



FCC Test Report

APPLICANT : Motorola Mobility, LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : 10720
FCC ID : IHDT56WB2
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

This is a variant report. The product was received on Jun. 15, 2017 and testing was completed on Jun. 23, 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.

Louis Wu

Reviewed by: Louis Wu / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

**SPORTON INTERNATIONAL INC.**

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FCC ID : IHDT56WB2

Page Number : 1 of 22

Report Issued Date : Jun. 29, 2017

Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 1.3



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC733129-24	Rev. 01	Initial issue of report	Jun. 29, 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 2.60 dB at 0.222 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.95 dB at 36.050 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	10720
FCC ID	IHDT56WB2
IMEI Code	For Radiation : 990007530010344 For Conduction : 990007530003398
EUT supports Radios application	CDMA/GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
EUT Stage	Identical Prototype

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. This is a variant report by adding WPC Back cover. All the test cases were performed on original report which can be referred to Sporton Report Number FC733129-04. Based on the original report, only worst case was verified.

Accessory List	
WPC Cover	Brand Name : Motorola
	Model Name : MD100W



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 ~ 1909.8 MHz CDMA BC0:824.70 MHz ~ 848.31 MHz CDMA BC1:1851.25 MHz ~ 1908.75 MHz CDMA BC 10: 817.9 MHz ~ 822.9 MHz 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 LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 25 : 1850.7 MHz ~ 1914.3 MHz LTE Band 26 : 814.7 MHz ~ 848.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz 802.11b/g/n/ac: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz ; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz



Standards-related Product Specification	
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 CDMA BC10: 862.9 MHz ~ 867.9 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 LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 25 : 1930.7 MHz ~ 1994.3 MHz LTE Band 26 : 859.7 MHz ~ 893.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz 802.11b/g/n/ac: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz ; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz Glonass : 1602 MHz + n× 0.5625MHz (n=-7,-6,-5,...,0,...,6) NFC : 13.56 MHz
Antenna Type	WWAN : Fixed Internal Antenna WLAN : Fixed Internal Antenna Bluetooth : Fixed Internal Antenna GPS / Glonass : Fixed Internal Antenna NFC : Fixed Internal Antenna
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) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS / Glonass : 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. TW0007 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

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	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
Test Site No.	Sporton Site No.
	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:

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

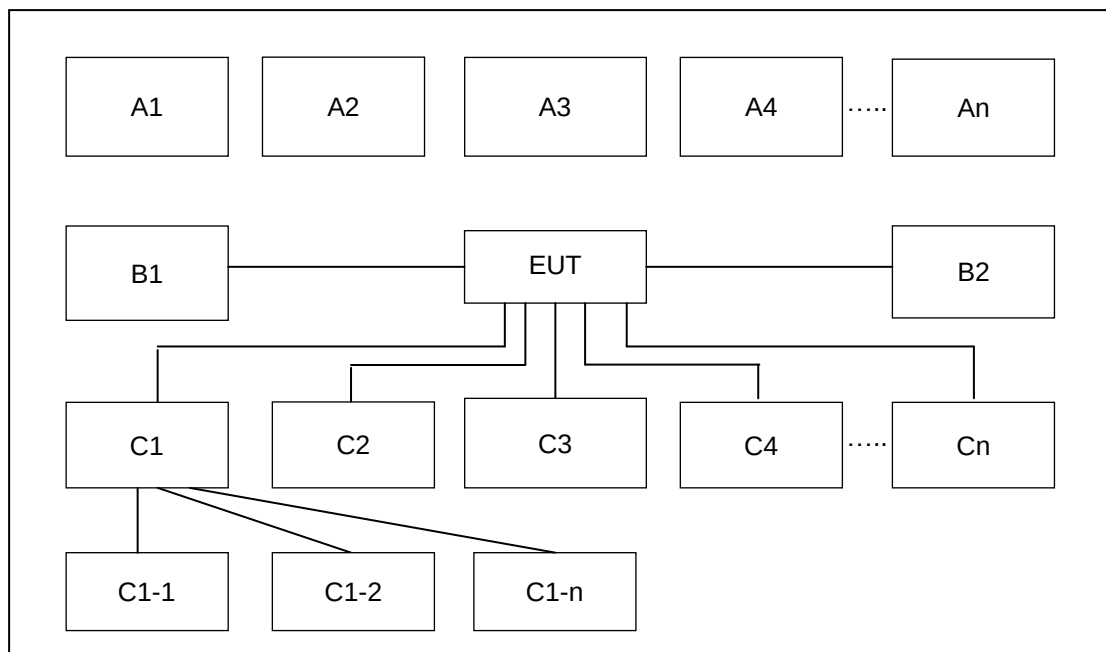
2.1. Test Mode

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).

Test Items	Function Type
AC Conducted Emission	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	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 $\geq$ 1GHz	Mode 1: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC On + WPC Back cover + Battery + PMA Charging pad + 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 2; only the test data of this mode was reported.	

2.2. Connection Diagram of Test System



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					
A4	WPC pad	WPC	X						
A5	PMA pad	PMA		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	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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
4.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
5.	Adapter	HUAWEI	HW-059200UHQ	FCC DoC	N/A	N/A
6.	USB Cable	HUAWEI	N/A	FCC DoC	N/A	N/A
7.	WPC Pad	LG	WCD-100	FCC DoC	N/A	N/A
8.	PMA Pad	DURACELL	M-018B-518A	FCC DoC	N/A	shielded,1.8m

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 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.

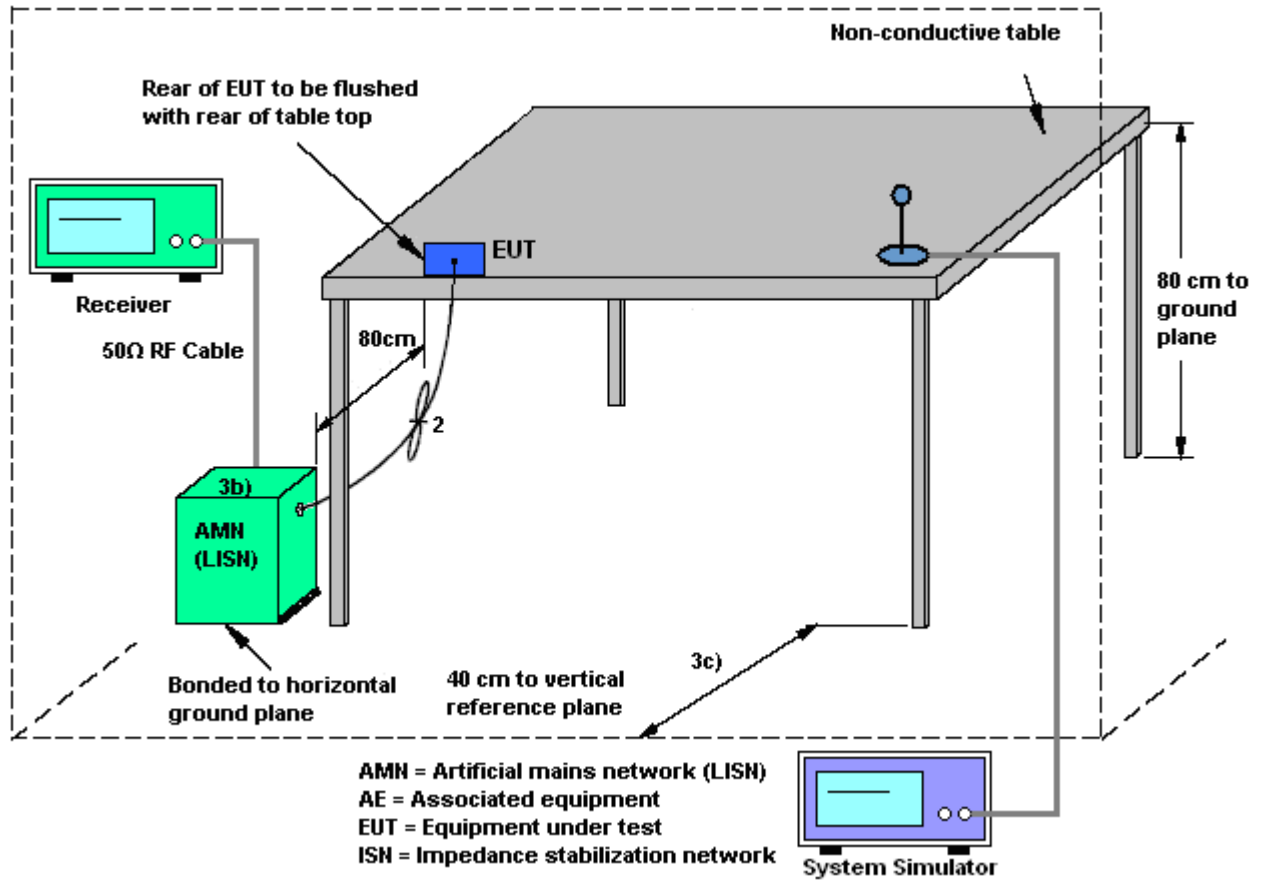
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

