



# FCC Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT1955-4  
**FCC ID** : IHDT56XQ5  
**STANDARD** : FCC CFR Title 47 Part 15 Subpart B  
**CLASSIFICATION** : Certification

The product was received on Sep. 06, 2018 and testing was completed on Oct. 18, 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.**  
**No. 1098, Pengxi North Road, Kunshan Economic Development Zone,**  
**Jiangsu Province 215335, China**



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**APPENDIX A. SETUP PHOTOGRAPHS**



### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC890604	Rev. 01	Initial issue of report	Nov. 09, 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 3.70 dB at 0.199 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 9.94 dB at 43.58 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	XT1955-4
FCC ID	IHDT56XQ5
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(16QAM not support uplink)/DC-HSDPA/LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 Bluetooth BR/EDR/LE
IMEI Code	Conduction: Sample 1: 359517090033150/359517090033168 Radiation: Sample 1: 359517090034257/359517090034265 Sample 2: 359518090002617
HW Version	DVT2
SW Version	fastboot_ocean_oem_userdebug_9_PPO29.36_b671_intcf g-test-keys_oem.tar
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, the differences between two samples are only for SIM slot, the sample 1 is dual SIM slot, the sample 2 is single SIM slot. According to the difference, we evaluate the sample 1 to perform full test and the sample 2 to verify worse case for Radiation Emission.



### 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 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 38 : 2572.5 MHz ~ 2617.5 MHz 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 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 38 : 2572.5 MHz ~ 2617.5 MHz 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 : Fixed Internal Antenna WLAN : Monopole Antenna Bluetooth : Monopole Antenna GNSS: Monopole Antenna FM: External headset Antenna
<b>Type of Modulation</b>	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA : BPSK (Uplink) HSDPA/DC-HSDPA : QPSK (Uplink) HSUPA : QPSK (Uplink) HSPA+ : 16QAM(16QAM not support uplink) DC-HSDPA : 64QAM LTE: QPSK / 16QAM / 64QAM 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



### 1.5. Specification of Accessory

Specification of Accessory				
AC Adapter 1 (US)	Brand Name	Motorola(Salom)	Model Name	SC-51
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 1 (EU)	Brand Name	Motorola(Salom)	Model Name	SC-52
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 1 (UK)	Brand Name	Motorola(Salom)	Model Name	SC-53
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 1 (AU)	Brand Name	Motorola(Salom)	Model Name	SC-55
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 2 (US)	Brand Name	Motorola(Chenyang)	Model Name	SC-51
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 2 (EU)	Brand Name	Motorola(Chenyang)	Model Name	SC-52
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 2 (UK)	Brand Name	Motorola(Chenyang)	Model Name	SC-53
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
AC Adapter 2 (AU)	Brand Name	Motorola(Chenyang)	Model Name	SC-55
	Power Rating	I/P: 100 - 240 Vac, 0.6A, O/P: 5Vdc -3000mA; 9Vdc -2000mA;12Vdc -1500mA		
Earphone	Brand Name	Motorola(Lianyun)	Model Name	LYM500B-36C-003
	Signal Line	1.2 meter, non-shielded cable, without ferrite core		
USB Cable	Brand Name	Motorola(Saibao)	Model Name	711310002491
	Signal Line	1.0 meter, shielded cable, without ferrite core		
Battery	Brand Name	Motorola (SCUD)	Model Name	JK50
	Power Rating	3.8Vdc,5000mAh	Type	Li-ion

### 1.6. Modification of EUT

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



### 1.7. Test Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0).

<b>Test Site</b>	Sporton International (Kunshan) Inc.		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu Province 215335, China TEL : 86-512-57900158 FAX : 86-512-57900958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC designation No.</b>	<b>FCC Test Firm Registration No.</b>
	CO01-KS 03CH06-KS	CN5013	630927

