FCC COMPLIANCE REPORT

for

HUIZHOU FORYOU GENERAL ELECTRONICS CO., LTD.

Bluetooth Box

Model Number: BTM10(JENSEN);BTM10(ADVENT);
BTM10(Audiovox);CAB501(FORYOU)

Prepared for: HUIZHOU FORYOU GENERAL ELECTRONICS CO., LTD.

Address : No.6 Zhongkai Songshan Industrial Distric, Huizhou

Guangdong, China.

Prepared By: NS Technology Co., Ltd.

Address : Chenwu Industrial Zone, Houjie Town, Dongguan City,

Guangdong, China

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Report Number : NSE-F08052100 Date of Test : Jun. 16, 2008 Date of Report : Jun. 23, 2008

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NS Technology Co., Ltd.

Applicant: HUIZHOU FORYOU GENERAL ELECTRONICS CO., LTD.

Address: No.6 Zhongkai Songshan Industrial Distric, Huizhou

Guangdong, China.

Manufacturer: HUIZHOU FORYOU GENERAL ELECTRONICS CO., LTD.

Address: No.6 Zhongkai Songshan Industrial Distric, Huizhou

Guangdong, China.

E.U.T: Bluetooth Box

Model Number: BTM10(JENSEN);BTM10(ADVENT);BTM10(Audiovox);

CAB501(FORYOU)

Trade Name: Operating Frequency: 2402MHz~2480MHz

Date of Receipt: Mar. 25, 2008 **Date of Test:** Jun. 16, 2008

Test Specification: FCC Part 15 Subpart C: Sep. 20, 2007

ANSI C63.4:2003 DA 00-705

Test Result: The equipment under test was found to be compliance with the requirements

of the standards applied.

Issue Date: Jun. 23, 2008

Tested by: Reviewed by: Approved by:

David / Engineer Iceman Hu / Supervisor Steven Lee / Manager

Other Aspects:

None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

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 NS Technology Co., Ltd.

1. GENERAL PRODUCT INFORMATION

1.1. Product Function

Details please refer to Technical Construction Form and User Manual.

1.2. Description of Device (EUT)

E.U.T. : Bluetooth Box

Model No. : BTM10

Operating Frequency : 2400MHz to 2483.5MHz

Number of Channels : 79 Channels

Channel Separation : 1MHz

Type of Modulation : FHSS(Frequency Hopping Spread Spectrum);

Dwell time : Each channel is less than 0.4S.

Antenna Type : Integral

System Input Voltage : Nominal Voltage: DC 12V

Temperature Range(Operating) : +15 ~+ 35 ℃

1.3. Difference between Model Numbers

All model numbers use identical circuit and PCB layout. Only the model name are different.

1.4. Independent Operation Modes

The basic operation modes are:

Channel No.	Operation Frequency(MHz)	Channel No.	Operation frequency(MHz)
CH1	2402	CH41	2442
CH2	2403	CH42	2443
CH3	2404	CH43	2444
CH4	2405	CH44	2445
CH5	2406	CH45	2446
CH6	2407	CH46	2447
CH7	2408	CH47	2448
CH8	2409	CH48	2449
CH9	2410	CH49	2450
CH10	2411	CH50	2451
CH11	2412	CH51	2452
CH12	2413	CH52	2453
CH13	2414	CH53	2454
CH14	2415	CH54	2455
CH15	2416	CH55	2456
CH16	2417	CH56	2457
CH17	2418	CH57	2458
CH18	2419	CH58	2459
CH19	2420	CH59	2460
CH20	2421	CH60	2461
CH21	2422	CH61	2462
CH22	2423	CH62	2463
CH23	2424	CH63	2464

CH24	2425	CH64	2465
CH25	2426	CH65	2466
CH26	2427	CH66	2467
CH27	2428	CH67	2468
CH28	2429	CH68	2469
CH29	2430	CH69	2470
CH30	2431	CH70	2471
CH31	2432	CH71	2472
CH32	2433	CH72	2473
CH33	2434	CH73	2474
CH34	2435	CH74	2475
CH35	2436	CH75	2476
CH36	2437	CH76	2477
CH37	2438	CH77	2478
CH38	2439	CH78	2479
CH39	2440	CH79	2480
CH40	2441		

The tested modes are:

- 1.4.1. CH1 (2402MHz),
- 1.4.2. CH40 (2441MHz),
- 1.4.3. CH79 (2480MHz)
- 1.4.4. Normal operating

2. TEST SITES

2.1. Test Facilities

EMC Lab : Certificated by TUV Rheinland, Germany.

Date of registration: July 28, 2003

Certificated by FCC, USA Registration No.: 897109

Date of registration: October 10, 2003

Certificated by VCCI, Japan

Registration No.: R-1798 & C-1926 Date of registration: January 30, 2004

Certificated by CNAL, CHINA

Registration No.: L1744

Date of registration: November 25, 2004

Certificated by Intertek ETL SEMKO

Registration No.: TMP-013

Date of registration: June 11, 2005

Certificated by TUV/PS, Hong Kong Date of registration: December 1, 2005

Certificated by Industry Canada

Registration No.: 5936

Date of registration: March 24, 2006

Certificated by ATCB, America

Date of registration: August 03, 2006

Name of Firm : NS Technology Co., Ltd.

Site Location : Chenwu Industrial Zone, Houjie Town, Dongguan City,

Guangdong, China

2.2. List of Test and Measurement Instruments

2.2.1. For maximum conducted output power test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	Agilent	E4416A	MY45100656	Mar.20,08	Mar.20,09
Power Sensor	Agilent	E9327A	MY44420694	Mar.20,08	Mar.20,09

2.2.2. For occupied bandwidth test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	R/S	ESPI	1142.8007.03	Mar.20,08	Mar.20,09

2.2.3. For dwell time test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	R/S	ESPI	1142.8007.03	Mar.20,08	Mar.20,09

2.2.4. For adjacent channel separation test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	R/S	ESPI	1142.8007.03	Mar.20,08	Mar.20,09

2.2.5. For channel number test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	R/S	ESPI	1142.8007.03	Mar.20,08	Mar.20,09

2.2.6. For Radiation Emission Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Test Receiver	Rohde & Schwarz	ESCS30	100199	Mar.20,08	Mar.20,09
Spectrum Analyzer	HP	8593E	3448U00806	Mar.20,08	Mar.20,09
Amplifier	Agilent	8447D	2944A10488	May 2,08	May 2,09
Signal Generator	HP	8648A	3426A01263	Apr.8,08	Apr.8,09
Bilog Antenna	EMCO	3142B	00022050	May 2,08	May 2,09
Horn Antenna	EMCO	3117	00062558	May 2,08	May 2,09

2.2.7. For band edge test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	R/S	ESPI	1142.8007.03	Mar.20,08	Mar.20,09

2.2.8. For Conducted Emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	Agilent	E4407B	MY41440292	Mar.20,08	Mar.20,09

3. TEST SET-UP AND OPERATION MODES

3.1. Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its highest possible radiated level. The test modes were adapted accordingly in reference to the Operating Instructions.

3.2. Block Diagram of Test Set-up

Refer to follow test item

3.3. Test Operation Mode and Test Software

Refer to clause 1.4

3.4. Special Accessories and Auxiliary Equipment

None.

3.5. Countermeasures to Achieve EMC Compliance

None.

4. TEST SUMMARY

Test items and result lists

No.	Item	Specification	Remarks	Results
1	Conducted emission	FCC Part15.207		N/A
2	20dB Bandwidth	FCC Part15.247(a)(1) DA 00-705	Conducted	PASS
3	Number of Hopping Frequency	FCC Part15.247(a)(1)(iii) DA 00-705	Conducted	PASS
4	Dwell time	FCC Part15.247(a)(1)(iii) DA 00-705	Conducted	PASS
5	Band Edge	FCC Part 15.247(c) DA 00-705	Conducted	PASS
6	Maximum Peak Output Power	FCC Part 15.247(b)(1) DA 00-705	Conducted	PASS
7	Transmitter Spurious Emission	FCC Part 15.247(c) DA 00-705	Radiated Conducted	PASS
8	Carrier Frequency Separation	FCC Part 15.247(a)(1) DA 00-705	Conducted	PASS

Note: N/A stand for not applicable.

4.1. Maximum Peak Conducted Output Power

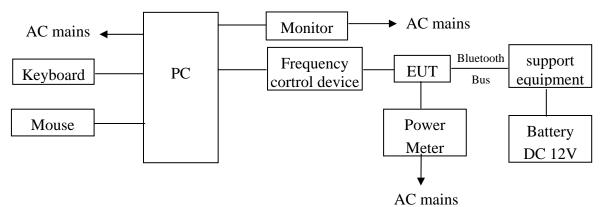
4.1.1. Test limits

The maximum peak conducted output power shall less than 125mW

4.1.2. Test procedure

- 1. Ensure the spectrum analyzer is calibrated and during a valid calibration.
- 2. The EUT was placed on a turntable which is 0.8m above ground plane.
- 3. Connect EUT RF output port to the Power meter through an RF attenuator.
- 4. Set the EUT work on the CH1, CH40,CH79 individually.
- 5. record maximum peak conducted output power.

4.1.3. Test setup diagram



4.1.4. Test result

Test condition: Temp:25.3°C: Humi:55% Test voltage: DC 12V

Test condition. Temp.22.2 c , Hamiles / v Test / orange. 2 c 12 /					
frequency MHz	Reading dBm	Cable loss dB	Result (dBm)	Limit dBm	Margin dBm
2402	1.99	0.63	2.62	20.97	18.35
2441	1.84	0.57	2.41	20.97	18.56
2480	1.27	0.68	1.95	20.97	19.02

Note: Transmitter Effective Isotropic radiated power =SA +cable loss+Ant gain

4.2. 20dB Occupied Bandwidth

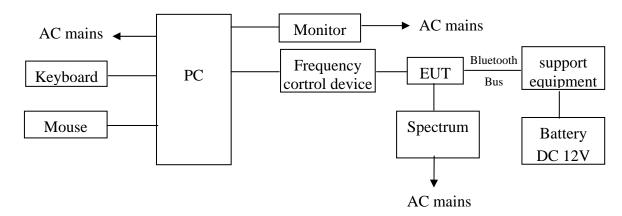
4.2.1. Test limits

No requirement.

