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Report No.: 1601RSU00702 Report Version: V03 Issue Date: 02-05-2016

MEASUREMENT REPORT

FCC Part 15B

YZZGXP2140 FCC ID:

APPLICANT: Grandstream Networks, Inc.

Product: IP Phone

Model No.: **GXP2140**

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

Approved By

(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.

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Revision History

Report No.	Version	Description	Issue Date
1601RSU00702	Rev. 01	Initial report	01-18-2016
1601RSU00702	Rev. 02	Update the test date and delete the radiated emission data above 1GHz	01-20-2016
1601RSU00702	Rev. 03	Update the test setup diagram	02-05-2016

Note: The EUT has been got the FCC certificate (FCC ID: YZZGXP2140). 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

Applicant:	Grandstream Networks, Inc.			
Applicant Address:	4th Floor, Rainbow Technology Building #16 New West Rd, Nanshan			
	Science & Technology Park (North District), Shenzhen, China			
	518057			
Manufacturer:	Grandstream Networks, Inc.			
Manufacturer Address:	4th Floor, Rainbow Technology Building #16 New West Rd, Nanshan			
	Science & Technology Park (North District), Shenzhen, China			
	518057			
Test Site:	MRT Technology (Suzhou) Co., Ltd			
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong			
	Economic Development Zone, Suzhou, China			
MRT FCC Registration No.:	809388			
Model No.:	GXP2140			
Test Device Serial No.:	N/A ☐ Production ☐ Pre-Production ☐ 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.



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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.



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2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	IP Phone
Model No.	GXP2140
Brand Name	Grandstream
BT Specification	v2.1 + EDR
Antenna Type	PIFA Antenna
Antenna Gain	2dBi
Components	
Adapter #1	M/N: F12US1200100A
	Input: AC 100-240V ~ 50/60Hz, 0.5A max
	OUTPUT: 12Vdc, 1.0A
Adapter #2 M/N: PEA-120100VA	
	Input: AC 100-240V ~ 50/60Hz, 0.3A
	OUTPUT: 12Vdc, 1.0A

2.2. Test Mode

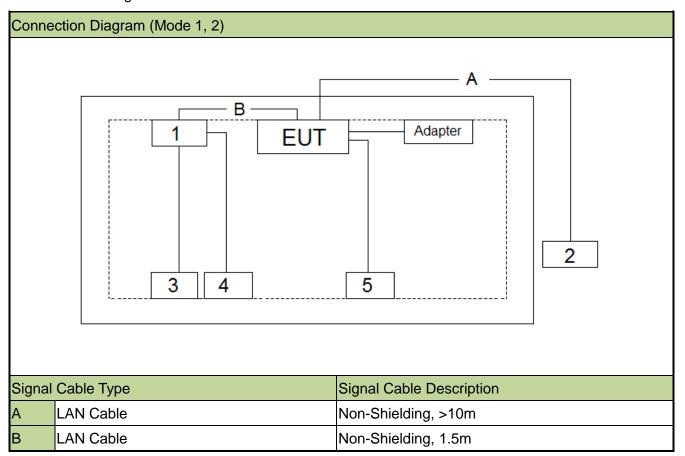
Test Mode	
	Mode 1: Audio Call with another IP Phone and Communicate with PC and Powered
EMI Mode	by Adapter #1
LIVII IVIOGE	Mode 2: Audio Call with another IP Phone and Communicate with PC and Powered
	by Adapter #2

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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.



2.4. Test System Details

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

Produ	ct	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
5	USB Mouse	Dell	MS111	N/A	N/A

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

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2.5. Test Software

1	Setup the EUT and simulators as shown on above.
	(1), Make the EUT set-up as shown above.
2	(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.

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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, $50\Omega/50uH$ 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

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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.

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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

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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=2Uc(y)):

150kHz~30MHz: 3.5dB

Radiated Emission Measurement - AC2

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

Horizontal: 30MHz~1GHz: 4.07dB Vertical: 30MHz~1GHz: 4.18 dB

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6. TEST RESULT

6.1. Summary

Company Name: Grandstream Networks, Inc.

