Shenzhen Academy of Information and Communications Technology

FCC PART 15C
TEST REPORT
No. B17N01624-WLAN

for

Roam Data Inc.

POS Tablet

Moby/M70

with

Hardware Version: 9888C

Software Version: M70

FCC ID: 2ABY6-M70

Issued Date: 2017-11-27

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

Shenzhen Academy of Information and Communications Technology

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
B17N01624-WLAN	Rev.0	1st edition	2017-11-27

CONTENTS

1. Test Laboratory

1.1. Testing Location

Location:	Shenzhen Academy of Information and Communications Technology
Address:	Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong Province ,China
Postal Code:	518026
Telephone:	+86(0)755-33322000
Fax:	+86(0)755-33322001

1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	20-75%

1.3. Project data

Testing Start Date:	2017-11-06
Testing End Date:	2017-11-24

1.4. Signature

An Ran
(Prepared this test report)

Tang Weisheng
(Reviewed this test report)

Zhang Bojun
(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Roam Data Inc.
Address:	101 Federal Street, Suite 700, Boston, MA 02110 USA
Contact Person	Christopher Rotsaert
Telephone:	857-350-7418
Fax:	/
E-Mail	christopher.rotsaert@ingenico.com

2.2. Manufacturer Information

Company Name:	Roam Data Inc.
Address:	101 Federal Street, Suite 700, Boston, MA 02110 USA
Contact Person	Christopher Rotsaert
Telephone:	857-350-7418
Fax:	/
E-Mail	christopher.rotsaert@ingenico.com

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	POS Tablet
Model Name	Moby/M70
Market Name	/
RF Protocol	IEEE 802.11 b/g/n-HT20/n-HT40
Operating Frequency	2400MHz~2483.5MHz
Number of Channels	11 (802.11 b/g/n-HT20)/7(802.11n HT40)
Antenna Type	Integrated
Antenna Gain	3.6dBi
Power Supply	3.7V DC by Battery
FCC ID	2ABY6-M70

Note: Components list, please refer to documents of the manufacturer.

3.2. Internal Identification of EUT

EUT ID*	IMEI	HW Version	SW Version	Receive Date
EUT1	/	9888C	M70	2017-10-26

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description	Mode	Manufacturer
AE1	Adapter	/	/
AE2	Battery	/	/

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment Under Test (EUT) are a model of Tablet with integrated antenna.
It consists of normal options: travel Charger, USB cable.
Manual and specifications of the EUT were provided to fulfil the test.
Samples undergoing test were selected by the client.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz	2016
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013

5. Test Results

5.1. Summary of Test Results

No	Test cases	Sub-clause of Part15C	Verdict
0	Antenna Requirement	15.203	**P**
1	Maximum Output Power	15.247 (b)	**P**
2	Peak Power Spectral Density	15.247 (e)	**P**
3	6dB Bandwidth	15.247 (a)	**P**
4	Band Edges Compliance	15.247 (d)	**P**
5	Conducted Emission	15.247 (d)	**P**
6	Radiated Emission	15.247, 15.205, 15.209	**P**
7	AC Power line Conducted	15.207	**P**

See **ANNEX A** for details.

5.2. Statements

CTTL has evaluated the test cases requested by the applicant/manufacturer as listed in section 5.1 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

5.3. Terms used in the result table

Terms used in Verdict column

P	Pass
NA	Not Available
F	Fail

Abbreviations

AC	Alternating Current
AFH	Adaptive Frequency Hopping
BW	Band Width
E.I.R.P.	equivalent isotropic radiated power
ISM	Industrial, Scientific and Medical
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
Tx	Transmitter

5.4. Laboratory Environment

Semi-anechoic Chamber did not exceed following limits along the EMC testing

Temperature	Min. = 15 ˚C, Max. = 30 ˚C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Normalised site attenuation (NSA)	< ±4dB, 3m/10m distance, from 30 to 1000 MHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

Shielded room did not exceed following limits along the EMC testing

Temperature	Min. = 15 ˚C, Max. = 30 ˚C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω

Fully-anechoic Chamber did not exceed following limits along the EMC testing

Temperature	Min. = 15 ˚C, Max. = 30 ˚C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Voltage Standing Wave Ratio (VSWR)	≤6dB, from 1 to 18 GHz,3m distance

6. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Vector Signal Analyzer	FSV40	100903	Rohde & Schwarz	2018-01-18	1 year
2	Power Sensor	U2021XA	MY55430013	Agilent	2018-01-18	1 year

Radiated test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	LISN	ESH2-Z5	100196	Rohde & Schwarz	2018-01-05	1 year
2	Test Receiver	ESCI	100702	Rohde & Schwarz	2018-06-25	1 year
3	Loop Antenna	HLA6120	35779	TESEQ	2019-05-02	3 years
4	BiLog Antenna	VULB9163	9163 329	Schwarzbeck	2020-02-27	3 years
5	Horn Antenna	3117	00066585	ETS-Lindgren	2019-03-05	3 years
6	Test Receiver	ESR7	101676	Rohde & Schwarz	2018-11-29	1 year
7	Spectrum Analyzer	FSV40	101192	Rohde & Schwarz	2018-05-22	1 year
8	Chamber	FACT5-2.0	4166	ETS-Lindgren	2018-05-13	3 years
9	Antenna	3160-09	LM4214/0011 8383	ETS-Lindgren	2018-07-14	3 years

Test software

No.	Equipment	Manufacturer	Version
1	TechMgr Software	CAICT	2.1.1
2	EMC32	Rohde & Schwarz	8.53.0
3	EMC32	Rohde & Schwarz	10.01.00

EUT is MTK engineering software provided by the customer to control the transmitting signal. The EUT was programmed to be in continuously transmitting mode.

Anechoic Chamber

Fully anechoic Chamber by ETS-Lindgren.

ANNEX A: MEASUREMENT RESULTS FOR RECEIVER

A.0 Antenna requirement

Measurement Limit:

Standard	Requirement
FCC CRF Part 15.203	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.

Conclusion: The Directional gains of antenna used for transmitting is 3.6 dBi.
The RF transmitter uses an integrate antenna without connector.

A.1 Maximum Output Power - Conduced

Measurement Limit:

Standard	Limit (dBm)
FCC CRF Part 15.247(b) & RSS-247 Issue1 5.4	< 30

Measurement of method :See ANSI C63.10-2013-Clause 11.9.2.3.2

Method AVGPM-G is a measurement using a gated RF average power meter.

Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Measurement Results:

Mode	Test Result (dBm)			Conclusion
	2412MHz (CH1)	2437MHz (CH6)	2462 MHz (CH11)	
802.11b	14.84	14.90	14.89	**P**
802.11g	14.55	14.68	14.70	**P**
802.11n HT20	13.95	14.06	14.10	**P**

Mode	Test Result (dBm)			Conclusion
	2422MHz (CH3)	2437MHz (CH6)	2452 MHz (CH9)	
802.11n HT40	13.82	13.98	14.01	**P**

Note:

Worst-case data rates as provided by the client were: 1Mbps (802.11b), 6Mbps (802.11g), MCS0 (802.11n). The following cases and test graphs are performed with this condition.

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

A.2 Peak Power Spectral Density

Measurement Limit:

Standard	Limit
FCC CRF Part 15.247(e) & RSS-247 Issue1 5.2	< 8 dBm/3 kHz

Measurement Results:

Mode	Channel	Test Results (dBm)		Conclusion
802.11b	1	Fig.1	-4.05	**P**
	6	Fig.2	-3.79	**P**
	11	Fig.3	-4.19	**P**
802.11g	1	Fig.4	-8.00	**P**
	6	Fig.5	-10.79	**P**
	11	Fig.6	-11.73	**P**
802.11n HT20	1	Fig.7	-12.33	**P**
	6	Fig.8	-11.32	**P**
	11	Fig.9	-11.78	**P**
802.11n HT40	3	Fig.10	-14.62	**P**
	6	Fig.11	-15.17	**P**
	9	Fig.12	-14.72	**P**

See ANNEX B for test graphs.

Conclusion: PASS

A.3 6dB Bandwidth

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a) & RSS-247 Issue1 5.2	≥ 500

Measurement Result:

Mode	Channel	Test Results (kHz)		Conclusion
802.11b	1	Fig.13	9500	**P**
	6	Fig.14	9050	**P**
	11	Fig.15	9050	**P**
802.11g	1	Fig.16	15350	**P**
	6	Fig.17	15350	**P**
	11	Fig.18	15500	**P**
802.11n HT20	1	Fig.19	16850	**P**
	6	Fig.20	16750	**P**
	11	Fig.21	16000	**P**
802.11n HT40	3	Fig.22	35120	**P**
	6	Fig.23	35120	**P**
	9	Fig.24	35120	**P**

See ANNEX B for test graphs.

Conclusion: PASS

A.4 Band Edges Compliance

Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d) & RSS-247 Issue1 5.5	> 20

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.25	**P**
	11	Fig.26	**P**
802.11g	1	Fig.27	**P**
	11	Fig.28	**P**
802.11n HT20	1	Fig.29	**P**
	11	Fig.30	**P**
802.11n HT40	3	Fig.31	**P**
	9	Fig.32	**P**

See ANNEX B for test graphs.

Conclusion: PASS

A.5 Conducted Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d) & RSS-247 Issue1 5.5/RSS-Gen 6.13	20dB below peak output power in 100 kHz bandwidth

Measurement Results:

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	1GHz-10GHz	Fig.33	**P**
	6	1GHz-10GHz	Fig.34	**P**
	11	1GHz-10GHz	Fig.35	**P**
802.11g	1	1GHz-10GHz	Fig.36	**P**
	6	1GHz-10GHz	Fig.37	**P**
	11	1GHz-10GHz	Fig.38	**P**
802.11n HT20	1	1GHz-10GHz	Fig.39	**P**
	6	1GHz-10GHz	Fig.40	**P**
	11	1GHz-10GHz	Fig.41	**P**
802.11n HT40	3	1GHz-10GHz	Fig.42	**P**
	6	1GHz-10GHz	Fig.43	**P**
	9	1GHz-10GHz	Fig.44	**P**
/	All Channels	30MHz~1GHz	Fig.45	**P**
		1GHz-26GHz	Fig.46	**P**

See ANNEX B for test graphs.
Conclusion: PASS

A.6 Radiated Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 Issue1 5.5/RSS-Gen 6.13	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(μV/m)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Note:

According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band below 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic.

The measurement results include the horizontal polarization and vertical polarization measurements.

Measurement Results:

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	1 GHz ~18 GHz	Fig.47	**P**
	6	1 GHz ~18 GHz	Fig.48	**P**
	11	1 GHz ~18 GHz	Fig.49	**P**
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.50	**P**
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.51	**P**
802.11g	1	1 GHz ~18 GHz	Fig.52	**P**
	6	1 GHz ~18 GHz	Fig.53	**P**
	11	1 GHz ~18 GHz	Fig.54	**P**
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.55	**P**
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.56	**P**
802.11n HT20	1	1 GHz ~18 GHz	Fig.57	**P**
	6	1 GHz ~18 GHz	Fig.58	**P**
	11	1 GHz ~18 GHz	Fig.59	**P**
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.60	**P**
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.61	**P**
802.11n HT40	3	1 GHz ~18 GHz	Fig.62	**P**
	6	1 GHz ~18 GHz	Fig.63	**P**
	9	1 GHz ~18 GHz	Fig.64	**P**
	Restricted Band (CH3)	2.38 GHz ~ 2.45 GHz	Fig.65	**P**
	Restricted Band (CH9)	2.45 GHz ~ 2.5 GHz	Fig.66	**P**
/	All Channels	9 kHz ~30 MHz	Fig.67	**P**
		30 MHz ~1 GHz	Fig.68	**P**
		18 GHz ~26.5 GHz	Fig.69	**P**

Worst-Case Result:

802.11b CH 6(1-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
12626.500000	55.83	74.00	18.17	V	20.0
14613.500000	56.60	74.00	17.40	H	21.5
15571.500000	60.16	74.00	13.84	V	23.6
15934.000000	62.24	74.00	11.76	H	24.8
17138.000000	62.87	74.00	11.13	H	26.5
17707.500000	61.90	74.00	12.10	H	27.6

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
7136.500000	45.36	54.00	8.64	V	13.1
14681.000000	44.59	54.00	9.41	V	21.5
15574.500000	48.70	54.00	5.30	V	23.7
15936.000000	50.09	54.00	3.91	V	24.9
16596.500000	50.88	54.00	3.12	H	26.3
17710.500000	50.80	54.00	3.20	H	27.7

802.11g CH6 (1GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13919.000000	54.18	74.00	19.82	H	20.5
14595.000000	55.00	74.00	19.00	V	21.5
15325.500000	59.60	74.00	14.40	H	22.7
16346.500000	61.83	74.00	12.17	H	25.6
16596.000000	63.43	74.00	10.57	H	26.3
17707.500000	61.44	74.00	12.56	V	27.6

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
7136.500000	42.85	54.00	11.15	V	13.1
14681.000000	43.46	54.00	10.54	V	21.5
15572.500000	48.09	54.00	5.91	V	23.7
15942.000000	49.44	54.00	4.56	V	24.9
16599.500000	50.30	54.00	3.70	V	26.3
17706.000000	49.96	54.00	4.04	H	27.6

802.11n HT20 CH6 (1GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13907.500000	53.77	74.00	20.23	H	21.0
14686.000000	55.88	74.00	18.12	V	21.5
15569.500000	59.98	74.00	14.02	H	23.6
15942.500000	61.10	74.00	12.90	H	24.9
16598.000000	62.55	74.00	11.45	H	26.3
17715.500000	60.72	74.00	13.28	H	27.7

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13907.500000	42.90	54.00	11.10	V	21.0
14688.000000	43.36	54.00	10.64	V	21.6
15575.500000	48.20	54.00	5.80	V	23.8
15924.500000	49.52	54.00	4.48	V	24.7
16587.000000	50.43	54.00	3.57	H	26.3
17720.500000	49.84	54.00	4.16	H	27.7

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and Antenna Factor, the gain of the preamplifier, the cable loss. P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= P_{Mea} +Cable Loss +Antenna Factor-Gain of the preamplifier.

See ANNEX B for test graphs.

Conclusion: PASS

A.8 AC Powerline Conducted Emission

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)-AE1

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.70	Fig.71	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)-AE1

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig 70	Fig 71	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note: The measurement results include the L1 and N measurements.

See ANNEX B for test graphs.

Conclusion: PASS

ANNEX B: TEST GRAPHS

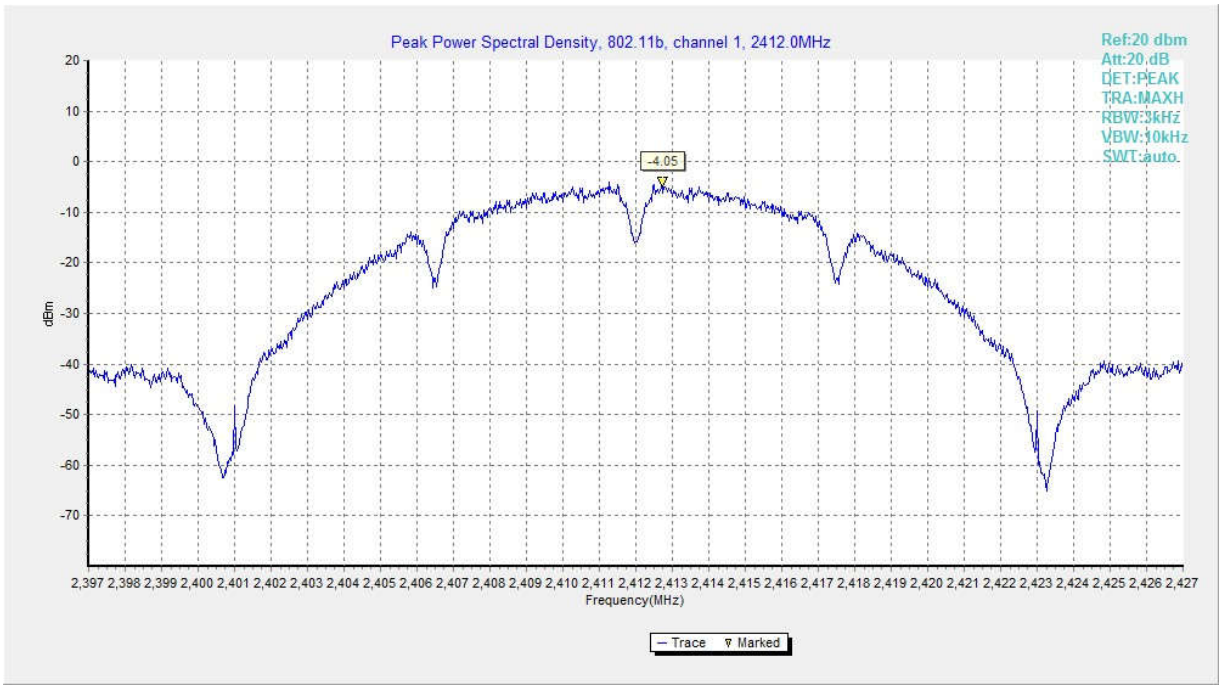

Fig.1 Power Spectral Density (802.11b, CH 1)

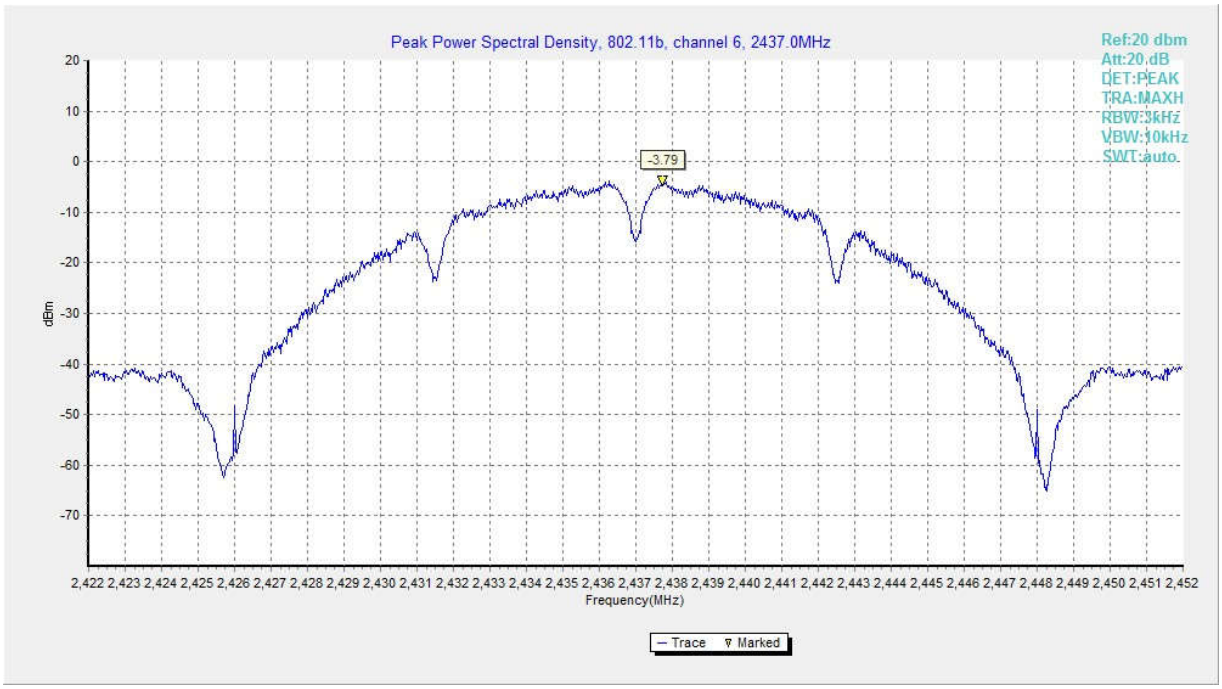

Fig.2 Power Spectral Density (802.11b, CH 6)

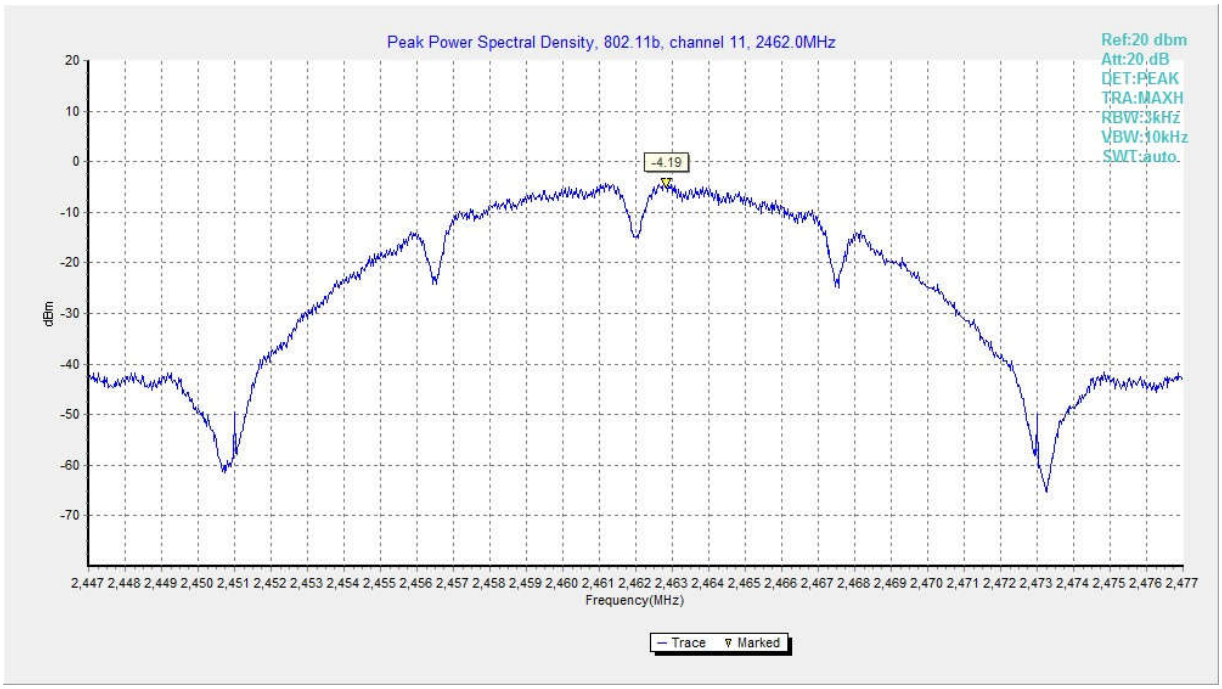

Fig.3 Power Spectral Density (802.11b, CH 11)

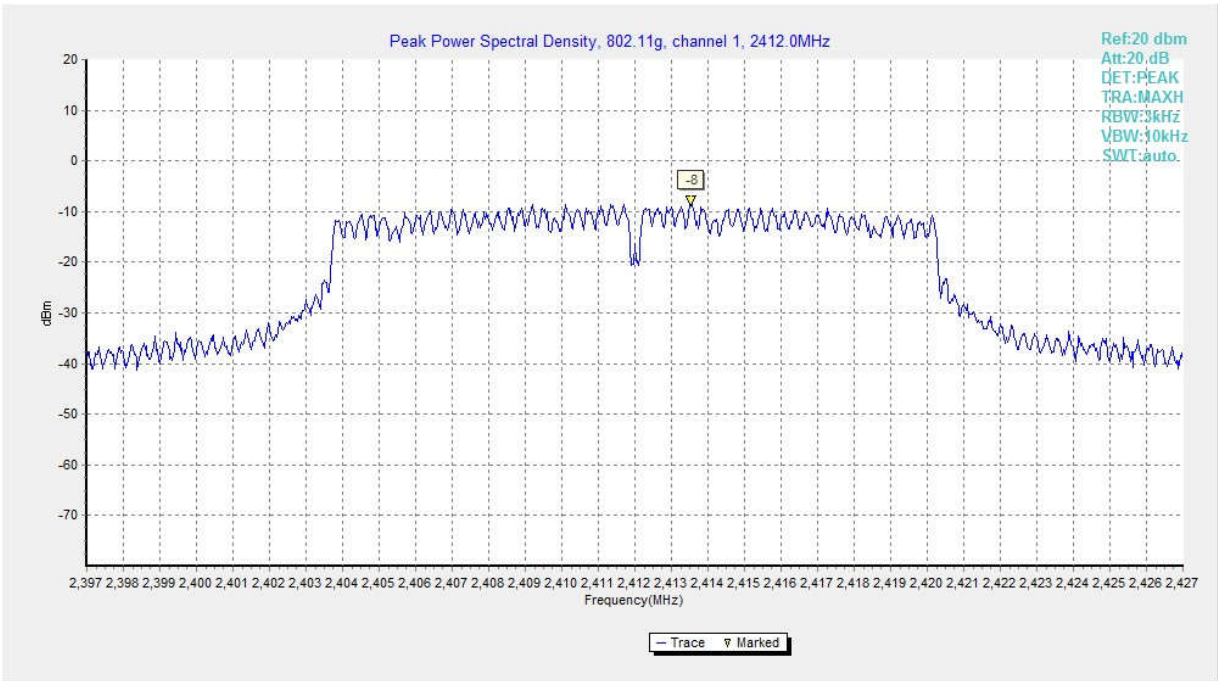

Fig.4 Power Spectral Density (802.11g, CH 1)

