



MRT Technology (Suzhou) Co., Ltd  
Phone: +86-512-66308358  
Fax: +86-512-66308368  
Web: www.mrt-cert.com

Report No.: 1601RSU00602  
Report Version: V03  
Issue Date: 02-05-2016

## MEASUREMENT REPORT

### FCC Part 15B

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**FCC ID:** YZZGXP2130V2  
**APPLICANT:** Grandstream Networks, Inc.

**Product:** IP Phone  
**Model No.:** GXP2130  
**Brand Name:** Grandstream  
**FCC Classification:** FCC Class B Digital Device (JBP)  
**FCC Rule Part(s):** FCC Part 15 Subpart B: 2014  
**Test Procedure(s):** ANSI C63.4: 2014  
**Test Date:** January 12 ~ 16, 2016

Reviewed By : Robin Wu  
( Robin Wu )  
Approved By : Marlin Chen  
( Marlin Chen )



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

### Revision History

Report No.	Version	Description	Issue Date
1601RSU00602	Rev. 01	Initial report	01-18-2016
1601RSU00602	Rev. 02	Update the test date and delete the radiated emission data above 1GHz	01-20-2016
1601RSU00602	Rev. 03	Update the test setup diagram	02-05-2016

Note: The EUT has been got the FCC certificate (FCC ID: YZZGXP2130V2). The EUT adds two new adapters now and we have shown the conducted emission data and radiated emission data in this report.

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## §2.1033 General Information

<b>Applicant:</b>	Grandstream Networks, Inc.
<b>Applicant Address:</b>	4th Floor, Rainbow Technology Building #16 New West Rd, Nanshan Science & Technology Park (North District), Shenzhen, China 518057
<b>Manufacturer:</b>	Grandstream Networks, Inc.
<b>Manufacturer Address:</b>	4th Floor, Rainbow Technology Building #16 New West Rd, Nanshan Science & Technology Park (North District), Shenzhen, China 518057
<b>Test Site:</b>	MRT Technology (Suzhou) Co., Ltd
<b>Test Site Address:</b>	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
<b>MRT FCC Registration No.:</b>	809388
<b>Model No.:</b>	GXP2130
<b>Test Device Serial No.:</b>	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering

### Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



## 1. INTRODUCTION

### 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



## 2. PRODUCT INFORMATION

### 2.1. Equipment Description

Product Name	IP Phone
Model No.	GXP2130
Brand Name	Grandstream
BT Specification	v2.1 + EDR
Antenna Type	PCB Antenna
Antenna Gain	2dBi
<b>Components</b>	
Adapter #1	M/N: NBS05B120050VU Input: AC 100-240V ~ 50/60Hz, 0.15A OUTPUT: 12Vdc, 0.5A
Adapter #2	M/N: F06US1200050A Input: AC 100-240V ~ 50/60Hz, 0.2A max OUTPUT: 12Vdc, 0.5A

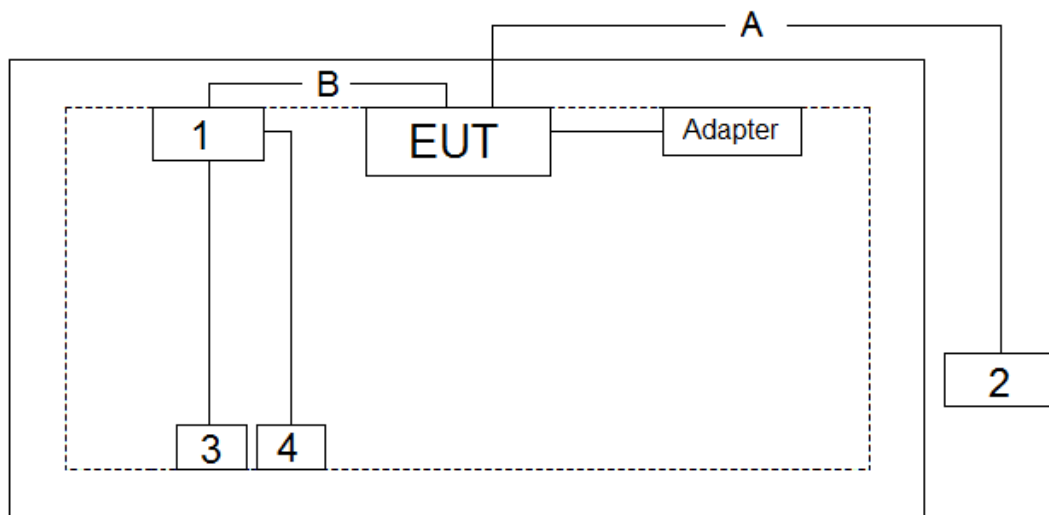
### 2.2. Test Mode

<b>Test Mode</b>	
EMI Mode	Mode 1: Audio Call with another IP Phone and Communicate with PC and Powered by Adapter #1 Mode 2: Audio Call with another IP Phone and Communicate with PC and Powered by Adapter #2

### 2.3. Test Configuration

The EUT was tested per the guidance FCC Part 15 Subpart B: 2014 and ANSI C63.4: 2014 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

Connection Diagram (Mode 1 & 2)



Signal Cable Type		Signal Cable Description
A	LAN Cable	Non-Shielding, >10m
B	LAN Cable	Non-Shielding, 1.5m

### 2.4. Test System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook	Lenovo	X201	3626AM3	Non-Shielded, 1.8m
2 IP Phone	GRANDSTREAM	GXP2160	N/A	N/A
3 USB Keyboard	Dell	KB212	N/A	N/A
4 USB Mouse	Dell	MS111	N/A	N/A

Remark: The auxiliary equipment notebook was authorized by FCC Declaration of Confirmation.

