



# FCC Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : 9369, 9847  
**FCC ID** : IHDT56VF2  
**STANDARD** : FCC 47 CFR FCC Part 15 Subpart B  
**CLASSIFICATION** : Certification

The product was received on Sep. 30, 2016 and testing was completed on Oct. 15, 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 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 13.1 dB at 0.190 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 8.48 dB at 240.060 MHz



# 1. General Description

## 1.1. Applicant

Motorola Mobility LLC  
222 W. Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2. Manufacturer

Motorola Mobility LLC  
222 W. Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	9369, 9847
FCC ID	IHDT56VF2
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/ WLAN 5GHz 802.11a/n HT20/HT40/ Bluetooth v3.0+EDR/Bluetooth v4.0 LE Bluetooth v4.2 LE
IMEI Code	Conduction/Radiation: Sample 1: 351864080029139/351864080029147 Sample 2: 351871080011470
HW Version	DVT2(V5.0)
SW Version	cedric-userdebug 7.0 NPP25.73 270 intcfg,test-keys
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. There are two types of EUT sample 1 and sample 2, the differences between two samples are only for SIM slot, sample 1(Model name: 9369) is dual SIM slot, sample 2(Model name: 9847) is single SIM slot. According to the difference, the sample 1 to perform full test and the sample 2 to verify worse mode for EMC test.



### 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 II : 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 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 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 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 II: 1932.4 MHz ~ 1987.6 MHz WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band V: 871.4 MHz ~ 891.6 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 7 : 2622.5 MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 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) FM : 88 MHz ~ 108 MHz



<b>Antenna Type</b>	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS/Glonass: PIFA Antenna FM: External headset Antenna
<b>Type of Modulation</b>	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA/DC-HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM uplink is not supported DC-HSDPA: 64QAM 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 FM : FM

### 1.5. Specification of Accessory

Specification of Accessory				
<b>AC Adapter</b>	<b>Brand Name</b>	Motorola (Acbel)	<b>Model Name</b>	C-P35
	<b>Power Rating</b>	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc, 2000mA		
<b>Battery</b>	<b>Brand Name</b>	Motorola (ATL)	<b>Model Name</b>	GK40
	<b>Power Rating</b>	3.8Vdc, 2685/2800mAh (Min/Typ)	<b>Type</b>	Li-ion
<b>Earphone</b>	<b>Brand Name</b>	Motorola	<b>Model Name</b>	SJYN1181B
	<b>Signal Line Type</b>	1.2 meter, non-shielded cable, without ferrite core		
<b>USB Cable</b>	<b>Brand Name</b>	Motorola (Liqi)	<b>Model Name</b>	L25W-051000100AL
	<b>Signal Line Type</b>	1.0 meter, non-shielded cable, without ferrite core		

### 1.6. Modification of EUT

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



### 1.7. Test Location

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

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

### 1.8. 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).

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.	Data application transferred mode (EUT with notebook)	☒	☒	☒

