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Report No.: 1601RSU01002
Report Version: V01
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MEASUREMENT REPORT

FCC PART 15.247 WLAN 802.11b/g/n

FCC ID: YZZGXV3240

APPLICANT: Grandstream Networks, Inc.

Application Type: Certification

Product: IP Multimedia Phone

Model No.: GXV3240

Brand Name: Grandstream

FCC Classification: Digital Transmission System (DTS)

FCC Rule Part(s): Part 15.247

Test Procedure(s): ANSI C63.10-2009, KDB 558074 D01v03r04

Test Date: January 12 ~ 20, 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 KDB 558074 D01v03r04. 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
1601RSU01002	Rev. 01	Initial report	01-21-2016

Note: The EUT has been got the FCC certificate (FCC ID: YZZGXV3240). The EUT adds two new adapters now and we have shown the conducted emission data and radiated emission data (below 1GHz) in the DTS 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 Registration No.:	809388
FCC Rule Part(s):	Part 15.247
Model No.:	GXV3240
FCC ID:	YZZGXV3240
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering
FCC Classification:	Digital Transmission System (DTS)

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 Multimedia Phone
Model No.	GXV3240
Brand Name	Grandstream
WLAN Specification	802.11a/b/g/n
BT Specification	v3.0 + HS, v4.0
BT Antenna	Small antenna with 2dBi peak gain
WiFi Antenna	FPC Antenna, 1T1R
Components	
Adapter #1	M/N: H18US1200150A Input: AC 100-240V ~ 50/60Hz, 0.8A max OUTPUT: 12Vdc, 1.5A
Adapter #2	M/N: F18W8-120150SPAUY Input: AC 100-240V ~ 50/60Hz, 0.6A OUTPUT: 12Vdc, 1.5A

2.2. Product Specification Subjective to this Standard

Product Specification Subjective to this Standard	
Frequency Range	2412 ~ 2462 MHz
Number of Channels	11
Channel Spacing	5MHz
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM

Note: For other features of this EUT, test report will be issued separately.

2.3. Operation Frequency / Channel List

802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	N/A	N/A

2.4. Test Software

The test utility software used during testing was engineering order by applicant.

3. DESCRIPTION OF TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2009), and the guidance provided in KDB 558074 D01v03r04 were used in the measurement of the **IP Multimedia Phone FCC ID: YZZGXV3240**.

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. 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 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. 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 data exchange speed, 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 were used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013 at Clause 4.3.

Line conducted emissions test results are shown in Section 6.3.

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. A 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 30MHz 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 30MHz, 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, clock speed, mode of operation or video resolution, 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 BeamWidth 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 Emissions - 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
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	V 8.3.5	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
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 150kHz~30MHz: 3.46dB
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz ~ 1GHz: 4.18dB

6. TEST RESULT

6.1. Summary

Company Name: Grandstream Networks, Inc.
FCC ID: YZZGXV3240
FCC Classification: Digital Transmission System (DTS)
Data Rate(s) 1Mbps ~ 11Mbps (b); 6Mbps ~ 54Mbps (g);
Tested: 6.5/7.2Mbps ~ 65/72.2Mbps (n-HT20)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.209	General Field Strength Limits (Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 6.2
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 6.3

Notes: All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.

6.2. Radiated Spurious Emission Measurement

6.2.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.2.2. Test Procedure Used

KDB 558074 D01v03r04 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r04 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r04 - Section 12.2.5 (average power measurements)

6.2.3. Test Setting

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r04

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple

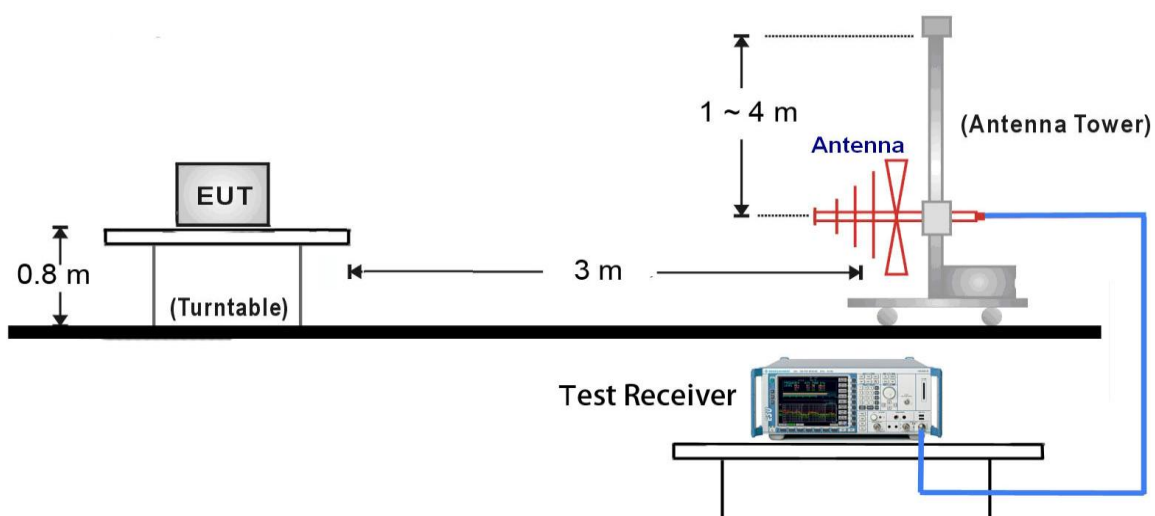
6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

