



Test Report

FCC Part15 Subpart C & RSS-247 Issue 2

Product Name : Virtual Reality System
Model No. : MH-A32, MH-A64
FCC ID : 2AGOZMH-A
IC : 20849-MHA

Applicant : Oculus VR LLC

Address : 1 Hacker Way, Bldg 18 Menlo Park CA 94025-1456

Date of Receipt : Sep. 12, 2017
Test Date : Sep. 12, 2017~ Oct. 26, 2017
Issued Date : Dec. 04, 2017
Report No. : 1792053R-RF-US-P06V01
Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, A2LA or any agency of the government.

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Test Report Certification

Issued Date : Dec. 04, 2017

Report No. : 1792053R-RF-US-P06V01



Product Name : Virtual Reality System
Applicant : Oculus VR LLC
Address : 1 Hacker Way, Bldg 18Menlo Park CA 94025-1456
Manufacturer : Oculus VR LLC
Address : 1 Hacker Way, Bldg 18Menlo Park CA 94025-1456
Model No. : MH-A32, MH-A64
FCC ID : 2AGOZMH-A
IC : 20849-MHA
EUT Voltage : 5 V dc, 2 A
Test Voltage : AC 120V/60Hz
Brand Name : Oculus Go
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C
ANSI C63.10:2013;
KDB 558074 D01v04
KDB 662911 D01 Multiple Transmitter Output v02r01
RSS-Gen Issue 4 / RSS-247 Issue 2
Test Result : Complied
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.
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FCC Designation Number: CN1199; ISED Lab Code: 4075B

Documented By :



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Approved By :



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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1792053R-RF-US-P06V01	V1.0	Initial Issued Report	Dec. 04, 2017

1. General Information

1.1. EUT Description

Product Name	Virtual Reality System
Brand Name	Oculus Go
Model No.	MH-A32, MH-A64
EUT Voltage	5 V dc, 2 A
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz)/ac(20MHz): 2412~2462MHz 802.11n(40MHz)/ac(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz)/ac(20MHz): 11 802.11n(40MHz)/ac(40MHz): 7
Type of Modulation	802.11b: DSSS-DBPSK, DQPSK, CCK 802.11g/n/ac: OFDM-BPSK, QPSK, 16QAM, 64QAM, 128QAM, 256QAM
Data Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 400Mbps
Channel Control	Auto

Note:

1. The RF specifications of two models are identical. The difference is below:

Their memory is different.

	MH-A32	MH-A64
memory	32G	64G

There is not any change in design, circuitry or construction for this device, including RF parameters (antenna, software, firmware and hardware versions, power, frequency ranges, etc.).

We used MH-A32 for all the test items.

- The SISO power will be less than the each chain power of MIMO mode, so only MIMO mode was tested for compliance.
- The power of 400Mbps rate is less than the power at lower rate, so test was performed in lower rate.

1.2. Working Frequency of Each Channel:

802.11b/g/n/ac(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A
802.11n/ac(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

1.3. Antenna information

Model No.	N/A				
Antenna manufacturer	SPEED				
Antenna Delivery	☒	1*TX+1*RX	☒	2*TX+2*RX	☐ 3*TX+3*RX
Antenna technology	☒	SISO			
	☒	MIMO	☐	Basic	
			☒	CDD	
			☐	Sectorized	
			☐	Beam-forming	
Antenna Type	☐	External	☐	Dipole	
			☐	Sectorized	
	☒	Internal	☒	PIFA	
			☐	PCB	
			☐	Ceramic Chip Antenna	
			☐	Metal plate type F antenna	
Antenna Technology	Ant Gain (dBi)			Directional Gain (dBi)	
				For Power	For PSD
☒ CDD	Ant1:2 Ant2: 2.2			2.1	5.11

1.4. Mode of Operation

Test Modes List
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11n(20MHz)
Mode 4: Transmit by 802.11n(40MHz)

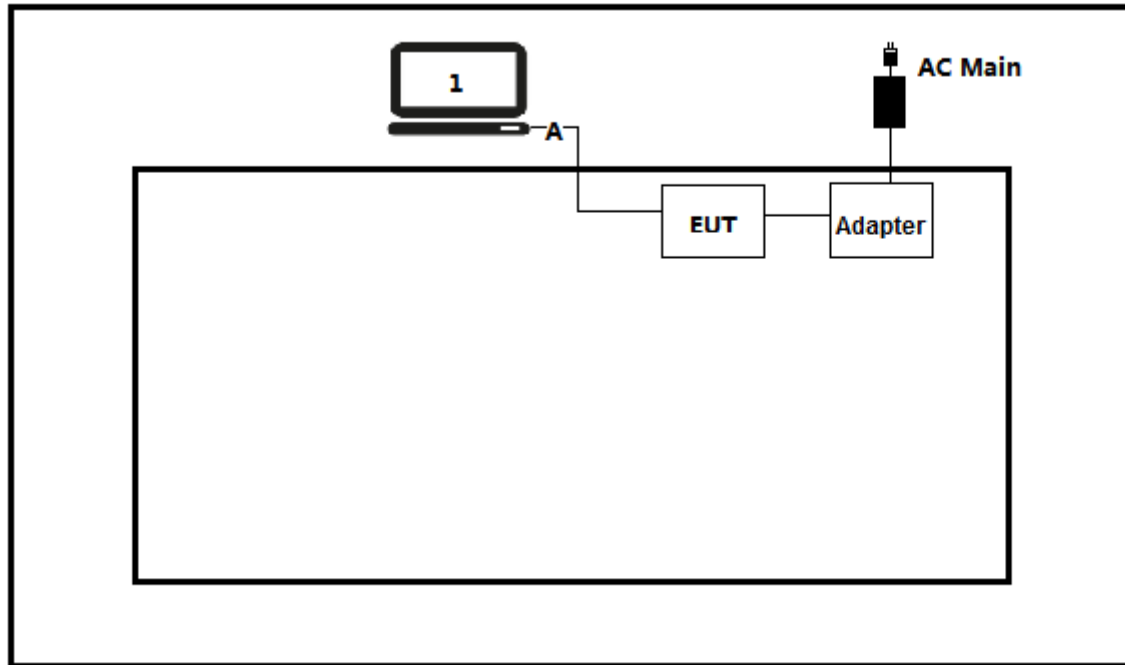
1.5. Tested System Details

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

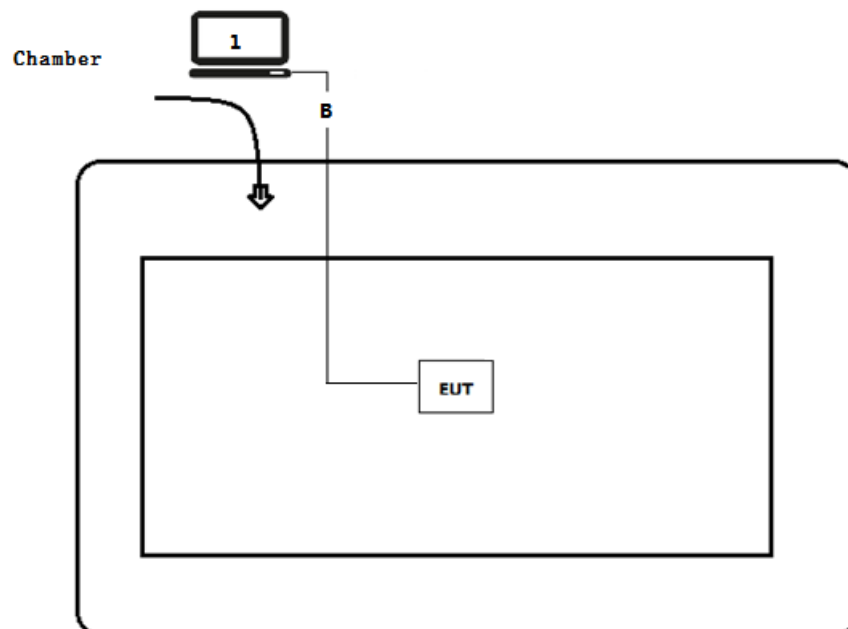
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded
A	USB cable	N/A	N/A	N/A	Shielded, 0.5m
B	USB cable	N/A	N/A	N/A	Shielded, 10m

1.6. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



1.7. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Run RF software [QRCT], and set the test mode and channel, then press OK to start to continue transmit.

2. Technical Test

2.2. Summary of Test Result

For FCC rule:

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: Section 15.207	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: Section 15.209	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(d)	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 15.247(d)	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(a)(2)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(b)(3)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(e)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: Section 15.203	FCC 15.203	PASS

For ISED rule:

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	RSS-Gen Issue 4 Section 8.8	RSS-Gen	N/A
Emissions in restricted frequency bands	RSS-Gen Issue 4 Section 8.9	RSS-Gen	PASS
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section A5.5	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	RSS-247 Issue 2 Section A5.5	RSS-247	PASS
Occupied Bandwidth	RSS-Gen Issue 4 Section 6.6 RSS-247 Issue 2 Section A5.2(1)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	RSS-247 Issue 2 Section A5.4(4)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	RSS-247 Issue 2 Section A5.2(2)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	RSS-Gen Issue 4 Section 8.3	RSS-Gen Issue 4	PASS

2.3. Test Frequency configuration:

Modulation Mode	Channel	Frequency	Channel	Frequency	Channel	Frequency
802.11b	01	2412 MHz	06	2437MHz	11	2462MHz
802.11g	01	2412 MHz	06	2437MHz	11	2462MHz
802.11n(20MHz)	01	2412 MHz	06	2437MHz	11	2462MHz
802.11n(40MHz)	03	2422 MHz	06	2437MHz	09	2452MHz

2.4. Power setting parameter

Test Software	QRCT			
Modulation Mode	Test Frequency	Ant 1	Ant 2	Ant 1+2
802.11b	2412	19	19	19
	2437	19	19	19
	2462	19	19	19
802.11g	2412	17	17	17
	2437	18	18	18
	2462	15.5	15.5	15.5
802.11n(20MHz)	2412	16.5	16.5	16.5
	2437	18	18	18
	2462	15	15	15
802.11n(40MHz)	2422	15	15	15
	2437	17	17	17
	2452	14	14	14

2.5. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g		20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	---	6.5	7.2	13.5	15.0
1	1	2	9	---	13.0	14.4	27.0	30.0
2	1	5.5	12	---	19.5	21.7	40.5	45.0
3	1	11	18	---	26.0	28.9	54.0	60.0
4	1	---	24	---	39.0	43.3	81.0	90.0
5	1	---	36	---	52.0	57.8	108.0	120.0
6	1	---	48	---	58.5	65.0	121.5	135.0
7	1	---	54	---	65.0	72.2	135.0	150.0
8	2	---	---	---	13.0	14.4	27.0	30.0
9	2	---	---	---	26.0	28.9	54.0	60.0
10	2	---	---	---	39.0	43.3	81.0	90.0
11	2	---	---	---	52.0	57.8	108.0	120.0
12	2	---	---	---	78.0	86.7	162.0	180.0
13	2	---	---	---	104.0	115.6	216.0	240.0
14	2	---	---	---	117.0	130.0	243.0	270.0
15	2	---	---	---	130.0	144.0	270.0	300.0

Note 1: The EUT supports all data rate above. The blue form is the maximum power data rate

Note 2: The EUT has two spatial Streams

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)					
				20MHz		40MHz		80MHz	
				Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5
	1	QPSK	1/2	13	14.4	27	30	58.5	65
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5
	3	16-QAM	1/2	26	28.9	54	60	117	130
	4	16-QAM	3/4	39	43.3	81	90	175.5	195
	5	64-QAM	2/3	52	57.8	108	120	234	260
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5
	7	64-QAM	5/6	65	72.2	135	150	292.5	325
	8	256-QAM	3/4	78	86.7	162	180	351	390
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3
2	0	BPSK	1/2	13	14.4	27	30	58.6	65
	1	QPSK	1/2	26	28.8	54	60	117	130
	2	QPSK	3/4	39	43.4	81	90	175.6	195
	3	16-QAM	1/2	52	57.8	108	120	234	260
	4	16-QAM	3/4	78	86.6	162	180	351	390
	5	64-QAM	2/3	104	115.6	216	240	468	520
	6	64-QAM	3/4	117	130	243	270	526.6	585
	7	64-QAM	5/6	130	144.4	270	300	585	650
	8	256-QAM	3/4	156	173.4	324	360	702	780
	9	256-QAM	5/6	N/A	N/A	360	400	780	866.6
Note 1: The blue form is the maximum power data rate.									
2: The EUT supports two spatial streams.									

2.6. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

2.7. Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	$\pm 2.02\text{dB}$
Radiated Emission	Below 1GHz $\pm 3.8\text{ dB}$
	Above 1GHz $\pm 3.9\text{ dB}$
RF Antenna Port Conducted Emission	$\pm 1.27\text{dB}$
Radiated Emission Band Edge	$\pm 3.9\text{dB}$
Occupied Bandwidth	$\pm 1\text{kHz}$
Power Spectral Density	$\pm 1.27\text{dB}$

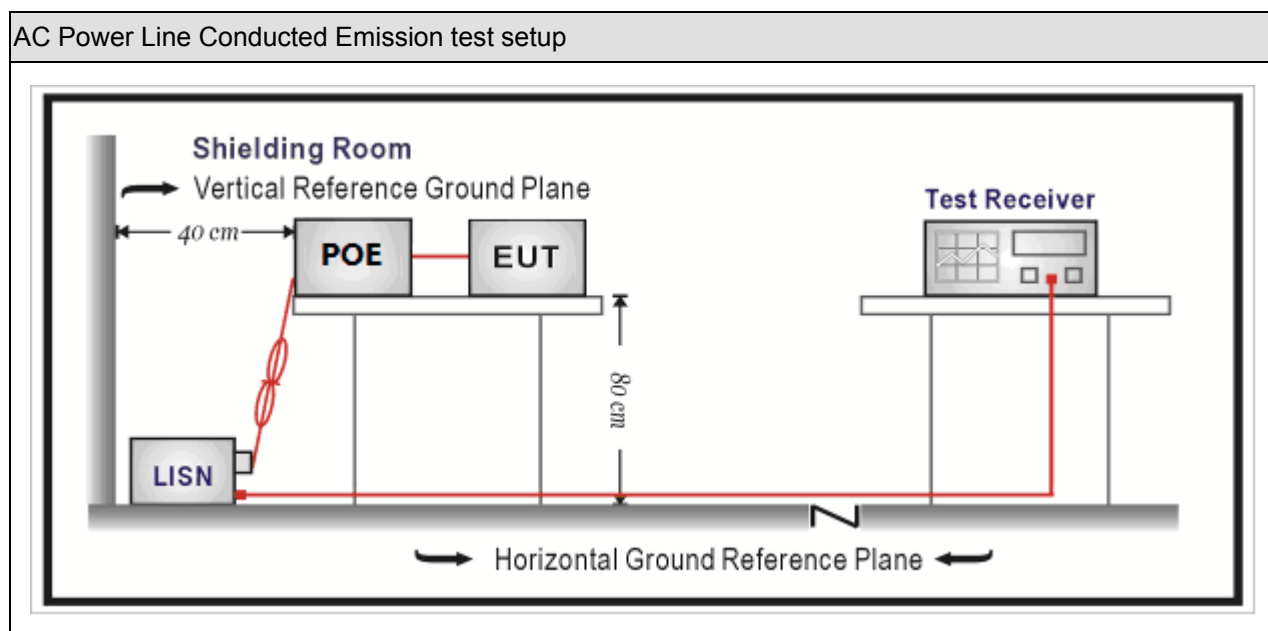
3. AC Power Line Conducted Emission

3.2. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100726	2017.03.29	2018.03.28
Two-Line V-Network	R&S	ENV216	100043	2017.03.29	2018.03.28
Two-Line V-Network	R&S	ENV216	100044	2017.09.17	2018.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2017.03.02	2018.03.01
50ohm Termination	SHX	TF2	07081401	2017.09.17	2018.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2017.01.04	2018.01.03

Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.3. Test Setup



3.4. Limit

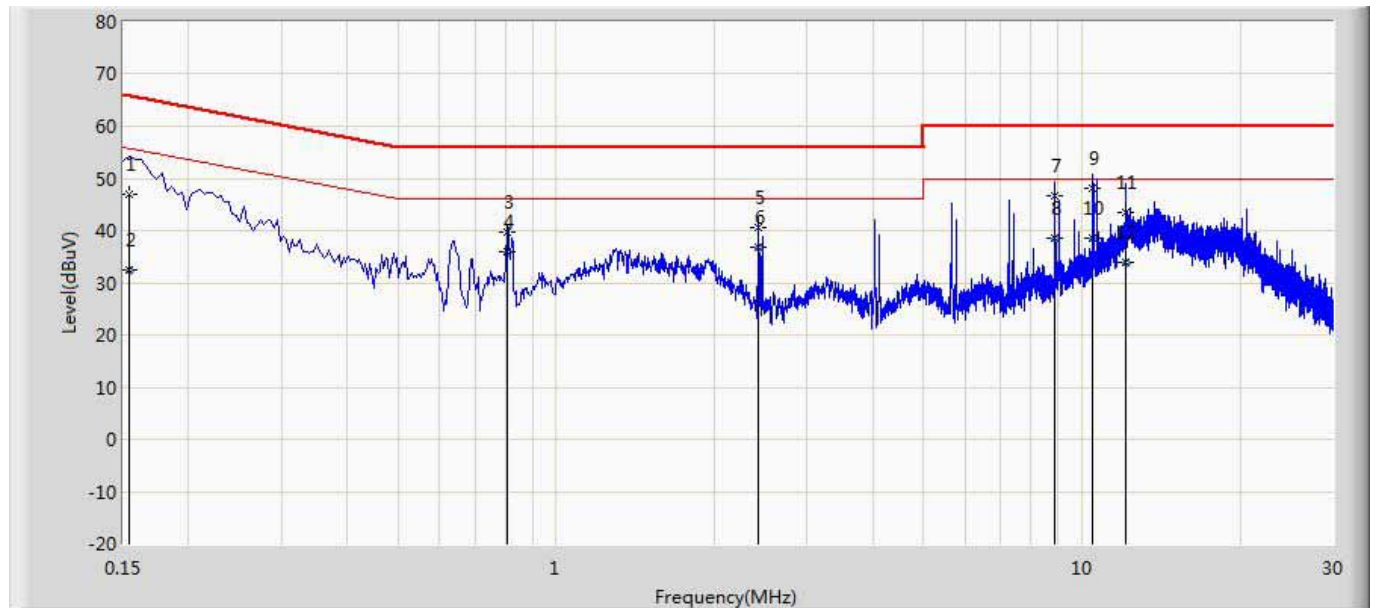
Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average(dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Note 1: The lower limit shall apply at the transition frequencies.		
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

3.5. Test Procedure

Test Method			
	References Rule	Chapter	Item
☒	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

3.6. Test Result

Engineer: Glory	
Site: TR1	Time: 2017/11/07
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2412MHz by 802.11b	



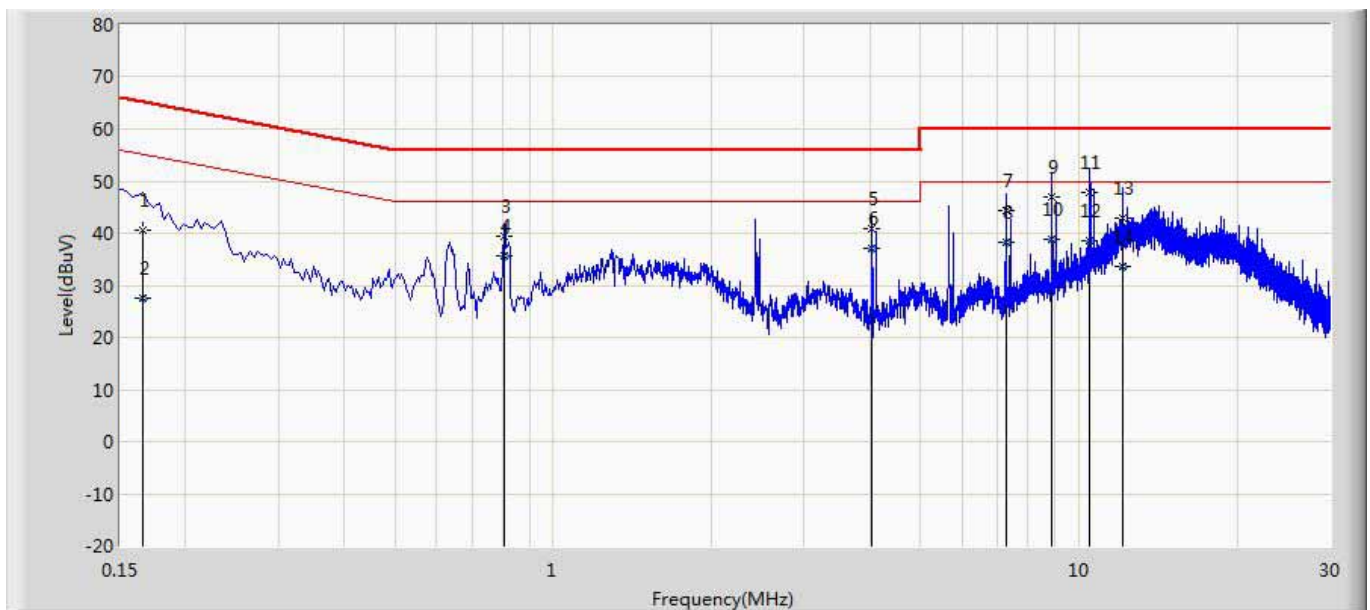
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.154	46.938	37.304	-18.843	65.781	9.609	0.025	0.000	QP
2		0.154	32.402	22.767	-23.380	55.781	9.609	0.025	0.000	AV
3		0.806	39.598	29.941	-16.402	56.000	9.604	0.053	0.000	QP
4		0.806	35.879	26.222	-10.121	46.000	9.604	0.053	0.000	AV
5		2.422	40.475	30.761	-15.525	56.000	9.617	0.097	0.000	QP
6	*	2.422	36.827	27.113	-9.173	46.000	9.617	0.097	0.000	AV
7		8.882	46.734	36.800	-13.266	60.000	9.744	0.190	0.000	QP
8		8.882	38.553	28.620	-11.447	50.000	9.744	0.190	0.000	AV
9		10.494	48.071	38.083	-11.929	60.000	9.783	0.206	0.000	QP
10		10.494	38.525	28.536	-11.475	50.000	9.783	0.206	0.000	AV
11		12.110	43.334	33.287	-16.666	60.000	9.824	0.222	0.000	QP
12		12.110	33.924	23.878	-16.076	50.000	9.824	0.222	0.000	AV

Note:

1. " * ", means this data is the worst emission level.

2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Glory	
Site: TR1	Time: 2017/11/07
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2412MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.166	40.547	30.927	-24.611	65.158	9.593	0.027	0.000	QP
2		0.166	27.594	17.974	-27.564	55.158	9.593	0.027	0.000	AV
3		0.806	39.484	29.842	-16.516	56.000	9.590	0.053	0.000	QP
4		0.806	35.719	26.076	-10.281	46.000	9.590	0.053	0.000	AV
5		4.038	40.870	31.105	-15.130	56.000	9.637	0.128	0.000	QP
6	*	4.038	36.974	27.209	-9.026	46.000	9.637	0.128	0.000	AV
7		7.266	44.307	34.428	-15.693	60.000	9.708	0.171	0.000	QP
8		7.266	38.140	28.261	-11.860	50.000	9.708	0.171	0.000	AV
9		8.882	46.987	37.041	-13.013	60.000	9.757	0.190	0.000	QP
10		8.882	38.868	28.921	-11.132	50.000	9.757	0.190	0.000	AV
11		10.498	47.963	37.950	-12.037	60.000	9.807	0.206	0.000	QP
12		10.498	38.518	28.506	-11.482	50.000	9.807	0.206	0.000	AV
13		12.114	42.964	32.881	-17.036	60.000	9.862	0.222	0.000	QP
14		12.114	33.711	23.627	-16.289	50.000	9.862	0.222	0.000	AV

Note:

1. " * ", means this data is the worst emission level.

2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

4. Emissions in restricted frequency bands

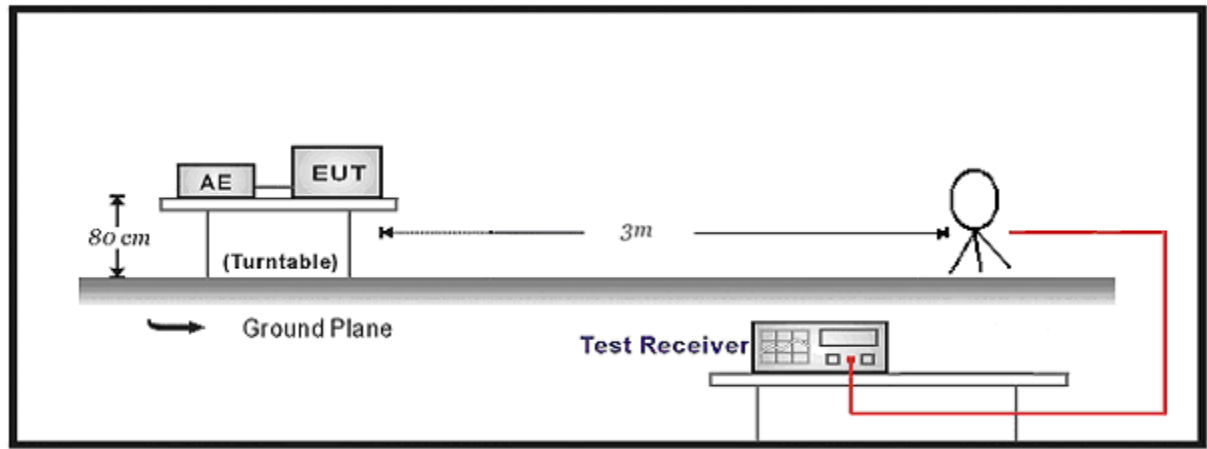
4.2. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2017.03.29	2018.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.16	2017.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2017.10.16	2018.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2017.03.02	2018.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2017.01.04	2018.01.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

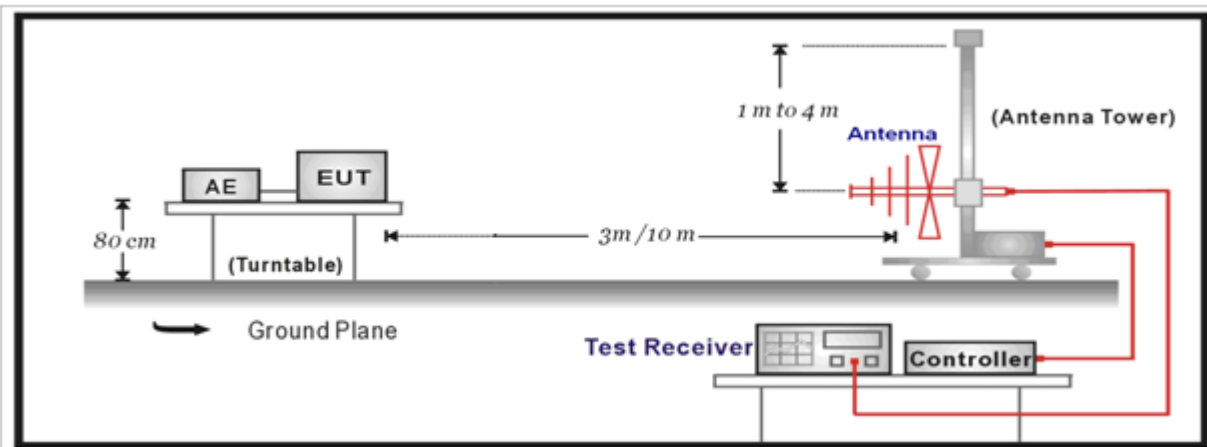
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.04	2018.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2017.05.06	2018.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2017.05.06	2018.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2017.01.22	2018.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2017.03.02	2018.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2017.06.10	2018.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.3. Test Setup

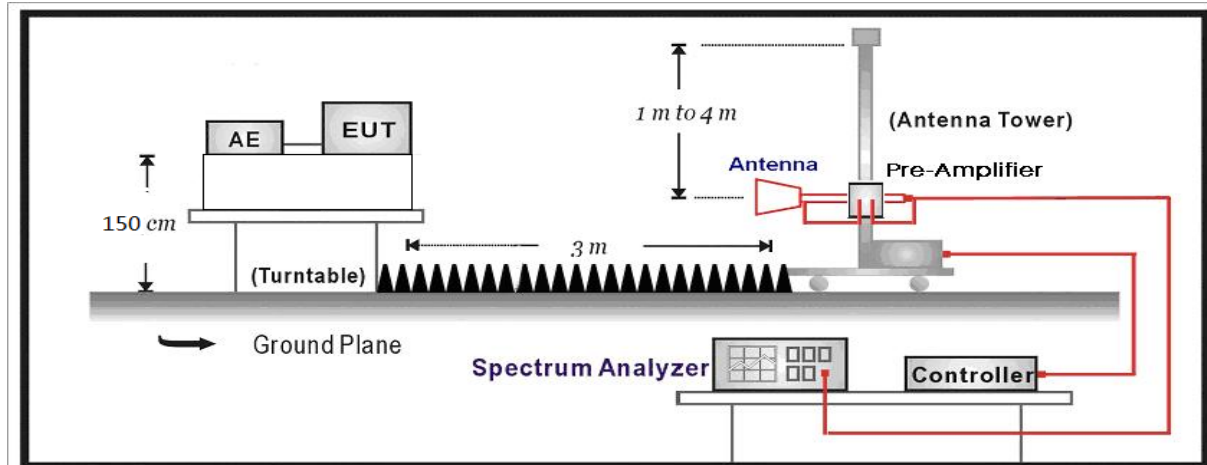
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.4. Limit

For FCC

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

For ISED:

Restricted Bands of operation

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090-0.110	13.36-13.41	1645.5-1646.5	9.0-9.2
2.1735-2.1905	16.42-16.423	1660-1710	9.3-9.5
3.020-3.026	16.69475-16.69525	1718.8-1722.2	10.6-12.7
4.125-4.128	16.80425-16.80475	2200-2300	13.25-13.4
4.17725-4.17775	25.5-25.67	2310-2390	14.47-14.5
4.20725-4.20775	37.5-38.25	2655-2900	15.35-16.2
5.677-5.683	73-74.6	3260-3267	17.7-21.4
6.215-6.218	74.8-75.2	3332-3339	22.01-23.12
6.26775-6.26825	108-138	3345.8-3358	23.6-24.0
6.31175-6.31225	156.52475-156.52525	3500-4400	31.2-31.8
8.291-8.294	156.7-156.9	4500-5150	36.43-36.5
8.362-8.366	240-285	5350-5460	Above 38.6
8.37625-8.38675	322-335.4	7250-7750	
8.41425-8.41475	399.9-410	8025-8500	
12.29-12.293	608-614		
12.51975-12.52025	960-1427		
12.57675-12.57725	1435-1626.5		

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

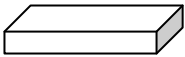
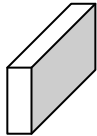
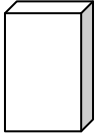
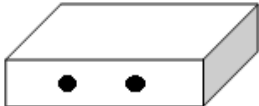
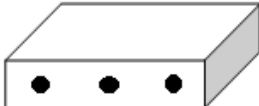
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.5. Test Procedure

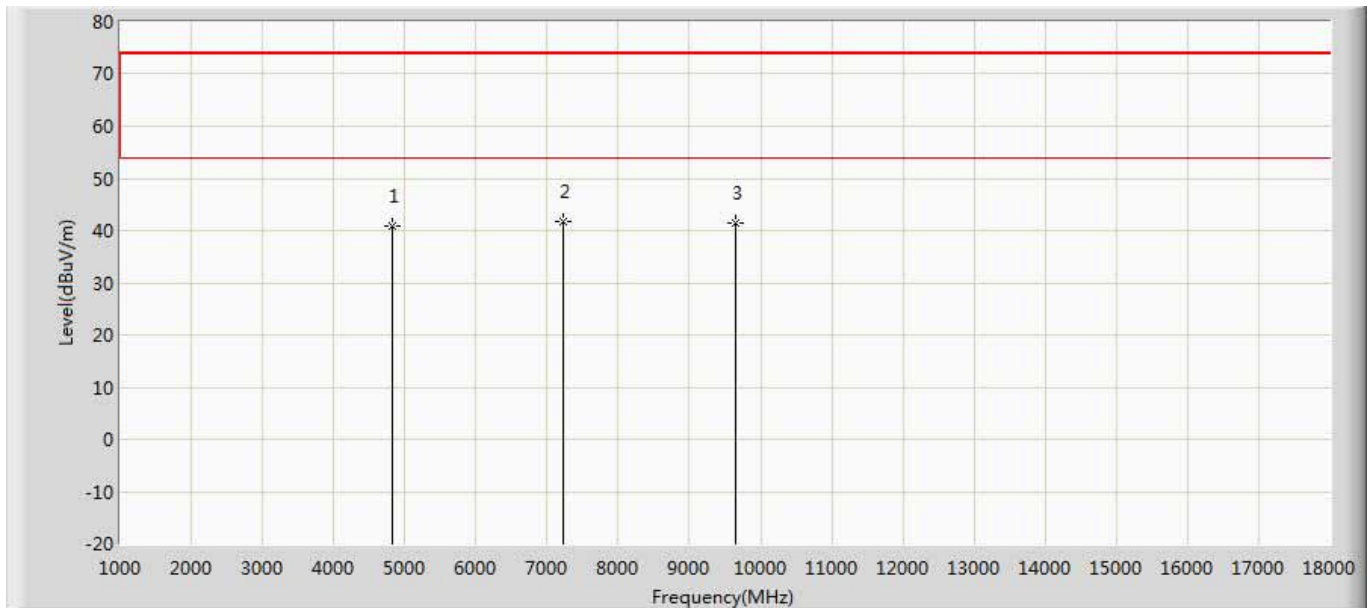
Test Method				
	References Rule		Chapter	Description
☐	ANSI C63.10		11.11	Emissions in non-restricted frequency bands
	☐	ANSI C63.10	11.11.2	Reference level measurement
	☐	ANSI C63.10	11.11.3	Emission level measurement
	☒	ANSI C63.10		11.12 Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test
	☒	☒ ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
		☒ ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
		☒ ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☐	ANSI C63.10		11.12.2 Antenna-port conducted measurements
	☐	☐ ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
		☐ ANSI C63.10	11.12.2.4	Peak power measurement procedure
		☐ ANSI C63.10	11.12.2.5	Average power measurement procedures
		☐ ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
		☐ ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
		☐ ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.6. EUT test Axis definition

