



FCC Test Report

APPLICANT : Motorola Mobility, LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : 5892
FCC ID : IHDT56VC1
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Verification

This is a variant report which is only valid together with the original test report. The product was received on Jul. 25, 2016 and testing was completed on Jul. 29, 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.

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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FCC ID : IHDT56VC1

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TABLE OF CONTENTS

REVISION HISTORY 3

SUMMARY OF TEST RESULT 4

1. GENERAL DESCRIPTION 5

 1.1. Applicant..... 5

 1.2. Manufacturer 5

 1.3. Product Feature of Equipment Under Test 5

 1.4. Product Specification of Equipment Under Test 6

 1.5. Modification of EUT 7

 1.6. Test Location 7

 1.7. Applicable Standards 8

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 9

 2.1. Test Mode 9

 2.2. Connection Diagram of Test System 10

 2.3. Support Unit used in test configuration and system 11

 2.4. EUT Operation Test Setup 11

3. TEST RESULT 12

 3.1. Test of AC Conducted Emission Measurement 12

 3.2. Test of Radiated Emission Measurement 18

4. LIST OF MEASURING EQUIPMENT 22

5. UNCERTAINTY OF EVALUATION 23

APPENDIX A. ORIGINAL REPORT



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 1.50 dB at 0.270 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 7.12 dB at 41.88 MHz



1. General Description

1.1. Applicant

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.2. Manufacturer

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	5892
FCC ID	IHDT56VC1
IMEI Code	354130070011991
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth v3.0 EDR Bluetooth v4.0 LE
HW Version	DVT2
EUT Stage	Identical Prototype

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

Accessory List	
WPC Cover	Brand Name : INCIPIO
	Model Name : MT-043-CASE



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz CDMA BC0:824.70 MHz ~ 848.31 MHz CDMA BC1:1851.25 MHz ~ 1908.75 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 13 : 779.5 MHz ~ 784.5 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 ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz CDMA BC0: 869.70 MHz ~ 893.31 MHz CDMA BC1: 1931.25 MHz ~ 1988.75 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 13 : 748.5 MHz ~ 753.5 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 ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz NFC : 13.56 MHz
Antenna Type	WWAN : Coupling type (LDS) Antenna WLAN Ant. 1: Loop Antenna WLAN Ant. 2: ILA Antenna Bluetooth : Loop Antenna GPS : Fixed Internal Antenna NFC: Coil / embeded Antenna



Standards-related Product Specification	
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK CDMA2000 1xRTT: QPSK CDMA2000 1xEV-DO: QPSK/8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK NFC: ASK

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.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st 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	
Test Site No.	Sporton Site No.	
	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:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. For FCC 15 Subpart B - Unintentional Radiators, receivers contained within a transceiver shall be authorized under the verification procedure per the Section 15.101 (b).
3. For other Unintentional Radiators features of this EUT, test reports are be issued separately. Per the Note of the Section 15.101, when device supports features (USB, FM Radio, digital devices...etc) more than one category of authorization, type of authorization shall be appropriately chosen for FCC 15B compliance rule, and the Section 15.101 (b), only those receivers that operate (tune) within the frequency range of 30-960 MHz, CB receivers and radar detectors are subject to the authorizations shown in paragraph (a) of the Section 15.101. However, receivers indicated as being subject to Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the verification procedure.
4. Receivers operating above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, are exempt from complying with the technical provisions of this part but are subject to § 15.5.



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).

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

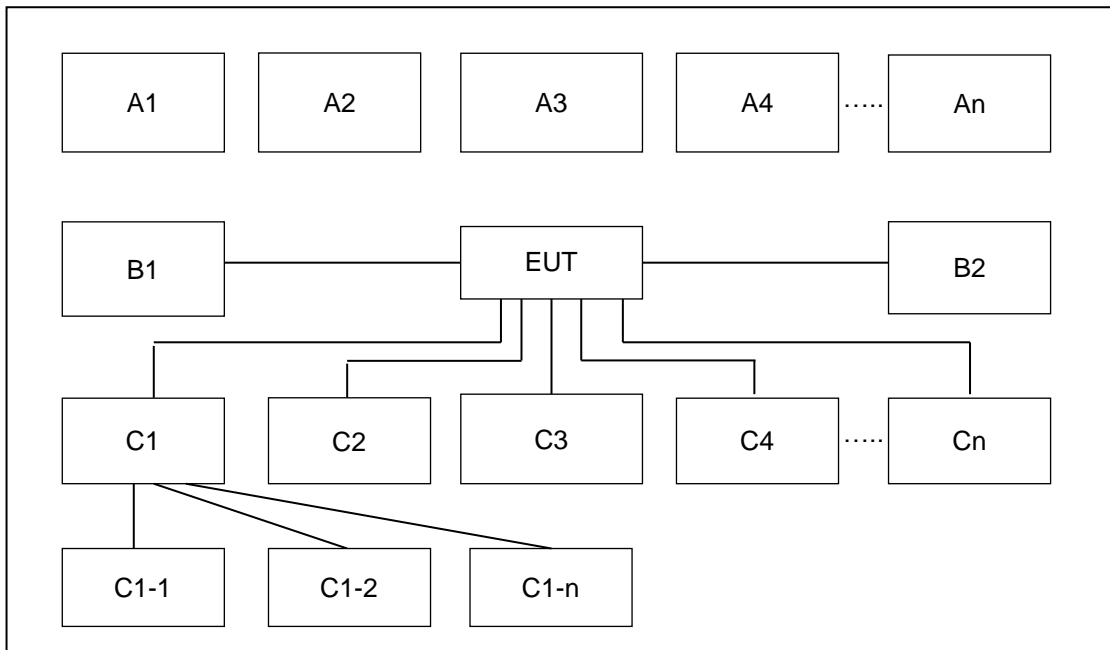
Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	☒	☒	☒

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	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter) Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter
Radiated Emissions < 1GHz	1	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter) Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter
Radiated Emissions ≥ 1GHz	1	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter)
Remark:		
1. The worst case of AC is mode 2; only the test data of this mode was reported. 2. The worst case of RE < 1G is mode 1; only the test data of this mode was reported.		

2.2. Connection Diagram of Test System



Conduction & Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	-	-	-	-	-
A1	Bluetooth Earphone	Bluetooth	X	X					
A2	System Simulator	GSM/WCDMA	X	X					
A3	AP router	WiFi	X	X					
A4	WPC pad	WPC	X						
A5	PMA pad	PMA		X					
No.	Power Source	Connection Type	1	2	-	-	-	-	-
A4-1	AC : 120V/60Hz	AC Power Cable	X						
A5-1	AC : 120V/60Hz	AC Power Cable		X					
No.	Setup Peripherals	Connection Type	1	2	-	-	-	-	-
C1	SD card	SD I/O interface without Cable	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	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
6.	Wireless Charger	LG	WCD-100	FCC DoC	N/A	N/A
7.	PMA	DURACELL	M-018B-518A	FCC DoC	N/A	N/A
8.	USB Cable	Motorola	SKN6461A	N/A	Unshielded, 1.0 m	N/A
9.	Adapter	Motorola	SPN5865A	N/A	N/A	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 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. Turn on camera to capture images.
2. Turn on the NFC function.



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.