4.2.2. Test procedure

- 1. The EUT was placed on a turntable which is 0.8m above ground plane.
- 2. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
- 2. Set the EUT work on the CH1, CH40,CH79 individually.
- 3. Set SA Center Frequency = Operation frequency, RBW=100kHz,VBW=300kHz.
- 4. Set SA trace max hold, then view.

4.2.3. Test setup diagram

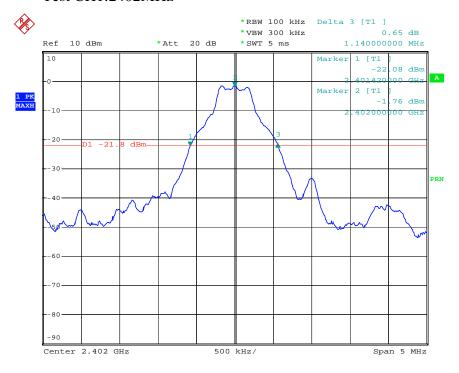


4.2.4. Test result

Pass

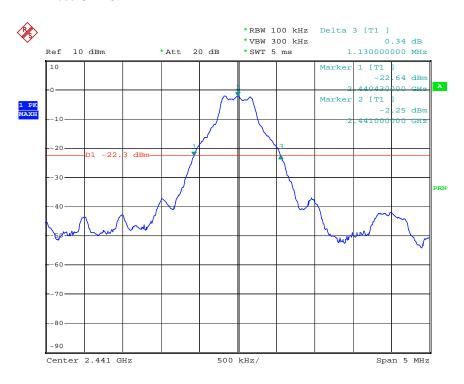
Test Channel	Frequency MHz	20dB Occupied bandwidth MHz
CH1	2402	1.14
CH40	2441	1.13
CH79	2480	1.12

Test CH1:2402MHz



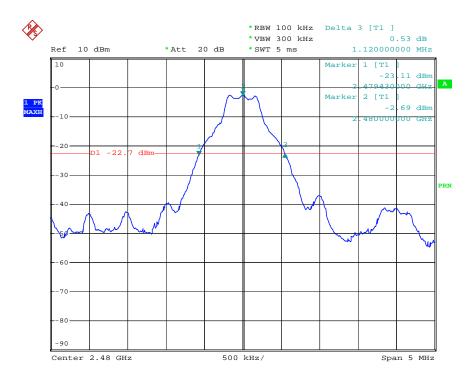
Date: 18.JUN.2008 16:59:05

Test CH40:2441MHz



Date: 18.JUN.2008 17:00:59

Test CH79:2480MHz



Date: 18.JUN.2008 17:02:52

4.3. Dwell Time

4.3.1. Limit

The maximum dwell time shall be 0.4s within a period of 0.4 seconds multiplied by the number of hopping channels employed..

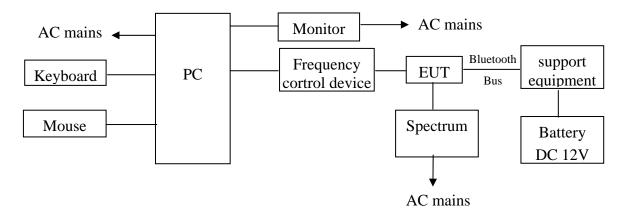
4.3.2. Test procedure

- 1. The EUT was placed on a turntable which is 0.8m above ground plane.
- 2. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
- 3. Set the EUT work on the CH1, CH40,CH79 individually.
- 4. Set SP Center Frequency = Operation frequency, RBW:1KHz;

VBW:3KHz; Sweep time:1s, SPAN:0Hz

5. Set SP trace max hold, then view.

4.3.3. Test setup diagram

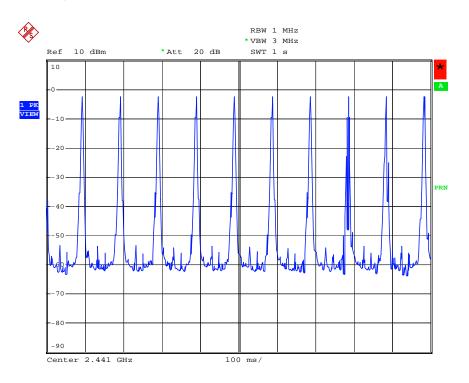


4.3.4. Test result

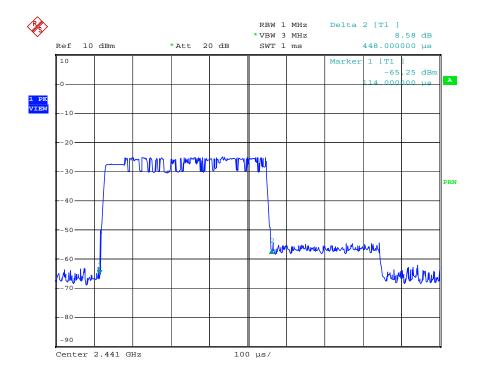
Test Type	Numbers of emission in 31.6s(79*0.4s)	Single transmission time(ms)	Total transmission time in 31.6s(79*0.4s)	Limit	result
DH1	10*31.6	0.448	141.568ms	400ms	pass
DH3	10*31.6	0.462	145.992ms	400ms	pass
DH5	10*31.6	0.460	145.360ms	400ms	pass

The dwell time is lesser than 0.4s within a period of 0.4 seconds multiplied by the number of hopping channels employed. comply with the standard requirement. The test plots as following:

DH1:

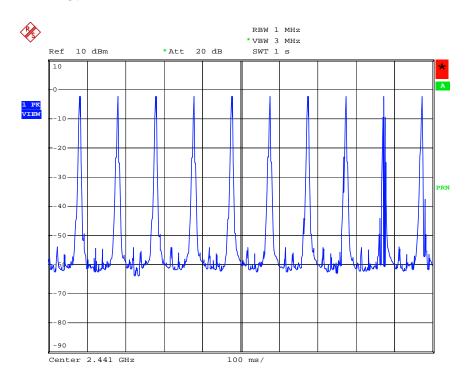


Date: 18.JUN.2008 19:03:25

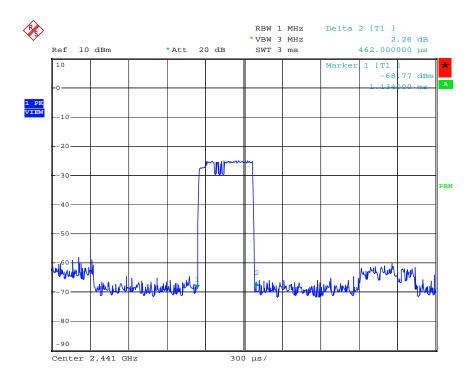


Date: 18.JUN.2008 19:04:37

DH3:

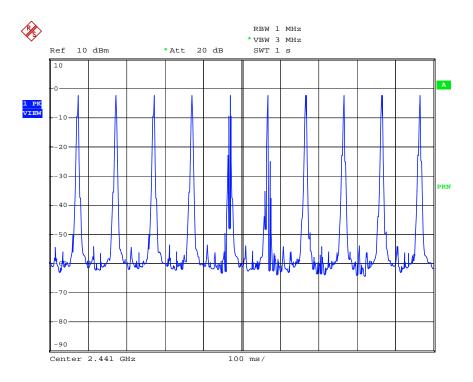


Date: 18.JUN.2008 19:07:22

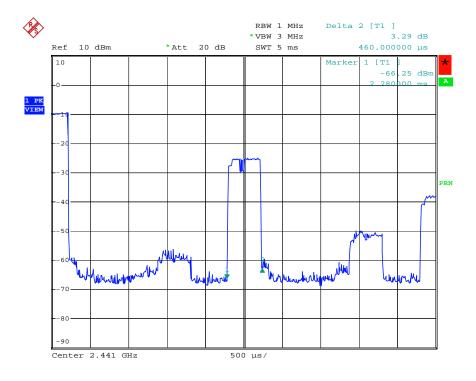


Date: 18.JUN.2008 19:08:36

DH5:



Date: 18.JUN.2008 19:09:15



Date: 18.JUN.2008 19:10:15

4.4. Adjacent Channel Separation

4.4.1. Limit

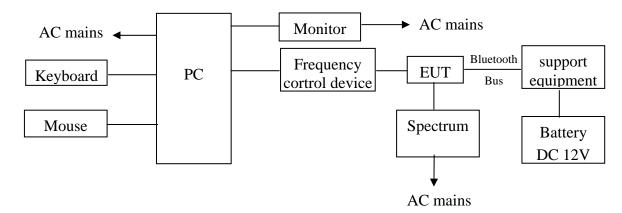
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 20dB bandwidth of the hoping channel. whichever is greater.

4.4.2. Test procedure

Test was performed at normal test condition and test in the lowest frequency and the middle frequency and the highest frequency.

RBW:100kHz; VBW:300kHz; Sweep time:5ms;

4.4.3. Test setup diagram



4.4.4. Test result

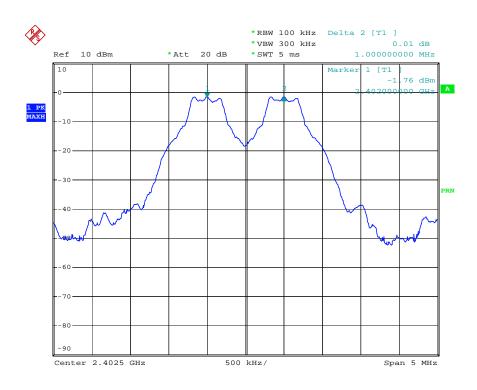
Pass.

