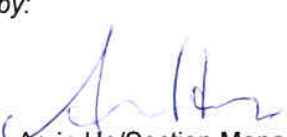


Produkte  
Products

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                         |                                                                                                      |                                              |                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------|
| <b>Prüfbericht - Nr.: 10037140 001</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                            |                                                                                                                                         | <b>Seite 1 von 38</b>                                                                                |                                              |                                         |
| <i>Test Report No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                            |                                                                                                                                         | <i>Page 1 of 38</i>                                                                                  |                                              |                                         |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                            | <b>Endex Automation Technology Co., Ltd.</b><br>No. 29, Keji 1 st Rd., Guishan Township, Taoyuan County, Taiwan                         |                                                                                                      |                                              |                                         |
| <b>Gegenstand der Prüfung:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                            | Bluetooth Limited module                                                                                                                |                                                                                                      |                                              |                                         |
| <b>Bezeichnung:</b><br><i>Identification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                     | IDG001                                                                                                                                     | <b>Serien-Nr.:</b><br><i>Serial No.:</i>                                                                                                | N/A                                                                                                  |                                              |                                         |
| <b>Wareneingangs-Nr.:</b><br><i>Receipt No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  | TPE71588                                                                                                                                   | <b>Eingangsdatum:</b><br><i>Date of receipt:</i>                                                                                        | 2012/04/16                                                                                           |                                              |                                         |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                            | The sample is ok for testing and not damaged                                                                                            |                                                                                                      |                                              |                                         |
| <b>Prüfört:</b><br><i>Testing location:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TÜV Rheinland Taiwan Ltd.</b><br>11F., No.758, Sec. 4, Bade Rd., Songshan Dist., Taipei City 105 Taiwan<br>FCC Registration No.: 365730 |                                                                                                                                         |                                                                                                      |                                              |                                         |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>FCC CFR47 Part 15: Subpart C Section 15.247</b>                                                                                         |                                                                                                                                         |                                                                                                      |                                              |                                         |
| <b>Prüfergebnis:</b><br><i>Test Result:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).</b><br><i>The test item passed the test specification(s).</i>            |                                                                                                                                         |                                                                                                      |                                              |                                         |
| <b>Prüflaboratorium:</b><br><i>Testing Laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>TÜV Rheinland Taiwan Ltd.</b><br>11F., No.758, Sec. 4, Bade Rd., Songshan Dist., Taipei City 105, Taiwan,<br>R.O.C.                     |                                                                                                                                         |                                                                                                      |                                              |                                         |
| <b>geprüft/ tested by:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                            | <b>kontrolliert/ reviewed by:</b>                                                                                                       |                                                                                                      |                                              |                                         |
| <br>2012-05-02 Arvin Ho/Section Manager                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                            | <br>2012-05-02 Rene Charton/Senior Project Manager |                                                                                                      |                                              |                                         |
| <b>Datum</b><br><i>Date</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Name/Stellung</b><br><i>Name/Position</i>                                                                                               | <b>Unterschrift</b><br><i>Signature</i>                                                                                                 | <b>Datum</b><br><i>Date</i>                                                                          | <b>Name/Stellung</b><br><i>Name/Position</i> | <b>Unterschrift</b><br><i>Signature</i> |
| <b>Sonstiges/ Other Aspects:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                            |                                                                                                                                         |                                                                                                      |                                              |                                         |
| <b>Abkürzungen:</b> P(ass) = entspricht Prüfgrundlage<br>F(ail) = entspricht nicht Prüfgrundlage<br>N/A = nicht anwendbar<br>N/T = nicht getestet                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                            |                                                                                                                                         | <b>Abbreviations:</b> P(ass) = passed<br>F(ail) = failed<br>N/A = not applicable<br>N/T = not tested |                                              |                                         |
| <b>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.</b><br><i>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.</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 CONDUCTED SPURIOUS EMISSIONS AND FREQUENCY BAND EDGE MEASURED IN 100kHz BANDWIDTH***RESULT: Passed***5.1.5 SPURIOUS EMISSION***RESULT: Passed***5.1.6 FREQUENCY SEPARATION***RESULT: Passed***5.1.7 NUMBER OF HOPPING FREQUENCY***RESULT: Passed***5.1.8 TIME OF OCCUPANCY***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: Photo**

**(File:10037140APPENDIX1)**

**Appendix 2: Test Result of Radiated Emissions**

**(File:10037140APPENDIX2)**

**Test Specifications**

The following standards were applied (in bold: product standards, otherwise: basic standards).

**Table 1: Applied Standard and Test Levels**

| <b>Radio</b>                                                               |
|----------------------------------------------------------------------------|
| FCC CFR47 Part 15: Subpart C Section 15.247<br>DA 00-705 of March 30, 2000 |

## 2. Test Sites

### 2.1 Test Facilities

TUV Rheinland Taiwan Ltd.

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.  
Taipei City 105  
Taiwan (R.O.C.)  
FCC Registration No.: 365730

### 2.2 List of Test and Measurement Instruments

**Table 2: List of Test and Measurement Equipment**

| Kind of Equipment          | Manufacturer | Type         | S/N                    | Calibrated until |
|----------------------------|--------------|--------------|------------------------|------------------|
| EMI Test Receiver          | R&S          | ESCI 7       | 1166.5950K07-100797-Pt | 9-Nov-12         |
| Bilog Antenna              | TESEQ        | CBL6111D     | 29802                  | 1-Oct-12         |
| Pre-Amplifier              | HP           | 8447F        | 2805A03335             | 22-Dec-12        |
| Spectrum Analyzer          | R&S          | FSV 40       | 100921                 | 12-Oct-12        |
| Horn Antenna (1GHz~18GHz)  | COM-POWER    | AHA118       | 701101                 | 27-Dec-12        |
| Horn Antenna (18GHz~25GHz) | COM-POWER    | AH840        | 101031                 | 1-Oct-12         |
| Power meter                | R&S          | NRVD         | 100439                 | 27-Mar-13        |
| Power sensor               | R&S          | NRV-Z1       | 100013                 | 27-Mar-13        |
| Temp. & Humid. Chamber     | Giant Force  | GCT-099-40-S | MAF0103-007            | 13-May-13        |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, 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  $\pm 3\text{dB}$ .

**Table 3:** Emission Measurement Uncertainty

| Parameter                                            | Uncertainty                      |
|------------------------------------------------------|----------------------------------|
| Radio Frequency                                      | $\pm 1 \times 10^{-7}$           |
| RF power, conducted                                  | $\pm 1 \text{ dB}$               |
| Adjacent channel power                               | $\pm 3 \text{ dB}$               |
| Radiated emission of transmitter, valid up to 26 GHz | $\pm 6 \text{ dB}$               |
| Radiated emission of receiver, valid up to 26 GHz    | $\pm 6 \text{ dB}$               |
| Temperature                                          | $\pm 2 \text{ }^{\circ}\text{C}$ |
| Humidity                                             | $\pm 10 \text{ \%}$              |

### 3. General Product Information

#### 3.1 Product Function and Intended Use

Bluetooth Limited module.  
For details refer to the User Guide, Data Sheet and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 4: Technical Specification of EUT**

| Technical Specification | Value                                 |
|-------------------------|---------------------------------------|
| Kind of Equipment       | Bluetooth Limited module              |
| Brand Name              | Endex Automation Technology Co., Ltd. |
| FCC ID                  | B9OENDEX-IDG001                       |
| Type Designation        | IDG001                                |
| Operating Frequency     | 2402 MHz ~ 2480 MHz                   |
| Channel Spacing         | 1 MHz                                 |
| Channel number          | 79                                    |
| Operation Voltage       | 5 V                                   |
| Modulation              | GFSK, $\pi/4$ QPSK, 8 DPSK            |
| Antenna gain            | 1.0 dBi                               |

**Table 5: 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Hopping Sequence         | Example of a 79 hopping sequence in data mode:<br><br>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 | <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. Receiving
- C. Standby
- D. 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 4. All testing were performed according to the procedures in ANSI C63.10: 2009 and DA 00-705 of March 30, 2000.

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

### 4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

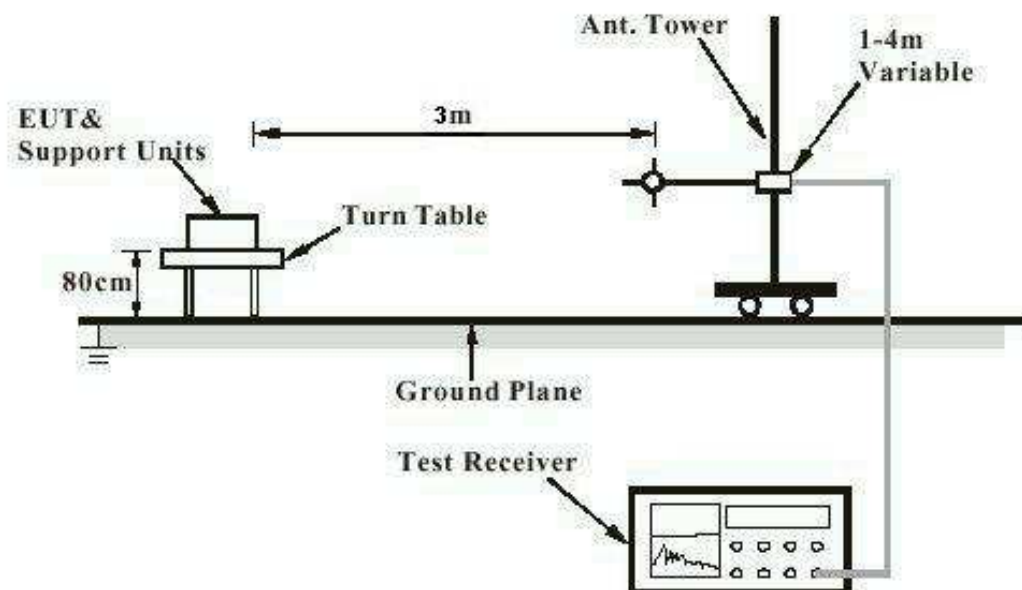
| Kind of Equipment | Manufacturer | Model Name           | S/N                           |
|-------------------|--------------|----------------------|-------------------------------|
| Laptop            | MSI          | MSI4532<br>(CX420MX) | CX420 MX-233TWK<br>1008000096 |

## 4.4 Countermeasures to achieve EMC Compliance

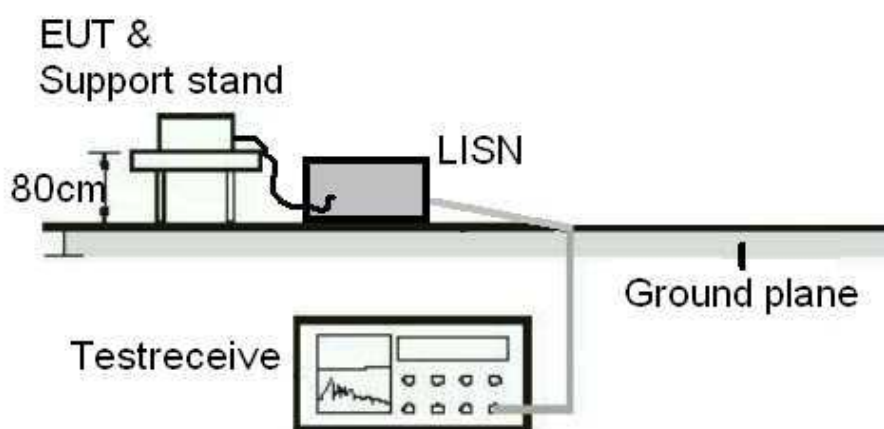
The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

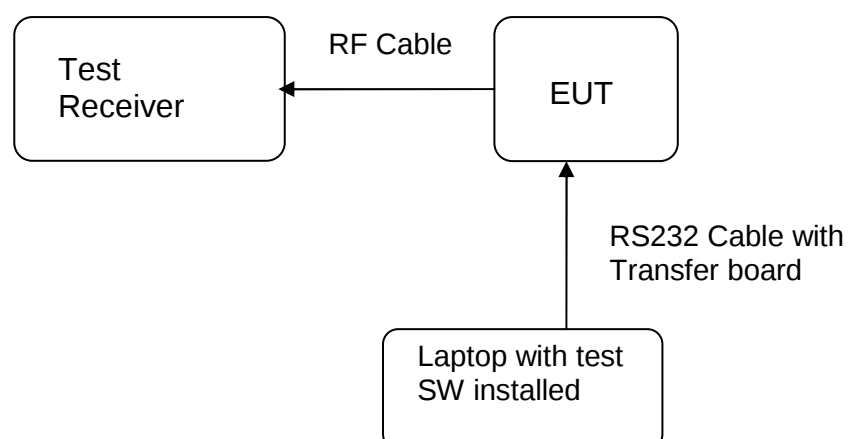
**Diagram of Measurement Configuration for Radiation Test**



### 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     | : | April 24, 2012                                                      |
| Test standard | : | FCC Part 15.247(b)(4), Part 15.203                                  |
| Limit         | : | the use of antennas with directional gains that do not exceed 6 dBi |

According to the manufacturer declaration, the EUT has an internal antenna with an directional gain of 1.0 dBi, and the antenna is a printed PCB trace with no possibility of replacement. Therefore, the EUT is considered to comply the provision.

Refer to EUT photo for details.

## 5.1.2 Peak Output Power

**RESULT:**
**Passed**

Test date : April 24, 2012  
 Test standard : FCC Part 15.247(b)(1)  
 Basic standard : DA 00-705 of March 30, 2000  
 Limit : 1 Watt (EBW<1MHz) 0.125W (EBW>1MHz)  
 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 : 102 kPa

**Table 6: Test result of Peak Output Power, GFSK modulation**

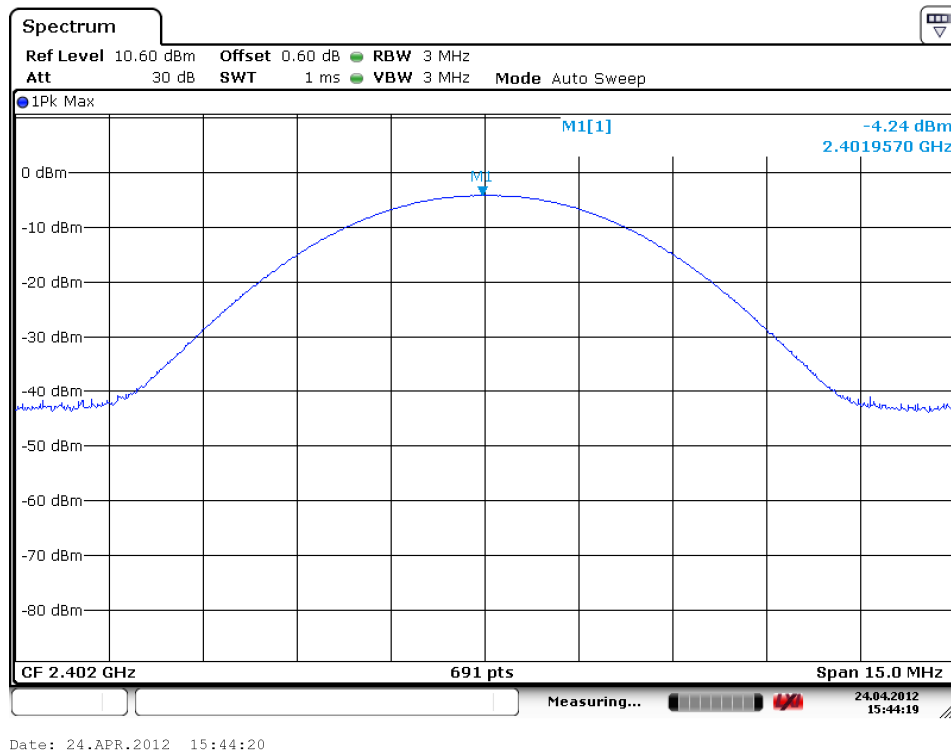
| Channel      | Channel Frequency<br>(MHz) | Peak Output Power |        | Limit<br>(W ) |
|--------------|----------------------------|-------------------|--------|---------------|
|              |                            | (dBm)             | (W)    |               |
| Low Channel  | 2402                       | -4.24             | 0.0004 | 0.125         |
| Mid-Channel  | 2442                       | -4                | 0.0004 | 0.125         |
| High Channel | 2480                       | -4.35             | 0.0004 | 0.125         |

**Table 7: Test result of Peak Output Power, QPSK modulation**

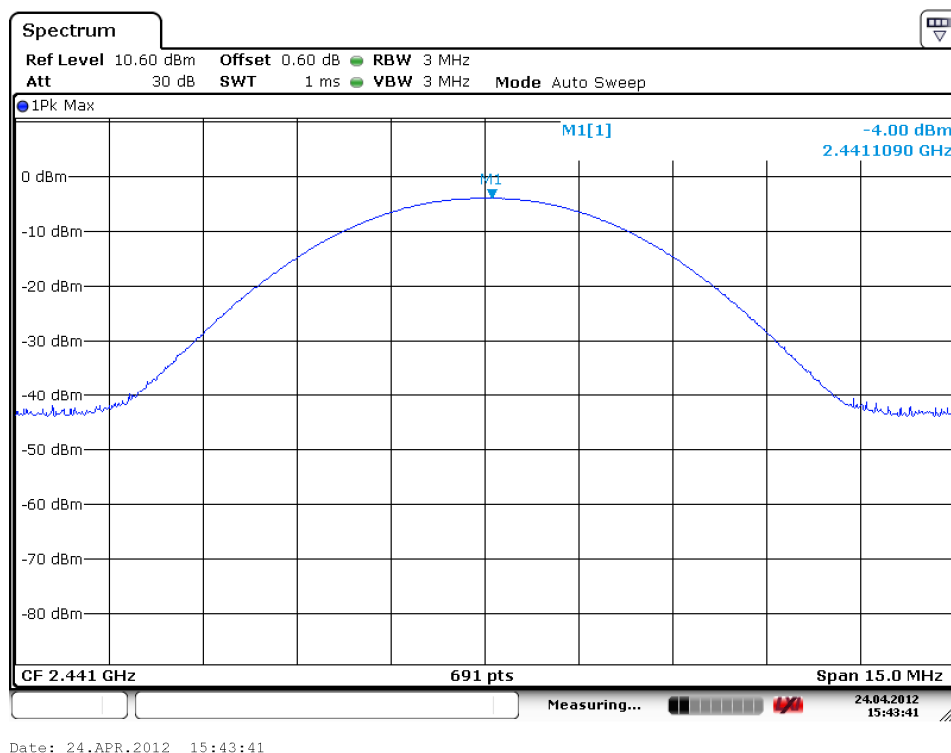
| Channel      | Channel Frequency<br>(MHz) | Peak Output Power |        | Limit<br>(W ) |
|--------------|----------------------------|-------------------|--------|---------------|
|              |                            | (dBm)             | (W)    |               |
| Low Channel  | 2402                       | -3.72             | 0.0004 | 0.125         |
| Mid-Channel  | 2442                       | -3.55             | 0.0004 | 0.125         |
| High Channel | 2480                       | -3.91             | 0.0004 | 0.125         |

## Test Plot of Peak Output Power, GFSK modulation

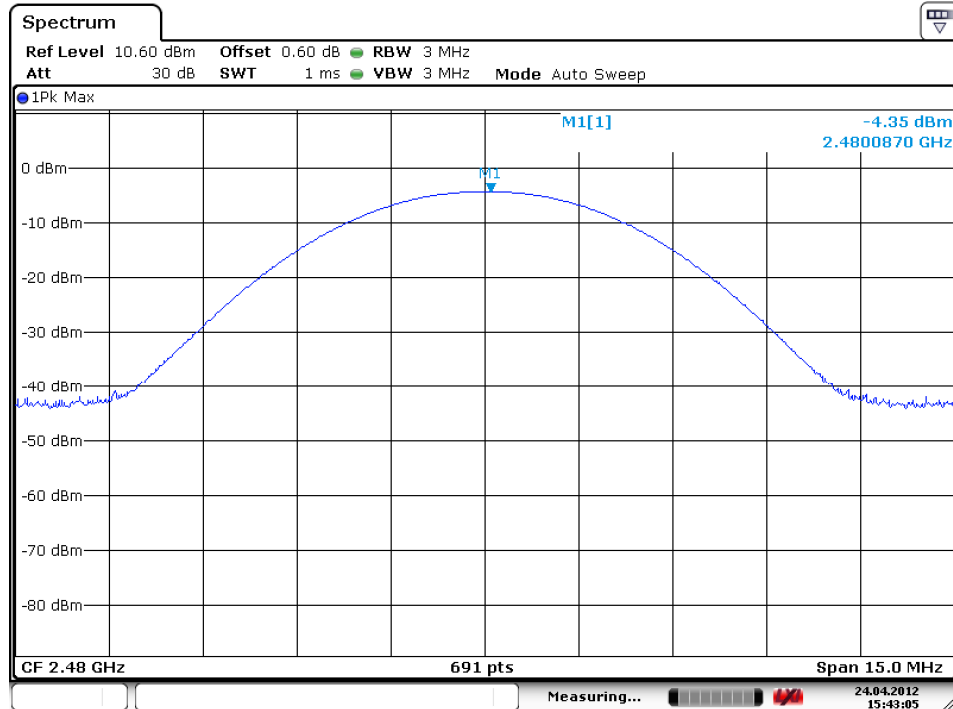
### Low Channel



### Middle Channel



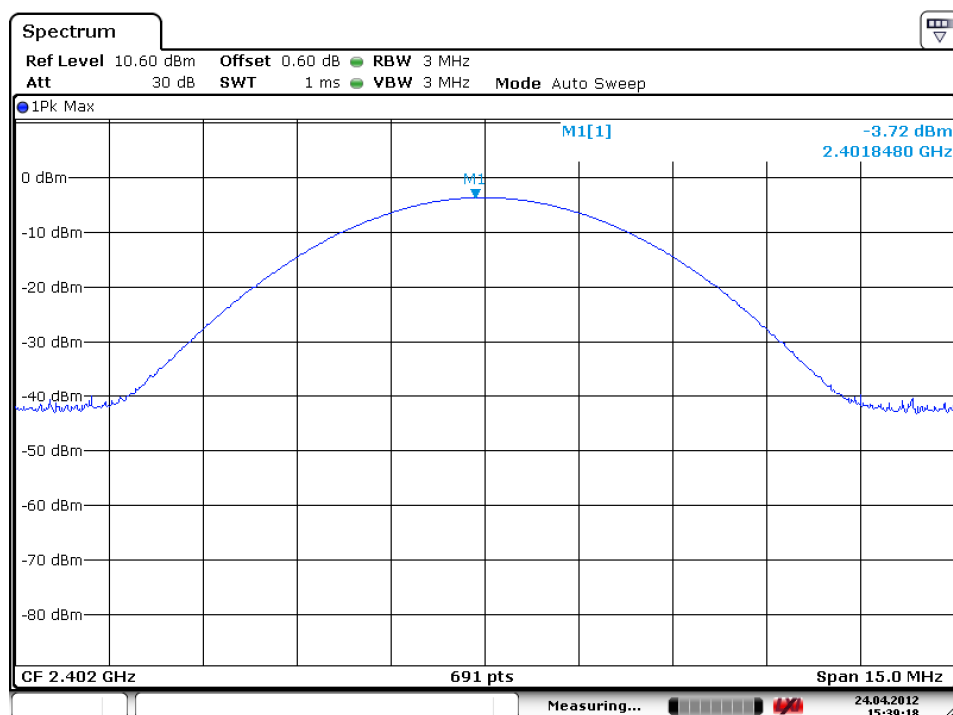
### High Channel



Date: 24.APR.2012 15:43:05

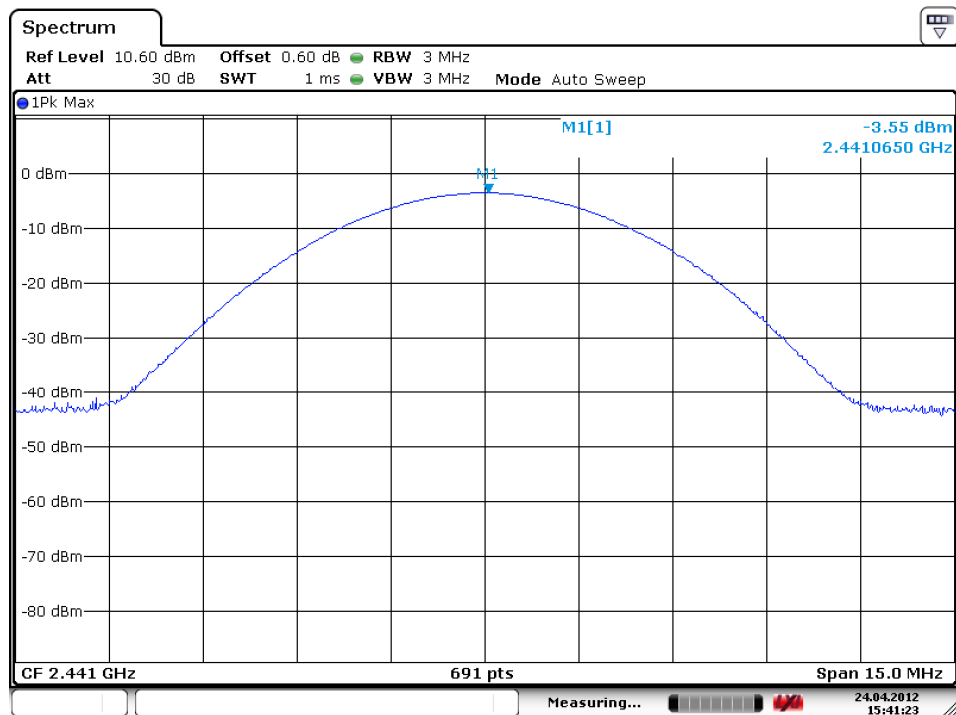
### Test Plot of Peak Output Power, QPSK modulation

#### Low Channel



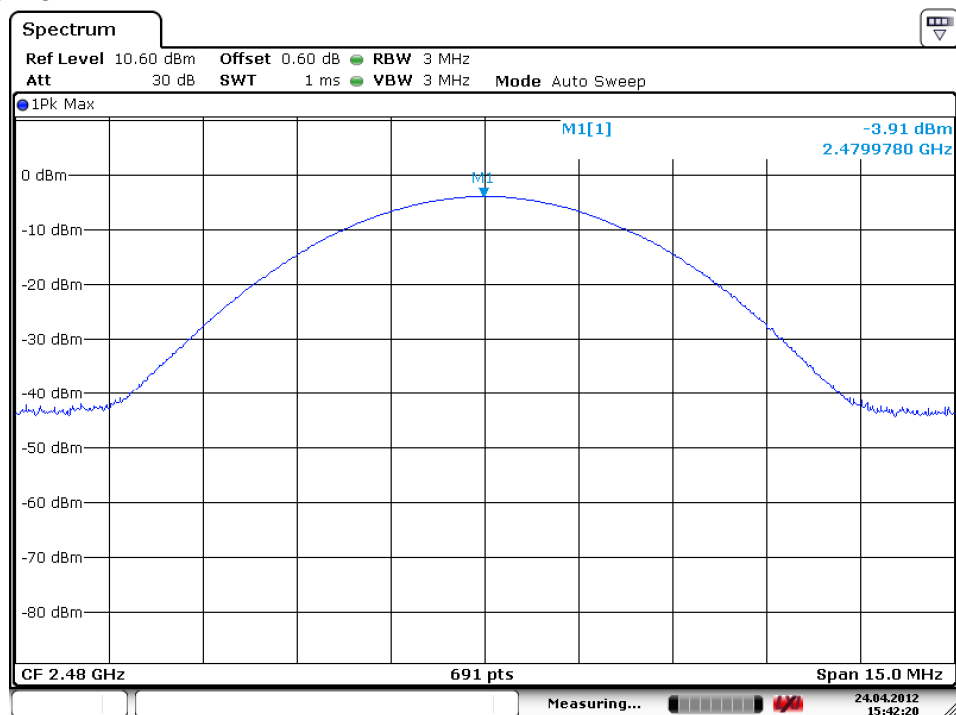
Date: 24.APR.2012 15:39:18

### Middle Channel



Date: 24.APR.2012 15:41:23

### High Channel



Date: 24.APR.2012 15:42:21

### 5.1.3 20dB Bandwidth

**RESULT:**
**Passed**

Date of testing : April 25,2012  
 Test standard : FCC Part 15.247(a)(1)  
 Basic standard : DA 00-705 of March 30, 2000  
 Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature : 24°C  
 Relative humidity : 53%  
 Atmospheric pressure : 102 kPa

