

APPLICATION FOR CERTIFICATION

On Behalf of

AVITA Corporation

Bluetooth Pressure Monitor

Total Model No. : BPM65ZB

FCC ID : UV3BPW-07XX

Prepared for : AVITA Corporation
9F, No. 78, Sec. 1, Kwang-Fu Rd.,
San-Chung, Taipei County, Taiwan, R.O.C..

Prepared by : Audix Technology Corporation
EMC Department
No. 53-11, Tin-Fu Tsun, Lin-Kou,
Taipei, Taiwan

Tel : (02) 2609-9301, 2609-2133
Fax: (02) 2609-9303

File Number : EM960413A
Report Number : EM-F960262
Date of Test : Jun. 14, 2007
Date of Report : Jun. 20, 2007

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	4
1. GENERAL INFORMATION	5
1.1. Description of Device (EUT).....	5
1.2. Description of Test Facility	5
1.3. Measurement Uncertainty.....	6
2. CONDUCTED EMISSION MEASUREMENT.....	7
3. RADIATED EMISSION MEASUREMENT	8
3.1. Test Equipment.....	8
3.2. Test Setup	8
3.3. Radiated Emission Limits (§15.209)	10
3.4. Operating Condition of EUT	10
3.5. Test Procedure	11
3.6. Radiated Emission Measurement Results.....	11
4. 20dB BANDWIDTH MEASUREMENT	29
4.1. Test Equipment.....	29
4.2. Block Diagram of Test Setup.....	29
4.3. Specification Limits (§15.247(a)(1))	29
4.4. Operating Condition of EUT	29
4.5. Test Procedure	29
4.6. Test Results.....	30
5. CARRIER FREQUENCY SEPARATION MEASUREMENT	32
5.1. Test Equipment.....	32
5.2. Block Diagram of Test Setup.....	32
5.3. Specification Limits (§15.247(a)(1))	32
5.4. Operating Condition of EUT	32
5.5. Test Procedure	32
5.6. Test Results.....	33
6. TIME OF OCCUPANCY MEASUREMENT	35
6.1. Test Equipment.....	35
6.2. Block Diagram of Test Setup.....	35
6.3. Specification Limits (§15.247(a)(1)(iii))	35
6.4. Operating Condition of EUT	35
6.5. Test Procedure	35
6.6. Test Results.....	36
7. NUMBER OF HOPPING CHANNELS MEASUREMENT	40
7.1. Test Equipment.....	40
7.2. Block Diagram of Test Setup.....	40
7.3. Specification Limits (§15.247(a)(1)(iii))	40
7.4. Operating Condition of EUT	40
7.5. Test Procedure	40
7.6. Test Results.....	40
8. MAXIMUM PEAK OUTPUT POWER MEASUREMENT	42
8.1. Test Equipment.....	42
8.2. Block Diagram of Test Setup.....	42
8.3. Specification Limits (§15.247(b)-(1)).....	42
8.4. Operating Condition of EUT	42
8.5. Test Procedure	42
8.6. Test Results.....	43

9. EMISSION LIMITATIONS MEASUREMENT44

9.1. Test Equipment..... 44

9.2. Block Diagram of Test Setup..... 44

9.3. Specification Limits (§15.247(c))..... 44

9.4. Operating Condition of EUT 44

9.5. Test Procedure 44

9.6. Test Results..... 45

10. BAND EDGES MEASUREMENT.....47

10.1. Test Equipment..... 47

10.2. Block Diagram of Test Setup 47

10.3. Specification Limits (§15.247(c)) 47

10.4. Operating Condition of EUT 47

10.5. Test Procedure 47

10.6. Test Results 47

11. DEVIATION TO TEST SPECIFICATIONS49

12. PHOTOGRAPHS50

12.1. Photos of Radiated Measurement at Semi-Anechoic Chamber..... 50

12.2. Photo of Section 4 ~ 6 & Section 9 ~ 10..... 53

12.3. Photo of Section 8 53

TEST REPORT CERTIFICATION

Applicant : AVITA Corporation
 Manufacturer : AVITA Corporation
 EUT Description : Bluetooth Pressure Monitor
 FCC ID : UV3BPW-07XX
 (A) MODEL NO. : BPM65ZB
 (B) SERIAL NO. : N/A
 (C) POWER SUPPLY : DC 6V
 (D) TEST VOLTAGE : DC 6V (Via DC Batteries)

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, FEBRUARY 2006
AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.205, §15.207, §15.209 and §15.247)

The device described above was tested by Audix Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits.

The measurement results are contained in this test report and Audix Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology Corporation.

Date of Test: Jun. 14, 2007

Prepared by: Tina Huang Jun. 22, 2007
(Tina Huang/Assistant)

Test Engineer: Ben Cheng Jun. 22, 2007
(Ben Cheng/Section Manager)

Approved & Authorized Signer: Leon Liu Jun. 22 2007
(Leon Liu/Senior Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Bluetooth Pressure Monitor
Model Number	:	BPM65ZB
FCC ID	:	UV3BPW-07XX
Applicant	:	AVITA Corporation 9F, No.78, Sec. 1, Kwang-Fu Rd., San-Chung, Taipei County, Taiwan, R.O.C.
Bluetooth Module	:	BlueMode+B20
Fundamental Range	:	2400MHz ~ 2483.5MHz
Channel Number	:	79
Radio Technology	:	FHSS Modulation
Antenna Gain	:	2.8dBi
Date of Receipt of Sample	:	May 28, 2007
Date of Test	:	Jun. 14, 2007

1.2. Description of Test Facility

Name of Firm	:	Audix Technology Corporation EMC Department No. 53-11, Tin-Fu Tsun, Lin-Kou, Taipei, Taiwan
Test Location & Facility (AC)	:	Semi-Anechoic Chamber No. 53-11, Tin-Fu Tsun, Lin-Kou, Taipei, Taiwan May 15, 2006 File on Federal Communication Commission Registration Number: 90993
NVLAP Lab. Code (NVLAP is a NATA accredited body under Mutual Recognition Agreement)	:	200077-0

1.3. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Radiation Test (Distance: 3m)	30MHz~300MHz	±2.91dB
	300MHz~1000MHz	±2.94dB
	Above 1GHz	± 5.02dB

Remark : Uncertainty = $ku_c(y)$

Test Item	Uncertainty
20dB Bandwidth	± 0.2kHz
Carrier Frequency Separation	± 0.2kHz
Time Of Occupancy	± 0.03sec
Maximum peak Output power	± 0.52dBm
Emission Limitations	± 0.13dB
Band Edges	± 0.13dB

2. CONDUCTED EMISSION MEASUREMENT

【The EUT only employs battery power for operation, no conductive emission limits are required according to FCC Part 15 Section §15.207】

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

3.1.1. For Frequency 30MHz~1000MHz (at Semi-Anechoic Chamber)

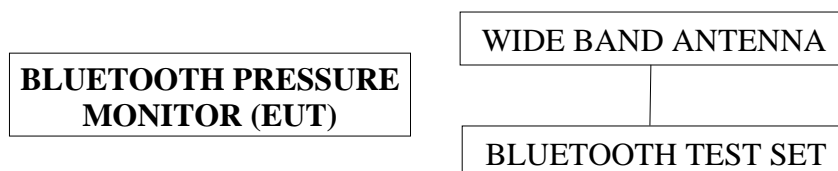
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Aug. 23, 06'	Aug. 22, 07'
2.	Test Receiver	R & S	ESCS30	100265	Sep. 19, 06'	Sep. 18, 07'
3.	Pre-Amplifier	HP	8447D	2944A06305	Mar. 03, 07'	Mar. 01, 08'
4.	Biconical Antenna	CHASE	VBA6106A	1264	Apr. 11, 07'	Apr. 09, 08'
5.	Log Periodic Antenna	Schwarzbeck	UHALP91 08-A	0139	Apr. 11, 07'	Apr. 09, 08'
6.	Wide Band Antenna	N/A	RS-1500	N/A	N/A	N/A
7.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A

3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

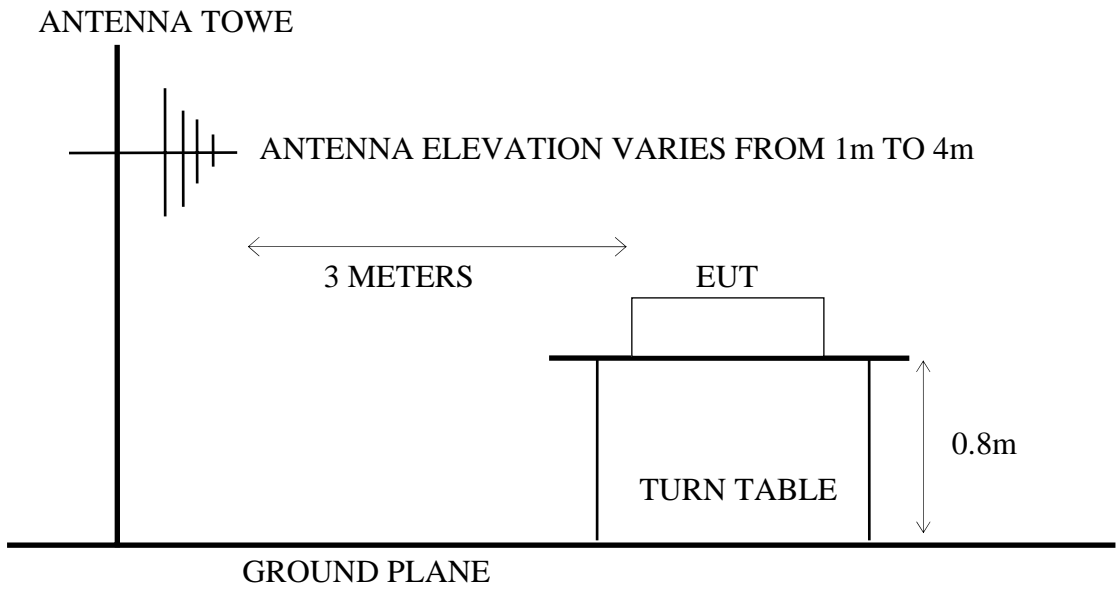
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Aug. 23, 06'	Aug. 22, 07'
2.	Pre-Amplifier	HP	8449B	3008A01284	Jun. 30, 06'	Jun. 29, 07'
3.	3.5G High Pass Filter	HP	84300- 80038	005	Jan. 11, 07'	Jan. 10, 08'
4.	Horn Antenna	EMCO	3115	9112-3775	May 23, 07'	May 21, 08'
5.	Horn Antenna	EMCO	3116	2653	Oct. 04, 06'	Oct. 03, 07'
6.	Wide Band Antenna	N/A	RS-1500	N/A	N/A	N/A
7.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A

3.2. Test Setup

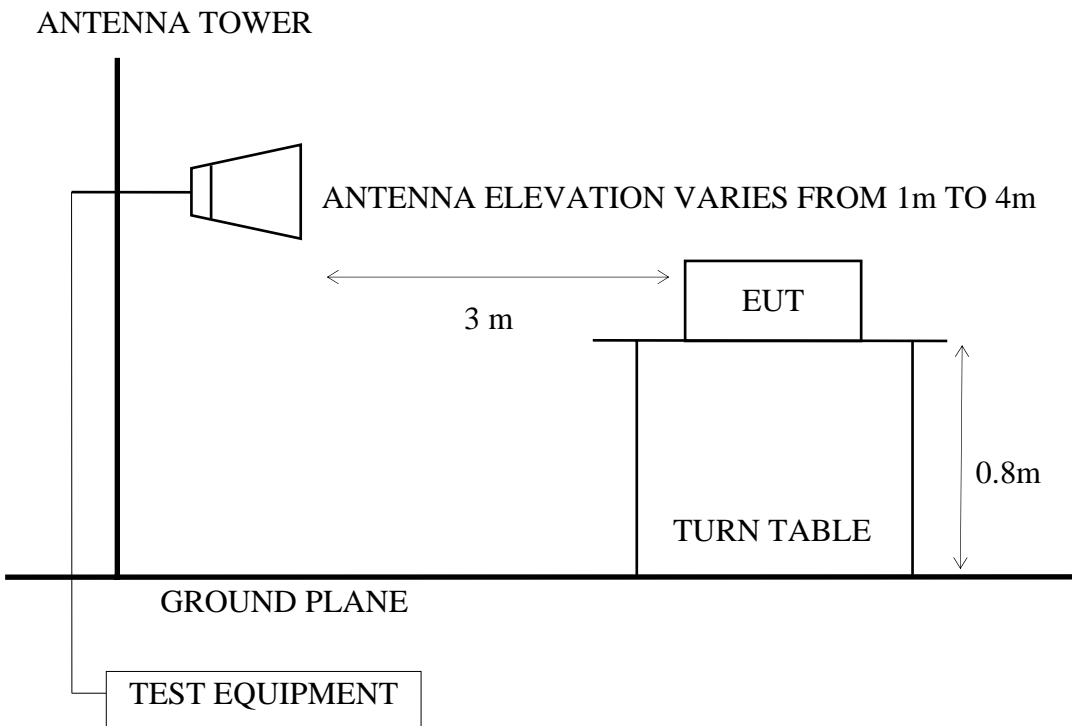
3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram for 30-1000MHz



3.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



3.3. Radiated Emission Limits (§15.209)

Frequency MHz	Distance Meters	Field Strengths Limits	
		$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 $\text{dB}\mu\text{V/m}$ (Peak) 54.0 $\text{dB}\mu\text{V/m}$ (Average)	

- Remark :
- (1) Emission level ($\text{dB}\mu\text{V/m}$) = 20 log Emission level ($\mu\text{V/m}$)
 - (2) The tighter limit applies at the edge between two frequency bands.
 - (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
 - (4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
 - (5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT (Bluetooth Pressure Monitor) and simulator as shown on 3.2.1.
- 3.4.2. Turn on the power of all equipment.
- 3.4.3. The Bluetooth test set link to wide band antenna.
- 3.4.4. The EUT was set to continuously transmit signals at 2402MHz, 2441MHz and 2480MHz during testing.
- 3.4.5. The EUT was set to continuously receive signals at 2441MHz during testing.

