



# FCC Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT1920-16  
**FCC ID** : IHDT56XH1  
**STANDARD** : FCC CFR Title 47 Part 15 Subpart B  
**CLASSIFICATION** : Certification

The product was received on Apr. 12, 2018 and testing was completed on May 26, 2018. We, Sporton International (Kunshan) 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 (Kunshan) Inc., the test report shall not be reproduced except in full.



Approved by: James Huang / Manager

**Sporton International (Kunshan) Inc.**  
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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC841203-01	Rev. 01	Initial issue of report	Jun. 01, 2018



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 8.84 dB at 0.190 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.15 dB at 44.550 MHz for Quasi-Peak



# 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	XT1920-16
FCC ID	IHDT56XH1
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE WLAN 2.4G 802.11b/g/n HT20 Bluetooth v3.0+EDR/Bluetooth v4.0 LE/ Bluetooth v4.1 LE/Bluetooth v4.2 LE
IMEI Code	Conduction: 355531090019253/355531090019261 Radiation: 355531090019519/355531090019527
HW Version	DVT2
SW Version	OPG28.25
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.



### 1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz 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 LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2537.5 MHz ~ 2652.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
<b>Rx Frequency</b>	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2537.5 MHz ~ 2652.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 MHz ~ 1610 MHz FM : 88 MHz ~ 108 MHz
<b>Antenna Type</b>	WWAN : PIFA Antenna Bluetooth/WLAN/GNSS : PIFA Antenna FM: External headset Antenna
<b>Type of Modulation</b>	GSM/GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA : BPSK (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) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK FM

GNSS Rx = GPS Rx + Glonass Rx

### 1.5. Modification of EUT

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

### 1.6. Specification of Accessory

Specification of Accessory				
AC Adapter 1(EU)	Brand Name	Motorola (Acbel)	Model Name	C-P57 SPN5948A
	Power Rating	I/P: 100 - 240 Vac, 0.13A,50/60HZ O/P: 5Vdc 1000mA		
AC Adapter 1(UK)	Brand Name	Motorola (Acbel)	Model Name	C-P58 SPN5950A
	Power Rating	I/P: 100 - 240 Vac, 0.13A,50/60HZ O/P: 5Vdc 1000mA		
AC Adapter 2(EU)	Brand Name	Motorola (Chenyang)	Model Name	C-P57 SPN5985A
	Power Rating	I/P: 100 - 240 Vac, 0.13A,50/60HZ O/P: 5Vdc 1000mA		
AC Adapter 2(UK)	Brand Name	Motorola (Chenyang)	Model Name	C-P58 SPN5981A
	Power Rating	I/P: 100 - 240 Vac, 0.13A,50/60HZ O/P: 5Vdc 1000mA		
Battery	Brand Name	Motorola (Amperex)	Model Name	JE30
	Power Rating	3.8Vdc,2000/2120mAh		
Earphone 1	Brand Name	Motorola(JuWei)	Model Name	711411000731
	Signal Line Type	1.1 meter, non-shielded cable, without ferrite core		
Earphone 2	Brand Name	Motorola(New Leader)	Model Name	711411000711
	Signal Line Type	1.1 meter, non-shielded cable, without ferrite core		
USB Cable	Brand Name	Motorola (Saibao)	Model Name	711310002261
	Signal Line Type	1.0 meter, non-shielded cable, without ferrite core		



### 1.7. Test Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

<b>Test Site</b>	Sporton International (Kunshan) Inc.		
<b>Test Site Location</b>	No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>		<b>FCC Test Firm Registration No.</b>
	CO01-KS	03CH02-KS	630927

**Note:** The test site complies with ANSI C63.4 2014 requirement.

### 1.8. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC CFR Title 47 Part 15 Subpart B
- ♦ ANSI C63.4-2014

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.





