

FCC PART 15C TEST REPORT FOR CERTIFICATION  
On Behalf of

Sam Ash Music Corporation

Portable PA with Bluetooth

Model Number: Expedition Express

FCC ID: CCRXPEX360

Prepared for : Sam Ash Music Corporation  
262 Duffy Avenue, Hicksville, New York, United States, 11801

Prepared By : EST Technology Co., Ltd.  
Santun(guantai Road), Houjie Town, DongGuan City,  
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Report Number: ESTE-R1304001  
Date of Test : Mar. 22 ~ April. 10, 2013  
Date of Report : April. 15, 2013

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### Test Report Verification

<b>Applicant:</b>	Sam Ash Music Corporation		
<b>Address:</b>	262 Duffy Avenue, Hicksville, New York, United States, 11801		
<b>Manufacturer</b>	Sam Ash Music Corporation		
<b>Address:</b>	262 Duffy Avenue, Hicksville, New York, United States, 11801		
<b>E.U.T:</b>	Portable PA with Bluetooth		
<b>Model Number:</b>	Expedition Express		
<b>Power Supply:</b>	DC 19V From Adapter Input AC 100-240V~50/60Hz DC 12V From Internal Battery		
<b>Test Voltage:</b>	DC 19V From Adapter Input AC 120V/60Hz Adapter 1: TDX-1903000; Adapter 2: FJ-SW1903000		
<b>Trade Name:</b>	Samson	Serial No.:	-----
<b>Date of Receipt:</b>	Mar 22,2013	<b>Date of Test:</b>	Mar 22 ~ April 10,2013
<b>Test Specification:</b>	FCC Rules and Regulations Part 15 Subpart C:2012 ANSI C63.4:2003		
<b>Test Result:</b>	<p>The device described above is tested by EST Technology Co., Ltd.. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the ETSI EN FCC Rules and Regulations Part 15 Subpart C requirements.</p> <p style="text-align: right;">This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. Date: April 15,2013</p>		
Prepared by:	Tested by:	Approved by:	
			
_____ Ada / Assistant	_____ Tony.Tang/ Engineer	_____ IcemanHu / Manager	
<b>Other Aspects:</b>	None.		
<i>Abbreviations: OK/P=passed    fail/F=failed    n.a/N=not applicable    E.U.T=equipment under tested</i>			
<i>This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.</i>			

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

<b>Product Name</b>	: Portable PA with Bluetooth
<b>Model Number</b>	: Expedition Express
<b>FCC ID</b>	: CCRXPEX360
<b>Operation frequency</b>	: 2402MHz~2480MHz
<b>Number of channel</b>	: 79
<b>Antenna</b>	: Internal antenna, 1 dBi gain
<b>Modulation</b>	: FHSS (GFSK, $\pi/4$ -DQPSK, 8-DPSK)
<b>Power Supply</b>	: DC 19V From Adapter Input AC 120V/60Hz
<b>Sample Type</b>	: Prototype production

## 2. SUMMARY OF TEST

### 2.1. Summary of test result

Description of Test Item	Standard	Results
Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) DA 00-705	PASS
20dB Bandwidth	FCC Part 15: 15.215 DA 00-705	PASS
Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) DA 00-705	PASS
Number Of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Dwell Time	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.4: 2003 DA 00-705	PASS
Band Edge Compliance	FCC Part 15: 15.247(d) DA 00-705	PASS
Power Line Conducted Emissions	FCC Part 15: 15.207 ANSI C63.4: 2003 DA 00-705	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

## 2.2. Test Facilities

EMC Lab	:	Certificated by CNAL, CHINA Registration No.: L5288 Date of registration: October 28, 2011
		Certificated by FCC, USA Registration No.: 989591 Date of registration: December 07, 2010
		Certificated by Industry Canada Registration No.: 46405-9405 Date of registration: December 16, 2010
		Certificated by VCCI, Japan Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011
		Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011
		Certificated by TUV/PS, Shenzhen Registration No.: SCN1017 Date of registration: January 27, 2011
		Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011
		Certificated by Siemic, Inc. Registration No.: SLCN021 Date of registration: November 8, 2011
		Certificated by Nemko, Hong Kong Registration No.: 175193 Date of registration: May 4, 2011
Name of Firm	:	EST Technology Co., Ltd.
Site Location	:	San Tun Management Zone, Houjie Town, Dongguan, Guangdong, China

### 2.3. Assistant equipment used for test

#### 2.3.1. Adapter 1

Manufacturer : Shenzhen Teng Da Xing Electron Co.,Ltd.  
M/N : TDX-1903000  
Input : AC 100-240V~50/60Hz 2A Max  
Output : DC 19V/3A

#### 2.3.2. Adapter 2

Manufacturer : Shenzhen Fujia Appliance Co.,Ltd.  
M/N : FJ-SW1903000  
Input : AC 100-240V~50/60Hz 1.5A Max  
Output : DC 19V/3A

#### 2.3.3. Internal Battery 1

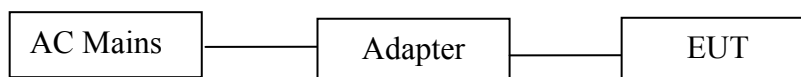
Manufacturer : HUANYU POWER SOURCE (SHENZHEN) CO., LTD  
M/N : HYS1222  
Technical : DC 12V / 2.2AH

#### 2.3.4. Internal Battery 2

Manufacturer : MOTOMA POWER CO.,LTD.  
M/N : MS12V26  
Technical : DC 12V / 2.6AH

### 2.4. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground. EUT was be set into BT test mode by software before test.



(EUT: Portable PA with Bluetooth)



## 2.5. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Mode	Channel	Frequency
GFSK	Low	2402MHz
	Middle	2441MHz
	High	2480MHz
8-DPSK	Low	2402MHz
	Middle	2441MHz
	High	2480MHz

## 2.6. Test Equipment

### 2.6.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	Mar,7,13	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	Mar,7,13	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101100	Aug.24,12	1 Year

### 2.6.2. For radiated emission test(30-1000MHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESVS10	100004	Mar,7,13	1 Year
Spectrum Analyzer	Agilent	E4411B	MY50140697	Mar,7,13	1 Year
Bilog Antenna	Teseq	CBL 6111D	25872	Mar,7,13	1 .5Year
Signal Amplifier	Agilent	310N	187037	Aug,24,12	1 Year

### 2.6.3. For radiated emission test(above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Temperature controller	Terchy	MHQ	120	May.08,12	1 Year
Spectrum Analyzer	Agilent	E4408B	MY44211139	May.08,12	1 Year
Vector Signal Generator	R&S	SMBV100A	1407.6004K02	May.08,12	1 Year
Double Ridged Horn Antenna	R&S	HF907	100276	Jan.16.13	2 Year
Double Ridged Horn Antenna	R&S	HF907	100268	Jan.16.13	2 Year
Log-periodic Dipole Antenna	R&S	HL223	100435	Jan.16.13	2 Year
Biconical Antenna	R&S	HK116	100431	Jan.16.13	2 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	9163-462	Jan.16.13	2 Year
Pre-amplifer	AH	PAM-0118	10008	May.08,12	1 Year
Pre-amplifer	R&S	SCU-01	10049	May.08,12	1 Year
High Pass filter	Micro	HPM50111	324455	May.08,12	1 Year
RF Cable	Hubersuhner	W10.02	534096	May.08,12	1 Year
RF Cable	Hubersuhner	W10.02	534123	May.08,12	1 Year
RF Cable	Hubersuhner	RG 214/U	513423	May.08,12	1 Year
RF Cable	Hubersuhner	RG 214/U	523455	May.08,12	1 Year

### 3. MAXIMUM PEAK OUTPUT POWER

#### 3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

#### 3.2. Test Procedure

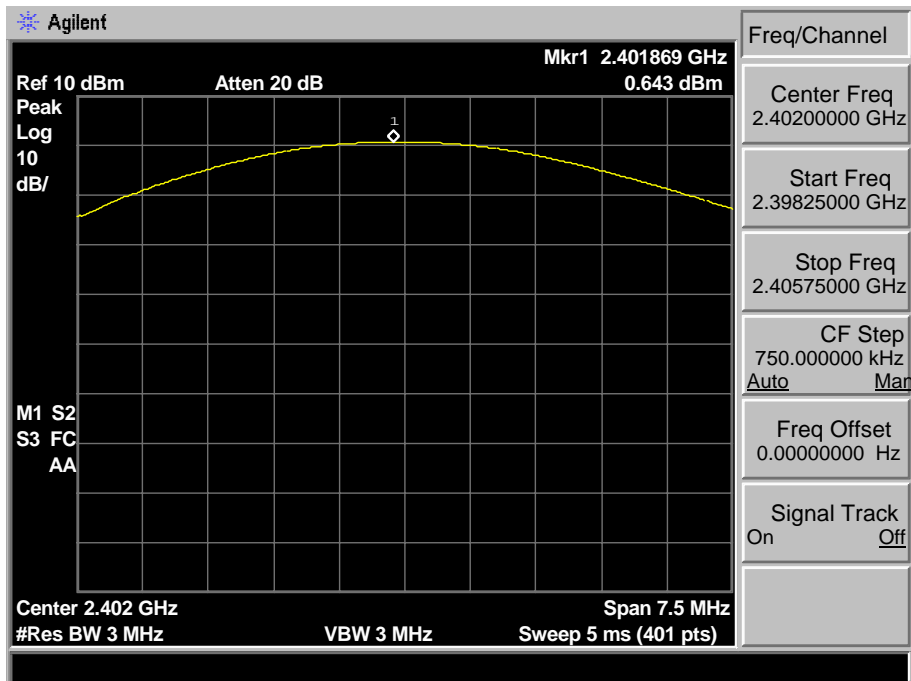
The transmitter output (antenna port) was connected to the spectrum analyzer

#### 3.3. Test Result

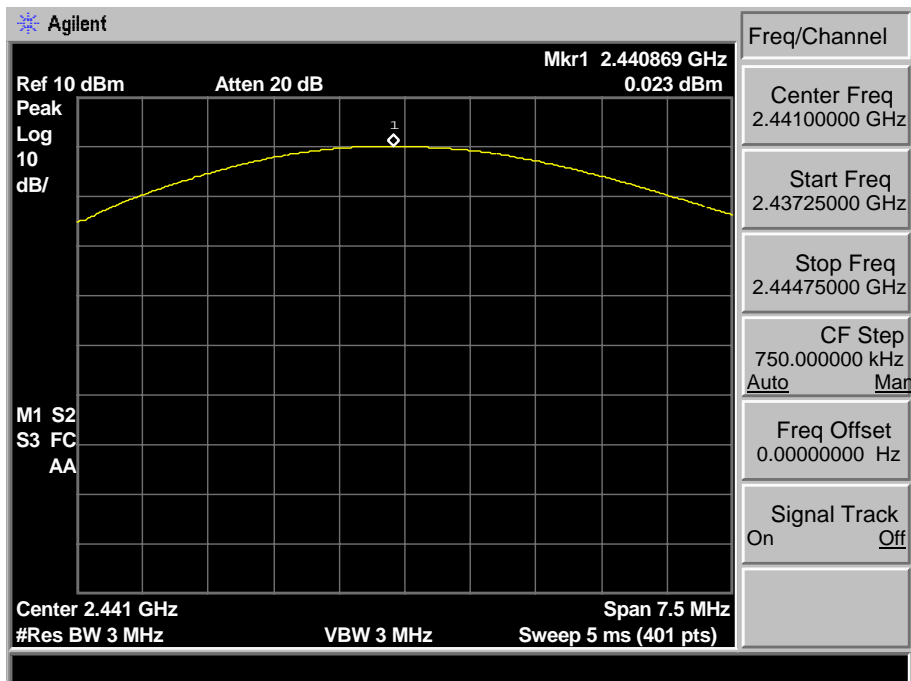
EUT: Portable PA with Bluetooth					
M/N: Expedition Express					
Test date: 2013-04-08		Test site: RF site		Tested by: Tony Tang	
Mode	Freq (MHz)	Result (dBm)	Limit		Margin (dB)
			dBm	W	
Adapter 1					
GFSK	2402	0.643	30.00	1	29.357
	2441	0.023	30.00	1	29.977
	2480	-0.309	30.00	1	30.309
8-DPSK	2402	0.084	21.00	0.125	20.916
	2441	-0.666	21.00	0.125	21.666
	2480	-0.946	21.00	0.125	21.946
Adapter 2					
GFSK	2402	0.897	30.00	1	29.103
	2441	0.786	30.00	1	29.214
	2480	0.509	30.00	1	29.491
8-DPSK	2402	0.362	21.00	0.125	20.638
	2441	0.235	21.00	0.125	20.765
	2480	0.112	21.00	0.125	20.888
Conclusion: PASS					

