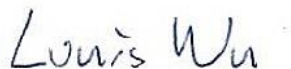


# FCC Test Report

**APPLICANT** : LG Electronics Mobile Comm USA  
**EQUIPMENT** : Smart phone  
**BRAND NAME** : LG  
**MODEL NAME** : LG-X240F  
**FCC ID** : ZNFX240F  
**STANDARD** : FCC 47 CFR FCC Part 15 Subpart B  
**CLASSIFICATION** : Certification

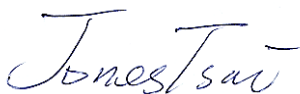
The product was received on Oct. 18, 2016 and testing was completed on Nov. 19, 2016. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

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



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Reviewed by: Louis Wu / Manager



---

Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

**No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.**

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**SPORTON INTERNATIONAL INC.**

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : ZNFX240F

Page Number : 1 of 20

Report Issued Date : Feb. 24, 2017

Report Version : Rev. 02

Report Template No.: BU5-FC15B Version 1.3



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## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC6O1804	Rev. 01	Initial issue of report	Feb. 20, 2017
FC6O1804	Rev. 02	Adding pictures of the EUT setup for all three orthogonal orientations (X, Y, Z) tested within the EMC test setup photos, and adding description in section 2.1.	Feb. 24, 2017



## 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 12.80 dB at 1.446 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 9.90 dB at 30.000 MHz for Quasi-Peak



## 1. General Description

### 1.1. Applicant

**LG Electronics Mobile Comm USA**

LG Twin Towers 20, Yeouido-Dong Youngdeungpo-Gu, Seoul 150-721, Republic Of Korea

### 1.2. Manufacturer

**Arima Communications Corp.**

6F, No.866, Jhongjheng Rd., Jhonghe Dist., New Taipei City 23586, Taiwan

### 1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart phone
Brand Name	LG
Model Name	LG-X240F
FCC ID	ZNFX240F
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11b/g/n HT20/HT40 Bluetooth BR/EDR/LE
HW Version	PP2
SW Version	LGX240FAT-00-V08a-CIS-XX-NOV-17-2016+0
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.

Specification of Accessory		
AC Adapter 1	Brand Name	Sunlin
	Model Name	EAY64009102(MCS-02WR2)
AC Adapter 2	Brand Name	Sunlin
	Model Name	EAY62709914(MCS-02ER2)
Battery	Brand Name	LG
	Model Name	EAC63382101(BL-45F1F)
Earphone	Brand Name	Cresyn
	Model Name	EAB64468401(EMB-LGE41STGWA)
USB Cable	Brand Name	KSD
	Model Name	EAD62377922(DC03WK-G)

## 1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
<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 IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 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 IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz FM : 87.5 MHz ~ 108 MHz
<b>Antenna Type</b>	WWAN : PIFA Antenna LTE : PIFA Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GPS : PIFA Antenna FM : Integral Antenna (Earphone acting as FM antenna deemed as an integral antenna)
<b>Type of Modulation</b>	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK FM : FM