Audio Call with another IP Phone and Communicate with PC and

Test Mode: Powered by Adapter #1;

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

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6.2. Conducted Emission Measurement

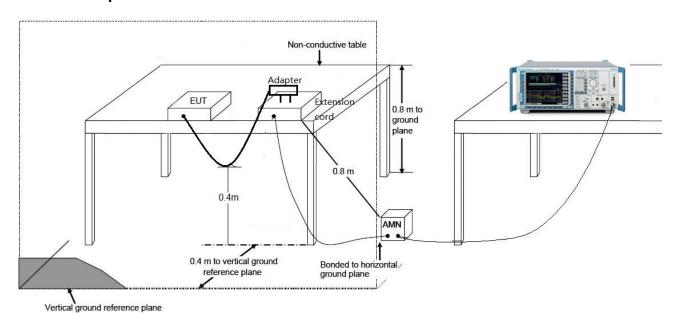
6.2.1. Test Limit

FCC Part 15.107 Limits				
Frequency (MHz)	QP (dBµV)	ΑV (dBμV)		
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

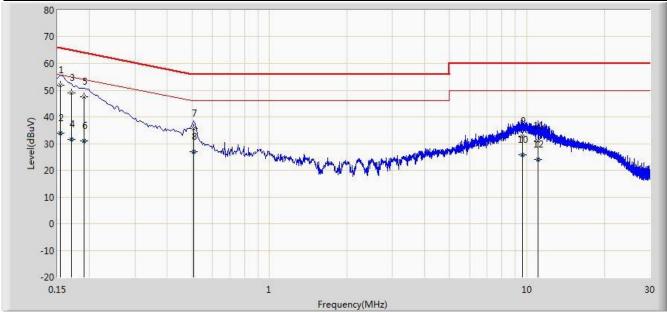


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6.2.3. Test Result of Conducted Emissions

Site: SR2	Time: 2016/01/12 - 13:30
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	



						icy(ivii iz)	l		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.154	51.811	41.071	-13.970	65.781	10.740	QP
2			0.154	33.822	23.082	-21.960	55.781	10.740	AV
3			0.170	48.930	38.853	-16.030	64.960	10.078	QP
4			0.170	31.719	21.641	-23.241	54.960	10.078	AV
5			0.190	47.680	37.651	-16.356	64.037	10.029	QP
6			0.190	30.904	20.875	-23.133	54.037	10.029	AV
7			0.506	35.531	25.374	-20.469	56.000	10.157	QP
8			0.506	26.893	16.737	-19.107	46.000	10.157	AV
9			9.602	32.766	22.599	-27.234	60.000	10.167	QP
10			9.602	25.863	15.696	-24.137	50.000	10.167	AV
11			11.030	31.115	21.009	-28.885	60.000	10.106	QP
12			11.030	23.973	13.867	-26.027	50.000	10.106	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

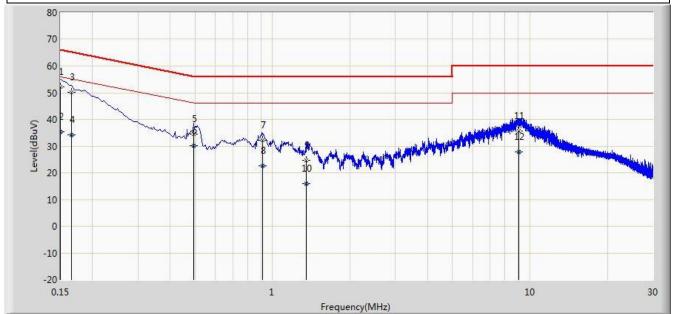
Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

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Site: SR2	Time: 2016/01/12 - 13:35
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: Made 1	

Note: Mode 1



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.150	52.075	40.933	-13.925	66.000	11.142	QP
2			0.150	35.352	24.210	-20.648	56.000	11.142	AV
3			0.166	50.146	40.075	-15.012	65.158	10.071	QP
4			0.166	34.140	24.069	-21.018	55.158	10.071	AV
5			0.494	34.348	24.169	-21.752	56.100	10.178	QP
6			0.494	30.011	19.832	-16.090	46.100	10.178	AV
7			0.914	32.044	22.087	-23.956	56.000	9.957	QP
8			0.914	22.637	12.681	-23.363	46.000	9.957	AV
9			1.350	24.555	14.658	-31.445	56.000	9.896	QP
10			1.350	16.060	6.163	-29.940	46.000	9.896	AV
11			9.042	35.726	25.551	-24.274	60.000	10.175	QP
12			9.042	27.864	17.689	-22.136	50.000	10.175	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

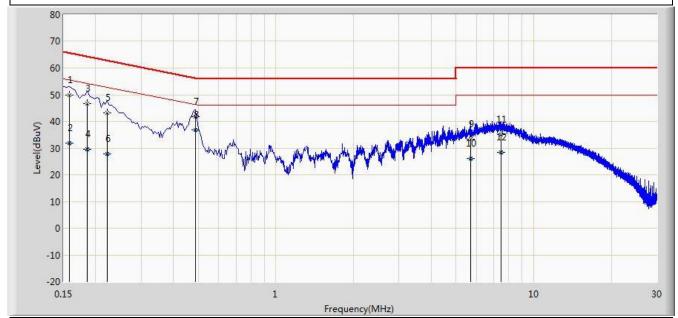
Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

