

MRT Technology (Suzhou) Co., Ltd

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# **MEASUREMENT REPORT**

# FCC PART 15.247 Bluetooth v3.0 + HS

FCC ID: YZZGVC3200

**APPLICANT:** Grandstream Networks, Inc.

**Application Type:** Certification

**Product:** Full HD Video Conferencing System

Model No.: GVC3200

**Brand Name:** Grandstream

**FCC Classification:** FCC Part 15 Spread Spectrum Transmitter(DSS)

FCC Rule Part(s): Part 15.247

**Test Procedure(s):** ANSI C63.10-2013, DA 00-705

**Test Date:** January 12 ~ 20, 2016

Reviewed By : Resim Wu

(Robin Wu)

Approved By : Marlinchen

( Marlin Chen )



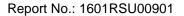


The test results relate only to the samples tested.

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 C63.10-2013 and DA 00-705. 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
1601RSU00901	Rev. 01	Initial report	01-21-2016

Note: The EUT has been got the FCC certificate (FCC ID: YZZGVC3200). The EUT adds one new adapter now and we have shown the conducted emission data and radiated emission data (below 1GHz) in the DSS 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.	GVC3200	
FCC ID:	YZZGVC3200	
Test Device Serial No.:	N/A ☐ Production ☐ Pre-Production ☐ Engineering	
FCC Classification:	FCC Part 15 Spread Spectrum Transmitter (DSS)	

### **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, 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	Full HD Video Conferencing System	
Model No.	GVC3200	
Brand Name	Grandstream	
WLAN Specification	802.11a/b/g/n	
BT Specification	v3.0 + HS, v4.0	
Antenna Type	PCB Antenna	
Antenna Gain	2.12dBi for 2.4GHz, 1.14dBi for 5GHz	
Components		
Adapter	M/N: NBS65A120500M3	
	Input: AC 100-240V ~ 50/60Hz, 1.5A	
	OUTPUT: 12Vdc, 5.0A	

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## 2.2. Product Specification Subjective to this Standard

Product Specification Subjective to this Standard				
Frequency Range	2402~2480MHz			
Number of Channels	79			
Channel Spacing	1MHz			
Type of Modulation	FHSS			
Data Rate 1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps (8DPSK)				

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

The equipment under test (EUT) is the **Full HD Video Conferencing System FCC ID: YZZGVC3200**. The test data contained in this report pertains only to the emissions due to the EUT's bluetooth transmitter.

- 15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.
- 15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate
  its channels selection/ hopping sequence with other frequency hopping systems for the
  express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by
  multiple transmitters.
- 15.247(h): The EUT employs Adaptive Frequency Hopping (AFH) which identifies sources of interference namely devices operating in 802.11 WLAN and excludes them from the list of available channels. The process of re-mapping reduces the number of test channels from 79 channels to a minimum number of 20 channels.

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# 2.3. Operation Frequency / Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz
03	2405 MHz	04	2406 MHz	05	2407 MHz
06	2408 MHz	07	2409 MHz	08	2410 MHz
09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz
15	2417 MHz	16	2418 MHz	17	2419 MHz
18	2420 MHz	19	2421 MHz	20	2422 MHz
21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz
27	2429 MHz	28	2430 MHz	29	2431 MHz
30	2432 MHz	31	2433 MHz	32	2434 MHz
33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz
39	2441 MHz	40	2442 MHz	41	2443 MHz
42	2444 MHz	43	2445 MHz	44	2446 MHz
45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz
51	2453 MHz	52	2454 MHz	53	2455 MHz
54	2456 MHz	55	2457 MHz	56	2458 MHz
57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz
63	2465 MHz	64	2466 MHz	65	2467 MHz
66	2468 MHz	67	2469 MHz	68	2470 MHz
69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz
75	2477 MHz	76	2478 MHz	77	2479 MHz
78	2480 MHz	N/A	N/A	N/A	N/A

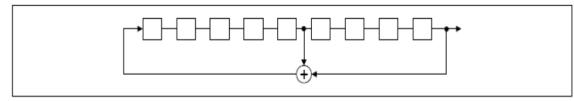
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## 2.4. Pseudorandom Frequency Hopping Sequence

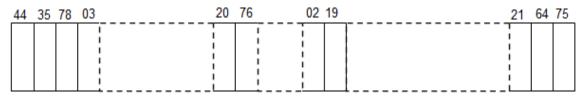
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9<sup>th</sup> stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: 29 1 = 511 bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

### 2.5. Test Configuration

The **Full HD Video Conferencing System FCC ID: YZZGVC3200** was tested per the guidance of ANSI C63.10-2013 and DA 00-705. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

### 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 Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the "Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems" (DA 00-705) were used in the measurement of the **Full HD Video Conferencing System FCC ID: YZZGVC3200.** 

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. 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.

