

MEASUREMENT REPORT

FCC Part 15 Subpart B / ICES-003

Applicant: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD

Address: 309, 3th Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China

Application Type: Certification

Product: HD IP Conference Phone

Model No.: CP920

Brand Name: YEALINK

FCC Rule Part(s): FCC Part 15 Subpart B: 2016

IC Rule(s): ICES-003 Issue 6

Test Procedure(s): ANSI C63.4: 2014

Result: Complies

Test Date: August 10 ~ 12, 2017

Reviewed By : 
(Sunny Sun)

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.

Revision History

Report No.	Version	Description	Issue Date	Note
1707RSU03505	Rev. 01	Initial Report	09-01-2017	Valid

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§2.1033 General Information

Applicant:	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD
Applicant Address:	309, 3th Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
Manufacturer:	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD
Manufacturer Address:	309, 3th Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
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
FCC Registration No.:	893164
IC Registration No.:	11384A-1
FCC Rule Part(s):	FCC Part 15 Subpart B: 2016
IC Rule(s):	ICES-003 Issue 6
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. 893164) 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:	HD IP Conference Phone
Model No.:	CP920
Brand Name:	YEALINK
Wi-Fi Specification:	802.11b/g/n-HT20
Bluetooth Module:	v3.0 + HS, v4.0
Accessories	
Adapter	M/N: YLPS121000C-US INPUT: 100-240V ~ 50/60Hz, 0.5A OUTPUT: 12Vdc, 1.0A

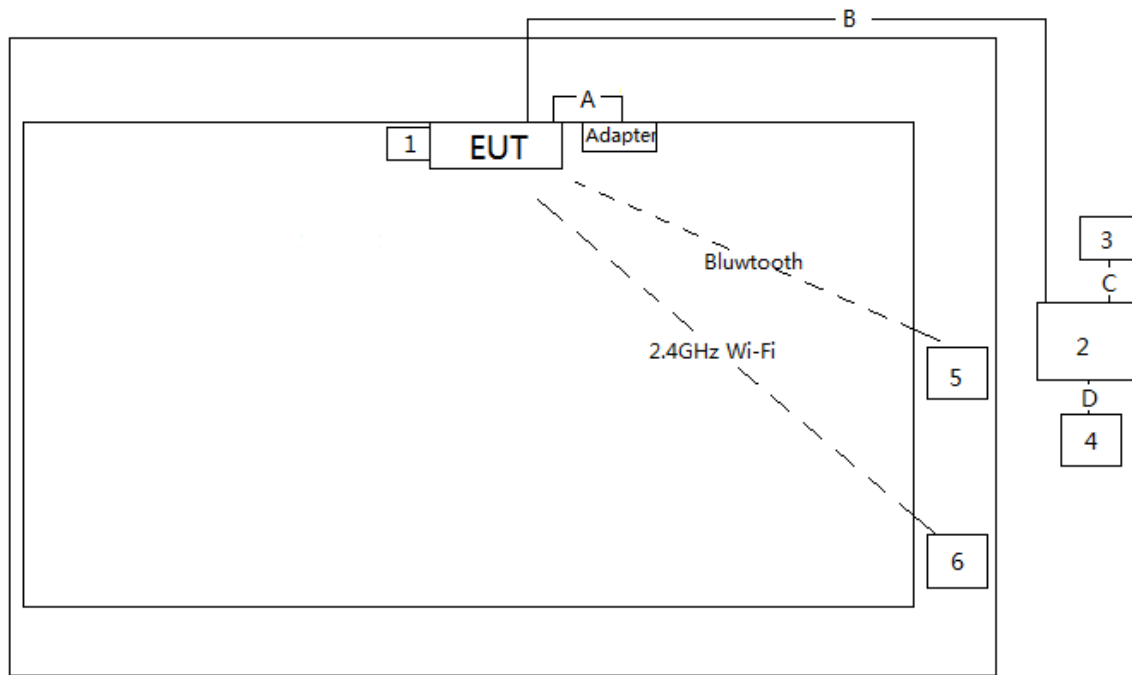
2.2. Test Mode

EMI Mode	Mode 1: Power on with adapter, make the EUT communication with the IP phone by LAN cable, and communication with the PC by WLAN and BT. Mode 2: Power on with POE, make the EUT communication with the IP phone, and communication with the PC by WLAN and BT.
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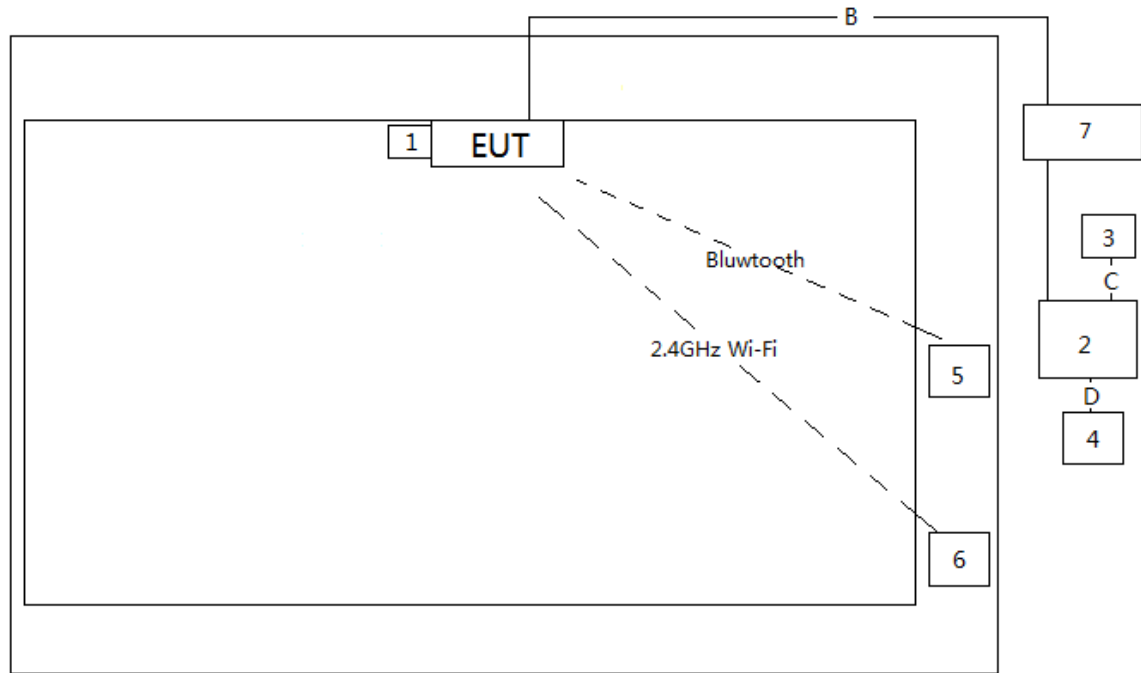
2.3. Configuration of Tested System

The **HD IP Conference Phone** was tested per the guidance FCC Part 15 Subpart B: 2016, ICES-003 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)



Connection Diagram (Mode 2)



Signal Cable Type		Signal Cable Description
A	Power Cable	Non -shielded, 3.0m
B	LAN Cable	Non -shielded, 10.0m
C	LAN Cable	Non -shielded, 1.0m
D	LAN Cable	Non -shielded, 1.0m

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 iPod	Apple	A1373	N/A	N/A
2 Router	TP-Link	C9	N/A	N/A
3 HD IP Conference Phone	YEALINK	CP920	N/A	N/A
4 PC	Dell	Vostro270	N/A	Non-Shielded, 1.8m
5 Notebook	Lenovo	X201	N/A	Non-Shielded, 1.8m
6 Notebook	Lenovo	E430c	MP-4CFX213/10	Non-Shielded, 1.8m
7 POE	FUHUA	PoE35-54A	N/A	N/A

2.5. Test Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	(1) Power on with adapter, make the EUT communicate with the IP phone by LAN cable, and communication with the PC by "PING" function, WLAN and BT. (2) Power on with POE, make the EUT communicate with the IP phone, and communication with the PC by "PING" function, WLAN and BT.