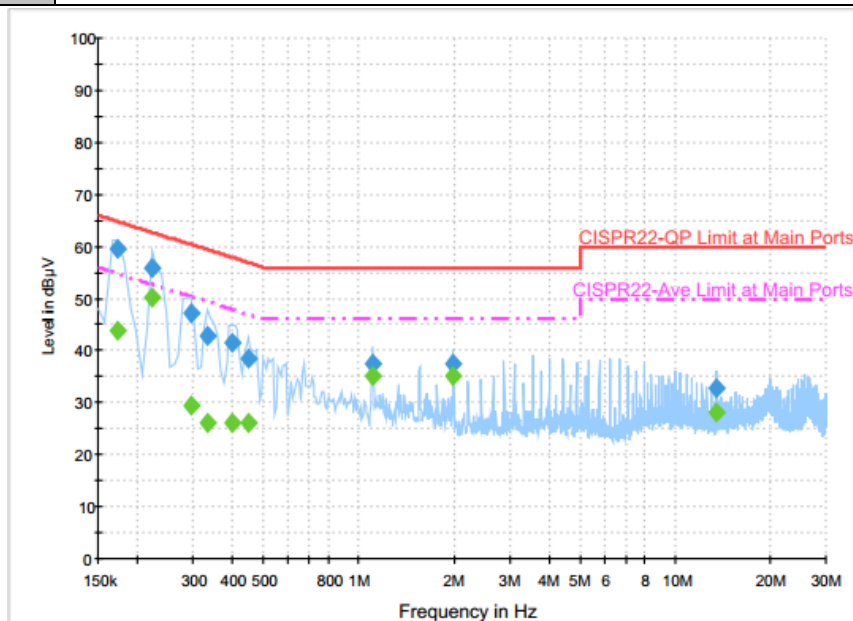
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 :	22~25℃
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~55%
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		