**Table 8: Test result of 20dB Bandwidth, GFSK modulation**

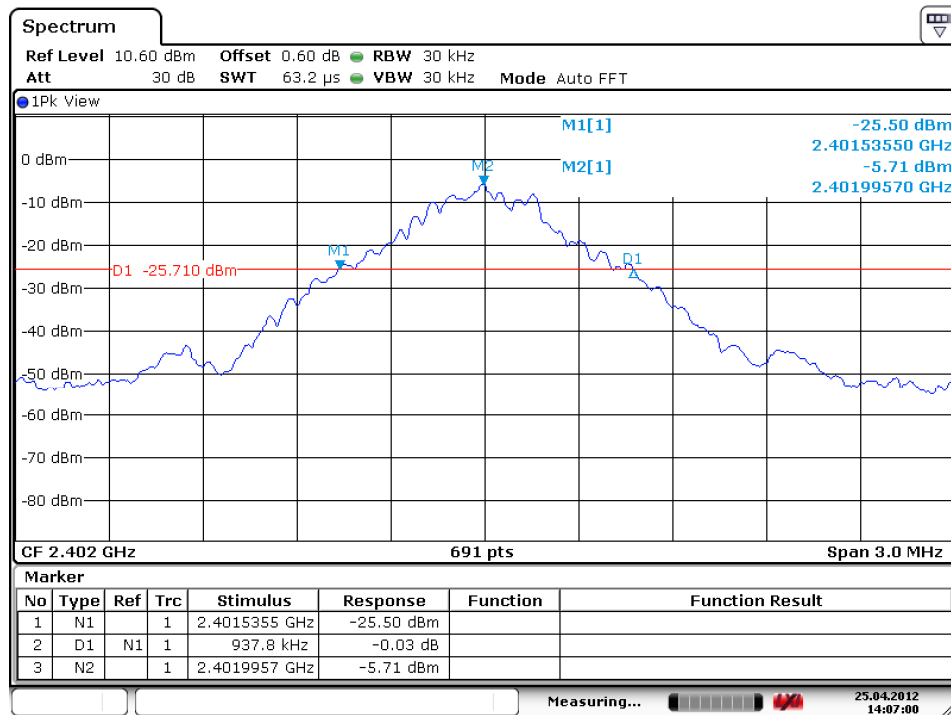
| Channel      | Channel Frequency (MHz) | 20dB Bandwidth (kHz) | Limit (MHz) | Result |
|--------------|-------------------------|----------------------|-------------|--------|
| Low Channel  | 2402                    | 937.8                | /           | Pass   |
| Mid Channel  | 2441                    | 937.8                | /           | Pass   |
| High Channel | 2480                    | 937.8                | /           | Pass   |

**Table 9: Test result of 20dB Bandwidth, QPSK modulation**

| Channel      | Channel Frequency (MHz) | 20dB Bandwidth (kHz) | Limit (MHz) | Result |
|--------------|-------------------------|----------------------|-------------|--------|
| Low Channel  | 2402                    | 1254.7               | /           | Pass   |
| Mid Channel  | 2441                    | 1250.4               | /           | Pass   |
| High Channel | 2480                    | 1250.4               | /           | Pass   |

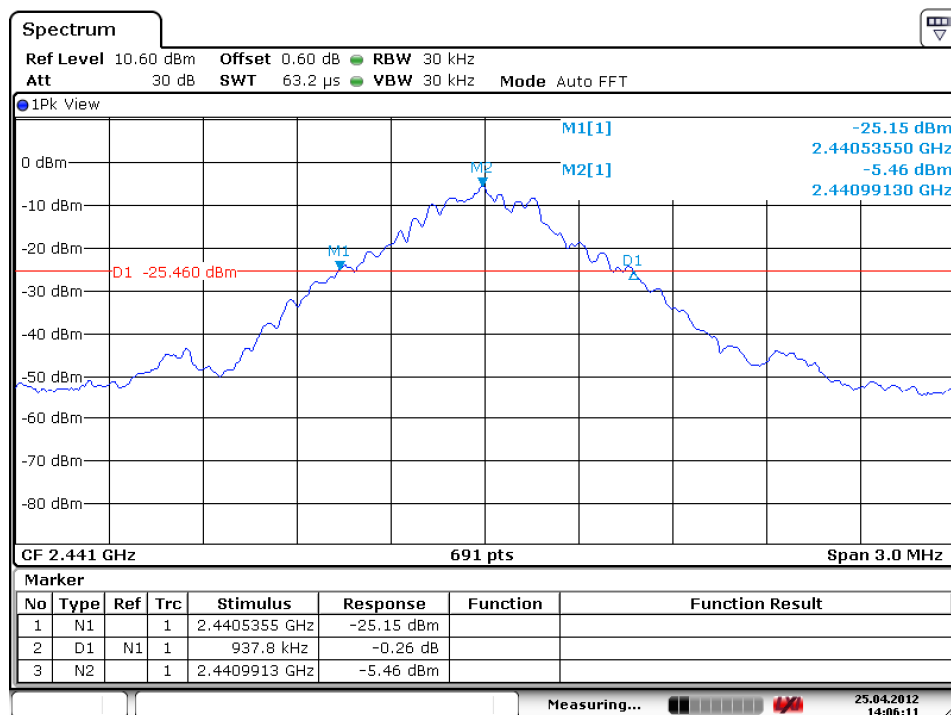
## Test Plot of 20dB Bandwidth, GFSK modulation

### Low Channel



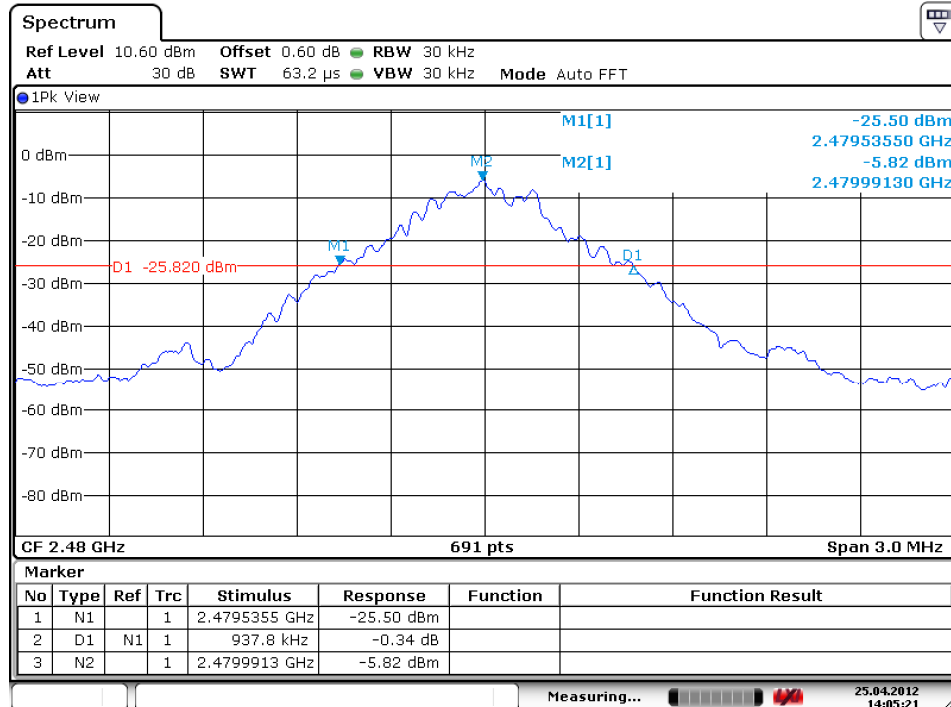
Date: 25.APR.2012 14:07:00

### Middle Channel



Date: 25.APR.2012 14:06:11

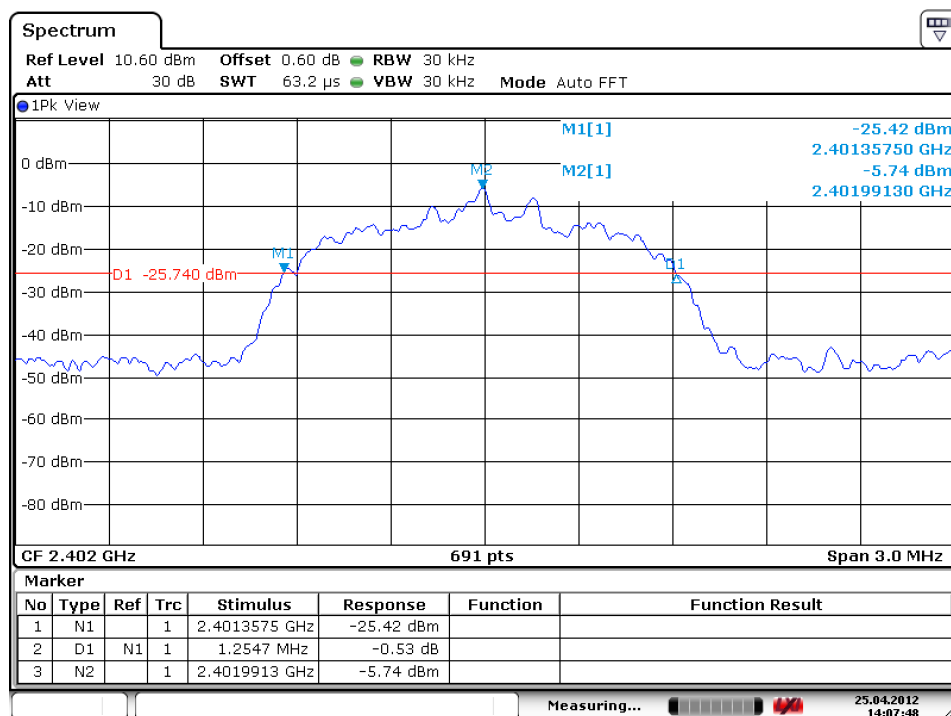
## High Channel



Date: 25.APR.2012 14:05:21

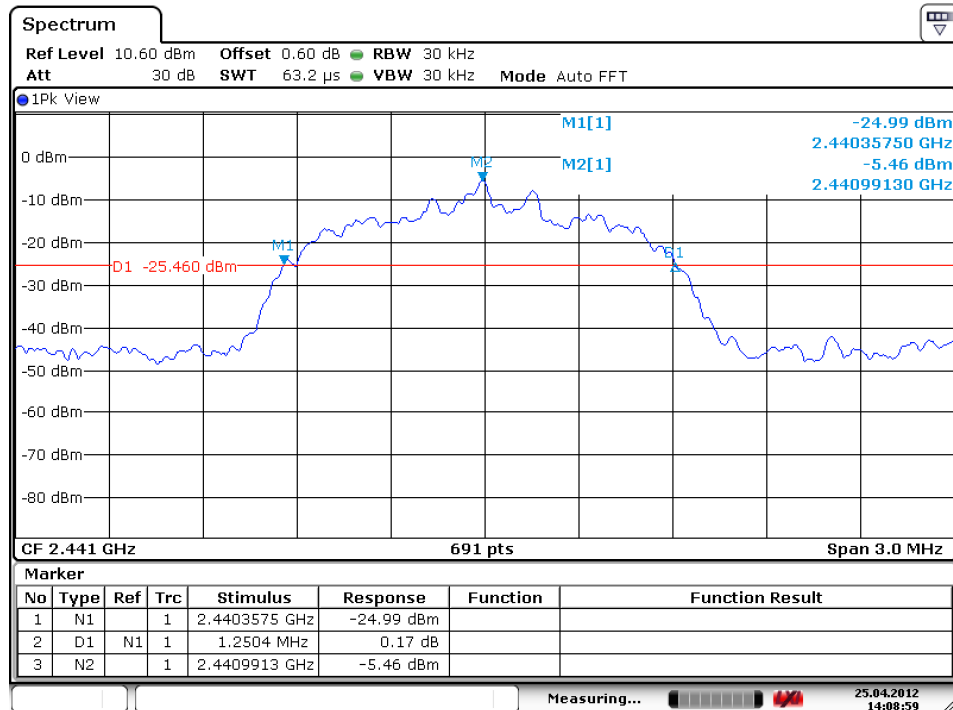
## Test Plot of 20dB Bandwidth, QPSK modulation

### Low Channel



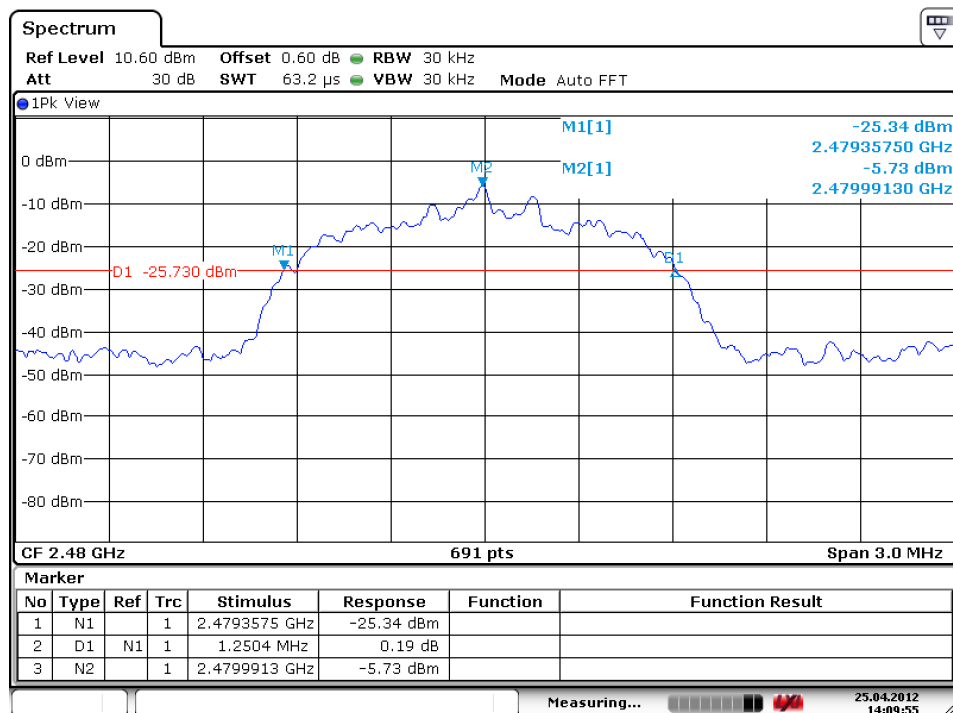
Date: 25.APR.2012 14:07:48

### Middle Channel



Date: 25.APR.2012 14:08:59

### High Channel



Date: 25.APR.2012 14:09:54

### 5.1.4 Conducted spurious emissions and Frequency Band Edge measured in 100kHz Bandwidth

**RESULT:****Passed**

|                   |   |                                                                                                                |
|-------------------|---|----------------------------------------------------------------------------------------------------------------|
| Date of testing   | : | April 24, 2012                                                                                                 |
| Test standard     | : | FCC part 15.247(d)                                                                                             |
| Basic standard    | : | DA 00-705 of March 30, 2000                                                                                    |
| Limit             | : | 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power) |
| Kind of test site | : | Shielded room                                                                                                  |

**Test setup**

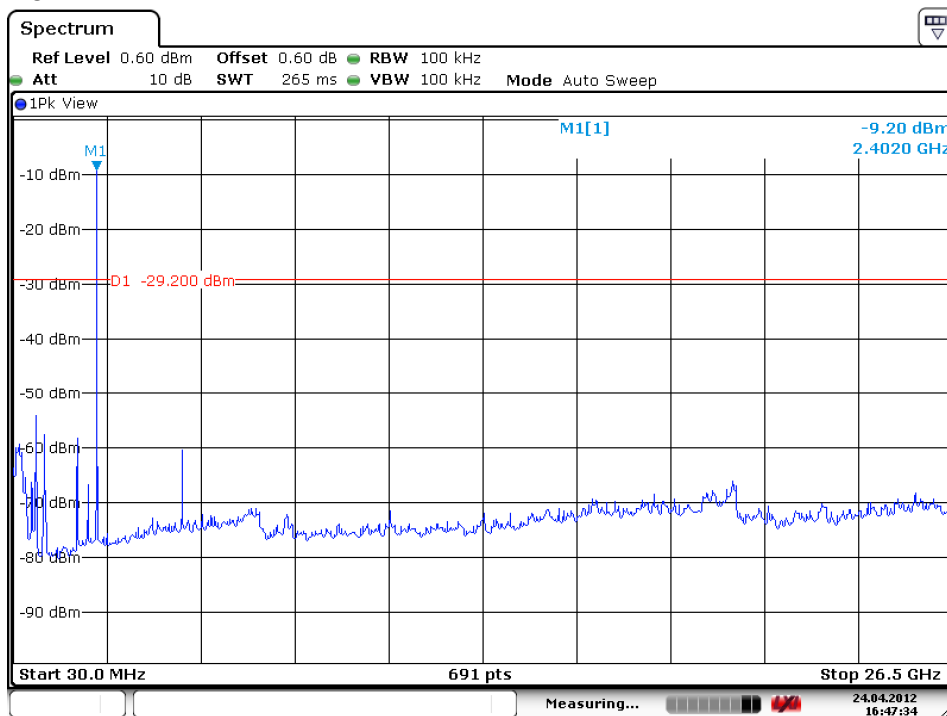
|                      |   |           |
|----------------------|---|-----------|
| Test Channel         | : | Low/ High |
| Operation mode       | : | A         |
| Ambient temperature  | : | 22°C      |
| Relative humidity    | : | 52%       |
| Atmospheric pressure | : | 102 kPa   |

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

Due to the small size of the product and that there are no inductive components of significant size, 9kHz to 30MHz frequency range is not tested based on technical judgment.

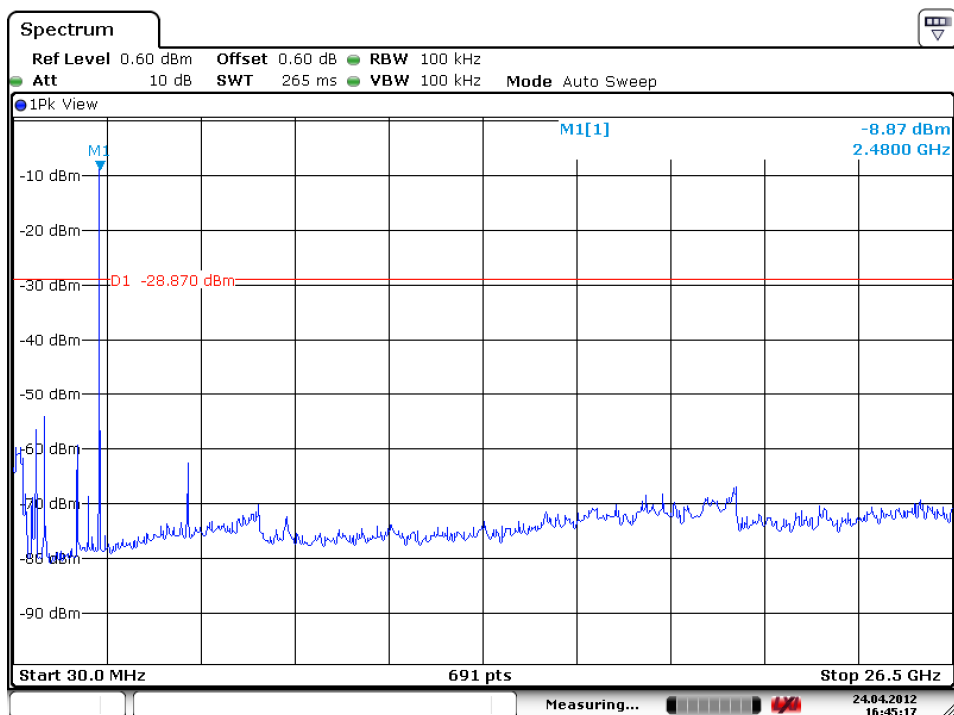
## Test Plot of 100kHz Conducted Emissions, GFSK modulation

### Low Channel



Date: 24.APR.2012 16:47:34

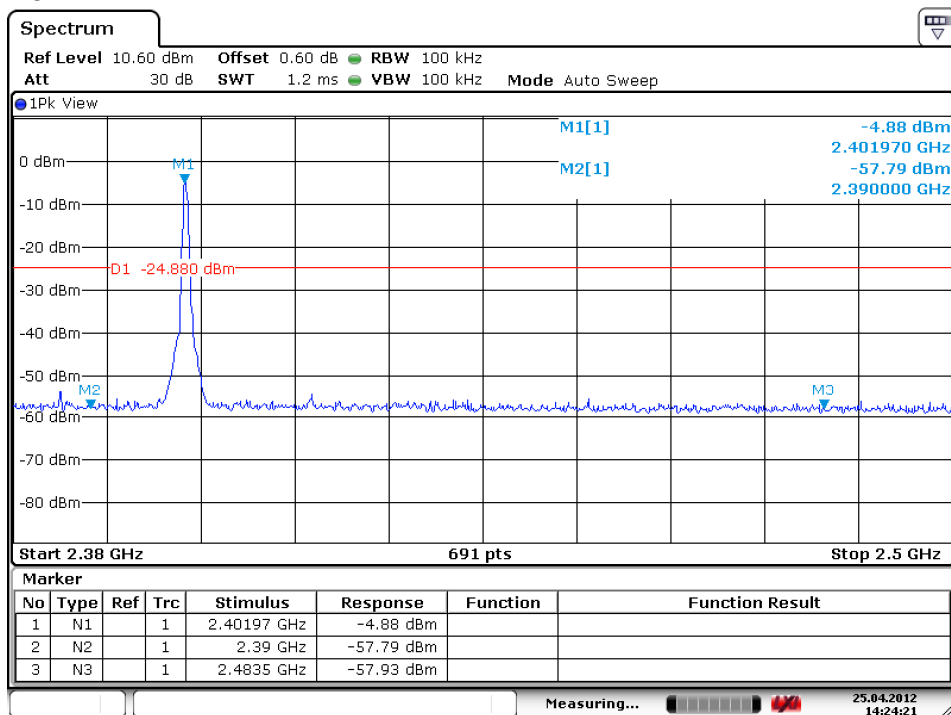
### High Channel



Date: 24.APR.2012 16:45:17

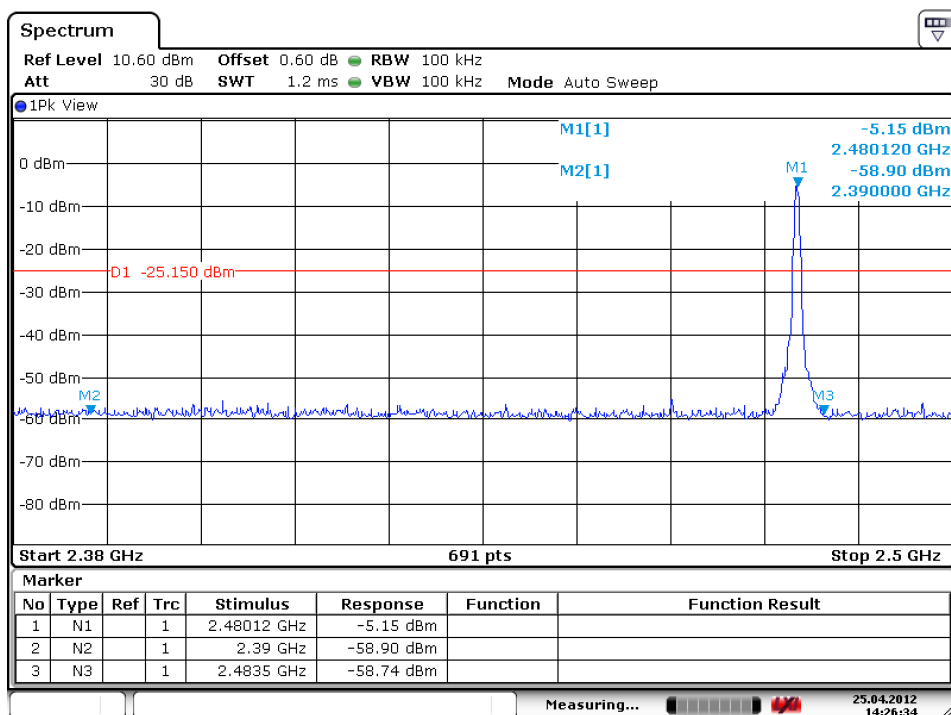
## Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

