



# FCC Test Report

**APPLICANT** : Motorola Mobility, LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : 10059  
**FCC ID** : IHDT56WA5  
**STANDARD** : FCC 47 CFR FCC Part 15 Subpart B  
**CLASSIFICATION** : Certification

The product was received on Feb. 03, 2017 and testing was completed on Mar. 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.**

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FCC ID : IHDT56WA5

Page Number : 1 of 21

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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 11.80 dB at 0.198 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.10 dB at 172.020 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	
<b>Equipment</b>	Mobile Cellular Phone
<b>Brand Name</b>	Motorola
<b>Model Name</b>	10059
<b>FCC ID</b>	IHDT56WA5
<b>IMEI Code</b>	Conduction: IMEI 1 : 353302080001616 IMEI 2 : 353302080001624  Radiation: IMEI 1 : 353302080001178 IMEI 2 : 353302080001186
<b>EUT supports Radios application</b>	GSM/EGPRS/WCDMA/HSPA/LTE/NFC/FM WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth BR/EDR/LE
<b>HW Version</b>	DVT2
<b>EUT Stage</b>	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	
<b>AC Adapter</b>	Brand Name : Motorola
	Model Name : SPN5970A
<b>Battery 1</b>	Brand Name : Motorola
	Model Name : SNN5983A
<b>Battery 2</b>	Brand Name : Motorola
	Model Name : SNN5985A
<b>Earphone</b>	Brand Name : Motorola
	Model Name : SH38C16618
<b>USB Cable</b>	Brand Name : Motorola
	Model Name : SKN6473A



### 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 ~ 1909.8 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 7 : 2502.5 MHz ~ 2567.5 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
<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 II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5 MHz ~ 2687.5 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 Glonass : 1602 MHz + n× 0.5625MHz (n=-7,-6,-5,...,0,...,6) NFC : 13.56 MHz FM : 88 MHz ~ 108 MHz



Standards-related Product Specification	
<b>Antenna Type</b>	WWAN : Coupling type (LDS) Antenna LTE : Coupling type (LDS) Antenna WLAN : Loop Antenna Bluetooth : Loop Antenna GPS / Glonass : Fixed Internal Antenna NFC : Coil / embeded Antenna FM : Headset cable 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) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS / Glonass : BPSK NFC: ASK 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. TW1190 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:**

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, device supporting USB interface or similar peripherals (defined as the Section 15.3 (r) Peripheral device) acting as a peripheral for personal computers shall be authorized as “The Class B personal computers and peripherals” per the Section 15.101 (a) Equipment authorization of unintentional radiators.
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.