3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of the R&S Test Receiver ESCS30 was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 3Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 25GHz (Up to 10th harmonics from fundamental frequency) was checked.

3.6. Radiated Emission Measurement Results

PASSED. All the emissions not reported below are too low against the official limits.

EUT : Bluetooth Pressure Monitor

M/N : BPM65ZB

Test Date : Jun. 14, 2007

Temperature : 28

Humidity : 63%

For Frequency Range 30MHz~1000MHz:

The EUT with following test modes were performed during this section testing and all the test results are listed in section 3.6.1.

No.	Test Mode and Frequency		Reference Test Data No.	
			Horizontal	Vertical
1.	Transmitting	2402MHz (CH0)	# 9	# 10
2.		2441MHz (CH39)	# 10	# 9
3.		2480MHz (CH78)	# 9	# 10
4.	Receiving	2441MHz (CH39)	# 10	# 9

* Above all final readings were measured with Quasi-Peak detector.

For Frequency above 1GHz:

The EUT with following test modes were performed during this section testing and all the test results are listed in section 3.6.2.

No.	Test Mode and Frequency	
1.	Transmitting	2402MHz (CH0)
2.		2441MHz (CH39)
3.		2480MHz (CH78)
4.	Receiving	2441MHz (CH39)

* Above all final readings were measured with Peak detector and Average detector.

For Restricted Bands:

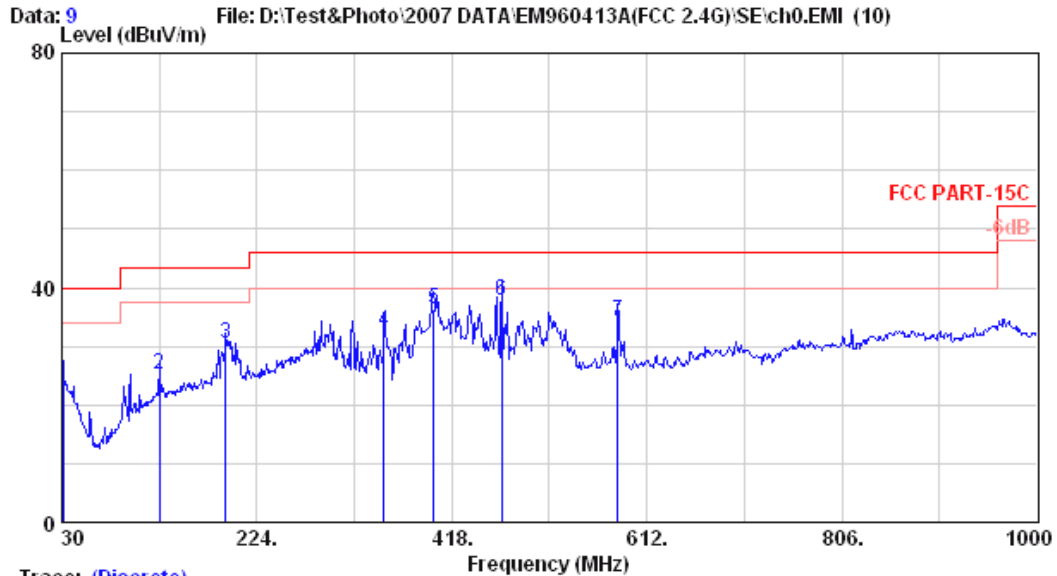
The EUT was tested in restricted bands and all the test results are listed in section 3.6.3. (The restricted bands defined in part 15.205(a))

No.	Test Mode and Frequency	Reference Test Data No.		
		Horizontal	Vertical	
1.	Transmitting	2402MHz (CH0)	# 8, # 5	# 7, # 6
2.		2480MHz (CH78)	# 1, # 4	# 2, # 3

3.6.1. 30MHz~ 1000MHz Frequency Range Measurement Result



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

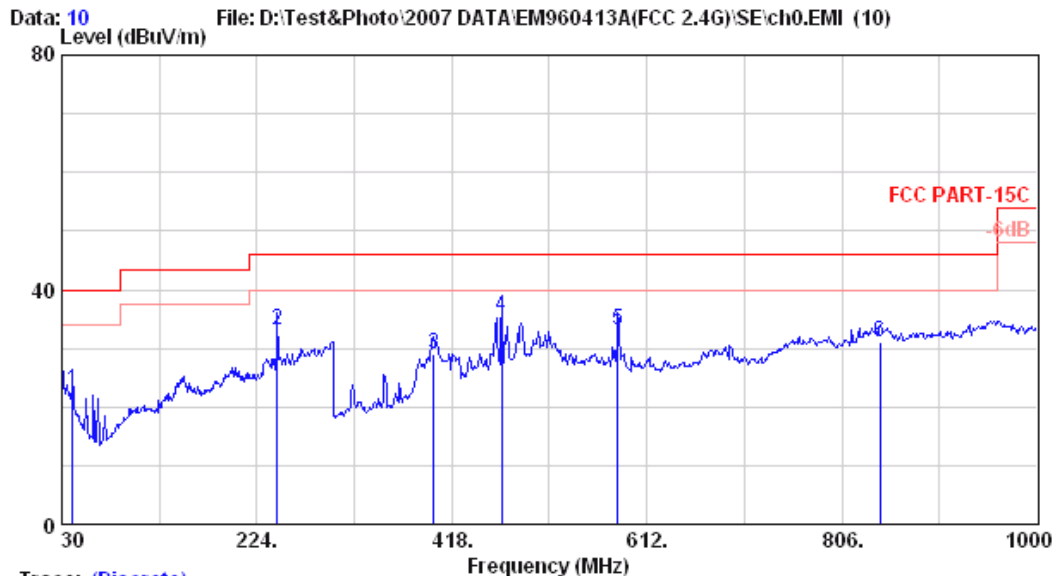
Site no. : A/C Chamber Data no. : 9
 Dis. / Ant. : 3m VBA6106A/UHALP9108-A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N: BPM652B
 Power Rating : DV6V
 Test Mode : CH0

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBμV)	Level (dBμV/m)	(dBμV/m)	(dB)	
1	30.970	24.81	1.10	-1.24	24.67	40.00	15.33
2	127.000	19.56	2.40	3.18	25.14	43.50	18.36
3	192.960	21.66	3.00	5.68	30.33	43.50	13.17
4	350.100	15.44	4.30	12.91	32.65	46.00	13.35
5	399.570	17.69	4.80	13.80	36.28	46.00	9.72
6	467.470	18.21	5.80	13.92	37.93	46.00	8.07
7	582.900	20.92	6.36	6.89	34.16	46.00	11.84

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

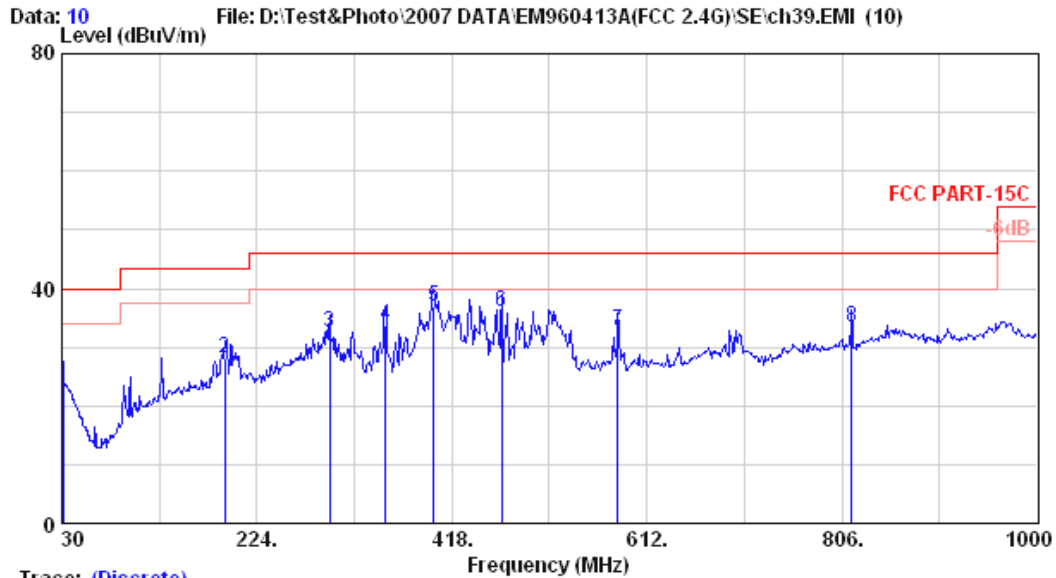
Site no.	: A/C Chamber	Data no.	: 10
Dis. / Ant.	: 3m VBA6106A/UHALP9108-A	Ant. pol.	: VERTICAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 28°C/63%	Engineer	: Alvin_Yang
EUT	: Bluetooth Pressure Monitor M/N:BPM652B		
Power Rating	: DV6V		
Test Mode	: CH0		

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	40.670	20.33	1.15	22.78	40.00	17.22	
2	244.370	24.48	5.02	33.00	46.00	13.00	
3	399.570	17.61	6.51	28.92	46.00	17.08	
4	467.470	18.99	10.62	35.42	46.00	10.58	
5	582.900	21.68	4.93	32.97	46.00	13.03	
6	843.830	26.62	-2.61	31.11	46.00	14.89	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

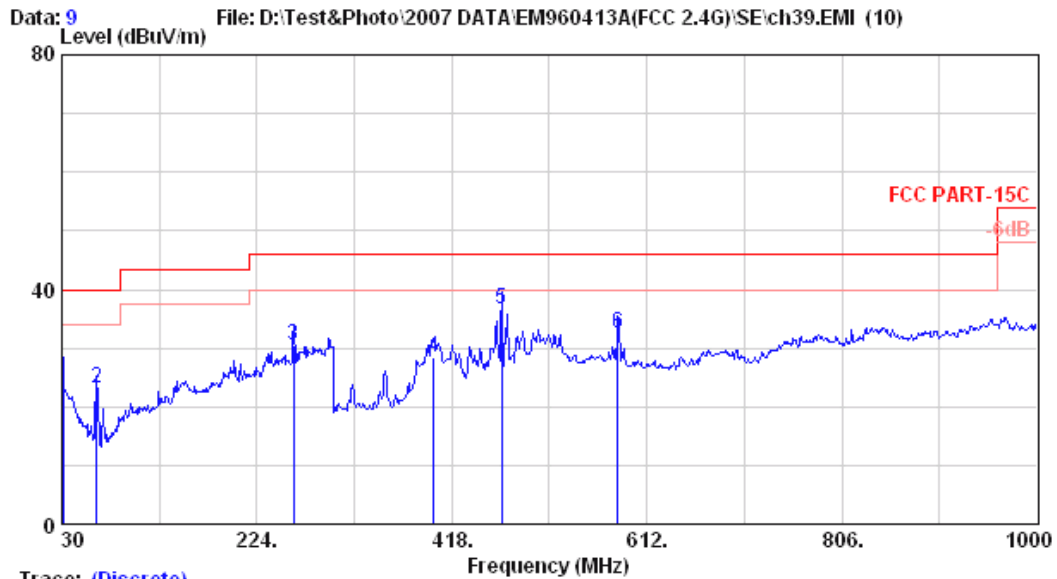
Site no.	: A/C Chamber	Data no.	: 10
Dis. / Ant.	: 3m VBA6106A/UHALP9108-A	Ant. pol.	: HORIZONTAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 28*C/63%	Engineer	: Alvin_Yang
EUT	: Bluetooth Pressure Monitor	M/N:	BPM65ZB
Power Rating	: DV6V		
Test Mode	: CH39		

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)	
1	30.970	24.81	1.10	-1.47	24.44	40.00	15.56
2	191.990	21.60	3.00	3.49	28.09	43.50	15.41
3	296.750	26.59	4.00	1.86	32.45	46.00	13.55
4	352.040	15.55	4.30	13.83	33.69	46.00	12.31
5	399.570	17.69	4.80	14.42	36.90	46.00	9.10
6	467.470	18.21	5.80	11.89	35.90	46.00	10.10
7	582.900	20.92	6.36	5.42	32.69	46.00	13.31
8	815.700	23.89	7.00	2.51	33.40	46.00	12.60

