



## *FCC COMPLIANCE TEST REPORT*

Technical Statement of Conformity  
in accordance with 47 CFR Part 15 Subpart C

### The product

<b>Equipment Under Test</b>	: Bluetooth Speaker
<b>Model Number</b>	: BT-02
<b>Product Series</b>	: N/A
<b>Report Number</b>	: HA140008-FID
<b>Issue Date</b>	: 22-Jan-2014
<b>Test Result</b>	: Compliance

is produced by

**ForeShot Industrial Corporation**  
No.7-1, Mincyuan Rd., Dayuan Shiang, Taoyuan County, Taiwan



**HongAn TECHNOLOGY CO., LTD.**

NO.15-1, CWEISHUH KENG, CWEIPIN VILLAGE,  
LINKOU, TAIPEI COUNTY,  
TAIWAN, R. O. C.

**TEL:** +886-2-26030362

**FAX:** +886-2-26019259

**E-mail:** hatlab@ms19.hinet.net

**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**

<b>1</b>	<b>General Description</b>	<b>6</b>
1.1	Description of EUT	6
1.2	Test Instruments	8
1.3	Auxiliary Equipments	9
1.4	EUT SETUP	9
1.5	Identifying the Final Test Mode	9
1.6	Final Test Mode	10
1.7	Condition of Power Supply	10
1.8	EUT Configuration	10
1.9	Test Methodology	10
1.10	General Test Procedures	10
1.11	Modification	11
1.12	FCC Part 15.205 restricted bands of operations	11
1.13	Qualification of Test Facility	12
<b>2</b>	<b>Power line Conducted Emission Measurement</b>	<b>13</b>
2.1	Test Instruments	13
2.2	Test Arrangement and Procedure	13
2.3	Limit (§ 15.207)	13
2.4	Test Result	13
<b>3</b>	<b>Radiated Emission Test</b>	<b>16</b>
3.1	Test Instruments	16
3.2	Test Arrangement and Procedure	16
3.3	Limit (§ 15.205 & § 15.209)	17
3.4	Test Result	18
<b>4</b>	<b>20 dB Bandwidth</b>	<b>71</b>
4.1	Test Instruments	71
4.2	Test Arrangement and Procedure	71
4.3	Limit	71
4.4	Test Result	71
<b>5</b>	<b>Hopping Frequency Separation</b>	<b>77</b>
5.1	Test Instruments	77
5.2	Test Arrangement and Procedure	77
5.3	Limit (§ 15.247(a)(1))	77
5.4	Test Result	77

<b>6</b>	<b>Number of Hopping Channels</b>	<b>84</b>
6.1	Test Instruments	84
6.2	Test Arrangement and Procedure	84
6.3	Limit (§ 15.247(a)(1)(iii))	84
6.4	Test Result	84
<b>7</b>	<b>Average Time of Occupancy</b>	<b>85</b>
7.1	Test Instruments	85
7.2	Test Arrangement and Procedure	85
7.3	Limit (§ 15.247(a)(1)(iii))	85
7.4	Test Result	85
<b>8</b>	<b>Peak Output Power</b>	<b>116</b>
8.1	Test Instruments	116
8.2	Test Arrangement and Procedure	116
8.3	Limit (§ 15.247(b))	116
8.4	Test Result	116
<b>9</b>	<b>100kHz Bandwidth of Band Edges</b>	<b>123</b>
9.1	Test Instruments	123
9.2	Test Arrangement and Procedure	123
9.3	Limit (§ 15.247(d))	123
9.4	Test Result	123
<b>10</b>	<b>Antenna requirement</b>	<b>129</b>
10.1	Limit (§ 15.203)	129
10.2	Test Result	129
<b>11</b>	<b>RF Exposure Compliance Requirements</b>	<b>130</b>
11.1	Limit (§ 1.1310(4))	130
11.2	Test Result	130
<b>12</b>	<b>Photographs of the Tests</b>	<b>131</b>
12.1	Power line Conducted Emission Test(at Mains Terminals)	131
12.2	Radiated Disturbances Emission Test (Below 1G)	132
12.3	Radiated Disturbances Emission Test(Above 1G)	133
<b>13</b>	<b>Photographs of the EUT</b>	<b>134</b>




# Test Result Certification

**Applicant** : ForeShot Industrial Corporation

**Address of Applicant** : No.7-1, Mincyuan Rd., Dayuan Shiang, Taoyuan County, Taiwan.

**Manufacturer** : ForeShot Optoelectrical Technology (Zhongshan) Ltd.

**Address of Manufacturer** : No. 8, Zhi Ye Rd., Torch Hi-Tech Development Zone, ZhongShan City, GuangDong Province, China.

**Trade Name** : 

**Equipment Under Test** : Bluetooth Speaker

**Model Number** : BT-02

**Product Series** : N/A

**FCC ID** : OT9BT02140001

**Filing Type** : Certification

**Sample Received Date** : 31-Dec-2013

**Test Standard** :

☒ FCC Part 15 Subpart C §15.247

☒ FCC Public Notice DA00-705 March 30,2000

**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 C63.4 (2009), FCC Public Notice DA00-705 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.203, 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.

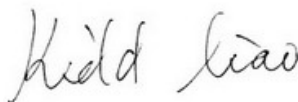
**Documented by:**



**Kay Wang/ ADM. Dept Staff**

**2014-01-22**

**Tested by:**



**Kidd Liao/ ENG. Dept. Staff**

**2014-01-14**

**Approved by:**



**Peter Chin / Section Manager**

**Date: 2014-01-22**

## Summary of Test Result

	Test Item	Applicable Standard	Test Result
1	Antenna Requirement	FCC part 15 subpart C §203	Compliance
2	Conducted limits	FCC part 15 subpart C §207	Compliance
3	Radiated emission limits	FCC part 15 subpart C §209	Compliance
4	Hopping Frequency Separation	FCC part 15 subpart C §247(a)(1)	Compliance
5	Number of Hopping Channels	FCC part 15 subpart C §247(a)(1)	Compliance
6	Average Time of Occupancy	FCC part 15 subpart C §247(a)(1)(iii)	Compliance
7	Peak Output Power	FCC part 15 subpart C §247(b)	Compliance
8	100kHz Bandwidth of Band Edges	FCC part 15 subpart C §247(d)	Compliance

Note: According to FCC Public Notice DA00-705 March 30,2000

# 1 General Description

## 1.1 Description of EUT

Equipment Under Test	:	Bluetooth Speaker							
Model Number of EUT	:	BT-02							
Product Series	:	N/A							
Power Supply	:	Input : USB 5 Vdc Li-ion Battery Pack Output : Input <u>3.7</u> Vdc, <u>1800</u> mAh.							
Frequency Range	:	2402~2480 MHz							
Transmit Power	:	-1.54 dBm							
Number of Channels	:	79 Channels							
Carrier Frequency of Each Channel	:	00	2402	20	2422	40	2442	60	2462
		01	2403	21	2423	41	2443	61	2463
		02	2404	22	2424	42	2444	62	2464
		03	2405	23	2425	43	2445	63	2465
		04	2406	24	2426	44	2446	64	2466
		05	2407	25	2427	45	2447	65	2467
		06	2408	26	2428	46	2448	66	2468
		07	2409	27	2429	47	2449	67	2469
		08	2410	28	2430	48	2450	68	2470
		09	2411	29	2431	49	2451	69	2471
		10	2412	30	2432	50	2452	70	2472
		11	2413	31	2433	51	2453	71	2473
		12	2414	32	2434	52	2454	72	2474
		13	2415	33	2435	53	2455	73	2475
		14	2416	34	2436	54	2456	74	2476
		15	2417	35	2437	55	2457	75	2477
		16	2418	36	2438	56	2458	76	2478
		17	2419	37	2439	57	2459	77	2479
		18	2420	38	2440	58	2460	78	2480
		19	2421	39	2441	59	2461	-	-
Antenna Specification	:	Print Antenna/ Gain: 2.44 dBi							
Modulation Technique	:	FHSS Bluetooth : GFSK Bluetooth EDR : $\pi/4$ -DQPSK, 8-DPSK							
Transmit Data Rate	:	Bluetooth : 1Mbps Bluetooth EDR : 2/3 Mbps							



<b>Specification</b>	<b>Dimensions</b> : 15 cm (L) X 7.5 cm (W) X 6.5 cm (H) <b>Weight</b> : 220 g <b>Function</b> : The EUT is a Bluetooth Speaker, using BT as its wireless transmitting technology. ✂For more detail specification, please refer to the User Manual.
----------------------	---

## 1.2 Test Instruments

### 3.3.1. Instruments Used for Measurement

HA1

Instrument Name	Manufacture Mode	Model Number	Serial Number	Last Cal. Date	Next Cal. Date
RF Amplifier	AR	15S1G3	306578	11-AUG-2012	11-AUG-2013
EMI Receiver	R&S	ESCI	100615	03-MAR-2013	03-MAR-2014
Spectrum Analyzer	R&S	FSL6	100323	11-JUN-2012	11-JUN-2013
Spectrum Analyzer	Advantest	R3172	101202158	24-JUN-2012	24-JUN-2013
Preamplifier	WIRELESS	FPA-6592G	060009	09-JUL-2012	09-JUL-2013
Preamplifier	HD	HD17187	004	04-AUG-2012	04-AUG-2013
Bilog Antenna	TESEQ	CBL6111D	25769	03-MAR-2013	03-MAR-2014
Bilog Antenna	Schaffner	CBL6112B	2860	12-AUG-2012	12-AUG-2013
Double-Ridged Waveguide Horn	EMCO	3115	9912-5992	04-MAY-2013	04-MAY-2014
Temp. & Humidity Chamber	Giant Force	GTH-150-20-SP-AR	MMA0907-012	22-JUL-2012	22-JUL-2013

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



### 1.3 Auxiliary Equipments

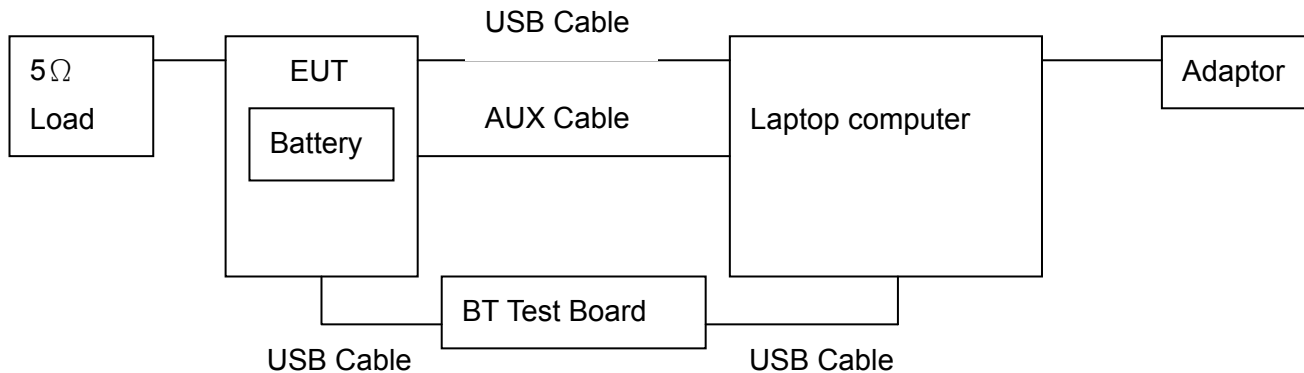
#### 1.3.1. Provided by HongAn Technology Co., Ltd. for Emission Test.

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Description	
						Data Cable	Power Cable
01	Notebook	N61J	N61JV-021A520M	CE,FCC, C-TICK N13219, BSMI R31018	ASUS	Adapter to Notebook Unshielded*1.8 m	AC to Adapter Unshielded*1.8 m

#### 1.3.2. Provided by the Manufacturer

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Description	
						Data Cable	Power Cable
01	MicroSD Card	MM8GR01GJCCA-MGI	F0230000050	CE	Transcend	N/A	N/A

### 1.4 EUT SETUP



Note: Main Test Sample: Bluetooth Speaker

### 1.5 Identifying the Final Test Mode

1. Mode 1: TX BT mode (1Mbps) CH 00.
2. Mode 2: TX BT mode (1Mbps) CH 39.
3. Mode 3: TX BT mode (1Mbps) CH 78.
4. Mode 4: TX BT EDR mode (2Mbps) CH 00.
5. Mode 5: TX BT EDR mode (2Mbps) CH 39.
6. Mode 6: TX BT EDR mode (2Mbps) CH 78.
7. Mode 7: TX BT EDR mode (3Mbps) CH 00.
8. Mode 8: TX BT EDR mode (3Mbps) CH 39.
9. Mode 9: TX BT EDR mode (3Mbps) CH 78.
10. Mode 10: RX mode.

Note:

1. To access into different Bluetooth modes, the EUT is connected to Notebook through USB cable.



Notebook executes PUTTY testing program to control the Bluetooth function.

2. EUT has been evaluated placing in all three orthogonal directions. In horizontal position, the EUT was most likely to cause maximum unwanted disturbance. Therefore, the final assessments were performed in horizontal position.
3. After pre-test, we identified that the Mode 9 (the worst case) was most likely to cause maximum unwanted disturbance on 30~1GHz. Mode 10 (the worst case) was most likely to cause maximum unwanted disturbance on 1~26.5 GHz. Therefore, the Final Assessments were performed for the worst cases, respectively. All pre-test data show at appendix.
4. Channel Low (2402 MHz), Mid (2441 MHz) and High (2480 MHz) were chosen for full testing.
5. According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

Remark:

The EUT could perform scanning function through USB connection. In real world, however, when using USB mode, Bluetooth function will be disabled. In other words, Bluetooth function could only work when powering by battery.

## 1.6 Final Test Mode

1. Radiated Emission (30~960MHz): Mode 2.
2. Radiated Emission (above 960MHz): Mode 4.
3. Conducted Emission: Mode 2.

## 1.7 Condition of Power Supply

DC 3.7 V, 1800 mAh (Li-ion battery pack)

## 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 C63.4 (2009) and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.203, 15.207, 15.209 and 15.247.

## 1.10 General Test Procedures

### Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.3 of ANSI C63.4 (2009) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and average detector modes.

### Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360

degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. The EUT was designed to be mounted on back of front seat, according to the requirements in Section 13.4.1 of ANSI C 63.4 (2009), only one axe of the EUT has to be measured.

### 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
<sup>1</sup> 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	( <sup>2</sup> )
13.36-13.41			

<sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

<sup>2</sup> 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

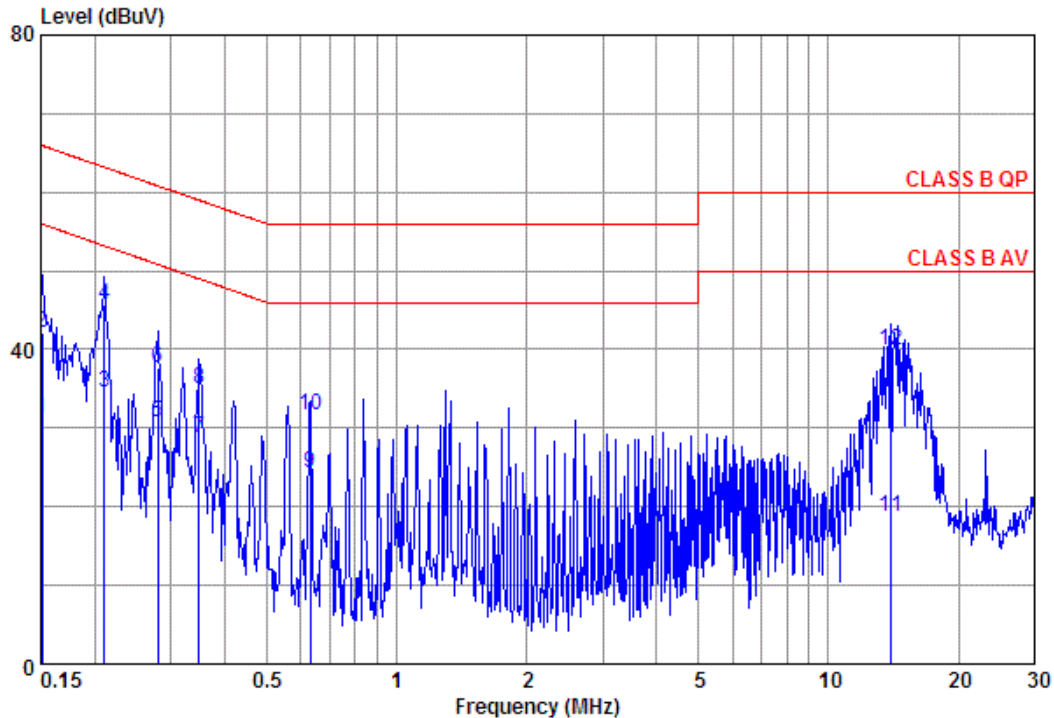
**Pass.**

#### **Compliance**

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

## Conducted Emission Test Data

Test Date : 2014-01-14 Power Line : Line  
 Temperature : 22°C Humidity : 51%



	Freq	Reading	C.F	Result	Limit	Margin	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.151	31.02	0.10	31.12	55.96	-24.84	Average
2	0.151	42.04	0.10	42.14	65.96	-23.82	QP
3	+ 0.211	33.82	0.66	34.48	53.18	-18.70	Average
4	@ 0.211	45.08	0.66	45.74	63.18	-17.44	QP
5	0.280	30.28	0.41	30.69	50.81	-20.12	Average
6	0.280	37.33	0.41	37.74	60.81	-23.07	QP
7	0.348	28.54	0.22	28.76	49.00	-20.24	Average
8	0.348	34.82	0.22	35.04	59.00	-23.96	QP
9	0.630	24.17	0.10	24.27	46.00	-21.73	Average
10	0.630	31.52	0.10	31.62	56.00	-24.38	QP
11	13.989	18.02	0.75	18.77	50.00	-31.23	Average
12	13.989	39.14	0.75	39.89	60.00	-20.11	QP

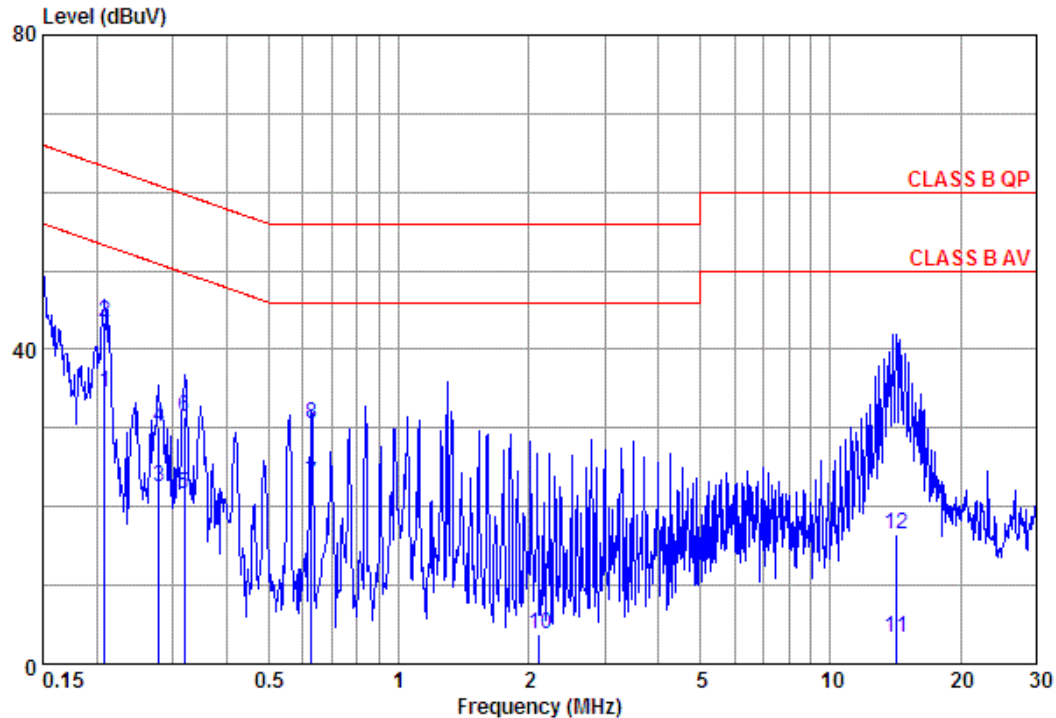
Result = Reading + C.F ; C.F = LISN Factor + Cable Loss

@ :Maximum QP \* :Maximum AVG x :Over Limit

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

## Conducted Emission Test Data

Test Date : 2014-01-14 Power Line : Neutral  
 Temperature : 22°C Humidity : 51%



	Freq	Reading	C.F	Result	Limit	Margin	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	+	0.208	34.45	0.10	34.55	53.27	-18.72 Average
2	@	0.208	43.45	0.10	43.55	63.27	-19.72 QP
3		0.279	22.45	0.09	22.54	50.85	-28.31 Average
4		0.279	30.07	0.09	30.16	60.85	-30.69 QP
5		0.318	21.51	0.10	21.61	49.75	-28.14 Average
6		0.318	31.31	0.10	31.41	59.75	-28.34 QP
7		0.627	22.96	0.09	23.05	46.00	-22.95 Average
8		0.627	30.42	0.09	30.51	56.00	-25.49 QP
9		2.121	-4.15	0.14	-4.01	46.00	-50.01 Average
10		2.121	3.70	0.14	3.84	56.00	-52.16 QP
11		14.213	2.47	0.78	3.25	50.00	-46.75 Average
12		14.213	15.72	0.78	16.50	60.00	-43.50 QP

Result = Reading + C.F ; C.F = LISN Factor + Cable Loss

@ :Maximum QP \* :Maximum AVG x :Over Limit

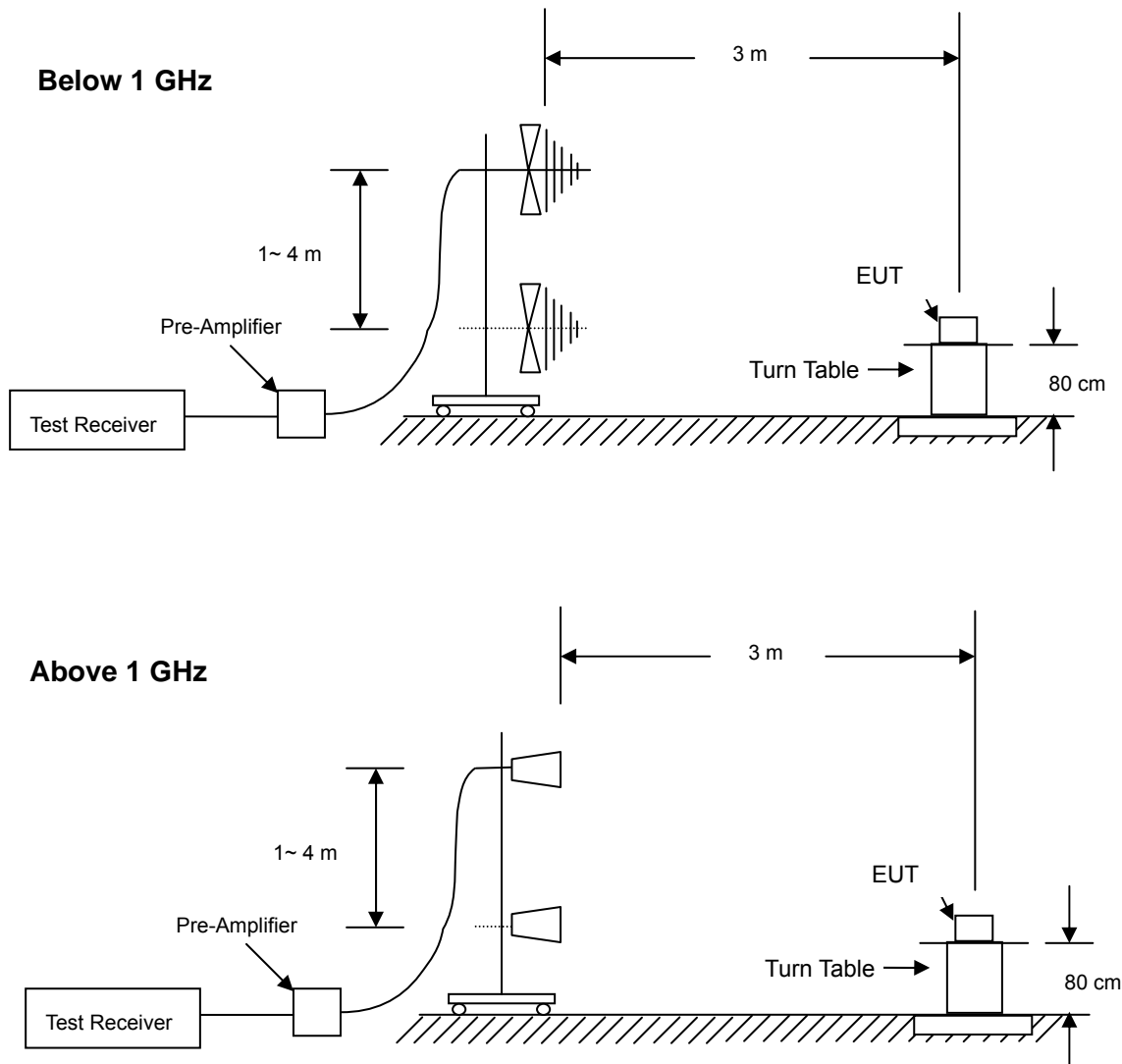
Remark : All readings are Quasi-Peak and Average values.

### 3 Radiated Emission Test

#### 3.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

#### 3.2 Test Arrangement and Procedure



1. The EUT is placed on a turntable, which is 0.8 m 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. Maximum 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 = 1 MHz/ Sweep = AUTO; Average: RBW = 1 MHz/ VBW =



10Hz/ Sweep = AUTO.

7. Repeat above procedures until the measurements for all frequencies are complete.

### 3.3 Limit (§ 15.205 & § 15.209)

#### 3.3.1. Limit of Restricted Band of Operation (§ 15.205)

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

Frequency Band			
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 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
8.37625-8.38675	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	
13.36-13.41			

### 3.3.2. 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.

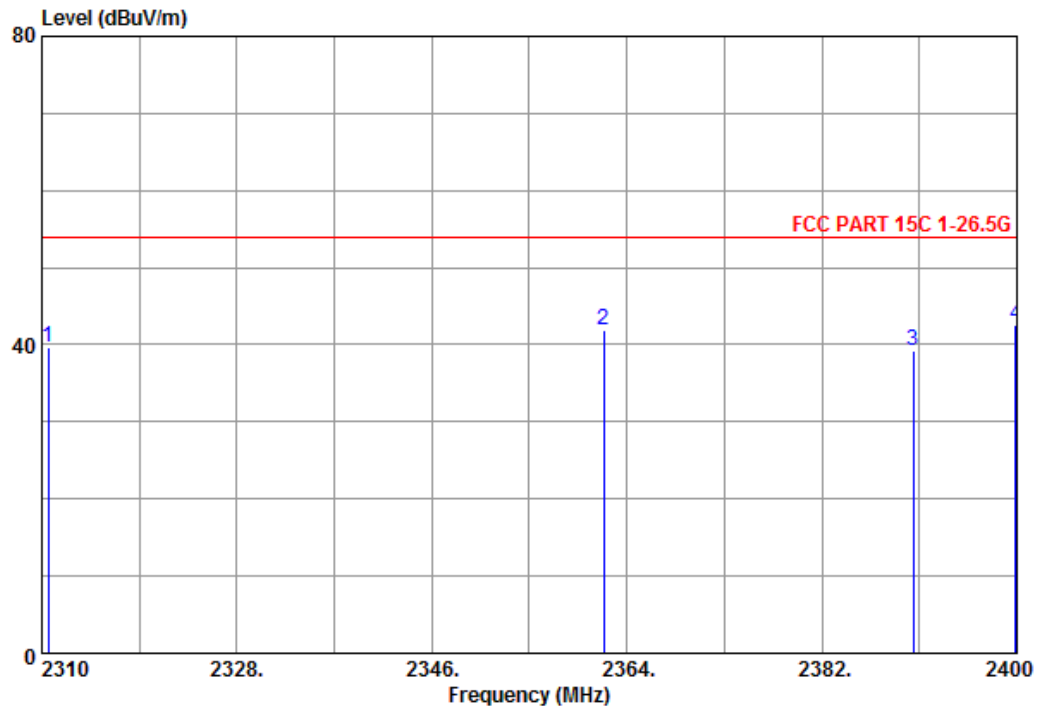
## 3.4 Test Result

### Compliance

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

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.600	47.58	-7.88	39.70	54.00	-14.30	---	---	
2	2361.900	49.68	-7.74	41.94	54.00	-12.06	---	---	
3	2390.400	46.88	-7.63	39.25	54.00	-14.75	---	---	
4	@2399.900	50.19	-7.63	42.56	54.00	-11.44	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

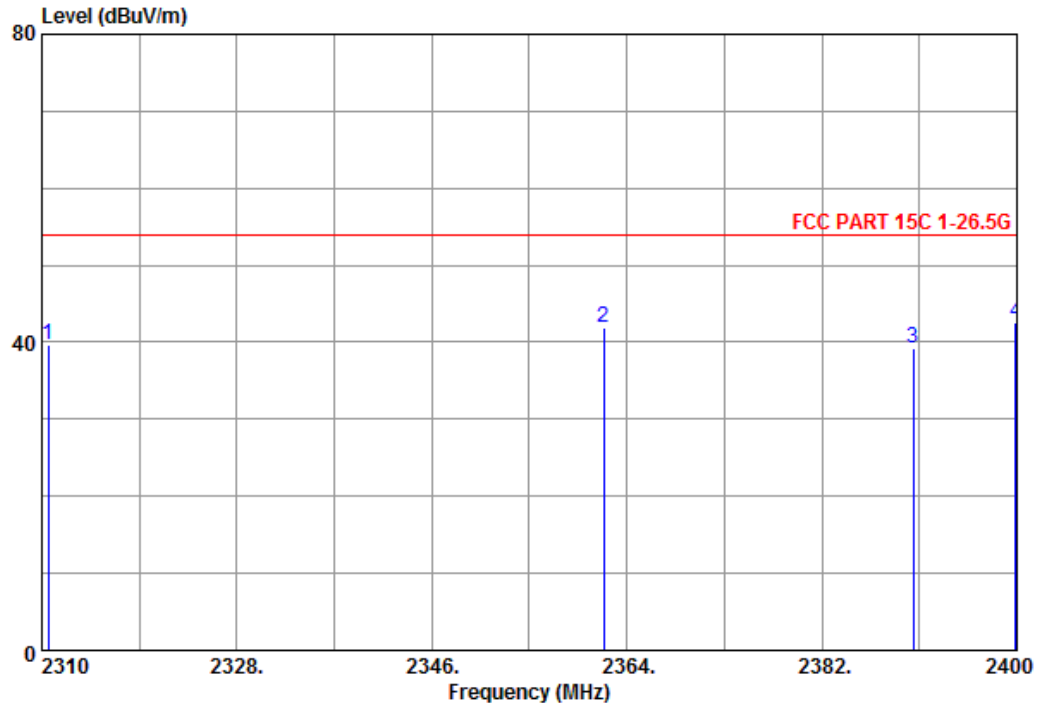
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.600	47.58	-7.88	39.70	54.00	-14.30	---	---	
2	2361.900	49.68	-7.74	41.94	54.00	-12.06	---	---	
3	2390.400	46.88	-7.63	39.25	54.00	-14.75	---	---	
4	@2399.900	50.19	-7.63	42.56	54.00	-11.44	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

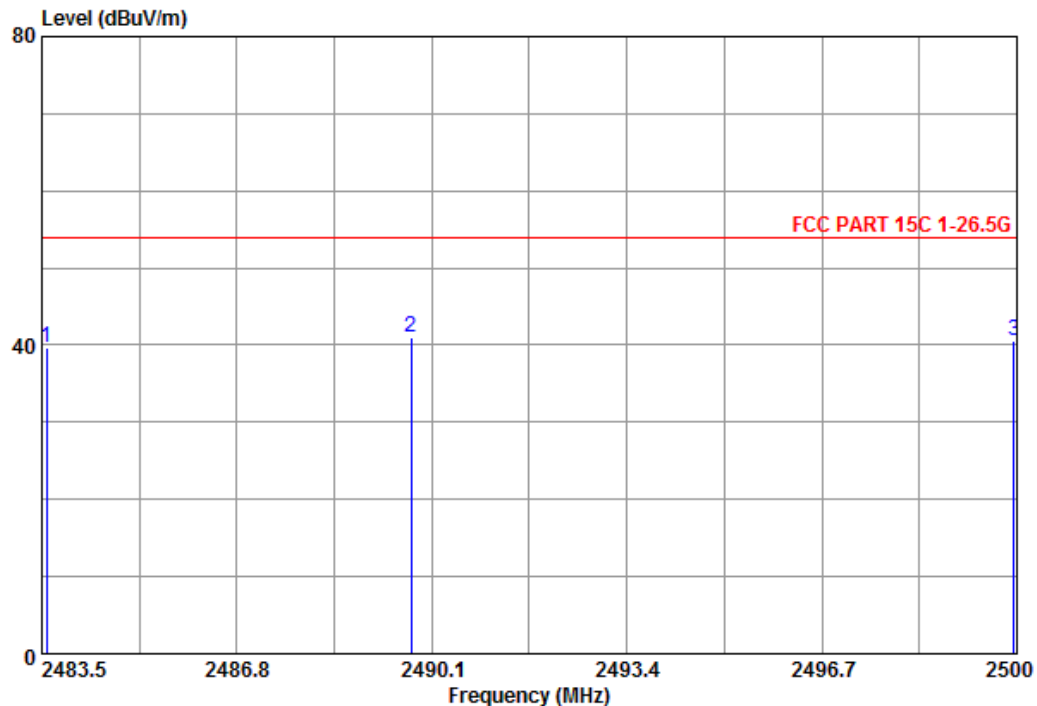
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.583	47.14	-7.39	39.75	54.00	-14.25	---	---	
2	2489.753	48.28	-7.33	40.95	54.00	-13.05	---	---	
3	2499.950	47.96	-7.33	40.63	54.00	-13.37	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

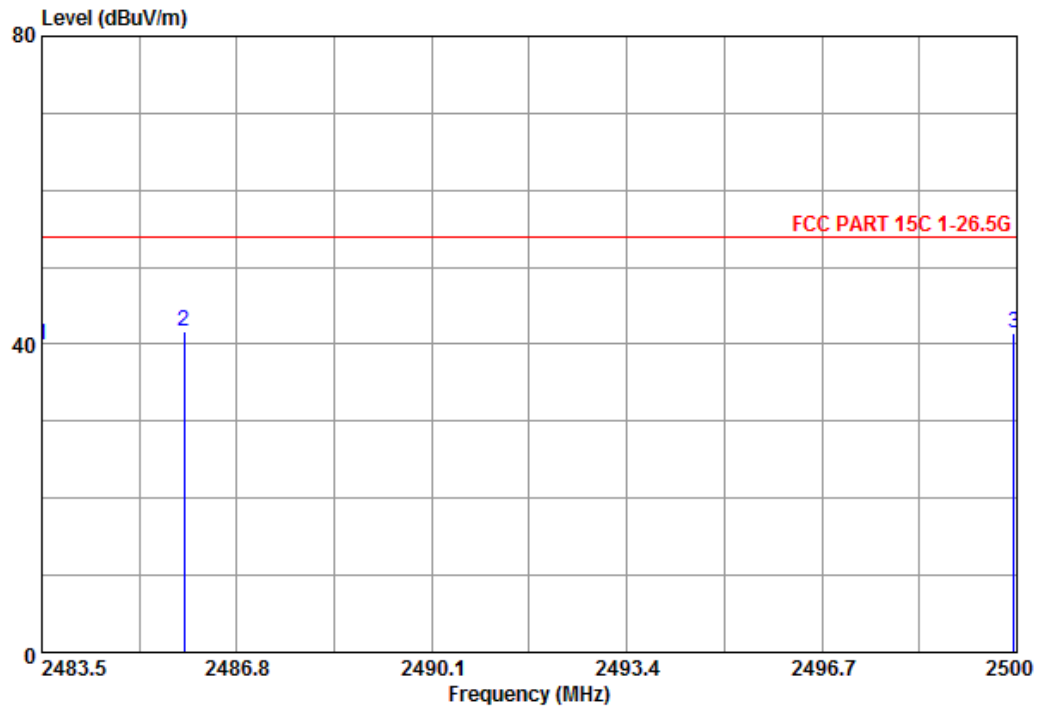
Ⓜ : Maximum Data    × : Over Limit

### Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.500	47.25	-7.39	39.86	54.00	-14.14	---	---	
2	@2485.909	49.14	-7.39	41.75	54.00	-12.25	---	---	
3	2499.950	48.68	-7.33	41.35	54.00	-12.65	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