### Low Channel



Date: 25.APR.2012 14:24:21

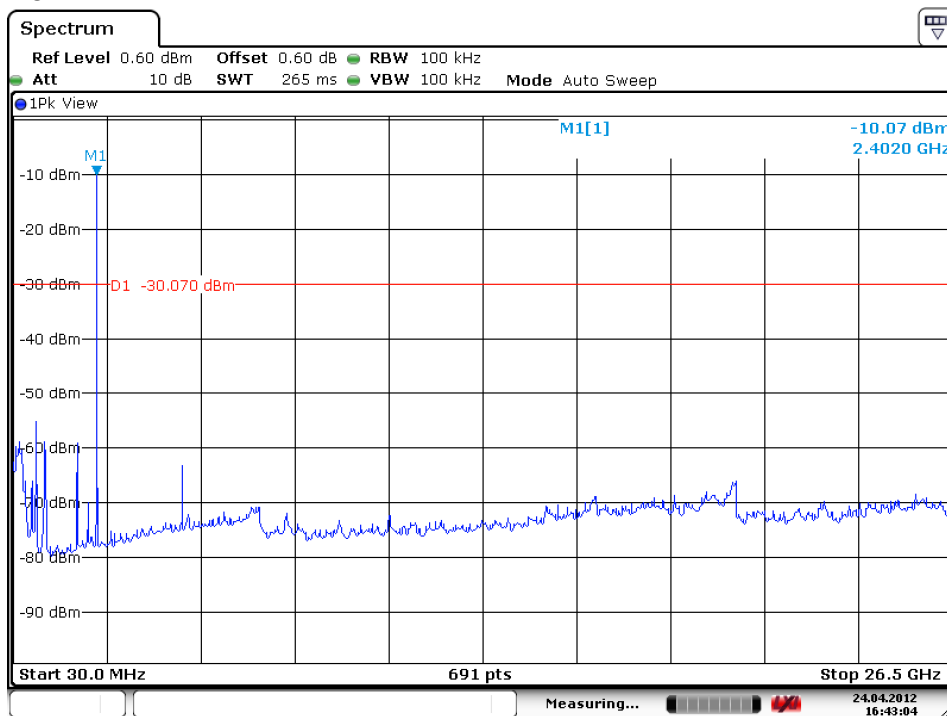
### High Channel



Date: 25.APR.2012 14:26:34

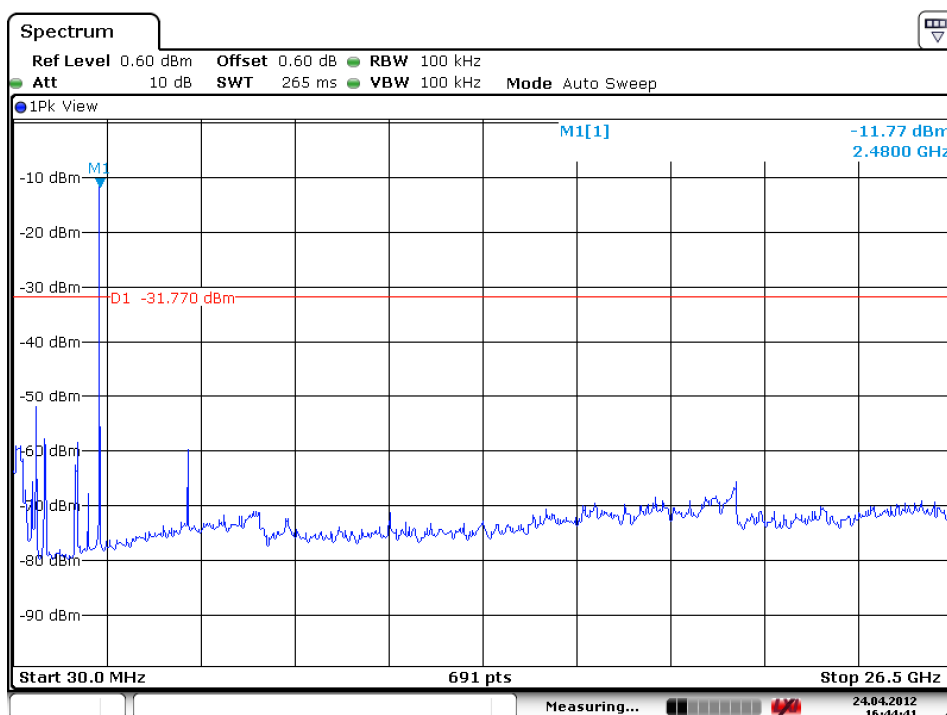
## Test Plot of 100kHz Conducted Emissions, QPSK modulation

### Low Channel



Date: 24.APR.2012 16:43:05

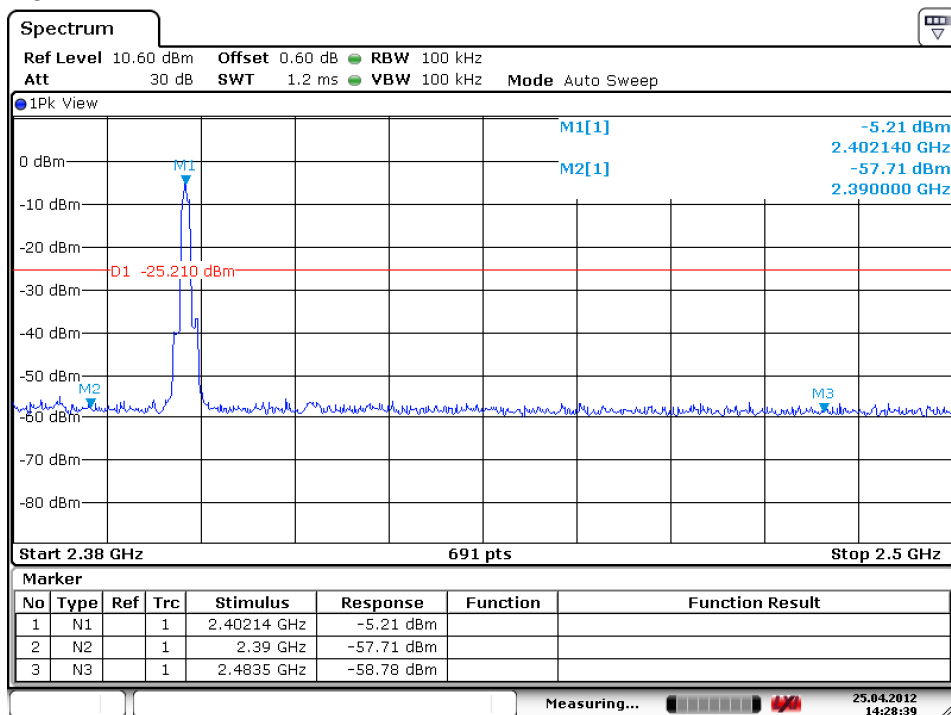
### High Channel



Date: 24.APR.2012 16:44:41

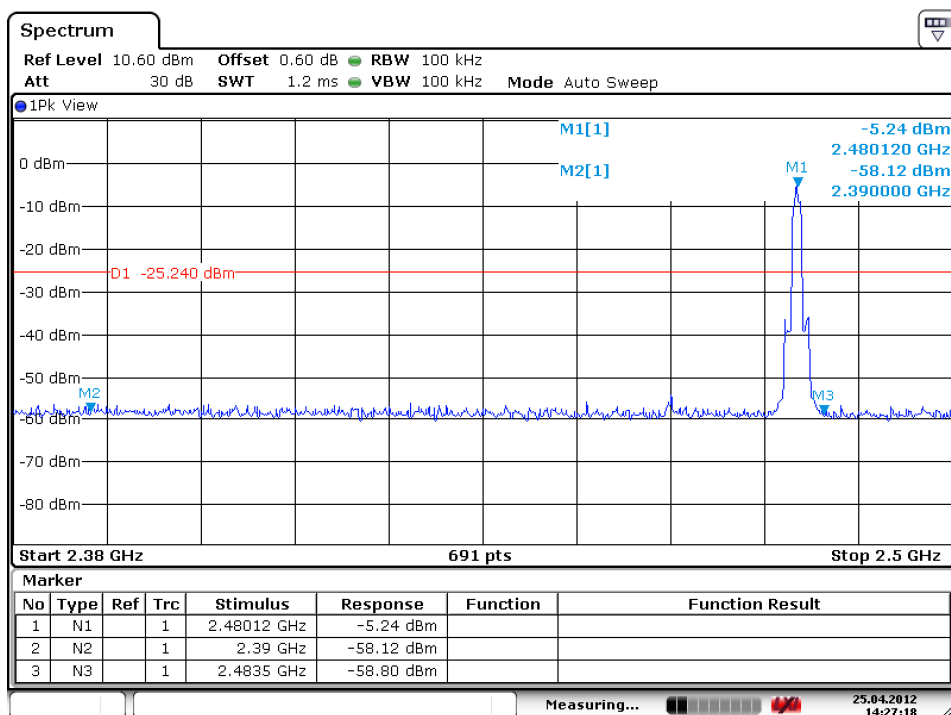
## Test Plot of 100kHz Bandwidth of Frequency Band Edge, QPSK modulation

### Low Channel



Date: 25.APR.2012 14:28:39

### High Channel



Date: 25.APR.2012 14:27:18

### 5.1.5 Spurious Emission

**RESULT:****Passed**

|                   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date of testing   | : | April 24, 2012                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test standard     | : | FCC part 15.247(d), FCC 15.205, FCC 15.209                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Basic standard    | : | ANSI C63.10: 2009                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Limits            | : | Radiated emissions which fall in the restricted bands, as defined in FCC 15.205(a) and RSS-210 2.7 (Table 1), must comply with the radiated emission limits specified in FCC 15.209(a) and RSS-210 2.7 (Table 2 and 3). Emission radiated outside the specified frequency bands must comply with the radiated emission limits specified in FCC 15.209(a) or the applicable rule part for the specific frequency band, RSS-210 2.7 (Table 2 and 3) and RSS-210 A2.9(a). |
| Kind of test site | : | 3m Semi-Anechoic Chamber                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Test setup**

|                      |   |                   |
|----------------------|---|-------------------|
| Test Channel         | : | Low/ Middle/ High |
| Operation mode       | : | A, C              |
| Ambient temperature  | : | 24°C              |
| Relative humidity    | : | 56%               |
| Atmospheric pressure | : | 102 kPa           |

Remark: Testing was carried out within frequency range 30MHz to the tenth harmonic. For details refer to Appendix 2. The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The X Axis orientation is the worst-case and recorded in this test report. Due to the small size of the product and that there are no inductive components of significant size, 9kHz to 30MHz frequency range is not tested based on technical judgment.

### 5.1.6 Frequency Separation

**RESULT:****Passed**

Date of testing : April 24, 2012  
Test standard : FCC part 15.247(a)(1)  
Basic standard : DA 00-705 of March 30, 2000  
Limit :  $\geq 25\text{kHz}$  or  $2/3$  of 20dB bandwidth, whichever is greater

**Test setup**

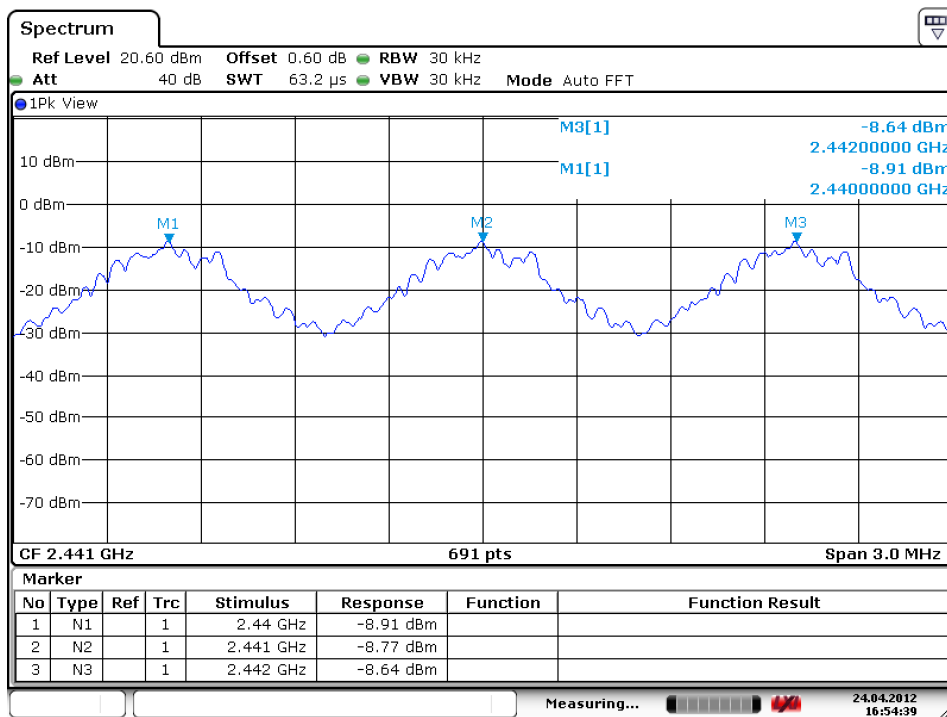
Test Channel : Low/ Middle/ High  
Operation Mode : A  
Ambient temperature :  $24^{\circ}\text{C}$   
Relative humidity : 53%  
Atmospheric pressure : 102 kPa

**Table 10: Test result of Frequency Separation**

| Channel              | Channel Frequency (MHz) | Measured Channel Separation (MHz) | Limit (kHz)                                    | Result |
|----------------------|-------------------------|-----------------------------------|------------------------------------------------|--------|
| Record Channel       | 2441                    | 1                                 | $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth | Pass   |
| Record Channel adj 1 | 2440                    |                                   |                                                |        |
| Record Channel adj 2 | 2442                    |                                   |                                                |        |

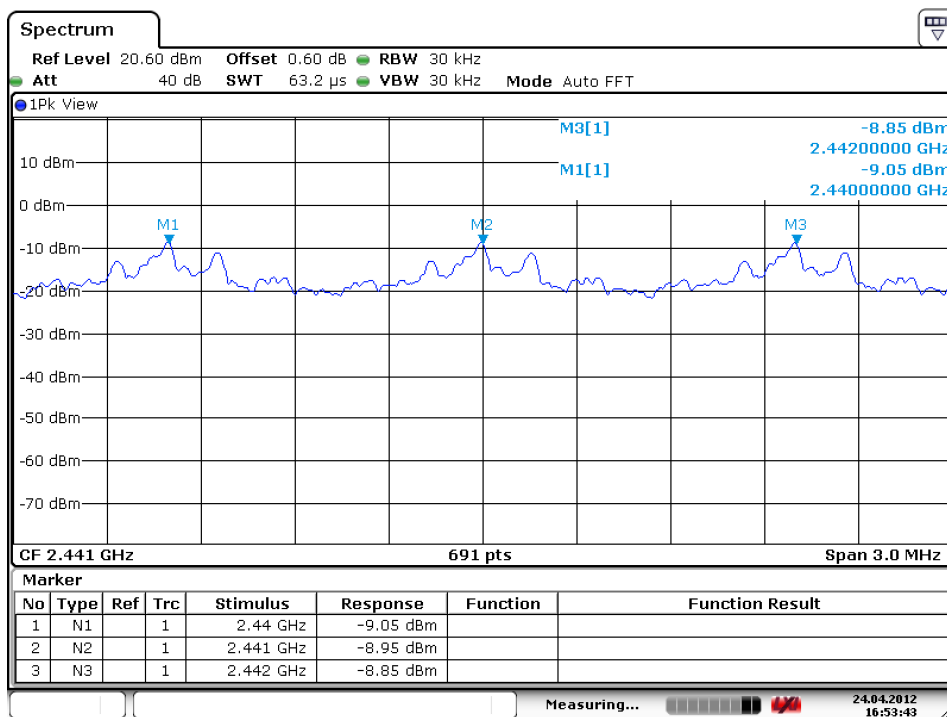
## Test Plot of Frequency Separation

### GFSK



Date: 24.APR.2012 16:54:39

### QPSK



Date: 24.APR.2012 16:53:43

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### 5.1.7 Number of hopping frequency

**RESULT:****Passed**

Date of testing : April 24, 2012  
Test standard : FCC part 15.247(a)(1)(iii)  
Basic standard : DA 00-705 of March 30, 2000  
Limits :  $\geq 15$   
Kind of test site : Shield room

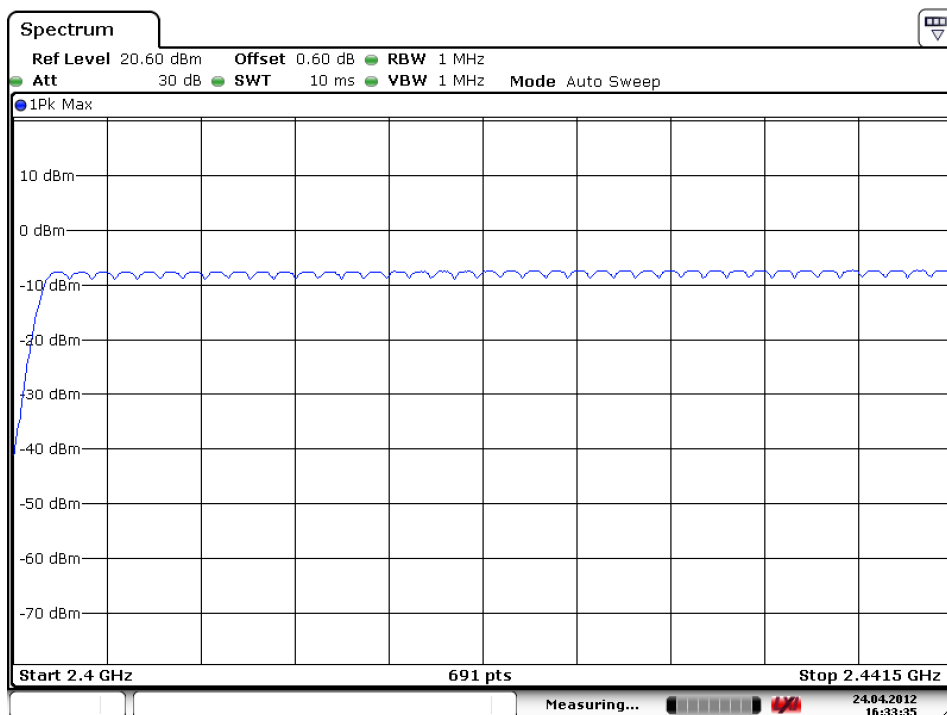
**Test setup**

Test Channel : Low/ Middle/ High  
Operation Mode : A  
Ambient temperature : 24°C  
Relative humidity : 53%  
Atmospheric pressure : 102 kPa

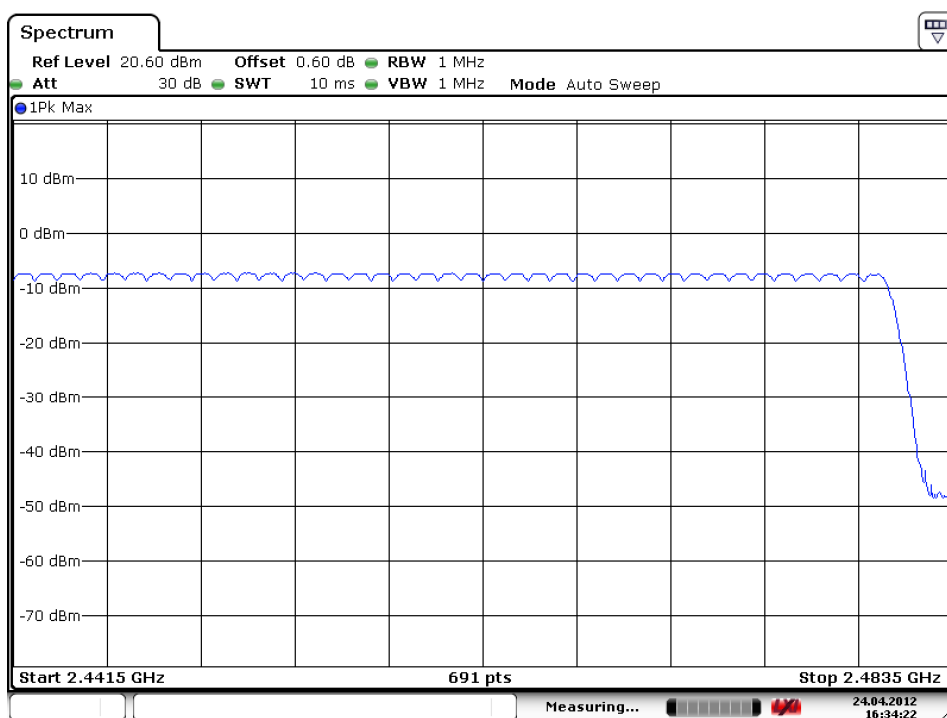
**Table 11: Test result of Number of hopping frequency**

| Frequency Range    | Measured Quantity of Hopping Channel | Limit     | Result |
|--------------------|--------------------------------------|-----------|--------|
| 2400 to 2483.5 MHz | 79                                   | $\geq 15$ | Pass   |

## Test Plot of Number of hopping frequencies



Date: 24.APR.2012 16:33:35



Date: 24.APR.2012 16:34:23

### 5.1.8 Time of Occupancy

**RESULT:****Passed**

Date of testing : April 24, 2012  
Test standard : FCC part 15.247(a)(1)(iii)  
Basic standard : DA 00-705 of March 30, 2000  
Limits : 0.4s  
Kind of test site : Shield room

**Test setup**

Test Channel : Low/ Middle/ High  
Operation Mode : A  
Ambient temperature : 24°C  
Relative humidity : 53%  
Atmospheric pressure : 102 kPa

**Table 12: Test result of Time of Occupancy**

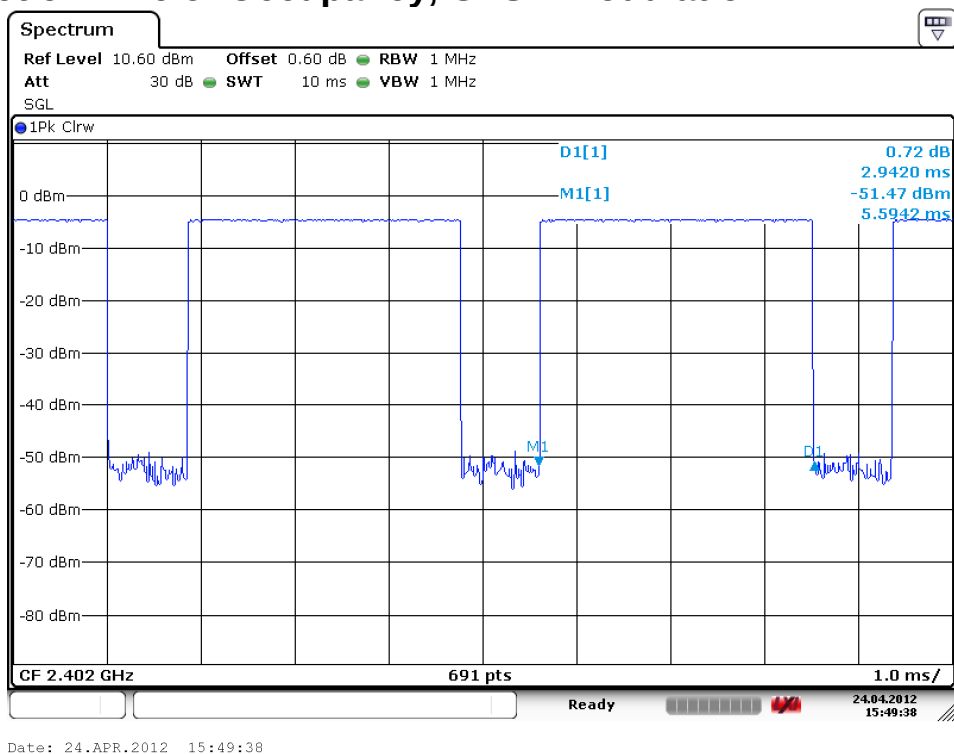
| Data Mode | Captured Burst (s) | Dwell time (s) | Limit (s) | Result |
|-----------|--------------------|----------------|-----------|--------|
| DH5       | 0.00294            | 0.3138         | 0.4       | Pass   |
| 3DH5      | 0.00294            | 0.3138         | 0.4       | Pass   |

Note:

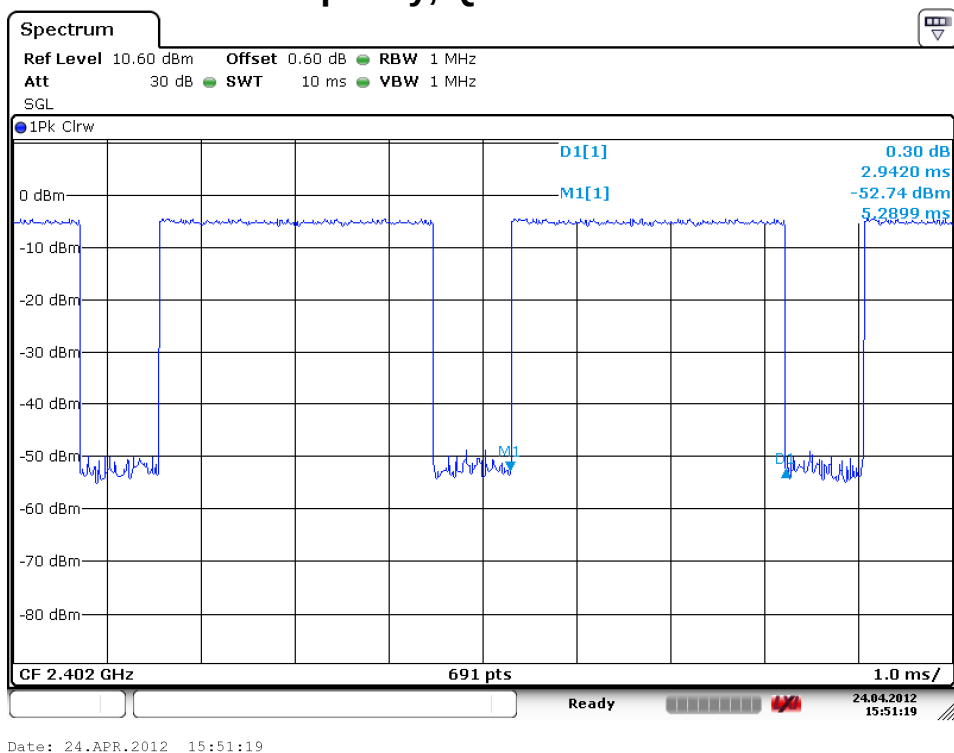
Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

## Test Plot of Time of Occupancy, GFSK modulation



## Test Plot of Time of Occupancy, QPSK modulation



## 6. Safety Human exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

**RESULT:****Passed**

Test standard : FCC KDB Publication 447498

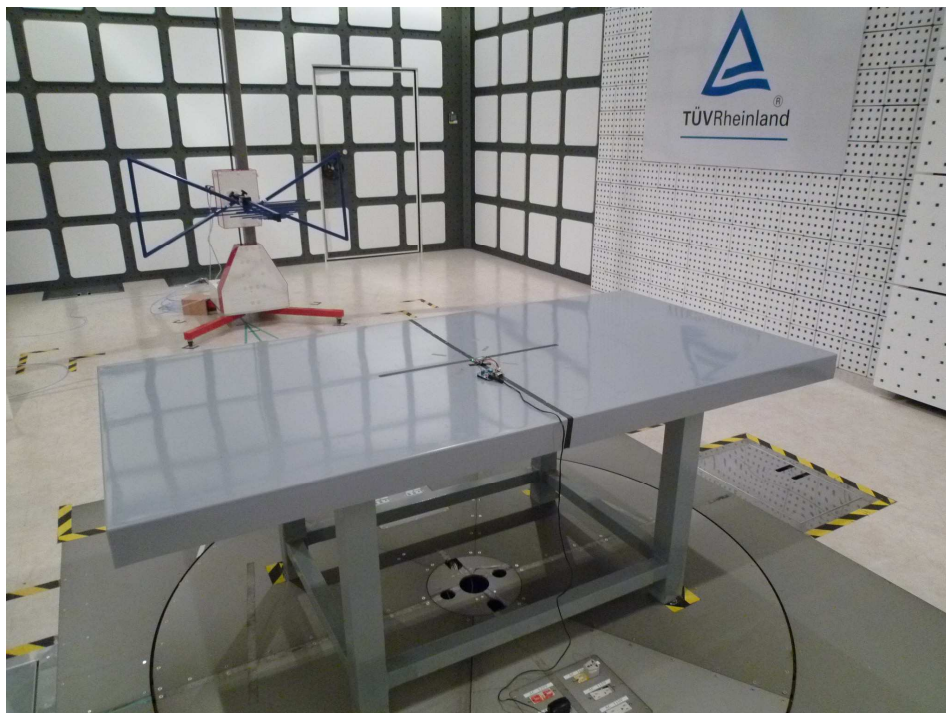
Since maximum peak output power of the transmitter is  $<60/f(\text{GHz})\text{mW}$ , i.e.  $0.4416\text{mW} < 25(=60/2.4)\text{mW}$ , hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