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

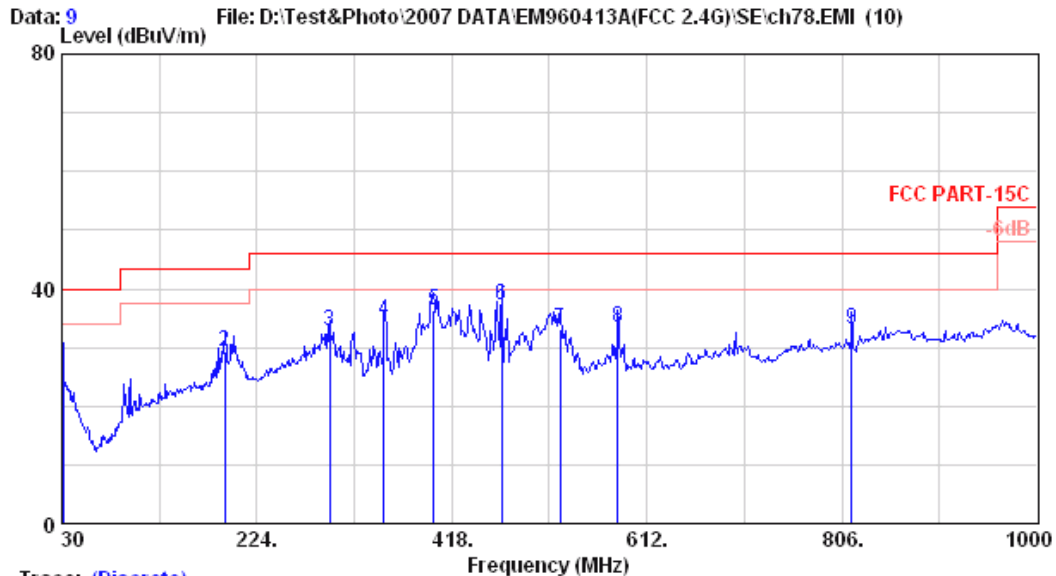
Site no.	: A/C Chamber	Data no.	: 9
Dis. / Ant.	: 3m VBA6106A/UHALP9108-A	Ant. pol.	: VERTICAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 28+C/63%	Engineer	: Alvin_Yang
EUT	: Bluetooth Pressure Monitor	M/N:	BPM652B
Power Rating	: DV6V		
Test Mode	: CH39		

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBμV)	Level (dBμV/m)	(dBμV/m)	(dB)	
1	30.970	23.39	1.10	0.94	25.43	40.00	14.57
2	64.920	12.84	1.70	8.55	23.09	40.00	16.91
3	260.860	24.74	3.60	2.28	30.62	46.00	15.38
4	399.570	17.61	4.80	6.13	28.54	46.00	17.46
5	467.470	18.99	5.80	11.69	36.49	46.00	9.51
6	582.900	21.68	6.36	4.46	32.50	46.00	13.50

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

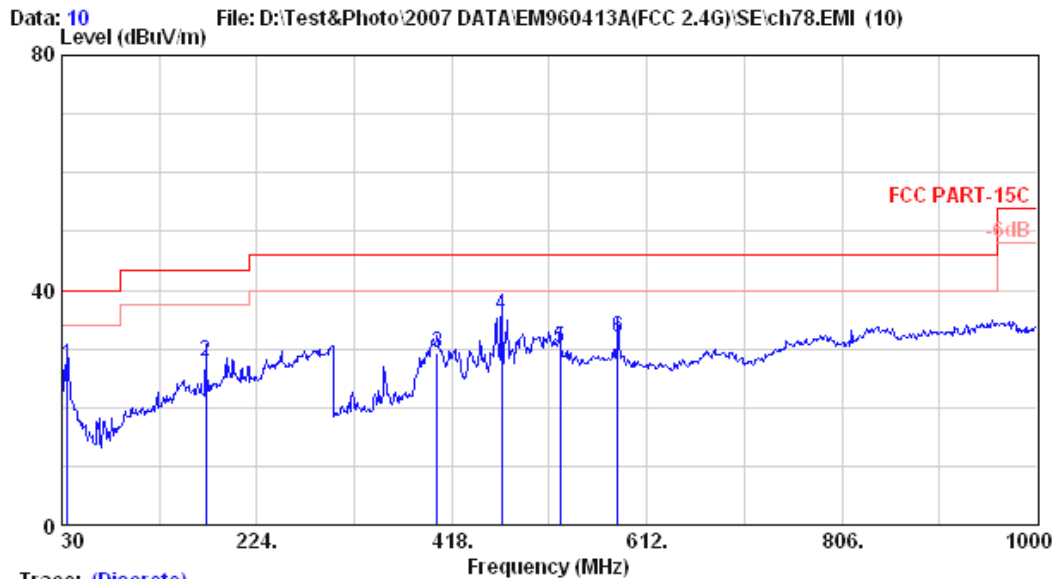
Site no. : A/C Chamber Data no. : 9
 Dis. / Ant. : 3m VBA6106A/UHALP9108-A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : 8593EM 28*C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N: BEM65ZB
 Power Rating : DV6V
 Test Mode : CH78

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.970	24.81	1.10	1.87	27.78	40.00	12.22	
2	191.990	21.60	3.00	4.82	29.42	43.50	14.08	
3	296.750	26.59	4.00	2.12	32.71	46.00	13.29	
4	350.100	15.44	4.30	14.72	34.46	46.00	11.54	
5	399.570	17.69	4.80	13.83	36.31	46.00	9.69	
6	467.470	18.21	5.80	13.33	37.34	46.00	8.66	
7	525.670	19.66	6.90	6.57	33.13	46.00	12.87	
8	582.900	20.92	6.36	6.04	33.31	46.00	12.69	
9	815.700	23.89	7.00	2.18	33.07	46.00	12.93	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

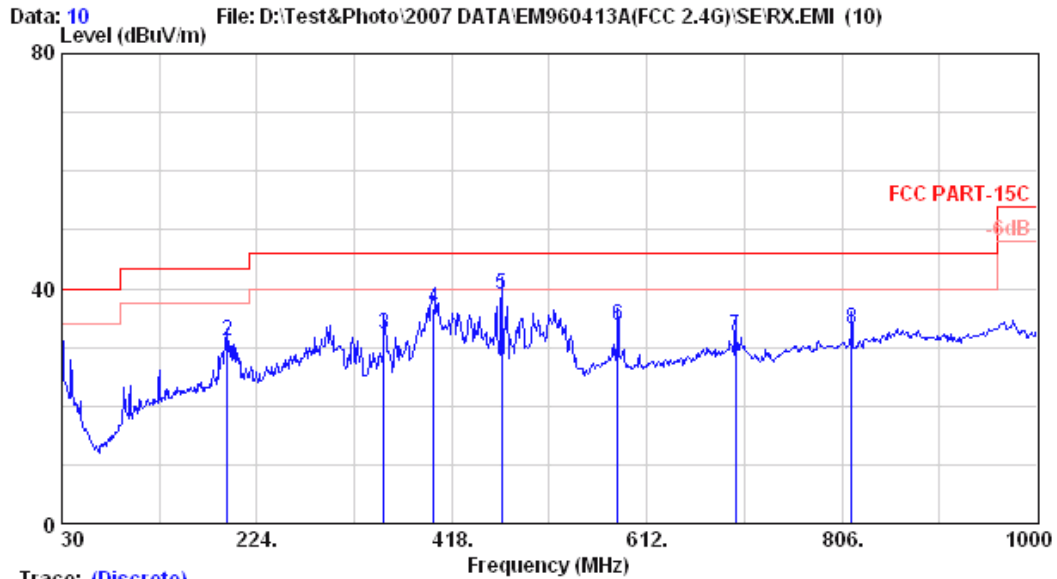
Site no. : A/C Chamber Data no. : 10
 Dis. / Ant. : 3m VBA6106A/UHALP9108-A Ant. pol. : VERTICAL
 Limit : FCC PART-15C
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH78

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	35.820	21.79	1.20	4.40	27.39	40.00	12.61
2	173.560	20.30	2.80	4.79	27.90	43.50	15.60
3	403.450	17.42	4.90	6.90	29.22	46.00	16.78
4	467.470	18.99	5.80	10.85	35.65	46.00	10.35
5	525.670	20.31	6.90	3.08	30.29	46.00	15.71
6	582.900	21.68	6.36	4.02	32.06	46.00	13.94

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

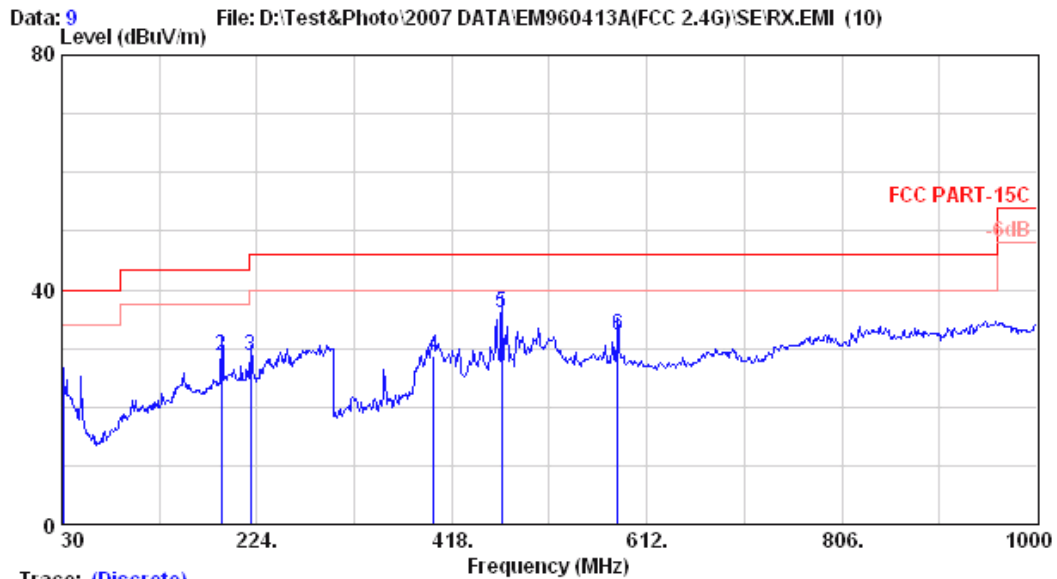
Site no. : A/C Chamber Data no. : 10
 Dis. / Ant. : 3m VBA6106A/UHALP9108-A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : RX

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBμV)	Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark	
1	30.000	24.86	1.10	3.69	29.65	40.00	10.35	
2	194.900	21.77	3.00	6.22	31.00	43.50	12.50	
3	350.100	15.44	4.30	12.61	32.35	46.00	13.65	
4	399.570	17.69	4.80	14.25	36.73	46.00	9.27	
5	467.470	18.21	5.80	14.98	38.99	46.00	7.01	
6	582.900	20.92	6.36	6.37	33.64	46.00	12.36	
7	700.270	23.46	6.50	1.86	31.82	46.00	14.18	
8	815.700	23.89	7.00	2.16	33.05	46.00	12.95	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.



Trace: (Discrete)

Site no.	: A/C Chamber	Data no.	: 9
Dis. / Ant.	: 3m VBA6106A/UHALP9108-A	Ant. pol.	: VERTICAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 28°C/63%	Engineer	: Alvin_Yang
EUT	: Bluetooth Pressure Monitor	M/N:	BPM652B
Power Rating	: DV6V		
Test Mode	: RX		

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	30.970	23.39	1.10	-0.90	23.59	40.00	16.41
2	189.080	21.70	2.90	4.23	28.82	43.50	14.68
3	218.180	22.45	3.20	2.96	28.61	46.00	17.39
4	399.570	17.61	4.80	6.33	28.75	46.00	17.25
5	467.470	18.99	5.80	11.32	36.12	46.00	9.88
6	582.900	21.68	6.36	4.16	32.20	46.00	13.80

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

3.6.2. Above 1GHz Frequency Range Measurement Results

Date of Test :	<u>Jun. 14, 2007</u>	Temperature :	<u>28</u>
EUT :	<u>Bluetooth Pressure Monitor</u>	Humidity :	<u>63%</u>
Test Mode :	<u>Transmitting Mode, Frequency: 2402MHz (CH0)</u>	Test Voltage :	<u>DC 6V</u>

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dBμV	Meter Reading Horizontal dBμV/m	Emission Level Horizontal dBμV/m	Limits dB	Margin
Peak	1204.960	25.29	4.59	10.47	40.35	74.00	33.65
	1653.520	26.22	6.52	8.58	41.32	74.00	32.68
	2137.360	28.10	6.04	9.66	43.80	74.00	30.20
	2560.720	29.05	6.57	9.42	45.04	74.00	28.96
	2644.720	29.40	6.71	10.76	46.87	74.00	27.13
Average	1204.960	25.29	4.59	2.47	32.35	54.00	21.65
	1653.520	26.22	6.52	0.58	33.32	54.00	20.68
	2137.360	28.10	6.04	1.66	35.80	54.00	18.20
	2560.720	29.05	6.57	1.42	37.04	54.00	16.96
	2644.720	29.40	6.71	2.76	38.87	54.00	15.13