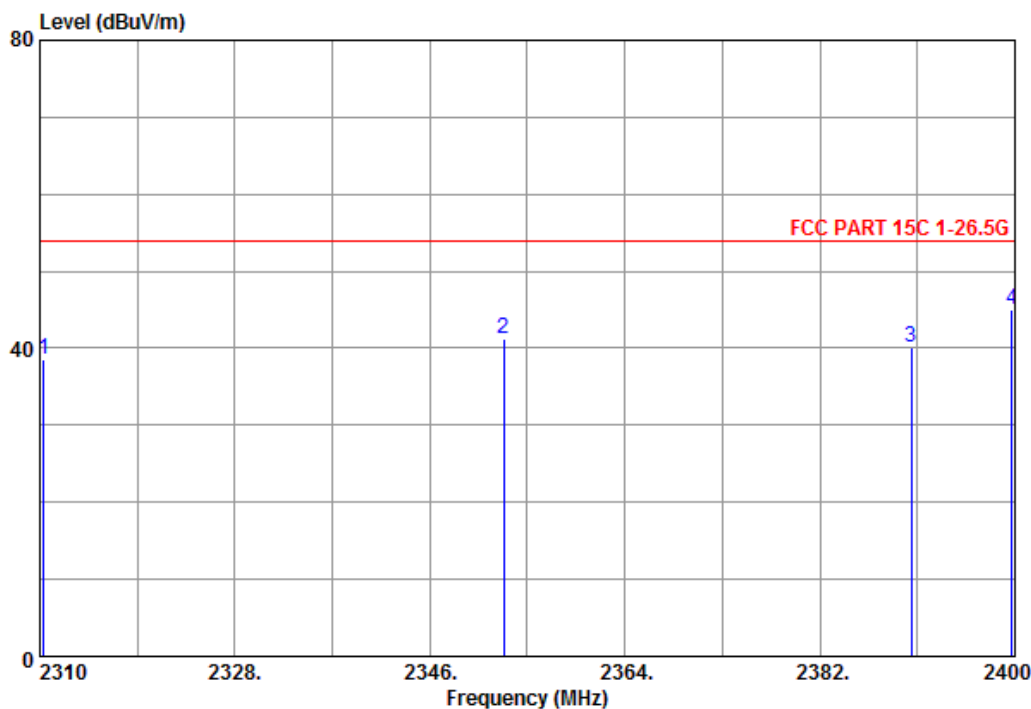
Ⓜ : Maximum Data    × : Over Limit

Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 4		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.360	46.48	-7.88	38.60	54.00	-15.40	---	---	
2	2352.840	49.00	-7.74	41.26	54.00	-12.74	---	---	
3	2390.460	47.77	-7.63	40.14	54.00	-13.86	---	---	
4	@2399.730	52.70	-7.63	45.07	54.00	-8.93	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

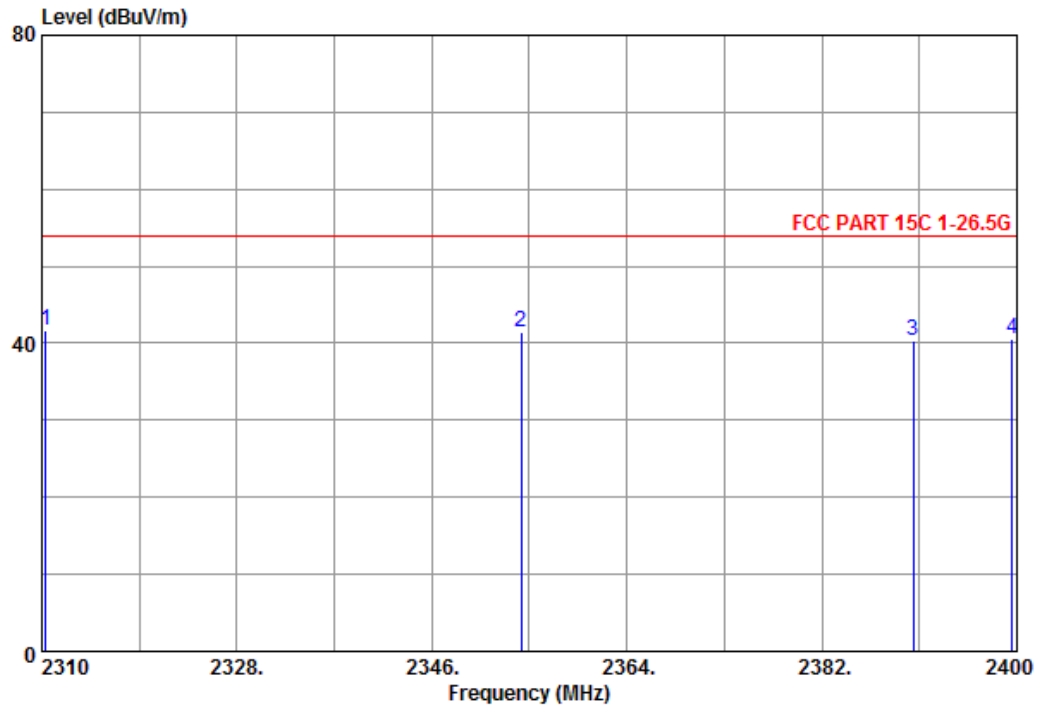
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Restricted Band Edge)**

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 4		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2310.360	49.64	-7.88	41.76	54.00	-12.24	---	---	
2 2354.280	49.26	-7.74	41.52	54.00	-12.48	---	---	
3 2390.460	47.94	-7.63	40.31	54.00	-13.69	---	---	
4 2399.550	48.23	-7.63	40.60	54.00	-13.40	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ : Maximum Data    x : Over Limit

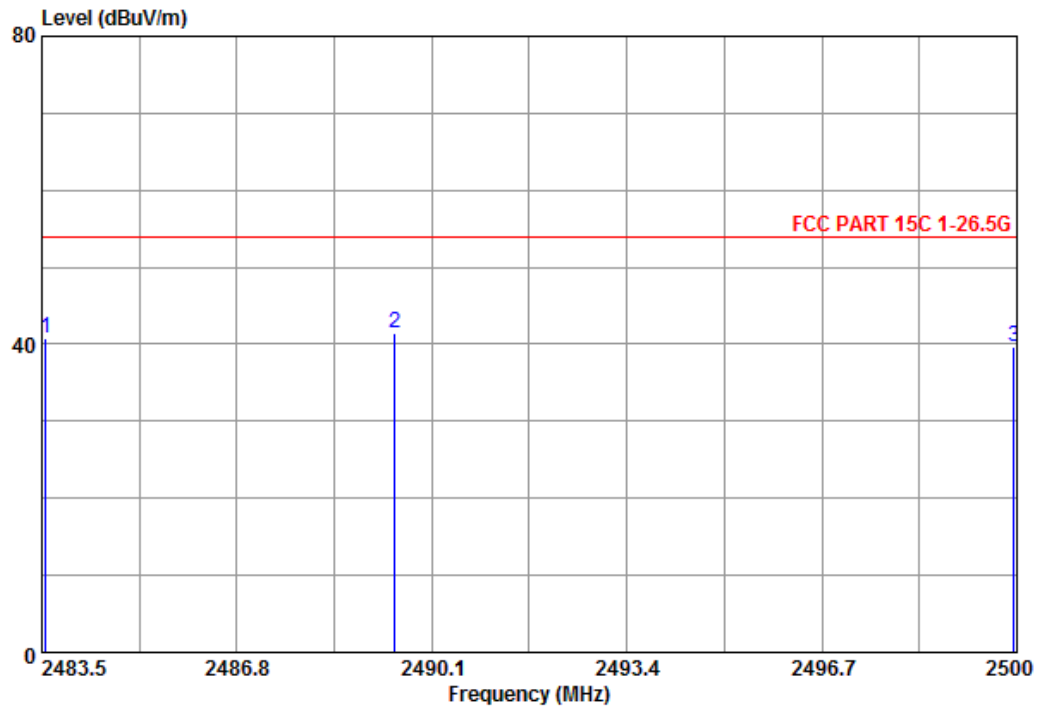
Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.



## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.566	48.20	-7.39	40.81	54.00	-13.19	---	---	
2	2489.473	48.85	-7.33	41.52	54.00	-12.48	---	---	
3	2499.950	47.08	-7.33	39.75	54.00	-14.25	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

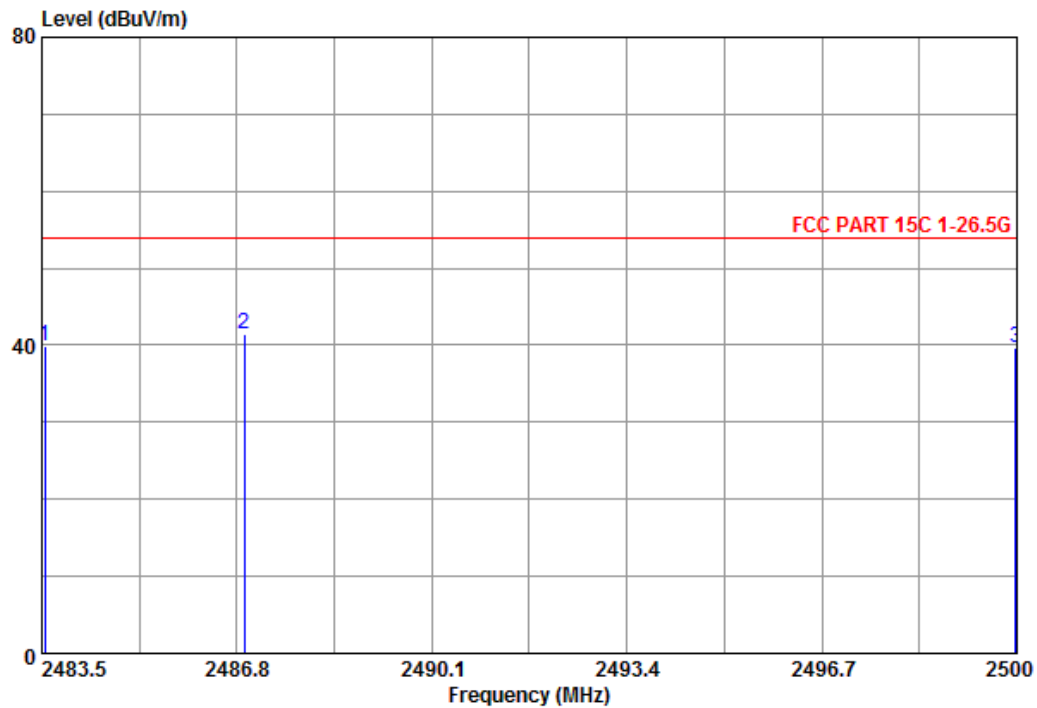
Ⓜ : Maximum Data    × : Over Limit

Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.550	47.24	-7.39	39.85	54.00	-14.15	---	---	
2	@2486.932	48.73	-7.39	41.34	54.00	-12.66	---	---	
3	2499.983	47.06	-7.33	39.73	54.00	-14.27	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

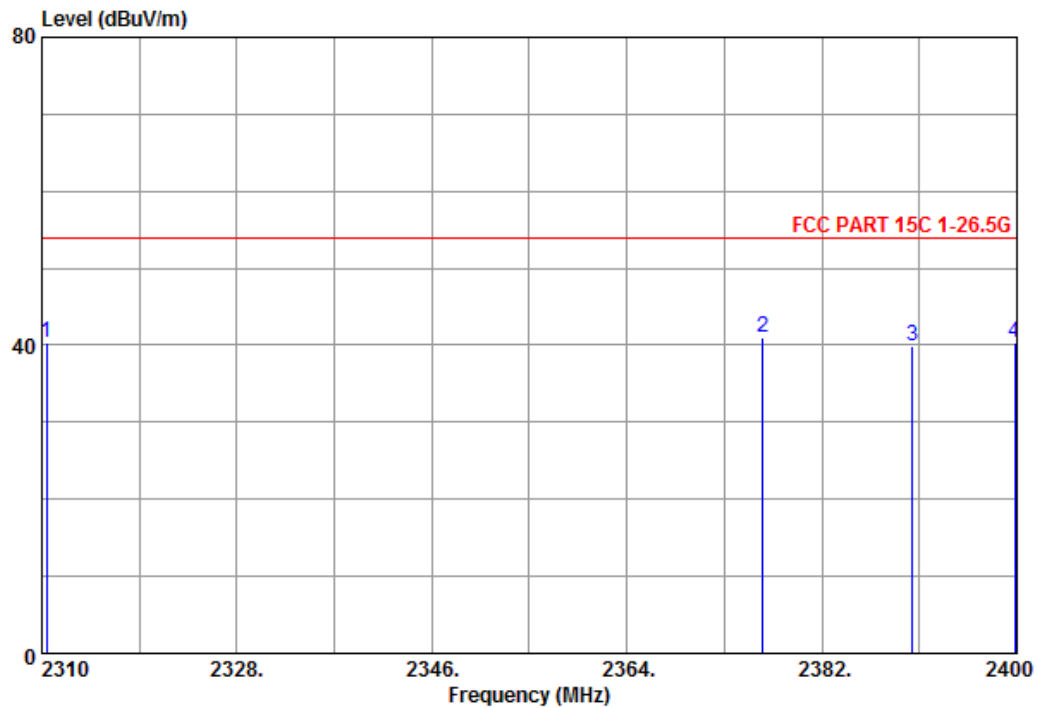
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.450	48.17	-7.88	40.29	54.00	-13.71	---	---	
2	2376.510	48.69	-7.69	41.00	54.00	-13.00	---	---	
3	2390.370	47.50	-7.63	39.87	54.00	-14.13	---	---	
4	2399.820	48.04	-7.63	40.41	54.00	-13.59	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

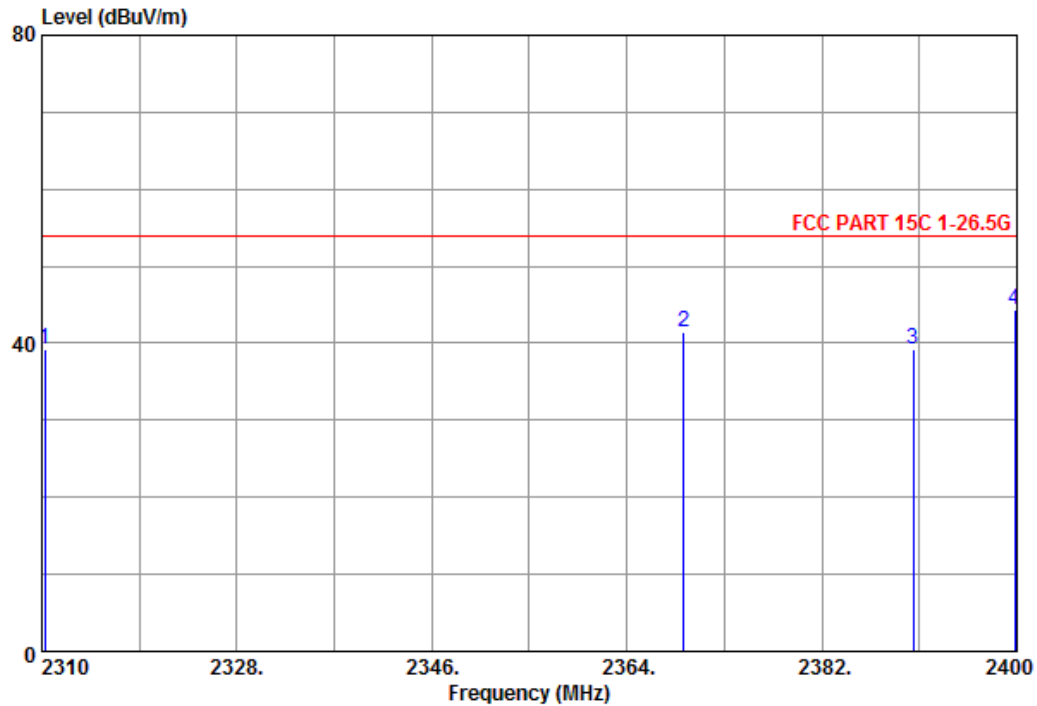
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.270	47.15	-7.88	39.27	54.00	-14.73	---	---	
2	2369.220	49.13	-7.69	41.44	54.00	-12.56	---	---	
3	2390.460	46.76	-7.63	39.13	54.00	-14.87	---	---	
4	@2399.820	52.02	-7.63	44.39	54.00	-9.61	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

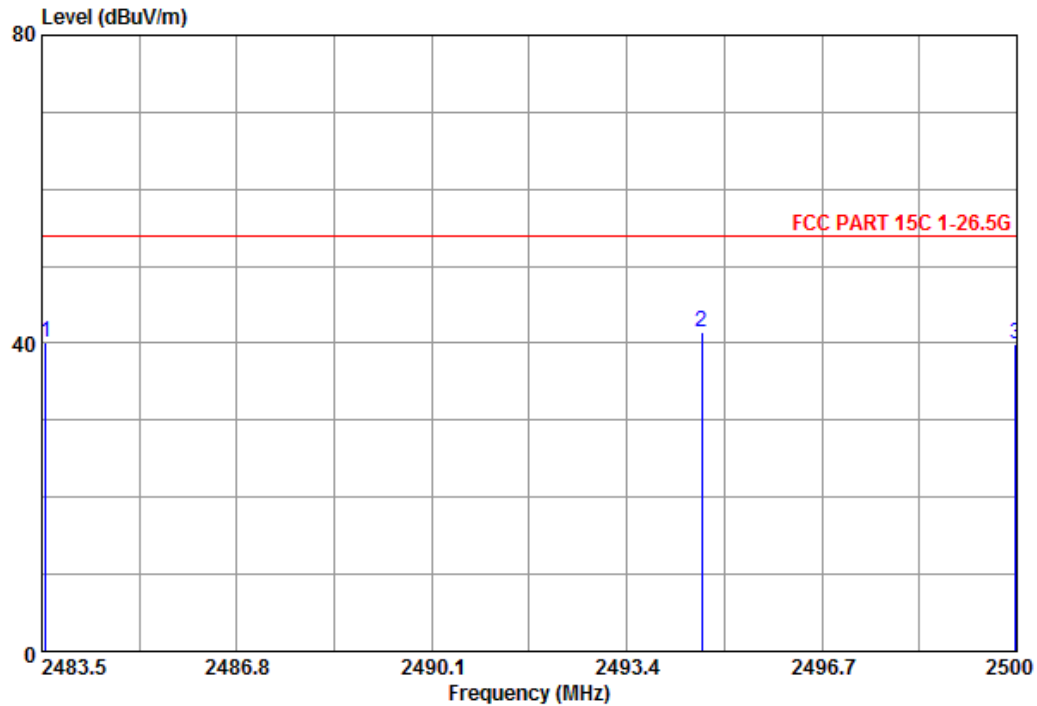
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2310 to 2400 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.566	47.46	-7.39	40.07	54.00	-13.93	---	---	
2	@2494.670	48.85	-7.33	41.52	54.00	-12.48	---	---	
3	2499.983	47.20	-7.33	39.87	54.00	-14.13	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

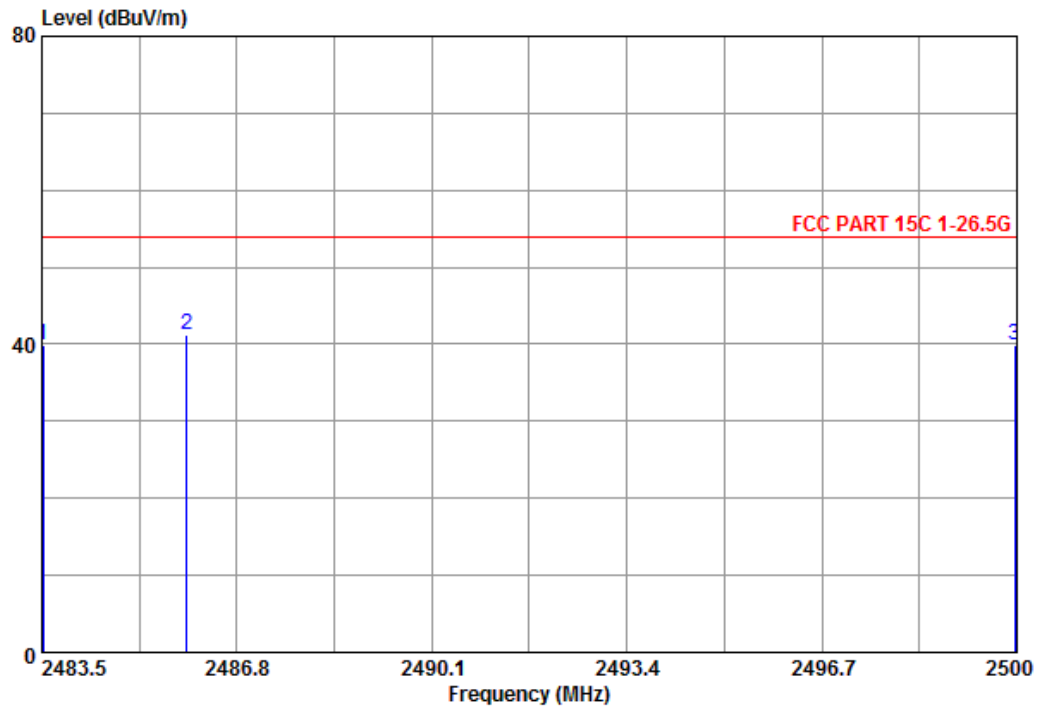
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Restricted Band Edge)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2483.517	47.19	-7.39	39.80	54.00	-14.20	---	---	
2	@2485.958	48.54	-7.39	41.15	54.00	-12.85	---	---	
3	2499.967	47.19	-7.33	39.86	54.00	-14.14	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

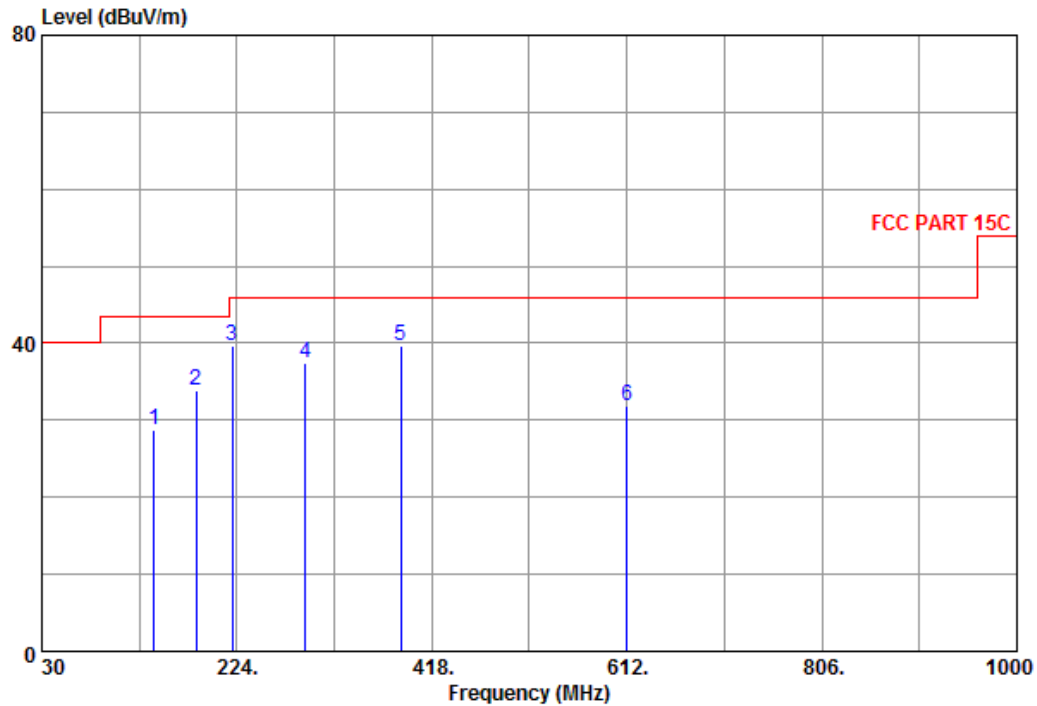
Ⓜ : Maximum Data    × : Over Limit

Remark :

- Measuring frequencies from 2483.5 to 2500 MHz.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	141.550	50.63	-21.79	28.84	43.50	-14.66	---	---	
2	183.260	51.30	-17.38	33.92	43.50	-9.58	---	---	
3 @	219.150	57.65	-17.95	39.70	46.00	-6.30	---	---	
4	291.900	55.22	-17.71	37.51	46.00	-8.49	---	---	
5	386.960	53.64	-13.94	39.70	46.00	-6.30	---	---	
6	612.000	40.89	-9.06	31.83	46.00	-14.17	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

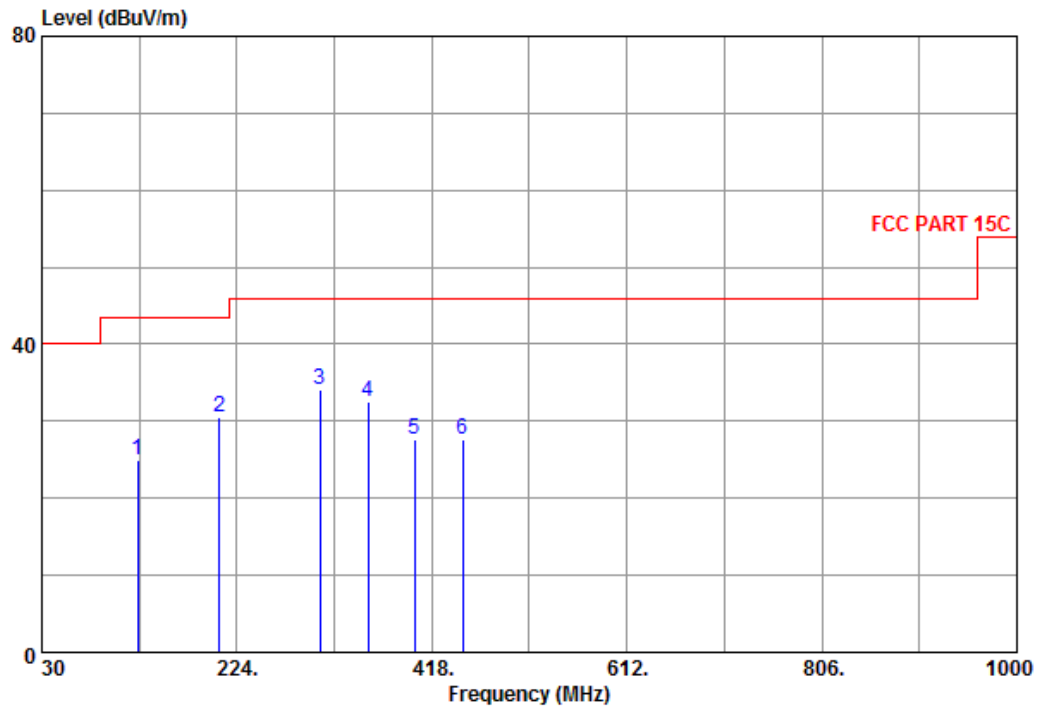
@ : Maximum Data x : Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	47.46	-22.41	25.05	43.50	-18.45	---	---	
2	206.540	48.02	-17.44	30.58	43.50	-12.92	---	---	
3 @	306.450	51.14	-17.04	34.10	46.00	-11.90	---	---	
4	354.950	47.39	-14.77	32.62	46.00	-13.38	---	---	
5	400.540	41.52	-13.97	27.55	46.00	-18.45	---	---	
6	449.040	40.65	-12.99	27.66	46.00	-18.34	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ :Maximum Data x :Over Limit

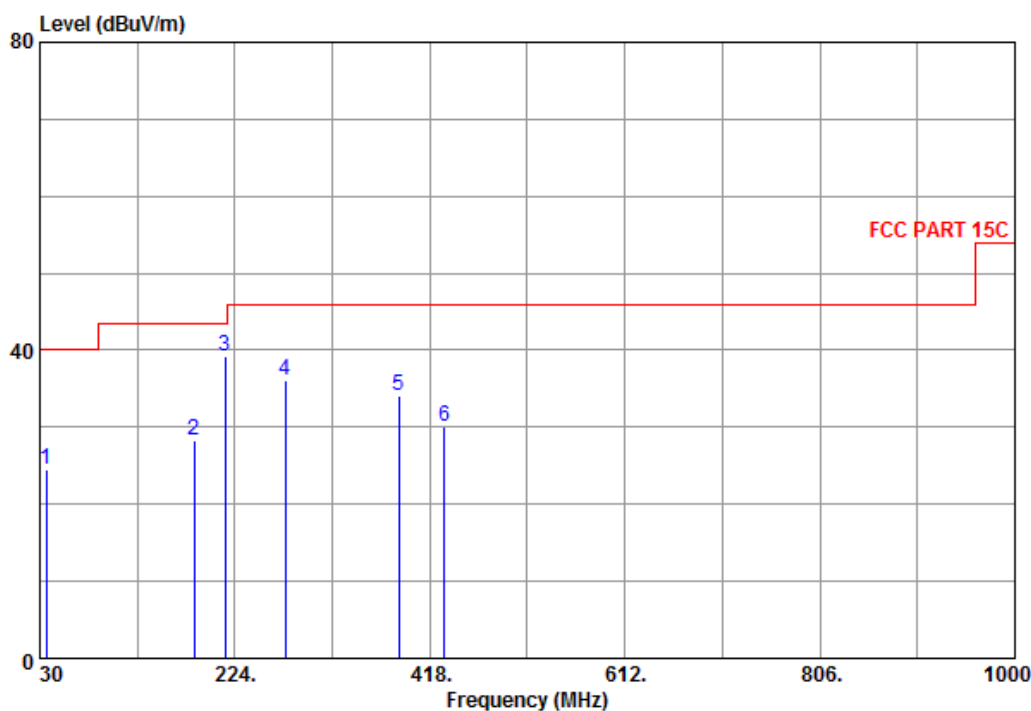
Remark :

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.



## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 2		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	36.050	30.83	-6.32	24.51	40.00	-15.49	---	---	
2	183.260	45.69	-17.38	28.31	43.50	-15.19	---	---	
3 @	214.300	57.01	-17.73	39.28	43.50	-4.22	---	---	
4	274.440	54.67	-18.60	36.07	46.00	-9.93	---	---	
5	386.960	48.12	-13.94	34.18	46.00	-11.82	---	---	
6	432.550	45.54	-15.43	30.11	46.00	-15.89	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

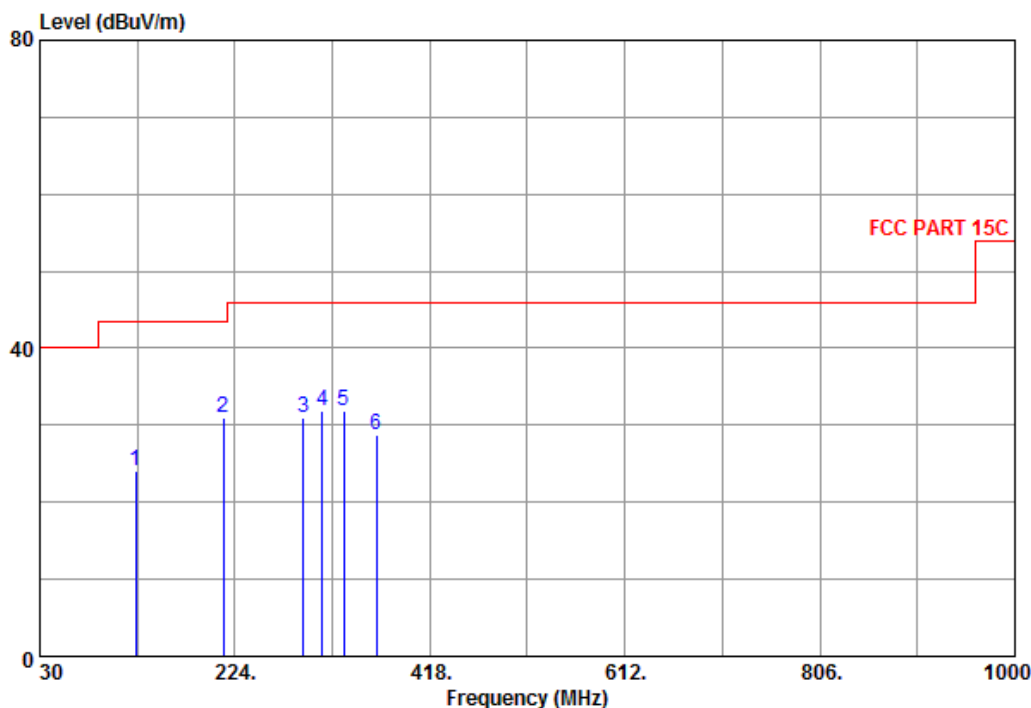
@ : Maximum Data x : Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 39
Test Mode	: Mode 2		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	46.46	-22.41	24.05	43.50	-19.45	---	---	
2	@ 212.360	48.54	-17.64	30.90	43.50	-12.60	---	---	
3	291.900	48.58	-17.71	30.87	46.00	-15.13	---	---	
4	311.300	48.63	-16.75	31.88	46.00	-14.12	---	---	
5	332.640	47.33	-15.44	31.89	46.00	-14.11	---	---	
6	364.650	43.38	-14.56	28.82	46.00	-17.18	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

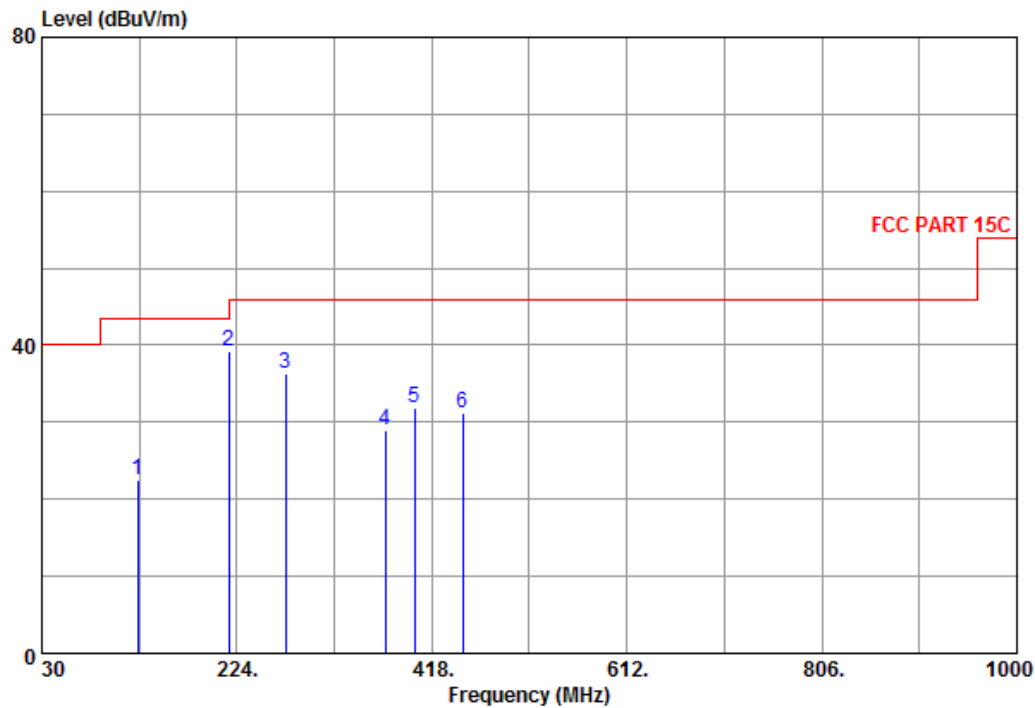
@ :Maximum Data    x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	44.98	-22.41	22.57	43.50	-20.93	---	---	
2	@ 216.240	56.97	-17.81	39.16	46.00	-6.84	---	---	
3	272.500	54.91	-18.70	36.21	46.00	-9.79	---	---	
4	371.440	43.26	-14.38	28.88	46.00	-17.12	---	---	
5	400.540	45.84	-13.97	31.87	46.00	-14.13	---	---	
6	449.040	44.14	-12.99	31.15	46.00	-14.85	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

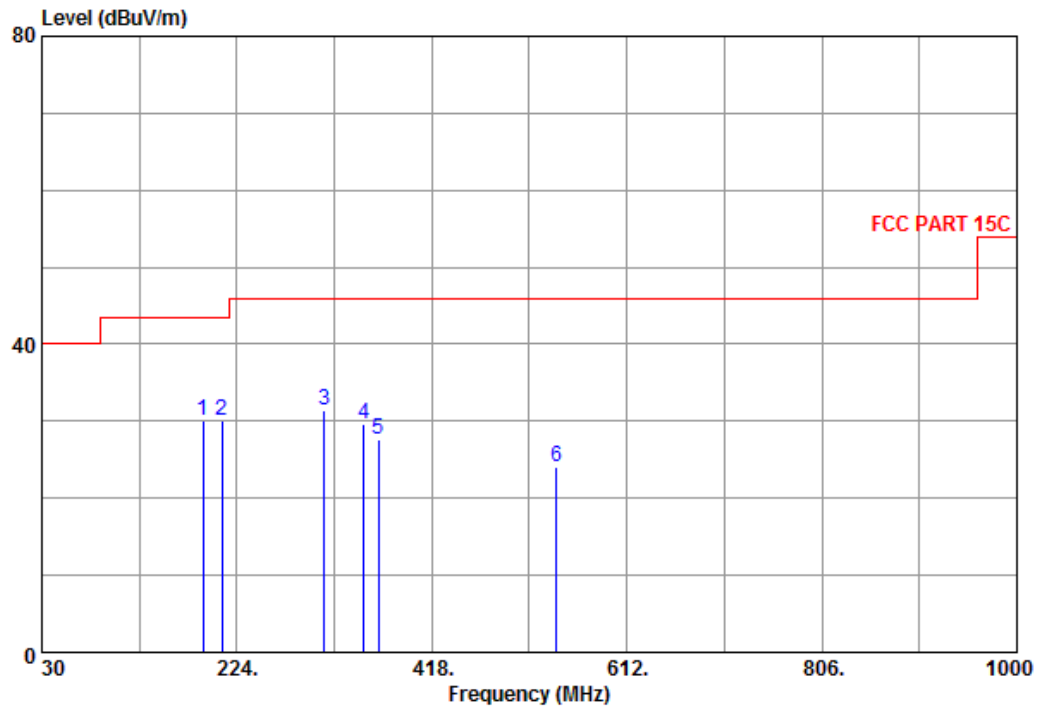
@ :Maximum Data x :Over Limit

#### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	190.050	47.35	-17.36	29.99	43.50	-13.51	---	---	
2	@ 209.450	47.70	-17.53	30.17	43.50	-13.33	---	---	
3	311.300	48.12	-16.75	31.37	46.00	-14.63	---	---	
4	350.100	44.50	-14.85	29.65	46.00	-16.35	---	---	
5	364.650	42.29	-14.56	27.73	46.00	-18.27	---	---	
6	542.160	34.70	-10.56	24.14	46.00	-21.86	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

