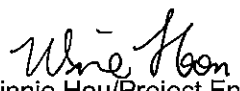


Prüfbericht - Nr.: 17019986 001 <i>Test Report No.:</i>			Seite 1 von 50 <i>Page 1 of 50</i>		
Auftraggeber: <i>Client:</i>			Primax Electronics Ltd. No. 669, Ruey Kuang Rd. Neihu, Taipei 114, Taiwan		
Gegenstand der Prüfung: Wireless Bluetooth Headset <i>Test item:</i>					
Bezeichnung: <i>Identification:</i>		RF-QX4 RF-GPS31204	RF-QX4-T	Serien-Nr.: n.a. <i>Serial No.:</i>	
Wareneingangs-Nr.: <i>Receipt No.:</i>		163075383		Eingangsdatum: 2011-03-22 <i>Date of receipt:</i>	
Prüfört: <i>Testing location:</i>		TÜV Rheinland (Guangdong) Ltd. EMC Laboratory NEUTRON ENGINEERING INC. (details refer to clause 2.1)			
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 FCC CFR47 Part 15: Subpart B Section 15.107 FCC CFR47 Part 15: Subpart B Section 15.109 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). <i>The test item passed the test specification(s).</i>			
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland (Shenzhen) Co., Ltd.			
geprüft/ tested by:			kontrolliert/ reviewed by:		
					
2011-05-04 Winnie Hou/Project Engineer			2011-05-06 Shawn Peng/Manager		
Datum	Name/Stellung	Unterschrift	Datum	Name/Stellung	Unterschrift
<i>Date</i>	<i>Name/Position</i>	<i>Signature</i>	<i>Date</i>	<i>Name/Position</i>	<i>Signature</i>
Sonstiges/ Other Aspects:					
Abkürzungen: <i>P(ass)</i> = entspricht Prüfgrundlage <i>F(ail)</i> = entspricht nicht Prüfgrundlage <i>N/A</i> = nicht anwendbar <i>N/T</i> = nicht getestet					
Abbreviations: <i>P(ass)</i> = passed <i>F(ail)</i> = failed <i>N/A</i> = not applicable <i>N/T</i> = 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. <i>This test report relates to the a. m. test sample. 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.</i>					

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***5.1.11 RADIATED EMISSIONS***RESULT: Passed***6.1.1 ELECTROMAGNETIC FIELDS***RESULT: Passed*

Contents

1.	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
2.	TEST SITES	4
2.1	TEST FACILITIES	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	6
2.4	CALIBRATION	6
2.5	MEASUREMENT UNCERTAINTY.....	6
2.6	LOCATION OF ORIGINAL DATA.....	6
2.7	STATUS OF FACILITY USED FOR TESTING.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
3.3	INDEPENDENT OPERATION MODES	8
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS	9
4.	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	11
4.5	TEST SETUP DIAGRAM	11
5.	TEST RESULTS	13
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	13
5.1.1	<i>Antenna Requirement</i>	<i>13</i>
5.1.2	<i>Peak Output Power</i>	<i>14</i>
5.1.3	<i>20dB Bandwidth</i>	<i>18</i>
5.1.4	<i>99% Bandwidth</i>	<i>22</i>
5.1.5	<i>Conducted spurious emissions measured in 100kHz Bandwidth.....</i>	<i>26</i>
5.1.6	<i>Spurious Emission</i>	<i>32</i>
5.1.7	<i>Frequency Separation.....</i>	<i>33</i>
5.1.8	<i>Number of hopping frequency.....</i>	<i>36</i>
5.1.9	<i>Time of Occupancy</i>	<i>38</i>
5.1.10	<i>Conducted emissions</i>	<i>44</i>
5.1.11	<i>Radiated emissions</i>	<i>45</i>
6.	SAFETY HUMAN EXPOSURE	46
6.1	RADIO FREQUENCY EXPOSURE COMPLIANCE.....	46
6.1.1	<i>Electromagnetic Fields.....</i>	<i>46</i>
7.	PHOTOGRAPHS OF THE TEST SET-UP	47

8.	LIST OF TABLES	50
9.	LIST OF PHOTOGRAPHS	50

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 of Radiated Emissions

2. Test Sites

2.1 Test Facilities

TÜV Rheinland (Guangdong) Ltd.
EMC Laboratory

Guangzhou Auto Market,
Yuan Gang Section of Guangshan Road,
Guangzhou, P.R. China

FCC Registration No.: 833845

Test site Industry Canada No.: 2932C-1

NEUTRON ENGINEERING INC.

No.3,Jinshagang 1st Road,
ShiXia,Dalang Town,DongGuan,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				
Test Receiver	R&S	ESCI	100382	2011-05-26
Spectrum	Agilent	E4408B	US39240143	2011-11-26
Antenna	Schwarbeck	VULB9160	9160-3232	2011-06-08
Amplifier	HP	8447D	2944A09673	2011-05-26
Antenna	ETS	3115	00075789	2011-05-27
Amplifier	Agilent	8449B	3008A02274	2011-05-26
Test Cable	N/A	C-01_CB03	N/A	2011-07-06
Test Cable	HUBER+SUHNER	SUCOFLEX_8m	313794/4	2012-04-12
Controller	CT	SC100	N/A	N/A
Active Loop Antenna	R&S	HFH2-Z2	830749/020	2011-05-27
Radio Test Suite				
Receiver	Rohde & Schwarz	ESCI	100178	2011-09-27
Conducted Emission				
EMI Test Receiver	Rohde & Schwarz	ESCS30	100316	2012-03-16
Artificial Mains Network	Rohde & Schwarz	ESH2-Z5	100114	2012-03-16

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, 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 Appendix1 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 TÜV Rheinland (Guangdong) Ltd. test facility located at Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou, P.R. 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 Bluetooth headset. It operates at 2.4GHz ISM frequency band.
All models are identical except model number for different market.
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 Bluetooth Headset
Type Designation:	RF-QX4, RF-QX4-T, RF-GPS31204
FCC ID	EMJHRF-QX4
IC	4251A-HRFQX4T

Table 3: Technical Specification of EUT

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-10°C to +55°C
Operation Voltage	DC 3.7V (via Lithium Battery)
Modulation	FHSS, GFSK, 8DPSK, $\pi/4$ DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	-0.5dBi
RF Output Power	0.00222W (3.47dBm)

Table 4: Frequency hopping information

Technical Specification	Description
Hopping Range	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).
Hopping Sequence	Example of a 79 hopping sequence in data mode: 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,
Receiver input bandwidth	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. 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. 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. That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

3.3 Independent Operation Modes

The basic operation modes are:

- A. Transmitting
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. Receiving
- C. Standby
- 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.

Due to clause 3.1, full test was applied on model RF-QX4 only.

Full test was applied on all test modes, but only worst case was shown.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories

Description	Manufacturer	Type	Rating
AC/DC Adapter	Salcomp	3202	I/P: AC100-240V 150mA 50-60Hz O/P: DC5V, 700mA

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

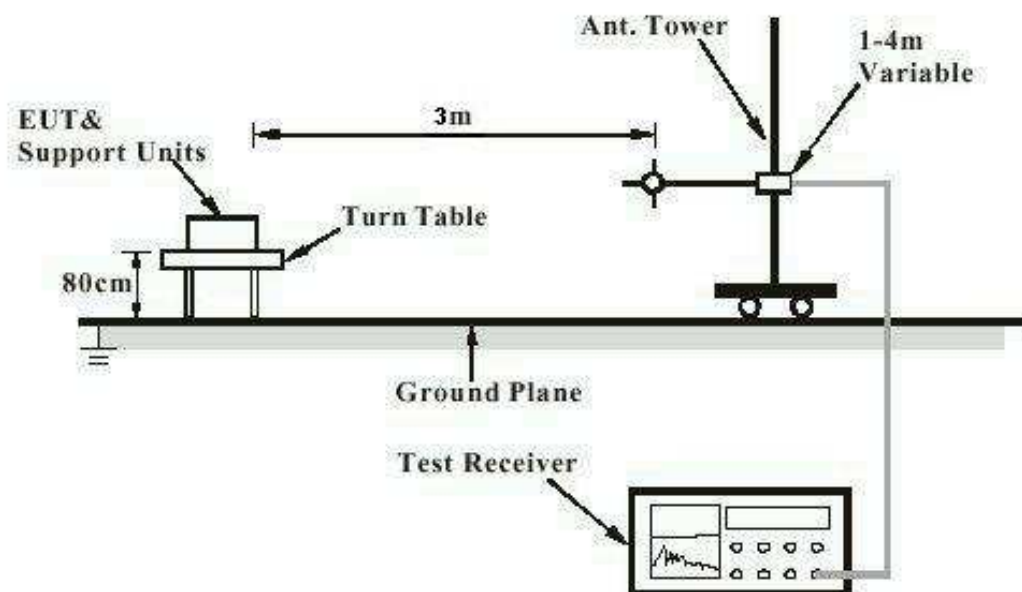


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

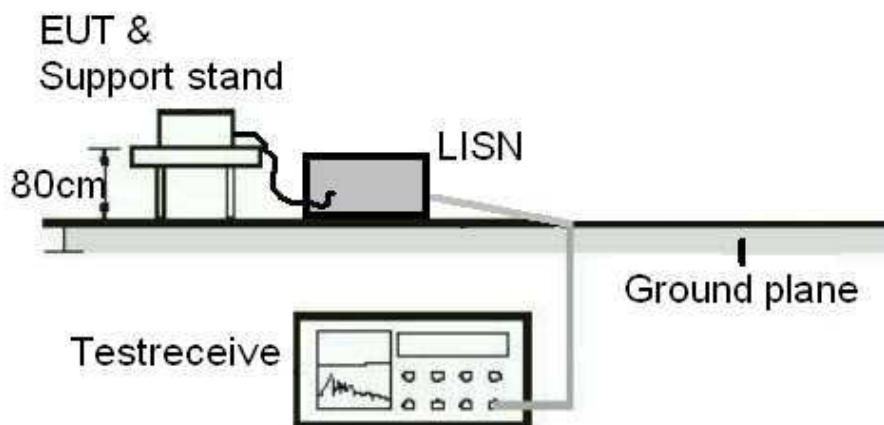
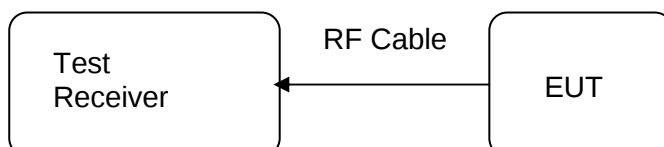


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2011-04-02
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 3.5dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply the provision.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT:
Passed

Test date : 2011-04-02
 Test standard : FCC Part 15.247(b)(1)
 RSS-210 A8.4 (2)
 Basic standard : ANSI C63.4: 2003
 Limit : 1 Watt
 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, GFSK modulation

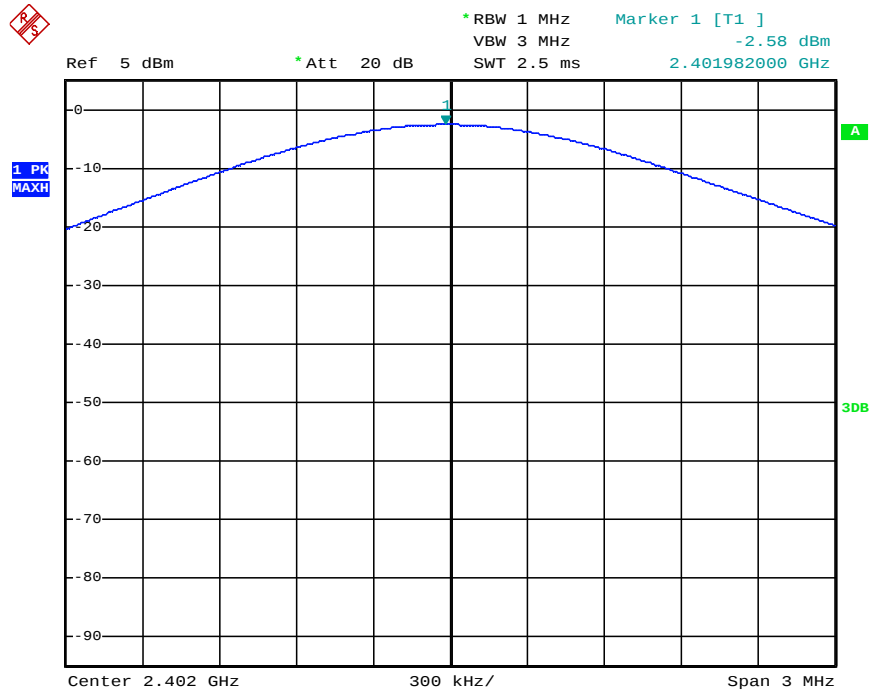
Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	-2.58	0.00055	1
Middle Channel	2441	-2.12	0.00061	1
High Channel	2480	-1.94	0.00064	1

Table 6: Test result of Peak Output Power, 8DPSK modulation

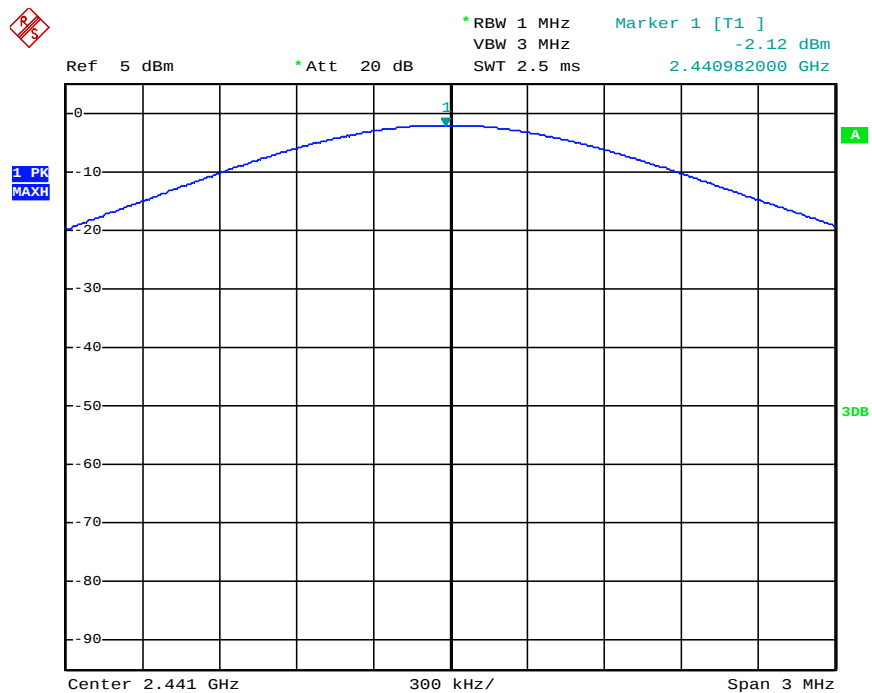
Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	3.47	0.00222	1
Middle Channel	2441	3.12	0.00205	1
High Channel	2480	1.87	0.00154	1

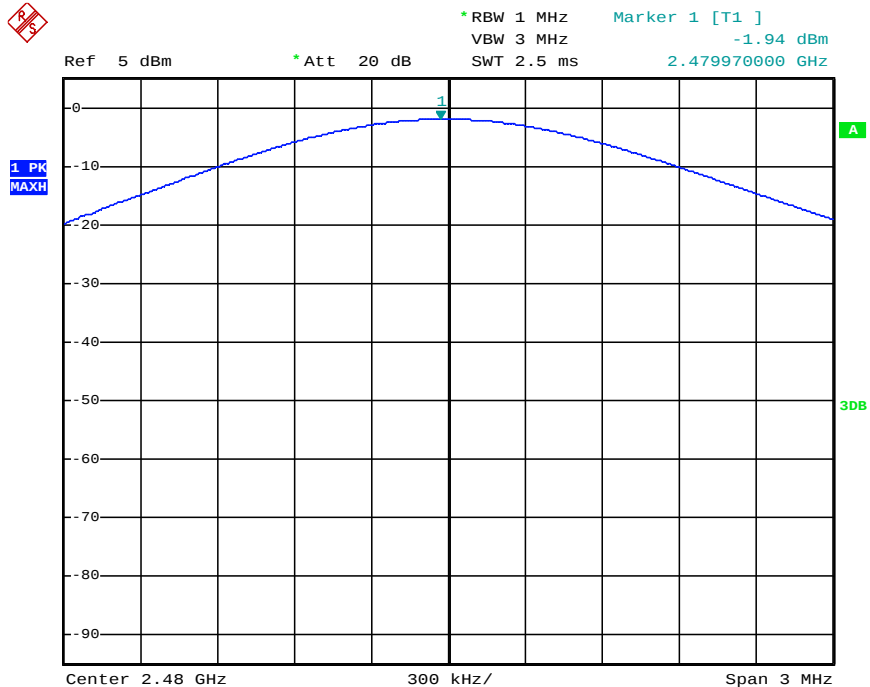
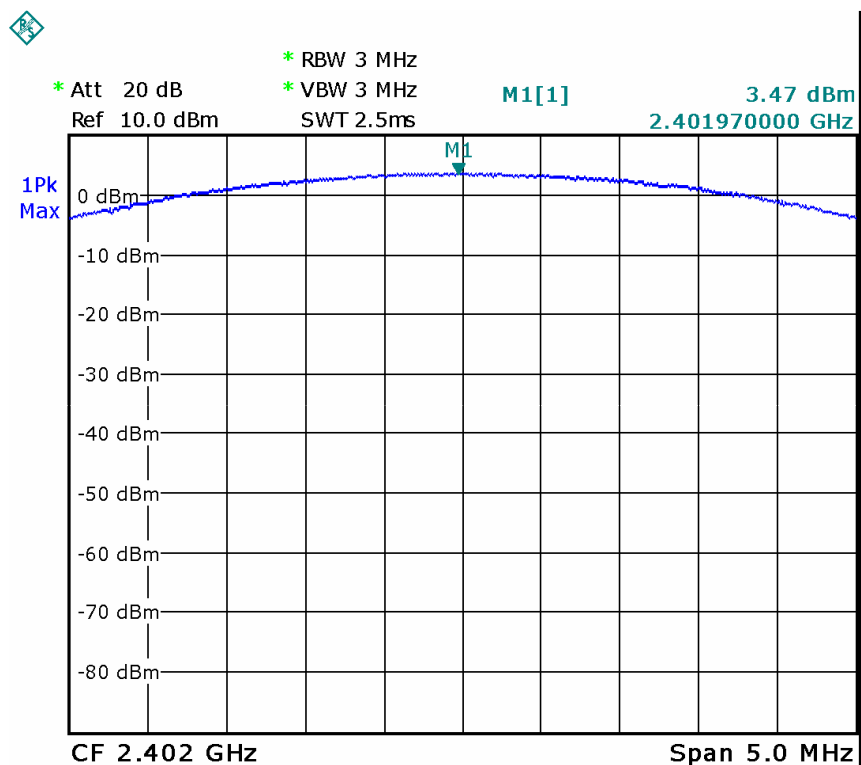
Test Plot of peak output power, GFSK modulation