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dBμV	Meter Reading Vertical dBμV/m	Emission Level Vertical dBμV/m	Limits dB	Margin
Peak	1204.960	25.29	4.59	14.66	44.54	74.00	29.46
	1603.120	25.95	6.18	11.95	44.08	74.00	29.92
	1804.720	26.94	6.88	11.87	45.69	74.00	28.31
	2560.720	29.05	6.57	12.84	48.46	74.00	25.54
	2641.360	29.40	6.69	11.95	48.04	74.00	25.96
Average	1204.960	25.29	4.59	6.66	36.54	54.00	17.46
	1603.120	25.95	6.18	3.95	36.08	54.00	17.92
	1804.720	26.94	6.88	3.87	37.69	54.00	16.31
	2560.720	29.05	6.57	4.84	40.46	54.00	13.54
	2641.360	29.40	6.69	3.95	40.04	54.00	13.96

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Transmitting Mode, Frequency: 2441MHz (CH39) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Horizontal dB μ V/m	Emission Level Horizontal dB μ V/m	Limits dB	Margin
Peak	1204.960	25.29	4.59	9.53	39.41	74.00	34.59
	1927.360	27.49	6.23	8.55	42.27	74.00	31.73
	2560.720	29.05	6.57	9.61	45.23	74.00	28.77
	2644.720	29.40	6.71	11.38	47.49	74.00	26.51
Average	1204.960	25.29	4.59	1.53	31.41	54.00	22.59
	1927.360	27.49	6.23	0.55	34.27	54.00	19.73
	2560.720	29.05	6.57	0.61	36.23	54.00	17.77
	2644.720	29.40	6.71	2.38	38.49	54.00	15.51

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Vertical dB μ V/m	Emission Level Vertical dB μ V/m	Limits dB	Margin
Peak	1146.160	25.27	4.49	14.99	44.75	74.00	29.25
	1603.120	25.95	6.18	11.23	43.36	74.00	30.64
	1989.520	27.75	5.91	11.38	45.04	74.00	28.96
	2560.720	29.05	6.57	14.16	49.78	74.00	24.22
	2644.720	29.40	6.71	11.76	47.87	74.00	26.13
Average	1146.160	25.27	4.49	6.99	36.75	54.00	17.25
	1603.120	25.95	6.18	3.23	35.36	54.00	18.64
	1989.520	27.75	5.91	3.38	37.04	54.00	16.96
	2560.720	29.05	6.57	6.16	41.78	54.00	12.22
	2644.720	29.40	6.71	3.76	39.87	54.00	14.13

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Transmitting Mode, Frequency: 2480MHz (CH78) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Horizontal dB μ V/m	Emission Level Horizontal dB μ V/m	Limits dB	Margin
Peak	1199.920	25.29	4.59	10.90	40.78	74.00	33.22
	1750.960	26.70	7.16	8.77	42.63	74.00	31.37
	2560.720	29.05	6.57	12.53	48.15	74.00	25.85
	2644.720	29.40	6.71	12.43	48.54	74.00	25.46
Average	1199.920	25.29	4.59	2.90	32.78	54.00	21.22
	1750.960	26.70	7.16	0.77	34.63	54.00	19.37
	2560.720	29.05	6.57	4.53	40.15	54.00	13.85
	2644.720	29.40	6.71	4.43	40.54	54.00	13.46

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Vertical dB μ V/m	Emission Level Vertical dB μ V/m	Limits dB	Margin
Peak	1204.960	25.29	4.59	12.94	42.82	74.00	31.18
	1603.120	25.95	6.18	11.04	43.17	74.00	30.83
	1846.720	27.13	6.65	8.77	42.55	74.00	31.45
	2560.720	29.05	6.57	13.38	49.00	74.00	25.00
	2644.720	29.40	6.71	12.46	48.57	74.00	25.43
Average	1204.960	25.29	4.59	4.94	34.82	54.00	19.18
	1603.120	25.95	6.18	3.04	35.17	54.00	18.83
	1846.720	27.13	6.65	0.77	34.55	54.00	19.45
	2560.720	29.05	6.57	5.38	41.00	54.00	13.00
	2644.720	29.40	6.71	4.46	40.57	54.00	13.43

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Receiving Mode, Frequency: 2441MHz (CH39) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Horizontal dB μ V/m	Emission Level Horizontal dB μ V/m	Limits dB	Margin
Peak	1204.960	25.29	4.59	10.08	39.96	74.00	34.04
	1846.720	27.13	6.65	9.05	42.83	74.00	31.17
Average	1204.960	25.29	4.59	2.08	31.96	54.00	22.04
	1846.720	27.13	6.65	1.05	34.83	54.00	19.17

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Vertical dB μ V/m	Emission Level Vertical dB μ V/m	Limits dB	Margin
Peak	1104.160	25.25	4.40	12.21	41.86	74.00	32.14
	1204.960	25.29	4.59	14.05	43.93	74.00	30.07
	1603.120	25.95	6.18	10.97	43.10	74.00	30.90
	2095.360	28.01	5.98	11.69	45.68	74.00	28.32
	2565.760	29.09	6.58	12.51	48.18	74.00	25.82
Average	1104.160	25.25	4.40	4.21	33.86	54.00	20.14
	1204.960	25.29	4.59	6.05	35.93	54.00	18.07
	1603.120	25.95	6.18	2.97	35.10	54.00	18.90
	2095.360	28.01	5.98	3.69	37.68	54.00	16.32
	2565.760	29.09	6.58	4.51	40.18	54.00	13.82

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

3.6.3. Restricted Bands Measurement Results

Date of Test : Jun. 14, 2007 Temperature : 28
 EUT : Bluetooth Pressure Monitor Humidity : 63%
 Test Mode : Transmitting Mode, Frequency: 2402MHz (CH0) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Horizontal dB μ V/m	Emission Level Horizontal dB μ V/m	Limits dB	Margin
Peak *	2380.290	28.58	6.32	8.17	43.07	74.00	30.93
Average *	2386.340	28.59	6.33	-3.67	31.25	54.00	22.75

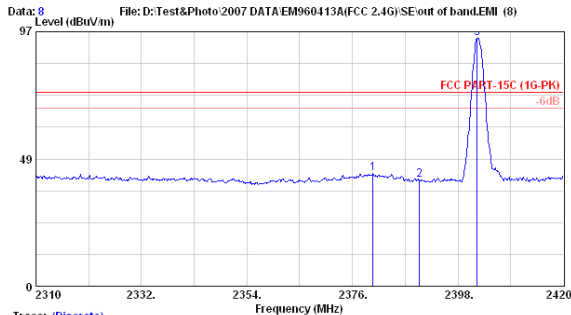
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



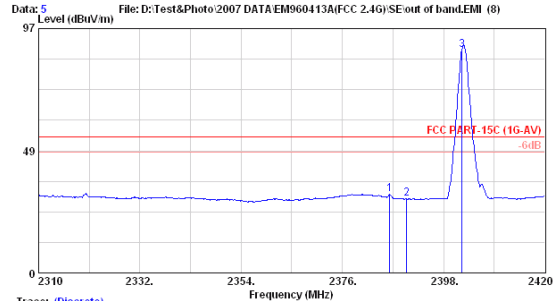
AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttmc@ttmc.com



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttmc@ttmc.com



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 8
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N: BPM652B
 Power Rating : DV6V
 Test Mode : CH0



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 5
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N: BPM652B
 Power Rating : DV6V
 Test Mode : CH0

1	2	3				
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark
2380.290	28.58	6.32	43.07	74.00	30.93	Peak
2390.000	28.59	6.34	40.39	74.00	33.61	Peak
2402.000	28.62	6.36	59.38	74.00	-20.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

1	2	3					
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark	
2386.340	28.59	6.33	31.25	54.00	22.74	Average	
2390.000	28.59	6.34	-5.57	29.37	54.00	24.63	Average
2402.000	28.62	6.36	53.36	88.34	54.00	-34.34	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Transmitting Mode, Frequency: 2402MHz (CH0) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dBμV	Meter Reading Vertical dBμV/m	Emission Level Vertical dBμV/m	Limits dB	Margin
Peak *	2385.790	28.59	6.33	7.67	42.59	74.00	31.41
Average *	2386.340	28.59	6.33	-2.73	32.19	54.00	21.81

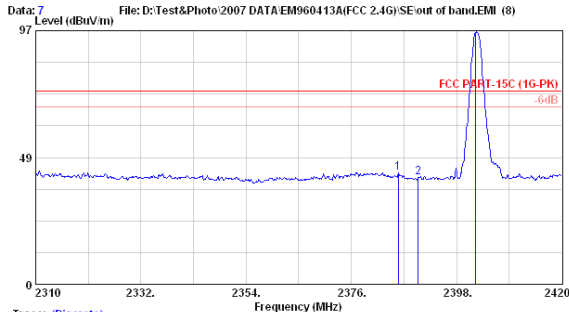
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com



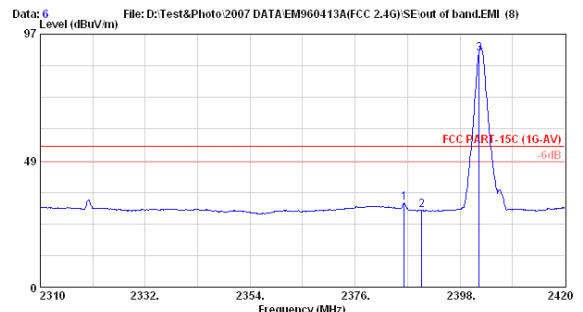
AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 7
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH0

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2385.790	28.59	6.33	7.67	42.59	74.00	31.41	Peak
2 2390.000	28.59	6.34	5.87	40.81	74.00	33.19	Peak
3 2402.000	28.62	6.36	61.20	96.18	74.00	-22.18	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 6
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH0

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2386.340	28.59	6.33	-2.73	32.20	54.00	21.80	Average
2 2390.000	28.59	6.34	-5.57	29.37	54.00	24.63	Average
3 2402.000	28.62	6.36	54.60	89.57	54.00	-35.57	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Transmitting Mode, Frequency: 2480MHz (CH78) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Horizontal dB μ V/m	Emission Level Horizontal dB μ V/m	Limits dB	Margin
Peak *	2487.600	28.77	6.45	7.98	43.20	74.00	30.80
Average *	2483.600	28.77	6.45	-3.14	32.08	54.00	21.92

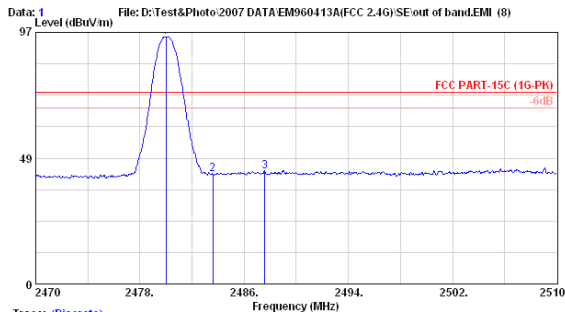
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com



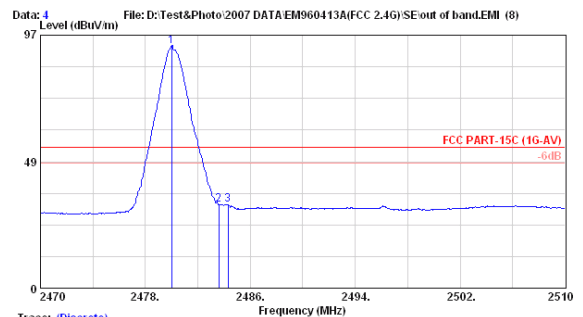
AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 1
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH78

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark
1	2480.000	28.76	6.44	59.99	95.20	74.00	-21.20	Peak
2	2483.600	28.77	6.45	7.13	42.35	74.00	31.65	Peak
3	2487.600	28.77	6.45	7.98	43.21	74.00	30.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 4
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH78

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark
1	2480.000	28.76	6.44	57.68	92.88	54.00	-38.88	Average
2	2483.600	28.77	6.45	-3.14	32.09	54.00	21.91	Average
3	2484.320	28.77	6.45	-3.40	31.83	54.00	22.17	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Date of Test : Jun. 14, 2007 Temperature : 28

EUT : Bluetooth Pressure Monitor Humidity : 63%

Test Mode : Transmitting Mode, Frequency: 2480MHz (CH78) Test Voltage : DC 6V

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB μ V	Meter Reading Vertical dB μ V/m	Emission Level Vertical dB μ V/m	Limits dB	Margin
Peak *	2488.080	28.77	6.45	9.11	44.33	74.00	29.67
Average *	2496.080	28.79	6.46	-1.32	33.93	54.00	20.07

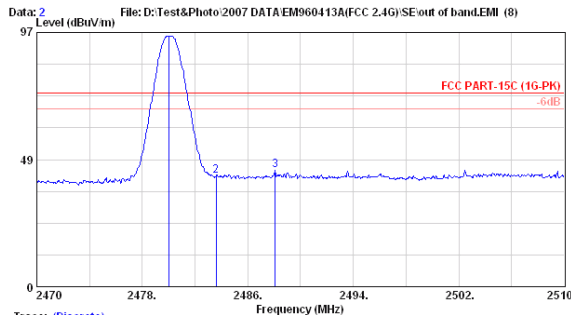
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:itmc@itmc.com