## 1.5. Modification of EUT

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

## 1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	CO05-HY	03CH06-HY

## 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 C63.4-2014

**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

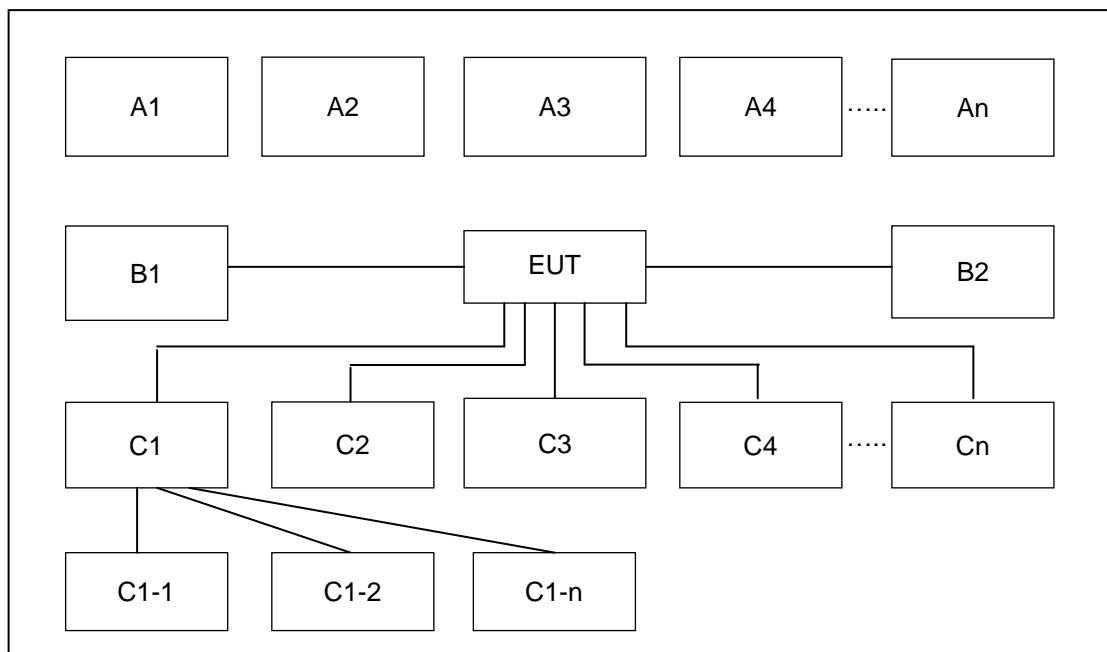
The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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). For radiated measurement, X, Y, Z in three orthogonal panels to determine the final configuration (Y plane as worst plane).

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter 1) Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter 2) Mode 3: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter 1) Mode 4: Flight Mode + Earphone + Battery + USB Cable (Data Link with Notebook)
Radiated Emissions < 1GHz	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter 1) Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter 2) Mode 3: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter 2) Mode 4: Flight Mode + Earphone + Battery + USB Cable (Data Link with Notebook)
Radiated Emissions ≥ 1GHz	Mode 1: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter 2)
<b>Remark:</b> <ol style="list-style-type: none"> <li>The worst case of AC is mode 1; only the test data of this mode was reported.</li> <li>The worst case of RE &lt; 1G is mode 2; only the test data of this mode was reported.</li> <li>Data Link with Notebook means data application transferred mode between EUT and Notebook.</li> </ol>	



## 2.2. Connection Diagram of Test System



Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	-	-	-
A1	BT Earphone	Bluetooth	X	X	X	-			
A2	System Simulator	GSM/UMTS/LTE	X	X	X	-			
A3	AP router	WiFi	X	X	X	-			
No.	Power Source	Connection Type	1	2	3	4	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	X	X	X	-			
No.	Setup Peripherals	Connection Type	1	2	3	4	-	-	-
C1	Notebook	USB Cable	-	-	-	X			
C1-1	iPod	USB Cable to C1	-	-	-	X			
C1-2	AP router	RJ-45 Cable to C1	-	-	-	X			
C2	Earphone	Earphone jack	X	X	X	X			
C3	SD card	SD I/O interface without Cable	X	X	X	X			

## 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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
6.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
7.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A

## 2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA or LTE 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.

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 Laptop and EUT via USB cable.
2. Execute "Video player" to play MPEG4 files.
3. Turn on camera to capture images.
4. Turn on the Flight mode.

