FCC Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	CDMA 1X&EVDO Multi-Mode Digital Mobile Phone
BRAND NAME	:	ZTE
MODEL NAME	:	N818S
FCC ID	:	SRQ-N818S
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Jun. 03, 2017 and testing was completed on Jun. 25, 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.

Prepared by: James Huang / Manager

Approved by: Jones Tsai / Manager

Testing Laboratory
2627

Sporton International (KunShan) INC.
No.3-2, Pingxiang Road, Kunshan Development Zone, Jiangsu, China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC760307	Rev. 01	Initial issue of report	Jul. 10, 2017

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 7.11 dB at 1.472 MHz
0	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 2.41 dB at 349.700 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	CDMA 1X&EVDO Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	N818S
FCC ID	SRQ-N818S
EUT supports Radios application	CDMA/EV-DO/ WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth v3.0 + EDR/ Bluetooth v 4.0 LE/ Bluetooth v 4.1 LE
MEID	Conduction: A000006AA90C65 Radiation: A000006AA90C65
HW Version	N818SHW1.0
SW Version	N818SV1.0.0B01
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	CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz CDMA2000 BC10 : 817.9 MHz ~ 823.1 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency	CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz CDMA2000 BC10 : 862.9 MHz ~ 868.1 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) FM : 87.5 MHz ~ 108 MHz
Antenna Type	WWAN : PIFA Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GPS/Glonass: PIFA Antenna FM: External headset Antenna
Type of Modulation	CDMA2000 : QPSK CDMA2000 1xEV-DO : 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 FM : FM

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 Development Zone, Jiangsu, 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).

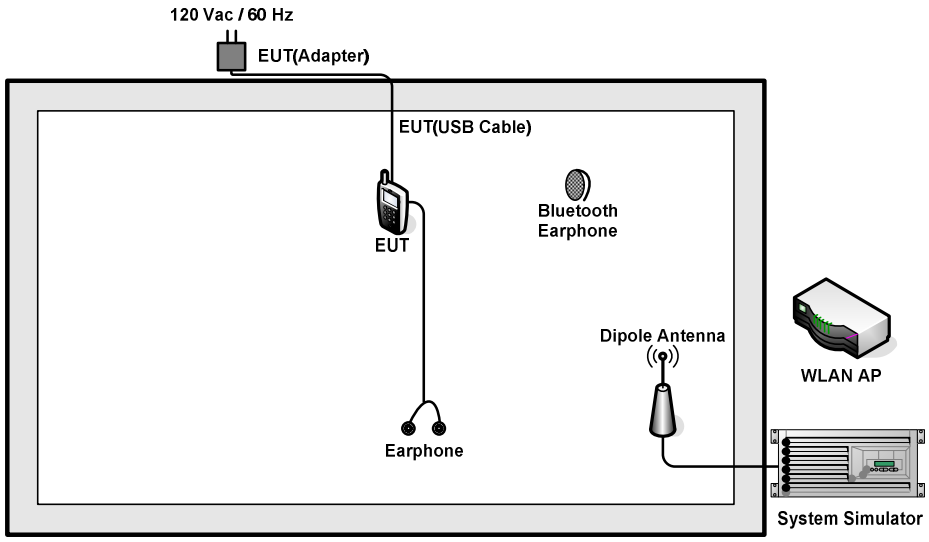
Test Items	Function Type
AC Conducted Emission	Mode 1 : CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear) <Fig.1> Mode 2 : CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 2) + Earphone + Battery 2 + Camera(Front) <Fig.1> Mode 3 : CDMA 2000 BC10 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 3) + Earphone + Battery 1 + MPEG4<Fig.1> Mode 4 : CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Glonass Rx<Fig.2> Mode 5 : CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx<Fig.3>

Radiated Emissions < 1GHz	Mode 1 : CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear) <Fig.1> Mode 2 : CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 2) + Earphone + Battery 2 + Camera(Front) <Fig.1> Mode 3 : CDMA 2000 BC10 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 3) + Earphone + Battery 1 + MPEG4<Fig.1> Mode 4 : CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Glonass Rx<Fig.2> Mode 5 : CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx<Fig.3>
Radiated Emissions ≥ 1GHz	Mode 1 : CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx

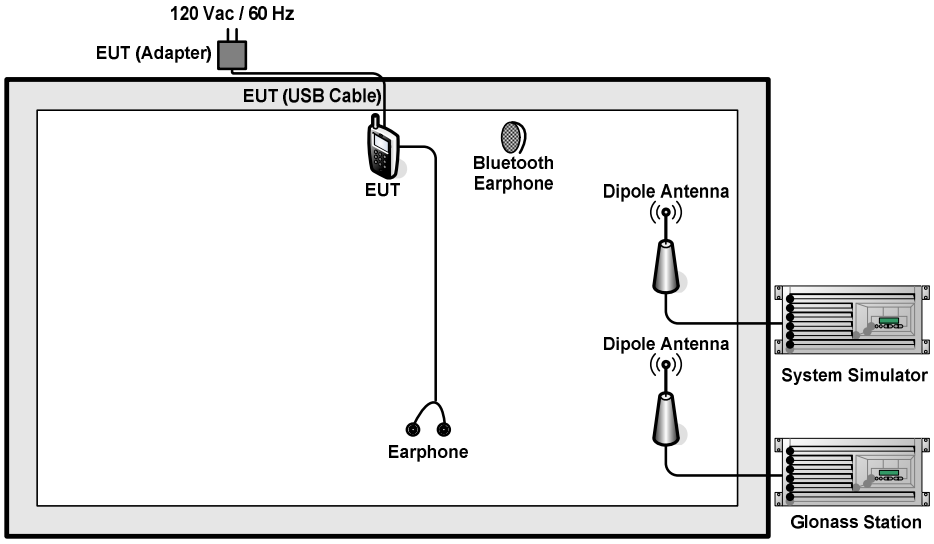
Remark:

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

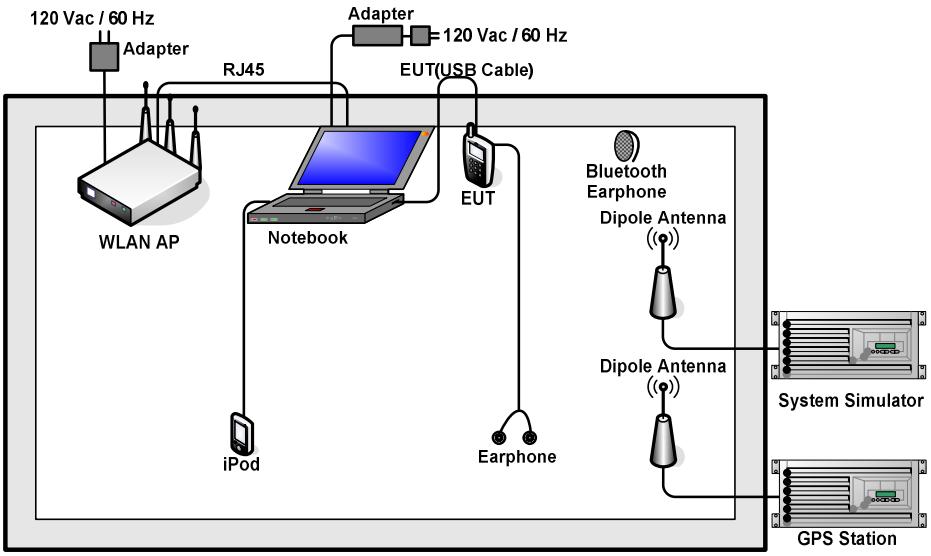
2.2. Connection Diagram of Test System



<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
System Simulator
iPod
Earphone
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.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
3.	Glonass Station	RACELOGIC	RLLS03-2P	N/A	N/A	Unshielded, 1.8 m
4.	WLAN AP	D-link	DIR855	KA2DIR855A2	N/A	Unshielded, 1.8 m
5.	WLAN AP	TP-Link	TL-WDR5600	N/A	N/A	Unshielded, 1.8 m
6.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
7.	Notebook	Lenovo	G480	PRC4	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
8.	Notebook	DELL	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
9.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
10.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
11.	Earphone	Lenovo	LH102	N/A	N/A	Unshielded, 1.2 m
12.	Earphone	Lenovo	SH100	N/A	N/A	N/A
13.	iPod	Apple	A1199	FCC DoC	Unshielded, 1.2 m	N/A
14.	SD Card	Kingston	8GB	N/A	N/A	N/A
15.	SD Card	SanDisk	Uitra	N/A	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in CDMA2000 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.

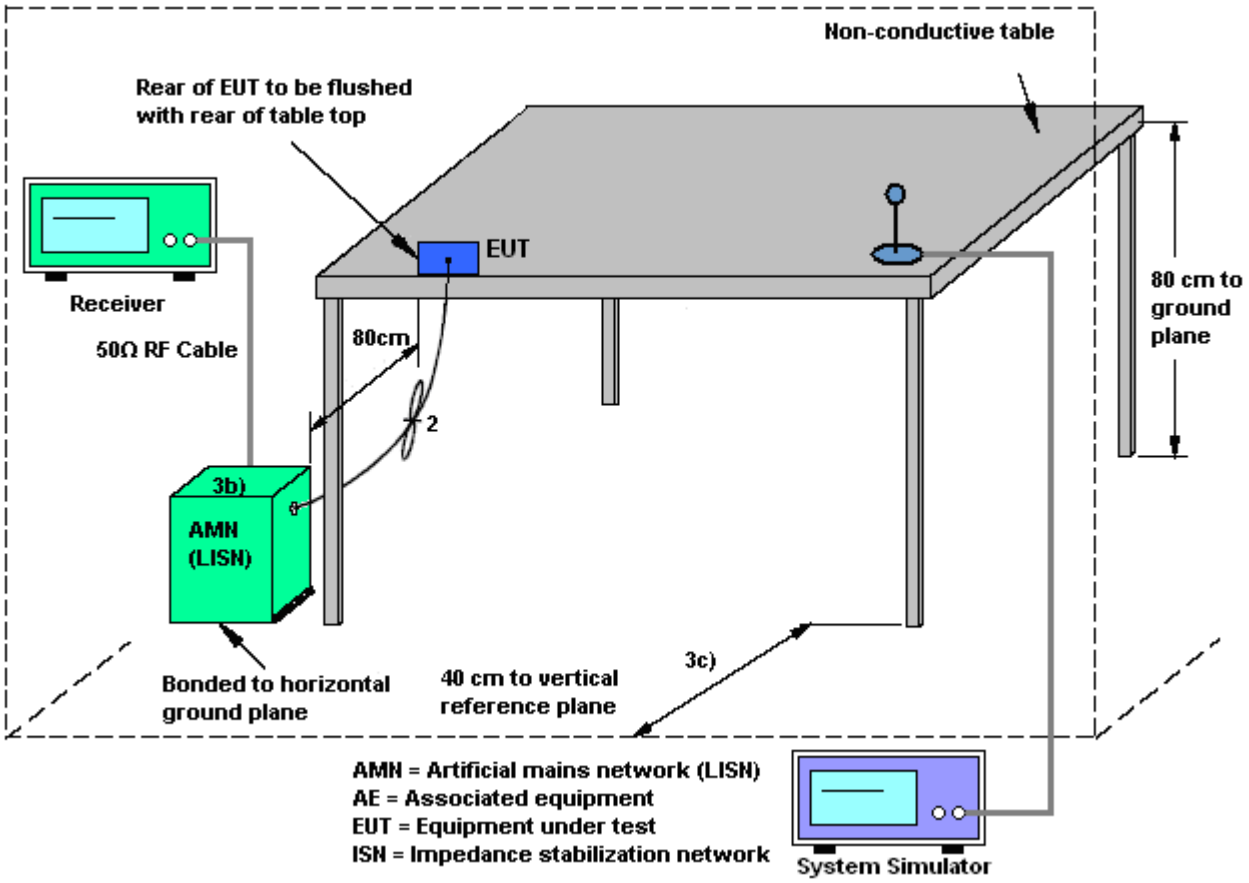
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

