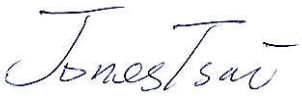
FCC Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	LTE/CDMA Multi-Mode Digital Mobile Phone
BRAND NAME	:	ZTE
MODEL NAME	:	Z799VL
FCC ID	:	SRQ-Z799VL
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Sep. 26, 2016 and testing was completed on Nov. 30, 2016. 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.

Prepared by: James Huang / Manager



Approved by: Jones Tsai / Manager

Testing Laboratory
2627

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC692605	Rev. 01	Initial issue of report	Dec. 22, 2016

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 6.02 dB at 2.461 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 0.78 dB at 959.900 MHz for Quasi-Peak

1. General Description

1.1. Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2. Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE/CDMA Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	Z799VL
FCC ID	SRQ-Z799VL
EUT supports Radios application	CDMA/EV-DO/ LTE WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth v3.0 + EDR Bluetooth v4.0 LE/ Bluetooth v4.2 LE
MEID Code	Conduction: 99000689000290 Radiation: 99000689000323
HW Version	Z799VLHWV1.0
SW Version	Z799VLV1.0.0B02
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	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz Glonass: 1602 MHz + n× 0.5625MHz (n=−7,−6,−5,...0,...,6)
Antenna Type	WWAN : PIFA Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GPS/Glonass: PIFA Antenna
Type of Modulation	LTE: QPSK / 16QAM CDMA2000 : QPSK CDMA2000 1xEV-DO : QPSK/8PSK 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : π /4-DQPSK Bluetooth (3Mbps) : 8-DPSK GPS/Glonass : BPSK

1.5. Modification of EUT

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

1.6. Test Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	**Sporton Site No.**		**FCC Registration No.**
	CO01-KS	03CH02-KS	418269

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).

The following tables are showing the test modes as the worst cases and recorded in this report.

Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	☒	☒	Note 1
2.	Data application transferred mode (EUT with notebook)	☒	☒	☒

Abbreviations:

- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

Note 1: Testing for this mode is not required or not the worst case.

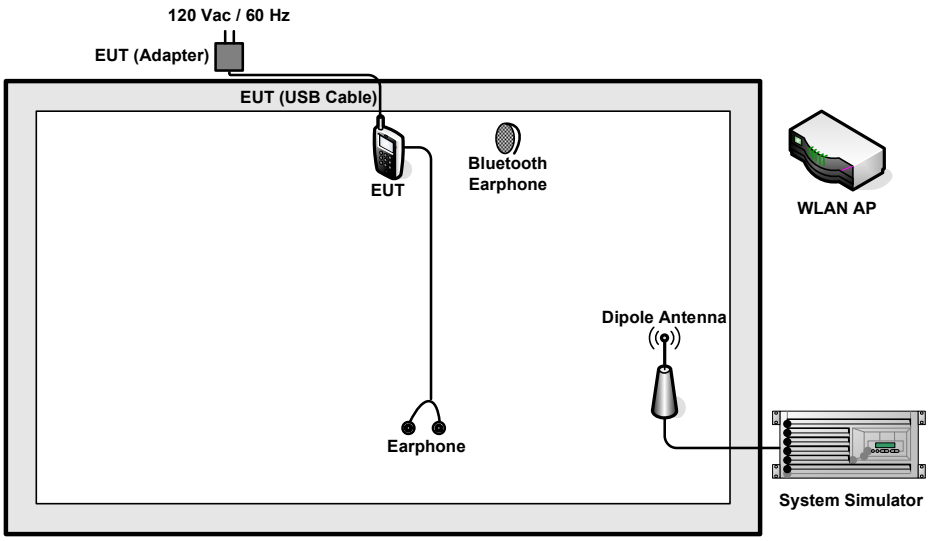
Remark: For signal above 1GHz, the worst case was test item 2.

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2	Mode 1 : CDMA2000 BC0 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 1) + Battery 1 + Earphone + Camera (Rear)<Fig.1> Mode 2 : CDMA2000 BC1 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + Camera (Front)<Fig.1> Mode 3 : LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + MPEG4<Fig.1> Mode 4 : LTE Band 4 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + Glonass Rx<Fig.2> Mode 5 : LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 2 + Earphone + GPS Rx<Fig.3>
Radiated Emissions < 1GHz	1/2	Mode 1 : CDMA2000 BC0 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 1) + Battery 1 + Earphone + Camera (Rear)<Fig.1> Mode 2 : CDMA2000 BC1 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + Camera (Front)<Fig.1> Mode 3 : LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 1) + Battery 1 + Earphone + MPEG4<Fig.1> Mode 4 : LTE Band 4 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 1) + Battery 1 + Earphone + Glonass Rx<Fig.2> Mode 5 : LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 1 + Earphone + GPS Rx<Fig.3>
Radiated Emissions ≥ 1GHz	2	Mode 1 : LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 1 + Earphone + GPS Rx<Fig.3>