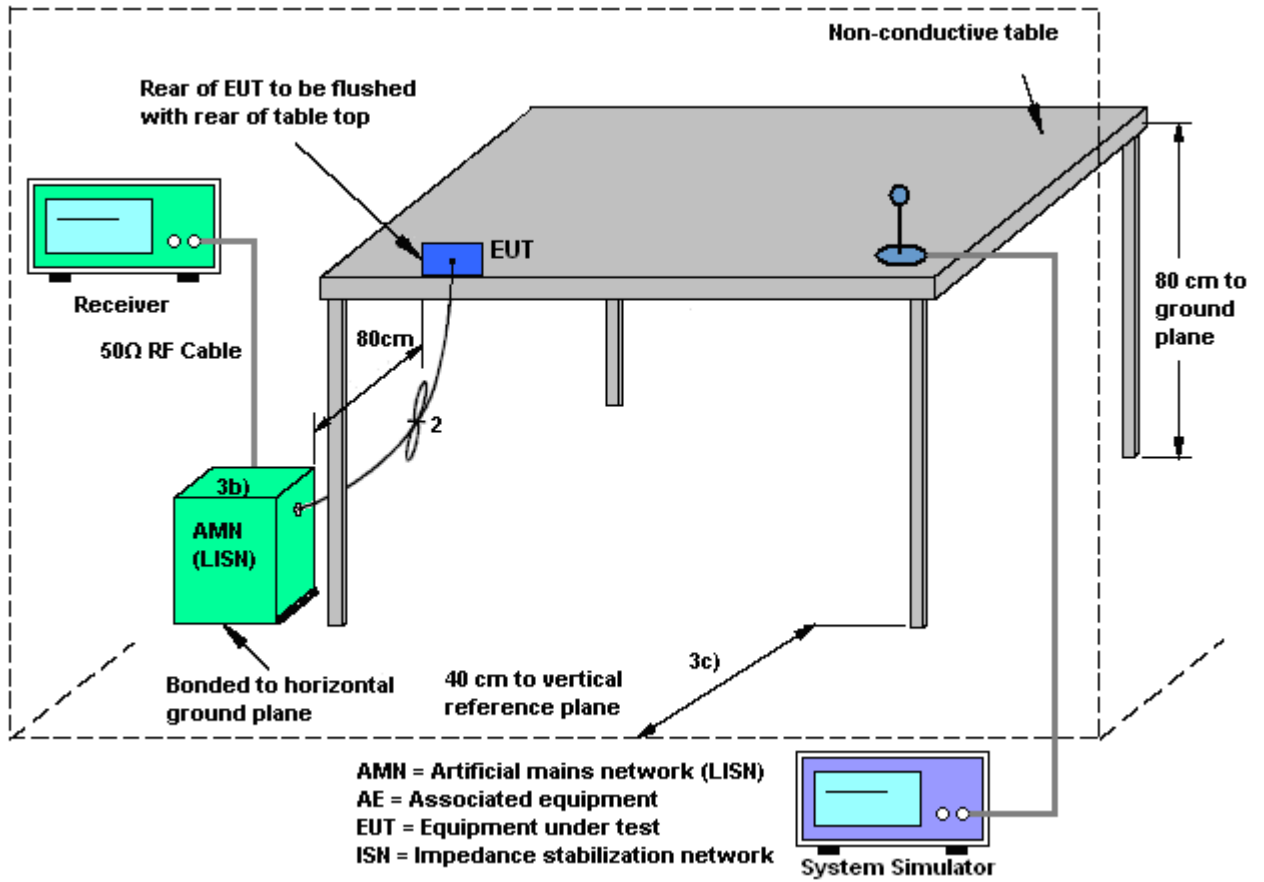
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

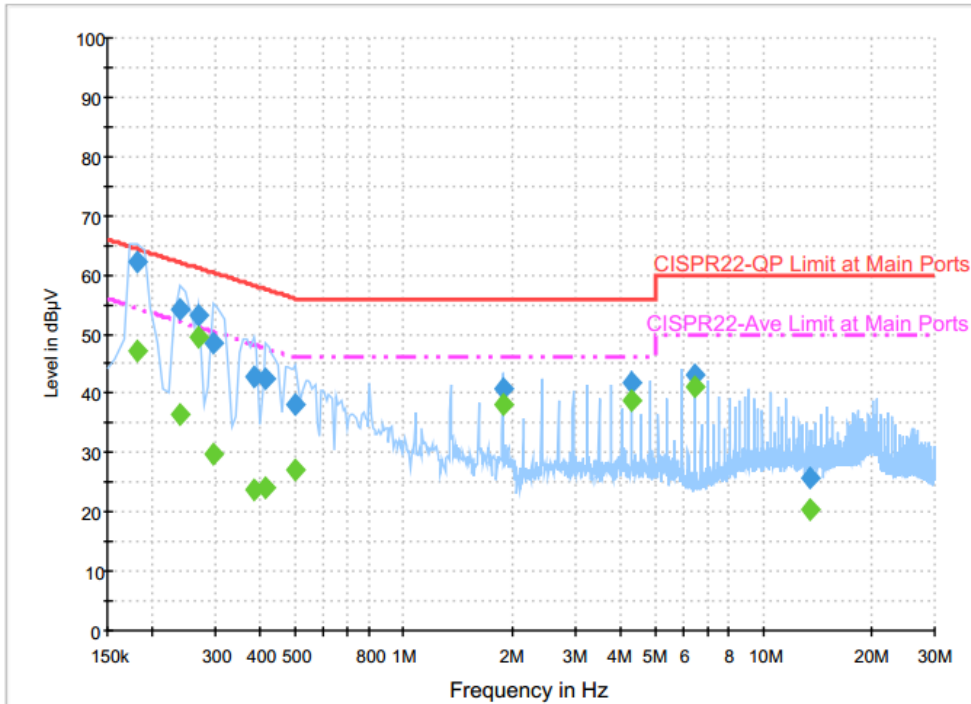
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 2	Temperature :	24~25°C
Test Engineer :	Arthur Hsieh and Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter		

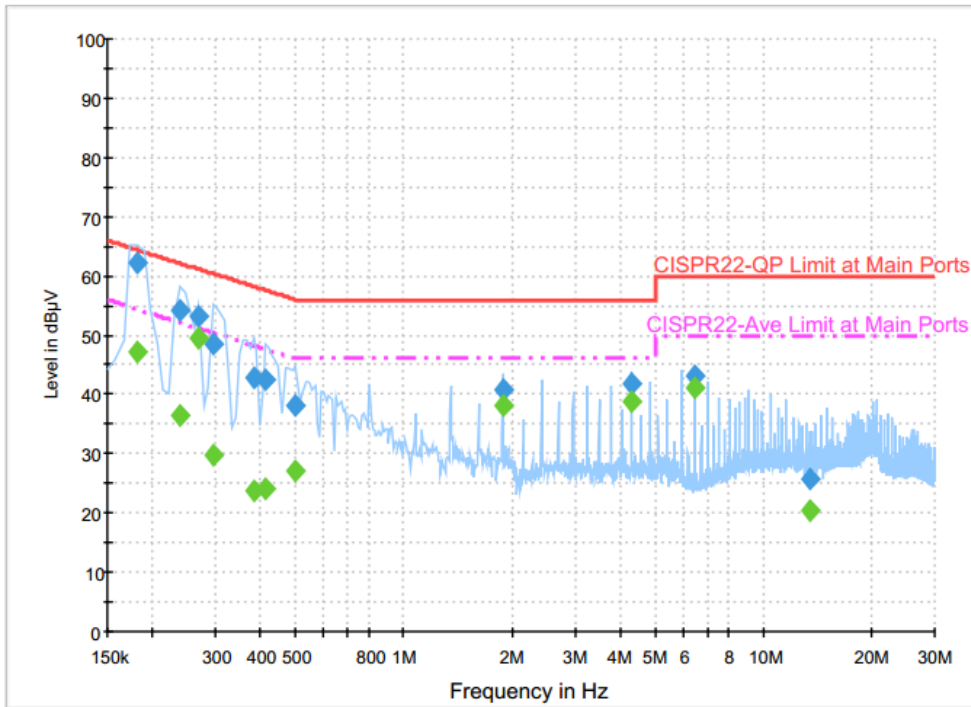


Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	62.3	Off	L1	19.6	2.1	64.4
0.238000	54.2	Off	L1	19.6	8.0	62.2
0.270000	53.1	Off	L1	19.6	8.0	61.1
0.294000	48.5	Off	L1	19.6	11.9	60.4
0.382000	42.9	Off	L1	19.6	15.3	58.2
0.414000	42.5	Off	L1	19.6	15.1	57.6
0.502000	38.1	Off	L1	19.6	17.9	56.0
1.886000	40.9	Off	L1	19.7	15.1	56.0
4.310000	41.9	Off	L1	19.8	14.1	56.0
6.462000	43.2	Off	L1	20.0	16.8	60.0
13.558000	25.6	Off	L1	20.3	34.4	60.0