## 2. Test Configuration of Equipment Under Test

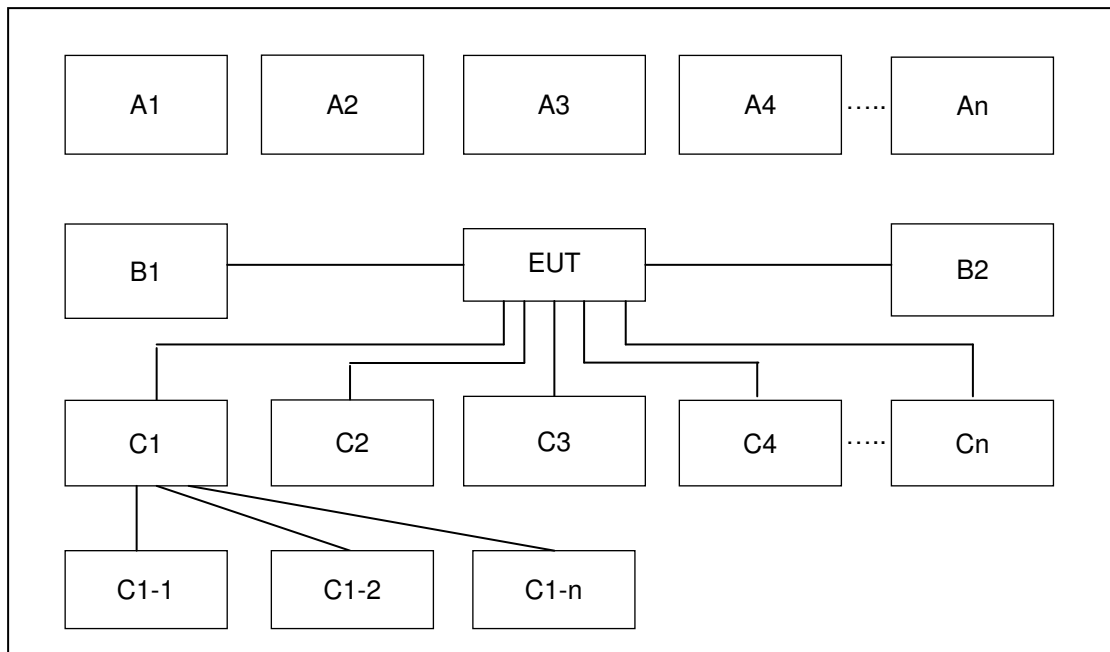
### 2.1. Test Mode

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 + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 1
	Mode 2 : WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2
Radiated Emissions < 1GHz	Mode 1 : GSM1900 Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 1
	Mode 2 : WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2
Radiated Emissions ≥ 1GHz	Mode 1 : WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2
<b>Remark:</b>	
<ol style="list-style-type: none"> <li>1. The worst case of AC is mode 2; only the test data of this mode was reported.</li> <li>2. The worst case of RE &lt; 1G is mode 2; only the test data of this mode was reported.</li> <li>3. 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	-	-	-	-	-
A1	BT Earphone	Bluetooth	X	X					
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	X	X					
A3	AP router	WiFi	X	X					
No.	Setup Peripherals	Connection Type	1	2	-	-	-	-	-
C1	Notebook	USB cable	X	X					
C1-2	iPod	USB Cable to C1	X	X					
C1-3	AP Router	RJ-45 Cable to C1	X	X					
C2	Earphone	Earphone jack	X	X					
C3	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	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	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
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
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 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.



