FCC PART 15C
TEST REPORT
No. I21Z70460-IOT03

for

SAMSUNG Electronics Co., Ltd

Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN

SM-A035F/DS, SM-A035F

With

FCC ID: ZCASMA035F

Hardware Version: REV1.0

Software Version: A035F.001

Issued Date: 2021-11-15

Note:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z70460-IOT03	Rev.0	1st edition	2021-11-15
I21Z70460-IOT03	Rev.1	P. 11 delete the radiated description . P. 15 update the result 24.26(peak)to 14.69(average)	2021-11-25

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CONTENTS

1. TEST LABORATORY 5

1.1. INTRODUCTION & ACCREDITATION 5
1.2. TESTING LOCATION 5
1.3. TESTING ENVIRONMENT 6
1.4. PROJECT DATE 6
1.5. SIGNATURE 6

2. CLIENT INFORMATION 7

2.1. APPLICANT INFORMATION 7
2.2. MANUFACTURER INFORMATION 7

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE) 8

3.1. ABOUT EUT 8
3.2. INTERNAL IDENTIFICATION OF EUT 8
3.3. INTERNAL IDENTIFICATION OF AE 8
3.4. GENERAL DESCRIPTION 9
3.5. INTERPRETATION OF THE TEST ENVIRONMENT 9

4. REFERENCE DOCUMENTS 10

4.1. DOCUMENTS SUPPLIED BY APPLICANT 10
4.2. REFERENCE DOCUMENTS FOR TESTING 10

5. TEST RESULTS 10

5.1. SUMMARY OF TEST RESULTS 10
5.2. STATEMENTS 11
5.3. TEST CONDITIONS 11

6. TEST FACILITIES UTILIZED 12

10. MEASUREMENT UNCERTAINTY 13

10.1. MAXIMUM OUTPUT POWER 13
10.2. PEAK POWER SPECTRAL DENSITY 13
10.3. DTS 6-DB SIGNAL BANDWIDTH 13
10.4. BAND EDGES COMPLIANCE 13
10.5. TRANSMITTER SPURIOUS EMISSION 13
10.6. AC POWER-LINE CONDUCTED EMISSION 13

ANNEX A: DETAILED TEST RESULTS 14

A.1. MEASUREMENT METHOD 14

A.2. MAXIMUM OUTPUT POWER 15

A.2.1. PEAK OUTPUT POWER-CONDUCTED 15

A.3. PEAK POWER SPECTRAL DENSITY 17

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A.4. DTS 6-DB SIGNAL BANDWIDTH 23

A.5. BAND EDGES COMPLIANCE 29

A.6. TRANSMITTER SPURIOUS EMISSION 33

A.6.1 TRANSMITTER SPURIOUS EMISSION – CONDUCTED 33

A.6.2 TRANSMITTER SPURIOUS EMISSION - RADIATED 73

A.7. AC POWER-LINE CONDUCTED EMISSION 84

ANNEX B: EUT PARAMETERS 88

ANNEX C: ACCREDITATION CERTIFICATE 89

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1:CTTL(Huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

Radiated testing Location: CTTL (BDA)

Address: No. 18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, 100176, P.R. China

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1.3. Testing Environment

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

1.4. Project date

Testing Start Date: 2021-09-01
Testing End Date: 2021-10-15

1.5. Signature

Feng Aiyu
(Prepared this test report)

Zheng Wei
(Reviewed this test report)

Hu Xiaoyu
(Approved this test report)

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2. Client Information

2.1. Applicant Information

Company Name:	SAMSUNG Electronics Co., Ltd
Address:	19 Chapin Rd,Building D Pine Brook,NJ 07058
City:	/
Postal Code:	/
Contact:	Jenni Chun
Telephone:	+1-201-937-4203
Email:	j1.chun@samsung.com

2.2. Manufacturer Information

Company Name:	SAMSUNG Electronics Co., Ltd.
Address:	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea
Contact:	(Sunghoon Cho)
Email:	ggobi.cho@samsung.com
Telephone:	+82-10-2722-4159
Fax:	/

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

3.1. About EUT

Description	Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN
Model name	SM-A035F/DS, SM-A035F
FCC ID	ZCASMA035F
With WLAN Function	Yes
Frequency Band	ISM 2400MHz~2483.5MHz
Type of Modulation	DSSS/CCK/OFDM
Number of Channels	11
Antenna	Integral Antenna
MAX Conducted Power	24.26dBm
Power Supply	3.85V

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version
UT07a	2170432UT07a	REV1.0	A035M.001
UT09a	2170432UT09a	REV1.0	A035M.001

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

3.3. Internal Identification of AE

AE ID*	Description	SN
AE1		
	Model	EP-TA50JWS
	Manufacturer	RFTECH Co., Ltd.
	Length of cable	/
AE2		
	Model	EP-TA50JWS
	Manufacturer	HAMEN
	Length of cable	/
AE3		
	Model	EP-TA50EWE
	Manufacturer	DY
	Length of cable	/
AE4		
	Model	EP-TA50EWE
	Manufacturer	HAMEN
	Length of cable	/
AE5		
	Model	EP-TA50EWE
	Manufacturer	Salcomp

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Length of cable	/
AE6	
Model	EP-TA50UWE
Manufacturer	DY
Length of cable	/
AE7	
Model	EP-TA50UWE
Manufacturer	HAMEN
Length of cable	/
AE8	
Model	EP- TA50UWE
Manufacturer	Salcomp
Length of cable	/
AE9	
Model	ECB-DU68WE
Manufacturer	Samsung Electronics Co., Ltd.
Length	/ /
AE10	
Model	EHS61ASFWE
Manufacturer	CRESYN HANOI Co., Ltd
Length	/
AE11	
Model	EHS61ASFWE
Manufacturer	DONGGUAN YOUNGBO ELECTRONICS CO.,LTD
Length	/
AE12	
TYPE	Secondary Li-ion Battery
SN	HQ-50SD
Manufacturer	SCUD (Fujian) Electronics CO.,LTD
AE13	
TYPE	Secondary Li-ion Battery
SN	HQ-50N
Manufacturer	SCUD (Fujian) Electronics CO.,LTD

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

3.4. General Description

The Equipment under Test (EUT) is a model of Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN

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.

3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor

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k=2.

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

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.	2018
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 558074 D01	Federal Communications Commission Office of Engineering and Technology Laboratory Division GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

5. Test Results

5.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.247 (b)	/	**P**
Peak Power Spectral Density	15.247 (e)	/	**P**
Occupied 6dB Bandwidth	15.247 (a)	/	**P**
Band Edges Compliance	15.247 (d)	/	**P**
Transmitter Spurious Emission - Conducted	15.247 (d)	/	**P**
Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	/	**P**
AC Powerline Conducted Emission	15.107, 15.207	/	**P**

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

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P	Pass, The EUT complies with the essential requirements in the standard.
NP	Not Perform, The test was not performed by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

5.2. Statements

The test cases as listed in section 5.1 of this report for the EUT specified in section 3 was performed by CTTL and according to the standards or reference documents listed in section 4.2

The EUT met all requirements of the standards or reference documents, and only the WLAN function was tested in this report.

Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN, SM-A035F/DS, SM-A035F, manufactured by SAMSUNG Electronics Co., Ltd. is a variant model of SM-A035M/DS, SM-A035M for testing; according to the declaration of changes provided by the applicant, all the test results are derived from test report of SM-A035M/DS, SM-A035M.

The Equipment Under Test (EUT) model SM-A035F/DS, SM-A035F (FCC ID: ZCASMA035F) is a variant product of SM-A035M/DS, SM-A035M (FCC ID: ZCASMA035M), according to the declaration of changes provided by the applicant and FCC KDB publication 484596 D01, spot check measurements were performed on this device, all the conducted test results are derived from test report I21Z70432-IOT05

For detail differences between two models please refer the Declaration of Changes document.

5.3. Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage

For this report, if the test cases listed above are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	T nom	26℃
Voltage	V nom	3.85V(By battery)
Humidity	H nom	20-75%

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6. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2022-05-15
2	LISN	ENV216	101200	R&S	1 year	2022-05-30
3	Test Receiver	ESCI	100344	R&S	1 year	2022-02-23
4	Shielding Room	S81	/	ETS-Lindgren	/	/
5	Data Acquisition Unit	U2531A	TW54433522	Agilent	/	/
6	Power Sensor	U2021XA	MY54460006	Agilent	1 year	2022-02-17

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESU26	100235	R&S	1 year	2022-02-23
2	EMI Antenna	VULB9163	9163-482	Schwarzbeck	1 year	2021-11-04
3	EMI Antenna	LB-180-NF	203001300041	A-INFO	1 year	2022-02-28
4	EMI Antenna	LB-180400-25-C-KF	211008400006	A-INFO	1 year	2022-02-28
5	Analytical Spectrometer	FSV40	101047	R&S	1 year	2022-06-02

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7. Measurement Uncertainty

7.1. Maximum Output Power

Measurement Uncertainty: 0.387dB,k=1.96

7.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

7.3. DTS 6-dB Signal Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

7.4. Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

7.5. Transmitter Spurious Emission

Conducted (k=1.96)

Frequency Range	Uncertainty(dB)
30MHz ≤ f ≤ 2GHz	1.22
2GHz ≤ f ≤3.6GHz	1.22
3.6GHz ≤ f ≤8GHz	1.22
8GHz ≤ f ≤12.75GHz	1.51
12.75GHz ≤ f ≤26GHz	1.51
26GHz ≤ f ≤40GHz	1.59

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
30MHz ≤ f ≤ 1GHz	5.40
1GHz ≤ f ≤18GHz	4.32
18GHz ≤ f ≤40GHz	5.26

7.6. AC Power-line Conducted Emission

Measurement Uncertainty : 3.10dB,k=2

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ANNEX A: Detailed Test Results

A.1. Measurement Method

A.1.1. Conducted Measurements

Connect the EUT to the test system as Fig.A.1.1.1 shows.
Set the EUT to the required work mode.
Set the EUT to the required channel.
Set the Vector Signal Analyzer and start measurement.
Record the values. Vector Signal Analyzer

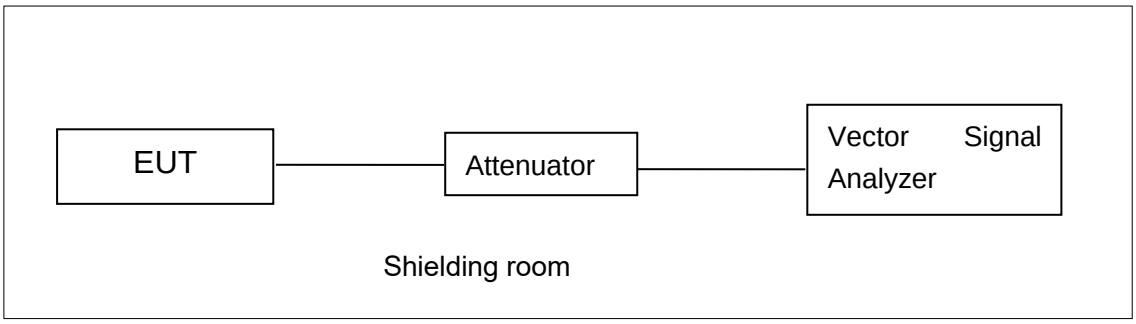

Fig.A.1.1.1: Test Setup Diagram for Conducted Measurements

A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,
Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;
Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 10Hz;

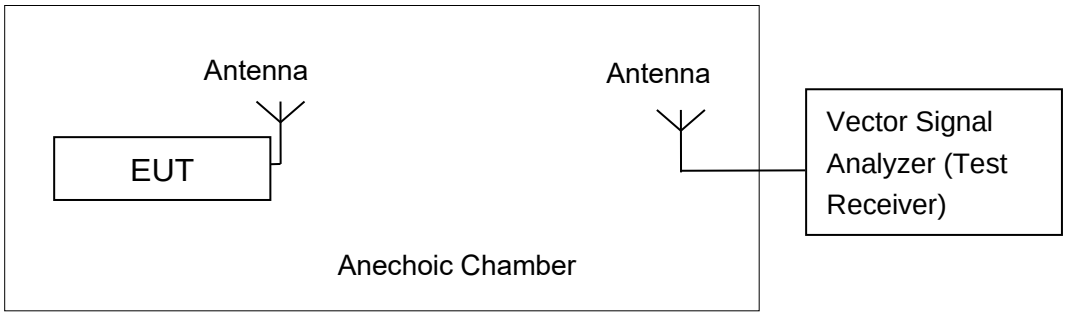

Fig.A.1.2.1: Test Setup Diagram for Radiated Measurements

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A.2. Maximum Output Power

Method of Measurement: See ANSI C63.10-2013-clause 11.9.1.3

Measurement Limit:

Standard	Limit (dBm)
FCC CRF Part 15.247(b)	< 30

EUT ID: EUT07

A.2.1. Peak Output Power-conducted

Measurement Results:

802.11b/g mode

Channel\ rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	18.42	18.73	20.02	21.68
6	/	/	/	22.97
11	/	/	/	21.28

Channel\ rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	23.28	23.38	22.86	22.75	22.42	22.17	21.76	21.67
6	/	24.26	/	/	/	/	/	/
11	/	22.90	/	/	/	/	/	/

The data rate 11Mbps and 9Mbps are selected as worse condition, and the following cases are performed with this condition.

The spot check result of average output power is 14.66dBm (802.11g 9Mbps ch6 prototype result: 14.69dBm).

802.11n-HT20 mode

Channel\ rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
1	23.31	23.11	22.89	23.15	22.5	22.75	21.95	21.66
6	24.25	/	/	/	/	/	/	/
11	22.94	/	/	/	/	/	/	/

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

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Conclusion: Pass

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A.3. Peak Power Spectral Density

Method of Measurement: See ANSI C63.10-2013-clause 11.10.2

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 RBW = 3 kHz.
d) Set the VBW = 10 kHz.
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 RBW.

Measurement Limit:

Standard	Limit
FCC CRF Part 15.247(e)	< 8 dBm/3 kHz

Measurement Results:

UT07

802.11b/g mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11b	1	Fig.A.3.1	-6.00	**P**
	6	Fig.A.3.2	-1.78	**P**
	11	Fig.A.3.3	-1.99	**P**
802.11g	1	Fig.A.3.4	-10.51	**P**
	6	Fig.A.3.5	-9.09	**P**
	11	Fig.A.3.6	-12.26	**P**

802.11n-HT20 mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11n (HT20)	1	Fig.A.3.7	-9.90	**P**
	6	Fig.A.3.8	-9.47	**P**
	11	Fig.A.3.9	-10.99	**P**

Conclusion: Pass

Test graphs as below:

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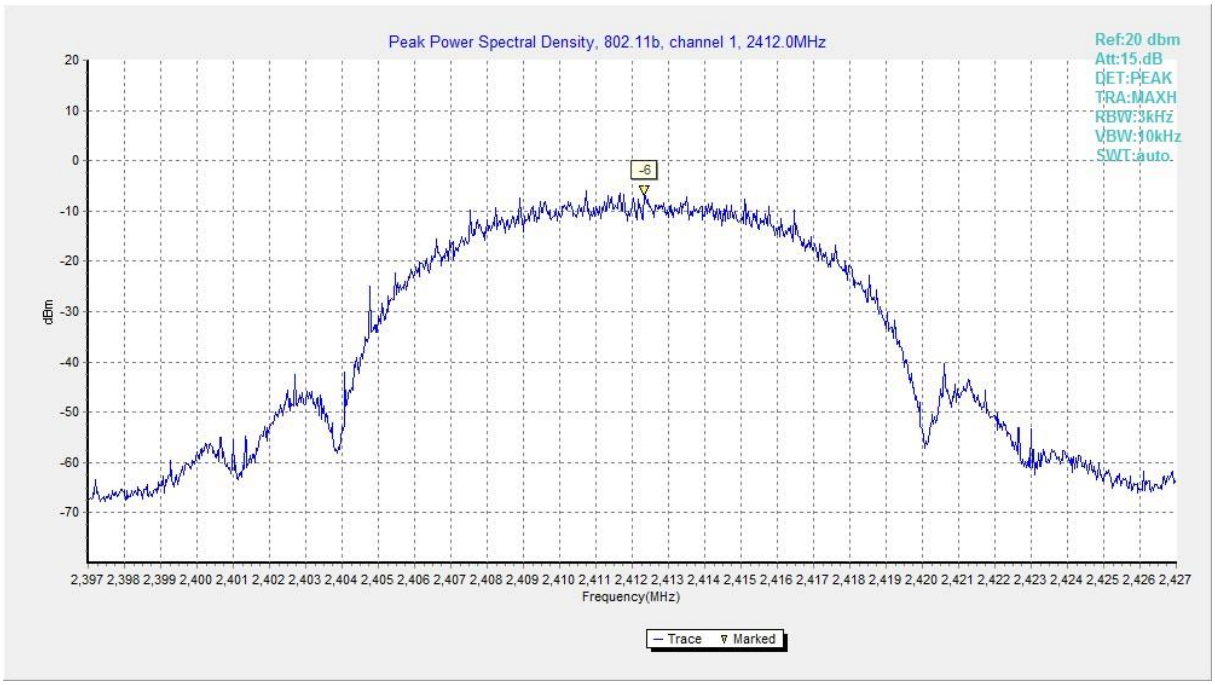

Fig.A.3.1 Power Spectral Density(802.11b,Ch1)

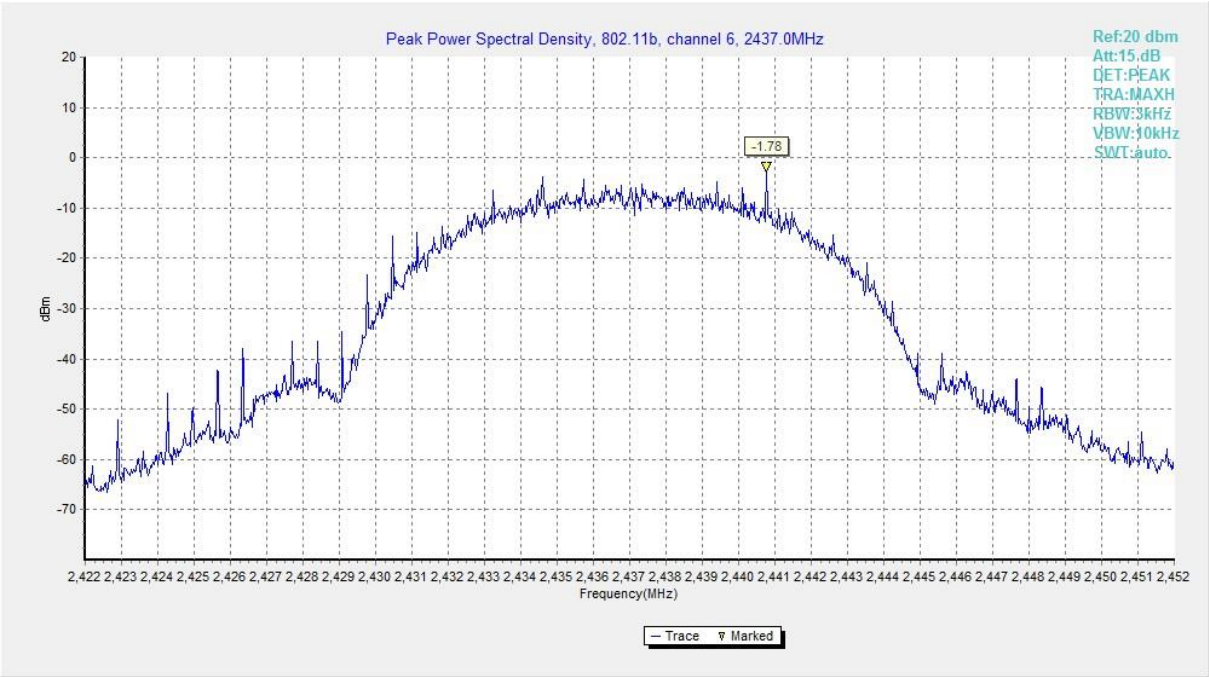

Fig.A.3.2 Power Spectral Density (802.11b, Ch 6)

