



TEST REPORT

REPORT NUMBER: B16X50266-WLAN-Rev1

ON

Type of Equipment: Tablet

Model Name: Ilium Pad L8X

Manufacturer: Corporativo Lanix S.A.de C.V.

ACCORDING TO

FCC Part 15, Subpart C, 2015:

15.205 Restricted bands of operation,

15.209 Radiated emission limits; general requirements,

15.247 Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz

ANSI C63.10-2013:American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

China Telecommunication Technology Labs.

Month date, year

Aug, 5, 2016

Signature

He Guili

Director

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 China Telecommunication Technology Labs.

Report No.: B16X50266-WLAN-Rev1

FCC ID: ZC4L8X
Report Date: 2016-08-05

Test Firm Name: China Telecommunication Technology Labs
FCC Registration Number: 840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC Parts 15, subpart C. The sample tested was found to comply with the requirements defined in the applied rules.

CONTENTS

1 GENERAL INFORMATION	4
1.1 NOTES	4
1.2 TESTERS	5
1.3 TESTING LABORATORY INFORMATION.....	6
1.4 DETAILS OF APPLICANT OR MANUFACTURER.....	7
2 TEST ITEM.....	8
2.1 GENERAL INFORMATION	8
2.2 OUTLINE OF EQUIPMENT UNDER TEST.....	8
2.3 MODIFICATIONS INCORPORATED IN EUT	8
2.4 EQUIPMENT CONFIGURATION	8
2.5 OTHER INFORMATION.....	8
3 SUMMARY OF TEST RESULTS	9
4 TEST EQUIPMENTS AND ANCILLARIES USED FOR TESTS	10
5 TEST RESULTS	11
5.1 MAXIMUM PEAK OUTPUT POWER	11
5.2 PEAK POWER SPECTRAL DENSITY	55
5.3 6DB OCCUPIED BANDWIDTH.....	63
5.4 BAND EDGES COMPLIANCE.....	71
5.5 TRANSMITTER SPURIOUS EMISSION-CONDUCTED.....	77
5.6 TRANSMITTER SPURIOUS EMISSION-RADIATED	91
5.7 POWER LINE CONDUCTED EMISSIONS.....	98
ANNEX A EUT PHOTOS	101
ANNEX B DEVIATIONS FROM PRESCRIBED TEST METHODS	102

1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC Parts 15, subpart C and ANSI C63.10-2013 and FCC DA 00-705.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

China Telecommunication Technology Labs.(CTTL) authorizes the applicant or manufacturer (see section 1.4) to reproduce this report provided, and the test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of director of CTTL Mr. He Guili.

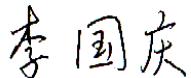
Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. CTTL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Report No.: B16X50266-WLAN-Rev1

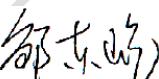
1.2 Testers

Name: Li Guoqing
Position: Engineer
Department: Department of RF test
Date: 2016-06-28 to 2016-08-05
Signature: 

Editor of this test report:

Name: Li Guoqing
Position: Engineer
Department: Department of RF test
Date: 2016-08-05
Signature: 

Technical responsibility for area of testing:

Name: Zou Dongyi
Position: Manager
Department: Director of the laboratory
Date: 2016-08-05
Signature: 

1.3 Testing Laboratory information

1.3.1 Location

Name: China Telecommunication Technology Labs.
Address: No. 11, Yue Tan Nan Jie, Xi Cheng District
BEIJING
P. R. CHINA, 100083
Tel: +86 10 68094053
Fax: +86 10 68011404
Email: emc@chinattl.com

1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity Assessment (CNAS)
Registration number: CNAS Registration No. CNAS L0570
Standard: ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

Name: -----
Street: -----
City: -----
Country: -----
Telephone: -----
Fax: -----
Postcode: -----

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: Corporativo Lanix S.A.de C.V.
Address: Carretera Internacional Hermosillo - Nogales Km 8.5
Hermosillo, Sonora, México
Country: México
Telephone: 0052 16621090811
Fax: --
Contact: Oscar Guzman
Email: oguzman@lanix.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: Corporativo Lanix S.A.de C.V.
Address: Carretera Internacional Hermosillo - Nogales Km 8.5
Hermosillo, Sonora, México
Country: México
Telephone: 0052 16621090811
Fax: --
Contact: Oscar Guzman
Email: oguzman@lanix.com

2 Test Item

2.1 General Information

Manufacturer: Corporativo Lanix S.A.de C.V.
 Type of Equipment: Tablet
 Model Name: Ilium Pad L8X
 Serial Number: S5/9: 358067070000929
 S9/9: 358067070001059
 Production Status: Product
 Receipt date of test item: 2016-05-24

2.2 Outline of Equipment under Test

The Ilium Pad L8X, referred to as “EUT” hereafter, is a multi-band wireless modem operating on the GSM/UMTS networks, Bluetooth and WLAN. The table below shows the supported bands for the EUT.

Technology	Freq.(MHz)	Note
2.4G WLAN	2400 - 2483.5	--

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	Modem	Corporativo Lanix S.A.de C.V.	Ilium Pad L8X	S5/9: 358067070000929 S9/9: 358067070001059	None
B	Adaptor	None	None	--	None

2.5 Other Information

--

3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

FCC Rules	Name of Test	Result
15.247(b)	Maximum Peak Output Power	Pass
15.247(e)	Peak Power Spectral Density	Pass
15.247(a)	6dB Occupied Bandwidth	Pass
15.247(d)	Band Edges Compliance	Pass
15.247 (d)	Transmitter Spurious Emission-Conducted	Pass
15.247, 15.205, 15.209	Transmitter Spurious Emission-Radiated	Pass
ANSI C63.4 voltage mains test	Power line Conducted Emissions	Pass

4 Test Equipments and Ancillaries Used For Tests

The test equipments and ancillaries used are as follows.

No.	Equipment	Model	SN	Manufacture	Cal. Due Date
1	EMI Test Receiver	ESU26	100367	R&S	2017-03-04
2	Trilog super broadband test antenna	VULB 9163	9163-544	R&S	2017-01-05
3	Double-Ridged Horn Antenna	HF907	100356	R&S	2016-12-12
4	Fully-Anechoic Chamber	11.8m×6.5 m×6.3m	--	ETS	2017-08-19
5	Universal Radio Communication Tester	CMW500	128181	R&S	2017-03-04
6	Signal Generator	SMU200A	104517	R&S	2017-03-04
7	spectrum analyzer	FSQ 26	201137/026	R&S	2017-03-04
8	Climate chamber	SH-241	92010759	ESPEC	2017-03-04
9	DC Power Supply	N6705B	MY50000919	Agilent	2017-12-06

5 Test Results

5.1 Maximum Peak Output Power

Specifications:	FCC Part 15.247(b)
DUT Serial Number:	S5/9: 358067070000929
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

The maximum peak output power of the intentional radiator shall not exceed the following:

1. For systems using digital modulation in the bands of 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz: 1 watt.
2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Method:

The measurement is according to ANSI C63.10 clause 11.2

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW \geq OBW, Set the appropriate VBW
4. Detector : Peak.
5. Trace mode: Max Hold

Note: --

Report No.: B16X50266-WLAN-Rev1

Measurement Results:

802.11b/g mode

Mode	Data Rate(Mbps)	Teat Result(dBm)			Conclusion
		Ch1	Ch6	Ch11	
802.11b	1	22.14	22.35	21.18	Pass
	2	22.07	22.35	21.17	Pass
	5.5	21.93	22.51	20.98	Pass
	11	22.04	22.48	21.15	Pass
802.11g	6	21.32	21.58	20.61	Pass
	9	21.19	20.93	20.56	Pass
	12	21.02	21.01	20.38	Pass
	18	20.85	20.62	20.27	Pass
	24	21.32	21.07	20.57	Pass
	36	21.38	21.18	20.37	Pass
	48	21.23	20.82	20.66	Pass
	54	21.45	21.02	20.38	Pass

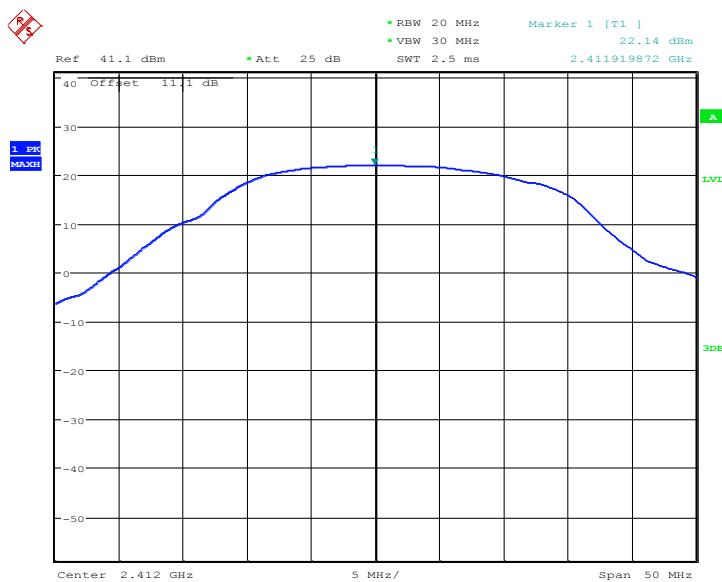
802.11n mode

Mode	Data Rate(Mbps)	Teat Result(dBm)			Conclusion
		Ch1	Ch6	Ch11	
802.11n (20MHz)	MCS0	21.49	21.13	20.66	Pass
	MCS1	21.36	21.03	20.68	Pass
	MCS2	21.25	21.07	20.63	Pass
	MCS3	21.32	21.09	20.54	Pass
	MCS4	21.30	21.05	20.66	Pass
	MCS5	21.07	20.99	20.35	Pass
	MCS6	21.11	21.09	20.82	Pass
	MCS7	21.19	20.80	20.45	Pass
802.11n (40MHz)	MCS0	21.52	20.60	20.34	Pass
	MCS1	21.23	20.47	20.40	Pass
	MCS2	21.16	20.38	20.32	Pass
	MCS3	21.14	20.51	20.39	Pass
	MCS4	21.50	20.80	20.37	Pass
	MCS5	21.50	20.78	20.37	Pass
	MCS6	21.18	19.51	20.37	Pass
	MCS7	21.06	19.50	20.54	Pass

Conclusion: PASS

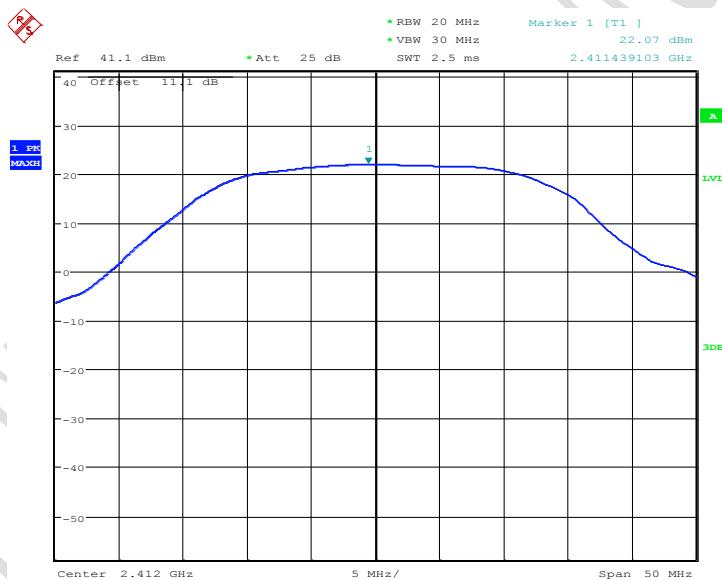
Report No.: B16X50266-WLAN-Rev1

Test figure as below:



Date: 11.JUL.2016 10:23:08

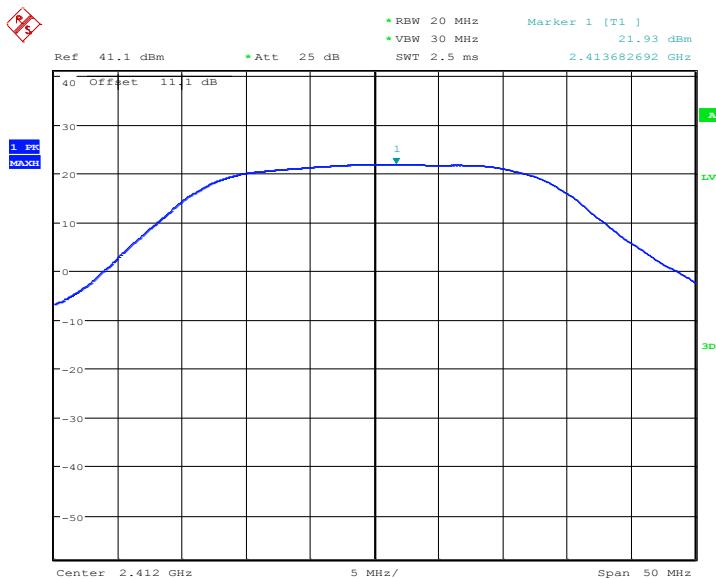
Fig.1 Peak Conducted Output Power CH1, 11b, Rate1



Date: 11.JUL.2016 10:23:45

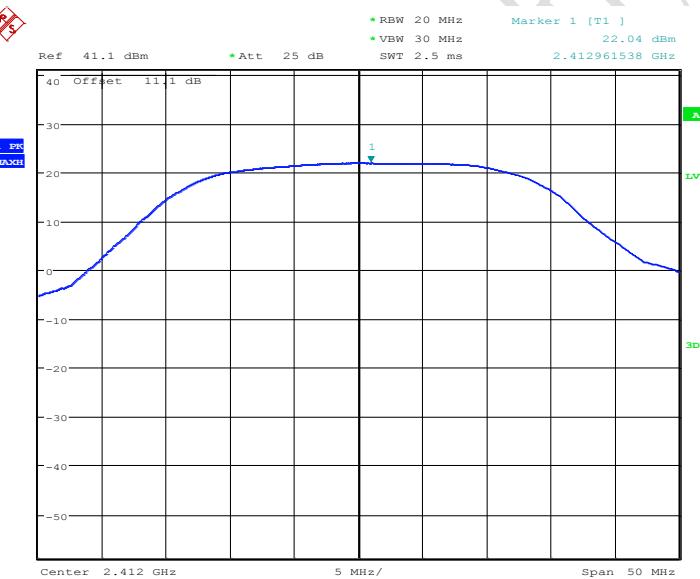
Fig.2 Peak Conducted Output Power CH1, 11b, Rate2

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:24:14

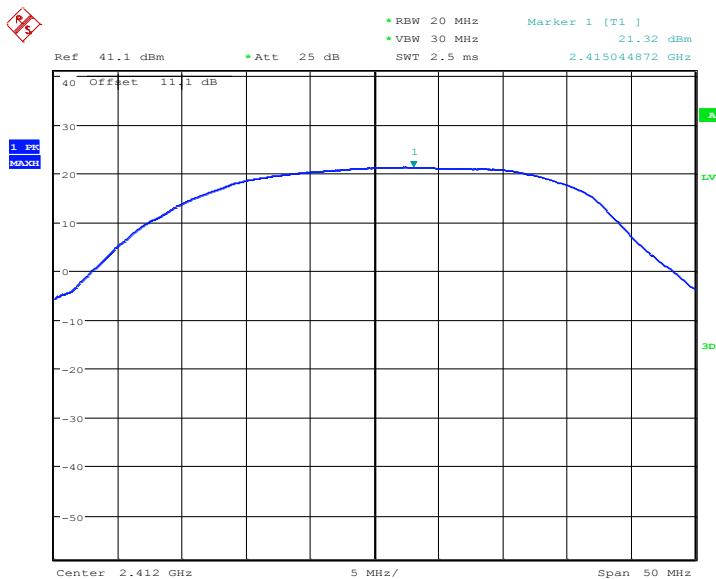
Fig.3 Peak Conducted Output Power CH1, 11b, Rate5.5



Date: 11.JUL.2016 10:24:47

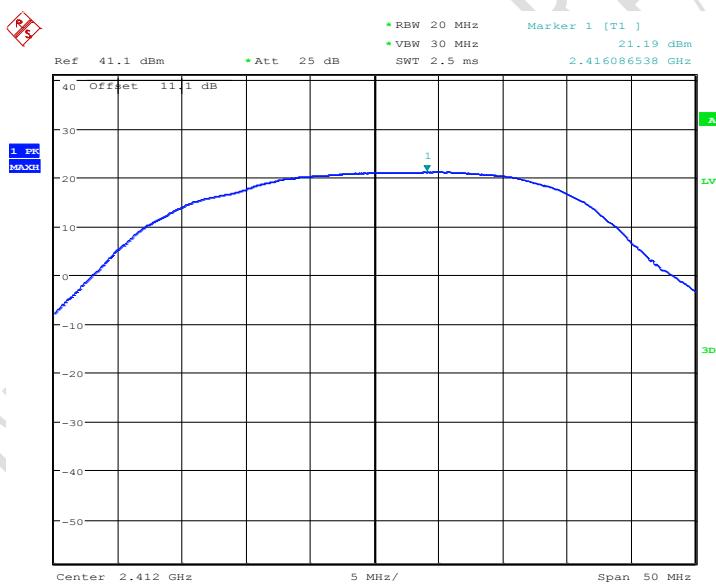
Fig.4 Peak Conducted Output Power CH1, 11b, Rate11

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:25:39

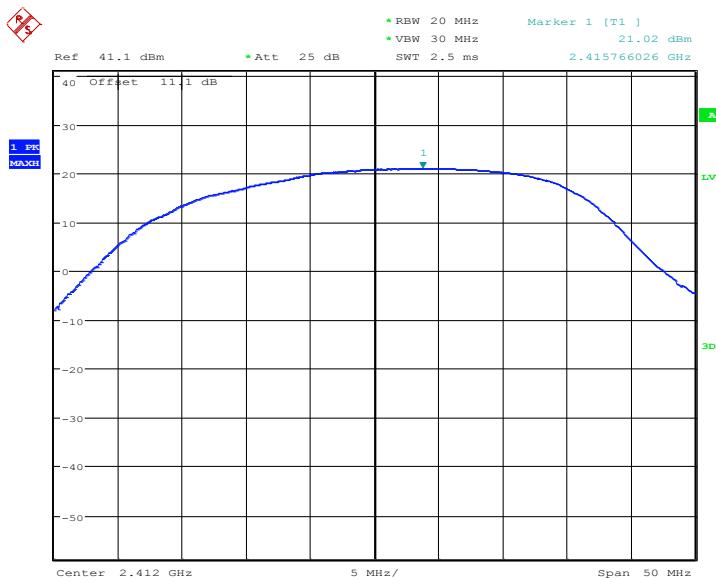
Fig.5 Peak Conducted Output Power CH1, 11g, Rate6



Date: 11.JUL.2016 10:26:08

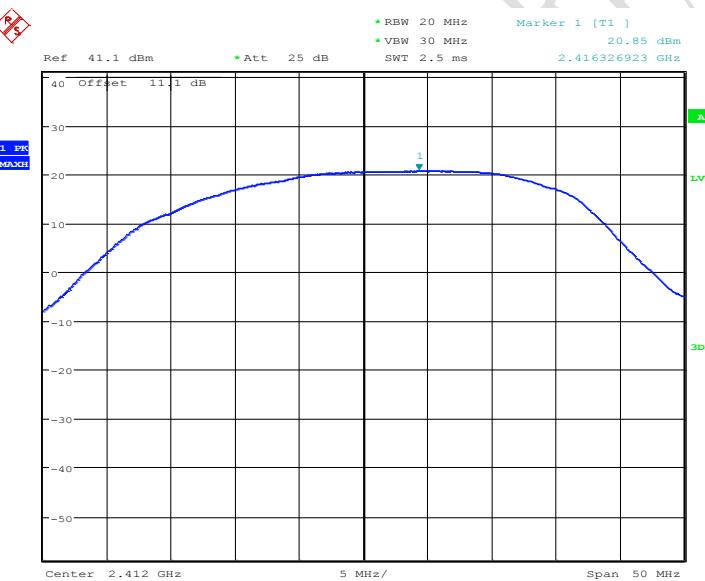
Fig.6 Peak Conducted Output Power CH1, 11g, Rate9

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:26:35

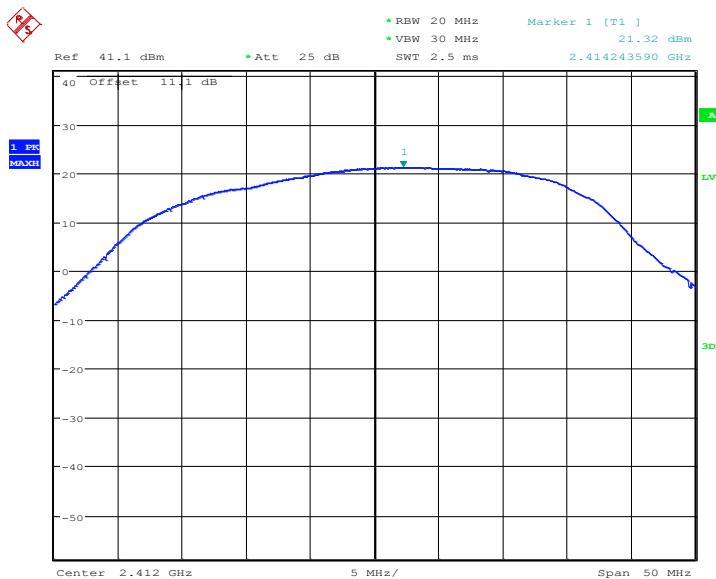
Fig.7 Peak Conducted Output Power CH1, 11g, Rate12



Date: 11.JUL.2016 10:27:26

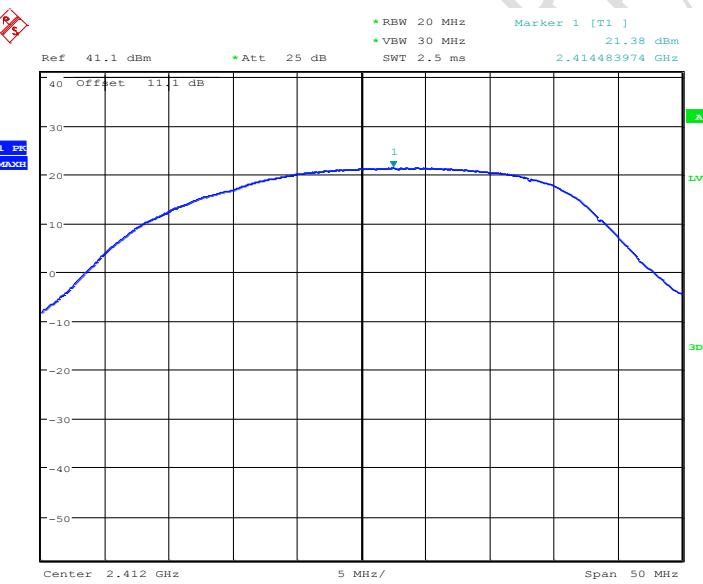
Fig.8 Peak Conducted Output Power CH1, 11g, Rate18

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:27:48

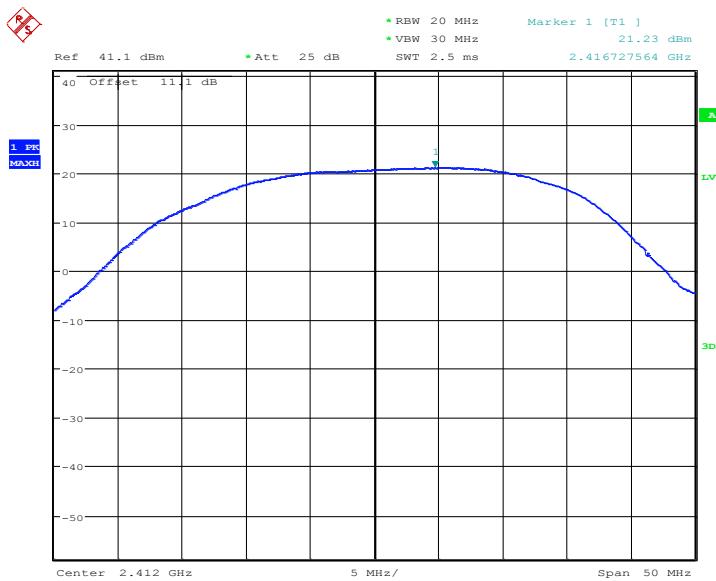
Fig.9 Peak Conducted Output Power CH1, 11g, Rate24



Date: 11.JUL.2016 10:28:14

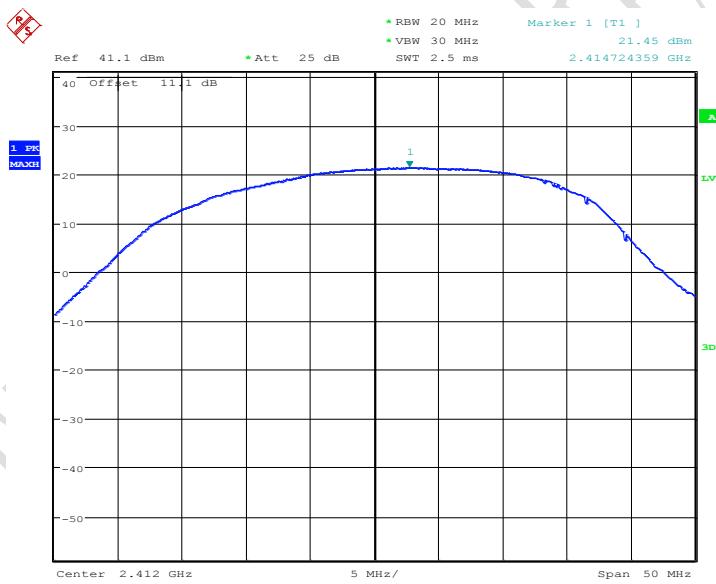
Fig.10 Peak Conducted Output Power CH1, 11g, Rate36

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:28:37

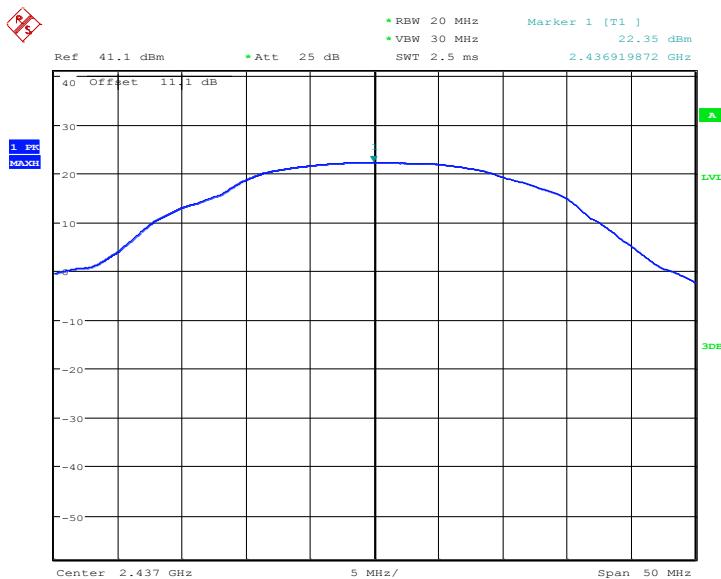
Fig.11 Peak Conducted Output Power CH1, 11g, Rate48



Date: 11.JUL.2016 10:28:56

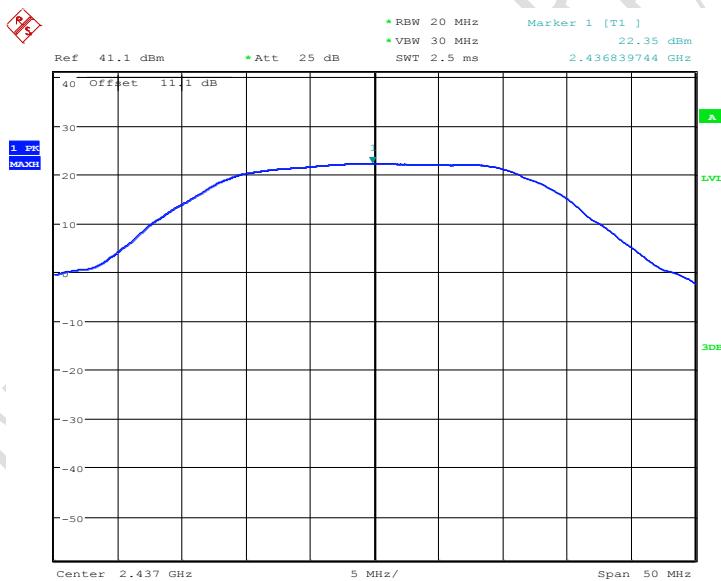
Fig.12 Peak Conducted Output Power CH1, 11g, Rate54