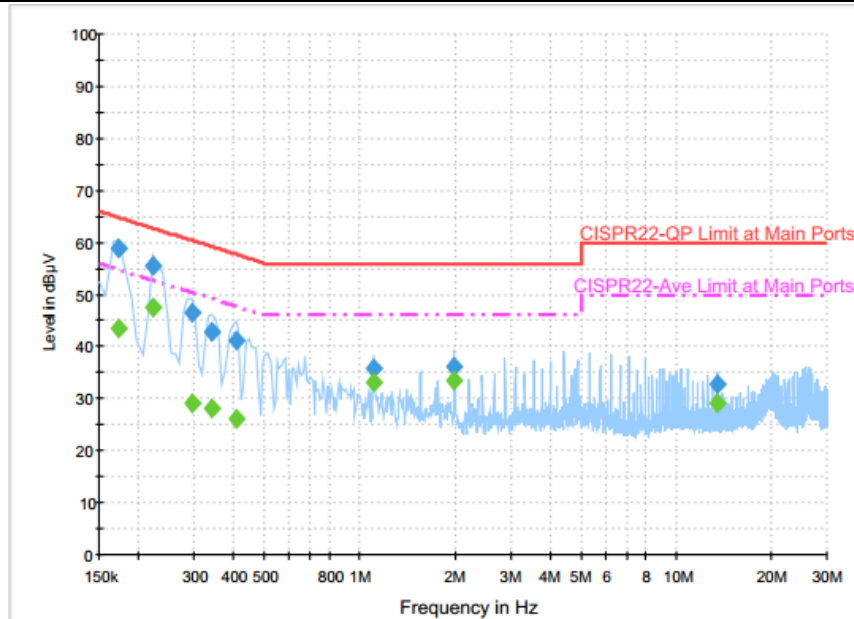
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	59.4	Off	L1	19.6	5.4	64.8
0.222000	55.8	Off	L1	19.6	6.9	62.7
0.294000	47.0	Off	L1	19.6	13.4	60.4
0.334000	42.9	Off	L1	19.6	16.5	59.4
0.398000	41.4	Off	L1	19.6	16.5	57.9
0.446000	38.4	Off	L1	19.6	18.5	56.9
1.110000	37.6	Off	L1	19.6	18.4	56.0
1.998000	37.6	Off	L1	19.6	18.4	56.0
13.558000	32.7	Off	L1	20.2	27.3	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	43.8	Off	L1	19.6	11.0	54.8
0.222000	50.1	Off	L1	19.6	2.6	52.7
0.294000	29.3	Off	L1	19.6	21.1	50.4
0.334000	26.2	Off	L1	19.6	23.2	49.4
0.398000	26.0	Off	L1	19.6	21.9	47.9
0.446000	26.0	Off	L1	19.6	20.9	46.9
1.110000	35.0	Off	L1	19.6	11.0	46.0
1.998000	35.1	Off	L1	19.6	10.9	46.0
13.558000	28.1	Off	L1	20.2	21.9	50.0

Test Mode :	Mode 2	Temperature :	22~25°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~55%
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)
0.174000	58.8	Off	N	19.5	6.0	64.8
0.222000	55.5	Off	N	19.5	7.2	62.7
0.294000	46.4	Off	N	19.5	14.0	60.4
0.342000	42.7	Off	N	19.5	16.5	59.2
0.406000	41.2	Off	N	19.5	16.5	57.7
1.110000	35.9	Off	N	19.6	20.1	56.0
1.998000	36.0	Off	N	19.6	20.0	56.0
13.558000	32.8	Off	N	20.3	27.2	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	43.4	Off	N	19.5	11.4	54.8
0.222000	47.6	Off	N	19.5	5.1	52.7
0.294000	29.1	Off	N	19.5	21.3	50.4
0.342000	28.1	Off	N	19.5	21.1	49.2
0.406000	26.2	Off	N	19.5	21.5	47.7
1.110000	33.1	Off	N	19.6	12.9	46.0
1.998000	33.4	Off	N	19.6	12.6	46.0
13.558000	28.9	Off	N	20.3	21.1	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