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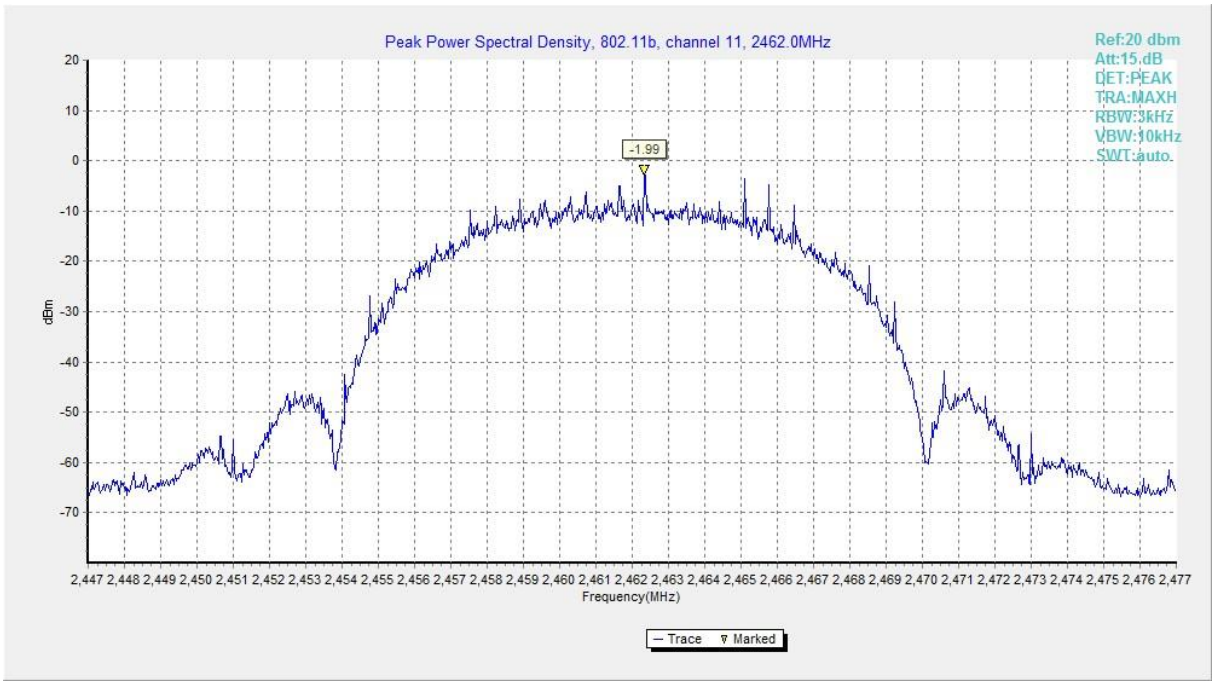

Fig.A.3.3 Power Spectral Density (802.11b, Ch 11)

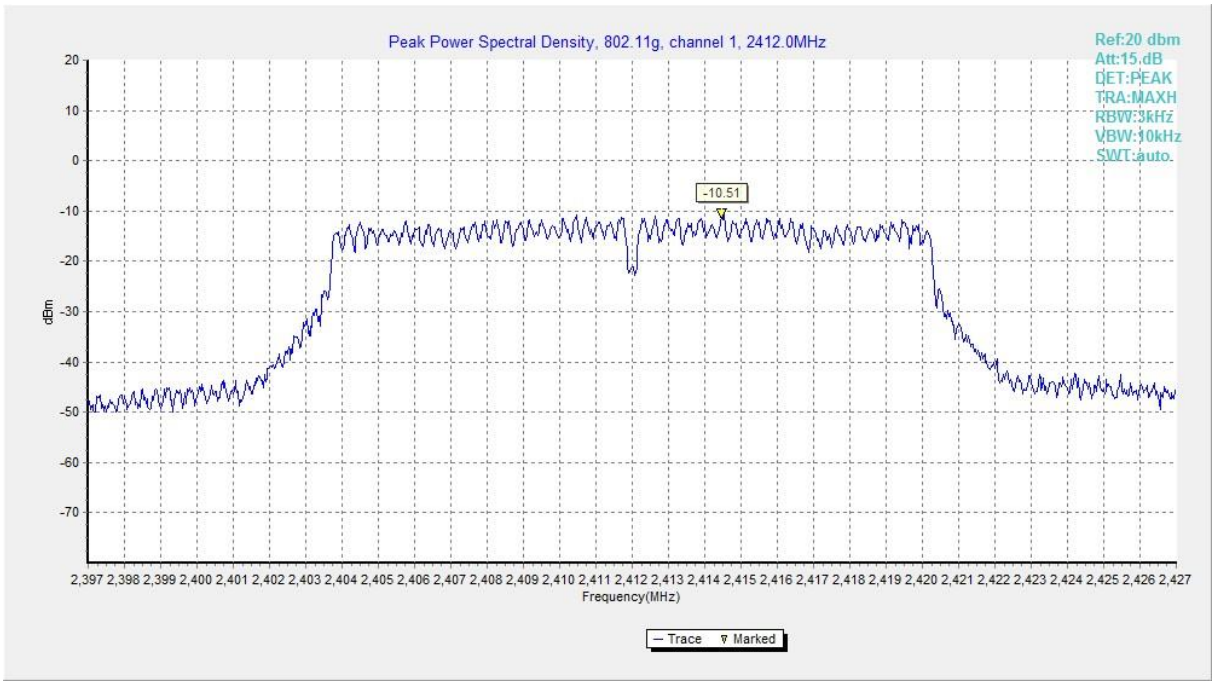

Fig.A.3.4 Power Spectral Density (802.11g, Ch 1)

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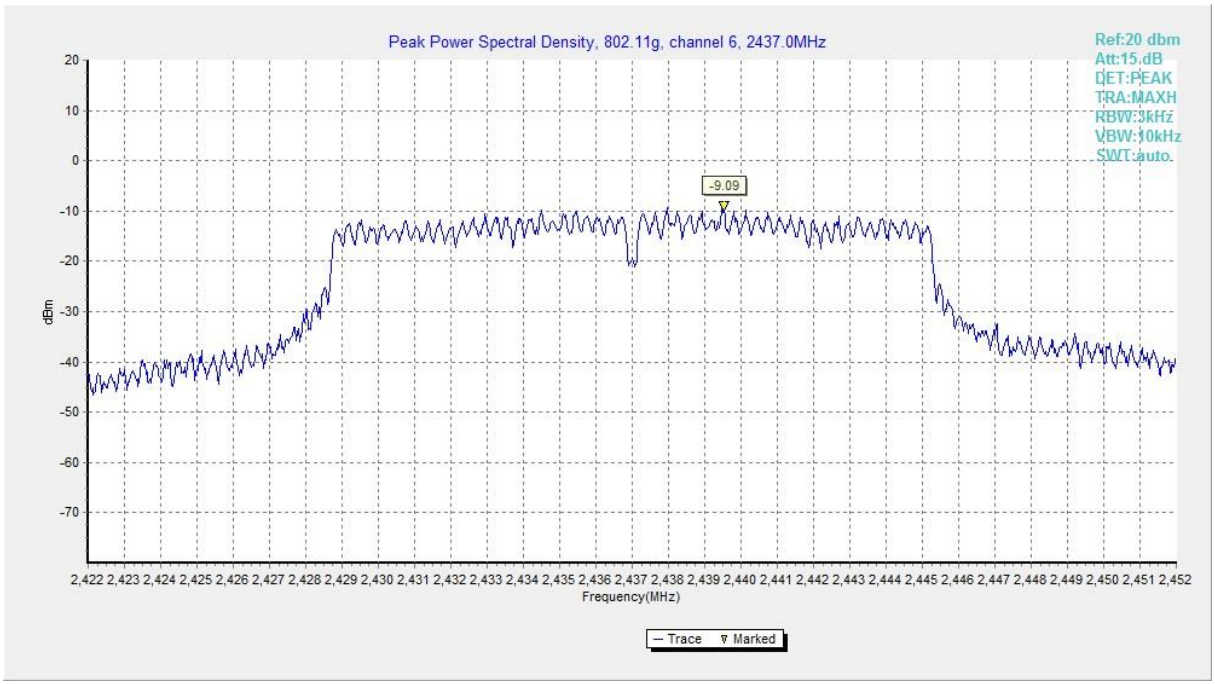

Fig.A.3.5 Power Spectral Density (802.11g, Ch 6)

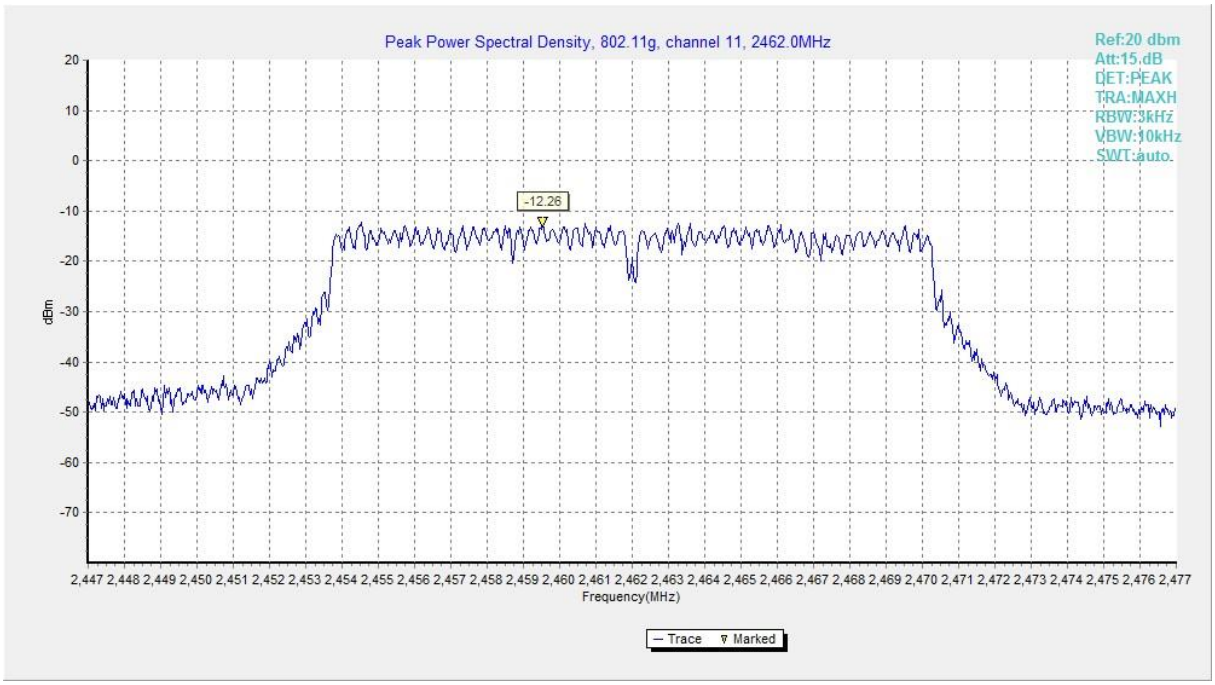

Fig.A.3.6 Power Spectral Density (802.11g, Ch 11)

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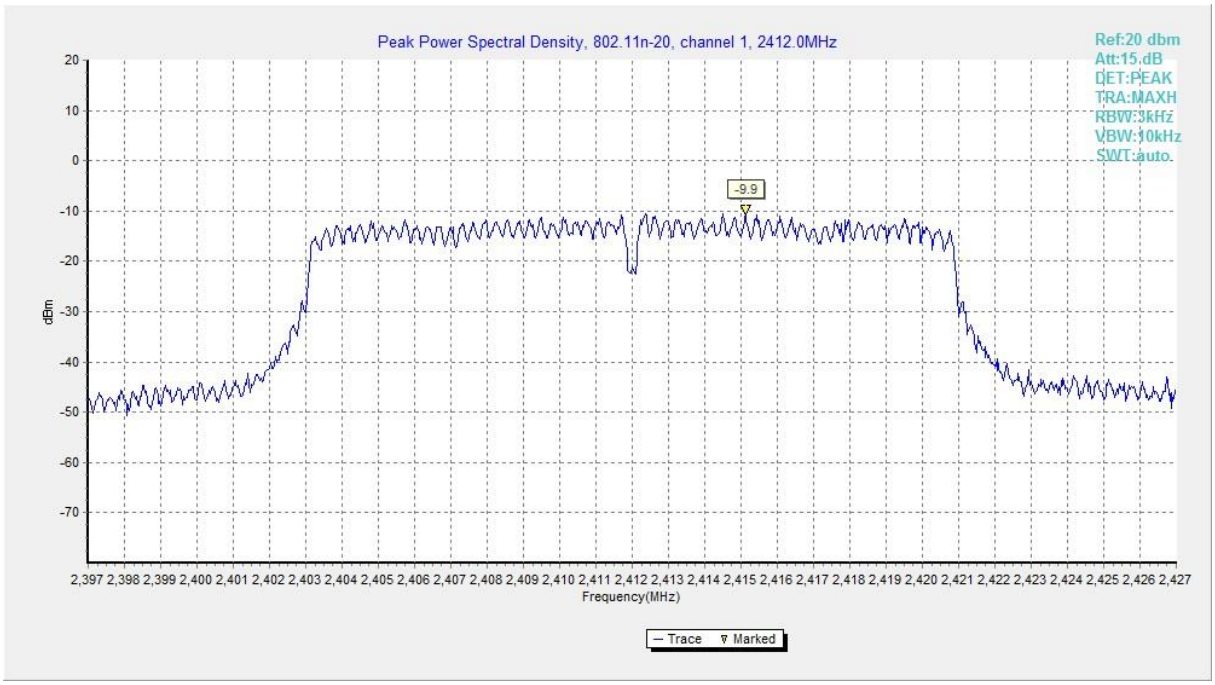

Fig.A.3.7 Power Spectral Density (802.11n-HT20, Ch 1)

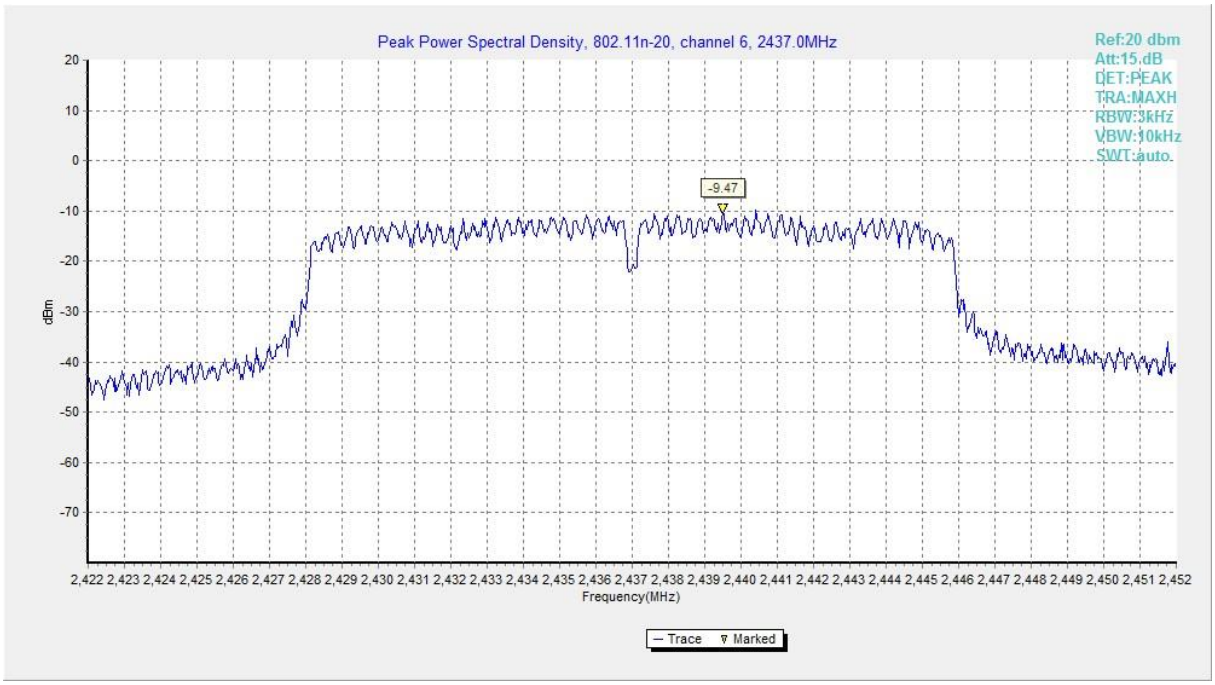

Fig.A.3.8 Power Spectral Density (802.11n-HT20, Ch 6)

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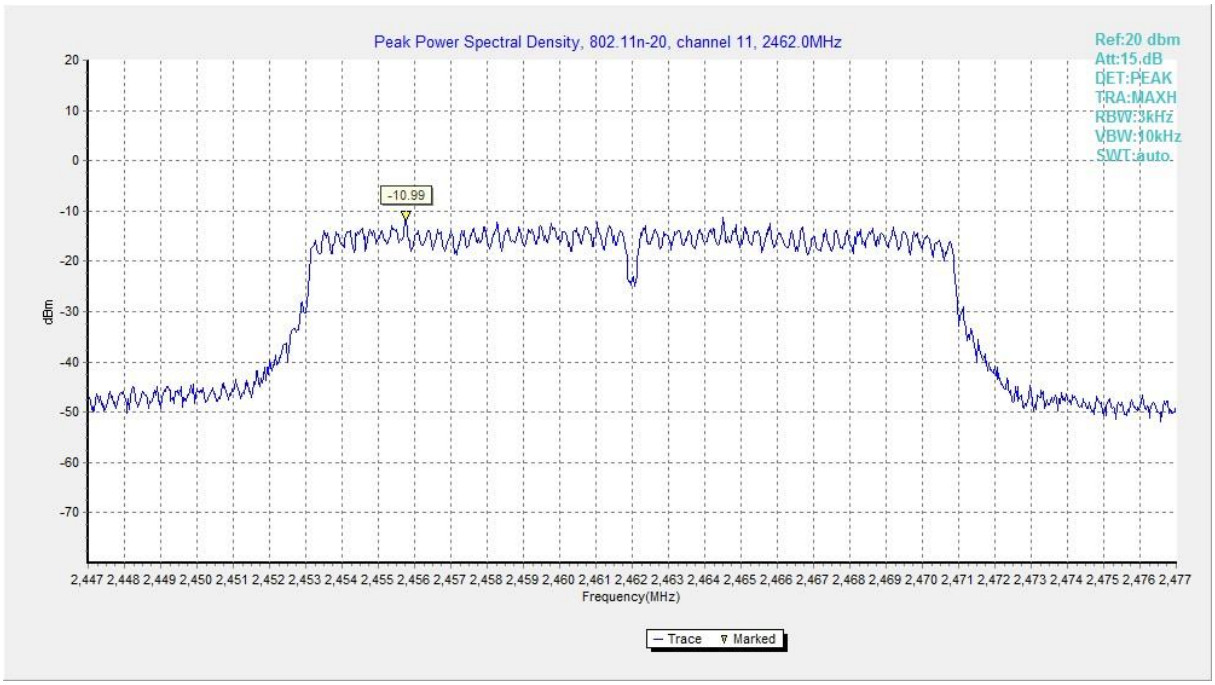