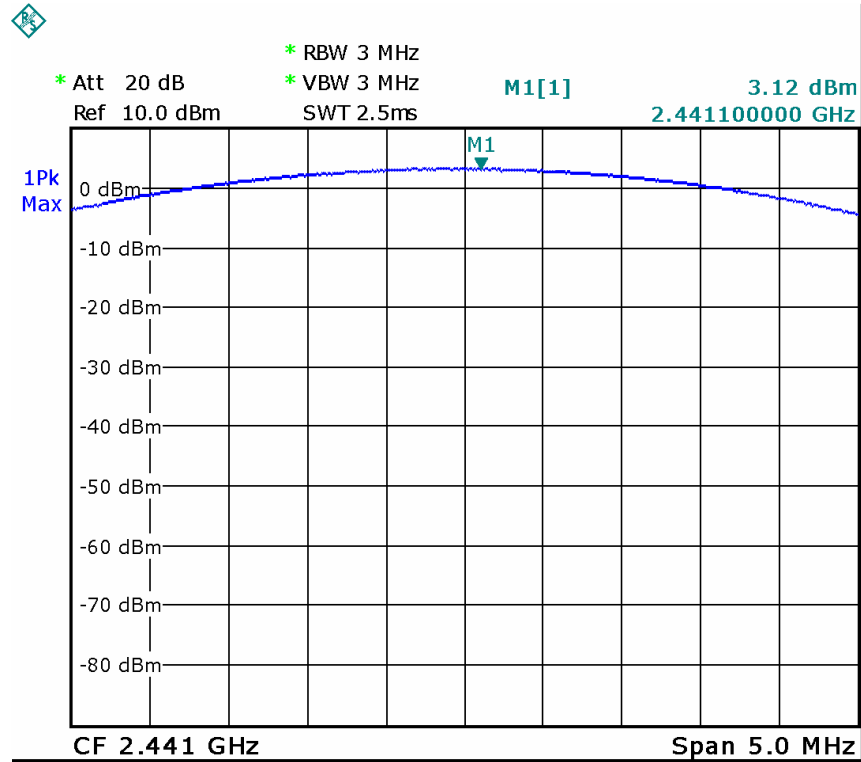
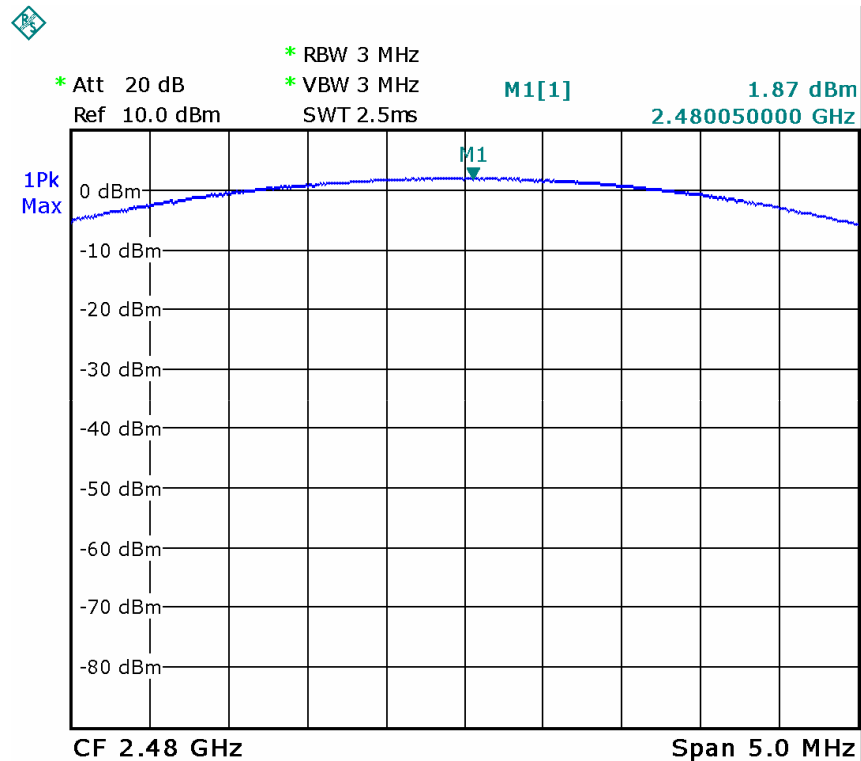
Low Channel



Middle Channel



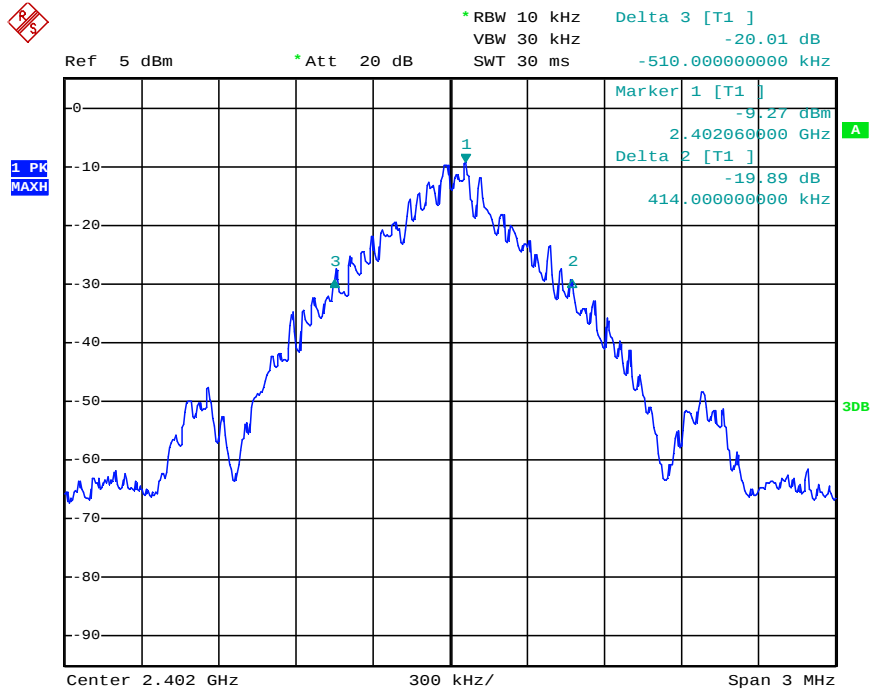
High Channel

Test Plot of peak output power, 8DPSK modulation
Low Channel


Middle Channel

High Channel


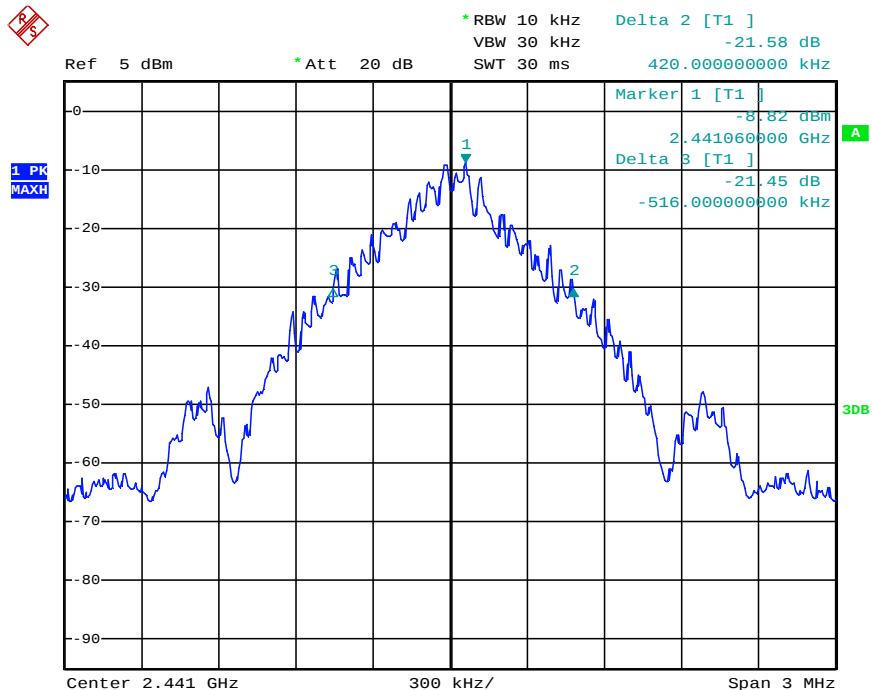
Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2402	1.34	/	Pass
Mid Channel	2441	1.34	/	Pass
High Channel	2480	1.34	/	Pass

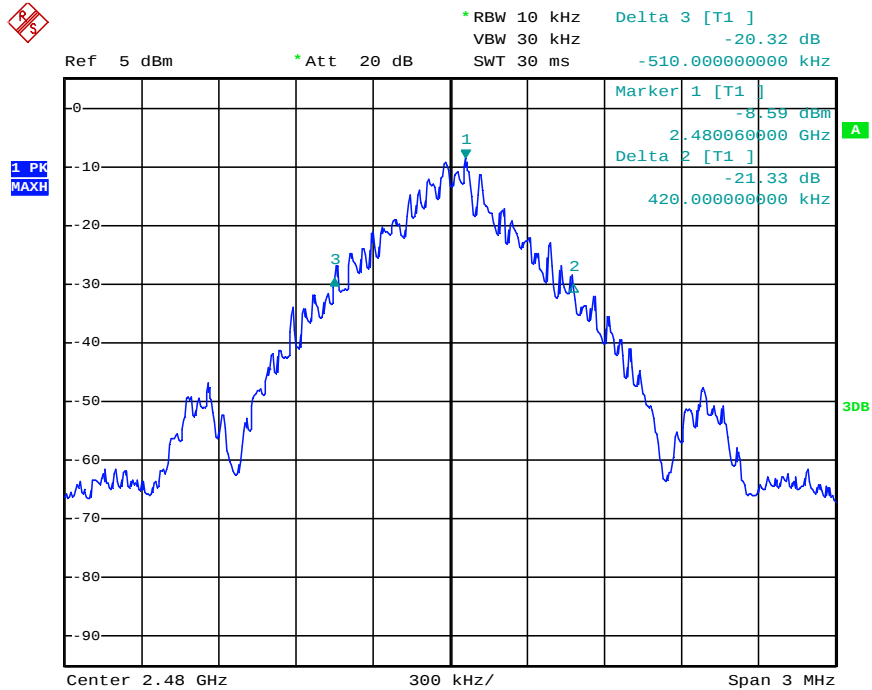
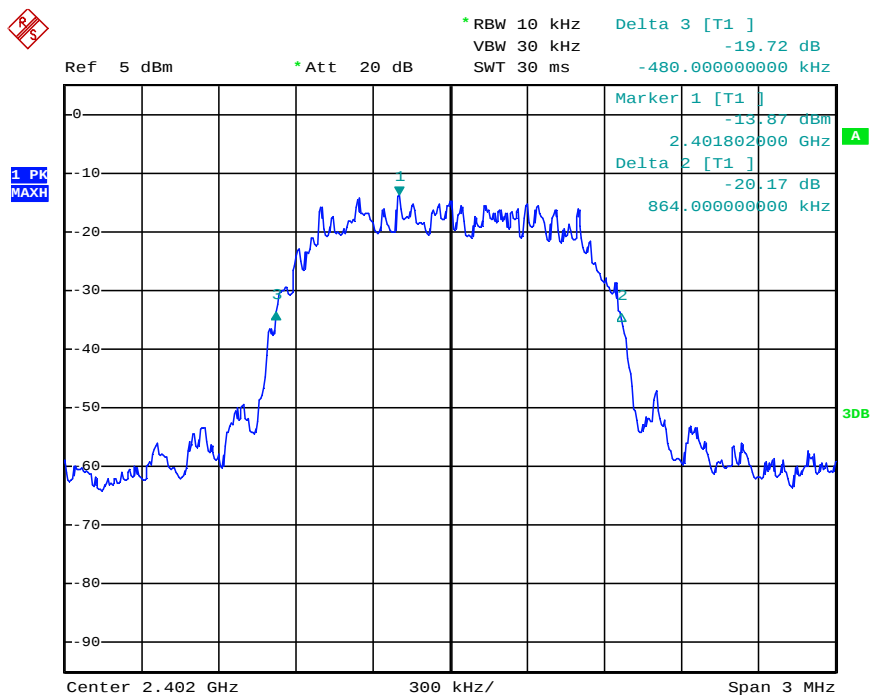
Test Plot of 20dB Bandwidth, GFSK modulation

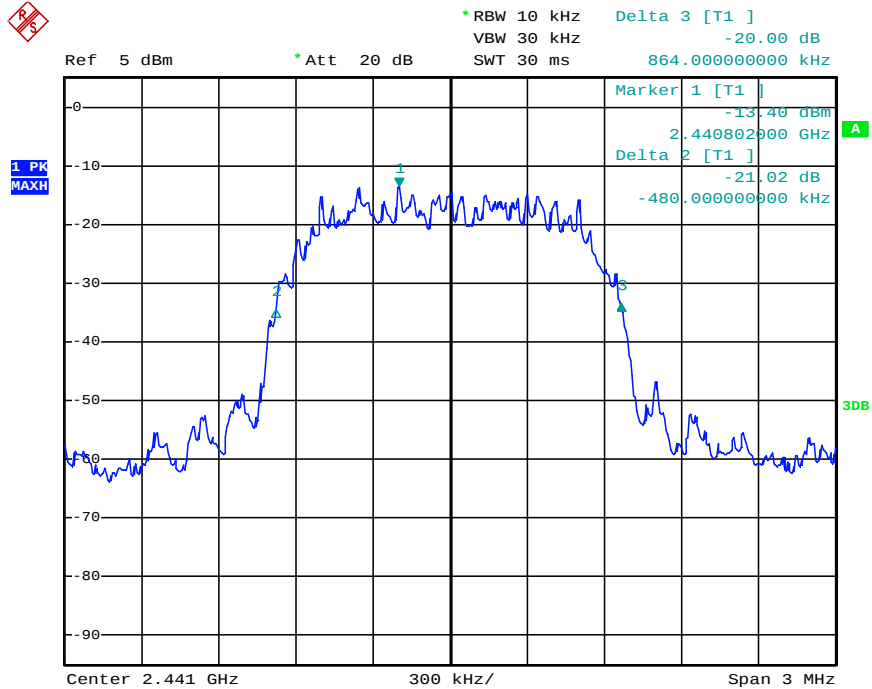
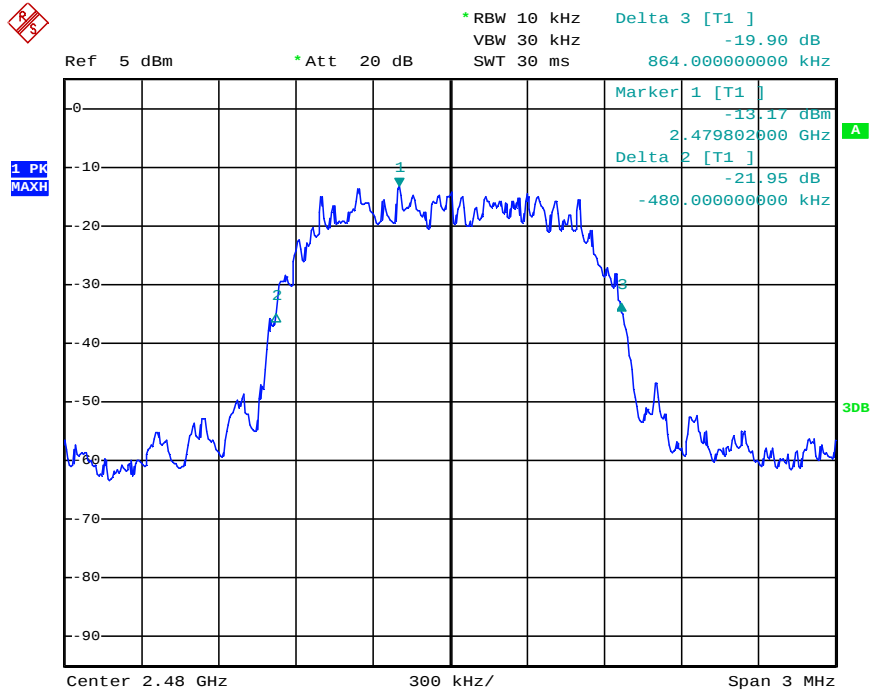
Low Channel



Middle Channel



High Channel

Test Plot of 20dB Bandwidth, 8DPSK modulation
Low Channel


Middle Channel

High Channel


5.1.4 99% Bandwidth

RESULT:
Passed

Date of testing : 2011-04-02
 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 : 22°C
 Relative humidity : 52%
 Atmospheric pressure : 101 kPa

Table 9: Test result of 99% Bandwidth, GFSK modulation

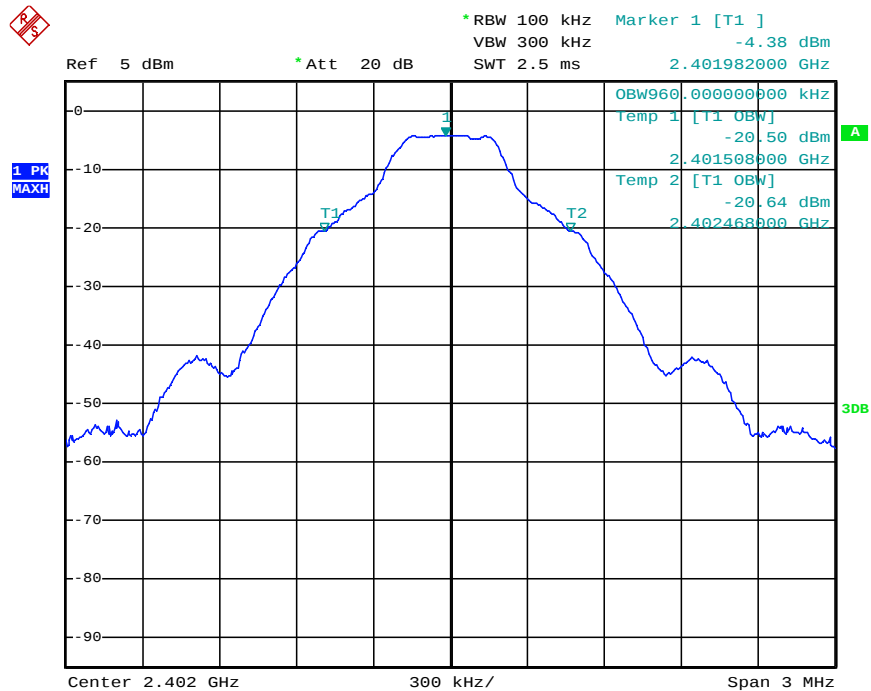
Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	960	/	Pass
Mid Channel	2441	966	/	Pass
High Channel	2480	966	/	Pass

Table 10: Test result of 99% Bandwidth, 8DPSK modulation

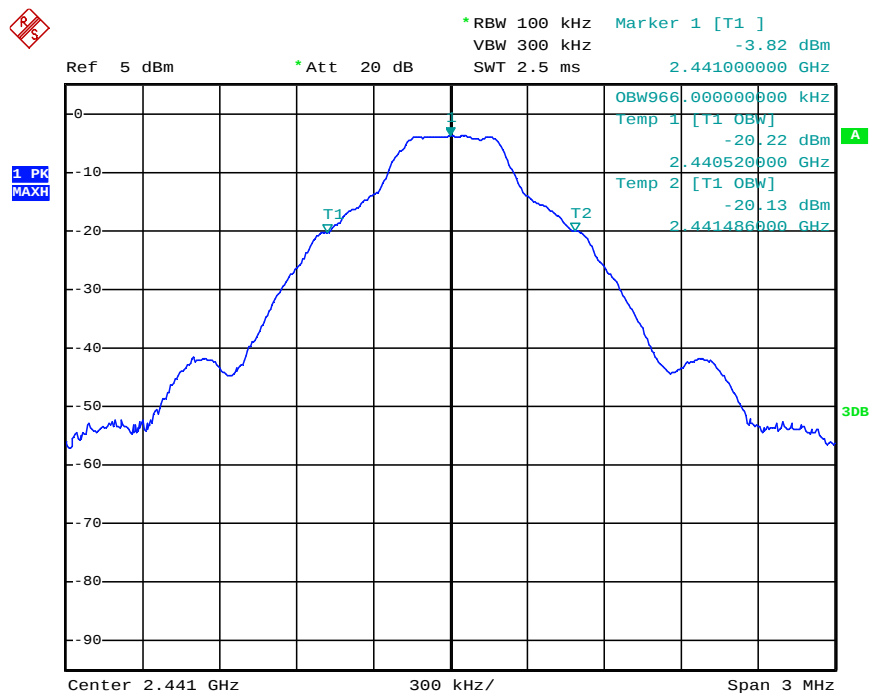
Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2402	1.224	/	Pass
Mid Channel	2441	1.224	/	Pass
High Channel	2480	1.224	/	Pass