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 18GHz (ANSI C63.4-2014) was used in the measurement of the **HD IP Conference 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 Ω /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	ESR3	MRTSUE06185	1 year	2018/04/24
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2018/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2018/06/20
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06181	1 year	2017/12/20
Shielding Anechoic Chamber	Mikebang	Chamber-SR2	MRTSUE06214	1 year	2018/05/10

Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Agilent	N9038A	MRTSUE06125	1 year	2018/08/03
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2018/03/28
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2017/11/19
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2017/10/22
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06183	1 year	2017/12/20
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2018/05/10

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

The maximum measurement uncertainty is evaluated as:

9kHz~150kHz: 3.84dB

150kHz~30MHz: 3.46dB

Radiated Emission Measurement - AC1

The maximum measurement uncertainty is evaluated as:

Horizontal: 30MHz~300MHz: 4.07dB

300MHz~1GHz: 3.63 dB

1GHz~18GHz: 4.16 dB

Vertical: 30MHz~300MHz: 4.18 dB

300MHz~1GHz: 3.60 dB

1GHz~18GHz: 4.76 dB

6. TEST RESULT

6.1. Summary

Product Name: HD IP Conference Phone

Applicant: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD

Test Mode: Mode 1: Power on with adapter, make the EUT communication with the IP phone by LAN cable, and communication with the PC by WLAN and BT.
Mode 2: Power on with POE, make the EUT communication with the IP phone, and communication with the PC by WLAN and BT.

Normative References	Test Description	Test Result (Pass/Fail)
15.107	Conducted Emission	Pass
15.109	Radiated Emission	Pass

6.2. Conducted Emission Measurement

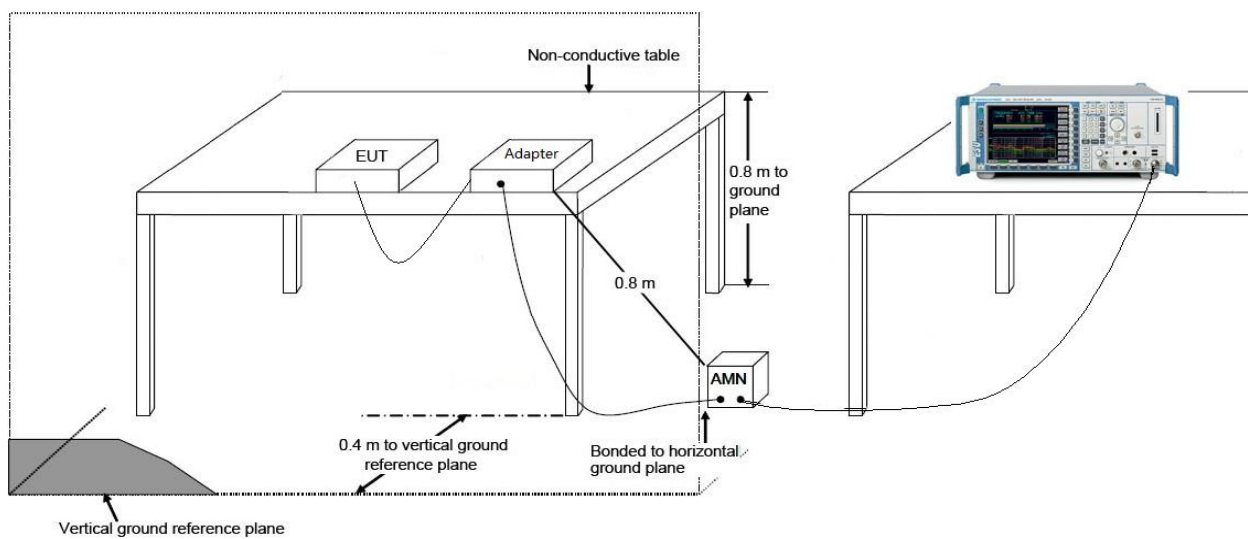
6.2.1. Test Limit

FCC Part 15.107 Limits		
Frequency (MHz)	QP (dB μ V)	AV (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.

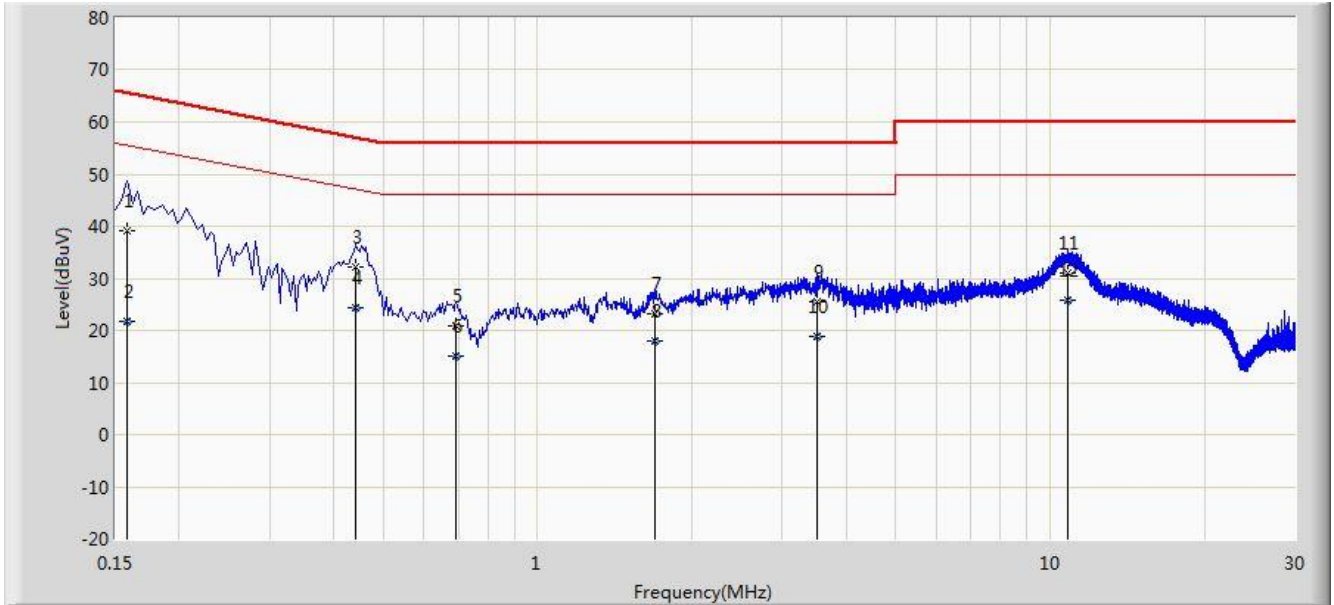
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.2.2. Test Setup