## 2. Test Configuration of Equipment Under Test

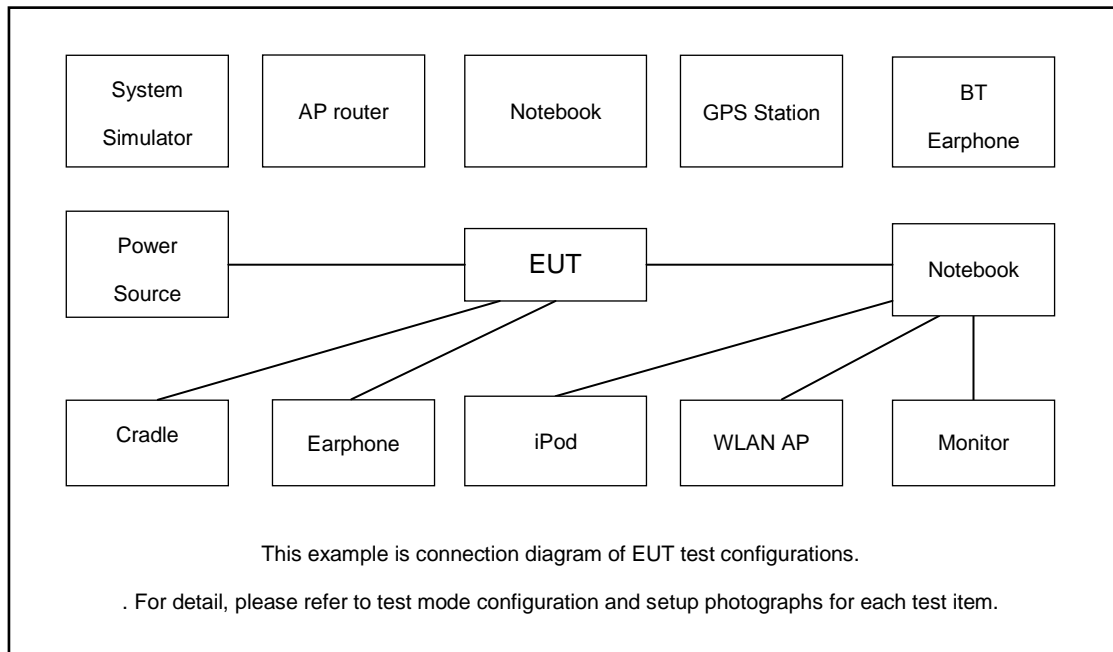
### 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + Camera (Rear) + SIM 1
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + Camera(Front) + SIM 2
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + MPEG4 + SIM 1
	Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone 1 + GNSS Rx + SIM 2
	Mode 5: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (88MHz)
	Mode 6: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (98MHz)
	Mode 7: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (108MHz)
	Mode 8: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 2) + Earphone 2 + Camera (Rear) + SIM 1
Radiated Emissions	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + Camera (Rear) + SIM 1
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + Camera(Front) + SIM 2
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone 1 + MPEG4 + SIM 1
	Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone 1 + GNSS Rx + SIM 2
	Mode 5: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (88MHz)
	Mode 6: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (98MHz)
	Mode 7: USB Cable (Charging from Adapter 1) + Earphone 1 + FM Rx (108MHz)
	Mode 8: USB Cable (Charging from Adapter 2) + Earphone 2 + FM Rx (88MHz)
<b>Remark:</b>	
<ol style="list-style-type: none"> <li>1. The worst case of AC is mode 1; only the test data of this mode is reported.</li> <li>2. The worst case of RE is mode 5; only the test data of this mode is 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



### 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.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
3.	GNSS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
4.	GNSS Station	RACELOGIC	RLLS03-2RP	N/A	N/A	Unshielded, 1.8 m
5.	FM Generator	R&S	SMBV100A	N/A	N/A	Unshielded, 1.8 m
6.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8m
7.	WLAN AP	TP-LINK	TL-WDR5600	N/A	N/A	Unshielded, 1.8m
8.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
9.	Notebook	Dell	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
10.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
11.	Hard Disk	Lenovo	F310	DoC	Shielded, 1.2m	N/A
12.	SD Card	Kingston	8GB	N/A	N/A	N/A
13.	SD Card	SanDisk	Ultra	N/A	N/A	N/A

