



## Test Report

Product Name : IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard  
Model No. : MM210-M  
FCC ID. : N89-MM230M

Applicant : CyberTAN Technology, Inc.  
Address : 99 Park Avenue 3, Science Park Hsinchu 308,  
Taiwan, R.O.C.

Date of Receipt : 2008/01/06  
Issued Date : 2008/02/26  
Report No. : 081090R-RFUSP05V01-2  
Version : V1.0

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

# Test Report Certification

Issued Date : 2008/02/26

Report No. : 081090R-RFUSP05V01-2

**QuieTek**

Product Name : IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard  
Applicant : CyberTAN Technology, Inc.  
Address : 99 Park Avenue 3, Science Park Hsinchu 308, Taiwan,  
R.O.C.  
Manufacturer : Foxconn Technology Group- Ambit Microsystems  
(Zhongshan)LTD.  
Model No. : MM210-M  
FCC ID. : N89-MM230M  
Rated Voltage : AC 120 V / 60 Hz  
EUT Voltage : Power by PC  
Trade Name : CyberTAN  
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2006  
Test Result : Complied

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Carol Tsai

( Carol Tsai / Engineering Adm. Specialist )

Reviewed By : Lucia Lu

( Lucia Lu / Assistant Engineer )

Approved By : Roy Wang

( Roy Wang / Manager )

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## 1. General Information

### 1.1. EUT Description

Product Name	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard
Trade Name	CyberTAN
Model No.	MM210-M
Frequency Range	2412~2462MHz
Channel Number	11
Type of Modulation (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Type of Modulation (IEEE 802.11g)	Orthogonal Frequency Division Multiplexing (OFDM)
Data Speed (IEEE 802.11b)	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data Speed (IEEE 802.11g)	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
Channel Control	Manual
Antenna Type	Connector (PIFA)
Antenna Gain	2.45dBi

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz
005	2432 MHz	006	2437 MHz	007	2442 MHz	008	2447 MHz
009	2452 MHz	010	2457 MHz	011	2462 MHz		

#### Note:

1. This device is an IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard, including a 2.4GHz BT/WLAN receiving function, and transmitting function.
2. These test results on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for DTS devices.
3. Regards to the frequency band operation; the highest rate that was included the lowest, middle and highest frequency of channel were selected to perform the test, and then shown on this report.
4. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 081090R-RFUSP01V02-2 under Declaration of Conformity.

### 1.3. Test Mode

QuiTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
EMI	Mode 1: Transmit
Final Test Mode	
TX	Mode 1: Transmit