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Site: SR2	Time: 2016/01/12 - 19:29
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
Nata Mada O	

Note: Mode 2



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.158	49.828	39.517	-15.740	65.568	10.311	QP
2			0.158	31.752	21.441	-23.817	55.568	10.311	AV
3			0.186	46.640	36.601	-17.574	64.213	10.039	QP
4			0.186	29.530	19.491	-24.684	54.213	10.039	AV
5			0.222	43.329	33.388	-19.415	62.744	9.941	QP
6			0.222	27.931	17.990	-24.813	52.744	9.941	AV
7			0.486	41.665	31.510	-14.570	56.236	10.155	QP
8		*	0.486	36.955	26.800	-9.281	46.236	10.155	AV
9			5.698	33.377	23.278	-26.623	60.000	10.099	QP
10			5.698	26.145	16.046	-23.855	50.000	10.099	AV
11			7.474	35.033	24.863	-24.967	60.000	10.170	QP
12			7.474	28.494	18.324	-21.506	50.000	10.170	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

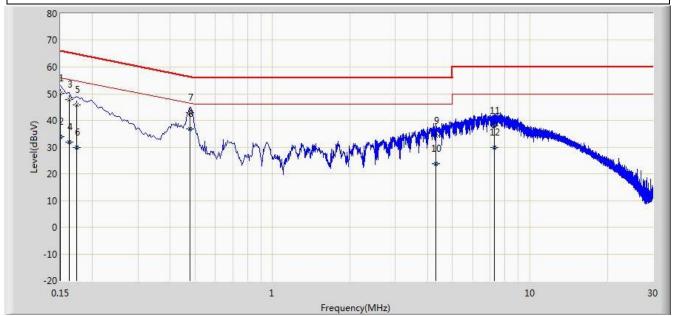
Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

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Site: SR2	Time: 2016/01/12 - 19:34
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: Made O	

Note: Mode 2



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.150	50.022	38.880	-15.978	66.000	11.142	QP
2			0.150	33.862	22.720	-22.138	56.000	11.142	AV
3			0.162	47.697	37.619	-17.664	65.361	10.078	QP
4			0.162	31.853	21.774	-23.508	55.361	10.078	AV
5			0.174	45.740	35.683	-19.027	64.767	10.057	QP
6			0.174	29.941	19.884	-24.827	54.767	10.057	AV
7			0.478	42.845	32.674	-13.529	56.374	10.170	QP
8		*	0.478	36.858	26.688	-9.516	46.374	10.170	AV
9			4.318	34.326	24.338	-21.674	56.000	9.987	QP
10			4.318	23.825	13.837	-22.175	46.000	9.987	AV
11			7.278	37.957	27.778	-22.043	60.000	10.178	QP
12			7.278	29.732	19.553	-20.268	50.000	10.178	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

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

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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 $(dB\mu V/m) = 20 \log E$ 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:

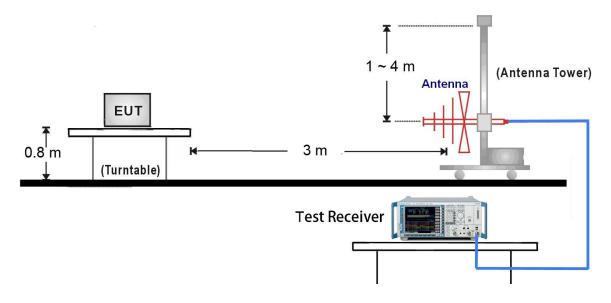
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

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6.3.3. Test Setup

30MHz ~ 1GHz Test Setup:

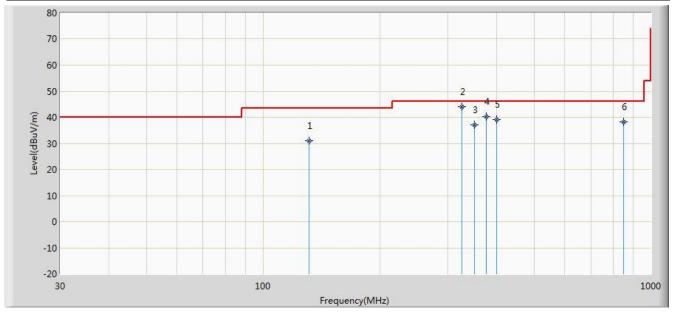


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6.3.4. Test Result of Radiated Emissions

