FCC Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	LTE/WCDMA/CDMA/GSM Multi-Mode Digital Mobile Phone
BRAND NAME	:	ZTE
MODEL NAME	:	Z986DL
FCC ID	:	SRQ-Z986DL
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Sep. 28, 2016 and testing was completed on Dec. 19, 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.
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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC692805	Rev. 01	Initial issue of report	Dec. 21, 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 3.88 dB at 0.150 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.77 dB at 30.540 MHz for 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/WCDMA/CDMA/GSM Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	Z986DL
FCC ID	SRQ-Z986DL
EUT supports Radios application	CDMA/EV-DO/GSM/GPRS/EGPRS/WCDMA/HSPA/ HSPA+(16QAM uplink is not supported)/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ WLAN 5GHz 802.11a/n HT20/HT40/ WLAN 5GHz 802.11ac VHT20/VHT40/ Bluetooth v3.0 + EDR/ Bluetooth v4.0 LE/ Bluetooth v4.2 LE
MEID Code	Conduction/Radiation: 990006860007516
HW Version	Z986DLHWV1.1
SW Version	Z986DLV1.0.0B01
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	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz 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 LTE Band 12 : 699.7 MHz ~ 715.3 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 802.11a/n/ac: 5180 MHz ~ 5240 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 IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz 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 LTE Band 12 : 729.7 MHz ~ 745.3 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 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 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	GSM/GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: BPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM uplink is not supported LTE: QPSK / 16QAM CDMA2000 : QPSK CDMA2000 1xEV-DO : 8PSK 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac : OFDM (BPSK / QPSK / 16QAM / 64QAM /256QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : 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

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.

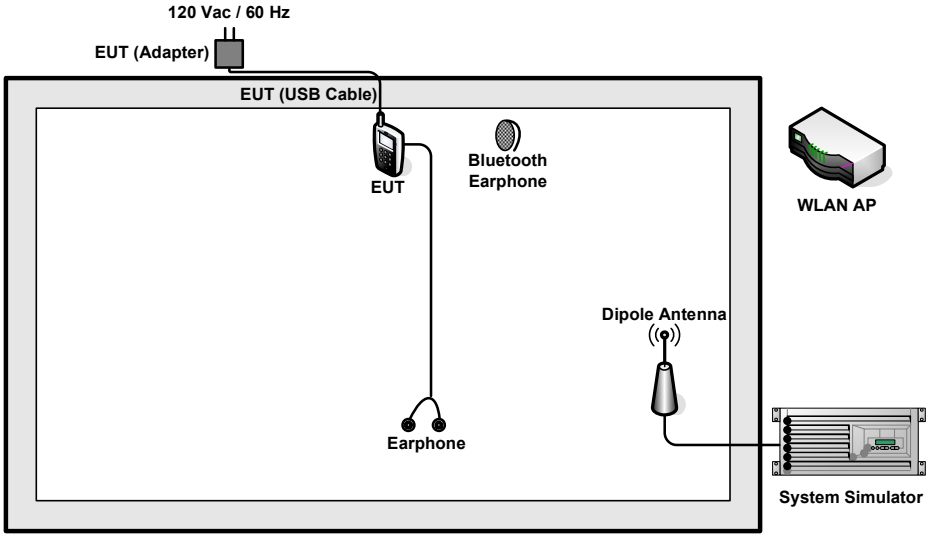
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

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

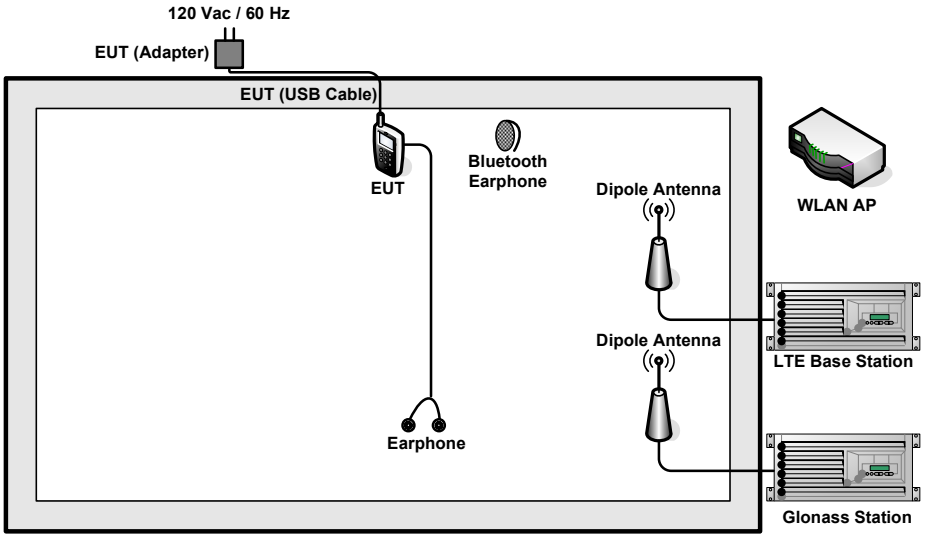
Remark:

1. The worst case of AC is mode 1; 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 3; and the USB Link mode of RE 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.

