



FCC ID:KA2IR524B1

AUDIX Technology (Shenzhen) Co., Ltd.

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

D-Link Corporation

Wireless N 150 Router

Model Number: DIR-524

FCC ID: KA2IR524B1

Prepared for : D-Link Corporation  
17595 Mt. Hermann, Fountain Valley, CA92708

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Report Number : ACS-F12119  
Date of Test : May.18~24, 2012  
Date of Report : Jun.05, 2012

## TABLE OF CONTENTS

| Description                                                           | Page        |
|-----------------------------------------------------------------------|-------------|
| <b>1. SUMMARY OF STANDARDS AND RESULTS.....</b>                       | <b>1-1</b>  |
| 1.1. Description of Standards and Results .....                       | 1-1         |
| <b>2. GENERAL INFORMATION .....</b>                                   | <b>2-1</b>  |
| 2.1. Description of Device (EUT) .....                                | 2-1         |
| 2.2. Test Information.....                                            | 2-2         |
| 2.3. Tested Supporting System Details .....                           | 2-2         |
| 2.4. Block diagram of connection between the EUT and simulators ..... | 2-2         |
| 2.5. Test Facility .....                                              | 2-3         |
| 2.6. Measurement Uncertainty (95% confidence levels, k=2) .....       | 2-4         |
| <b>3. POWER LINE CONDUCTED EMISSION TEST .....</b>                    | <b>3-1</b>  |
| 3.1. Test Equipments.....                                             | 3-1         |
| 3.2. Block Diagram of Test Setup.....                                 | 3-1         |
| 3.3. Power Line Conducted Emission Test Limits.....                   | 3-1         |
| 3.4. Configuration of EUT on Test .....                               | 3-2         |
| 3.5. Operating Condition of EUT.....                                  | 3-2         |
| 3.6. Test Procedure.....                                              | 3-2         |
| 3.7. Power Line Conducted Emission Test Results .....                 | 3-2         |
| <b>4. RADIATED EMISSION TEST .....</b>                                | <b>4-1</b>  |
| 4.1. Test Equipment .....                                             | 4-1         |
| 4.2. Block Diagram of Test Setup.....                                 | 4-1         |
| 4.3. Radiated Emission Limit.....                                     | 4-2         |
| 4.4. EUT Configuration on Test.....                                   | 4-3         |
| 4.5. Operating Condition of EUT.....                                  | 4-3         |
| 4.6. Test Procedure.....                                              | 4-4         |
| 4.7. Radiated Emission Test Results .....                             | 4-4         |
| <b>5. CONDUCTED SPURIOUS EMISSIONS.....</b>                           | <b>5-1</b>  |
| 5.1. Test Equipment .....                                             | 5-1         |
| 5.2. Limit.....                                                       | 5-1         |
| 5.3. Test Procedure.....                                              | 5-1         |
| 5.4. Test result.....                                                 | 5-1         |
| <b>6. BAND EDGE COMPLIANCE TEST .....</b>                             | <b>6-1</b>  |
| 6.1. Test Equipment .....                                             | 6-1         |
| 6.2. Limit.....                                                       | 6-1         |
| 6.3. Test Produce .....                                               | 6-1         |
| 6.4. Test Results .....                                               | 6-1         |
| <b>7. 6dB Bandwidth Test.....</b>                                     | <b>7-34</b> |
| 7.1. Test Equipment .....                                             | 7-34        |
| 7.2. Limit.....                                                       | 7-34        |
| 7.3. Test Procedure.....                                              | 7-34        |
| 7.4. Test Results .....                                               | 7-34        |
| <b>8. OUTPUT POWER TEST.....</b>                                      | <b>8-1</b>  |
| 8.1. Test Equipment .....                                             | 8-1         |
| 8.2. Limit (FCC Part 15C 15.247 b(3)).....                            | 8-1         |
| 8.3. Test Procedure.....                                              | 8-1         |

