

Test Report

FCC Part15 Subpart C

Product Name : AC750 Wireless Dual Band ADSL2+
Modem Router

Model No. : Archer D20

FCC ID : TE7D20V1

Applicant : TP-LINK TECHNOLOGIES CO., LTD.

Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park, Shennan
Rd, Nanshan, Shenzhen, China

Date of Receipt : Aug. 20, 2015

Test Date : Aug. 20, 2015~ Oct. 27, 2015

Issued Date : Nov. 20, 2015

Report No. : 1580591R-RF-US-P06V01

Report Version : V1.3

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.

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Test Report Certification

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China
Manufacturer : TP-LINK TECHNOLOGIES CO., LTD
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science
and Technology Park, Shennan Rd, Nanshan, Shenzhen,
China
Model No. : Archer D20
FCC ID : TE7D20V1
EUT Voltage : AC 120V/60Hz
Brand Name : TP-LINK
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2014
ANSI C63.4:2014;
ANSI C63.10:2013;
KDB 558074 D01v03r03
KDB 662911 D01 Multiple Transmitter Output v02r01
Test Result : Complied
Performed Location : Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006,
Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392; IC Lab Code: 4075B

Documented By

:

Zhenrenang

Reviewed By

:

Jack Zhang

Approved By

:

Harry Zhao

Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :
<http://www.quietek.com/>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory :

No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

Suzhou Testing Laboratory :

No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006, Jiangsu, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

TABLE OF CONTENTS

Description	Page
1. General Information	7
1.1. EUT Description	7
1.2. Mode of Operation	11
1.3. Tested System Details	12
1.4. Configuration of Tested System	13
1.5. EUT Exercise Software	14
2. Technical Test	15
2.1. Summary of Test Result	15
2.2. Test Environment	16
3. Conducted Emission	17
3.1. Test Equipment	17
3.2. Test Setup	17
3.3. Limit	18
3.4. Test Procedure	18
3.5. Uncertainty	18
3.6. Test Result	19
4. Radiated Emission	21
4.1. Test Equipment	21
4.2. Test Setup	22
4.3. Limit	23
4.4. Test Procedure	23
4.5. Uncertainty	24
4.6. Test Result	25
5. RF Antenna Conducted Spurious	31
5.1. Test Equipment	31
5.2. Test Setup	31
5.3. Limit	31
5.4. Test Procedure	32
5.5. Uncertainty	32
5.6. Test Result	33
6. Radiated Emission Band Edge	40
6.1. Test Equipment	40
6.2. Test Setup	41
6.3. Limit	41
6.4. Test Procedure	41
6.5. Uncertainty	42
6.6. Test Result	43

7.	Operation Frequency Range of 20dB Bandwidth	75
7.1.	Test Equipment.....	75
7.2.	Test Setup.....	75
7.3.	Limit.....	75
7.4.	Test Procedure	75
7.5.	Uncertainty	75
7.6.	Test Result.....	76
8.	Occupied Bandwidth.....	90
8.1.	Test Equipment.....	90
8.2.	Test Setup.....	90
8.3.	Limit.....	90
8.4.	Test Procedure	90
8.5.	Uncertainty	91
8.6.	Test Result.....	92
9.	Power Output.....	100
9.1.	Test Equipment.....	100
9.2.	Test Setup.....	100
9.3.	Limit.....	100
9.4.	Test Procedure	101
9.5.	Uncertainty	101
9.6.	Test Result.....	102
10.	Power Spectral Density	105
10.1.	Test Equipment.....	105
10.2.	Test Setup.....	105
10.3.	Limit.....	105
10.4.	Test Procedure	106
10.5.	Uncertainty	106
10.6.	Test Result.....	107

History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1580591R-RF-US-P06V01	V1.0	Initial Issued Report	Nov. 04, 2015
1580591R-RF-US-P06V01	V1.1	1, Based on the duty cycle, updated the TX ON/T and TX OFF time. 2, Show the Directional gain and its Calculation. 3, Updated the RF Antenna Conducted Spurious Data 4, Radiated Emission Updated the test Procedure.	Nov. 18, 2015
1580591R-RF-US-P06V01	V1.2	1, On page 2, add KDB 662911 2, On page 8, add Directional gain description and Calculation formula, also re-describe the b/g/n mode antenna technology used. 3, On page 9. Add a note to describe b mode. 4, On page 10, Add T Time value and VBW set value	Nov. 19, 2015
1580591R-RF-US-P06V01	V1.3	Add Note: The EUT can only transmit by Ant 1 for 802.11b	Nov. 20, 2015

1. General Information

1.1. EUT Description

Product Name	AC750 Wireless Dual Band ADSL2+ Modem Router
Brand Name	TP-LINK
Model No.	Archer D20
EUT Voltage	AC 120V/60Hz
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 300 Mbps
Channel Control	Auto
Antenna Delivery	1*Tx + 1*Rx for 802.11b 2*Tx + 2*Rx for 802.11g/n
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

Note: The EUT can only transmit by Ant 1 for 802.11b

For 2.4GHz Band

802.11b/g/n(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(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

Antenna List

Antenna	Type	Model No.	Peak Gain	Directional gain
Antenna	N/A	N/A	2.0dBi	5.0dBi

- Note: 1: The EUT uses CDD technology by 802.11g and MIMO technology by 802.11n mode, but 802.11b mode only use SISO technology .The EUT of g/n mode which always operate with the antennas transmitting simultaneously, so we only test the mode when the antennas transmitting simultaneously.
- 2: The EUT has two antennas, and each port has same gain, they transmit signals are correlated with each other .So the Directional gain Calculation is $\text{Gain}_{\text{ANT}} + 10 \log(\text{N}_{\text{ANT}})$ dBi.

Power Parameter Value of the test software

Test Mode	Test Channel	Ant1	Ant2	MODE(Ant1+2)
802.11b	2412	√	×	×
	2437	√	×	×
	2462	√	×	×
802.11g	2412	×	×	√
	2437	×	×	√
	2462	×	×	√
802.11n(20MHz)	2412	×	×	√
	2437	×	×	√
	2462	×	×	√
802.11n(40MHz)	2422	×	×	√
	2437	×	×	√
	2452	×	×	√

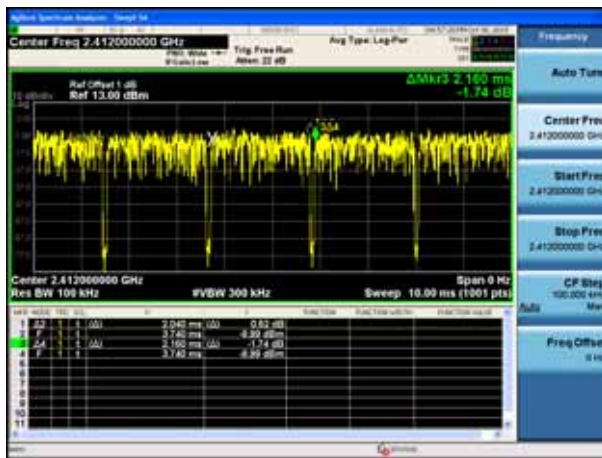
Note: The EUT can only transmit by Ant 1 for 802.11b when uses in market declared by the manufacturer.

Duty Cycle

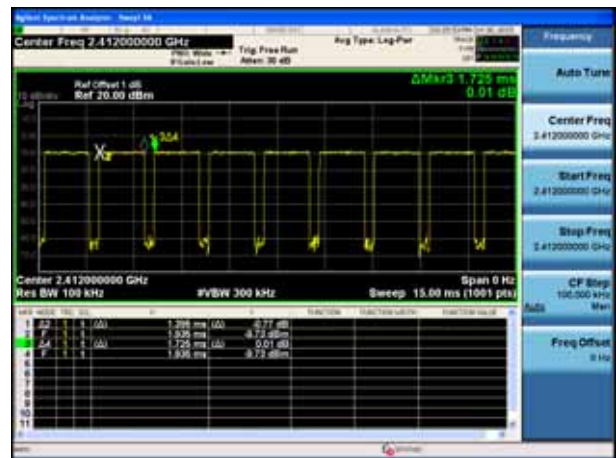
2.4GHz Band

Test Mode	Tx On (μ s)	T (μ s)	VBW	Tx Off (μ s)	Duty Cycle
802.11b	2040	2040	510Hz	120	94.44 %
802.11g	1395	1395	720Hz	330	80.87 %
802.11n(20MHz)	1290	1290	780Hz	345	78.90 %
802.11n(40MHz)	640	640	1.6kHz	335	65.64 %

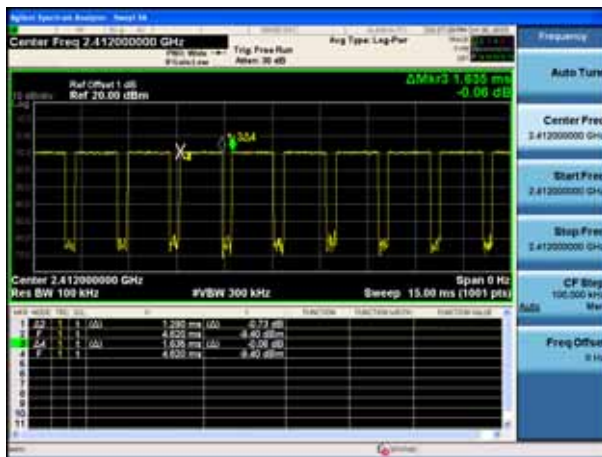
802.11b



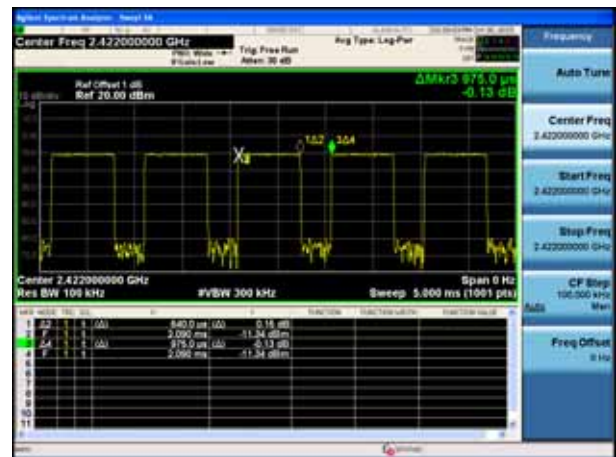
802.11g



802.11n(20MHz)



802.11n(40MHz)



- Note:
1. T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
 2. According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, $VBW \geq 1/T$ will be used.

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g(Ant1+2;)
Mode 3: Transmit by 802.11n(20MHz) (Ant1+2;)
Mode 4: Transmit by 802.11n(40MHz) (Ant1+2;)

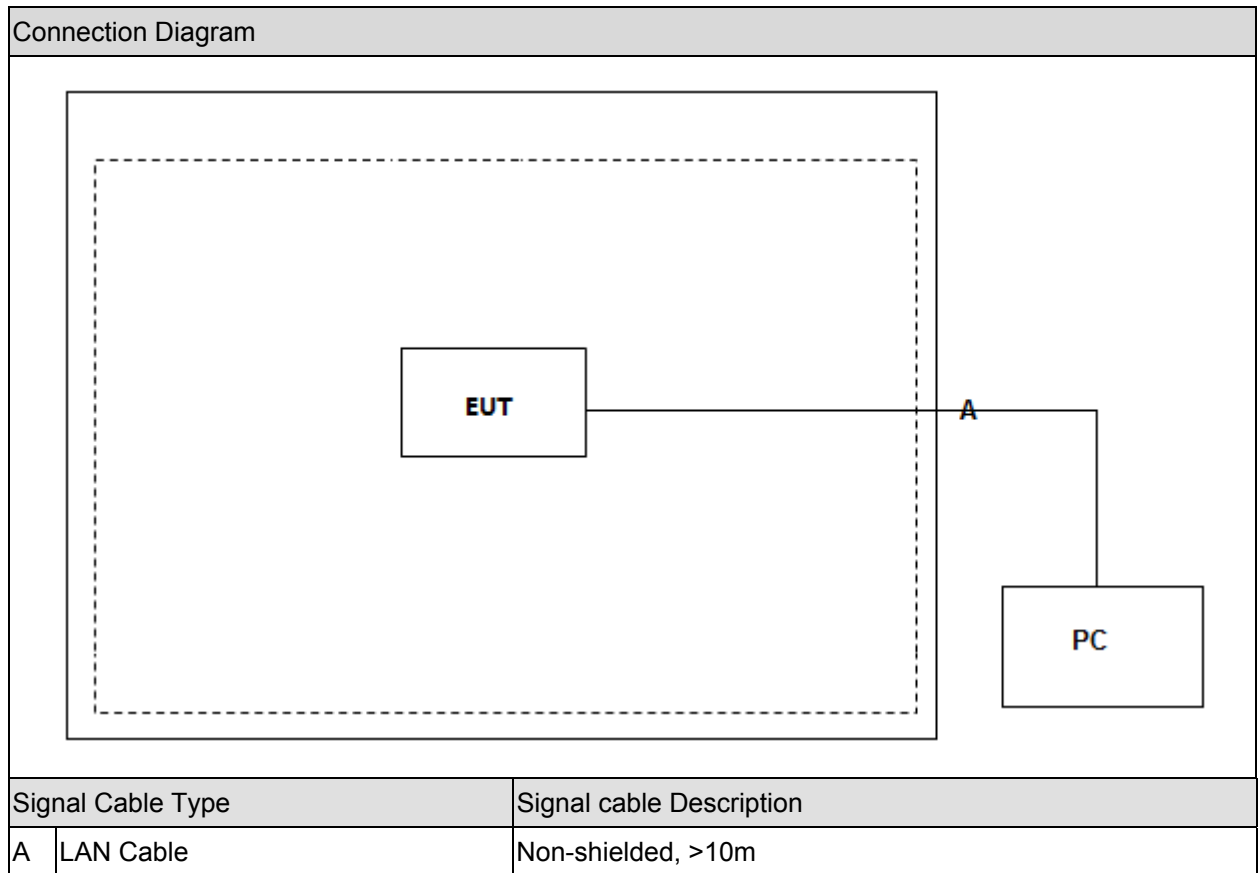
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, and be shown on this report.

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Input launch command, and set the test mode and channel, then press OK to start continue Transmit or receive.

2. Technical Test

2.1. Summary of Test Result

- ☒ No deviations from the test standards
- ☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.209	Yes	No
RF Antenna Conducted Spurious	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2014 15.247(d)	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2014 15.215(c)	Yes	No
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.247(a)(2)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.247(b)(3)	Yes	No
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2014 Section 15.247(e)	Yes	No

2.2. 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

3. Conducted Emission

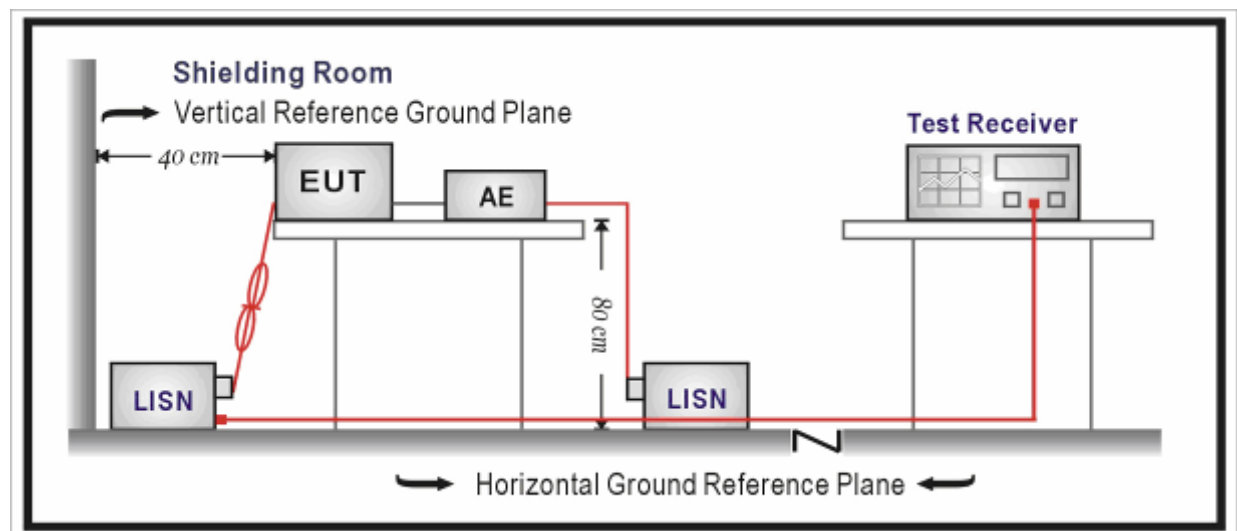
3.1. Test Equipment

Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100726	2016.03.28
Two-Line V-Network	R&S	ENV216	100043	2016.03.28
Two-Line V-Network	R&S	ENV216	100044	2016.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2016.03.01
50ohm Termination	SHX	TF2	07081401	2016.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2016.01.08

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

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50 - 5.0	56	46
5.0 - 30	60	50

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

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

3.4. Test Procedure

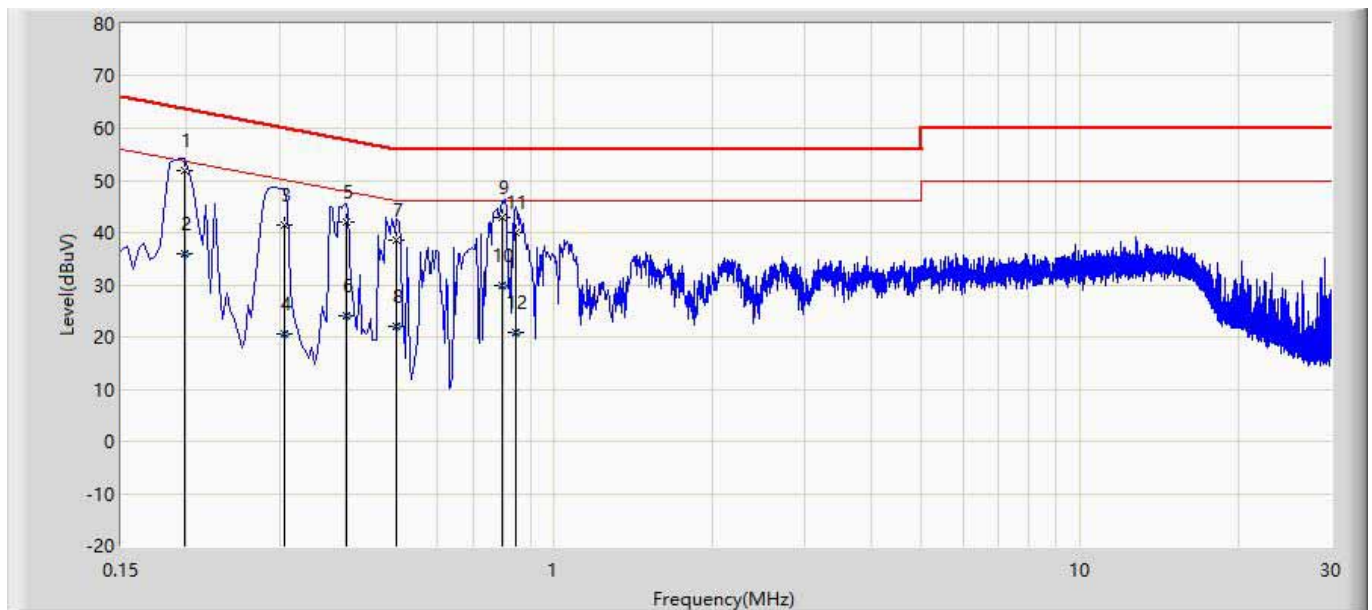
The EUT was setup according to ANSI C63.4, 2014 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.5. Uncertainty

The measurement uncertainty is defined as ± 2.02 dB

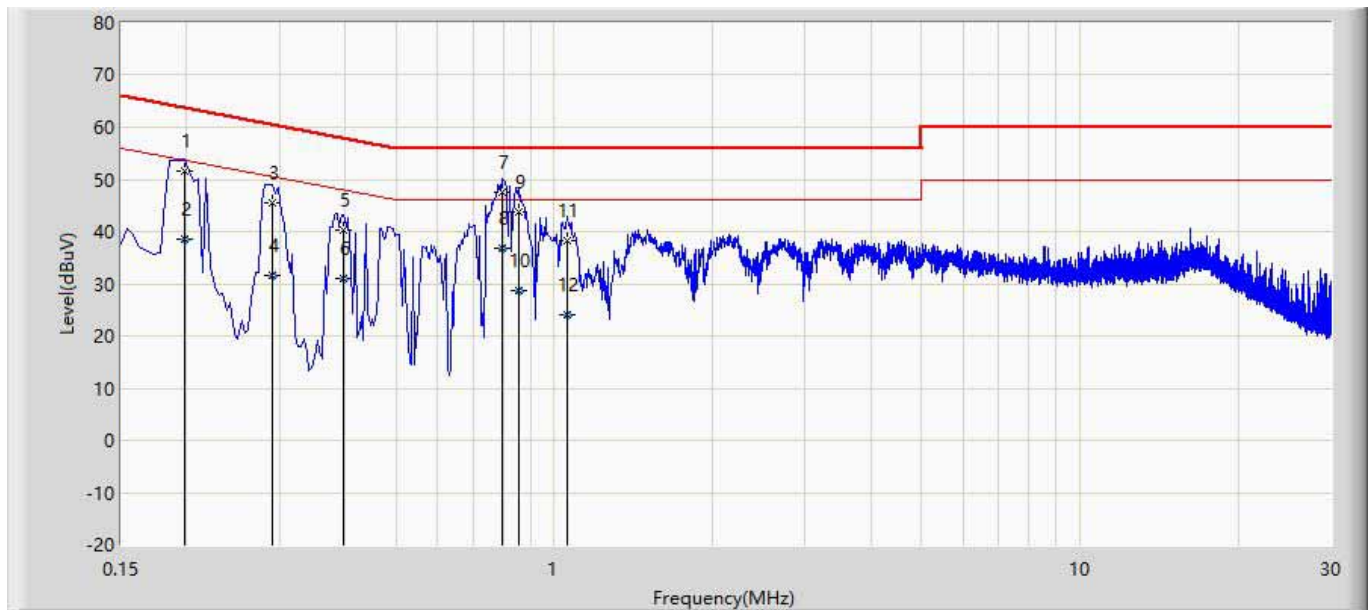
3.6. Test Result

Engineer: Scott	
Site: TR5	Time: 2015/08/24
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: AC750 Wireless Dual Band ADSL2+ModemRouter	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.198	51.783	42.073	-11.911	63.694	9.710	QP
2		0.198	35.930	26.220	-17.764	53.694	9.710	AV
3		0.306	41.554	31.854	-18.524	60.078	9.700	QP
4		0.306	20.566	10.866	-29.512	50.078	9.700	AV
5		0.402	41.995	32.292	-15.817	57.812	9.703	QP
6		0.402	23.972	14.269	-23.840	47.812	9.703	AV
7		0.502	38.685	28.985	-17.315	56.000	9.700	QP
8		0.502	21.988	12.288	-24.012	46.000	9.700	AV
9		0.798	42.815	33.125	-13.185	56.000	9.690	QP
10		0.798	29.915	20.225	-16.085	46.000	9.690	AV
11		0.846	40.040	30.350	-15.960	56.000	9.690	QP
12		0.846	20.746	11.056	-25.254	46.000	9.690	AV

Engineer: Scott	
Site: TR5	Time: 2015/08/24
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: AC750 Wireless Dual Band ADSL2+ModemRouter	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.198	51.580	41.860	-12.114	63.694	9.720	QP
2		0.198	38.440	28.720	-15.254	53.694	9.720	AV
3		0.290	45.616	35.906	-14.908	60.524	9.710	QP
4		0.290	31.500	21.790	-19.024	50.524	9.710	AV
5		0.398	40.415	30.712	-17.480	57.895	9.703	QP
6		0.398	30.916	21.213	-16.979	47.895	9.703	AV
7	*	0.794	47.446	37.736	-8.554	56.000	9.710	QP
8		0.794	36.817	27.107	-9.183	46.000	9.710	AV
9		0.858	43.875	34.168	-12.125	56.000	9.707	QP
10		0.858	28.802	19.095	-17.198	46.000	9.707	AV
11		1.058	38.298	28.588	-17.702	56.000	9.710	QP
12		1.058	24.136	14.426	-21.864	46.000	9.710	AV

Note: All the test modes are pretested and mode 1 802.11b mode was found to be the worst mode, so the data of this test mode was recorded.

4. Radiated Emission

4.1. Test Equipment

Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2015.11.17
Bilog Chainenna	Teseq GmbH	CBL6112D	27611	2016.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2016.01.08

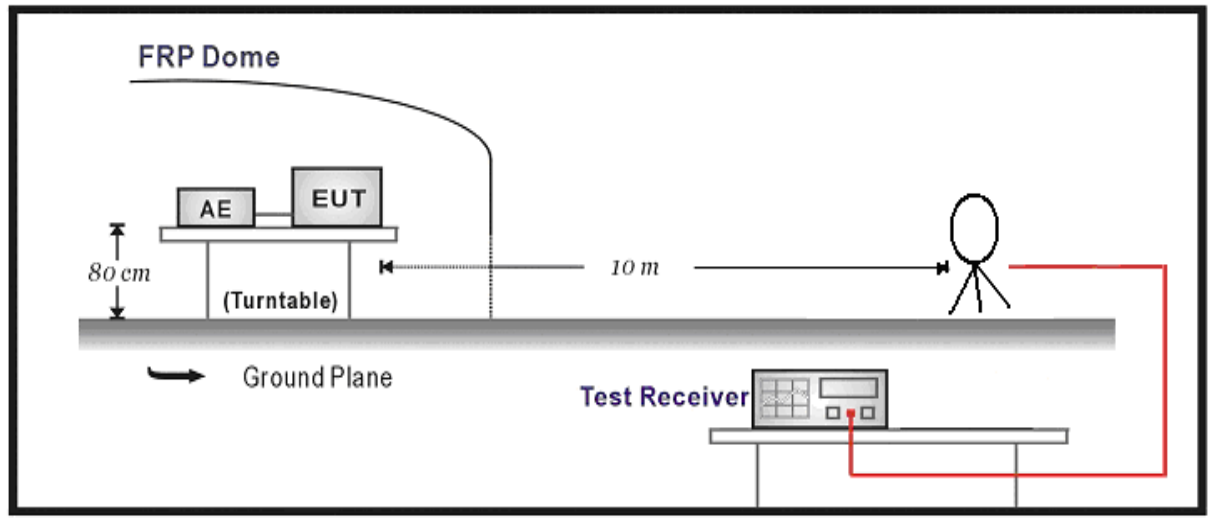
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2016.03.28
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2015.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.08

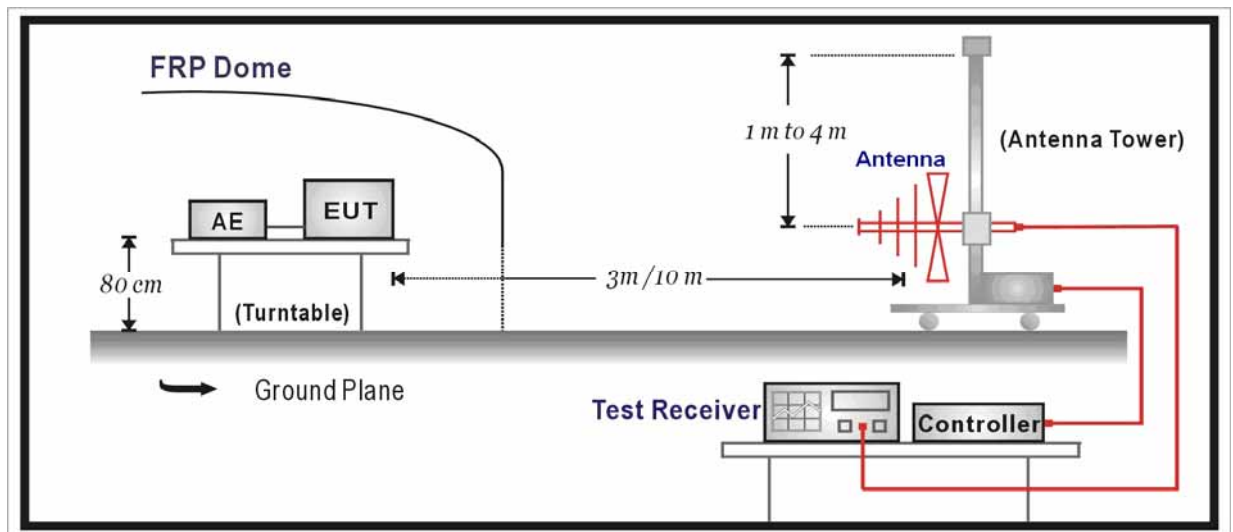
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

4.2. Test Setup

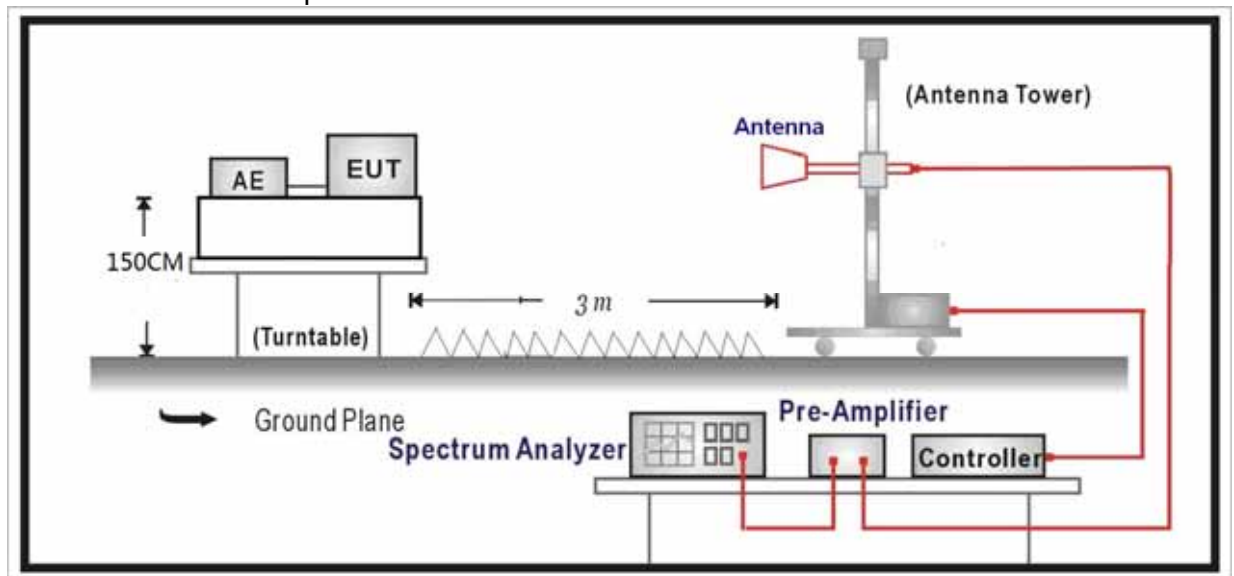
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

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

Note 2: Distance refers to the distance in meters between the measuring instrument Antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2014 and tested according to ANSI C63.10, 2013.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from Antenna to the EUT was 3 meters.

The Antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This

is repeated for both horizontal and vertical polarization of the Antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2014 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is not constant (i.e., duty cycle variations exceed ± 2 percent), then the following procedure shall be used:

- a) Set RBW = 1 MHz.
- b) Set VBW $\geq 1/T$.
- c) Video bandwidth mode or display mode
 - 1) The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).
 - 2) As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode.
- d) Detector = Peak.
- e) Sweep time = auto.
- f) Trace mode = max hold.
- g) Allow max hold to run for at least 50 times (1/duty cycle) traces.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
below 1G is defined as ± 3.8 dB

4.6. Test Result

Mode1: Transmit by 802.11b

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	4824.0	49.9	-6.7	43.2	54(note3)	-10.8	PK
	H	7236.0	51.6	-2.6	49.0	54(note3)	-5.0	PK
	H	9648.0	44.7	1.0	45.7	54(note3)	-8.3	PK
	V	4824.0	59.2	-6.7	52.5	54(note3)	-1.5	PK
	V	7236.0	56.2	-2.6	53.6	54(note3)	-0.4	PK
	V	9648.0	46.7	1.0	47.7	54(note3)	-6.3	PK
6	H	4874.0	50.5	-6.6	43.9	54(note3)	-10.1	PK
	H	7311.0	49.5	-2.9	46.6	54(note3)	-7.4	PK
	H	9478.0	43.5	1.4	44.9	54(note3)	-9.1	PK
	V	4874.0	55.1	-6.6	48.5	54(note3)	-5.5	PK
	V	7311.0	52.4	-2.9	49.5	54(note3)	-4.5	PK
	V	9748.0	44.4	1.0	45.4	54(note3)	-8.6	PK
11	H	4924.0	48.4	-6.7	41.7	54(note3)	-12.3	PK
	H	7386.0	48.2	-2.4	45.8	54(note3)	-8.2	PK
	H	9848.0	43.0	1.2	44.2	54(note3)	-9.8	PK
	V	4924.0	52.7	-6.7	46.0	54(note3)	-8.0	PK
	V	7386.0	51.7	-2.4	49.3	54(note3)	-4.7	PK
	V	9848.0	44.4	1.2	45.6	54(note3)	-8.4	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB 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.