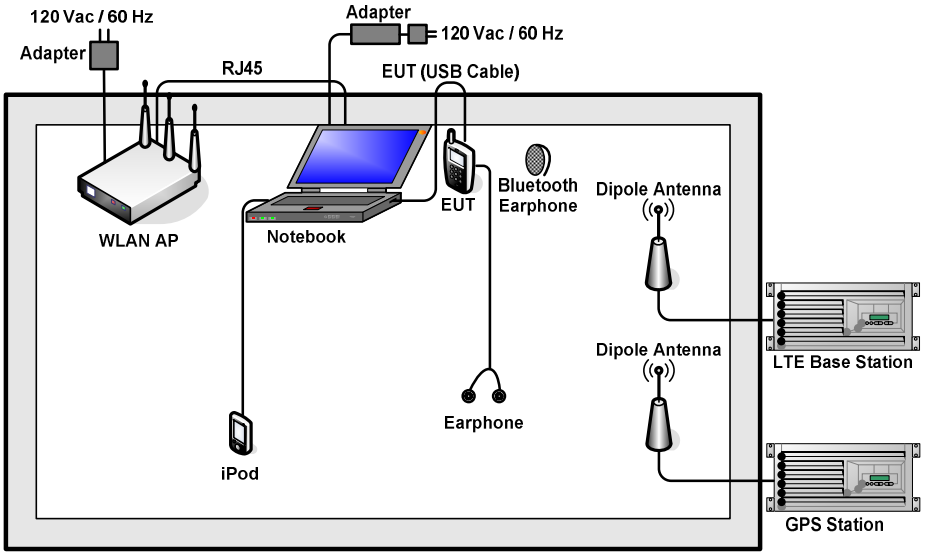
2.2. Connection Diagram of Test System



<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
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	D-Link	DIR-855	KA2DIR855A2	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.	Notebook	Dell	Latiitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
10.	SD Card	Kingston	4GB	N/A	N/A	N/A
11.	SD Card	Kingston	SD4 8GB	N/A	N/A	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 GSM or WCDMA or LTE idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Notebook and EUT via USB cable.
2. 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.

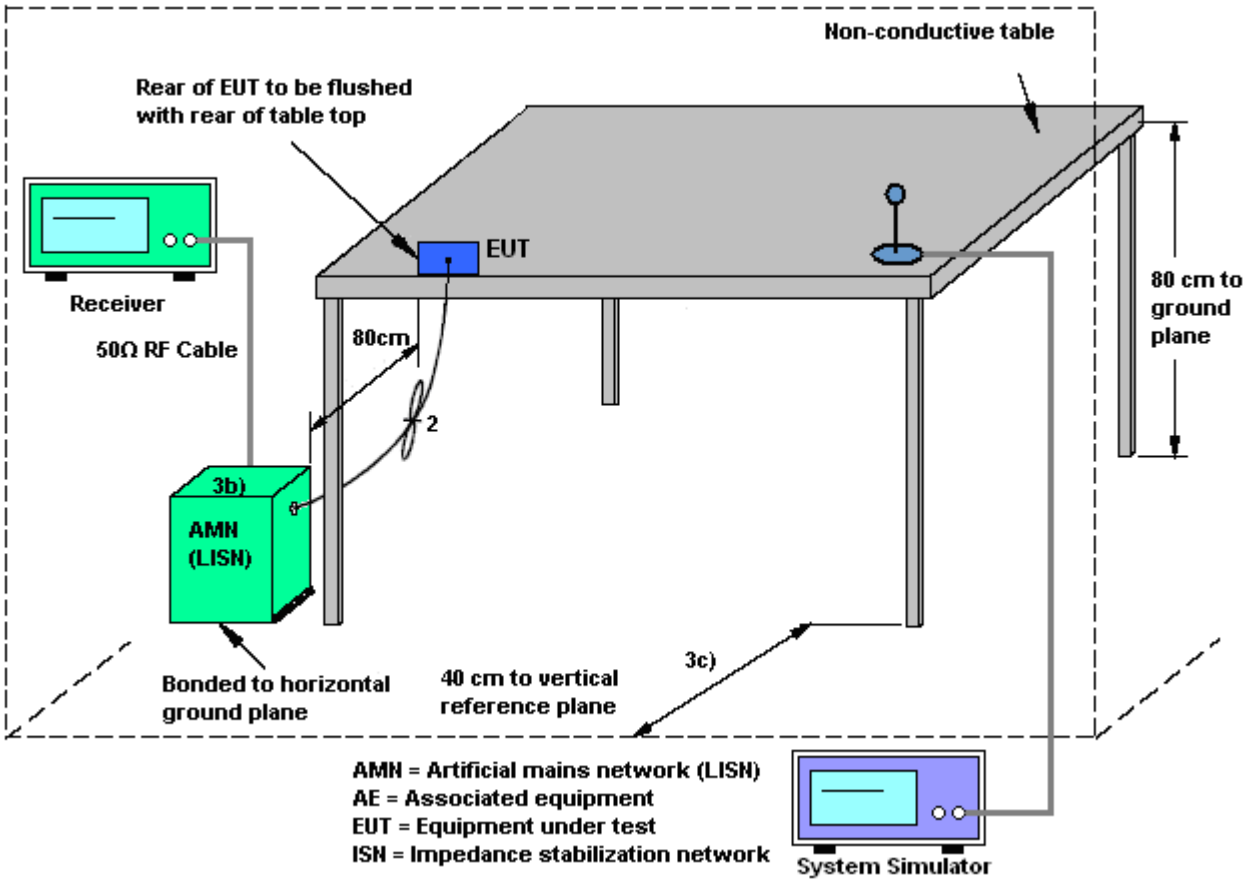
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

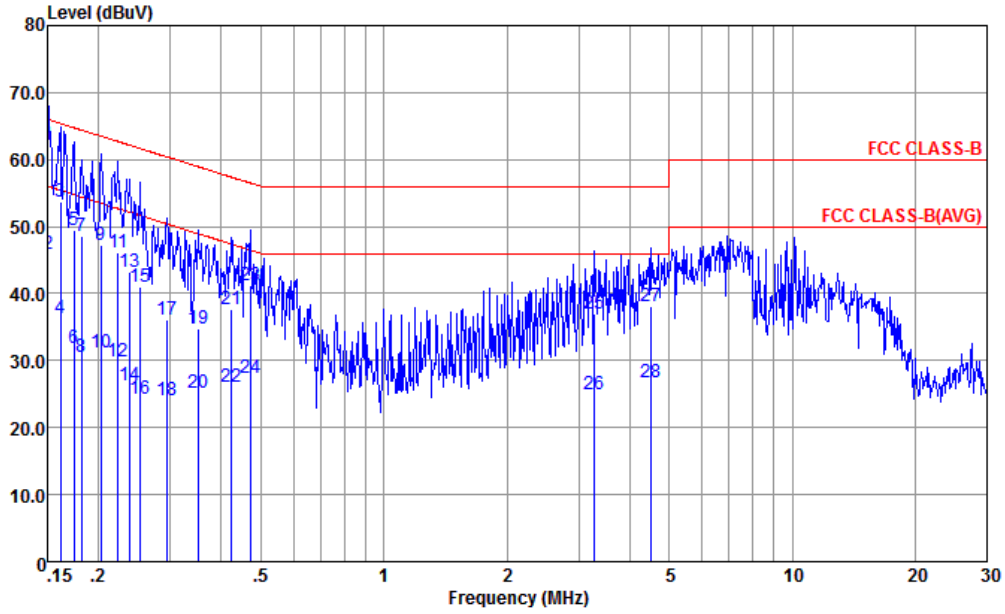
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

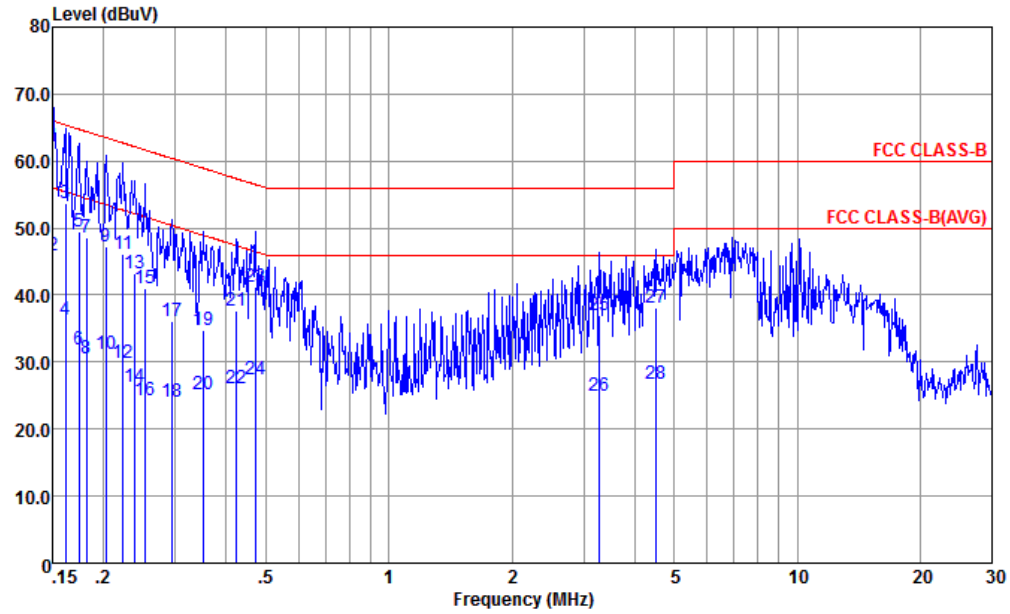
Test Mode :	Mode 1	**Temperature :**	20~22℃
Test Engineer :	Morris Li	**Relative Humidity :**	42~44%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692805
mode : Mode 1
IMEI : 990006860007516
: #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	*	0.150	62.12	-3.88	66.00	51.20	0.53	10.39	QP
2		0.150	45.82	-10.18	56.00	34.90	0.53	10.39	Average
3		0.162	53.73	-11.65	65.38	42.90	0.45	10.38	QP
4		0.162	36.43	-18.95	55.38	25.60	0.45	10.38	Average
5		0.174	49.53	-15.24	64.77	38.80	0.37	10.36	QP
6		0.174	31.93	-22.84	54.77	21.20	0.37	10.36	Average
7		0.182	48.48	-15.94	64.42	37.80	0.33	10.35	QP
8		0.182	30.58	-23.84	54.42	19.90	0.33	10.35	Average
9		0.203	47.35	-16.14	63.49	36.80	0.22	10.33	QP
10		0.203	31.25	-22.24	53.49	20.70	0.22	10.33	Average
11		0.223	46.13	-16.57	62.70	35.60	0.22	10.31	QP
12		0.223	29.83	-22.87	52.70	19.30	0.22	10.31	Average
13		0.239	43.12	-19.01	62.13	32.60	0.22	10.30	QP
14		0.239	26.32	-25.81	52.13	15.80	0.22	10.30	Average
15		0.252	41.11	-20.58	61.69	30.60	0.22	10.29	QP
16		0.252	24.31	-27.38	51.69	13.80	0.22	10.29	Average