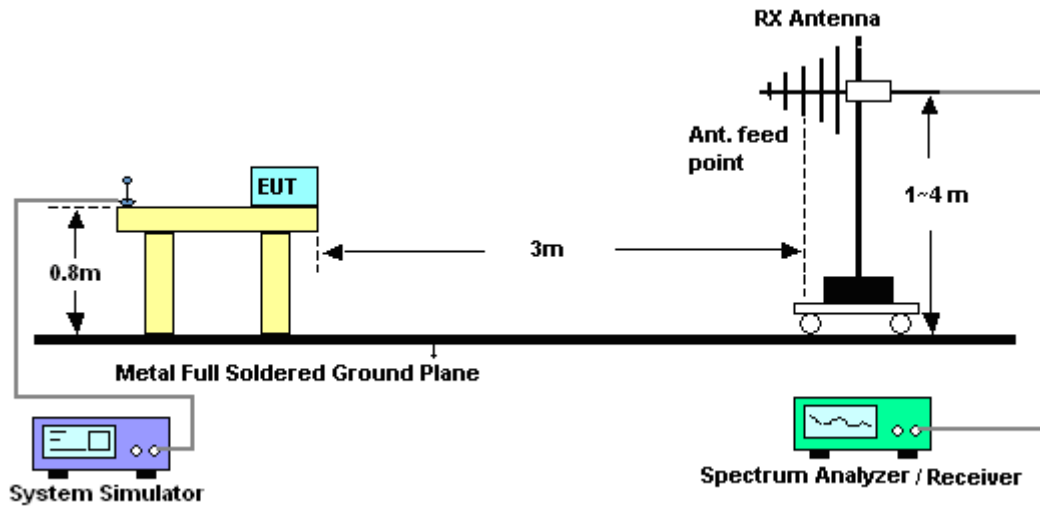
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

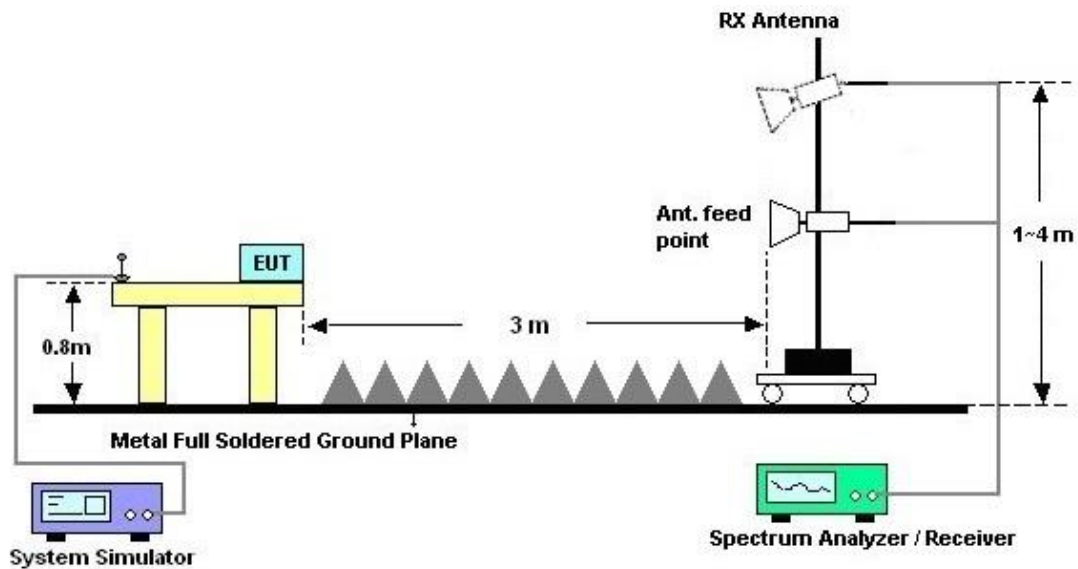
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

