FCC REPORT

Applicant:	SWAGTEK
Address of Applicant:	10205 NW 19th Street, STE 101, Miami, FL 33172 USA

Equipment Under Test (EUT)

Product Name:	2.4 inch Flip 3G Phone
Model No.:	LOGIC F3G, iSWAG PEARL, UNONU F3G
Trade mark:	LOGIC
FCC ID:	O55243717
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B
Date of sample receipt:	11 Oct., 2017
Date of Test:	11 Oct., to 01 Nov., 2017
Date of report issued:	02 Nov., 2017
Test Result:	Pass *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Bruce Zhang
Laboratory Manager

2 Version

Version No.	Date	Description
00	*02 Nov., 2017*	*Original*

Tested by: Zora Lee ***Date:*** *02 Nov., 2017*

Test Engineer

Reviewed by: RYan.Lee ***Date:*** *02 Nov., 2017*

Project Engineer

3 Contents

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4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part 15.107	Pass
Radiated Emission	Part 15.109	Pass

Pass: The EUT complies with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	SWAGTEK
Address of Applicant:	10205 NW 19th Street, STE 101, Miami, FL 33172 USA
Manufacturer/ Factory:	SWAGTEK
Address of Manufacturer/ Factory :	10205 NW 19th Street, STE 101, Miami, FL 33172 USA

5.2 General Description of E.U.T.

Product Name:	2.4 inch Flip 3G Phone
Model No.:	LOGIC F3G, iSWAG PEARL, UNONU F3G
Power supply:	Rechargeable Li-ion Battery DC3.7V-800mAh
AC adapter with two plugs :	Model: F3G Input: AC100-240V 50/60Hz 0.1A Output: DC 5.0V, 500mA
Remark:	Model No.: LOGIC F3G, iSWAG PEARL, UNONU F3G Advanced were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name for different customer.

5.3 Test Mode

Operating mode	Detail description
PC mode	Keep the EUT in Downloading mode(Worst case)
Charging+Recording mode	Keep the EUT in Charging+Recording mode
Charging+Playing mode	Keep the EUT in Charging+Playing mode
FM mode	Keep the EUT in FM receiver mode
GPS mode	Keep the EUT in GPS receiver mode
The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.	

5.4 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)
Radiated Emission (18GHz ~ 26.5GHz)	4.56 dB (k=2)

5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	KEYBOARD	SK-8115	N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC
HP	Printer	CB495A	05257893	DoC
MERCURY	Wireless router	MW150R	12922104015	FCC ID
NAKAMICHI	Bluetooth earphone	T8	N/A	FCC ID

5.6 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Registration No.: 727551**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551 October 12, 2017.

- **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

5.7 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Website: http://www.ccis-cb.com
Tel: +86-755-23118282
Fax:+86-755-23116366
Email: info@ccis-cb.com

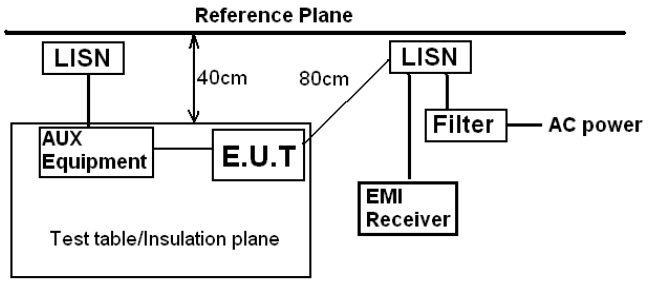
5.8 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	07-22-2017	07-21-2020
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	02-25-2017	02-24-2018
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	02-25-2017	02-24-2018
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	02-25-2017	02-24-2018
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	02-25-2017	02-24-2018
6	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	02-25-2017	02-24-2018
7	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	02-25-2017	02-24-2018
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	N/A	N/A	CCIS0018	02-25-2017	02-24-2018
10	Coaxial Cable	N/A	N/A	CCIS0020	02-25-2017	02-24-2018

