FCC Test Report

APPLICANT	:	TCL Communication Ltd.
EQUIPMENT	:	GSM Quad-band / UMTS Quad-band / LTE hepta-band mobile phone
BRAND NAME	:	alcatel
MODEL NAME	:	6055A
MARKETING NAME	:	IDOL 4
FCC ID	:	2ACCJA018
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was completed on Jul. 31, 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.

James Huang

Prepared by: James Huang / Manager

Jones Tsai

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
FC670106	Rev. 01	Initial issue of report	Aug. 09, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	ICES003 Section 6.1	AC Conducted Emission	< 15.107 limits < ICES003 6.1 limits	PASS	Under limit 10.07 dB at 13.700 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 2.32 dB at 344.800 MHz for Quasi-Peak

1. General Description

1.1. Applicant

TCL Communication Ltd.

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

1.2. Manufacturer

TCL Communication Ltd.

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	GSM Quad-band / UMTS Quad-band / LTE hepta-band mobile phone
Brand Name	alcatel
Model Name	6055A
Marketing Name	IDOL 4
FCC ID	2ACCJA018
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/ HSPA+(16QAM uplink is not supported)/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth v3.0 + EDR/ Bluetooth v4.0 LE/ Bluetooth v4.2 LE
IMEI Code	Conduction: 014727000002313 Radiation: 014727000002396
HW Version	PIO
SW Version	4D26
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 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz ; 5745 MHz ~ 5805 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 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 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz ; 5745 MHz ~ 5805 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz Glonass: 1602 MHz + n× 0.5625MHz (n=−7,−6,−5,...0,...,6) NFC : 13.56 MHz
Antenna Type	WWAN : Loop Antenna WLAN : IFA Antenna Bluetooth : IFA Antenna GPS/Glonass : IFA Antenna NFC : Loop Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA : QPSK (Uplink) HSDPA : QPSK (Uplink) HSUPA : QPSK (Uplink) HSPA+ : 16QAM (16QAM uplink is not supported) LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac : OFDM (BPSK / QPSK / 16QAM / 64QAM /256QAM)

	Bluetooth v4.0 LE : GFSK Bluetooth v4.2 LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : π/4-DQPSK Bluetooth (3Mbps) : 8-DPSK GPS/Glonass : BPSK NFC: ASK

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/IC Registration No.**
	CO01-KS	03CH02-KS	418269/4086E

1.7. Specification of Accessory

Specification of Accessory				
AC Adapter 1	**Brand Name**	alcatel	**Model Name**	UC13US
	Power Rating	I/P: 100-240Vac, 500mA, O/P: 5.0Vdc, 2A		
	Manufacturer	Aohai	**P/N**	CBA0059AGAC4
AC Adapter 2	**Brand Name**	alcatel	**Model Name**	UC13US
	Power Rating	I/P: 100-240Vac, 500mA, O/P: 5.0Vdc, 2A		
	Manufacturer	TENPAO	**P/N**	CBA0059AGAC2 CBA0059AG4C2
Battery	**Brand Name**	ALCATEL onetouch	**Model Name**	TLp026E2
	Power Rating	3.84Vdc, 2610mAh		
	Manufacturer	SCUD	**P/N**	CAC2610002C2
USB Cable 1	**Brand Name**	N/A	**Model Name**	CDA0000043C8
	Signal Line Type	1.01m shielded without core		
	Manufacturer	PUAN	**P/N**	N/A
USB Cable 2	**Brand Name**	N/A	**Model Name**	CDA0000043C2
	Signal Line Type	1.00m shielded without core		
	Manufacturer	Shenghua	**P/N**	N/A

1.8. 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
- IC ICES-003 Issue 6
- IC RSS-Gen Issue 4

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.

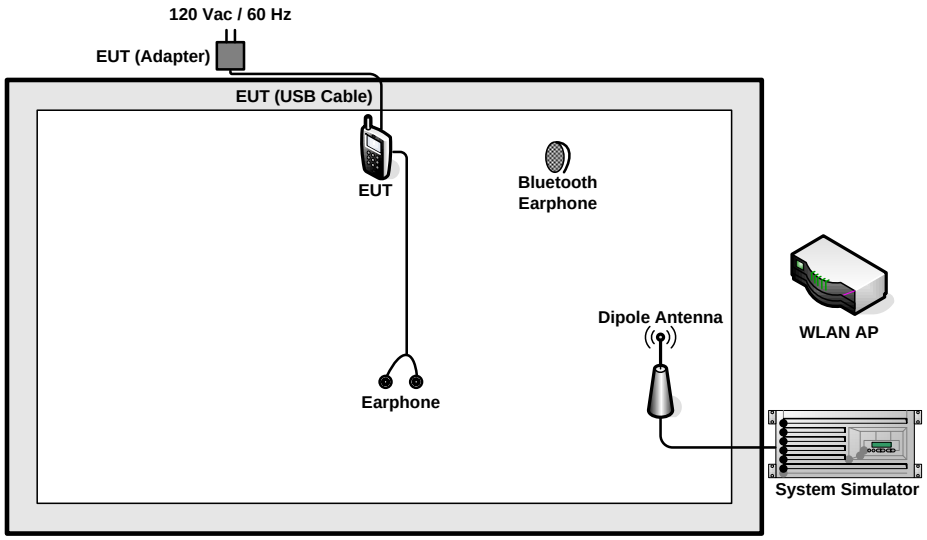
Remark: For signal above 1GHz, the worst case was test item 2.