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:35:00

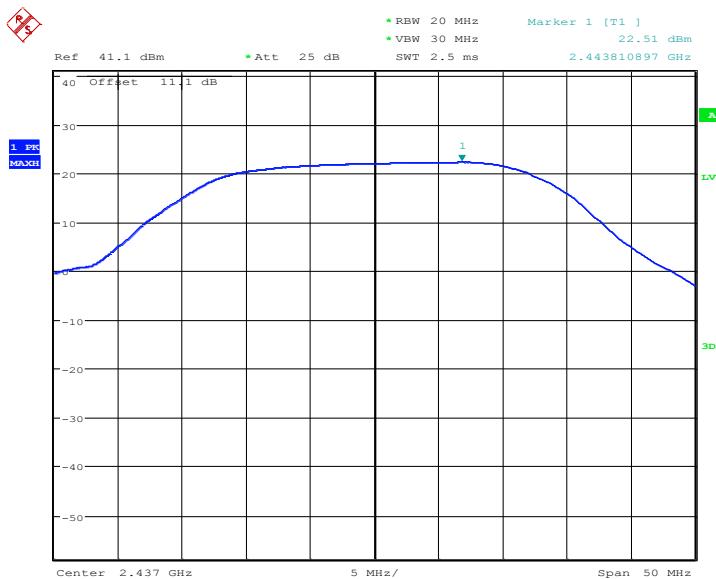
Fig.13 Peak Conducted Output Power CH6, 11b, Rate1



Date: 11.JUL.2016 10:35:31

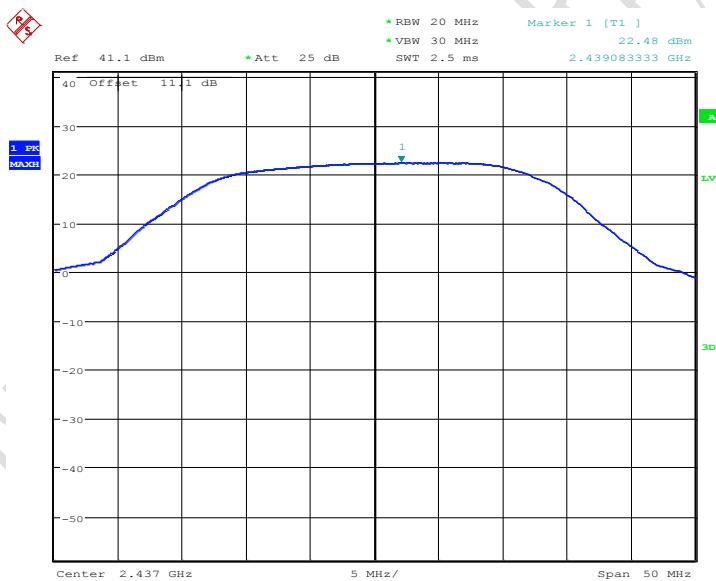
Fig.14 Peak Conducted Output Power CH6, 11b, Rate2

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:35:57

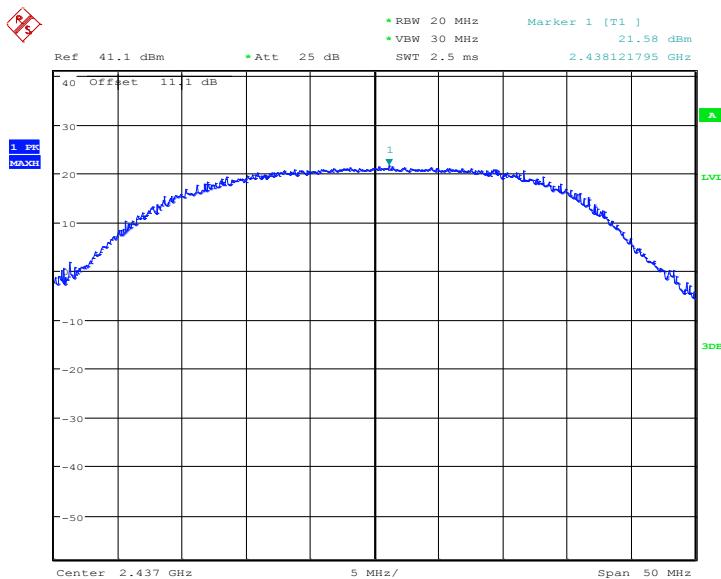
Fig.15 Peak Conducted Output Power CH6, 11b, Rate5.5



Date: 11.JUL.2016 10:36:29

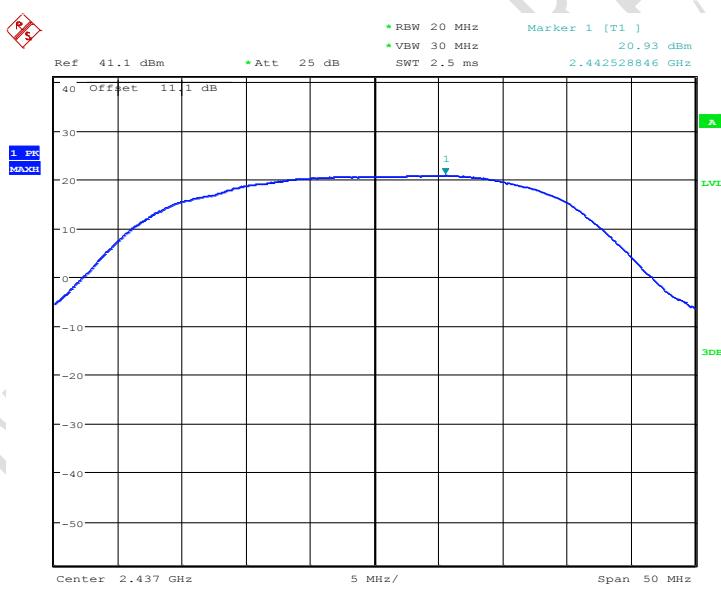
Fig.16 Peak Conducted Output Power CH6, 11b, Rate11

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:37:09

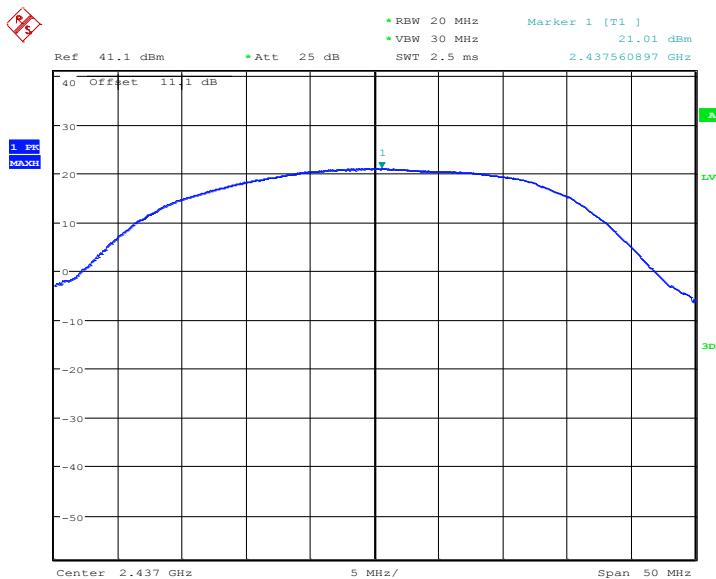
Fig.17 Peak Conducted Output Power CH6, 11g, Rate6



Date: 11.JUL.2016 10:37:37

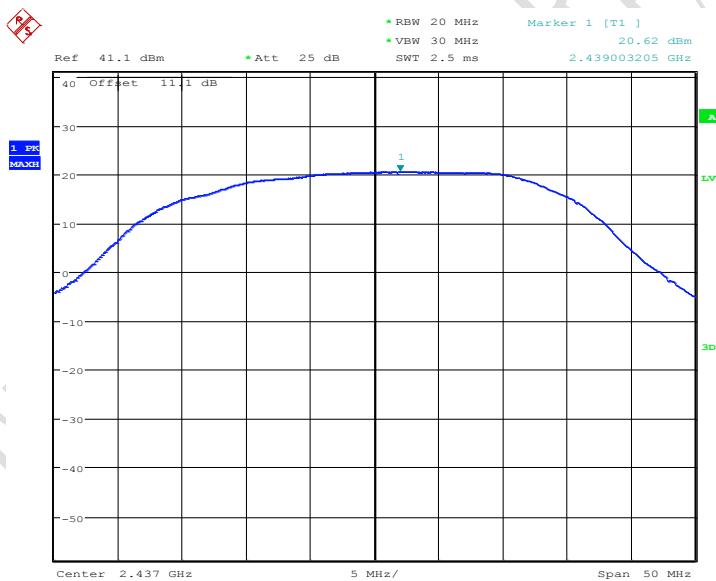
Fig.18 Conducted Output Power CH6, 11g, Rate9

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:38:01

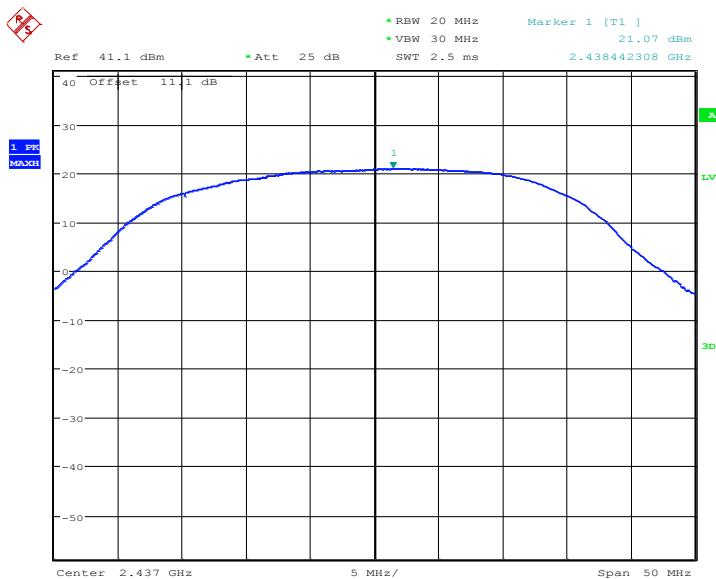
Fig.19 Conducted Output Power CH6, 11g, Rate12



Date: 11.JUL.2016 10:38:45

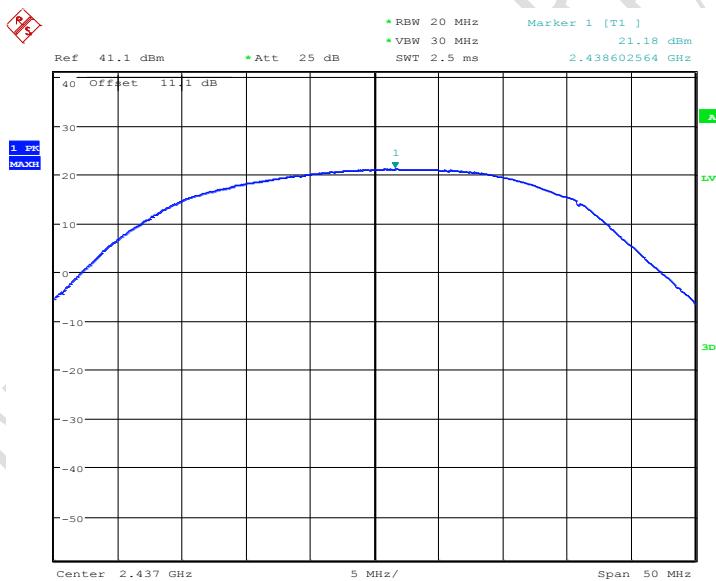
Fig.20 Conducted Output Power CH6, 11g, Rate18

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:39:08

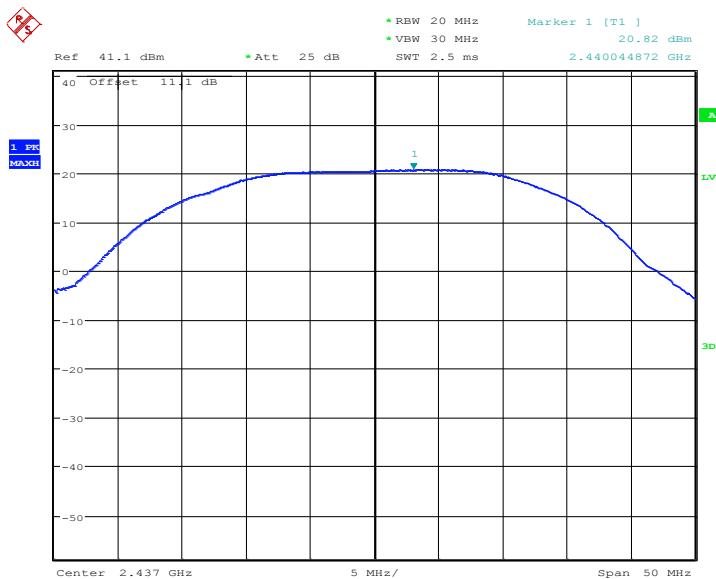
Fig.21 Conducted Output Power CH6, 11g, Rate24



Date: 11.JUL.2016 10:39:35

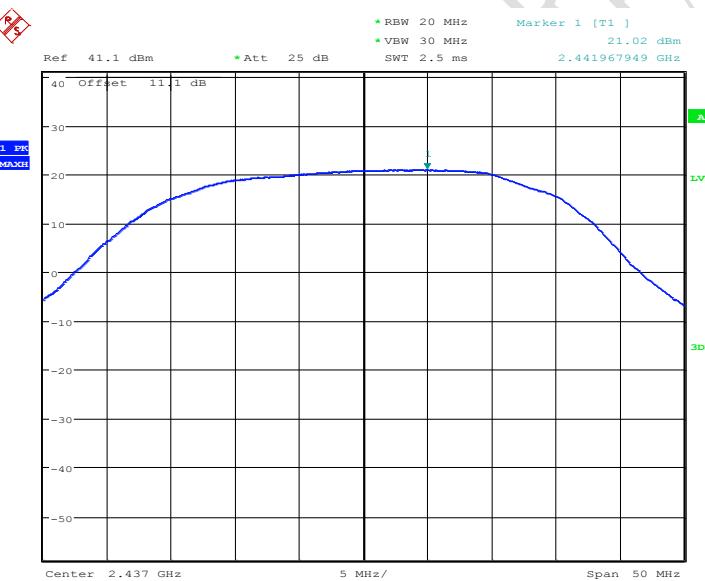
Fig.22 Conducted Output Power CH6, 11g, Rate36

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:40:01

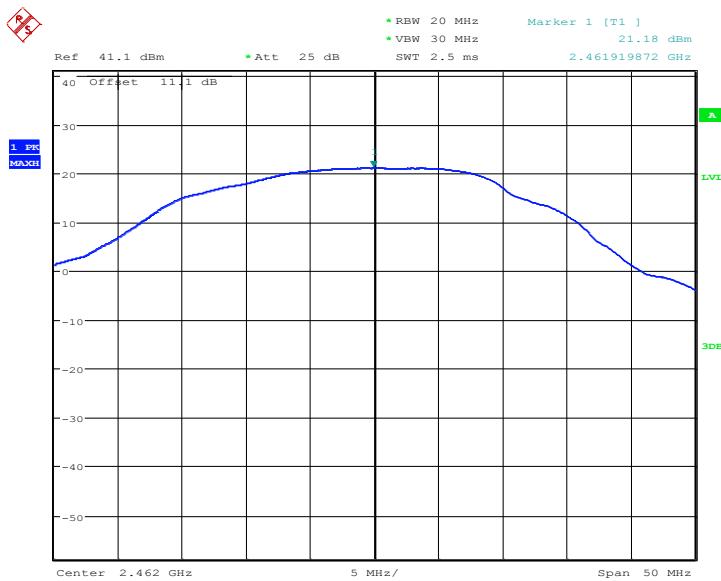
Fig.23 Conducted Output Power CH6, 11g, Rate48



Date: 11.JUL.2016 10:40:30

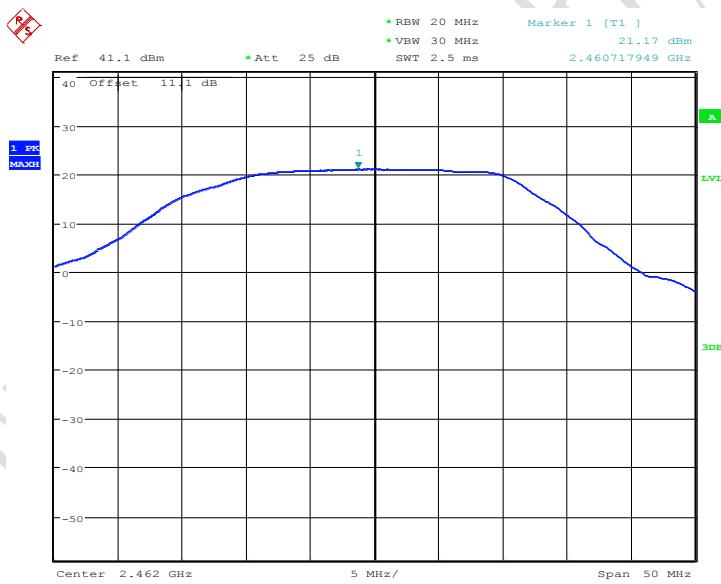
Fig.24 Conducted Output Power CH6, 11g, Rate54

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:44:41

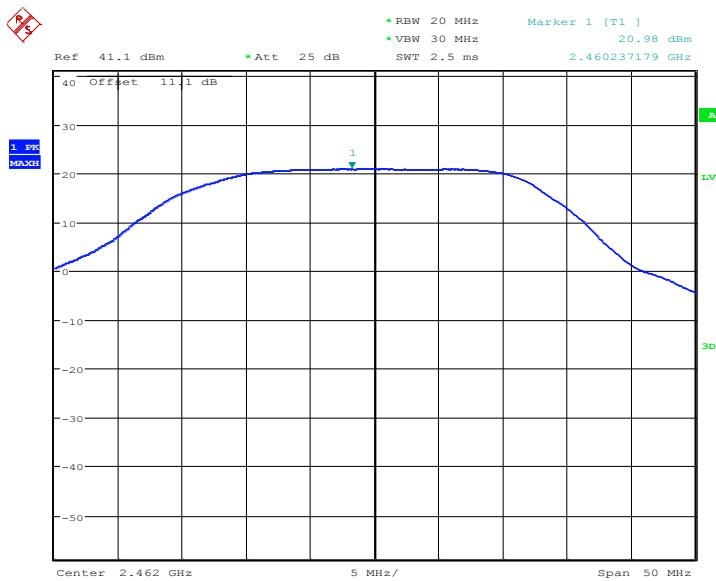
Fig.25 Conducted Output Power CH11, 11b, Rate1



Date: 11.JUL.2016 10:45:04

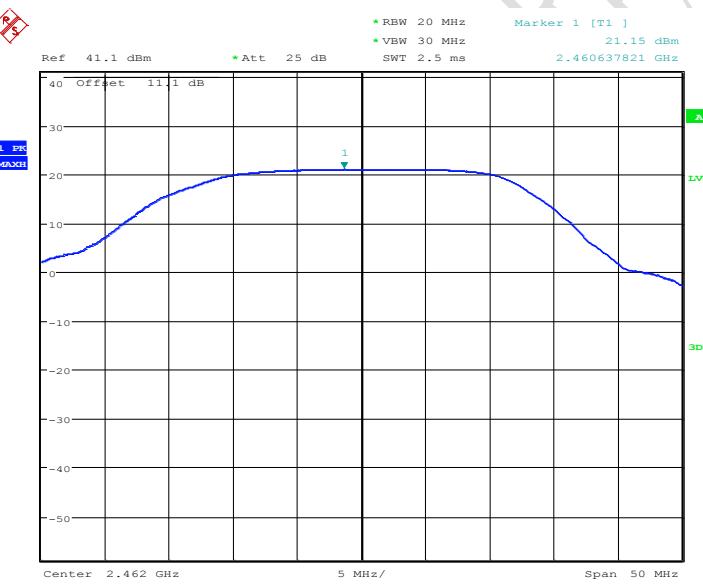
Fig.26 Conducted Output Power CH11, 11b, Rate2

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:45:27

Fig.27 Conducted Output Power CH11, 11b, Rate5.5



Date: 11.JUL.2016 10:45:55

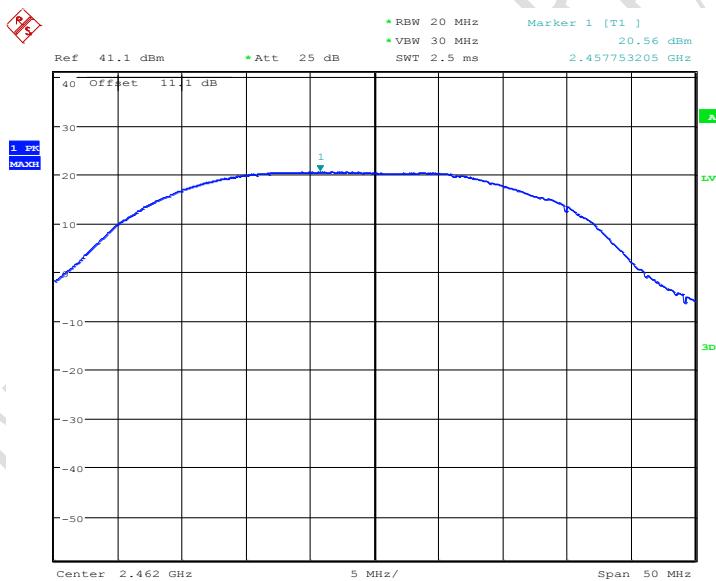
Fig.28 Conducted Output Power CH11, 11b, Rate11

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:46:33

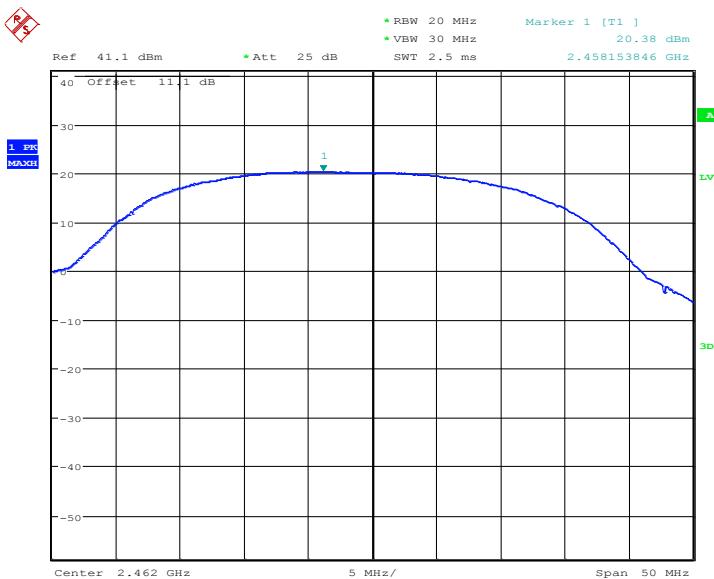
Fig.29 Conducted Output Power CH11, 11g, Rate6



Date: 11.JUL.2016 10:46:58

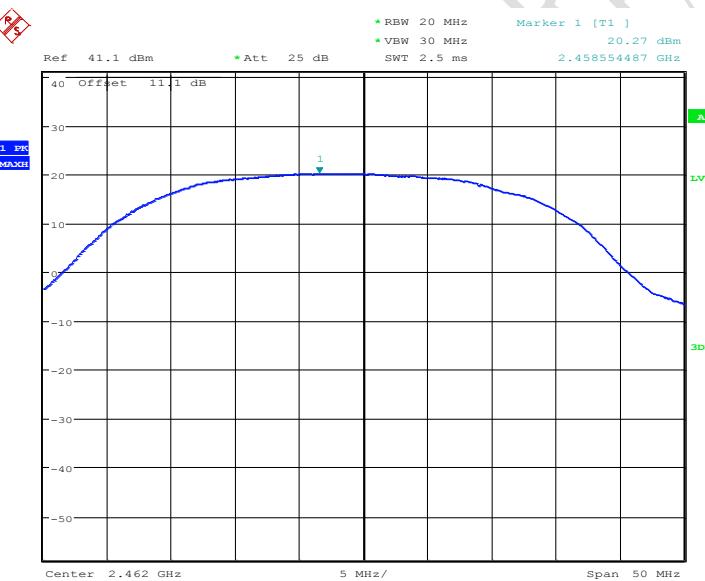
Fig.30 Conducted Output Power CH11, 11g, Rate9

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:47:24

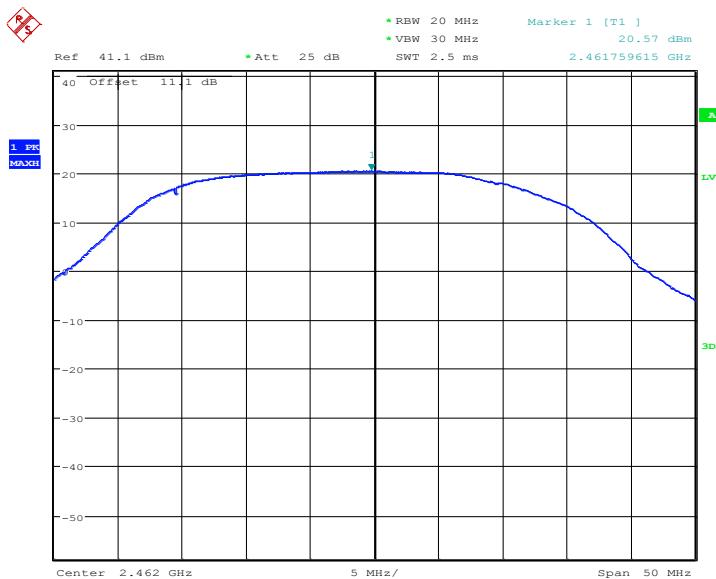
Fig.31 Conducted Output Power CH11, 11g, Rate12



Date: 11.JUL.2016 10:47:53

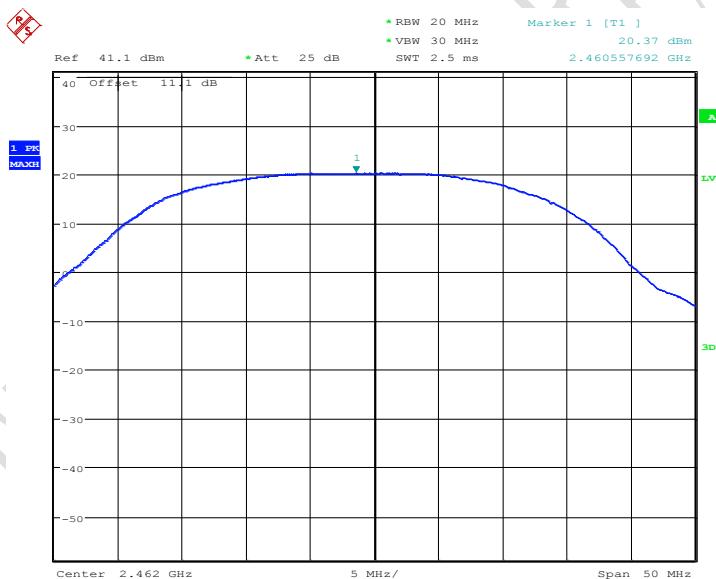
Fig.32 Conducted Output Power CH11, 11g, Rate18

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:48:14

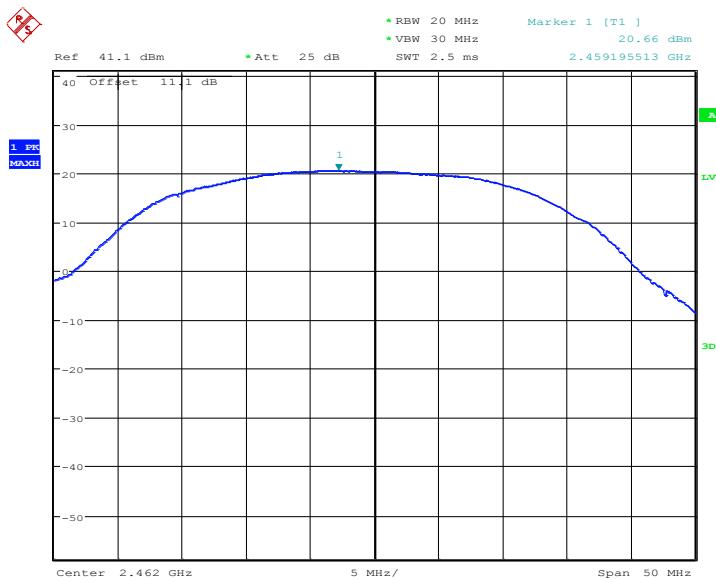
Fig.33 Conducted Output Power CH11, 11g, Rate24



