# **FCC Test Report**

APPLICANT : Xiaomi Communications Co., Ltd.

**EQUIPMENT**: Mobile Phone

BRAND NAME : MI

MODEL NAME : M1806E7TG

FCC ID : 2AFZZ-RMSE7TG

STANDARD : FCC CFR Title 47 Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Jun. 26, 2018 and testing was completed on Jul. 11, 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.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China

Sporton International (Kunshan) Inc.

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Report Issued Date : Aug. 02, 2018

Report No.: FC862604

Report Version : Rev. 01

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## **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC862604	Rev. 01	Initial issue of report	Aug. 02, 2018

Sporton International (Kunshan) Inc.

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## **SUMMARY OF TEST RESULT**

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	5.57 dB at
					0.165 MHz
					Under limit
2.0	15.109 Radiated Emis	45.400	45 400 limite	PASS	4.36 dB at
3.2		Radiated Emission	< 15.109 limits		43.580 MHz for
					Quasi-Peak

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## 1. General Description

## 1.1. Applicant

Xiaomi Communications Co., Ltd.

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

### 1.2. Manufacturer

Xiaomi Communications Co., Ltd.

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

## 1.3. Product Feature of Equipment Under Test

Product Feature					
Equipment	Mobile Phone				
Brand Name	MI				
Model Name	M1806E7TG				
FCC ID	2AFZZ-RMSE7TG				
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/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE				
IMEI Code	Conduction: 868931030100777/868931030105388 Radiation: 868931030100777 868931030105388				
HW Version	P2.0				
SW Version	MIUI 9				
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.

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## 1.4. Product Specification of Equipment Under Test

Standards-related Product Specification					
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 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 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz Bluetooth: 2402 MHz ~ 2480 MHz				
Rx Frequency	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 IV: 2112.4 MHz ~ 2152.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 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 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS: 1559 MHz ~ 1610 MHz FM: 88 MHz ~ 108 MHz				
Antenna Type	WWAN: PIFA&Loop Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GNSS: PIFA Antenna FM: External Headset Antenna				

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Report Template No.: BU5-FC15B Version 2.0

Type of Modulation	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 (Uplink is not supported) DC-HSDPA: 64QAM LTE: QPSK / 16QAM / 64QAM / 256QAM (Downlink only) 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE: GFSK Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): $\pi$ /4-DQPSK Bluetooth (3Mbps): 8-DPSK GNSS: BPSK FM
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#### Note:

- 1. GNSS=GPS + GLONASS + Beidou + Galileo + SBAS
- 2. WLAN operation in 5600 MHz ~ 5650 MHz is notched.

### 1.5. Modification of EUT

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

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### 1.6. 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.

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

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

## 1.7. 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.

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## 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
	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable1(Charging from Adapter1) + Antenna 1
	Mode 2: GSM 1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + Camera(Front) + USB Cable2(Charging from Adapter2) + Antenna 1
	Mode 3: WCDMA Band V Idle + Earphone+ Bluetooth Idle + WLAN Idle(2.4G) + MPEG4 + USB Cable2(Charging from Adapter2) + Antenna 1
AC Conducted Emission	Mode 4: WCDMA Band II Idle + Earphone+ Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable1(Data Link with Notebook) + Antenna 1
	Mode 5: LTE Band 4 Idle + Earphone+ Bluetooth Idle + WLAN Idle(2.4G) + GNSS Rx + USB Cable2(Data Link with Notebook) + Antenna 1
	Mode 6: LTE Band 7 Idle + Earphone+ Bluetooth Idle + WLAN Idle(5G) + FM Rx + USB Cable2(Charging from Adapter2) + Antenna 1
	Mode 7: GSM 1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + Camera(Front) + USB Cable2(Charging from Adapter2) + Antenna 2
	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable1(Charging from Adapter1) + Antenna 1
	Mode 2: GSM 1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + Camera(Front) + USB Cable2(Charging from Adapter2) + Antenna 1
	Mode 3: WCDMA Band V Idle + Earphone+ Bluetooth Idle + WLAN Idle(2.4G) + MPEG4 + USB Cable1(Charging from Adapter1) + Antenna 1
Radiated Emissions	Mode 4: WCDMA Band II Idle + Earphone+ Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable1(Data Link with Notebook) + Antenna 1
	Mode 5: LTE Band 4 Idle + Earphone+ Bluetooth Idle + WLAN Idle(2.4G) + GNSS Rx + USB Cable2(Data Link with Notebook) + Antenna 1
	Mode 6: LTE Band 7 Idle + Earphone+ Bluetooth Idle + WLAN Idle(2.4G) + FM(108M) Rx + USB Cable1(Charging from Adapter1) + Antenna 1
	Mode 7: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable1(Charging from Adapter1) + Antenna 2

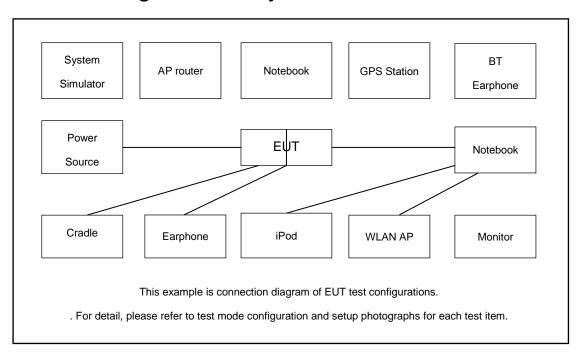
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#### Remark:

- 1. The worst case of AC is mode 2; only the test data of this mode is reported.
- 2. The worst case of RE is mode 1; only the test data of this mode is reported.
- Data Link with Notebook means data application transferred mode between EUT and Notebook.
- **4.** Antenna 1: Bottom Antenna, Antenna 2: Top Antenna. The Antenna 2 is verified worse case of Antenna 1.
- 5. The memory of EUT is 4+64GB.

### 2.2. Connection Diagram of Test System



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

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	GNSS Station	RACELOGIC	RLLS03-2RP	N/A	N/A	Unshielded, 1.8 m
3.	FM Station	R&S	SMBV100A	258305	N/A	N/A
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	Dell	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
8.	Bluetooth Earphone	Xiaomi	LYEJ02LM	N/A	N/A	N/A
9.	SD Card	Kingston	8GB	N/A	N/A	N/A
10.	SD Card	SanDisk	Uitra	N/A	N/A	N/A
11.	iPod	Apple	A1199	Fcc DoC	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. Execute "Video player" to play MPEG4 files.
- 3. Turn on camera to capture images.
- 4. Turn on GNSS function to make the EUT receive continuous signals from GNSS station
- 5. Turn on FM receiver function to make the EUT receive continuous signals from FM station.

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### 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	Conducted limit (dBuV)				
(MHz)	Quasi-peak	Average			
0.15-0.5	66 to 56*	56 to 46*			
0.5-5	56	46			
5-30	60	50			

<sup>\*</sup>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

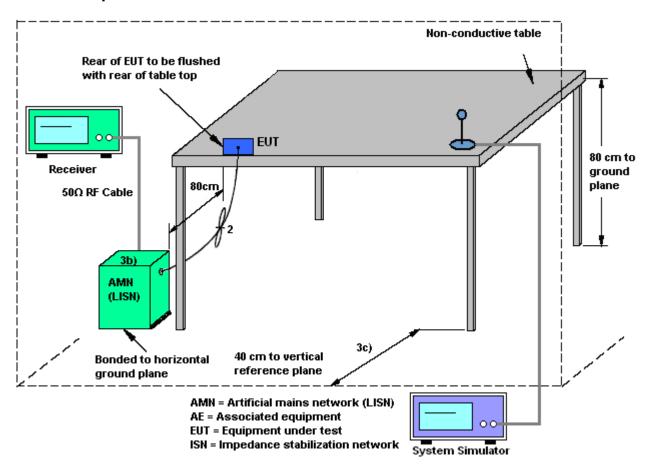
- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other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

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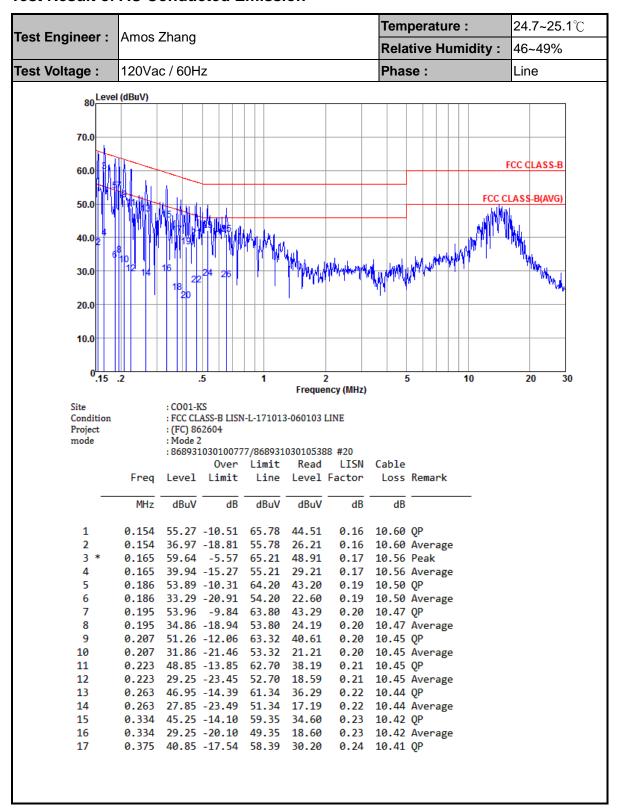
### 3.1.4 Test Setup



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#### 3.1.5 Test Result of AC Conducted Emission

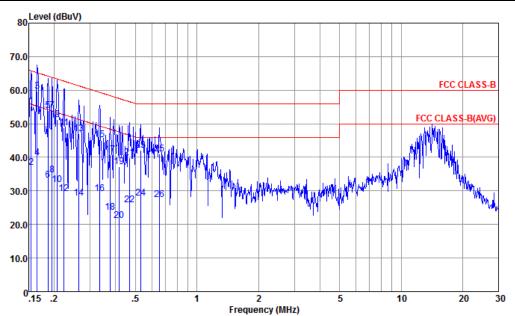


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: CO01-KS

Condition : FCC CLASS-B LISN-L-171013-060103 LINE

Project : (FC) 862604

: Mode 2

:868931030100777/868931030105388 #20

			0ver	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	0.375	23.55	-24.84	48.39	12.90	0.24	10.41	Average
19	0.417	37.24	-20.27	57.51	26.60	0.25	10.39	QP
20	0.417	21.14	-26.37	47.51	10.50	0.25	10.39	Average
21	0.469	39.89	-16.65	56.54	29.29	0.26	10.34	QP
22	0.469	25.79	-20.75	46.54	15.19	0.26	10.34	Average
23	0.529	42.14	-13.86	56.00	31.60	0.26	10.28	QP
24	0.529	27.84	-18.16	46.00	17.30	0.26	10.28	Average
25	0.654	40.95	-15.05	56.00	30.50	0.26	10.19	QP
26	0.654	27.35	-18.65	46.00	16.90	0.26	10.19	Average

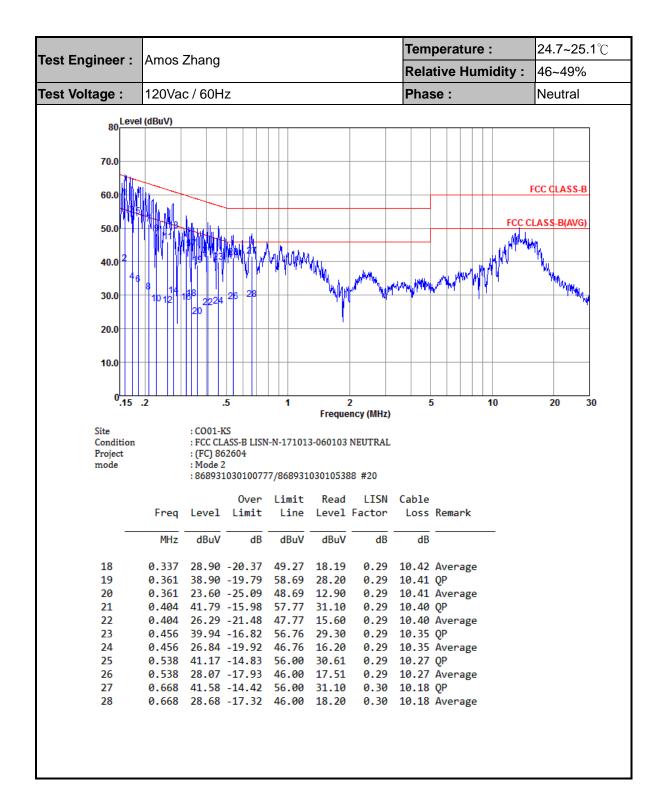
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Temperature: 24.7~25.1°C Test Engineer: Amos Zhang **Relative Humidity:** 46~49% Test Voltage: 120Vac / 60Hz Phase: Neutral 80 Level (dBuV) 70.0 FCC CLASS-B 60.0 50.0 40.0 30.0 20.0 10.0 20 30 Frequency (MHz) : CO01-KS Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL Project : (FC) 862604 mode : Mode 2 :868931030100777/868931030105388 #20 Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark MHz dBuV dΒ dBuV dBuV dB dΒ 0.159 59.07 -6.45 65.52 48.20 0.28 10.59 QP 1 39.47 -16.05 55.52 28.60 0.28 10.59 Average 2 0.159 3 0.173 54.02 -10.79 64.81 43.20 0.28 10.54 QP 0.173 34.12 -20.69 54.81 23.30 0.28 10.54 Average 0.184 53.38 -10.90 64.28 42.60 0.28 10.50 QP 5 0.184 33.28 -21.00 54.28 22.50 0.28 10.50 Average 0.28 10.45 QP 7 0.208 51.23 -12.04 63.27 40.50 0.28 10.45 Average 8 0.208 31.03 -22.24 53.27 20.30 0.227 48.33 -14.24 62.57 37.60 9 0.28 10.45 QP 0.227 27.33 -25.24 52.57 16.60 0.28 10.45 Average 10 0.258 45.92 -15.59 61.51 35.20 0.28 10.44 QP 12 0.258 27.02 -24.49 51.51 16.30 0.28 10.44 Average 0.274 49.32 -11.66 60.98 38.61 0.28 10.43 QP 13 0.274 29.92 -21.06 50.98 19.21 14 0.28 10.43 Average 15 0.318 43.91 -15.84 59.75 33.20 0.29 10.42 OP 16 0.318 27.91 -21.84 49.75 17.20 0.29 10.42 Average 0.337 43.90 -15.37 59.27 33.19 0.29 10.42 QP

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### 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	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(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.

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#### 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

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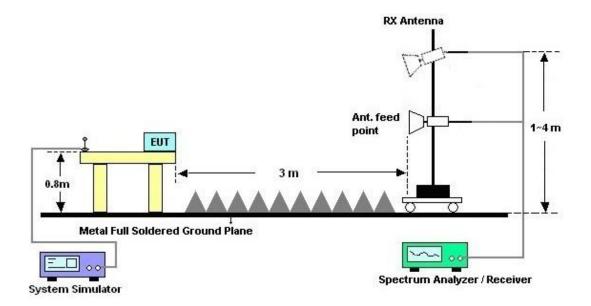
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### 3.2.4. Test Setup of Radiated Emission

#### For radiated emissions from 30MHz to 1GHz



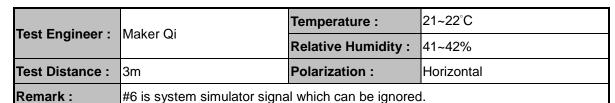
#### For radiated emissions above 1GHz

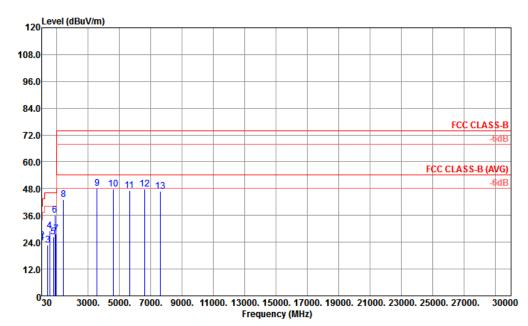


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#### 3.2.5. Test Result of Radiated Emission





Site : 03CH02-KS

Condition : FCC CLASS-B 3m LF 23182-3M HORIZONTAL

Project : (FC)862604

Mode : 1

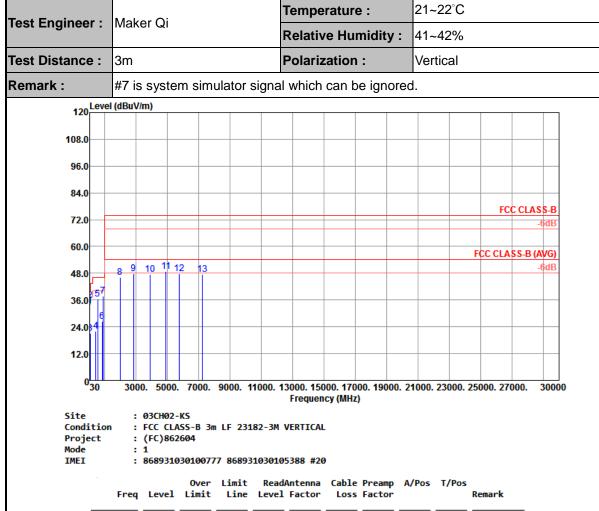
IMEI : 868931030100777 868931030105388 #20

	Freq	Level	Over Limit			Antenna Factor			A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.97	23.57	-16.43	40.00	31.08	23.93	0.59	32.03			Peak
2	43.58	24.86	-15.14	40.00	39.32	16.98	0.66	32.10	100	0	Peak
3	424.79	22.77	-23.23	46.00	29.26	22.00	2.13	30.62			Peak
4	549.92	29.11	-16.89	46.00	32.80	23.74	2.55	29.98			Peak
5	780.78	26.40	-19.60	46.00	26.57	25.57	2.71	28.45			Peak
6	881.66	36.00			34.29	26.29	3.08	27.66			Peak
7	944.71	27.71	-18.29	46.00	24.81	26.89	3.19	27.18			Peak
8	1432.00	43.28	-30.72	74.00	48.64	28.14	3.95	37.45			Peak
9	3568.00	48.11	-25.89	74.00	45.07	33.03	6.43	36.42			Peak
10	4624.00	47.83	-26.17	74.00	43.03	33.96	7.65	36.81			Peak
11	5640.00	47.12	-26.88	74.00	41.09	34.70	8.01	36.68			Peak
12	6608.00	47.95	-26.05	74.00	40.24	35.43	8.88	36.60			Peak
13	7608.00	46.73	-27.27	74.00	38.31	35.97	9.52	37.07			Peak

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			0ver	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor			Remark
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	31.94	33.55	-6.45	40.00	41.62	23.36	0.60	32.03			Peak
2!	43.58	35.64	-4.36	40.00	50.10	16.98	0.66	32.10	100	263	QP
3	70.74	21.03	-18.97	40.00	39.57	12.64	0.85	32.03			Peak
4	427.70	22.05	-23.95	46.00	28.49	22.05	2.13	30.62			Peak
5	549.92	36.33	-9.67	46.00	40.02	23.74	2.55	29.98			Peak
6	828.31	26.46	-19.54	46.00	25.70	25.97	2.88	28.09			Peak
7	881.66	37.76			36.05	26.29	3.08	27.66			Peak
8	1968.00	46.16	-27.84	74.00	47.36	30.97	4.59	36.76			Peak
9	2824.00	47.91	-26.09	74.00	46.31	32.72	5.85	36.97			Peak
10	3904.00	47.44	-26.56	74.00	43.94	33.47	6.67	36.64			Peak
11	4904.00	48.65	-25.35	74.00	43.24	34.36	7.79	36.74			Peak
12	5768.00	47.81	-26.19	74.00	41.69	34.75	8.27	36.90			Peak
13	7216.00	47.53	-26.47	74.00	39.51	35.73	9.19	36.90			Peak

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## 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	Jul. 11, 2018	Apr. 18, 2019	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2017	Jul. 11, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2017	Jul. 11, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2017	Jul. 11, 2018	Oct. 11, 2018	Conduction (CO01-KS)
Transient limiter	COM-POWER	LIT-153	531040	150kHz~30MHz	Aug. 25, 2017	Jul. 11, 2018	Aug. 24, 2018	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Aug. 08, 2017	Jul. 05, 2018	Aug. 07, 2018	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44G,MAX 30dB	Apr. 17, 2018	Jul. 05, 2018	Apr. 16, 2019	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz-2GHz	Jan. 29, 2018	Jul. 05, 2018	Jan. 28, 2019	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 21, 2017	Jul. 05, 2018	Oct. 20, 2018	Radiation (03CH02-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 07, 2018	Jul. 05, 2018	Feb. 06, 2019	Radiation (03CH02-KS)
Amplifier	MITEQ	TTA1840-35-H G	1887435	18~40GHz	Oct. 12, 2017	Jul. 05, 2018	Oct. 11, 2018	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 07, 2017	Jul. 05, 2018	Aug. 06, 2018	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 12, 2017	Jul. 05, 2018	Oct. 11, 2018	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	61601000247 3	N/A	NCR	Jul. 05, 2018	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jul. 05, 2018	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jul. 05, 2018	NCR	Radiation (03CH02-KS)

NCR: No Calibration Required

Sporton International (Kunshan) Inc.

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## 5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence	2.9 dB
of 95% (U = 2Uc(y))	2.9 UD

#### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

#### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

#### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence	4.7 dB
of 95% (U = 2Uc(y))	4.7 dB

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