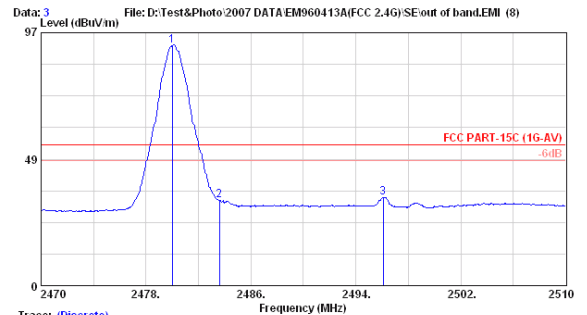
AUDIX TECHNOLOGY Corp. EMC Laboratory
 No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:itmc@itmc.com



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 2
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH78

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark
1	2480.000	28.76	6.44	60.46	95.66	74.00	-21.66	Peak
2	2483.600	28.77	6.45	7.07	42.30	74.00	31.70	Peak
3	2488.080	28.77	6.45	9.11	44.34	74.00	29.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Trace: (Discrete)
 Site no. : A/C Chamber Data no. : 3
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : 8593EM 28°C/63% Engineer : Alvin_Yang
 EUT : Bluetooth Pressure Monitor M/N:BPM652B
 Power Rating : DV6V
 Test Mode : CH78

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark
1	2480.000	28.76	6.44	56.80	92.00	54.00	-38.00	Average
2	2483.600	28.77	6.45	-2.67	32.56	54.00	21.44	Average
3	2496.080	28.79	6.46	-1.32	33.93	54.00	20.07	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

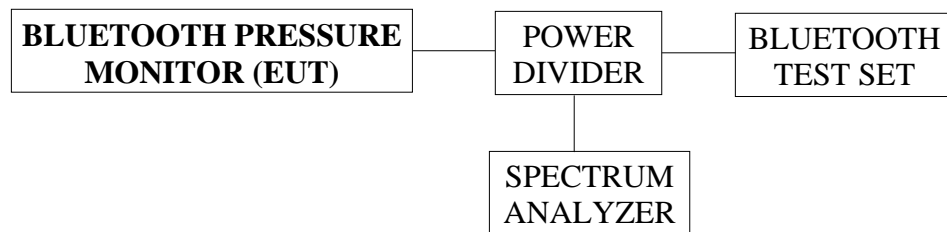
4. 20dB BANDWIDTH MEASUREMENT

4.1. Test Equipment

The following test equipment was used during the 20dB bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10. 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

4.2. Block Diagram of Test Setup



4.3. Specification Limits (§15.247(a)(1))

Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT and simulator as shown on 4.2.
- 4.4.2. Turn on the power of all equipment.
- 4.4.3. EUT (Bluetooth Pressure Monitor) was on transmitting frequency function during the testing.

4.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

4.6. Test Results

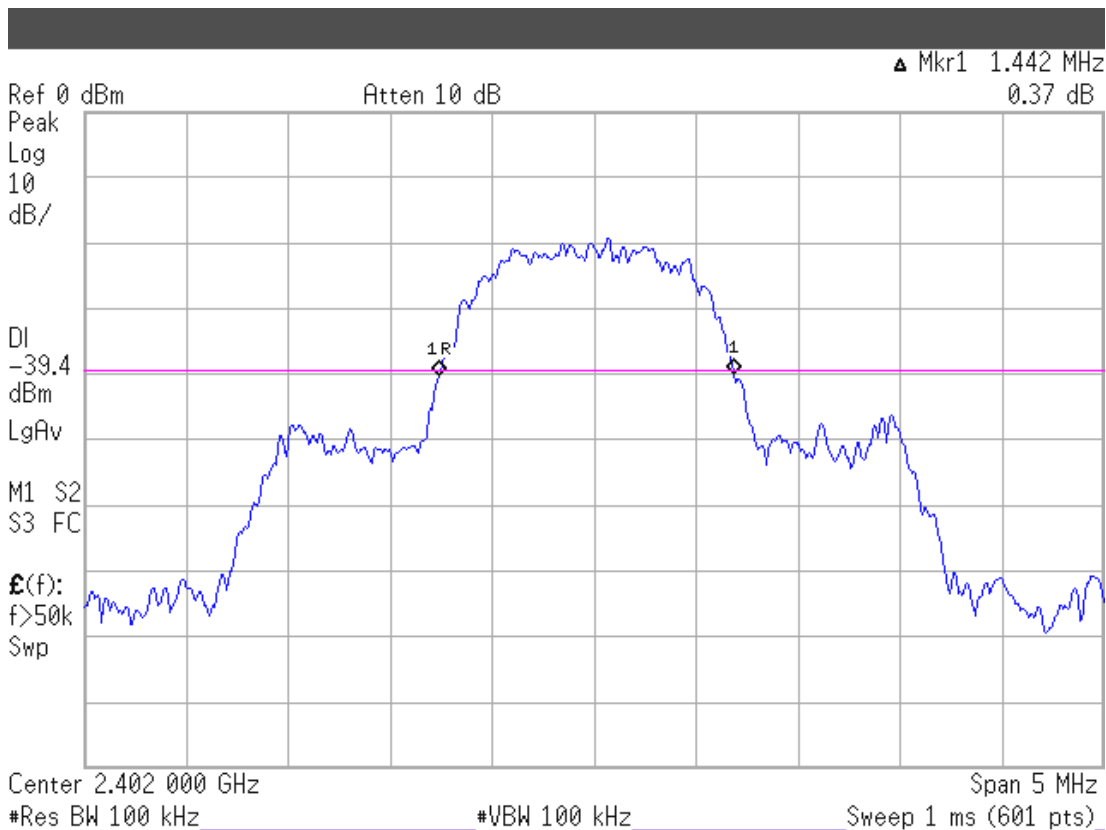
PASSED. All the test results are attached in next pages.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

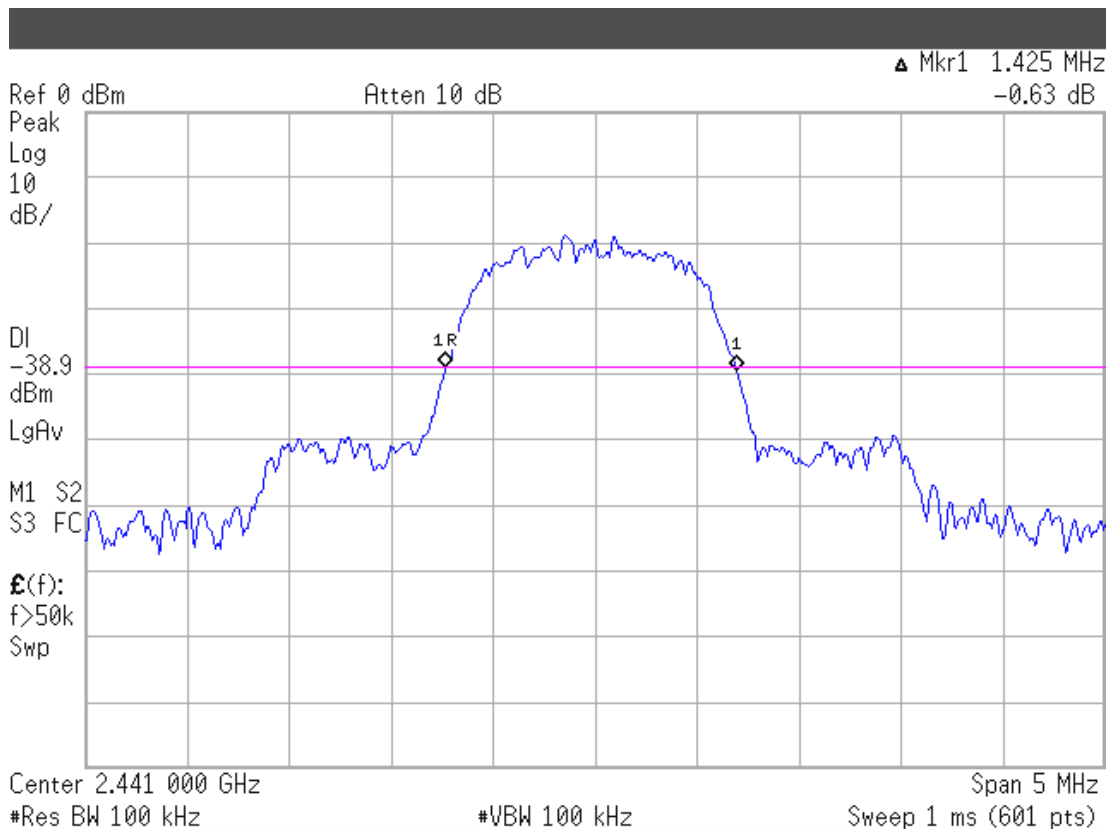
No.	Channel	Test Frequency	20dB Bandwidth	2/3 (20dB Bandwidth)
1.	0	2402MHz	1.442MHz	0.961MHz
2.	39	2441MHz	1.425MHz	0.950MHz
3.	78	2480MHz	1.392MHz	0.928MHz

The maximum two-thirds of the 20dB bandwidth shall be at maximum 0.961MHz.

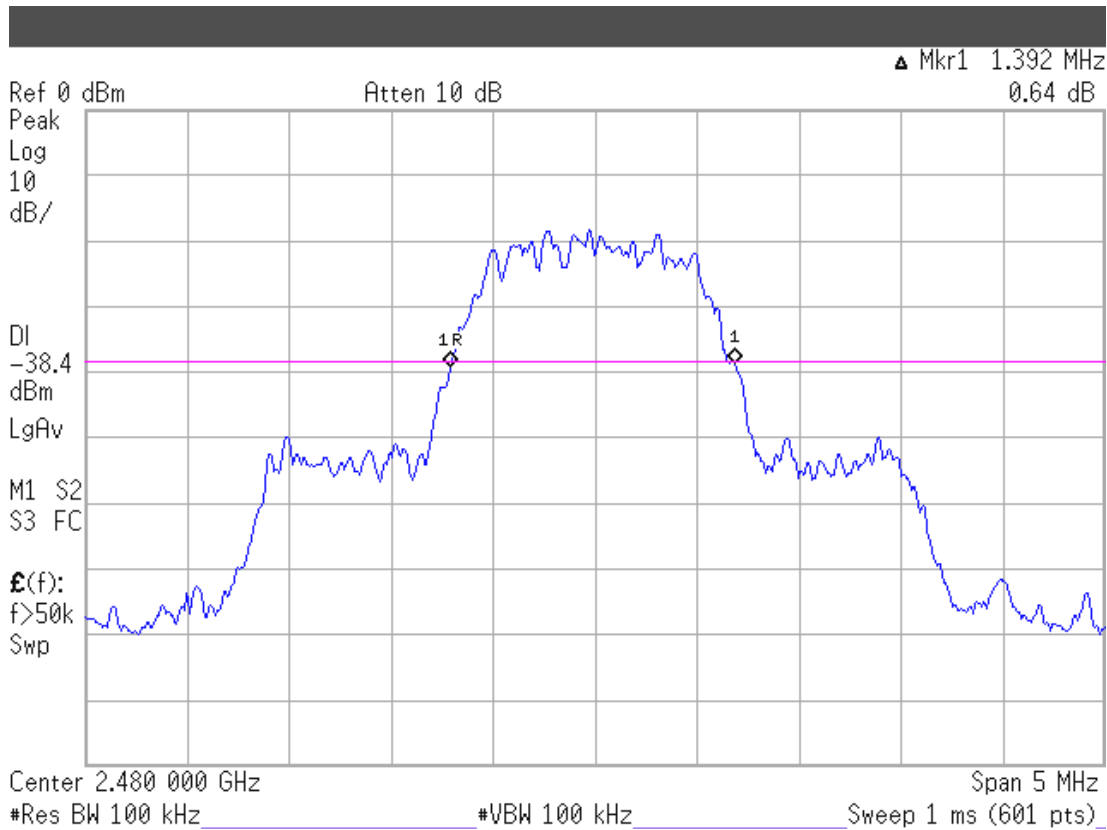
4.6.1. Channel 0, Frequency: 2402MHz



4.6.2. Channel 39, Frequency: 2441MHz



4.6.3. Channel 78, Frequency: 2480MHz



5. CARRIER FREQUENCY SEPARATION MEASUREMENT

5.1. Test Equipment

The following test equipment was used during the carrier frequency separation measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10. 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

5.2. Block Diagram of Test Setup

The same as section.4.2.

5.3. Specification Limits (§15.247(a)(1))

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

5.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

5.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The channel separation was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The video bandwidth not to be smaller than resolution bandwidth, the peak was mark on adjacent bandwidth, the between of peak is carrier frequency separation.