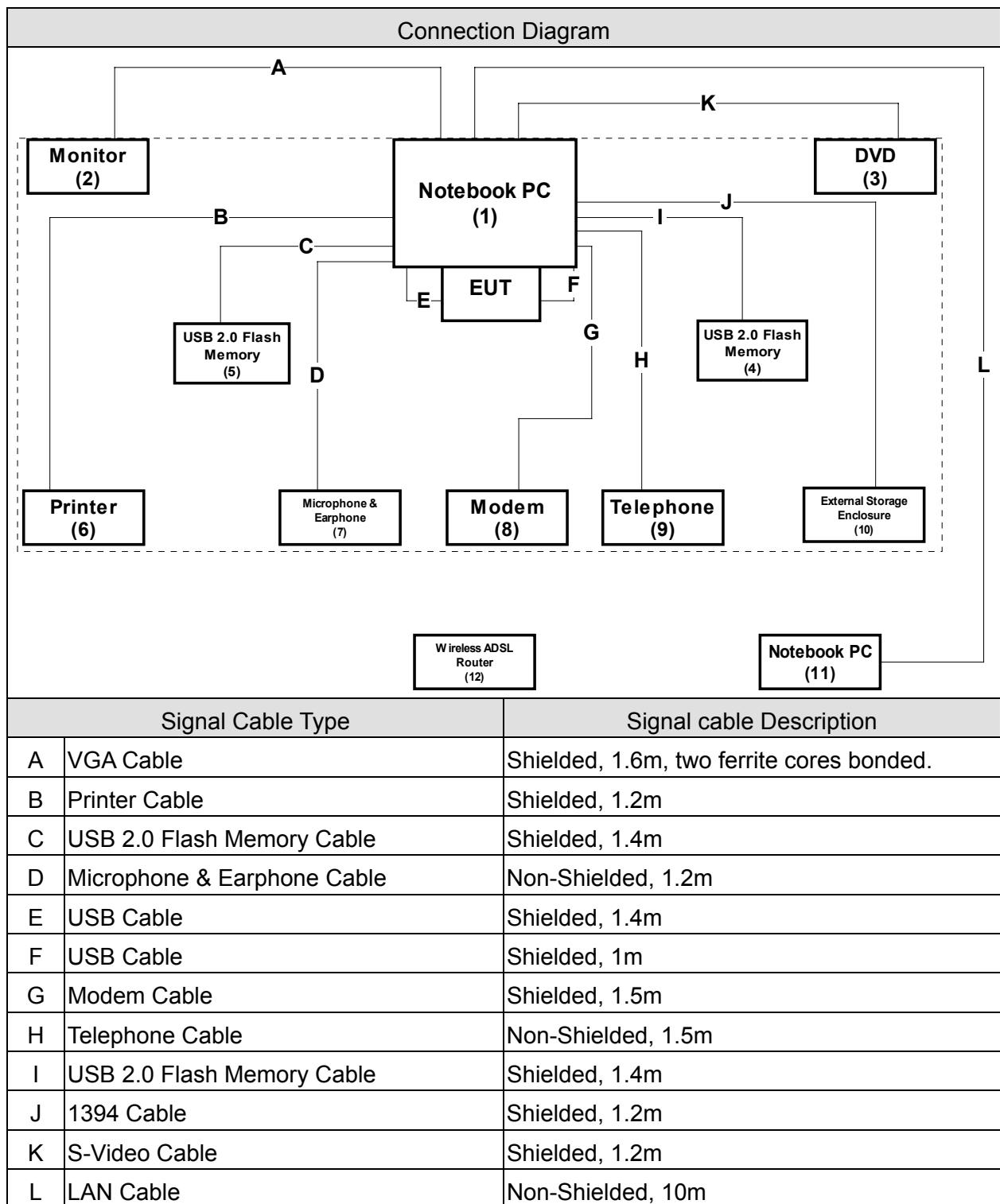
Emission	Mode 1
Conducted Emission	Yes
Peak Power Output	Yes
Radiated Emission	Yes
Band Edge	Yes
Occupied Bandwidth	Yes
Power Density	Yes

#### 1.4. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	HP	NX6320	CNU62D1F4K	DoC	Non-Shielded, 1.8m
2	Monitor	CHI MEI	A170E1-09	3UC120954HA0063	DoC	Non-Shielded, 1.8m
3	DVD	Panasonic	DVD-A120TN	9542160	DoC	Non-Shielded, 1.8m
4	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
5	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
6	Printer	HP	C2642A	TH86M1M34W	DoC	Non-Shielded, 0.7m
7	Microphone & Earphone	TOKTO	SX-MI	N/A	DoC	--
8	Modem	ACEEX	DM-1414	0102027535	DoC	Non-Shielded, 1.6m
9	Telephone	TENTEL	K-302	50721005000219	DoC	--
10	External Storage Enclosure	MACPOWER	Laureate Super 800	N/A	DoC	--
11	Notebook PC	HP	NX6320	CNU62D1F5Y	DoC	Non-Shielded, 1.8m
12	Wireless ADSL Router	D-Link	DSL-2640R	N/A	DoC	Non-Shielded, 1.8m

## 1.5. Configuration of tested System



**1.6. EUT Exercise Software**

1	Setup the EUT and Notebook PC as shown on 1.4
2	Turn on the power of all equipment.
3	Notebook PC reads data from disk.
4	Data will be transmitting through EUT.
5	The transmitting status will be shown on the monitor.
6	Repeat the above procedure (4) to (5)

## 1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207	15 - 35	20
Humidity (%RH)	Conducted Emission	25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Peak Power Output (DSSS)	25 - 75	51
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	25
Humidity (%RH)	Radiated Emission (DSSS)	25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Band Edge (DSSS)	25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Occupied Bandwidth (DSSS)	25 - 75	51
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Power Density (DSSS)	25 - 75	51
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description:

January 24, 2005 File on  
Federal Communications Commission  
Laboratory Division  
7435 Oakland Mills Road  
Columbia, MD 21046  
Registration Number: 365520



Accredited by TAF  
Accreditation Number: 1313  
Effective through: December 27, 2010



Accredited by NVLAP  
NVLAP Lab Code: 200347-0  
Effective through: September 30, 2008



Site Name: Quietek Corporation  
Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,  
Chiung-Lin, Hsin-Chu County,  
Taiwan, R.O.C.  
TEL : 886-3-592-8858 / FAX : 886-3-592-8859  
E-Mail : [service@quietek.com](mailto:service@quietek.com)

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## 2. Peak Power Output

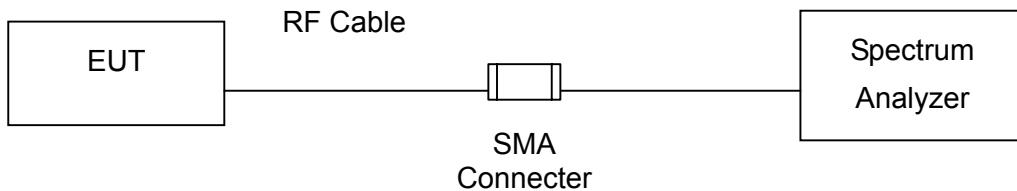
### 2.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP/ 100005	Oct., 2007
2	No.1 OATS			Sep., 2007

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

### 2.2. Test Setup



### 2.3. Test procedures

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

### 2.4. Limits

The maximum peak power shall be less 1 Watt.

### 2.5. Test Specification

According to FCC CFR Title 47 Part 15 Subpart C Section 15.247:2006

### 2.6. Uncertainty

The measurement uncertainty is defined as  $\pm 1.27$  dB.

## 2.7. Test Result

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2007/01/05	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	17.98	1Watt= 30 dBm	Pass
6	2437	15.33	1Watt= 30 dBm	Pass
11	2462	14.89	1Watt= 30 dBm	Pass

The worst emission of data rate is 1Mbps.

Peak Power Output (dBm)						
Channel No	Frequency (MHz)	Data Rate (Mbps)				Required Limit
		1	2	5.5	11	
1	2412	17.98	17.82	17.69	17.55	1 Watt=30dBm
6	2437	15.33	15.19	14.89	14.66	1 Watt=30dBm
11	2462	14.89	14.61	14.50	14.43	1 Watt=30dBm

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2008/01/06	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	17.79	1Watt= 30 dBm	Pass
6	2437	17.61	1Watt= 30 dBm	Pass
11	2462	17.38	1Watt= 30 dBm	Pass

The worst emission of data rate is 6Mbps.

Channel No	Frequency (MHz)	Peak Power Output (dBm)								Required Limit
		6	9	12	18	24	36	48	54	
1	2412	17.79	17.68	17.65	17.62	17.59	17.57	17.54	17.51	1 Watt=30dBm
6	2437	17.61	17.58	17.55	17.52	17.51	17.49	17.48	17.44	1 Watt=30dBm
11	2462	17.38	17.36	17.35	17.32	17.30	17.29	17.27	17.22	1 Watt=30dBm

### 3. Radiated Emission

#### 3.1. Test Equipment

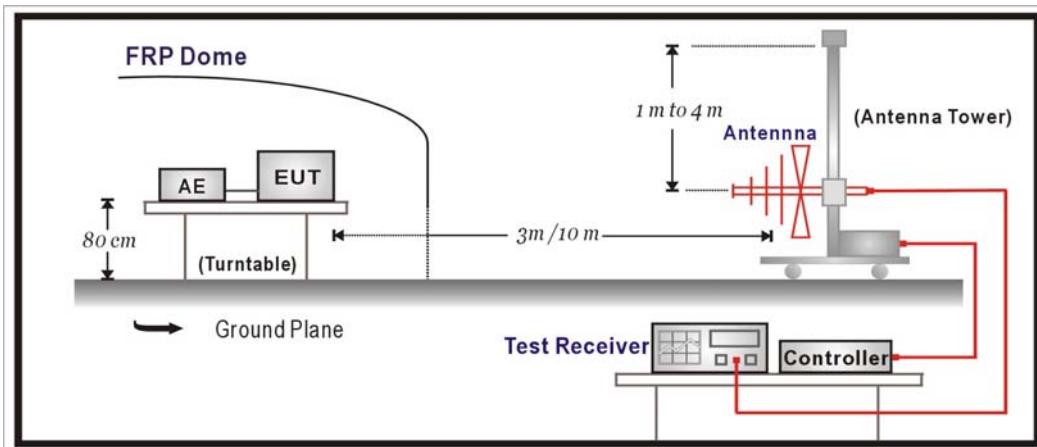
The following test equipments are used during the test:

Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Test Receiver	R & S	ESCS 30 / 825442/017	Jan., 2008
2	X	Spectrum Analyzer	Advantest	R3261C / 81720266	N/A
3	X	Pre-Amplifier	HP	8447D / 2944A09276	N/A
4	X	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2007
5	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2007
6	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2007
7	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Jul., 2007
8	No.1 OATS				Sep., 2007

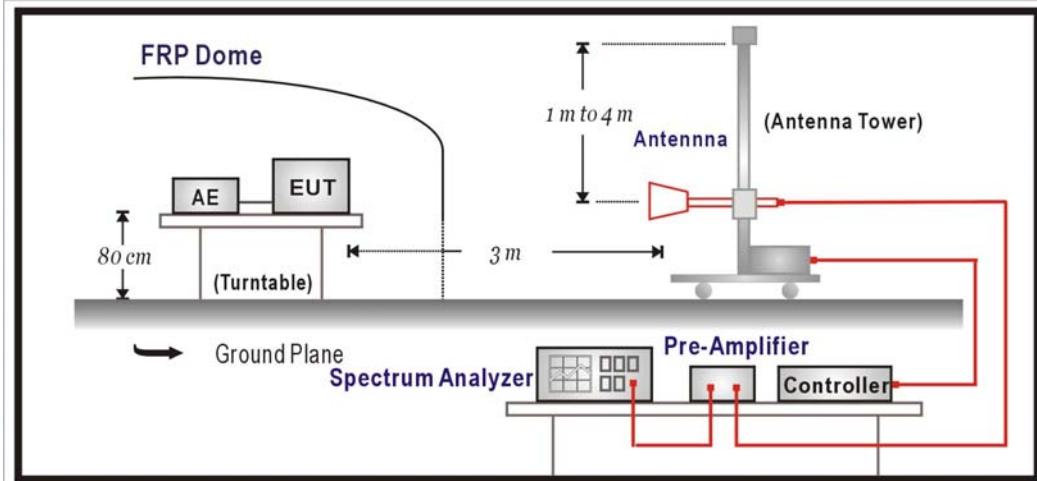
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.  
 2. "N/A" Ca1.Date is used to Pre-test, not final test.

#### 3.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



### 3.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

<b>FCC Part 15 Subpart C Paragraph 15.209 Limits</b>		
Frequency MHz	dBuV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)  
2. In the Above Table, the tighter limit applies at the band edges.  
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.

### 3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

### 3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

### 3.6. Uncertainty

The measurement uncertainty

30MHz~1GHz as  $\pm 3.19\text{dB}$

1GHz~26.5Ghz as  $\pm 3.9\text{dB}$

### 3.7. Test Result

#### 30MHz-1GHz Spurious

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard			
Test Item	Radiated Emission			
Test Mode	Mode 1: Transmit (B)			
Date of Test	2008/02/25	Test Site		No.1 OATS

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)
<b>Horizontal</b>					
31.944	3.144	24.184	27.328	-12.672	40.000
269.098	-7.085	41.577	34.492	-11.508	46.000
434.329	2.385	23.072	25.457	-20.543	46.000
582.064	4.928	25.474	30.402	-15.598	46.000
665.651	1.750	32.565	34.315	-11.685	46.000
871.703	5.455	24.316	29.771	-16.229	46.000
<b>Vertical</b>					
31.944	0.427	22.106	22.533	-17.467	40.000
271.042	-12.170	42.638	30.468	-15.532	46.000
323.527	-4.426	33.139	28.713	-17.287	46.000
582.064	0.932	27.549	28.481	-17.519	46.000
714.248	2.233	29.376	31.609	-14.391	46.000
939.740	9.011	21.479	30.490	-15.510	46.000

Note:

1. All Reading Levels below 1GHz are Quasi-Peak value.
2. "■", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard				
Test Item	Radiated Emission				
Test Mode	Mode 1: Transmit (G)				
Date of Test	2008/02/25		Test Site	No.1 OATS	

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)
<b>Horizontal</b>					
31.944	3.144	19.904	23.048	-16.952	40.000
271.042	-6.935	42.132	35.197	-10.803	46.000
463.487	3.129	22.348	25.477	-20.523	46.000
576.232	5.112	24.806	29.918	-16.082	46.000
747.295	3.967	23.885	27.852	-18.148	46.000
871.703	5.455	24.604	30.059	-15.941	46.000
<b>Vertical</b>					
105.812	-0.248	21.192	20.944	-22.556	43.500
302.144	-7.445	30.601	23.156	-22.844	46.000
399.339	-0.493	24.961	24.468	-21.532	46.000
566.513	3.209	24.611	27.820	-18.180	46.000
768.677	5.068	22.655	27.723	-18.277	46.000
937.796	8.994	20.579	29.573	-16.427	46.000

**Note:**

1. All Reading Levels below 1GHz are Quasi-Peak value.
2. " **■** ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

**Harmonic & Spurious:**

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH01-B

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
--------------------	---------------------------	----------------------------	------------------------------	----------------	---------------------------	------------------------------

**Horizontal****Peak Detector:**

4824.110	3.734	37.250	40.984	-33.016	74.000	54.00
7236.190	8.726	36.661	45.387	-28.613	74.000	54.00
9648.270	12.707	32.102	44.809	-29.191	74.000	54.00
12060.350	15.086	30.893	45.979	-28.021	74.000	54.00

**Average Detector:**

--

**Vertical****Peak Detector:**

4824.150	1.983	38.213	40.196	-33.804	74.000	54.00
7236.110	8.726	35.312	44.038	-29.962	74.000	54.00
9648.160	14.706	33.032	47.738	-26.262	74.000	54.00
12060.280	17.227	31.507	48.734	-25.266	74.000	54.00

**Average Detector:**

--

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH06-B

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
--------------------	---------------------------	----------------------------	------------------------------	----------------	---------------------------	------------------------------

**Horizontal****Peak Detector:**

4873.910	4.087	39.873	43.960	-30.040	74.000	54.00
7310.900	8.844	37.657	46.501	-27.499	74.000	54.00
9747.740	13.131	36.858	49.989	-24.011	74.000	54.00
12184.890	18.996	33.787	52.783	-21.217	74.000	54.00