### 2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA or LTE idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator’s paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Notebook and EUT via USB cable.
2. Turn on GNSS function to make the EUT receive continuous signals from GNSS station.
3. Execute “Video Player” to play MPEG4 files.
4. Turn on camera to capture images.
5. The EUT was turned to Radio frequency channels, FM88 MHz, FM98 MHz and FM108 MHz, from FM Generator.



### 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.

<Class B Limit>

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

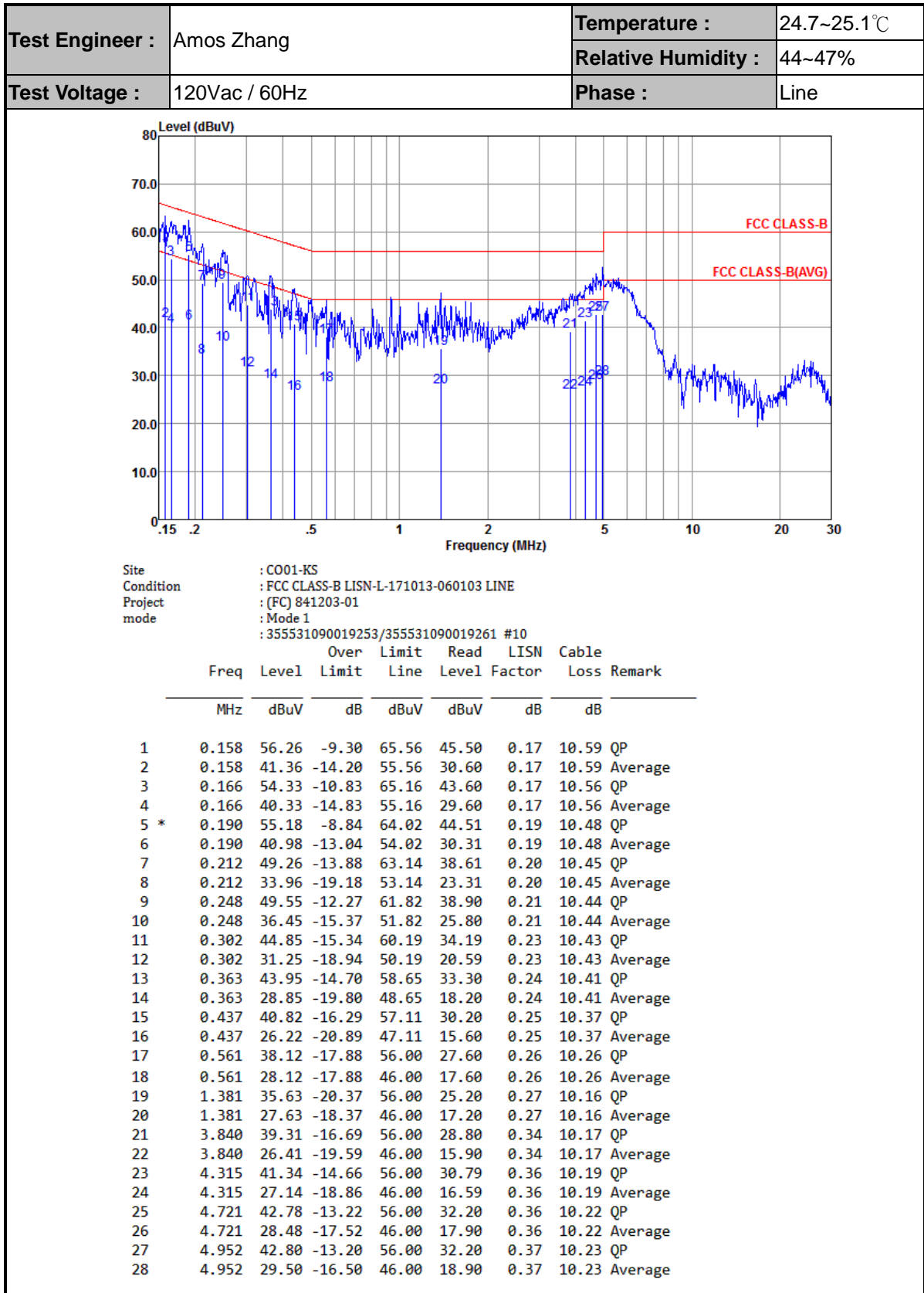
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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