### 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.

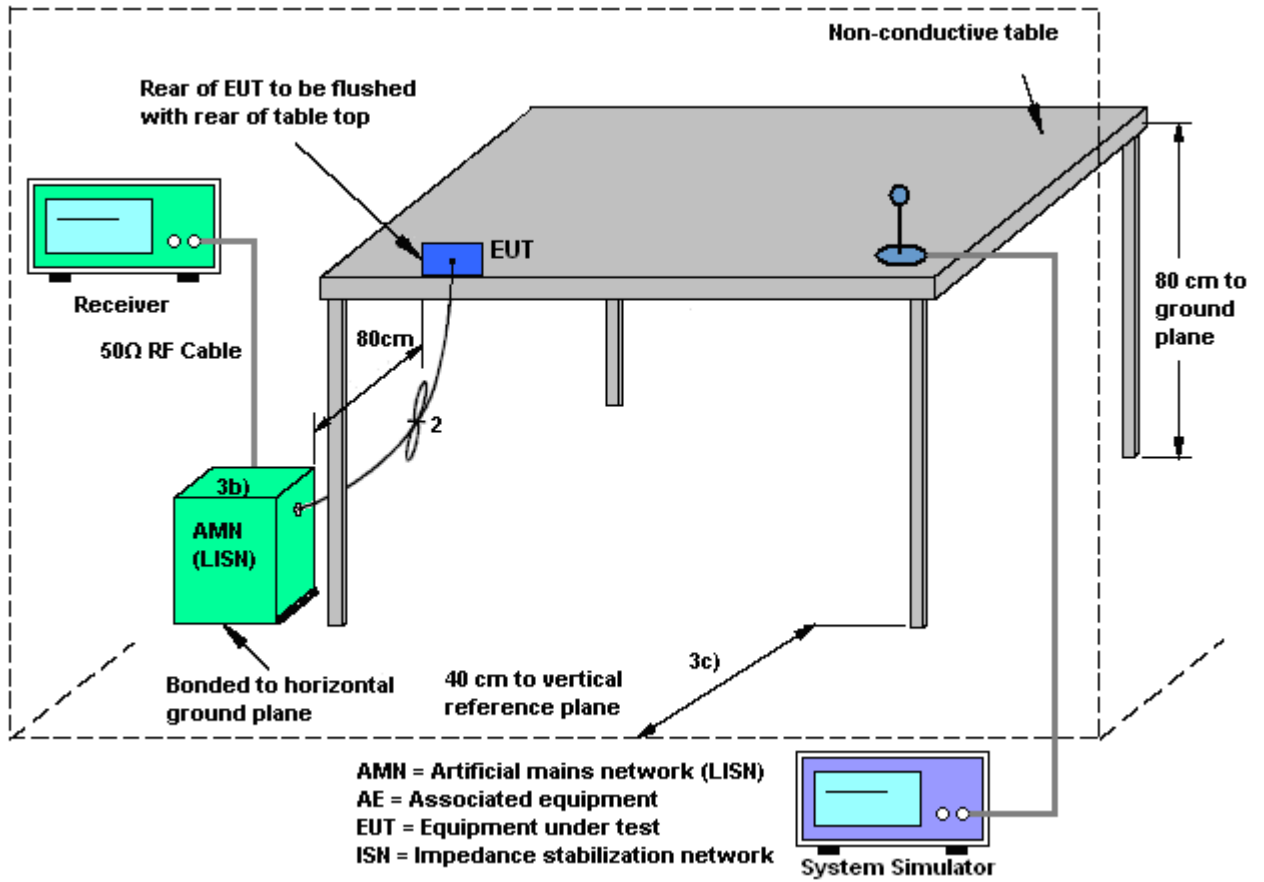
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedure

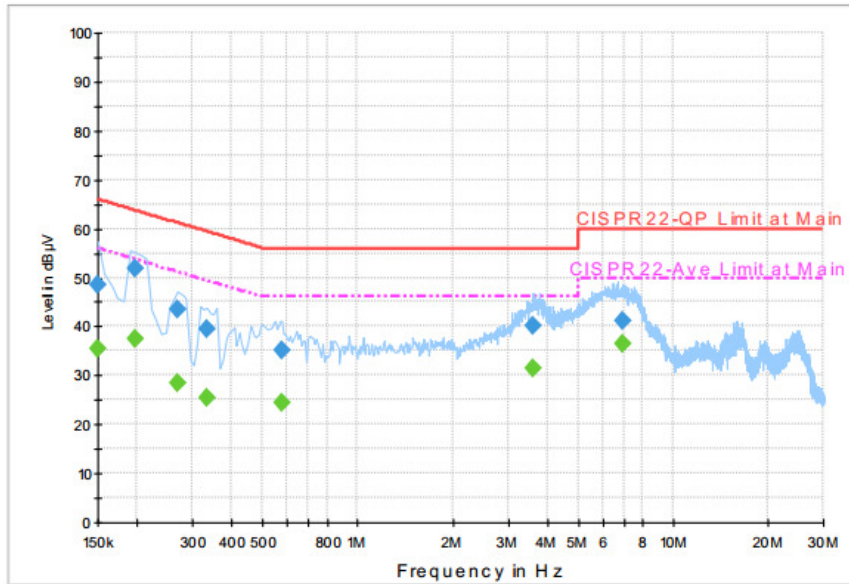
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2		