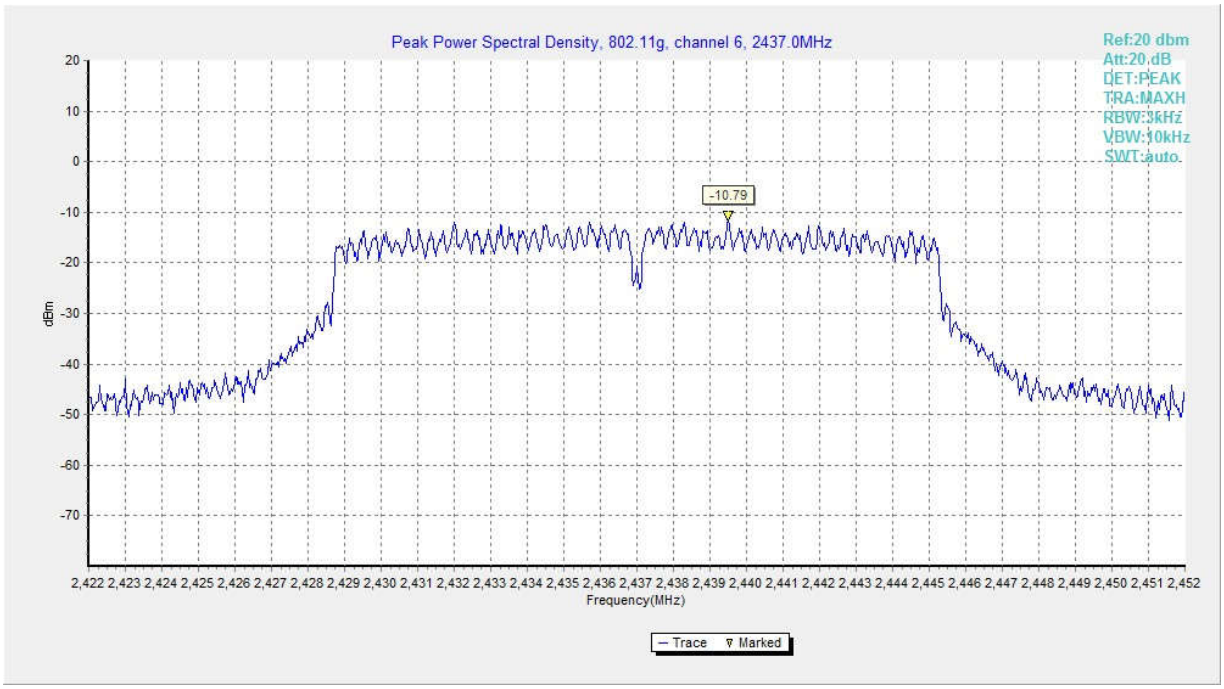

Fig.5 Power Spectral Density (802.11g, CH 6)

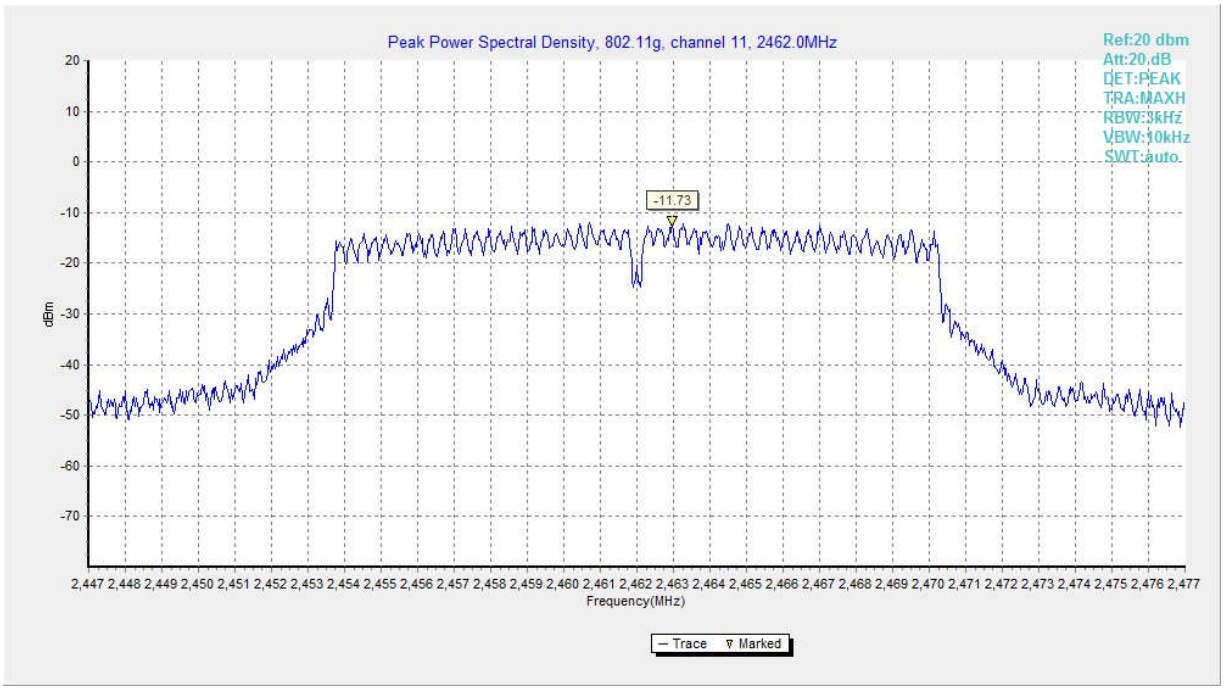

Fig.6 Power Spectral Density (802.11g, CH 11)

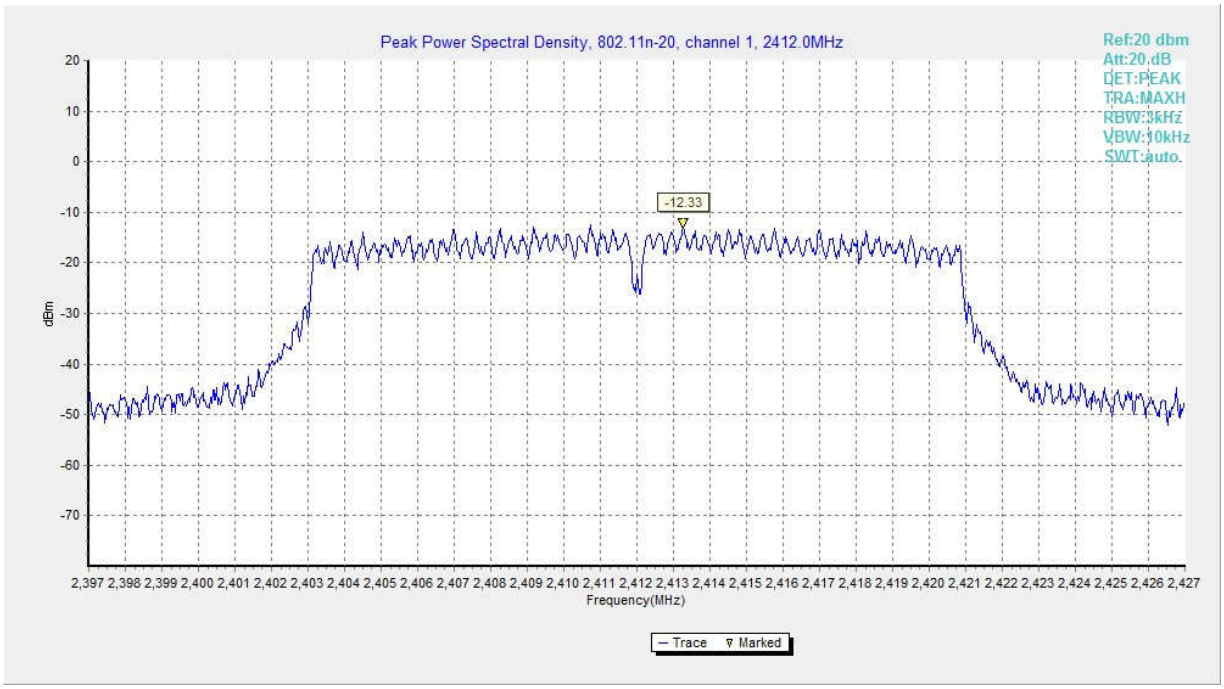

Fig.7 Power Spectral Density (802.11n HT20, CH 1)

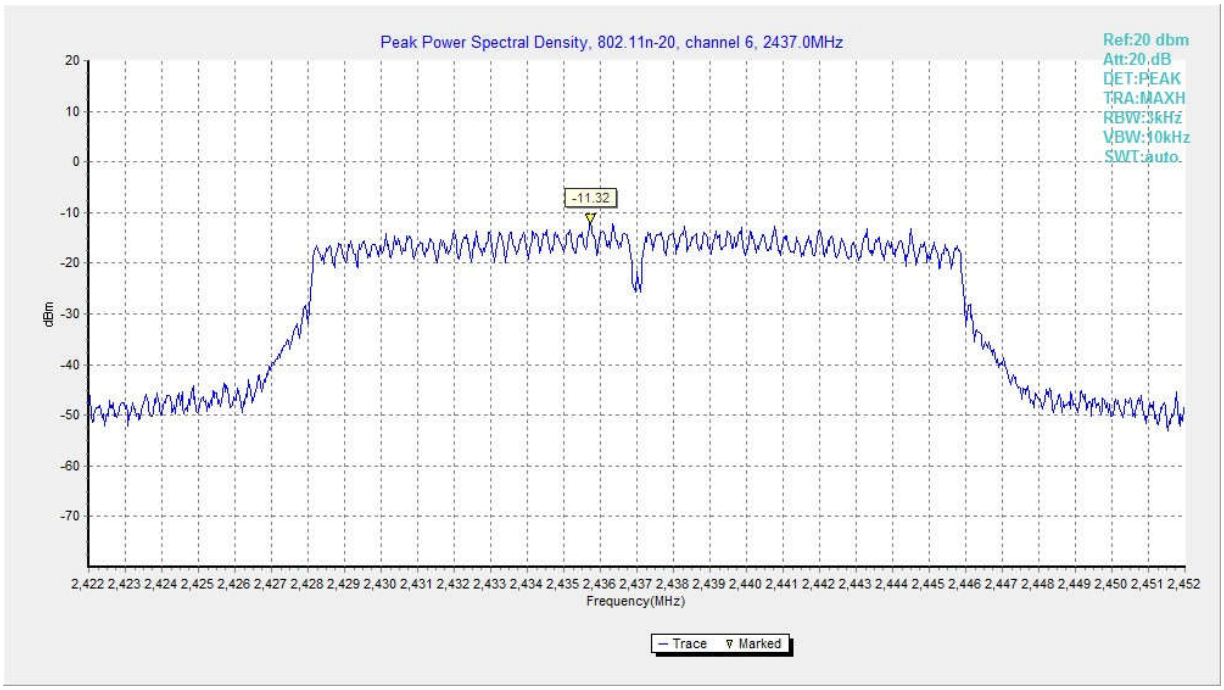

Fig.8 Power Spectral Density (802.11n HT20, CH 6)

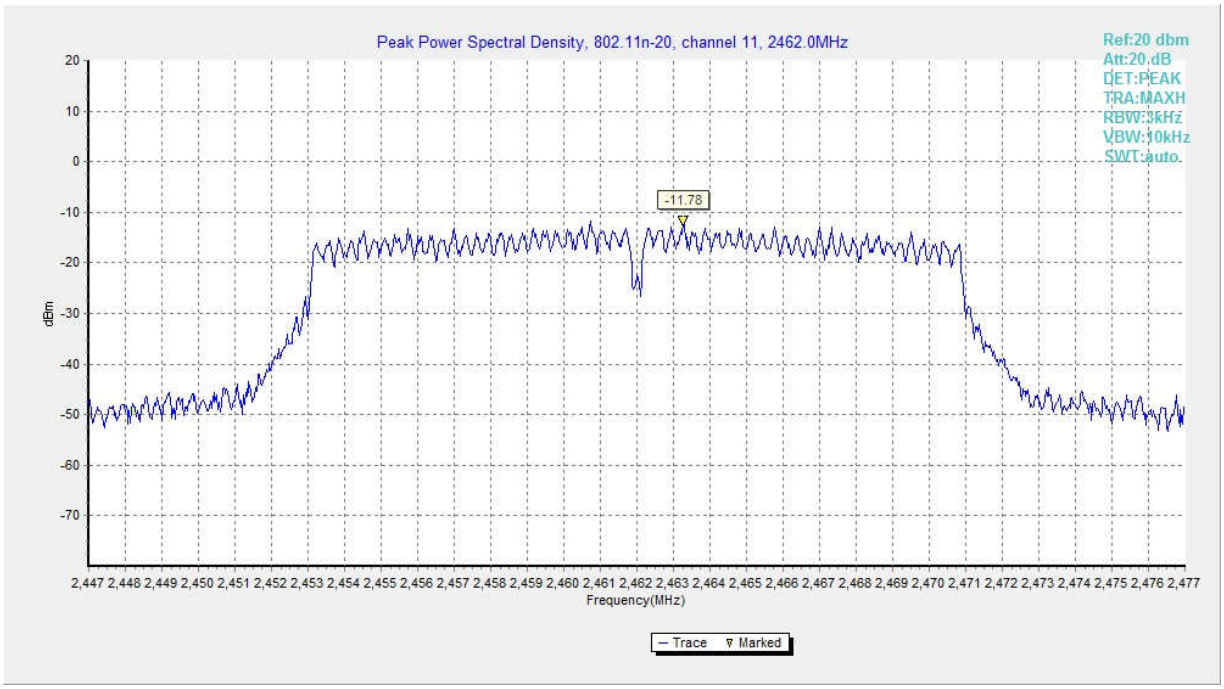

Fig.9 Power Spectral Density (802.11n HT20, CH 11)

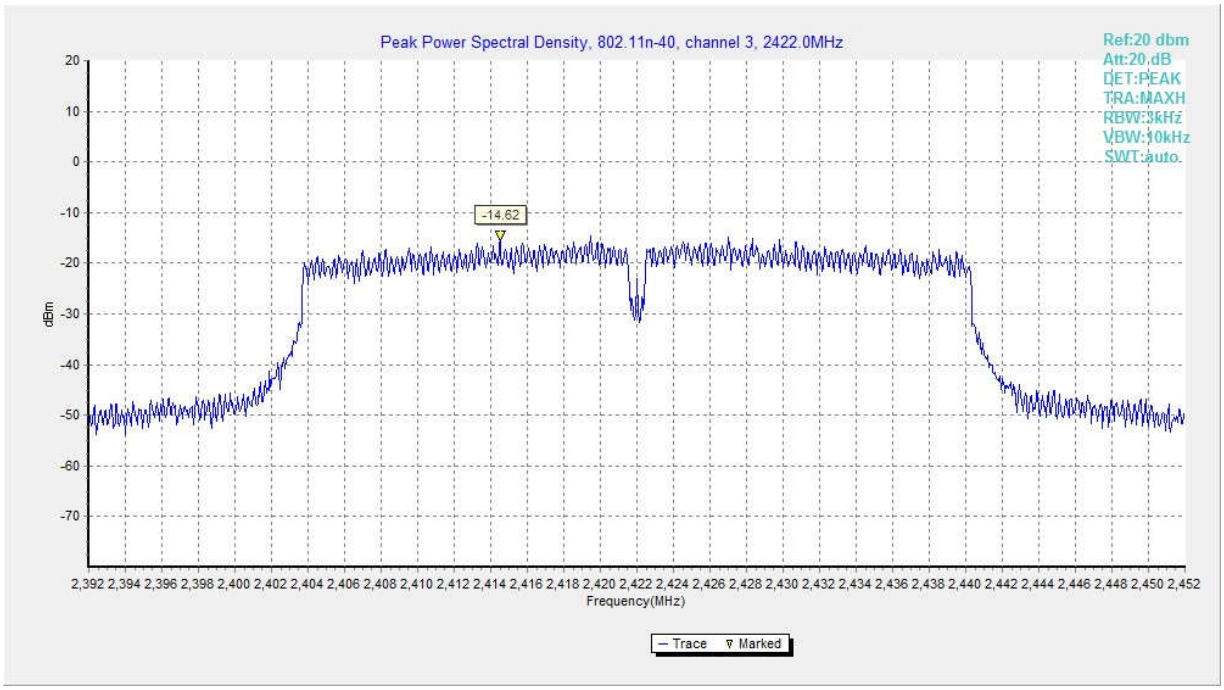

Fig.10 Power Spectral Density (802.11n HT40, CH 3)

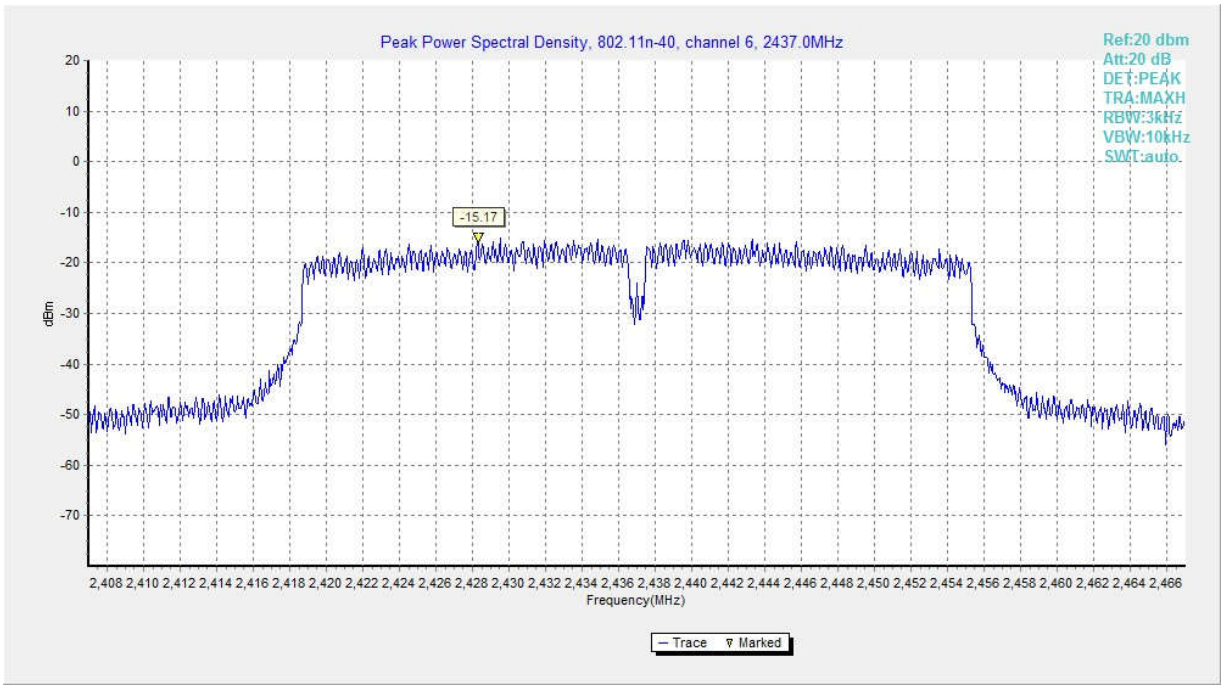

Fig.11 Power Spectral Density (802.11n HT40, CH 6)

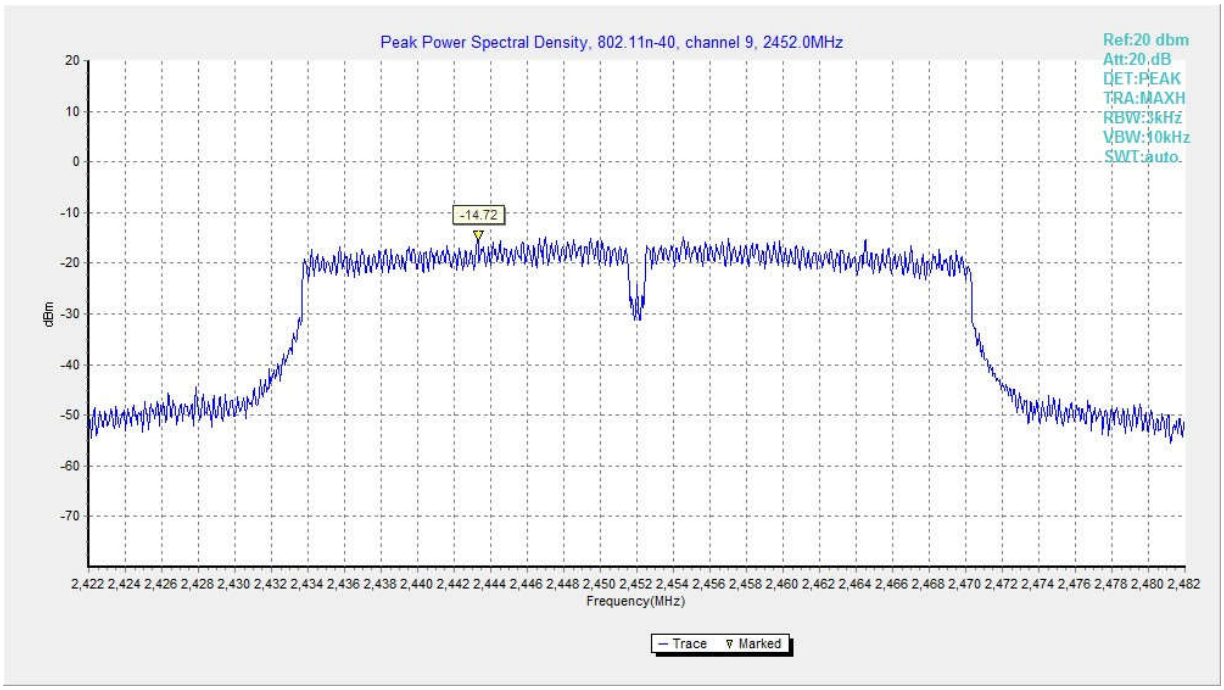

Fig.12 Power Spectral Density (802.11n HT40, CH 9)

