FCC COMPLIANCE TEST REPORT

Technical Statement of Conformity

in accordance with 47 CFR Part 15 Subpart C

The product

Equipment Under Test	: WiFi Module
Model Number	: WN7911B-ZZ
Product Series	: N/A
Report Number	: HA160058-RA
Issue Date	: 28-MAR-2016
Test Result	: Compliance

is produced by

LawMate International Co., Ltd.

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BSMI Registration No.: SL2-IN-E-0023, SL2-A1-E-0023, SL2-IS-E-0023, SL2-R1-E-0023, SL2-R2-E-0023, SL2-L1-E-0023

FCC Designation No.: TW1071
TAF Accreditation No.: 1163
VCCI Registration No.: R-2156, C-2329, T-219

Contents

1 General Description 6

1.1 Description of EUT 6
1.2 Test Instruments 7
1.3 Auxiliary Equipments 9
1.4 EUT SETUP 9
1.5 Identifying the Final Test Mode 10
1.6 Final Test Mode (Worst Case) 11
1.7 Condition of Power Supply 11
1.8 EUT Configuration 11
1.9 Test Methodology 11
1.10 General Test Procedures 11
1.11 Modification 11
1.12 FCC Part 15.205 restricted bands of operations 11
1.13 Qualification of Test Facility 12

2 Power line Conducted Emission Measurement 13

2.1 Test Instruments 13
2.2 Test Arrangement and Procedure 13
2.3 Limit (§ 15.207) 13
2.4 Test Result 13

3 Radiated Emission Test 16

3.1 Test Instruments 16
3.2 Test Arrangement and Procedure 16
3.3 Limit of Spurious Emission (§ 15.209) 17
3.4 Test Result 17

4 6 dB Bandwidth of the Emission 44

4.1 Test Instruments 44
4.2 Test Arrangement 44
4.3 Test Procedure 44
4.4 Limit (§ 15.247(a)(2)) 44
4.5 Test Result 44

5 Maximum Conducted Output Power 58

5.1 Test Instruments 58
5.2 Test Arrangement 58
5.3 Test Procedure 58
5.4 Limit (§ 15.247(b)(3)) 58

5.5 Test Result 58

6 Out of Band Emission Test 60

6.1 Test Instruments 60
6.2 Test Arrangement 60
6.3 Test Procedure 60
6.4 Limit (§ 15.247(d)) 60
6.5 Test Result 60

7 Power Spectral Density 85

7.1 Test Instruments 85
7.2 Test Arrangement 85
7.3 Test Procedure 85
7.4 Limit (§ 15.247(e)) 85
7.5 Test Result 85

8 Antenna requirement 99

8.1 Limit (§ 15.203) 99
8.2 Test Result 99

9 Photographs of Test 100

9.1 Radiated Disturbance Test – Below 1 GHz 100

10 Photographs of EUT 101

Test Result Certification

Applicant	:	LawMate International Co., Ltd.
Address of Applicant	:	3F, No.34, Lane 60, Wenhu St., Taipei, Taiwan
Manufacturer	:	New Champion Technology Co., Ltd.
Address of Manufacturer	:	Rm. 804, Sino Centre, 582-592 Nathan Rd., Mongkok, Kln., Hong Kong
Trade Name	:	LawMate
Equipment Under Test	:	WiFi Module
Model Number	:	WN7911B-ZZ
Product Series	:	N/A
FCC ID	:	2AHTX-WN7911B-ZZ
Filing Type	:	Certification
Sample Received Date	:	16-FEB-2016
Test Standard	:	

☒ FCC Part 15 Subpart C §15.247

Deviations from standard test methods & any other specifications : NONE

Remark:

1. This report details the results of the test carried out on one sample.
2. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.
3. This report applies to the above sample only and shall not be reproduced in part without written approval of HongAn Technology Co., Ltd..

Documented by: _____ _____

Kay Wang/ ADM. Dept Staff 2016-03-25

Tested by: _____ _____

Eason Hsieh / ENG. Dept. Staff 2016-03-22

Approved by: _____ **Date:** _____

Peter Chin / Section Manager 2016-03-28

Summary of Test Result

	Test Item	Applicable Standard	Test Result
1	Conducted limits	FCC part 15 subpart C §207	Compliance
2	Radiated emission limits	FCC part 15 subpart C §209	Compliance
3	6dB Bandwidth	FCC part 15 subpart C §247(a)(2)	Compliance
4	Maximum Conducted Output Power	FCC part 15 subpart C §247(b)(3)	Compliance
5	Out of Band Emission	FCC part 15 subpart C §247(d)	Compliance
6	Power Spectral Density	FCC part 15 subpart C §247(e)	Compliance
7	Antenna Requirement	FCC part 15 subpart C §203	Compliance

1 General Description

1.1 Description of EUT

<table>
<tr><td>Equipment Under Test</td><td>:</td><td>WiFi Module</td></tr>
<tr><td>Model Number of EUT</td><td>:</td><td>WN7911B-ZZ</td></tr>
<tr><td>Product Series</td><td>:</td><td>N/A</td></tr>
<tr><td>Power Supply</td><td>:</td><td>DC input 3.3V</td></tr>
<tr><td>Frequency Range</td><td>:</td><td>802.11 b/ g/ n HT(20) : 2412~2462 MHz
802.11n HT(40) : 2422~2452 MHz</td></tr>
<tr><td>Number of Channels</td><td>:</td><td>11 Channels</td></tr>
<tr><td>Carrier Frequency of Each Channel</td><td>:</td><td>
<table>
<tr><td>Ch.</td><td>Fre. (MHz)</td><td>Ch.</td><td>Fre. (MHz)</td><td>Ch.</td><td>Fre. (MHz)</td><td>Ch.</td><td>Fre. (MHz)</td><td>Ch.</td><td>Fre. (MHz)</td></tr>
<tr><td>01</td><td>2412</td><td>02</td><td>2417</td><td>03</td><td>2422</td><td>04</td><td>2427</td><td>05</td><td>2432</td></tr>
<tr><td>06</td><td>2437</td><td>07</td><td>2442</td><td>08</td><td>2447</td><td>09</td><td>2452</td><td>10</td><td>2457</td></tr>
<tr><td>11</td><td>2462</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Antenna Specification</td><td>:</td><td>PCB Antenna/ Gain: 1.5 dBi</td></tr>
<tr><td>Modulation Technique</td><td>:</td><td>802.11b : DSSS (Type: CCK, DQPSK, DBPSK)
802.11g : OFDM (Type: 64QAM, 16QAM, QPSK, BPSK)
802.11n : OFDM (Type: 64QAM, 16QAM, QPSK, BPSK)</td></tr>
<tr><td>Transmit Data Rate</td><td>:</td><td>802.11b : 11/5.5/2/1 Mbps
802.11g : 54/48/36/24/18/12/9/6 Mbps
802.11n : MSC 0/1/2/3/4/5/6/7</td></tr>
<tr><td>Specification</td><td>:</td><td>Dimensions： 25 mm (L) X 13 mm (W) X 2 mm (H)
Weight：2g
Function：The EUT is a WIFI single module.
※For more detail specification, please refer to the User Manual.</td></tr>
</table>

1.2 Test Instruments

Instruments Used for Measurement

HA2

Instrument Name	Manufacture Mode	Model Number	Serial Number	Last Cal. Date	Next Cal. Date
RF Amplifier	AR	15S1G3	306578	11-AUG-2015	11-AUG-2016
EMI Receiver	R&S	ESCI	100615	27-JUN-2015	27-JUN-2016
Spectrum Analyzer	R&S	FSL6	100323	11-JUN-2015	11-JUN-2016
Spectrum Analyzer	Advantest	R3172	101202158	24-JUN-2015	24-JUN-2016
Preamplifier	WIRELESS	FPA-6592G	060009	09-JUL-2015	09-JUL-2016
Preamplifier	HD	HD17187	004	04-AUG-2015	04-AUG-2016
Bilog Antenna	TESEQ	CBL6111D	25769	03-MAR-2016	03-MAR-2017
Bilog Antenna	Schaffner	CBL6112B	2860	12-AUG-2015	12-AUG-2016
Double-Ridged Waveguide Horn	EMCO	3115	9912-5992	04-MAY-2015	04-MAY-2016
Temp. & Humidity Chamber	Giant Force	GTH-150-20-SP-AR	MMA0907-012	22-JUL-2015	22-JUL-2016
Horn Antenna (18-40GHz)	Com-Power	AH-840	101042	03-JUL-2015	03-JUL2016
Microwave Preamplifier	Com-Power	PAM-840	461269	02-JUL-2015	02-JUL-2016
L.I.S.N.	Mess Tec	NNB-2/16Z	03/1006	24-JAN-2015	24-JAN-2016
L.I.S.N.	EMCIS	LN2-16	LN04023	01-AUG-2015	01-AUG-2016
Wideband Power Sensor	R&S	NRP-Z11	111731	05-Dec-2015	05-Dec-2016

WIDEBAND RADIO COMMUNICATION TESTER	ROHDE&SCHWARZ	CMW-500	141958	05-NOV-2015	05-NOV-2016

※ The test equipments used are calibrated and can be traced to National ITRI and International Standards.

1.3 Auxiliary Equipments

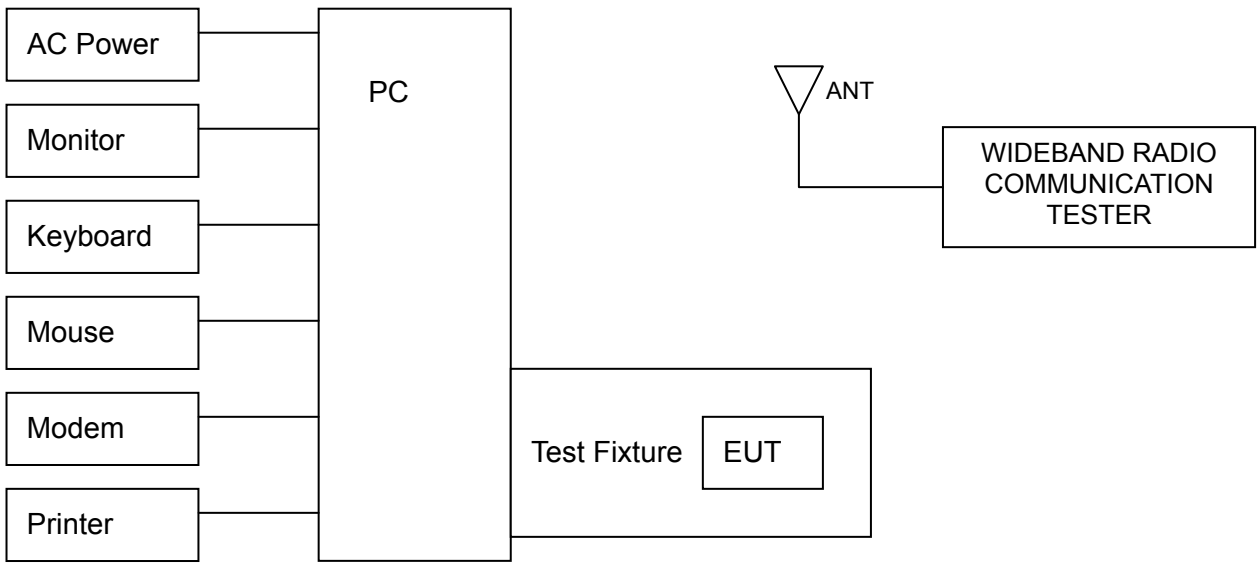
1.3.1. Provided by HongAn Technology Co., Ltd. for Emission Test.