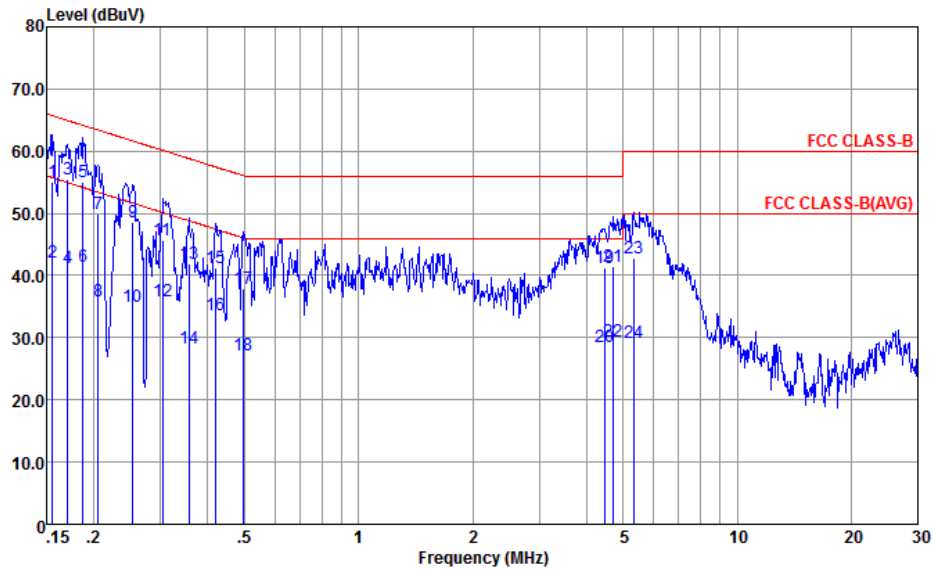


3.1.5 Test Result of AC Conducted Emission





Test Engineer :	Amos Zhang	Temperature :	24.7~25.1°C
		Relative Humidity :	44~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-KS  
 Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL  
 Project : (FC) 841203-01  
 mode : Mode 1  
 : 355531090019253/355531090019261 #10