Test Mode :	Mode 2	Temperature :	24~25°C
Test Engineer :	Arthur Hsieh and Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter		

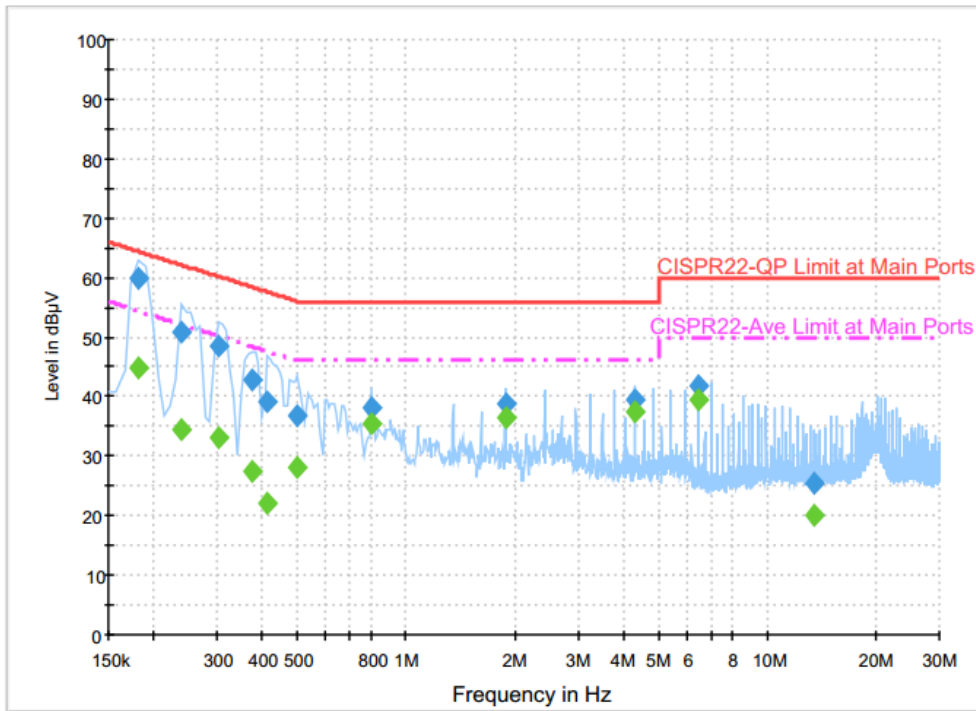


Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	47.1	Off	L1	19.6	7.3	54.4
0.238000	36.4	Off	L1	19.6	15.8	52.2
0.270000	49.6	Off	L1	19.6	1.5	51.1
0.294000	29.7	Off	L1	19.6	20.7	50.4
0.382000	23.7	Off	L1	19.6	24.5	48.2
0.414000	24.2	Off	L1	19.6	23.4	47.6
0.502000	27.2	Off	L1	19.6	18.8	46.0
1.886000	38.3	Off	L1	19.7	7.7	46.0
4.310000	38.9	Off	L1	19.8	7.1	46.0
6.462000	41.1	Off	L1	20.0	8.9	50.0
13.558000	20.2	Off	L1	20.3	29.8	50.0



Test Mode :	Mode 2	Temperature :	24~25°C
Test Engineer :	Arthur Hsieh and Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter		

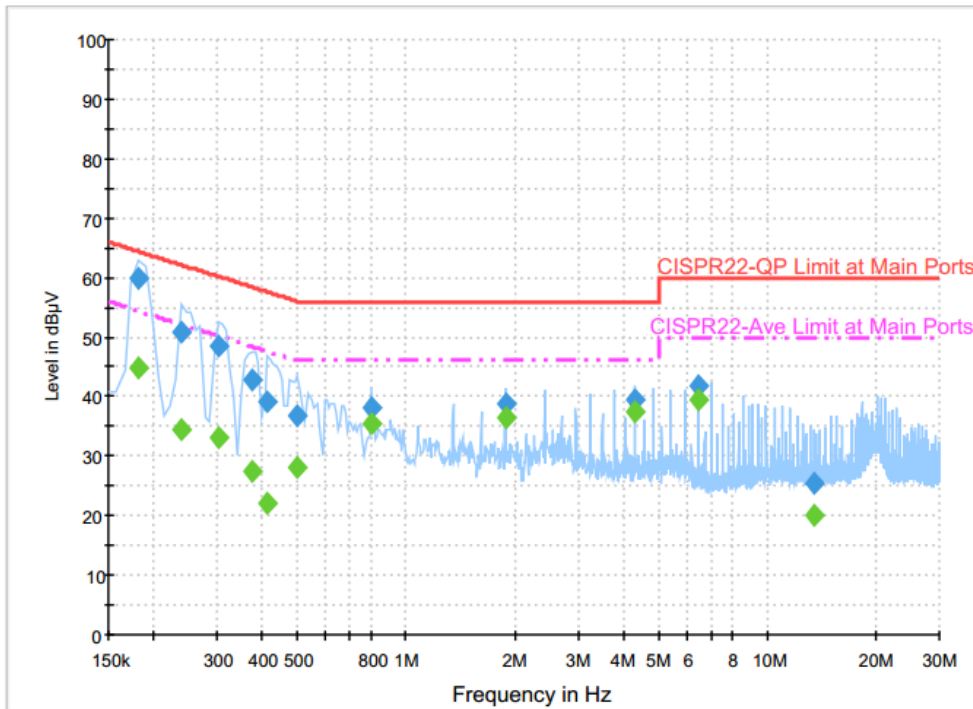


Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	59.8	Off	N	19.6	4.6	64.4
0.238000	50.8	Off	N	19.6	11.4	62.2
0.302000	48.5	Off	N	19.6	11.7	60.2
0.374000	42.7	Off	N	19.6	15.7	58.4
0.414000	39.0	Off	N	19.6	18.6	57.6
0.502000	36.9	Off	N	19.6	19.1	56.0
0.806000	38.0	Off	N	19.6	18.0	56.0
1.886000	38.7	Off	N	19.7	17.3	56.0
4.310000	39.6	Off	N	19.8	16.4	56.0
6.462000	41.7	Off	N	19.9	18.3	60.0
13.558000	25.6	Off	N	20.4	34.4	60.0



Test Mode :	Mode 2	Temperature :	24~25°C
Test Engineer :	Arthur Hsieh and Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter		



Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	44.8	Off	N	19.6	9.6	54.4
0.238000	34.3	Off	N	19.6	17.9	52.2
0.302000	33.2	Off	N	19.6	17.0	50.2
0.374000	27.3	Off	N	19.6	21.1	48.4
0.414000	22.2	Off	N	19.6	25.4	47.6
0.502000	28.1	Off	N	19.6	17.9	46.0
0.806000	35.3	Off	N	19.6	10.7	46.0
1.886000	36.5	Off	N	19.7	9.5	46.0
4.310000	37.3	Off	N	19.8	8.7	46.0
6.462000	39.5	Off	N	19.9	10.5	50.0
13.558000	20.0	Off	N	20.4	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