### 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.

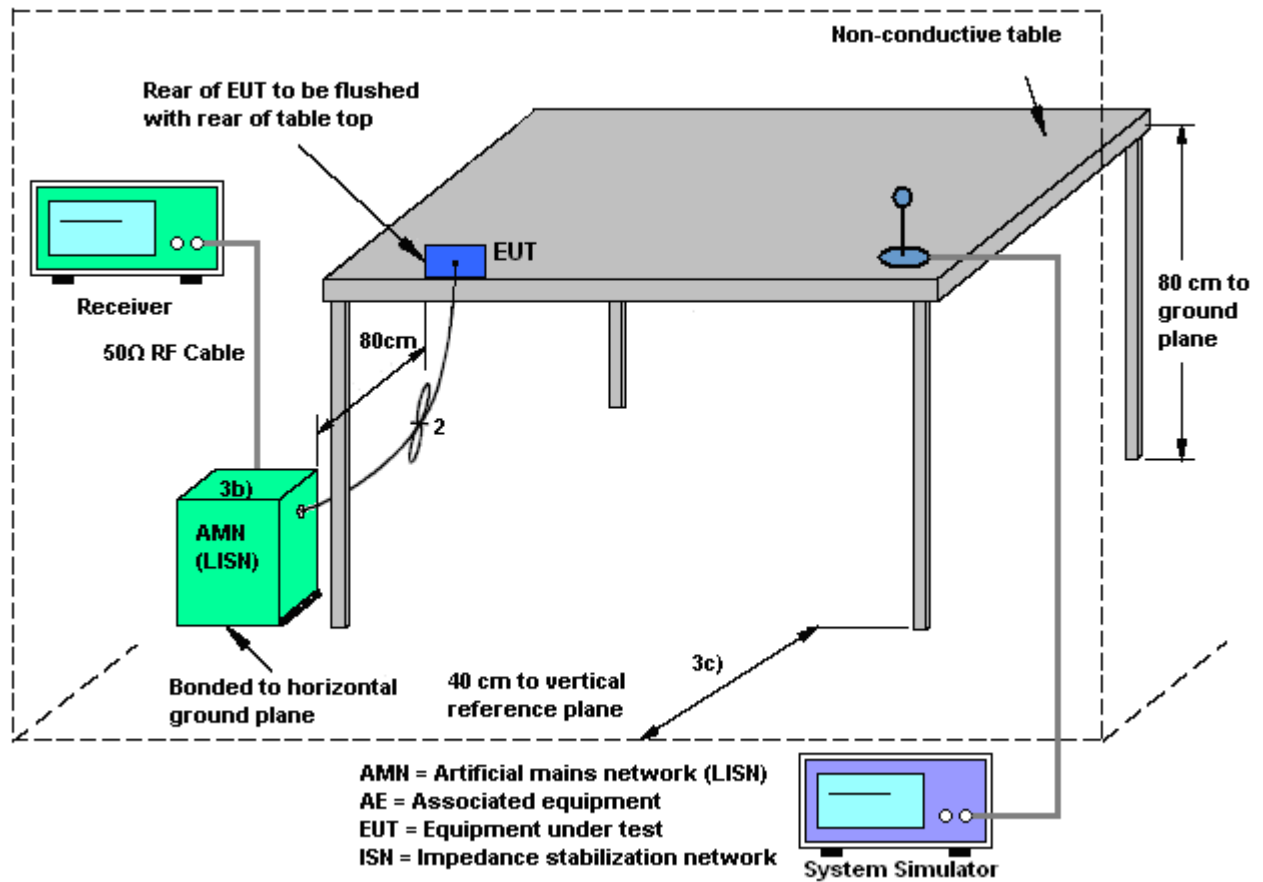
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedure

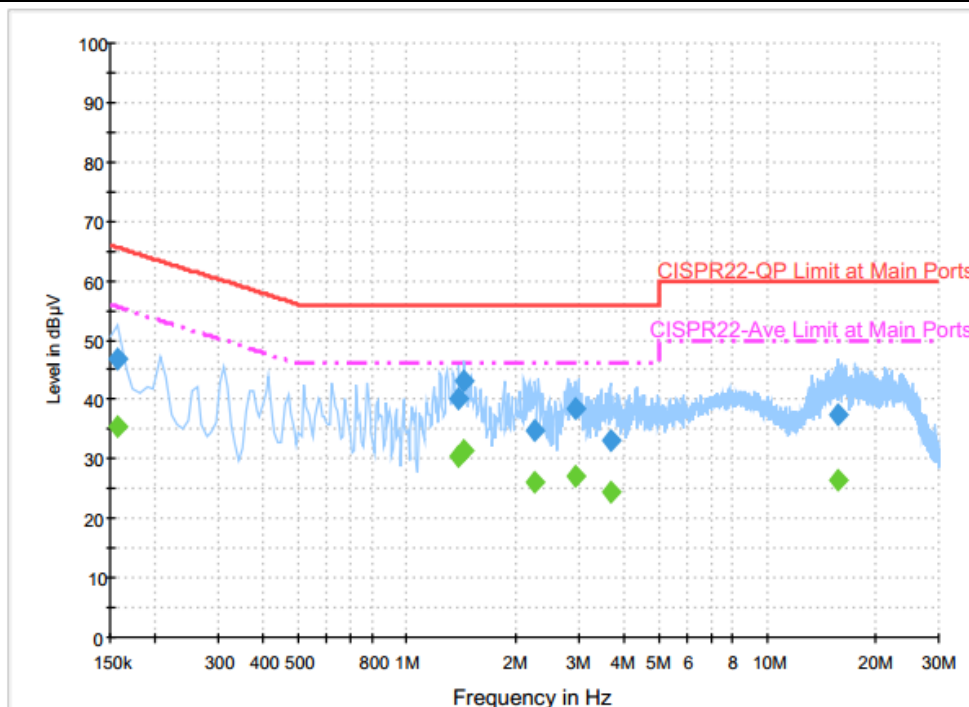
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