**Final Result : Quasi-Peak**

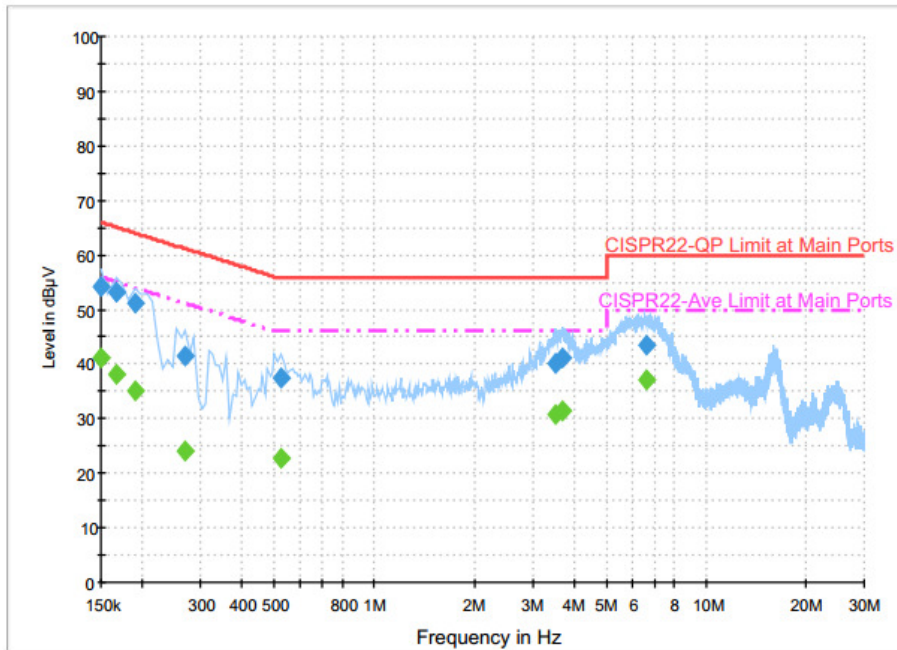
Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	48.4	Off	L1	19.6	17.6	66.0
0.198000	51.9	Off	L1	19.5	11.8	63.7
0.270000	43.5	Off	L1	19.5	17.6	61.1
0.334000	39.6	Off	L1	19.5	19.8	59.4
0.574000	35.0	Off	L1	19.5	21.0	56.0
3.590000	40.2	Off	L1	19.6	15.8	56.0
6.926000	41.1	Off	L1	19.6	18.9	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	35.3	Off	L1	19.6	20.7	56.0
0.198000	37.4	Off	L1	19.5	16.3	53.7
0.270000	28.3	Off	L1	19.5	22.8	51.1
0.334000	25.4	Off	L1	19.5	24.0	49.4
0.574000	24.5	Off	L1	19.5	21.5	46.0
3.590000	31.3	Off	L1	19.6	14.7	46.0
6.926000	36.5	Off	L1	19.6	13.5	50.0



Test Mode :	Mode 2	Temperature :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2		



**Final Result : Quasi-Peak**

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	54.1	Off	N	19.5	11.9	66.0
0.166000	53.1	Off	N	19.5	12.1	65.2
0.190000	51.2	Off	N	19.5	12.8	64.0
0.270000	41.4	Off	N	19.5	19.7	61.1
0.526000	37.6	Off	N	19.5	18.4	56.0
3.510000	40.2	Off	N	19.5	15.8	56.0
3.686000	41.2	Off	N	19.6	14.8	56.0
6.606000	43.6	Off	N	19.6	16.4	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	41.1	Off	N	19.5	14.9	56.0
0.166000	38.0	Off	N	19.5	17.2	55.2
0.190000	35.2	Off	N	19.5	18.8	54.0
0.270000	24.2	Off	N	19.5	26.9	51.1
0.526000	22.6	Off	N	19.5	23.4	46.0
3.510000	30.9	Off	N	19.5	15.1	46.0
3.686000	31.3	Off	N	19.6	14.7	46.0
6.606000	37.1	Off	N	19.6	12.9	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