Date: 11.JUL.2016 10:48:38

Fig.34 Conducted Output Power CH11, 11g, Rate36

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:49:00

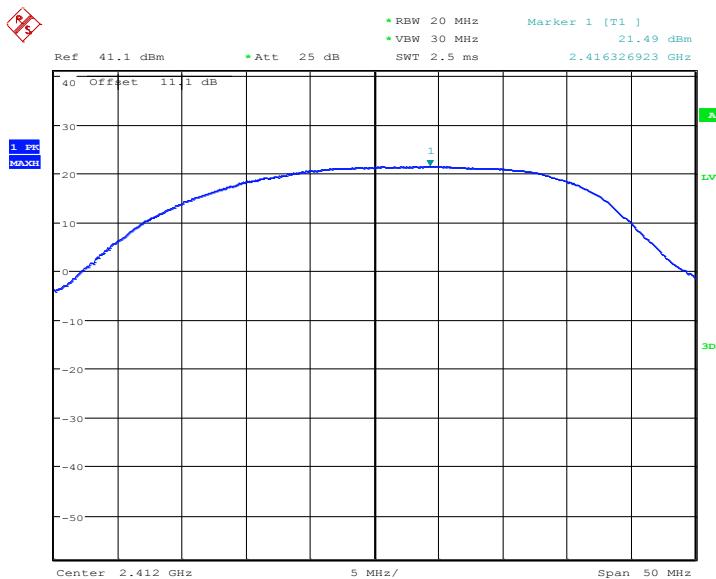
Fig.35 Conducted Output Power CH11, 11g, Rate48



Date: 11.JUL.2016 10:49:27

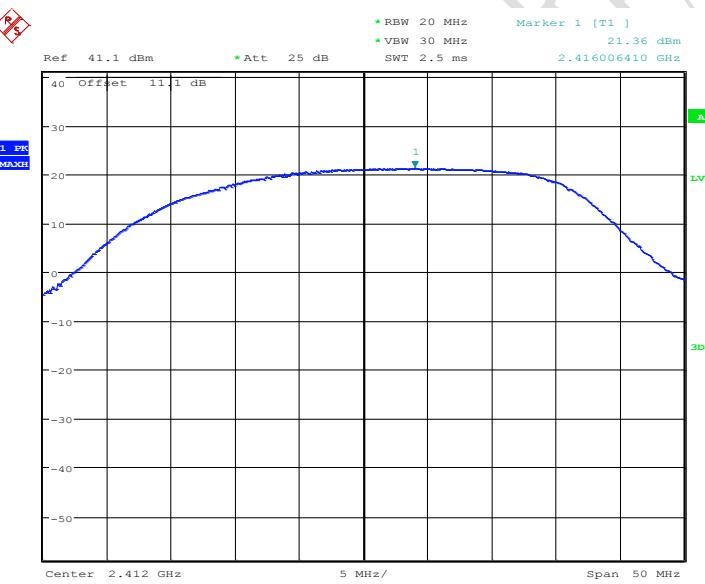
Fig.36 Conducted Output Power CH11, 11g, Rate54

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:31:28

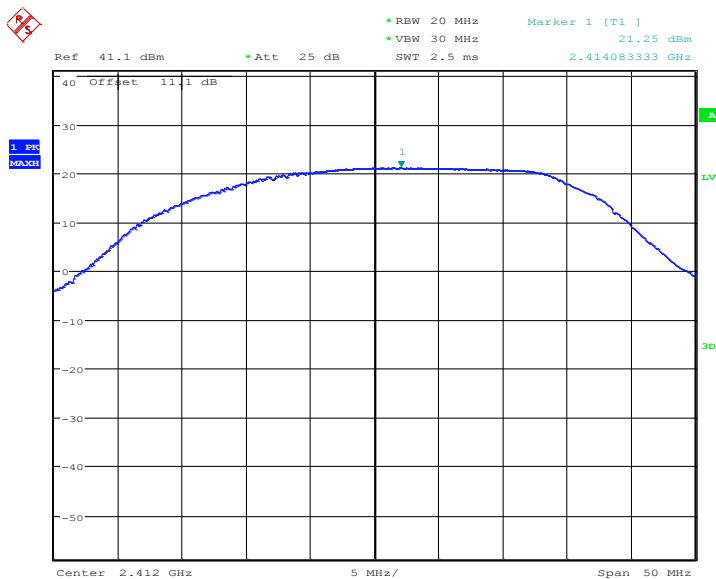
Fig.37 Conducted Output Power CH1, 11n, Rate MCS0



Date: 11.JUL.2016 10:31:51

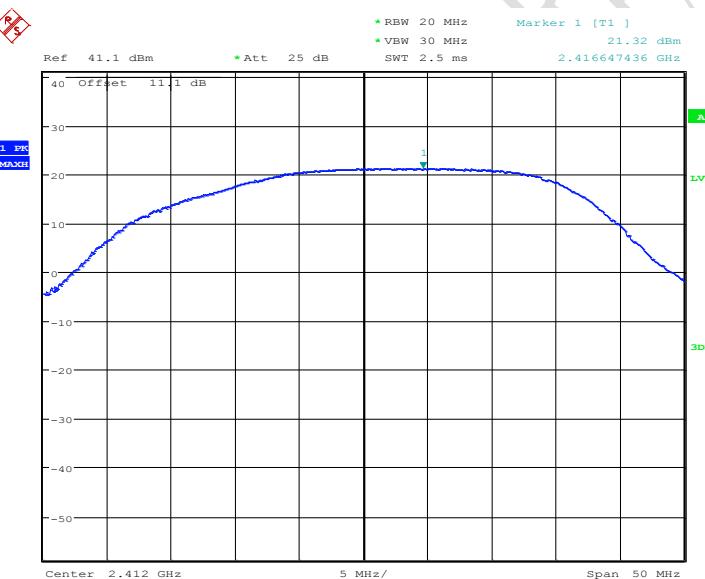
Fig.38 Conducted Output Power CH1, 11n, Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:32:13

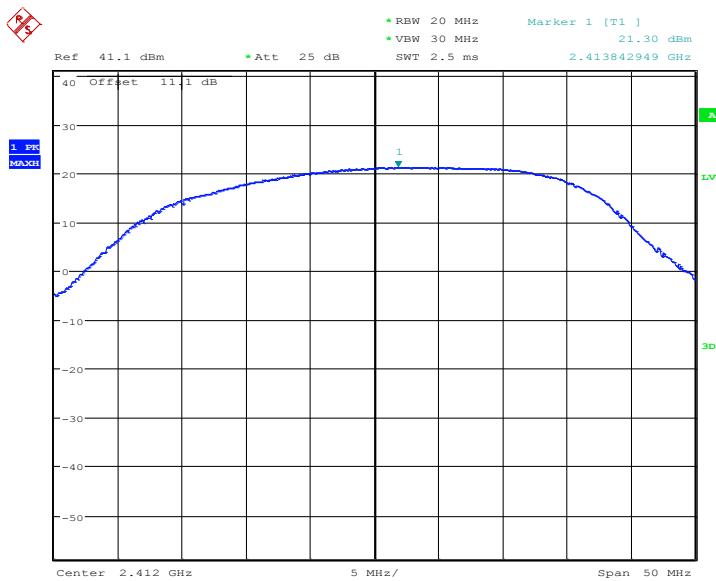
Fig.39 Conducted Output Power CH1, 11n, Rate MCS2



Date: 11.JUL.2016 10:32:34

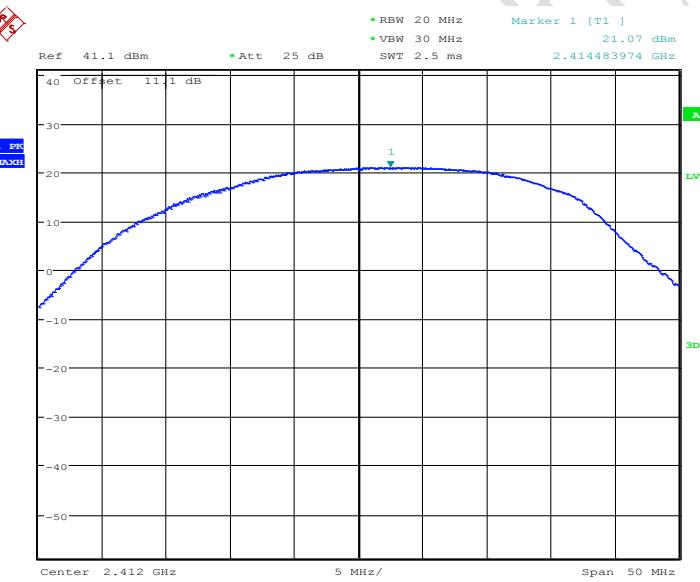
Fig.40 Conducted Output Power CH1, 11n, Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:32:56

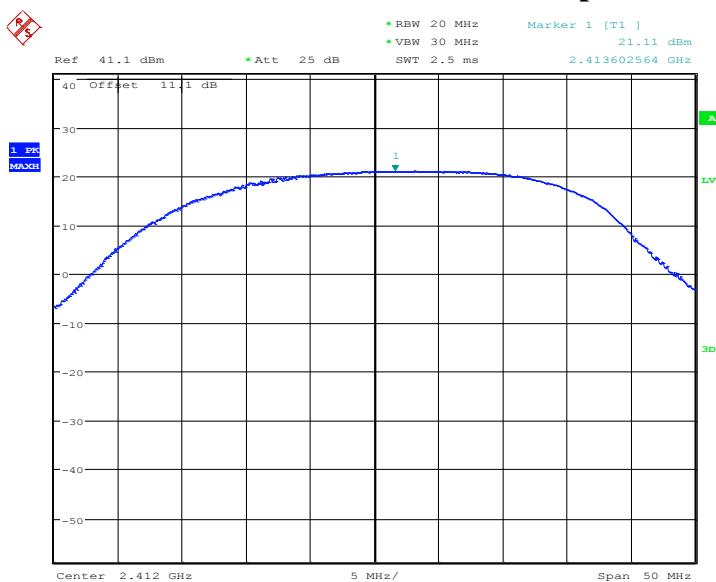
Fig.41 Conducted Output Power CH1, 11n, Rate MCS4



Date: 11.JUL.2016 10:33:17

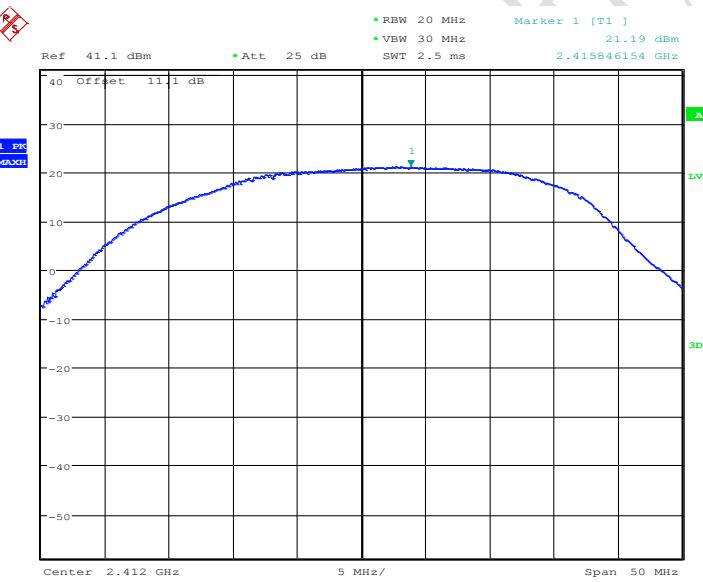
Fig.42 Conducted Output Power CH1, 11n, Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:33:36

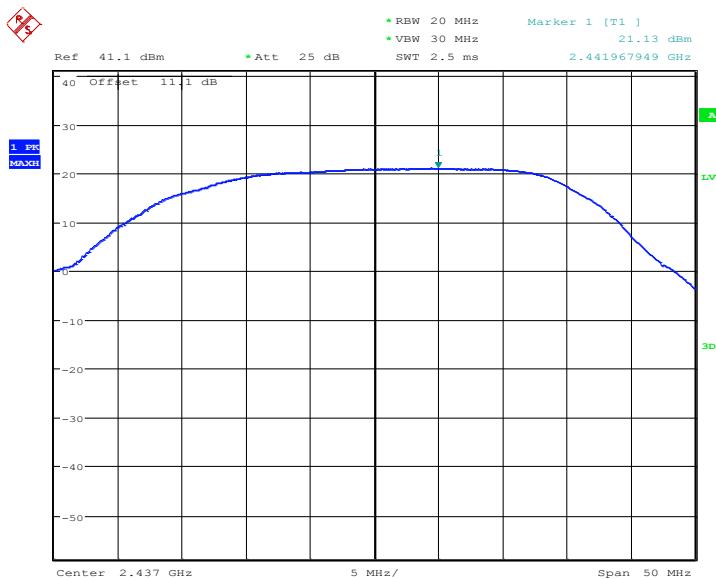
Fig.43 Conducted Output Power CH1, 11n, Rate MCS6



Date: 11.JUL.2016 10:33:56

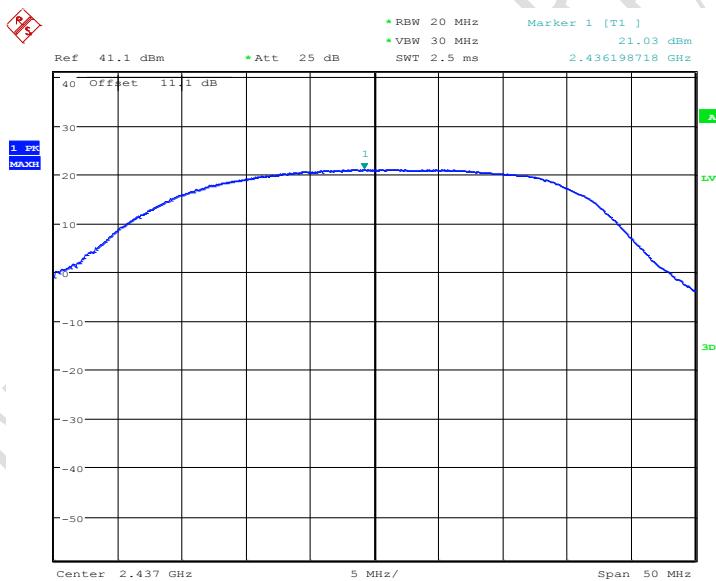
Fig.44 Conducted Output Power CH1, 11n, Rate MCS7

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:41:12

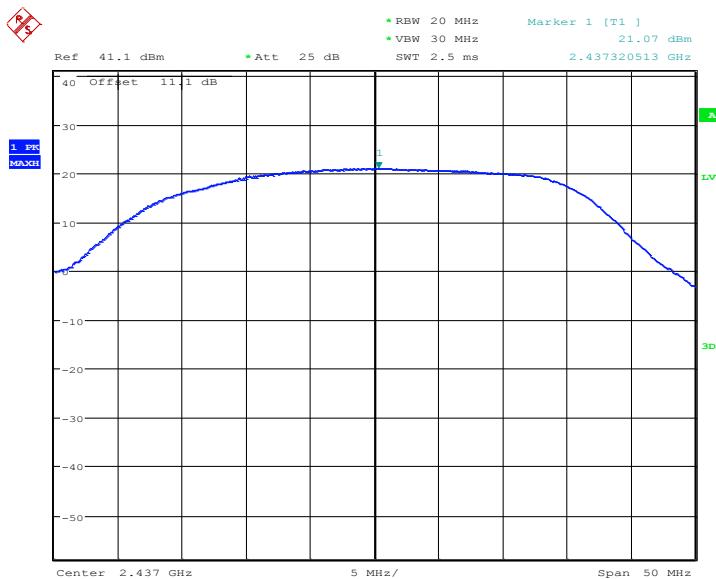
Fig.45 Conducted Output Power CH6, 11n, Rate MCS0



Date: 11.JUL.2016 10:41:38

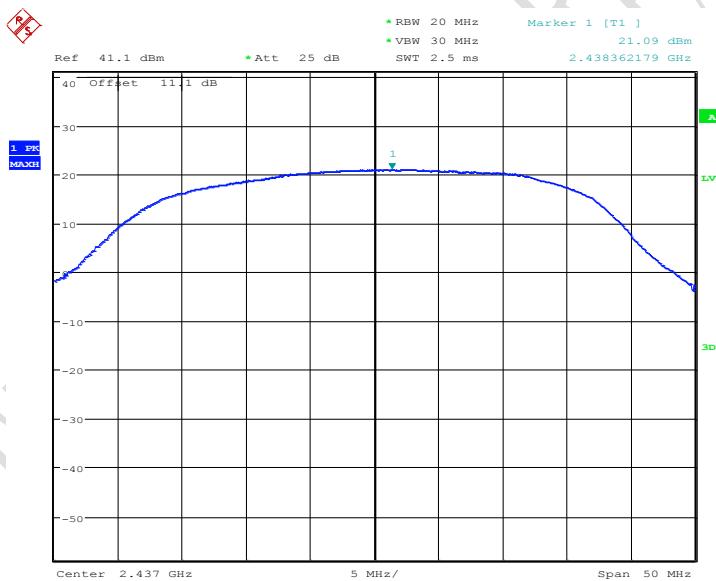
Fig.46 Conducted Output Power CH6, 11n, Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:42:04

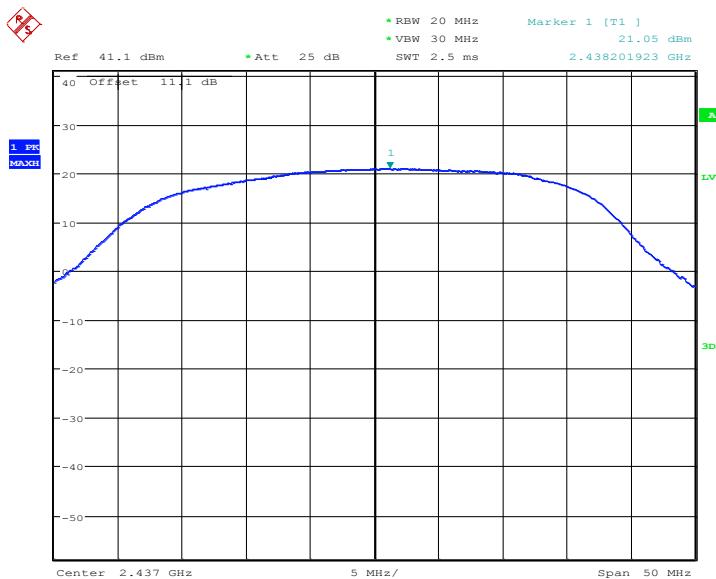
Fig.47 Conducted Output Power CH6, 11n, Rate MCS2



Date: 11.JUL.2016 10:42:29

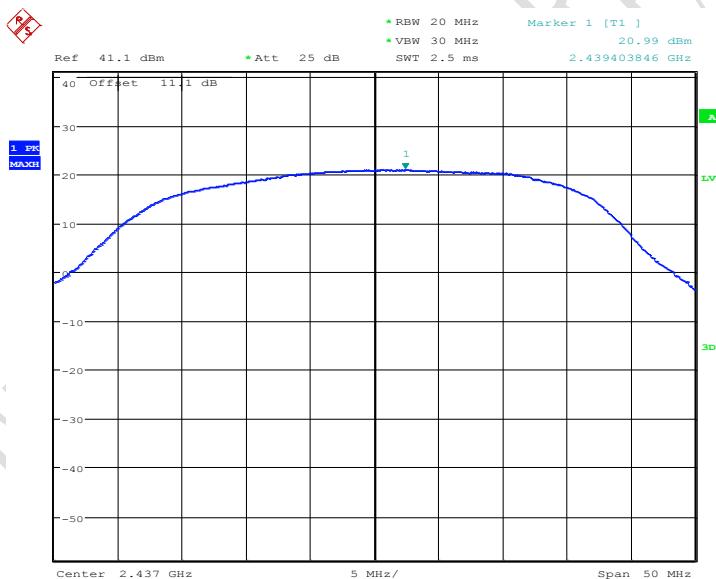
Fig.48 Conducted Output Power CH6, 11n, Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:42:42

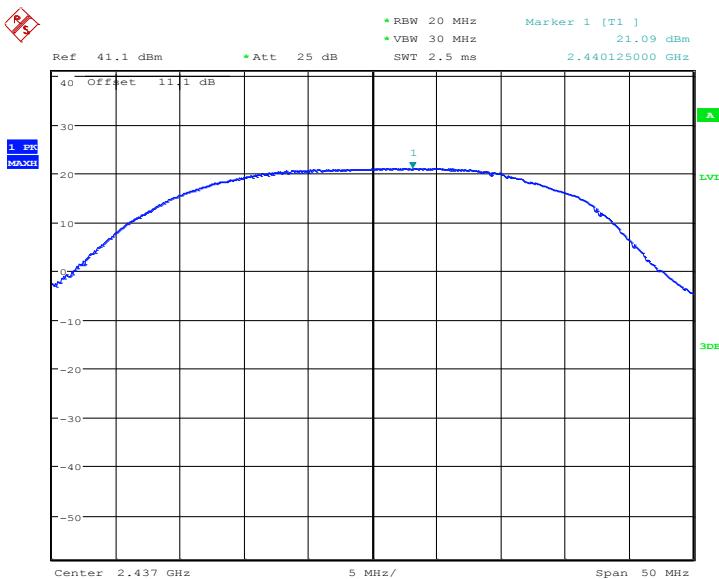
Fig.49 Conducted Output Power CH6, 11n, Rate MCS4



Date: 11.JUL.2016 10:42:55

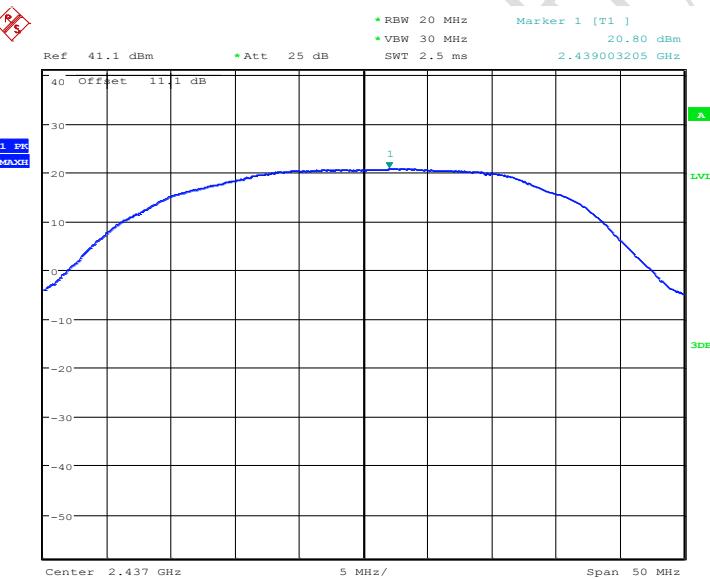
Fig.50 Conducted Output Power CH6, 11n, Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:43:21

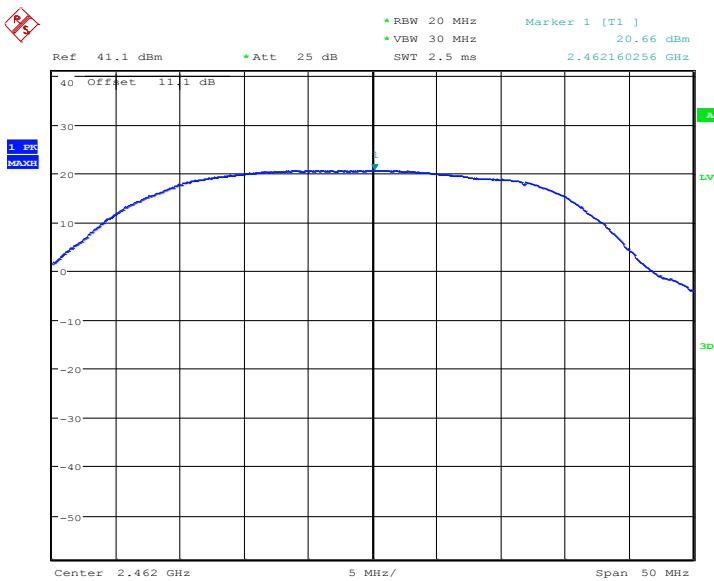
Fig.51 Conducted Output Power CH6, 11n, Rate MCS6



Date: 11.JUL.2016 10:43:53

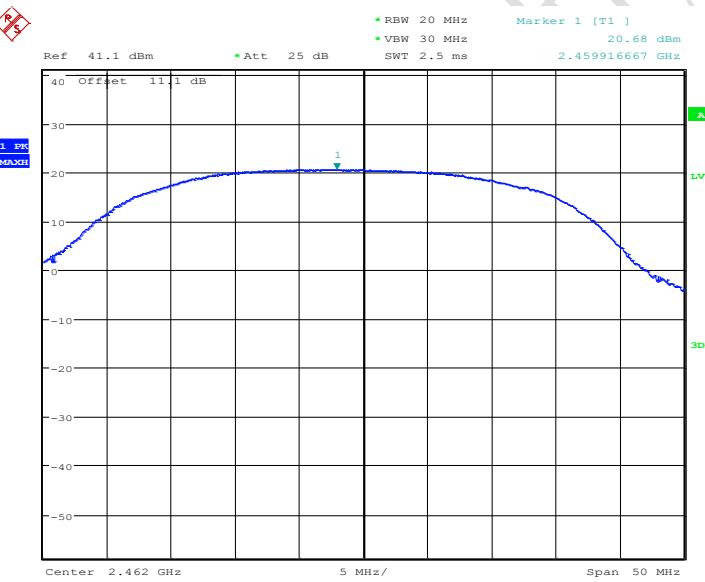
Fig.52 Conducted Output Power CH6, 11n, Rate MCS7

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:49:58

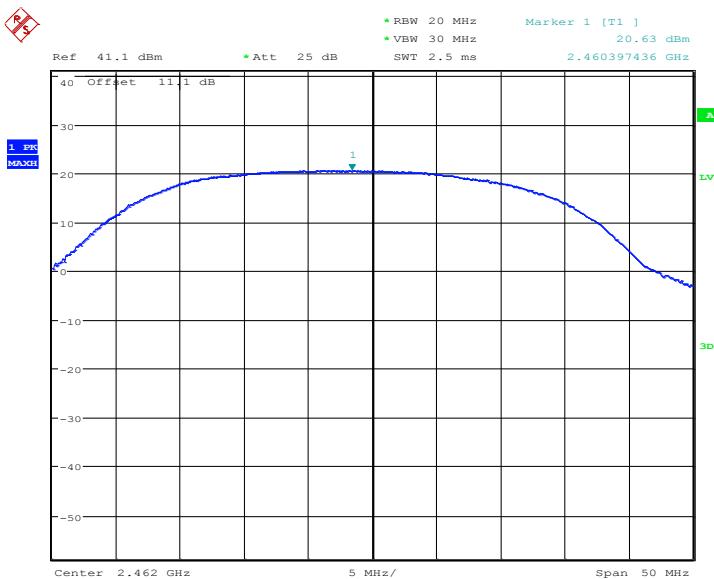
Fig.53 Conducted Output Power CH11, 11n, Rate MCS0



Date: 11.JUL.2016 10:50:19

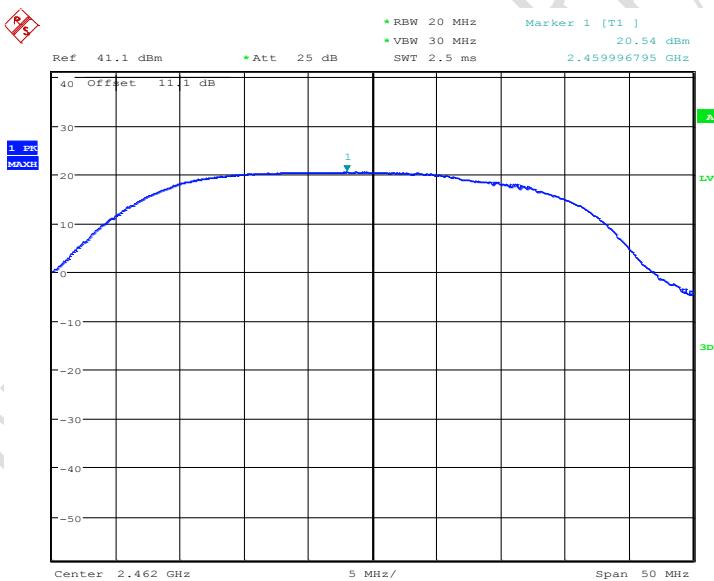
Fig.54 Conducted Output Power CH11, 11n, Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:50:49