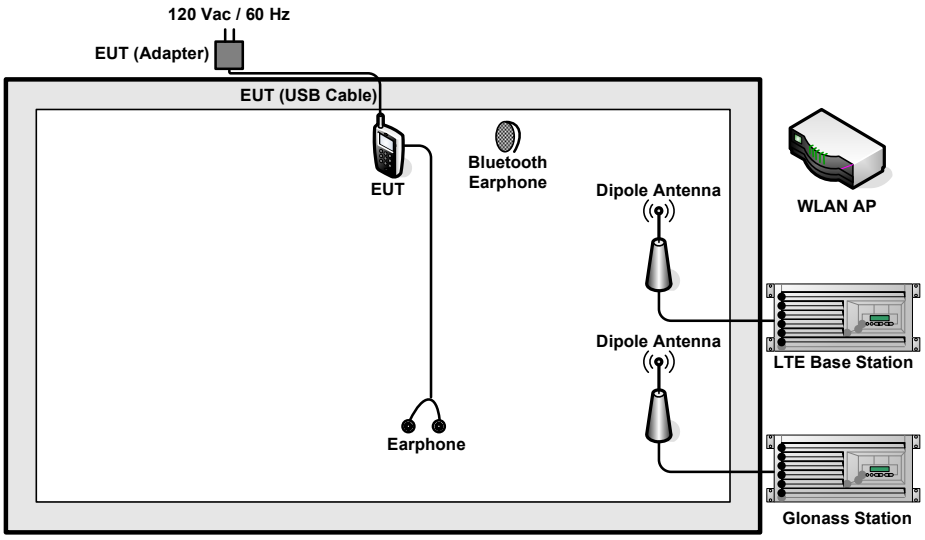
Remark:

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

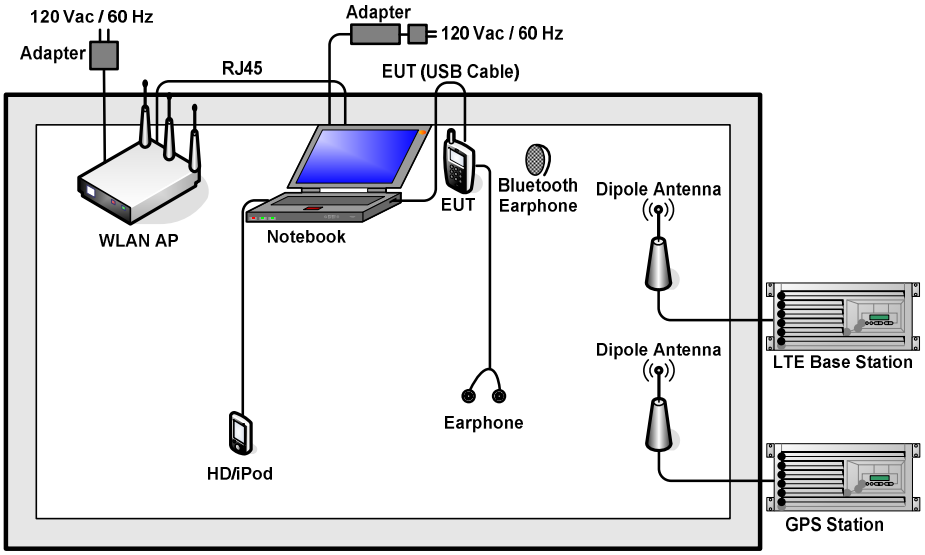
2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>


120 Vac / 60 Hz
Adapter
Adapter
120 Vac / 60 Hz
RJ45
EUT (USB Cable)
WLAN AP
Notebook
EUT
Bluetooth Earphone
Dipole Antenna
Dipole Antenna
LTE Base Station
Earphone
HD/iPod
GPS Station

<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	Anritus	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	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
4.	Glonass Station	RACELOGIC	RLLS03-2RP	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
6.	WLAN AP	TP-LINK	TL-WDR5600	N/A	N/A	Unshielded, 1.8 m
7.	Bluetooth Earphone	Lenovo	LBH308	2010DP1340	N/A	N/A
8.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
9.	SD Card	Kingston	4GB	N/A	N/A	N/A
10.	SD Card	Kingston	SD4 8GB	N/A	N/A	N/A
11.	Hard Disk	Lenovo	F310	FCC DoC	Shielded, 0.5m	N/A
12.	iPod	Apple	A1199	FCC DoC	Shielded, 1.2 m	N/A
13.	Earphone	Lenovo	LH102	N/A	N/A	Unshielded, 1.2 m
14.	Earphone	Lenovo	SH100	N/A	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in CDMA2000 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 GPS/Glonass function to make the EUT receive continuous signals from GPS/Glonass 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.

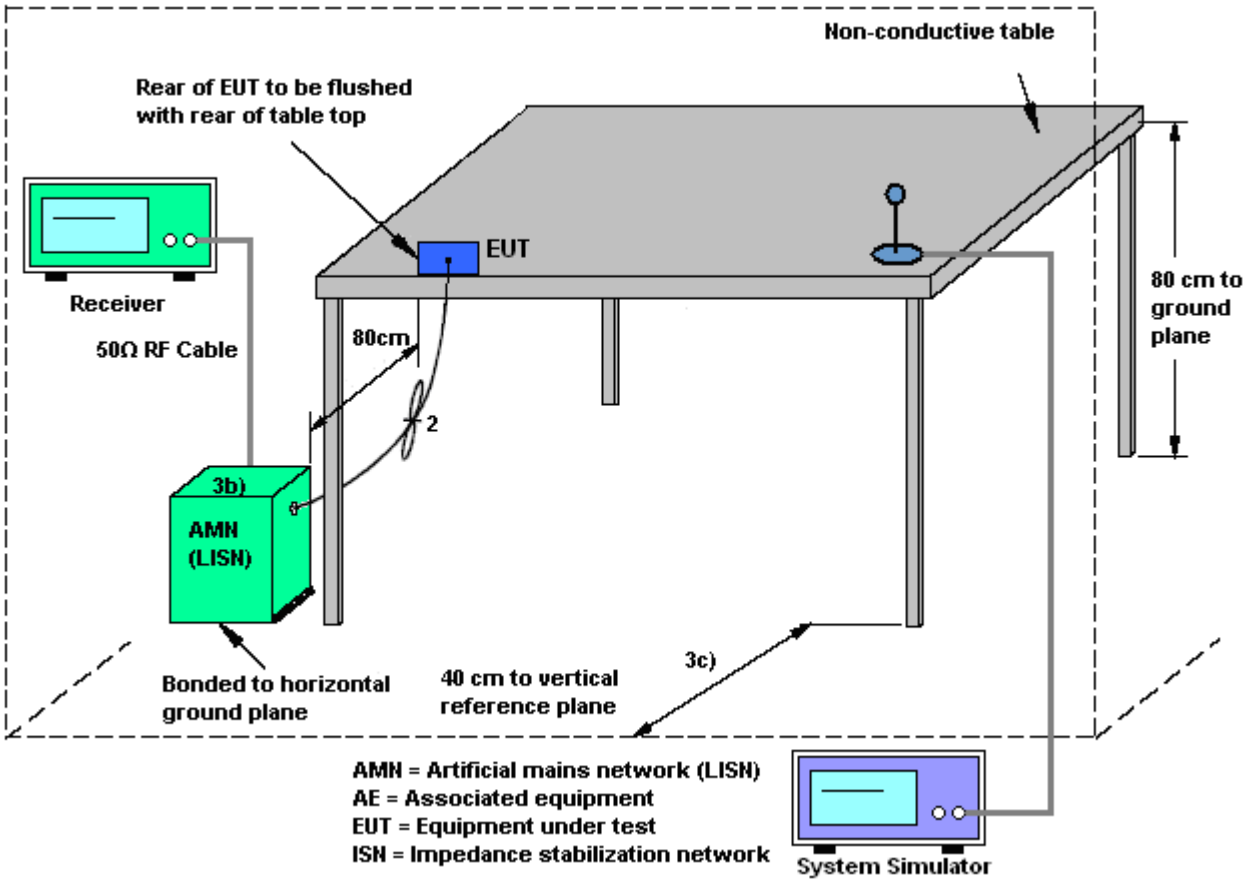
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