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.156	55.08	-10.61	65.69	44.20	0.28	10.60	QP
2	0.156	42.08	-13.61	55.69	31.20	0.28	10.60	Average
3	0.170	55.43	-9.51	64.94	44.60	0.28	10.55	QP
4	0.170	41.33	-13.61	54.94	30.50	0.28	10.55	Average
5 *	0.187	54.97	-9.18	64.15	44.20	0.28	10.49	QP
6	0.187	41.37	-12.78	54.15	30.60	0.28	10.49	Average
7	0.205	49.93	-13.47	63.40	39.20	0.28	10.45	QP
8	0.205	35.93	-17.47	53.40	25.20	0.28	10.45	Average
9	0.253	48.52	-13.12	61.64	37.80	0.28	10.44	QP
10	0.253	35.02	-16.62	51.64	24.30	0.28	10.44	Average
11	0.303	45.61	-14.54	60.15	34.90	0.28	10.43	QP
12	0.303	35.91	-14.24	50.15	25.20	0.28	10.43	Average
13	0.356	41.90	-16.93	58.83	31.19	0.29	10.42	QP
14	0.356	28.20	-20.63	48.83	17.49	0.29	10.42	Average
15	0.419	41.17	-16.29	57.46	30.49	0.29	10.39	QP
16	0.419	33.57	-13.89	47.46	22.89	0.29	10.39	Average
17	0.494	37.80	-18.30	56.10	27.20	0.29	10.31	QP
18	0.494	27.20	-18.90	46.10	16.60	0.29	10.31	Average
19	4.454	41.14	-14.86	56.00	30.60	0.34	10.20	QP
20	4.454	28.44	-17.56	46.00	17.90	0.34	10.20	Average
21	4.721	41.36	-14.64	56.00	30.80	0.34	10.22	QP
22	4.721	29.46	-16.54	46.00	18.90	0.34	10.22	Average
23	5.333	42.80	-17.20	60.00	32.19	0.34	10.27	QP
24	5.333	29.20	-20.80	50.00	18.59	0.34	10.27	Average