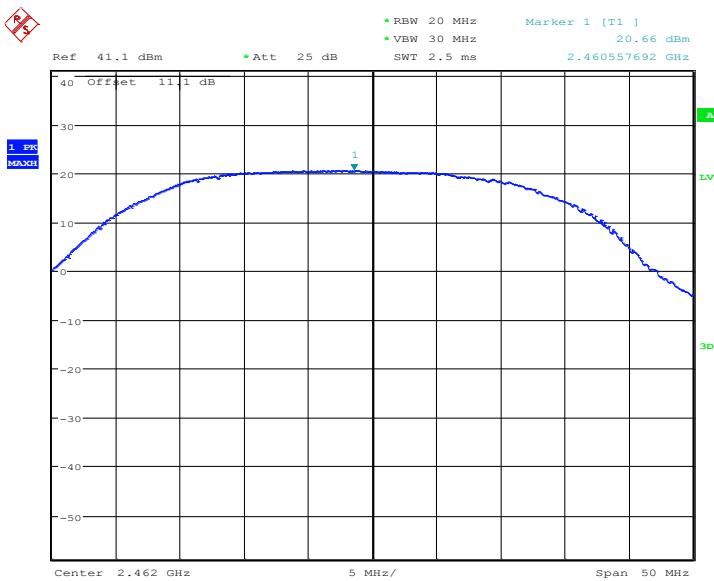
Fig.55 Conducted Output Power CH11, 11n, Rate MCS2



Date: 11.JUL.2016 10:51:10

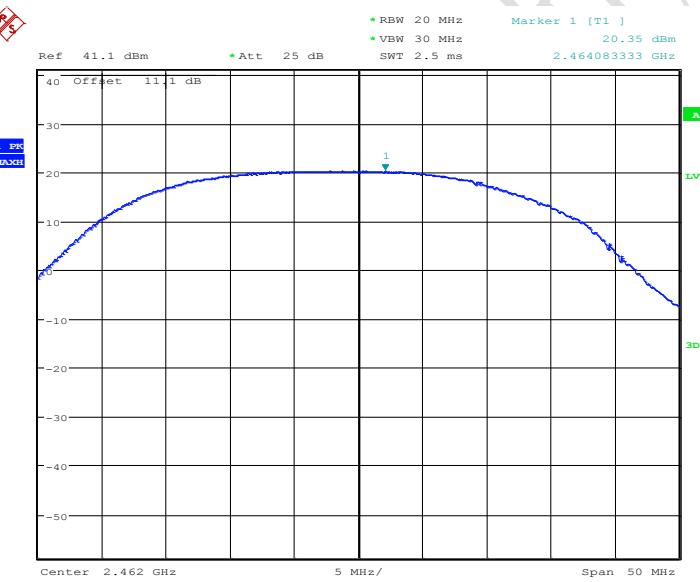
Fig.56 Conducted Output Power CH11, 11n, Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:51:29

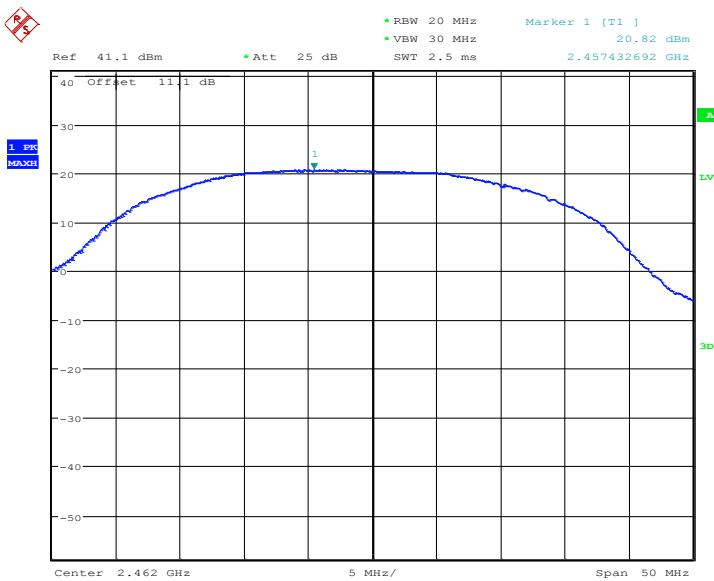
Fig.57 Conducted Output Power CH11, 11n, Rate MCS4



Date: 11.JUL.2016 10:51:50

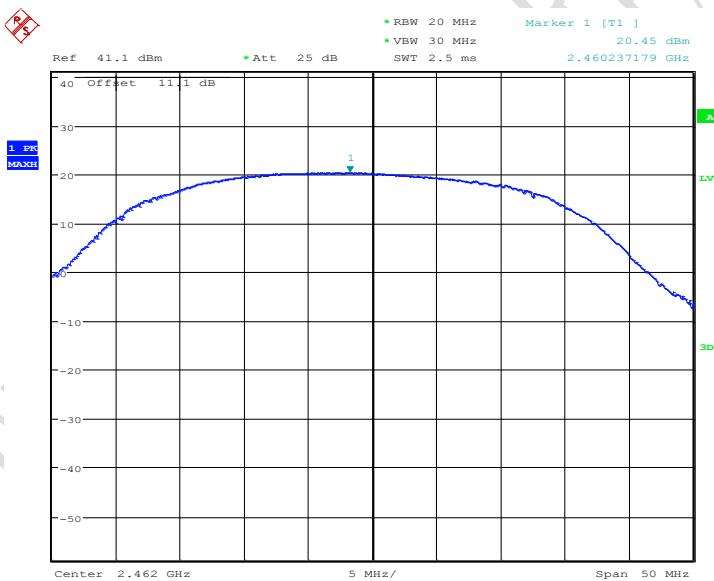
Fig.58 Conducted Output Power CH11, 11n, Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 10:52:13

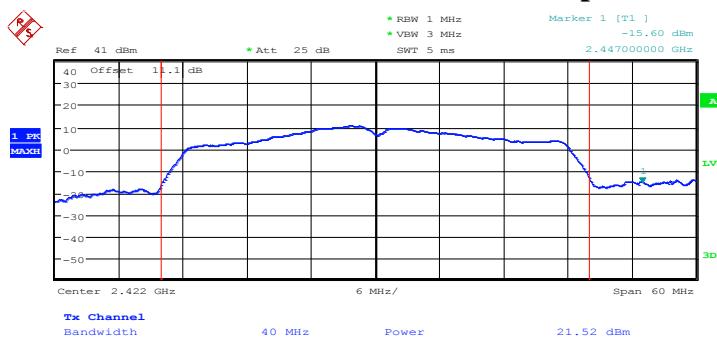
Fig.59 Conducted Output Power CH11, 11n, Rate MCS6



Date: 11.JUL.2016 10:52:37

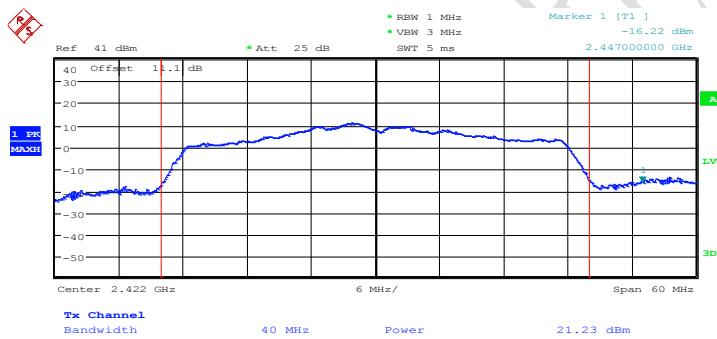
Fig.60 Conducted Output Power CH11, 11n, Rate MCS7

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:32:02

Fig.61 Conducted Output Power CH1, 11n(40M), Rate MCS0



Date: 12.JUL.2016 10:32:24

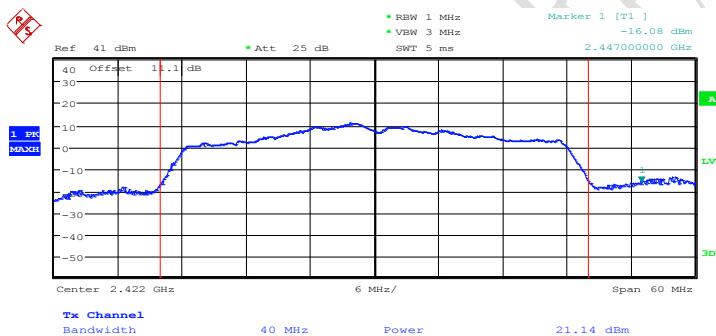
Fig.62 Conducted Output Power CH1, 11n(40M), Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:32:33

Fig.63 Conducted Output Power CH1, 11n(40M), Rate MCS2



Date: 12.JUL.2016 10:32:43

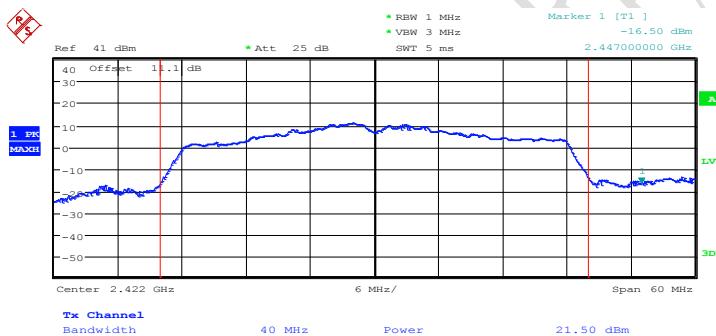
Fig.64 Conducted Output Power CH1, 11n(40M), Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:33:01

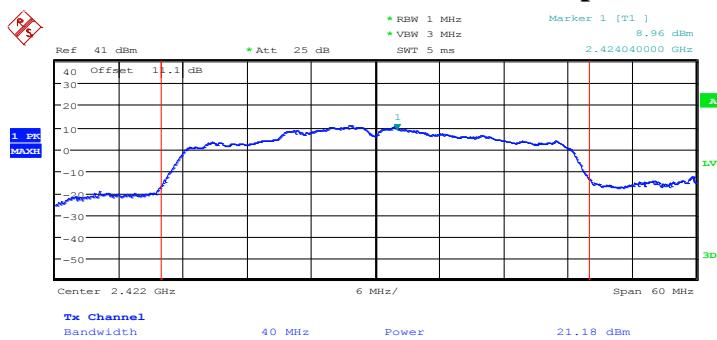
Fig.65 Conducted Output Power CH1, 11n(40M), Rate MCS4



Date: 12.JUL.2016 10:33:10

Fig.66 Conducted Output Power CH1, 11n(40M), Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:34:23

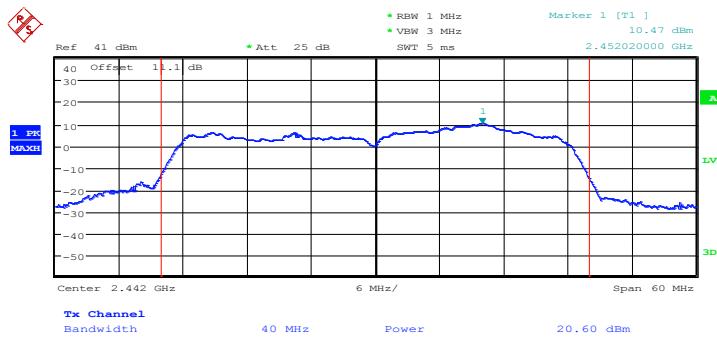
Fig.67 Conducted Output Power CH1, 11n(40M), Rate MCS6



Date: 12.JUL.2016 10:34:31

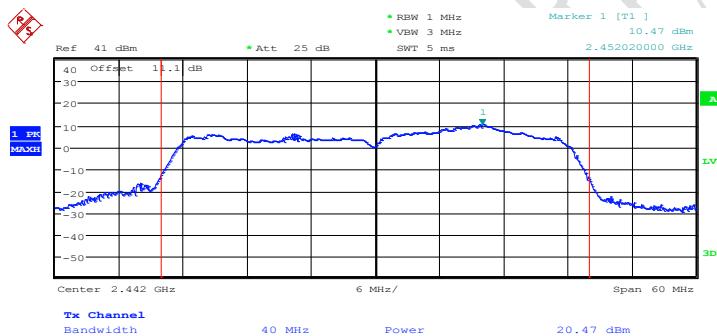
Fig.68 Conducted Output Power CH1, 11n(40M), Rate MCS7

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:35:02

Fig.69 Conducted Output Power CH6, 11n(40M), Rate MCS0



Date: 12.JUL.2016 10:35:11

Fig.70 Conducted Output Power CH6, 11n(40M), Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:35:19

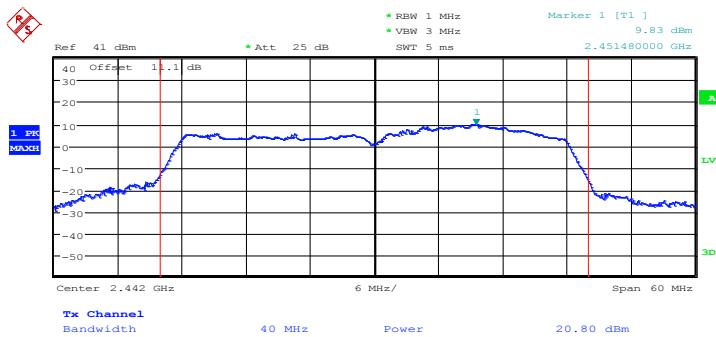
Fig.71 Conducted Output Power CH6, 11n(40M), Rate MCS2



Date: 12.JUL.2016 10:35:32

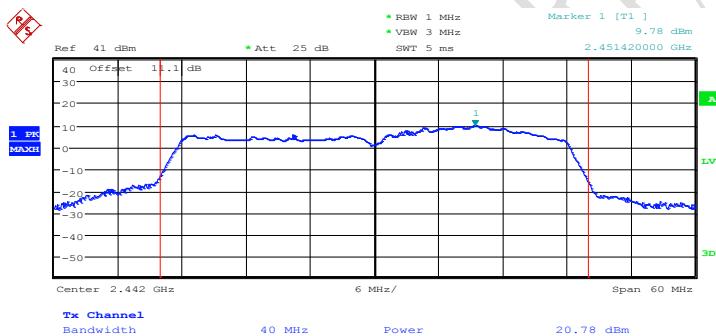
Fig.72 Conducted Output Power CH6, 11n(40M), Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:36:05

Fig.73 Conducted Output Power CH6, 11n(40M), Rate MCS4



Date: 12.JUL.2016 10:36:16

Fig.74 Conducted Output Power CH6, 11n(40M), Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:36:37

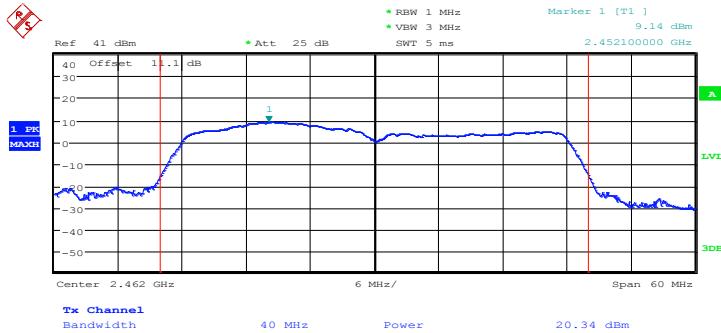
Fig.75 Conducted Output Power CH6, 11n(40M), Rate MCS6



Date: 12.JUL.2016 10:36:48

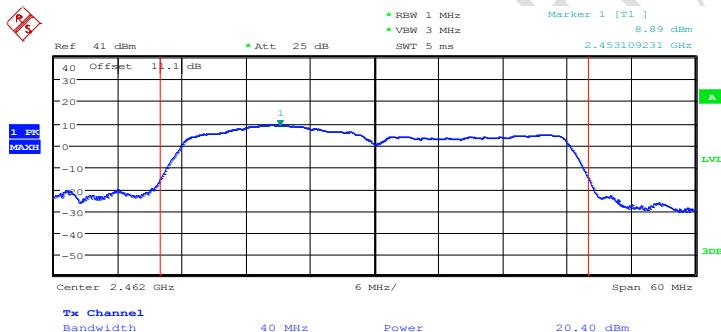
Fig.76 Conducted Output Power CH6, 11n(40M), Rate MCS7

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:37:50

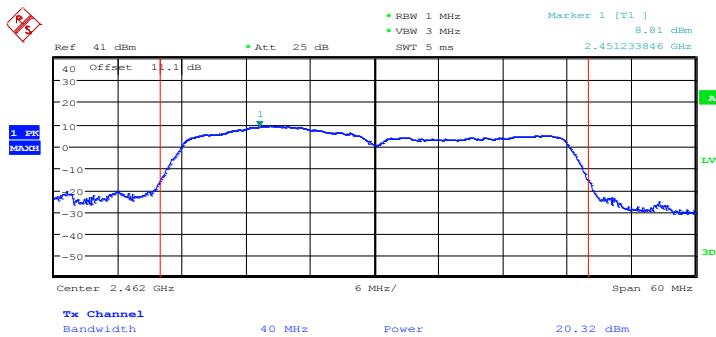
Fig.77 Conducted Output Power CH11, 11n(40M), Rate MCS0



Date: 12.JUL.2016 10:37:37

Fig.78 Conducted Output Power CH11, 11n(40M), Rate MCS1

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:38:01

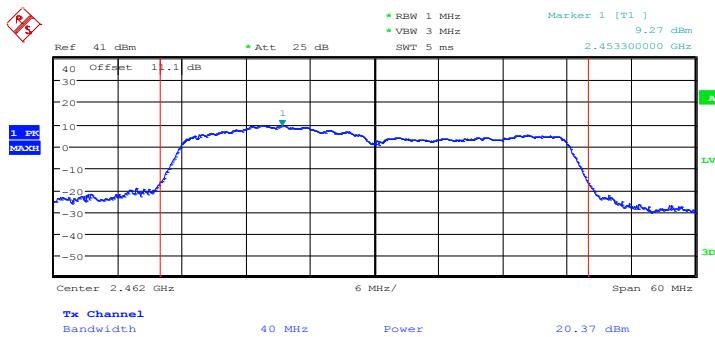
Fig.79 Conducted Output Power CH11, 11n(40M), Rate MCS2



Date: 12.JUL.2016 10:38:27

Fig.80 Conducted Output Power CH11, 11n(40M), Rate MCS3

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:38:36

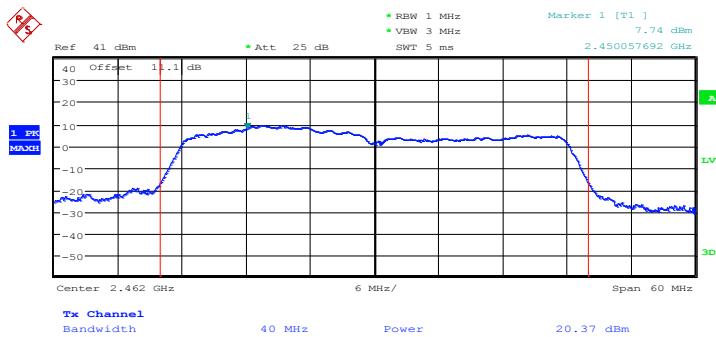
Fig.81 Conducted Output Power CH11, 11n(40M), Rate MCS4



Date: 12.JUL.2016 10:38:45

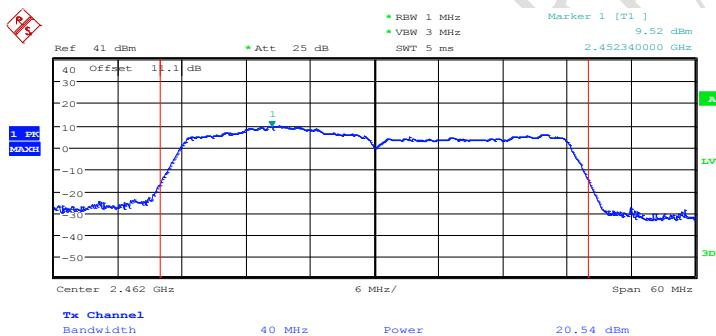
Fig.82 Conducted Output Power CH11, 11n(40M), Rate MCS5

Report No.: B16X50266-WLAN-Rev1



Date: 12.JUL.2016 10:38:56

Fig.83 Conducted Output Power CH11, 11n(40M), Rate MCS6



Date: 12.JUL.2016 10:39:14

Fig.84 Conducted Output Power CH11, 11n(40M), Rate MCS7

5.2 Peak Power Spectral Density

Specifications:	FCC CFR Part 15.247(e)
DUT Serial Number:	S5/9: 358067070000929
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limit
FCC CFR Part 15.247(e)	< 8dBm/3 KHz

Test procedure:

The measurement is according to ANSI C63.10 clause 11.10.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
6. Set the VBW $\geq [3 \times \text{RBW}]$.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

Note: --

Test Results:**802.11b/g mode**

Mode	Power Spectral Density(dBm/3kHz)			Conclusion
	Ch1	Ch6	Ch11	
802.11b	-7.20	-7.97	-8.79	Pass
802.11g	-9.44	-12.09	-10.55	Pass

802.11n mode

Mode	Power Spectral Density(dBm/3kHz)			Conclusion
	Ch1	Ch6	Ch11	
802.11n(20MHz)	-9.68	-12.36	-10.77	Pass
802.11n(40MHz)	-9.60	-10.81	-10.34	Pass

Test figure as below:

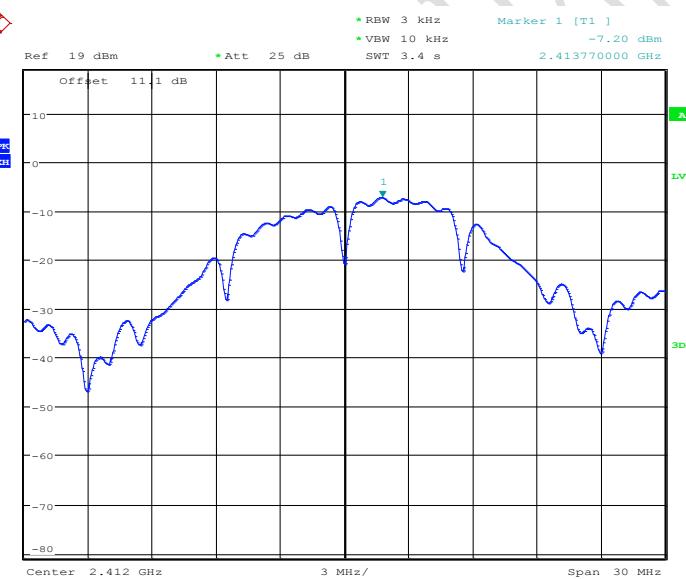
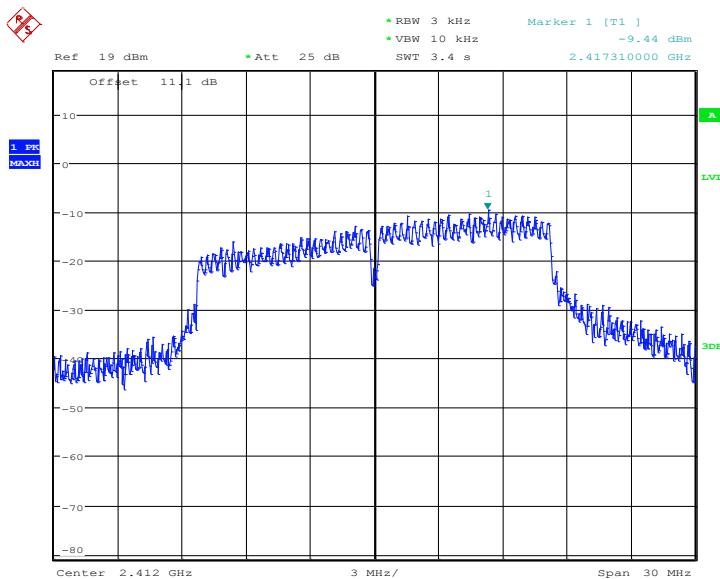


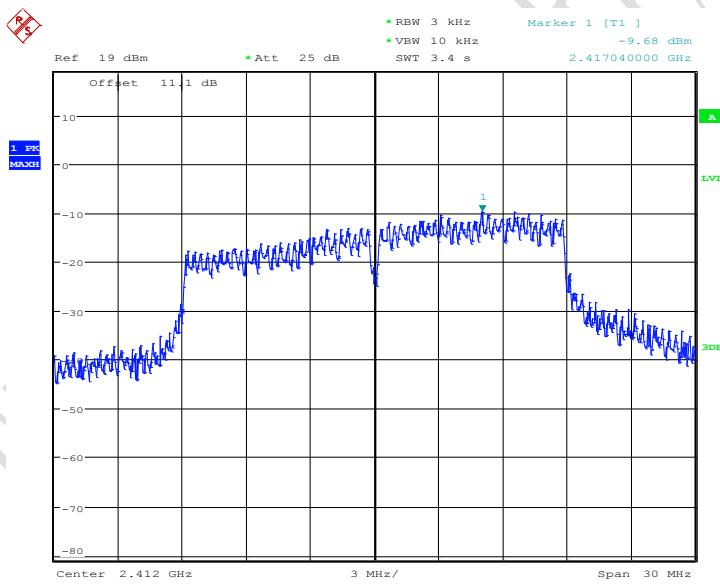
Fig.85 Power spectral density: CH1,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 14:57:51

Fig.86 Power spectral density: CH1,11g



Date: 11.JUL.2016 14:59:33

Fig.87 Power spectral density: CH1,11n

Report No.: B16X50266-WLAN-Rev1

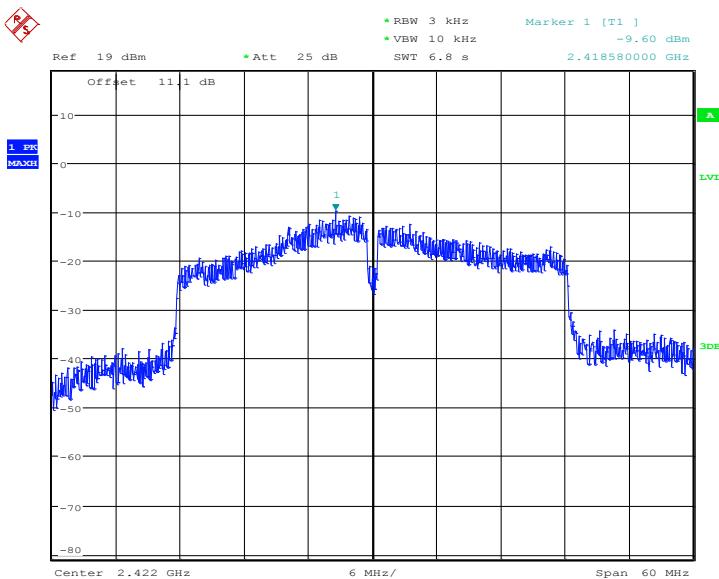


Fig.88 Power spectral density: CH1,11n(40M)

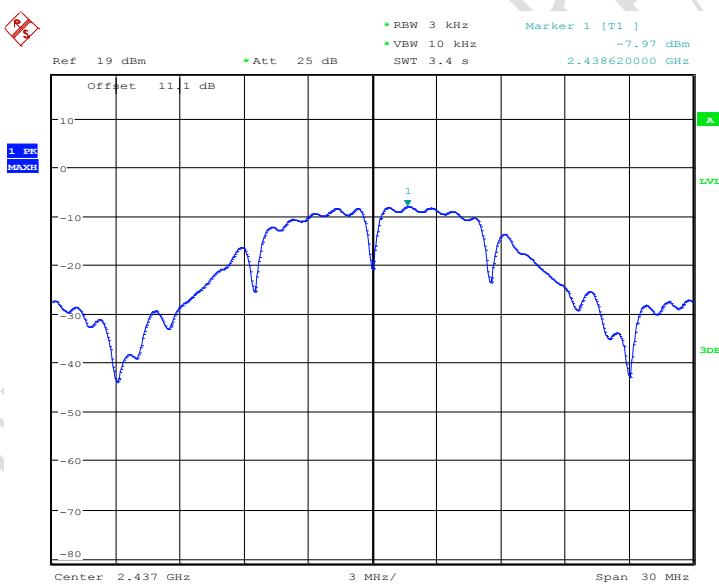
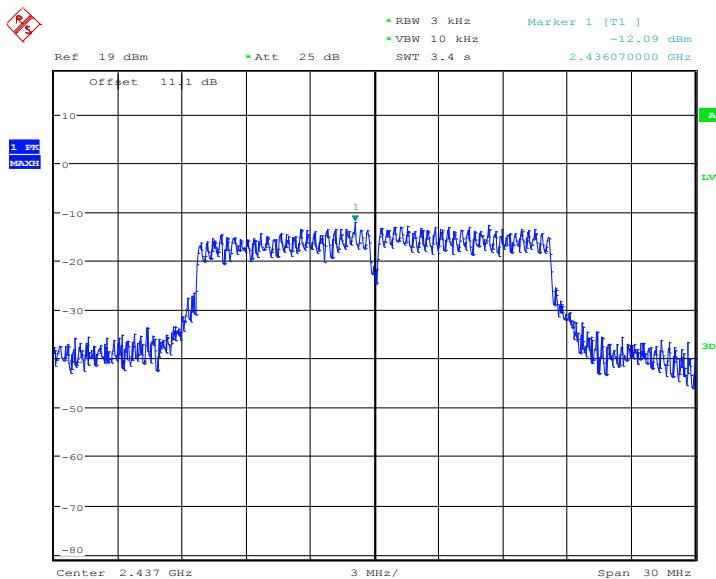