Item	Emissions in restricted frequency bands			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1~4			
Test method	☒	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☒	Worst Axis ☐	Worst Axis ☐
	☐	Conducted		
	☐	Chain 1		
				
	☐	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

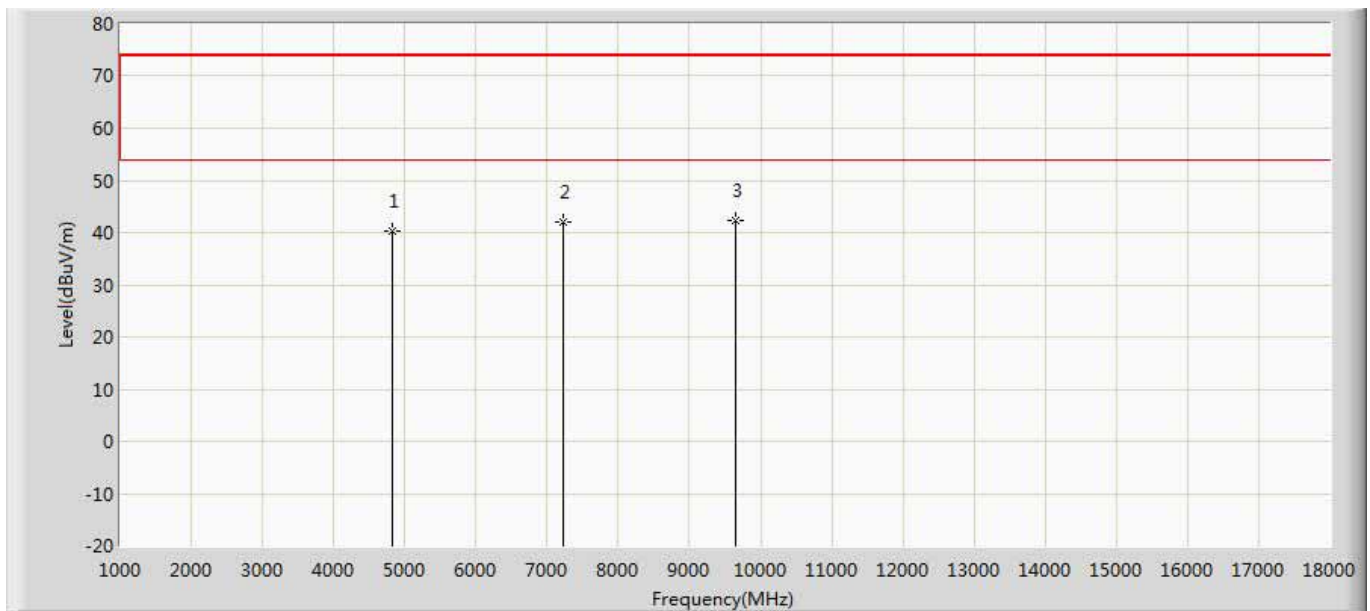
4.7. Test Result

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



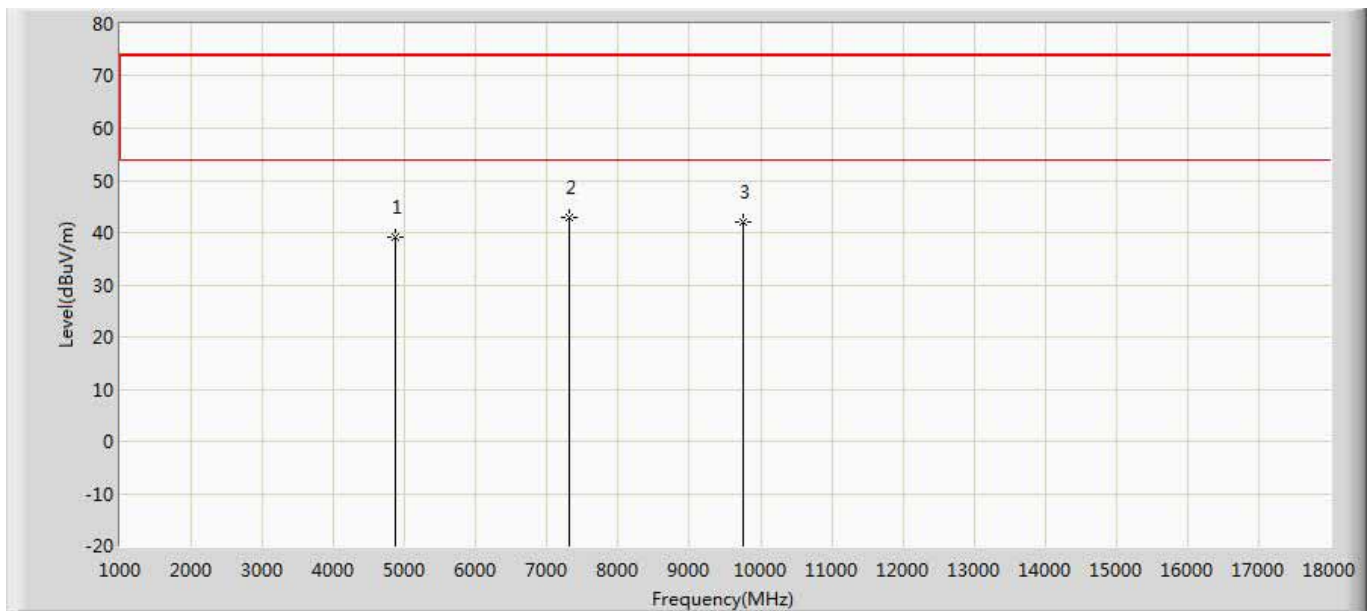
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.768	42.329	-33.232	74.000	-1.561	PK
2	*	7236.000	41.790	39.466	-32.210	74.000	2.323	PK
3		9648.000	41.310	37.282	-32.690	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



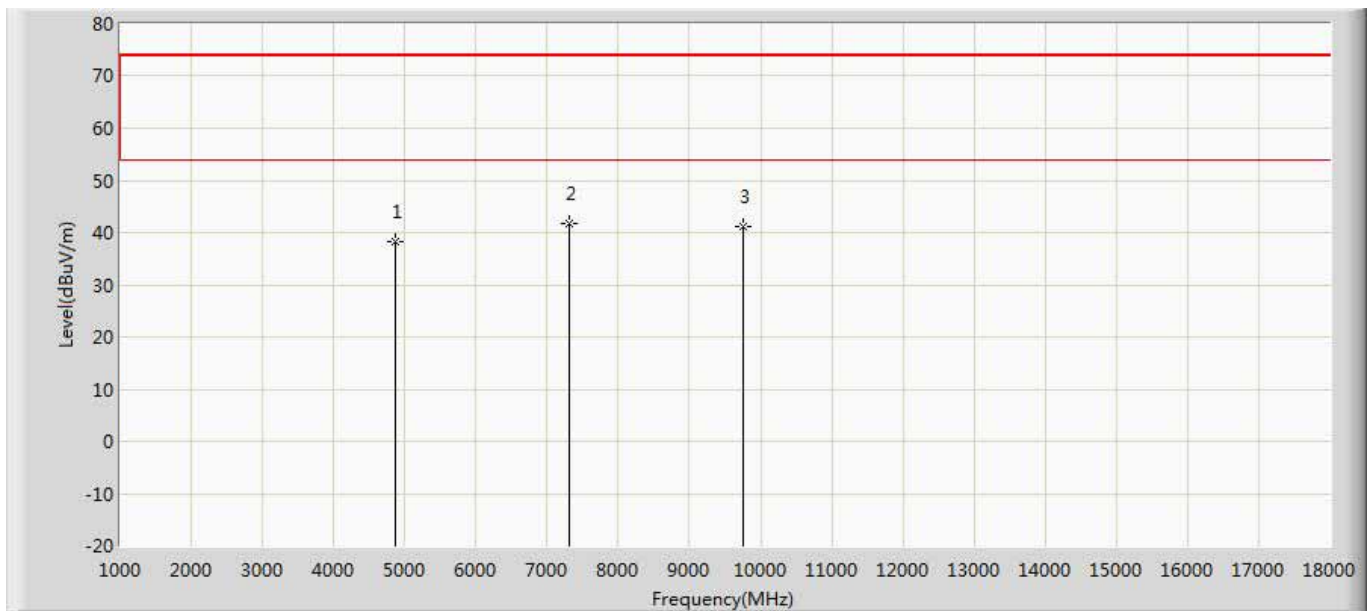
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.181	41.742	-33.819	74.000	-1.561	PK
2		7236.000	42.080	39.756	-31.920	74.000	2.323	PK
3	*	9648.000	42.457	38.429	-31.543	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



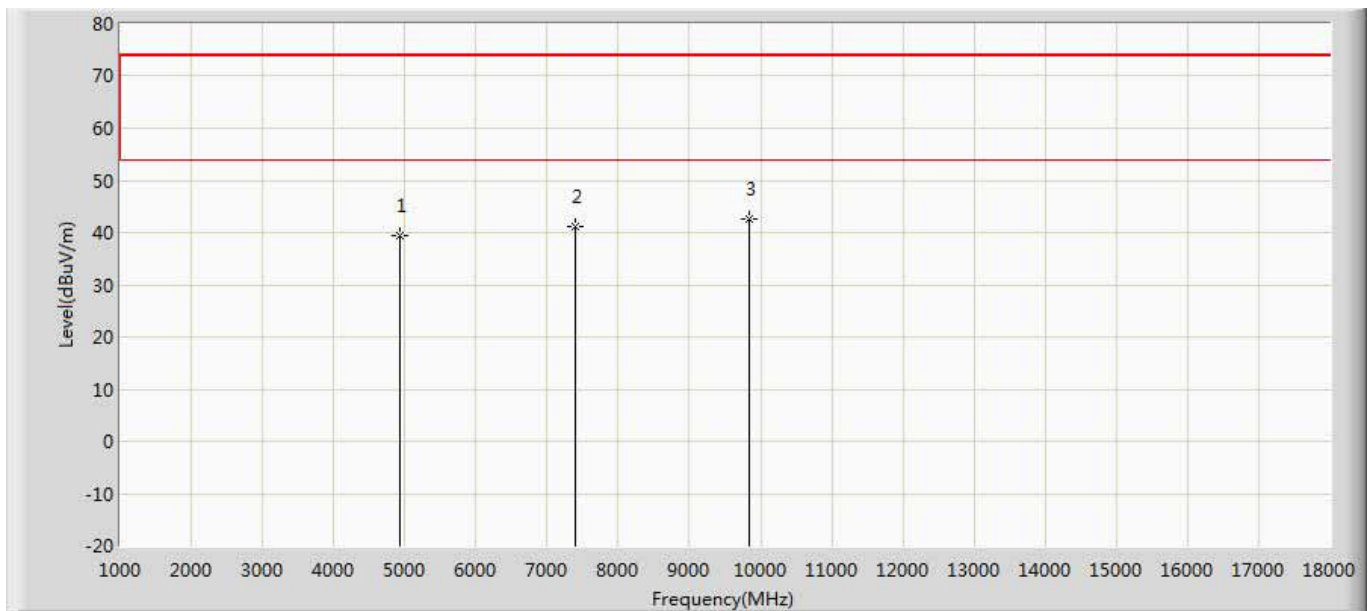
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.106	40.718	-34.894	74.000	-1.612	PK
2	*	7311.000	43.039	40.164	-30.961	74.000	2.875	PK
3		9748.000	41.978	37.764	-32.022	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



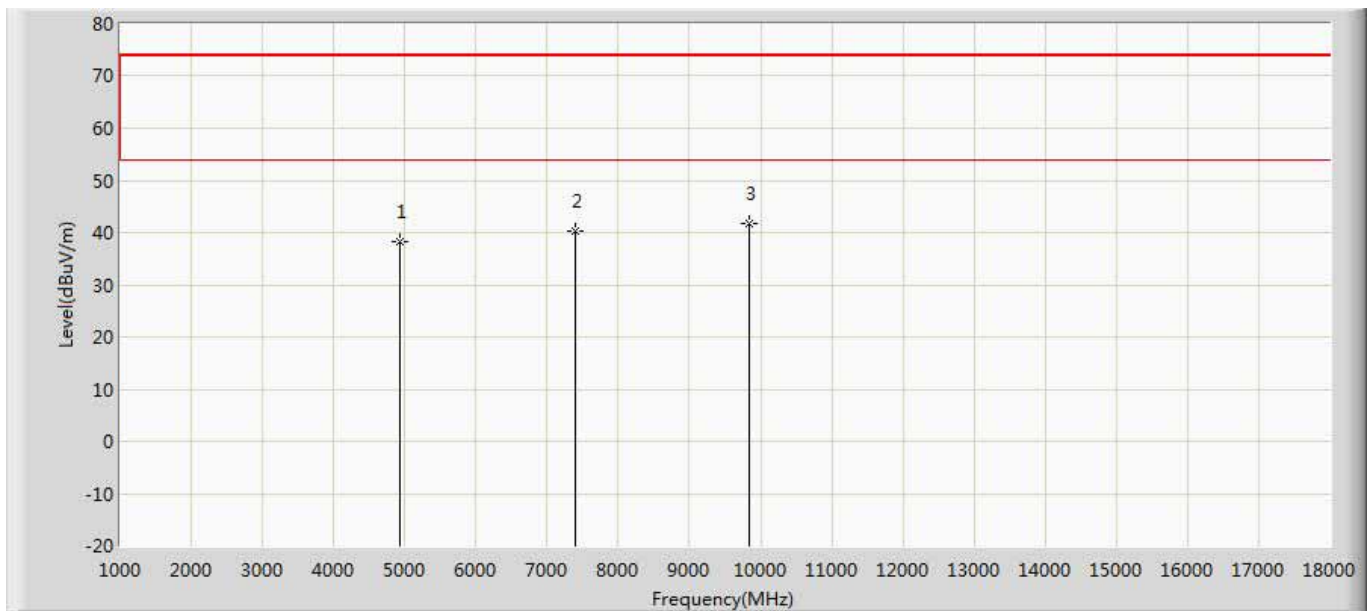
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.311	39.923	-35.689	74.000	-1.612	PK
2	*	7311.000	41.777	38.902	-32.223	74.000	2.875	PK
3		9748.000	41.237	37.023	-32.763	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



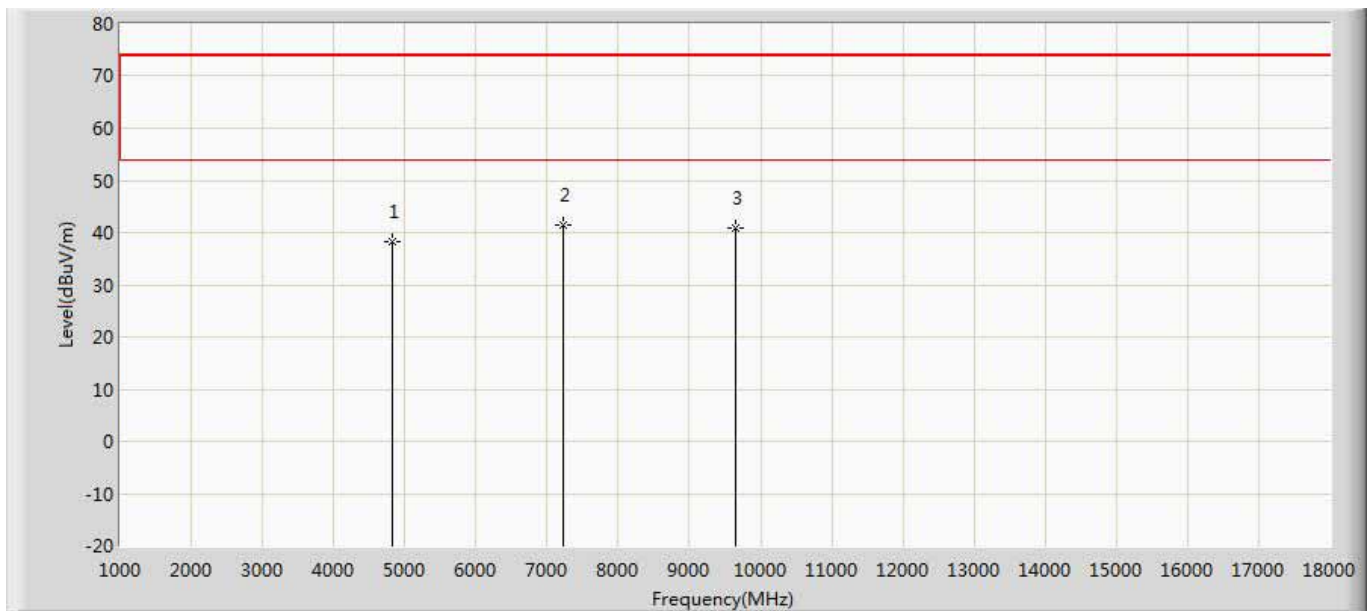
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.416	40.416	-34.584	74.000	-1.001	PK
2		7386.000	41.275	39.170	-32.725	74.000	2.105	PK
3	*	9848.000	42.553	37.483	-31.447	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



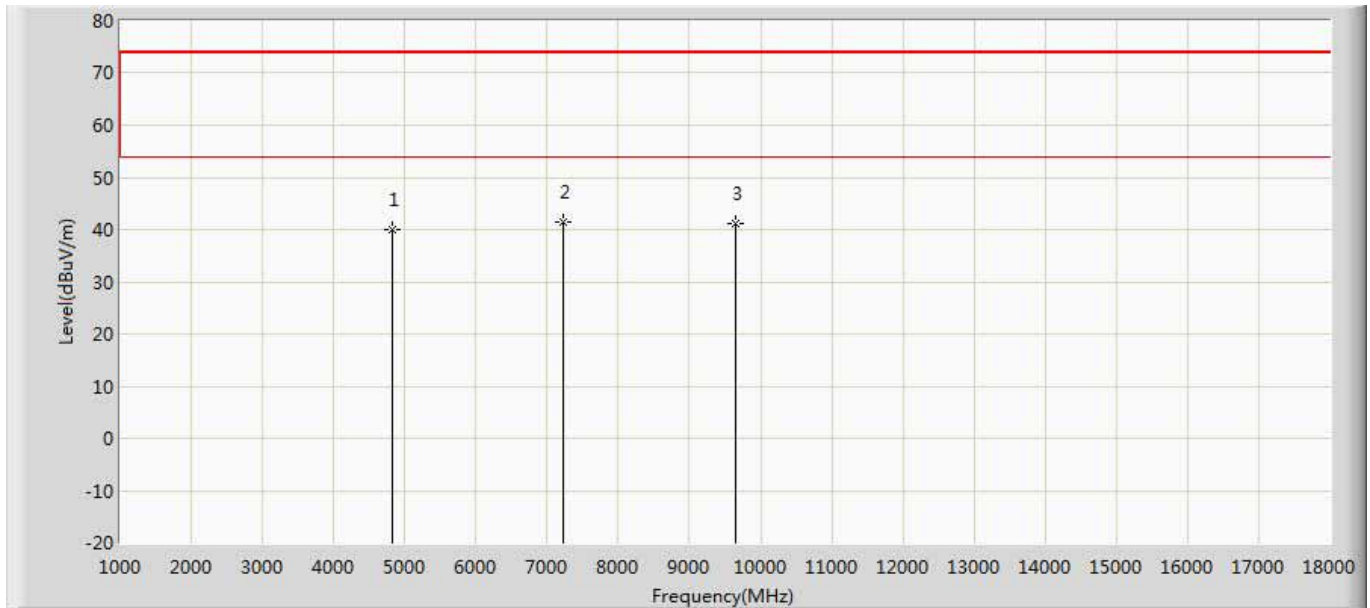
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.119	39.119	-35.881	74.000	-1.001	PK
2		7386.000	40.198	38.093	-33.802	74.000	2.105	PK
3	*	9848.000	41.733	36.663	-32.267	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



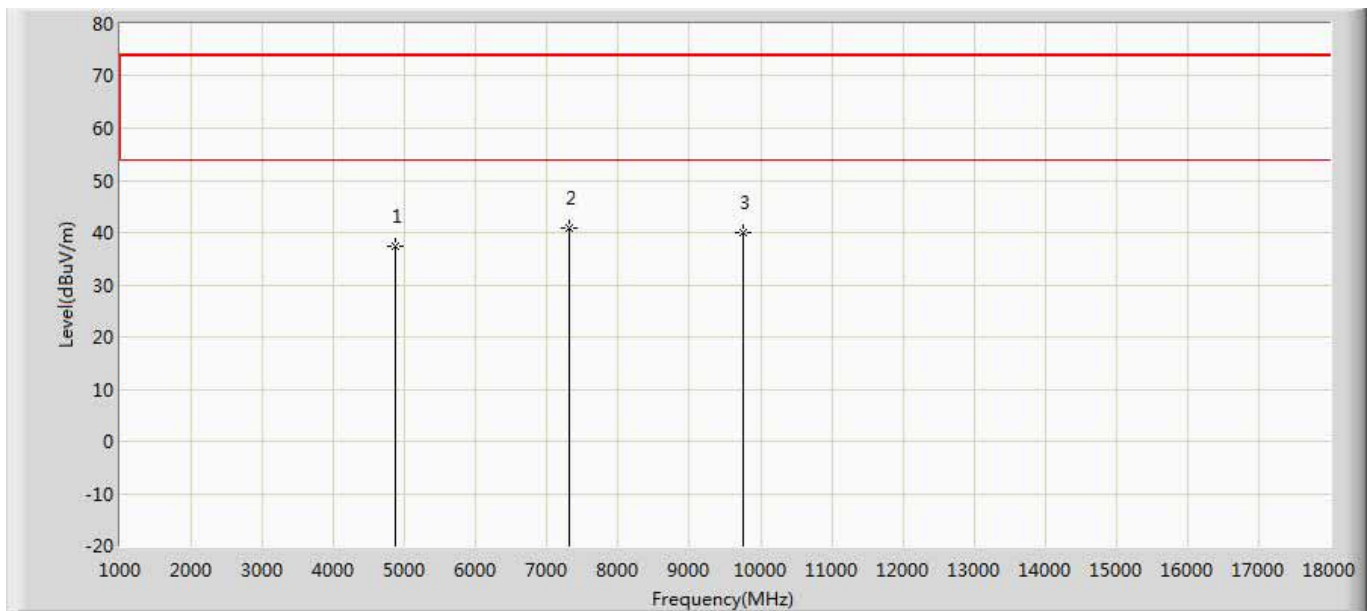
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	38.204	39.765	-35.796	74.000	-1.561	PK
2	*	7236.000	41.412	39.088	-32.588	74.000	2.323	PK
3		9648.000	40.877	36.849	-33.123	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



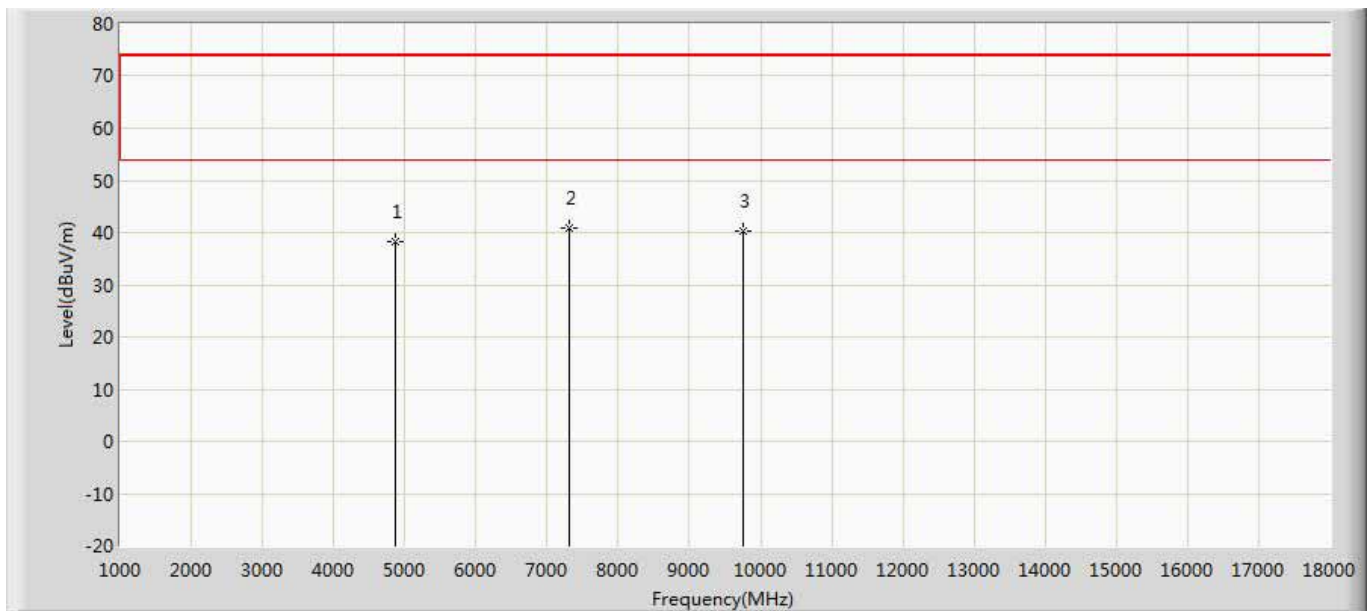
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.871	41.432	-34.129	74.000	-1.561	PK
2	*	7236.000	41.470	39.146	-32.530	74.000	2.323	PK
3		9648.000	41.142	37.114	-32.858	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



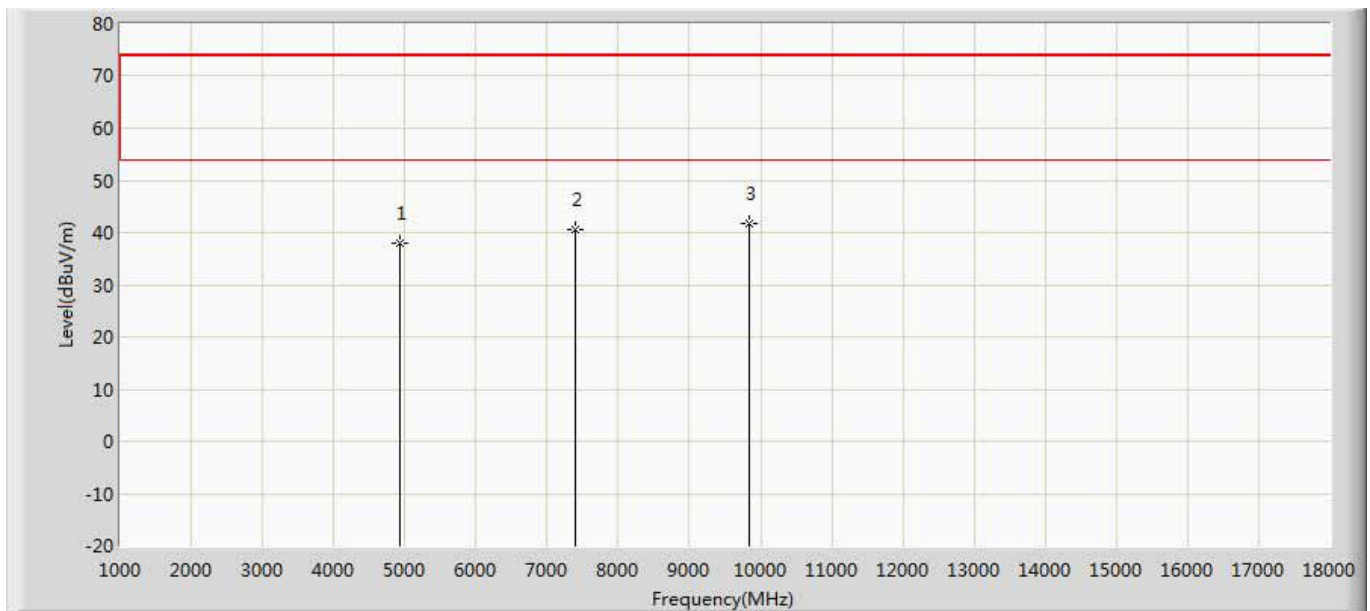
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.455	39.067	-36.545	74.000	-1.612	PK
2	*	7311.000	40.984	38.109	-33.016	74.000	2.875	PK
3		9748.000	39.859	35.645	-34.141	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



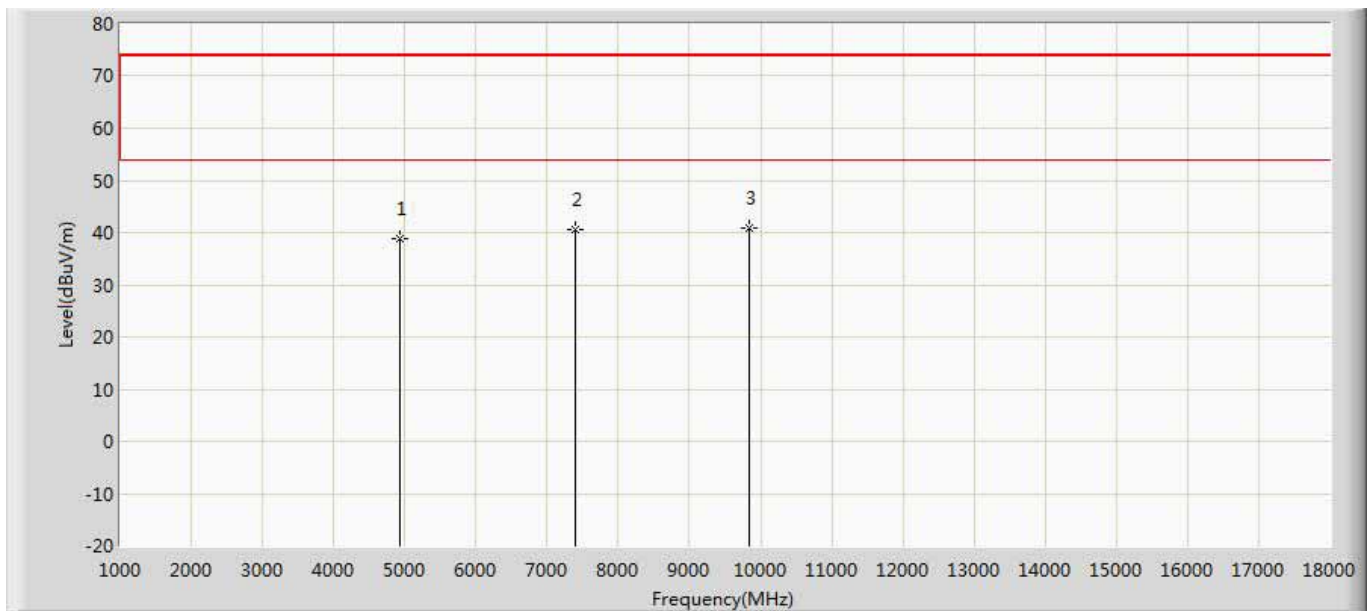
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.366	39.978	-35.634	74.000	-1.612	PK
2	*	7311.000	40.881	38.006	-33.119	74.000	2.875	PK
3		9748.000	40.377	36.163	-33.623	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



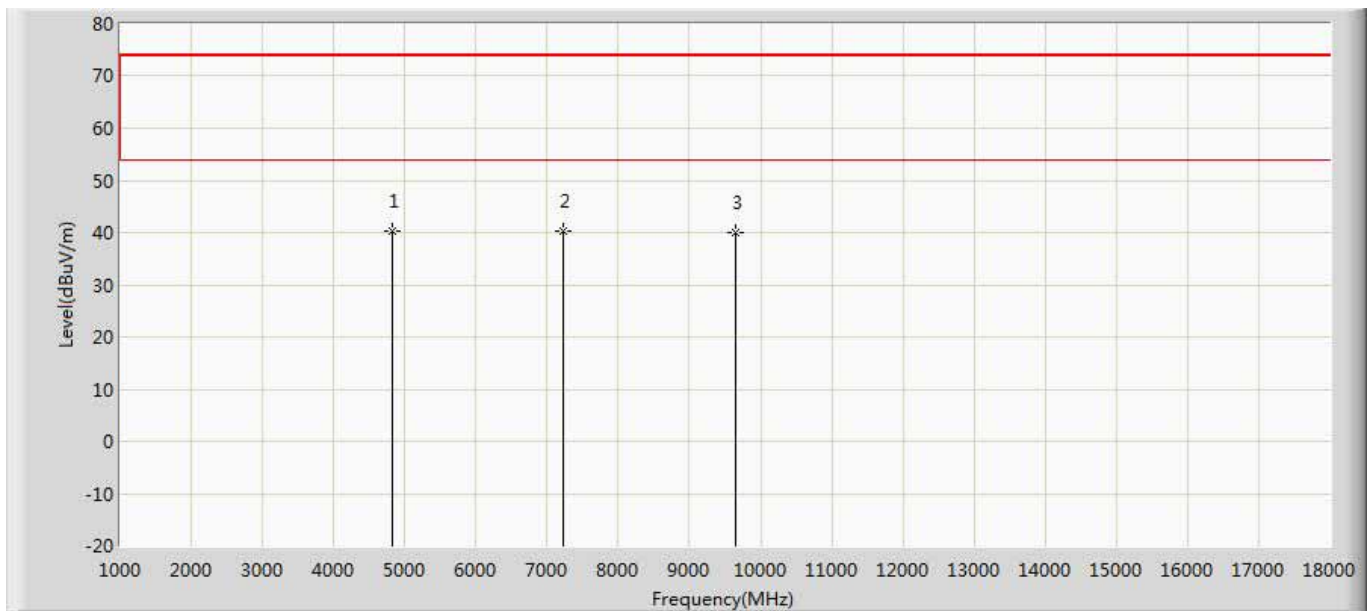
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.956	38.956	-36.044	74.000	-1.001	PK
2		7386.000	40.508	38.403	-33.492	74.000	2.105	PK
3	*	9848.000	41.606	36.536	-32.394	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



