



# FCC Test Report

**APPLICANT** : LG Electronics Mobile Comm USA  
**EQUIPMENT** : Smart phone  
**BRAND NAME** : LG  
**MODEL NAME** : LG-X240YK  
**FCC ID** : ZNFX240YK  
**STANDARD** : FCC 47 CFR FCC Part 15 Subpart B  
**CLASSIFICATION** : Certification

The product was received on Dec. 10, 2016 and testing was completed on Apr. 12, 2017. 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.

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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## 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 8.40 dB at 0.422 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 6.62 dB at 956.600 MHz for 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-X240YK
FCC ID	ZNFX240YK
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11b/g/n HT20/HT40 Bluetooth BR/EDR/LE
HW Version	Rev. 1.0
SW Version	LGX240YKAT-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	Brand Name	Sunlin
	Model Name	EAY64009102(MCS-02WR2)
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 LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 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 LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 759.5 MHz ~ 801.5 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 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:64 QAM (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. TW0007 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

<b>Test Site</b>	SPORTON INTERNATIONAL INC.
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	03CH10-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.

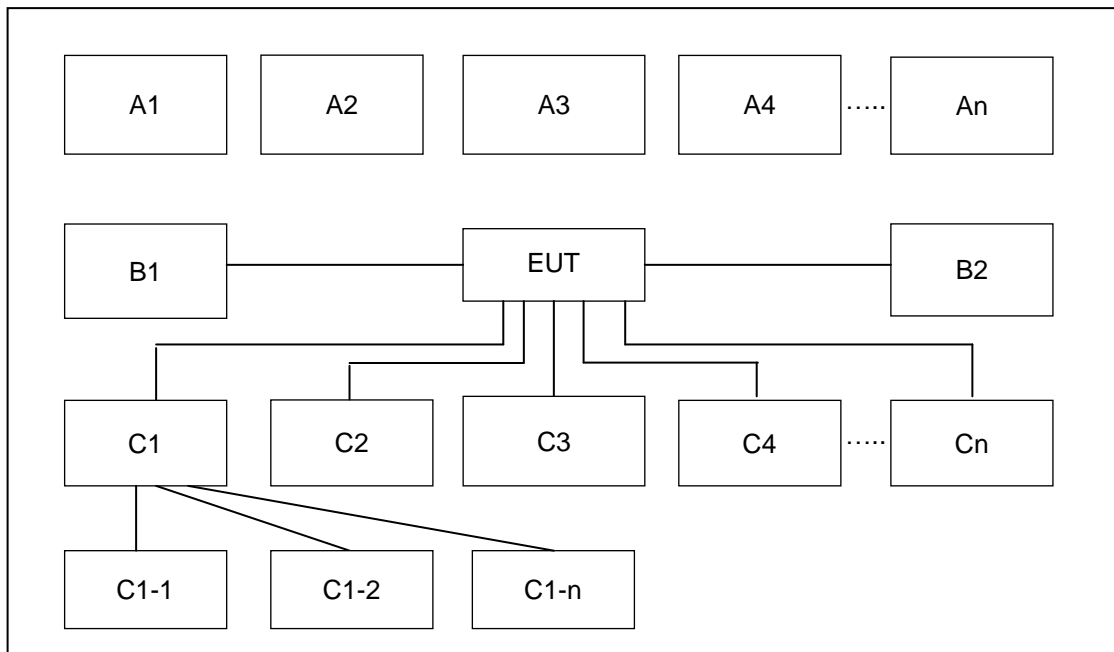
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).





Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 3: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 4: Flight mode + Earphone + Battery + USB Cable (Data Link with Notebook) + SIM 1 Mode 5: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (98MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 6: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (88MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 7: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (108MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1
Radiated Emissions < 1GHz	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 3: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 4: Flight mode + Earphone + Battery + USB Cable (Data Link with Notebook) + SIM 1 Mode 5: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (98MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 6: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (88MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1 Mode 7: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + FM Rx (108MHz) + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1
Radiated Emissions ≥ 1GHz	Mode 1: Flight mode + Earphone + Battery + USB Cable (Data Link with Notebook) + SIM 1
<b>Remark:</b> 1. The worst case of AC is mode 1; 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. Data Link with Notebook means data application transferred mode between EUT and Notebook.	