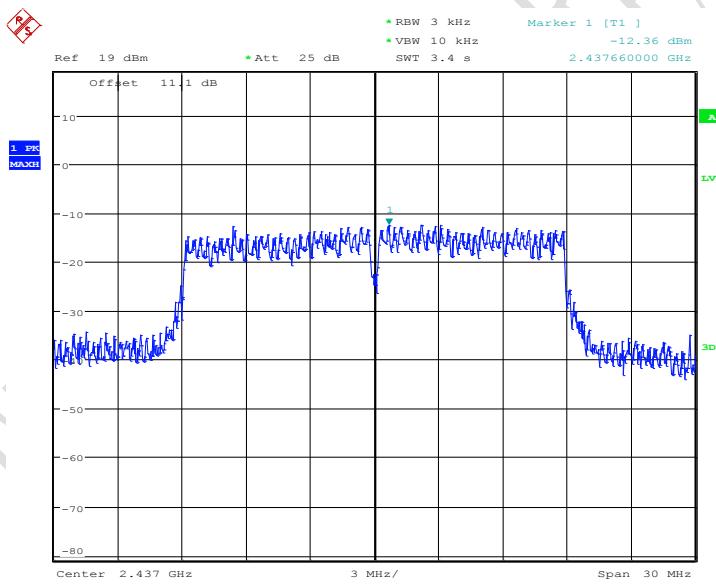
Fig.89 Power spectral density: CH6,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 14:58:22

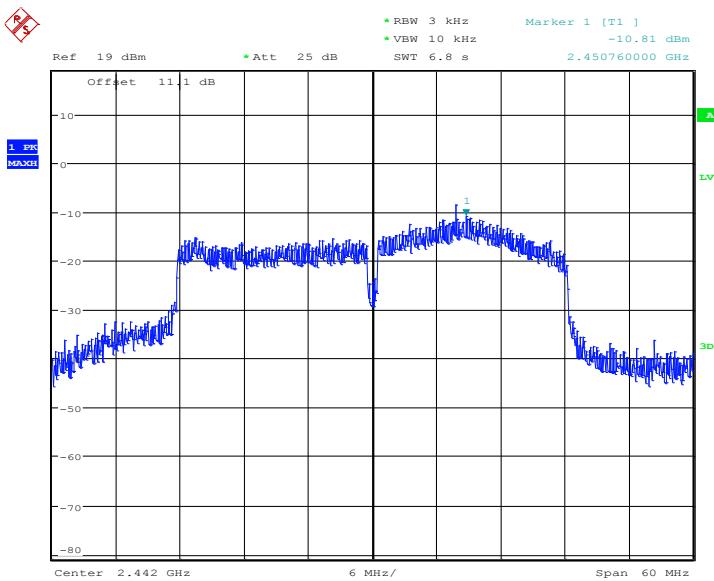
Fig.90 Fig.66 Power spectral density: CH6,11g



Date: 11.JUL.2016 15:00:00

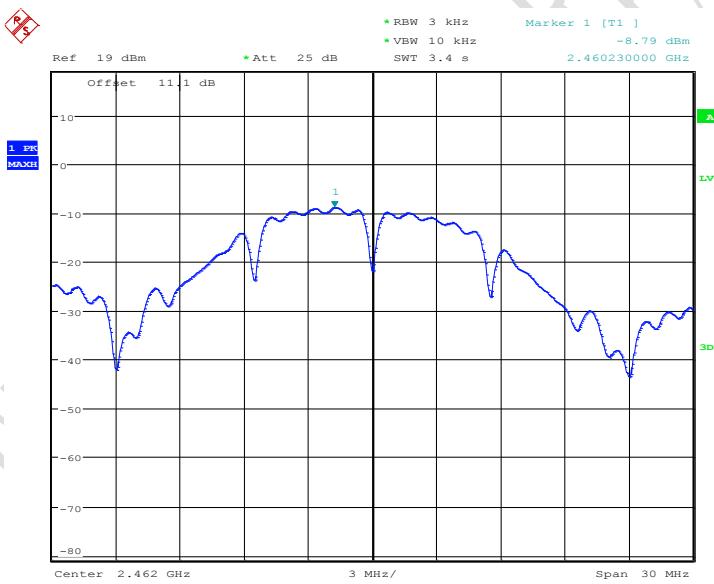
Fig.91 Power spectral density: CH6,11n

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:02:55

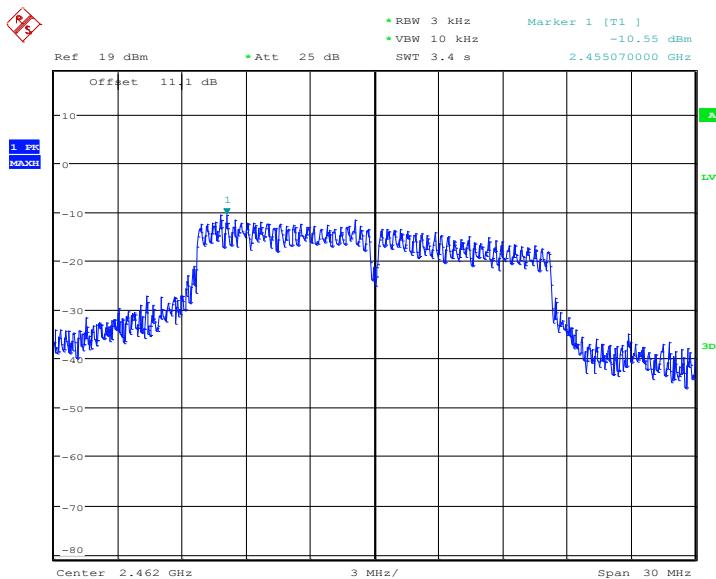
Fig.92 Power spectral density: CH6,11n(40M)



Date: 11.JUL.2016 14:56:57

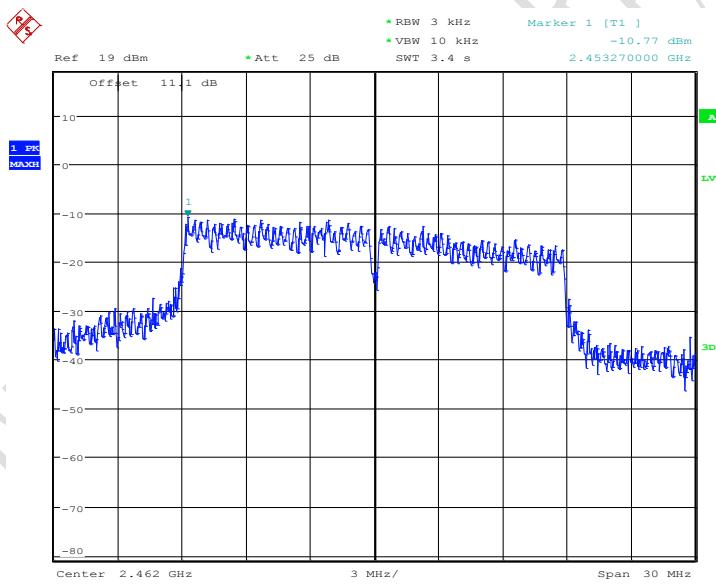
Fig.93 Power spectral density: CH11,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 14:58:51

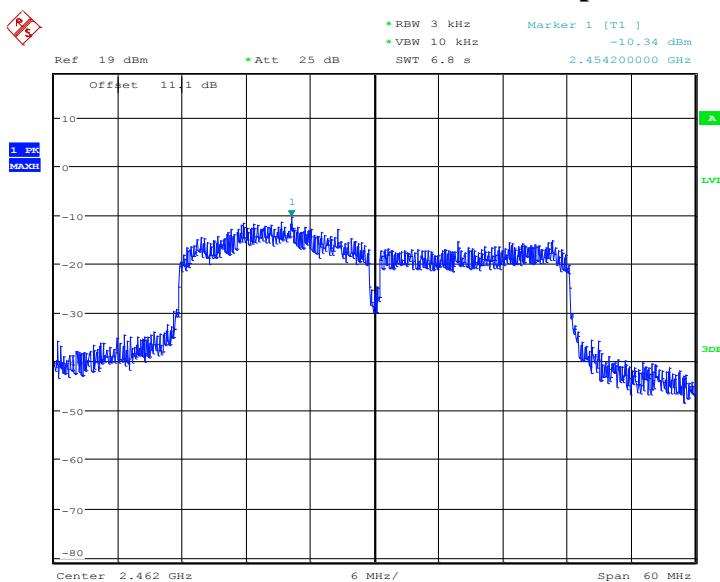
Fig.94 Power spectral density: CH11,11g



Date: 11.JUL.2016 15:00:27

Fig.95 Power spectral density: CH11,11n

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:04:17

Fig.96 Power spectral density: CH11,11n(40M)

5.3 6dB Occupied Bandwidth

Specifications:	FCC 47 CFR Part 15.247(a)
DUT Serial Number:	S5/9: 358067070000929
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30% -60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

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

Test Procedure

The measurement is according to ANSI C63.10 clause 11.8.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW = 100 kHz.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. 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.

Note: --

Test Result:**802.11b/g mode**

Mode	Occupied 6dB Bandwidth(MHz)			Conclusion
	Ch1	Ch6	Ch11	
802.11b	8.221	9.781	9.317	Pass
802.11g	11.538	16.587	14.503	Pass

802.11n mode

Mode	Occupied 6dB Bandwidth(MHz)			Conclusion
	Ch1	Ch6	Ch11	
802.11n(20MHz)	11.378	17.869	12.580	Pass
802.11n(40MHz)	17.628	17.949	19.712	Pass

Conclusion: PASS

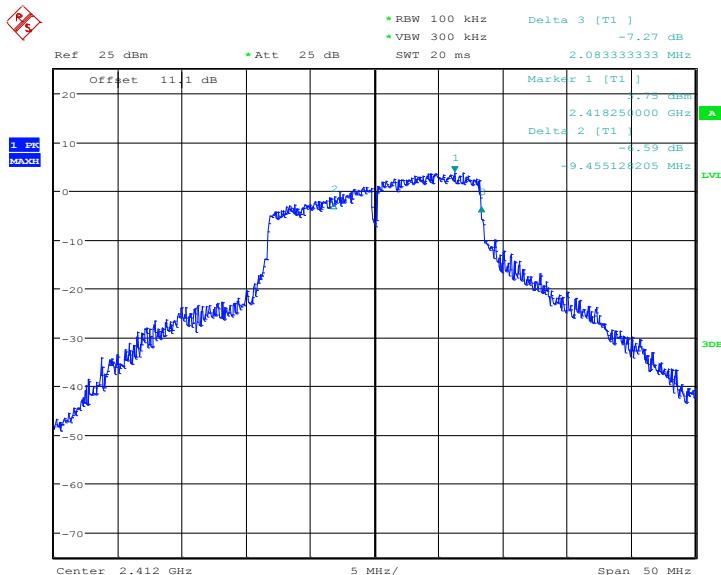
Test figure as below:



Date: 11.JUL.2016 15:08:18

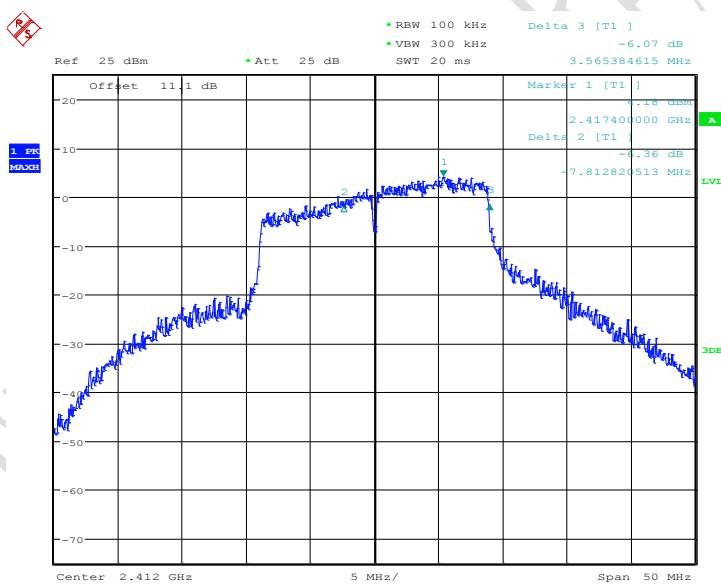
Fig.97 6dB Bandwidth: Ch1,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:11:15

Fig.98 6dB Bandwidth: Ch1,11g



Date: 11.JUL.2016 16:33:25

Fig.99 6dB Bandwidth: Ch1,11n

Report No.: B16X50266-WLAN-Rev1

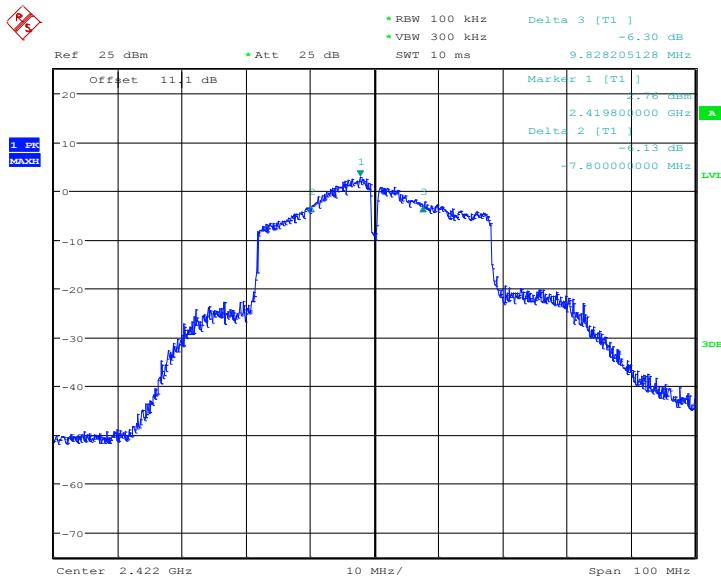


Fig.100 6dB Bandwidth: Ch1,11n(40M)

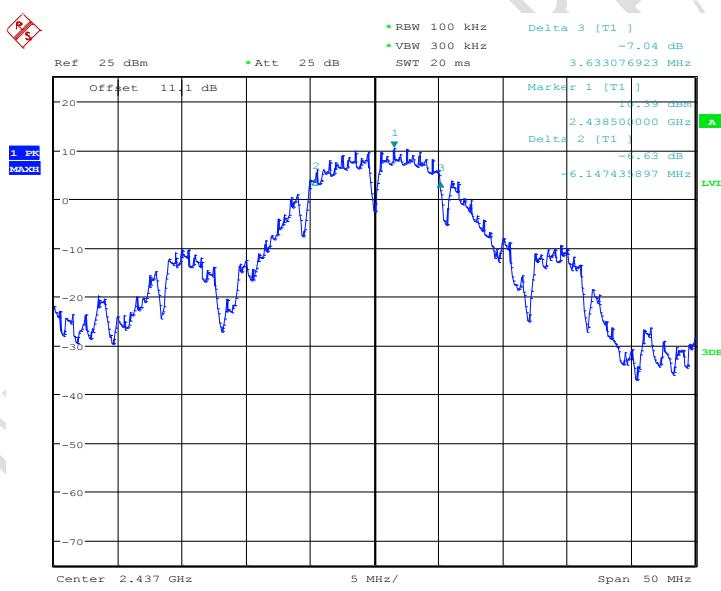
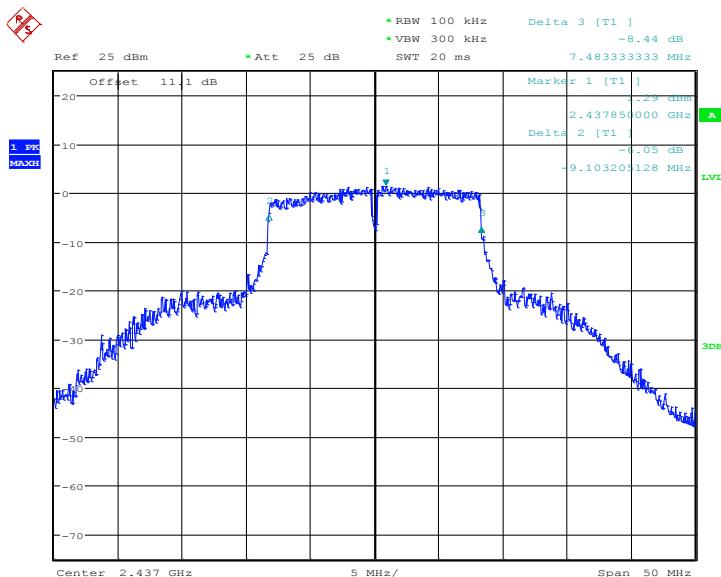


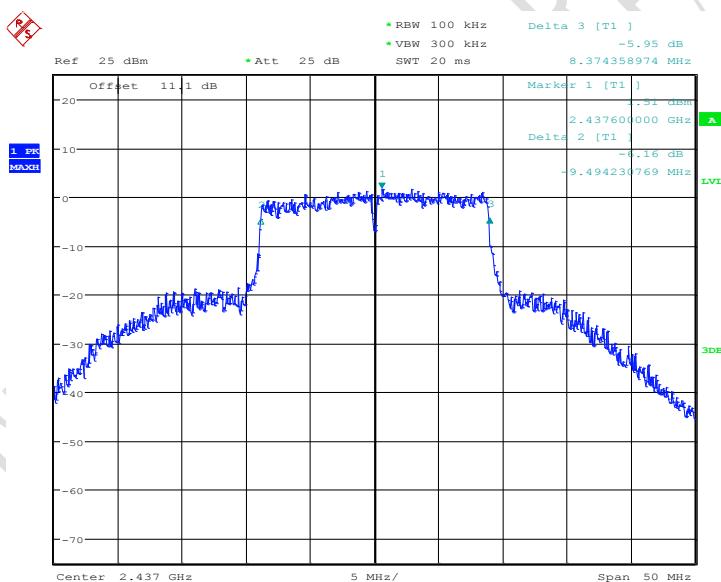
Fig.101 6dB Bandwidth: Ch6,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:12:17

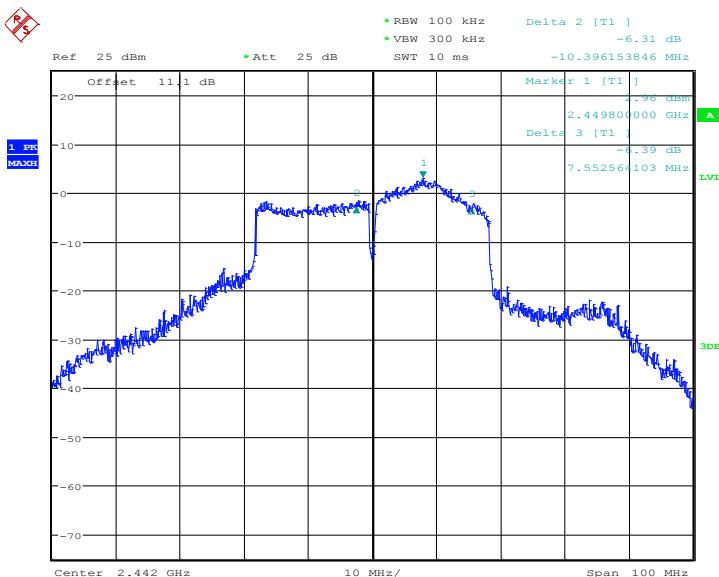
Fig.102 6dB Bandwidth: Ch6,11g



Date: 11.JUL.2016 15:18:05

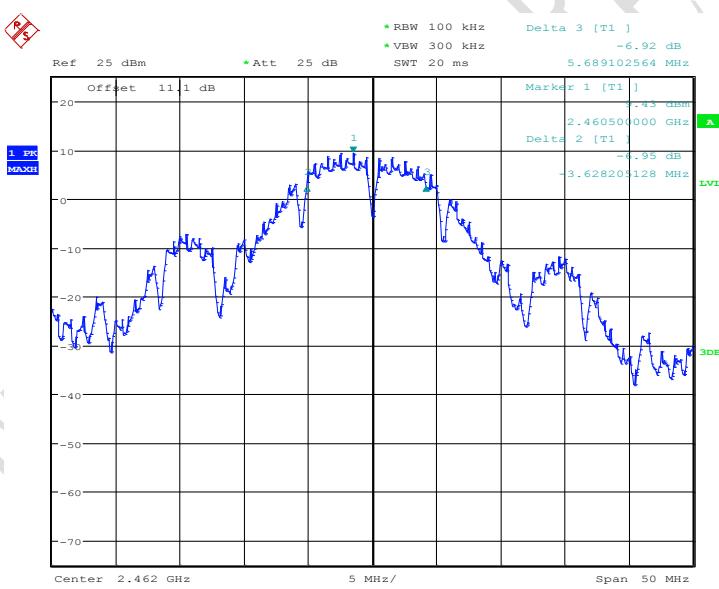
Fig.103 6dB Bandwidth: Ch6,11n

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:23:14

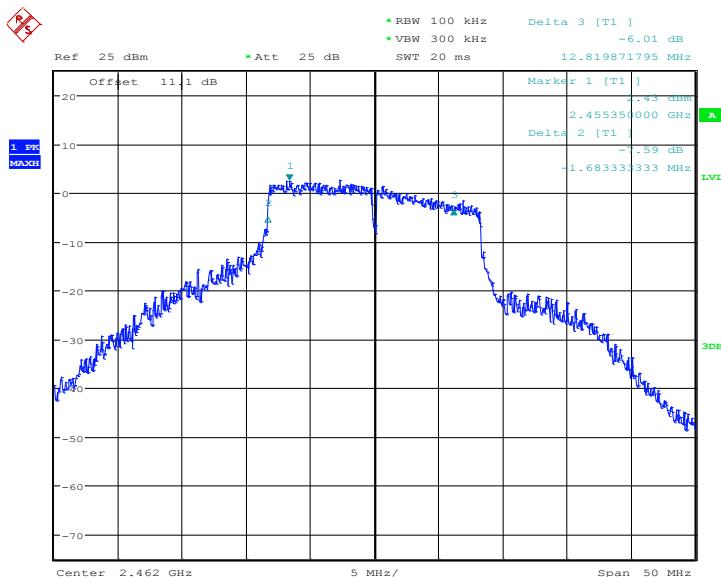
Fig.104 6dB Bandwidth: Ch6,11n(40M)



Date: 11.JUL.2016 15:09:50

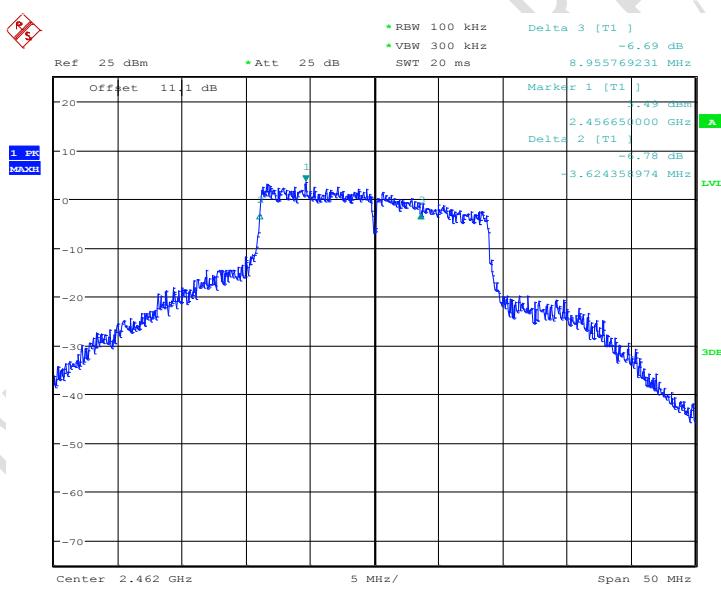
Fig.105 6dB Bandwidth: Ch11,11b

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:13:00

Fig.106 6dB Bandwidth: Ch11,11g



Date: 11.JUL.2016 16:34:31

Fig.107 6dB Bandwidth: Ch11,11n

Report No.: B16X50266-WLAN-Rev1

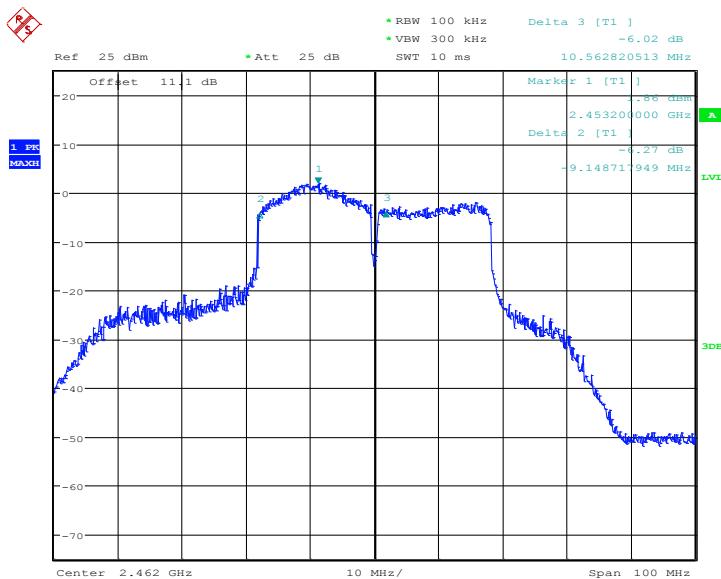


Fig.108 6dB Bandwidth: Ch11,11n(40M)

5.4 Band Edges Compliance

Specifications:	FCC 47 CFR Part 15.247(d)
DUT Serial Number:	S9/9: 358067070001059
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30% -60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limited(dBuV/m)	
FCC 47 CFR Part 15.247(d)	Peak	74
	Average	54

Test Procedure

The measurement is according to ANSI C63.10 clause11.13.

1. Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.
2. Reference level offset: Corrected for gains and losses of test antenna factor, preamp gain and cable loss, so as to indicate field strength, in units of dB μ V/m at 3 m, directly on the instrument display. Alternatively, the reference level offset may be set to zero and calculations shall be provided showing the conversion of raw measured data to thefield strength in dB μ V/m at 3 m.
3. Reference level: As required to keep the signal from exceeding the maximum spectrum analyzer input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2..
4. Attenuation: Auto (at least 10 dB preferred).
5. Sweep time: Coupled.
6. Resolution bandwidth: Above 1 GHz: 1 MHz
7. Video bandwidth: VBW for Peak, Quasi-peak, or Average Detector Function: 3×RBW
8. Detector (unless specified otherwise): Peak and average above 1 GHz
9. Trace: Max hold for final measurement; a combination of two traces, clear-write and max hold, is recommended for maximizing the emission.