## 7. Photographs of the Test Set-Up

**Photograph 1: Set-up for Spurious Emissions (Front View)**



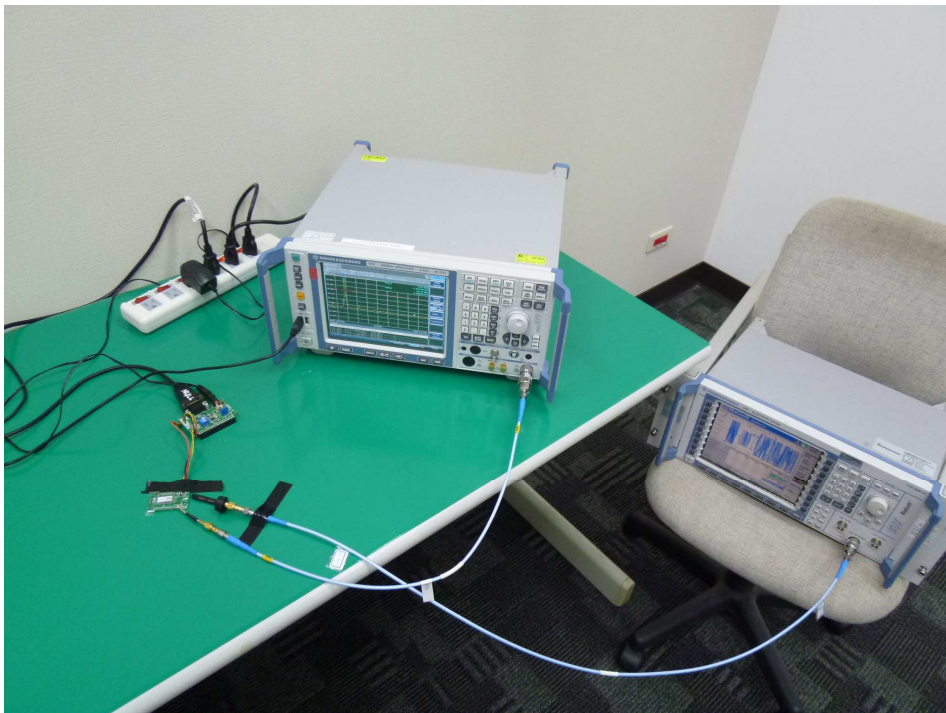
**Photograph 2: Set-up for Spurious Emissions (Back View 1)**



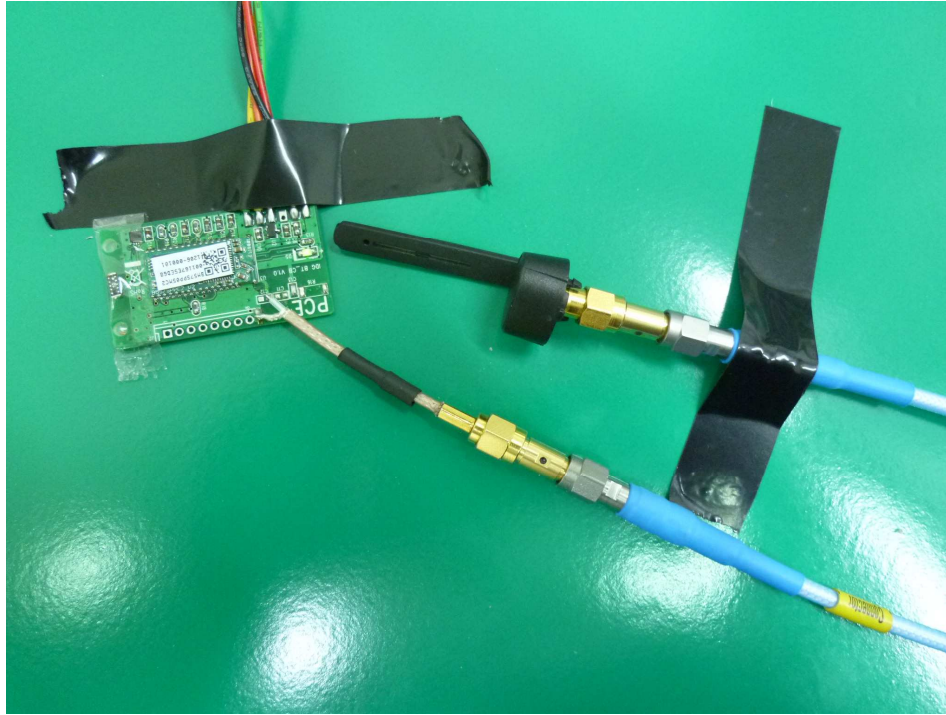
**Photograph 3: Set-up for Spurious Emissions (Back View 2)**



**Photograph 4: Set-up for Conducted testing**



**Photograph 5: Set-up for Conducted testing**



## 8. List of Tables

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## 9. List of Photographs

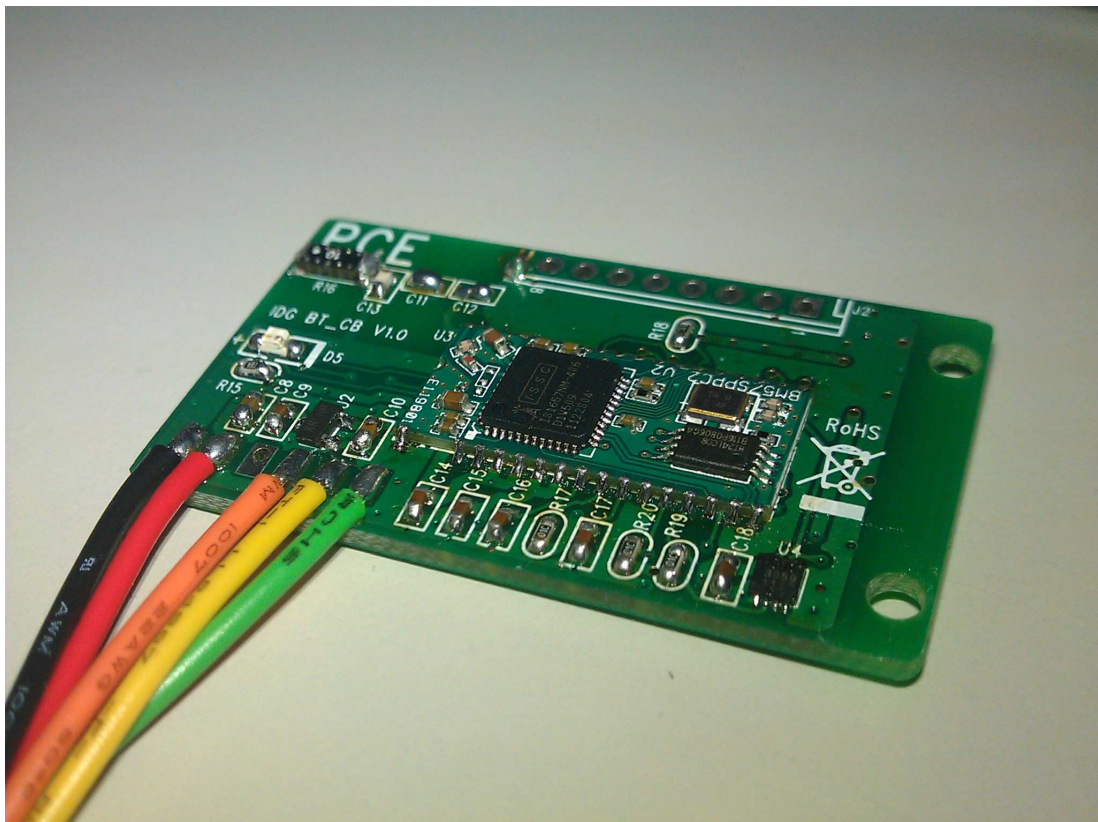
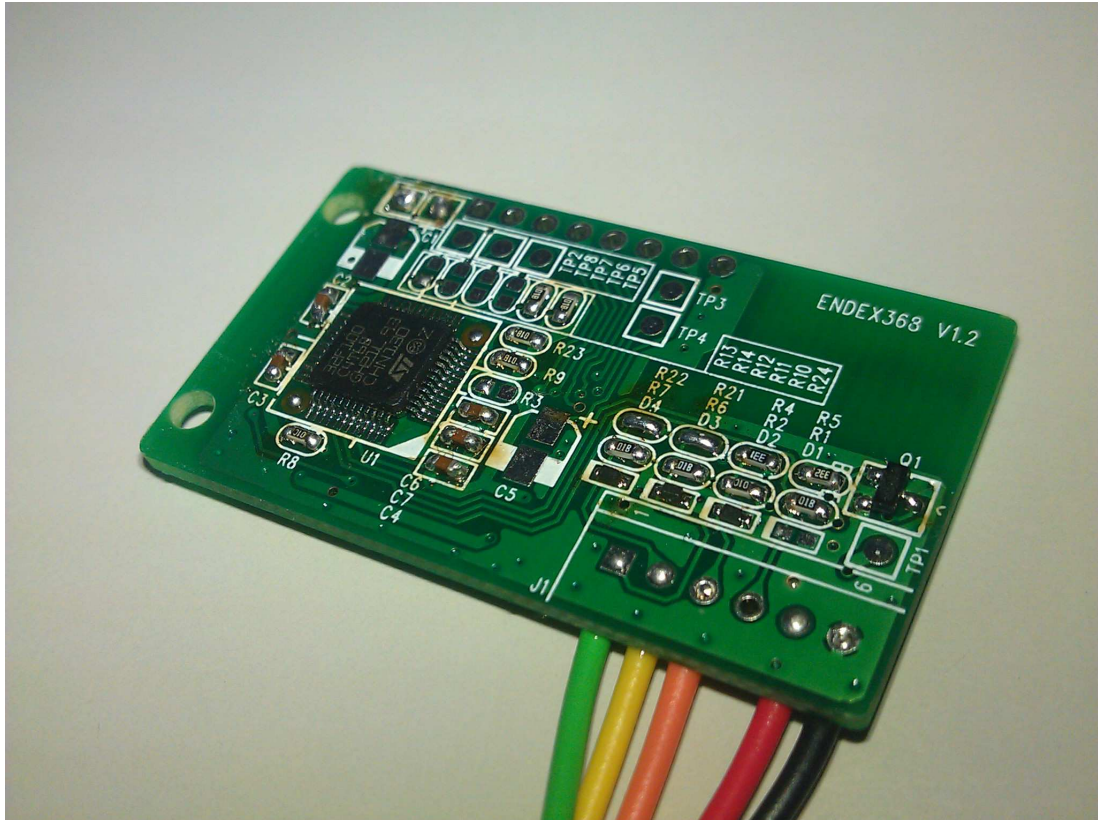
|                                                                 |    |
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Appendix 1: IUT Photos

(File: 10037140Appendix1)

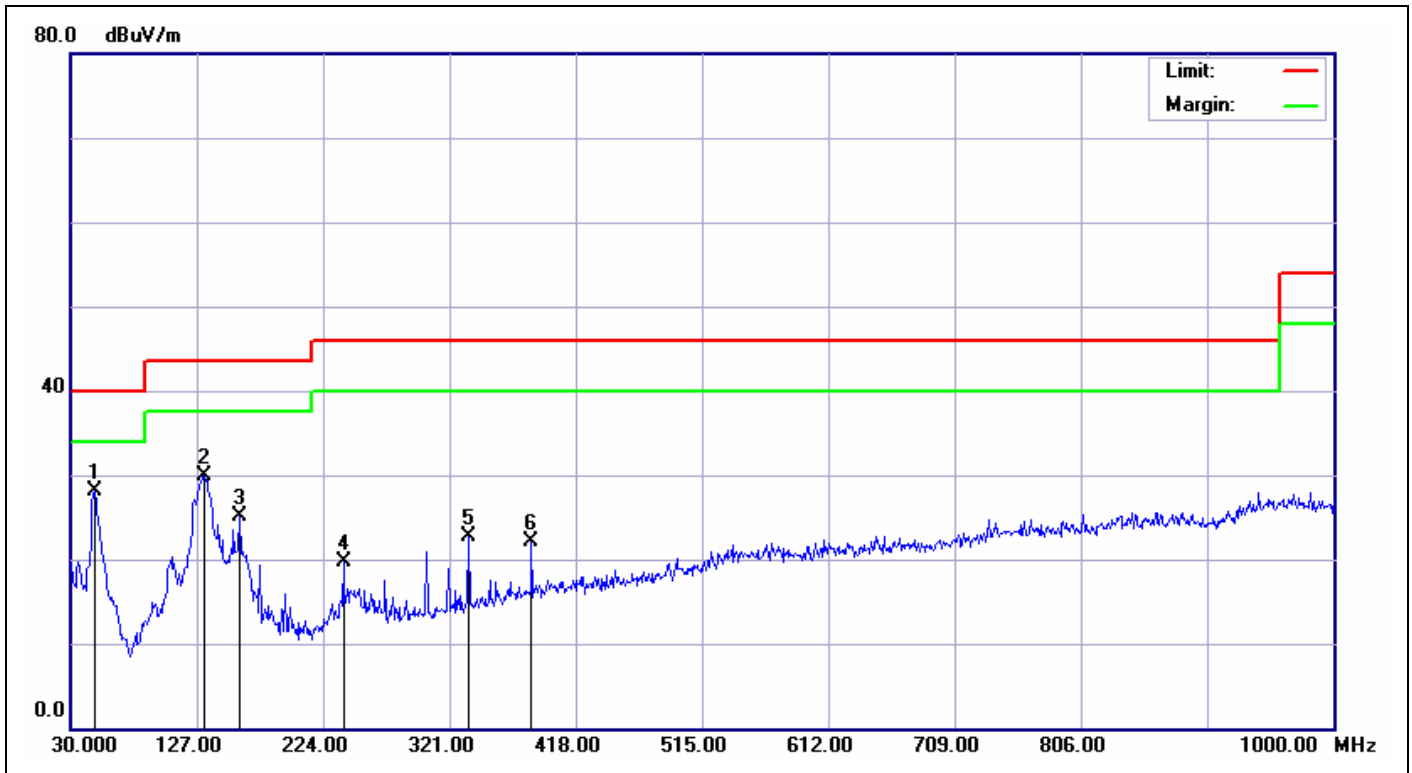
Product: Endex Automation Technology Co., Ltd.  
Type Designation: Bluetooth Limited module



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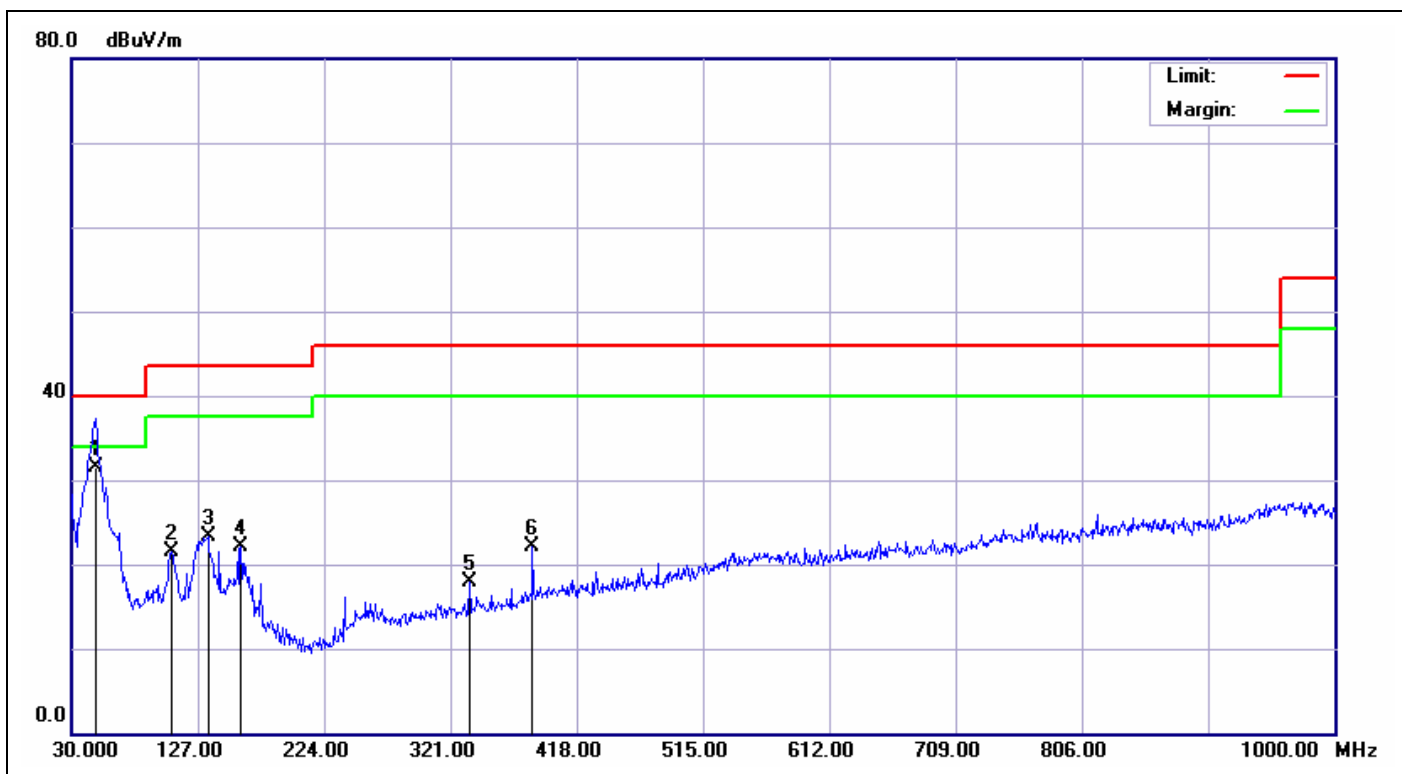
Appendix 2: Test Result of Radiated Emissions and  
Radiated Band Edge

(File: 10037140Appendix2)



|                       |                                 |                           |                              |
|-----------------------|---------------------------------|---------------------------|------------------------------|
| <b>Service No.:</b>   | <b>113155501</b>                | <b>Test Distance:</b>     | <b>3m</b>                    |
| <b>Test Standard:</b> | <b>FCC Class B 3M Radiation</b> | <b>Ant. Polarization:</b> | <b>Horizontal</b>            |
| <b>Test item:</b>     | <b>Radiation Emission</b>       | <b>Test Time:</b>         | <b>2012/4/24 PM 01:04:46</b> |
| <b>Applicant:</b>     | <b>Endex</b>                    | <b>Test Rating:</b>       |                              |
| <b>Product:</b>       | <b>BT module</b>                | <b>Temp.(°C)/Hum.(%):</b> | <b>24(°C)/58%</b>            |
| <b>Model No.:</b>     | <b>IDG BI_CB V1 0</b>           | <b>Test Engineer:</b>     | <b>Howard Lin</b>            |
| <b>Test Mode:</b>     | <b>TX BT 2441</b>               |                           |                              |
| <b>Remark:</b>        |                                 |                           |                              |

| No. | Frequency<br>(MHz) | Factor<br>(dB/m) | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Det. | Height<br>(cm) | Azimuth<br>( ° ) | Remark |
|-----|--------------------|------------------|-------------------|-------------------|-------------------|----------------|------|----------------|------------------|--------|
| 1   | 48.4300            | -17.52           | 45.59             | 28.07             | 40.00             | -11.93         | QP   | 200            | 24               |        |
| 2   | 132.8200           | -13.63           | 43.53             | 29.90             | 43.50             | -13.60         | QP   | 100            | 241              |        |
| 3   | 159.9800           | -14.64           | 39.74             | 25.10             | 43.50             | -18.40         | QP   | 200            | 113              |        |
| 4   | 239.5200           | -14.27           | 34.06             | 19.79             | 46.00             | -26.21         | QP   | 300            | 274              |        |
| 5   | 335.5500           | -10.50           | 33.19             | 22.69             | 46.00             | -23.31         | QP   | 100            | 162              |        |
| 6   | 384.0500           | -9.32            | 31.34             | 22.02             | 46.00             | -23.98         | QP   | 100            | 35               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC Class B 3M Radiation

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2012/4/24 PM 01:11:36

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

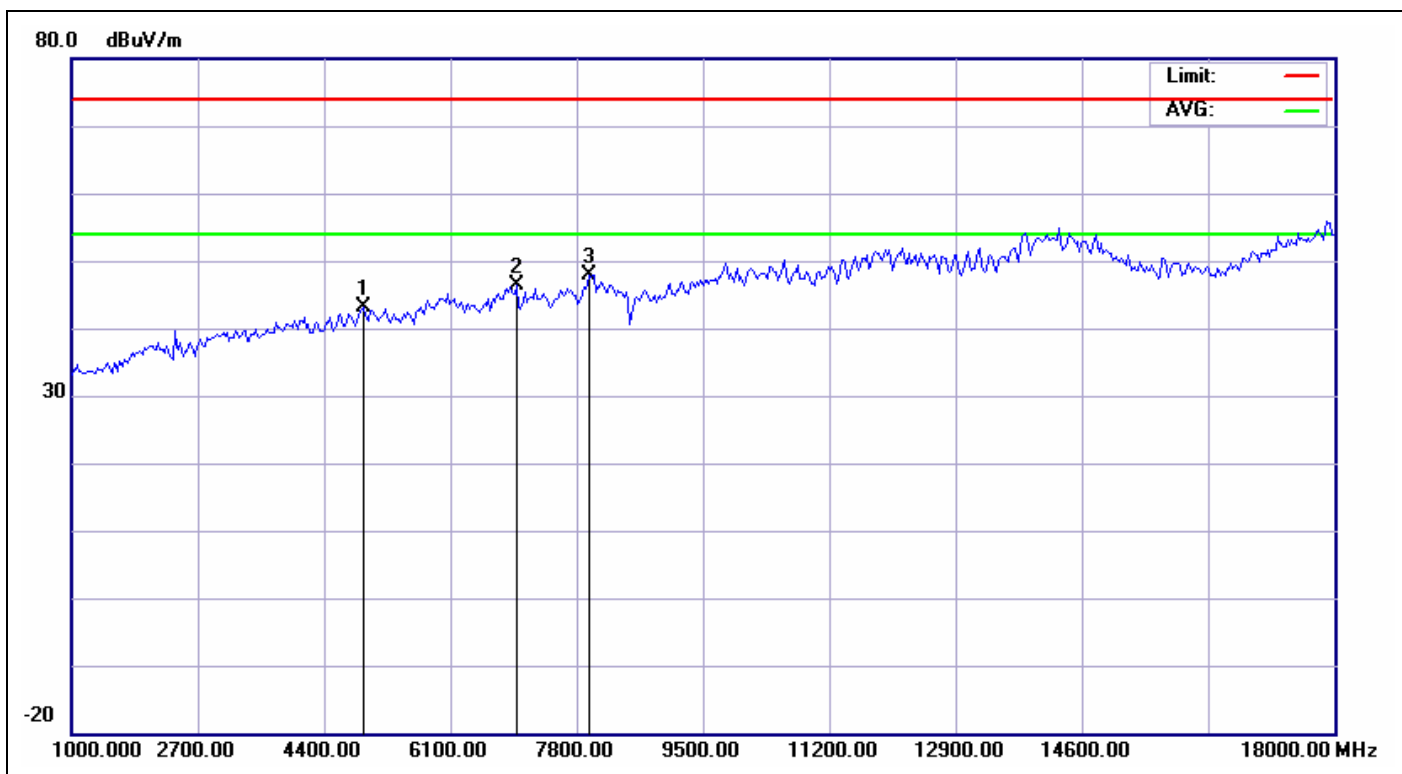
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: TX BT 2441

Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 48.1100         | -17.37        | 48.97          | 31.60          | 40.00          | -8.40       | QP   | 100         | 243           |        |
| 2   | 106.6300        | -15.20        | 36.71          | 21.51          | 43.50          | -21.99      | QP   | 100         | 200           |        |
| 3   | 134.7600        | -13.61        | 36.82          | 23.21          | 43.50          | -20.29      | QP   | 100         | 149           |        |
| 4   | 159.9800        | -14.64        | 36.74          | 22.10          | 43.50          | -21.40      | QP   | 100         | 1             |        |
| 5   | 335.5500        | -10.50        | 28.43          | 17.93          | 46.00          | -28.07      | QP   | 100         | 126           |        |
| 6   | 384.0500        | -9.32         | 31.36          | 22.04          | 46.00          | -23.96      | QP   | 100         | 186           |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2012/4/25 PM 04:21:54

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 25(°C)/58%

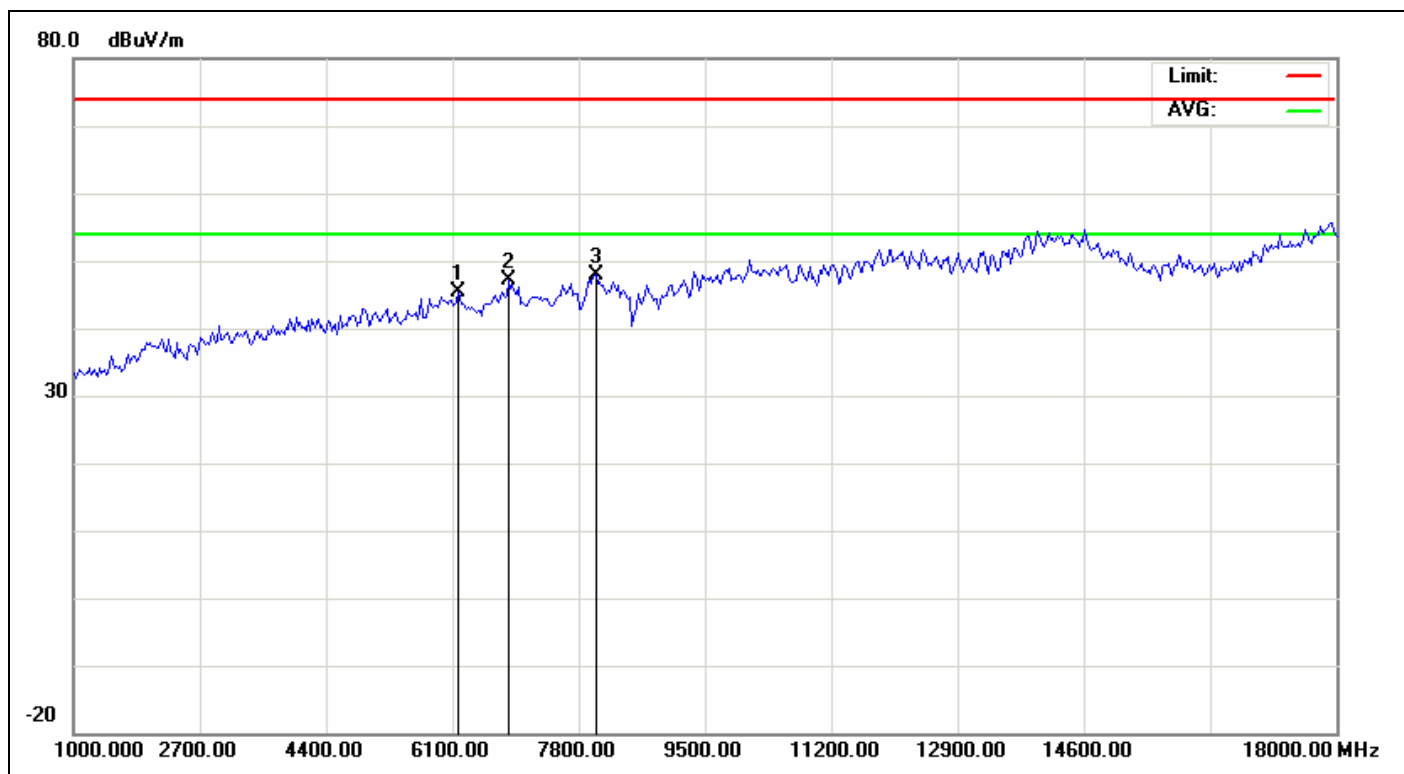
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: BT 2402 TX