## 2.2. Connection Diagram of Test System



Conduction and Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	7
A1	BT Earphone	Bluetooth	X	X	X		X	X	X
A2	System Simulator	GSM/WCDMA/LTE	X	X	X		X	X	X
A3	AP router	WiFi	X	X	X		X	X	X
No.	Power Source	Connection Type	1	2	3	4	5	6	7
B1	AC : 120V/60Hz	AC Power Cable	X	X	X		X	X	X
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
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	X	X	X
C3	SD card	SD I/O interface without Cable	X	X	X	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.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
4.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
6.	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
7.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	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.
5. Turn on Radio and receive continuous signals from FM Generator during the test.



### 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.

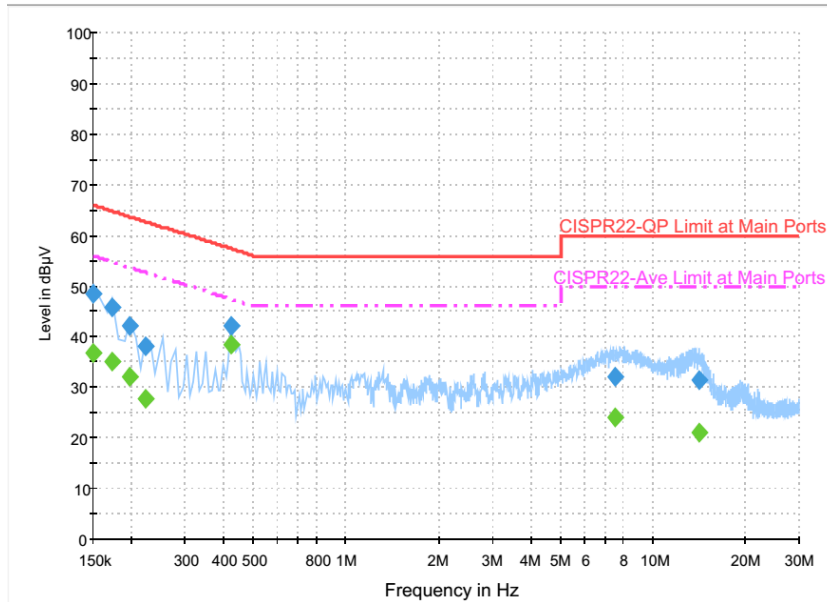
### 3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~25°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1		



Final Result : Quasi-Peak

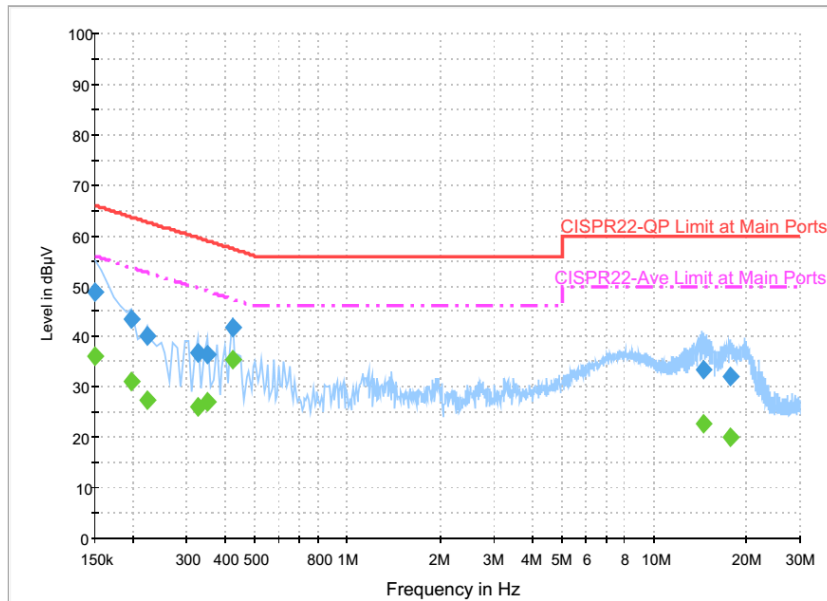
Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	48.6	Off	L1	19.6	17.4	66.0
0.174000	45.7	Off	L1	19.6	19.1	64.8
0.198000	42.0	Off	L1	19.6	21.7	63.7
0.222000	38.2	Off	L1	19.6	24.5	62.7
0.422000	42.1	Off	L1	19.6	14.7	56.8
7.550000	32.2	Off	L1	19.9	27.8	60.0
14.118000	31.4	Off	L1	20.3	28.6	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	36.9	Off	L1	19.6	19.1	56.0
0.174000	35.1	Off	L1	19.6	19.7	54.8
0.198000	32.1	Off	L1	19.6	21.6	53.7
0.222000	27.6	Off	L1	19.6	25.1	52.7
0.422000	38.4	Off	L1	19.6	8.4	46.8
7.550000	24.1	Off	L1	19.9	25.9	50.0
14.118000	21.0	Off	L1	20.3	29.0	50.0