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Power Cord
01	PC No.6	P67 Extreme4	N/A	FCC, BSMI	ASROCK	Non-shielded, Detachable, 1.5m
02	Monitor No. 1	E2210Hc	CN-0G337R-6418 0-021-0FNL	CE FCC BSMI	DELL	VGA CABLE Shielded, Detachable, 1.5m, With Core DVI CABLE Shielded, Detachable, 1.5m, With Core
03	PS2 Key Board No. 1	Y-BL49	STW42802867	CE FCC	LOGITECH	USB CABLE Shielded, Un-detachable, 1.8m, With Core
04	USB Mouse No. 1	M-BE58	HCA80100240	CE FCC	LOGITECH	USB CABLE Non-shielded, Un-detachable, 1.8m Without Core
05	Printer No. 1	EPSON STYLUS C61	EK5Y014949	3912E328	EPSON	PRINTER CABLE Non-shielded, Detachable, 1.8M
06	Modem No. 1	1456VQE-C	1234A36998	3882B582	LEMEL	RS-232 CABLE Non-shielded, Detachable, 3M

1.3.2. Provided by the Manufacturer

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Remark
01	Text Fixture	N/A	N/A	N/A	N/A	N/A
02	SD card reader Express card	MP250	BL-M8189NS2	CE	Bplus	N/A

1.4 EUT SETUP



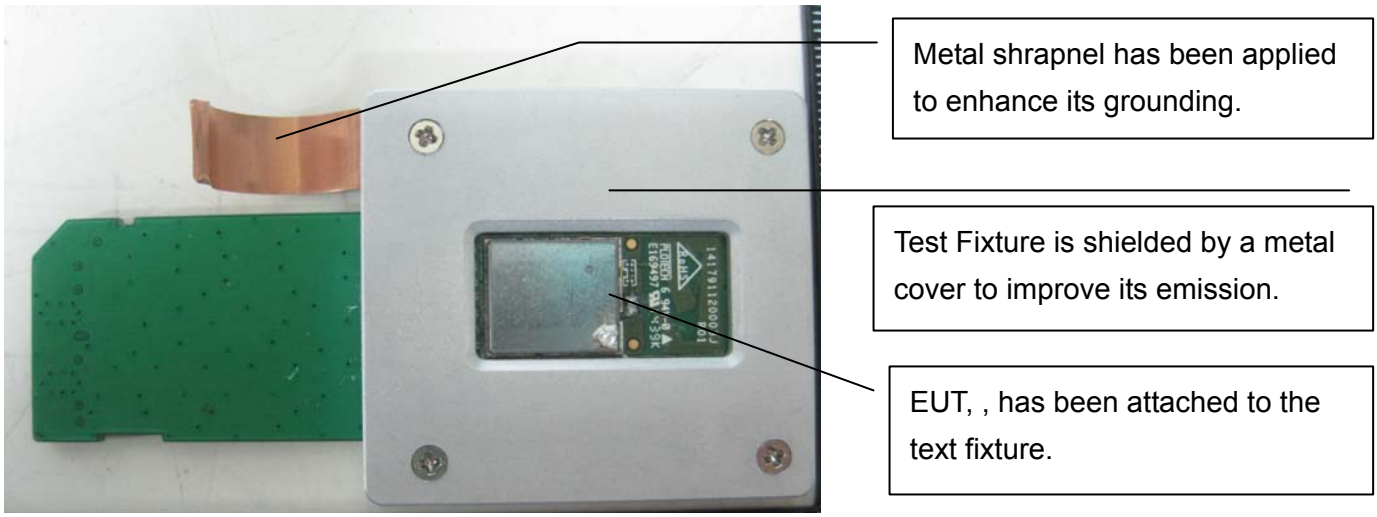


Photo of Test Fixture

1.5 Identifying the Final Test Mode

1. Mode 1: TX WIFI mode (802.11b) CH 01.
2. Mode 2: TX WIFI mode (802.11b) CH 06.
3. Mode 3: TX WIFI mode (802.11b) CH 11.
4. Mode 4: TX WIFI mode (802.11g) CH 01.
5. Mode 5: TX WIFI mode (802.11g) CH 06.
6. Mode 6: TX WIFI mode (802.11g) CH 11.
7. Mode 7: TX WIFI mode (802.11n HT[20]) CH 01.
8. Mode 8: TX WIFI mode (802.11n HT[20]) CH 06.
9. Mode 9: TX WIFI mode (802.11n HT[20]) CH 11.
10. Mode 10: TX WIFI mode (802.11n HT[40]) CH 03.
11. Mode 11: TX WIFI mode (802.11n HT[40]) CH 06.
12. Mode 12: TX WIFI mode (802.11n HT[40]) CH 09.

Note:

1. During radiated emission pre-test, rotation of the EUT through three orthogonal axes has been evaluated.
2. After pre-test, we identified that the TX Vertical Position was most likely to cause maximum disturbance and most likely to be susceptible to disturbance. Therefore, the Final Assessment was performed for the worst case. All pre-test data show at appendix.
3. The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.
4. Channel Low (2412MHz), Mid (2437MHz) and High (2462MHz) with highest data rate were chosen for full testing.
5. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

1.6 Final Test Mode (Worst Case)

802.11b: CCK 1Mbps.
802.11g: 64QAM 6Mbps.
802.11n (20M&40M): 64QAM MCS0.
Conducted Emission: Mode 3.
Radiated Emission (30~1000 MHz): Mode 3.
Radiated Emission (1~26.5GHz): All Mode.

1.7 Condition of Power Supply

DC 3.3 V

1.8 EUT Configuration

1. Setup the EUT as shown in Sec.1.4 Block Diagram.
2. Turn on the power of all equipments.
3. Activate the selected Final Test Mode.

1.9 Test Methodology

The tests documented in this report were performed in accordance with ANSI C63.10 (2013) and FCC CFR 47 15.203, 15.207, 15.209 and 15.247.

1.10 General Test Procedures

Conducted Emissions

The EUT is set according to the requirements in Section 6.2 of ANSI C63.10 (2013).

Radiated Emissions

The EUT is set according to the requirements in Section 6.2 of ANSI C63.10 (2013).

1.11 Modification

N/A

1.12 FCC Part 15.205 restricted bands of operations

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5

6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37635-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

[2] Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

1.13 Qualification of Test Facility

BSMI Certificate No. : SL2-IS-E-0023, SL2-IN-E-0023, SL2-R1-E-0023, SL2-R2-E-0023, SL2-A1-E-0023, SL2-L1-E-0023.

FCC Designation No. : TW1071

TAF Accreditation No. : 1163

VCCI Certificate No. : R-2156, C-2329, T-219

2 Power line Conducted Emission Measurement

2.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

2.2 Test Arrangement and Procedure

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

2.3 Limit (§ 15.207)

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 microvolts (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 is listed as follows:

Frequency (MHz)	Limits (dBuV)	
	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

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.

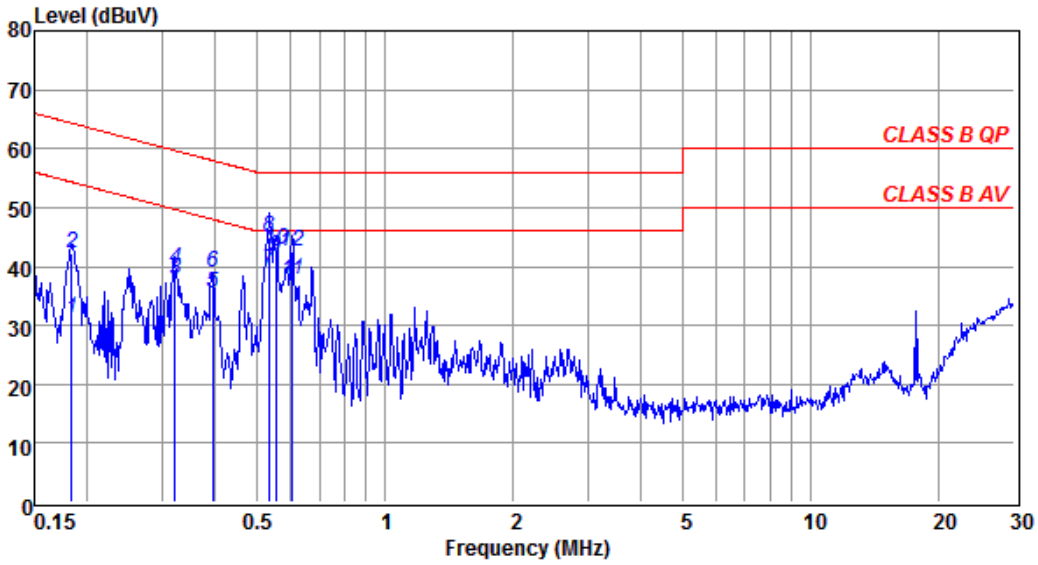
2.4 Test Result

Compliance

The final test data are shown on the following page(s).

Power Line Conducted Test Data

Test Date	:	2016-03-22	Power Line	:	Line
Temperature	:	21.9℃	Humidity	:	51%



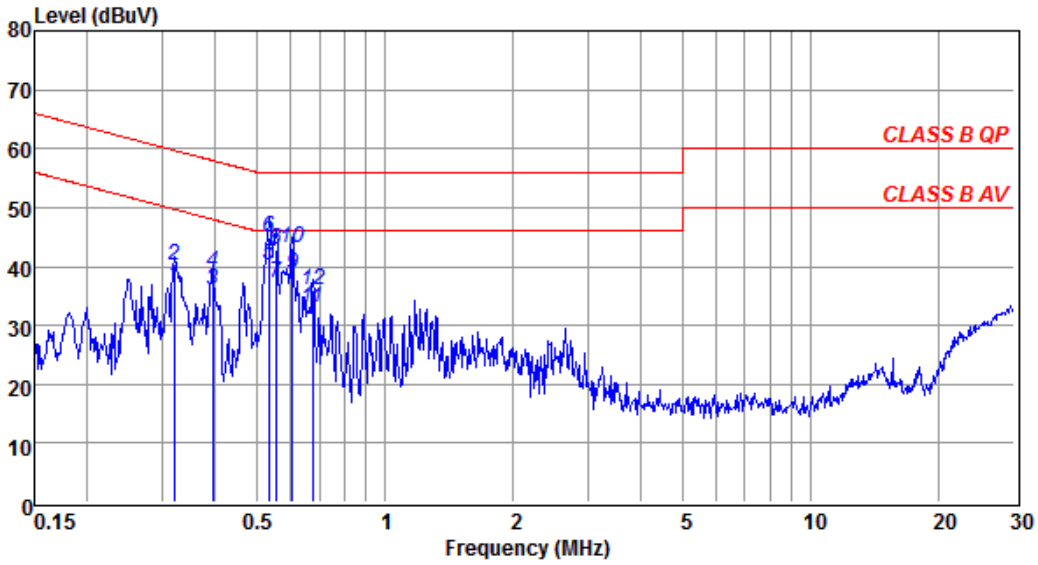
Freq MHz	Read QP dBuV	Read AV dBuV	C.F dB	Result QP dBuV	Result AV dBuV	Limit QP dBuV	Limit AV dBuV	Margin QP dB	Margin AV dB
0.18	32.25	21.28	9.95	42.20	31.23	64.33	54.33	-22.13	-23.10
0.32	29.59	27.79	9.91	39.50	37.70	59.66	49.66	-20.16	-11.96
0.39	29.10	25.45	9.90	39.00	35.35	57.99	47.99	-18.99	-12.64
0.53	35.02	29.35	9.98	45.00	39.33	56.00	46.00	-11.00	-6.67
0.55	32.85	31.78	9.98	42.83	41.76	56.00	46.00	-13.17	-4.24
0.60	32.65	27.65	10.01	42.66	37.66	56.00	46.00	-13.34	-8.34

Note1: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse limiter
Note2: Margin = Result - Limit

Remark：All readings are Quasi-Peak and Average values.

Power Line Conducted Test Data

Test Date	:	2016-03-22	Power Line	:	Neutral
Temperature	:	21.9℃	Humidity	:	51%



Freq MHz	Read QP dBuV	Read AV dBuV	C.F dB	Result QP dBuV	Result AV dBuV	Limit QP dBuV	Limit AV dBuV	Margin QP dB	Margin AV dB
0.32	30.15	26.93	9.92	40.07	36.85	59.71	49.71	-19.64	-12.86
0.39	29.13	25.98	9.90	39.03	35.88	57.99	47.99	-18.96	-12.11
0.53	34.90	30.21	9.98	44.88	40.19	56.00	46.00	-11.12	-5.81
0.55	32.96	27.05	9.98	42.94	37.03	56.00	46.00	-13.06	-8.97
0.60	33.17	28.67	10.01	43.18	38.68	56.00	46.00	-12.82	-7.32
0.68	25.96	23.02	10.03	35.99	33.05	56.00	46.00	-20.01	-12.95

Note1: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse limiter
Note2: Margin = Result - Limit

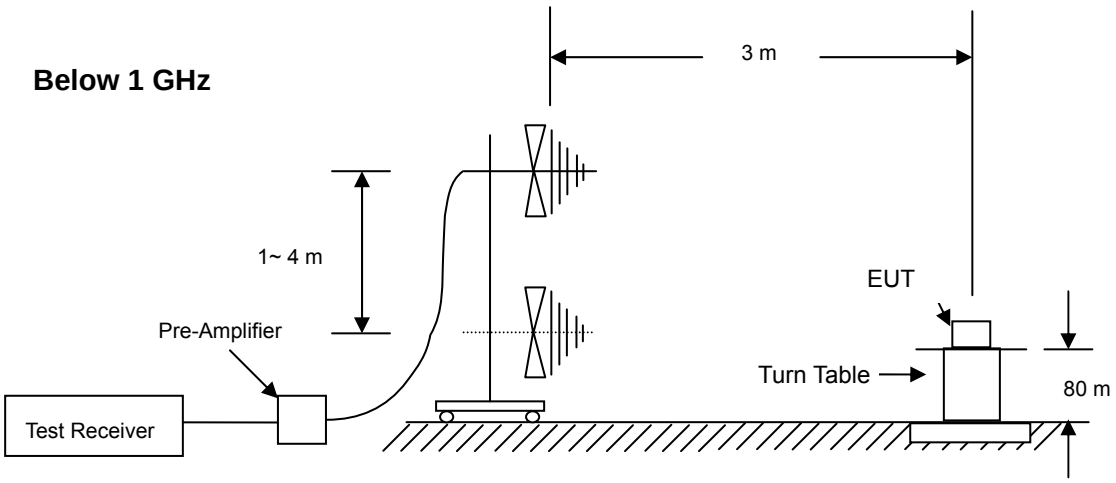
Remark：All readings are Quasi-Peak and Average values.