Fig.A.3.9 Power Spectral Density (802.11n-HT20, Ch 11)

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A.4. DTS 6-dB Signal Bandwidth

Method of Measurement: See ANSI C63.10-2013 section 11.8.1.

a) Set RBW = 100 kHz.

b) Set the video bandwidth (VBW) = 300 kHz.

c) Detector = Peak.

d) Trace mode = max hold.

e) Sweep = auto couple.

f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

EUT ID: EUT07

Measurement Result:

802.11b/g mode

Mode	Channel	Occupied 6dB Bandwidth (MHz)		conclusion
802.11b	1	Fig.A.4.1	9.00	**P**
	6	Fig.A.4.2	9.00	**P**
	11	Fig.A.4.3	9.00	**P**
802.11g	1	Fig.A.4.4	16.30	**P**
	6	Fig.A.4.5	16.04	**P**
	11	Fig.A.4.6	16.35	**P**

802.11n-HT20 mode

Mode	Channel	Occupied 6dB Bandwidth (MHz)		conclusion
802.11n (HT20)	1	Fig.A.4.7	16.95	**P**
	6	Fig.A.4.8	16.90	**P**
	11	Fig.A.4.9	17.30	**P**

Conclusion: Pass

Test graphs as below:

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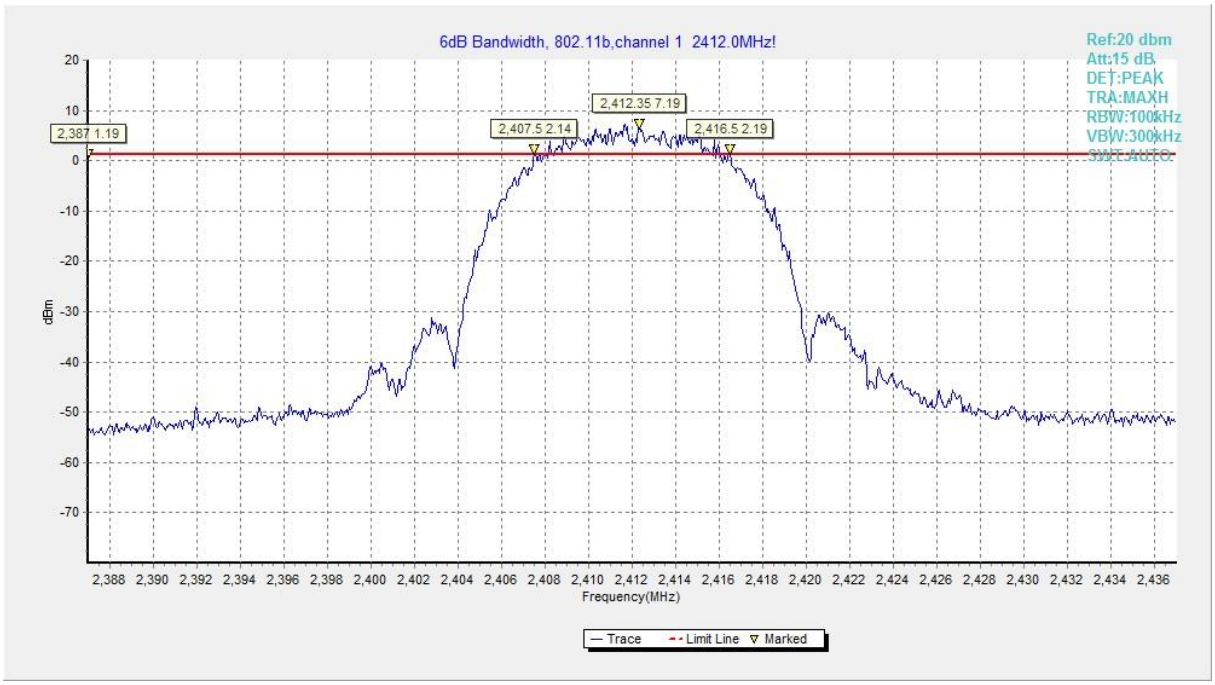

Fig.A.4.1 Occupied 6dB Bandwidth(802.11b,Ch 1)

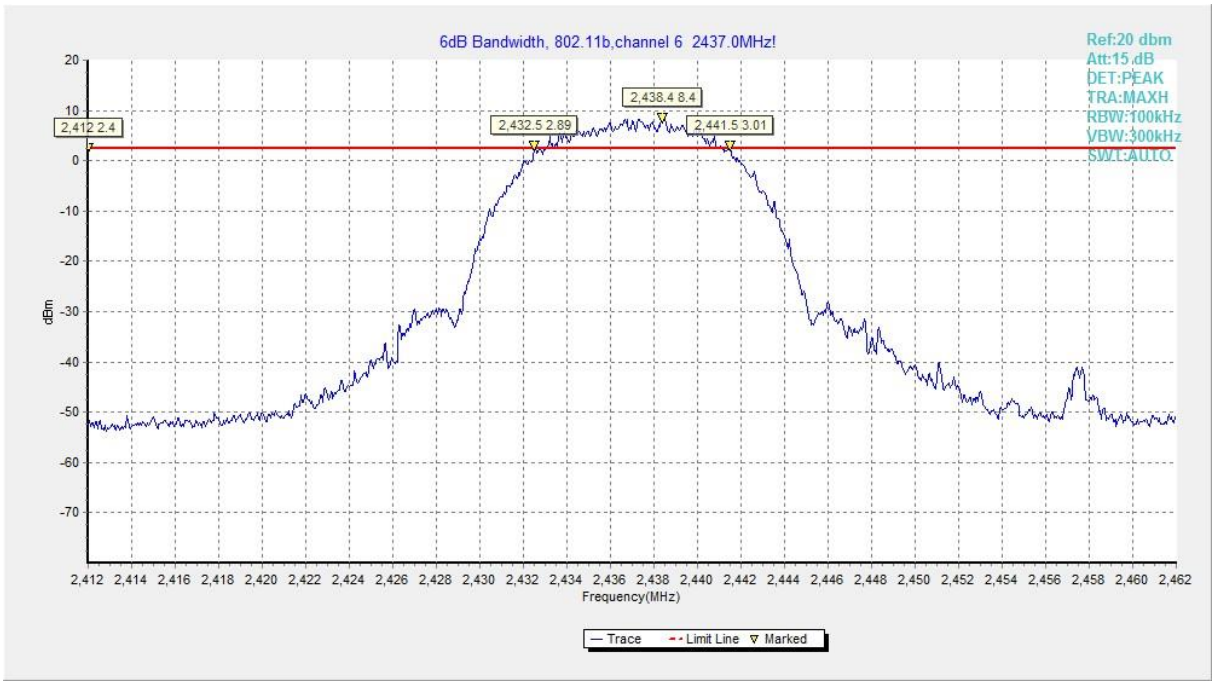

Fig.A.4.2 Occupied 6dB Bandwidth (802.11b, Ch 6)

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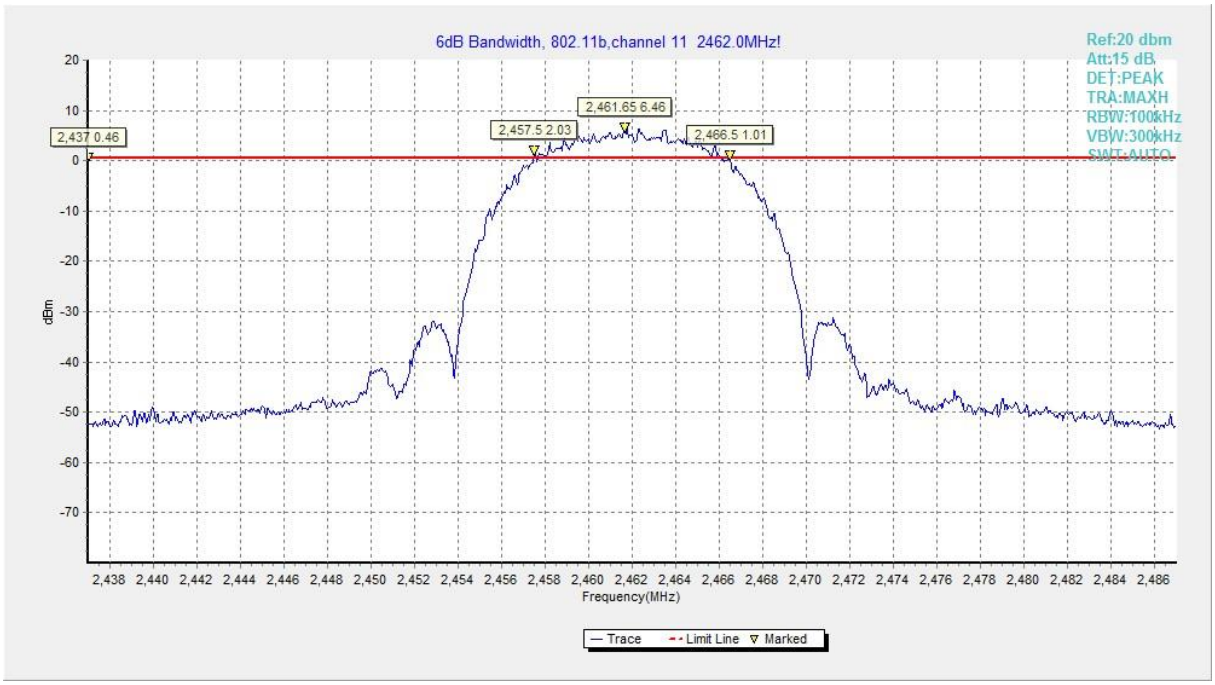

Fig.A.4.3 Occupied 6dB Bandwidth (802.11b, Ch 11)

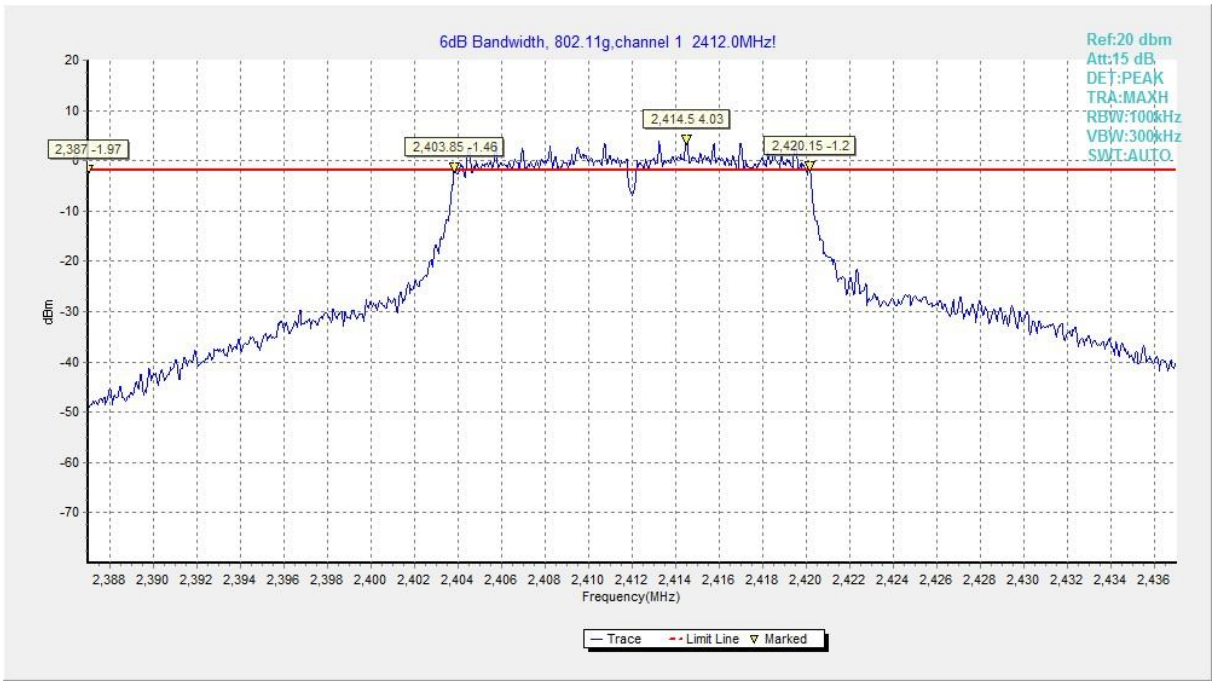

Fig.A.4.4 Occupied 6dB Bandwidth (802.11g, Ch 1)

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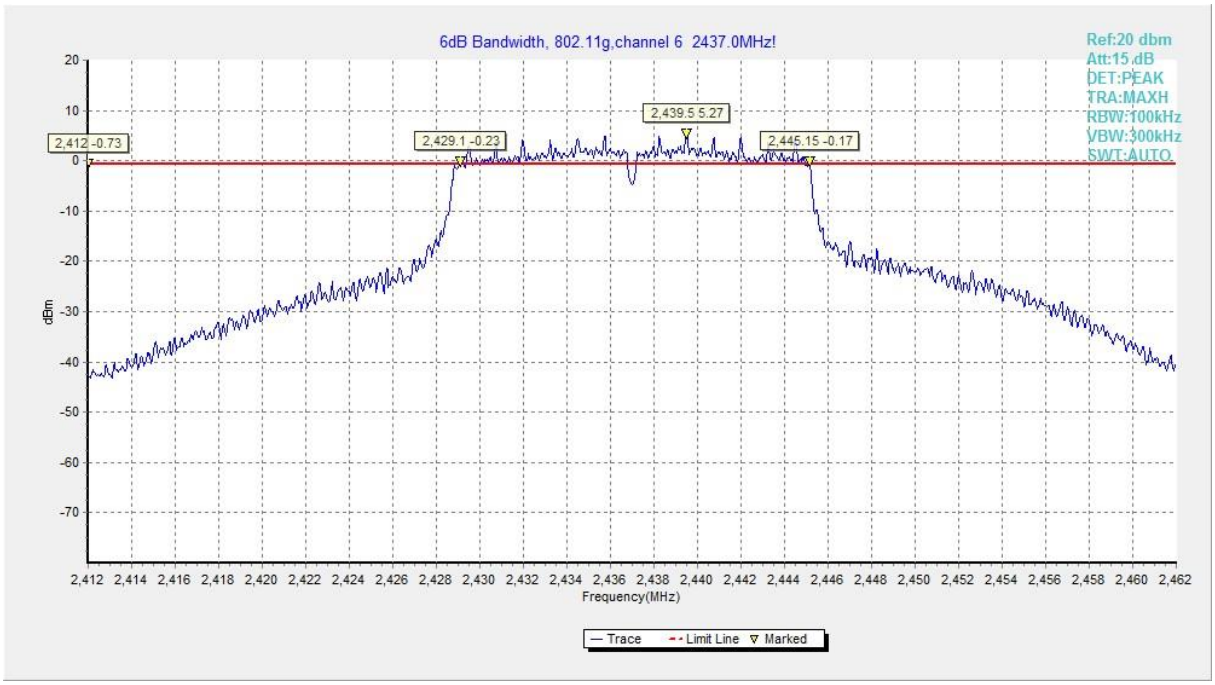

Fig.A.4.5 Occupied 6dB Bandwidth (802.11g, Ch 6)

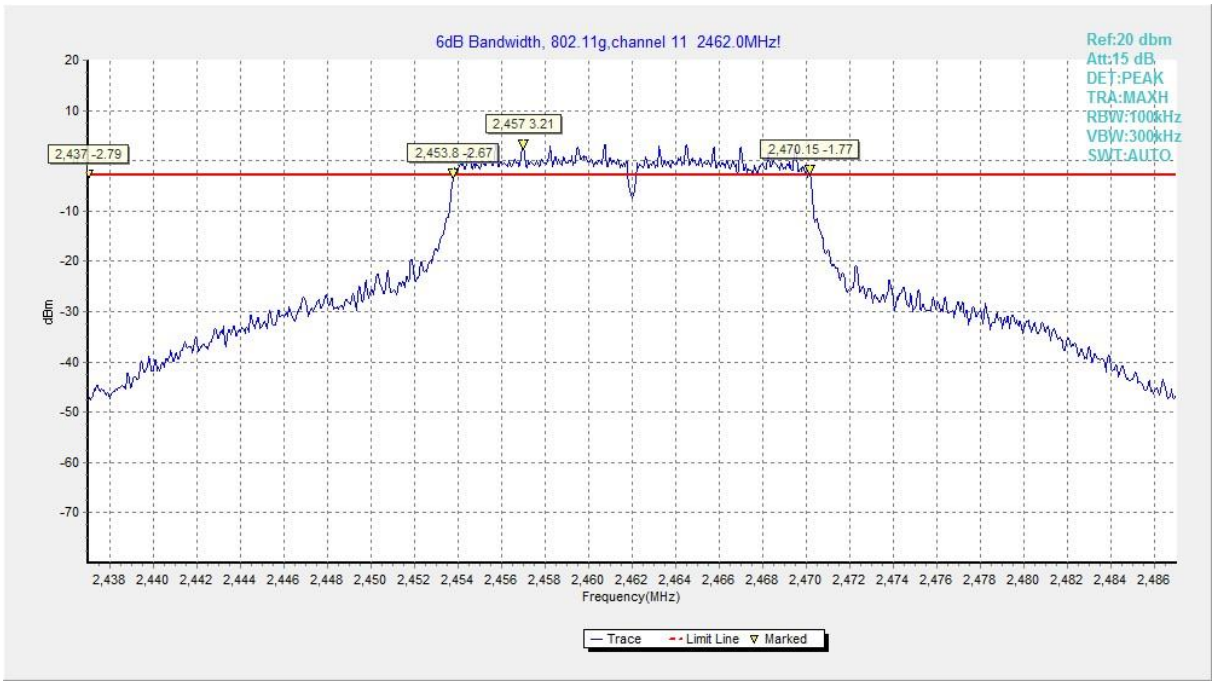

Fig.A.4.6 Occupied 6dB Bandwidth (802.11g, Ch 11)

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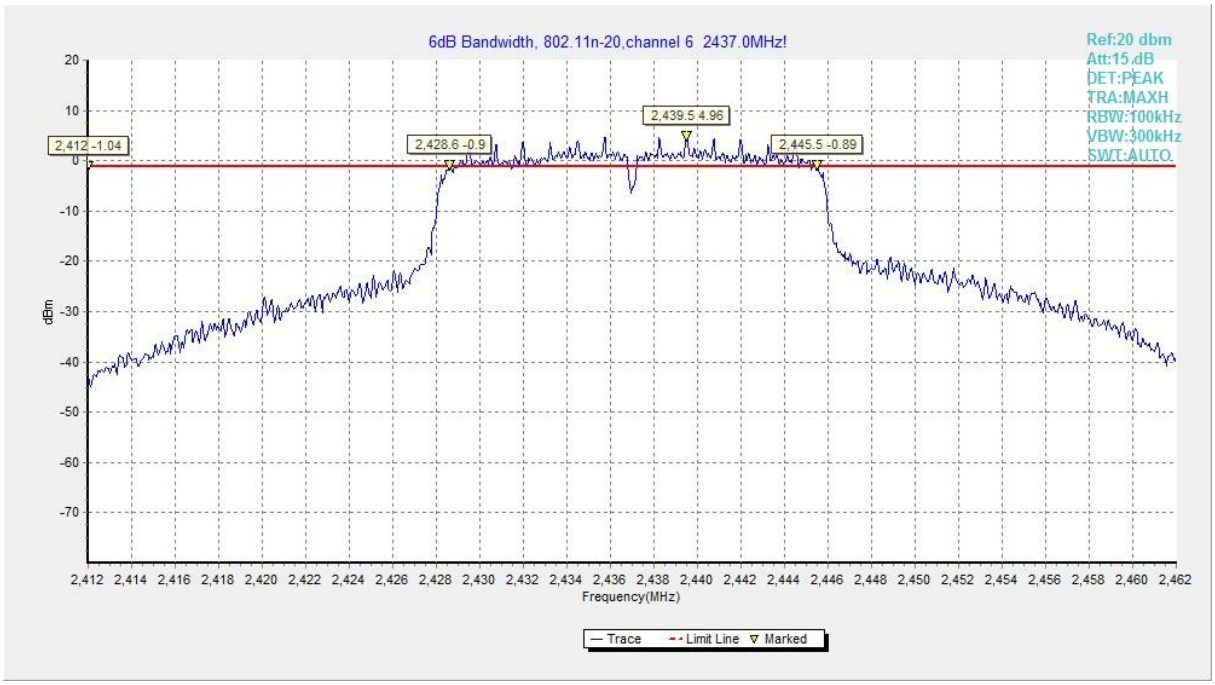