Test Mode :	Mode 1	Temperature :	21~25°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter) + SIM 1		



**Final Result : Quasi-Peak**

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	49.0	Off	N	19.5	17.0	66.0
0.198000	43.5	Off	N	19.5	20.2	63.7
0.222000	40.2	Off	N	19.5	22.5	62.7
0.326000	36.7	Off	N	19.5	22.9	59.6
0.350000	36.5	Off	N	19.5	22.5	59.0
0.422000	41.7	Off	N	19.5	15.7	57.4
14.542000	33.4	Off	N	20.4	26.6	60.0
17.774000	31.9	Off	N	20.6	28.1	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	36.0	Off	N	19.5	20.0	56.0
0.198000	31.0	Off	N	19.5	22.7	53.7
0.222000	27.3	Off	N	19.5	25.4	52.7
0.326000	26.1	Off	N	19.5	23.5	49.6
0.350000	27.2	Off	N	19.5	21.8	49.0
0.422000	35.5	Off	N	19.5	11.9	47.4
14.542000	22.6	Off	N	20.4	27.4	50.0
17.774000	20.0	Off	N	20.6	30.0	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**

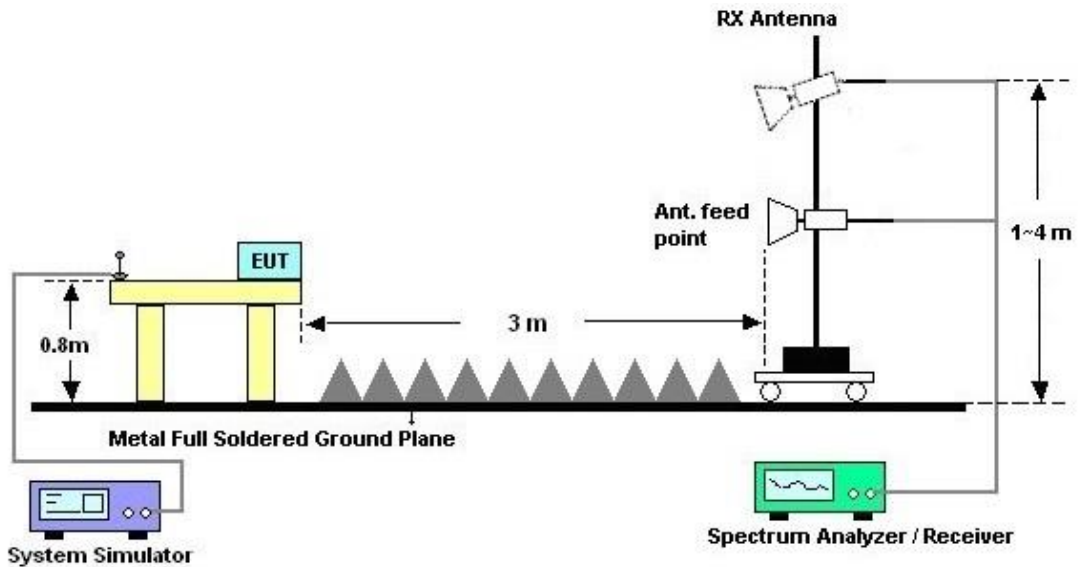
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 - Preamp Factor = Level

