

FCC Test Report

APPLICANT : HTC Corporation
EQUIPMENT : Smartphone
MODEL NAME : 2Q5V200
FCC ID : NM82Q5V200
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Jan. 02, 2018 and testing was completed on Feb. 28, 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.

This report contains data that were produced under subcontract by Laboratory SPORTON INTERNATIONAL INC.

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**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC810208	Rev. 01	Initial issue of report	Mar. 15, 2018
FC810208	Rev. 02	Increase the difference of the two Sample (FLASH/Main Camera/LCD), Please reference appendix B	Mar. 20, 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 4.70 dB at 0.169 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.18 dB at 35.130 MHz

1. General Description

1.1. Applicant

HTC Corporation

No. 88, Sec. 3, Zhongxing Rd. Xindian Dist., New Taipei City, Taiwan

1.2. Manufacturer

Shanghai Longcheer Technology Co.,Ltd

Building 1, No.401, Caobao Rd, Xuhui Dist, Shanghai, P.R.China

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Model Name	2Q5V200
FCC ID	NM82Q5V200
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 Bluetooth v3.0 + EDR / Bluetooth v4.0 LE
EUT Stage	Production Unit

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 different types of EUT. The detailed differences of first source and second source are listed in the product equality declaration could be referred to Appendix B.

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 WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
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 WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7: 2622.5 MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS: 1559 MHz to 1610 MHz FM : 88 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 DC-HSDPA : 64QAM LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK



	Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK FM : FM
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Note: GNSS=GLONASS+GPS

1.5. Modification of EUT

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

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 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	630927

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	FCC Registration No.
	03CH06-HY	TW 1022

Note: Test data subcontracted: radiated emissions only in section 3.2 of this report

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.

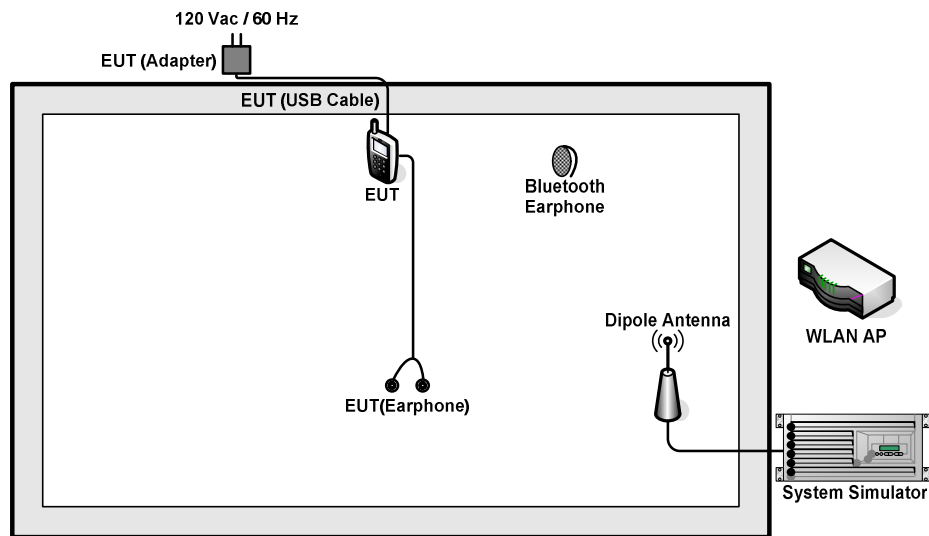
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1<Fig.1>
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle (5G) + USB Cable(Charging from Adapter) + Earphone + Camera (Front) + SIM2 for Sample 1 <Fig.1>
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Earphone + MPEG4 + SIM1 for Sample 1 <Fig.1>
	Mode 4: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 1<Fig.3>
	Mode 5: GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 2<Fig.1>
Radiated Emissions< 1GHz	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1<Fig.1>
	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle (5G) + USB Cable(Charging from Adapter) + Earphone + Camera (Front) + SIM2 for Sample 1 <Fig.1>
	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Earphone + MPEG4 + SIM1 for Sample 1 <Fig.1>
	Mode 4: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 1<Fig.3>
	Mode 5: LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 2<Fig.3>
	Mode 6: GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Data Link with Notebook) + Earphone + Camera (Rear) + SIM1 for Sample 2<Fig.2>

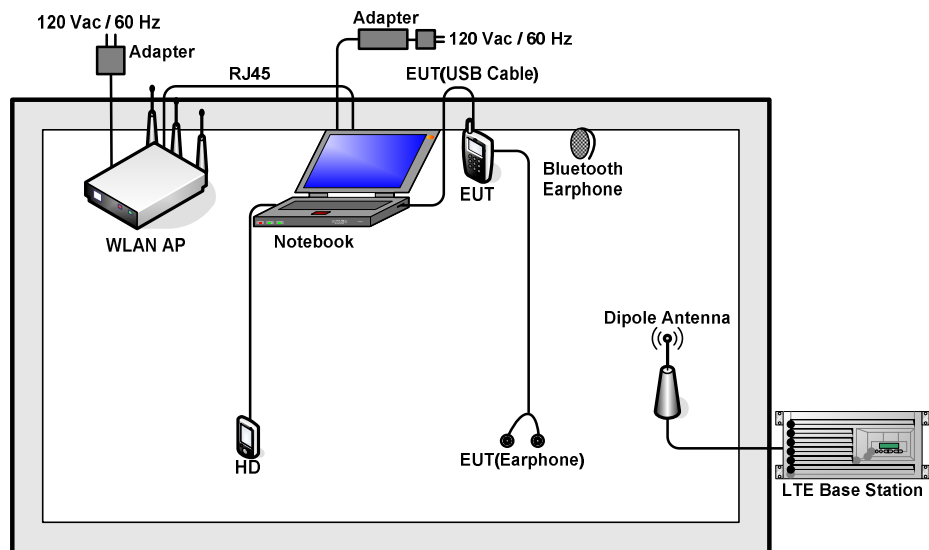


Radiated Emissions $\geq 1\text{GHz}$	Mode 1 : LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 2 <Fig.3>
Remark: 1. The worst case of AC is mode 1, and the USB Link mode of AC is mode 4; the test data of these modes were reported. 2. The worst case of RE < 1G is mode 5, only the test data of this mode was reported. 3. Data Link with Notebook means data application transferred mode between EUT and Notebook	

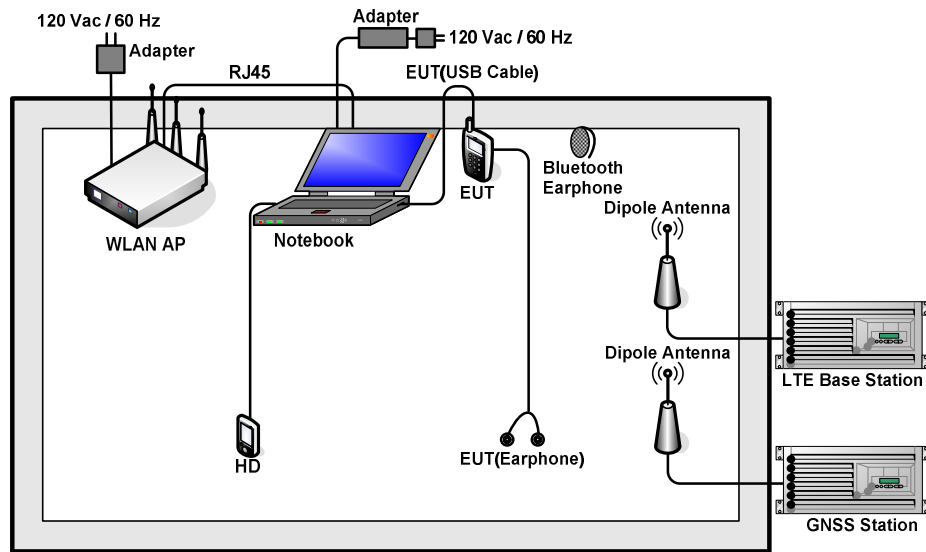
2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>



<Fig.3>

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8m
4.	GNSS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
5.	LABSAT GPS Simulator	RACELOGIC	RLLS03-2RP	N/A	N/A	LABSAT GPS Simulator
6.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
7.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
8.	NOTE BOOK	Dell	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
9.	Notebook	Lenovo	G480	PRC4	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.	Bluetooth Earphone	SonyErricsson	MW600	PY700A2029	N/A	N/A
12.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0m	N/A
13.	SD Card	Kingston	8GB	N/A	N/A	N/A
14.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

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

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.

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.

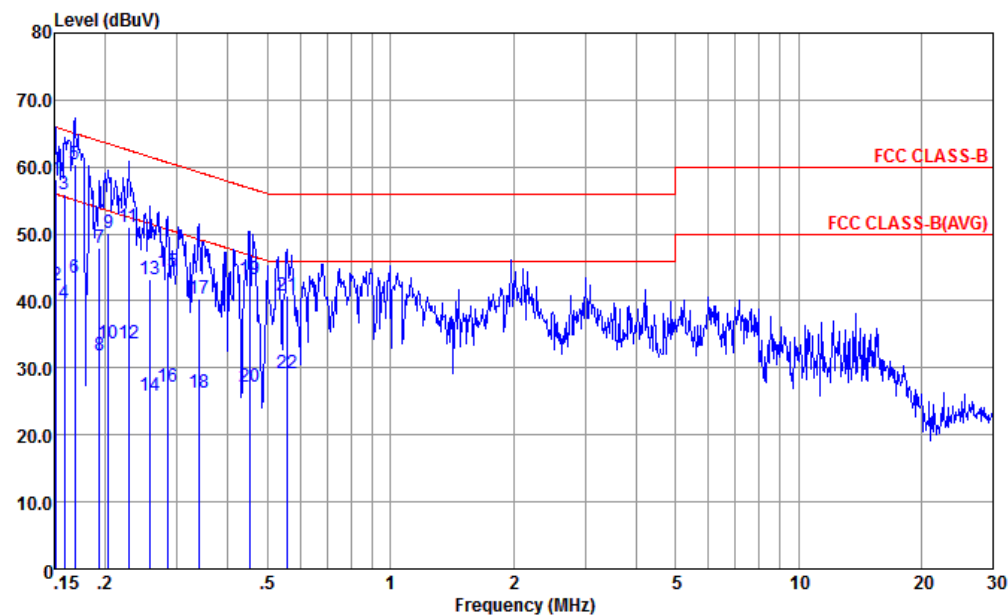
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1		

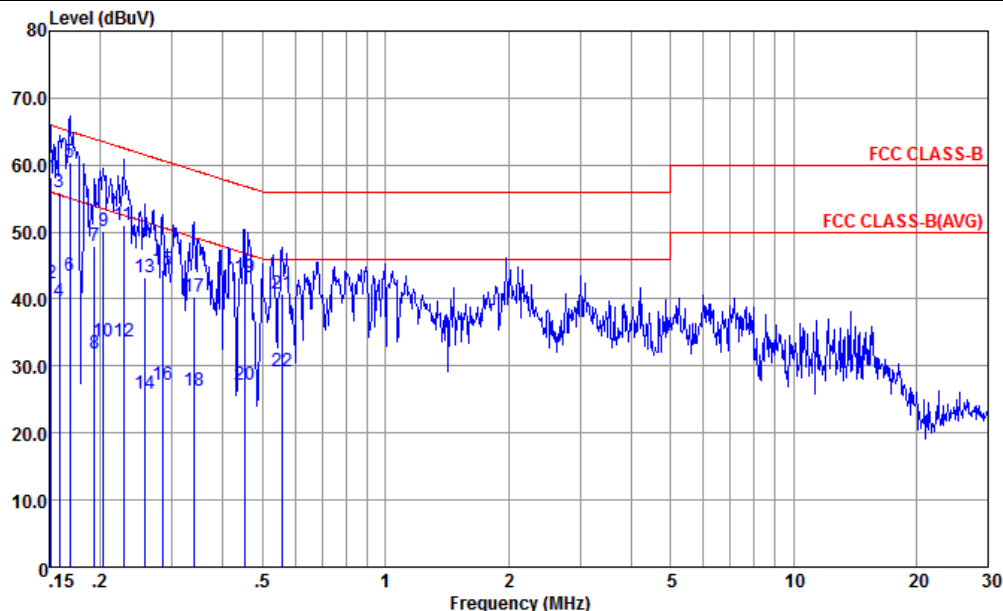


Site : CO01-KS
Condition : FCC CLASS-B LISN-L-171013-060103 LINE
Project : (FC) 810208
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	58.07	-7.84	65.91	47.30	0.16	10.61	QP
2	0.152	42.37	-13.54	55.91	31.60	0.16	10.61	Average
3	0.159	55.85	-9.67	65.52	45.09	0.17	10.59	QP
4	0.159	39.65	-15.87	55.52	28.89	0.17	10.59	Average
5 *	0.169	60.33	-4.70	65.03	49.60	0.18	10.55	QP
6	0.169	43.53	-11.50	55.03	32.80	0.18	10.55	Average
7	0.193	47.97	-15.92	63.89	37.30	0.20	10.47	QP
8	0.193	31.87	-22.02	53.89	21.20	0.20	10.47	Average
9	0.204	50.16	-13.29	63.45	39.51	0.20	10.45	QP
10	0.204	33.76	-19.69	53.45	23.11	0.20	10.45	Average
11	0.228	50.95	-11.57	62.52	40.29	0.21	10.45	QP
12	0.228	33.55	-18.97	52.52	22.89	0.21	10.45	Average
13	0.258	43.15	-18.36	61.51	32.49	0.22	10.44	QP
14	0.258	25.85	-25.66	51.51	15.19	0.22	10.44	Average
15	0.285	44.25	-16.43	60.68	33.60	0.22	10.43	QP
16	0.285	27.25	-23.43	50.68	16.60	0.22	10.43	Average
17	0.339	40.25	-18.97	59.22	29.60	0.23	10.42	QP



Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1		

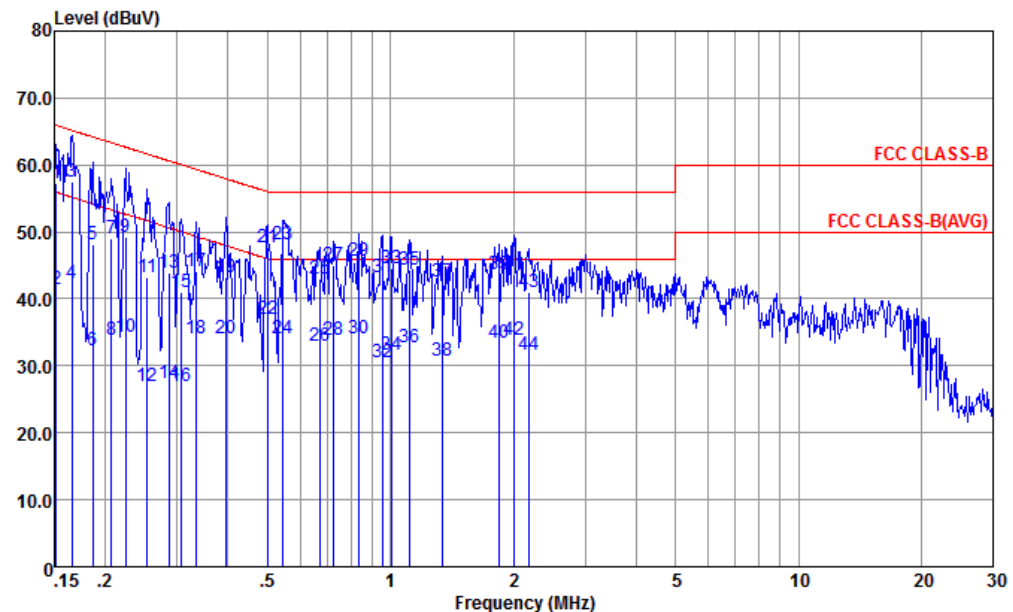


Site : CO01-KS
 Condition : FCC CLASS-B LISN-L-171013-060103 LINE
 Project : (FC) 810208
 mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	0.339	26.25	-22.97	49.22	15.60	0.23	10.42	Average
19	0.452	43.21	-13.64	56.85	32.61	0.25	10.35	QP
20	0.452	27.21	-19.64	46.85	16.61	0.25	10.35	Average
21	0.558	40.82	-15.18	56.00	30.30	0.26	10.26	QP
22	0.558	29.12	-16.88	46.00	18.60	0.26	10.26	Average



Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1		

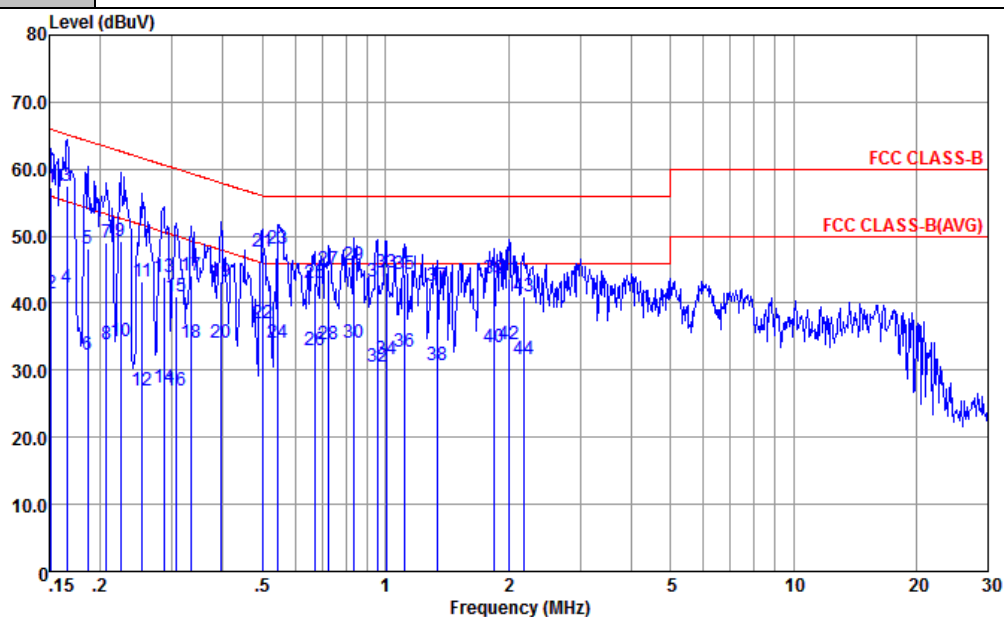


Site : CO01-KS
 Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL
 Project : (FC) 810208
 mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	57.19	-8.72	65.91	46.30	0.28	10.61	QP
2	0.152	41.49	-14.42	55.91	30.60	0.28	10.61	Average
3 *	0.166	57.44	-7.72	65.16	46.60	0.28	10.56	QP
4	0.166	42.34	-12.82	55.16	31.50	0.28	10.56	Average
5	0.186	48.08	-16.12	64.20	37.30	0.28	10.50	QP
6	0.186	32.38	-21.82	54.20	21.60	0.28	10.50	Average
7	0.207	48.93	-14.39	63.32	38.20	0.28	10.45	QP
8	0.207	33.93	-19.39	53.32	23.20	0.28	10.45	Average
9	0.224	49.33	-13.33	62.66	38.60	0.28	10.45	QP
10	0.224	34.23	-18.43	52.66	23.50	0.28	10.45	Average
11	0.253	43.32	-18.32	61.64	32.60	0.28	10.44	QP
12	0.253	27.02	-24.62	51.64	16.30	0.28	10.44	Average
13	0.286	43.91	-16.72	60.63	33.20	0.28	10.43	QP
14	0.286	27.31	-23.32	50.63	16.60	0.28	10.43	Average
15	0.307	41.01	-19.05	60.06	30.30	0.28	10.43	QP
16	0.307	26.91	-23.15	50.06	16.20	0.28	10.43	Average
17	0.334	44.21	-15.14	59.35	33.50	0.29	10.42	QP



Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1		

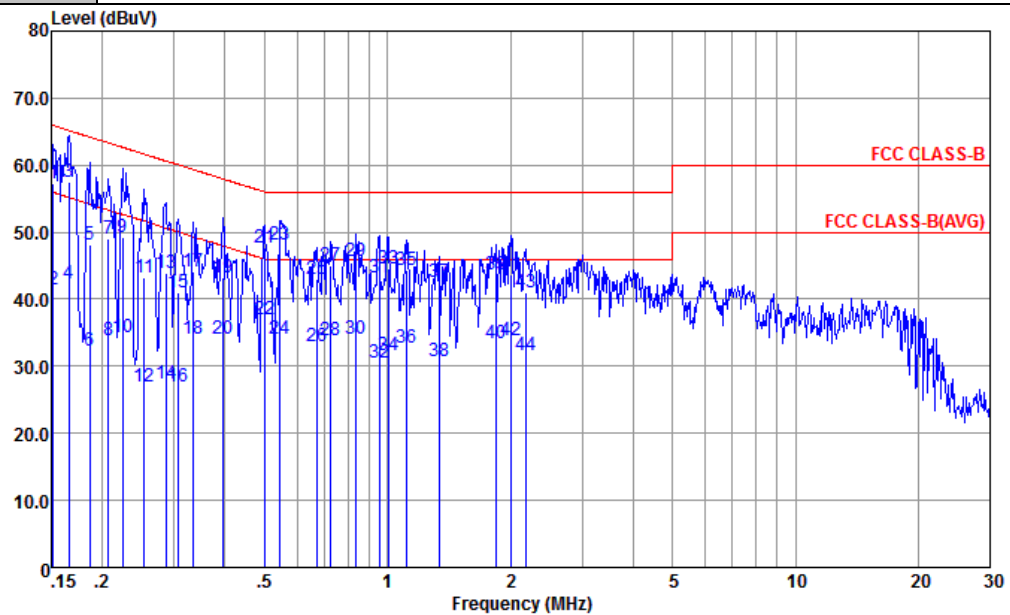


Site : CO01-KS
Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL
Project : (FC) 810208
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	0.334	34.21	-15.14	49.35	23.50	0.29	10.42	Average
19	0.396	43.20	-14.75	57.95	32.50	0.29	10.41	QP
20	0.396	34.00	-13.95	47.95	23.30	0.29	10.41	Average
21	0.499	47.80	-8.21	56.01	37.20	0.29	10.31	QP
22	0.499	36.90	-9.11	46.01	26.30	0.29	10.31	Average
23	0.546	48.16	-7.84	56.00	37.60	0.29	10.27	QP
24	0.546	34.16	-11.84	46.00	23.60	0.29	10.27	Average
25	0.672	43.08	-12.92	56.00	32.60	0.30	10.18	QP
26	0.672	33.08	-12.92	46.00	22.60	0.30	10.18	Average
27	0.727	44.94	-11.06	56.00	34.50	0.30	10.14	QP
28	0.727	33.94	-12.06	46.00	23.50	0.30	10.14	Average
29	0.839	45.61	-10.39	56.00	35.20	0.31	10.10	QP
30	0.839	34.01	-11.99	46.00	23.60	0.31	10.10	Average



Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN Idle (2.4G) + USB Cable(Charging from Adapter) + Earphone + Camera (Rear) + SIM1 for Sample 1		

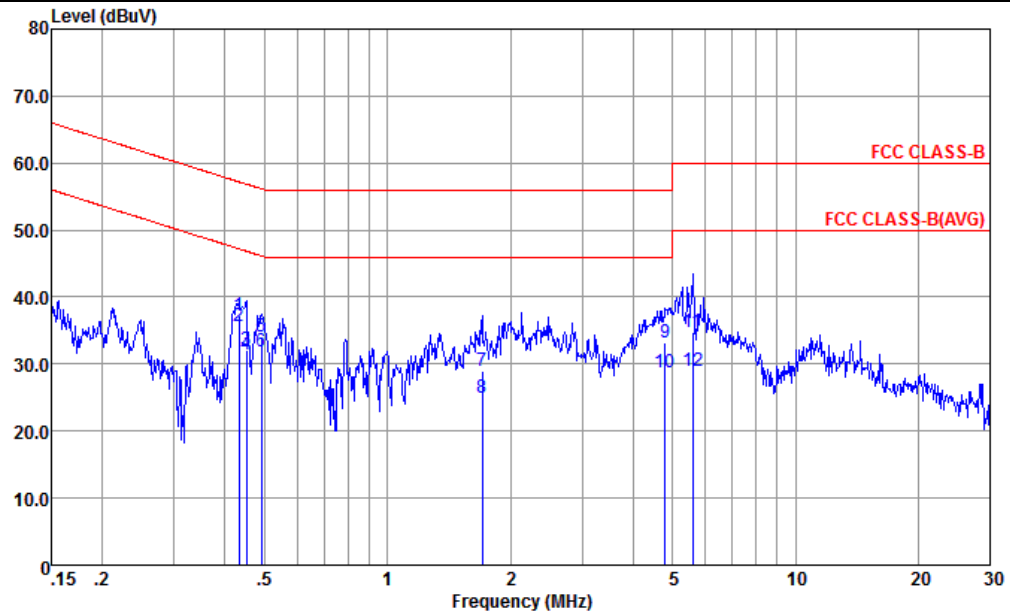


Site : C001-KS
 Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL
 Project : (FC) 810208
 mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
31	0.953	43.32	-12.68	56.00	32.90	0.31	10.11	QP
32	0.953	30.62	-15.38	46.00	20.20	0.31	10.11	Average
33	1.005	44.62	-11.38	56.00	34.20	0.31	10.11	QP
34	1.005	31.62	-14.38	46.00	21.20	0.31	10.11	Average
35	1.117	44.34	-11.66	56.00	33.91	0.31	10.12	QP
36	1.117	32.74	-13.26	46.00	22.31	0.31	10.12	Average
37	1.345	42.67	-13.33	56.00	32.21	0.31	10.15	QP
38	1.345	30.67	-15.33	46.00	20.21	0.31	10.15	Average
39	1.839	43.72	-12.28	56.00	33.20	0.32	10.20	QP
40	1.839	33.42	-12.58	46.00	22.90	0.32	10.20	Average
41	2.001	43.73	-12.27	56.00	33.20	0.32	10.21	QP
42	2.001	33.83	-12.17	46.00	23.30	0.32	10.21	Average
43	2.178	41.03	-14.97	56.00	30.50	0.32	10.21	QP
44	2.178	31.63	-14.37	46.00	21.10	0.32	10.21	Average



Test Mode :	Mode 4	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 1		

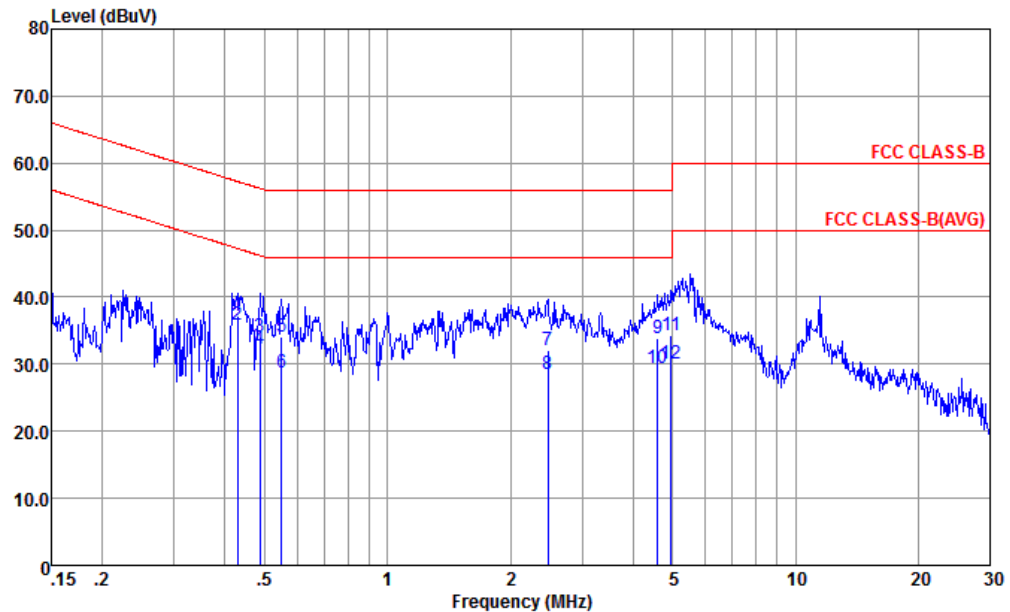


Site : CO01-KS
 Condition : FCC CLASS-B LISN-L-171013-060103 LINE
 Project : (FC) 810208
 mode : Mode 4

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.433	37.22	-19.98	57.20	26.60	0.25	10.37	QP
2 *	0.433	35.72	-11.48	47.20	25.10	0.25	10.37	Average
3	0.452	32.11	-24.74	56.85	21.51	0.25	10.35	QP
4	0.452	31.41	-15.44	46.85	20.81	0.25	10.35	Average
5	0.491	34.07	-22.07	56.14	23.50	0.26	10.31	QP
6	0.491	31.87	-14.27	46.14	21.30	0.26	10.31	Average
7	1.707	28.97	-27.03	56.00	18.50	0.28	10.19	QP
8	1.707	25.07	-20.93	46.00	14.60	0.28	10.19	Average
9	4.797	33.19	-22.81	56.00	22.60	0.37	10.22	QP
10	4.797	28.69	-17.31	46.00	18.10	0.37	10.22	Average
11	5.594	34.86	-25.14	60.00	24.20	0.36	10.30	QP
12	5.594	29.06	-20.94	50.00	18.40	0.36	10.30	Average



Test Mode :	Mode 4	Temperature :	21~23℃
Test Engineer :	Amos Zhang	Relative Humidity :	41~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 1		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-171013-060103 NEUTRAL
Project : (FC) 810208
mode : Mode 4

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.428	37.26	-20.03	57.29	26.59	0.29	10.38	QP
2 *	0.428	35.96	-11.33	47.29	25.29	0.29	10.38	Average
3	0.486	34.11	-22.12	56.23	23.50	0.29	10.32	QP
4	0.486	32.21	-14.02	46.23	21.60	0.29	10.32	Average
5	0.549	34.06	-21.94	56.00	23.50	0.29	10.27	QP
6	0.549	28.86	-17.14	46.00	18.30	0.29	10.27	Average
7	2.474	32.02	-23.98	56.00	21.50	0.32	10.20	QP
8	2.474	28.62	-17.38	46.00	18.10	0.32	10.20	Average
9	4.598	33.85	-22.15	56.00	23.30	0.34	10.21	QP
10	4.598	29.45	-16.55	46.00	18.90	0.34	10.21	Average
11	4.952	34.37	-21.63	56.00	23.80	0.34	10.23	QP
12	4.952	30.07	-15.93	46.00	19.50	0.34	10.23	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

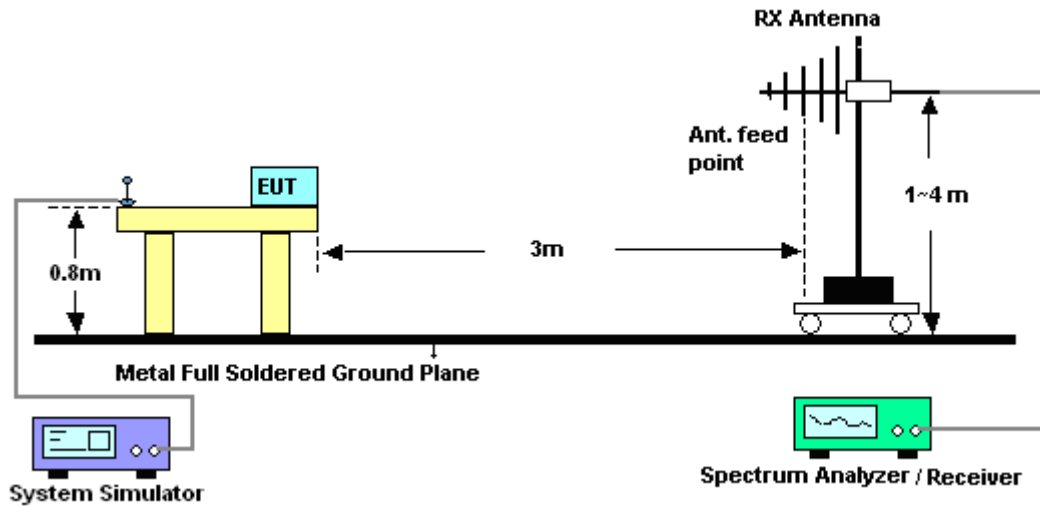
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

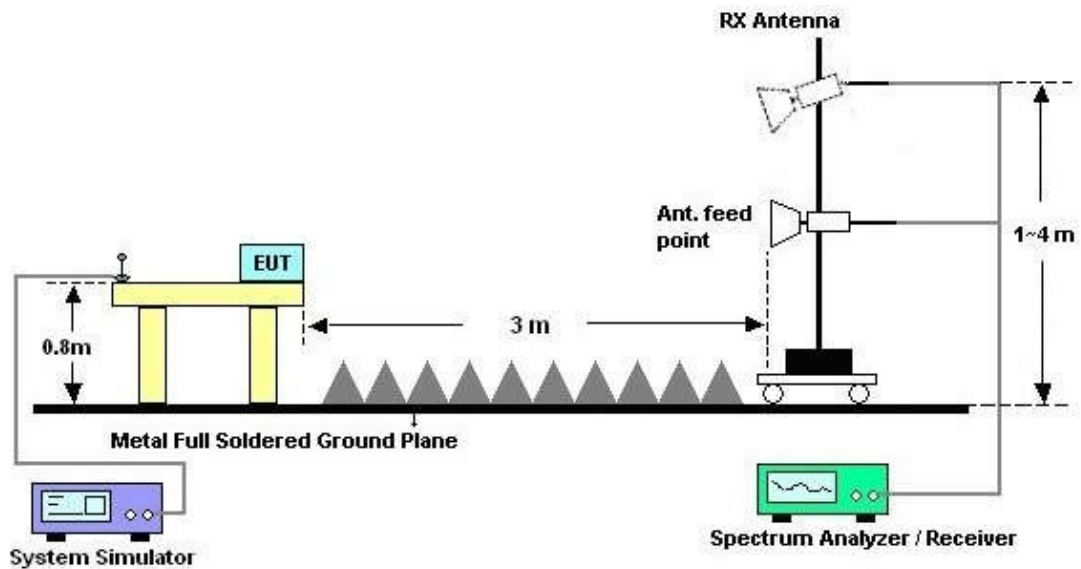
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 (dB μ V/m) = 20 log Emission level (μ 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



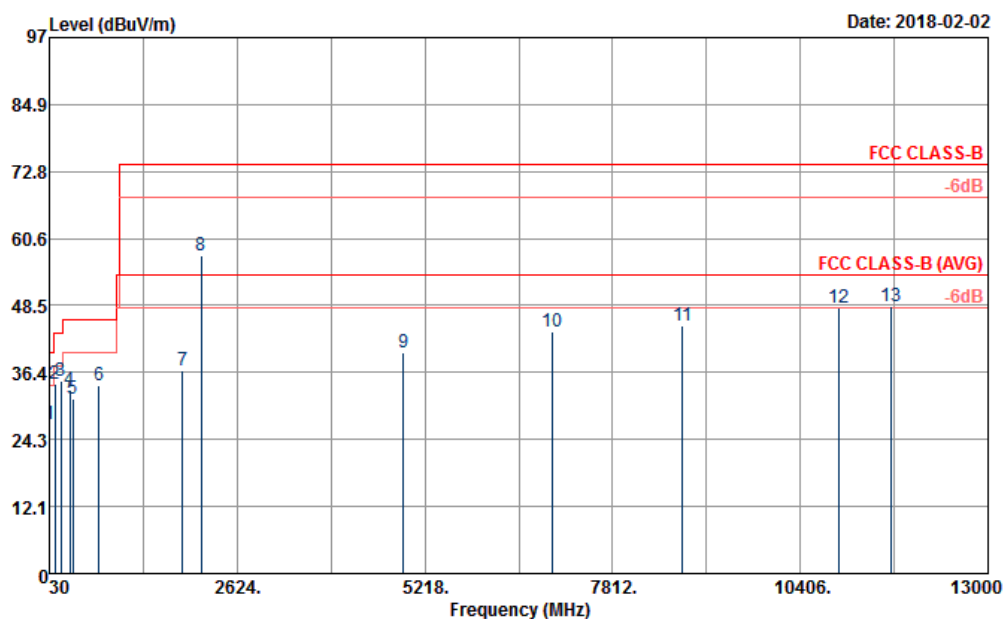
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 5	Temperature :	21~23°C
Test Engineer :	Eric Jeng	Relative Humidity :	51~54%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 2		
Remark:	#8 is system simulator signal which can be ignored.		