Fig.A.4.7 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 1)

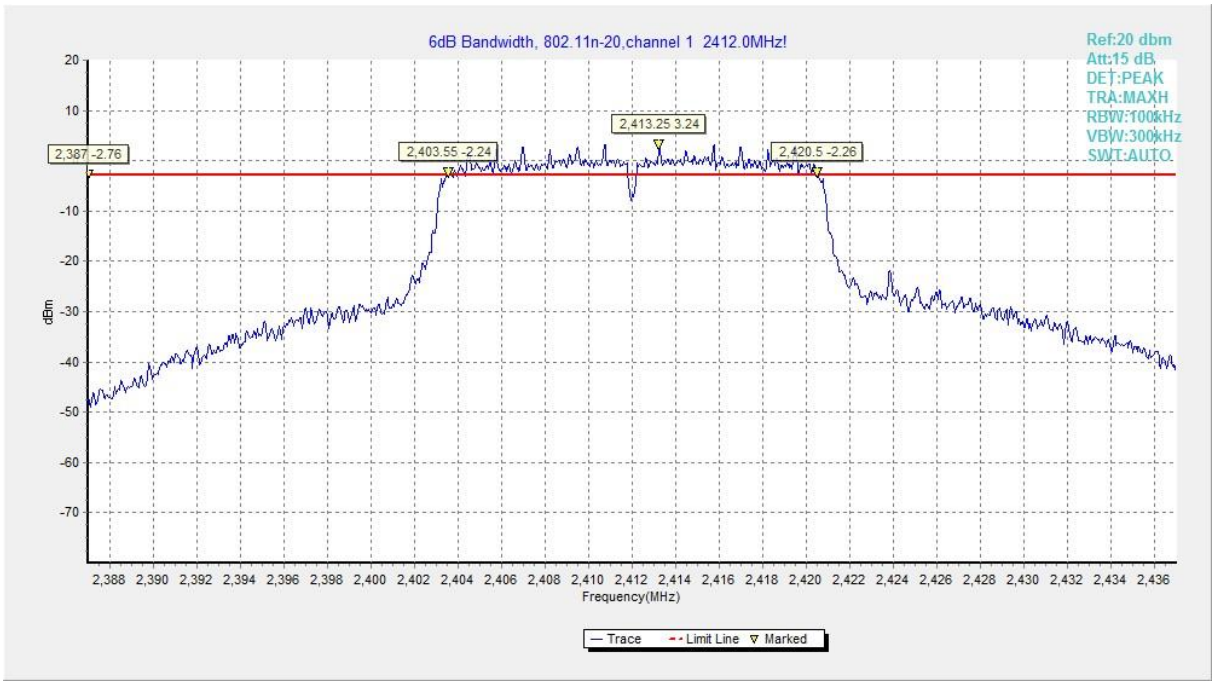

Fig.A.4.8 Occupied 6dB Bandwidth (802.11n-HT20, Ch 6)

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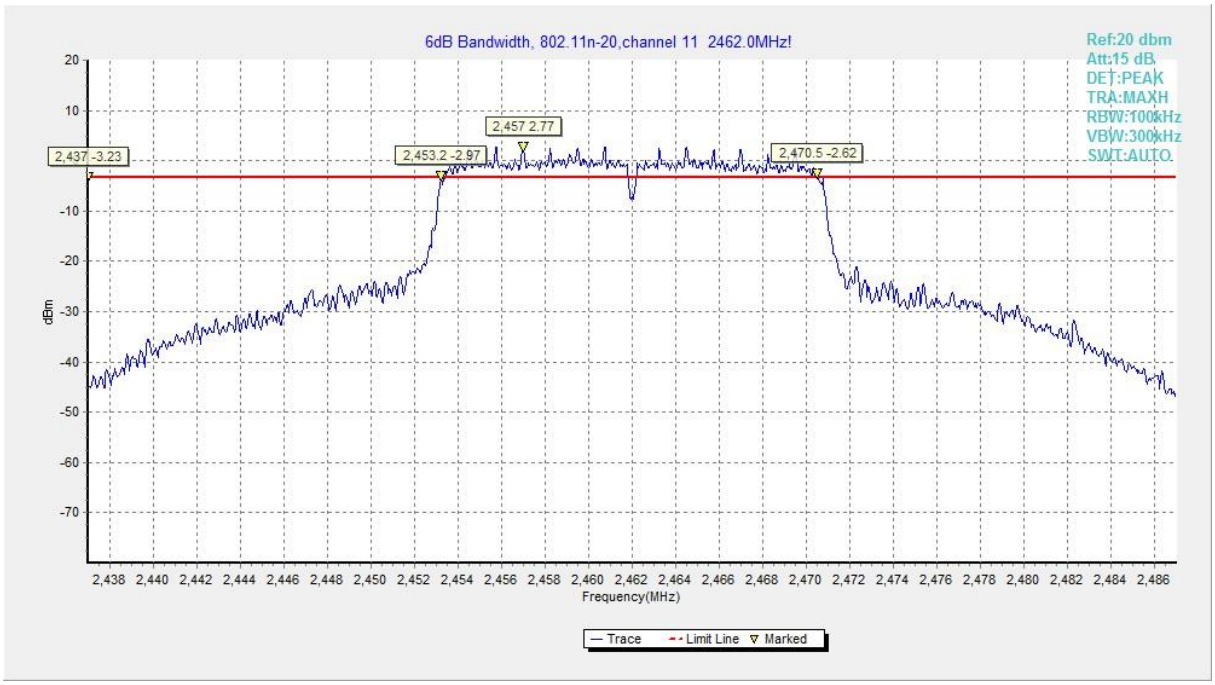

Fig.A.4.9 Occupied 6dB Bandwidth (802.11n-HT20, Ch 11)

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A.5. Band Edges Compliance

Method of Measurement: See ANSI C63.10-2013-clause 6.10.4

Connect the spectrum analyzer to the EUT using an appropriate RF cable connected to the EUT output. Configure the spectrum analyzer settings as described below.

a) Set Span = 100MHz
b) Sweep Time: coupled
c) Set the RBW= 100 kHz
c) Set the VBW= 300 kHz
d) Detector: Peak
e) Trace: Max hold

Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

EUT ID: EUT07

Measurement Result:

802.11b/g mode

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.A.5.1	**P**
	11	Fig.A.5.2	**P**
802.11g	1	Fig.A.5.3	**P**
	11	Fig.A.5.4	**P**

802.11n-HT20 mode

Mode	Channel	Test Results	Conclusion
802.11n (HT20)	1	Fig.A.5.5	**P**
	11	Fig.A.5.6	**P**

Conclusion: Pass

Test graphs as below:

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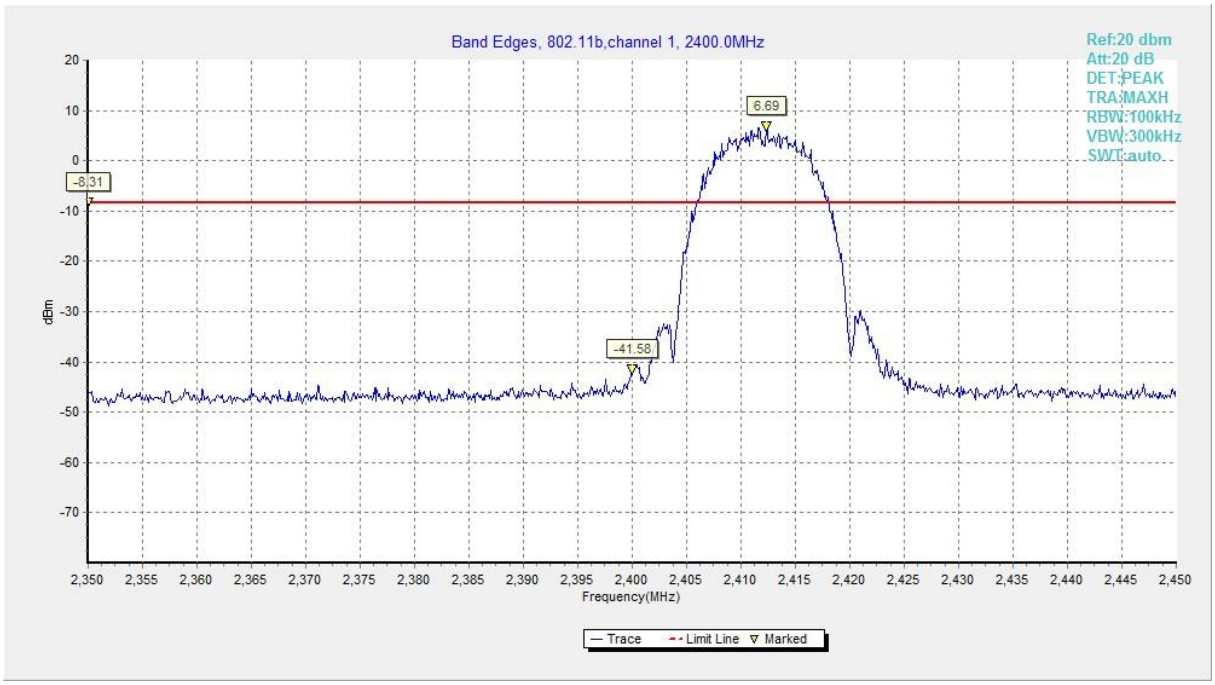

Fig.A.5.1 Band Edges (802.11b, Ch 1)

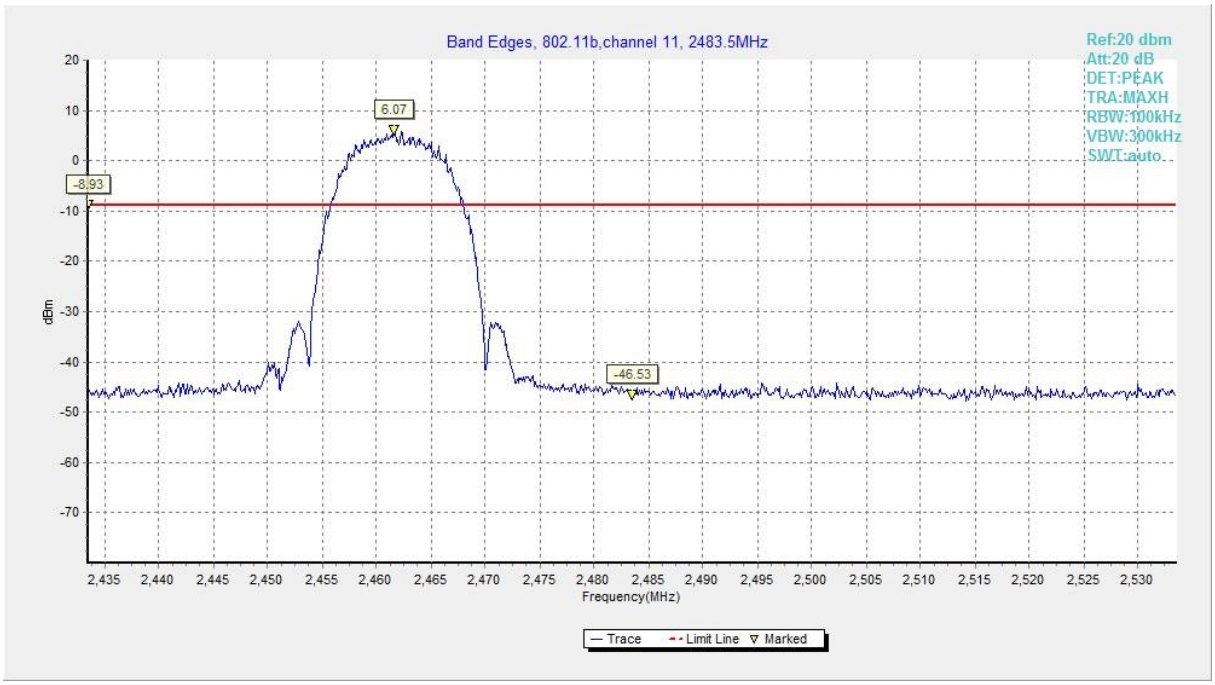

Fig.A.5.2 Band Edges (802.11b, Ch 11)

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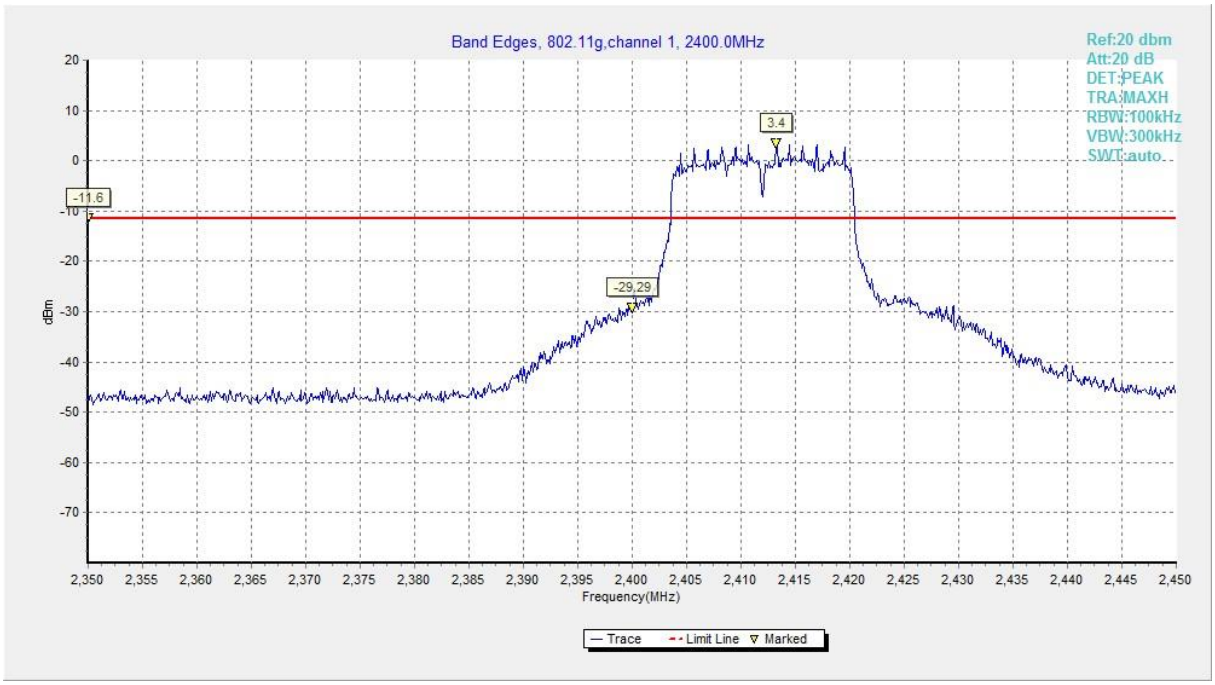

Fig.A.5.3 Band Edges (802.11g, Ch 1)

Fig.A.5.4 Band Edges (802.11g, Ch 11)

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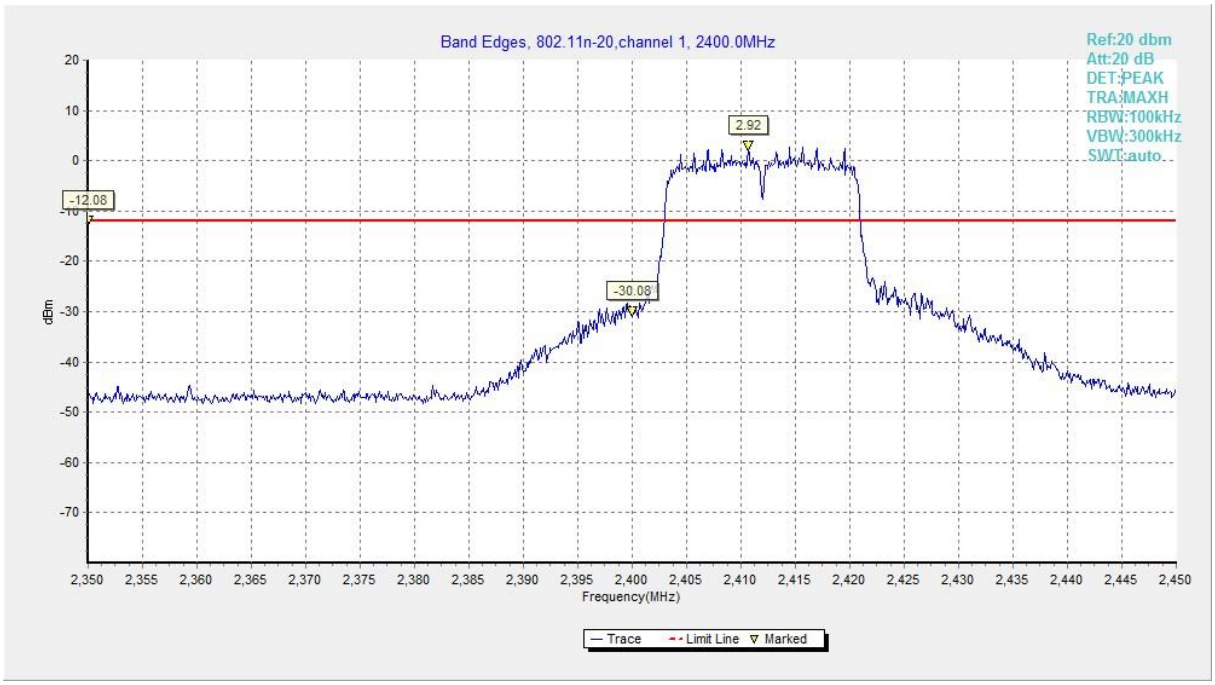

Fig.A.5.5 Band Edges (802.11n-HT20, Ch 1)

Fig.A.5.6 Band Edges (802.11n-HT20, Ch 11)

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A.6. Transmitter Spurious Emission

A.6.1 Transmitter Spurious Emission – Conducted

Method of Measurement: See ANSI C63.10-2013-clause 11.11

Establish a reference level by using the following procedure:

a) Set instrument center frequency to DTS channel center frequency
b) Set the span to ≥ 1.5 times the DTS bandwidth
c) Set the RBW= 100 kHz
d) Set the VBW= 300 kHz
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 PSD level

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz.
c) Set the VBW = 300 kHz.
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

EUT ID: EUT07

Measurement Results:

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802.11b mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412 GHz	Fig.A.6.1.1	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.2	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.3	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.4	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.5	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.6	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.7	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.8	**P**
	6	2.437 GHz	Fig.A.6.1.9	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.10	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.11	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.12	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.13	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.14	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.15	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.16	**P**
	11	2.462 GHz	Fig.A.6.1.17	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.18	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.19	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.20	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.21	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.22	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.23	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.24	**P**

