & Schwarz	ENV216	100081	9KHz ~ 30MHz	Dec. 12, 2012	Mar. 16, 2013 ~ Mar. 30, 2013	Dec. 11, 2013	Conduction (CO05-HY)
Two-LISN	Rohde & Schwarz	ENV216	100080	9KHz ~ 30MHz	Dec. 06, 2012	Mar. 16, 2013 ~ Mar. 30, 2013	Dec. 05, 2013	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	Mar. 16, 2013 ~ Mar. 30, 2013	N/A	Conduction (CO05-HY)
GPS Station	T&E	GS-50	N/A	N/A	N/A	Mar. 16, 2013 ~ Mar. 30, 2013	N/A	Conduction (CO05-HY)
Spectrum Analyzer	R&S	FSP30	101352	9KHz~30GHz	Nov. 07, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Nov. 06, 2013	Radiation (03CH06-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211030	9KHz ~ 26.5GHz	Nov. 26, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Nov. 25, 2013	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz ~ 1000MHz	May 04, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	May 03, 2013	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz ~ 2GHz	Oct. 06, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Oct. 05, 2013	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 01, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Jul. 31, 2013	Radiation (03CH06-HY)
Double Ridge Horn Antenna	COM-POWER	AH-118	071025	1GHz~18GHz	Aug. 09, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Aug. 08, 2013	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Sep. 28, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Sep. 27, 2013	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz ~ 26.5GHz	Apr. 13, 2012	Mar. 16, 2013 ~ Mar. 28, 2013-	Apr. 12, 2013	Radiation (03CH06-HY)
Amplifier	Agilent	310N	186713	9KHz ~ 1GHz	Apr. 11, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Apr. 10, 2013	Radiation (03CH06-HY)
Pre Amplifier	EMCI	EMC051845	SN980048	1GHz ~ 18GHz	Jul. 21, 2012	Mar. 16, 2013 ~ Mar. 28, 2013	Jul. 20, 2013	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	159087	1GHz~18GHz	Feb. 26, 2013	Mar. 16, 2013 ~ Mar. 28, 2013	Feb. 25, 2014	Radiation (03CH06-HY)
GPS Station	Pendulum	GSG-54	N/A	N/A	N/A	Mar. 16, 2013 ~ Mar. 28, 2013	N/A	Radiation (03CH06-HY)
System Simulator	R&S	CMU200	117591	N/A	Oct. 21, 2011	Mar. 16, 2013 ~ Mar. 30, 2013	Oct. 20, 2013	-

5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**