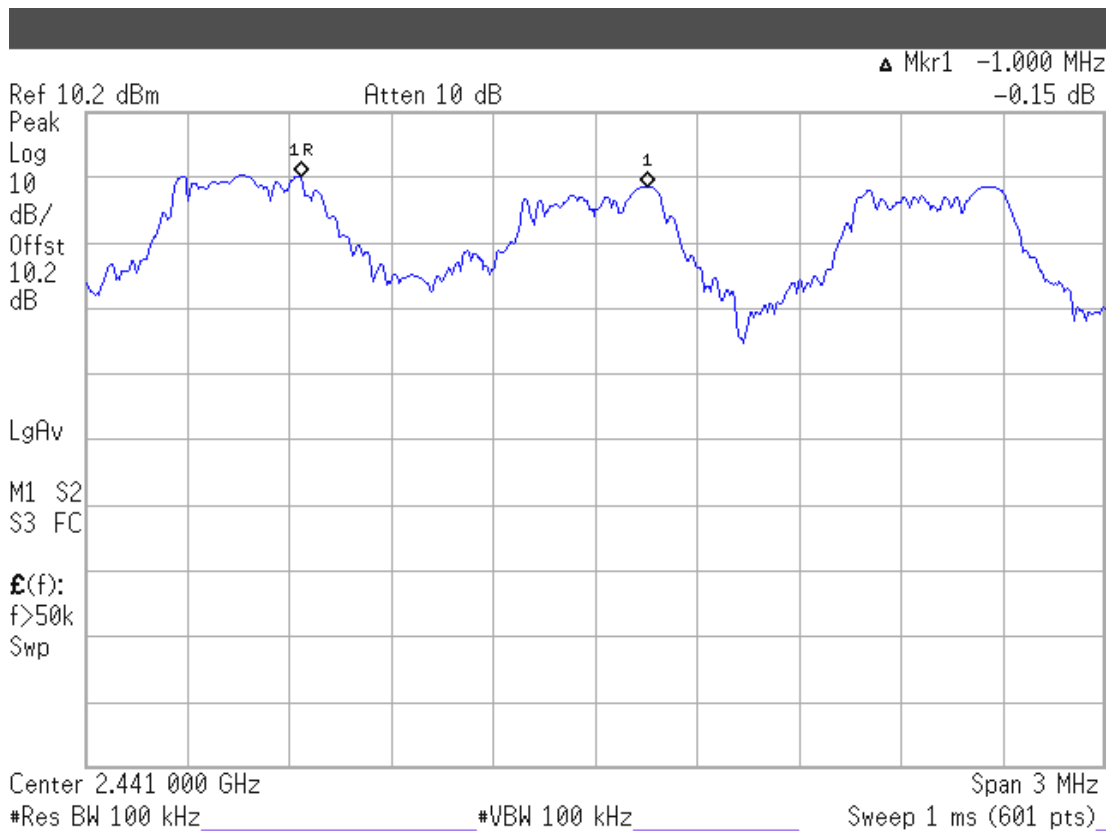
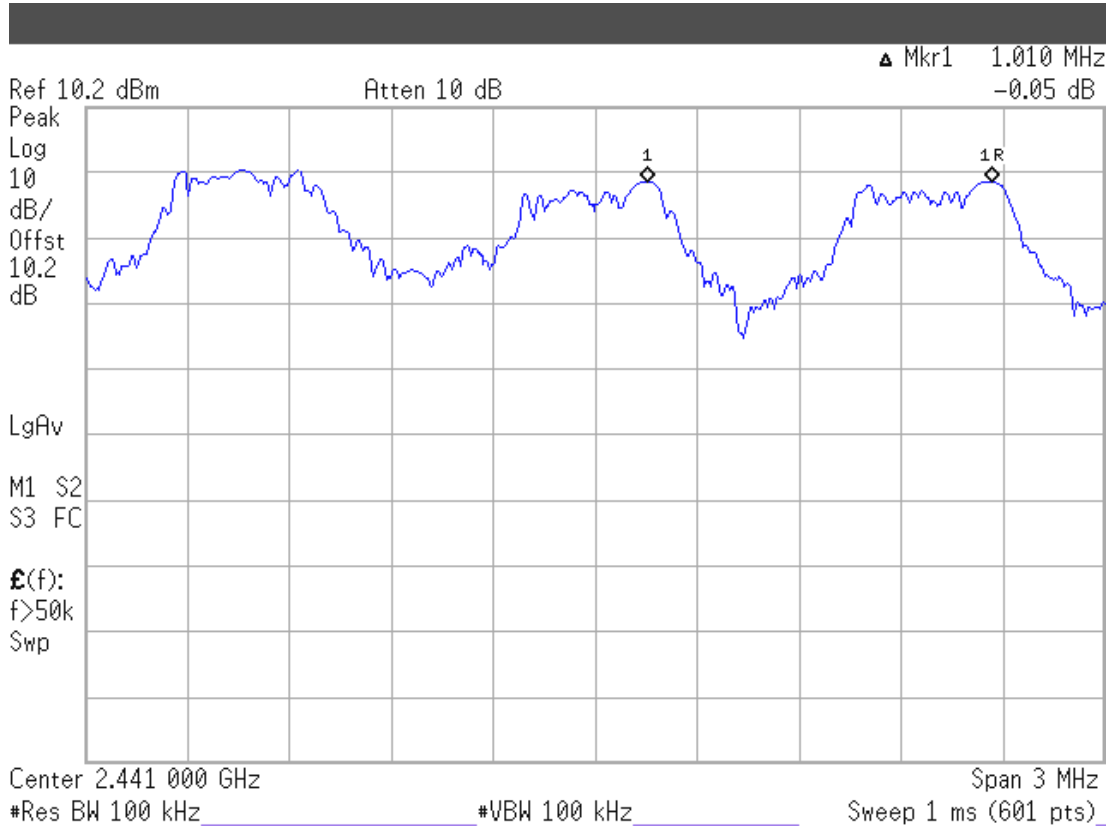
5.6. Test Results

PASSED. All the test results are attached in next pages.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

1. 2441MHz adjacent channel of right carrier frequency separation: 1.010MHz.
2. 2441MHz adjacent channel of left carrier frequency separation: 1.000MHz.

[Above values have met the requirement as specified in section 4.3: 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.]



6. TIME OF OCCUPANCY MEASUREMENT

6.1. Test Equipment

The following test equipment was used during the time of occupancy measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

6.2. Block Diagram of Test Setup

The same as section.4.2.

6.3. Specification Limits (§15.247(a)(1)(iii))

Frequency hopping systems in the 2400-2483.5MHz shall use at least 15 non-overlapping channels. 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 number of hopping channels employed.

6.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

6.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 1MHz RBW and 1MHz VBW. $VBW \geq RBW$; Span=zero span.

Centered on a hopping channel sweep=as necessary to capture the entire dwell time per hopping channel ; Detector function=peak ; Trace=Max hold

6.6. Test Results

PASSED. All the test results are attached in next pages.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

DH1 : A The system makes worst case 1600 hops per second or 1 time slot has a length of 625us with 79 channels. A DH1 packet need 1 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 800 hops per second with 79 channels. So you have each channel 10.13 time per second and so for 31.6 seconds you have 320 time of appearance.

Each Tx-time per appearance is 416.7us.

$$10.13 \text{ time} * 31.6 \text{ seconds} * 0.4167 \text{ms} = 133.3890 \text{ms} (<400 \text{ms})$$

B. For each 5 seconds of 51 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

$$51 \text{ channels} * 31.6 \text{ seconds} / 5 * 0.4167 \text{ms} = 134.3107 \text{ms} (<400 \text{ms})$$

DH3 : A The system makes worst case 1600 hops per second or 1 time slot has a length of 625us with 79 channels. A DH3 packet need 3 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 400 hops per second with 79 channels. So you have each channel 5.1 time per second and so for 31.6 seconds you have 161 time of appearance.

Each Tx-time per appearance is 1675us.

$$5.1 \text{ time} * 31.6 \text{ seconds} * 1.675 \text{ms} = 269.943 \text{ms} (<400 \text{ms})$$

B. For each 5 seconds of 26 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

$$26 \text{ channels} * 31.6 \text{ seconds} / 5 * 1.675 \text{ms} = 275.236 \text{ms} (<400 \text{ms})$$

DH5 : A The system makes worst case 1600 hops per second or 1 time slot has a length of 625us with 79 channels. A DH5 packet need 1 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 266.7 hops per second with 79 channels. So you have each channel 3.37 time per second and so for 31.6 seconds you have 106 time of appearance.

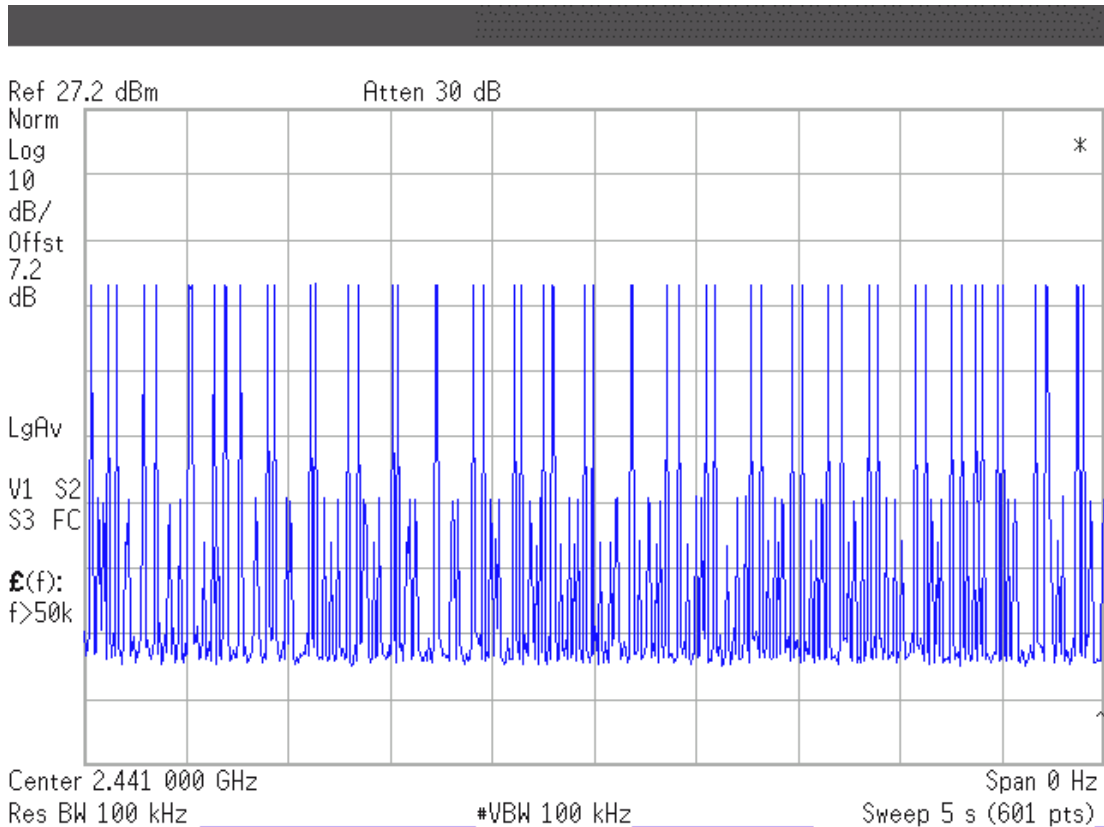
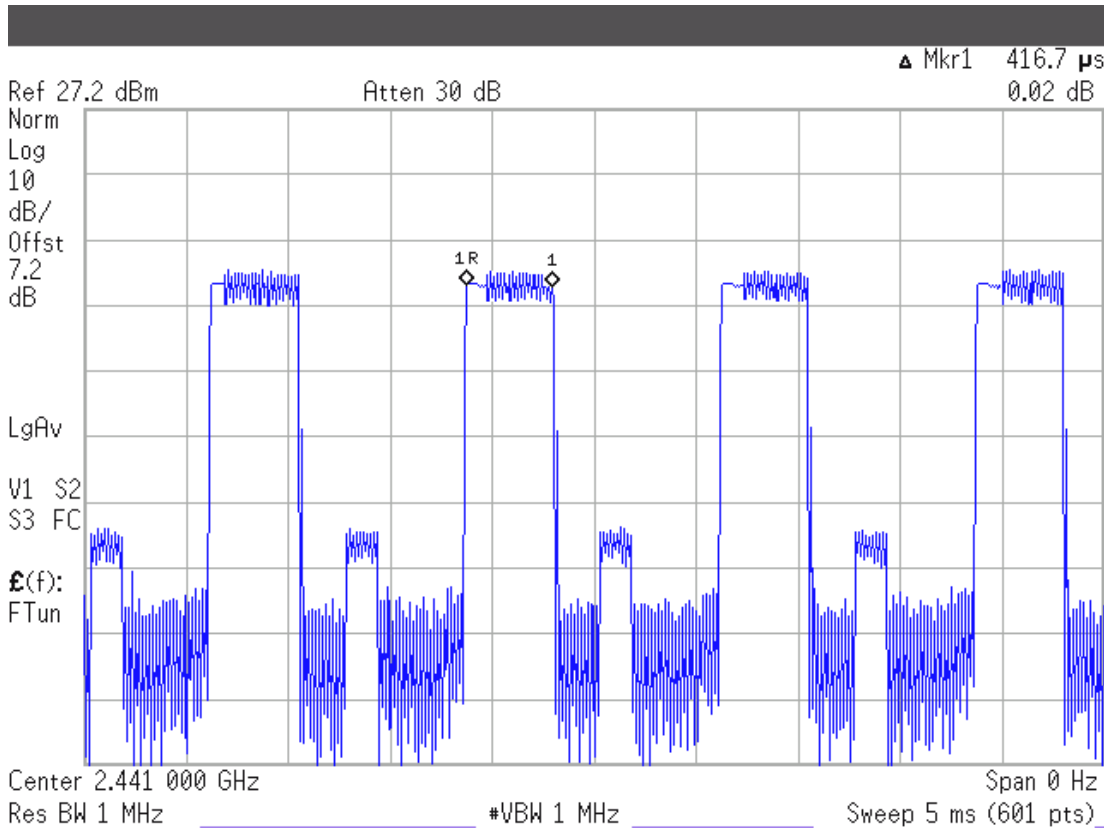
Each Tx-time per appearance is 2925us.