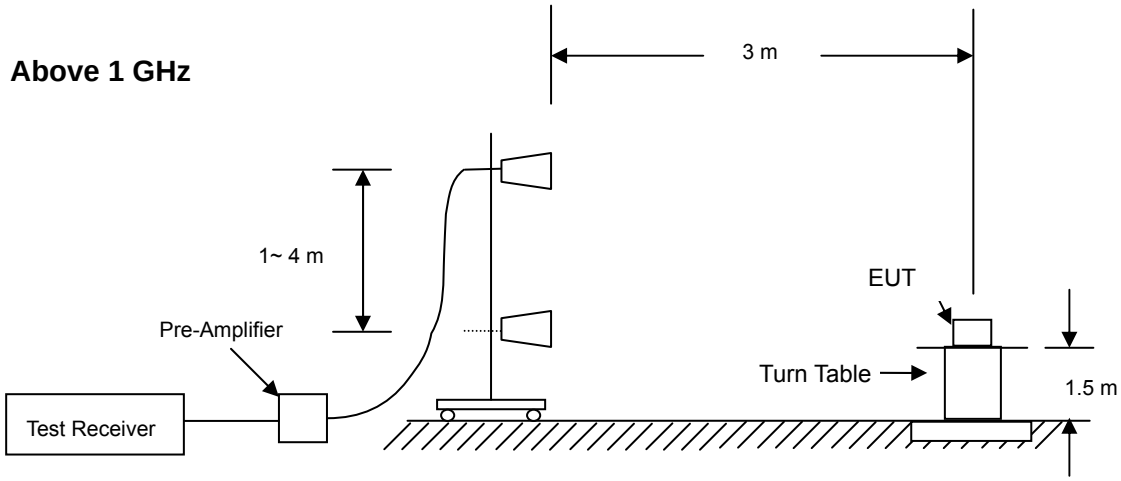
3 Radiated Emission Test

3.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

3.2 Test Arrangement and Procedure





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1. The EUT is placed on a turntable, which is 0.8 m (below 1GHz) and 1.5m (above 1GHz) above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
4. Maxium procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:
   (a) Below 1 GHz: RBW =100 kHz/ VBW = 1 MHz/ Sweep = AUTO.
   (b) Above 1 GHz: Peak: RBW = VBW = 1MHz/ Sweep = AUTO.
7. Repeat above procedures until the meausreemnts for all frequencies are complete.

3.3 Limit of Spurious Emission (§ 15.209)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is lesser attenuation.

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

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g.§§ 15.231 and 15.241.

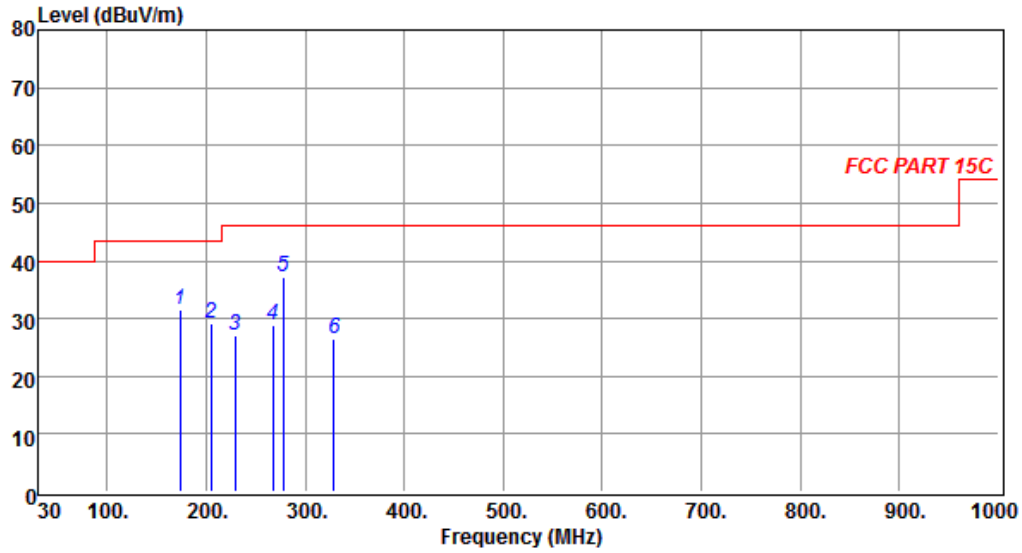
3.4 Test Result

Compliance

The final test data are shown on the following page(s).

Radiated Emission Test Data (Below 1 GHz)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 3			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
173.56	53.52	-22.08	31.44	43.50	-12.06	----------	----------	VERTICAL	Peak
204.60	48.25	-19.13	29.12	43.50	-14.38	----------	----------	VERTICAL	Peak
228.85	47.13	-20.01	27.12	46.00	-18.88	----------	----------	VERTICAL	Peak
267.65	49.19	-20.47	28.72	46.00	-17.28	----------	----------	VERTICAL	Peak
277.35	57.33	-20.05	37.28	46.00	-8.72	----------	----------	VERTICAL	Peak
328.76	43.91	-17.41	26.50	46.00	-19.50	----------	----------	VERTICAL	Peak

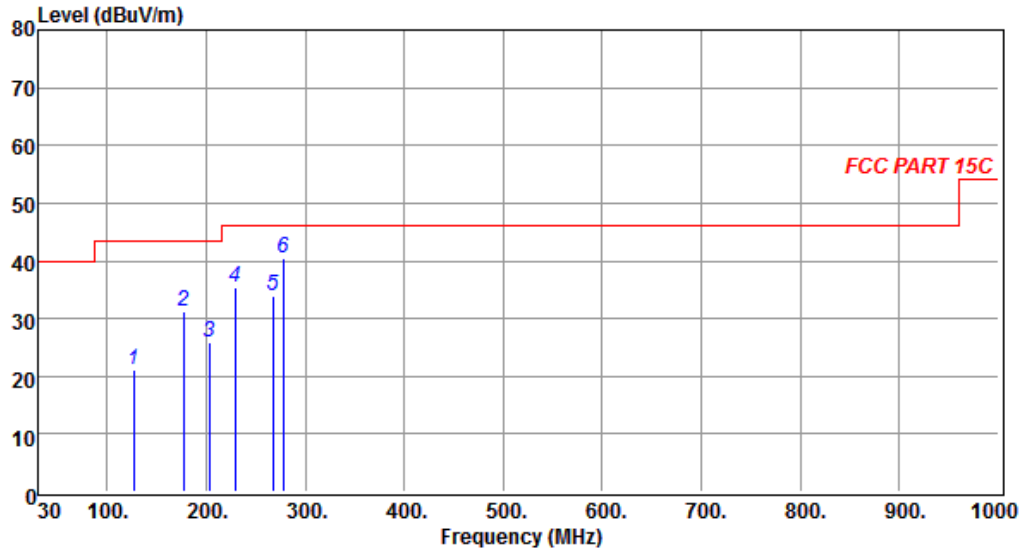
Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

Remark：

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 3			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
127.00	44.68	-23.67	21.01	43.50	-22.49	----------	----------	HORIZONTAL	Peak
177.44	51.45	-20.31	31.14	43.50	-12.36	----------	----------	HORIZONTAL	Peak
202.66	44.85	-19.08	25.77	43.50	-17.73	----------	----------	HORIZONTAL	Peak
228.85	55.36	-20.01	35.35	46.00	-10.65	----------	----------	HORIZONTAL	Peak
267.65	54.32	-20.47	33.85	46.00	-12.15	----------	----------	HORIZONTAL	Peak
277.35	60.62	-20.05	40.57	46.00	-5.43	----------	----------	HORIZONTAL	Peak

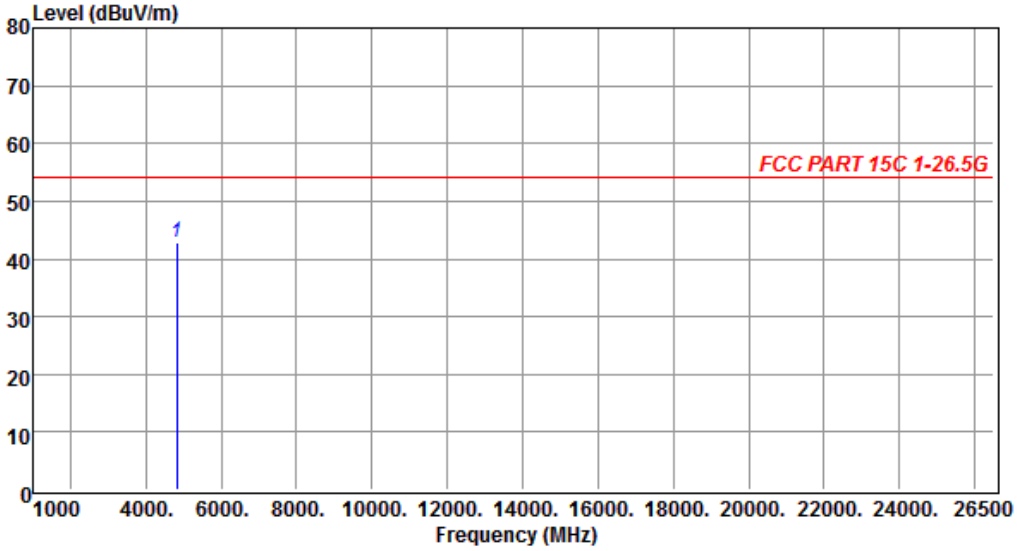
Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

Remark：

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 1			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	42.36	0.57	42.93	54.00	-11.07	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

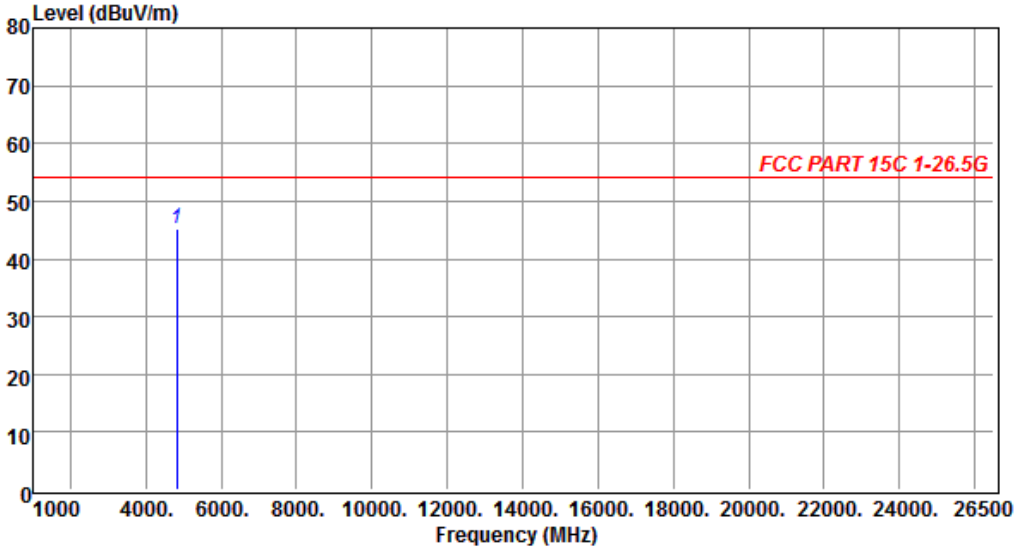
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 1			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	44.58	0.57	45.15	54.00	-8.85	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