Conducted Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	07-22-2017	07-21-2020
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	02-25-2017	02-24-2018
3	LISN	CHASE	MN2050D	CCIS0074	02-25-2017	02-24-2018
4	Coaxial Cable	CCIS	N/A	CCIS0086	02-25-2017	02-24-2018
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

6 Test results and Measurement Data

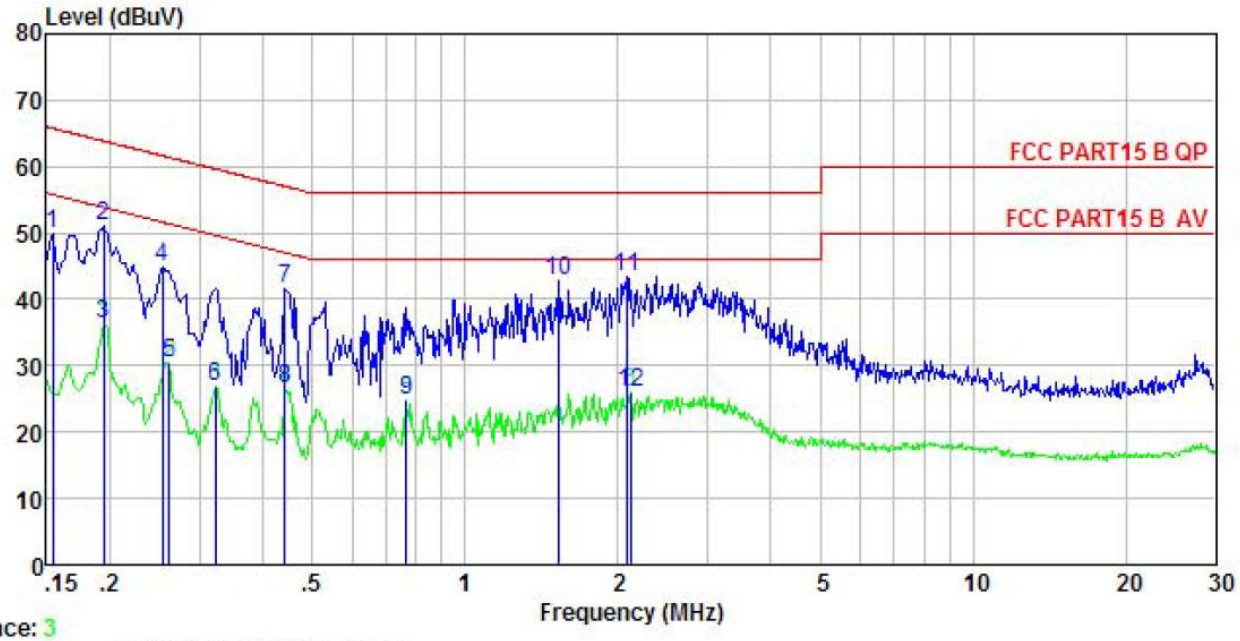
6.1 Conducted Emission

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part 15 B Section 15.107</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.4:2014</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">150kHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td colspan="5">Class B</td></tr>
<tr><td>Receiver setup:</td><td colspan="5">RBW=9kHz, VBW=30kHz</td></tr>
<tr><td>Limit:</td><td colspan="5"><table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBµV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>0.5-30</td><td>60</td><td>50</td></tr>
<tr><td colspan="3">* Decreases with the logarithm of the frequency.</td></tr>
</table></td></tr>
<tr><td>Test setup:</td><td colspan="5"> 

Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test procedure</td><td colspan="5">1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.</td></tr>
<tr><td>Test environment:</td><td>Temp.:</td><td>23 °C</td><td>Humid.:</td><td>56%</td><td>Press.:</td><td>101kPa</td></tr>
<tr><td>Test Instruments:</td><td colspan="5">Refer to section 5.7 for details</td></tr>
<tr><td>Test mode:</td><td colspan="5">Refer to section 5.3 for details</td></tr>
<tr><td>Test results:</td><td colspan="5">Pass</td></tr>
</table>