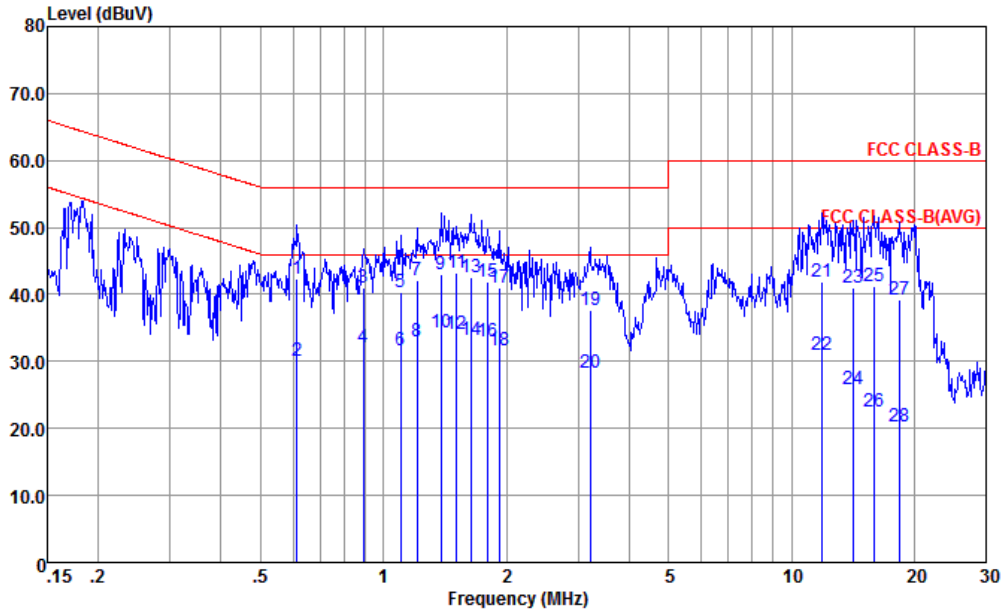
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

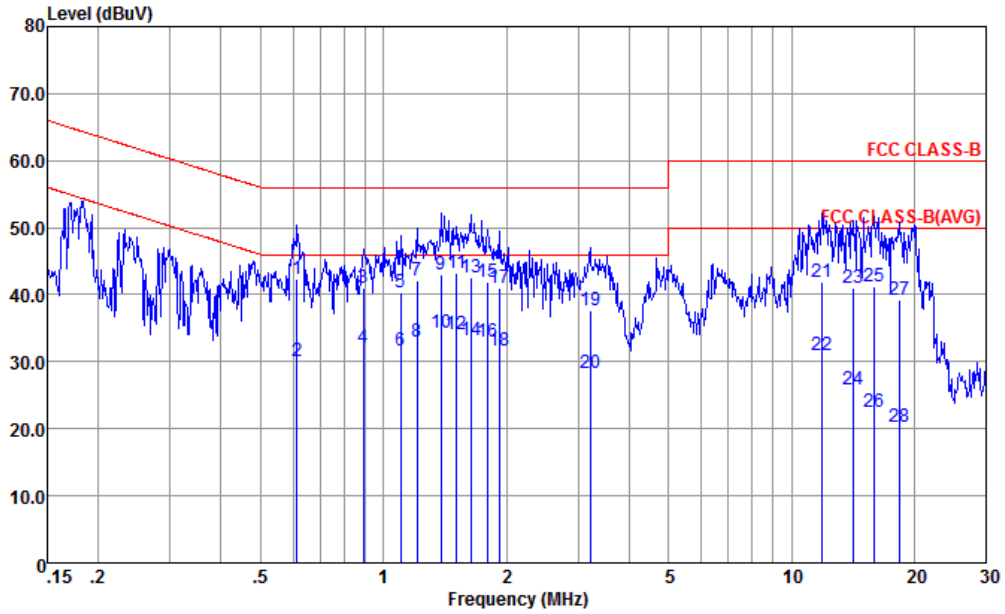
Test Mode :	Mode 1	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	42~46%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-161017-060103 LINE
Project : (FC) 760307
mode : Mode 1