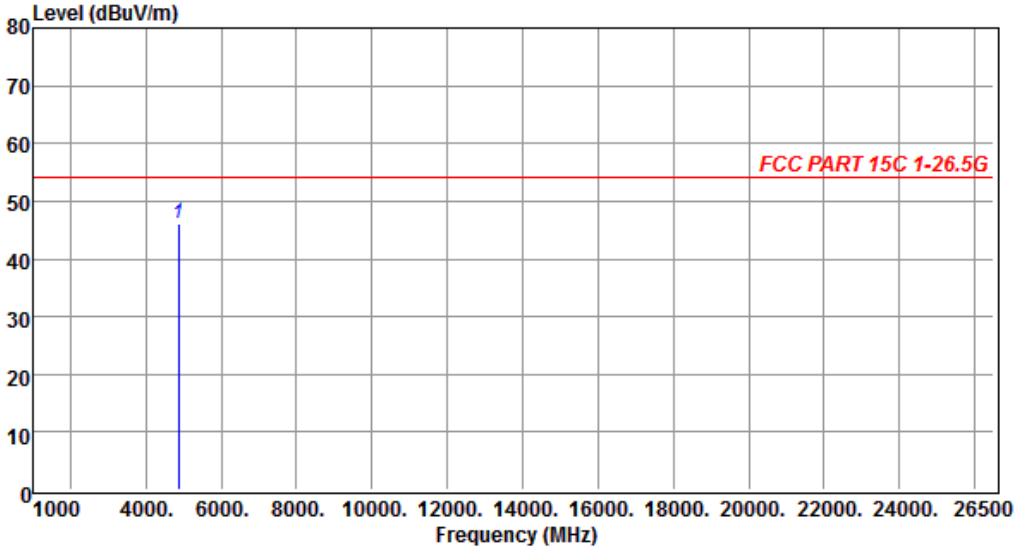
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 2			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	45.20	0.80	46.00	54.00	-8.00	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

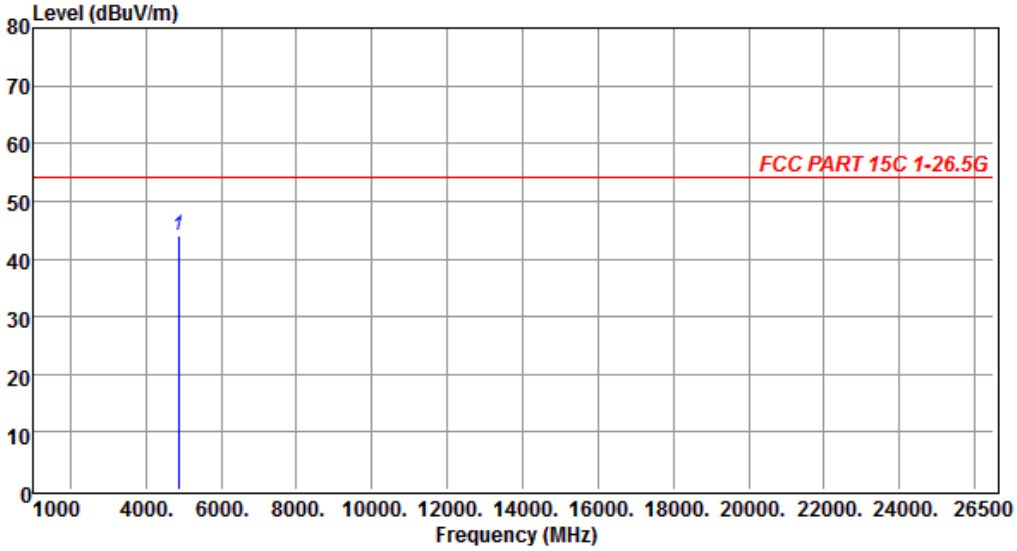
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 2			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	43.33	0.80	44.13	54.00	-9.87	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

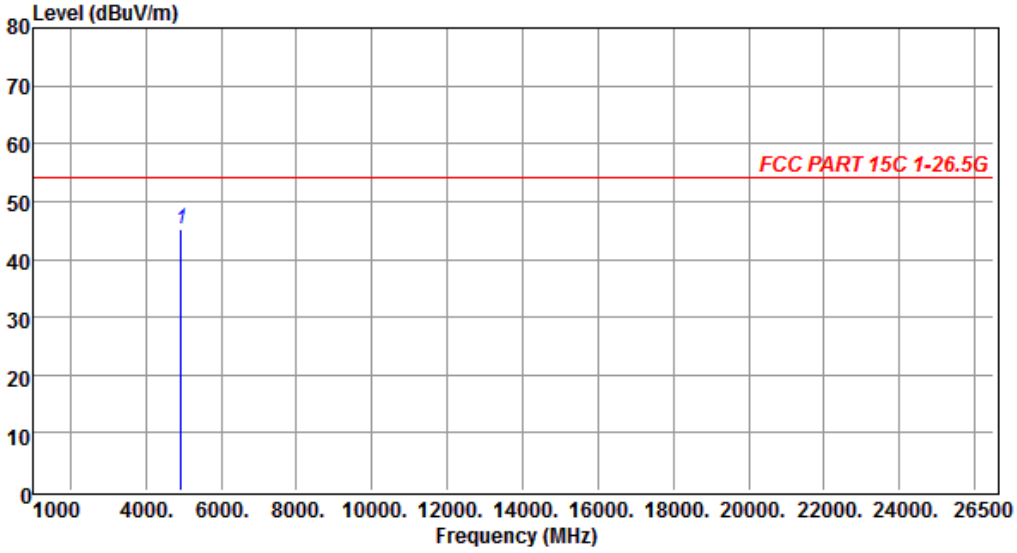
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 3			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	44.17	1.01	45.18	54.00	-8.82			VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

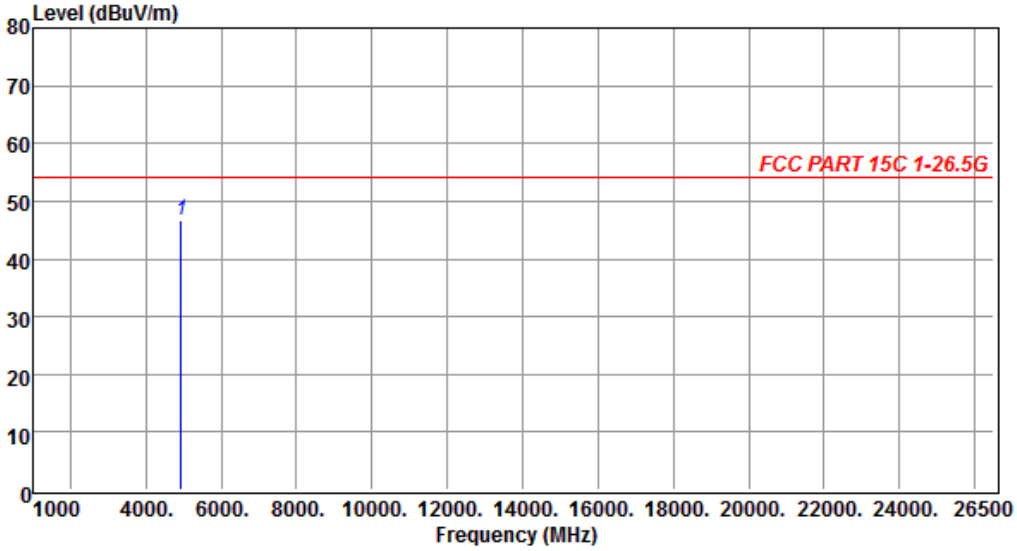
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 3			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	45.77	1.01	46.78	54.00	-7.22	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

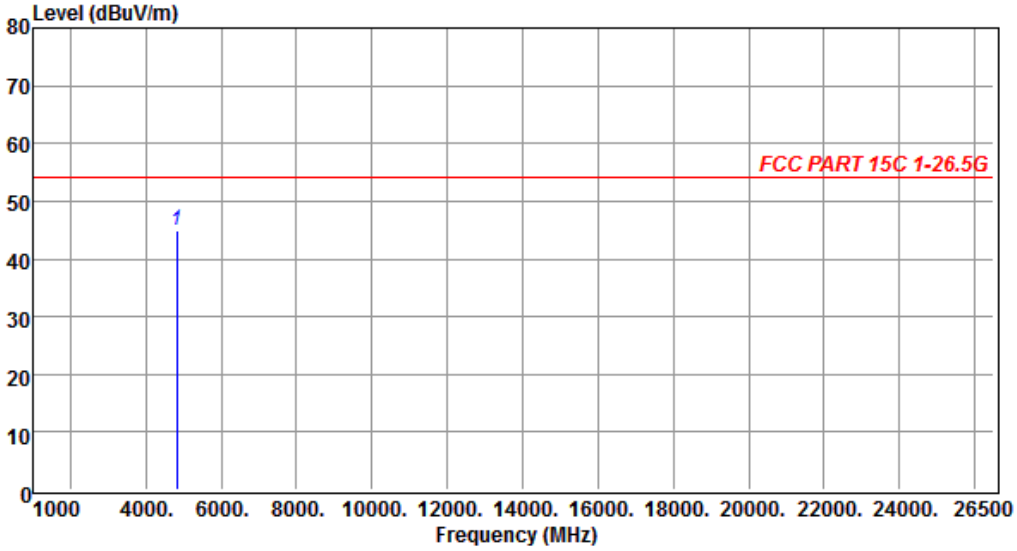
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 4			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	44.37	0.57	44.94	54.00	-9.06	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

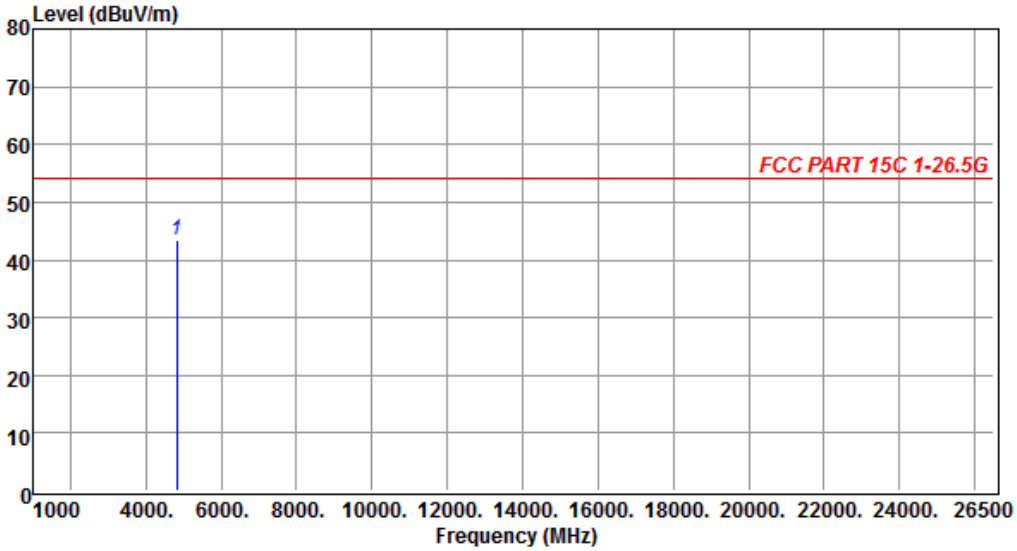
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 4			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	42.99	0.57	43.56	54.00	-10.44	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

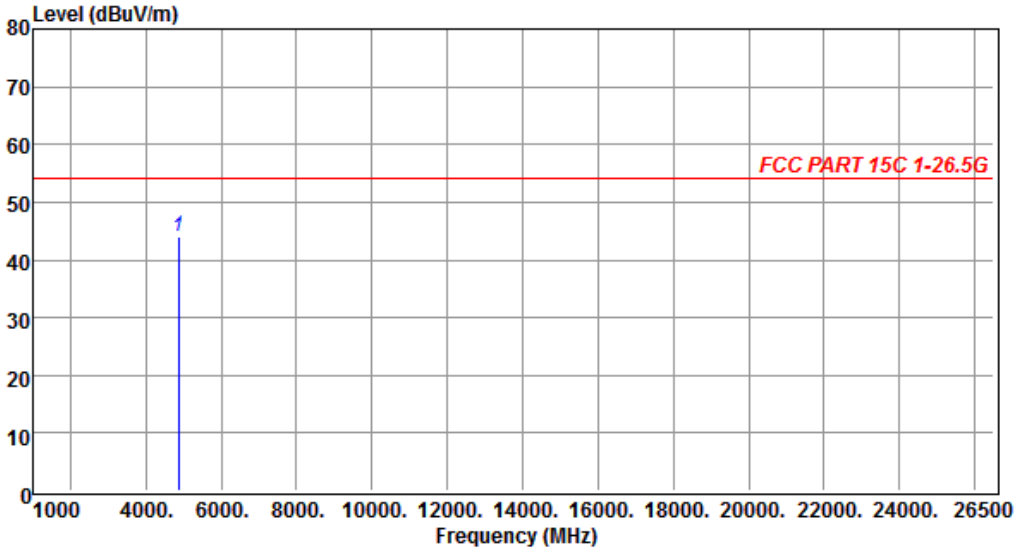
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 5			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	43.24	0.80	44.04	54.00	-9.96	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