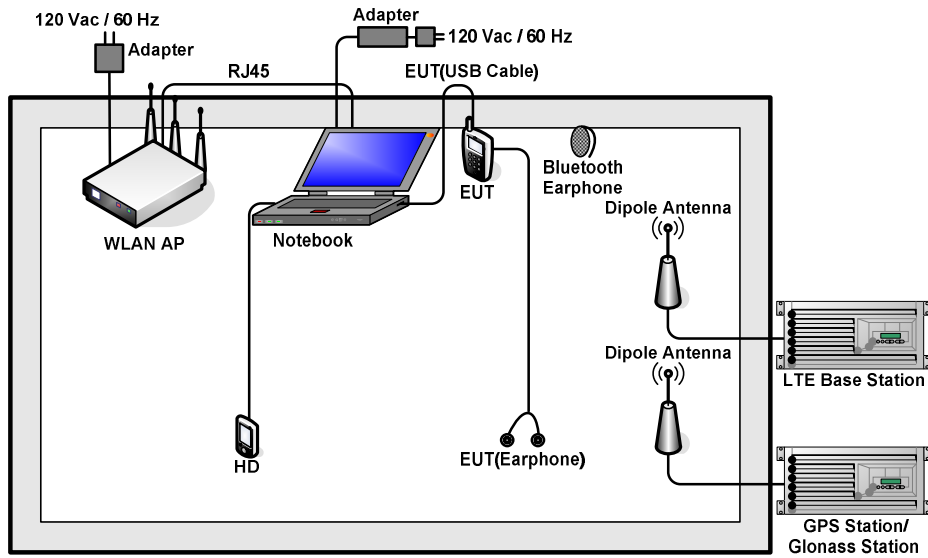
**Abbreviations:**

- 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	<p>Mode 1: LTE Band 2 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT eMMC Data Link to Notebook) + Glonass Rx + SIM 2 for Sample 1</p> <p>Mode 2: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (Notebook Data Link to EUT eMMC) + GPS Rx + SIM 1 for Sample 1</p> <p>Mode 3: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + Glonass Rx + SIM 2 for Sample 1</p> <p>Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (Notebook Data Link to EUT SD card) + Glonass Rx + SIM 1 for Sample 1</p> <p>Mode 5: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + Glonass Rx for Sample 2</p>
Radiated Emissions < 1GHz	1	<p>Mode 1: LTE Band 2 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT eMMC Data Link to Notebook) + Glonass Rx + SIM 2 for Sample 1</p> <p>Mode 2: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (Notebook Data Link to EUT eMMC) + GPS Rx + SIM 1 for Sample 1</p> <p>Mode 3: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + GPS Rx + SIM 2 for Sample 1</p> <p>Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (Notebook Data Link to EUT SD card) + GPS Rx + SIM 1 for Sample 1</p> <p>Mode 5: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + GPS Rx for Sample 2</p>
Radiated Emissions ≥ 1GHz	1	<p>Mode 1: LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + GPS Rx + SIM 2 for Sample 1</p>
<p><b>Remark:</b></p> <ol style="list-style-type: none"> <li>The worst case of AC is mode 3; only the test data of this mode was reported.</li> <li>The worst case of RE &lt; 1G is mode 3; only the test data of this mode was reported.</li> <li>Data Link with Notebook means data application transferred mode between EUT and Notebook.</li> </ol>		

## 2.2. Connection Diagram of Test System





### 2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded,1.8m
3.	Glonass Station	RACELOGIC	KS141204JCGS07	N/A	N/A	Unshielded, 1.8 m
4.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
5.	NOTE BOOK	Dell	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
6.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
7.	Bluetooth Earphone	lenovo	LBH 301	FCC DoC	N/A	N/A
8.	Hard Disk	Lenovo	F310	FCC DoC	Shielded, 1.2m	N/A

### 2.4. EUT Operation Test Setup

The EUT was in 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.

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 notebook and EUT via USB cable.
2. Turn on GPS/Glonass function to make the EUT receive continuous signals from GPS/Glonass station.



### 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.

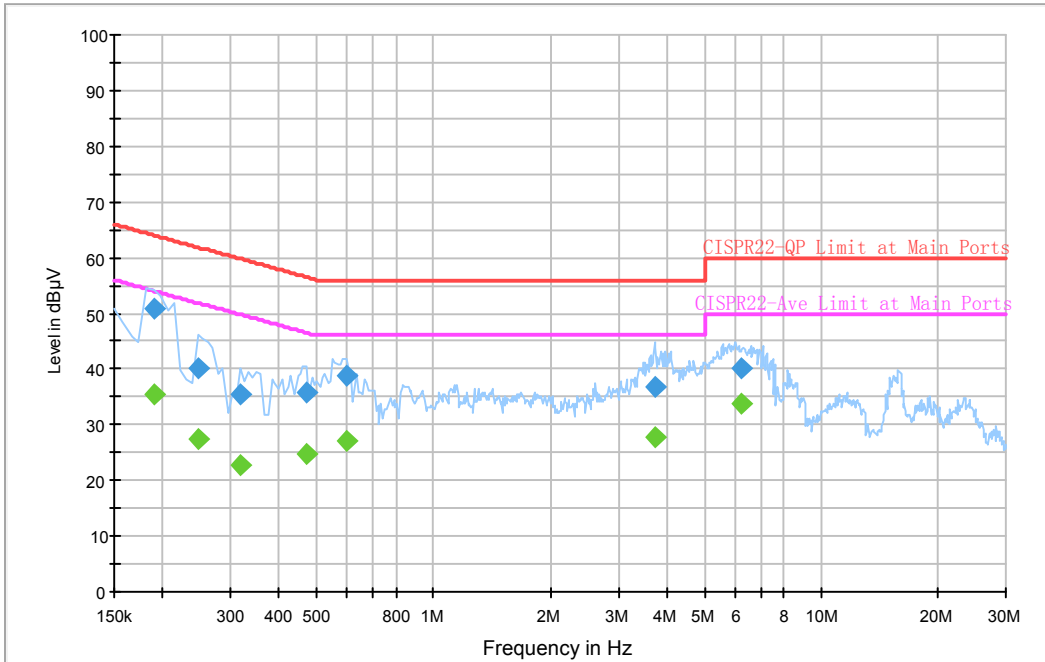
### 3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 3	Temperature :	21~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + Glonass Rx + SIM 2 for Sample 1		