Test condition:	Temp:25℃	; Humi:55%	Test voltage: DC 12V

Test Channel	test frequency	Two Adjacent Channel spacing	Limit
MHz	MHz	MHz	kHz
CH1	2402	1.000	
CH2	2403	1.000	
CH39	2440	1.000	≥20dB
CH40	2441	1.000	bandwidth
CH78	2479	1.000	
CH79	2480	1.000	

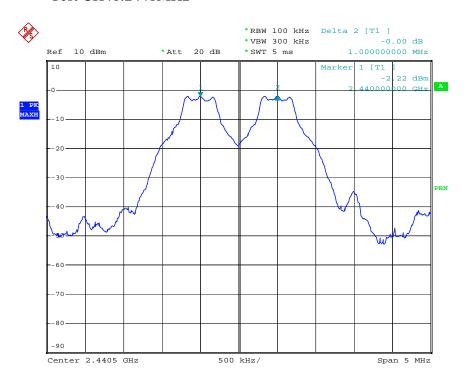
The two adjacent channel spacing is greater than 20dB bandwidth. comply with standard requirement. The test plots as following:

Test DH1:2402MHz



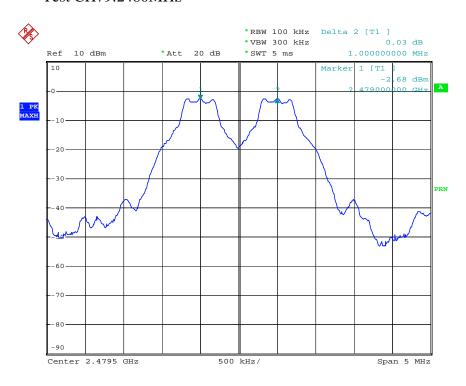
Date: 18.JUN.2008 16:45:34

Test CH40:2441MHz



Date: 18.JUN.2008 16:46:32

Test CH79:2480MHz



Date: 18.JUN.2008 16:47:34

4.5. Channel Number

4.5.1. Limit

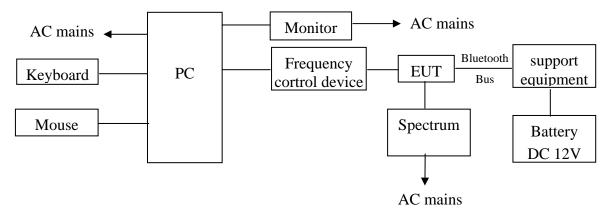
Frequency hopping systems in the 2400-2483.5MHz band shall use at least 15 channels.

4.5.2. Test procedure

Test was performed at normal test condition

RBW:300kHz; VBW:1MHz; Sweep time: 2.5ms;

4.5.3. Test setup diagram

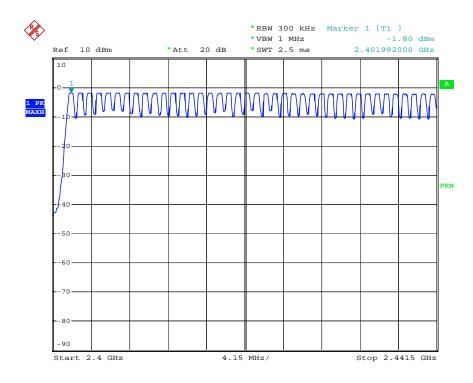


4.5.4. Test result

Total channel numbers are 79 .compliance with standard requirement.

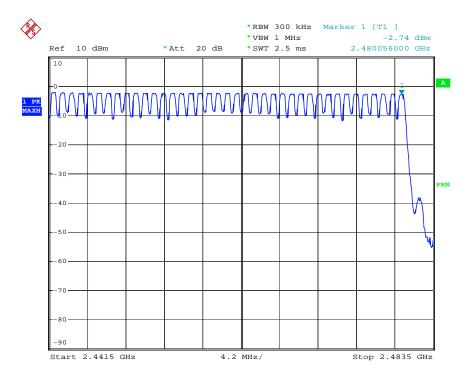
The test plots as following:

Test Plot 1



Date: 18.JUN.2008 17:08:28

Test Plot 2



Date: 18.JUN.2008 17:11:14

4.6. Radiated Emission

4.6.1. Test limits

- 1) FCC part 15C section 15.209
- 2) FCC part 15C section 15.247(d)

4.6.2. Test procedure

The EUT was placed on a turn table which was 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. At the frequency band of 30MHz to 1GHz, The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 to 4 m for horizontal and vertical polarizations. The broadband antenna (calibrated by dipole antenna) was used as a receiving antenna. At the frequency band of 1GHz to 25GHz, The measuring antenna moved from 1 to 4 m for horizontal and vertical polarization. The horn antenna was used as a receiving antenna.

The resolution bandwidth and video bandwidth of the test receiver was 120 KHz and 300KHz for Quasi-peak detection at frequency below 1GHz.

The resolution bandwidth and video bandwidth of the test receiver was1MHz and 1MHz for Peak detection at frequency above 1GHz.

For Average measurement at frequency above 1GHz. The resolution bandwidth of the test receiver was 1MHz; due to the shortest pulse width T is 116us, according the video bandwidth should not smaller than 1/T, so the video bandwidth is 10Hz.

In 18GHz to 24GHz, The EUT was checked by Horn ANT. But the test result is background.

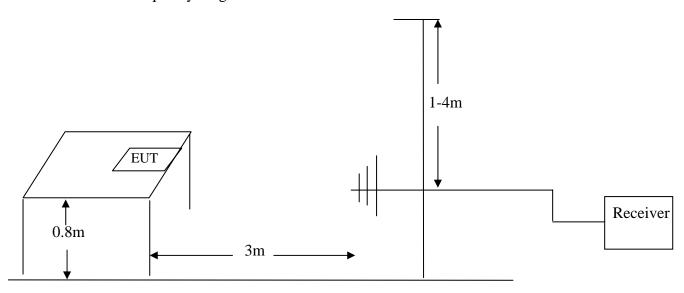
The EUT position(X. Y. Z) were checked and worse case was happened in Y position. So Y position was chose for find measurement.

The EUT was tested in Chamber Site.

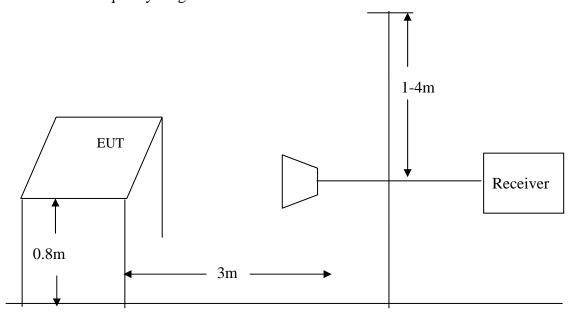


4.6.3 Test Setup Diagram

4.6.3.1. Frequency range: 30MHz-1000MHz



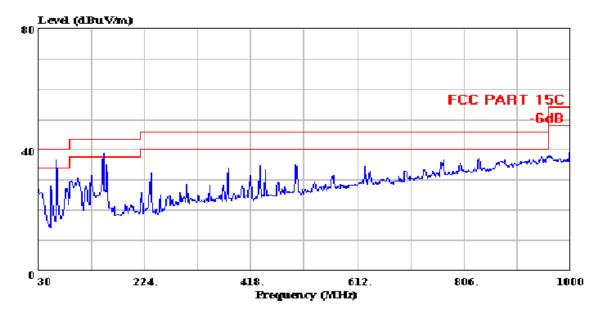
4.6.3.2. Frequency range: 1 GHz -25GHz



NS Electromagnetic Technology Co.,Ltd

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Data#: 157 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 00:45:13



Site : 966 Chamber

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

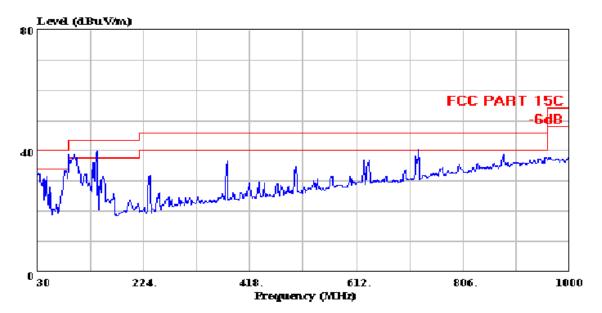
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402MHz Comment

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Date: 2008-06-16 Time: 00:44:39 Data#: 156 File#: \\966pc1\radiation\F\Foryou.emi



Site : 966 Chamber

: FCC PART 15C 3m 3142B VERTICAL Condition

EUT : Bluetooth BOX

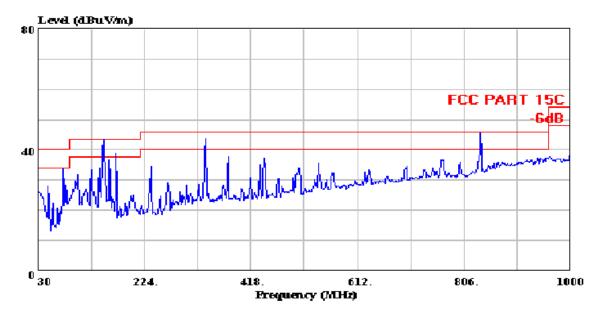
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402MHz Comment

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Date: 2008-06-16 Time: 00:48:11 Data#: 158 File#: \\966pc1\radiation\F\Foryou.emi



