

MEASUREMENT REPORT

FCC Part 15 Subpart B / ICES-003

FCC ID: O57VR3030S

Applicant: Lenovo (Shanghai) Electronics Technology Co., Ltd.

Application Type: Certification

Product: Standalone VR Headset


Model Number: Lenovo VR-3030S

FCC Rule Part(s): FCC Part 15 Subpart B: 2019

IC Rule(s): ICES-003 Issue 6

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

Test Date: December 02 ~ 20, 2019

Reviewed By: 

(Sunny Sun)

Approved By: 

(Robin Wu)



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
1911RSU052-U5	Rev. 01	Initial Report	12-26-2019	Valid

CONTENTS

Description	Page
General Information	4
1. INTRODUCTION	5
1.1. Scope	5
1.2. MRT Test Location	5
2. PRODUCT INFORMATION	6
2.1. Equipment Description	6
2.2. Test Mode	6
2.3. Configuration of Tested System	7
2.4. Test System Details	8
2.5. EMI Suppression Device(s)/Modifications	8
3. DESCRIPTION OF TEST	9
3.1. Evaluation Procedure	9
3.2. AC Line Conducted Emissions	9
3.3. Radiated Emissions	10
4. TEST EQUIPMENT CALIBRATION DATE	11
5. MEASUREMENT UNCERTAINTY	12
6. TEST RESULT	13
6.1. Summary	13
6.2. Conducted Emission Measurement	14
6.2.1. Test Limit	14
6.2.2. Test Setup	14
6.2.3. Test Result of Conducted Emissions	15
6.3. Radiated Emission Measurement	25
6.3.1. Test Limit	25
6.3.2. Test Setup	25
6.3.3. Test Result of Radiated Emissions	27
7. CONCLUSION	47
Appendix A - Test Setup Photograph	48
Appendix B - EUT Photograph	49

General Information

Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd.
Applicant Address:	Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone
Manufacturer:	Lenovo PC HK Limited
Manufacturer Address:	23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, P.R.China
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering

Test Facility / Accreditations

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

- MRT facility is a FCC accredited (MRT Designation No. CN1166) test facility with the site description report on file and has met all the requirements specified in ANSI C63.4-2014.
- 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-20025, G-20034, C-20020, T-20020) 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, Radio and SAR testing.



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 Innovation, Science and Economic Development Canada.

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 measurement facility compliant with the test site requirements specified in ANSI C63.4-2014.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	Standalone VR Headset
Model No.	Lenovo VR-3030S
WLAN Specification	802.11a/b/g/n/ac
Bluetooth Version	v4.2 dual mode
Accessories	
Adapter	MODEL/MODELO: UC13US PRI/ENTRADA: 100-240V ~ 50/60Hz, 0.35A SEC/SALIDA: 5Vdc, 2A

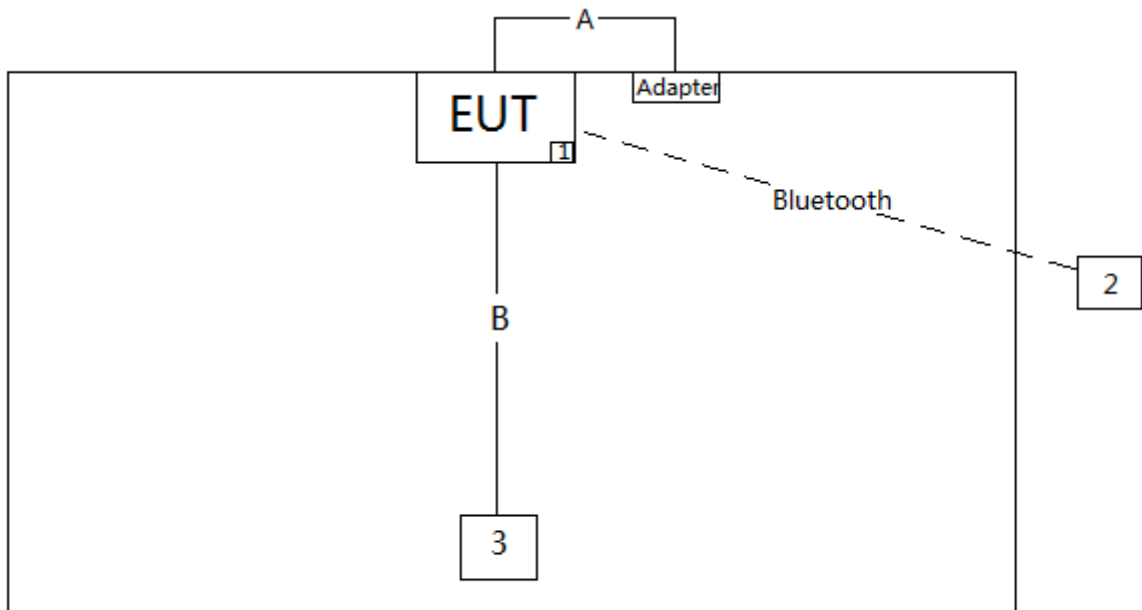
2.2. Test Mode

Test Mode
Mode 1: Playing video by internal storage + Communicating with Controller by Bluetooth + Charging
Mode 2: Playing video by SD card + Communicating with Controller by Bluetooth + Charging
Mode 3: Playing video via WLAN from Internet + Communicating with Controller by Bluetooth + Charging
Mode 4: Connecting with PC and copying files to SD card via USB cable
Mode 5: Connecting with PC and copying files to internal storage via USB cable

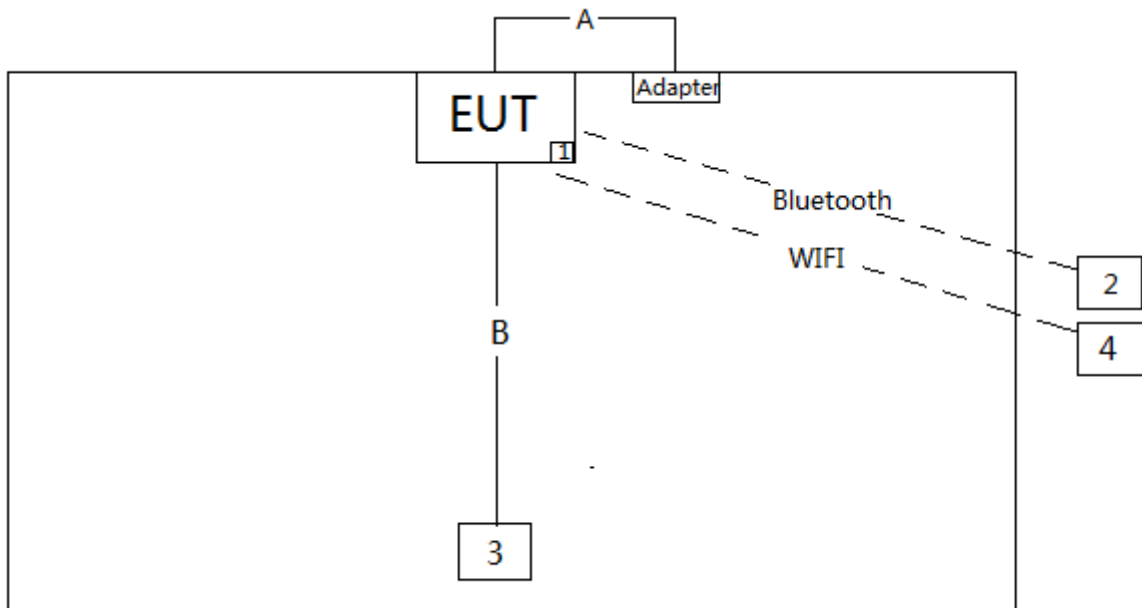
2.3. Configuration of Tested System

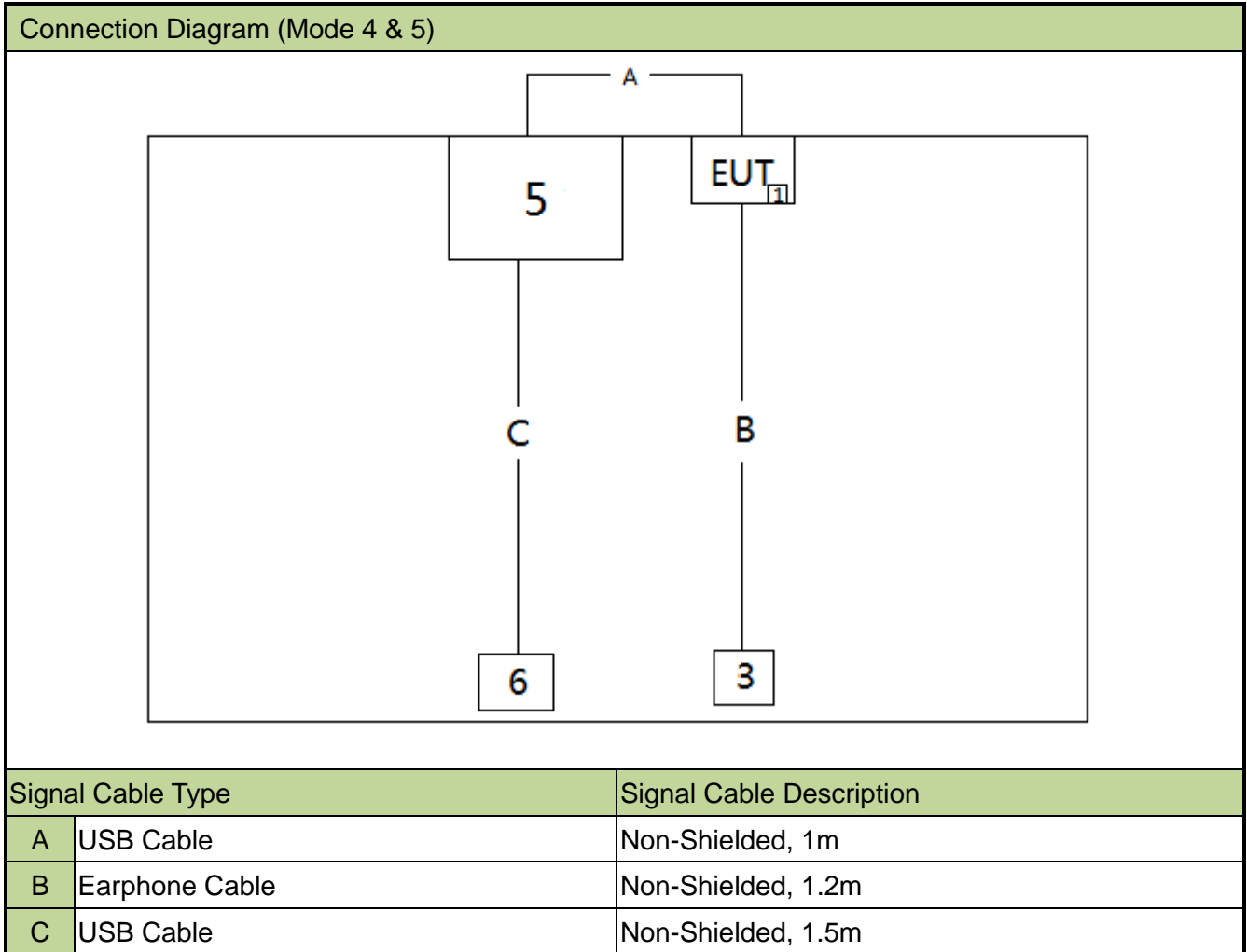
The unit was tested per the guidance FCC Part 15 Subpart B: 2019 & ICES-003 Issue 6, and ANSI C63.4: 2014 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

Connection Diagram (Mode 1 & 2)



Connection Diagram (Mode 3)





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	SD card	Sandisk	N/A	N/A	
2	Controller	Pico	C1510	N/A	
3	Headset	Logitech	H111	N/A	
4	Router	Cisco	CVR100W	CCQ16220BC5	Non-Shielded, 1m
5	Notebook	Lenovo	E430c	MP-4CFX213/10	Non-Shielded, 1.8m
6	USB Mouse	DELL	MS111-T	N/A	N/A

2.5. 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 device.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

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

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

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

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	2020/04/15
Two-Line V-Network	R&S	ENV 216	MRTSUE06002	1 year	2020/06/13
Two-Line V-Network	R&S	ENV 216	MRTSUE06003	1 year	2020/06/13
Thermohygrometer	Testo	608-H1	MRTSUE06404	1 year	2020/08/08
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2020/08/01
PXA Signal Analyzer	Keysight	9030B	MRTSUE06395	1 year	2020/09/03
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2020/11/10
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2020/03/31
Broad Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2020/10/13
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2020/12/17
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2020/11/15
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2020/06/11
Thermohygrometer	Testo	608-H1	MRTSUE06403	1 year	2020/08/08
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2020/04/30

Radiated Emission - AC2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Keysight	N9038A	MRTSUE06125	1 year	2020/08/01
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2020/11/10
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2020/10/13
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06171	1 year	2020/10/27
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2020/12/17
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2020/11/15
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2020/06/11
Temperature/Humidity Meter	Minggao	ETH529	MRTSUE06170	1 year	2020/12/13
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2020/04/30

Software	Version	Function
EMI Software	V3	EMI Test Software

5. MEASUREMENT UNCERTAINTY

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

AC Conducted Emission Measurement - SR2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 150kHz~30MHz: 2.42dB
Radiated Emission Measurement - AC1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): Horizontal: 30MHz~1GHz: 4.22dB 1GHz~18GHz: 4.05dB Vertical: 30MHz~1GHz: 3.37dB 1GHz~18GHz: 4.08dB
Radiated Emission Measurement - AC2
The maximum measurement uncertainty is evaluated as: Horizontal: 30MHz~300MHz: 3.75dB 300MHz~1GHz: 3.53dB 1GHz~18GHz: 4.28dB Vertical: 30MHz~300MHz: 3.86dB 300MHz~1GHz: 3.53dB 1GHz~18GHz: 4.33dB

6. TEST RESULT

6.1. Summary

FCC Part Section(s)	IC Part Section(s)	Test Description	Test Result (Pass/Fail)
15.107	ICES-003 Issue 6	Conducted Emission	Pass
15.109	ICES-003 Issue 6	Radiated Emission	Pass

6.2. Conducted Emission Measurement

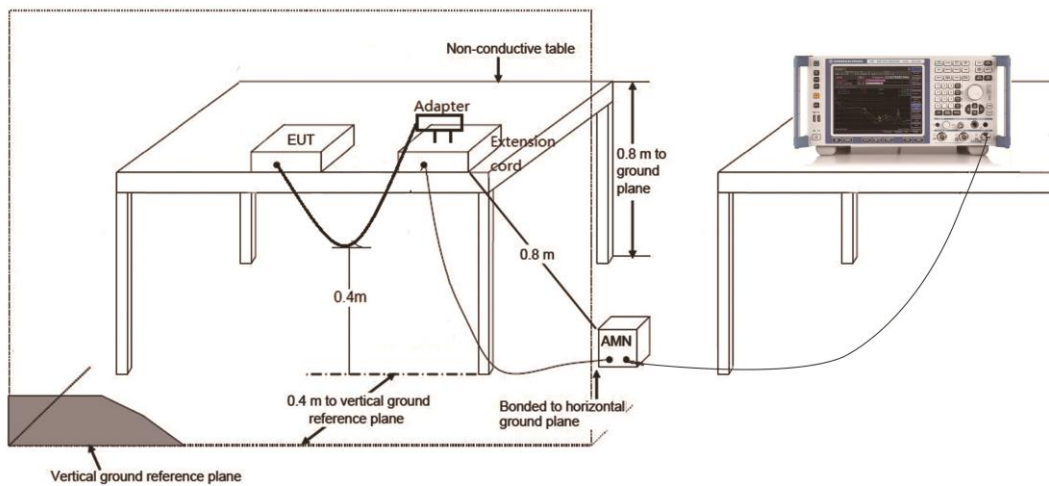
6.2.1. Test Limit

FCC Part 15.107 & ICES-003 Issue5 - 6.1 Limits Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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.

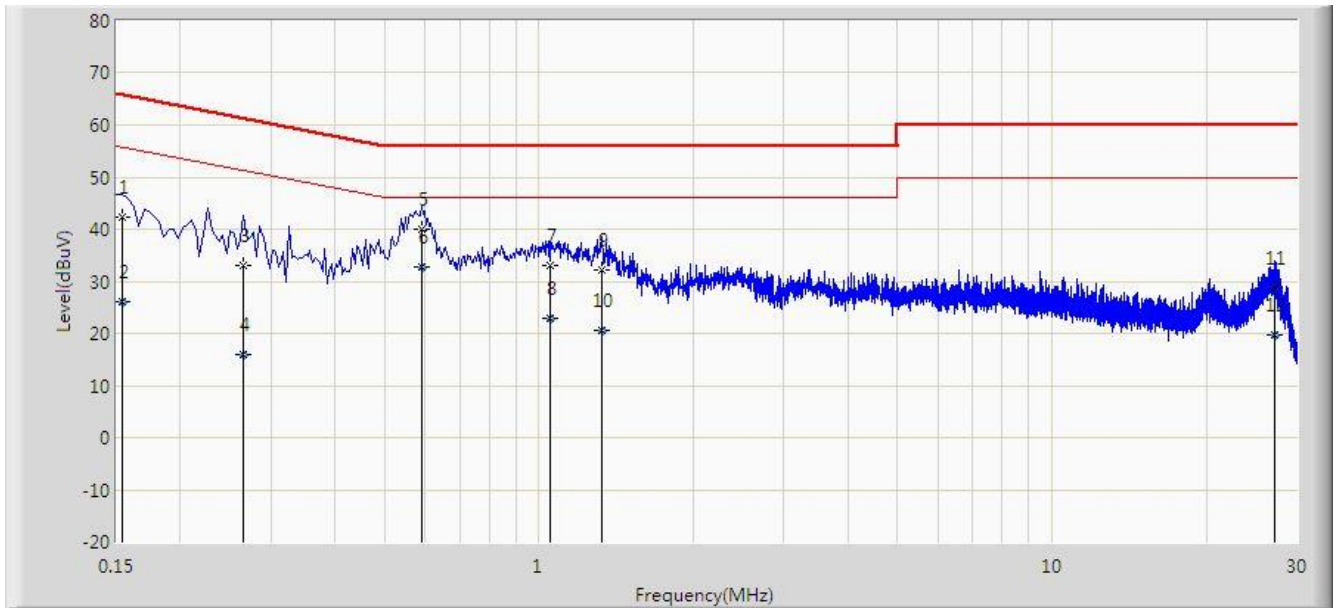
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.2.2. Test Setup



6.2.3. Test Result of Conducted Emissions

Site: SR2	Time: 2019/12/11 - 14:43
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

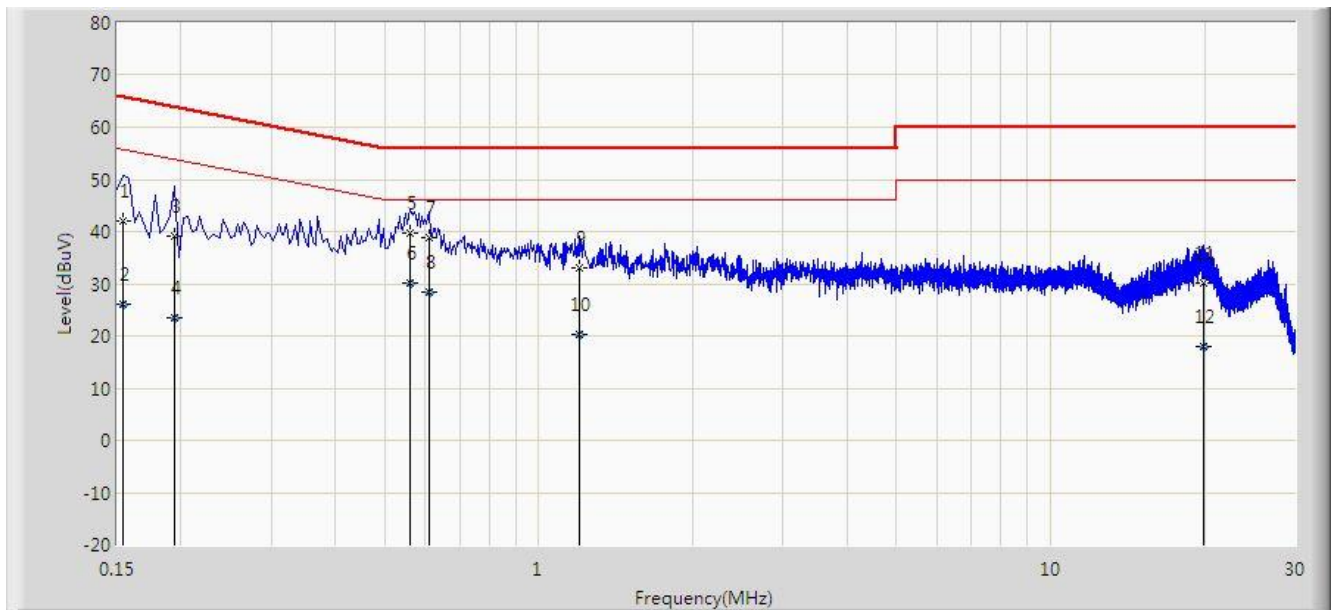


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	42.405	31.665	-23.377	65.781	10.740	QP
2			0.154	26.021	15.281	-29.761	55.781	10.740	AV
3			0.266	33.045	23.068	-28.197	61.242	9.977	QP
4			0.266	15.996	6.019	-35.246	51.242	9.977	AV
5			0.590	39.934	29.814	-16.066	56.000	10.120	QP
6		*	0.590	32.861	22.741	-13.139	46.000	10.120	AV
7			1.050	33.073	23.166	-22.927	56.000	9.907	QP
8			1.050	22.858	12.951	-23.142	46.000	9.907	AV
9			1.326	32.099	22.203	-23.901	56.000	9.896	QP
10			1.326	20.463	10.567	-25.537	46.000	9.896	AV
11			27.162	28.834	18.588	-31.166	60.000	10.246	QP
12			27.162	19.609	9.363	-30.391	50.000	10.246	AV

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

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

Site: SR2	Time: 2019/12/11 - 14:56
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

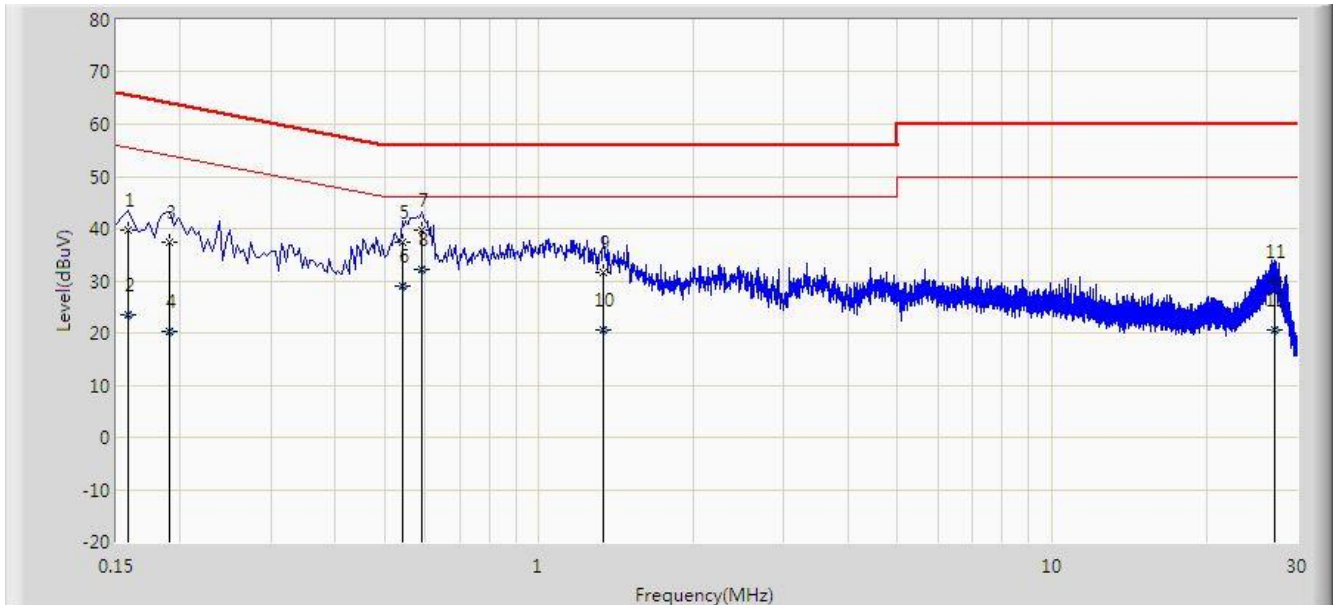


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	41.980	31.264	-23.802	65.781	10.716	QP
2			0.154	25.974	15.259	-29.807	55.781	10.716	AV
3			0.194	39.267	29.246	-24.596	63.864	10.021	QP
4			0.194	23.375	13.354	-30.488	53.864	10.021	AV
5			0.562	39.838	29.686	-16.162	56.000	10.152	QP
6		*	0.562	30.062	19.910	-15.938	46.000	10.152	AV
7			0.610	38.838	28.712	-17.162	56.000	10.126	QP
8			0.610	28.376	18.251	-17.624	46.000	10.126	AV
9			1.198	33.103	23.200	-22.897	56.000	9.902	QP
10			1.198	20.325	10.423	-25.675	46.000	9.902	AV
11			19.962	30.246	20.076	-29.754	60.000	10.170	QP
12			19.962	18.009	7.839	-31.991	50.000	10.170	AV

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

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

Site: SR2	Time: 2019/12/11 - 15:14
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

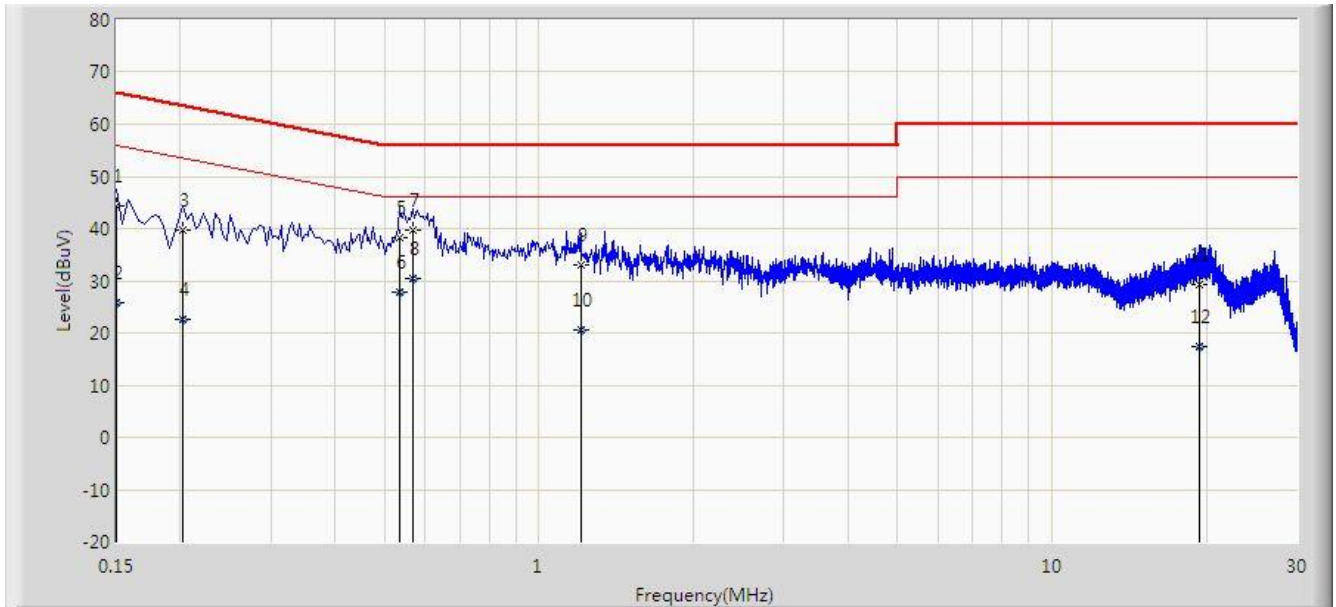


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.158	39.792	29.481	-25.777	65.568	10.311	QP
2			0.158	23.540	13.229	-32.028	55.568	10.311	AV
3			0.190	37.322	27.293	-26.715	64.037	10.029	QP
4			0.190	20.270	10.241	-33.767	54.037	10.029	AV
5			0.542	37.493	27.348	-18.507	56.000	10.145	QP
6			0.542	29.054	18.909	-16.946	46.000	10.145	AV
7			0.590	39.656	29.536	-16.344	56.000	10.120	QP
8		*	0.590	32.147	22.027	-13.853	46.000	10.120	AV
9			1.330	31.494	21.598	-24.506	56.000	9.896	QP
10			1.330	20.661	10.765	-25.339	46.000	9.896	AV
11			27.158	29.858	19.612	-30.142	60.000	10.247	QP
12			27.158	20.650	10.403	-29.350	50.000	10.247	AV

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

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

Site: SR2	Time: 2019/12/11 - 15:11
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

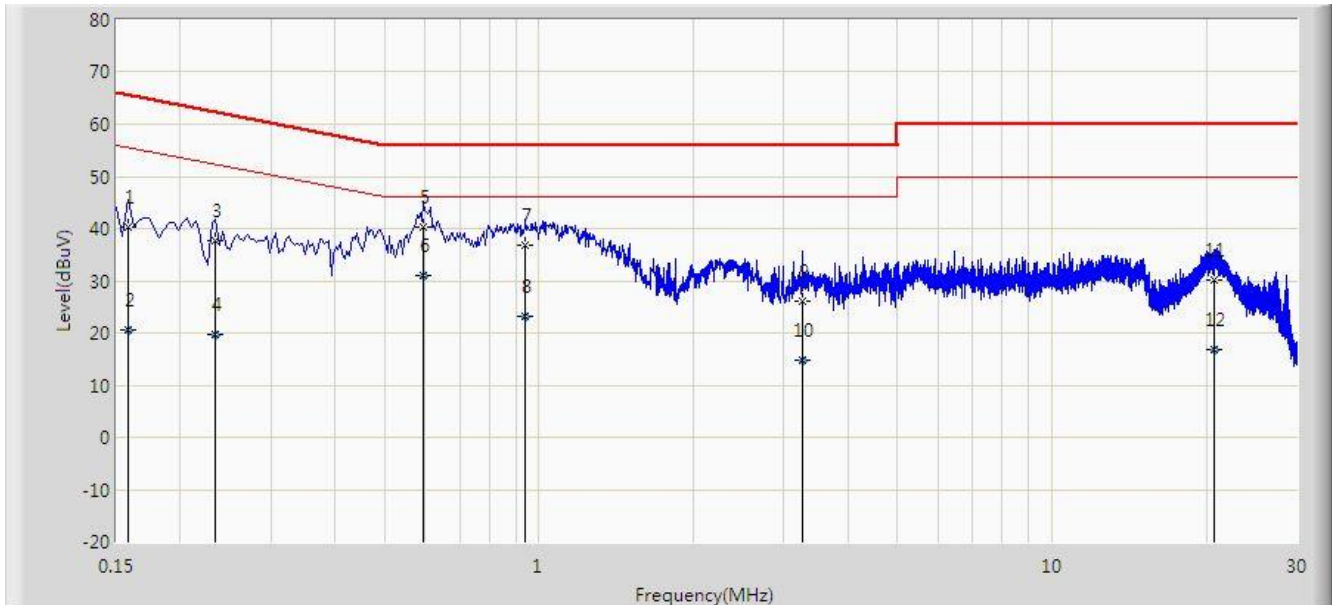


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	44.241	33.099	-21.759	66.000	11.142	QP
2			0.150	25.917	14.775	-30.083	56.000	11.142	AV
3			0.202	39.615	29.608	-23.912	63.528	10.008	QP
4			0.202	22.590	12.582	-30.938	53.528	10.008	AV
5			0.534	38.349	28.182	-17.651	56.000	10.168	QP
6			0.534	27.711	17.543	-18.289	46.000	10.168	AV
7			0.566	39.577	29.428	-16.423	56.000	10.150	QP
8		*	0.566	30.324	20.174	-15.676	46.000	10.150	AV
9			1.206	33.031	23.129	-22.969	56.000	9.902	QP
10			1.206	20.596	10.694	-25.404	46.000	9.902	AV
11			19.318	29.135	18.977	-30.865	60.000	10.158	QP
12			19.318	17.252	7.094	-32.748	50.000	10.158	AV

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

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

Site: SR2	Time: 2019/12/11 - 11:34
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

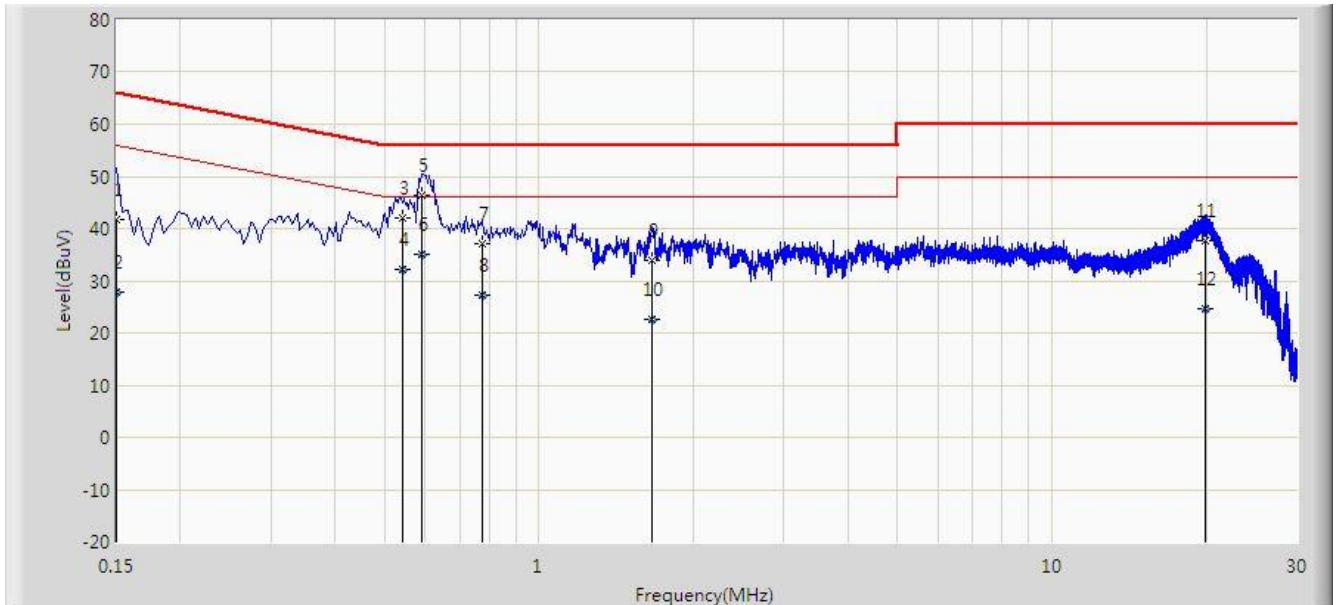


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.158	40.205	29.894	-25.364	65.568	10.311	QP
2			0.158	20.517	10.206	-35.052	55.568	10.311	AV
3			0.234	37.652	27.701	-24.655	62.307	9.951	QP
4			0.234	19.707	9.757	-32.599	52.307	9.951	AV
5			0.594	40.240	30.122	-15.760	56.000	10.118	QP
6		*	0.594	31.051	20.933	-14.949	46.000	10.118	AV
7			0.942	36.887	26.949	-19.113	56.000	9.938	QP
8			0.942	23.239	13.301	-22.761	46.000	9.938	AV
9			3.258	26.103	16.222	-29.897	56.000	9.881	QP
10			3.258	14.854	4.973	-31.146	46.000	9.881	AV
11			20.734	30.106	19.957	-29.894	60.000	10.149	QP
12			20.734	16.751	6.602	-33.249	50.000	10.149	AV

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

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

Site: SR2	Time: 2019/12/11 - 11:46
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

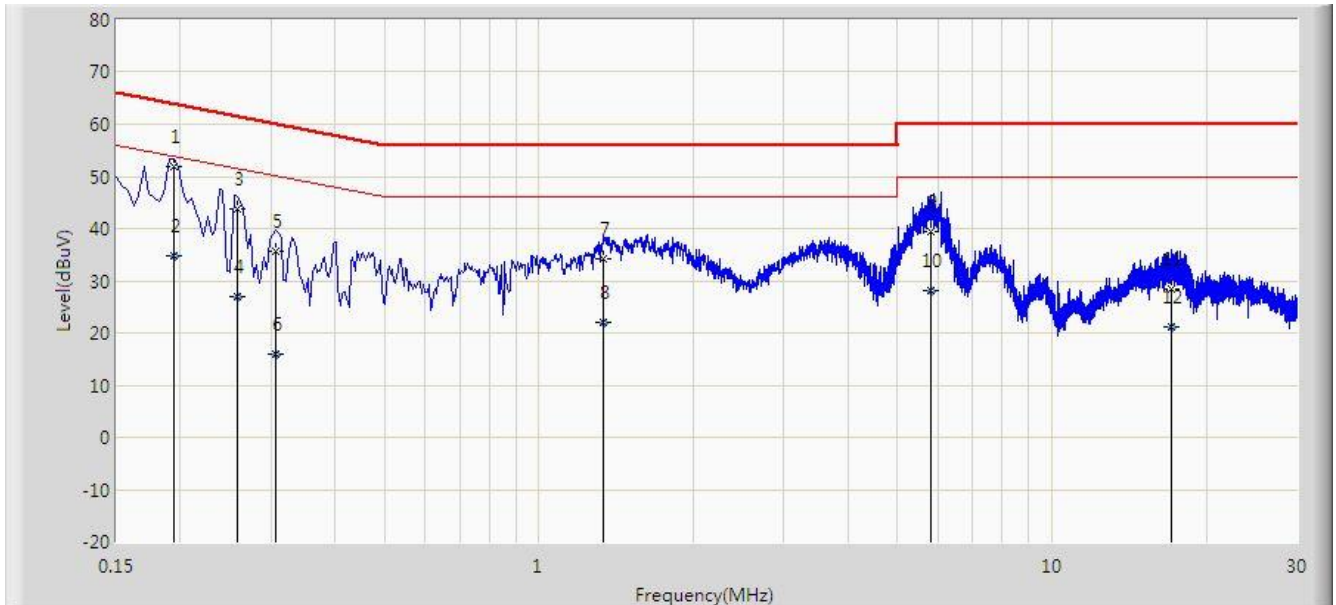


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	41.850	30.708	-24.150	66.000	11.142	QP
2			0.150	27.737	16.595	-28.263	56.000	11.142	AV
3			0.542	42.035	31.872	-13.965	56.000	10.163	QP
4			0.542	32.104	21.940	-13.896	46.000	10.163	AV
5		*	0.590	46.333	36.196	-9.667	56.000	10.137	QP
6			0.590	34.958	24.821	-11.042	46.000	10.137	AV
7			0.774	37.071	27.038	-18.929	56.000	10.034	QP
8			0.774	27.135	17.101	-18.865	46.000	10.034	AV
9			1.662	34.032	24.147	-21.968	56.000	9.885	QP
10			1.662	22.505	12.621	-23.495	46.000	9.885	AV
11			19.934	37.710	27.540	-22.290	60.000	10.170	QP
12			19.934	24.560	14.390	-25.440	50.000	10.170	AV

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

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

Site: SR2	Time: 2019/12/11 - 16:20
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

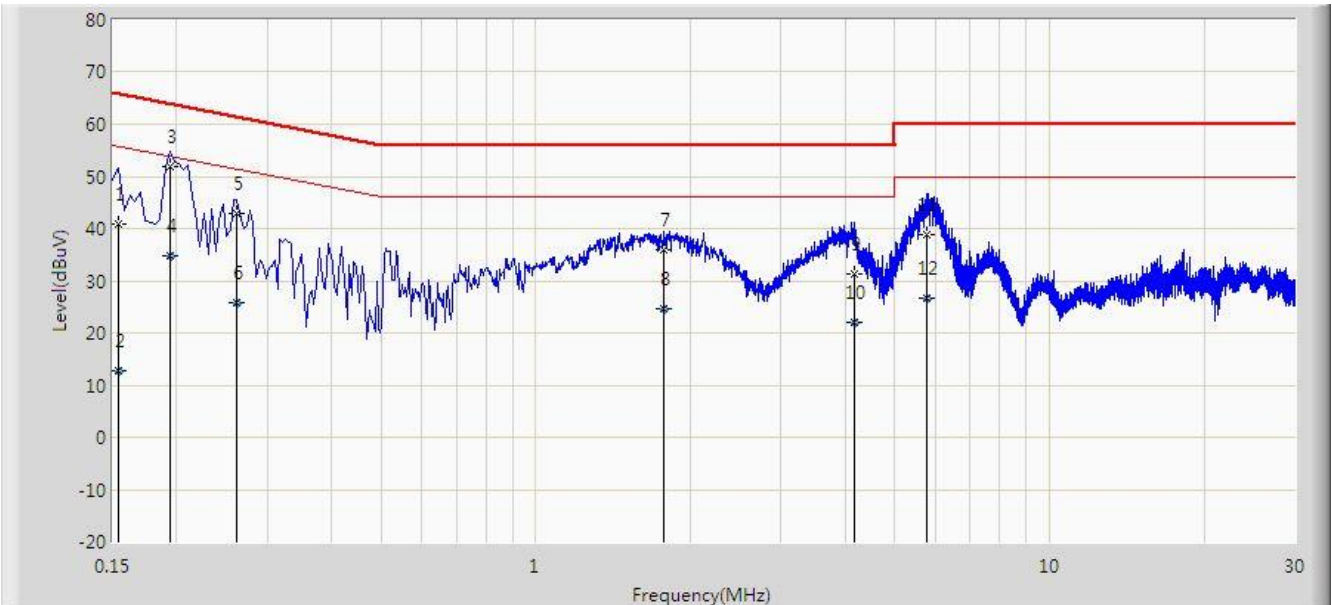


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.194	51.847	41.830	-12.017	63.864	10.017	QP
2			0.194	34.861	24.844	-19.003	53.864	10.017	AV
3			0.258	43.625	33.655	-17.870	61.496	9.970	QP
4			0.258	27.035	17.064	-24.461	51.496	9.970	AV
5			0.306	35.657	25.648	-24.421	60.078	10.009	QP
6			0.306	15.997	5.988	-34.082	50.078	10.009	AV
7			1.334	34.132	24.236	-21.868	56.000	9.896	QP
8			1.334	22.022	12.126	-23.978	46.000	9.896	AV
9			5.822	39.497	29.399	-20.503	60.000	10.097	QP
10			5.822	28.131	18.034	-21.869	50.000	10.097	AV
11			17.038	28.527	18.448	-31.473	60.000	10.078	QP
12			17.038	21.120	11.041	-28.880	50.000	10.078	AV

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

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

Site: SR2	Time: 2019/12/11 - 16:14
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

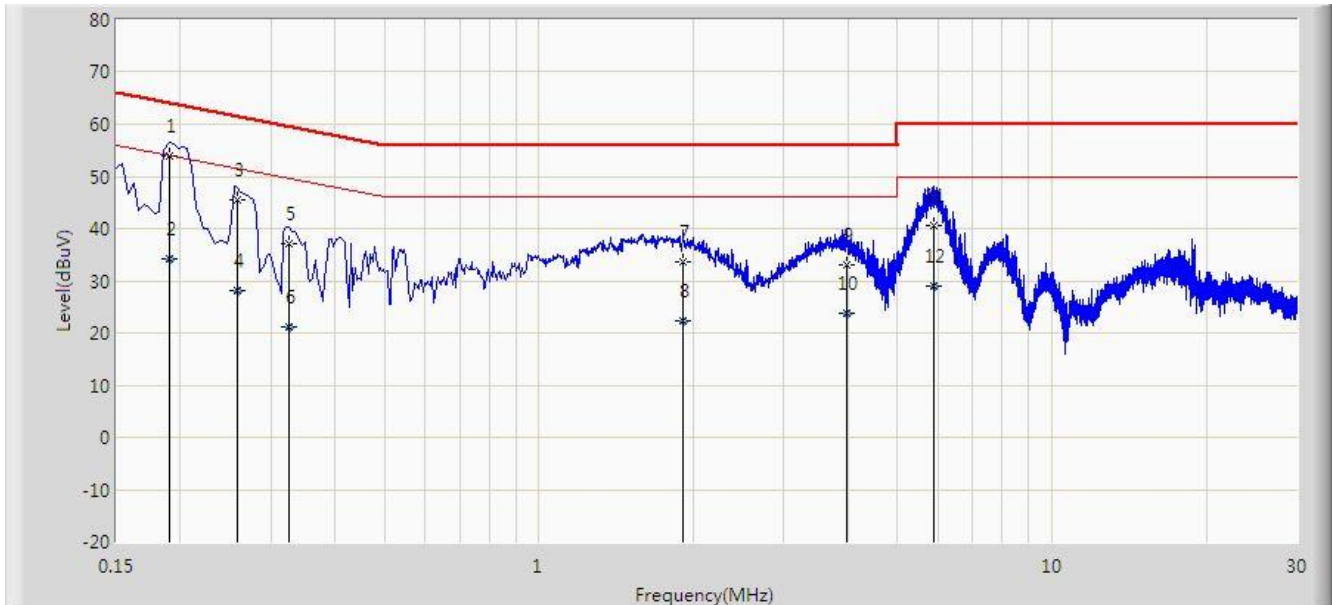


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	40.856	30.140	-24.925	65.781	10.716	QP
2			0.154	12.856	2.140	-42.926	55.781	10.716	AV
3		*	0.194	51.921	41.900	-11.943	63.864	10.021	QP
4			0.194	34.693	24.672	-19.171	53.864	10.021	AV
5			0.262	43.005	32.995	-18.362	61.368	10.010	QP
6			0.262	25.769	15.759	-25.598	51.368	10.010	AV
7			1.774	35.818	25.937	-20.182	56.000	9.881	QP
8			1.774	24.609	14.728	-21.391	46.000	9.881	AV
9			4.178	31.308	21.325	-24.692	56.000	9.983	QP
10			4.178	22.139	12.156	-23.861	46.000	9.983	AV
11			5.758	38.867	28.756	-21.133	60.000	10.111	QP
12			5.758	26.625	16.514	-23.375	50.000	10.111	AV

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

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

Site: SR2	Time: 2019/12/11 - 15:48
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	

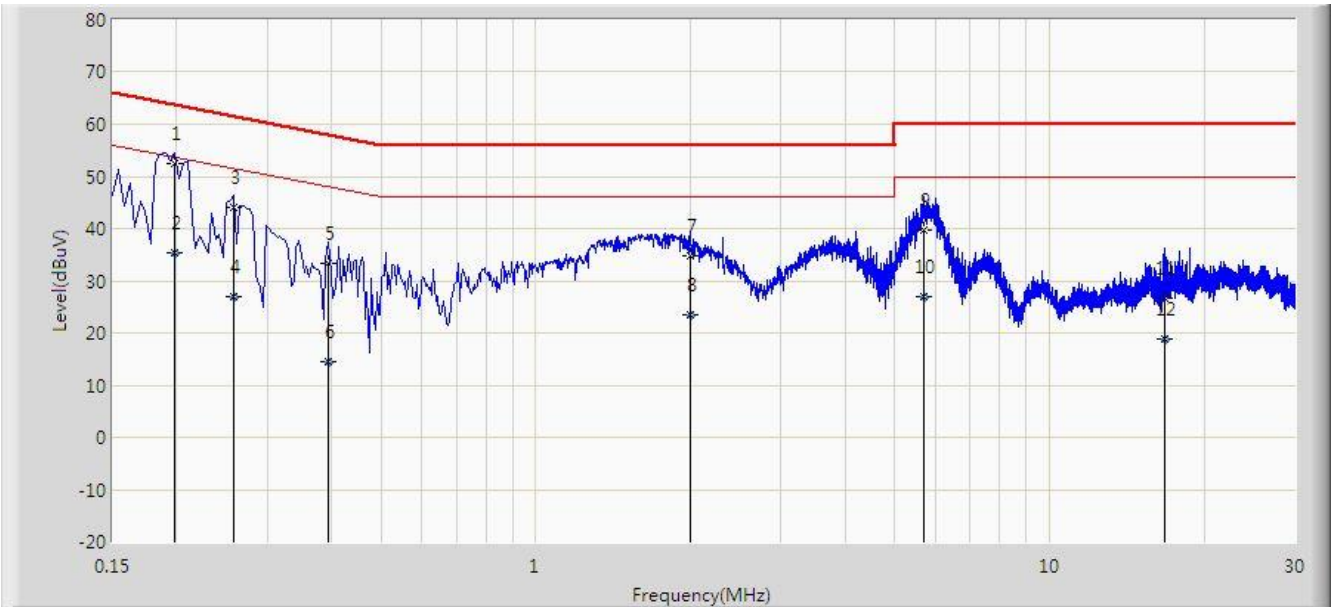


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.190	53.857	43.829	-10.179	64.037	10.029	QP
2			0.190	34.215	24.186	-19.821	54.037	10.029	AV
3			0.258	45.409	35.439	-16.086	61.496	9.970	QP
4			0.258	28.062	18.092	-23.433	51.496	9.970	AV
5			0.326	37.054	27.029	-22.499	59.552	10.025	QP
6			0.326	21.213	11.188	-28.340	49.552	10.025	AV
7			1.910	33.622	23.747	-22.378	56.000	9.875	QP
8			1.910	22.433	12.558	-23.567	46.000	9.875	AV
9			3.986	33.147	23.183	-22.853	56.000	9.963	QP
10			3.986	23.694	13.730	-22.306	46.000	9.963	AV
11			5.894	40.618	30.515	-19.382	60.000	10.102	QP
12			5.894	29.012	18.910	-20.988	50.000	10.102	AV

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

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

Site: SR2	Time: 2019/12/11 - 15:53
Limit: FCC_Part15.107_CE	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.198	52.350	42.335	-11.344	63.694	10.015	QP
2			0.198	35.280	25.266	-18.414	53.694	10.015	AV
3			0.258	43.959	33.952	-17.537	61.496	10.007	QP
4			0.258	27.097	17.090	-24.399	51.496	10.007	AV
5			0.394	33.196	23.088	-24.783	57.979	10.108	QP
6			0.394	14.602	4.494	-33.377	47.979	10.108	AV
7			1.994	34.646	24.773	-21.354	56.000	9.873	QP
8			1.994	23.516	13.643	-22.484	46.000	9.873	AV
9			5.698	39.662	29.551	-20.338	60.000	10.111	QP
10			5.698	27.078	16.967	-22.922	50.000	10.111	AV
11			16.790	26.760	16.648	-33.240	60.000	10.111	QP
12			16.790	18.870	8.759	-31.130	50.000	10.111	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 & ICES-003 Issue5 - 6.2 Limits		
Frequency (MHz)	Field Strength (dB μ V/m)	Measured Distance (Meters)
30 - 88	40	3
88 - 216	43.5	3
216 - 960	46	3
Above 960	54	3

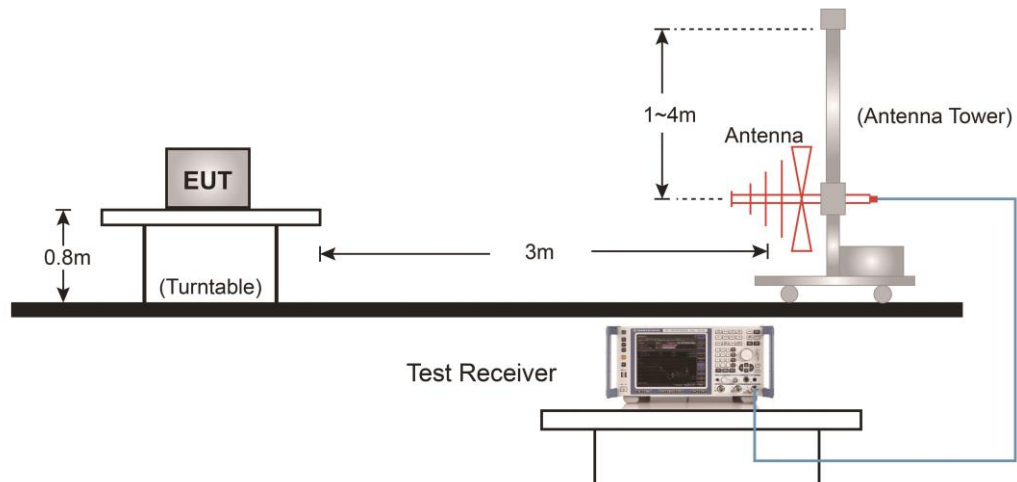
Note 1: The lower limit shall apply at the transition frequency.

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.

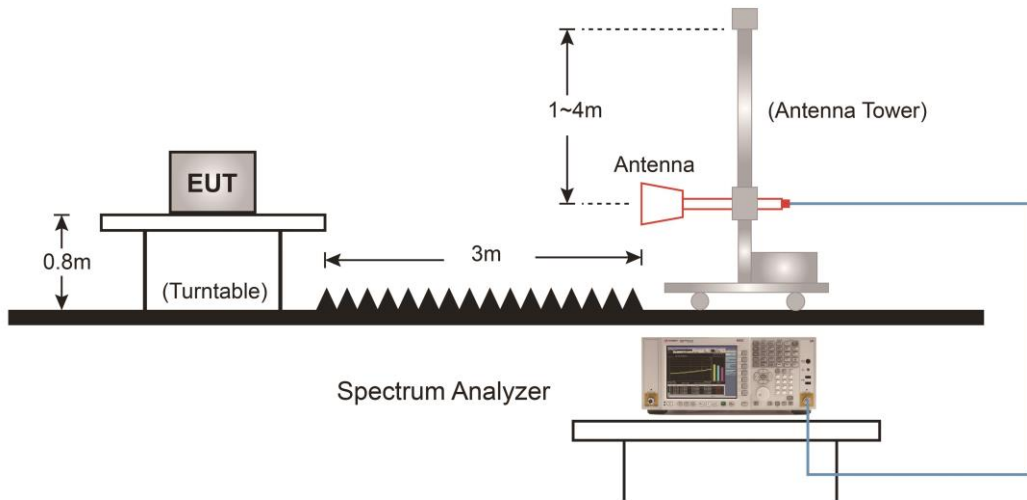
Note 3: E field strength (dB μ V/m) = 20 log E field strength (uV/m)

6.3.2. Test Setup

30MHz ~ 1GHz Test Setup:

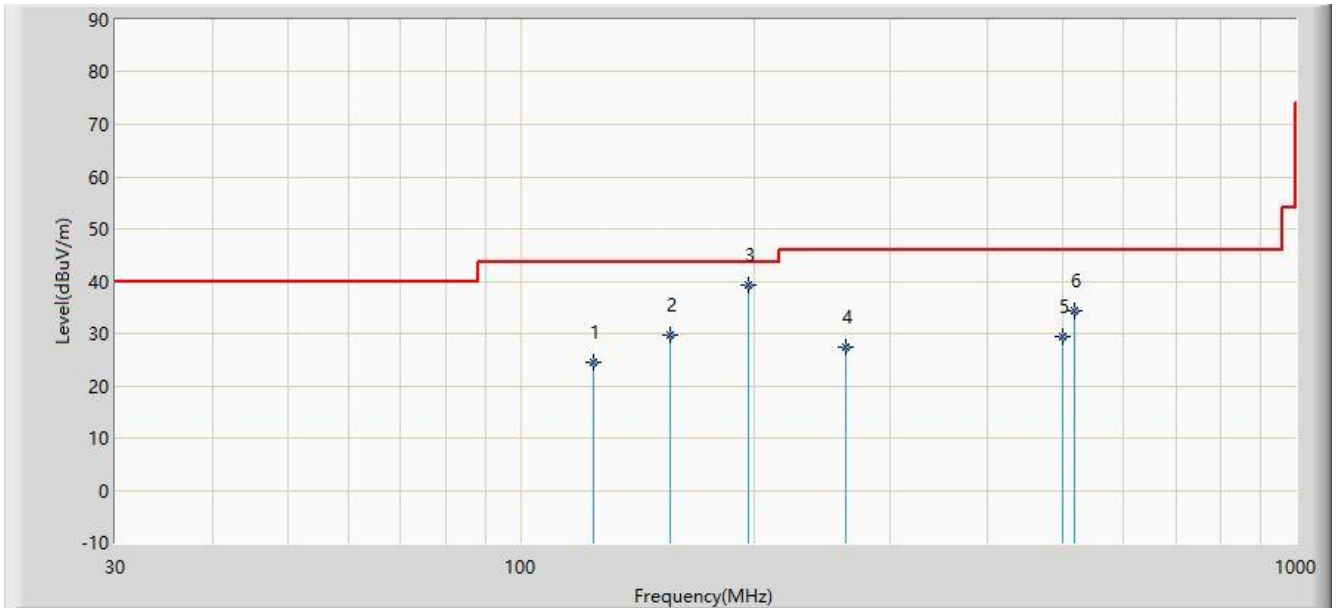


1GHz ~18GHz Test Setup:



6.3.3. Test Result of Radiated Emissions

Site: AC2	Time: 2019/12/15 - 18:03
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

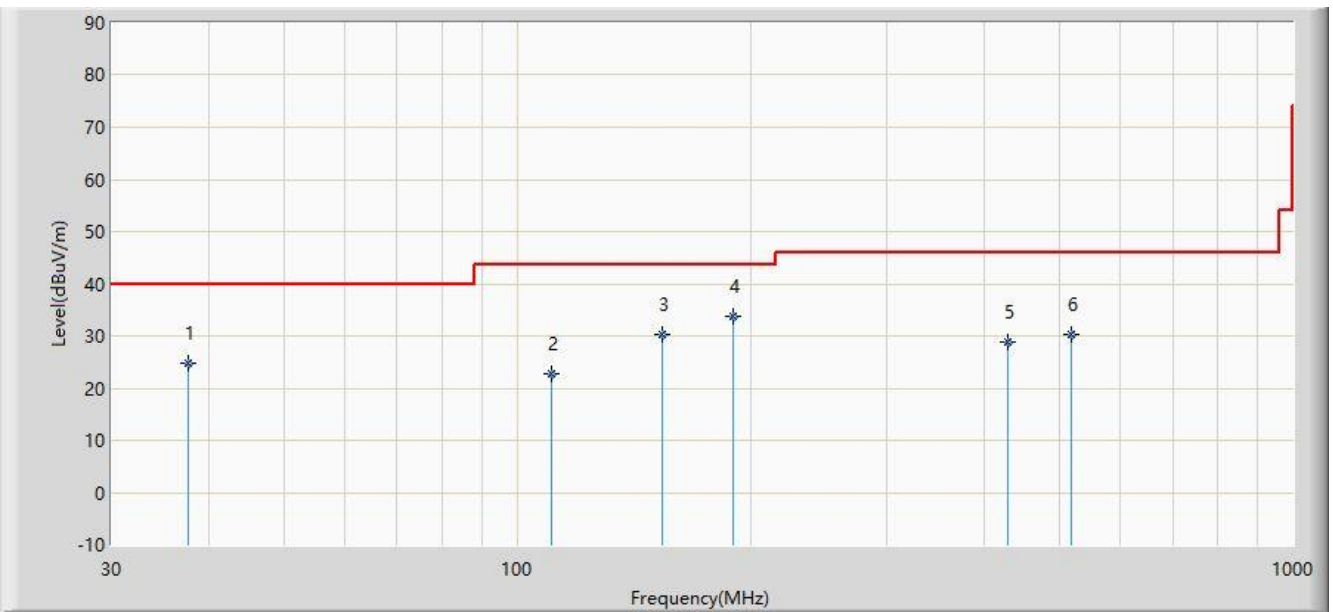


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			124.120	24.489	14.260	-19.011	43.500	10.230	QP
2			155.640	29.759	20.310	-13.741	43.500	9.450	QP
3		*	196.860	39.275	26.240	-4.225	43.500	13.035	QP
4			262.350	27.331	13.030	-18.669	46.000	14.301	QP
5			500.000	29.302	10.040	-16.698	46.000	19.262	QP
6			518.850	34.478	15.150	-11.522	46.000	19.329	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:03
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

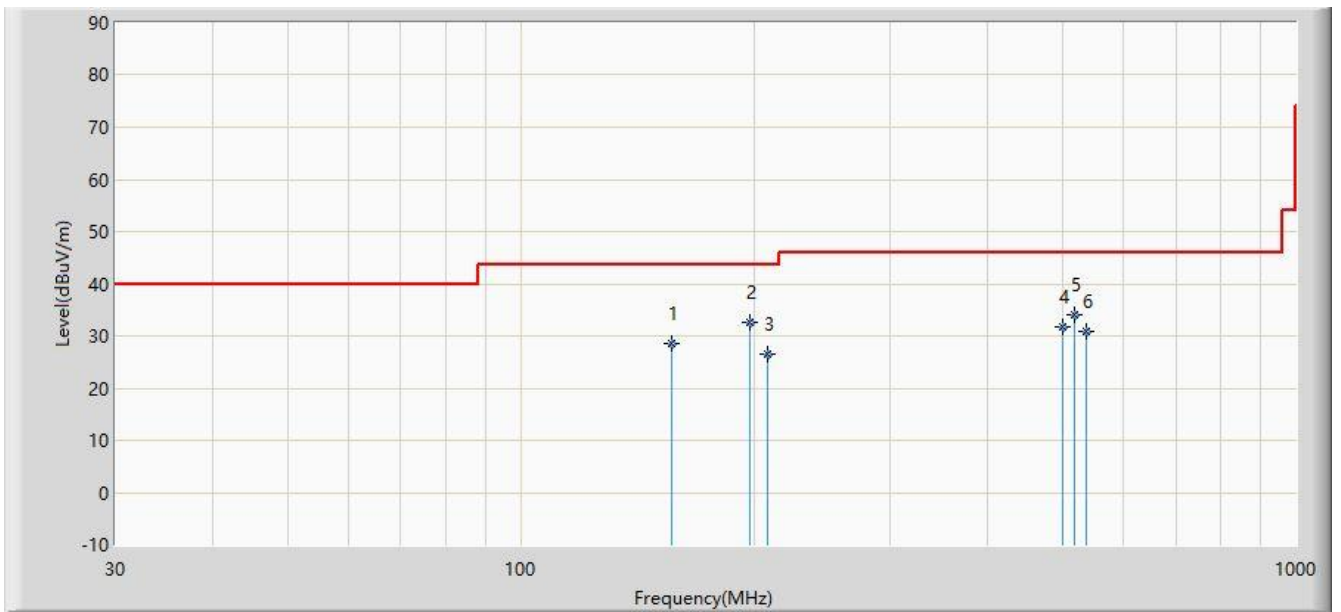


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			37.760	24.689	12.080	-15.311	40.000	12.608	QP
2			110.980	22.839	10.930	-20.661	43.500	11.909	QP
3			153.680	30.394	21.030	-13.106	43.500	9.364	QP
4		*	190.120	33.913	22.140	-9.587	43.500	11.773	QP
5			429.650	28.926	11.030	-17.074	46.000	17.895	QP
6			518.000	30.317	11.010	-15.683	46.000	19.307	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:03
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

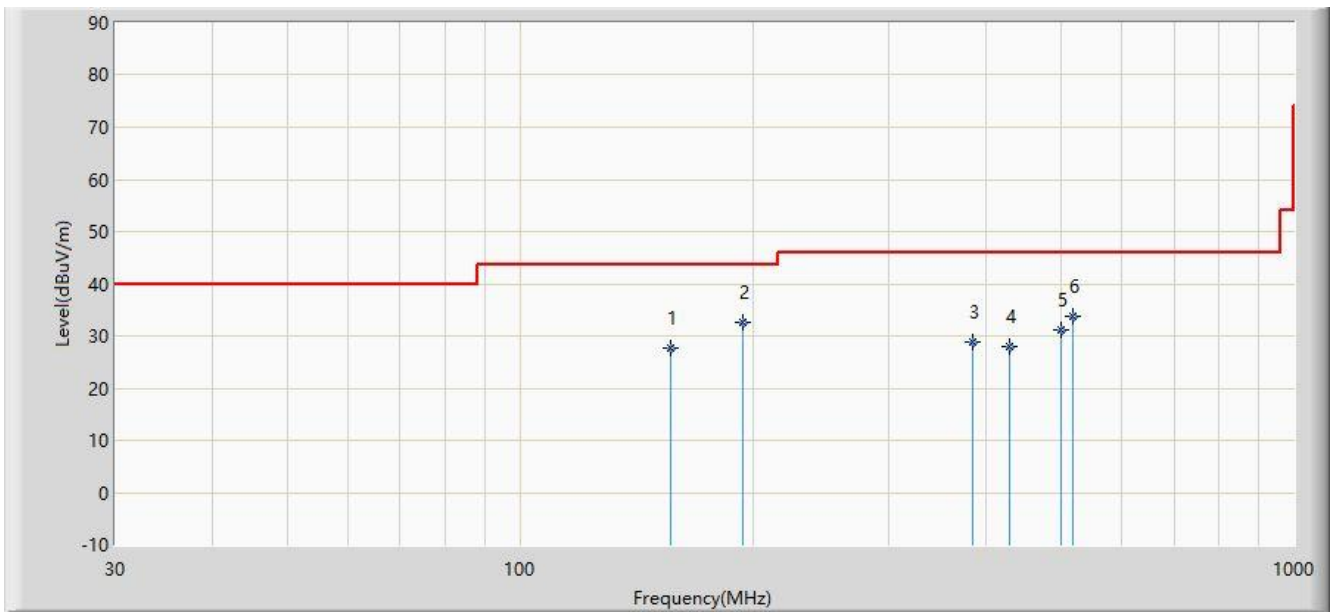


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			156.510	28.635	19.140	-14.865	43.500	9.495	QP
2		*	197.820	32.467	19.410	-11.033	43.500	13.057	QP
3			208.500	26.633	14.280	-16.867	43.500	12.353	QP
4			500.000	31.782	12.520	-14.218	46.000	19.262	QP
5			517.450	34.111	14.820	-11.889	46.000	19.291	QP
6			536.830	30.785	11.010	-15.215	46.000	19.774	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

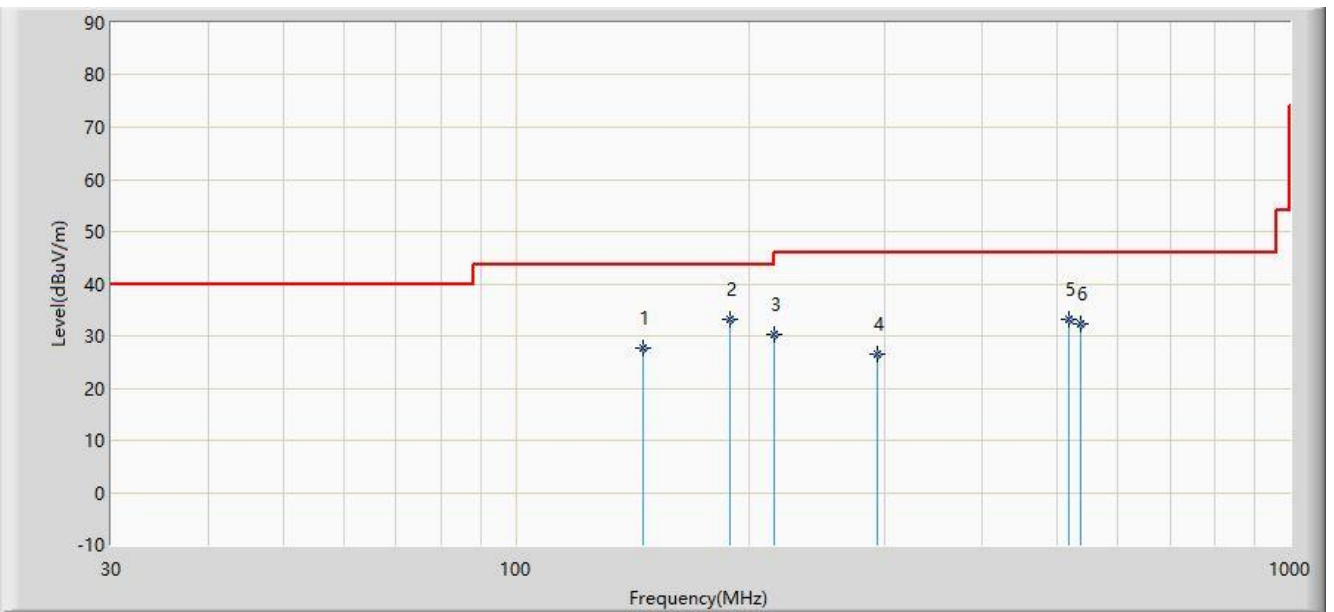


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			156.890	27.554	18.040	-15.946	43.500	9.513	QP
2		*	193.950	32.582	20.100	-10.918	43.500	12.482	QP
3			384.080	28.968	11.890	-17.032	46.000	17.078	QP
4			429.650	27.956	10.060	-18.044	46.000	17.895	QP
5			500.000	31.212	11.950	-14.788	46.000	19.262	QP
6			517.850	33.822	14.520	-12.178	46.000	19.302	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

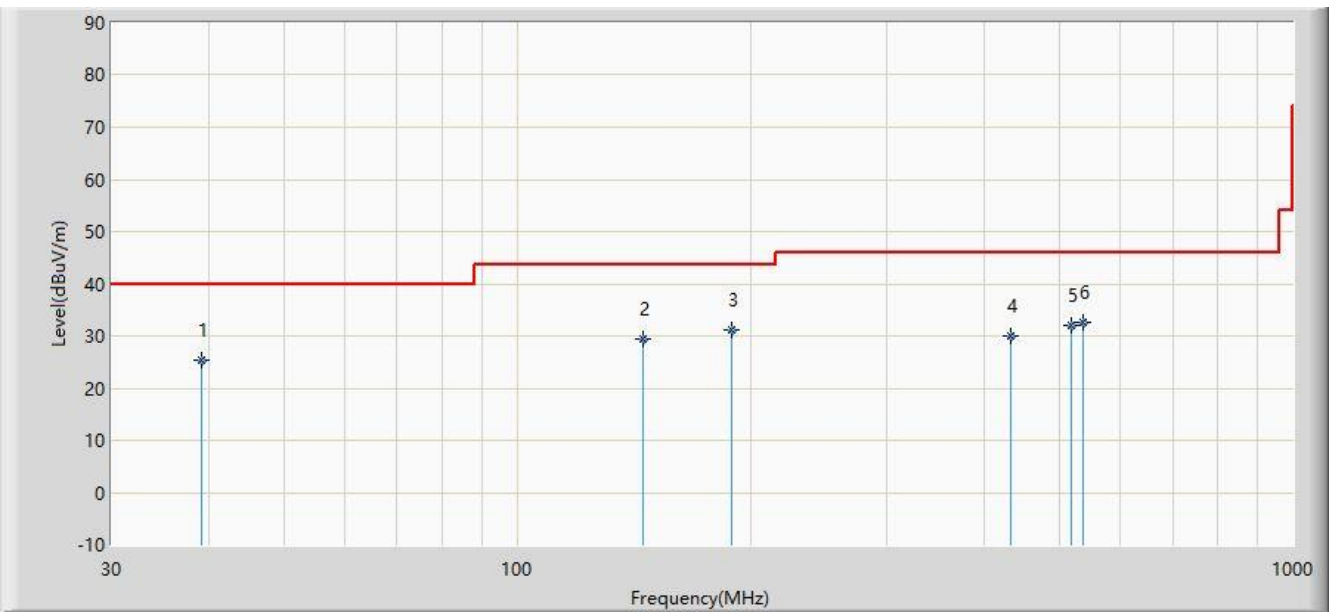


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			145.920	27.539	18.410	-15.961	43.500	9.129	QP
2		*	189.050	33.077	21.410	-10.423	43.500	11.668	QP
3			215.800	30.145	17.630	-13.355	43.500	12.514	QP
4			293.450	26.539	11.750	-19.461	46.000	14.789	QP
5			517.950	33.275	13.970	-12.725	46.000	19.305	QP
6			536.350	32.239	12.480	-13.761	46.000	19.759	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

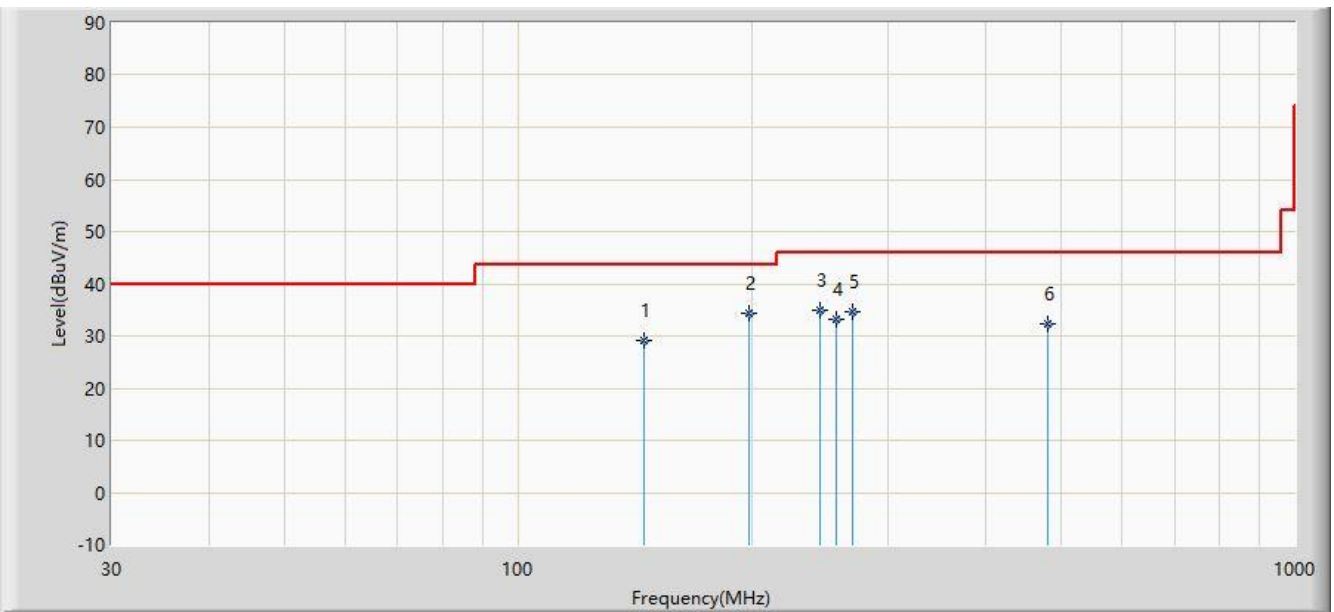


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			39.250	25.444	12.410	-14.556	40.000	13.034	QP
2			145.400	29.431	20.310	-14.069	43.500	9.121	QP
3		*	189.050	31.297	19.630	-12.203	43.500	11.668	QP
4			433.550	29.938	12.040	-16.062	46.000	17.898	QP
5			518.420	32.101	12.780	-13.899	46.000	19.321	QP
6			536.350	32.599	12.840	-13.401	46.000	19.759	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

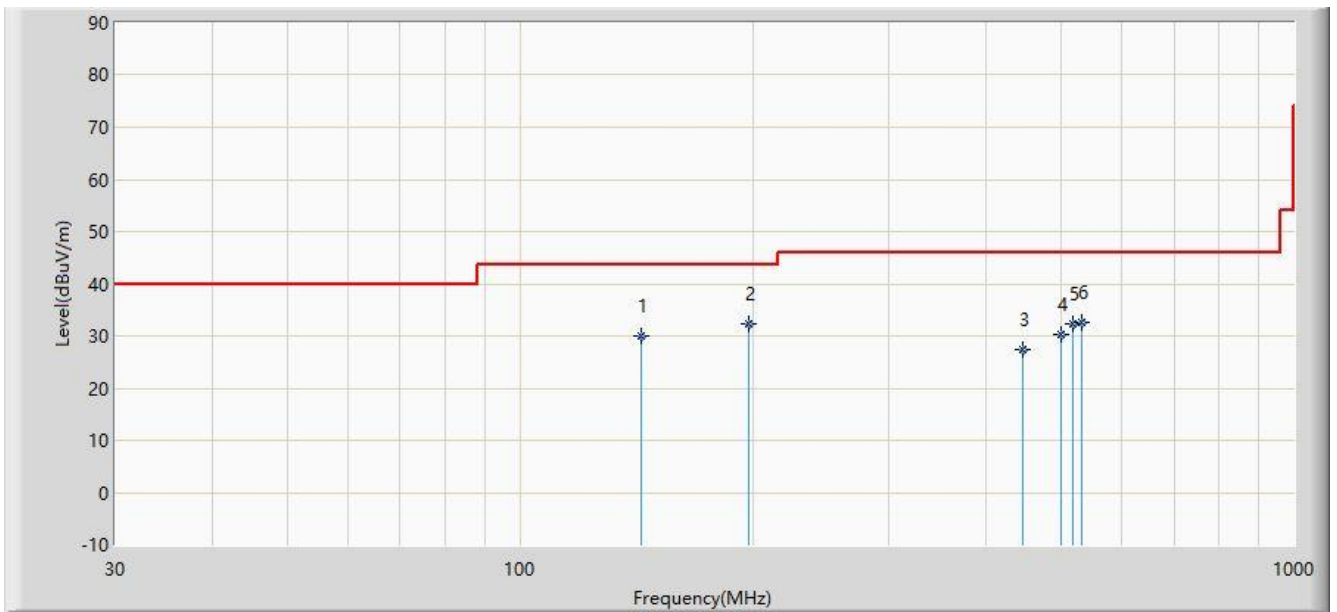


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			145.450	29.132	20.010	-14.368	43.500	9.121	QP
2		*	198.780	34.255	21.300	-9.245	43.500	12.954	QP
3			244.860	34.789	21.040	-11.211	46.000	13.749	QP
4			257.500	33.261	19.040	-12.739	46.000	14.221	QP
5			270.120	34.619	20.310	-11.381	46.000	14.309	QP
6			480.000	32.413	13.510	-13.587	46.000	18.903	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

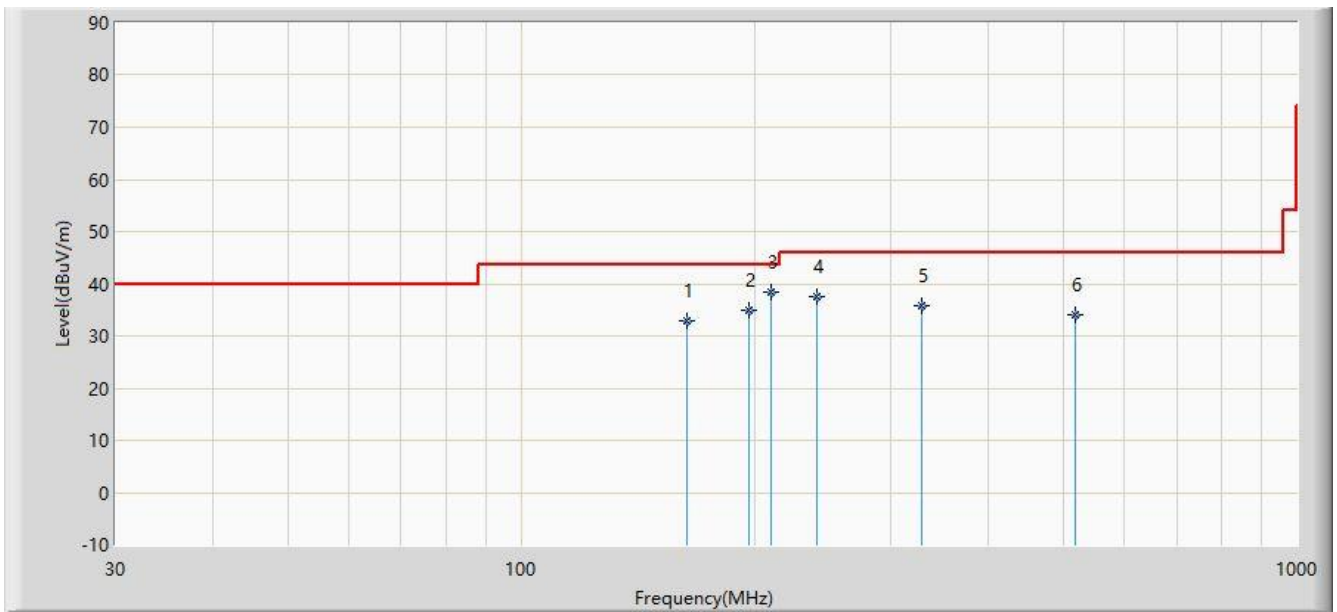


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			143.450	30.116	21.030	-13.384	43.500	9.086	QP
2		*	197.820	32.397	19.340	-11.103	43.500	13.057	QP
3			445.690	27.425	9.350	-18.575	46.000	18.076	QP
4			500.000	30.312	11.050	-15.688	46.000	19.262	QP
5			517.950	32.345	13.040	-13.655	46.000	19.305	QP
6			531.000	32.531	12.960	-13.469	46.000	19.570	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	

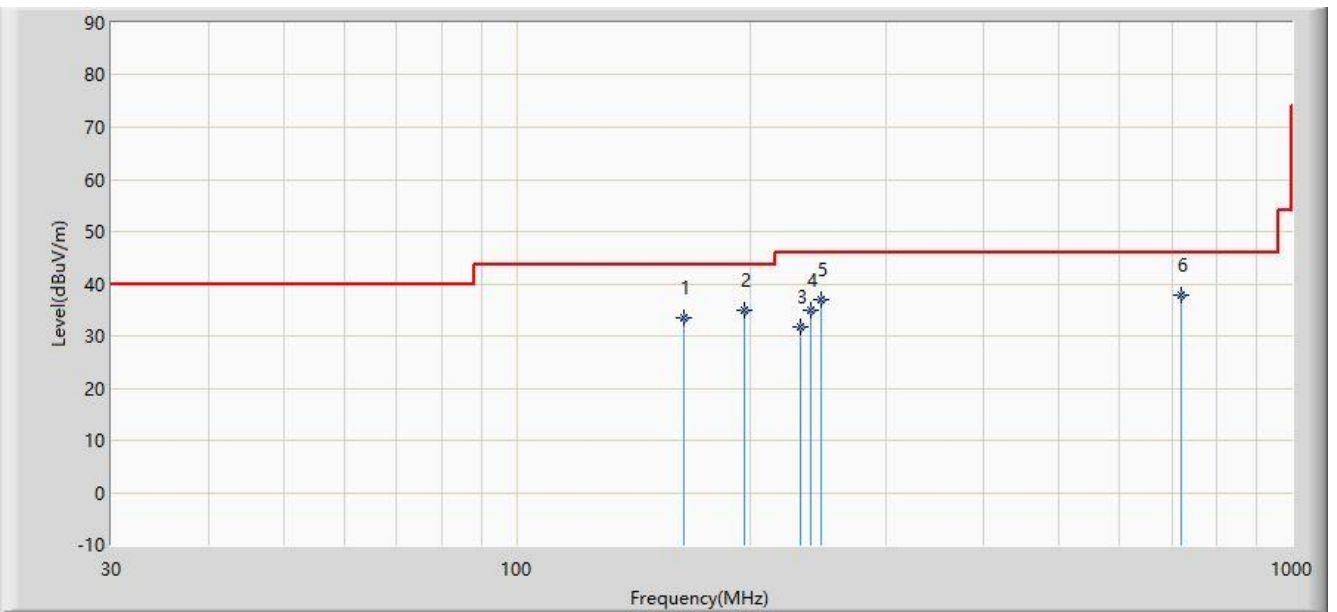


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			163.820	32.869	23.010	-10.631	43.500	9.859	QP
2			196.400	34.956	22.010	-8.544	43.500	12.946	QP
3		*	209.940	38.541	26.210	-4.959	43.500	12.331	QP
4			240.500	37.590	24.010	-8.410	46.000	13.580	QP
5			328.280	35.799	19.980	-10.201	46.000	15.819	QP
6			517.850	34.152	14.850	-11.848	46.000	19.302	QP

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

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

Site: AC2	Time: 2019/12/15 - 18:04
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	

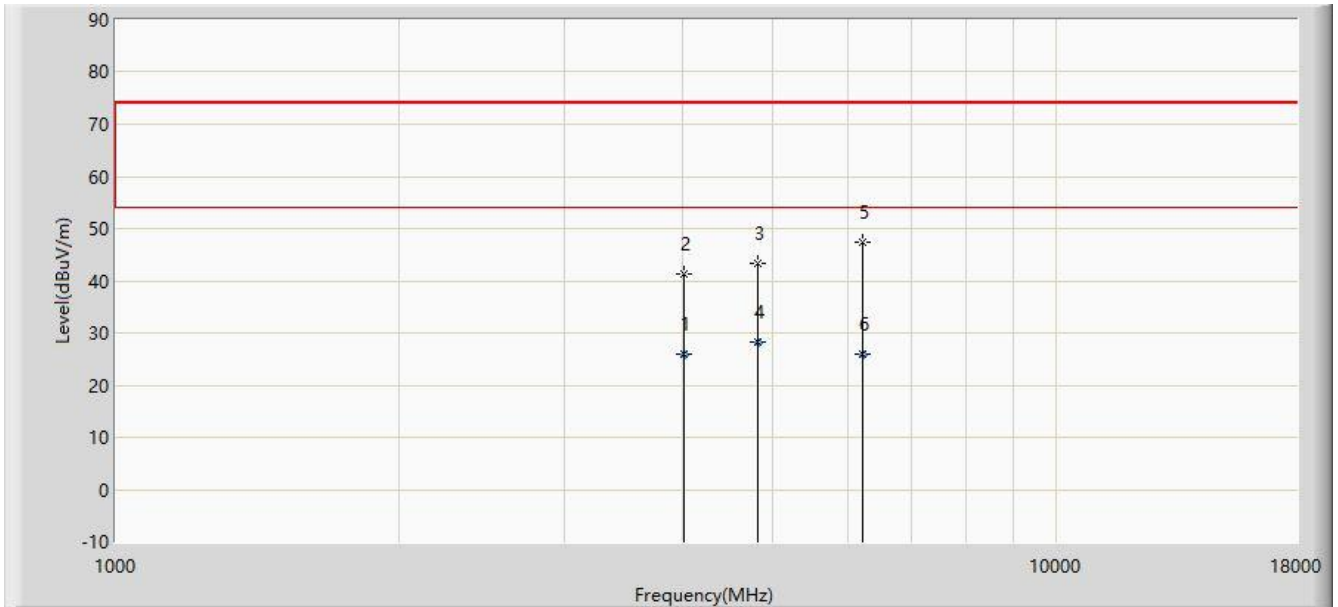


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			164.380	33.403	23.520	-10.097	43.500	9.883	QP
2			196.380	34.982	22.040	-8.518	43.500	12.942	QP
3			232.750	31.774	18.410	-14.226	46.000	13.365	QP
4			240.000	35.070	21.510	-10.930	46.000	13.560	QP
5			247.500	37.030	23.150	-8.970	46.000	13.880	QP
6		*	720.200	37.930	15.100	-8.070	46.000	22.831	QP

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

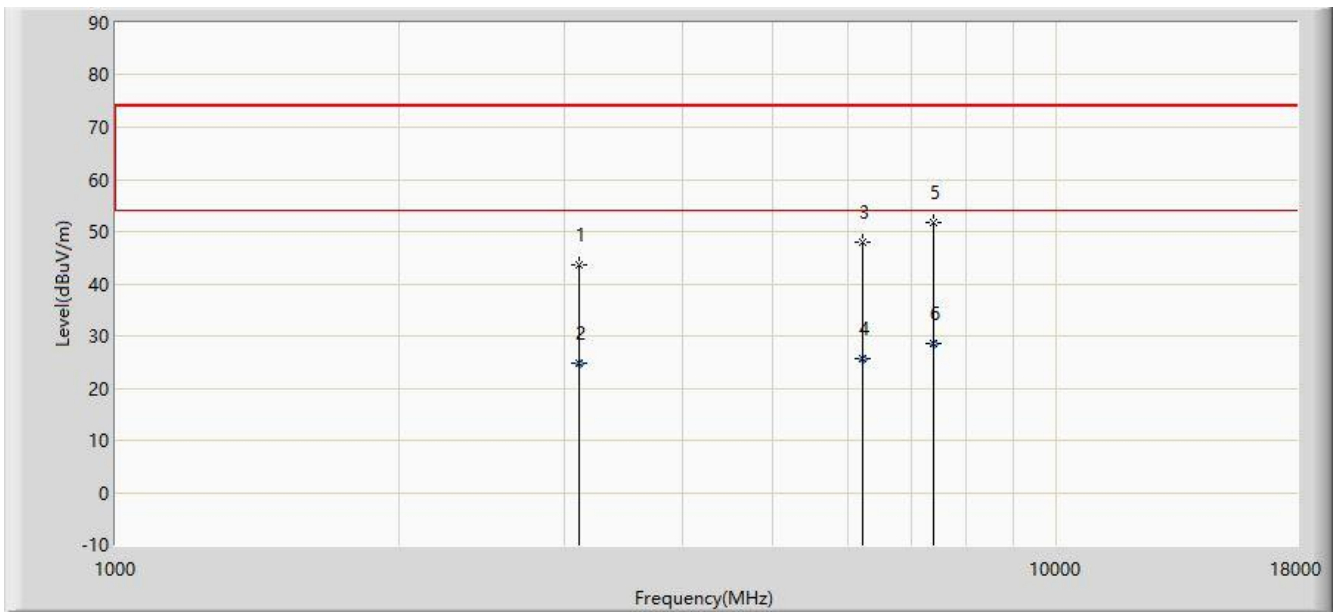


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			4017.160	25.953	22.655	-28.047	54.000	3.298	AV
2			4017.500	41.172	37.875	-32.828	74.000	3.298	PK
3			4808.000	43.324	37.484	-30.676	74.000	5.839	PK
4		*	4808.326	28.254	22.410	-25.746	54.000	5.843	AV
5			6219.000	47.297	39.106	-26.703	74.000	8.192	PK
6			6219.310	25.854	17.660	-28.146	54.000	8.194	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 1	

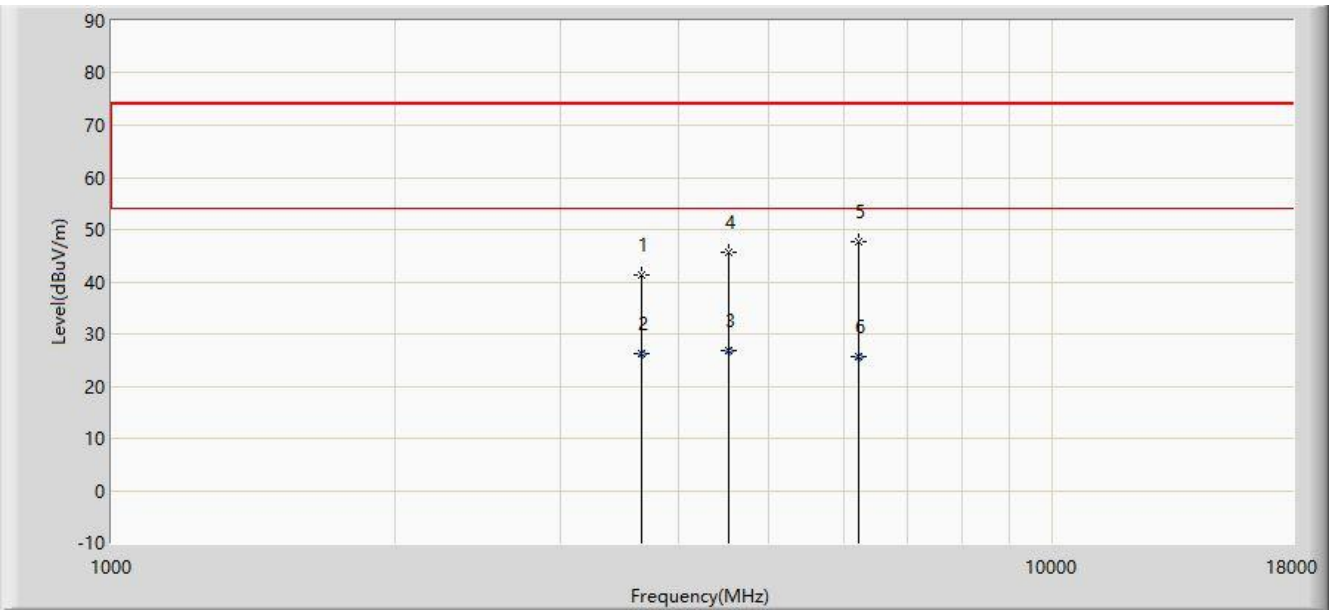


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3108.000	43.643	42.476	-30.357	74.000	1.166	PK
2			3108.410	24.916	23.745	-29.084	54.000	1.171	AV
3			6219.000	47.879	39.688	-26.121	74.000	8.192	PK
4			6219.250	25.650	17.457	-28.350	54.000	8.194	AV
5		*	7409.000	51.617	39.849	-22.383	74.000	11.768	PK
6			7409.326	28.613	16.844	-25.387	54.000	11.769	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

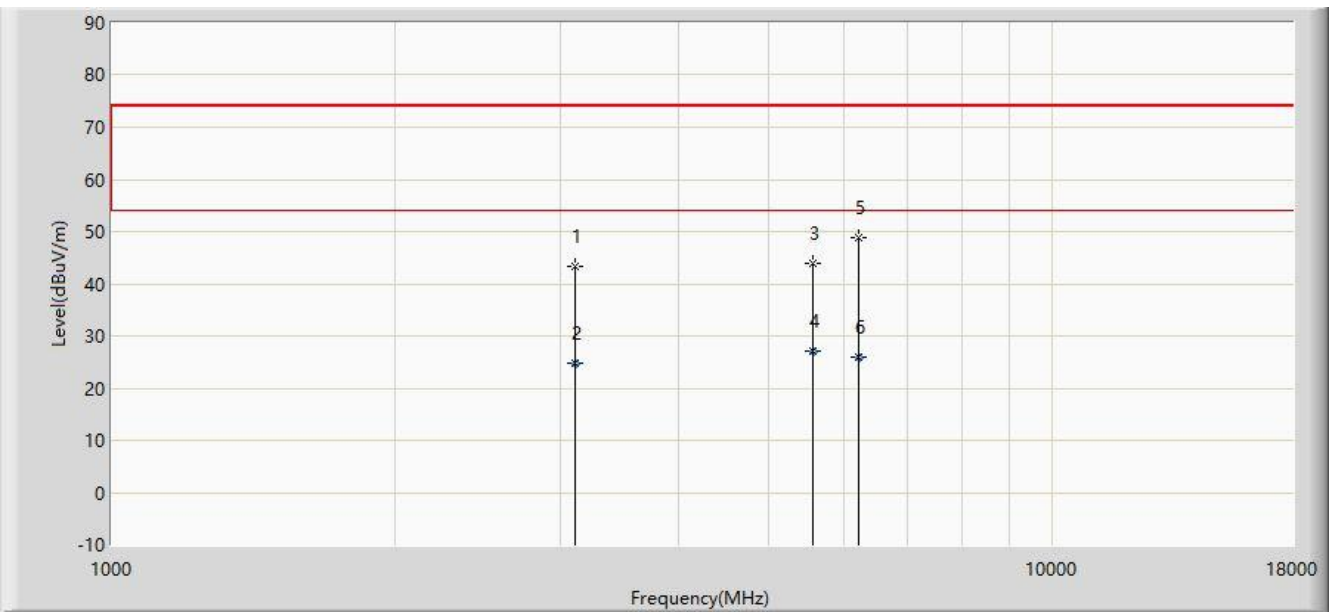


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3652.000	41.282	38.908	-32.718	74.000	2.373	PK
2			3652.241	26.116	23.741	-27.884	54.000	2.374	AV
3			4527.320	26.899	22.124	-27.101	54.000	4.775	AV
4			4527.500	45.538	40.762	-28.462	74.000	4.776	PK
5		*	6227.500	47.765	39.508	-26.235	74.000	8.257	PK
6			6227.500	25.735	17.478	-28.265	54.000	8.257	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 2	

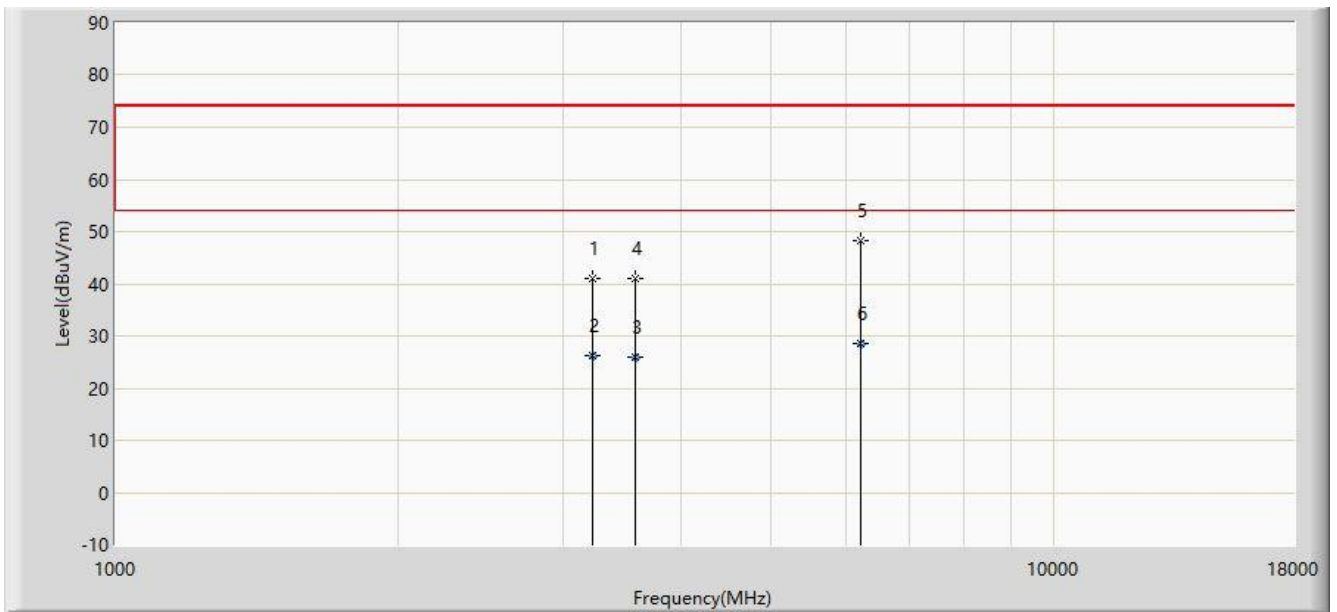


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3108.000	43.253	42.086	-30.747	74.000	1.166	PK
2			3108.326	24.830	23.660	-29.170	54.000	1.170	AV
3			5556.000	43.976	36.748	-30.024	74.000	7.228	PK
4			5556.326	27.085	19.856	-26.915	54.000	7.229	AV
5		*	6219.000	48.850	40.659	-25.150	74.000	8.192	PK
6			6219.200	25.856	17.663	-28.144	54.000	8.192	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

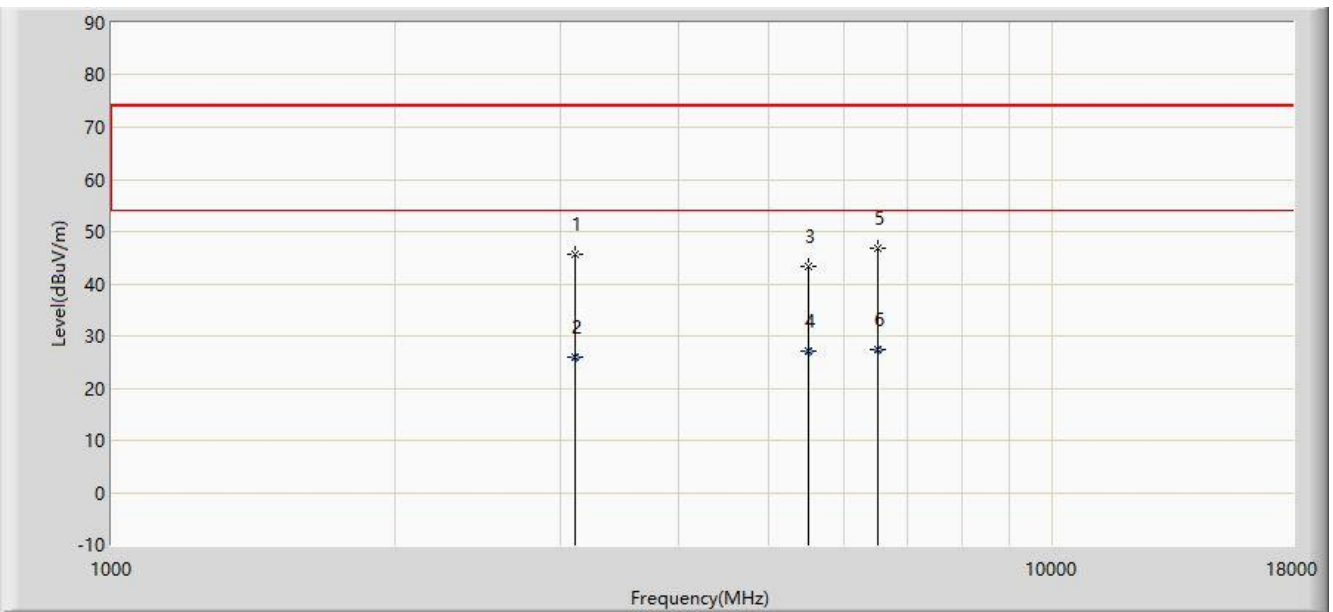


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3227.000	41.011	39.691	-32.989	74.000	1.320	PK
2			3227.625	26.152	24.840	-27.848	54.000	1.312	AV
3			3575.200	25.846	23.745	-28.154	54.000	2.100	AV
4			3575.500	40.991	38.888	-33.009	74.000	2.104	PK
5			6219.000	48.304	40.113	-25.696	74.000	8.192	PK
6		*	6219.266	28.513	20.320	-25.487	54.000	8.194	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 3	

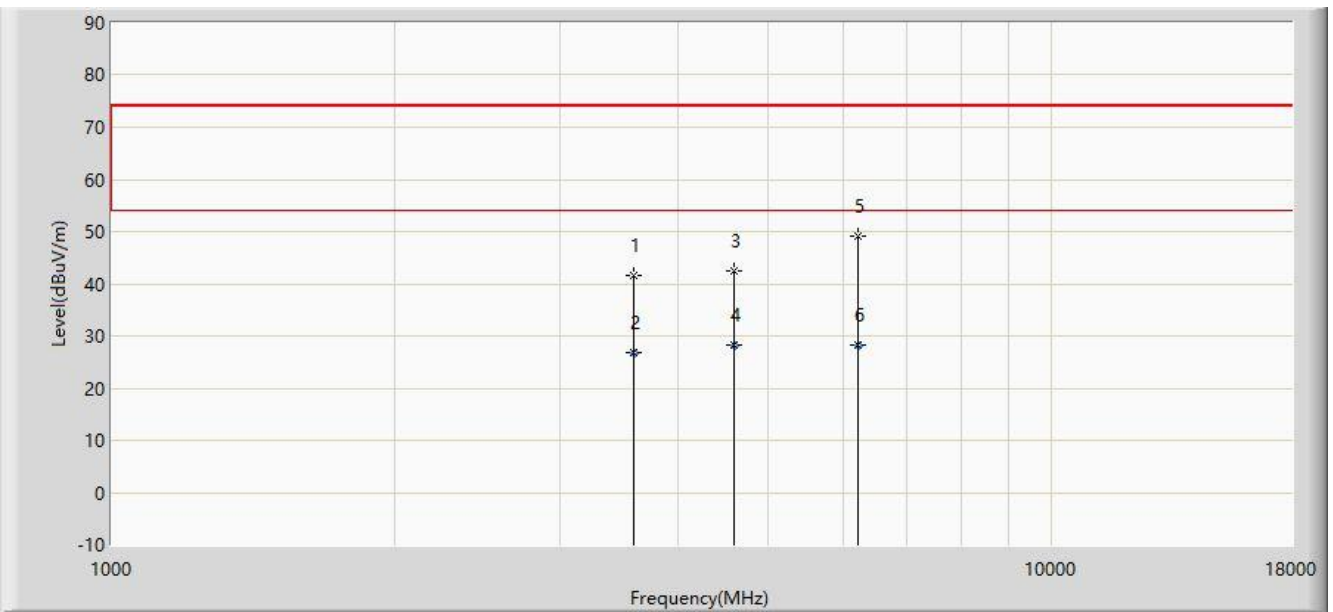


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3108.000	45.638	44.471	-28.362	74.000	1.166	PK
2			3108.363	26.028	24.857	-27.972	54.000	1.171	AV
3			5496.500	43.349	36.118	-30.651	74.000	7.231	PK
4			5496.540	27.086	19.854	-26.914	54.000	7.232	AV
5			6516.500	46.669	37.052	-27.331	74.000	9.616	PK
6		*	6516.510	27.471	17.854	-26.529	54.000	9.617	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

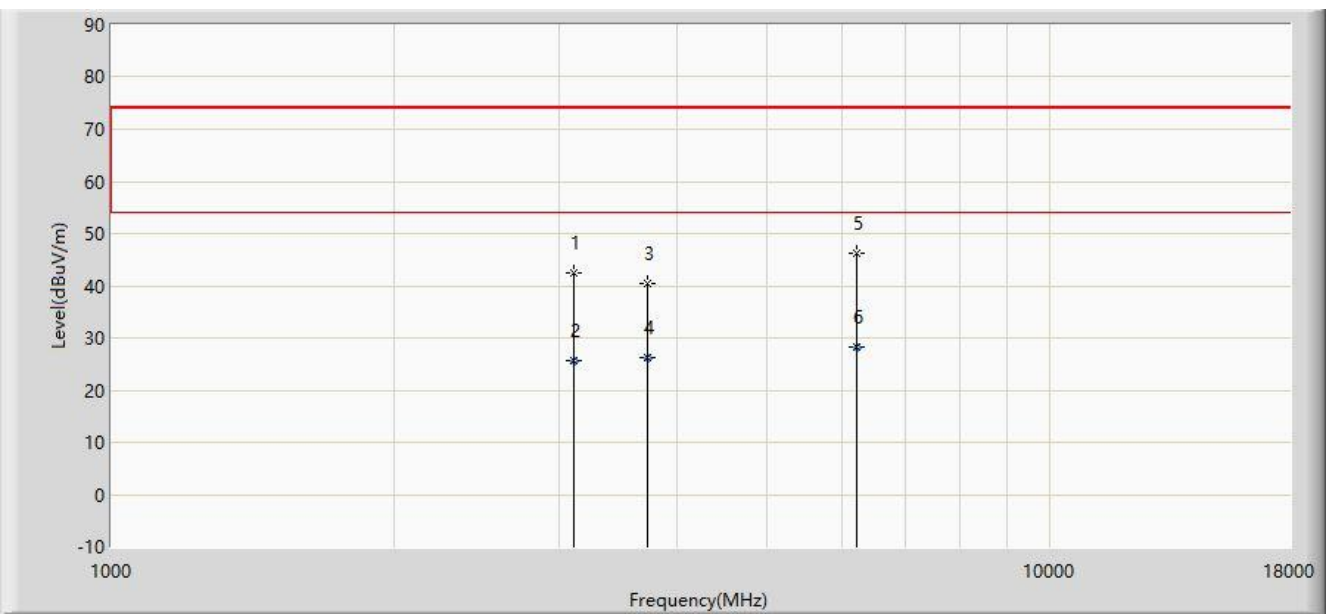


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3592.500	41.534	39.361	-32.466	74.000	2.174	PK
2			3592.540	26.913	24.740	-27.087	54.000	2.174	AV
3			4595.500	42.366	37.342	-31.634	74.000	5.024	PK
4			4595.626	28.165	23.142	-25.835	54.000	5.022	AV
5		*	6219.000	49.182	40.991	-24.818	74.000	8.192	PK
6			6219.260	28.313	20.120	-25.687	54.000	8.194	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 4	

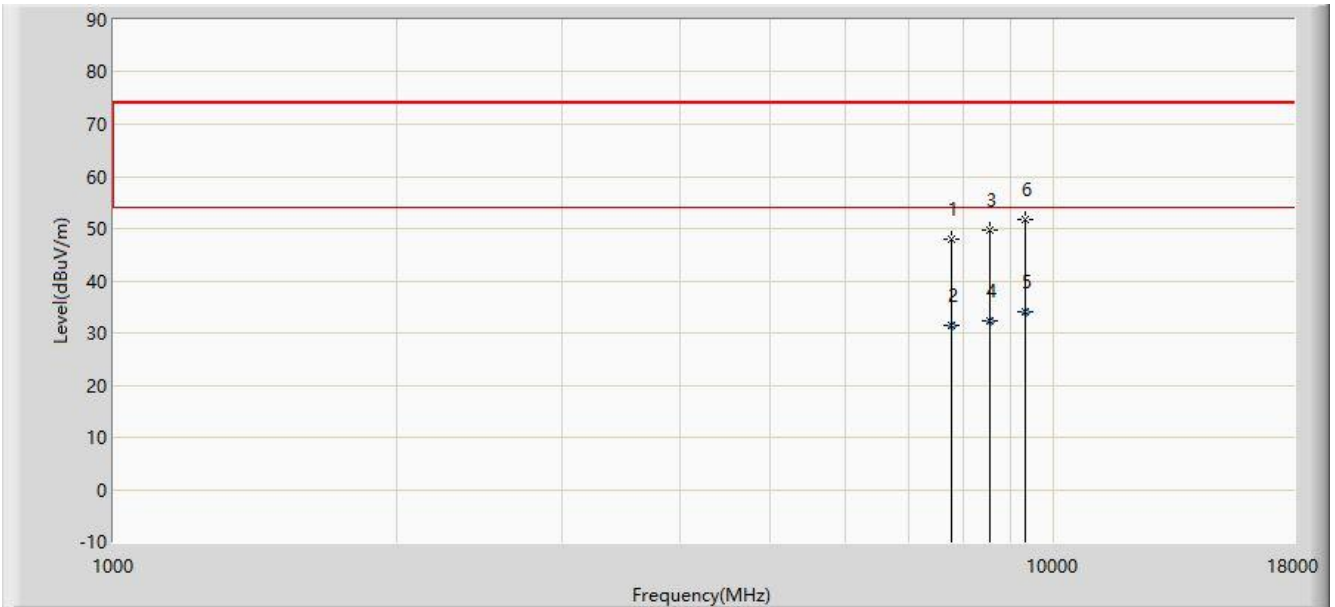


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			3108.000	42.323	41.156	-31.677	74.000	1.166	PK
2			3108.413	25.582	24.411	-28.418	54.000	1.171	AV
3			3720.000	40.568	38.066	-33.432	74.000	2.503	PK
4			3720.326	26.123	23.620	-27.877	54.000	2.503	AV
5			6219.000	46.273	38.082	-27.727	74.000	8.192	PK
6		*	6219.326	28.305	20.111	-25.695	54.000	8.195	AV

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

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

Site: AC1	Time: 2019/12/22 - 11:36
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	

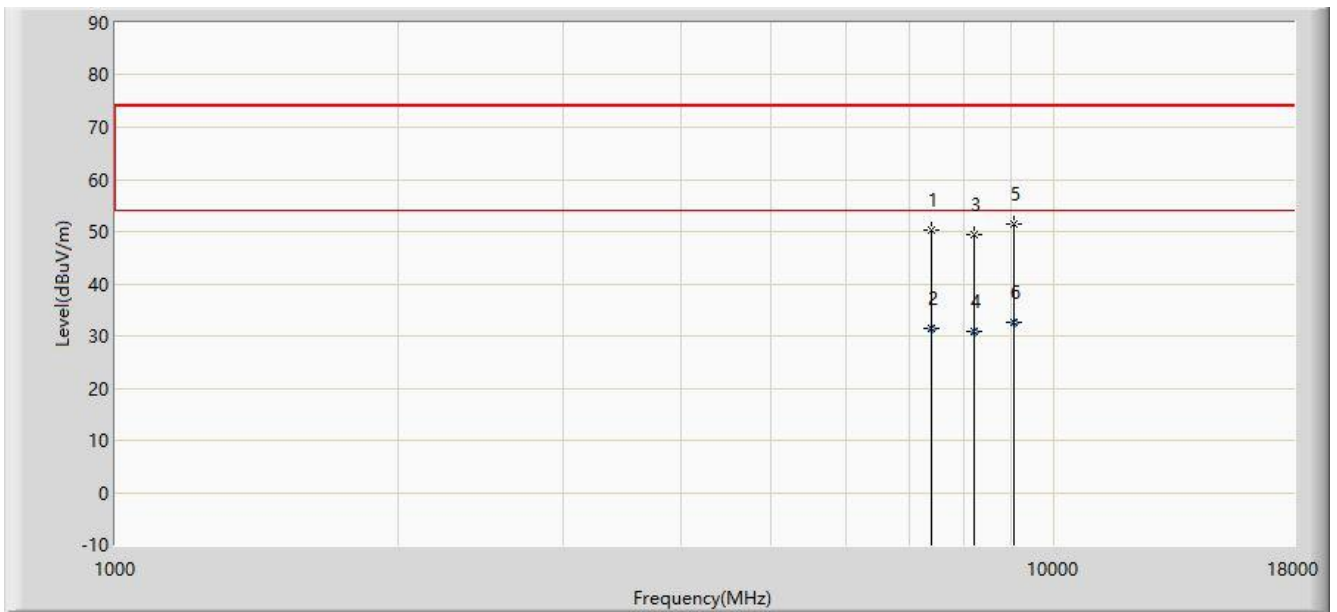


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7774.500	48.055	36.291	-25.945	74.000	11.765	PK
2			7774.500	31.416	19.652	-22.584	54.000	11.765	AV
3			8565.000	49.579	36.434	-24.421	74.000	13.145	PK
4			8565.326	32.360	19.214	-21.640	54.000	13.146	AV
5		*	9338.312	34.031	18.210	-19.969	54.000	15.821	AV
6			9338.500	51.843	36.020	-22.157	74.000	15.823	PK

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

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

Site: AC1	Time: 2019/12/22 - 11:36
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Milo Li
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Standalone VR Headset	Power: AC 120V/60Hz
Test Mode 5	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			7392.000	50.206	38.442	-23.794	74.000	11.764	PK
2			7392.326	31.510	19.746	-22.490	54.000	11.763	AV
3			8208.000	49.472	37.149	-24.528	74.000	12.323	PK
4			8208.210	30.949	18.625	-23.051	54.000	12.324	AV
5			9066.500	51.443	36.778	-22.557	74.000	14.665	PK
6		*	9066.500	32.519	17.854	-21.481	54.000	14.665	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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 unit has been tested to comply with the requirements specified in the FCC Rules and ISED Rules.

_____ The End _____

Appendix A - Test Setup Photograph

Refer to "1911RSU052-UT" file.

Appendix B - EUT Photograph

Refer to "1911RSU052-UE" file.