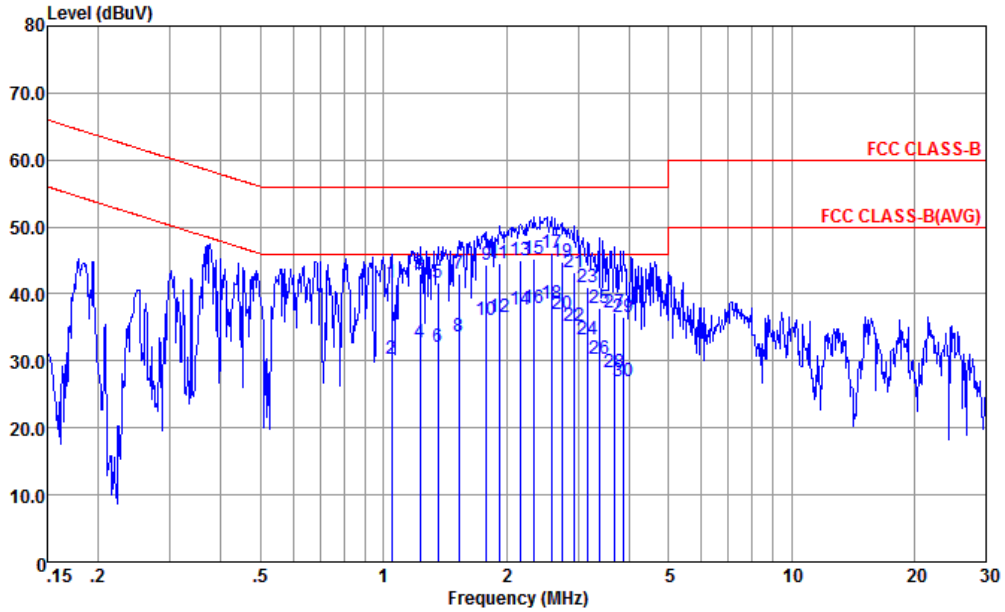
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

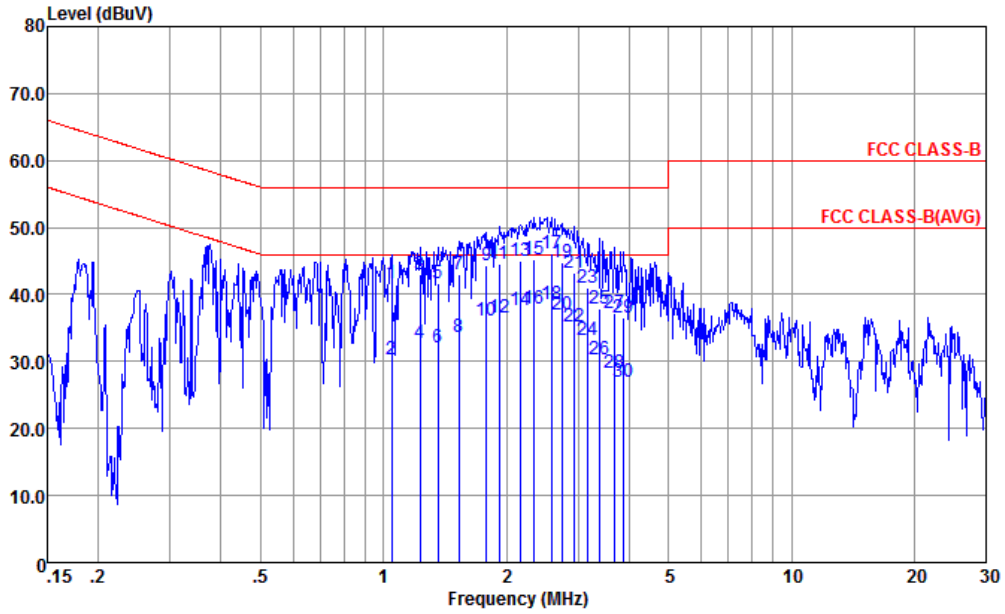
Test Mode :	Mode 3	**Temperature :**	20~22℃
Test Engineer :	Morris Li	**Relative Humidity :**	42~44%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + MPEG4		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692605
mode : Mode 3