### 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

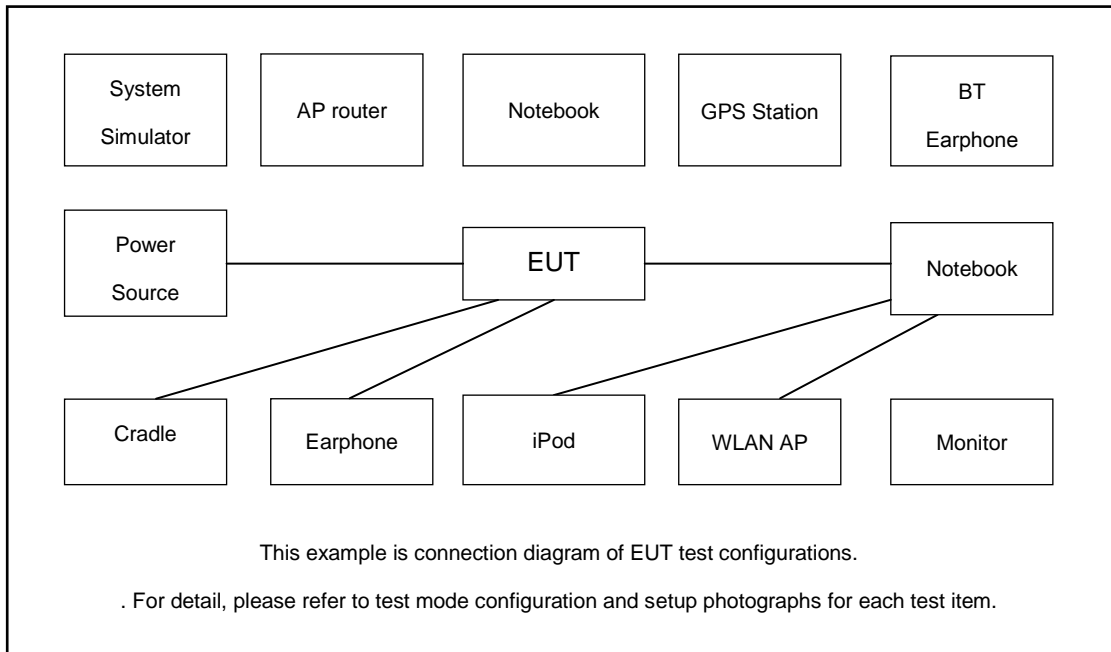
### 2.1. Test Mode

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 + Camera (Rear) for Sample 1
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + Camera (Front) for Sample 1
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + MPEG4 for Sample 1
	Mode 4: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + FM Rx(98MHz) for Sample 1
	Mode 5: LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Data Link with Notebook) + Earphone + GNSS Rx for Sample 1
	Mode 6: LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 2) + Earphone + GNSS RX for Sample 1
Radiated Emissions	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + Camera (Rear) for Sample 1
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + Camera (Front) for Sample 1
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + MPEG4 for Sample 1
	Mode 4: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + FM Rx(98MHz) for Sample 1
	Mode 5: LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Data Link with Notebook) + Earphone + GNSS Rx for Sample 1
	Mode 6: GSM 850 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 2) + Earphone + Camera(Rear) for Sample 1
	Mode 7: GSM 850 Idle + Bluetooth Idle + WLAN Idle + USB Cable(Charging from Adapter 1) + Earphone + Camera(Rear) for Sample 2
<b>Remark:</b>	
<ol style="list-style-type: none"> <li>The worst case of AC is mode 6; only the test data of this mode is reported.</li> <li>The worst case of RE is mode 1; only the test data of this mode is 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.	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.	Vector Signal Generator	R&S	SMBV100A	258305	N/A	Unshielded, 1.8m
4.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8m
5.	WLAN AP	TP-LINK	TL-WDR5600	N/A	N/A	Unshielded, 1.8m
6.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
7.	Notebook	Lenovo	Y510P	N/A	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
8.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
9.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
10.	SD Card	SanDisk	Uitra	N/A	N/A	N/A
11.	SD Card	Kingston	8GB	N/A	N/A	N/A
12.	Hard Disk	Lenovo	LH310	N/A	Shielded, 1.2m	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. Turn on FM function to make the EUT receive continuous signals from FM station.
4. Execute "Video Player" to play MPEG4 files.
5. Turn on camera to capture images.