Measurement data:

Test Polarization: Line



Trace: 3

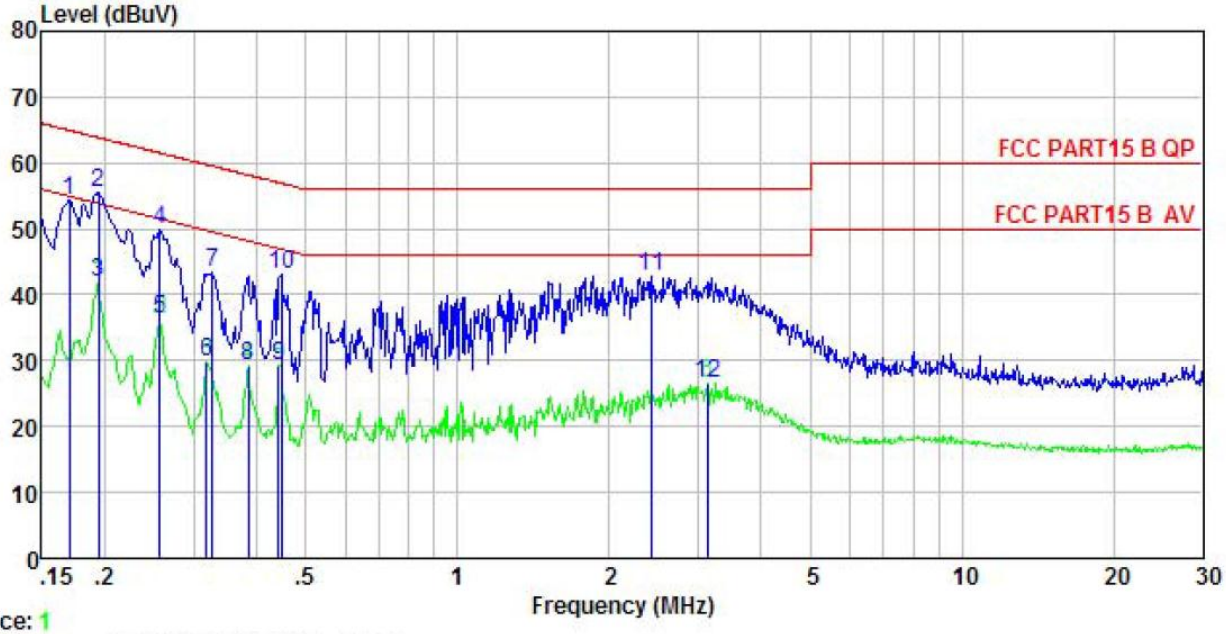
```
Site          : CCIS Shielding Room
Condition     : FCC PART15 B QP LISN LINE
EUT           : 2.4 inch Flip 3G Phone
Model         : LOGIC F3G
Test Mode     : PC mode
Power Rating  : AC 120V/60Hz
Environment   : Temp: 23 'C Huni:56%  Atmos:101KPa
Test Engineer: Zora
Remark        :
```

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.154	39.81	-0.56	10.78	50.03	65.78	-15.75	QP
2	0.194	40.79	-0.52	10.76	51.03	63.84	-12.81	QP
3	0.194	26.20	-0.52	10.76	36.44	53.84	-17.40	Average
4	0.253	34.72	-0.51	10.75	44.96	61.64	-16.68	QP
5	0.262	20.19	-0.51	10.75	30.43	51.38	-20.95	Average
6	0.322	16.75	-0.51	10.74	26.98	49.66	-22.68	Average
7	0.442	31.47	-0.50	10.74	41.71	57.02	-15.31	QP
8	0.442	16.43	-0.50	10.74	26.67	47.02	-20.35	Average
9	0.767	14.46	-0.48	10.80	24.78	46.00	-21.22	Average
10	1.527	32.29	-0.45	10.93	42.77	56.00	-13.23	QP
11	2.077	32.86	-0.43	10.96	43.39	56.00	-12.61	QP
12	2.121	15.56	-0.43	10.95	26.08	46.00	-19.92	Average