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	1.049	41.63	-14.37	56.00	31.19	0.25	10.19	QP
2	1.049	30.23	-15.77	46.00	19.79	0.25	10.19	Average
3	1.229	42.92	-13.08	56.00	32.50	0.23	10.19	QP
4	1.229	32.82	-13.18	46.00	22.40	0.23	10.19	Average
5	1.359	41.61	-14.39	56.00	31.20	0.22	10.19	QP
6	1.359	32.11	-13.89	46.00	21.70	0.22	10.19	Average
7	1.527	43.10	-12.90	56.00	32.70	0.21	10.19	QP
8	1.527	33.60	-12.40	46.00	23.20	0.21	10.19	Average
9	1.790	44.28	-11.72	56.00	33.90	0.19	10.19	QP
10	1.790	36.18	-9.82	46.00	25.80	0.19	10.19	Average
11	1.918	44.57	-11.43	56.00	34.20	0.18	10.19	QP
12	1.918	36.57	-9.43	46.00	26.20	0.18	10.19	Average
13	2.167	44.97	-11.03	56.00	34.60	0.18	10.19	QP
14	2.167	37.57	-8.43	46.00	27.20	0.18	10.19	Average
15	2.334	45.18	-10.82	56.00	34.80	0.18	10.20	QP
16	2.334	37.78	-8.22	46.00	27.40	0.18	10.20	Average

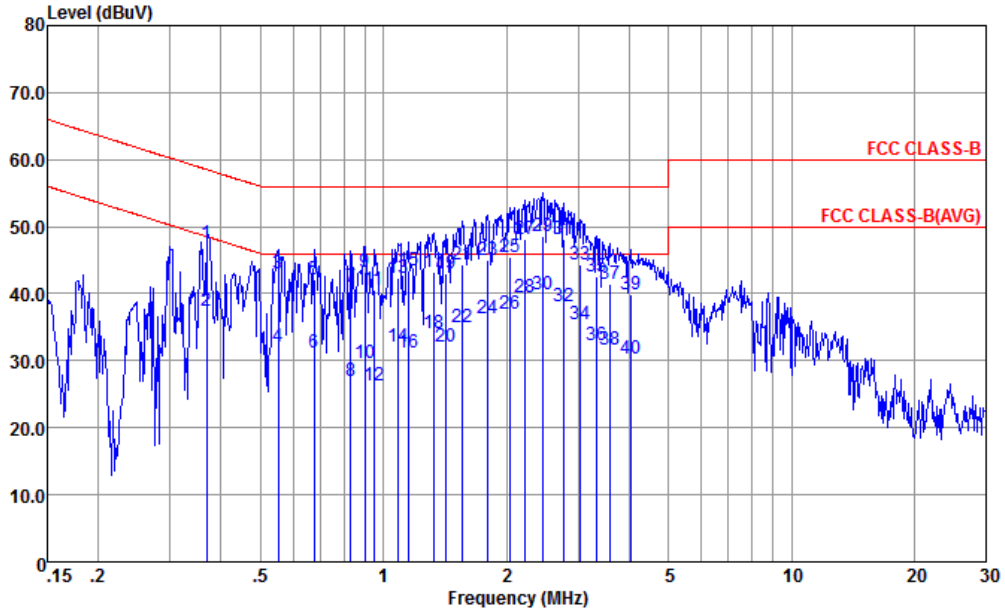
Test Mode :	Mode 3	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + MPEG4		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692605
mode : Mode 3

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
17	2.594	46.09	-9.91	56.00	35.70	0.18	10.21	QP
18 *	2.594	38.59	-7.41	46.00	28.20	0.18	10.21	Average
19	2.736	44.79	-11.21	56.00	34.40	0.18	10.21	QP
20	2.736	36.89	-9.11	46.00	26.50	0.18	10.21	Average
21	2.931	43.20	-12.80	56.00	32.80	0.18	10.22	QP
22	2.931	35.20	-10.80	46.00	24.80	0.18	10.22	Average
23	3.173	41.01	-14.99	56.00	30.60	0.19	10.22	QP
24	3.173	33.11	-12.89	46.00	22.70	0.19	10.22	Average
25	3.381	37.91	-18.09	56.00	27.49	0.19	10.23	QP
26	3.381	30.21	-15.79	46.00	19.79	0.19	10.23	Average
27	3.681	37.22	-18.78	56.00	26.80	0.19	10.23	QP
28	3.681	28.22	-17.78	46.00	17.80	0.19	10.23	Average
29	3.860	36.62	-19.38	56.00	26.19	0.19	10.24	QP
30	3.860	26.92	-19.08	46.00	16.49	0.19	10.24	Average