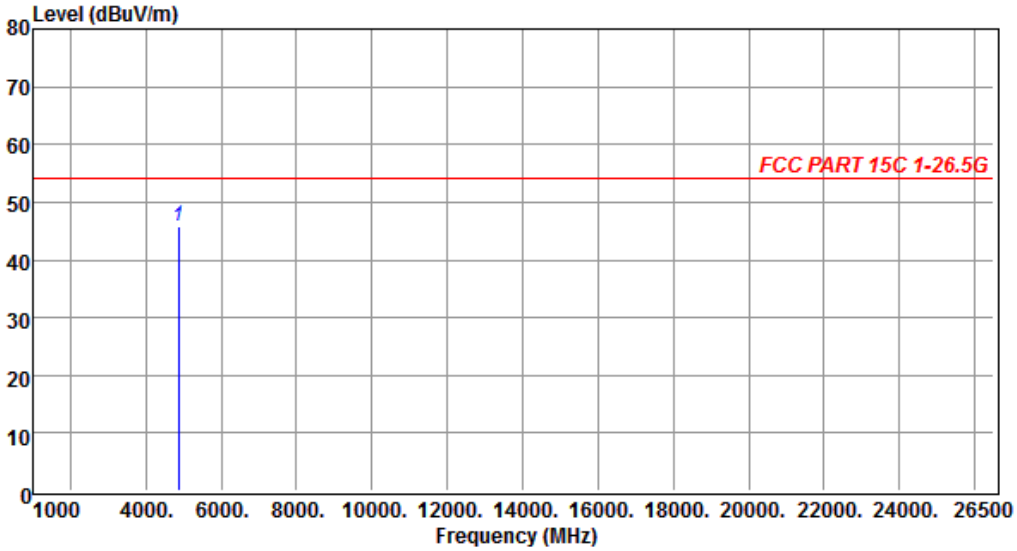
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 5			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	45.09	0.80	45.89	54.00	-8.11	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

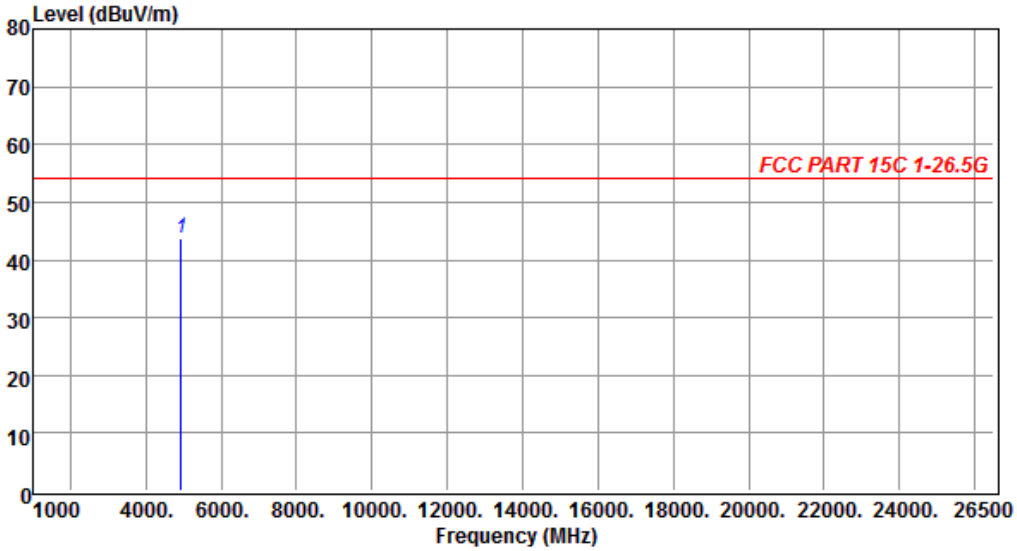
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 6			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	42.72	1.01	43.73	54.00	-10.27	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

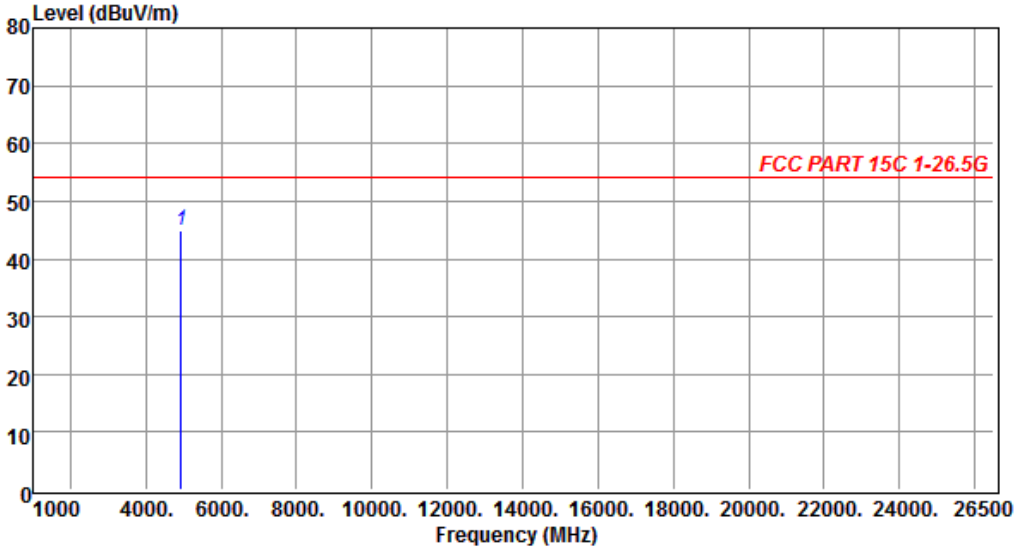
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 6			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	43.79	1.01	44.80	54.00	-9.20	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

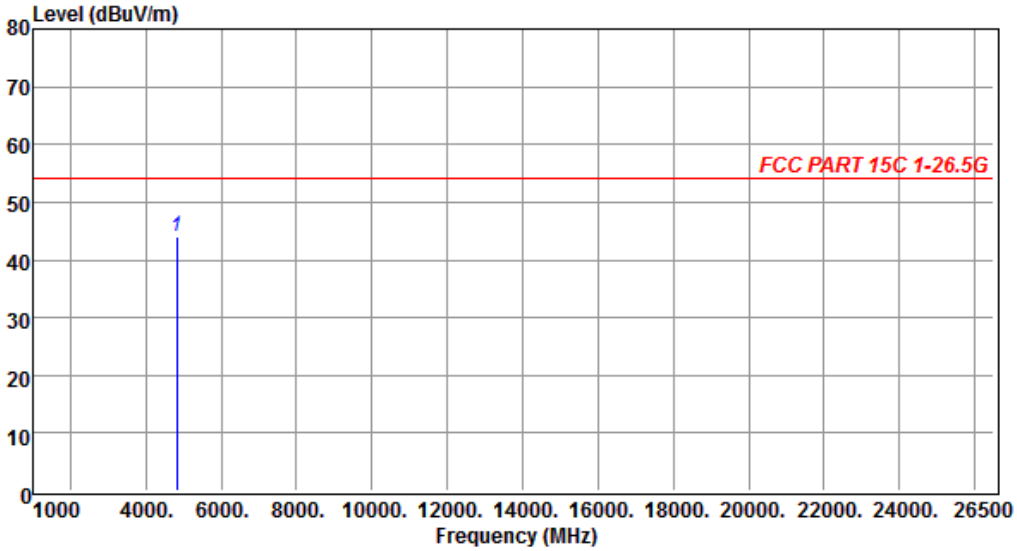
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 7			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	43.42	0.57	43.99	54.00	-10.01	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

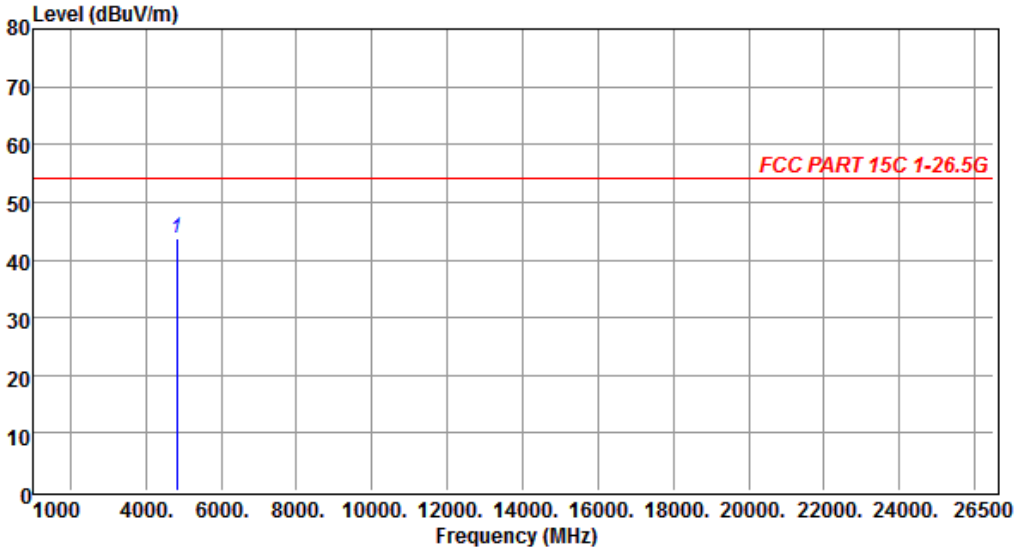
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH01 (2412MHz)
Test Mode	:	Mode 7			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4824.00	43.22	0.57	43.79	54.00	-10.21	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

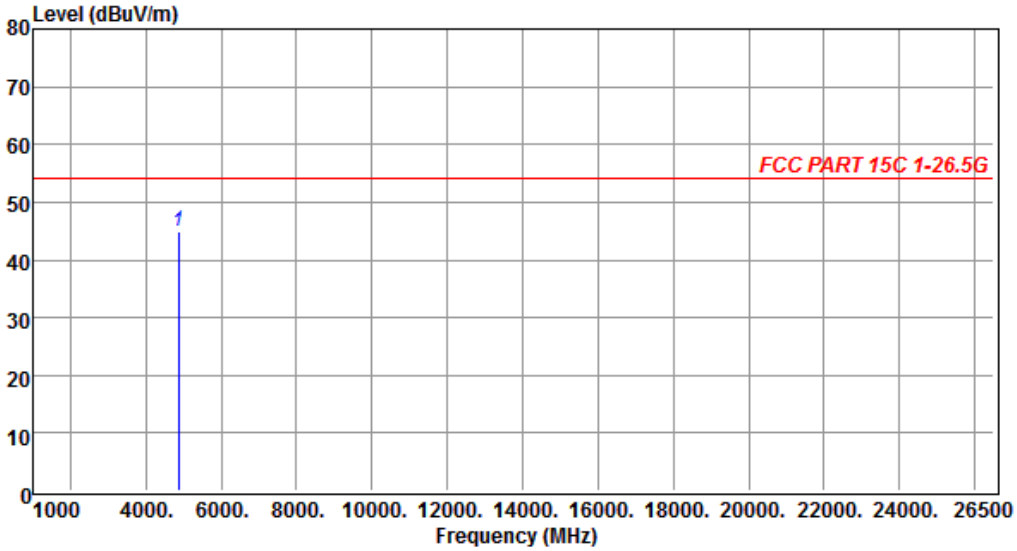
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 8			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	44.17	0.80	44.97	54.00	-9.03	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

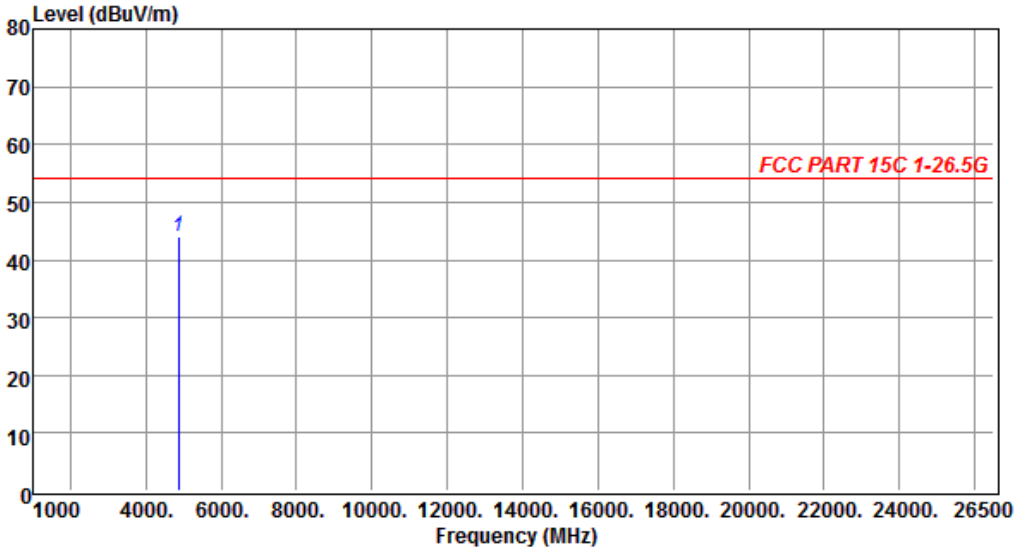
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 8			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	43.19	0.80	43.99	54.00	-10.01	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