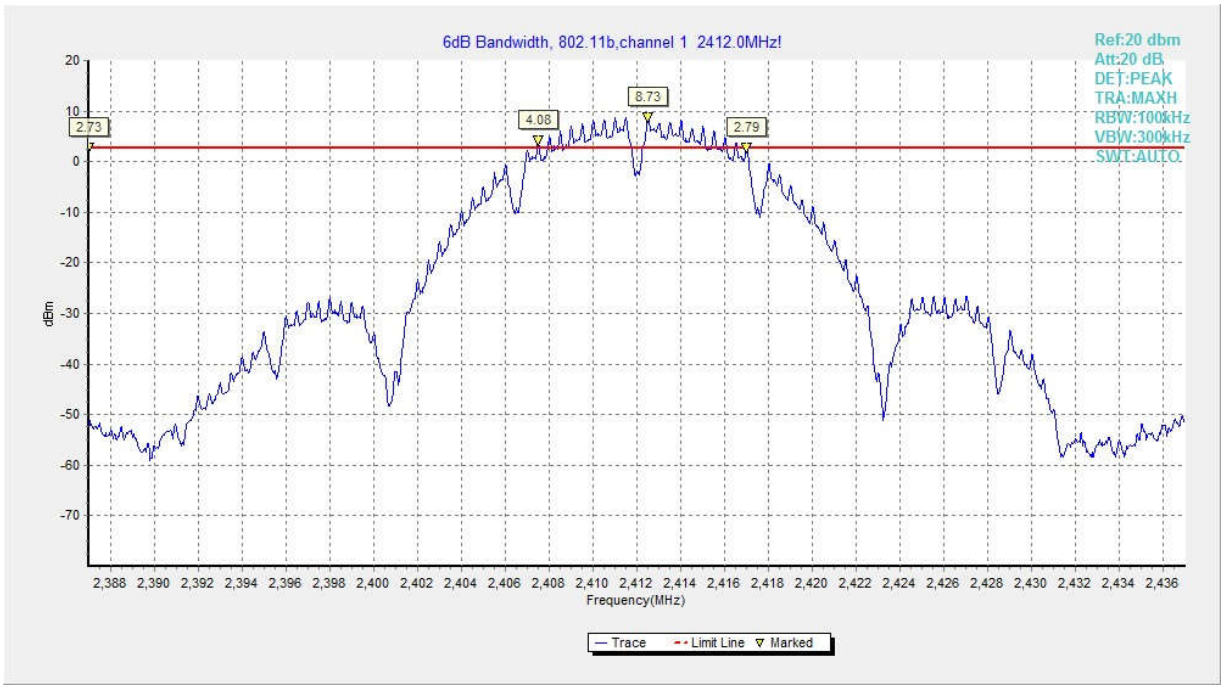

Fig.13 6dB Bandwidth (802.11b, CH 1)

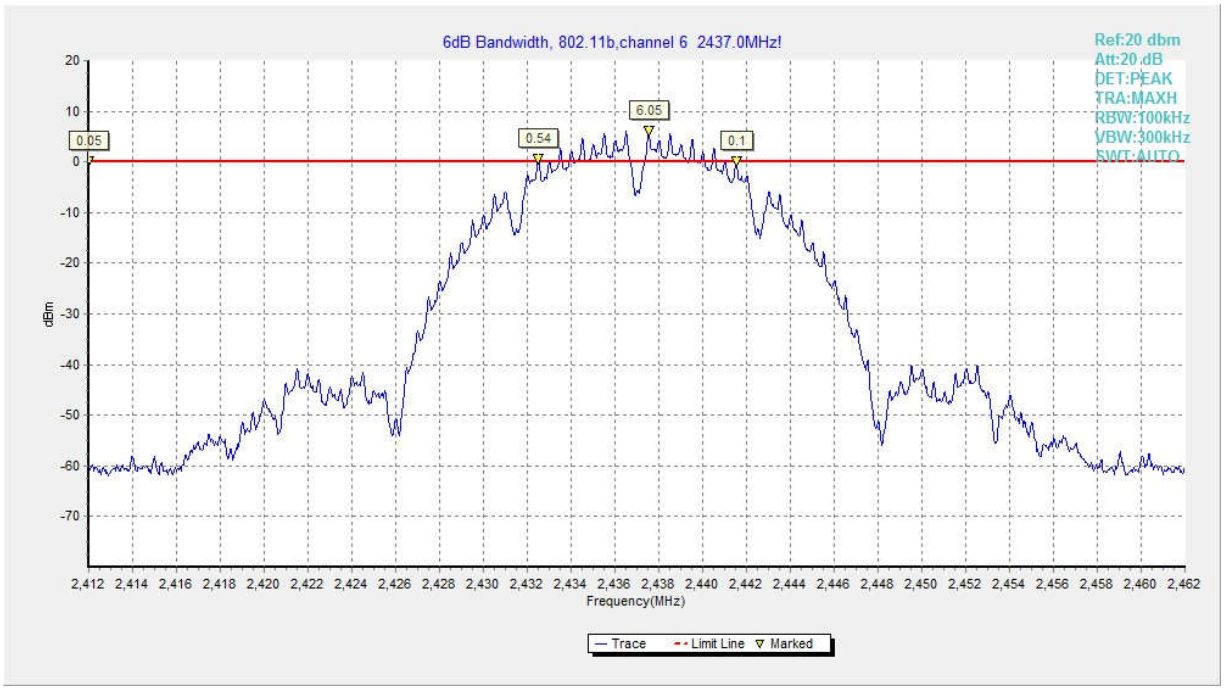

Fig.14 6dB Bandwidth (802.11b, CH 6)

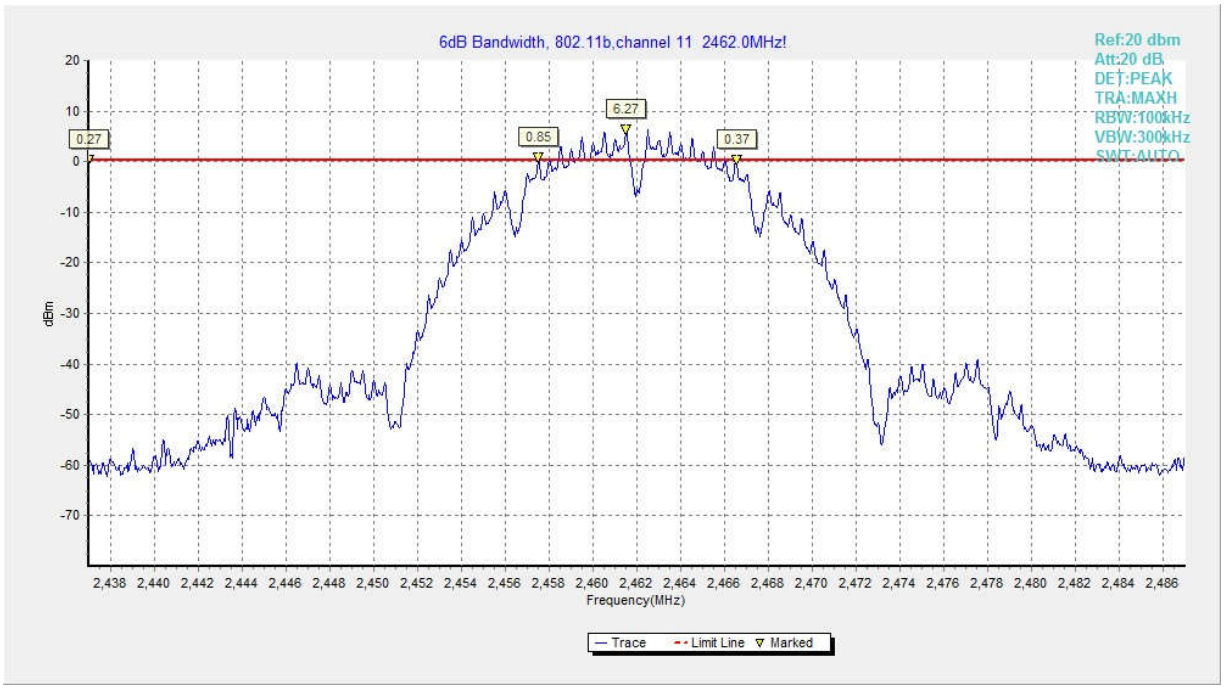

Fig.15 6dB Bandwidth (802.11b, CH 11)

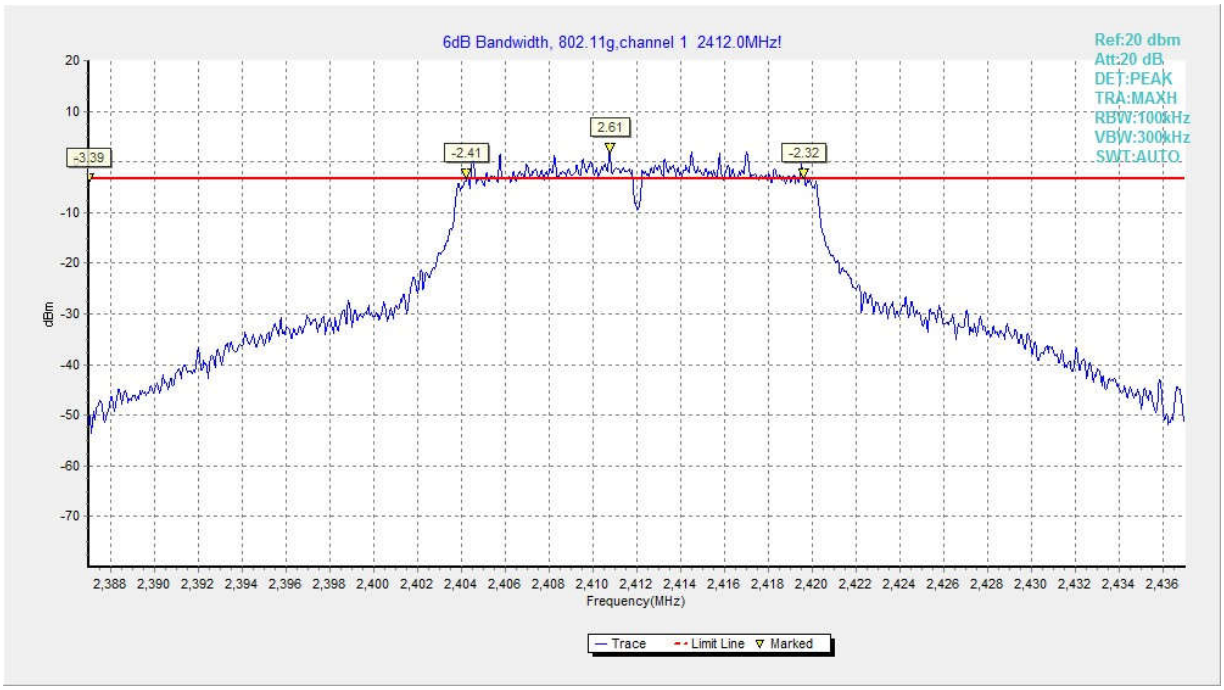

Fig.16 6dB Bandwidth (802.11g, CH 1)

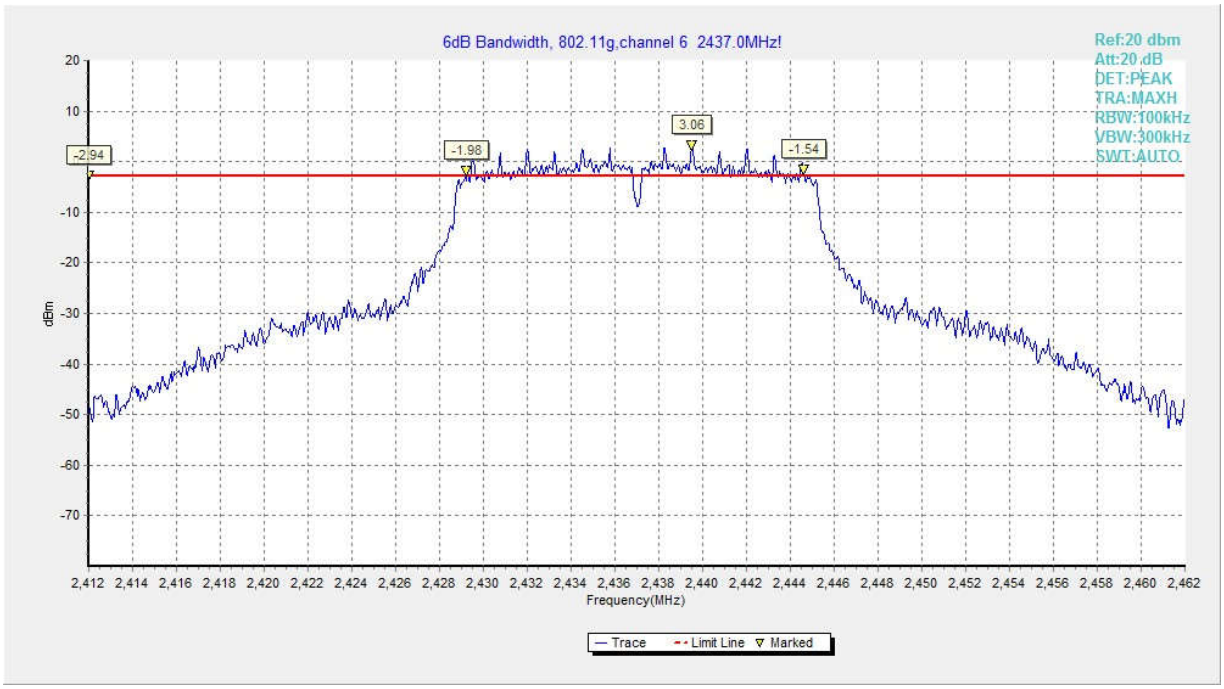

Fig.17 6dB Bandwidth (802.11g, CH 6)

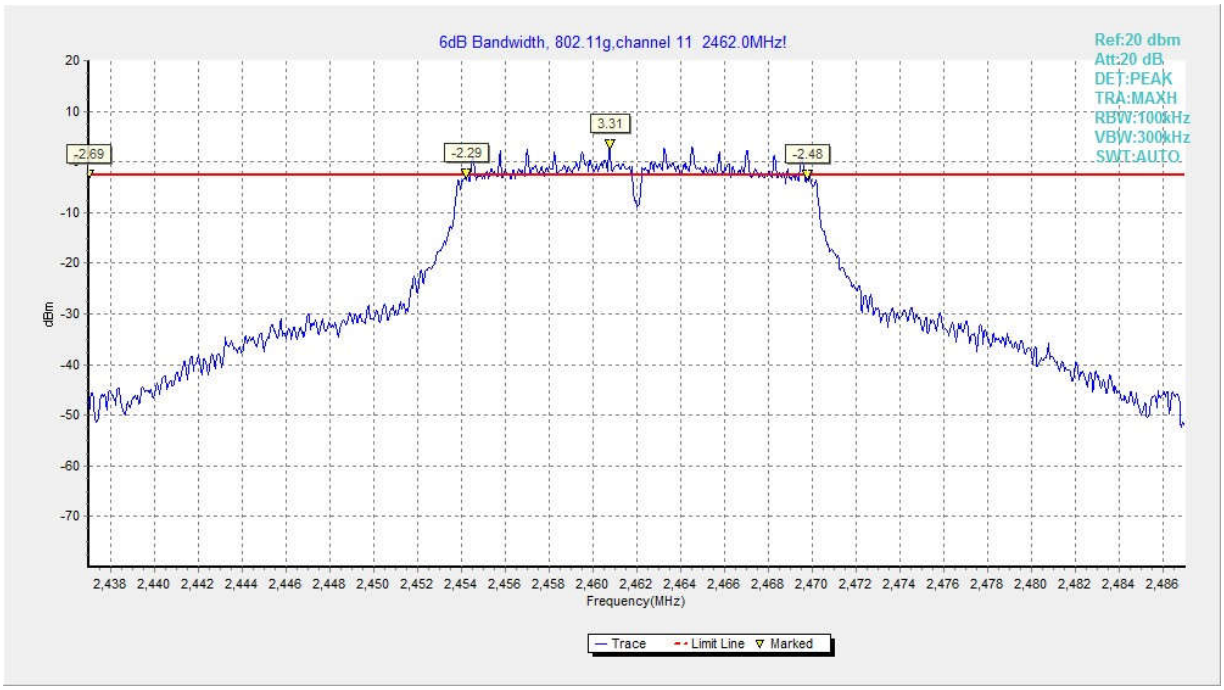

Fig.18 6dB Bandwidth (802.11g, CH 11)

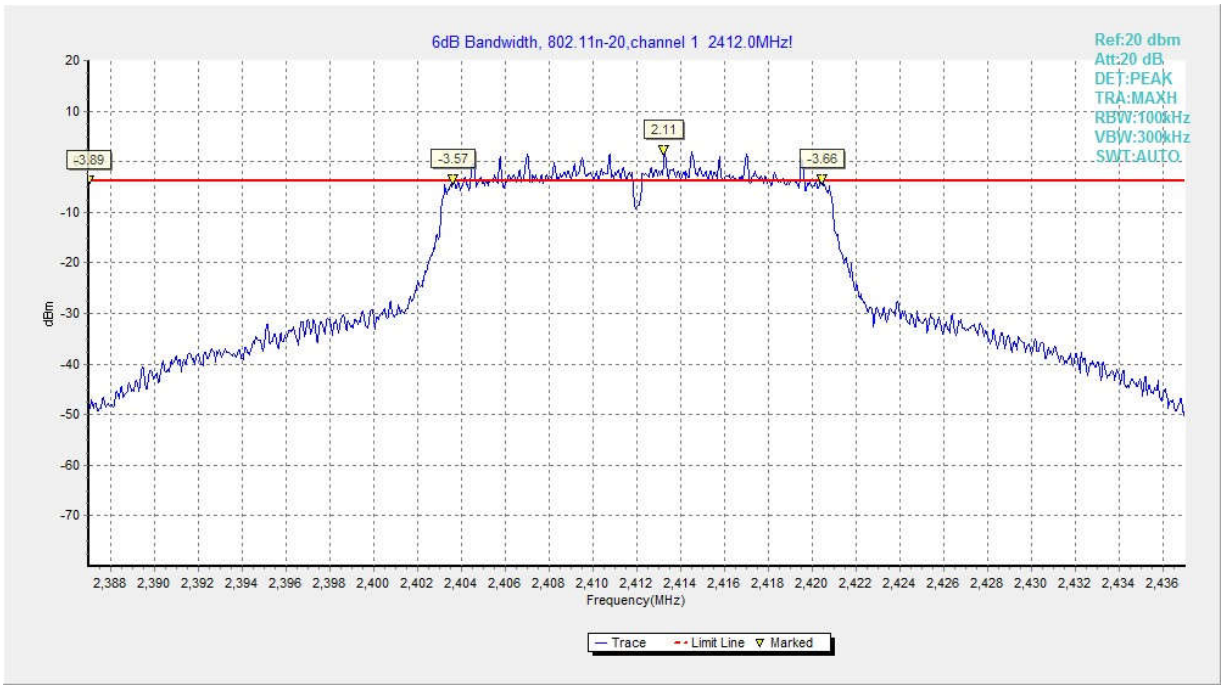

Fig.19 6dB Bandwidth (802.11n HT20, CH 1)

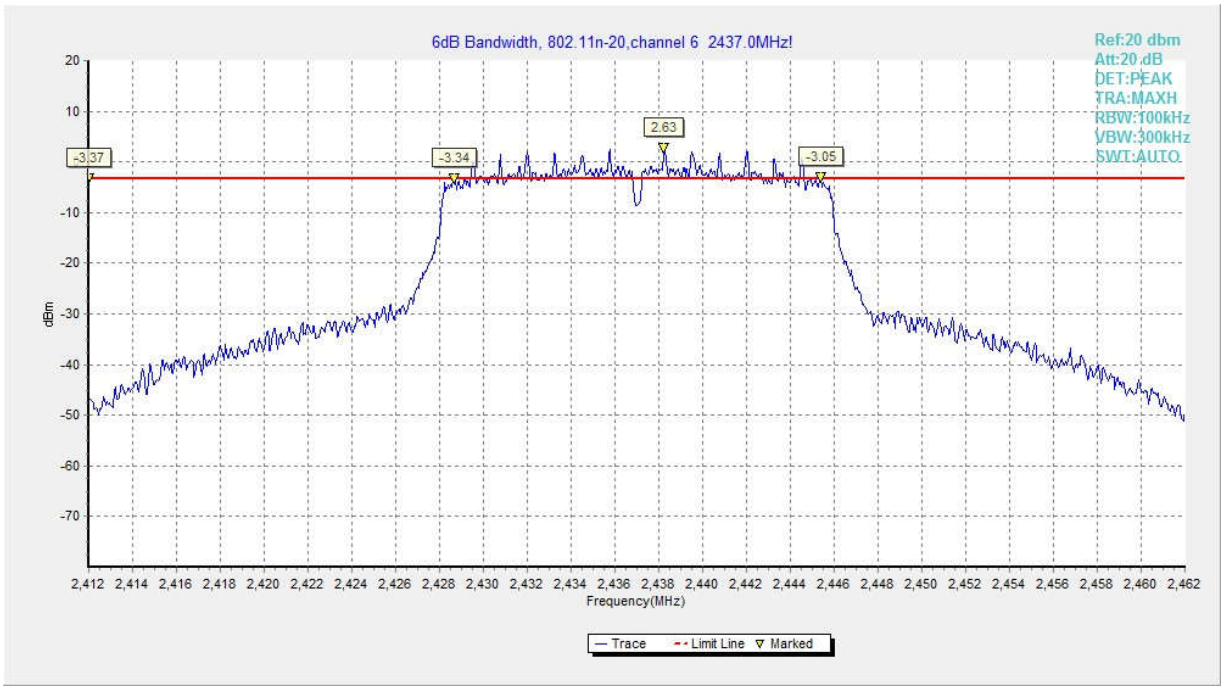

Fig.20 6dB Bandwidth (802.11n HT20, CH 6)

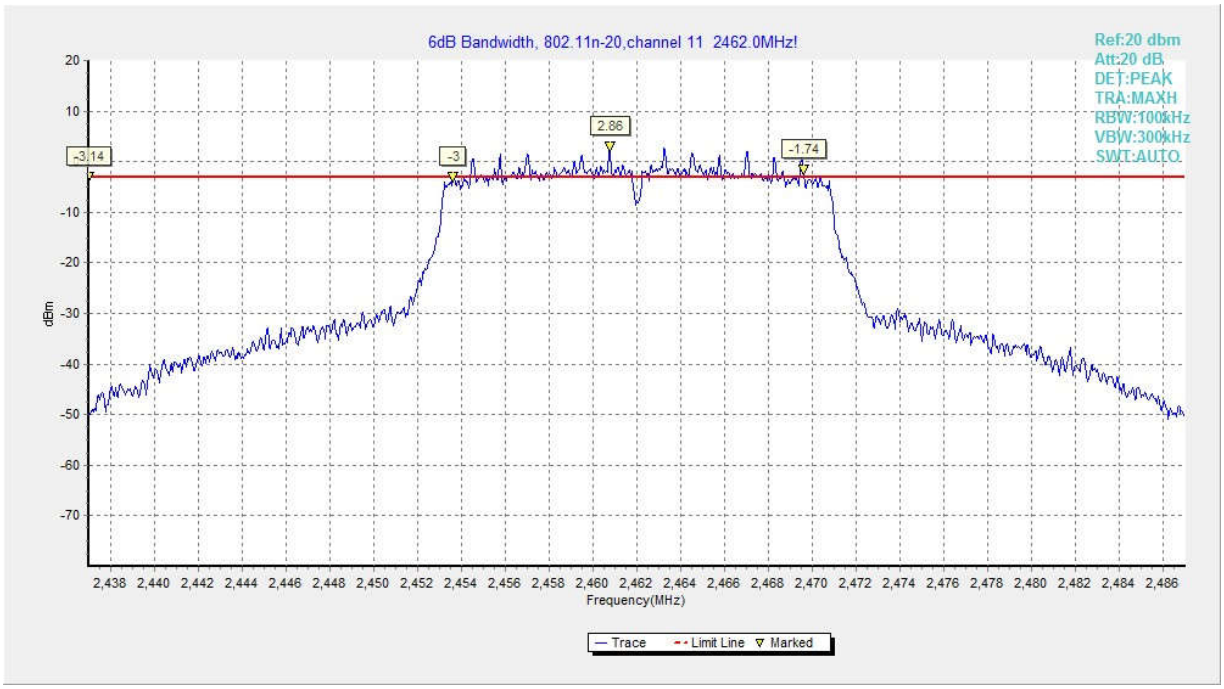

Fig.21 6dB Bandwidth (802.11n HT20, CH 11)