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.614	42.34	-13.66	56.00	31.90	0.26	10.18	QP
2		0.614	30.04	-15.96	46.00	19.60	0.26	10.18	Average
3		0.894	41.04	-14.96	56.00	30.60	0.26	10.18	QP
4		0.894	32.04	-13.96	46.00	21.60	0.26	10.18	Average
5		1.100	40.24	-15.76	56.00	29.80	0.25	10.19	QP
6		1.100	31.74	-14.26	46.00	21.30	0.25	10.19	Average
7		1.210	42.04	-13.96	56.00	31.60	0.25	10.19	QP
8		1.210	33.04	-12.96	46.00	22.60	0.25	10.19	Average
9		1.381	43.03	-12.97	56.00	32.60	0.24	10.19	QP
10	*	1.381	34.33	-11.67	46.00	23.90	0.24	10.19	Average
11		1.511	43.32	-12.68	56.00	32.90	0.23	10.19	QP
12		1.511	34.02	-11.98	46.00	23.60	0.23	10.19	Average
13		1.636	42.61	-13.39	56.00	32.20	0.22	10.19	QP
14		1.636	33.31	-12.69	46.00	22.90	0.22	10.19	Average
15		1.800	42.01	-13.99	56.00	31.60	0.22	10.19	QP
16		1.800	33.01	-12.99	46.00	22.60	0.22	10.19	Average
17		1.918	41.00	-15.00	56.00	30.60	0.21	10.19	QP

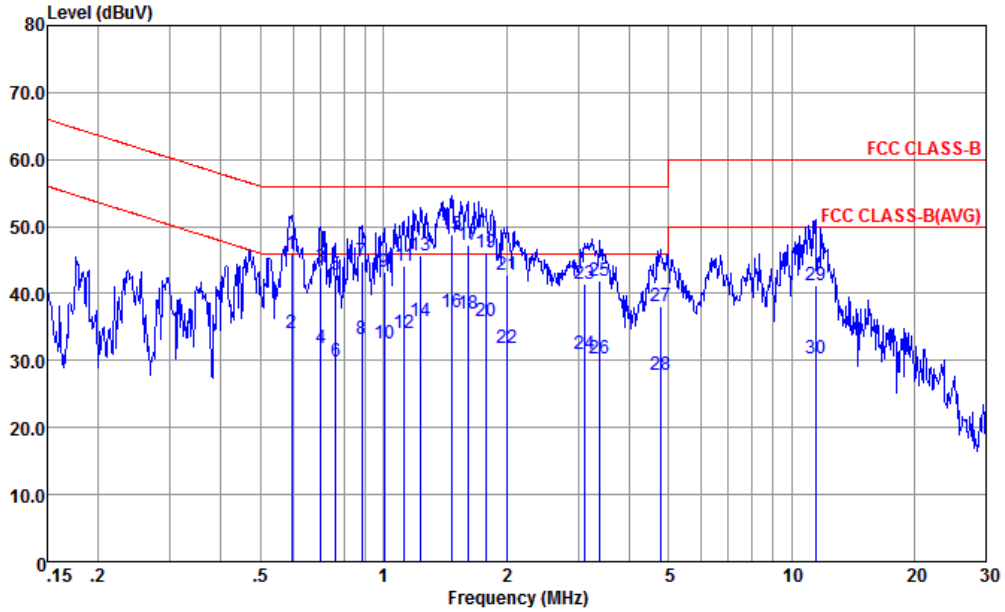
Test Mode :	Mode 1	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-161017-060103 LINE
Project : (FC) 760307
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	1.918	31.70	-14.30	46.00	21.30	0.21	10.19	Average
19	3.207	37.73	-18.27	56.00	27.30	0.21	10.22	QP
20	3.207	28.33	-17.67	46.00	17.90	0.21	10.22	Average
21	11.870	41.87	-18.13	60.00	31.20	0.29	10.38	QP
22	11.870	30.97	-19.03	50.00	20.30	0.29	10.38	Average
23	14.138	41.01	-18.99	60.00	30.30	0.28	10.43	QP
24	14.138	25.91	-24.09	50.00	15.20	0.28	10.43	Average
25	15.970	41.12	-18.88	60.00	30.30	0.28	10.54	QP
26	15.970	22.42	-27.58	50.00	11.60	0.28	10.54	Average
27	18.328	39.25	-20.75	60.00	28.20	0.29	10.76	QP
28	18.328	20.35	-29.65	50.00	9.30	0.29	10.76	Average