### 3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



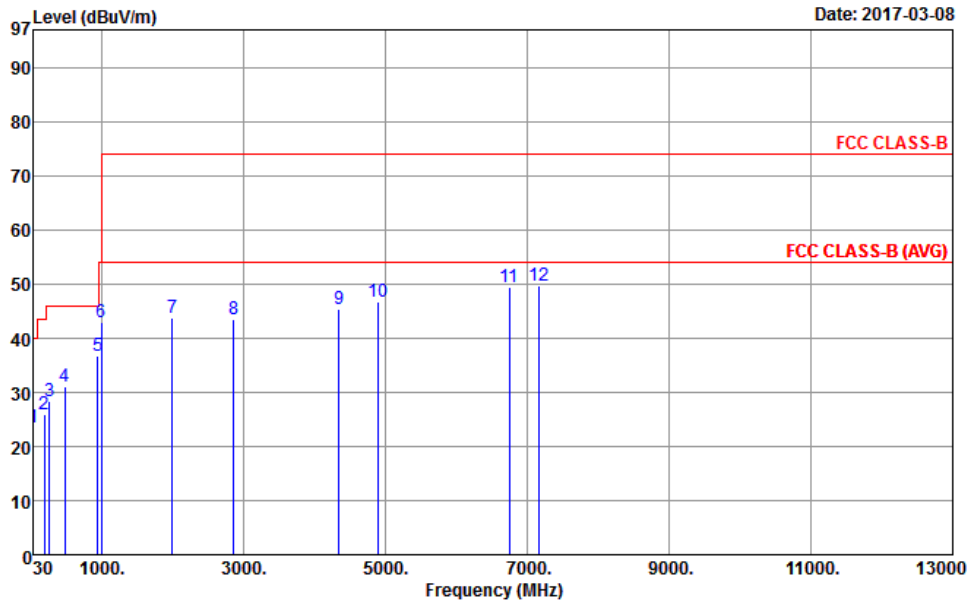
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 4	Temperature :	22~24°C
Test Engineer :	Kyle Jhuang	Relative Humidity :	45~47%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	Flight mode + Earphone + Battery + USB Cable (Data Link with Notebook) + SIM 1		

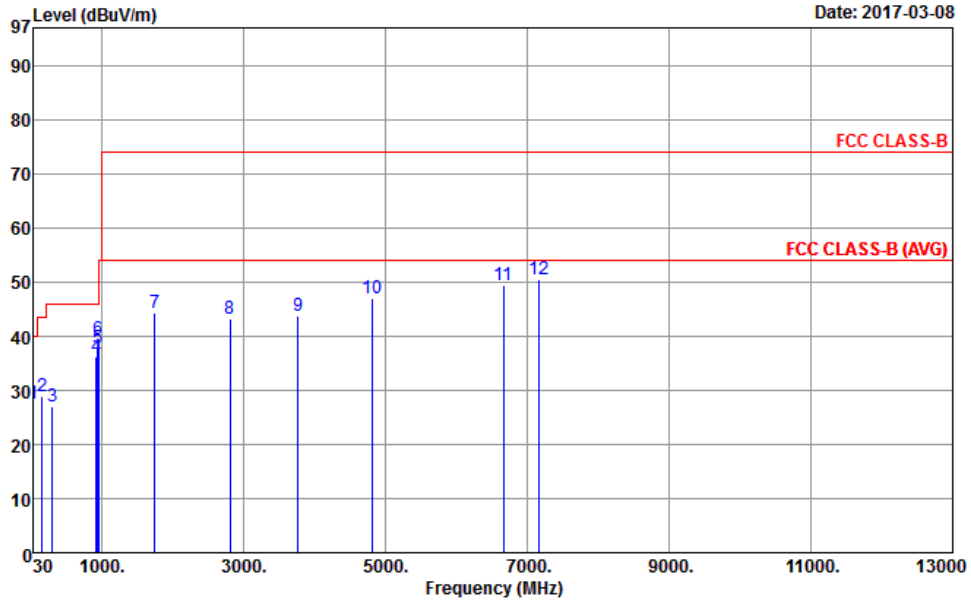


Site : 03CH10-HY  
 Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL  
 Power : From System  
 Project : 6D1013  
 Mode : 4