### 3.1.4 Test Setup



### 3.1.5 Test Result of AC Conducted Emission

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	21~23℃
<b>Test Engineer :</b>	Arthur Hsieh	<b>Relative Humidity :</b>	50~52%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Line
<b>Function Type :</b>	GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter 1)		



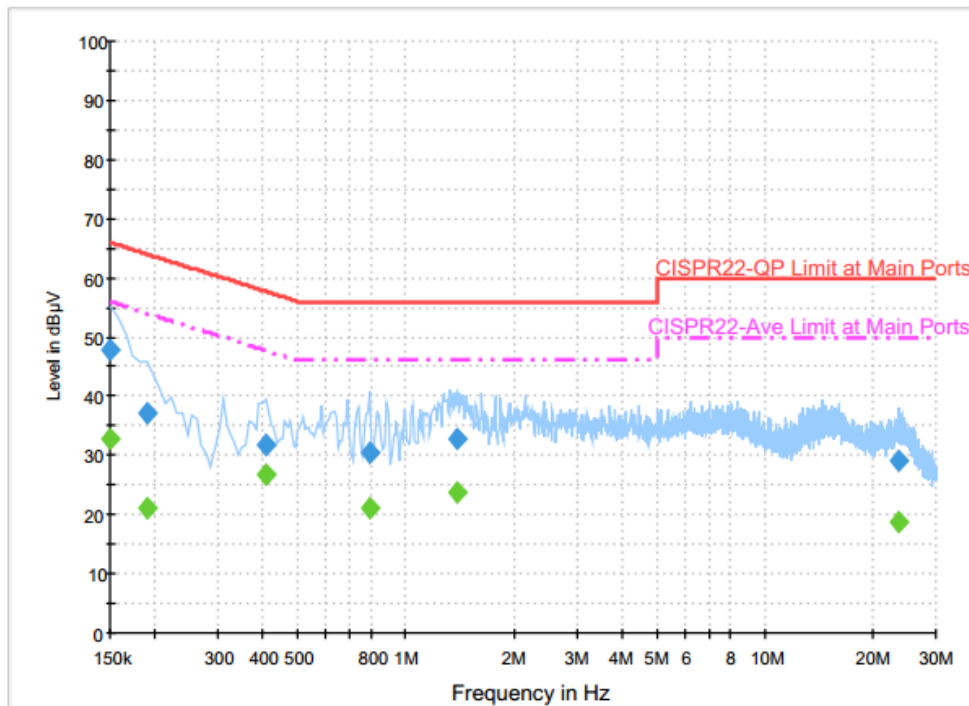
#### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	46.9	Off	L1	19.6	18.7	65.6
1.398000	40.2	Off	L1	19.7	15.8	56.0
1.446000	43.2	Off	L1	19.7	12.8	56.0
2.278000	34.9	Off	L1	18.5	21.1	56.0
2.942000	38.3	Off	L1	19.6	17.7	56.0
3.678000	33.2	Off	L1	19.8	22.8	56.0
15.726000	37.5	Off	L1	20.5	22.5	60.0

#### Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	35.5	Off	L1	19.6	20.1	55.6
1.398000	30.5	Off	L1	19.7	15.5	46.0
1.446000	31.5	Off	L1	19.7	14.5	46.0
2.278000	26.2	Off	L1	18.5	19.8	46.0
2.942000	27.2	Off	L1	19.6	18.8	46.0
3.678000	24.5	Off	L1	19.8	21.5	46.0
15.726000	26.5	Off	L1	20.5	23.5	50.0

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	21~23℃
<b>Test Engineer :</b>	Arthur Hsieh	<b>Relative Humidity :</b>	50~52%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Neutral
<b>Function Type :</b>	GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter 1)		