Note: --

Test Result:**802.11b/g mode**

mode	Channel	Test Results(dBuV/m)			Conclusion
802.11b	1	Peak	2390.000MHz	44.747	Pass
		Average	2390.000MHz	33.583	
		Fig.109			
	11	Peak	2483.500MHz	47.067	Pass
		Average	2483.500MHz	36.676	
		Fig.110			
802.11g	1	Peak	2390.000MHz	50.388	Pass
		Average	2390.000MHz	35.442	
		Fig.111			
	11	Peak	2483.500MHz	68.013	Pass
		Average	2483.500MHz	50.055	
		Fig.112			

802.11n mode

mode	Channel	Test Results(dBuV/m)			Conclusion
802.11n (20MHz)	3	Peak	2390.000MHz	50.570	Pass
		Average	2390.000MHz	44.398	
		Fig.113			
	11	Peak	2483.500MHz	61.870	Pass
		Average	2483.500MHz	48.986	
		Fig.114			
802.11n (40MHz)	3	Peak	2390.000MHz	48.413	Pass
		Average	2390.000MHz	36.502	
		Fig.115			
	9	Peak	2483.880MHz	56.609	Pass
		Average	2483.500MHz	39.698	
		Fig.116			

Conclusion: PASS

Test figure as below:

BAND EDGERE 1GHz-3GHz 2300-2390

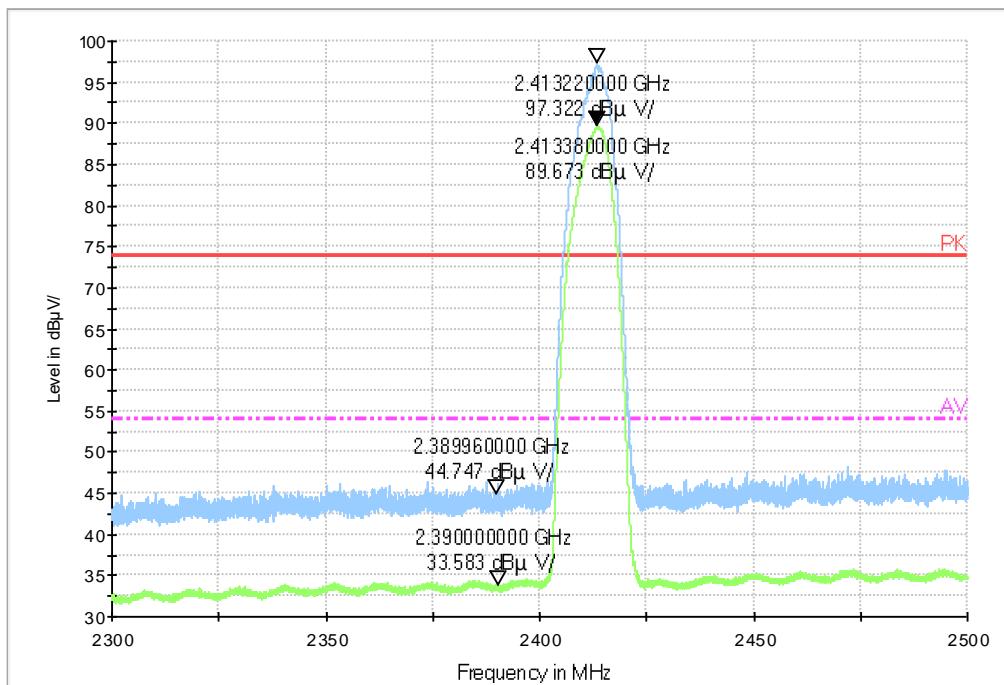


Fig.109 Frequency Band Edge: Ch1,11b

BAND EDGERE 1GHz-3GHz 2483.5-2500

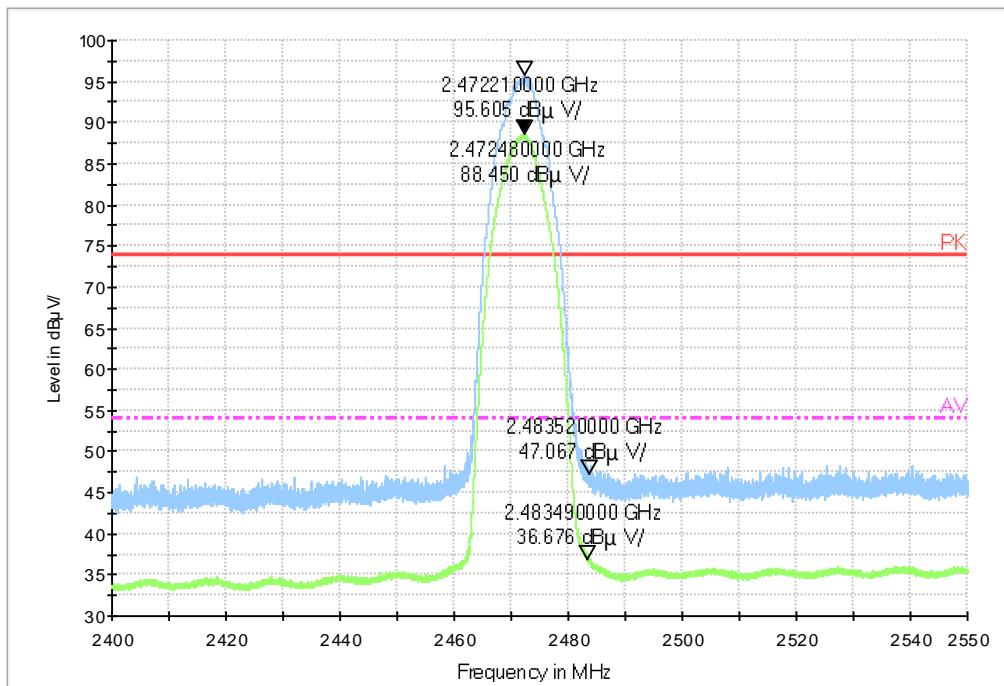


Fig.110 Frequency Band Edge: Ch11,11b

Report No.: B16X50266-WLAN-Rev1

BAND EDGERE 1GHz-3GHz 2300-2390

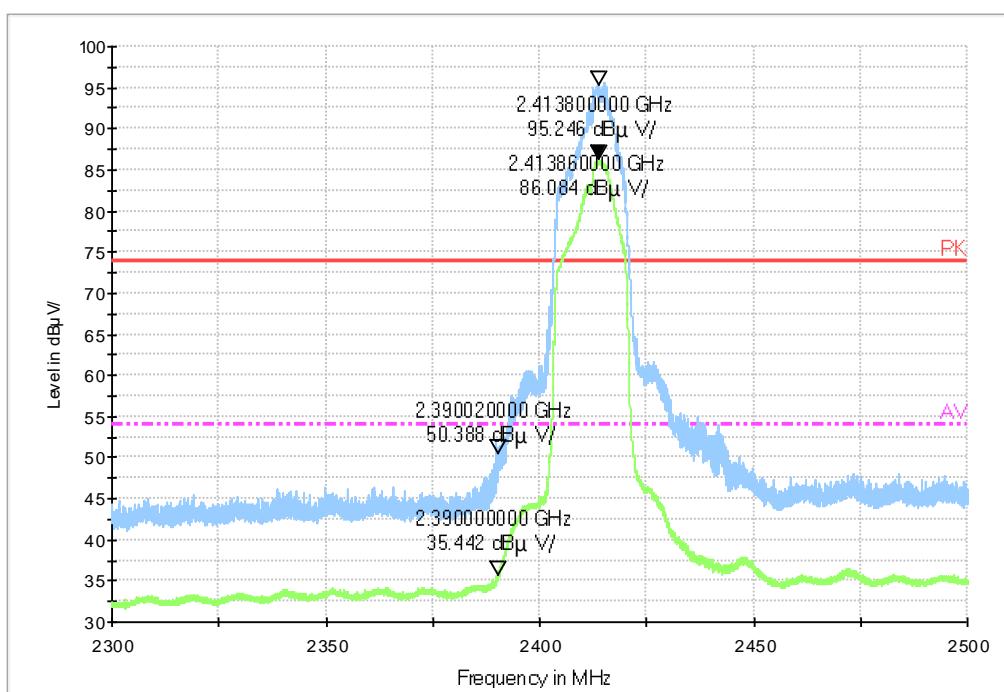


Fig.111 Frequency Band Edge: Ch1,11g

BAND EDGERE 1GHz-3GHz 2483.5-2500

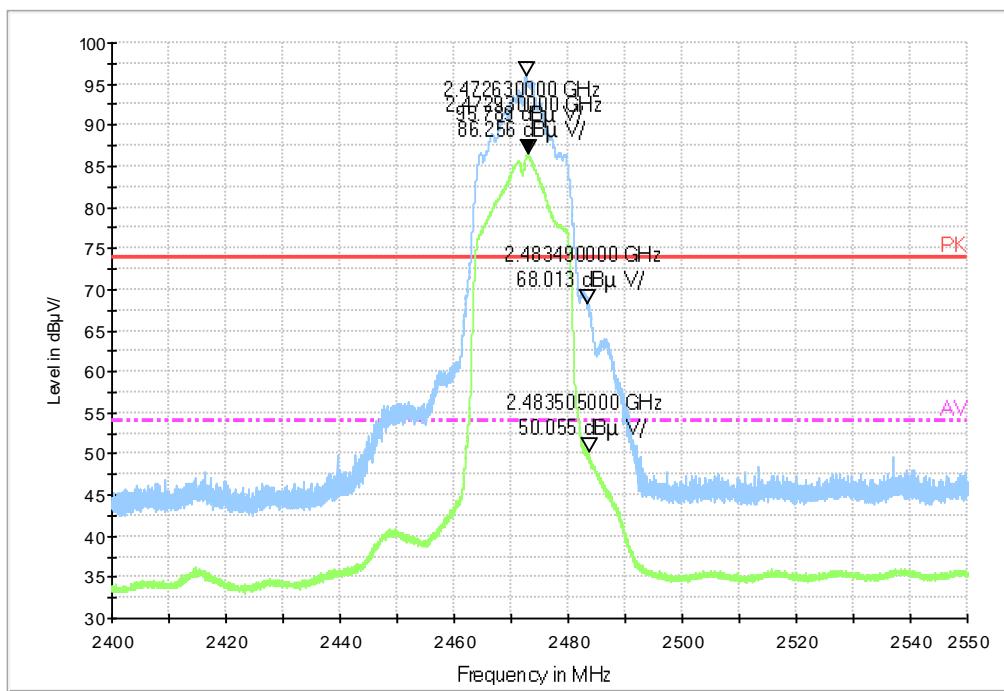


Fig.112 Frequency Band Edge: Ch11,11g

Report No.: B16X50266-WLAN-Rev1

BAND EDGERE 1GHz-3GHz 2300-2390

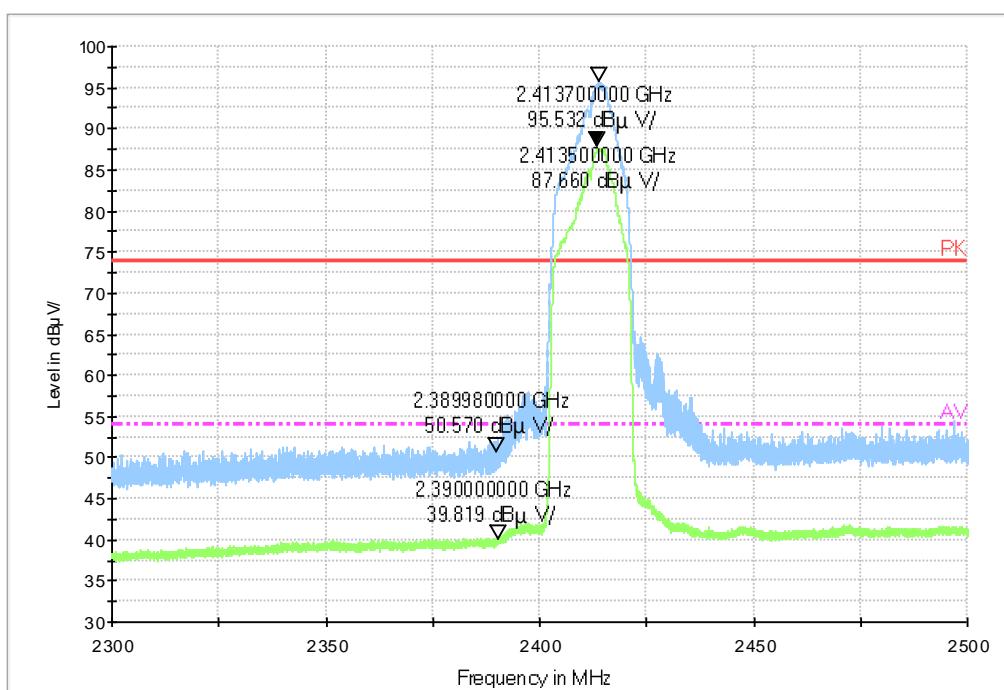


Fig.113 Frequency Band Edge: Ch3,11n(20MHz)

BAND EDGERE 1GHz-3GHz 2483.5-2500

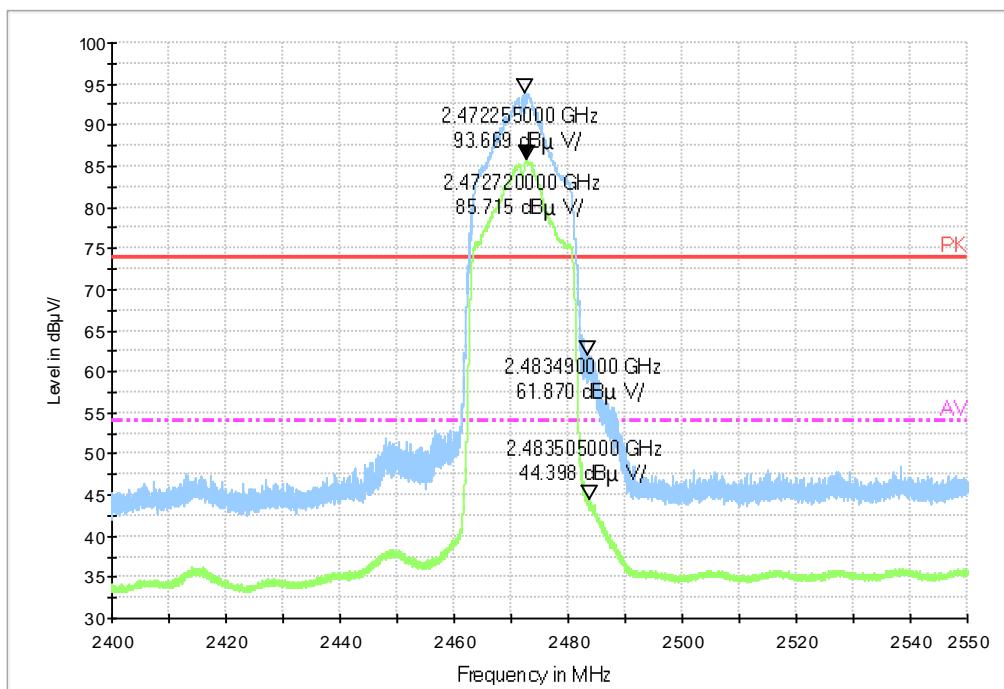


Fig.114 Frequency Band Edge: Ch11,11n(20MHz)

Report No.: B16X50266-WLAN-Rev1

BAND EDGERE 1GHz-3GHz 2300-2390

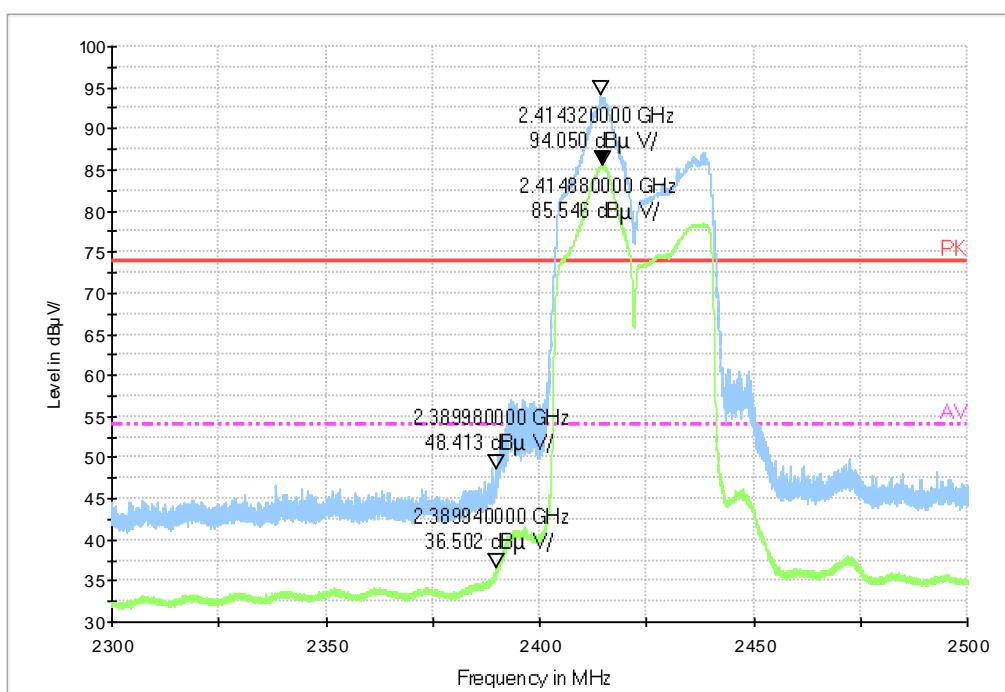


Fig.115 Frequency Band Edge: Ch3,11n(40M)

BAND EDGERE 1GHz-3GHz 2483.5-2500

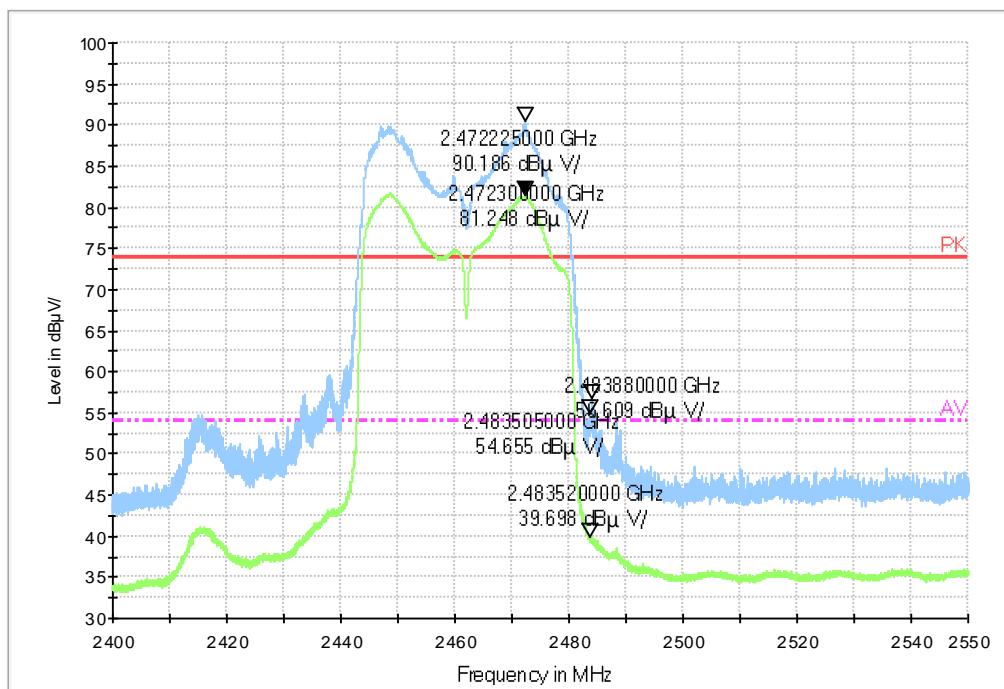


Fig.116 Frequency Band Edge: Ch9,11n(40M)

5.5 Transmitter Spurious Emission-Conducted

Specifications:	FCC 47 CFR Part15.247 (d)
DUT Serial Number:	S5/9: 358067070000929
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30% -60% Air pressure: 86-106kPa
Test Results:	--

Limit

Standard	Limit
FCC 47 CFR Part15.247 (d)	20dB below peak output power in 100KHz bandwidth

Test Procedure

This measurement is according to ANSI C63.10 clause 11.11.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.

Reference level measurement

3. Set instrument center frequency to DTS channel center frequency.
4. Set the span to ≥ 1.5 times the DTS bandwidth.
5. Set the RBW = 100 kHz.
6. Set the VBW $\geq [3 \times \text{RBW}]$.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum PSD level.

Emission level measurement

12. Set the center frequency and span to encompass frequency range to be measured.
13. Set the RBW = 100 kHz.
14. Set the VBW $\geq [3 \times \text{RBW}]$.
15. Detector = peak.
16. Sweep time = auto couple.
17. Trace mode = max hold.
18. Allow trace to fully stabilize.
19. Use the peak marker function to determine the maximum amplitude level.

Test Result:**802.11b/g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412GHz	Fig.117	Pass
		30MHz~26GHz	Fig.118	Pass
	6	2.437GHz	Fig.119	Pass
		30MHz~26GHz	Fig.120	Pass
	11	2.462GHz	Fig.121	Pass
		30MHz~26GHz	Fig.122	Pass
802.11g	1	2.412GHz	Fig.123	Pass
		30MHz~26GHz	Fig.124	Pass
	6	2.437GHz	Fig.125	Pass
		30MHz~26GHz	Fig.126	Pass
	11	2.462GHz	Fig.127	Pass
		30MHz~26GHz	Fig.128	Pass

802.11n mode

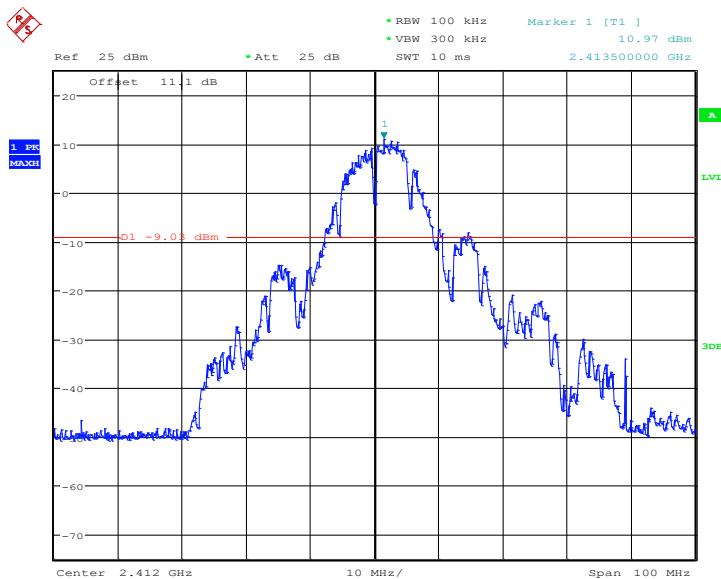
Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(20MHz)	1	2.412GHz	Fig.129	Pass
		30MHz~26GHz	Fig.130	Pass
	6	2.437GHz	Fig.131	Pass
		30MHz~26GHz	Fig.132	Pass
	11	2.462GHz	Fig.133	Pass
		30MHz~26GHz	Fig.134	Pass
802.11n(40MHz)	1	2.422GHz	Fig.135	Pass
		30MHz~26GHz	Fig.136	Pass
	6	2.442GHz	Fig.137	Pass
		30MHz~26GHz	Fig.138	Pass
	11	2.462GHz	Fig.139	Pass
		30MHz~26GHz	Fig.140	Pass

Conclusion: PASS

Test figure as below:

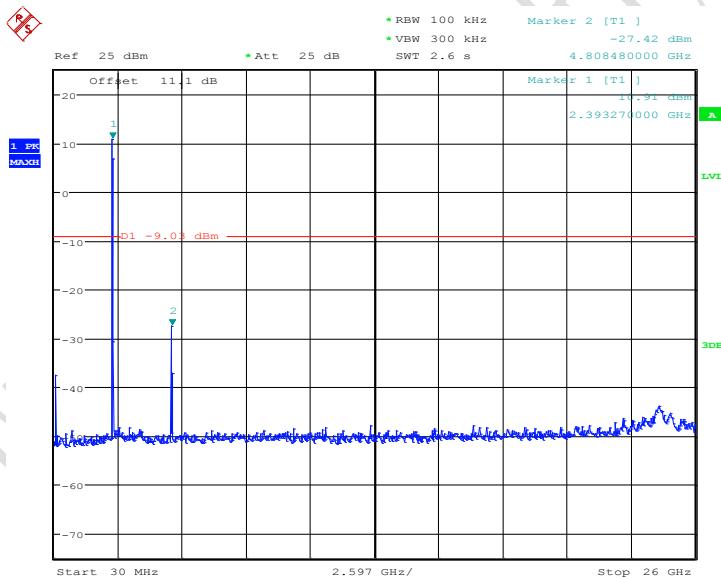
Address: 11 YUE TAN NAN JIE, BEIJING, P.R.C,100045 Tel:+86 10 68094053 FAX:+86 10 68011404 Web:<http://www.chinattl.com>

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:29:46

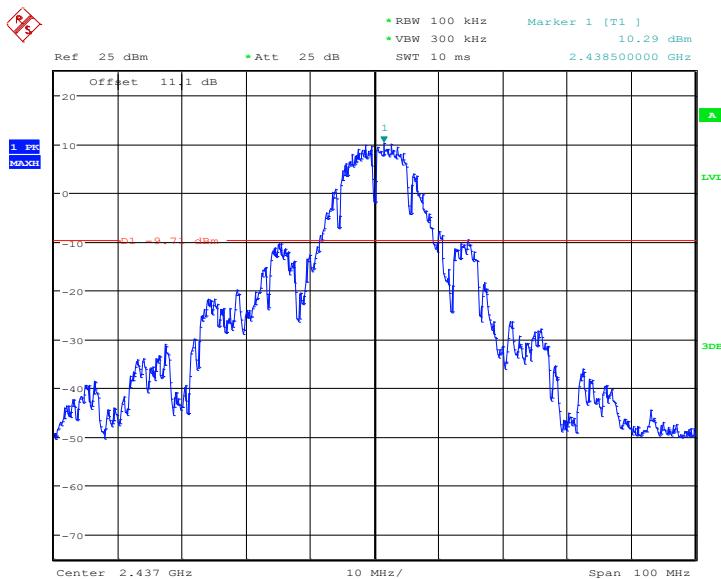
Fig.117 Conducted spurious emission: Ch1,11b,2412MHz



Date: 11.JUL.2016 15:31:09

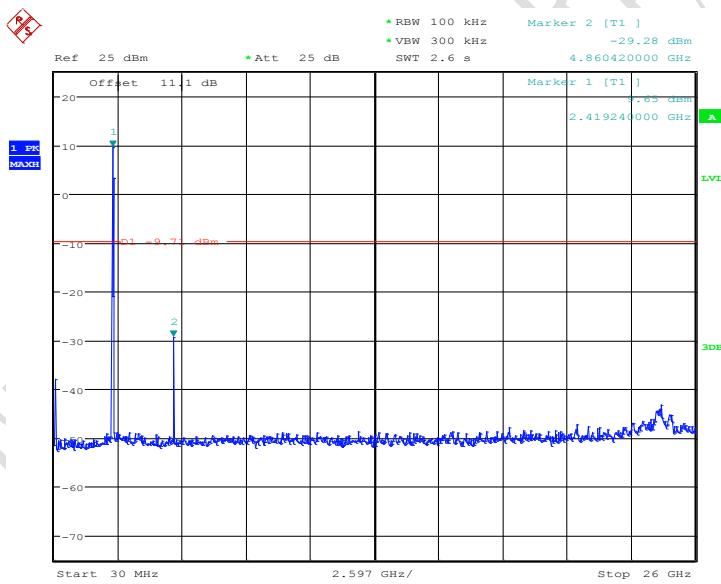
Fig.118 Conducted spurious emission: Ch1,11b,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:33:17

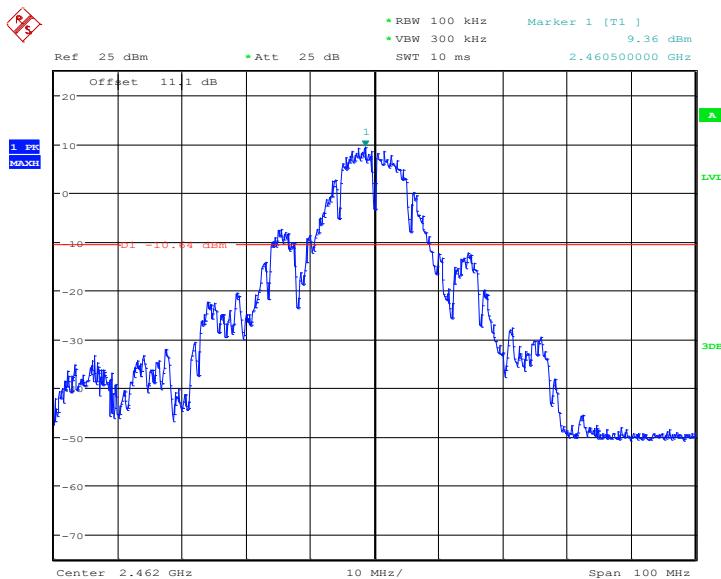
Fig.119 Conducted spurious emission: Ch6,11b,2437MHz