### 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.

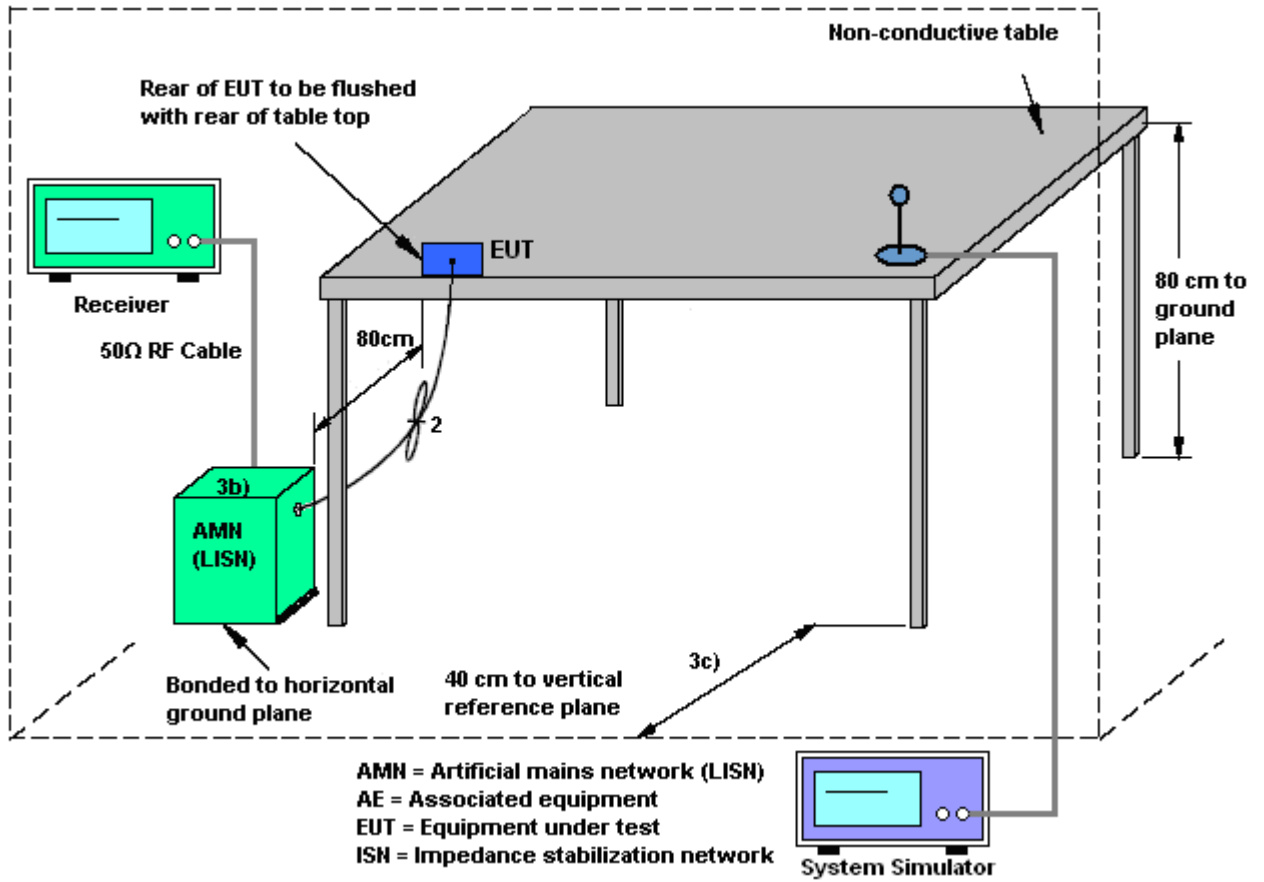
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedure

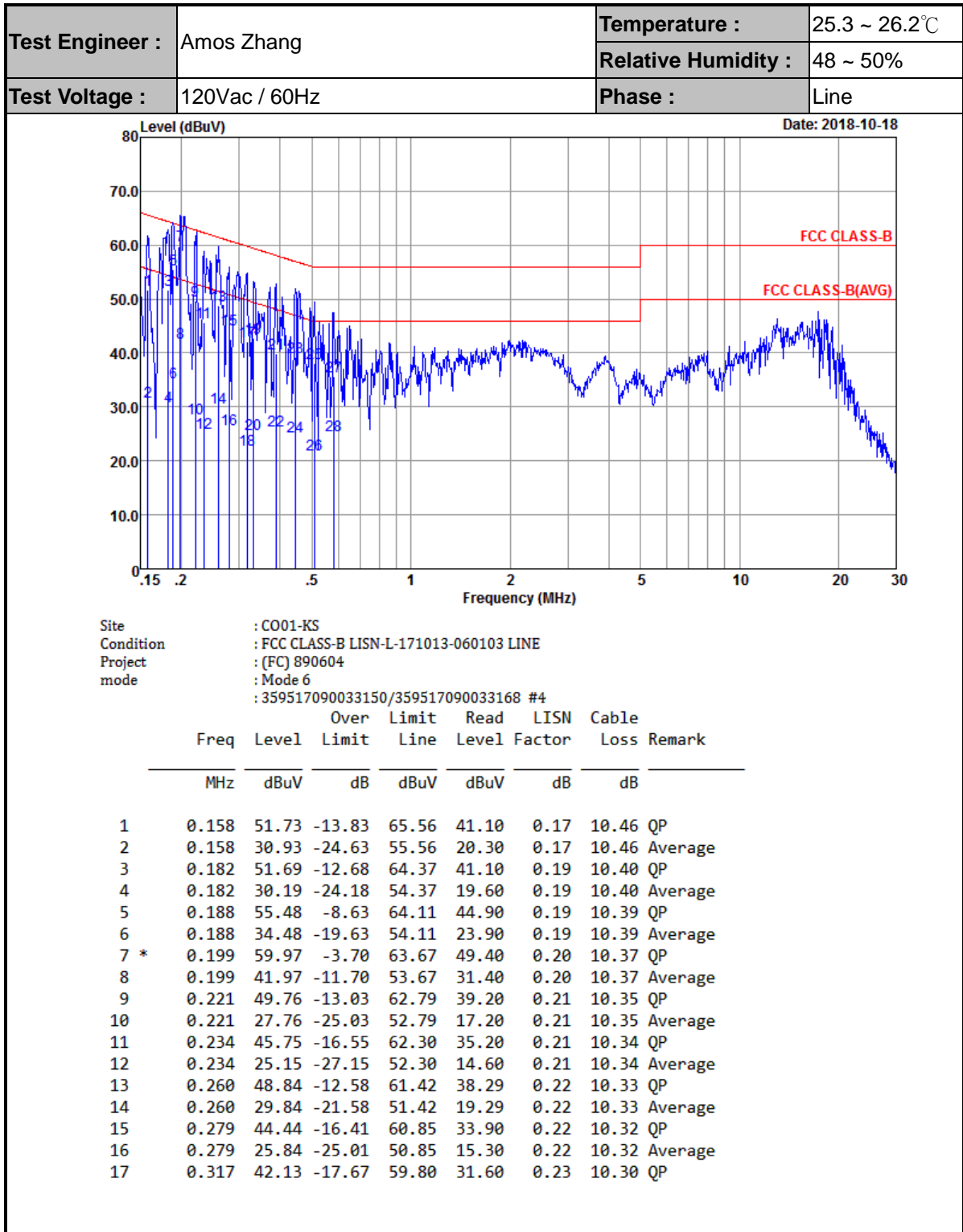
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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