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2	Mode 1 : GSM850 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Charging from Adapter 1) + Earphone + Battery + Camera (Rear) <Fig.1> Mode 2 : GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + Camera (Front) <Fig.1> Mode 3 : WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + MPEG4 <Fig.1> Mode 4 : WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On <Fig.1> Mode 5 : LTE Band 4 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Data Link with Notebook) + Earphone + Battery + Glonass Rx <Fig.2> Mode 6 : LTE Band 7 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Data Link with Notebook) + Earphone + Battery + GPS Rx <Fig.2>
Radiated Emissions < 1GHz	1/2	Mode 1 : GSM850 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Charging from Adapter 1) + Earphone + Battery + Camera (Rear) <Fig.1> Mode 2 : GSM1900 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + Camera (Front) <Fig.1> Mode 3 : WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + MPEG4 <Fig.1> Mode 4 : WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On <Fig.1> Mode 5 : LTE Band 4 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Data Link with Notebook) + Earphone + Battery + Glonass Rx <Fig.2> Mode 6 : LTE Band 7 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Data Link with Notebook) + Earphone + Battery + GPS Rx <Fig.2>
Radiated Emissions ≥ 1GHz	2	Mode 1 : LTE Band 7 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Data Link with Notebook) + Earphone + Battery + GPS Rx <Fig.2>

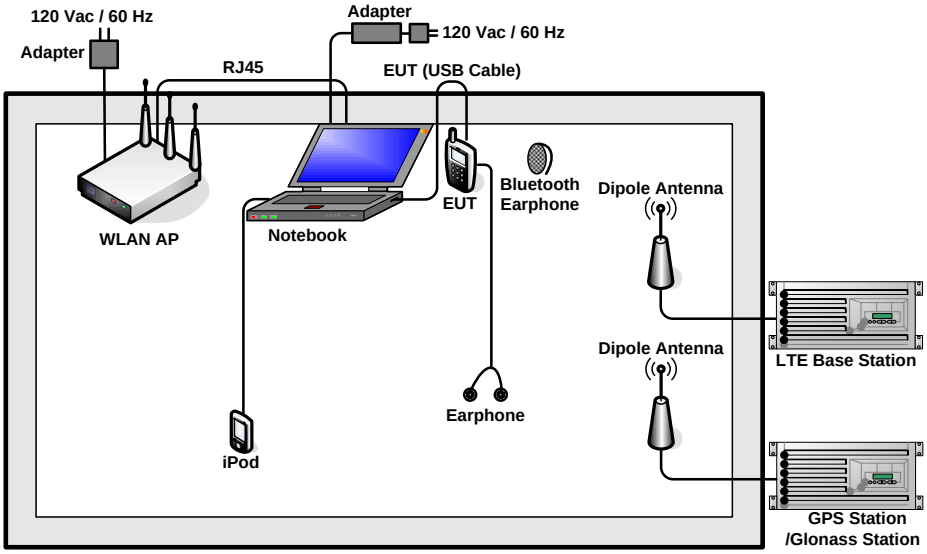
Remark:

1. The worst case of AC is mode 4; and the USB Link mode of AC is mode 5, only the test data of this mode was reported.
2. The worst case of RE < 1G is mode 6; only the test data of this mode was reported.
3. Data Link with Notebook means data application transferred mode between EUT and Notebook.

2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

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.	LTE Base Station	Anritus	MT8820C	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	RLLS03-2P	N/A	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Lenovo	LBH-301	2010DP1340	N/A	N/A
6.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
7.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
8.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
9.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
10.	Notebook	DELL	Latitude3440	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
11.	SD Card	Kingston	4GB	N/A	N/A	N/A
12.	SD Card	SanDisk	Uitra	N/A	N/A	N/A
13.	iPod	Apple	A1199	FCC DoC	Shielded, 1.2 m	N/A
14.	Earphone	Lenovo	SH100	N/A	Unshielded,1.0m	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.
5. Turn on NFC function.

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.

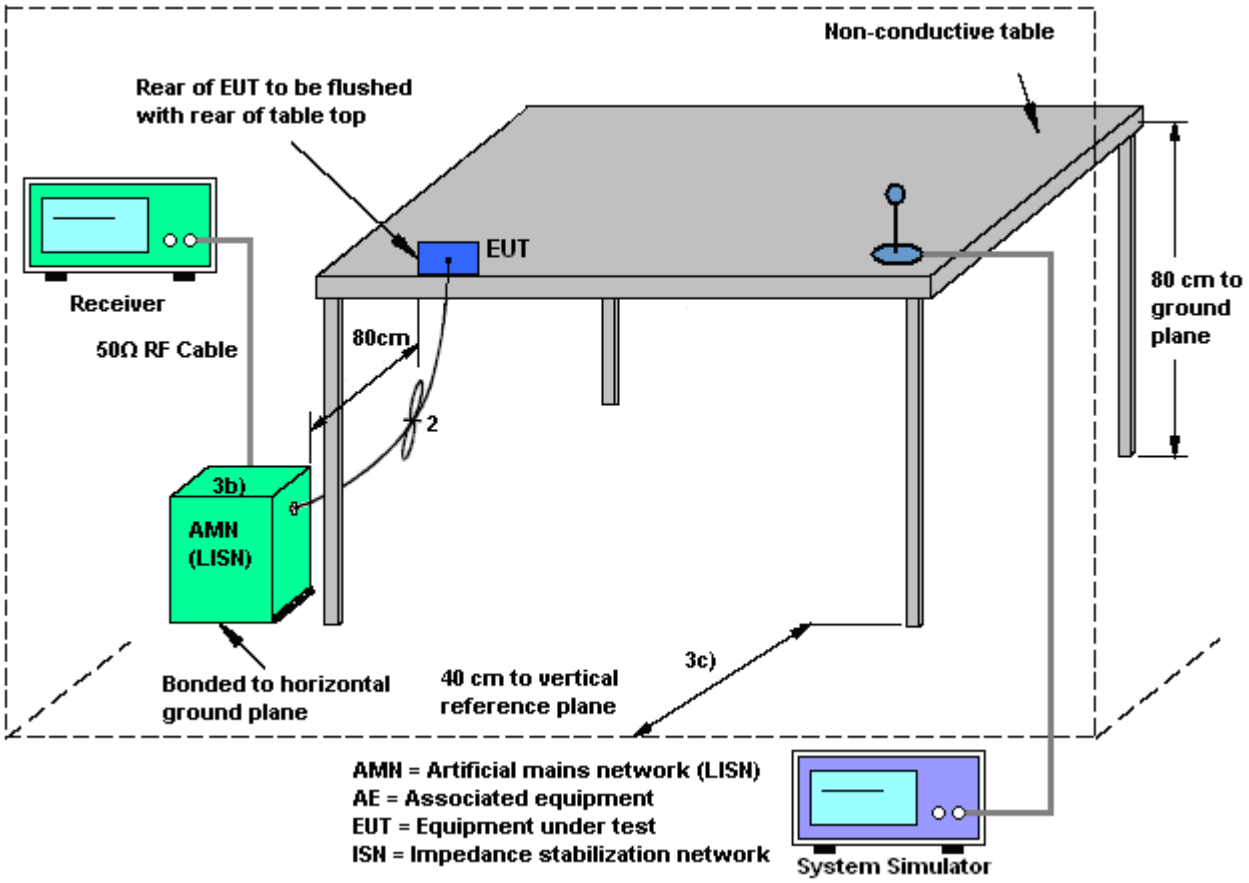
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