6.2.4. Test Setup

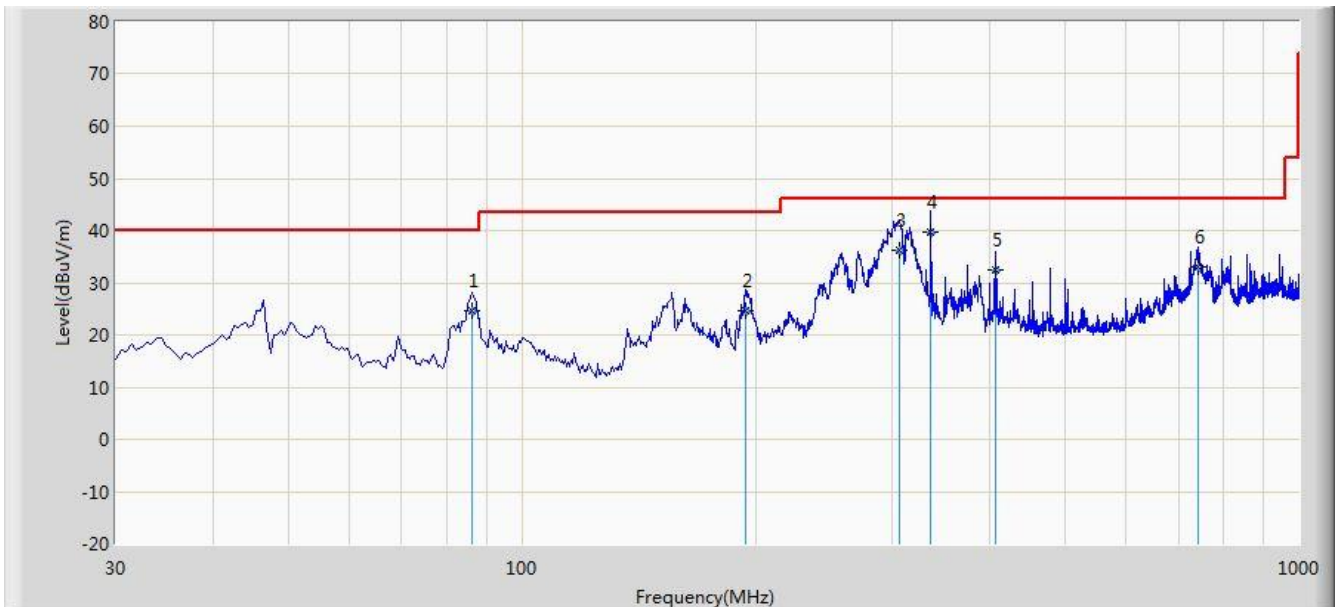
30MHz ~ 1GHz Test Setup:



6.2.5. Test Result

The worst case of Radiated Emission 30MHz ~ 1GHz:

Site: AC2	Time: 2016/01/20 - 14:07
Limit: FCC_Part15.209_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b (Adapter #1)	