Line conducted emissions test results are shown in Section 6.3.

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#### 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 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 for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 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.

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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 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

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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**

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

150kHz~30MHz: 3.46dB

#### Radiated Emission Measurement

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

9kHz ~ 1GHz: 4.18dB

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## 6. TEST RESULT

## 6.1. Summary

Product Name: Full HD Video Conferencing System

FCC ID: YZZGVC3200

Method/System: Frequency Hopping Spread Spectrum (FHSS)

Number of Channels: 79

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
	General Field Strength	Emissions in restricted			
15.209	Limits	bands must meet the	Radiated PASS		Section 6.2
	(Radiated Emission	radiated limits detailed in			
	Limits)	15.209			
15.207	AC Conducted Emissions	. FCC 4F 207 limite	Line	Door	Continu C 2
	150kHz - 30MHz	< FCC 15.207 limits	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.

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## 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.

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

ANSI C63.10-2013 - Section 11.12.1

## 6.2.3. Test Setting

#### **Peak Field Strength Measurements**

- 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 = 3 \* RBW
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold

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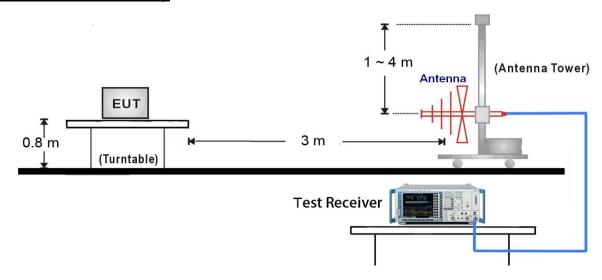
#### 7. Trace was allowed to stabilize

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:



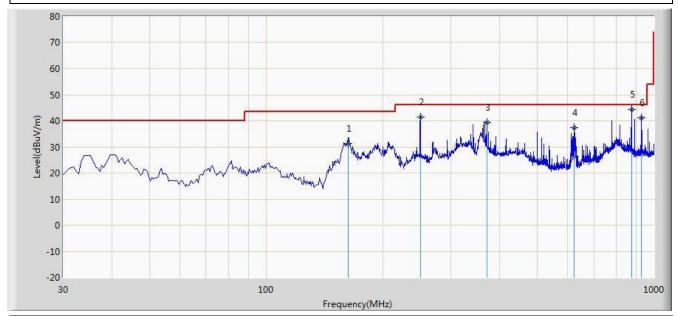
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### 6.2.5. Test Result

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

Site: AC2	Time: 2016/01/13 - 20:07				
Limit: FCC_Part15.209_RE(3m)_Class B	Engineer: Lewis Huang				
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal				
EUT: Full HD Video Conferencing System	Power: AC 120V/60Hz				
Worse Case Mode: Transmit at Channel 2480MHz by DH5					



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			162.890	31.321	21.364	-12.179	43.500	9.956	QP
2			250.190	41.541	27.845	-4.459	46.000	13.696	QP
3			371.440	39.537	23.364	-6.463	46.000	16.174	QP
4			623.155	37.381	17.021	-8.619	46.000	20.360	QP
5		*	874.870	44.301	20.364	-1.699	46.000	23.937	QP
6			930.160	41.187	16.840	-4.813	46.000	24.347	QP

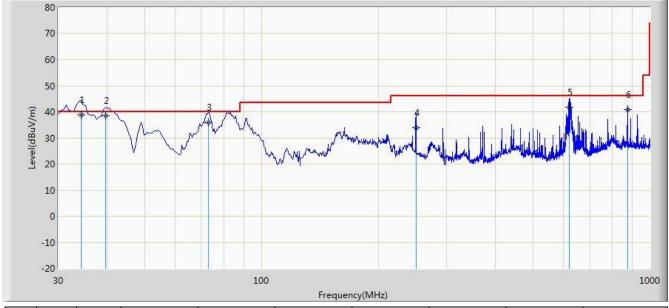
Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

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Engineer: Lewis Huang		
Polarity: Vertical		
Power: AC 120V/60Hz		
F		



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	34.365	38.863	26.031	-1.137	40.000	12.832	QP
2			39.700	38.681	24.875	-1.319	40.000	13.806	QP
3			73.165	36.034	25.874	-3.966	40.000	10.160	QP
4			250.190	33.843	20.147	-12.157	46.000	13.696	QP
5			620.245	41.653	21.324	-4.347	46.000	20.330	QP
6			874.870	40.973	17.036	-5.027	46.000	23.937	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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### 6.3. AC Conducted Emissions Measurement

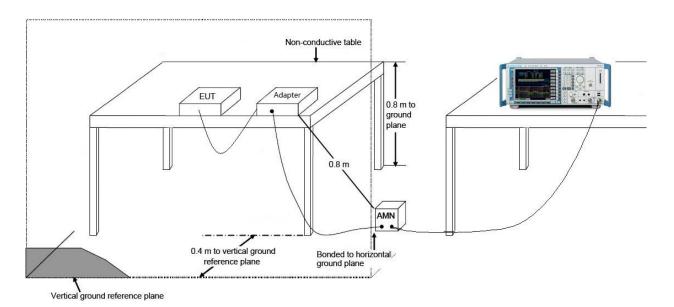
#### 6.3.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits								
Frequency (MHz)	QP (dBµV)	Average (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.