Final Result : Quasi-Peak

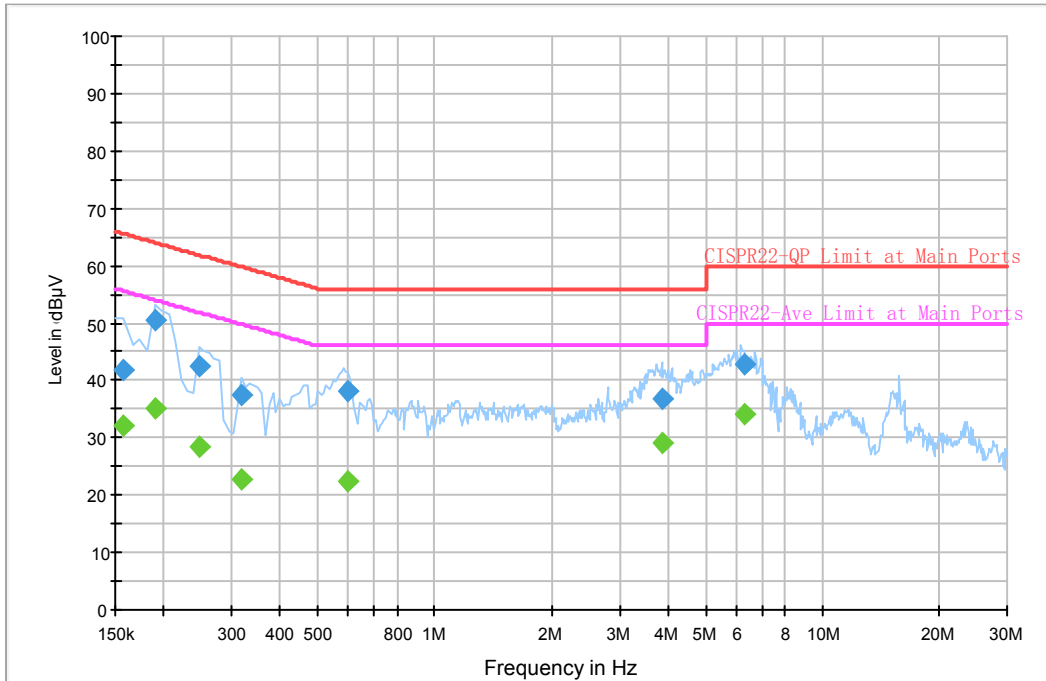
Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	50.9	Off	L1	19.6	13.1	64.0
0.246000	40.3	Off	L1	19.6	21.6	61.9
0.318000	35.6	Off	L1	19.6	24.2	59.8
0.470000	35.9	Off	L1	19.6	20.6	56.5
0.598000	38.9	Off	L1	19.6	17.1	56.0
3.718000	36.9	Off	L1	19.7	19.1	56.0
6.230000	40.2	Off	L1	19.7	19.8	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	35.3	Off	L1	19.6	18.7	54.0
0.246000	27.4	Off	L1	19.6	24.5	51.9
0.318000	22.7	Off	L1	19.6	27.1	49.8
0.470000	24.6	Off	L1	19.6	21.9	46.5
0.598000	27.2	Off	L1	19.6	18.8	46.0
3.718000	27.9	Off	L1	19.7	18.1	46.0
6.230000	33.7	Off	L1	19.7	16.3	50.0



Test Mode :	Mode 3	Temperature :	21~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + Glonass Rx + SIM 2 for Sample 1		