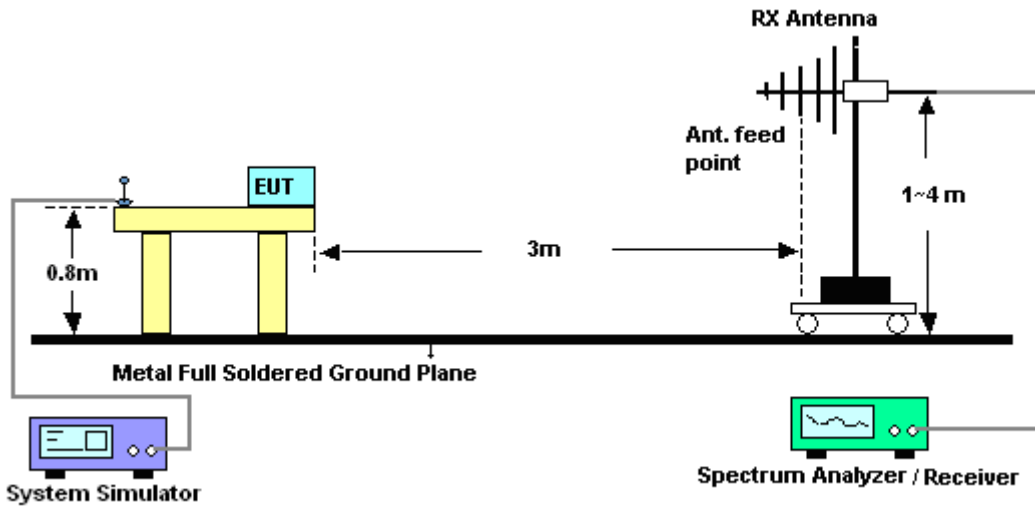
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

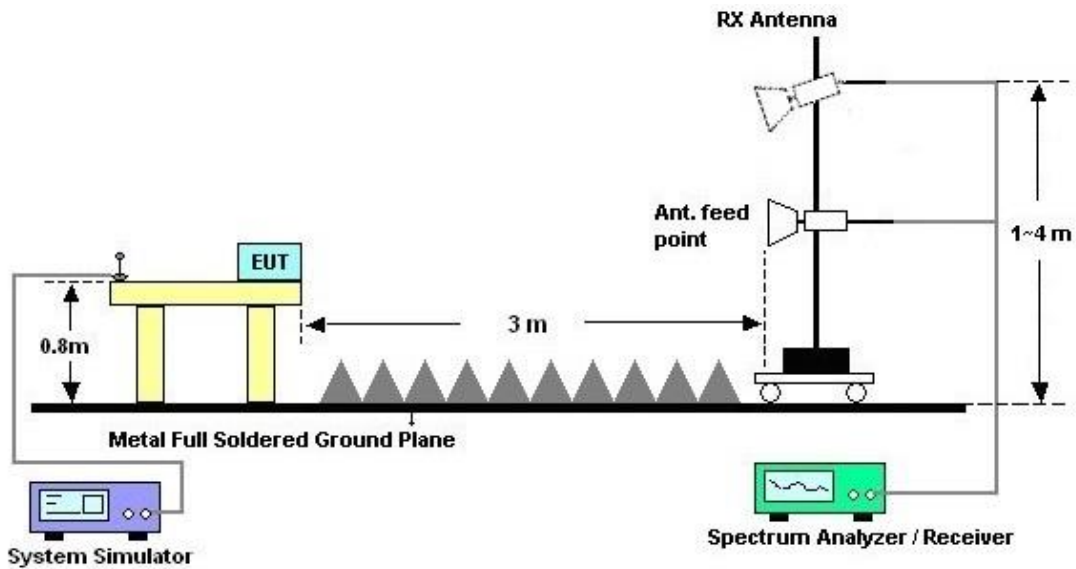
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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



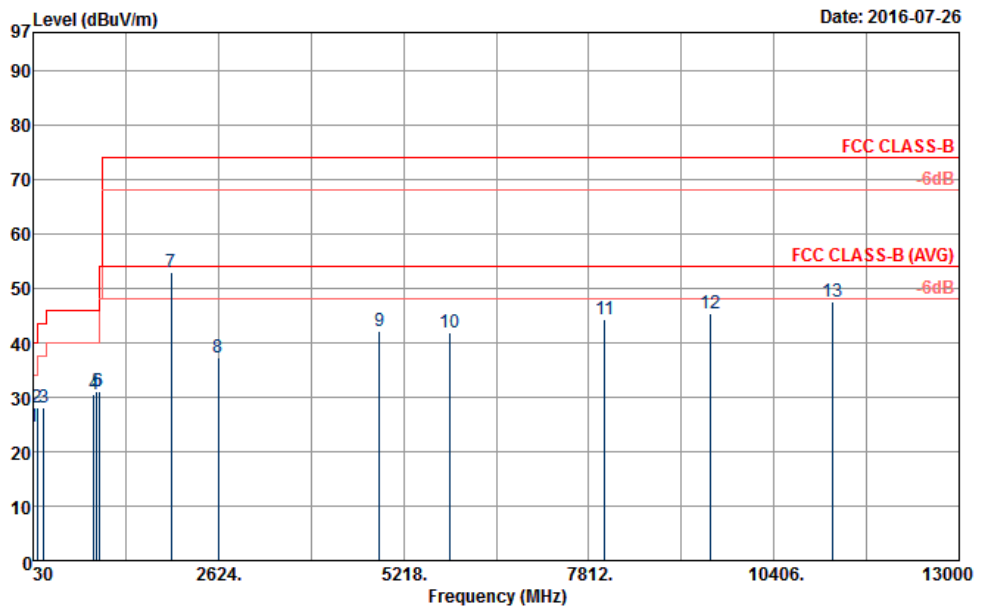
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 1	Temperature :	23~24°C
Test Engineer :	Donny Tang	Relative Humidity :	52~53%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter)		
Remark :	#7 is system simulator signal which can be ignored.		



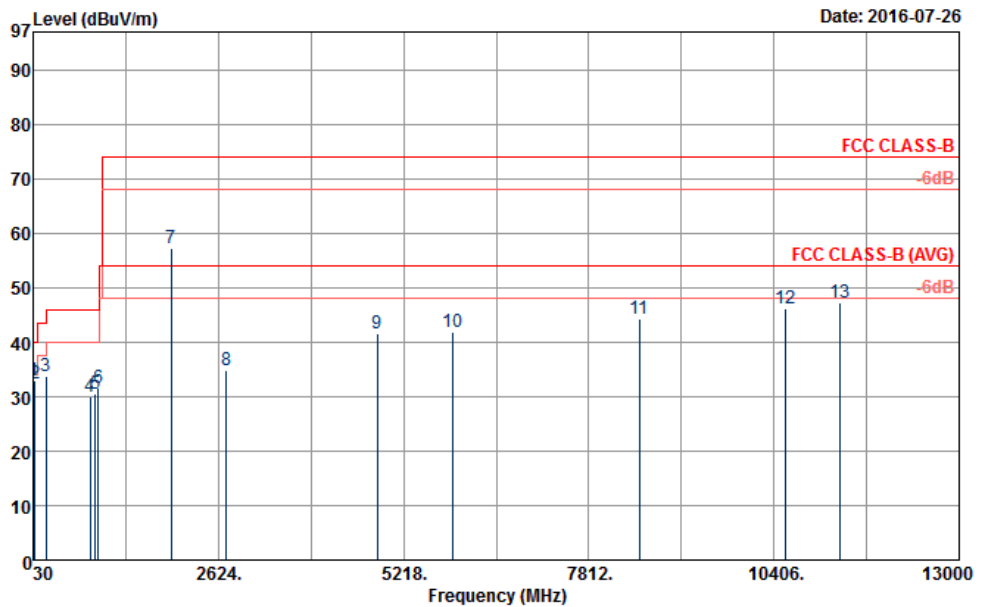
Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL

Power : 120Vac/60Hz
 Memo : Mode 1

	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	cm	deg	
1	30.00	24.48	-15.52	40.00	28.68	25.70	1.90	31.80	---	Peak
2	89.13	28.00	-15.50	43.50	43.23	14.58	1.91	31.72	---	Peak
3	174.45	28.05	-15.45	43.50	42.21	15.53	2.03	31.72	---	Peak
4	882.40	30.60	-15.40	46.00	29.54	29.30	3.36	31.60	---	Peak
5	923.70	31.05	-14.95	46.00	29.11	30.01	3.23	31.30	---	Peak
6	951.70	31.18	-14.82	46.00	28.47	30.70	3.05	31.04	100	163 Peak
7	1960.00	53.08			81.04	26.23	6.31	60.50	---	Peak
8	2622.00	37.35	-36.65	74.00	63.00	27.66	7.28	60.59	---	Peak
9	4880.00	42.04	-31.96	74.00	59.13	31.31	11.06	59.46	---	Peak
10	5856.00	41.93	-32.07	74.00	57.83	32.41	11.20	59.51	---	Peak
11	8036.00	44.44	-29.56	74.00	54.14	37.18	12.71	59.59	---	Peak
12	9506.00	45.42	-28.58	74.00	53.78	38.80	13.94	61.10	---	Peak
13	11234.00	47.59	-26.41	74.00	50.52	40.36	15.48	58.77	100	245 Peak



Test Mode :	Mode 1	Temperature :	23~24°C
Test Engineer :	Donny Tang	Relative Humidity :	52~53%
Test Distance :	3m	Polarization :	Vertical
Function Type :	GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter)		
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL
 Power : 120Vac/60Hz
 Memo : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	41.88	32.88	-7.12	40.00	44.03	18.88	1.75	31.78	100	194 Peak	
2	59.70	32.29	-7.71	40.00	49.95	11.90	2.20	31.76	---	---	Peak
3	206.31	33.77	-9.73	43.50	47.49	16.03	1.97	31.72	---	---	Peak
4	824.30	29.87	-16.13	46.00	29.72	28.64	3.34	31.83	---	---	Peak
5	898.50	30.62	-15.38	46.00	29.38	29.39	3.39	31.54	---	---	Peak
6	941.90	31.72	-14.28	46.00	29.26	30.50	3.10	31.14	---	---	Peak
7	1960.00	57.17			85.13	26.23	6.31	60.50	---	---	Peak
8	2734.00	34.98	-39.02	74.00	60.36	27.91	7.40	60.69	---	---	Peak
9	4846.00	41.52	-32.48	74.00	58.82	31.25	11.06	59.61	---	---	Peak
10	5906.00	41.85	-32.15	74.00	57.89	32.48	11.14	59.66	---	---	Peak
11	8518.00	44.22	-29.78	74.00	52.79	36.93	13.93	59.43	---	---	Peak
12	10562.00	46.10	-27.90	74.00	52.07	40.14	14.33	60.44	---	---	Peak
13	11330.00	47.28	-26.72	74.00	49.93	40.30	15.68	58.63	100	144 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	Jul. 29, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	Jul. 29, 2016	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Jul. 29, 2016	Dec. 01, 2016	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C	2725	30MHz~1GHz	Nov. 17, 2015	Jul. 25, 2016 ~ Jul. 26, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Jul. 25, 2016 ~ Jul. 26, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 21, 2015	Jul. 25, 2016 ~ Jul. 26, 2016	Aug. 20, 2016	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Jul. 25, 2016 ~ Jul. 26, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Jul. 25, 2016 ~ Jul. 26, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Jul. 25, 2016 ~ Jul. 26, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Jul. 25, 2016 ~ Jul. 26, 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% ($U = 2Uc(y)$)	2.26
-------------------------------------------------------------------------	------

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

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



Appendix A. Original Report

Please refer to Sporton report number FV651612 as below.



FCC Test Report

APPLICANT : Motorola Mobility, LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : 5892
FCC ID : IHDT56VC1
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Verification

The product was received on May 16, 2016 and testing was completed on Jun. 03, 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.

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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

SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : IHDT56VC1

Page Number : 1 of 21

Report Issued Date : Jun. 28, 2016

Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 1.2



TABLE OF CONTENTS

REVISION HISTORY..... 3

SUMMARY OF TEST RESULT 4

1. GENERAL DESCRIPTION 5

 1.1. Applicant..... 5

 1.2. Manufacturer 5

 1.3. Product Feature of Equipment Under Test 5

 1.4. Product Specification of Equipment Under Test 6

 1.5. Modification of EUT 7

 1.6. Test Location 7

 1.7. Applicable Standards 8

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 9

 2.1. Test Mode 9

 2.2. Connection Diagram of Test System 10

 2.3. Support Unit used in test configuration and system 11

 2.4. EUT Operation Test Setup 11

3. TEST RESULT 12

 3.1. Test of AC Conducted Emission Measurement 12

 3.2. Test of Radiated Emission Measurement 16

4. LIST OF MEASURING EQUIPMENT 20

5. UNCERTAINTY OF EVALUATION 21



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FV651612	Rev. 01	Initial issue of report	Jun. 28, 2016



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 12.30 dB at 13.558 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 1.80 dB at 30.000 MHz



1. General Description

1.1. Applicant

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.2. Manufacturer

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	5892
FCC ID	IHDT56VC1
IMEI Code	354130070013450 (for Conduction) 354130070011991 (for Radiation)
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth v3.0 EDR Bluetooth v4.0 LE
HW Version	DVT2
EUT Stage	Identical Prototype

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

Accessory List	
AC Adapter	Brand Name : Motorola
	Model Name : SPN5913A
Earphone	Brand Name : Motorola
	Model Name : SJYN1181B
Battery 1	Brand Name : Motorola
	Model Name : SNN5974A
Battery 2	Brand Name : Motorola
	Model Name : SNN5975A
USB Cable	Brand Name : Motorola
	Model Name : SKN6473A



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz CDMA BC0:824.70 MHz ~ 848.31 MHz CDMA BC1:1851.25 MHz ~ 1908.75 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 13 : 779.5 MHz ~ 784.5 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 ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz CDMA BC0: 869.70 MHz ~ 893.31 MHz CDMA BC1: 1931.25 MHz ~ 1988.75 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 13 : 748.5 MHz ~ 753.5 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 ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz NFC : 13.56 MHz
Antenna Type	WWAN : Coupling type (LDS) Antenna WLAN Ant. 1: Loop Antenna WLAN Ant. 2: ILA Antenna Bluetooth : Loop Antenna GPS : Fixed Internal Antenna NFC: Coil / embeded Antenna



Standards-related Product Specification	
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK CDMA2000 1xRTT: QPSK CDMA2000 1xEV-DO: QPSK/8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK NFC: ASK

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.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st 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	
Test Site No.	Sporton Site No.	
	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:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. For FCC 15 Subpart B - Unintentional Radiators, receivers contained within a transceiver shall be authorized under the verification procedure per the Section 15.101 (b).
3. For other Unintentional Radiators features of this EUT, test reports are be issued separately.
Per the Note of the Section 15.101, when device supports features (USB, FM Radio, digital devices...etc) more than one category of authorization, type of authorization shall be appropriately chosen for FCC 15B compliance rule, and the Section 15.101 (b), only those receivers that operate (tune) within the frequency range of 30-960 MHz, CB receivers and radar detectors are subject to the authorizations shown in paragraph (a) of the Section 15.101. However, receivers indicated as being subject to Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the verification procedure.
4. Receivers operating above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, are exempt from complying with the technical provisions of this part but are subject to § 15.5.



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).