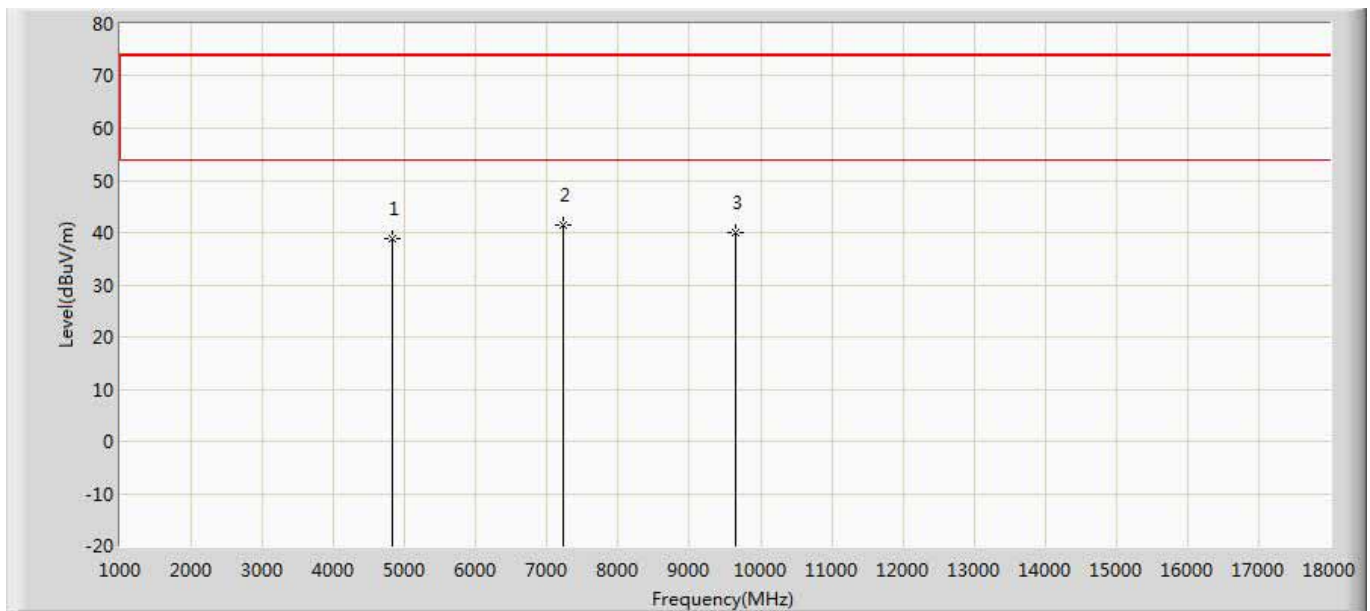
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.876	39.876	-35.124	74.000	-1.001	PK
2		7386.000	40.711	38.606	-33.289	74.000	2.105	PK
3	*	9848.000	40.782	35.712	-33.218	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



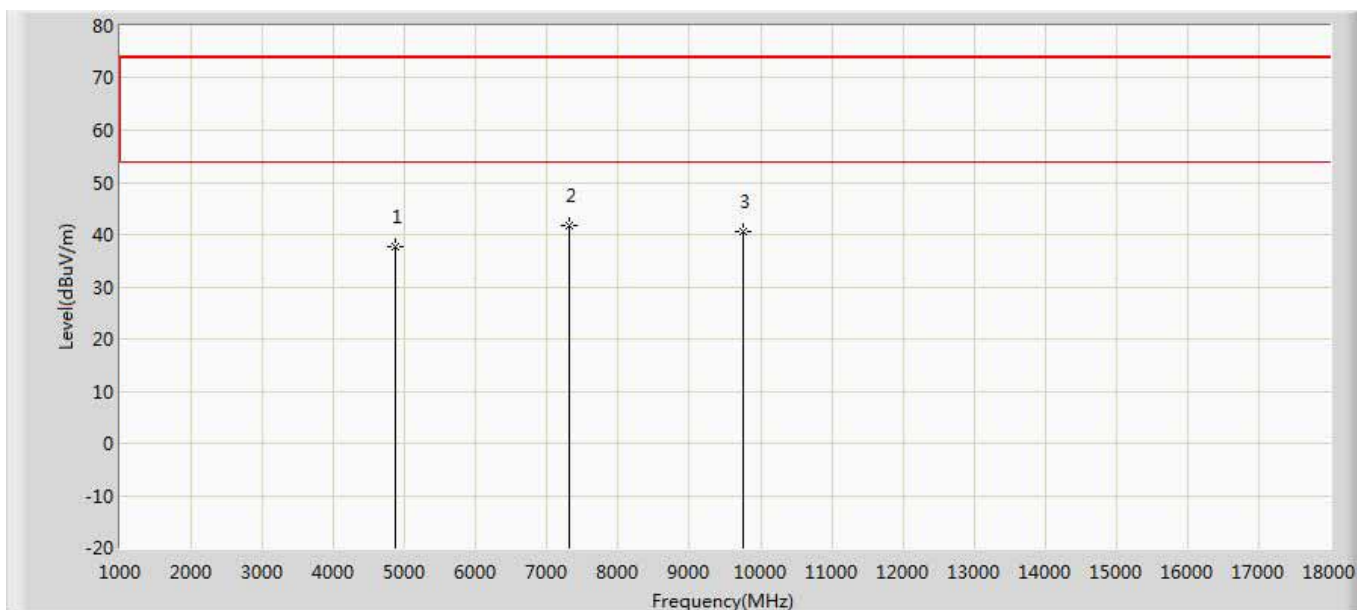
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.146	41.707	-33.854	74.000	-1.561	PK
2	*	7236.000	40.188	37.864	-33.812	74.000	2.323	PK
3		9648.000	40.055	36.027	-33.945	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



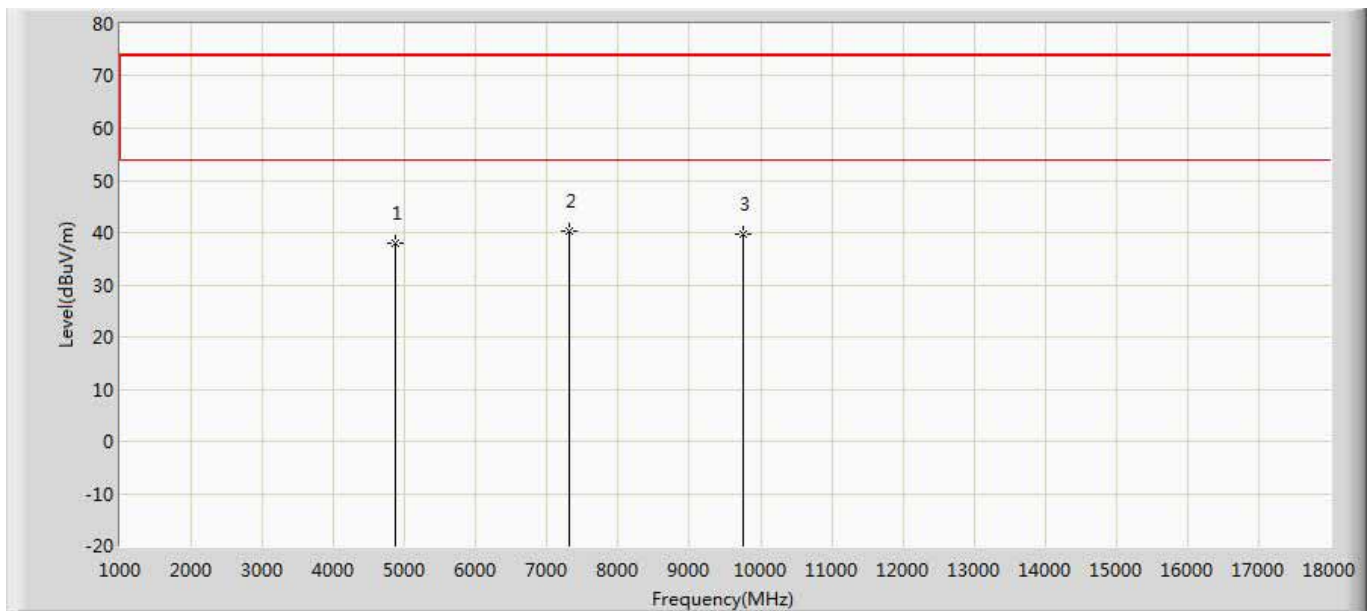
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	38.920	40.481	-35.080	74.000	-1.561	PK
2	*	7236.000	41.346	39.022	-32.654	74.000	2.323	PK
3		9648.000	40.029	36.001	-33.971	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



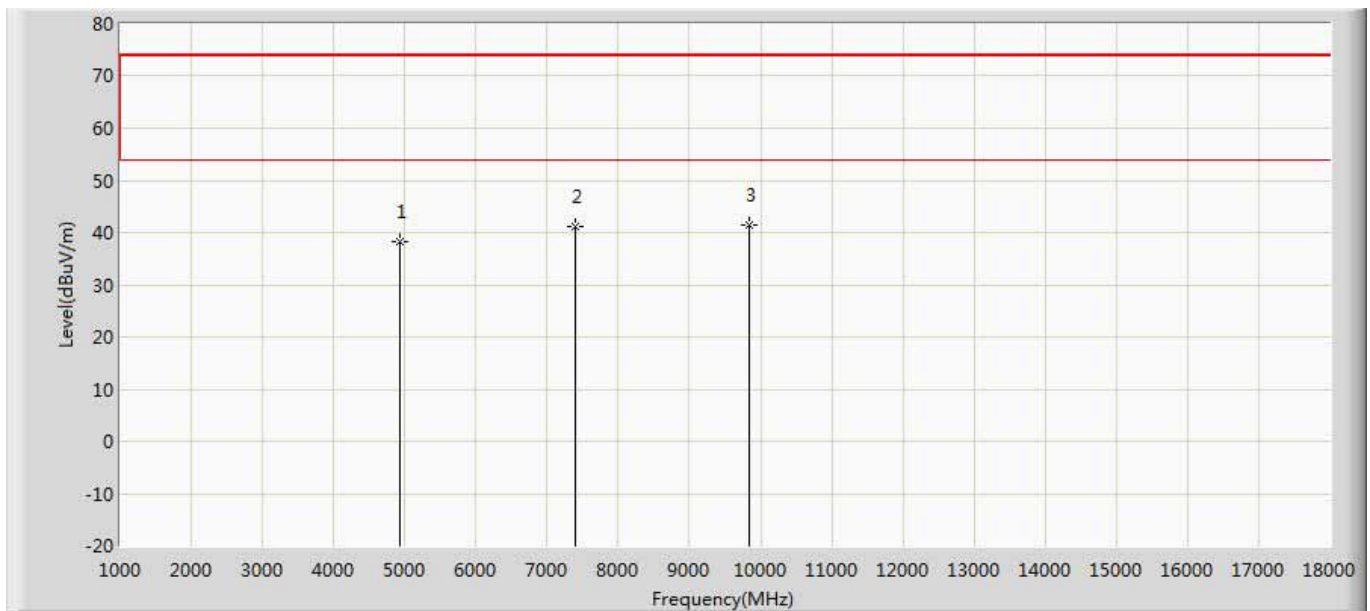
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.675	39.287	-36.325	74.000	-1.612	PK
2	*	7311.000	41.599	38.724	-32.401	74.000	2.875	PK
3		9748.000	40.530	36.316	-33.470	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



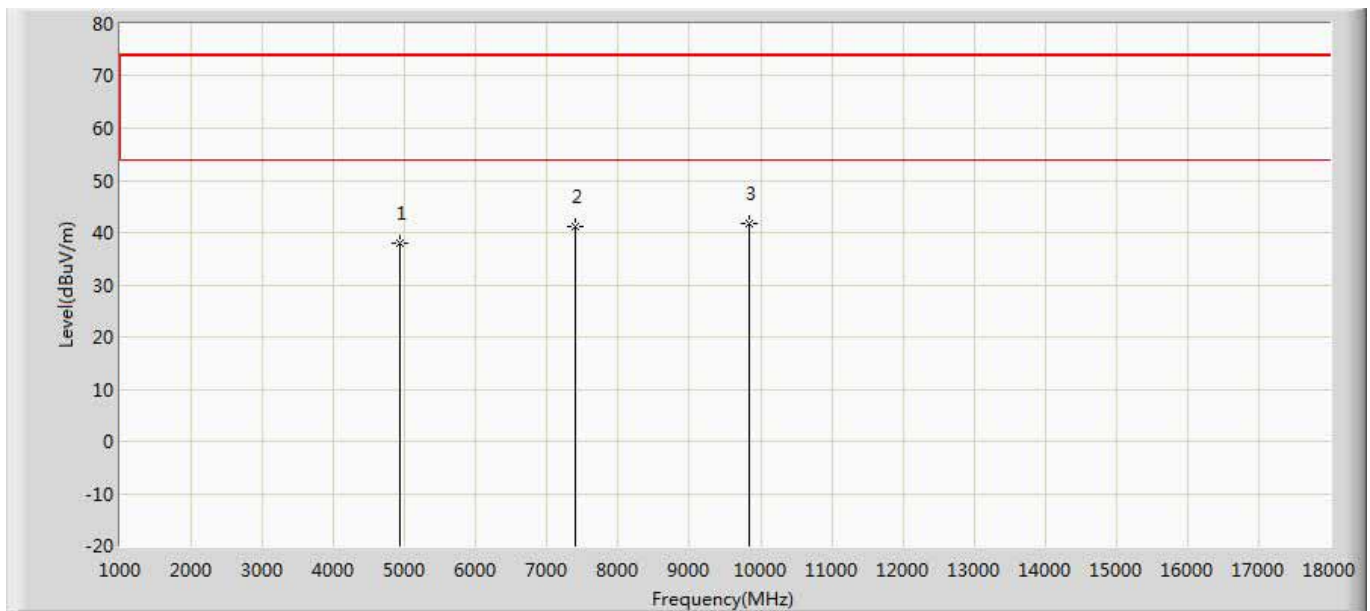
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.871	39.483	-36.129	74.000	-1.612	PK
2	*	7311.000	40.274	37.399	-33.726	74.000	2.875	PK
3		9748.000	39.776	35.562	-34.224	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



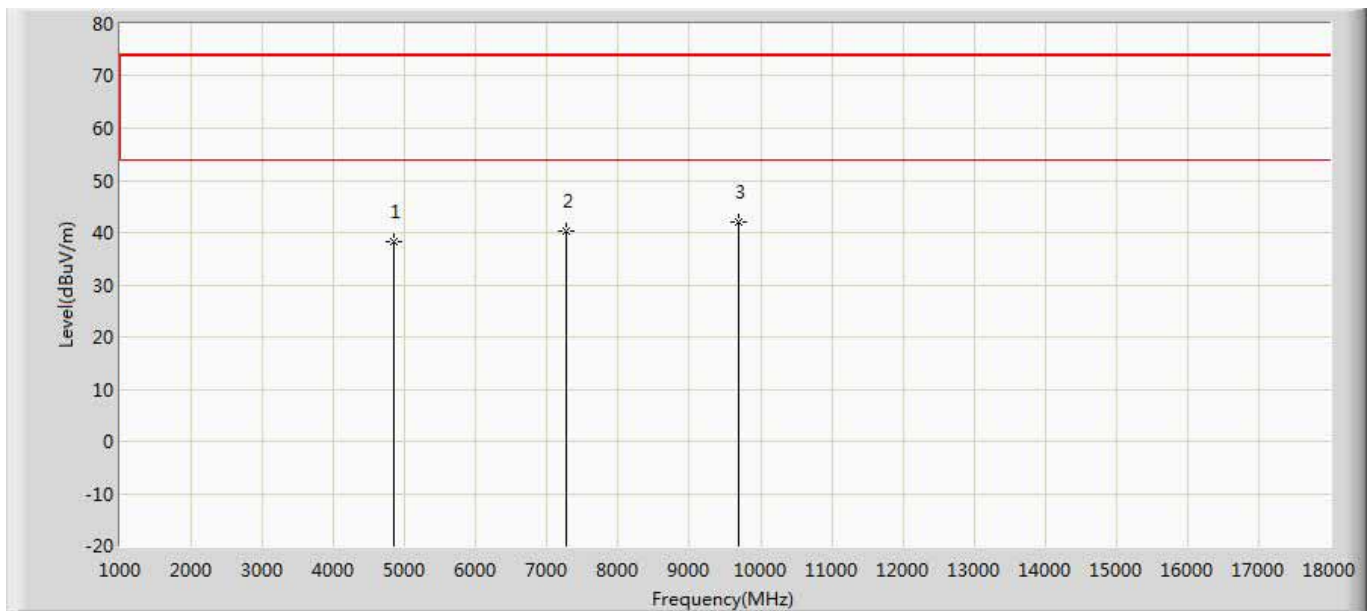
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.271	39.271	-35.729	74.000	-1.001	PK
2		7386.000	41.216	39.111	-32.784	74.000	2.105	PK
3	*	9848.000	41.485	36.415	-32.515	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



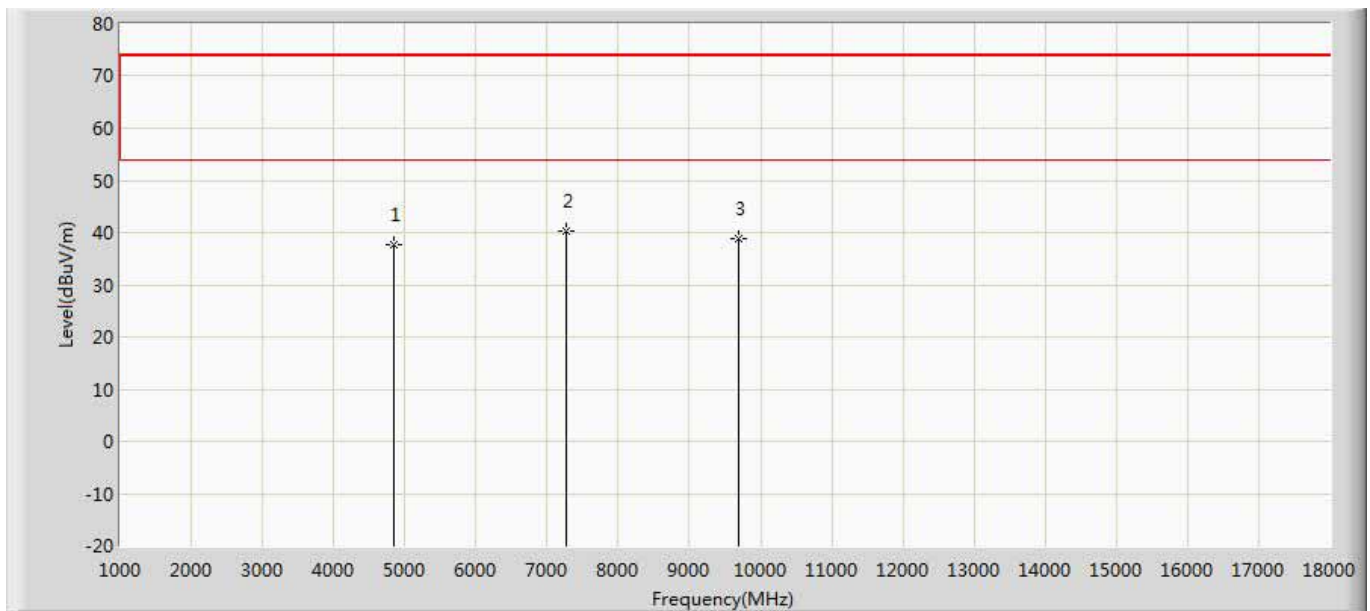
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.986	38.986	-36.014	74.000	-1.001	PK
2		7386.000	41.058	38.953	-32.942	74.000	2.105	PK
3	*	9848.000	41.834	36.764	-32.166	74.000	5.070	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)	



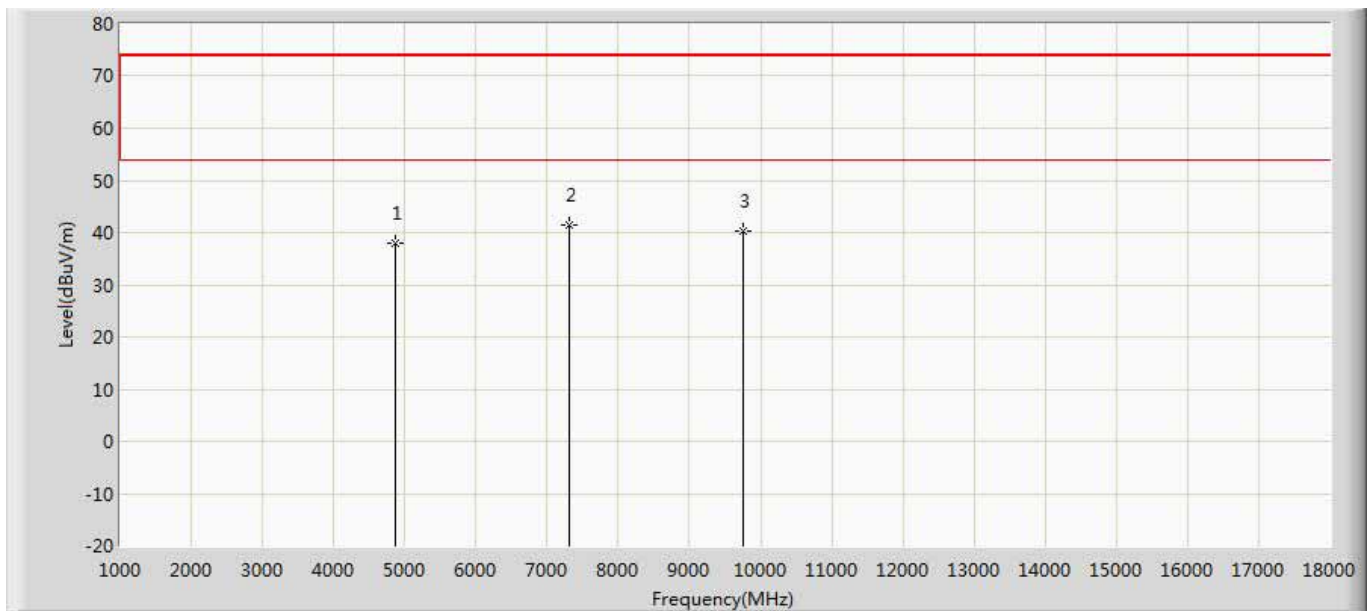
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	38.184	40.001	-35.816	74.000	-1.818	PK
2		7266.000	40.348	38.298	-33.652	74.000	2.050	PK
3	*	9688.000	42.036	37.306	-31.964	74.000	4.729	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)	



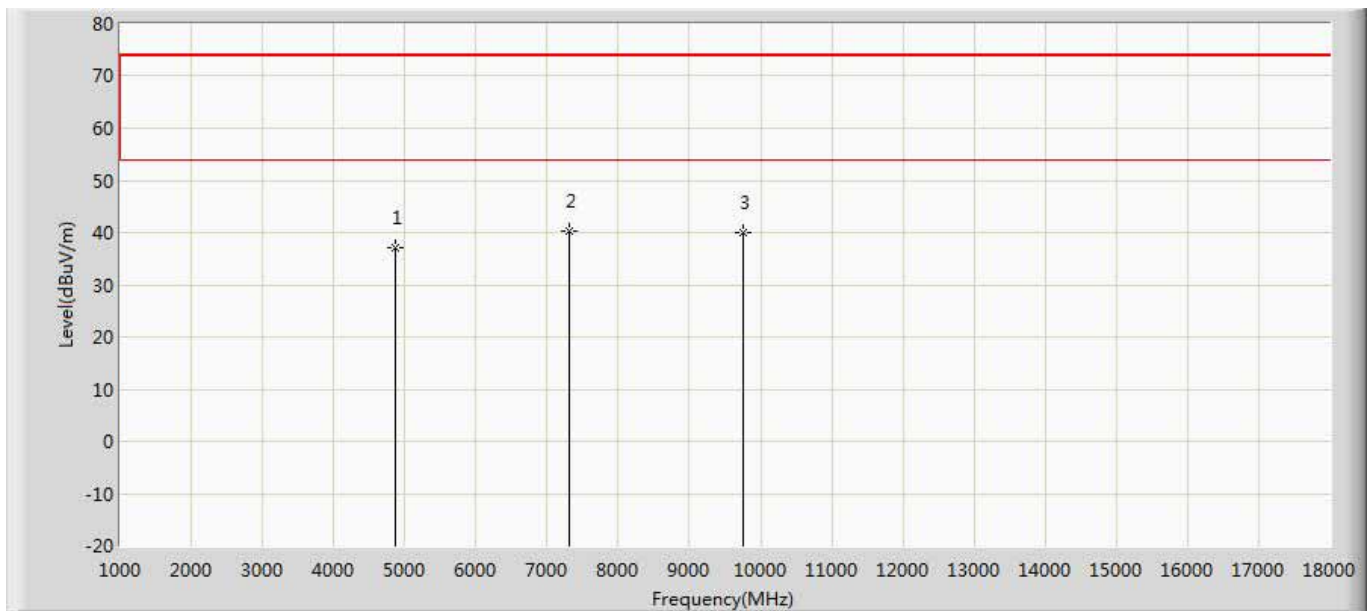
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	37.652	39.469	-36.348	74.000	-1.818	PK
2	*	7266.000	40.311	38.261	-33.689	74.000	2.050	PK
3		9688.000	38.815	34.085	-35.185	74.000	4.729	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)	



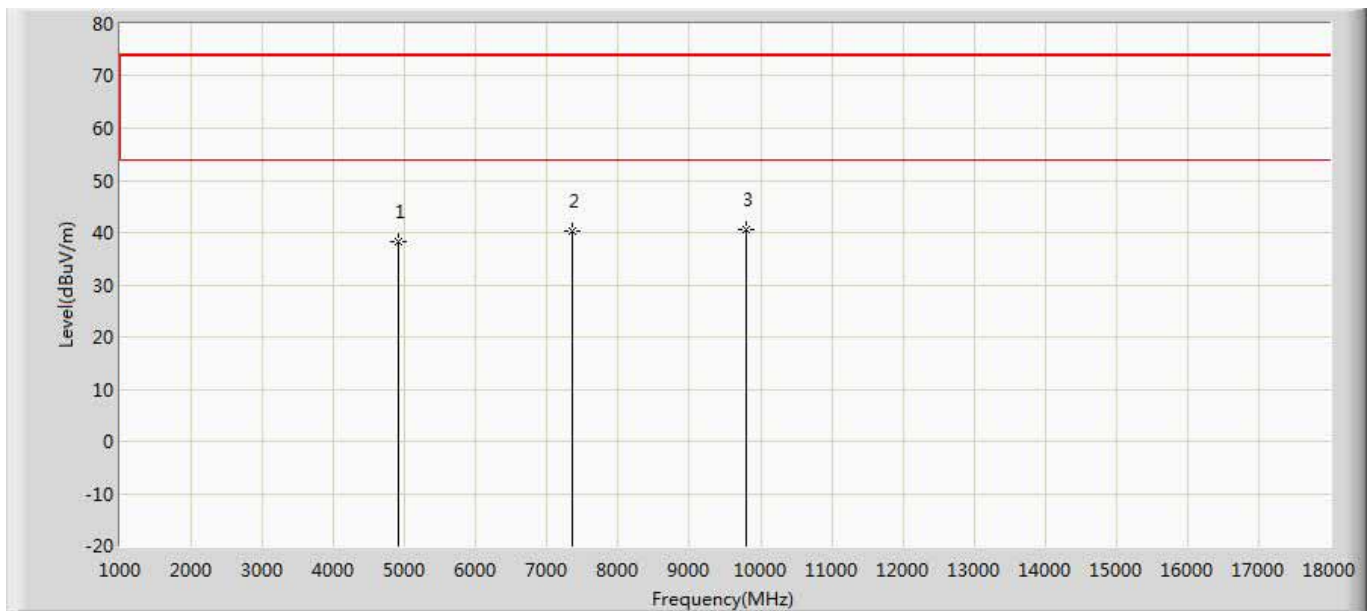
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.877	39.489	-36.123	74.000	-1.612	PK
2	*	7311.000	41.437	38.562	-32.563	74.000	2.875	PK
3		9748.000	40.396	36.182	-33.604	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)	



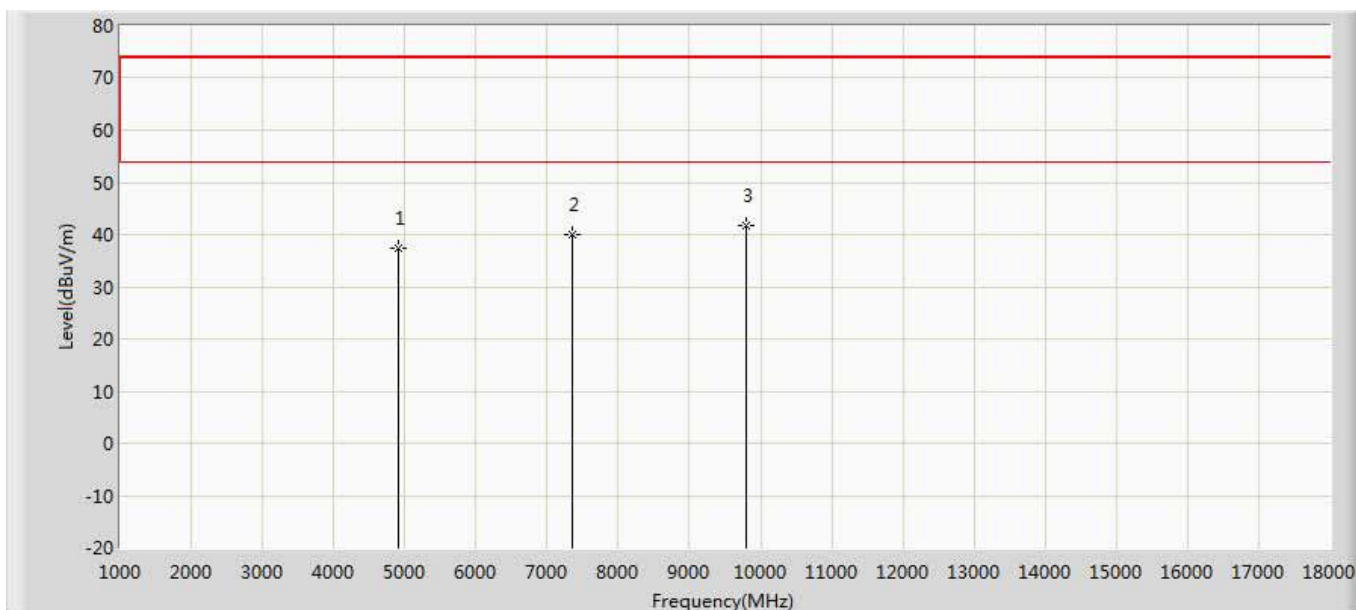
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.178	38.790	-36.822	74.000	-1.612	PK
2	*	7311.000	40.366	37.491	-33.634	74.000	2.875	PK
3		9748.000	39.967	35.753	-34.033	74.000	4.214	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	38.282	39.742	-35.718	74.000	-1.460	PK
2		7356.000	40.340	37.893	-33.660	74.000	2.447	PK
3	*	9808.000	40.592	35.664	-33.408	74.000	4.928	PK

Engineer: Slark	
Site: AC5	Time: 2017/10/11 - 17:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2452MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	37.495	38.955	-36.505	74.000	-1.460	PK
2		7356.000	39.938	37.491	-34.062	74.000	2.447	PK
3	*	9808.000	41.692	36.764	-32.308	74.000	4.928	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. As the radiated emission was performed, so conducted emission was not tested.