**Final Result : Quasi-Peak**

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	41.7	Off	N	19.6	23.9	65.6
0.190000	50.4	Off	N	19.6	13.6	64.0
0.246000	42.4	Off	N	19.6	19.5	61.9
0.318000	37.5	Off	N	19.6	22.3	59.8
0.598000	38.2	Off	N	19.6	17.8	56.0
3.854000	36.8	Off	N	19.6	19.2	56.0
6.294000	42.9	Off	N	19.7	17.1	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	32.2	Off	N	19.6	23.4	55.6
0.190000	35.1	Off	N	19.6	18.9	54.0
0.246000	28.4	Off	N	19.6	23.5	51.9
0.318000	22.6	Off	N	19.6	27.2	49.8
0.598000	22.3	Off	N	19.6	23.7	46.0
3.854000	29.0	Off	N	19.6	17.0	46.0
6.294000	34.1	Off	N	19.7	15.9	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

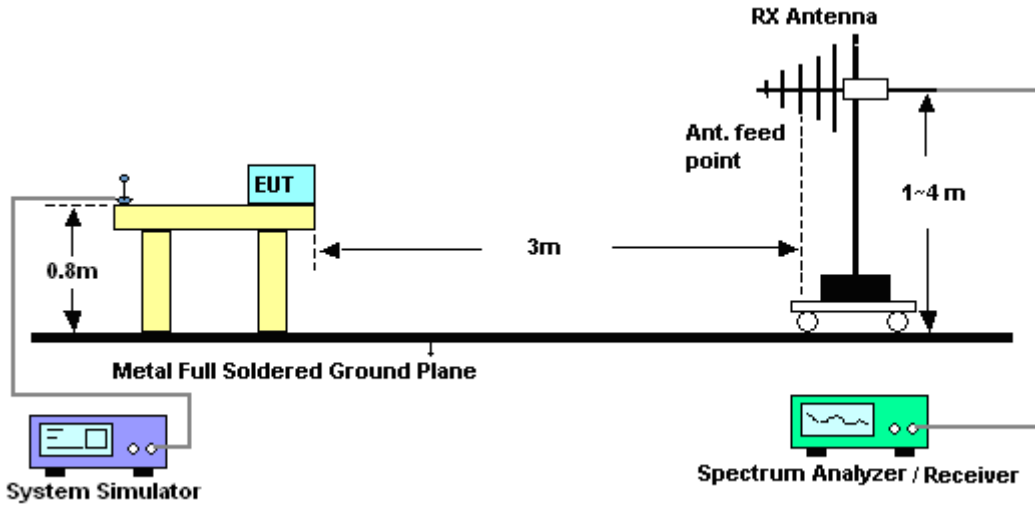
The measuring equipment is listed in the section 4 of this test report.

#### 3.2.3. Test Procedures

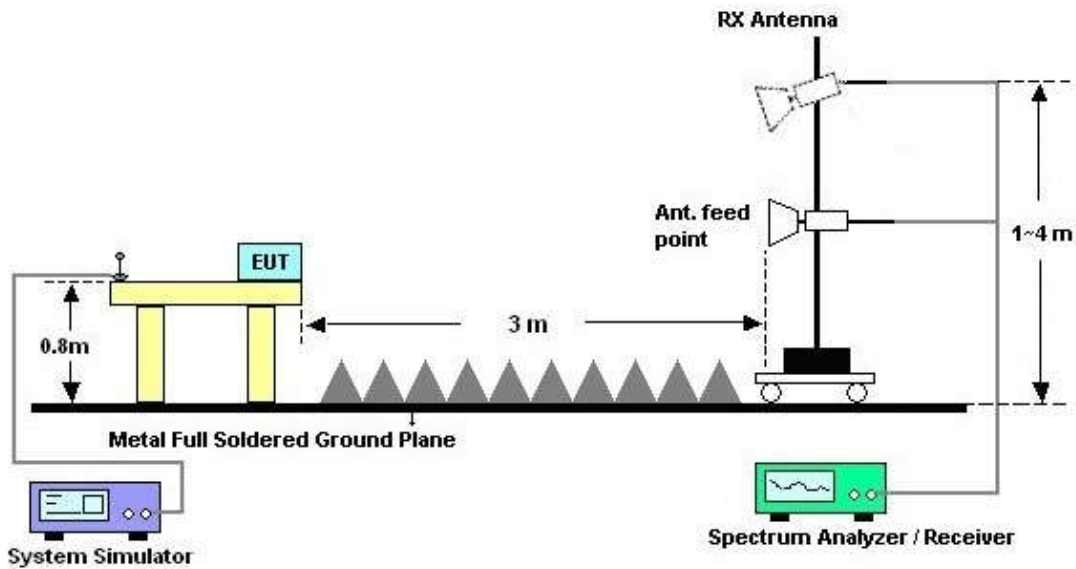
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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