**Final Result : Quasi-Peak**

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	47.9	Off	N	19.6	18.1	66.0
0.190000	37.3	Off	N	19.6	26.7	64.0
0.406000	31.7	Off	N	19.6	26.0	57.7
0.790000	30.5	Off	N	19.6	25.5	56.0
1.382000	32.9	Off	N	19.7	23.1	56.0
23.550000	29.0	Off	N	21.0	31.0	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	32.9	Off	N	19.6	23.1	56.0
0.190000	20.9	Off	N	19.6	33.1	54.0
0.406000	26.8	Off	N	19.6	20.9	47.7
0.790000	21.2	Off	N	19.6	24.8	46.0
1.382000	23.9	Off	N	19.7	22.1	46.0
23.550000	18.8	Off	N	21.0	31.2	50.0

## 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

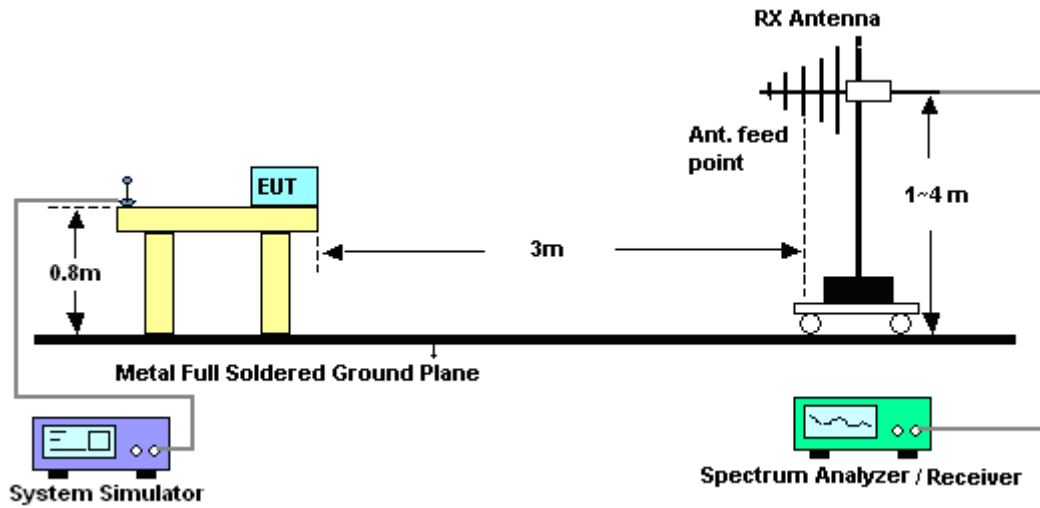
The measuring equipment is listed in the section 4 of this test report.

### 3.2.3. Test Procedures

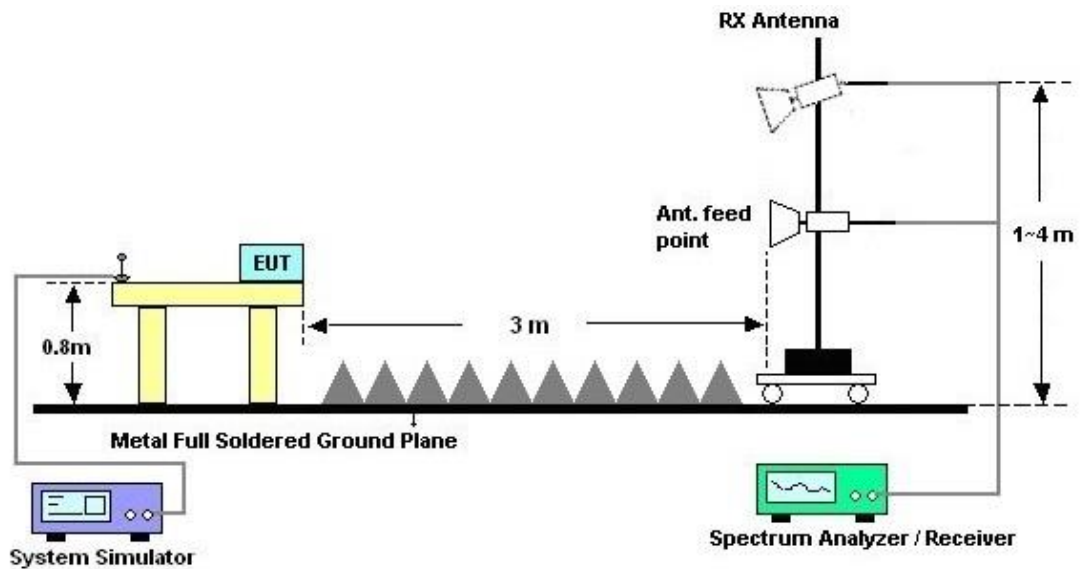
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
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 - Preamplifier Factor = Level