Site : 03CH06-HY

Condition : FCC CLASS-B 3m 9120D_1156_170915 HORIZONTAL

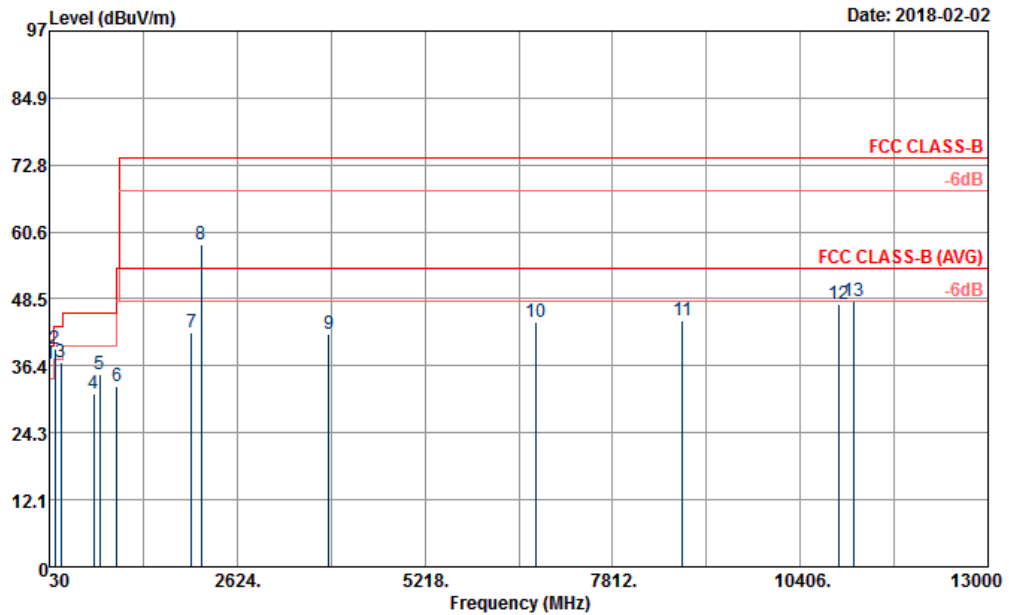
Power : From System

Memo : Mode 5

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	35.13	26.98	-13.02	40.00	36.07	21.84	0.91	31.84	---	---	Peak
2	105.87	34.40	-9.10	43.50	48.35	16.32	1.54	31.81	---	---	Peak
3	187.41	34.91	-8.59	43.50	50.18	14.59	1.92	31.78	100	66	Peak
4	311.90	33.32	-12.68	46.00	43.34	19.30	2.43	31.75	---	---	Peak
5	350.40	31.60	-14.40	46.00	40.55	20.22	2.60	31.77	---	---	Peak
6	720.70	33.99	-12.01	46.00	35.63	26.90	3.54	32.08	---	---	Peak
7	1866.00	36.72	-37.28	74.00	65.84	25.68	6.17	60.97	---	---	Peak
8	2132.00	57.56			85.74	26.16	6.66	61.00	---	---	Peak
9	4918.00	40.06	-33.94	74.00	57.30	31.29	10.70	59.23	---	---	Peak
10	6980.00	43.65	-30.35	74.00	54.53	35.45	12.88	59.21	---	---	Peak
11	8778.00	44.73	-29.27	74.00	51.26	36.79	14.82	58.14	---	---	Peak
12	10928.00	48.07	-25.93	74.00	48.47	40.05	16.72	57.17	---	---	Peak
13	11670.00	48.35	-25.65	74.00	48.38	38.96	17.84	56.83	100	0	Peak



Test Mode :	Mode 5	Temperature :	21~23°C
Test Engineer :	Eric Jeng	Relative Humidity :	51~54%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN Idle (2.4G) + Earphone + USB Cable(Data Link with Notebook) + GNSS Rx + SIM2 for Sample 2		
Remark:	#8 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156_170915 VERTICAL

Power : From System
Memo : Mode 5

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	35.13	36.82	-3.18	40.00	45.91	21.84	0.91	31.84	100	57 Peak
2	105.87	39.36	-4.14	43.50	53.31	16.32	1.54	31.81	---	---
3	187.68	36.94	-6.56	43.50	52.19	14.59	1.93	31.77	---	---
4	638.80	31.30	-14.70	46.00	33.68	26.30	3.39	32.07	---	---
5	722.10	34.99	-11.01	46.00	36.54	26.98	3.55	32.08	---	---
6	958.00	32.61	-13.39	46.00	28.50	31.02	4.13	31.04	---	---
7	1992.00	42.46	-31.54	74.00	71.33	25.72	6.41	61.00	---	---
8	2132.00	58.31			86.49	26.16	6.66	61.00	---	---
9	3894.00	42.02	-31.98	74.00	64.41	29.70	9.39	61.48	---	---
10	6762.00	44.26	-29.74	74.00	55.90	34.86	12.79	59.29	---	---
11	8782.00	44.70	-29.30	74.00	51.23	36.79	14.82	58.14	---	---
12	10934.00	47.61	-26.39	74.00	47.98	40.05	16.72	57.14	---	---
13	11136.00	48.12	-25.88	74.00	48.04	39.92	17.02	56.86	100	151 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	Feb. 28, 2018	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2017	Feb. 28, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2017	Feb. 28, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2017	Feb. 28, 2018	Oct. 11, 2018	Conduction (CO01-KS)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Oct. 14, 2017	Feb. 02, 2018	Oct. 13, 2018	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 04, 2018	Feb. 02, 2018	Jan. 03, 2019	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 08, 2017	Feb. 02, 2018	Aug. 07, 2018	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 25, 2017	Feb. 02, 2018	Apr. 24, 2018	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	May. 22, 2017	Feb. 02, 2018	May. 21, 2018	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Feb. 02, 2018	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Feb. 02, 2018	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Feb. 02, 2018	N/A	Radiation (03CH06-HY)

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% ($U = 2U_c(y)$)	2.3dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.5dB
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Appendix B. Product Equality Declaration

No. 88, Sec. 3, Zhongxing Rd. Xindian Dist., New Taipei City, Taiwan
HTC Corporation
Tel: 8862 8912 4138

Date: March 20, 2018

Product Equality Declaration

We, HTC Corporation, declare on our sole responsibility for the product of 2Q5V200 as below, the detailed differences of first source and second source are list in the table:

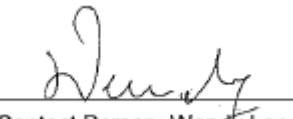
Object	First source	Second source	Remark
FLASH	16EMCP16-EL3DT527	KMQE60013M-B318	Only supplier difference
Main Camera	TLQ8910M	LCSCP01	Only supplier difference
LCD	KD055M27-40TH-A012	KD055M27-40TH-A012	Only supplier difference

The detailed differences are listed above.

Except above, the others are all the same.

Should you have any questions or comments regarding this matter, please have my best attention.

Sincerely yours,


Contact Person: Wendy Lan
COMPANY: HTC Corporation
Tel:86- 8862 8912 4138
E-Mail: wendy_lan@htc.com