|            |                                                            |             |
|------------|------------------------------------------------------------|-------------|
| 8.4.       | Test Results .....                                         | 8-2         |
| <b>9.</b>  | <b>POWER SPECTRAL DENSITY TEST .....</b>                   | <b>9-1</b>  |
| 9.1.       | Test Equipment .....                                       | 9-1         |
| 9.2.       | Limit.....                                                 | 9-1         |
| 9.3.       | Test Procedure.....                                        | 9-1         |
| 9.4.       | Test Results .....                                         | 9-2         |
| <b>10.</b> | <b>ANTENNA REQUIREMENT .....</b>                           | <b>10-1</b> |
| <b>11.</b> | <b>MPE ESTIMATION.....</b>                                 | <b>11-2</b> |
| 11.1.      | Limit for General Population/ Uncontrolled Exposures ..... | 11-2        |
| 11.2.      | Estimation Result .....                                    | 11-2        |
| <b>12.</b> | <b>DEVIATION TO TEST SPECIFICATIONS.....</b>               | <b>12-1</b> |
| <b>13.</b> | <b>PHOTOGRAPH OF TEST .....</b>                            | <b>13-1</b> |
| 13.1.      | Photos of Power Line Conducted Emission Test .....         | 13-1        |
| 13.2.      | Photos of Radiated Emission Test.....                      | 13-2        |
| <b>14.</b> | <b>PHOTOGRAPH OF EUT .....</b>                             | <b>14-1</b> |



FCC ID:KA2IR524B1

AUDIX Technology (Shenzhen) Co., Ltd.

## TEST REPORT CERTIFICATION

Applicant : D-Link Corporation  
Manufacturer : D-Link Corporation  
EUT Description : Wireless N 150 Router  
FCC ID : KA2IR524B1  
(A) MODEL NO. : DIR-524  
(B) SERIAL NO. : N/A  
(C) POWER SUPPLY : DC 5V  
(D) TEST VOLTAGE : DC 5V From Adapter Input AC 120V/60Hz

Tested for comply with:  
FCC Rules and Regulations Part 15 Subpart C:2008  
Test procedure used:  
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : May.18~ 24, 2012 Report of date: Jun.05, 2012

Prepared by : Sandy Gao Reviewed by : Sunny Lu  
Sandy Gao / Assistant Sunny Lu / Supervisor



Approved & Authorized Signer :

Ken Lu / Manager

## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

| EMISSION                      |                                          |         |
|-------------------------------|------------------------------------------|---------|
| Description of Test Item      | Standard                                 | Results |
| Power Line Conducted Emission | FCC Part 15: 15.207<br>ANSI C63.10: 2009 | PASS    |
| Radiated Emission             | FCC Part 15: 15.209<br>ANSI C63.10: 2009 | PASS    |
| Band Edge Compliance          | FCC Part 15: 15.247<br>ANSI C63.10: 2009 | PASS    |
| Conducted spurious emissions  | FCC Part 15: 15.247<br>ANSI C63.10: 2009 | PASS    |
| 6dB Bandwidth                 | FCC Part 15: 15.247<br>ANSI C63.10: 2009 | PASS    |
| Peak Output Power             | FCC Part 15: 15.247<br>ANSI C63.10: 2009 | PASS    |
| Power Spectral Density        | FCC Part 15: 15.247<br>ANSI C63.10: 2009 | PASS    |
| Antenna requirement           | FCC Part 15: 15.203                      | PASS    |

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

|                       |                                                                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | : Wireless N 150 Router                                                                                                                                                                                        |
| Model Number          | : DIR-524                                                                                                                                                                                                      |
| FCC ID                | : KA2IR524B1                                                                                                                                                                                                   |
| Operation Frequency   | : IEEE 802.11b: 2412MHz—2462MHz<br>IEEE 802.11g: 2412MHz—2462MHz<br>IEEE 802.11n HT20: 2412MHz—2462MHz<br>IEEE 802.11n HT40: 2422MHz—2452MHz                                                                   |
| Channel Number        | : IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels<br>IEEE 802.11n HT40: 7Channels                                                                                                                               |
| Modulation Technology | : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)<br>IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)                                                               |
| Antenna and Gain      | : Dipole Antenna, 2dBi Gain                                                                                                                                                                                    |
| Applicant             | : D-Link Corporation<br>17595 Mt. Hermann, Fountain Valley, CA92708                                                                                                                                            |
| Manufacturer          | : D-Link Corporation<br>17595 Mt. Hermann, Fountain Valley, CA92708                                                                                                                                            |
| Power Adapter #1      | Manufacturer: D-Link<br>M/N: AMS47-0501000FU<br>Cable: Unshielded, Undetachable, 1.5m                                                                                                                          |
| Power Adapter #2      | Manufacturer: D-Link<br>M/N: F05W-050100SPAU<br>Cable: Unshielded, Undetachable, 1.2m<br>Remark: According to explore test, power adapter #1 has the worst case emission. So choose this adapter for all test. |
| Date of Test          | : May.18~24, 2012                                                                                                                                                                                              |
| Date of Receipt       | : Apr.22, 2012                                                                                                                                                                                                 |
| Sample Type           | : Prototype production                                                                                                                                                                                         |