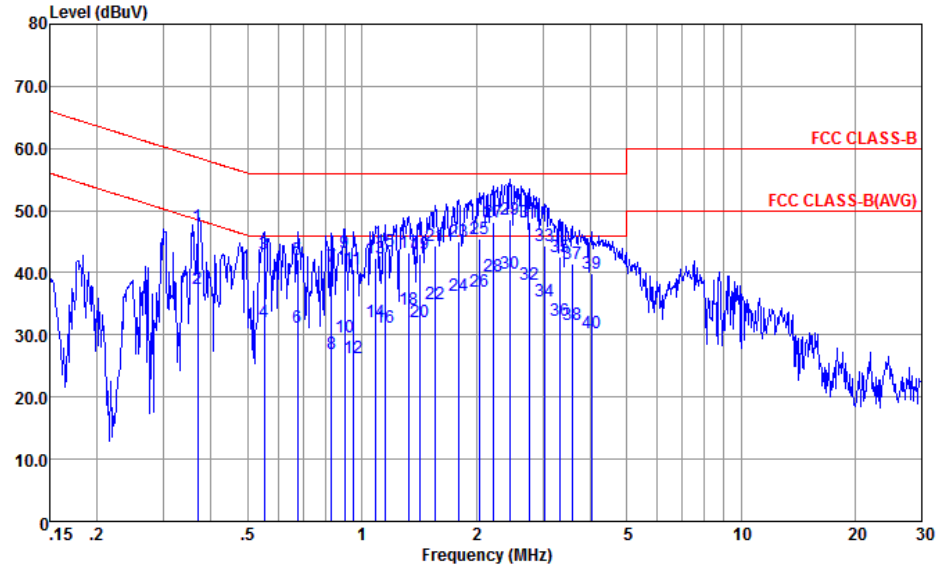
Test Mode :	Mode 3	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + MPEG4		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 692605
mode : Mode 3

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.369	47.43	-11.09	58.52	36.90	0.32	10.21	QP
2	0.369	37.33	-11.19	48.52	26.80	0.32	10.21	Average
3	0.552	42.91	-13.09	56.00	32.40	0.33	10.18	QP
4	0.552	32.11	-13.89	46.00	21.60	0.33	10.18	Average
5	0.675	42.02	-13.98	56.00	31.50	0.34	10.18	QP
6	0.675	31.22	-14.78	46.00	20.70	0.34	10.18	Average
7	0.830	41.03	-14.97	56.00	30.50	0.35	10.18	QP
8	0.830	27.03	-18.97	46.00	16.50	0.35	10.18	Average
9	0.899	43.14	-12.86	56.00	32.60	0.36	10.18	QP
10	0.899	29.74	-16.26	46.00	19.20	0.36	10.18	Average
11	0.948	40.45	-15.55	56.00	29.89	0.37	10.19	QP
12	0.948	26.35	-19.65	46.00	15.79	0.37	10.19	Average
13	1.082	42.36	-13.64	56.00	31.80	0.37	10.19	QP
14	1.082	32.16	-13.84	46.00	21.60	0.37	10.19	Average
15	1.147	43.36	-12.64	56.00	32.80	0.37	10.19	QP
16	1.147	31.26	-14.74	46.00	20.70	0.37	10.19	Average

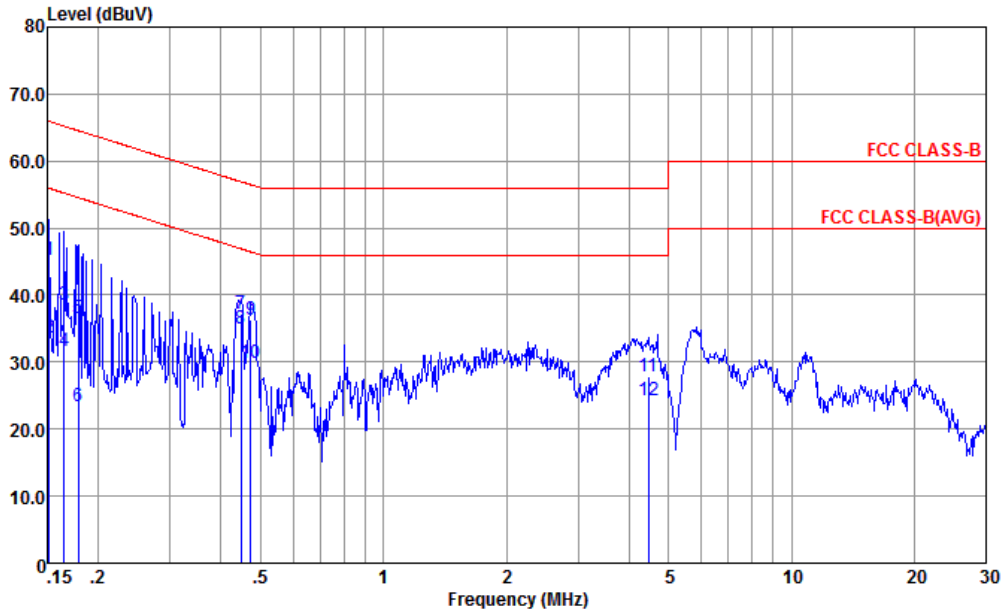
Test Mode :	Mode 3	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter 2) + Battery 2 + Earphone + MPEG4		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 692605
mode : Mode 3

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
17		1.324	43.16	-12.84	56.00	32.60	0.37	10.19	QP
18		1.324	34.06	-11.94	46.00	23.50	0.37	10.19	Average
19		1.426	42.96	-13.04	56.00	32.39	0.38	10.19	QP
20		1.426	32.06	-13.94	46.00	21.49	0.38	10.19	Average
21		1.560	44.26	-11.74	56.00	33.69	0.38	10.19	QP
22		1.560	35.06	-10.94	46.00	24.49	0.38	10.19	Average
23		1.800	45.07	-10.93	56.00	34.50	0.38	10.19	QP
24		1.800	36.37	-9.63	46.00	25.80	0.38	10.19	Average
25		2.044	45.47	-10.53	56.00	34.90	0.38	10.19	QP
26		2.044	37.07	-8.93	46.00	26.50	0.38	10.19	Average
27		2.213	48.07	-7.93	56.00	37.50	0.38	10.19	QP
28		2.213	39.47	-6.53	46.00	28.90	0.38	10.19	Average
29		2.461	48.48	-7.52	56.00	37.90	0.38	10.20	QP
30	*	2.461	39.98	-6.02	46.00	29.40	0.38	10.20	Average
31		2.765	48.08	-7.92	56.00	37.50	0.37	10.21	QP
32		2.765	38.18	-7.82	46.00	27.60	0.37	10.21	Average
33		3.041	44.29	-11.71	56.00	33.70	0.37	10.22	QP
34		3.041	35.49	-10.51	46.00	24.90	0.37	10.22	Average
35		3.328	42.49	-13.51	56.00	31.89	0.37	10.23	QP
36		3.328	32.29	-13.71	46.00	21.69	0.37	10.23	Average
37		3.584	41.40	-14.60	56.00	30.80	0.37	10.23	QP
38		3.584	31.70	-14.30	46.00	21.10	0.37	10.23	Average
39		4.027	39.80	-16.20	56.00	29.20	0.36	10.24	QP
40		4.027	30.20	-15.80	46.00	19.60	0.36	10.24	Average