### 3.4. Test Data

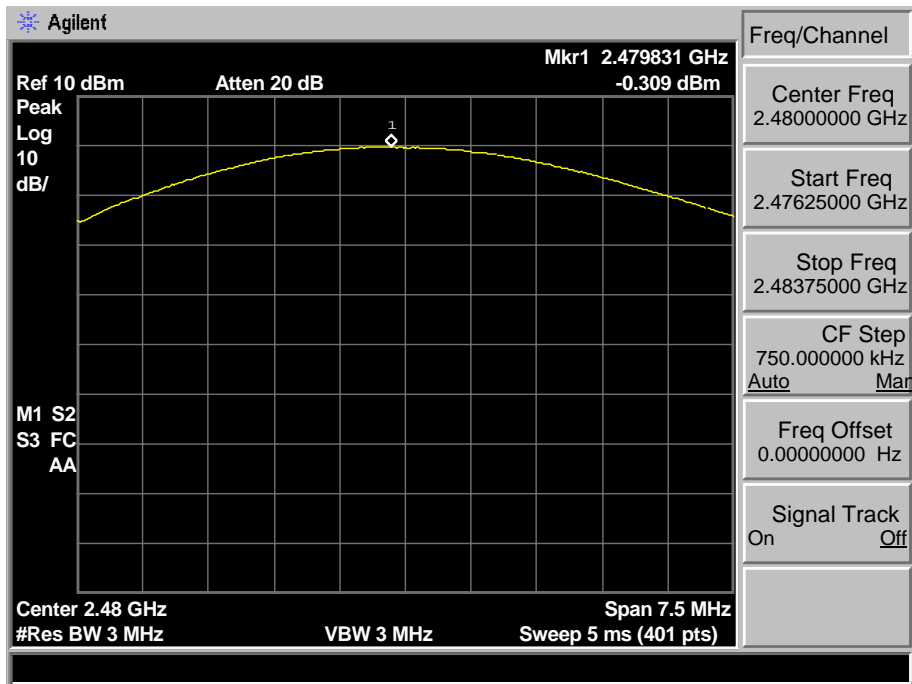
#### Power From Adapter 1 GFSK 2402 MHz



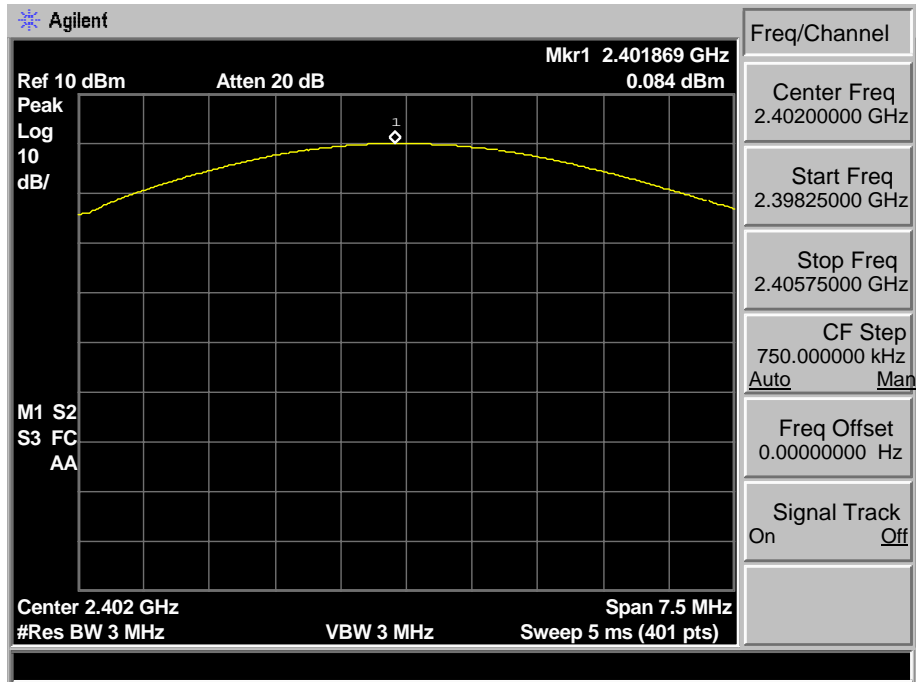
#### GFSK 2441 MHz



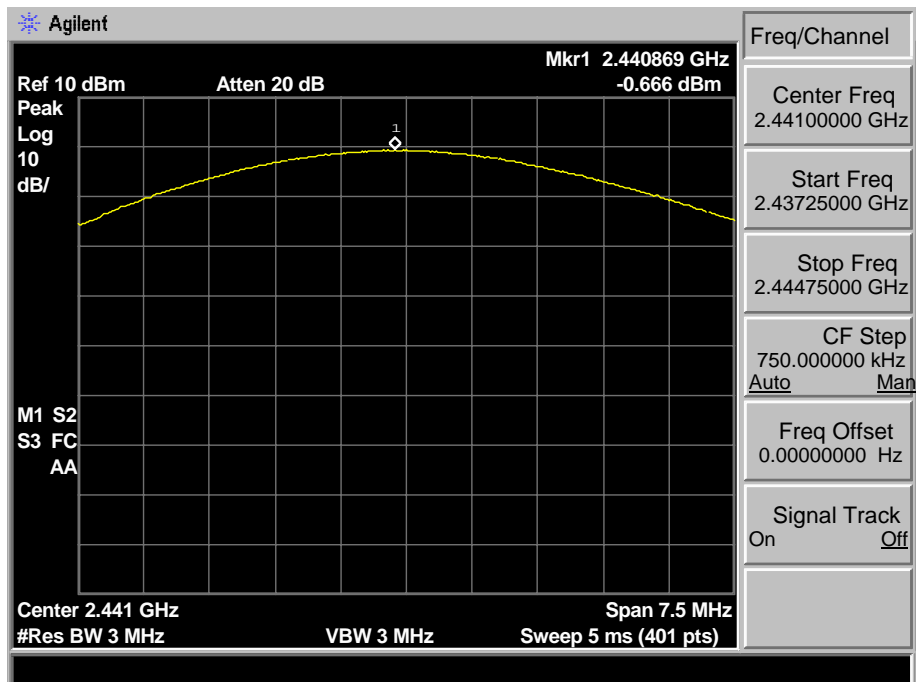
### GFSK 2480 MHz



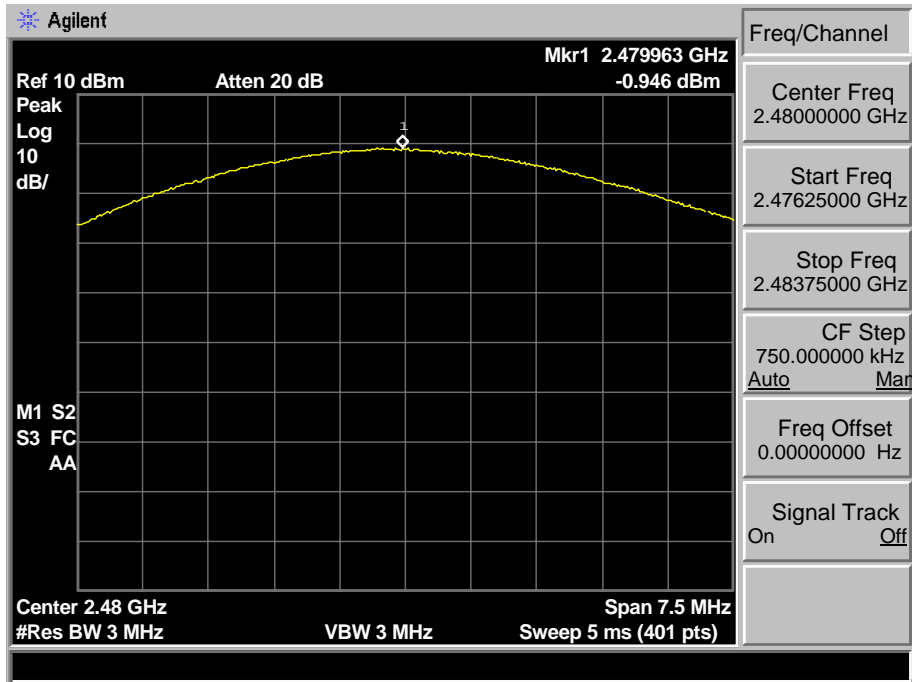
### 8-DPSK 2402MHz



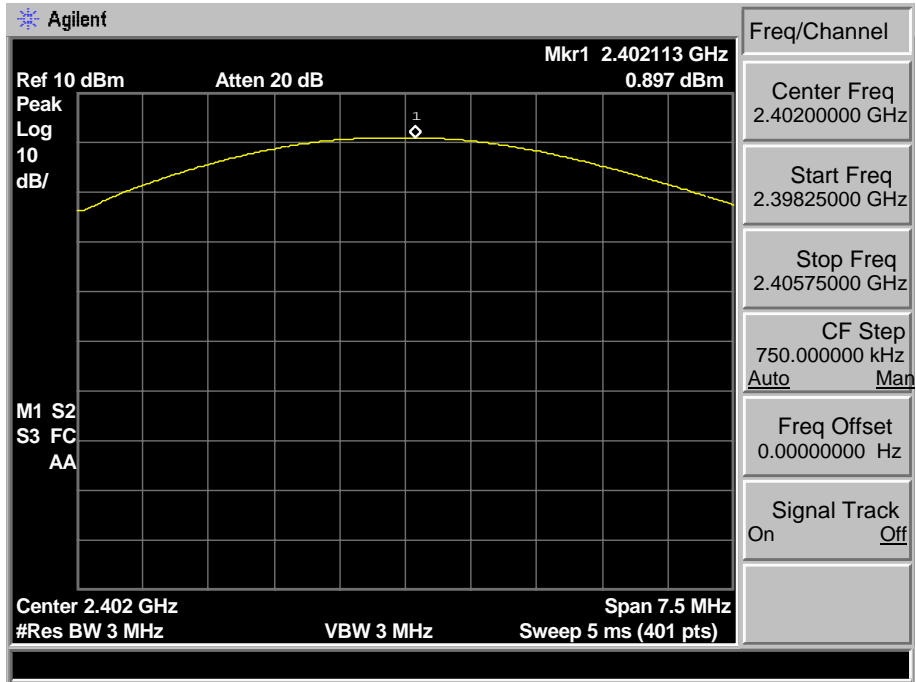
### 8-DPSK 2441MHz



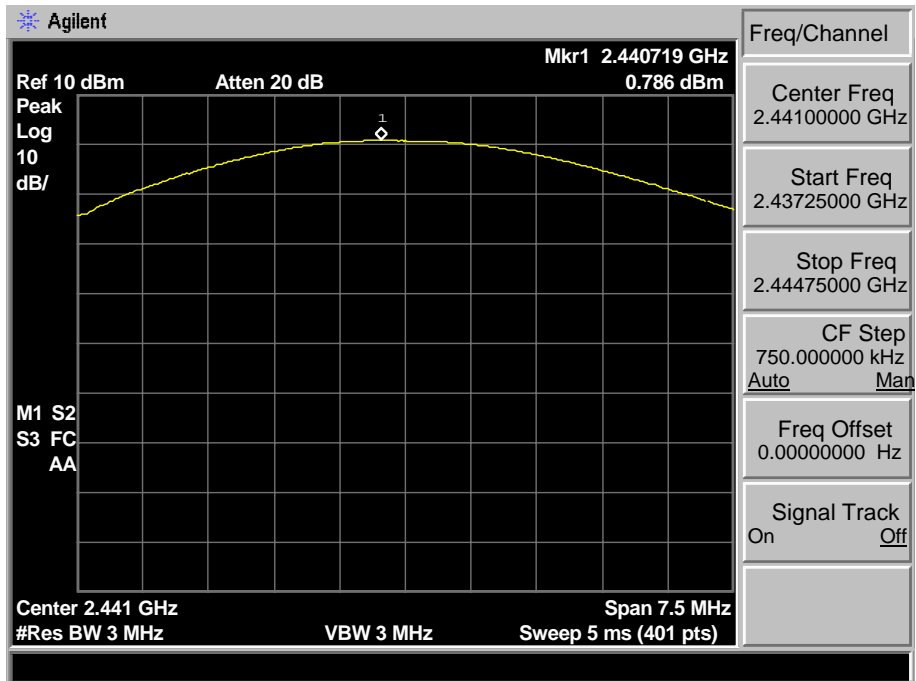
### 8-DPSK 2480MHz



### Power From Adapter 2 GFSK 2402 MHz

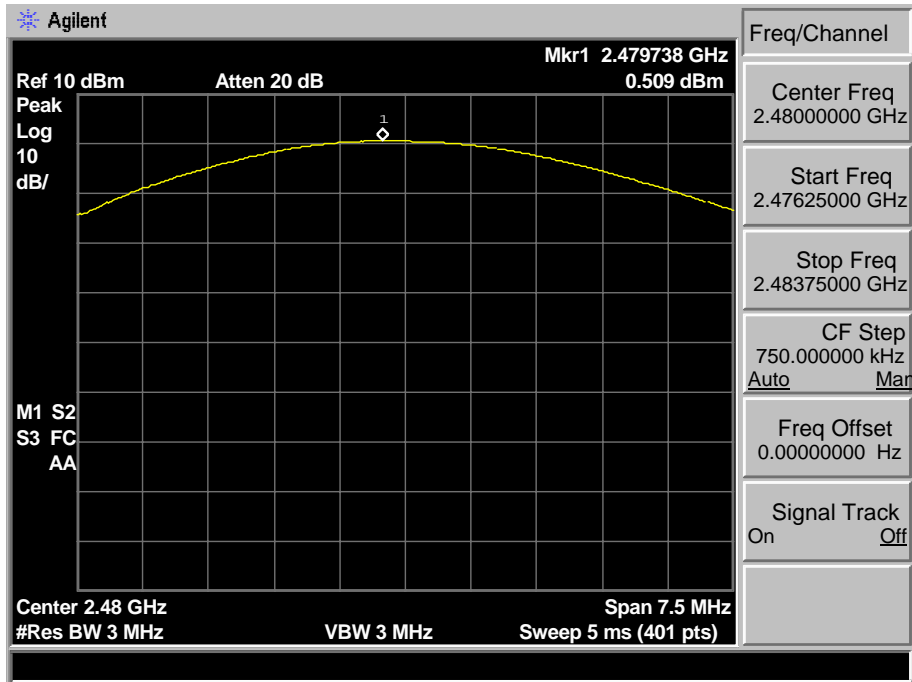


### GFSK 2441 MHz

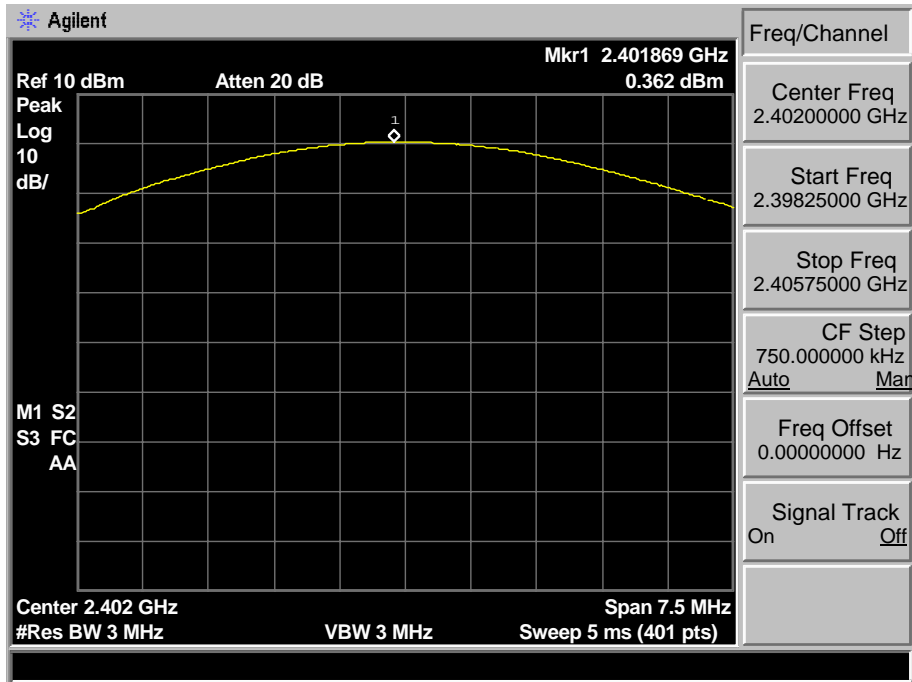




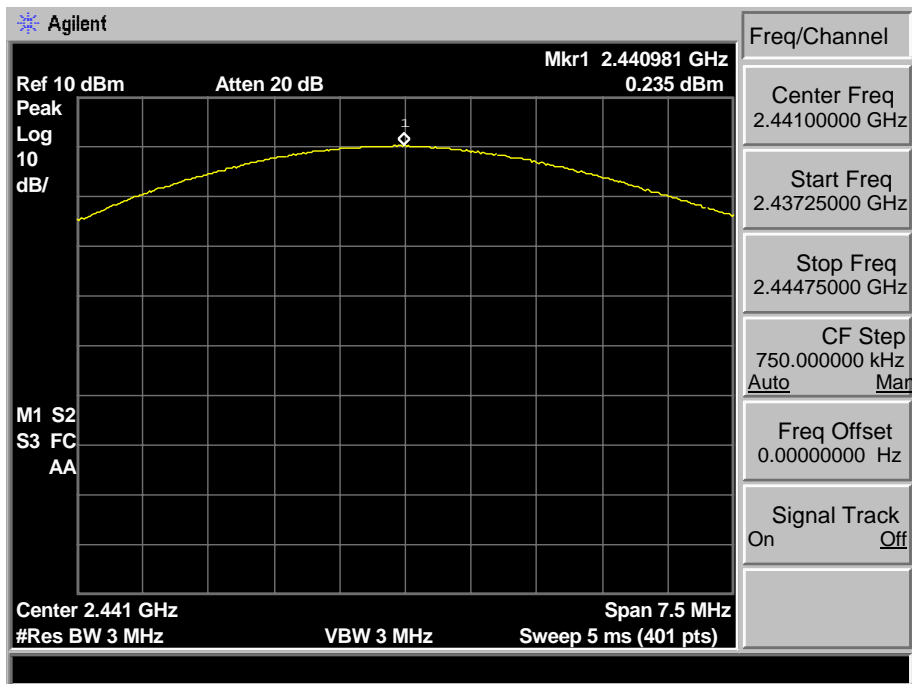
### GFSK 2480 MHz



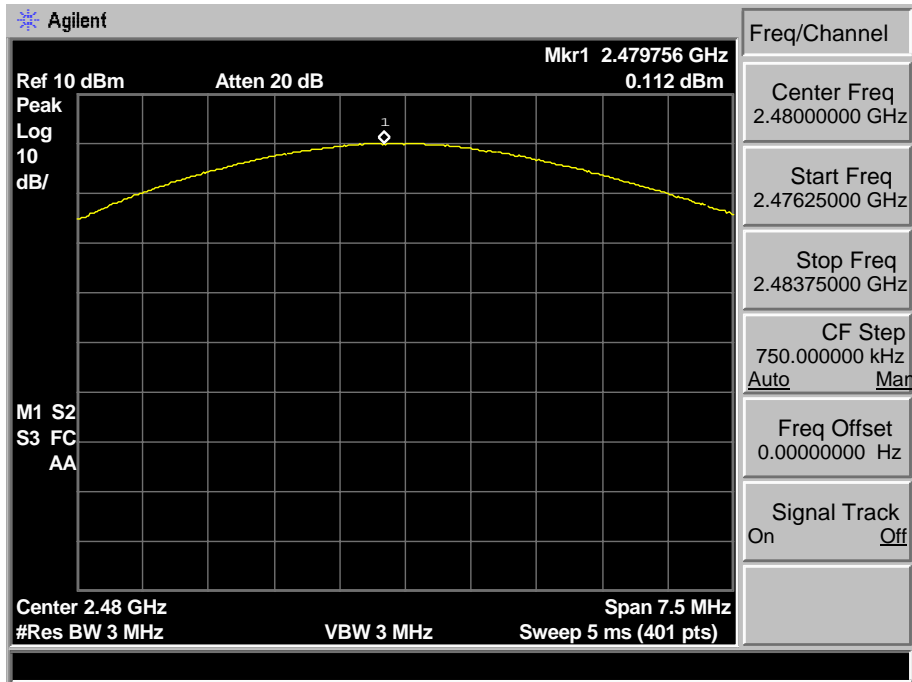
8-DPSK 2402MHz



8-DPSK 2441MHz



### 8-DPSK 2480MHz



## 4. 20 DB BANDWIDTH

### 4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### 4.2. Test Procedure

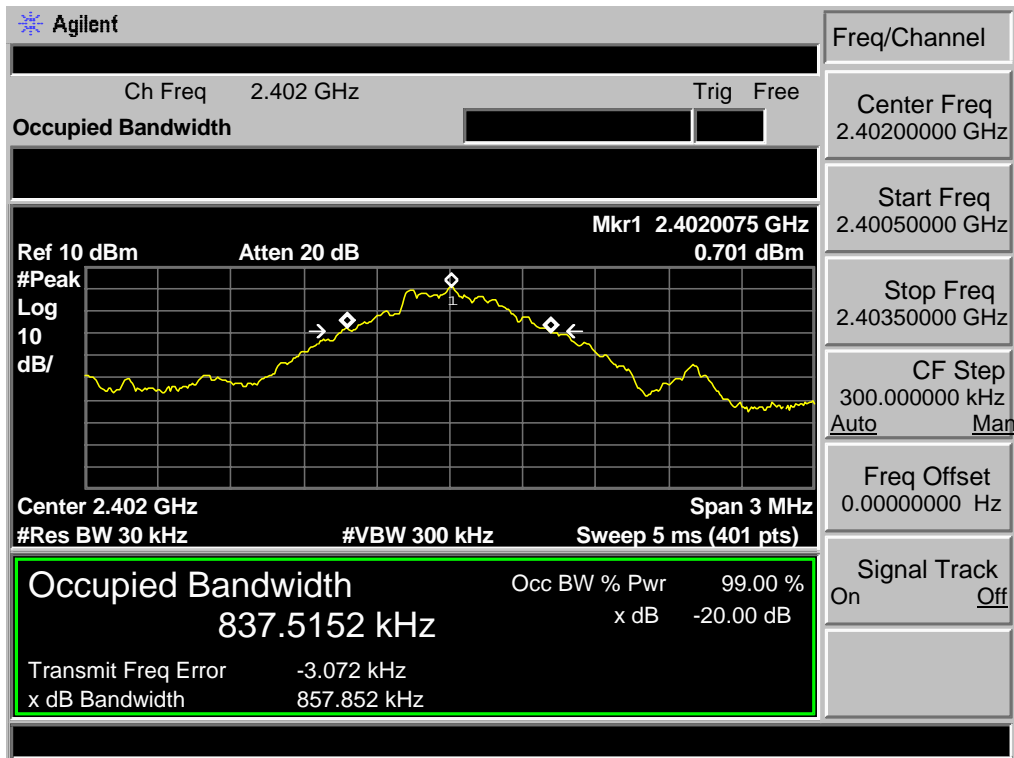
The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 300kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

### 4.3. Test Result

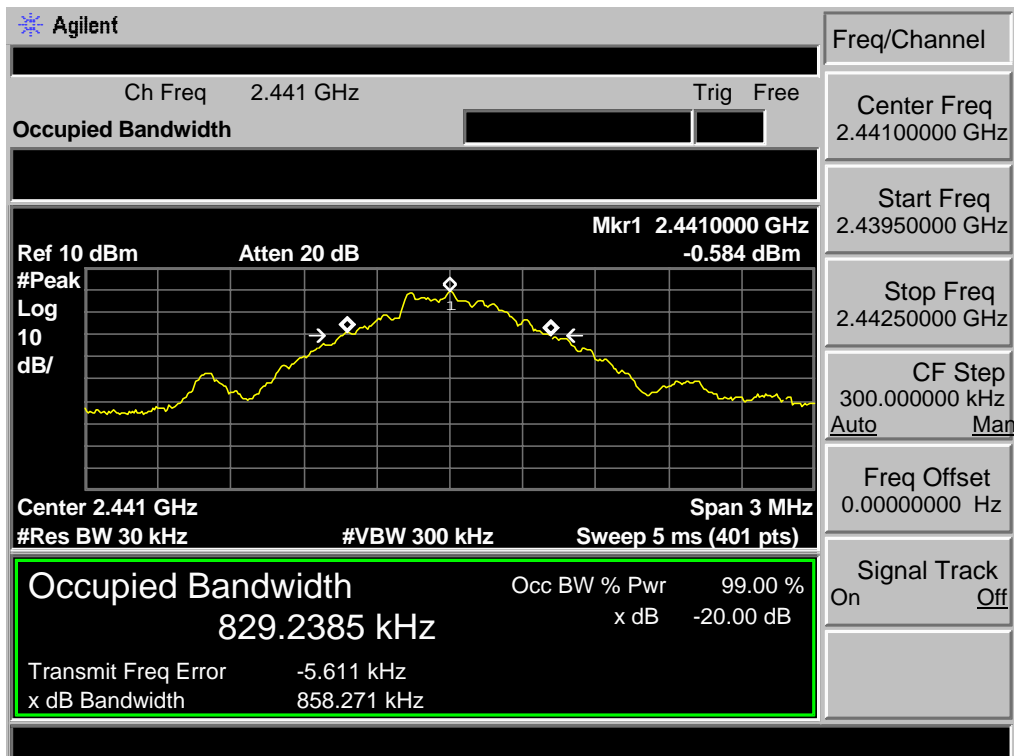
EUT: Portable PA with Bluetooth				
M/N: Expedition Express				
Test date: 2013-04-08		Test site: RF site		Tested by: Tony Tang
Mode	Freq (MHz)	20dB Bandwidth (MHz)	Limit (kHz)	Conclusion
Adapter 1				
GFSK	2402	0.858	/	PASS
	2441	0.858	/	PASS
	2480	0.857	/	PASS
8-DPSK	2402	1.212	/	PASS
	2441	1.212	/	PASS
	2480	1.208	/	PASS
Adapter 2				
GFSK	2402	0.855	/	PASS
	2441	0.860	/	PASS
	2480	0.858	/	PASS
8-DPSK	2402	1.215	/	PASS
	2441	1.222	/	PASS
	2480	1.217	/	PASS