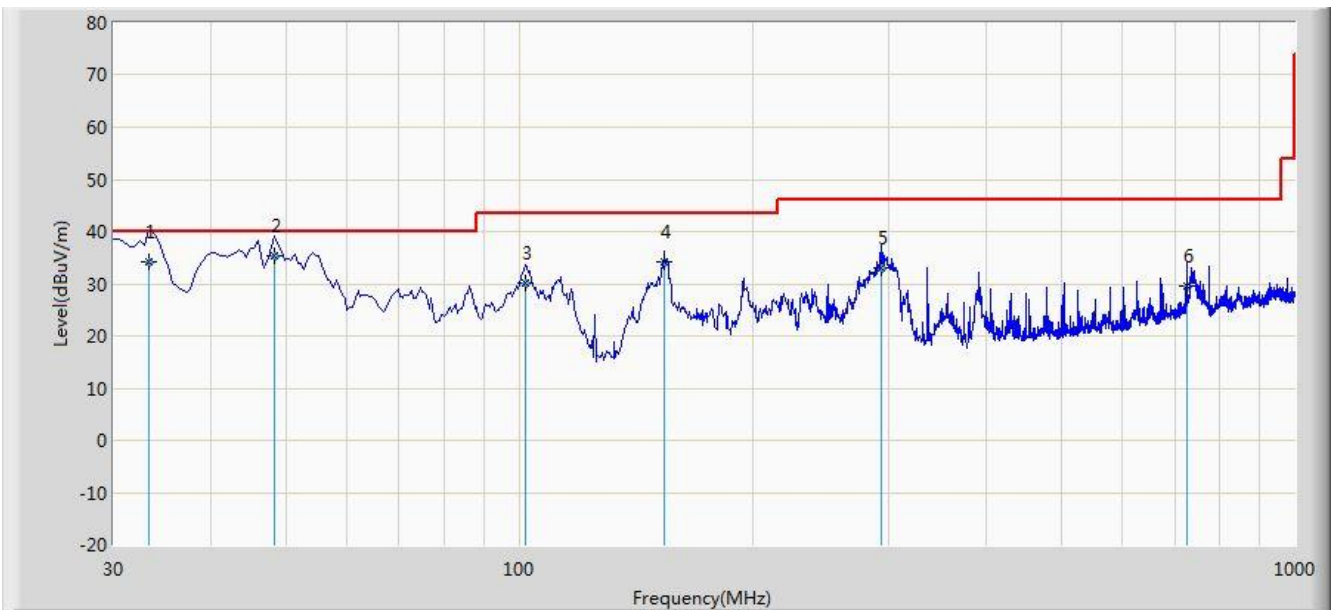


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			86.260	24.526	14.210	-15.474	40.000	10.316	QP
2			194.415	24.529	12.470	-18.971	43.500	12.059	QP
3			305.965	36.204	21.480	-9.796	46.000	14.724	QP
4		*	336.035	39.720	24.150	-6.280	46.000	15.570	QP
5			407.815	32.357	15.498	-13.643	46.000	16.859	QP
6			741.495	33.180	11.030	-12.820	46.000	22.150	QP

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

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

Site: AC2	Time: 2016/01/20 - 14:10
Limit: FCC_Part15.209_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b (Adapter #1)	