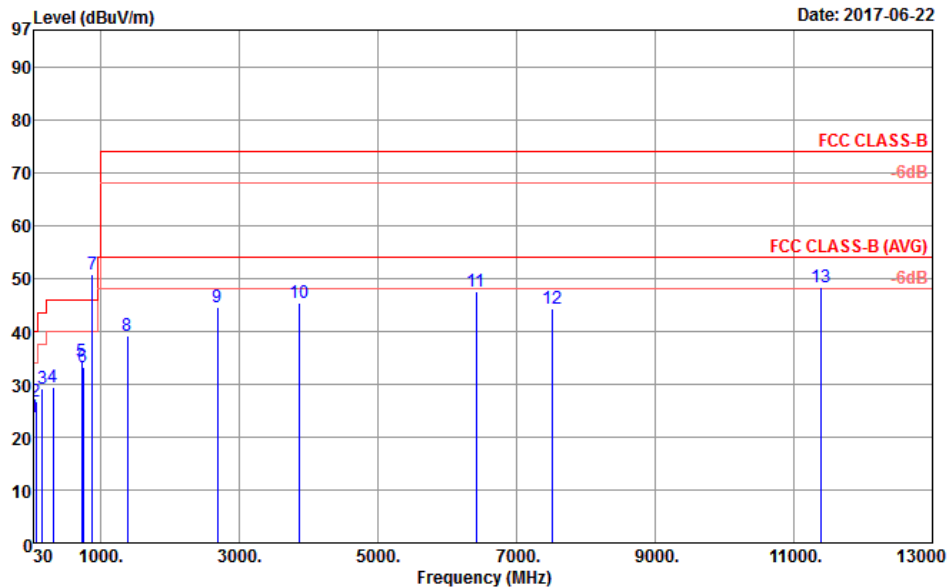


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 2	Temperature :	45~47°C
Test Engineer :	Stan Hsieh	Relative Humidity :	44~46%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC On + WPC Back cover + Battery + PMA Charging pad + Adapter		
Remark :	#7 is system simulator signal which can be ignored.		



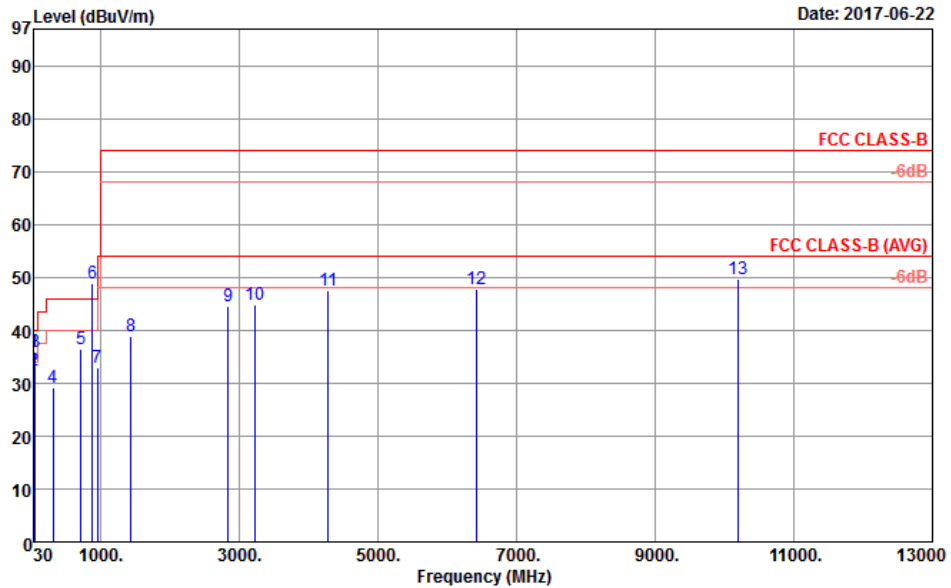
Site : 03CH10-HY
 Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL
 Power : 120Vac/60Hz