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802.11g mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.412 GHz	Fig.A.6.1.25	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.26	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.27	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.28	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.29	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.30	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.31	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.32	**P**
	6	2.437 GHz	Fig.A.6.1.33	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.34	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.35	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.36	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.37	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.38	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.39	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.40	**P**
	11	2.462 GHz	Fig.A.6.1.41	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.42	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.43	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.44	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.45	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.46	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.47	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.48	**P**

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802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.412 GHz	Fig.A.6.1.49	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.50	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.51	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.52	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.53	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.54	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.55	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.56	**P**
	6	2.437 GHz	Fig.A.6.1.57	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.58	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.59	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.60	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.61	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.62	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.63	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.64	**P**
	11	2.462 GHz	Fig.A.6.1.65	**P**
		30 MHz ~ 1 GHz	Fig.A.6.1.66	**P**
		1 GHz ~ 2.5 GHz	Fig.A.6.1.67	**P**
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.68	**P**
		7.5 GHz ~ 10 GHz	Fig.A.6.1.69	**P**
		10 GHz ~ 15 GHz	Fig.A.6.1.70	**P**
		15 GHz ~ 20 GHz	Fig.A.6.1.71	**P**
		20 GHz ~ 26 GHz	Fig.A.6.1.72	**P**

Conclusion: Pass

Test graphs as below:

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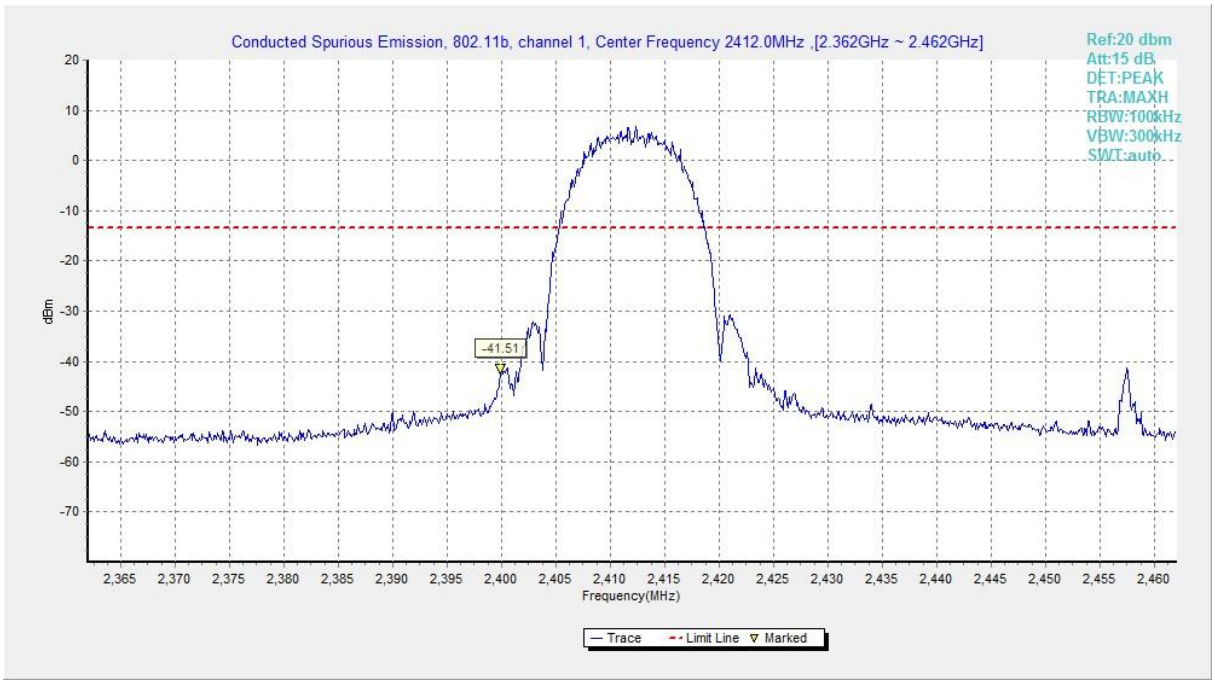

Fig.A.6.1.1 Transmitter Spurious Emission - Conducted (802.11b, Ch1, Center Frequency)

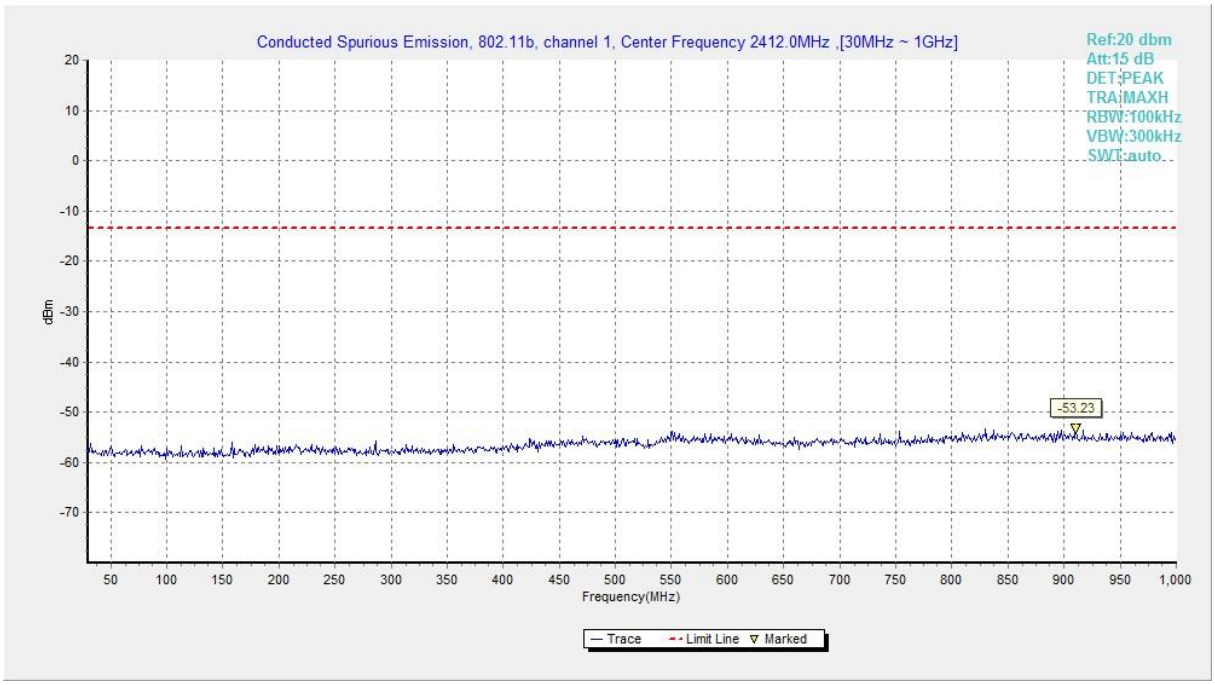

Fig.A.6.1.2 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 30 MHz-1 GHz)

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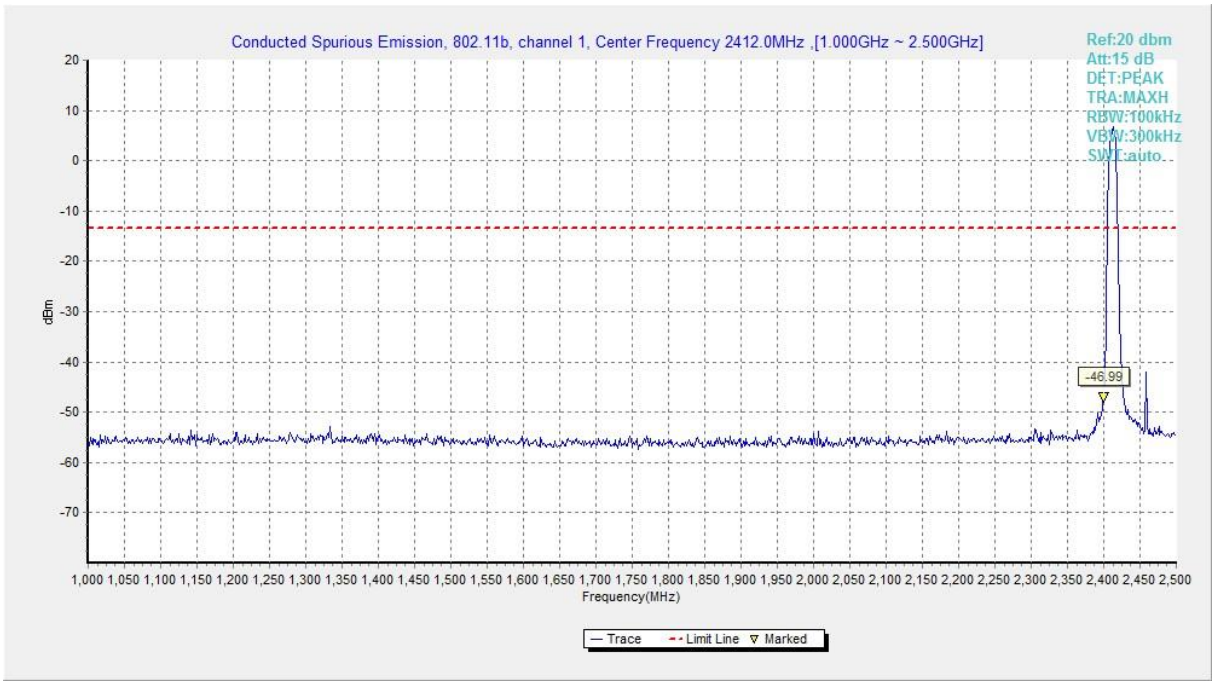

Fig.A.6.1.3 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 1 GHz-2.5 GHz)

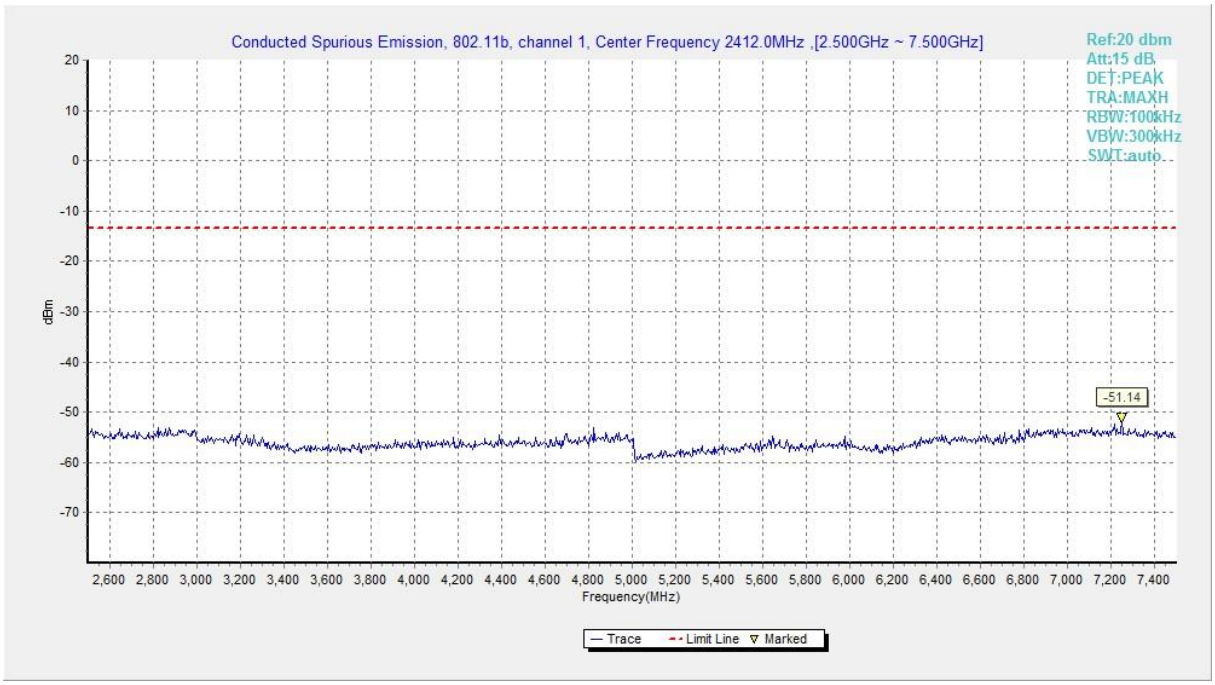

Fig.A.6.1.4 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 2.5 GHz-7.5 GHz)

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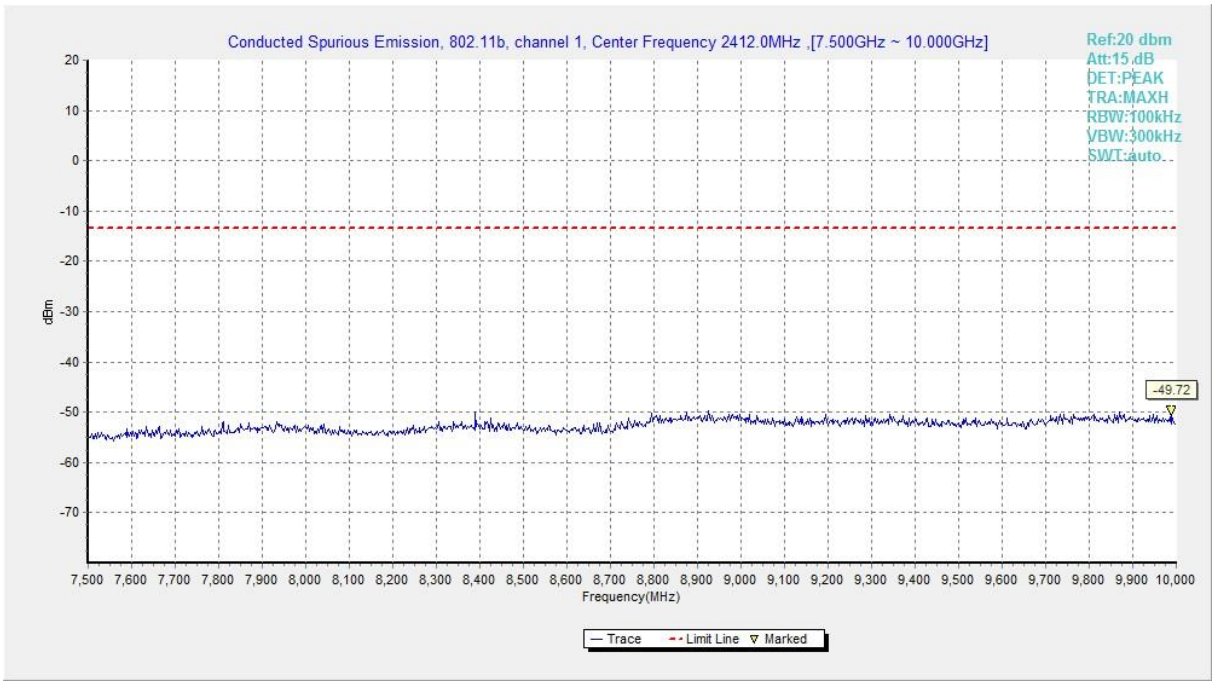

Fig.A.6.1.5 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 7.5 GHz-10 GHz)

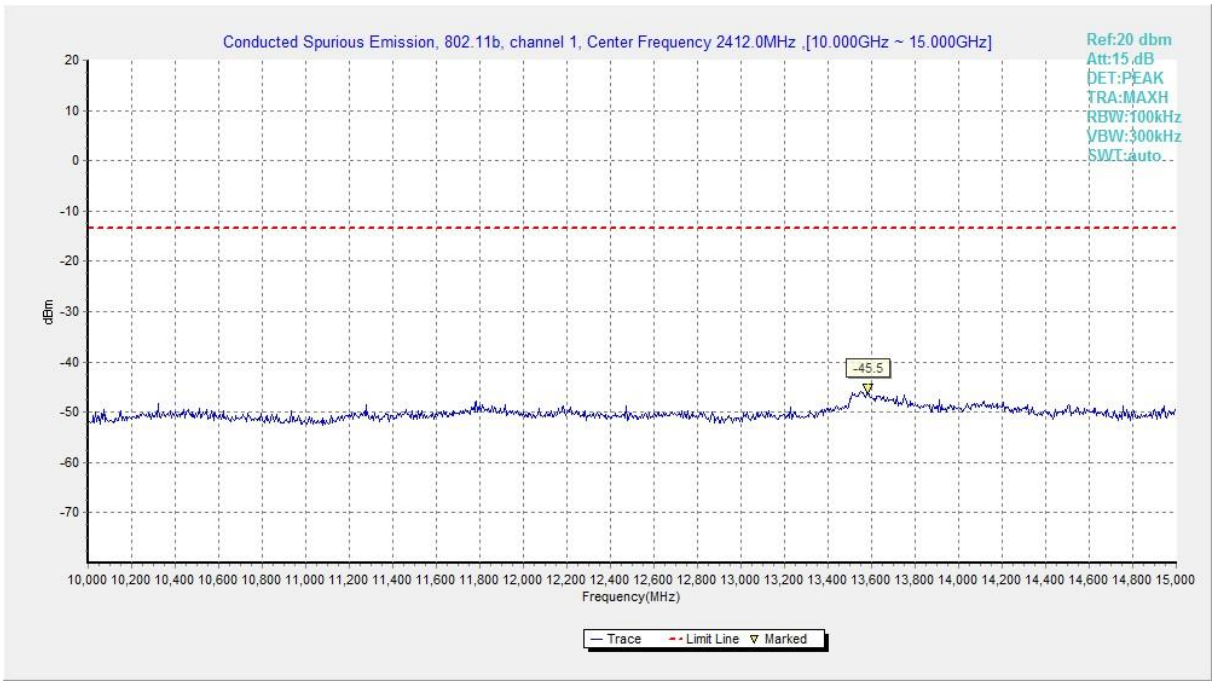

Fig.A.6.1.6 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 10 GHz-15 GHz)

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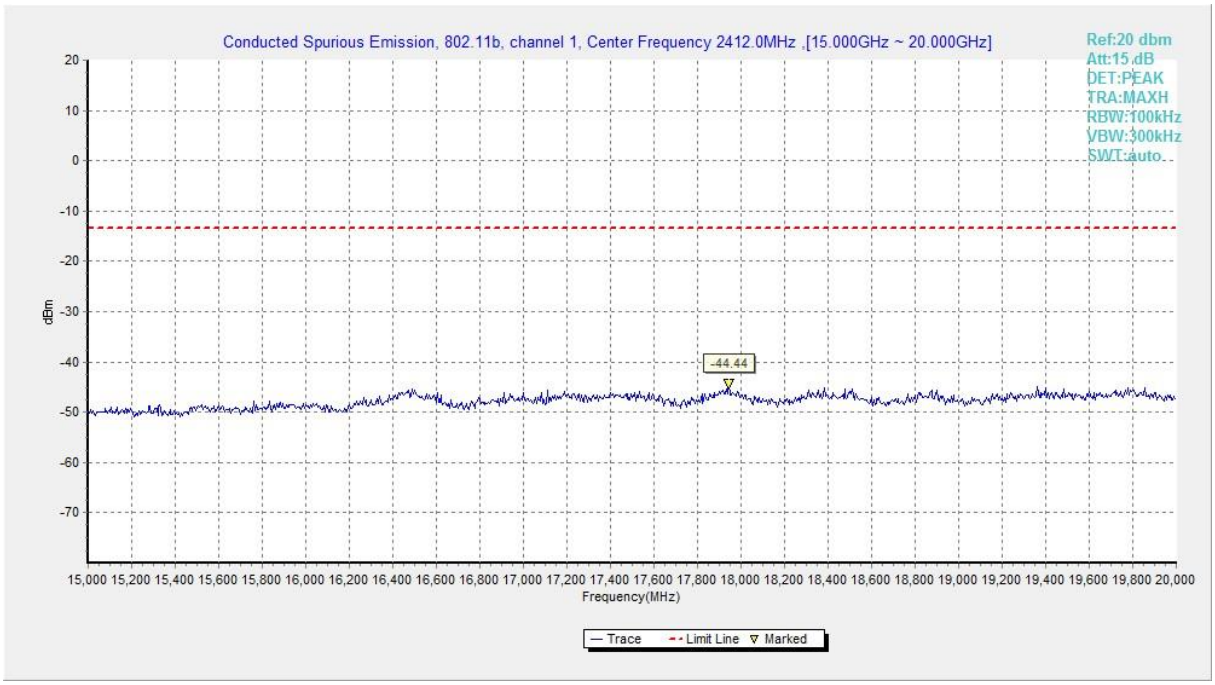