### 4.4. Test Data

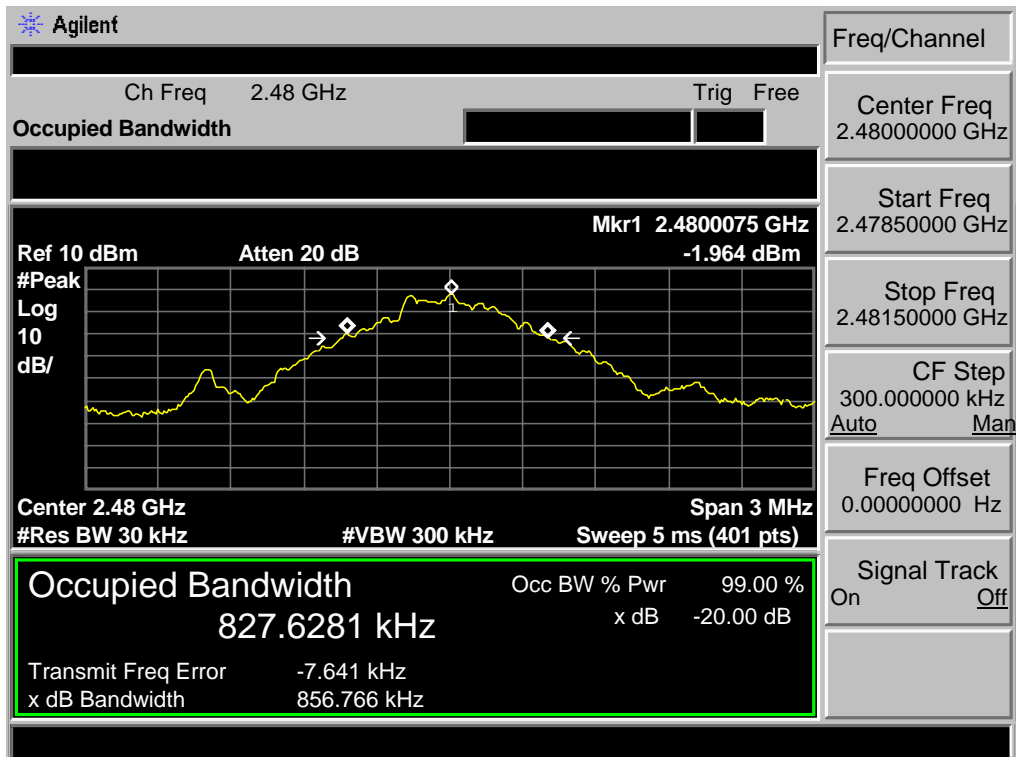
#### Power From Adapter 1 GFSK 2402MHz



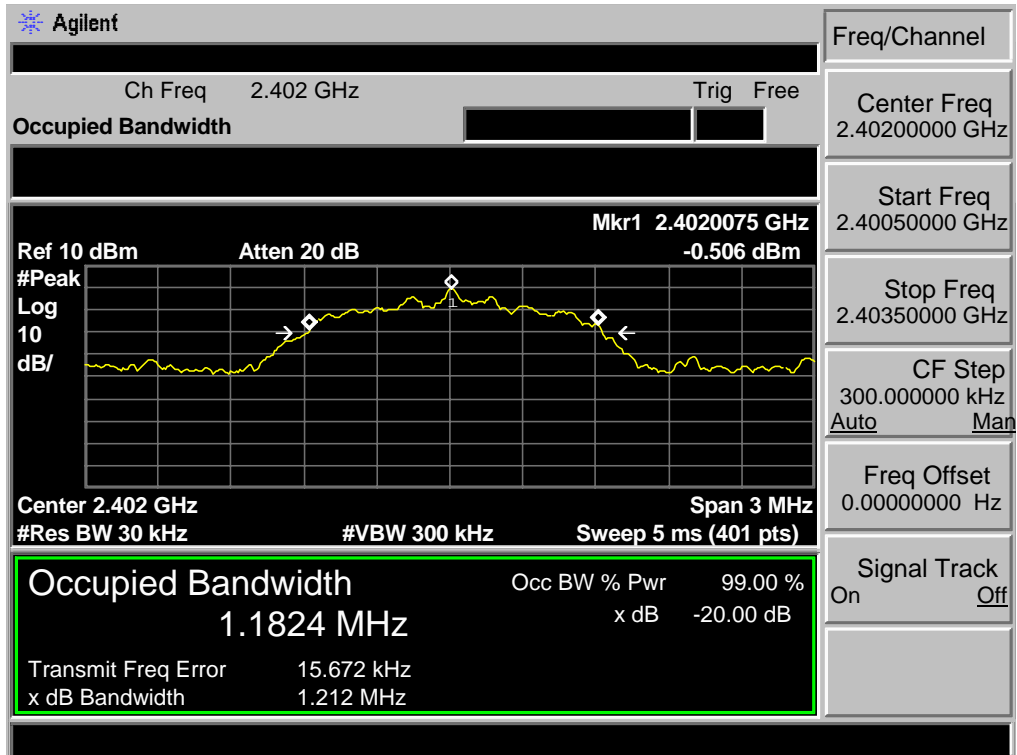
#### GFSK 2441MHz



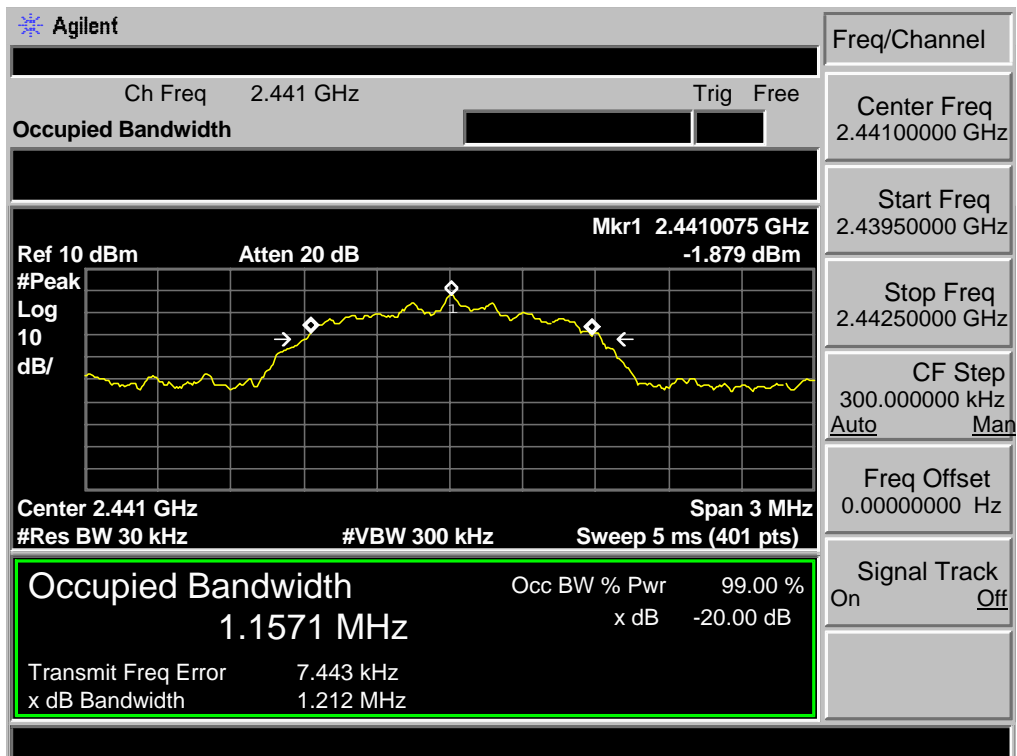
**GFSK 2480MHz**



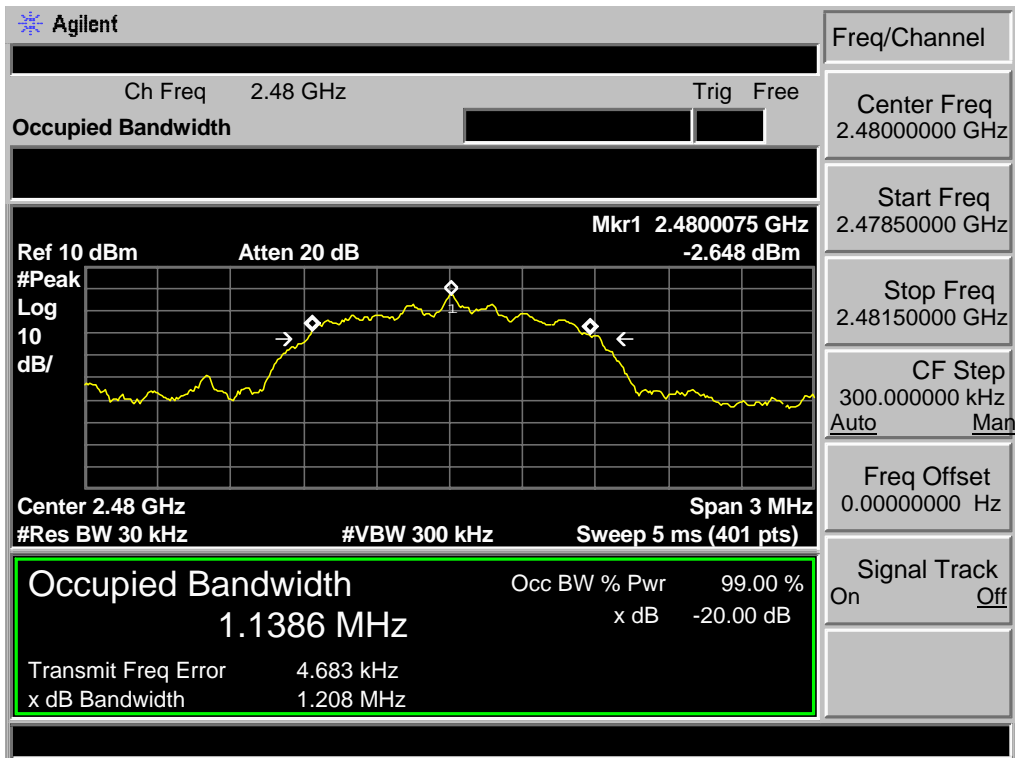
8-DPSK 2402MHz



8-DPSK 2441MHz

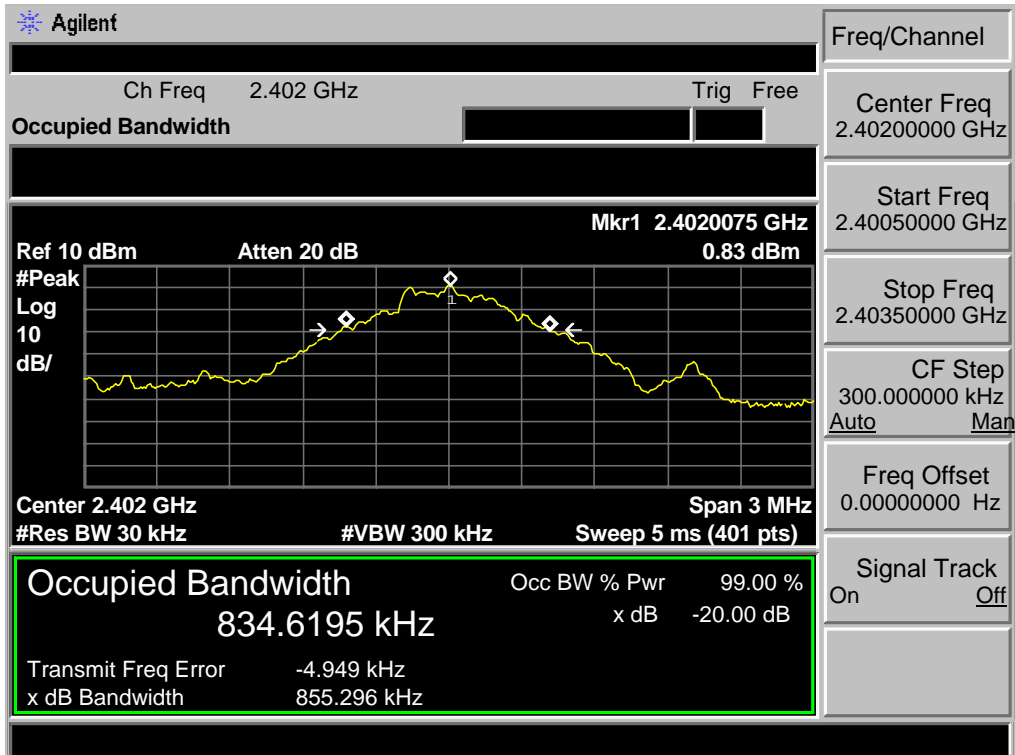


8-DPSK 2480MHz

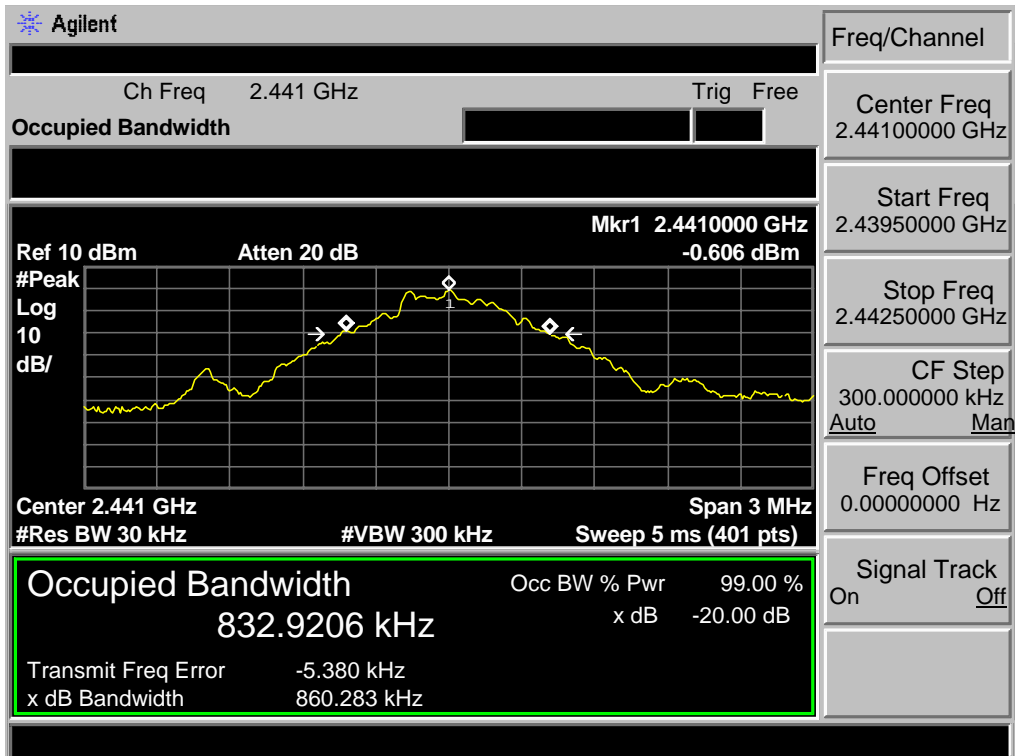




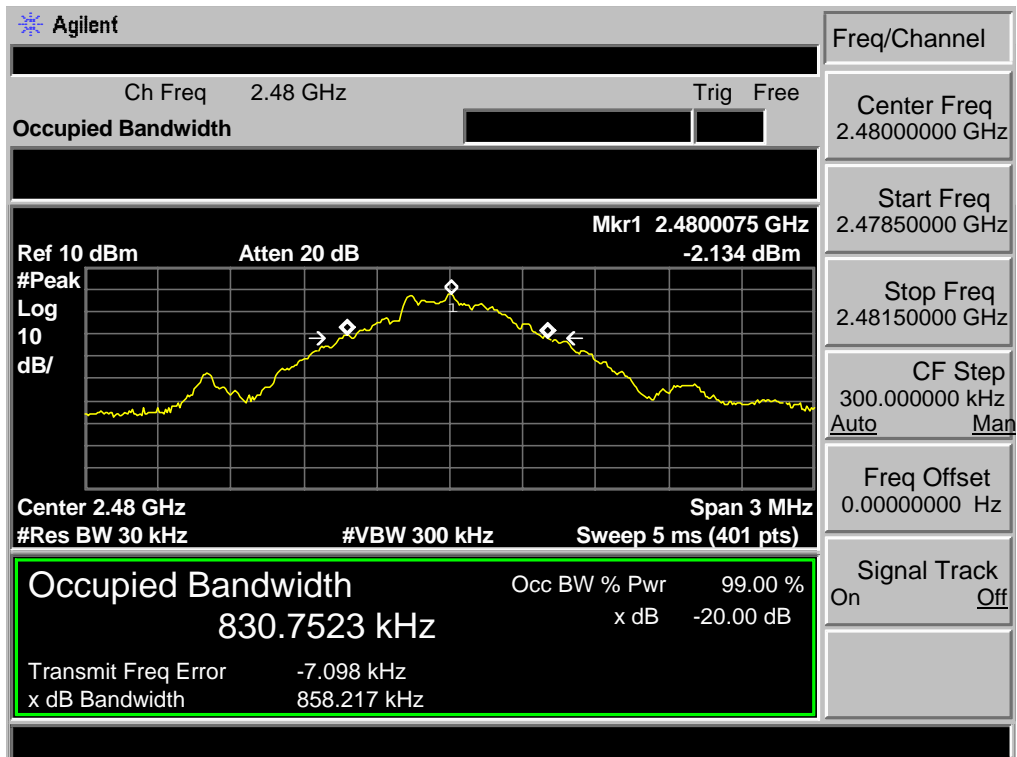
**Power From Adapter 2  
GFSK 2402MHz**



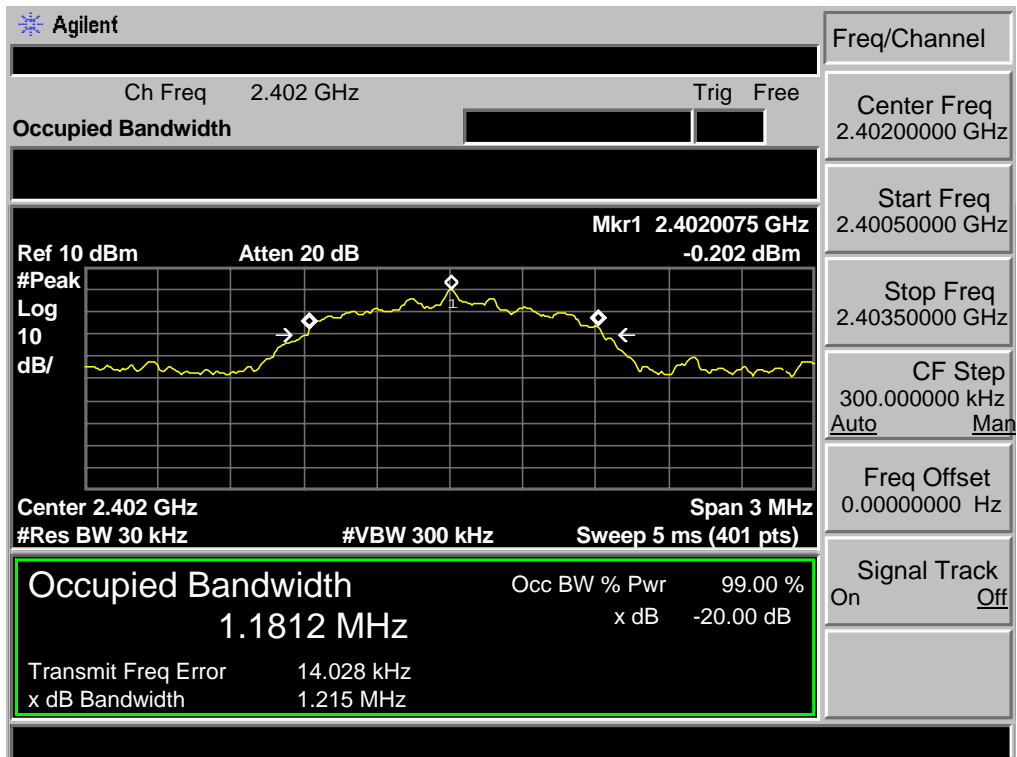
**GFSK 2441MHz**



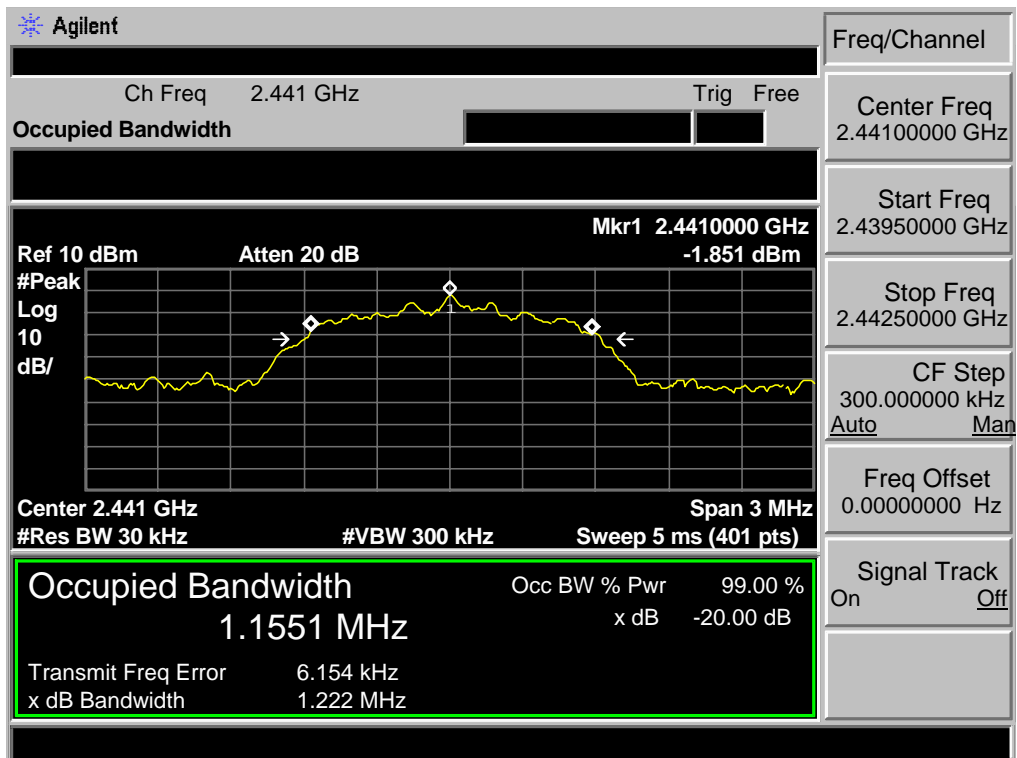
**GFSK 2480MHz**



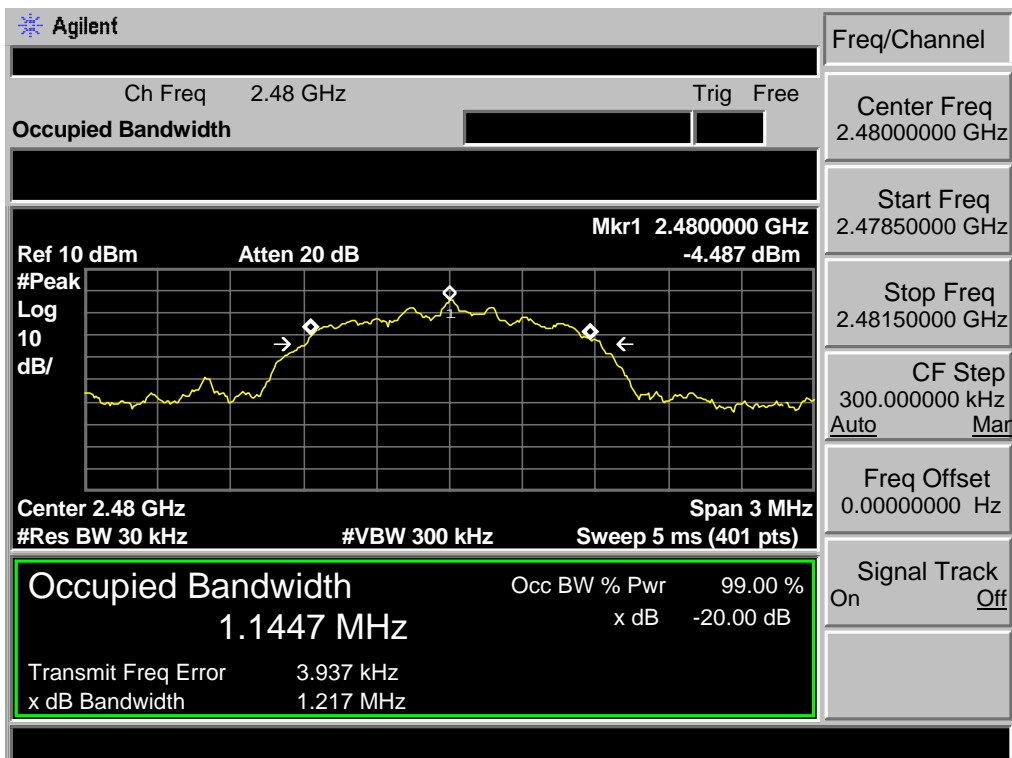
8-DPSK 2402MHz



8-DPSK 2441MHz



8-DPSK 2480MHz



## 5. CARRIER FREQUENCY SEPARATION

### 5.1. Limit

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

### 5.2. Test Procedure

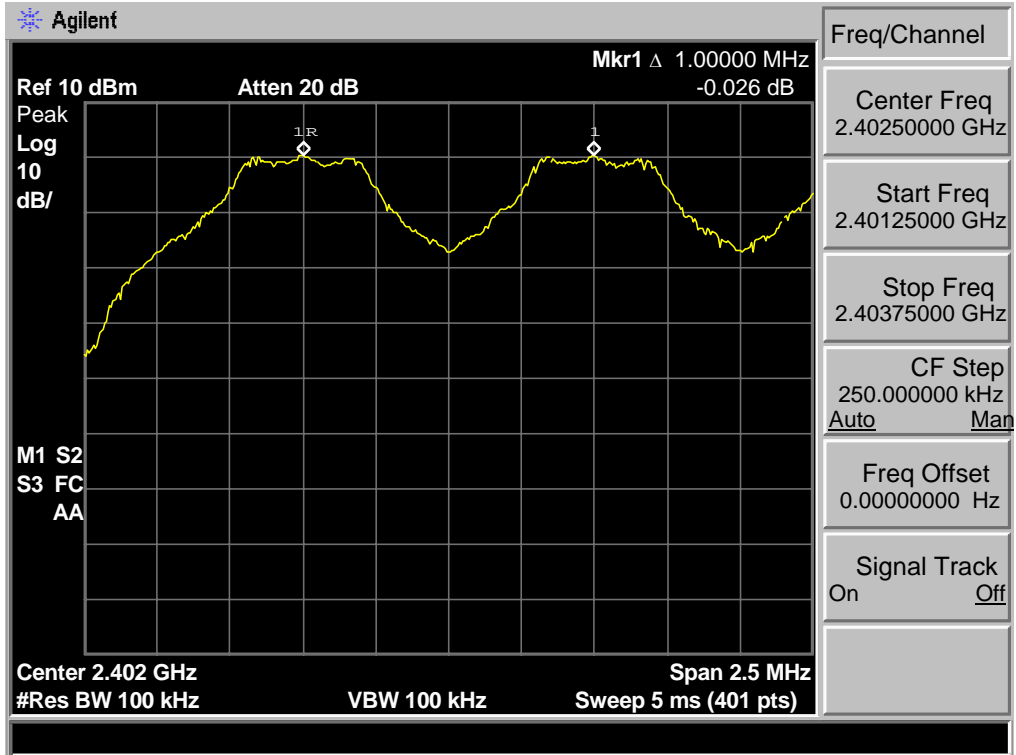
The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW.

### 5.3. Test Result

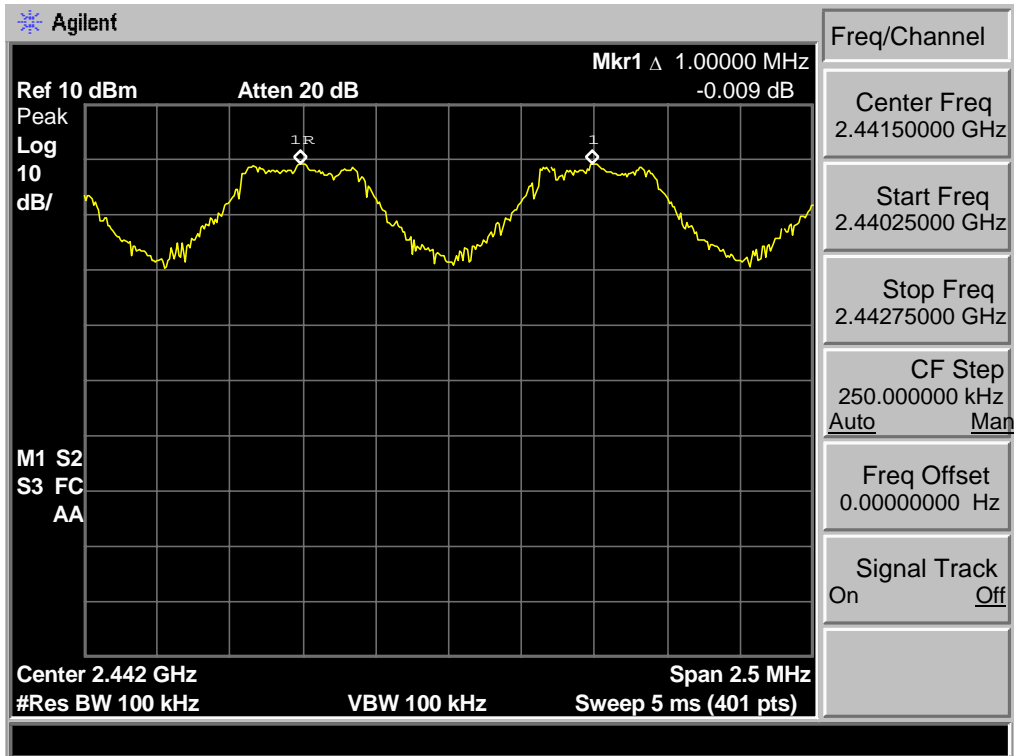
EUT: Portable PA with Bluetooth				
M/N: Expedition Express				
Test date: 2013-04-08		Test site: RF site		Tested by: Tony Tang
Mode	Channel	Channel separation (MHz)	Limit	Conclusion
Adapter 1				
GFSK	Low CH	1.000	0.858 MHz	PASS
	Mid CH	1.000	0.858 MHz	PASS
	High CH	1.018	0.857 MHz	PASS
8-DPSK	Low CH	1.012	> 2/3 of the 20dB Bandwidth or 25[kHz]( whichever is greater)	PASS
	Mid CH	1.000		PASS
	High CH	1.000		PASS
Adapter 2				
GFSK	Low CH	1.006	0.855 MHz	PASS
	Mid CH	1.006	0.860 MHz	PASS
	High CH	1.012	0.858 MHz	PASS
8-DPSK	Low CH	1.000	> 2/3 of the 20dB Bandwidth or 25[kHz]( whichever is greater)	PASS
	Mid CH	1.006		PASS
	High CH	1.000		PASS

### 5.4. Test Data

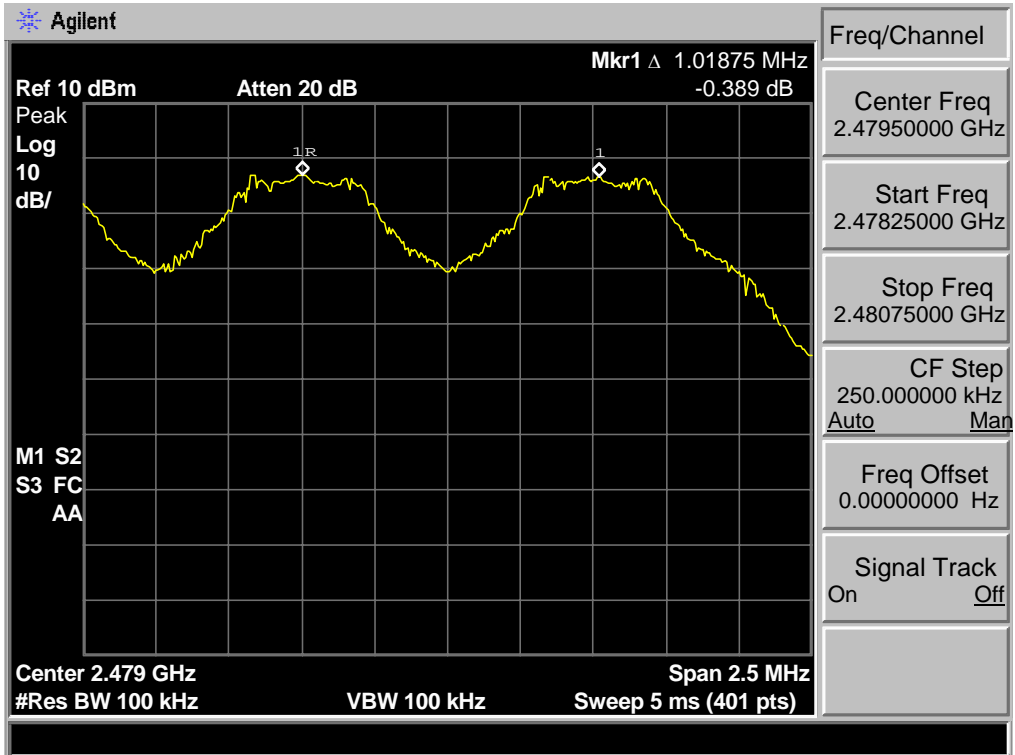
#### Power From Adapter 1 GFSK Low Channel



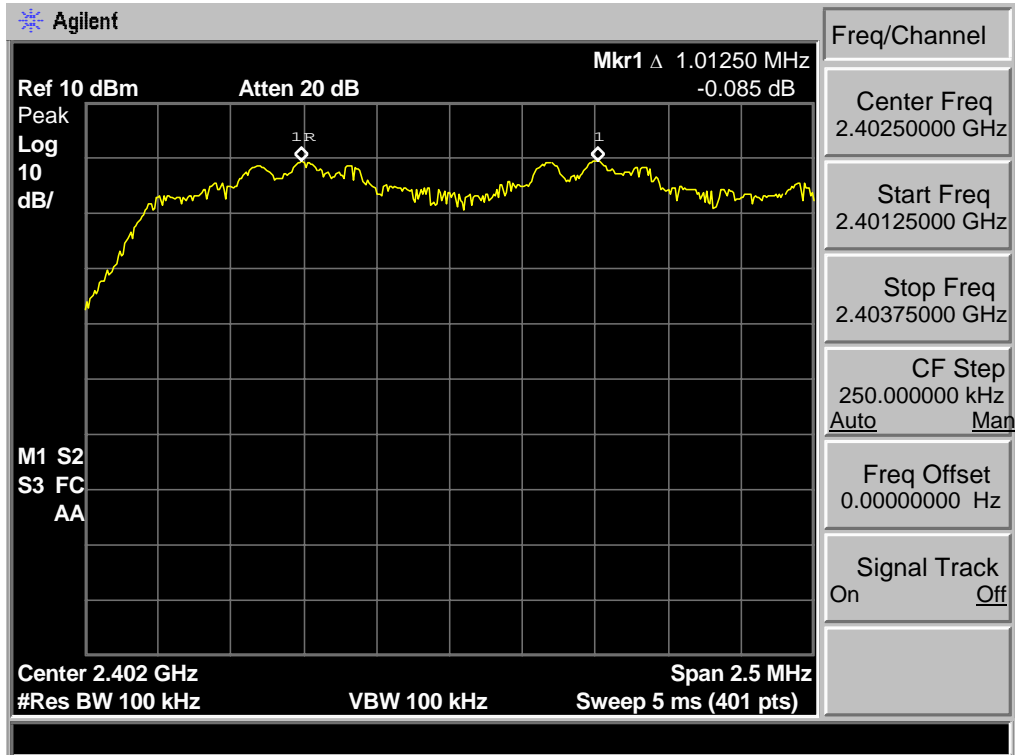
#### Mid Channel



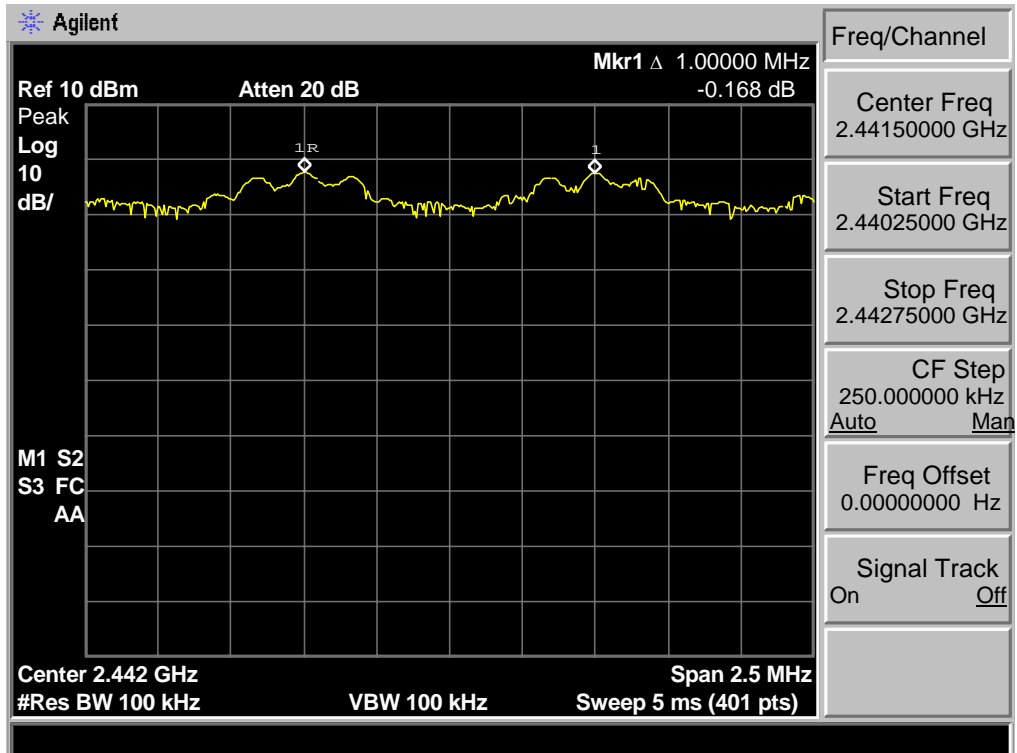
### High Channel



### 8-DPSK Low Channel

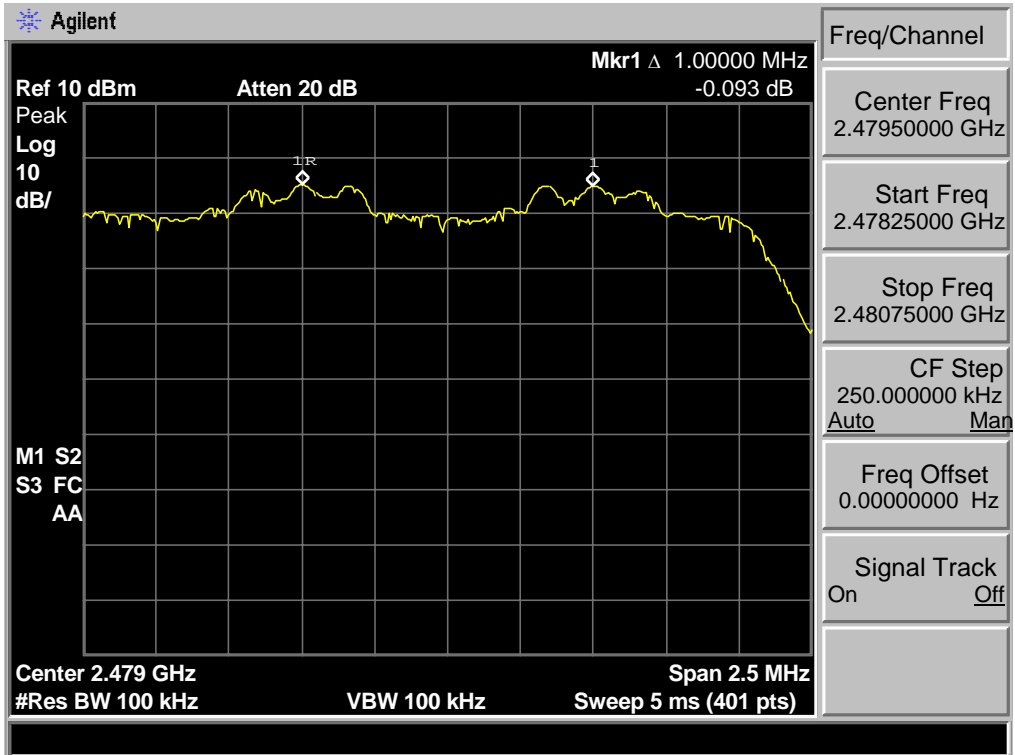


### Mid Channel

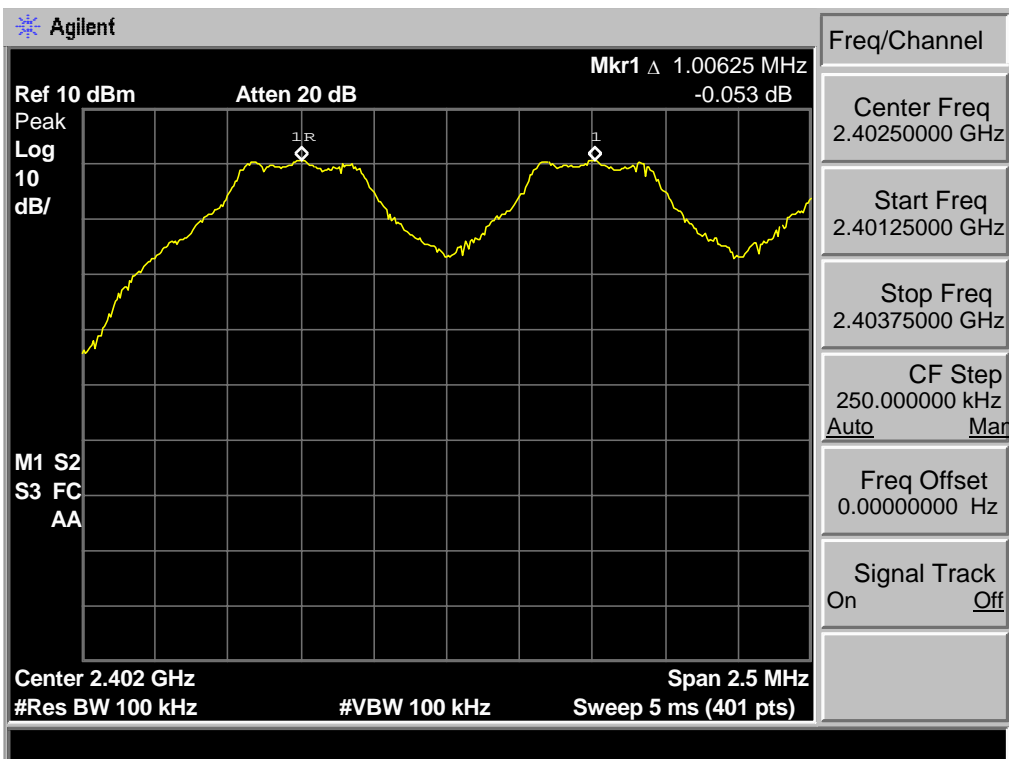




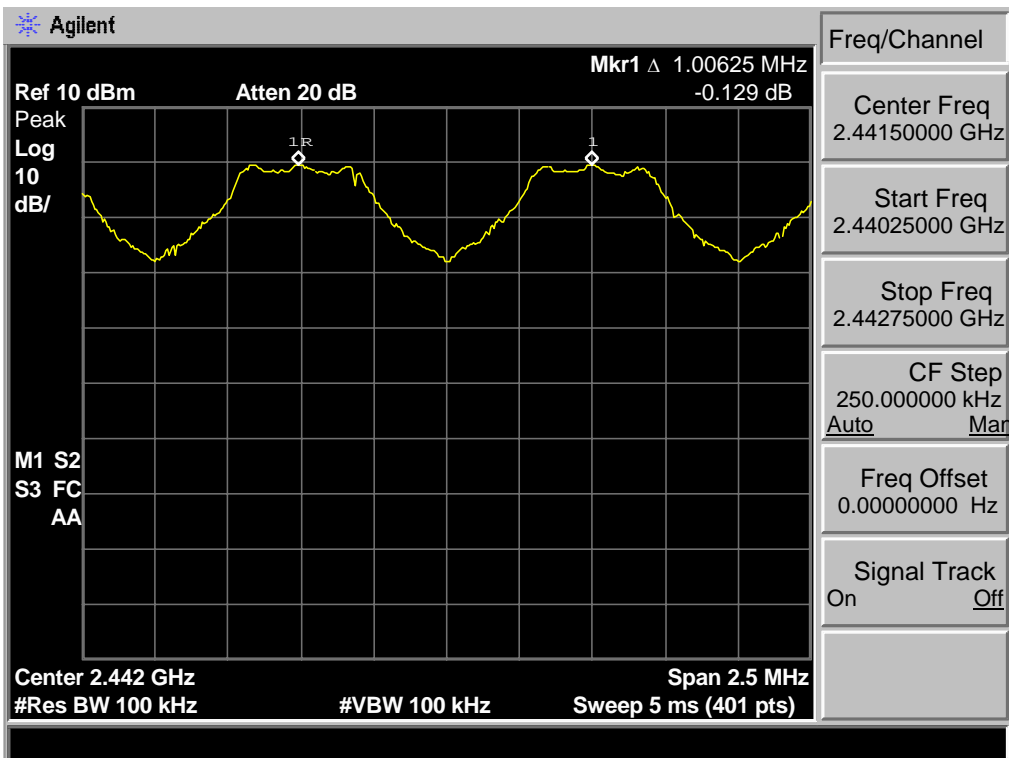
### High Channel



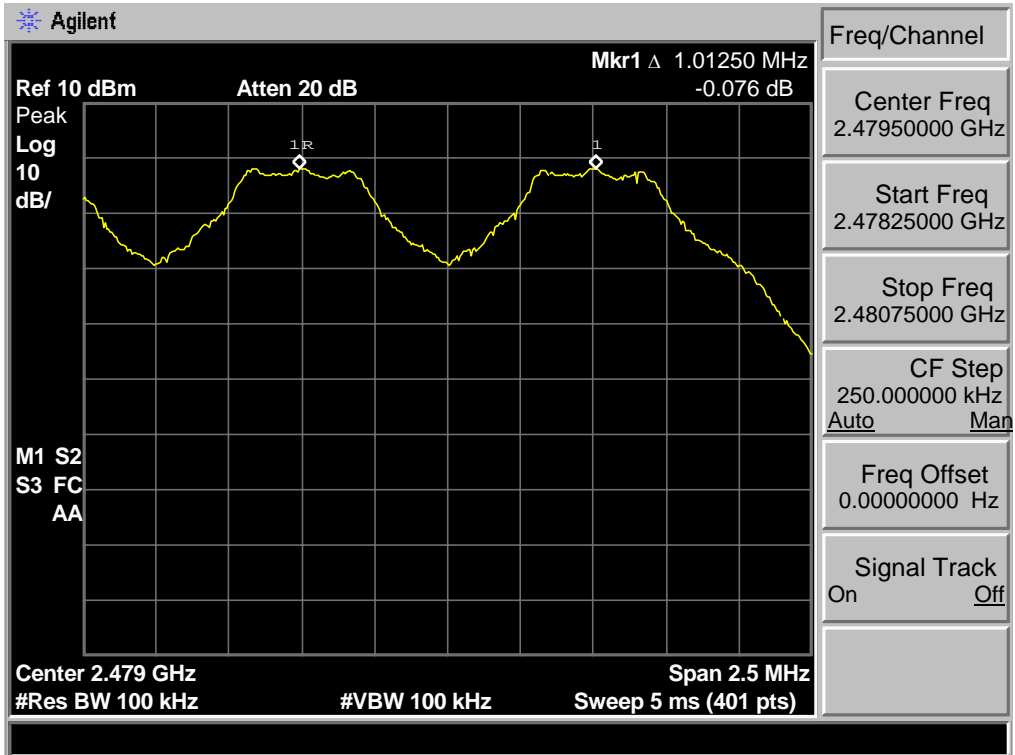
**Power From Adapter 2**  
**GFSK**  
**Low Channel**