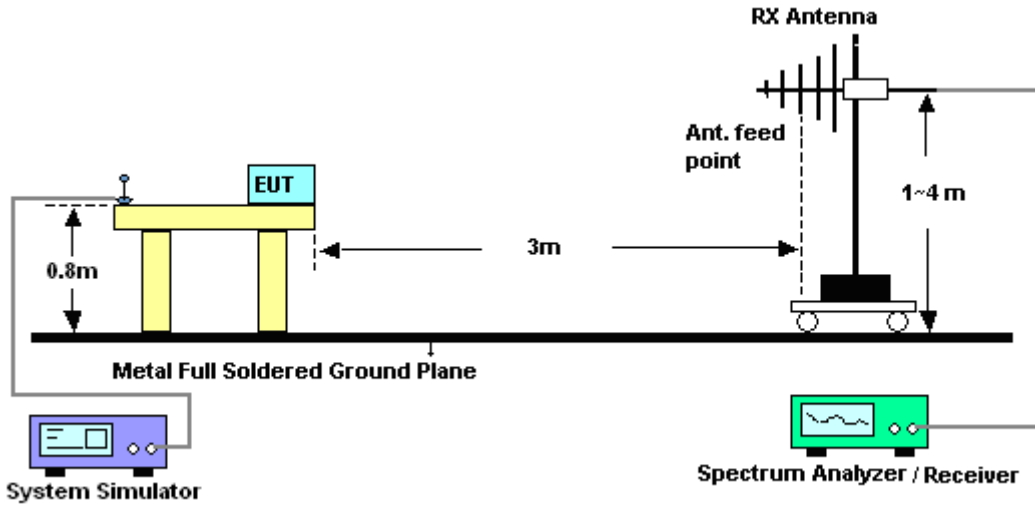
The measuring equipment is listed in the section 4 of this test report.

#### 3.2.3. Test Procedures

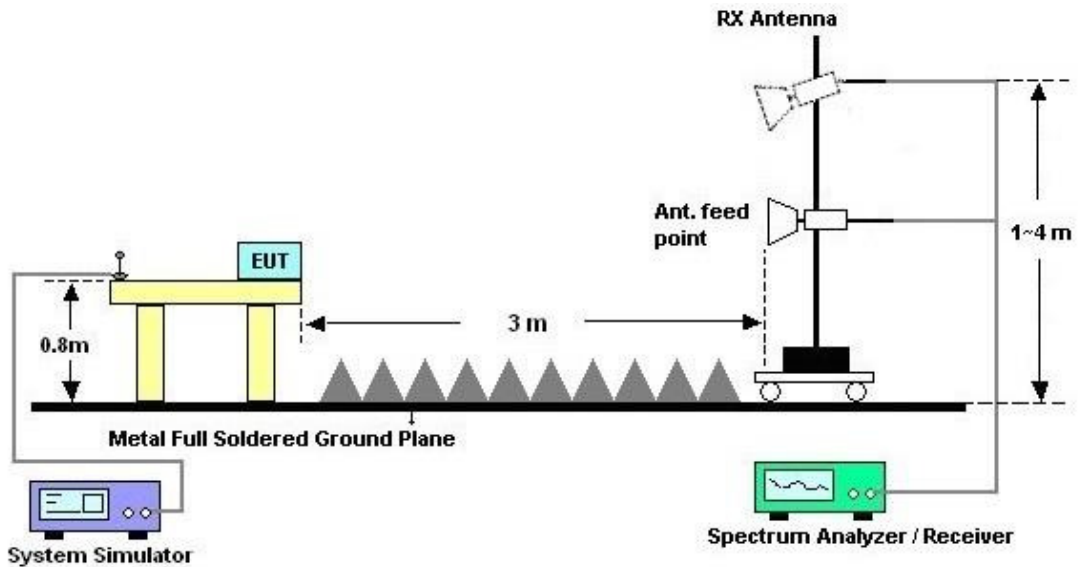
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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