## 2.5. Test Software

1	Setup the EUT and simulators as shown on above.
2	(1), Make the EUT set-up as shown above. (2), Power on the EUT and Make a Audio Call with another IP Phone and Communicate with PC. (3), Start to test.

## 2.6. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

### 3. DESCRIPTION OF TEST

#### 3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical Equipment in the Range of 9kHz to 40GHz (ANSI C63.4-2014) was used in the measurement of the **IP Phone**

**Deviation from measurement procedure.....None**

#### 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150 kHz to 30 MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9 kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or resolution, clock or data exchange speed, scrolling H pattern to the EUT and/or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. Line conducted emissions test results are shown in Section 6.2.

### 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. An MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30 MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30 MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 0.8 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB beam-width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

#### 4. TEST EQUIPMENT CALIBRATION DATE

##### Conducted Emissions - SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2016/11/03
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2016/11/03
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2016/11/03
Temperature/ Meter Humidity	Yuhuaze	N/A	MRTSUE06180	1 year	2016/12/20

##### Radiated Emission - AC2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MRTSUE06124	1 year	2016/06/23
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2016/11/03
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2016/03/29
TRILOG Antenna	Schwarzbeck	VULB9168	MRTSUE06172	1 year	2016/12/10
Temperature/ Meter Humidity	Mingao	ETH529	MRTSUE06170	1 year	2016/11/29

Software	Version	Function
e3	V8.3.5	EMI Test Software

## 5. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .

AC Conducted Emission Measurement - SR2
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 150kHz~30MHz: 3.5dB
Radiated Emission Measurement - AC2
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): Horizontal: 30MHz~1GHz: 4.07dB Vertical: 30MHz~1GHz: 4.18 dB

## 6. TEST RESULT

### 6.1. Summary

Company Name: Grandstream Networks, Inc.

Audio Call with another IP Phone and Communicate with PC and  
Powered by Adapter #1;

Test Mode:

Audio Call with another IP Phone and Communicate with PC and  
Powered by Adapter #2;

FCC Part Section(s)	Test Description	Test Result
15.107	Conducted Emissions	Pass
15.109	Radiated Emissions	Pass

## 6.2. Conducted Emission Measurement

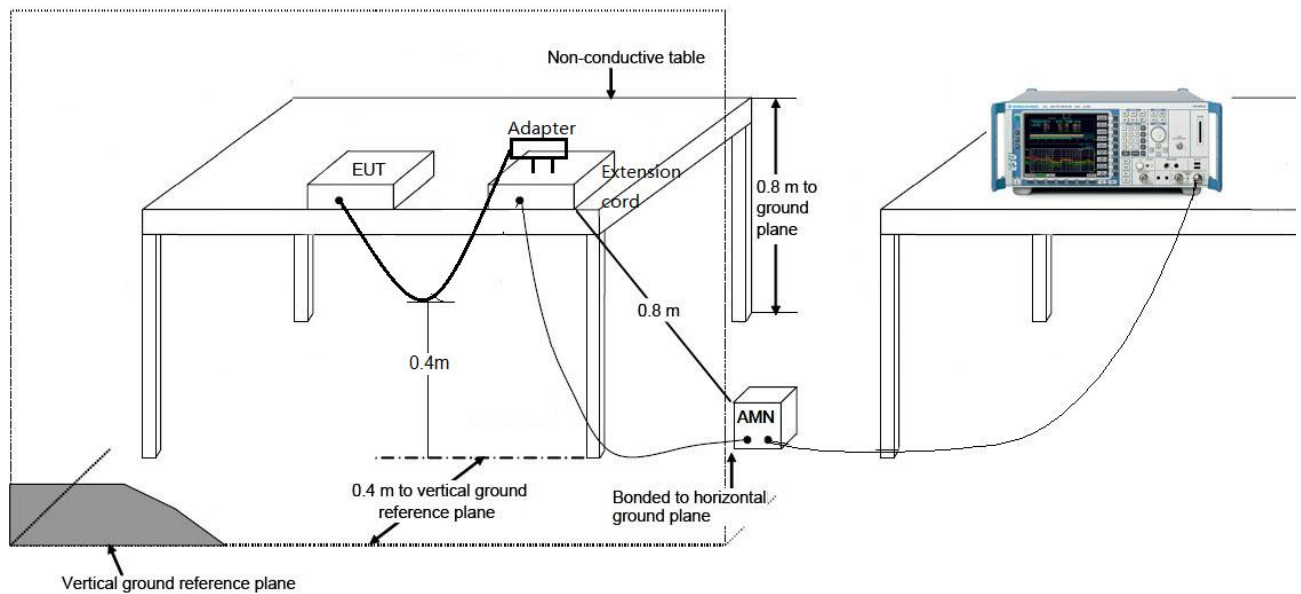
### 6.2.1. Test Limit

FCC Part 15.107 Limits		
Frequency (MHz)	QP (dB $\mu$ V)	AV (dB $\mu$ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