6.2.3. Test Result of Conducted Emissions

Site: SR2	Time: 2017/08/11 - 09:33
Limit: FCC_Part15.107_CE_Class B	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test mode 1	

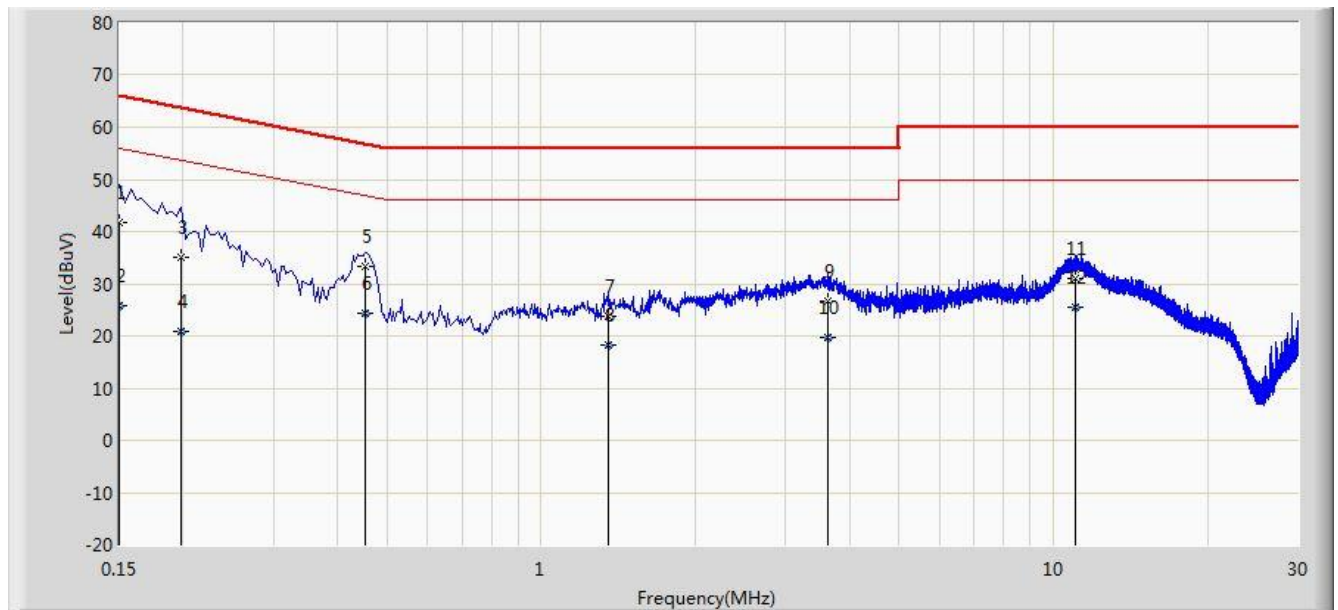


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.158	39.205	28.894	-26.364	65.568	10.311	QP
2			0.158	21.674	11.363	-33.894	55.568	10.311	AV
3			0.442	32.223	22.103	-24.801	57.024	10.120	QP
4		*	0.442	24.373	14.253	-22.651	47.024	10.120	AV
5			0.694	20.741	10.675	-35.259	56.000	10.066	QP
6			0.694	15.186	5.120	-30.814	46.000	10.066	AV
7			1.690	23.097	13.215	-32.903	56.000	9.882	QP
8			1.690	17.850	7.968	-28.150	46.000	9.882	AV
9			3.506	25.643	15.734	-30.357	56.000	9.908	QP
10			3.506	18.842	8.933	-27.158	46.000	9.908	AV
11			10.826	31.087	20.972	-28.913	60.000	10.115	QP
12			10.826	25.672	15.557	-24.328	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: 2017/08/11 - 09:37
Limit: FCC_Part15.107_CE_Class B	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 1	

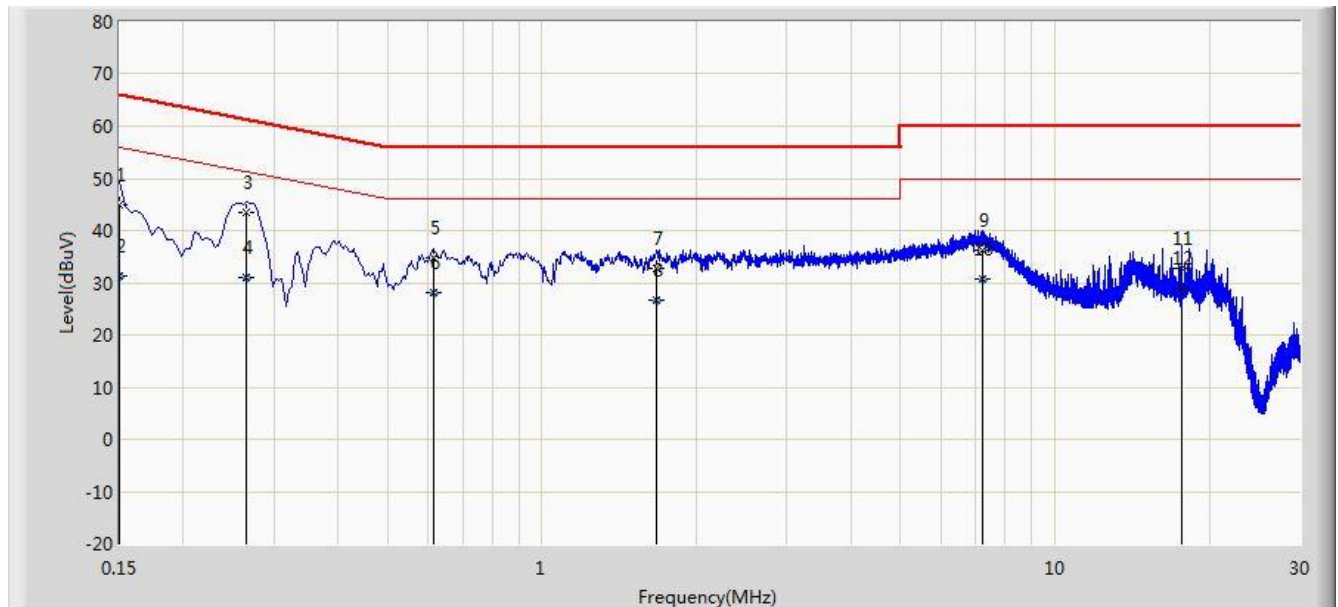


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	41.676	30.534	-24.324	66.000	11.142	QP
2			0.150	25.688	14.546	-30.312	56.000	11.142	AV
3			0.198	34.944	24.930	-28.750	63.694	10.015	QP
4			0.198	20.816	10.802	-32.878	53.694	10.015	AV
5			0.454	33.344	23.192	-23.457	56.802	10.153	QP
6		*	0.454	24.306	14.153	-22.496	46.802	10.153	AV
7			1.350	23.664	13.767	-32.336	56.000	9.896	QP
8			1.350	18.200	8.303	-27.800	46.000	9.896	AV
9			3.626	26.775	16.846	-29.225	56.000	9.929	QP
10			3.626	19.812	9.883	-26.188	46.000	9.929	AV
11			11.002	30.903	20.770	-29.097	60.000	10.133	QP
12			11.002	25.510	15.377	-24.490	50.000	10.133	AV