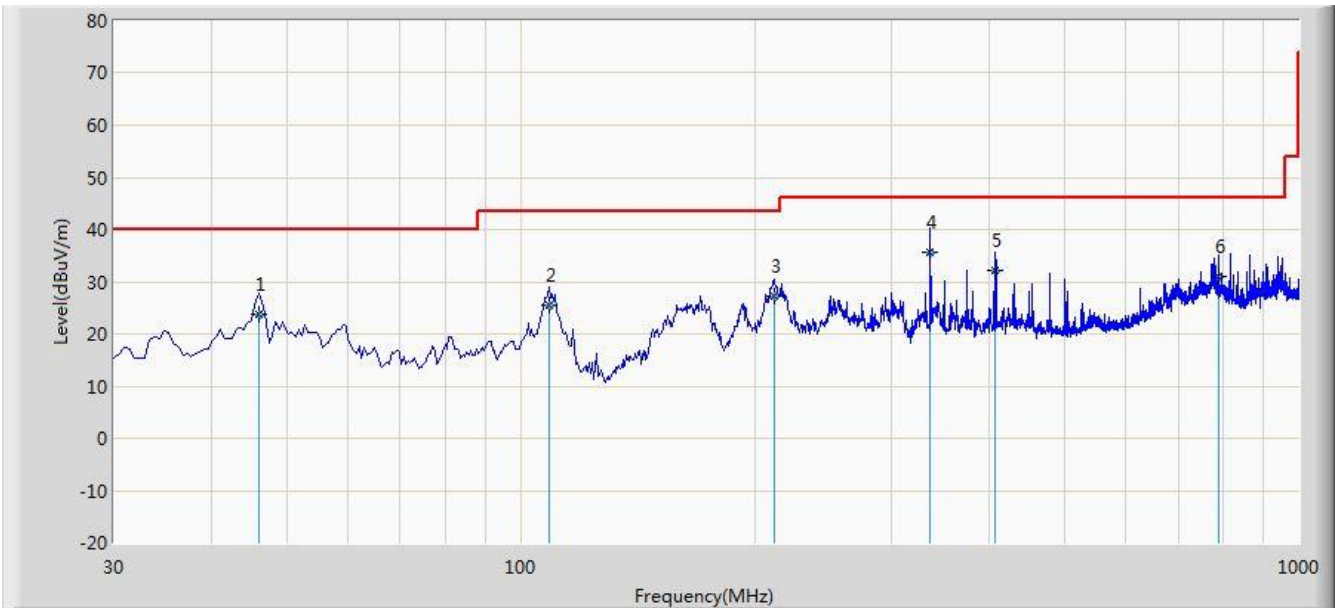


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			33.395	34.297	21.650	-5.703	40.000	12.647	QP
2		*	48.430	35.308	20.340	-4.692	40.000	14.968	QP
3			101.780	30.184	16.980	-13.316	43.500	13.204	QP
4			153.675	34.188	24.570	-9.312	43.500	9.618	QP
5			292.870	33.058	18.640	-12.942	46.000	14.418	QP
6			725.000	29.516	7.548	-16.484	46.000	21.968	QP

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

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

Site: AC2	Time: 2016/01/20 - 14:27
Limit: FCC_Part15.209_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b (Adapter #2)	

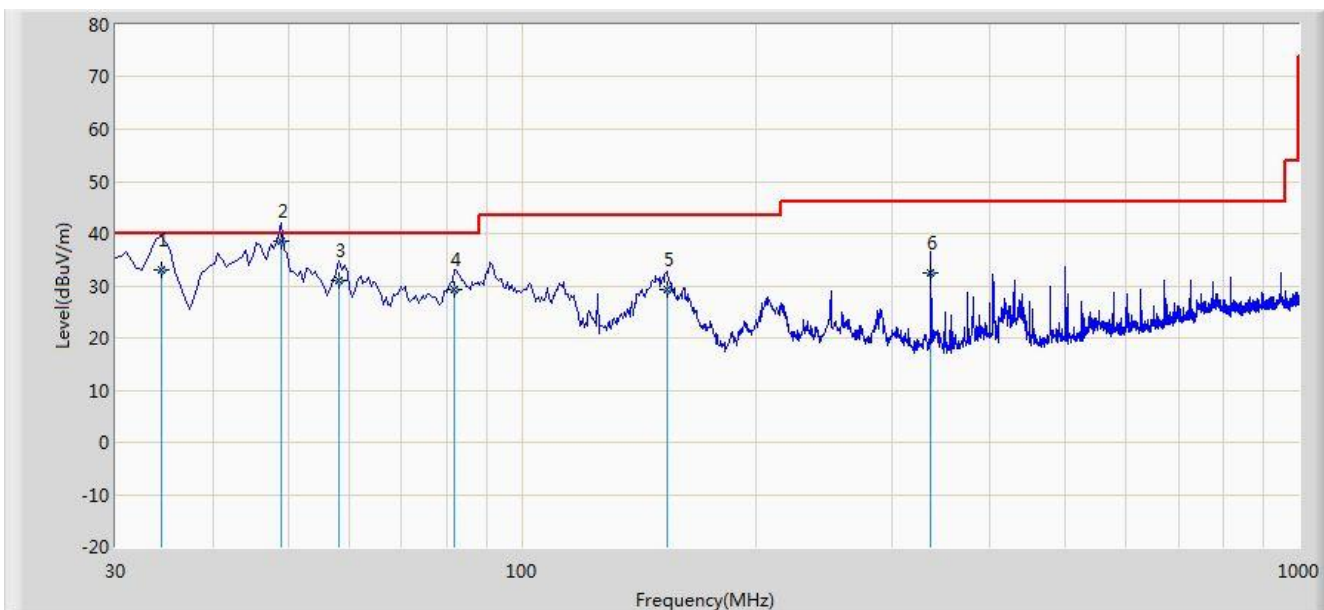


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			46.005	23.646	8.640	-16.354	40.000	15.007	QP
2			109.055	25.468	12.484	-18.032	43.500	12.983	QP
3			211.875	27.115	14.640	-16.385	43.500	12.476	QP
4		*	336.035	35.720	20.150	-10.280	46.000	15.570	QP
5			407.815	32.099	15.240	-13.901	46.000	16.859	QP
6			789.025	31.091	8.360	-14.909	46.000	22.731	QP

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

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

Site: AC2	Time: 2016/01/20 - 14:27
Limit: FCC_Part15.209_RE(3m)_Class B	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b (Adapter #2)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			34.365	32.982	20.150	-7.018	40.000	12.832	QP
2		*	48.915	38.565	23.600	-1.435	40.000	14.965	QP
3			58.130	31.059	16.890	-8.941	40.000	14.169	QP
4			81.895	29.330	19.678	-10.670	40.000	9.653	QP
5			153.675	29.376	19.758	-14.124	43.500	9.618	QP
6			336.035	32.420	16.850	-13.580	46.000	15.570	QP

