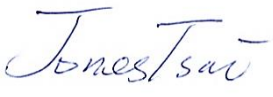
FCC Test Report

APPLICANT	:	BLU Products, Inc.
EQUIPMENT	:	Mobile phone
BRAND NAME	:	BLU
MODEL NAME	:	S1, VIVO S
MARKETING NAME	:	BLU S1
FCC ID	:	YHLBLUS1
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Jun. 13, 2017 and testing was completed on Jun. 21, 2017. We, SPORTON International (ShenZhen) 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 (ShenZhen) INC., the test report shall not be reproduced except in full.

Prepared by: Eric Shih / Manager



Approved by: Jones Tsai / Manager

Testing Laboratory
2353

SPORTON International (ShenZhen) INC.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan District, Shenzhen City, Guangdong Province, China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC761305	Rev. 01	Initial issue of report	Jul. 12, 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 9.70 dB at 0.550 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 5.14 dB at 34.590 MHz

1. General Description

1.1. Applicant

BLU Products, Inc.
10814 NW 33rd St # 100 Doral, FL 33172

1.2. Manufacturer

BLU Products, Inc.
10814 NW 33rd St # 100 Doral, FL 33172

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile phone
Brand Name	BLU
Model Name	S1, VIVO S
Marketing Name	BLU S1
FCC ID	YHLBLUS1
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/GPRS WCDMA/HSPA/DC-HSDPA/HSPA+/LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 Bluetooth v3.0+EDR/ Bluetooth v4.1LE
IMEI/MEID Code	Conduction: 990010370000227/99001037000022 Radiation: 990010370000128
HW Version	S01
SW Version	BLU_S0330WW_V7.0.01.00_GENERIC
EUT Stage	Pre-Production

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 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 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 LTE Band 26 : 814.7MHz ~ 848.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz 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	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 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 26 : 859.7MHz ~ 893.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz 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)
Antenna Type	WWAN : Loop Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GPS/Glonass: PIFA 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)

	DC-HSDPA: 64QAM HSPA+ : 16QAM LTE: QPSK / 16QAM / 64QAM (Downlink only) 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

1.5. Modification of EUT

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

1.6. Test Location

Test Site	SPORTON International (ShenZhen) INC.	
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan District, Shenzhen City, Guangdong Province, China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595	
Test Site No.	**Sporton Site No.**	
	CO01-SZ	

Test Site	SPORTON International (ShenZhen) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	**Sporton Site No.**	**FCC Registration No.**
	03CH03-SZ	565805

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

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

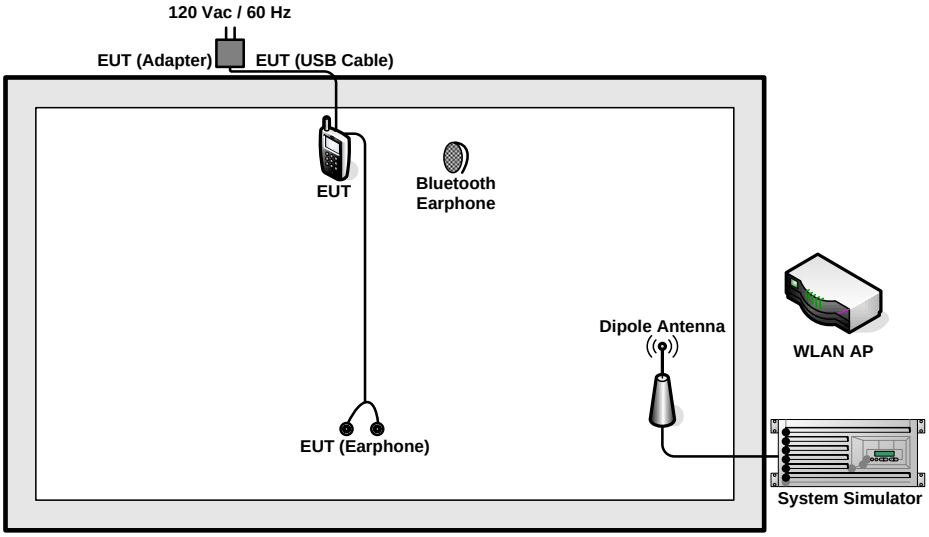
Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Camera(Rear) <Fig. 1> Mode 2: GSM 1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Camera(Front) <Fig. 1> Mode 3: WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4 <Fig. 1> Mode 4: LTE Band 2 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Glonass Rx <Fig. 2> Mode 5: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx <Fig. 3>
Radiated Emissions < 1GHz	Mode 1: GSM 850 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Camera(Rear) <Fig. 1> Mode 2: GSM 1900 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Camera(Front) <Fig. 1> Mode 3: WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4 <Fig. 1> Mode 4: LTE Band 2 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + Glonass Rx <Fig. 2> Mode 5: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx <Fig. 3>
Radiated Emissions ≥ 1GHz	Mode 1: WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4 <Fig. 1> Mode 2: LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx <Fig. 3>