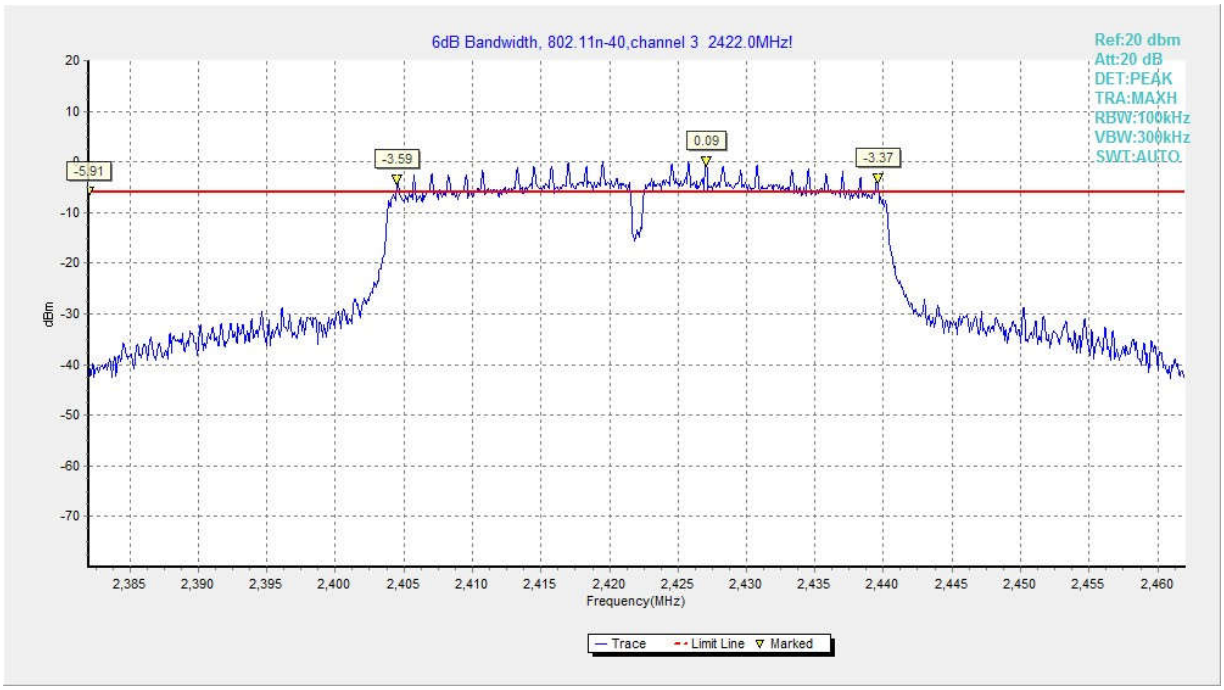

Fig.22 6dB Bandwidth (802.11n HT40, CH 3)

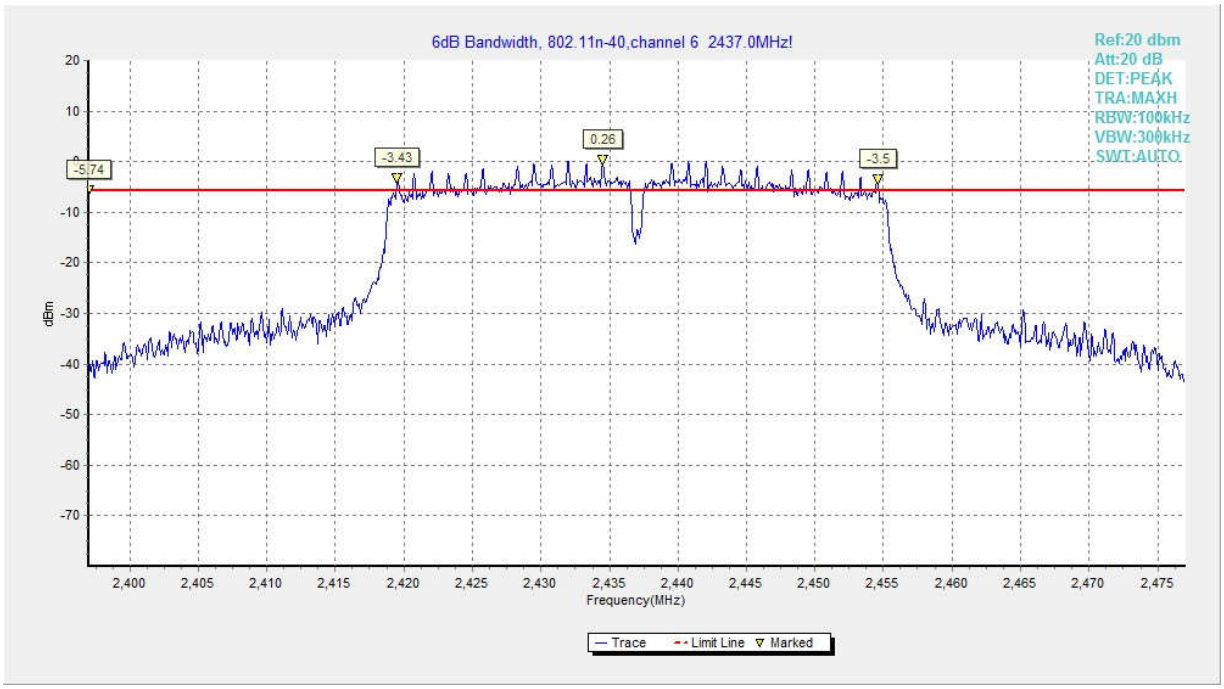

Fig.23 6dB Bandwidth (802.11n HT40, CH 6)

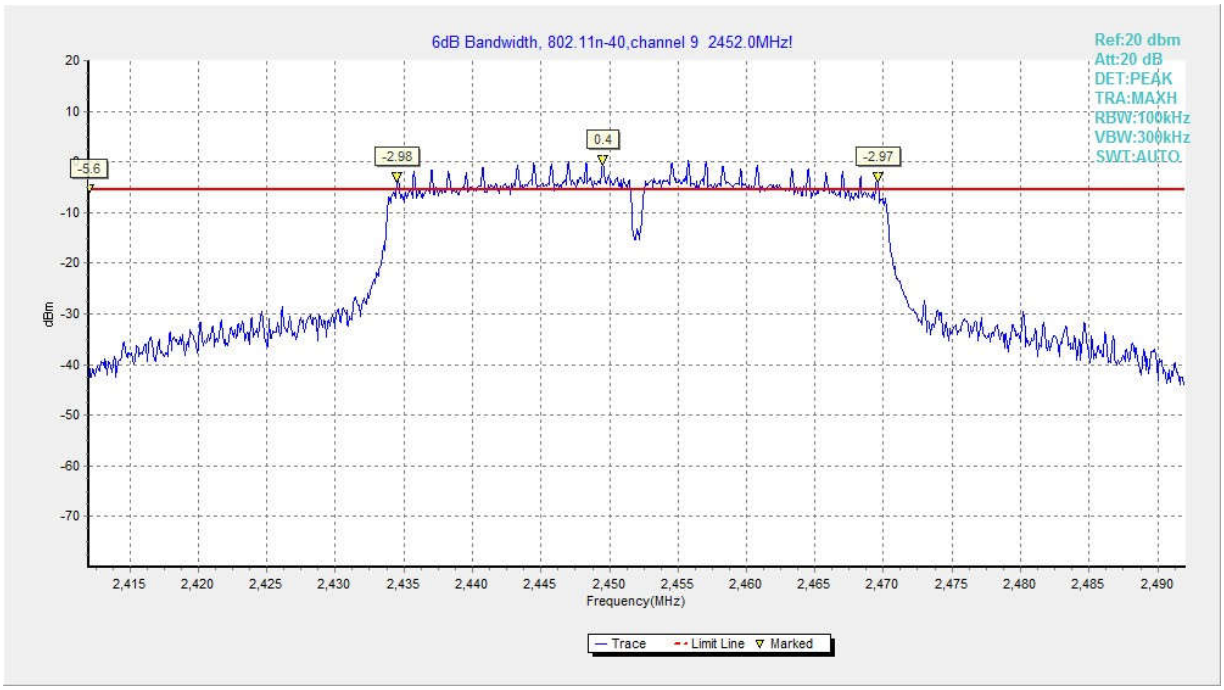

Fig.24 6dB Bandwidth (802.11n HT40, CH 9)

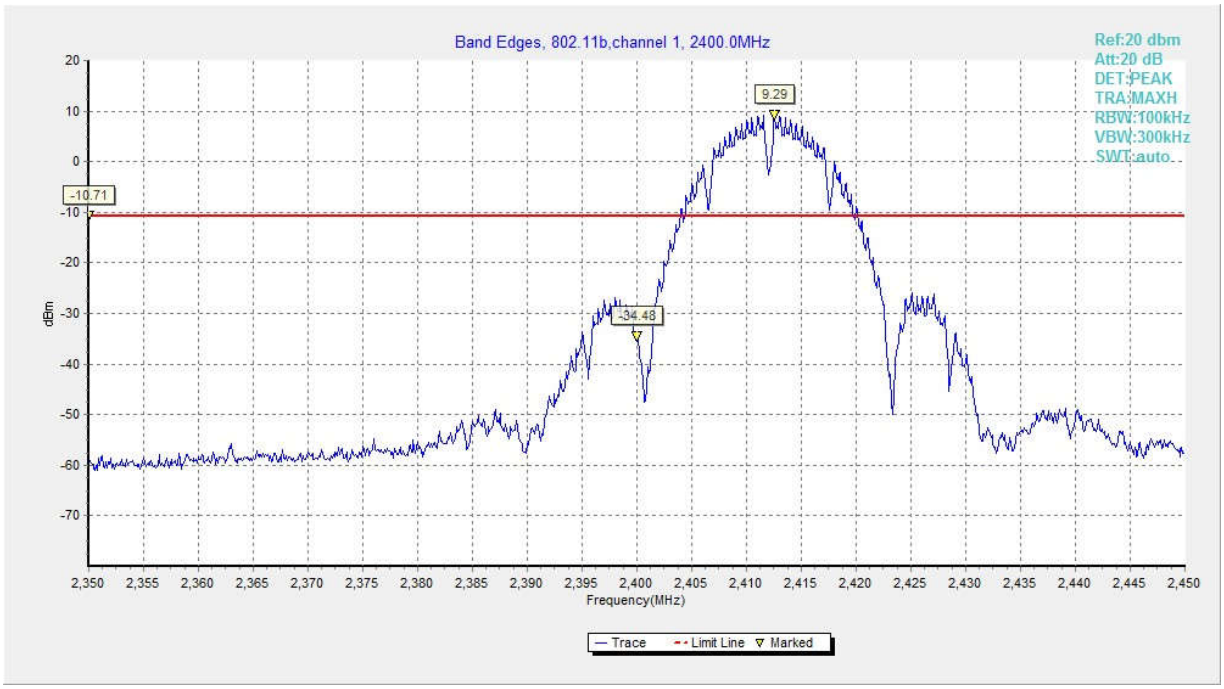

Fig.25 Band Edges (802.11b, CH 1)

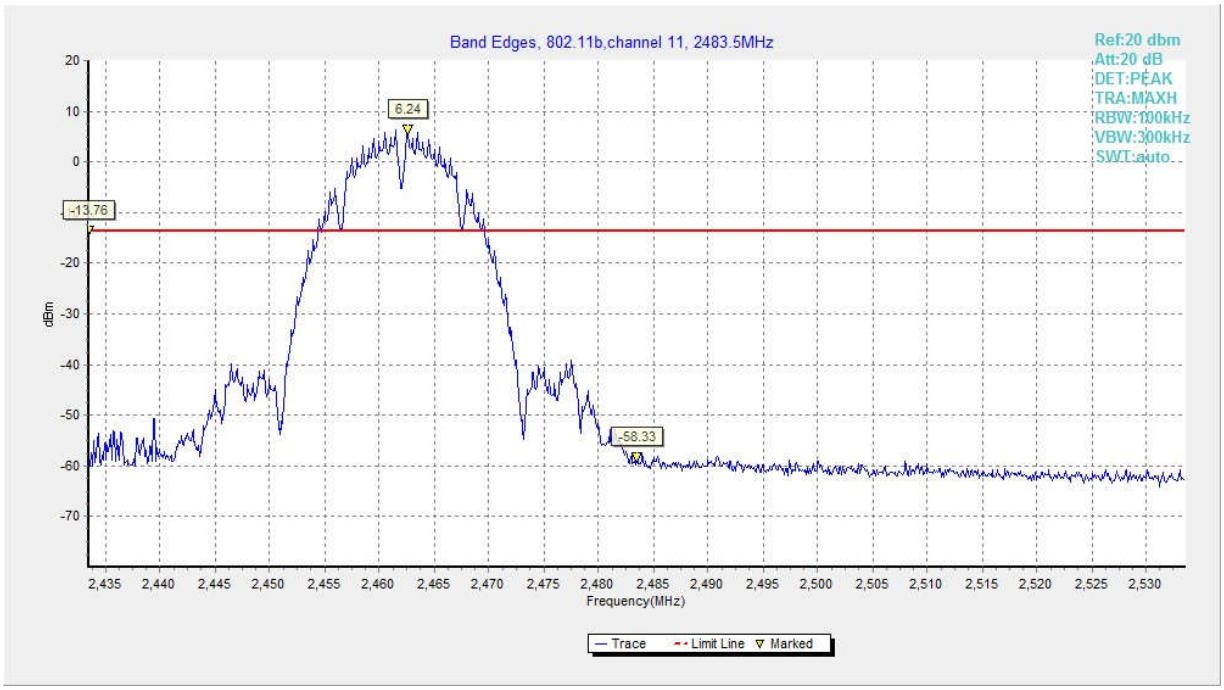

Fig.26 Band Edges (802.11b, CH 11)

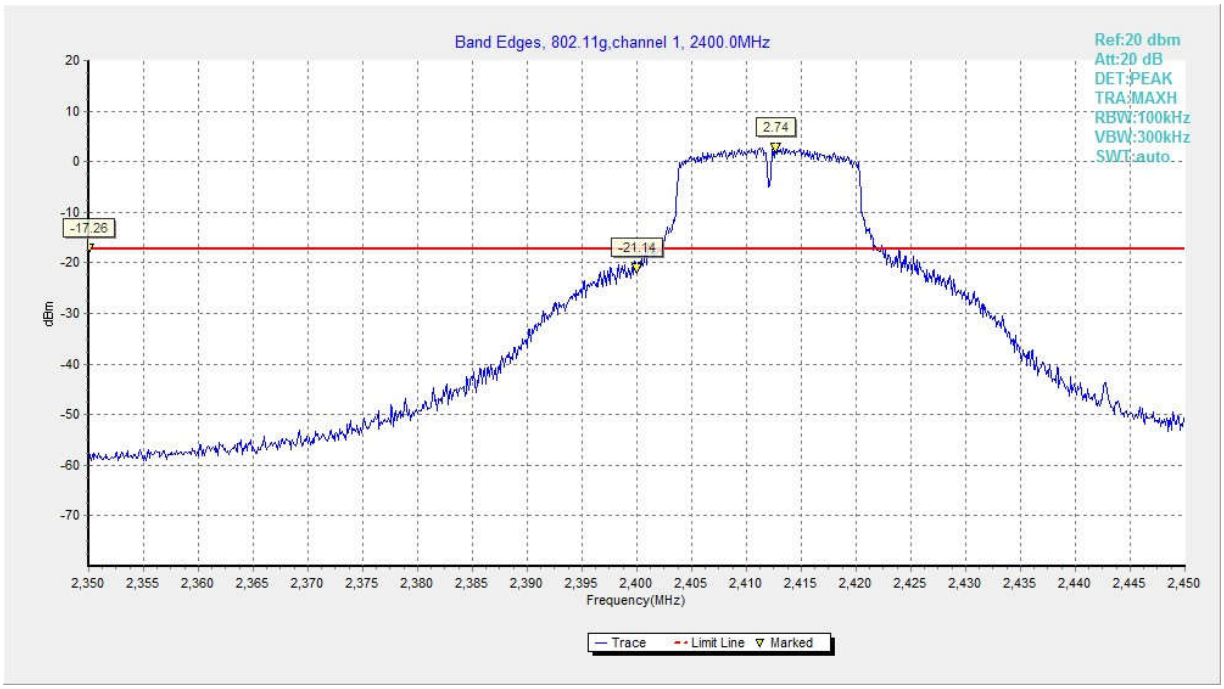

Fig.27 Band Edges (802.11g, CH 1)

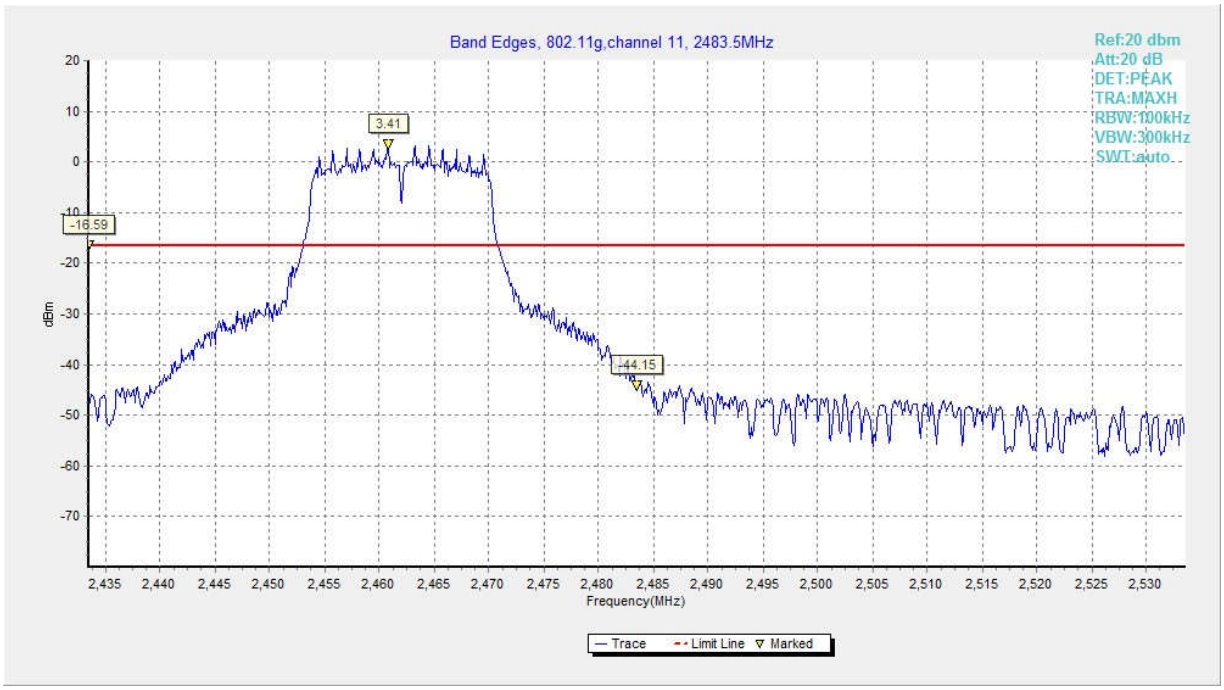

Fig.28 Band Edges (802.11g, CH 11)

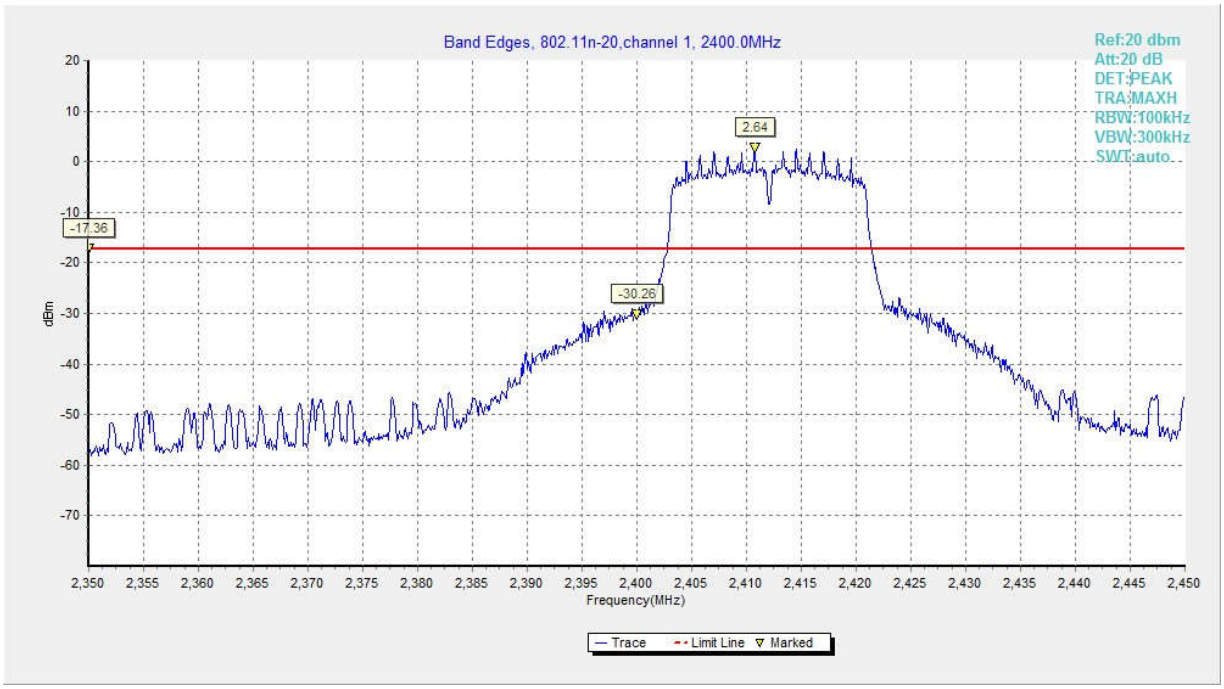

Fig.29 Band Edges (802.11n HT20, CH 1)

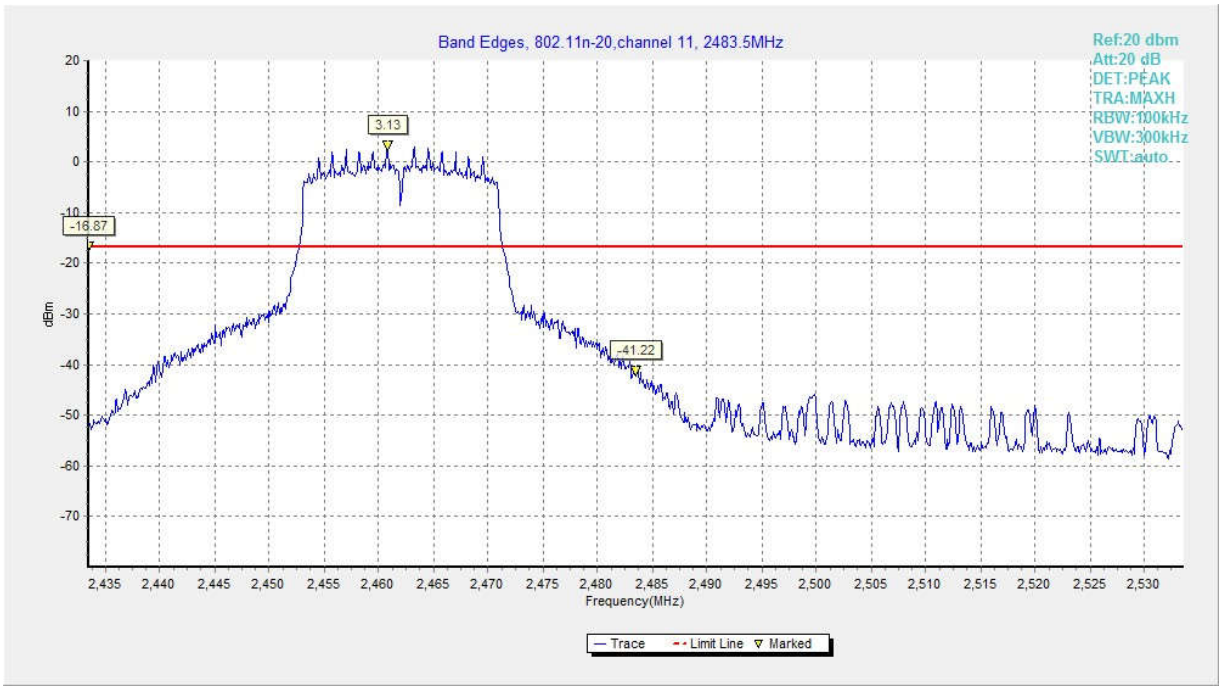

Fig.30 Band Edges (802.11n HT20, CH 11)