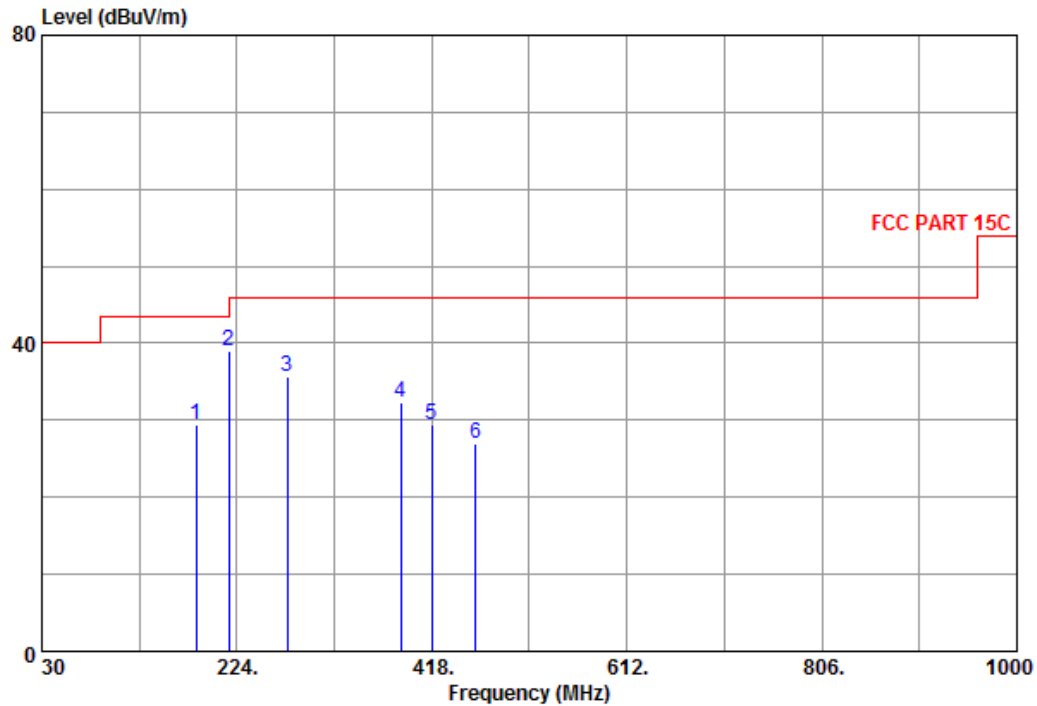
@ :Maximum Data    x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 4		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	183.260	46.82	-17.38	29.44	43.50	-14.06	---	---	
2	@ 216.240	56.90	-17.81	39.09	46.00	-6.91	---	---	
3	274.440	54.26	-18.60	35.66	46.00	-10.34	---	---	
4	386.960	46.19	-13.94	32.25	46.00	-13.75	---	---	
5	418.000	45.17	-15.84	29.33	46.00	-16.67	---	---	
6	461.650	39.84	-12.79	27.05	46.00	-18.95	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

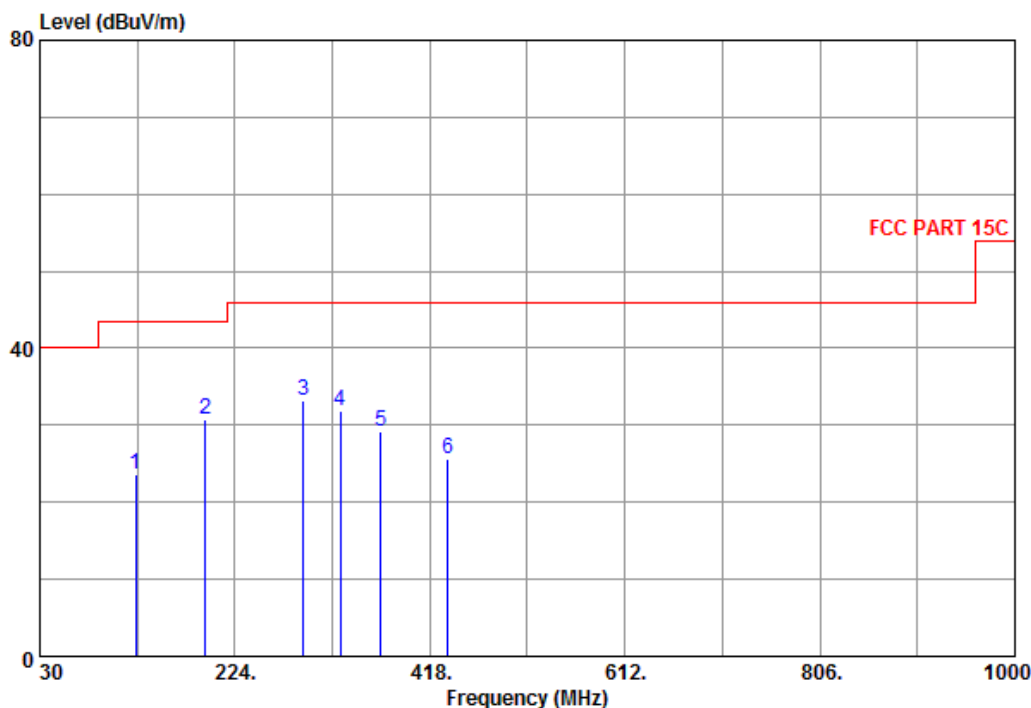
@ :Maximum Data x :Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 4		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	45.97	-22.41	23.56	43.50	-19.94	---	---	
2	@ 194.900	48.15	-17.30	30.85	43.50	-12.65	---	---	
3	291.900	50.94	-17.71	33.23	46.00	-12.77	---	---	
4	328.760	47.58	-15.72	31.86	46.00	-14.14	---	---	
5	369.500	43.61	-14.44	29.17	46.00	-16.83	---	---	
6	435.460	40.52	-15.00	25.52	46.00	-20.48	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

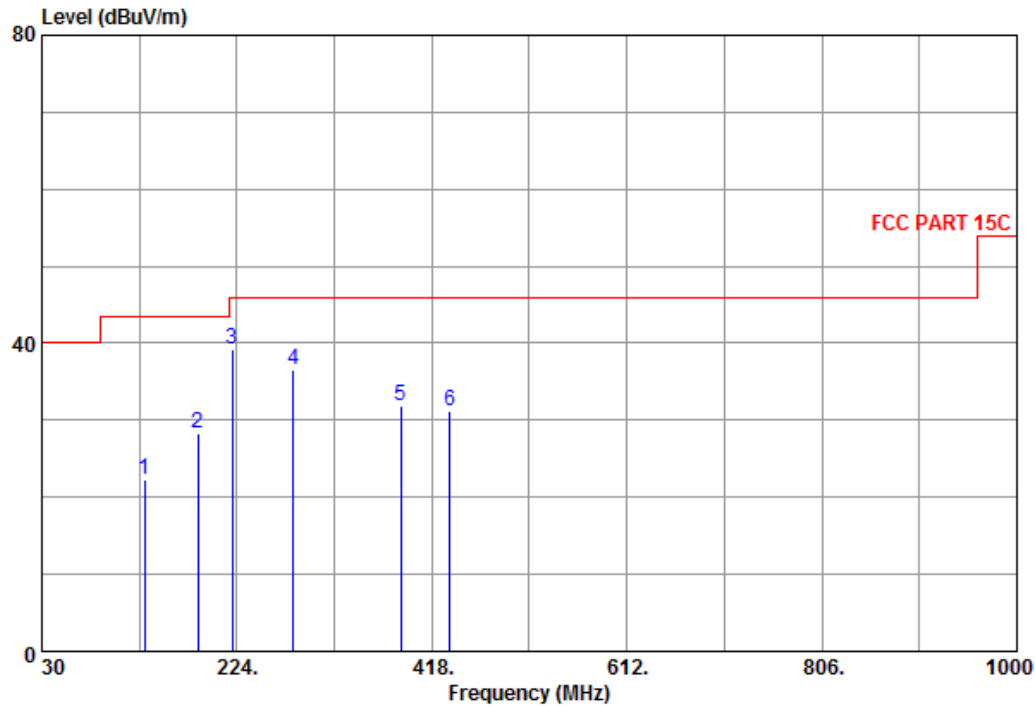
@ :Maximum Data    x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 5		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	131.850	44.43	-22.04	22.39	43.50	-21.11	---	---	
2	185.200	45.71	-17.37	28.34	43.50	-15.16	---	---	
3 @	219.150	57.18	-17.95	39.23	46.00	-6.77	---	---	
4	280.260	54.79	-18.30	36.49	46.00	-9.51	---	---	
5	386.960	45.70	-13.94	31.76	46.00	-14.24	---	---	
6	435.460	46.26	-15.00	31.26	46.00	-14.74	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

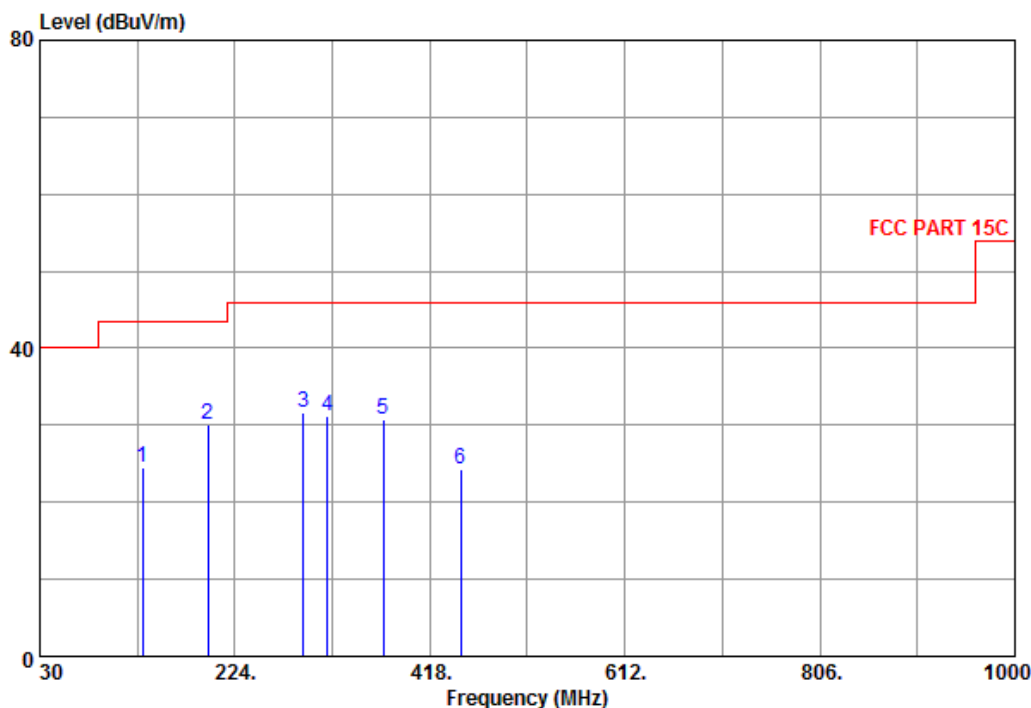
@ :Maximum Data x :Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

# Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 38
Test Mode	: Mode 5		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	131.850	46.58	-22.04	24.54	43.50	-18.96	---	---	
2	@ 196.840	47.38	-17.28	30.10	43.50	-13.40	---	---	
3	291.900	49.33	-17.71	31.62	46.00	-14.38	---	---	
4	316.150	47.72	-16.49	31.23	46.00	-14.77	---	---	
5	371.440	45.06	-14.38	30.68	46.00	-15.32	---	---	
6	449.040	37.24	-12.99	24.25	46.00	-21.75	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ :Maximum Data    x :Over Limit

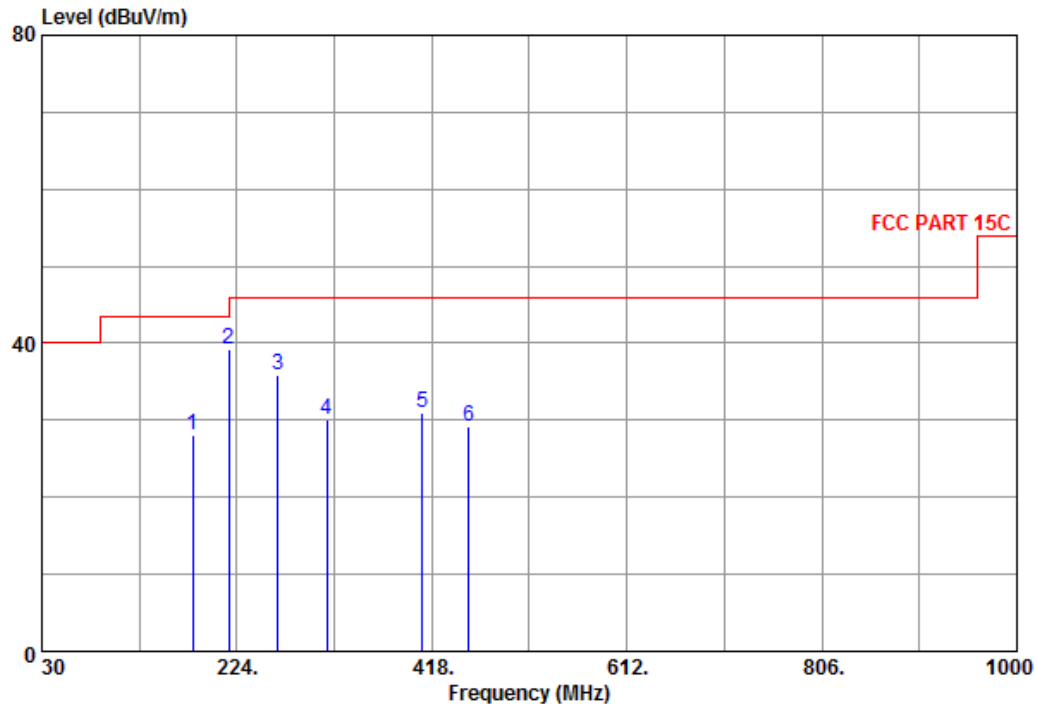
Remark :

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.



### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 79
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	180.350	45.49	-17.39	28.10	43.50	-15.40	---	---	
2	@ 216.240	57.00	-17.81	39.19	46.00	-6.81	---	---	
3	264.740	54.78	-19.00	35.78	46.00	-10.22	---	---	
4	313.240	46.80	-16.65	30.15	46.00	-15.85	---	---	
5	408.300	45.69	-14.80	30.89	46.00	-15.11	---	---	
6	454.860	41.99	-12.82	29.17	46.00	-16.83	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

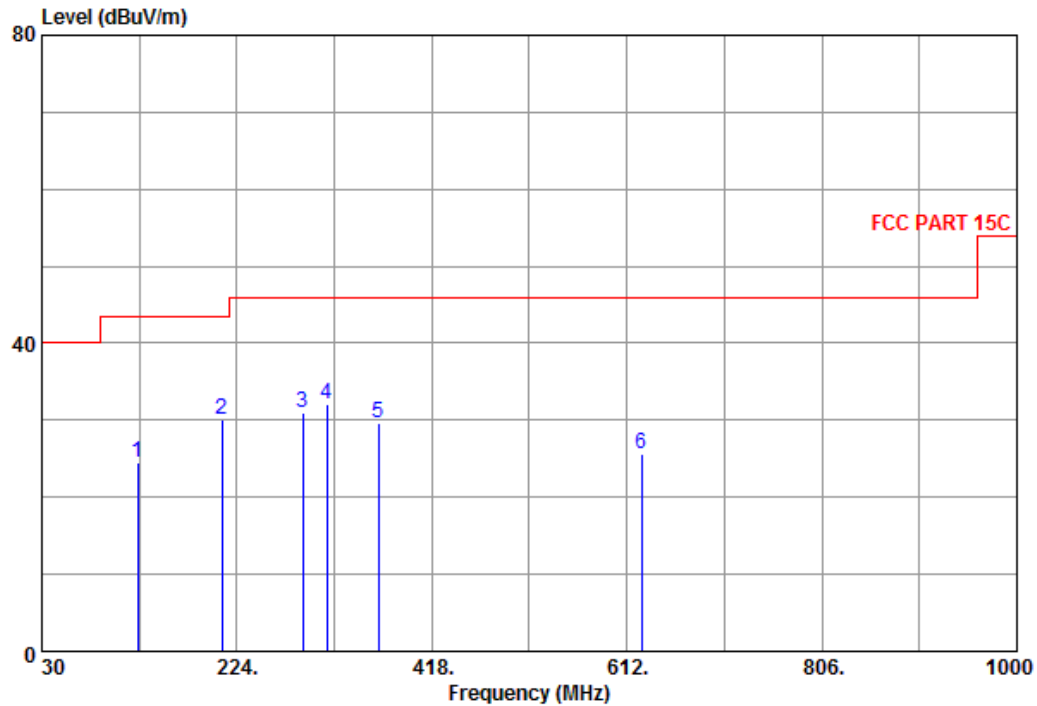
@ : Maximum Data x : Over Limit

#### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 79
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	46.92	-22.41	24.51	43.50	-18.99	---	---	
2	@ 209.450	47.59	-17.53	30.06	43.50	-13.44	---	---	
3	289.960	48.65	-17.78	30.87	46.00	-15.13	---	---	
4	313.240	48.81	-16.65	32.16	46.00	-13.84	---	---	
5	364.650	44.30	-14.56	29.74	46.00	-16.26	---	---	
6	626.550	34.33	-8.76	25.57	46.00	-20.43	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

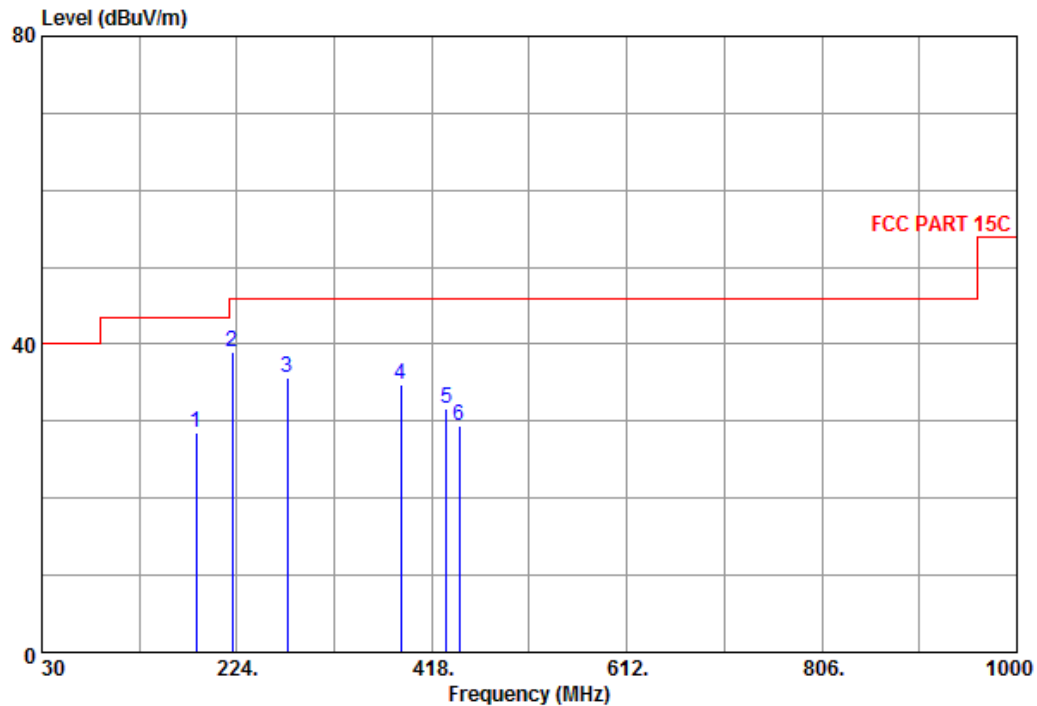
@ : Maximum Data x : Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	183.260	45.80	-17.38	28.42	43.50	-15.08	---	---	
2	@ 219.150	56.97	-17.95	39.02	46.00	-6.98	---	---	
3	274.440	54.26	-18.60	35.66	46.00	-10.34	---	---	
4	386.960	48.80	-13.94	34.86	46.00	-11.14	---	---	
5	432.550	47.06	-15.43	31.63	46.00	-14.37	---	---	
6	445.160	43.09	-13.57	29.52	46.00	-16.48	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

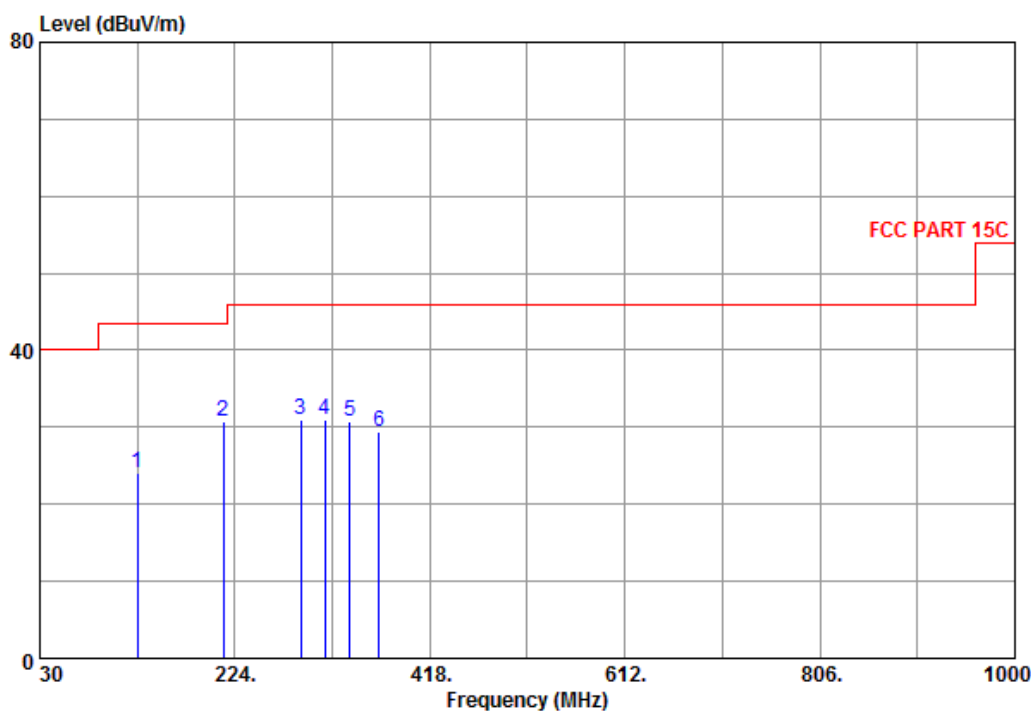
@ :Maximum Data x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	127.000	46.46	-22.29	24.17	43.50	-19.33	---	---	
2	@ 212.360	48.36	-17.64	30.72	43.50	-12.78	---	---	
3	289.960	48.86	-17.78	31.08	46.00	-14.92	---	---	
4	313.240	47.64	-16.65	30.99	46.00	-15.01	---	---	
5	338.460	45.90	-15.04	30.86	46.00	-15.14	---	---	
6	367.560	43.98	-14.49	29.49	46.00	-16.51	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

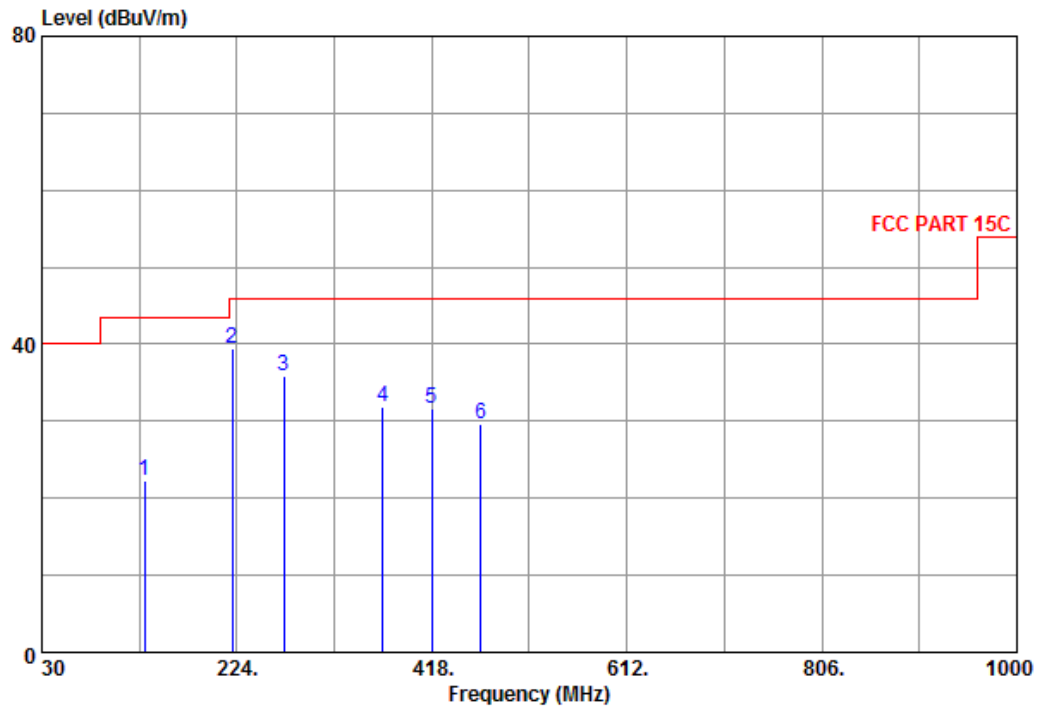
@ : Maximum Data x : Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 8		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	131.850	44.22	-22.04	22.18	43.50	-21.32	---	---	
2	@ 219.150	57.37	-17.95	39.42	46.00	-6.58	---	---	
3	270.560	54.70	-18.80	35.90	46.00	-10.10	---	---	
4	369.500	46.22	-14.44	31.78	46.00	-14.22	---	---	
5	418.000	47.56	-15.84	31.72	46.00	-14.28	---	---	
6	466.500	42.30	-12.76	29.54	46.00	-16.46	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

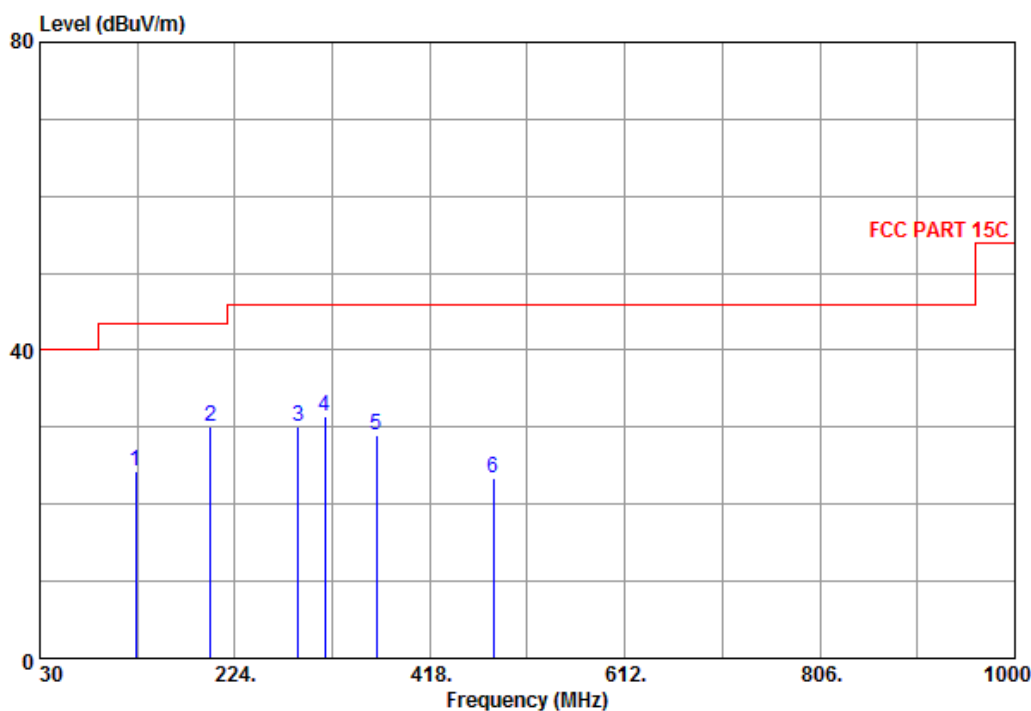
@ :Maximum Data x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 39
Test Mode	: Mode 8		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	125.060	46.69	-22.41	24.28	43.50	-19.22	---	---	
2	@ 199.750	47.36	-17.24	30.12	43.50	-13.38	---	---	
3	287.050	47.99	-17.94	30.05	46.00	-15.95	---	---	
4	313.240	47.99	-16.65	31.34	46.00	-14.66	---	---	
5	364.650	43.50	-14.56	28.94	46.00	-17.06	---	---	
6	481.050	35.82	-12.38	23.44	46.00	-22.56	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

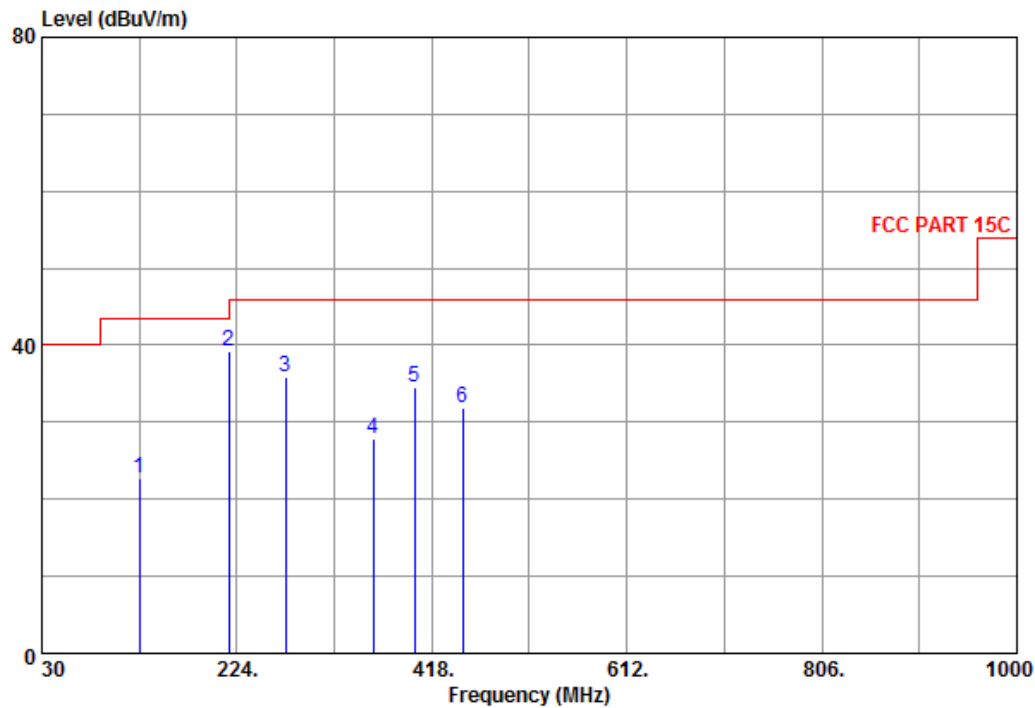
@ : Maximum Data    x : Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	127.000	45.10	-22.29	22.81	43.50	-20.69	---	---	
2	@ 216.240	57.06	-17.81	39.25	46.00	-6.75	---	---	
3	272.500	54.62	-18.70	35.92	46.00	-10.08	---	---	
4	359.800	42.49	-14.69	27.80	46.00	-18.20	---	---	
5	400.540	48.48	-13.97	34.51	46.00	-11.49	---	---	
6	449.040	44.78	-12.99	31.79	46.00	-14.21	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

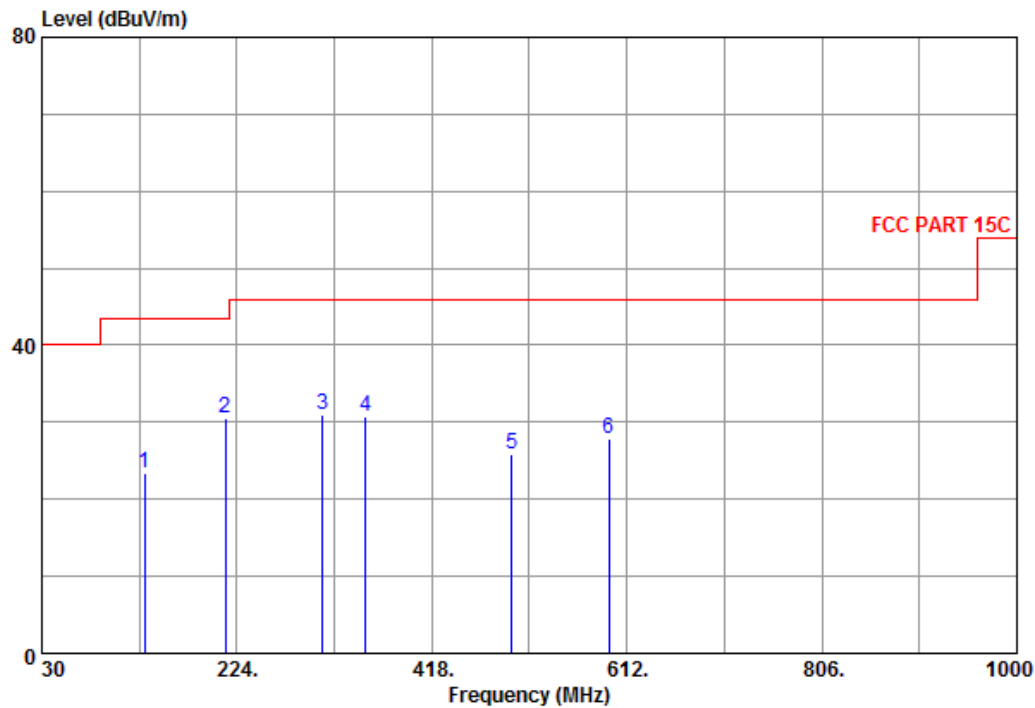
@ : Maximum Data    x : Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	131.850	45.35	-22.04	23.31	43.50	-20.19	---	---	
2	@ 212.360	48.22	-17.64	30.58	43.50	-12.92	---	---	
3	309.360	47.83	-16.86	30.97	46.00	-15.03	---	---	
4	352.040	45.52	-14.82	30.70	46.00	-15.30	---	---	
5	497.540	37.22	-11.42	25.80	46.00	-20.20	---	---	
6	594.540	37.34	-9.48	27.86	46.00	-18.14	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ :Maximum Data x :Over Limit

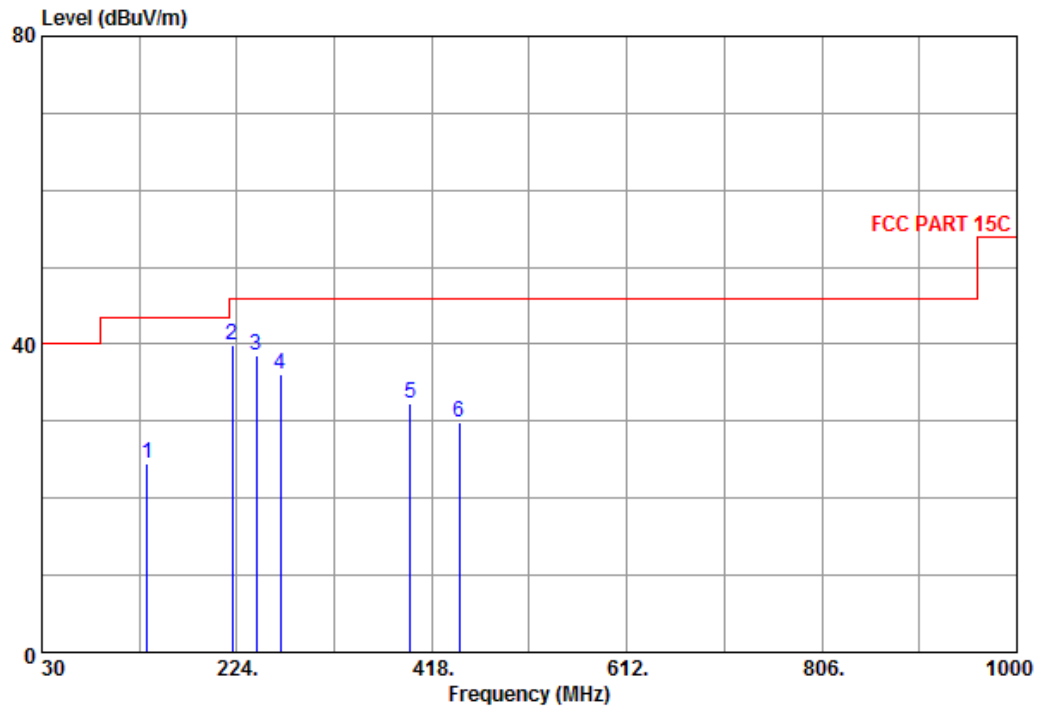
Remark :

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.



### Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: RX
Test Mode	: Mode 10		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	134.760	46.36	-21.93	24.43	43.50	-19.07	---	---	
2	@ 219.150	57.81	-17.95	39.86	46.00	-6.14	---	---	
3	243.400	57.58	-19.02	38.56	46.00	-7.44	---	---	
4	267.650	55.06	-18.92	36.14	46.00	-9.86	---	---	
5	396.660	46.12	-13.86	32.26	46.00	-13.74	---	---	
6	445.160	43.45	-13.57	29.88	46.00	-16.12	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

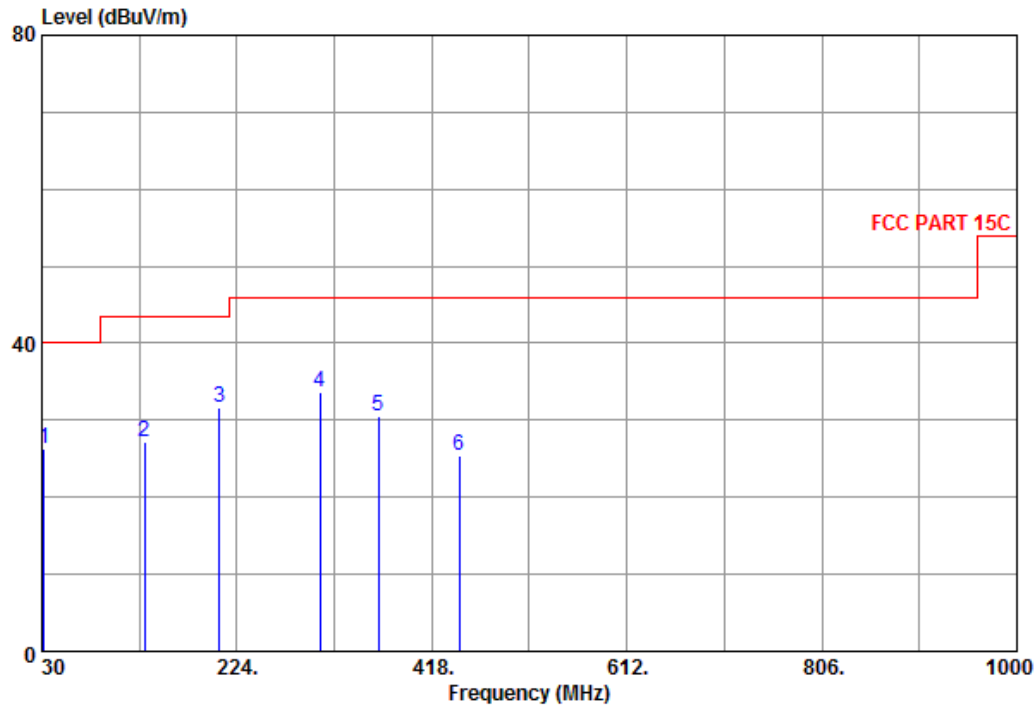
@ :Maximum Data x :Over Limit

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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Below 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: RX
Test Mode	: Mode 10		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	31.940	30.69	-4.43	26.26	40.00	-13.74	---	---	
2	131.850	49.12	-22.04	27.08	43.50	-16.42	---	---	
3 @	206.540	49.17	-17.44	31.73	43.50	-11.77	---	---	
4	306.450	50.60	-17.04	33.56	46.00	-12.44	---	---	
5	364.650	45.18	-14.56	30.62	46.00	-15.38	---	---	
6	445.160	38.86	-13.57	25.29	46.00	-20.71	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

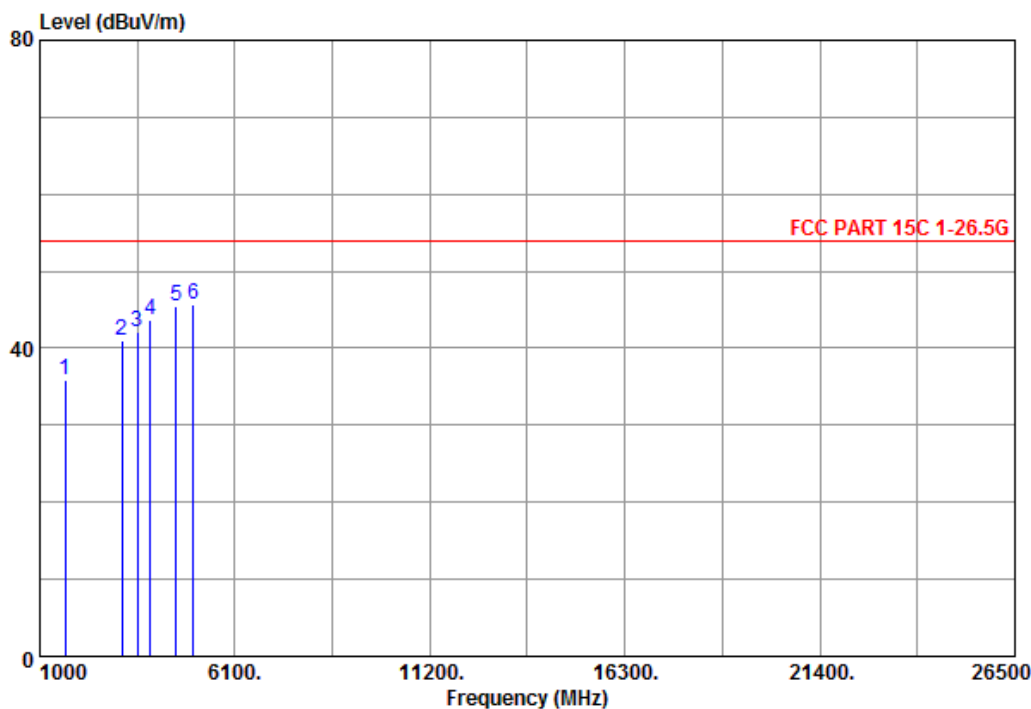
@ : Maximum Data x : Over Limit

### 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 Q.P. 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. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1663.000	46.29	-10.32	35.97	54.00	-18.03	---	---	
2	3142.000	46.36	-5.45	40.91	54.00	-13.09	---	---	
3	3550.000	46.49	-4.27	42.22	54.00	-11.78	---	---	
4	3881.500	46.94	-3.29	43.65	54.00	-10.35	---	---	
5	4570.000	45.96	-0.51	45.45	54.00	-8.55	---	---	
6	5003.500	44.30	1.34	45.64	54.00	-8.36	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

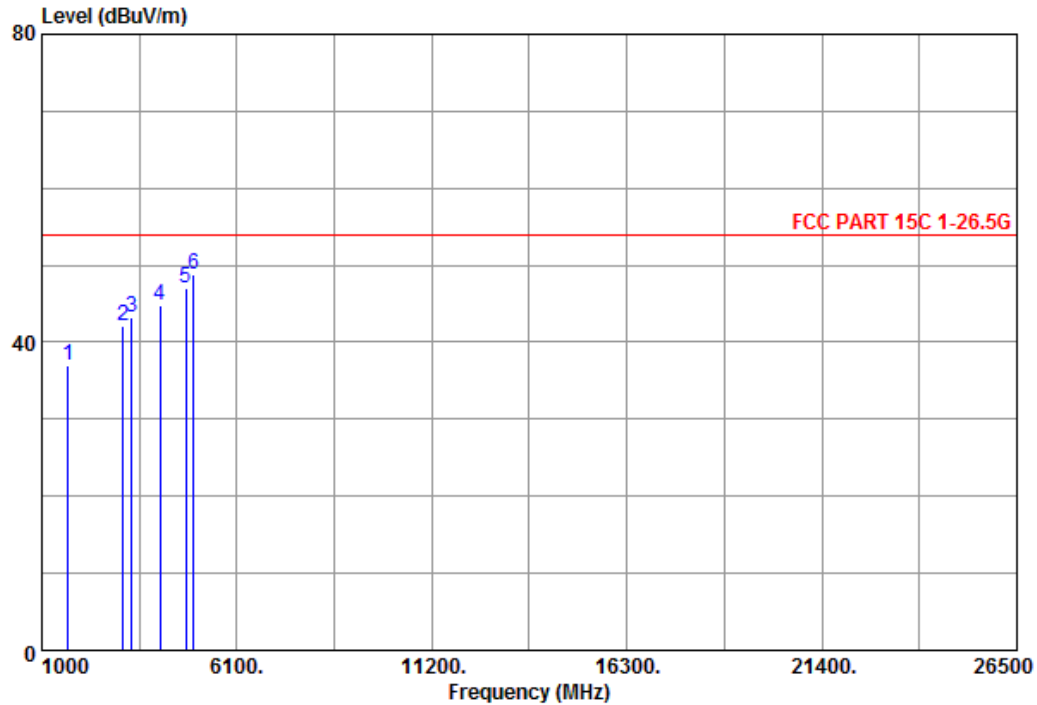
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 1		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1688.500	47.15	-10.23	36.92	54.00	-17.08	---	---	
2	3116.500	47.60	-5.54	42.06	54.00	-11.94	---	---	
3	3346.000	48.04	-4.85	43.19	54.00	-10.81	---	---	
4	4085.500	47.43	-2.55	44.88	54.00	-9.12	---	---	
5	4774.000	46.75	0.35	47.10	54.00	-6.90	---	---	
6	@4978.000	47.50	1.22	48.72	54.00	-5.28	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

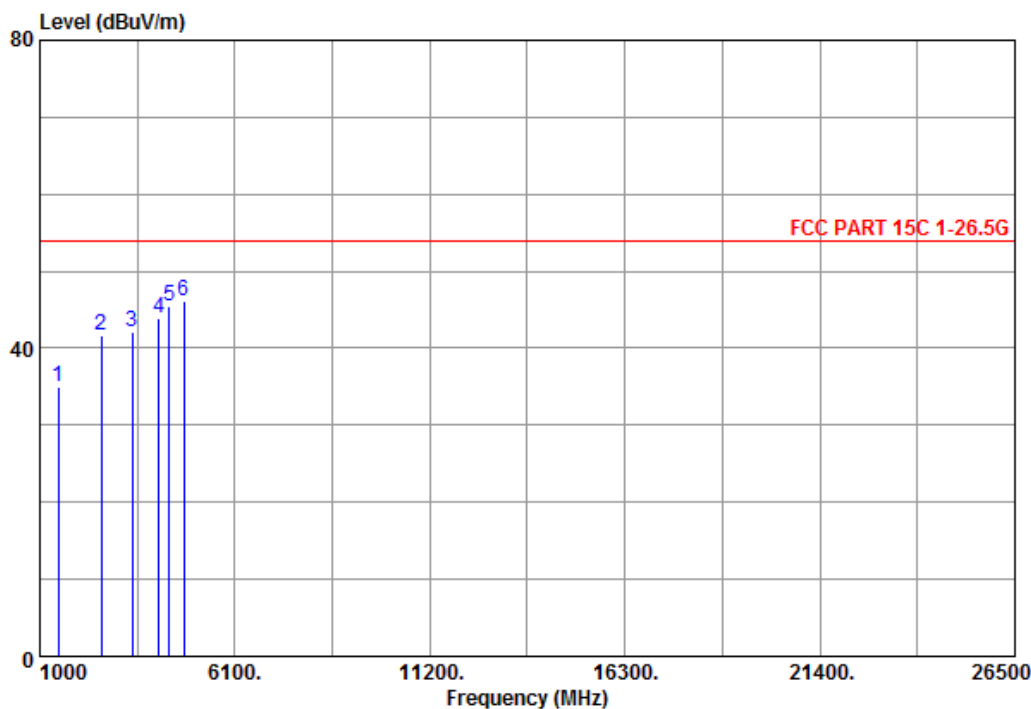
@ :Maximum Data    x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 2		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1484.500	46.22	-11.17	35.05	54.00	-18.95	---	---	
2	2606.500	48.62	-7.04	41.58	54.00	-12.42	---	---	
3	3422.500	46.71	-4.66	42.05	54.00	-11.95	---	---	
4	4111.000	46.46	-2.48	43.98	54.00	-10.02	---	---	
5	4391.500	46.72	-1.24	45.48	54.00	-8.52	---	---	
6	@4774.000	45.74	0.35	46.09	54.00	-7.91	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

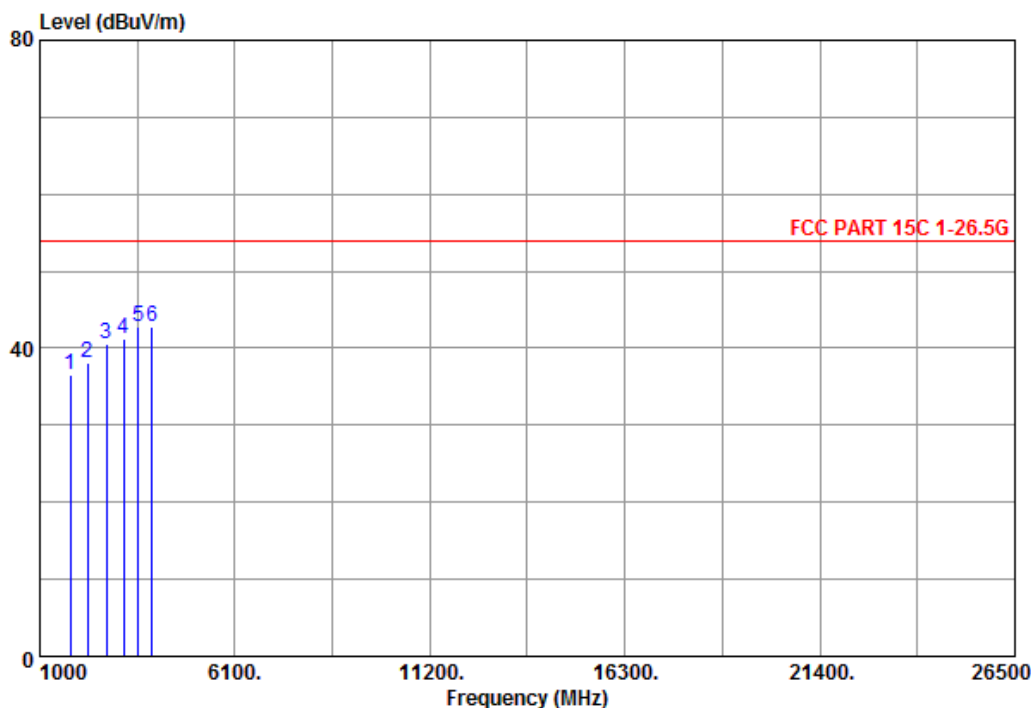
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 39
Test Mode	: Mode 2		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1790.500	46.26	-9.79	36.47	54.00	-17.53	---	---	
2	2249.500	46.16	-8.03	38.13	54.00	-15.87	---	---	
3	2734.000	47.19	-6.64	40.55	54.00	-13.45	---	---	
4	3193.000	46.57	-5.29	41.28	54.00	-12.72	---	---	
5	3575.500	46.88	-4.17	42.71	54.00	-11.29	---	---	
6	@3932.500	45.92	-3.19	42.73	54.00	-11.27	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

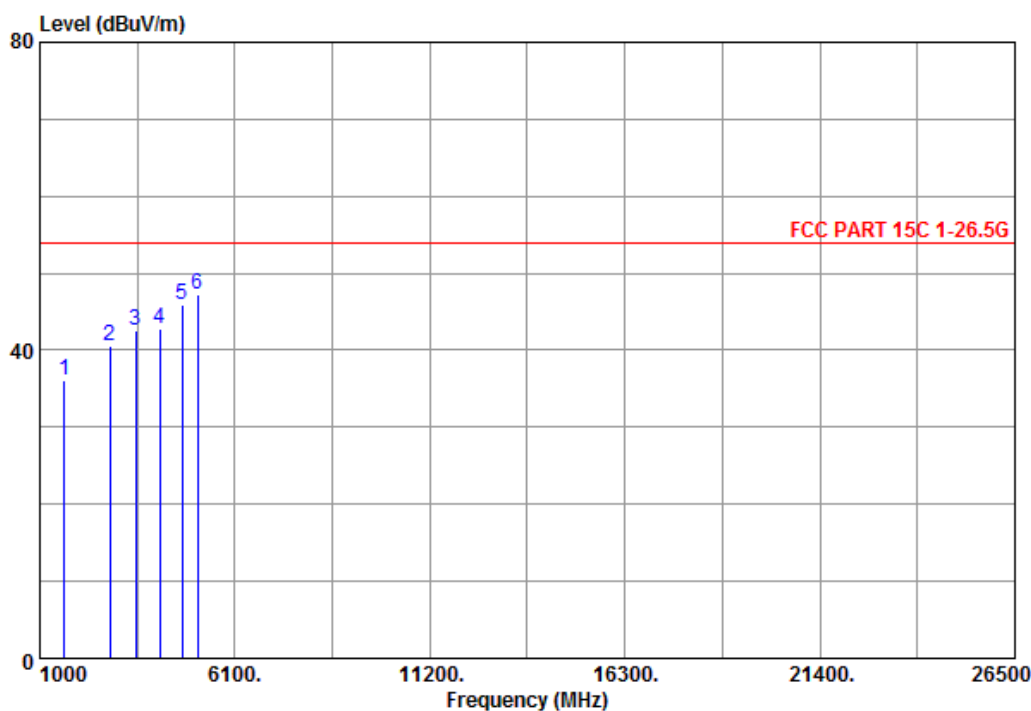
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1637.500	46.47	-10.39	36.08	54.00	-17.92	---	---	
2	2836.000	47.00	-6.34	40.66	54.00	-13.34	---	---	
3	3499.000	46.96	-4.40	42.56	54.00	-11.44	---	---	
4	4136.500	45.28	-2.41	42.87	54.00	-11.13	---	---	
5	4723.000	45.67	0.15	45.82	54.00	-8.18	---	---	
6	@5131.000	45.64	1.65	47.29	54.00	-6.71	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

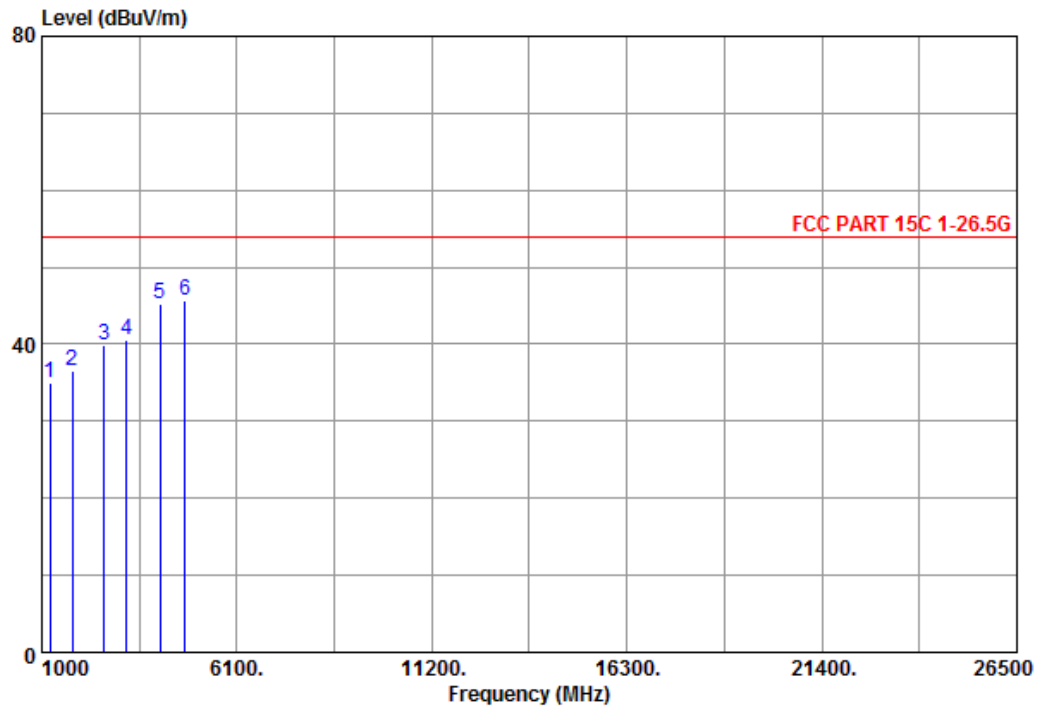
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Above 1 GHz)**

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 3		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1204.000	47.45	-12.40	35.05	54.00	-18.95	---	---	
2	1790.500	46.38	-9.79	36.59	54.00	-17.41	---	---	
3	2632.000	46.91	-6.93	39.98	54.00	-14.02	---	---	
4	3218.500	45.86	-5.25	40.61	54.00	-13.39	---	---	
5	4085.500	47.68	-2.55	45.13	54.00	-8.87	---	---	
6	@4748.500	45.49	0.21	45.70	54.00	-8.30	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

@ : Maximum Data    x : Over Limit

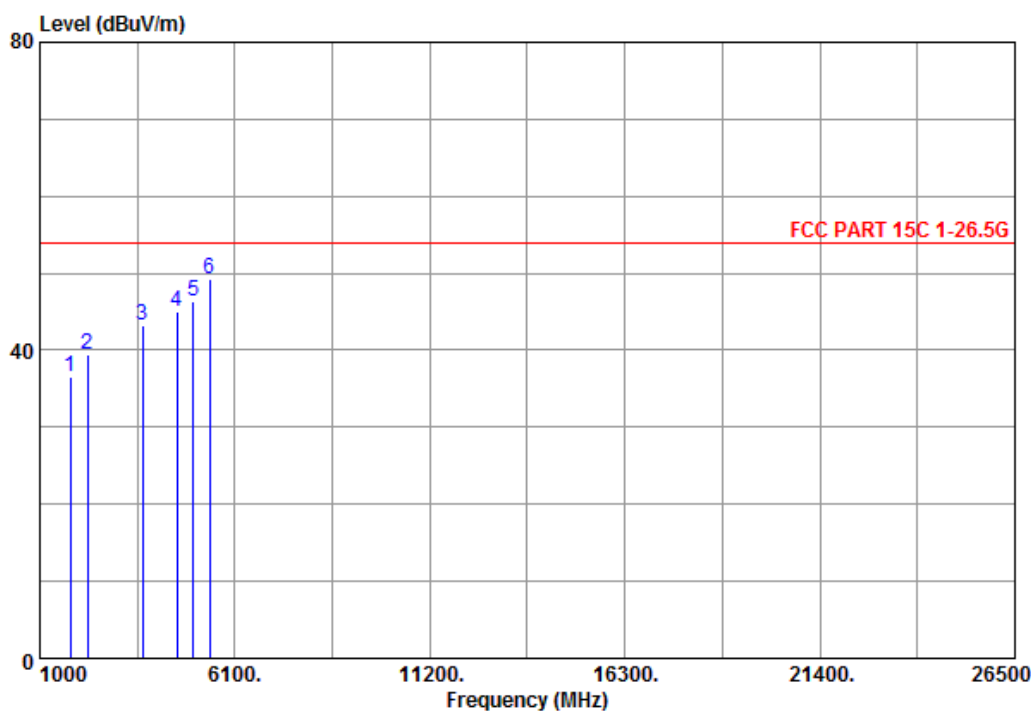
Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.



## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 4		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1790.500	46.27	-9.79	36.48	54.00	-17.52	---	---	
2	2249.500	47.40	-8.03	39.37	54.00	-14.63	---	---	
3	3677.500	47.17	-3.87	43.30	54.00	-10.70	---	---	
4	4595.500	45.41	-0.38	45.03	54.00	-8.97	---	---	
5	5003.500	45.06	1.34	46.40	54.00	-7.60	---	---	
6	@5437.000	46.85	2.43	49.28	54.00	-4.72	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

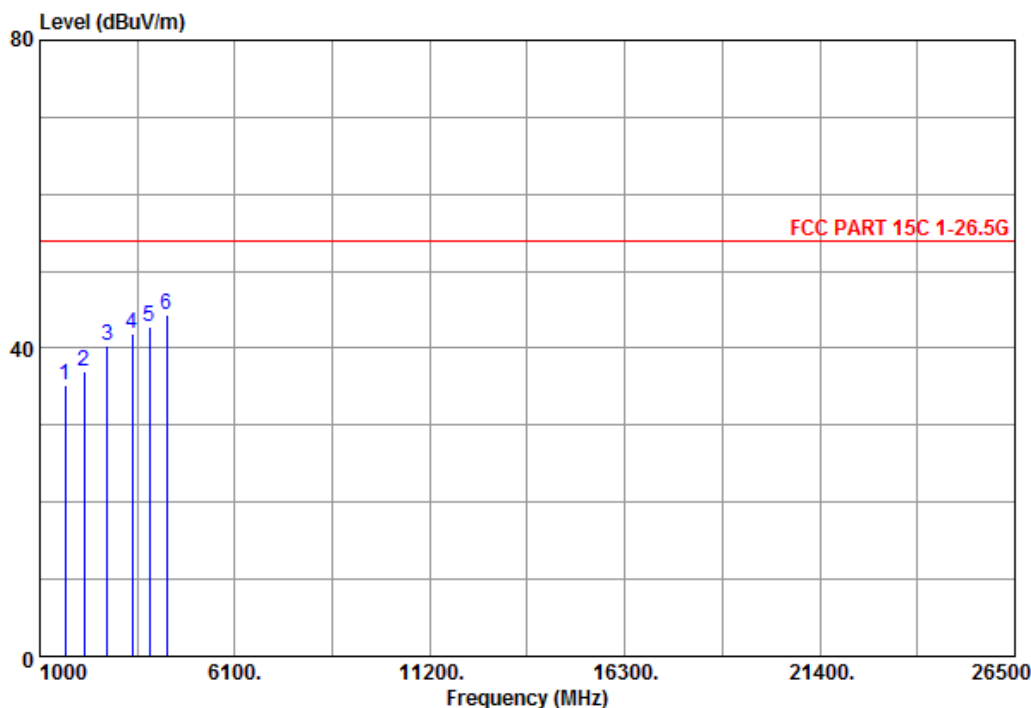
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 4		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1663.000	45.51	-10.32	35.19	54.00	-18.81	---	---	
2	2147.500	45.23	-8.33	36.90	54.00	-17.10	---	---	
3	2759.500	46.81	-6.54	40.27	54.00	-13.73	---	---	
4	3422.500	46.60	-4.66	41.94	54.00	-12.06	---	---	
5	3856.000	46.11	-3.38	42.73	54.00	-11.27	---	---	
6	@4315.000	46.02	-1.61	44.41	54.00	-9.59	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

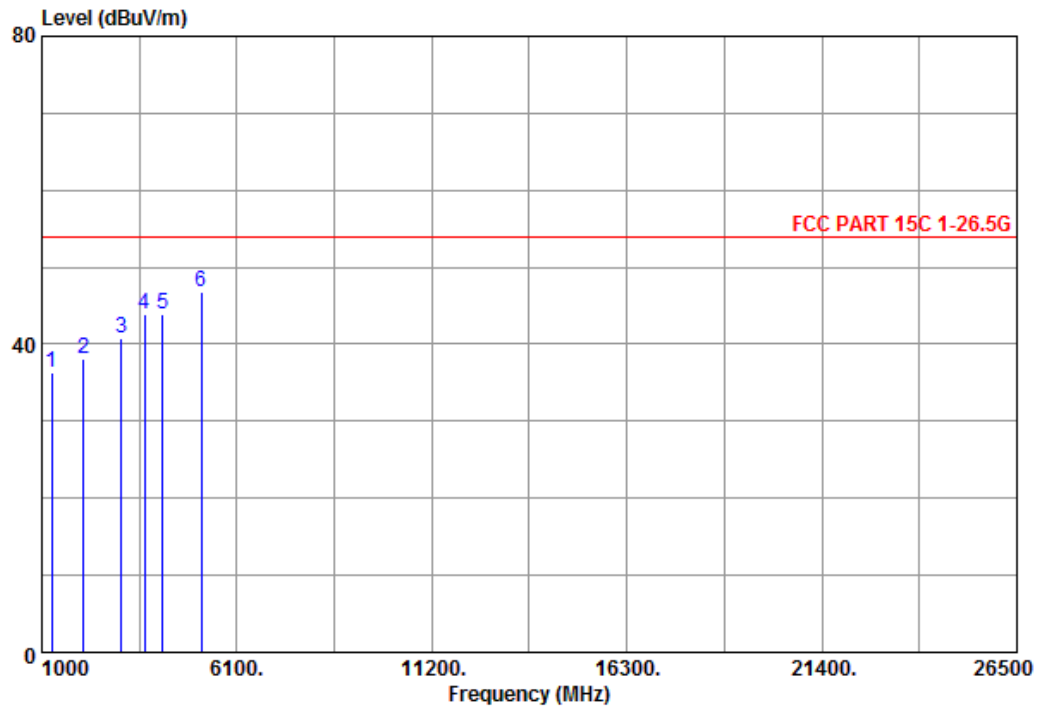
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

### Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 5		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1255.000	48.41	-12.16	36.25	54.00	-17.75	---	---	
2	2096.500	46.74	-8.54	38.20	54.00	-15.80	---	---	
3	3091.000	46.43	-5.59	40.84	54.00	-13.16	---	---	
4	3677.500	47.72	-3.87	43.85	54.00	-10.15	---	---	
5	4162.000	46.17	-2.26	43.91	54.00	-10.09	---	---	
6	@5182.000	45.10	1.78	46.88	54.00	-7.12	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

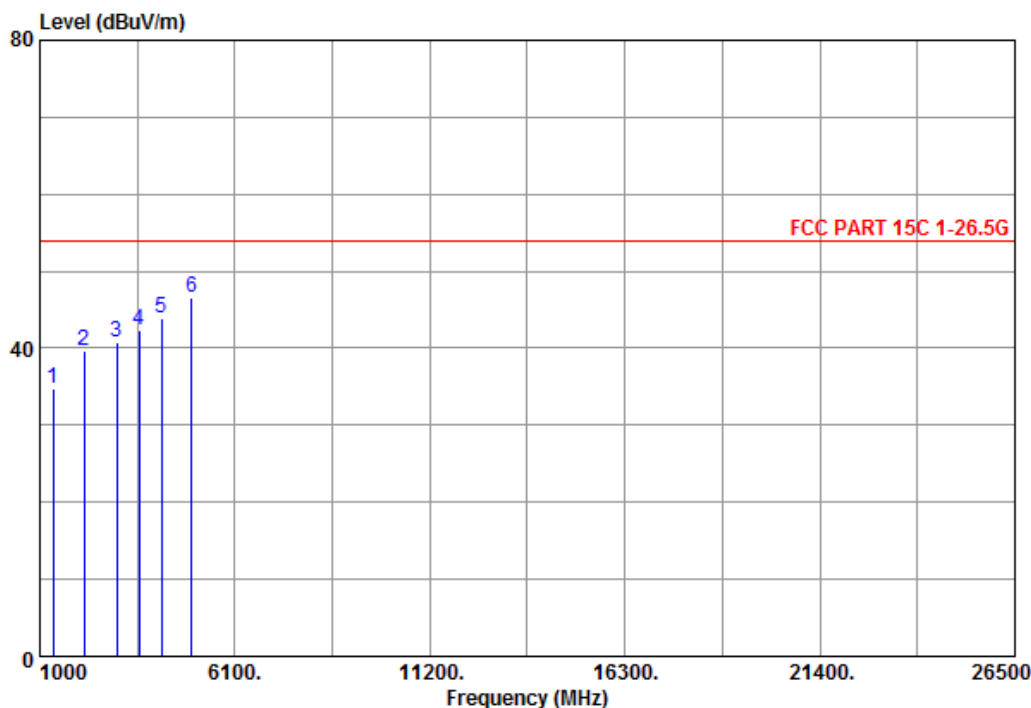
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 38
Test Mode	: Mode 5		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1357.000	46.40	-11.71	34.69	54.00	-19.31	---	---	
2	2147.500	48.01	-8.33	39.68	54.00	-14.32	---	---	
3	3014.500	46.70	-5.84	40.86	54.00	-13.14	---	---	
4	3601.000	46.42	-4.12	42.30	54.00	-11.70	---	---	
5	4187.500	45.95	-2.12	43.83	54.00	-10.17	---	---	
6	@4978.000	45.31	1.22	46.53	54.00	-7.47	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

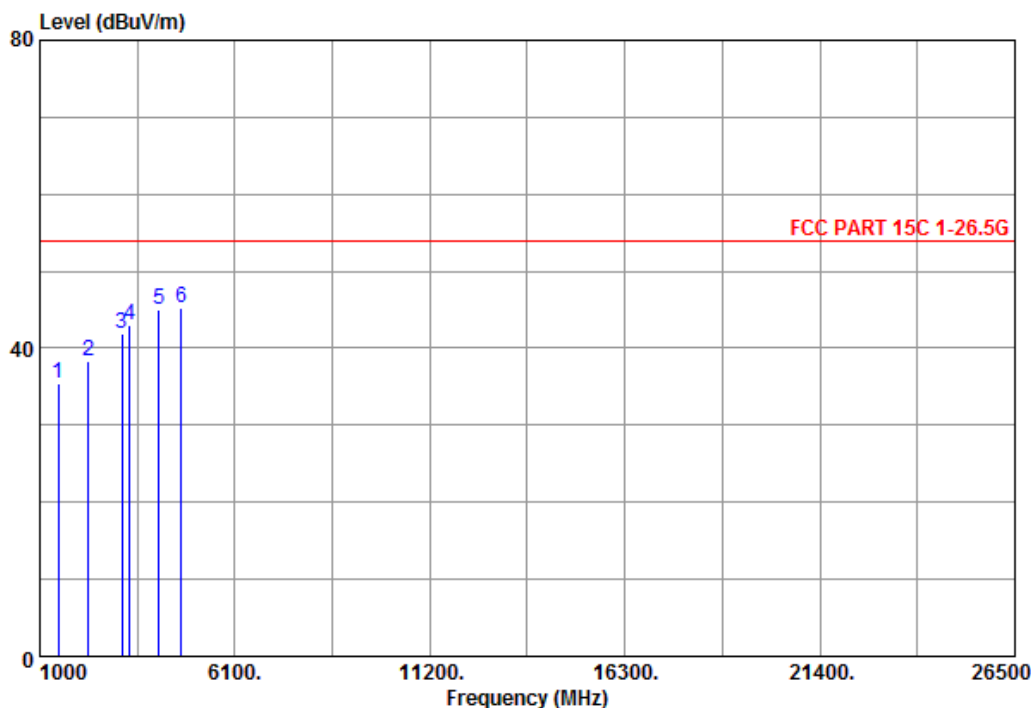
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 79
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1484.500	46.63	-11.17	35.46	54.00	-18.54	---	---	
2	2275.000	46.39	-7.98	38.41	54.00	-15.59	---	---	
3	3142.000	47.23	-5.45	41.78	54.00	-12.22	---	---	
4	3346.000	47.92	-4.85	43.07	54.00	-10.93	---	---	
5	4111.000	47.41	-2.48	44.93	54.00	-9.07	---	---	
6	4697.500	45.26	0.07	45.33	54.00	-8.67	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

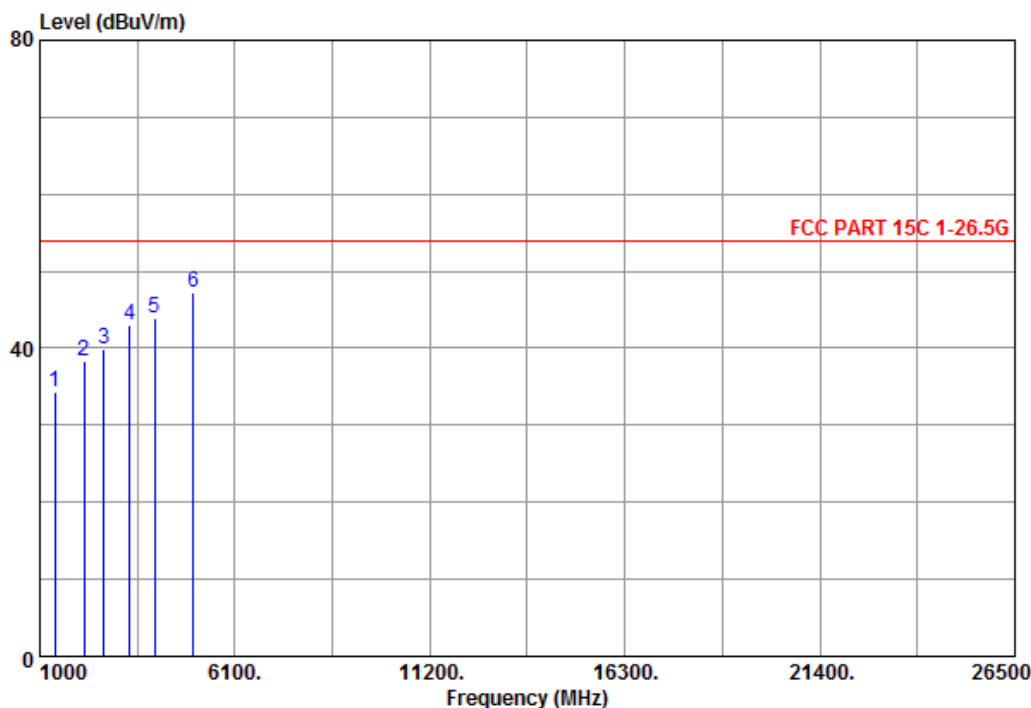
@ :Maximum Data    x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 79
Test Mode	: Mode 6		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1382.500	45.88	-11.62	34.26	54.00	-19.74	---	---	
2	2147.500	46.59	-8.33	38.26	54.00	-15.74	---	---	
3	2683.000	46.71	-6.78	39.93	54.00	-14.07	---	---	
4	3346.000	47.90	-4.85	43.05	54.00	-10.95	---	---	
5	4009.000	46.70	-2.91	43.79	54.00	-10.21	---	---	
6	@5003.500	45.90	1.34	47.24	54.00	-6.76	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

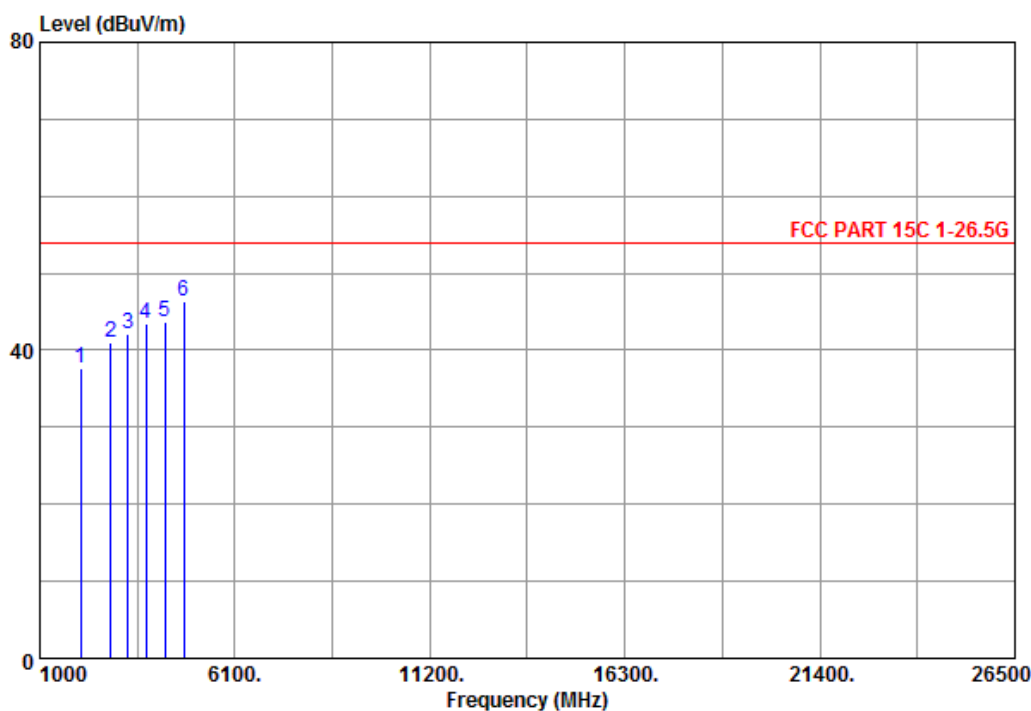
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2071.000	46.19	-8.58	37.61	54.00	-16.39	---	---	
2	2861.500	47.31	-6.25	41.06	54.00	-12.94	---	---	
3	3295.000	47.13	-5.01	42.12	54.00	-11.88	---	---	
4	3779.500	46.97	-3.58	43.39	54.00	-10.61	---	---	
5	4264.000	45.55	-1.83	43.72	54.00	-10.28	---	---	
6	@4774.000	45.93	0.35	46.28	54.00	-7.72	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

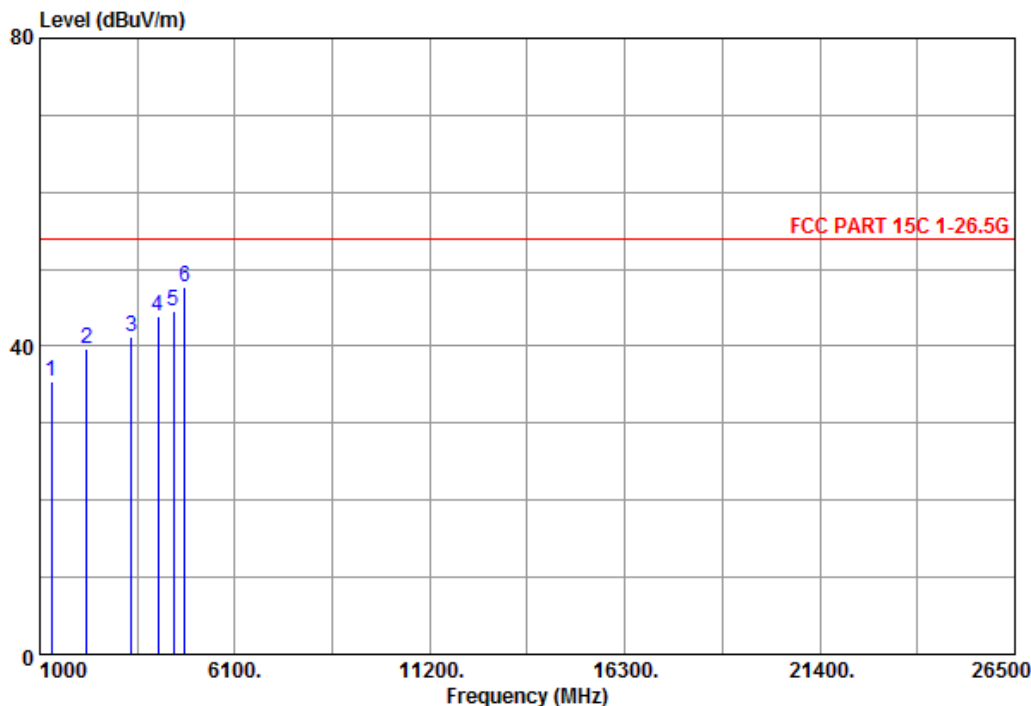
@ : Maximum Data    x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

### Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 00
Test Mode	: Mode 7		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1306.000	47.39	-11.93	35.46	54.00	-18.54	---	---	
2	2224.000	47.74	-8.13	39.61	54.00	-14.39	---	---	
3	3397.000	45.82	-4.70	41.12	54.00	-12.88	---	---	
4	4085.500	46.38	-2.55	43.83	54.00	-10.17	---	---	
5	4493.500	45.45	-0.81	44.64	54.00	-9.36	---	---	
6	@4799.500	47.25	0.49	47.74	54.00	-6.26	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ :Maximum Data x :Over Limit

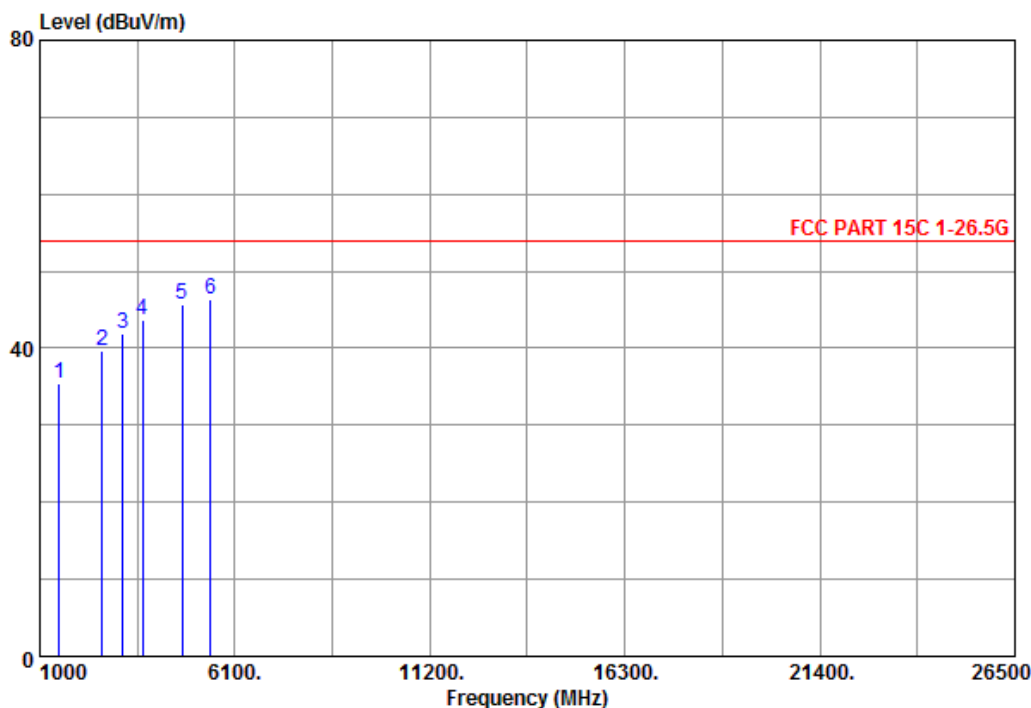
Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.



## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 39
Test Mode	: Mode 8		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1510.000	46.47	-11.02	35.45	54.00	-18.55	---	---	
2	2632.000	46.67	-6.93	39.74	54.00	-14.26	---	---	
3	3167.500	47.16	-5.35	41.81	54.00	-12.19	---	---	
4	3677.500	47.63	-3.87	43.76	54.00	-10.24	---	---	
5	4723.000	45.61	0.15	45.76	54.00	-8.24	---	---	
6	@5462.500	43.95	2.48	46.43	54.00	-7.57	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
 Result = Reading + C.F ; Margin = Result - Limit

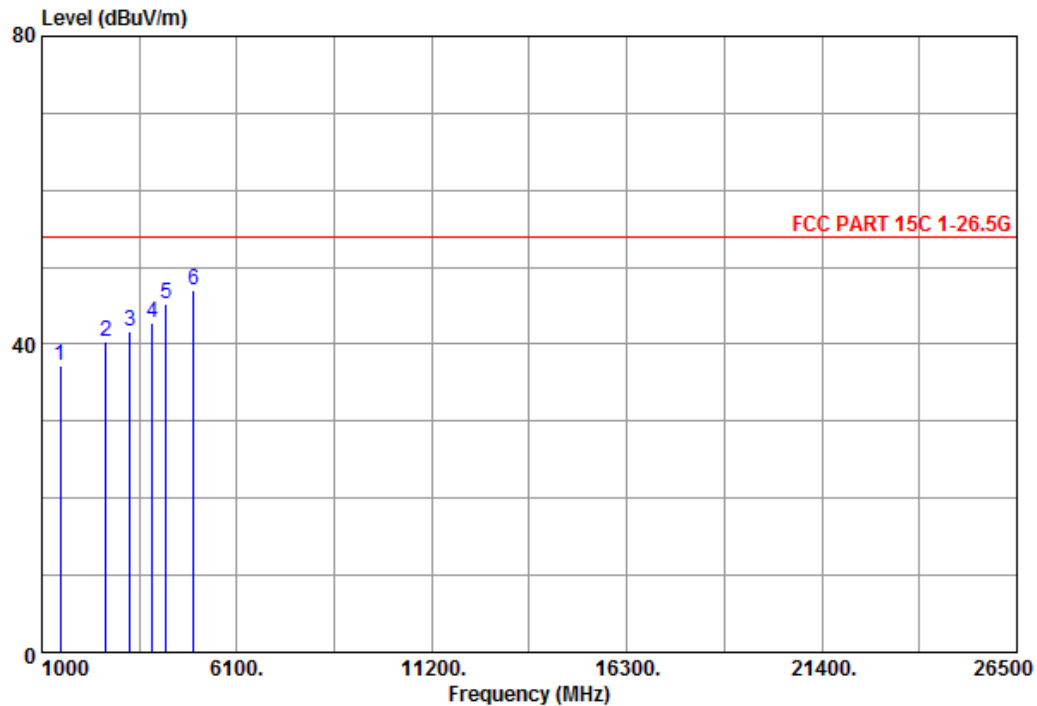
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

### Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 39
Test Mode	: Mode 8		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1484.500	48.38	-11.17	37.21	54.00	-16.79	---	---	
2	2683.000	47.09	-6.78	40.31	54.00	-13.69	---	---	
3	3295.000	46.62	-5.01	41.61	54.00	-12.39	---	---	
4	3881.500	46.07	-3.29	42.78	54.00	-11.22	---	---	
5	4238.500	47.20	-1.97	45.23	54.00	-8.77	---	---	
6	@4978.000	45.74	1.22	46.96	54.00	-7.04	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

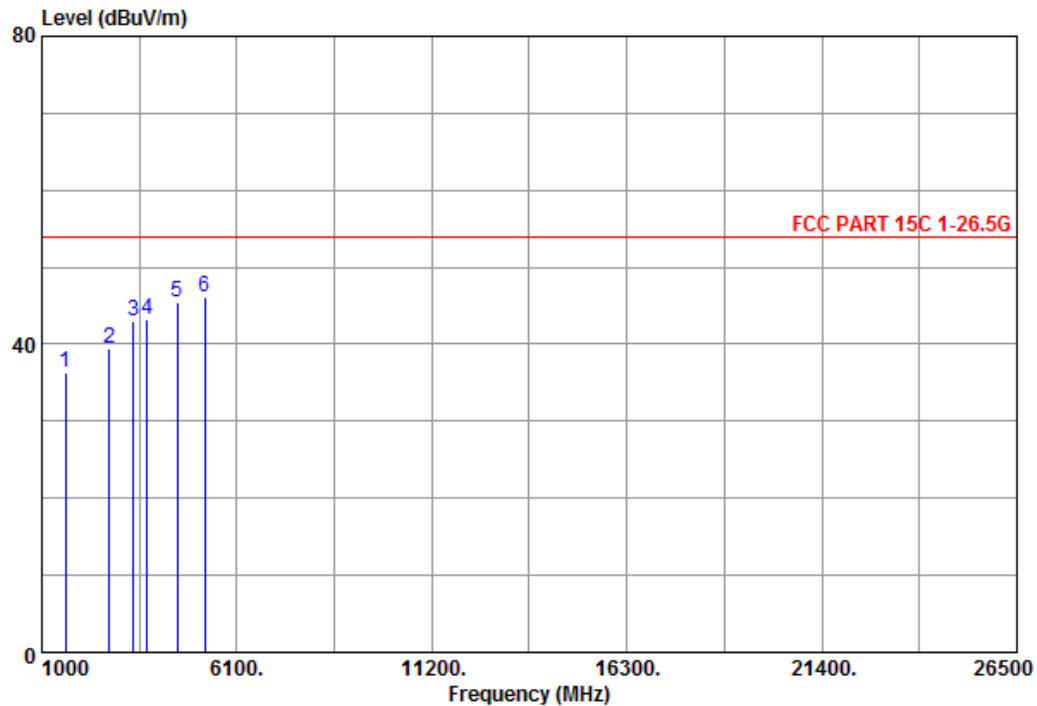
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

### Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1612.000	46.85	-10.55	36.30	54.00	-17.70	---	---	
2	2759.500	45.91	-6.54	39.37	54.00	-14.63	---	---	
3	3397.000	47.71	-4.70	43.01	54.00	-10.99	---	---	
4	3754.000	46.83	-3.68	43.15	54.00	-10.85	---	---	
5	4544.500	46.23	-0.66	45.57	54.00	-8.43	---	---	
6	@5258.500	44.17	1.95	46.12	54.00	-7.88	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

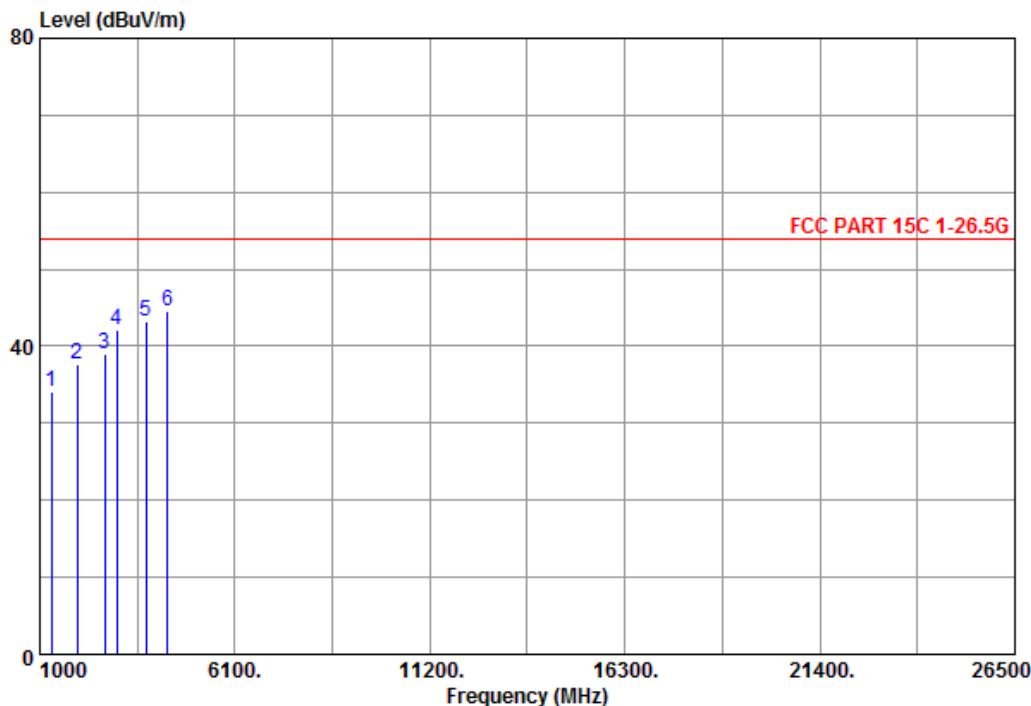
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: 78
Test Mode	: Mode 9		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1306.000	46.02	-11.93	34.09	54.00	-19.91	---	---	
2	1969.000	46.59	-8.94	37.65	54.00	-16.35	---	---	
3	2708.500	45.68	-6.74	38.94	54.00	-15.06	---	---	
4	3014.500	47.87	-5.84	42.03	54.00	-11.97	---	---	
5	3779.500	46.78	-3.58	43.20	54.00	-10.80	---	---	
6	@4340.500	46.18	-1.53	44.65	54.00	-9.35	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

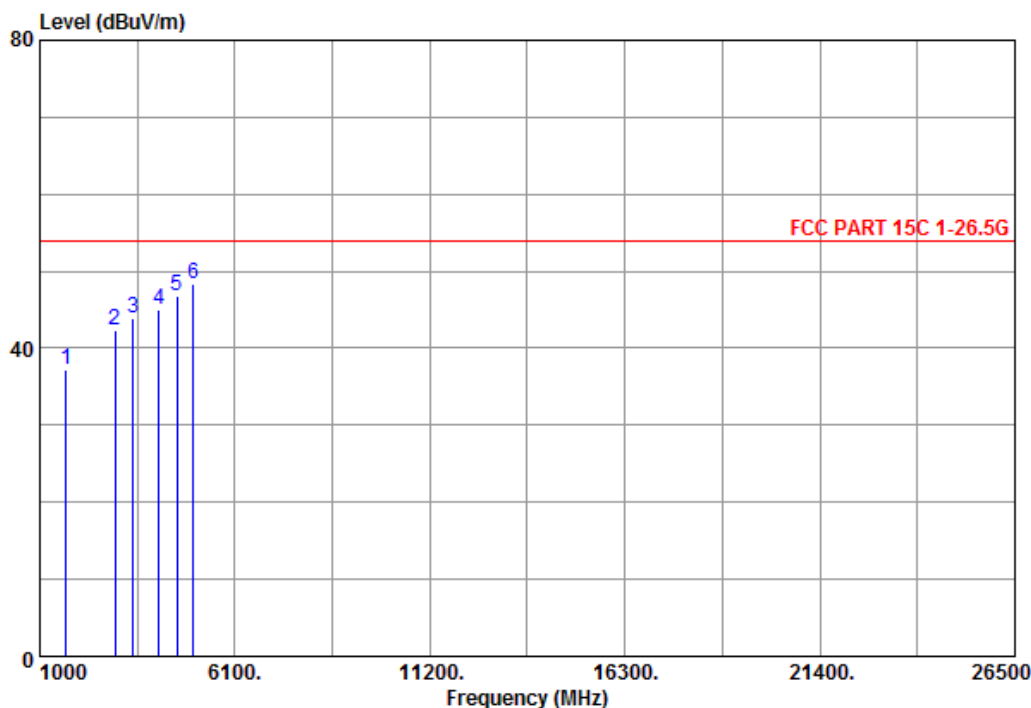
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Horizontal	Channel	: RX
Test Mode	: Mode 10		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1688.500	47.42	-10.23	37.19	54.00	-16.81	---	---	
2	2963.500	48.34	-5.94	42.40	54.00	-11.60	---	---	
3	3448.000	48.38	-4.56	43.82	54.00	-10.18	---	---	
4	4111.000	47.39	-2.48	44.91	54.00	-9.09	---	---	
5	4595.500	47.20	-0.38	46.82	54.00	-7.18	---	---	
6	@5003.500	47.06	1.34	48.40	54.00	-5.60	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

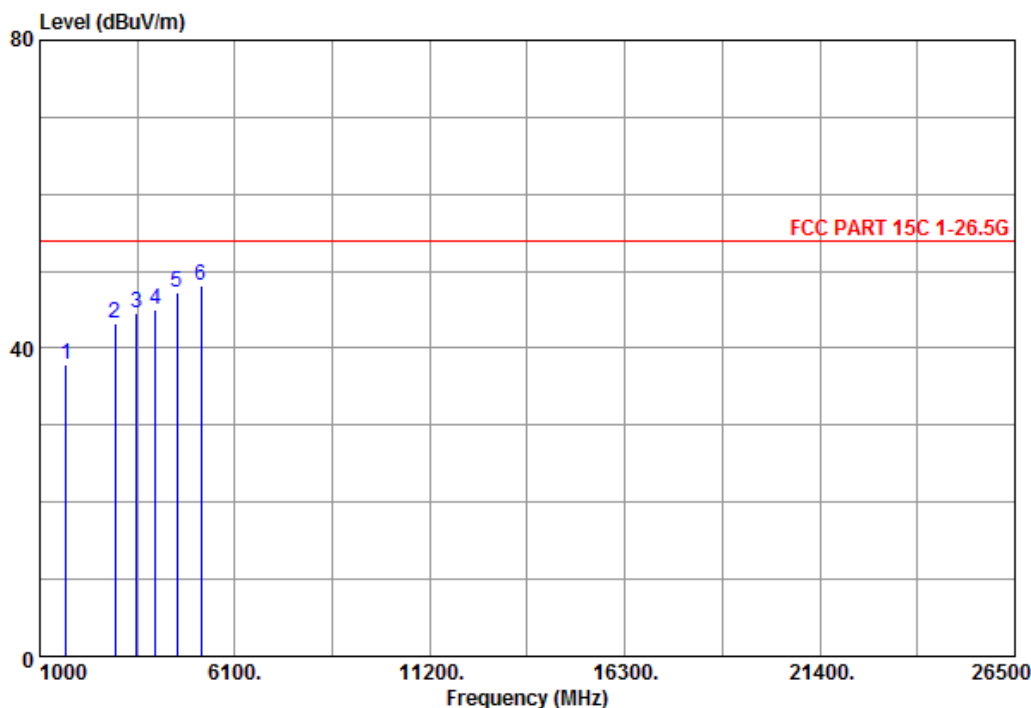
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- 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.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## Radiated Emission Test Data (Above 1 GHz)

Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Polarization	: Vertical	Channel	: RX
Test Mode	: Mode 10		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1688.500	48.03	-10.23	37.80	54.00	-16.20	---	---	
2	2963.500	49.25	-5.94	43.31	54.00	-10.69	---	---	
3	3524.500	48.86	-4.37	44.49	54.00	-9.51	---	---	
4	4034.500	47.86	-2.84	45.02	54.00	-8.98	---	---	
5	4595.500	47.62	-0.38	47.24	54.00	-6.76	---	---	
6	5207.500	46.25	1.86	48.11	54.00	-5.89	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain  
Result = Reading + C.F ; Margin = Result - Limit

@ : Maximum Data    x : Over Limit

Remark :

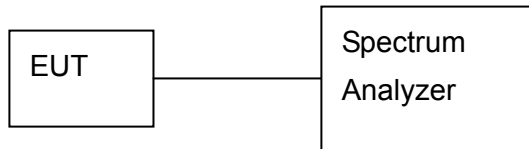
- Measuring frequencies from 1 GHz to the 10<sup>th</sup> harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 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.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
  - Peak Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
  - Average Setting 1GHz to 10<sup>th</sup> harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

## 4 20 dB Bandwidth

### 4.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

### 4.2 Test Arrangement and Procedure



1. The transmitter output was connected to a spectrum analyzer (through an attenuator, if it's necessary).
2. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 300kHz VBW. Measured the -20 dB bandwidth and plotted the graph.

### 4.3 Limit

None; For report purpose only.

### 4.4 Test Result

**No non-compliance noted.**

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

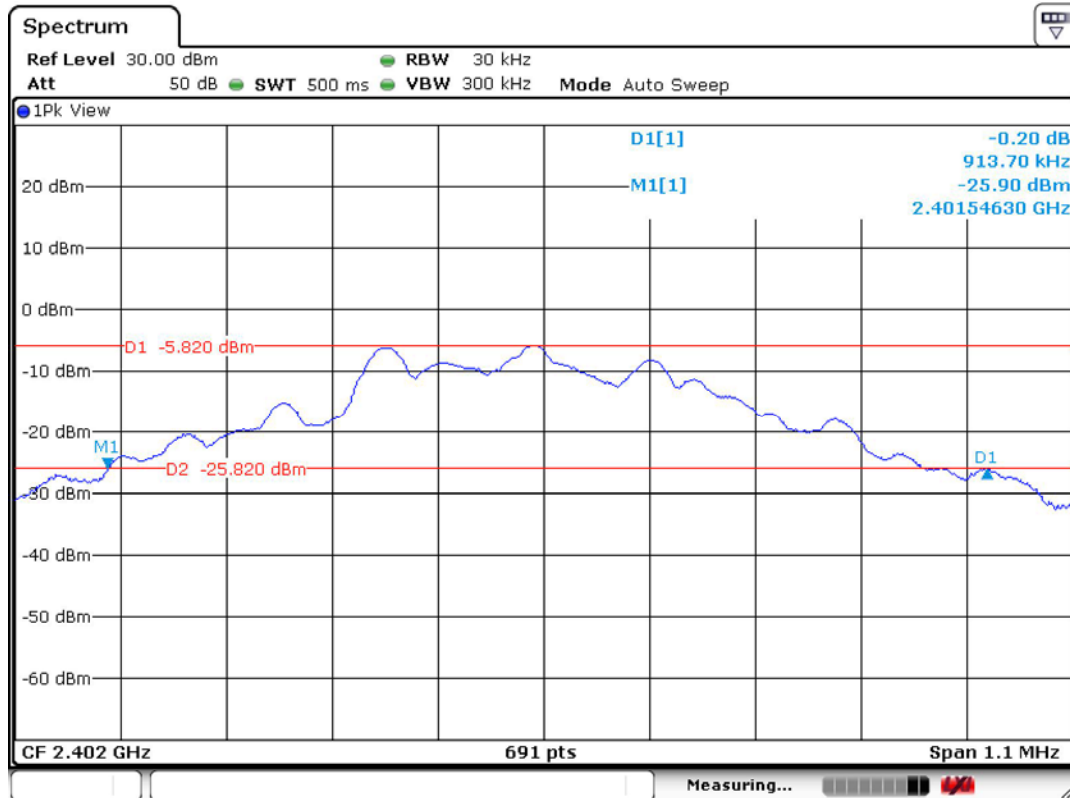
Bluetooth 1 Mbps		
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Low	2402	0.9137
Middle	2441	0.9137
High	2480	0.9032

Bluetooth EDR 2 Mbps		
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Low	2402	1.2444
Middle	2441	1.2203
High	2480	1.2184

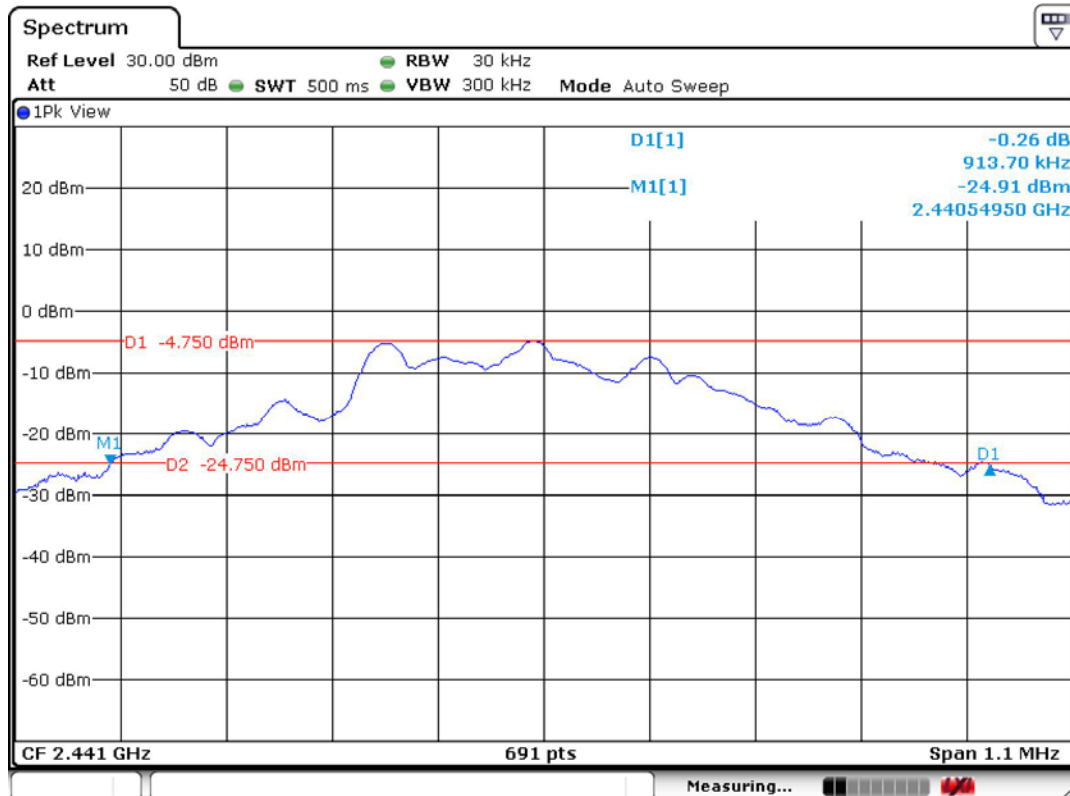
Bluetooth EDR 3 Mbps		
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Low	2402	1.2097
Middle	2441	1.2087
High	2480	1.2068



Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Test Mode	: BT (1Mbps)	Channel	: 2402



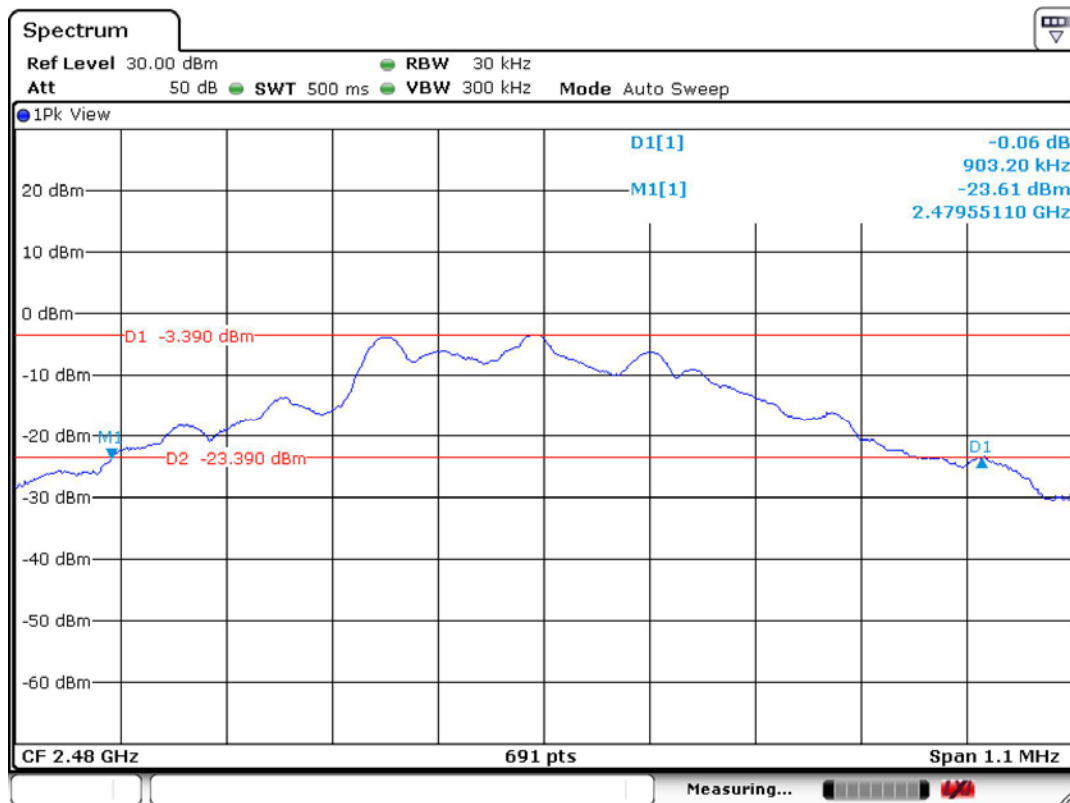
Test Mode	: BT (1Mbps)	Channel	: 2441
-----------	--------------	---------	--------





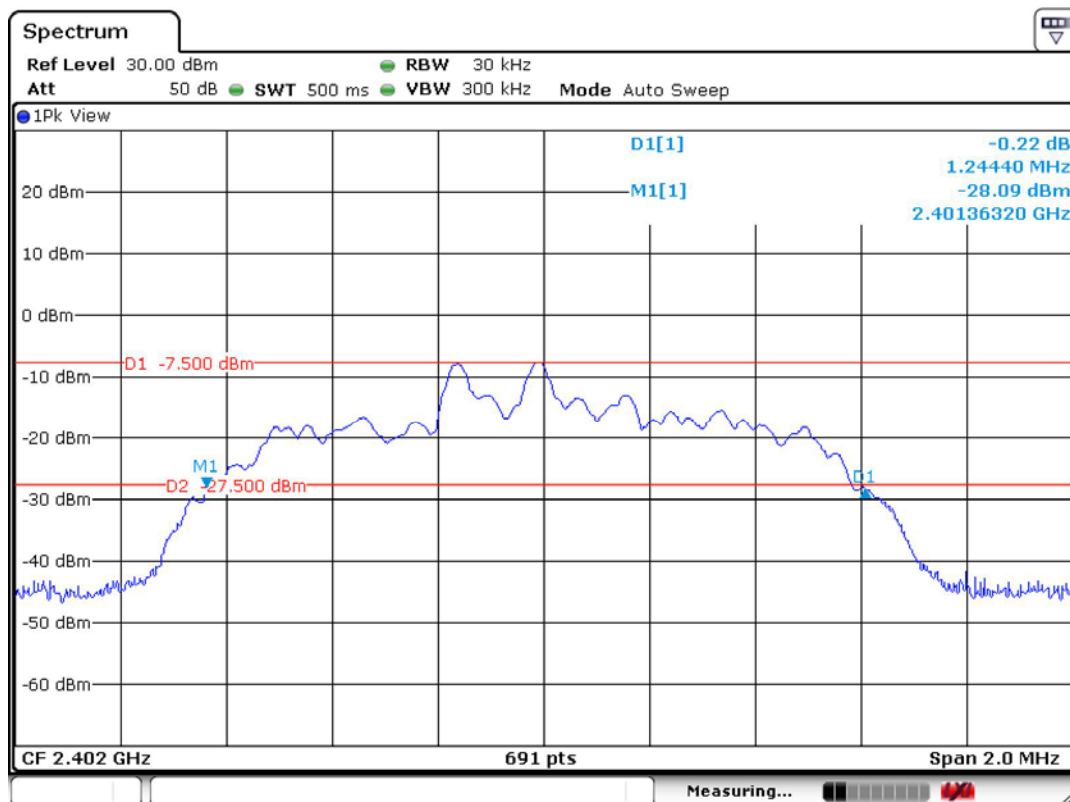
Test Mode : BT (1 Mbps)

Channel : 2480



Test Mode : BT EDR (2 Mbps)

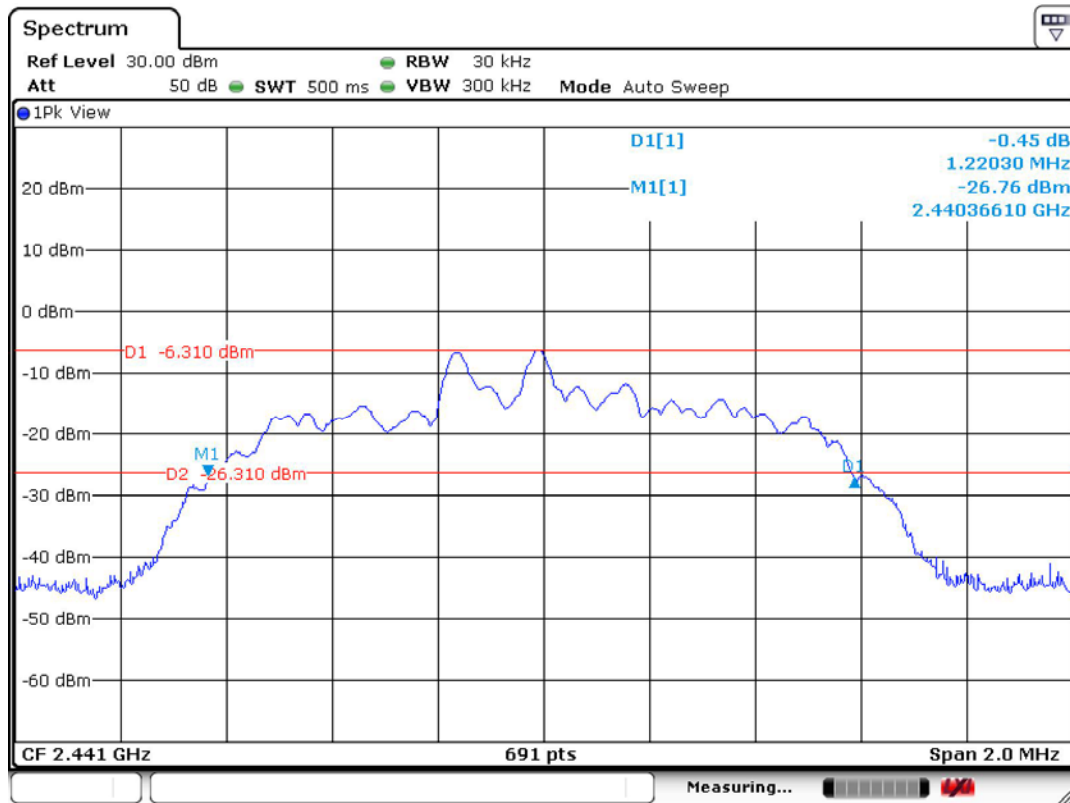
Channel : 2402





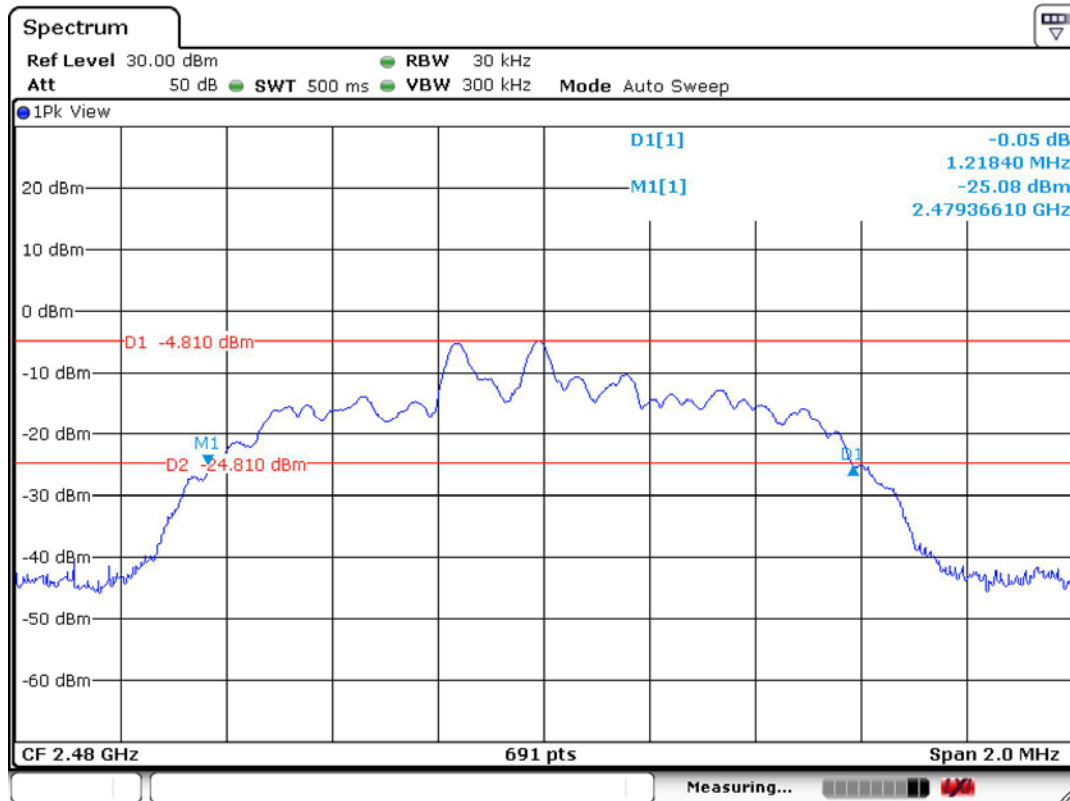
Test Mode : BT EDR (2 Mbps)

Channel : 2441



Test Mode : BT EDR (2 Mbps)

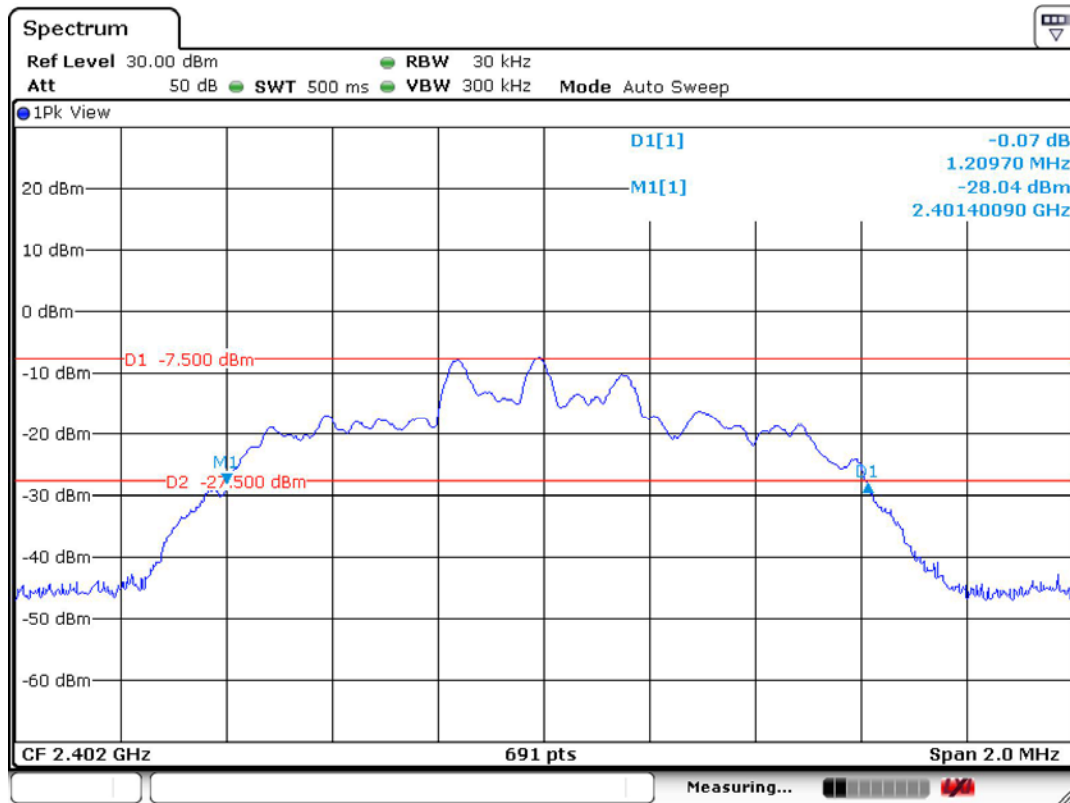
Channel : 2480





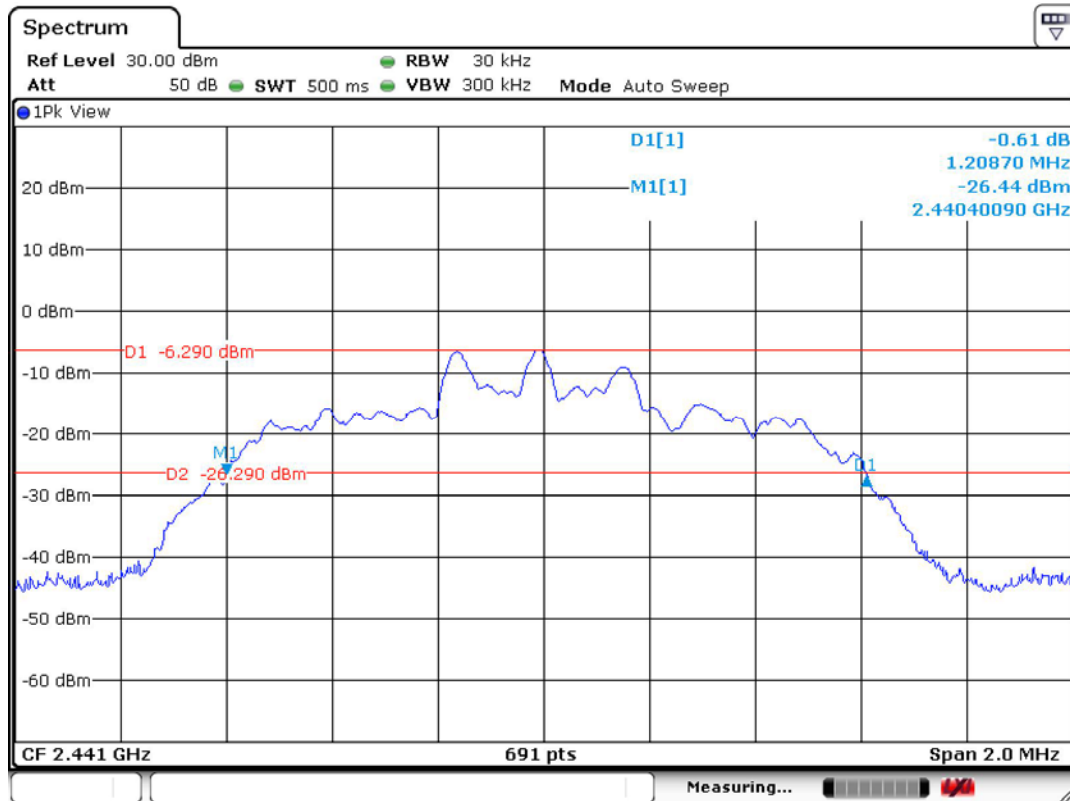
Test Mode : BT EDR (3 Mbps)

Channel : 2402



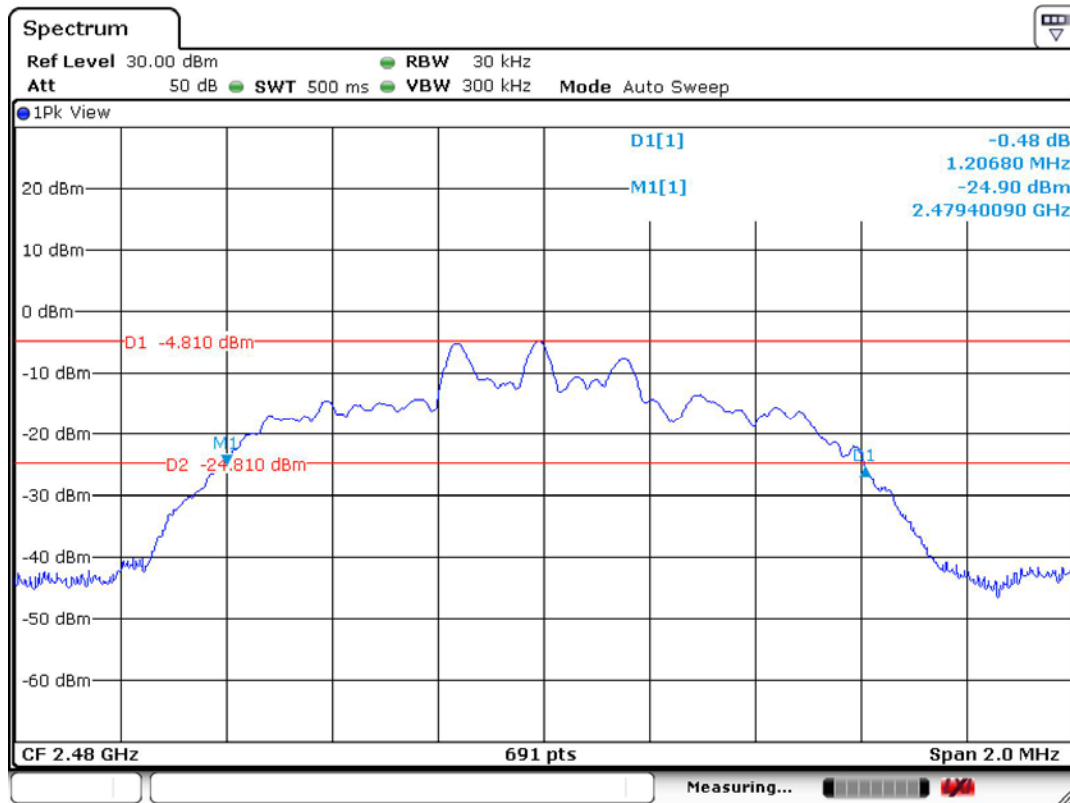
Test Mode : BT EDR (3 Mbps)

Channel : 2441





Test Mode : BT EDR (3 Mbps) Channel : 2480



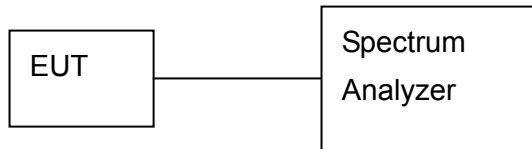


## 5 Hopping Frequency Separation

### 5.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

### 5.2 Test Arrangement and Procedure



1. The transmitter output was connected to a spectrum analyzer (through an attenuator, if it's necessary).
2. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 300kHz VBW.
3. Mark the peak outputs of two adjacent channels. And, measured the separation between the marked peak outputs of two adjacent channels.

### 5.3 Limit (§ 15.247(a)(1))

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

### 5.4 Test Result

#### Compliance.

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

### Bluetooth 1 Mbps

Channel	Frequency (MHz)	20 dB bandwidth (MHz)	Limit (2/3 of 20dB bandwidth) (MHz)	Result	Verdict
Low	2402	0.9137	0.6091	0.9986	Pass
Middle	2441	0.9137	0.6091	1.0014	Pass
High	2480	0.9032	0.6021	0.9986	Pass

### Bluetooth EDR 2 Mbps

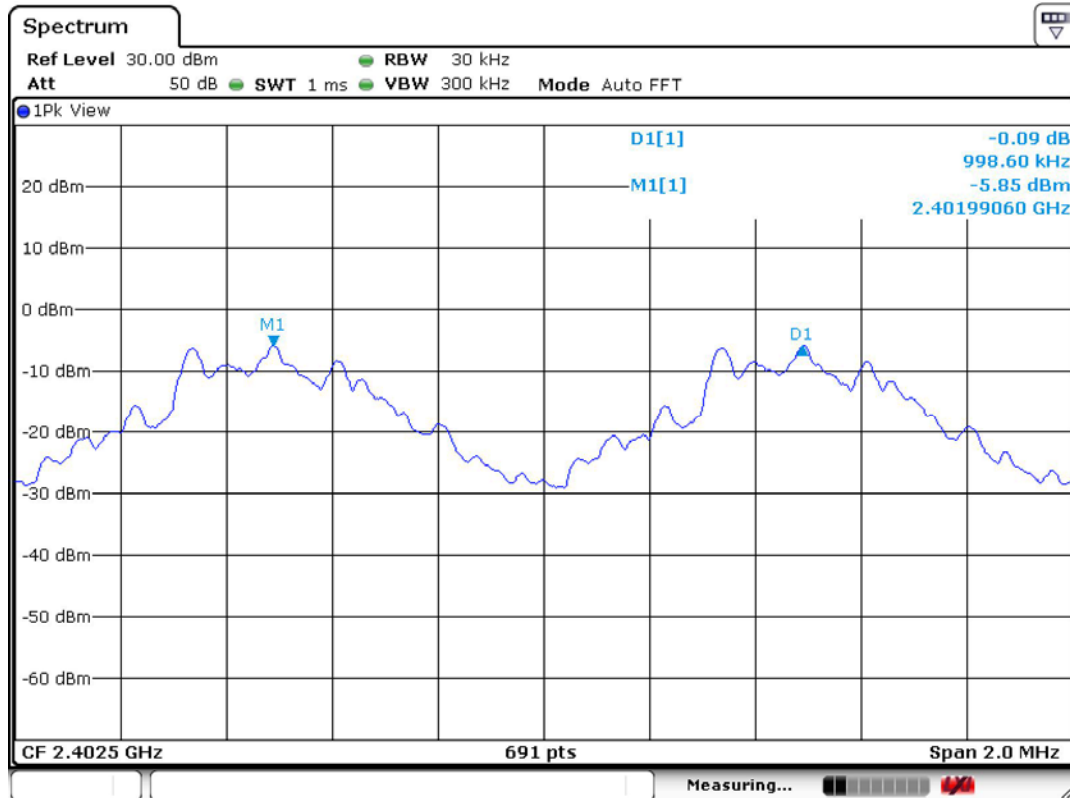
Channel	Frequency (MHz)	20 dB bandwidth (MHz)	Limit (2/3 of 20dB bandwidth) (MHz)	Result	Verdict
Low	2402	1.2444	0.8296	0.9986	Pass
Middle	2441	1.2203	0.8135	0.9986	Pass
High	2480	1.2184	0.8123	0.9986	Pass

### Bluetooth EDR 3 Mbps

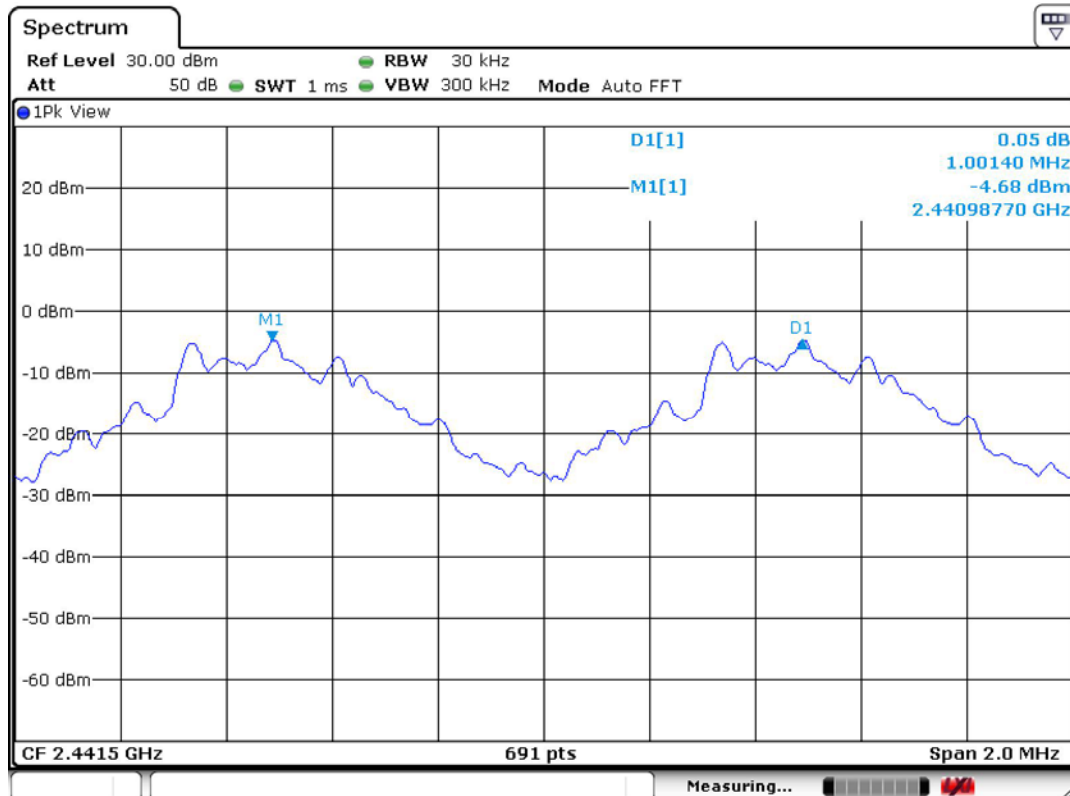
Channel	Frequency (MHz)	20 dB bandwidth (MHz)	Limit (2/3 of 20dB bandwidth) (MHz)	Result	Verdict
Low	2402	1.2097	0.8065	0.9986	Pass
Middle	2441	1.2087	0.8058	0.9986	Pass
High	2480	1.2068	0.8045	0.9986	Pass



Temperature	: 22°C	Humidity	: 51%
Test Date	: 14-Jan-2014	Tested by	: Kidd Liao
Test Mode	: BT (1Mbps)	Channel	: 2402



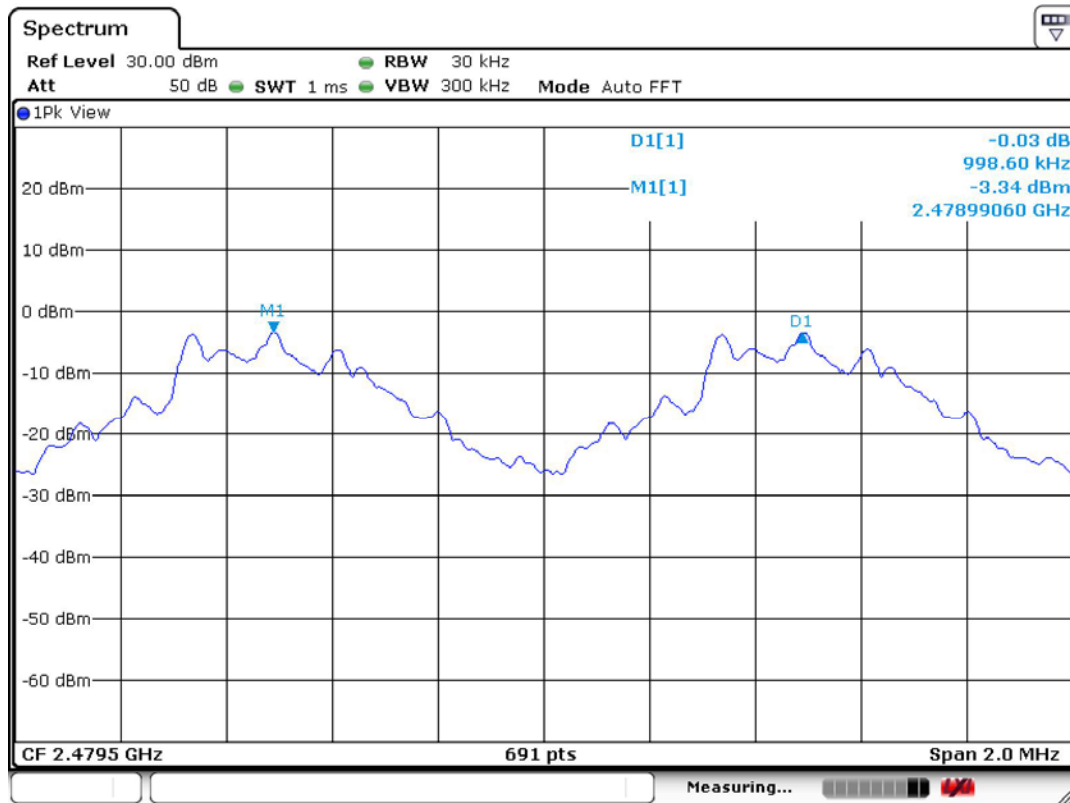
Test Mode	: BT (1Mbps)	Channel	: 2441
-----------	--------------	---------	--------





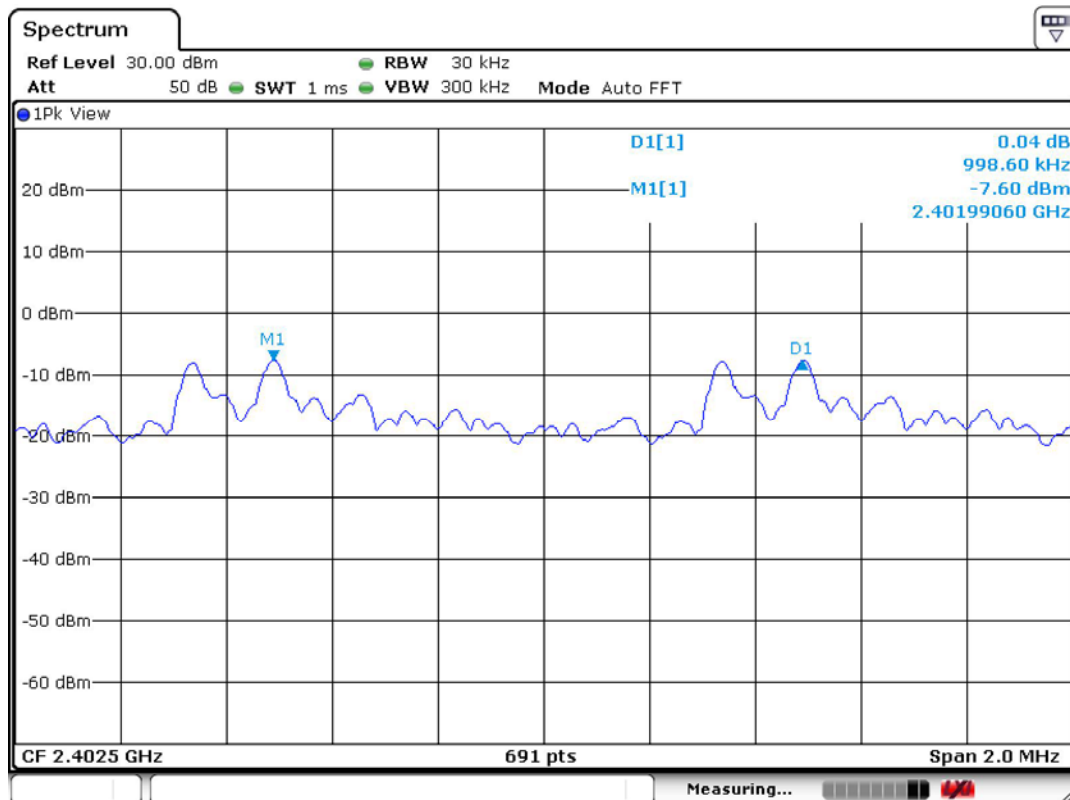
Test Mode : BT (1 Mbps)

Channel : 2480



Test Mode : BT EDR (2 Mbps)

Channel : 2402

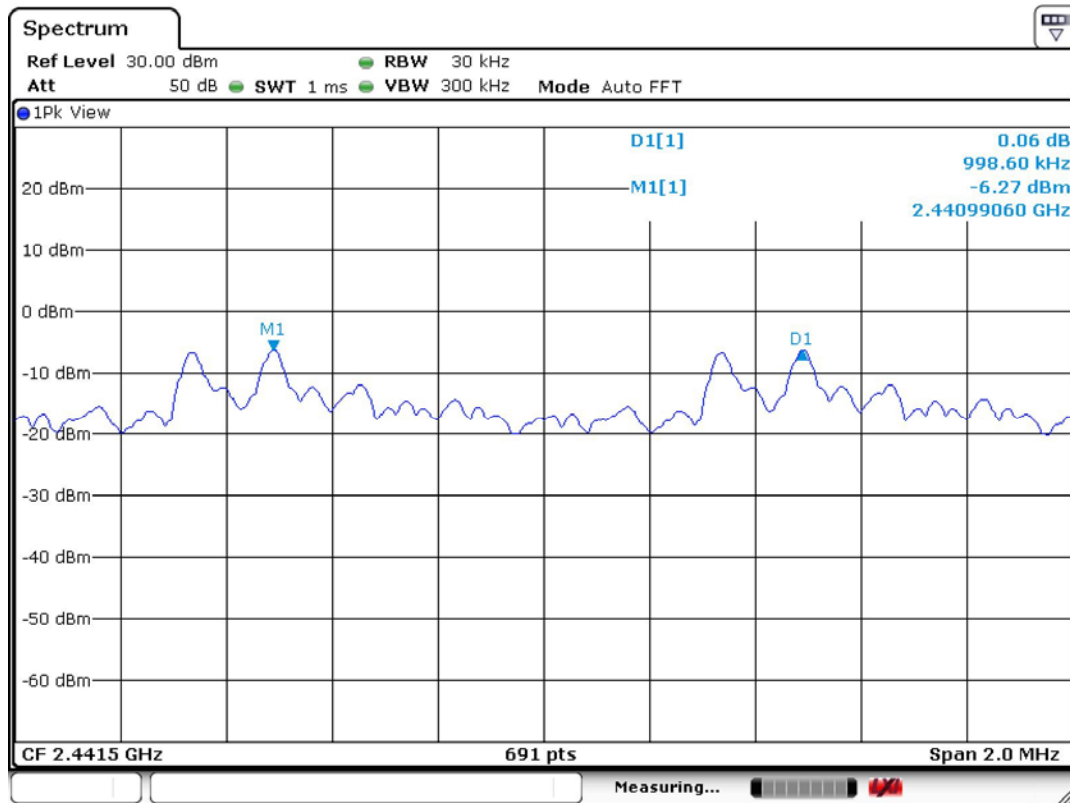






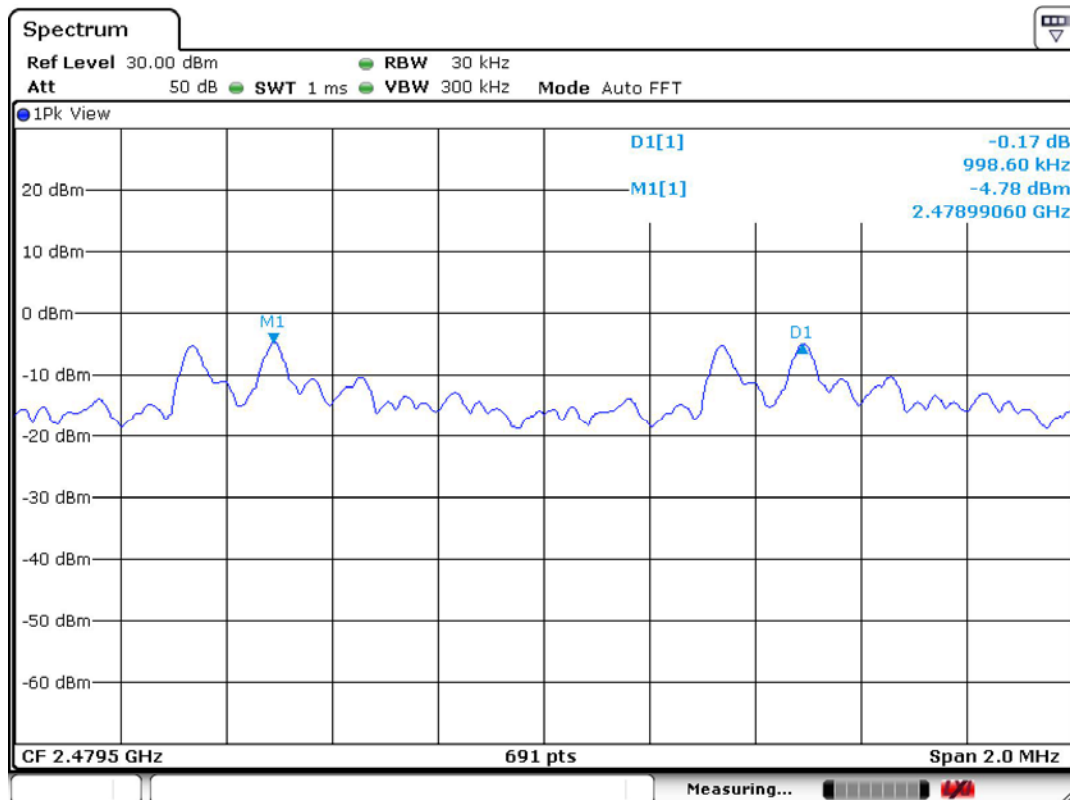
Test Mode : BT EDR (2 Mbps)

Channel : 2441



Test Mode : BT EDR (2 Mbps)

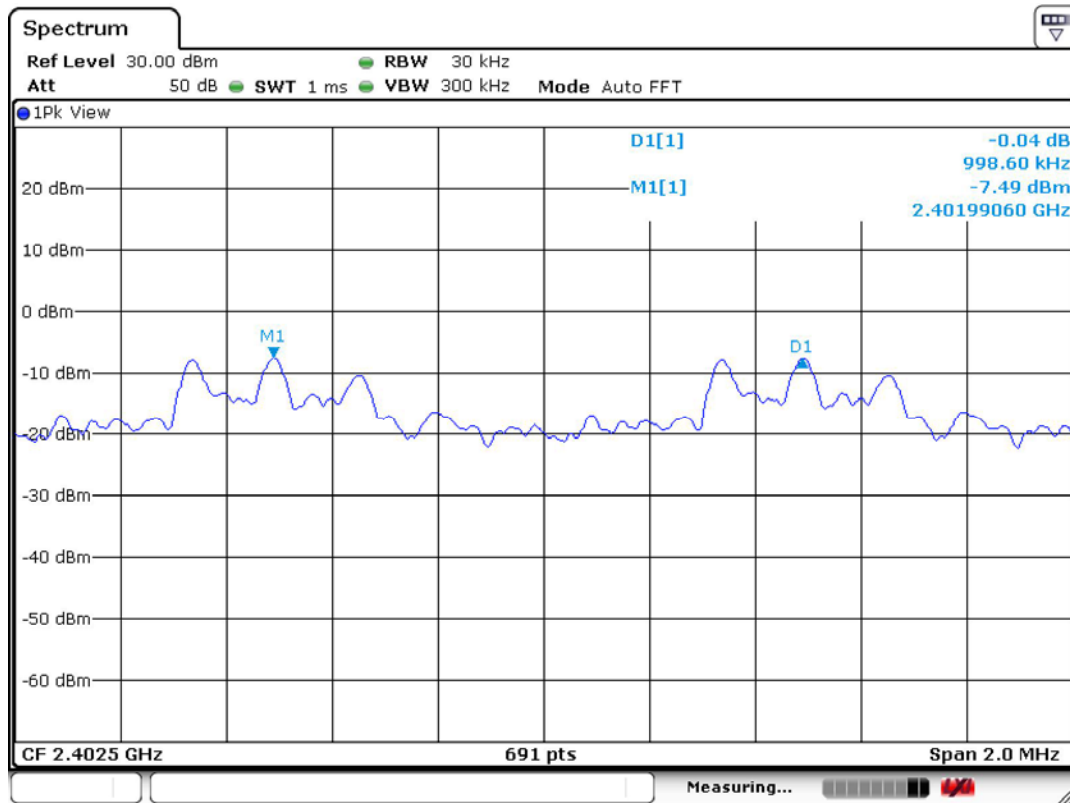
Channel : 2480





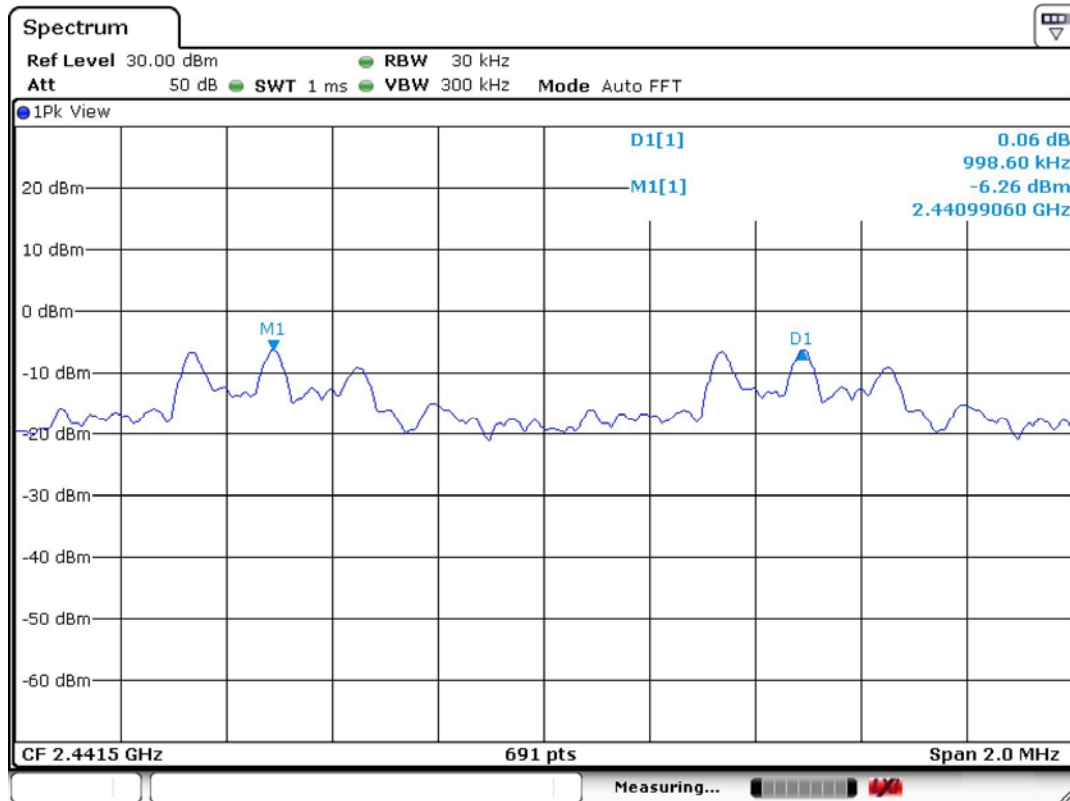
Test Mode : BT EDR (3 Mbps)

Channel : 2402



Test Mode : BT EDR (3 Mbps)

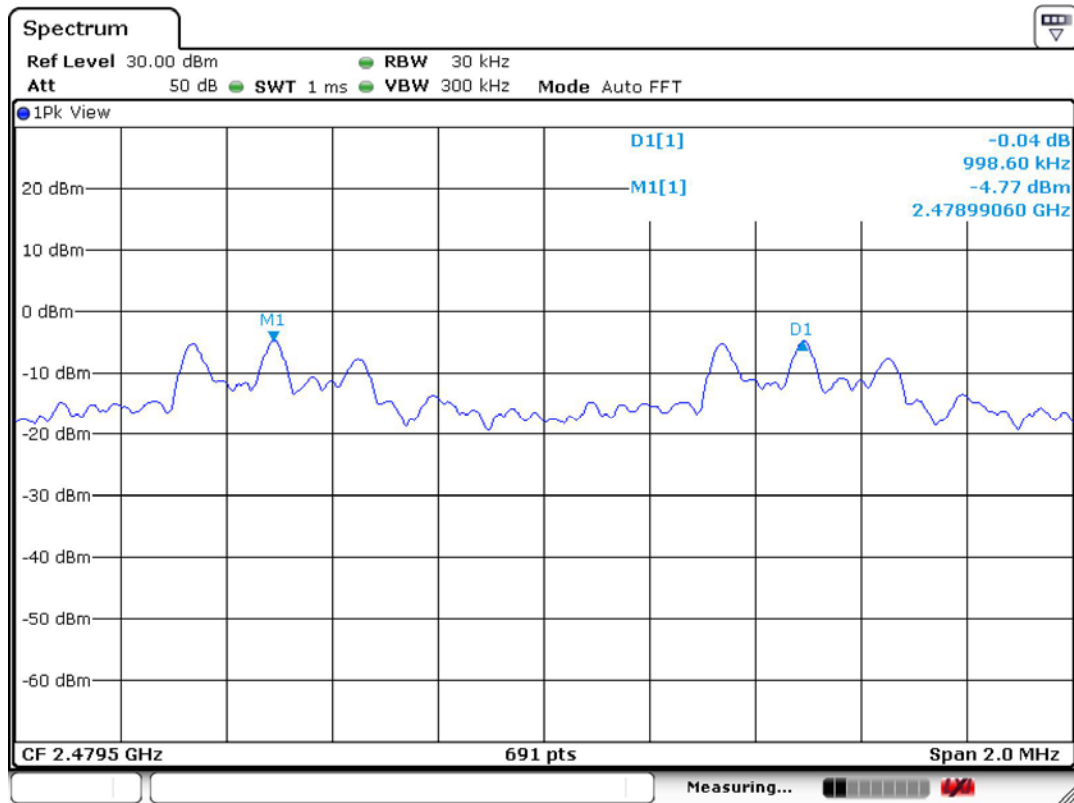
Channel : 2441





Test Mode : BT EDR (3 Mbps)

Channel : 2480



## 6 Number of Hopping Channels

### 6.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

### 6.2 Test Arrangement and Procedure



1. The transmitter output was connected to a spectrum analyzer (through an attenuator, if it's necessary).
2. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps.
3. The RBW is set to 100 kHz and VBW is set to 100 kHz .
4. Max Hold.

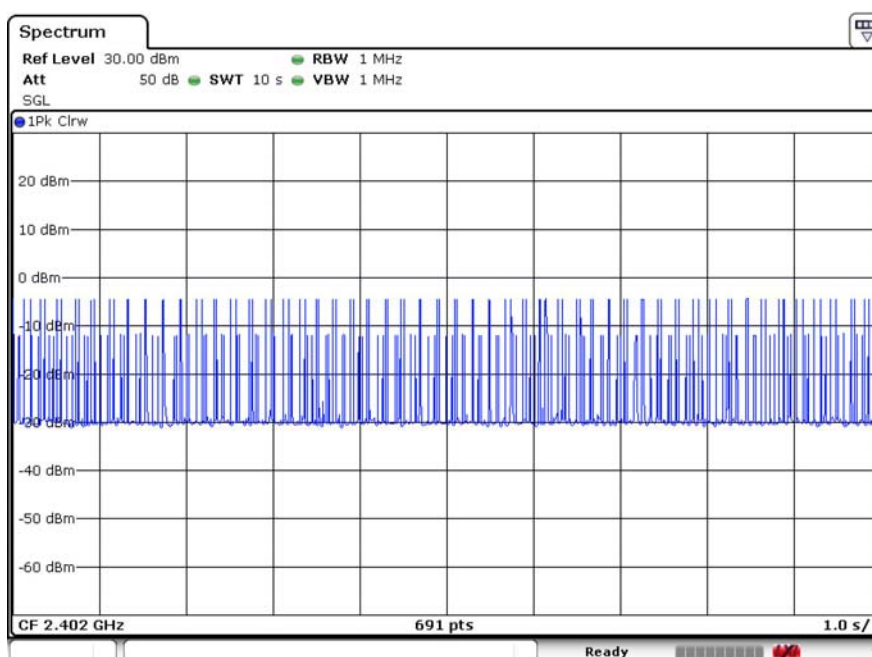
### 6.3 Limit (§ 15.247(a)(1)(iii))

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

### 6.4 Test Result

#### Compliance.

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



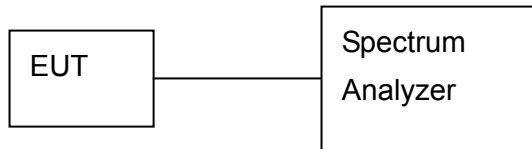


## 7 Average Time of Occupancy

### 7.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

### 7.2 Test Arrangement and Procedure



1. The transmitter output was connected to a spectrum analyzer (through an attenuator, if it's necessary).
2. First, measure the Average number of pulses per second, the RBW is set to 1MHz and VBW is set to 1MHz. Sweep is set to 1 sec. Span 0 Hz.
3. Second, measure the Pulse width, the RBW is set to 1MHz and VBW is set to 1MHz. Sweep is adjusted to appropriate time to show a complete pulse. Span 0 Hz.

### 7.3 Limit (§ 15.247(a)(1)(iii))

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

### 7.4 Test Result

#### Compliance.

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

**Bluetooth (1 Mbps) Channel 00**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.3	0.00040870	0.133024	0.4
DH3	5.2	0.00166667	0.273867	0.4
DH5	3.6	0.00292029	0.322984	0.4

**Bluetooth EDR (2 Mbps) Channel 00**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.4	0.00042174	0.138601	0.4
DH3	5.4	0.00168116	0.286873	0.4
DH5	3.5	0.00294203	0.325389	0.4

**Bluetooth EDR (3 Mbps) Channel 00**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.3	0.00043478	0.141512	0.4
DH3	5.4	0.00168116	0.286873	0.4
DH5	3.5	0.00292754	0.323786	0.4

Remark: AV time of Occupancy = 79 (Total Channel) \* 0.4 (sec) \* AV Number of Pulses per sec \* Pulse Width (sec)

Bluetooth (1 Mbps) Channel <u>39</u>				
DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.5	0.00042899	0.142339	0.4
DH3	5.3	0.00168406	0.282046	0.4
DH5	3.4	0.00292319	0.314068	0.4

Bluetooth EDR (2 Mbps) Channel <u>39</u>				
DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.5	0.00042464	0.140896	0.4
DH3	5.4	0.0016913	0.288603	0.4
DH5	3.6	0.00295217	0.335839	0.4

Bluetooth EDR (3 Mbps) Channel <u>39</u>				
DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.3	0.00041594	0.13538	0.4
DH3	5.5	0.00168406	0.29269	0.4
DH5	3.6	0.00293043	0.333366	0.4
Remark: AV time of Occupancy = 79 (Total Channel) * 0.4 (sec) * AV Number of Pulses per sec * Pulse Width (sec)				

**Bluetooth (1 Mbps) Channel 78**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.4	0.00041159	0.135265	0.4
DH3	5.3	0.00167681	0.280832	0.4
DH5	3.4	0.00293043	0.314845	0.4

**Bluetooth EDR (2 Mbps) Channel 78**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.6	0.00042464	0.142237	0.4
DH3	5.5	0.00168406	0.29269	0.4
DH5	3.5	0.00293768	0.324907	0.4

**Bluetooth EDR (3 Mbps) Channel 78**

DH Packet	AV Number of Pulses per sec	Pulse Width (sec)	AV time of Occupancy (sec)	Limit (sec)
DH1	10.4	0.00042899	0.40983	0.4
DH3	5.4	0.00169855	0.289841	0.4
DH5	3.4	0.00293768	0.315624	0.4

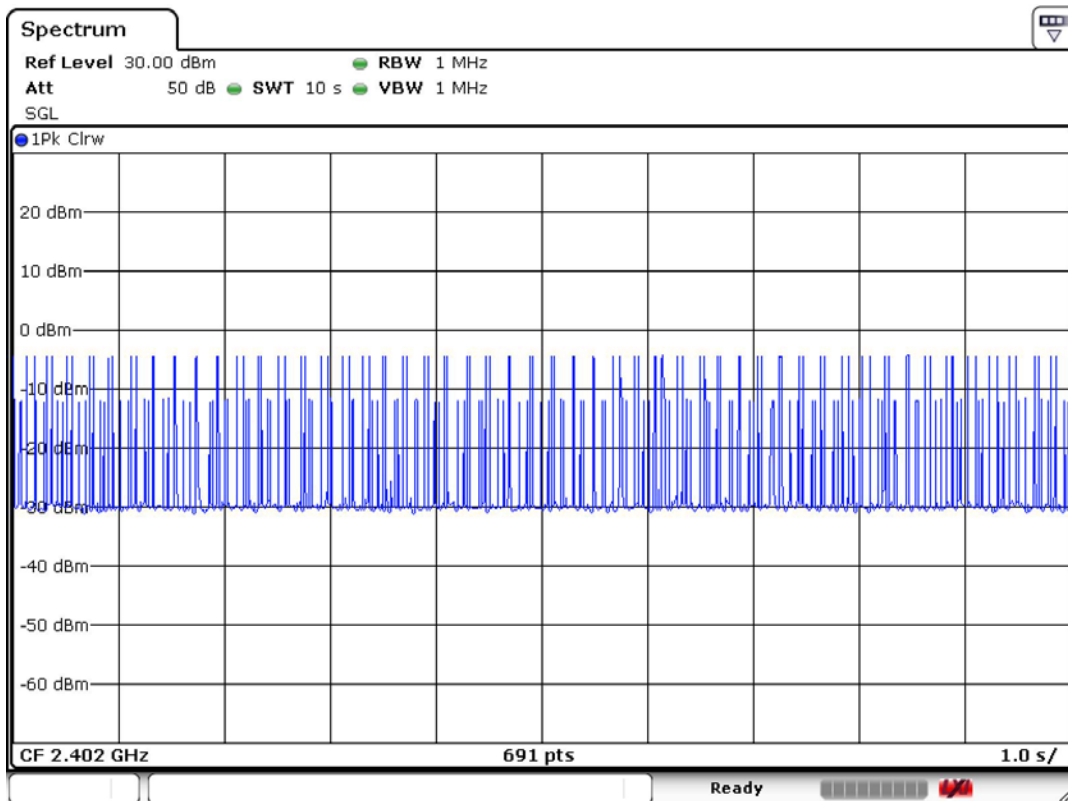
Remark: AV time of Occupancy = 79 (Total Channel) \* 0.4 (sec) \* AV Number of Pulses per sec \* Pulse Width (sec)



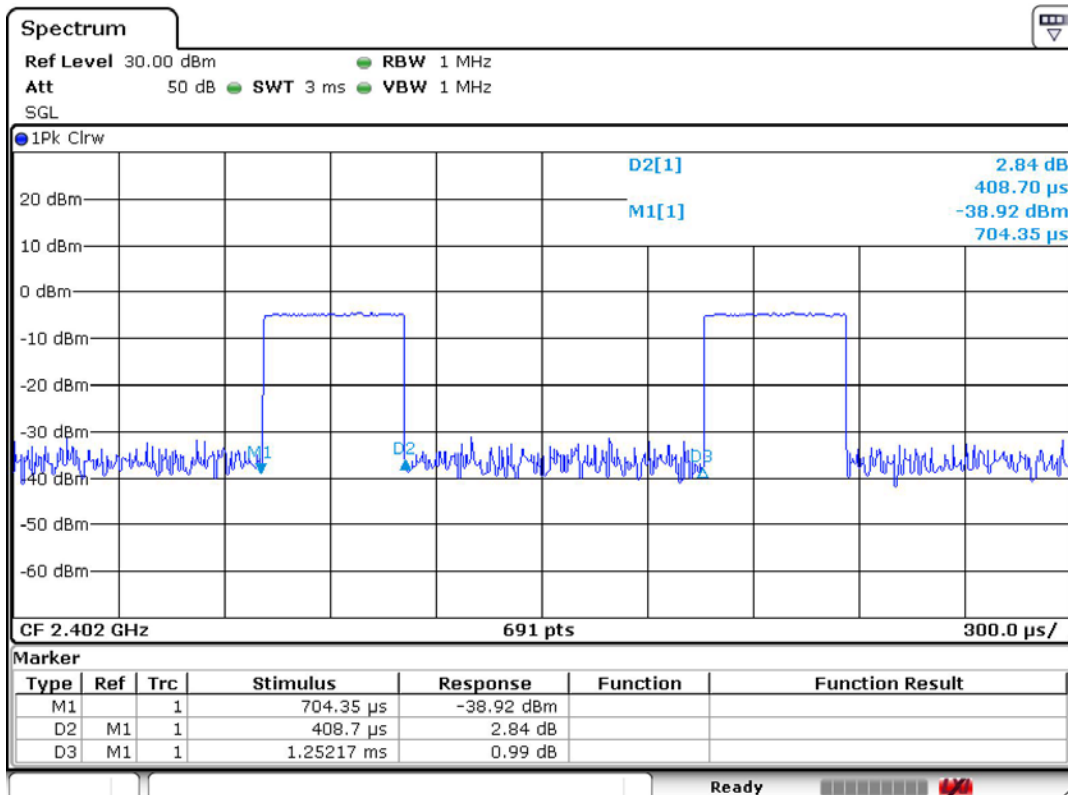


Temperature : 22°C  
Test Date : 14-Jan-2014  
Test Mode : BT (1Mbps) DH1  
Average Number of Pulses Per sec

Humidity : 51%  
Tested by : Kidd Liao  
Channel : 2402



Pulse Width (sec)

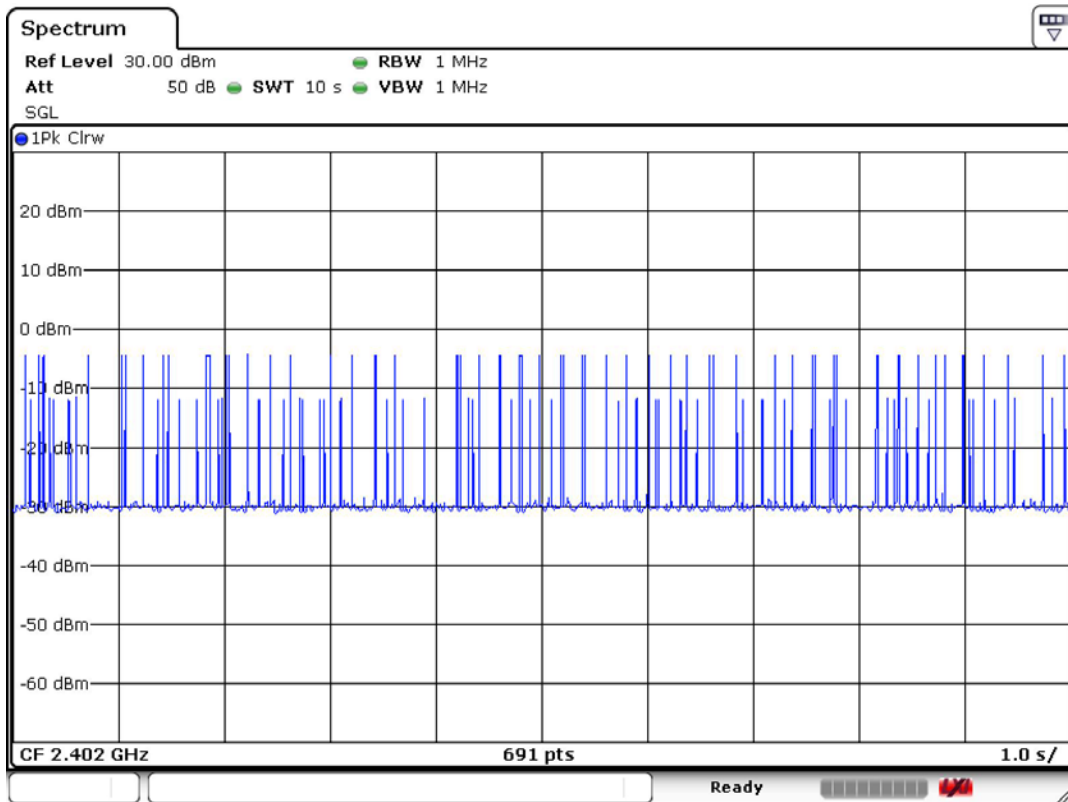




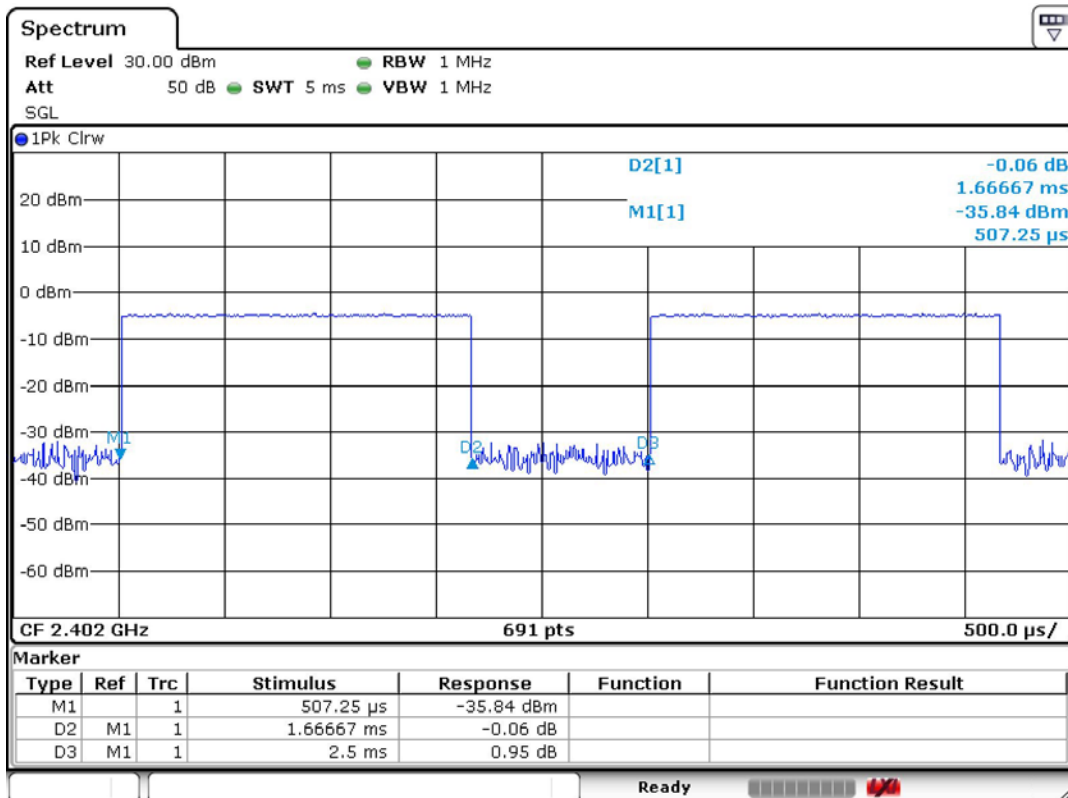
Test Mode : BT (1Mbps) DH3

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

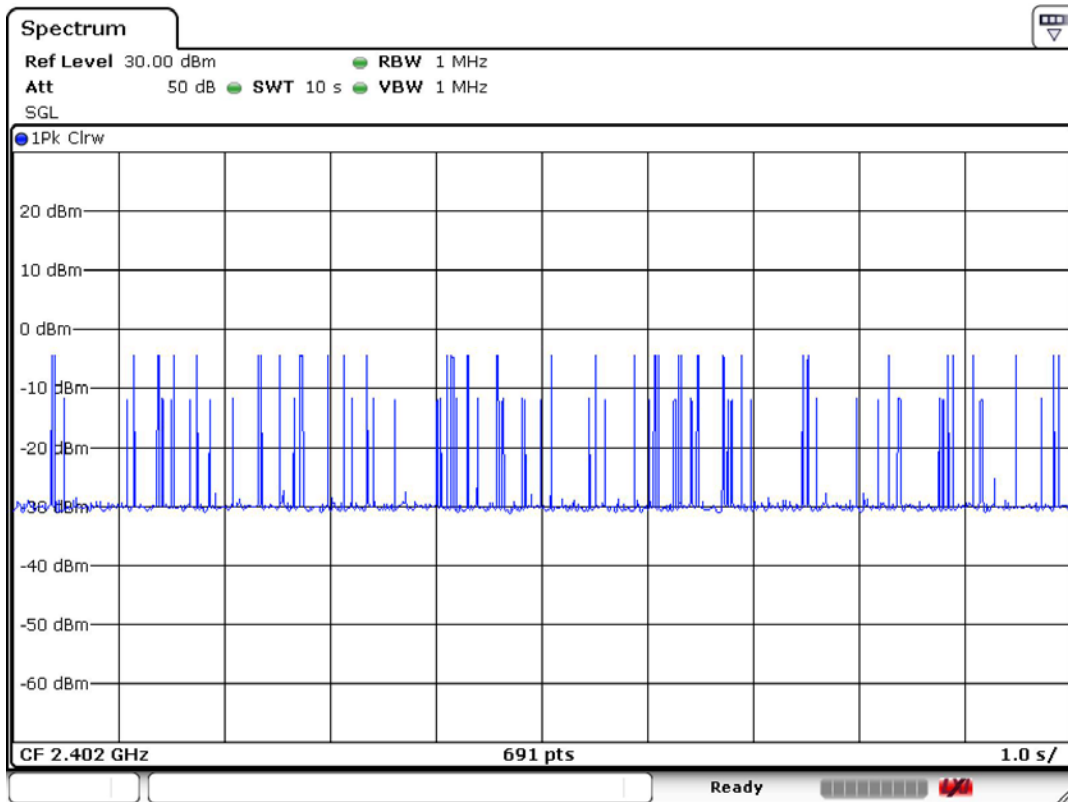




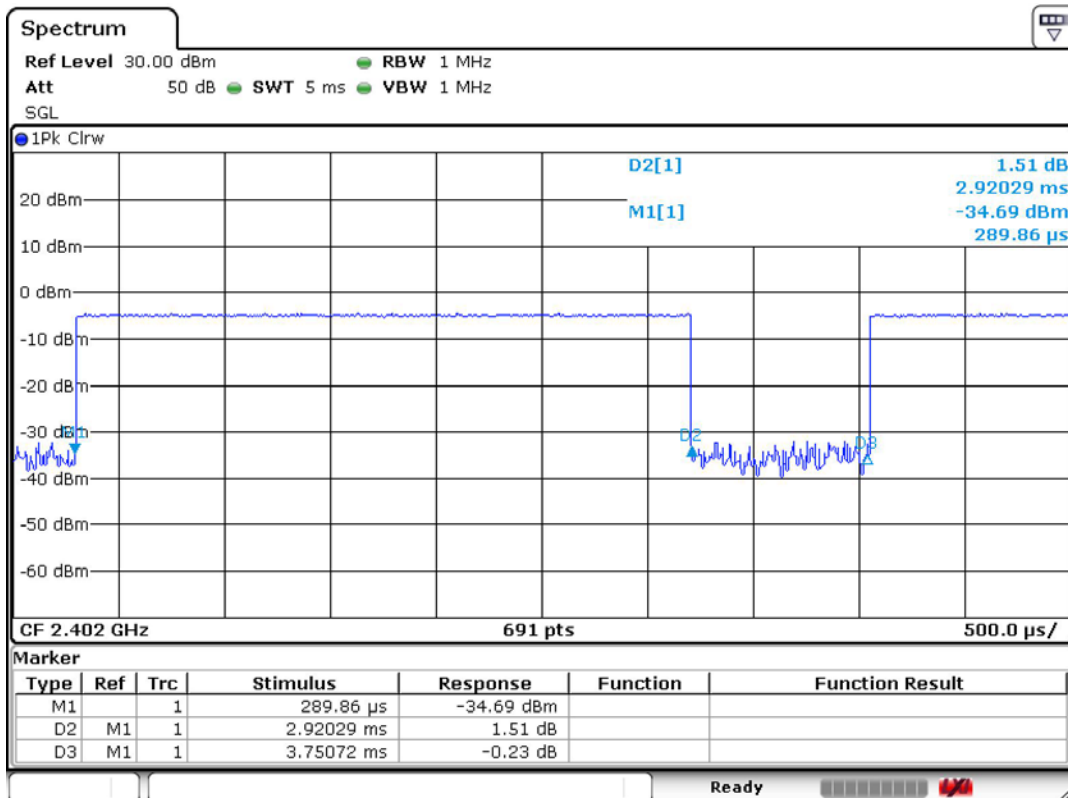
Test Mode : BT (1Mbps) DH5

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

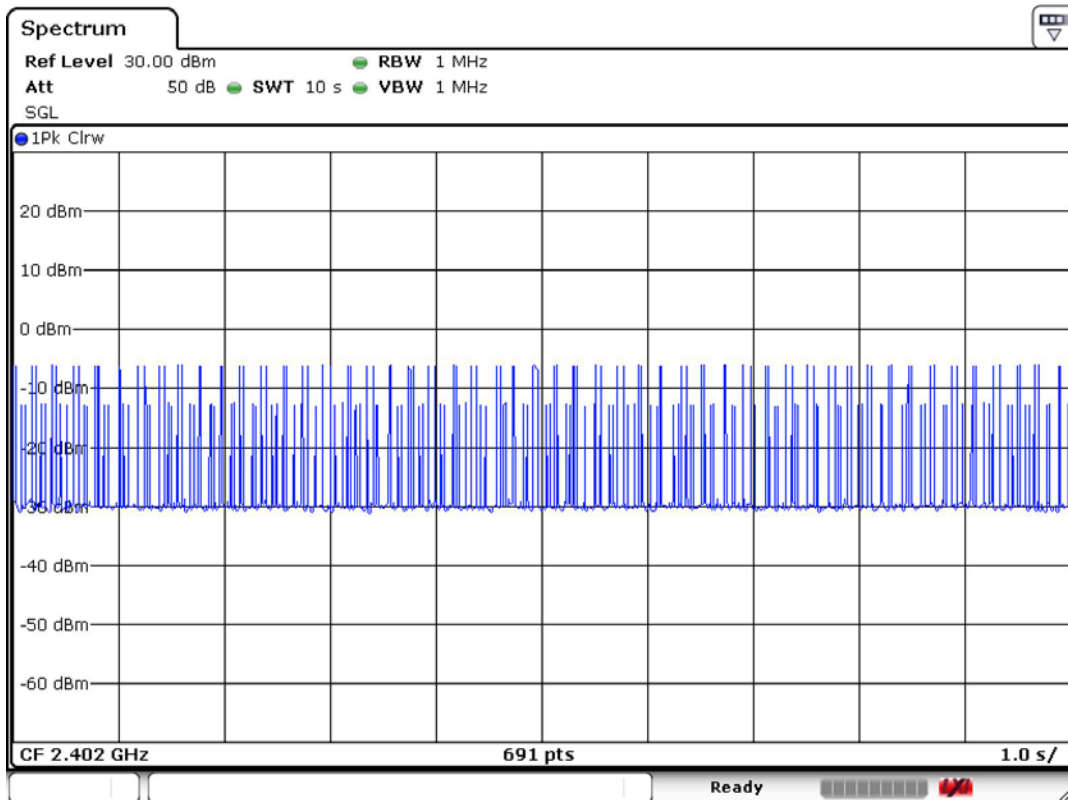




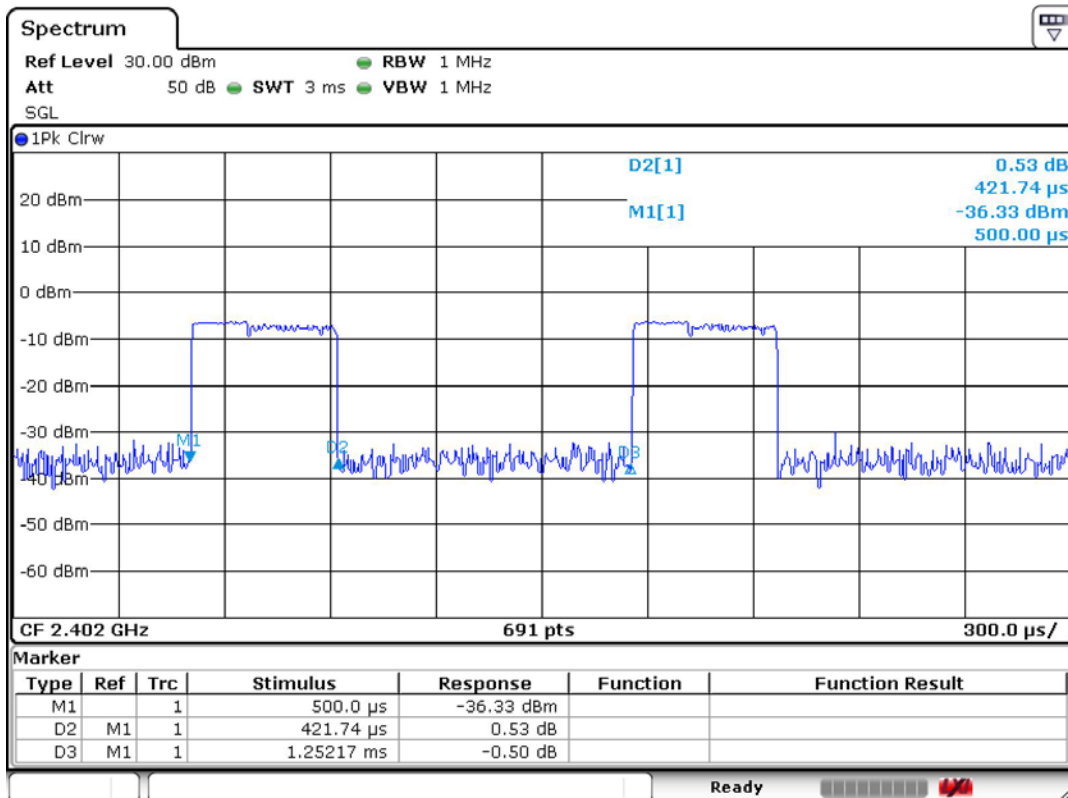
Test Mode : BT EDR (2Mbps) DH1

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

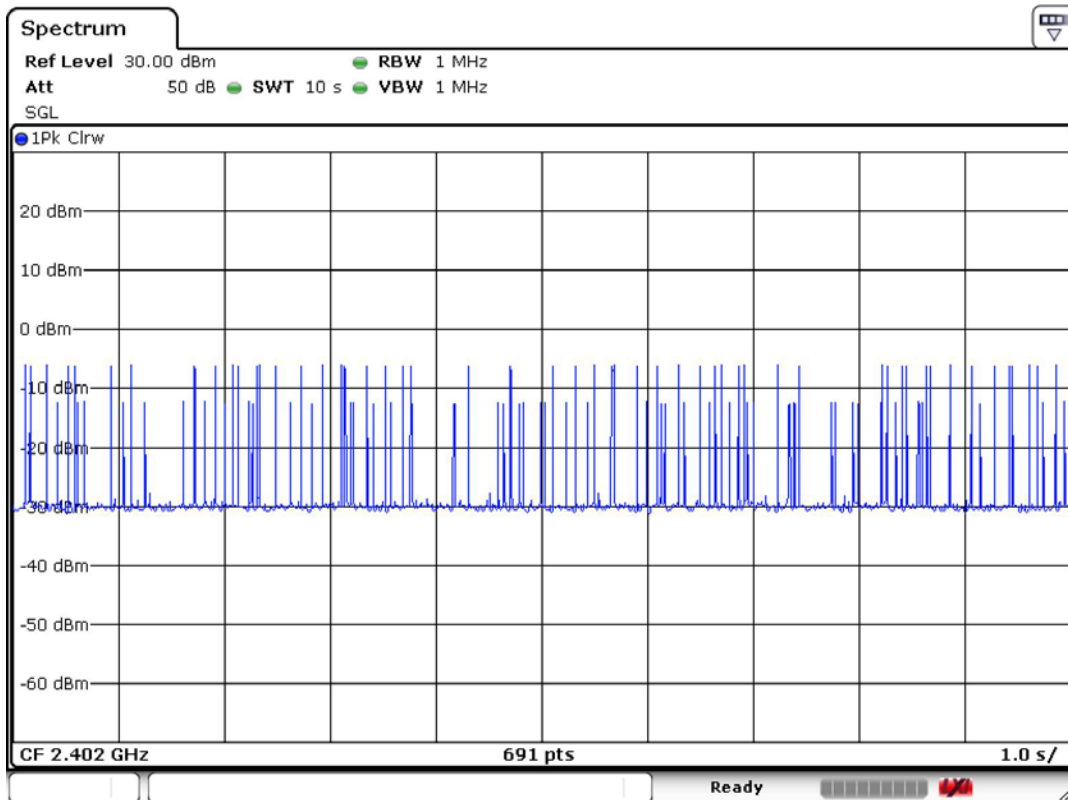




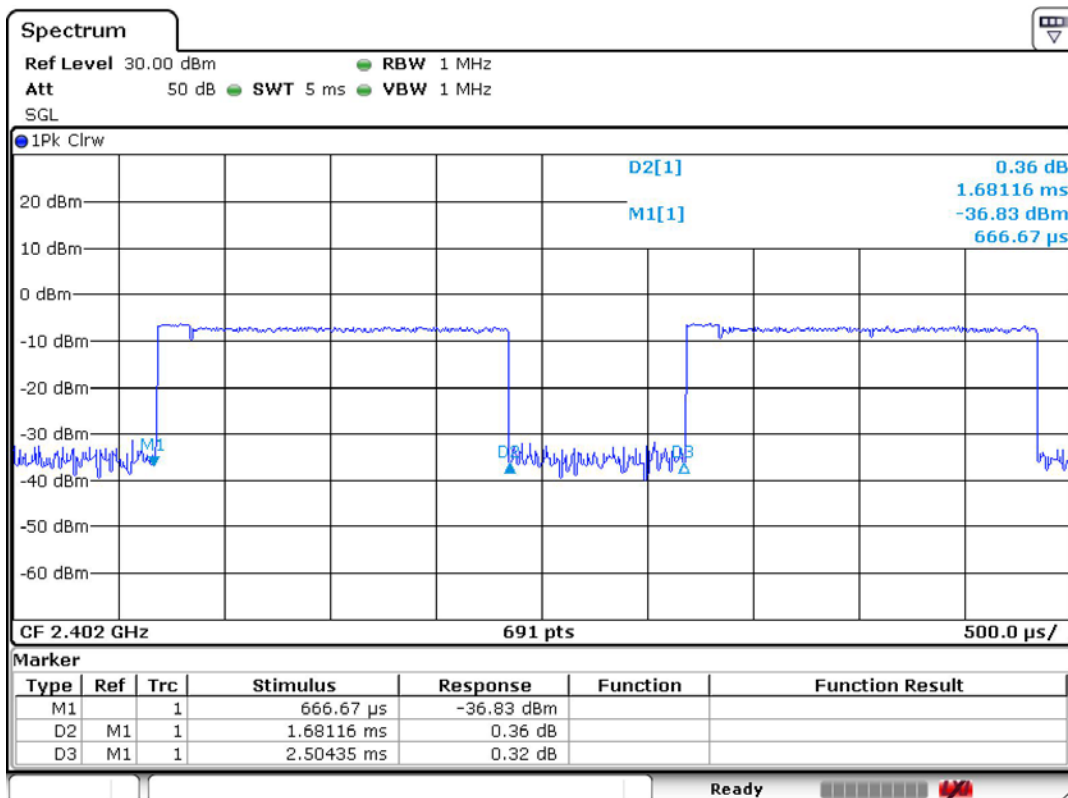
Test Mode : BT EDR (2Mbps) DH3

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

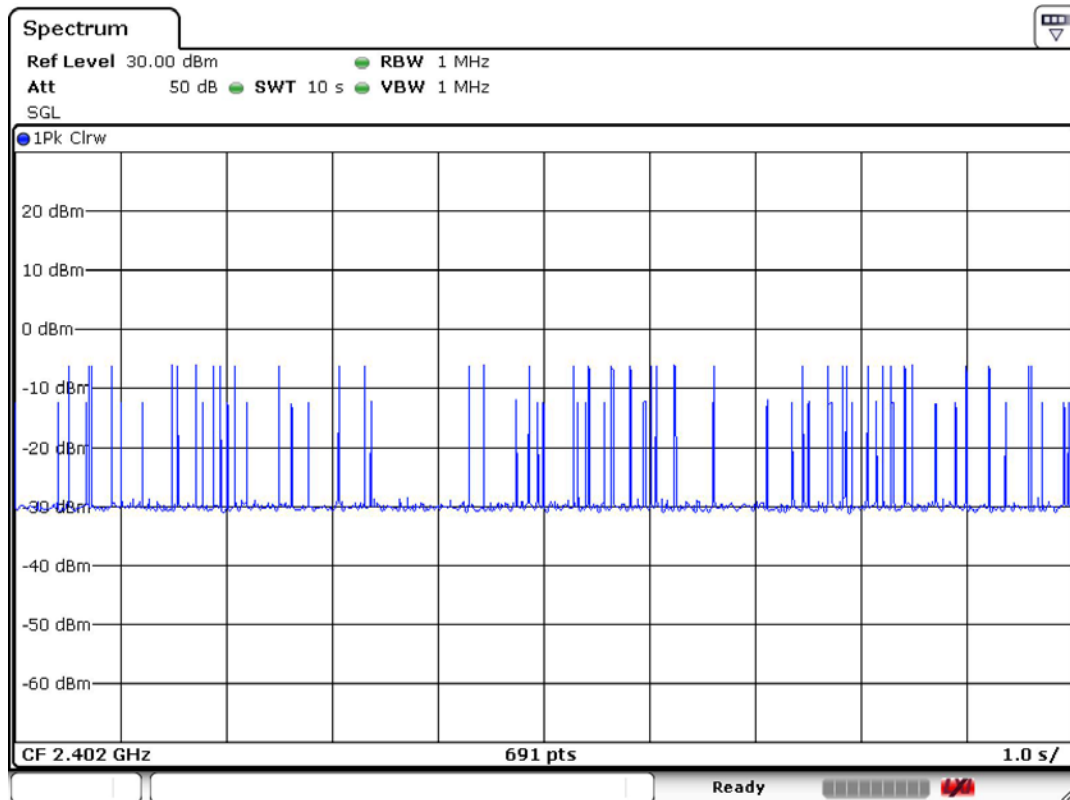




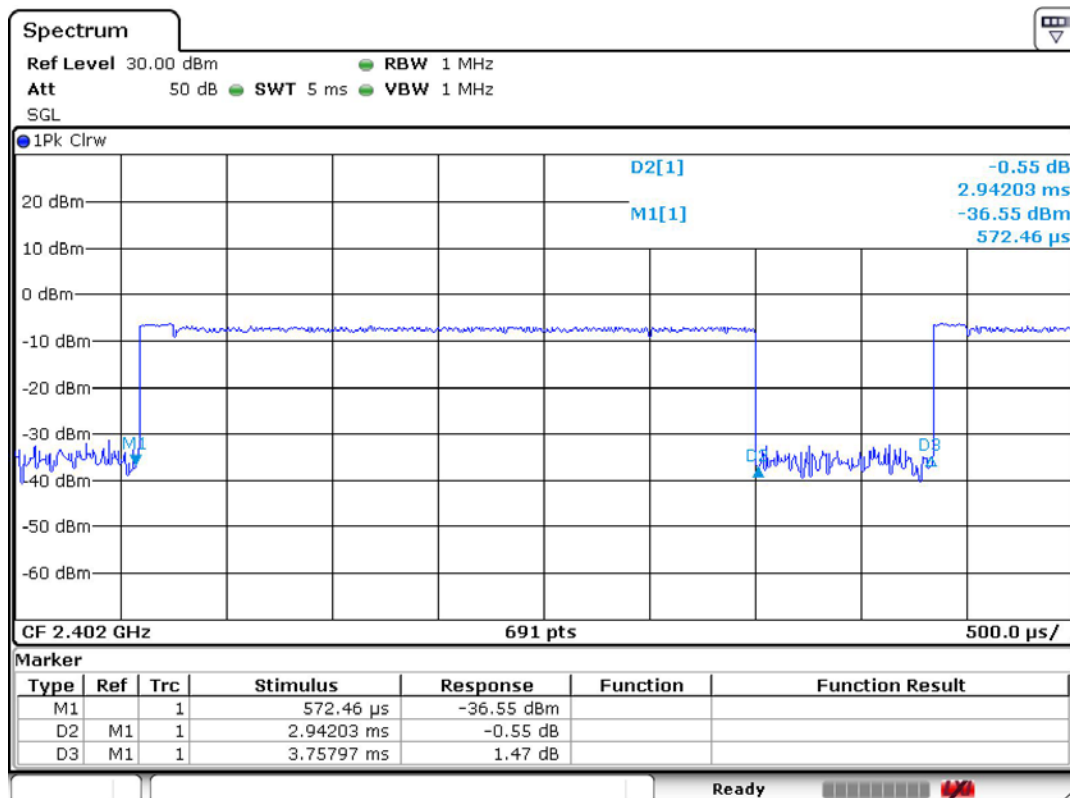
Test Mode : BT EDR (2Mbps) DH5

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

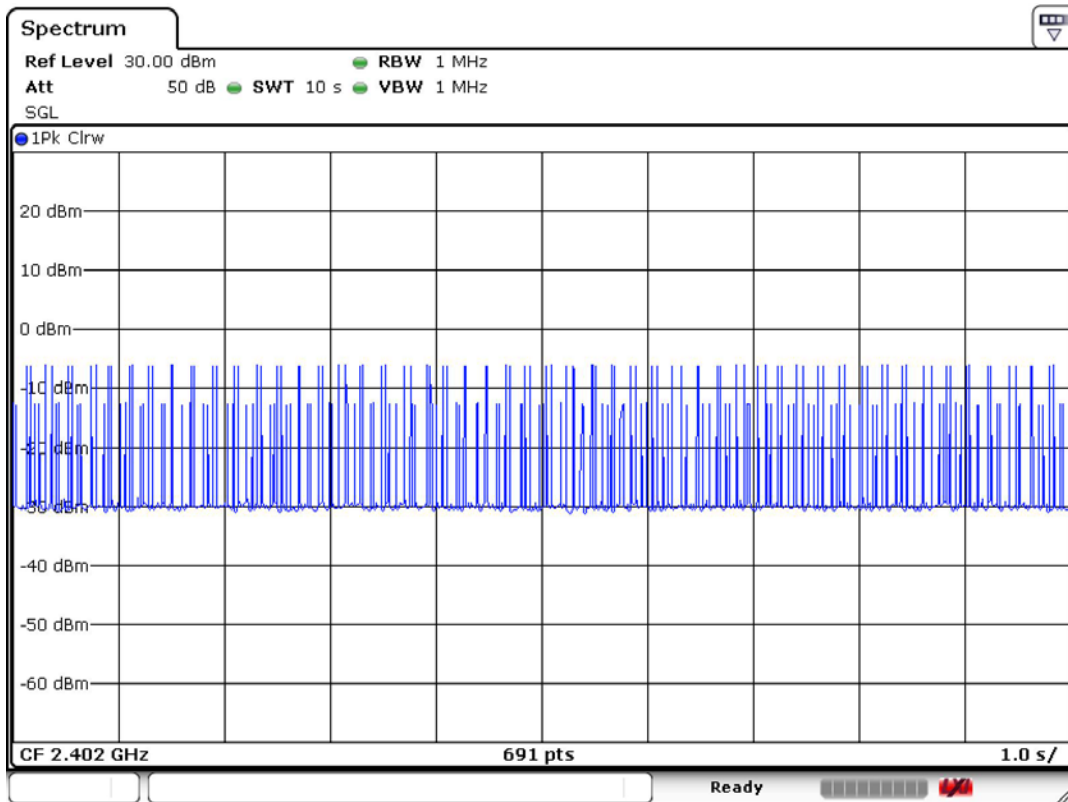




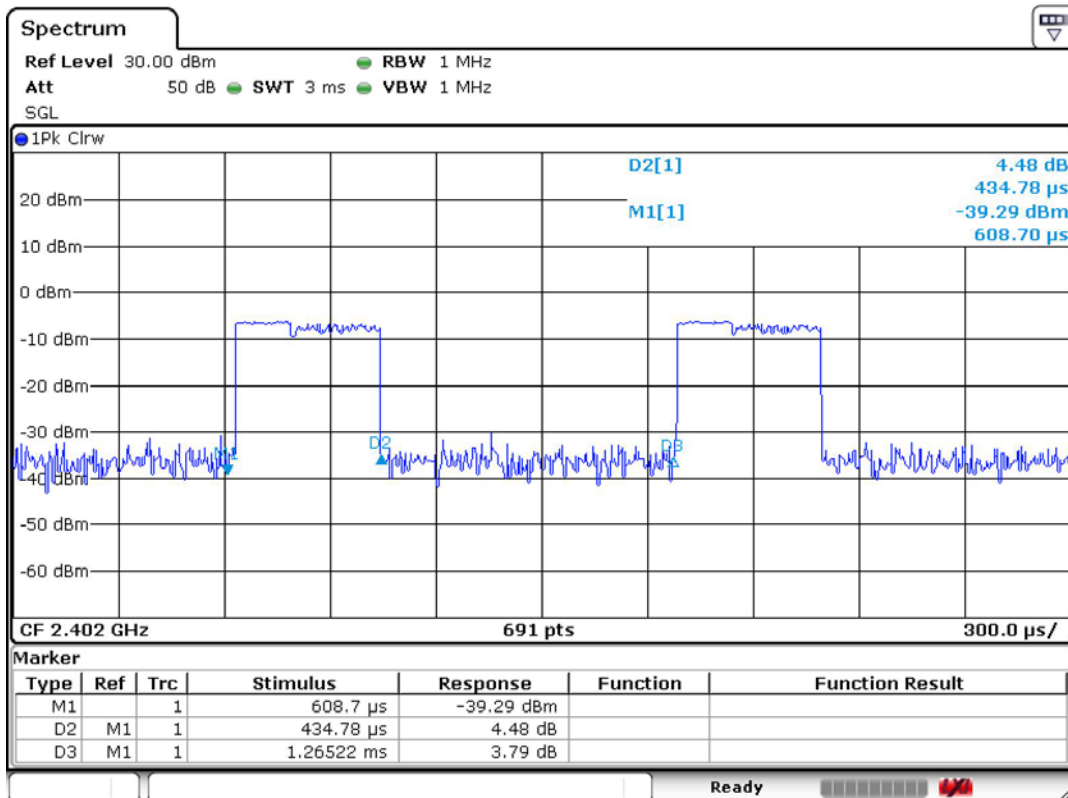
Test Mode : BT EDR (3Mbps) DH1

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

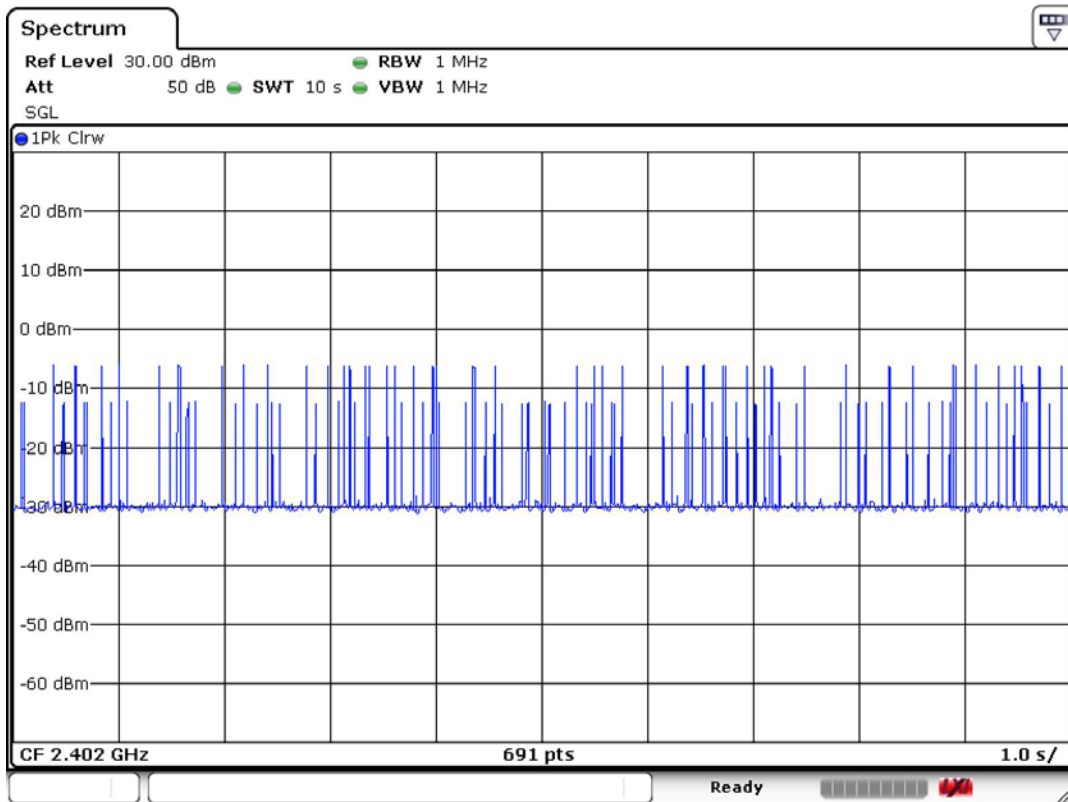




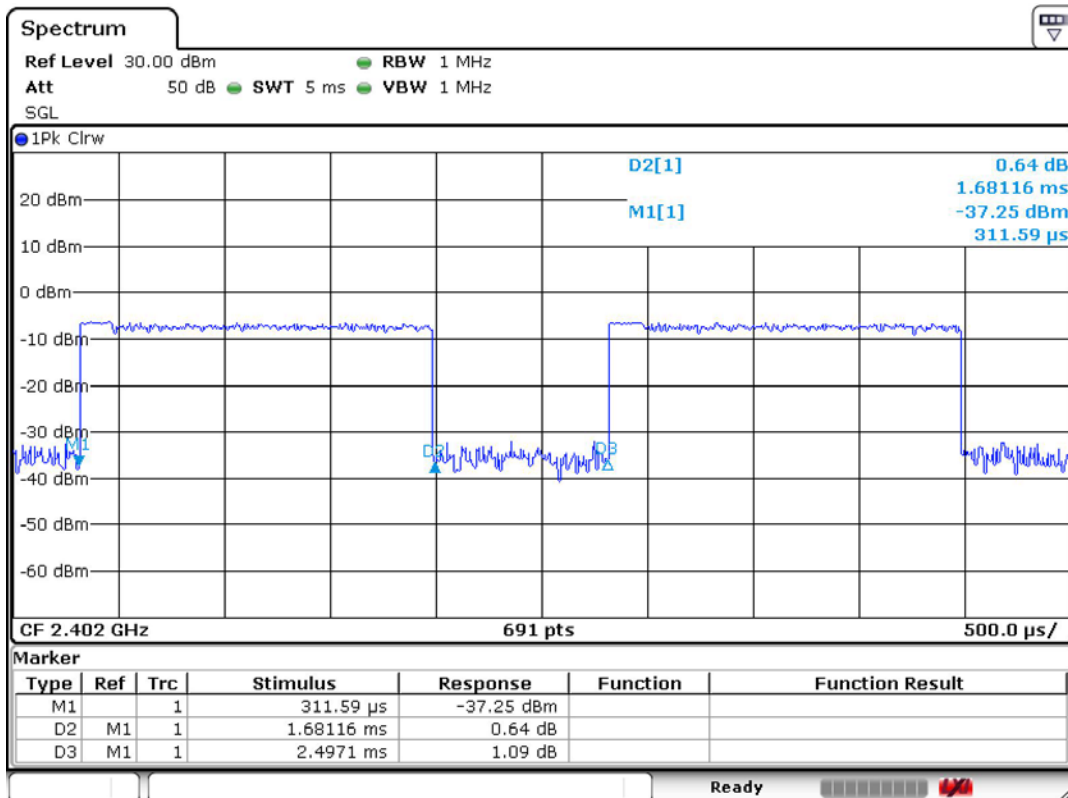
Test Mode : BT EDR (3Mbps) DH3

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)



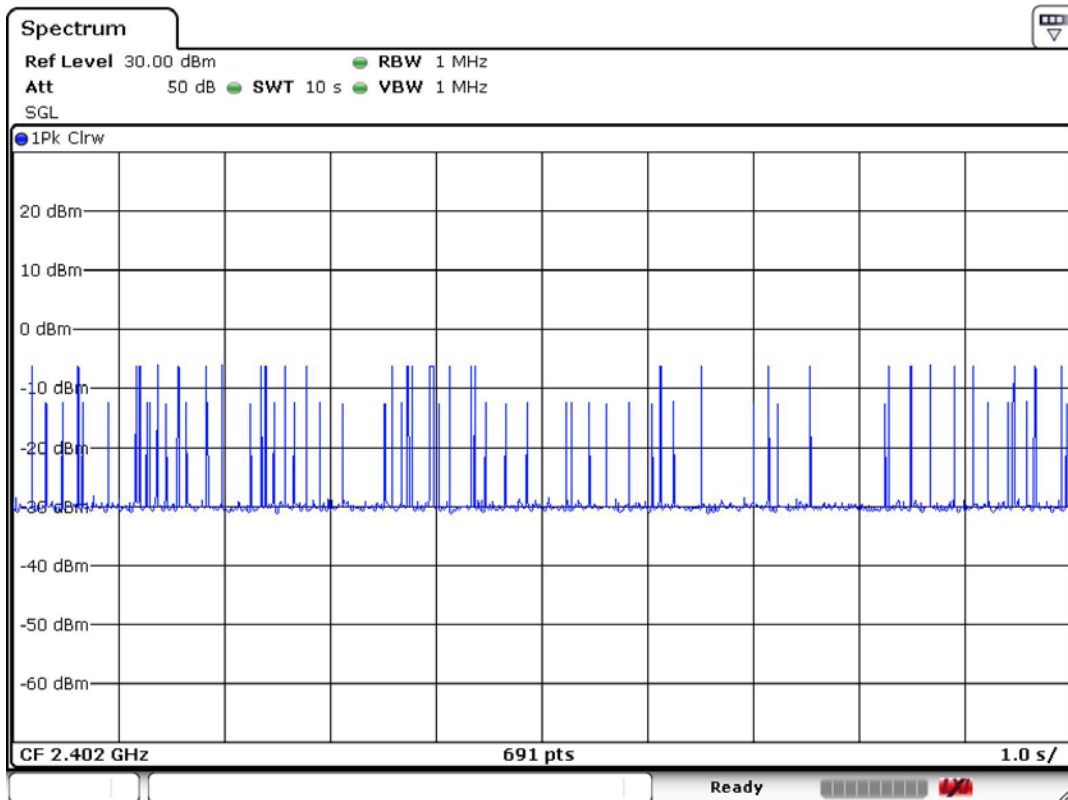




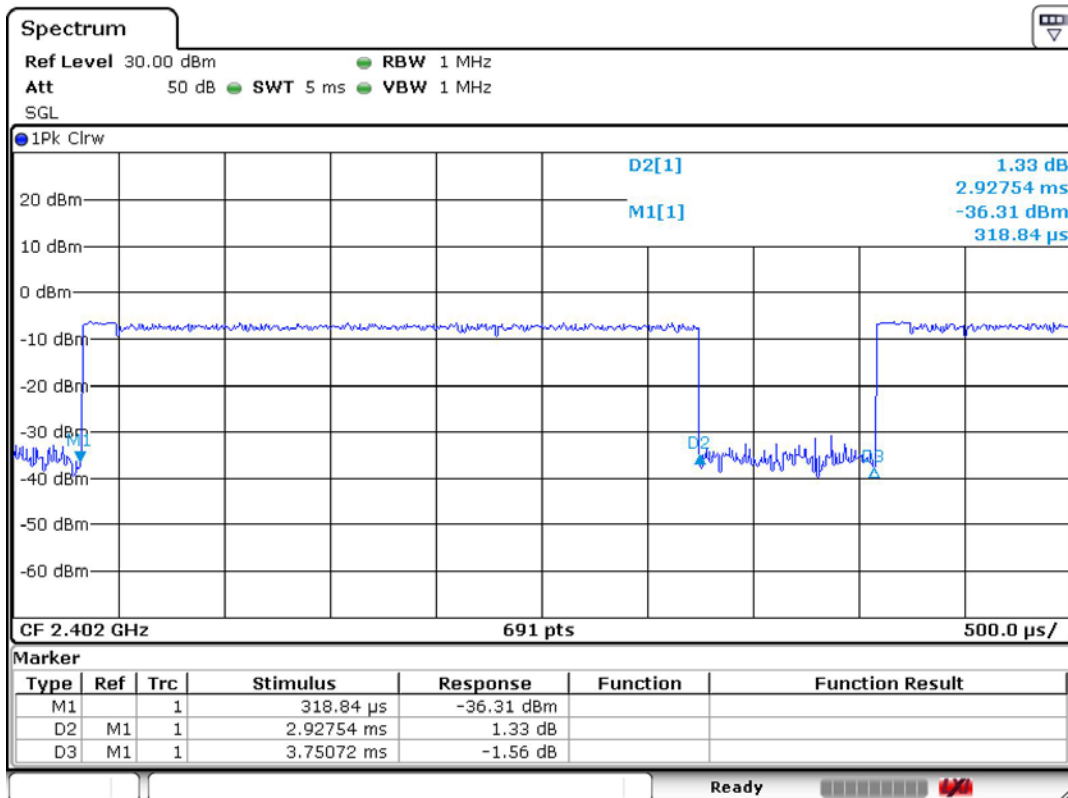
Test Mode : BT EDR (3Mbps) DH5

Channel : 2402

Average Number of Pulses Per sec



Pulse Width (sec)

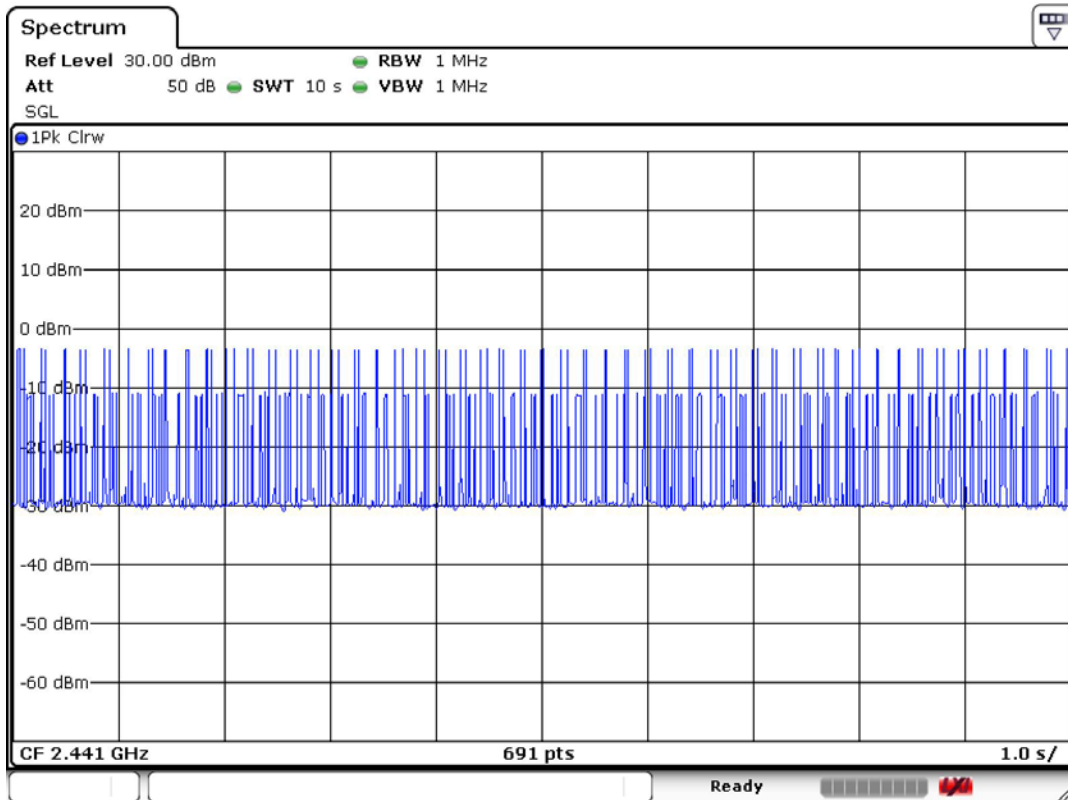




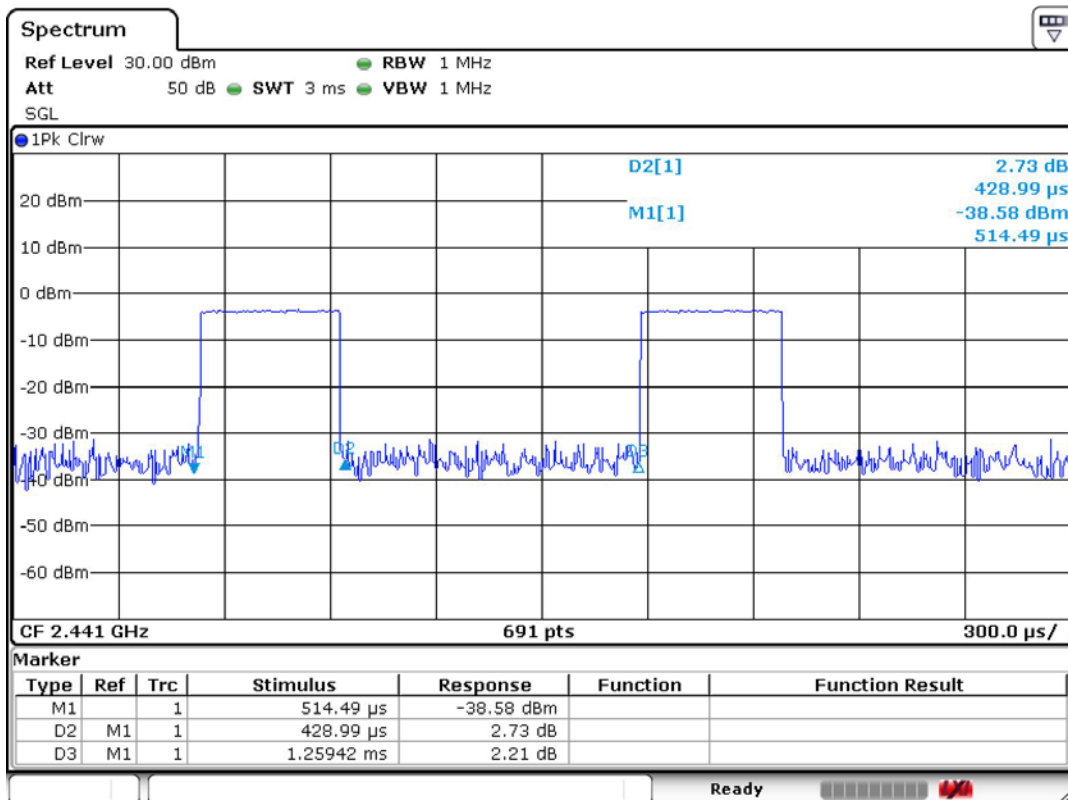
Test Mode : BT (1Mbps) DH1

Channel : 2441

Average Number of Pulses Per sec



Pulse Width (sec)

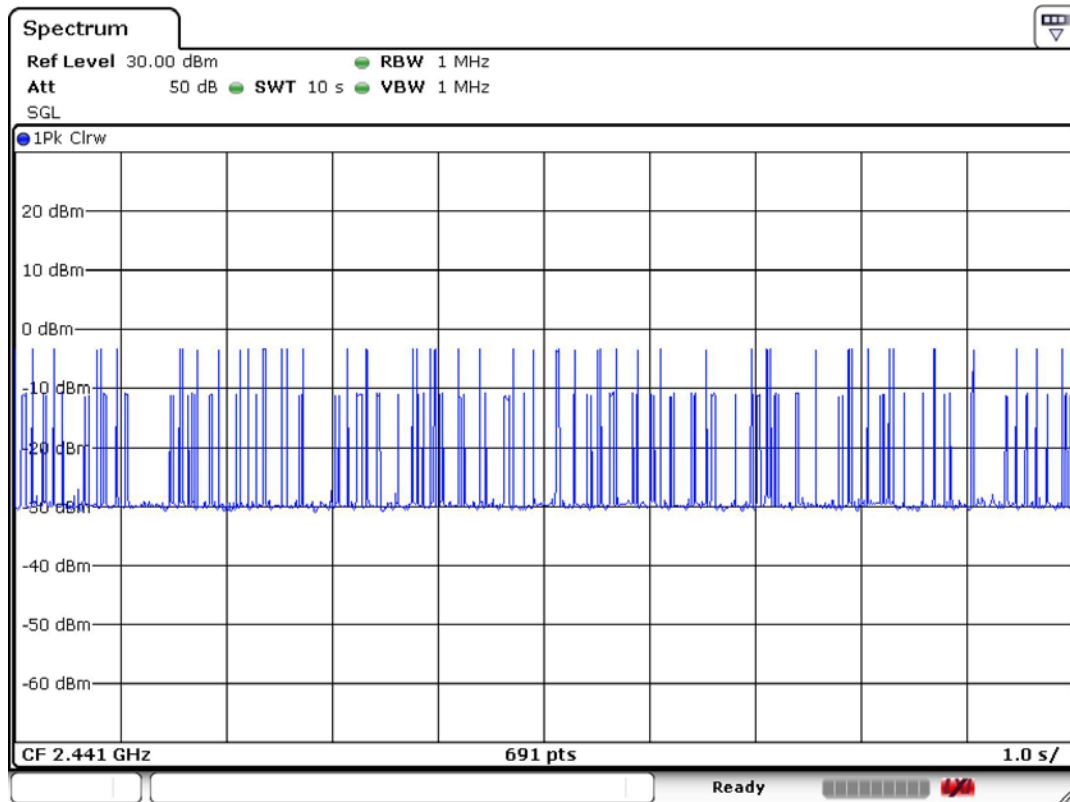




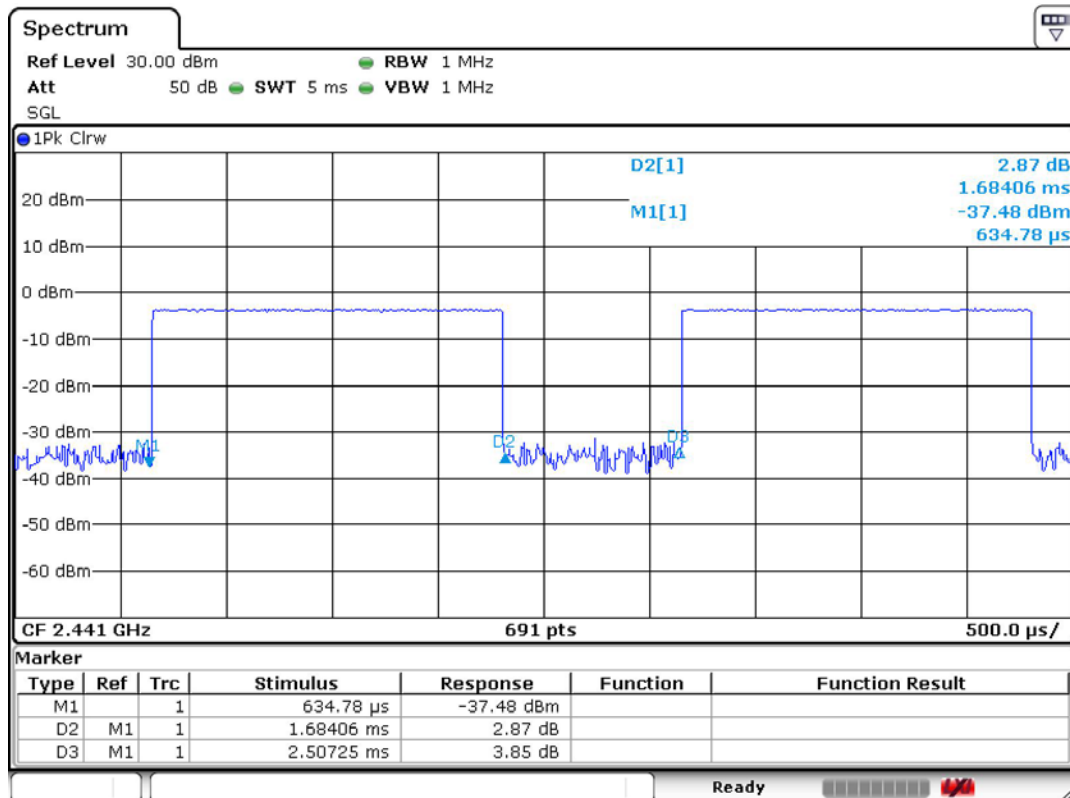
Test Mode : BT (1Mbps) DH3

Channel : 2441

Average Number of Pulses Per sec



Pulse Width (sec)

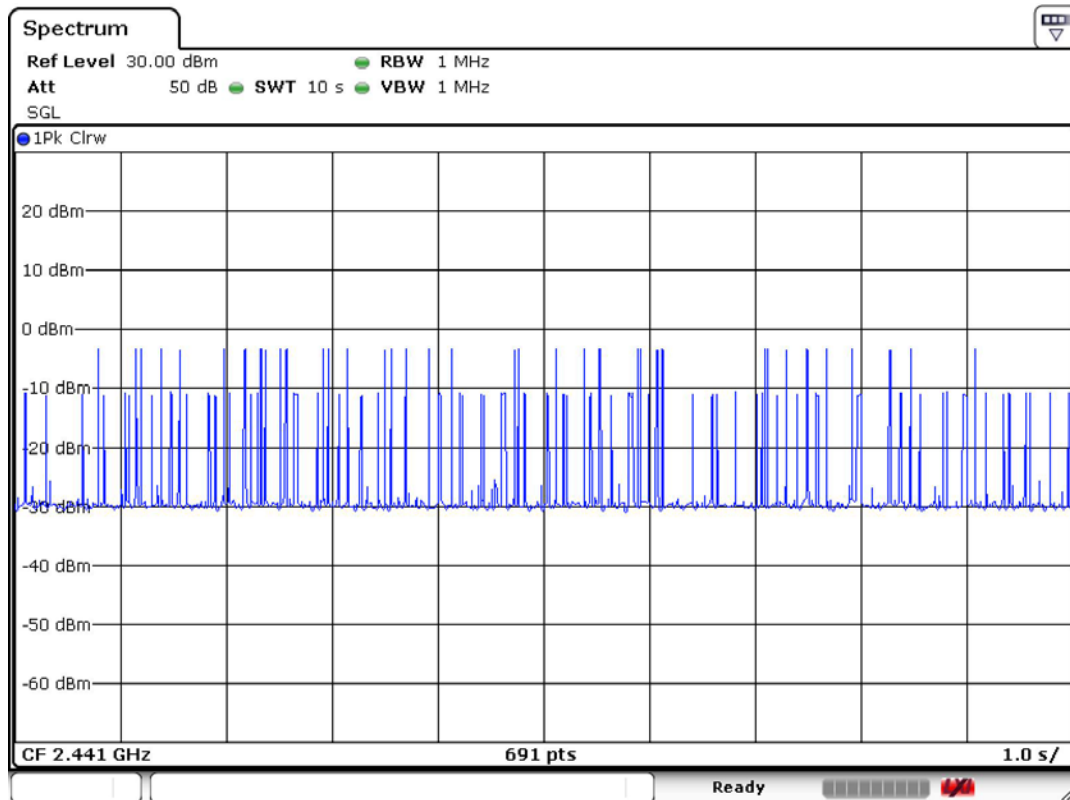




Test Mode : BT (1Mbps) DH5

Channel : 2441

Average Number of Pulses Per sec



Pulse Width (sec)

