
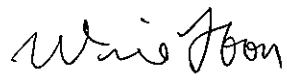


Produkte
Products



Prüfbericht - Nr.: 17024310 001 <i>Test Report No.:</i>		Seite 1 von 54 Page 1 of 54	
Auftraggeber: <i>Client:</i>		Midland Radio Corporation 5900 Parretta Drive, Kansas City, Missouri 64120, United States	
Gegenstand der Prüfung: <i>Test item:</i>		Wireless Remote Controller	
Bezeichnung: <i>Identification:</i>	BT Remote	Serien-Nr.: <i>Serial No.:</i>	n.a.
Wareneingangs-Nr.: <i>Receipt No.:</i>	163088286	Eingangsdatum: <i>Date of receipt:</i>	2012-01-05
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>		Test samples received are sufficient for testing and not damaged.	
Prüfört: <i>Testing location:</i>	Neutron Engineering Inc. No. 3 Jinshagang 1st Road, ShiXia, DaLang Town, Dong Guan, China FCC Registration No.: 319330 Test site Industry Canada No.: 4428B-1		
Prüfgrundlage: <i>Test specification:</i>	FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 FCC CFR47 Part 15: Subpart C Section 15.209 RSS-210 Issue 8 December 2010 RSS-Gen Issue 3 December 2010 RSS-102 Issue 4 March 2010		
Prüfergebnis: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test item passed the test specification(s).		
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.		
geprüft/ tested by:		kontrolliert/ reviewed by:	
 2012-09-02 Owen Tian/ Project Manager		 2012-09-30 Winnie Hou/ Technical Certifier	
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
			Name/Stellung <i>Name/Position</i>
			Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:			
Abkürzungen:	P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet	Abbreviations:	P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test item. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.			

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Passed***5.1.2 PEAK OUTPUT POWER***RESULT: Passed***5.1.3 20DB BANDWIDTH***RESULT: Passed***5.1.4 99% BANDWIDTH***RESULT: Passed***5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH***RESULT: Passed***5.1.6 SPURIOUS EMISSION***RESULT: Passed***5.1.7 FREQUENCY SEPARATION***RESULT: Passed***5.1.8 NUMBER OF HOPPING FREQUENCY***RESULT: Passed***5.1.9 TIME OF OCCUPANCY***RESULT: Passed***5.1.10 CONDUCTED EMISSIONS***RESULT: Passed***6.1.1 ELECTROMAGNETIC FIELDS***RESULT: Passed*

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix 1: Test Result

2. Test Sites

2.1 Test Facilities

Neutron Engineering Inc.
No. 3 Jinshagang 1st Road, ShiXia, DaLang Town, Dong Guan, China
FCC Registration No.: 319330
Test site Industry Canada No.: 4428B-1

The tests at the test site have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Spurious emission and Radiated emission				
EMI Test Receiver	ESVS10	834468/011	100216	2013-03-08
Spectrum Analyzer	Agilent	E4407B	MY4144029 2	2013-03-08
Trilog-Broadband Antenna	Schaffner	CBL6111C	2598	2013-03-08
Amplifier	HP	8447D	2648A0473 8	2013-03-08
RF Cable	MIYAZAKI	8D-FB	N/A	2013-03-08
Horn Antenna	EMCO	3115	9607-4877	2013-11-25
Loop Antenna	Chase	HLA6120	1062	2013-05-08
3m Anechoic Chamber	AUDIX	N/A	N/A	2013-12-05
Active Loop Antenna	R&S	HFH2-Z2	830749/020	2013-05-27
Radio Test Suite				
Test Receiver	Rohde & Schwarz	ESCI	100842	2013-10-20
Conducted Emission				
Receiver	R&S	ESHS20	836600/006	2013-03-08
Artificial Mains Network	R&S	ESH2-Z5	834066/011	2013-03-08

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are $\pm 3\text{dB}$.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Neutron Engineering Inc. No. 3 Jinshagang 1st Road, ShiXia, DaLang Town, Dong Guan, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Wireless Remote Controller. BT Remote can be fixed on the handlebar of your motorbike to control all the functions of your BTNext, BTX1 and BTX2 intercom devices. BT Remote replicates exactly the same functions as the 5 buttons available on the BT Next, BTX1 and BTX2 intercom.
For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Wireless Remote Controller
Type Designation:	BT Remote
FCC ID	MMABTREMOTE
IC	3690A-BTREMOTE

Table 3: Technical Specification of EUT

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-20°C to +55°C
Operation Voltage	DC 3.7V (via lithium battery)
Modulation	GFSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0dBi
RF Output Power	0.00284W (4.53dBm)

Table 4: Frequency hopping information

Technical Specification	Description
Hopping Range	<p>Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).</p>
Hopping Sequence	<p>Example of a 79 hopping sequence in data mode:</p> <p>33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43,15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,</p>
Receiver input bandwidth	<p>The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.</p> <p>Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.</p> <p>Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case.</p> <p>That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.</p>

3.3 Independent Operation Modes

The basic operation modes are:

- A. Transmitting
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. Standby
- C. Receiving
- D. Charging
- E. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2003.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories

Description	Manufacturer	Type	Rating
AC/DC Adapter	Midland	SKB0500400PE	Input: AC100-240V 50-60Hz 300mA Output: DC5V 400mA

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

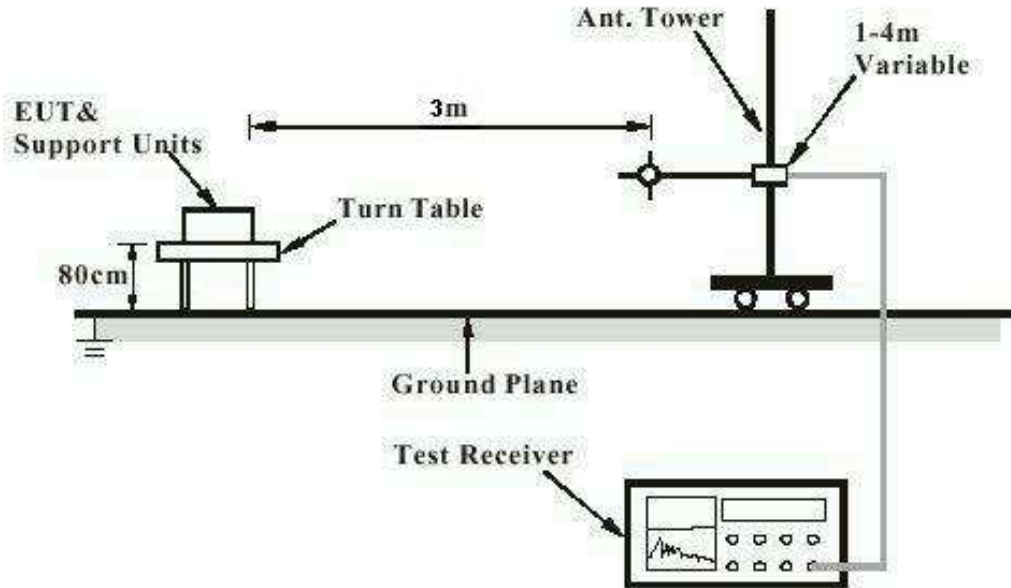


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

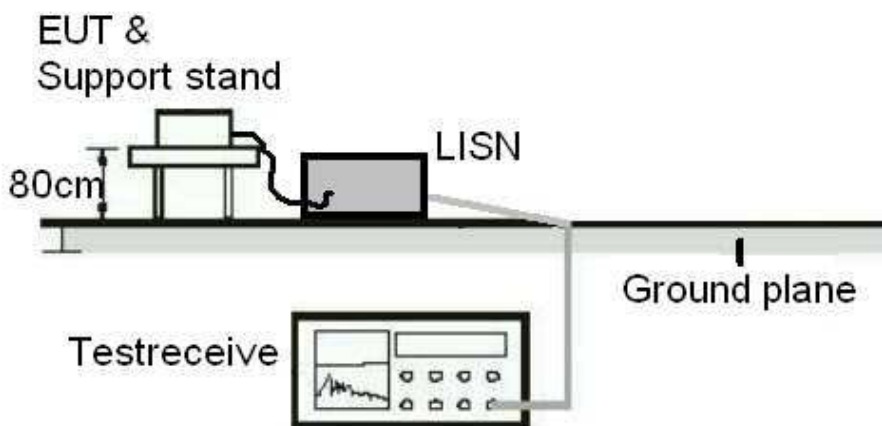
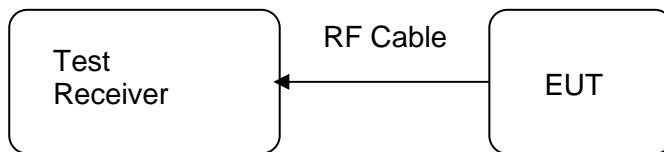


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2012-03-28
Test standard	:	FCC Part 15.247(b)(4) and Part 15.203 RSS-Gen 7.1.4
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT:
Passed

Test date : 2012-03-26
 Test standard : FCC Part 15.247(b)(1)
 : RSS-210 A8.4 (2)
 Basic standard : ANSI C63.4: 2003
 Limit : 125mW
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 20°C
 Relative humidity : 50%
 Atmospheric pressure : 101 kPa

Table 5: Test result of Peak Output Power

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	4.53	0.00284	0.125
Middle Channel	2441	3.96	0.00249	0.125
High Channel	2480	3.09	0.00204	0.125

Remark: RBW is 1MHz

5.1.3 20dB Bandwidth

RESULT:**Passed**

Date of testing : 2012-03-26
Test standard : FCC Part 15.247(a)(1)
RSS-210 A8.1 (a)
Basic standard : ANSI C63.4: 2003
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 20°C
Relative humidity : 50%
Atmospheric pressure : 101 kPa

Table 6: Test result of 20dB Bandwidth

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	860	/	Pass
Mid Channel	2441	850	/	Pass
High Channel	2480	850	/	Pass

5.1.4 99% Bandwidth

RESULT:**Passed**

Date of testing : 2012-03-26
Test standard : RSS-Gen clause 4.6.1
Basic standard : ANSI C63.4: 2003
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 20°C
Relative humidity : 50%
Atmospheric pressure : 101 kPa

Table 7: Test result of 99% Bandwidth

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	880	/	Pass
Mid Channel	2441	850	/	Pass
High Channel	2480	870	/	Pass

5.1.5 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:**Passed**

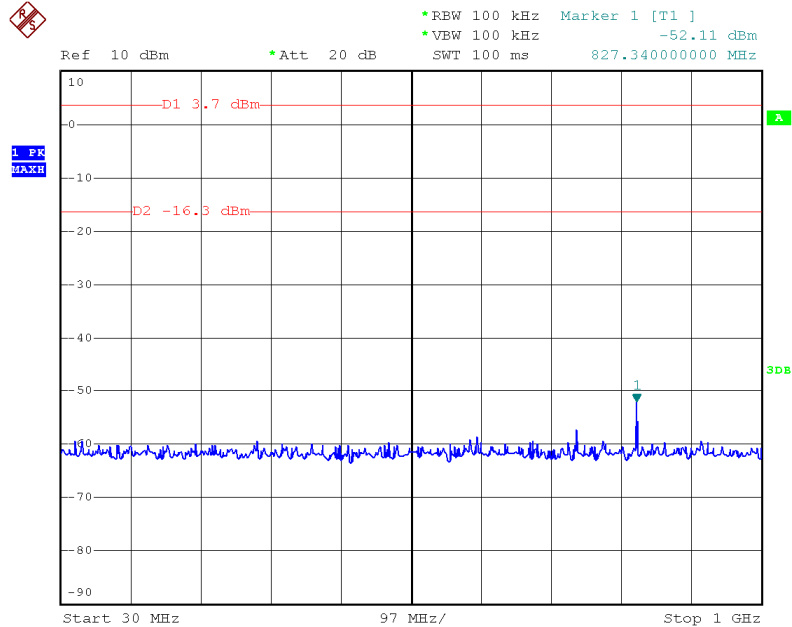
Date of testing	:	2012-03-26
Test standard	:	FCC part 15.247(d) RSS-210 A8.5
Basic standard	:	ANSI C63.4: 2003
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	20°C
Relative humidity	:	50%
Atmospheric pressure	:	101 kPa

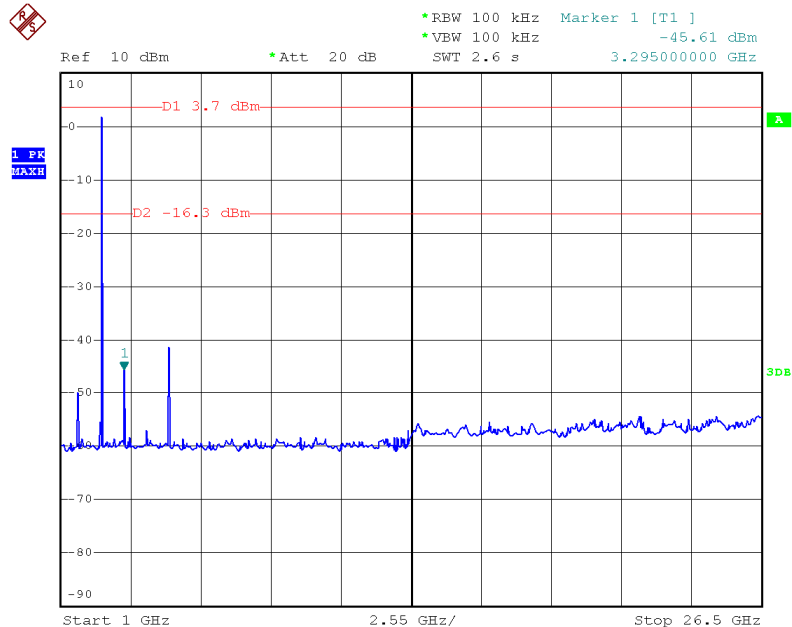
All emissions are more than 50dB below fundamental, details refer to following test plot, and compliance is achieved as well.