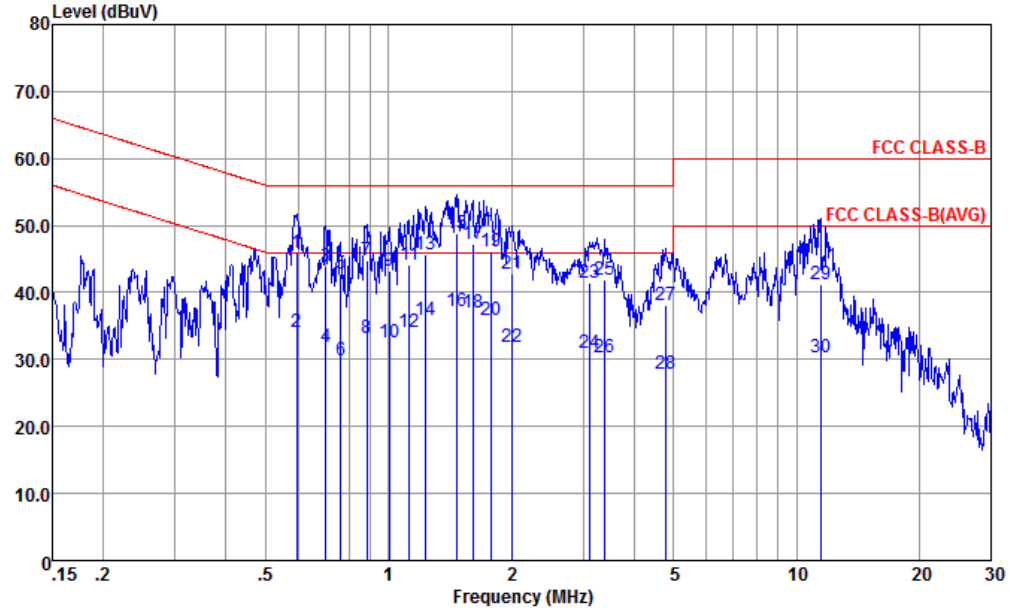
Test Mode :	Mode 1	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
Project : (FC) 760307
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.595	45.86	-10.14	56.00	35.30	0.38	10.18	QP
2	0.595	34.16	-11.84	46.00	23.60	0.38	10.18	Average
3	0.701	43.86	-12.14	56.00	33.30	0.38	10.18	QP
4	0.701	31.86	-14.14	46.00	21.30	0.38	10.18	Average
5	0.763	42.76	-13.24	56.00	32.21	0.38	10.17	QP
6	0.763	29.76	-16.24	46.00	19.21	0.38	10.17	Average
7	0.885	44.77	-11.23	56.00	34.20	0.39	10.18	QP
8	0.885	33.17	-12.83	46.00	22.60	0.39	10.18	Average
9	1.005	43.19	-12.81	56.00	32.60	0.40	10.19	QP
10	1.005	32.49	-13.51	46.00	21.90	0.40	10.19	Average
11	1.123	44.19	-11.81	56.00	33.60	0.40	10.19	QP
12	1.123	34.19	-11.81	46.00	23.60	0.40	10.19	Average
13	1.236	45.79	-10.21	56.00	35.20	0.40	10.19	QP
14	1.236	35.89	-10.11	46.00	25.30	0.40	10.19	Average
15 *	1.472	48.89	-7.11	56.00	38.29	0.41	10.19	QP
16	1.472	37.19	-8.81	46.00	26.59	0.41	10.19	Average
17	1.610	47.19	-8.81	56.00	36.59	0.41	10.19	QP

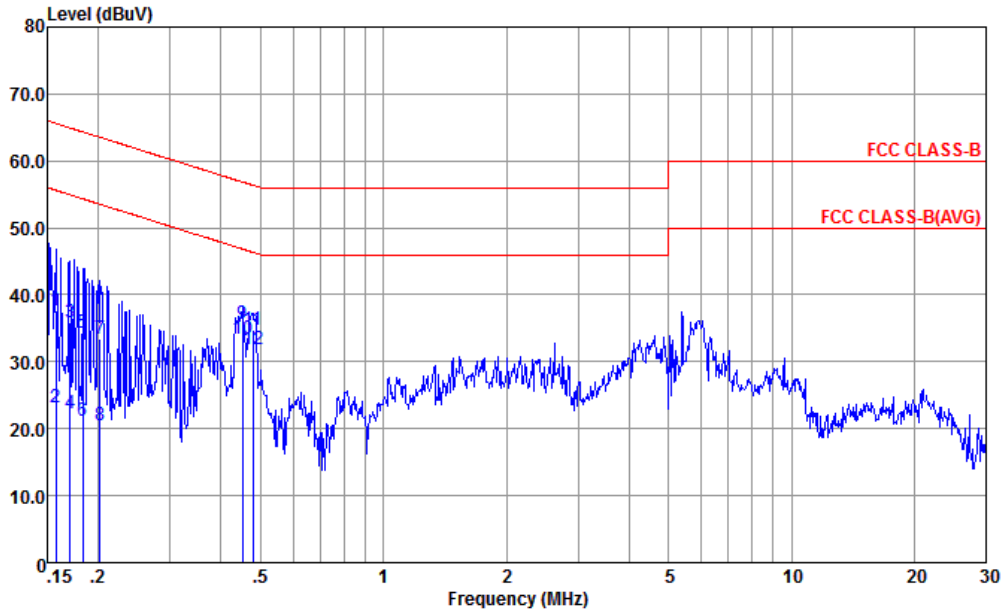
Test Mode :	Mode 1	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA 2000 BC0 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Earphone + Battery 1 + Camera(Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
Project : (FC) 760307
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	1.610	36.89	-9.11	46.00	26.29	0.41	10.19	Average
19	1.790	46.20	-9.80	56.00	35.60	0.41	10.19	QP
20	1.790	35.80	-10.20	46.00	25.20	0.41	10.19	Average
21	2.001	42.80	-13.20	56.00	32.20	0.41	10.19	QP
22	2.001	31.80	-14.20	46.00	21.20	0.41	10.19	Average
23	3.107	41.42	-14.58	56.00	30.80	0.40	10.22	QP
24	3.107	30.92	-15.08	46.00	20.30	0.40	10.22	Average
25	3.399	41.92	-14.08	56.00	31.30	0.39	10.23	QP
26	3.399	30.22	-15.78	46.00	19.60	0.39	10.23	Average
27	4.772	38.12	-17.88	56.00	27.50	0.38	10.24	QP
28	4.772	27.82	-18.18	46.00	17.20	0.38	10.24	Average
29	11.438	41.25	-18.75	60.00	30.60	0.28	10.37	QP
30	11.438	30.25	-19.75	50.00	19.60	0.28	10.37	Average