### 3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



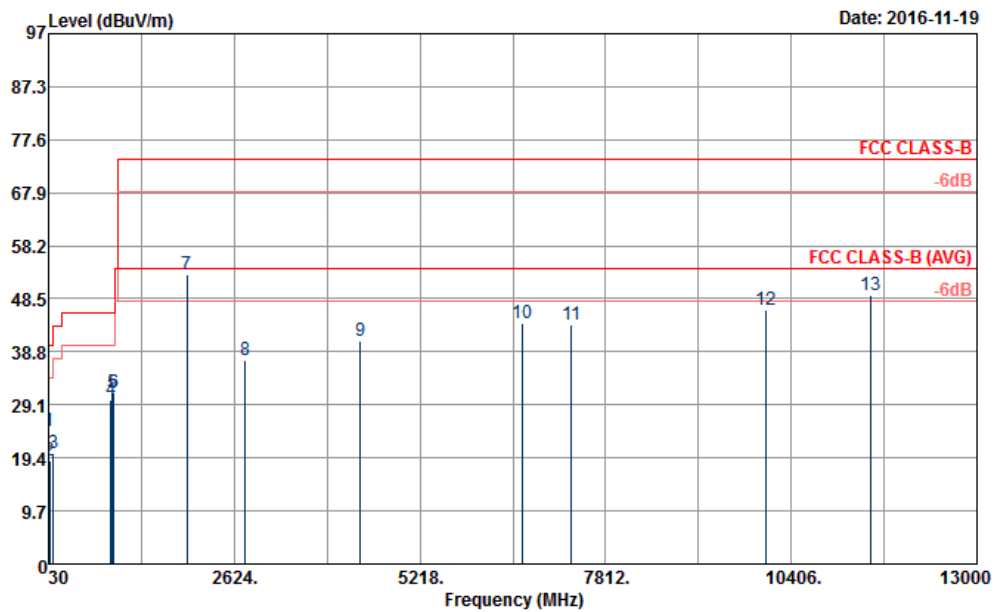
For radiated emissions above 1GHz





### 3.2.5. Test Result of Radiated Emission

<b>Test Mode :</b>	Mode 2	<b>Temperature :</b>	20~23°C
<b>Test Engineer :</b>	Hayden Wu	<b>Relative Humidity :</b>	50~53%
<b>Test Distance :</b>	3m	<b>Polarization :</b>	Horizontal
<b>Function Type :</b>	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter 2)		
<b>Remark :</b>	#7 is system simulator signal which can be ignored.		