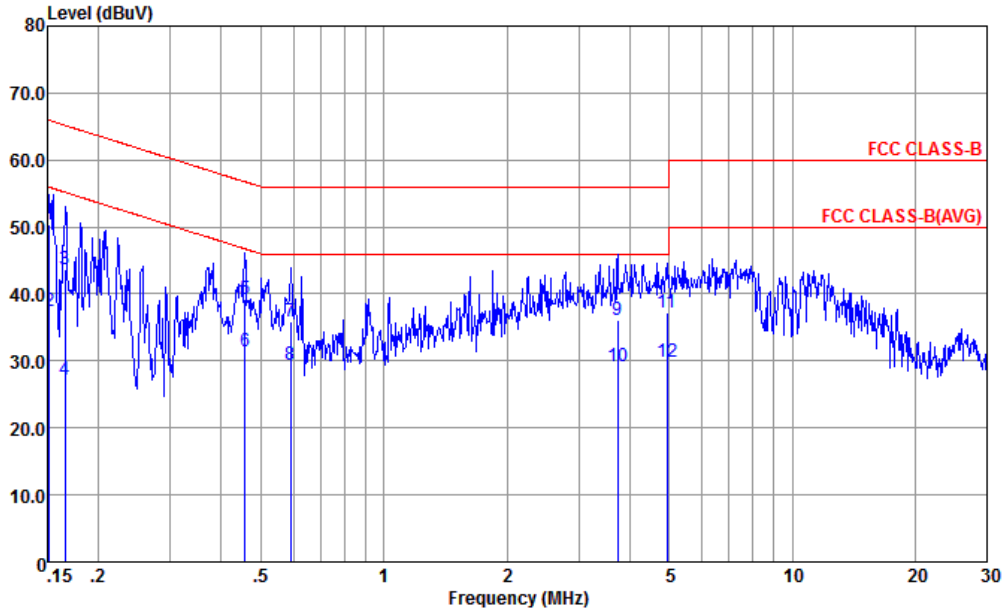
Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692805
mode : Mode 1
IMEI : 990006860007516
: #6

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
17	0.294	36.18	-24.23	60.41	25.70	0.22	10.26	QP
18	0.294	23.98	-26.43	50.41	13.50	0.22	10.26	Average
19	0.350	34.85	-24.11	58.96	24.40	0.23	10.22	QP
20	0.350	25.15	-23.81	48.96	14.70	0.23	10.22	Average
21	0.424	37.62	-19.75	57.37	27.19	0.23	10.20	QP
22	0.424	26.02	-21.35	47.37	15.59	0.23	10.20	Average
23	0.471	41.32	-15.17	56.49	30.90	0.23	10.19	QP
24	0.471	27.32	-19.17	46.49	16.90	0.23	10.19	Average
25	3.276	37.01	-18.99	56.00	26.60	0.19	10.22	QP
26	3.276	24.91	-21.09	46.00	14.50	0.19	10.22	Average
27	4.525	38.03	-17.97	56.00	27.60	0.19	10.24	QP
28	4.525	26.83	-19.17	46.00	16.40	0.19	10.24	Average

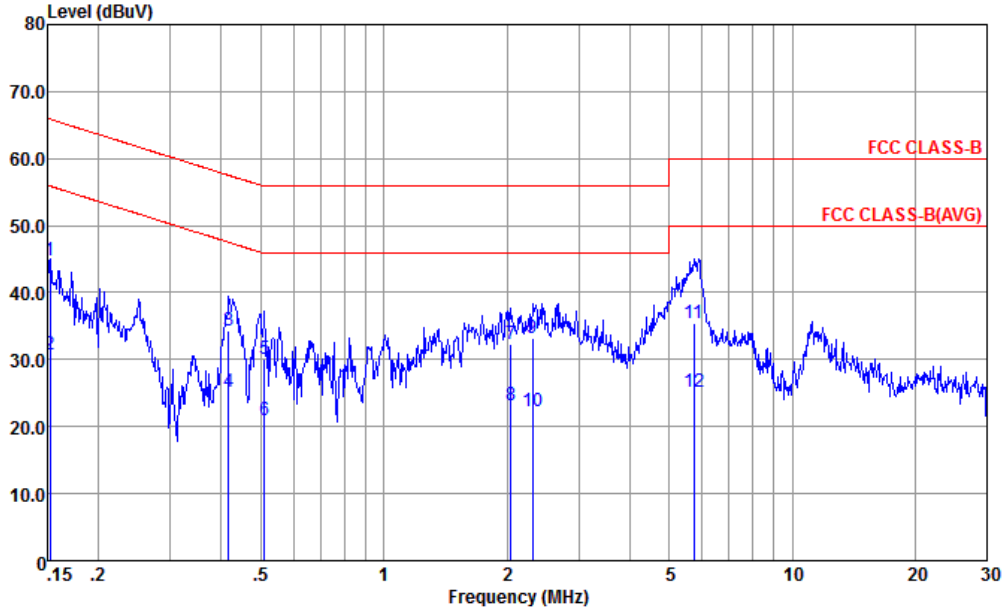
Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Rear)		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 692805
mode : Mode 1
IMEI : 990006860007516
: #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.152	50.29	-15.62	65.91	39.60	0.30	10.39	QP
2		0.152	37.49	-18.42	55.91	26.80	0.30	10.39	Average
3		0.166	43.58	-21.58	65.16	32.91	0.30	10.37	QP
4		0.166	27.18	-27.98	55.16	16.51	0.30	10.37	Average
5		0.456	39.21	-17.55	56.76	28.70	0.32	10.19	QP
6	*	0.456	31.41	-15.35	46.76	20.90	0.32	10.19	Average
7		0.592	35.81	-20.19	56.00	25.30	0.33	10.18	QP
8		0.592	29.41	-16.59	46.00	18.90	0.33	10.18	Average
9		3.740	36.20	-19.80	56.00	25.60	0.37	10.23	QP
10		3.740	29.10	-16.90	46.00	18.50	0.37	10.23	Average
11		4.926	37.30	-18.70	56.00	26.70	0.36	10.24	QP
12		4.926	29.90	-16.10	46.00	19.30	0.36	10.24	Average