## 2.2.Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

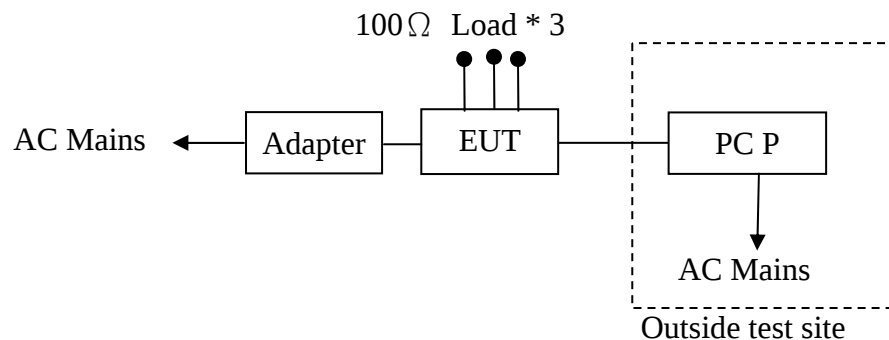
| Tested mode, channel, and data rate information |                               |             |                    |
|-------------------------------------------------|-------------------------------|-------------|--------------------|
| Mode                                            | data rate<br>(Mbps)(see Note) | Channel     | Frequency<br>(MHz) |
| IEEE 802.11b                                    | 11                            | Low :CH1    | 2412               |
|                                                 | 11                            | Middle: CH6 | 2437               |
|                                                 | 11                            | High: CH11  | 2462               |
| IEEE 802.11g                                    | 54                            | Low :CH1    | 2412               |
|                                                 | 54                            | Middle: CH6 | 2437               |
|                                                 | 54                            | High: CH11  | 2462               |
| IEEE 802.11n HT20                               | 6.5                           | Low :CH1    | 2412               |
|                                                 | 6.5                           | Middle: CH6 | 2437               |
|                                                 | 6.5                           | High: CH11  | 2462               |
| IEEE 802.11n HT40                               | 13.5                          | Low :CH1    | 2422               |
|                                                 | 13.5                          | Middle: CH4 | 2437               |
|                                                 | 13.5                          | High: CH7   | 2452               |

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

## 2.3.Tested Supporting System Details

| No. | Description       | ACS No.                                                                         | Manufacturer | Model      | Serial Number | Approved type                                                                                        |
|-----|-------------------|---------------------------------------------------------------------------------|--------------|------------|---------------|------------------------------------------------------------------------------------------------------|
| 1   | Personal Computer | Test PC P                                                                       | DELL         | Studio 540 | 124XK2X       | <input checked="" type="checkbox"/> FCC DoC<br><input checked="" type="checkbox"/> BSMI<br>ID:R33002 |
|     |                   | Power Cord: Unshielded, Detachable, 1.8m<br>Display Card: HD3450 (DVI+VGA+HDMI) |              |            |               |                                                                                                      |

## 2.4. Block diagram of connection between the EUT and simulators



## 2.5. Test Facility

### Site Description

#### Name of Firm

: Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block, Shenzhen  
Science & Industrial Park, Nantou,  
Shenzhen, Guangdong, China

#### 3m Anechoic Chamber

: Certificated by FCC, USA  
Registration Number: 90454  
Valid Date: Feb.22, 2015

#### 3m & 10m Anechoic Chamber

: Certificated by FCC, USA  
Registration Number: 794232  
Valid Date: Dec.30, 2012

#### EMC Lab.

: Certificated by Industry Canada  
Registration Number: IC 5183A-1  
Valid Date: Jun.13, 2014

: Certificated by DAkkS, Germany  
Registration No: D-PL-12151-01-01  
Valid Date: Feb.01, 2014

Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2013

## 2.6.Measurement Uncertainty (95% confidence levels, k=2)

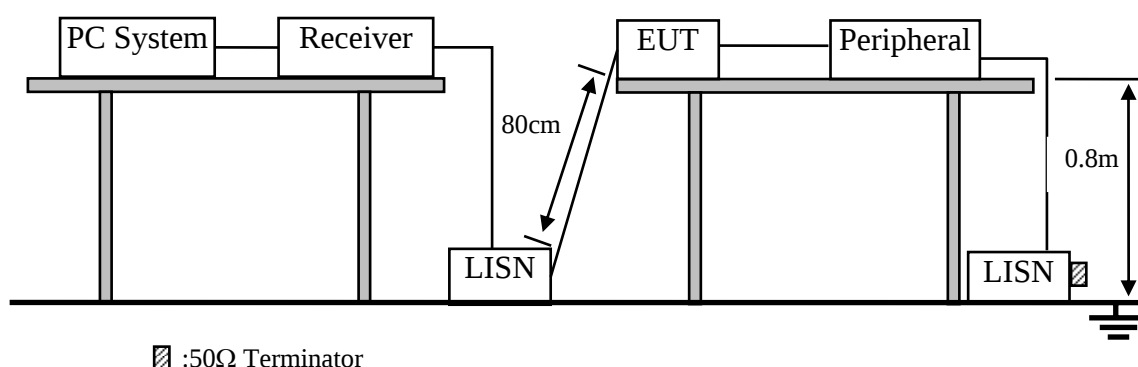
| Test Item                                                          | Uncertainty                       |
|--------------------------------------------------------------------|-----------------------------------|
| Uncertainty for Conduction emission test in No. 1 Conduction       | 3.2 dB (150KHz to 30MHz)          |
| Uncertainty for Radiation Emission test in 3m chamber              | 3.6 dB(30~200MHz, Polarize: H)    |
|                                                                    | 3.8 dB(30~200MHz, Polarize: V)    |
|                                                                    | 4.2 dB(200M~1GHz, Polarize: H)    |
|                                                                    | 3.8 dB(200M~1GHz, Polarize: V)    |
| Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz) | 3.1dB (Distance: 3m Polarize: V)  |
|                                                                    | 3.7 dB (Distance: 3m Polarize: H) |
| Uncertainty for Radiated Spurious Emission test in RF chamber      | 3.57 dB                           |
| Uncertainty for Conduction Spurious emission test                  | 2.00 dB                           |
| Uncertainty for Output power test                                  | 0.73 dB                           |
| Uncertainty for Power density test                                 | 2.00 dB                           |
| Uncertainty for Frequency range test                               | $7 \times 10^{-8}$                |
| Uncertainty for Bandwidth test                                     | 83 kHz                            |
| Uncertainty for DC power test                                      | 0.038 %                           |
| Uncertainty for test site temperature and humidity                 | 0.6°C                             |
|                                                                    | 3%                                |

### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1.Test Equipments

| Item | Equipment      | Manufacturer    | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|------------|------------|---------------|
| 1.   | Test Receiver  | Rohde & Schwarz | ESHS10    | 838693/001 | Oct.31, 11 | 1 Year        |
| 2.   | L.I.S.N.#1     | Rohde & Schwarz | ESH2-Z5   | 834066/011 | Oct.31, 11 | 1 Year        |
| 3.   | L.I.S.N.#3     | Kyoritsu        | KNW-242C  | 8-1920-1   | May.08, 12 | 1 Year        |
| 4.   | Terminator     | Hubersuhner     | 50Ω       | No. 1      | May.08, 12 | 1 Year        |
| 5.   | Terminator     | Hubersuhner     | 50Ω       | No. 2      | May.08, 12 | 1 Year        |
| 6.   | RF Cable       | Fujikura        | 3D-2W     | No.1       | May.08, 12 | 1Year         |
| 7.   | Coaxial Switch | Anritsu         | MP59B     | M50564     | May.08, 12 | 1 Year        |
| 8.   | Pulse Limiter  | Rohde & Schwarz | ESH3-Z2   | 100341     | May.08, 12 | 1 Year        |

#### 3.2.Block Diagram of Test Setup



#### 3.3.Power Line Conducted Emission Test Limits

| Frequency       | Maximum RF Line Voltage    |                         |
|-----------------|----------------------------|-------------------------|
|                 | Quasi-Peak Level<br>dB(μV) | Average Level<br>dB(μV) |
| 150kHz ~ 500kHz | 66 ~ 56*                   | 56 ~ 46*                |
| 500kHz ~ 5MHz   | 56                         | 46                      |
| 5MHz ~ 30MHz    | 60                         | 50                      |

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

### 3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4.1. Wireless N 150 Router (EUT)

Model Number : DIR-524  
Serial Number : N/A

#### 3.4.2. Support Equipment : As Tested Supporting System Details, in Section 2.3.

### 3.5.Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 2.4.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software to control EUT work in Tx mode.

### 3.6.Test Procedure

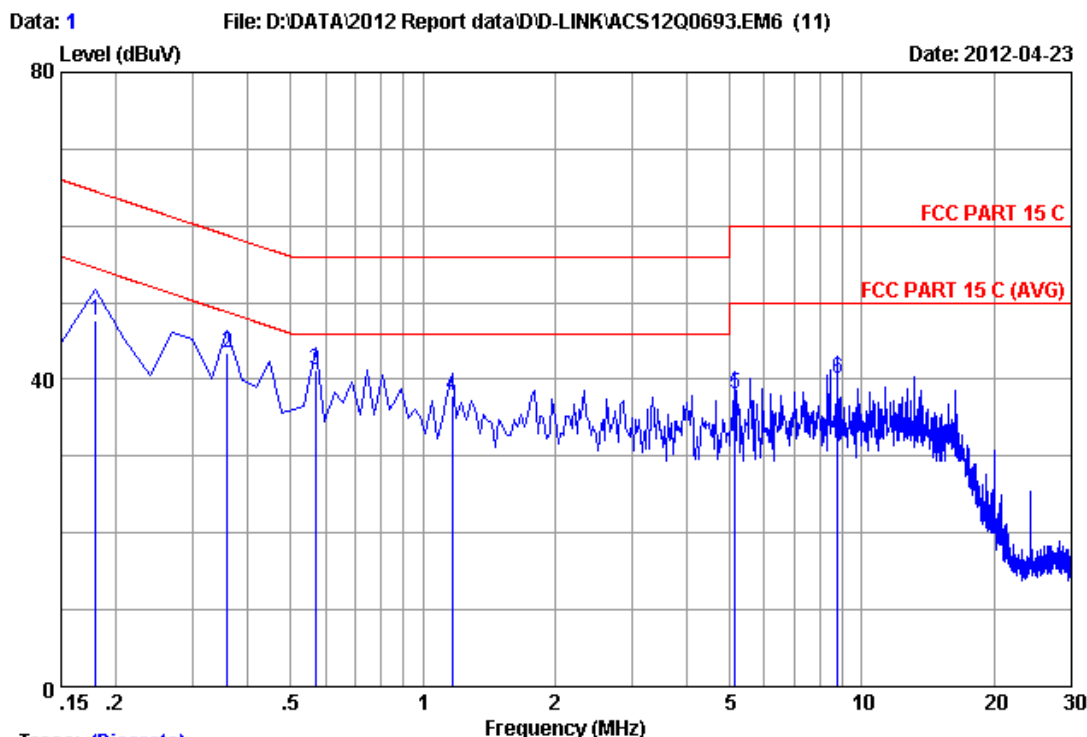
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via Notebook connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

### 3.7.Power Line Conducted Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

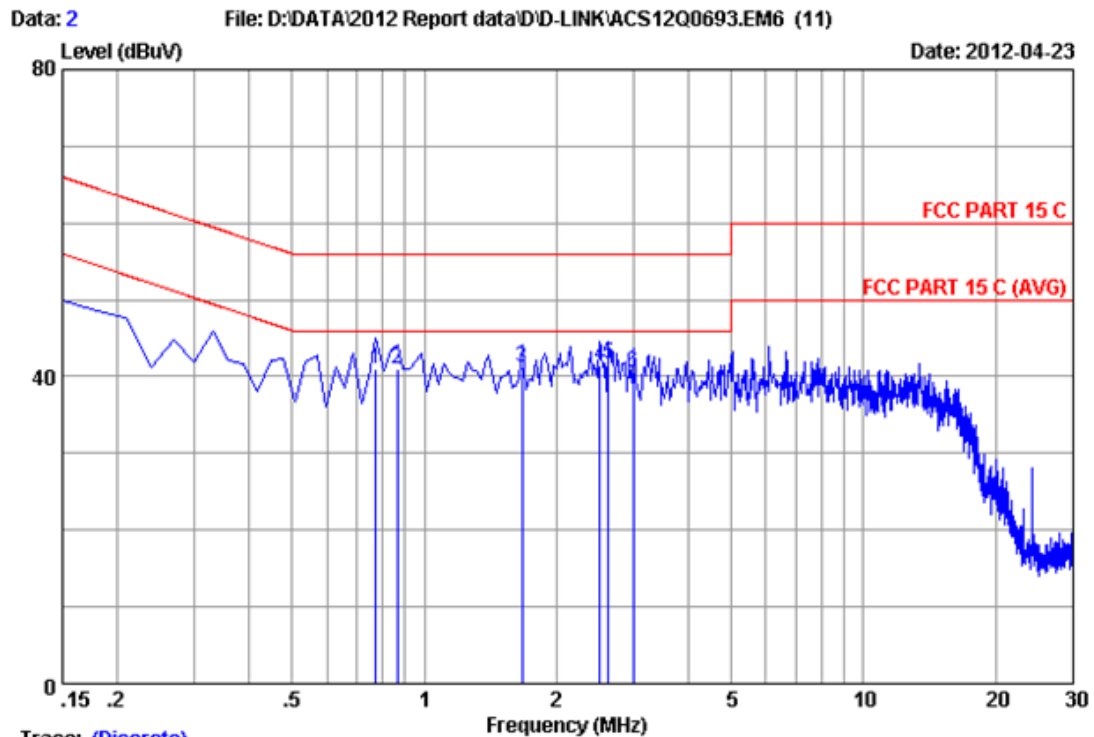


Trace: (Discrete)

Site no :1#conduction Data No :1  
 Dis./Ant. :\*\* 2011 ESH2-Z5 LINE  
 Limit :FCC PART 15 C  
 Env./Ins. :29.5°C/55% Engineer :Leo-Li  
 EUT :Wireless N 150 Router  
 Power Rating :DC 5V From Adapter Input AC 120V/60Hz  
 Test Mode :Tx Mode  
 M/N:DIR-524

| No | Freq<br>(MHz) | LISN<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV) | Limits<br>(dBUV) | Margin<br>(dB) | Remark |
|----|---------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|--------|
| 1  | 0.17985       | 0.15                   | 9.98                  | 37.60             | 47.73                       | 64.49            | 16.76          | QP     |
| 2  | 0.35895       | 0.16                   | 9.98                  | 33.28             | 43.42                       | 58.75            | 15.33          | QP     |
| 3  | 0.56790       | 0.16                   | 9.98                  | 30.98             | 41.12                       | 56.00            | 14.88          | QP     |
| 4  | 1.165         | 0.18                   | 9.98                  | 27.67             | 37.83                       | 56.00            | 18.17          | QP     |
| 5  | 5.135         | 0.25                   | 9.93                  | 27.92             | 38.10                       | 60.00            | 21.90          | QP     |
| 6  | 8.806         | 0.31                   | 9.91                  | 29.82             | 40.04                       | 60.00            | 19.96          | QP     |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)  
 +Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



Trace: (Discrete)

Site no :1#conduction Data No :2  
 Dis./Ant. :\*\* 2011 ESH2-Z5 NEUTRAL  
 Limit :FCC PART 15 C  
 Env./Ins. :29.5°C/55% Engineer :Leo-Li  
 EUT :Wireless N 150 Router  
 Power Rating :DC 5V From Adapter Input AC 120V/60Hz  
 Test Mode :Tx Mode  
 M/N:DIR-524

| No | Freq (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|----|------------|------------------|-----------------|----------------|-----------------------|---------------|-------------|--------|
| 1  | 0.77685    | 0.16             | 9.97            | 30.91          | 41.04                 | 56.00         | 14.96       | QP     |
| 2  | 0.86640    | 0.17             | 9.98            | 30.96          | 41.11                 | 56.00         | 14.89       | QP     |
| 3  | 1.672      | 0.19             | 9.97            | 31.05          | 41.21                 | 56.00         | 14.79       | QP     |
| 4  | 2.508      | 0.21             | 9.96            | 31.29          | 41.46                 | 56.00         | 14.54       | QP     |
| 5  | 2.628      | 0.21             | 9.96            | 31.45          | 41.62                 | 56.00         | 14.38       | QP     |
| 6  | 2.986      | 0.22             | 9.96            | 30.39          | 40.57                 | 56.00         | 15.43       | QP     |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