Test Plot of 100kHz Bandwidth of Frequency Band Edge Low Channel, below 1GHz

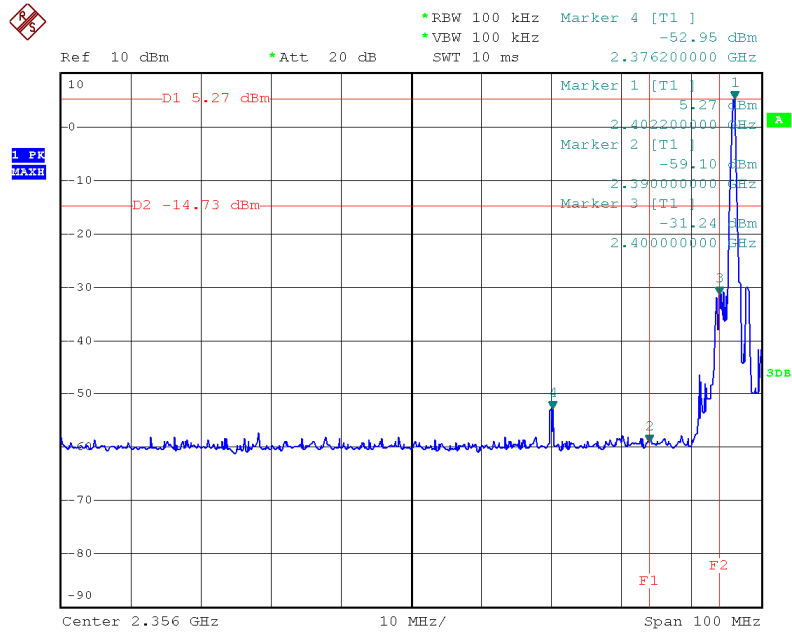


Date: 26.MAR.2012 10:06:40

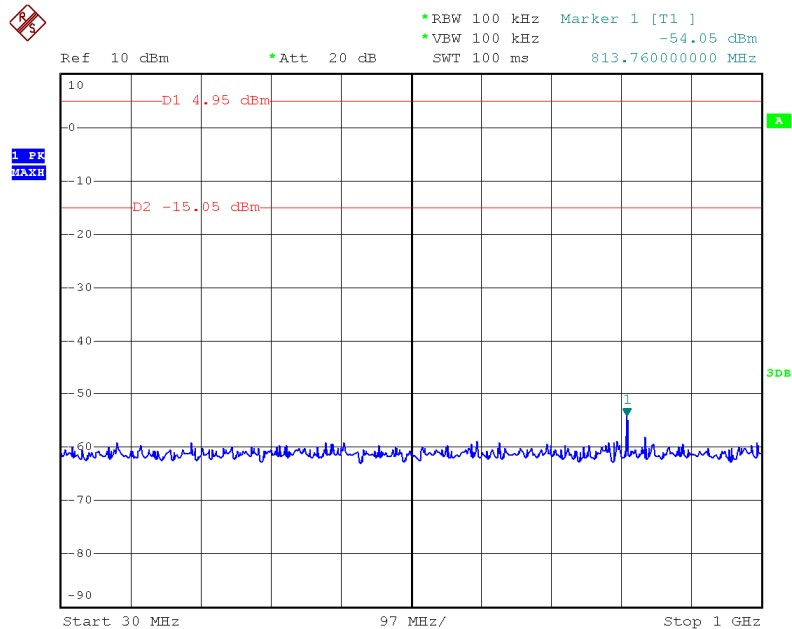
Low Channel, above 1GHz



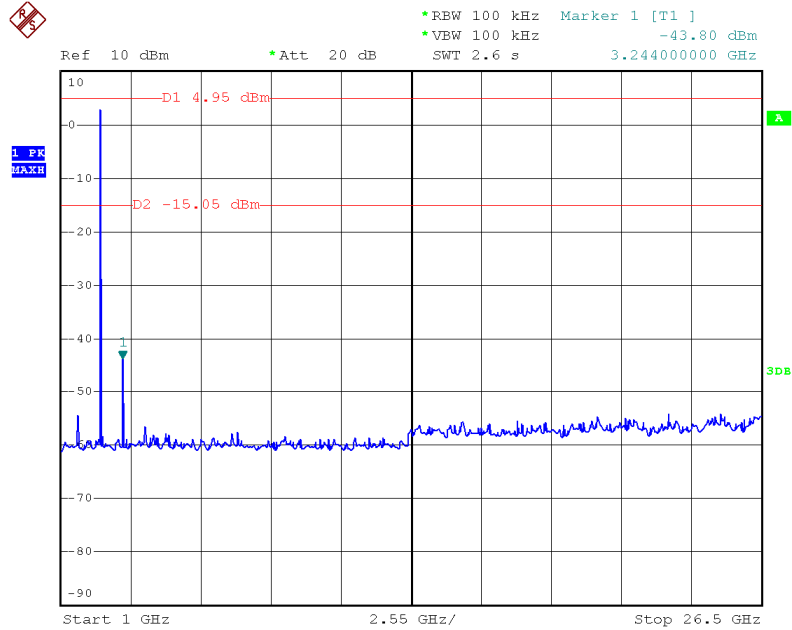
Date: 26.MAR.2012 10:10:43

Low Channel, Band Edge


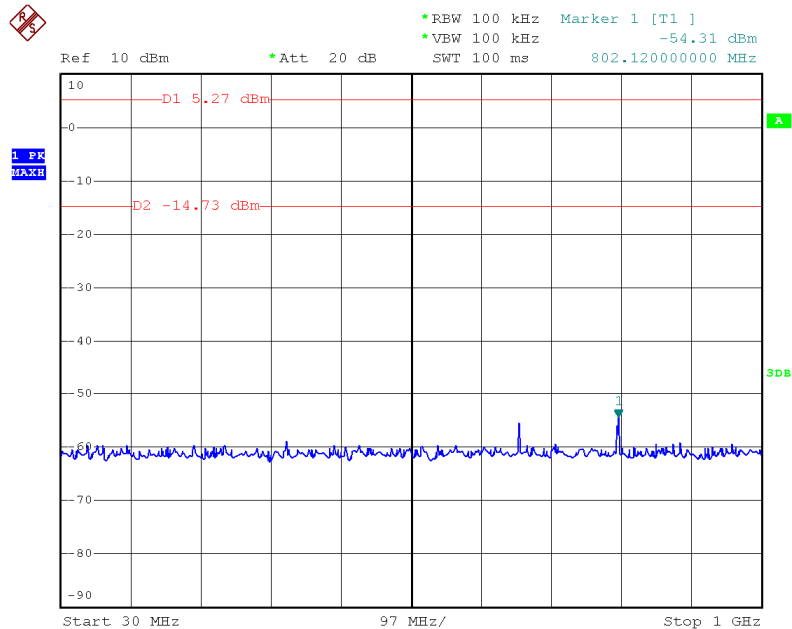
Date: 26.MAR.2012 10:08:16

Middle Channel, below 1GHz


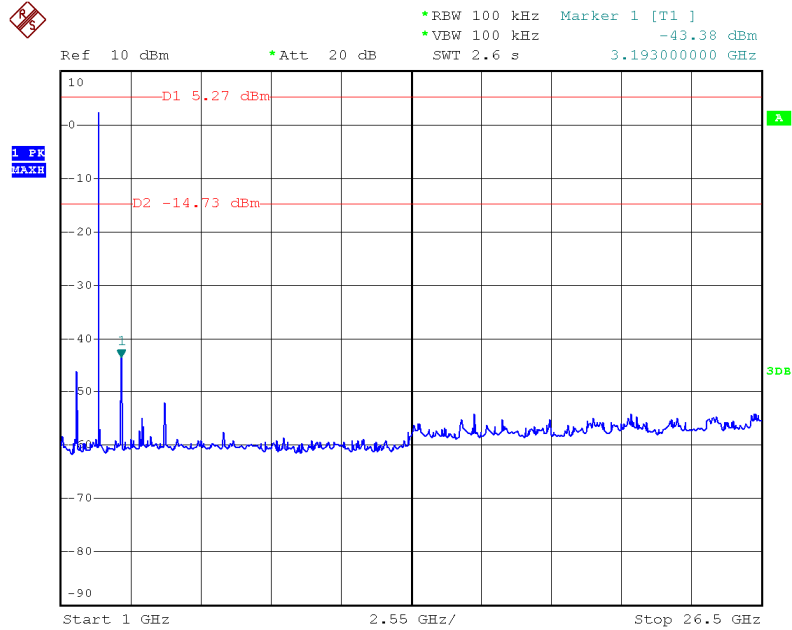
Date: 26.MAR.2012 10:09:34

Middle Channel, above 1GHz


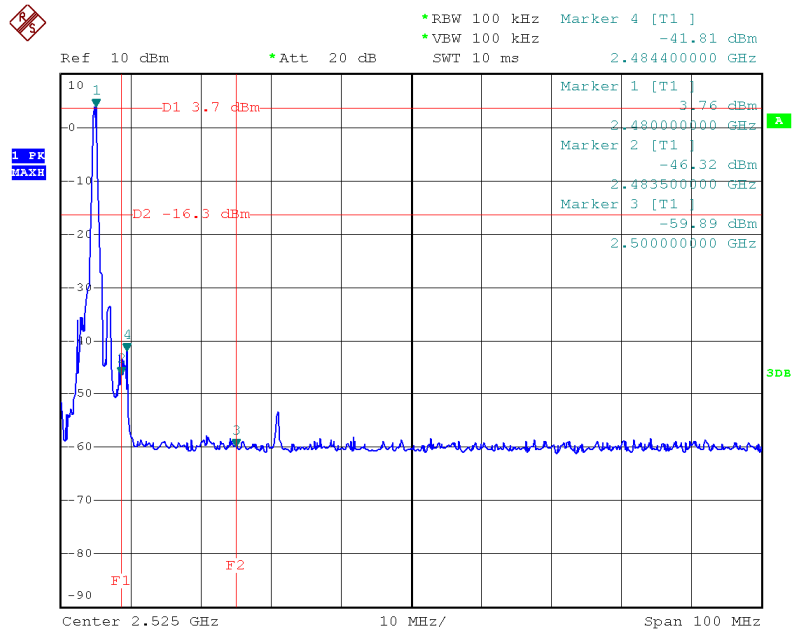
Date: 26.MAR.2012 10:09:55

High Channel, below 1GHz


Date: 26.MAR.2012 10:08:35

High Channel, above 1GHz


Date: 26.MAR.2012 10:08:56

High Channel, Band Edge


Date: 26.MAR.2012 10:06:23

5.1.6 Spurious Emission

RESULT:**Passed**

Date of testing : 2012-03-27 to 2012-03-28
Test standard : FCC part 15.247(d)
FCC Part 15.205
RSS-210 Clause 2.2
Basic standard : ANSI C63.4: 2003
Limits : Refer to 15.209(a) of FCC part 15.247(d)
Refer to RSS-210 Table 2
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/ Middle/ High
Operation mode : A, C
Ambient temperature : 27°C
Relative humidity : 64%
Atmospheric pressure : 101 kPa

Remark:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.

5.1.7 Frequency Separation

RESULT:
Passed

Date of testing : 2012-03-28
 Test standard : FCC part 15.247(a)(1)
 : RSS-210 A8.1 (b)
 Basic standard : ANSI C63.4: 2003
 Limit : $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 20°C
 Relative humidity : 50%
 Atmospheric pressure : 101 kPa

Table 8: Test result of Frequency Separation

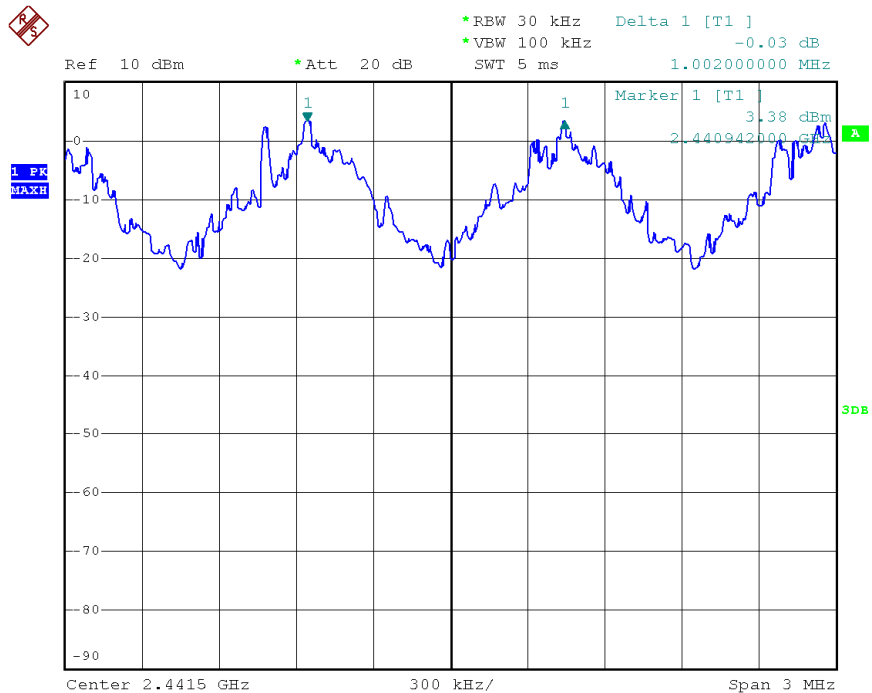
Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2479			

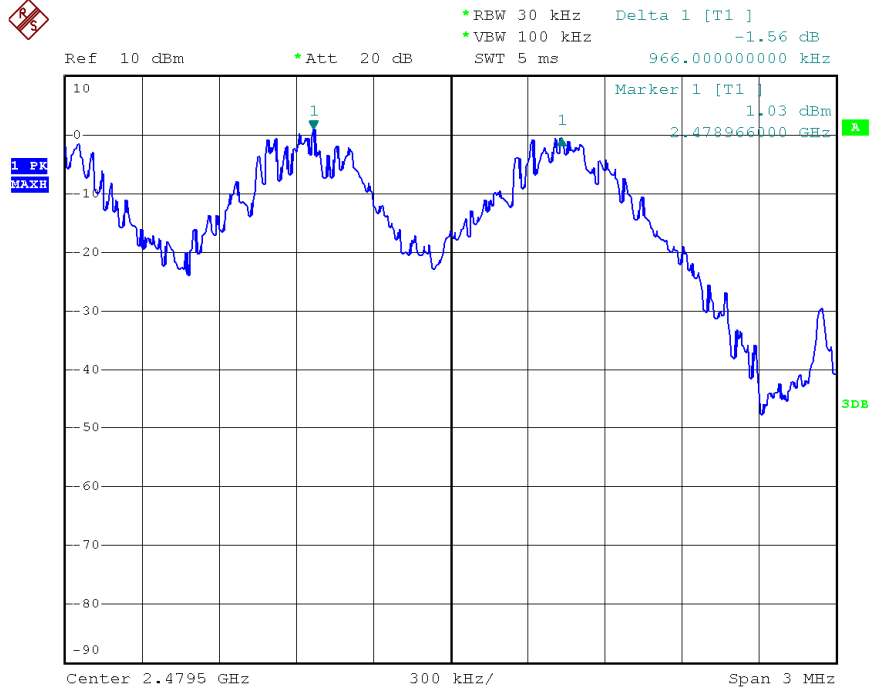
Test Plot of Frequency Separation

Low Channel



Middle Channel



High Channel


5.1.8 Number of hopping frequency

RESULT:**Passed**

Date of testing : 2012-03-28
Test standard : FCC part 15.247(a)(1)(iii)
RSS-210 A8.1 (d)
Basic standard : ANSI C63.4: 2003
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shield room

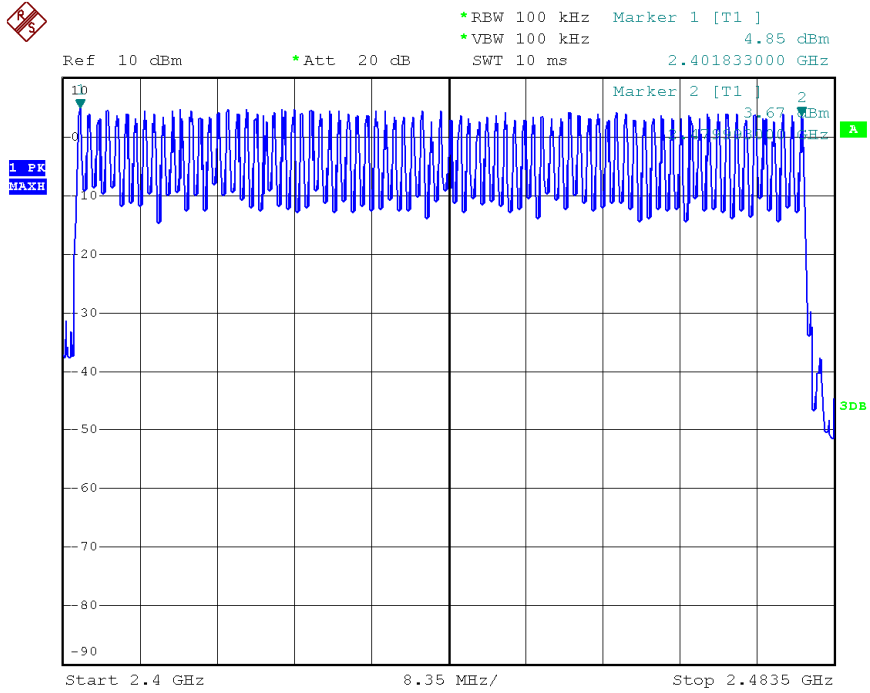
Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 20°C
Relative humidity : 50%
Atmospheric pressure : 101 kPa

Table 9: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
<u>2400</u> to <u>2483.5</u> MHz	79	≥ 15	Pass

Test Plot of Number of hopping frequencies



5.1.9 Time of Occupancy

RESULT:
Passed

Date of testing : 2012-03-28
 Test standard : FCC part 15.247(a)(1)(iii)
 : RSS-210 A8.1 (d)
 Basic standard : ANSI C63.4: 2003
 Limits : 0.4s
 Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 20°C
 Relative humidity : 50%
 Atmospheric pressure : 101 kPa

Table 10: Test result of Time of Occupancy

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.54	0.17	0.4	Pass
	DH3	1.82	0.29	0.4	Pass
	DH5	3.12	0.33	0.4	Pass
Mid Channel	DH1	0.54	0.17	0.4	Pass
	DH3	1.82	0.29	0.4	Pass
	DH5	3.12	0.33	0.4	Pass
High Channel	DH1	0.54	0.17	0.4	Pass
	DH3	1.82	0.29	0.4	Pass
	DH5	3.12	0.33	0.4	Pass

Note:

$$\text{Dwell time} = \text{Pulse width} \times (\text{Hopping rate} / \text{Number of channels}) \times \text{Period}$$

$$\text{Period} = 0.4 \text{ (seconds/ channel)} \times 79 \text{ (channel)} = 31.6 \text{ seconds}$$

5.1.10 Conducted emissions

RESULT:**Passed**

Date of testing : 2012-03-27
Test standard : FCC Part 15.207(a), RSS-Gen 7.2.4
Basic standard : ANSI C63.4: 2003
Frequency range : 0.15 – 30MHz
Limits : FCC Part 15.207(a), Table 4 of RSS-GEN
Kind of test site : Shield room

Test setup

Input Voltage (to AC : AC 120V, 60Hz
input of Adapter)
Operation Mode : D
Earthing : Not connected
Ambient temperature : 24°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

For details refer to Appendix 1.

5.1.11 Radiated emissions

RESULT:**Passed**

Date of testing : 2012-03-27
Test standard : FCC Part 15.209
RSS-Gen 7.1.4
Basic standard : ANSI C63.4: 2003
Test frequency : 30 - 6000MHz
Limite : FCC Part 15.209(a)
RSS-Gen Table 5
Kind of test site : 3m Semi-Anechoic Chamber

Test Setup

Input Voltage (to AC input : AC 120V, 60Hz
of Adapter)
Operation Mode : D
Earthing : Not connected
Ambient temperature : 23°C
Relative humidity : 51%
Atmospheric pressure : 101 kPa

The Radiated Emissions testing was performed in the X and Z axis mode. The X Axis mode is the worst-case recorded in this test report.

For details refer to Appendix 1.