Mode2: Transmit by 802.11g

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1+2	1	H	4824.0	48.9	-6.7	42.2	54(note3)	-11.8	PK
		H	7236.0	46.8	-2.6	44.2	54(note3)	-9.8	PK
		H	9648.0	44.3	1.0	45.3	54(note3)	-8.7	PK
		V	4824.0	48.7	-6.7	42.0	54(note3)	-12.0	PK
		V	7236.0	46.4	-2.6	43.8	54(note3)	-10.2	PK
		V	9648.0	44.3	1.0	45.3	54(note3)	-8.7	PK
	6	H	4874.0	48.2	-6.6	41.6	54(note3)	-12.4	PK
		H	7311.0	47.0	-2.9	44.1	54(note3)	-9.9	PK
		H	9748.0	43.1	1.0	44.1	54(note3)	-9.9	PK
		V	4874.0	53.7	-6.6	47.1	54(note3)	-6.9	PK
		V	7311.0	50.4	-2.9	47.5	54(note3)	-6.5	PK
		V	9748.0	44.3	1.0	45.3	54(note3)	-8.7	PK
	11	H	4924.0	48.2	-6.7	41.5	54(note3)	-12.5	PK
		H	7386.0	46.8	-2.4	44.4	54(note3)	-9.6	PK
		H	9848.0	44.4	1.2	45.6	54(note3)	-8.4	PK
		V	4924.0	50.1	-6.7	43.4	54(note3)	-10.6	PK
		V	7386.0	46.1	-2.4	43.7	54(note3)	-10.3	PK
		V	9848.0	44.9	1.2	46.1	54(note3)	-7.9	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB 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.

Mode3: Transmit by 802.11n(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1+2	1	H	4824.0	48.4	-6.7	41.7	54(note3)	-12.3	PK
		H	7236.0	47.0	-2.6	44.4	54(note3)	-9.6	PK
		H	9648.0	43.3	1.0	44.3	54(note3)	-9.7	PK
		V	4824.0	49.4	-6.7	42.7	54(note3)	-11.3	PK
		V	7236.0	46.2	-2.6	43.6	54(note3)	-10.4	PK
		V	9648.0	44.3	1.0	45.3	54(note3)	-8.7	PK
	6	H	4874.0	49.3	-6.6	42.7	54(note3)	-11.3	PK
		H	7311.0	47.0	-2.9	44.1	54(note3)	-9.9	PK
		H	9748.0	43.6	1.0	44.6	54(note3)	-9.4	PK
		V	4874.0	54.0	-6.6	47.4	54(note3)	-6.6	PK
		V	7311.0	48.9	-2.9	46.0	54(note3)	-8.0	PK
		V	9748.0	44.5	1.0	45.5	54(note3)	-8.5	PK
	11	H	4924.0	48.5	-6.7	41.8	54(note3)	-12.2	PK
		H	7386.0	46.8	-2.4	44.4	54(note3)	-9.6	PK
		H	9848.0	43.8	1.2	45.0	54(note3)	-9.0	PK
		V	4924.0	49.8	-6.7	43.1	54(note3)	-10.9	PK
		V	7386.0	46.5	-2.4	44.1	54(note3)	-9.9	PK
		V	9848.0	44.7	1.2	45.9	54(note3)	-8.1	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB 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.

Mode4: Transmit by 802.11n(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 1+2	3	H	4844.0	49.0	-6.6	42.4	54(note3)	-11.6	PK
		H	7266.0	45.7	-2.7	43.0	54(note3)	-11.0	PK
		H	9688.0	43.5	0.8	44.3	54(note3)	-9.7	PK
		V	4844.0	49.6	-6.6	43.0	54(note3)	-11.0	PK
		V	7266.0	46.1	-2.7	43.4	54(note3)	-10.6	PK
		V	9688.0	45.4	0.8	46.2	54(note3)	-7.8	PK
	6	H	4874.0	47.8	-6.6	41.2	54(note3)	-12.8	PK
		H	7311.0	46.7	-2.9	43.8	54(note3)	-10.2	PK
		H	9748.0	45.9	1.0	46.9	54(note3)	-7.1	PK
		V	4874.0	49.4	-6.6	42.8	54(note3)	-11.2	PK
		V	7311.0	46.4	-2.9	43.5	54(note3)	-10.5	PK
		V	9748.0	45.5	1.0	46.5	54(note3)	-7.5	PK
		H	4904.0	48.7	-6.7	42.0	54(note3)	-12.0	PK
	9	H	7356.0	46.2	-2.5	43.7	54(note3)	-10.3	PK
		H	9808.0	42.8	1.3	44.1	54(note3)	-9.9	PK
		V	4904.0	50.0	-6.7	43.3	54(note3)	-10.7	PK
		V	7356.0	46.1	-2.5	43.6	54(note3)	-10.4	PK
		V	9808.0	43.5	1.3	44.8	54(note3)	-9.2	PK
		H	4844.0	49.0	-6.6	42.4	54(note3)	-11.6	PK

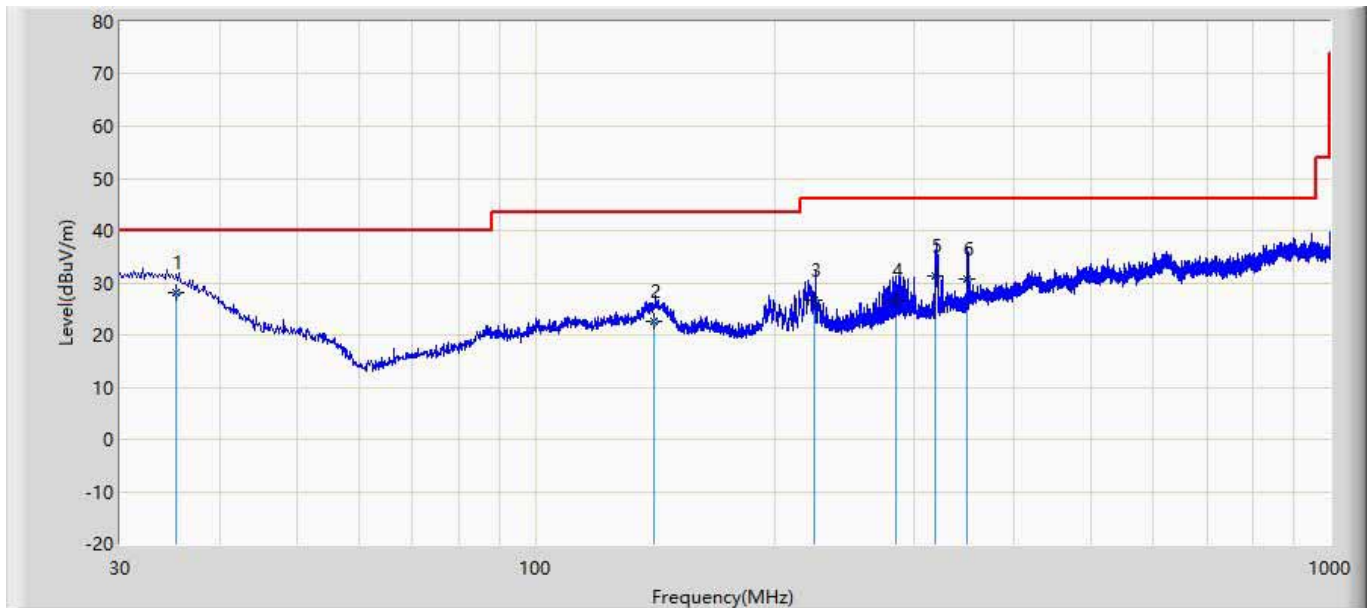
Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB 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.

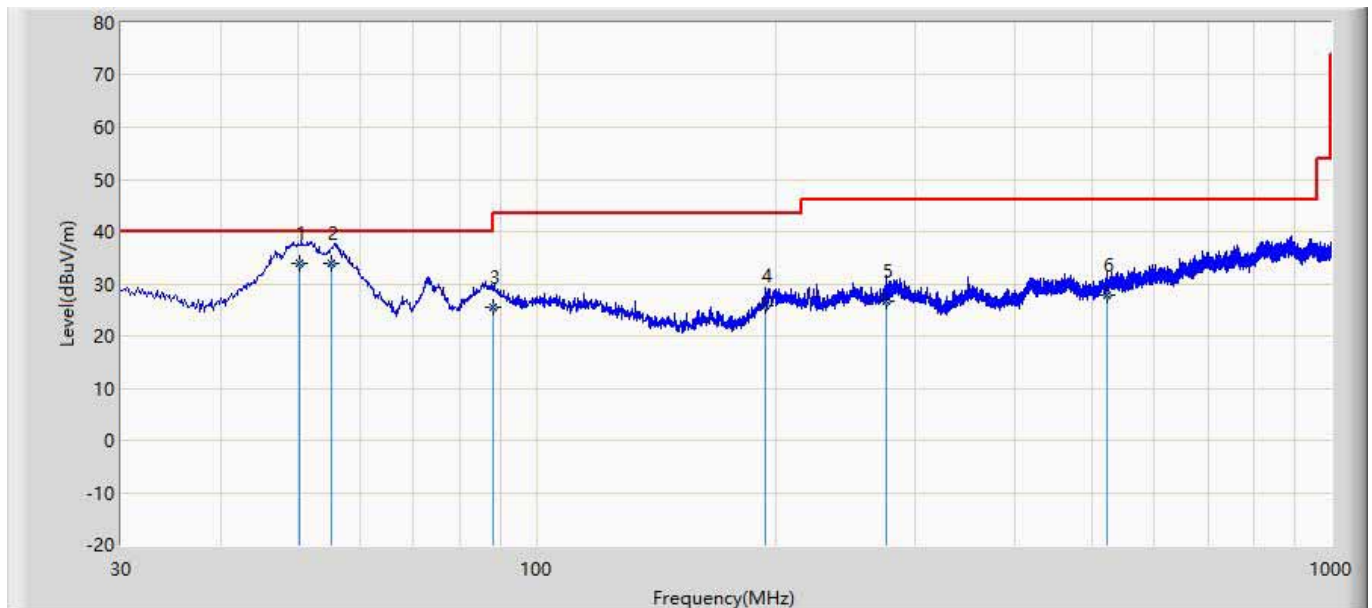
The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2015/08/24
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_10M(30-1000M)20150408	Polarity: Horizontal
EUT: AC750 Wireless Dual Band ADSL2+ModemRouter	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	35.236	34.908	28.141	-11.859	40.000	6.767	QP
2		141.265	33.344	22.622	-20.878	43.500	10.722	QP
3		224.236	38.470	26.564	-19.436	46.000	11.906	QP
4		284.236	34.952	26.677	-19.323	46.000	8.275	QP
5		319.236	38.350	31.229	-14.771	46.000	7.121	QP
6		349.236	37.090	30.830	-15.170	46.000	6.260	QP

Site: AC2	Time: 2015/08/24
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_10M(30-1000M)20150408	Polarity: Vertical
EUT: AC750 Wireless Dual Band ADSL2+ModemRouter	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	50.236	47.951	33.854	-6.146	40.000	14.097	QP
2		55.236	48.692	33.792	-6.208	40.000	14.900	QP
3		88.236	38.772	25.382	-18.118	43.500	13.390	QP
4		194.236	37.975	25.655	-17.845	43.500	12.320	QP
5		276.235	35.076	26.596	-19.404	46.000	8.480	QP
6		522.236	29.881	27.925	-18.075	46.000	1.956	QP

Note: All the test modes are pretested and mode 1 802.11b mode was found to be the worst mode, so the data of this test mode was recorded.

5. RF Antenna Conducted Spurious

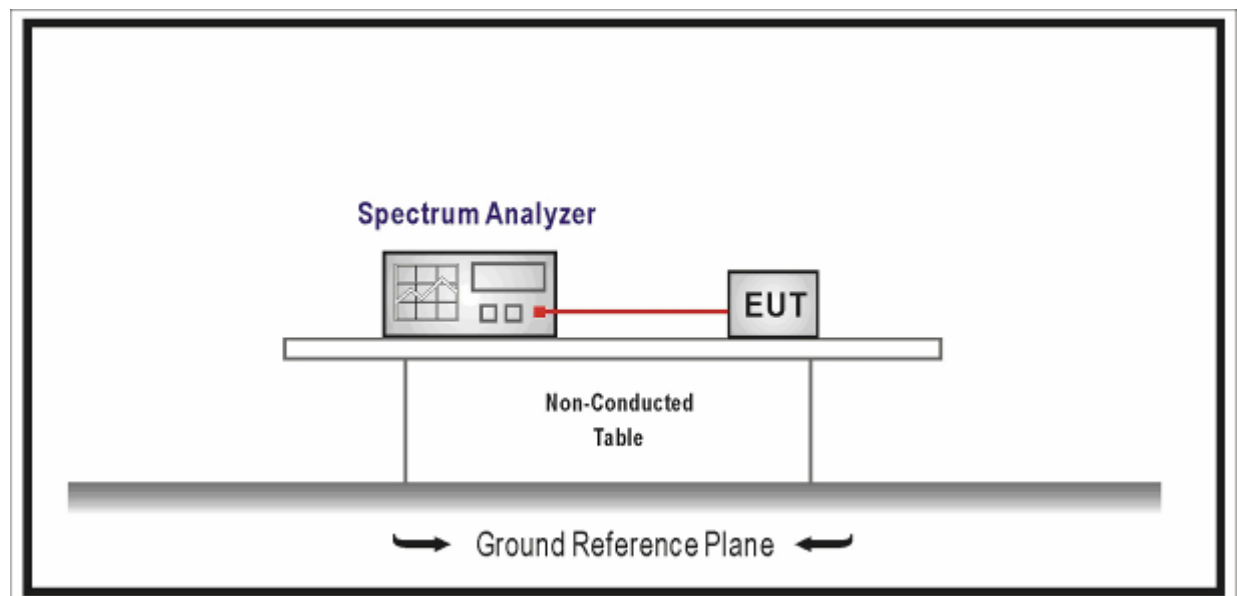
5.1. Test Equipment

RF Antenna Conducted Spurious / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.09

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

5.2. Test Setup



5.3. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

If maximum conducted (average) output power was used to determine compliance as described in 11.9.2, 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)

5.4. Test Procedure

The EUT was tested according to ANSI C63.10 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

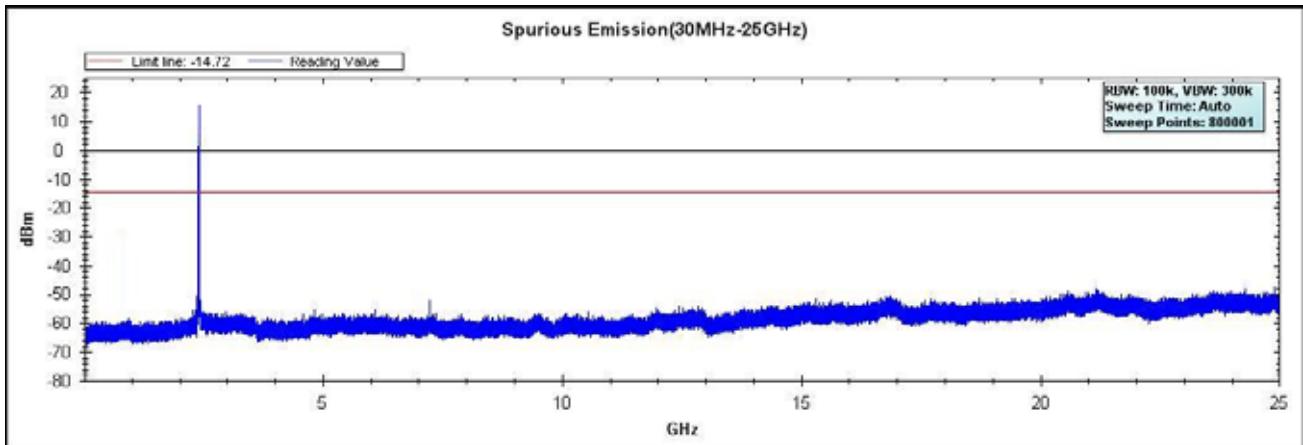
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

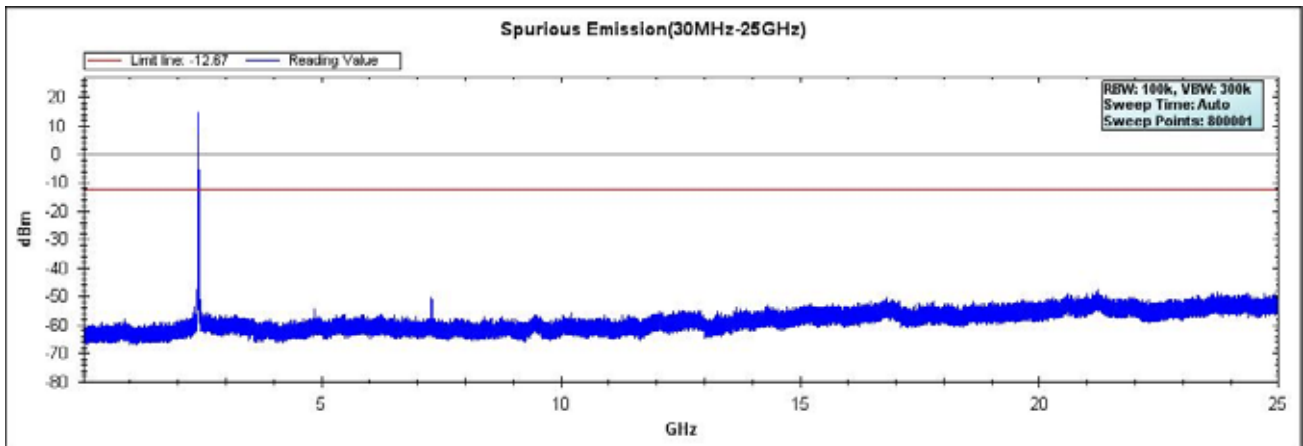
5.6. Test Result

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b

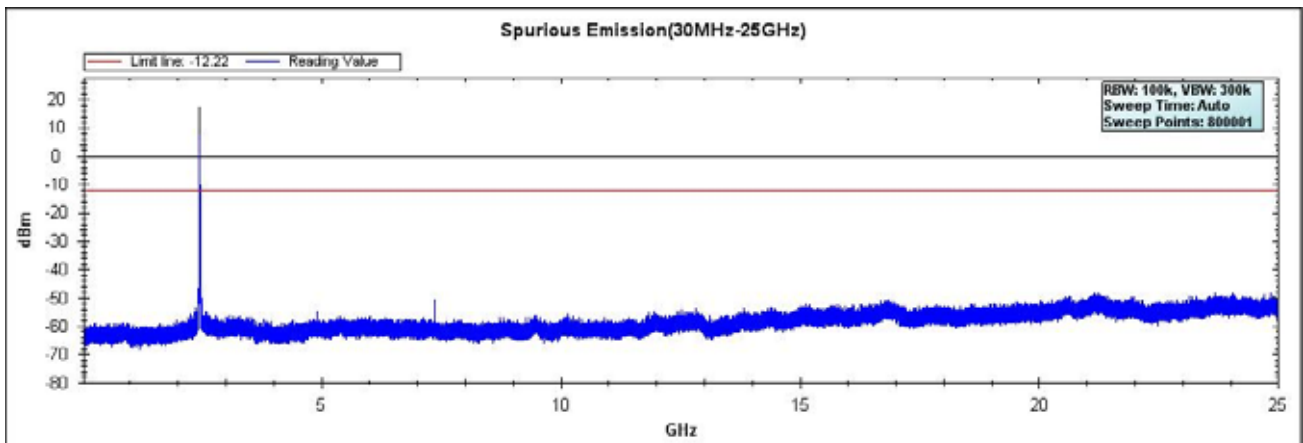
Channel 01 (2412MHz)



Channel 06 (2437MHz)



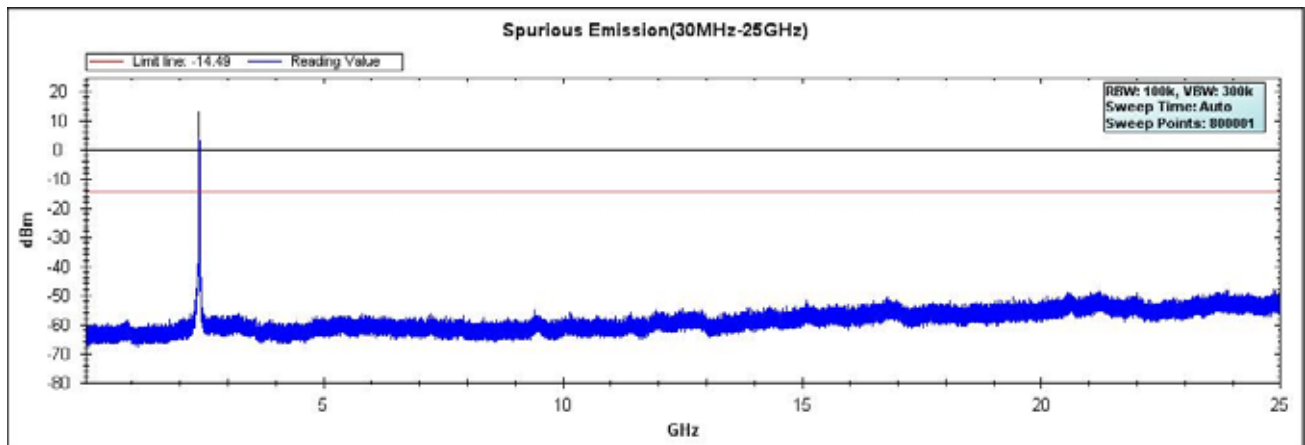
Channel 11 (2462MHz)



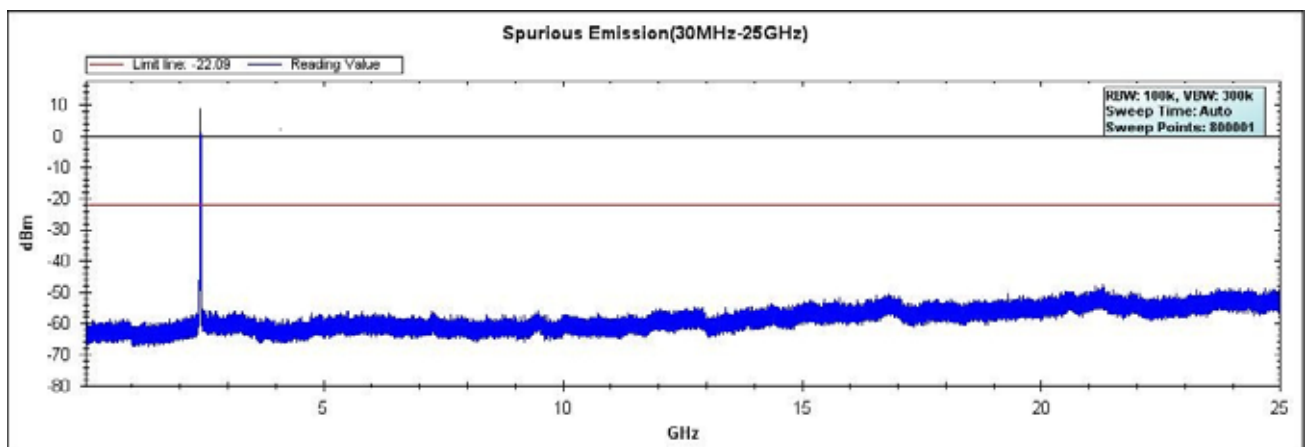
Product	: AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	: RF Antenna Conducted Spurious
Test Site	: TR-8
Test Mode	: Mode 2: Transmit by 802.11g (Ant 1+2)

ANT 1

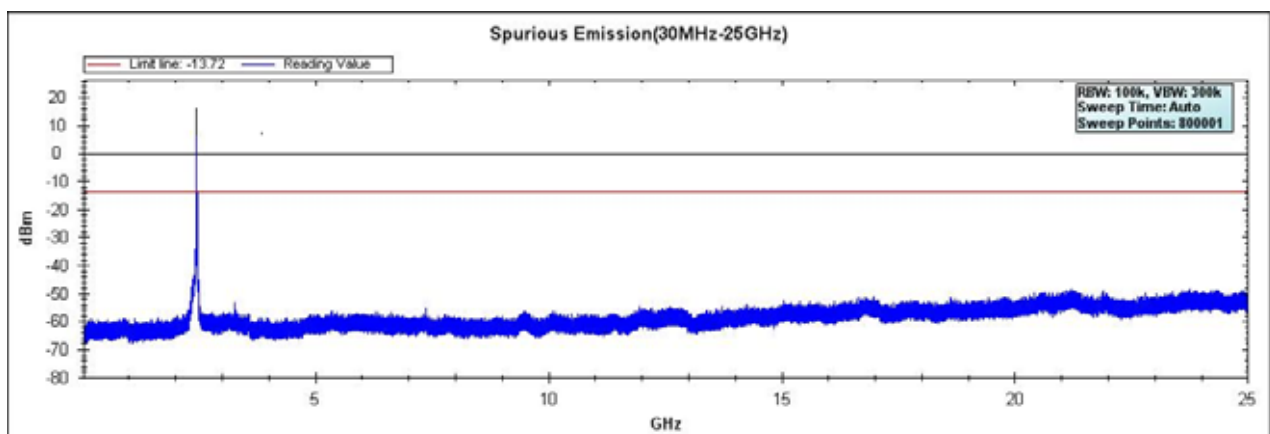
Channel 01 (2412MHz)



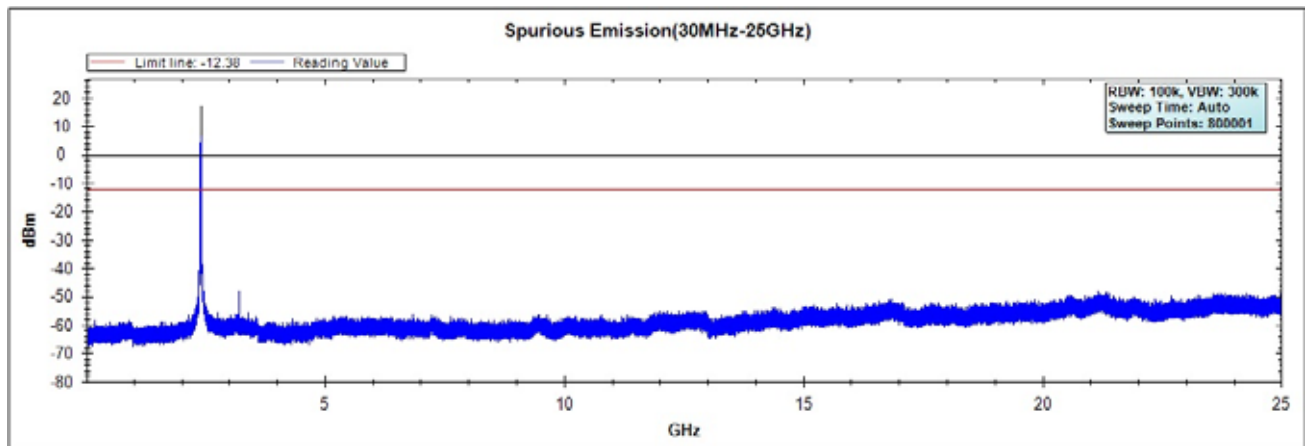
Channel 06 (2437MHz)



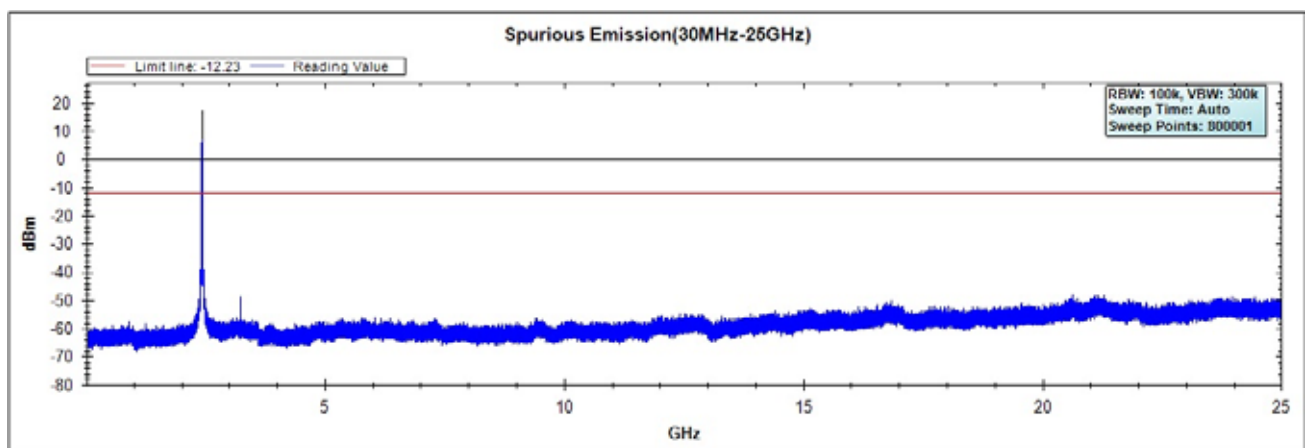
Channel 11 (2462MHz)



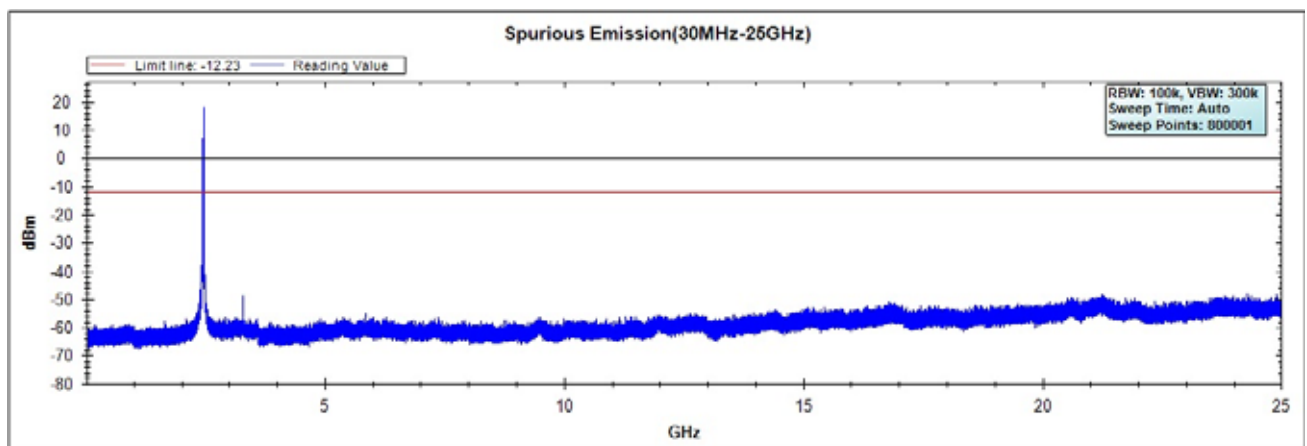
ANT 2
Channel 01 (2412MHz)



Channel 06 (2437MHz)



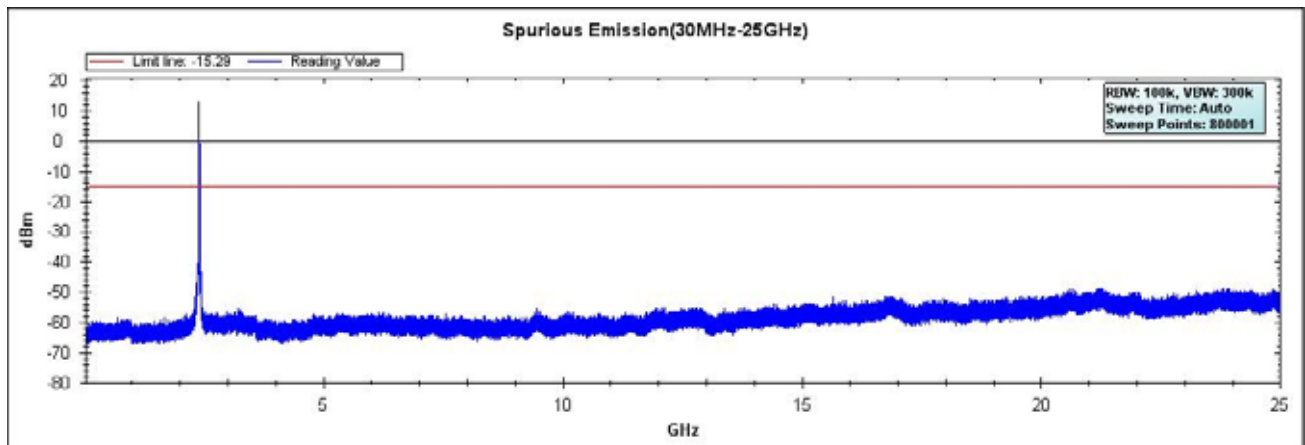
Channel 11 (2462MHz)