	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	30.54	23.39	-16.61	40.00	29.96	25.54	0.65	32.76	---	---	Peak
2	188.22	25.86	-17.64	43.50	41.55	15.58	1.48	32.75	---	---	Peak
3	266.52	28.36	-17.64	46.00	39.80	19.52	1.76	32.72	---	---	Peak
4	479.90	31.21	-14.79	46.00	37.97	23.80	2.30	32.86	---	---	Peak
5	944.70	36.65	-9.35	46.00	35.29	29.87	3.29	31.80	100	0	Peak
6	996.50	43.04	-10.96	54.00	40.91	30.00	3.38	31.25	---	---	Peak
7	1998.00	43.87	-30.13	74.00	46.22	26.20	4.84	33.39	---	---	Peak
8	2856.00	43.63	-30.37	74.00	42.58	28.20	5.91	33.06	---	---	Peak
9	4340.00	45.41	-28.59	74.00	40.42	30.47	7.16	32.64	---	---	Peak
10	4888.00	46.61	-27.39	74.00	39.75	31.59	7.82	32.55	---	---	Peak
11	6748.00	49.34	-24.66	74.00	38.51	34.93	9.09	33.19	---	---	Peak
12	7158.00	49.84	-24.16	74.00	38.02	35.84	9.41	33.43	100	0	Peak



Test Mode :	Mode 4	Temperature :	22~24°C
Test Engineer :	Kyle Jhuang	Relative Humidity :	45~47%
Test Distance :	3m	Polarization :	Vertical
Function Type :	Flight mode + Earphone + Battery + USB Cable (Data Link with Notebook) + SIM 1		



Site : 03CH10-HY  
 Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL  
 Power : From System  
 Project : 6D1013  
 Mode : 4

	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	39.99	27.54	-12.46	40.00	39.14	20.50	0.65	32.75	---	---	Peak
2	159.87	28.79	-14.71	43.50	43.22	17.00	1.33	32.76	---	---	Peak
3	298.65	27.09	-18.91	46.00	38.23	19.69	1.88	32.71	---	---	Peak
4	923.70	36.21	-9.79	46.00	35.73	29.31	3.20	32.03	---	---	Peak
5	947.50	37.81	-8.19	46.00	36.35	29.95	3.29	31.78	---	---	Peak
6	956.60	39.38	-6.62	46.00	37.76	30.00	3.29	31.67	100	0	Peak
7	1744.00	44.27	-29.73	74.00	47.66	25.80	4.55	33.74	---	---	Peak
8	2810.00	43.20	-30.80	74.00	42.33	28.10	5.85	33.08	---	---	Peak
9	3770.00	43.89	-30.11	74.00	40.40	29.35	6.93	32.79	---	---	Peak
10	4824.00	46.94	-27.06	74.00	40.46	31.46	7.58	32.56	---	---	Peak
11	6660.00	49.35	-24.65	74.00	38.71	34.74	9.04	33.14	---	---	Peak
12	7166.00	50.46	-23.54	74.00	38.61	35.88	9.42	33.45	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	Mar. 07, 2017 ~ Apr. 12, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Mar. 07, 2017 ~ Apr. 12, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Mar. 07, 2017 ~ Apr. 12, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Mar. 07, 2017 ~ Apr. 12, 2017	Dec. 05, 2017	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 26, 2016	Mar. 08, 2017 ~ Apr. 10, 2017	Oct. 25, 2017	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35413&02	30MHz~1GHz	Jan. 07, 2017	Mar. 08, 2017 ~ Apr. 10, 2017	Jan. 06, 2018	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Sep. 30, 2016	Mar. 08, 2017 ~ Apr. 10, 2017	Sep. 29, 2017	Radiation (03CH10-HY)
Preamplifier	Keysight	83017A	MY53270078	1GHz~26.5GHz	Oct. 26, 2016	Mar. 08, 2017 ~ Apr. 10, 2017	Oct. 25, 2017	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHz	Oct. 17, 2016	Mar. 08, 2017 ~ Apr. 10, 2017	Oct. 16, 2017	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 08, 2017 ~ Apr. 10, 2017	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Mar. 08, 2017 ~ Apr. 10, 2017	N/A	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JPA00101800- 30-10P	1601180002	1GHz~18GHz	Jul. 27, 2016	Mar. 08, 2017 ~ Apr. 10, 2017	Jul. 26, 2017	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	N/A	Mar. 10, 2016	Mar. 08, 2017	Mar. 09, 2017	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY53290045	N/A	Jan. 19, 2017	Mar. 15, 2017 ~ Apr. 10, 2017	Jan. 18, 2018	Radiation (03CH10-HY)



## 5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.70
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.60
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 13000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.90
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