Fig.A.6.1.7 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 15 GHz-20 GHz)

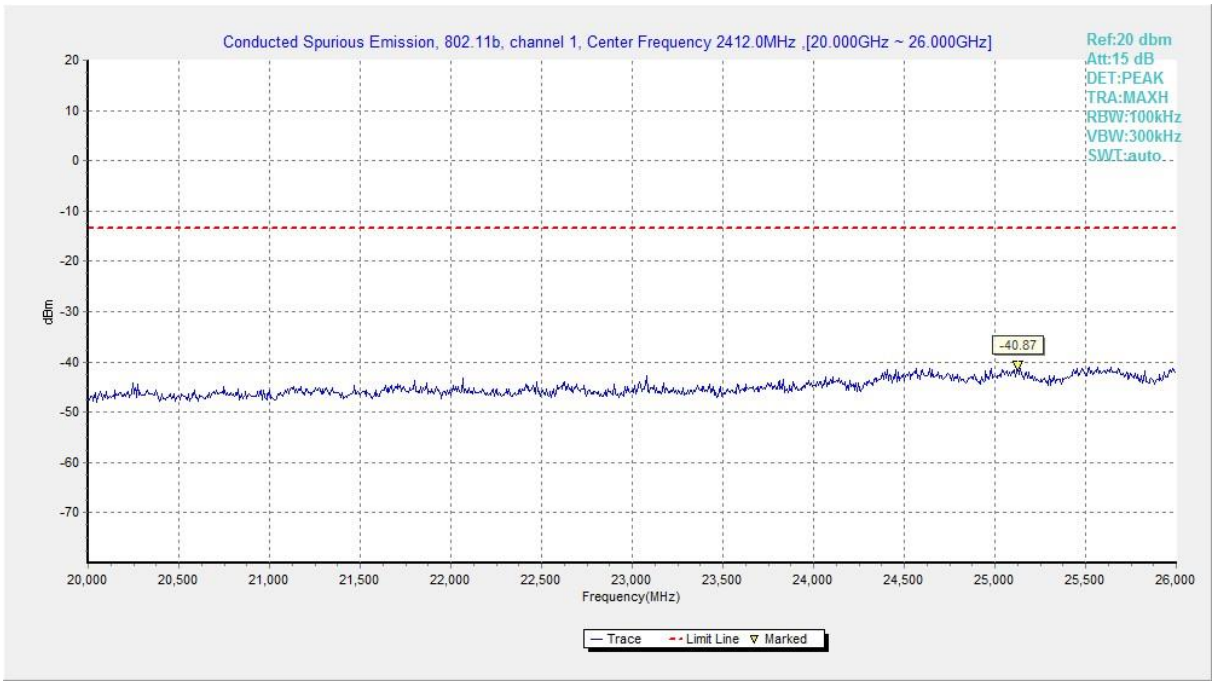

Fig.A.6.1.8 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 20 GHz-26 GHz)

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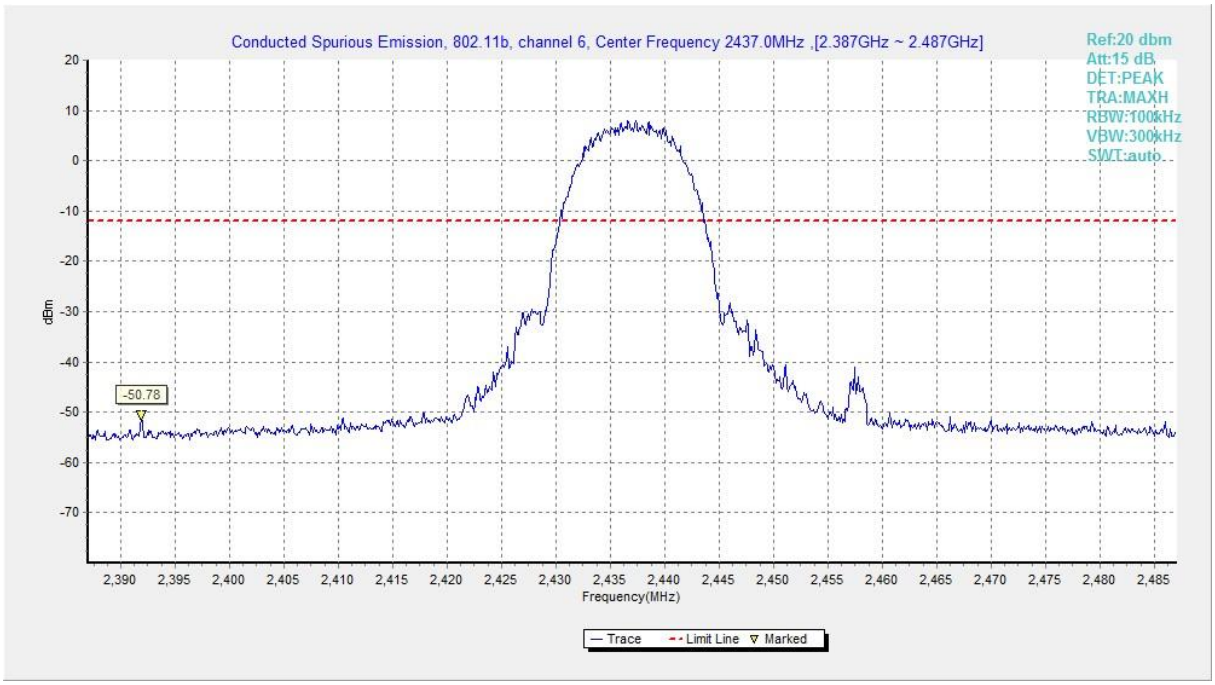

Fig.A.6.1.9 Transmitter Spurious Emission - Conducted (802.11b, Ch6, Center Frequency)

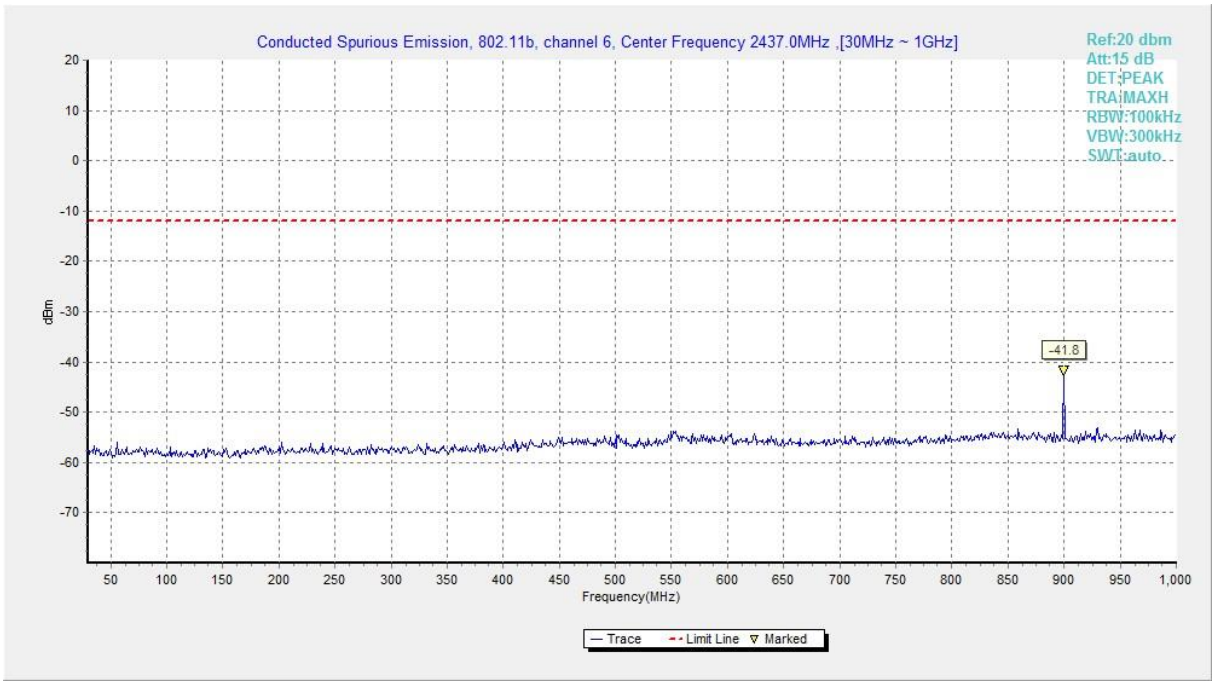

Fig.A.6.1.10 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 30 MHz-1 GHz)

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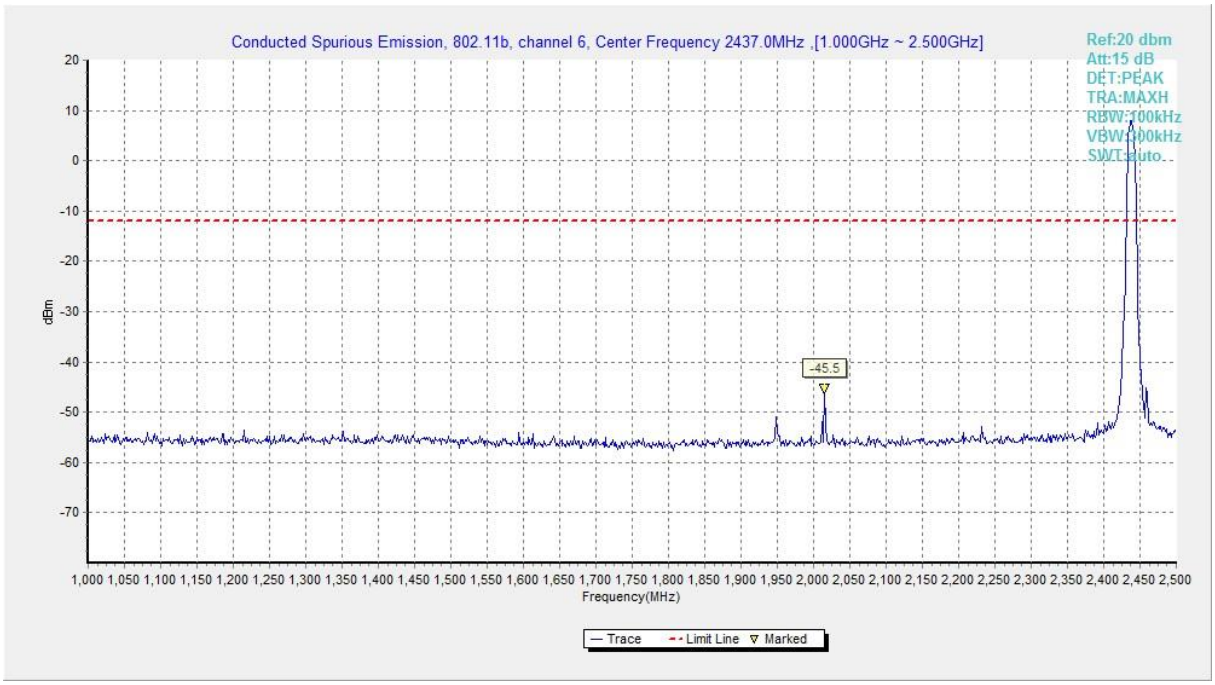

Fig.A.6.1.11 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 1 GHz-2.5 GHz)

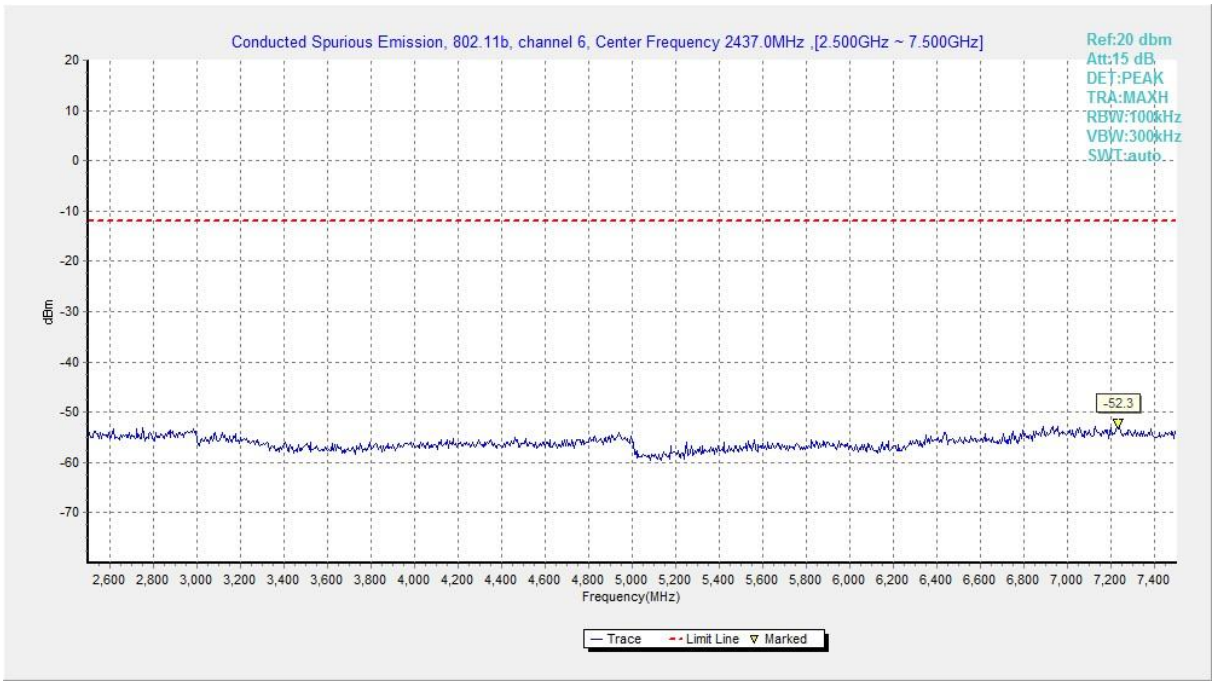

Fig.A.6.1.12 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 2.5 GHz-7.5 GHz)

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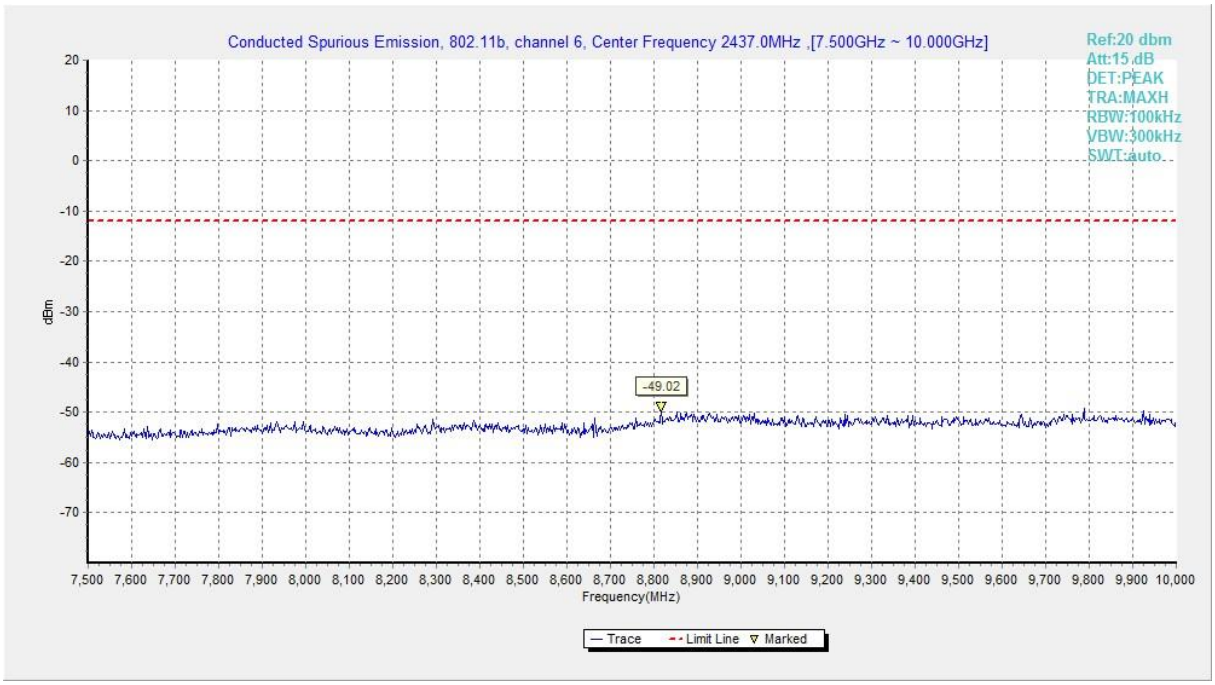

Fig.A.6.1.13 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 7.5 GHz-10 GHz)

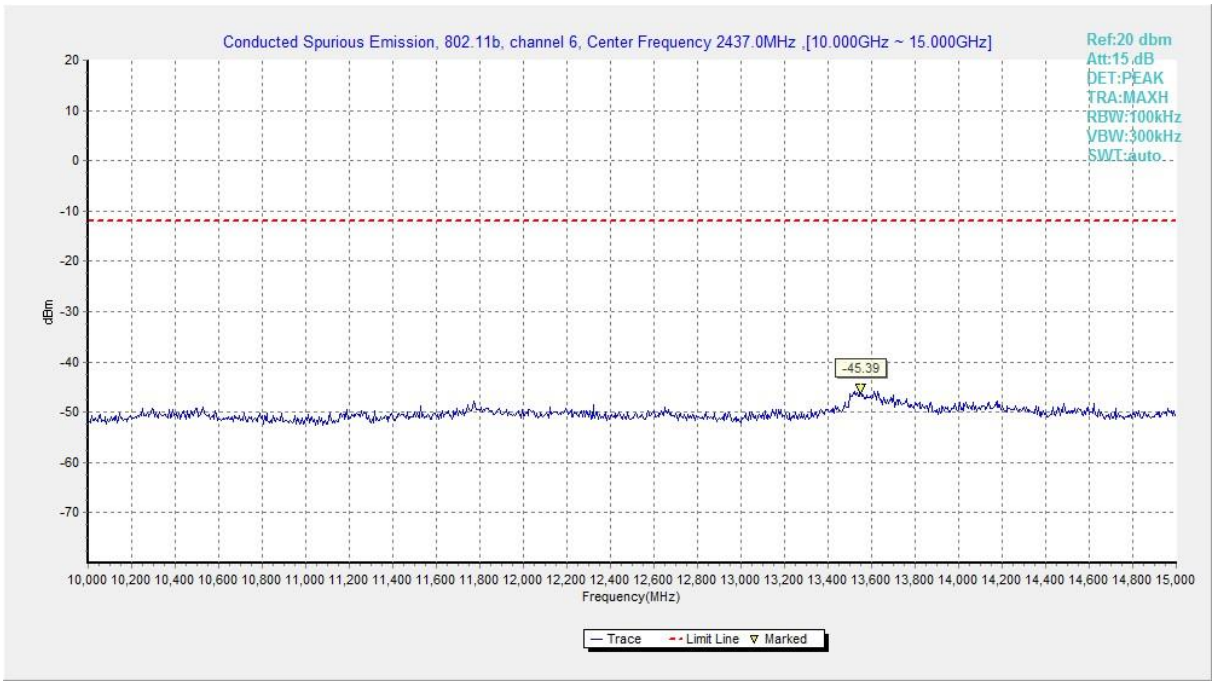

Fig.A.6.1.14 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 10 GHz-15 GHz)