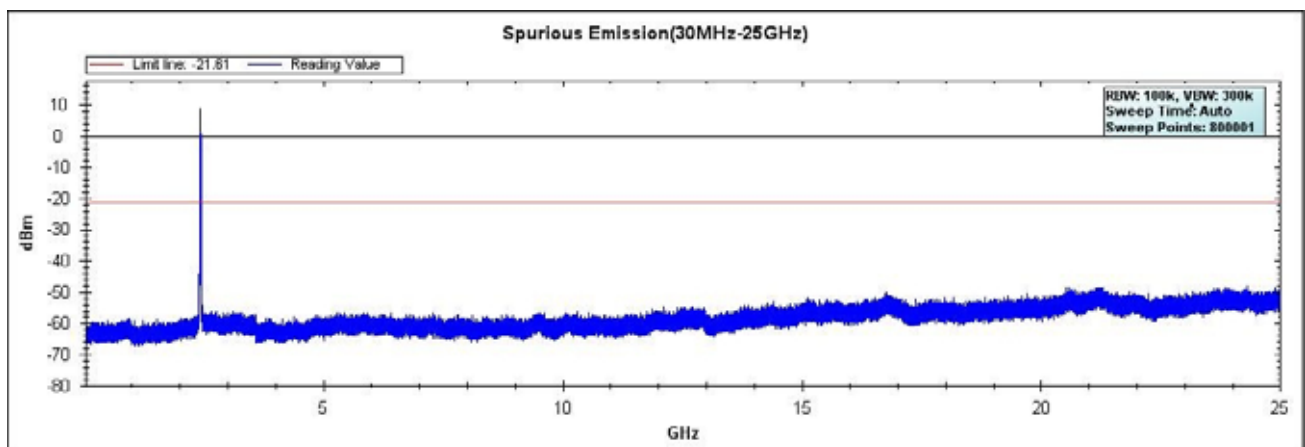
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 1+2)

Ant 1

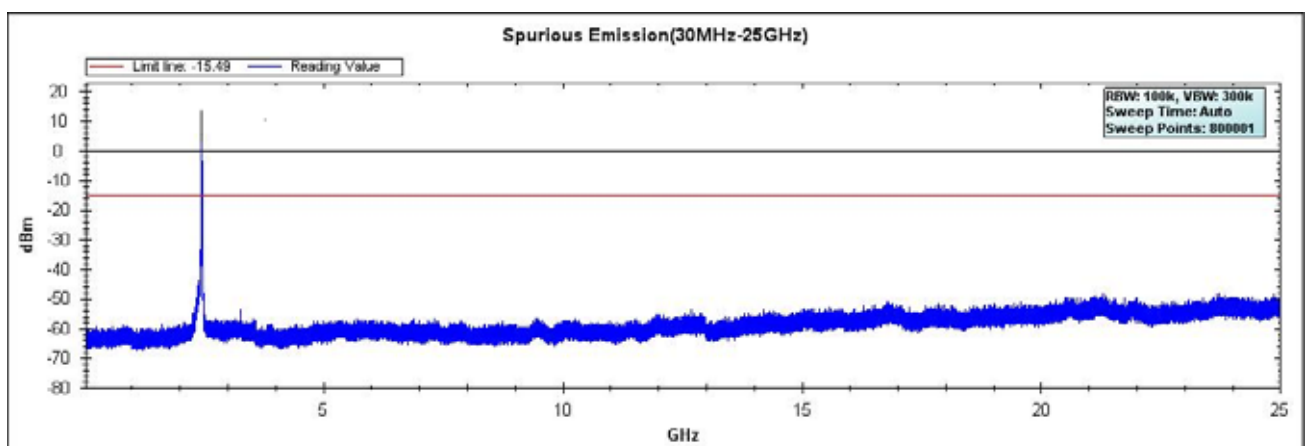
Channel 01 (2412MHz)



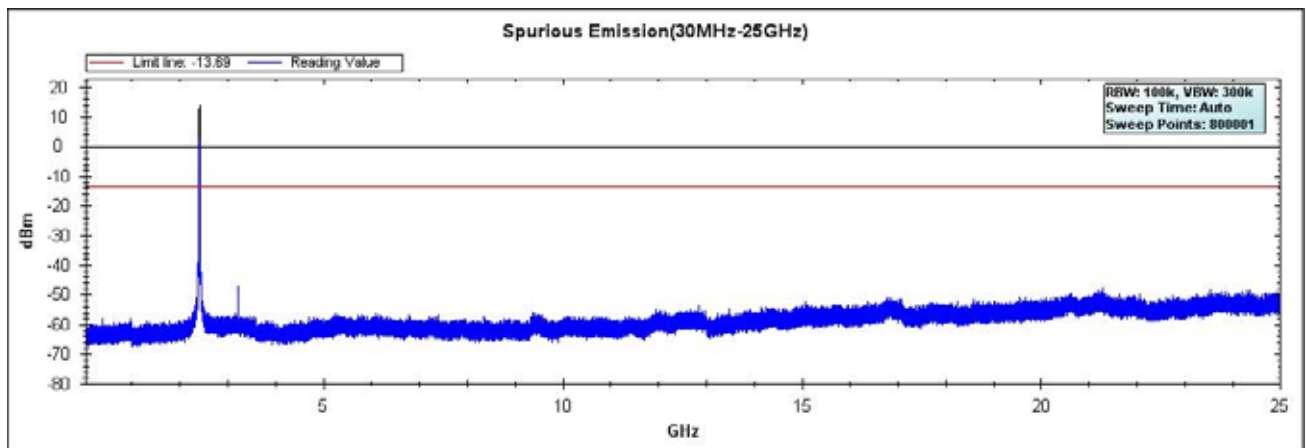
Channel 06 (2437MHz)



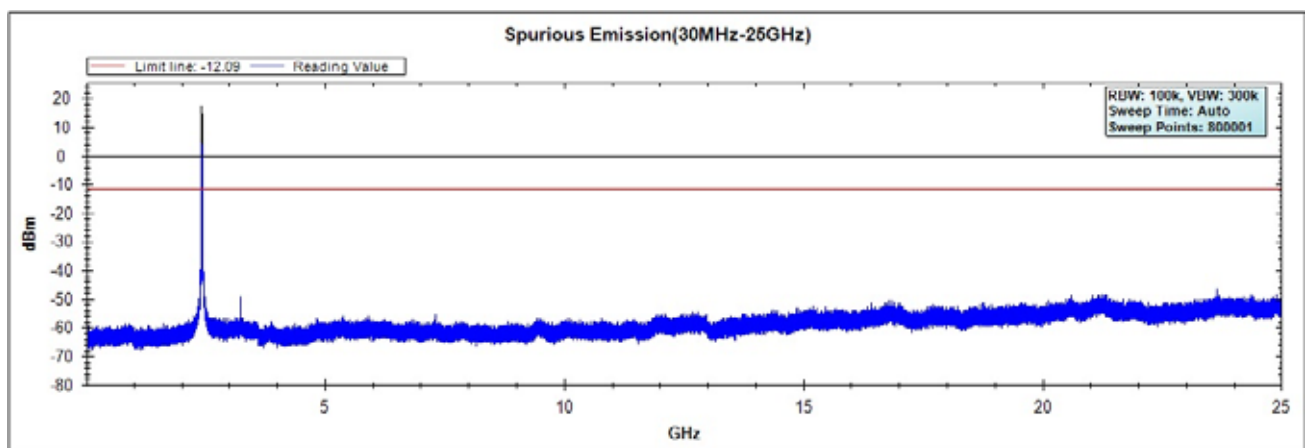
Channel 11 (2462MHz)



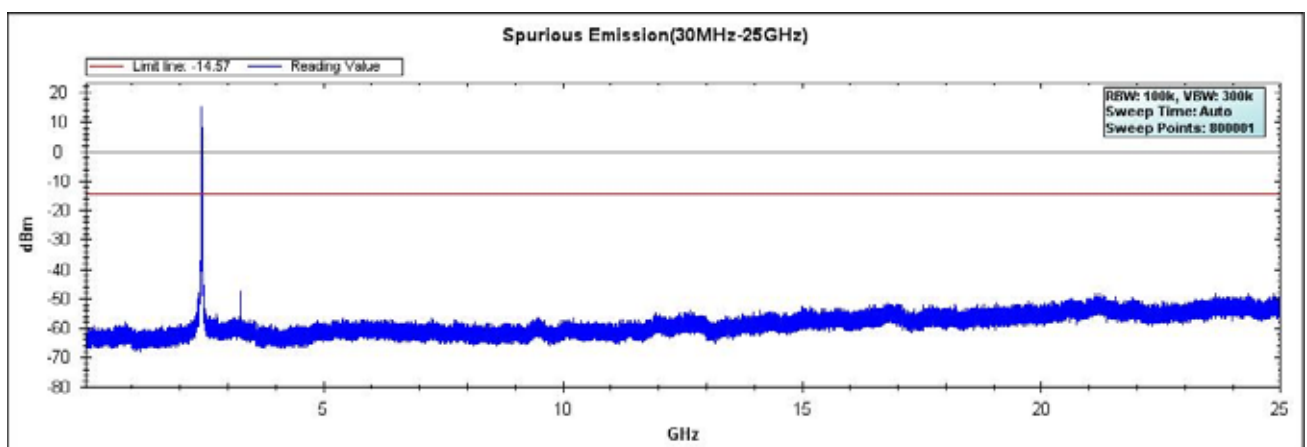
Ant 2
Channel 01 (2412MHz)



Channel 09 (2437MHz)



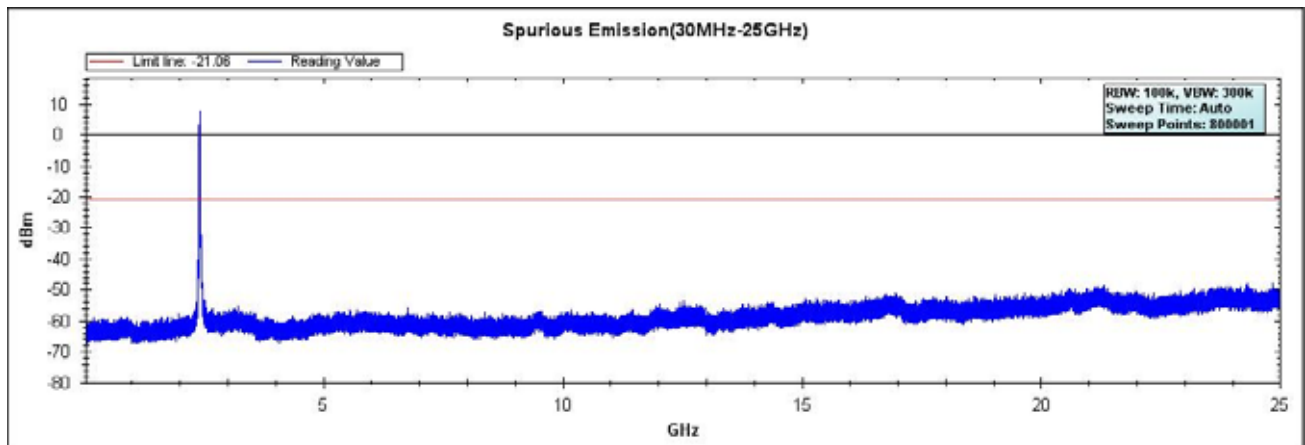
Channel 11 (2462MHz)



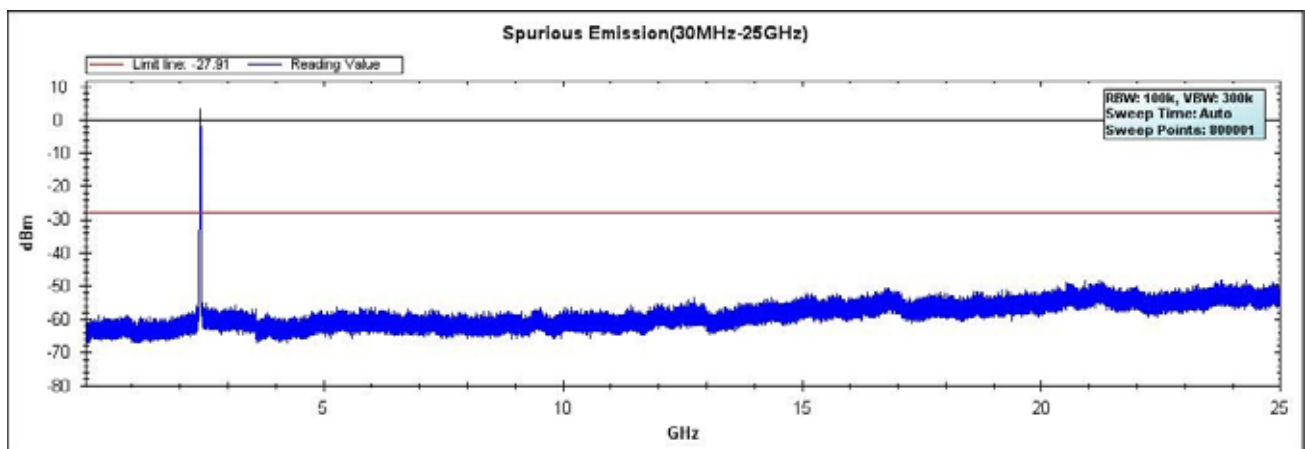
Product	: AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	: RF Antenna Conducted Spurious
Test Site	: TR-8
Test Mode	: Mode 4: Transmit by 802.11n(40MHz) (Ant 1+2)

ANT 1

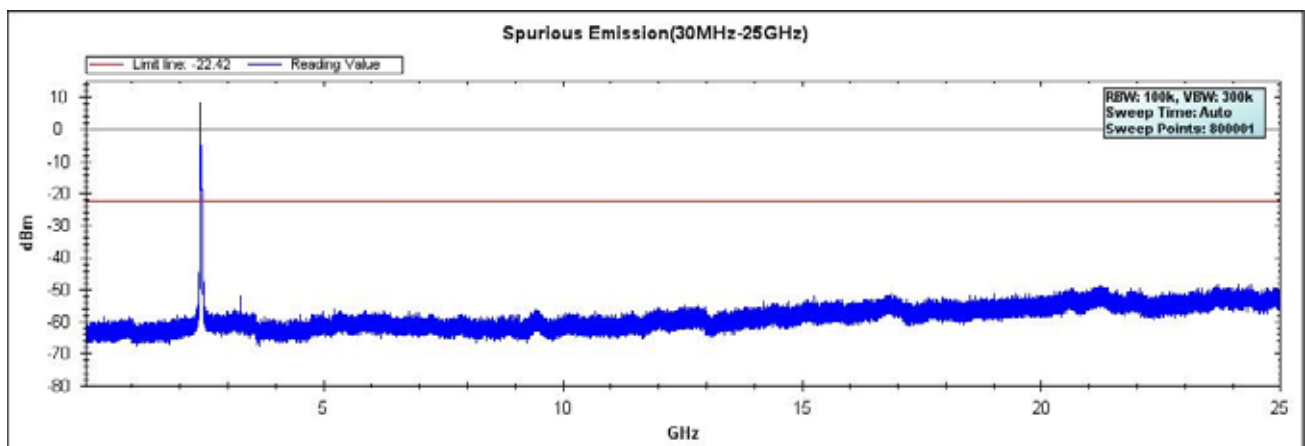
Channel 03 (2422MHz)



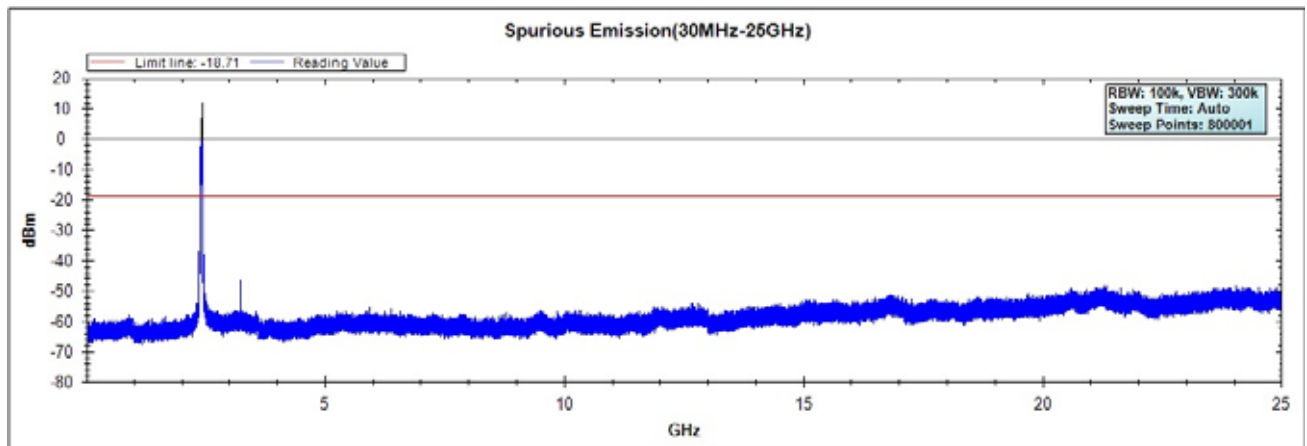
Channel 06 (2437MHz)



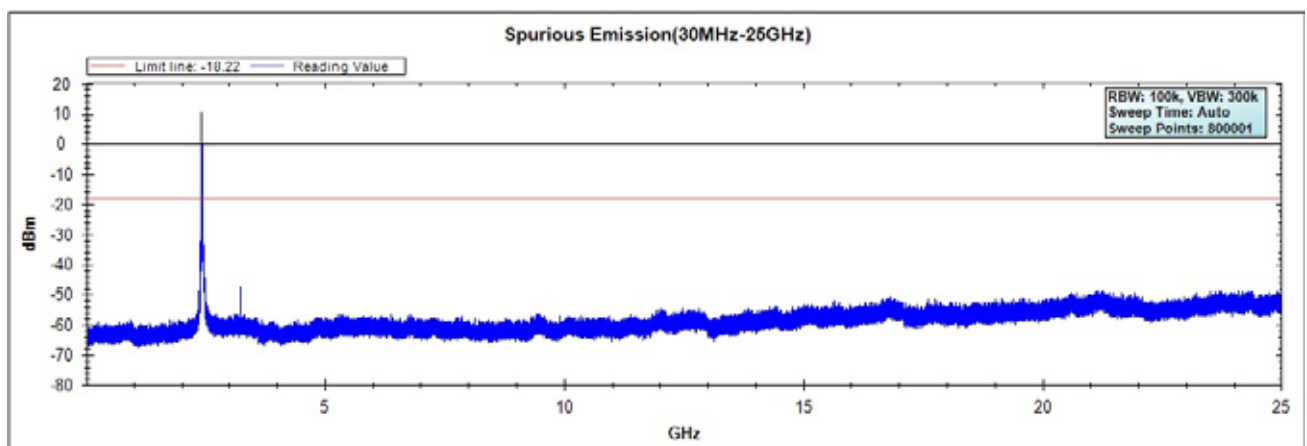
Channel 09 (2452MHz)



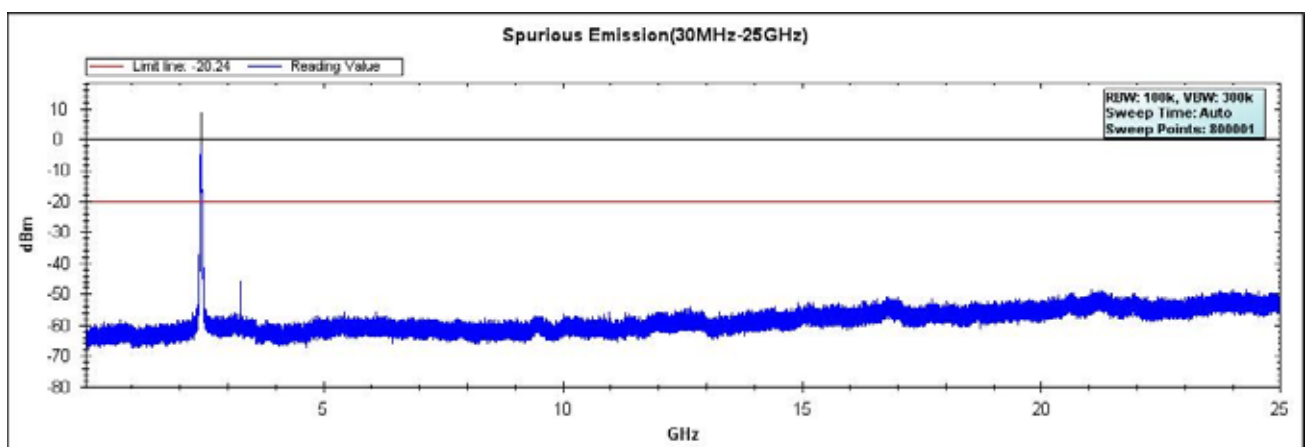
ANT 2
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



6. Radiated Emission Band Edge

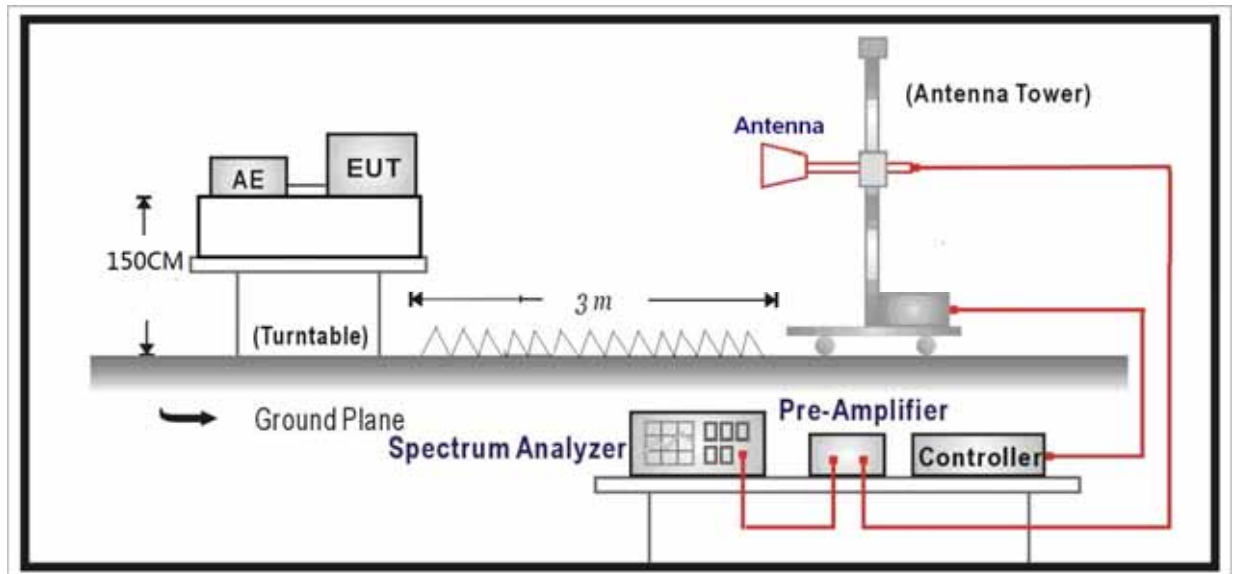
6.1. Test Equipment

☒ Radiated Emission Band Edge / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2016.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.07
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.08

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

6.2. Test Setup



6.3. Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.4. Test Procedure

According to ANSI C63.10: 2013.

This test is required for any spurious emission or modulation product that falls in a Restricted Band, as defined in Section 15.205 of FCC part 15. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being

corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b) of FCC part 15.

Now set the VBW $\geq 1 / T$ (the minimum transmission duration), while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209 of FCC Part 15.

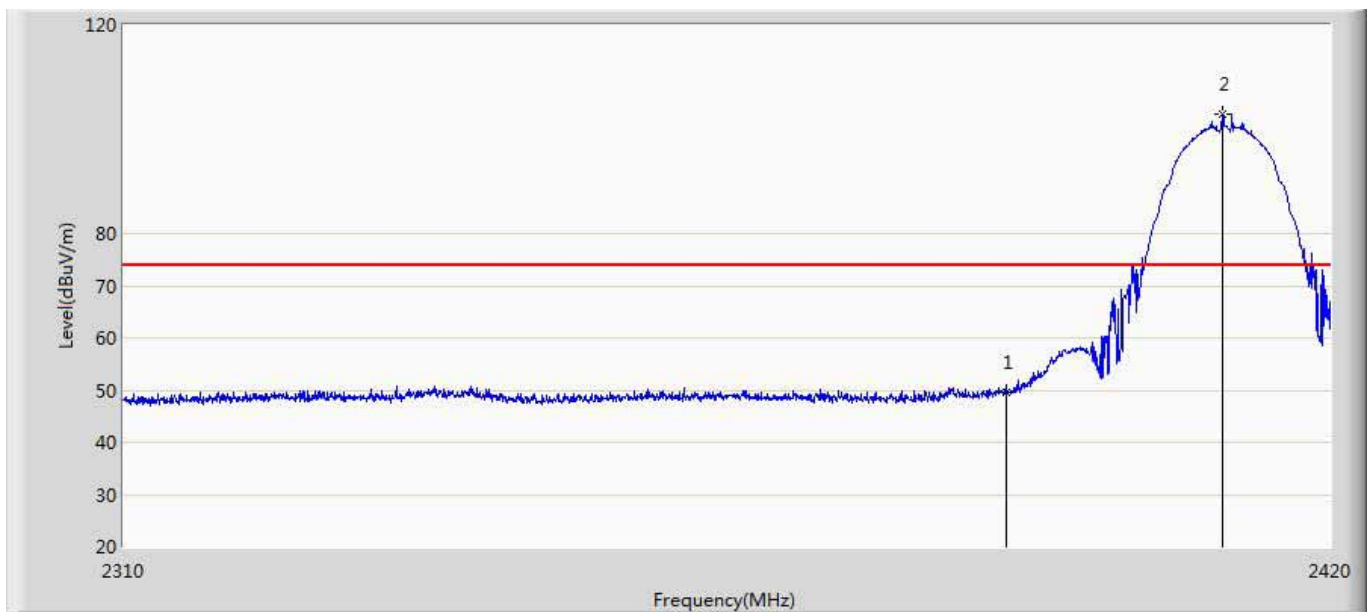
If the emission on which a radiated measurement must be made is located at the edge of the authorized band of operation, then the alternative “marker-delta” method may be employed.

6.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

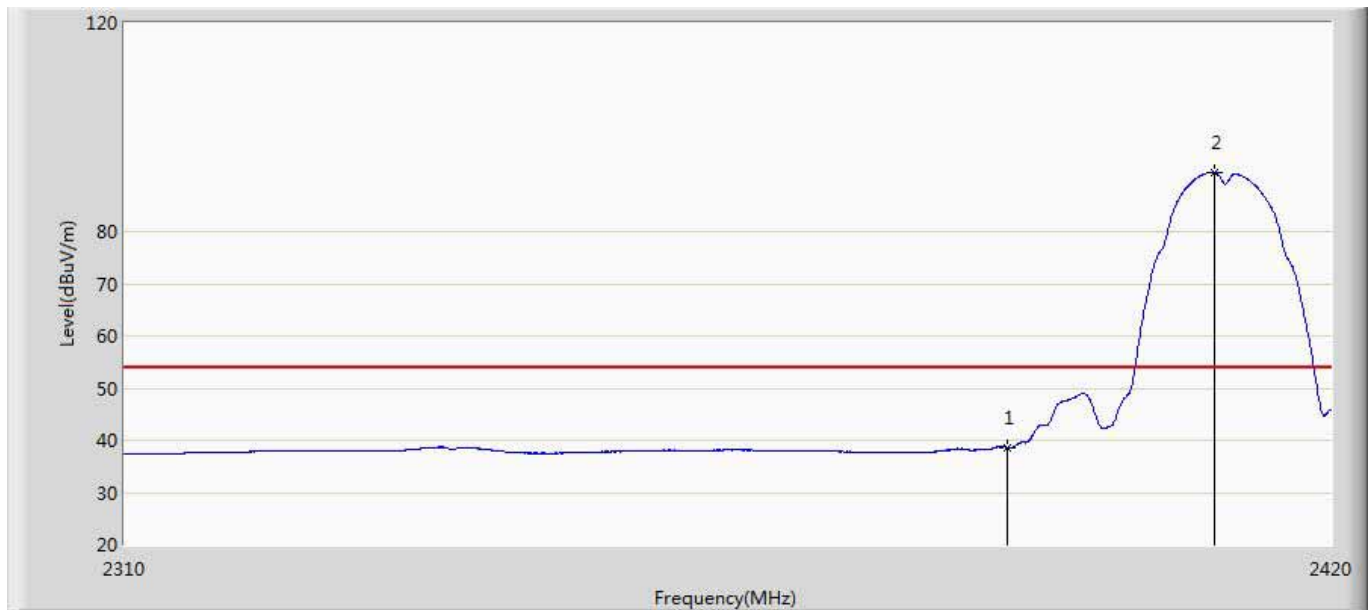
6.6. Test Result

Site: AC5	Time: 2015/09/29 - 12:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11b	



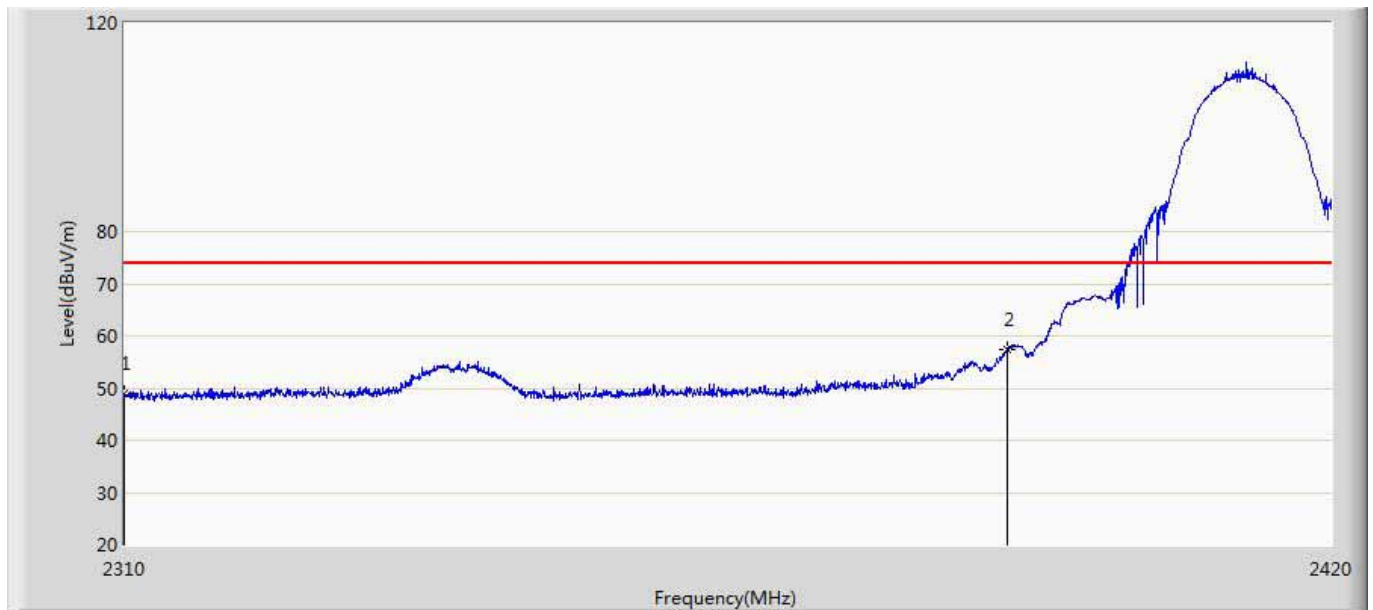
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.486	12.131	N/A	N/A	37.355	PK
2	*	2409.935	102.825	65.496	28.825	74.000	37.329	PK

Site: AC5	Time: 2015/09/29 - 12:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11b	