Site: AC2	Time: 2016/01/14 - 14:47
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	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			131.630	30.978	21.030	-12.522	43.500	9.947	QP
2		*	325.003	44.153	28.920	-1.847	46.000	15.233	QP
3			350.030	37.119	21.260	-8.881	46.000	15.859	QP
4			375.800	40.172	23.940	-5.828	46.000	16.231	QP
5			400.000	39.133	22.380	-6.867	46.000	16.753	QP
6			850.140	38.344	14.720	-7.656	46.000	23.624	QP

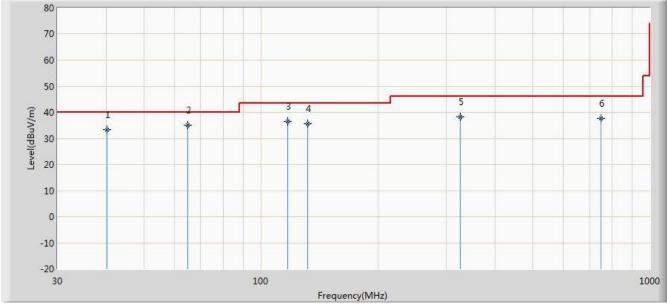
Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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Site: AC2	Time: 2016/01/14 - 14:49
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	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			40.230	33.207	19.300	-6.793	40.000	13.908	QP
2		*	64.900	35.122	22.530	-4.878	40.000	12.592	QP
3			117.510	36.597	24.930	-6.903	43.500	11.667	QP
4			131.969	35.731	25.810	-7.769	43.500	9.921	QP
5			325.030	38.214	22.980	-7.786	46.000	15.234	QP
6			750.290	37.793	15.530	-8.207	46.000	22.263	QP

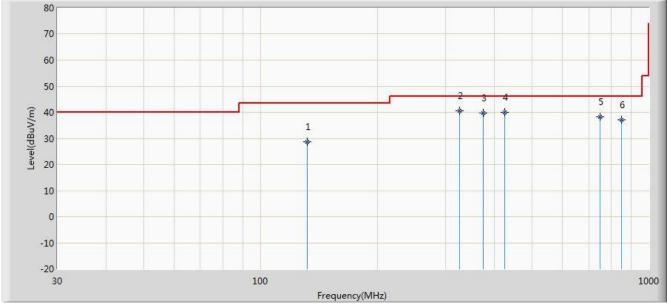
Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

FCC ID: YZZGXP2140 Page Number: 22 of 25



Site: AC2	Time: 2016/01/14 - 15:10
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	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			131.950	28.752	18.830	-14.748	43.500	9.922	QP
2		*	325.010	40.443	25.210	-5.557	46.000	15.233	QP
3			375.140	39.632	23.410	-6.368	46.000	16.222	QP
4			425.030	39.923	22.850	-6.077	46.000	17.073	QP
5			750.020	38.212	15.950	-7.788	46.000	22.261	QP
6			850.200	37.165	13.540	-8.835	46.000	23.625	QP

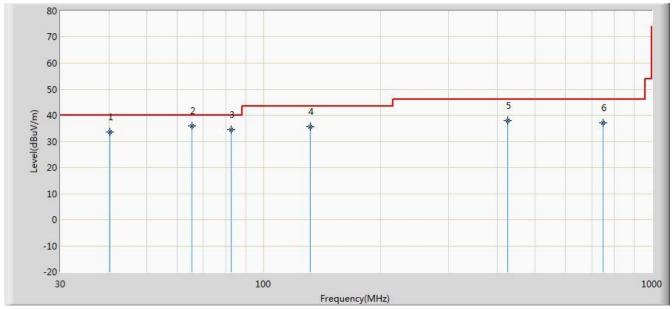
Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

FCC ID: YZZGXP2140 Page Number: 23 of 25



Site: AC2	Time: 2016/01/14 - 15:15
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	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			40.250	33.591	19.680	-6.409	40.000	13.911	QP
2		*	65.520	36.013	23.630	-3.987	40.000	12.383	QP
3			82.400	34.473	24.750	-5.527	40.000	9.723	QP
4			131.750	35.718	25.780	-7.782	43.500	9.938	QP
5			425.100	38.024	20.950	-7.976	46.000	17.075	QP
6			750.010	37.002	14.740	-8.998	46.000	22.261	QP

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

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

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7. CONCLUSION

The data collected relate only the item(s) tested and show that the **IP Phone FCC ID: YZZGXP2140** has been tested to comply with the requirements specified in §15.107 and §15.109 of the FCC Rules.

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The End