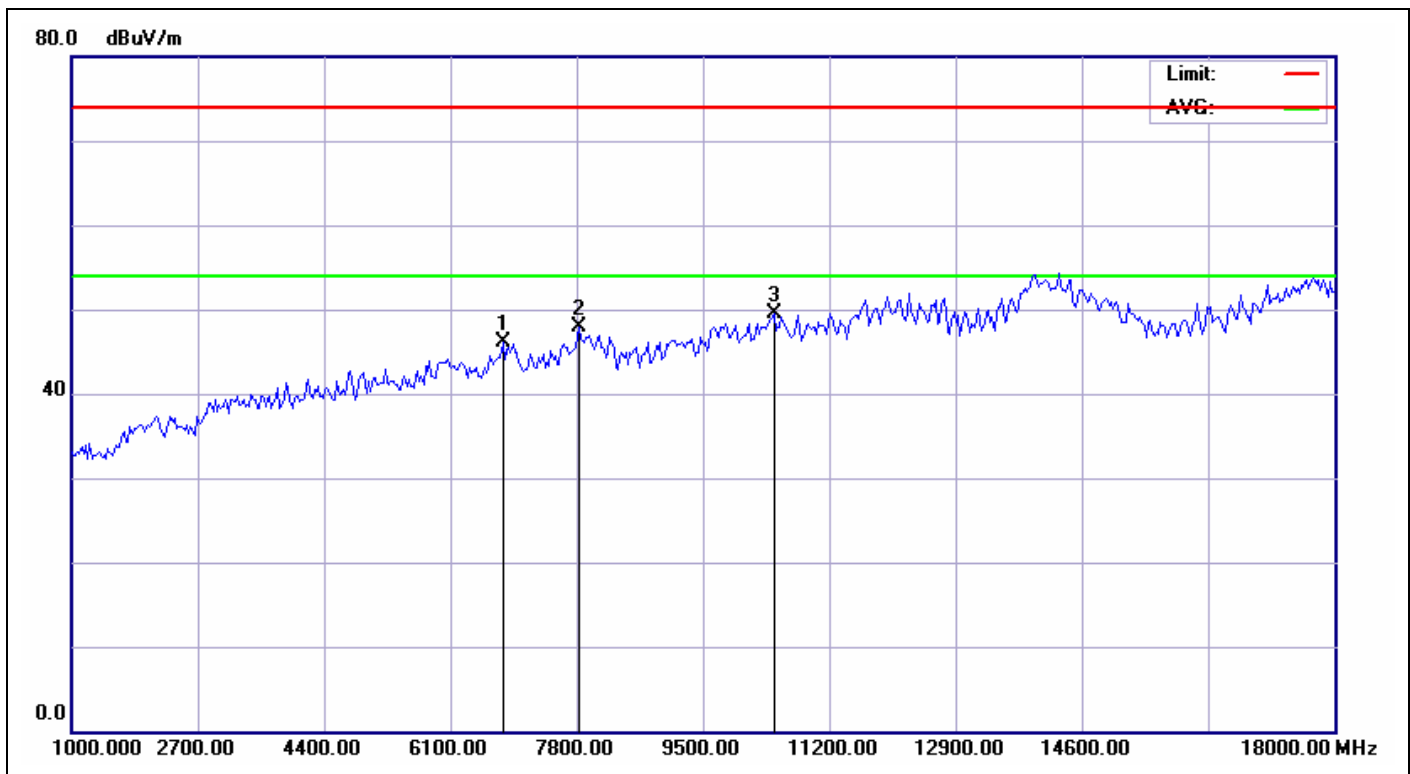
Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 4923.077        | 13.51         | 29.66          | 43.17          | 74.00          | -30.83      | peak |             |               |        |
| 2   | 6993.590        | 18.58         | 27.70          | 46.28          | 74.00          | -27.72      | peak |             |               |        |
| 3   | 7974.359        | 21.06         | 26.83          | 47.89          | 74.00          | -26.11      | peak |             |               |        |



|                |                    |                    |                       |
|----------------|--------------------|--------------------|-----------------------|
| Service No.:   | 113155501          | Test Distance:     | 3m                    |
| Test Standard: | FCC above 1G PEAK  | Ant. Polarization: | Vertical              |
| Test item:     | Radiation Emission | Test Time:         | 2012/4/25 PM 04:19:46 |
| Applicant:     | Endex              | Test Rating:       |                       |
| Product:       | BT module          | Temp.(°C)/Hum.(%)  | 25(°C)/58%            |
| Model No.:     | IDG BI_CB V1 0     | Test Engineer:     | Howard Lin            |
| Test Mode:     | BT 2402 TX         |                    |                       |
| Remark:        |                    |                    |                       |

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 6176.282        | 17.07         | 28.20          | 45.27          | 74.00          | -28.73      | peak |             |               |        |
| 2   | 6857.372        | 18.11         | 29.06          | 47.17          | 74.00          | -26.83      | peak |             |               |        |
| 3   | 8028.846        | 21.02         | 26.89          | 47.91          | 74.00          | -26.09      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2012/4/24 AM 11:30:10

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

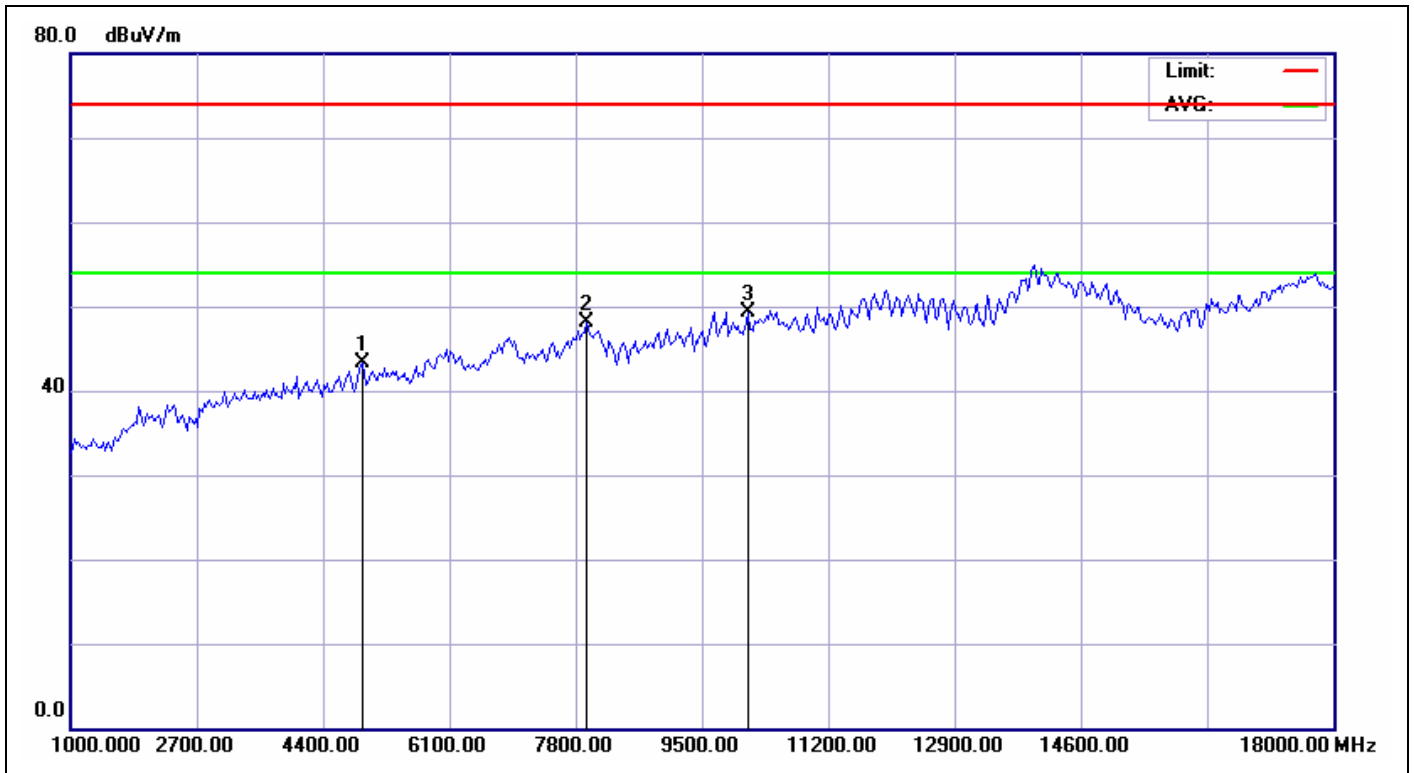
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: BT 2441 TX

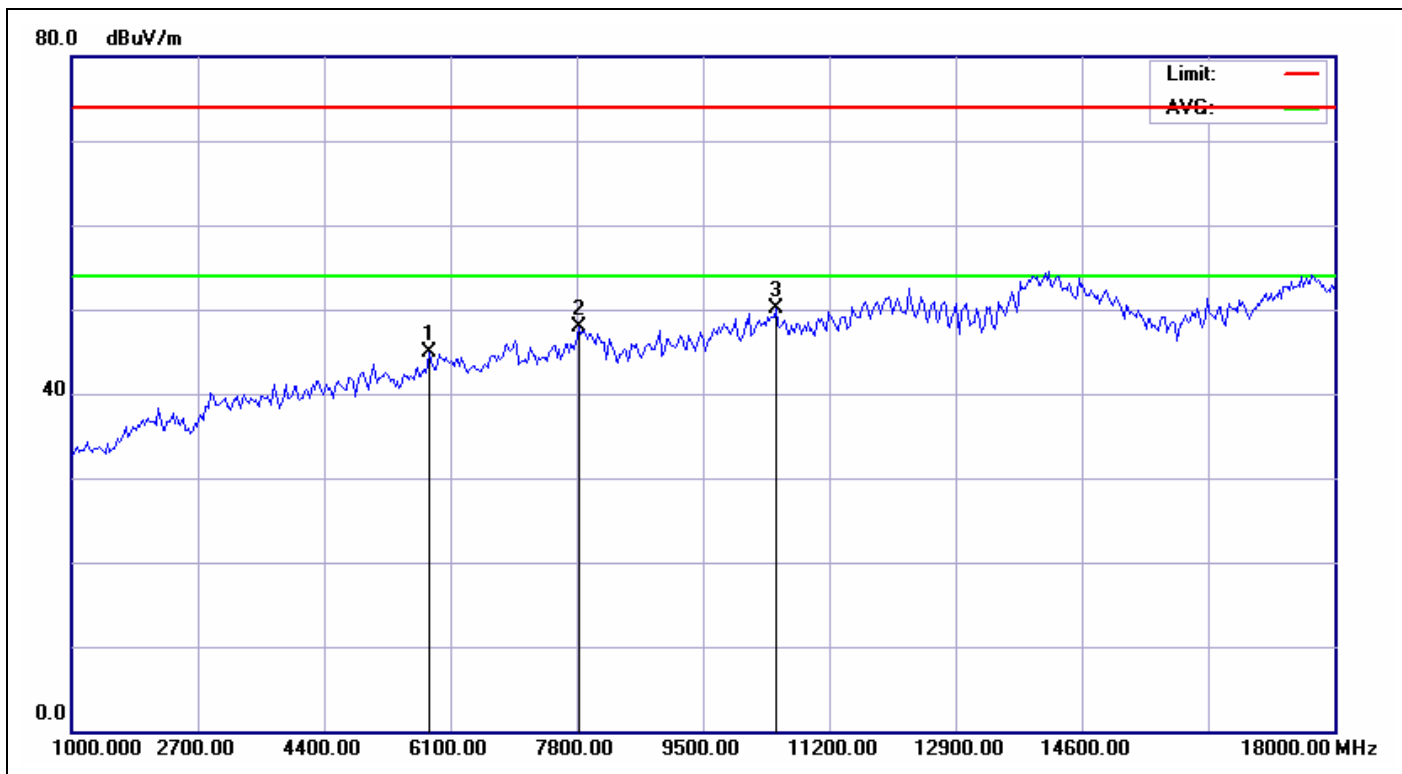
Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 6802.885        | 17.91         | 28.20          | 46.11          | 74.00          | -27.89      | peak |             |               |        |
| 2   | 7838.141        | 20.52         | 27.35          | 47.87          | 74.00          | -26.13      | peak |             |               |        |
| 3   | 10453.526       | 22.98         | 26.56          | 49.54          | 74.00          | -24.46      | peak |             |               |        |



|                       |                           |                           |                              |
|-----------------------|---------------------------|---------------------------|------------------------------|
| <b>Service No.:</b>   | <b>113155501</b>          | <b>Test Distance:</b>     | <b>3m</b>                    |
| <b>Test Standard:</b> | <b>FCC above 1G PEAK</b>  | <b>Ant. Polarization:</b> | <b>Vertical</b>              |
| <b>Test item:</b>     | <b>Radiation Emission</b> | <b>Test Time:</b>         | <b>2012/4/24 AM 11:29:09</b> |
| <b>Applicant:</b>     | <b>Endex</b>              | <b>Test Rating:</b>       |                              |
| <b>Product:</b>       | <b>BT module</b>          | <b>Temp.(°C)/Hum.(%)</b>  | <b>24(°C)/58%</b>            |
| <b>Model No.:</b>     | <b>IDG BI_CB V1 0</b>     | <b>Test Engineer:</b>     | <b>Howard Lin</b>            |
| <b>Test Mode:</b>     | <b>BT 2441 TX</b>         |                           |                              |
| <b>Remark:</b>        |                           |                           |                              |

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 4923.077        | 13.51         | 29.79          | 43.30          | 74.00          | -30.70      | peak |             |               |        |
| 2   | 7947.115        | 20.95         | 27.15          | 48.10          | 74.00          | -25.90      | peak |             |               |        |
| 3   | 10126.603       | 22.21         | 27.02          | 49.23          | 74.00          | -24.77      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2012/4/24 AM 11:32:06

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

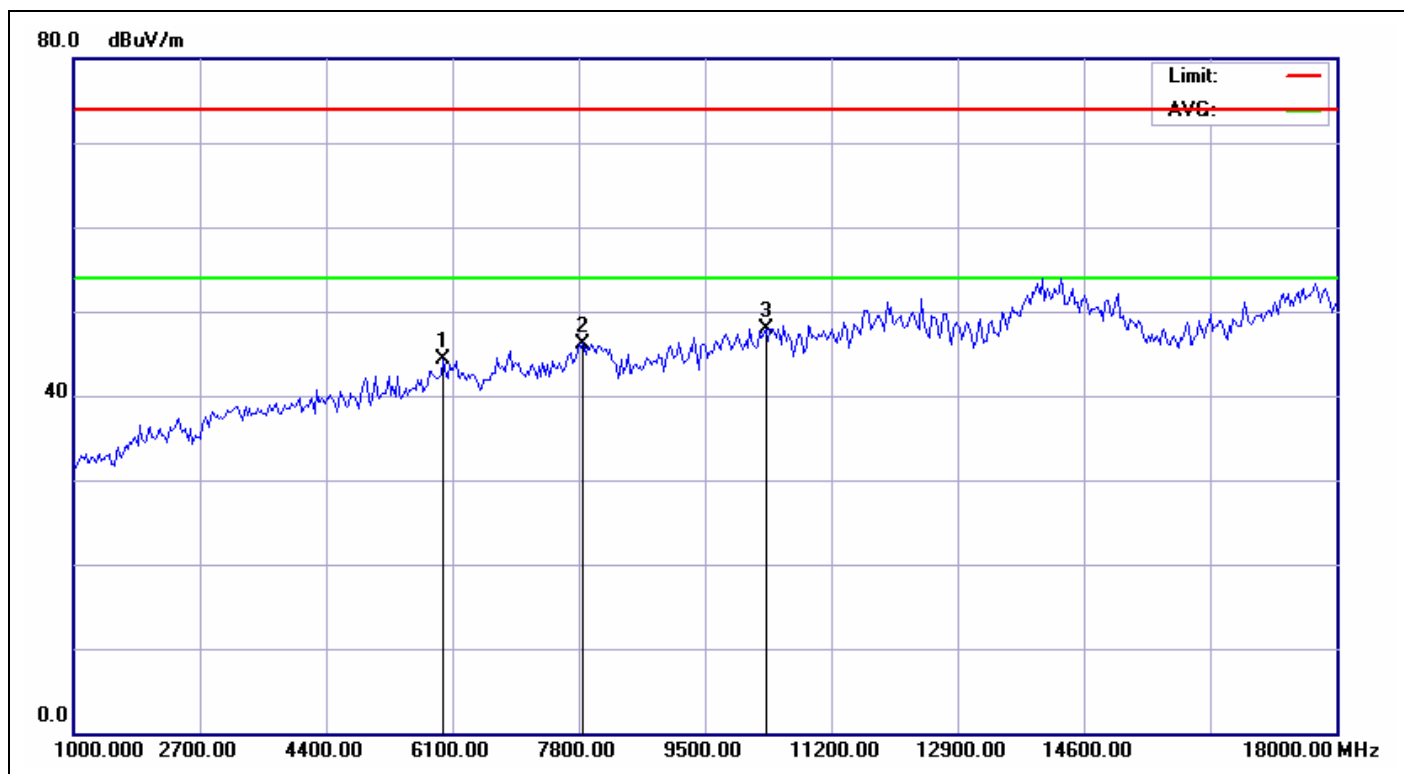
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: BT 2480 TX

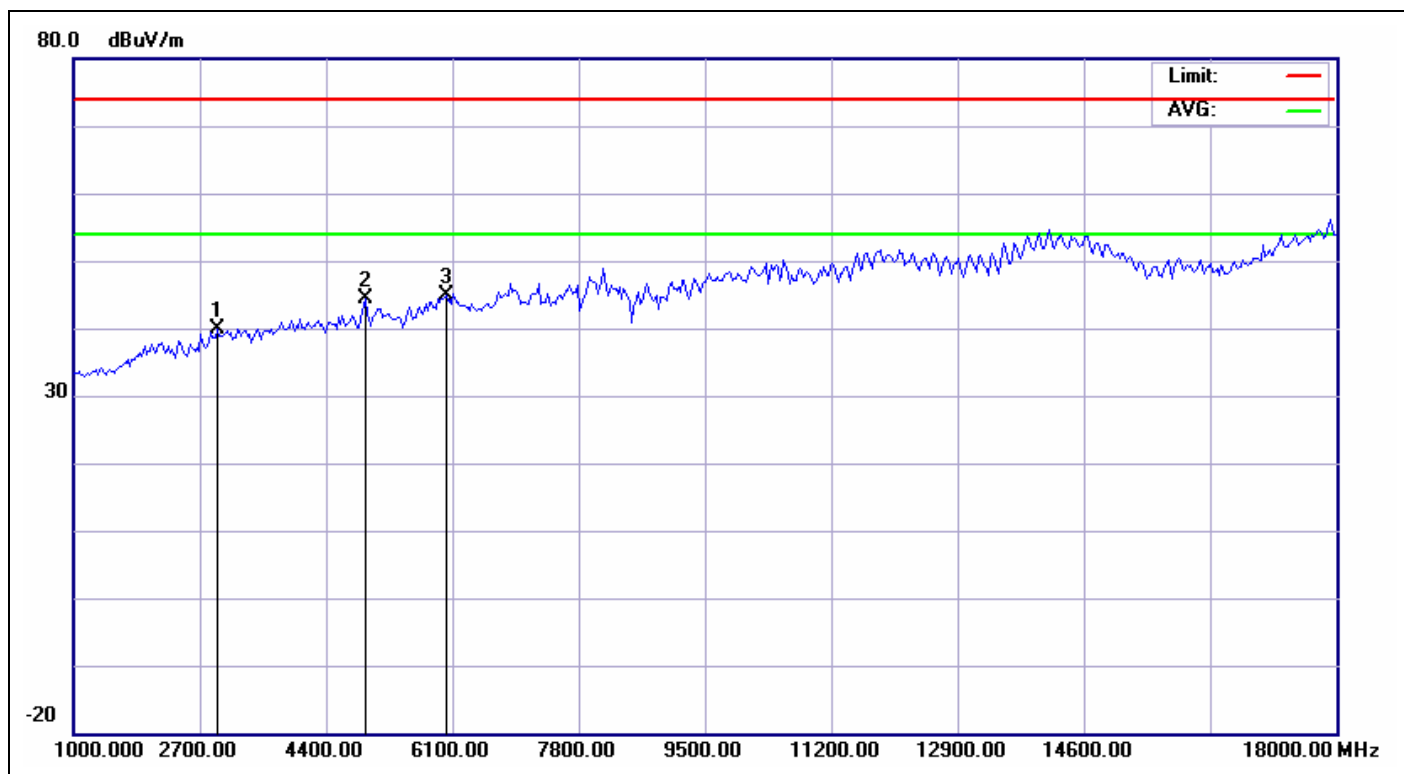
Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 5822.115        | 16.21         | 28.72          | 44.93          | 74.00          | -29.07      | peak |             |               |        |
| 2   | 7838.141        | 20.52         | 27.38          | 47.90          | 74.00          | -26.10      | peak |             |               |        |
| 3   | 10480.769       | 23.05         | 26.97          | 50.02          | 74.00          | -23.98      | peak |             |               |        |



|                       |                           |                           |                              |
|-----------------------|---------------------------|---------------------------|------------------------------|
| <b>Service No.:</b>   | <b>113155501</b>          | <b>Test Distance:</b>     | <b>3m</b>                    |
| <b>Test Standard:</b> | <b>FCC above 1G PEAK</b>  | <b>Ant. Polarization:</b> | <b>Vertical</b>              |
| <b>Test item:</b>     | <b>Radiation Emission</b> | <b>Test Time:</b>         | <b>2012/4/24 AM 11:32:48</b> |
| <b>Applicant:</b>     | <b>Endex</b>              | <b>Test Rating:</b>       |                              |
| <b>Product:</b>       | <b>BT module</b>          | <b>Temp.(°C)/Hum.(%):</b> | <b>24(°C)/58%</b>            |
| <b>Model No.:</b>     | <b>IDG BI_CB V1 0</b>     | <b>Test Engineer:</b>     | <b>Howard Lin</b>            |
| <b>Test Mode:</b>     | <b>BT 2480 TX</b>         |                           |                              |
| <b>Remark:</b>        |                           |                           |                              |

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 5985.577        | 17.11         | 27.20          | 44.31          | 74.00          | -29.69      | peak |             |               |        |
| 2   | 7865.385        | 20.62         | 25.58          | 46.20          | 74.00          | -27.80      | peak |             |               |        |
| 3   | 10317.308       | 22.66         | 25.25          | 47.91          | 74.00          | -26.09      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2012/4/25 PM 04:24:21

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 25(°C)/58%

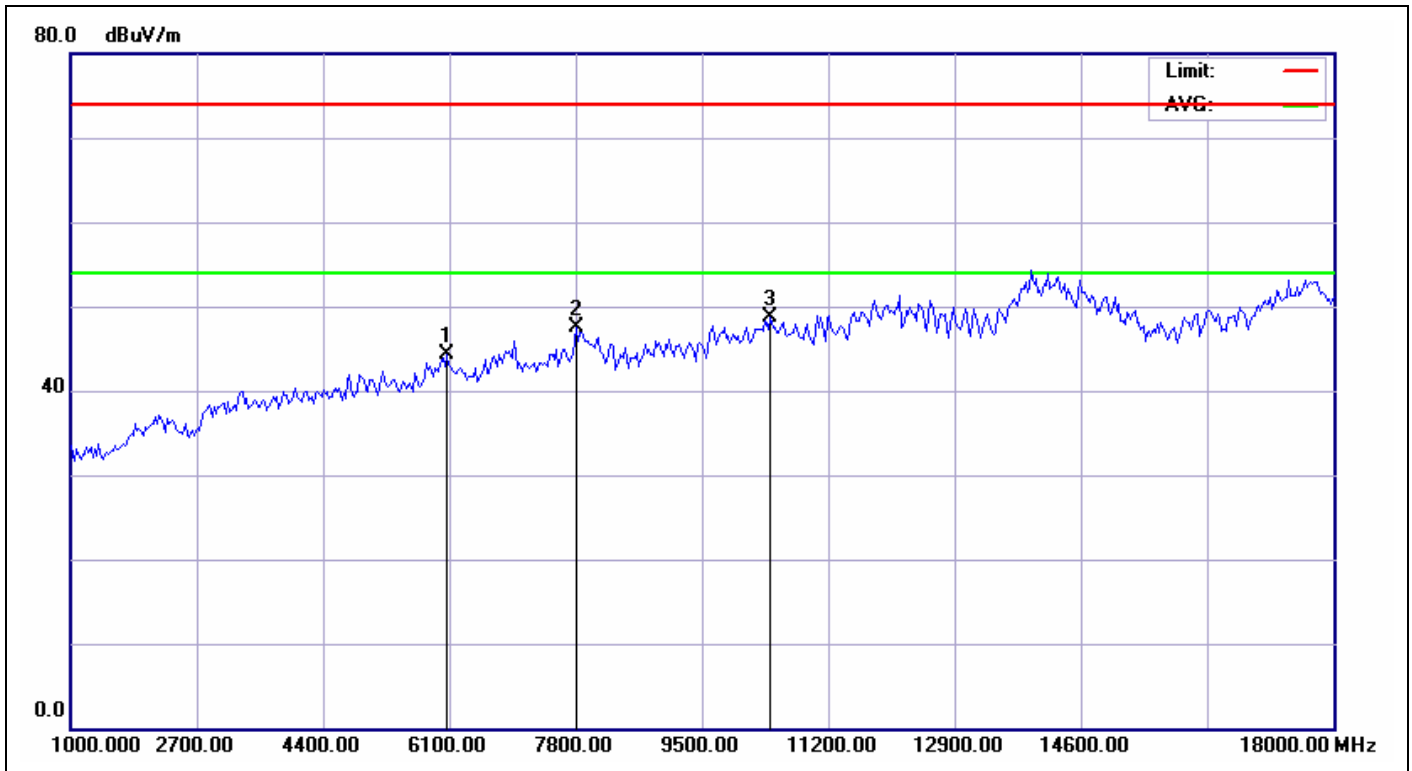
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: EDR 2402 TX

Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 2934.295        | 9.70          | 30.09          | 39.79          | 74.00          | -34.21      | peak |             |               |        |
| 2   | 4923.077        | 13.51         | 30.88          | 44.39          | 74.00          | -29.61      | peak |             |               |        |
| 3   | 6012.821        | 17.18         | 27.68          | 44.86          | 74.00          | -29.14      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2012/4/24 AM 11:34:45