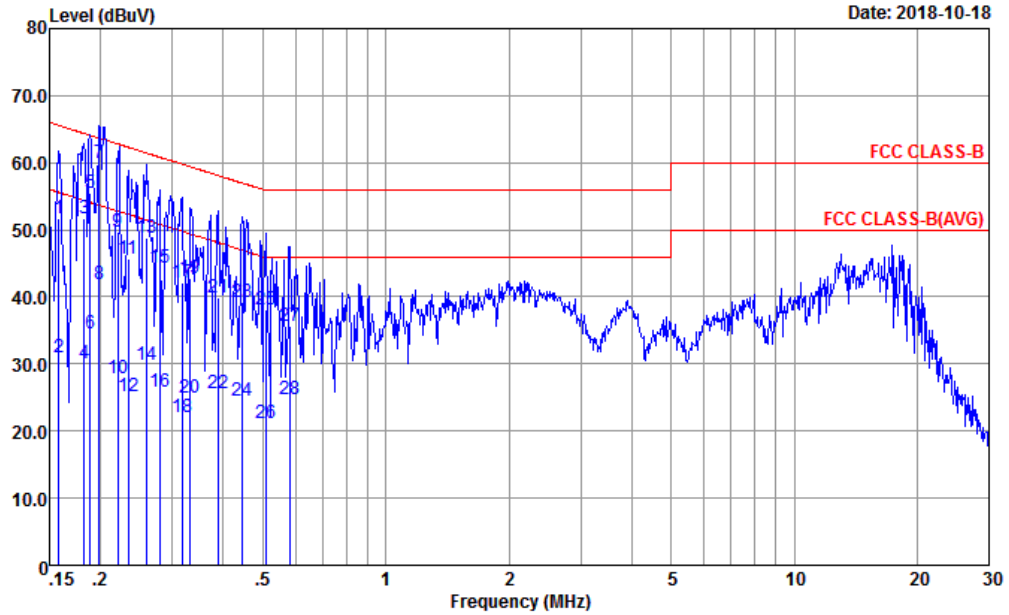


3.1.5 Test Result of AC Conducted Emission





Test Engineer :	Amos Zhang	Temperature :	25.3 ~ 26.2°C
		Relative Humidity :	48 ~ 50%
Test Voltage :	120Vac / 60Hz	Phase :	Line