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)	☒	☒	☒

Abbreviations:

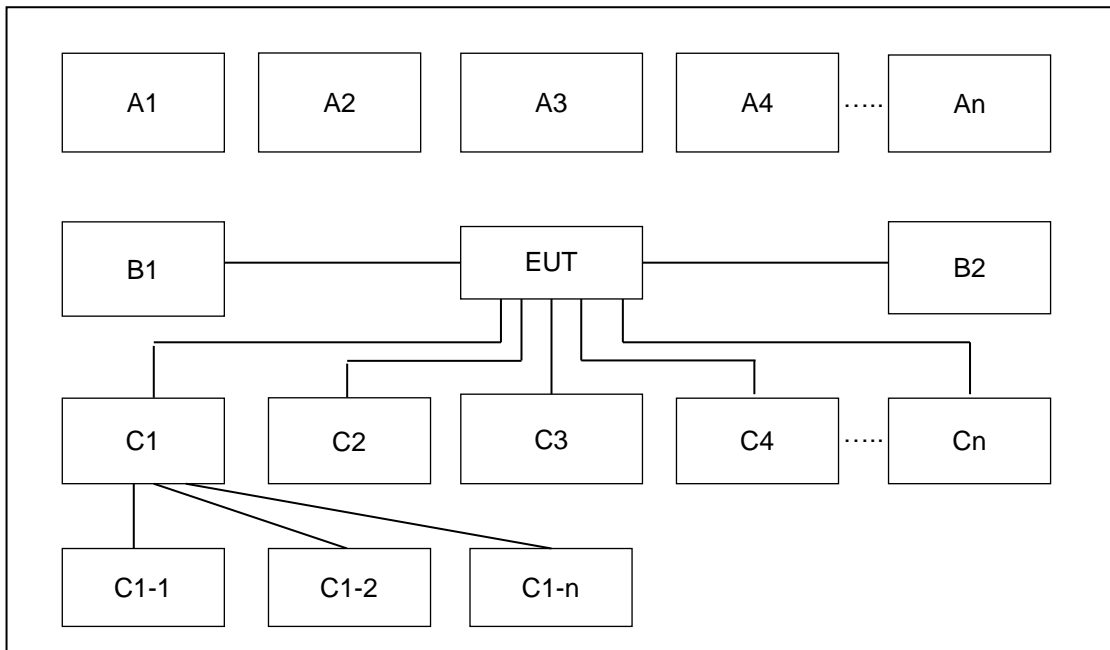
- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MP3 + NFC On + Earphone + Battery + Adapter + SIM 1 Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera + NFC On + Earphone + Battery + Adapter + SIM 1
Radiated Emissions < 1GHz	1	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + MP3 + NFC On + Earphone + Battery + Adapter + SIM 1 Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera + NFC On + Earphone + Battery + Adapter + SIM 1
Radiated Emissions ≥ 1GHz	1	Mode 1: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera + NFC On + Earphone + Battery + Adapter + SIM 1

Remark:

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 2; only the test data of this mode was reported.

2.2. Connection Diagram of Test System



Conduction & Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	-	-	-	-	-
A1	BT Earphone	Bluetooth	X	X					
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	X	X					
A3	AP router	WiFi	X	X					
No.	Power Source	Connection Type	1	2	-	-	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	X	X					
No.	Setup Peripherals	Connection Type	1	2	-	-	-	-	-
C1	Earphone	Earphone jack	X	X					
C2	SD card	SD I/O interface without cable	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	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-865L	KA2IR865LA1	N/A	Unshielded, 1.8 m
4.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 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

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 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. Execute "Music Player" to play MP3 file.
2. Turn on camera to capture images.
3. Turn on the NFC function.



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.

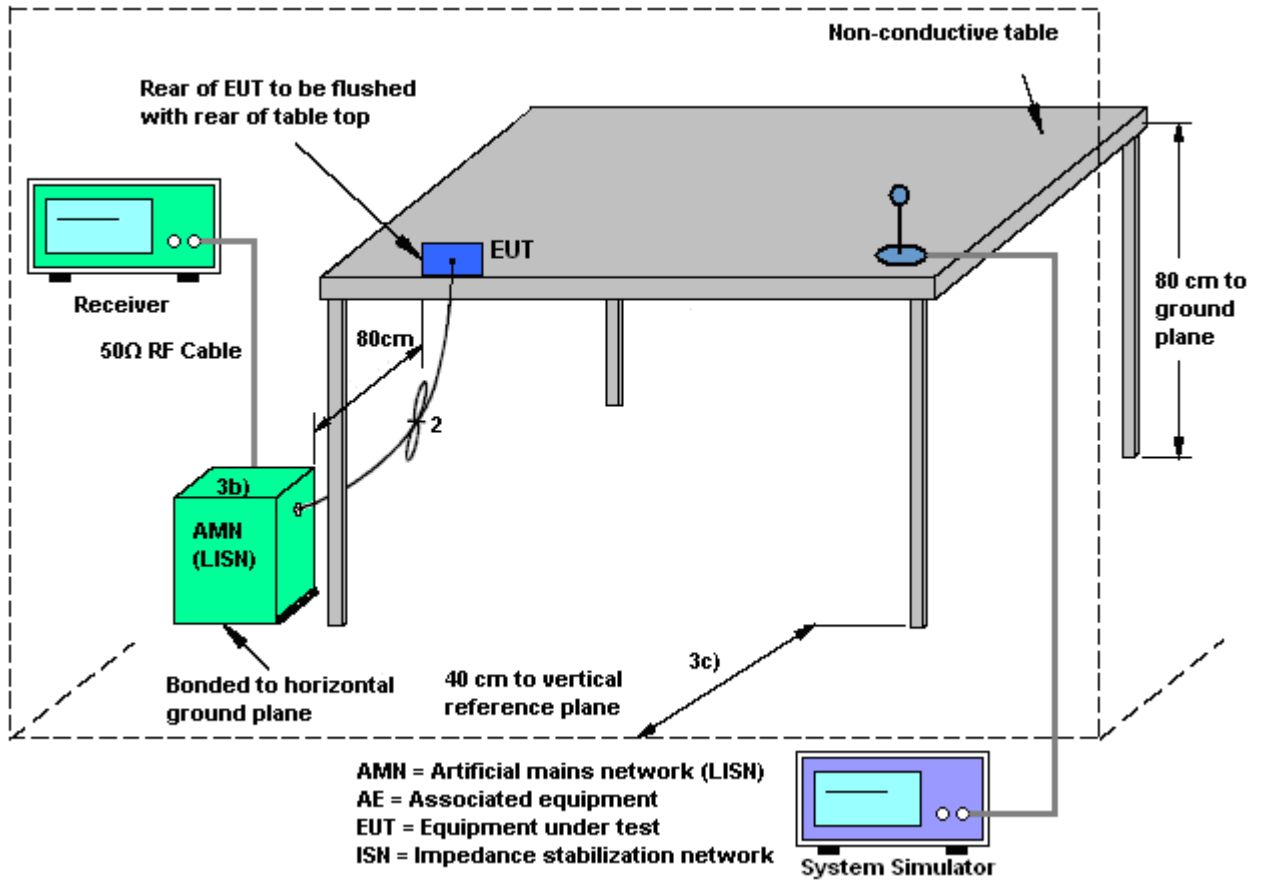
3.1.2 Measuring Instruments

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.

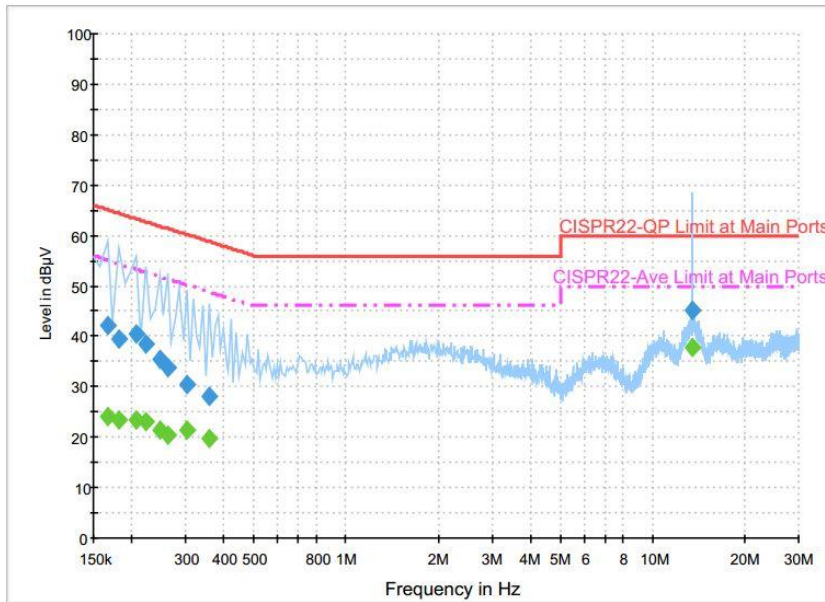
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	25~26°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + MP3 + NFC On + Earphone + Battery + Adapter + SIM 1		