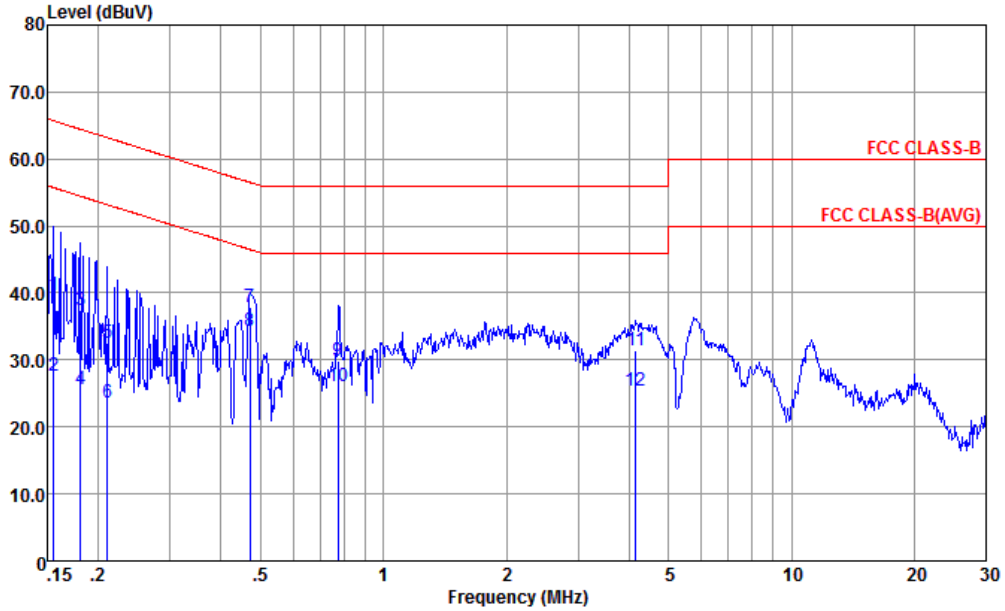
Test Mode :	Mode 5	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 2 + Earphone + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692605
mode : Mode 5

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.152	45.31	-20.60	65.91	34.40	0.52	10.39	QP
2		0.152	33.61	-22.30	55.91	22.70	0.52	10.39	Average
3		0.165	38.50	-26.71	65.21	27.71	0.42	10.37	QP
4		0.165	31.70	-23.51	55.21	20.91	0.42	10.37	Average
5		0.179	36.60	-27.95	64.55	25.90	0.34	10.36	QP
6		0.179	23.40	-31.15	54.55	12.70	0.34	10.36	Average
7		0.447	37.12	-19.81	56.93	26.70	0.23	10.19	QP
8	*	0.447	35.02	-11.91	46.93	24.60	0.23	10.19	Average
9		0.474	36.22	-20.23	56.45	25.80	0.23	10.19	QP
10		0.474	29.82	-16.63	46.45	19.40	0.23	10.19	Average
11		4.454	27.93	-28.07	56.00	17.50	0.19	10.24	QP
12		4.454	24.33	-21.67	46.00	13.90	0.19	10.24	Average

Test Mode :	Mode 5	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 2 + Earphone + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 692605
mode : Mode 5

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.156	39.59	-26.10	65.69	28.90	0.30	10.39	QP
2		0.156	27.59	-28.10	55.69	16.90	0.30	10.39	Average
3		0.181	37.46	-27.00	64.46	26.80	0.31	10.35	QP
4		0.181	25.56	-28.90	54.46	14.90	0.31	10.35	Average
5		0.211	32.53	-30.65	63.18	21.90	0.31	10.32	QP
6		0.211	23.53	-29.65	53.18	12.90	0.31	10.32	Average
7		0.471	37.91	-18.58	56.49	27.40	0.32	10.19	QP
8	*	0.471	34.21	-12.28	46.49	23.70	0.32	10.19	Average
9		0.775	29.92	-26.08	56.00	19.40	0.35	10.17	QP
10		0.775	26.12	-19.88	46.00	15.60	0.35	10.17	Average
11		4.158	31.50	-24.50	56.00	20.90	0.36	10.24	QP
12		4.158	25.30	-20.70	46.00	14.70	0.36	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:

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

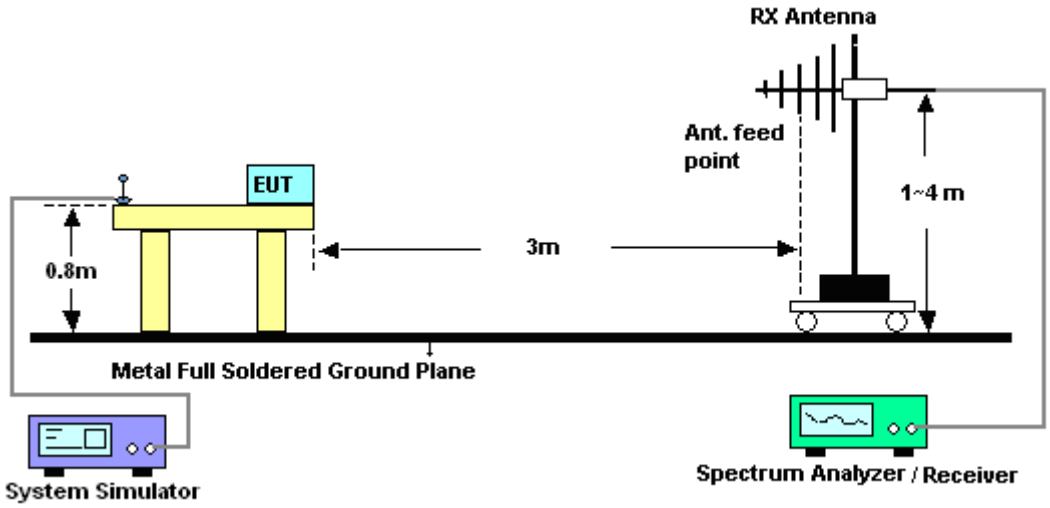
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

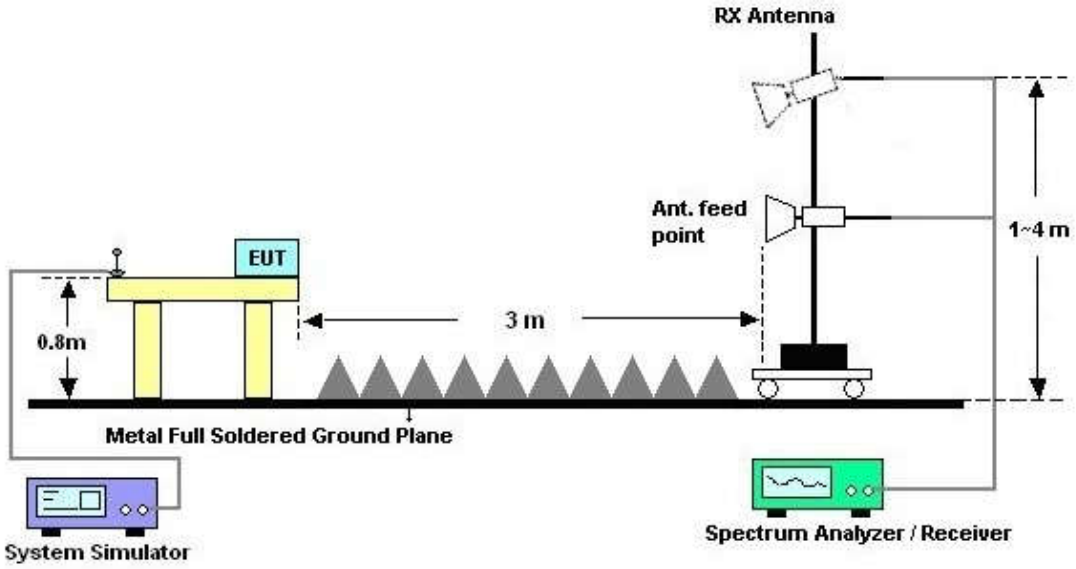
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