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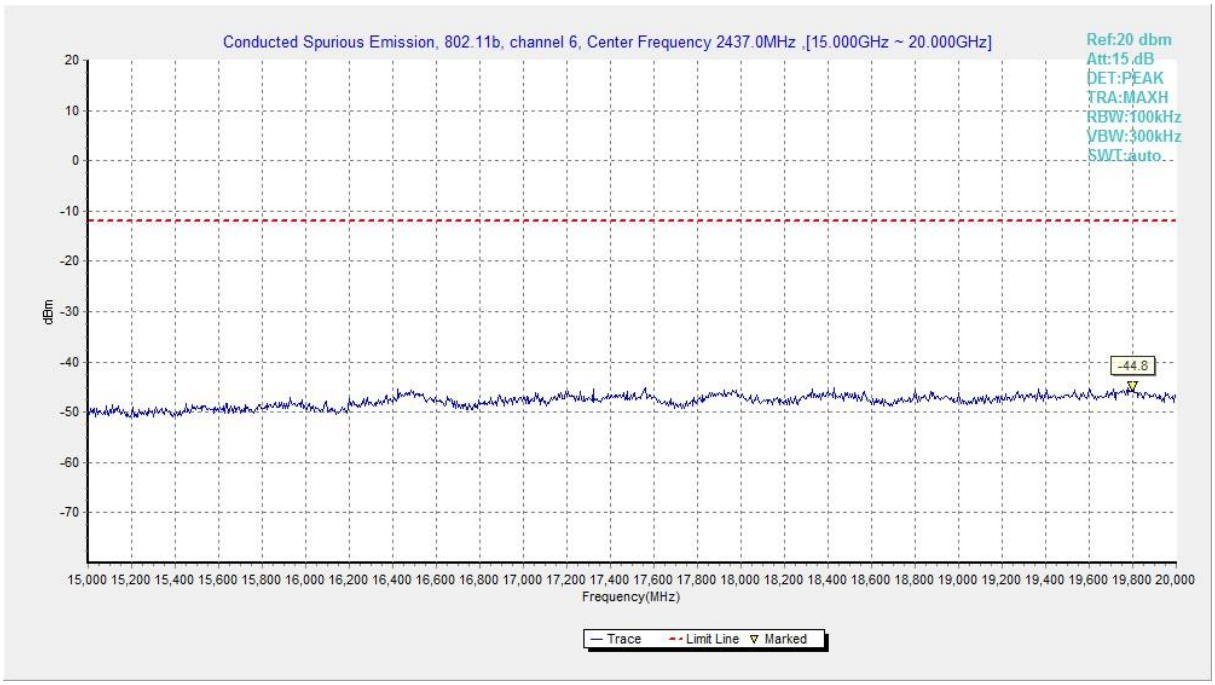

Fig.A.6.1.15 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 15 GHz-20 GHz)

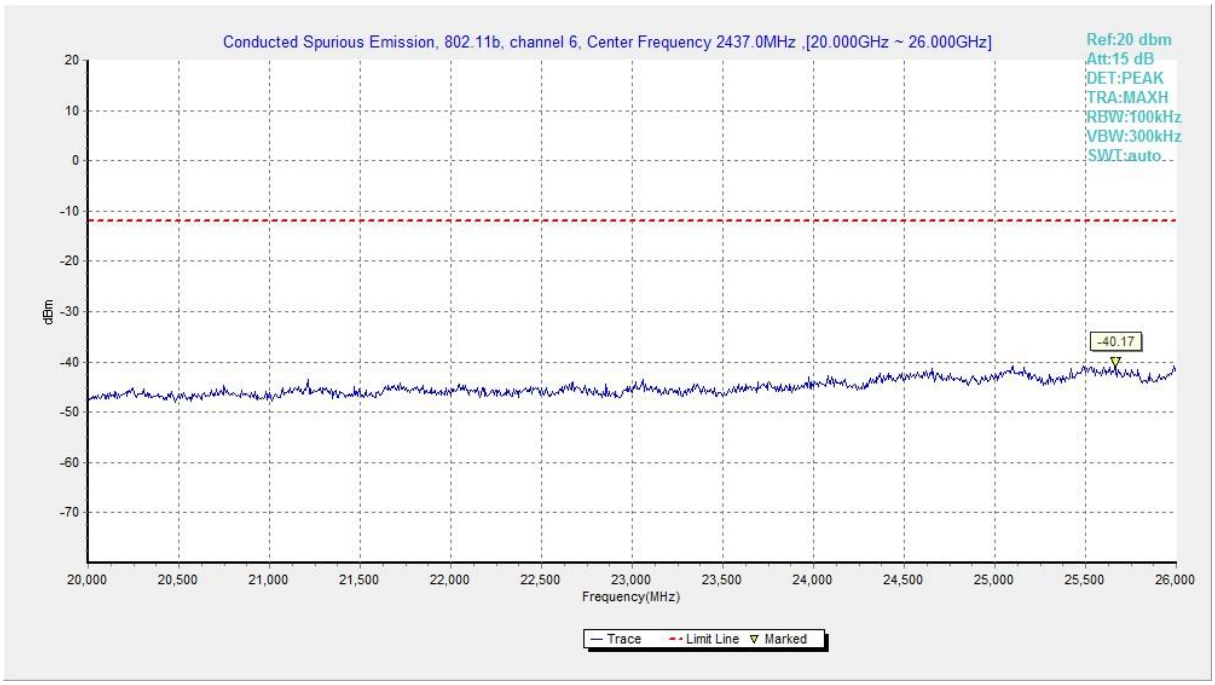

Fig.A.6.1.16 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 20 GHz-26 GHz)

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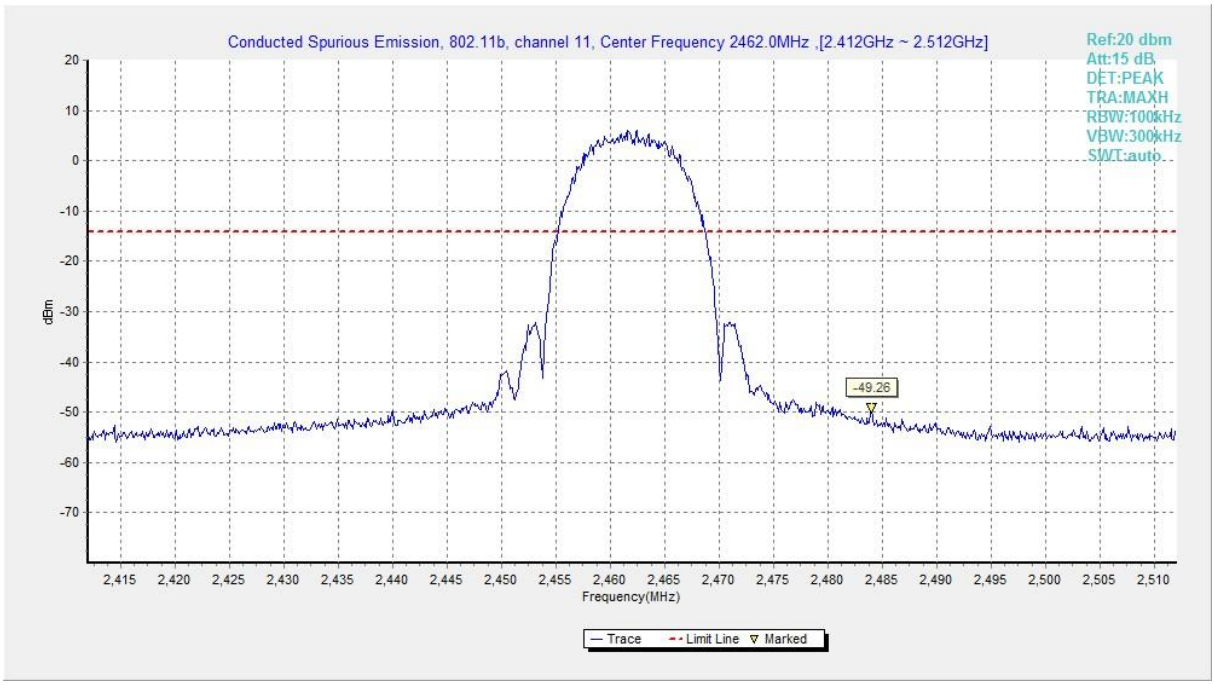

Fig.A.6.1.17 Transmitter Spurious Emission - Conducted (802.11b, Ch11, Center Frequency)

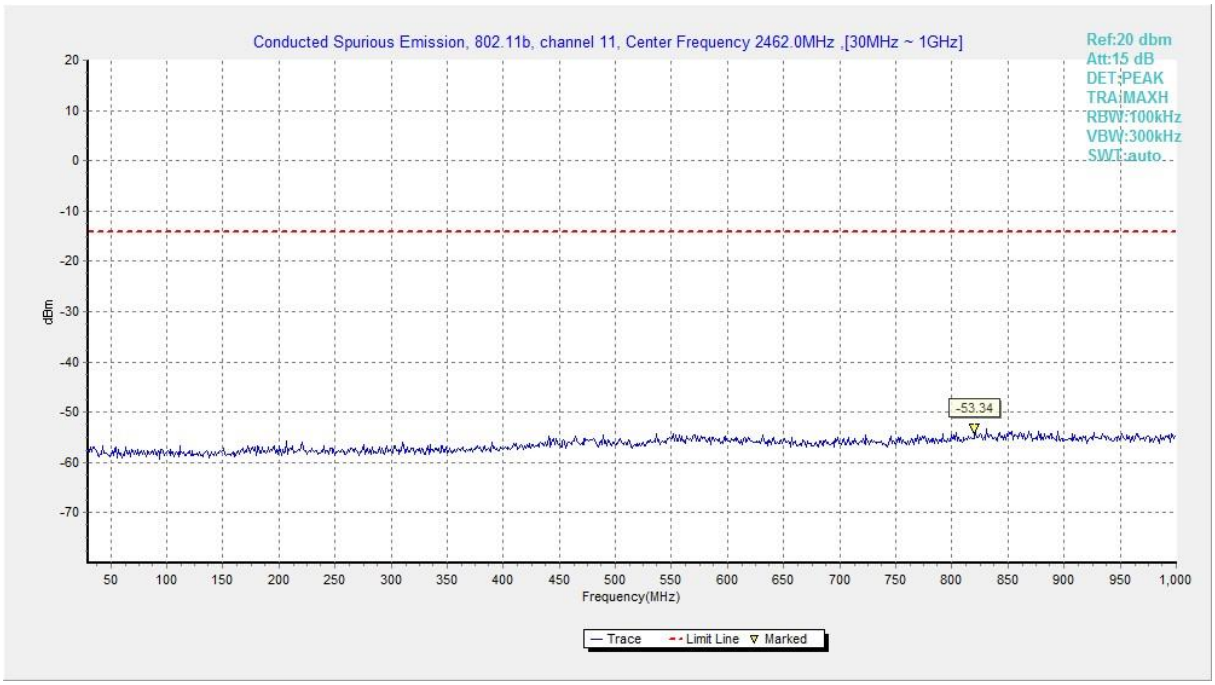

Fig.A.6.1.18 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 30 MHz-1 GHz)

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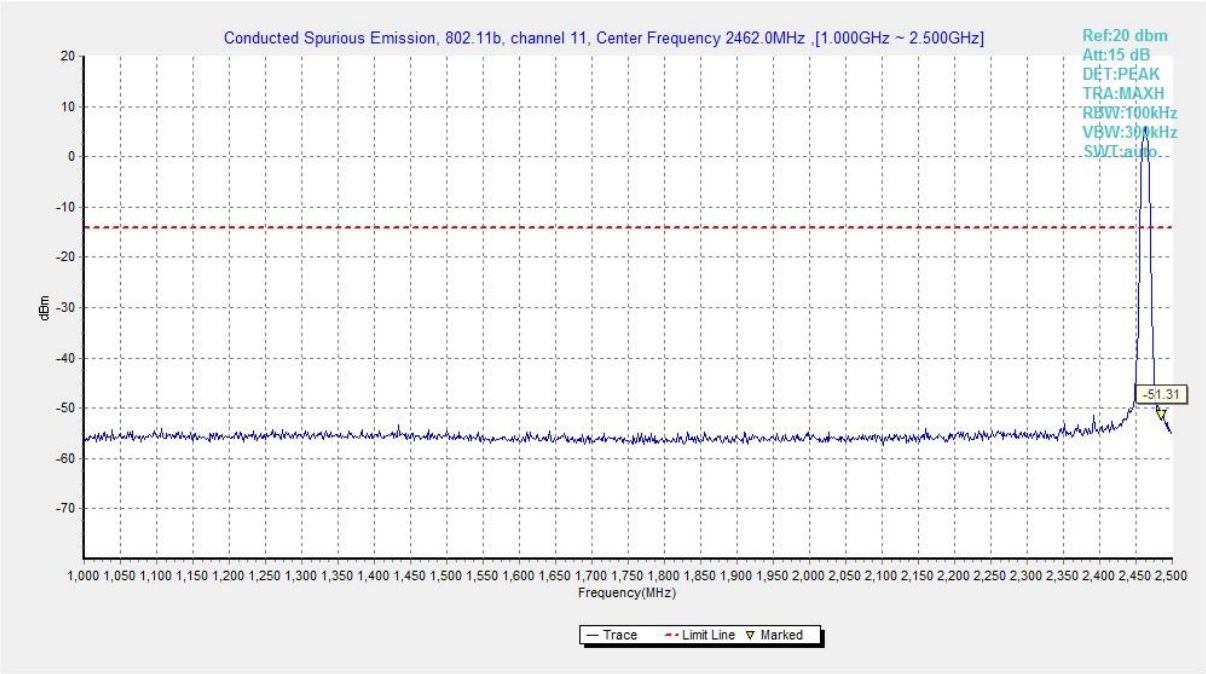

Fig.A.6.1.19 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 1 GHz-2.5 GHz)

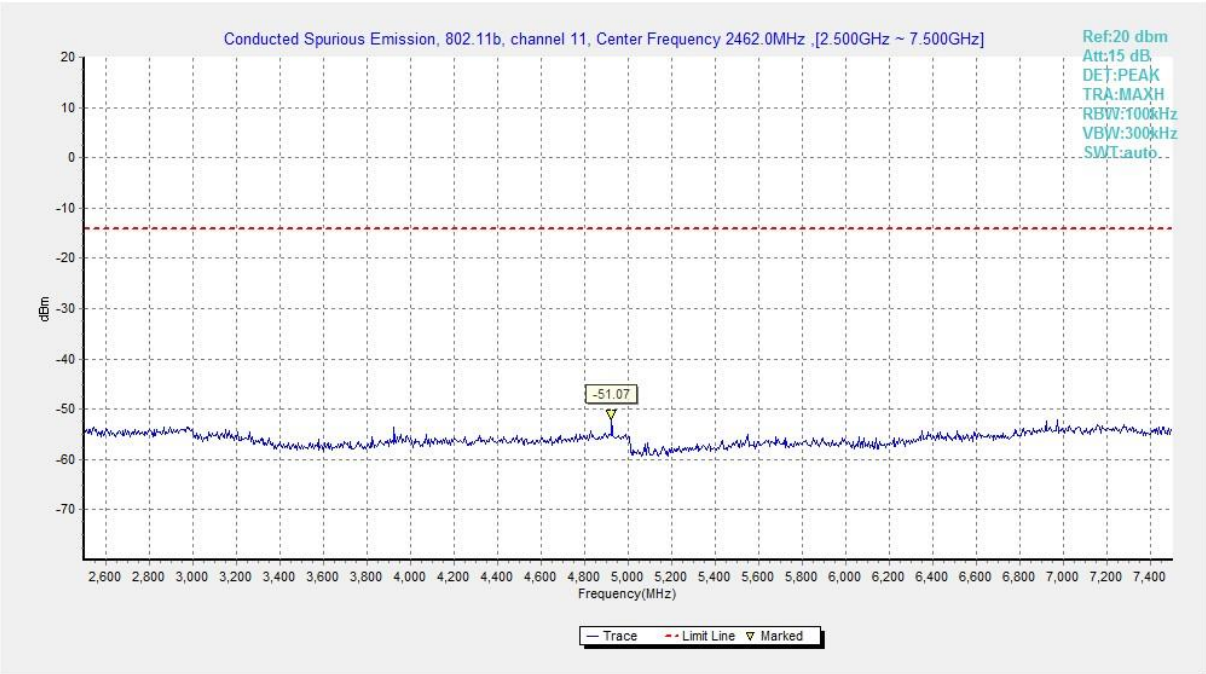

Fig.A.6.1.20 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 2.5 GHz-7.5 GHz)

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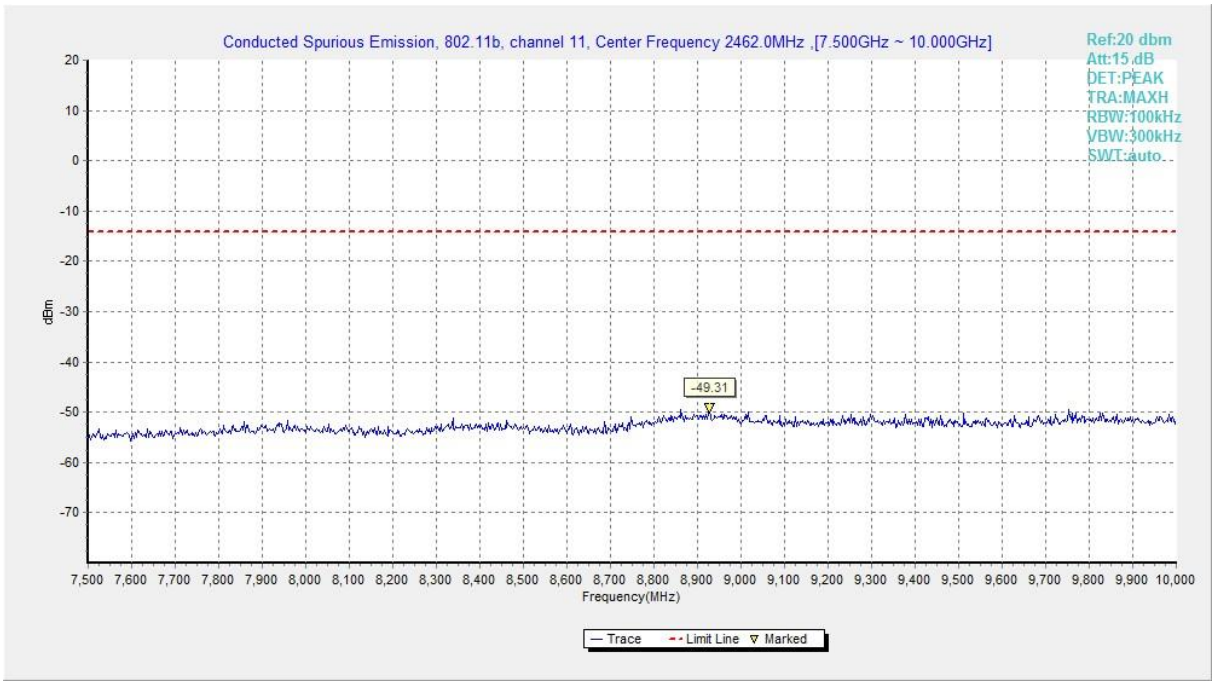