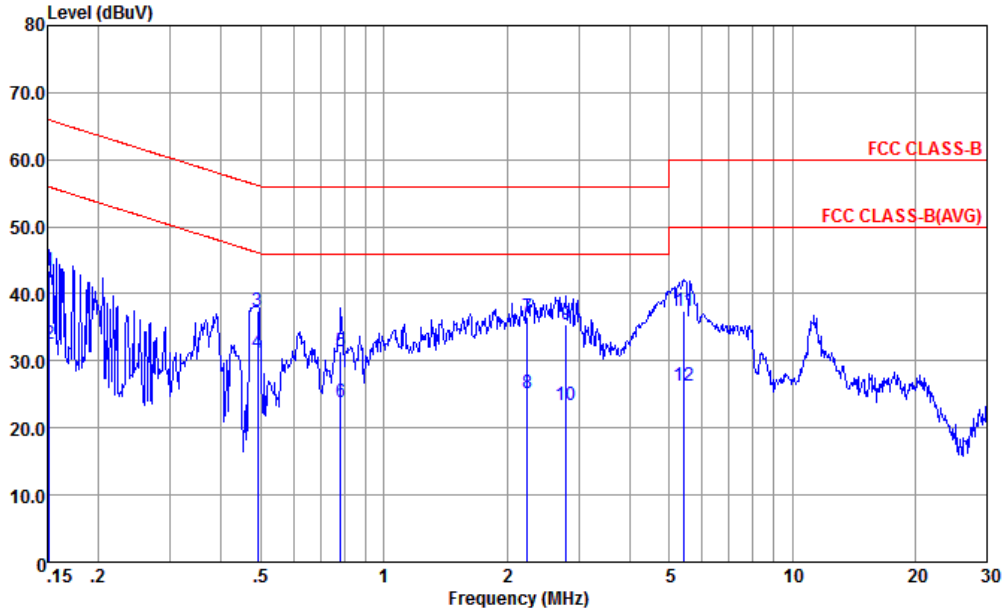
Test Mode :	Mode 5	Temperature :	20~22℃
Test Engineer :	Morris Li	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(5G)Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 692805
mode : Mode 5
IMEI : 990006860007516
: #6

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 *	0.152	44.80	-21.07	65.87	33.90	0.51	10.39	QP
2	0.152	30.70	-25.17	55.87	19.80	0.51	10.39	Average
3	0.417	34.32	-23.19	57.51	23.89	0.23	10.20	QP
4	0.417	25.22	-22.29	47.51	14.79	0.23	10.20	Average
5	0.510	30.12	-25.88	56.00	19.70	0.23	10.19	QP
6	0.510	20.92	-25.08	46.00	10.50	0.23	10.19	Average
7	2.044	32.27	-23.73	56.00	21.90	0.18	10.19	QP
8	2.044	23.17	-22.83	46.00	12.80	0.18	10.19	Average
9	2.309	33.18	-22.82	56.00	22.80	0.18	10.20	QP
10	2.309	22.28	-23.72	46.00	11.90	0.18	10.20	Average
11	5.744	35.36	-24.64	60.00	24.89	0.21	10.26	QP
12	5.744	25.16	-24.84	50.00	14.69	0.21	10.26	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 2 Idle + Bluetooth Idle + WLAN(5G)Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 692805
mode : Mode 5
IMEI : 990006860007516
: #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.152	43.49	-22.42	65.91	32.80	0.30	10.39	QP
2		0.152	32.59	-23.32	55.91	21.90	0.30	10.39	Average
3		0.491	37.41	-18.73	56.14	26.90	0.32	10.19	QP
4	*	0.491	31.31	-14.83	46.14	20.80	0.32	10.19	Average
5		0.783	31.42	-24.58	56.00	20.90	0.35	10.17	QP
6		0.783	23.92	-22.08	46.00	13.40	0.35	10.17	Average
7		2.249	36.47	-19.53	56.00	25.89	0.38	10.20	QP
8		2.249	25.27	-20.73	46.00	14.69	0.38	10.20	Average
9		2.794	35.49	-20.51	56.00	24.91	0.37	10.21	QP
10		2.794	23.39	-22.61	46.00	12.81	0.37	10.21	Average
11		5.447	37.39	-22.61	60.00	26.80	0.34	10.25	QP
12		5.447	26.29	-23.71	50.00	15.70	0.34	10.25	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

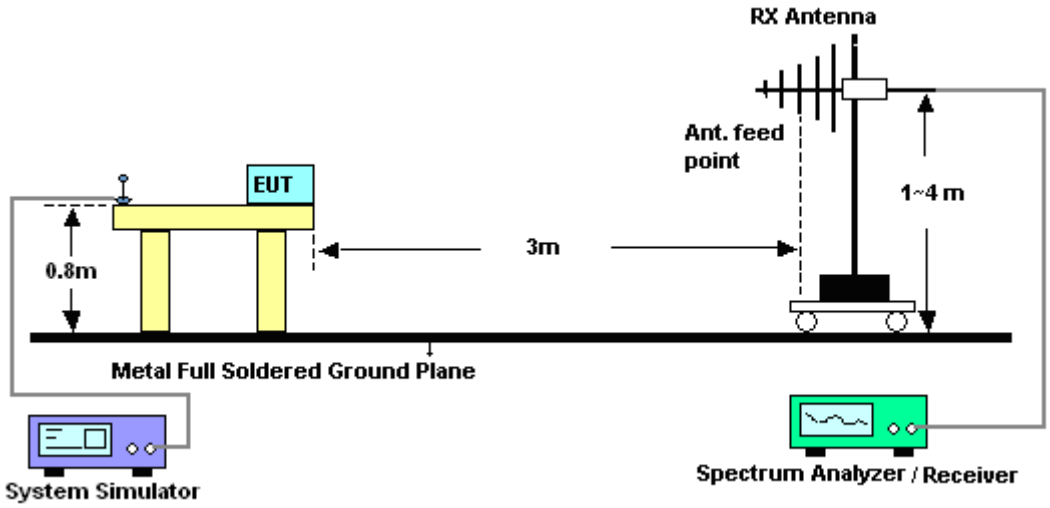
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

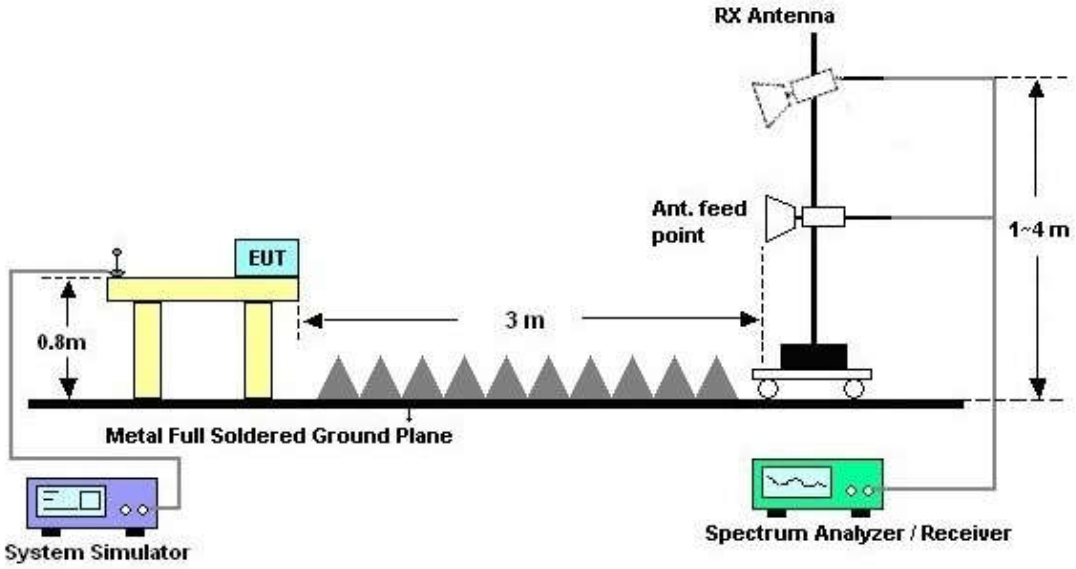
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

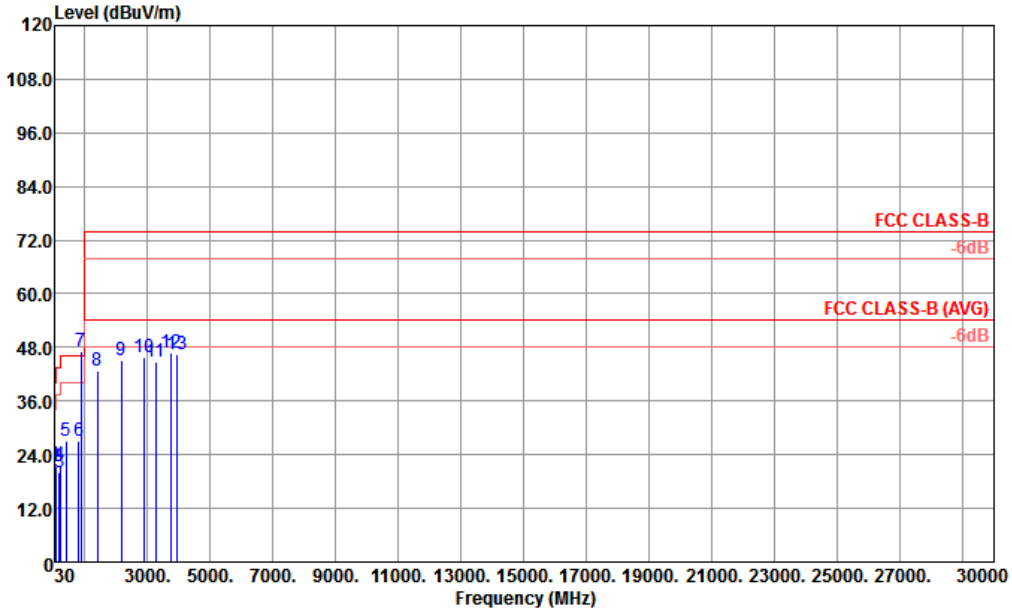


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

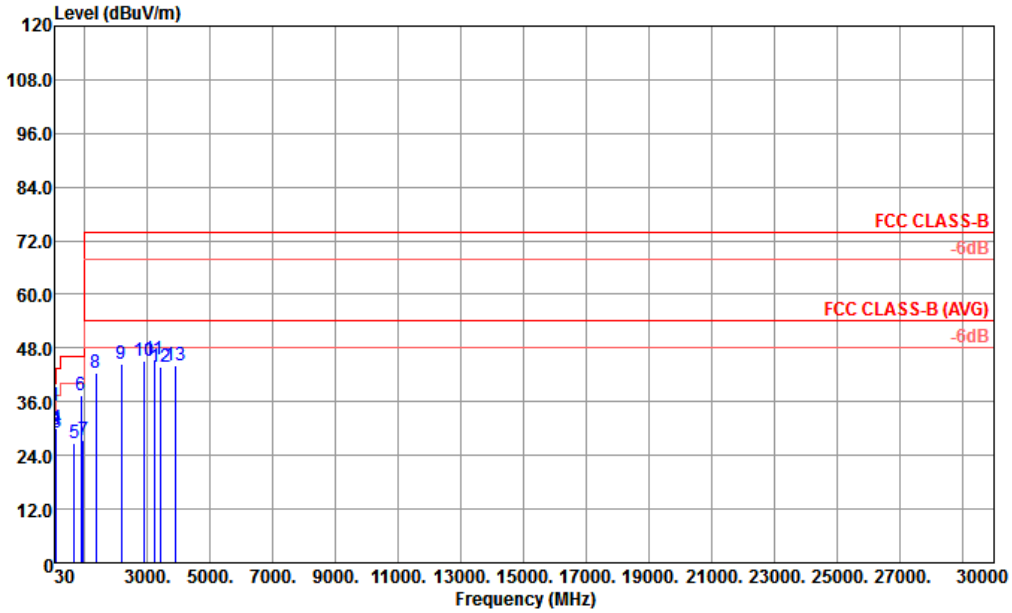
Test Mode :	Mode 3	**Temperature :**	21~22°C
Test Engineer :	Carl Ni	**Relative Humidity :**	41~42%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4		
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT HORIZONTAL
Project : (FC)692805
Mode : 3
IMEI : 990006860007516/01 #6