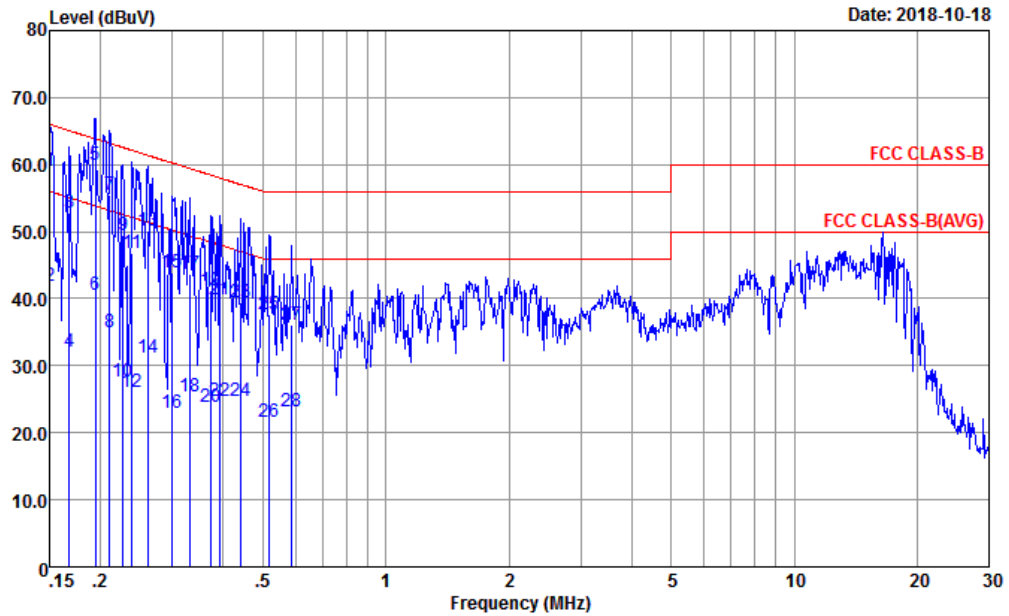


Site : CO01-KS  
 Condition : FCC CLASS-B LISN-L-171013-060103 LINE  
 Project : (FC) 890604  
 mode : Mode 6  
 : 359517090033150/359517090033168 #4

Freq	Level	Over	Limit	Read	LISN	Cable	Remark
MHz	dBuV	Limit	Line	Level	Factor	Loss	
		dB	dBuV	dBuV	dB	dB	
18	0.317	22.13	-27.67	49.80	11.60	0.23	10.30 Average
19	0.332	42.83	-16.57	59.40	32.31	0.23	10.29 QP
20	0.332	25.03	-24.37	49.40	14.51	0.23	10.29 Average
21	0.387	39.81	-18.31	58.12	29.30	0.24	10.27 QP
22	0.387	25.71	-22.41	48.12	15.20	0.24	10.27 Average
23	0.444	39.30	-17.68	56.98	28.80	0.25	10.25 QP
24	0.444	24.60	-22.38	46.98	14.10	0.25	10.25 Average
25	0.510	38.10	-17.90	56.00	27.60	0.26	10.24 QP
26	0.510	21.10	-24.90	46.00	10.60	0.26	10.24 Average
27	0.582	35.70	-20.30	56.00	25.20	0.26	10.24 QP
28	0.582	24.70	-21.30	46.00	14.20	0.26	10.24 Average



Test Engineer :	Amos Zhang	Temperature :	25.3 ~ 26.2°C
		Relative Humidity :	48 ~ 50%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



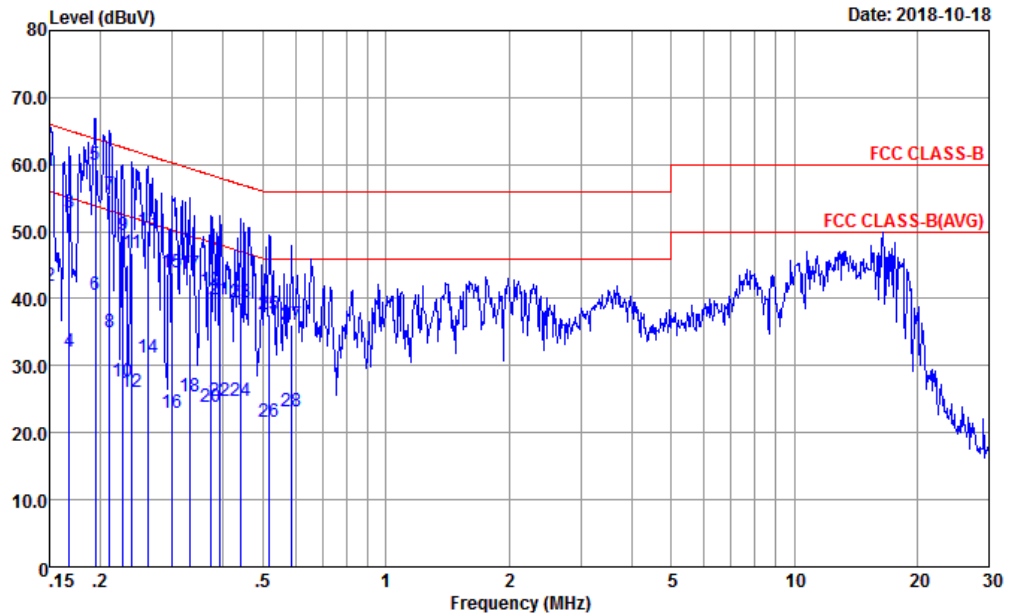
Site : CO01-KS  
 Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL  
 Project : (FC) 890604  
 mode : Mode 6  
 : 359517090033150/359517090033168 #4