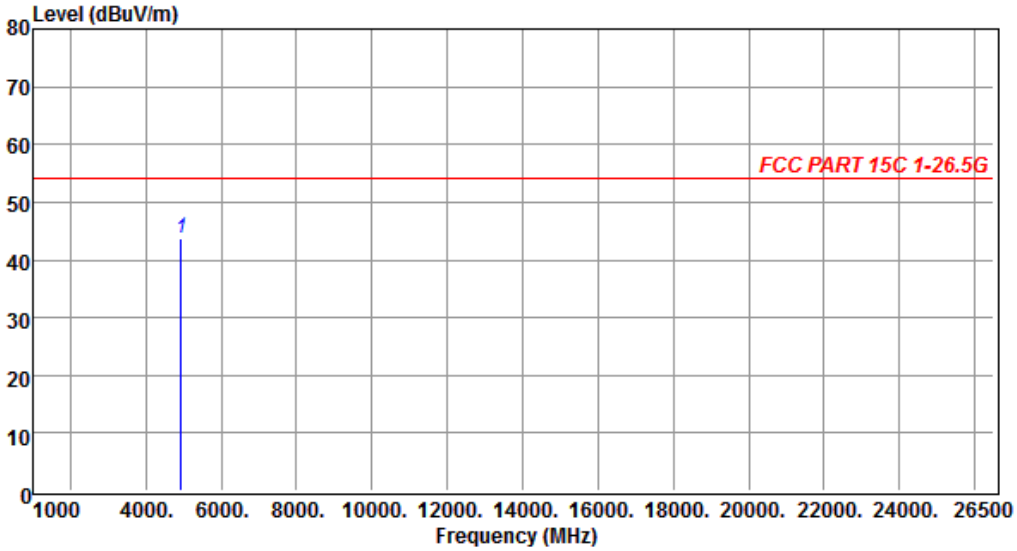
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 9			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	42.74	1.01	43.75	54.00	-10.25	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

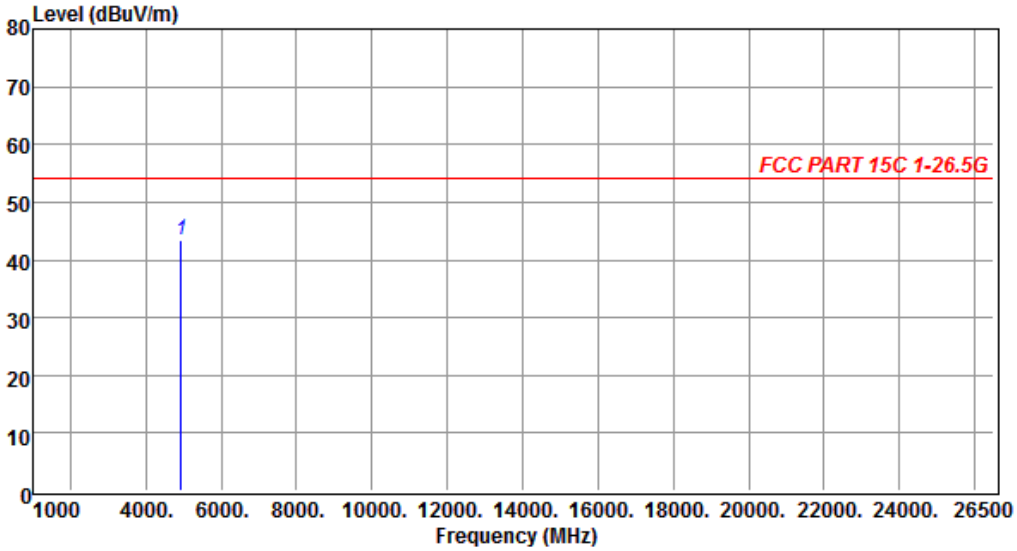
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH11 (2462 MHz)
Test Mode	:	Mode 9			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4924.00	42.37	1.01	43.38	54.00	-10.62	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

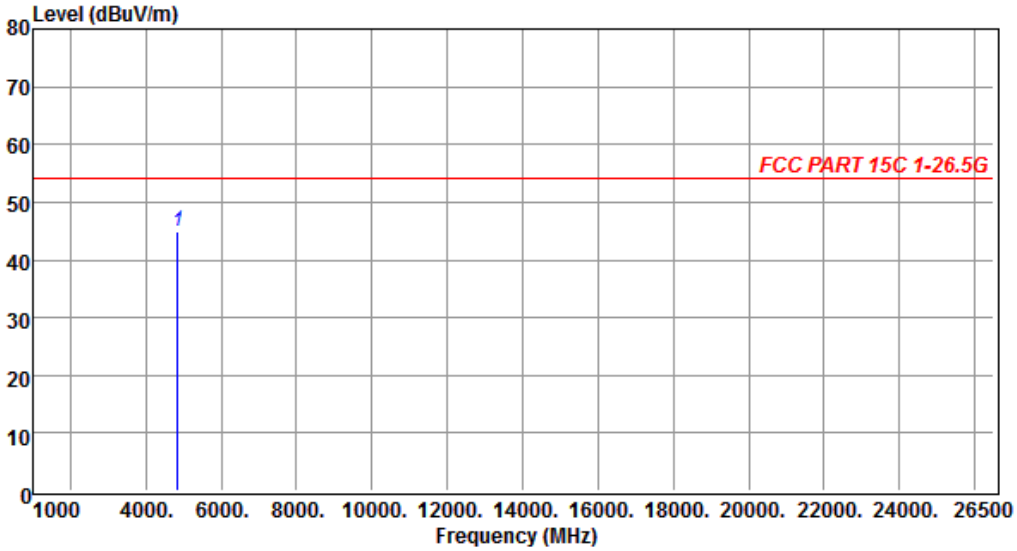
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH03 (2422 MHz)
Test Mode	:	Mode 10			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4844.00	44.28	0.65	44.93	54.00	-9.07	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

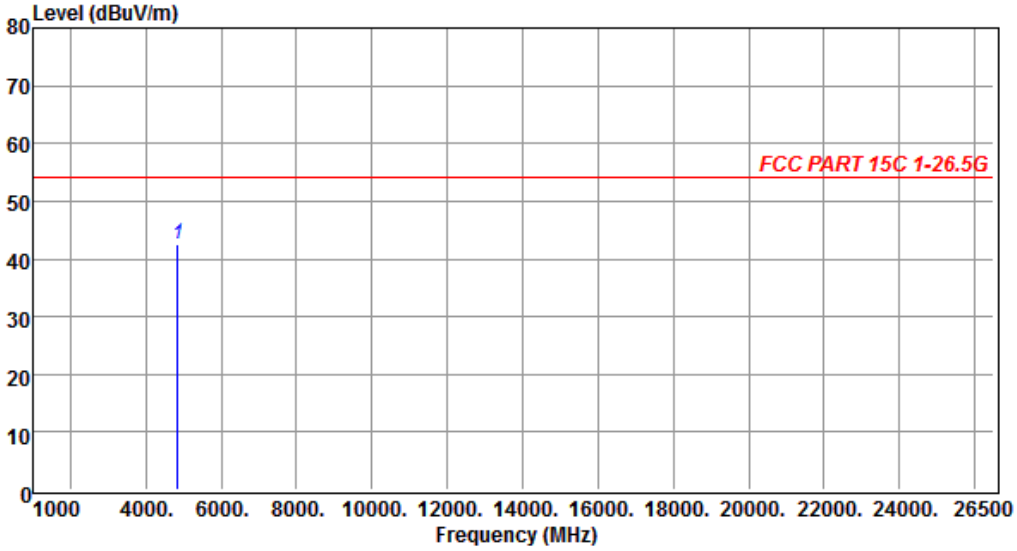
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH03 (2422 MHz)
Test Mode	:	Mode 10			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4844.00	42.00	0.65	42.65	54.00	-11.35	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

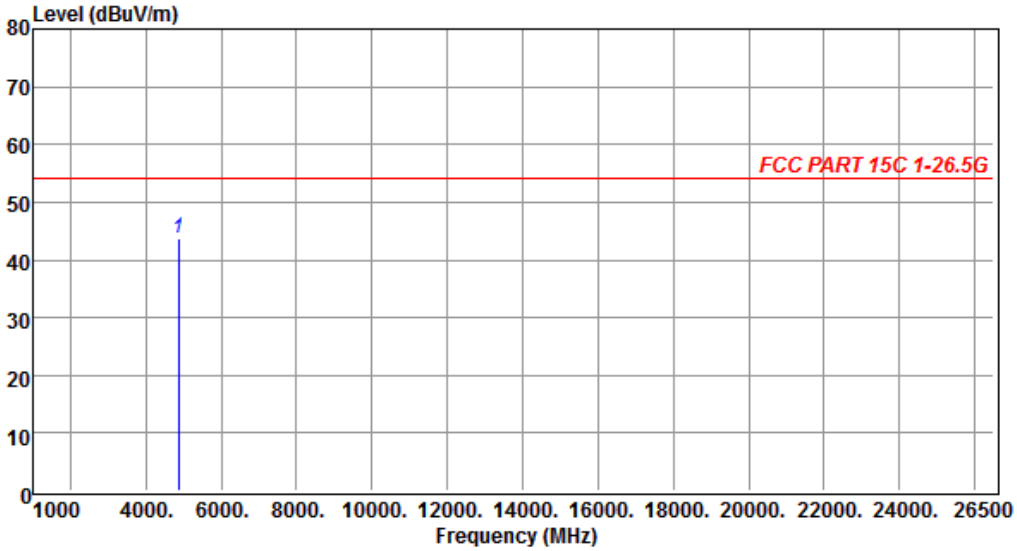
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 11			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	42.79	0.80	43.59	54.00	-10.41	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

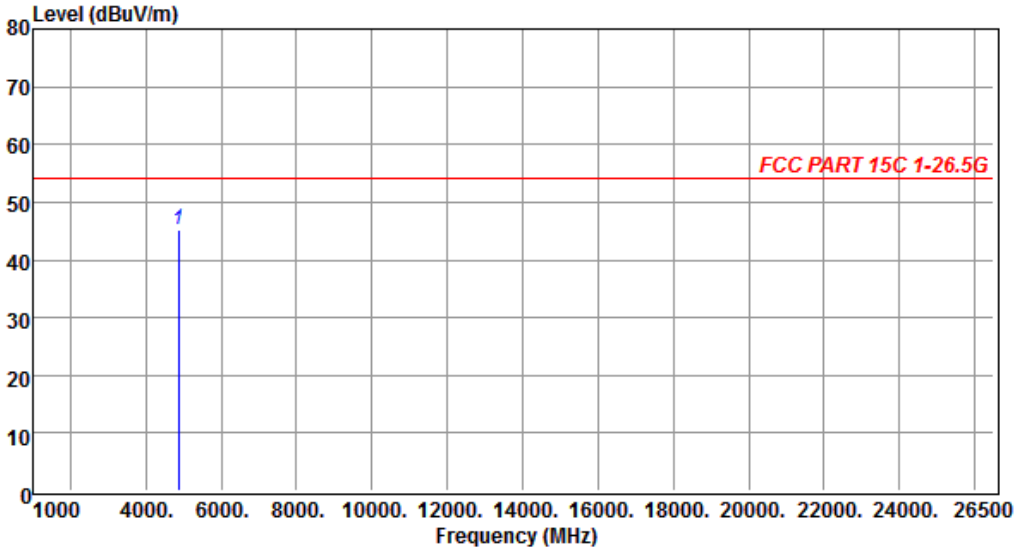
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH06 (2437 MHz)
Test Mode	:	Mode 11			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4874.00	44.52	0.80	45.32	54.00	-8.68	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