## 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:

<Class B Limit>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

### 3.2.2. Measuring Instruments

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

### 3.2.3. Test Procedures

1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

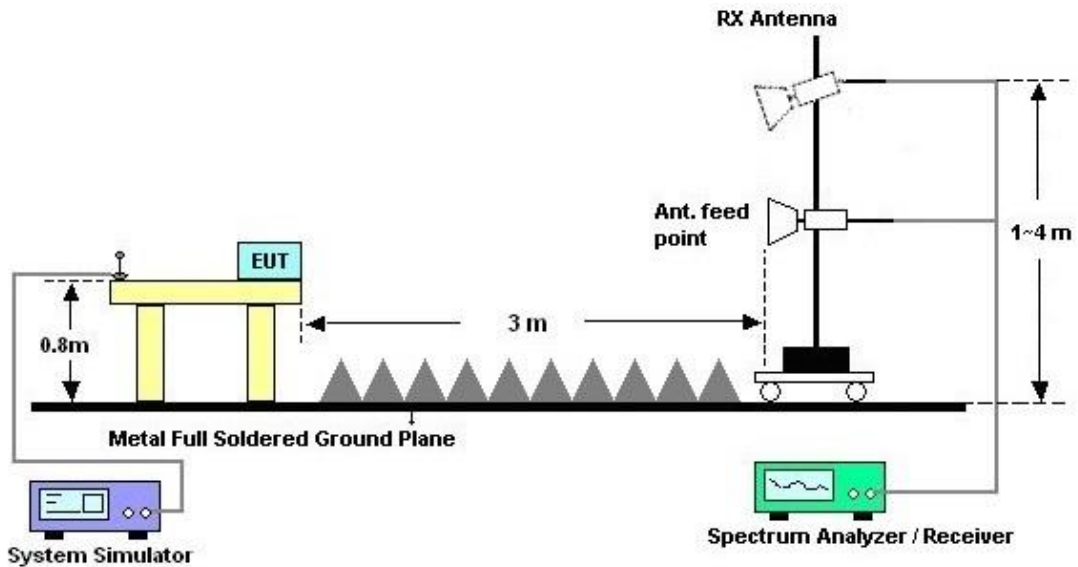


### 3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



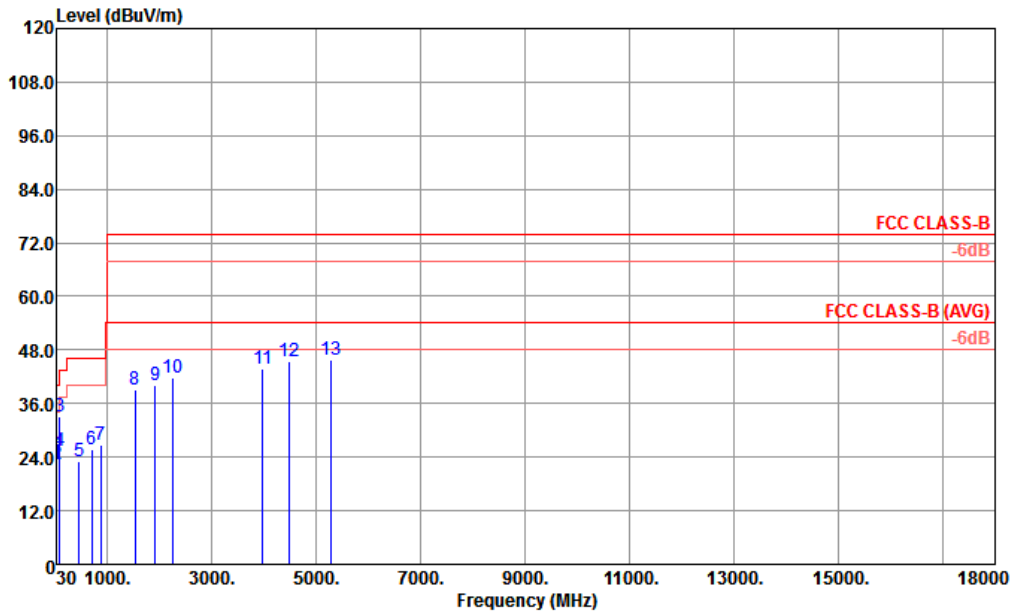
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Rock Shi	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#3 is Base station (FM option) signal which can be ignored.		

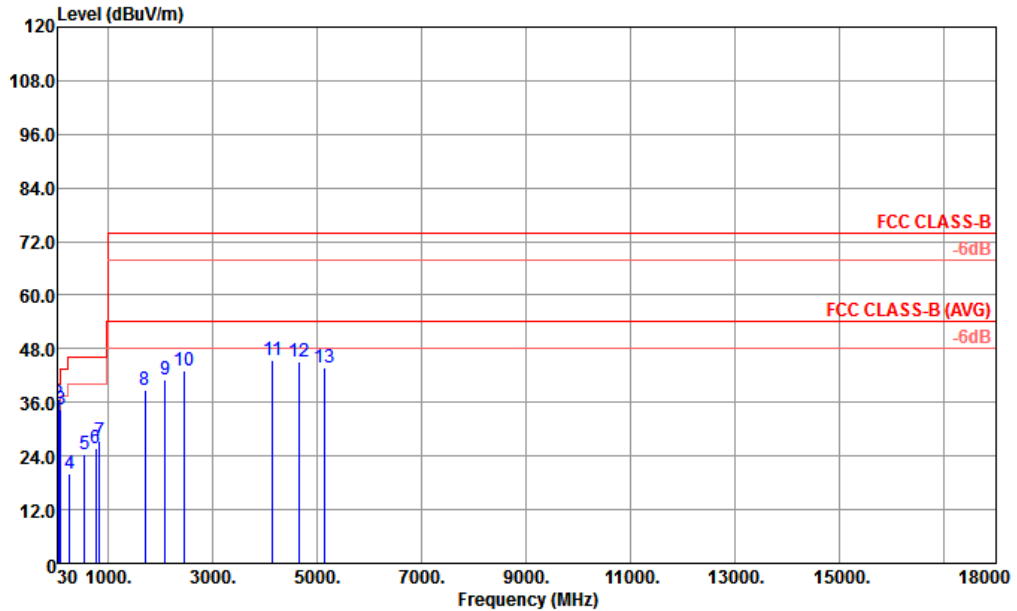


Site : 03CH02-KS  
 Condition : FCC CLASS-B 3m LF 47610 HORIZONTAL  
 Project : (FC)841203-01  
 Mode : 5  
 IMEI : 355531090019519 355531090019527 #11