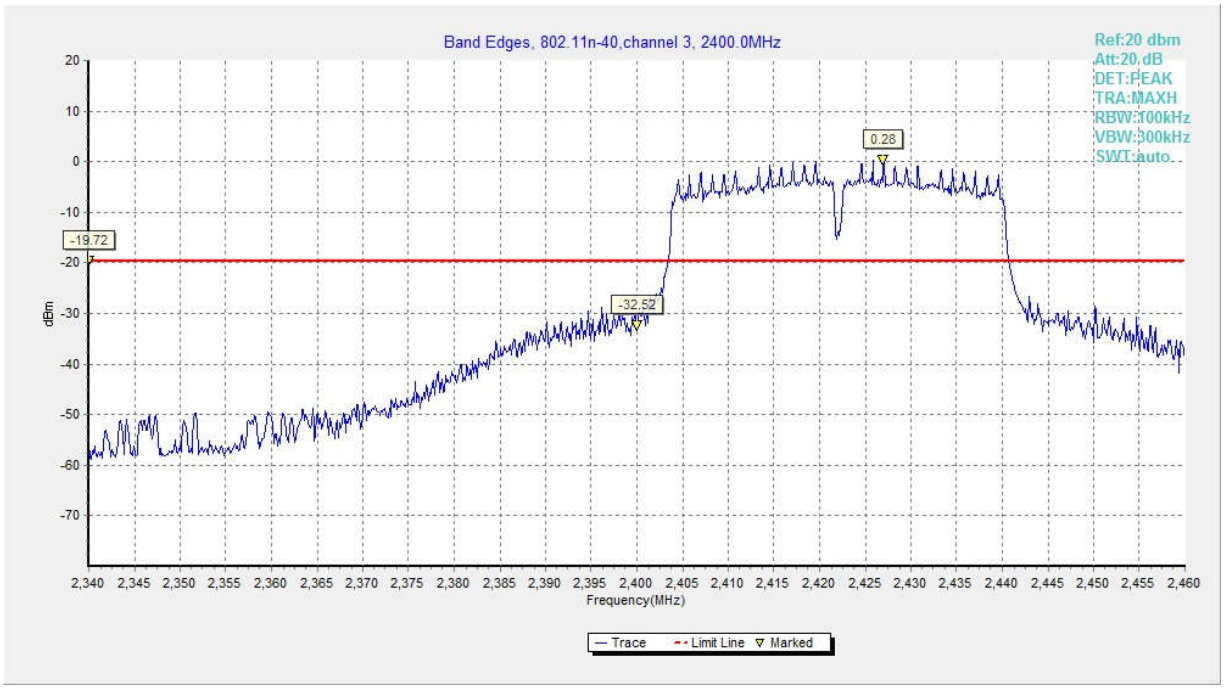

Fig.31 Band Edges (802.11n HT40, CH 3)

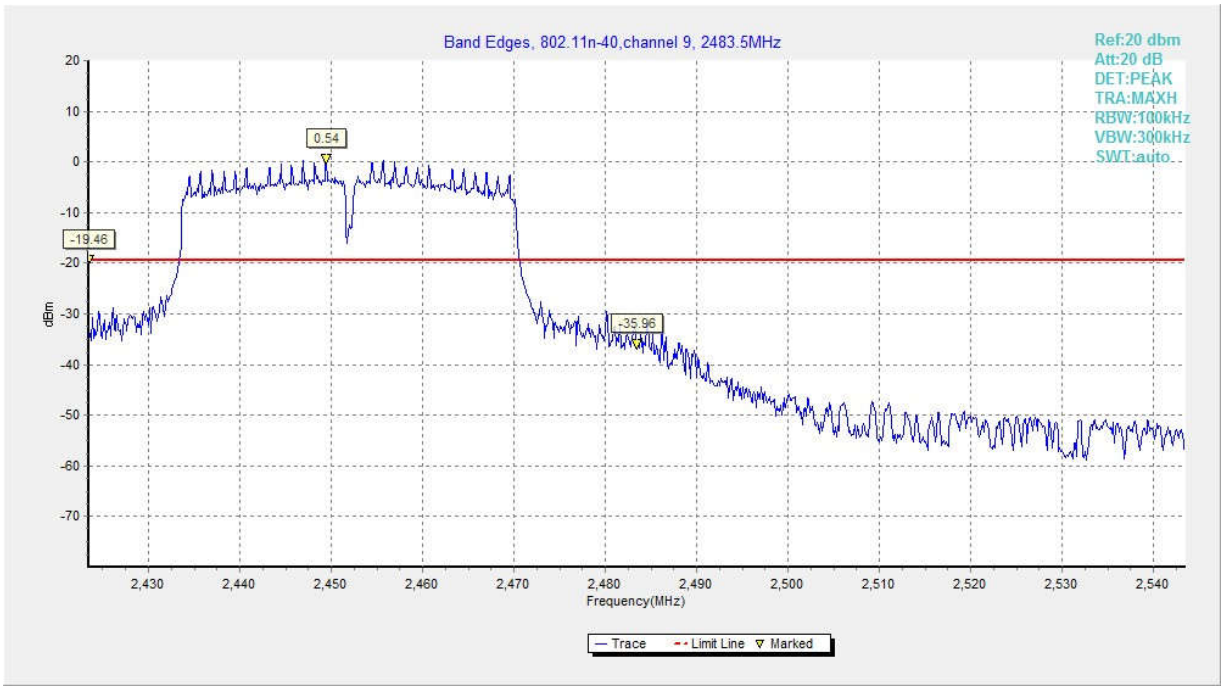

Fig.32 Band Edges (802.11n HT40, CH 9)

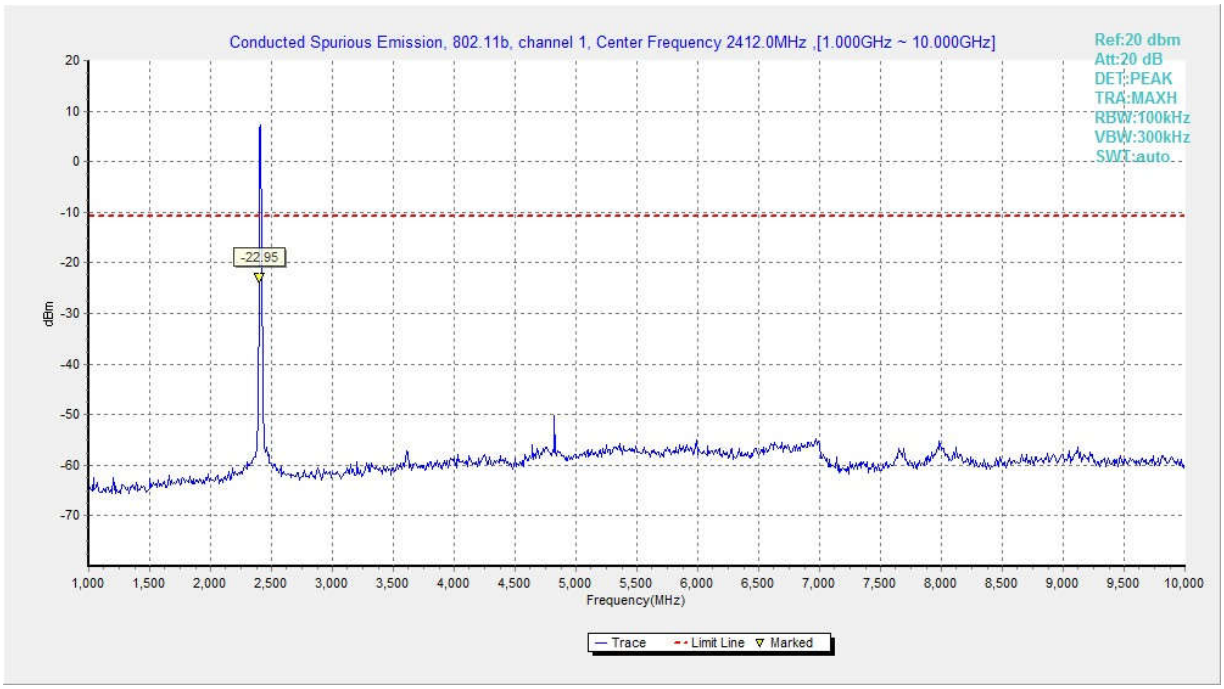

Fig.33 Conducted Spurious Emission (802.11b, CH1, 1 GHz-10 GHz)

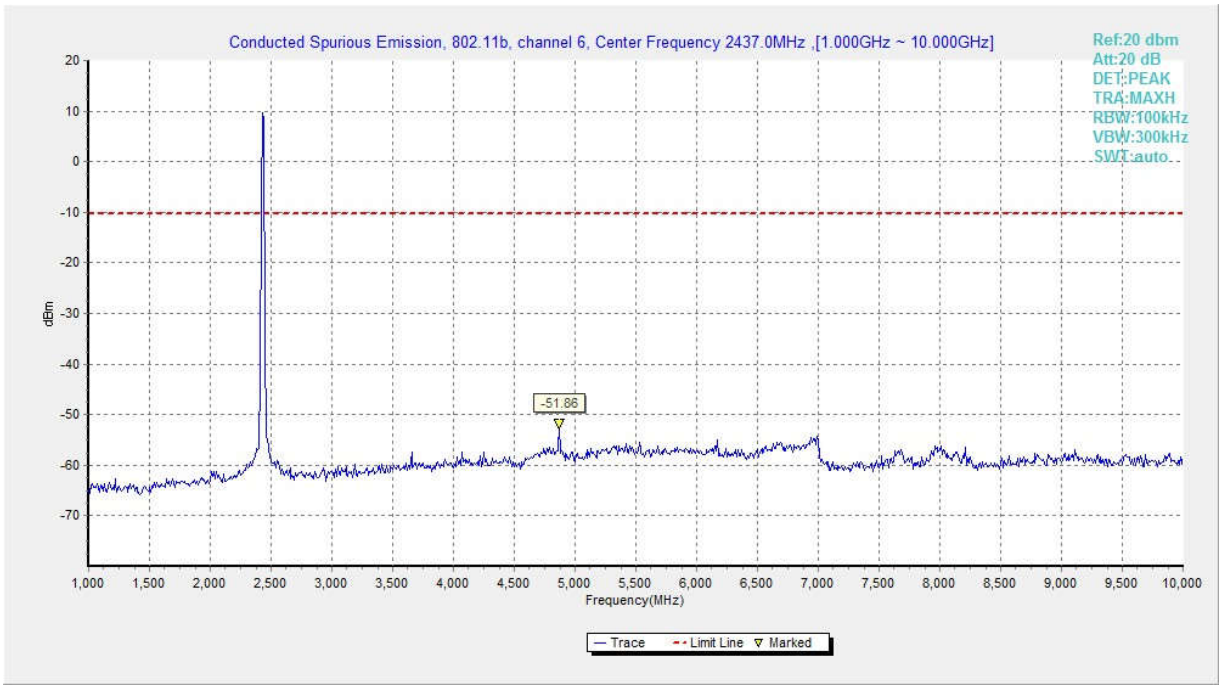

Fig.34 Conducted Spurious Emission (802.11b, CH6, 1 GHz-10 GHz)

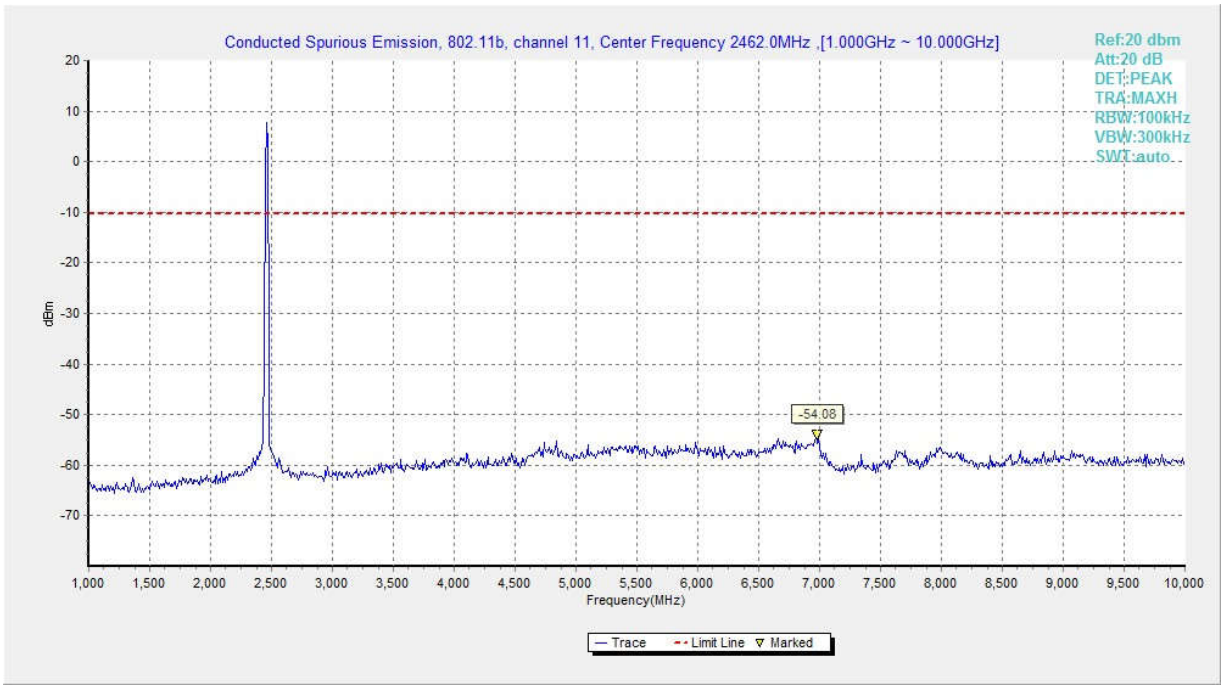

Fig.35 Conducted Spurious Emission (802.11b, CH11, 1 GHz-10 GHz)

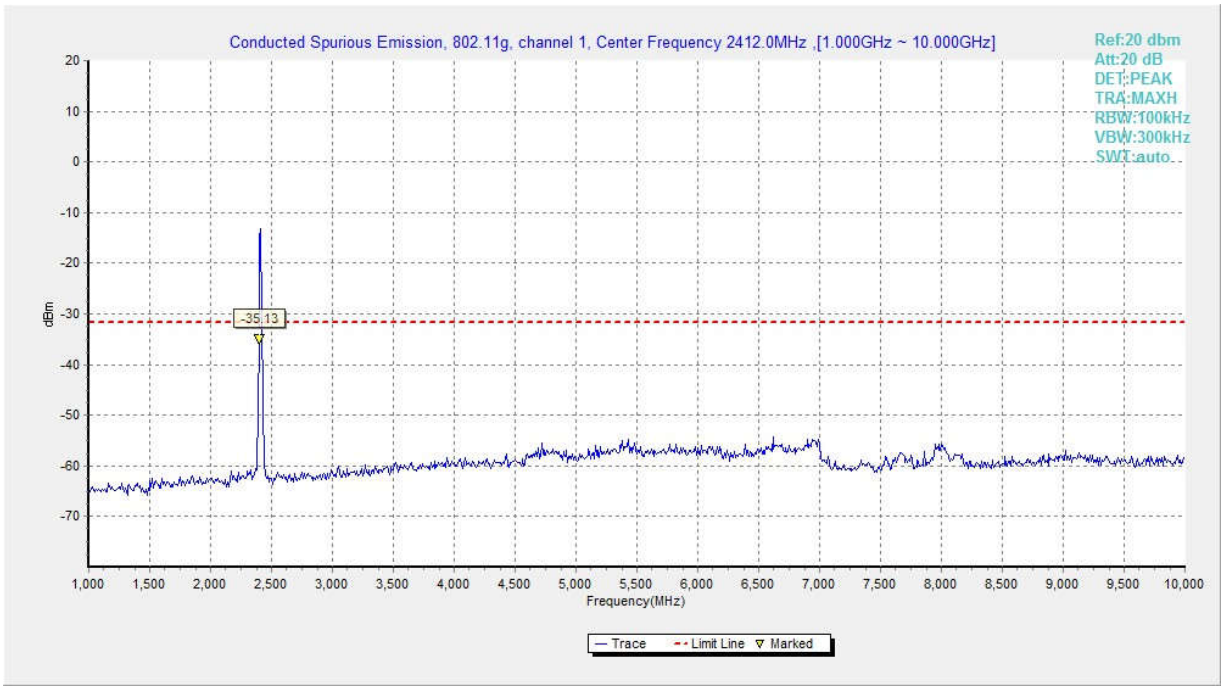

Fig.36 Conducted Spurious Emission (802.11g, CH1, 1 GHz-10 GHz)

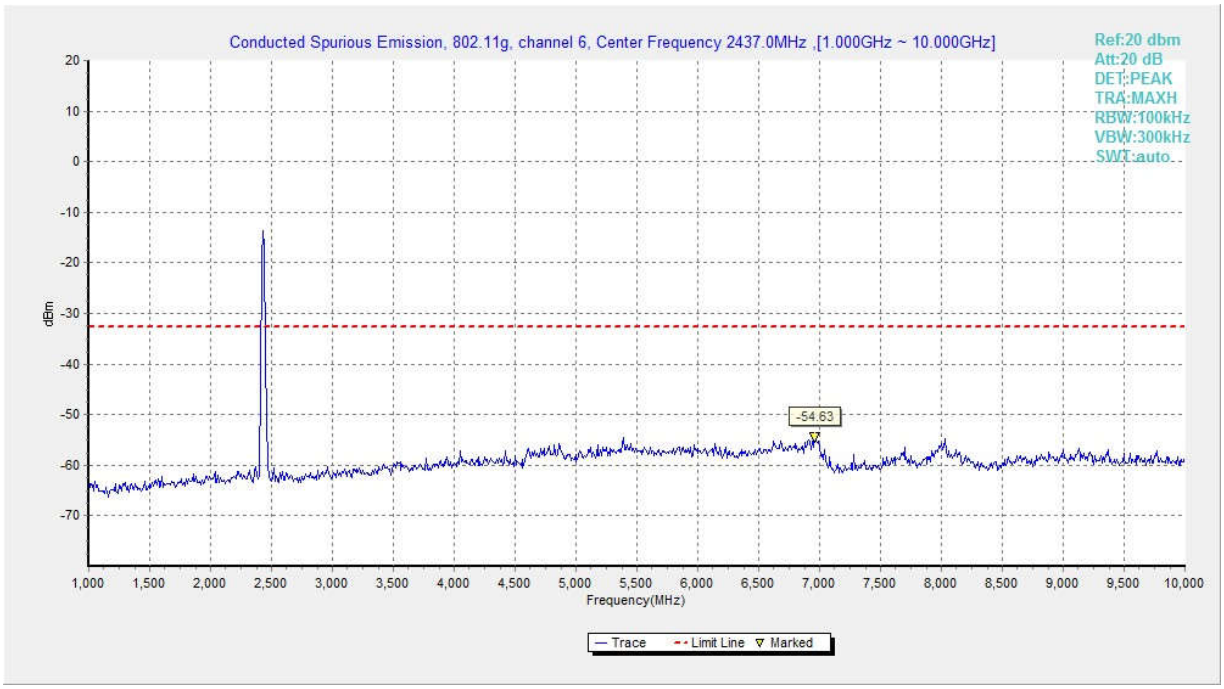

Fig.37 Conducted Spurious Emission (802.11g, CH6, 1 GHz-10 GHz)

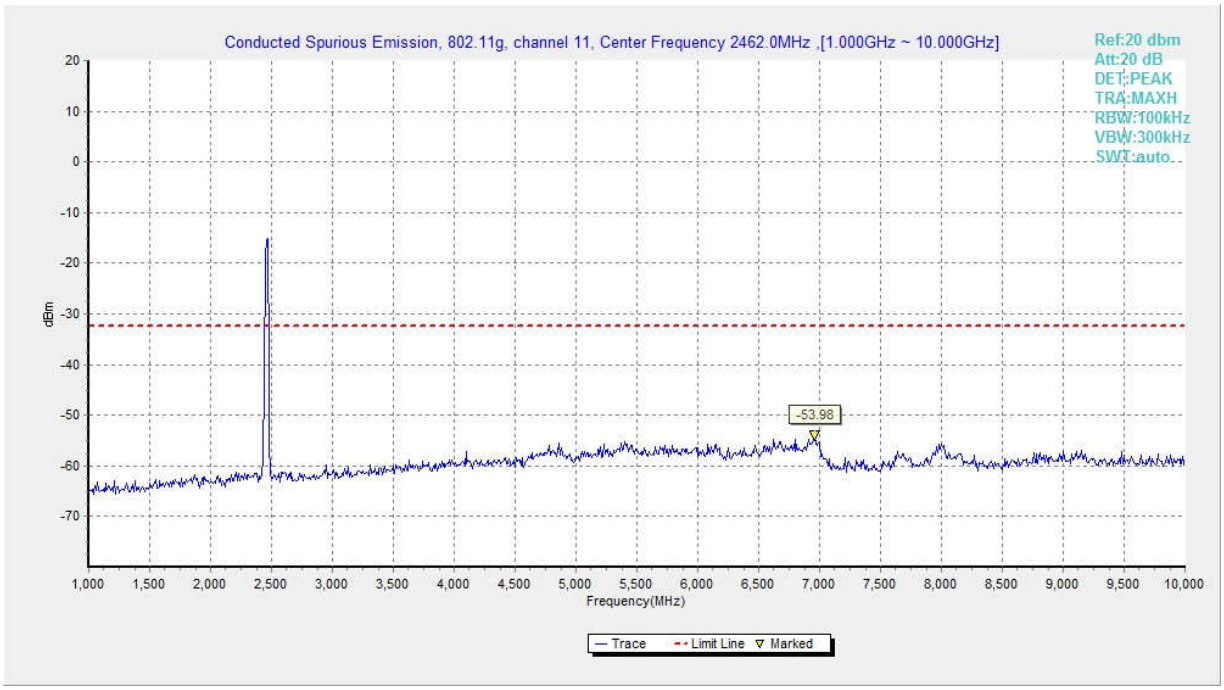

Fig.38 Conducted Spurious Emission (802.11g, CH11, 1 GHz-10 GHz)

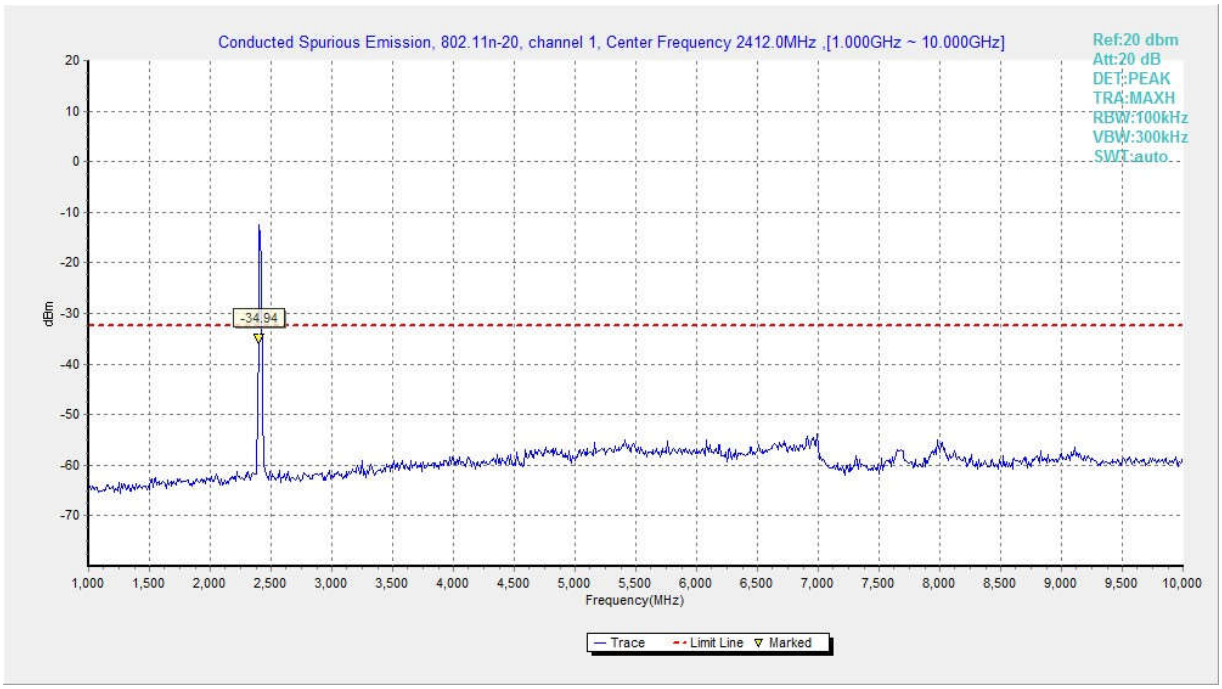

Fig.39 Conducted Spurious Emission (802.11n HT20, CH1, 1 GHz-10 GHz)

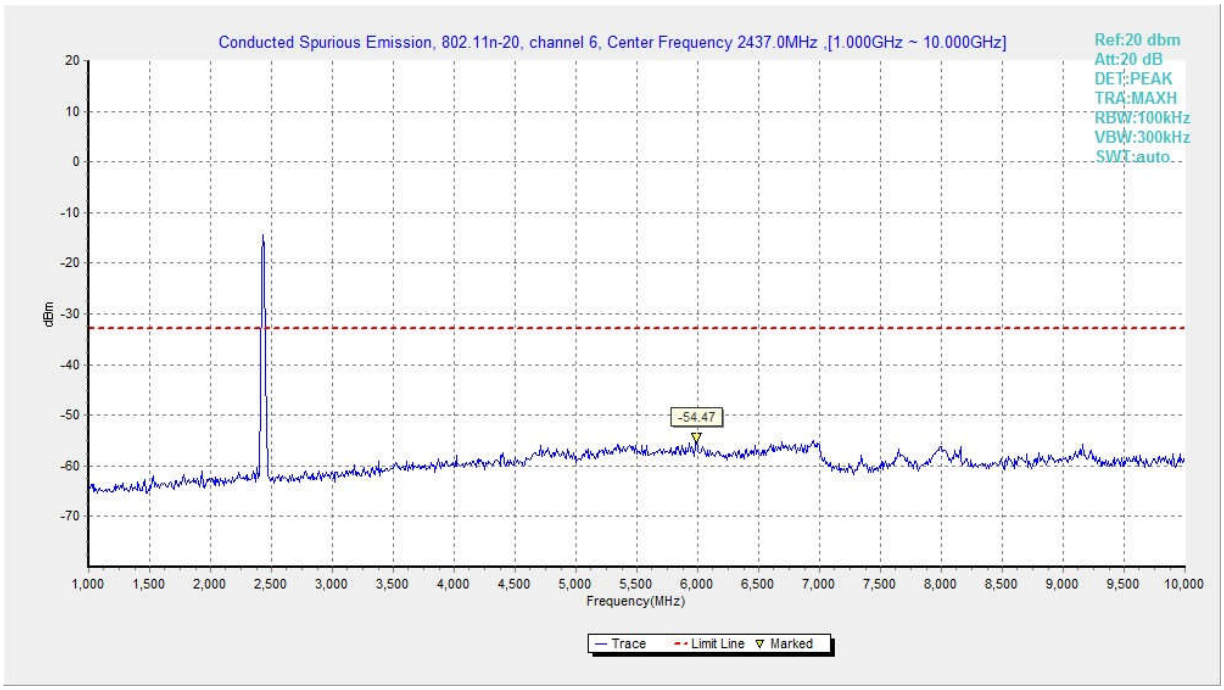

Fig.40 Conducted Spurious Emission (802.11n HT20, CH6, 1 GHz-10 GHz)

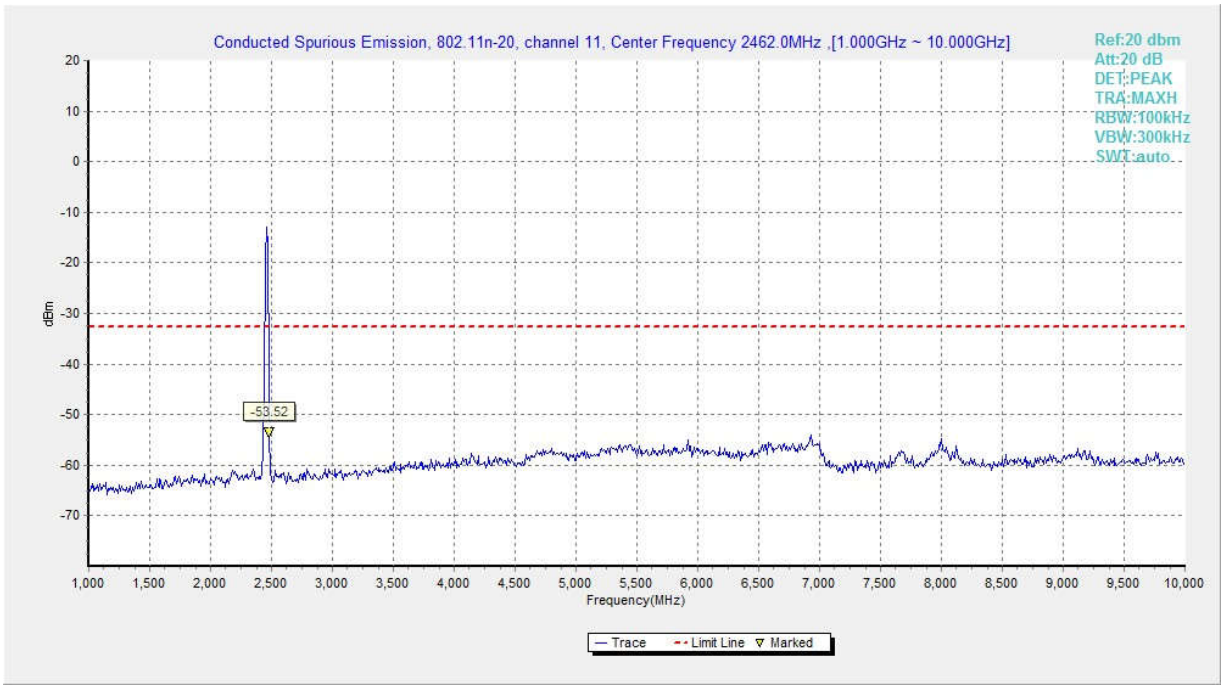

Fig.41 Conducted Spurious Emission (802.11n HT20, CH11, 1 GHz-10 GHz)

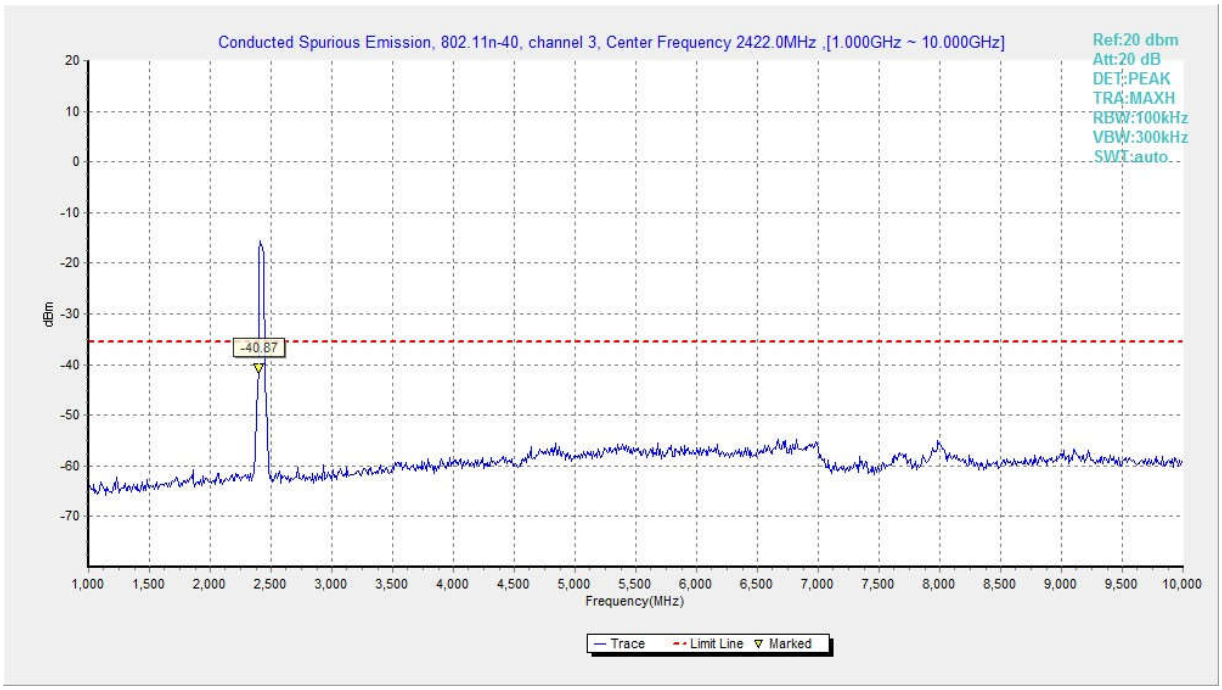

Fig.42 Conducted Spurious Emission (802.11n HT40, CH3, 1 GHz-10 GHz)

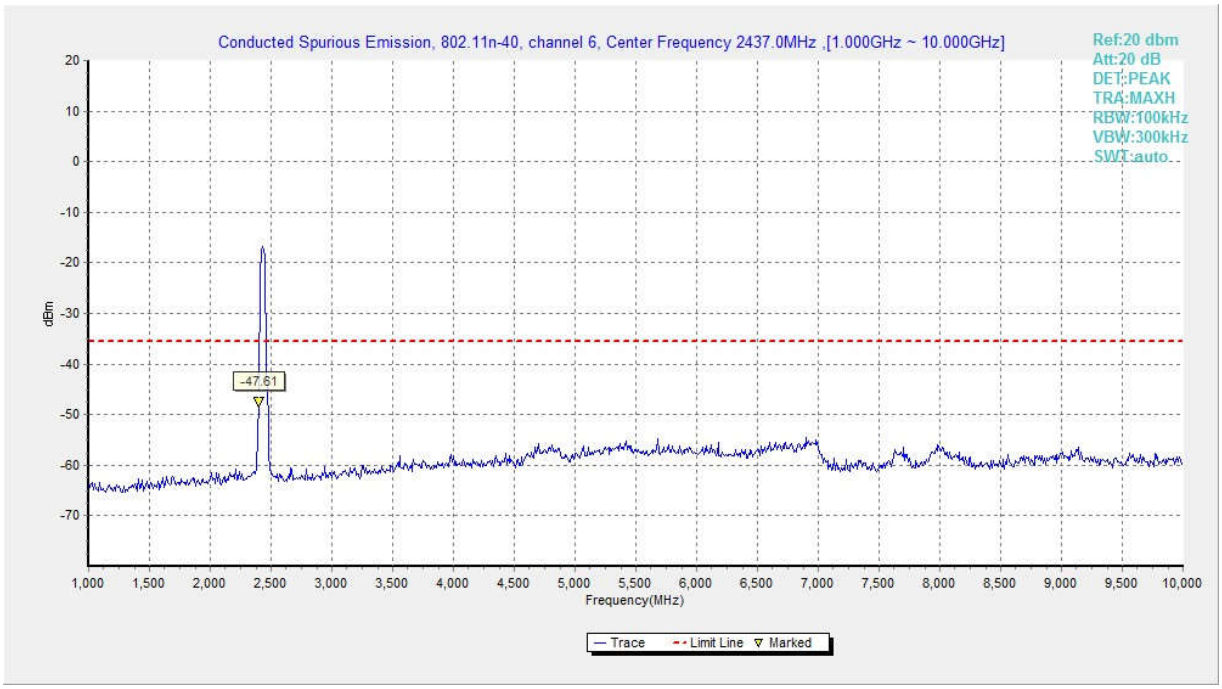

Fig.43 Conducted Spurious Emission (802.11n HT40, CH6, 1 GHz-10 GHz)

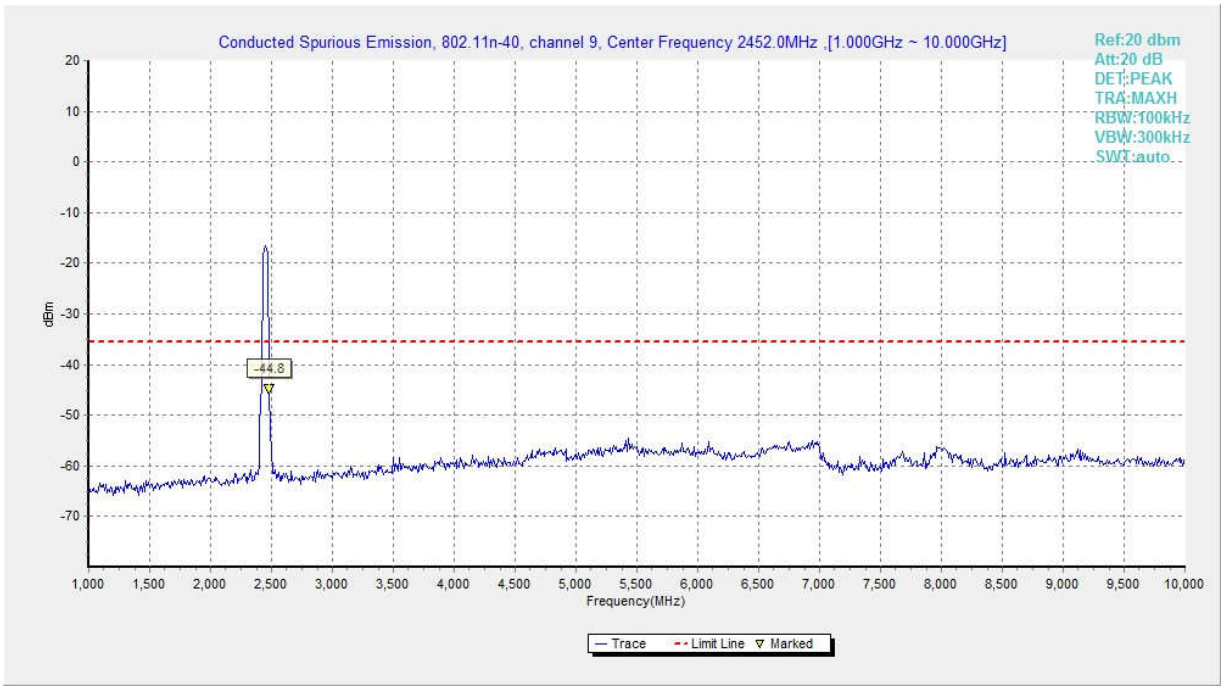

Fig.44 Conducted Spurious Emission (802.11n HT40, CH9, 1 GHz-10 GHz)

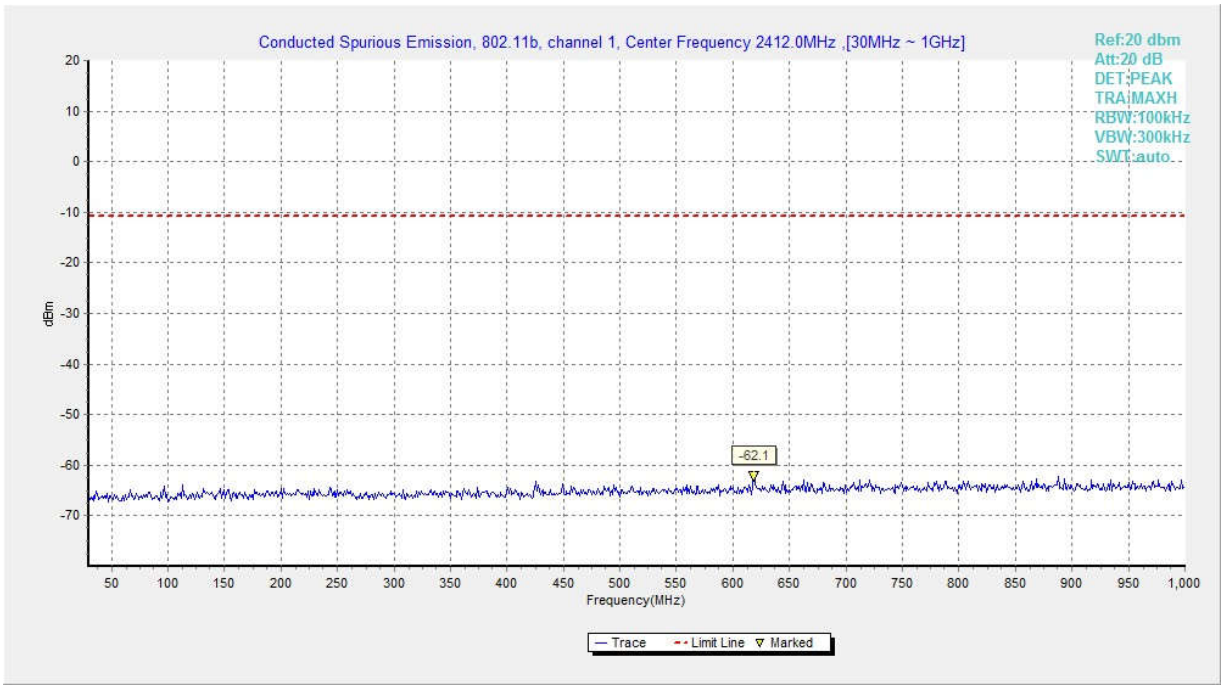

Fig.45 Conducted Spurious Emission (All Channels, 30 MHz-1 GHz)

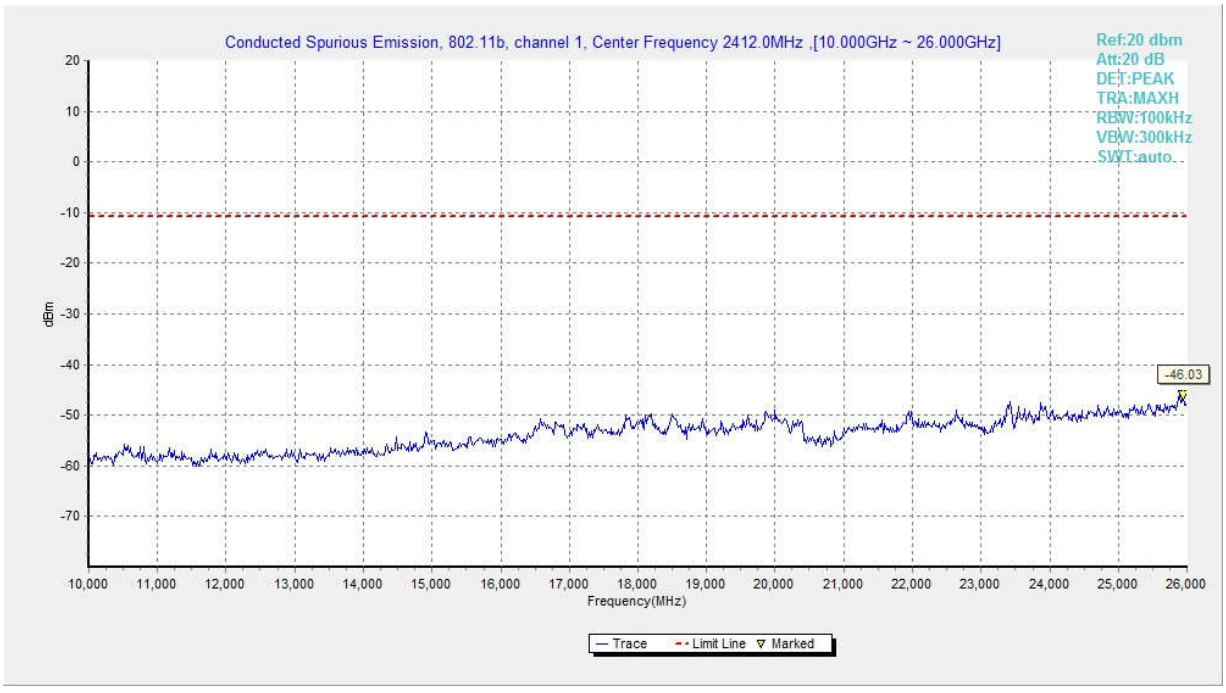

Fig.46 Conducted Spurious Emission (All Channels, 10 GHz-26 GHz)

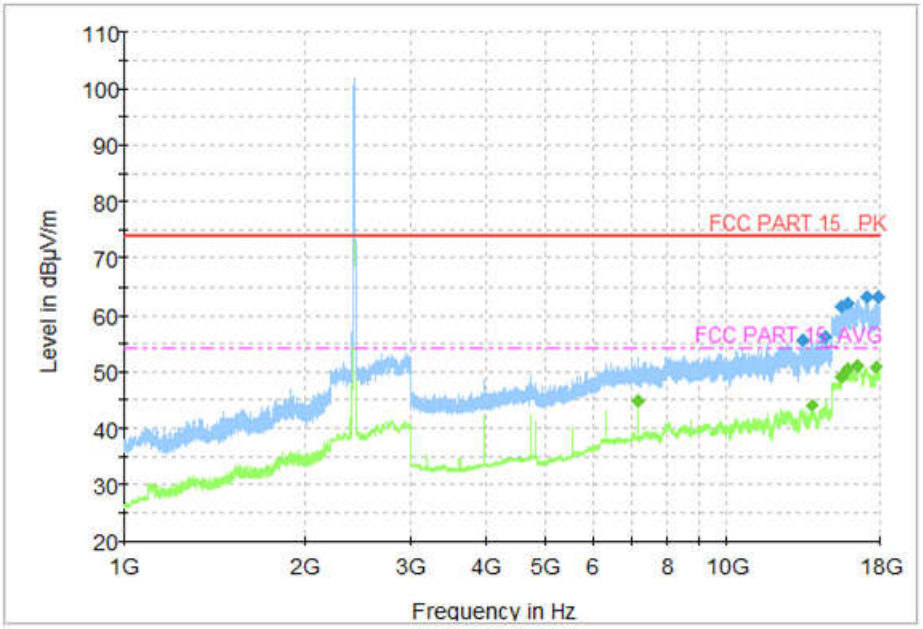

Fig.47 Radiated Spurious Emission (802.11b, CH1, 1 GHz-18GHz)

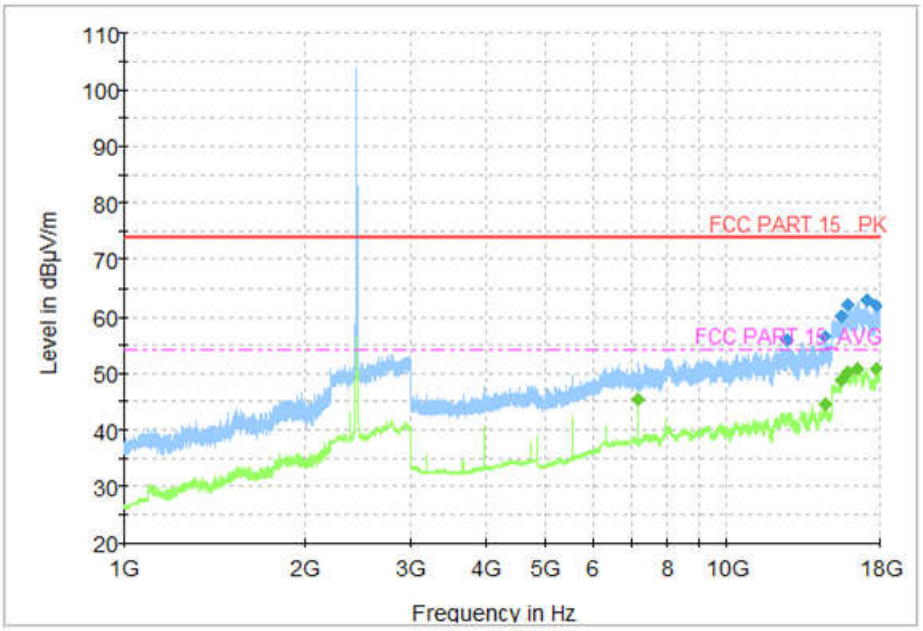

Fig.48 Radiated Spurious Emission (802.11b, CH6, 1 GHz-18GHz)

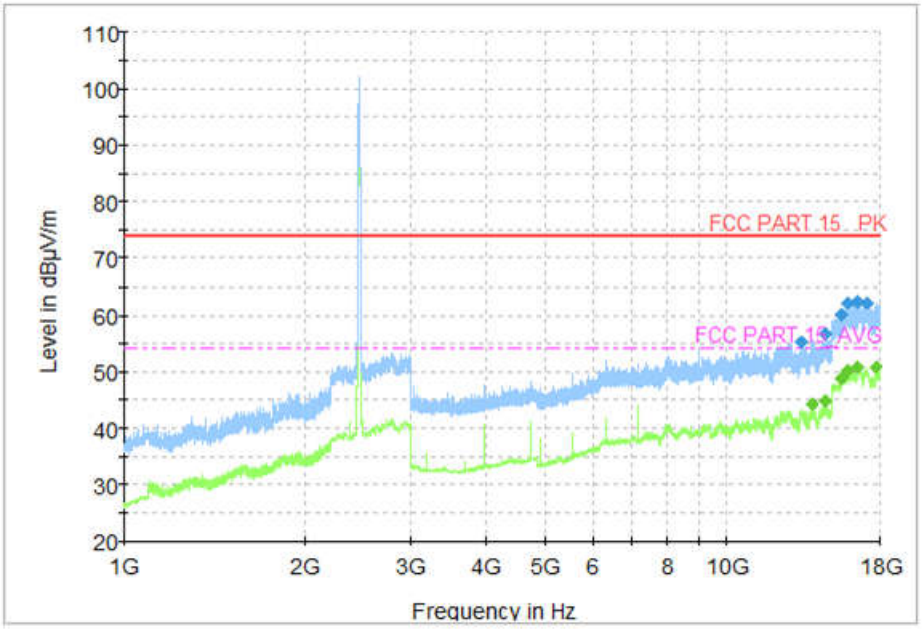

Fig.49 Radiated Spurious Emission (802.11b, CH11, 1 GHz-18GHz)

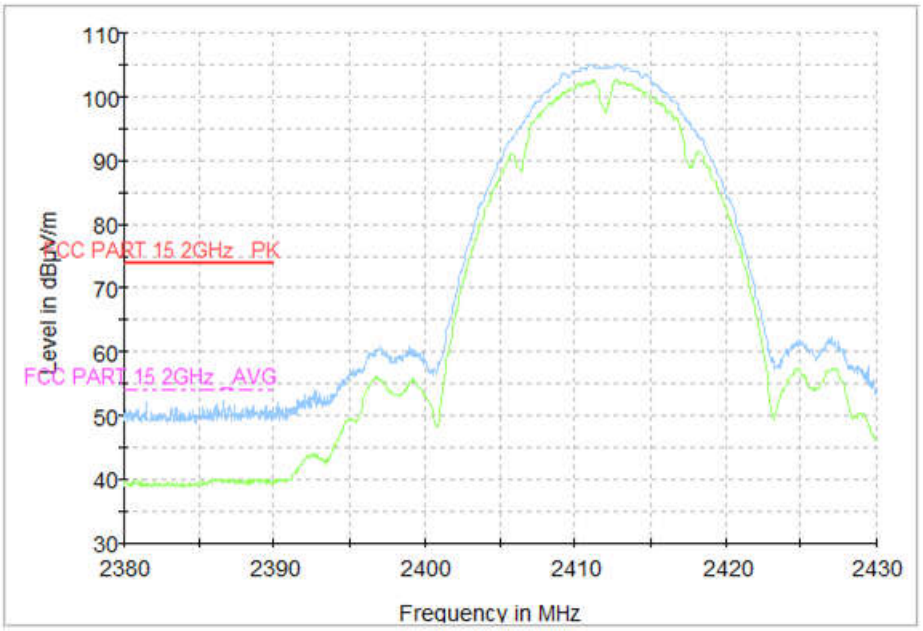

Fig.50 Radiated Restricted Band (802.11b, CH1, 2.38GHz~2.45GHz)

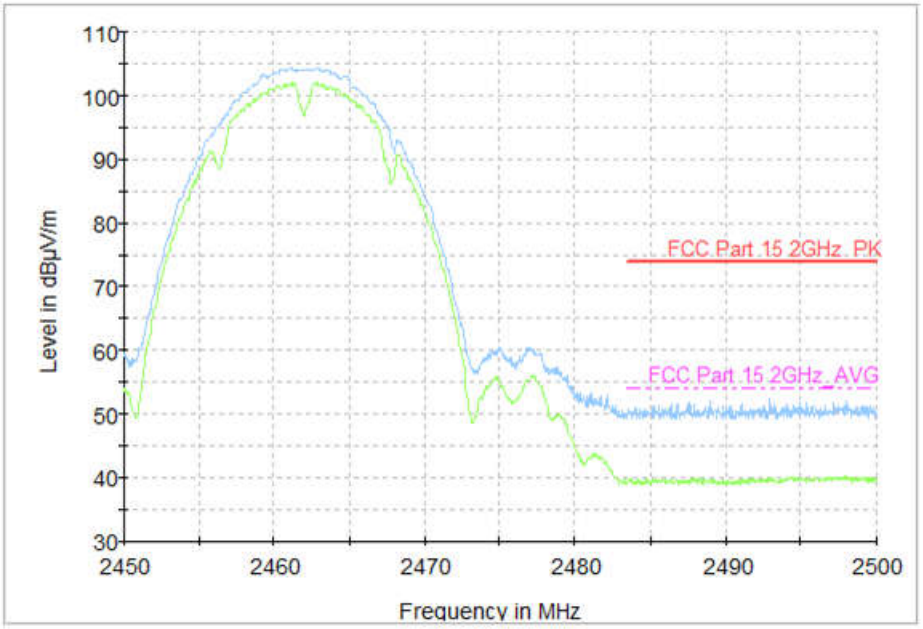

Fig.51 Radiated Restricted Band (802.11b, CH11, 2.45GHz~2.5GHz)

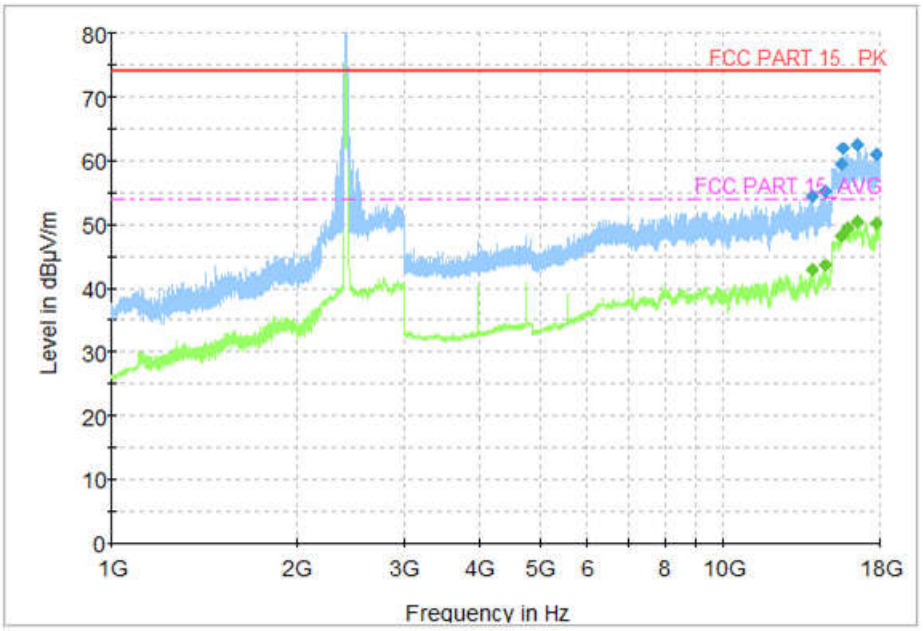

Fig.52 Radiated Spurious Emission (802.11g, CH1, 1 GHz-18 GHz)

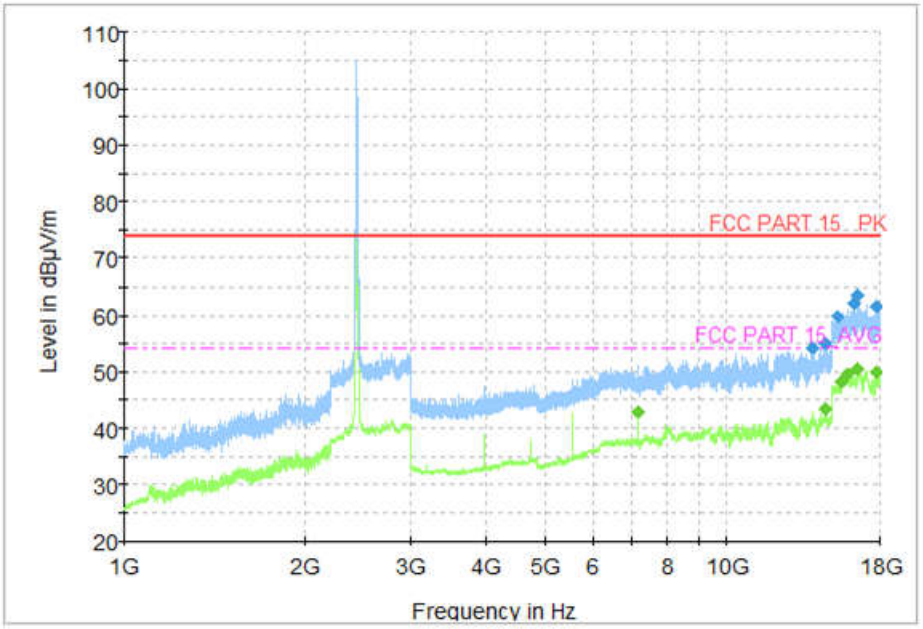

Fig.53 Radiated Spurious Emission (802.11g, CH6, 1 GHz-18 GHz)

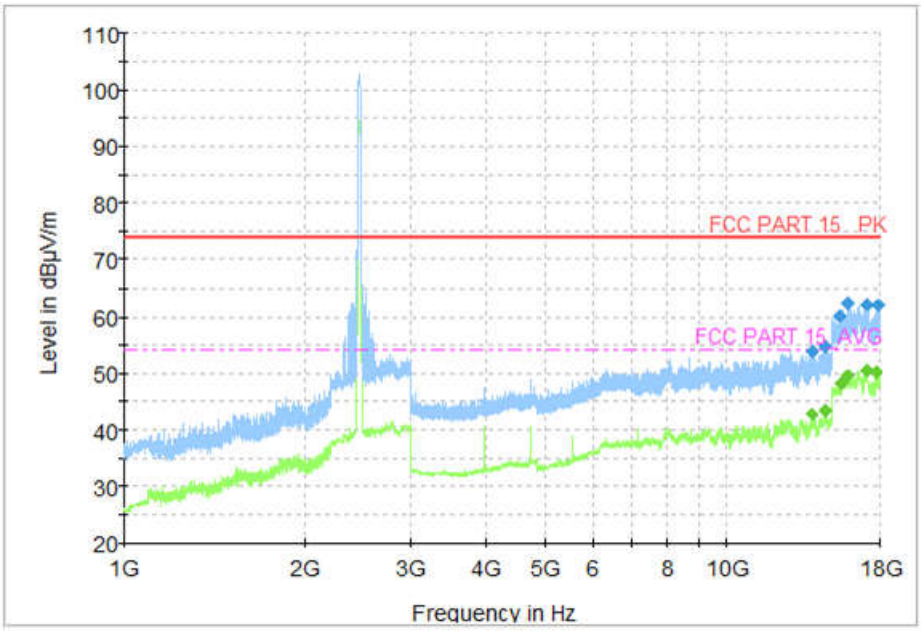

Fig.54 Radiated Spurious Emission (802.11g, CH11, 1 GHz-18 GHz)

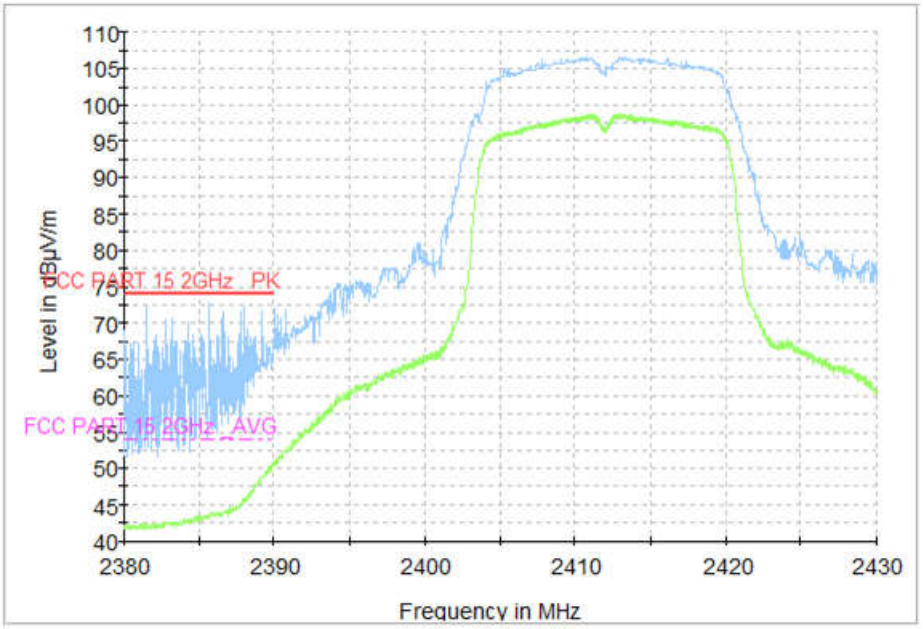

Fig.55 Radiated Restricted Band (802.11g, CH1, 2.38GHz~2.45GHz)

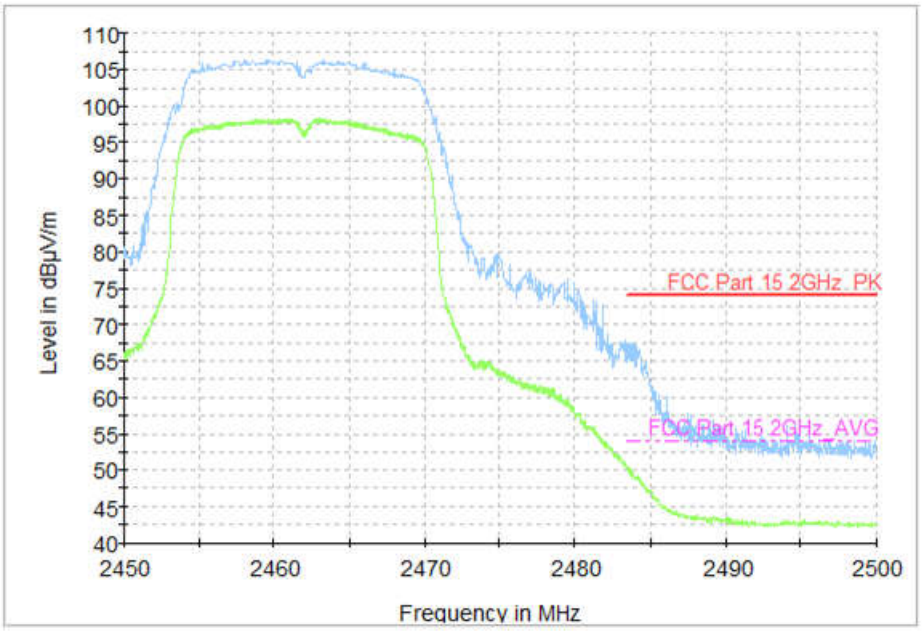

Fig.56 Radiated Restricted Band (802.11g, CH11, 2.45GHz~2.5GHz)

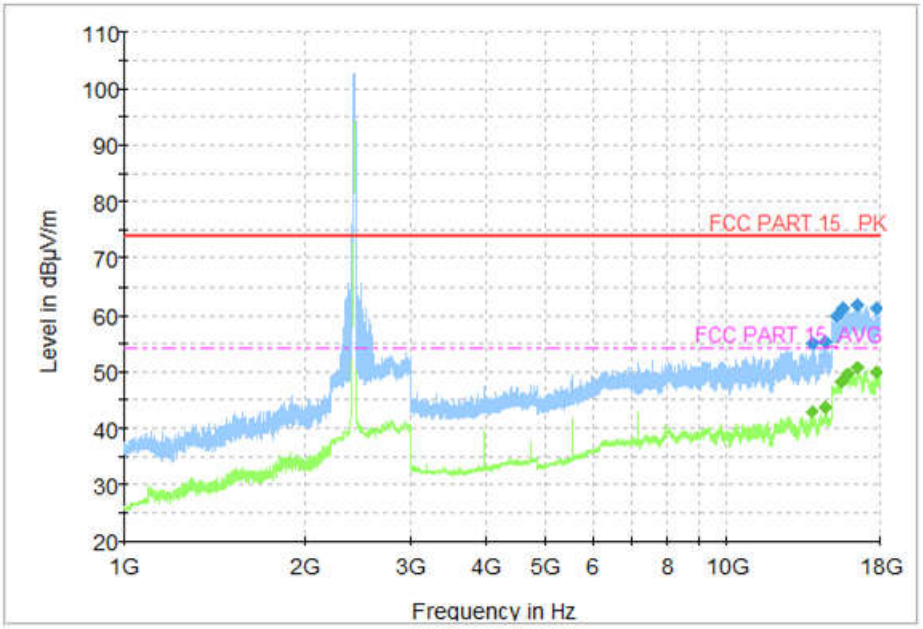

Fig.57 Radiated Spurious Emission (802.11n HT20, CH1, 1 GHz-18 GHz)

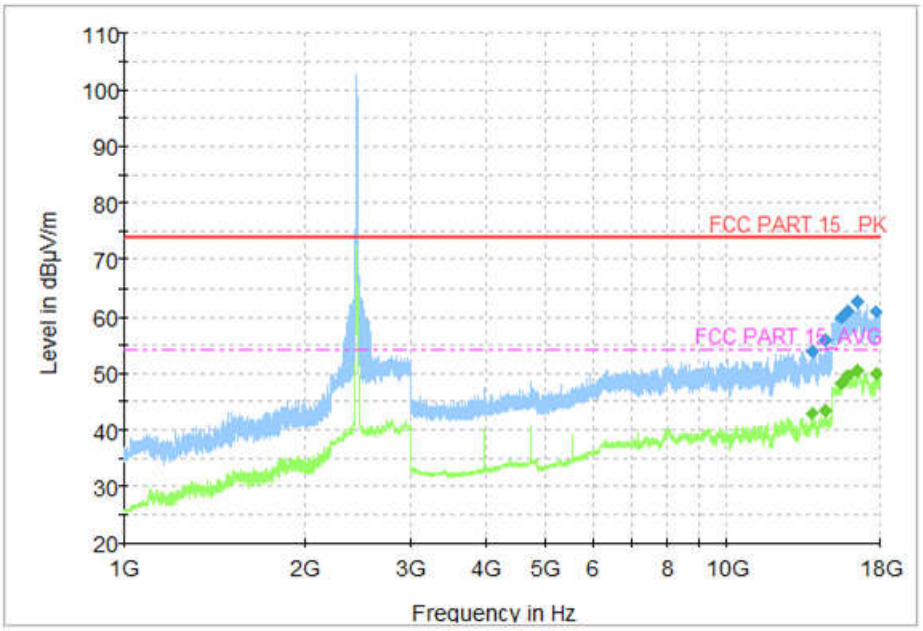

Fig.58 Radiated Spurious Emission (802.11n HT20, CH6, 1 GHz-18 GHz)

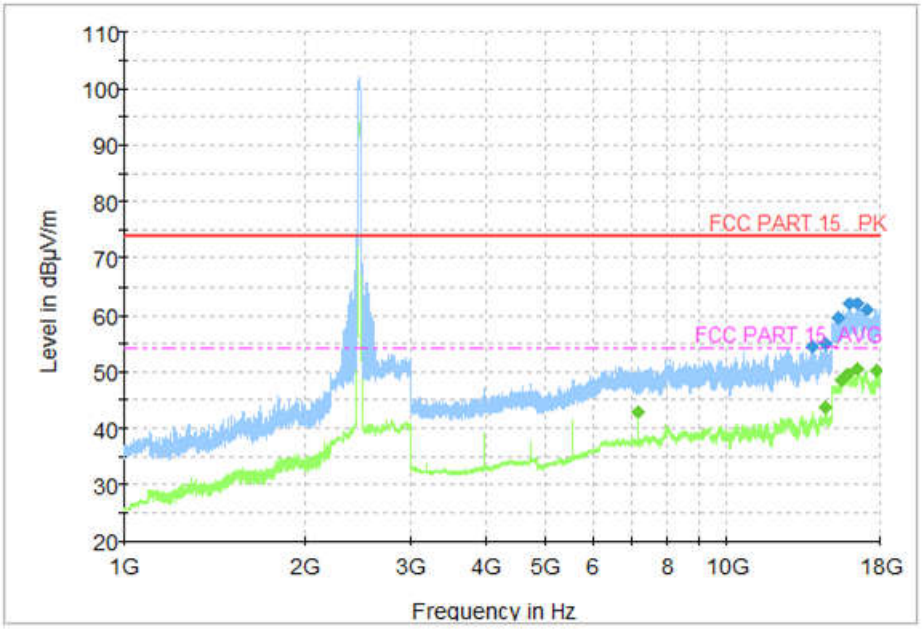

Fig.59 Radiated Spurious Emission (802.11n HT20, CH11, 1 GHz-18 GHz)

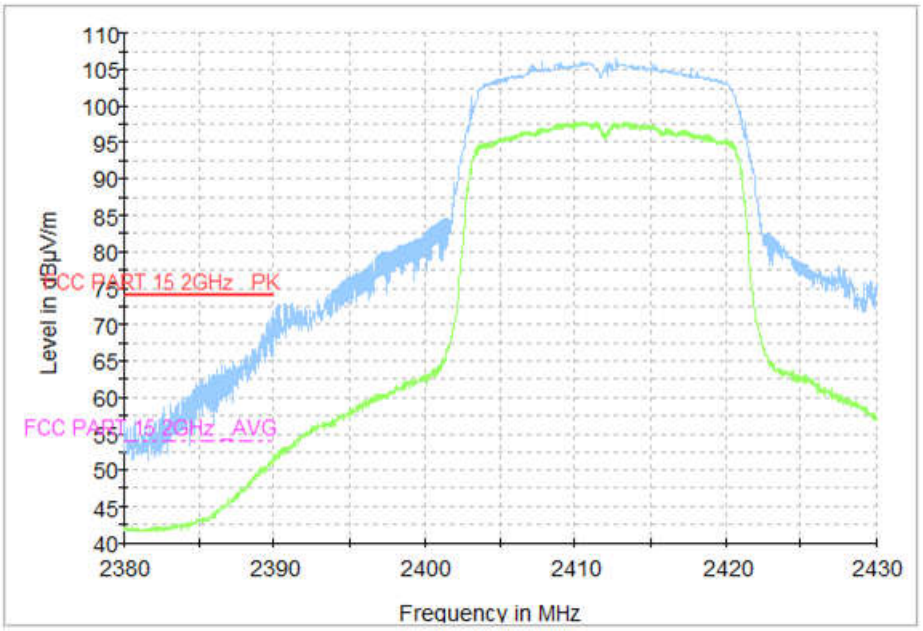

Fig.60 Radiated Restricted Band (802.11n HT20, CH1, 2.38GHz~2.45GHz)