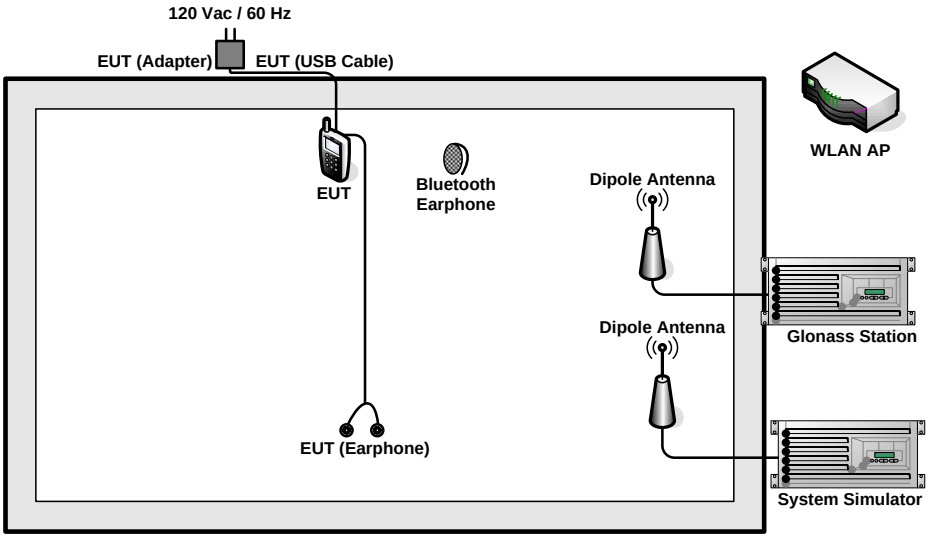
Remark:

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

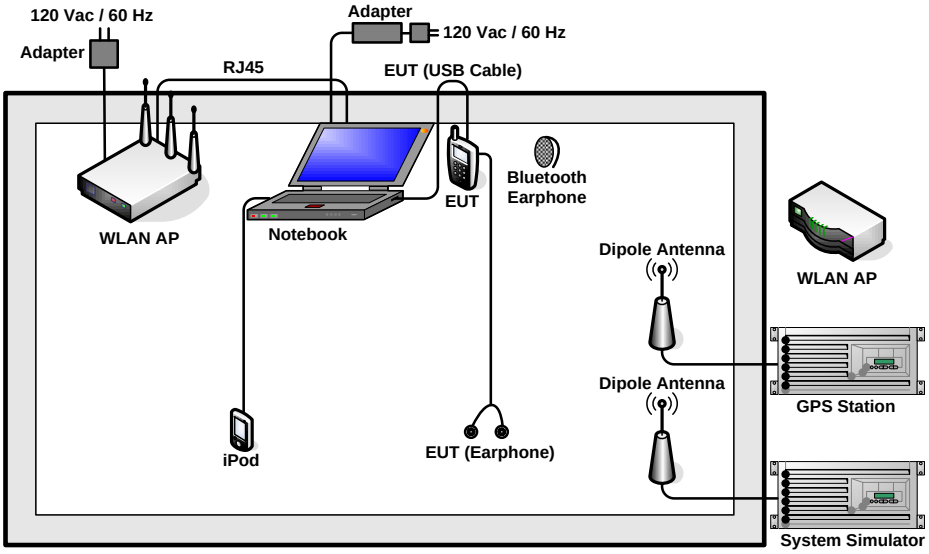
2.2. Connection Diagram of Test System



<Fig. 1>



<Fig. 2>


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

<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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	ADIVIE	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	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
6.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
7.	Bluetooth Earphone	Samsung	HS3000	A3LHS3000	N/A	N/A
8.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
9.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
10.	Notebook	Lenovo	E450	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
11.	iPod	Apple	MC525 ZP/A	DoC	Unshielded, 1.2 m	N/A
12.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2m	N/A
13.	SD Card	Kingston	MicroSD HC	FCC DoC	N/A	N/A
14.	SD Card	N/A	MicroSD HC	FCC DoC	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 Laptop and EUT via USB cable.
2. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.
3. Execute "Glonass Test" to make the EUT receive continuous signals from Glonass station
4. Execute "Video player" to play MPEG4 files.
5. 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.

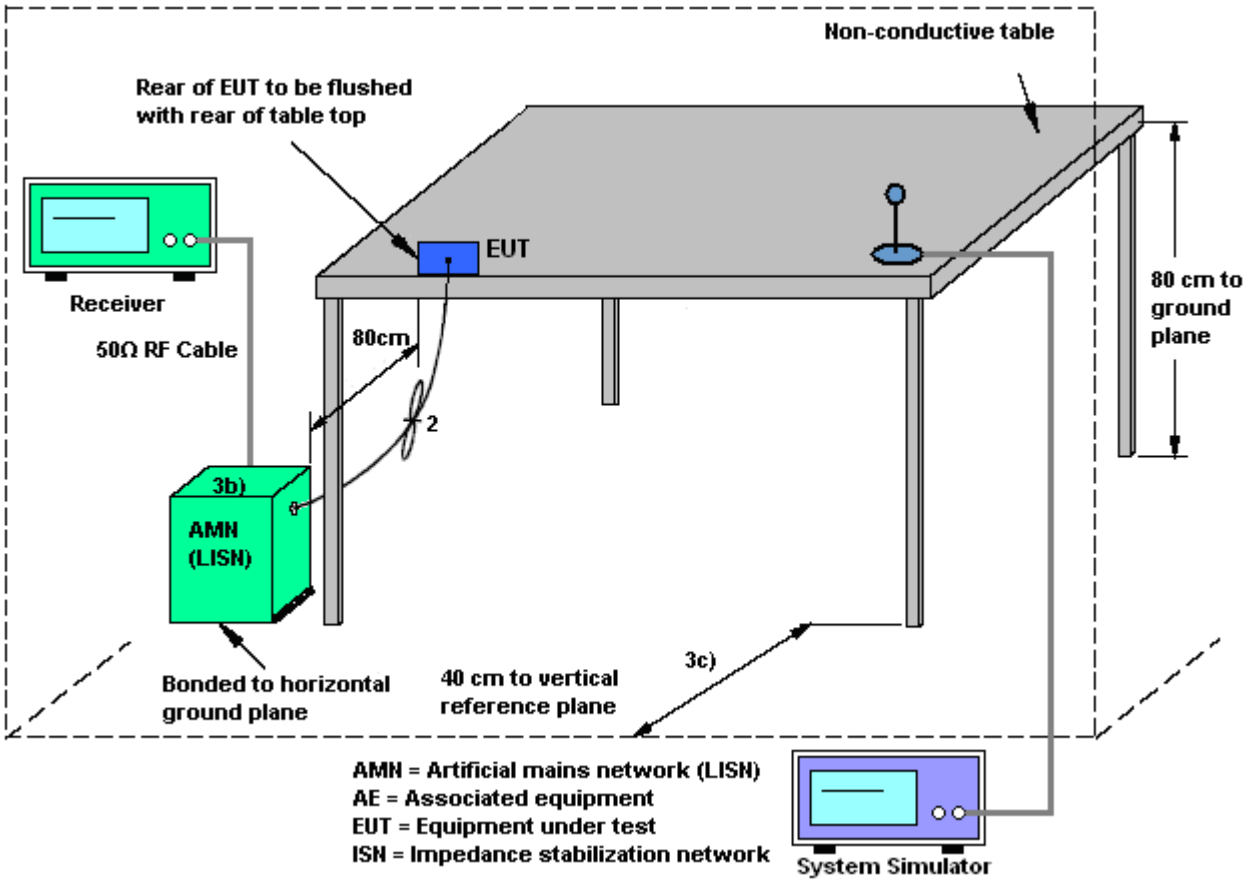
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