$$3.37 \text{ time} * 31.6 \text{ seconds} * 2.925 \text{ms} = 311.4891 \text{ms} (<400 \text{ms})$$

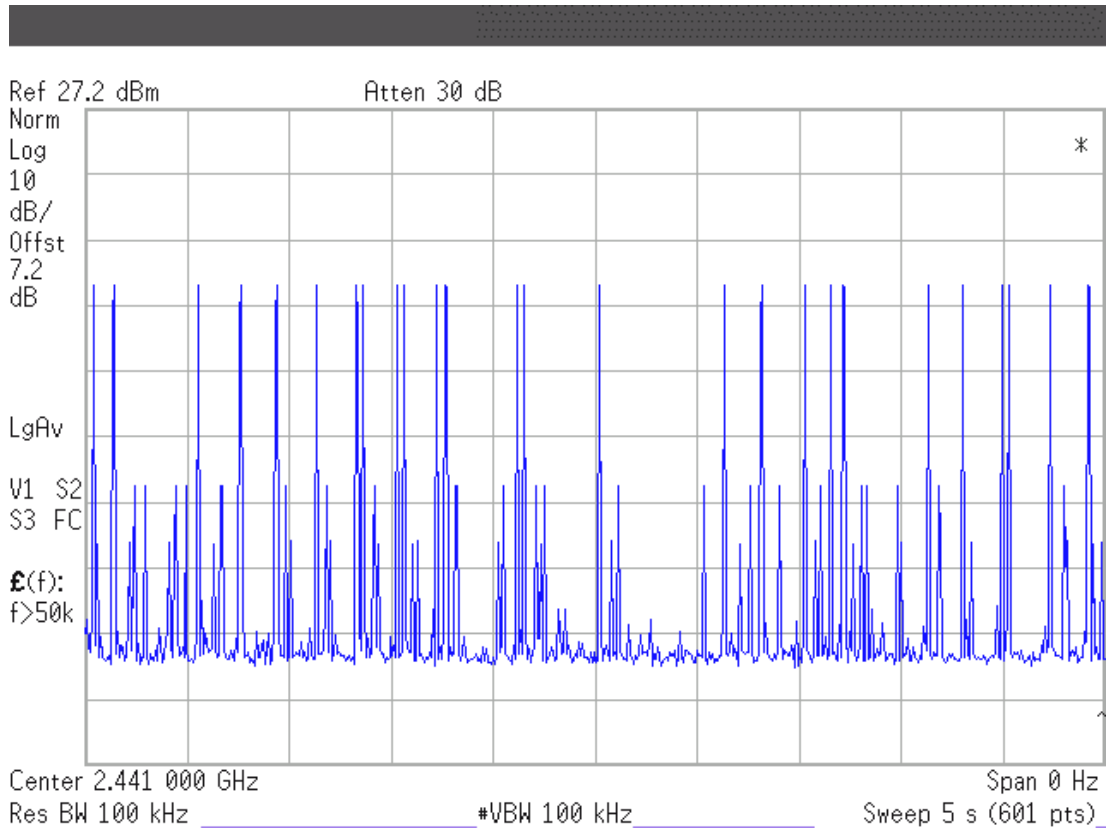
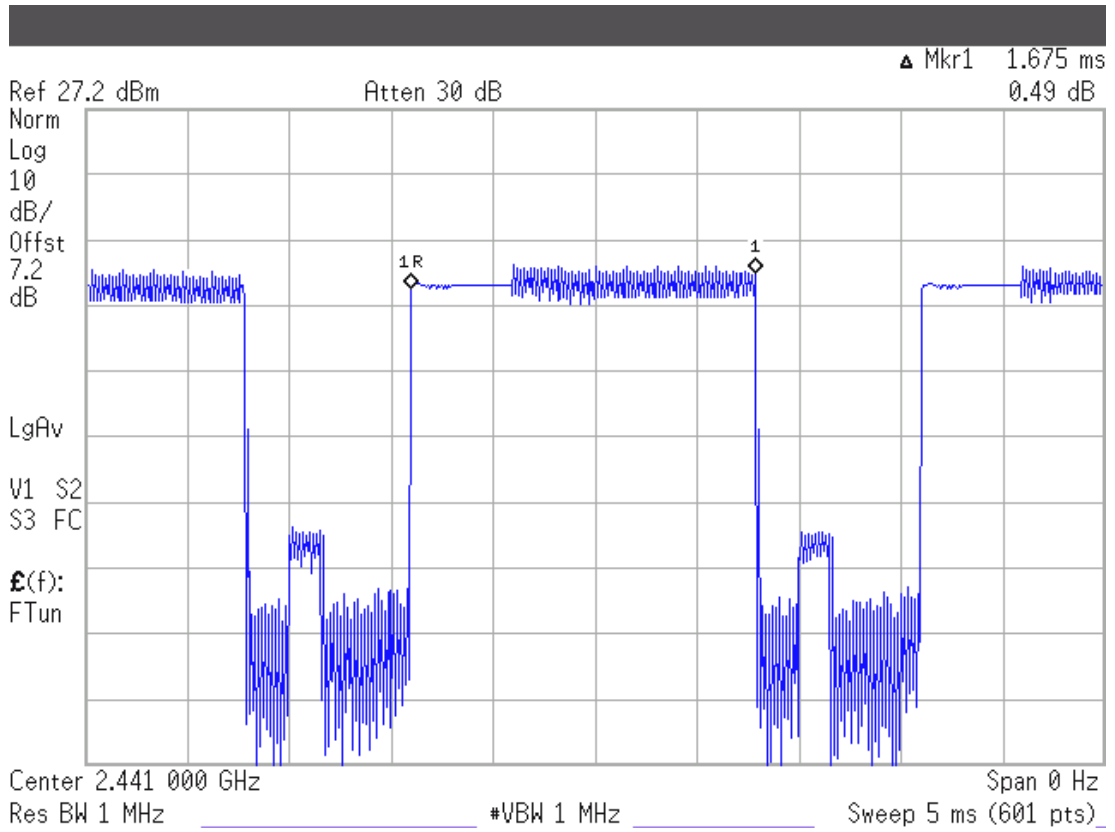
B. For each 5 seconds of 17 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

$$17 \text{ channels} * 31.6 \text{ seconds} / 5 * 2.925 \text{ms} = 314.262 \text{ms} (<400 \text{ms})$$

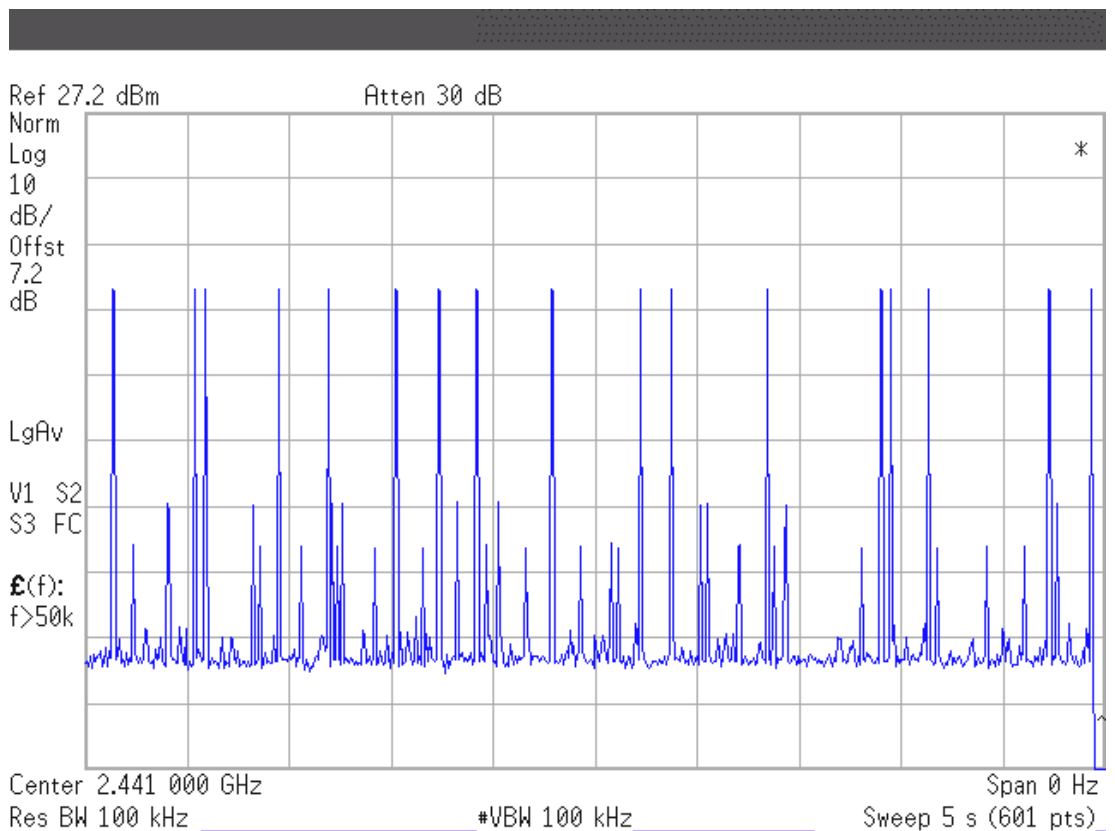
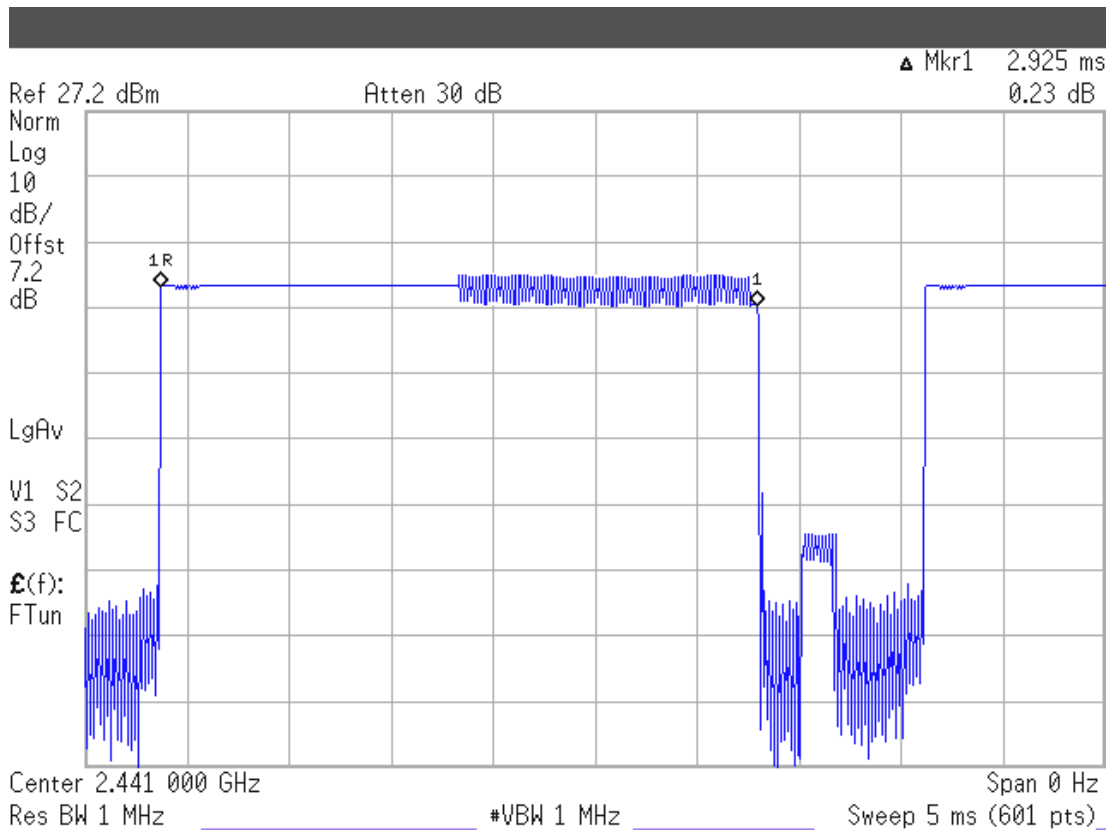
6.6.1. DH1



6.6.2. DH3



6.6.3. DH5



7. NUMBER OF HOPPING CHANNELS MEASUREMENT

7.1. Test Equipment

The following test equipment was used during the number of hopping channels measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

7.2. Block Diagram of Test Setup

The same as section.4.2.