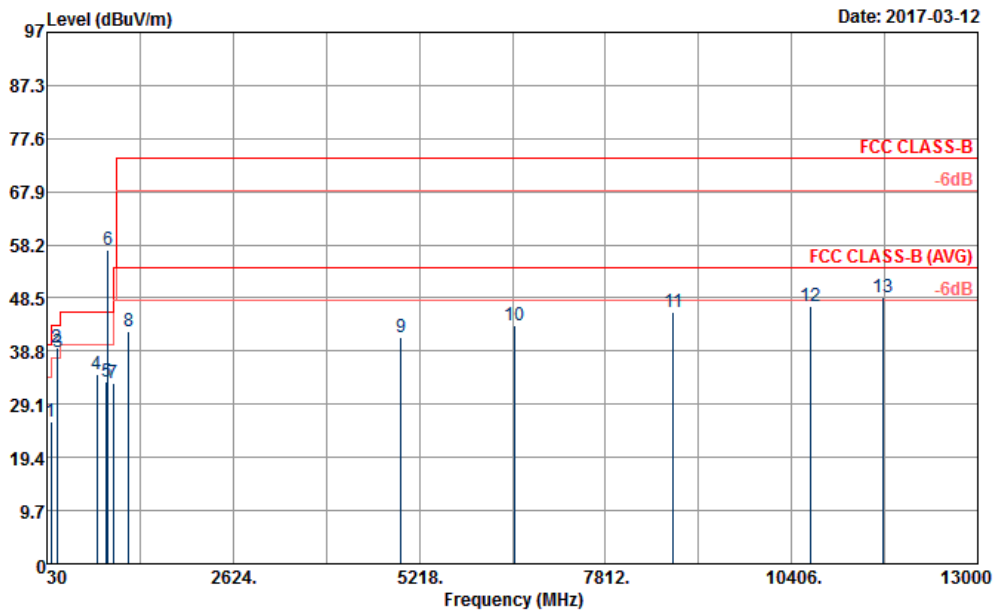
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 2	Temperature :	22~23°C
Test Engineer :	Donny Tang	Relative Humidity :	48~50%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2		
Remark :	#6 is system simulator signal which can be ignored.		

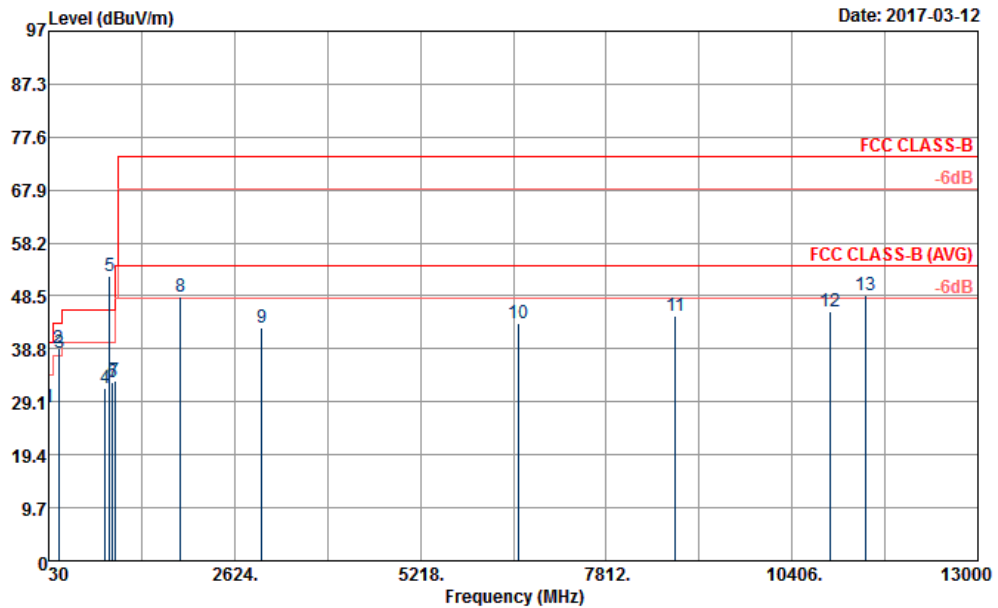


Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m 9120D\_1156\_160817 HORIZONTAL  
 Project : 720310-06  
 Power : From System  
 Memo : Mode 2  
 : SD to NB