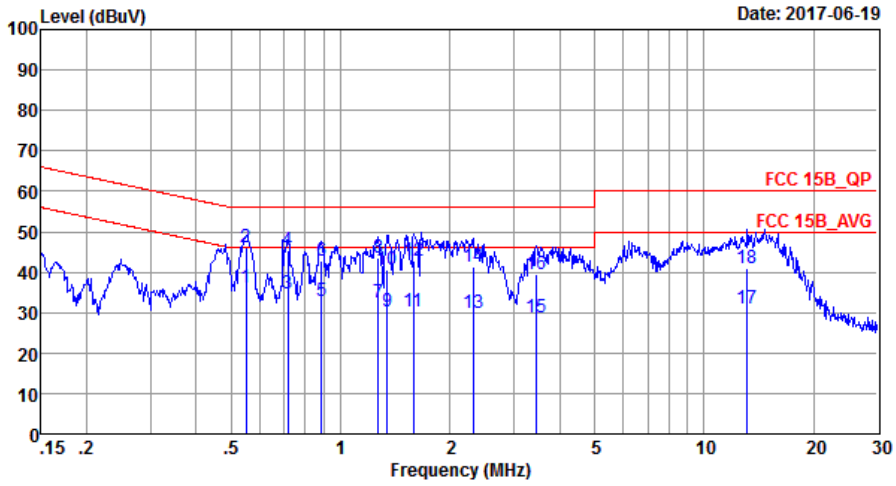
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

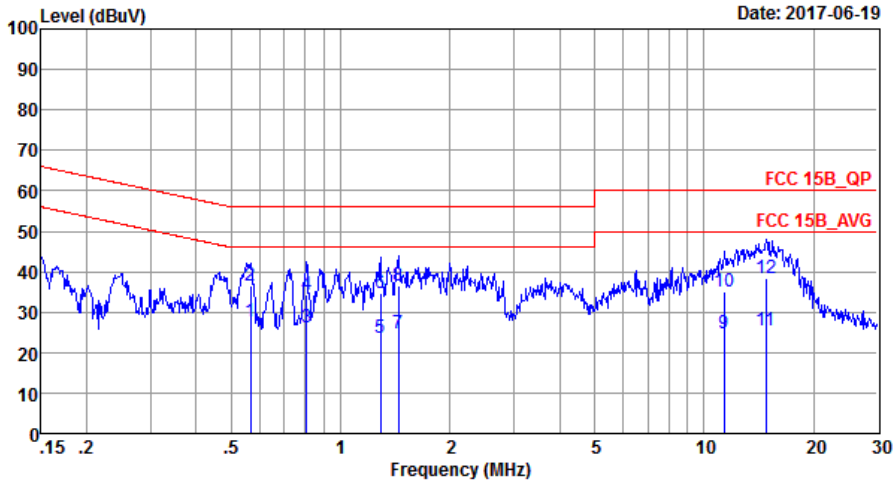
Test Mode :	Mode 3	Temperature :	22~25℃
Test Engineer :	HaoHai YE	Relative Humidity :	50~ 60%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4		



Site : CO01-SZ
Condition: FCC 15B_QP LISN_20170301_L LINE
Project : (FC)761305
Mode : Mode 3
IMEI : 990010370000227/9900037000022

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	*	0.55	36.30	-9.70	46.00	26.10	0.02	10.18	Average
2		0.55	46.10	-9.90	56.00	35.90	0.02	10.18	QP
3		0.72	34.69	-11.31	46.00	24.51	0.02	10.16	Average
4		0.72	45.39	-10.61	56.00	35.21	0.02	10.16	QP
5		0.88	32.91	-13.09	46.00	22.70	0.05	10.16	Average
6		0.88	42.81	-13.19	56.00	32.60	0.05	10.16	QP
7		1.27	32.64	-13.36	46.00	22.41	0.08	10.15	Average
8		1.27	43.44	-12.56	56.00	33.21	0.08	10.15	QP
9		1.34	30.34	-15.66	46.00	20.10	0.09	10.15	Average
10		1.34	40.44	-15.56	56.00	30.20	0.09	10.15	QP
11		1.59	30.35	-15.65	46.00	20.09	0.10	10.16	Average
12		1.59	42.65	-13.35	56.00	32.39	0.10	10.16	QP
13		2.32	29.71	-16.29	46.00	19.40	0.13	10.18	Average
14		2.32	41.31	-14.69	56.00	31.00	0.13	10.18	QP
15		3.45	28.80	-17.20	46.00	18.40	0.17	10.23	Average
16		3.45	39.50	-16.50	56.00	29.10	0.17	10.23	QP
17		13.13	30.89	-19.11	50.00	20.10	0.46	10.33	Average
18		13.13	40.79	-19.21	60.00	30.00	0.46	10.33	QP

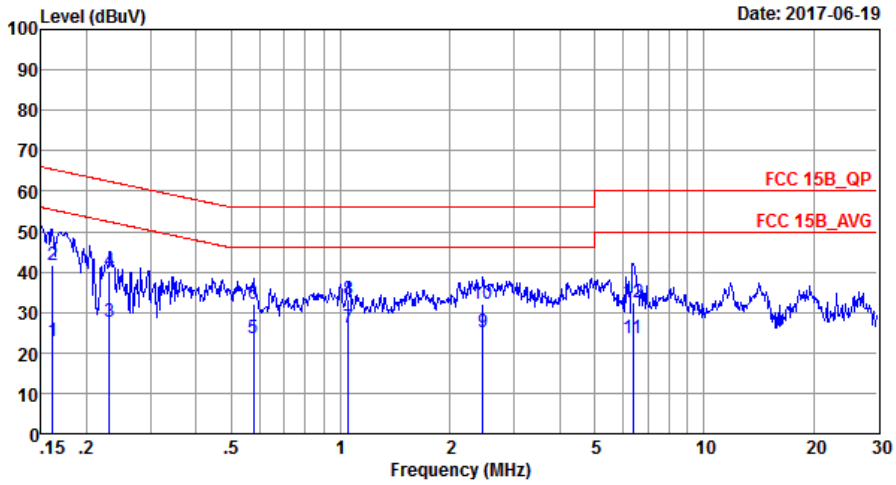
Test Mode :	Mode 3	**Temperature :**	22~25℃
Test Engineer :	HaoHai YE	**Relative Humidity :**	50~ 60%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4		



Site : CO01-SZ
Condition: FCC 15B_QP LISN_20170301_N NEUTRAL
Project : (FC)761305
Mode : Mode 3
IMEI : 990010370000227/9900037000022

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	*	0.56	27.59	-18.41	46.00	17.40	0.02	10.17	Average
2		0.56	36.49	-19.51	56.00	26.30	0.02	10.17	QP
3		0.80	26.09	-19.91	46.00	15.90	0.03	10.16	Average
4		0.80	34.29	-21.71	56.00	24.10	0.03	10.16	QP
5		1.29	23.60	-22.40	46.00	13.40	0.05	10.15	Average
6		1.29	34.80	-21.20	56.00	24.60	0.05	10.15	QP
7		1.44	24.61	-21.39	46.00	14.40	0.05	10.16	Average
8		1.44	36.71	-19.29	56.00	26.50	0.05	10.16	QP
9		11.38	24.76	-25.24	50.00	14.20	0.21	10.35	Average
10		11.38	35.06	-24.94	60.00	24.50	0.21	10.35	QP
11		14.83	25.33	-24.67	50.00	14.70	0.32	10.31	Average
12		14.83	38.23	-21.77	60.00	27.60	0.32	10.31	QP

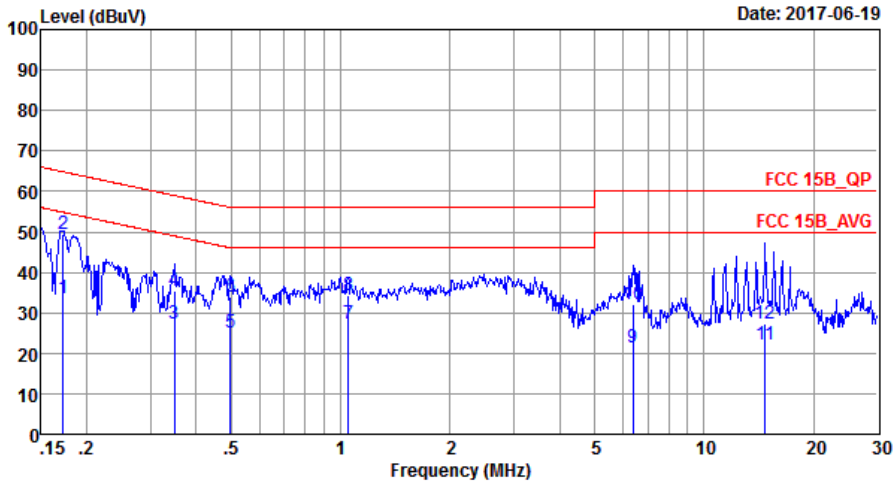
Test Mode :	Mode 5	Temperature :	22~25℃
Test Engineer :	HaoHai YE	Relative Humidity :	50~ 60%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx		



Site : CO01-SZ
Condition: FCC 15B_QP LISN_20170301_L LINE
Project : (FC)761305
Mode : Mode 5
IMEI : 990010370000227/9900037000022

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.16	22.79	-32.59	55.38	12.40	0.03	10.36	Average
2		0.16	41.69	-23.69	65.38	31.30	0.03	10.36	QP
3		0.23	27.65	-24.74	52.39	17.40	0.03	10.22	Average
4		0.23	40.15	-22.24	62.39	29.90	0.03	10.22	QP
5		0.58	23.59	-22.41	46.00	13.40	0.02	10.17	Average
6		0.58	31.99	-24.01	56.00	21.80	0.02	10.17	QP
7	*	1.05	26.32	-19.68	46.00	16.10	0.07	10.15	Average
8		1.05	33.32	-22.68	56.00	23.10	0.07	10.15	QP
9		2.46	24.95	-21.05	46.00	14.62	0.14	10.19	Average
10		2.46	32.12	-23.88	56.00	21.79	0.14	10.19	QP
11		6.39	23.73	-26.27	50.00	13.20	0.22	10.31	Average
12		6.39	32.33	-27.67	60.00	21.80	0.22	10.31	QP

Test Mode :	Mode 5	Temperature :	22~25℃
Test Engineer :	HaoHai YE	Relative Humidity :	50~ 60%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx		



Site : CO01-SZ
Condition: FCC 15B_QP LISN_20170301_N NEUTRAL
Project : (FC)761305
Mode : Mode 5
IMEI : 990010370000227/9900037000022

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.17	33.55	-21.31	54.86	23.20	0.03	10.32	Average
2	*	0.17	49.35	-15.51	64.86	39.00	0.03	10.32	QP
3		0.35	27.43	-21.57	49.00	17.21	0.02	10.20	Average
4		0.35	35.53	-23.47	59.00	25.31	0.02	10.20	QP
5		0.50	25.20	-20.85	46.05	15.00	0.02	10.18	Average
6		0.50	33.90	-22.15	56.05	23.70	0.02	10.18	QP
7		1.05	27.30	-18.70	46.00	17.10	0.05	10.15	Average
8		1.05	34.50	-21.50	56.00	24.30	0.05	10.15	QP
9		6.39	21.38	-28.62	50.00	11.00	0.07	10.31	Average
10		6.39	32.18	-27.82	60.00	21.80	0.07	10.31	QP
11		14.75	22.13	-27.87	50.00	11.50	0.32	10.31	Average
12		14.75	27.33	-32.67	60.00	16.70	0.32	10.31	QP

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

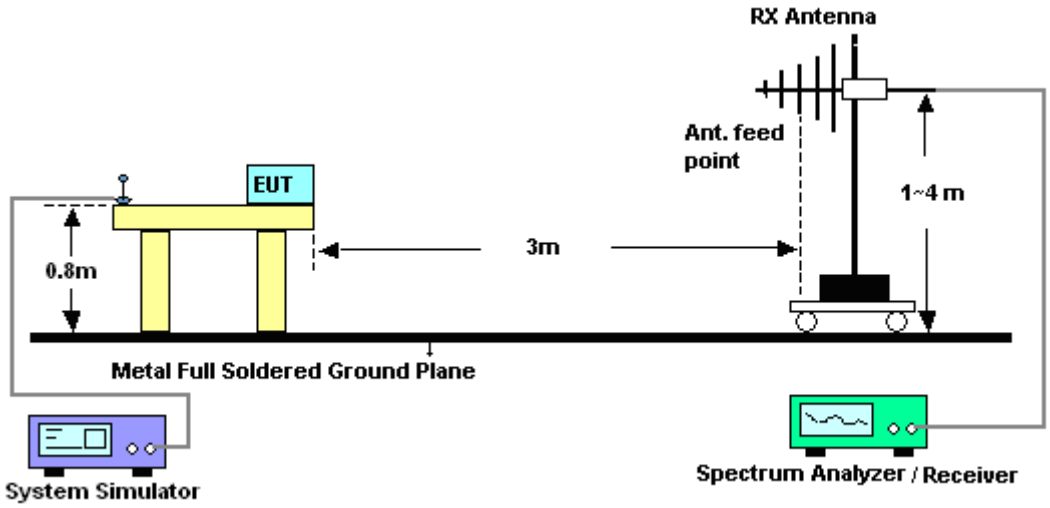
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

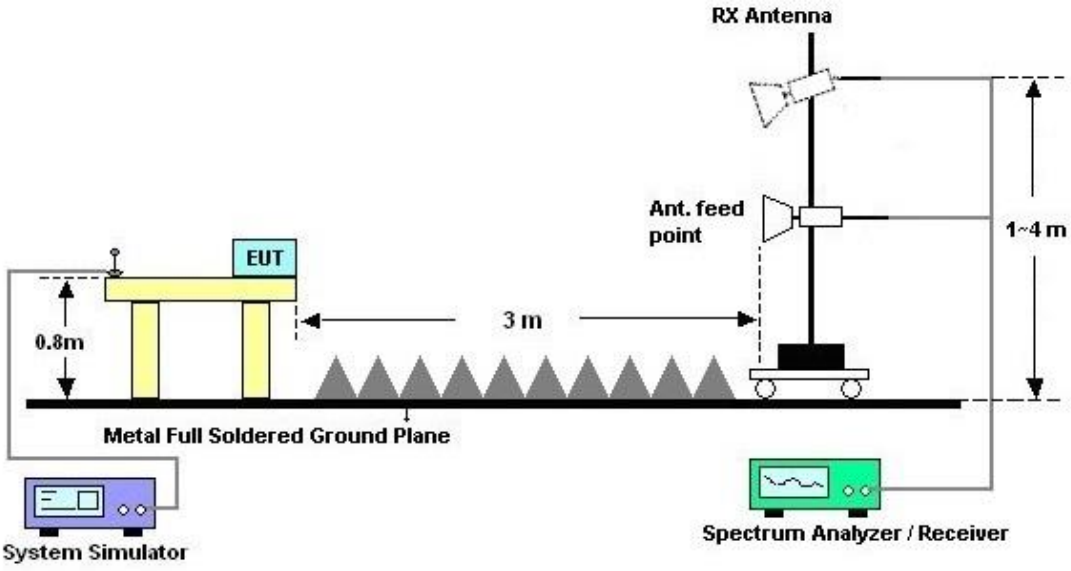
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