	Freq	Level	Over Limit	Limit	Read	LISN	Cable	
	MHz	dBuV		dB	dBuV	dB	dB	Remark
1	0.150	58.96	-7.04	66.00	48.20	0.28	10.48	QP
2	0.150	41.96	-14.04	56.00	31.20	0.28	10.48	Average
3	0.168	52.91	-12.17	65.08	42.20	0.28	10.43	QP
4	0.168	32.01	-23.07	55.08	21.30	0.28	10.43	Average
5 *	0.194	59.85	-3.99	63.84	49.20	0.28	10.37	QP
6	0.194	40.55	-13.29	53.84	29.90	0.28	10.37	Average
7	0.211	55.54	-7.64	63.18	44.90	0.28	10.36	QP
8	0.211	34.94	-18.24	53.18	24.30	0.28	10.36	Average
9	0.227	49.53	-13.04	62.57	38.90	0.28	10.35	QP
10	0.227	27.53	-25.04	52.57	16.90	0.28	10.35	Average
11	0.239	46.82	-15.31	62.13	36.20	0.28	10.34	QP
12	0.239	26.12	-26.01	52.13	15.50	0.28	10.34	Average
13	0.262	50.24	-11.14	61.38	39.63	0.28	10.33	QP
14	0.262	31.21	-20.17	51.38	20.60	0.28	10.33	Average
15	0.300	43.79	-16.45	60.24	33.20	0.28	10.31	QP
16	0.300	22.89	-27.35	50.24	12.30	0.28	10.31	Average
17	0.330	43.78	-15.66	59.44	33.20	0.29	10.29	QP





Test Engineer :	Amos Zhang	Temperature :	25.3 ~ 26.2°C
		Relative Humidity :	48 ~ 50%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-KS  
 Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL  
 Project : (FC) 890604  
 mode : Mode 6  
 : 359517090033150/359517090033168 #4

Freq	Level	Over	Limit	Read	LISN	Cable	Loss	Remark
MHz	dBuV		dB	dBuV	dBuV	dB	dB	
18	0.330	25.48	-23.96	49.44	14.90	0.29	10.29	Average
19	0.373	41.16	-17.27	58.43	30.59	0.29	10.28	QP
20	0.373	23.86	-24.57	48.43	13.29	0.29	10.28	Average
21	0.393	39.86	-18.13	57.99	29.30	0.29	10.27	QP
22	0.393	24.66	-23.33	47.99	14.10	0.29	10.27	Average
23	0.442	39.34	-17.68	57.02	28.80	0.29	10.25	QP
24	0.442	24.74	-22.28	47.02	14.20	0.29	10.25	Average
25	0.516	37.73	-18.27	56.00	27.20	0.29	10.24	QP
26	0.516	21.73	-24.27	46.00	11.20	0.29	10.24	Average
27	0.589	36.03	-19.97	56.00	25.50	0.29	10.24	QP
28	0.589	23.13	-22.87	46.00	12.60	0.29	10.24	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.

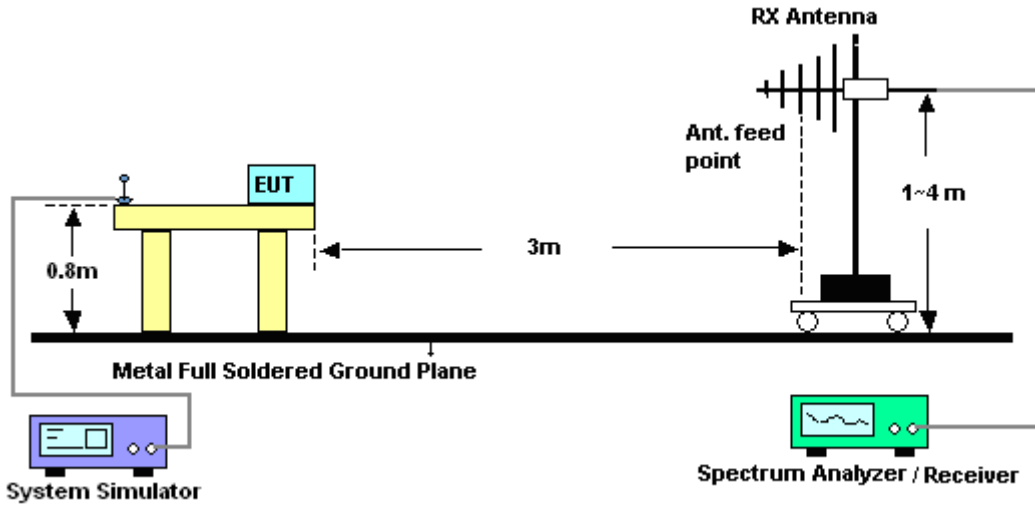


### **3.2.3. Test Procedures**

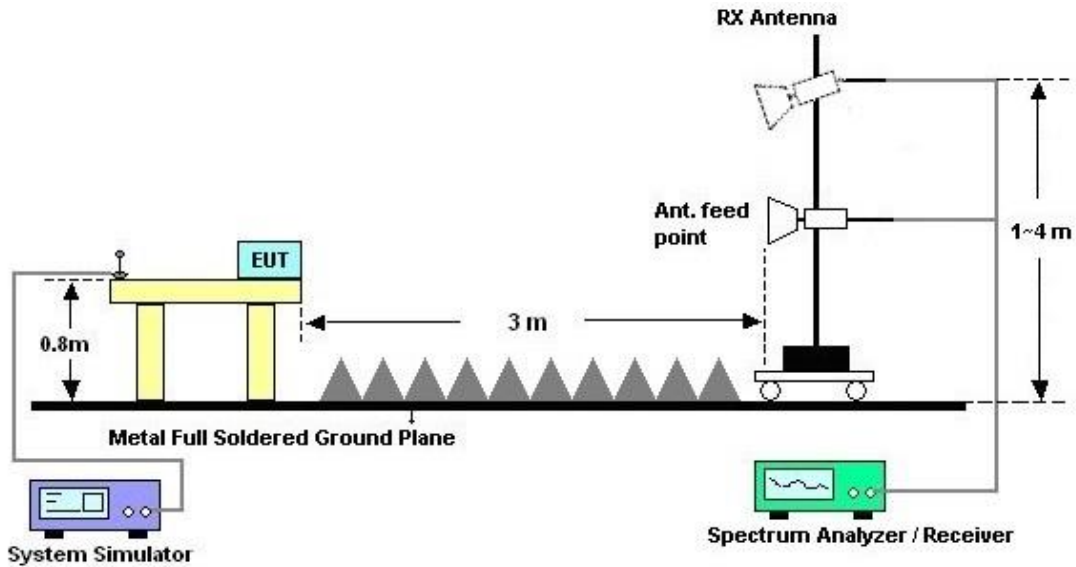
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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



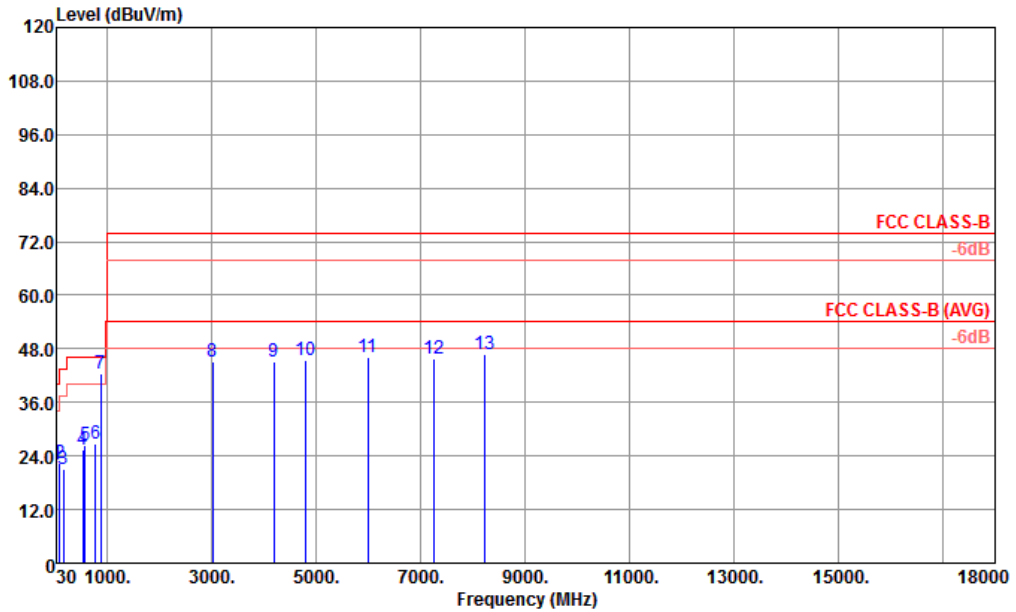
For radiated emissions above 1GHz





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 :	#7 is system simulator signal which can be ignored.		

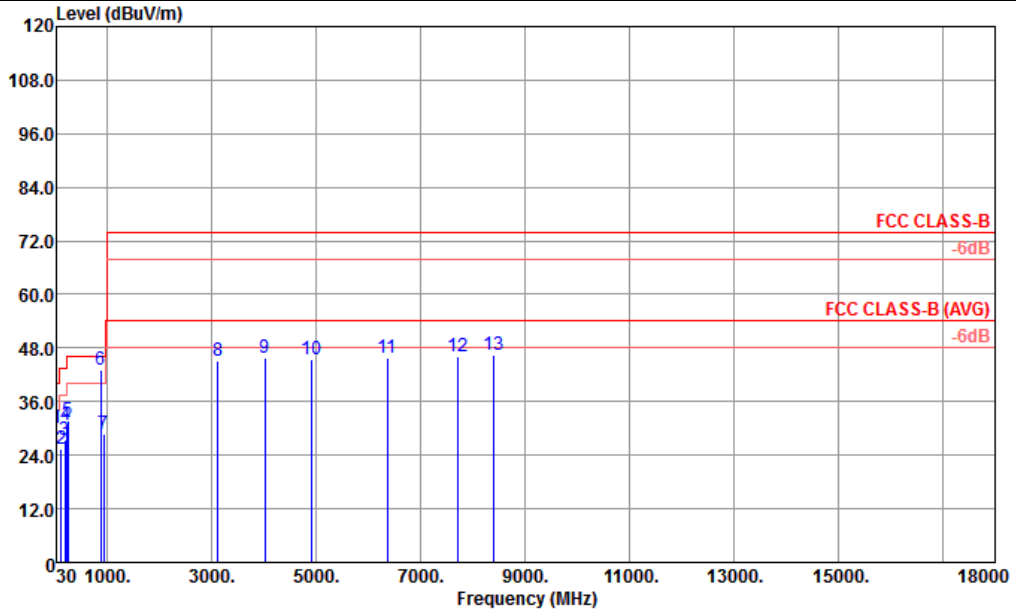


Site : 03CH06-KS  
 Condition : FCC CLASS-B 3m CBL6112D SN 23188 HORIZONTAL  
 Project : [FC]890604  
 Mode : 1  
 IMEI : 359517090034257 359517090034265 #6

	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	30.00	22.20	-17.80	40.00	30.13	24.10	0.57	32.60	100	0 Peak
2	99.84	22.54	-20.96	43.50	36.83	16.90	1.01	32.20	---	Peak
3	159.01	21.23	-22.27	43.50	36.11	15.87	1.33	32.08	---	Peak
4	533.43	25.37	-20.63	46.00	30.71	23.86	2.47	31.67	---	Peak
5	579.02	26.39	-19.61	46.00	31.22	24.37	2.56	31.76	---	Peak
6	779.81	26.85	-19.15	46.00	29.70	25.86	3.03	31.74	---	Peak
7 !	881.66	42.35			44.37	26.43	3.19	31.64	---	Peak
8	3024.00	45.02	-28.98	74.00	41.66	32.83	6.10	35.57	---	Peak
9	4200.00	45.17	-28.83	74.00	39.37	33.40	7.30	34.90	---	Peak
10	4800.00	45.40	-28.60	74.00	38.43	34.20	7.92	35.15	---	Peak
11	5992.00	46.13	-27.87	74.00	37.14	35.20	8.94	35.15	---	Peak
12	7248.00	45.64	-28.36	74.00	36.13	35.70	9.66	35.85	---	Peak
13	8224.00	46.87	-27.13	74.00	36.25	36.00	10.47	35.85	---	Peak



Test Engineer :	Rock Shi	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH06-KS  
 Condition : FCC CLASS-B 3m CBL6112D SN 23188 VERTICAL  
 Project : [FC]890604  
 Mode : 1  
 IMEI : 359517090034257 359517090034265 #6

	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	43.58	30.06	-9.94	40.00	45.15	16.70	0.63	32.42	100	0 Peak
2	119.24	25.45	-18.05	43.50	38.36	18.14	1.11	32.16	---	---
3	191.02	27.46	-16.04	43.50	42.54	15.47	1.47	32.02	---	---
4	224.00	30.61	-15.39	46.00	45.16	15.72	1.63	31.90	---	---
5	256.98	31.79	-14.21	46.00	42.39	19.46	1.75	31.81	---	---
6 !	881.66	43.22			45.24	26.43	3.19	31.64	---	---
7	938.89	28.64	-17.36	46.00	29.94	26.89	3.33	31.52	---	---
8	3128.00	45.23	-28.77	74.00	41.47	33.00	6.23	35.47	---	---
9	4024.00	45.82	-28.18	74.00	40.27	33.50	7.09	35.04	---	---
10	4928.00	45.61	-28.39	74.00	38.67	34.00	8.06	35.12	---	---
11	6360.00	45.83	-28.17	74.00	36.53	35.40	9.18	35.28	---	---
12	7720.00	45.99	-28.01	74.00	35.92	35.90	10.02	35.85	---	---
13	8400.00	46.50	-27.50	74.00	35.78	36.10	10.44	35.82	---	---



### 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A	MY56400023	3Hz~8.5GHz;Max 30dBm	Oct. 12, 2018	Oct. 18, 2018	Oct. 11, 2019	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471084	10Hz-44GHz	Jun. 25, 2018	Oct. 18, 2018	Jun. 24, 2019	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Jan. 29, 2018	Oct. 18, 2018	Jan. 28, 2019	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 21, 2017	Oct. 18, 2018	Oct. 20, 2018	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Aug. 06, 2018	Oct. 18, 2018	Aug. 05, 2019	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5GHz	Dec. 16, 2017	Oct. 18, 2018	Dec. 15, 2018	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 18, 2018	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 18, 2018	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 18, 2018	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 19, 2018	Oct. 18, 2018	Apr. 18, 2019	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 12, 2018	Oct. 18, 2018	Oct. 11, 2019	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Nov. 23, 2017	Oct. 18, 2018	Nov. 22, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2018	Oct. 18, 2018	Oct. 11, 2019	Conduction (CO01-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% ( $U = 2Uc(y)$ )	2.9dB
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0dB
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