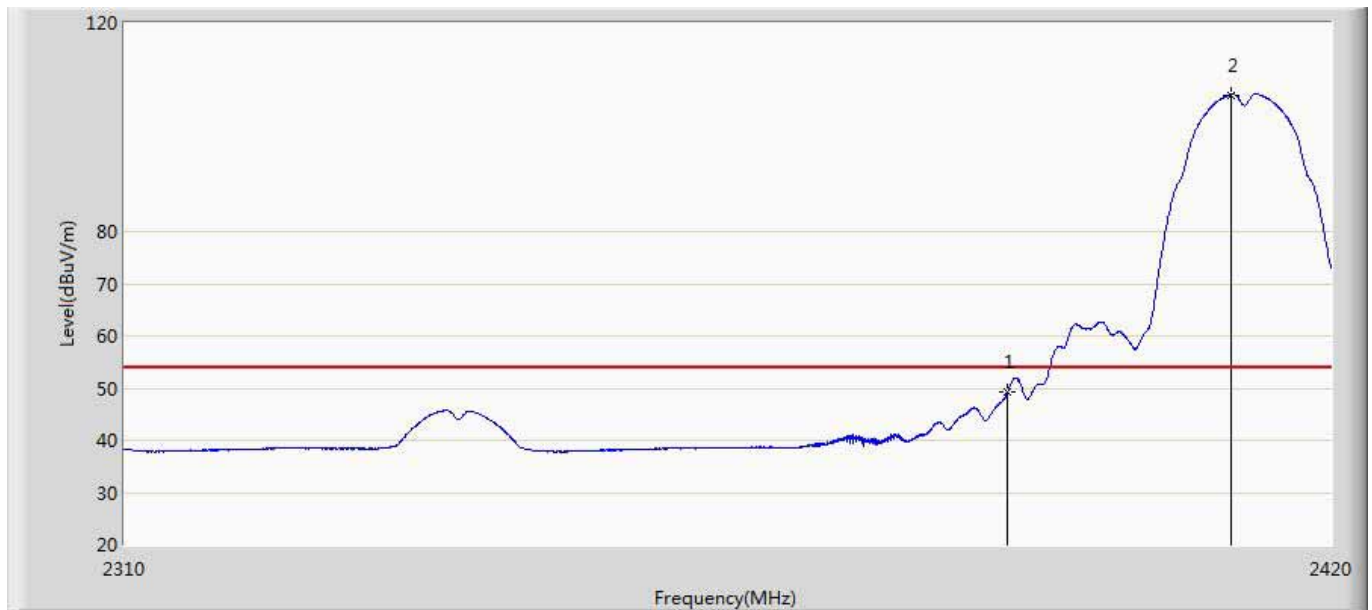
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.597	1.242	N/A	N/A	37.355	AV
2	*	2409.220	91.395	54.065	37.395	54.000	37.330	AV

Site: AC5	Time: 2015/09/29 - 12:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11b	



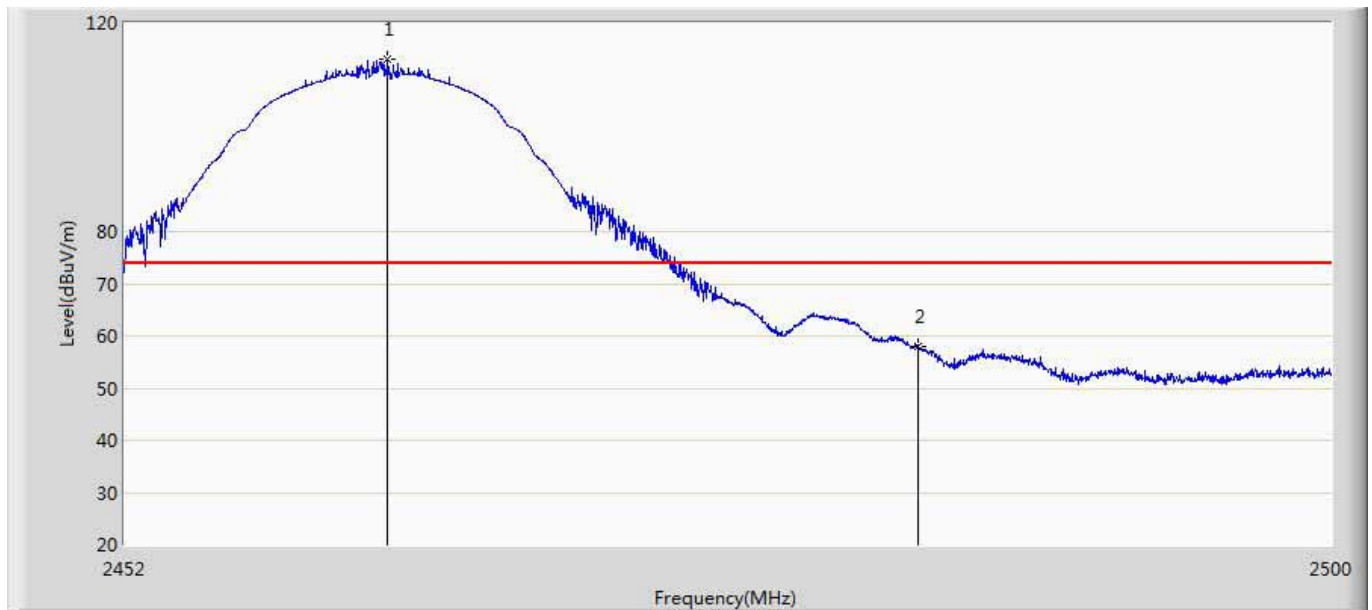
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2310.055	48.992	11.866	-25.008	74.000	37.126	PK
2	*	2390.000	57.321	19.966	-16.679	74.000	37.355	PK

Site: AC5	Time: 2015/09/29 - 12:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1: Transmit at channel 2412Mhz by 802.11b	



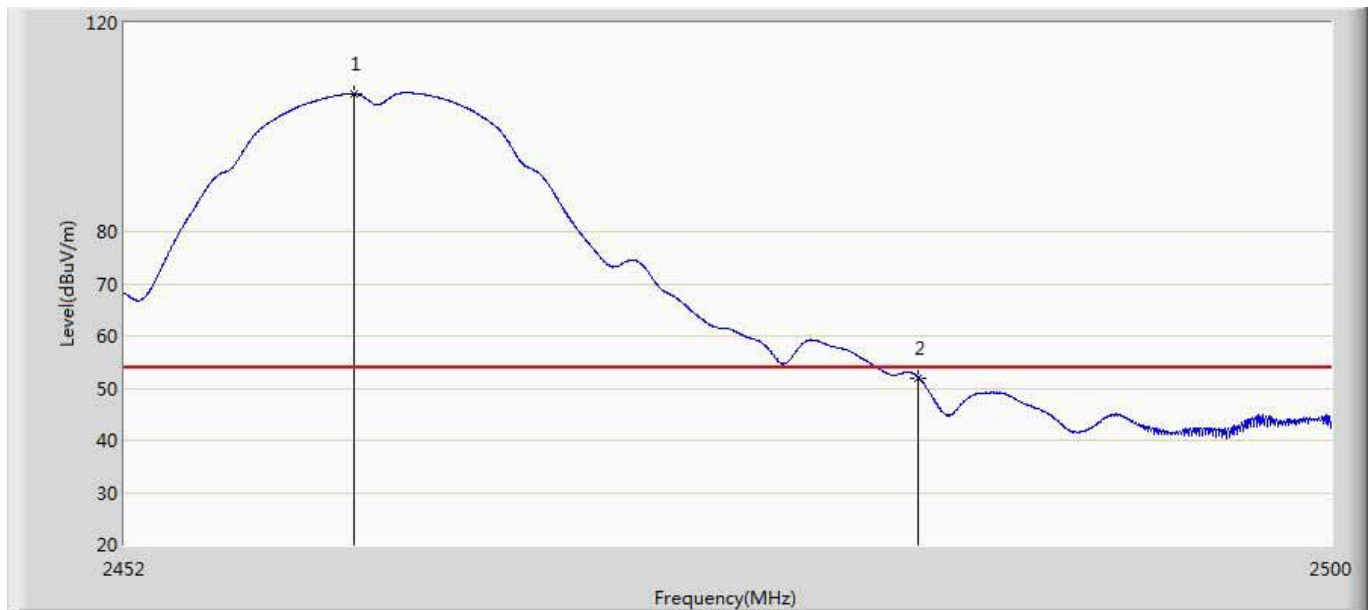
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.181	11.826	-4.819	54.000	37.355	AV
2	*	2410.650	106.190	68.862	N/A	N/A	37.328	AV

Site: AC5	Time: 2015/09/29 - 12:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11b	



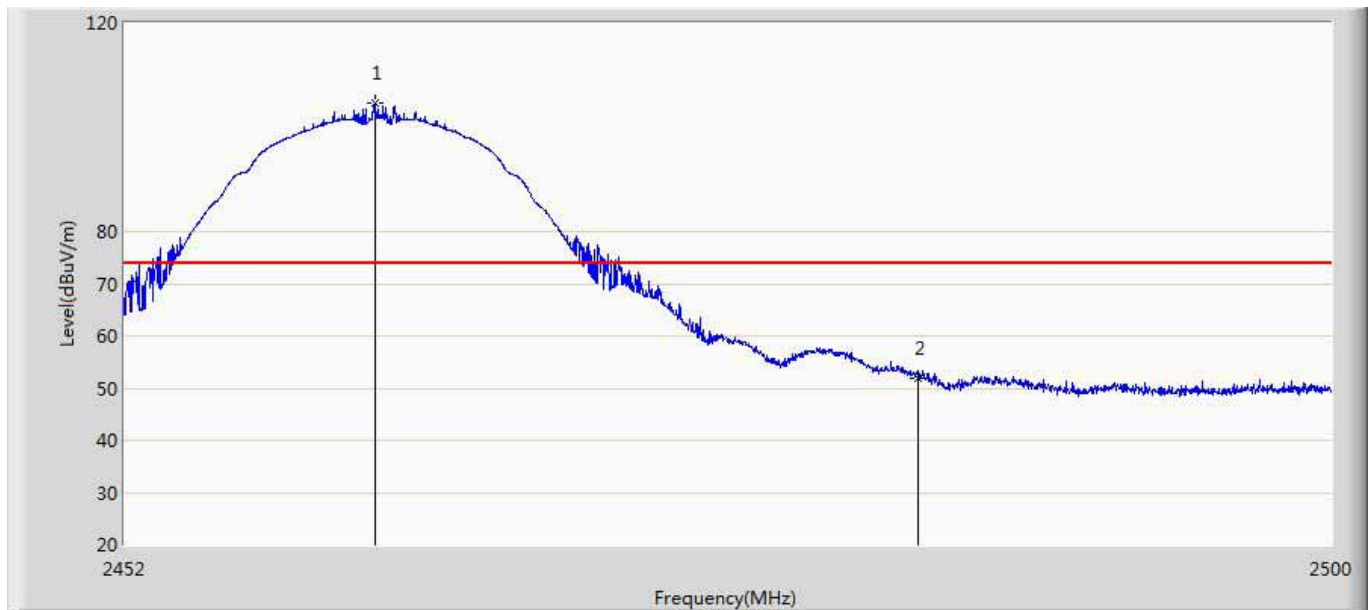
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.416	113.129	75.707	N/A	N/A	37.422	PK
2		2483.500	57.855	20.344	-16.145	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 12:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11b	



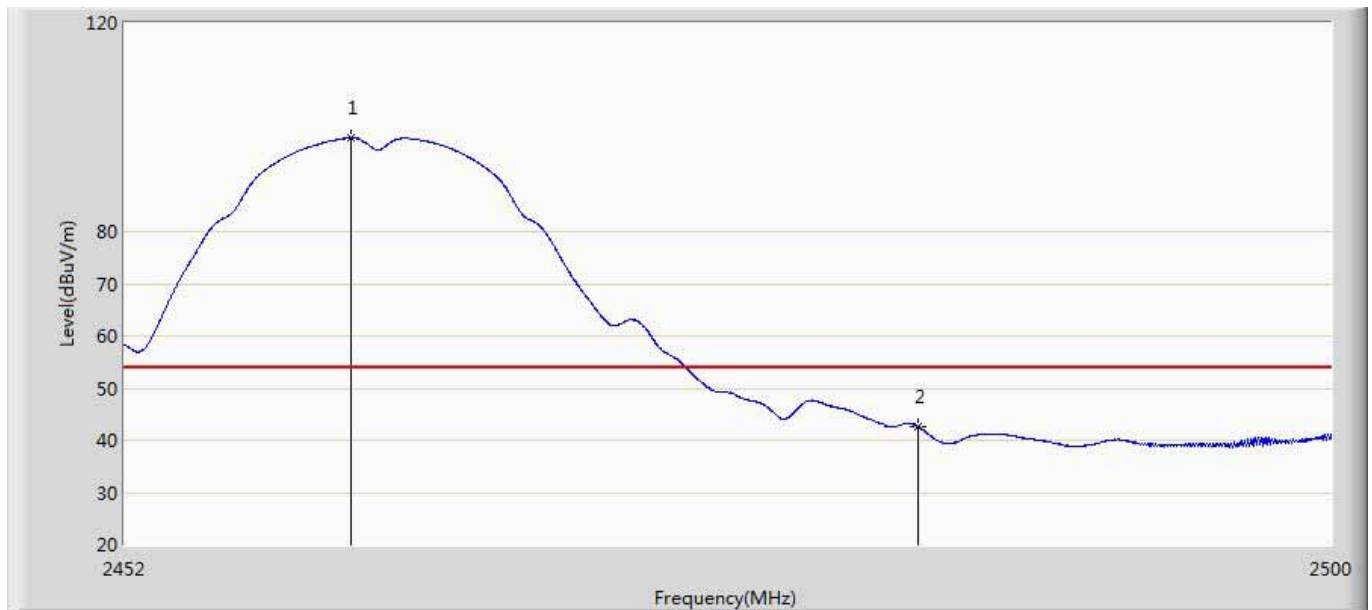
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.072	106.404	68.983	N/A	N/A	37.421	AV
2		2483.500	52.004	14.493	-1.996	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 12:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11b	



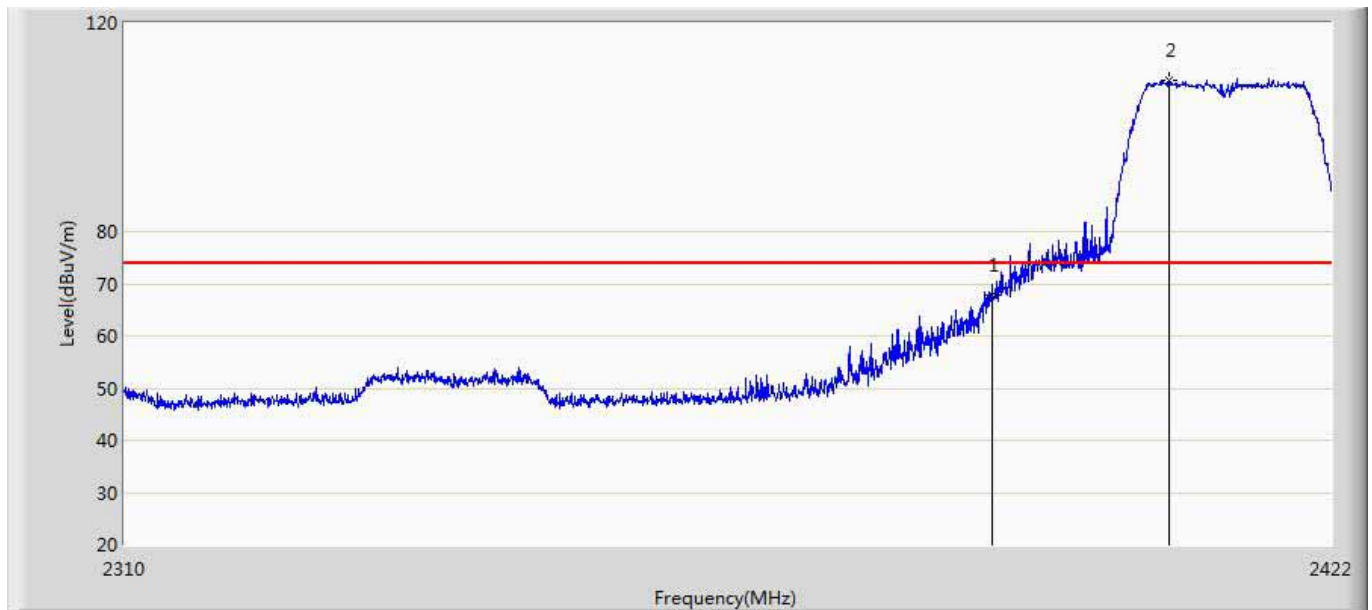
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.912	104.720	67.300	N/A	N/A	37.421	PK
2		2483.500	51.994	14.483	-22.006	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 12:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11b	



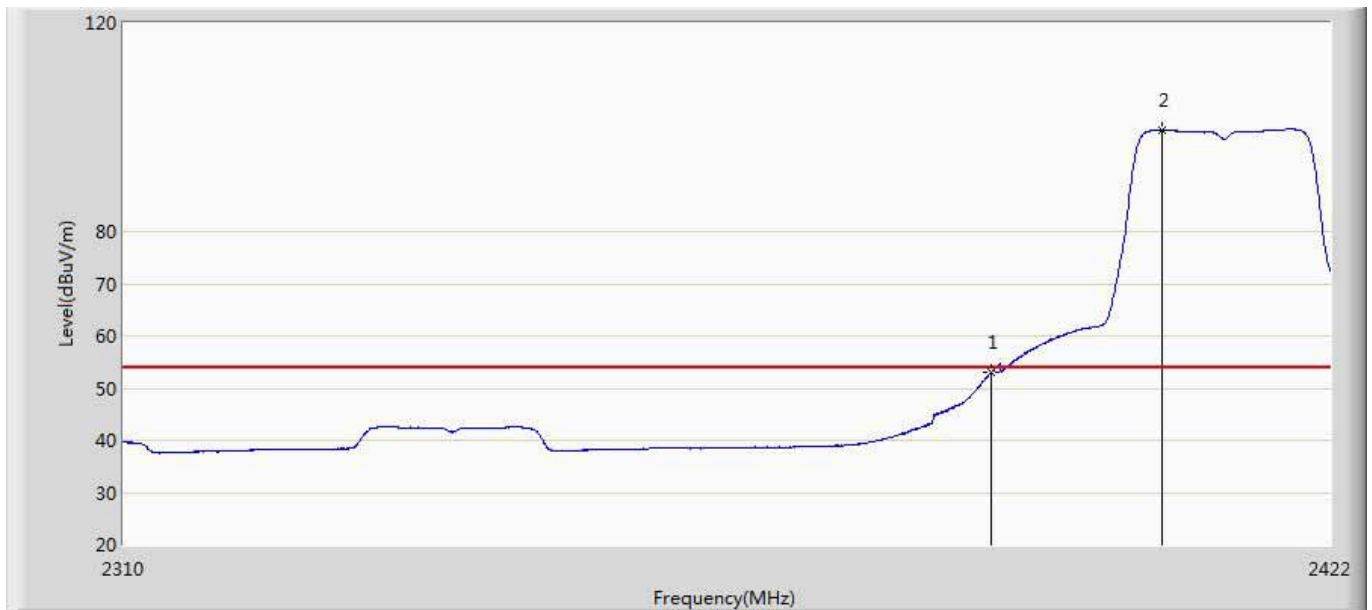
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.928	97.914	60.493	N/A	N/A	37.421	AV
2		2483.500	42.606	5.095	-11.394	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 17:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11g	



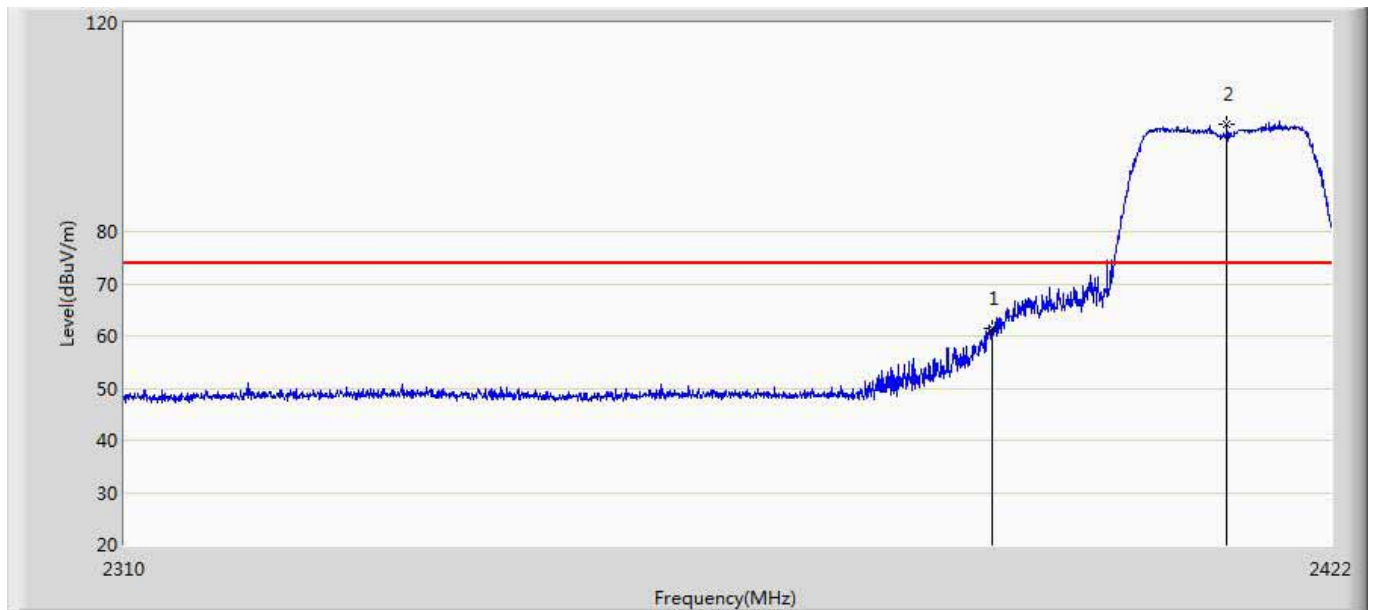
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.799	30.444	-6.201	74.000	37.355	PK
2	*	2406.712	109.103	71.769	N/A	N/A	37.334	PK

Site: AC5	Time: 2015/09/29 - 17:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11g	



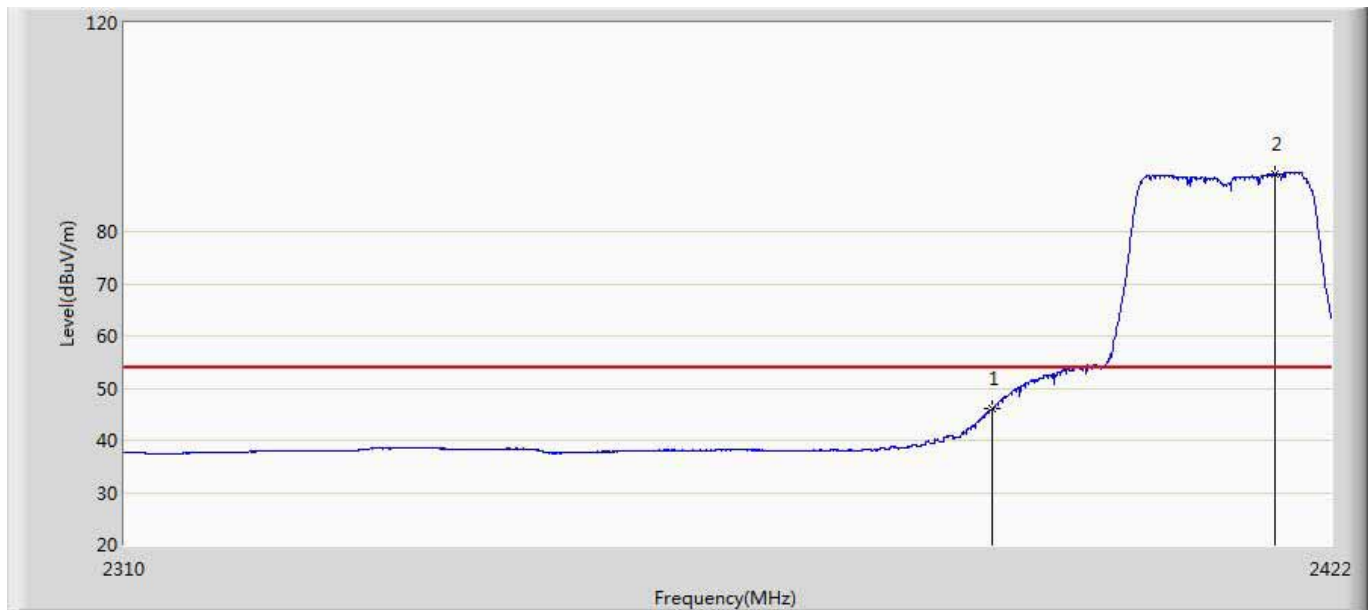
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.971	15.616	-1.029	54.000	37.355	AV
2	*	2406.040	99.453	62.118	N/A	N/A	37.335	AV

Site: AC5	Time: 2015/09/29 - 18:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11g	



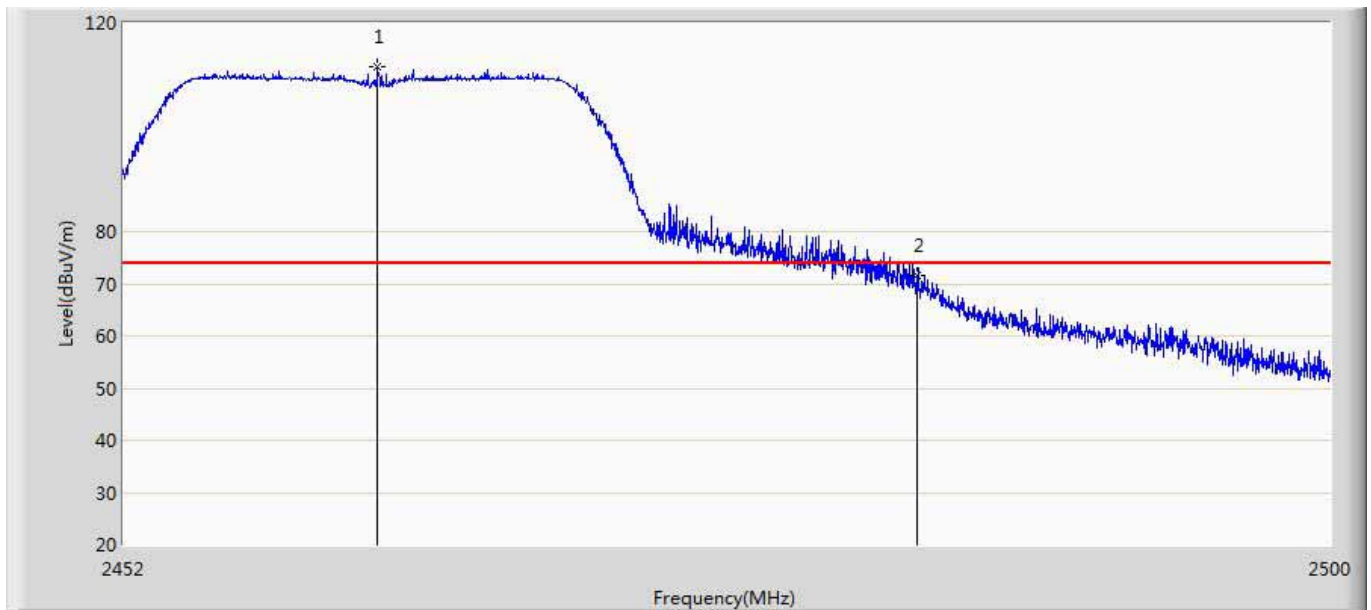
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.494	24.139	-12.506	74.000	37.355	PK
2	*	2412.144	100.630	63.295	N/A	N/A	37.335	PK

Site: AC5	Time: 2015/09/29 - 18:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11g	



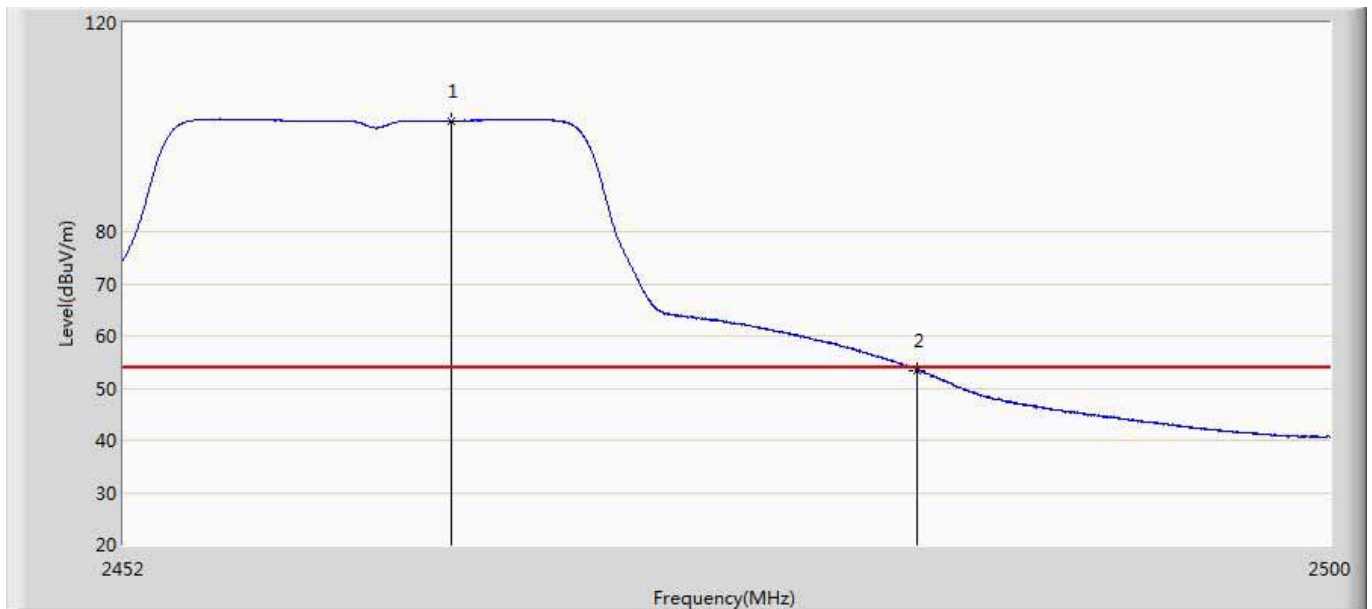
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.973	8.618	-8.027	54.000	37.355	AV
2	*	2416.624	90.970	53.605	N/A	N/A	37.365	AV

Site: AC5	Time: 2015/09/29 - 18:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11g	



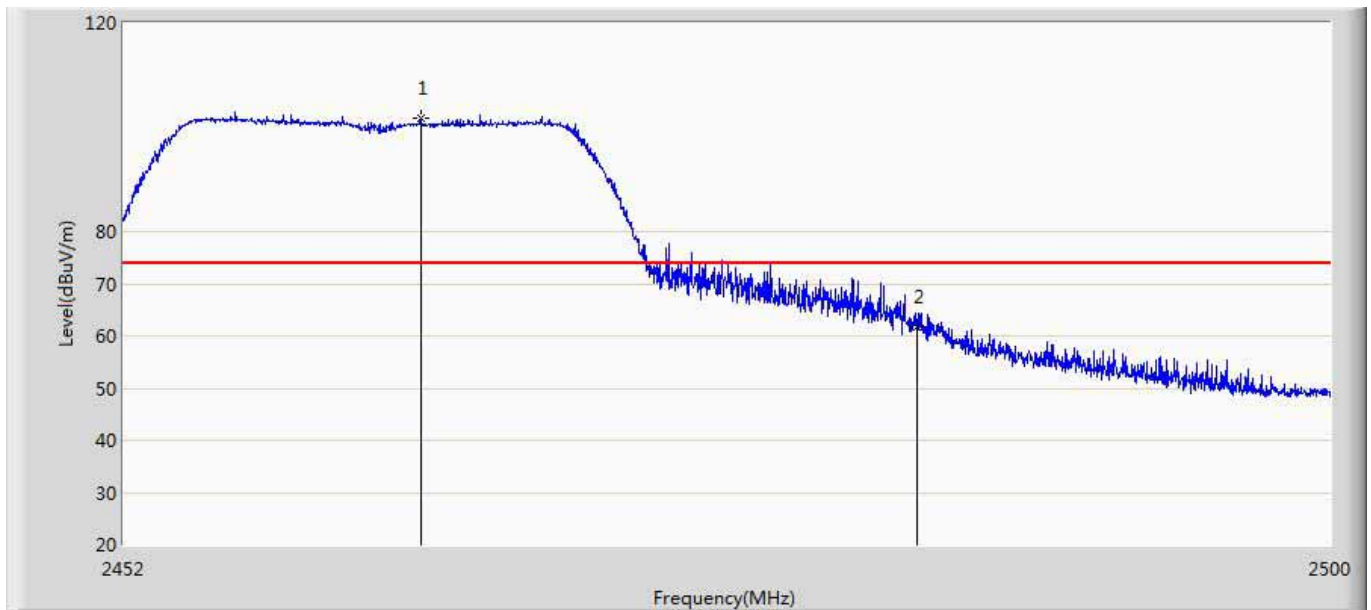
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.056	111.573	74.152	N/A	N/A	37.421	PK
2		2483.500	71.612	34.101	-2.388	74.000	37.511	PK

Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11g	



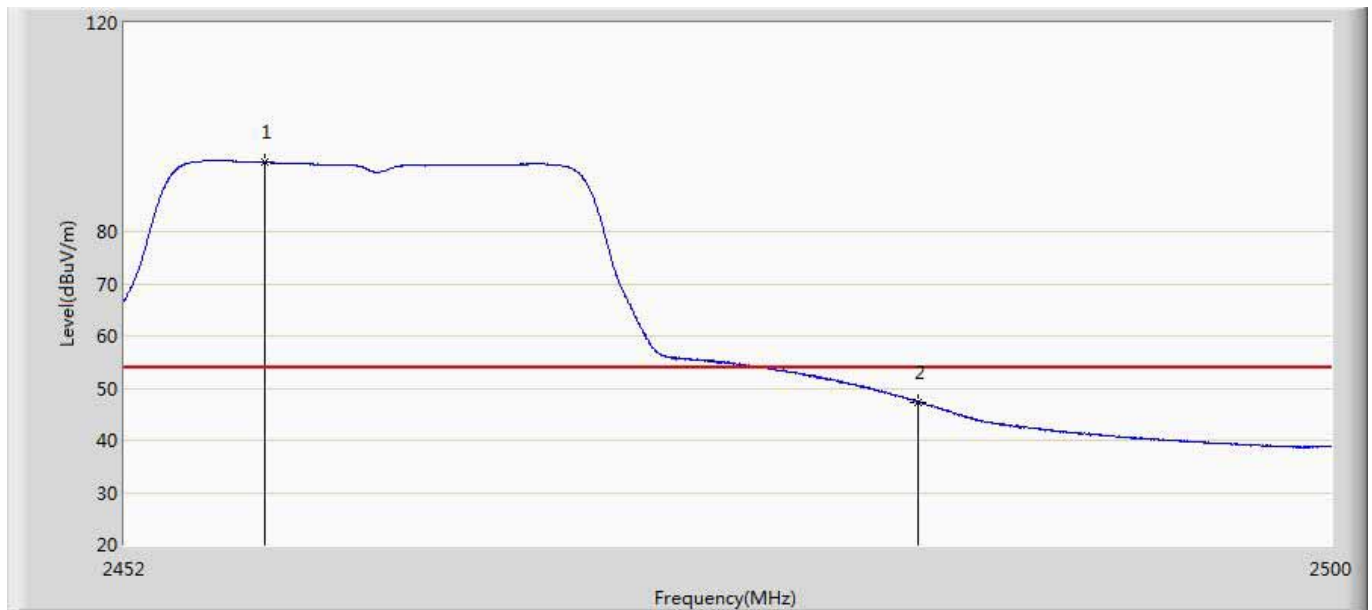
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.960	101.253	63.822	N/A	N/A	37.431	AV
2		2483.500	53.408	15.897	-0.592	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 18:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11g	



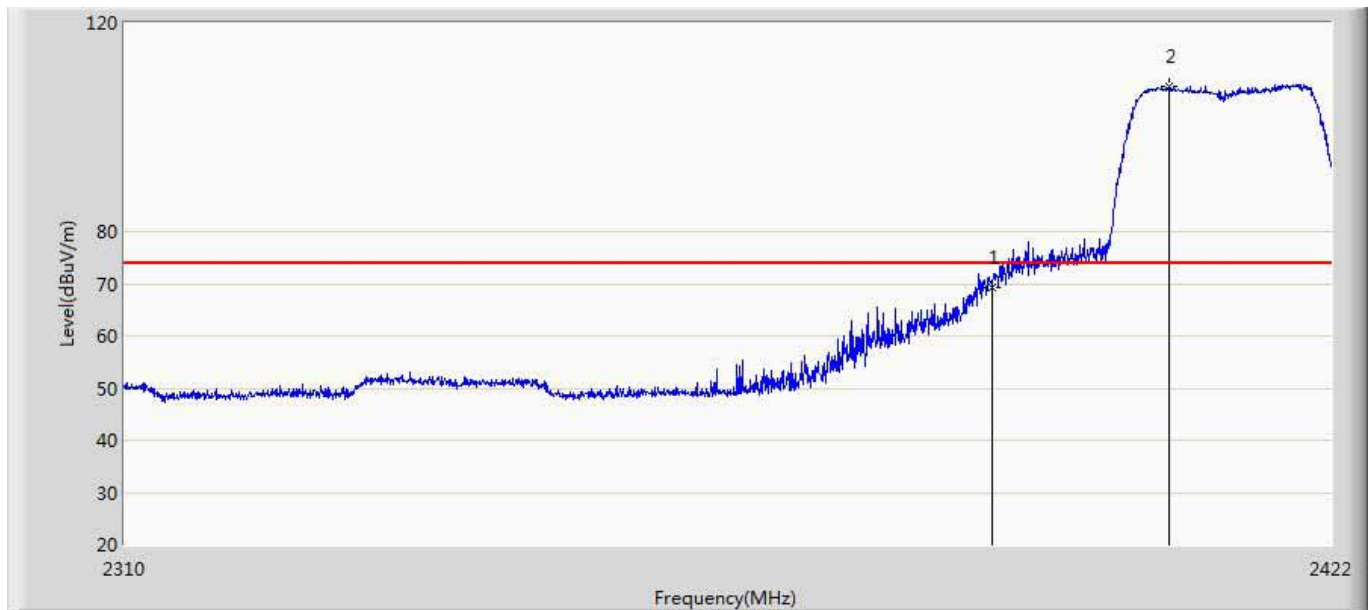
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.736	101.863	64.437	N/A	N/A	37.426	PK
2		2483.500	61.729	24.218	-12.271	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 18:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1: Transmit at channel 2462Mhz by 802.11g	



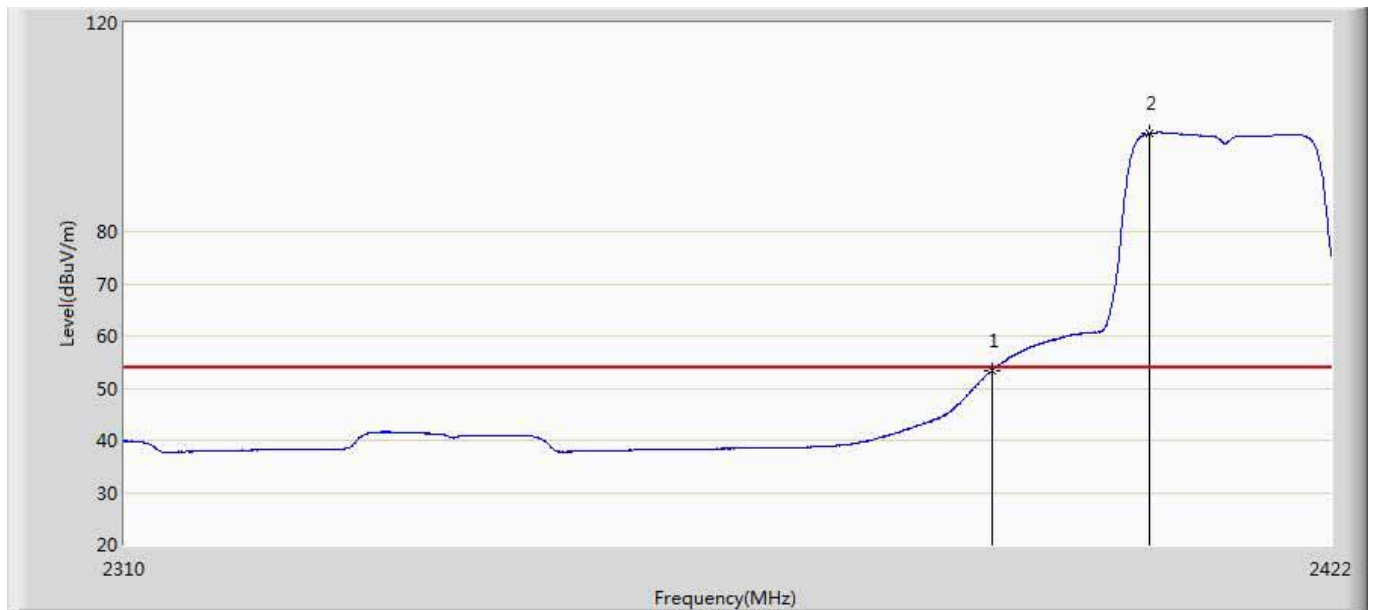
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.568	93.222	55.798	N/A	N/A	37.424	AV
2		2483.500	47.375	9.864	-6.625	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 18:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11n(20MHz)	



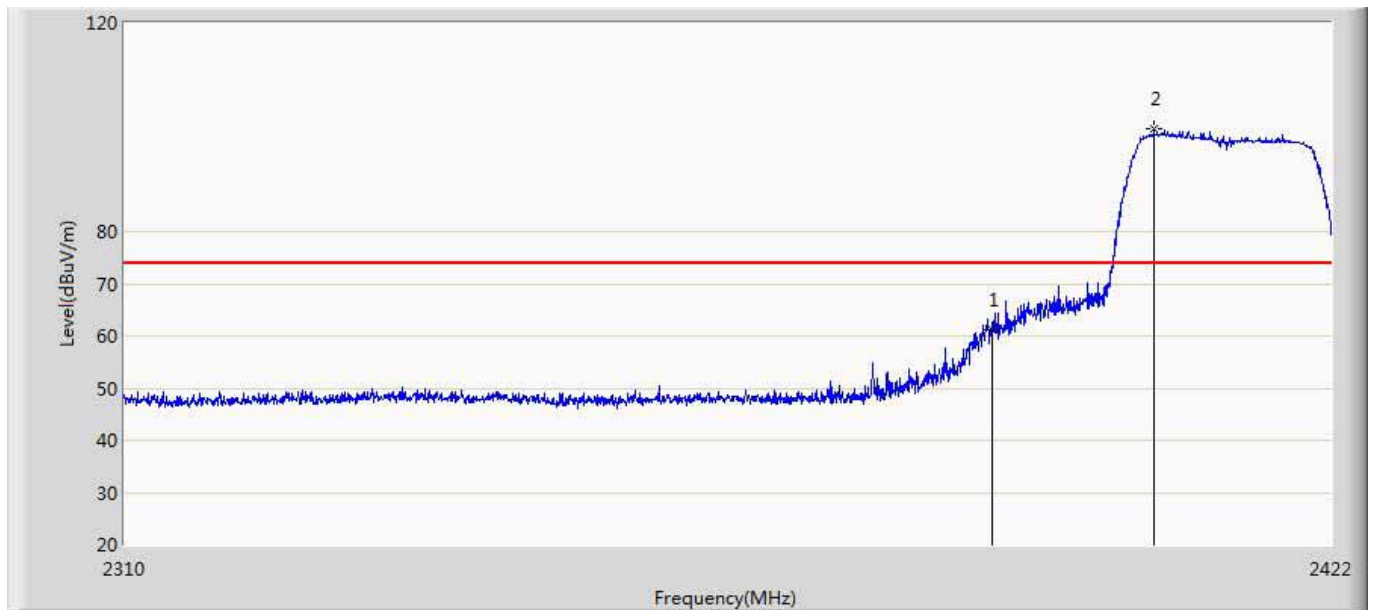
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	69.395	32.040	-4.605	74.000	37.355	PK
2	*	2406.656	107.888	70.554	N/A	N/A	37.335	PK

Site: AC5	Time: 2015/09/29 - 18:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2412Mhz by 802.11n(20MHz)	



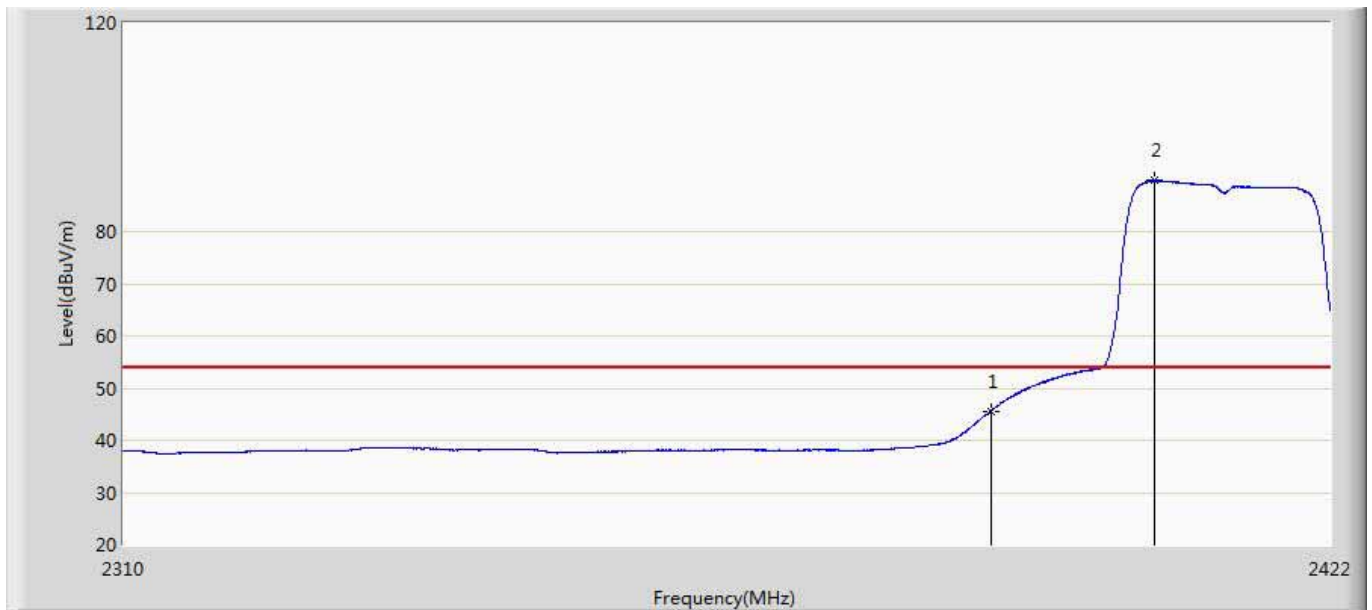
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.376	16.021	-0.624	54.000	37.355	AV
2	*	2404.752	98.755	61.418	N/A	N/A	37.338	AV

Site: AC5	Time: 2015/09/29 - 18:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2422Mhz by 802.11n(20MHz)	



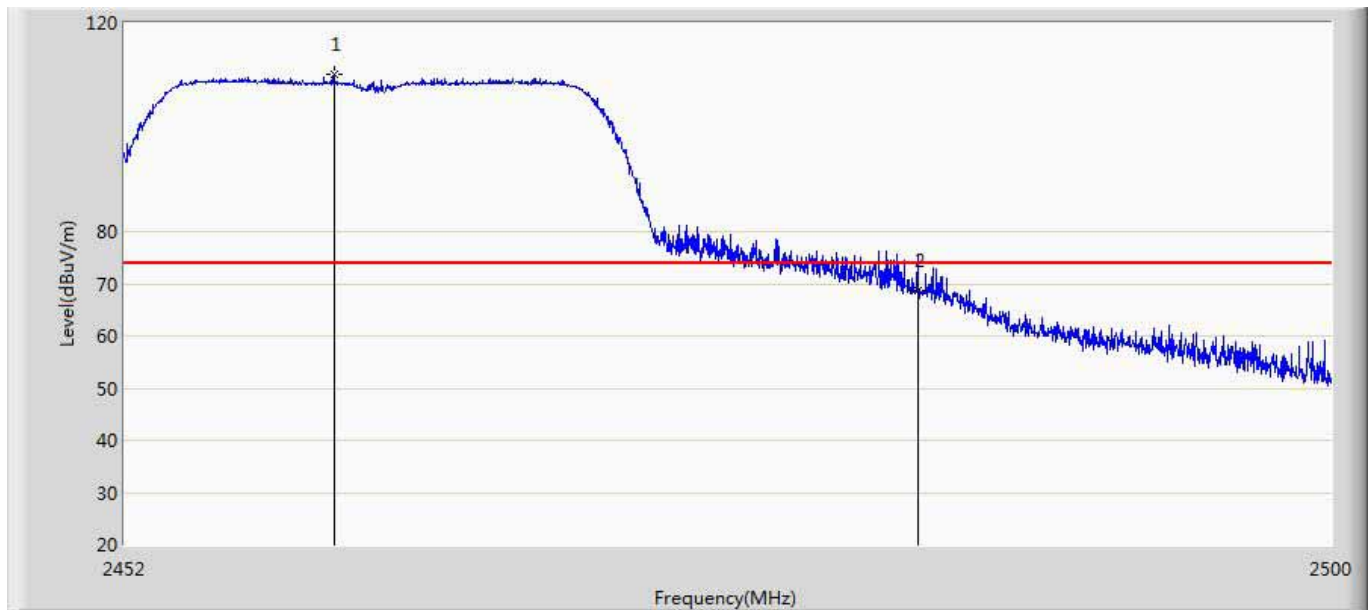
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.092	23.737	-12.908	74.000	37.355	PK
2	*	2405.256	99.677	62.340	N/A	N/A	37.336	PK

Site: AC5	Time: 2015/09/29 - 18:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1: Transmit at channel 2412Mhz by 802.11n(20MHz)	



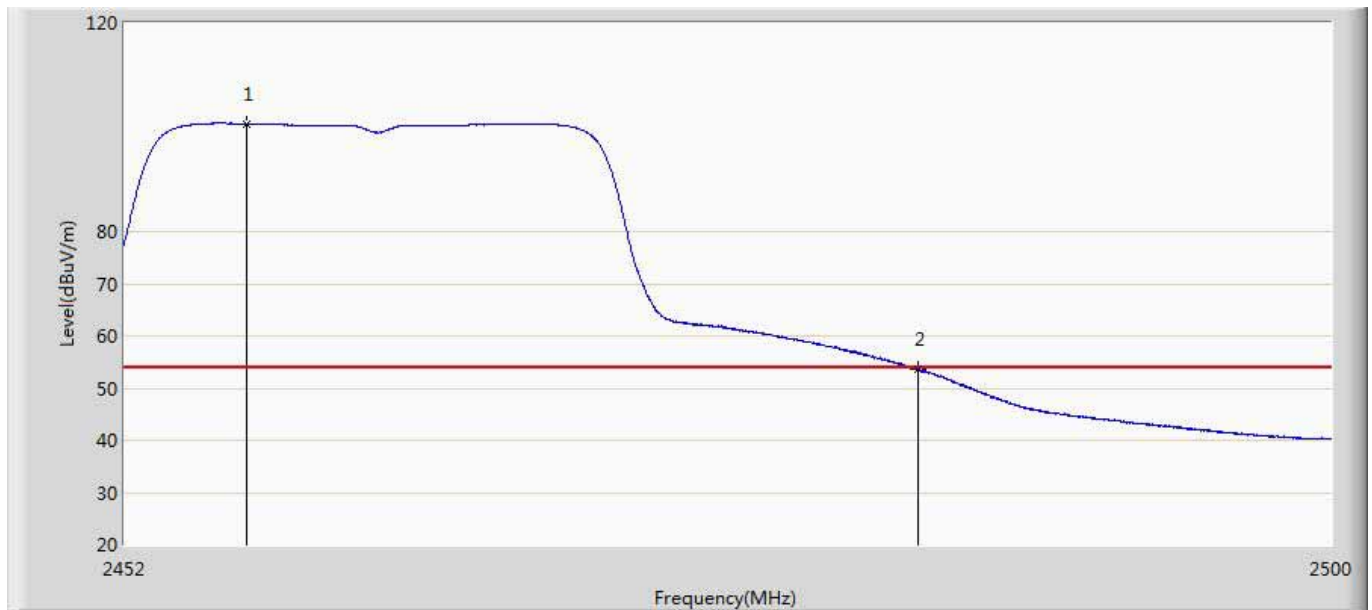
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.642	8.287	-8.358	54.000	37.355	AV
2	*	2405.424	89.732	52.396	N/A	N/A	37.336	AV

Site: AC5	Time: 2015/09/29 - 18:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11n(20MHz)	



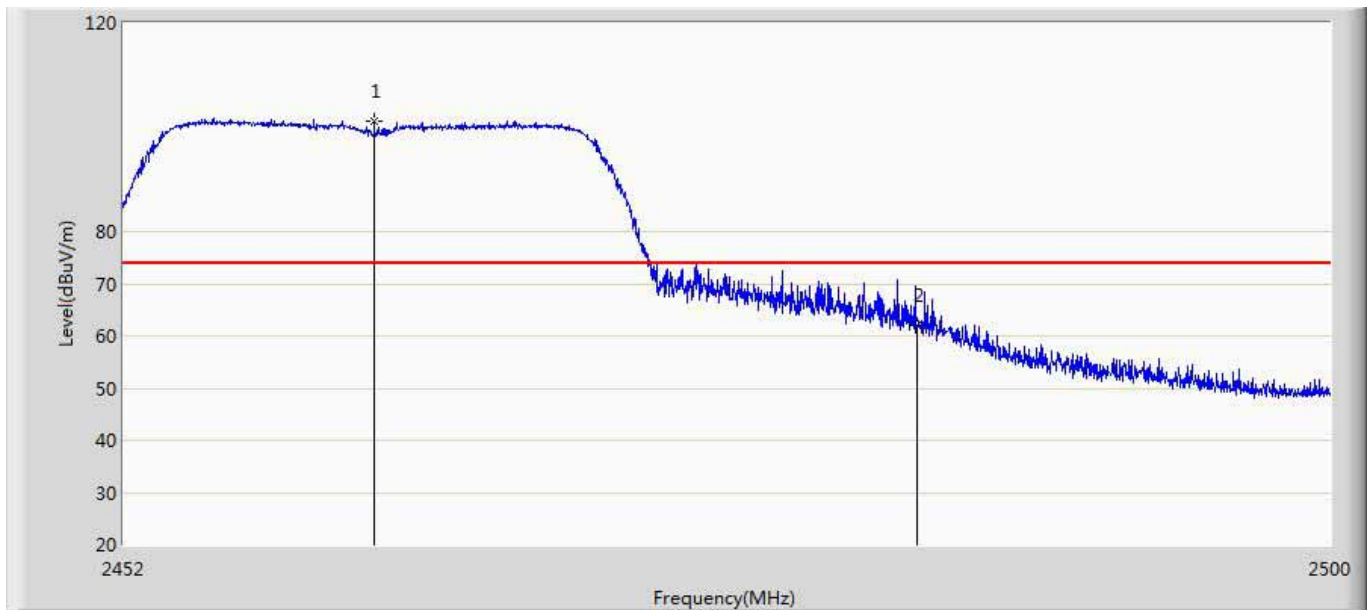
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.280	110.076	72.654	N/A	N/A	37.422	PK
2		2483.500	68.565	31.054	-5.435	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 18:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11n(20MHz)	



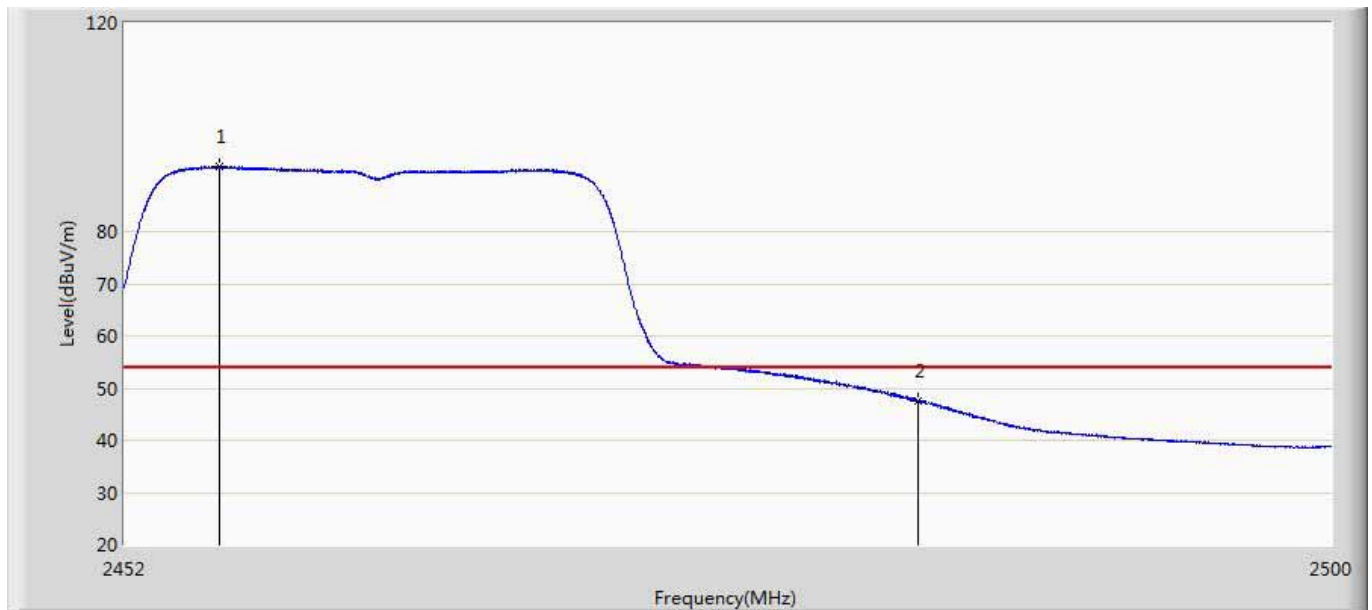
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.824	100.599	63.175	N/A	N/A	37.424	AV
2		2483.500	53.495	15.984	-0.505	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11n(20MHz)	



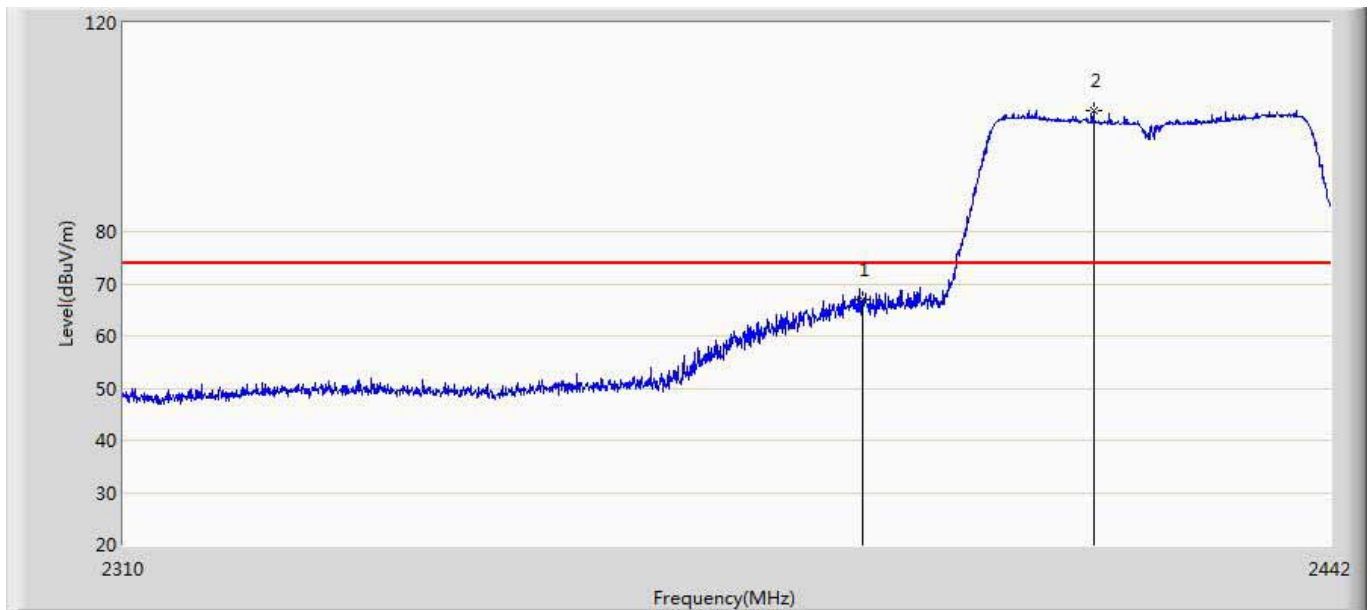
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.912	101.276	63.856	N/A	N/A	37.421	PK
2		2483.500	62.089	24.578	-11.911	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 18:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2462Mhz by 802.11n(20MHz)	



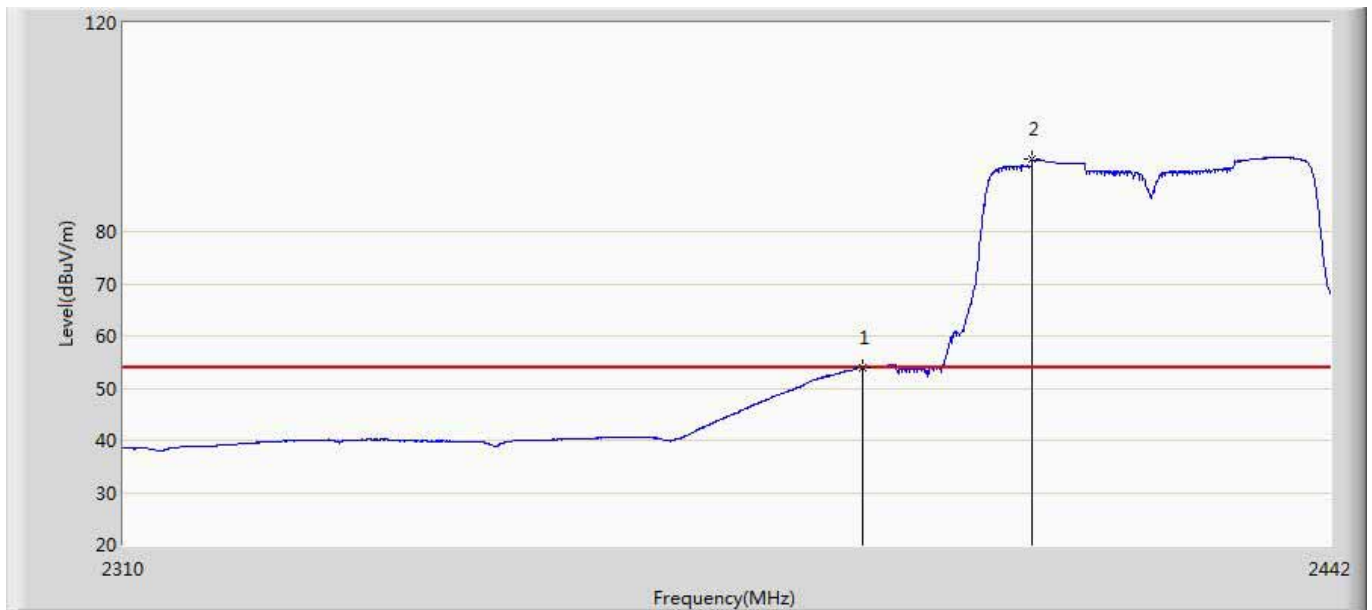
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.744	92.425	55.000	N/A	N/A	37.426	AV
2		2483.500	47.465	9.954	-6.535	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 18:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2422Mhz by 802.11n(40MHz)	



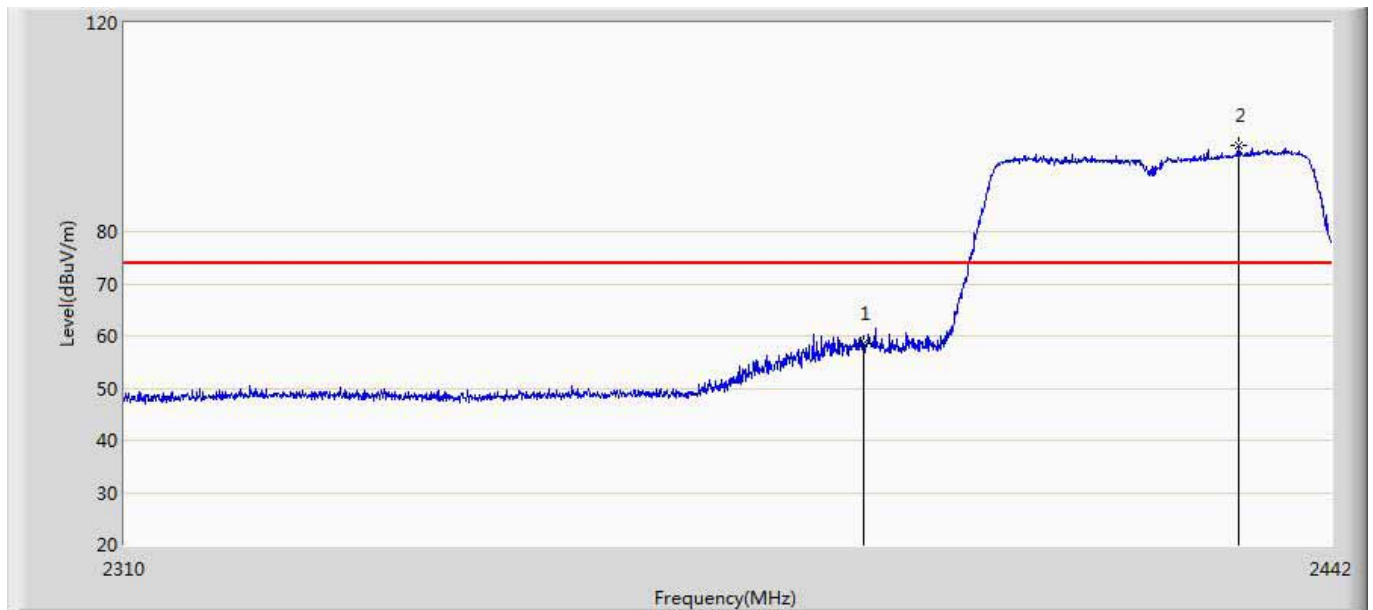
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.012	29.657	-6.988	74.000	37.355	PK
2	*	2415.534	103.288	65.930	N/A	N/A	37.358	PK

Site: AC5	Time: 2015/09/29 - 18:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2422Mhz by 802.11n(40MHz)	



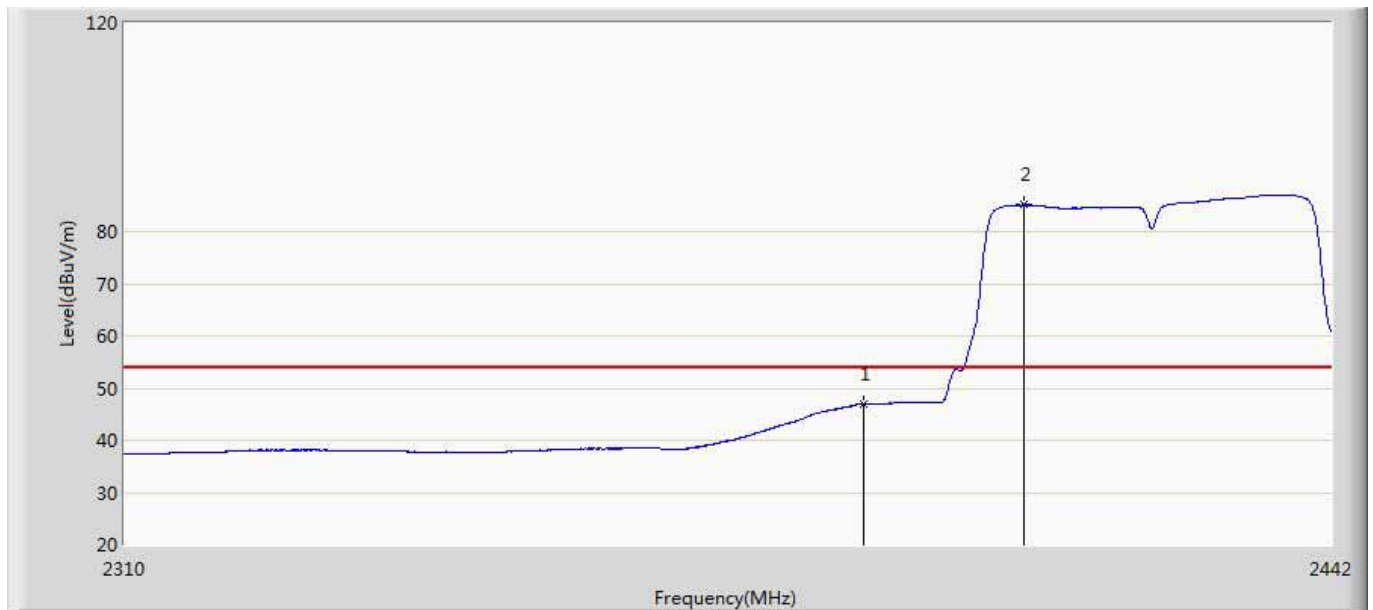
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.938	16.583	-0.062	54.000	37.355	AV
2	*	2408.802	93.829	56.498	N/A	N/A	37.331	AV

Site: AC5	Time: 2015/09/29 - 19:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2422Mhz by 802.11n(40MHz)	



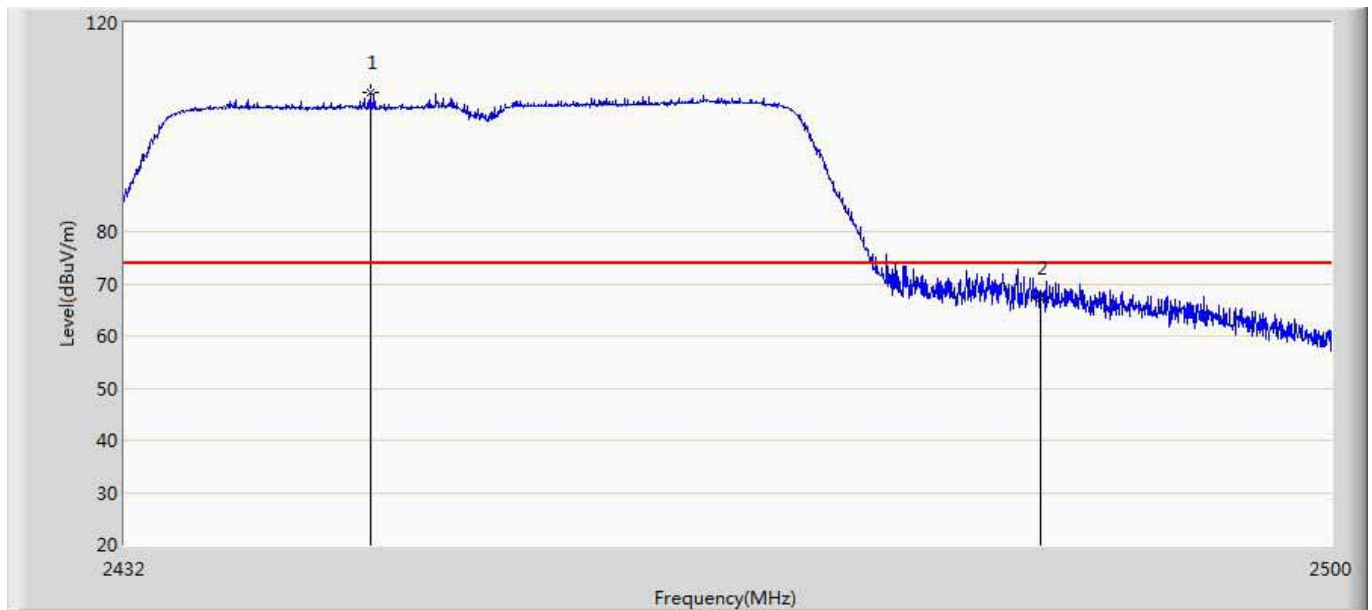
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	58.454	21.099	-15.546	74.000	37.355	PK
2	*	2431.572	96.380	58.940	N/A	N/A	37.440	PK

Site: AC5	Time: 2015/09/29 - 19:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2422Mhz by 802.11n(40MHz)	



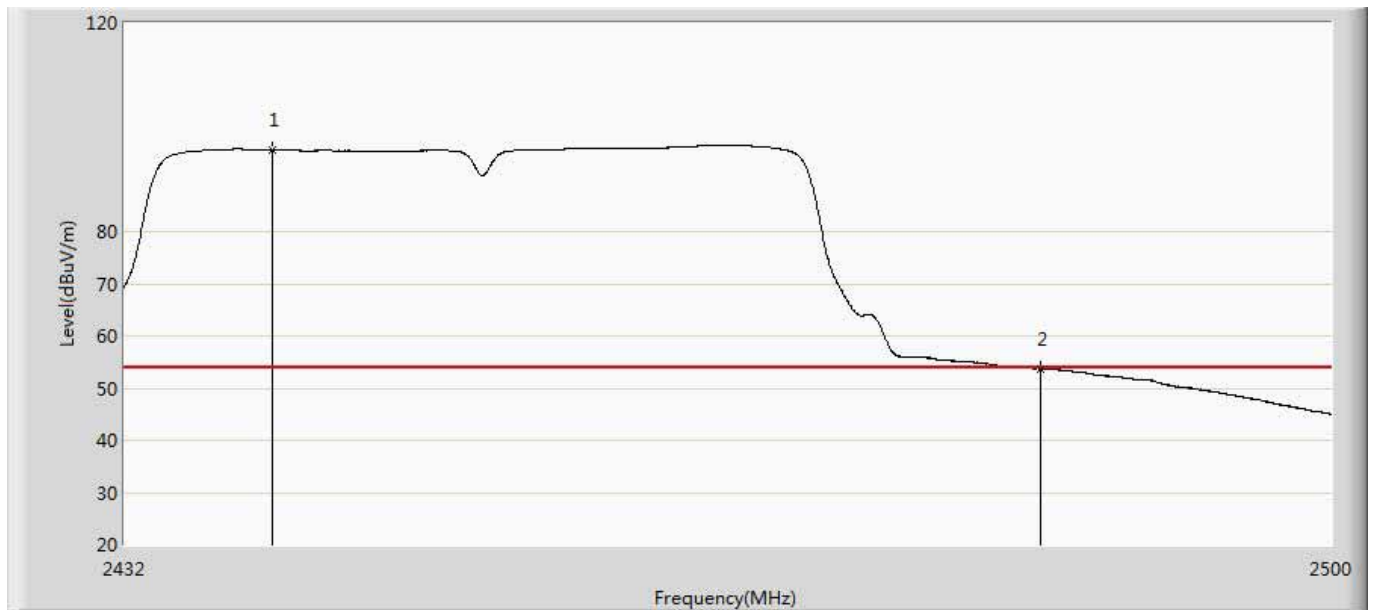
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.853	9.498	-7.147	54.000	37.355	AV
2	*	2407.746	85.090	47.757	N/A	N/A	37.333	AV

Site: AC5	Time: 2015/09/29 - 19:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 2452Mhz by 802.11n(40MHz)	



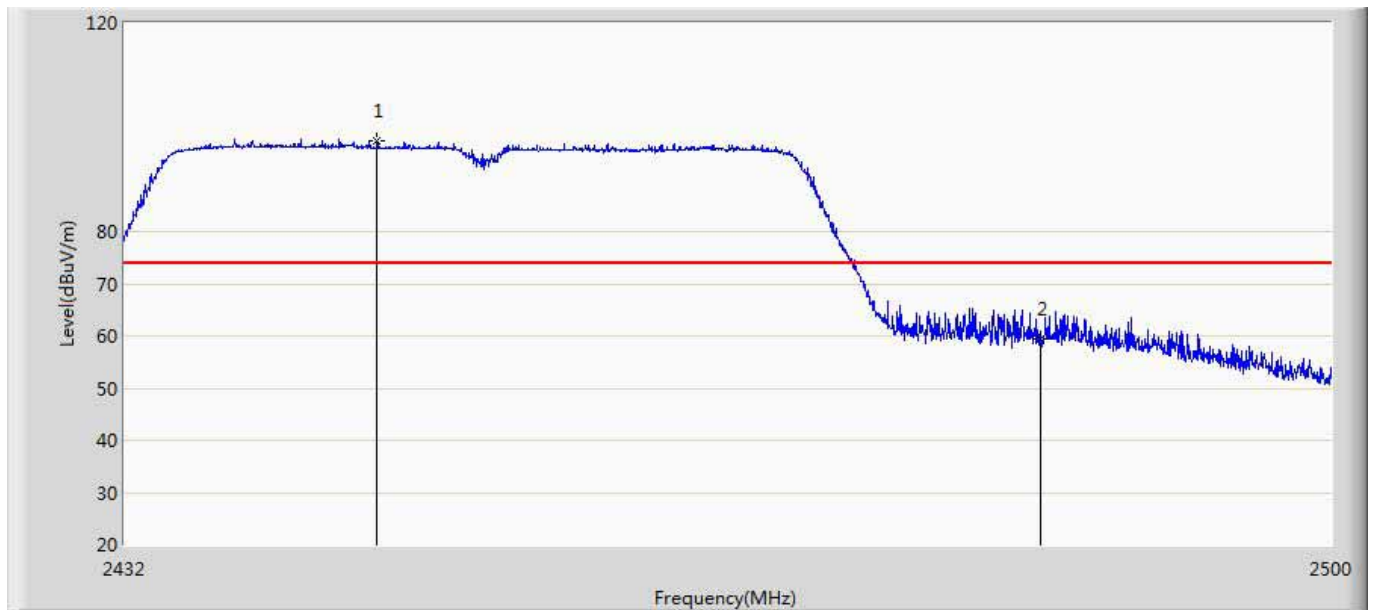
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2445.702	106.540	69.107	N/A	N/A	37.433	PK
2		2483.500	67.201	29.690	-6.799	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 19:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: D20	Power: 120V/60Hz
Note: Mode 1: Transmit at channel 2452Mhz by 802.11n(40MHz)	



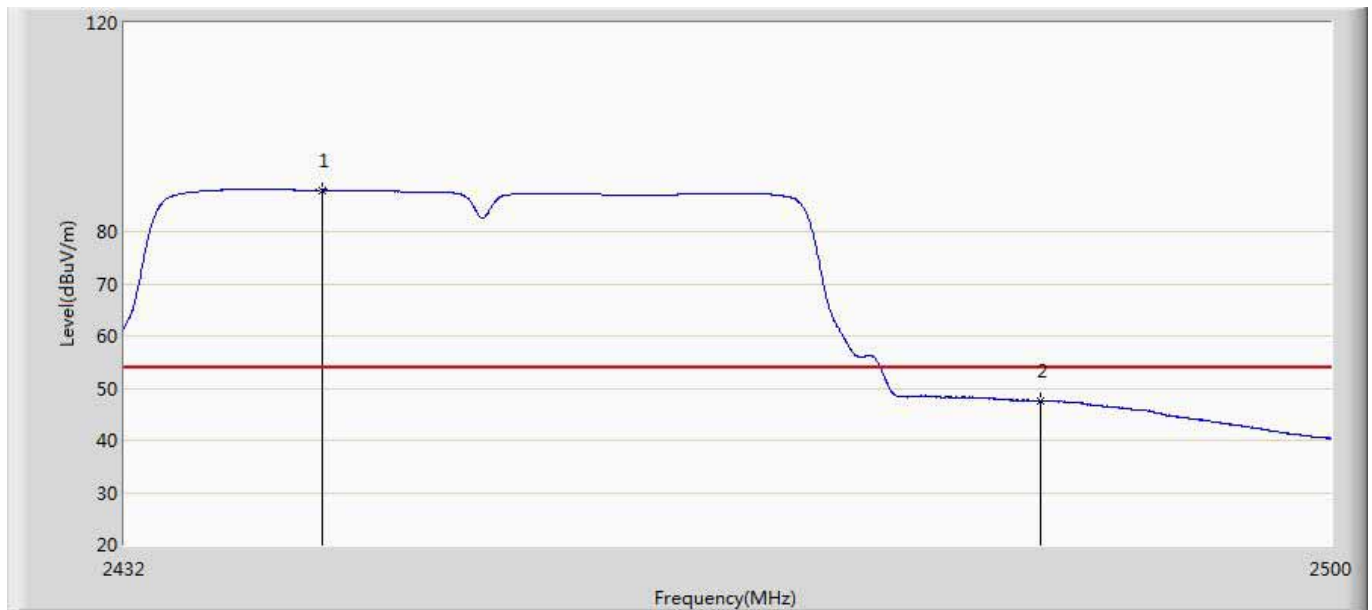
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2440.262	95.750	58.314	N/A	N/A	37.435	AV
2		2483.500	53.688	16.177	-0.312	54.000	37.511	AV

Site: AC5	Time: 2015/09/29 - 19:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 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	*	2446.110	97.269	59.836	N/A	N/A	37.432	PK
2		2483.500	59.329	21.818	-14.671	74.000	37.511	PK

Site: AC5	Time: 2015/09/29 - 19:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: D20	Power: 120V/60Hz
Note: Mode 1:Transmit at channel 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	*	2443.016	87.971	50.537	N/A	N/A	37.435	AV
2		2483.500	47.538	10.027	-6.462	54.000	37.511	AV

7. Operation Frequency Range of 20dB Bandwidth

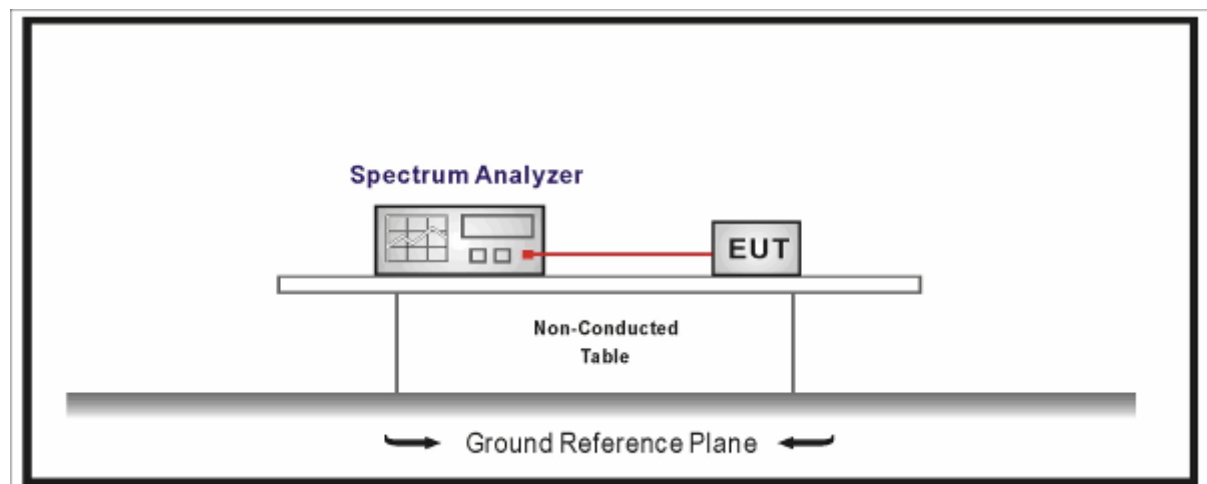
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

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

7.2. Test Setup



7.3. Limit

20 dB bandwidth of the emission is contained within the operation frequency band.

7.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

7.6. Test Result

Product	: AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	: Operation Frequency Range of 20dB Bandwidth
Test Site	: TR-8
Test Mode	: Mode 1: Transmit by 802.11b

Channel 01 (2412MHz)

Reference Level – Frequency L



Low Band Edge - Frequency L



Channel 11 (2462MHz)

Reference Level – Frequency H



High Band Edge - Frequency H



Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1+2)

Channel 01 (2412MHz)

Reference Level – Frequency L Ant 1



Low Band Edge - Frequency L Ant 1

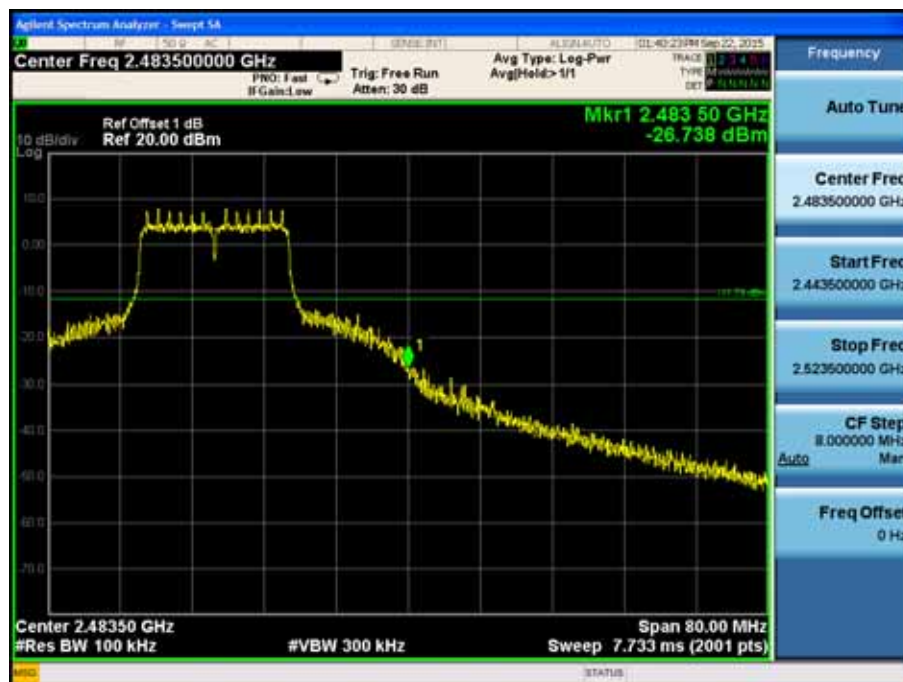


Channel 11 (2462MHz)

Reference Level – Frequency H Ant 1

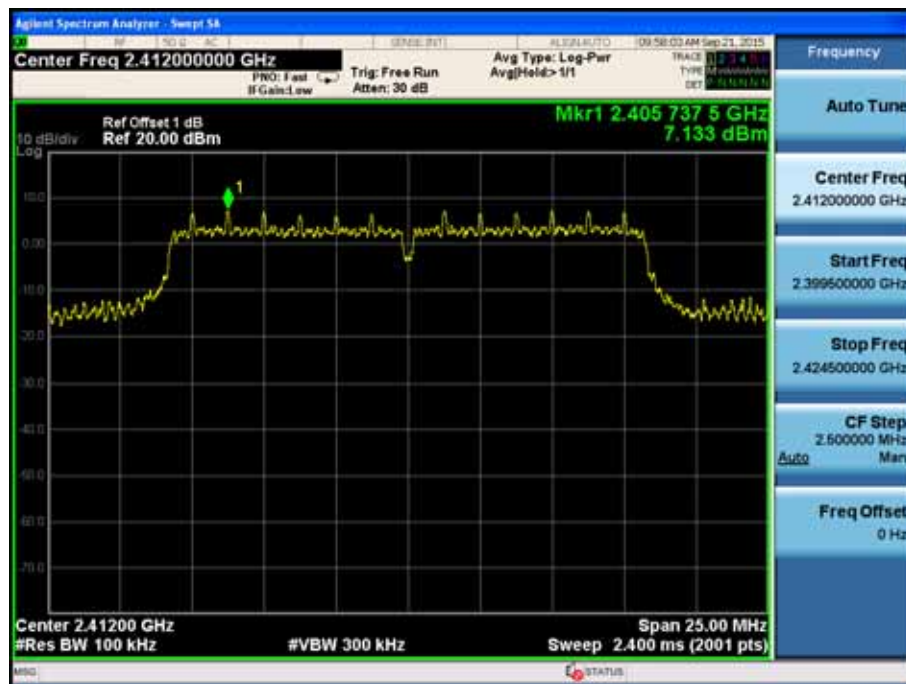


High Band Edge - Frequency H Ant 1



Channel 01 (2412MHz)

Reference Level – Frequency L Ant 2

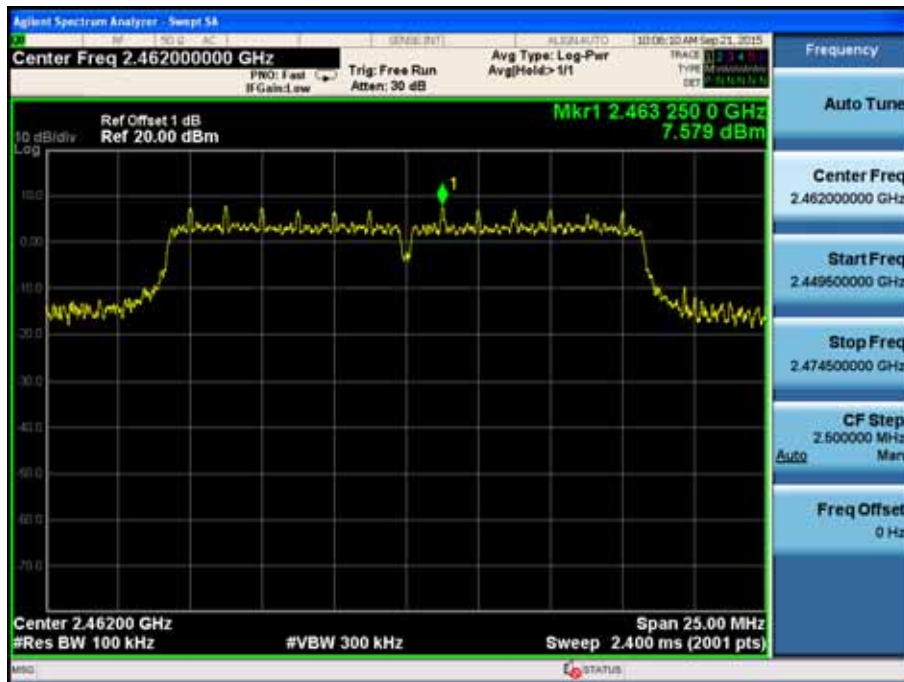


Low Band Edge - Frequency L Ant 2



Channel 11 (2462MHz)

Reference Level – Frequency H Ant 2



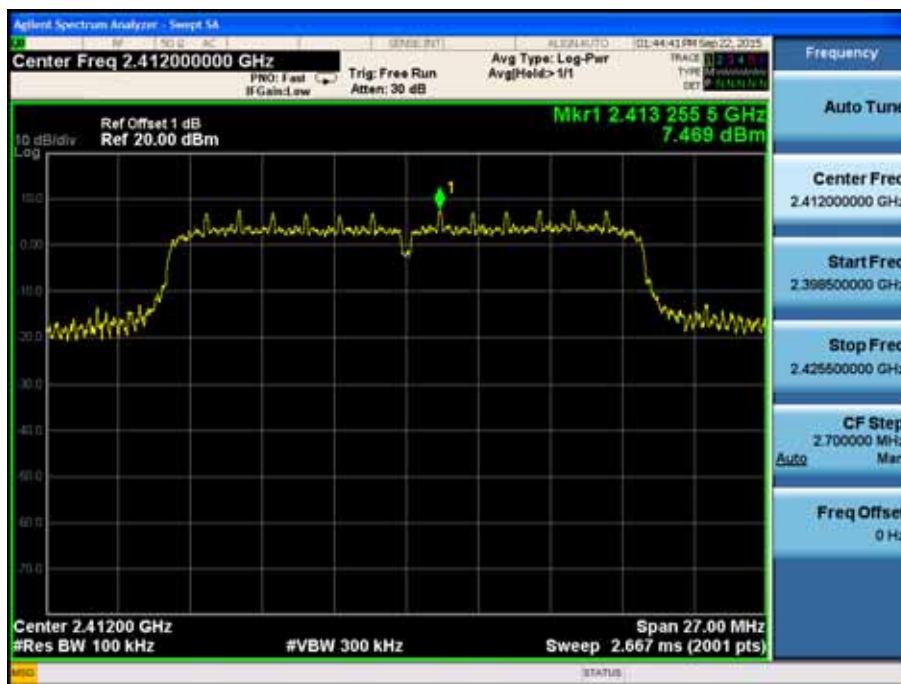
High Band Edge - Frequency H Ant 2



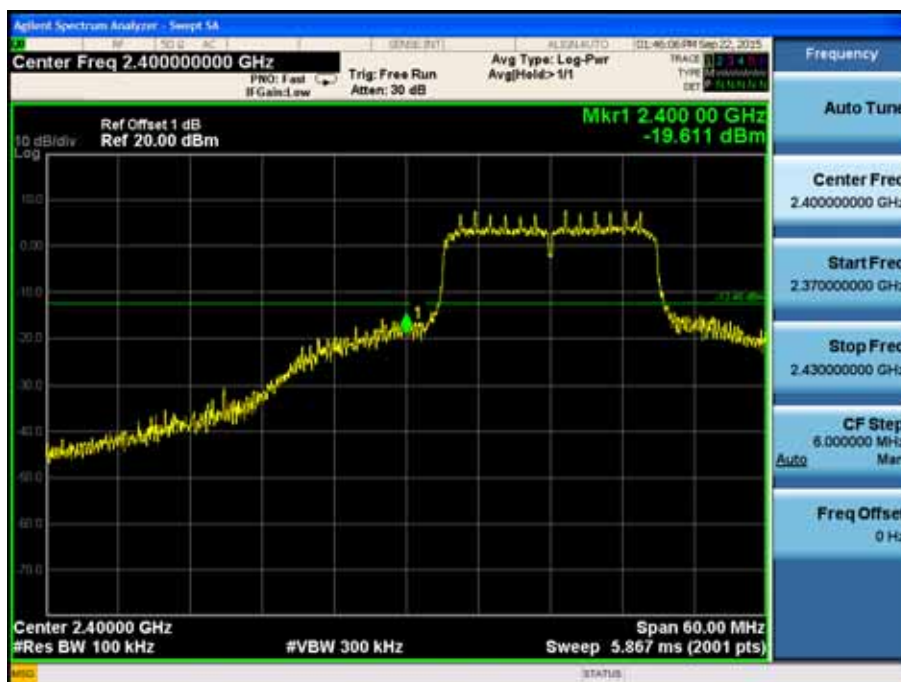
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 1+2)

Channel 01 (2412MHz)

Reference Level – Frequency L Ant 1



Low Band Edge - Frequency L Ant 1



Channel 11 (2462MHz)

Reference Level – Frequency H Ant 1



High Band Edge - Frequency H Ant 1



Channel 01 (2412MHz)

Reference Level – Frequency L Ant 2



Low Band Edge - Frequency L Ant 2



Channel 11 (2462MHz)

Reference Level – Frequency H Ant 2



High Band Edge - Frequency H Ant 2



Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel 03 (2422MHz)

Reference Level – Frequency L Ant 1



Low Band Edge - Frequency L Ant 1

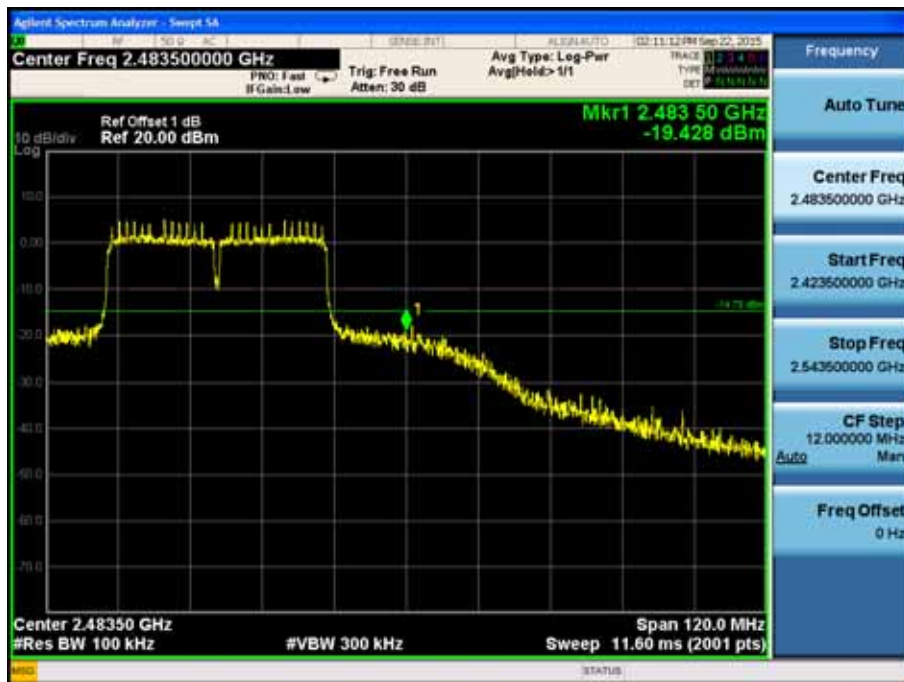


Channel 09 (2452MHz)

Reference Level – Frequency H Ant 1

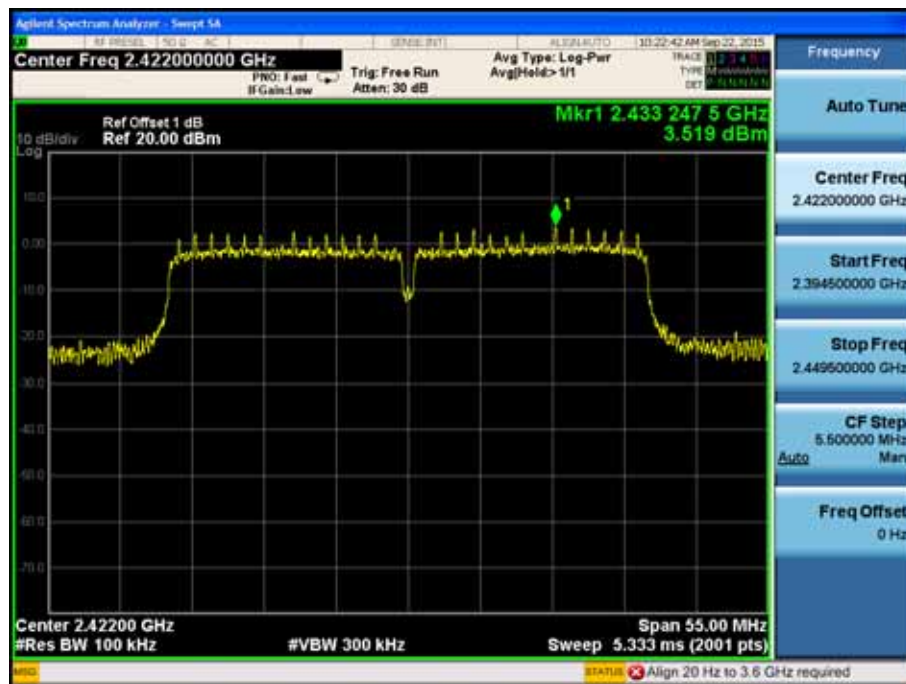


High Band Edge - Frequency H Ant 1



Channel 03(2422MHz)

Reference Level – Frequency L Ant 2

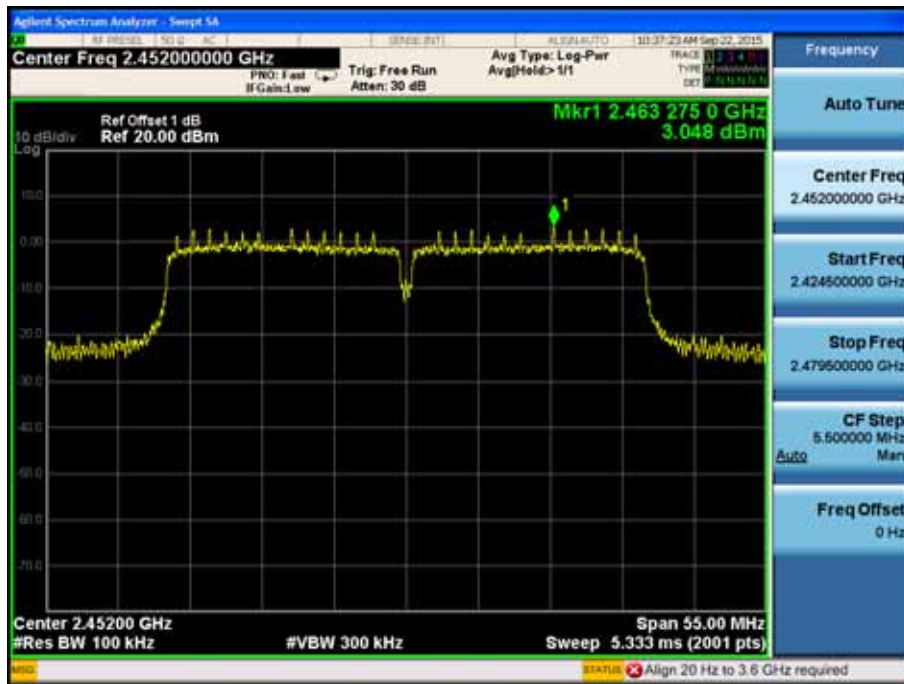


Low Band Edge - Frequency L Ant 2



Channel 09 (2452MHz)

Reference Level – Frequency H Ant 2



High Band Edge - Frequency H Ant 2



8. Occupied Bandwidth

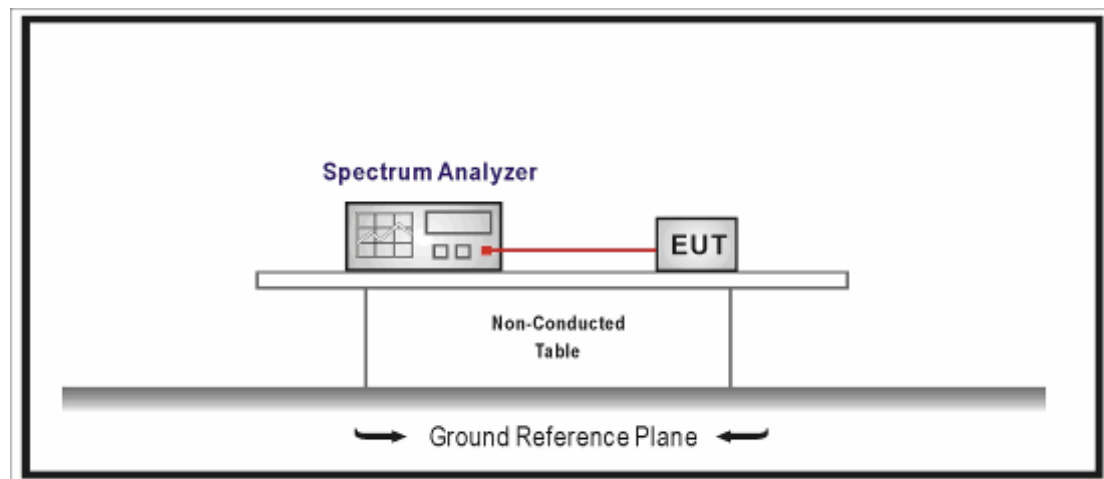
8.1. Test Equipment

Occupied Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

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

8.2. Test Setup



8.3. Limit

According to ANSI C63.10 11.2 c) test 99% occupied bandwidth.
Should be less than the nominal bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2014; tested according to DTS test procedure of ANSI C63.10 requirements.

When the average power is exercised, the measured power is to be referenced to the OBW (99% occupied bandwidth) rather than to the DTS bandwidth according to Clause 11.9.2.1 of ANSI C63.10.

The 99% bandwidth test is using ANSI C63.10 Section 6.9.3 method.

- Set RBW = in the range of 1% to 5% of the OBW.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.

- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

8.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

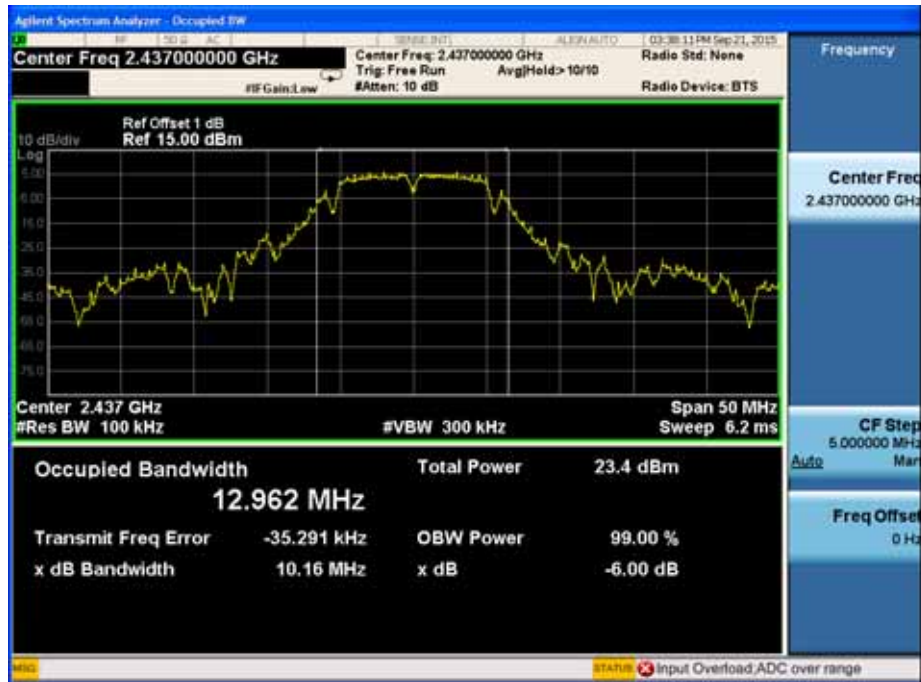
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12828	20000	Pass
06	2437	12962	20000	Pass
11	2462	13238	20000	Pass

Channel 01 (2412MHz)(Ant 1)



Channel 06 (2437MHz) (Ant 1)



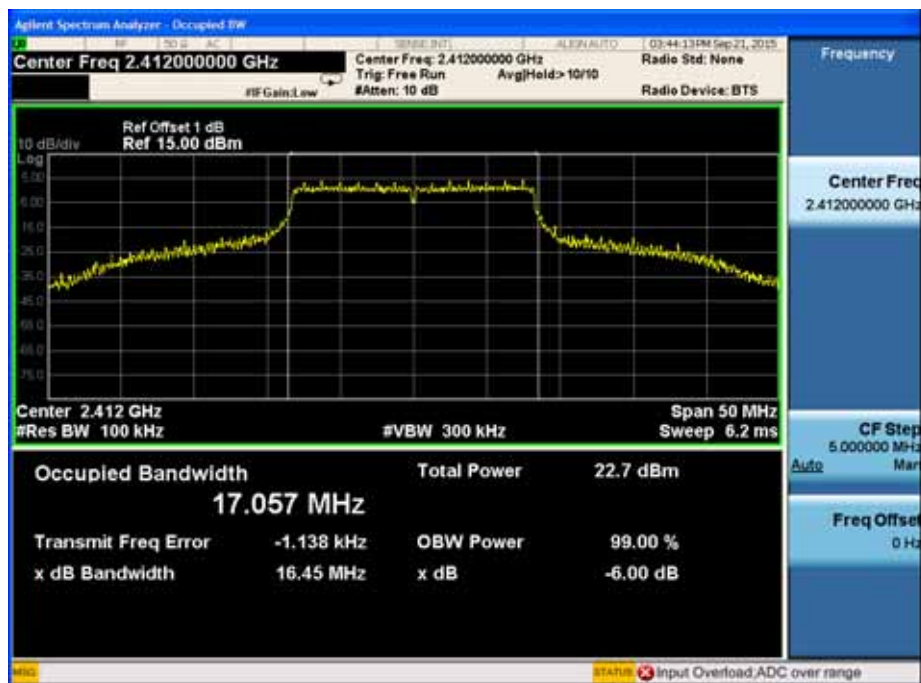
Channel 11 (2462MHz) (Ant 1)



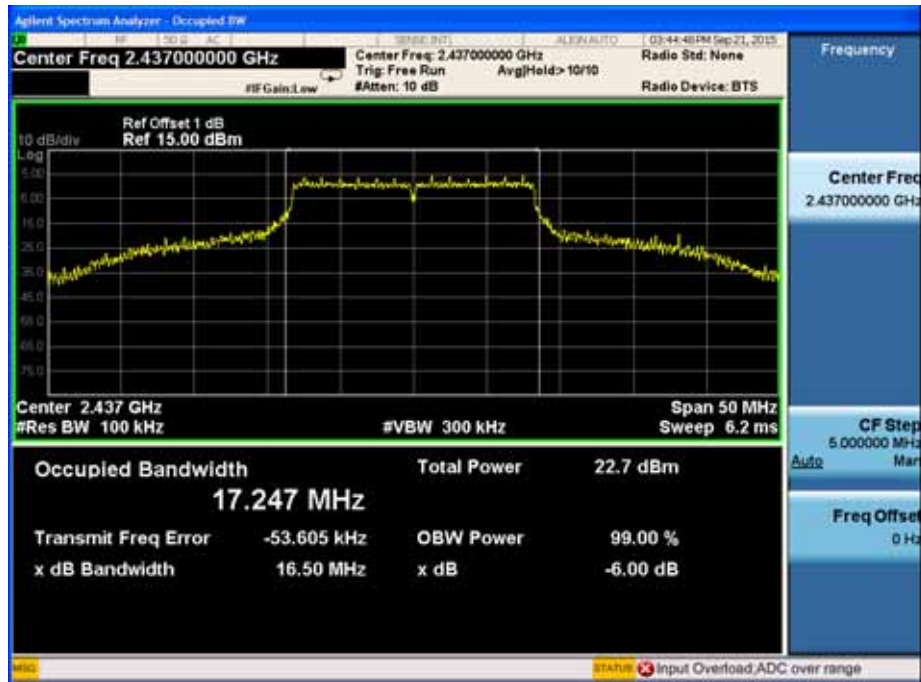
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17057	20000	Pass
06	2437	17247	20000	Pass
11	2462	17175	20000	Pass

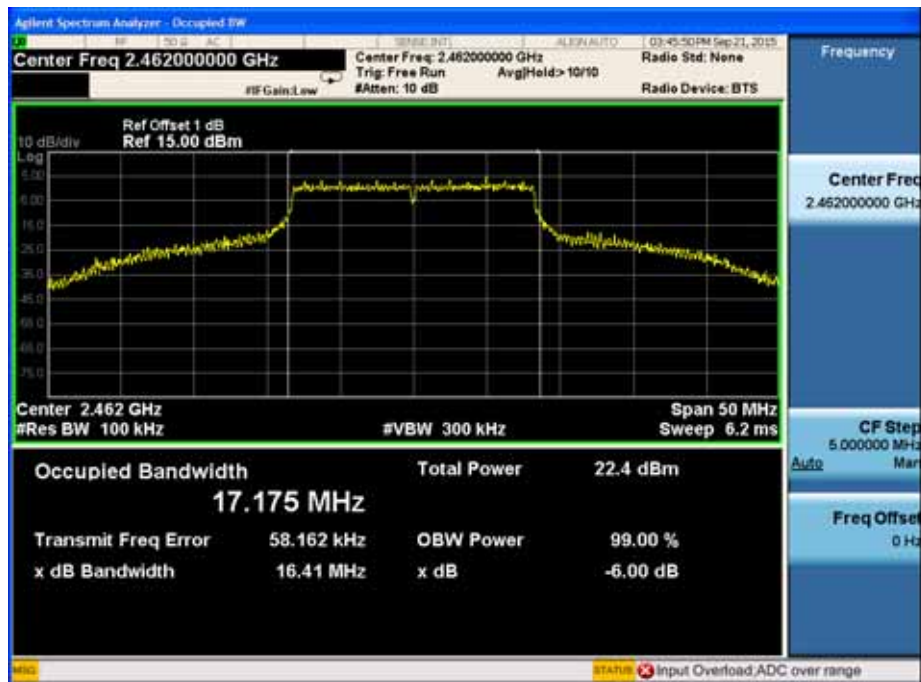
Channel 01 (2412MHz)(Ant 2)



Channel 06 (2437MHz) (Ant 2)



Channel 11 (2462MHz) (Ant 2)

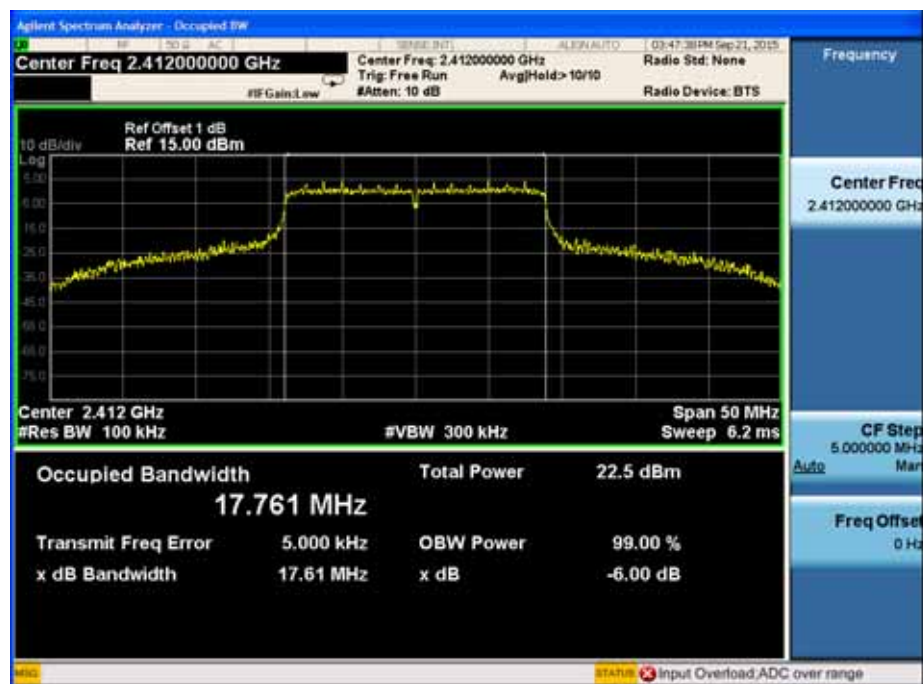


Note: For this test item, the modulation of g and n mode we have evaluated two antennas, presented data in the report is the worst case.

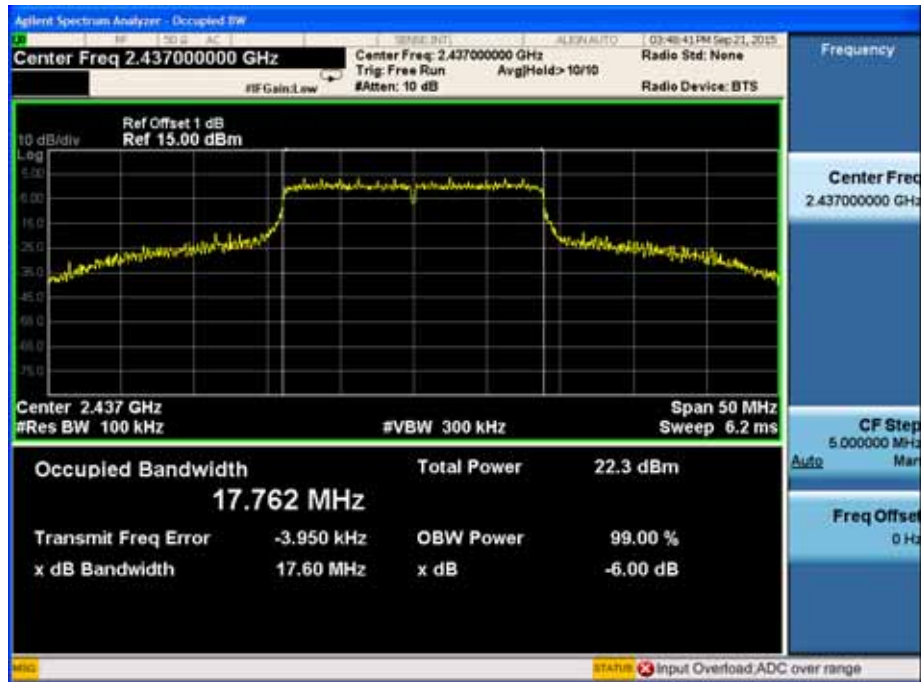
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17761	20000	Pass
06	2437	17762	20000	Pass
11	2462	17954	20000	Pass

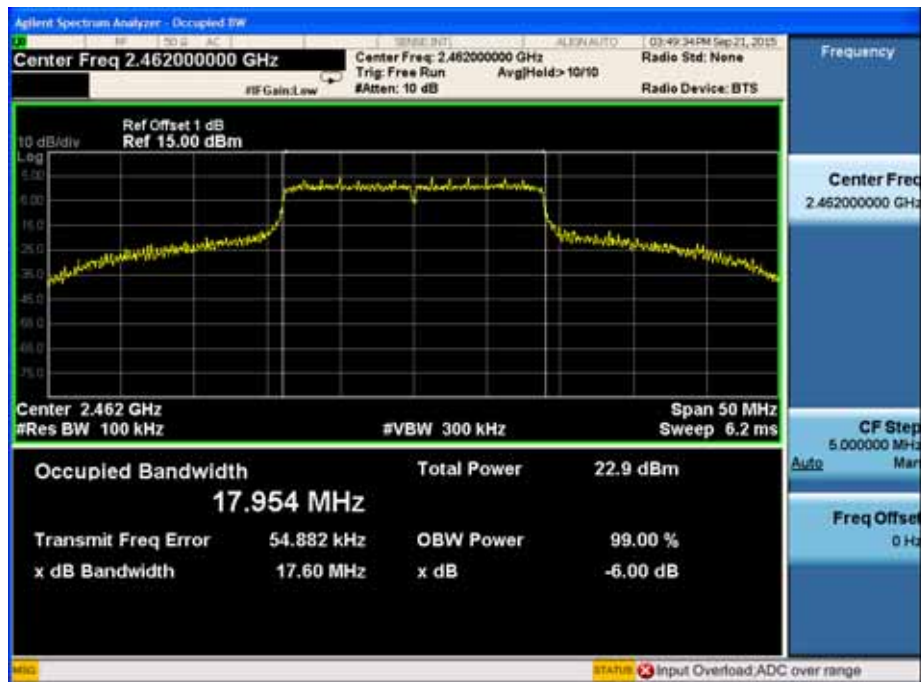
Channel 01 (2412MHz) (Ant 2)



Channel 06 (2437MHz) (Ant 2)



Channel 11 (2462MHz) (Ant 2)

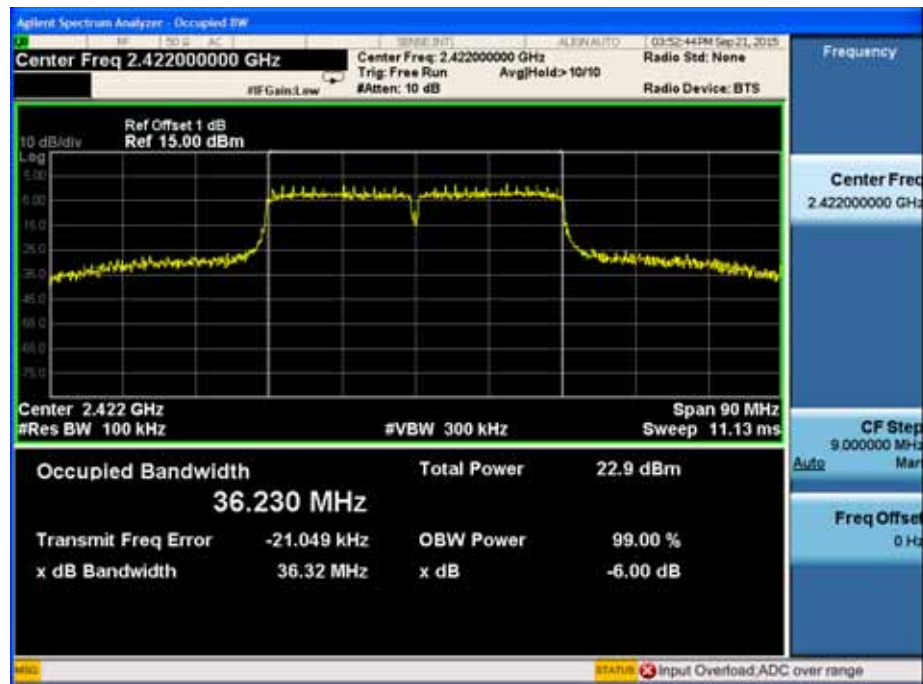


Note: For this test item, the modulation of g and n mode we have evaluated two antennas, presented data in the report is the worst case.

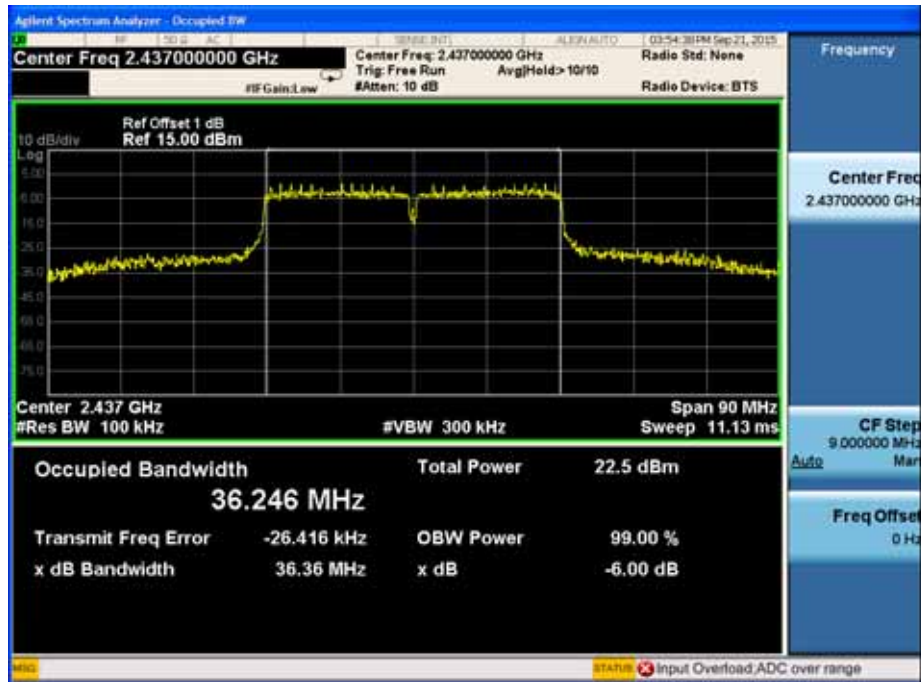
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36230	40000	Pass
06	2437	36246	40000	Pass
09	2452	36270	40000	Pass

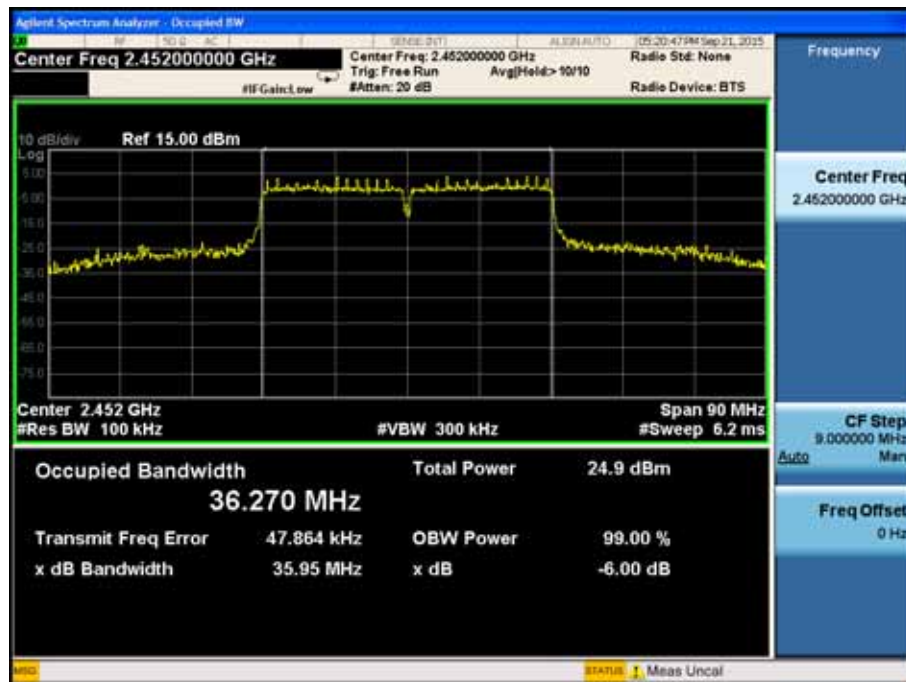
Channel 03 (2422MHz) (Ant 2)



Channel 06 (2437MHz) (Ant 2)



Channel 09 (2452MHz) (Ant 2)



Note: For this test item, the modulation of g and n mode we have evaluated two antennas, presented data in the report is the worst case.

9. Power Output

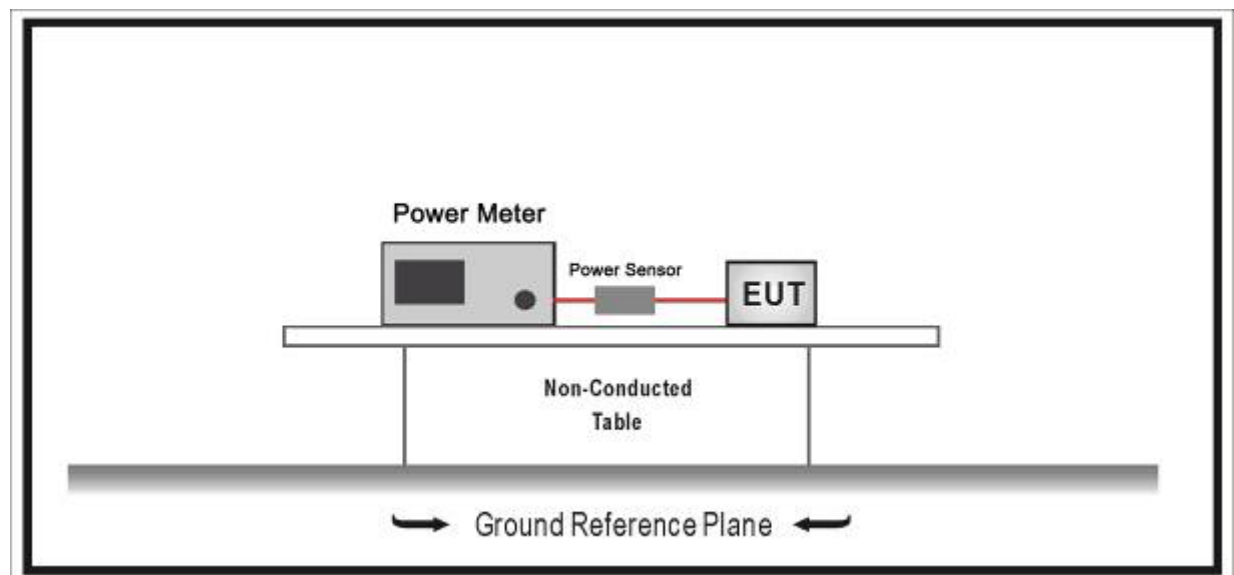
9.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2015.11.10
Power Sensor	Anritsu	MA2411B	0846014	2015.11.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

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

9.2. Test Setup



9.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

9.4. Test Procedure

The EUT was tested according to DTS test procedure of ANSI C63.10 for compliance to FCC 47CFR 15.247 requirements. The maximum conducted output power using ANSI C63.10 section 11.9.2.3 AVGPM Average power meter method.

1. Power meter and sensor's minimum video bandwidth is 50MHz, larger than 802.11n(40MHz) bandwidth;
2. Fast responding diode sensors respond immediately to changes in power level to reduce total test time.
3. Use average detector to test.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

Power output at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate	Average Power (dBm)
802.11b	20	2437	6	1	18.43
				5.5	18.64
				11	18.76
802.11g(Ant 1+2)	20	2437	6	6	15.72
				24	15.66
				54	15.63
802.11n (Ant 1+2)	20	2437	6	MCS0	20.51
				MCS4	20.28
				MCS7	20.37
802.11n (Ant 1+2)	40	2437	6	MCS0	13.33
				MCS4	13.18
				MCS7	13.21

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)	Limit (dBm)	Result
1	2412	18.43	30.00	Pass
6	2437	18.64	30.00	Pass
11	2462	18.76	30.00	Pass

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	16.63	17.65	20.18	30.00	Pass
6	2437	16.88	17.94	20.45	30.00	Pass
11	2462	16.92	17.96	20.48	30.00	Pass

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	16.57	17.52	20.08	30.00	Pass
6	2437	17.14	17.56	20.37	30.00	Pass
11	2462	17.11	18.01	20.59	30.00	Pass

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
3	2422	16.56	17.37	19.99	30.00	Pass
6	2437	17.13	17.02	20.09	30.00	Pass
9	2452	17.30	17.94	20.64	30.00	Pass

10. Power Spectral Density

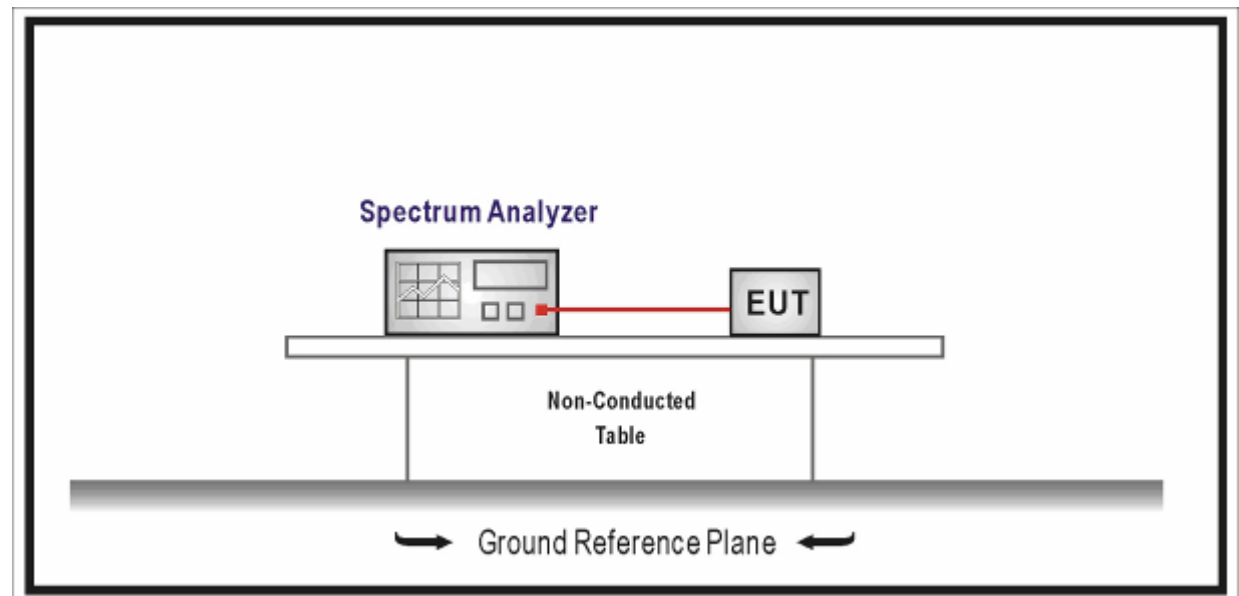
10.1. Test Equipment

Power Spectral Density / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

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

10.2. Test Setup



10.3. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiated to the Antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

10.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2014; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$. (Actually we use 3kHz RBW)
- d) Set the VBW $\geq 3 \times \text{RBW}$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the band.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

10.5. Uncertainty

The measurement uncertainty is defined as $\pm 1.27 \text{ dB}$

10.6. Test Result

Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)	Limit (dBm)	Result
01	2412	-7.644	8	Pass
06	2437	-7.825	8	Pass
11	2462	-6.926	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



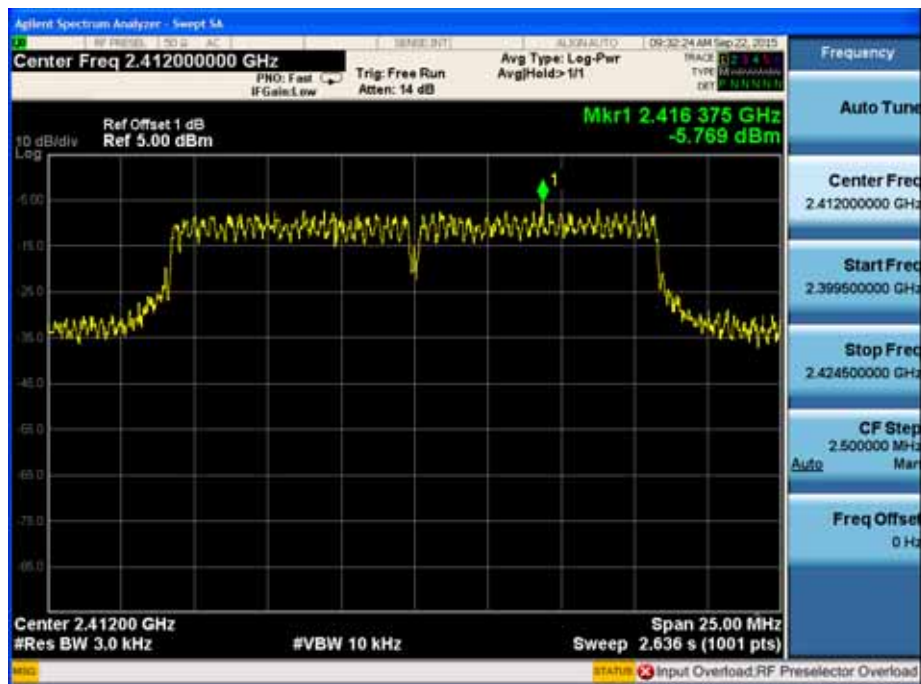
Channel 11 (2462MHz)



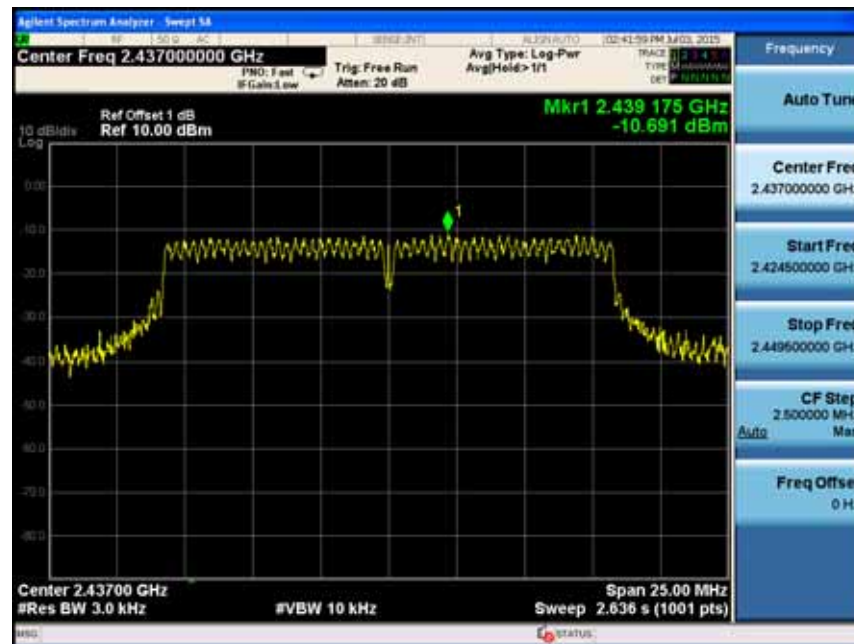
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
01	2412	-5.769	-6.609	-3.158	8	Pass
06	2437	-10.691	-10.950	-7.808	8	Pass
11	2462	-6.811	-7.400	-4.085	8	Pass

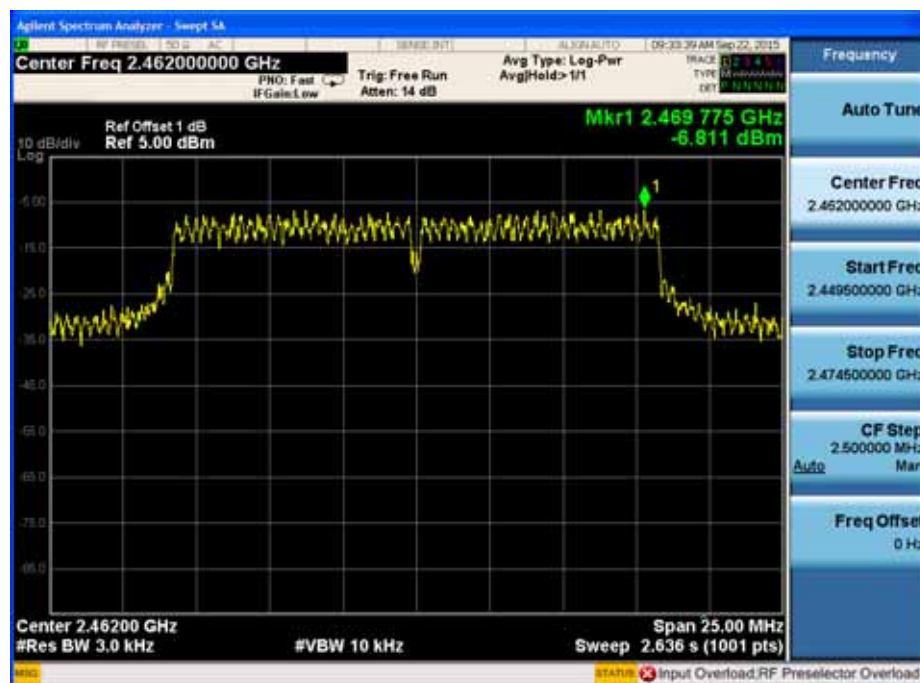
Channel 01 (2412MHz) Ant 1



Channel 06 (2437MHz) Ant 1



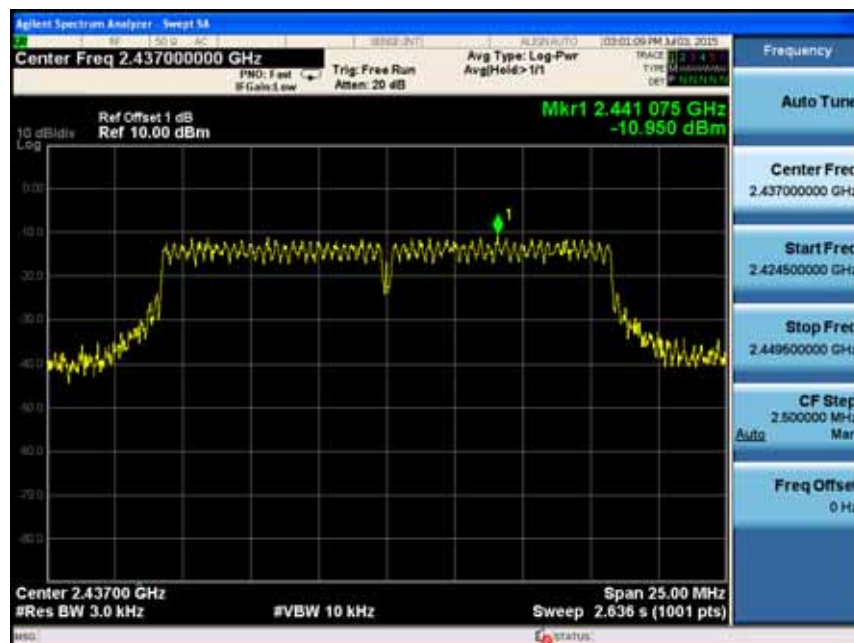
Channel 11 (2462MHz) Ant 1



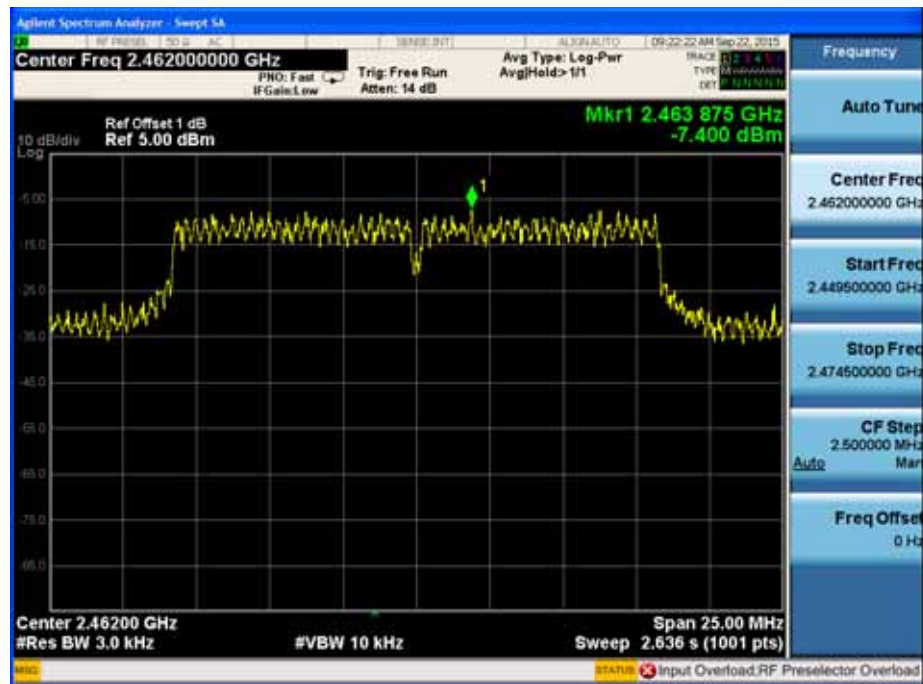
Channel 01 (2412MHz) Ant 2



Channel 06 (2437MHz) Ant 2



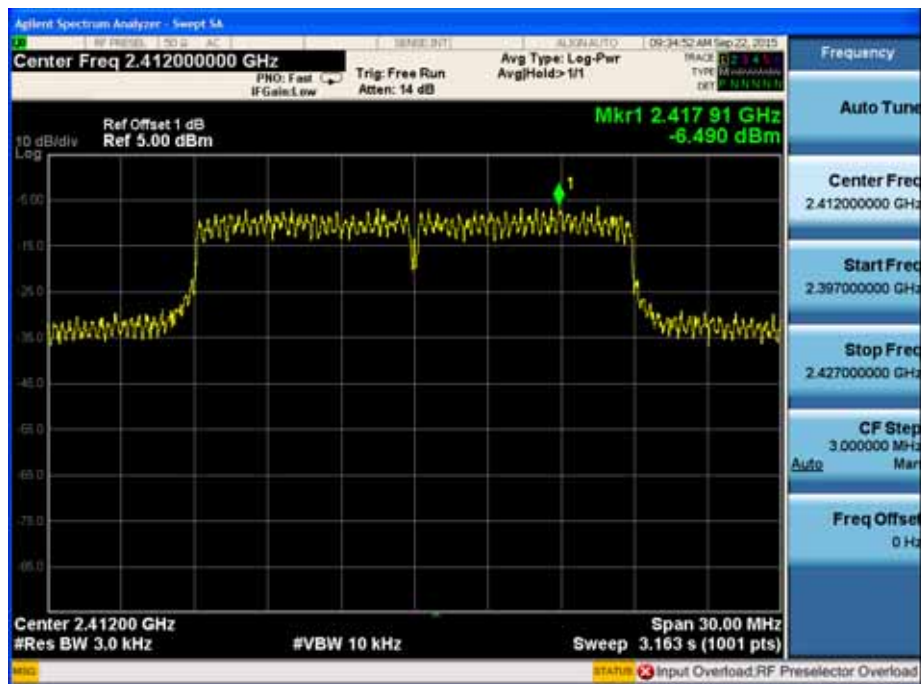
Channel 11 (2462MHz) Ant 2



Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
01	2412	-6.490	-14.701	-5.879	8	Pass
06	2437	-6.309	-11.344	-5.124	8	Pass
11	2462	-6.272	-7.071	-3.643	8	Pass

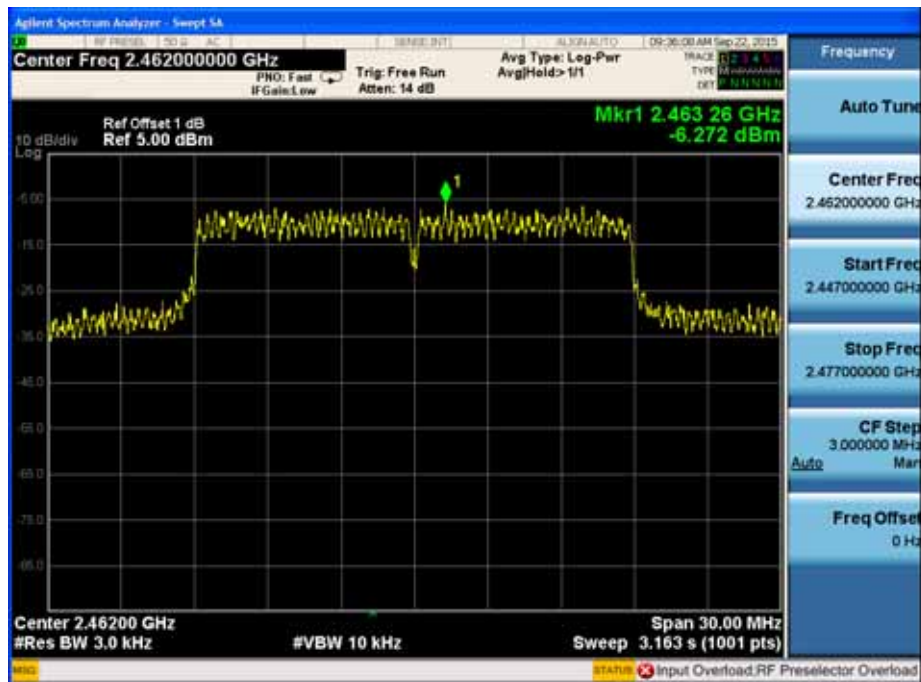
Channel 01 (2412MHz) Ant 1



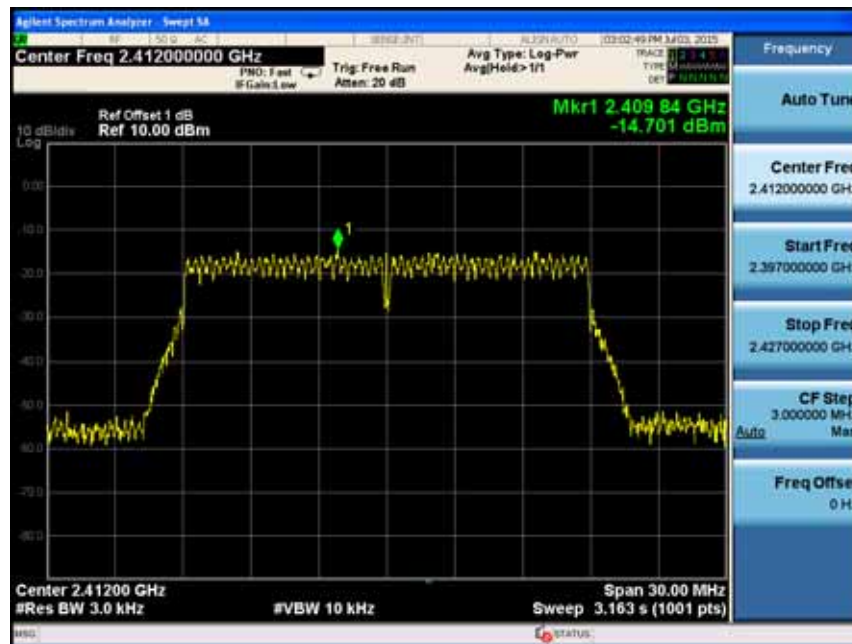
Channel 06 (2437MHz) Ant 1



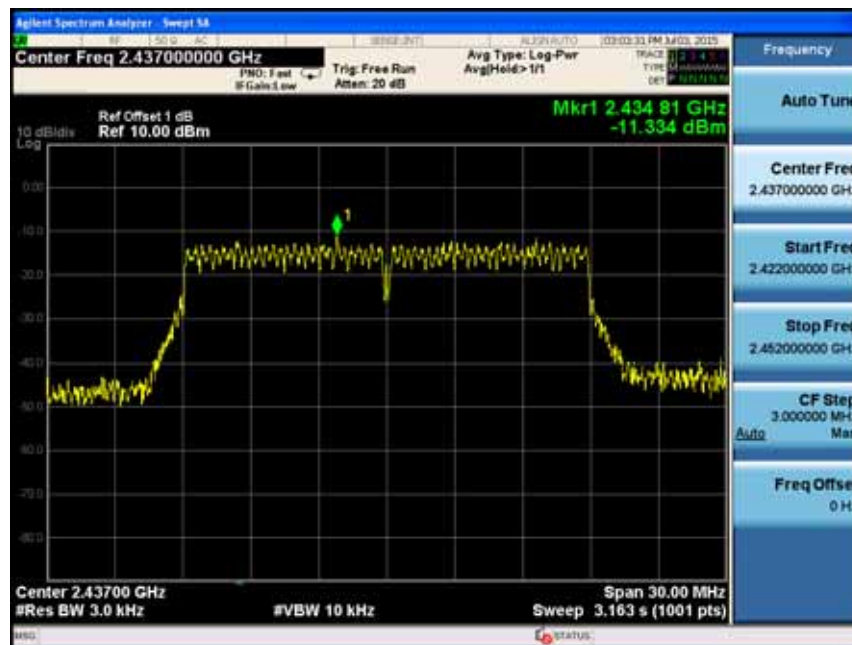
Channel 11 (2462MHz) Ant 1



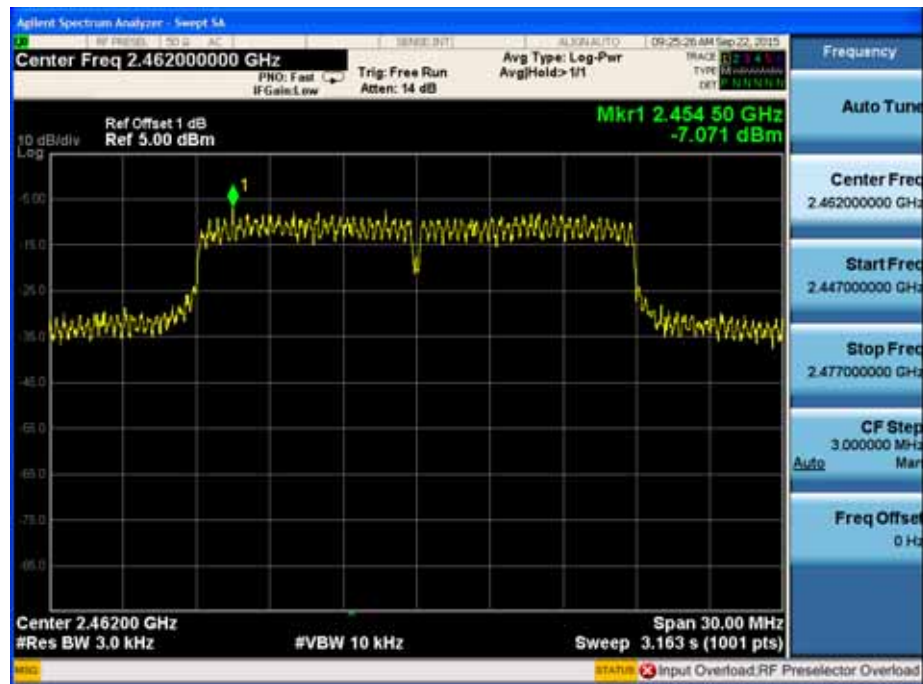
Channel 01 (2412MHz) Ant 2



Channel 06 (2437MHz) Ant 2



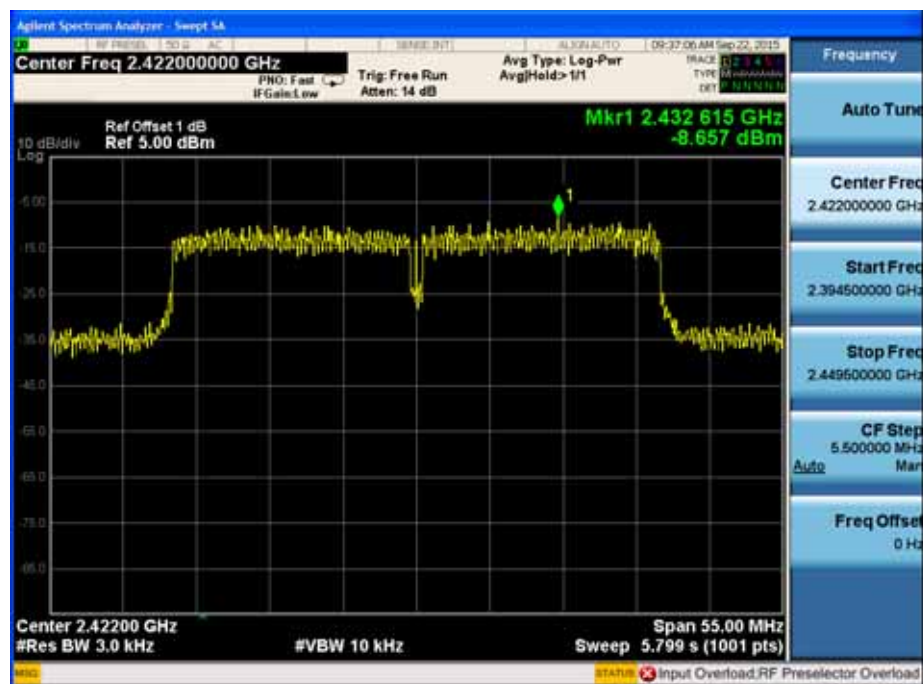
Channel 11 (2462MHz) Ant 2



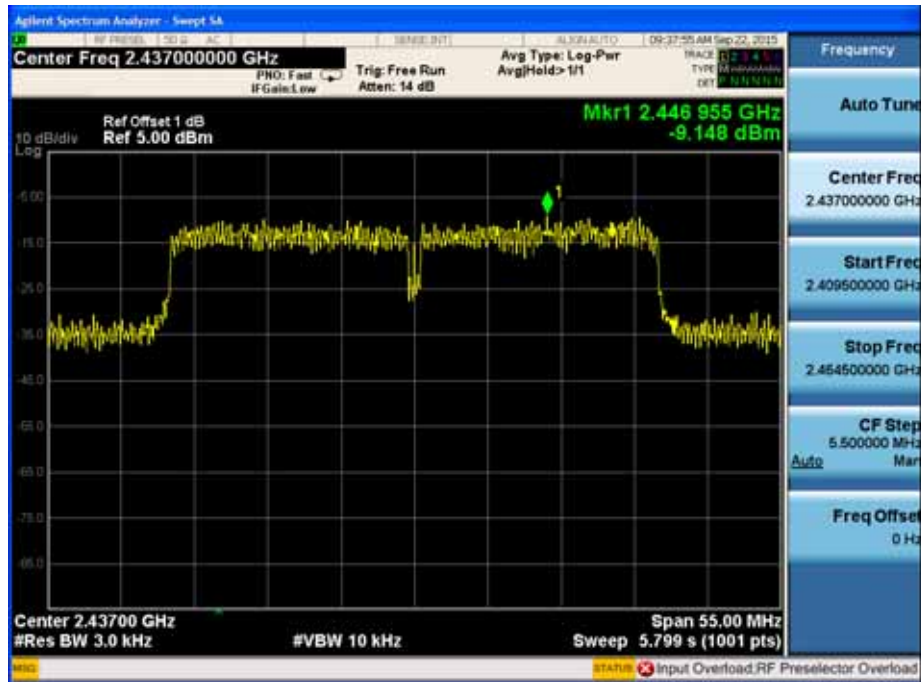
Product	:	AC750 Wireless Dual Band ADSL2+ModemRouter
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
03	2422	-8.657	-10.889	-6.621	8	Pass
06	2437	-9.148	-10.442	-6.737	8	Pass
09	2452	-8.281	-10.848	-6.367	8	Pass

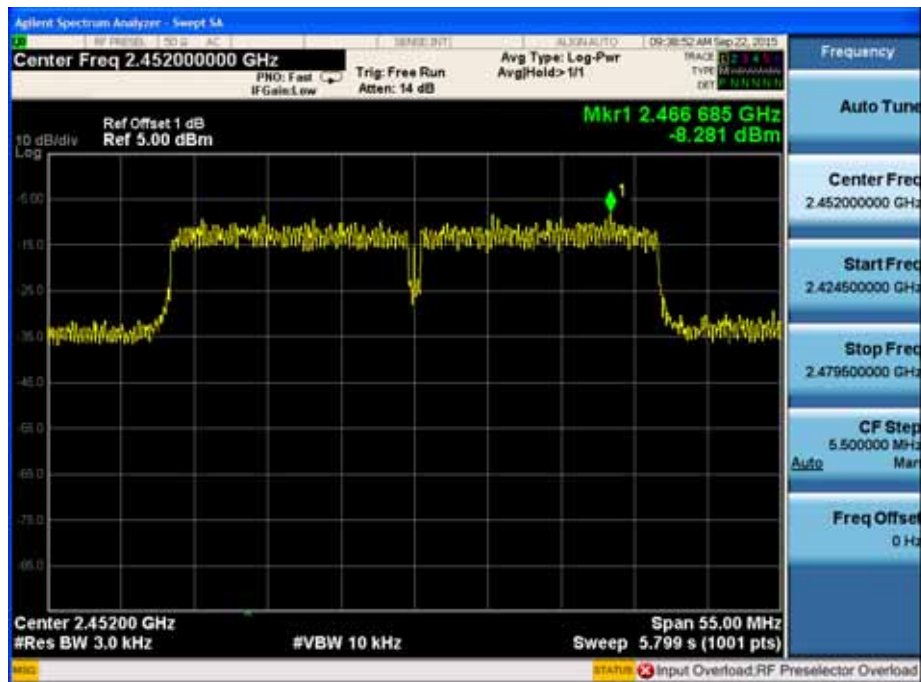
Channel 03 (2422MHz) Ant 1



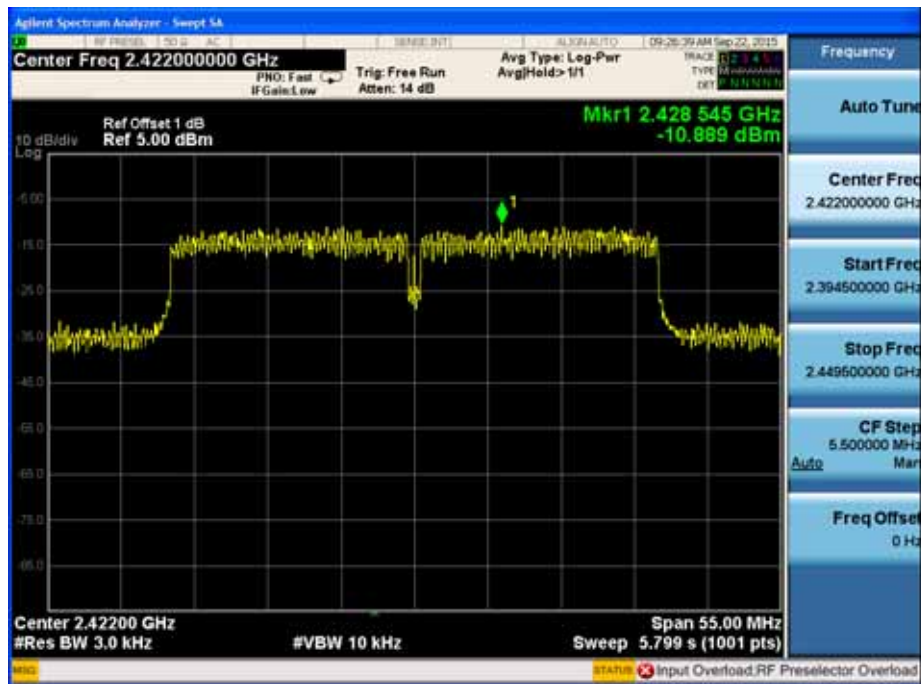
Channel 06 (2437MHz) Ant 1



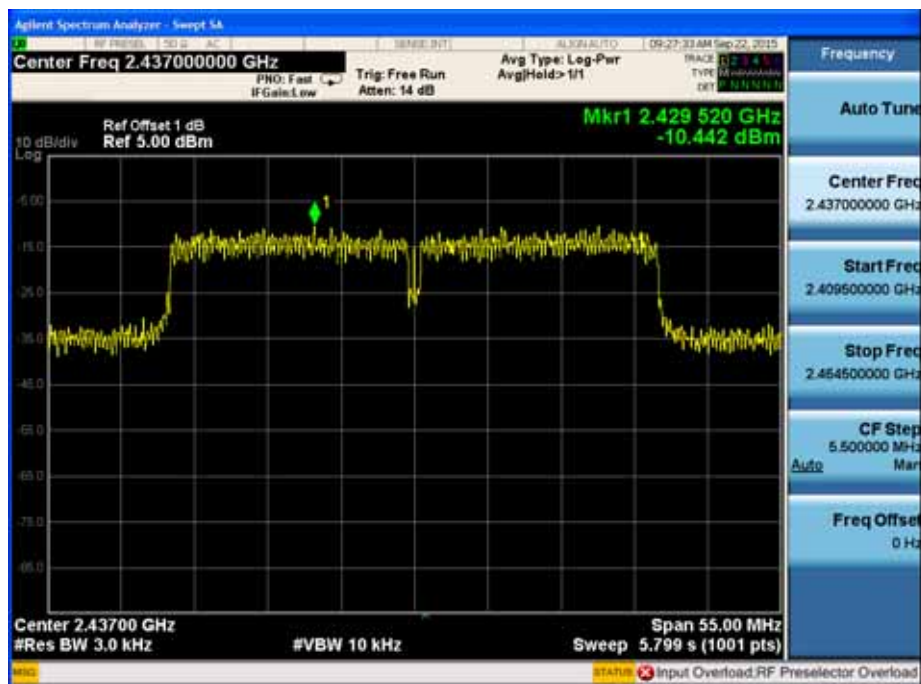
Channel 09 (2452MHz) Ant 1



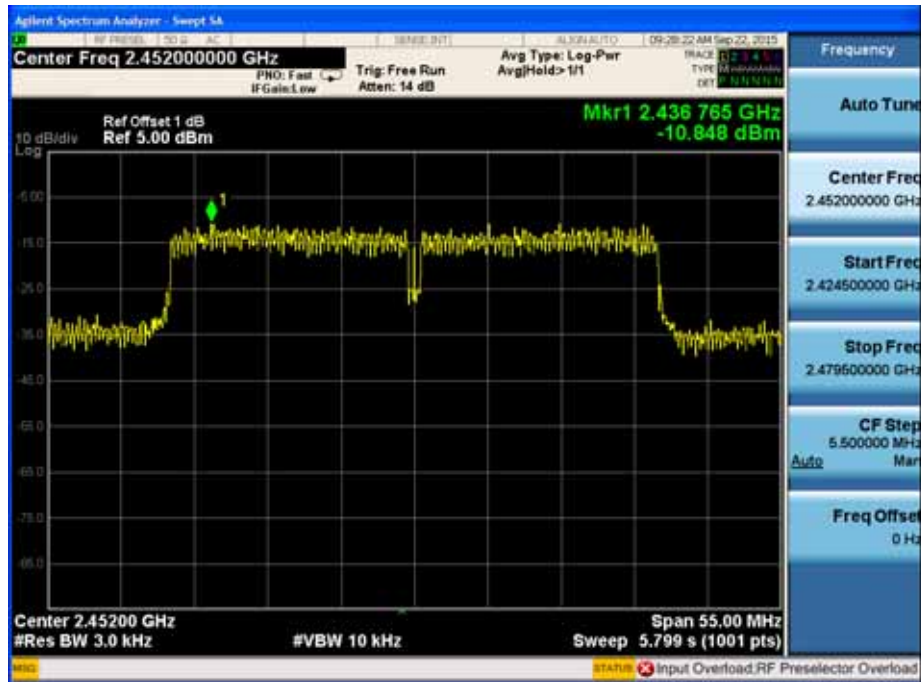
Channel 03 (2422MHz) Ant 2



Channel 06 (2437MHz) Ant 2



Channel 09 (2452MHz) Ant 2



The End