Date: 11.JUL.2016 15:33:59

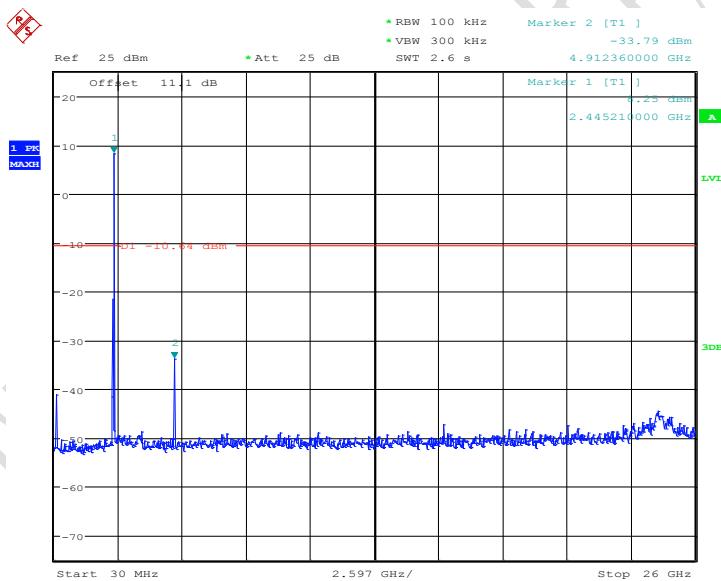
Fig.120 Conducted spurious emission: Ch6,11b,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:36:13

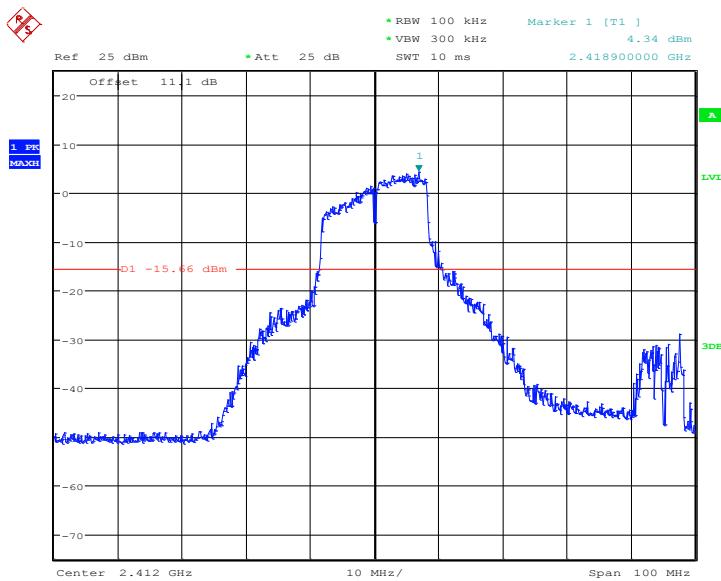
Fig.121 Conducted spurious emission: Ch11,11b,2462MHz



Date: 11.JUL.2016 15:36:36

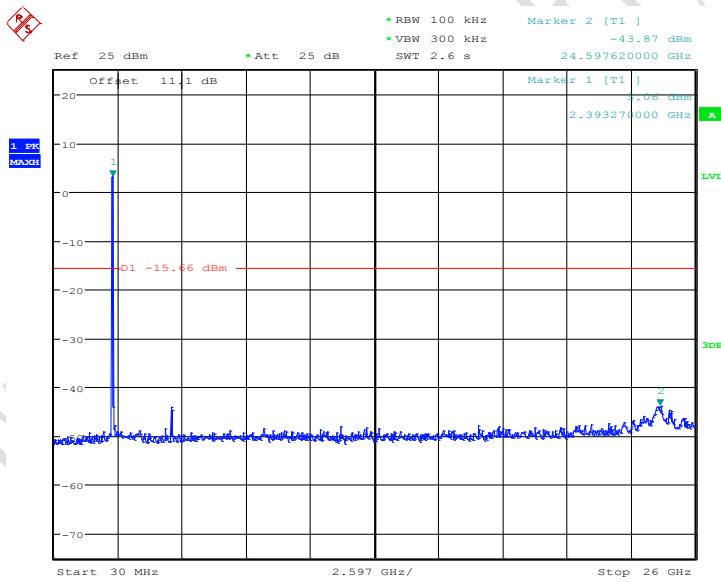
Fig.122 Conducted spurious emission: Ch11,11b,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:38:48

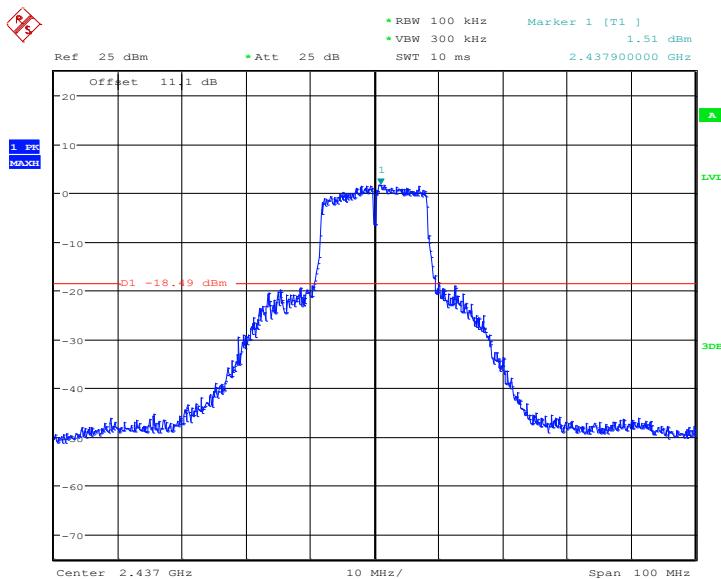
Fig.123 Conducted spurious emission: Ch1,11g,2412MHz



Date: 11.JUL.2016 15:41:17

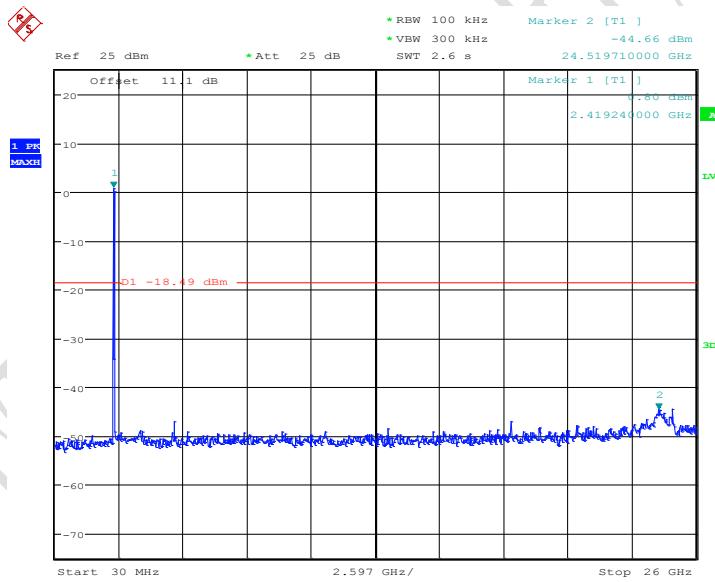
Fig.124 Conducted spurious emission: Ch1,11g,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:42:24

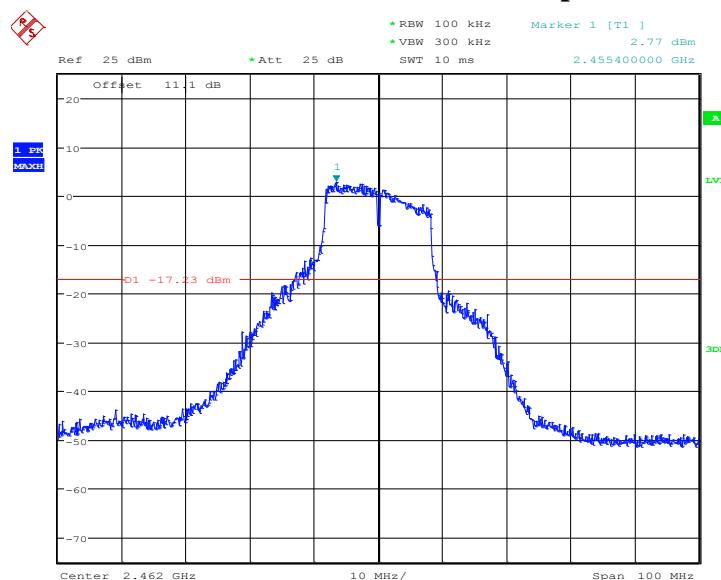
Fig.125 Conducted spurious emission: Ch6,11g,2437MHz



Date: 11.JUL.2016 15:42:47

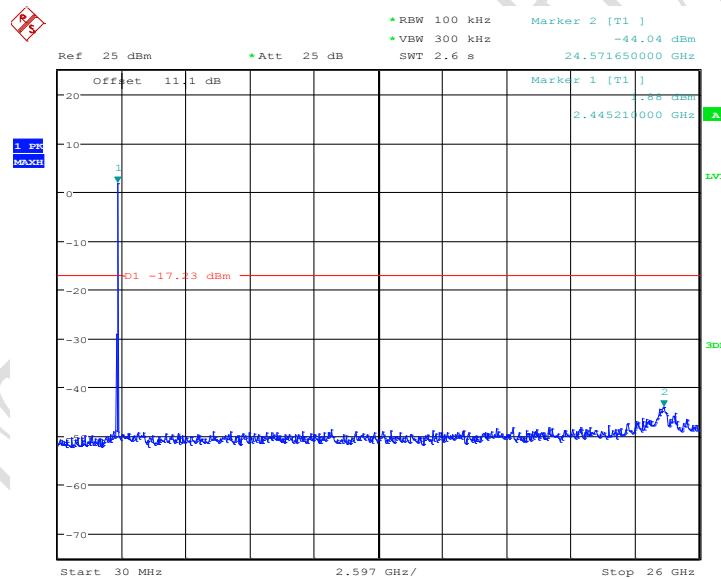
Fig.126 Conducted spurious emission: Ch6,11g,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:43:50

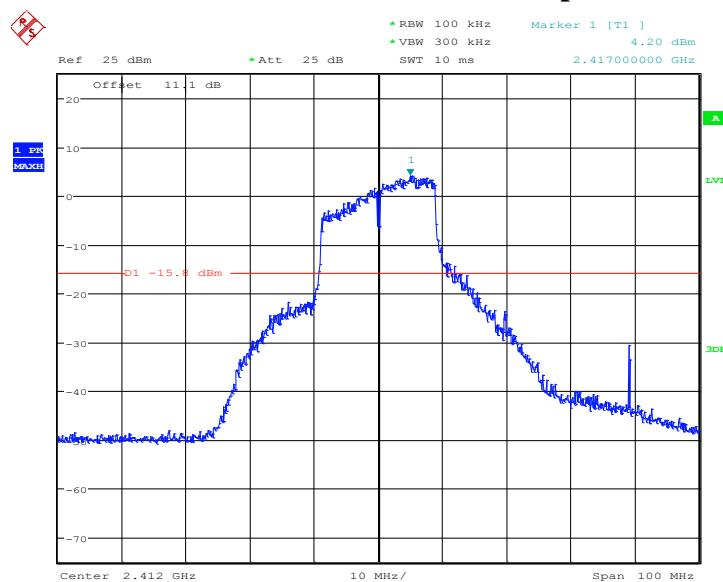
Fig.127 Conducted spurious emission: Ch11,11g,2462MHz



Date: 11.JUL.2016 15:44:31

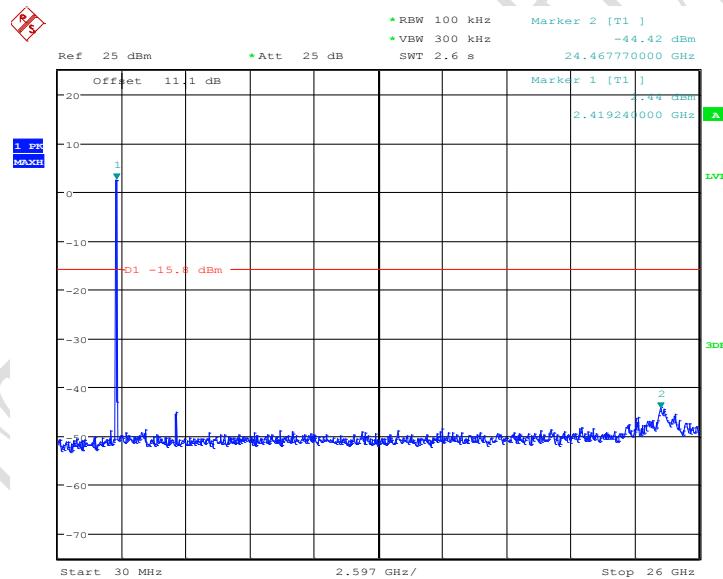
Fig.128 Conducted spurious emission: Ch11,11g,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:52:08

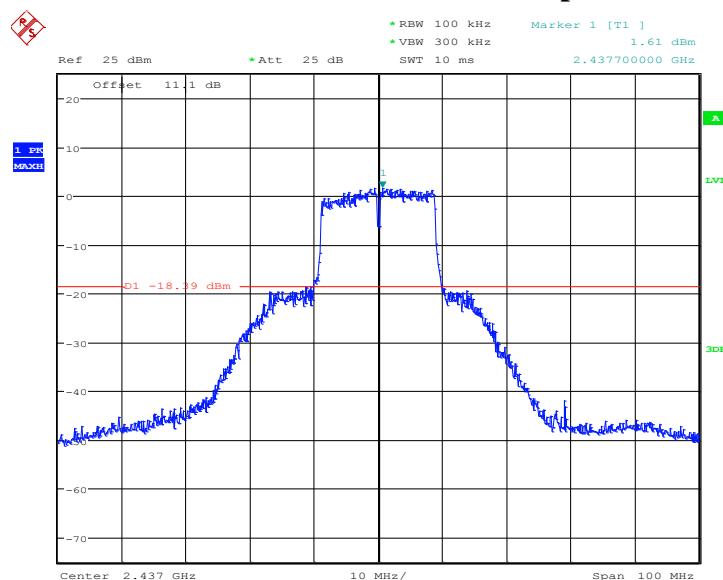
Fig.129 Conducted spurious emission: Ch1,11n,2412MHz



Date: 11.JUL.2016 15:52:31

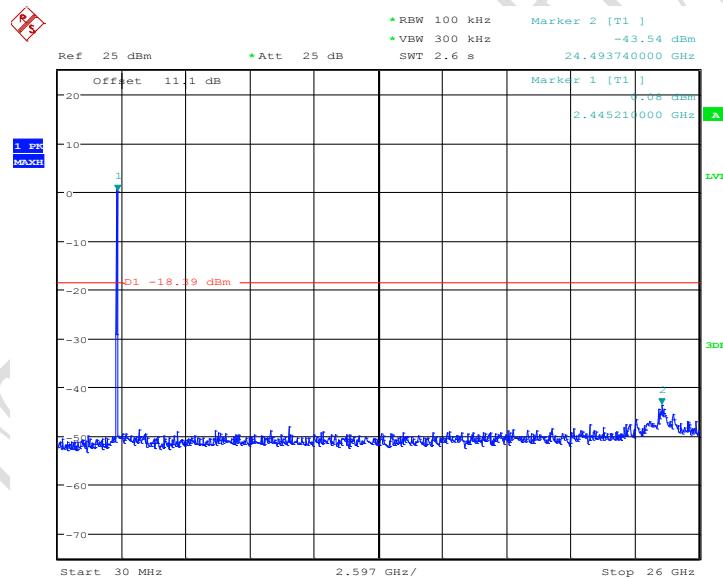
Fig.130 Conducted spurious emission: Ch1,11n,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:54:04

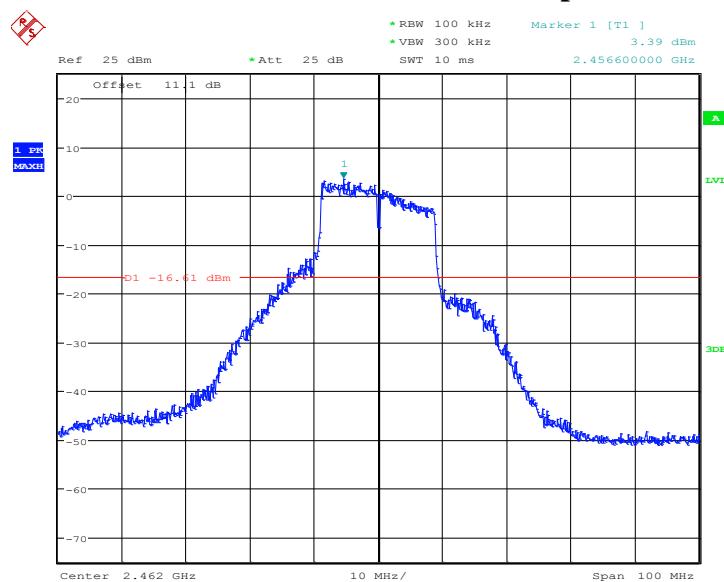
Fig.131 Conducted spurious emission: Ch6,11n,2437MHz



Date: 11.JUL.2016 15:54:24

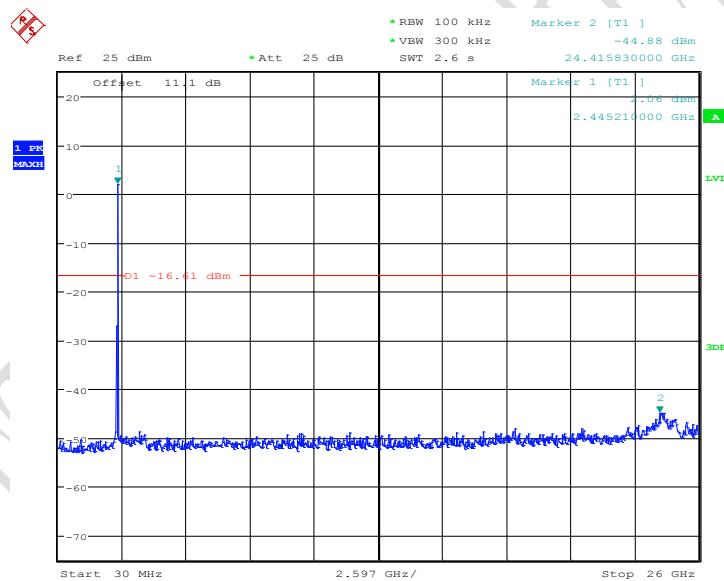
Fig.132 Conducted spurious emission: Ch6,11n,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 15:55:39

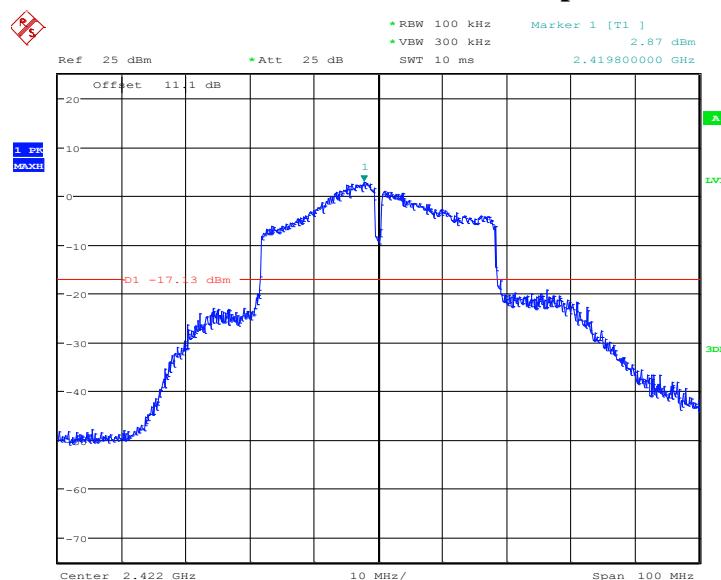
Fig.133 Conducted spurious emission: Ch11,11n,2462MHz



Date: 11.JUL.2016 15:55:56

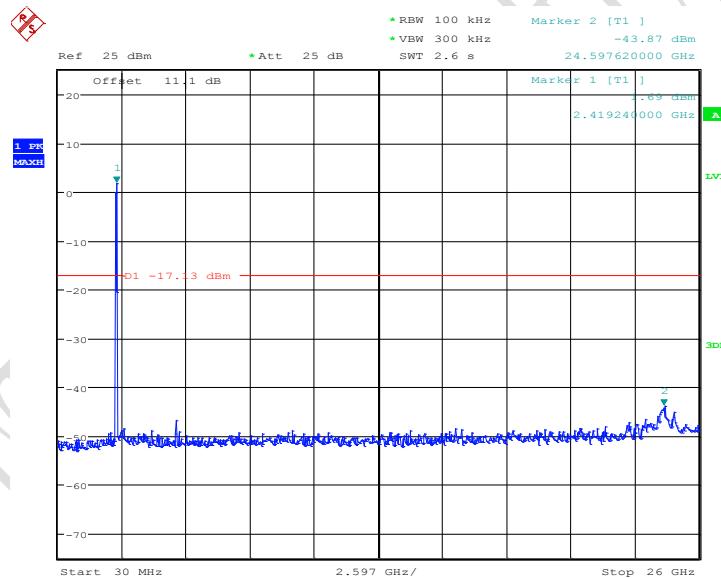
Fig.134 Conducted spurious emission: Ch11,11n,30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 16:00:43

Fig.135 Conducted spurious emission: Ch1,11n(40M),2422MHz



Date: 11.JUL.2016 16:01:08

Fig.136 Conducted spurious emission: Ch1,11n(40M),30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1

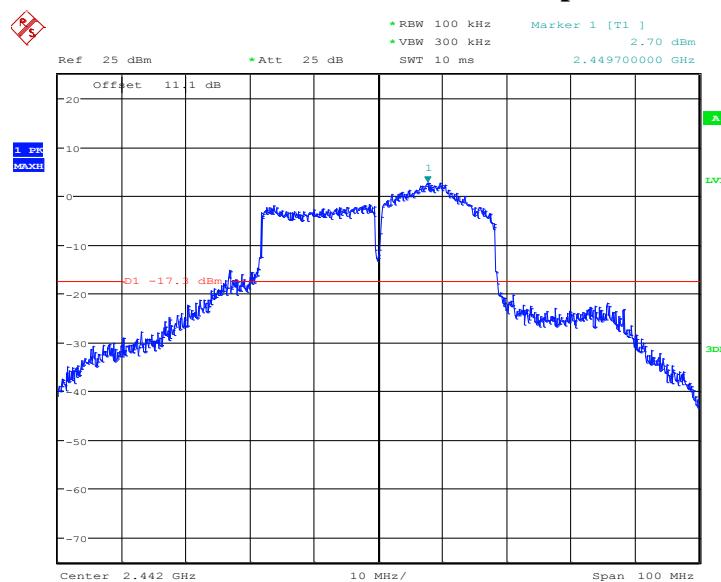


Fig.137 Conducted spurious emission: Ch6,11n(40M),2442MHz

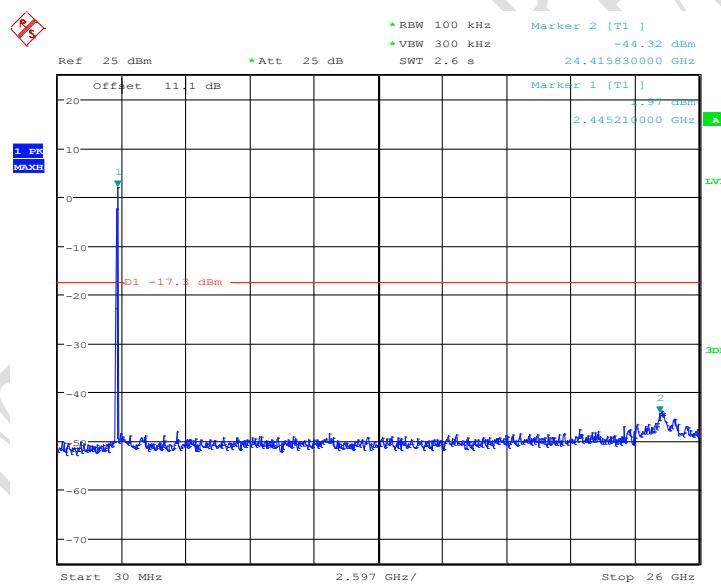
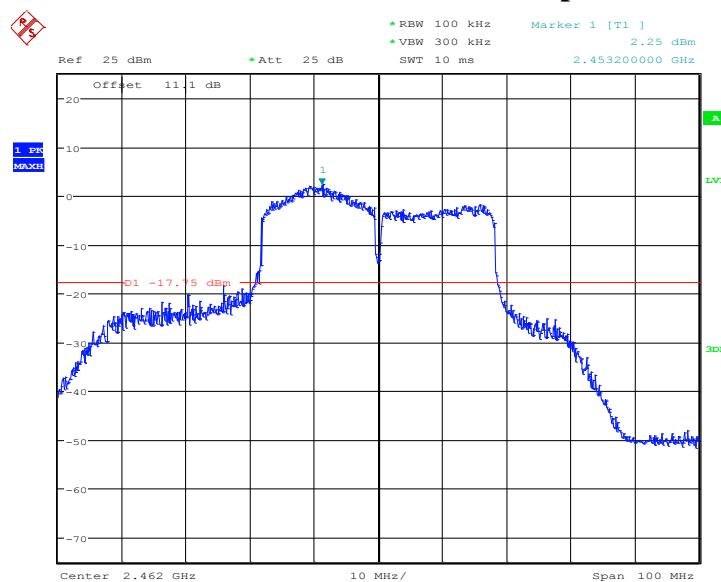


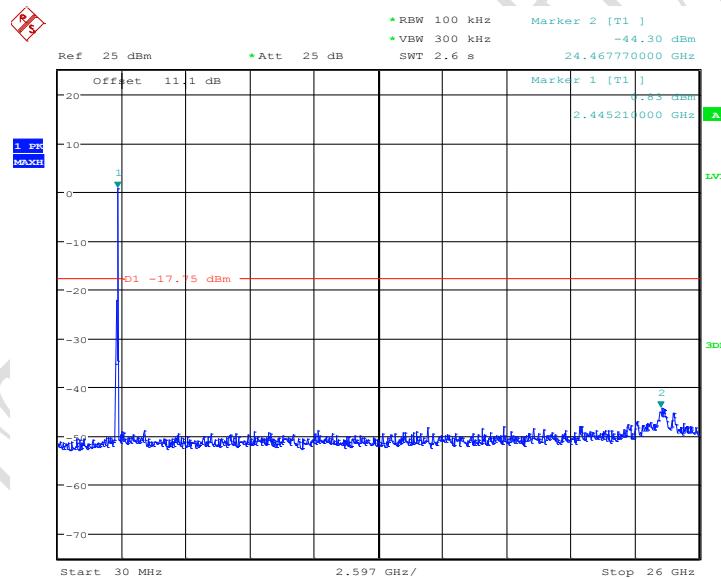
Fig.138 Conducted spurious emission: Ch6,11n(40M),30MHz~26GHz

Report No.: B16X50266-WLAN-Rev1



Date: 11.JUL.2016 16:04:10

Fig.139 Conducted spurious emission: Ch11,11n(40M),2462MHz



Date: 11.JUL.2016 16:04:28

Fig.140 Conducted spurious emission: Ch11,11n(40M),30MHz~26GHz

5.6 Transmitter Spurious Emission-Radiated

Specifications:	FCC 47 CFR Part 15.247, 15.205, 15.209
DUT Serial Number:	S9/9: 358067070001059
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	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 (uV/m)	Field strength (dBuV/m)
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

Test Procedure

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

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	100KHz/300KHz	5
1000~4000	1MHz/1MHz	15
4000~18000	1MHz/1MHz	40
18000~26500	1MHz/1MHz	20

Test Result:

A “reference path loss” is established and ARpi is the attenuation of “reference path loss”, and including the gain of receive antenna , the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

$$ARpi = \text{Cable loss} + \text{Antenna Gain-Preamplifier gain}$$

$$\text{Result} = PMea + ARpi$$

Channel	Frequency Range	Test Results	Conclusion
Ch1	30MH-1GHz	Fig.141	Pass
	1GHz-3GHz	Fig.142	Pass
	3GHz-18GHz	Fig.143	Pass

Channel	Frequency Range	Test Results	Conclusion
Ch6	30MH-1GHz	Fig.144	Pass
	1GHz-3GHz	Fig.145	Pass
	3GHz-18GHz	Fig.146	Pass

Channel	Frequency Range	Test Results	Conclusion
Ch11	30MH-1GHz	Fig.147	Pass
	1GHz-3GHz	Fig.148	Pass
	3GHz-18GHz	Fig.149	Pass
All channels	18GHz-26GHz	Fig.150	Pass

Note: all the test data shown was peak detected.