6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:**Passed**

Test standard : RSS-102 Issue 4
FCC KDB Publication 447498

The maximum peak output power of the transmitter is 2.84mW (4.53dBm) only, which less than 20mW. Hence the EUT is exempted from routine evaluation limits (SAR Evaluation) according to clause 2.5.1 of RSS-102 Issue 4.

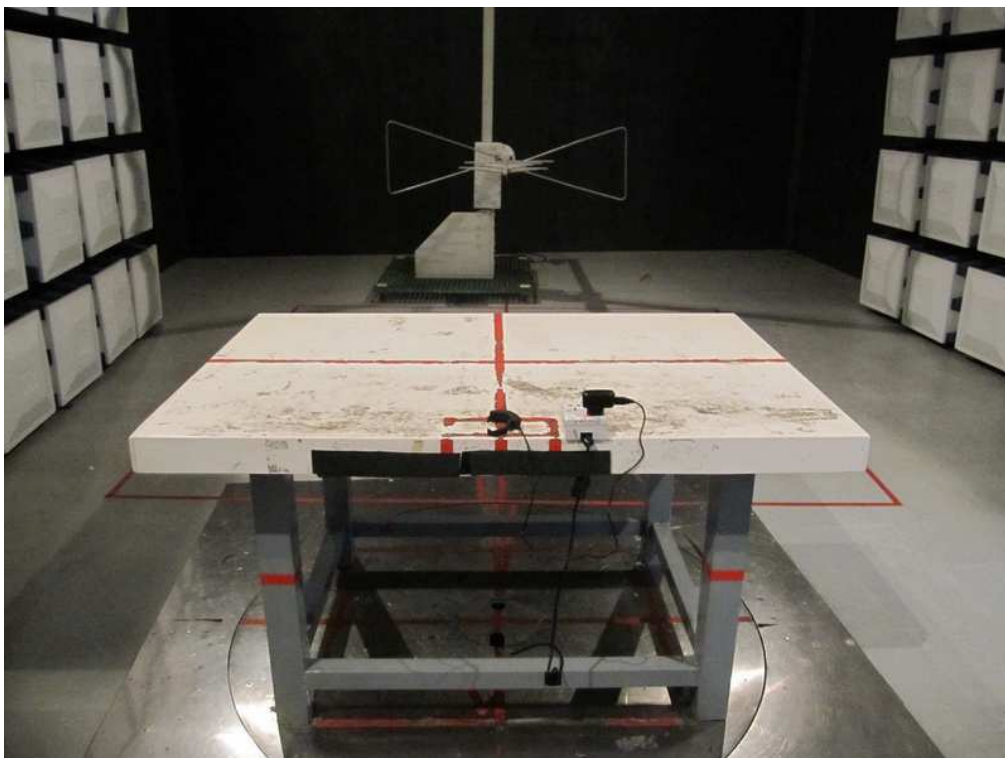
Since maximum peak output power of the transmitter is $<60/f(\text{GHz})\text{mW}$, i.e. $2.84\text{mW} < 25(=60/2.4)\text{mW}$, hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

7. Photographs of the Test Set-Up

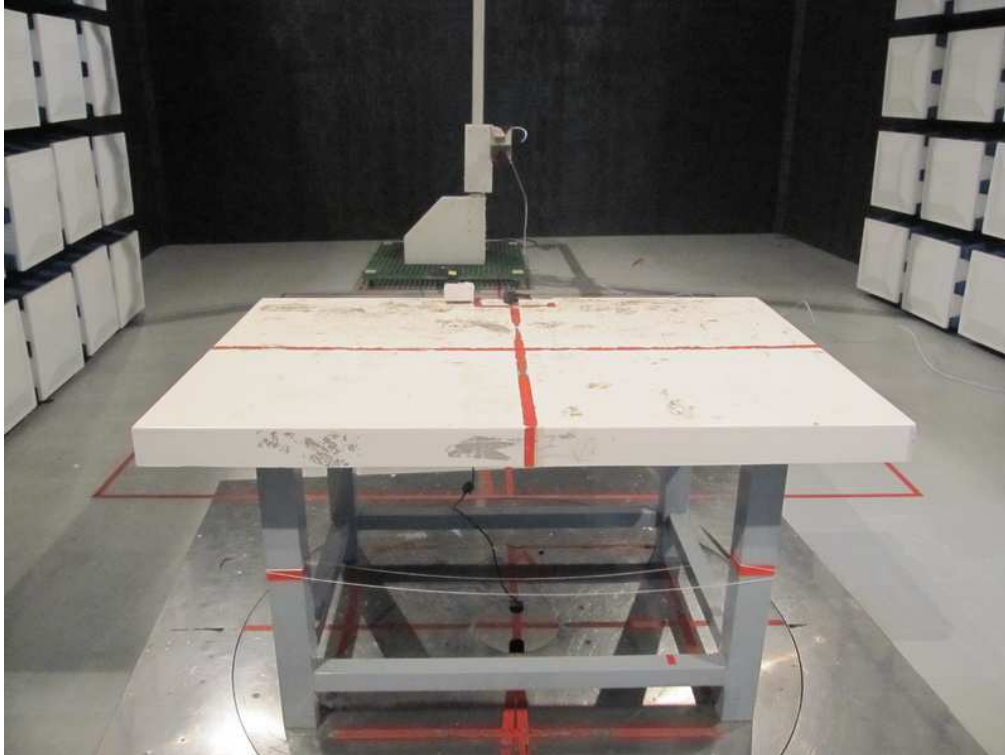
Photograph 1: Set-up for Coducted Emissions



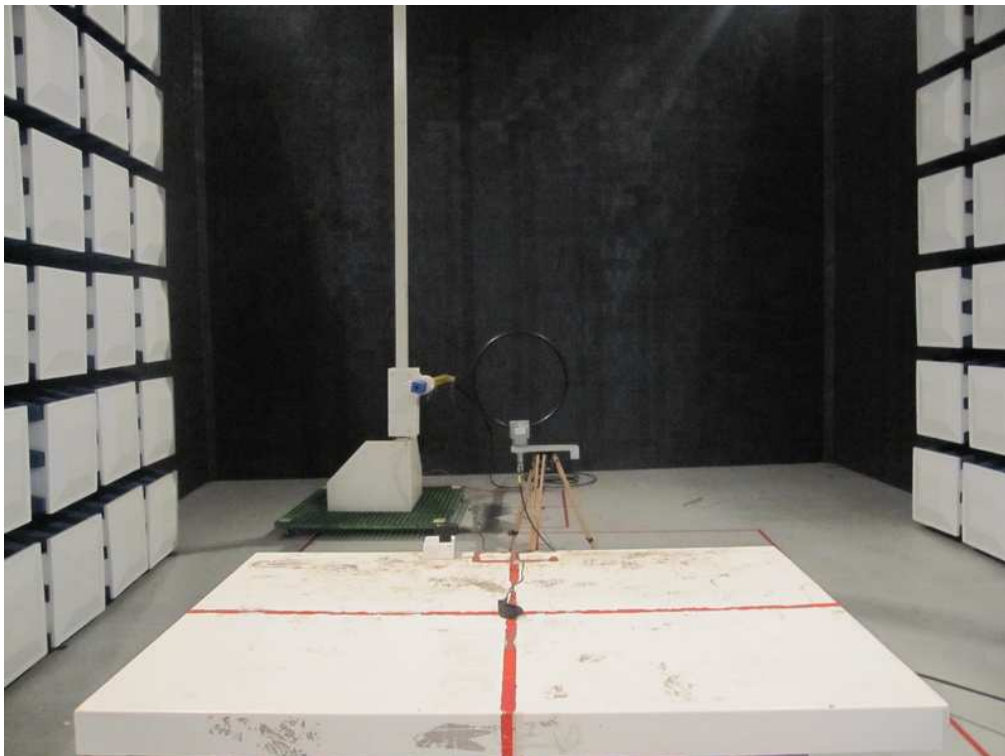
Photograph 2: Set-up for Radiated Emissions, below 1GHz



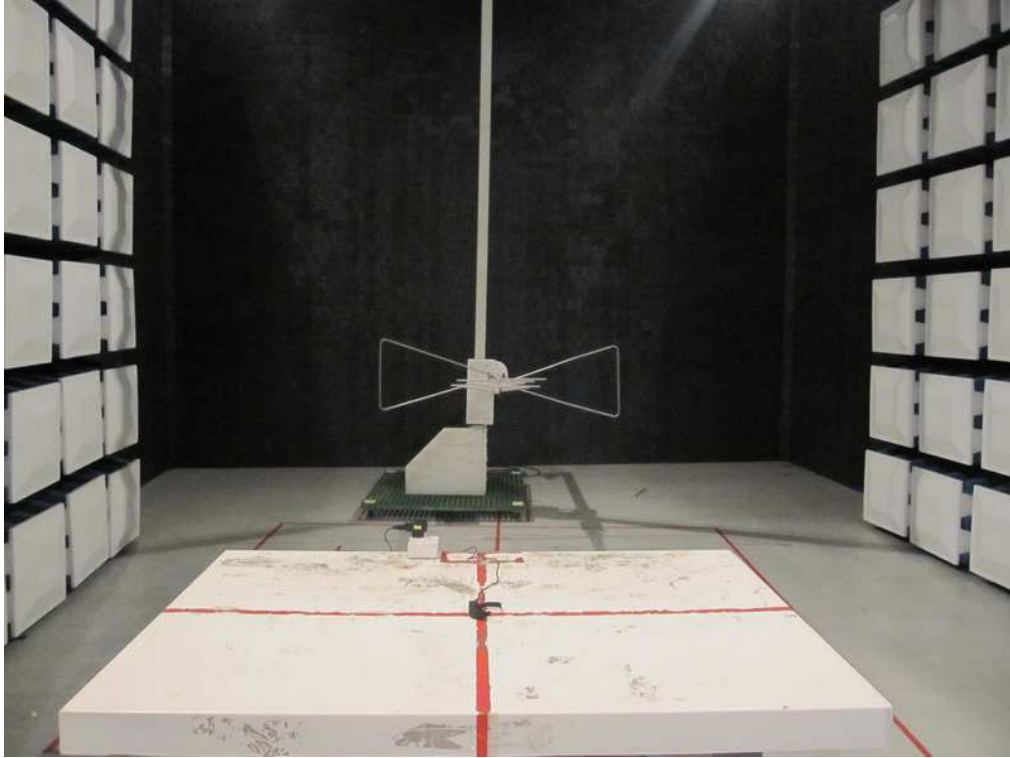
Photograph 3: Set-up for Radiated Emissions, above 1GHz



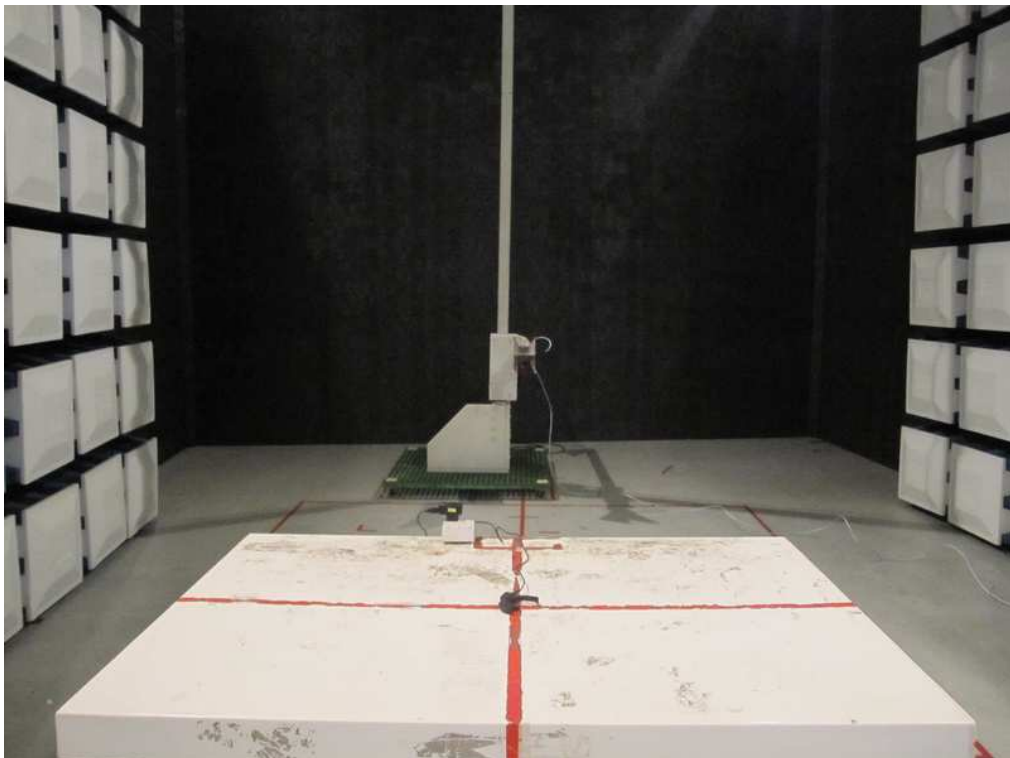
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Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 0.15MHz)

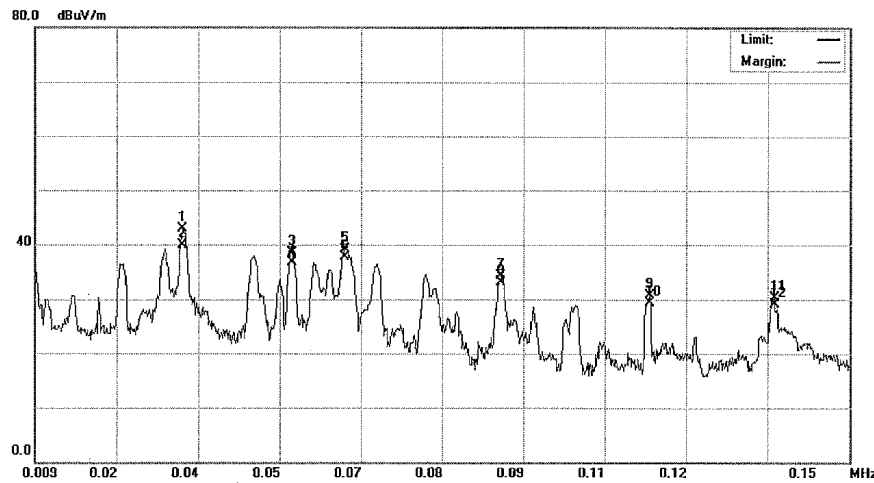


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Radiated Emission Measurement

File :15 Data :#5 Date: 2012-3-28 Time: 14:46:23



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2402MHZ
Note: **Horizontal**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0345	19.48	23.38	42.86	123.5	-80.64	peak	
2		0.0345	16.53	23.38	39.91	123.5	-83.59	AVG	
3		0.0534	16.18	22.33	38.51	119.7	-81.26	peak	
4		0.0534	14.37	22.33	36.70	119.7	-83.07	AVG	
5		0.0627	17.00	22.15	39.15	117.9	-78.79	peak	
6		0.0627	15.63	22.15	37.78	117.9	-80.16	AVG	
7		0.0898	12.79	21.60	34.39	112.6	-78.21	peak	
8		0.0898	11.42	21.60	33.02	112.6	-79.58	AVG	
9		0.1155	9.54	21.15	30.69	107.5	-76.85	peak	
10		0.1155	8.06	21.15	29.21	107.5	-78.33	AVG	
11	*	0.1370	9.59	20.81	30.40	105.2	-74.88	peak	
12		0.1370	8.37	20.81	29.18	105.2	-76.10	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 0.15MHz)

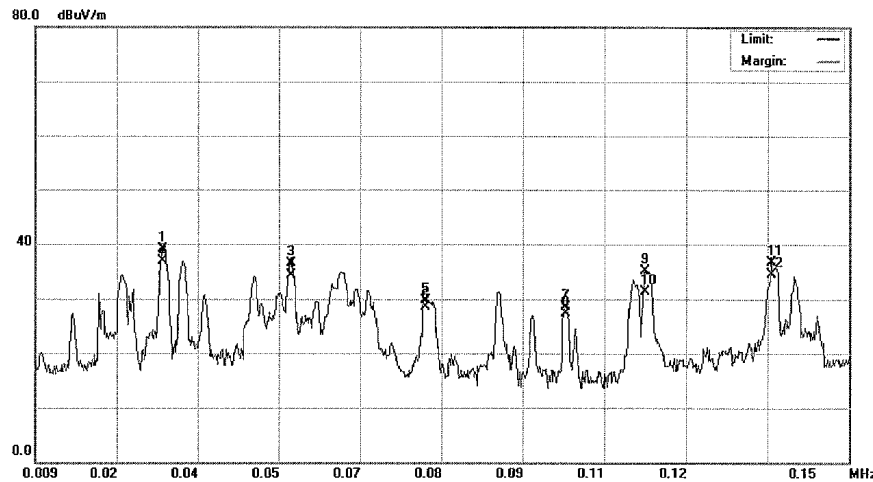


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Radiated Emission Measurement