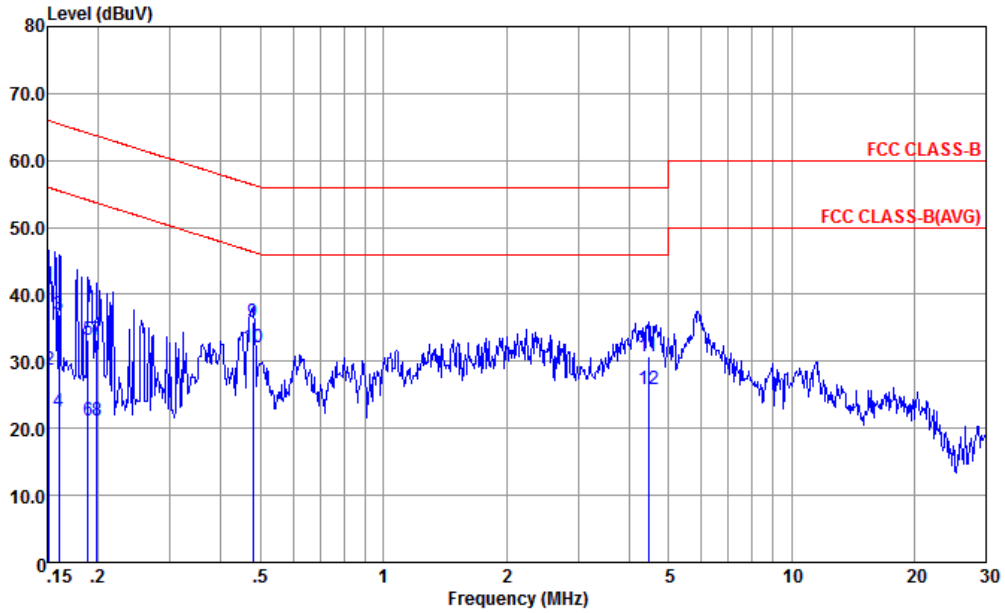
Test Mode :	Mode 5	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-161017-060103 LINE
Project : (FC) 760307
mode : Mode 5

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.157	37.69	-27.91	65.60	26.81	0.50	10.38	QP
2		0.157	23.19	-32.41	55.60	12.31	0.50	10.38	Average
3		0.170	35.99	-28.95	64.94	25.20	0.42	10.37	QP
4		0.170	22.39	-32.55	54.94	11.60	0.42	10.37	Average
5		0.183	34.30	-30.03	64.33	23.60	0.35	10.35	QP
6		0.183	21.20	-33.13	54.33	10.50	0.35	10.35	Average
7		0.202	33.50	-30.04	63.54	22.90	0.27	10.33	QP
8		0.202	20.40	-33.14	53.54	9.80	0.27	10.33	Average
9		0.452	35.76	-21.09	56.85	25.30	0.27	10.19	QP
10	*	0.452	33.36	-13.49	46.85	22.90	0.27	10.19	Average
11		0.479	34.76	-21.60	56.36	24.30	0.27	10.19	QP
12		0.479	31.76	-14.60	46.36	21.30	0.27	10.19	Average

Test Mode :	Mode 5	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	42~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-161017-060103 NEUTRAL
Project : (FC) 760307
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	41.53	-24.38	65.91	30.80	0.34	10.39	QP
2		0.152	28.83	-27.08	55.91	18.10	0.34	10.39	Average
3		0.160	37.02	-28.45	65.47	26.30	0.34	10.38	QP
4		0.160	22.62	-32.85	55.47	11.90	0.34	10.38	Average
5		0.188	33.28	-30.83	64.11	22.60	0.33	10.35	QP
6		0.188	21.28	-32.83	54.11	10.60	0.33	10.35	Average
7		0.199	33.27	-30.40	63.67	22.61	0.33	10.33	QP
8		0.199	21.27	-32.40	53.67	10.61	0.33	10.33	Average
9		0.479	35.77	-20.59	56.36	25.20	0.38	10.19	QP
10	*	0.479	32.17	-14.19	46.36	21.60	0.38	10.19	Average
11		4.454	30.83	-25.17	56.00	20.21	0.38	10.24	QP
12		4.454	25.83	-20.17	46.00	15.21	0.38	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