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

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

Site: SR2	Time: 2017/08/11 - 09:45
Limit: FCC_Part15.107_CE_Class B	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	

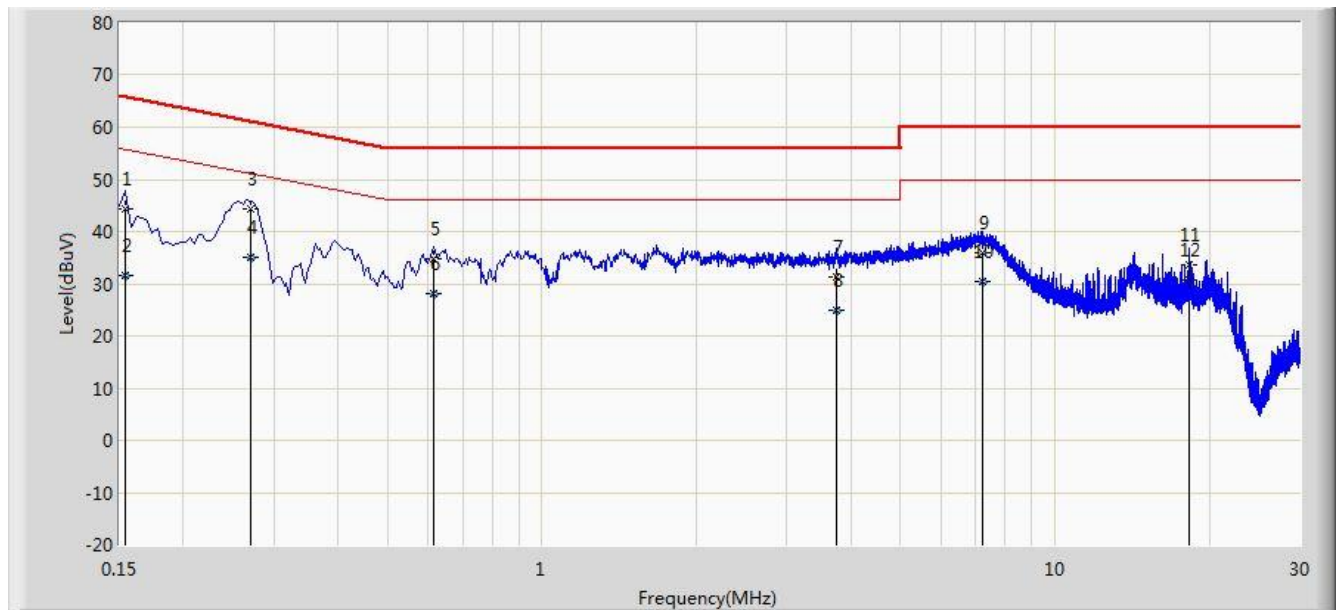


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	44.863	33.694	-21.137	66.000	11.168	QP
2			0.150	31.162	19.994	-24.838	56.000	11.168	AV
3		*	0.266	43.491	33.514	-17.751	61.242	9.977	QP
4			0.266	31.145	21.168	-20.097	51.242	9.977	AV
5			0.614	34.774	24.666	-21.226	56.000	10.108	QP
6			0.614	28.012	17.904	-17.988	46.000	10.108	AV
7			1.670	32.680	22.798	-23.320	56.000	9.883	QP
8			1.670	26.615	16.733	-19.385	46.000	9.883	AV
9			7.214	36.189	26.027	-23.811	60.000	10.161	QP
10			7.214	30.691	20.530	-19.309	50.000	10.161	AV
11			17.694	32.807	22.713	-27.193	60.000	10.094	QP
12			17.694	28.992	18.898	-21.008	50.000	10.094	AV

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

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

Site: SR2	Time: 2017/08/11 - 09:50
Limit: FCC_Part15.107_CE_Class B	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	44.410	33.694	-21.372	65.781	10.716	QP
2			0.154	31.606	20.891	-24.175	55.781	10.716	AV
3			0.270	44.329	34.313	-16.789	61.118	10.016	QP
4		*	0.270	35.063	25.047	-16.055	51.118	10.016	AV
5			0.614	34.926	24.803	-21.074	56.000	10.124	QP
6			0.614	28.151	18.028	-17.849	46.000	10.124	AV
7			3.750	31.436	21.472	-24.564	56.000	9.964	QP
8			3.750	24.884	14.920	-21.116	46.000	9.964	AV
9			7.238	36.005	25.828	-23.995	60.000	10.177	QP
10			7.238	30.521	20.344	-19.479	50.000	10.177	AV
11			18.242	33.758	23.620	-26.242	60.000	10.138	QP
12			18.242	30.864	20.726	-19.136	50.000	10.138	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 (dB μ V/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

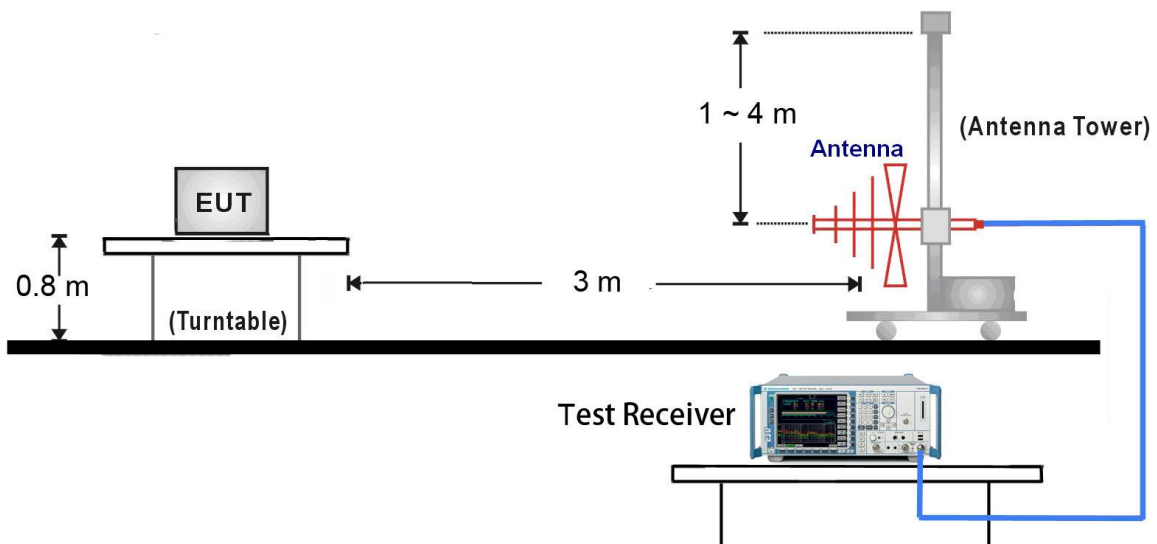
Note 1: The lower limit shall apply at the transition frequency.

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.

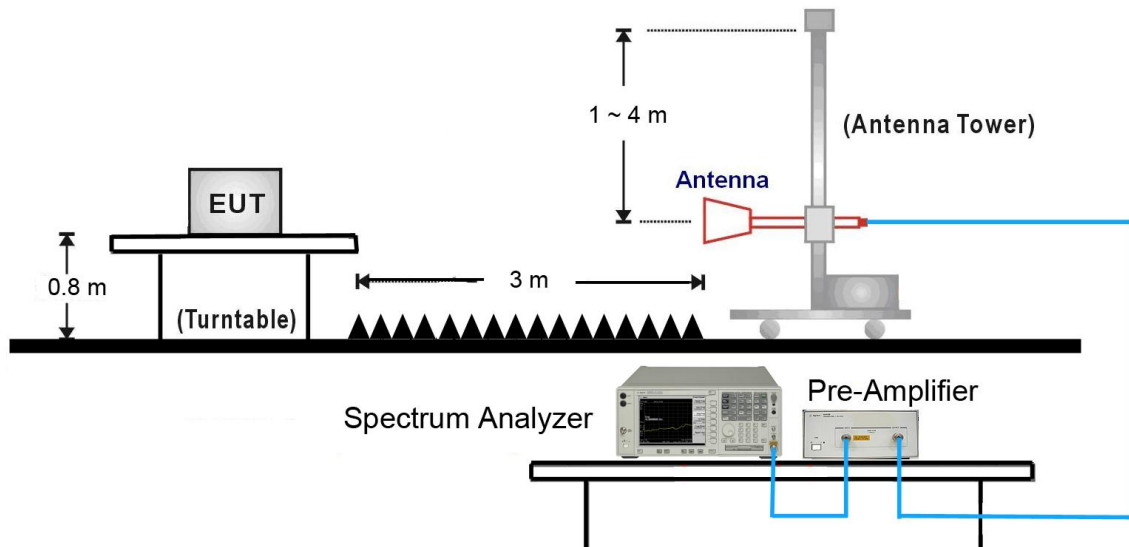
Note 3: E field strength (dB μ V/m) = 20 log E field strength (uV/m)

6.3.2. Test Setup

30MHz ~ 1GHz Test Setup:

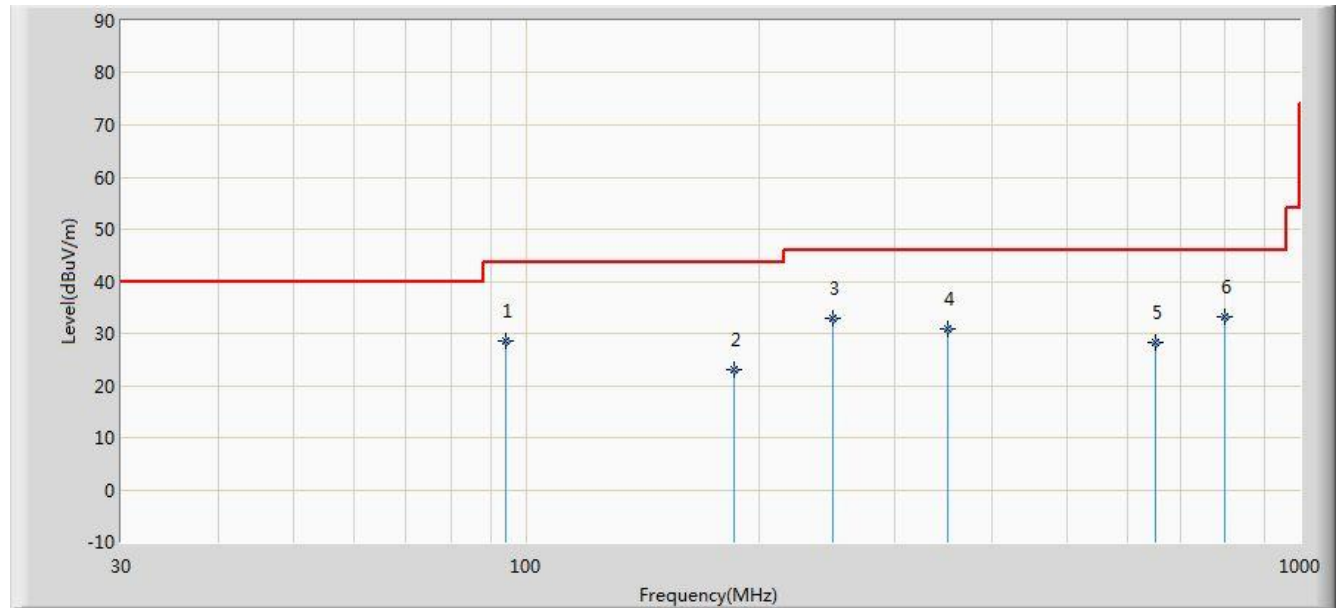


1GHz ~18GHz Test Setup:



6.3.3. Test Result of Radiated Emissions

Site: AC1	Time: 2017/08/11 - 03:07
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 1	

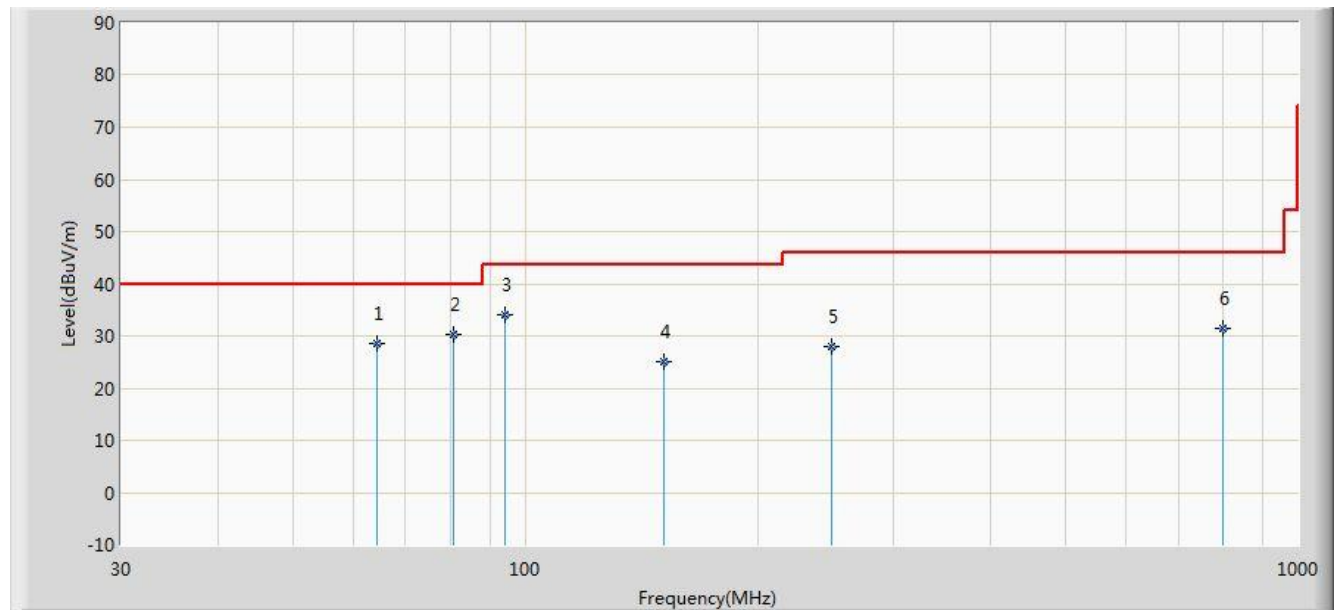


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			94.020	28.632	18.138	-14.868	43.500	10.494	132	65	QP
2			186.170	22.965	10.892	-20.535	43.500	12.073	142	163	QP
3			249.705	32.995	20.074	-13.005	46.000	12.921	118	96	QP
4			350.100	30.787	15.314	-15.213	46.000	15.473	175	325	QP
5			649.830	28.380	7.018	-17.620	46.000	21.362	164	217	QP
6			800.180	33.280	10.085	-12.720	46.000	23.195	153	185	QP

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

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

Site: AC1	Time: 2017/08/11 - 03:08
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 1	

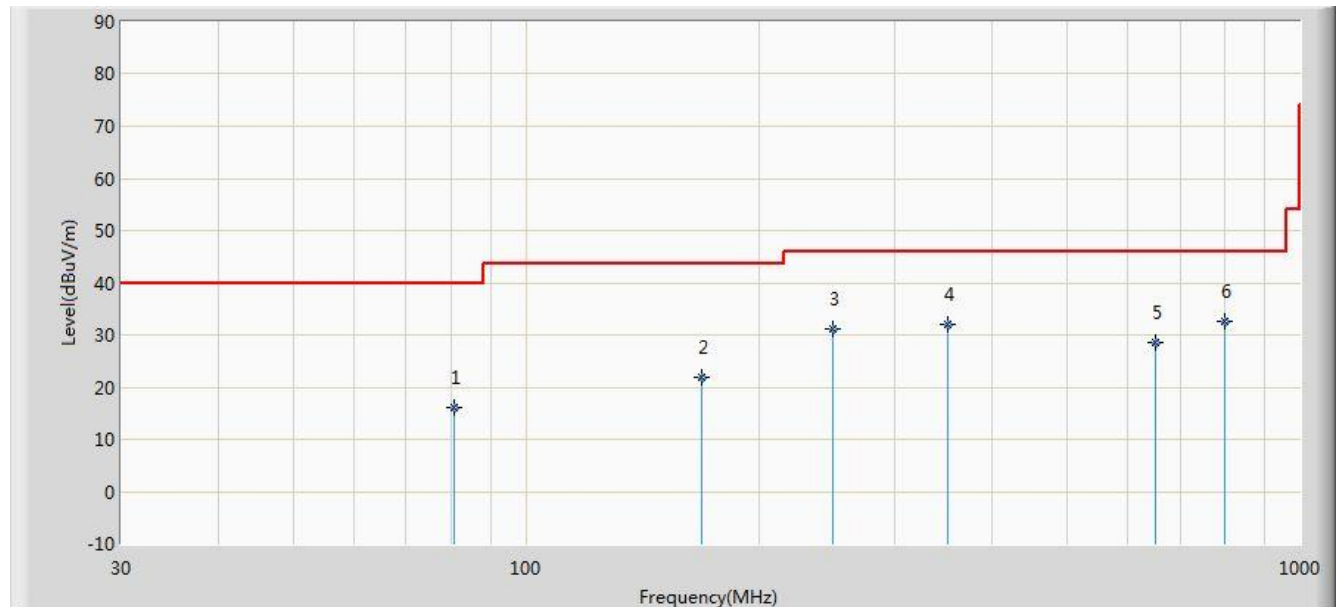


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			64.435	28.647	16.099	-11.353	40.000	12.548	142	174	QP
2			80.925	30.314	20.255	-9.686	40.000	10.059	163	217	QP
3			94.020	34.058	23.564	-9.442	43.500	10.494	124	118	QP
4			151.250	25.042	9.858	-18.458	43.500	15.184	153	73	QP
5			249.705	28.020	15.099	-17.980	46.000	12.921	174	152	QP
6			800.180	31.453	8.258	-14.547	46.000	23.195	139	34	QP

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

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

Site: AC1	Time: 2017/08/11 - 03:08
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	

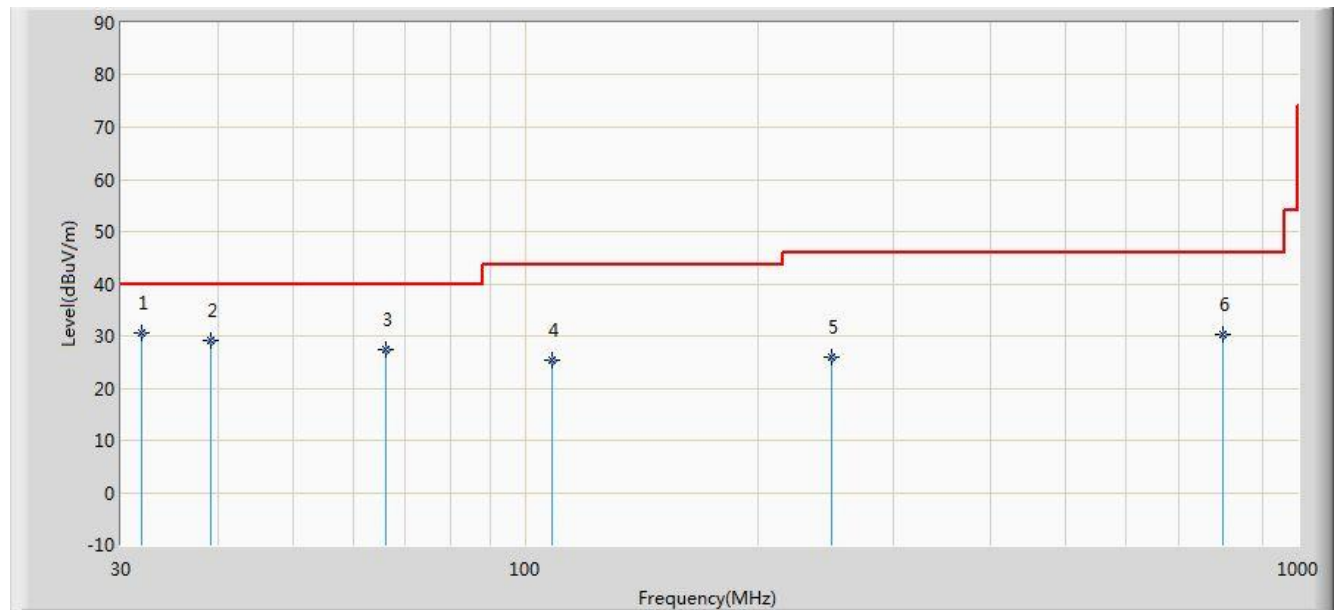


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			80.925	15.948	5.889	-24.052	40.000	10.059	152	53	QP
2			168.710	21.962	7.576	-21.538	43.500	14.386	163	153	QP
3			249.705	31.067	18.146	-14.933	46.000	12.921	138	75	QP
4			350.100	32.171	16.698	-13.829	46.000	15.473	159	185	QP
5			649.830	28.694	7.332	-17.306	46.000	21.362	163	207	QP
6			800.180	32.502	9.307	-13.498	46.000	23.195	125	315	QP

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

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

Site: AC1	Time: 2017/08/11 - 03:08
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	

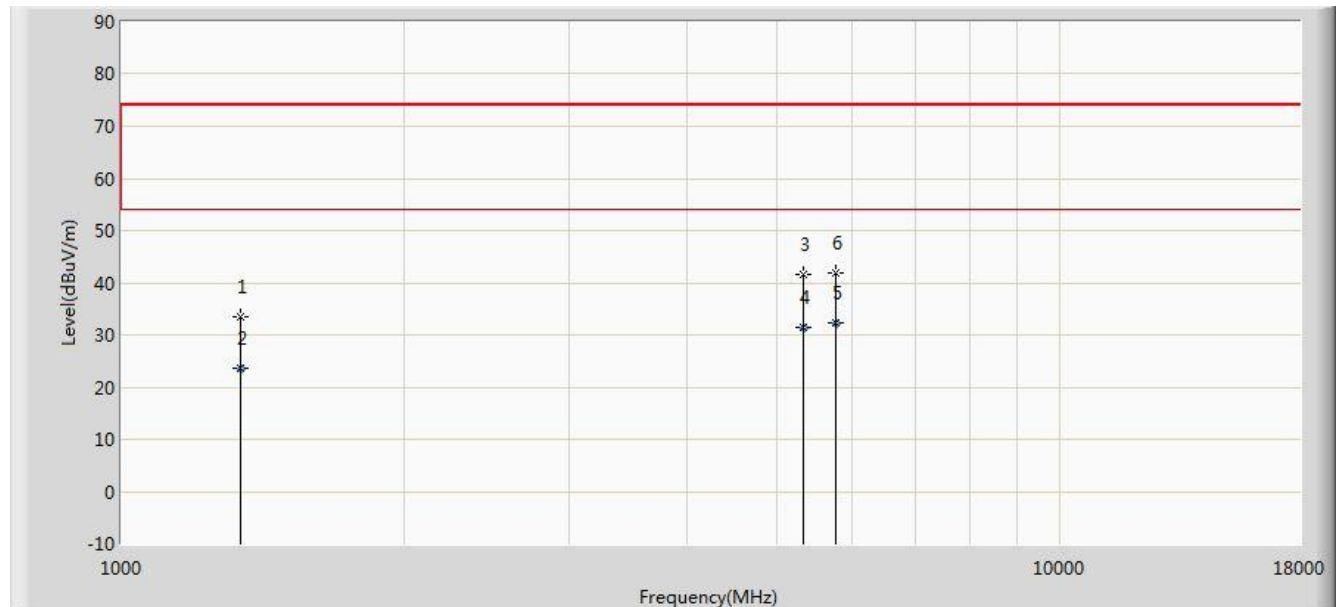


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			31.940	30.664	16.974	-9.336	40.000	13.690	152	129	QP
2			39.215	29.199	14.760	-10.801	40.000	14.440	163	207	QP
3			65.890	27.323	15.058	-12.677	40.000	12.265	132	93	QP
4			108.570	25.476	13.636	-18.024	43.500	11.840	174	185	QP
5			249.705	25.984	13.063	-20.016	46.000	12.921	144	252	QP
6			800.180	30.194	6.999	-15.806	46.000	23.195	184	42	QP

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

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

Site: AC1	Time: 2017/08/11 - 03:09
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 1	

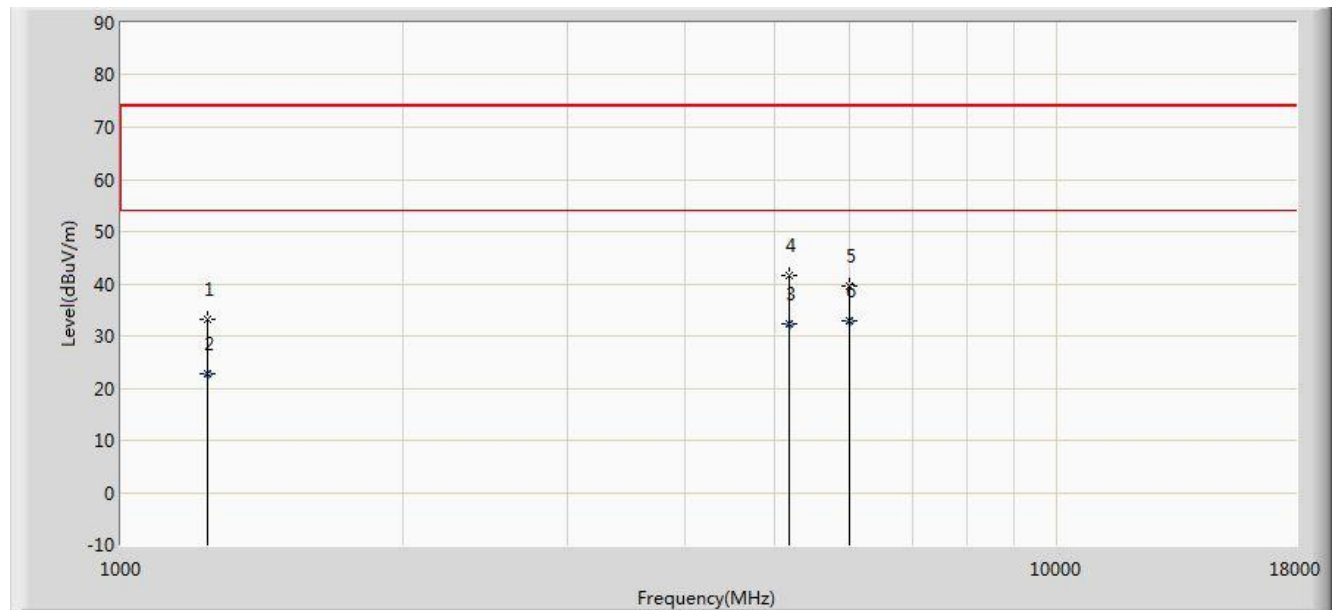


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1340.000	33.394	41.335	-40.606	74.000	-7.941	100	45	PK
2			1340.500	23.717	31.654	-30.283	54.000	-7.937	110	164	AV
3			5318.000	41.452	38.375	-32.548	74.000	3.077	130	252	PK
4			5318.500	31.531	28.455	-22.469	54.000	3.076	100	185	AV
5			5768.100	32.279	28.366	-21.721	54.000	3.913	117	94	AV
6			5768.500	42.021	38.107	-31.979	74.000	3.914	100	306	PK

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

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

Site: AC1	Time: 2017/08/11 - 03:09
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 1	

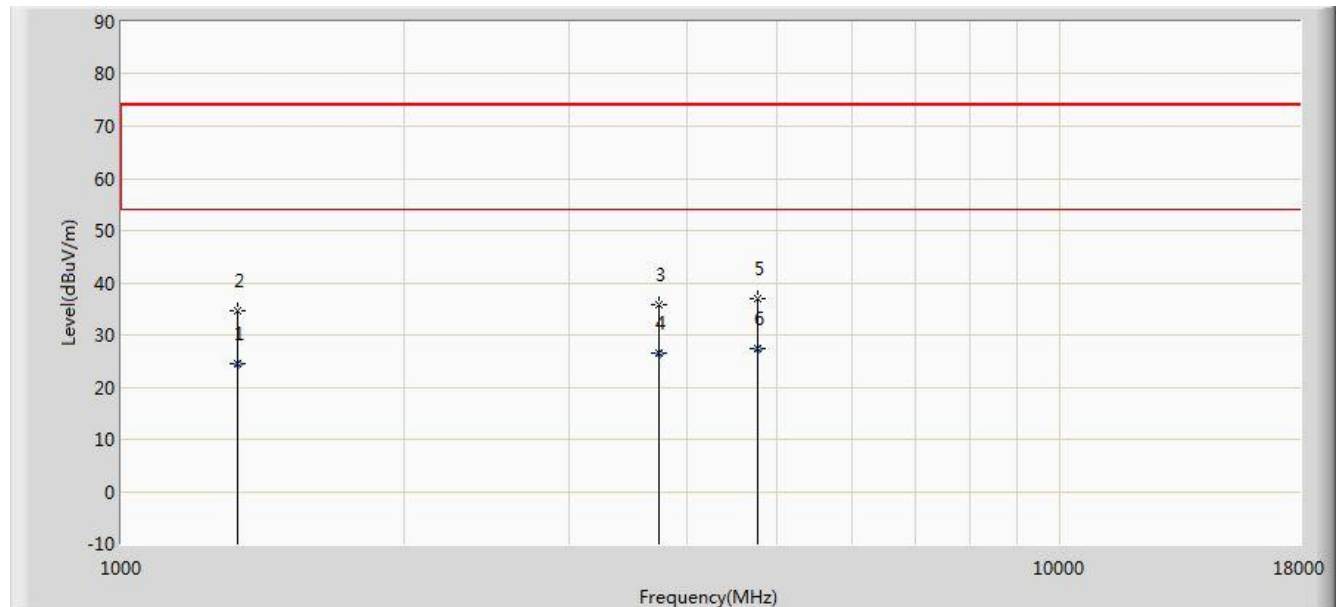


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1238.000	33.120	41.802	-40.880	74.000	-8.682	100	42	PK
2			1238.500	22.786	31.461	-31.214	54.000	-8.676	141	92	AV
3			5173.000	32.238	28.959	-21.762	54.000	3.278	115	163	AV
4			5173.500	41.729	38.451	-32.271	74.000	3.278	100	84	PK
5			5998.000	39.612	35.360	-34.388	74.000	4.252	123	115	PK
6			5998.500	33.023	28.773	-20.977	54.000	4.250	100	317	AV

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

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

Site: AC1	Time: 2017/08/11 - 03:09
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	

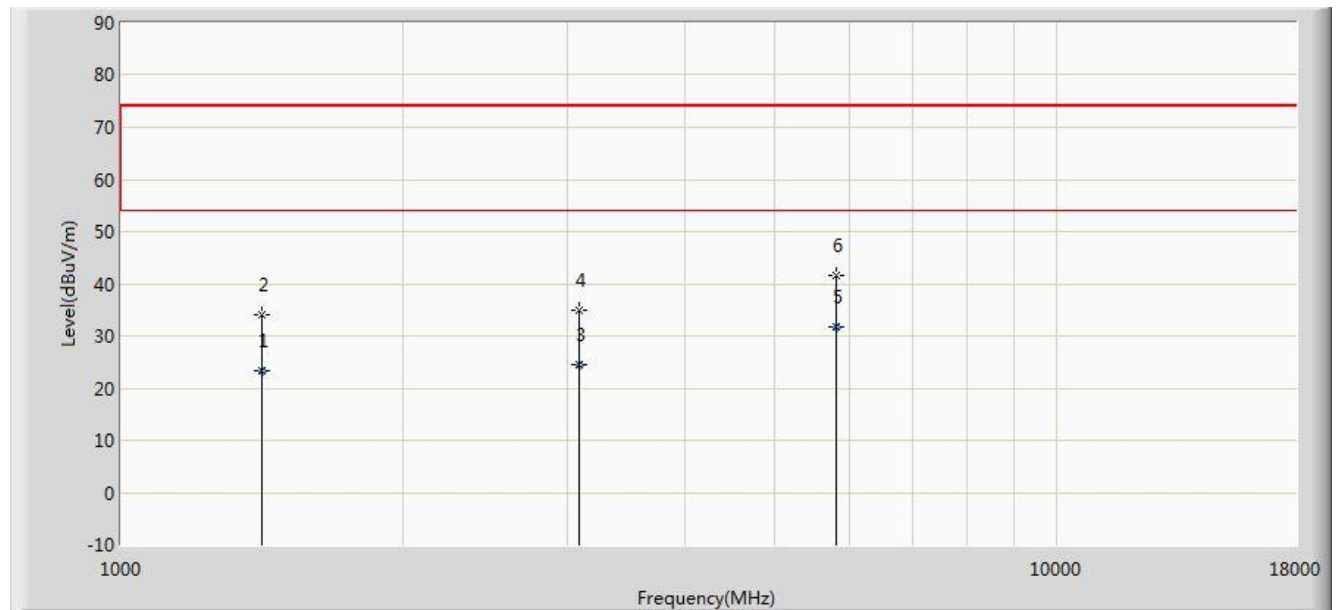


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1331.000	24.442	32.452	-29.558	54.000	-8.010	126	231	AV
2			1331.500	34.691	42.697	-39.309	74.000	-8.006	100	164	PK
3			3737.000	35.942	36.388	-38.058	74.000	-0.446	132	96	PK
4			3737.500	26.421	26.865	-27.579	54.000	-0.444	116	73	AV
5			4757.000	37.100	34.519	-36.900	74.000	2.581	100	106	PK
6			4757.500	27.272	24.689	-26.728	54.000	2.583	100	322	AV

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

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

Site: AC1	Time: 2017/08/11 - 03:09
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1416.300	23.408	31.334	-30.592	54.000	-7.926	100	252	AV
2			1416.500	33.981	41.906	-40.019	74.000	-7.926	116	63	PK
3			3082.000	24.560	26.413	-29.440	54.000	-1.853	100	174	AV
4			3082.500	34.905	36.757	-39.095	74.000	-1.852	133	96	PK
5			5802.000	31.630	27.668	-22.370	54.000	3.962	128	175	AV
6			5802.500	41.486	37.523	-32.514	74.000	3.963	100	84	PK

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

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

7. CONCLUSION

The data collected relate only the item(s) tested and show that the **HD IP Conference Phone** has been tested to comply with the requirements specified in §15.107 and §15.109 of the FCC Rules & ICES-003 Rule.