7.3. Specification Limits (§15.247(a)(1)(iii))

Frequency hopping systems which use fewer than 20 hopping frequencies may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels.

7.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

7.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. Sweep=Auto ; Detector function=peak ; Trace=Max hold

7.6. Test Results

PASSED. All the test results are attached in next page.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

The number hopping channel is 79.

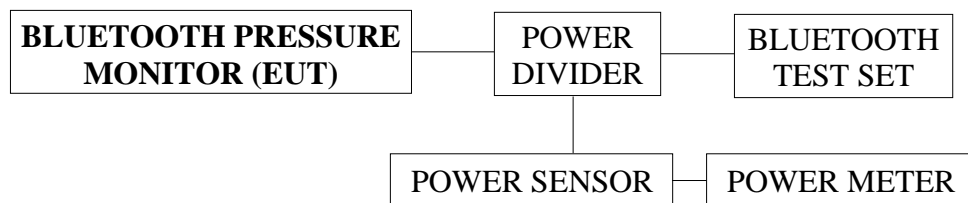
8. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

8.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Power Meter	Anritsu	ML2487A	6K000001563	Jan. 09, 06'	Jan. 08, 07'
2.	Power Sensor	Anritsu	MA2491A	030873	Jan. 09, 06'	Jan. 08, 07'
3.	Bluetooth Test Set	Anritsu	MT8852B	N/A	N/A	N/A
4.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

8.2. Block Diagram of Test Setup



8.3. Specification Limits (§15.247(b)-(1))

The Limits of maximum Peak Output Power for frequency hopping systems in 2400-2483.5MHz is: 0.125Watt. (21dBm)

8.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in 4.4 except the test set up replaced by section 8.2.

8.5. Test Procedure

The transmitter output was connected to the power sensor and record the reading of power meter.

8.6. Test Results

PASSED. All the test results are listed below.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

No.	Channel	Test Frequency	Peak Output Power	Limit
1.	0	2402MHz	1.03dBm	21dBm
2.	39	2441MHz	0.94dBm	21dBm
3.	78	2480MHz	0.83dBm	21dBm

9. EMISSION LIMITATIONS MEASUREMENT

9.1. Test Equipment

The following test equipment was used during the emission limitations measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10. 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

9.2. Block Diagram of Test Setup

The same as section.4.2.

9.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).(This test result attaching to §3.6.3)

9.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

9.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with frequency range from 30MHz to 25GHz.

9.6. Test Results

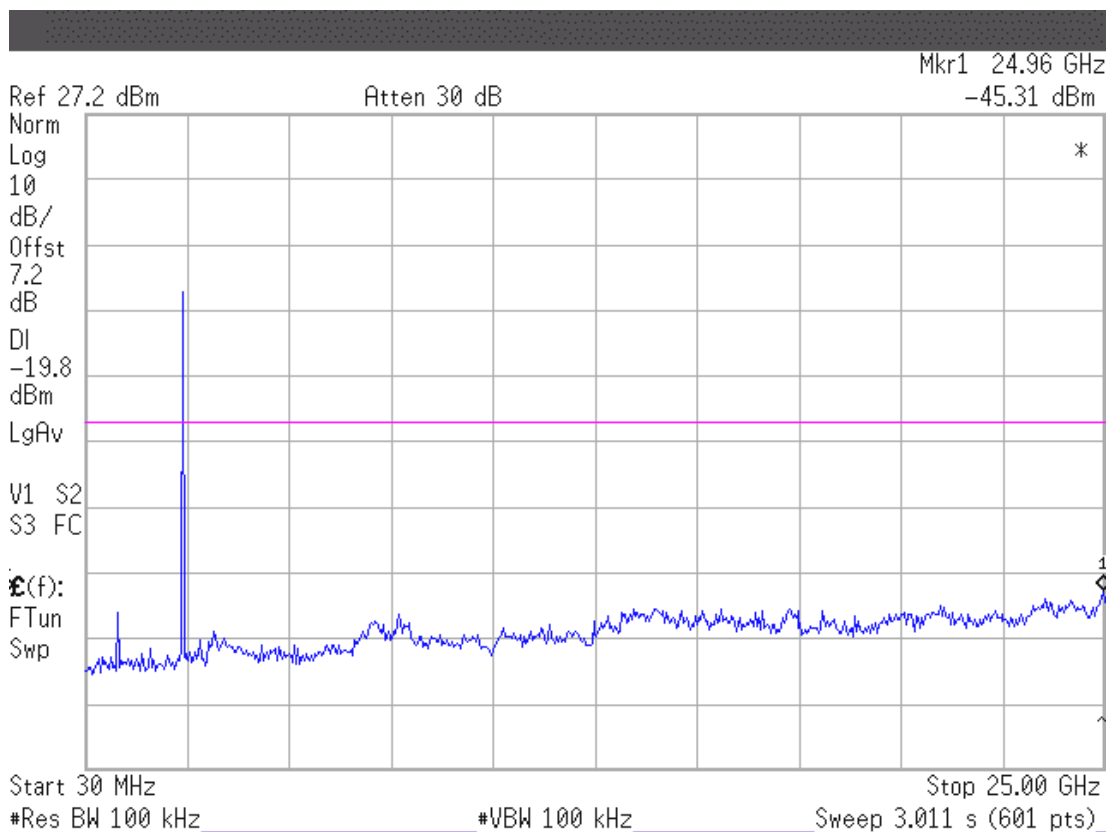
PASSED. All the test results are attached in next pages.

Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

1. 2402MHz: During 30MHz~25GHz bandwidth. In the 24.96GHz, the -45.31dBm is max value that is lower than 20dB of primary channel.
2. 2441MHz: During 30MHz~25GHz bandwidth. In the 24.92GHz, the -45.36dBm is max value that is lower than 20dB of primary channel.
3. 2480MHz: During 30MHz~25GHz bandwidth. In the 24.92GHz, the -43.49dBm is max value that is lower than 20dB of primary channel.

Note: The peak above the limit line is the carrier frequency.

9.6.1. Channel 0, Frequency: 2402MHz



10. BAND EDGES MEASUREMENT

10.1. Test Equipment

The following test equipment was used during the band edges measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Monitor	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10. 07'
2.	Bluetooth Test Set	Anitsu	MT8852B	N/A	N/A	N/A
3.	Power Divider	Anritsu	K240C	019728	May 15, 07'	May 13, 08'

10.2. Block Diagram of Test Setup

The same as section.4.2.

10.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)). (This test result attaching to §3.6.3)

10.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

10.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

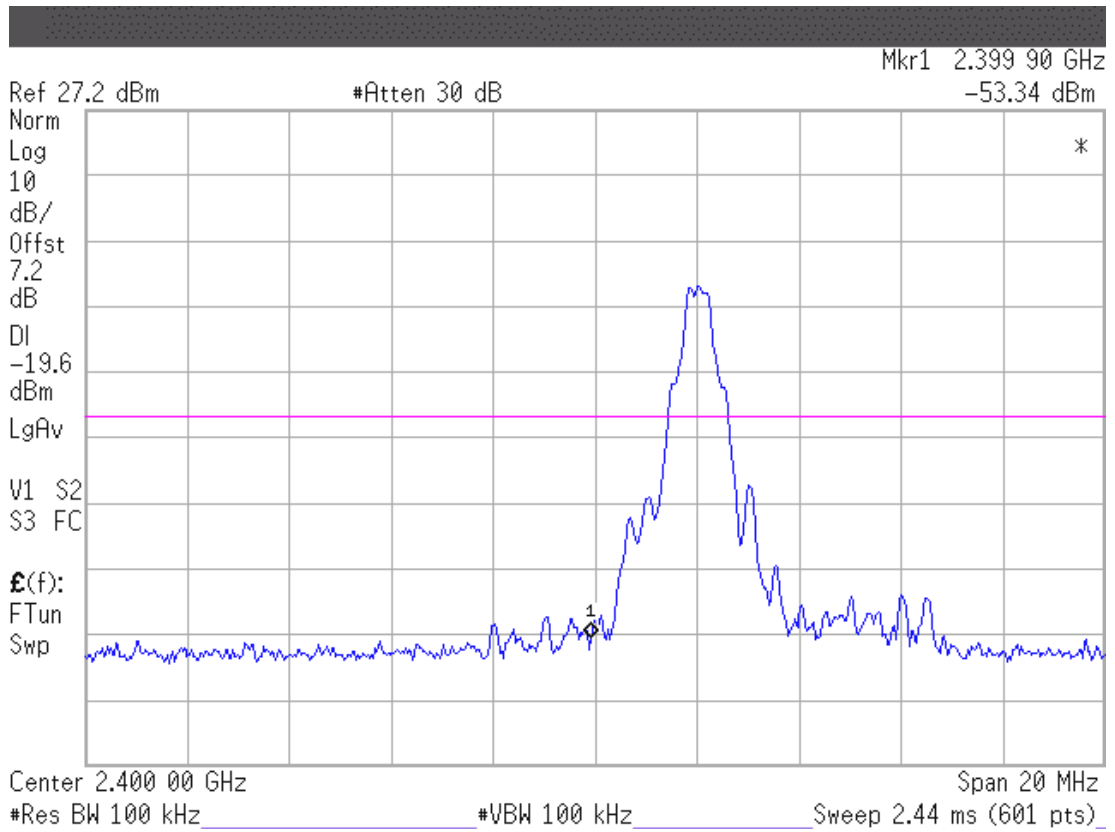
10.6. Test Results

PASSED. The testing data was attached in the next pages.

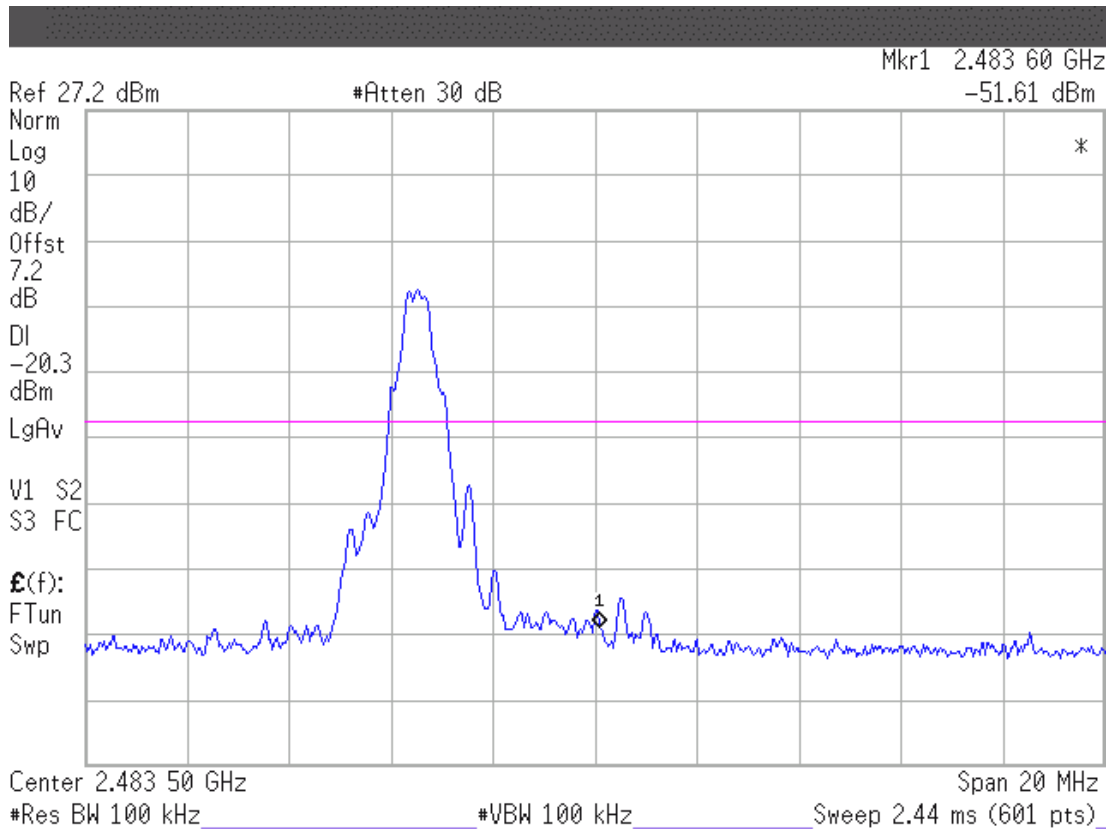
Test Date : Jun. 14, 2007 Temperature : 28 Humidity : 63 %

1. Upper Band edge : The highest emission level is – 53.34dBm on 2.39990GHz.
2. Below Band edge: The highest emission level is – 51.61dBm on 2.48360GHz.

10.6.1. Below Band edge



10.6.2. Upper Band edge



11.DEVIATION TO TEST SPECIFICATIONS

【NONE】