Site : 966 Chamber

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

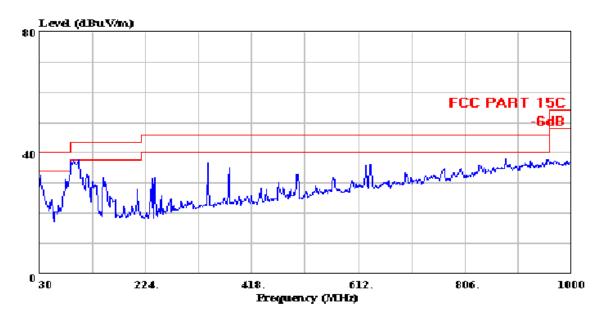
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441MHz Comment

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Data#: 159 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 00:48:51



Site : 966 Chamber

: FCC PART 15C 3m 3142B VERTICAL Condition

EUT : Bluetooth BOX

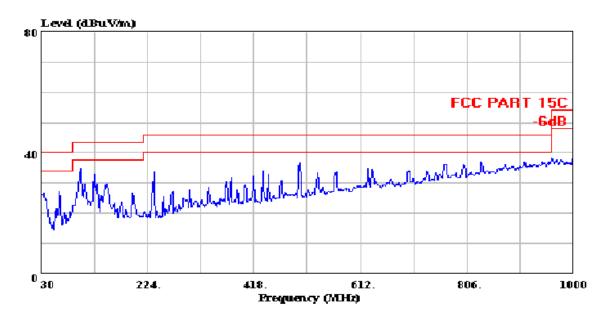
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441MHz Comment

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Data#: 161 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 00:57:34



Site : 966 Chamber

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

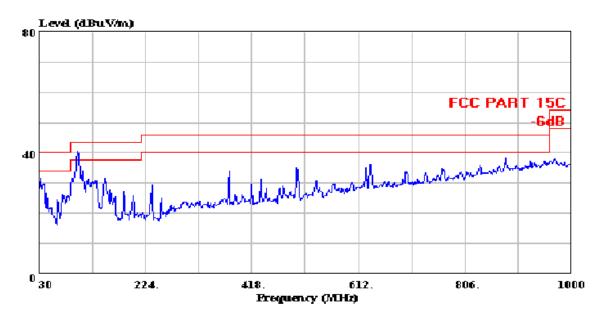
Power : DC 12V M/N: BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2480MHz Comment

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Data#: 160 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 00:50:53



Site : 966 Chamber

: FCC PART 15C 3m 3142B VERTICAL Condition

EUT : Bluetooth BOX

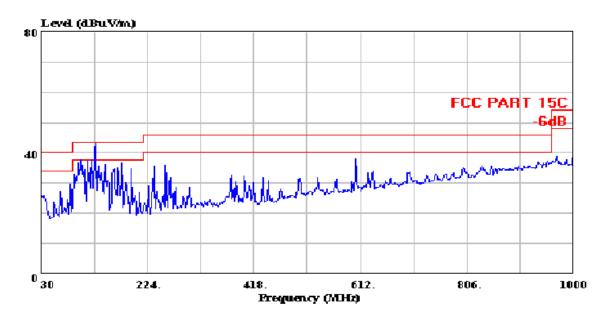
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2480MHz Comment

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Data#: 162 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:00:24



Site : 966 Chamber

Condition : FCC PART 15C 3m 3142B HORIZONTAL

EUT : Bluetooth BOX

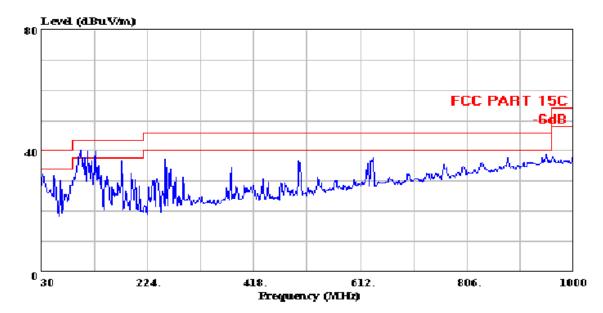
Power : DC 12V M/N : BTM10 Test Engineer: David

Comment : Temp:25.3'C Humi:55% Memo : Normal operating

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Data#: 163 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:02:44



Site : 966 Chamber

Condition : FCC PART 15C 3m 3142B VERTICAL

EUT : Bluetooth BOX

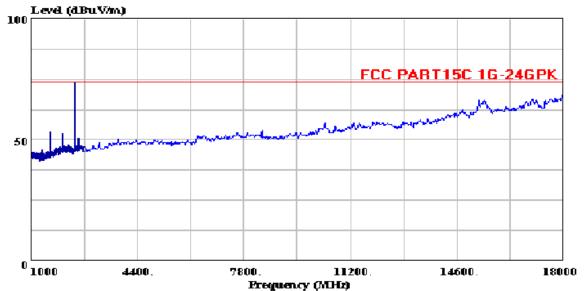
Power : DC 12V M/N : BTM10 Test Engineer: David

Comment : Temp:25.3'C Humi:55% Memo : Normal operating

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Date: 2008-06-16 Time: 01:30:05 Data#: 174 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 173

Site : 966 Chamber

: FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N: BTM10

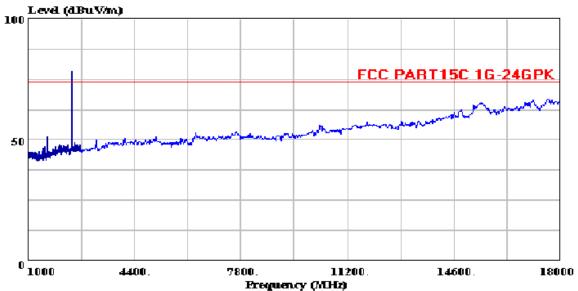
Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402 Comment

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Date: 2008-06-16 Time: 01:24:14 Data#: 170 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 169

Site

: 966 Chamber : FCC PART15C 1G-24GPK 3m 3117 VERTICAL Condition

EUT : Bluetooth BOX

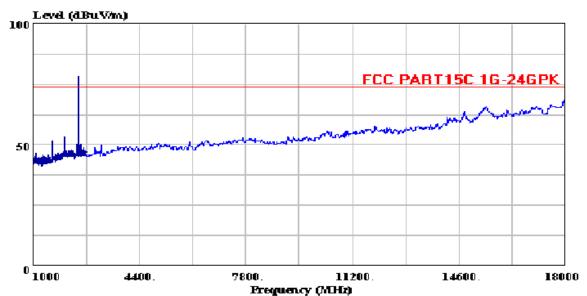
Power : DC 12V M/N: BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402 Comment

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Date: 2008-06-16 Time: 01:34:47 Data#: 178 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 177

Site : 966 Chamber

: FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL Condition

EUT : Bluetooth BOX

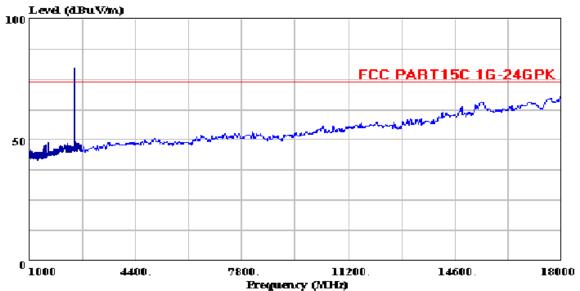
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441 Comment

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Date: 2008-06-16 Time: 01:36:51 Data#: 180 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 179

Site

: 966 Chamber : FCC PART15C 1G-24GPK 3m 3117 VERTICAL Condition

EUT : Bluetooth BOX

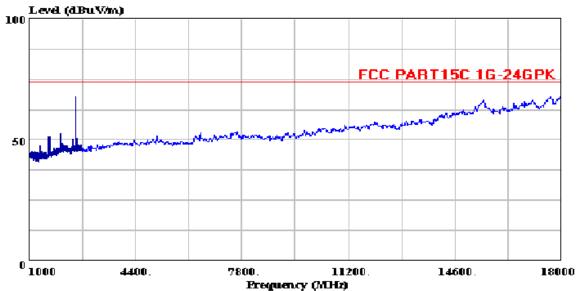
Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441 Comment

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Date: 2008-06-16 Time: 01:40:10 Data#: 184 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 183

Site : 966 Chamber

: FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N: BTM10 Test Engineer: David

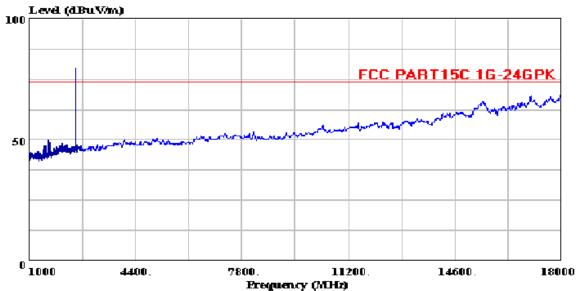
: Temp:25.3'C Humi:55% : TX 2480 Comment

Memo

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Chenwu Industrial Zone, Houjie Town, Dongguan, Guangdong,China Tel:0769-85935656 Fax:0769-85991080 Http://www.nsco.cn

Date: 2008-06-16 Time: 01:38:40 Data#: 182 File#: \\966pc1\radiation\F\Foryou.emi



Trace: 181

Site

: 966 Chamber : FCC PART15C 1G-24GPK 3m 3117 VERTICAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N: BTM10

Test Engineer: David

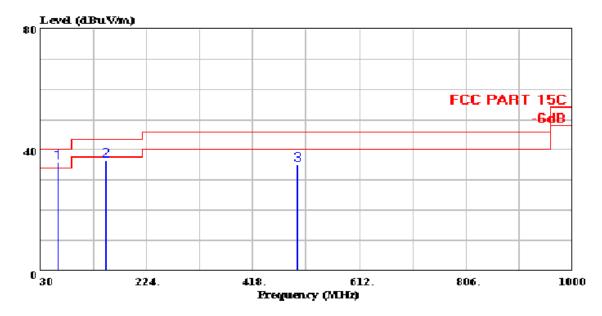
: Temp:25.3'C Humi:55% : TX 2480 Comment

Memo

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Data#: 210 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 00:45:13