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

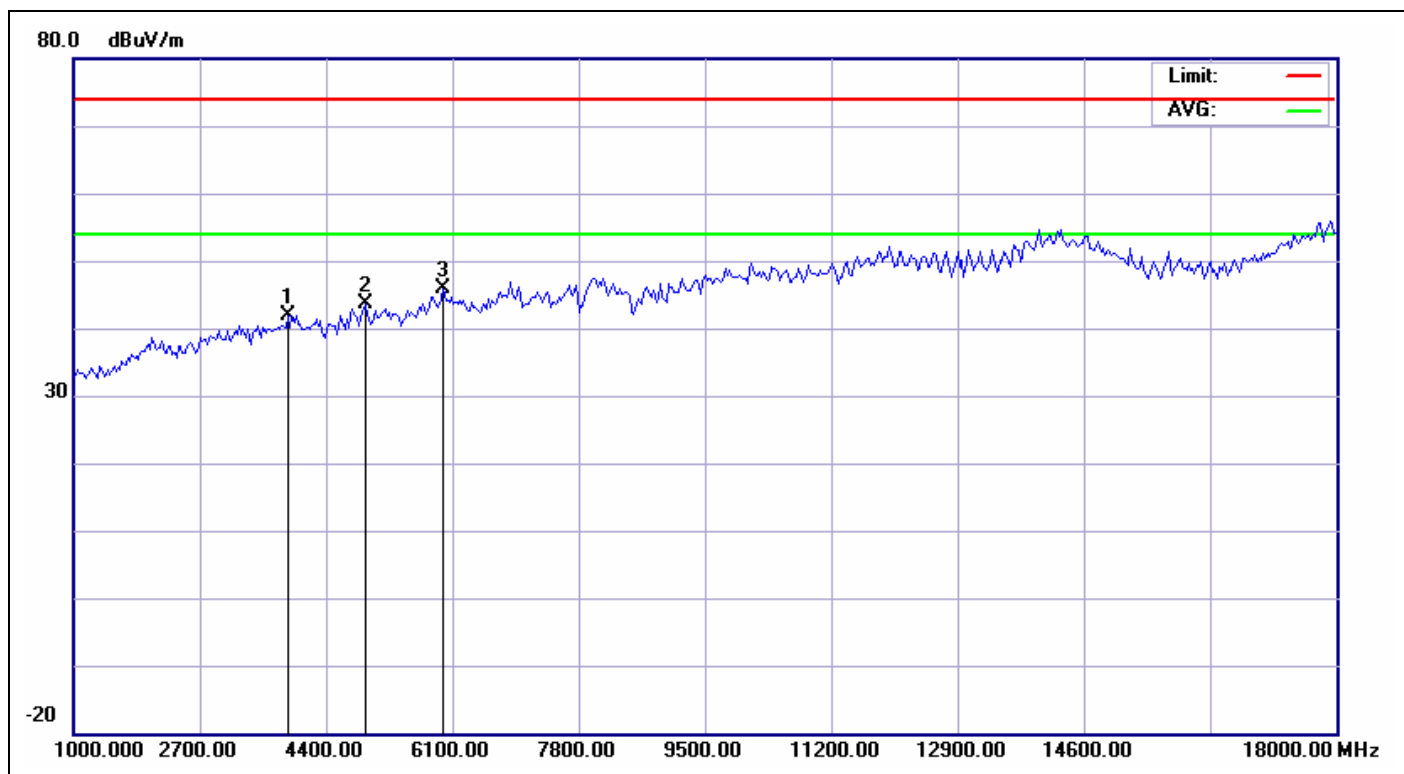
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: EDR 2402 TX

Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 6067.308        | 17.15         | 27.16          | 44.31          | 74.00          | -29.69      | peak |             |               |        |
| 2   | 7810.897        | 20.41         | 27.17          | 47.58          | 74.00          | -26.42      | peak |             |               |        |
| 3   | 10426.282       | 22.93         | 25.71          | 48.64          | 74.00          | -25.36      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2012/4/25 PM 04:26:23

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 25(°C)/58%

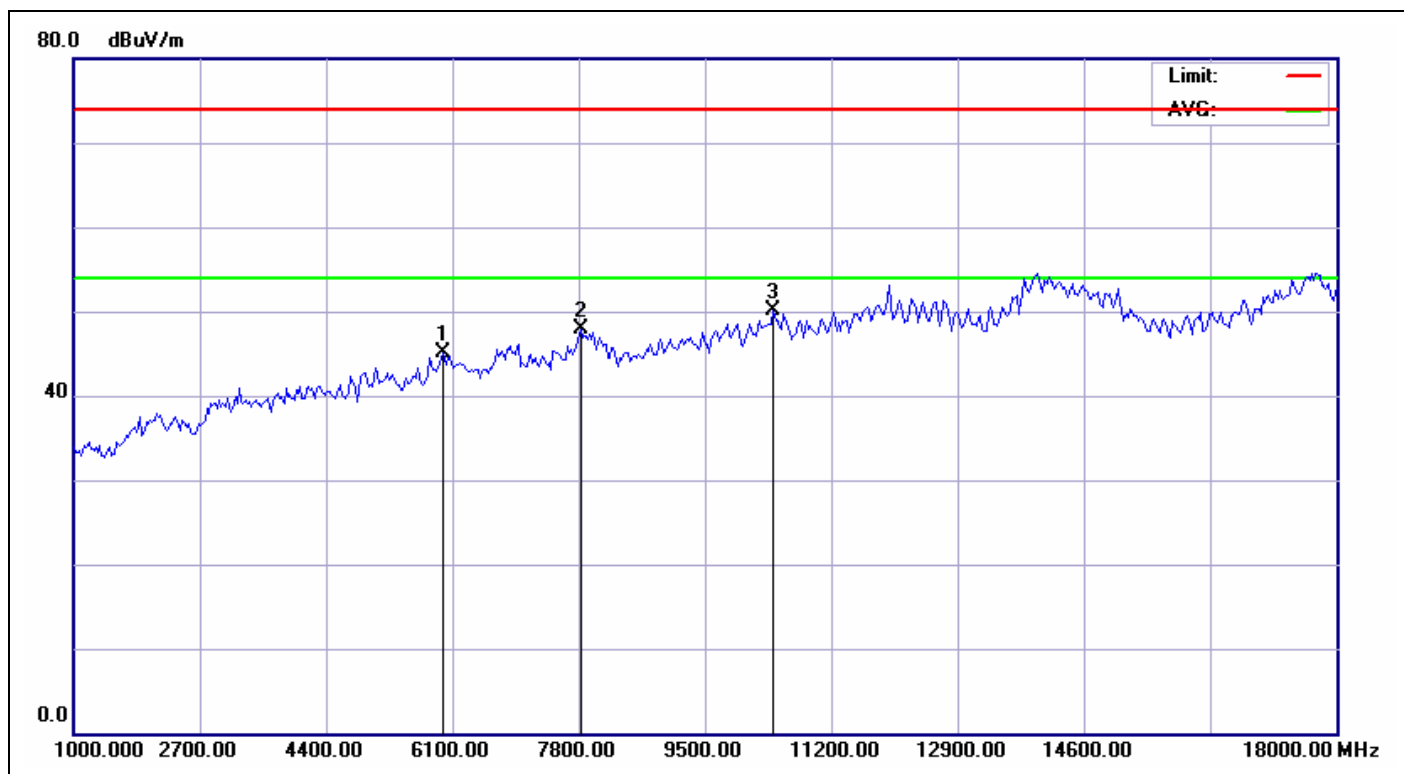
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: EDR 2441 TX

Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 3887.821        | 11.13         | 30.81          | 41.94          | 74.00          | -32.06      | peak |             |               |        |
| 2   | 4923.077        | 13.51         | 30.15          | 43.66          | 74.00          | -30.34      | peak |             |               |        |
| 3   | 5985.577        | 17.11         | 28.81          | 45.92          | 74.00          | -28.08      | peak |             |               |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2012/4/24 AM 11:40:36

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

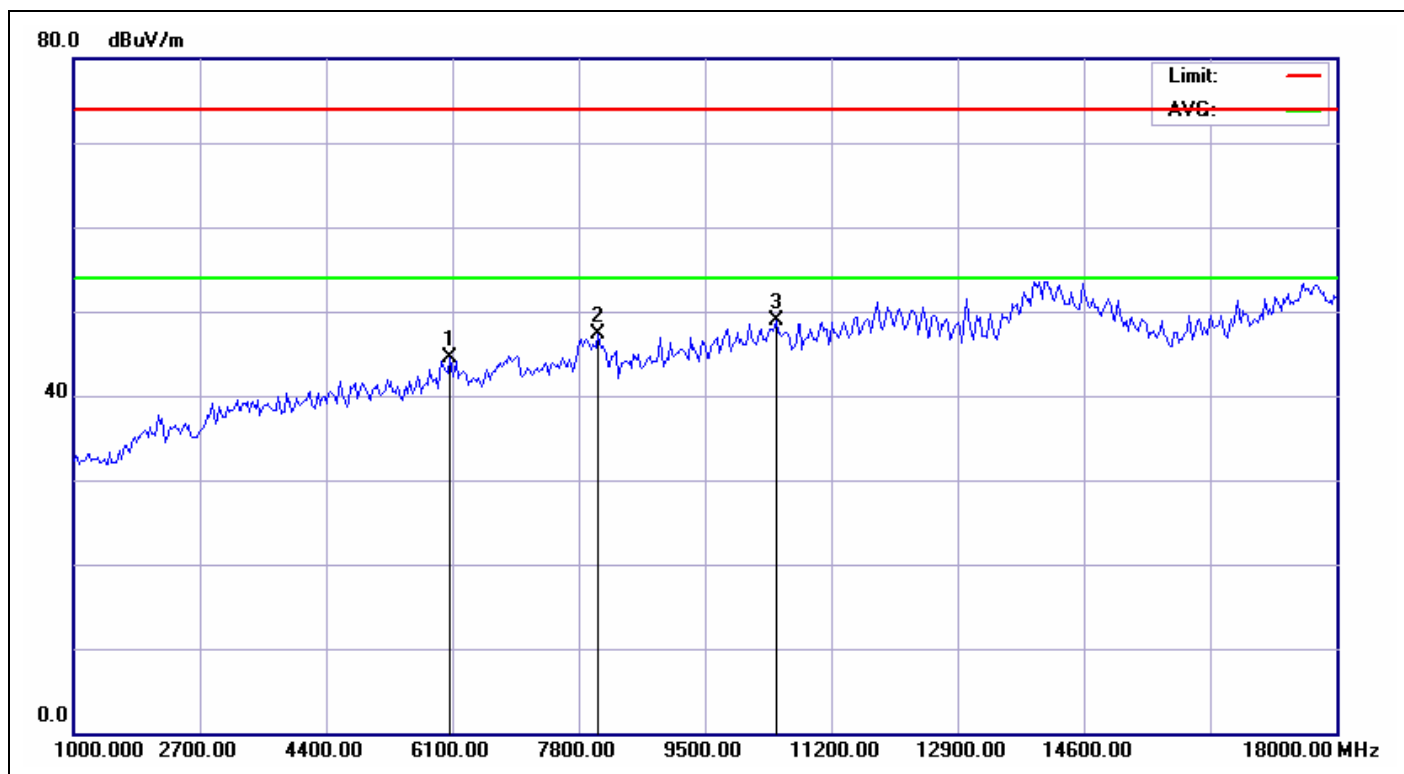
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: EDR 2441 TX

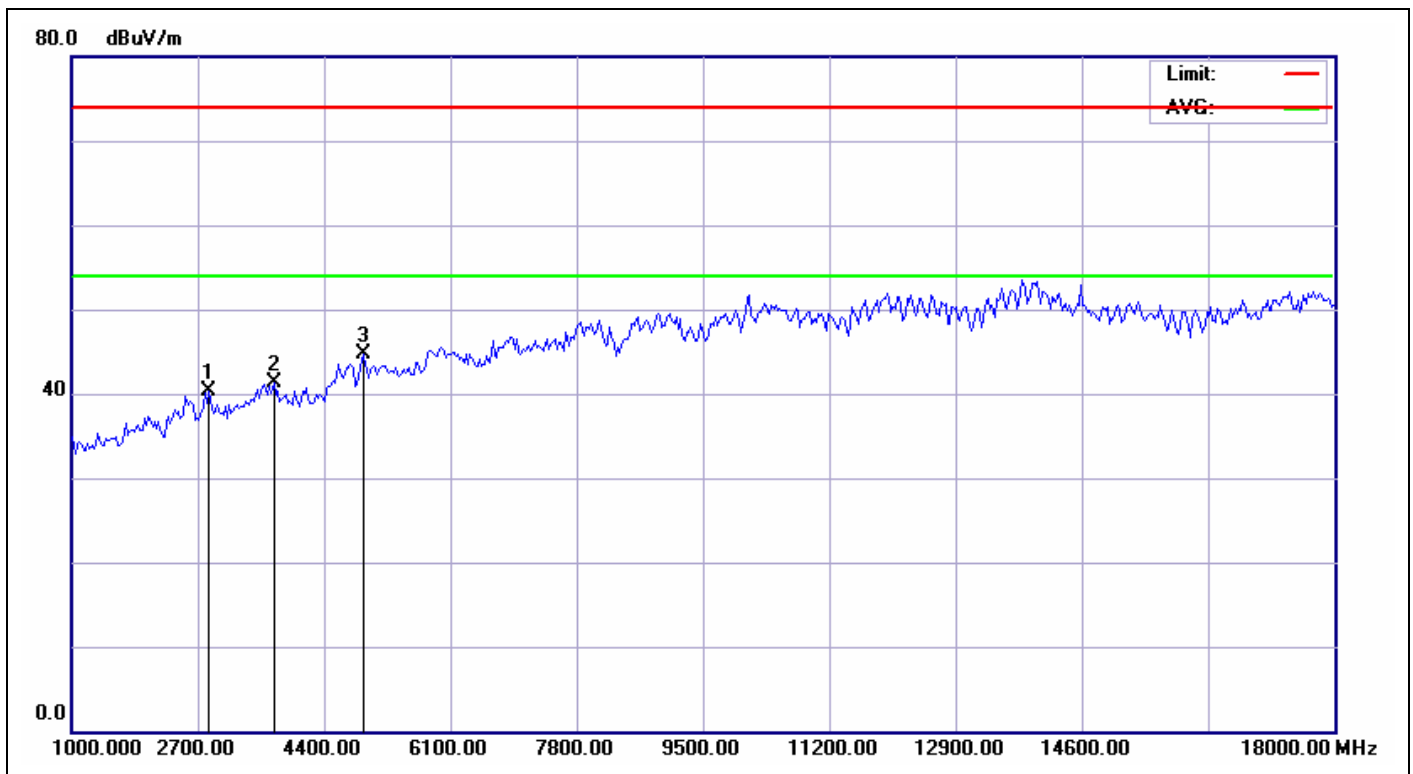
Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 5985.577        | 17.11         | 28.00          | 45.11          | 74.00          | -28.89      | peak |             |               |        |
| 2   | 7838.141        | 20.52         | 27.43          | 47.95          | 74.00          | -26.05      | peak |             |               |        |
| 3   | 10426.282       | 22.93         | 27.12          | 50.05          | 74.00          | -23.95      | peak |             |               |        |



|                       |                           |                           |                              |
|-----------------------|---------------------------|---------------------------|------------------------------|
| <b>Service No.:</b>   | <b>113155501</b>          | <b>Test Distance:</b>     | <b>3m</b>                    |
| <b>Test Standard:</b> | <b>FCC above 1G PEAK</b>  | <b>Ant. Polarization:</b> | <b>Horizontal</b>            |
| <b>Test item:</b>     | <b>Radiation Emission</b> | <b>Test Time:</b>         | <b>2012/4/24 AM 11:42:58</b> |
| <b>Applicant:</b>     | <b>Endex</b>              | <b>Test Rating:</b>       |                              |
| <b>Product:</b>       | <b>BT module</b>          | <b>Temp.(°C)/Hum.(%):</b> | <b>24(°C)/58%</b>            |
| <b>Model No.:</b>     | <b>IDG BI_CB V1 0</b>     | <b>Test Engineer:</b>     | <b>Howard Lin</b>            |
| <b>Test Mode:</b>     | <b>EDR 2480 TX</b>        |                           |                              |
| <b>Remark:</b>        |                           |                           |                              |

| No. | Frequency<br>(MHz) | Factor<br>(dB/m) | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Det. | Height<br>(cm) | Azimuth<br>( ° ) | Remark |
|-----|--------------------|------------------|-------------------|-------------------|-------------------|----------------|------|----------------|------------------|--------|
| 1   | 6067.308           | 17.15            | 27.33             | 44.48             | 74.00             | -29.52         | peak |                |                  |        |
| 2   | 8056.090           | 20.90            | 26.40             | 47.30             | 74.00             | -26.70         | peak |                |                  |        |
| 3   | 10453.526          | 22.98            | 26.02             | 49.00             | 74.00             | -25.00         | peak |                |                  |        |



Service No.: 113155501

Test Distance: 3m

Test Standard: FCC above 1G PEAK

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2012/4/24 AM 11:42:14

Applicant: Endex

Test Rating:

Product: BT module

Temp.(°C)/Hum.(%): 24(°C)/58%

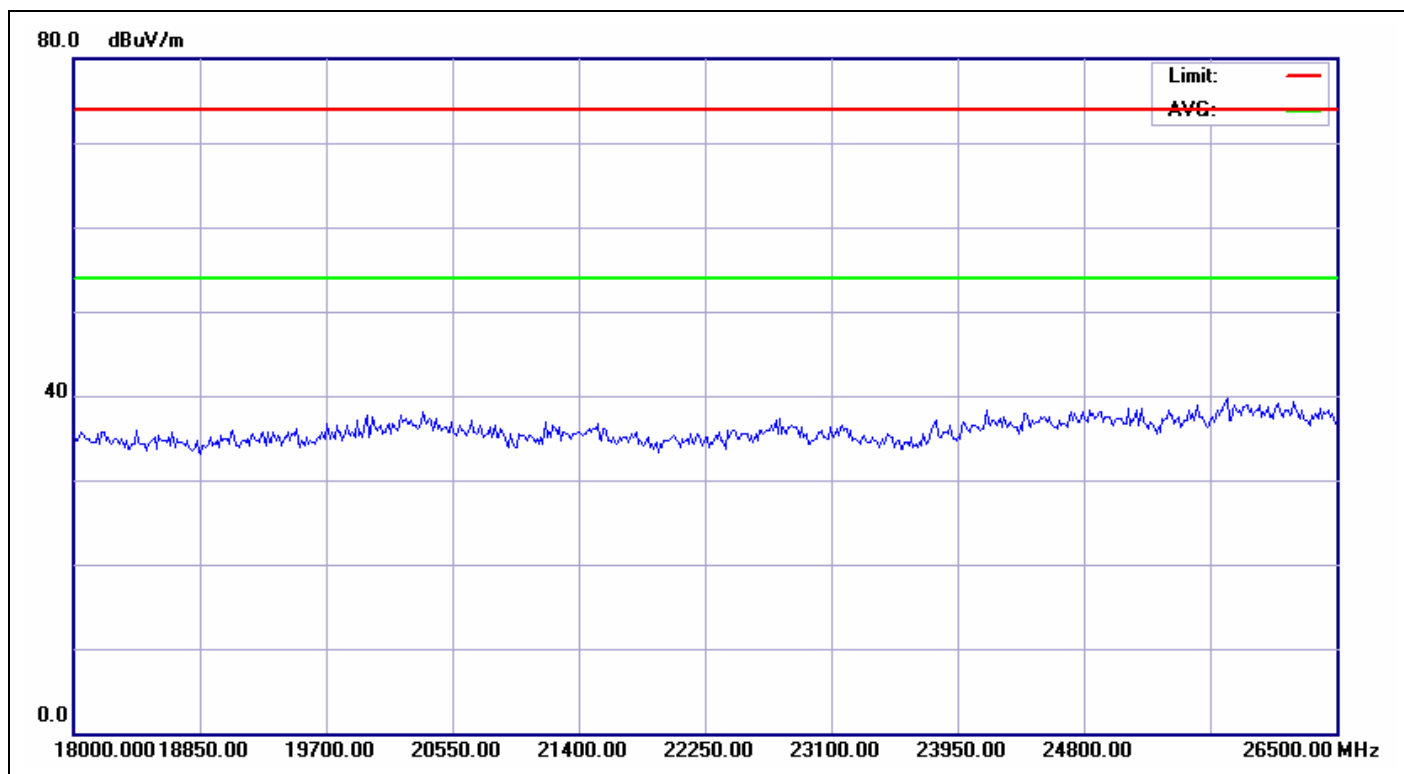
Model No.: IDG BI\_CB V1 0

Test Engineer: Howard Lin

Test Mode: EDR 2480 TX

Remark:

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | Height (cm) | Azimuth ( ° ) | Remark |
|-----|-----------------|---------------|----------------|----------------|----------------|-------------|------|-------------|---------------|--------|
| 1   | 2852.564        | 9.43          | 30.83          | 40.26          | 74.00          | -33.74      | peak |             |               |        |
| 2   | 3724.359        | 10.78         | 30.47          | 41.25          | 74.00          | -32.75      | peak |             |               |        |
| 3   | 4923.077        | 13.51         | 31.19          | 44.70          | 74.00          | -29.30      | peak |             |               |        |



Service No.: 113155501

Test Standard: FCC above 1G PEAK

Test item: Radiation Emission

Applicant: Endex

Product: BT module

Model No.: IDG BI\_CB V1 0

Test Mode: BT 2402 TX

Remark:

Test Distance: 3m

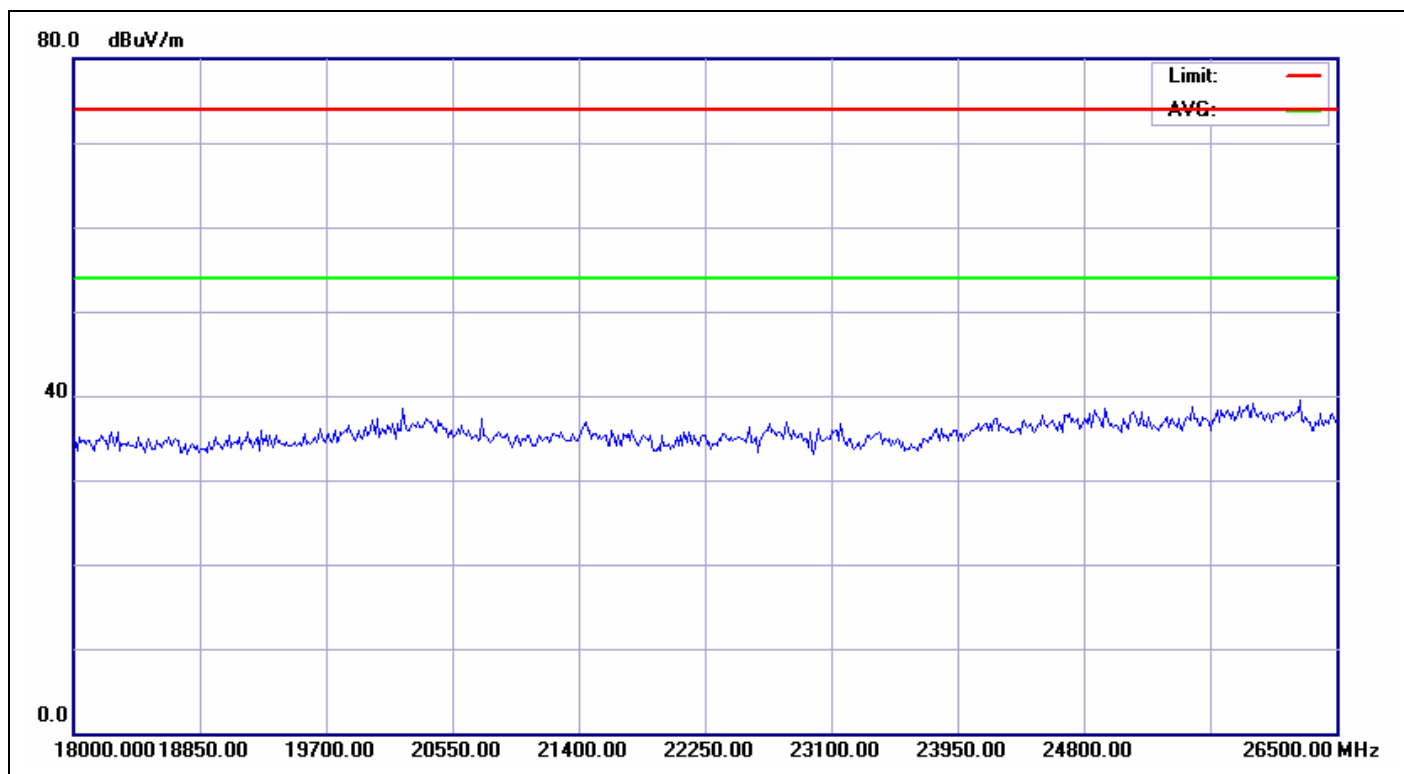
Ant. Polarization: Horizontal

Test Time: 2012/4/24 PM 12:41:12

Test Rating:

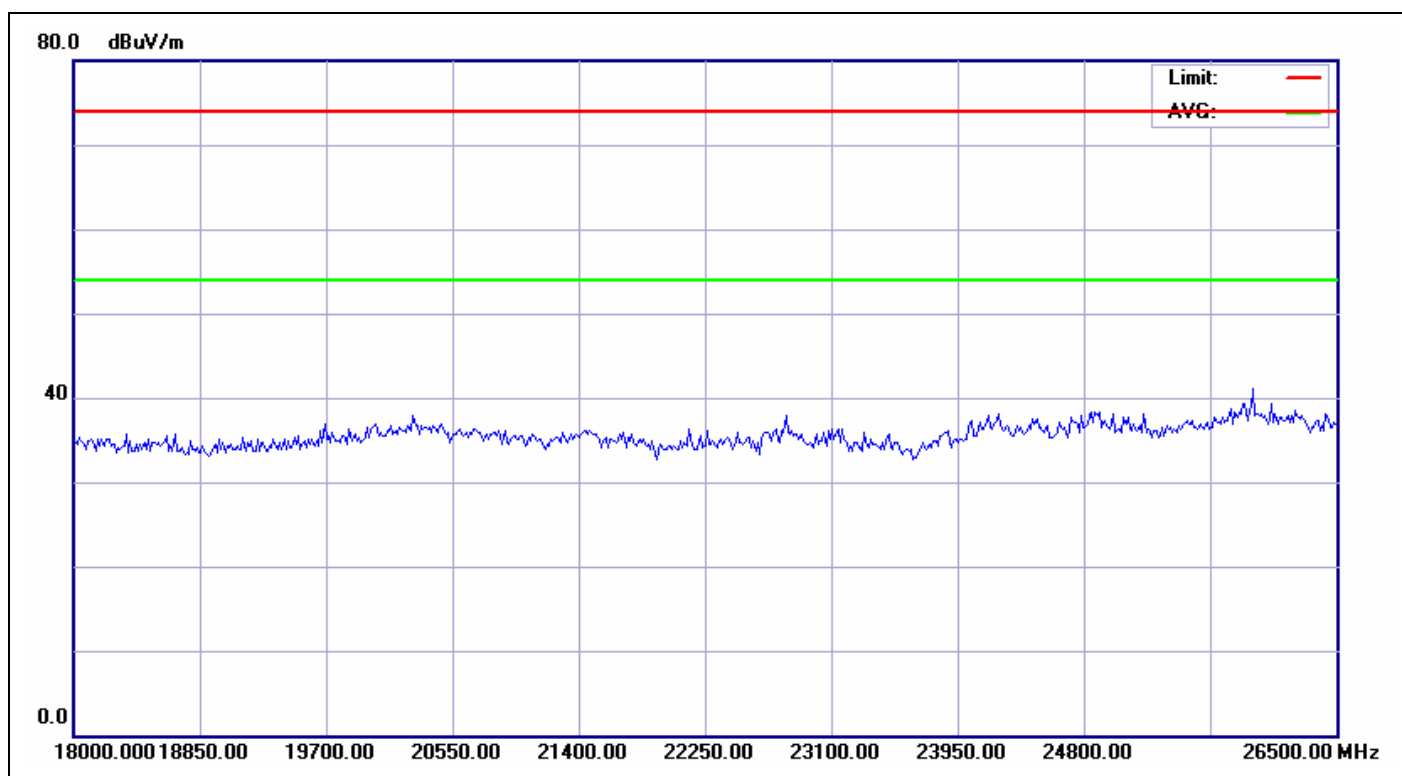
Temp.(°C)/Hum.(%): 24(°C)/58%

Test Engineer: Howard Lin



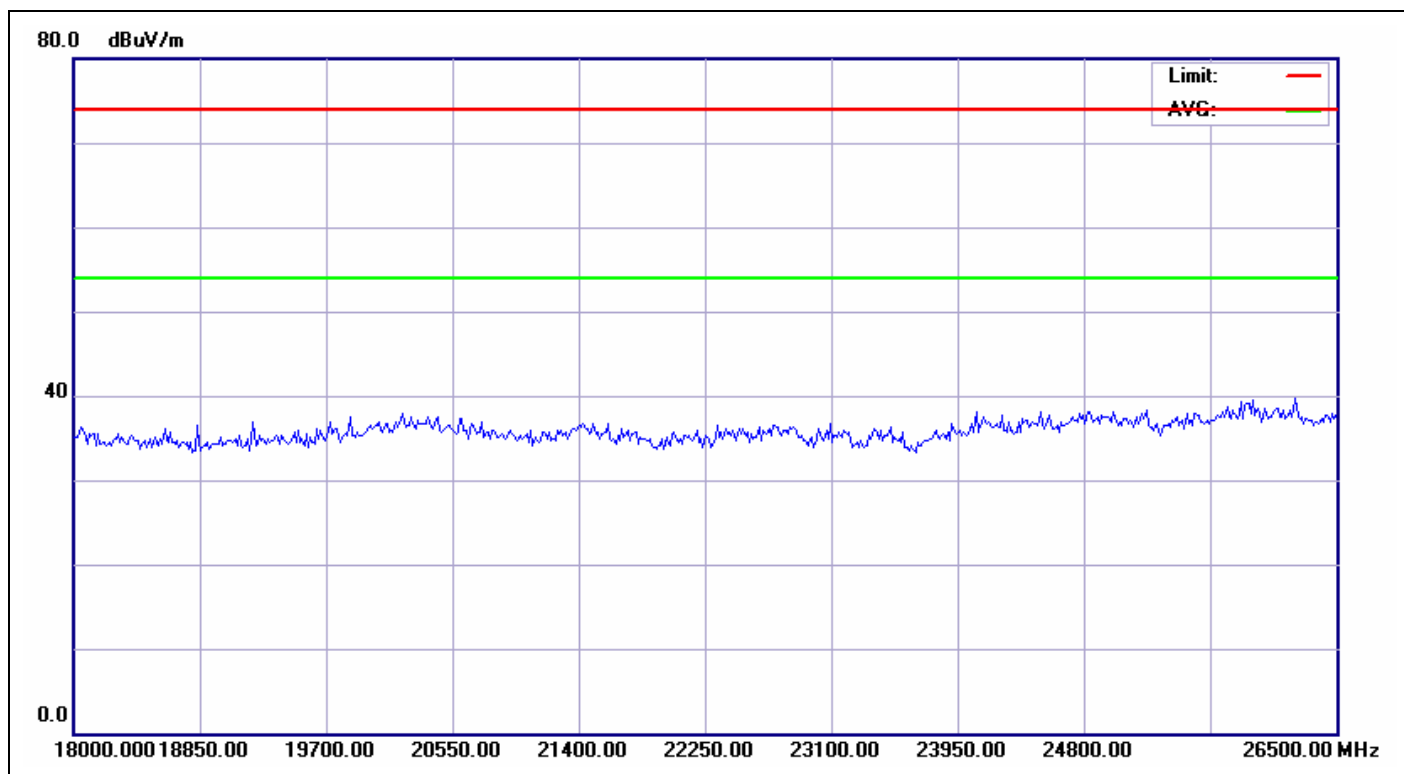
**Service No.:** 113155501  
**Test Standard:** FCC above 1G PEAK  
**Test item:** Radiation Emission  
**Applicant:** Endex  
**Product:** BT module  
**Model No.:** IDG BI\_CB V1 0  
**Test Mode:** BT 2402 TX  
**Remark:**

**Test Distance:** 3m  
**Ant. Polarization:** Vertical  
**Test Time:** 2012/4/24 PM 12:41:46  
**Test Rating:**  
**Temp.(°C)/Hum.(%):** 24(°C)/58%  
**Test Engineer:** Howard Lin



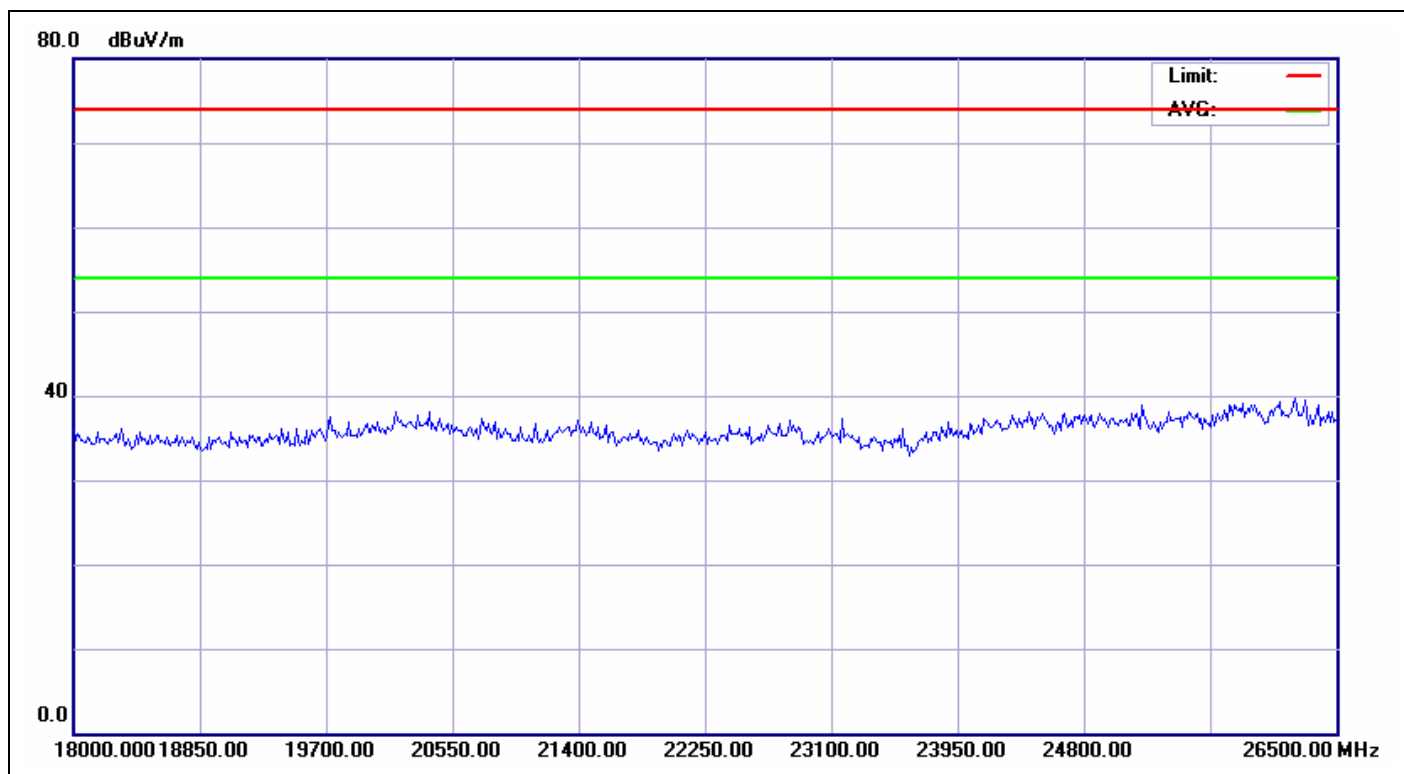
Service No.: 113155501  
Test Standard: FCC above 1G PEAK  
Test item: Radiation Emission  
Applicant: Endex  
Product: BT module  
Model No.: IDG BI\_CB V1 0  
Test Mode: BT 2441 TX  
Remark:

Test Distance: 3m  
Ant. Polarization: Horizontal  
Test Time: 2012/4/24 PM 12:42:48  
Test Rating:  
Temp.(°C)/Hum.(%): 24(°C)/58%  
Test Engineer: Howard Lin



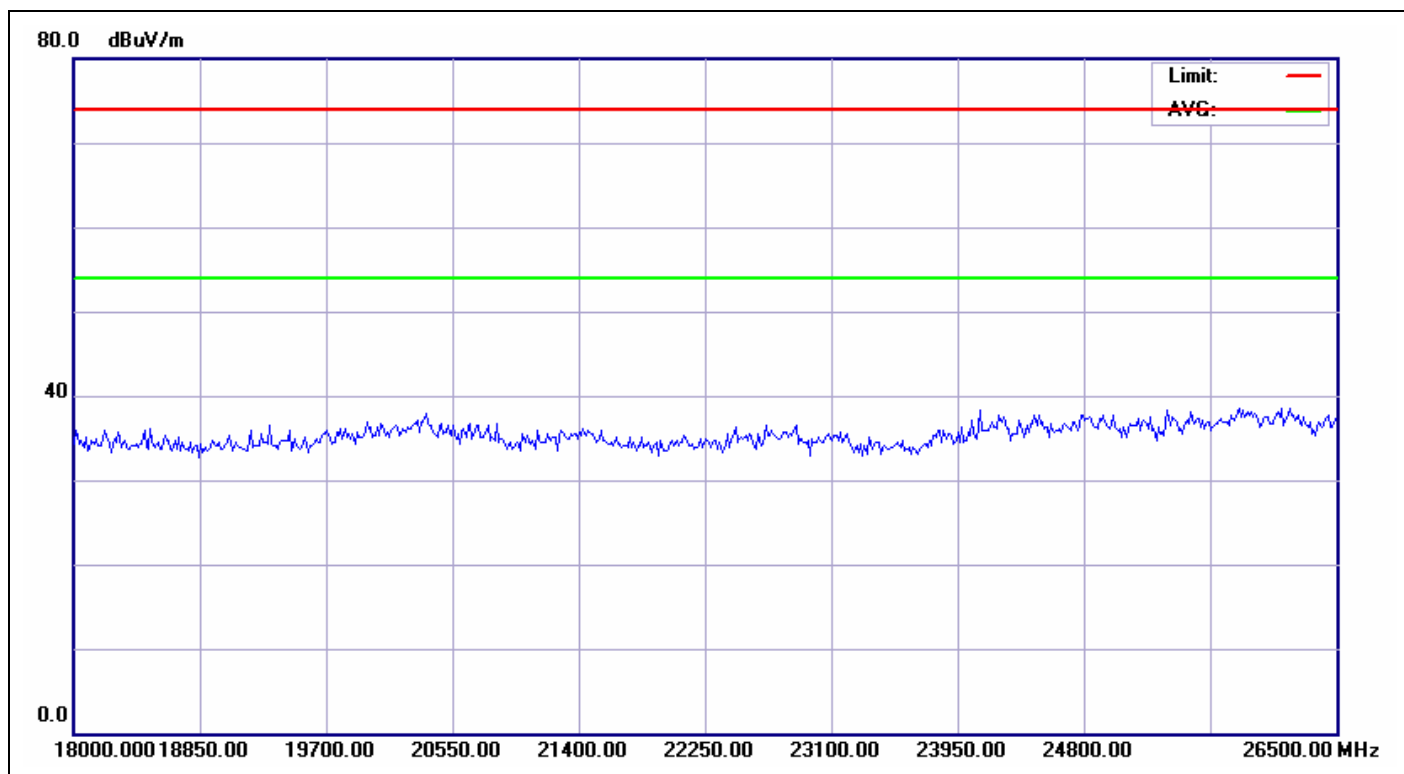
Service No.: 113155501  
 Test Standard: FCC above 1G PEAK  
 Test item: Radiation Emission  
 Applicant: Endex  
 Product: BT module  
 Model No.: IDG BI\_CB V1 0  
 Test Mode: BT 2441 TX  
 Remark:

Test Distance: 3m  
 Ant. Polarization: Vertical  
 Test Time: 2012/4/24 PM 12:42:17  
 Test Rating:  
 Temp.(°C)/Hum.(%): 24(°C)/58%  
 Test Engineer: Howard Lin



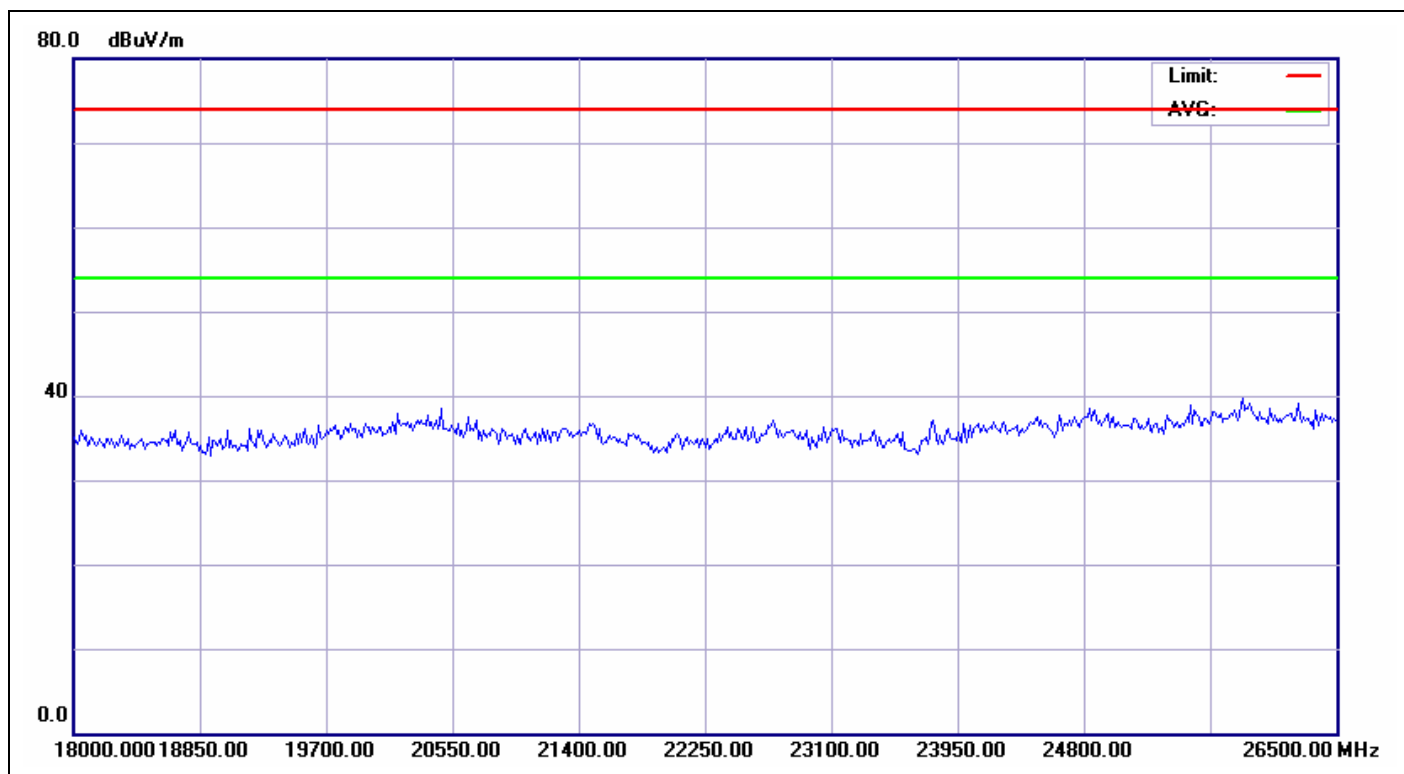
Service No.: 113155501  
 Test Standard: FCC above 1G PEAK  
 Test item: Radiation Emission  
 Applicant: Endex  
 Product: BT module  
 Model No.: IDG BI\_CB V1 0  
 Test Mode: BT 2480 TX  
 Remark:

Test Distance: 3m  
 Ant. Polarization: Horizontal  
 Test Time: 2012/4/24 PM 12:43:17  
 Test Rating:  
 Temp.(°C)/Hum.(%): 24(°C)/58%  
 Test Engineer: Howard Lin



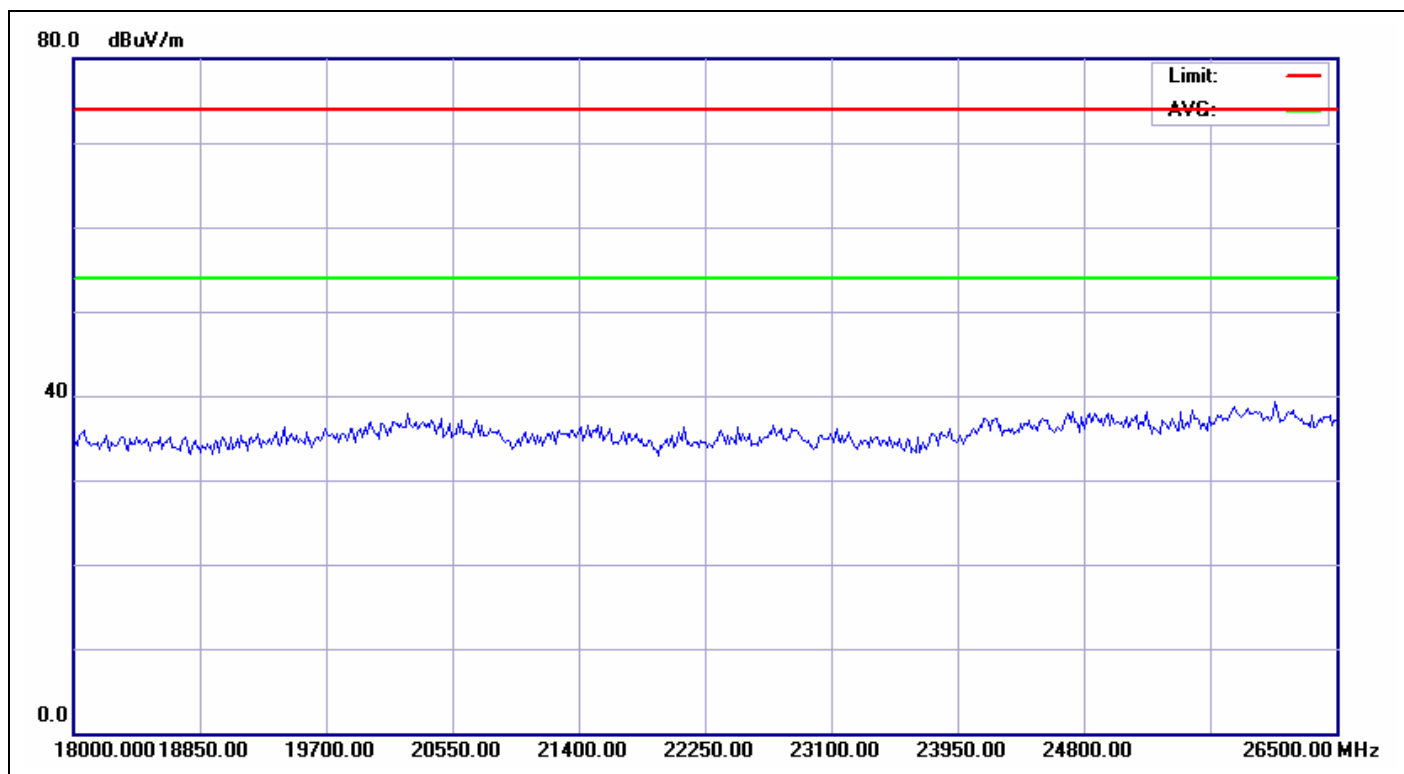
Service No.: 113155501  
Test Standard: FCC above 1G PEAK  
Test item: Radiation Emission  
Applicant: Endex  
Product: BT module  
Model No.: IDG BI\_CB V1 0  
Test Mode: BT 2480 TX  
Remark:

Test Distance: 3m  
Ant. Polarization: Vertical  
Test Time: 2012/4/24 PM 12:43:43  
Test Rating:  
Temp.(°C)/Hum.(%): 24(°C)/58%  
Test Engineer: Howard Lin



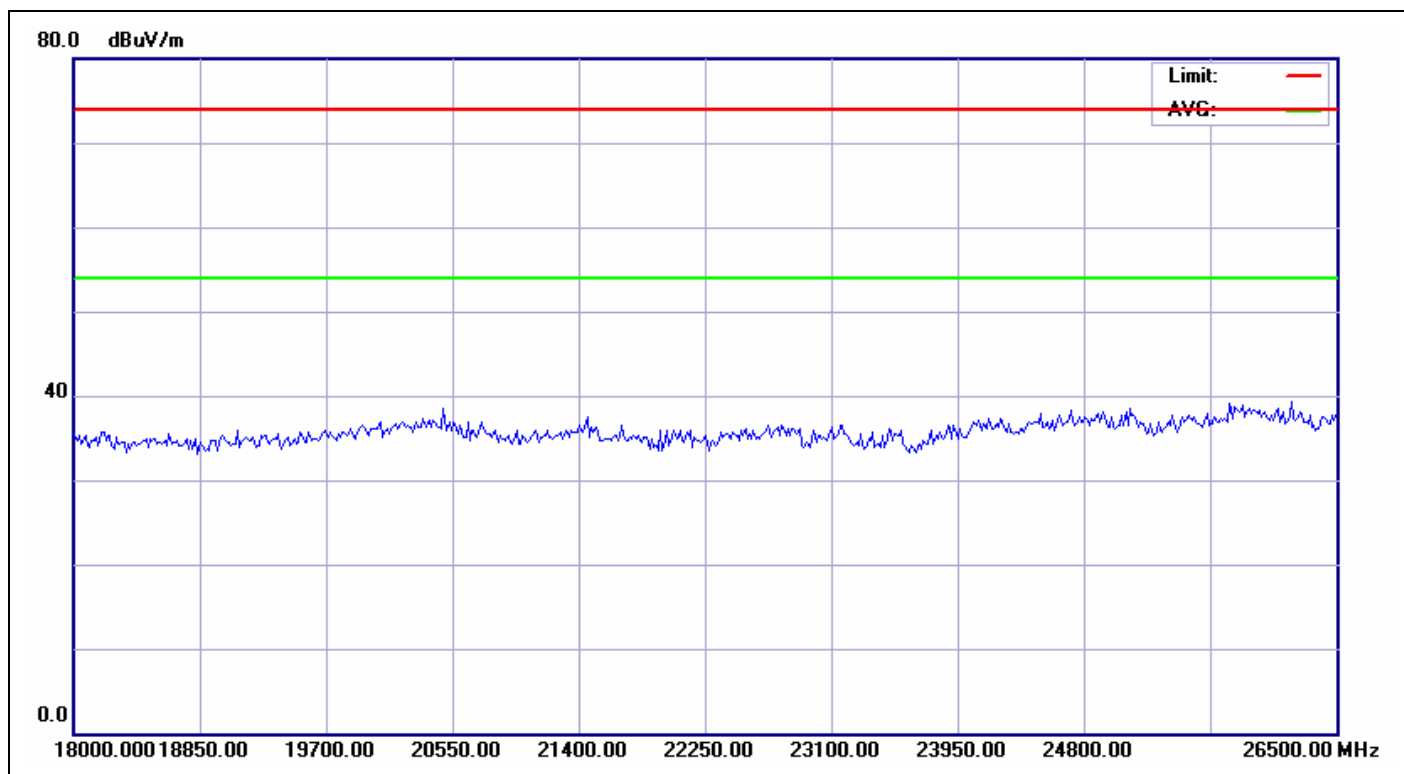
Service No.: 113155501  
 Test Standard: FCC above 1G PEAK  
 Test item: Radiation Emission  
 Applicant: Endex  
 Product: BT module  
 Model No.: IDG BI\_CB V1 0  
 Test Mode: EDR 2402 TX  
 Remark:

Test Distance: 3m  
 Ant. Polarization: Horizontal  
 Test Time: 2012/4/24 PM 12:46:46  
 Test Rating:  
 Temp.(°C)/Hum.(%): 24(°C)/58%  
 Test Engineer: Howard Lin

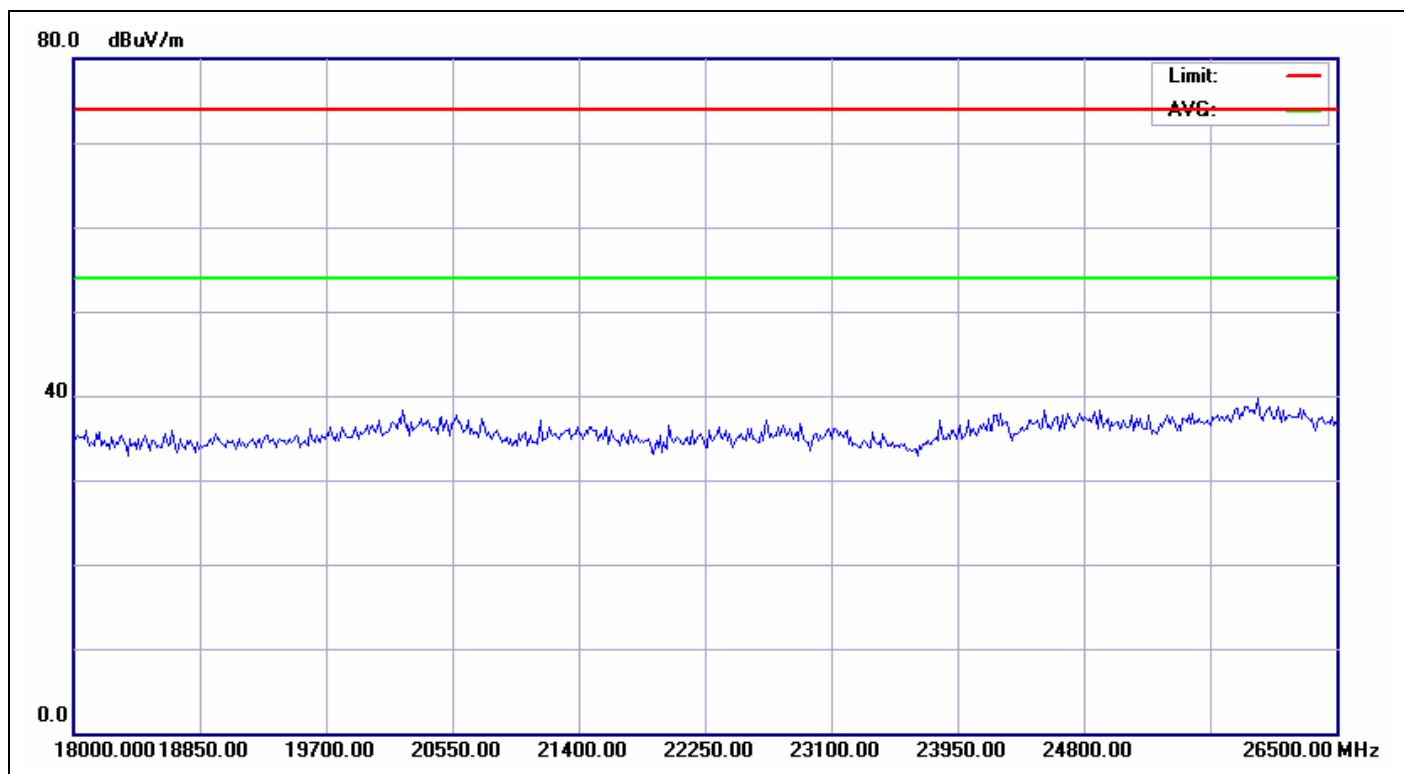


Service No.: 113155501  
Test Standard: FCC above 1G PEAK  
Test item: Radiation Emission  
Applicant: Endex  
Product: BT module  
Model No.: IDG BI\_CB V1 0  
Test Mode: EDR 2402 TX  
Remark:

Test Distance: 3m  
Ant. Polarization: Vertical  
Test Time: 2012/4/24 PM 12:46:19  
Test Rating:  
Temp.(°C)/Hum.(%): 24(°C)/58%  
Test Engineer: Howard Lin

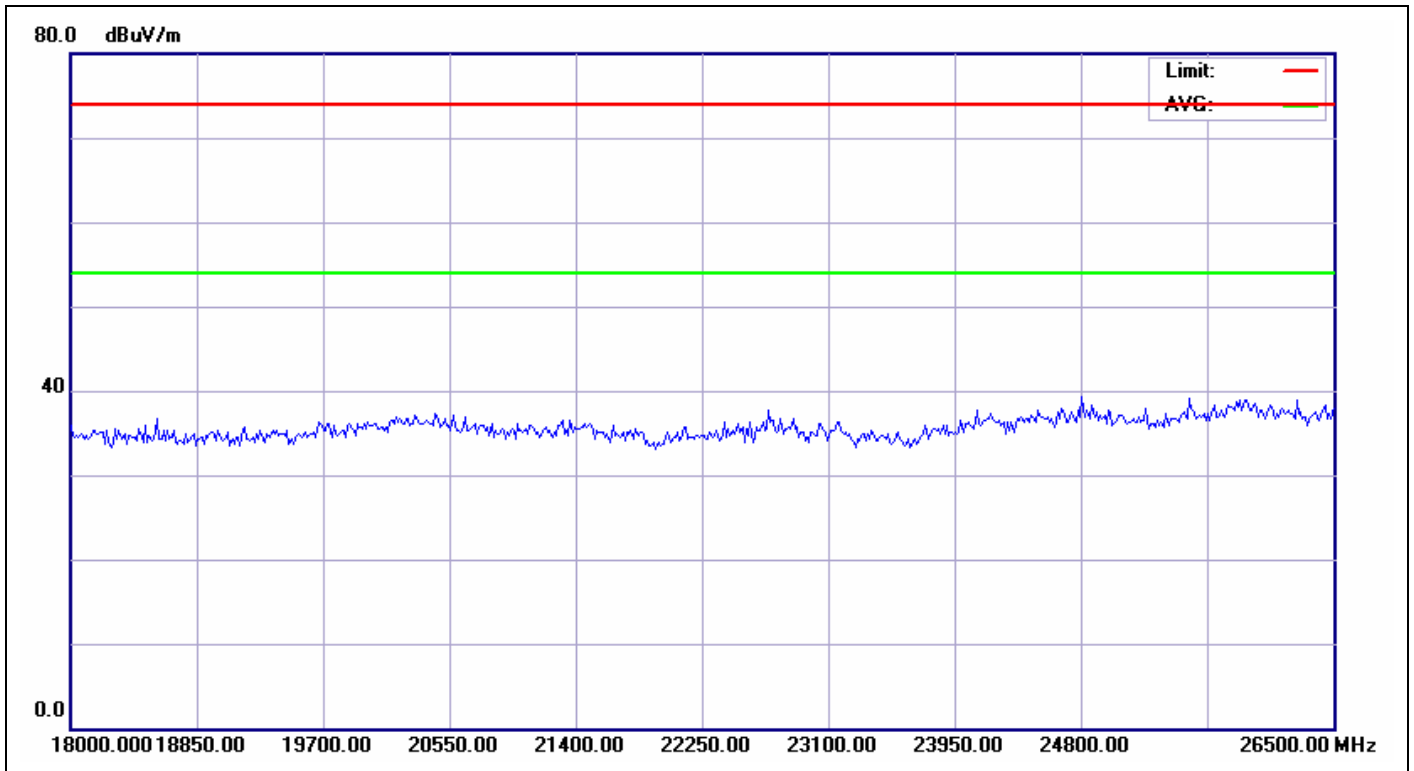


|                       |                           |                           |                              |
|-----------------------|---------------------------|---------------------------|------------------------------|
| <b>Service No.:</b>   | <b>113155501</b>          | <b>Test Distance:</b>     | <b>3m</b>                    |
| <b>Test Standard:</b> | <b>FCC above 1G PEAK</b>  | <b>Ant. Polarization:</b> | <b>Horizontal</b>            |
| <b>Test item:</b>     | <b>Radiation Emission</b> | <b>Test Time:</b>         | <b>2012/4/24 PM 12:45:16</b> |
| <b>Applicant:</b>     | <b>Endex</b>              | <b>Test Rating:</b>       |                              |
| <b>Product:</b>       | <b>BT module</b>          | <b>Temp.(°C)/Hum.(%):</b> | <b>24(°C)/58%</b>            |
| <b>Model No.:</b>     | <b>IDG BI_CB V1 0</b>     | <b>Test Engineer:</b>     | <b>Howard Lin</b>            |
| <b>Test Mode:</b>     | <b>EDR 2441 TX</b>        |                           |                              |
| <b>Remark:</b>        |                           |                           |                              |



Service No.: 113155501  
 Test Standard: FCC above 1G PEAK  
 Test item: Radiation Emission  
 Applicant: Endex  
 Product: BT module  
 Model No.: IDG BI\_CB V1 0  
 Test Mode: EDR 2441 TX  
 Remark:

Test Distance: 3m  
 Ant. Polarization: Vertical  
 Test Time: 2012/4/24 PM 12:45:44  
 Test Rating:  
 Temp.(°C)/Hum.(%): 24(°C)/58%  
 Test Engineer: Howard Lin



**Service No.:** 113155501

**Test Standard:** FCC above 1G PEAK

**Test item:** Radiation Emission

**Applicant:** Endex

**Product:** BT module

**Model No.:** IDG BI\_CB V1 0

**Test Mode:** EDR 2480 TX

**Remark:**

**Test Distance:** 3m

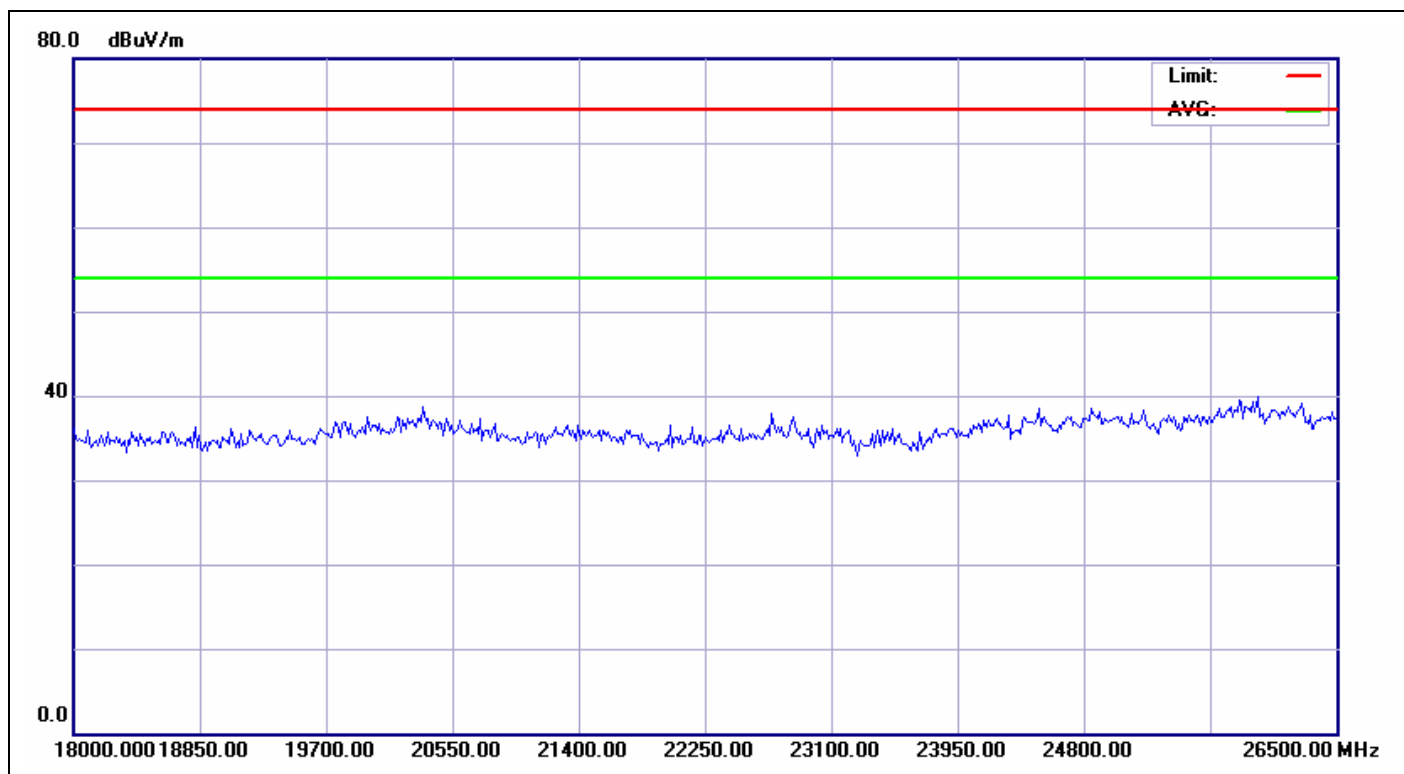
**Ant. Polarization:** Horizontal

**Test Time:** 2012/4/24 PM 12:44:39

**Test Rating:**

**Temp.(°C)/Hum.(%):** 24(°C)/58%

**Test Engineer:** Howard Lin



Service No.: 113155501

Test Standard: FCC above 1G PEAK

Test item: Radiation Emission

Applicant: Endex

Product: BT module

Model No.: IDG BI\_CB V1 0

Test Mode: EDR 2480 TX

Remark:

Test Distance: 3m

Ant. Polarization: Vertical

Test Time: 2012/4/24 PM 12:44:12

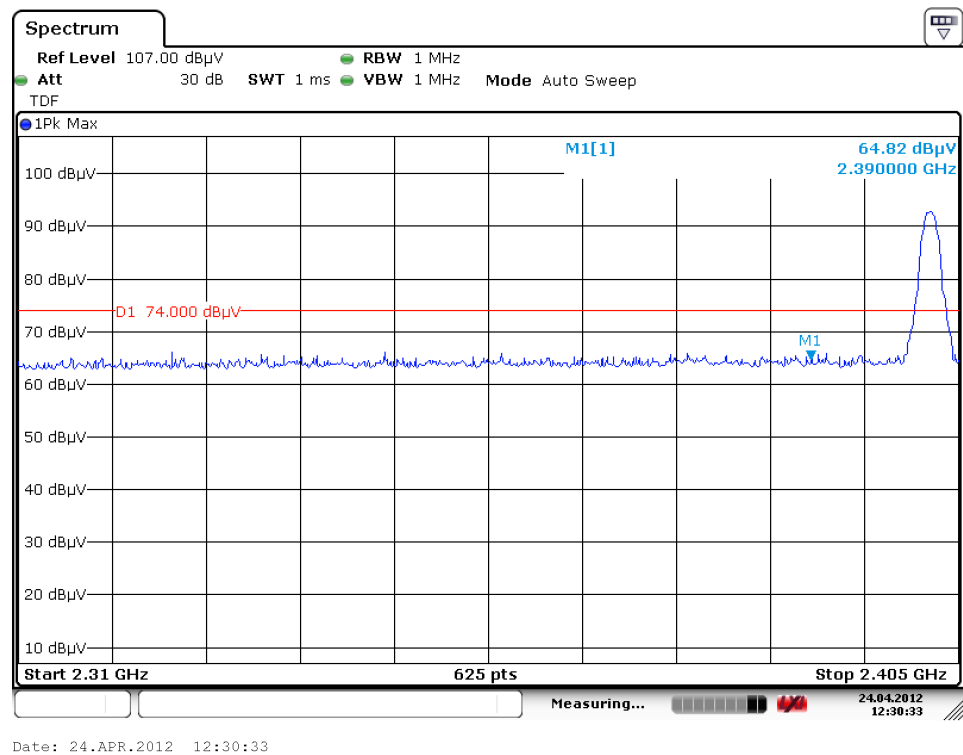
Test Rating:

Temp.(°C)/Hum.(%): 24(°C)/58%

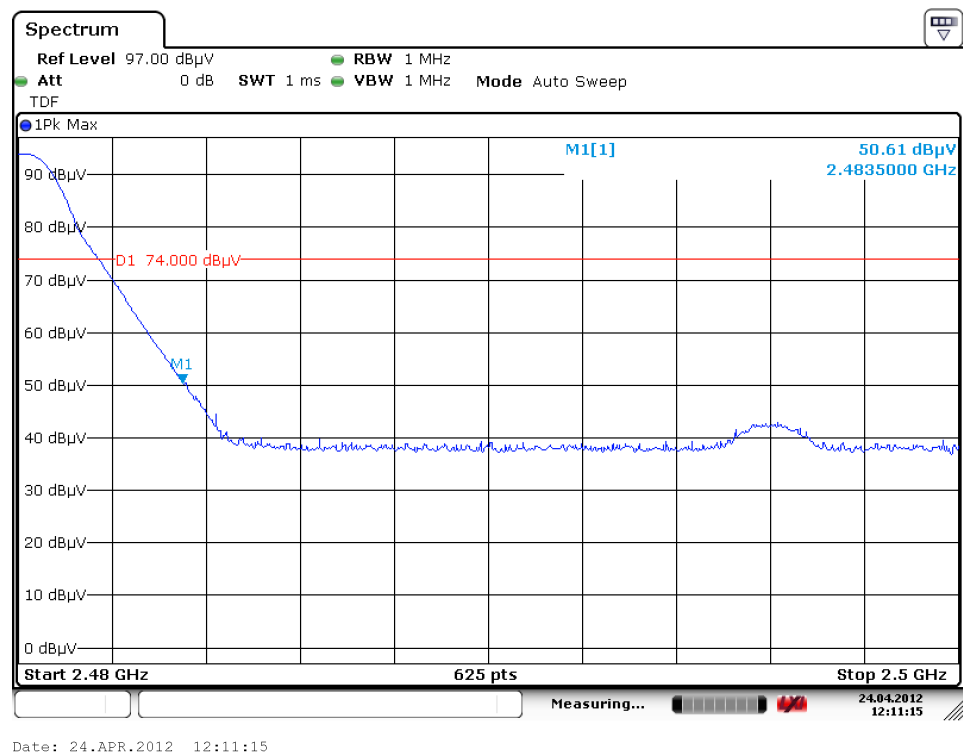
Test Engineer: Howard Lin

# Radiated Bandedge (GFSK)

## Low Channel (H)

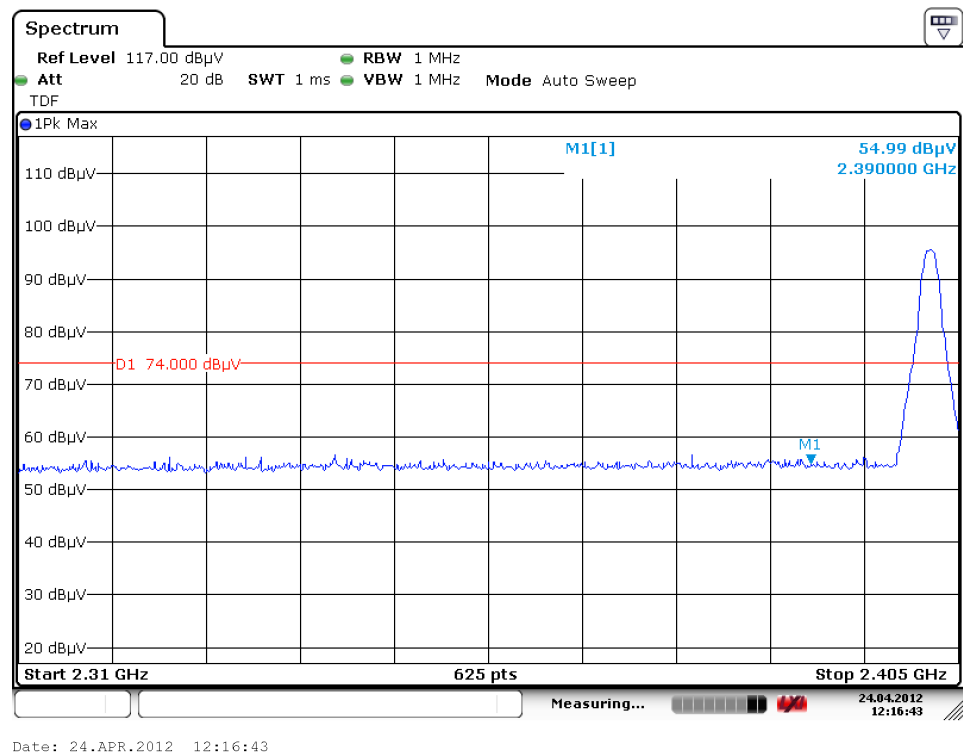


## High Channel (H)

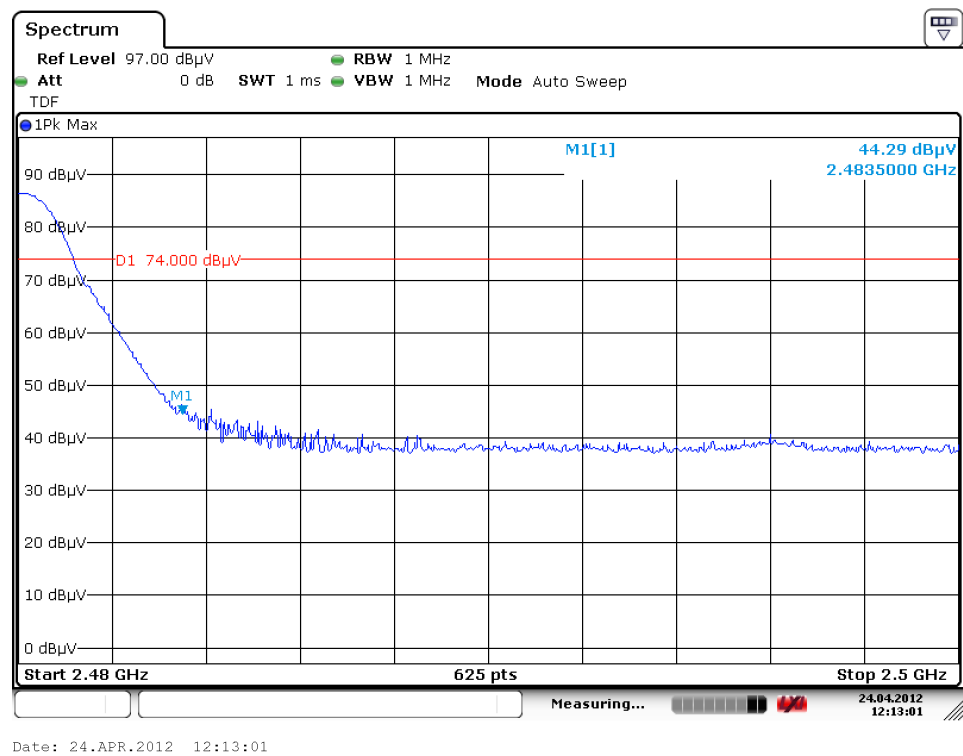


# Radiated Bandedge (GFSK)

## Low Channel (V)

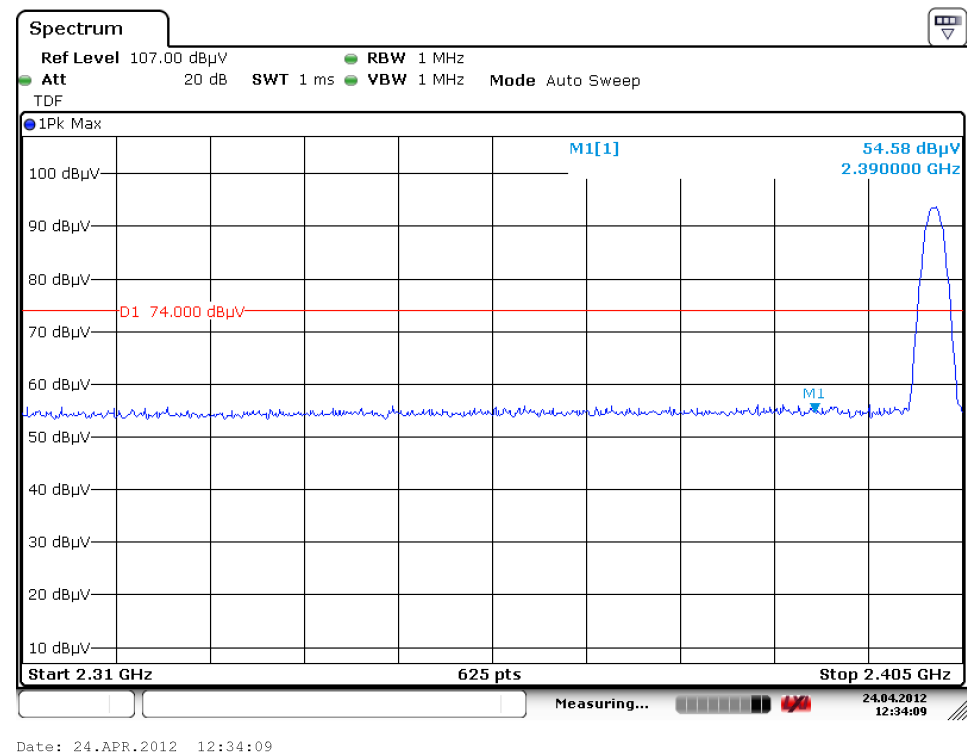


## High Channel (V)

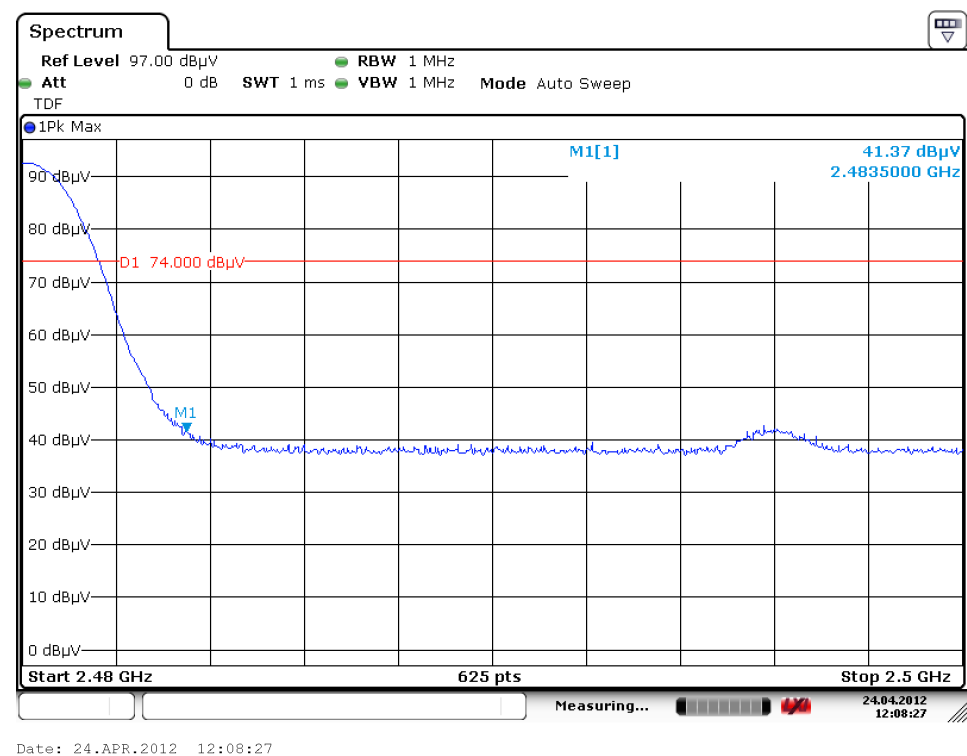


# Radiated Bandedge (QPSK)

## Low Channel (H)

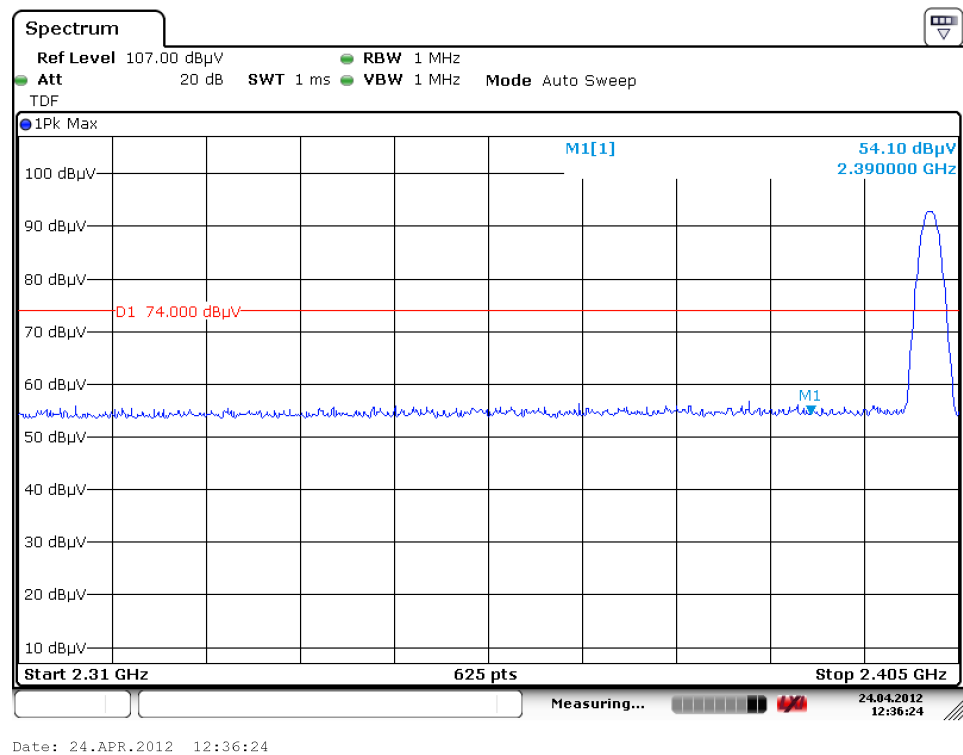


## High Channel (H)



# Radiated Bandedge (QPSK)

## Low Channel (V)



## High Channel (V)