Notes:

1. *An initial pre-scan was performed on the line and neutral lines with peak detector.*
2. *Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.*
3. *Final Level =Receiver Read level + LISN Factor + Cable Loss.*

Test Polarization: Neutral



Trace: 1

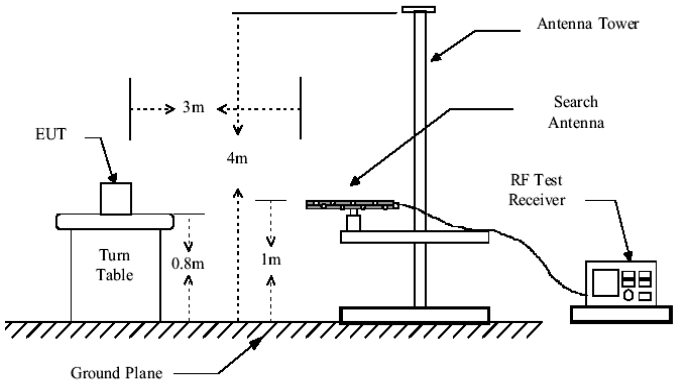
Site : CCIS Shielding Room
Condition : FCC PART15 B QP LISN NEUTRAL
EUT : 2.4 inch Flip 3G Phone
Model : LOGIC F3G
Test Mode : PC mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 'C Huni:56% Atmos:101KPa
Test Engineer: Zora
Remark :

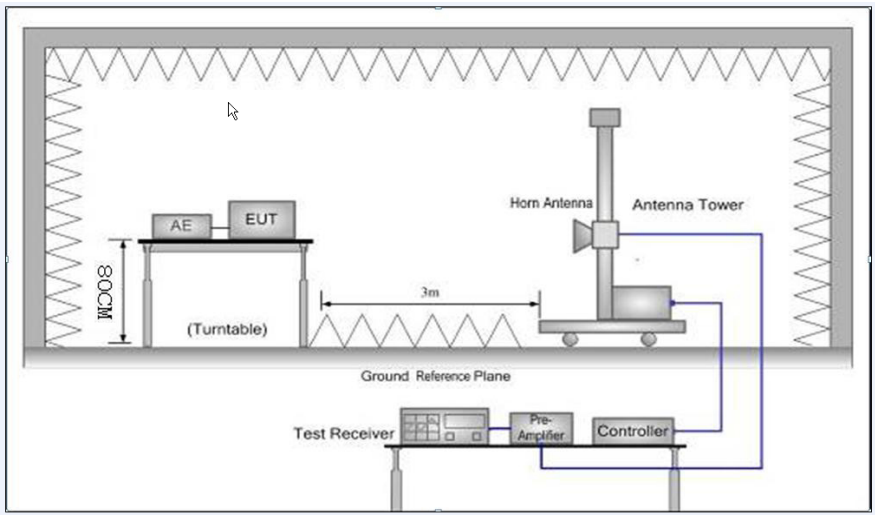
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.170	44.05	-0.36	10.77	54.46	64.94	-10.48	QP
2	0.194	45.22	-0.34	10.76	55.64	63.84	-8.20	QP
3	0.194	31.56	-0.34	10.76	41.98	53.84	-11.86	Average
4	0.258	39.59	-0.33	10.75	50.01	61.51	-11.50	QP
5	0.258	26.03	-0.33	10.75	36.45	51.51	-15.06	Average
6	0.318	19.36	-0.32	10.74	29.78	49.75	-19.97	Average
7	0.327	33.06	-0.32	10.73	43.47	59.53	-16.06	QP
8	0.385	18.94	-0.32	10.72	29.34	48.17	-18.83	Average
9	0.442	18.93	-0.31	10.74	29.36	47.02	-17.66	Average
10	0.447	32.80	-0.31	10.74	43.23	56.93	-13.70	QP
11	2.422	32.15	-0.23	10.94	42.86	56.00	-13.14	QP
12	3.123	15.76	-0.20	10.92	26.48	46.00	-19.52	Average

Notes:

1. *An initial pre-scan was performed on the line and neutral lines with peak detector.*
2. *Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.*
3. *Final Level =Receiver Read level + LISN Factor + Cable Loss.*

6.2 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part 15 B Section 15.109</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.4:2014</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">30MHz to 6000MHz</td></tr>
<tr><td>Test site:</td><td colspan="5">Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td rowspan="4">Receiver setup:</td><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120kHz</td><td>300kHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>RMS</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
<tr><td rowspan="7">Limit:</td><td colspan="2">Frequency</td><td colspan="2">Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td colspan="2">30MHz-88MHz</td><td colspan="2">40.0</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">88MHz-216MHz</td><td colspan="2">43.5</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">216MHz-960MHz</td><td colspan="2">46.0</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">960MHz-1GHz</td><td colspan="2">54.0</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2" rowspan="2">Above 1GHz</td><td colspan="2">54.0</td><td>Average Value</td></tr>
<tr><td colspan="2">74.0</td><td>Peak Value</td></tr>
<tr><td>Test setup:</td><td colspan="5">Below 1GHz
 

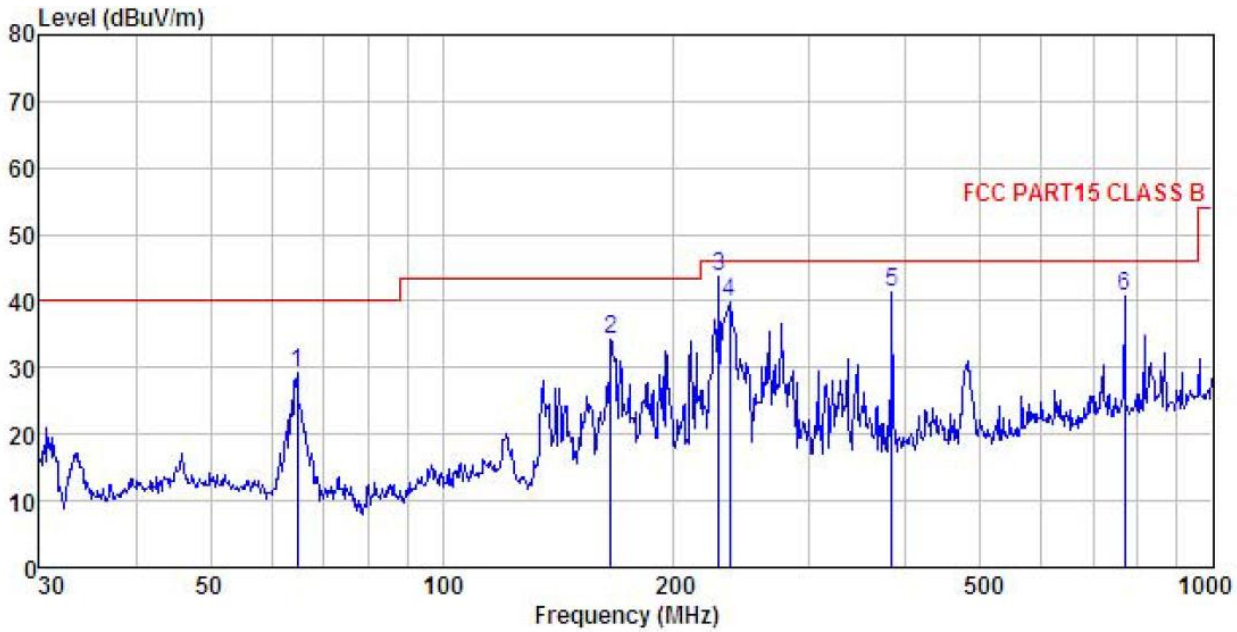
Above 1GHz
 
</td></tr>
</table>

Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.					
Test environment:	Temp.:	25 °C	Humid.:	55%	Press.:	1 01kPa
Test Instruments:	Refer to section 5.7 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Passed					
Remark:	All of the observed value above 6GHz ware the niose floor , which were no recorded					

Measurement Data:

Below 1GHz

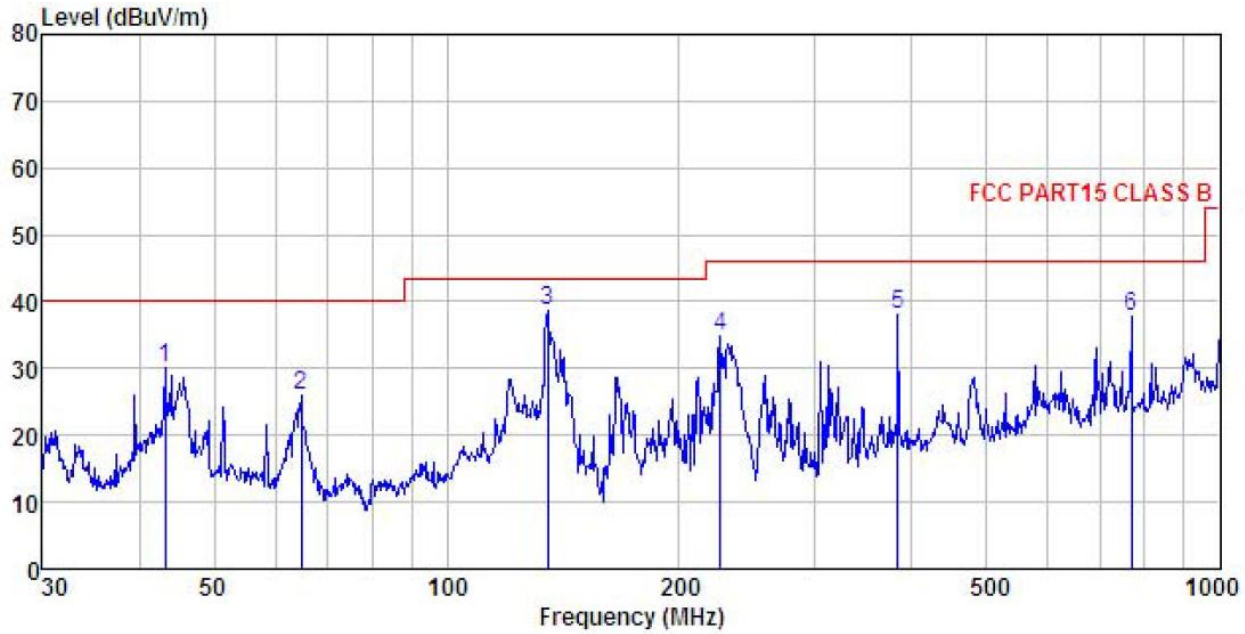
Test Polarization: Horizontal



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163(30M2G) HORIZONTAL
EUT : 2.4 inch Flip 3G Phone
Model : LOGIC F3G
Test mode : PC mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55% 101KPa
Test Engineer: Zora
REMARK :

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	64.887	46.30	11.24	1.38	29.76	29.16	40.00	-10.84	QP
2	165.487	51.79	8.84	2.62	29.09	34.16	43.50	-9.34	QP
3	228.490	58.20	11.44	2.84	28.66	43.82	46.00	-2.18	QP
4	235.816	54.02	11.65	2.83	28.62	39.88	46.00	-6.12	QP
5	383.932	52.24	14.64	3.09	28.71	41.26	46.00	-4.74	QP
6	768.748	45.28	19.58	4.36	28.37	40.85	46.00	-5.15	QP

Test Polarization: Vertical

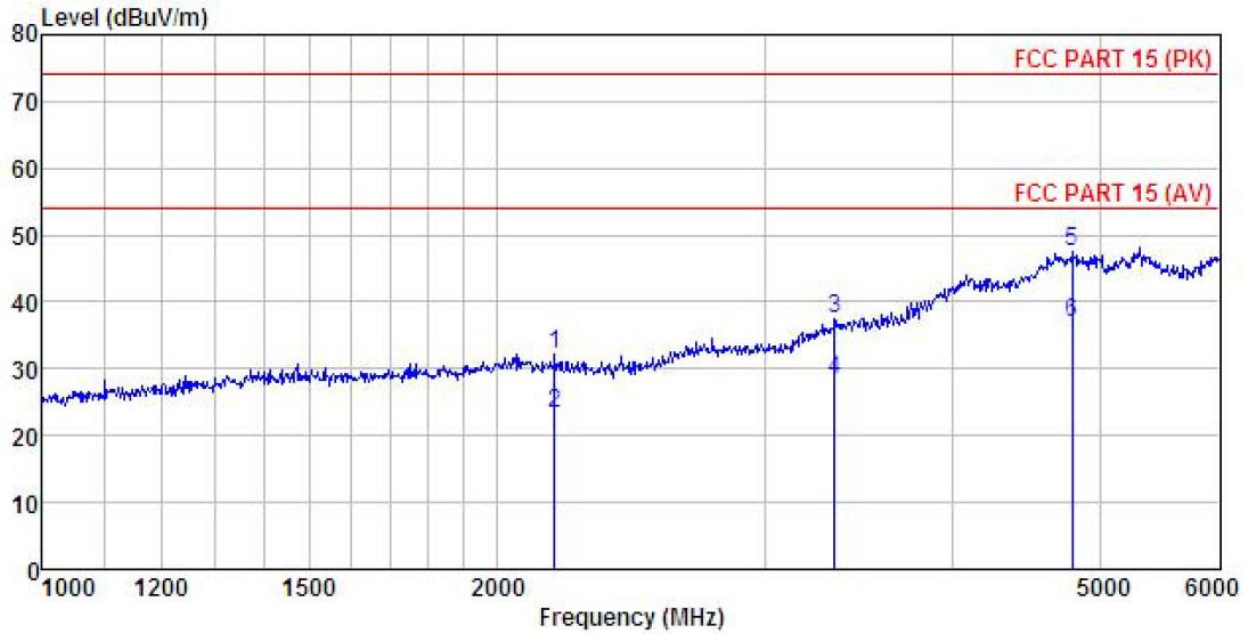


Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163(30M2G) VERTICAL
EUT : 2.4 inch Flip 3G Phone
Model : LOGIC F3G
Test mode : PC mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5℃ Huni:55% 101KPa
Test Engineer: Zora
REMARK :

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	43.202	44.54	14.07	1.26	29.87	30.00	40.00	-10.00	QP
2	64.887	43.00	11.24	1.38	29.76	25.86	40.00	-14.14	QP
3	135.032	57.12	8.48	2.34	29.30	38.64	43.50	-4.86	QP
4	226.099	49.44	11.37	2.84	28.67	34.98	46.00	-11.02	QP
5	383.932	49.15	14.64	3.09	28.71	38.17	46.00	-7.83	QP
6	768.748	42.08	19.58	4.36	28.37	37.65	46.00	-8.35	QP

Above 1GHz

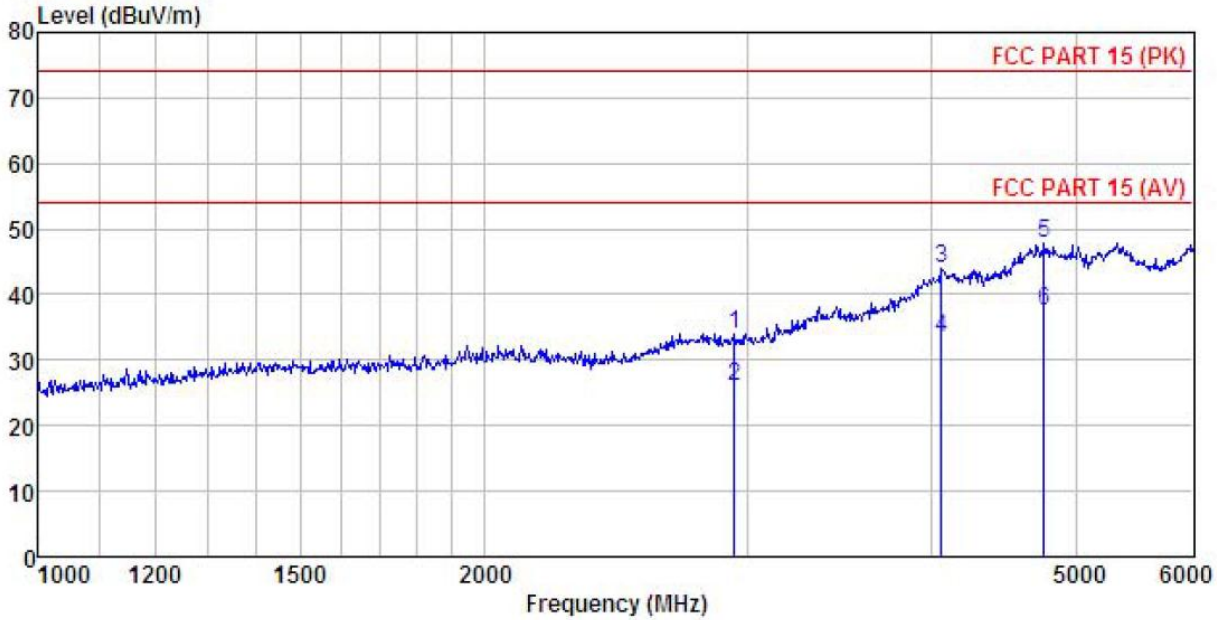
Test Polarization: Horizontal



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18G) HORIZONTAL
EUT : 2.4 inch Flip 3G Phone
Model : LOGIC F3G
Test mode : PC mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5℃ Huni:55% 101KPa
Test Engineer: Zora
REMARK :

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2180.197	44.48	24.91	4.49	41.68	32.20	74.00	-41.80	Peak
2	2180.197	35.52	24.91	4.49	41.68	23.24	54.00	-30.76	Average
3	3339.610	45.82	27.41	5.56	41.37	37.42	74.00	-36.58	Peak
4	3339.610	36.82	27.41	5.56	41.37	28.42	54.00	-25.58	Average
5	4796.035	51.74	30.77	6.81	41.83	47.49	74.00	-26.51	Peak
6	4796.035	41.26	30.77	6.81	41.83	37.01	54.00	-16.99	Average

Test Polarization: Vertical



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18G) VERTICAL
EUT : 2.4 inch Flip 3G Phone
Model : LOGIC F3G
Test mode : PC mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5℃ Huni:55% 101KPa
Test Engineer: Zora
REMARK :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2945.949	43.28	27.00	5.30	41.55	34.03	74.00	-39.97	Peak
2	2945.949	35.21	27.00	5.30	41.55	25.96	54.00	-28.04	Average
3	4059.890	51.22	28.52	6.20	41.81	44.13	74.00	-29.87	Peak
4	4059.890	40.58	28.52	6.20	41.81	33.49	54.00	-20.51	Average
5	4761.785	52.23	30.59	6.82	41.88	47.76	74.00	-26.24	Peak
6	4761.785	41.90	30.59	6.82	41.88	37.43	54.00	-16.57	Average