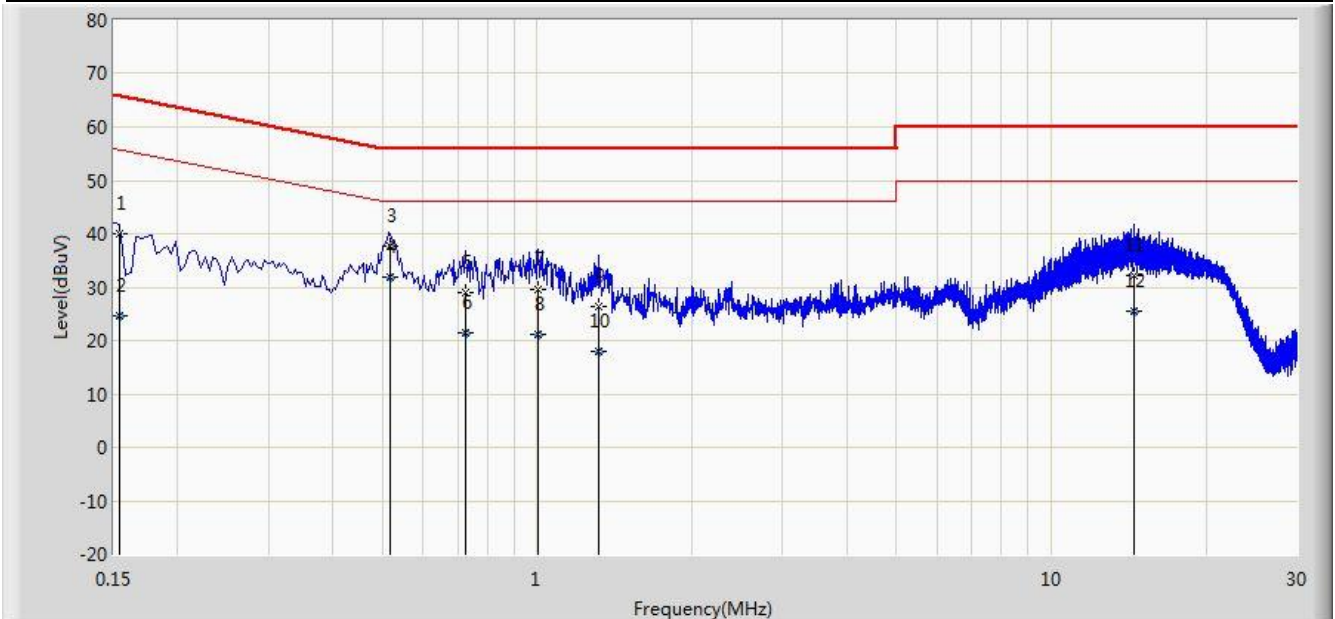
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

### 6.2.2. Test Setup



### 6.2.3. Test Result of Conducted Emissions

Site: SR2	Time: 2016/01/12 - 09:53
Limit: FCC_Part15.107_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: IP Phone	Power: AC 120V/60Hz
Note: Mode 1	