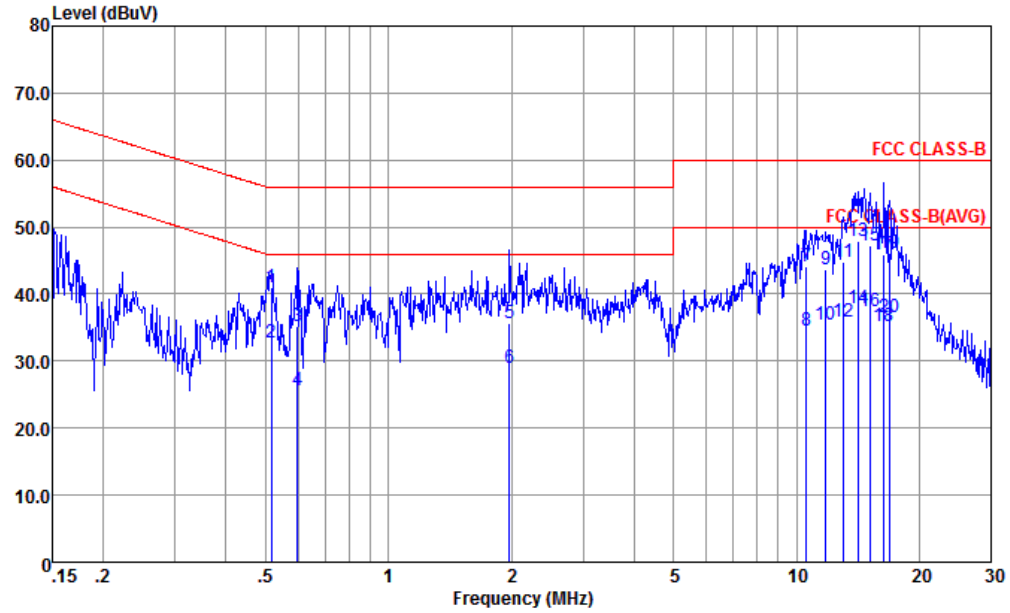
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

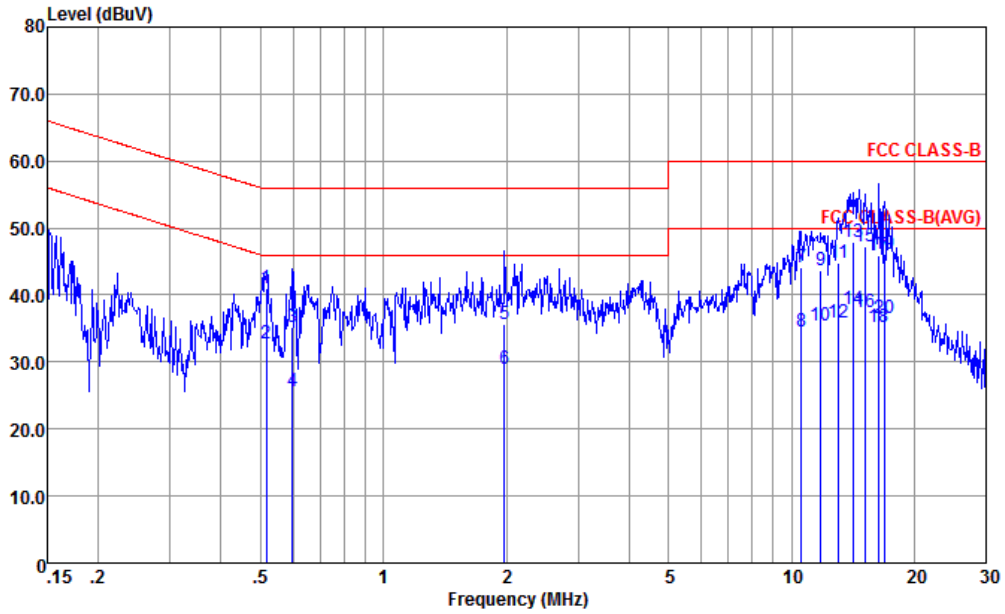
Test Mode :	Mode 4	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 670106
mode : Mode 4
: 014727000002313 #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.52	40.99	-15.01	56.00	30.60	0.23	10.16	QP
2		0.52	32.69	-13.31	46.00	22.30	0.23	10.16	Average
3		0.60	35.29	-20.71	56.00	24.89	0.24	10.16	QP
4		0.60	25.69	-20.31	46.00	15.29	0.24	10.16	Average
5		1.98	35.62	-20.38	56.00	25.30	0.18	10.14	QP
6		1.98	28.92	-17.08	46.00	18.60	0.18	10.14	Average
7		10.56	44.03	-15.97	60.00	33.50	0.25	10.28	QP
8		10.56	34.63	-15.37	50.00	24.10	0.25	10.28	Average
9		11.81	43.77	-16.23	60.00	33.21	0.25	10.31	QP
10		11.81	35.47	-14.53	50.00	24.91	0.25	10.31	Average
11		13.06	44.70	-15.30	60.00	34.10	0.26	10.34	QP
12		13.06	35.80	-14.20	50.00	25.20	0.26	10.34	Average
13	*	14.14	47.92	-12.08	60.00	37.29	0.26	10.37	QP
14		14.14	37.92	-12.08	50.00	27.29	0.26	10.37	Average
15		15.15	47.25	-12.75	60.00	36.60	0.26	10.39	QP
16		15.15	37.45	-12.55	50.00	26.80	0.26	10.39	Average
17		16.40	45.89	-14.11	60.00	35.20	0.26	10.43	QP

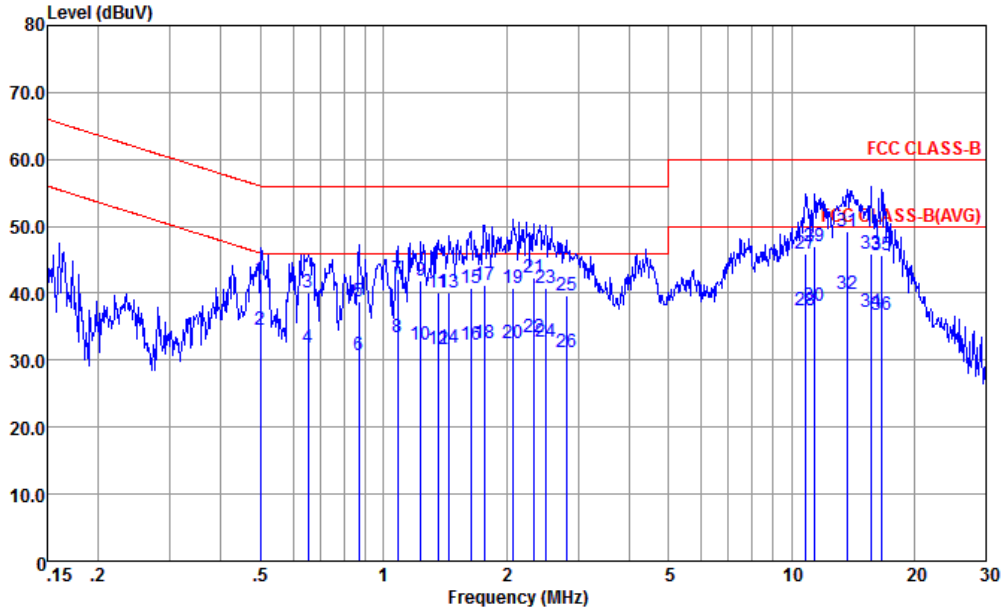
Test Mode :	Mode 4	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 670106
mode : Mode 4
: 014727000002313 #6

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	16.40	35.29	-14.71	50.00	24.60	0.26	10.43	Average
19	16.93	46.21	-13.79	60.00	35.51	0.26	10.44	QP
20	16.93	36.51	-13.49	50.00	25.81	0.26	10.44	Average

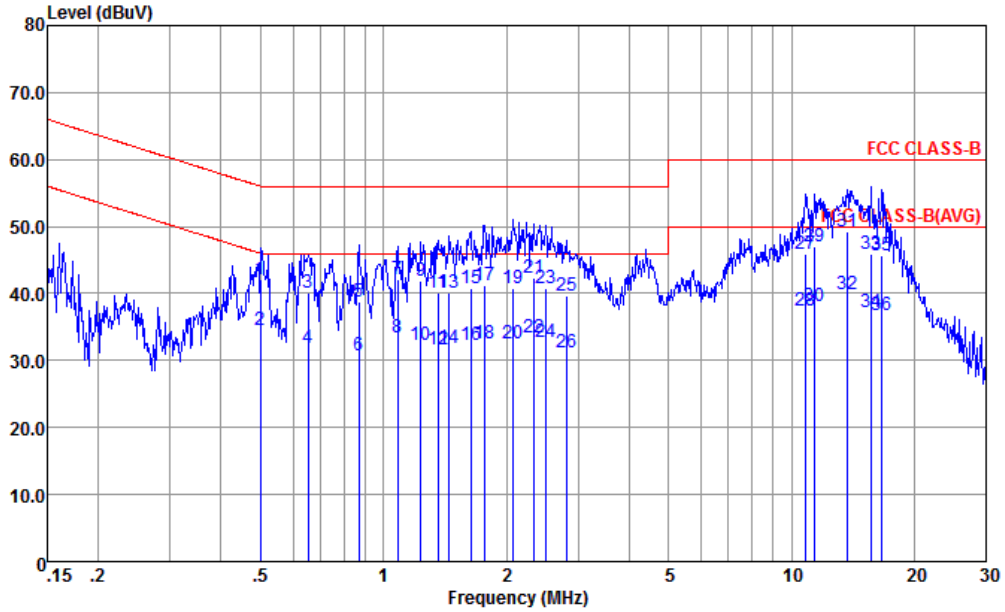
Test Mode :	Mode 4	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 670106
mode : Mode 4
: 014727000002313 #6

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.50	42.08	-13.93	56.01	31.60	0.32	10.16	QP
2	0.50	34.58	-11.43	46.01	24.10	0.32	10.16	Average
3	0.65	40.09	-15.91	56.00	29.60	0.34	10.15	QP
4	0.65	31.79	-14.21	46.00	21.30	0.34	10.15	Average
5	0.87	38.80	-17.20	56.00	28.30	0.36	10.14	QP
6	0.87	30.80	-15.20	46.00	20.30	0.36	10.14	Average
7	1.08	42.11	-13.89	56.00	31.60	0.37	10.14	QP
8	1.08	33.41	-12.59	46.00	22.90	0.37	10.14	Average
9	1.24	41.81	-14.19	56.00	31.30	0.37	10.14	QP
10	1.24	32.41	-13.59	46.00	21.90	0.37	10.14	Average
11	1.36	40.11	-15.89	56.00	29.60	0.37	10.14	QP
12	1.36	31.61	-14.39	46.00	21.10	0.37	10.14	Average
13	1.45	40.01	-15.99	56.00	29.49	0.38	10.14	QP
14	1.45	31.81	-14.19	46.00	21.29	0.38	10.14	Average
15	1.64	40.82	-15.18	56.00	30.30	0.38	10.14	QP
16	1.64	32.42	-13.58	46.00	21.90	0.38	10.14	Average
17	1.77	41.12	-14.88	56.00	30.60	0.38	10.14	QP

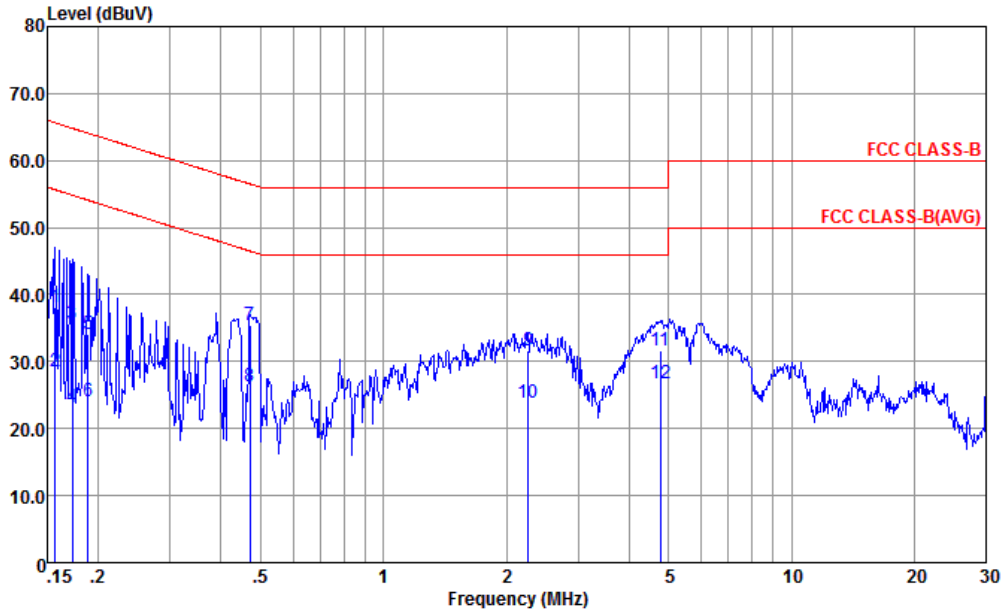
Test Mode :	Mode 4	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Charging from Adapter 2) + Earphone + Battery + NFC On		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 670106
mode : Mode 4
: 014727000002313 #6

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	1.77	32.62	-13.38	46.00	22.10	0.38	10.14	Average
19	2.08	40.82	-15.18	56.00	30.30	0.38	10.14	QP
20	2.08	32.62	-13.38	46.00	22.10	0.38	10.14	Average
21	2.33	42.42	-13.58	56.00	31.89	0.38	10.15	QP
22	2.33	33.32	-12.68	46.00	22.79	0.38	10.15	Average
23	2.50	40.82	-15.18	56.00	30.29	0.38	10.15	QP
24	2.50	32.72	-13.28	46.00	22.19	0.38	10.15	Average
25	2.81	39.62	-16.38	56.00	29.10	0.37	10.15	QP
26	2.81	31.12	-14.88	46.00	20.60	0.37	10.15	Average
27	10.85	45.87	-14.13	60.00	35.30	0.28	10.29	QP
28	10.85	37.47	-12.53	50.00	26.90	0.28	10.29	Average
29	11.38	47.08	-12.92	60.00	36.50	0.28	10.30	QP
30	11.38	38.08	-11.92	50.00	27.50	0.28	10.30	Average
31	13.70	49.23	-10.77	60.00	38.60	0.27	10.36	QP
32 *	13.70	39.93	-10.07	50.00	29.30	0.27	10.36	Average
33	15.63	45.97	-14.03	60.00	35.29	0.27	10.41	QP
34	15.63	37.27	-12.73	50.00	26.59	0.27	10.41	Average
35	16.66	45.60	-14.40	60.00	34.90	0.26	10.44	QP
36	16.66	36.80	-13.20	50.00	26.10	0.26	10.44	Average

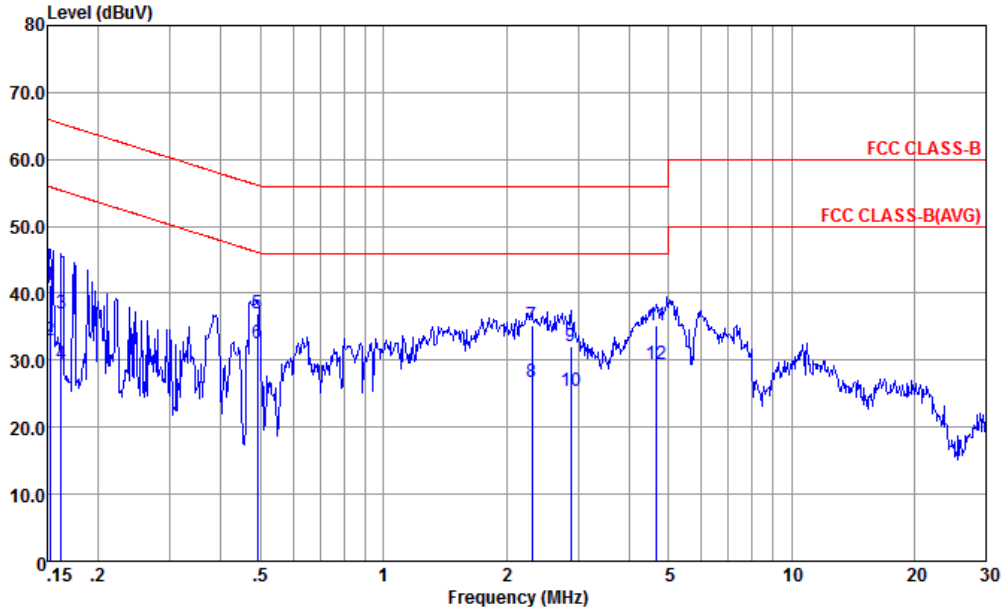
Test Mode :	Mode 5	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Data Link with Notebook) + Earphone + Battery + Glonass Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-L-20151024 LINE
Project : (FC) 670106
mode : Mode 5
: 014727000002313 #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.16	38.20	-27.45	65.65	27.60	0.49	10.11	QP
2		0.16	28.50	-27.15	55.65	17.90	0.49	10.11	Average
3		0.17	35.70	-29.11	64.81	25.20	0.38	10.12	QP
4		0.17	23.10	-31.71	54.81	12.60	0.38	10.12	Average
5		0.19	34.20	-29.91	64.11	23.80	0.28	10.12	QP
6		0.19	24.00	-30.11	54.11	13.60	0.28	10.12	Average
7		0.47	35.49	-21.00	56.49	25.10	0.23	10.16	QP
8		0.47	26.29	-20.20	46.49	15.90	0.23	10.16	Average
9		2.26	31.63	-24.37	56.00	21.30	0.18	10.15	QP
10		2.26	23.93	-22.07	46.00	13.60	0.18	10.15	Average
11		4.77	31.67	-24.33	56.00	21.30	0.19	10.18	QP
12	*	4.77	26.67	-19.33	46.00	16.30	0.19	10.18	Average

Test Mode :	Mode 5	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	LTE Band 4 Idle + Bluetooth Idle + WLAN (2.4G) Idle + USB Cable 1 (Data Link with Notebook) + Earphone + Battery + Glonass Rx		



Site : CO01-KS
Condition : FCC CLASS-B LISN-N-20151024 NEUTRAL
Project : (FC) 670106
mode : Mode 5
: 014727000002313 #6

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.15	41.31	-24.56	65.87	30.90	0.30	10.11	QP
2		0.15	33.01	-22.86	55.87	22.60	0.30	10.11	Average
3		0.16	37.01	-28.33	65.34	26.60	0.30	10.11	QP
4		0.16	29.31	-26.03	55.34	18.90	0.30	10.11	Average
5		0.49	37.08	-19.06	56.14	26.60	0.32	10.16	QP
6	*	0.49	32.58	-13.56	46.14	22.10	0.32	10.16	Average
7		2.31	35.12	-20.88	56.00	24.59	0.38	10.15	QP
8		2.31	26.72	-19.28	46.00	16.19	0.38	10.15	Average
9		2.88	32.12	-23.88	56.00	21.60	0.37	10.15	QP
10		2.88	25.42	-20.58	46.00	14.90	0.37	10.15	Average
11		4.67	35.14	-20.86	56.00	24.60	0.36	10.18	QP
12		4.67	29.44	-16.56	46.00	18.90	0.36	10.18	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

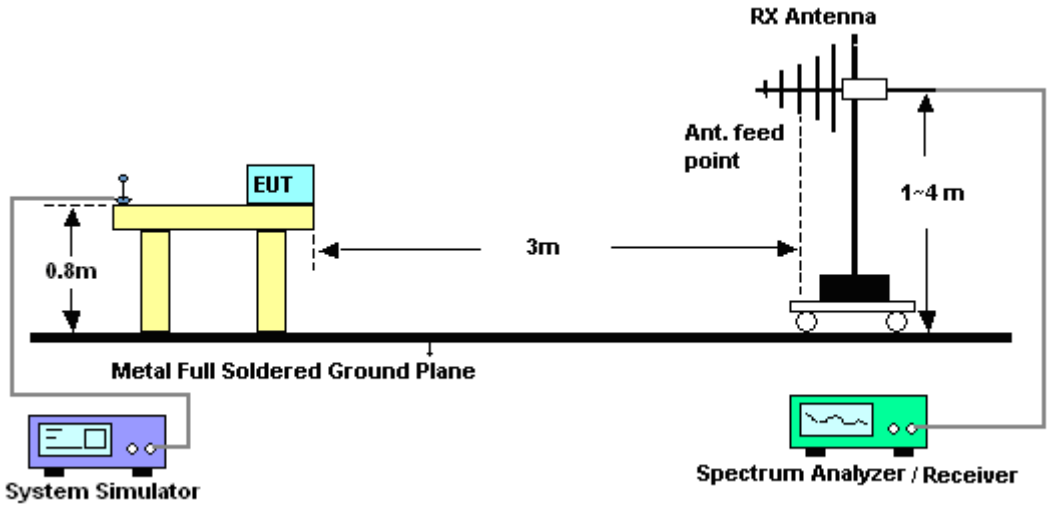
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

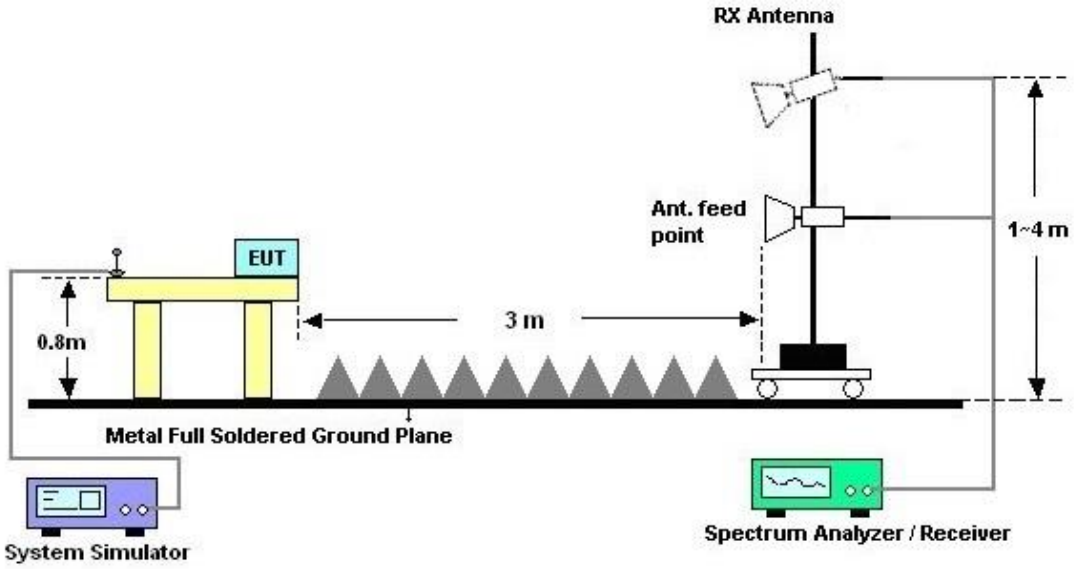
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

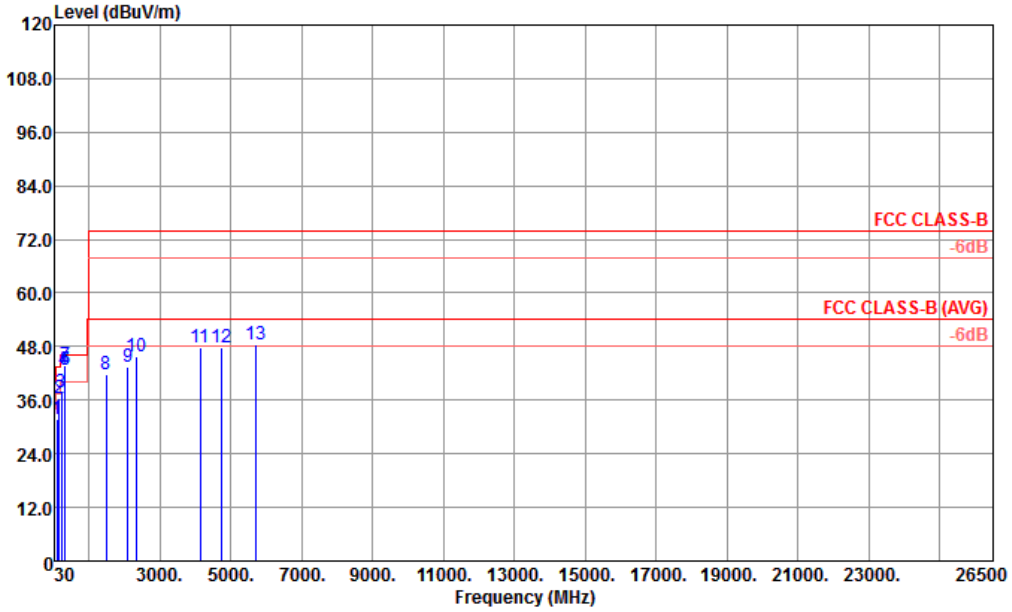


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

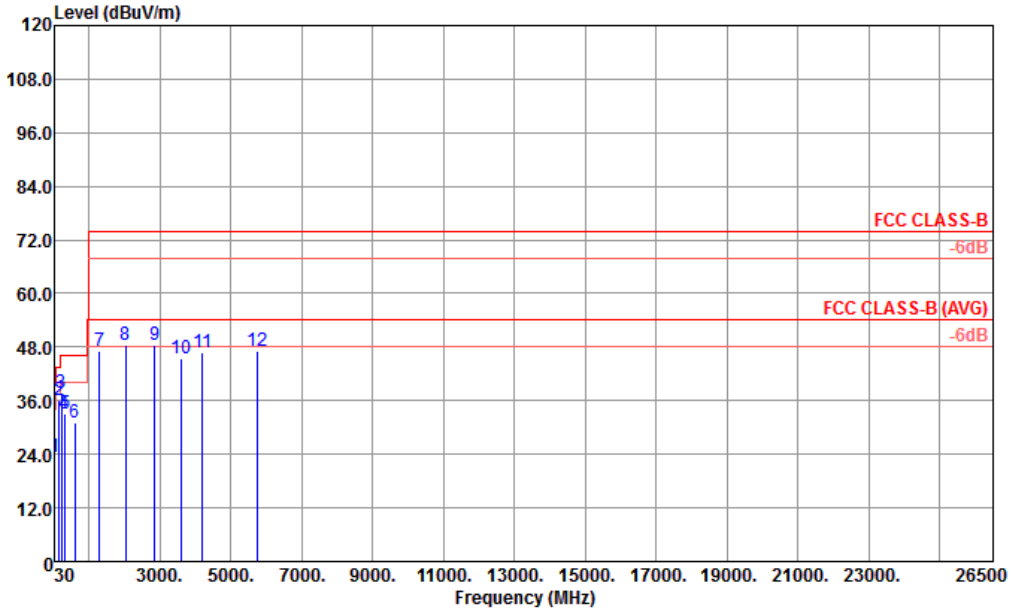
Test Mode :	Mode 6	**Temperature :**	21~22°C
Test Engineer :	Carl Ni	**Relative Humidity :**	41~42%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	LTE Band 7 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Data Link with Notebook) + Earphone + Battery + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT HORIZONTAL
Project : (FC) 670106
Mode : 6
IMEI : 014727000002396

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phas
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1		95.88	31.67	-11.83	43.50	45.55	17.50	0.23	31.61	---	---	Peak	HORIZONT
2		165.54	36.30	-7.20	43.50	50.53	16.86	0.35	31.44	---	---	Peak	HORIZONT
3		239.25	37.85	-8.15	46.00	51.54	16.92	0.48	31.09	---	---	Peak	HORIZONT
4	!	314.00	42.67	-3.33	46.00	54.20	18.50	0.63	30.66	100	280	QP	HORIZONT
5	!	329.40	42.79	-3.21	46.00	53.45	19.30	0.66	30.62	---	---	Peak	HORIZONT
6	!	335.70	42.80	-3.20	46.00	53.13	19.60	0.68	30.61	---	---	Peak	HORIZONT
7	!	344.80	43.68	-2.32	46.00	53.50	20.10	0.71	30.63	100	280	QP	HORIZONT
8		1500.00	41.71	-32.29	74.00	45.32	28.76	3.79	36.16	---	---	Peak	HORIZONT
9		2094.00	43.43	-30.57	74.00	41.95	30.79	5.20	34.51	---	---	Peak	HORIZONT
10		2330.00	45.75	-28.25	74.00	42.40	31.33	5.64	33.62	---	---	Peak	HORIZONT
11		4152.00	47.81	-26.19	74.00	38.12	35.05	6.53	31.89	---	---	Peak	HORIZONT
12		4731.00	47.72	-26.28	74.00	39.38	35.08	5.83	32.57	---	---	Peak	HORIZONT
13		5700.00	48.42	-25.58	74.00	42.54	35.33	7.38	36.83	---	---	Peak	HORIZONT

Test Mode :	Mode 6	Temperature :	21~22°C
Test Engineer :	Carl Ni	Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Function Type :	LTE Band 7 Idle + Bluetooth Idle + WLAN (5G) Idle + USB Cable 2 (Data Link with Notebook) + Earphone + Battery + GPS Rx		



Site : 03CH02-KS
Condition : FCC CLASS-B 3m 966-02 LF ANT VERTICAL
Project : (FC) 670106
Mode : 6
IMEI : 014727000002396

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phas
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1	44.85	23.34	-16.66	40.00	35.61	19.50	0.13	31.90	---	---	Peak	VERTICAL
2	165.81	36.14	-7.36	43.50	50.37	16.86	0.35	31.44	100	200	Peak	VERTICAL
3	239.25	37.75	-8.25	46.00	51.44	16.92	0.48	31.09	---	---	Peak	VERTICAL
4	314.00	33.01	-12.99	46.00	44.54	18.50	0.63	30.66	---	---	Peak	VERTICAL
5	344.80	33.18	-12.82	46.00	43.00	20.10	0.71	30.63	---	---	Peak	VERTICAL
6	598.20	30.98	-15.02	46.00	34.67	24.32	0.90	28.91	---	---	Peak	VERTICAL
7	1294.00	47.02	-26.98	74.00	51.73	28.42	3.33	36.46	---	---	Peak	VERTICAL
8	2048.00	48.40	-25.60	74.00	47.45	30.67	4.90	34.62	---	---	Peak	VERTICAL
9	2852.00	48.33	-25.67	74.00	41.21	32.22	2.85	27.95	---	---	Peak	VERTICAL
10	3615.00	45.57	-28.43	74.00	36.58	33.97	6.14	31.12	---	---	Peak	VERTICAL
11	4206.00	46.73	-27.27	74.00	36.86	35.12	6.59	31.84	---	---	Peak	VERTICAL
12	5748.00	47.21	-26.79	74.00	41.17	35.26	7.07	36.29	---	---	Peak	VERTICAL

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 18, 2016	Sep. 09, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Jul. 18, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Jul. 18, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Jul. 18, 2016	Oct. 23, 2016	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 31, 2016	Sep. 09, 2016	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz; Max 30dB	Apr. 22, 2016	Jul. 31, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz~2GHz	Sep. 12, 2015	Jul. 31, 2016	Sep. 11, 2016	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 07, 2015	Jul. 31, 2016	Nov. 06, 2016	Radiation (03CH02-KS)
SHF-EHF Horn	com-power	AH-840	101070	18GHz~40GHz	Oct. 10, 2015	Jul. 31, 2016	Oct. 09, 2016	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz~1000MHz / 32 dB	Apr. 22, 2016	Jul. 31, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1GHz~26.5GHz	Oct. 24, 2015	Jul. 31, 2016	Oct. 23, 2016	Radiation (03CH02-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Jan. 20, 2016	Jul. 31, 2016	Jan. 19, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jul. 31, 2016	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jul. 31, 2016	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jul. 31, 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**

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

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