The worst case of Radiated Emission below 1GHz:

Engineer: Samuel

Site: AC3

Time: 2017/10/31 - 16:13

Limit: FCC_Part15.209_RE(3m)

Margin: 0

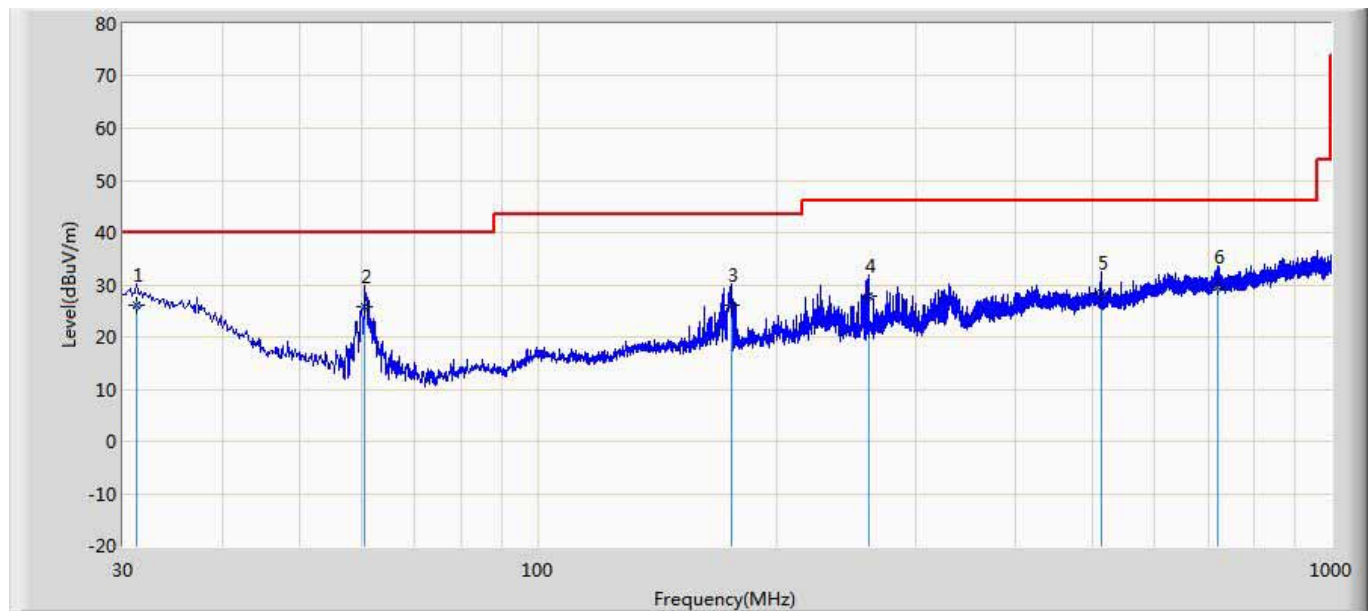
Probe: AC3_3m (30-1000MHz)

Polarity: Horizontal

EUT: Virtual Reality System

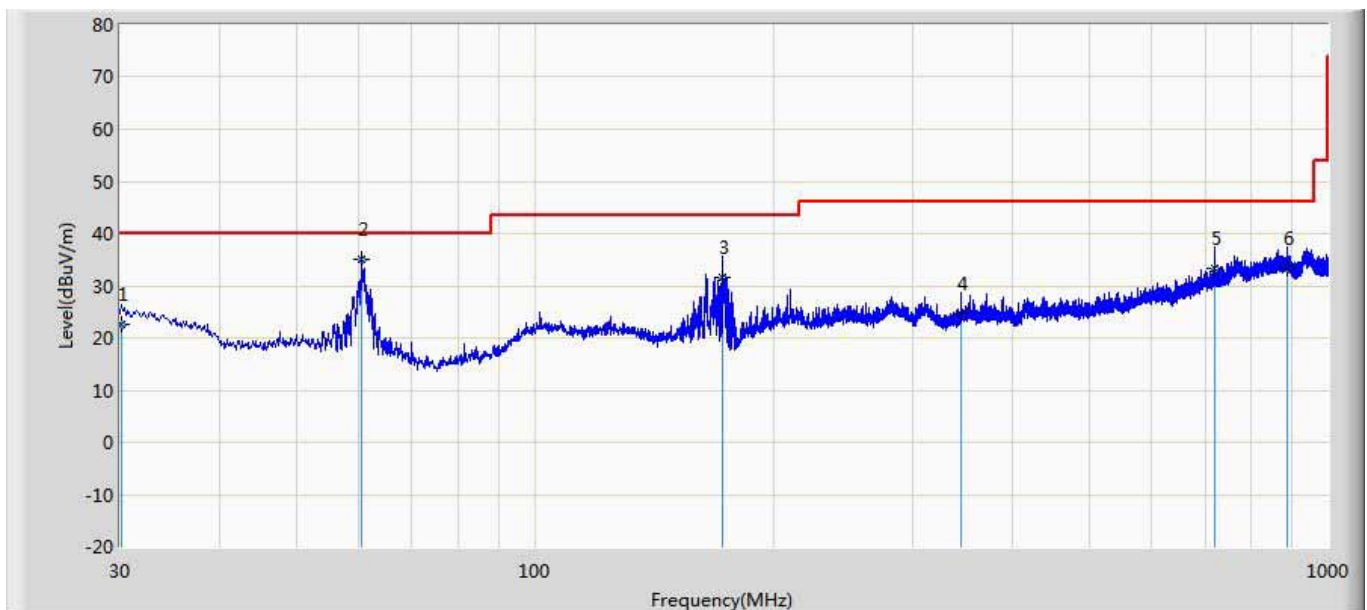
Power: AC 120V/60Hz

Note: Mode 1: Transmit at 2412MHz by 802.11b



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	31.212	26.055	-1.200	-13.945	40.000	20.794	6.461	0.000	100	306	QP
2		60.555	25.853	16.500	-14.147	40.000	2.702	6.651	0.000	100	97	QP
3		175.500	26.018	8.500	-17.482	43.500	10.335	7.183	0.000	200	110	QP
4		260.981	27.684	8.800	-18.316	46.000	11.392	7.492	0.000	100	193	QP
5		513.181	28.337	1.600	-17.663	46.000	18.538	8.198	0.000	200	229	QP
6		720.034	29.643	0.100	-16.357	46.000	20.834	8.709	0.000	100	360	QP

Engineer: Samuel	
Site: AC3	Time: 2017/10/31 - 16:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2412MHz by 802.11b	



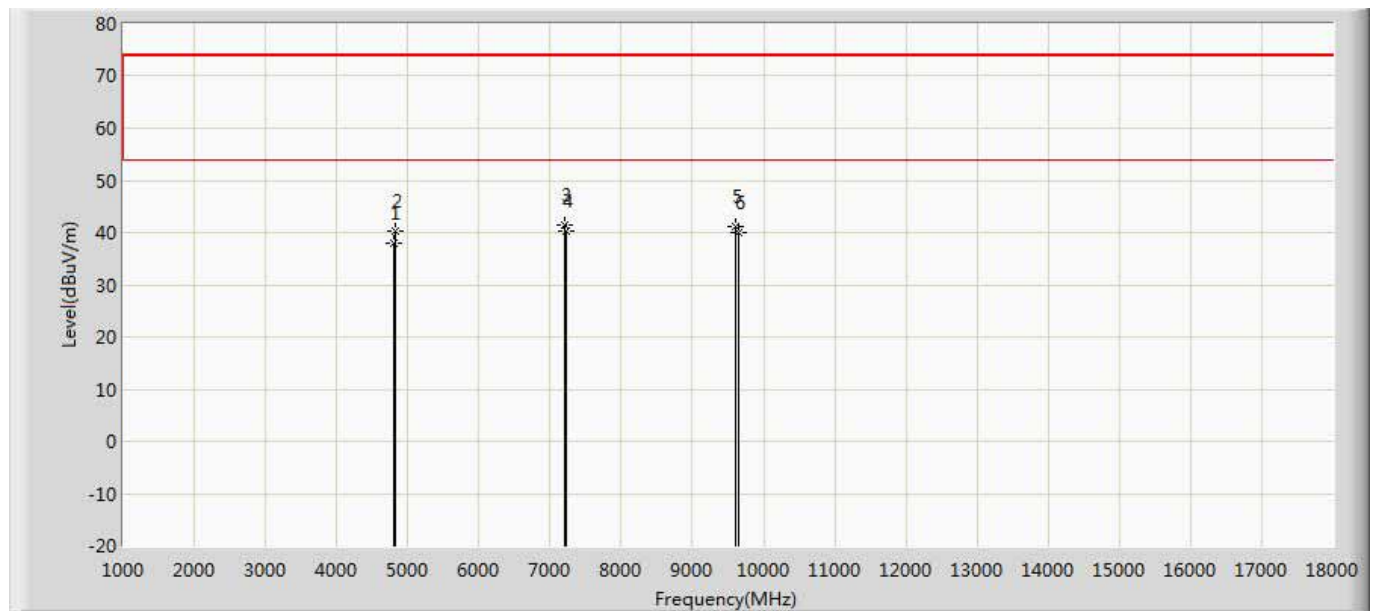
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.121	22.466	-1.600	-17.534	40.000	17.612	6.454	0.000	100	360	QP
2	*	60.540	34.940	19.000	-5.060	40.000	9.289	6.651	0.000	100	293	QP
3		172.711	31.623	13.800	-11.877	43.500	10.649	7.175	0.000	100	223	QP
4		345.008	24.558	0.700	-21.442	46.000	16.107	7.751	0.000	200	113	QP
5		720.034	33.293	3.100	-12.707	46.000	21.484	8.709	0.000	100	318	QP
6		889.420	33.451	0.100	-12.549	46.000	24.272	9.079	0.000	100	348	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

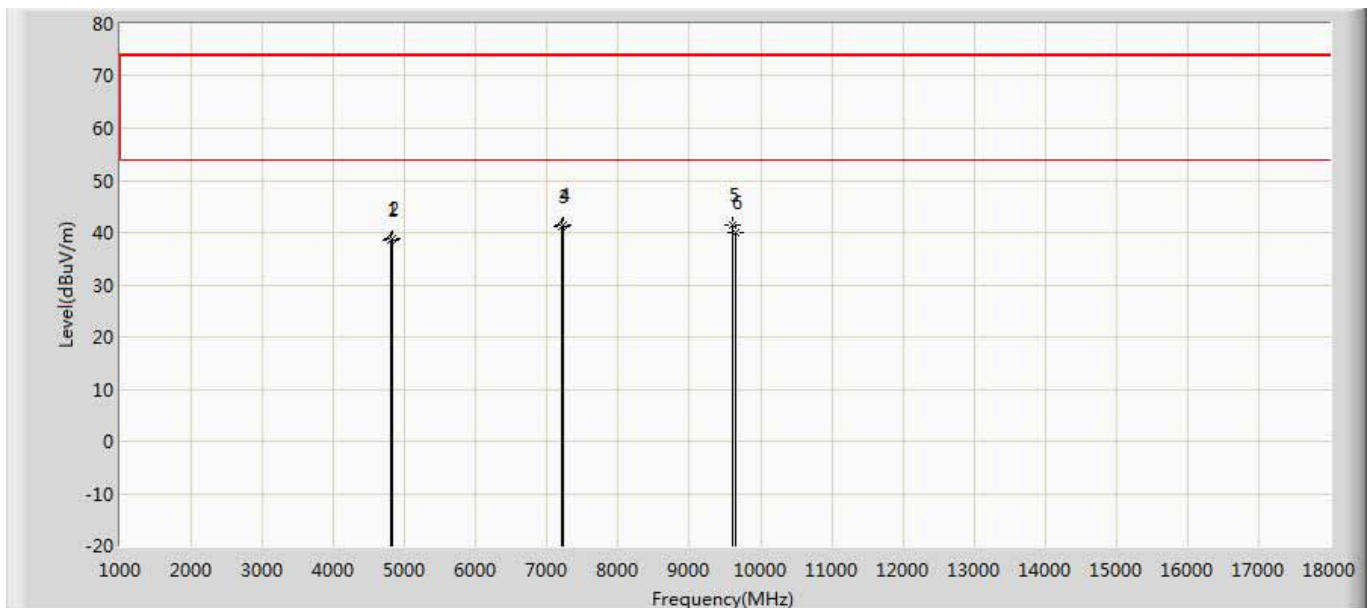
The worst case of Simultaneous Radiated Emission:

Engineer: Slark	
Site: AC5	Time: 2017/11/22 - 10:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Transmit at 2412MHz by 802.11n(20MHz) + BT	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.970	39.622	-36.030	74.000	-1.652	PK
2		4824.000	40.146	41.707	-33.854	74.000	-1.561	PK
3	*	7206.000	41.492	38.612	-32.508	74.000	2.880	PK
4		7236.000	40.188	37.864	-33.812	74.000	2.323	PK
5		9608.000	41.075	36.248	-32.925	74.000	4.827	PK
6		9648.000	40.055	36.027	-33.945	74.000	4.028	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/22 - 10:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Transmit at 2412MHz by 802.11n(20MHz) + BT	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.591	40.243	-35.409	74.000	-1.652	PK
2		4824.000	38.920	40.481	-35.080	74.000	-1.561	PK
3		7206.000	41.280	38.400	-32.720	74.000	2.880	PK
4		7236.000	41.346	39.022	-32.654	74.000	2.323	PK
5	*	9608.000	41.457	36.630	-32.543	74.000	4.827	PK
6		9648.000	40.029	36.001	-33.971	74.000	4.028	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. As the radiated emission was performed, so conducted emission was not tested.

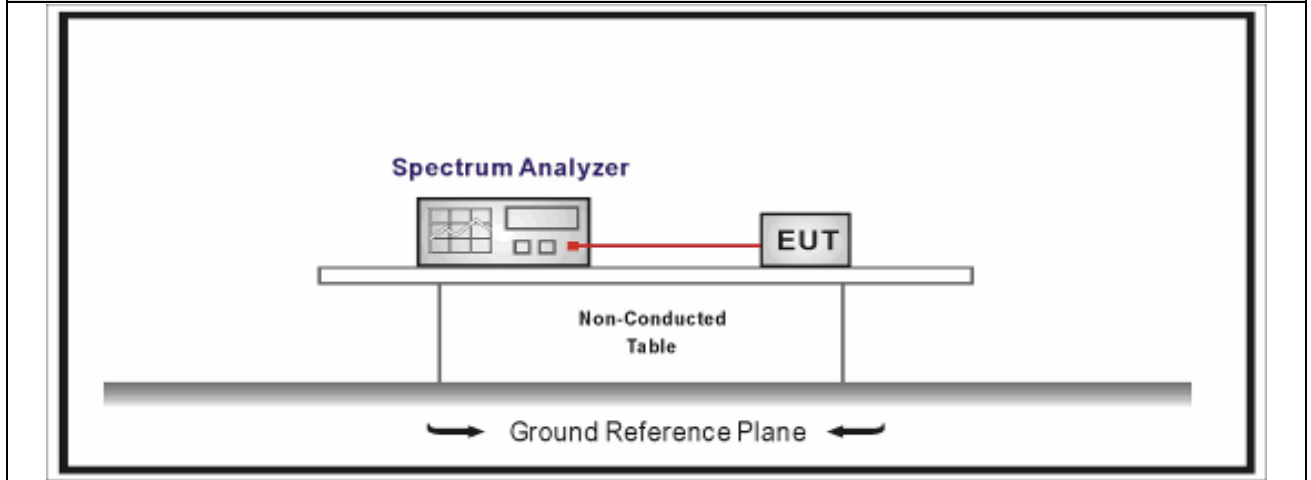
5. Emissions in non-restricted frequency bands

5.2. Test Equipment

Emissions in non-restricted frequency bands / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.3. Test Setup

Emissions in non-restricted frequency bands



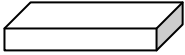
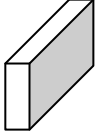
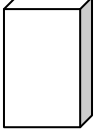
5.4. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc). Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).	

5.5. Test Procedure

Test Method					
	References Rule		Chapter	Description	
☒	ANSI C63.10		11.11	Emissions in non-restricted frequency bands	
	☒	ANSI C63.10	11.11.2	Reference level measurement	
	☒	ANSI C63.10	11.11.3	Emission level measurement	
☐	ANSI C63.10		11.12	Emissions in restricted frequency bands	
	☐	ANSI C63.10	11.12.1	Radiated emission measurements	
	☐	ANSI C63.10	11.12.2.7	Radiated spurious emission test	
☐	ANSI C63.10		6.4	Radiated emissions from unlicensed wireless devices below 30 MHz	
☐	ANSI C63.10		6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz	
☐	ANSI C63.10		6.6	Radiated emissions from unlicensed wireless devices above 1 GHz	
	☐	ANSI C63.10		11.12.2	Antenna-port conducted measurements
		☐	ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
		☐	ANSI C63.10	11.12.2.4	Peak power measurement procedure
		☐	ANSI C63.10	11.12.2.5	Average power measurement procedures
		☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
		☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
		☐	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

5.6. EUT test Axis definition

Item	Emissions in non-restricted frequency bands			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1 ~ Mode 4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

5.7. Test Result

Product Name	: Virtual Reality System	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.10.20	Test Engineer	: Tommy

Antenna #1

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	12.095	2400	-29.575	41.670	>20	Pass
1	11	2462	11.849	2500	-55.458	67.307	>20	Pass
2	01	2412	6.521	2400	-23.481	30.002	>20	Pass
2	11	2462	5.882	2500	-56.720	62.602	>20	Pass
3	01	2412	5.797	2400	-27.725	33.522	>20	Pass
3	11	2462	5.236	2500	-56.701	61.937	>20	Pass
4	03	2422	2.682	2400	-31.847	34.529	>20	Pass
4	09	2452	1.723	2500	-56.938	58.661	>20	Pass

Note: The worst case of emissions in non-restricted frequency bands as below:

Mode 2 CH01(2412MHz)



Antenna #2

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	11.989	2400	-26.226	38.215	>20	Pass
1	11	2462	11.831	2500	-56.952	68.783	>20	Pass
2	01	2412	6.783	2400	-24.046	30.829	>20	Pass
2	11	2462	5.675	2500	-56.607	62.282	>20	Pass
3	01	2412	6.069	2400	-26.079	32.148	>20	Pass
3	11	2462	5.164	2500	-57.753	62.917	>20	Pass
4	03	2422	2.345	2400	-31.288	33.633	>20	Pass
4	09	2452	1.319	2500	-57.613	58.932	>20	Pass

Note: The worst case of emissions in non-restricted frequency bands as below:

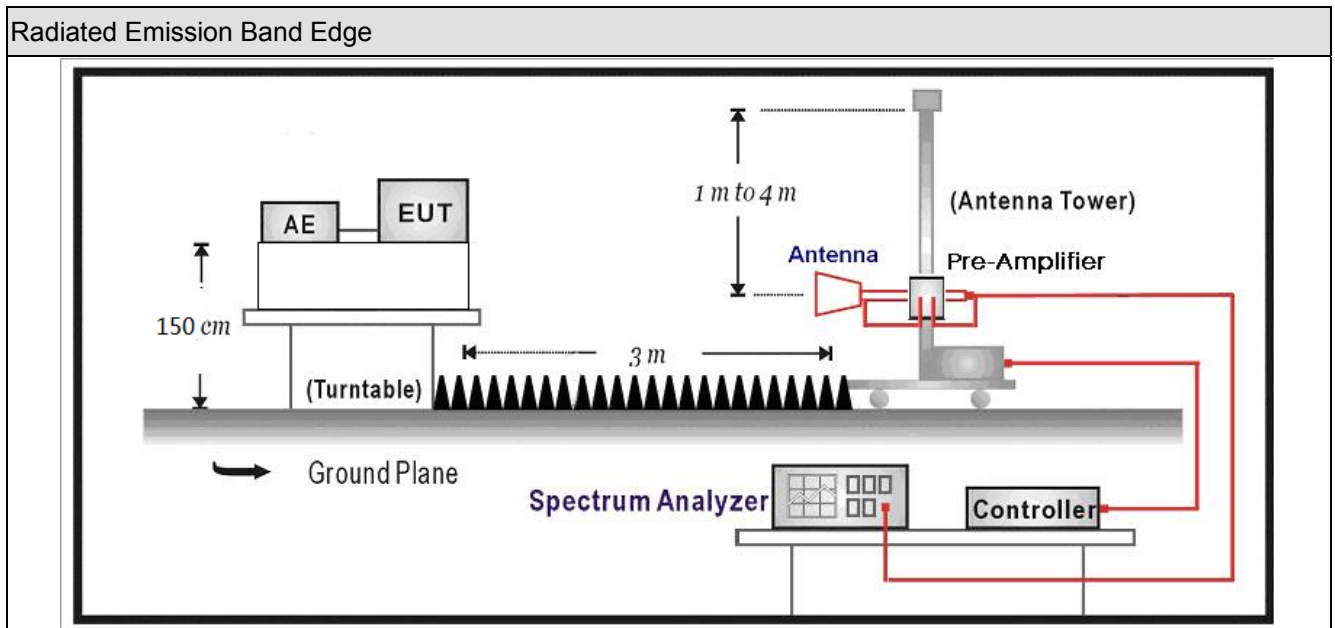
Mode 2 CH01(2412MHz)

6. Radiated Emission Band Edge

6.2. Test Equipment

Radiated Emission Band Edge / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.04	2018.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2017.05.06	2018.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2017.05.06	2018.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2017.01.22	2018.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2017.03.02	2018.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2017.06.10	2018.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.3. Test Setup



6.4. Limit

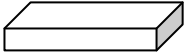
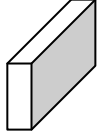
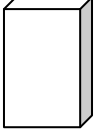
Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

6.5. Test Procedure

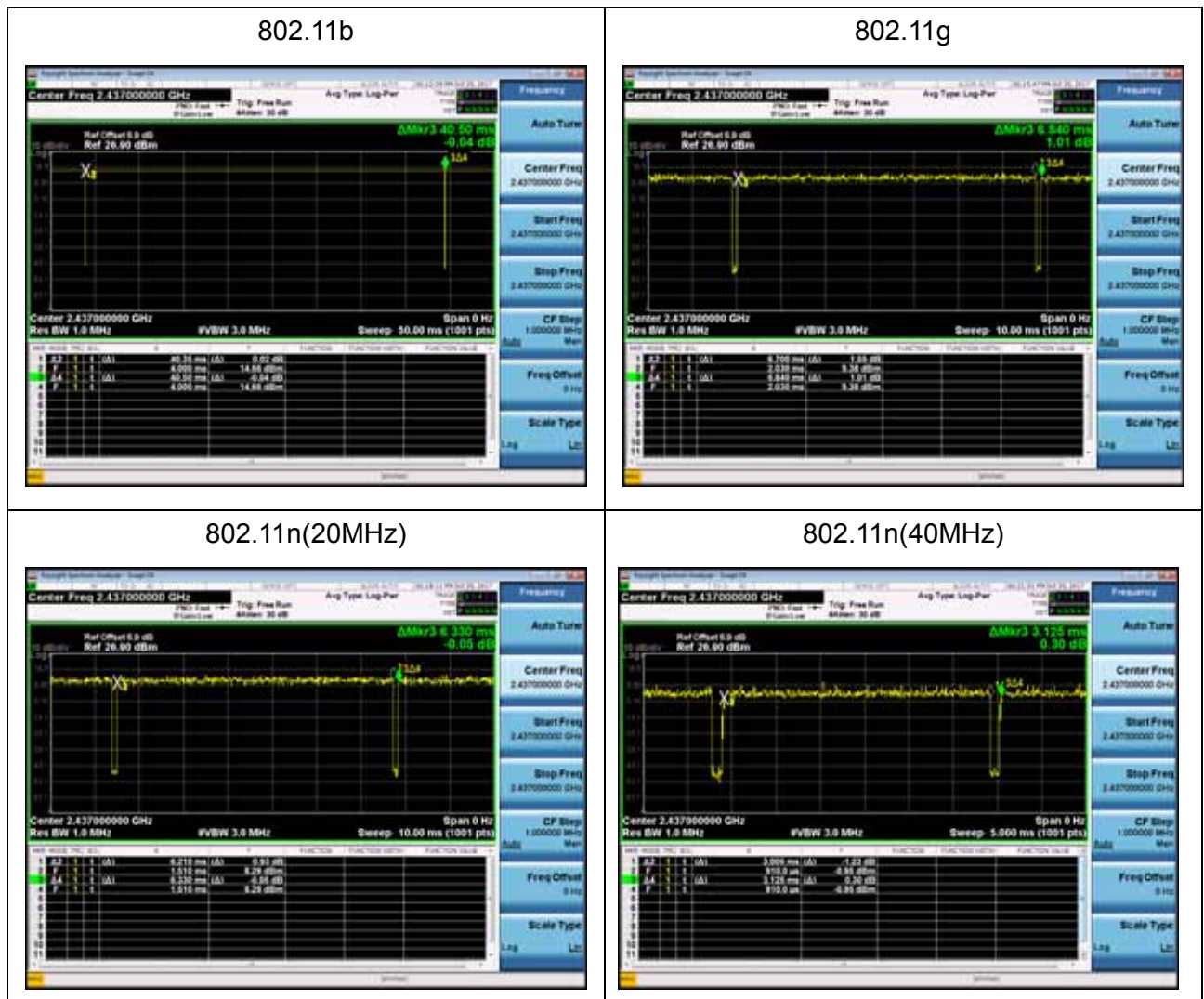
Radiated Emission Band Edge				
	References Rule		Chapter	Description
☒	ANSI C63.10		6.10	Band-edge testing
	☒	ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	☐	ANSI C63.10	6.10.6	Marker-delta method
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test
☐	ANSI C63.10		6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10		6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10		6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☐	ANSI C63.10	11.12.2	Antenna-port conducted measurements
		☐	ANSI C63.10	11.12.2.3 Quasi-peak measurement procedure
		☐	ANSI C63.10	11.12.2.4 Peak power measurement procedure
		☐	ANSI C63.10	11.12.2.5 Average power measurement procedures
		☐	ANSI C63.10	11.12.2.5.1 Trace averaging with continuous EUT transmission at full power
		☐	ANSI C63.10	11.12.2.5.2 Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
		☐	ANSI C63.10	11.12.2.5.3 Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

6.6. EUT test definition

Item	Radiated Emission Band Edge			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1~4			
Test method	☒	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☒	Worst Axis ☐	Worst Axis ☐
	☐	Conducted		
	☐	Chain 1		
				
	☐	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

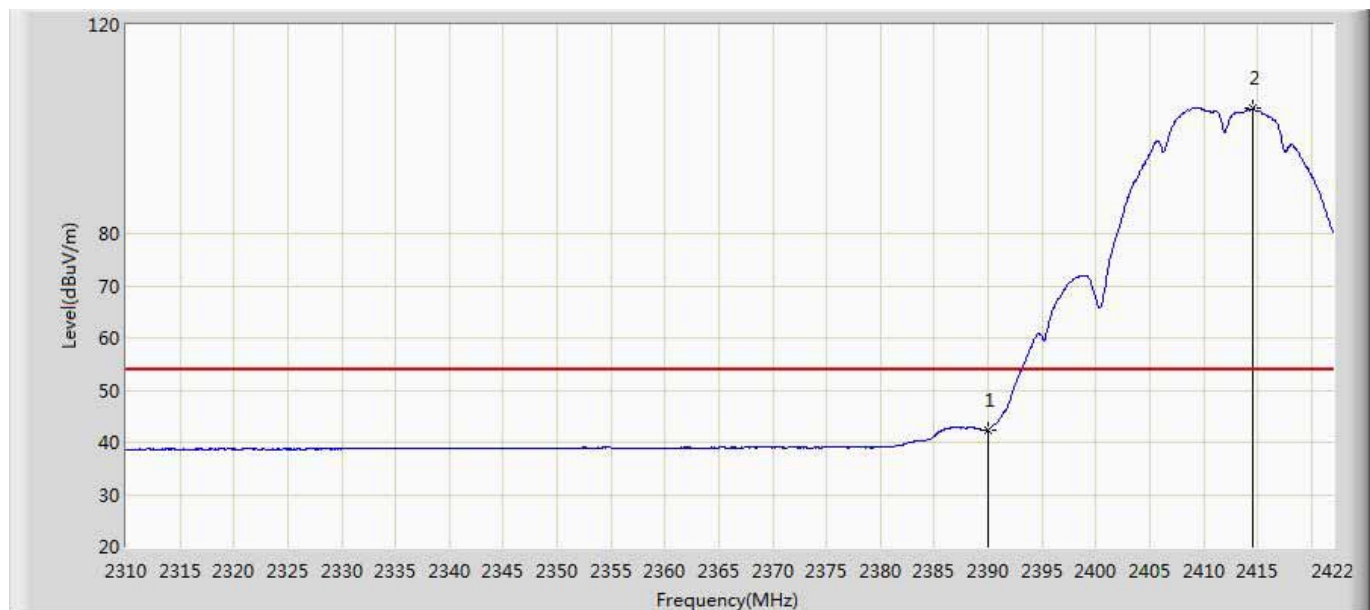
6.7. Duty Cycle

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	40.35	0.15	27Hz	40.5	99.63%
802.11g	6.7	0.14	150Hz	6.84	97.95%
802.11n(20MHz)	6.21	0.12	180Hz	6.33	98.10%
802.11n(40MHz)	3.005	0.12	360Hz	3.125	96.16%



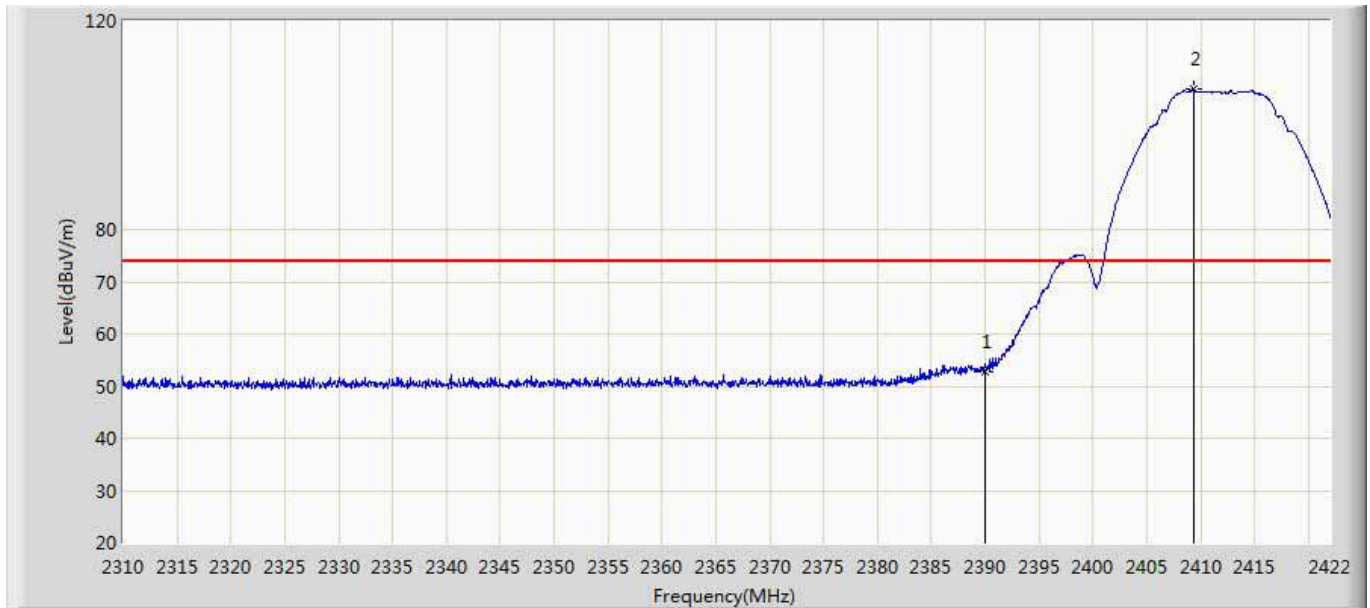
6.8. Test Result

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



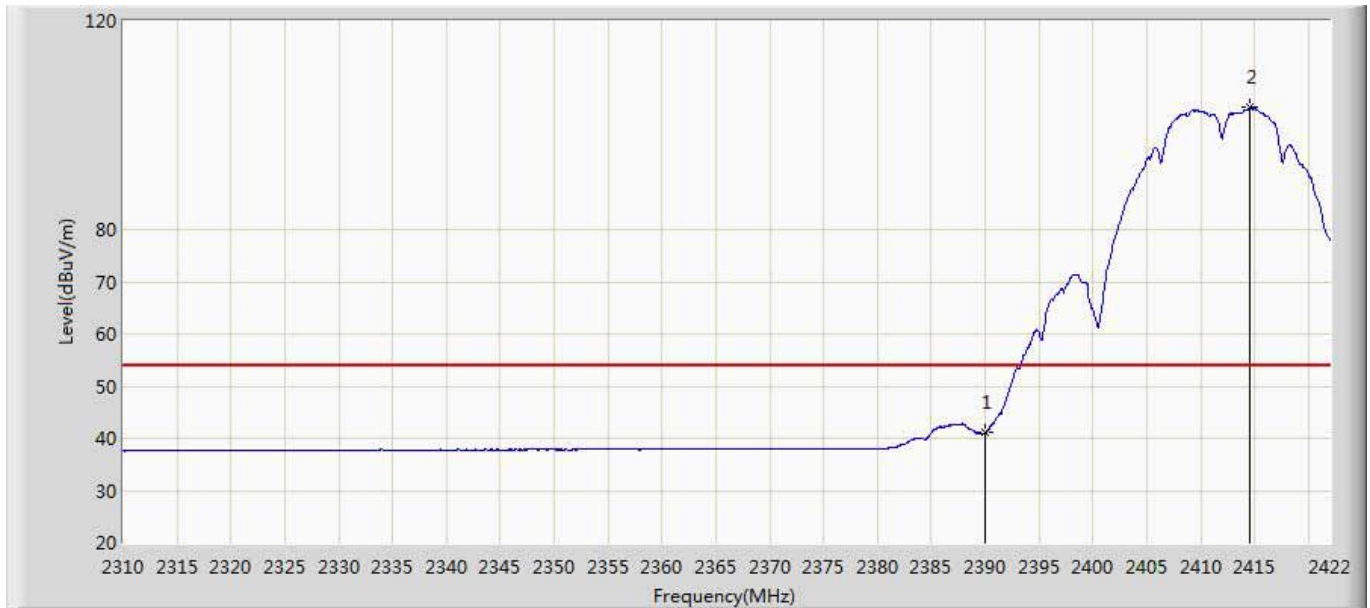
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	42.366	6.684	-11.634	54.000	35.682	AV
2	*	2414.608	104.015	68.263	N/A	N/A	35.752	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



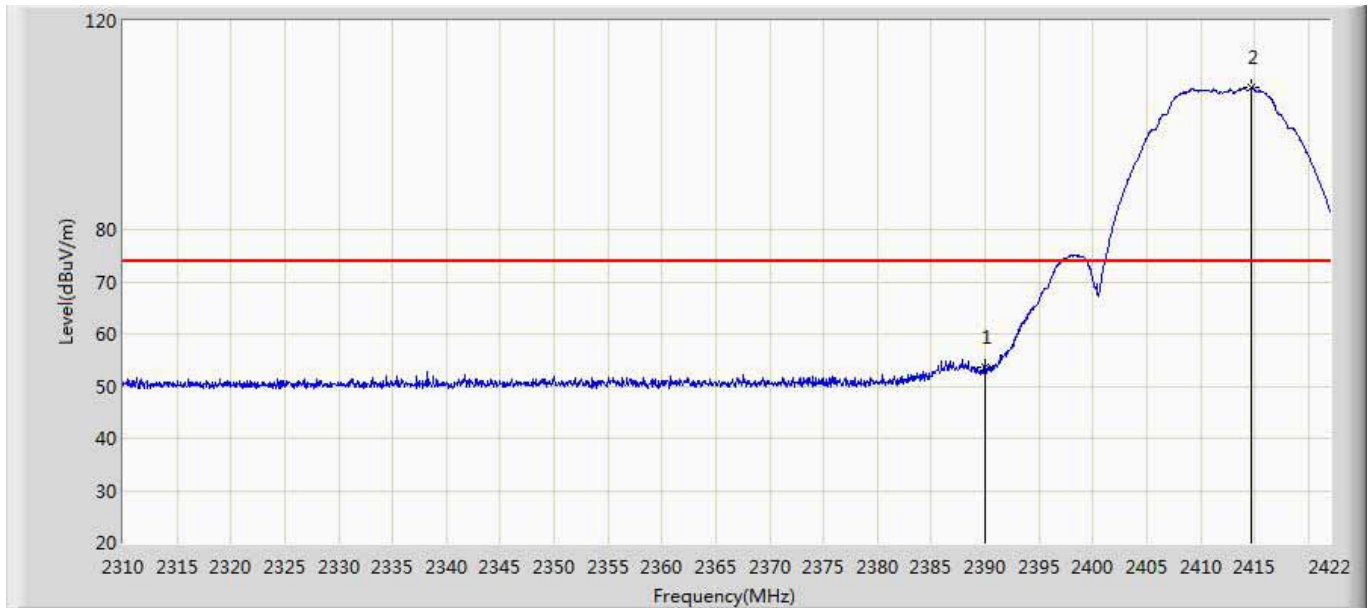
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.804	17.122	-21.196	74.000	35.682	PK
2	*	2409.344	106.879	71.146	N/A	N/A	35.733	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



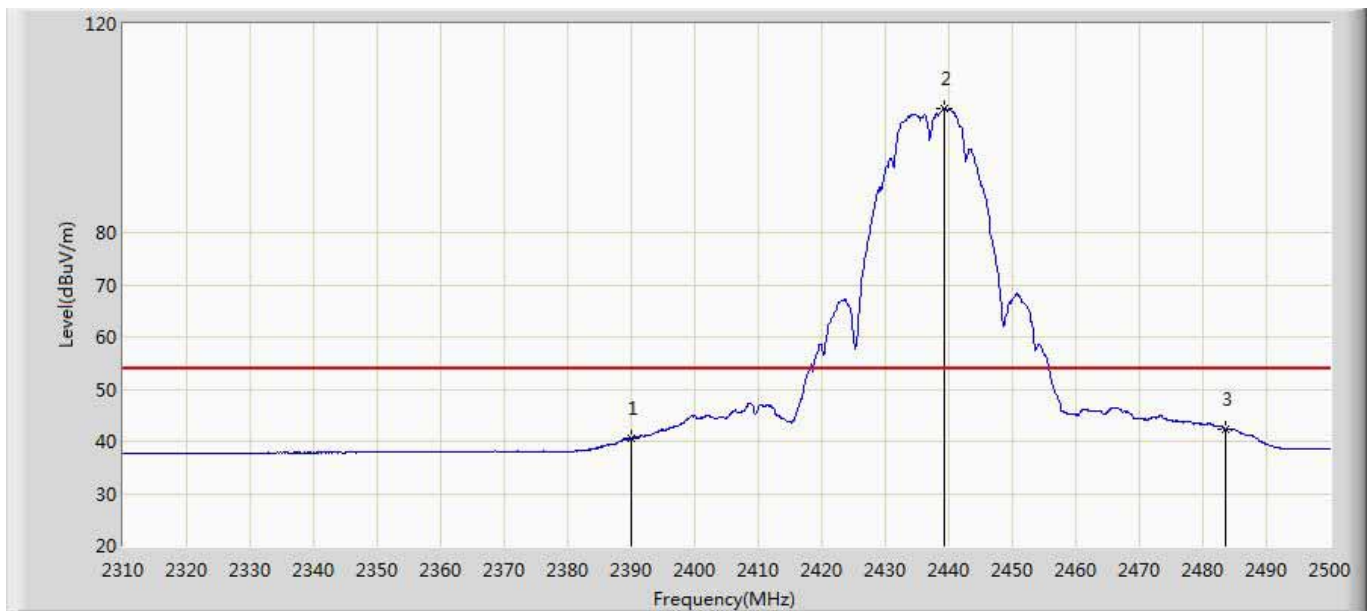
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.085	5.403	-12.915	54.000	35.682	AV
2	*	2414.608	103.409	67.657	N/A	N/A	35.752	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



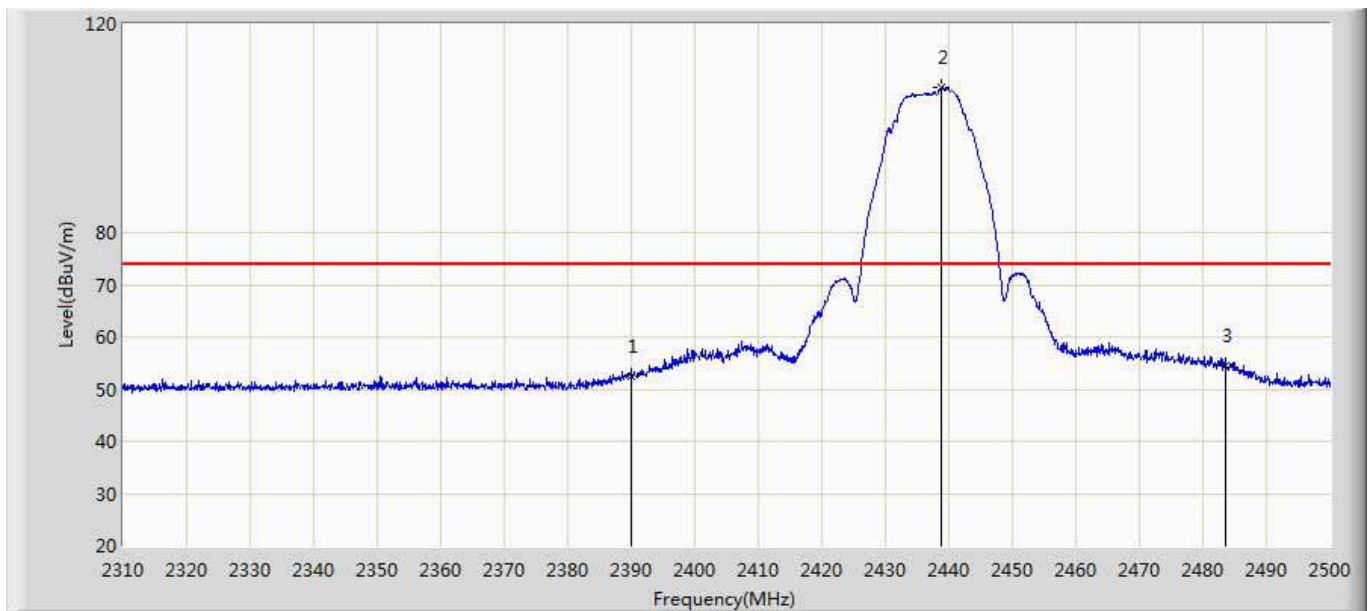
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.658	17.976	-20.342	74.000	35.682	PK
2	*	2414.664	107.135	71.382	N/A	N/A	35.753	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	40.672	4.990	-13.328	54.000	35.682	AV
2	*	2439.200	103.754	67.948	N/A	N/A	35.805	AV
3		2483.500	42.324	6.432	-11.676	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.488	16.806	-21.512	74.000	35.682	PK
2	*	2438.915	107.766	71.960	N/A	N/A	35.806	PK
3		2483.500	54.617	18.725	-19.383	74.000	35.891	PK

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 16:50

Limit: FCC_Part15.209_RE(3m)

Margin: 0

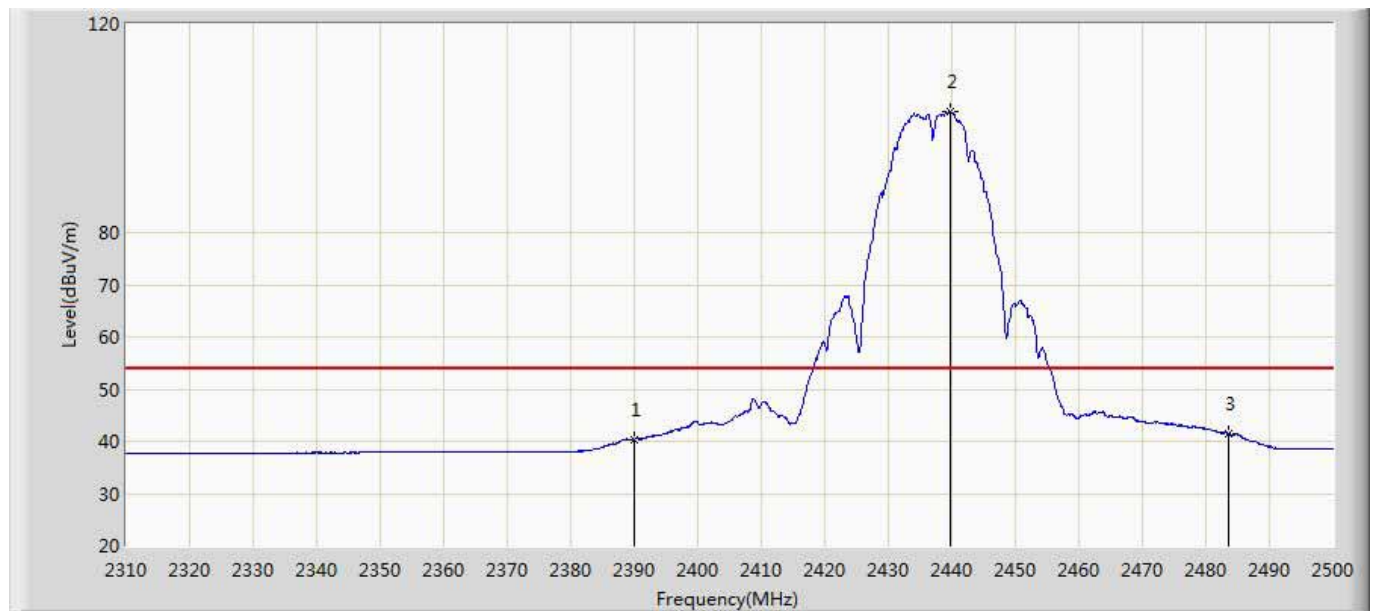
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: Virtual Reality System

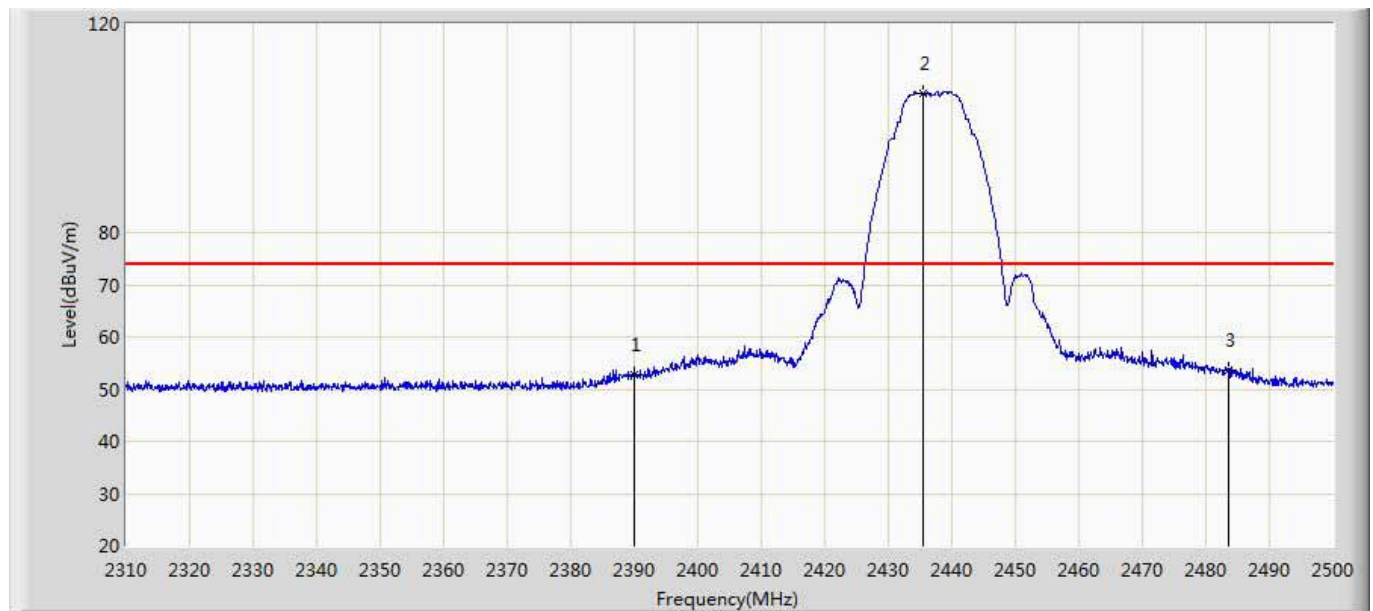
Power: AC 120V/60Hz

Note: Mode 1:Transmit at 2437MHz by 802.11b



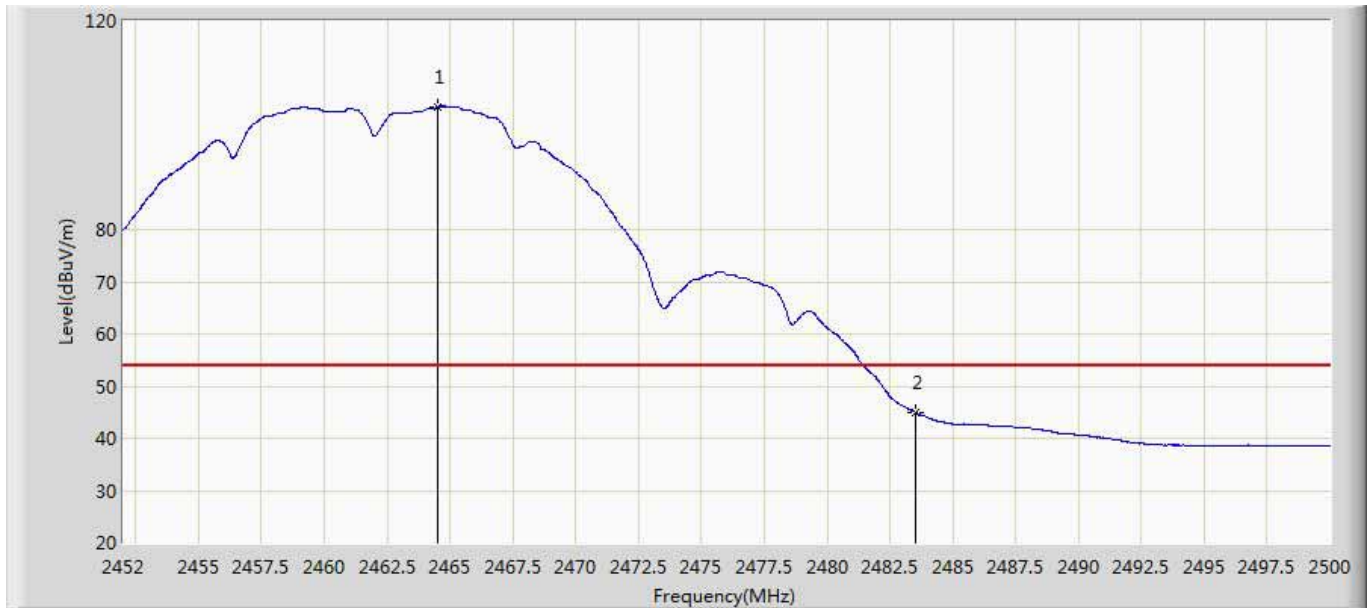
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	40.383	4.701	-13.617	54.000	35.682	AV
2	*	2439.865	103.147	67.342	N/A	N/A	35.805	AV
3		2483.500	41.408	5.516	-12.592	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



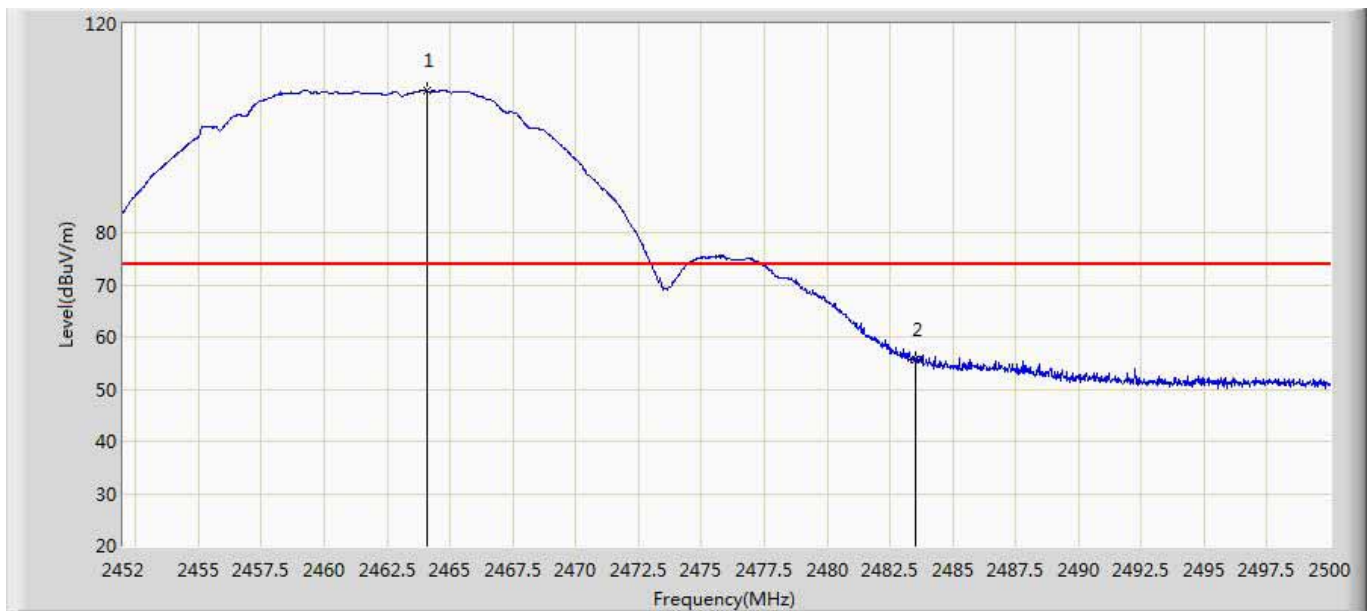
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.753	17.071	-21.247	74.000	35.682	PK
2	*	2435.495	106.804	70.998	N/A	N/A	35.807	PK
3		2483.500	53.511	17.619	-20.489	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



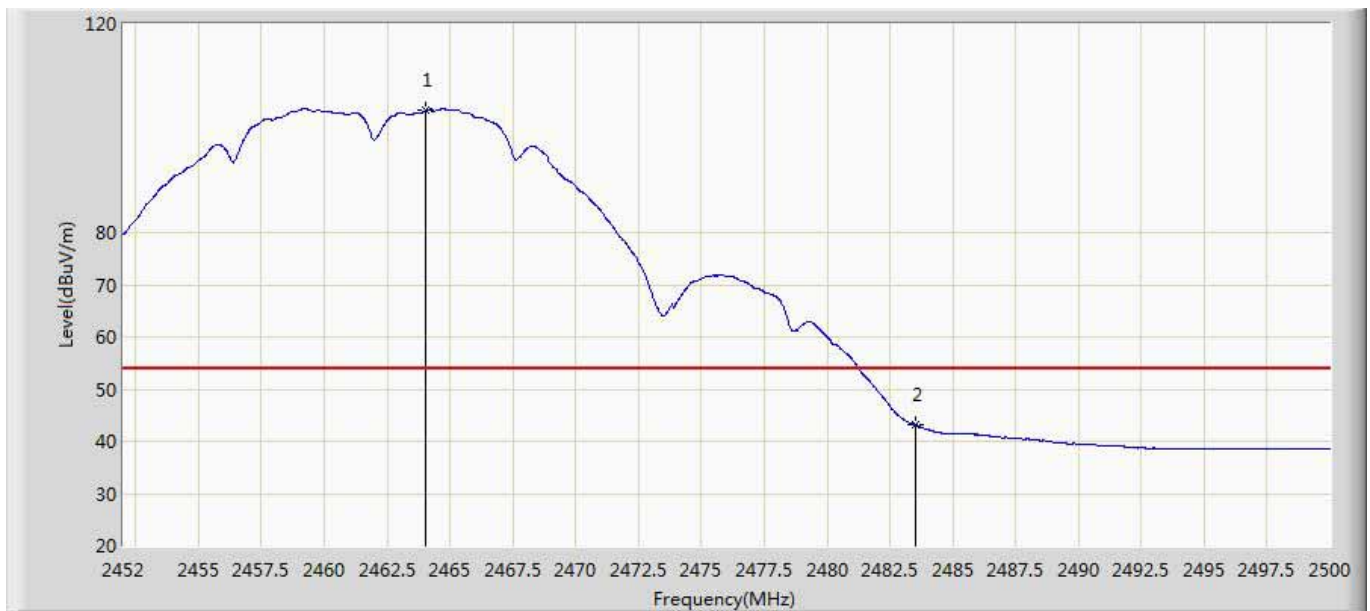
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.504	103.416	67.541	N/A	N/A	35.875	AV
2		2483.500	45.071	9.179	-8.929	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



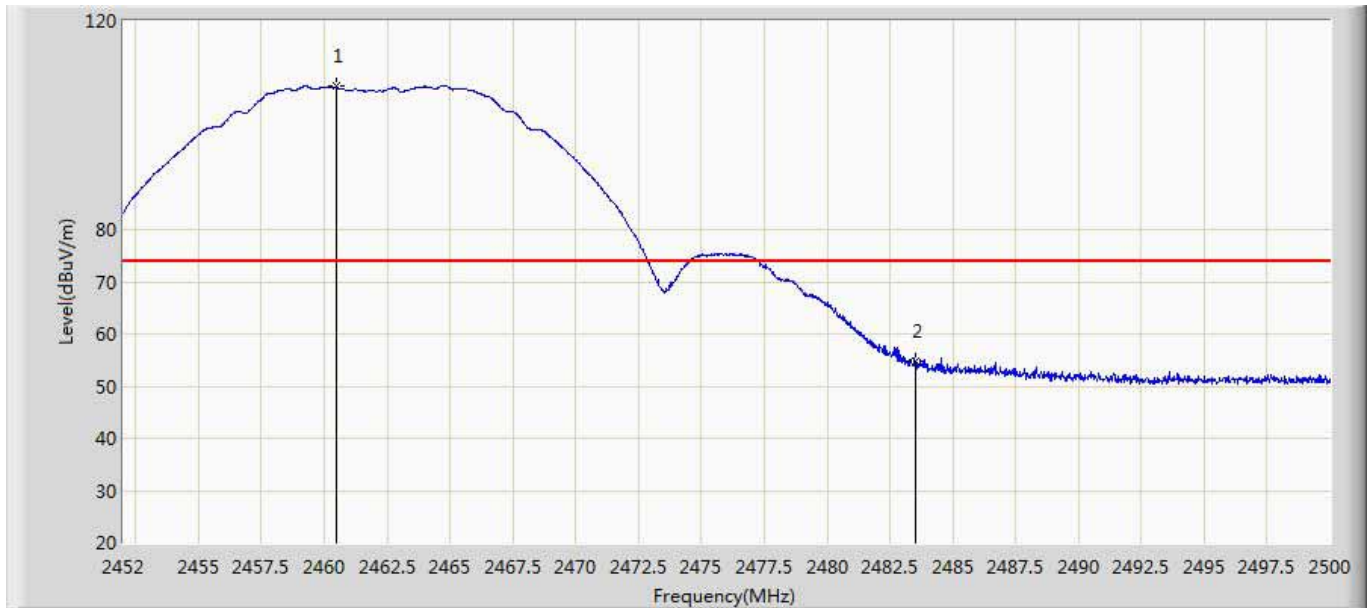
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.072	107.197	71.321	N/A	N/A	35.876	PK
2		2483.500	55.722	19.830	-18.278	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



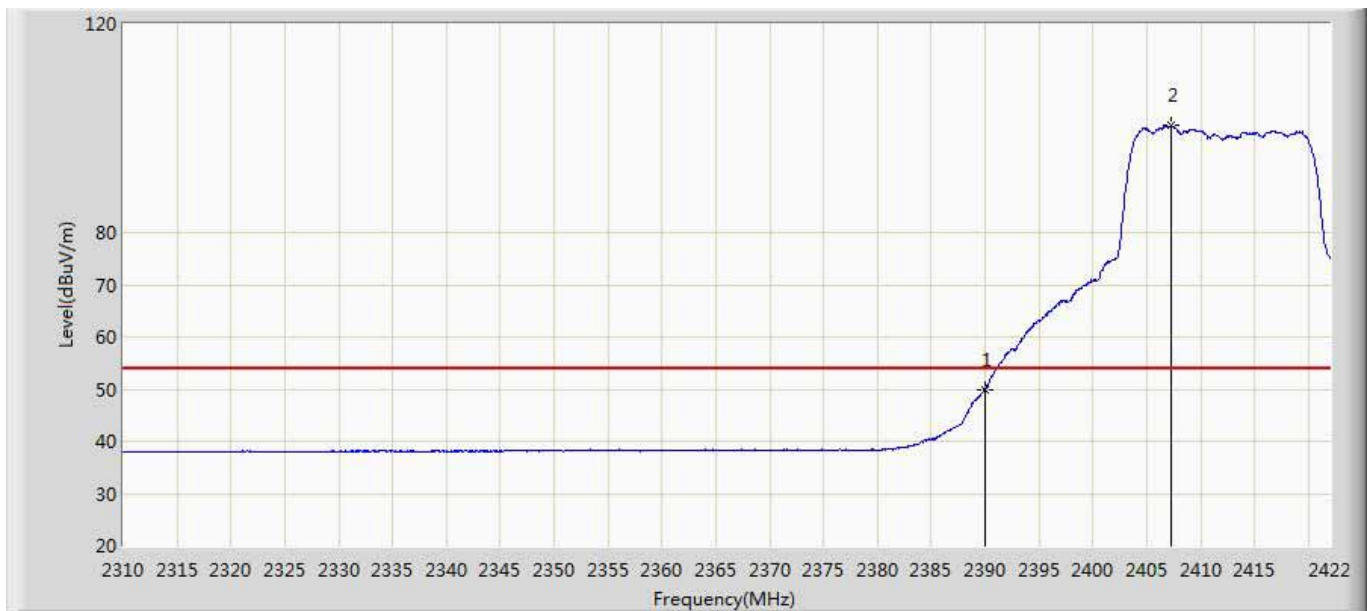
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.048	103.389	67.513	N/A	N/A	35.876	AV
2		2483.500	43.173	7.281	-10.827	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 16:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



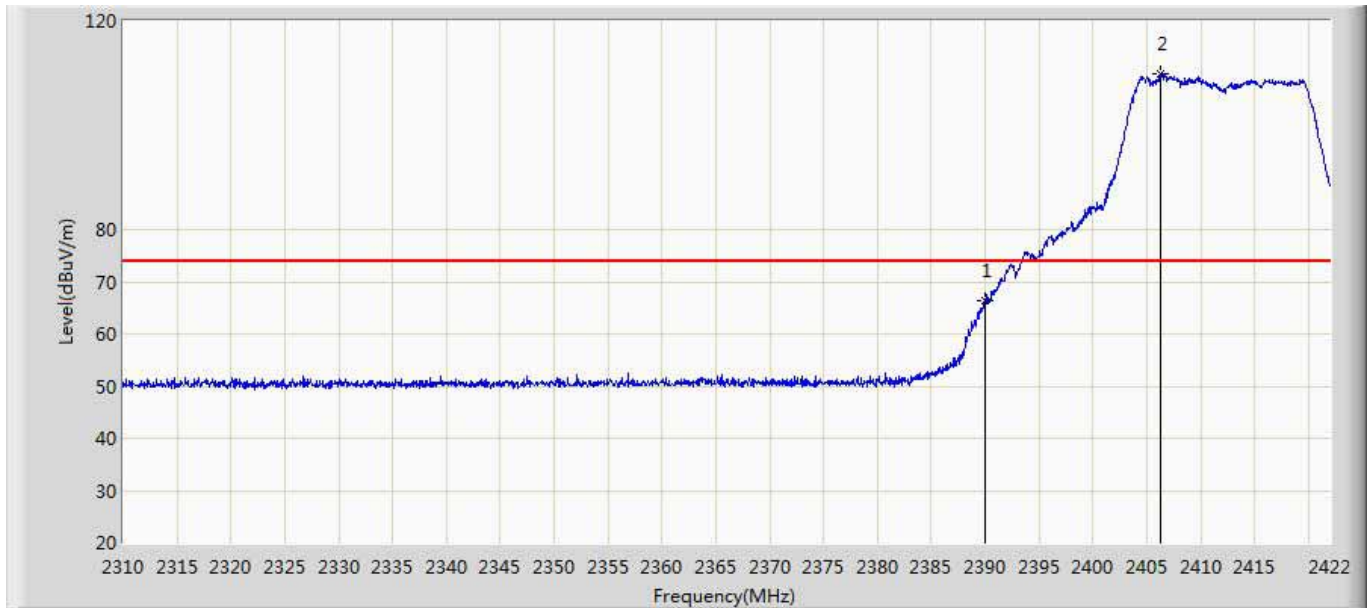
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.472	107.397	71.525	N/A	N/A	35.871	PK
2		2483.500	54.714	18.822	-19.286	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



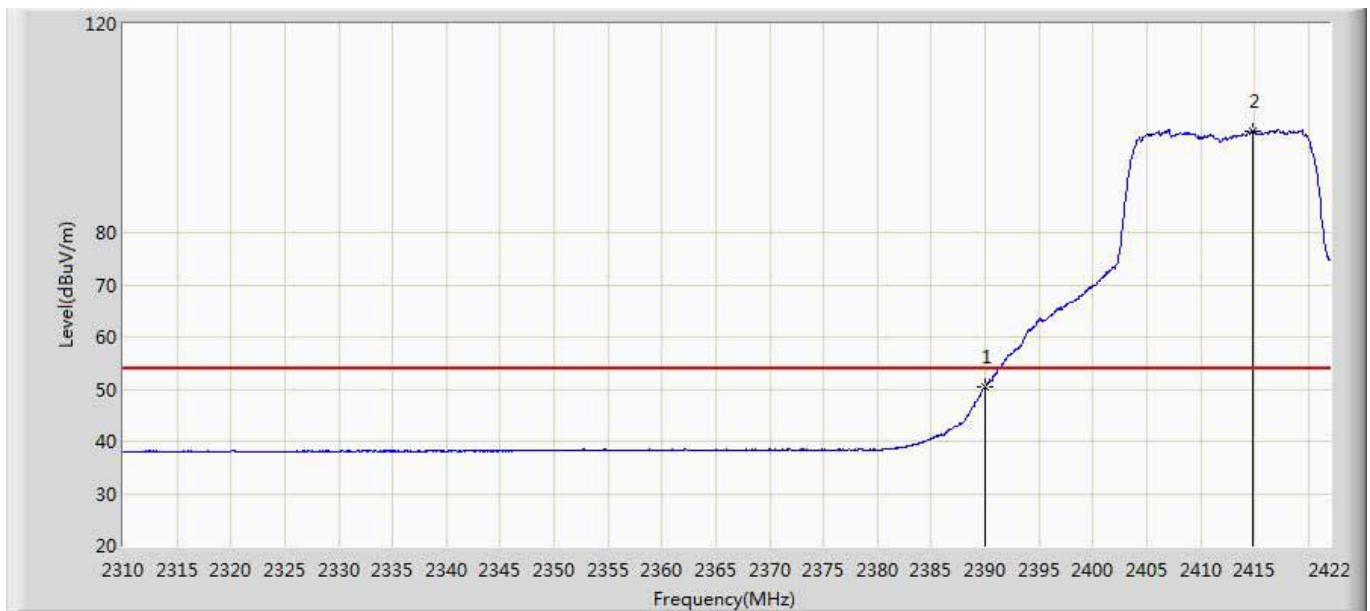
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.988	14.306	-4.012	54.000	35.682	AV
2	*	2407.216	100.476	64.749	N/A	N/A	35.727	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



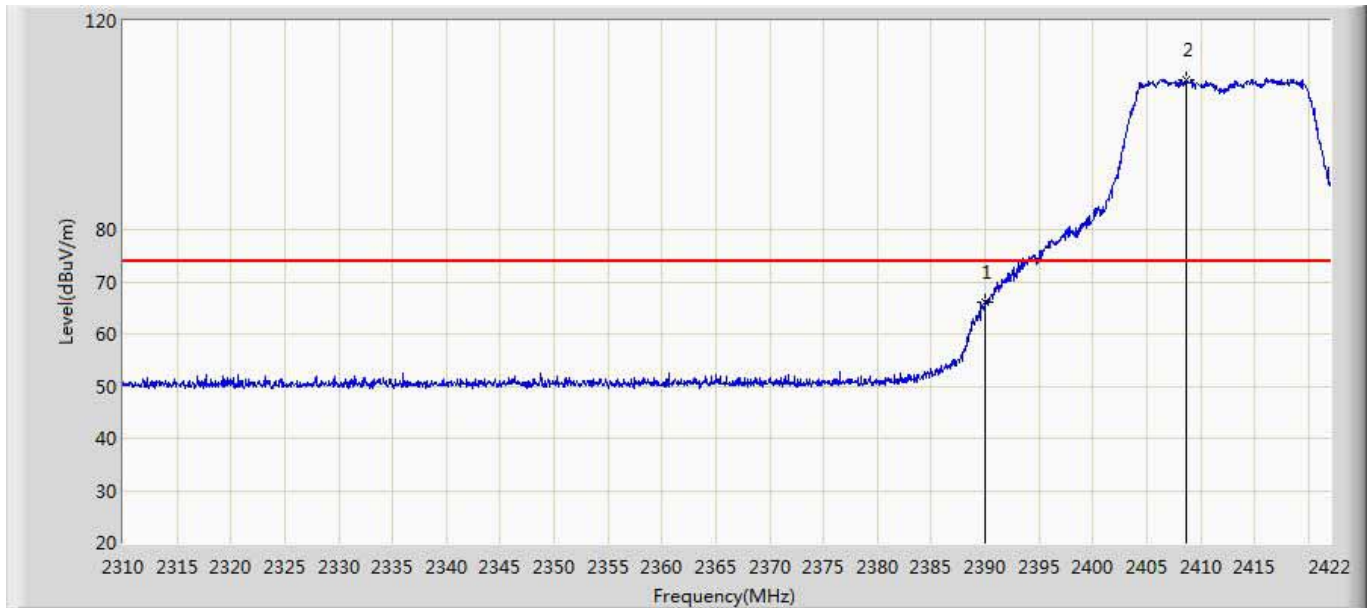
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	66.515	30.833	-7.485	74.000	35.682	PK
2	*	2406.320	109.750	74.026	N/A	N/A	35.724	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



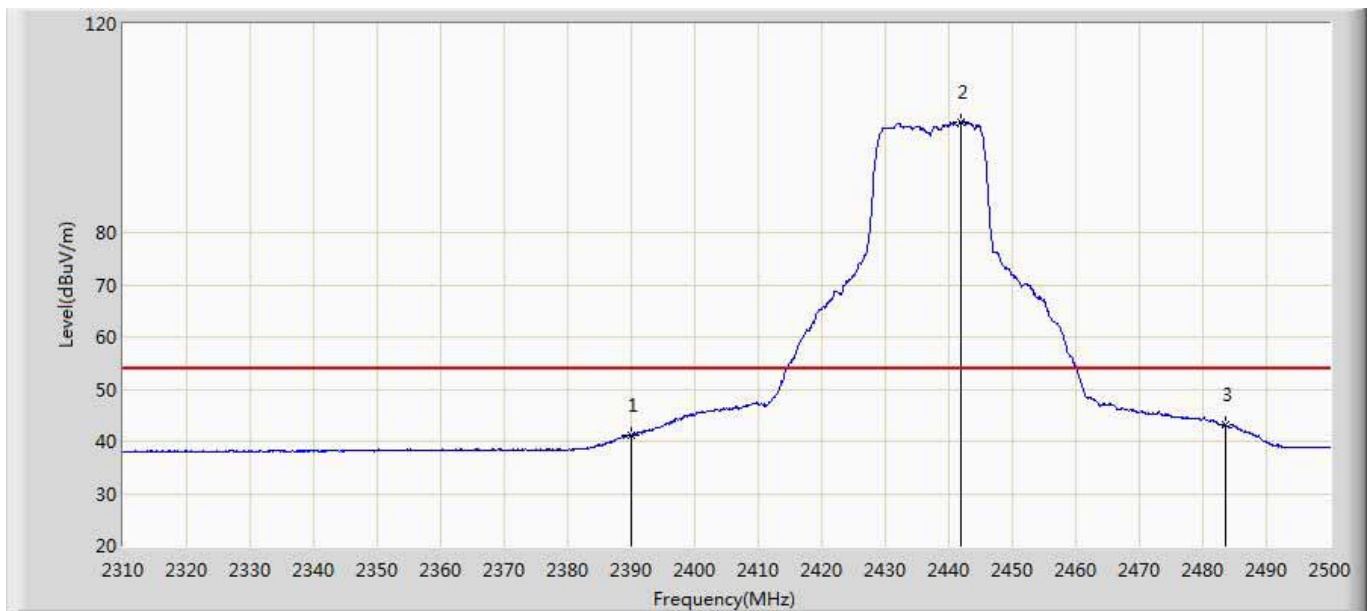
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.369	14.687	-3.631	54.000	35.682	AV
2	*	2414.776	99.420	63.667	N/A	N/A	35.753	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



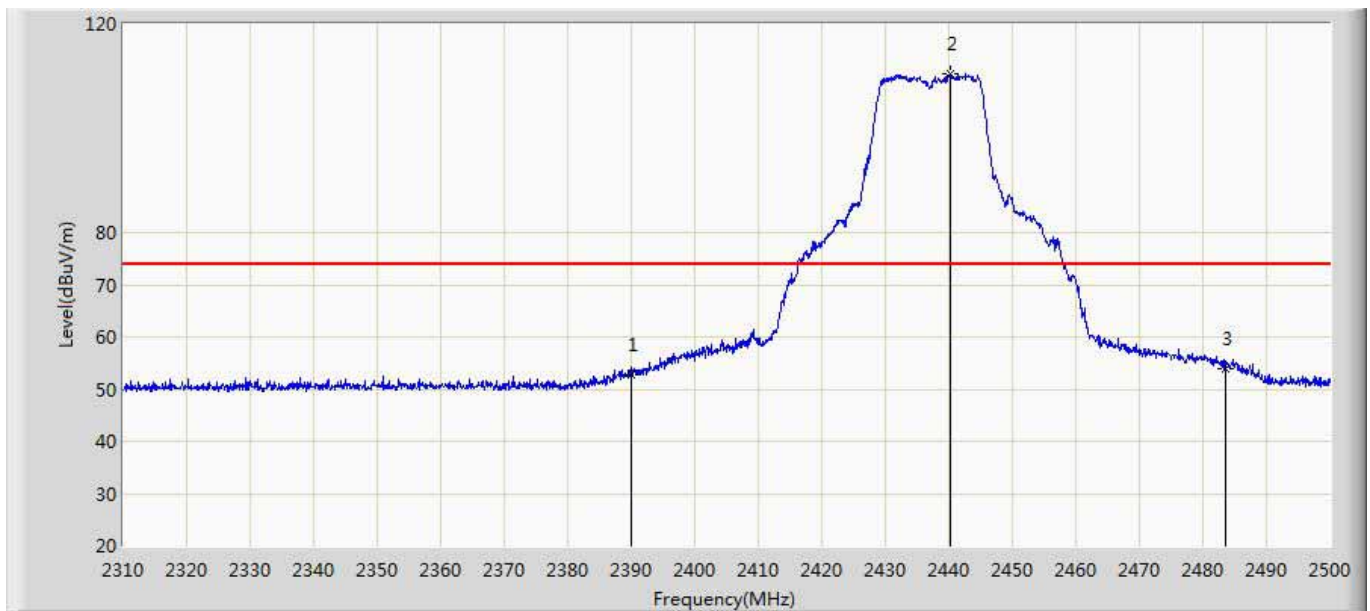
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	66.045	30.363	-7.955	74.000	35.682	PK
2	*	2408.616	108.818	73.087	N/A	N/A	35.731	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



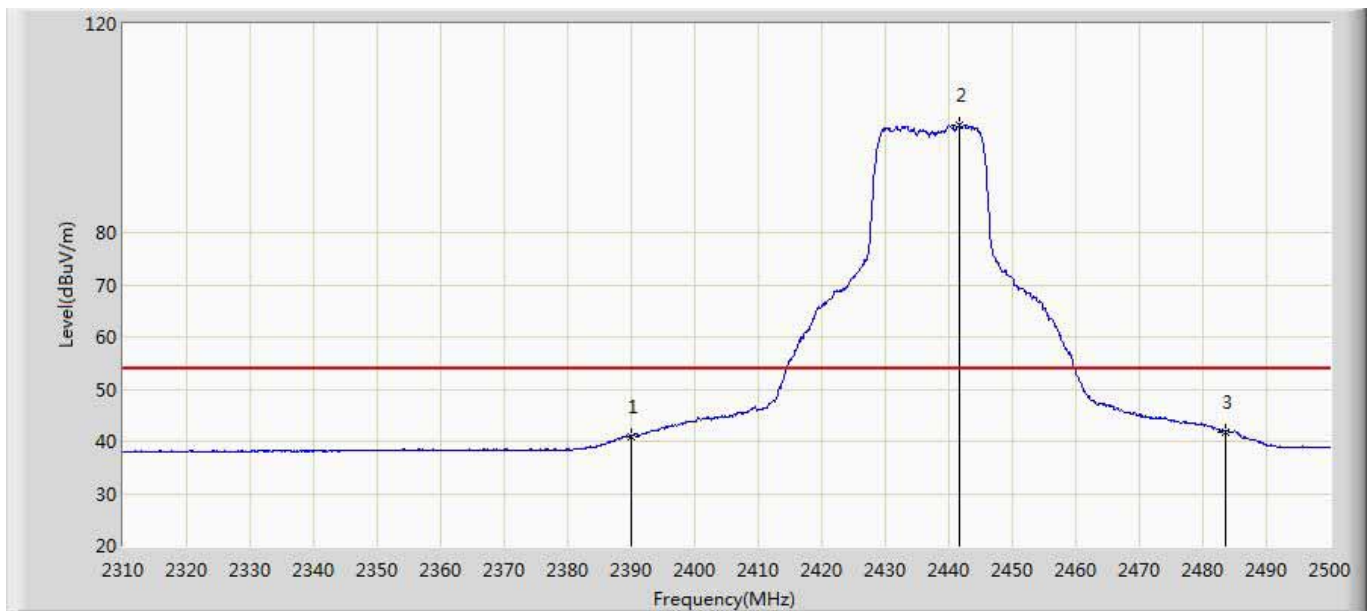
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.156	5.474	-12.844	54.000	35.682	AV
2	*	2441.860	101.227	65.422	N/A	N/A	35.804	AV
3		2483.500	43.256	7.364	-10.744	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.834	17.152	-21.166	74.000	35.682	PK
2	*	2440.150	110.443	74.638	N/A	N/A	35.805	PK
3		2483.500	53.847	17.955	-20.153	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	40.970	5.288	-13.030	54.000	35.682	AV
2	*	2441.670	100.671	64.866	N/A	N/A	35.805	AV
3		2483.500	41.881	5.989	-12.119	54.000	35.891	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 17:20

Limit: FCC_Part15.209_RE(3m)

Margin: 0

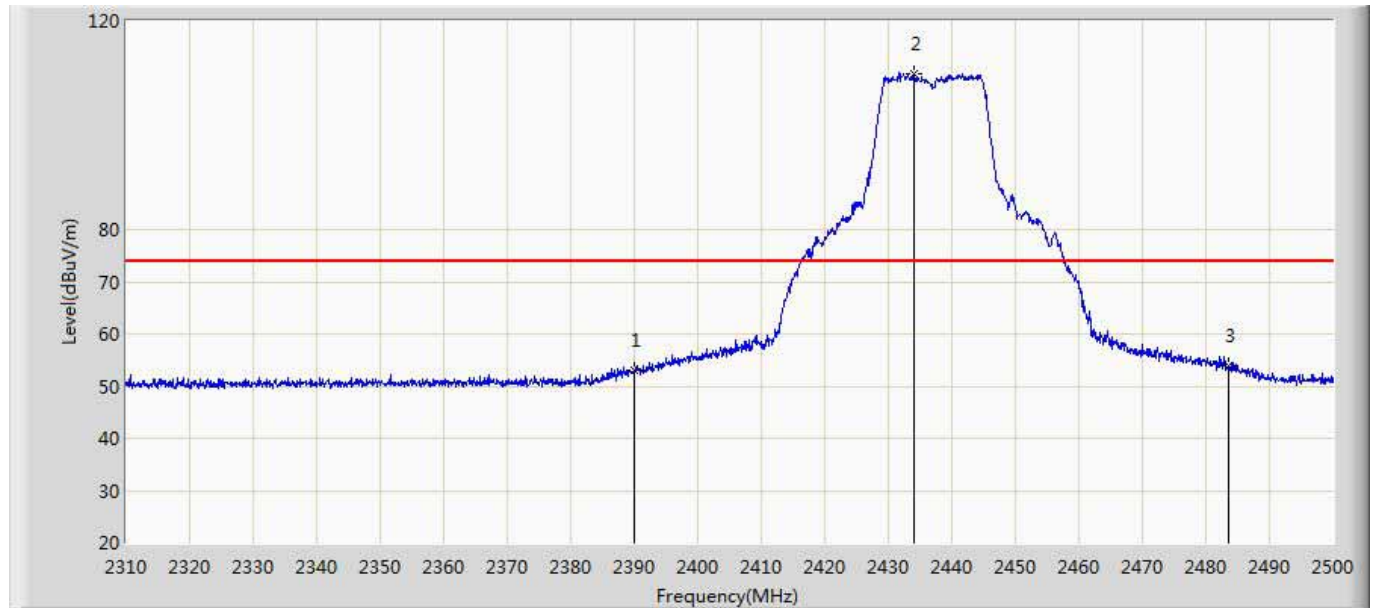
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: Virtual Reality System

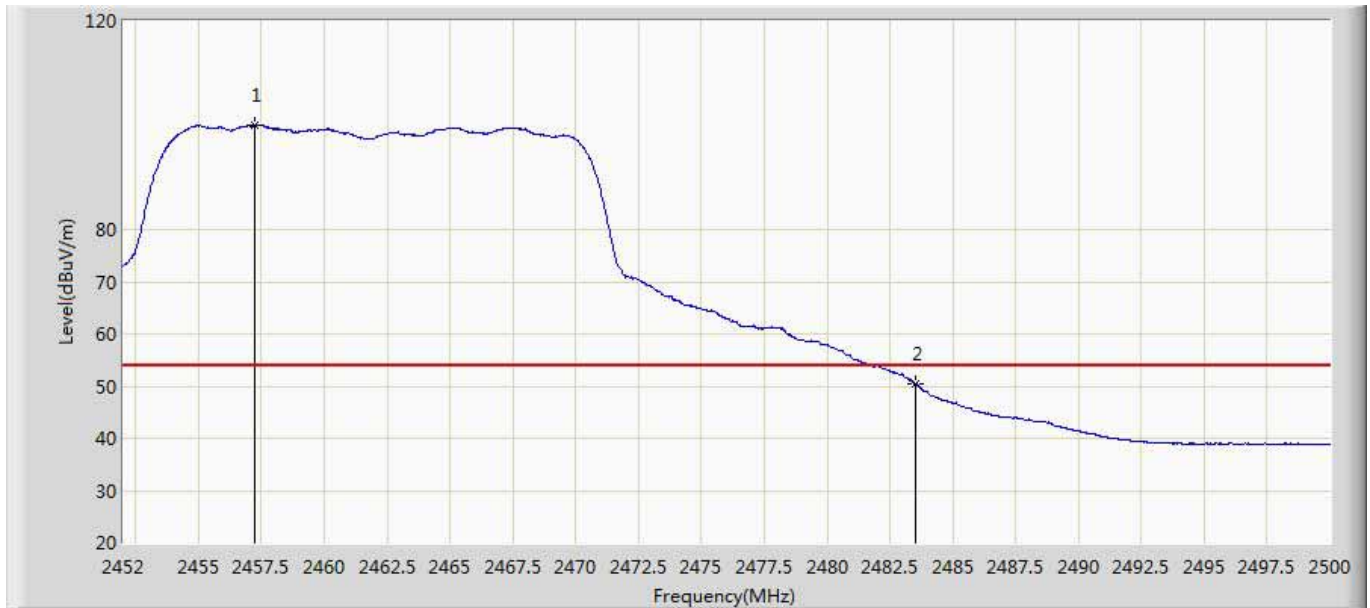
Power: AC 120V/60Hz

Note: Mode 2:Transmit at 2437MHz by 802.11g



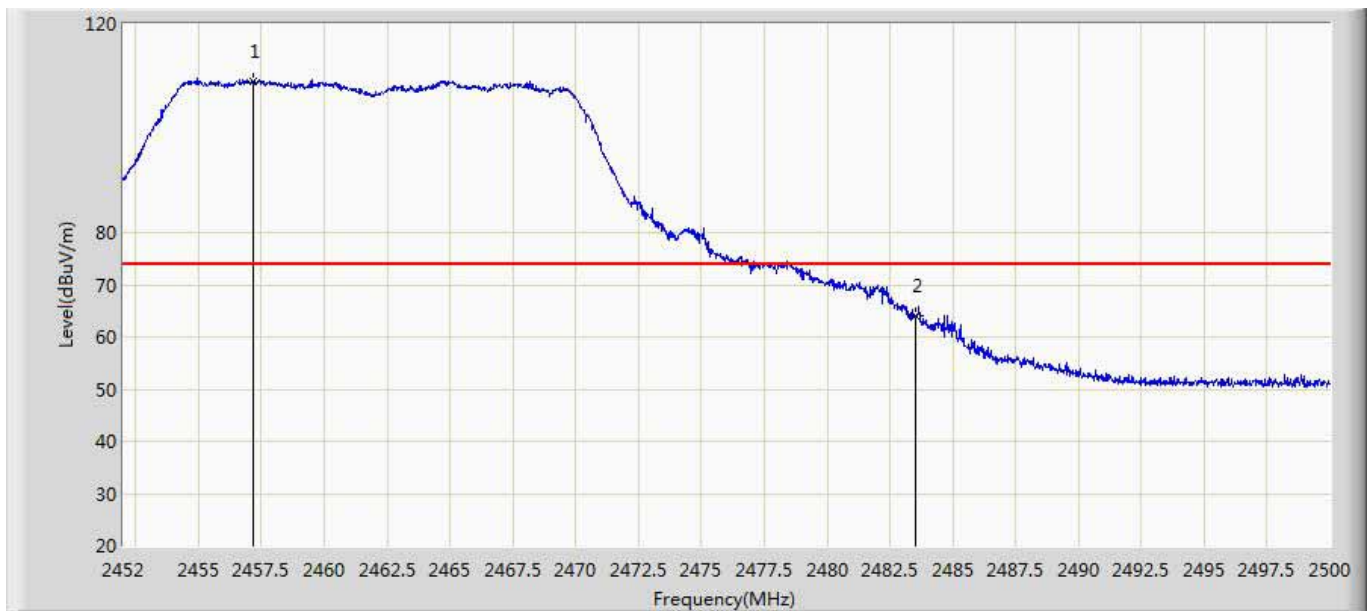
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.926	17.244	-21.074	74.000	35.682	PK
2	*	2433.975	109.794	73.987	N/A	N/A	35.807	PK
3		2483.500	53.849	17.957	-20.151	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.232	100.096	64.239	N/A	N/A	35.857	AV
2		2483.500	50.420	14.528	-3.580	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.160	108.978	73.121	N/A	N/A	35.857	PK
2		2483.500	63.952	28.060	-10.048	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



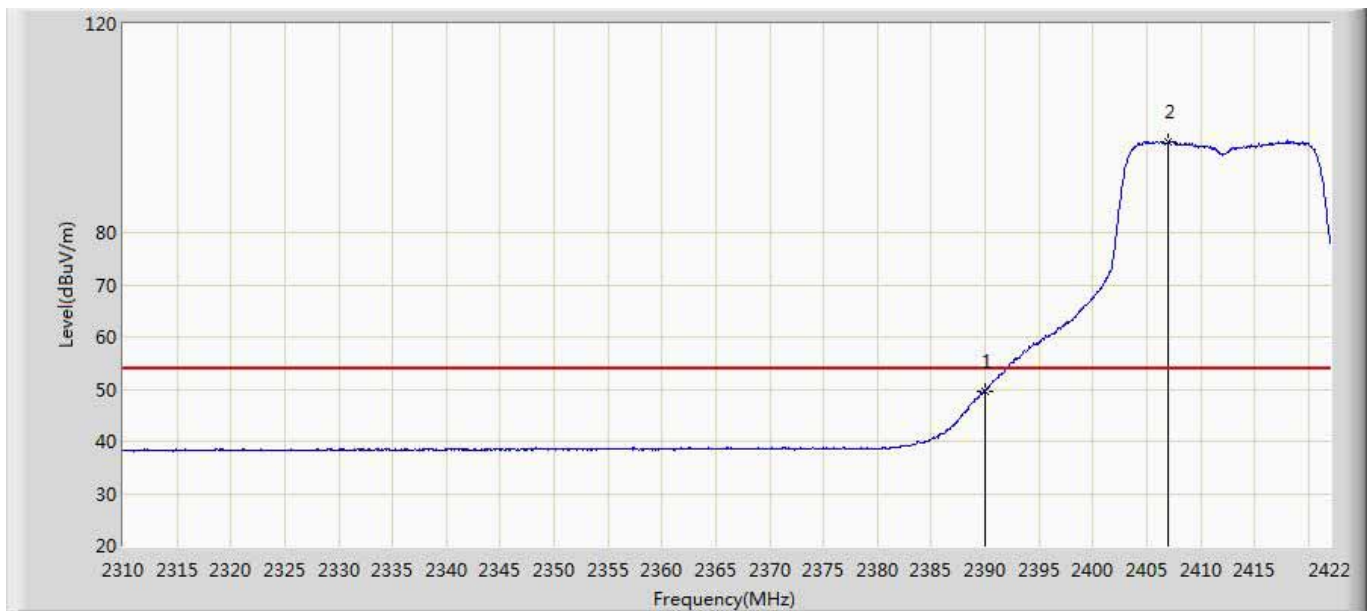
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.544	99.400	63.541	N/A	N/A	35.859	AV
2		2483.500	48.775	12.883	-5.225	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



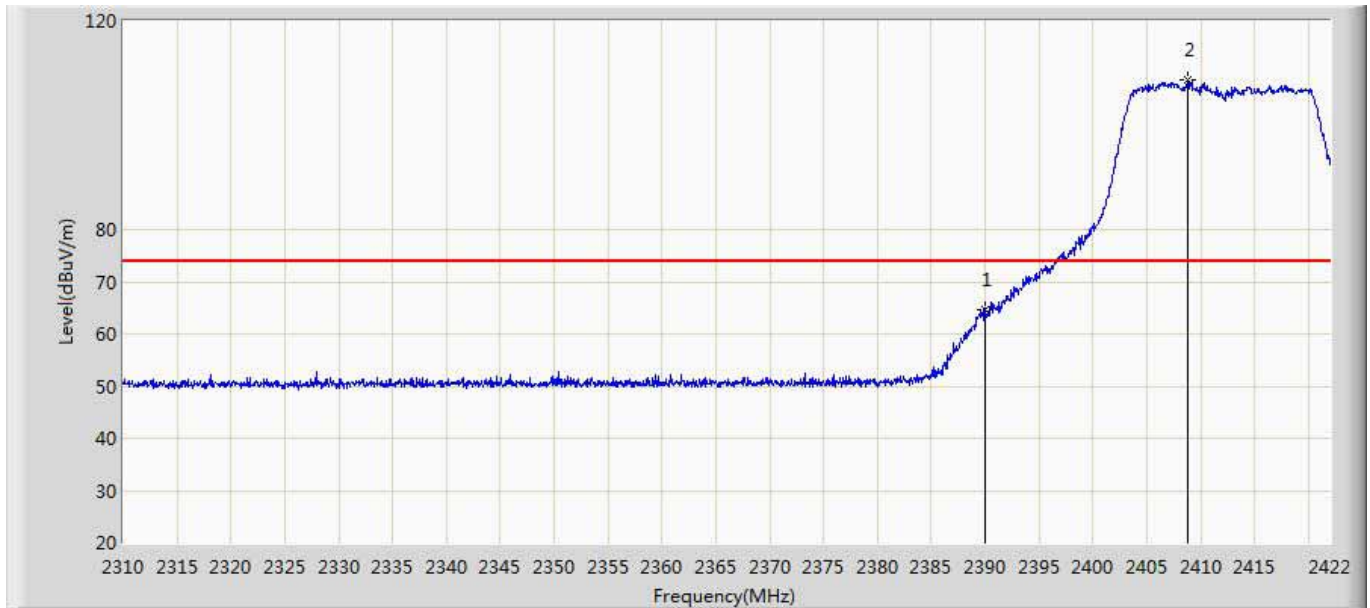
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.536	109.149	73.295	N/A	N/A	35.855	PK
2		2483.500	61.970	26.078	-12.030	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



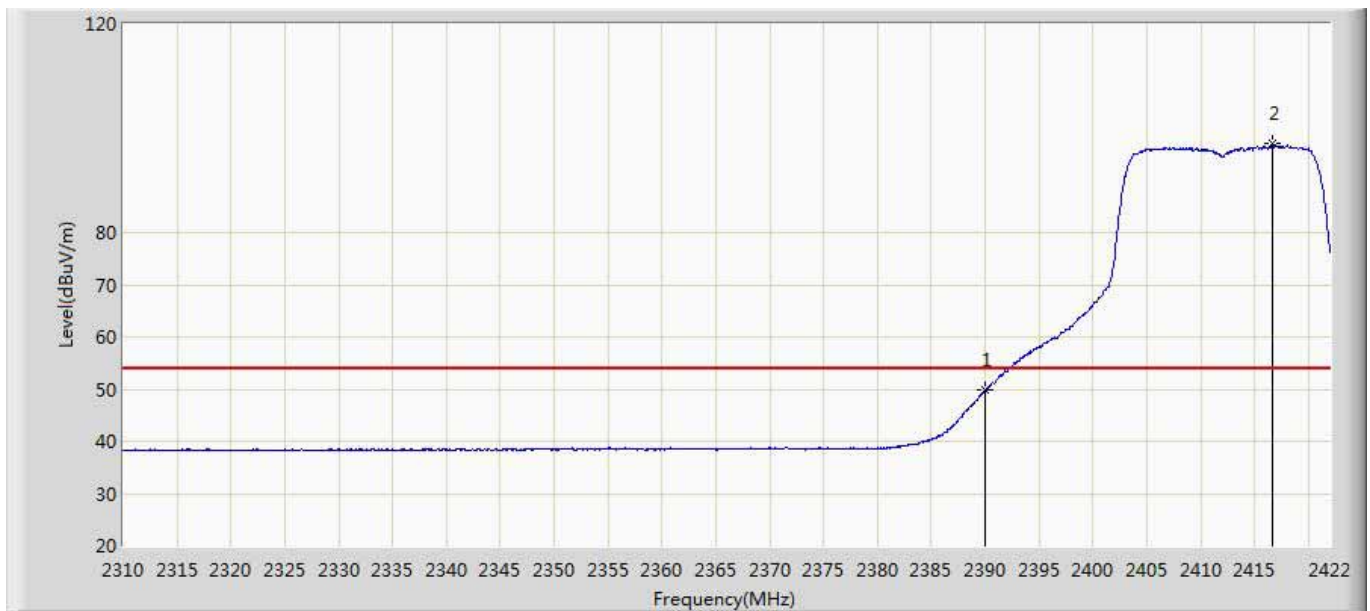
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.636	13.954	-4.364	54.000	35.682	AV
2	*	2406.992	97.266	61.540	N/A	N/A	35.726	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



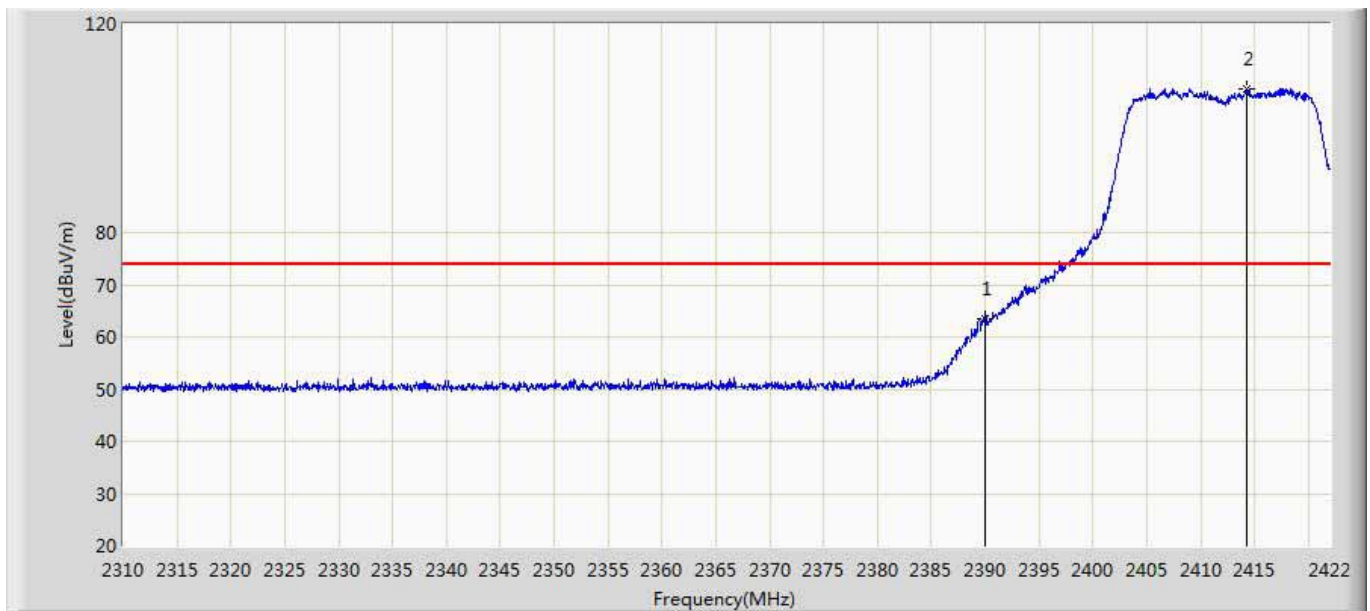
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	64.598	28.916	-9.402	74.000	35.682	PK
2	*	2408.784	108.582	72.851	N/A	N/A	35.731	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.820	14.138	-4.180	54.000	35.682	AV
2	*	2416.736	96.999	61.238	N/A	N/A	35.761	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.435	27.753	-10.565	74.000	35.682	PK
2	*	2414.216	107.636	71.885	N/A	N/A	35.751	PK

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 17:45

Limit: FCC_Part15.209_RE(3m)

Margin: 0

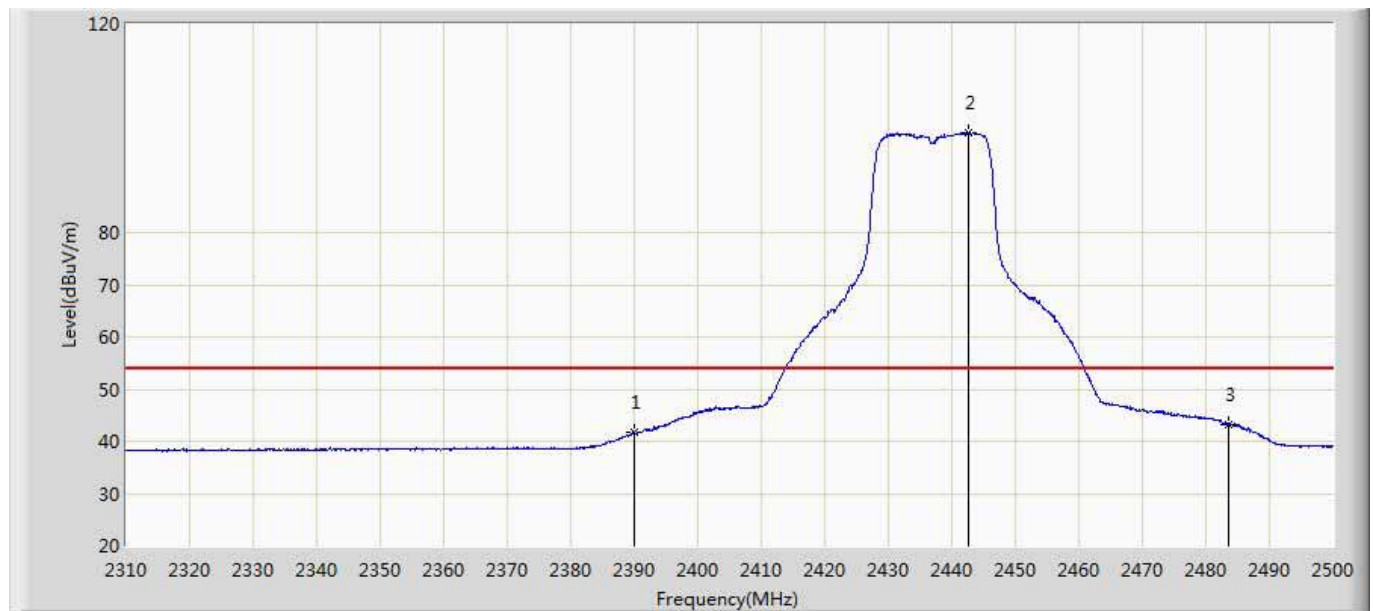
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Horizontal

EUT: Virtual Reality System

Power: AC 120V/60Hz

Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.789	6.107	-12.211	54.000	35.682	AV
2	*	2442.525	99.255	63.450	N/A	N/A	35.805	AV
3		2483.500	43.205	7.313	-10.795	54.000	35.891	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 17:47

Limit: FCC_Part15.209_RE(3m)

Margin: 0

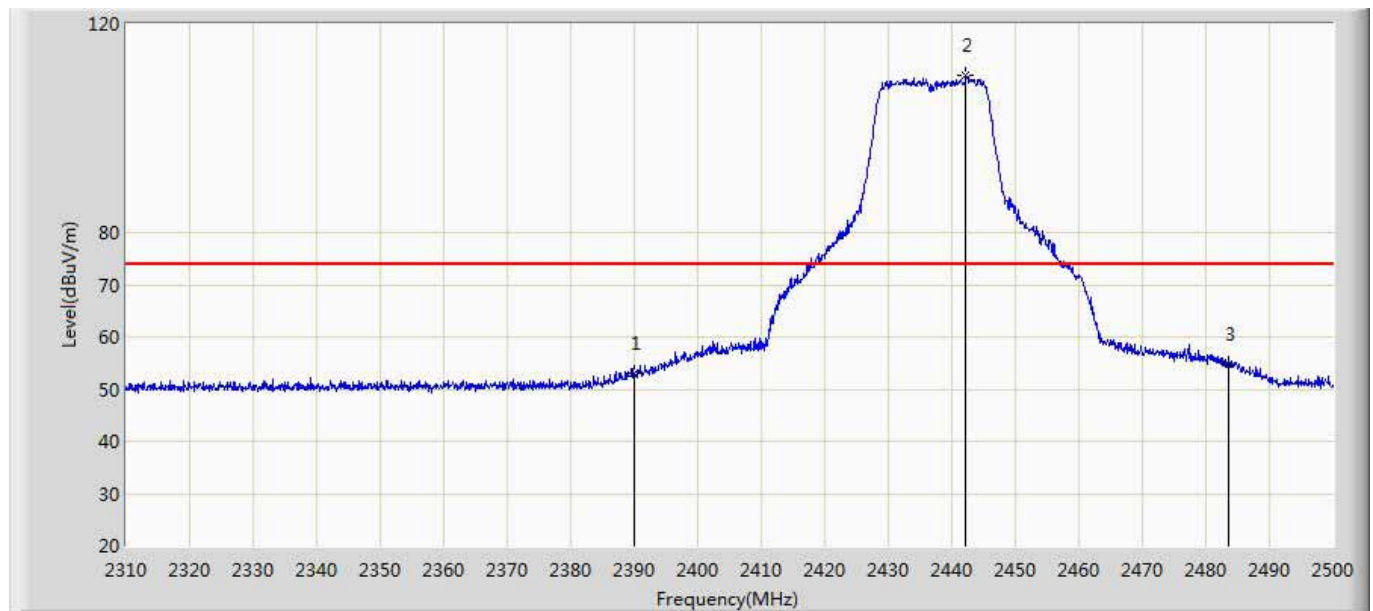
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Horizontal

EUT: Virtual Reality System

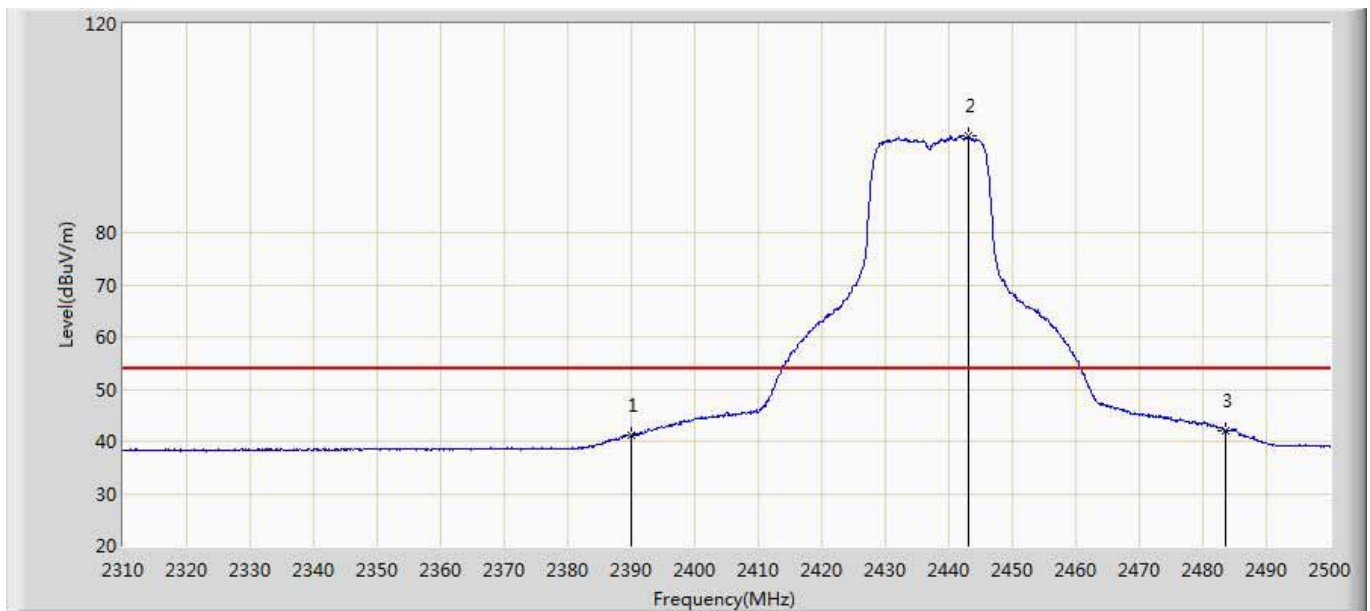
Power: AC 120V/60Hz

Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)



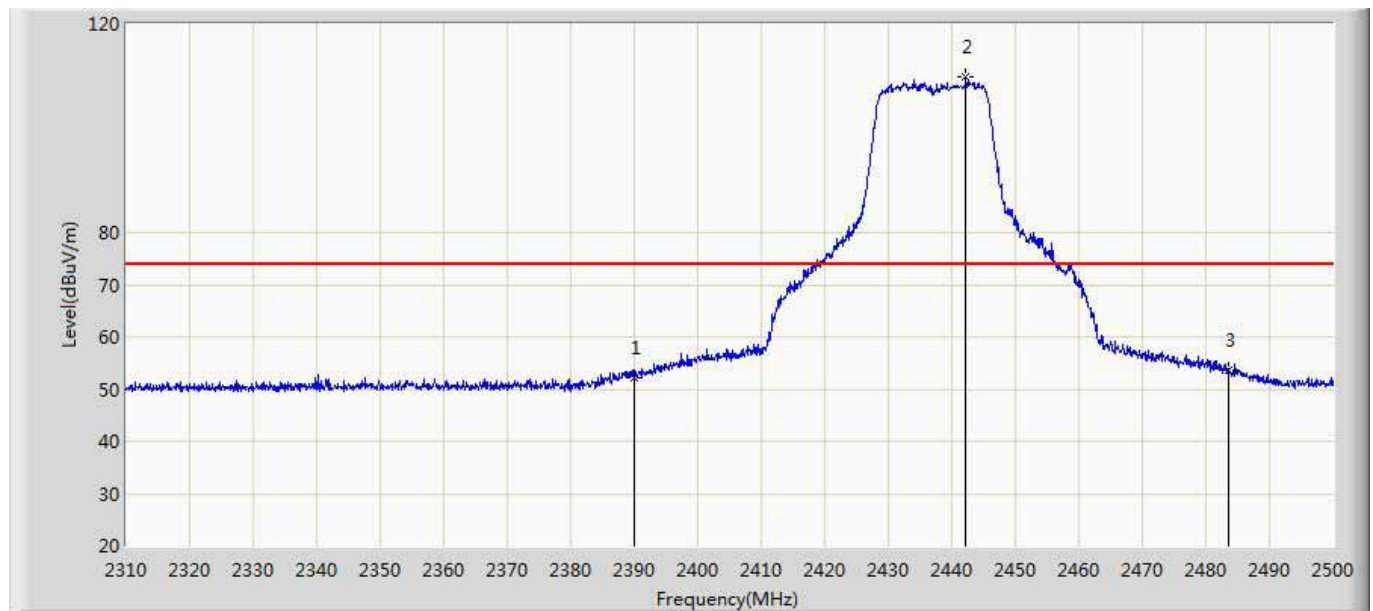
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.122	17.440	-20.878	74.000	35.682	PK
2	*	2442.145	110.090	74.285	N/A	N/A	35.805	PK
3		2483.500	54.903	19.011	-19.097	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



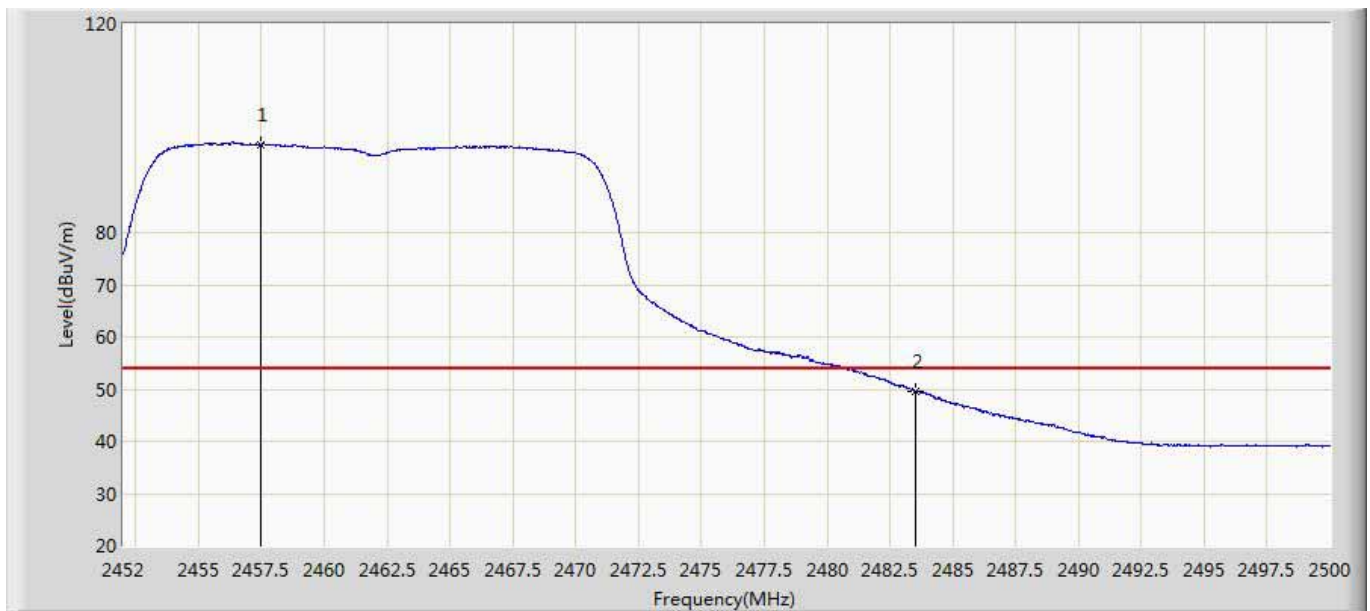
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.232	5.550	-12.768	54.000	35.682	AV
2	*	2443.095	98.493	62.689	N/A	N/A	35.805	AV
3		2483.500	41.945	6.053	-12.055	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



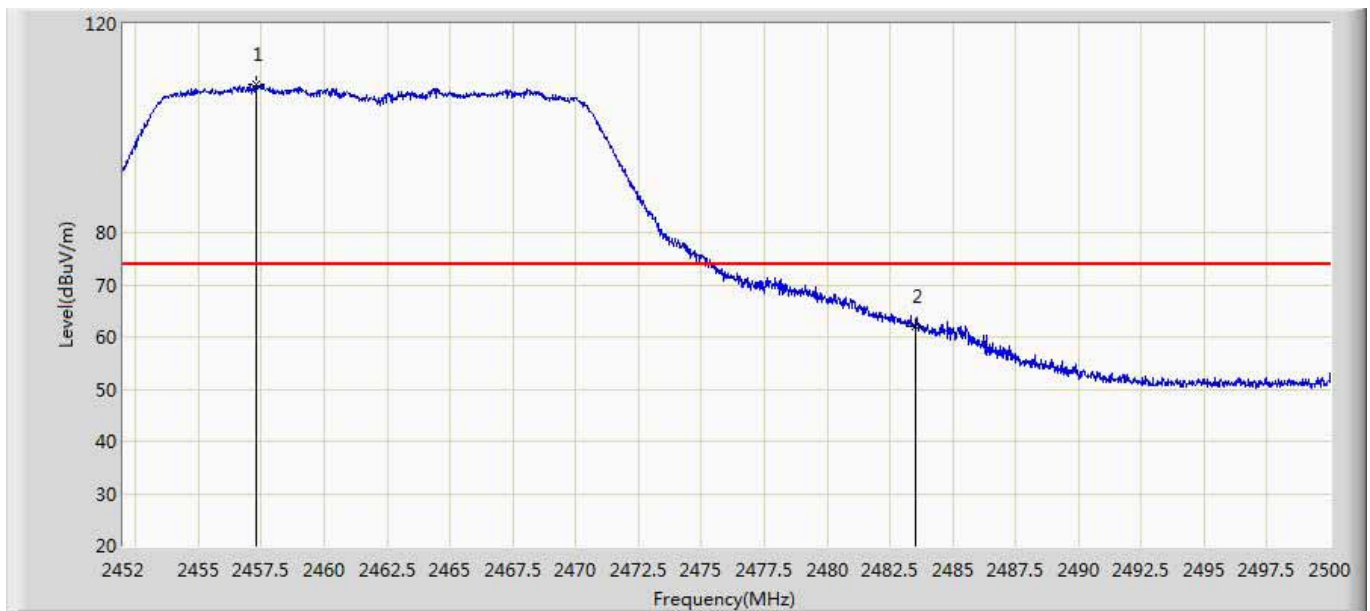
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.106	16.424	-21.894	74.000	35.682	PK
2	*	2442.240	109.895	74.090	N/A	N/A	35.805	PK
3		2483.500	53.600	17.708	-20.400	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



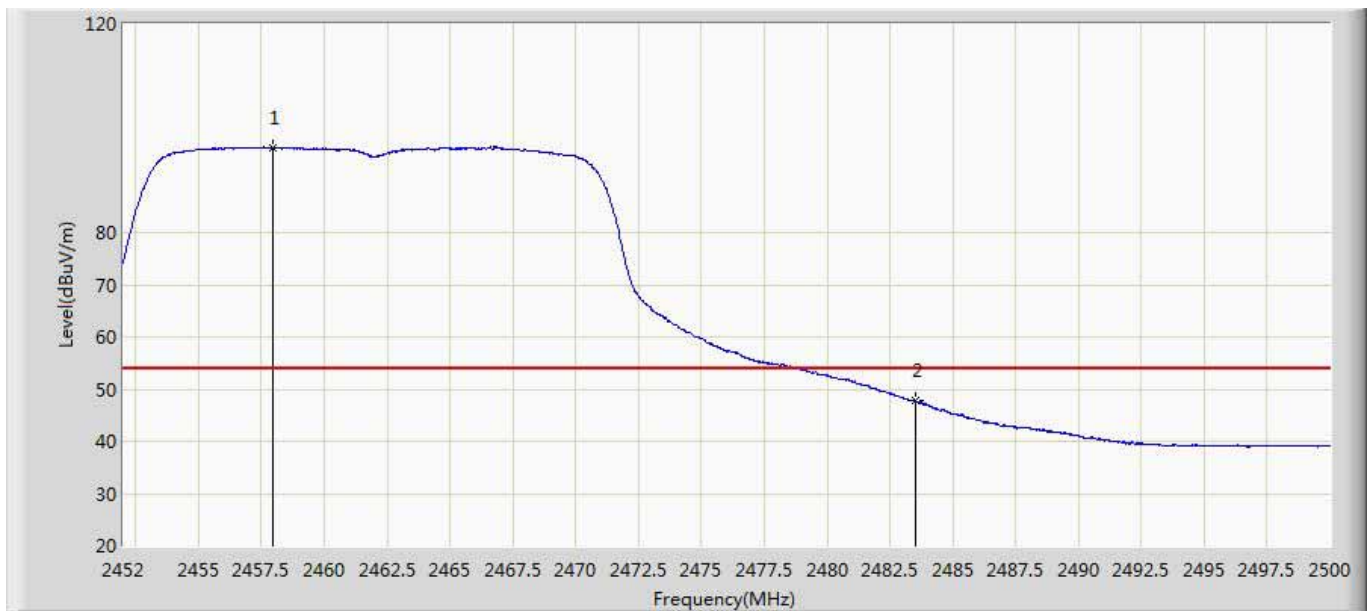
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.472	96.876	61.018	N/A	N/A	35.859	AV
2		2483.500	49.645	13.753	-4.355	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 17:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



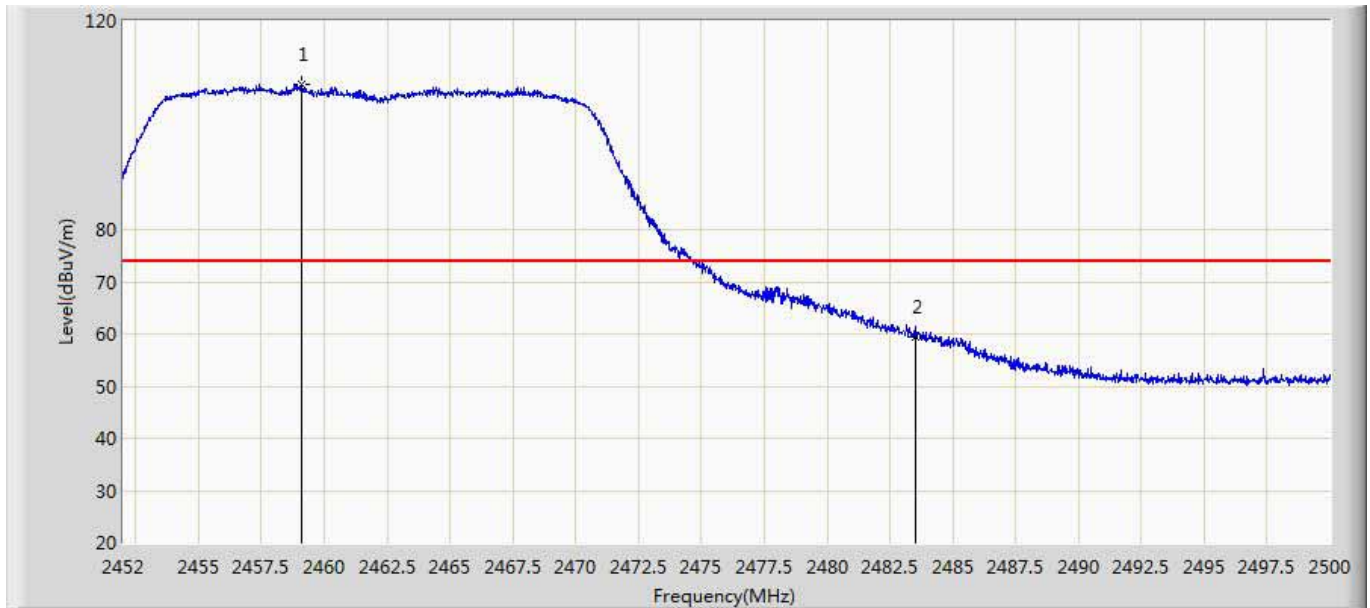
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.280	108.263	72.405	N/A	N/A	35.857	PK
2		2483.500	61.996	26.104	-12.004	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



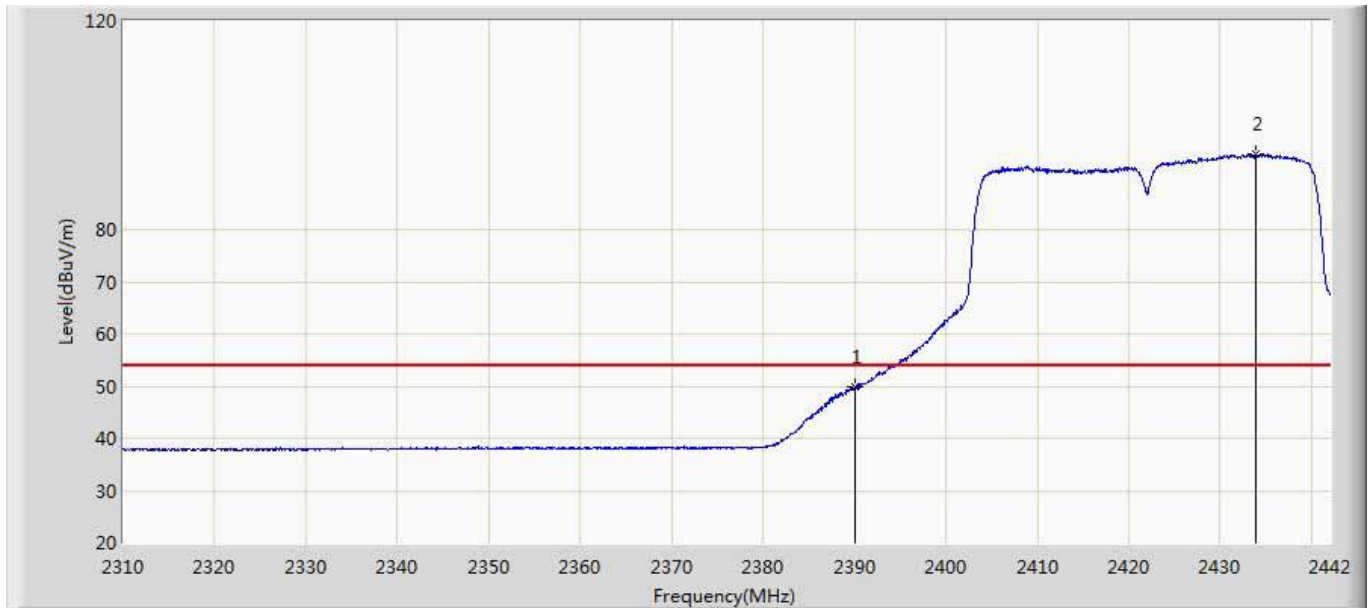
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.976	96.266	60.405	N/A	N/A	35.860	AV
2		2483.500	47.777	11.885	-6.223	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



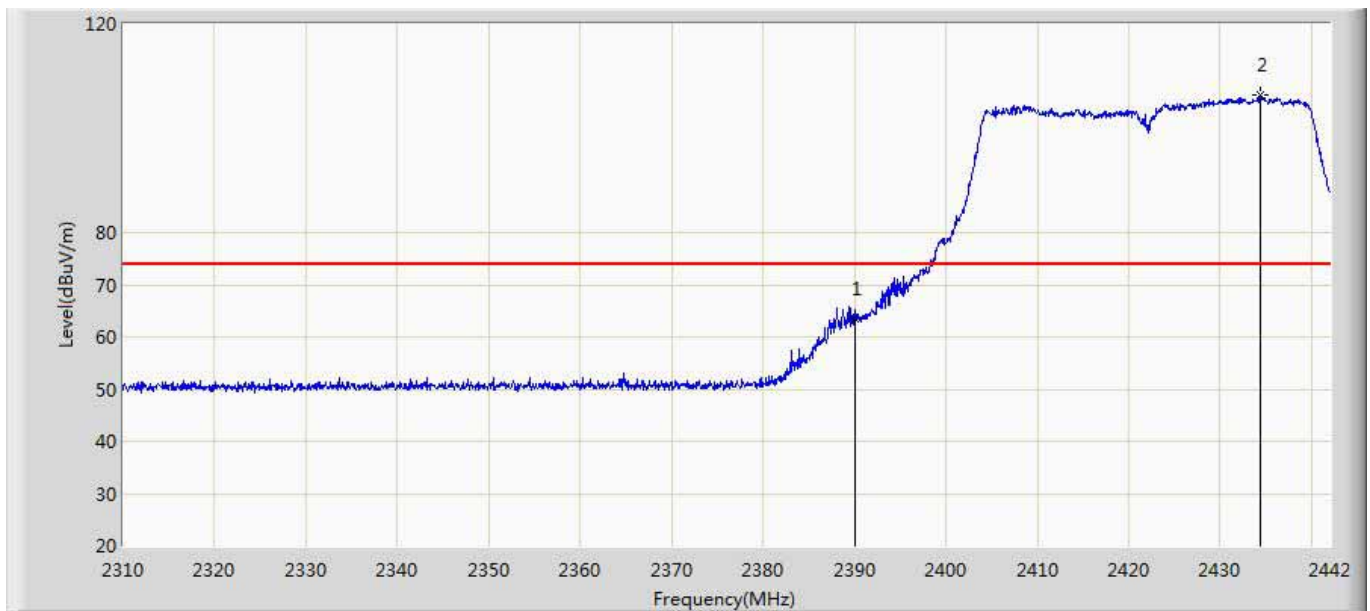
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.080	107.833	71.967	N/A	N/A	35.866	PK
2		2483.500	59.447	23.555	-14.553	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)	



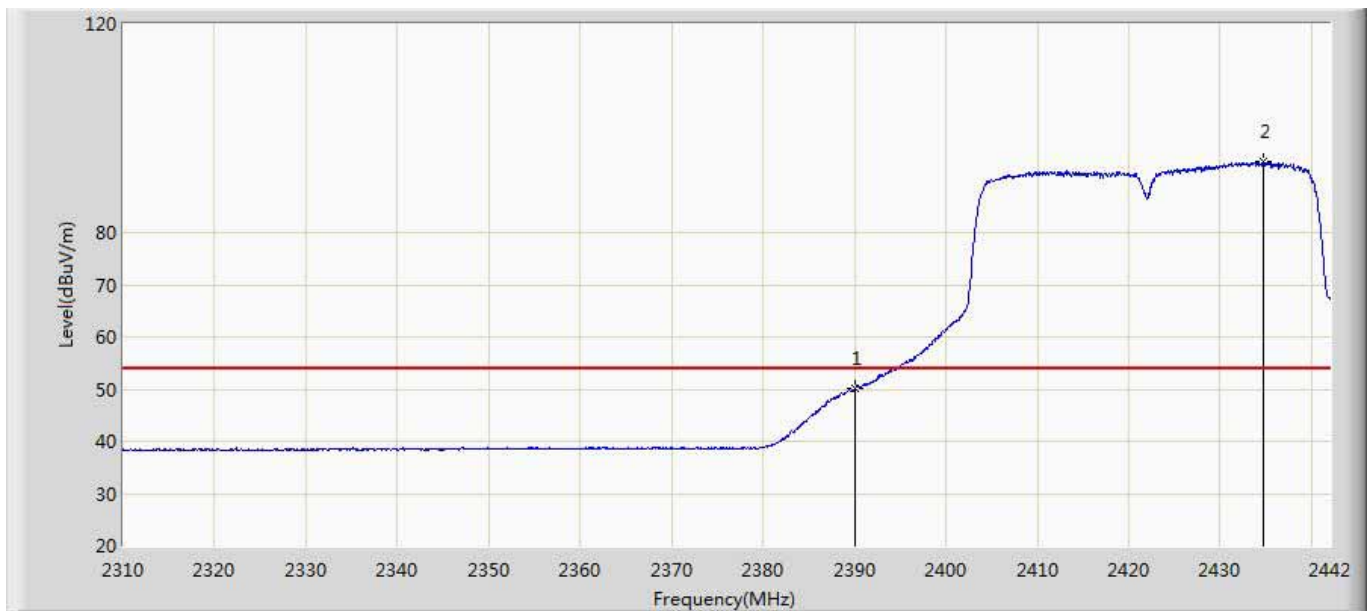
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.811	14.129	-4.189	54.000	35.682	AV
2	*	2433.948	94.523	58.716	N/A	N/A	35.807	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.394	27.712	-10.606	74.000	35.682	PK
2	*	2434.410	106.294	70.487	N/A	N/A	35.807	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.202	14.520	-3.798	54.000	35.682	AV
2	*	2434.674	93.513	57.706	N/A	N/A	35.807	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 18:40

Limit: FCC_Part15.209_RE(3m)

Margin: 0

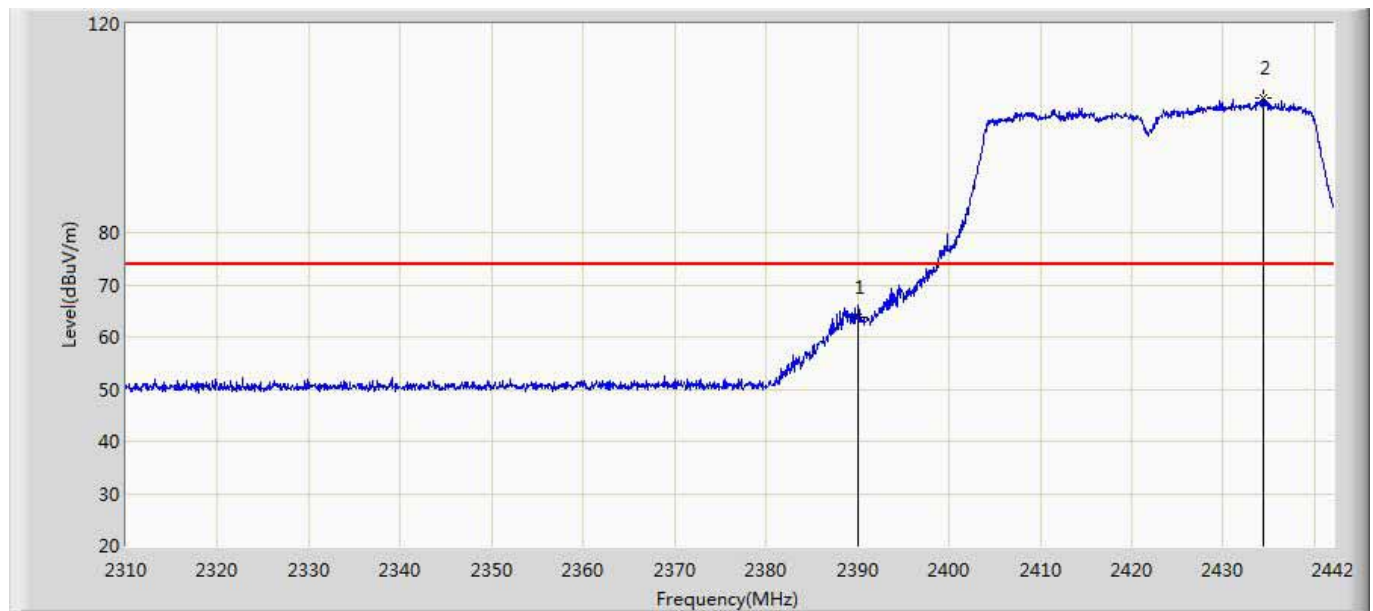
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: Virtual Reality System

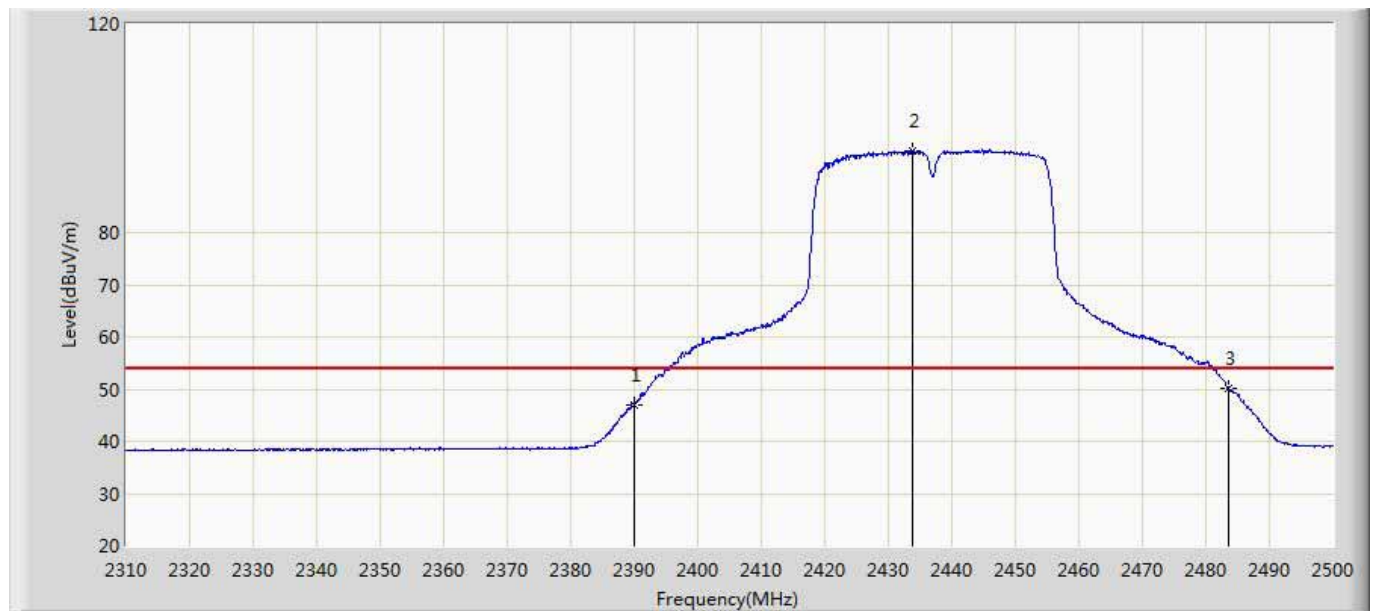
Power: AC 120V/60Hz

Note: Mode 4:Transmit at 2422MHz by 802.11n(40MHz)



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.825	28.143	-10.175	74.000	35.682	PK
2	*	2434.344	105.885	70.078	N/A	N/A	35.806	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.099	11.417	-6.901	54.000	35.682	AV
2	*	2433.785	95.636	59.829	N/A	N/A	35.807	AV
3		2483.500	50.265	14.373	-3.735	54.000	35.891	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 18:48

Limit: FCC_Part15.209_RE(3m)

Margin: 0

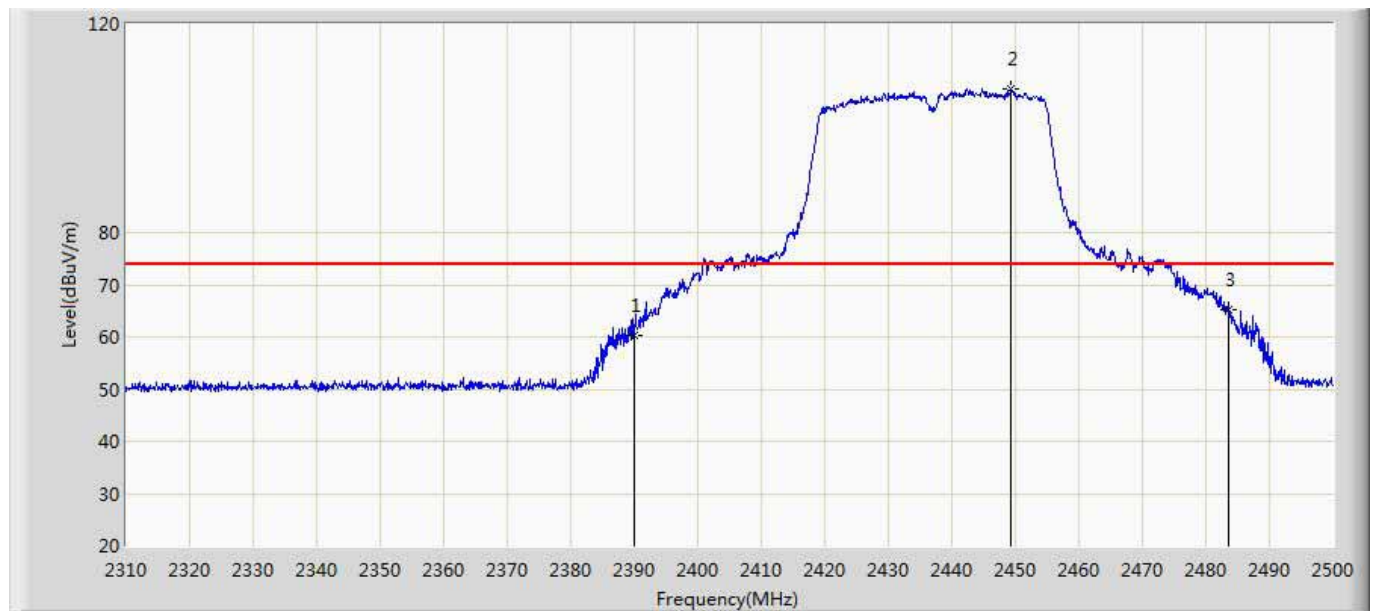
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Horizontal

EUT: Virtual Reality System

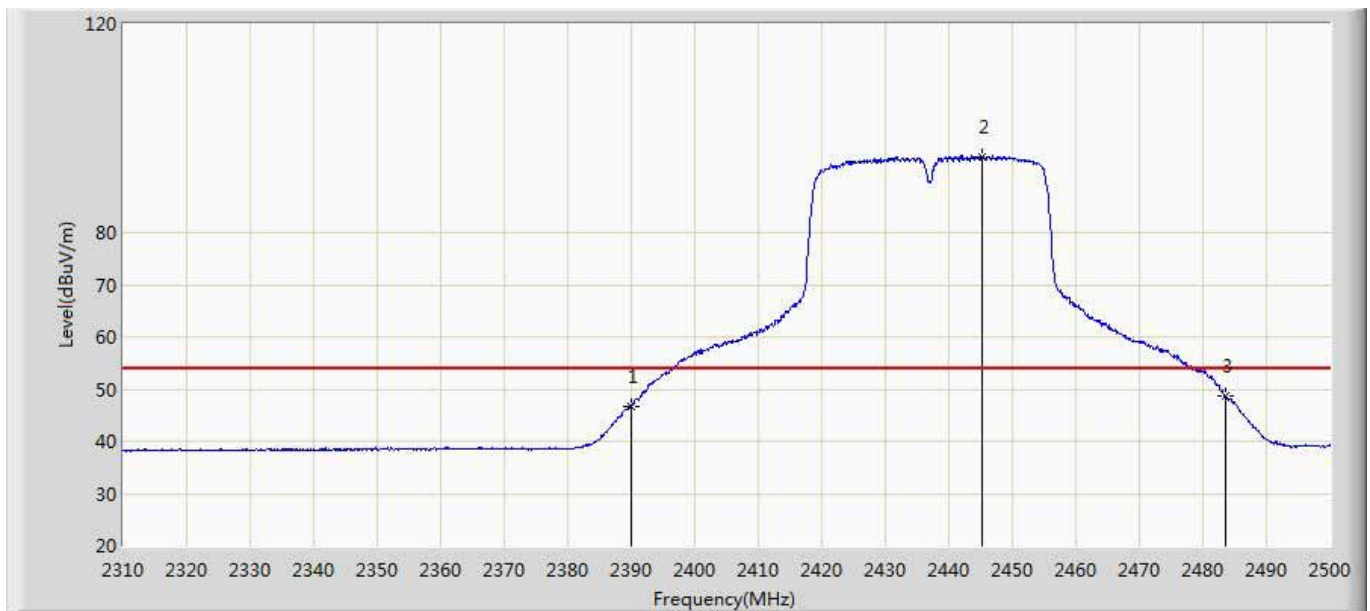
Power: AC 120V/60Hz

Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.433	24.751	-13.567	74.000	35.682	PK
2	*	2449.270	107.430	71.607	N/A	N/A	35.823	PK
3		2483.500	65.166	29.274	-8.834	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.748	11.066	-7.252	54.000	35.682	AV
2	*	2445.185	94.424	58.619	N/A	N/A	35.805	AV
3		2483.500	48.749	12.857	-5.251	54.000	35.891	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 18:52

Limit: FCC_Part15.209_RE(3m)

Margin: 0

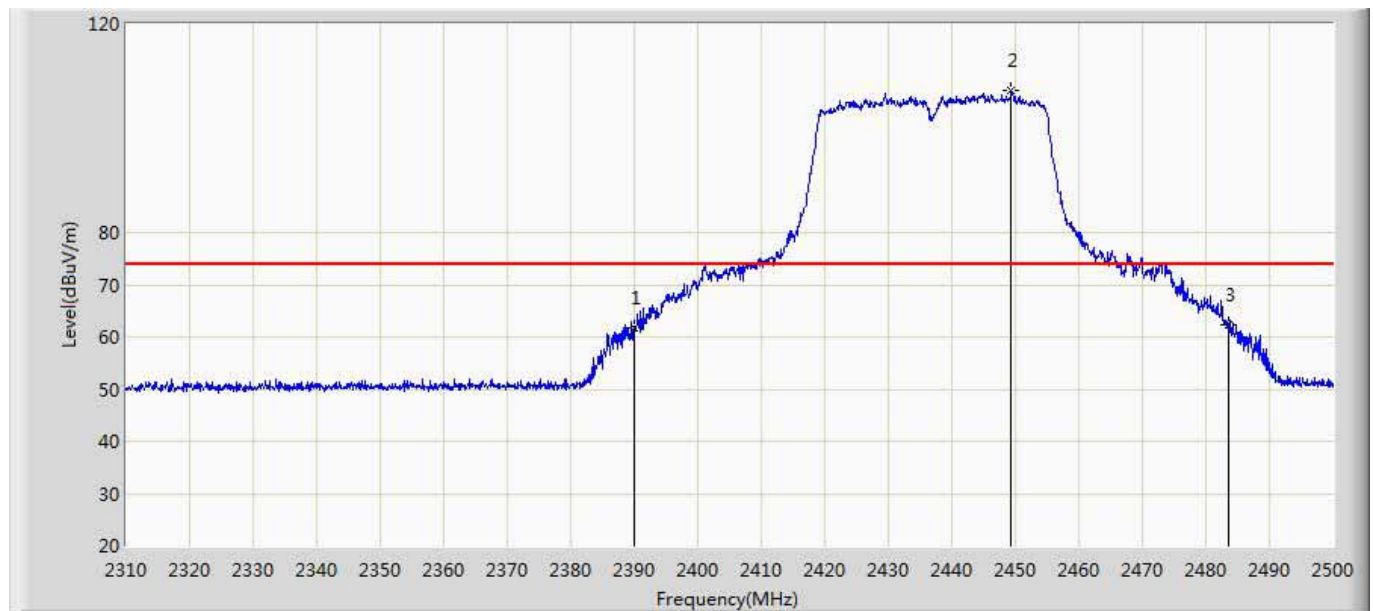
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: Virtual Reality System

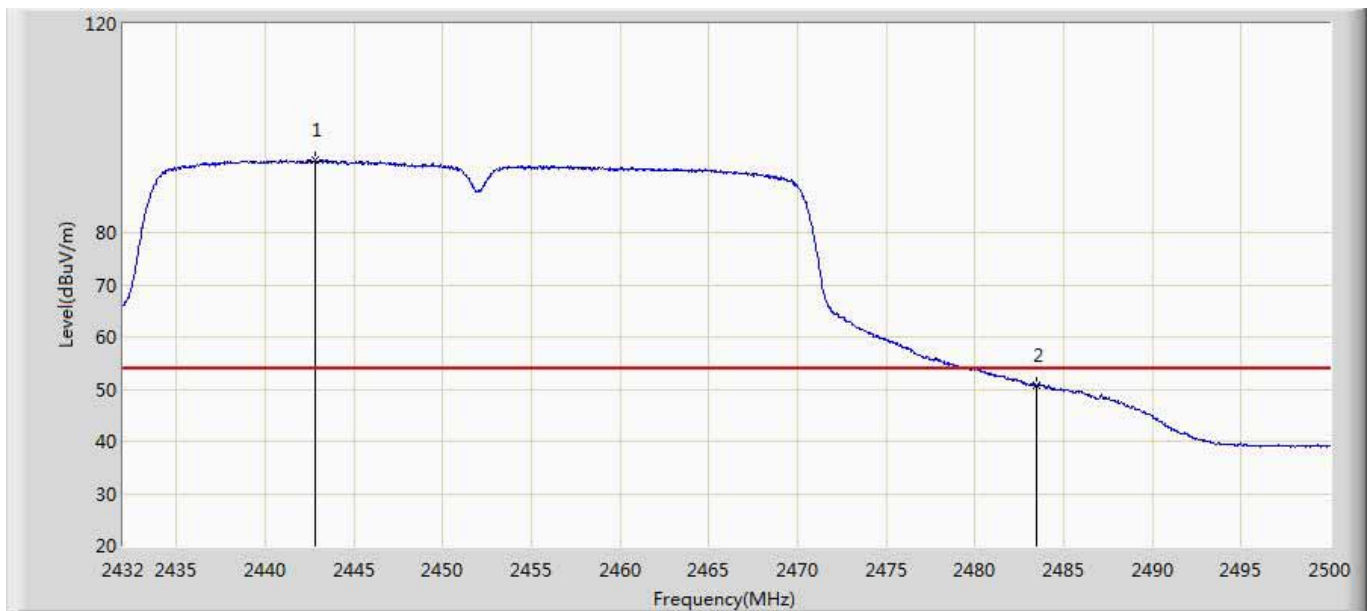
Power: AC 120V/60Hz

Note: Mode 4:Transmit at 2437MHz by 802.11n(40MHz)



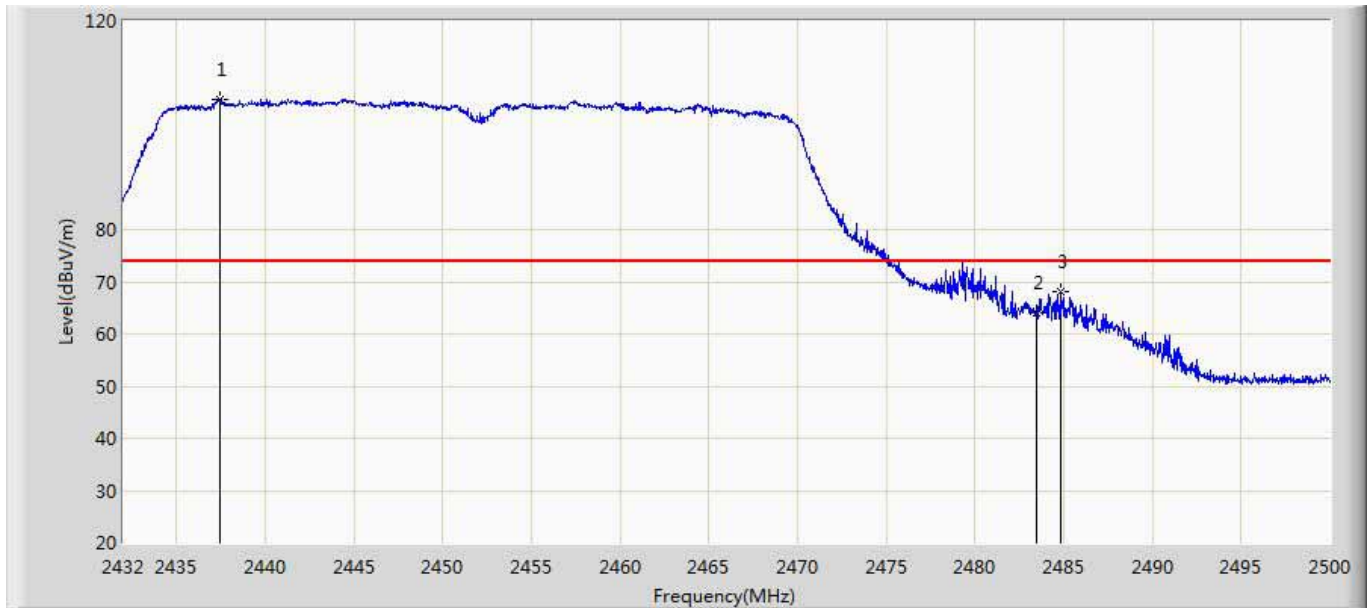
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.855	26.173	-12.145	74.000	35.682	PK
2	*	2449.365	107.184	71.361	N/A	N/A	35.823	PK
3		2483.500	62.369	26.477	-11.631	74.000	35.891	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n(40MHz)	



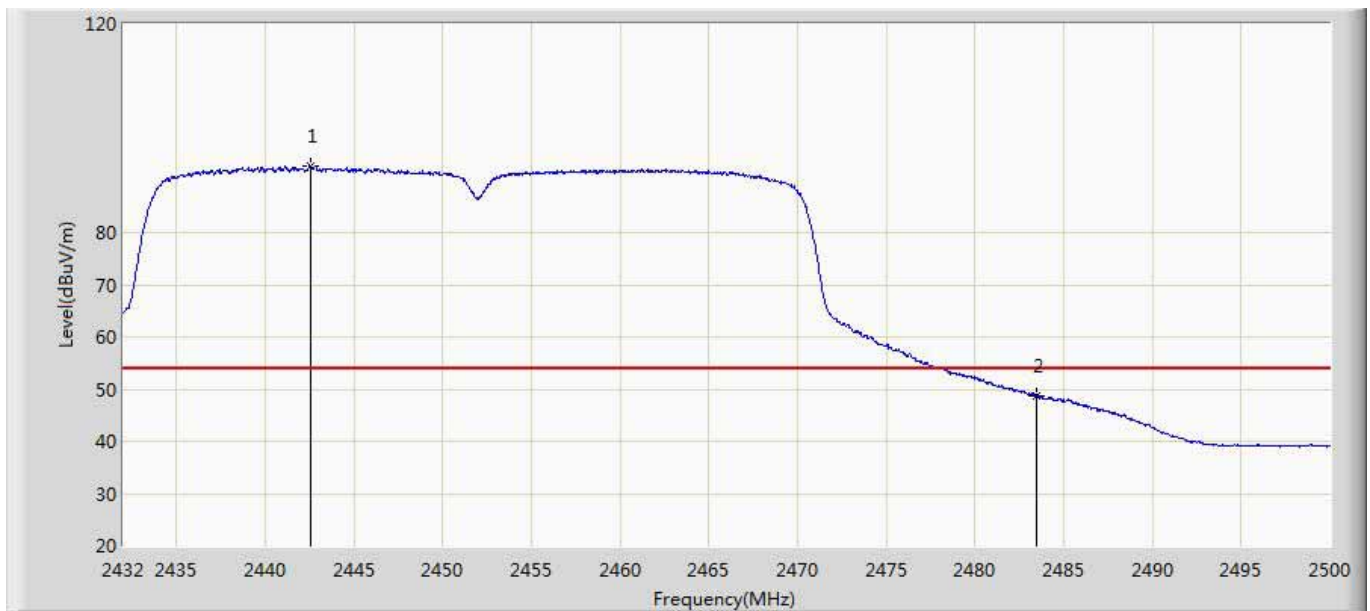
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2442.812	93.832	58.027	N/A	N/A	35.804	AV
2		2483.500	50.670	14.778	-3.330	54.000	35.891	AV

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2437.474	104.999	69.193	N/A	N/A	35.806	PK
2		2483.500	63.951	28.059	-10.049	74.000	35.891	PK
3		2484.836	68.074	32.173	-5.926	74.000	35.901	PK

Engineer: Slark	
Site: AC5	Time: 2017/11/08 - 18:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Virtual Reality System	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n(40MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2442.540	92.858	57.053	N/A	N/A	35.805	AV
2		2483.500	48.761	12.869	-5.239	54.000	35.891	AV

Engineer: Slark

Site: AC5

Time: 2017/11/08 - 19:00

Limit: FCC_Part15.209_RE(3m)

Margin: 0

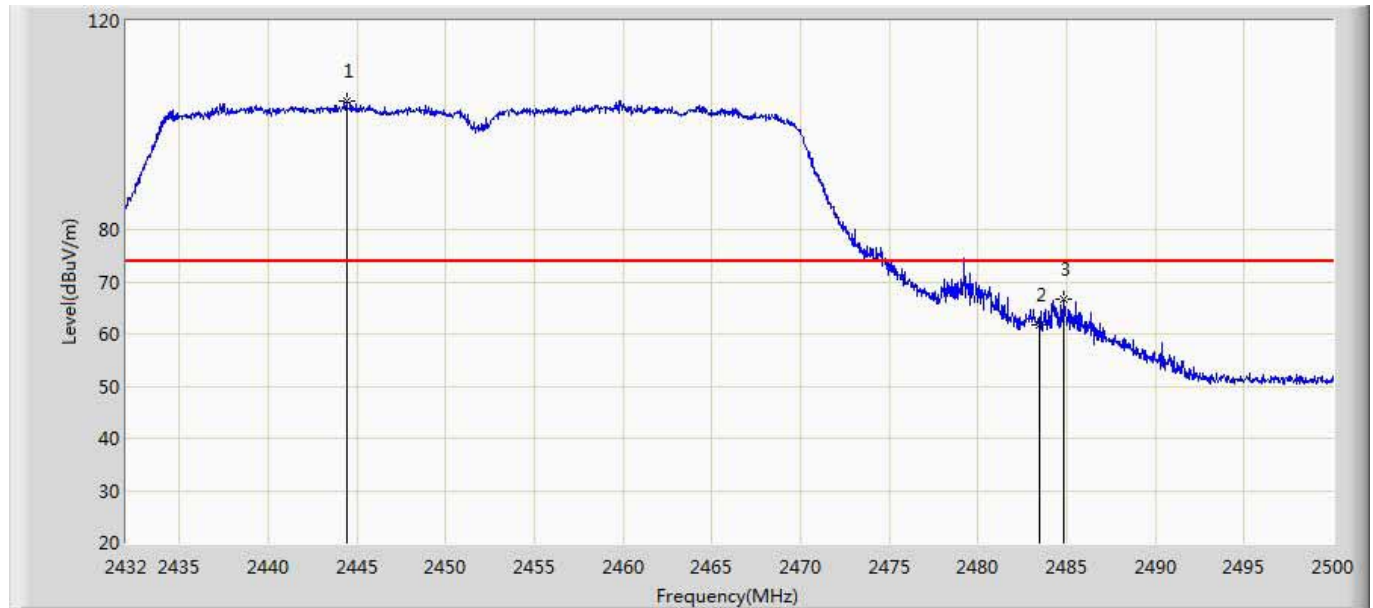
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: Virtual Reality System

Power: AC 120V/60Hz

Note: Mode 4:Transmit at 2452MHz by 802.11n(40MHz)



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2444.444	104.577	68.773	N/A	N/A	35.804	PK
2		2483.500	61.776	25.884	-12.224	74.000	35.891	PK
3		2484.870	66.701	30.799	-7.299	74.000	35.902	PK

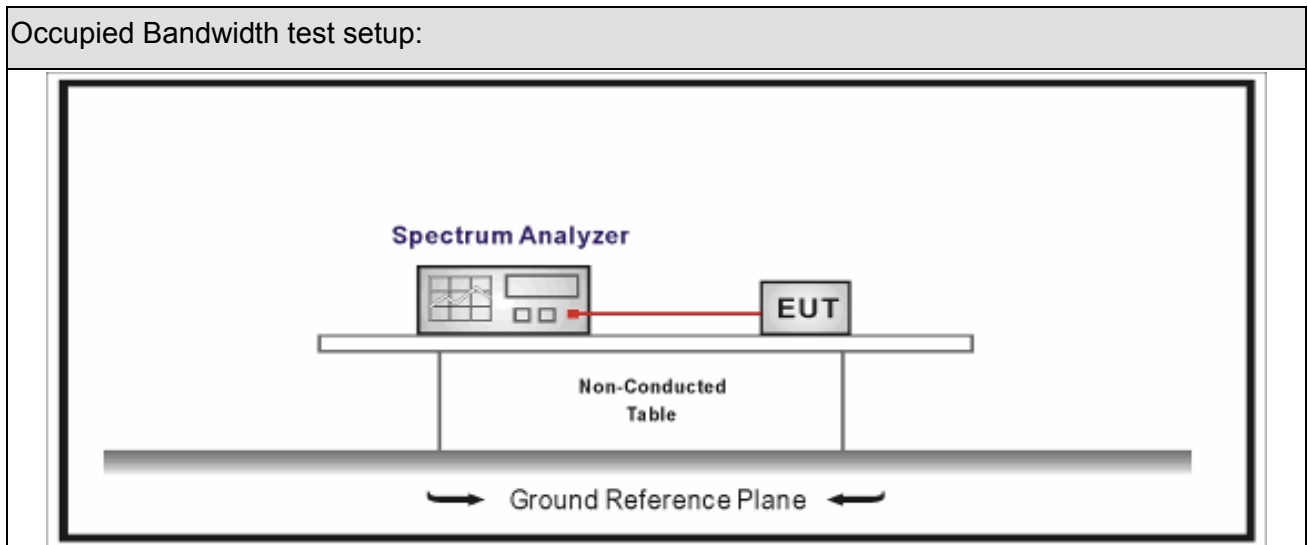
7. Occupied Bandwidth

7.2. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.3. Test Setup



7.4. Limit

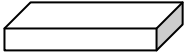
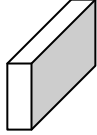
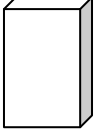
Occupied Bandwidth

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

7.5. Test Procedure

Test Method				
	Reference Rule		Chapter	Description
☒	ANSI C63.10		11.8	DTS bandwidth
	☐	ANSI C63.10	11.8.1	Option 1
	☒	ANSI C63.10	11.8.2	Option 2

7.6. EUT test definition

Item	Occupied Bandwidth			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

7.7. Test Result

Product Name	: Virtual Reality System	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.10.20	Test Engineer	: Tommy

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)		6dB Occupied Bandwidth (MHz)		Limit (kHz)	Result
			Ant 1	Ant 2	Ant 1	Ant 2		
1	01	2412	13.844	14.070	8.078	8.578	>500	Pass
1	06	2437	13.448	13.606	8.596	8.564	>500	Pass
1	11	2462	13.770	14.102	8.100	8.570	>500	Pass
2	01	2412	16.430	16.416	16.34	16.34	>500	Pass
2	06	2437	16.409	16.422	16.07	16.36	>500	Pass
2	11	2462	16.409	16.413	16.38	16.38	>500	Pass
3	01	2412	17.568	17.591	17.16	17.07	>500	Pass
3	06	2437	17.583	17.594	17.33	16.92	>500	Pass
3	11	2462	17.586	17.575	17.17	17.15	>500	Pass
4	03	2422	36.088	36.124	34.82	34.53	>500	Pass
4	06	2437	36.045	36.084	35.83	34.05	>500	Pass
4	09	2452	35.990	35.968	35.34	35.14	>500	Pass

Note : The worst case of Occupied Bandwidth as below in next page:

Mode 1 CH01 (2412MHz) Ant 1



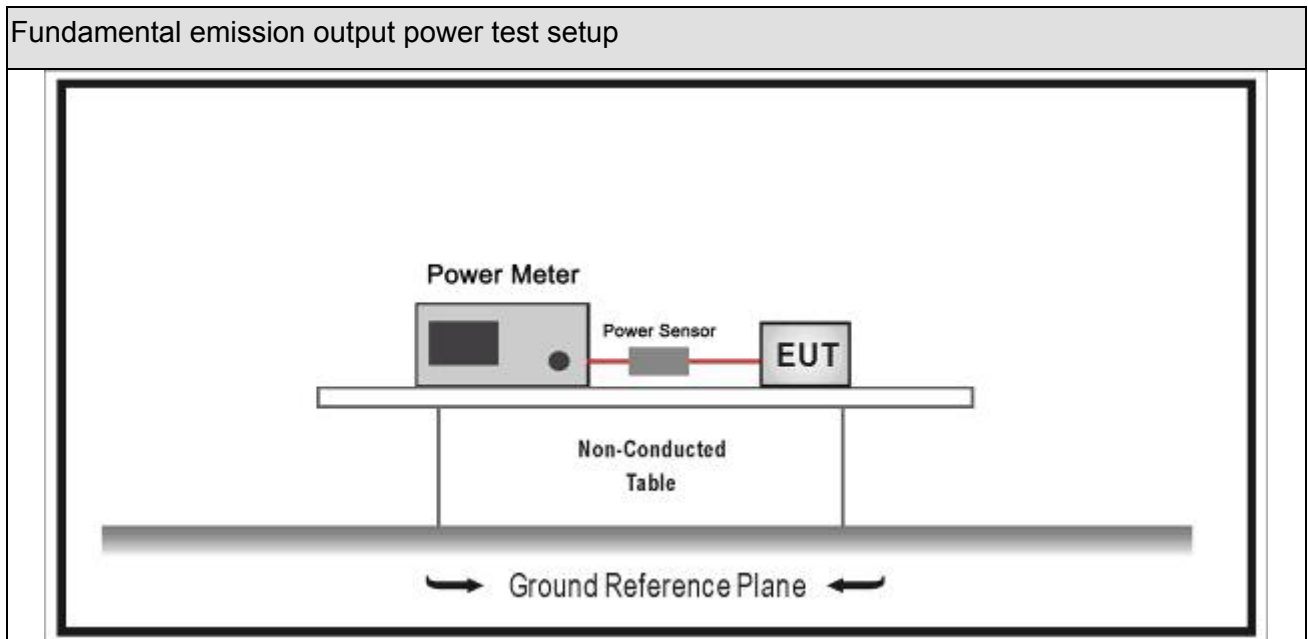
8. Fundamental emission output power

8.2. Test Equipment

Fundamental emission output power/ TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.04	2018.01.03
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2017.10.14	2018.10.13
Power Sensor	Anritsu	MA2411B	0846014	2017.10.14	2018.10.13
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.3. Test Setup



8.4. Limit

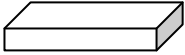
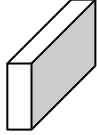
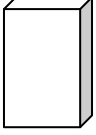
Fundamental emission output power Limit		
☒	$G_{TX} < 6\text{dBi}$	$P_{out} \leq 30\text{dBm}$
☐	$G_{TX} > 6\text{dBi}$	
☐	Non-Fix point-point	$P_{out} \leq 30 - (G_{TX} - 6)$
☐	Fix point-point	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
☐	Point-to-multipoint	$P_{out} \leq 30 - (G_{TX} - 6)$
☐	Overlap Beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
☐	Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
☐	single directional beam	$P_{out} \leq 30 - [(G_{TX} - 6)]/3 + 8\text{dB}$
Note 1 : G_{TX} directional gain of transmitting antennas.		
Note 2 : P_{out} is maximum peak conducted output power .		

8.5. Test Procedure

Fundamental emission output power Test Method						
	References Rule			Chapter	Description	
☒	ANSI C63.10			11.9	Fundamental emission output power	
	☒	ANSI C63.10		11.9.1	Maximum peak conducted output power	
		☐	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth	
		☐	ANSI C63.10	11.9.1.2	Integrated band power method	
		☒	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method	
	☐	ANSI C63.10		11.9.2	Maximum conducted (average) output power	
		☐	ANSI C63.10		11.9.2.2	Measurement using a spectrum analyzer (SA)
			☐	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle ≥ 98%)
			☐	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle ≥ 98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle ≤ 98%)
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle ≤ 98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-3
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
		☐	ANSI C63.10		11.9.2.3	Measurement using a power meter (PM)
			☐	ANSI C63.10	11.9.2.3.1	Method AVGPM
			☐	ANSI C63.10	11.9.2.3.2	Method AVGPM-G

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☒	KDB 662911		F2)e)	Spatial Multiplexing
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☒	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☐	KDB 662911	F2)f) (i)	Antennas have the same gain
	☒	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

8.6. EUT test definition

Item	Fundamental emission output power			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

8.7. Test Result

Product Name	:	Virtual Reality System	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.10.20	Test Engineer	:	Tommy

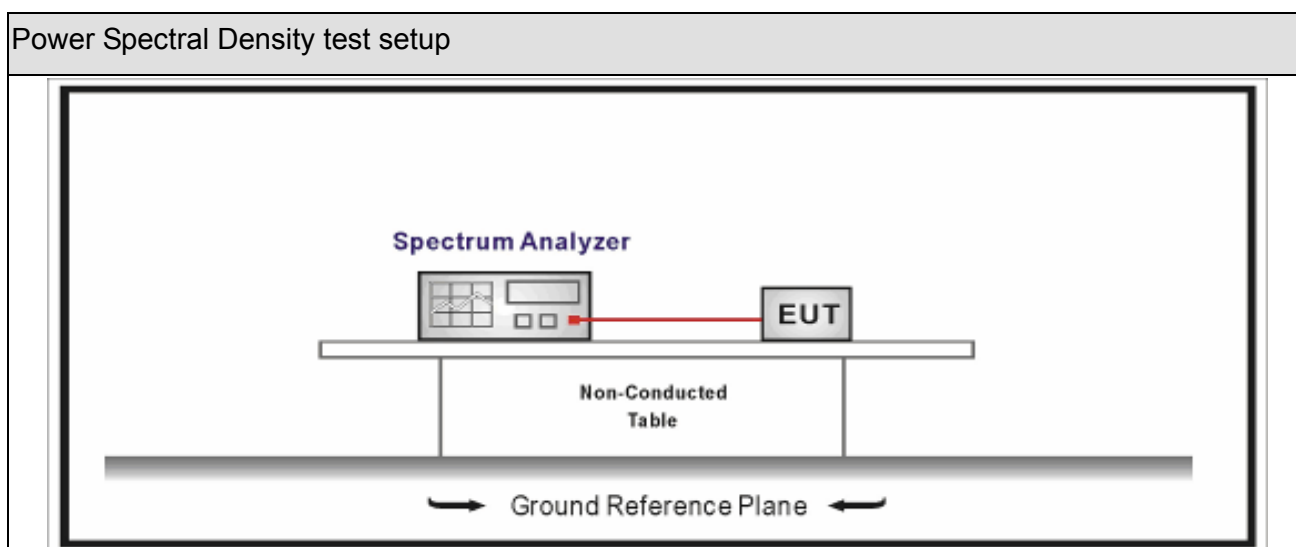
Mode	Channel	Test Frequency (MHz)	Peak Power Output (dBm)		Total Power (dBm)	Directional Gain (dBi)	Limit (dBm)	Result
			Ant 1	Ant 2				
1	01	2412	21.13	21.29	24.22	2.1	30	Pass
1	06	2437	21.17	21.34	24.27	2.1	30	Pass
1	11	2462	20.96	21.16	24.07	2.1	30	Pass
2	01	2412	22.51	22.61	25.57	2.1	30	Pass
2	06	2437	22.96	22.93	25.96	2.1	30	Pass
2	11	2462	21.59	21.73	24.67	2.1	30	Pass
3	01	2412	22.23	22.26	25.26	2.1	30	Pass
3	06	2437	22.93	22.82	25.89	2.1	30	Pass
3	11	2462	21.22	21.41	24.33	2.1	30	Pass
4	03	2422	21.72	21.75	24.75	2.1	30	Pass
4	06	2437	23.36	23.28	26.33	2.1	30	Pass
4	09	2452	21.28	21.51	24.41	2.1	30	Pass

9. Power Spectral Density

9.2. Test Equipment

Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

9.3. Test Setup



9.4. Limit

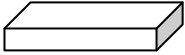
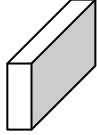
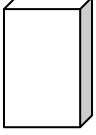
Power Spectral Density Limit
Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

9.5. Test Procedure

Power Spectral Density Test Method				
	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPSSD-1(Duty cycle $\geq 98\%$)
	☐	ANSI C63.10	11.10.4	Method AVGPSSD-1A(Duty cycle $\geq 98\%$)
	☐	ANSI C63.10	11.10.5	Method AVGPSSD-2(Duty cycle $< 98\%$)
	☐	ANSI C63.10	11.10.6	Method AVGPSSD-2A(Duty cycle $< 98\%$)
	☐	ANSI C63.10	11.10.7	Method AVGPSSD-3
	☐	ANSI C63.10	11.10.8	Method AVGPSSD-3A

Directional Gain Calculations for In-Band test method				
	Referred Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☒	KDB 662911		F2)e)	Spatial Multiplexing
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☒	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☐	KDB 662911	F2)f) (i)	Antennas have the same gain
	☒	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

9.6. EUT test definition

Item	Power Spectral Density Test Method			
Device Category	☐	Fixed point-to-point		
	☐	Emit multiple directional beams, simultaneously or sequentially		
	☒	Other cases		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

9.7. Test Result

Product Name	: Virtual Reality System	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.10.20	Test Engineer	: Tommy

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)		Total Measurement PSD (dBm/3kHz)	Directional Gain (dBi)	Limit (dBm/3kHz)	Result
			Ant 1	Ant 2				
1	01	2412	-3.503	-1.424	0.670	5.11	8.0	Pass
1	06	2437	-3.725	-2.564	-0.096	5.11	8.0	Pass
1	11	2462	-3.880	-1.953	0.200	5.11	8.0	Pass
2	01	2412	-8.698	-8.599	-5.638	5.11	8.0	Pass
2	06	2437	-6.410	-6.419	-3.404	5.11	8.0	Pass
2	11	2462	-10.737	-9.455	-7.039	5.11	8.0	Pass
3	01	2412	-11.118	-9.557	-7.257	5.11	8.0	Pass
3	06	2437	-7.430	-7.524	-4.466	5.11	8.0	Pass
3	11	2462	-11.101	-10.423	-7.738	5.11	8.0	Pass
4	03	2422	-13.489	-12.045	-9.697	5.11	8.0	Pass
4	06	2437	-11.292	-10.604	-7.924	5.11	8.0	Pass
4	09	2452	-14.169	-12.943	-10.503	5.11	8.0	Pass

Mode 1 CH01(2412MHz) Ant 1



Mode 1 CH01(2412MHz) Ant 2



10. Antenna Requirement

10.2. Limit

Antenna Requirement Limit	
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	

10.3. Antenna Connector Construction

Antenna Connector Construction	
☐	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☒	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

_____ The End _____