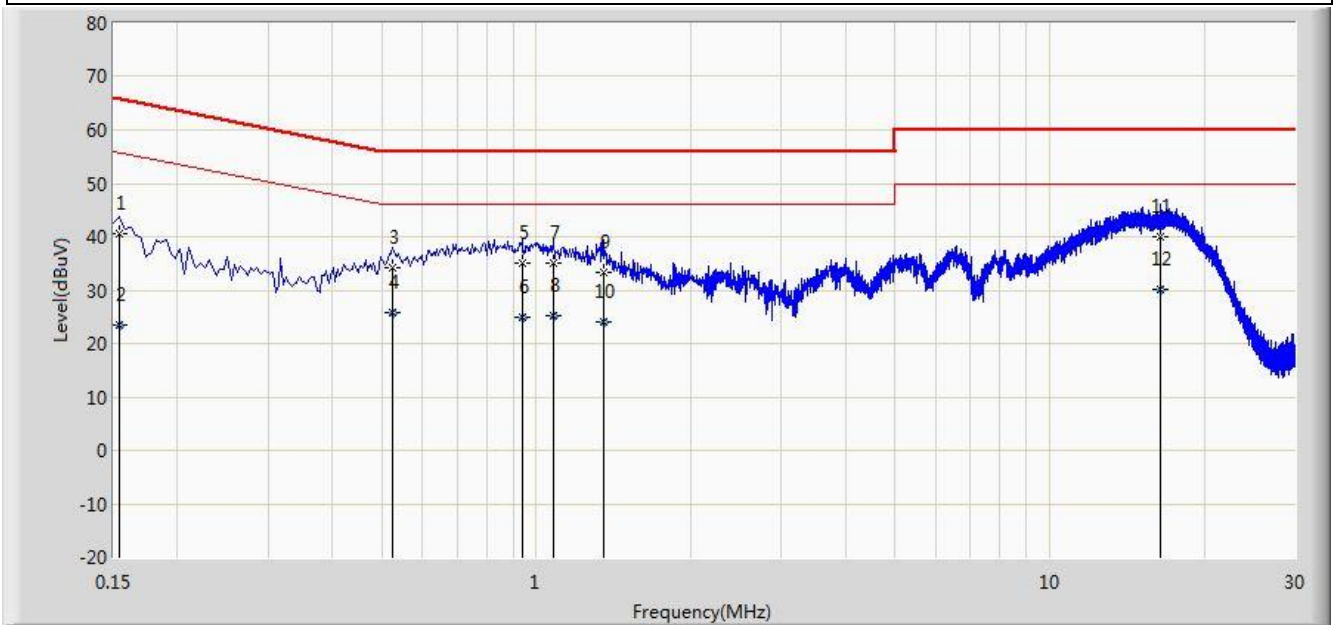


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.154	40.123	29.384	-25.658	65.781	10.740	QP
2			0.154	24.572	13.832	-31.210	55.781	10.740	AV
3			0.518	37.588	27.432	-18.412	56.000	10.156	QP
4		*	0.518	31.764	21.608	-14.236	46.000	10.156	AV
5			0.726	28.989	18.939	-27.011	56.000	10.050	QP
6			0.726	21.483	11.434	-24.517	46.000	10.050	AV
7			1.006	29.500	19.591	-26.500	56.000	9.909	QP
8			1.006	21.183	11.274	-24.817	46.000	9.909	AV
9			1.314	26.395	16.499	-29.605	56.000	9.897	QP
10			1.314	17.853	7.956	-28.147	46.000	9.897	AV
11			14.466	32.289	22.244	-27.711	60.000	10.045	QP
12			14.466	25.632	15.587	-24.368	50.000	10.045	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SR2	Time: 2016/01/12 - 09:58
Limit: FCC_Part15.107_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: IP Phone	Power: AC 120V/60Hz
Note: Mode 1	

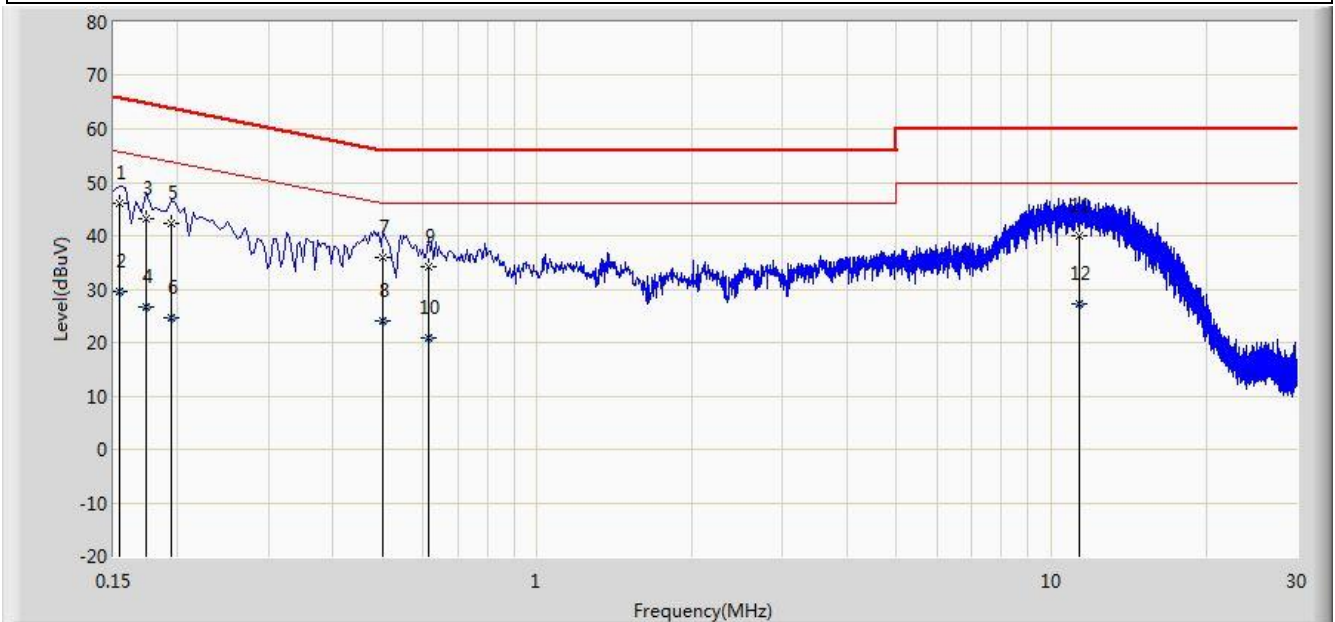


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	40.462	29.746	-25.319	65.781	10.716	QP
2			0.154	23.519	12.803	-32.263	55.781	10.716	AV
3			0.526	34.317	24.145	-21.683	56.000	10.172	QP
4			0.526	25.805	15.634	-20.195	46.000	10.172	AV
5			0.938	34.984	25.041	-21.016	56.000	9.943	QP
6			0.938	25.024	15.081	-20.976	46.000	9.943	AV
7			1.082	34.996	25.090	-21.004	56.000	9.906	QP
8			1.082	25.210	15.305	-20.790	46.000	9.906	AV
9			1.350	33.366	23.469	-22.634	56.000	9.896	QP
10			1.350	24.010	14.114	-21.990	46.000	9.896	AV
11			16.422	40.083	29.968	-19.917	60.000	10.116	QP
12		*	16.422	30.248	20.132	-19.752	50.000	10.116	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SR2	Time: 2016/01/12 - 11:42
Limit: FCC_Part15.107_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: IP Phone	Power: AC 120V/60Hz
Note: Mode 2	