		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	21.74	-18.26	40.00	28.80	24.55	0.12	31.73	100	162	Peak
2		76.98	21.41	-18.59	40.00	38.57	14.38	0.19	31.73	---	---	Peak
3		179.04	20.18	-23.32	43.50	35.31	16.27	0.38	31.78	---	---	Peak
4		199.56	21.58	-21.92	43.50	36.71	15.39	0.41	30.93	---	---	Peak
5		405.00	26.93	-19.07	46.00	31.23	25.22	0.93	30.45	---	---	Peak
6		808.90	27.16	-18.84	46.00	26.73	26.71	1.45	27.73	---	---	Peak
7	*	879.60	47.26			45.29	27.44	1.57	27.04	---	---	Peak
8		1390.00	42.72	-31.28	74.00	46.95	28.58	3.35	36.16	---	---	Peak
9		2166.00	45.04	-28.96	74.00	42.67	31.08	5.65	34.36	---	---	Peak
10		2896.00	45.71	-28.29	74.00	38.57	32.35	2.90	28.11	---	---	Peak
11		3258.00	44.77	-29.23	74.00	36.31	33.49	6.02	31.05	---	---	Peak
12		3750.00	46.78	-27.22	74.00	37.33	34.50	6.44	31.49	---	---	Peak
13		3954.00	46.40	-27.60	74.00	37.05	34.79	6.25	31.69	---	---	Peak

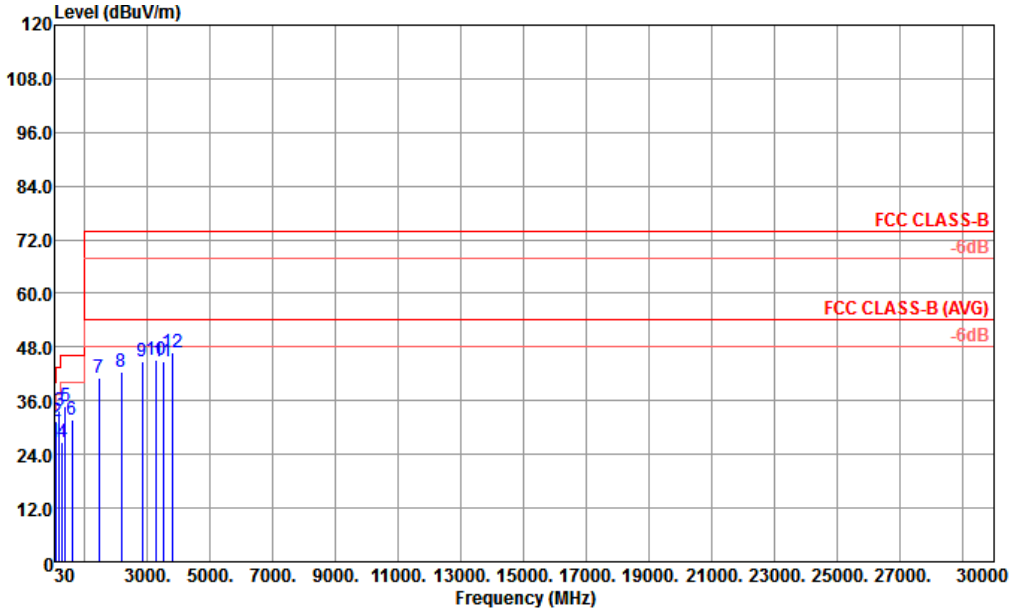
Test Mode :	Mode 3	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band V Idle + Bluetooth Idle + WLAN(2.4G)Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4		
Remark :	#6 is system simulator signal which can be ignored.		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT VERTICAL
Project : (FC)692805
Mode : 3
IMEI : 990006860007516/01 #6

	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	30.54	35.23	-4.77	40.00	41.32	25.55	0.11	31.75	100	153	Peak
2	40.80	29.74	-10.26	40.00	39.95	21.50	0.13	31.84	---	---	Peak
3	81.03	28.95	-11.05	40.00	45.12	15.33	0.20	31.70	---	---	Peak
4	88.59	30.20	-13.30	43.50	44.89	16.75	0.21	31.65	---	---	Peak
5	650.00	26.76	-19.24	46.00	29.21	25.19	1.02	28.66	---	---	Peak
6	881.70	37.45			35.44	27.45	1.59	27.03	---	---	Peak
7	948.20	27.51	-18.49	46.00	23.93	28.37	1.71	26.50	---	---	Peak
8	1350.00	42.35	-31.65	74.00	46.75	28.52	3.34	36.26	---	---	Peak
9	2172.00	44.55	-29.45	74.00	42.18	31.08	5.65	34.36	---	---	Peak
10	2912.00	44.98	-29.02	74.00	37.96	32.35	2.95	28.28	---	---	Peak
11	3216.00	45.29	-28.71	74.00	36.96	33.42	6.05	31.14	---	---	Peak
12	3426.00	43.72	-30.28	74.00	35.04	33.70	5.94	30.96	---	---	Peak
13	3882.00	44.28	-29.72	74.00	34.70	34.69	6.50	31.61	---	---	Peak