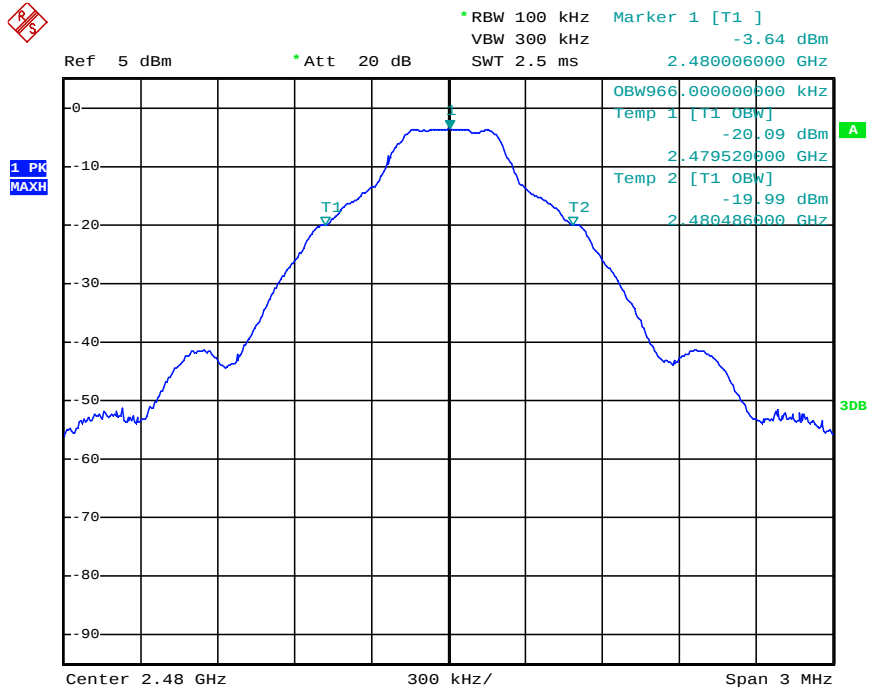
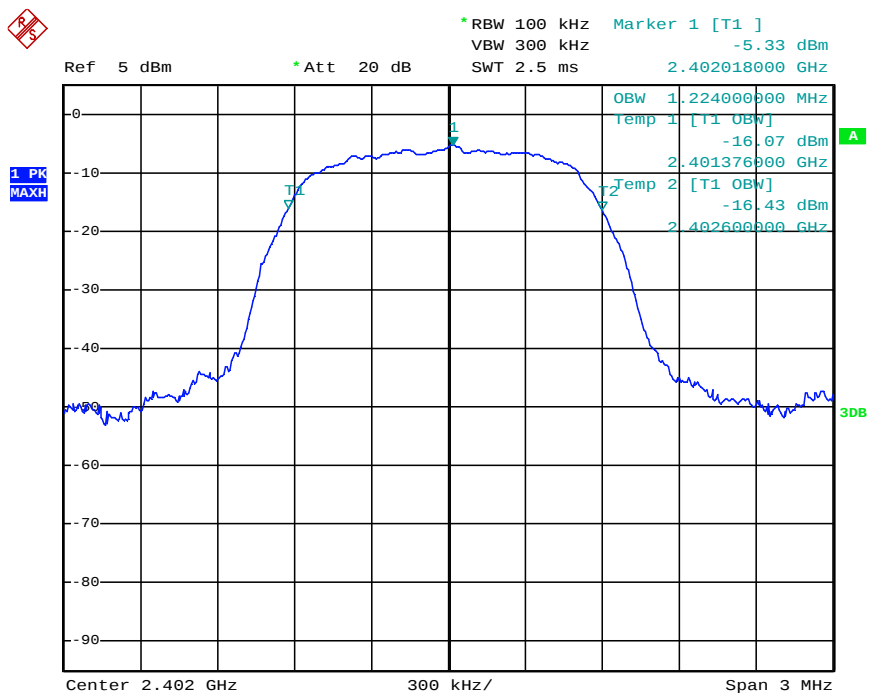
Test Plot of 99% Bandwidth, GFSK modulation

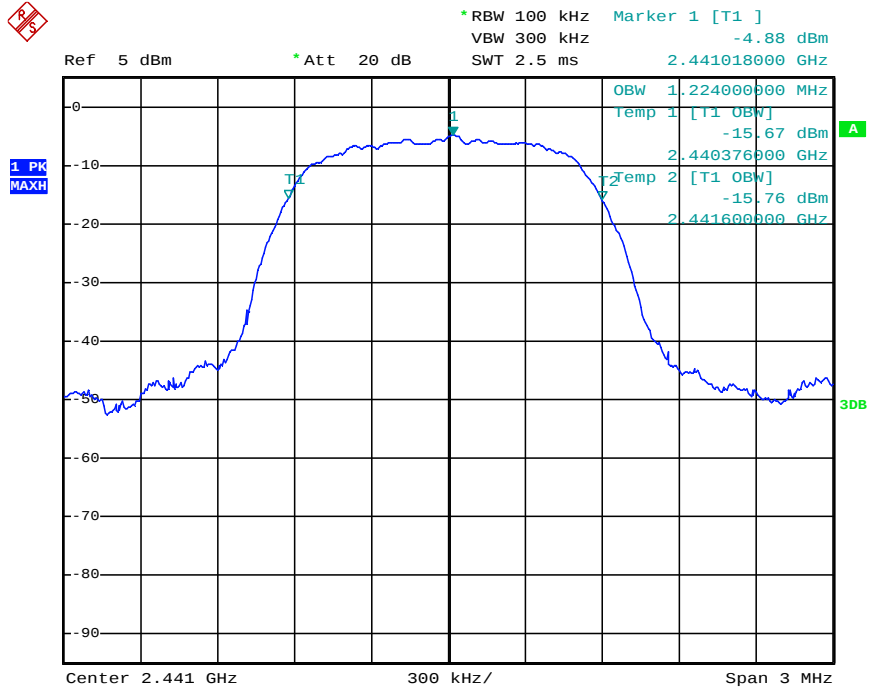
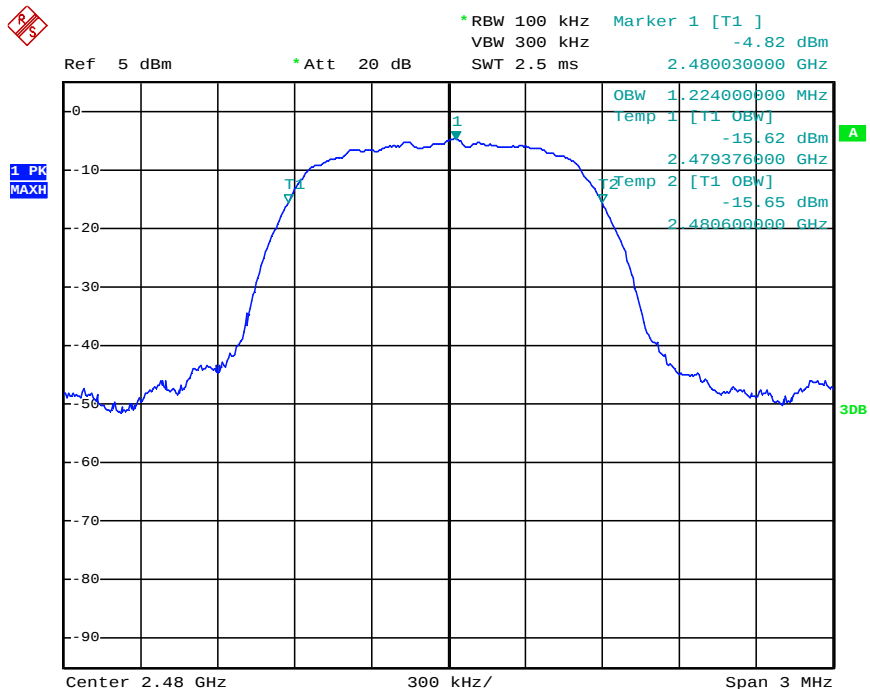
Low Channel



Middle Channel



High Channel

Test Plot of 99% Bandwidth, 8DPSK modulation
Low Channel


Middle Channel

High Channel


**5.1.5 Conducted spurious emissions measured in 100kHz
Bandwidth****RESULT:****Passed**

Date of testing	:	2011-04-02
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

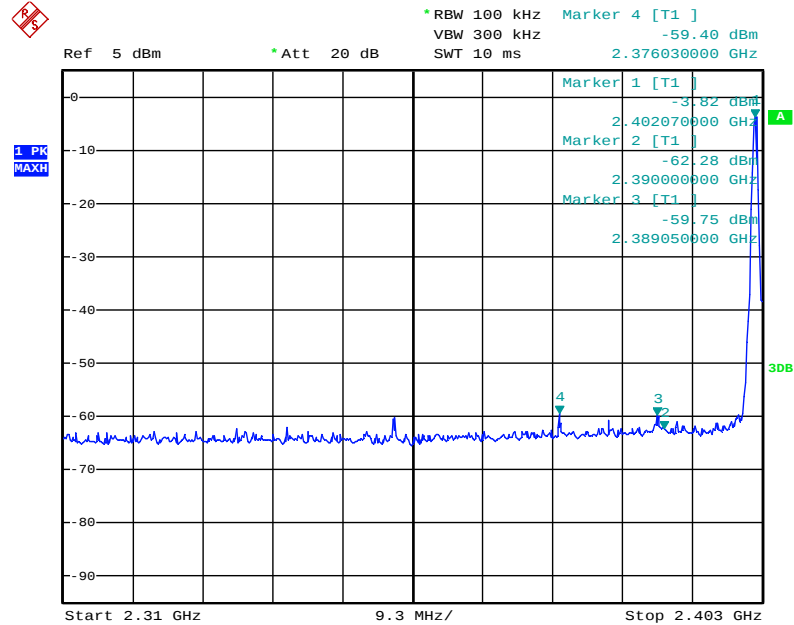
Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	22°C
Relative humidity	:	52%
Atmospheric pressure	:	101 kPa

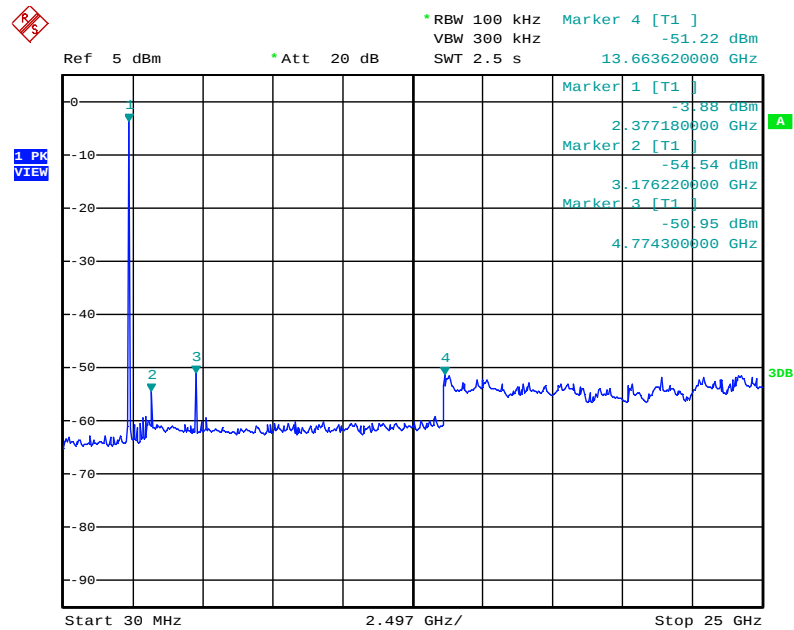
All emissions are more than 50dB below fundamental, details refer to following test plot, and compliance is achieved as well.

Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel

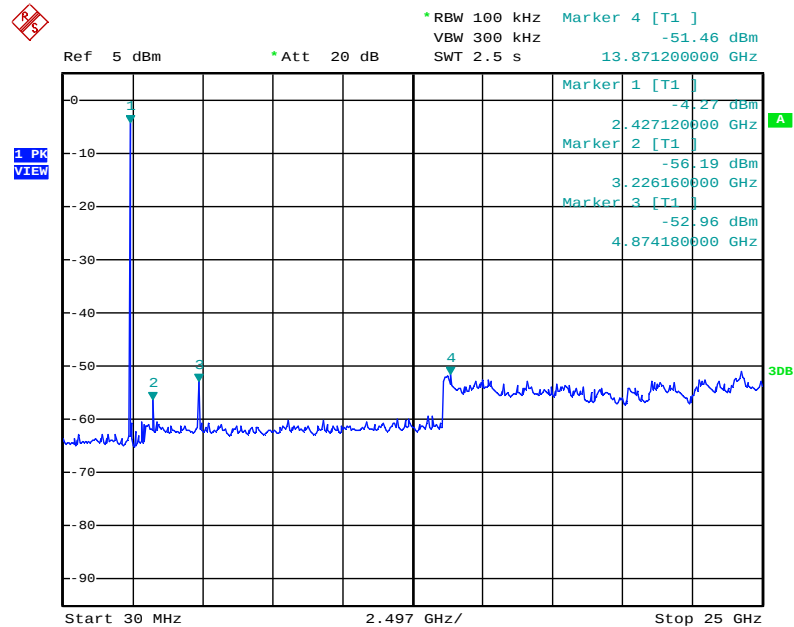


Date: 2.APR.2011 04:52:38



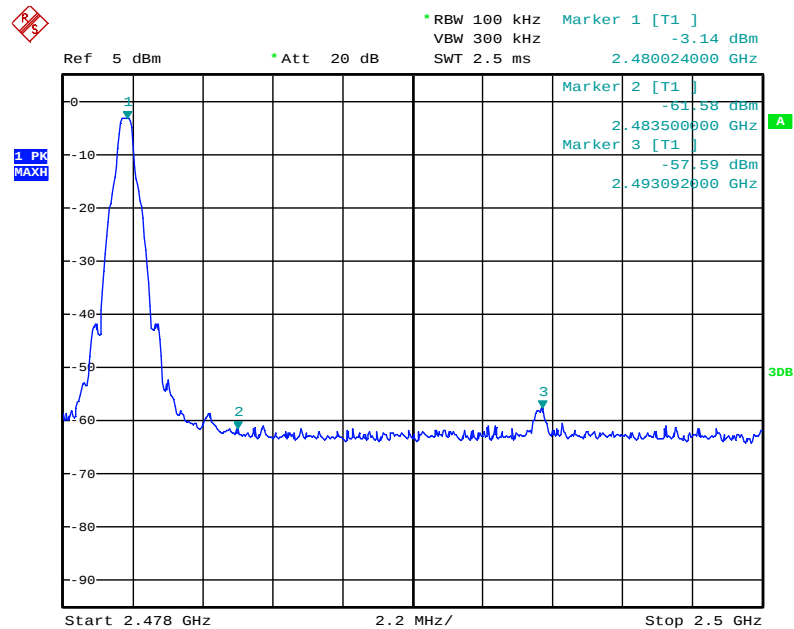
Date: 2.APR.2011 03:47:01

Middle Channel

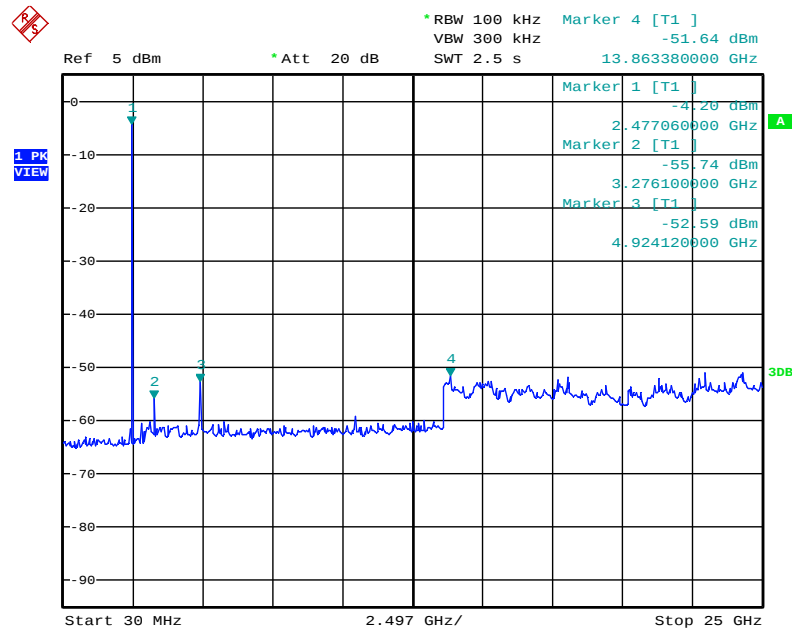


Date: 2.APR.2011 03:48:45

High Channel



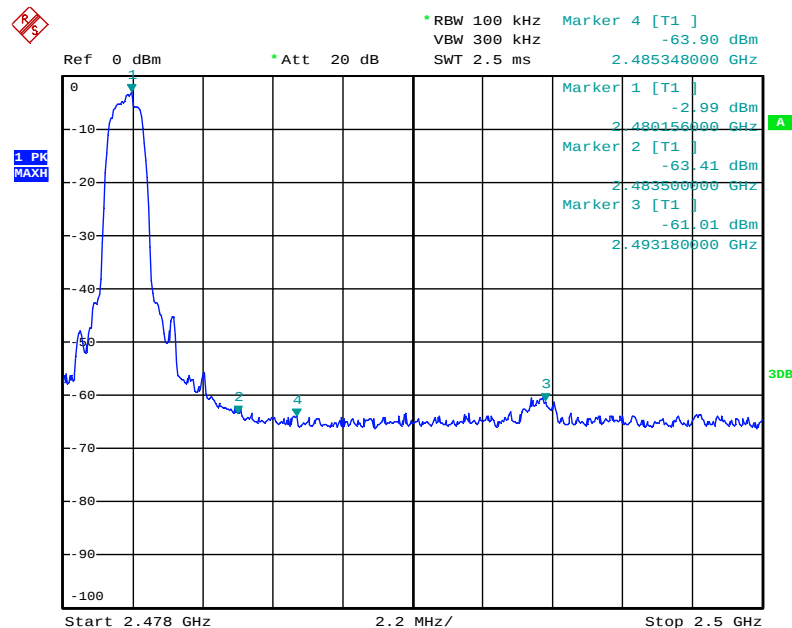
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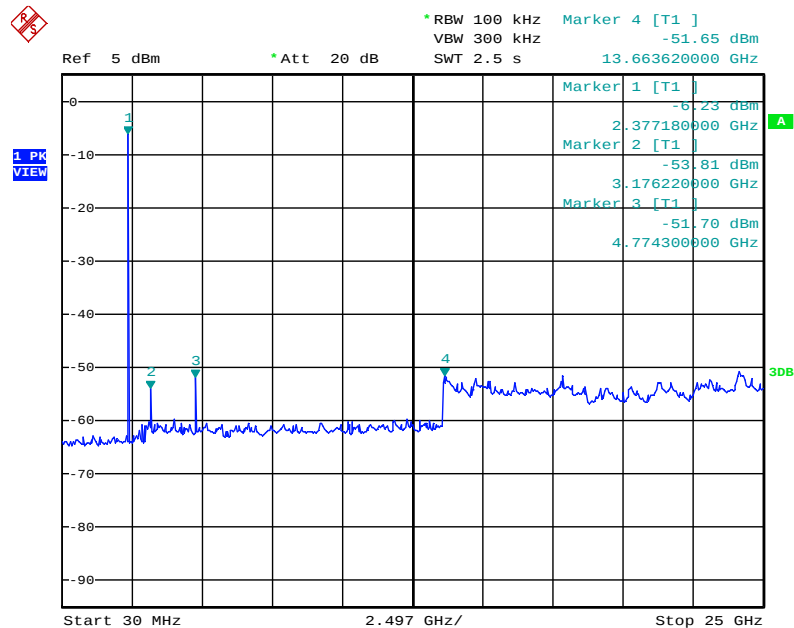
Date: 2.APR.2011 04:01:39

Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel

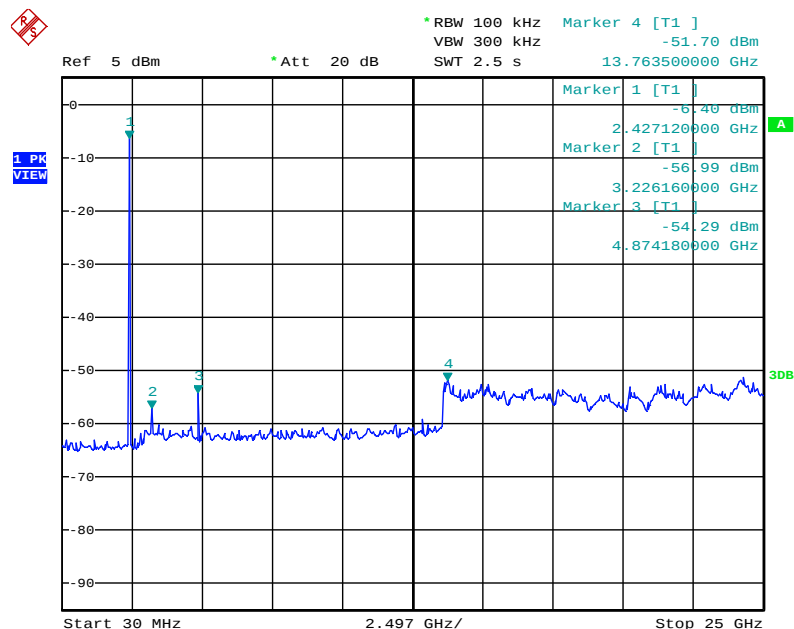


Date: 5.APR.2011 23:51:36



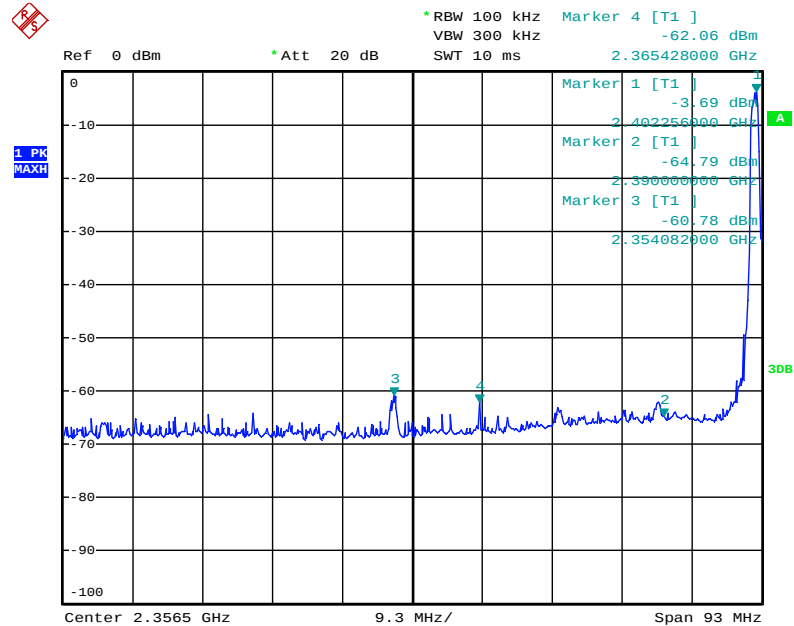
Date: 2.APR.2011 03:56:05

Middle channel

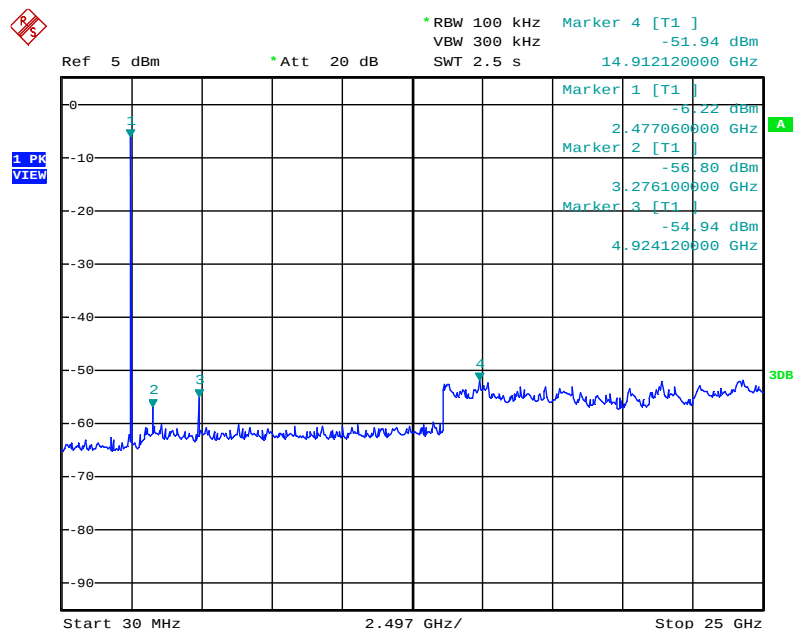


Date: 2.APR.2011 03:57:06

High Channel



Date: 5.APR.2011 23:49:44



Date: 2.APR.2011 03:58:01

5.1.6 Spurious Emission

RESULT:**Passed**

Date of testing	:	2011-04-18 to 2011-04-25
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	:	23°C
Relative humidity	:	51%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

Remark: Testing was carried out within frequency range 9kHz to the tenth harmonics. The worst case in frequency range 9kHz to 30MHz was found on middle channel. The worst case was found on 8DPSK modulation mode. The Radiated Emissions testing was performed in the X, Y and Z axis mode. The X Axis mode is the worst-case recorded in this test report.

5.1.7 Frequency Separation

RESULT:
Passed

Date of testing : 2011-04-05
 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

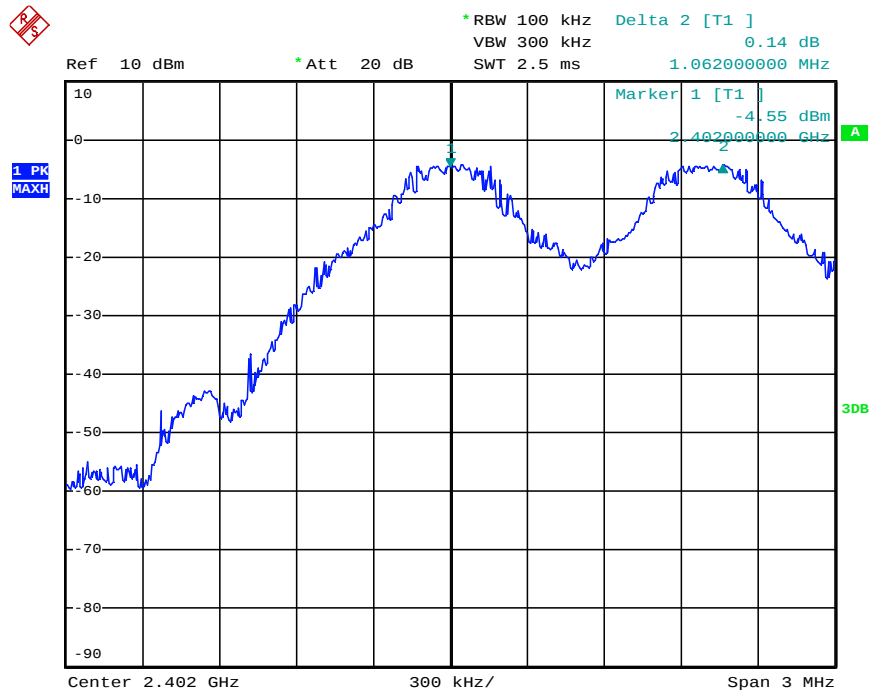
Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 22°C
 Relative humidity : 52%
 Atmospheric pressure : 101 kPa

Table 11: Test result of Frequency Separation

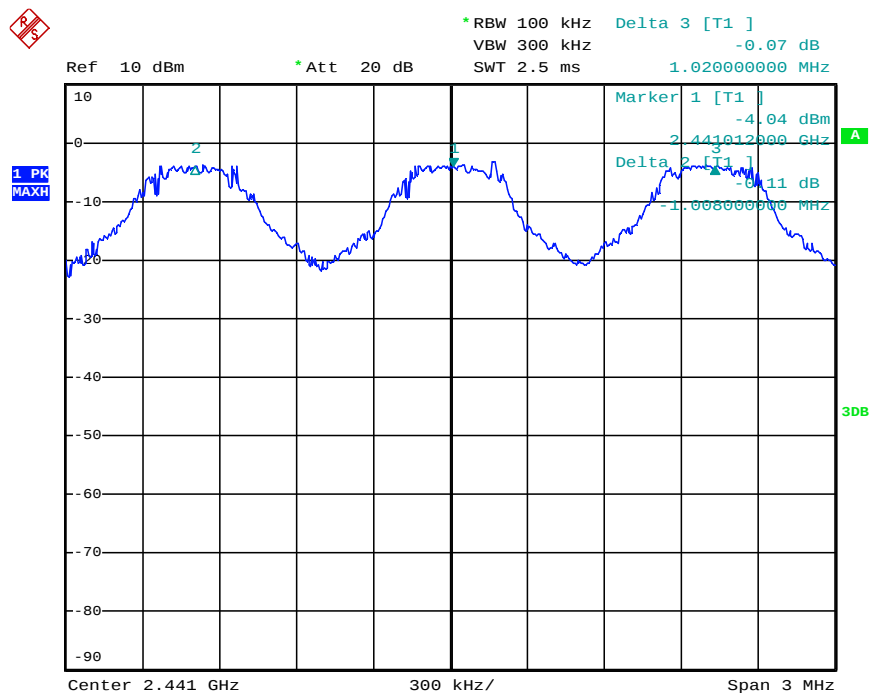
Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq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

Test Plot of Frequency Separation

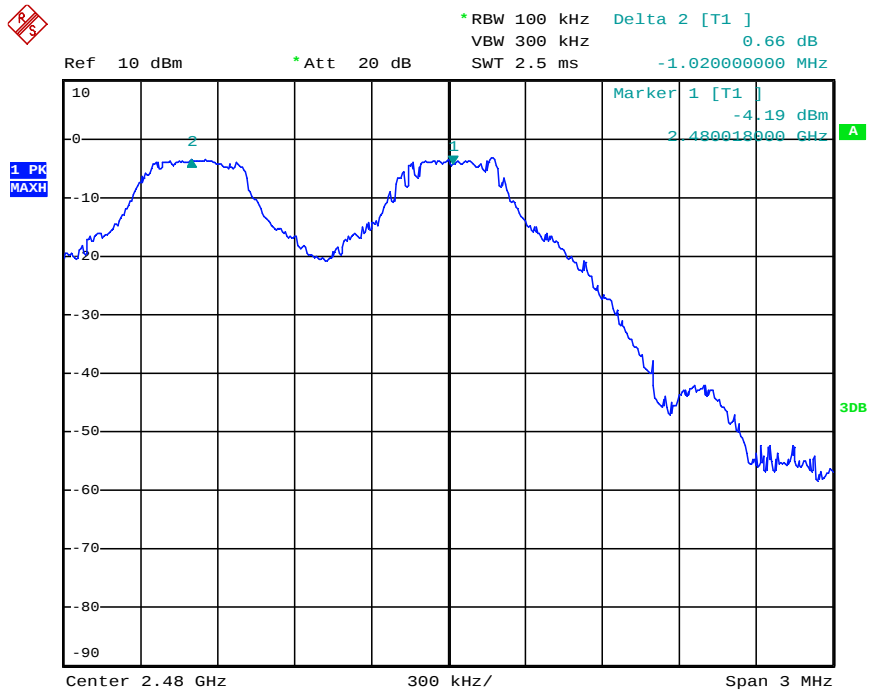
Low Channel



Middle Channel



High Channel



2.480018000 GHz

5.1.8 Number of hopping frequency

RESULT:**Passed**

Date of testing : 2011-04-05
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

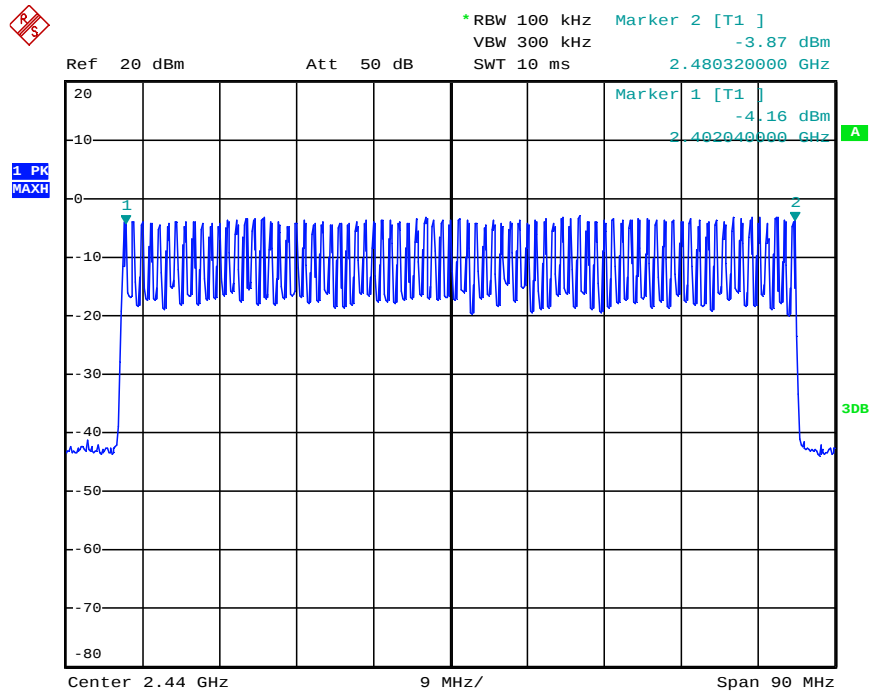
Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 22°C
Relative humidity : 52%
Atmospheric pressure : 101 kPa

Table 12: Test result of Number of hopping frequency

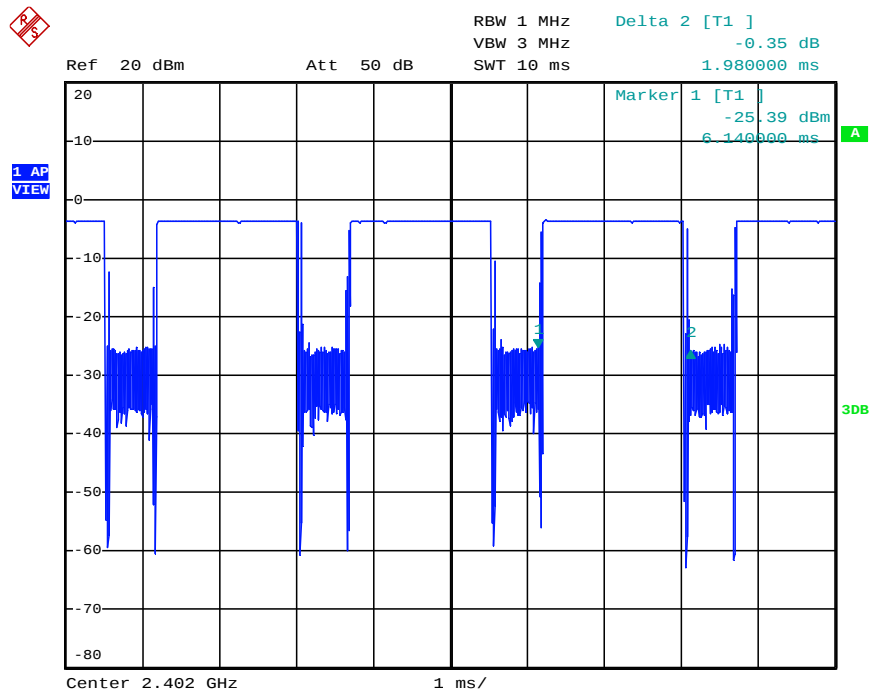
Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
<u>2400</u> to <u>2483.5</u> MHz	79	≥ 15	Pass

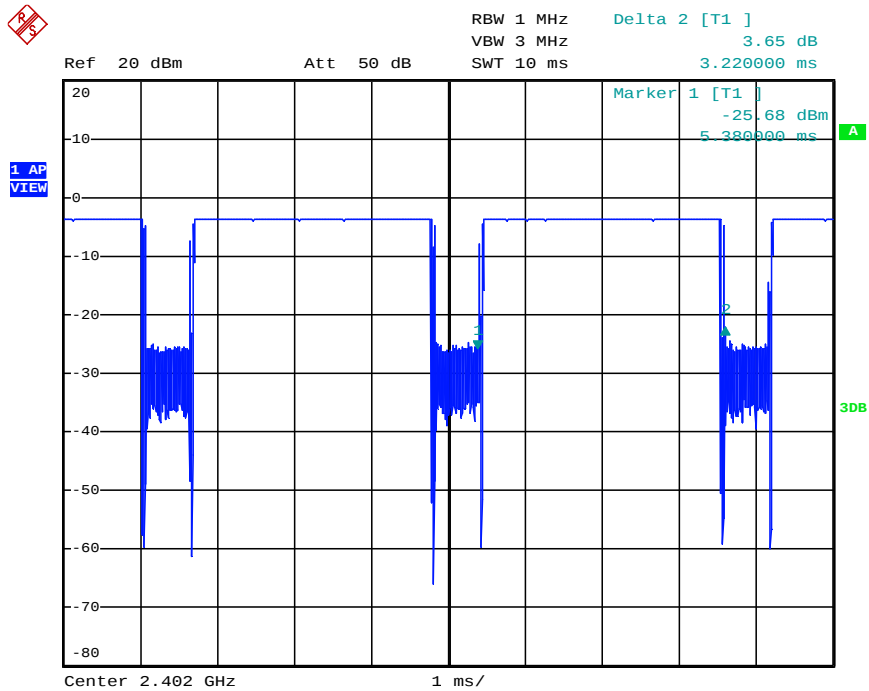
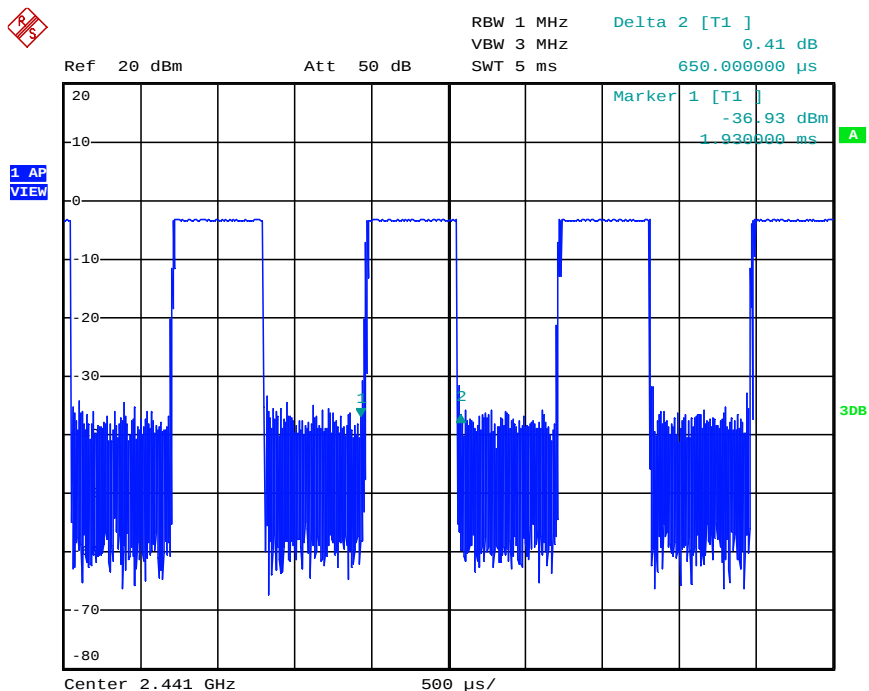
Test Plot of Number of hopping frequencies