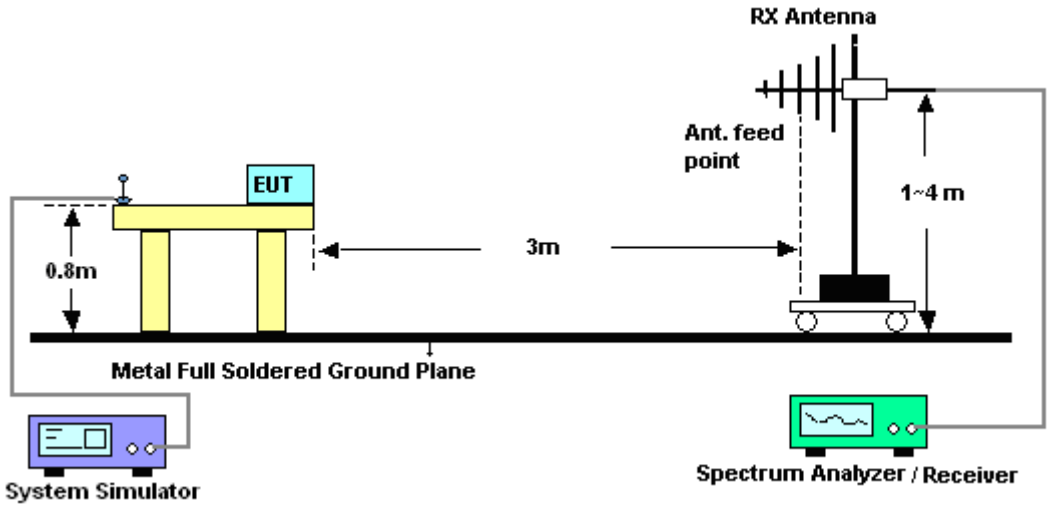
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

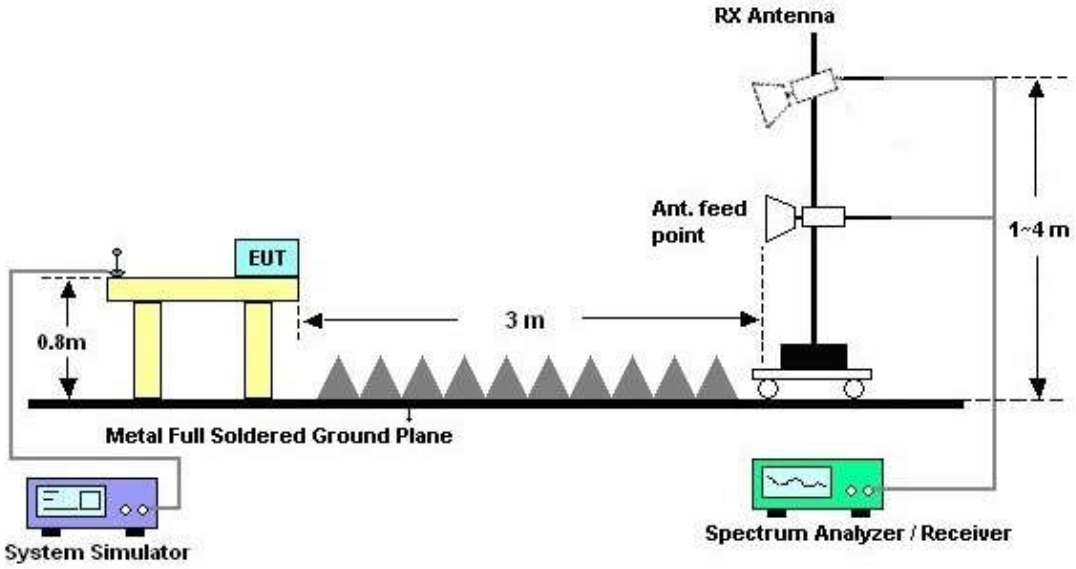
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