**Average Detector:**

--

**Vertical****Peak Detector:**

4873.850	2.432	38.452	40.884	-33.116	74.000	54.00
7310.500	8.844	38.053	46.897	-27.103	74.000	54.00
9747.720	15.131	32.380	47.511	-26.489	74.000	54.00
12184.850	19.387	31.511	50.898	-23.102	74.000	54.00

**Average Detector:**

--

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH11-B

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
--------------------	---------------------------	----------------------------	------------------------------	----------------	---------------------------	------------------------------

**Horizontal****Peak Detector:**

4924.050	4.382	38.408	42.790	-31.210	74.000	54.00
7386.010	8.943	37.294	46.237	-27.763	74.000	54.00
9848.050	13.836	32.596	46.432	-27.568	74.000	54.00
12310.050	6.441	33.684	40.125	-33.875	74.000	54.00

**Average Detector:**

--

**Vertical****Peak Detector:**

4924.100	2.835	43.294	46.129	-27.871	74.000	54.00
7386.110	8.943	37.287	46.230	-27.770	74.000	54.00
9848.020	15.355	35.333	50.688	-23.312	74.000	54.00
12310.060	17.902	33.711	51.613	-22.387	74.000	54.00

**Average Detector:**

--

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH1-G

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
--------------------	---------------------------	----------------------------	------------------------------	----------------	---------------------------	------------------------------

**Horizontal****Peak Detector:**

4824.170	3.977	36.573	40.550	-33.450	74.000	54.00
7236.100	11.442	37.787	49.229	-24.771	74.000	54.00
9648.200	16.093	33.648	49.741	-24.259	74.000	54.00
12060.240	17.524	33.746	51.270	-22.730	74.000	54.00

**Average Detector:**

--

**Vertical****Peak Detector:**

4824.110	3.976	39.701	43.677	-30.323	74.000	54.00
7236.060	11.915	37.111	49.026	-24.974	74.000	54.00
9648.090	14.794	37.106	51.900	-22.100	74.000	54.00
12060.180	17.406	33.214	50.620	-23.380	74.000	54.00

**Average Detector:**

--

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH6-G

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
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**Horizontal****Peak Detector:**

4873.990	4.143	36.801	40.944	-33.056	74.000	54.00
7310.800	11.639	39.415	51.054	-22.946	74.000	54.00
9747.760	16.419	34.398	50.817	-23.183	74.000	54.00
12184.850	17.887	35.631	53.518	-20.482	74.000	54.00

**Average Detector:**

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**Vertical****Peak Detector:**

4873.960	4.143	36.067	40.210	-33.790	74.000	54.00
7310.940	12.259	39.285	51.544	-22.456	74.000	54.00
9747.620	14.921	35.243	50.164	-23.836	74.000	54.00
12184.850	17.519	36.407	53.926	-20.074	74.000	54.00

**Average Detector:**

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## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	IEEE 802.11b/g Bluetooth 2.0+ EDR MiniCard					
Test Item	Radiated Emission					
Test Mode	Mode 1: Transmit					
Date of Test	2008/02/25			Test Site	No.1 OATS	

## CH11-G

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)
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**Horizontal****Peak Detector:**

4924.030	4.310	40.497	44.807	-29.193	74.000	54.00
7386.040	11.856	37.037	48.893	-25.107	74.000	54.00
9848.080	16.729	34.036	50.765	-23.235	74.000	54.00
12310.100	18.255	32.801	51.056	-22.944	74.000	54.00

**Average Detector:**

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**Vertical****Peak Detector:**

4924.120	4.310	39.580	43.890	-30.110	74.000	54.00
7386.160	12.626	35.141	47.767	-26.233	74.000	54.00
9848.070	15.034	34.575	49.609	-24.391	74.000	54.00
12310.040	17.636	35.096	52.732	-21.268	74.000	54.00

**Average Detector:**

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## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.