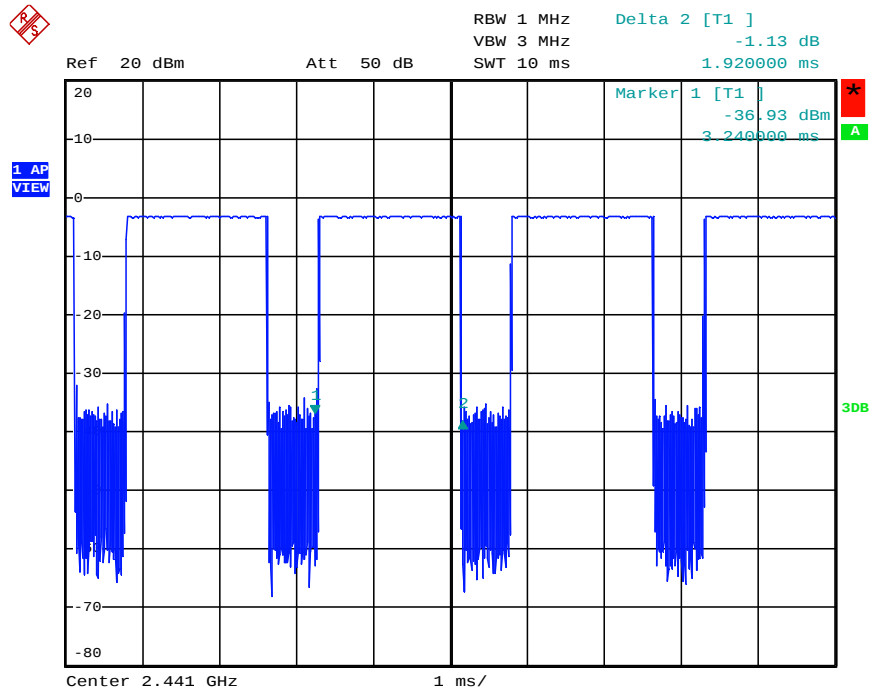
2.480320000 GHz

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

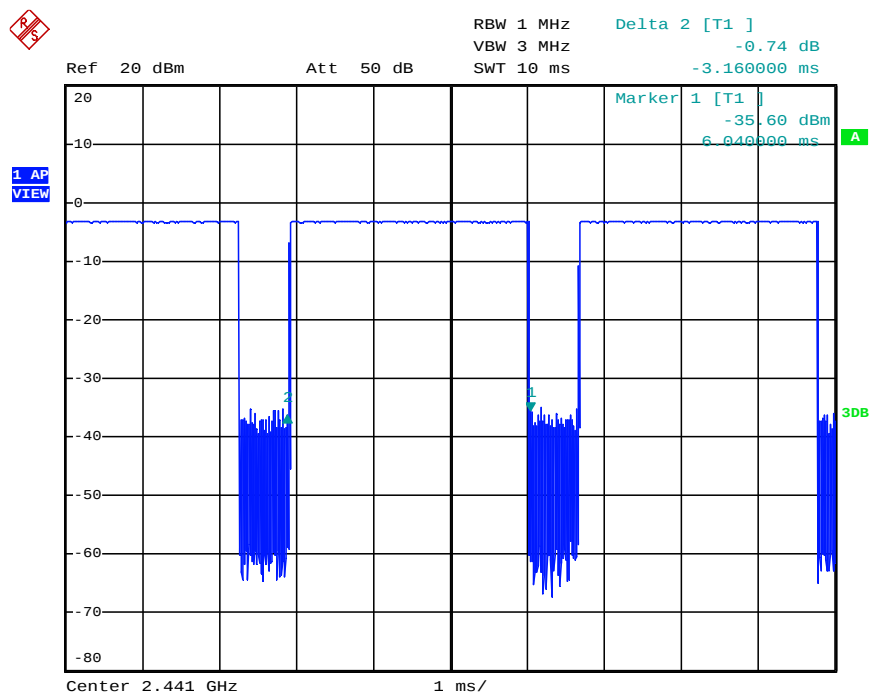


Low Channel- DH5

Middle Channel- DH1


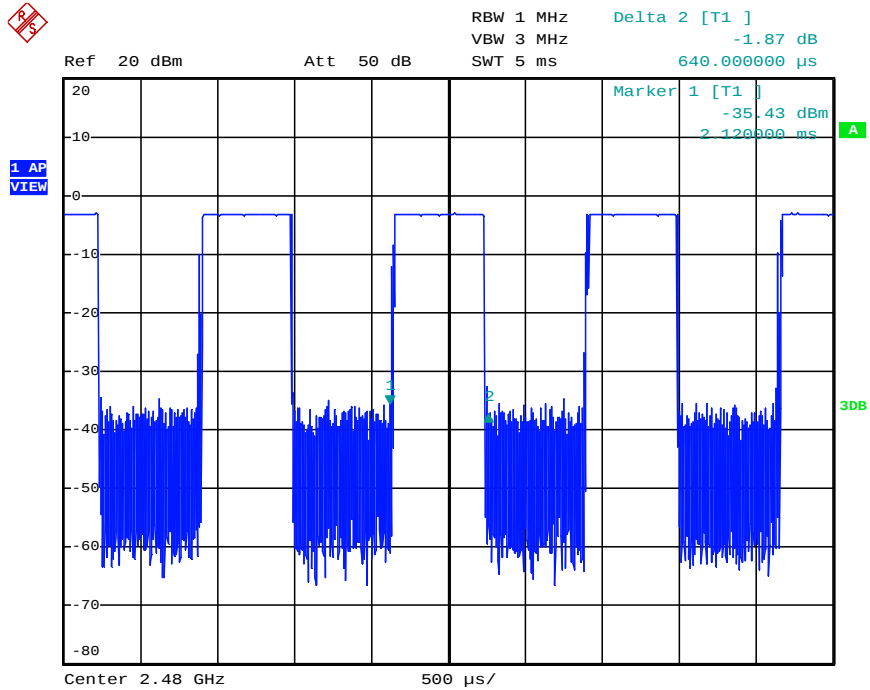
Middle Channel- DH3



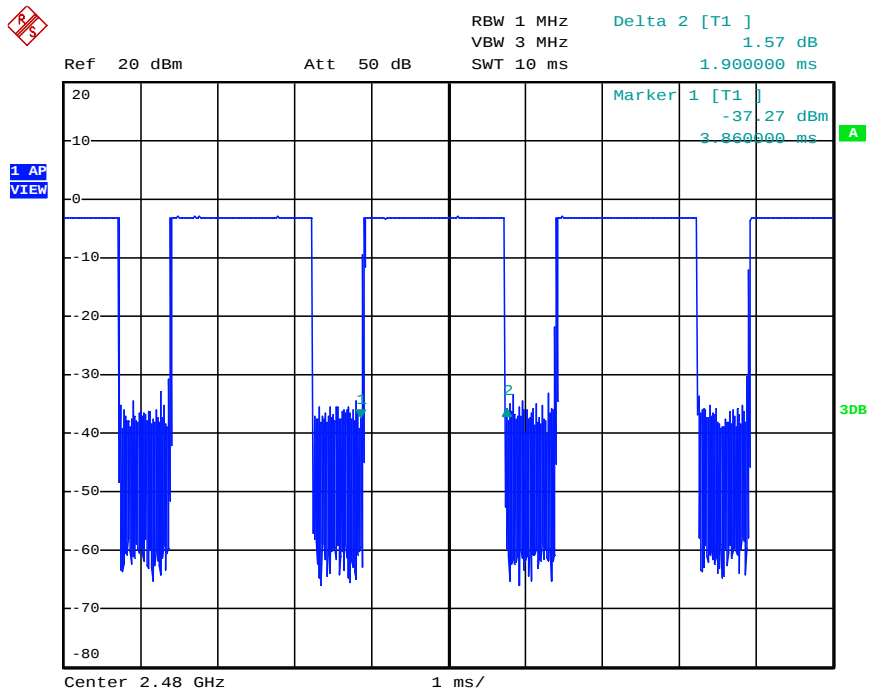
Middle Channel- DH5



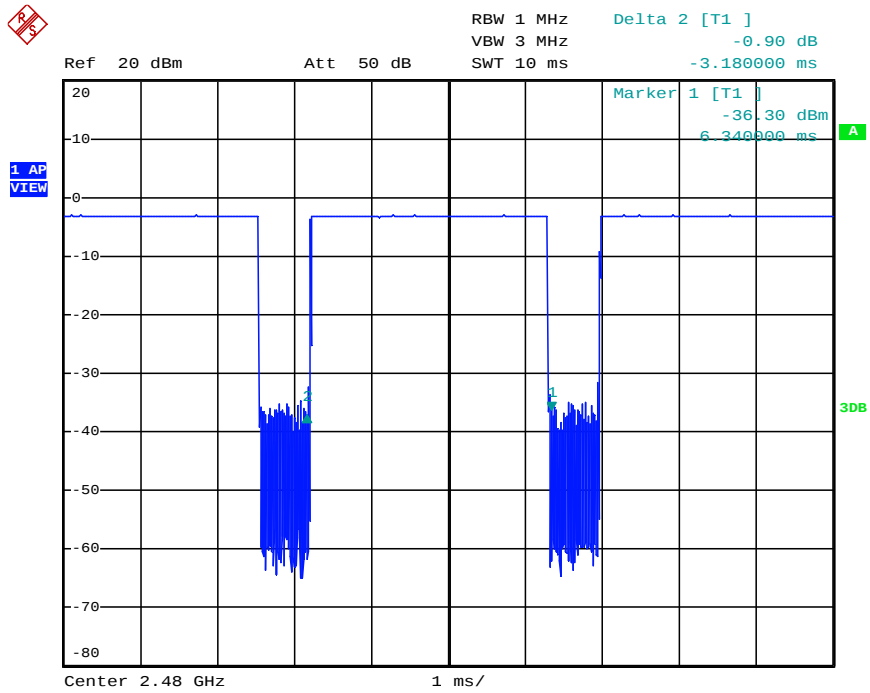
High Channel- DH1



High Channel- DH3



High Channel- DH5



0.1 0.155 0.014 0.0145 50

5.1.10 Conducted emissions

RESULT:**Passed**

Date of testing	:	2011-03-30
Test standard	:	FCC Part 15.107(a), FCC Part 15.207(a)
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a), FCC Part 15.207(a)
Kind of test site	:	Shield room

Test setup

Input Voltage (to AC input of Adapter)	:	AC 120V, 60Hz
Operation Mode	:	D
Earthing	:	Not connected
Ambient temperature	:	20°C
Relative humidity	:	50%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

5.1.11 Radiated emissions

RESULT:**Passed**

Date of testing	:	2011-04-24
Test standard	:	FCC Part 15.109 RSS-210 Clause 2.6
Basic standard	:	ANSI C63.4: 2003 FCC Part 15.109(a) RSS-210 Table 2
Kind of test site	:	3m Semi-Anechoic Chamber

Test Setup

Input Voltage (to AC input of Adapter)	:	AC 120V, 60Hz
Operation Mode	:	D
Earthing	:	Not connected
Ambient temperature	:	22°C
Relative humidity	:	50%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1. 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.

6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:**Passed**

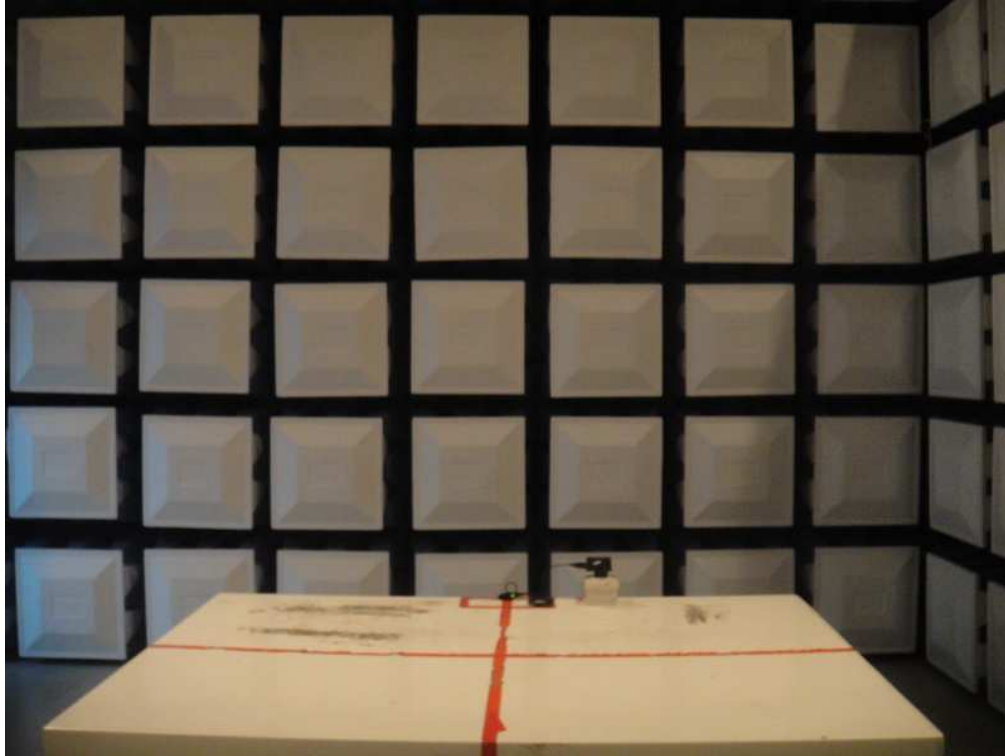
Test standard : RSS-102 Issue 4
FCC KDB Publication 447498

The maximum peak output power of the transmitter is 0.001135mW (0.55dBm) 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. $0.001135\text{mW} < 25(=60/2.4)\text{mW}$, 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

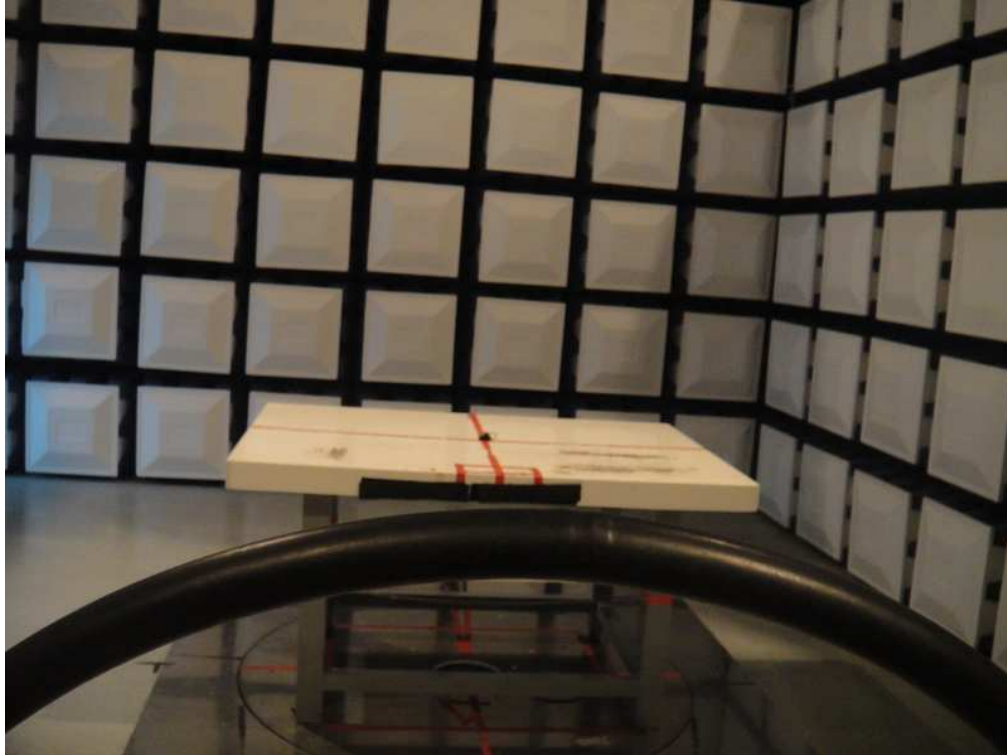
Photograph 1: Set-up for Radiated Emissions



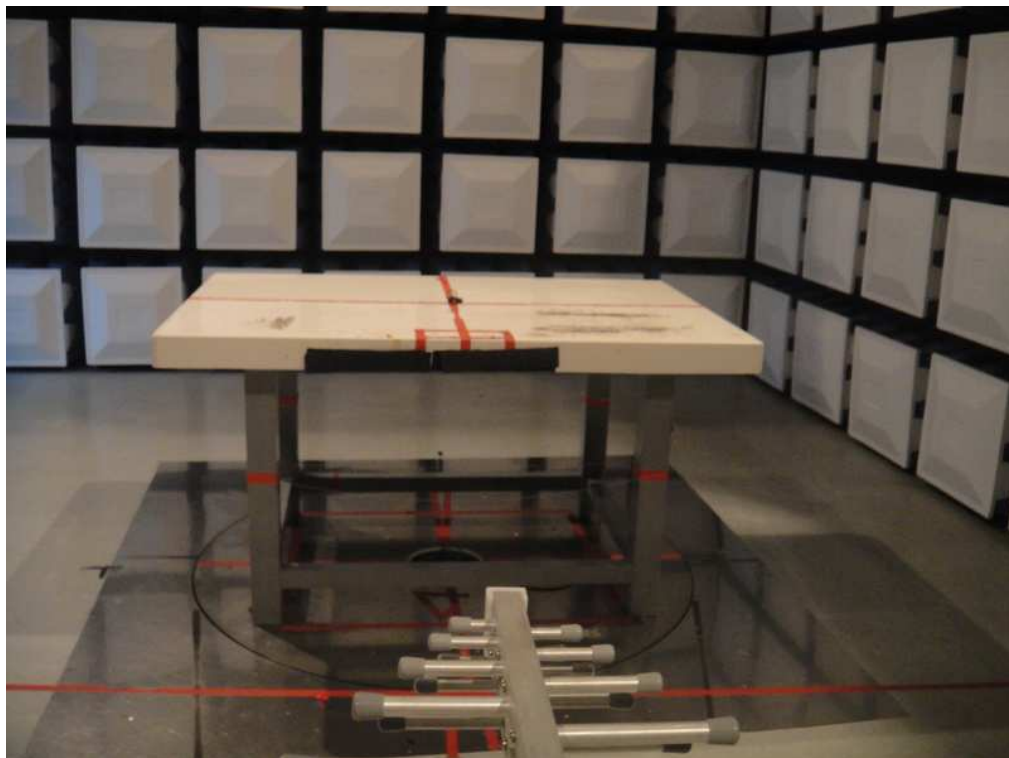
Photograph 2: Set-up for Conducted Emissions



Photograph 3: Set-up for Spurious Emissions (9kHz-30MHz)



Photograph 4: Set-up for Spurious Emissions (30MHz-1GHz)



Photograph 5: Set-up for Spurious Emissions (1GHz-26GHz)



8. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Rating of EUT	7
Table 3: Technical Specification of EUT	7
Table 4: Frequency hopping information	8
Table 5: Test result of Peak Output Power, GFSK modulation	14
Table 6: Test result of Peak Output Power, 8DPSK modulation	14
Table 7: Test result of 20dB Bandwidth, GFSK modulation	18
Table 8: Test result of 20dB Bandwidth, 8DPSK modulation	18
Table 9: Test result of 99% Bandwidth, GFSK modulation	22
Table 10: Test result of 99% Bandwidth, 8DPSK modulation	22
Table 11: Test result of Frequency Separation	33
Table 12: Test result of Number of hopping frequency	36
Table 13: Test result of Time of Occupancy	38

9. List of Photographs

Photograph 1: Set-up for Radiated Emissions	47
Photograph 2: Set-up for Conducted Emissions	47
Photograph 3: Set-up for Spurious Emissions (9kHz-30MHz)	48
Photograph 4: Set-up for Spurious Emissions (30MHz-1GHz)	48
Photograph 5: Set-up for Spurious Emissions (1GHz-26GHz)	49

Test Plot of Spurious emission of A.2 – Horizontal (9kHz – 30MHz)



Neutron
Engineering Inc.