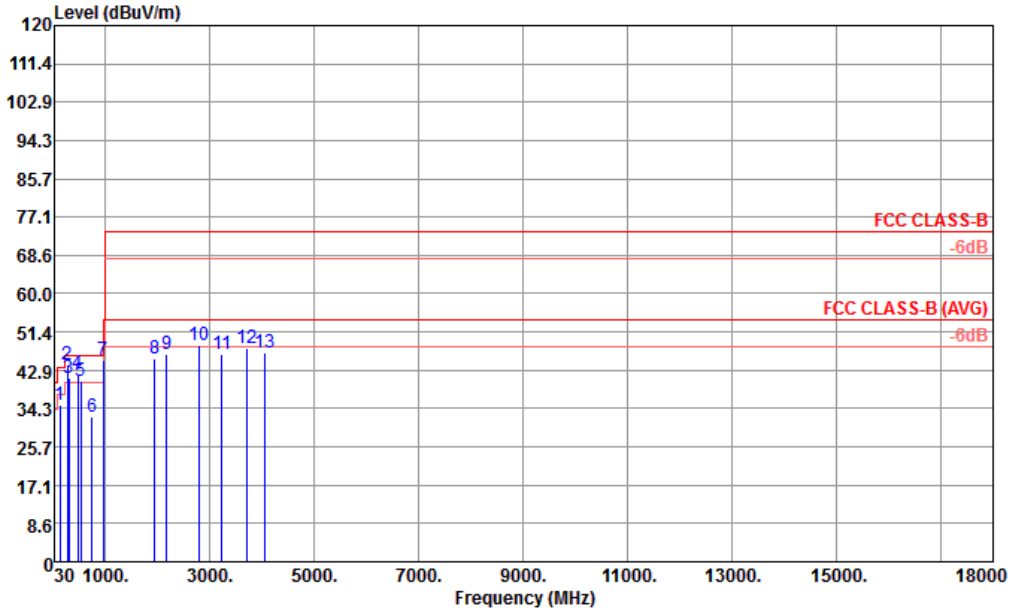


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

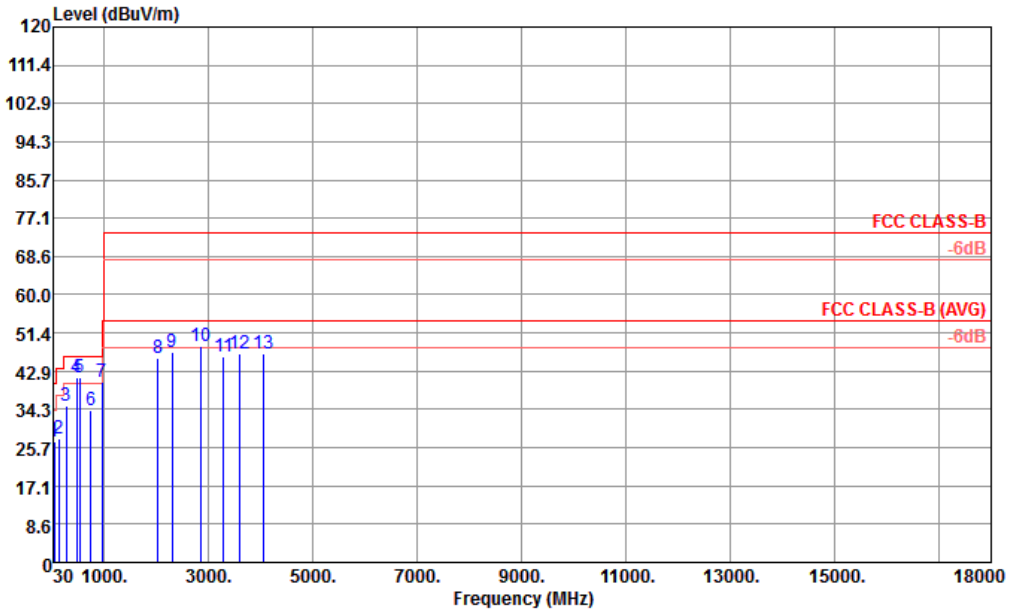
Test Mode :	Mode 5	**Temperature :**	21~22°C
Test Engineer :	Leo Liao	**Relative Humidity :**	41~42%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 1 + Earphone + GPS Rx		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT HORIZONTAL
Project : (FC) 692605
Mode : 5
IMEI : 99000689000323 #13

		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		134.76	35.17	-8.33	43.50	48.54	17.81	0.30	31.48	---	---	Peak
2	!	284.14	43.97	-2.03	46.00	56.70	17.67	0.56	30.96	100	44	QP
3	!	314.21	41.23	-4.77	46.00	52.71	18.55	0.63	30.66	---	---	Peak
4	!	480.08	41.98	-4.02	46.00	47.39	23.37	0.92	29.70	100	187	QP
5	!	530.52	40.31	-5.69	46.00	44.99	23.92	0.91	29.51	200	122	QP
6		751.68	32.31			32.74	26.22	1.36	28.01	---	---	Peak
7	!	959.90	45.22	-0.78	46.00	41.20	28.66	1.75	26.39	100	256	QP
8		1954.00	45.49	-28.51	74.00	45.93	30.07	4.49	35.00	---	---	Peak
9		2178.00	46.37	-27.63	74.00	44.00	31.08	5.65	34.36	---	---	Peak
10		2804.00	48.40	-25.60	74.00	41.21	32.10	2.71	27.62	---	---	Peak
11		3237.00	46.43	-27.57	74.00	38.01	33.47	6.04	31.09	---	---	Peak
12		3702.00	47.76	-26.24	74.00	38.51	34.30	6.29	31.34	---	---	Peak
13		4044.00	46.83	-27.17	74.00	37.51	34.91	6.17	31.76	---	---	Peak

Test Mode :	Mode 5	Temperature :	21~22°C
Test Engineer :	Leo Liao	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 13 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Data Link with Notebook) + Battery 1 + Earphone + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT VERTICAL
Project : (FC) 692605
Mode : 5
IMEI : 99000689000323 #13

		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		50.37	27.01	-12.99	40.00	43.53	14.98	0.15	31.65	---	---	Peak
2		134.76	27.72	-15.78	43.50	41.09	17.81	0.30	31.48	---	---	Peak
3		284.14	35.14	-10.86	46.00	47.87	17.67	0.56	30.96	---	---	Peak
4	!	480.08	41.30	-4.70	46.00	46.71	23.37	0.92	29.70	---	---	Peak
5	!	535.37	41.61	-4.39	46.00	46.06	24.14	0.89	29.48	100	0	Peak
6		754.59	34.03	-11.97	46.00	34.42	26.24	1.37	28.00	---	---	Peak
7	!	959.90	40.31	-5.69	46.00	36.29	28.66	1.75	26.39	---	---	Peak
8		2032.00	45.93	-28.07	74.00	45.22	30.62	4.76	34.67	---	---	Peak
9		2302.00	47.10	-26.90	74.00	43.88	31.31	5.67	33.76	---	---	Peak
10		2856.00	48.54	-25.46	74.00	41.42	32.22	2.85	27.95	---	---	Peak
11		3294.00	46.07	-27.93	74.00	37.56	33.53	5.99	31.01	---	---	Peak
12		3615.00	46.68	-27.32	74.00	37.69	33.97	6.14	31.12	---	---	Peak
13		4056.00	46.65	-27.35	74.00	37.27	34.93	6.24	31.79	---	---	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. 29, 2016	Nov. 15, 2016	Apr. 28, 2017	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Nov. 15, 2016	Oct. 12, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Nov. 15, 2016	Oct. 12, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Nov. 15, 2016	Oct. 12, 2017	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 09, 2016	Nov. 30, 2016	Aug. 08, 2017	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz, MAX 30dB	Apr. 22, 2016	Nov. 30, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz~2GHz	Aug. 20, 2016	Nov. 30, 2016	Aug. 19, 2017	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Nov. 30, 2016	Oct. 21, 2017	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz~1000MHz / 32 dB	Apr. 22, 2016	Nov. 30, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 13, 2016	Nov. 30, 2016	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Nov. 30, 2016	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Nov. 30, 2016	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Nov. 30, 2016	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))	**5.1dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.5dB**