## 6.3.2. Test Setup

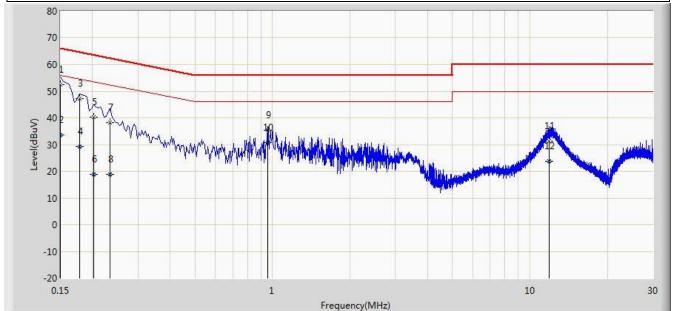


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#### 6.3.3. Test Result

Site: SR2	Time: 2016/01/12 - 20:51
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Full HD Video Conferencing System	Power: AC 120V/60Hz
Note: Transmit at Channel 2480MHz by DH5	·



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.150	52.437	41.269	-13.563	66.000	11.168	QP
2			0.150	33.505	22.336	-22.495	56.000	11.168	AV
3			0.178	47.198	37.140	-17.381	64.578	10.058	QP
4			0.178	29.257	19.199	-25.321	54.578	10.058	AV
5			0.202	40.415	30.422	-23.113	63.528	9.993	QP
6			0.202	18.979	8.987	-34.549	53.528	9.993	AV
7			0.234	38.318	28.367	-23.989	62.307	9.951	QP
8			0.234	18.752	8.801	-33.554	52.307	9.951	AV
9			0.958	35.281	25.351	-20.719	56.000	9.930	QP
10			0.958	30.693	20.763	-15.307	46.000	9.930	AV
11			11.898	31.359	21.268	-28.641	60.000	10.091	QP
12			11.898	23.890	13.799	-26.110	50.000	10.091	AV

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

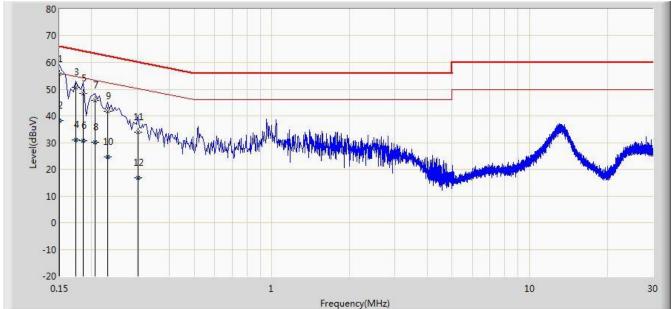
Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

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Site: SR2	Time: 2016/01/12 - 20:56		
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Vince Yu		
Probe: ENV216_101683_Filter On	Polarity: Neutral		
EUT: Full HD Video Conferencing System	Power: AC 120V/60Hz		
Note: Transmit at Channel 2490MHz by DH5			

Note: Transmit at Channel 2480MHz by DH5



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1		*	0.150	55.647	44.505	-10.353	66.000	11.142	QP
2			0.150	38.250	27.107	-17.750	56.000	11.142	AV
3			0.174	50.652	40.596	-14.115	64.767	10.057	QP
4			0.174	30.871	20.814	-23.897	54.767	10.057	AV
5			0.186	48.548	38.513	-15.666	64.213	10.035	QP
6			0.186	30.583	20.548	-23.630	54.213	10.035	AV
7			0.206	45.918	35.917	-17.447	63.365	10.001	QP
8			0.206	30.095	20.094	-23.270	53.365	10.001	AV
9			0.230	41.736	31.750	-20.714	62.450	9.985	QP
10			0.230	24.626	14.640	-27.824	52.450	9.985	AV
11			0.302	33.858	23.819	-26.329	60.188	10.039	QP
12			0.302	16.791	6.752	-33.397	50.188	10.039	AV

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

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

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## 7. CONCLUSION

The data collected relate only the item(s) tested and show that the **Full HD Video Conferencing**System FCC ID: YZZGVC3200 is in compliance with Part 15C of the FCC Rules.

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— The End