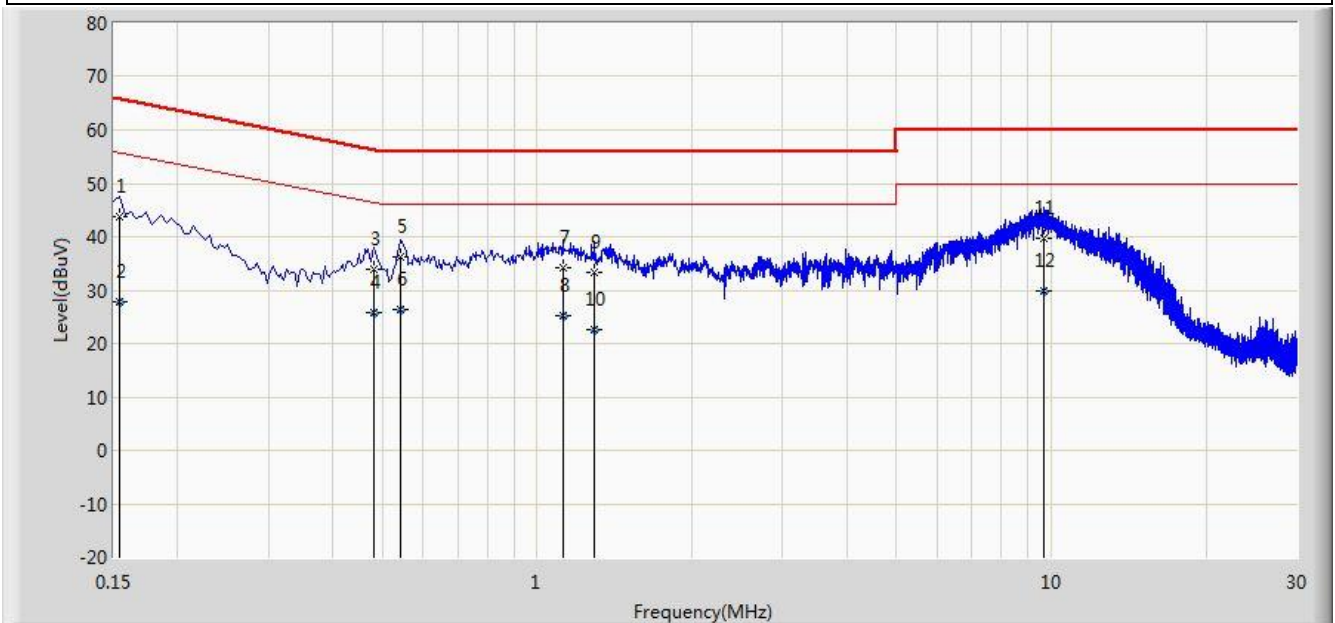


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.154	46.200	35.460	-19.581	65.781	10.740	QP
2			0.154	29.704	18.964	-26.078	55.781	10.740	AV
3			0.174	43.305	33.237	-21.463	64.767	10.068	QP
4			0.174	26.545	16.477	-28.222	54.767	10.068	AV
5			0.194	42.414	32.398	-21.449	63.864	10.017	QP
6			0.194	24.624	14.607	-29.240	53.864	10.017	AV
7			0.502	36.027	25.870	-19.973	56.000	10.157	QP
8			0.502	24.096	13.939	-21.904	46.000	10.157	AV
9			0.614	34.148	24.040	-21.852	56.000	10.108	QP
10			0.614	20.787	10.680	-25.213	46.000	10.108	AV
11			11.306	40.114	30.016	-19.886	60.000	10.097	QP
12			11.306	27.229	17.132	-22.771	50.000	10.097	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SR2	Time: 2016/01/12 - 11:49
Limit: FCC_Part15.107_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: IP Phone	Power: AC 120V/60Hz
Note: Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	43.719	33.003	-22.063	65.781	10.716	QP
2			0.154	27.716	17.000	-28.065	55.781	10.716	AV
3			0.482	33.831	23.657	-22.474	56.305	10.173	QP
4			0.482	25.659	15.486	-20.646	46.305	10.173	AV
5			0.542	36.253	26.090	-19.747	56.000	10.163	QP
6		*	0.542	26.384	16.221	-19.616	46.000	10.163	AV
7			1.122	34.320	24.416	-21.680	56.000	9.904	QP
8			1.122	25.252	15.348	-20.748	46.000	9.904	AV
9			1.294	33.240	23.342	-22.760	56.000	9.898	QP
10			1.294	22.714	12.816	-23.286	46.000	9.898	AV
11			9.654	39.626	29.448	-20.374	60.000	10.178	QP
12			9.654	29.828	19.650	-20.172	50.000	10.178	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