FCC 15.209 9K-30MHz

Test Data

3米測試距離量測表

Project No. :	BT headphone	
Produce Name:		
Model/Type No. :		
Test Date:		
Temperature :	26	°C
Relative Humidity:	58	%

frequency (MHz)	Read level dBuV/m	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)
0.0139	34.34	24.3	58.64	124.7439288	-66.1039
0.258	37.45	20.3808	57.8308	99.37183071	-41.541
0.9752	21.34	19.6992	41.0392	67.82235098	-26.7832
0.1576	19.43	20.5848	40.0148	103.6531006	-63.6383
0.4926	26.4	19.81776	46.21776	73.75433668	-27.5366
0.5311	27.54	19.89952	47.43952	73.10069881	-25.6612

Test Plot of Spurious emission of A.2 – Vertical (9kHz – 30MHz)



Neutron
Engineering Inc.

FCC 15.209 9K-30MHz

Test Data

3米測試距離量測表

Project No. :	Bt headphone	
Produce Name:		
Model/Type No. :		
Test Date:		
Temperature :	26	°C
Relative Humidity:	58	%

frequency (MHz)	level dBuV/m	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)
0.0146	34.65	24.3	58.95	124.3171677	-65.3672
0.257	36.76	20.3832	57.1432	99.40556237	-42.2624
0.9783	27.76	19.6868	47.4468	67.79478376	-20.348
0.1646	16.76	20.5708	37.3308	103.2756282	-65.9448
0.4876	25.63	19.82976	45.45976	93.8429509	-48.3832
0.5369	24.12	19.91808	44.03808	73.00635675	-28.9683

Test Plot of Spurious emission of A.1 – Horizontal (30MHz – 1GHz)



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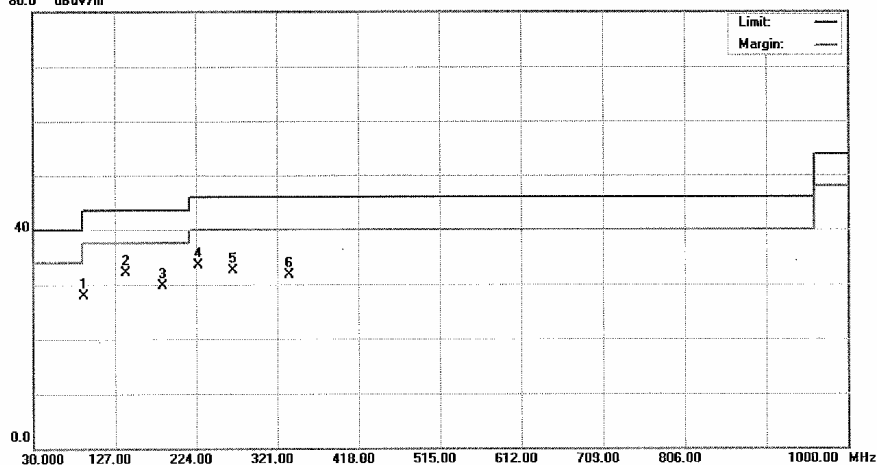
Radiated Emission Measurement

File :BTNEXT-fccp
80.0 dBuV/m

Data :#22

Date: 2011-4-25

Time: 20:06:14



Site CB08

Limit: FCC Class B 3M Radiation

EUT: Bluetooth

M/N.

Mode: TX

Note: 2402MHZ

Polarization: **Horizontal**

Temperature: 23

Power: DC 3V

Humidity: 51 %

Distance: 3m

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	89.7600	20.24	7.71	27.95	43.50	-15.55	peak	
2 *	139.7200	20.39	11.70	32.09	43.50	-11.41	peak	
3	183.7600	18.10	11.70	29.80	43.50	-13.70	peak	
4	226.2400	21.77	11.82	33.59	46.00	-12.41	peak	
5	267.8400	19.29	13.17	32.46	46.00	-13.54	peak	
6	335.4900	17.51	14.23	31.74	46.00	-14.26	peak	

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

(Reference Only)

File :BTNEXT-fccp>Data :#22

Page: 1

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Test Plot of Spurious emission of A.1 – Vertical (30MHz – 1GHz)



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Radiated Emission Measurement

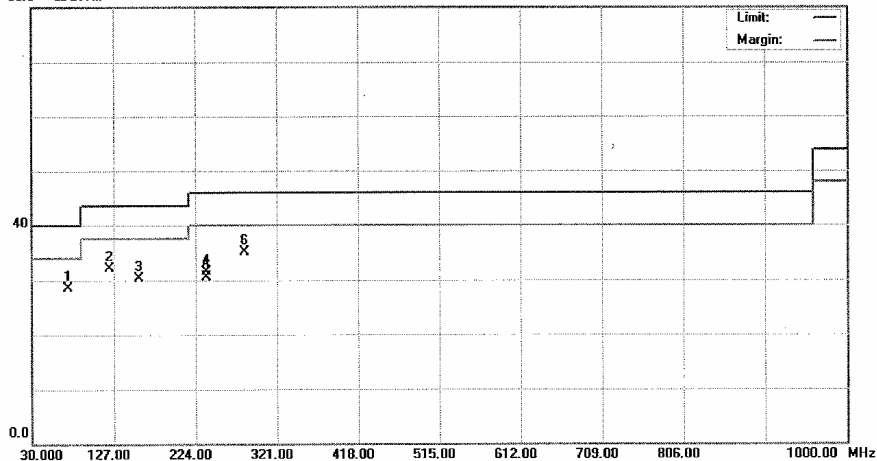
File :BTNEXT-fccp

Data :#21

Date: 2011-4-25

Time: 20:03:40

80.0 dBuV/m



Site CB08

Polarization: **Vertical**

Temperature: 23

Limit: FCC Class B 3M Radiation

Power: DC 3V

Humidity: 51 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2402MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		71.7200	20.00	8.56	28.56	40.00	-11.44	peak	
2		121.6800	20.59	11.43	32.02	43.50	-11.48	peak	
3		156.3900	18.80	11.56	30.36	43.50	-13.14	peak	
4		236.7600	19.46	11.97	31.43	46.00	-14.57	peak	
5		237.4900	18.54	11.97	30.51	46.00	-15.49	peak	
6	*	282.7500	21.50	13.57	35.07	46.00	-10.93	peak	

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

(Reference Only)

File :BTNEXT-fccp>Data :#21

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Test Plot of Spurious emission of A.1 – Horizontal (1GHz – 26GHz)



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Radiated Emission Measurement

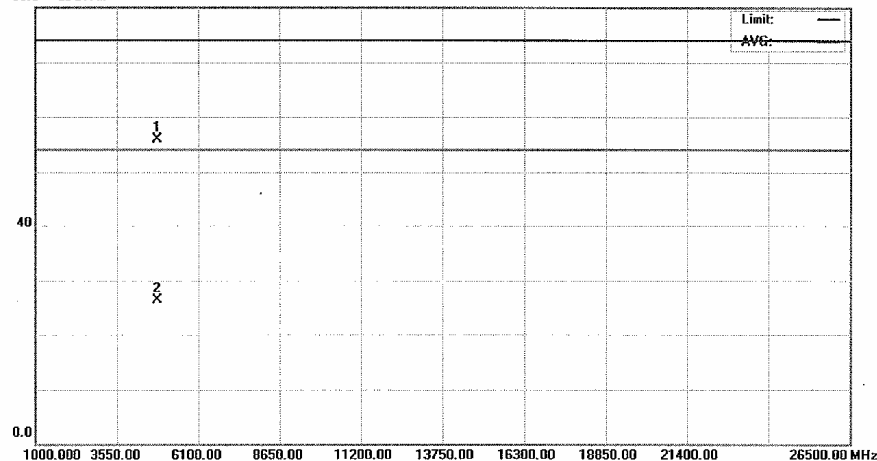
File :BTNEXT

Data :#11

Date: 2011-4-18

Time: 21:17:20

90.0 dBuV/m



Site DG-CB03

Polarization: **Horizontal**

Temperature: 20

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 55 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2402MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4803.620	49.79	6.13	55.92	74.00	-18.08	peak	
2		4804.010	20.08	6.13	26.21	54.00	-27.79	AVG	

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

<Reference Only

File :BTNEXT\Data :#11

Page: 1

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Test Plot of Spurious emission of A.1 – Vertical (1GHz – 26GHz)



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Radiated Emission Measurement

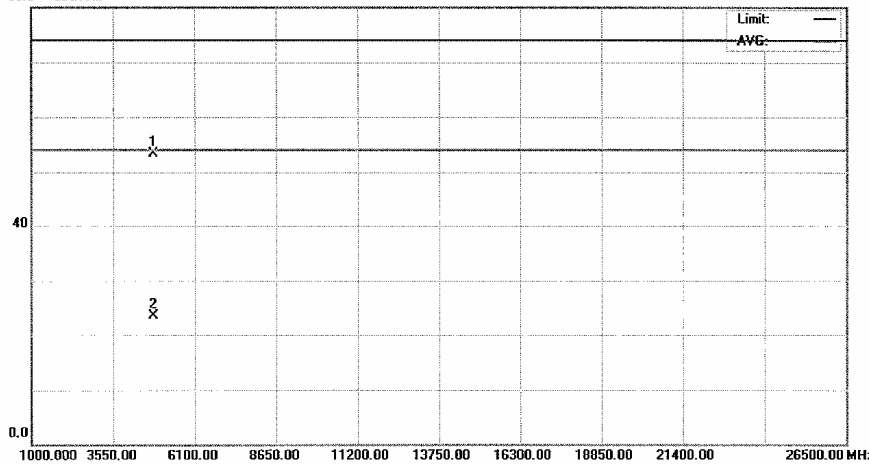
File : BTNEXT

Data : #12

Date: 2011-4-18

Time: 21:18:41

80.0 dBuV/m



Site DG-CB03

Limit: FCC_RF_1G-40G_(Peak)

EUT: Bluetooth

M/N:

Mode: TX

Note: 2402MHZ

Polarization: **Vertical**

Temperature: 20

Power: DC 3.7V

Humidity: 55 %

Distance: 3m

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4803.670	47.11	6.13	53.24	74.00	-20.76	peak	
2		4804.010	17.40	6.13	23.53	54.00	-30.47	AVG	

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

(Reference Only)

File : BTNEXT\Data : #12

Page: 1

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Test Plot of Spurious emission of A.2 – Horizontal (30MHz – 1GHz)



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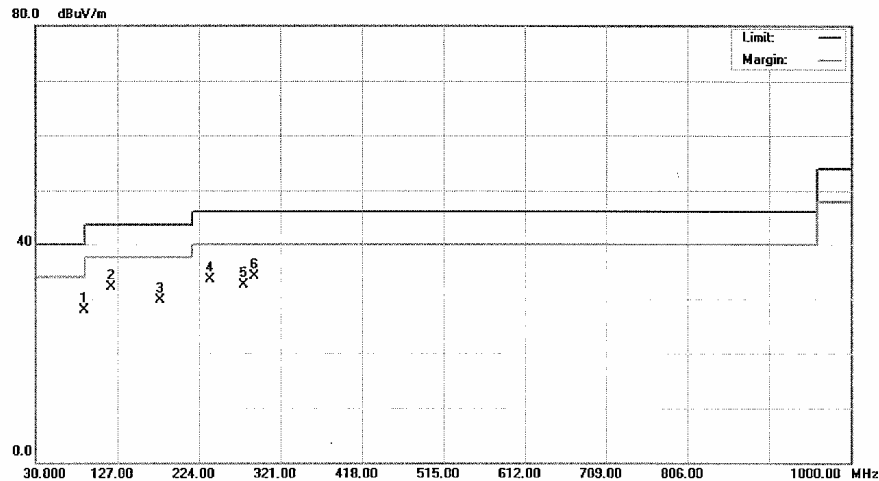
Radiated Emission Measurement

File :BTNEXT-fccp

Data :#24

Date: 2011-4-25

Time: 20:17:19



Site DG-CB03

Polarization: **Horizontal**

Temperature: 23

Limit: FCC Class B 3M Radiation

Power: DC 3V

Humidity: 51 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2441MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		86.5600	20.11	7.84	27.95	40.00	-12.05	peak	
2	*	119.3400	20.72	11.37	32.09	43.50	-11.41	peak	
3		176.8900	18.13	11.67	29.80	43.50	-13.70	peak	
4		237.5700	21.61	11.98	33.59	46.00	-12.41	peak	
5		276.9400	19.09	13.37	32.46	46.00	-13.54	peak	
6		289.3100	20.22	13.96	34.18	46.00	-11.82	peak	

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

(Reference Only)

File :BTNEXT-fccp>Data :#24

Page: 1

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Test Plot of Spurious emission of A.2 – Vertical (30MHz – 1GHz)



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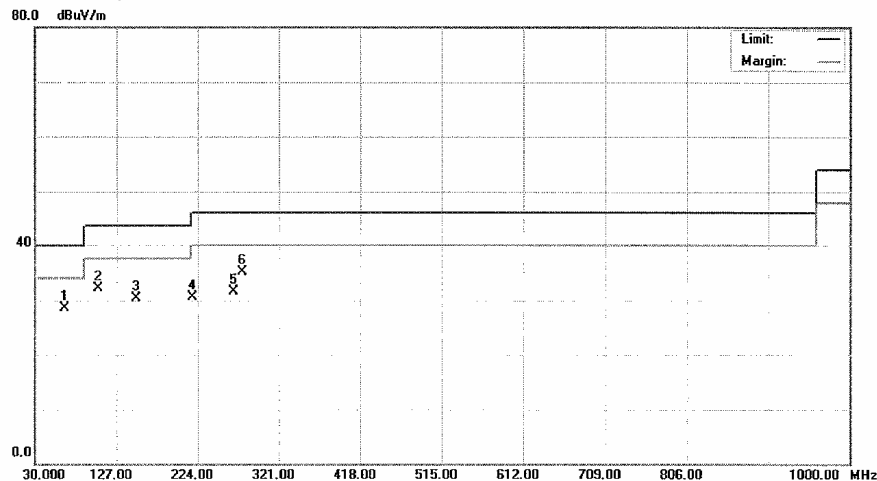
Radiated Emission Measurement

File: BTNEXT-fccp

Data: #23

Date: 2011-4-25

Time: 20:08:15



Site DG-CB03

Limit: FCC Class B 3M Radiation

EUT: Bluetooth

M/N:

Mode: TX

Note: 2441MHZ

Polarization: **Vertical**

Power: DC 3V

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	65.2400	19.47	9.09	28.56	40.00	-11.44	peak	
2	105.4700	22.12	9.90	32.02	43.50	-11.48	peak	
3	149.7600	18.86	11.50	30.36	43.50	-13.14	peak	
4	217.8200	18.83	11.68	30.51	46.00	-15.49	peak	
5	266.8900	18.32	13.11	31.43	46.00	-14.57	peak	
6 *	276.7000	21.70	13.37	35.07	46.00	-10.93	peak	

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

<Reference Only

File :BTNEXT-fccp\Data :#23

Page: 1

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Test Plot of Spurious emission of A.2 –Horizontal (1GHz – 26GHz)



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Radiated Emission Measurement

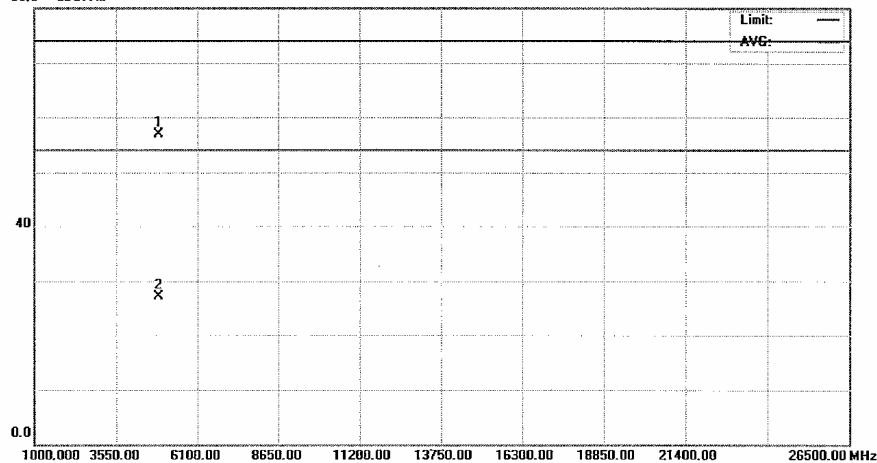
File :BTNEXT

Data :#10

Date: 2011-4-18

Time: 21:16:26

80.0 dBuV/m



Site DG-CB03

Polarization: *Horizontal*

Temperature: 20

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 55 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2441MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4881.830	50.35	6.51	56.86	74.00	-17.14	peak	
2		4882.010	20.64	6.52	27.16	54.00	-26.84	AVG	

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

<Reference Only

File :BTNEXT\Data :#10

Page: 1

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Test Plot of Spurious emission of A.2 –Vertical (1GHz – 26GHz)



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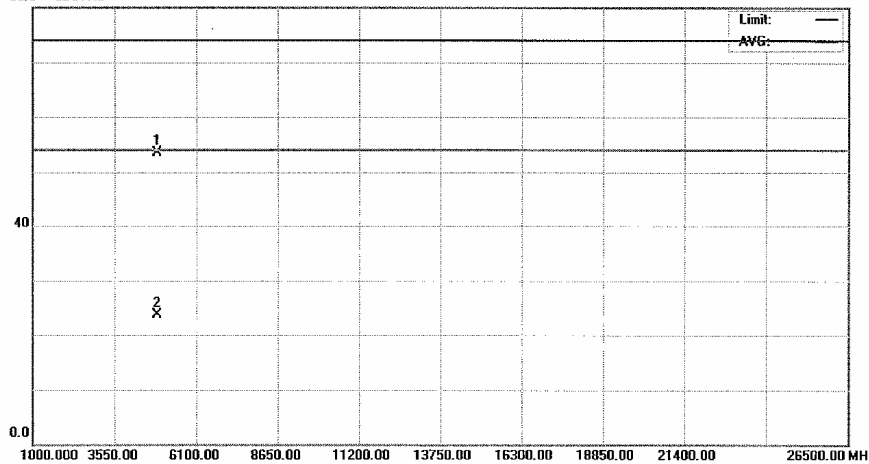
Radiated Emission Measurement