	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	33.88	22.58	-17.42	40.00	31.23	22.76	0.63	32.04	100	0	Peak
2	43.58	22.30	-17.70	40.00	36.86	16.88	0.66	32.10	---	---	Peak
3	88.20	33.13			49.65	14.54	0.97	32.03	---	---	Peak
4	95.96	25.49	-18.01	43.50	40.45	16.04	0.99	31.99	---	---	Peak
5	469.41	22.94	-23.06	46.00	28.06	23.07	2.26	30.45	---	---	Peak
6	709.97	25.80	-20.20	46.00	26.73	25.14	2.77	28.84	---	---	Peak
7	875.84	26.88	-19.12	46.00	25.06	26.46	3.07	27.71	---	---	Peak
8	1540.00	39.24	-34.76	74.00	70.28	28.90	4.09	64.03	---	---	Peak
9	1918.00	40.15	-33.85	74.00	69.80	29.73	4.54	63.92	---	---	Peak
10	2248.00	41.84	-32.16	74.00	69.22	31.05	4.99	63.42	---	---	Peak
11	3978.00	43.72	-30.28	74.00	66.30	35.06	6.70	64.34	---	---	Peak
12	4479.00	45.32	-28.68	74.00	66.20	35.87	7.32	64.07	---	---	Peak
13	5301.00	45.72	-28.28	74.00	67.34	35.27	7.83	64.72	---	---	Peak



Test Engineer :	Rock Shi	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Remark :	#3 is Base station (FM option) signal which can be ignored.		



Site : 03CH02-KS  
 Condition : FCC CLASS-B 3m LF 47610 VERTICAL  
 Project : (FC)841203-01  
 Mode : 5  
 IMEI : 355531090019519 355531090019527 #11

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.91	32.28	-7.72	40.00	40.39	23.32	0.61	32.04	---	---	Peak
2	44.55	35.85	-4.15	40.00	51.00	16.30	0.66	32.11	100	300	QP
3	88.20	34.30			50.82	14.54	0.97	32.03	---	---	Peak
4	263.77	19.92	-26.08	46.00	30.08	19.48	1.79	31.43	---	---	Peak
5	548.95	24.57	-21.43	46.00	27.14	24.87	2.55	29.99	---	---	Peak
6	767.20	25.85	-20.15	46.00	25.86	25.77	2.76	28.54	---	---	Peak
7	834.13	27.46	-18.54	46.00	26.42	26.17	2.92	28.05	---	---	Peak
8	1708.00	38.93	-35.07	74.00	69.53	29.17	4.35	64.12	---	---	Peak
9	2100.00	41.16	-32.84	74.00	69.39	30.65	4.79	63.67	---	---	Peak
10	2450.00	42.98	-31.02	74.00	69.55	31.39	5.19	63.15	---	---	Peak
11	4146.00	45.58	-28.42	74.00	67.37	35.34	7.16	64.29	---	---	Peak
12	4653.00	45.10	-28.90	74.00	65.94	35.78	7.66	64.28	---	---	Peak
13	5151.00	43.68	-30.32	74.00	65.28	35.39	7.77	64.76	---	---	Peak



### 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	Apr. 19, 2018	May 26, 2018	Apr. 18, 2019	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2017	May 26, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2017	May 26, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2017	May 26, 2018	Oct. 11, 2018	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 08, 2017	May 11, 2018	Aug. 07, 2018	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44G, MAX 30dB	Apr. 17, 2018	May 11, 2018	Apr. 16, 2019	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz~2GHz	Jan. 29, 2018	May 11, 2018	Jan. 28, 2019	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 21, 2017	May 11, 2018	Oct. 20, 2018	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 07, 2017	May 11, 2018	Aug. 06, 2018	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 12, 2017	May 11, 2018	Oct. 11, 2018	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	May 11, 2018	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	May 11, 2018	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	May 11, 2018	NCR	Radiation (03CH02-KS)

NCR: No Calibration Required



## 5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.3dB
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.2dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.2dB
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