: 966 Chamber

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V : BTM10 M/N Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402MHz Comment

Memo

: Ant high: 2.2m; Table angle: 153'

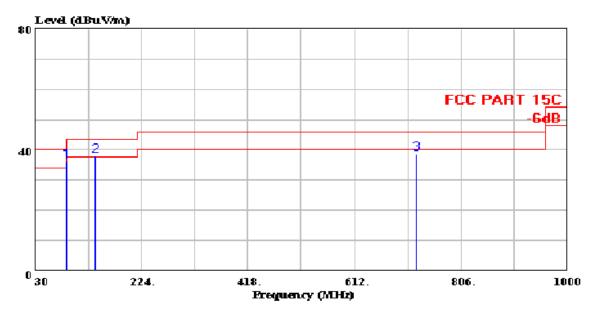
Over Limit Read Probe Cable Line Level Factor Freq Level Limit Loss Remark dB dBuV/m dBuV MHz dBuV/m dB dB 62.980 35.81 -4.19 40.00 26.39 8.25 148.340 36.59 -6.91 43.50 23.26 11.47 1 ! 8.25 1.17 QP 1.86 QP 3.99 QP 499.480 35.22 -10.78 46.00 12.08 19.15

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Date: 2008-06-16 Time: 00:44:39 Data#: 209 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber

: FCC PART 15C 3m 3142B VERTICAL Condition

EUT : Bluetooth BOX

Power : DC 12V : BTM10 M/N Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402MHz Comment

Memo

: Ant high: 1.6m; Table angle: 78'

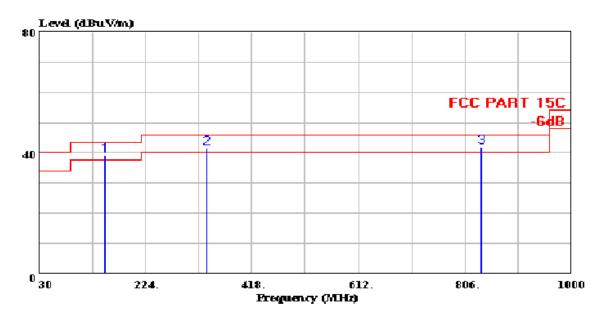
		Freq	Level		Limit Line				Remark
	-	MHz	$\overline{\text{dBuV/m}}$	dB	dBuV/m	dBuV	dB	dB	
1	į	87.230	36.25	-3.75	40.00	22.21	12.67	1.37	QP
2	1	138.640	38.15	-5.35	43.50	25.74	10.59	1.82	QP
3		725.490	38.73	-7.27	46.00	12.34	21.23	5.16	QP

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Date: 2008-06-16 Time: 00:48:11 Data#: 211 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441MHz Comment

Memo

: Ant high:2.3m; Table angle:82'

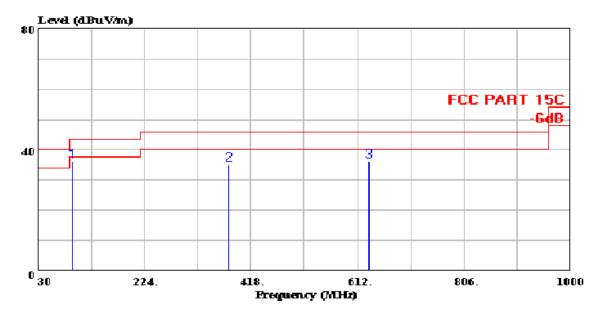
		Freq	Level		Limit Line				Remark
	-	MHz	$\overline{\mathtt{dBuV/m}}$	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	dB	dB	
1	į	148.340	38.97	-4.53	43.50	25.64	11.47	1.86	QP
2	ļ	334.580	41.78	-4.22	46.00	21.81	16.94	3.03	QP
3	Ţ	837.040	41.89	-4.11	46.00	12.22	23.55	6.12	QP

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Date: 2008-06-16 Time: 00:48:51 Data#: 212 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber Site

Condition : FCC PART 15C 3m 3142B VERTICAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441MHz Comment

Memo

: Ant high: 1.5m; Table angle: 76'

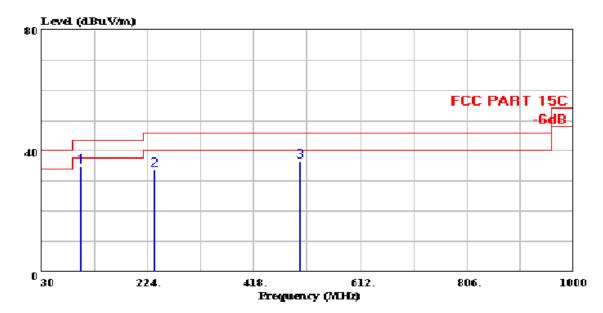
	Freq	Level		Limit Line				Remark
	MHz	$\overline{\tt dBuV/m}$	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	dB	dB	
1	92.080	36.25	-7.25	43.50	21.11	13.73	1.41	QP
2	376.290	35.27	-10.73	46.00	14.12	17.89	3.26	QP
3	633.340	36.38	-9.62	46.00	10.78	21.04	4.56	QP

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Page: 1

Date: 2008-06-16 Time: 00:57:34 Data#: 214 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber Site

: FCC PART 15C 3m 3142B HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2480MHz Comment

Memo

: Ant high: 2.4m; Table angle: 166'

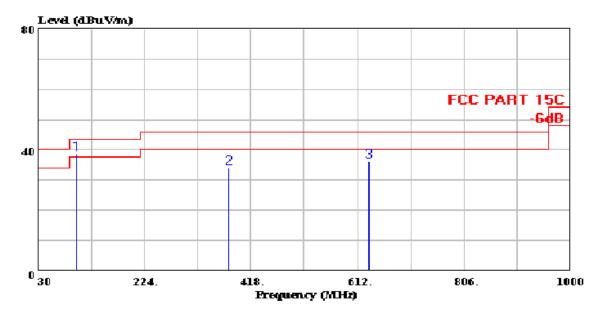
	Freq	Level		Limit Line				Remark
	MHz	$\overline{\tt dBuV/m}$	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	dB	dB	
1	101.780	34.64	-8.86	43.50	19.14	14.00	1.50	QP
2	235.640	33.78	-12.22	46.00	18.37	12.92	2.49	QP
3	502.390	36.75	-9.25	46.00	13.59	19.19	3.97	QP

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Page: 1

Date: 2008-06-16 Time: 00:50:53 Data#: 213 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber Site

: FCC PART 15C 3m 3142B VERTICAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2480MHz Comment

Memo

: Ant high: 1.8m; Table angle: 69'

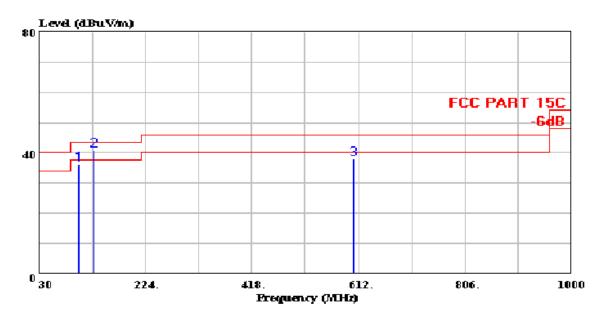
		Freq	Level		Limit Line				Remark
	-	MHz	$\overline{\tt dBuV/m}$	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	dB	dB	
1	!	99.840	38.57	-4.93	43.50	22.88	14.20	1.49	QP
2		376.290	34.02	-11.98	46.00	12.87	17.89	3.26	QP
3		633.340	36.40	-9.60	46.00	10.80	21.04	4.56	QP

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Data#: 215 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:00:24



Site : 966 Chamber

Condition : FCC PART 15C 3m 3142B HORIZONTAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

Comment : Temp:25.3'C Humi:55%
Memo : Normal operating

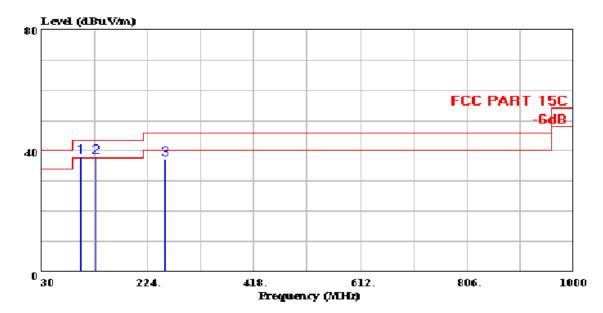
: Ant high:2.6m; Table angle:181'

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Page: 1

Data#: 216 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:02:44



Site : 966 Chamber

Condition : FCC PART 15C 3m 3142B VERTICAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

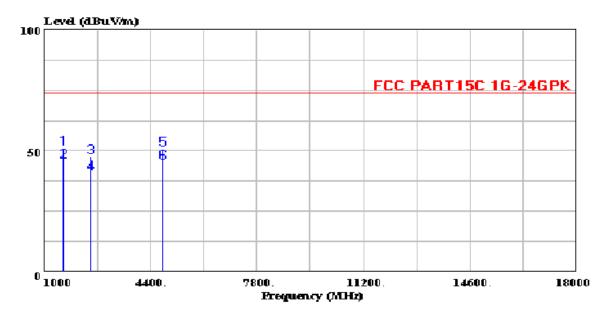
Comment : Temp:25.3'C Humi:55%
Memo : Normal operating

: Ant high:1.4m; Table angle:48'

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Date: 2008-06-16 Time: 01:25:57 Data#: 217 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber

: FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2402MHz Comment

Memo

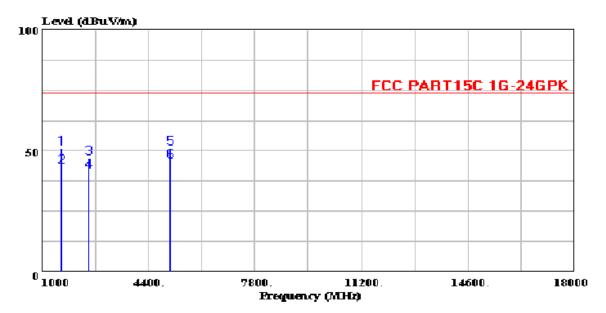
Page: 1 Over Limit Read Probe Cable

	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	$\overline{\mathtt{dBuV/m}}$	dBuV	dB	dB	
1 2 3 4 5	1603.120 1603.120 2483.500 2483.500 4778.840 4778.840	45.67 47.35 40.62 50.76	-22.82 -8.33 -26.65 -13.38 -23.24 -8.77	54.00 74.00 54.00 74.00	20.69 15.18 13.54 6.81 13.82 8.29	28.33 28.33 31.58 31.58 34.57 34.57	2.16 2.23 2.23 2.37	Peak Average Peak Average Peak Average

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Date: 2008-06-16 Time: 01:30:26 Data#: 218 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber : FCC PART15C 1G-24GPK 3m 3117 VERTICAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

Comment : Temp:25.3'C Humi:55% Memo : TX 2402MHz

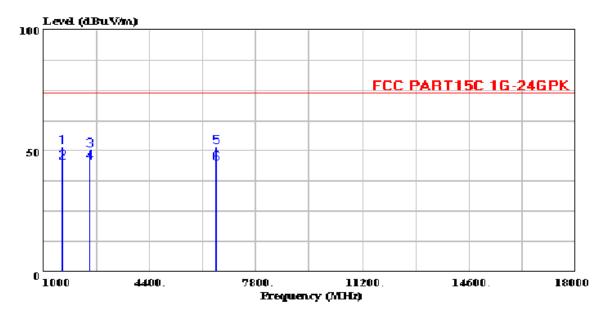
	Freq	Level	Over Limit	Limit Line		Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1603.120 1603.120 2483.500 2483.500 5085.240 5085.240	43.61 47.20 41.60 51.04	-23.03 -10.39 -26.80 -12.40 -22.96 -8.34	74.00 54.00 74.00 54.00 74.00 54.00	20.48 13.12 13.39 7.79 13.84 8.46	28.33 28.33 31.58 31.58 34.81 34.81	2.16 2.23 2.23 2.39	Peak Average Peak Average Peak Average

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Page: 1

Data#: 219 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:34:23



: 966 Chamber

: FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL Condition

EUT : Bluetooth BOX

: DC 12V Power : BTM10 M/N Test Engineer: David

: Temp:25.3'C Humi:55% : TX 2441MHz Comment

Memo

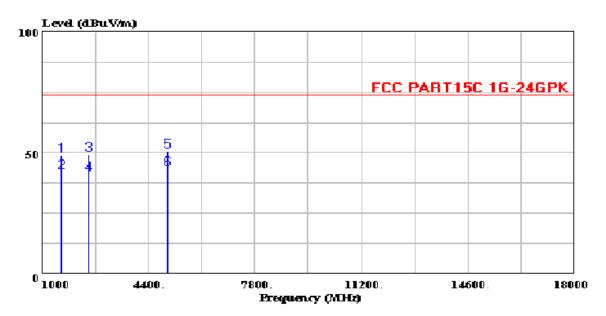
Freq	Level		Limit Line				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	

1594.720 51.56 -22.44 74.00 20.98 28.42 1594.720 45.12 -8.88 54.00 14.63 28.33 2.16 Peak 2.16 Average 2483.500 50.40 -23.60 74.00 16.56 31.61 2483.500 45.12 -8.88 54.00 11.31 31.58 6540.640 51.57 -22.43 74.00 12.46 36.63 6540.640 44.82 -9.18 54.00 5.71 36.63 2.23 Peak 2.23 Average 2.48 Peak 2.48 Average

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Date: 2008-06-16 Time: 01:36:31 Data#: 220 File#: \\966pc1\radiation\F\Foryou.emi



Site : 966 Chamber Condition : FCC PART15C 1G-24GPK 3m 3117 VERTICAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

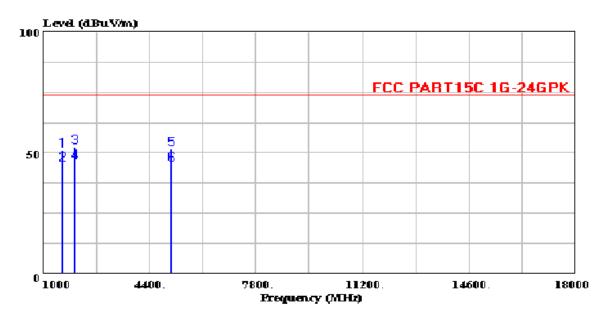
Comment : Temp:25.3'C Humi:55% Memo : TX 2441MHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1603.120 1603.120 2498.560 2498.560 5008.640 5008.640	42.10 49.25 41.28 50.56	-25.14 -11.90 -24.75 -12.72 -23.44 -10.64	74.00 54.00 74.00 54.00 74.00 54.00	18.22 11.61 15.42 7.45 20.81 6.27	28.48 28.33 31.60 31.60 27.61 34.70	2.16 2.23 2.23 2.14	Peak Average Peak Average Peak Average

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Date: 2008-06-16 Time: 01:39:52 Data#: 222 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber

Condition : FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

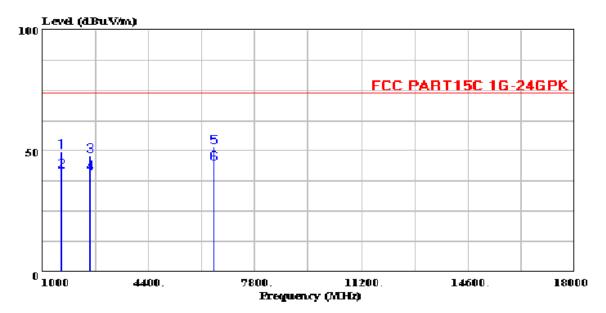
Comment : Temp:25.3'C Humi:55% Memo : TX 2480MHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1599.760 1599.760 2002.960 2002.960 5085.230 5085.230	45.29 52.67 46.03	-22.82 -8.71 -21.33 -7.97 -22.42 -8.67	74.00 54.00 74.00 54.00 74.00 54.00	20.56 14.80 19.37 12.73 21.82 8.13	28.46 28.33 31.10 31.10 27.62 34.81	2.16 2.20 2.20 2.14	Peak Average Peak Average Peak Average

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Date: 2008-06-16 Time: 01:38:18 Data#: 221 File#: \\966pc1\radiation\F\Foryou.emi



Site : 966 Chamber Condition : FCC PART15C 1G-24GPK 3m 3117 VERTICAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

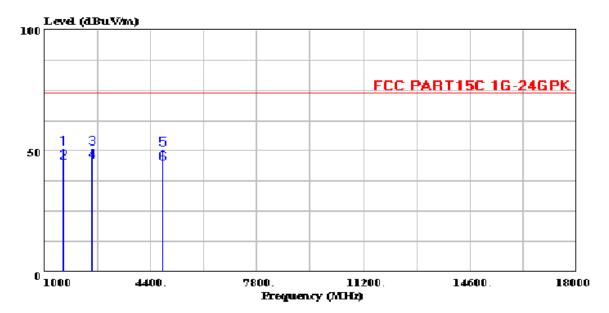
Comment : Temp:25.3'C Humi:55% Memo : TX 2480MHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1599.760 1599.760 2500.240 2500.240 6494.680 6494.680	41.69 48.13 40.88	-24.14 -12.31 -25.87 -13.12 -22.41 -9.09	74.00 54.00 74.00 54.00 74.00 54.00	19.24 11.20 14.30 7.05 21.35 5.83	28.46 28.33 31.60 31.60 28.08 36.60	2.16 2.23 2.23 2.16	Peak Average Peak Average Peak Average

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Data#: 223 File#: \\966pc1\radiation\F\Foryou.emi Date: 2008-06-16 Time: 01:44:47



Site : 966 Chamber

Condition : FCC PART15C 1G-24GPK 3m 3117 HORIZONTAL

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

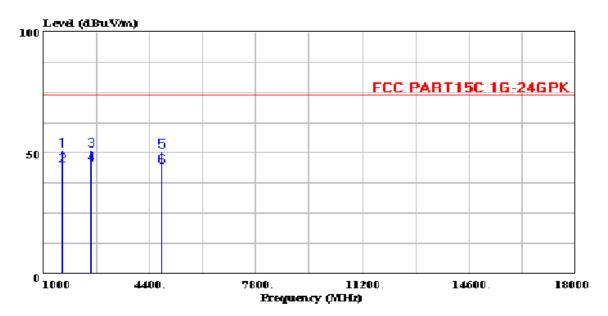
Comment : Temp:25.3'C Humi:55% Memo : Normal operating

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1603.120 1603.120 2501.920 2501.920 4778.840 4778.840	45.17 51.17 45.62	-22.82 -8.83 -22.83 -8.38 -23.24 -9.25	74.00 54.00 74.00 54.00 74.00 54.00	46.57 14.68 17.34 11.79 13.82 7.81	28.33 28.33 31.60 31.60 34.57 34.57	2.16 2.23 2.23 2.37	Peak Average Peak Average Peak Average

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Date: 2008-06-16 Time: 01:50:32 Data#: 224 File#: \\966pc1\radiation\F\Foryou.emi



: 966 Chamber : FCC PART15C 1G-24GPK 3m 3117 VERTICAL Condition

EUT : Bluetooth BOX

Power : DC 12V M/N : BTM10 Test Engineer: David

Comment : Temp:25.3'C Humi:55% : Normal operating Memo

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1 2 3 4 5	1603.120 1603.120 2501.920 2501.930 4778.840 4778.840	44.67 51.17 45.36	-22.82 -9.33 -22.83 -8.64 -23.24 -9.82	74.00 54.00 74.00 54.00 74.00 54.00	46.57 14.18 17.34 11.53 13.82 7.24	28.33 28.33 31.60 31.60 34.57 34.57	2.16 2.23 2.23 2.37	Peak Average Peak Average Peak Average

4.7. Conducted Emission

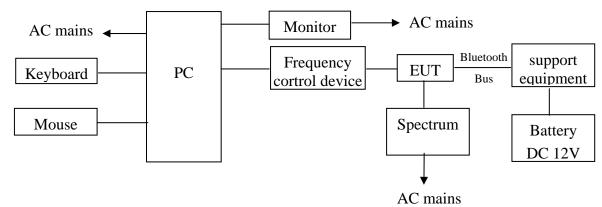
4.7.1. Test limits

intentional radiator shall be at least 20dB below that in 100kHz bandwidth within the band that contains the highest level of the desired power.