File :BTNEXT
80.0 dBuV/m

Data :#9

Date: 2011-4-18

Time: 21:14:25



Site DG-CB03

Limit: FCC_RF_1G-40G_(Peak)

EUT: Bluetooth

M/N:

Mode: TX

Note: 2441MHZ

Polarization: **Vertical**

Power: DC 3.7V

Distance: 3m

Temperature: 20

Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4881.910	46.90	6.51	53.41	74.00	-20.59	peak	
2		4881.990	17.19	6.52	23.71	54.00	-30.29	AVG	

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

(Reference Only)

File :BTNEXT\Data :#9

Page: 1

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Test Plot of Spurious emission of A.3 – Horizontal (30MHz – 1GHz)



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Tel: (0769)-8318-3000 Fax: (0769)-8319-6000 Post Code: 523792
<http://www.btl.org.cn>

Radiated Emission Measurement

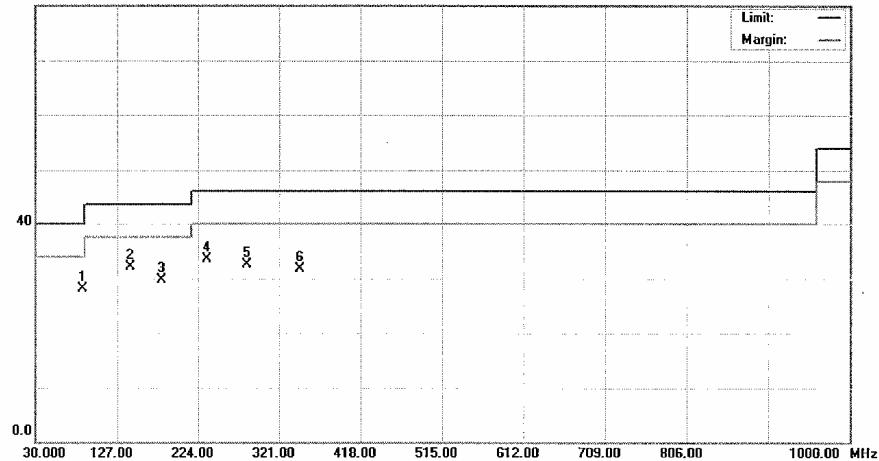
File :BTNEXT-fccp

Data :#26

Date: 2011-4-25

Time: 20:34:27

80.0 dBuV/m



Site DG-CB03

Polarization: **Horizontal**

Temperature: 23

Limit: FCC Class B 3M Radiation

Power: DC 3V

Humidity: 51 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2480MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		86.2600	20.17	7.85	28.02	40.00	-11.98	peak	
2	*	142.3400	20.44	11.65	32.09	43.50	-11.41	peak	
3		179.4600	18.11	11.69	29.80	43.50	-13.70	peak	
4		233.7500	21.65	11.94	33.59	46.00	-12.41	peak	
5		282.3700	18.92	13.54	32.46	46.00	-13.54	peak	
6		345.7900	17.39	14.35	31.74	46.00	-14.26	peak	

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

(Reference Only)

File :BTNEXT-fccp\Data :#26

Page: 1

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Test Plot of Spurious emission of A.3 – Vertical (30MHz – 1GHz)



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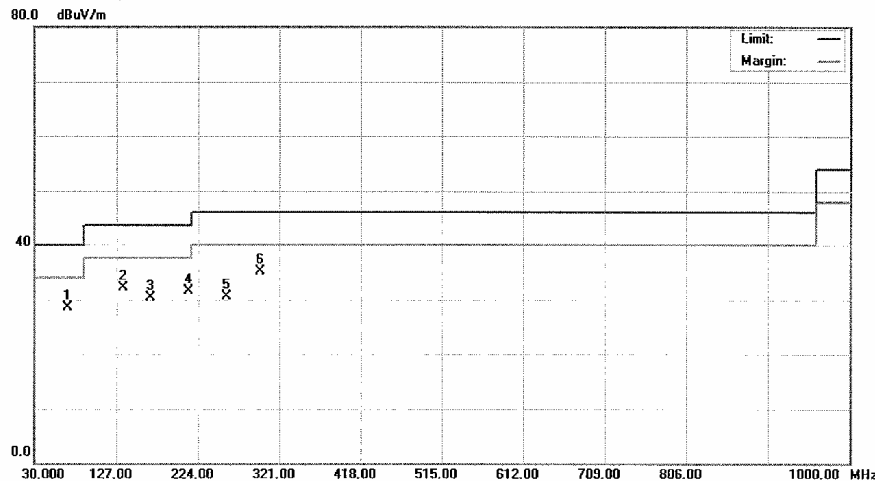
Radiated Emission Measurement

File :BTNEXT-fccp

Data :#25

Date: 2011-4-25

Time: 20:24:47



Site DG-CB03

Polarization: **Vertical**

Temperature: 23

Limit: FCC Class B 3M Radiation

Power: DC 3V

Humidity: 51 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2480MHZ

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	68.4800	19.67	8.89	28.56	40.00	-11.44	peak	
2	134.4500	20.38	11.64	32.02	43.50	-11.48	peak	
3	167.4800	18.76	11.60	30.36	43.50	-13.14	peak	
4	212.5000	19.80	11.63	31.43	43.50	-12.07	peak	
5	257.6700	17.93	12.58	30.51	46.00	-15.49	peak	
6 *	296.7570	21.21	13.86	35.07	46.00	-10.93	peak	

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

<Reference Only

File :BTNEXT-fccp\Data :#25

Page: 1

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Test Plot of Spurious emission of A.3 – Horizontal (1GHz – 26GHz)



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Radiated Emission Measurement

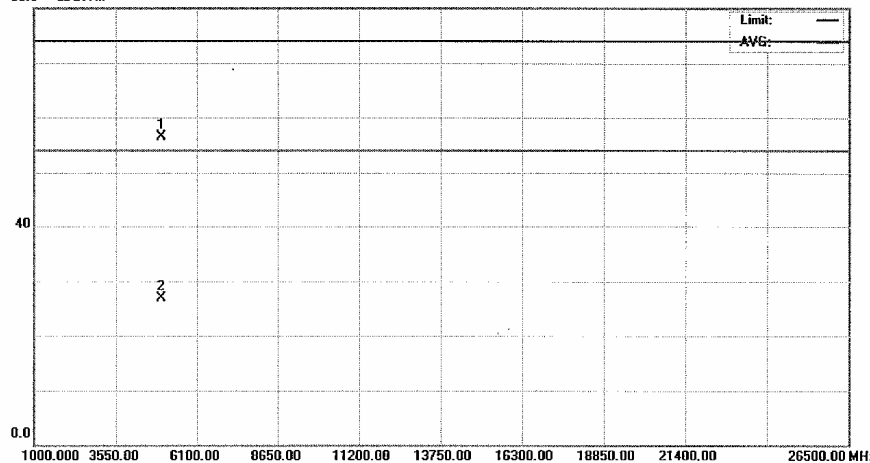
File :BTNEXT

Data :#7

Date: 2011-4-18

Time: 21:12:10

80.0 dBuV/m



Site DG-CB03

Polarization: **Horizontal**

Temperature: 20

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 55 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2480MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4959.700	49.65	6.88	56.53	74.00	-17.47	peak	
2		4960.010	19.94	6.89	26.83	54.00	-27.17	AVG	

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

(Reference Only)

File :BTNEXTData :#7

Page: 1

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Test Plot of Spurious emission of A.3 – Vertical (1GHz – 26GHz)



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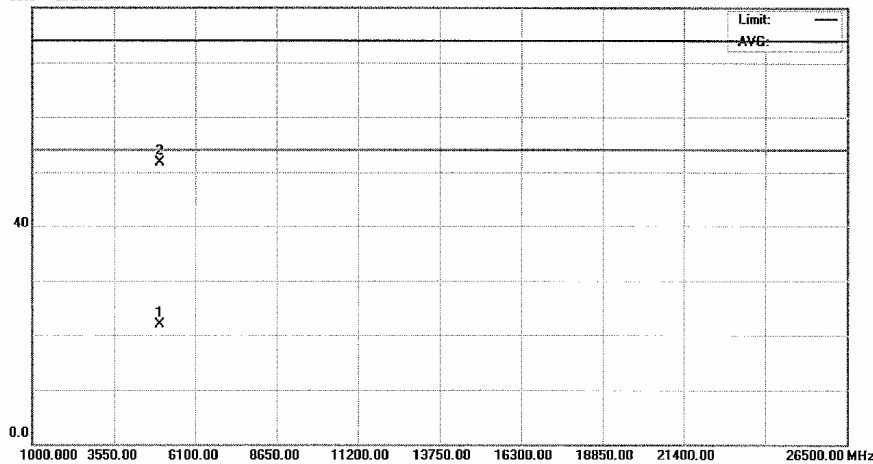
Radiated Emission Measurement

File :BTNEXT
80.0 dBuV/m

Data :#8

Date: 2011-4-18

Time: 21:12:42



Site DG-CB03

Limit: FCC_RF_1G-40G_(Peak)

EUT: Bluetooth

M/N:

Mode: TX

Note: 2480MHZ

Polarization: **Vertical**

Power: DC 3.7V

Distance: 3m

Temperature: 20

Humidity: 55 %

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4960.010	15.02	6.89	21.91	54.00	-32.09	AVG	
2 *	4960.570	44.73	6.89	51.62	74.00	-22.38	peak	

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

(Reference Only)

File :BTNEXT\Data :#8

Page: 1

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Test Plot of Spurious emission of B – Horizontal (30MHz – 1GHz)



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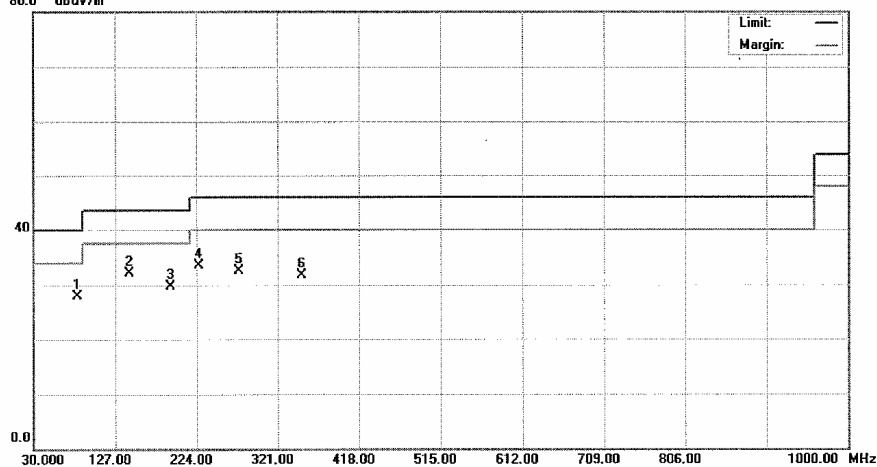
Radiated Emission Measurement

File :BTNEXT-fccp
80.0 dBuV/m

Data :#20

Date: 2011-4-25

Time: 20:06:14



Site DG-CB03

Limit: FCC Class B 3M Radiation

EUT: Bluetooth

M/N:

Mode: RX

Note: 2402MHZ

Polarization: **Horizontal**

Temperature: 23

Power: DC 3V

Humidity: 51 %

Distance: 3m

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		81.4300	19.91	8.04	27.95	40.00	-12.05	peak	
2	*	143.6700	20.46	11.63	32.09	43.50	-11.41	peak	
3		192.5600	18.07	11.73	29.80	43.50	-13.70	peak	
4		226.2400	21.77	11.82	33.59	46.00	-12.41	peak	
5		273.6100	19.12	13.34	32.46	46.00	-13.54	peak	
6		349.6700	17.34	14.40	31.74	46.00	-14.26	peak	

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

(Reference Only)

File :BTNEXT-fccp\Data :#20

Page: 1

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Test Plot of Spurious emission of B – Vertical (30MHz – 1GHz)



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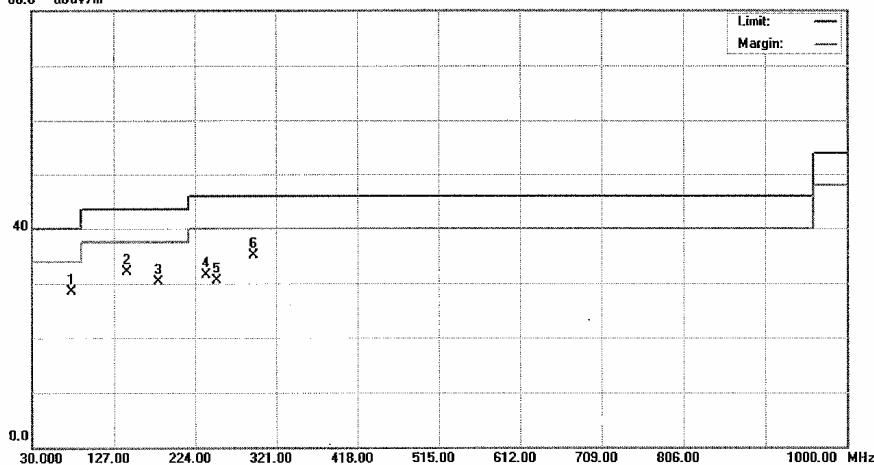
Radiated Emission Measurement

File :BTNEXT-fccp
80.0 dBuV/m

Data :#19

Date: 2011-4-25

Time: 20:03:40



Site DG-CB03
Limit: FCC Class B 3M Radiation
EUT: Bluetooth
M/N:
Mode: RX
Note: 2402MHZ

Polarization: **Vertical**
Power: DC 3V
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		76.9500	20.46	8.10	28.56	40.00	-11.44	peak	
2		143.2700	20.39	11.63	32.02	43.50	-11.48	peak	
3		179.8300	18.66	11.70	30.36	43.50	-13.14	peak	
4		237.1500	19.46	11.97	31.43	46.00	-14.57	peak	
5		249.3500	18.32	12.19	30.51	46.00	-15.49	peak	
6	*	293.0400	21.13	13.94	35.07	46.00	-10.93	peak	

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

<Reference Only

File :BTNEXT-fccp\Data :#19

Page: 1

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Test Plot of Spurious emission of B – Horizontal (1GHz – 26GHz)



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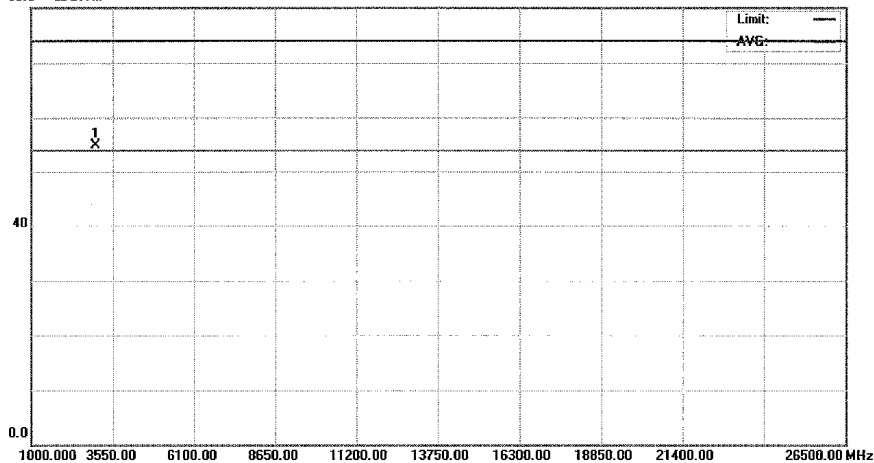
Radiated Emission Measurement

File :BTNEXT-fccp
80.0 dBuV/m

Data :#13

Date: 2011-4-25

Time: 18:01:26



Site DG-CB03
Limit: FCC_RF_1G-40G_(Peak)
EUT: Bluetooth
M/N:
Mode: RX
Note: 2402MHZ

Polarization: **Horizontal**
Power: DC 3V
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	*	3003.750	53.36	1.50	54.86	74.00	-19.14	peak	

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

(Reference Only)

File :BTNEXT-fccp\Data :#13

Page: 1

Engineer Signature: Susan

Test Plot of Spurious emission of B – Vertical (1GHz – 26GHz)



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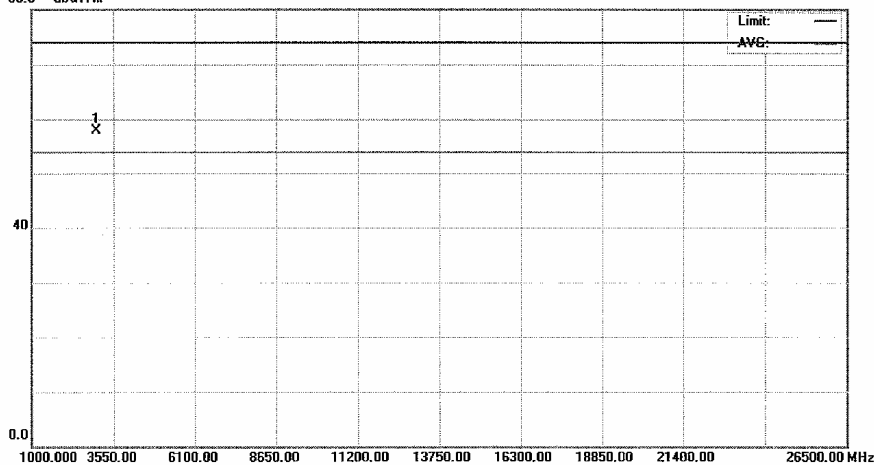
Radiated Emission Measurement

File :BTNEXT-fccp
80.0 dBuV/m

Data :#14

Date: 2011-4-25

Time: 18:03:14



Site DG-CB03
Limit: FCC_RF_1G-40G_(Peak)
EUT: Bluetooth
M/N:
Mode: RX
Note: 2402MHZ

Polarization: **Vertical**
Power: DC 3V
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	*	3004.320	56.40	1.50	57.90	74.00	-16.10	peak	

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

(Reference Only)

File :BTNEXT-fccpData :#14

Page: 1

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Test Plot of Radiated emissions in restricted bands, Mode A.1, Horizontal



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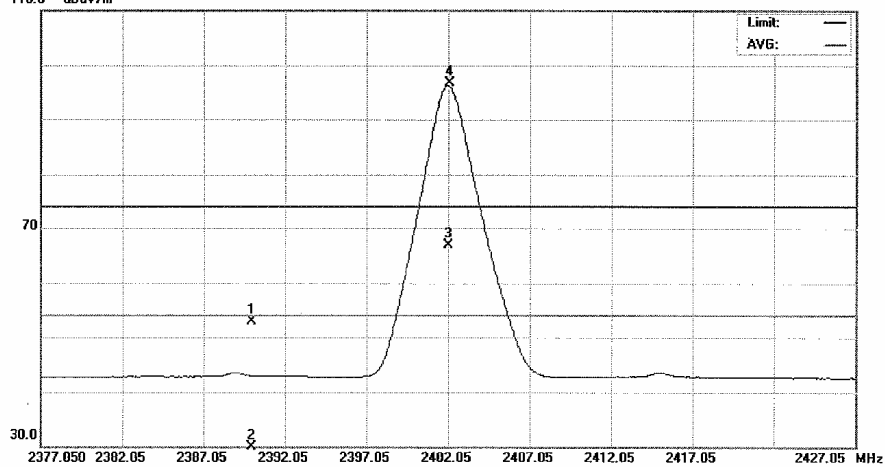
Radiated Emission Measurement