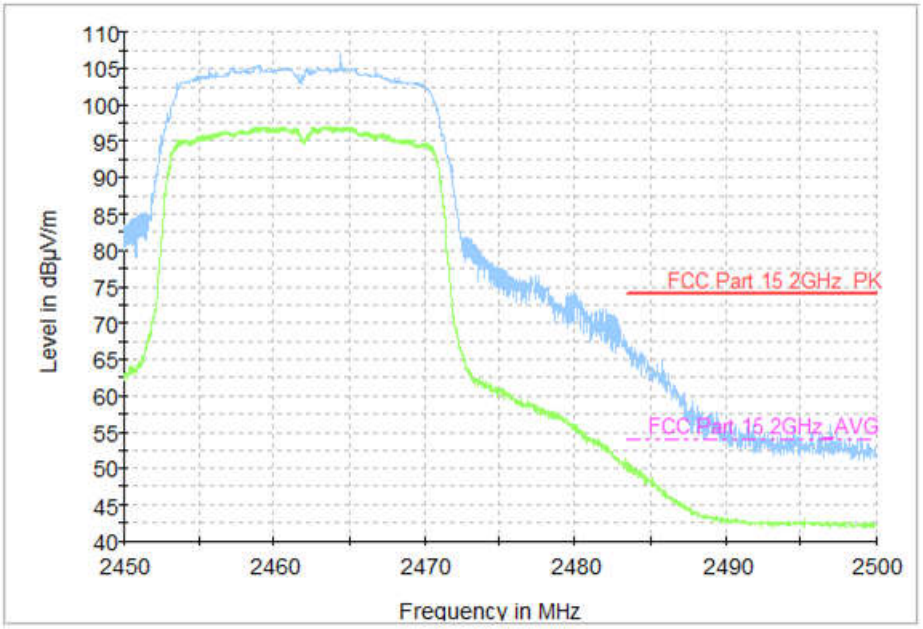

Fig.61 Radiated Restricted Band (802.11n HT20, CH11, 2.45GHz~2.5GHz)

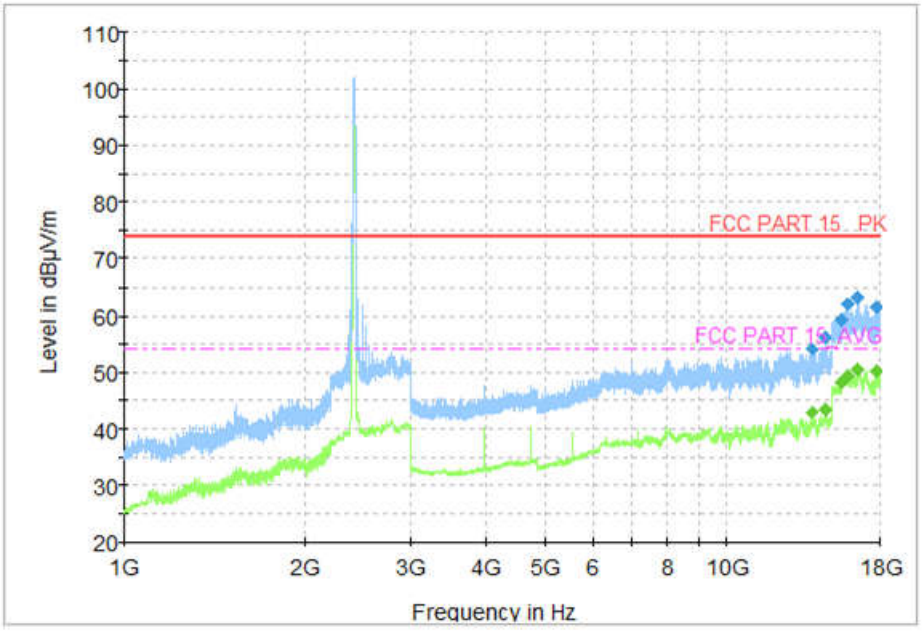

Fig.62 Radiated Spurious Emission (802.11n HT40, CH3, 1 GHz-18 GHz)

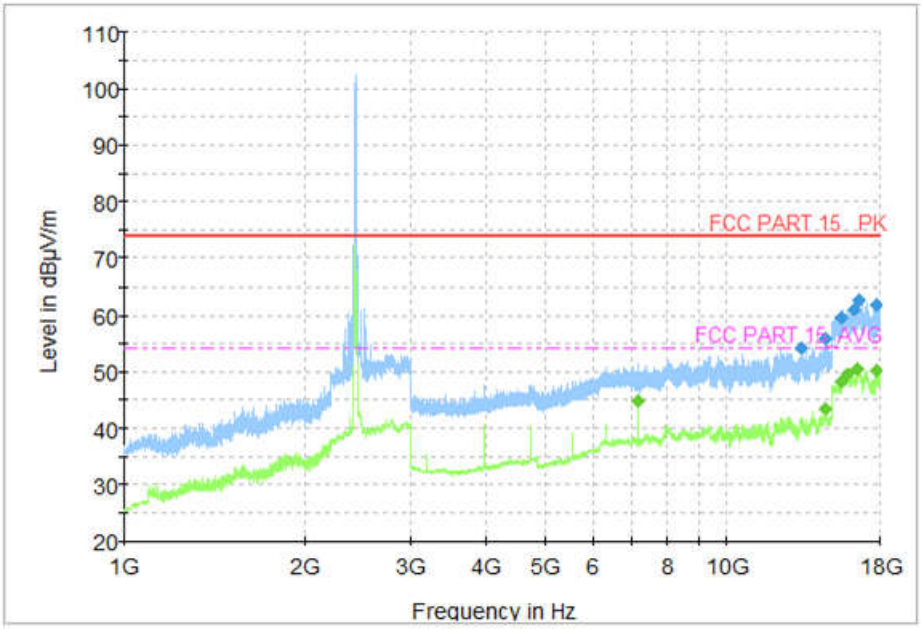

Fig.63 Radiated Spurious Emission (802.11n HT40, CH6, 1 GHz-18 GHz)

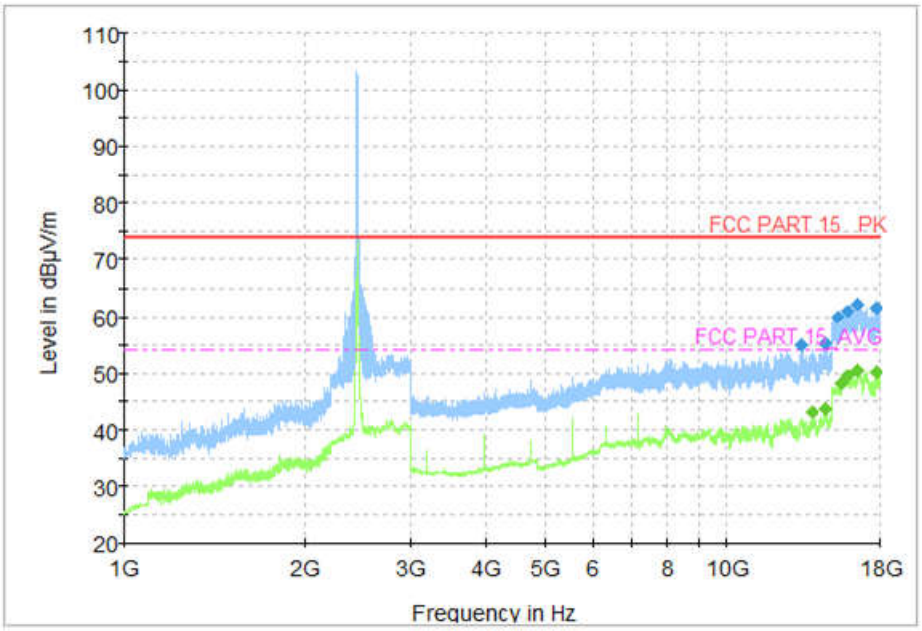

Fig.64 Radiated Spurious Emission (802.11n HT40, CH9, 1 GHz-18 GHz)

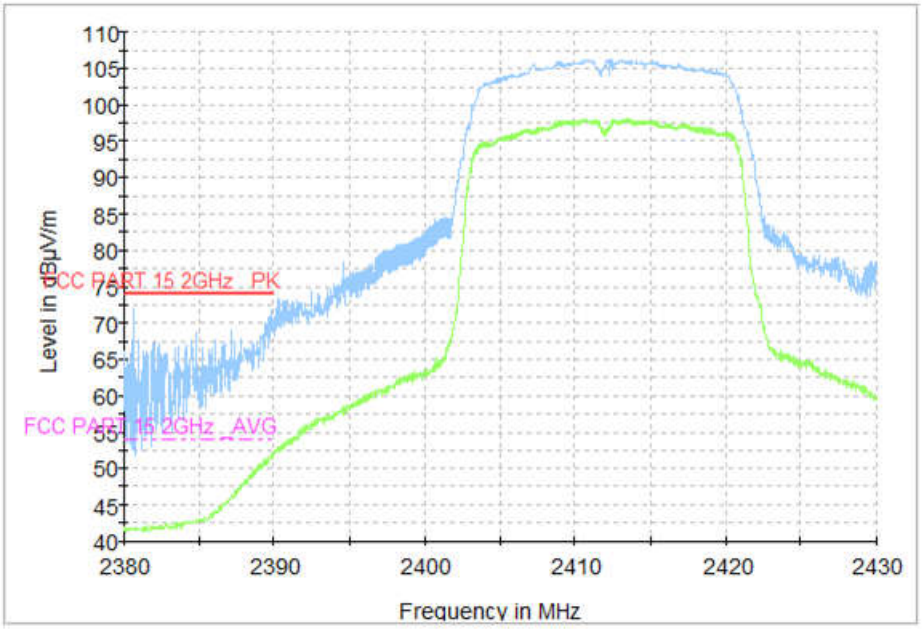

Fig.65 Radiated Restricted Band (802.11n HT40, CH3, 2.38GHz~2.45GHz)

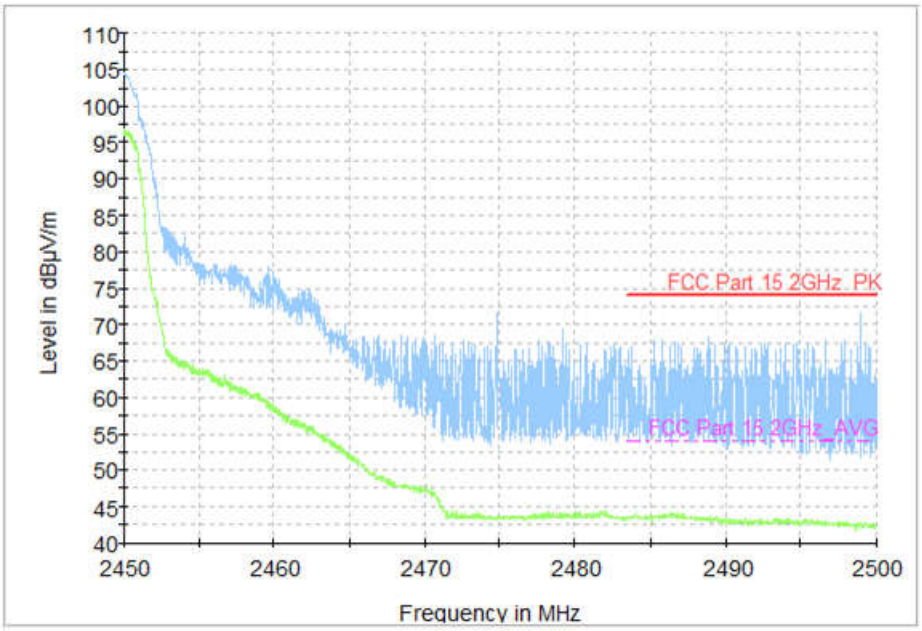

Fig.66 Radiated Restricted Band (802.11n HT40, CH9, 2.45GHz~2.5GHz)

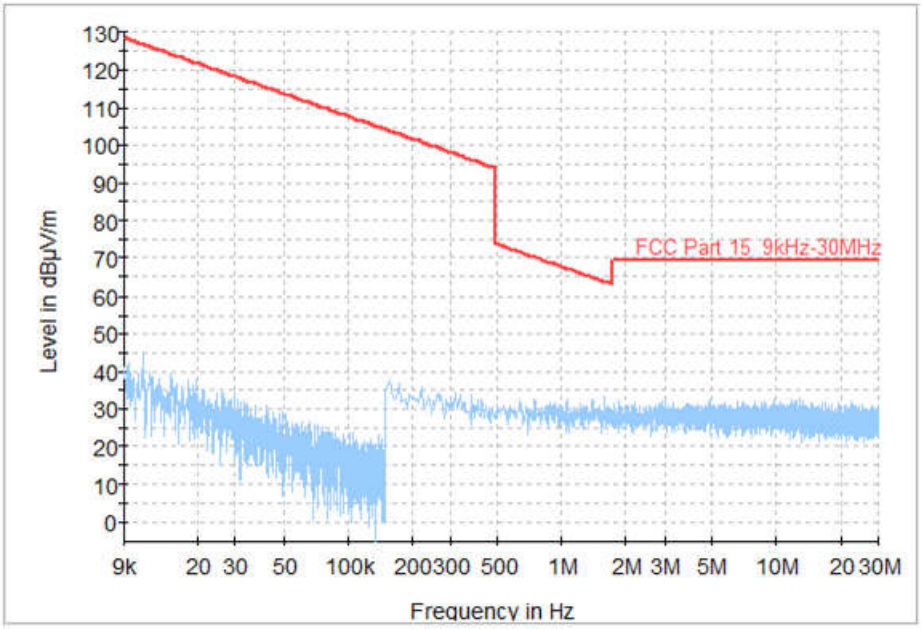

Fig.67 Radiated Spurious Emission (All Channels, 9KHz-30 MHz)

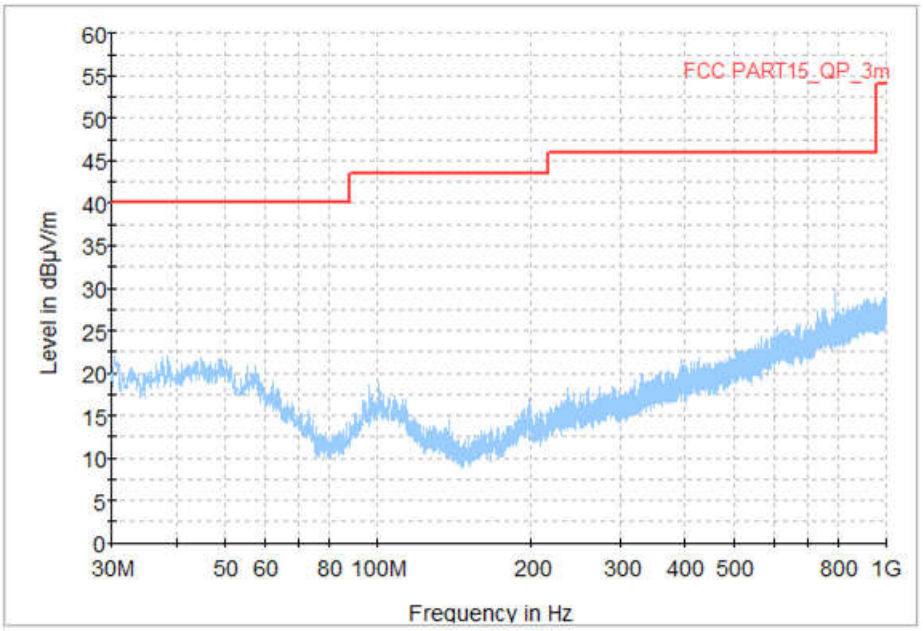

Fig.68 Radiated Spurious Emission (All Channels, 30MHz-1 GHz)

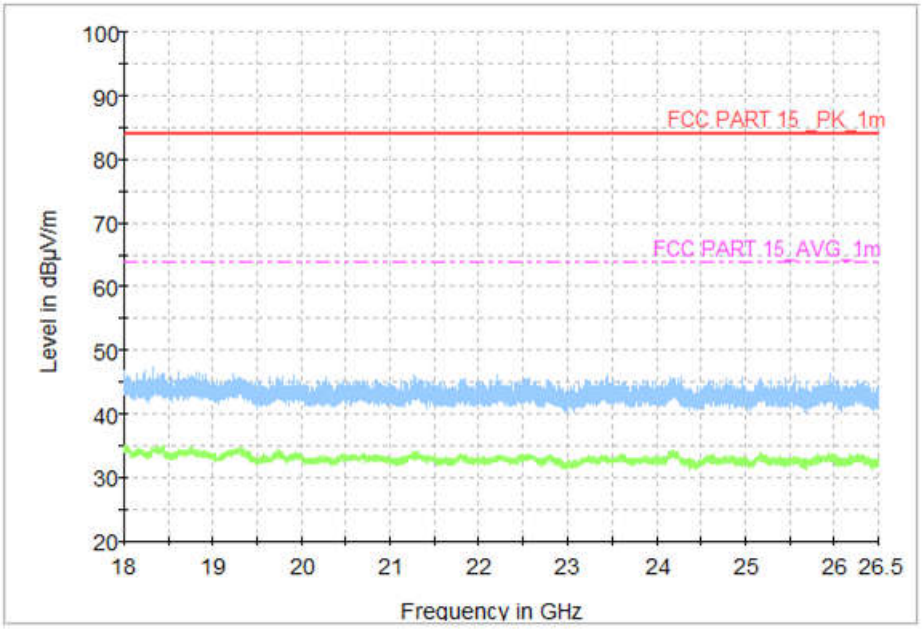

Fig.69 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz)

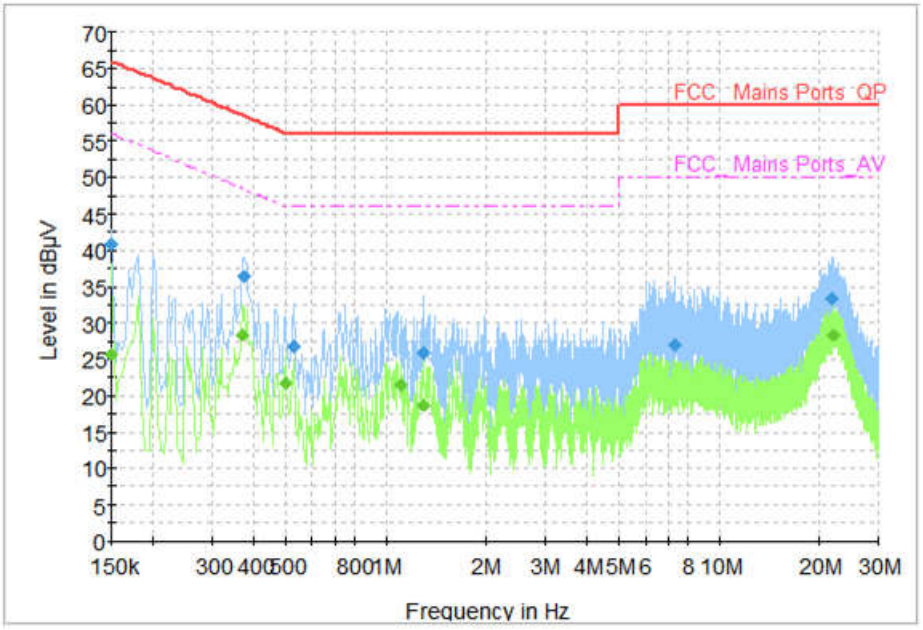

Fig.70 AC Powerline Conducted Emission (Traffic, AE1)

Measurement Results: Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	40.91	66.00	25.09	N	ON	9.6
0.373875	36.28	58.41	22.13	N	ON	9.6
0.526856	26.89	56.00	29.11	N	ON	9.7
1.291762	25.88	56.00	30.12	N	ON	9.7
7.340119	26.94	60.00	33.06	L1	ON	9.8
21.824831	33.36	60.00	26.64	L1	ON	10.1

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	25.75	56.00	30.25	N	ON	9.6
0.370144	28.34	48.50	20.16	L1	ON	9.7
0.497006	21.71	46.05	24.34	N	ON	9.7
1.105200	21.44	46.00	24.56	L1	ON	9.7
1.291762	18.69	46.00	27.31	N	ON	9.7
22.067362	28.35	50.00	21.65	N	ON	10.4

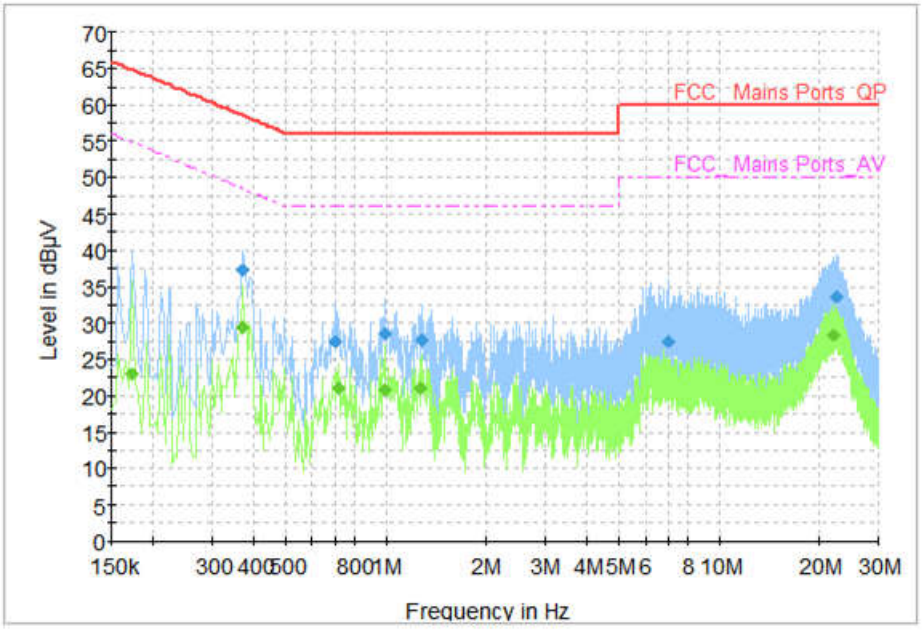

Fig.71 AC Power line Conducted Emission (Idle, AE1)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.370144	37.26	58.50	21.24	N	ON	9.6
0.698494	27.52	56.00	28.48	N	ON	9.7
0.985800	28.48	56.00	27.52	N	ON	9.7
1.284300	27.64	56.00	28.36	N	ON	9.7
6.985650	27.45	60.00	32.55	L1	ON	9.8
22.350938	33.72	60.00	26.28	N	ON	10.3

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.172388	22.92	54.85	31.92	N	ON	9.6
0.370144	29.42	48.50	19.08	N	ON	9.6
0.720881	20.97	46.00	25.03	N	ON	9.7
0.985800	20.78	46.00	25.22	N	ON	9.7
1.273106	21.07	46.00	24.93	L1	ON	9.7
21.940500	28.45	50.00	21.55	N	ON	10.4

ANNEX C: Persons involved in this testing

Test Name	Tester
Maximum Peak Output Power	An Ran, Tang Weisheng
Peak Power Spectral Density	An Ran, Tang Weisheng
Occupied 6dB Bandwidth	An Ran, Tang Weisheng
Band Edges Compliance	An Ran, Tang Weisheng
Transmitter Spurious Emission - Conducted	An Ran, Tang Weisheng
Transmitter Spurious Emission - Radiated	An Ran, Tang Weisheng
AC Powerline Conducted Emission	An Ran, Tang Weisheng

*****END OF REPORT*****