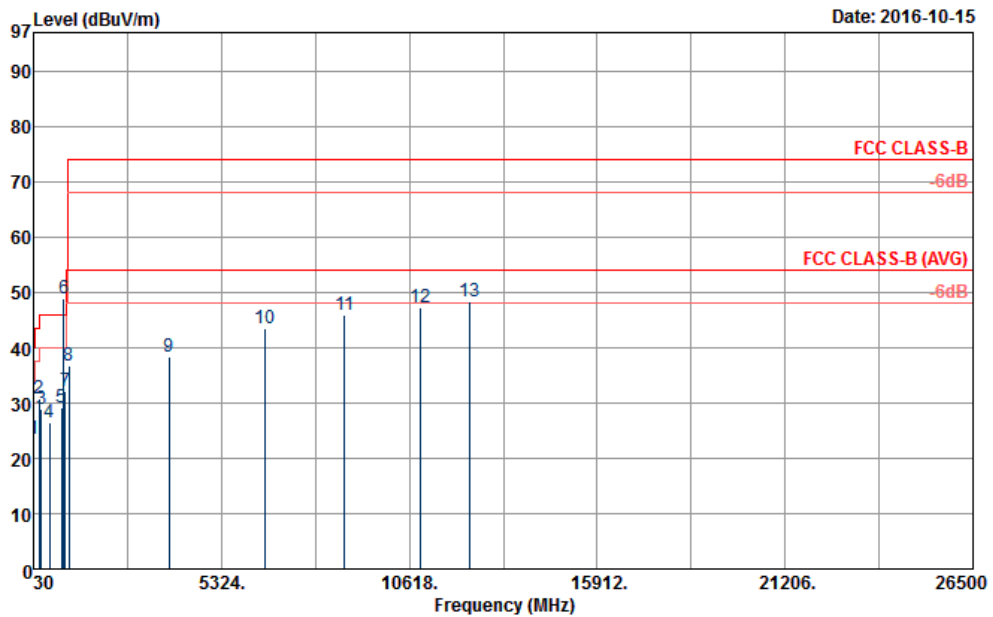
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 3	Temperature :	22~24°C
Test Engineer :	Derreck Chen	Relative Humidity :	48~50%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + GPS Rx + SIM 2 for Sample 1		
Remark :	#6 is system simulator signal which can be ignored.		

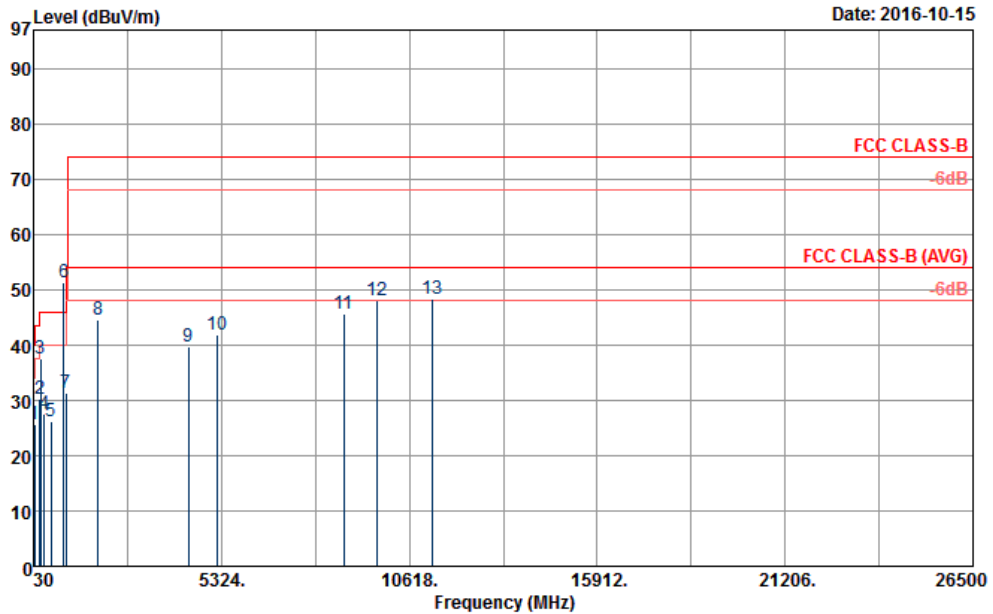


Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m 9120D\_1156\_160817 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	23.46	-16.54	40.00	27.66	25.70	1.90	31.80	---	---	Peak
2	187.95	30.76	-12.74	43.50	45.24	15.28	1.96	31.72	100	23	Peak
3	250.05	28.97	-17.03	46.00	39.76	18.70	2.21	31.70	---	---	Peak
4	479.90	26.55	-19.45	46.00	31.85	23.70	2.86	31.86	---	---	Peak
5	820.10	29.26	-16.74	46.00	29.20	28.57	3.34	31.85	---	---	Peak
6 *	881.50	48.85			47.81	29.29	3.36	31.61	---	---	Peak
7	925.10	32.24	-13.76	46.00	30.26	30.06	3.22	31.30	---	---	Peak
8	1038.00	36.82	-37.18	74.00	68.45	25.02	4.22	60.87	---	---	Peak
9	3850.00	38.46	-35.54	74.00	59.67	30.06	10.15	61.42	---	---	Peak
10	6552.00	43.58	-30.42	74.00	55.56	35.68	12.27	59.93	---	---	Peak
11	8784.00	45.98	-28.02	74.00	52.70	38.27	14.61	59.60	---	---	Peak
12	10926.00	47.39	-26.61	74.00	50.27	41.00	15.00	58.88	---	---	Peak
13	12318.00	48.34	-25.66	74.00	51.75	39.64	16.14	59.19	100	0	Peak



Test Mode :	Mode 3	Temperature :	22~24°C
Test Engineer :	Derreck Chen	Relative Humidity :	48~50%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 5 Idle + Bluetooth Idle + WLAN Idle(2.4G) + Earphone + USB Cable (EUT SD card Data Link to Notebook) + GPS Rx + SIM 2 for Sample 1		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m 9120D\_1156\_160817 VERTICAL

	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	51.33	25.74	-14.26	40.00	40.99	14.42	2.10	31.77	---	---	Peak
2	198.75	30.26	-13.24	43.50	44.20	15.84	1.94	31.72	---	---	Peak
3	240.06	37.52	-8.48	46.00	49.28	17.79	2.16	31.71	100	212	Peak
4	332.90	27.59	-18.41	46.00	36.50	20.55	2.25	31.71	---	---	Peak
5	521.90	26.27	-19.73	46.00	30.67	24.49	3.02	31.91	---	---	Peak
6 *	881.50	51.37			50.33	29.29	3.36	31.61	---	---	Peak
7	949.60	31.29	-14.71	46.00	28.60	30.70	3.05	31.06	---	---	Peak
8	1846.00	44.67	-29.33	74.00	72.72	26.28	6.07	60.40	---	---	Peak
9	4394.00	39.62	-34.38	74.00	59.07	30.88	11.01	61.34	---	---	Peak
10	5190.00	41.76	-32.24	74.00	56.87	32.39	11.47	58.97	---	---	Peak
11	8768.00	45.54	-28.46	74.00	52.34	38.29	14.48	59.57	---	---	Peak
12	9728.00	47.98	-26.02	74.00	54.12	40.25	14.21	60.60	---	---	Peak
13	11260.00	48.25	-25.75	74.00	49.24	41.80	15.54	58.33	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	Oct. 15, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Oct. 15, 2016	Aug. 29, 2017	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Apr. 19, 2016	Oct. 15, 2016	Apr. 18, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Oct. 15, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Oct. 15, 2016	Dec. 13, 2016	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 06, 2016	Oct. 15, 2016	Jan. 05, 2017	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 08, 2016	Oct. 15, 2016	Jan. 07, 2017	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Nov. 17, 2015	Oct. 15, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Oct. 15, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 05, 2016	Oct. 15, 2016	Aug. 04, 2017	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz~26.5GHz	Apr. 18, 2016	Oct. 15, 2016	Apr. 17, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Oct. 15, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Oct. 15, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Oct. 15, 2016	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Oct. 15, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Oct. 15, 2016	N/A	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 15, 2016	Oct. 15, 2016	Apr. 14, 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% ( $U = 2Uc(y)$ )	2.7dB
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.7dB
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### Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.5dB
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