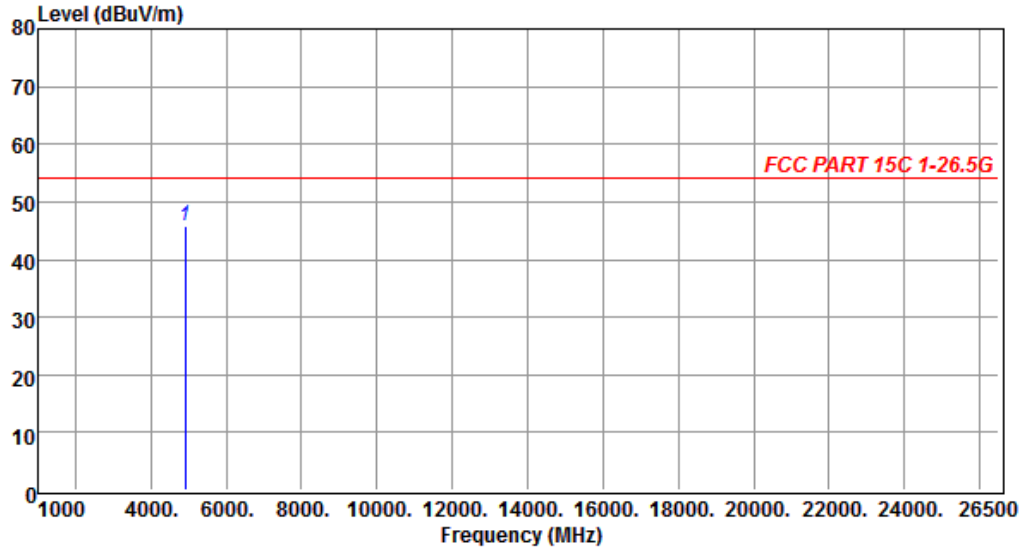
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Vertical	Channel	:	CH09 (2452 MHz)
Test Mode	:	Mode 12			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4904.00	44.98	0.94	45.92	54.00	-8.08	----------	----------	VERTICAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

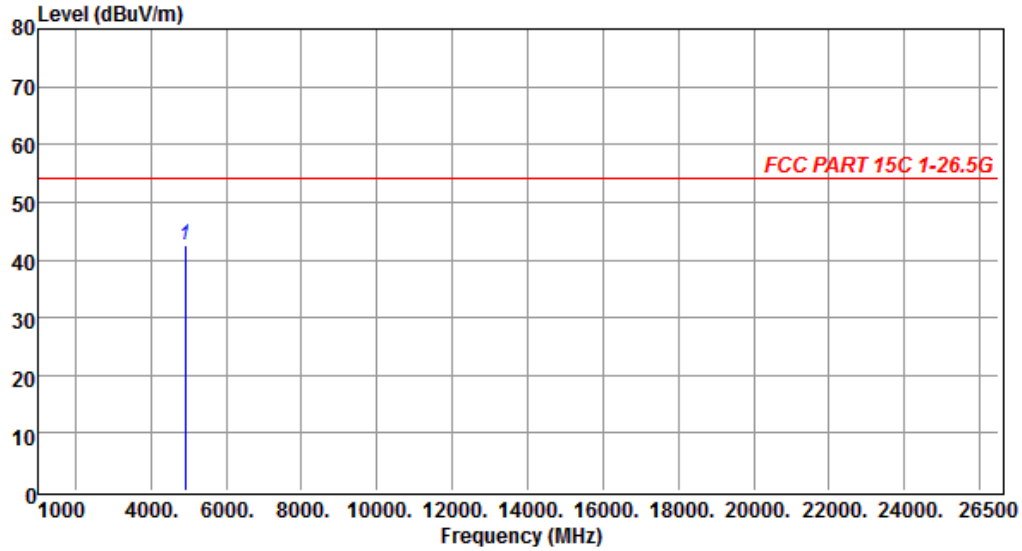
Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Polarization	:	Horizontal	Channel	:	CH09 (2452 MHz)
Test Mode	:	Mode 12			



Freq	Reading	C.F	Result	Limit	Margin	A/H	T/P	Polarity	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	deg		
4904.00	41.72	0.94	42.66	54.00	-11.34	----------	----------	HORIZONTAL	Peak

Note1: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
Note2: Margin = Result - Limit

Remark：

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:

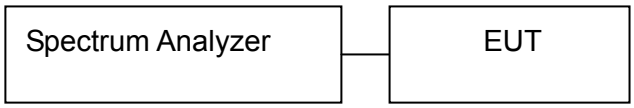
   Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.

4 6 dB Bandwidth of the Emission

4.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

4.2 Test Arrangement



4.3 Test Procedure

1. Connect the EUT to spectrum analyzer through appropriate attenuator.
2. Spectrum setting; RMB = 100 kHz; VBW ≥ 300 kHz. Detector = Peak. Sweep = Auto.
3. Trace = Max Hold.

4.4 Limit (§ 15.247(a)(2))

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

4.5 Test Result

Compliance

The final test data are shown on the following page(s).

Temperature : 21.9℃ Humidity : 51%

Test Date : 2016-03-22 Tested by : Eason Hsieh

Test Mode : 802.11 b

Test Channel	Frequency (MHz)	Test Result (MHz)	Limit (MHz)
01	2412	9.68	≥0.5
06	2437	9.35	≥0.5
11	2462	9.10	≥0.5

Test Mode : 802.11 g

Test Channel	Frequency (MHz)	Test Result (MHz)	Limit (MHz)
01	2412	16.46	≥0.5
06	2437	16.47	≥0.5
11	2462	16.47	≥0.5

Test Mode : 802.11 n HT(20)

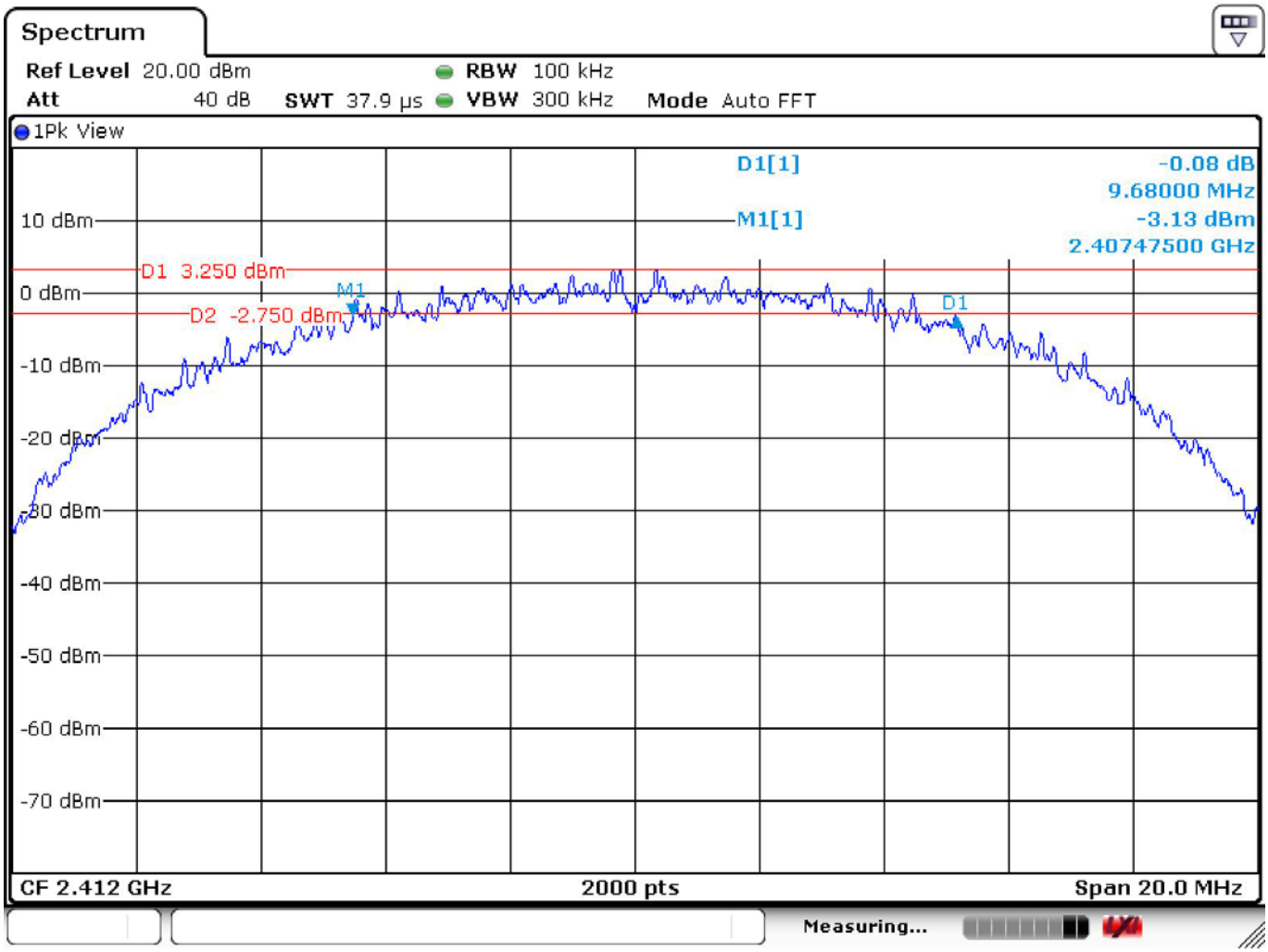
Test Channel	Frequency (MHz)	Test Result (MHz)	Limit (MHz)
01	2412	17.45	≥0.5
06	2437	17.46	≥0.5
11	2462	17.46	≥0.5

Test Mode : 802.11n HT(40)

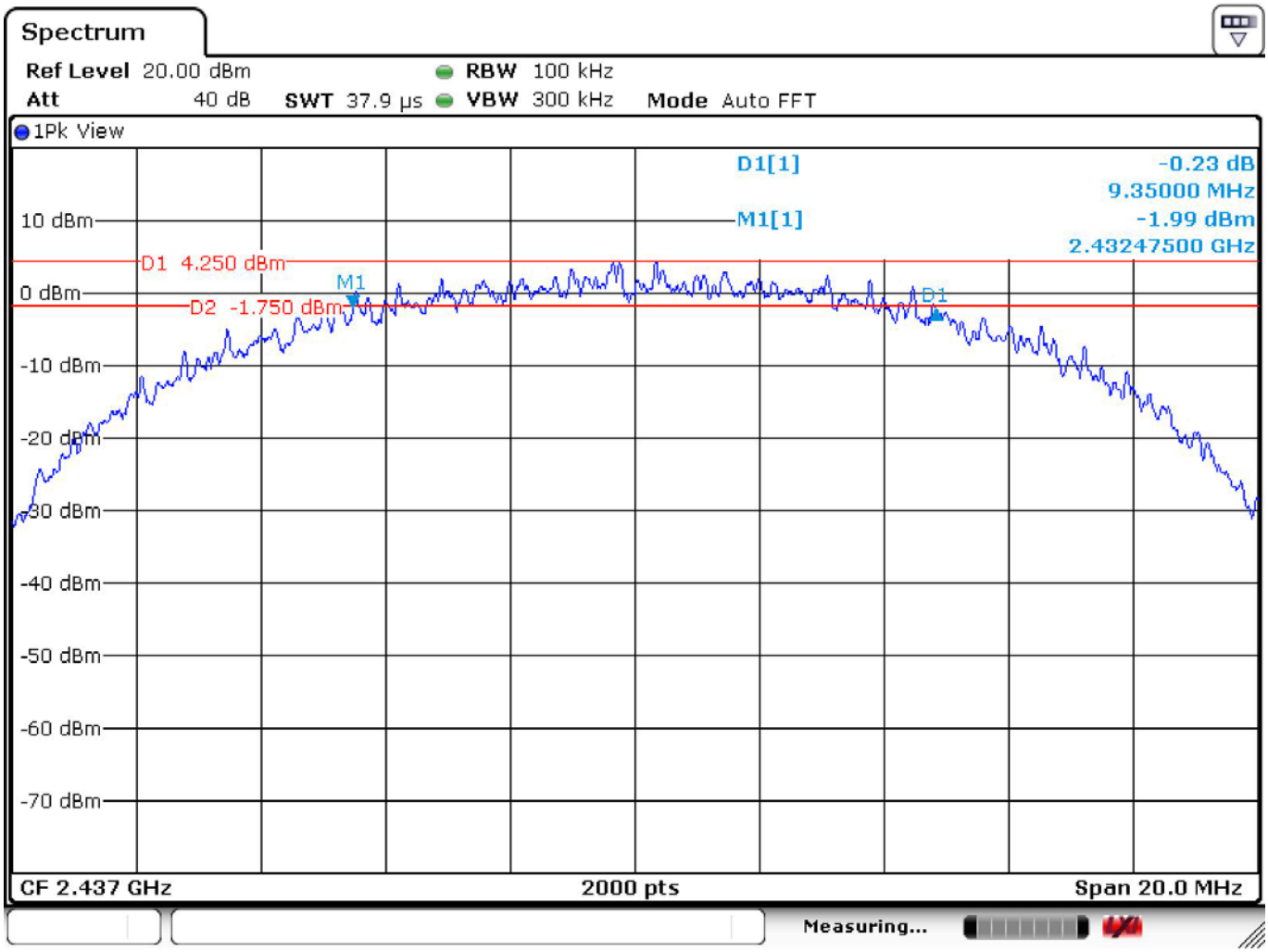
Test Channel	Frequency (MHz)	Test Result (MHz)	Limit (MHz)
03	2422	35.16	≥0.5
06	2437	35.14	≥0.5
09	2452	35.155	≥0.5

The final test data are shown on the following page(s).