4.7.2. Test procedure

- 1. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
- 2. Set the EUT work on the CH1, CH79individually.
- 4. Set SPA Frequency = Operation frequency, for PK: RBW =100kHz, VBW ≧ RBW
- 5. Set SPA trace max hold, then view.

4.7.3. Test setup diagram

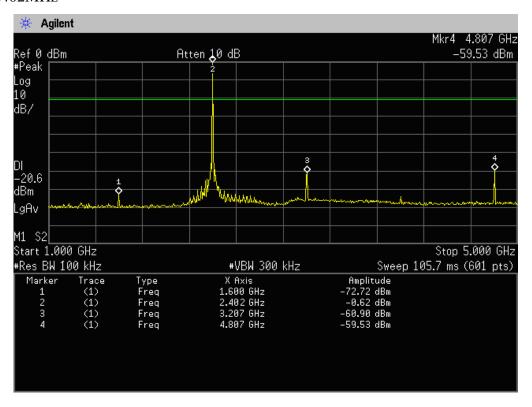


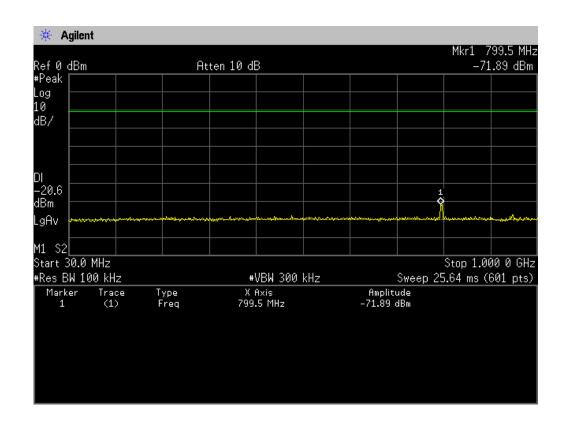
4.7.4. Test result

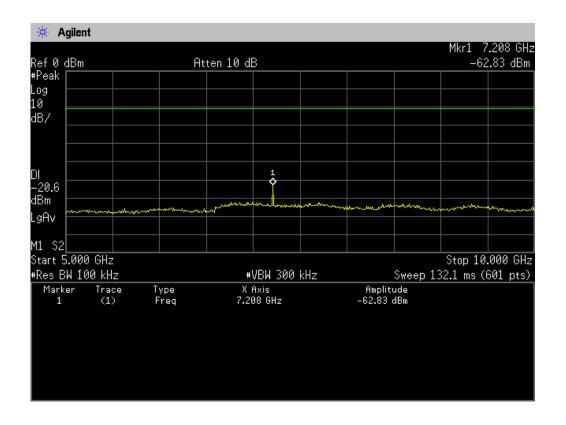
PASS.

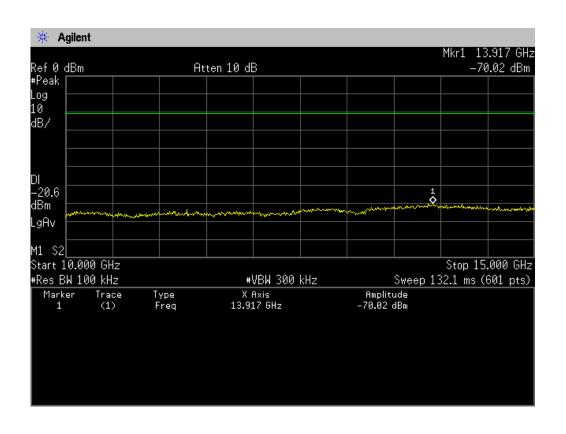
The test plots as following:

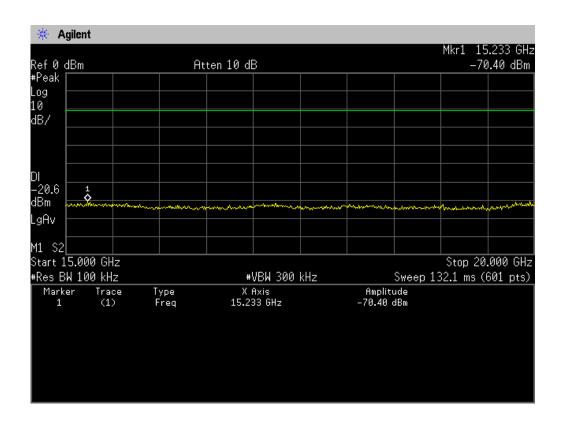
CH1:2402MHz

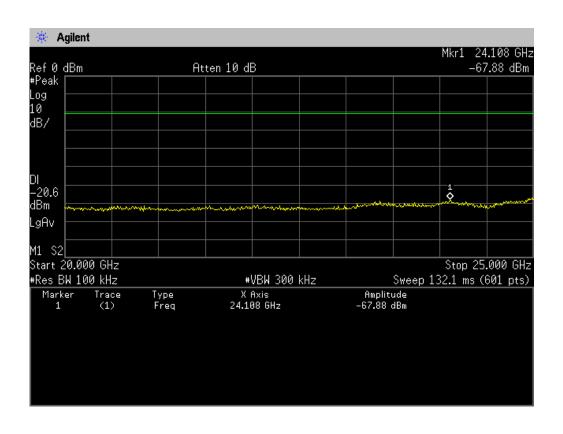




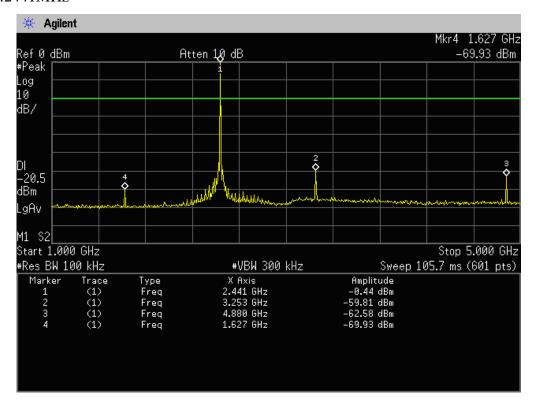


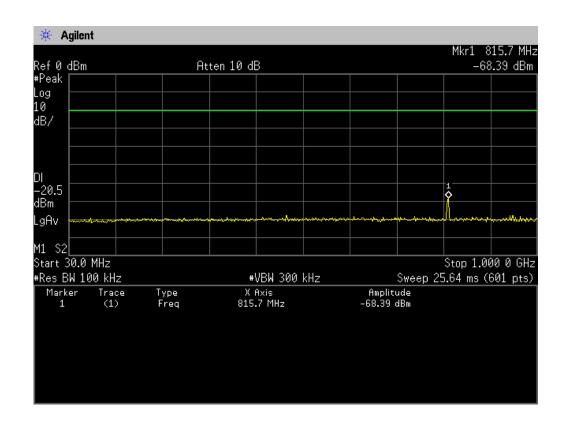


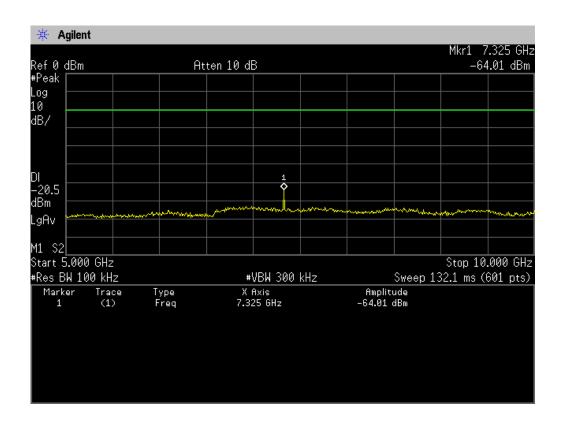


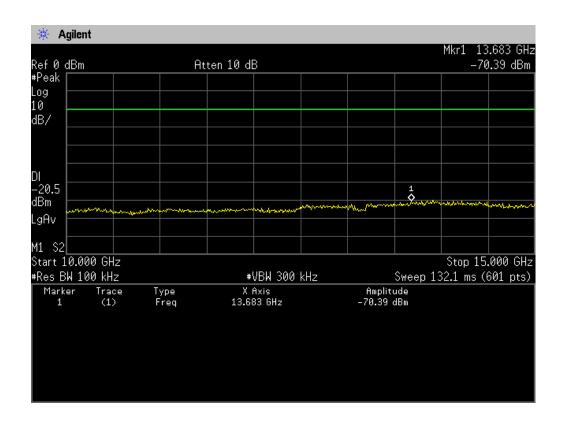


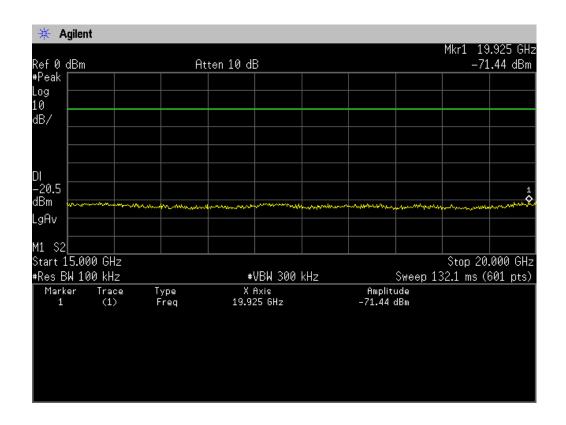
CH40:2441MHz

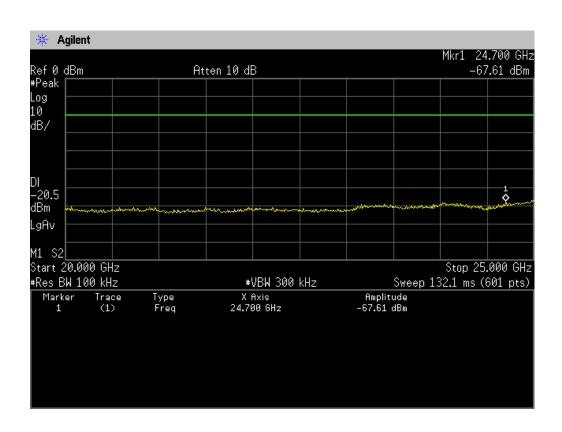




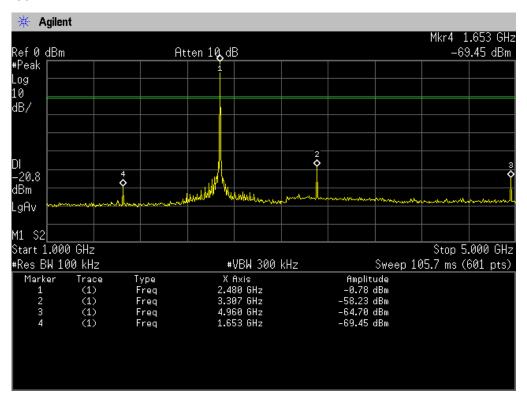


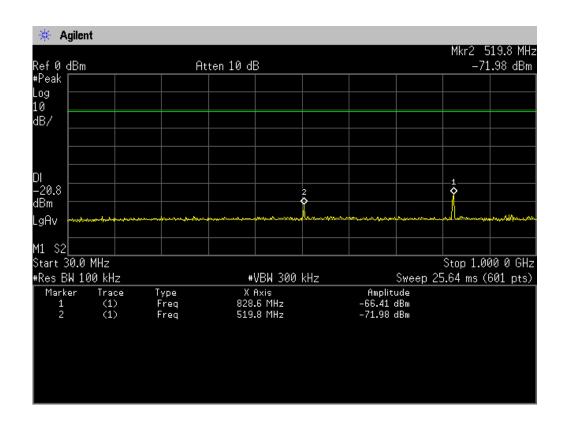


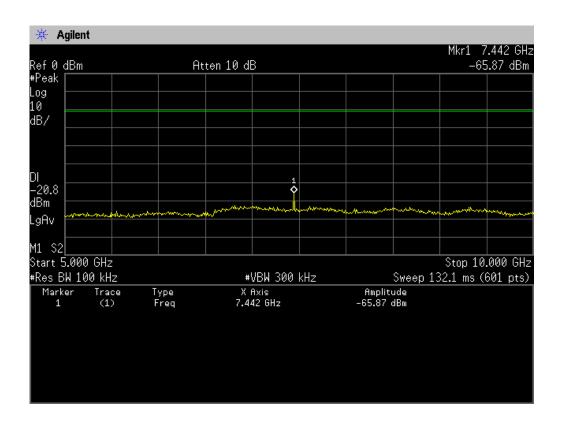


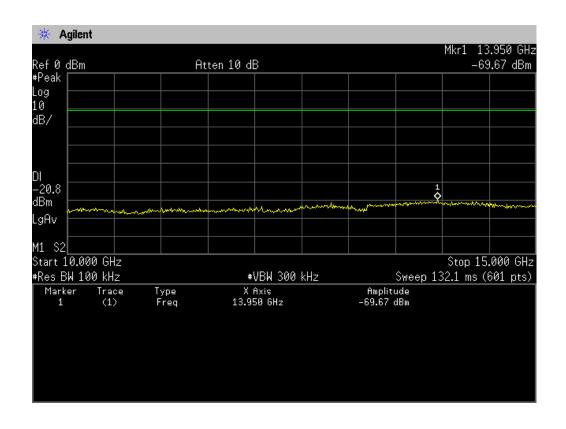


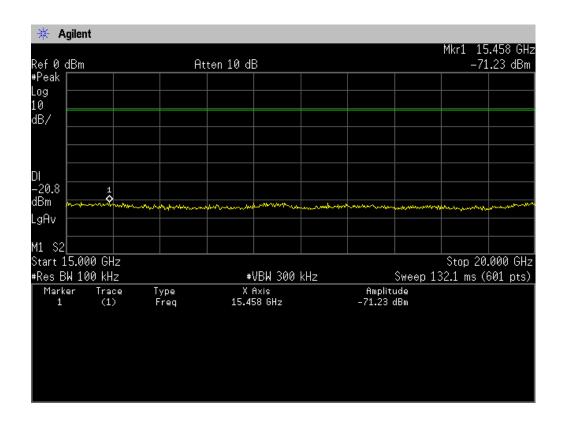
CH79:2480MHz

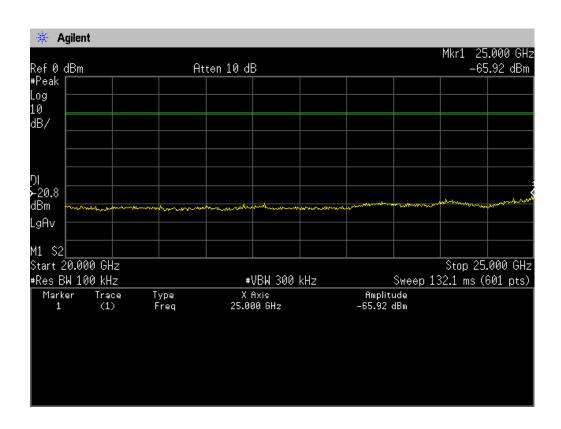












4.8. Band Edge

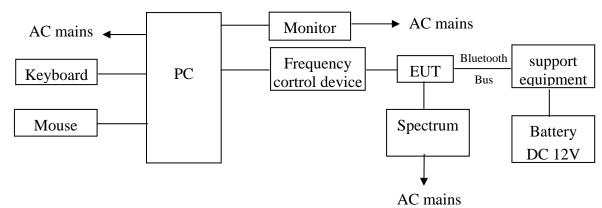
4.8.1. Test limits

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20dB below that in 100kHz bandwidth within the band that contains the highest level of the desired power.

4.8.2. Test procedure

- 1. The EUT was placed on a turntable which is 0.8m above ground plane.
- 2. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
- 3. Set the EUT work on the CH1, CH79individually.
- 4. Set SPA Frequency = Operation frequency, for PK: RBW =100kHz, VBW ≥ RBW
- 5. Set SPA trace max hold, then view.

4.8.3. Test setup diagram

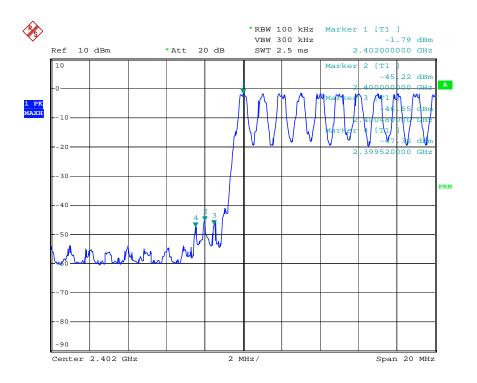


4.8.4. Test result

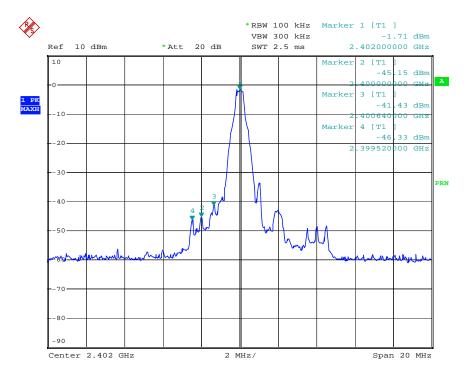
PASS.

The test plots as following:

Test CH1: 2402MHz

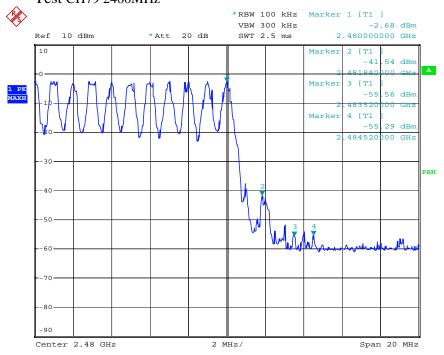


Date: 18.JUN.2008 18:03:07

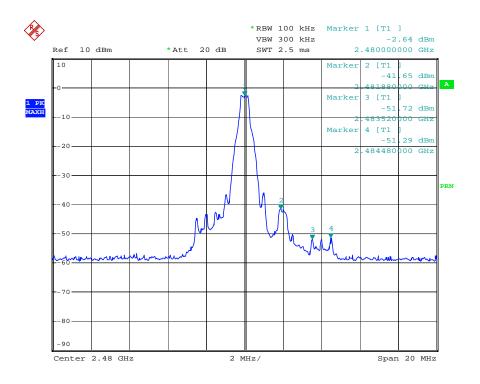


Date: 18.JUN.2008 17:56:55

Test CH79 2480MHz



Date: 18.JUN.2008 18:05:49



Date: 18.JUN.2008 18:45:20