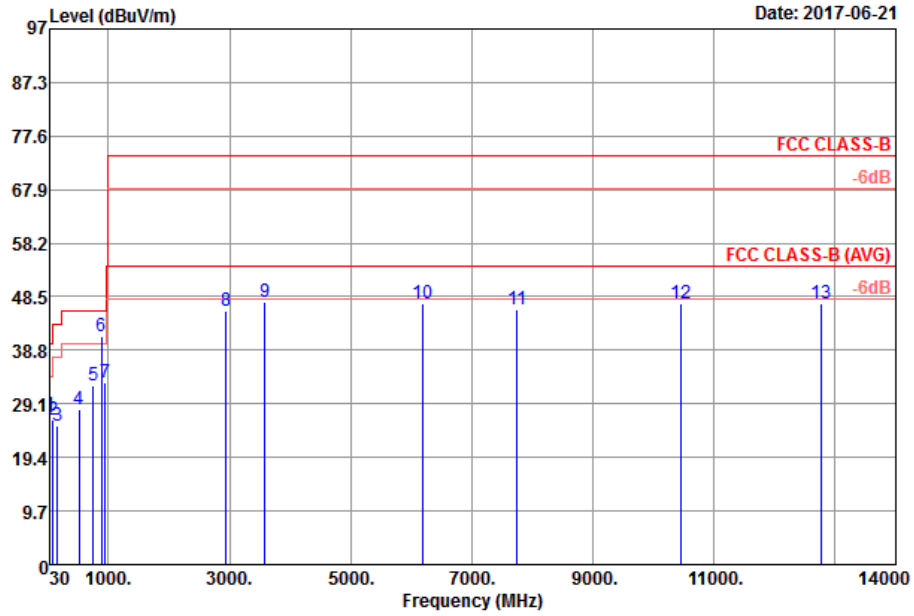


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 3	**Temperature :**	24 ~ 25℃
Test Engineer :	Clear Peng	**Relative Humidity :**	48~ 49%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4		
Remark :	#6 is system simulator signal which can be ignored.		

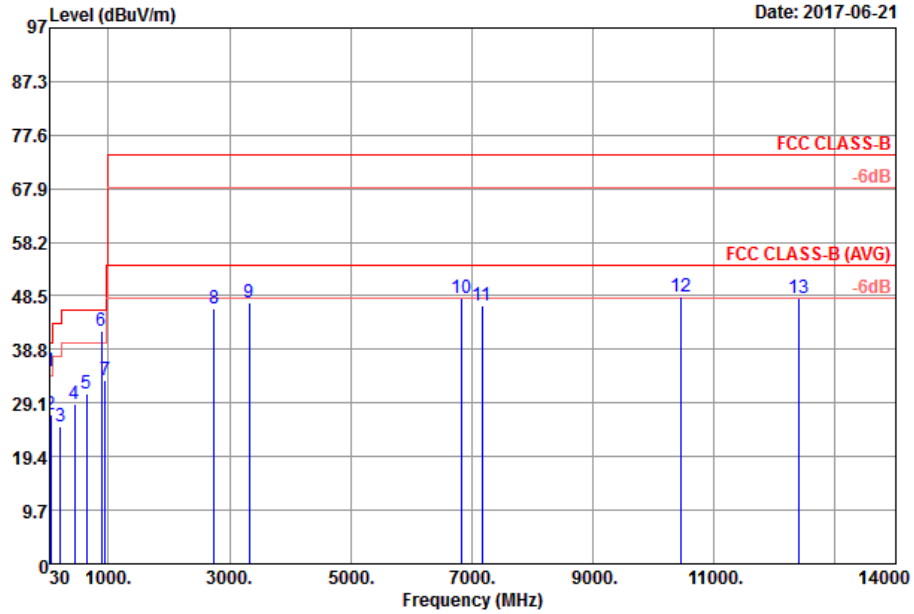


Site : 03CH03-SZ
Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 HORIZONTAL

Mode : Mode 3
IMEI : 990010370000128
Plane : Z

		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	26.96	-13.04	40.00	32.11	26.30	0.25	31.70	150	34	Peak
2		83.46	26.19	-13.81	40.00	40.85	16.22	0.72	31.60	---	---	Peak
3		157.98	25.16	-18.34	43.50	37.37	17.79	1.36	31.36	---	---	Peak
4		512.10	28.14	-17.86	46.00	33.42	23.38	2.74	31.40	---	---	Peak
5		752.20	32.49	-13.51	46.00	32.51	28.01	3.47	31.50	---	---	Peak
6	!	881.70	41.42			40.82	28.33	3.77	31.50	---	---	Peak
7		943.30	32.91	-13.09	46.00	30.93	29.55	3.93	31.50	---	---	Peak
8		2938.00	45.95	-28.05	74.00	61.18	32.97	8.62	56.82	---	---	Peak
9		3586.00	47.57	-26.43	74.00	62.83	32.45	9.61	57.32	120	200	Peak
10		6190.00	47.34	-26.66	74.00	54.01	36.13	13.93	56.73	---	---	Peak
11		7746.00	46.26	-27.74	74.00	54.91	35.25	12.70	56.60	---	---	Peak
12		10444.00	47.27	-26.73	74.00	51.30	37.86	14.63	56.52	---	---	Peak
13		12766.00	47.29	-26.71	74.00	50.52	39.01	15.10	57.34	---	---	Peak

Test Mode :	Mode 3	**Temperature :**	24 ~ 25℃
Test Engineer :	Clear Peng	**Relative Humidity :**	48~ 49%
Test Distance :	3m	**Polarization :**	Vertical
Function Type :	WCDMA Band V Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Charging from Adapter) + MPEG4		
Remark :	#6 is system simulator signal which can be ignored.		

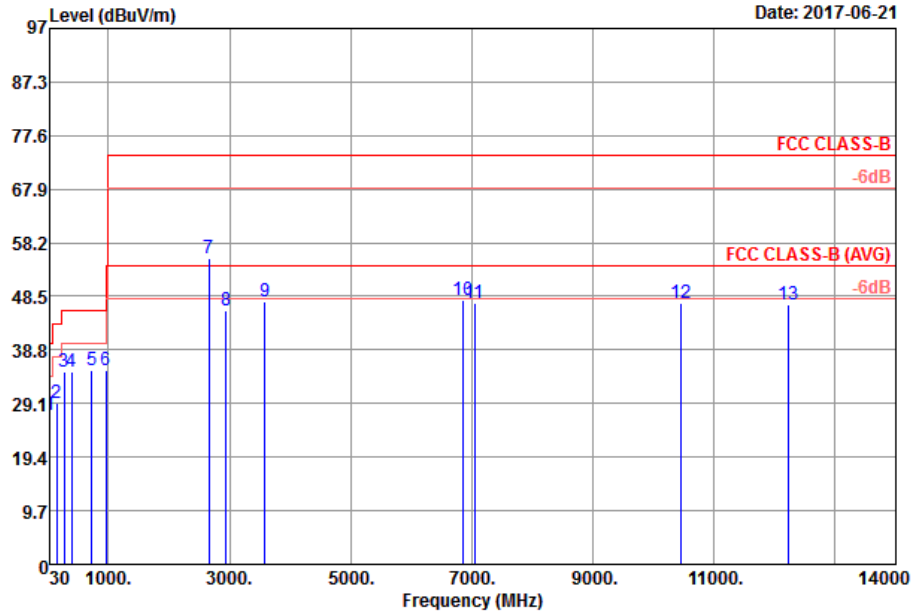


Site : 03CH03-SZ
Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 VERTICAL
: RBW:1000.000KHz VBW:1000.000KHz

Mode : Mode 3
IMEI : 990010370000128
Plane : Z

		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	34.86	-5.14	40.00	41.04	25.10	0.32	31.60	200	96	Peak
2		51.87	27.11	-12.89	40.00	42.56	15.66	0.49	31.60	---	---	Peak
3		206.85	24.98	-18.52	43.50	38.22	16.29	1.65	31.18	---	---	Peak
4		439.30	29.03	-16.97	46.00	33.43	24.37	2.53	31.30	---	---	Peak
5		638.10	30.81	-15.19	46.00	33.73	25.46	3.12	31.50	---	---	Peak
6	!	881.00	42.19			41.60	28.32	3.77	31.50	---	---	Peak
7		951.70	33.31	-12.69	46.00	31.14	29.72	3.95	31.50	---	---	Peak
8		2750.00	46.10	-27.90	74.00	62.85	32.60	7.40	56.75	---	---	Peak
9		3326.00	47.23	-26.77	74.00	62.42	32.71	9.23	57.13	---	---	Peak
10		6836.00	48.01	-25.99	74.00	54.27	35.93	15.59	57.78	---	---	Peak
11		7172.00	46.81	-27.19	74.00	55.51	35.62	13.75	58.07	---	---	Peak
12		10446.00	48.24	-25.76	74.00	52.27	37.86	14.63	56.52	200	230	Peak
13		12390.00	48.05	-25.95	74.00	51.64	38.80	15.05	57.44	---	---	Peak

Test Mode :	Mode 5	**Temperature :**	24 ~ 25℃
Test Engineer :	Clear Peng	**Relative Humidity :**	48~ 49%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx		
Remark :	#7 is system simulator signal which can be ignored.		

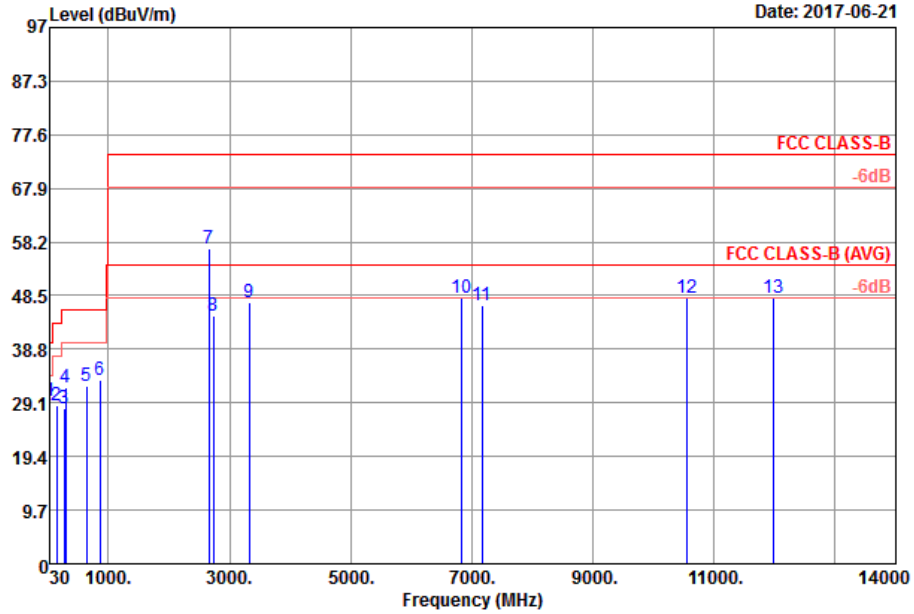


Site : 03CH03-SZ
Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 HORIZONTAL

Mode : Mode 5
IMEI : 990010370000128
Plane : Z

	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	33.78	26.91	-13.09	40.00	32.86	25.40	0.30	31.65	---	---	Peak
2	143.67	29.13	-14.37	43.50	41.04	18.26	1.25	31.42	---	---	Peak
3	265.98	34.81	-11.19	46.00	46.24	17.81	1.92	31.16	---	---	Peak
4	399.40	34.91	-11.09	46.00	39.92	23.90	2.39	31.30	---	---	Peak
5	722.10	35.00	-11.00	46.00	35.80	27.34	3.36	31.50	200	260	Peak
6	960.10	35.13	-18.87	54.00	32.85	29.78	4.00	31.50	---	---	Peak
7	2654.00	55.26			72.43	32.40	7.15	56.72	---	---	Peak
8	2938.00	45.95	-28.05	74.00	61.18	32.97	8.62	56.82	---	---	Peak
9	3586.00	47.57	-26.43	74.00	62.83	32.45	9.61	57.32	---	---	Peak
10	6866.00	47.70	-26.30	74.00	54.01	35.93	15.59	57.83	100	200	Peak
11	7040.00	47.36	-26.64	74.00	55.21	35.84	14.36	58.05	---	---	Peak
12	10444.00	47.27	-26.73	74.00	51.30	37.86	14.63	56.52	---	---	Peak
13	12234.00	47.14	-26.86	74.00	50.42	38.80	15.03	57.11	---	---	Peak

Test Mode :	Mode 5	**Temperature :**	24 ~ 25℃
Test Engineer :	Clear Peng	**Relative Humidity :**	48~ 49%
Test Distance :	3m	**Polarization :**	Vertical
Function Type :	LTE Band 7 Idle + Earphone + Bluetooth Idle + WLAN Idle(2.4G) + USB Cable(Data Link with Notebook) + GPS Rx		
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH03-SZ
Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 VERTICAL

Mode : Mode 5
IMEI : 990010370000128
Plane : Z

	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	35.67	29.48	-10.52	40.00	36.13	24.62	0.33	31.60	125	12	Peak
2	143.13	28.74	-14.76	43.50	40.65	18.26	1.25	31.42	---	---	Peak
3	265.17	28.02	-17.98	46.00	39.48	17.79	1.91	31.16	---	---	Peak
4	300.00	31.83	-14.17	46.00	42.59	18.50	2.04	31.30	---	---	Peak
5	638.10	32.16	-13.84	46.00	35.08	25.46	3.12	31.50	---	---	Peak
6	857.90	33.36	-12.64	46.00	32.92	28.23	3.71	31.50	---	---	Peak
7	2654.00	57.08			'4.25	32.40	7.15	56.72	---	---	Peak
8	2728.00	44.98	-29.02	74.00	61.84	32.57	7.32	56.75	---	---	Peak
9	3326.00	47.23	-26.77	74.00	62.42	32.71	9.23	57.13	---	---	Peak
10	6836.00	48.01	-25.99	74.00	54.27	35.93	15.59	57.78	---	---	Peak
11	7172.00	46.81	-27.19	74.00	55.51	35.62	13.75	58.07	---	---	Peak
12	10552.00	48.14	-25.86	74.00	52.03	37.91	14.66	56.46	200	100	Peak
13	11968.00	48.12	-25.88	74.00	50.90	38.79	14.99	56.56	---	---	Peak

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Jan. 06, 2017	Jun. 19, 2017	Jan. 05, 2018	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Jan. 05, 2017	Jun. 19, 2017	Jan. 04, 2018	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	3816/2SH	00103892	9kHz~30MHz	Jan. 05, 2017	Jun. 19, 2017	Jan. 04, 2018	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 16, 2016	Jun. 19, 2017	Jul. 15, 2017	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 11, 2016	Jun. 19, 2017	Oct. 10, 2017	Conduction (CO01-SZ)
RF Cable	Woken	B0720#0001	CO01SZ0007	150kHz~30MHz	Oct. 08, 2016	Jun. 19, 2017	Oct. 07, 2017	Conduction (CO01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 20, 2017	Jun. 21, 2017	Apr. 19, 2018	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 20, 2017	Jun. 21, 2017	Apr. 19, 2018	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	May 14, 2017	Jun. 21, 2017	May 13, 2018	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Nov. 19, 2016	Jun. 21, 2017	Nov. 18, 2017	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Aug. 10, 2016	Jun. 21, 2017	Aug. 09, 2017	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102210	0.01Hz ~3000MHz	Oct. 11, 2016	Jun. 21, 2017	Oct. 10, 2017	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 11, 2016	Jun. 21, 2017	Oct. 10, 2017	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 16, 2016	Jun. 21, 2017	Jul. 15, 2017	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jun. 21, 2017	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 21, 2017	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 21, 2017	NCR	Radiation (03CH03-SZ)

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))	**2.5dB**

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))	**5.0dB**