Mode : 2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.97	23.65	-16.35	40.00	32.98	22.89	0.53	32.75	---	---	Peak
2	67.80	26.75	-13.25	40.00	46.56	12.17	0.77	32.75	---	---	Peak
3	163.38	29.16	-14.34	43.50	44.53	16.19	1.20	32.76	---	---	Peak
4	310.50	29.39	-16.61	46.00	41.10	19.32	1.69	32.72	---	---	Peak
5	730.50	34.30	-11.70	46.00	37.04	27.74	2.48	32.96	100	0	Peak
6	746.60	33.32	-12.68	46.00	35.54	28.22	2.51	32.95	---	---	Peak
7 *	881.40	50.93			51.50	29.14	2.70	32.41	---	---	Peak
8	1382.00	39.30	-34.70	74.00	46.55	24.03	3.31	34.59	---	---	Peak
9	2688.00	44.55	-29.45	74.00	45.14	27.81	4.71	33.11	---	---	Peak
10	3858.00	45.51	-28.49	74.00	42.88	29.69	5.70	32.76	---	---	Peak
11	6416.00	47.66	-26.34	74.00	38.69	34.55	7.41	32.99	---	---	Peak
12	7510.00	44.43	-29.57	74.00	63.80	37.47	8.06	65.71	---	---	Peak
13	11395.00	48.46	-25.54	74.00	64.77	39.50	9.94	66.27	100	0	Peak



Test Mode :	Mode 2	Temperature :	45~47°C
Test Engineer :	Stan Hsieh	Relative Humidity :	44~46%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC On + WPC Back cover + Battery + PMA Charging pad + Adapter		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL
Power : 120Vac/60Hz

Mode : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	32.70	36.05	-3.95	40.00	45.38	22.89	0.53	32.75	100	0 Peak
2	38.64	32.44	-7.56	40.00	44.71	19.95	0.53	32.75	---	--- Peak
3	57.81	35.92	-4.08	40.00	55.84	12.05	0.77	32.74	---	--- Peak
4	314.00	29.22	-16.78	46.00	40.89	19.36	1.69	32.72	---	--- Peak
5	720.00	36.61	-9.39	46.00	39.85	27.27	2.46	32.97	---	--- Peak
6 *	881.40	48.81			49.38	29.14	2.70	32.41	---	--- Peak
7	957.30	32.87	-13.13	46.00	30.74	31.01	2.79	31.67	---	--- Peak
8	1440.00	38.85	-35.15	74.00	45.78	24.07	3.38	34.38	---	--- Peak
9	2836.00	44.71	-29.29	74.00	44.70	28.23	4.85	33.07	---	--- Peak
10	3222.00	44.82	-29.18	74.00	43.91	28.66	5.22	32.97	---	--- Peak
11	4286.00	47.46	-26.54	74.00	43.31	30.78	6.02	32.65	---	--- Peak
12	6430.00	47.88	-26.12	74.00	38.93	34.55	7.41	33.01	---	--- Peak
13	10205.00	49.65	-24.35	74.00	67.73	38.70	9.40	66.72	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	Jun. 18, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Jun. 18, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Jun. 18, 2017	Nov. 28, 2017	Conduction (CO05-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35413&02	30MHz~1GHz	Jan. 07, 2017	Jun. 22, 2017~ Jun. 23, 2017	Jan. 06, 2018	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	N/A	Mar. 03, 2017	Jun. 22, 2017~ Jun. 23, 2017	Mar. 02, 2018	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Sep. 30, 2016	Jun. 22, 2017~ Jun. 23, 2017	Sep. 29, 2017	Radiation (03CH10-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 26, 2016	Jun. 22, 2017~ Jun. 23, 2017	Oct. 25, 2017	Radiation (03CH10-HY)
Preamplifier	Keysight	83017A	MY53270078	1GHz~26.5GHz	Oct. 26, 2016	Jun. 22, 2017~ Jun. 23, 2017	Oct. 25, 2017	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JPA00101800- 30-10P	16011850004	1GHz~18GHz	Apr. 13, 2017	Jun. 22, 2017~ Jun. 23, 2017	Apr. 12, 2018	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jun. 22, 2017~ Jun. 23, 2017	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Jun. 22, 2017~ Jun. 23, 2017	N/A	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 ~ 18000 MHz)

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