File :15 Data :#6 Date: 2012-3-28 Time: 14:49:15



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2402MHZ
Note: **Vertical**

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	0.0311	15.49	23.60	39.09	124.1	-85.08	peak	
2	0.0311	13.29	23.60	36.89	124.1	-87.28	AVG	
3	0.0534	14.11	22.33	36.44	119.7	-83.33	peak	
4	0.0534	12.06	22.33	34.39	119.7	-85.38	AVG	
5	0.0767	7.89	21.87	29.76	115.1	-85.42	peak	
6	0.0767	6.54	21.87	28.41	115.1	-86.77	AVG	
7	0.1011	7.13	21.38	28.51	110.3	-81.87	peak	
8	0.1011	5.84	21.38	27.22	110.3	-83.16	AVG	
9	0.1147	13.91	21.16	35.07	107.7	-72.63	peak	
10	0.1147	10.24	21.16	31.40	107.7	-76.30	AVG	
11 *	0.1366	15.98	20.81	36.79	105.2	-68.50	peak	
12	0.1366	13.65	20.81	34.46	105.2	-70.83	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (0.15MHz – 30MHz)

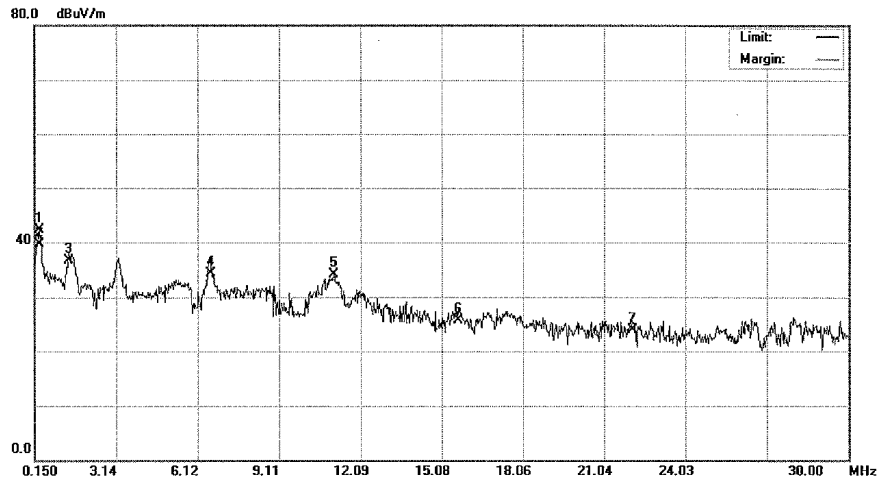


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Radiated Emission Measurement

File :15 Data :#8 Date: 2012-3-28 Time: 14:55:34



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2402MHZ
Note: **Horizontal**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.3291	22.19	20.21	42.40	99.03	-56.63	peak	
2		0.3291	19.56	20.21	39.77	99.03	-59.26	AVG	
3	*	1.4037	17.24	19.56	36.80			QP	
4		6.5976	16.32	18.07	34.39			QP	
5		11.1050	16.23	17.87	34.10			QP	
6		15.6720	7.69	18.01	25.70			QP	
7		22.0898	7.04	16.90	23.94			QP	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (0.15MHz – 30MHz)

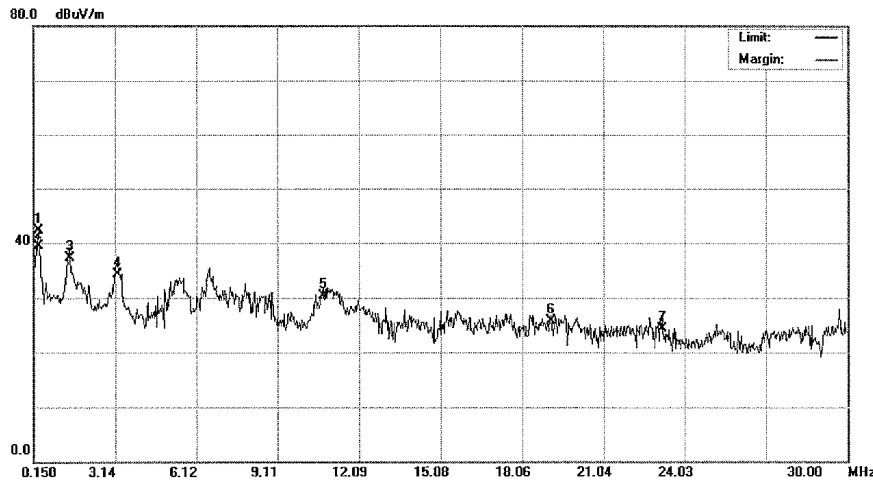


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Radiated Emission Measurement

File :15 Data :#7 Date: 2012-3-28 Time: 14:52:06



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2402MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	22.19	20.21	42.40	99.03	-56.63	peak	
2	0.3291	19.35	20.21	39.56	99.03	-59.47	AVG	
3 *	1.4634	17.69	19.55	37.24			QP	
4	3.2246	15.34	18.92	34.26			QP	
5	10.7766	12.36	17.85	30.21			QP	
6	19.1048	8.25	17.53	25.78			QP	
7	23.1942	7.58	16.63	24.21			QP	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)



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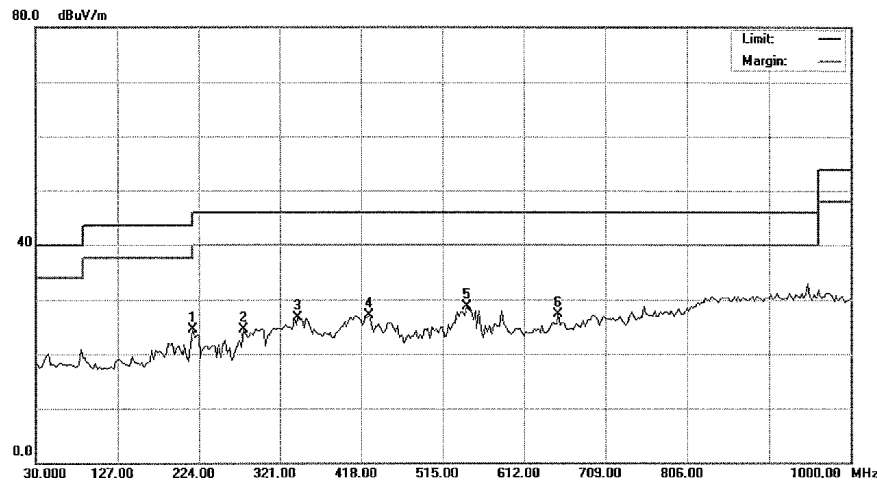
Radiated Emission Measurement

File :FCCP-BELOW 1G

Data :#2

Date: 2012-3-27

Time: 21:52:06



Site DG-CB03

Limit: FCC Class B 3M Radiation

EUT: Bluetooth Remote Controller

M/N: BTRemote

Mode: TX

Note: 2402MHZ

Polarization: **Horizontal**

Power: DC 3.7V

Distance: 3m

Temperature: .23

Humidity: 51 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		216.7250	40.41	-16.00	24.41	46.00	-21.59	peak	
2		277.3500	37.24	-12.81	24.43	46.00	-21.57	peak	
3		342.8250	37.73	-11.01	26.72	46.00	-19.28	peak	
4		427.7000	35.59	-8.52	27.07	46.00	-18.93	peak	
5	*	544.1000	34.35	-5.71	28.64	46.00	-17.36	peak	
6		653.2250	30.66	-3.33	27.33	46.00	-18.67	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)



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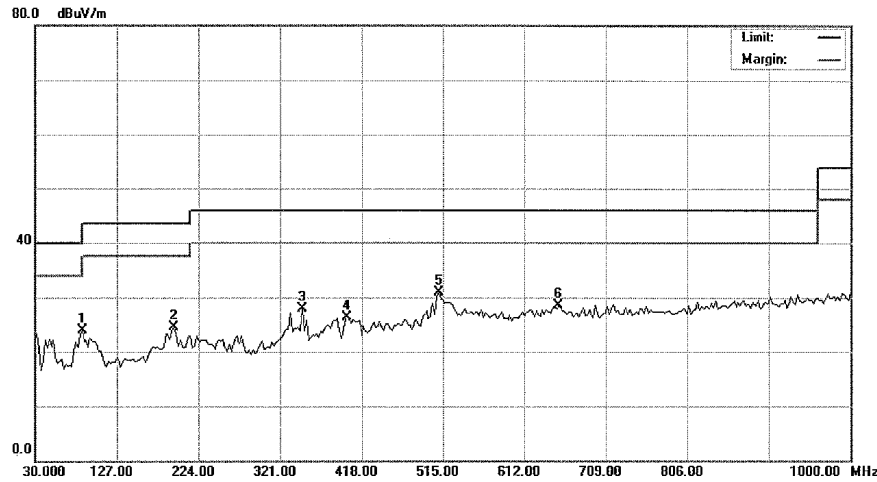
Radiated Emission Measurement

File :FCCP-BELOW 1G

Data :#1

Date: 2012-3-27

Time: 21:51:03



Site DG-CB03

Polarization: **Vertical**

Temperature: 23

Limit: FCC Class B 3M Radiation

Power: DC 3.7V

Humidity: 51 %

EUT: Bluetooth Remote Controller

Distance: 3m

M/N: BTRemote

Mode: TX

Note: 2402MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		85.7750	42.97	-19.11	23.86	40.00	-16.14	peak	
2		194.9000	41.14	-16.66	24.48	43.50	-19.02	peak	
3		347.6750	38.87	-10.90	27.97	46.00	-18.03	peak	
4		401.0250	35.23	-9.01	26.22	46.00	-19.78	peak	
5	*	510.1500	37.95	-6.98	30.97	46.00	-15.03	peak	
6		653.2250	31.88	-3.33	28.55	46.00	-17.45	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –26.5GHz)

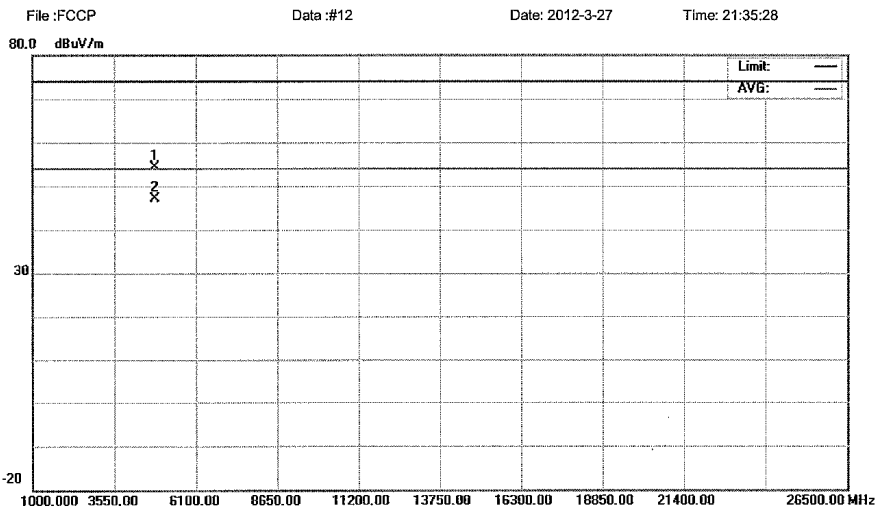


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2402MHZ		

Radiated Emission



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4803.840	49.15	5.21	54.36	74.00	-19.64	peak	
2 *	4803.840	41.86	5.21	47.07	54.00	-6.93	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 26.5GHz)

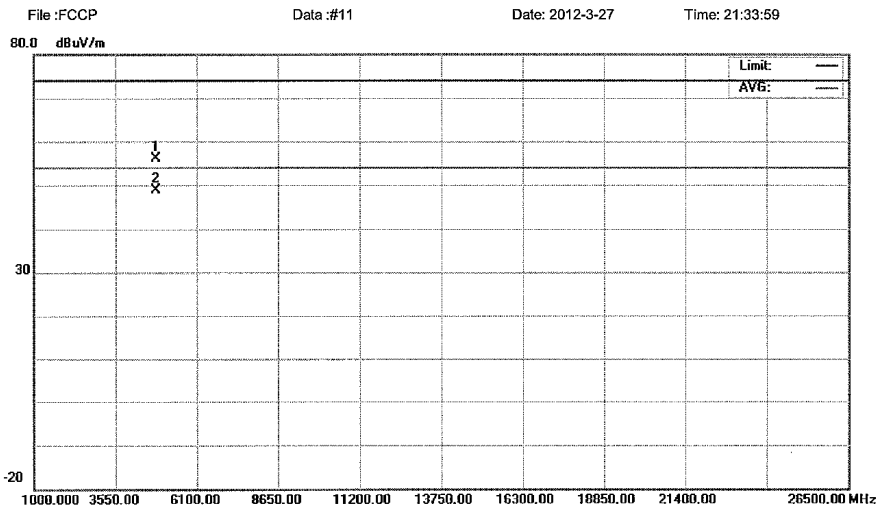


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2402MHZ		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4804.000	50.85	5.21	56.06	74.00	-17.94	peak	
2	*	4804.000	43.56	5.21	48.77	54.00	-5.23	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 0.15MHz)

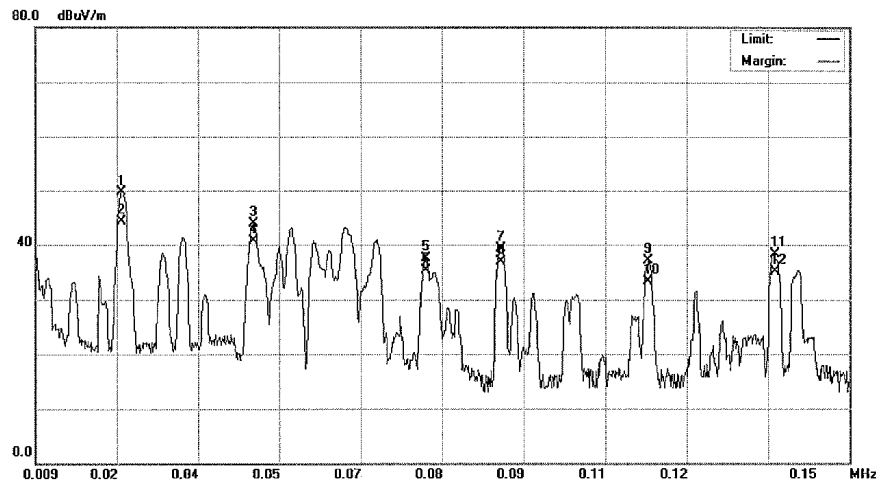


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Radiated Emission Measurement

File :15 Data :#5 Date: 2012-3-28 Time: 14:07:11



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2441MHZ
Note: **Horizontal**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.0240	25.73	24.05	49.78	125.5	-75.79	peak	
2	0.0240	20.17	24.05	44.22	125.5	-81.35	AVG	
3	0.0468	21.22	22.60	43.82	121.0	-77.25	peak	
4	0.0468	18.14	22.60	40.74	121.0	-80.33	AVG	
5	0.0767	15.72	21.87	37.59	115.1	-77.59	peak	
6	0.0767	13.40	21.87	35.27	115.1	-79.91	AVG	
7	0.0898	17.79	21.60	39.39	112.6	-73.21	peak	
8	0.0898	15.23	21.60	36.83	112.6	-75.77	AVG	
9	0.1151	15.86	21.16	37.02	107.6	-70.60	peak	
10	0.1151	12.15	21.16	33.31	107.6	-74.31	AVG	
11 *	0.1370	17.59	20.81	38.40	105.2	-66.88	peak	
12	0.1370	14.36	20.81	35.17	105.2	-70.11	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 0.15MHz)

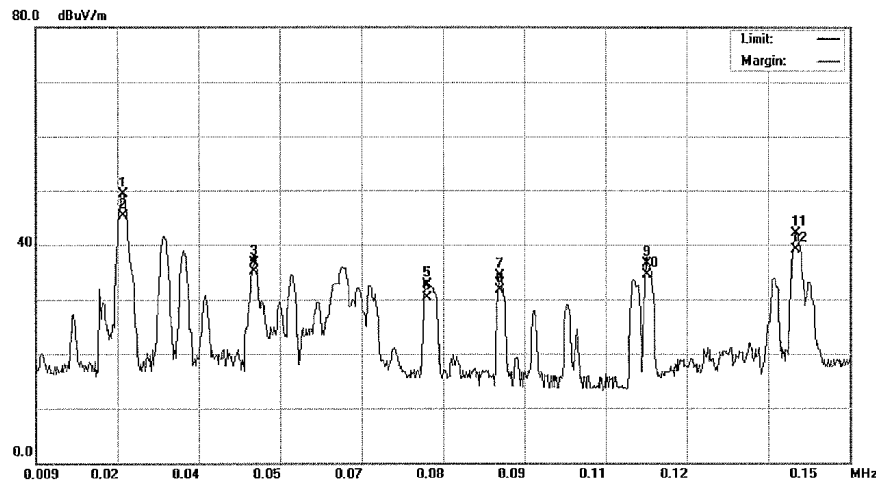


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Radiated Emission Measurement

File :15 Data :#6 Date: 2012-3-28 Time: 14:10:28



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2441MHZ
Note: **Vertical**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0241	25.31	24.04	49.35	125.5	-76.20	peak	
2		0.0241	21.35	24.04	45.39	125.5	-80.16	AVG	
3		0.0470	14.08	22.59	36.67	121.0	-84.36	peak	
4		0.0470	12.48	22.59	35.07	121.0	-85.96	AVG	
5		0.0767	10.89	21.87	32.76	115.1	-82.42	peak	
6		0.0767	8.42	21.87	30.29	115.1	-84.89	AVG	
7		0.0893	12.75	21.61	34.36	112.7	-78.34	peak	
8		0.0893	10.09	21.61	31.70	112.7	-81.00	AVG	
9		0.1150	15.38	21.16	36.54	107.6	-71.10	peak	
10		0.1150	13.27	21.16	34.43	107.6	-73.21	AVG	
11	*	0.1407	21.42	20.75	42.17	105.1	-62.99	peak	
12		0.1407	18.36	20.75	39.11	105.1	-66.05	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (0.15MHz – 30MHz)

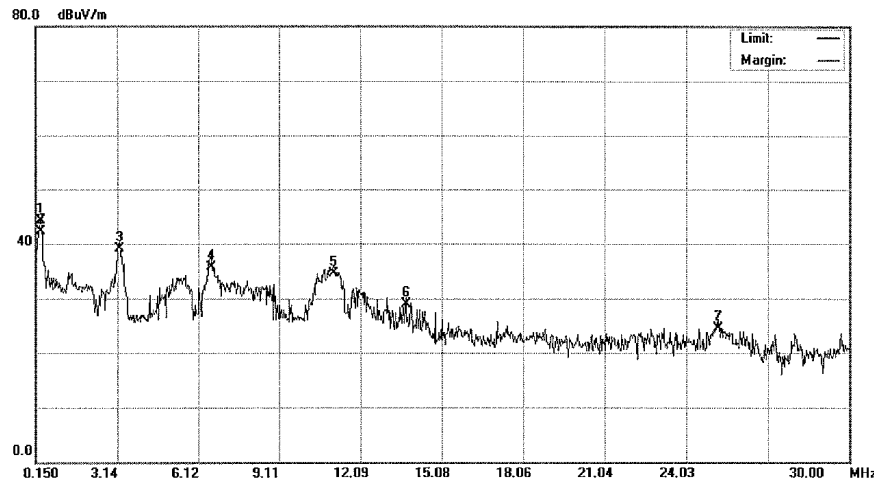


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Radiated Emission Measurement

File :15 Data :#8 Date: 2012-3-28 Time: 14:16:40



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2441MHZ
Note: *Horizontal*

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	24.19	20.21	44.40	99.03	-54.63	peak	
2	0.3291	22.10	20.21	42.31	99.03	-56.72	AVG	
3 *	3.2246	20.12	18.92	39.04			QP	
4	6.5976	17.56	18.07	35.63			QP	
5	11.1050	16.59	17.87	34.46			QP	
6	13.7616	10.85	18.03	28.88			QP	
7	25.1942	7.52	16.91	24.43			QP	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (0.15MHz – 30MHz)

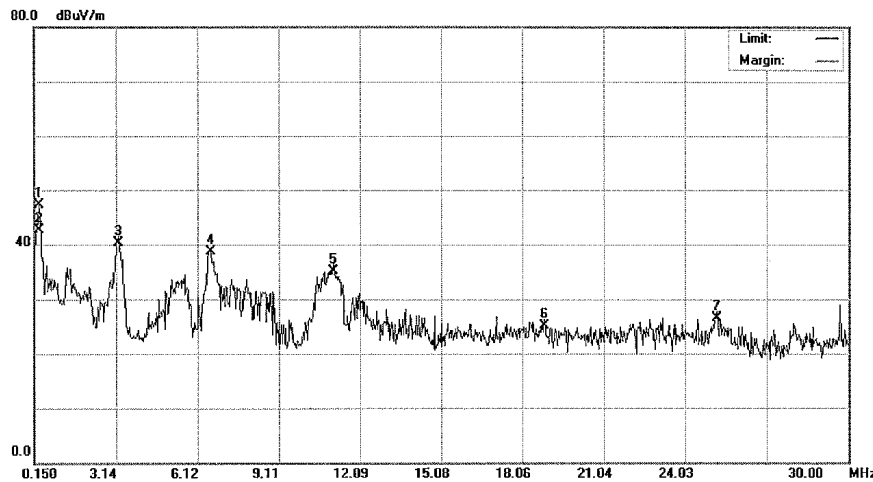


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Radiated Emission Measurement

File :15 Data :#7 Date: 2012-3-28 Time: 14:13:39



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2441MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	27.18	20.21	47.39	99.03	-51.64	peak	
2	0.3291	22.45	20.21	42.66	99.03	-56.37	AVG	
3 *	3.2246	21.29	18.92	40.21			QP	
4	6.5976	20.54	18.07	38.61			QP	
5	11.1050	17.20	17.87	35.07			QP	
6	18.8660	7.60	17.56	25.16			QP	
7	25.1942	9.50	16.91	26.41			QP	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

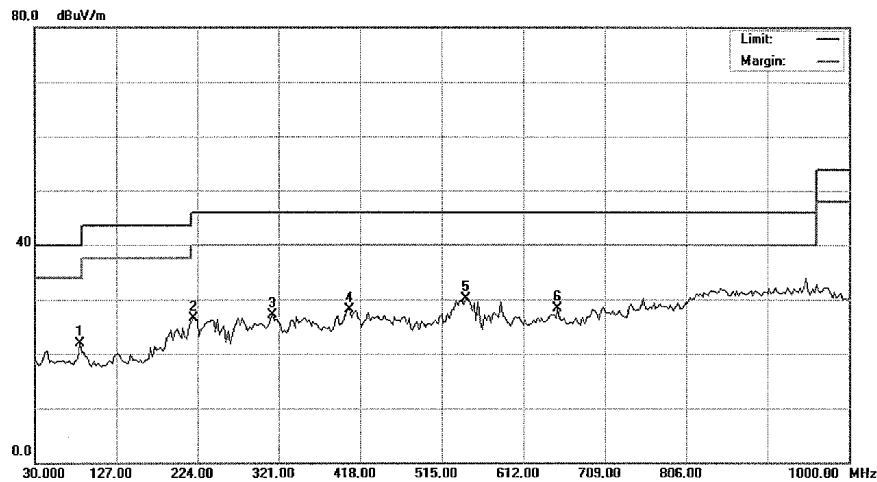


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Radiated Emission Measurement

File :FCCP-BELOW 1G Data :#3 Date: 2012-3-27 Time: 21:54:11



Site DG-CB03 Polarization: **Horizontal** Temperature: 23
Limit: FCC Class B 3M Radiation Power: DC 3.7V Humidity: 51 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX
Note: 2441MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		83.3500	40.92	-19.10	21.82	40.00	-18.18	peak	
2		219.1500	42.46	-15.89	26.57	46.00	-19.43	peak	
3		313.7250	38.93	-11.74	27.19	46.00	-18.81	peak	
4		405.8750	37.11	-8.92	28.19	46.00	-17.81	peak	
5	*	544.1000	35.85	-5.71	30.14	46.00	-15.86	peak	
6		653.2250	31.66	-3.33	28.33	46.00	-17.67	peak	

*:Maximum data x:Over limit !:over margin

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Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)



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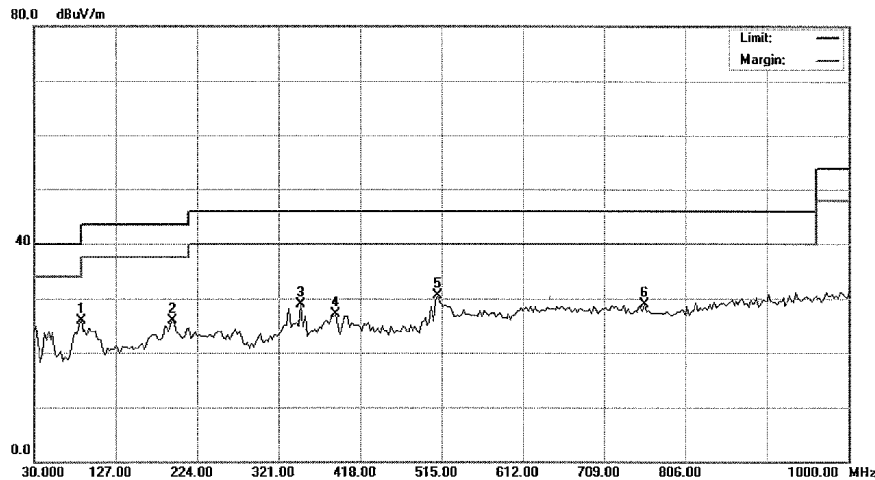
Radiated Emission Measurement

File :FCCP-BELOW 1G

Data :#4

Date: 2012-3-27

Time: 21:56:19



Site DG-CB03

Limit: FCC Class B 3M Radiation

EUT: Bluetooth Remote Controller

M/N: BTRemote

Mode: TX

Note: 2441MHZ

Polarization: **Vertical**

Power: DC 3.7V

Distance: 3m

Temperature: 23

Humidity: 51 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	85.7750	44.97	-19.11	25.86	40.00	-14.14	peak	
2		194.9000	42.64	-16.66	25.98	43.50	-17.52	peak	
3		347.6750	39.87	-10.90	28.97	46.00	-17.03	peak	
4		388.9000	36.46	-9.43	27.03	46.00	-18.97	peak	
5		510.1500	37.45	-6.98	30.47	46.00	-15.53	peak	
6		757.5000	31.33	-2.46	28.87	46.00	-17.13	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 26.5GHz), GFSK Modulation

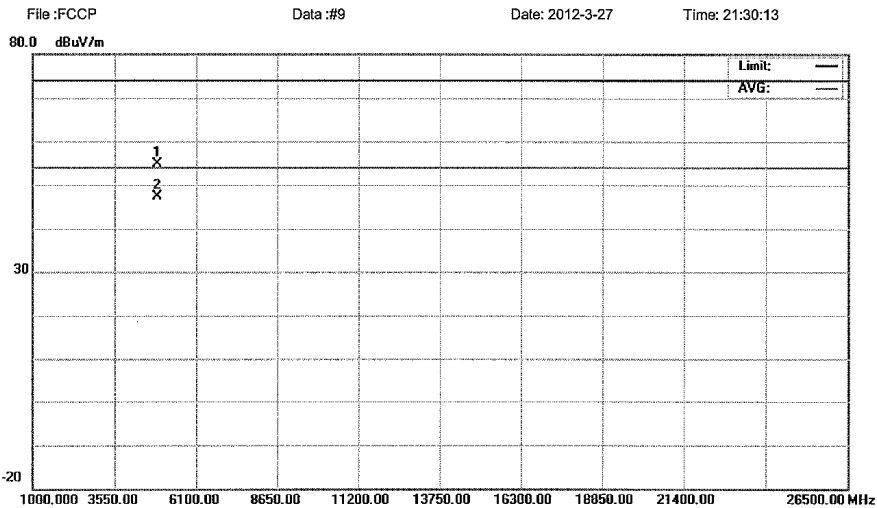


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2441MHZ		

Radiated Emission



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4881.980	49.27	5.50	54.77	74.00	-19.23	peak	
2 *	4881.980	41.98	5.50	47.48	54.00	-6.52	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 26.5GHz)

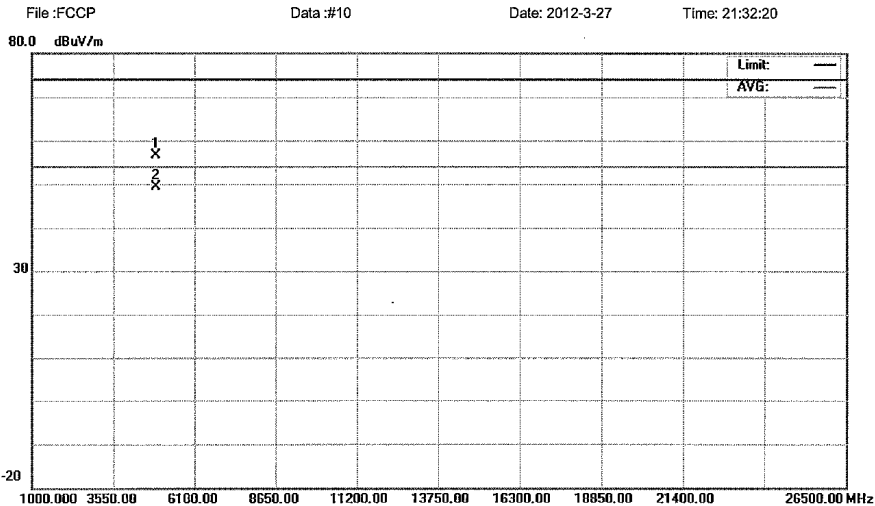


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2441MHZ		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4882.000	51.08	5.50	56.58	74.00	-17.42	peak	
2	*	4882.000	43.79	5.50	49.29	54.00	-4.71	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 0.15MHz)

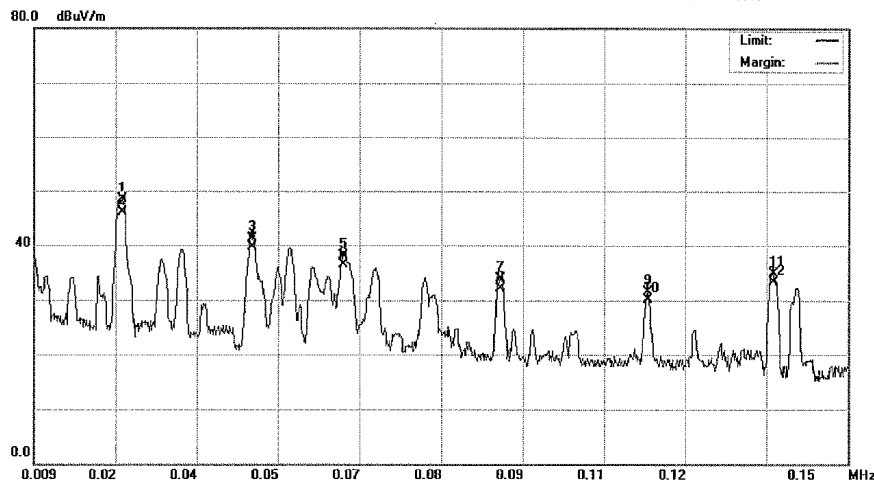


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Radiated Emission Measurement

File :15 Data :#5 Date: 2012-3-28 Time: 14:19:48



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2480MHZ
Note: **Horizontal**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.0244	24.40	24.02	48.42	125.4	-77.07	peak	
2	0.0244	22.13	24.02	46.15	125.4	-79.34	AVG	
3	0.0468	18.72	22.60	41.32	121.0	-79.75	peak	
4	0.0468	17.02	22.60	39.62	121.0	-81.45	AVG	
5	0.0627	16.00	22.15	38.15	117.9	-79.79	peak	
6	0.0627	14.36	22.15	36.51	117.9	-81.43	AVG	
7	0.0898	12.29	21.60	33.89	112.6	-78.71	peak	
8	0.0898	10.52	21.60	32.12	112.6	-80.48	AVG	
9	0.1152	10.26	21.16	31.42	107.6	-76.18	peak	
10	0.1152	8.94	21.16	30.10	107.6	-77.50	AVG	
11 *	0.1370	14.09	20.81	34.90	105.2	-70.38	peak	
12	0.1370	12.57	20.81	33.38	105.2	-71.90	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 0.15MHz)

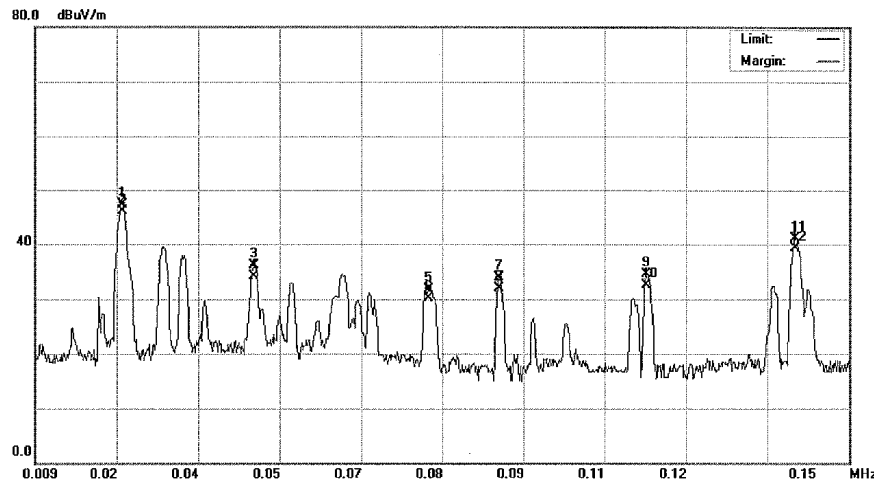


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Radiated Emission Measurement

File :15 Data :#6 Date: 2012-3-28 Time: 14:22:19



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2480MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.0241	23.31	24.04	47.35	125.5	-78.20	peak	
2	0.0241	22.10	24.04	46.14	125.5	-79.41	AVG	
3	0.0470	13.58	22.59	36.17	121.0	-84.86	peak	
4	0.0470	11.59	22.59	34.18	121.0	-86.85	AVG	
5	0.0771	9.77	21.86	31.63	115.1	-83.48	peak	
6	0.0771	8.27	21.86	30.13	115.1	-84.98	AVG	
7	0.0893	12.25	21.61	33.86	112.7	-78.84	peak	
8	0.0893	10.38	21.61	31.99	112.7	-80.71	AVG	
9	0.1150	13.38	21.16	34.54	107.6	-73.10	peak	
10	0.1150	11.29	21.16	32.45	107.6	-75.19	AVG	
11 *	0.1407	20.42	20.75	41.17	105.1	-63.99	peak	
12	0.1407	18.57	20.75	39.32	105.1	-65.84	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (0.15MHz – 30MHz)

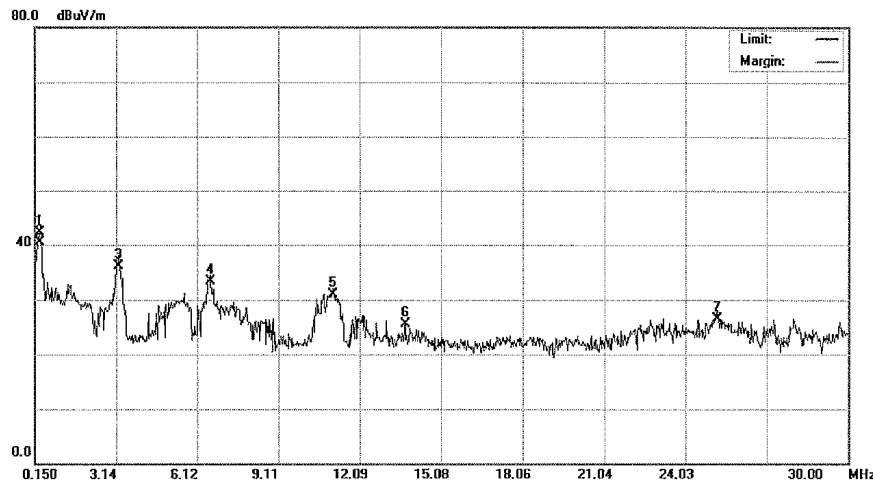


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Radiated Emission Measurement

File :15 Data :#8 Date: 2012-3-28 Time: 14:28:34



Site DG-CB03 Polarization: Temperature: 27
 Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
 EUT: Bluetooth Remote Controller Distance: 3m
 M/N: BTRemote
 Mode: TX 2480MHZ
 Note: **Horizontal**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	22.19	20.21	42.40	99.03	-56.63	peak	
2	0.3291	20.35	20.21	40.56	99.03	-58.47	AVG	
3 *	3.2246	17.26	18.92	36.18			QP	
4	6.5976	15.20	18.07	33.27			QP	
5	11.1050	13.05	17.87	30.92			QP	
6	13.7616	7.53	18.03	25.56			QP	
7	25.1942	9.67	16.91	26.58			QP	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (0.15MHz – 30MHz)

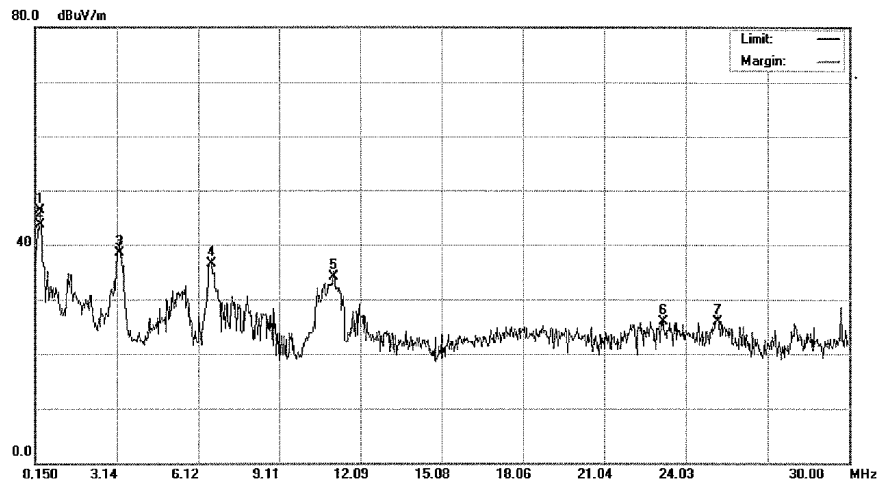


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Radiated Emission Measurement

File :15 Data :#7 Date: 2012-3-28 Time: 14:25:08



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX 2480MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	26.19	20.21	46.40	99.03	-52.63	peak	
2	0.3291	23.54	20.21	43.75	99.03	-55.28	AVG	
3 *	3.2246	19.55	18.92	38.47			QP	
4	6.5976	18.34	18.07	36.41			QP	
5	11.1050	16.31	17.87	34.18			QP	
6	23.1942	9.21	16.63	25.84			QP	
7	25.1942	9.09	16.91	26.00			QP	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)

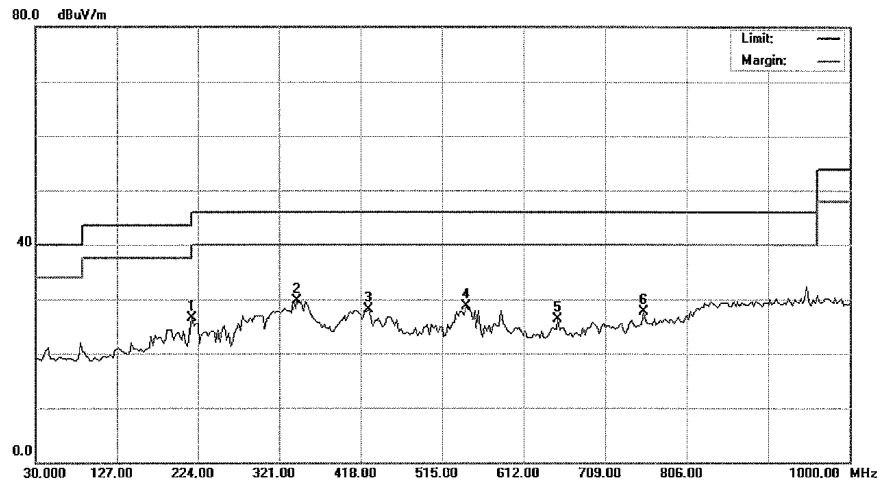


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Radiated Emission Measurement

File :FCCP-BELOW 1G Data :#6 Date: 2012-3-27 Time: 22:00:24



Site DG-CB03 Polarization: **Horizontal** Temperature: 23
Limit: FCC Class B 3M Radiation Power: DC 3.7V Humidity: 51 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX
Note: 2480MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		216.7250	42.41	-16.00	26.41	46.00	-19.59	peak	
2	*	342.8250	40.73	-11.01	29.72	46.00	-16.28	peak	
3		427.7000	36.59	-8.52	28.07	46.00	-17.93	peak	
4		544.1000	34.35	-5.71	28.64	46.00	-17.36	peak	
5		653.2250	29.66	-3.33	26.33	46.00	-19.67	peak	
6		755.0750	30.18	-2.49	27.69	46.00	-18.31	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)

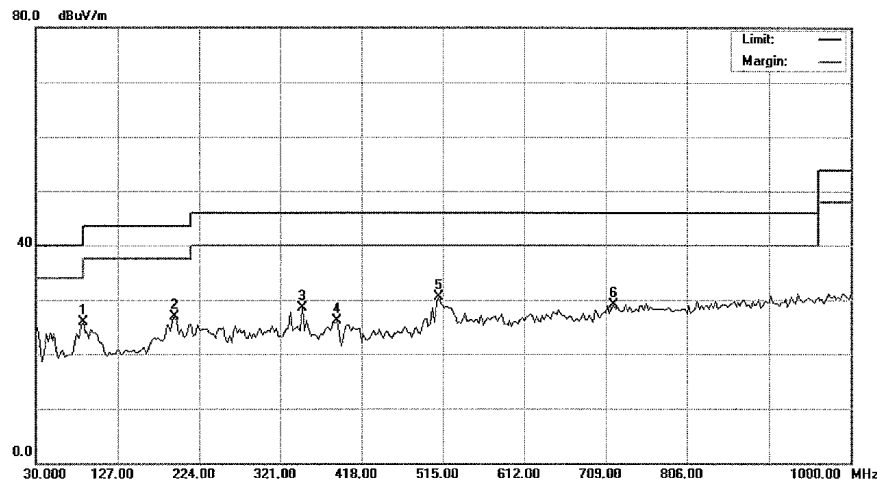


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Radiated Emission Measurement

File :FCCP-BELOW 1G Data :#5 Date: 2012-3-27 Time: 21:58:44



Site DG-CB03 Polarization: **Vertical** Temperature: 23
Limit: FCC Class B 3M Radiation Power: DC 3.7V Humidity: 51 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: TX
Note: 2480MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	85.7750	44.97	-19.11	25.86	40.00	-14.14	peak	
2		194.9000	43.64	-16.66	26.98	43.50	-16.52	peak	
3		347.6750	39.37	-10.90	28.47	46.00	-17.53	peak	
4		388.9000	35.46	-9.43	26.03	46.00	-19.97	peak	
5		510.1500	37.45	-6.98	30.47	46.00	-15.53	peak	
6		718.7000	32.13	-2.95	29.18	46.00	-16.82	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –26.5GHz)

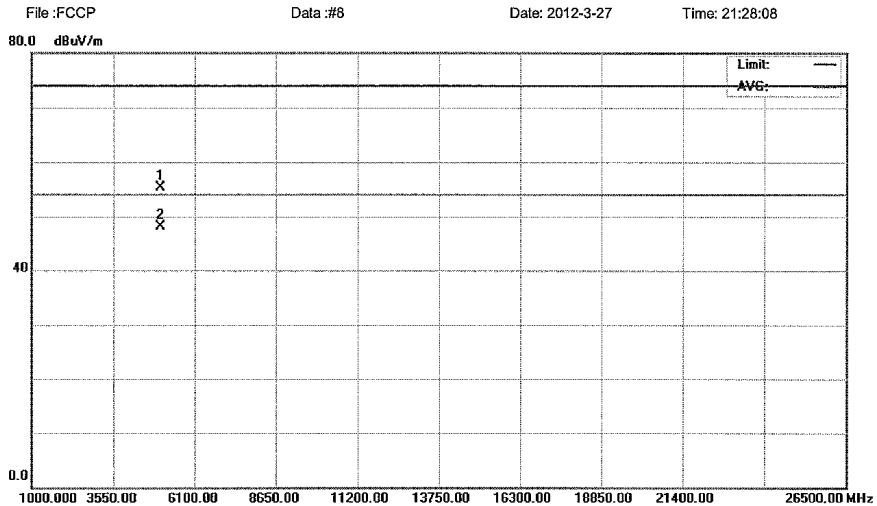


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2480MHZ		

Radiated Emission



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4959.880	49.60	5.78	55.38	74.00	-18.62	peak	
2 *	4959.880	42.31	5.78	48.09	54.00	-5.91	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 26.5GHz)

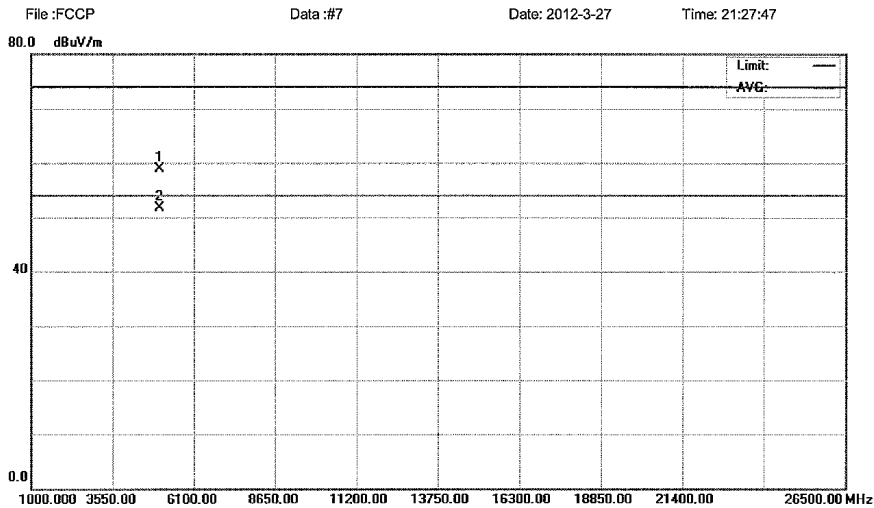


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2480MHZ		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4960.000	53.16	5.78	58.94	74.00	-15.06	peak	
2	*	4960.000	45.87	5.78	51.65	54.00	-2.35	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 25: Test figure of spurious emissions, mode C, Horizontal polarity (9kHz -0.15MHz)

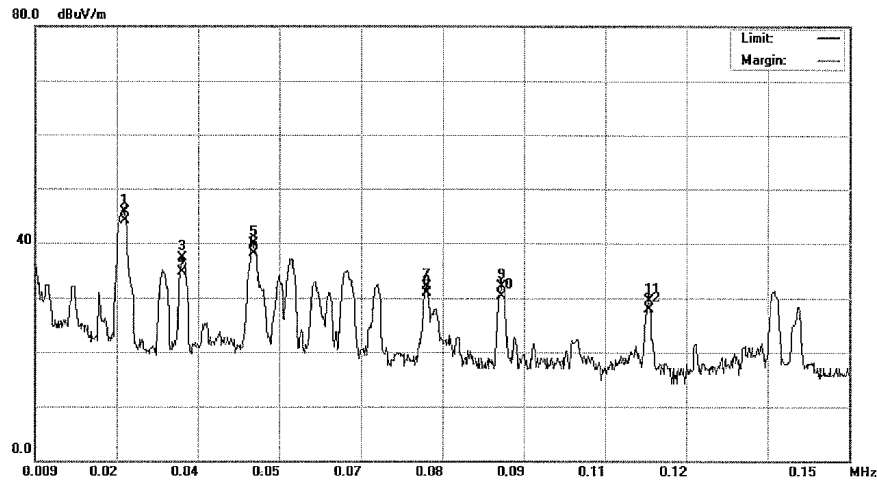


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Radiated Emission Measurement

File :15 Data :#5 Date: 2012-3-28 Time: 14:31:25



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX 2402MHZ
Note: *Horizontal*

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0245	21.59	24.02	45.61	125.4	-79.86	peak	
2		0.0245	20.04	24.02	44.06	125.4	-81.41	AVG	
3		0.0345	13.98	23.38	37.36	123.5	-86.14	peak	
4		0.0345	11.26	23.38	34.64	123.5	-88.86	AVG	
5		0.0468	17.22	22.60	39.82	121.0	-81.25	peak	
6		0.0468	15.47	22.60	38.07	121.0	-83.00	AVG	
7		0.0767	10.22	21.87	32.09	115.1	-83.09	peak	
8		0.0767	9.13	21.87	31.00	115.1	-84.18	AVG	
9		0.0898	10.60	21.60	32.20	112.6	-80.40	peak	
10		0.0898	8.69	21.60	30.29	112.6	-82.31	AVG	
11	*	0.1151	8.36	21.16	29.52	107.6	-78.10	peak	
12		0.1151	6.84	21.16	28.00	107.6	-79.62	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 26: Test figure of spurious emissions, mode C, Vertical polarity (9kHz – 0.15MHz)

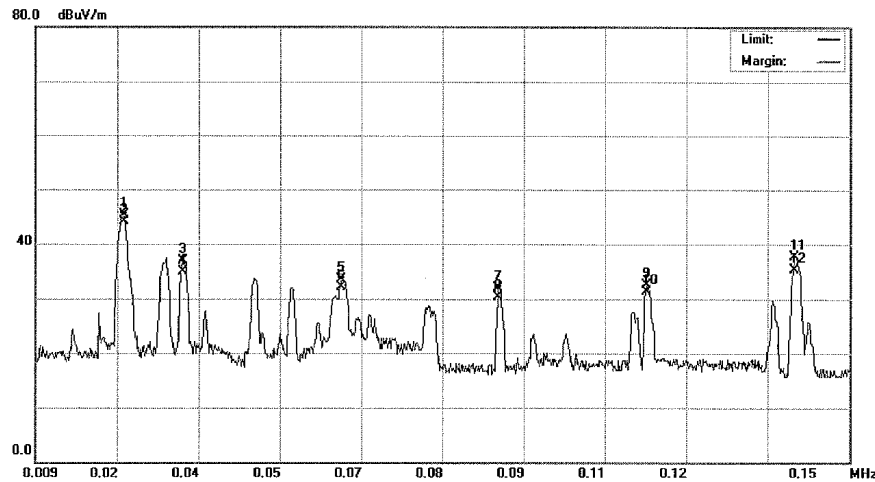


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Radiated Emission Measurement

File :15 Data :#6 Date: 2012-3-28 Time: 14:34:26



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz-30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX 2402MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.0241	21.31	24.04	45.35	125.5	-80.20	peak	
2	0.0241	20.09	24.04	44.13	125.5	-81.42	AVG	
3	0.0343	13.61	23.39	37.00	123.5	-86.54	peak	
4	0.0343	11.57	23.39	34.96	123.5	-88.58	AVG	
5	0.0620	11.28	22.16	33.44	118.0	-84.64	peak	
6	0.0620	9.87	22.16	32.03	118.0	-86.05	AVG	
7	0.0892	10.24	21.62	31.86	112.7	-80.86	peak	
8	0.0892	8.62	21.62	30.24	112.7	-82.48	AVG	
9	0.1150	11.38	21.16	32.54	107.6	-75.10	peak	
10	0.1150	10.07	21.16	31.23	107.6	-76.41	AVG	
11 *	0.1406	16.92	20.75	37.67	105.1	-67.49	peak	
12	0.1406	14.55	20.75	35.30	105.1	-69.86	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 27: Test figure of spurious emissions, mode C, Horizontal polarity (0.15MHz – 30MHz)

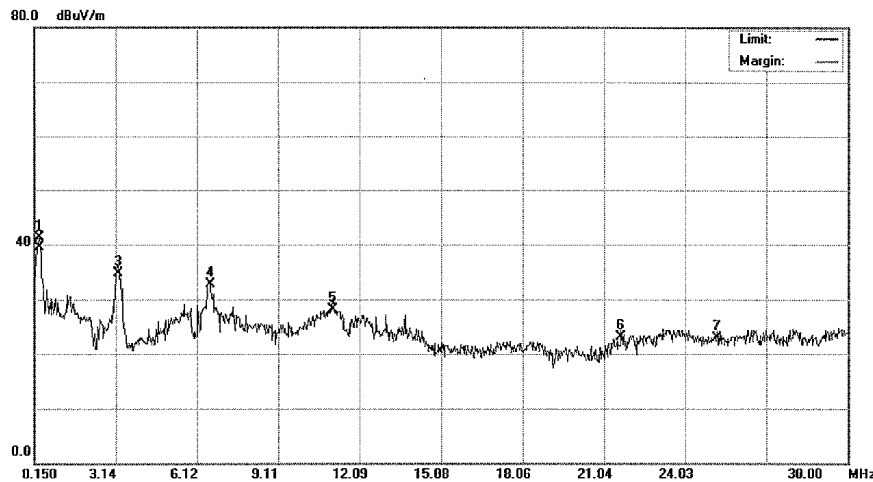


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Radiated Emission Measurement

File :15 Data :#8 Date: 2012-3-28 Time: 14:40:50



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX 2402MHZ
Note: *Horizontal*

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	21.19	20.21	41.40	99.03	-57.63	peak	
2	0.3291	19.35	20.21	39.56	99.03	-59.47	AVG	
3 *	3.2246	15.73	18.92	34.65			QP	
4	6.5975	14.62	18.07	32.69			QP	
5	11.1050	10.29	17.87	28.16			QP	
6	21.6720	6.18	17.00	23.18			QP	
7	25.1941	6.09	16.91	23.00			QP	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 28: Test figure of spurious emissions, mode C, Vertical polarity (0.15MHz – 30MHz)

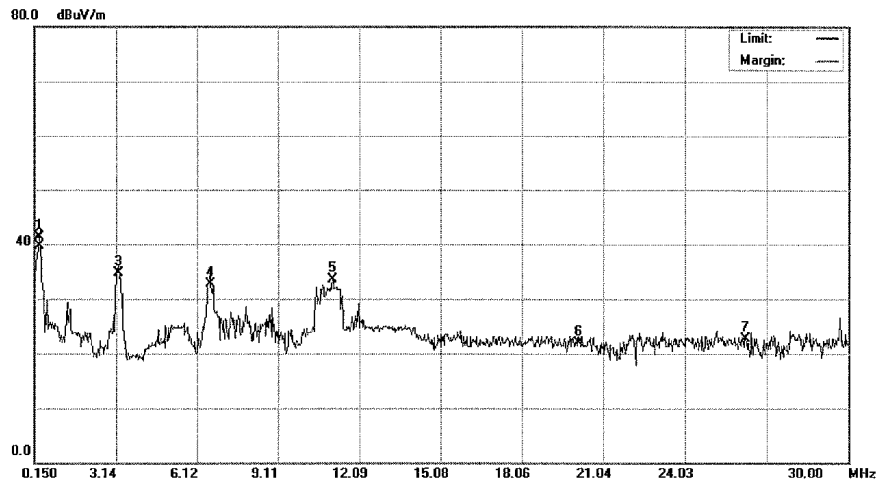


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Radiated Emission Measurement

File :15 Data :#7 Date: 2012-3-28 Time: 14:37:36



Site DG-CB03 Polarization: Temperature: 27
Limit: FCC PART 15.209 9KHz--30MHz Power: DC 3.7V Humidity: 64 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX 2402MHZ
Note: **Vertical**

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	0.3291	21.19	20.21	41.40	99.03	-57.63	peak	
2	0.3291	19.53	20.21	39.74	99.03	-59.29	AVG	
3 *	3.2246	15.82	18.92	34.74			QP	
4	6.5975	14.73	18.07	32.80			QP	
5	11.1050	15.67	17.87	33.54			QP	
6	20.1494	4.59	17.36	21.95			QP	
7	26.2390	5.97	16.80	22.77			QP	

!:Maximum data x:Over limit !:over margin

<Reference Only

Figure 29: Test figure of spurious emissions, mode C, Horizontal polarity (30MHz – 1GHz),



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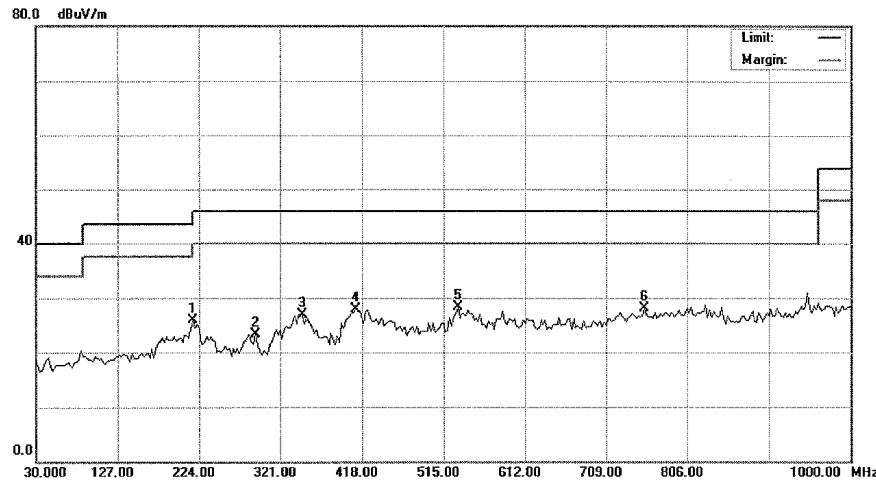
Radiated Emission Measurement

File :RSS-BELOW 1G

Data :#2

Date: 2012-3-27

Time: 21:34:47



Site DG-CB03

Limit: FCC Class B 3M Radiation

EUT: Bluetooth Remote Controller

M/N: BTRemote

Mode: RX

Note: 2402MHZ

Polarization: **Horizontal**

Temperature: 23

Power: DC 3.7V

Humidity: 51 %

Distance: 3m

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		216.7250	41.91	-16.00	25.91	46.00	-20.09	peak	
2		291.9000	35.46	-12.06	23.40	46.00	-22.60	peak	
3		347.6750	37.85	-10.90	26.95	46.00	-19.05	peak	
4		410.7250	36.83	-8.83	28.00	46.00	-18.00	peak	
5	*	531.9750	34.41	-6.16	28.25	46.00	-17.75	peak	
6		755.0750	30.68	-2.49	28.19	46.00	-17.81	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 30: Test figure of spurious emissions, mode C, Vertical polarity (30MHz – 1GHz)

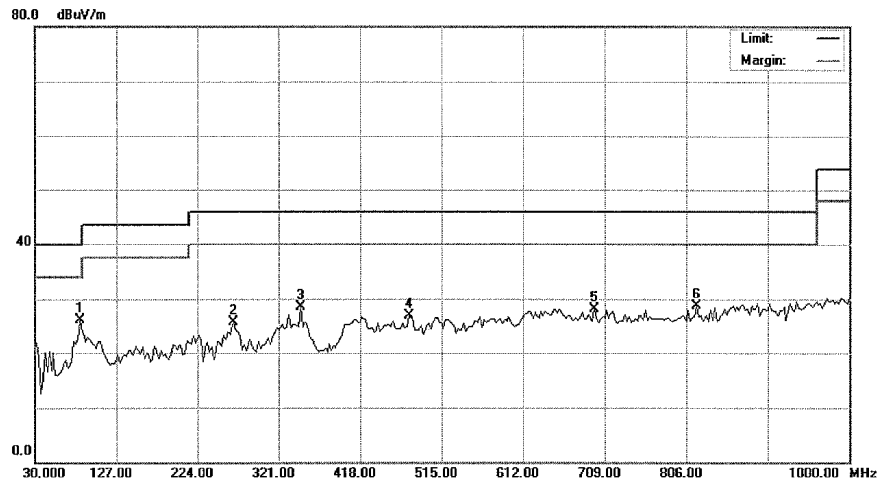


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Radiated Emission Measurement

File :RSS-BELOW 1G Data :#1 Date: 2012-3-27 Time: 22:32:28



Site DG-CB03 Polarization: **Vertical** Temperature: 23
Limit: FCC Class B 3M Radiation Power: DC 3.7V Humidity: 51 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX
Note: 2402MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	83.3500	45.15	-19.10	26.05	40.00	-13.95	peak	
2		267.6500	39.07	-13.42	25.65	46.00	-20.35	peak	
3		347.6750	39.37	-10.90	28.47	46.00	-17.53	peak	
4		476.2000	34.70	-7.72	26.98	46.00	-19.02	peak	
5		696.8750	31.26	-3.18	28.08	46.00	-17.92	peak	
6		818.1250	30.13	-1.51	28.62	46.00	-17.38	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Figure 31: Test figure of spurious emissions, mode C, Vertical polarity (1GHz – 26GHz)

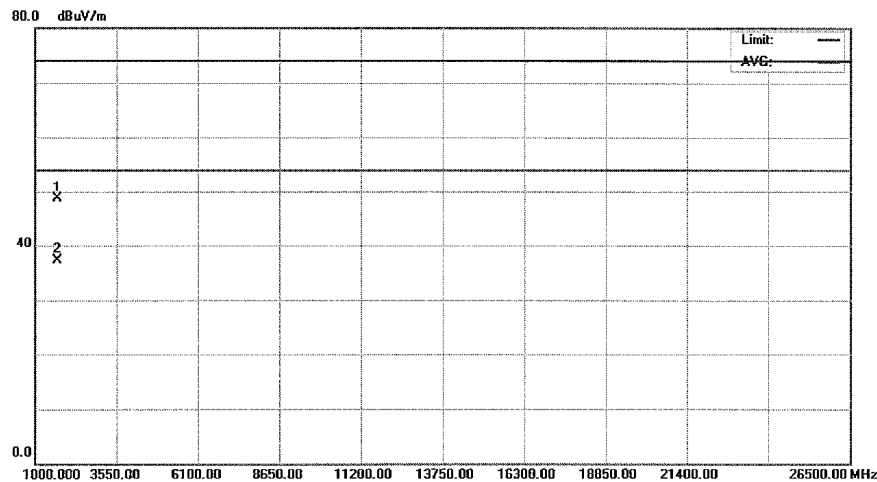


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Radiated Emission Measurement

File :RSS Data :#1 Date: 2012-3-27 Time: 22:04:16



Site DG-CB03 Polarization: **Horizontal** Temperature: 23
Limit: FCC_RF_1G-40G_(Peak) Power: DC 3.7V Humidity: 51 %
EUT: Bluetooth Remote Controller Distance: 3m
M/N: BTRemote
Mode: RX
Note: 2402MHZ

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	1640.000	53.63	-4.88	48.75	74.00	-25.25	peak	
2 *	1640.000	42.15	-4.88	37.27	54.00	-16.73	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 32: Test figure of spurious emissions, mode C, Vertical polarity (1GHz – 26GHz)

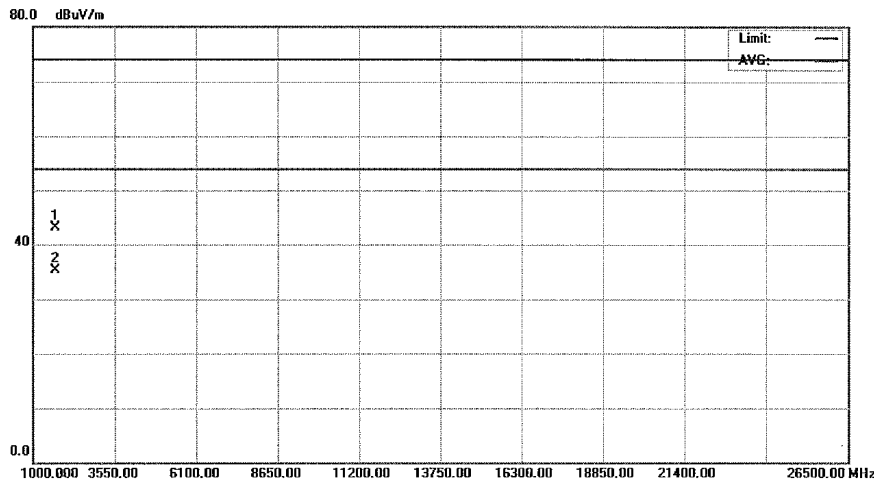


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Radiated Emission Measurement

File :RSS Data :#2 Date: 2012-3-27 Time: 22:07:25



Site DG-CB03 Polarization: **Vertical** Temperature: 23
 Limit: FCC_RF_1G-40G_(Peak) Power: DC 3.7V Humidity: 51 %
 EUT: Bluetooth Remote Controller Distance: 3m
 M/N: BTRemote
 Mode: RX
 Note: 2402MHZ

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		1640.000	48.07	-4.88	43.19	74.00	-30.81	peak	
2	*	1640.000	40.10	-4.88	35.22	54.00	-18.78	AVG	

*:Maximum data x:Over limit !:over margin <Reference Only

Figure 33: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal

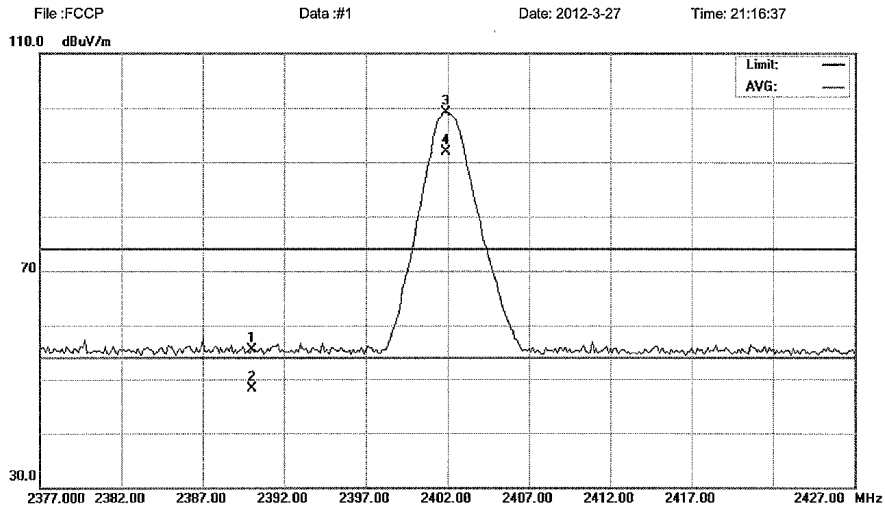


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2402MHZ		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	23.61	31.91	55.52	74.00	-18.48	peak	
2		2390.000	16.32	31.91	48.23	54.00	-5.77	AVG	
3	X	2401.875	67.20	31.90	99.10	74.00	25.10	peak	
4	*	2401.875	59.91	31.90	91.81	54.00	37.81	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 34: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical

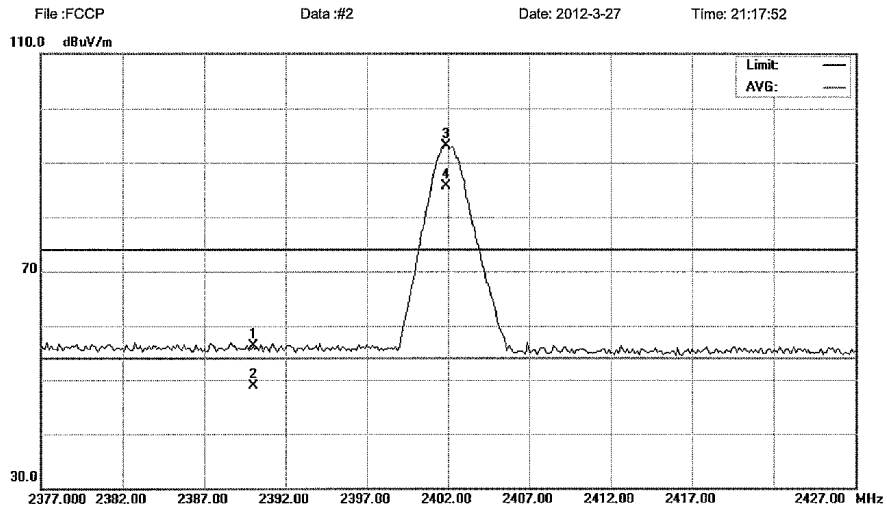


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2402MHZ		

Radiated Emission



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	2390.000	24.32	31.91	56.23	74.00	-17.77	peak	
2	2390.000	17.03	31.91	48.94	54.00	-5.06	AVG	
3 X	2401.875	61.16	31.90	93.06	74.00	19.06	peak	
4 *	2401.875	53.87	31.90	85.77	54.00	31.77	AVG	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 35: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

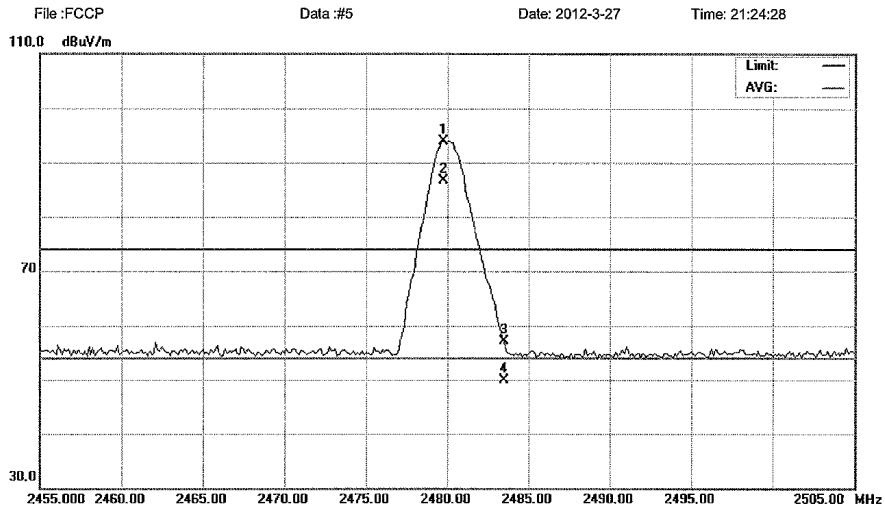


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2480MHZ		

Radiated Emission



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1 X	2479.750	62.18	31.80	93.98	74.00	19.98	peak	
2 *	2479.750	54.89	31.80	86.69	54.00	32.69	AVG	
3	2483.500	25.34	31.80	57.14	74.00	-16.86	peak	
4	2483.500	18.05	31.80	49.85	54.00	-4.15	AVG	

*:Maximum data x:Over limit !:over margin

<Reference Only

Figure 36: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

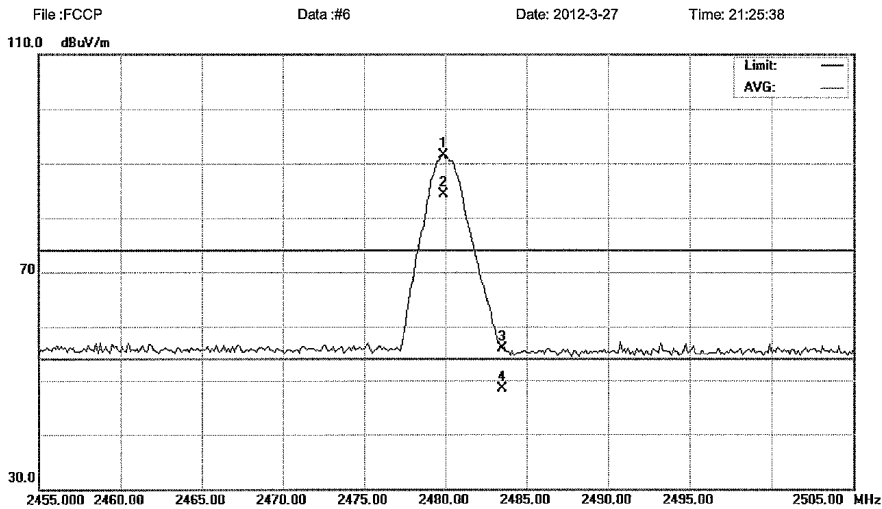


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC_RF_1G-40G_(Peak)	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: TX	
Note: 2480MHZ		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2479.875	59.70	31.80	91.50	74.00	17.50	peak	
2	*	2479.875	52.41	31.80	84.21	54.00	30.21	AVG	
3		2483.500	24.04	31.80	55.84	74.00	-18.16	peak	
4		2483.500	16.75	31.80	48.55	54.00	-5.45	AVG	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Figure 37: Test figure of conducted emissions, mode D, line live

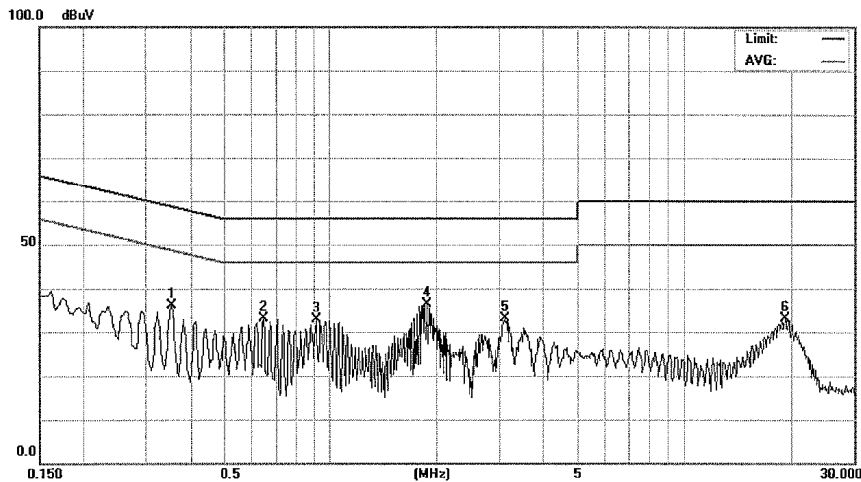


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Conducted Emission Measurement

File: FCC-CON Data: #1 Date: 2012/3/27 Time: 20:26:20



Site: DG-C02 Phase: **L1** Temperature: 24
Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 55 %
EUT: Bluetooth Remote Controller Distance:
M/N: BTRemote
Mode: charging
Note:

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.3540	26.21	10.01	36.22	58.87	-22.65	peak	
2	0.6460	23.12	10.05	33.17	56.00	-22.83	peak	
3	0.9100	22.68	10.10	32.78	56.00	-23.22	peak	
4 *	1.8780	26.30	10.04	36.34	56.00	-19.66	peak	
5	3.1380	23.10	10.06	33.16	56.00	-22.84	peak	
6	19.2220	22.44	10.61	33.05	60.00	-26.95	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

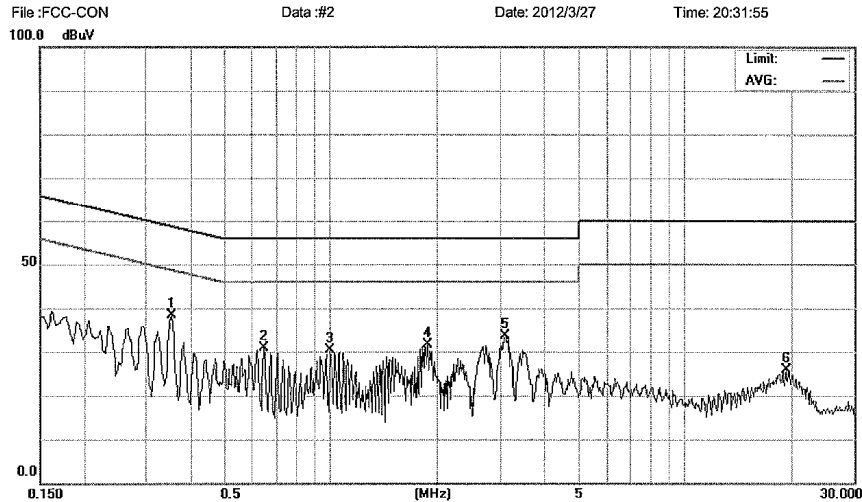
Figure 38: Test figure of conducted emissions, mode D, line neutral



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Conducted Emission Measurement



Site: DG-C02 Phase: **N** Temperature: 24
 Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 55 %
 EUT: Bluetooth Remote Controller Distance:
 M/N: BTRemote
 Mode: charging
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.3540	28.42	9.88	38.30	58.87	-20.57	peak	
2		0.6460	20.86	9.93	30.79	56.00	-25.21	peak	
3		0.9980	20.32	10.00	30.32	56.00	-25.68	peak	
4		1.8780	21.57	10.07	31.64	56.00	-24.36	peak	
5		3.1020	23.41	10.14	33.55	56.00	-22.45	peak	
6		19.2940	15.30	10.68	25.98	60.00	-34.02	peak	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 39: Test report of Radiated emissions, Mode D, Horizontal

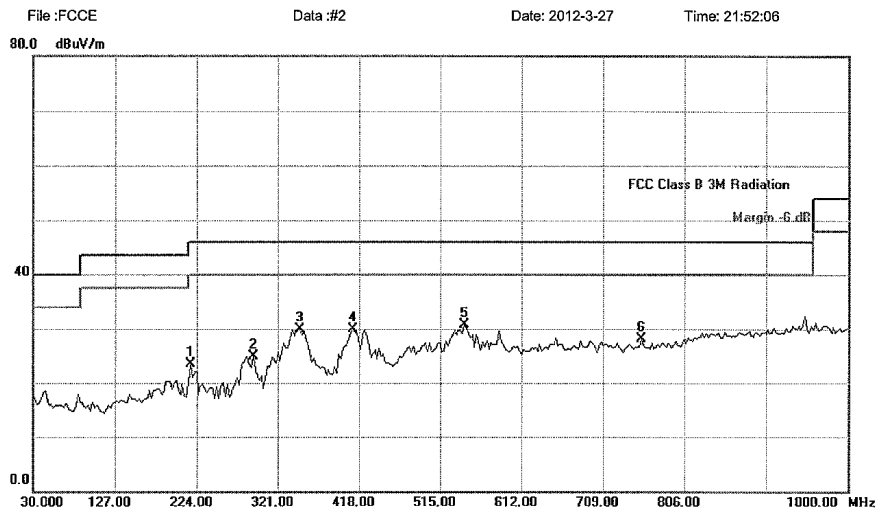


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Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC Class B 3M Radiation	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: charging	
Note:		

Radiated Emission



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	216.7250	39.41	-16.00	23.41	46.00	-22.59	peak	
2	291.9000	36.96	-12.06	24.90	46.00	-21.10	peak	
3	347.6750	40.85	-10.90	29.95	46.00	-16.05	peak	
4	410.7250	38.83	-8.83	30.00	46.00	-16.00	peak	
5 *	544.1000	36.35	-5.71	30.64	46.00	-15.36	peak	
6	755.0750	30.68	-2.49	28.19	46.00	-17.81	peak	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 40: Test figure of Radiated emissions, Mode D, Vertical

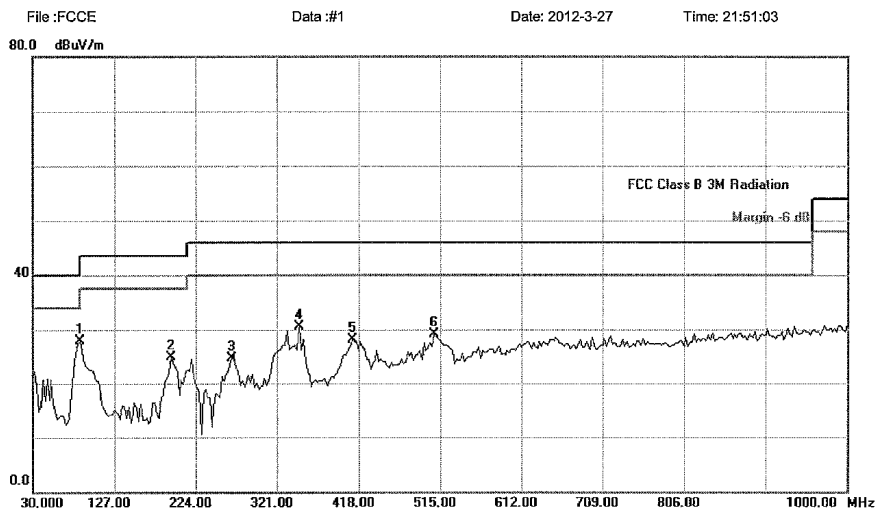


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC Class B 3M Radiation	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: charging	
Note:		

Radiated Emission



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1 *	85.7750	46.97	-19.11	27.86	40.00	-12.14	peak	
2	194.9000	41.64	-16.66	24.98	43.50	-18.52	peak	
3	267.6500	38.07	-13.42	24.65	46.00	-21.35	peak	
4	347.6750	41.37	-10.90	30.47	46.00	-15.53	peak	
5	410.7250	36.92	-8.83	28.09	46.00	-17.91	peak	
6	507.7250	36.13	-7.07	29.06	46.00	-16.94	peak	

*:Maximum data x:Over limit l:over margin (Reference Only)

Figure 41: Test report of Radiated emissions, Mode D, Horizontal

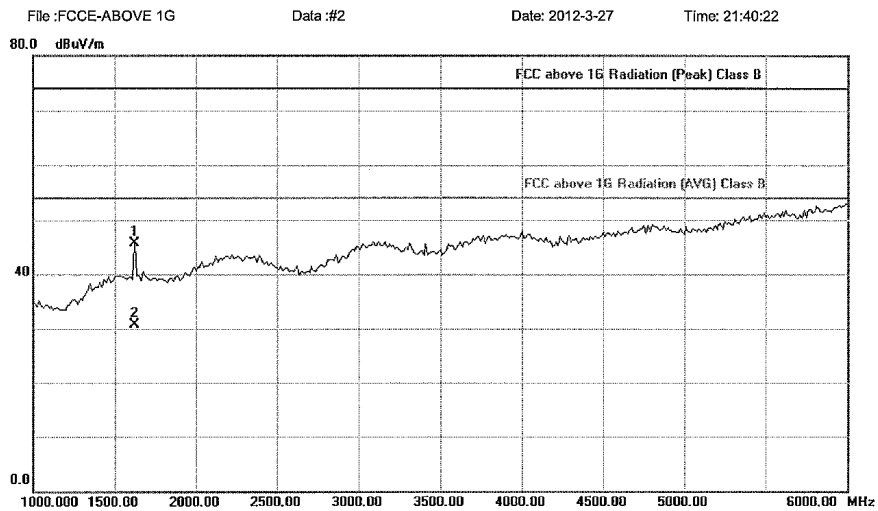


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<http://www.bti.org.cn>

Site DG-CB03	Polarization: Horizontal	Temperature: 23
Limit: FCC above 1G Radiation (Peak) Class B	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: charging	
Note:		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		1625.000	50.65	-5.03	45.62	74.00	-28.38	peak	
2	*	1625.000	35.69	-5.03	30.66	54.00	-23.34	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)

Figure 42: Test figure of Radiated emissions, Mode D, Vertical

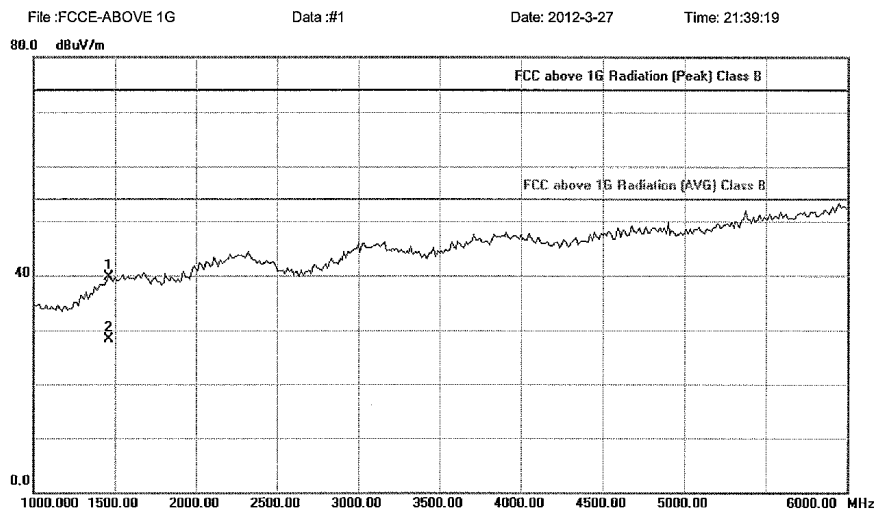


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Site DG-CB03	Polarization: Vertical	Temperature: 23
Limit: FCC above 1G Radiation (Peak) Class B	Power: DC 3.7V	Humidity: 51 %
EUT: Bluetooth Remote Controller	Distance: 3m	
M/N: BTRemote	Mode: charging	
Note:		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		1462.500	46.24	-6.62	39.62	74.00	-34.38	peak	
2	*	1462.500	34.87	-6.62	28.25	54.00	-25.75	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only)