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

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

6.1. AC Conducted Emissions Measurement

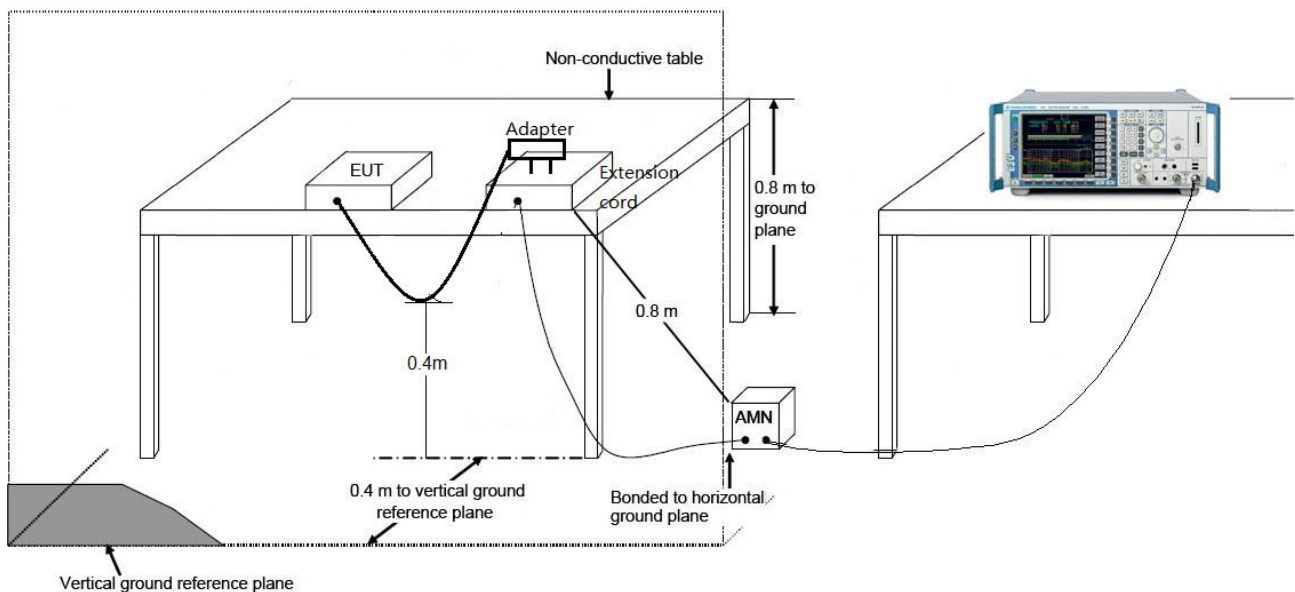
6.1.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	Average (dB μ 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.

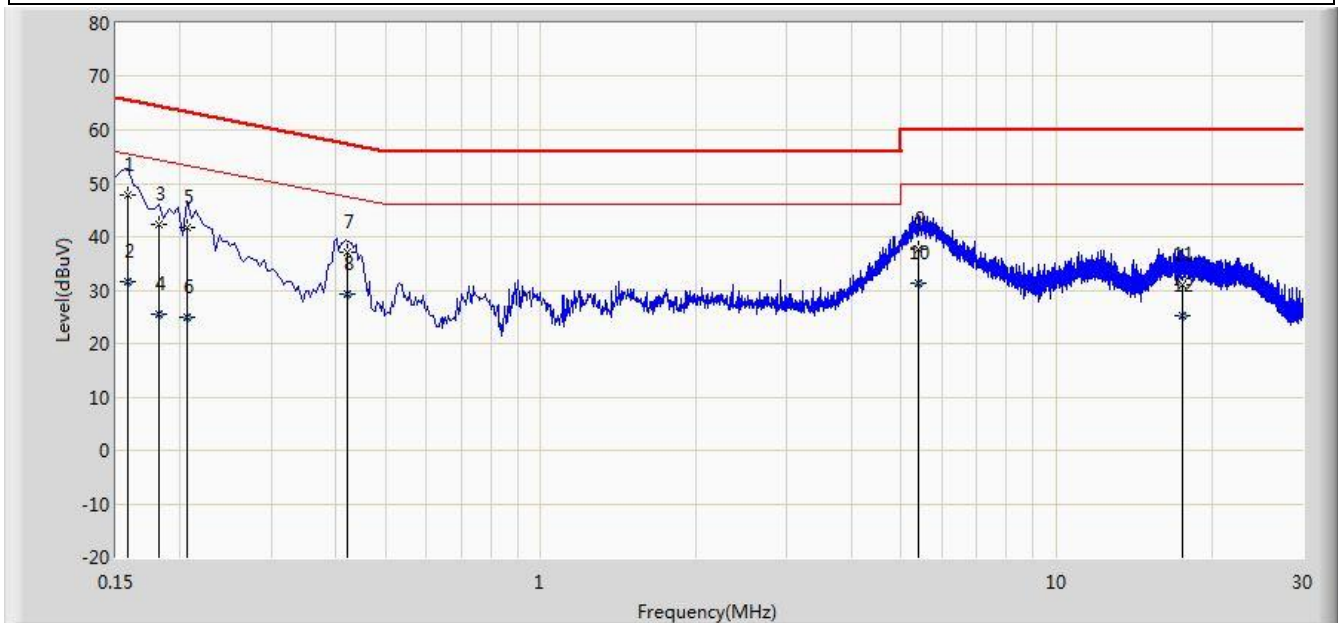
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.1.2. Test Setup