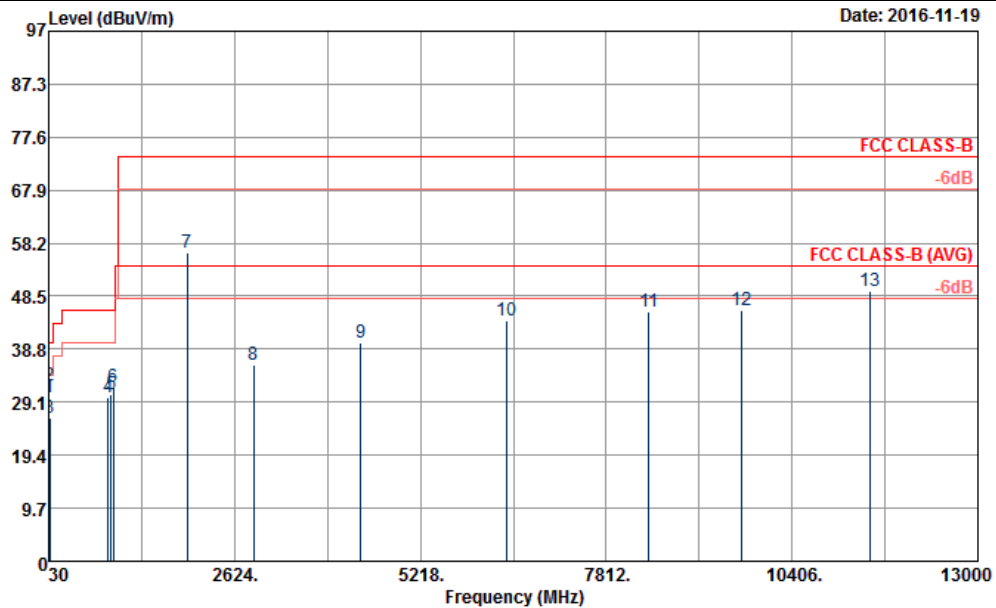


Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m 9120D\_1156\_160817 HORIZONTAL  
 Project : 601804  
 Power : 120Vac/60Hz  
 Memo : Mode 2

	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	30.00	24.37	-15.63	40.00	28.57	25.70	1.90	31.80	---	---	Peak
2	47.01	19.03	-20.97	40.00	33.00	15.95	1.85	31.77	---	---	Peak
3	97.77	20.19	-23.31	43.50	34.13	15.74	2.03	31.71	---	---	Peak
4	898.50	29.94	-16.06	46.00	28.70	29.39	3.39	31.54	---	---	Peak
5	923.00	31.38	-14.62	46.00	29.45	30.01	3.23	31.31	100	148	Peak
6	943.30	31.37	-14.63	46.00	28.85	30.55	3.10	31.13	---	---	Peak
7	1960.00	52.98			80.51	26.56	6.31	60.40	---	---	Peak
8	2776.00	37.22	-36.78	74.00	62.14	28.17	7.52	60.61	---	---	Peak
9	4386.00	40.67	-33.33	74.00	60.13	30.88	11.01	61.35	---	---	Peak
10	6640.00	43.91	-30.09	74.00	55.81	35.82	12.26	59.98	---	---	Peak
11	7334.00	43.88	-30.12	74.00	54.87	37.43	11.71	60.13	---	---	Peak
12	10042.00	46.57	-27.43	74.00	52.39	41.27	13.45	60.54	---	---	Peak
13	11510.00	49.21	-24.79	74.00	48.76	42.50	15.95	58.00	100	0	Peak



Test Mode :	Mode 2	Temperature :	20~23°C
Test Engineer :	Hayden Wu	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter 2)		
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m 9120D\_1156\_160817 VERTICAL  
Project : 6O1804  
Power : 120Vac/60Hz  
Memo : Mode 2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.00	30.10	-9.90	40.00	34.30	25.70	1.90	31.80	100	126 QP
2	34.05	32.10	-7.90	40.00	38.51	23.46	1.92	31.79	---	---
3	46.20	26.17	-13.83	40.00	39.80	16.37	1.78	31.78	---	---
4	858.60	30.12	-15.88	46.00	29.34	29.15	3.32	31.69	---	---
5	902.70	30.53	-15.47	46.00	29.18	29.48	3.37	31.50	---	---
6	927.20	31.89	-14.11	46.00	29.85	30.11	3.21	31.28	---	---
7	1960.00	56.44			83.97	26.56	6.31	60.40	---	---
8	2888.00	35.99	-38.01	74.00	60.48	28.63	7.59	60.71	---	---
9	4388.00	40.11	-33.89	74.00	59.57	30.88	11.01	61.35	---	---
10	6418.00	43.97	-30.03	74.00	56.23	35.43	12.08	59.77	---	---
11	8412.00	45.67	-28.33	74.00	52.58	38.40	13.89	59.20	---	---
12	9698.00	46.06	-27.94	74.00	52.40	40.19	14.07	60.60	---	---
13	11488.00	49.36	-24.64	74.00	48.98	42.45	15.95	58.02	100	0 Peak



## 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 06, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Nov. 06, 2016	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Nov. 06, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Nov. 06, 2016	Dec. 13, 2016	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Oct. 15, 2016	Nov. 19, 2016	Oct. 14, 2017	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Nov. 19, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 05, 2016	Nov. 19, 2016	Aug. 04, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Nov. 19, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Nov. 19, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Nov. 19, 2016	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Nov. 19, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Nov. 19, 2016	N/A	Radiation (03CH06-HY)

## 5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.7
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.9
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.7
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