Final Result : Quasi-Peak

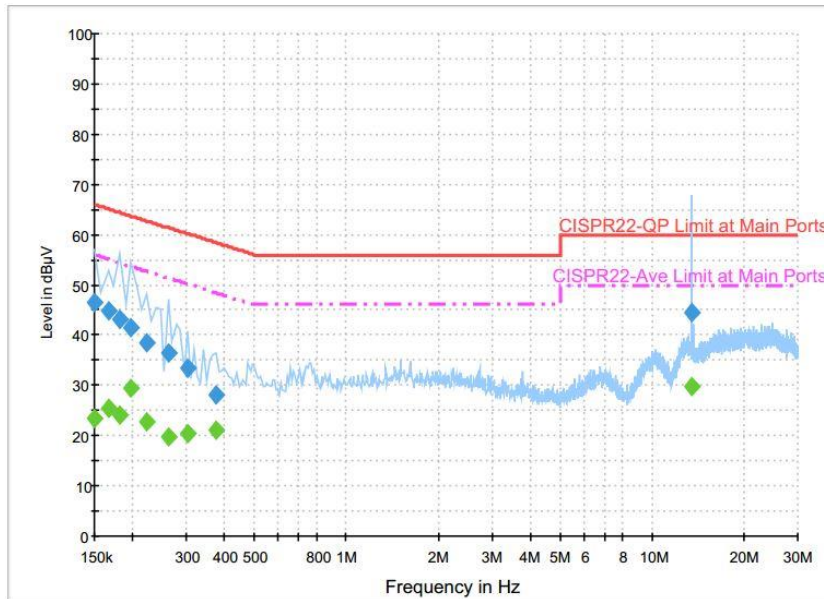
Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	42.0	Off	L1	19.6	23.2	65.2
0.182000	39.4	Off	L1	19.6	25.0	64.4
0.206000	40.4	Off	L1	19.6	23.0	63.4
0.222000	38.3	Off	L1	19.6	24.4	62.7
0.246000	35.4	Off	L1	19.6	26.5	61.9
0.262000	33.8	Off	L1	19.6	27.6	61.4
0.302000	30.4	Off	L1	19.6	29.8	60.2
0.358000	28.2	Off	L1	19.6	30.6	58.8
13.558000	45.3	Off	L1	20.3	14.7	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	24.1	Off	L1	19.6	31.1	55.2
0.182000	23.5	Off	L1	19.6	30.9	54.4
0.206000	23.3	Off	L1	19.6	30.1	53.4
0.222000	22.9	Off	L1	19.6	29.8	52.7
0.246000	21.5	Off	L1	19.6	30.4	51.9
0.262000	20.3	Off	L1	19.6	31.1	51.4
0.302000	21.5	Off	L1	19.6	28.7	50.2
0.358000	19.8	Off	L1	19.6	29.0	48.8
13.558000	37.7	Off	L1	20.3	12.3	50.0



Test Mode :	Mode 1	Temperature :	25~26°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle + MP3 + NFC On + Earphone + Battery + Adapter + SIM 1		



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	46.4	Off	N	19.6	19.6	66.0
0.166000	44.7	Off	N	19.6	20.5	65.2
0.182000	43.1	Off	N	19.6	21.3	64.4
0.198000	41.5	Off	N	19.6	22.2	63.7
0.222000	38.5	Off	N	19.6	24.2	62.7
0.262000	36.6	Off	N	19.6	24.8	61.4
0.302000	33.3	Off	N	19.6	26.9	60.2
0.374000	28.0	Off	N	19.6	30.4	58.4
13.558000	44.6	Off	N	20.3	15.4	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	23.4	Off	N	19.6	32.6	56.0
0.166000	25.5	Off	N	19.6	29.7	55.2
0.182000	24.2	Off	N	19.6	30.2	54.4
0.198000	29.5	Off	N	19.6	24.2	53.7
0.222000	22.8	Off	N	19.6	29.9	52.7
0.262000	19.7	Off	N	19.6	31.7	51.4
0.302000	20.4	Off	N	19.6	29.8	50.2
0.374000	21.2	Off	N	19.6	27.2	48.4
13.558000	29.6	Off	N	20.3	20.4	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

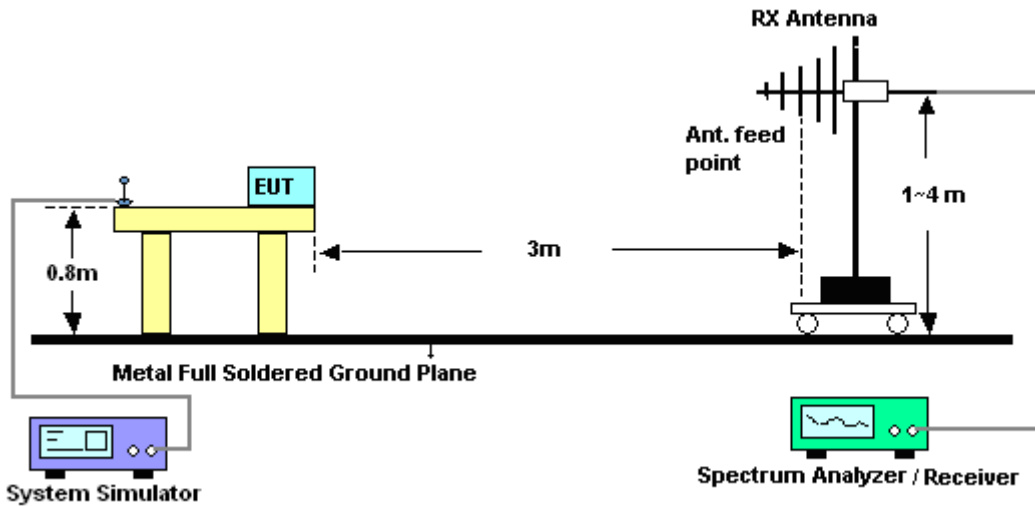
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

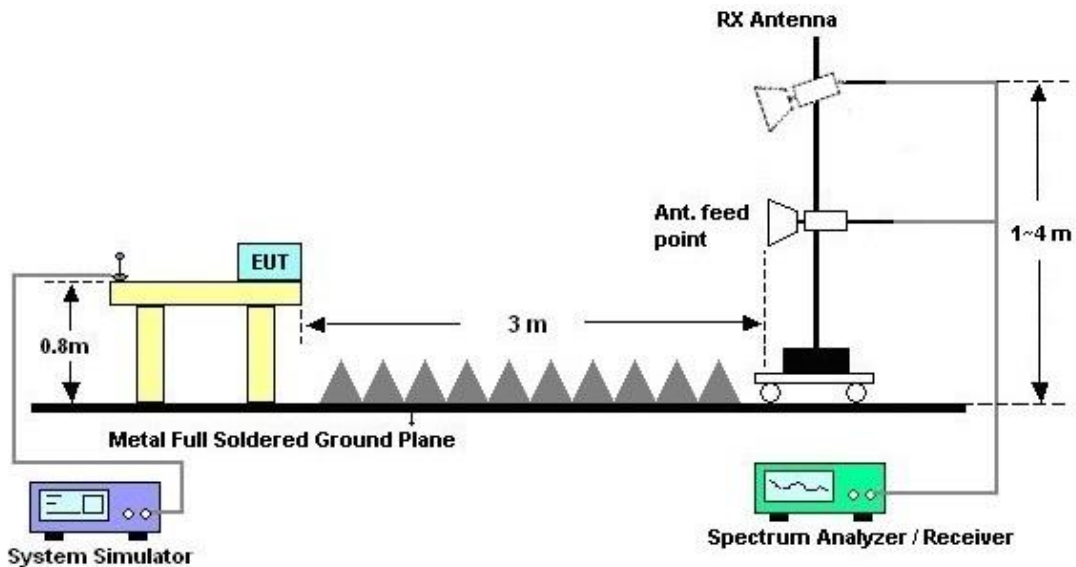
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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



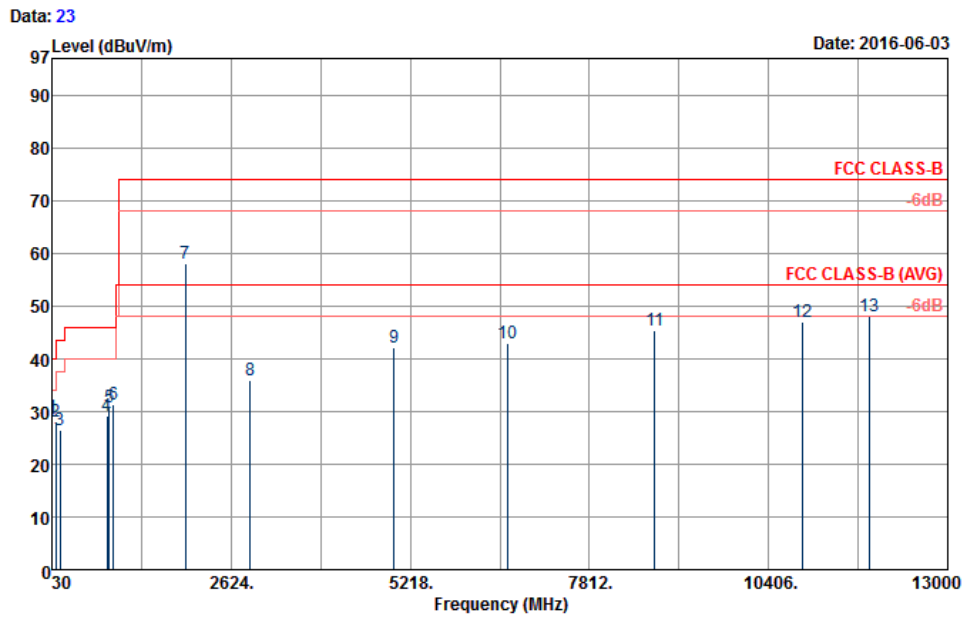
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 2	Temperature :	20~23°C
Test Engineer :	Daniel Lee	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera + NFC On + Earphone + Battery + Adapter + SIM 1		
Remark :	#7 is system simulator signal which can be ignored.		



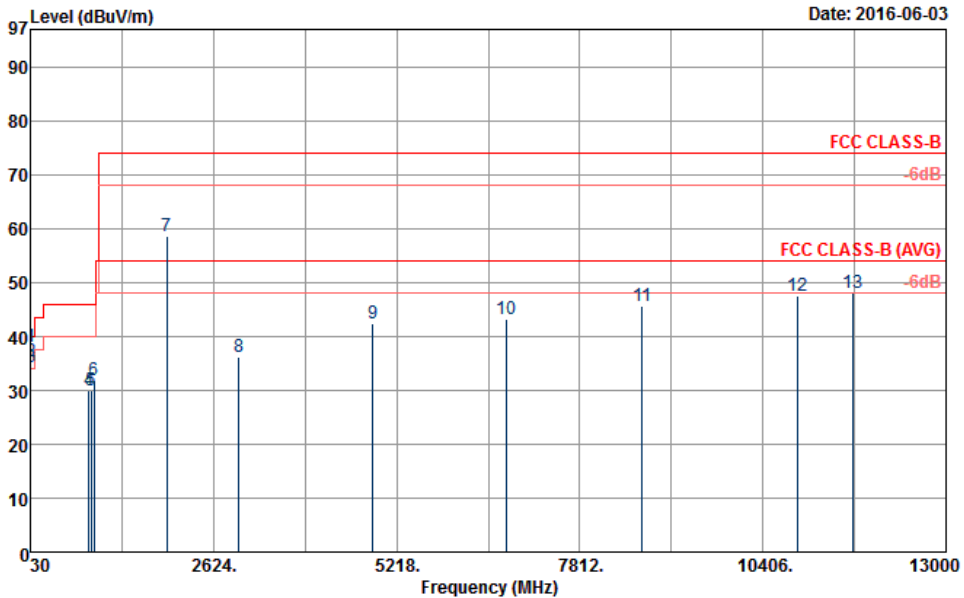
Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL

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	cm	deg		
1	30.27	28.82	-11.18	40.00	33.02	25.70	1.90	31.80	112	321 Peak	
2	83.73	28.16	-11.84	40.00	44.09	13.86	1.94	31.73	---	---	Peak
3	147.45	26.54	-16.96	43.50	38.59	17.54	2.12	31.71	---	---	Peak
4	824.30	29.24	-16.76	46.00	29.09	28.64	3.34	31.83	---	---	Peak
5	863.50	30.70	-15.30	46.00	29.87	29.18	3.33	31.68	---	---	Peak
6	923.00	31.47	-14.53	46.00	29.54	30.01	3.23	31.31	---	---	Peak
7	1960.00	58.23	86.19	26.23	6.31	60.50	---	---	Peak
8	2904.00	35.97	-38.03	74.00	60.88	28.28	7.63	60.82	---	---	Peak
9	4980.00	42.07	-31.93	74.00	58.36	31.47	11.22	58.98	---	---	Peak
10	6622.00	43.07	-30.93	74.00	56.66	34.39	12.40	60.38	---	---	Peak
11	8754.00	45.27	-28.73	74.00	53.34	37.30	14.48	59.85	---	---	Peak
12	10896.00	46.94	-27.06	74.00	50.99	40.42	14.94	59.41	---	---	Peak
13	11876.00	47.96	-26.04	74.00	50.67	39.29	16.63	58.63	100	0 Peak	



Test Mode :	Mode 2	Temperature :	20~23°C
Test Engineer :	Daniel Lee	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Camera + NFC On + Earphone + Battery + Adapter + SIM 1		
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL

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	38.20	-1.80	40.00	42.40	25.70	1.90	31.80	100	350 QP
2	34.05	35.48	-4.52	40.00	41.89	23.46	1.92	31.79	100	239 QP
3	39.18	34.30	-5.70	40.00	43.70	20.58	1.81	31.79	100	239 QP
4	857.20	29.89	-16.11	46.00	29.12	29.15	3.32	31.70	---	--- Peak
5	885.90	30.04	-15.96	46.00	28.95	29.31	3.37	31.59	---	--- Peak
6	927.90	31.80	-14.20	46.00	29.73	30.14	3.20	31.27	---	--- Peak
7	1960.00	58.67			86.63	26.23	6.31	60.50	---	--- Peak
8	2988.00	36.10	-37.90	74.00	60.83	28.46	7.70	60.89	---	--- Peak
9	4882.00	42.41	-31.59	74.00	59.45	31.31	11.11	59.46	---	--- Peak
10	6766.00	43.26	-30.74	74.00	57.03	34.72	11.86	60.35	---	--- Peak
11	8696.00	45.53	-28.47	74.00	53.86	37.22	14.21	59.76	---	--- Peak
12	10892.00	47.43	-26.57	74.00	51.48	40.42	14.94	59.41	---	--- Peak
13	11684.00	48.09	-25.91	74.00	50.51	39.79	16.29	58.50	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	May 28, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	May 28, 2016	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	May 28, 2016	Dec. 01, 2016	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C	2725	30MHz~1GHz	Nov. 17, 2015	Jun. 03, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Jun. 03, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 21, 2015	Jun. 03, 2016	Aug. 20, 2016	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Jun. 03, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jul. 01, 2015	Jun. 03, 2016	Jun. 30, 2016	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Jun. 03, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Jun. 03, 2016	N/A	Radiation (03CH06-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2015	Jun. 03, 2016	Sep. 01, 2016	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% ($U = 2Uc(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.00
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