Fig.A.6.1.21 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 7.5 GHz-10 GHz)

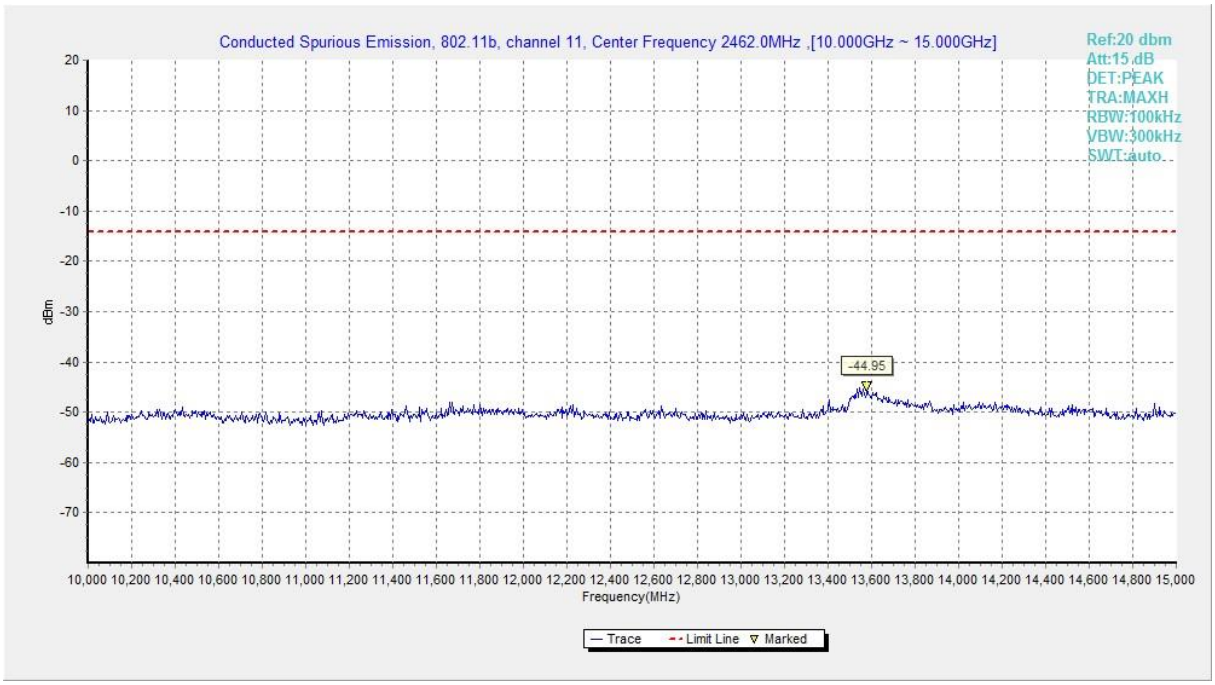

Fig.A.6.1.22 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 10 GHz-15 GHz)

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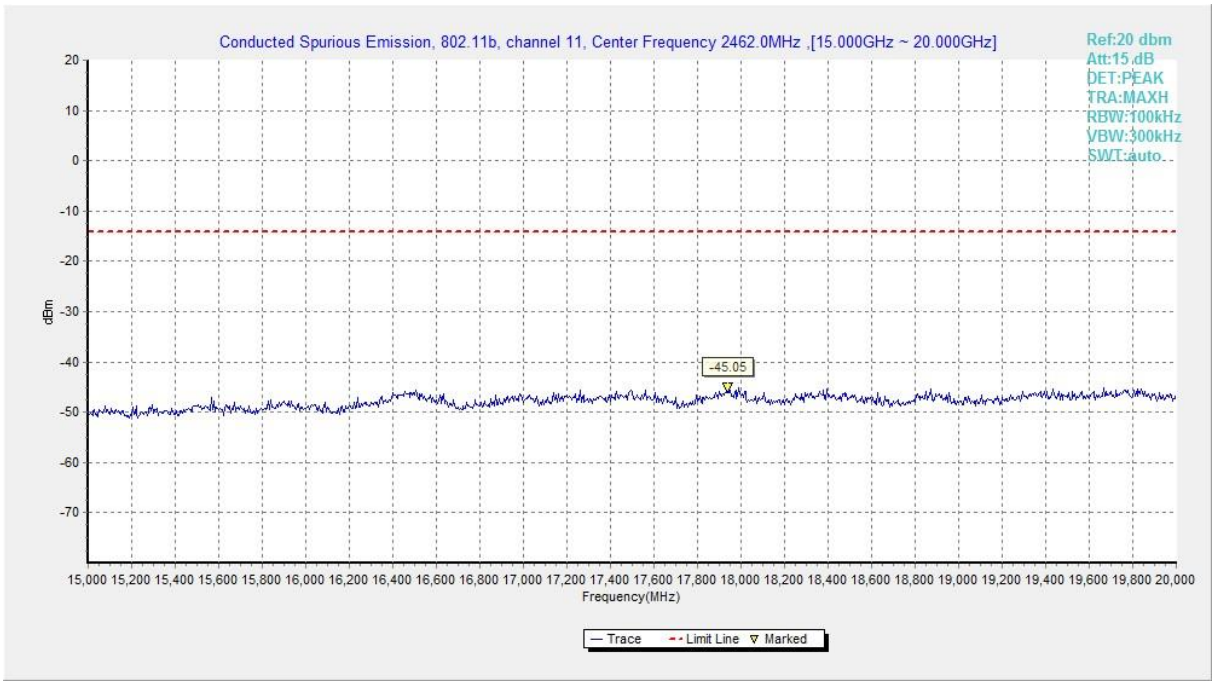

Fig.A.6.1.23 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 15 GHz-20 GHz)

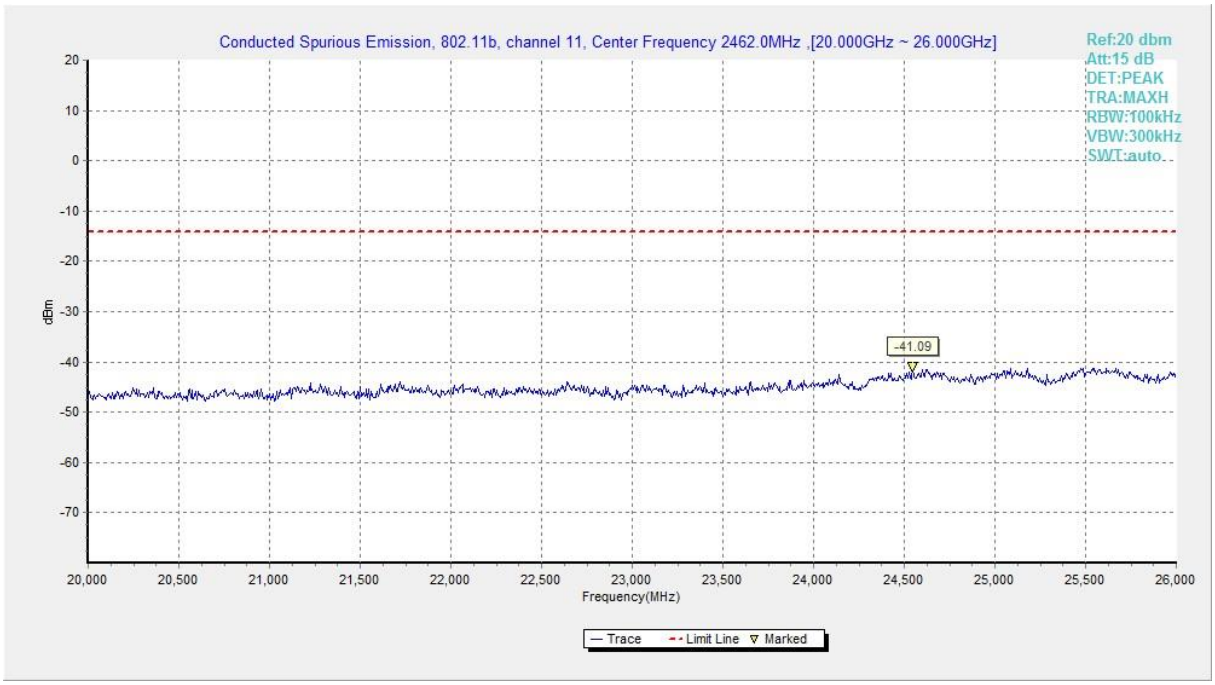

Fig.A.6.1.24 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 20 GHz-26 GHz)

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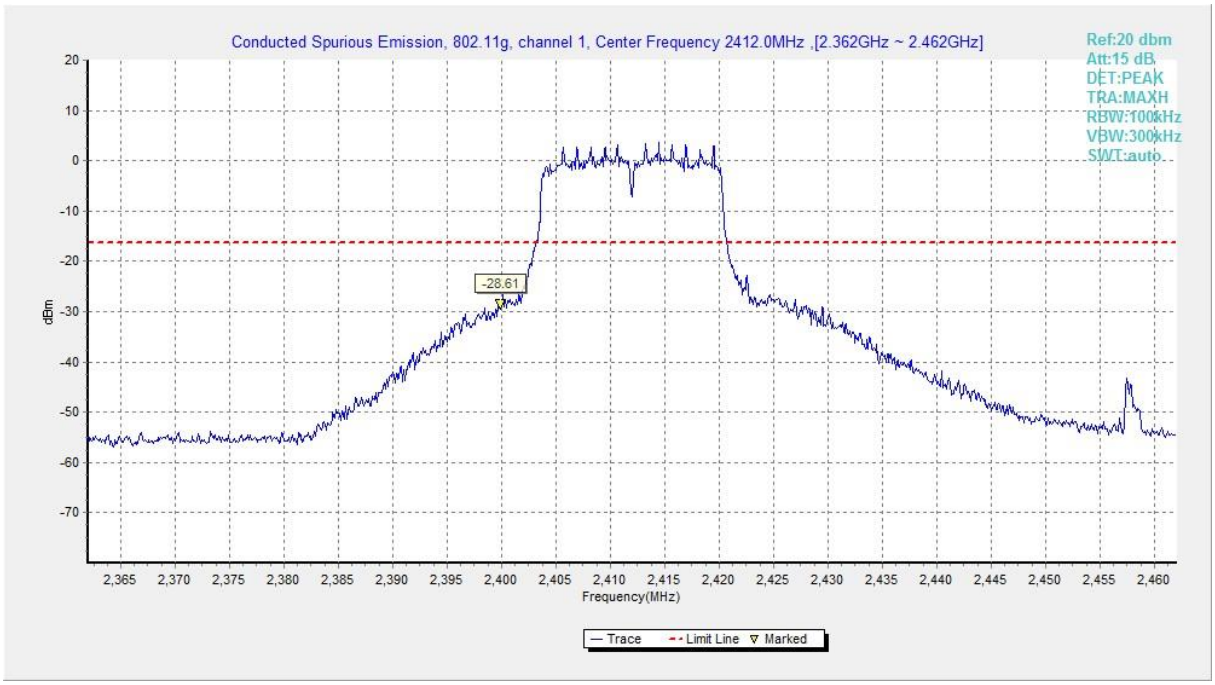

Fig.A.6.1.25 Transmitter Spurious Emission - Conducted (802.11g, Ch1, Center Frequency)

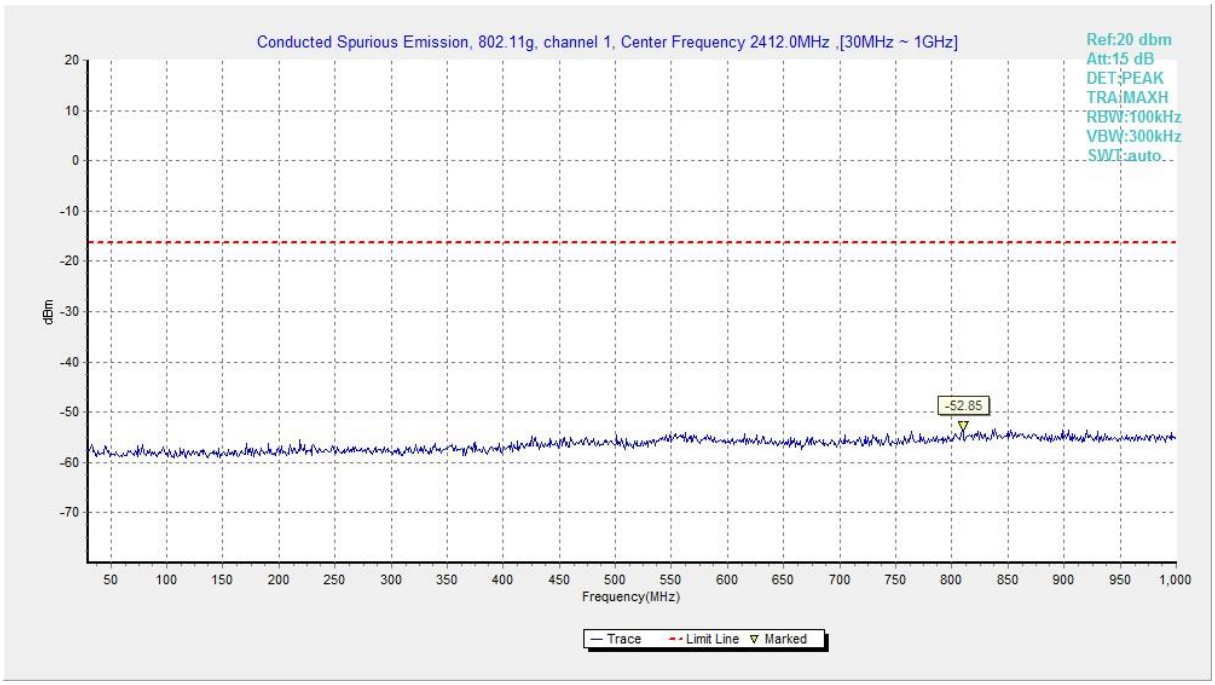

Fig.A.6.1.26 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 30 MHz-1 GHz)

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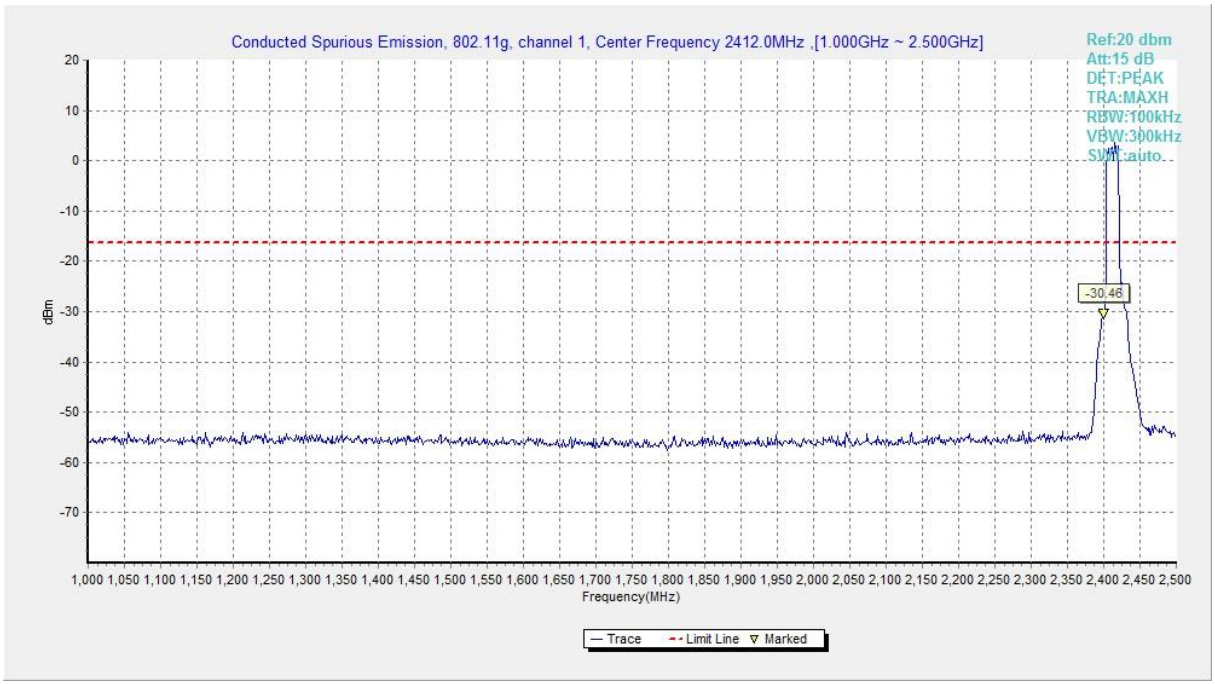

Fig.A.6.1.27 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 1 GHz-2.5 GHz)

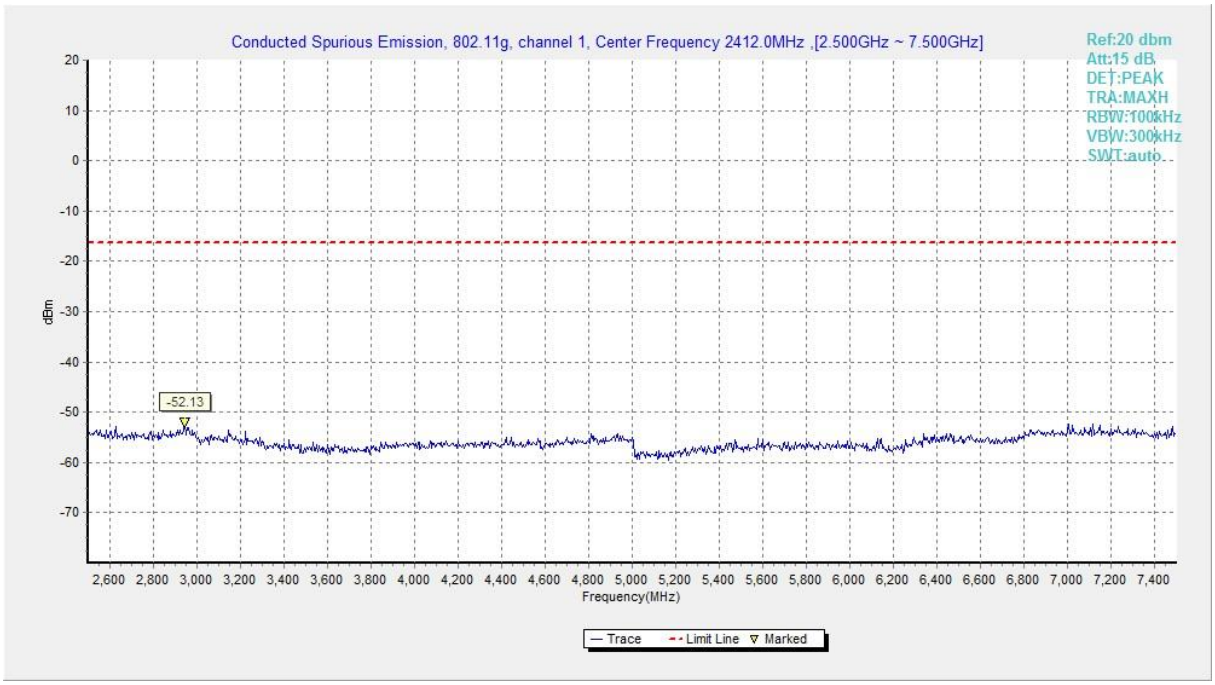

Fig.A.6.1.28 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 2.5 GHz-7.5 GHz)

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