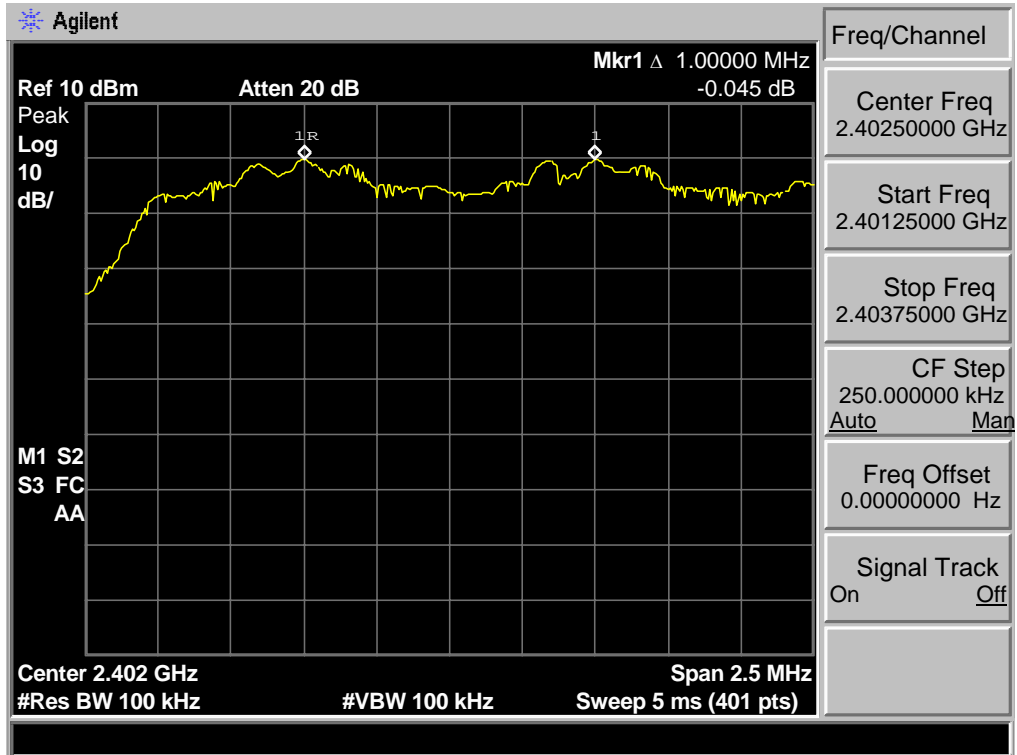
**Mid Channel**



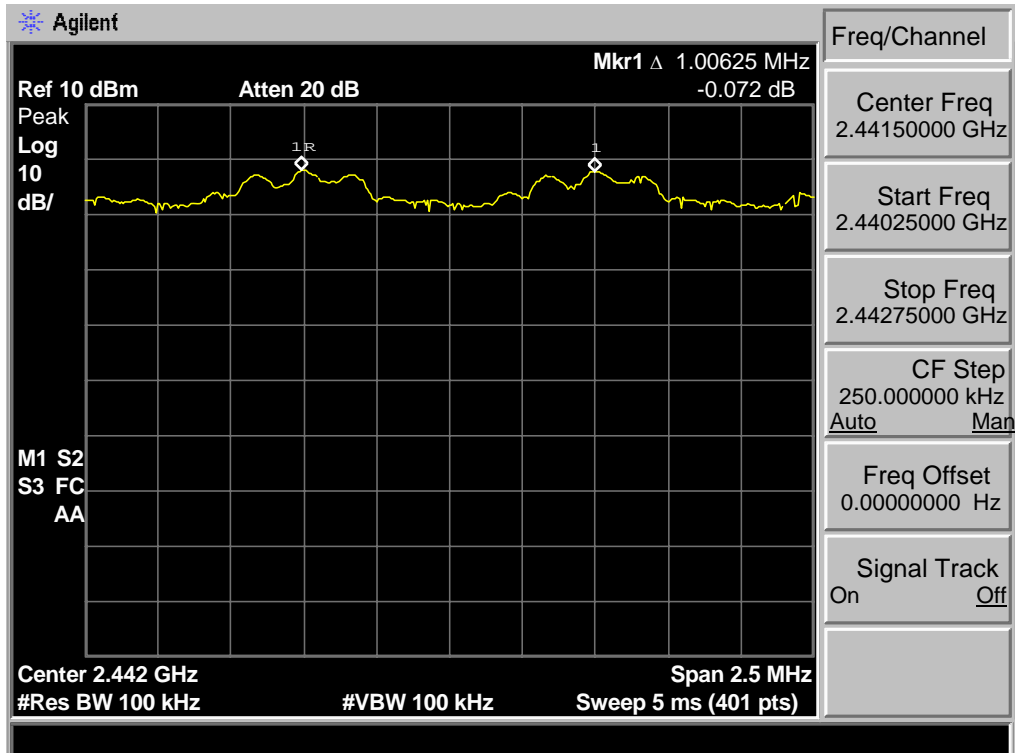
### High Channel



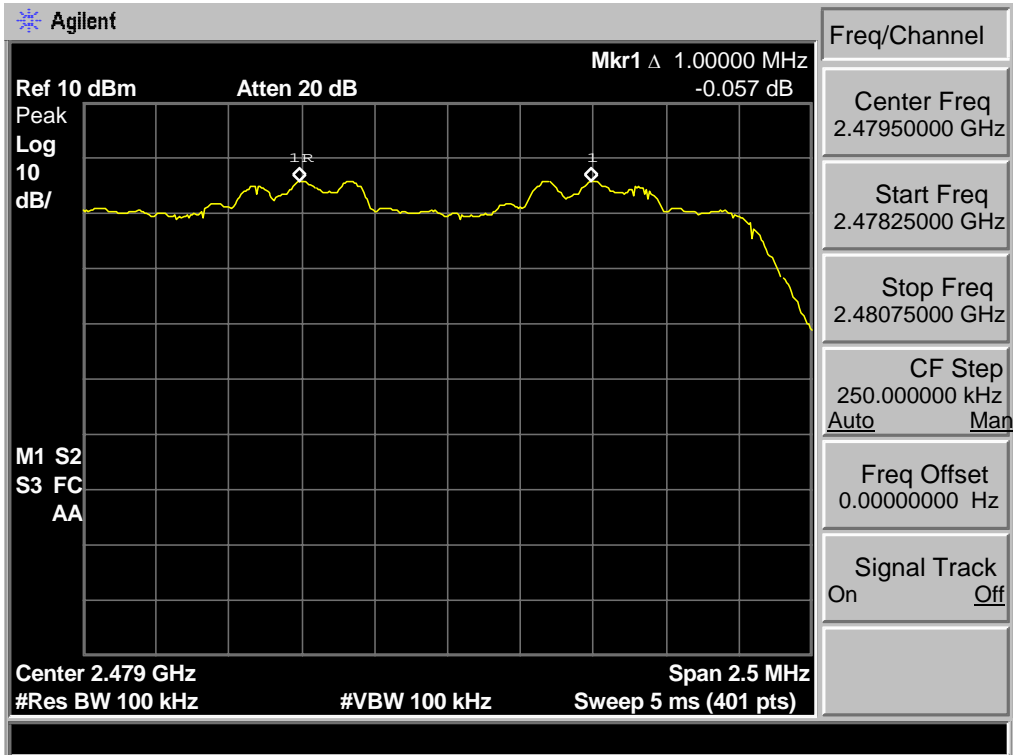
### 8-DPSK Low Channel



### Mid Channel



### High Channel



## 6. NUMBER OF HOPPING CHANNEL

### 6.1. Limit

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

### 6.2. Test Procedure

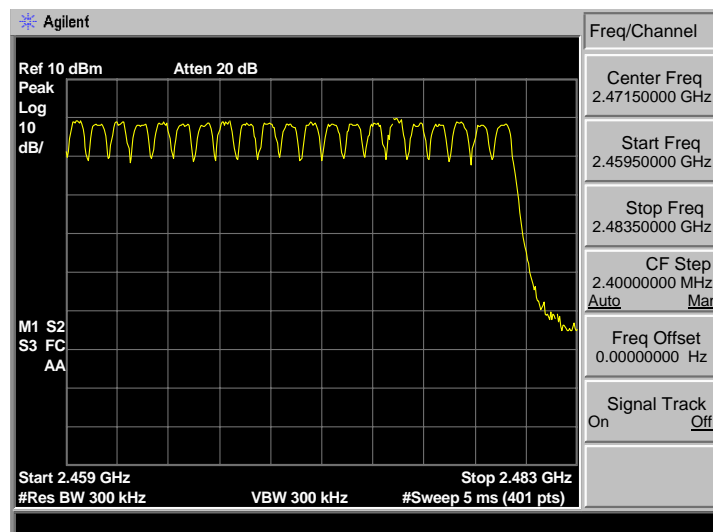
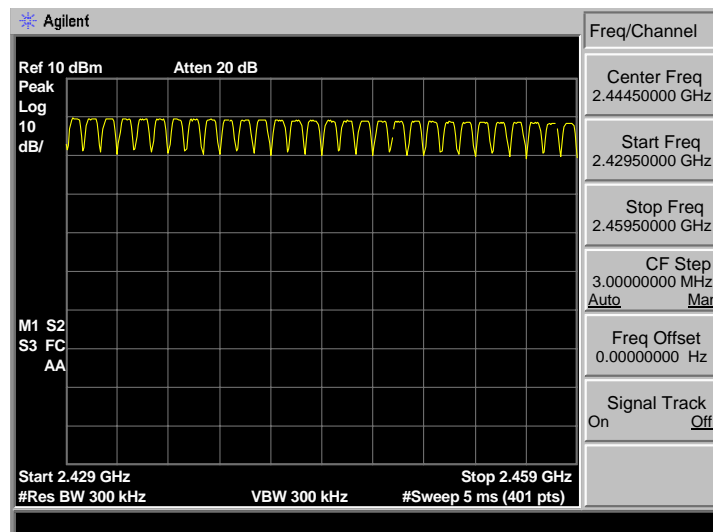
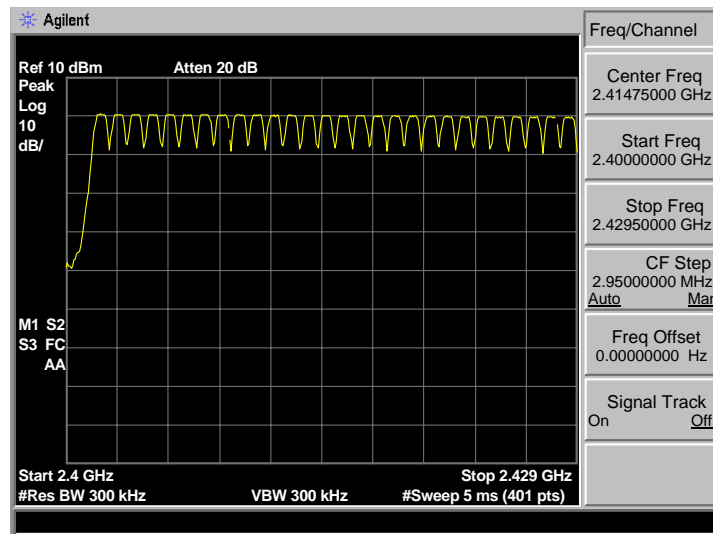
The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 300kHz VBW.

### 6.3. Test Result

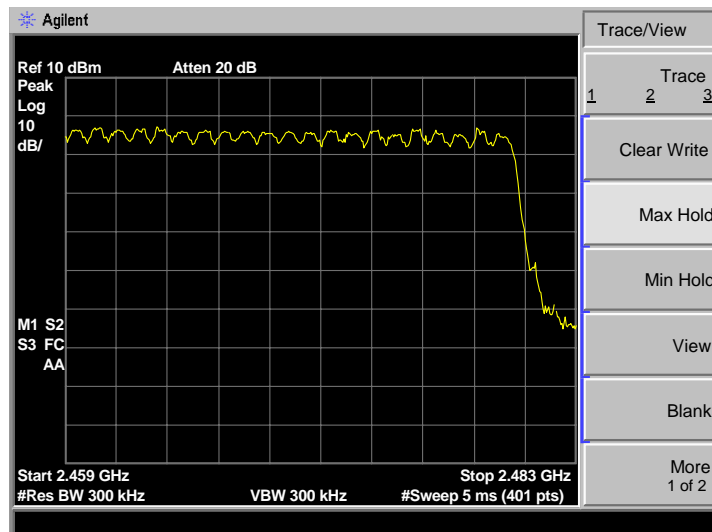
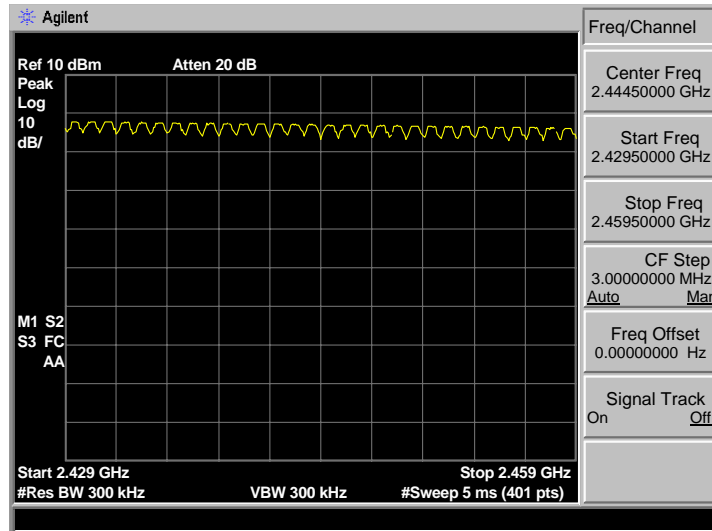
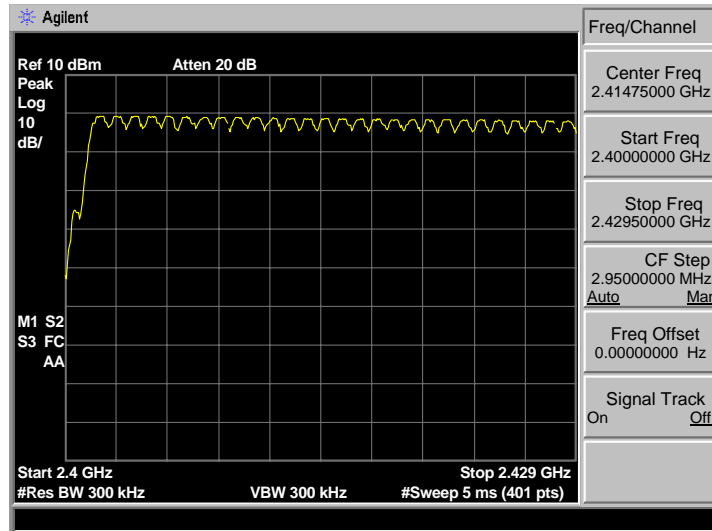
EUT: Portable PA with Bluetooth			
M/N: Expedition Express			
Test date: 2013-04-08		Test site: RF site	Tested by: Tony.Tang
Mode	Number of hopping channel		Conclusion
Adapter 1			
GFSK	79	>15	PASS
8-DPSK	79	>15	PASS
Adapter 2			
GFSK	79	>15	PASS
8-DPSK	79	>15	PASS

## 6.4. Test Data

### Power From Adapter 1 GFSK

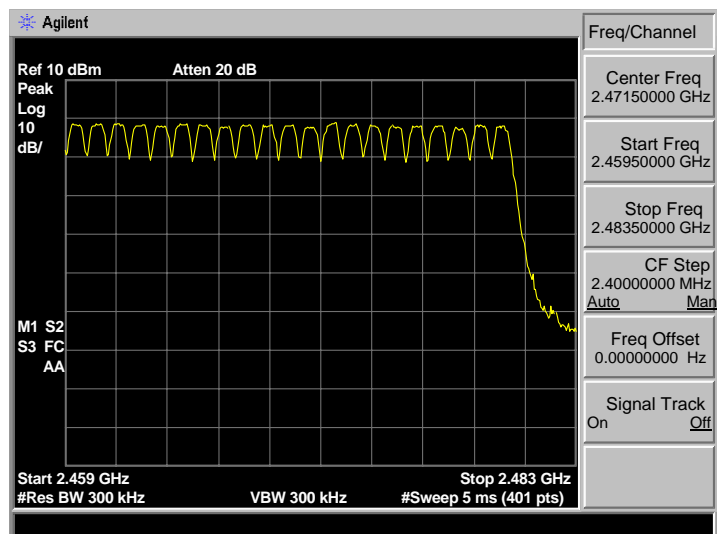
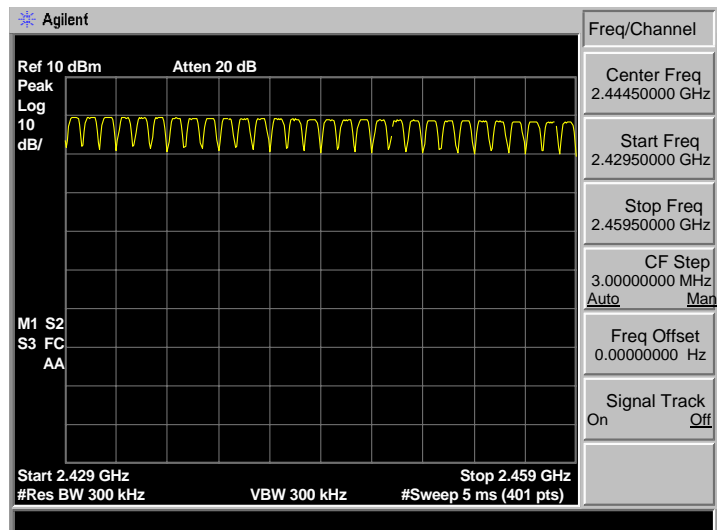
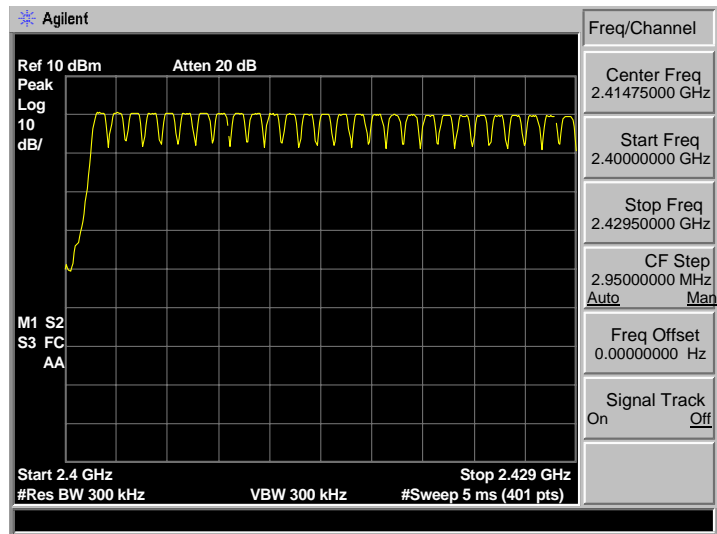


### 8-DPSK

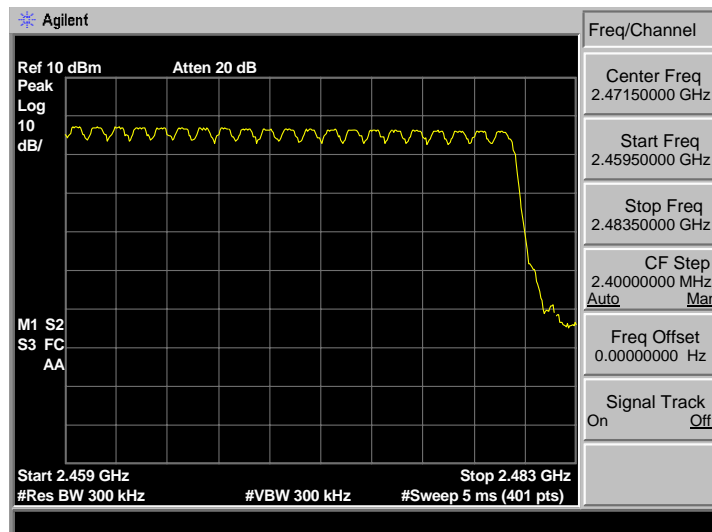
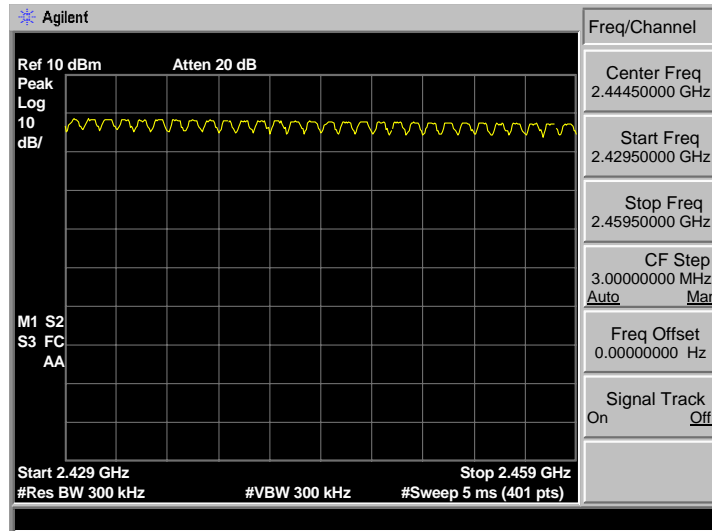
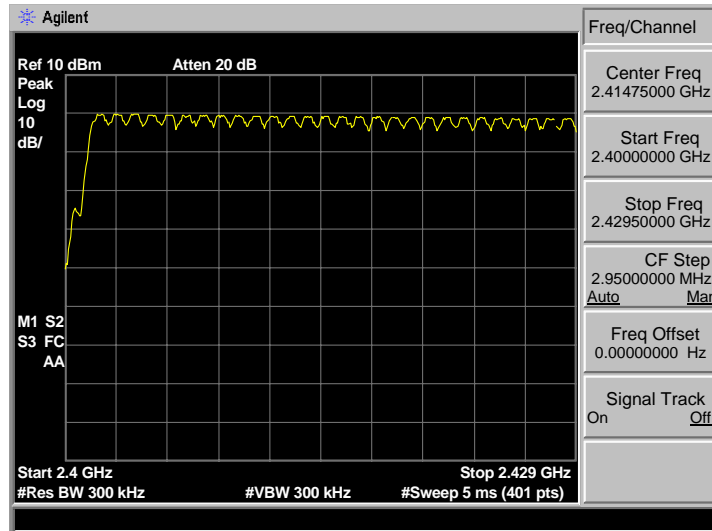




## Power From Adapter 2 GFSK



### 8-DPSK



## 7. DWELL TIME

### 7.1. Limit

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.

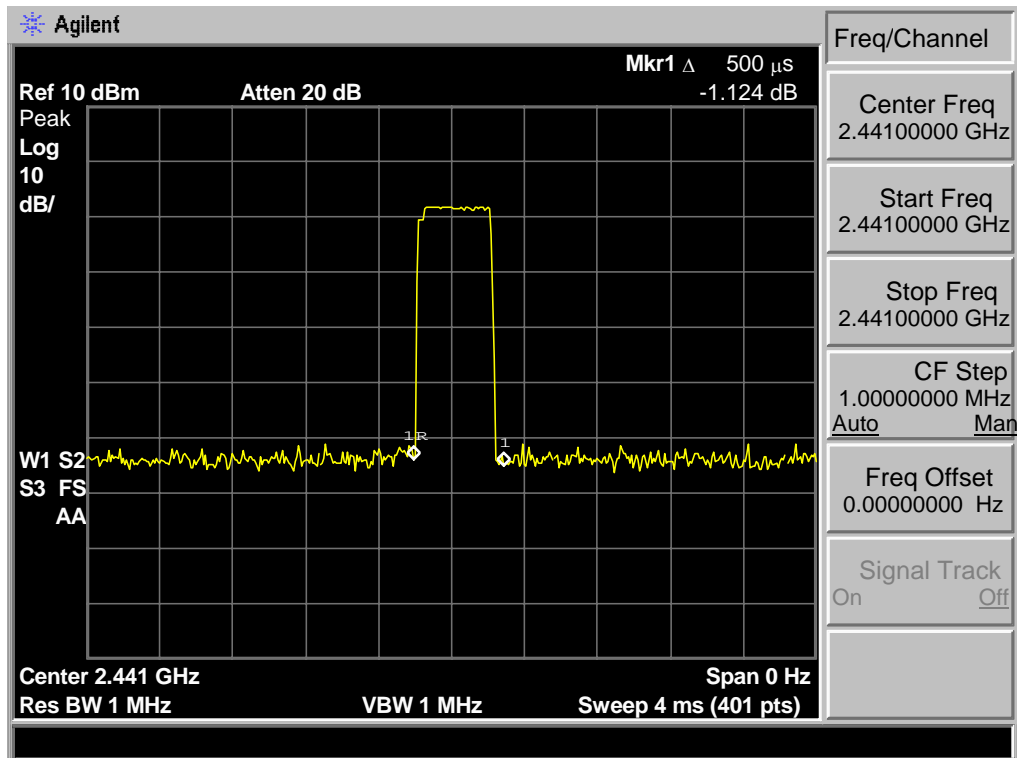
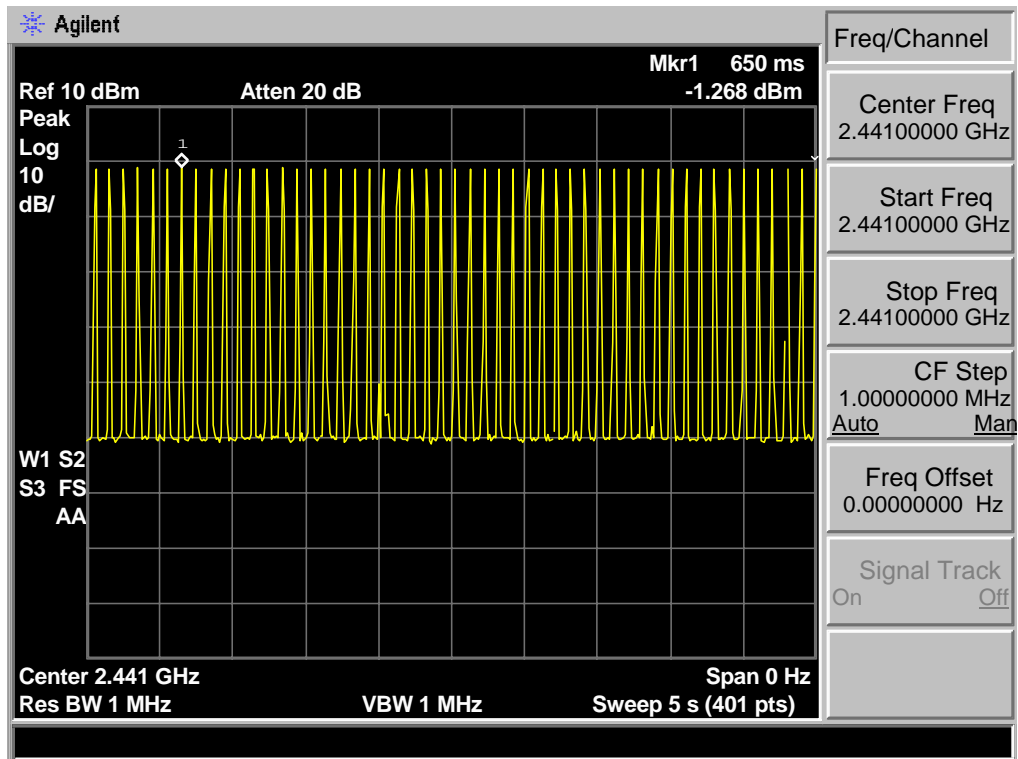
### 7.2. Test Result

EUT: Portable PA with Bluetooth			
M/N: Expedition Express			
Test date: 2013-04-08		Test site: RF site	Tested by: Tony Tang
Mode	Dwell time	Limit	Conclusion
Adapter 1			
GFSK DH1	158.00	<400ms	PASS
GFSK DH3	306.52	<400ms	PASS
GFSK DH5	330.92	<400ms	PASS
8-DPSK DH1	180.12	<400ms	PASS
8-DPSK DH3	285.98	<400ms	PASS
8-DPSK DH5	328.77	<400ms	PASS
Adapter 2			
Mode	Dwell time	Limit	Conclusion
GFSK DH1	180.12	<400ms	PASS
GFSK DH3	287.56	<400ms	PASS
GFSK DH5	320.17	<400ms	PASS
8-DPSK DH1	170.64	<400ms	PASS
8-DPSK DH3	293.88	<400ms	PASS
8-DPSK DH5	326.62	<400ms	PASS

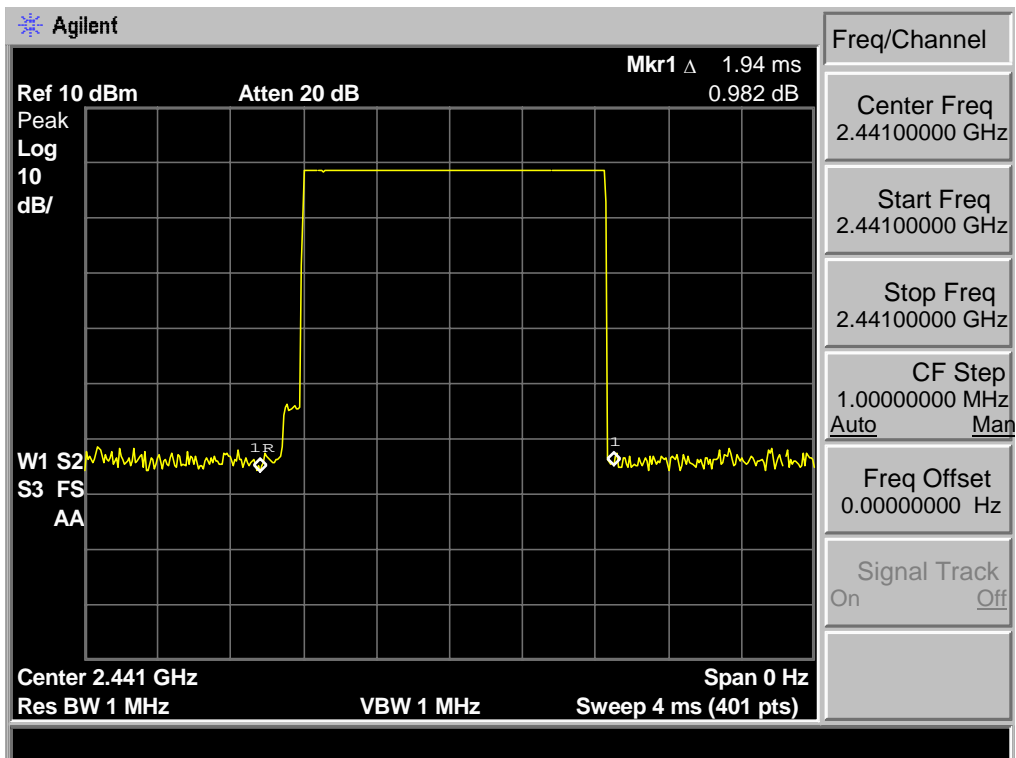
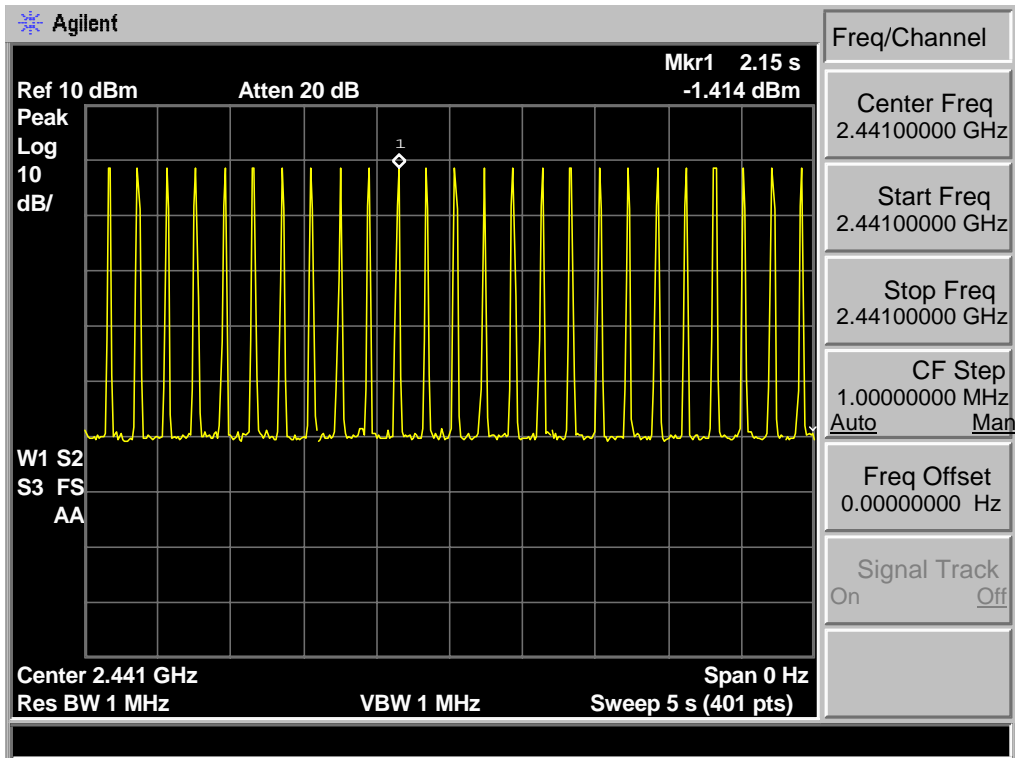
### 7.3. Test Data