### 6.3. Radiated Emission Measurement

#### 6.3.1. Test Limit

FCC Part 15.109 Limits		
Frequency (MHz)	Distance (m)	Level (dBμV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBμV/m) = 20 log E field strength (uV/m)

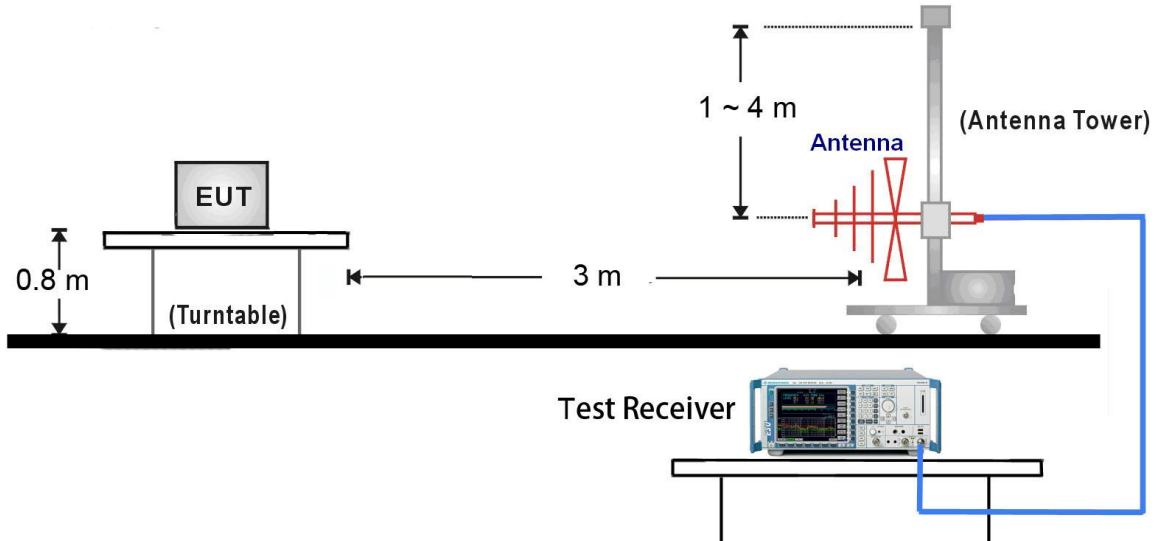
#### 6.3.2. Test Frequency selected

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

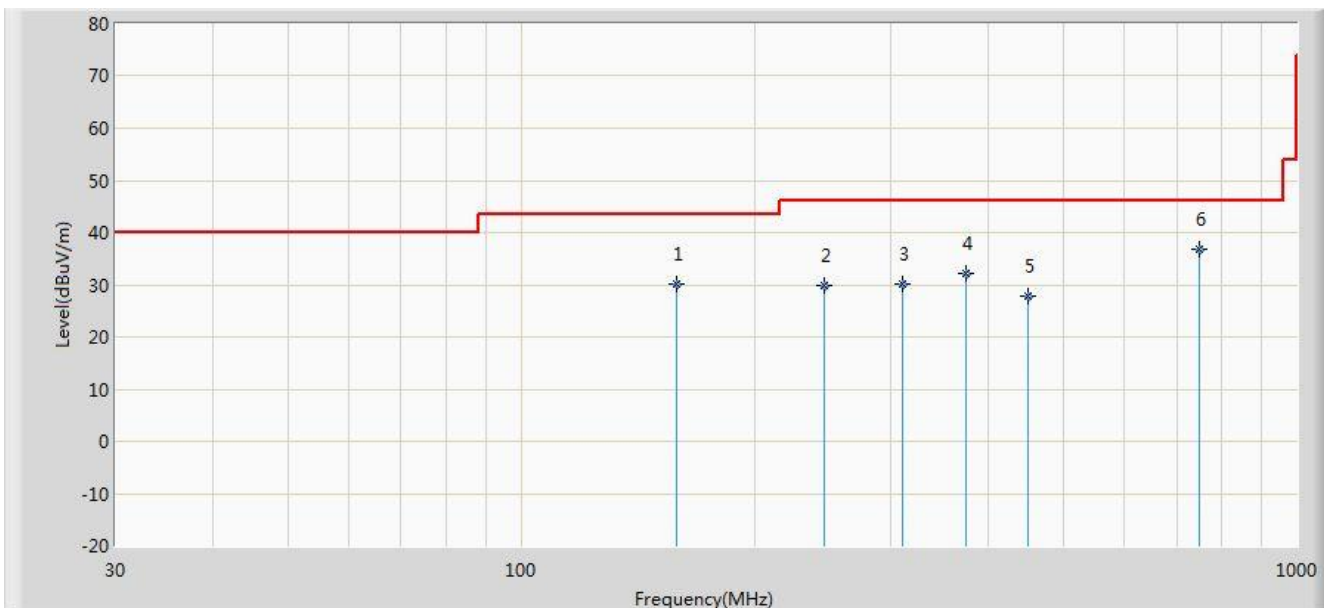
### 6.3.3. Test Setup

#### 30MHz ~ 1GHz Test Setup:



### 6.3.4. Test Result of Radiated Emissions

Site: AC2	Time: 2016/01/14 - 14:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: IP Phone	Power: AC 120V/60Hz
Test Mode: Mode 1	