6.1.3. Test Result

Site: SR2	Time: 2016/01/12 - 15:56
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Note: Transmit at Channel 2437MHz by 802.11n-HT20 (Adapter #1)	

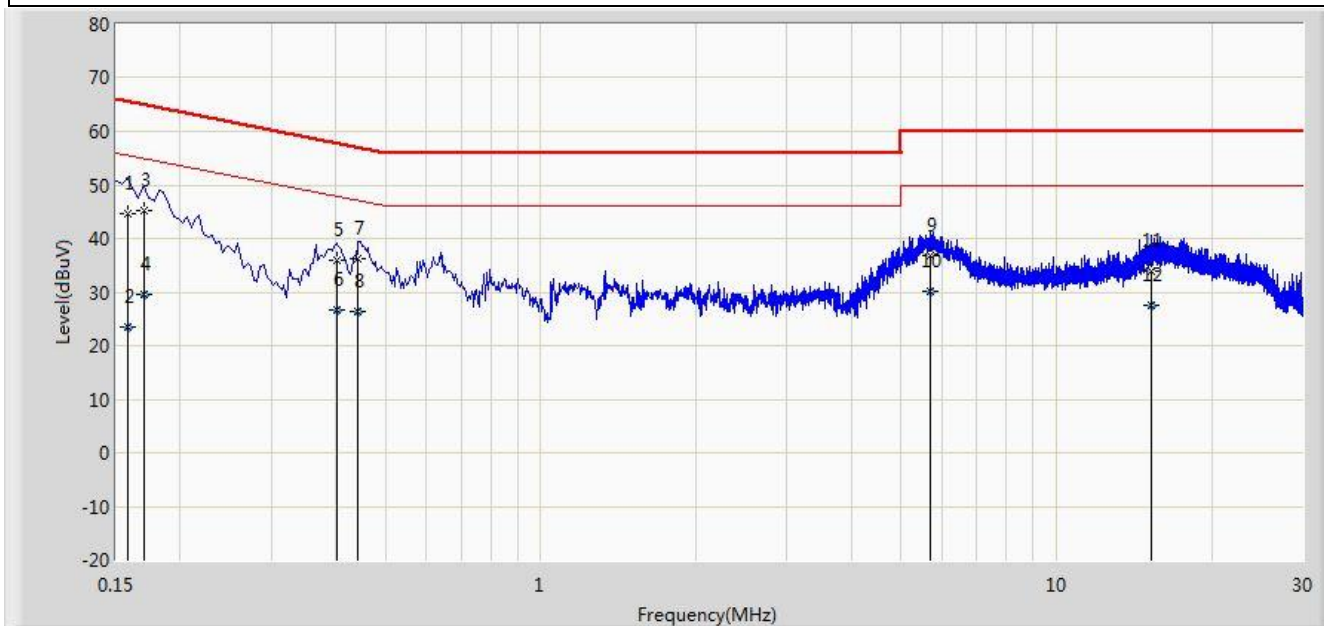


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.158	47.827	37.516	-17.741	65.568	10.311	QP
2			0.158	31.658	21.347	-23.910	55.568	10.311	AV
3			0.182	42.256	32.208	-22.138	64.394	10.048	QP
4			0.182	25.504	15.455	-28.890	54.394	10.048	AV
5			0.206	41.805	31.824	-21.560	63.365	9.981	QP
6			0.206	24.793	14.812	-28.572	53.365	9.981	AV
7			0.422	37.119	27.015	-20.290	57.409	10.104	QP
8			0.422	29.411	19.307	-17.998	47.409	10.104	AV
9			5.402	37.772	27.702	-22.228	60.000	10.070	QP
10			5.402	31.250	21.180	-18.750	50.000	10.070	AV
11			17.598	31.029	20.942	-28.971	60.000	10.088	QP
12			17.598	25.329	15.241	-24.671	50.000	10.088	AV

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

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

Site: SR2	Time: 2016/01/12 - 16:01
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Note: Transmit at Channel 2437MHz by 802.11n-HT20 (Adapter #1)	

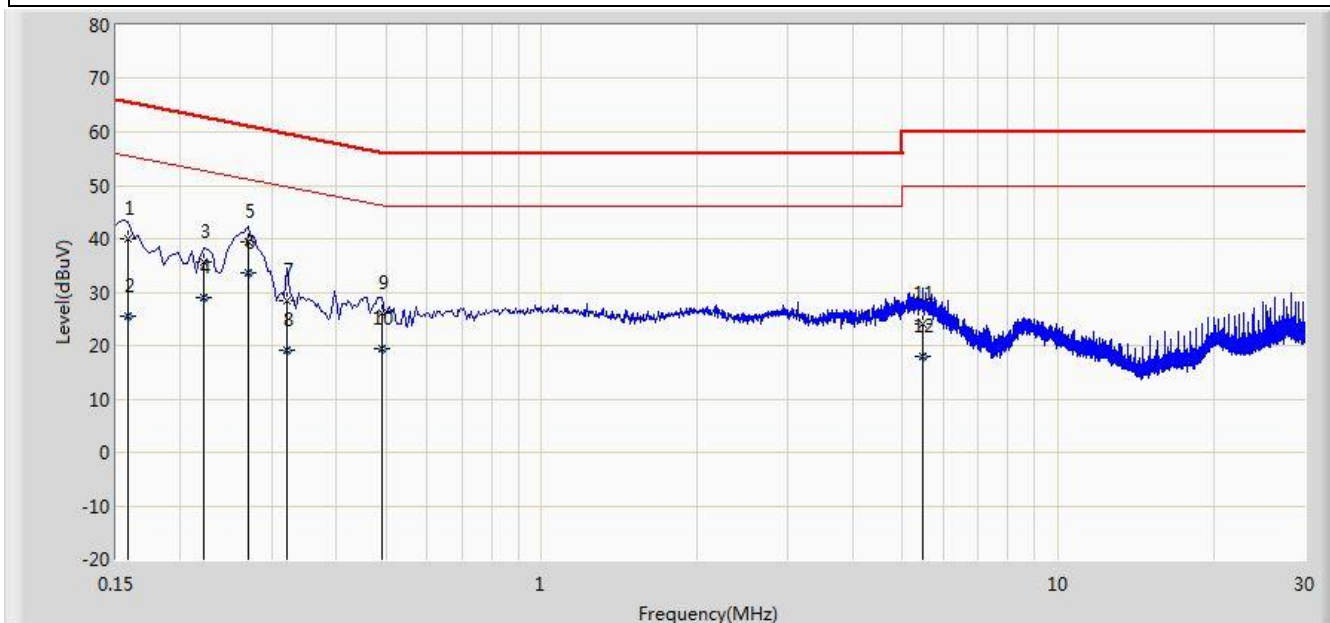


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.158	44.553	34.263	-21.015	65.568	10.290	QP
2			0.158	23.508	13.218	-32.061	55.568	10.290	AV
3		*	0.170	45.345	35.281	-19.616	64.960	10.064	QP
4			0.170	29.650	19.587	-25.310	54.960	10.064	AV
5			0.402	35.901	25.787	-21.911	57.812	10.114	QP
6			0.402	26.793	16.679	-21.019	47.812	10.114	AV
7			0.442	36.220	26.076	-20.805	57.024	10.144	QP
8			0.442	26.424	16.281	-20.600	47.024	10.144	AV
9			5.702	36.921	26.810	-23.079	60.000	10.112	QP
10			5.702	30.119	20.007	-19.881	50.000	10.112	AV
11			15.306	33.811	23.696	-26.189	60.000	10.115	QP
12			15.306	27.640	17.525	-22.360	50.000	10.115	AV

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

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

Site: SR2	Time: 2016/01/12 - 16:34
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Note: Transmit at Channel 2437MHz by 802.11n-HT20 (Adapter #2)	

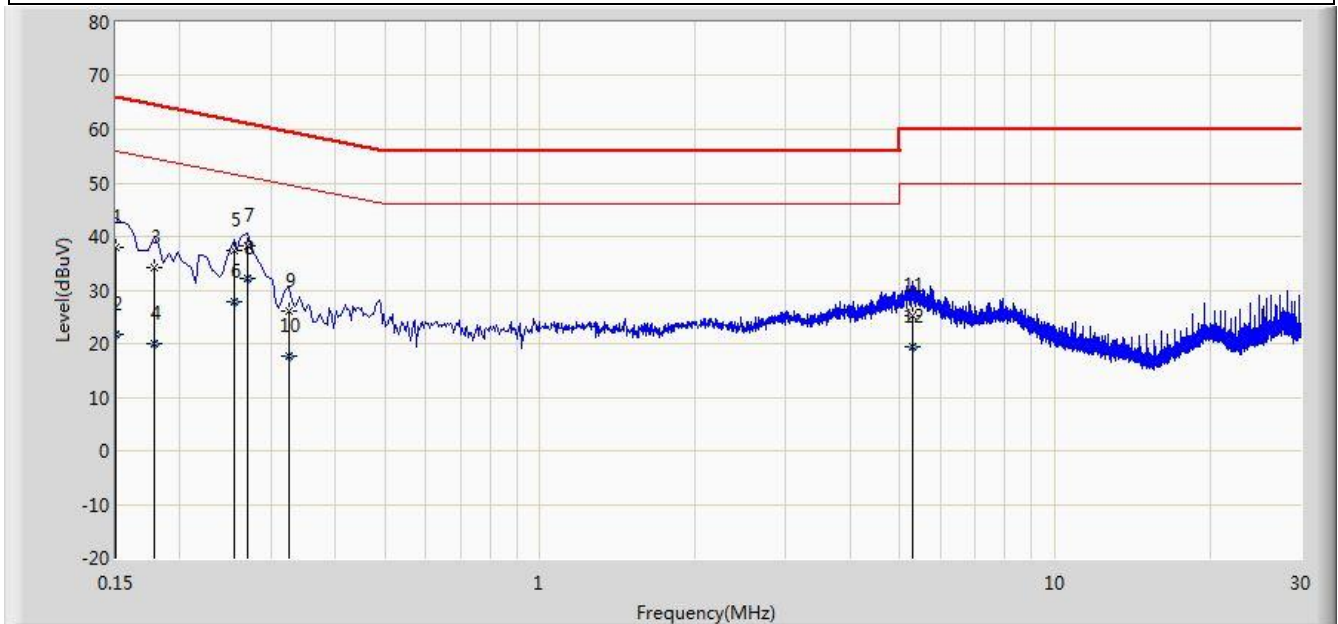


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.158	40.027	29.716	-25.541	65.568	10.311	QP
2			0.158	25.507	15.196	-30.062	55.568	10.311	AV
3			0.222	35.591	25.650	-27.153	62.744	9.941	QP
4			0.222	28.969	19.028	-23.775	52.744	9.941	AV
5			0.270	39.548	29.568	-21.570	61.118	9.980	QP
6		*	0.270	33.589	23.609	-17.529	51.118	9.980	AV
7			0.322	28.482	18.460	-31.173	59.655	10.022	QP
8			0.322	19.233	9.211	-30.423	49.655	10.022	AV
9			0.490	25.985	15.827	-30.183	56.168	10.158	QP
10			0.490	19.504	9.346	-26.664	46.168	10.158	AV
11			5.462	23.966	13.894	-36.034	60.000	10.072	QP
12			5.462	17.955	7.883	-32.045	50.000	10.072	AV

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

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

Site: SR2	Time: 2016/01/12 - 16:46
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: IP Multimedia Phone	Power: AC 120V/60Hz
Note: Transmit at Channel 2437MHz by 802.11n-HT20 (Adapter #2)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	37.986	26.844	-28.014	66.000	11.142	QP
2			0.150	21.802	10.660	-34.198	56.000	11.142	AV
3			0.178	34.181	24.131	-30.398	64.578	10.049	QP
4			0.178	20.021	9.972	-34.557	54.578	10.049	AV
5			0.254	37.489	27.485	-24.136	61.625	10.004	QP
6			0.254	27.968	17.964	-23.657	51.625	10.004	AV
7			0.270	38.129	28.114	-22.989	61.118	10.016	QP
8		*	0.270	32.033	22.017	-19.085	51.118	10.016	AV
9			0.326	25.968	15.911	-33.585	59.552	10.057	QP
10			0.326	17.740	7.684	-31.812	49.552	10.057	AV
11			5.286	25.299	15.241	-34.701	60.000	10.059	QP
12			5.286	19.287	9.228	-30.713	50.000	10.059	AV

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

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

7. CONCLUSION

The data collected relate only the item(s) tested and show that the **IP Multimedia Phone FCC ID: YZZGXV3240** is in compliance with Part 15C of the FCC Rules.

The End