#### Power From Adapter 1

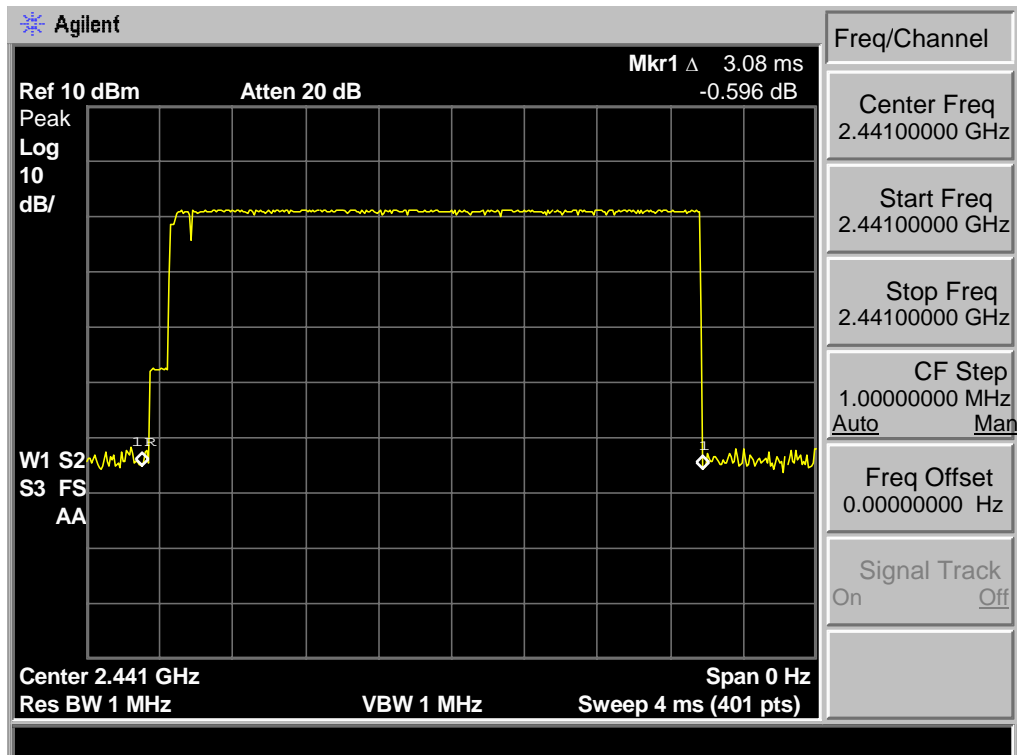
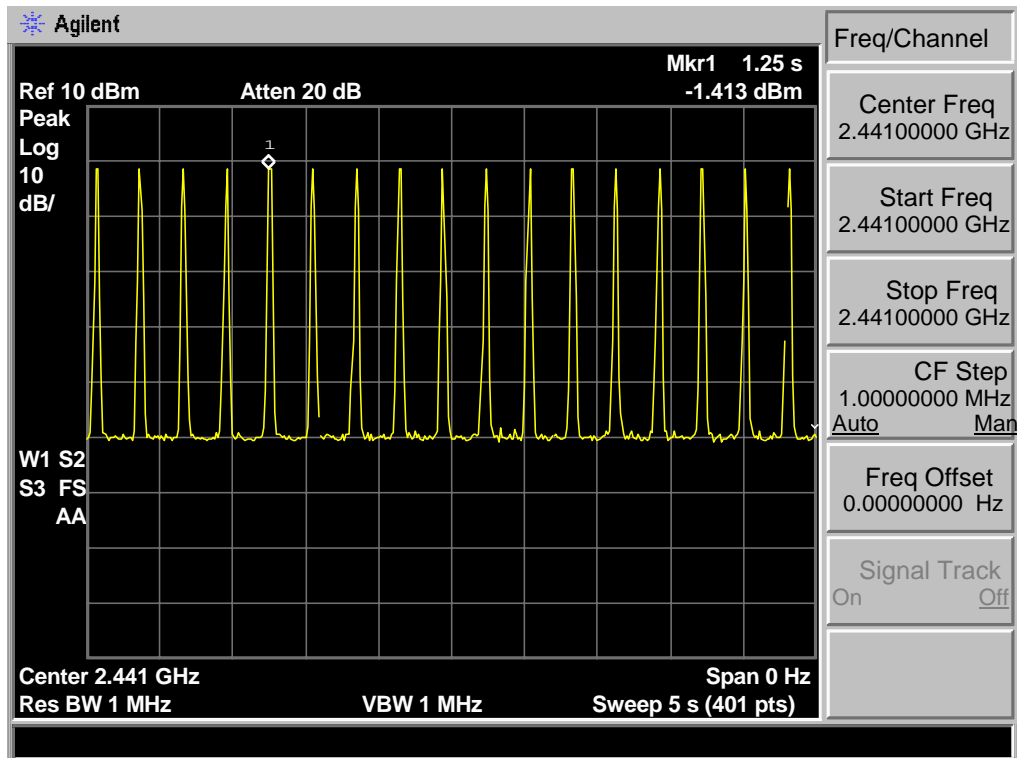
**GFSK DH1 :  $50\text{hop}/5\text{s} * 0.4 * 79 * 0.50\text{ms} = 158.00$**



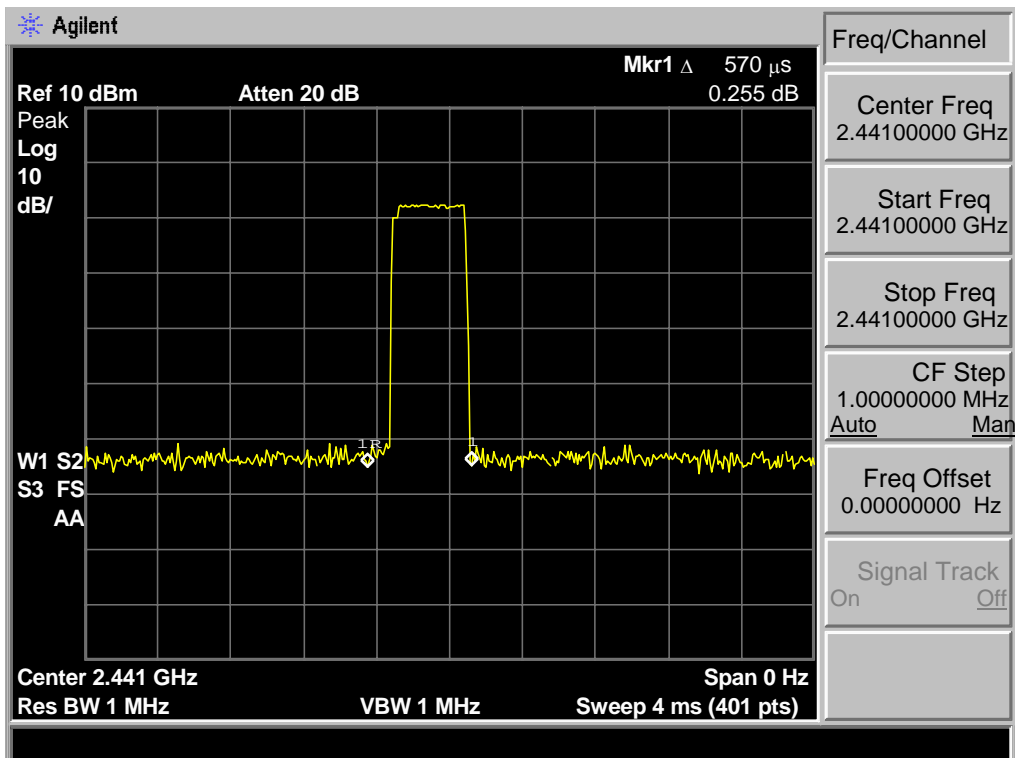
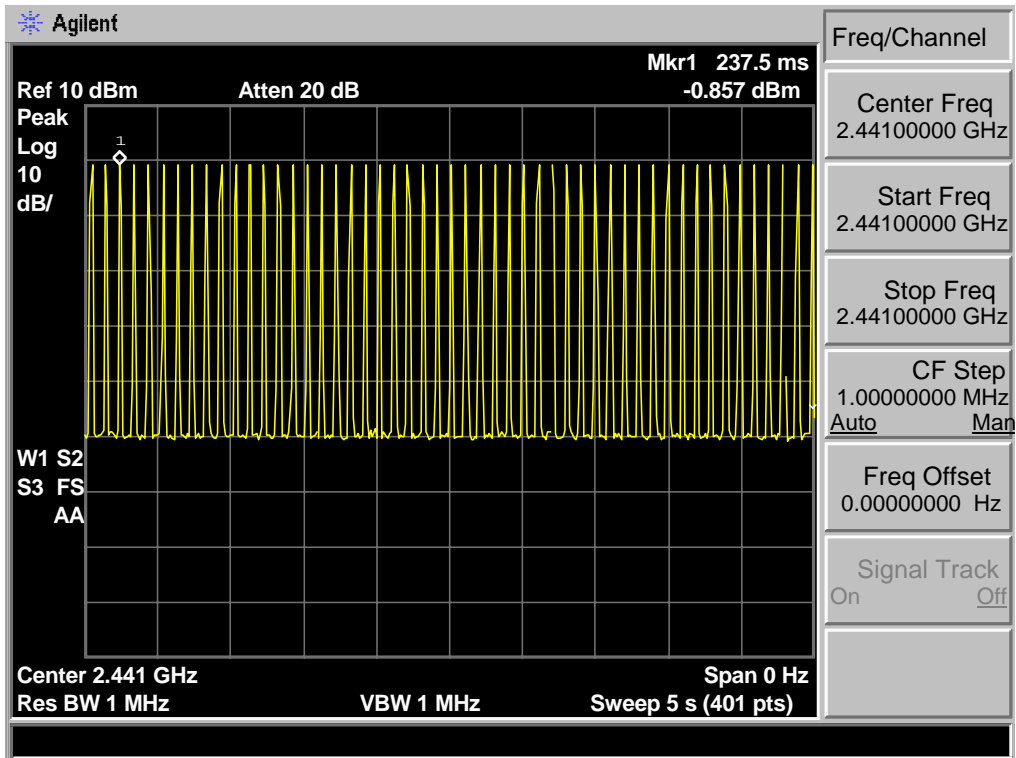
GFSK DH3 : 25hop/5s \* 0.4 \* 79 \* 1.94ms= 306.52



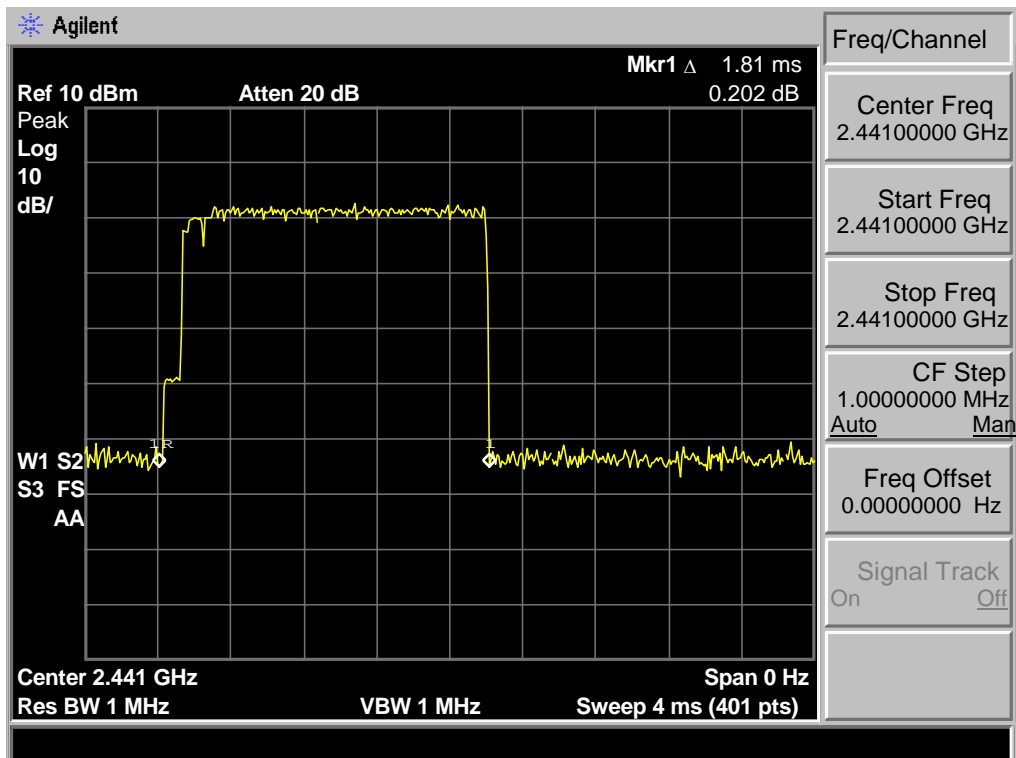
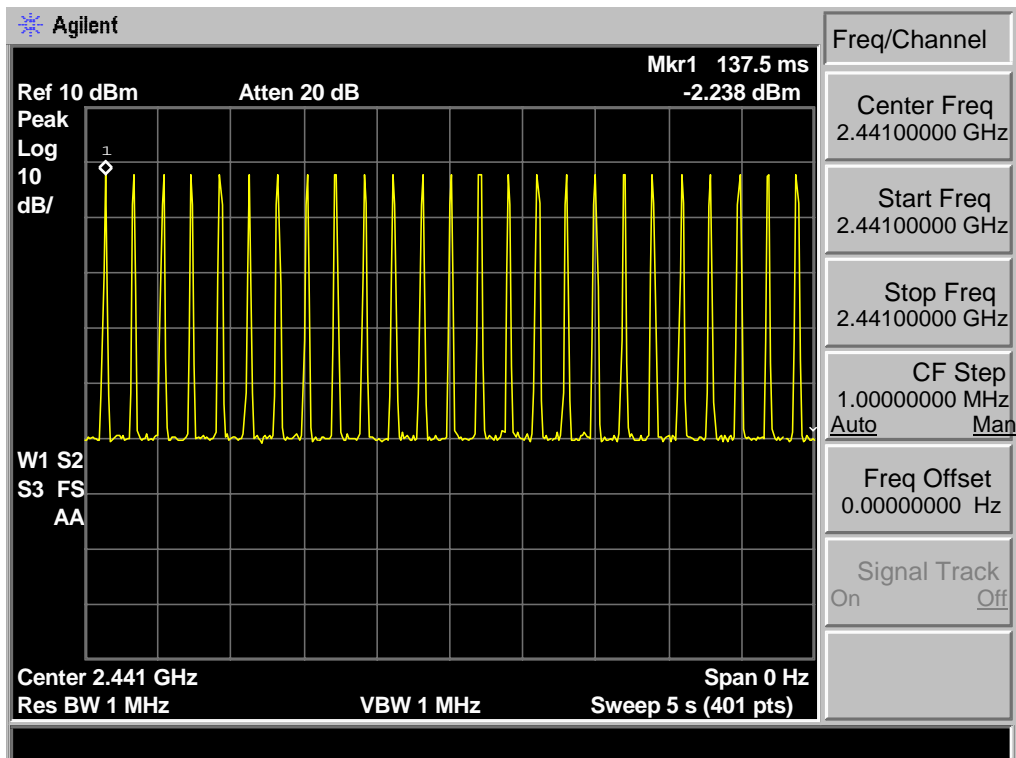
GSFK DH5 : 17hop/5s \* 0.4 \* 79 \* 3.08ms = 330.92



8-DPSK DH1: 50hop/5 \* 0.4 \* 79 \* 0.57ms=180.12

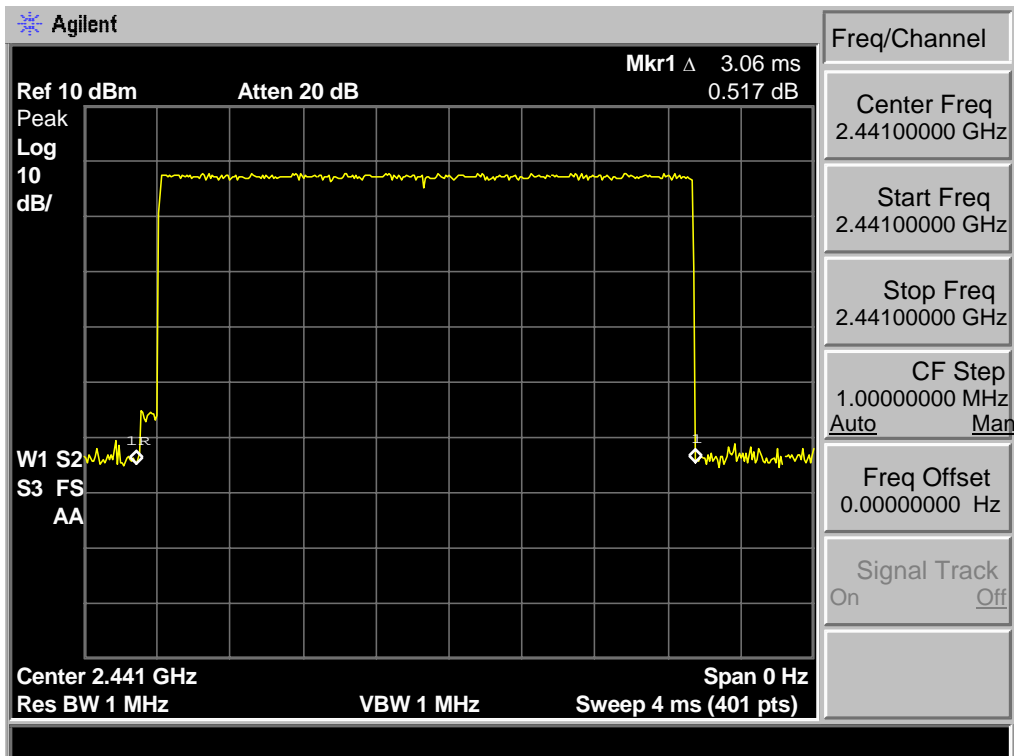
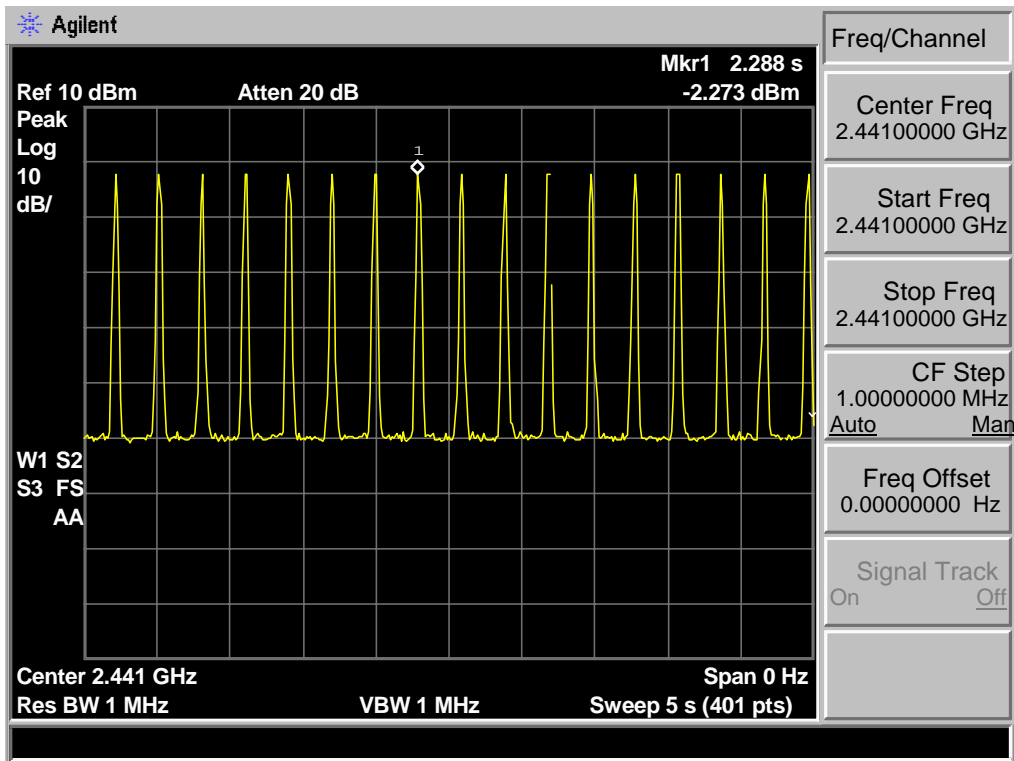


8-DPSK DH3:  $25/5 * 0.4 * 79 * 1.81\text{ms} = 285.98$



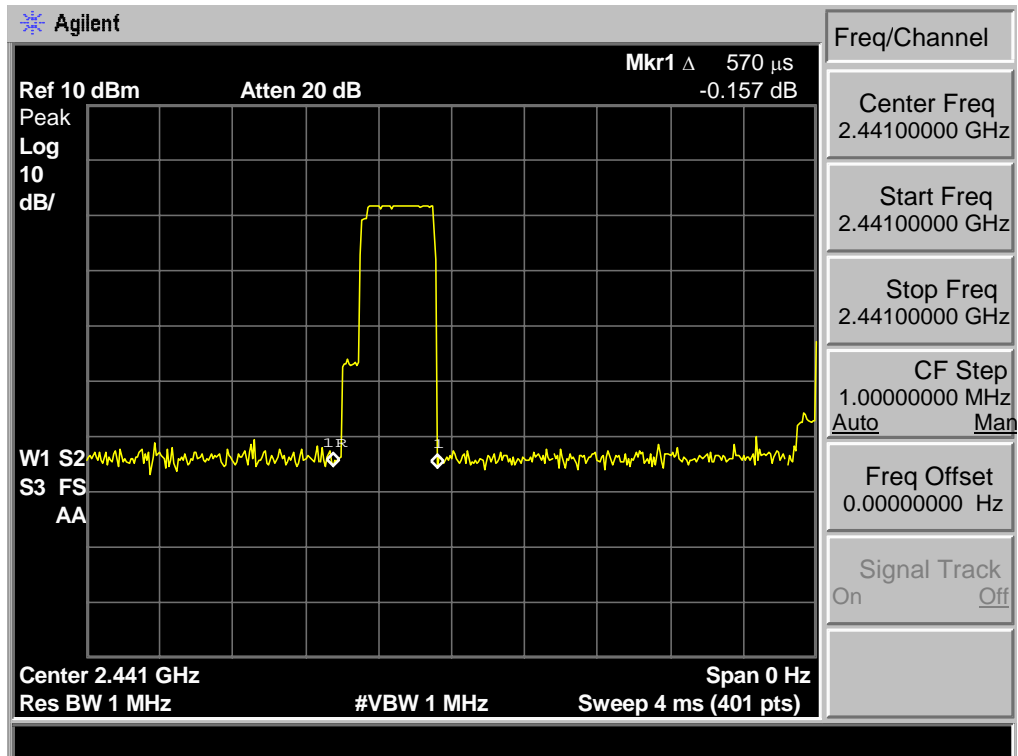
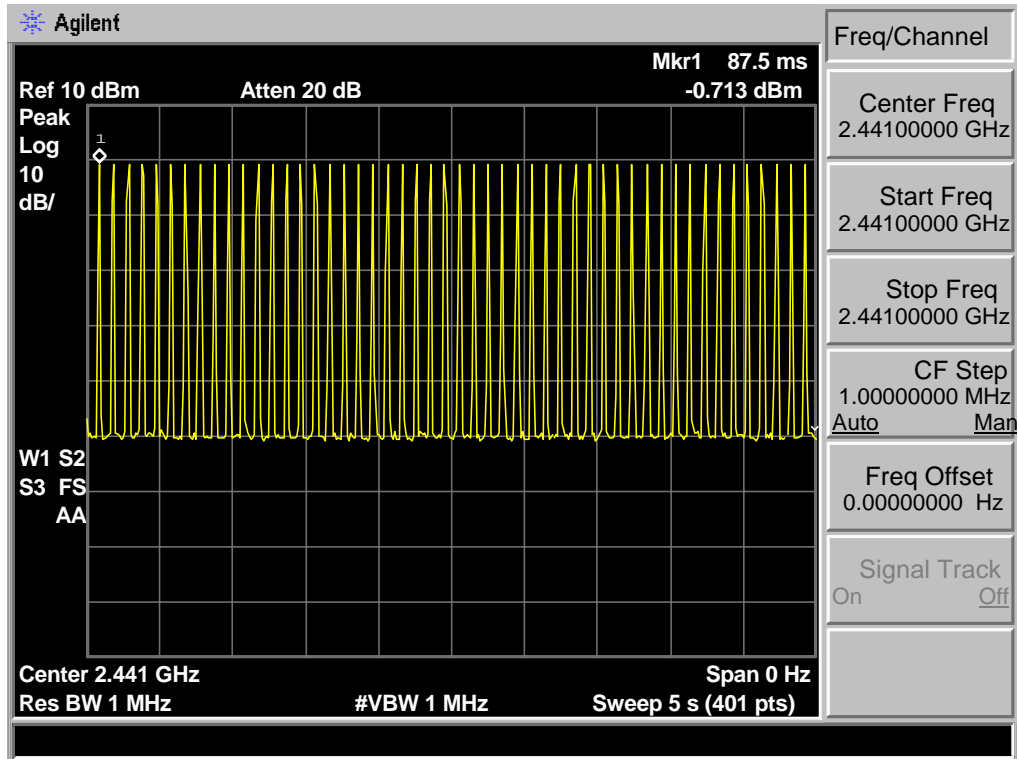


8-DPSK DH5: 17/5 \* 0.4 \* 79 \* 3.06ms=328.77

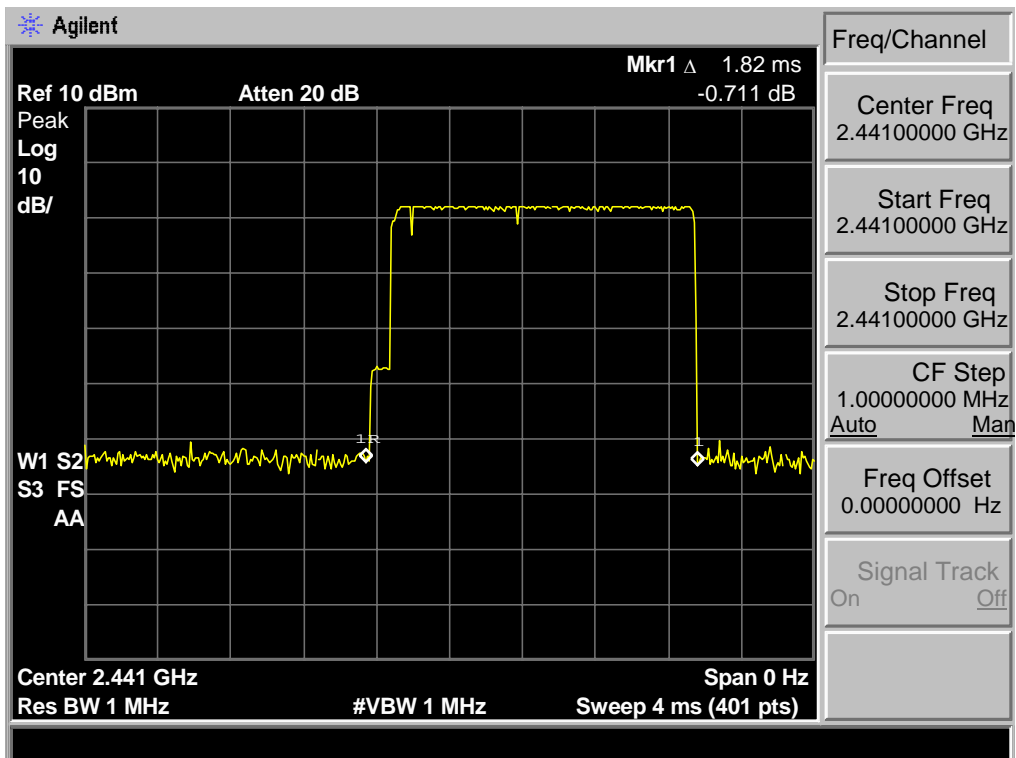
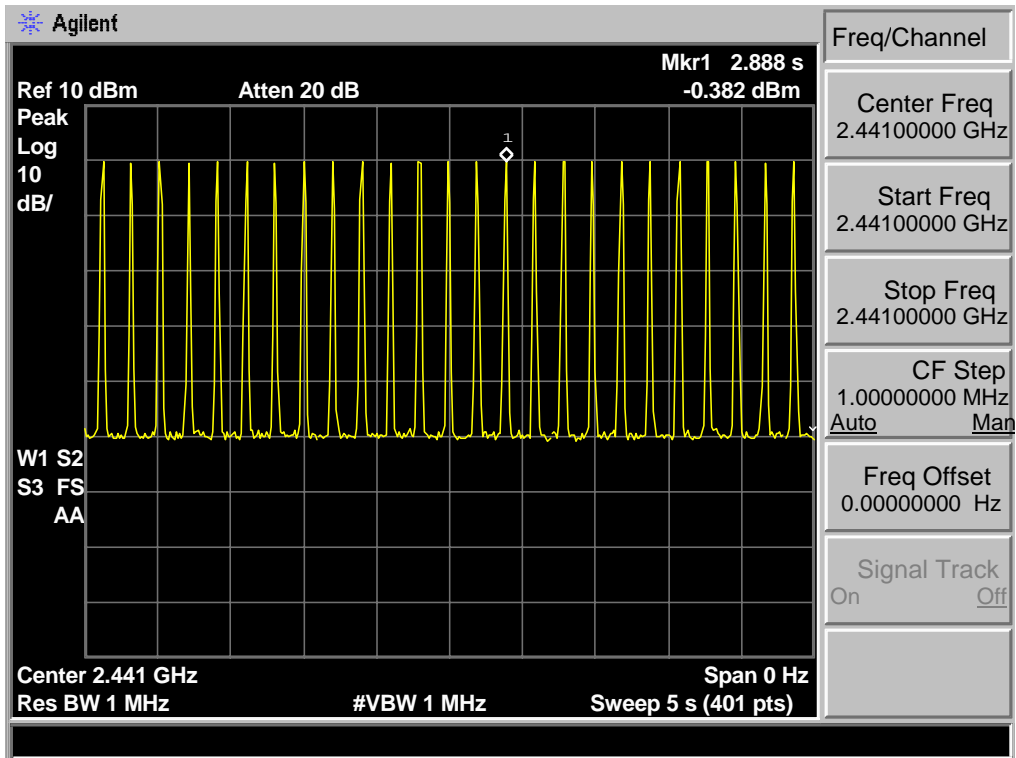


**Power From Adapter 2**

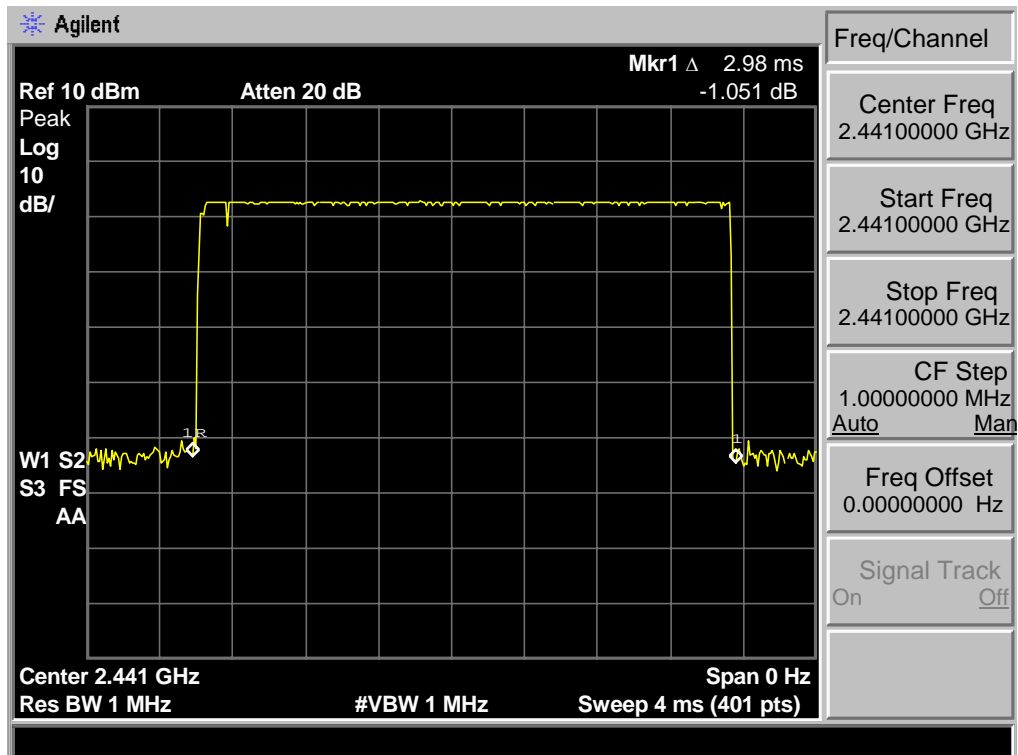
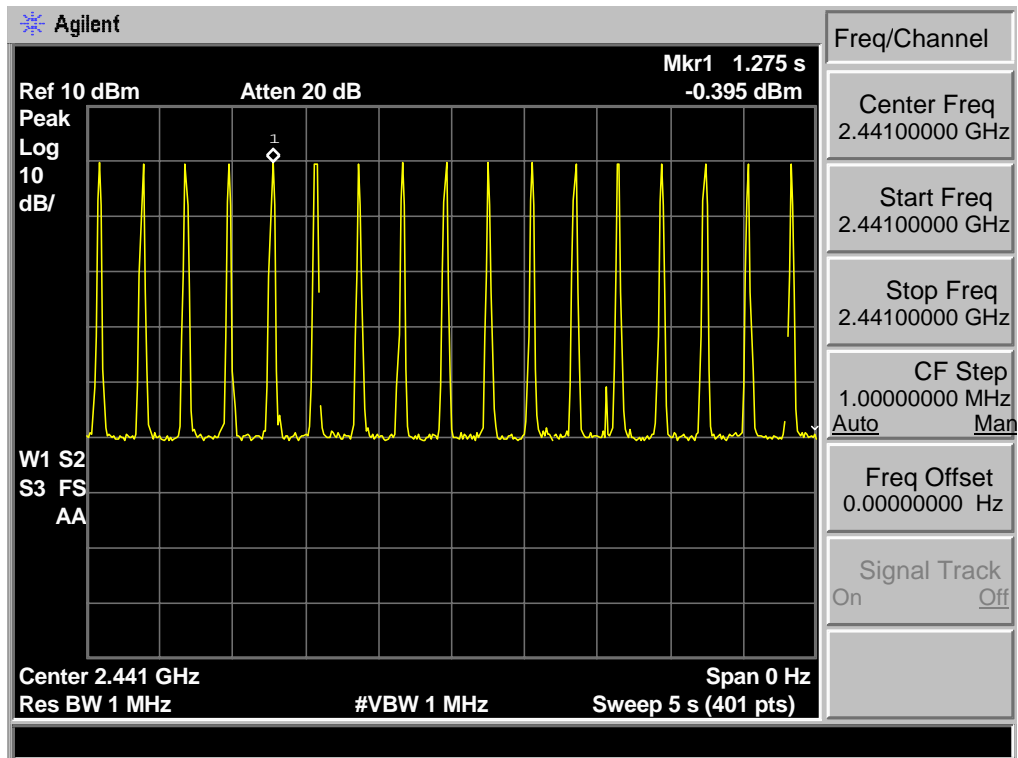
**GFSK DH1 :  $50\text{hop}/5\text{s} * 0.4 * 79 * 0.57\text{ms} = 180.12$**



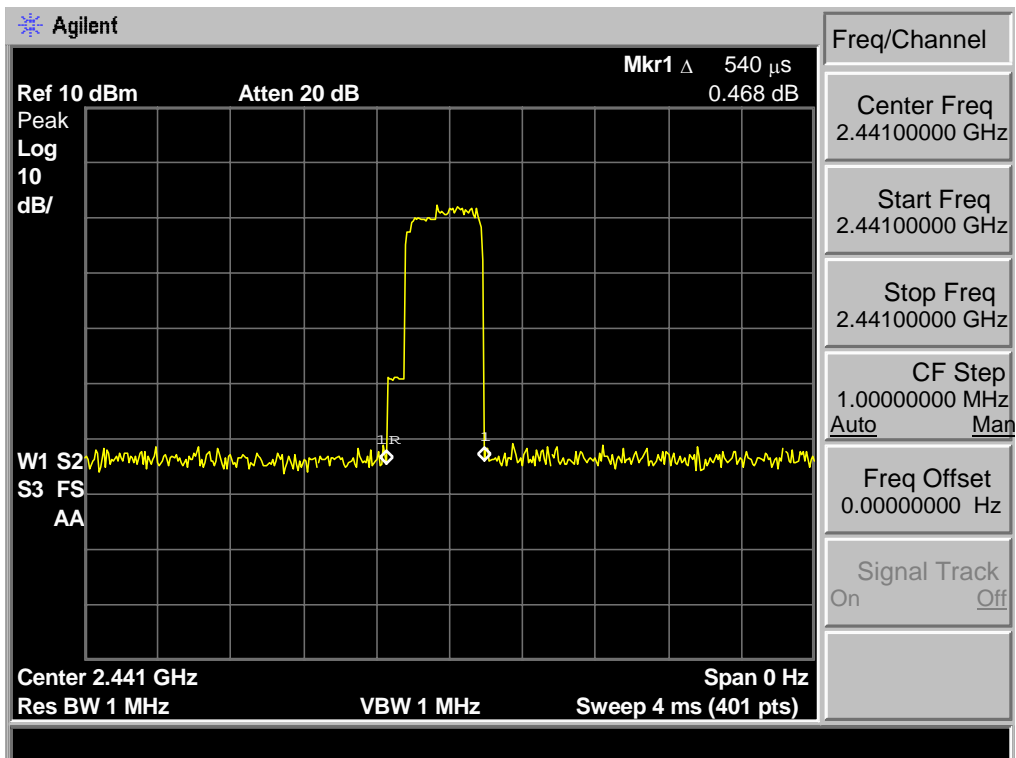
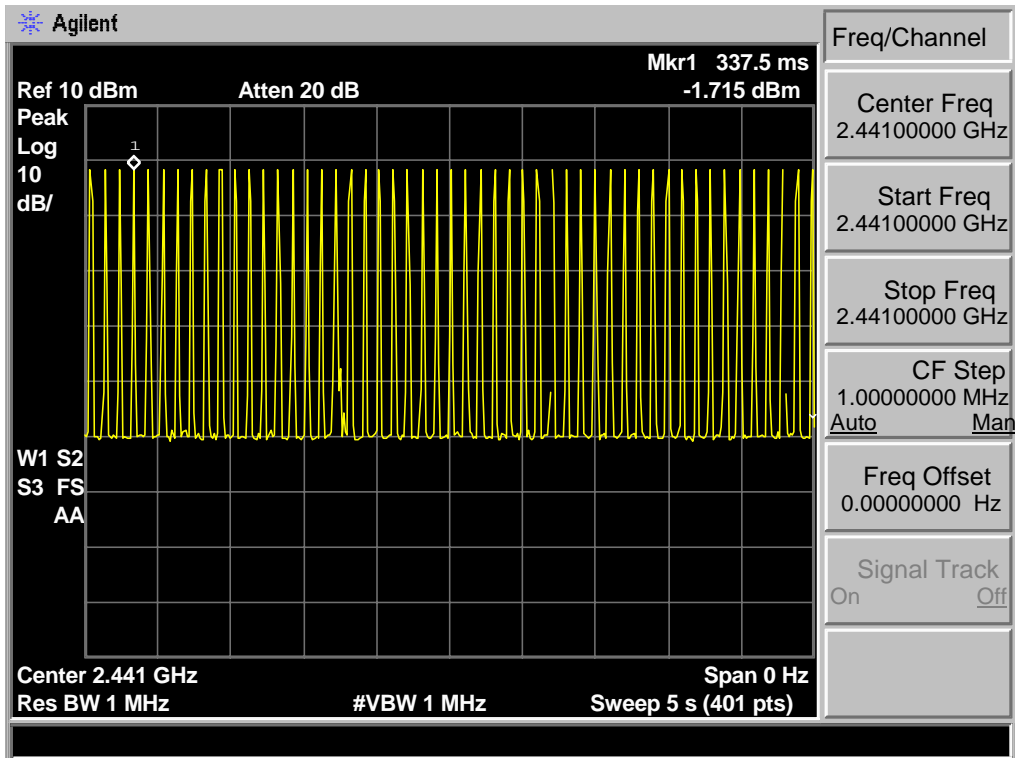
GFSK DH3 : 25hop/5s \* 0.4 \* 79 \* 1.82ms= 287.56



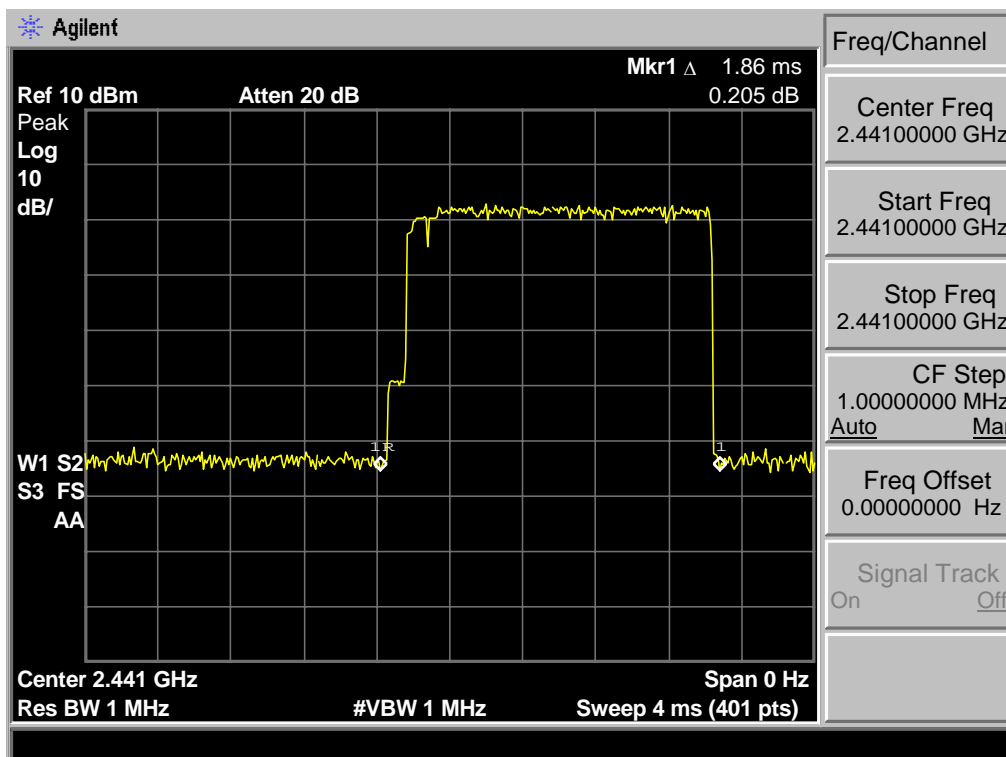
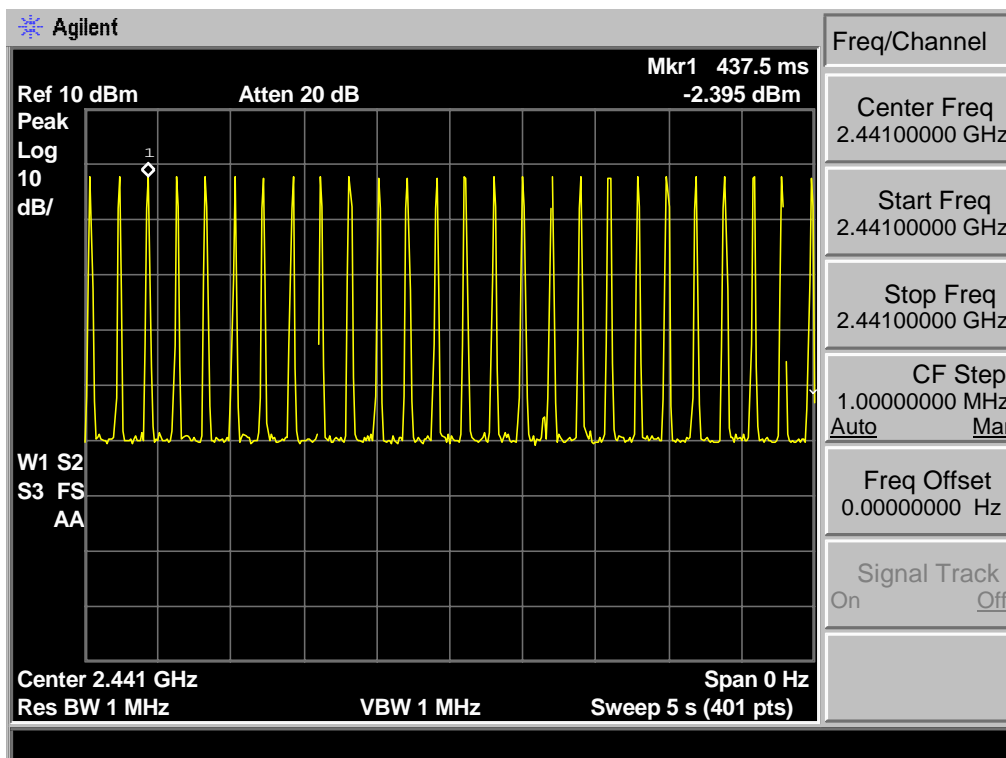
GSFK DH5 : 17hop/5s \* 0.4 \* 79 \* 2.98ms = 320.17



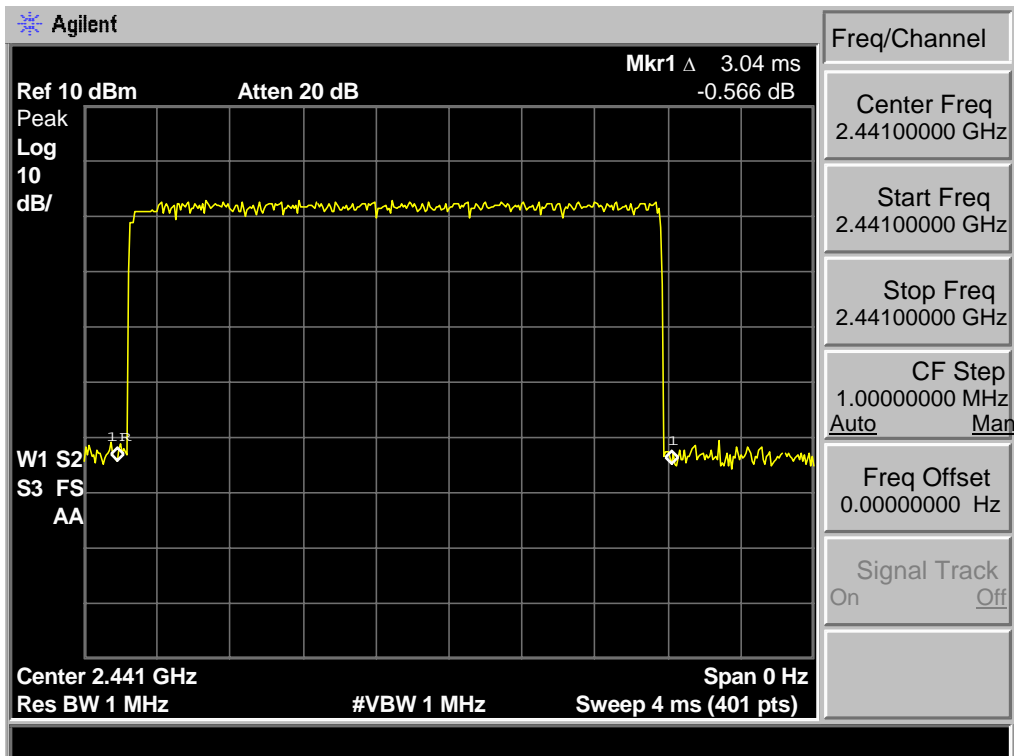
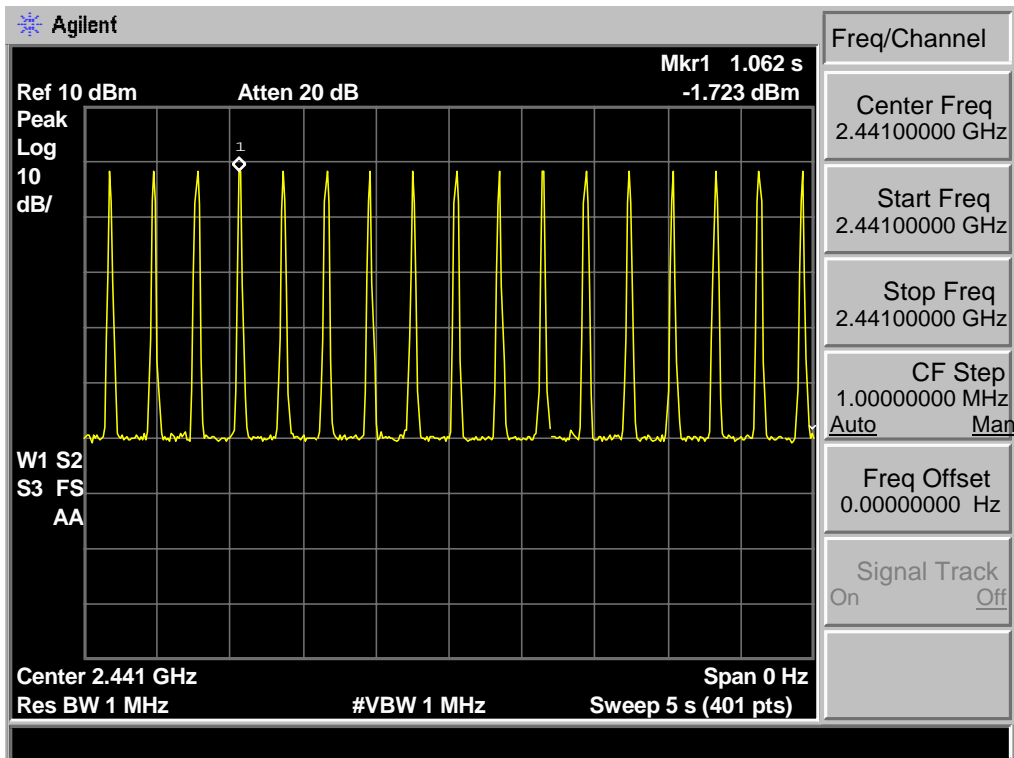
8-DPSK DH1: 50hop/5 \* 0.4 \* 79 \* 0.54ms=170.64



8-DPSK DH3:  $25/5 * 0.4 * 79 * 1.86\text{ms} = 293.88$



8-DPSK DH5: 17/5 \* 0.4 \* 79 \* 3.04ms=326.62



## 8. RADIATED EMISSIONS

### 8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

#### 15.205 Restricted frequency band

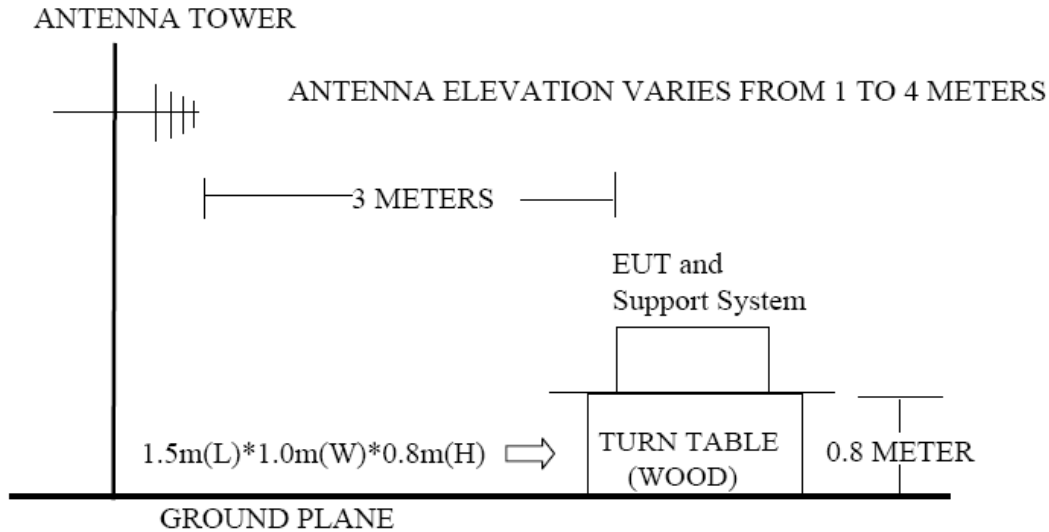
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
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	( <sup>2</sup> )

#### 15.209 Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	



### 8.2. Block Diagram of Test setup



### 8.3. Test Procedure

EUT was placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum’s VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked.

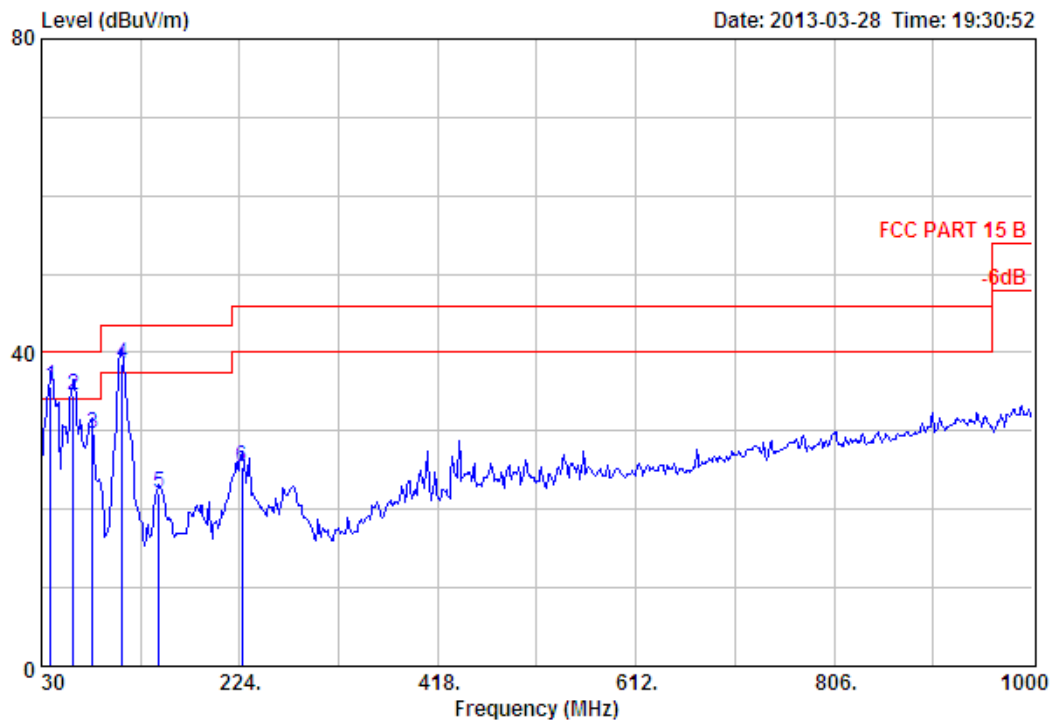
### 8.4. Test Result

30MHz—25GHz Radiated emissison Test result		
EUT: Portable PA with Bluetooth		
M/N: Expedition Express		
Power: AC 120V/60Hz		
Test date: 2013-03-28	Test site: 3m Chamber	Tested by: Tony Tang
Test mode: Tx Mode		
Pass		

- Note: 1、 For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- 2、 The frequency 2402MHz 、 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

### 8.5. Test Data

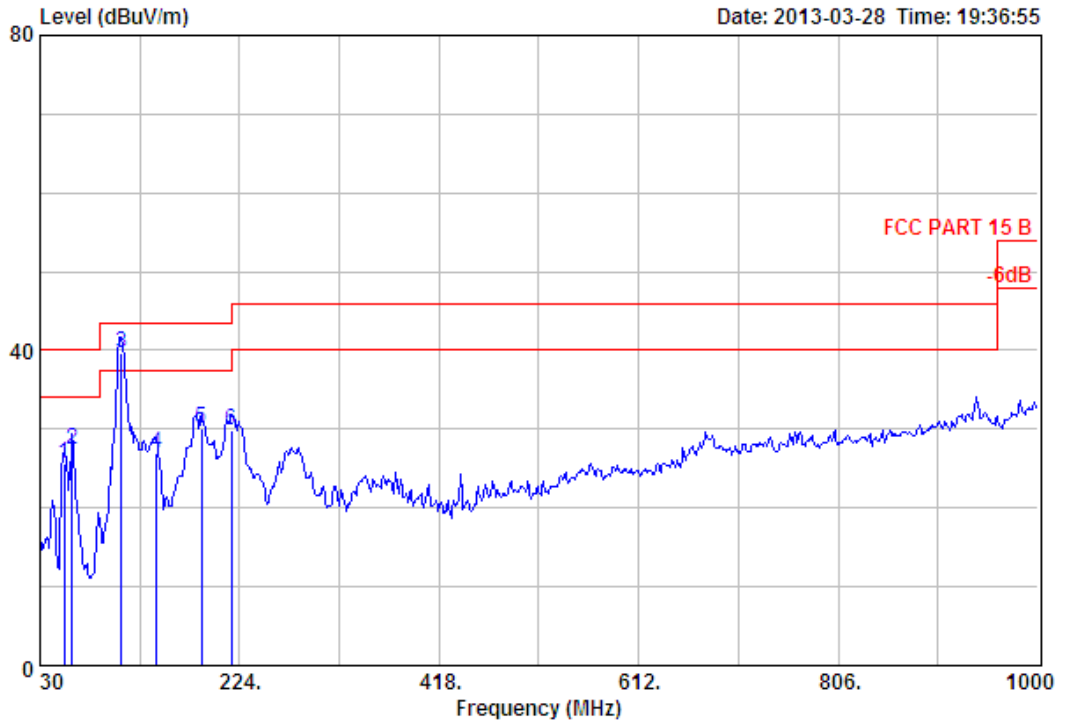
30 MHz – 1000 MHz



```

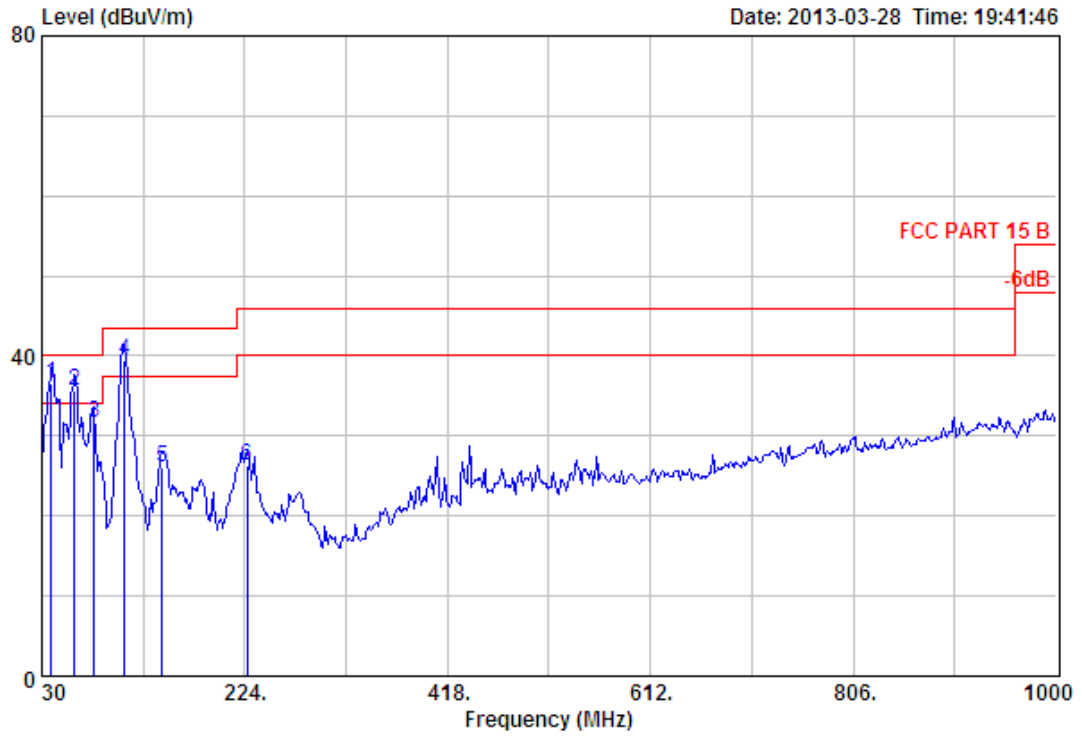
Site no.       : 3m Chamber                Data no. : 131
Dis. / Ant.   : 3m 27137                  Ant. pol. : VERTICAL
Limit        : FCC PART 15 B
Env. / Ins.   : Temp:25.6';Humi:56%;Press:101.52kPa
Engineer     : Tony
EUT          : Portable PA with Bluetooth
Power        : DC 19V From Adapter Input AC 120V/60Hz
M/N         : Expedition Express
Test Mode    : GFSK TX 2402MHz
              Adapter 1
    
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	38.73	13.48	2.10	20.01	35.59	40.00	4.41	QP
2	61.04	4.74	2.56	27.31	34.61	40.00	5.39	QP
3	80.44	7.07	2.84	19.68	29.59	40.00	10.41	QP
4	109.54	10.44	3.20	24.87	38.51	43.50	4.99	QP
5	145.43	11.22	3.73	7.17	22.12	43.50	21.38	QP
6	225.94	9.47	4.51	11.33	25.31	46.00	20.69	QP



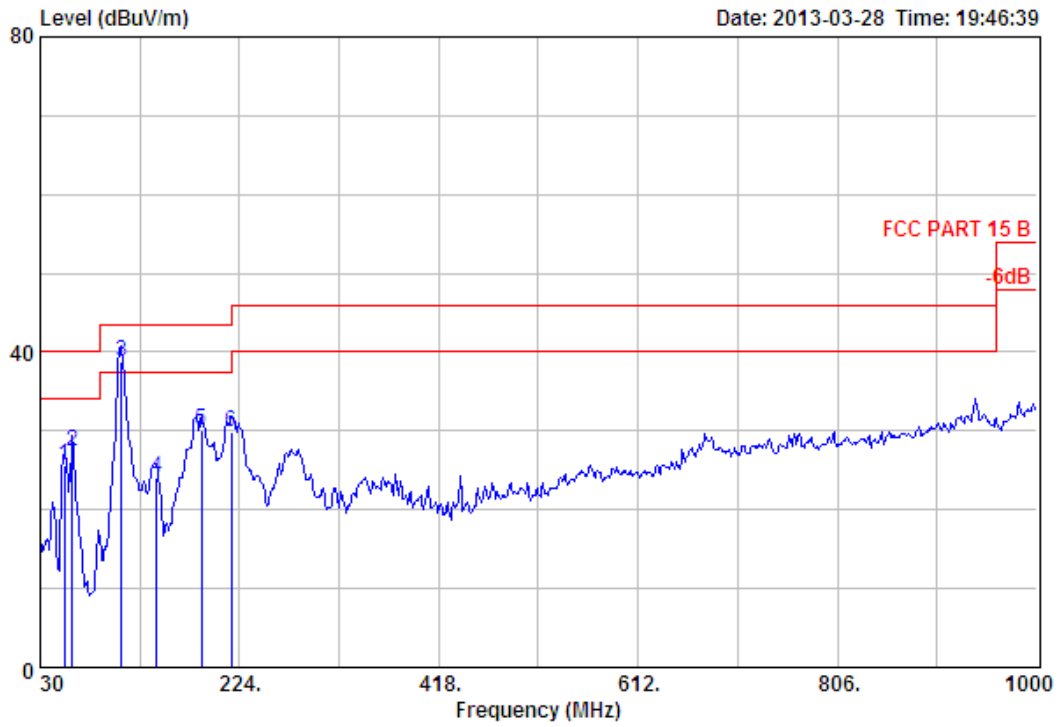
Site no. : 3m Chamber Data no. : 132  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2402MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	53.28	6.11	2.43	17.16	25.70	40.00	14.30	QP
2	61.04	4.74	2.56	20.13	27.43	40.00	12.57	QP
3	109.54	10.44	3.20	26.08	39.72	43.50	3.78	QP
4	143.49	11.29	3.71	11.96	26.96	43.50	16.54	QP
5	187.14	8.26	4.19	17.53	29.98	43.50	13.52	QP
6	216.24	8.80	4.40	16.63	29.83	46.00	16.17	QP



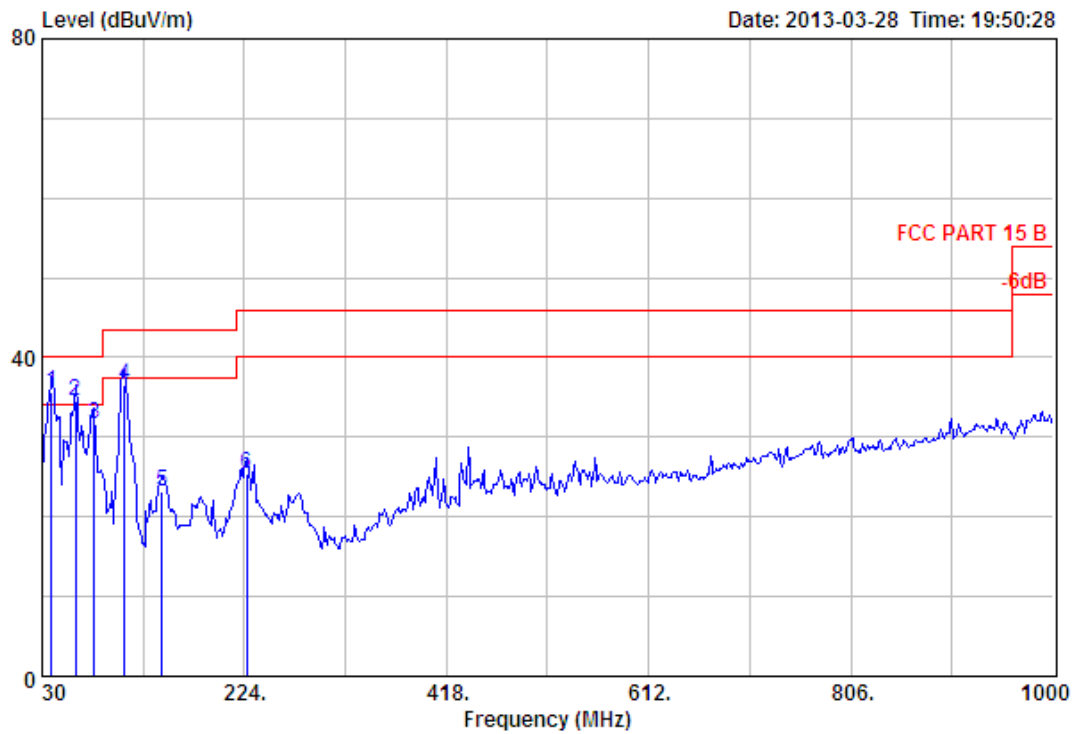
Site no. : 3m Chamber Data no. : 133  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2441MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Reamark (dB)
1	38.73	13.48	2.10	21.01	36.59	40.00	3.41	QP
2	61.04	4.74	2.56	28.31	35.61	40.00	4.39	QP
3	80.44	7.07	2.84	21.68	31.59	40.00	8.41	QP
4	109.54	10.44	3.20	25.87	39.51	43.50	3.99	QP
5	145.43	11.22	3.73	11.17	26.12	43.50	17.38	QP
6	225.94	9.47	4.51	12.33	26.31	46.00	19.69	QP



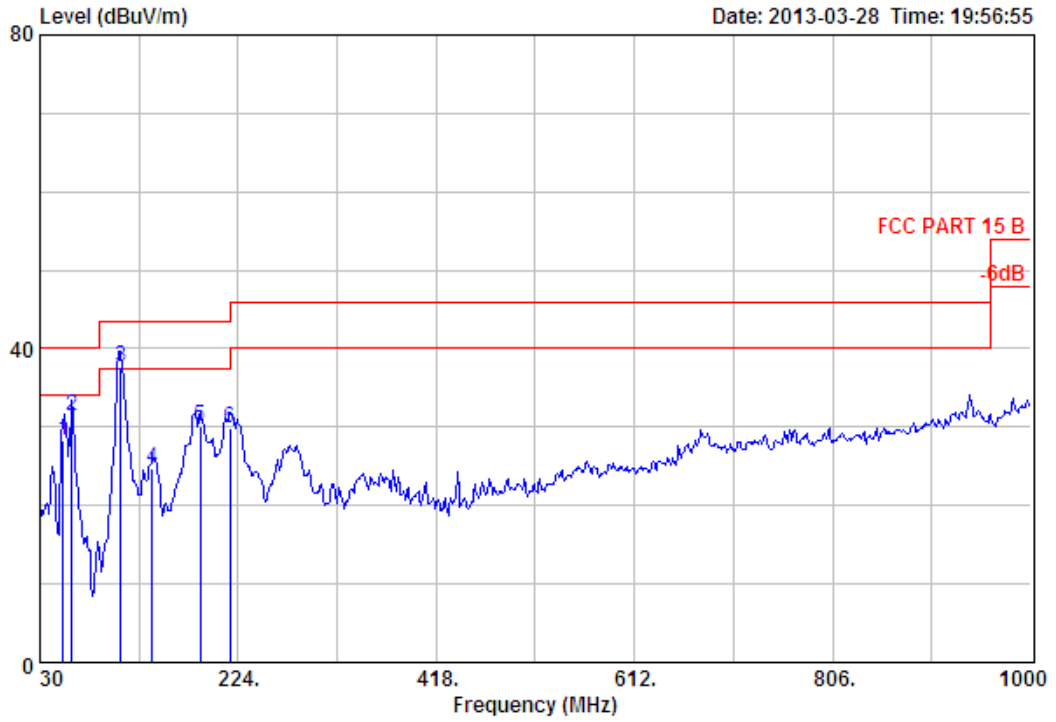
Site no. : 3m Chamber Data no. : 134  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2441MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark (dB)
					Level (dBuV/m)	Limits (dBuV/m)		
1	53.28	6.11	2.43	17.16	25.70	40.00	14.30	QP
2	61.04	4.74	2.56	20.13	27.43	40.00	12.57	QP
3	109.54	10.44	3.20	25.08	38.72	43.50	4.78	QP
4	143.49	11.29	3.71	8.96	23.96	43.50	19.54	QP
5	187.14	8.26	4.19	17.53	29.98	43.50	13.52	QP
6	216.24	8.80	4.40	16.63	29.83	46.00	16.17	QP



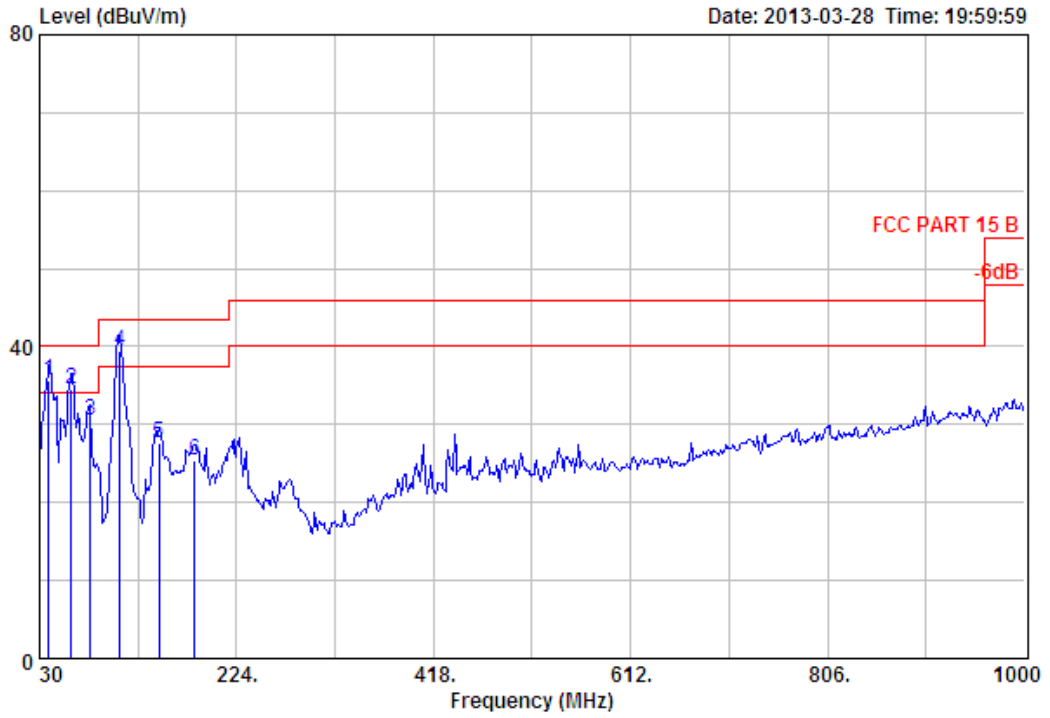
Site no. : 3m Chamber Data no. : 135  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2480MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	38.73	13.48	2.10	20.01	35.59	40.00	4.41	QP
2	62.01	4.78	2.59	27.10	34.47	40.00	5.53	QP
3	80.44	7.07	2.84	21.68	31.59	40.00	8.41	QP
4	109.54	10.44	3.20	22.87	36.51	43.50	6.99	QP
5	145.43	11.22	3.73	8.17	23.12	43.50	20.38	QP
6	225.94	9.47	4.51	11.33	25.31	46.00	20.69	QP



Site no. : 3m Chamber Data no. : 136  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2480MHz  
 Adapter 1

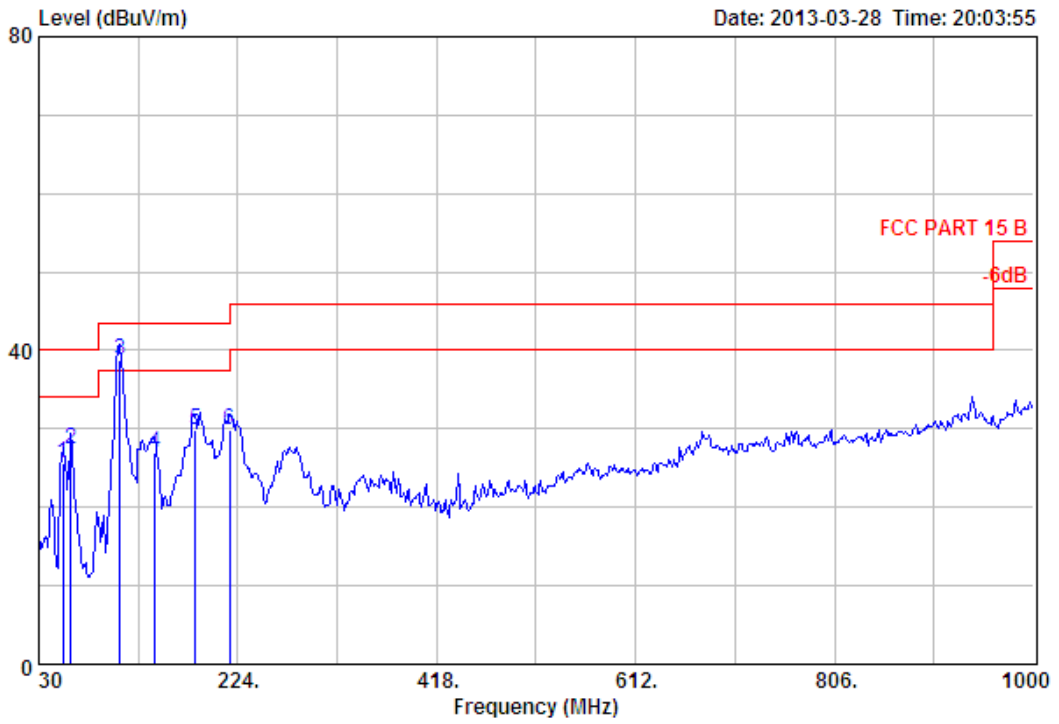
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark (dB)
					Level (dBuV/m)	Limits (dBuV/m)		
1	52.31	6.41	2.40	19.57	28.38	40.00	11.62	QP
2	61.04	4.74	2.56	24.13	31.43	40.00	8.57	QP
3	109.54	10.44	3.20	24.08	37.72	43.50	5.78	QP
4	139.61	11.43	3.65	9.57	24.65	43.50	18.85	QP
5	187.14	8.26	4.19	17.53	29.98	43.50	13.52	QP
6	216.24	8.80	4.40	16.63	29.83	46.00	16.17	QP



Site no. : 3m Chamber Data no. : 137  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2402MHz  
 Adapter 1

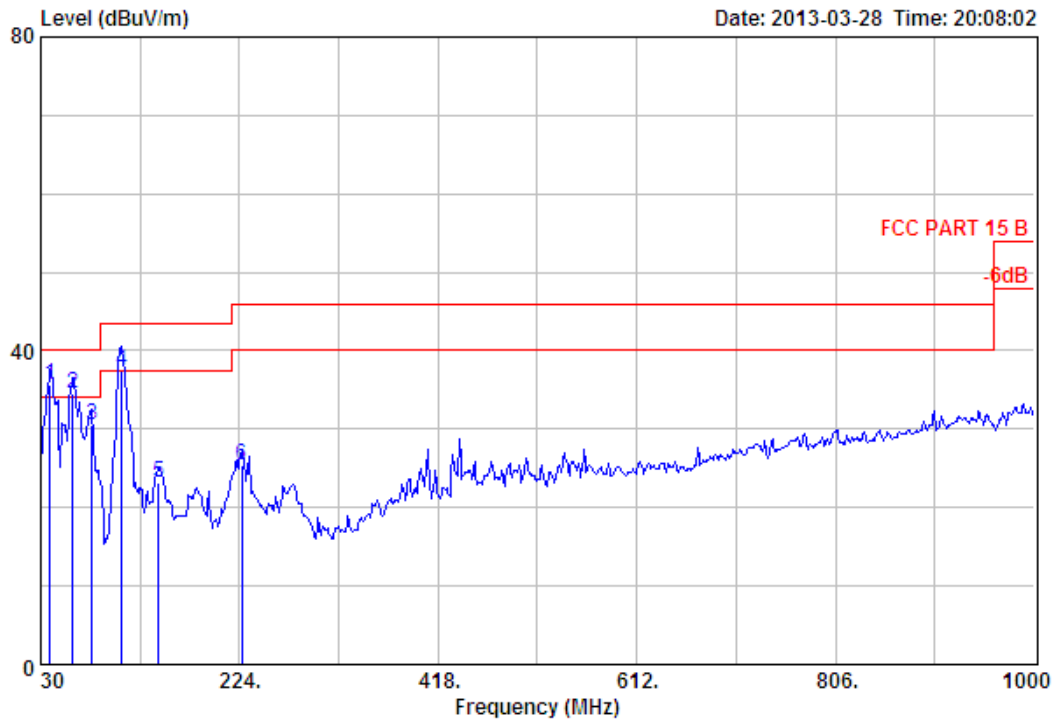
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark (dB)
					Level (dBuV/m)	Limits (dBuV/m)		
1	38.73	13.48	2.10	20.01	35.59	40.00	4.41	QP
2	61.04	4.74	2.56	27.31	34.61	40.00	5.39	QP
3	80.44	7.07	2.84	20.68	30.59	40.00	9.41	QP
4	109.54	10.44	3.20	25.87	39.51	43.50	3.99	QP
5	147.37	11.08	3.75	12.76	27.59	43.50	15.91	QP
6	182.29	8.76	4.15	12.53	25.44	43.50	18.06	QP





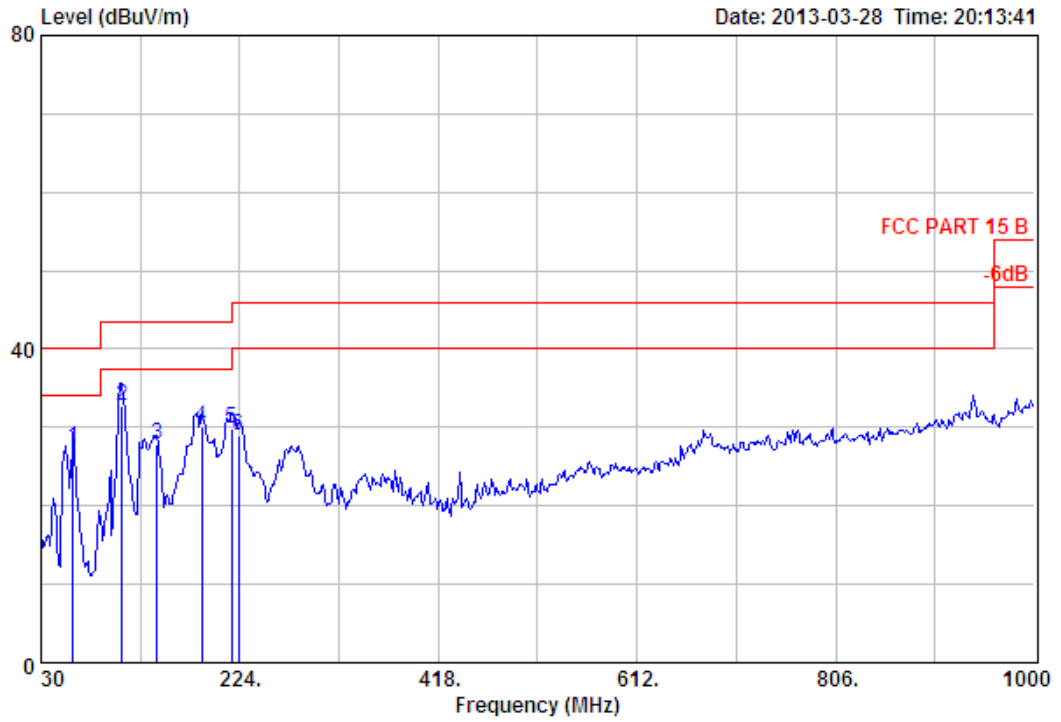
Site no. : 3m Chamber Data no. : 138  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2402MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	53.28	6.11	2.43	17.16	25.70	40.00	14.30	QP
2	61.04	4.74	2.56	20.13	27.43	40.00	12.57	QP
3	109.54	10.44	3.20	25.08	38.72	43.50	4.78	QP
4	143.49	11.29	3.71	11.96	26.96	43.50	16.54	QP
5	182.29	8.76	4.15	16.99	29.90	43.50	13.60	QP
6	216.24	8.80	4.40	16.63	29.83	46.00	16.17	QP



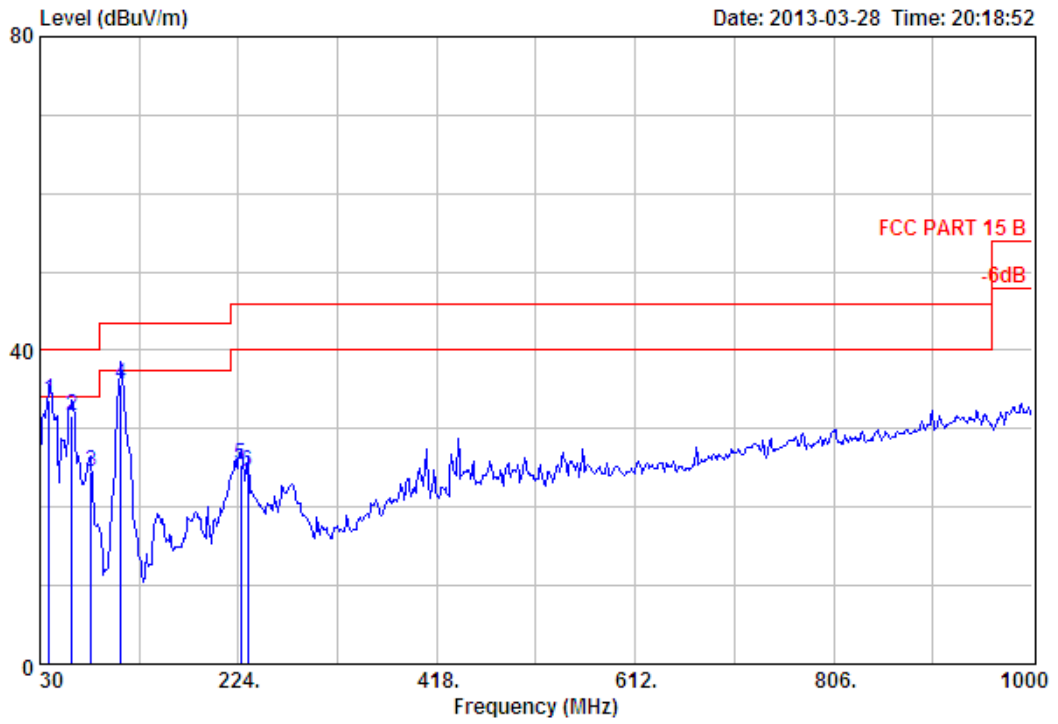
Site no. : 3m Chamber Data no. : 139  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2441MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	38.73	13.48	2.10	20.01	35.59	40.00	4.41	QP
2	61.04	4.74	2.56	27.31	34.61	40.00	5.39	QP
3	80.44	7.07	2.84	20.68	30.59	40.00	9.41	QP
4	109.54	10.44	3.20	23.87	37.51	43.50	5.99	QP
5	145.43	11.22	3.73	8.17	23.12	43.50	20.38	QP
6	225.94	9.47	4.51	11.33	25.31	46.00	20.69	QP



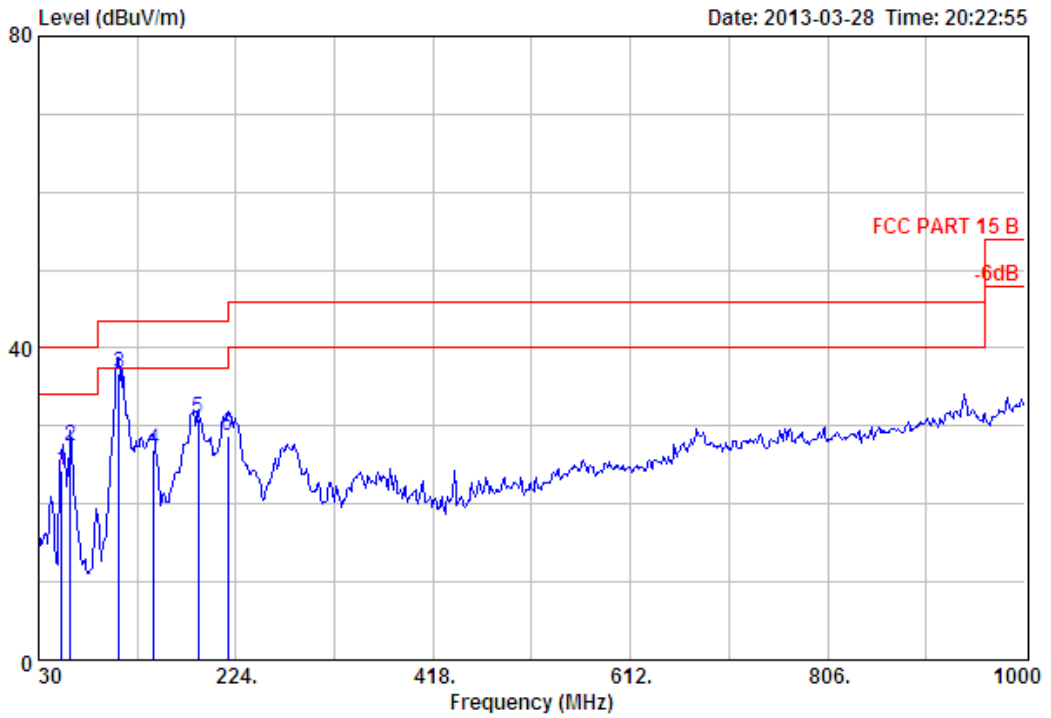
Site no. : 3m Chamber Data no. : 140  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2441MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	61.04	4.74	2.56	20.13	27.43	40.00	12.57	QP
2	109.54	10.44	3.20	19.08	32.72	43.50	10.78	QP
3	143.49	11.29	3.71	12.96	27.96	43.50	15.54	QP
4	187.14	8.26	4.19	17.53	29.98	43.50	13.52	QP
5	216.24	8.80	4.40	16.63	29.83	46.00	16.17	QP
6	223.03	9.37	4.47	15.04	28.88	46.00	17.12	QP



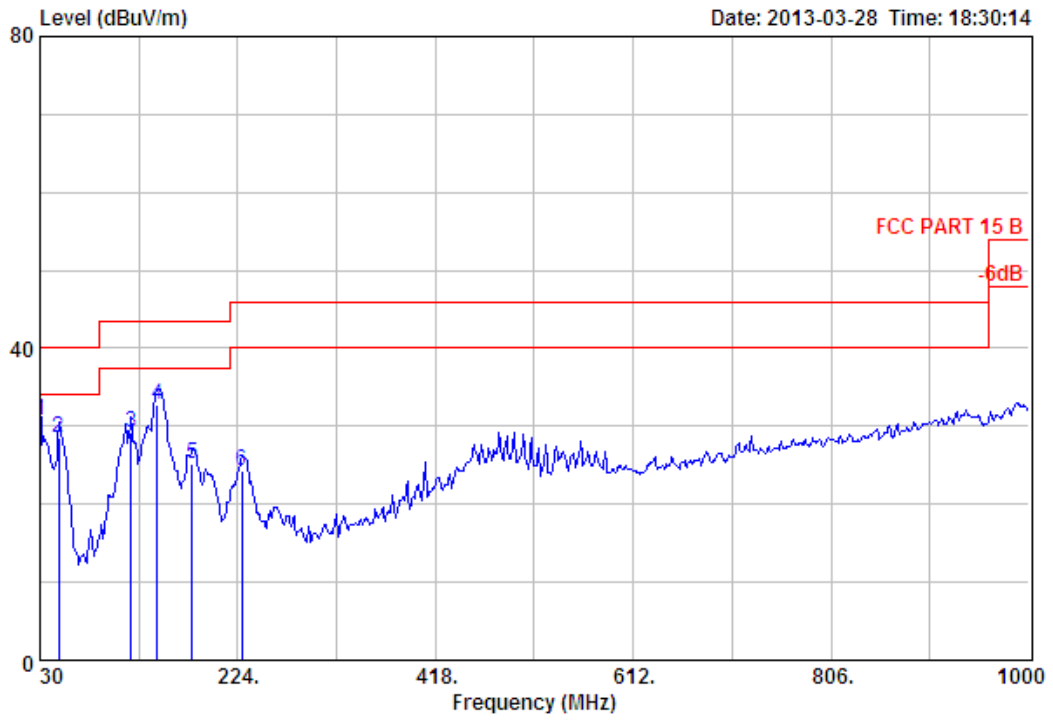
Site no. : 3m Chamber Data no. : 141  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2480MHz  
 Adapter 1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	38.73	13.48	2.10	18.01	33.59	40.00	6.41	QP
2	61.04	4.74	2.56	24.31	31.61	40.00	8.39	QP
3	80.44	7.07	2.84	14.68	24.59	40.00	15.41	QP
4	109.54	10.44	3.20	22.00	35.64	43.50	7.86	QP
5	225.94	9.47	4.51	11.33	25.31	46.00	20.69	QP
6	232.73	9.59	4.59	10.26	24.44	46.00	21.56	QP



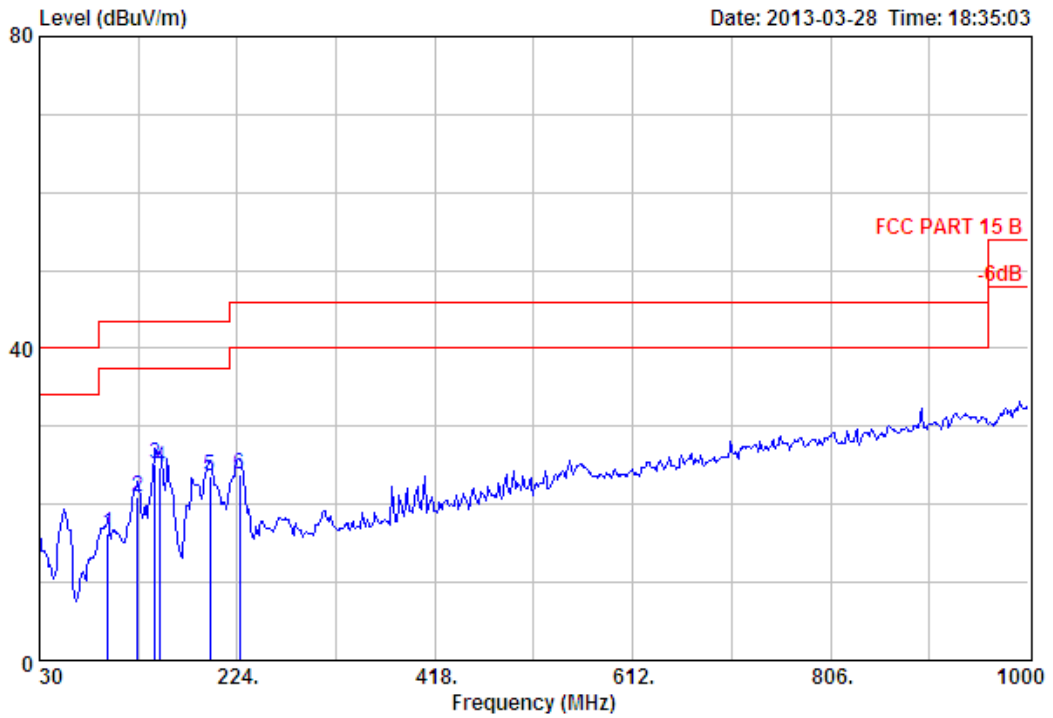
Site no. : 3m Chamber Data no. : 142  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2480MHz  
 Adapter 1

	Freq. (MHz)	Ant. Cable		Emission				Reamark
		Factor (dB/m)	Loss (dB)	Reading (dBUV)	Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	
1	52.31	6.41	2.40	15.57	24.38	40.00	15.62	QP
2	61.04	4.74	2.56	20.13	27.43	40.00	12.57	QP
3	109.54	10.44	3.20	23.08	36.72	43.50	6.78	QP
4	143.49	11.29	3.71	11.96	26.96	43.50	16.54	QP
5	187.14	8.26	4.19	18.53	30.98	43.50	12.52	QP
6	216.24	8.80	4.40	15.63	28.83	46.00	17.17	QP



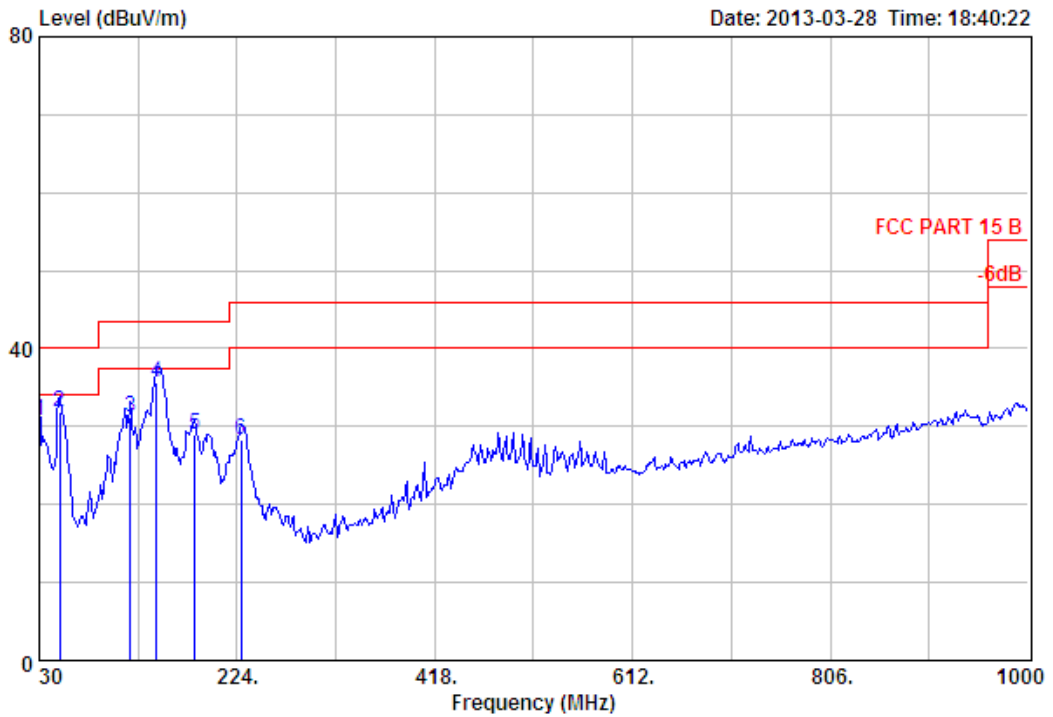
Site no. : 3m Chamber Data no. : 119  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2402MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Reamark (dB)
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	30.00	18.51	1.91	10.24	30.66	40.00	9.34	QP
2	48.43	8.37	2.30	17.93	28.60	40.00	11.40	QP
3	119.24	11.11	3.34	14.65	29.10	43.50	14.40	QP
4	145.43	11.22	3.73	17.76	32.71	43.50	10.79	QP
5	179.38	8.96	4.11	12.09	25.16	43.50	18.34	QP
6	227.88	9.46	4.51	10.32	24.29	46.00	21.71	QP



Site no. : 3m Chamber Data no. : 120  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2402MHz  
 Adapter 2

	Freq. (MHz)	Ant. Cable		Emission		Limits (dBuV/m)	Margin (dB)	Remark (dB)
		Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)			
1	96.93	8.92	3.03	4.27	16.22	43.50	27.28	QP
2	126.03	11.34	3.44	6.13	20.91	43.50	22.59	QP
3	143.49	11.29	3.71	10.26	25.26	43.50	18.24	QP
4	148.34	11.00	3.76	9.96	24.72	43.50	18.78	QP
5	196.84	7.72	4.26	11.54	23.52	43.50	19.98	QP
6	225.94	9.47	4.51	9.83	23.81	46.00	22.19	QP

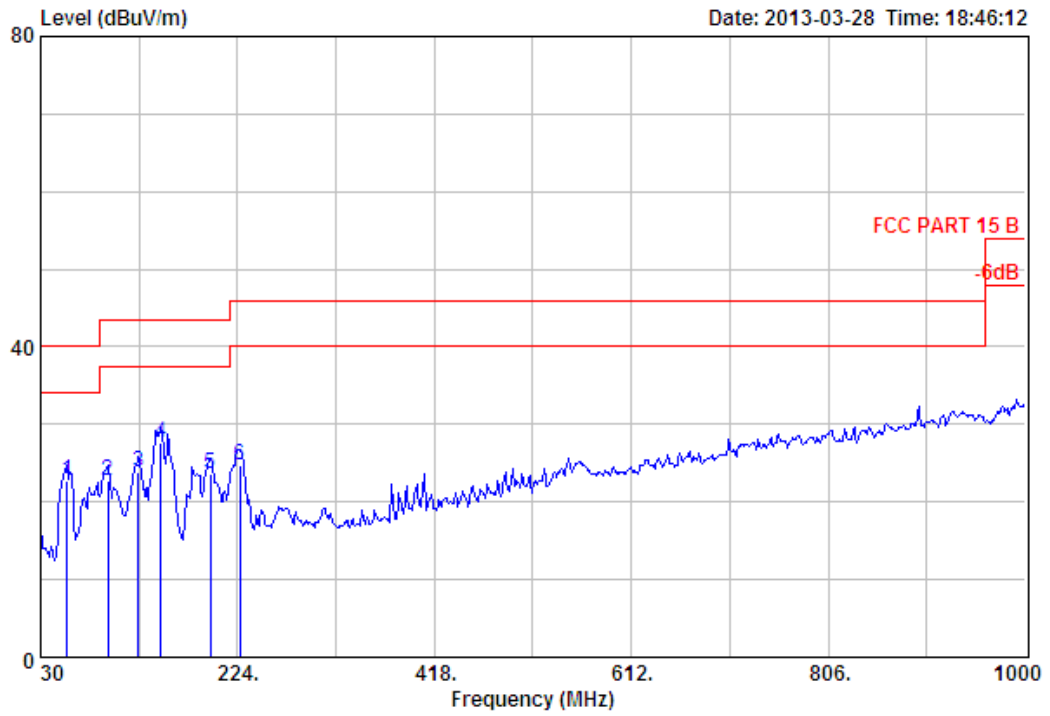


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Site no.      : 3m Chamber                      Data no. : 121
Dis. / Ant.  : 3m 27137                       Ant. pol. : VERTICAL
Limit        : FCC PART 15 B
Env. / Ins.  : Temp:25.6';Humi:56%;Press:101.52kPa
Engineer     : Tony
EUT          : Portable PA with Bluetooth
Power        : DC 19V From Adapter Input AC 120V/60Hz
M/N         : Expedition Express
Test Mode    : GFSK TX 2441MHz
              Adapter 2
    
```

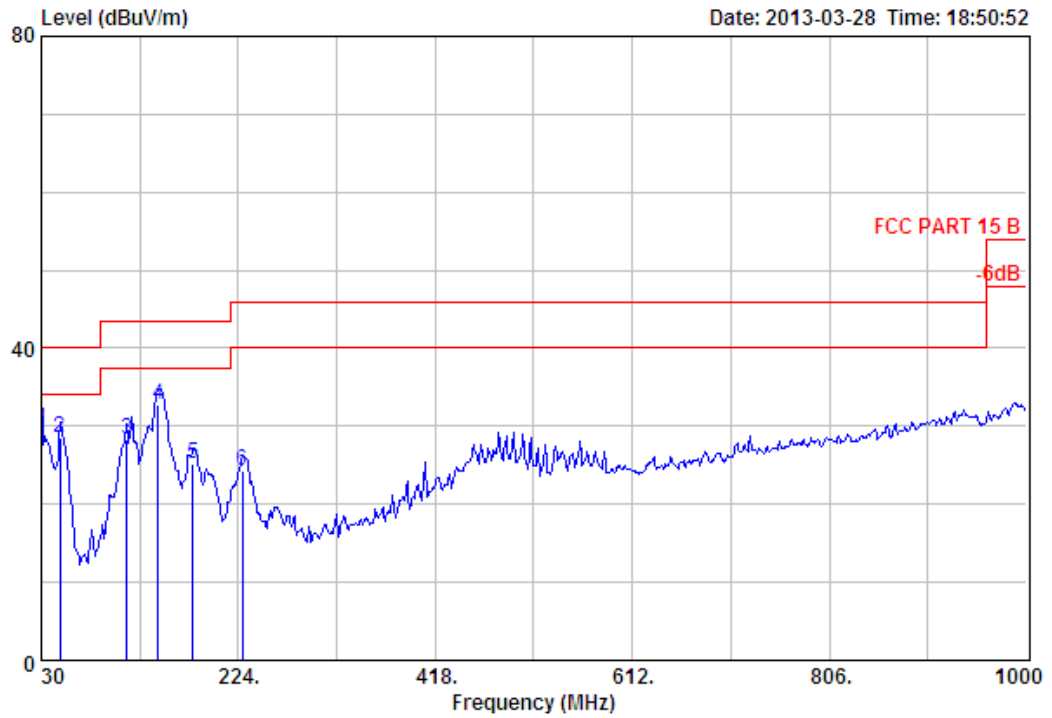
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Reamark (dB)
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	30.00	18.51	1.91	10.24	30.66	40.00	9.34	QP
2	50.37	7.43	2.35	22.09	31.87	40.00	8.13	QP
3	119.24	11.11	3.34	16.65	31.10	43.50	12.40	QP
4	145.43	11.22	3.73	20.76	35.71	43.50	7.79	QP
5	182.29	8.76	4.15	16.05	28.96	43.50	14.54	QP
6	227.88	9.46	4.51	14.32	28.29	46.00	17.71	QP





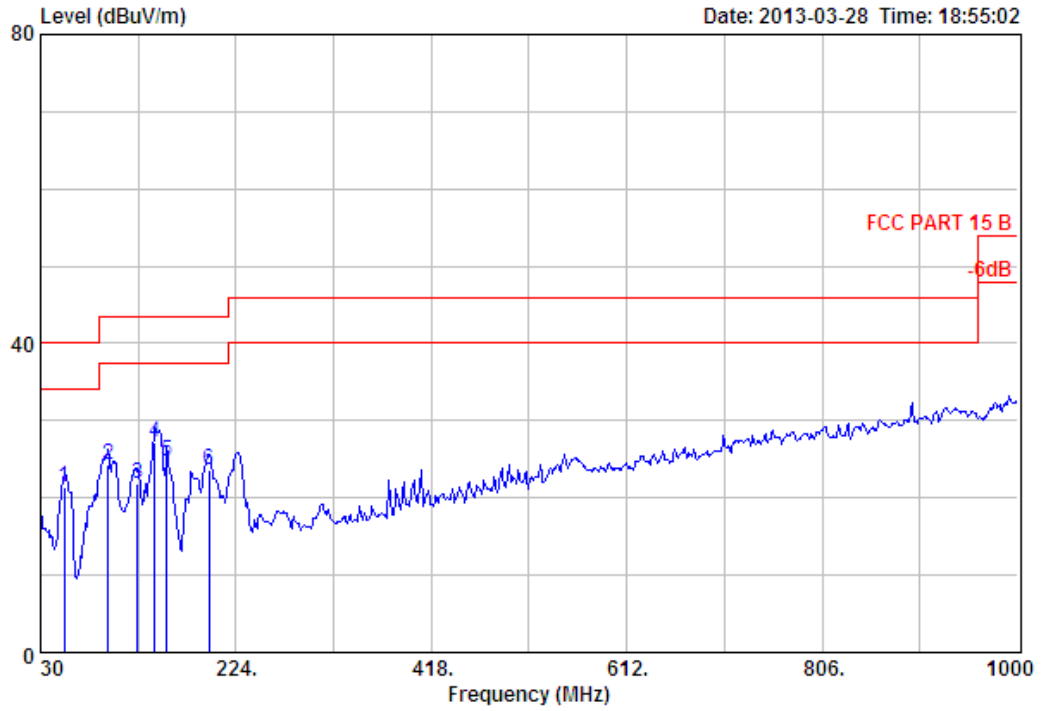
Site no. : 3m Chamber Data no. : 122  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6%;Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2441MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark (dB)
					Level (dBuV/m)	Limits (dBuV/m)		
1	56.19	5.21	2.46	15.05	22.72	40.00	17.28	QP
2	95.96	8.92	3.03	10.78	22.73	43.50	20.77	QP
3	126.03	11.34	3.44	9.13	23.91	43.50	19.59	QP
4	148.34	11.00	3.76	12.96	27.72	43.50	15.78	QP
5	196.84	7.72	4.26	11.54	23.52	43.50	19.98	QP
6	225.94	9.47	4.51	10.83	24.81	46.00	21.19	QP



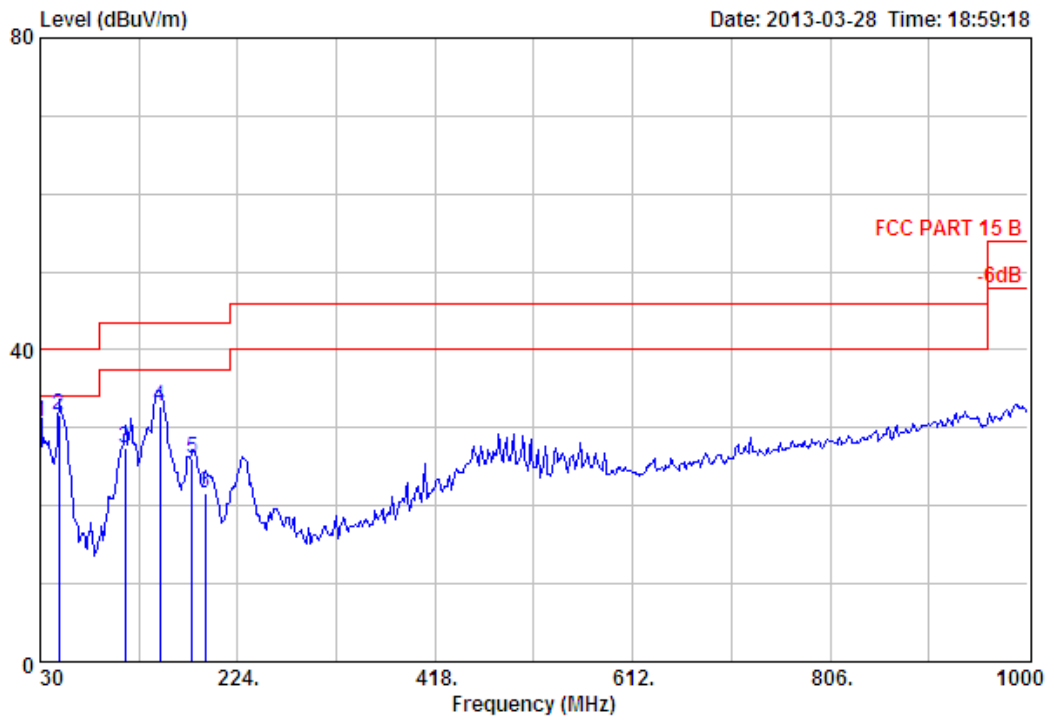
Site no. : 3m Chamber Data no. : 123  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2480MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	30.00	18.51	1.91	9.24	29.66	40.00	10.34	QP
2	48.43	8.37	2.30	17.93	28.60	40.00	11.40	QP
3	114.39	10.85	3.26	14.19	28.30	43.50	15.20	QP
4	145.43	11.22	3.73	17.76	32.71	43.50	10.79	QP
5	179.38	8.96	4.11	12.09	25.16	43.50	18.34	QP
6	227.88	9.46	4.51	10.32	24.29	46.00	21.71	QP



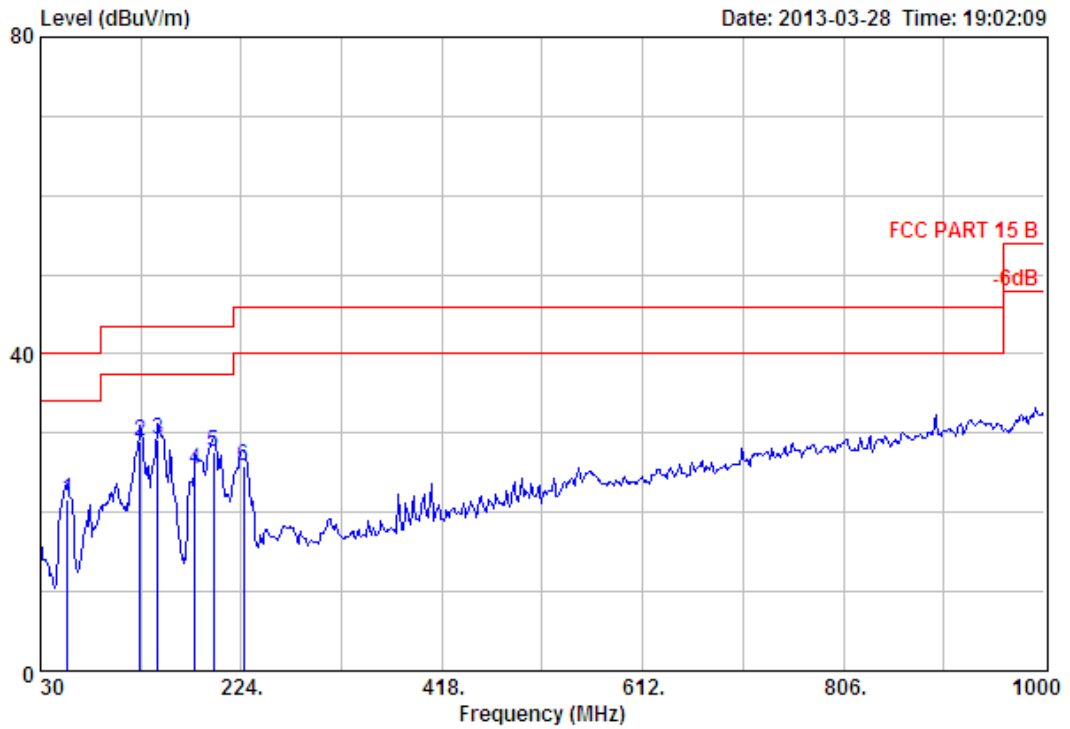
Site no. : 3m Chamber Data no. : 124  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : GFSK TX 2480MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reamark (dB)
1	53.28	6.11	2.43	12.86	21.40	40.00	18.60	QP
2	96.93	8.92	3.03	12.27	24.22	43.50	19.28	QP
3	126.03	11.34	3.44	7.13	21.91	43.50	21.59	QP
4	143.49	11.29	3.71	12.26	27.26	43.50	16.24	QP
5	155.13	10.67	3.82	10.26	24.75	43.50	18.75	QP
6	196.84	7.72	4.26	11.54	23.52	43.50	19.98	QP



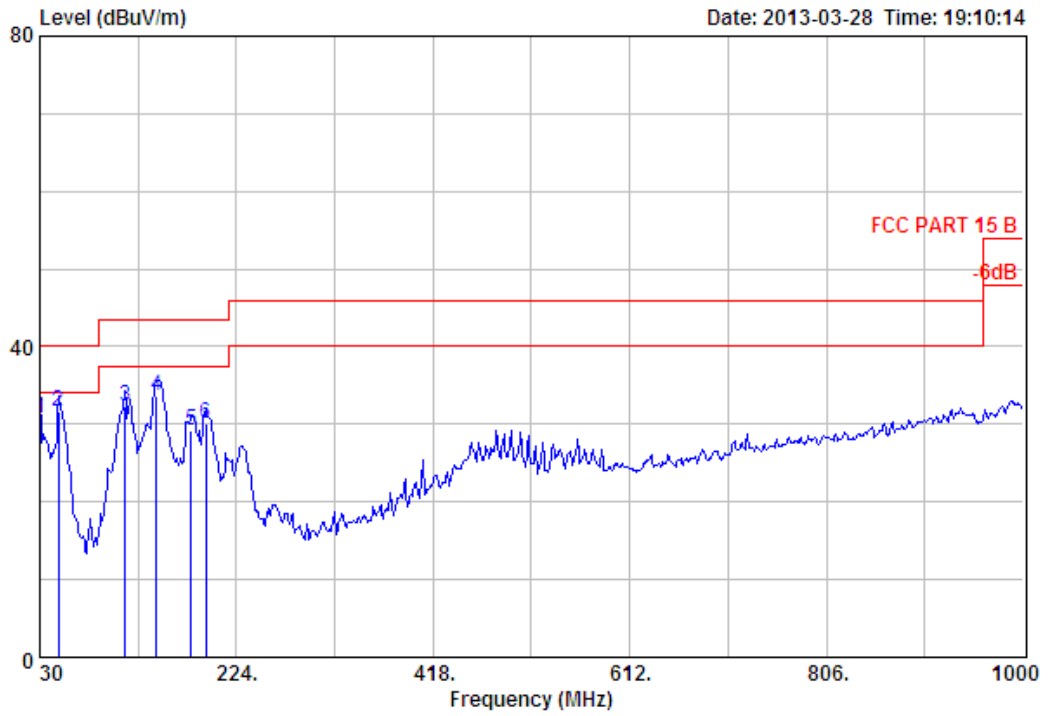
Site no. : 3m Chamber Data no. : 125  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2402MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	30.00	18.51	1.91	10.24	30.66	40.00	9.34	QP
2	48.43	8.37	2.30	20.93	31.60	40.00	8.40	QP
3	113.42	10.77	3.25	13.45	27.47	43.50	16.03	QP
4	147.37	11.08	3.75	17.83	32.66	43.50	10.84	QP
5	179.38	8.96	4.11	13.09	26.16	43.50	17.34	QP
6	191.99	7.85	4.22	9.50	21.57	43.50	21.93	QP



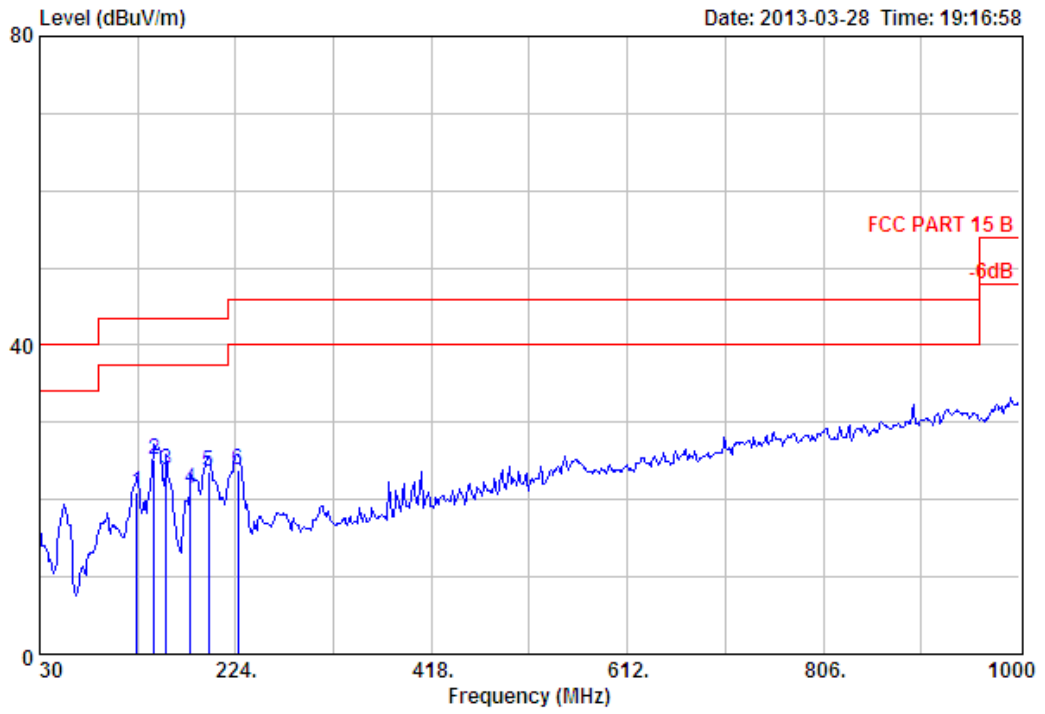
Site no. : 3m Chamber Data no. : 126  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2402MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	56.19	5.21	2.46	14.05	21.72	40.00	18.28	QP
2	126.03	11.34	3.44	14.13	28.91	43.50	14.59	QP
3	143.49	11.29	3.71	14.26	29.26	43.50	14.24	QP
4	179.38	8.96	4.11	12.37	25.44	43.50	18.06	QP
5	196.84	7.72	4.26	15.54	27.52	43.50	15.98	QP
6	225.94	9.47	4.51	11.83	25.81	46.00	20.19	QP



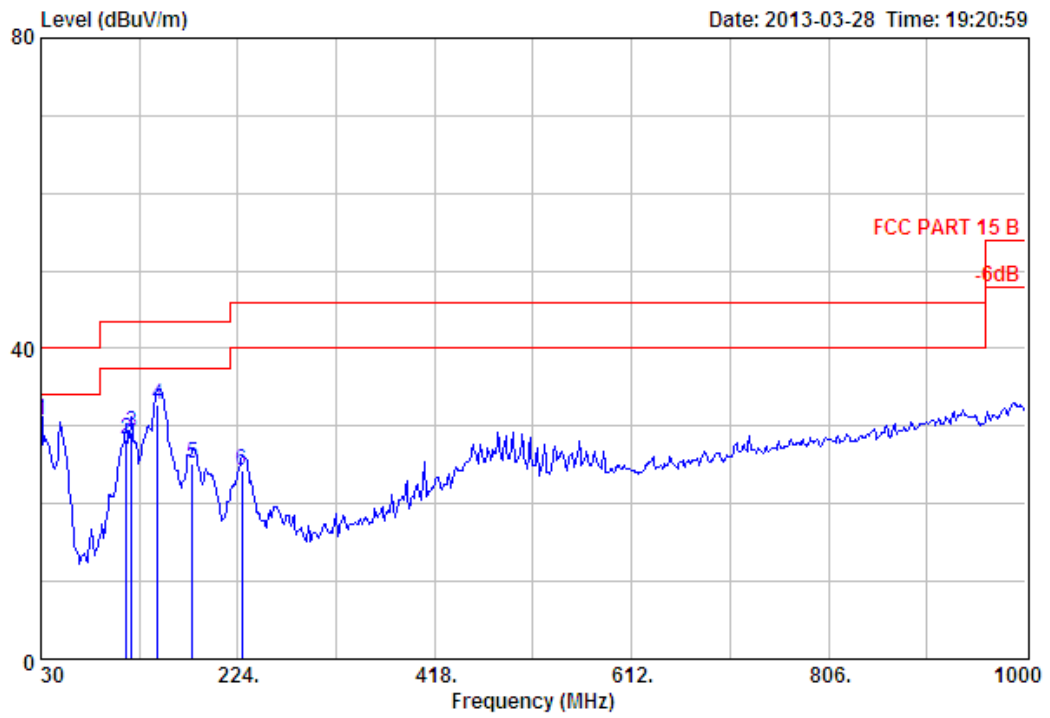
Site no. : 3m Chamber Data no. : 127  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2441MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	30.00	18.51	1.91	10.24	30.66	40.00	9.34	QP
2	48.43	8.37	2.30	20.93	31.60	40.00	8.40	QP
3	114.39	10.85	3.26	18.19	32.30	43.50	11.20	QP
4	145.43	11.22	3.73	18.76	33.71	43.50	9.79	QP
5	179.38	8.96	4.11	16.09	29.16	43.50	14.34	QP
6	193.93	7.76	4.21	18.06	30.03	43.50	13.47	QP



Site no. : 3m Chamber Data no. : 128  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK IX 2441MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	126.03	11.34	3.44	6.13	20.91	43.50	22.59	QP
2	143.49	11.29	3.71	10.26	25.26	43.50	18.24	QP
3	155.13	10.67	3.82	9.26	23.75	43.50	19.75	QP
4	179.38	8.96	4.11	8.37	21.44	43.50	22.06	QP
5	196.84	7.72	4.26	11.54	23.52	43.50	19.98	QP
6	225.94	9.47	4.51	9.83	23.81	46.00	22.19	QP



Site no. : 3m Chamber Data no. : 129  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B  
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Portable PA with Bluetooth  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : Expedition Express  
 Test Mode : 8-DPSK TX 2480MHz  
 Adapter 2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark (dB)
1	30.00	18.51	1.91	10.24	30.66	40.00	9.34	QP
2	114.39	10.85	3.26	14.19	28.30	43.50	15.20	QP
3	119.24	11.11	3.34	14.65	29.10	43.50	14.40	QP
4	145.43	11.22	3.73	17.76	32.71	43.50	10.79	QP
5	179.38	8.96	4.11	12.09	25.16	43.50	18.34	QP
6	227.88	9.46	4.51	10.32	24.29	46.00	21.71	QP