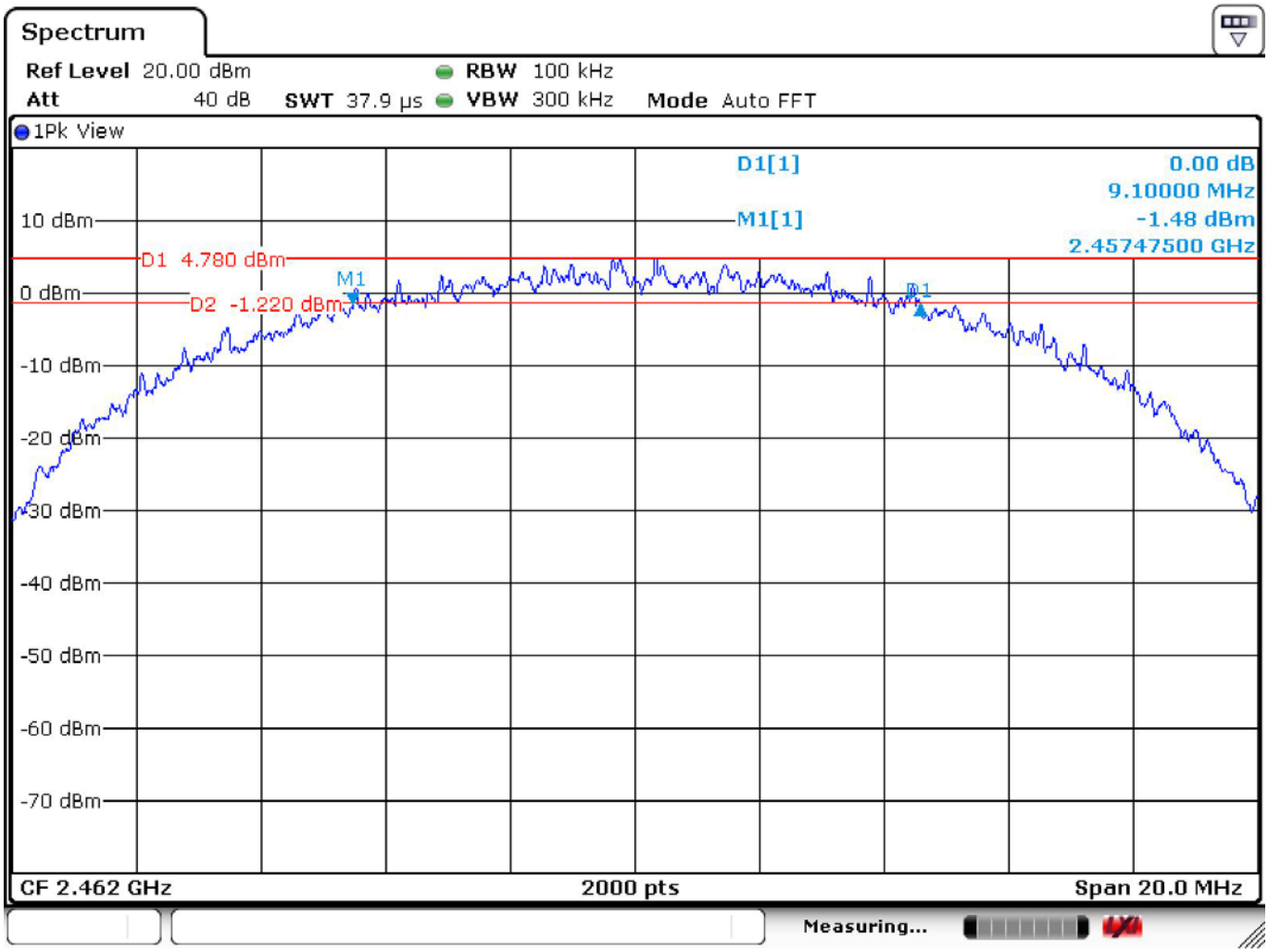
Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Test Mode	:	802.11b	Channel	:	CH01 (2412MHz)



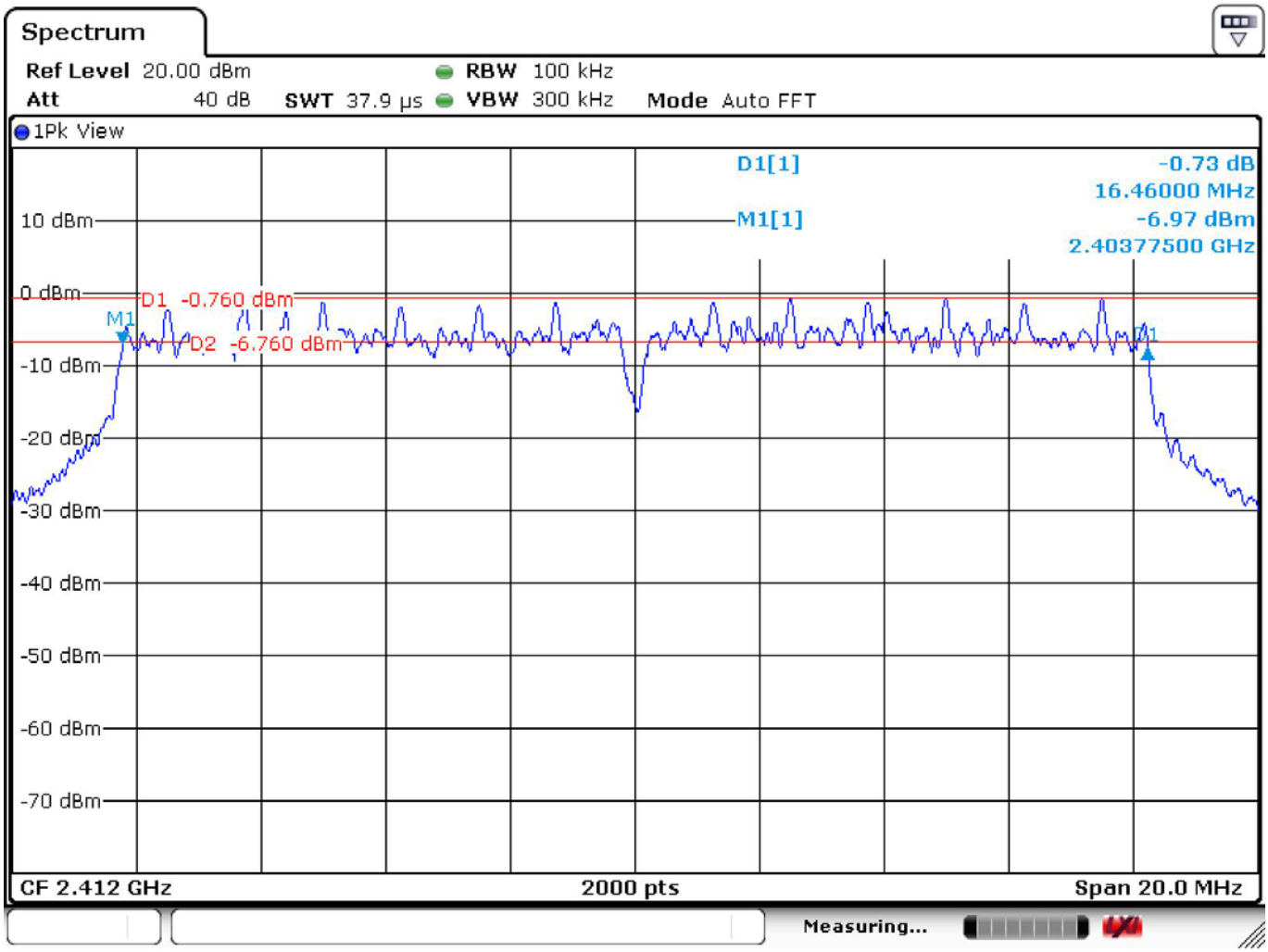
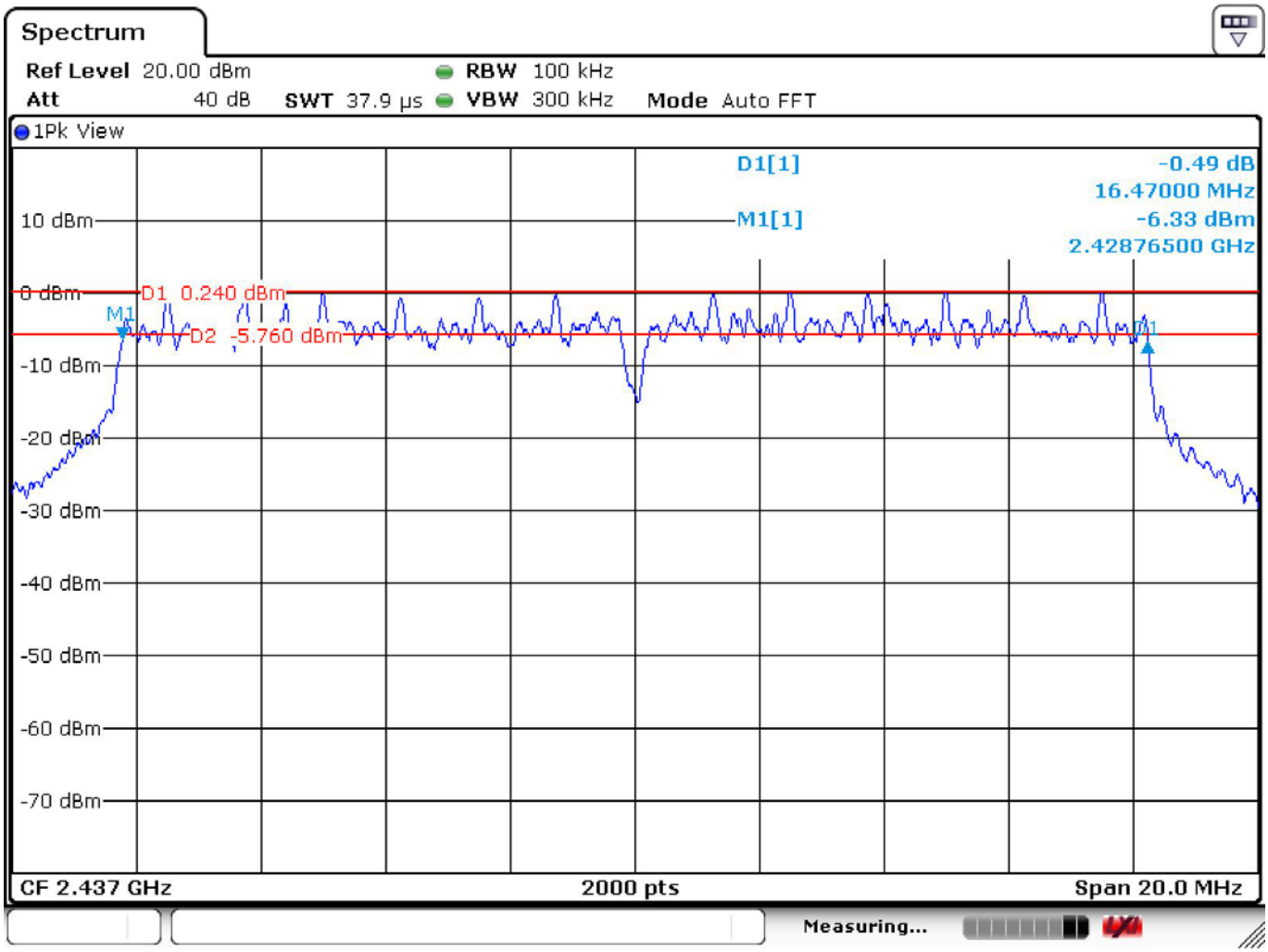
Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Test Mode	:	802.11b	Channel	:	CH06 (2437MHz)



Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Test Mode	:	802.11b	Channel	:	CH11 (2462MHz)



Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Test Mode	:	802.11g	Channel	:	CH01 (2412MHz)



Temperature	:	21.9℃	Humidity	:	51%
Test Date	:	2016-03-22	Tested by	:	Eason Hsieh
Test Mode	:	802.11g	Channel	:	CH06 (2437MHz)