File :BTNEXT
110.0 dBuV/m

Data :#1

Date: 2011-4-18

Time: 20:44:18



Site DG-CB03
Limit: FCC_RF_1G-40G_(Peak)
EUT: Bluetooth
M/N:
Mode: TX
Note: 2402MHZ

Polarization: **Horizontal**
Power: DC 3.7V
Distance: 3m

Temperature: 20
Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	21.21	31.61	52.82	74.00	-21.18	peak	
2		2390.000	-8.50	31.61	23.11	54.00	-30.89	AVG	
3	X	2402.050	35.38	31.60	66.98	54.00	12.98	AVG	
4	*	2402.150	65.09	31.60	96.69	74.00	22.69	peak	

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

(Reference Only)

File :BTNEXT\Data :#1

Page: 1

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Test Plot of Radiated emissions in restricted bands, Mode A.1, Vertical



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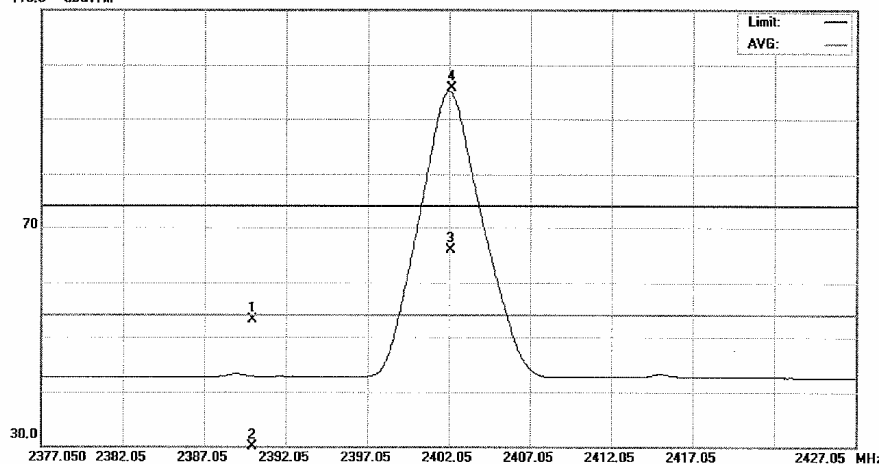
Radiated Emission Measurement

File :BTNEXT
110.0 dBuV/m

Data :#2

Date: 2011-4-18

Time: 20:47:17



Site DG-CB03

Polarization: **Vertical**

Temperature: 20

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 55 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2402MHZ

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.000	21.41	31.61	53.02	74.00	-20.98	peak	
2	2390.000	-8.30	31.61	23.31	54.00	-30.69	AVG	
3 X	2402.150	34.34	31.60	65.94	54.00	11.94	AVG	
4 *	2402.200	64.05	31.60	95.65	74.00	21.65	peak	

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

(Reference Only)

File :BTNEXT\Data :#2

Page: 1

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Test Plot of Radiated emissions in restricted bands, Mode A.3, Horizontal



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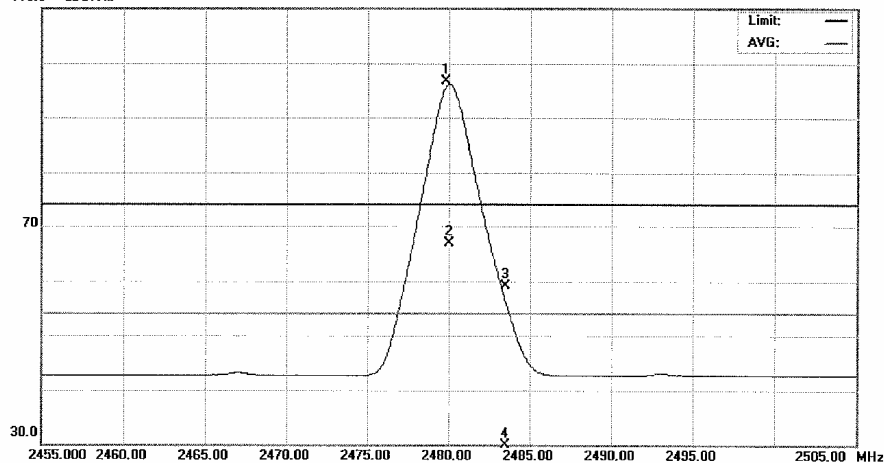
Radiated Emission Measurement

File : BTNEXT
110.0 dBuV/m

Data : #6

Date: 2011-4-18

Time: 21:03:40



Site DG-CB03

Polarization: **Horizontal**

Temperature: 20

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 55 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: TX

Note: 2480MHZ

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2479.850	65.13	31.50	96.63	74.00	22.63	peak	
2	X	2480.050	35.42	31.50	66.92	54.00	12.92	AVG	
3		2483.500	27.59	31.50	59.09	74.00	-14.91	peak	
4		2483.500	-2.12	31.50	29.38	54.00	-24.62	AVG	

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

(Reference Only)

File : BTNEXT\Data : #6

Page: 1

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Test Plot of Radiated emissions in restricted bands, Mode A.3, Vertical



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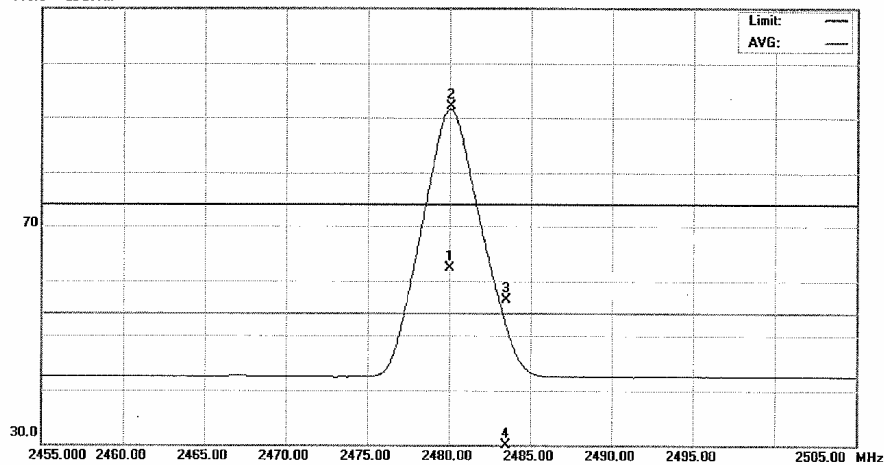
Radiated Emission Measurement

File :BTNEXT
110.0 dBuV/m

Data :#5

Date: 2011-4-18

Time: 21:00:41



Site DG-CB03
Limit: FCC_RF_1G-40G_(Peak)
EUT: Bluetooth
M/N:
Mode: TX
Note: 2480MHZ

Polarization: **Vertical**
Power: DC 3.7V
Distance: 3m
Temperature: 20
Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2480.050	30.87	31.50	62.37	54.00	8.37	AVG	
2	*	2480.100	60.58	31.50	92.08	74.00	18.08	peak	
3		2483.500	24.92	31.50	56.42	74.00	-17.58	peak	
4		2483.500	-4.79	31.50	26.71	54.00	-27.29	AVG	

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

(Reference Only)

File :BTNEXT\Data :#5

Page: 1

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Test plot of Radiated emissions, mode D, Horizontal polarity (30MHz – 1GHz)



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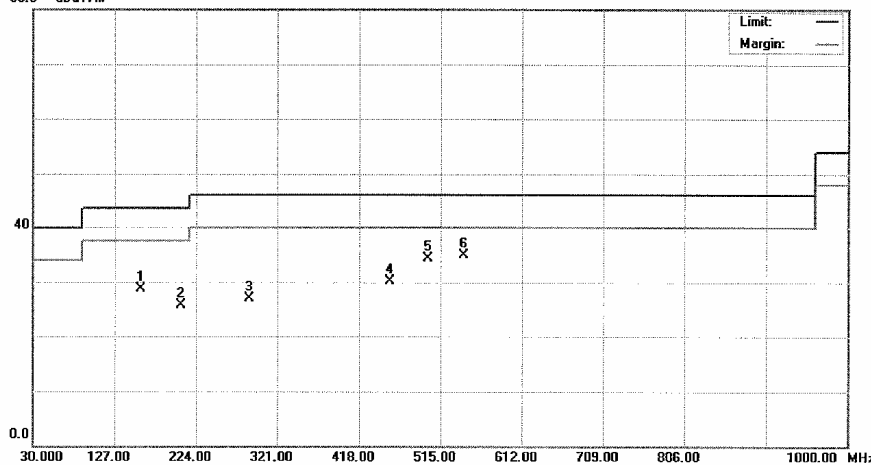
Radiated Emission Measurement

File: BTNEXT - FCCE
80.0 dBuV/m

Data: #1

Date: 2011-4-24

Time: 10:32:38



Site CB08

Limit: FCC Class B 3M Radiation

EUT: Bluetooth

M/N:

Mode: CHARGE

Note:

Polarization: **Horizontal**

Temperature: 25

Power: DC 3.7V

Humidity: 58 %

Distance: 3m

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		156.3400	46.29	-17.62	28.67	43.50	-14.83	peak	
2		205.3100	42.21	-16.43	25.78	43.50	-17.72	peak	
3		288.0200	39.07	-12.17	26.90	46.00	-19.10	peak	
4		453.5700	38.08	-8.05	30.03	46.00	-15.97	peak	
5		498.5600	41.67	-7.38	34.29	46.00	-11.71	peak	
6	*	541.2800	40.81	-5.82	34.99	46.00	-11.01	peak	

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

(Reference Only)

File: BTNEXT - FCCEData: #1

Page: 1

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Test plot of Radiated emissions, mode D, Vertical polarity (30MHz – 1GHz)



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Radiated Emission Measurement

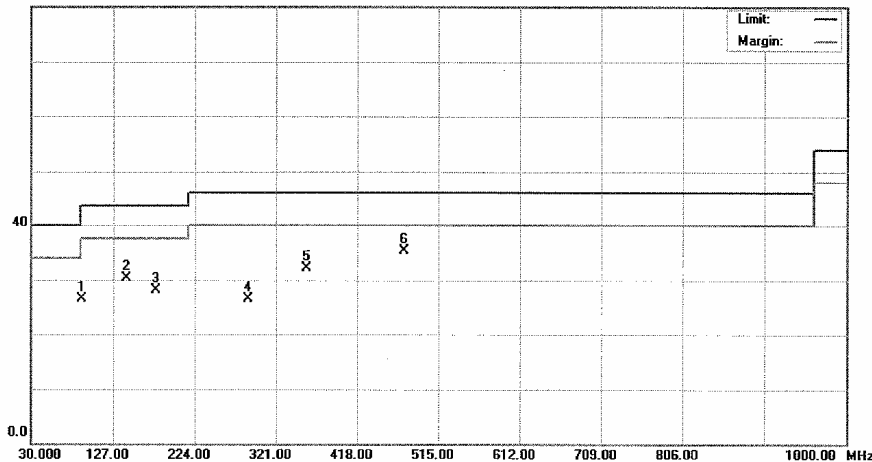
File: BTNEXT -FCCE

Data: #2

Date: 2011-4-24

Time: 10:35:18

80.0 dBuV/m



Site: CB08

Limit: FCC Class B 3M Radiation

EUT: Bluetooth

M/N:

Mode: CHARGE

Note:

Polarization: **Vertical**

Temperature: 25

Power: DC 3.7V

Humidity: 58 %

Distance: 3m

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	88.3400	45.61	-19.08	26.53	43.50	-16.97	peak	
2	141.1900	48.07	-17.71	30.36	43.50	-13.14	peak	
3	177.0800	45.12	-17.01	28.11	43.50	-15.39	peak	
4	288.0200	38.65	-12.17	26.48	46.00	-19.52	peak	
5	356.5200	42.73	-10.60	32.13	46.00	-13.87	peak	
6 *	472.4600	43.15	-7.78	35.37	46.00	-10.63	peak	

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

(Reference Only)

File: BTNEXT -FCCE>Data: #2

Page: 1

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Test plot of Radiated emissions, mode D, Horizontal polarity (1GHz – 6GHz)



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Engineering Inc.

No.3.JinShaGang 1st Road, ShiXia, DaLang Town, DongGuan, China.
Tel: (0769)-8318-3000 Fax: (0769)-8319-6000 Post Code: 523792
<http://www.btl.org.cn>

Radiated Emission Measurement

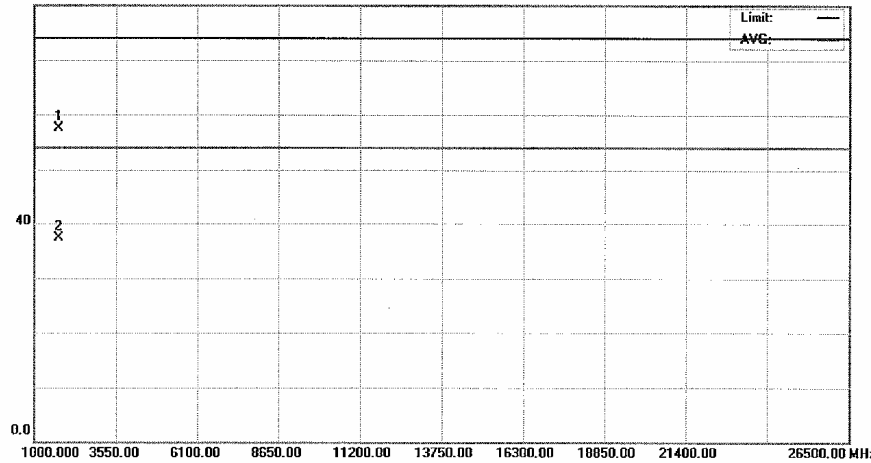
File :BTNEXT -FCCE

Data :#4

Date: 2011-4-24

Time: 10:58:23

80.0 dBuV/m



Site CB08

Polarization: **Horizontal**

Temperature: 25

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 58 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: CHARGE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1723.490	60.53	-2.93	57.60	74.00	-16.40	peak	
2		1723.490	40.28	-2.93	37.35	54.00	-16.65	AVG	

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

(Reference Only)

File :BTNEXT -FCCE\Data :#4

Page: 1

Engineer Signature:

Susan

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Test plot of Radiated emissions, mode D, Vertical polarity (1GHz – 6GHz)



Neutron
Engineering Inc.

No.3.JinShaGang 1st Road, ShiXia, DaLang Town, DongGuan, China.
Tel: (0769)-8318-3000 Fax: (0769)-8319-6000 Post Code: 523792
<http://www.btl.org.cn>

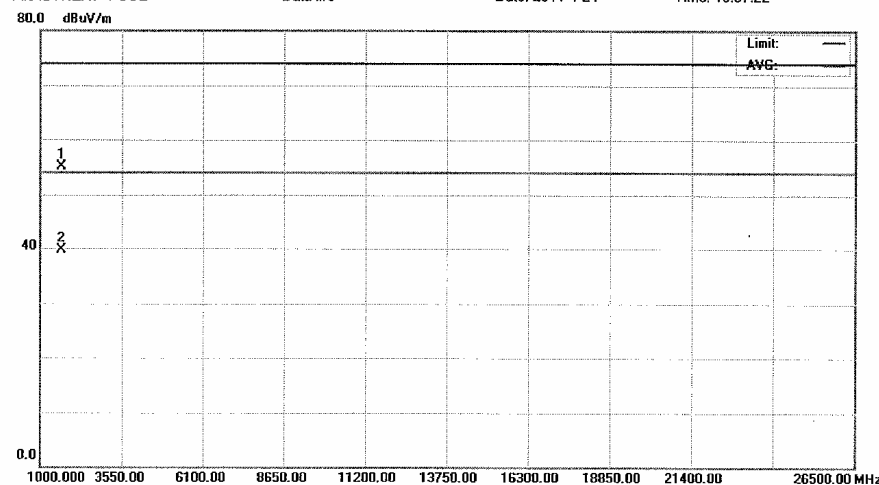
Radiated Emission Measurement

File: BTNEXT -FCCE

Data :#3

Date: 2011-4-24

Time: 10:57:22



Site CB08

Polarization: **Vertical**

Temperature: 25

Limit: FCC_RF_1G-40G_(Peak)

Power: DC 3.7V

Humidity: 58 %

EUT: Bluetooth

Distance: 3m

M/N:

Mode: CHARGE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1642.270	58.89	-3.82	55.07	74.00	-18.93	peak	
2	*	1642.270	43.52	-3.82	39.70	54.00	-14.30	AVG	

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

(Reference Only)

File :BTNEXT -FCCE\Data :#3

Page: 1

Engineer Signature:

Susan

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Test Plot of Conducted emissions

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

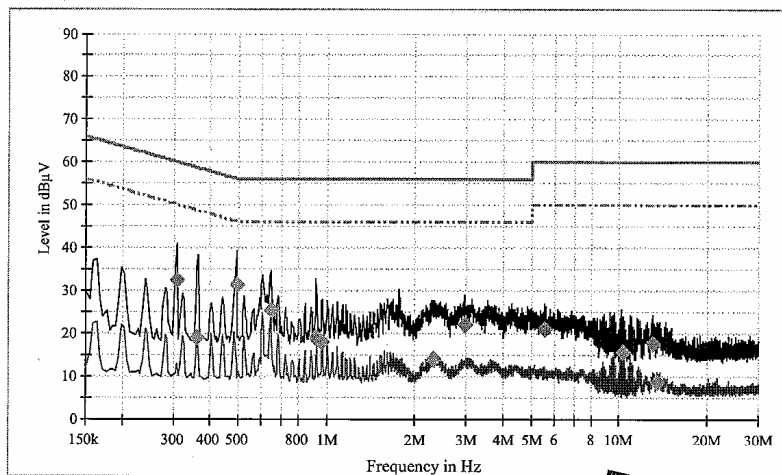
EMC Test Record (EMISSION)

Test Information

Manufacturer:	Primax
Test Item:	Bluetooth Headset
Identification:	RF-QX4
Test Standard:	FCC Part 15
Test Detail:	Conducted Emission
Operation Mode:	D
Climate Condition:	20 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq.:	AC 120 V/ 60 Hz
Port / Line:	AC Mains(L1+N)
Receipt No.:	163075383 200
Report No.:	17019986 001
Result:	Pass
Comment:	/

Hardware Setup:	1phase LISN ESH3-Z5 to ESU 26
Level Unit:	dB μ V

Subrange	Detectors	IF Bandwidth	Step Size	Meas. Time	Receiver
150kHz - 30MHz	Peak; Average	9kHz	4.5kHz	10ms	ESU 26



Sign-off Test Data

Date: 3/30/2011 Time: 10:27:18

Tested by:



Reviewed by:



TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.307500	32.2	1000.0	9.000	GN	L1	9.9	27.8	60.0	
0.492000	31.5	1000.0	9.000	GN	L1	10.1	24.6	56.1	
0.919500	18.9	1000.0	9.000	GN	L1	10.1	37.1	56.0	
2.940000	22.0	1000.0	9.000	GN	N	10.2	34.0	56.0	
5.554500	21.1	1000.0	9.000	GN	N	10.3	38.9	60.0	
12.979500	17.7	1000.0	9.000	GN	L1	10.7	42.3	60.0	

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.361500	18.9	1000.0	9.000	GN	N	10.0	29.8	48.7	
0.645000	25.2	1000.0	9.000	GN	N	10.0	20.8	46.0	
0.964500	17.8	1000.0	9.000	GN	N	10.1	28.2	46.0	
2.296500	14.1	1000.0	9.000	GN	N	10.2	31.9	46.0	
10.311000	15.8	1000.0	9.000	GN	N	10.7	34.2	50.0	
13.470000	8.6	1000.0	9.000	GN	L1	10.7	41.4	50.0	

Sign-off Test Data

Date: 3/30/2011 Time: 10:27:18

Tested by:

Reviewed by:

