FCC Test Report

APPLICANT	:	**Xiaomi Communications Co., Ltd.**
EQUIPMENT	:	**Mobile Phone**
BRAND NAME	:	**MI**
MODEL NAME	:	**MEG7**
FCC ID	:	**2AFZZ-RMMEG7**
STANDARD	:	**FCC 47 CFR FCC Part 15 Subpart B**
CLASSIFICATION	:	**Certification**

The product was received on Aug. 25, 2017 and testing was completed on Sep. 22, 2017. 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.

James Huang

TESTING
NVLAP LAB CODE 600155-0

Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.
No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC782506	Rev. 01	Initial issue of report	Oct. 10, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits < ICES003 6.1 limits	PASS	Under limit 6.67 dB at 0.334 MHz
3.2	15.109	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 3.54 dB at 44.04 MHz for peak

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	MEG7
FCC ID	2AFZZ-RMMEG7
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+ (16QAM uplink is not supported)/LTE/ WLAN2.4GHz 802.11b/g/n HT20/HT40/ WLAN5GHz 802.11a/n HT20/HT40/ Bluetooth v3.0 + EDR/Bluetooth v4.0 LE/ Bluetooth v4.1 LE/Bluetooth v4.2 LE
IMEI Code	Conduction: 865060030044505/865060030044513 Radiation: 865060030044981/865060030044992
HW Version	P2
SW Version	MIUI9
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	
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 II: 1852.4 MHz ~ 1907.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 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: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5720 MHz ; 5745 MHz ~ 5825 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 II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5720 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 GHz ~ 1610GHz FM : 87.5 MHz ~ 108 MHz
Antenna Type	WWAN : PIFA Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GNSS: PIFA Antenna FM: External headset Antenna
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 (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) : π/4-DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK

	FM

Note: GNSS=GPS + Glonass + BDS + SBAS

1.5. Modification of EUT

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

1.6. Test Location

Sporton Lab is accredited to ISO 17025 by 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 Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton 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 47 CFR FCC 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.

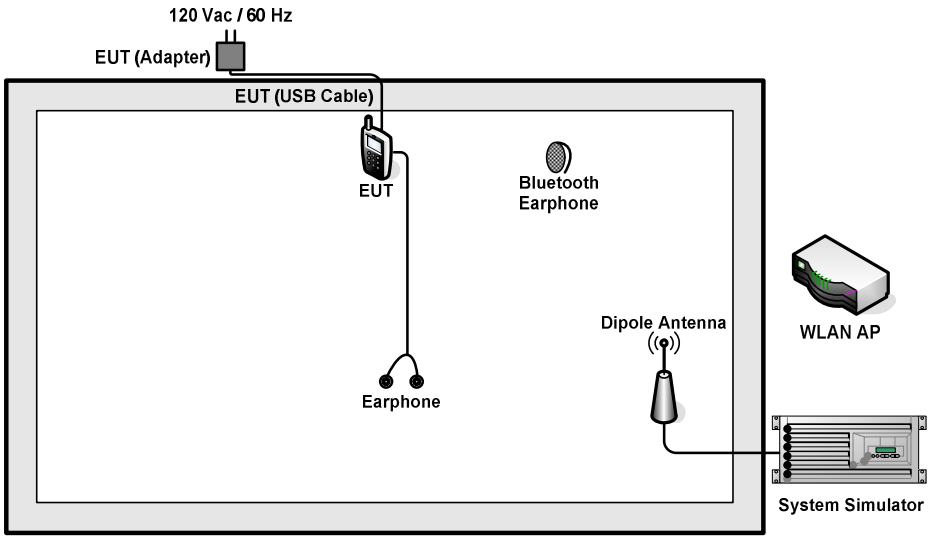
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + Camera(Rear)<Fig.1> Mode 2: GMS1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Charging from Adapter) + Camera(Front)<Fig.1> Mode 3: WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + MPEG4<Fig.1> Mode 4: LTE Band 4 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Data Link with Notebook) + GNSS Rx<Fig.2> Mode 5: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Data Link with Notebook) + GNSS Rx<Fig.2> Mode 6: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Charging from Adapter) + Camera(Rear)<Fig.1>
Radiated Emissions < 1GHz	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + Camera(Rear)<Fig.1> Mode 2: GMS1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Charging from Adapter) + Camera(Front)<Fig.1> Mode 3: WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + MPEG4<Fig.1> Mode 4: LTE Band 4 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Data Link with Notebook) + GNSS Rx<Fig.2> Mode 5: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Data Link with Notebook) + GNSS Rx<Fig.2> Mode 6: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Charging from Adapter) + Camera(Rear)<Fig.1>
Radiated Emissions ≥ 1GHz	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + Camera(Rear)<Fig.1> Mode 2: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Data Link with Notebook) + GNSS Rx<Fig.2>

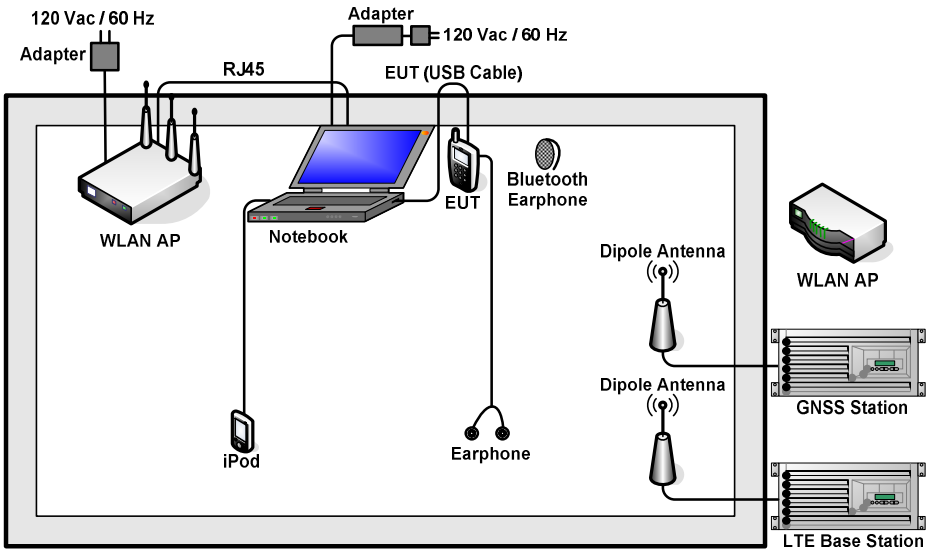
Remark:

1. The worst case of AC is mode 6; and the worse USB Link mode is mode 4, the test data of these modes were reported.
2. The worst case of RE < 1G is mode 1; and the worse USB Link mode is mode 5, the test data of these modes were reported.
3. Data Link with Notebook means data application transferred mode between EUT and Notebook.

2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

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	Anritus	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritus	CMU500	N/A	N/A	Unshielded, 1.8 m
3.	LTE Base Station	Anritus	MT8820C	N/A	N/A	Unshielded, 1.8 m
4.	GNSS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	TP-LINK	TL-WDR5600	N/A	N/A	Unshielded, 1.8 m
6.	Router	D-link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
7.	Bluetooth Earphone	Xiaomi	LYEJ02LM	N/A	N/A	N/A
8.	Notebook	Lenovo	G480	PRC4	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
9.	Notebook	Dell	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
10.	iPod	Apple	A1199	FCC DoC	Unshielded, 1.2 m	N/A
11.	SD Card	Kingston	8GB	N/A	N/A	N/A
12.	SD Card	SanDisk	Uitra	N/A	N/A	N/A
13.	GNSS Simulator	RACELOGIC	RLLS03-2RP	N/A	N/A	Unshielded,1.8 m
14.	Earphone	Xiaomi	N/A	N/A	Unshielded,1.2 m	N/A
15.	Signal Generator	R&S	SMBV100A	N/A	N/A	Unshielded,1.8m

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 Laptop and EUT via USB cable.
2. Execute "GNSS Test" 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.

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.

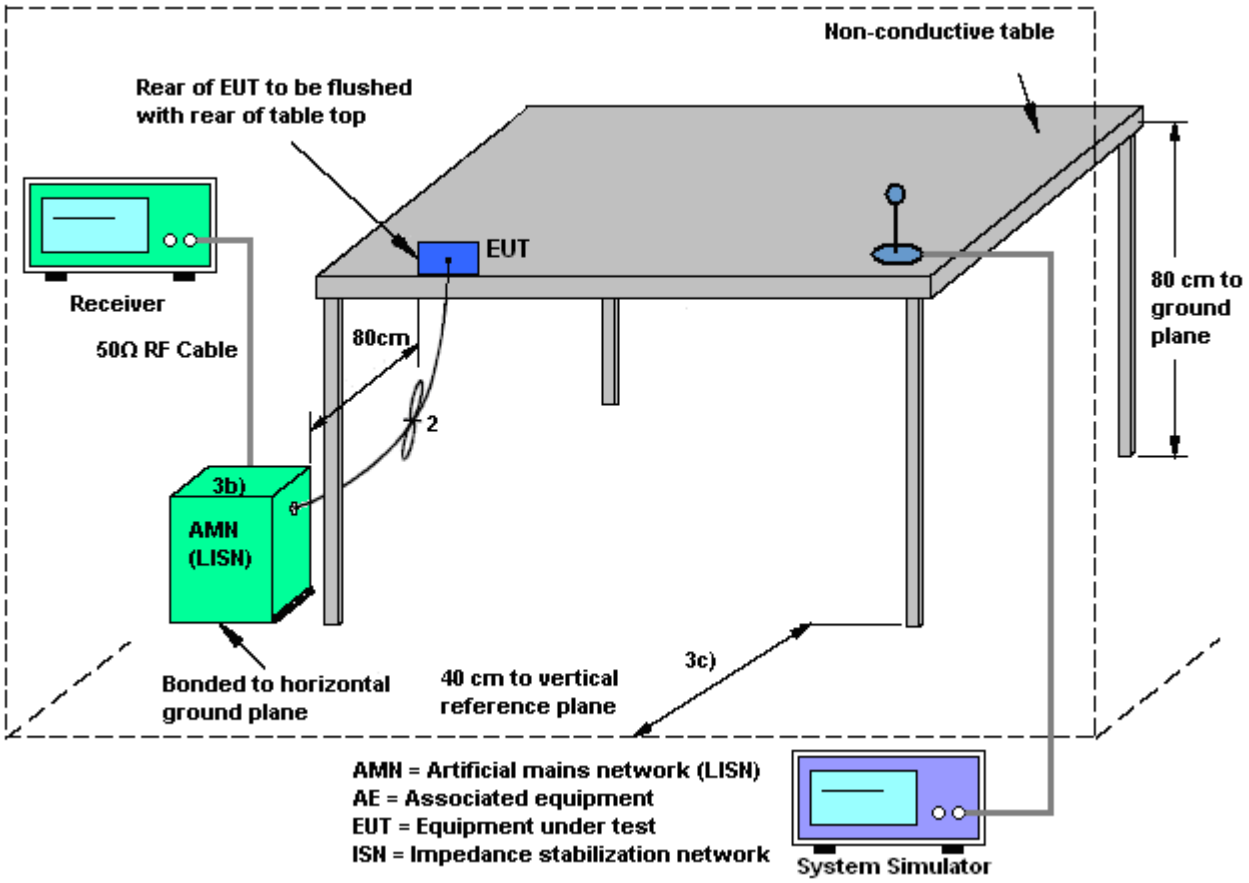
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

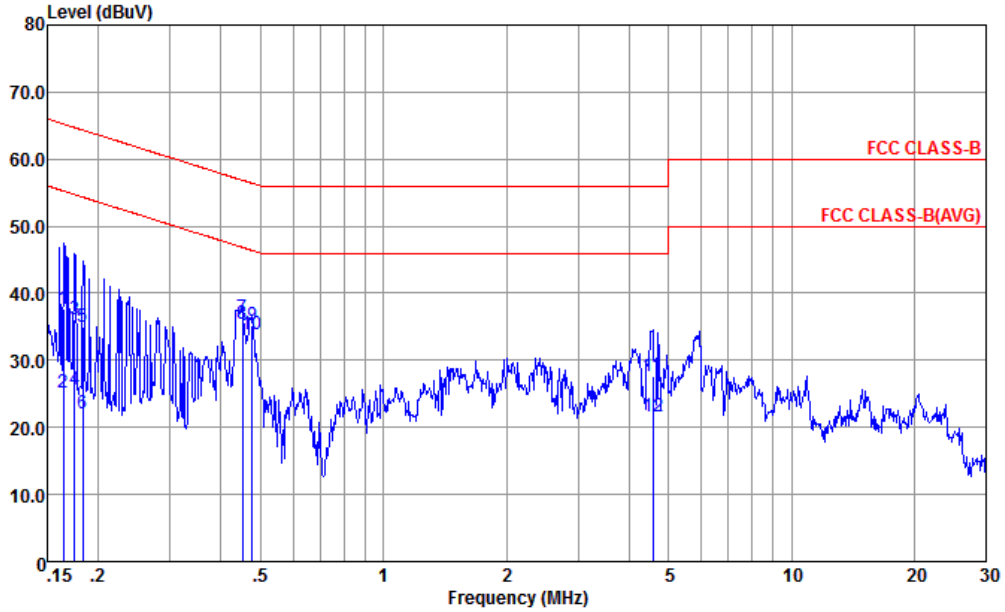
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

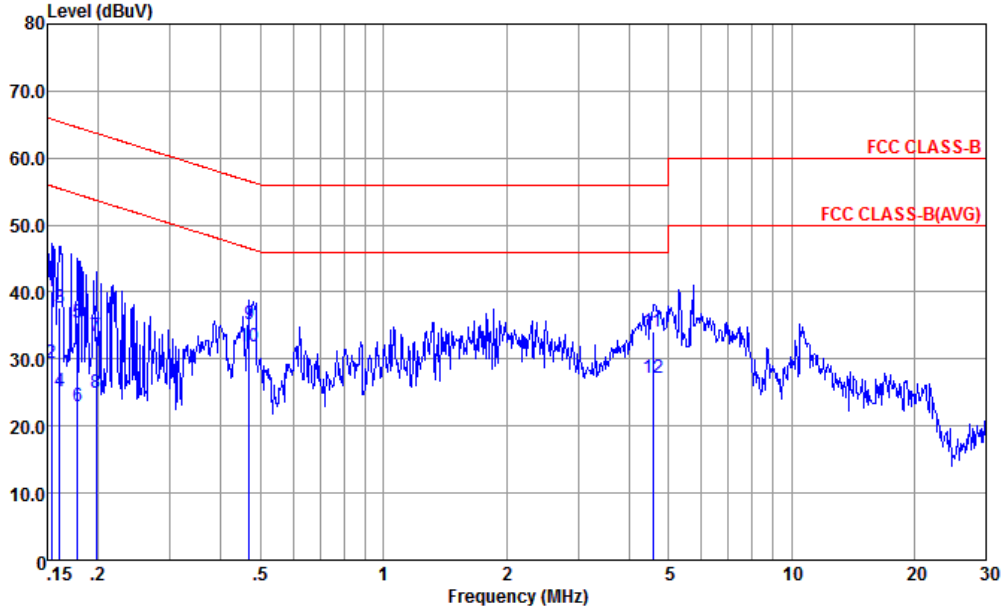
Test Mode :	Mode 4	**Temperature :**	23~25℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	43~46%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	LTE Band 4 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Data Link with Notebook) + GNSS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-161017-060103 LINE
Project : (FC) 782506
mode : Mode 4
: 865060030044505/865060030044513 #15

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.164	37.63	-27.62	65.25	26.60	0.46	10.57	QP
2		0.164	25.23	-30.02	55.25	14.20	0.46	10.57	Average
3		0.175	36.13	-28.59	64.72	25.20	0.40	10.53	QP
4		0.175	25.53	-29.19	54.72	14.60	0.40	10.53	Average
5		0.183	35.06	-29.27	64.33	24.20	0.35	10.51	QP
6		0.183	22.06	-32.27	54.33	11.20	0.35	10.51	Average
7		0.452	36.22	-20.63	56.85	25.60	0.27	10.35	QP
8	*	0.452	35.42	-11.43	46.85	24.80	0.27	10.35	Average
9		0.476	35.20	-21.21	56.41	24.60	0.27	10.33	QP
10		0.476	33.90	-12.51	46.41	23.30	0.27	10.33	Average
11		4.574	27.62	-28.38	56.00	17.20	0.21	10.21	QP
12		4.574	21.62	-24.38	46.00	11.20	0.21	10.21	Average

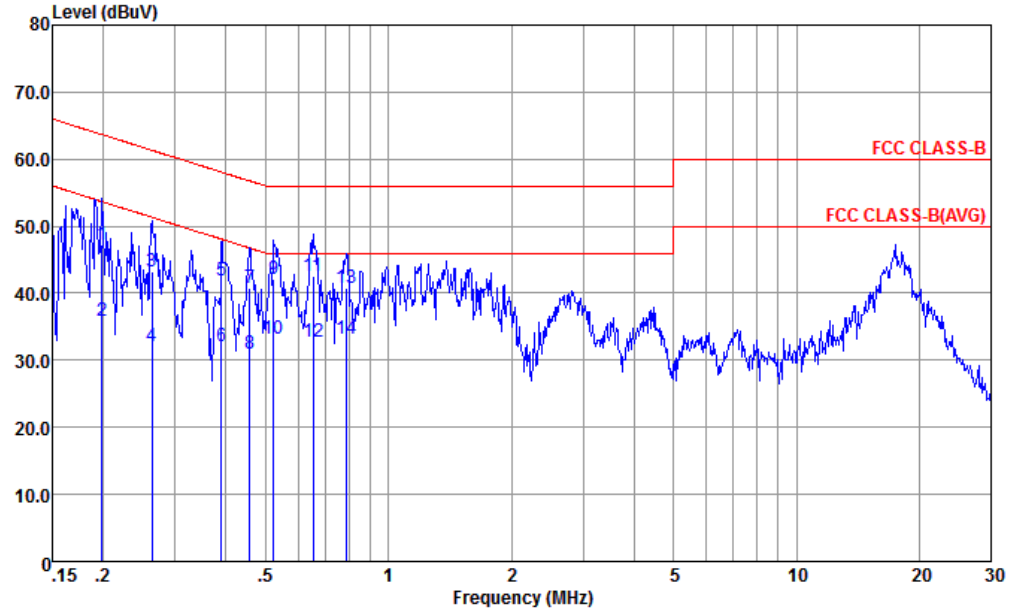
Test Mode :	Mode 4	Temperature :	23~25℃
Test Engineer :	Amos Zhang	Relative Humidity :	43~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 4 Idle + Earphone + Bluetooth Idle + WLAN Idle(5G) + USB Cable 1(Data Link with Notebook) + GNSS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
Project : (FC) 782506
mode : Mode 4
: 865060030044505/865060030044513 #15

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.153	40.15	-25.67	65.82	29.20	0.34	10.61	QP
2		0.153	29.45	-26.37	55.82	18.50	0.34	10.61	Average
3		0.161	37.72	-27.71	65.43	26.80	0.34	10.58	QP
4		0.161	25.22	-30.21	55.43	14.30	0.34	10.58	Average
5		0.178	35.46	-29.13	64.59	24.61	0.33	10.52	QP
6		0.178	23.06	-31.53	54.59	12.21	0.33	10.52	Average
7		0.198	33.39	-30.32	63.71	22.60	0.33	10.46	QP
8		0.198	24.99	-28.72	53.71	14.20	0.33	10.46	Average
9		0.469	35.21	-21.33	56.54	24.49	0.38	10.34	QP
10	*	0.469	31.91	-14.63	46.54	21.19	0.38	10.34	Average
11		4.574	34.19	-21.81	56.00	23.60	0.38	10.21	QP
12		4.574	27.19	-18.81	46.00	16.60	0.38	10.21	Average

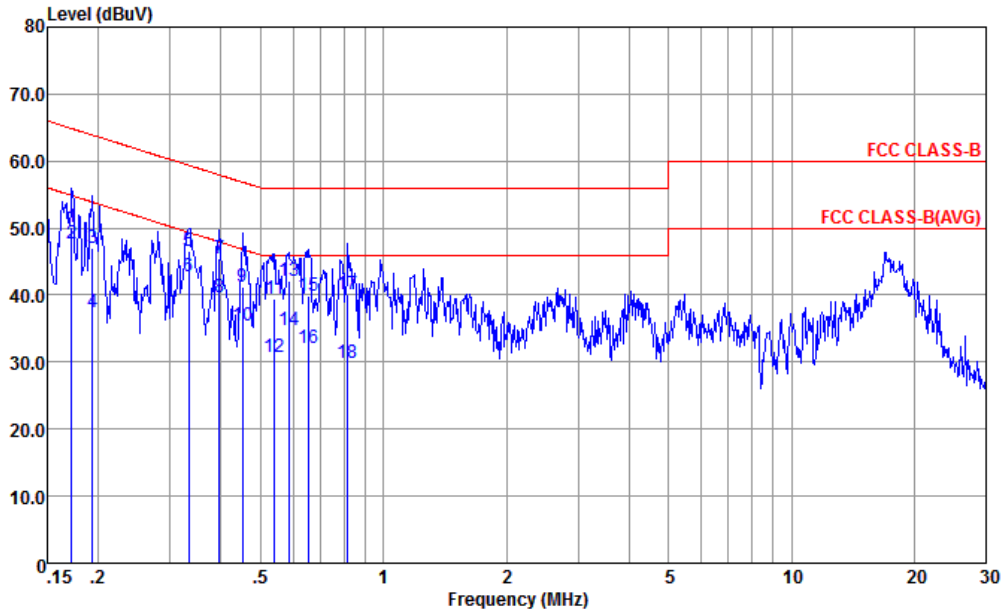
Test Mode :	Mode 6	Temperature :	23~25℃
Test Engineer :	Amos Zhang	Relative Humidity :	43~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Charging from Adapter) + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-161017-060103 LINE
Project : (FC) 782506
mode : Mode 6
: 865060030044505/865060030044513 #15

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.199	47.34	-16.33	63.67	36.60	0.28	10.46	QP
2	0.199	35.94	-17.73	53.67	25.20	0.28	10.46	Average
3	0.263	43.31	-18.03	61.34	32.60	0.27	10.44	QP
4	0.263	32.01	-19.33	51.34	21.30	0.27	10.44	Average
5	0.389	41.88	-16.20	58.08	31.20	0.27	10.41	QP
6	0.389	31.98	-16.10	48.08	21.30	0.27	10.41	Average
7	0.456	40.82	-15.94	56.76	30.20	0.27	10.35	QP
8	0.456	30.92	-15.84	46.76	20.30	0.27	10.35	Average
9	0.524	42.05	-13.95	56.00	31.49	0.27	10.29	QP
10	0.524	33.15	-12.85	46.00	22.59	0.27	10.29	Average
11	0.654	42.65	-13.35	56.00	32.21	0.25	10.19	QP
12	0.654	32.75	-13.25	46.00	22.31	0.25	10.19	Average
13	0.788	40.86	-15.14	56.00	30.50	0.25	10.11	QP
14 *	0.788	33.16	-12.84	46.00	22.80	0.25	10.11	Average

Test Mode :	Mode 6	Temperature :	23~25℃
Test Engineer :	Amos Zhang	Relative Humidity :	43~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Charging from Adapter) + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
Project : (FC) 782506
mode : Mode 6
: 865060030044505/865060030044513 #15

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.172	50.18	-14.68	64.86	39.30	0.34	10.54	QP
2		0.172	47.68	-7.18	54.86	36.80	0.34	10.54	Average
3		0.193	47.11	-16.78	63.89	36.31	0.33	10.47	QP
4		0.193	37.41	-16.48	53.89	26.61	0.33	10.47	Average
5		0.334	46.68	-12.67	59.35	35.90	0.36	10.42	QP
6	*	0.334	42.68	-6.67	49.35	31.90	0.36	10.42	Average
7		0.396	45.37	-12.58	57.95	34.59	0.37	10.41	QP
8		0.396	39.57	-8.38	47.95	28.79	0.37	10.41	Average
9		0.452	41.33	-15.52	56.85	30.61	0.37	10.35	QP
10		0.452	35.33	-11.52	46.85	24.61	0.37	10.35	Average
11		0.541	39.55	-16.45	56.00	28.90	0.38	10.27	QP
12		0.541	30.85	-15.15	46.00	20.20	0.38	10.27	Average
13		0.585	42.22	-13.78	56.00	31.60	0.38	10.24	QP
14		0.585	34.82	-11.18	46.00	24.20	0.38	10.24	Average
15		0.654	39.87	-16.13	56.00	29.30	0.38	10.19	QP
16		0.654	32.17	-13.83	46.00	21.60	0.38	10.19	Average
17		0.817	40.09	-15.91	56.00	29.60	0.39	10.10	QP
18		0.817	29.79	-16.21	46.00	19.30	0.39	10.10	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:

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

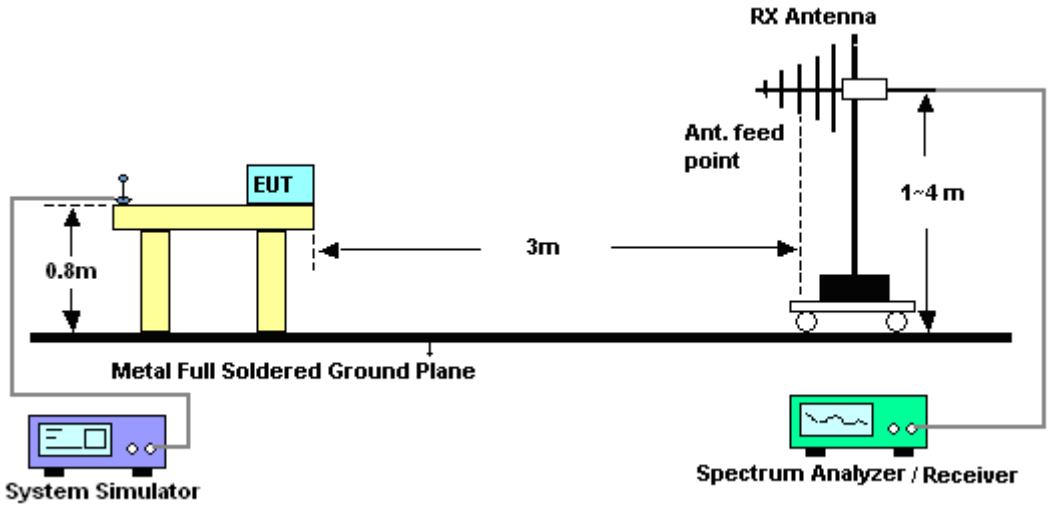
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

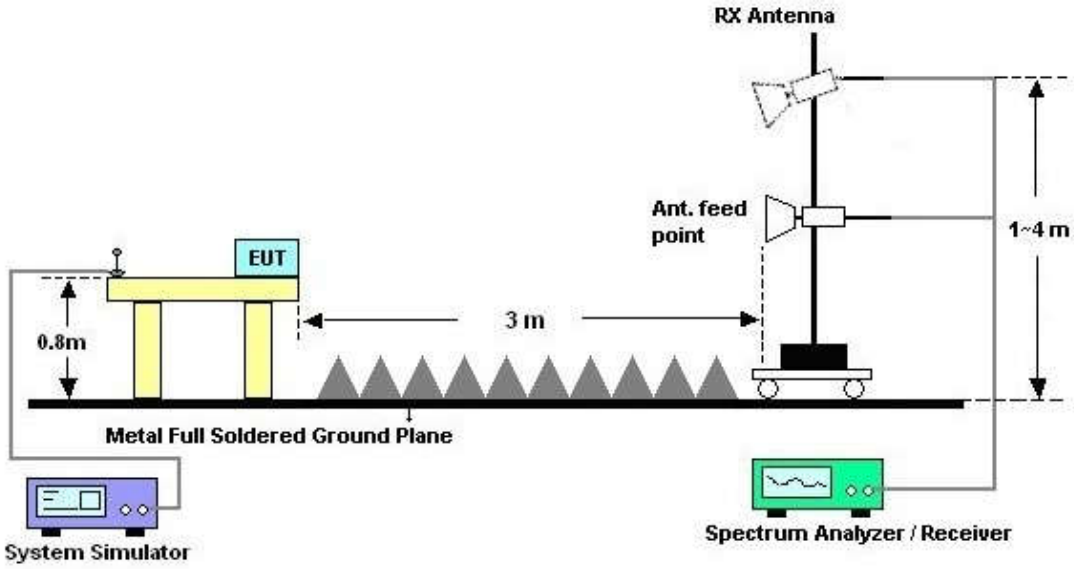
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

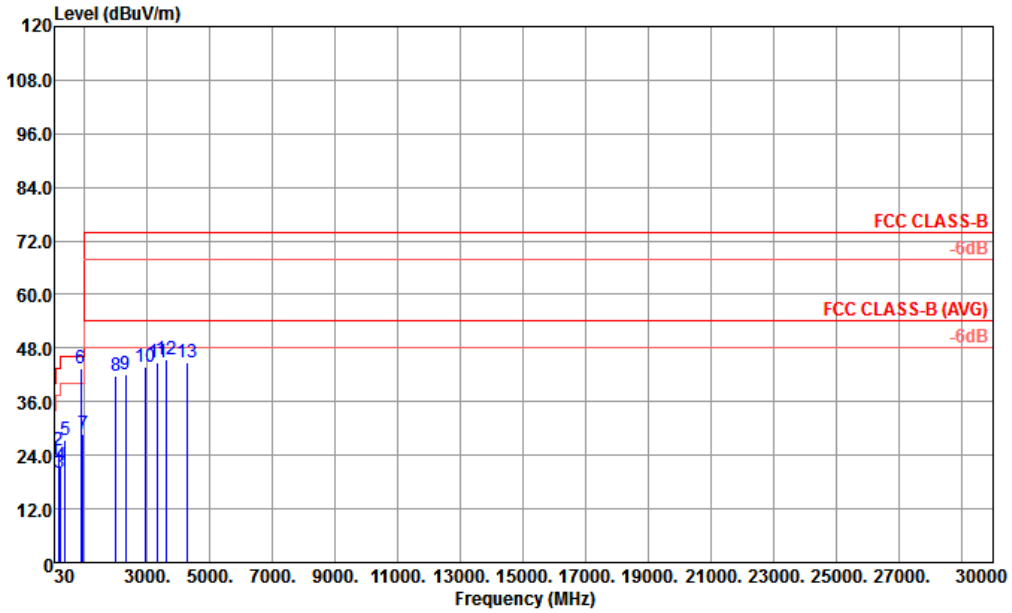


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

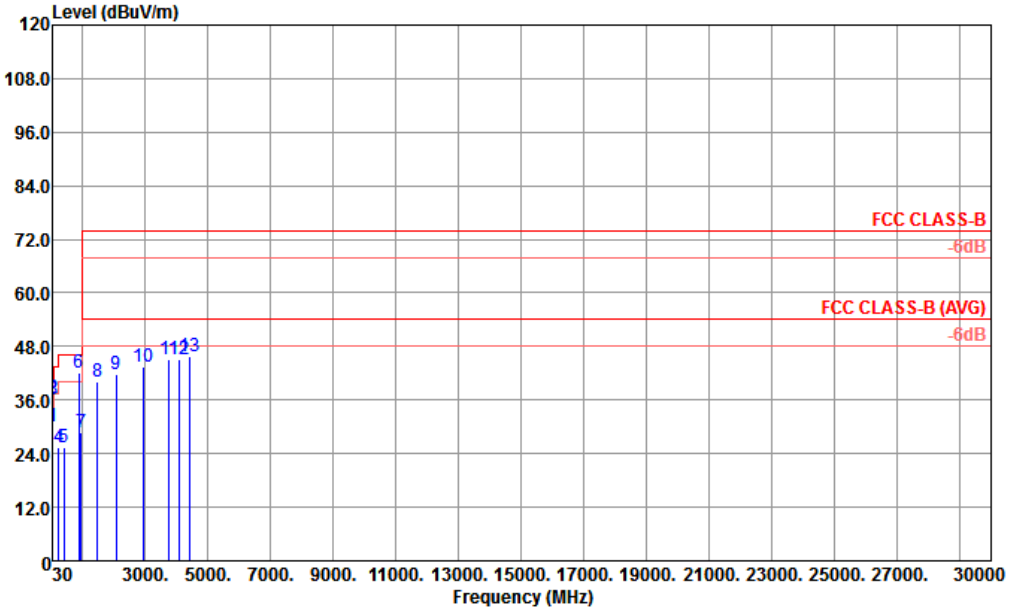
Test Mode :	Mode 1	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + Camera(Rear)		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT HORIZONTAL
Project : (FC) 782506
Mode : 1
IMEI : 865060030044984 865060030044992 #14

	Freq	Level	Over Limit	Limit Line	Read 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	34.59	23.16	-16.84	40.00	29.69	24.87	0.64	32.04	100	0	Peak
2	170.13	25.09	-18.41	43.50	38.70	16.82	1.34	31.77	---	---	Peak
3	203.88	20.09	-23.41	43.50	34.40	15.88	1.47	31.66	---	---	Peak
4	221.43	21.72	-24.28	46.00	35.49	16.27	1.58	31.62	---	---	Peak
5	384.70	27.34	-18.66	46.00	32.21	23.88	2.02	30.77	---	---	Peak
6 !	881.70	43.47			40.70	27.35	3.08	27.66	---	---	Peak
7	949.60	28.72	-17.28	46.00	24.16	28.50	3.20	27.14	---	---	Peak
8	1986.00	41.85	-32.15	74.00	39.79	30.07	4.61	32.62	---	---	Peak
9	2310.00	42.24	-31.76	74.00	38.40	31.02	5.07	32.25	---	---	Peak
10	2934.00	43.91	-30.09	74.00	35.05	32.20	5.92	29.26	---	---	Peak
11	3333.00	44.74	-29.26	74.00	35.73	33.19	6.25	30.43	---	---	Peak
12	3603.00	45.52	-28.48	74.00	35.56	33.60	6.45	30.09	---	---	Peak
13	4272.00	44.67	-29.33	74.00	33.13	35.38	7.25	31.09	---	---	Peak

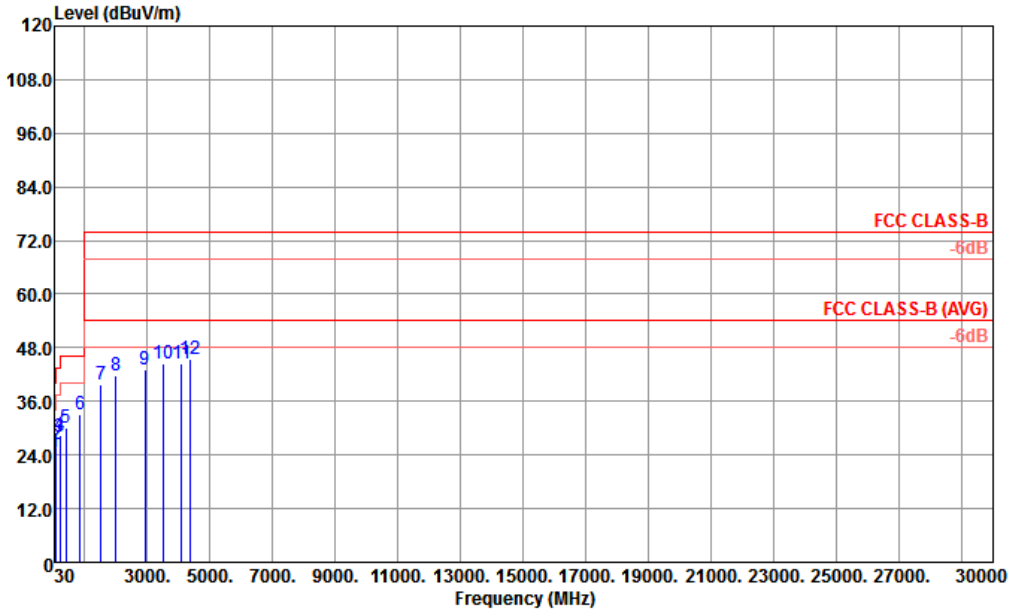
Test Mode :	Mode 1	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 1(Charging from Adapter) + Camera(Rear)		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT VERTICAL
Project : (FC) 782506
Mode : 1
IMEI : 865060030044984 865060030044992 #14

		Freq	Level	Over Limit	Limit Line	Read 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		31.35	30.10	-9.90	40.00	36.30	25.23	0.60	32.03	---	---	Peak
2	!	44.04	36.46	-3.54	40.00	47.33	20.57	0.66	32.10	100	0	Peak
3	!	44.85	36.21	-3.79	40.00	47.86	19.80	0.66	32.11	---	---	Peak
4		222.24	25.29	-20.71	46.00	39.02	16.31	1.58	31.62	---	---	Peak
5		398.70	25.37	-20.63	46.00	28.54	25.47	2.07	30.71	---	---	Peak
6	!	881.70	41.98			39.21	27.35	3.08	27.66	---	---	Peak
7		949.60	28.70	-17.30	46.00	24.14	28.50	3.20	27.14	---	---	Peak
8		1460.00	40.22	-33.78	74.00	42.65	28.58	3.98	34.99	---	---	Peak
9		2060.00	41.93	-32.07	74.00	39.89	30.35	4.71	33.02	---	---	Peak
10		2956.00	43.47	-30.53	74.00	34.32	32.25	5.94	29.04	---	---	Peak
11		3747.00	45.07	-28.93	74.00	34.02	34.60	6.57	30.12	---	---	Peak
12		4092.00	44.97	-29.03	74.00	33.59	35.16	7.01	30.79	---	---	Peak
13		4404.00	45.68	-28.32	74.00	34.31	35.51	7.13	31.27	---	---	Peak

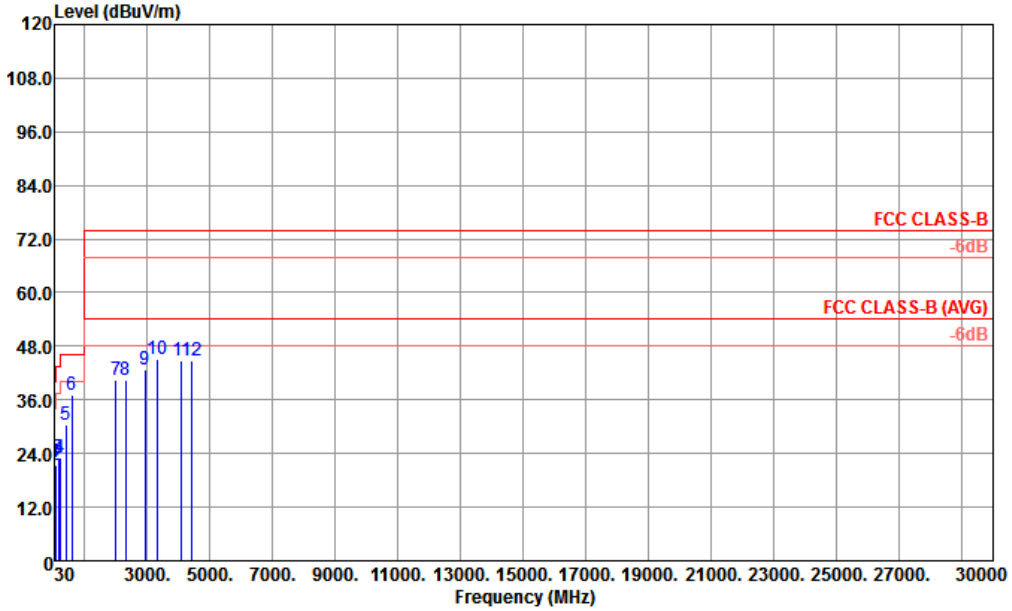
Test Mode :	Mode 5	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Data Link with Notebook) + GNSS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT HORIZONTAL
Project : (FC) 782506
Mode : 5
IMEI : 865060030044984 865060030044992 #14

	Freq	Level	Over Limit	Limit Line	Read 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	49.98	24.84	-15.16	40.00	40.63	15.60	0.71	32.10	---	---	Peak
2	100.20	26.54	-16.96	43.50	39.56	17.90	1.01	31.93	---	---	Peak
3	214.41	28.17	-15.33	43.50	42.14	16.14	1.53	31.64	---	---	Peak
4	217.11	28.47	-17.53	46.00	42.37	16.18	1.55	31.63	---	---	Peak
5	400.10	30.10	-15.90	46.00	33.03	25.70	2.08	30.71	---	---	Peak
6	862.10	33.25	-12.75	46.00	30.82	27.19	3.06	27.82	100	0	Peak
7	1520.00	39.92	-34.08	74.00	42.30	28.67	4.09	35.14	---	---	Peak
8	1992.00	41.72	-32.28	74.00	39.66	30.07	4.61	32.62	---	---	Peak
9	2914.00	43.24	-30.76	74.00	34.65	32.15	5.91	29.47	---	---	Peak
10	3498.00	44.54	-29.46	74.00	34.93	33.44	6.37	30.20	---	---	Peak
11	4089.00	44.45	-29.55	74.00	33.07	35.16	7.01	30.79	---	---	Peak
12	4371.00	45.60	-28.40	74.00	34.20	35.47	7.17	31.24	---	---	Peak

Test Mode :	Mode 5	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable 2(Data Link with Notebook) + GNSS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT VERTICAL
Project : (FC) 782506
Mode : 5
IMEI : 865060030044984 865060030044992 #14

	Freq	Level	Over Limit	Limit Line	Read 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	31.08	22.20	-17.80	40.00	28.41	25.23	0.59	32.03	---	---	Peak
2	99.66	21.37	-22.13	43.50	34.59	17.70	1.01	31.93	---	---	Peak
3	153.12	23.08	-20.42	43.50	36.21	17.43	1.27	31.83	---	---	Peak
4	202.80	23.15	-20.35	43.50	37.47	15.88	1.46	31.66	---	---	Peak
5	397.30	30.33	-15.67	46.00	33.73	25.25	2.07	30.72	---	---	Peak
6	598.20	36.99	-9.01	46.00	39.44	24.60	2.62	29.67	100	0	Peak
7	1992.00	40.34	-33.66	74.00	38.28	30.07	4.61	32.62	---	---	Peak
8	2306.00	40.38	-33.62	74.00	36.57	31.02	5.04	32.25	---	---	Peak
9	2928.00	42.73	-31.27	74.00	33.93	32.15	5.91	29.26	---	---	Peak
10	3327.00	45.14	-28.86	74.00	36.13	33.19	6.25	30.43	---	---	Peak
11	4080.00	44.74	-29.26	74.00	33.46	35.13	6.94	30.79	---	---	Peak
12	4410.00	44.80	-29.20	74.00	33.46	35.52	7.13	31.31	---	---	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. 20, 2017	Sep. 22, 2017	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Sep. 22, 2017	Oct. 13, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Sep. 22, 2017	Oct. 13, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Sep. 22, 2017	Oct. 13, 2017	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 08, 2017	Sep. 20, 2017	Aug. 07, 2018	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz, MAX 30dB	Apr. 18, 2017	Sep. 20, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz~2GHz	Jan. 22, 2017	Sep. 20, 2017	Jan. 21, 2018	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Sep. 20, 2017	Oct. 21, 2017	Radiation (03CH02-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 15, 2017	Sep. 20, 2017	Feb. 14, 2018	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9kHz~1GHz	Aug. 07, 2017	Sep. 20, 2017	Aug. 06, 2018	Radiation (03CH02-KS)
High Gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2012228	100MHz~18GHz	Apr. 18, 2017	Sep. 20, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1GHz~26.5GHz	Oct. 13, 2016	Sep. 20, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Oct. 13, 2016	Sep. 20, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Sep. 20, 2017	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Sep. 20, 2017	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Sep. 20, 2017	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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2dB

Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

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

Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3dB