	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	87.24	26.00	-14.00	40.00	41.71	14.12	1.90	31.73	---	---	Peak
2	172.02	39.40	-4.10	43.50	53.74	15.34	2.04	31.72	100	110	Peak
3	177.96	38.67	-4.83	43.50	53.45	14.94	2.00	31.72	---	---	Peak
4	729.10	34.50	-11.50	46.00	35.23	27.90	3.42	32.05	---	---	Peak
5	864.20	33.33	-12.67	46.00	32.29	29.38	3.33	31.67	---	---	Peak
6 *	881.70	57.39	-----	-----	56.41	29.22	3.36	31.60	---	---	Peak
7	948.20	32.87	-13.13	46.00	29.99	30.90	3.06	31.08	---	---	Peak
8	1174.00	42.34	-31.66	74.00	73.38	25.10	4.59	60.73	---	---	Peak
9	4962.00	41.21	-32.79	74.00	58.06	31.74	11.22	59.81	---	---	Peak
10	6548.00	43.63	-30.37	74.00	55.62	35.66	12.27	59.92	---	---	Peak
11	8762.00	45.92	-28.08	74.00	52.72	38.29	14.48	59.57	---	---	Peak
12	10668.00	46.89	-27.11	74.00	50.91	41.00	14.53	59.55	---	---	Peak
13	11682.00	48.57	-25.43	74.00	48.75	41.67	16.29	58.14	100	143	Peak



Test Mode :	Mode 2	Temperature :	22~23°C
Test Engineer :	Donny Tang	Relative Humidity :	48~50%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + Battery 1 + USB Cable (Data Link with Notebook) + SIM 2		
Remark :	#5 is system simulator signal which can be ignored.		



Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m 9120D\_1156\_160817 VERTICAL  
 Project : 720310-06  
 Power : From System  
 Memo : Mode 2  
 : SD to NB

	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	35.40	27.97	-12.03	40.00	36.69	21.15	1.92	31.79	---	Peak
2	174.18	38.85	-4.65	43.50	53.41	15.13	2.03	31.72	100	165 Peak
3	176.34	38.08	-5.42	43.50	52.75	15.04	2.01	31.72	---	Peak
4	823.60	31.52	-14.48	46.00	31.10	28.91	3.34	31.83	---	Peak
5 *	881.70	52.21			51.23	29.22	3.36	31.60	---	Peak
6	920.90	32.75	-13.25	46.00	30.62	30.21	3.25	31.33	---	Peak
7	949.60	33.04	-12.96	46.00	30.14	30.91	3.05	31.06	---	Peak
8	1868.00	48.26	-25.74	74.00	76.26	26.33	6.07	60.40	---	Peak
9	3006.00	42.80	-31.20	74.00	66.80	29.10	7.70	60.80	---	Peak
10	6596.00	43.62	-30.38	74.00	55.49	35.74	12.34	59.95	---	Peak
11	8774.00	44.81	-29.19	74.00	51.61	38.29	14.48	59.57	---	Peak
12	10948.00	45.70	-28.30	74.00	48.53	41.00	15.00	58.83	---	Peak
13	11428.00	48.70	-25.30	74.00	48.75	42.25	15.82	58.12	100	130 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	Feb. 27, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Feb. 27, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Feb. 27, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Feb. 27, 2017	Dec. 05, 2017	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Oct. 15, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Oct. 14, 2017	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Dec.29, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Dec.28, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 05, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Aug. 04, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Jun. 21, 2017	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Mar. 11, 2017 ~ Mar. 12, 2017	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Mar. 11, 2017 ~ Mar. 12, 2017	N/A	Radiation (03CH06-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2016	Mar. 11, 2017 ~ Mar. 12, 2017	Sep. 01, 2017	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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