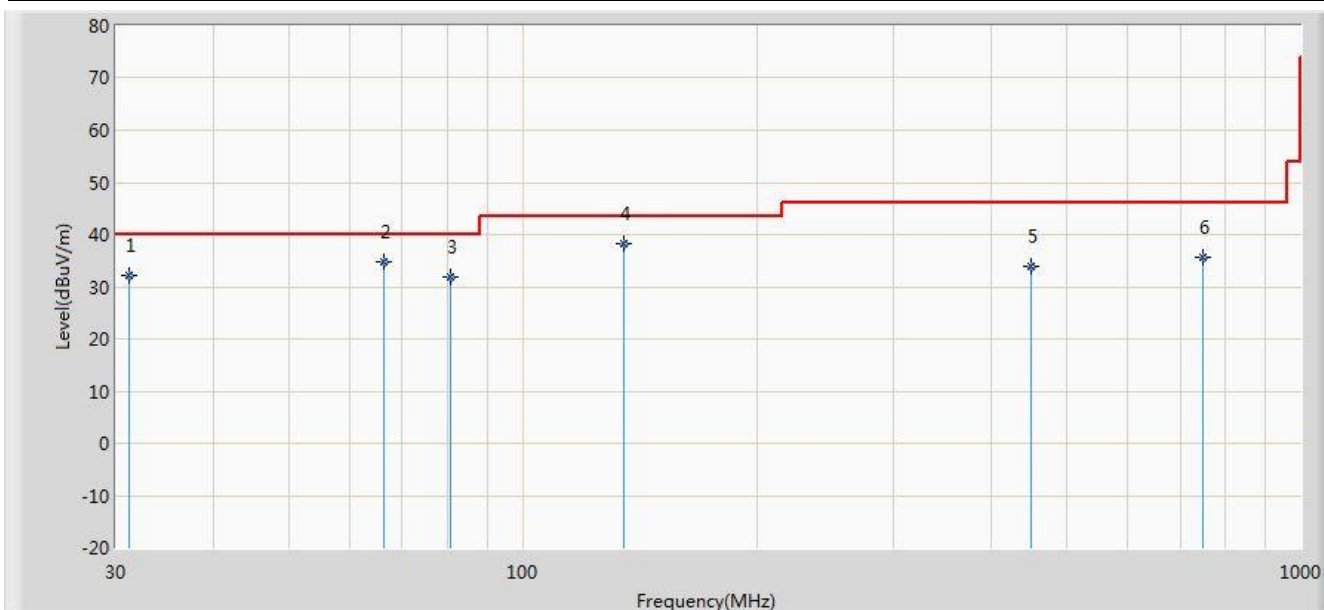


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			158.525	30.104	20.314	-13.396	43.500	9.790	QP
2			246.310	29.993	16.390	-16.007	46.000	13.603	QP
3			310.330	30.173	15.340	-15.827	46.000	14.833	QP
4			374.835	32.158	15.940	-13.842	46.000	16.218	QP
5			450.010	27.793	10.364	-18.207	46.000	17.429	QP
6		*	750.002	36.892	14.630	-9.108	46.000	22.262	QP

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: AC2	Time: 2016/01/14 - 14:38
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: IP Phone	Power: AC 120V/60Hz
Test Mode: Mode 1	

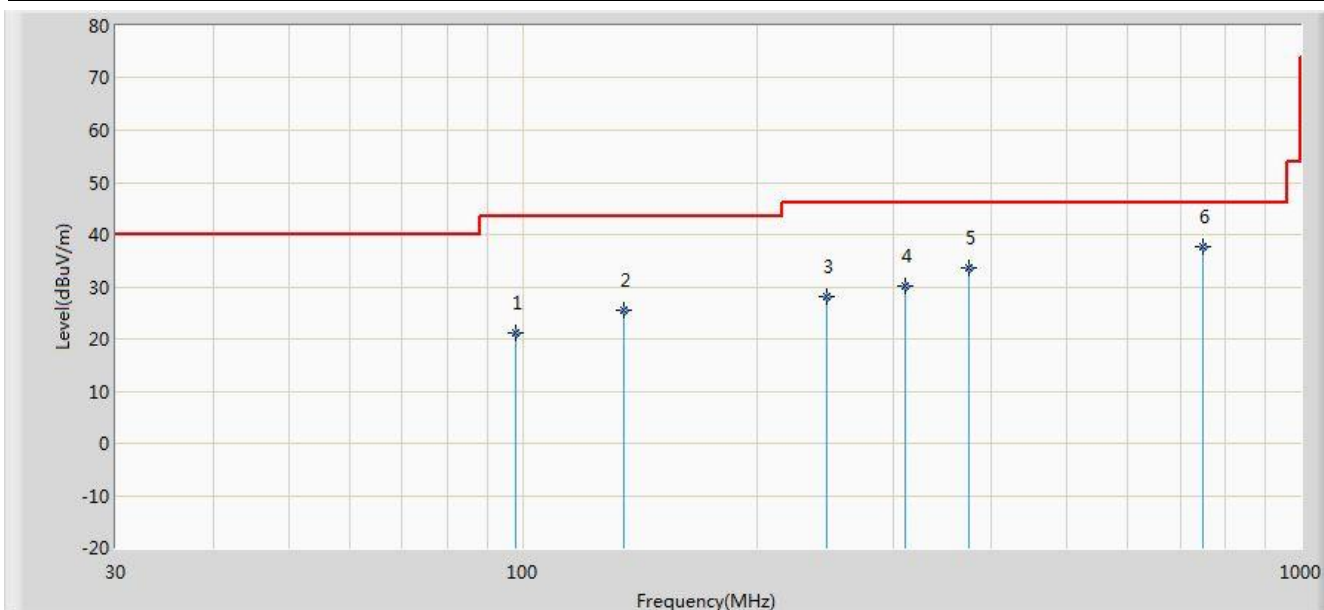


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			31.192	32.164	19.900	-7.836	40.000	12.264	QP
2			66.375	34.732	22.640	-5.268	40.000	12.092	QP
3			80.925	31.859	22.340	-8.141	40.000	9.519	QP
4		*	134.760	38.371	28.640	-5.129	43.500	9.731	QP
5			450.010	33.769	16.340	-12.231	46.000	17.429	QP
6			750.225	35.602	13.340	-10.398	46.000	22.262	QP

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: AC2	Time: 2016/01/14 - 14:38
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: IP Phone	Power: AC 120V/60Hz
Test Mode: Mode 2	

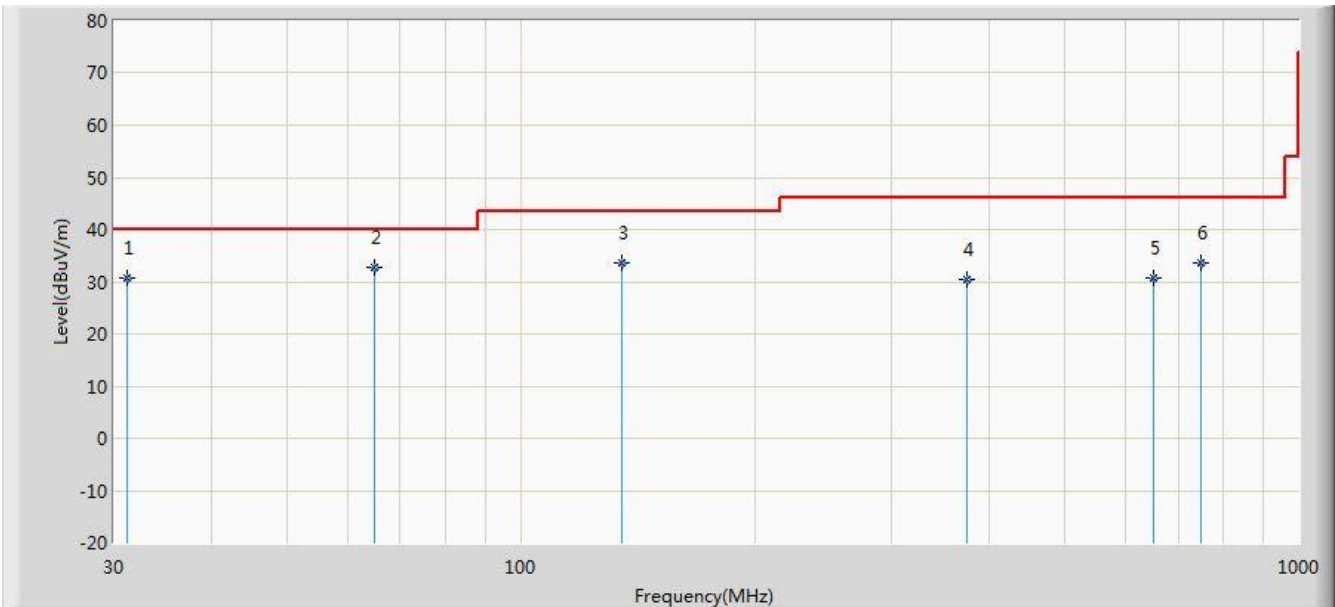


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			97.900	21.081	8.370	-22.419	43.500	12.710	QP
2			134.760	25.571	15.840	-17.929	43.500	9.731	QP
3			246.310	27.993	14.390	-18.007	46.000	13.603	QP
4			310.815	30.075	15.230	-15.925	46.000	14.845	QP
5			374.835	33.528	17.310	-12.472	46.000	16.218	QP
6		*	750.225	37.602	15.340	-8.398	46.000	22.262	QP

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: AC2	Time: 2016/01/14 - 14:39
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: IP Phone	Power: AC 120V/60Hz
Test Mode: Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			31.253	30.653	18.380	-9.347	40.000	12.273	QP
2		*	64.920	32.615	20.030	-7.385	40.000	12.585	QP
3			134.760	33.481	23.750	-10.019	43.500	9.731	QP
4			374.835	30.468	14.250	-15.532	46.000	16.218	QP
5			649.830	30.751	10.030	-15.249	46.000	20.722	QP
6			750.225	33.572	11.310	-12.428	46.000	22.262	QP

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

## 7. CONCLUSION

The data collected relate only the item(s) tested and show that the **IP Phone FCC ID:**

**YZZGXP2130V2** has been tested to comply with the requirements specified in §15.107 and §15.109 of the FCC Rules.

\_\_\_\_\_ The End \_\_\_\_\_