Conclusion: PASS

Test graphs as below:

RE 30MHz-1GHz

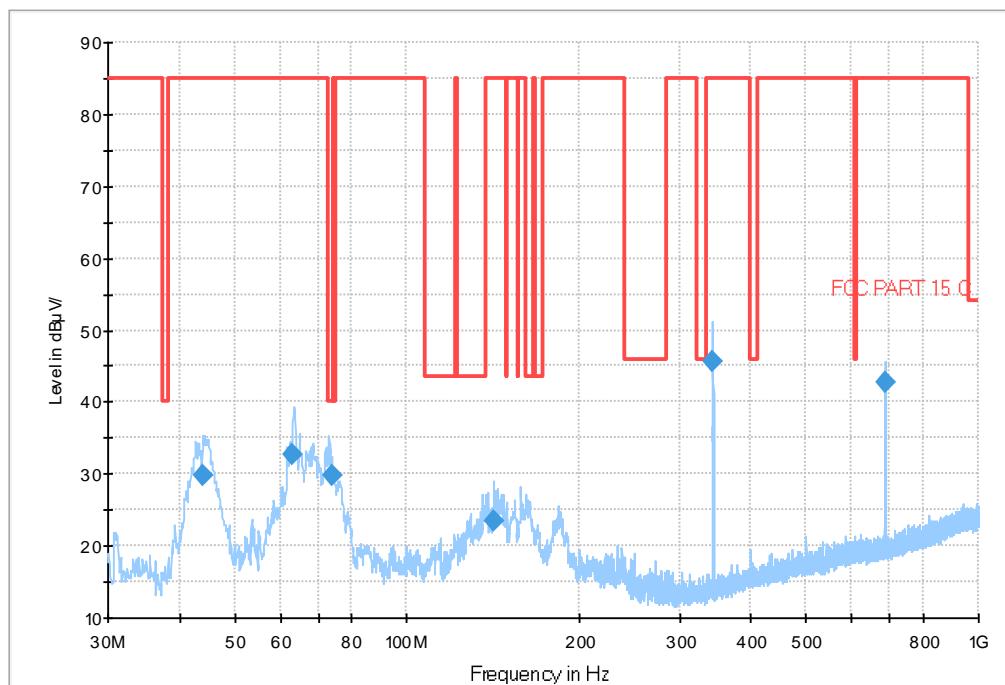


Fig.141 Radiated emission: Ch1, 30MHz-1GHz

RE 1GHz-3GHz

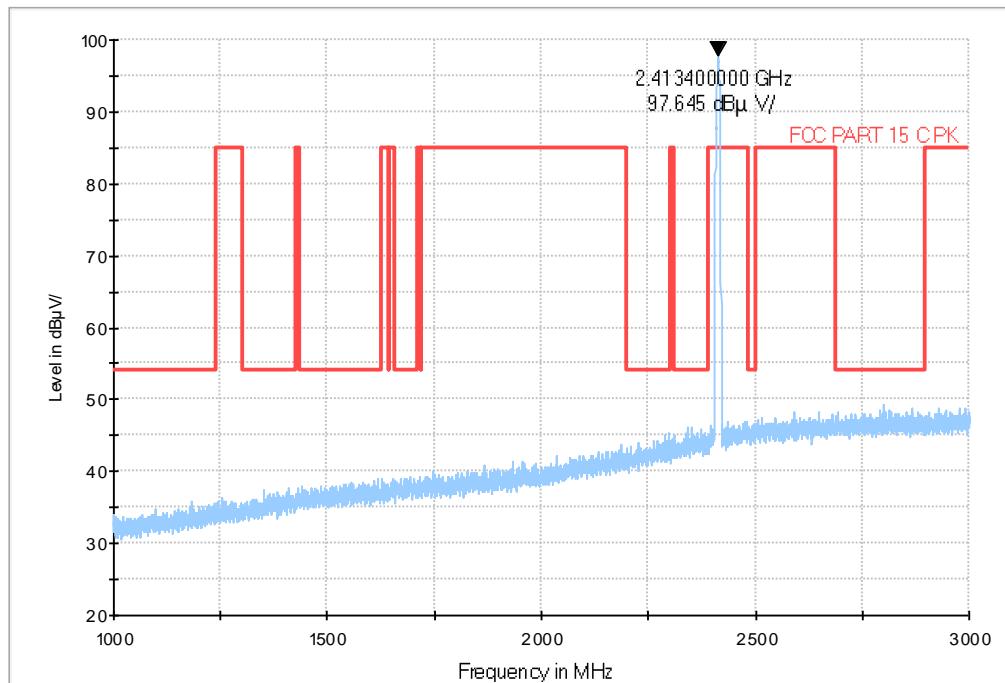


Fig.142 Radiated emission: Ch1, 1GHz-3GHz

Report No.: B16X50266-WLAN-Rev1

RE 3GHz-18GHz

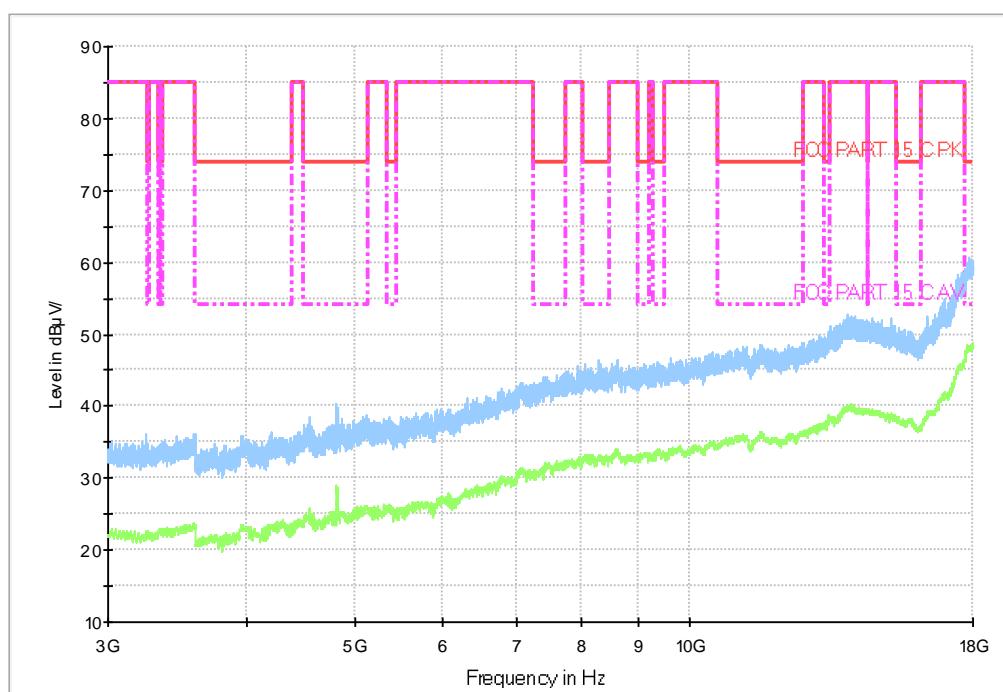


Fig.143 Radiated emission: Ch1, 3GHz-18GHz

RE 30MHz-1GHz

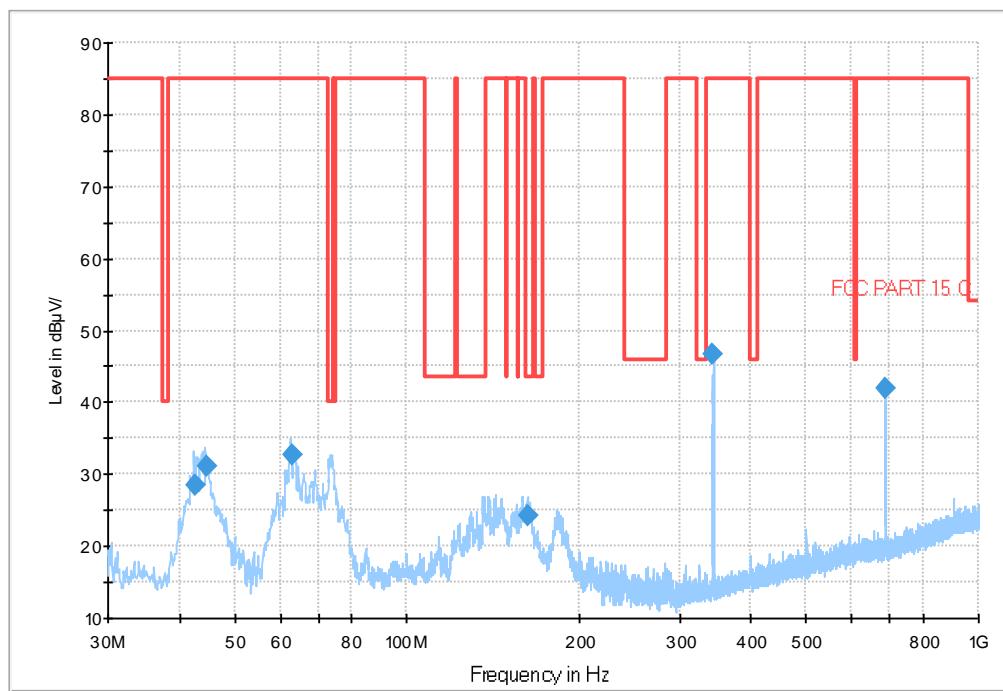


Fig.144 Radiated emission:Ch6, 30MHz-1GHz

Report No.: B16X50266-WLAN-Rev1

RE 1GHz-3GHz

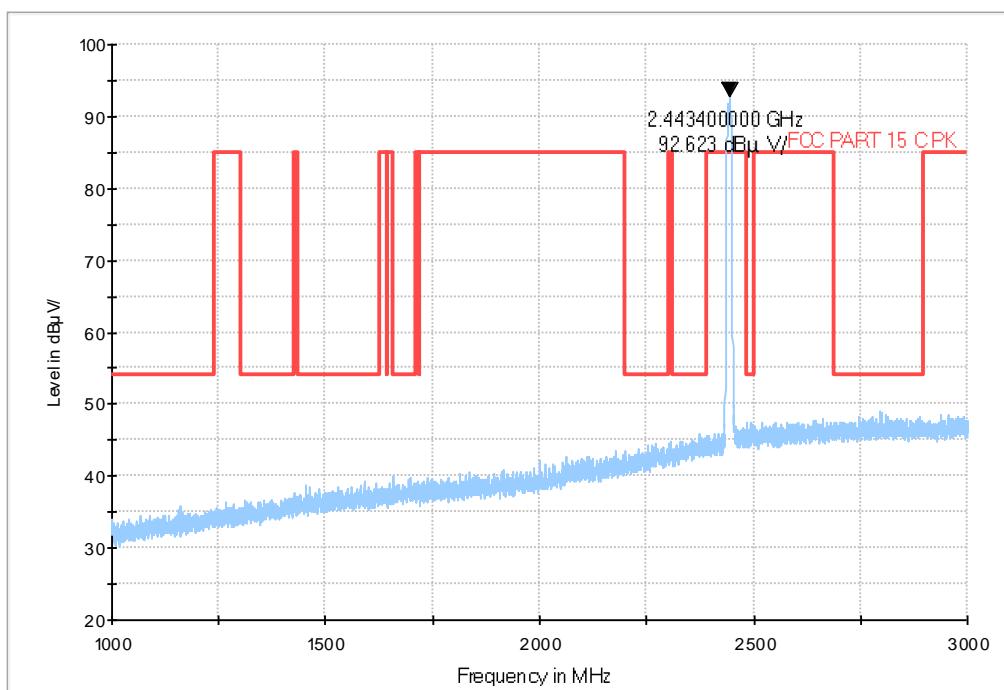


Fig.145 Radiated emission: Ch6, 1GHz-3GHz

RE 3GHz-18GHz

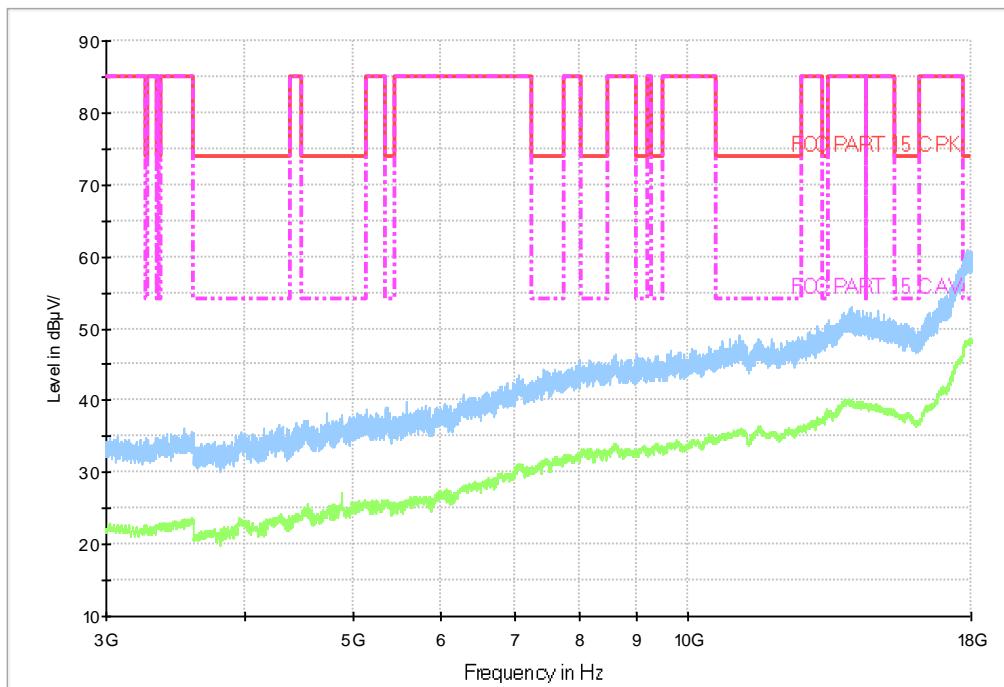


Fig.146 Radiated emission: Ch6, 3GHz-18GHz

Report No.: B16X50266-WLAN-Rev1

RE 30MHz-1GHz

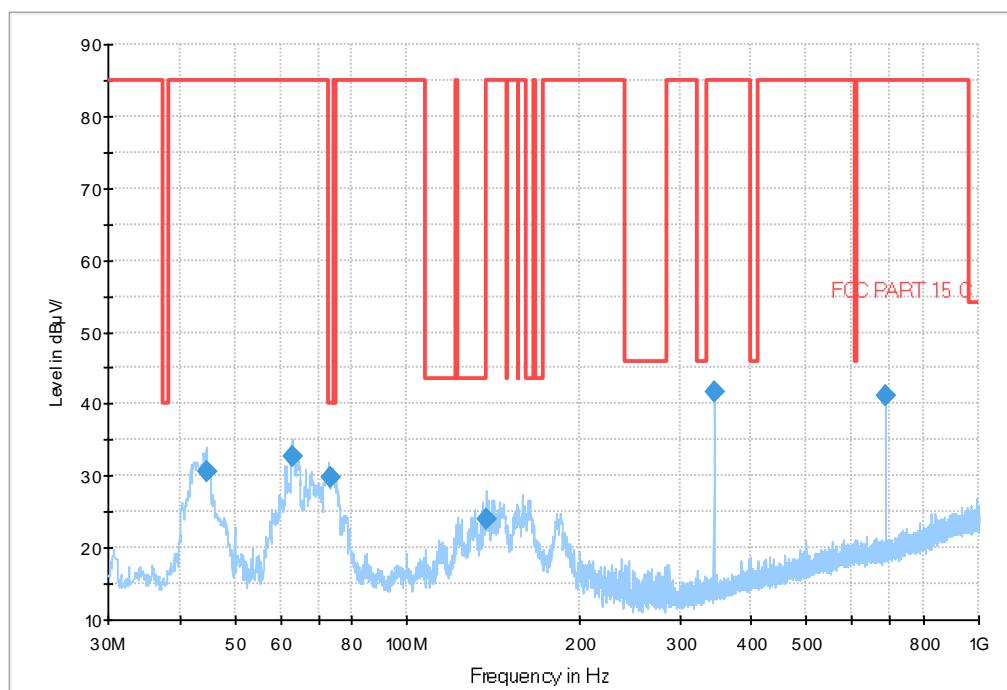


Fig.147 Radiated emission: Ch11, 30MHz-1GHz

RE 1GHz-3GHz

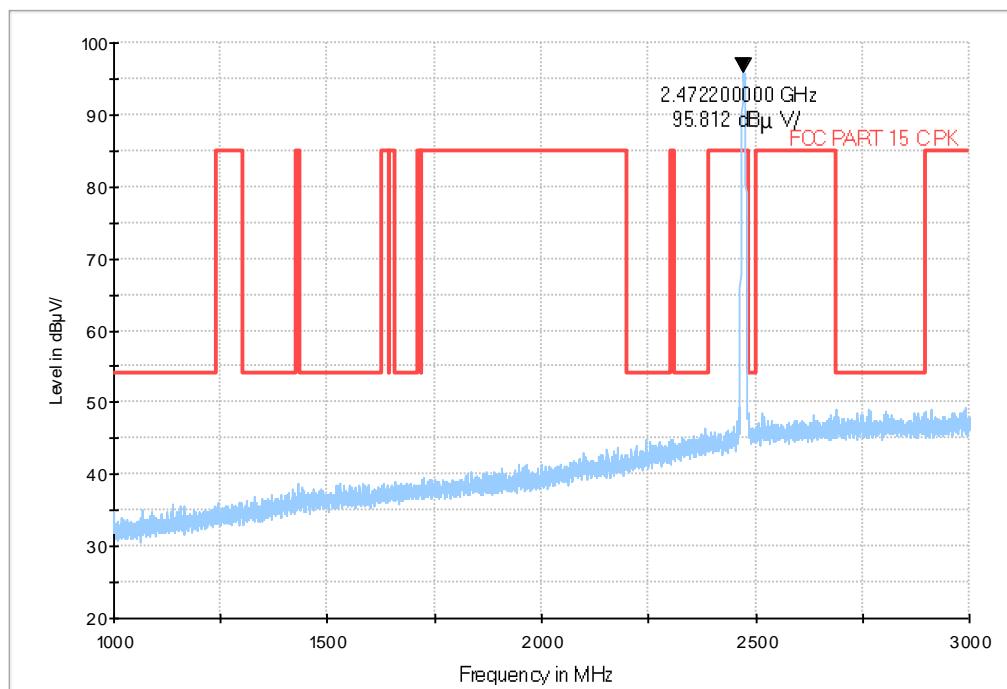


Fig.148 Radiated emission: Ch11, 1GHz-3GHz

Report No.: B16X50266-WLAN-Rev1

RE 3GHz-18GHz

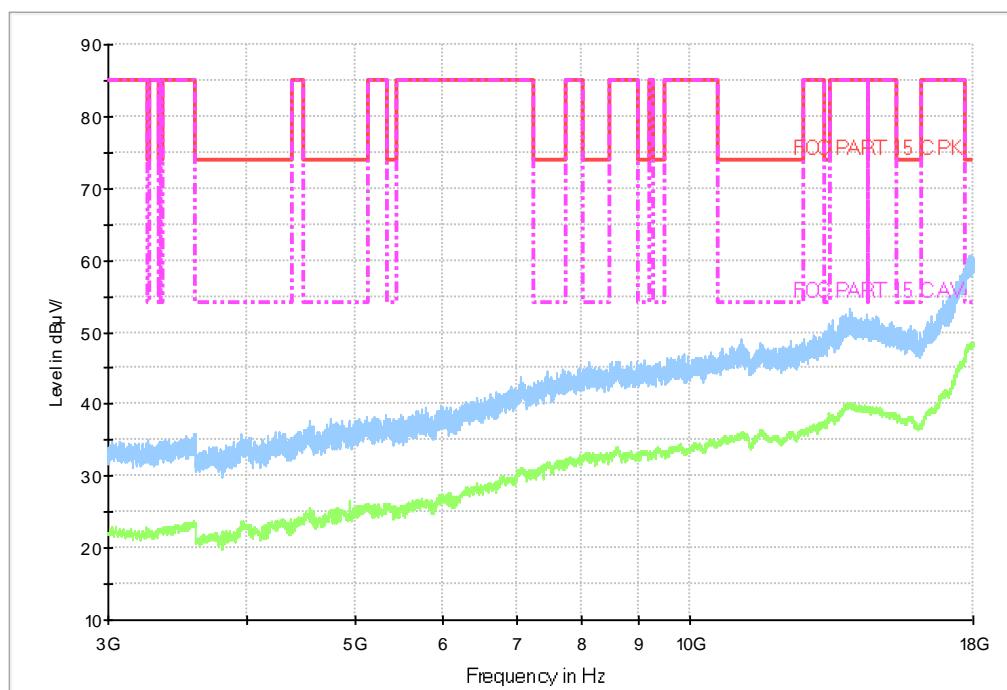


Fig.149 Radiated emission: Ch11, 3GHz-18GHz

Copy (2) of FCC Part15C 18-26G

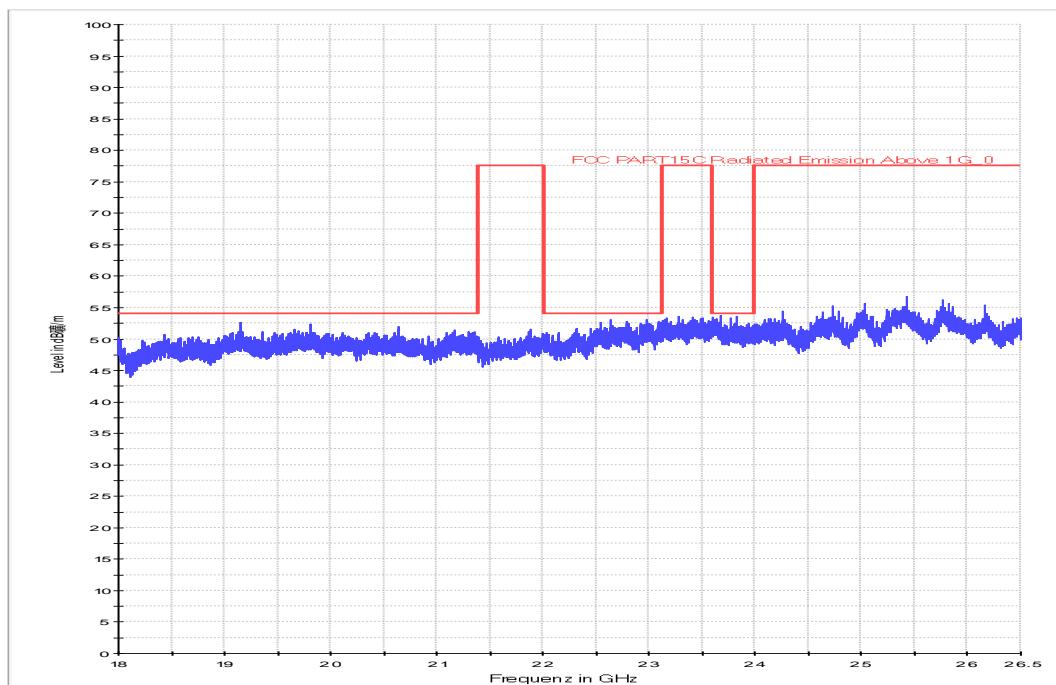


Fig.150 Radiated emission: 18 GHz - 26 GHz

Test photo

See the Pic1- Pic 6 in document " Ilium Pad L8X_Wifi_BT Test Setup Photos".

5.7 Power line Conducted Emissions

Specifications:	ANSI C63.4 voltage mains test
DUT Serial Number:	S9/9: 358067070001059
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30% -60% Air pressure: 86-106kPa
Test Results:	--

Limit

The EUT meets the requirement of having a peak to average ratio of less than 13dB.

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolt (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Limits of the conducted disturbance at the AC mains ports:

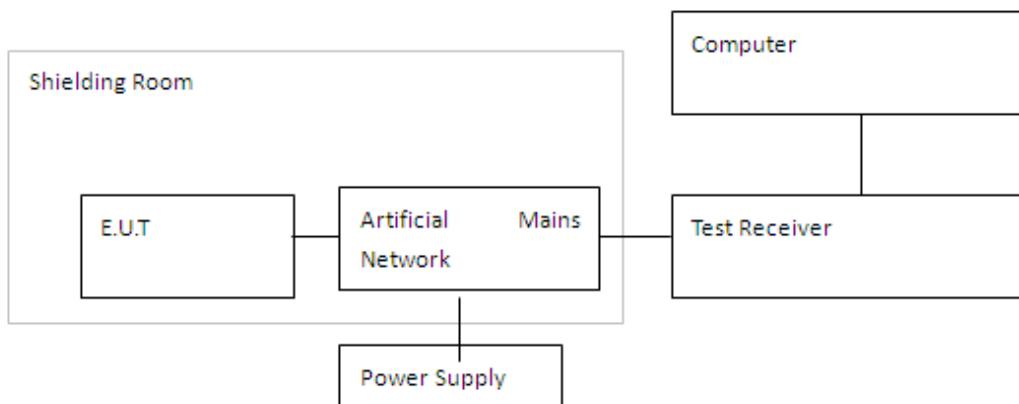
Frequency range	Limit(Quasi-peak)	Limit(Average)
0.15 MHz to 0.5 MHz	66 dB μ V – 56 dB μ V	56 dB μ V – 46 dB μ V
>0.5 MHz to 5MHz	56 dB μ V	46 dB μ V
>5 MHz to 30 MHz	60 dB μ V	50 dB μ V

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Setup

The EUT was placed in a shielding room. The WLAN TESTER was used to set the TX channel and power level. The ac adapter output is connected to Receiver through an AMN (Artificial Mains Network).



Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

The measurement is made according to Public notice FCC Public Notice DA 00-705, March 2000, and ANSI C63.4-2014.

Test Result:

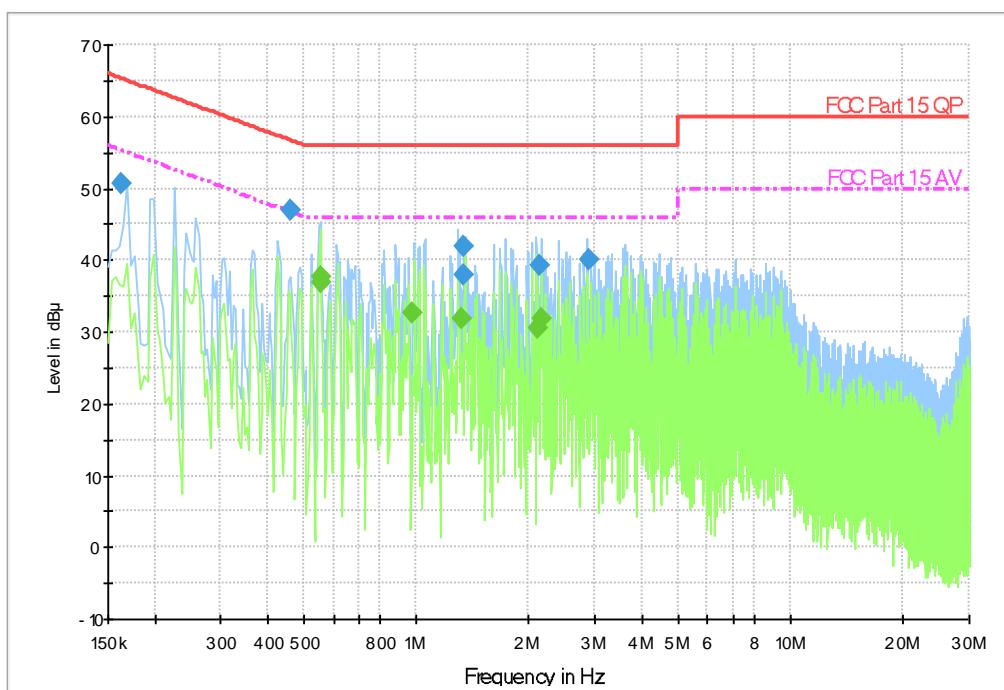
Line L&N					
Detector (QP)	Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Line	PE
QP	0.162000	50.7	65.4	L1	FLO
QP	0.462975	47.0	56.6	L1	FLO
QP	1.337762	41.8	56.0	L1	FLO
QP	1.341462	38.1	56.0	L1	FLO
QP	2.123981	39.2	56.0	L1	FLO
QP	2.884619	40.0	56.0	L1	FLO

Line L&N					
Detector (AV)	Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Line	PE
AV	0.554406	37.6	46.0	L1	FLO
AV	0.554975	36.9	46.0	L1	FLO
AV	0.979800	32.7	46.0	L1	FLO
AV	1.325462	31.9	46.0	L1	FLO
AV	2.120281	30.6	46.0	L1	FLO
AV	2.147981	31.8	46.0	L1	FLO

Conclusion: PASS

Report No.: B16X50266-WLAN-Rev1

CISPR N&L1 Voltage 150k to 30MHz-Class B



Line L & Line N

Test photo

See the Pic7 in document "Ilium Pad L8X_Wifi_BT_Test Setup Photos".

Report No.: B16X50266-WLAN-Rev1

Annex A EUT Photos

See the document "Ilium Pad L8X-External Photos".

See the document "Ilium Pad L8X-Internal Photos".

CTT Test Report

Report No.: B16X50266-WLAN-Rev1

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

End Of Report

CTT Test Report