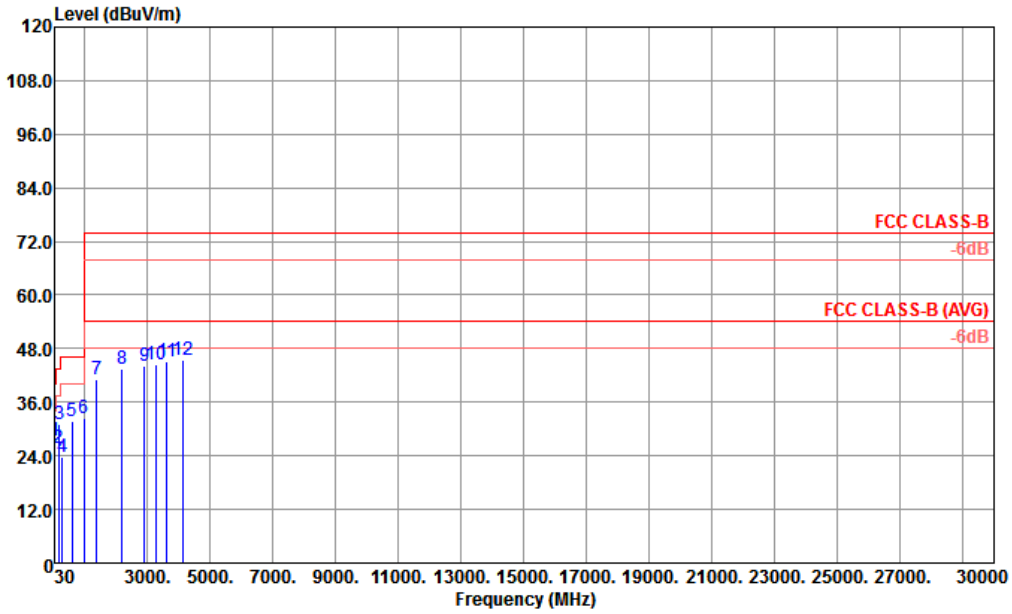
Test Mode :	Mode 5	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	LTE Band 2 Idle + Bluetooth Idle + WLAN(5G)Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT HORIZONTAL
Project : (FC)692805
Mode : 5
IMEI : 990006860007516/01 #6

	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	44.58	26.79	-13.21	40.00	38.65	19.90	0.13	31.89	---	---	Peak
2	87.90	31.38	-8.62	40.00	46.07	16.75	0.21	31.65	100	0	Peak
3	194.70	33.90	-9.60	43.50	49.09	15.53	0.40	31.12	---	---	Peak
4	283.80	26.72	-19.28	46.00	39.50	17.66	0.56	31.00	---	---	Peak
5	368.60	34.79	-11.21	46.00	42.41	22.13	0.80	30.55	---	---	Peak
6	598.20	31.84	-14.16	46.00	35.52	24.33	0.90	28.91	---	---	Peak
7	1442.00	41.07	-32.93	74.00	44.96	28.66	3.53	36.08	---	---	Peak
8	2170.00	42.53	-31.47	74.00	40.16	31.08	5.65	34.36	---	---	Peak
9	2822.00	44.69	-29.31	74.00	37.41	32.14	2.76	27.62	---	---	Peak
10	3264.00	45.05	-28.95	74.00	36.59	33.49	6.02	31.05	---	---	Peak
11	3495.00	44.66	-29.34	74.00	35.87	33.78	6.00	30.99	---	---	Peak
12	3783.00	46.91	-27.09	74.00	37.36	34.55	6.51	31.51	---	---	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 2 Idle + Bluetooth Idle + WLAN(5G)Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx		




```
Site                : 03CH02-KS
Condition           : FCC CLASS-B 3m 966-02 LF ANT VERTICAL
Project             : (FC)692805
Mode                : 5
IMEI                : 990006860007516/01  #6
```

	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	44.31	27.50	-12.50	40.00	39.36	19.90	0.13	31.89	100	200	Peak
2	161.76	25.73	-17.77	43.50	39.77	17.08	0.34	31.46	---	---	Peak
3	196.05	30.94	-12.56	43.50	46.14	15.48	0.41	31.09	---	---	Peak
4	283.80	23.83	-22.17	46.00	36.61	17.66	0.56	31.00	---	---	Peak
5	597.50	31.77	-14.23	46.00	35.47	24.32	0.90	28.92	---	---	Peak
6	964.30	32.55	-21.45	54.00	28.37	28.76	1.77	26.35	---	---	Peak
7	1378.00	41.00	-33.00	74.00	45.26	28.55	3.35	36.16	---	---	Peak
8	2188.00	43.40	-30.60	74.00	40.77	31.14	5.80	34.31	---	---	Peak
9	2892.00	44.24	-29.76	74.00	37.14	32.31	2.90	28.11	---	---	Peak
10	3282.00	44.54	-29.46	74.00	36.07	33.51	6.01	31.05	---	---	Peak
11	3612.00	45.27	-28.73	74.00	36.20	33.97	6.14	31.04	---	---	Peak
12	4110.00	45.46	-28.54	74.00	35.91	35.00	6.39	31.84	---	---	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	Dec. 19, 2016	Apr. 28, 2017	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Dec. 19, 2016	Oct. 12, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Dec. 19, 2016	Oct. 12, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Dec. 19, 2016	Oct. 12, 2017	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 09, 2016	Dec. 15, 2016	Aug. 08, 2017	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz, MAX 30dB	Apr. 22, 2016	Dec. 15, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz~2GHz	Aug. 20, 2016	Dec. 15, 2016	Aug. 19, 2017	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Dec. 15, 2016	Oct. 21, 2017	Radiation (03CH02-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Mar. 03, 2016	Dec. 15, 2016	Mar. 02, 2017	Radiation (03CH01-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Jan. 20, 2016	Dec. 15, 2016	Jan.19, 2017	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz~1000MHz / 32 dB	Apr. 22, 2016	Dec. 15, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 13, 2016	Dec. 15, 2016	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Dec. 15, 2016	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Dec. 15, 2016	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Dec. 15, 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 (1 GHz ~ 18 GHz)

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1dB