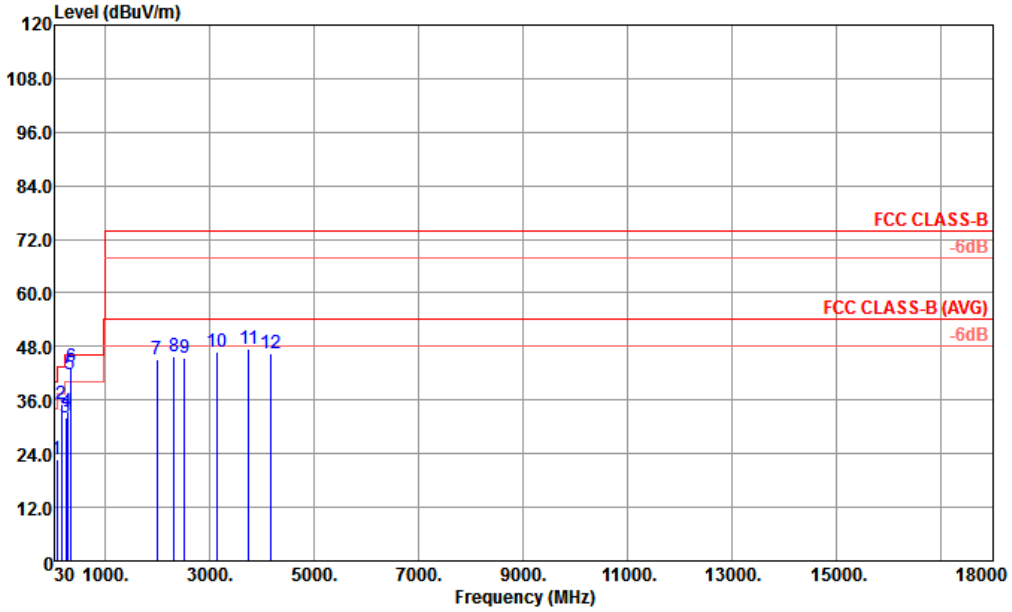


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

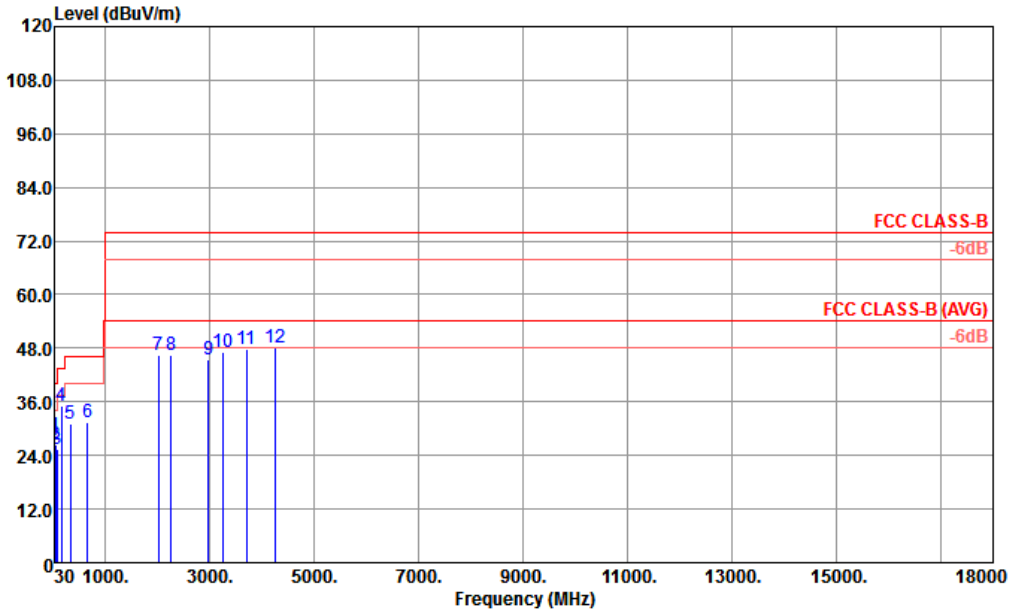
Test Mode :	Mode 5	**Temperature :**	21~22°C
Test Engineer :	Carl Ni	**Relative Humidity :**	41~42%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT HORIZONTAL
Project : (FC)760307
Mode : 5

		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		80.49	22.82	-17.18	40.00	39.44	15.17	0.20	31.99	---	---	Peak
2		165.54	35.18	-8.32	43.50	49.62	16.96	0.35	31.75	---	---	Peak
3		254.37	32.03	-13.97	46.00	45.95	17.00	0.50	31.42	---	---	Peak
4		284.07	33.55	-12.45	46.00	46.46	17.78	0.56	31.25	---	---	Peak
5	!	337.80	41.70	-4.30	46.00	52.59	19.42	0.69	31.00	---	---	Peak
6	!	349.70	43.59	-2.41	46.00	54.00	19.80	0.73	30.94	100	0	QP
7		1998.00	45.27	-28.73	74.00	43.23	30.20	4.46	32.62	---	---	Peak
8		2320.00	45.69	-28.31	74.00	40.87	31.05	5.67	31.90	---	---	Peak
9		2526.00	45.30	-28.70	74.00	40.10	31.33	4.42	30.55	---	---	Peak
10		3132.00	46.90	-27.10	74.00	39.23	32.85	5.08	30.26	---	---	Peak
11		3747.00	47.37	-26.63	74.00	36.50	34.60	6.39	30.12	---	---	Peak
12		4161.00	46.58	-27.42	74.00	35.72	35.27	6.53	30.94	---	---	Peak

Test Mode :	Mode 5	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	CDMA 2000 BC1 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + Battery 1 + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 02 LF ANT VERTICAL
Project : (FC)760307
Mode : 5

	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	35.13	28.38	-11.62	40.00	35.84	24.50	0.12	32.08	---	---	Peak
2	44.58	26.31	-13.69	40.00	37.67	20.57	0.13	32.06	---	---	Peak
3	79.68	25.57	-14.43	40.00	42.46	14.90	0.20	31.99	---	---	Peak
4	165.54	35.10	-8.40	43.50	49.54	16.96	0.35	31.75	100	0	Peak
5	337.80	31.19	-14.81	46.00	42.08	19.42	0.69	31.00	---	---	Peak
6	672.40	31.26	-14.74	46.00	33.36	25.84	1.09	29.03	---	---	Peak
7	2020.00	46.40	-27.60	74.00	44.29	30.25	4.61	32.75	---	---	Peak
8	2270.00	46.57	-27.43	74.00	42.51	30.95	5.72	32.61	---	---	Peak
9	2986.00	45.37	-28.63	74.00	38.76	32.35	3.09	28.83	---	---	Peak
10	3267.00	47.21	-26.79	74.00	38.62	33.14	6.01	30.56	---	---	Peak
11	3714.00	47.64	-26.36	74.00	37.03	34.38	6.34	30.11	---	---	Peak
12	4272.00	48.09	-25.91	74.00	37.84	35.38	5.96	31.09	---	---	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	Jun. 25, 2017	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Jun. 25, 2017	Oct. 12, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Jun. 25, 2017	Oct. 12, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Jun. 25, 2017	Oct. 12, 2017	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Aug.09, 2016	Jun. 25, 2017	Aug. 08, 2017	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44G,MAX 30dB	Apr.18, 2017	Jun. 25, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz-2GHz	Aug. 20, 2016	Jun. 25, 2017	Aug. 19, 2017	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Jun. 25, 2017	Oct. 21, 2017	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 09,2016	Jun. 25, 2017	Aug. 08,2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 13, 2016	Jun. 25, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jun. 25, 2017	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jun. 25, 2017	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jun. 25, 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 (30 MHz ~ 1000 MHz)

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