## 4. RADIATED EMISSION TEST

### 4.1.Test Equipment

Frequency rang: 30~1000MHz

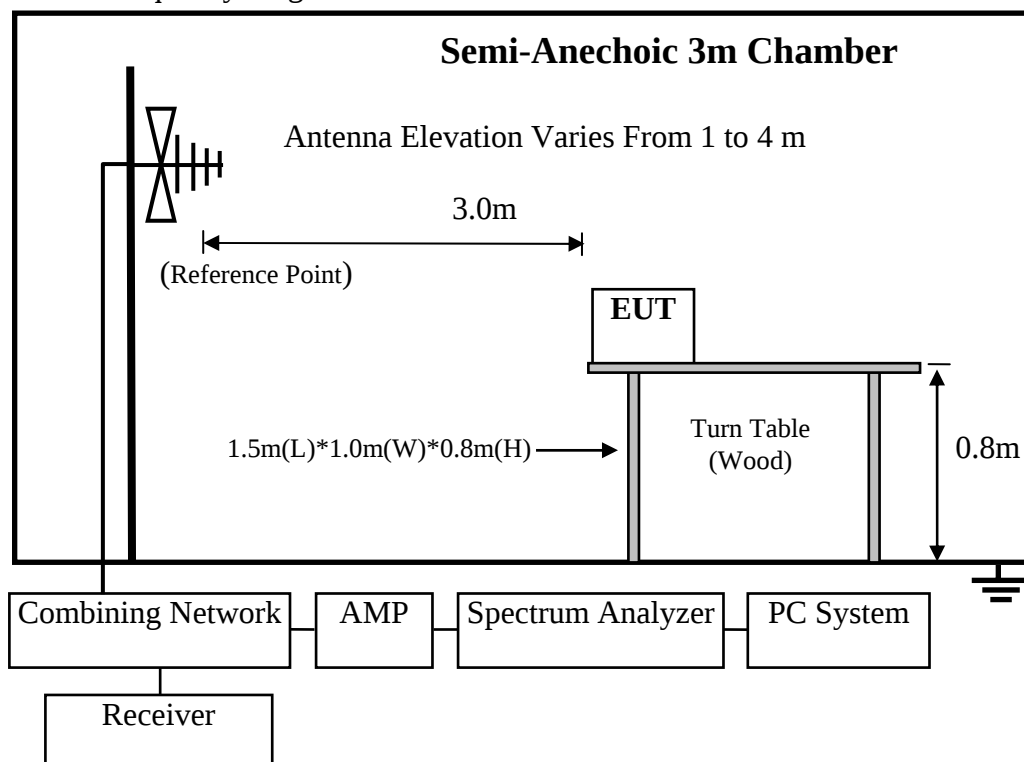
| Item | Equipment      | Manufacturer    | Model No. | Serial No.      | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|-----------------|------------|---------------|
| 1    | 3#Chamber      | AUDIX           | N/A       | N/A             | Nov.28,11  | 1 Year        |
| 2    | EMI Spectrum   | Agilent         | E4407B    | MY41440292      | May.08, 12 | 1 Year        |
| 3    | Test Receiver  | Rohde & Schwarz | ESVS10    | 834468/011      | May.08, 12 | 1 Year        |
| 4    | Amplifier      | HP              | 8447D     | 2648A04738      | May.08, 12 | 1 Year        |
| 5    | Bilog Antenna  | Schaffner       | CBL6111C  | 2598            | Oct.26, 10 | 2.0 Year      |
| 6    | RF Cable       | MIYAZAKI        | CFD400-NL | 3# Chamber No.1 | Dec.06, 11 | 0.5Year       |
| 7    | Coaxial Switch | Anritsu         | MP59B     | M74389          | May.08, 12 | 1 Year        |

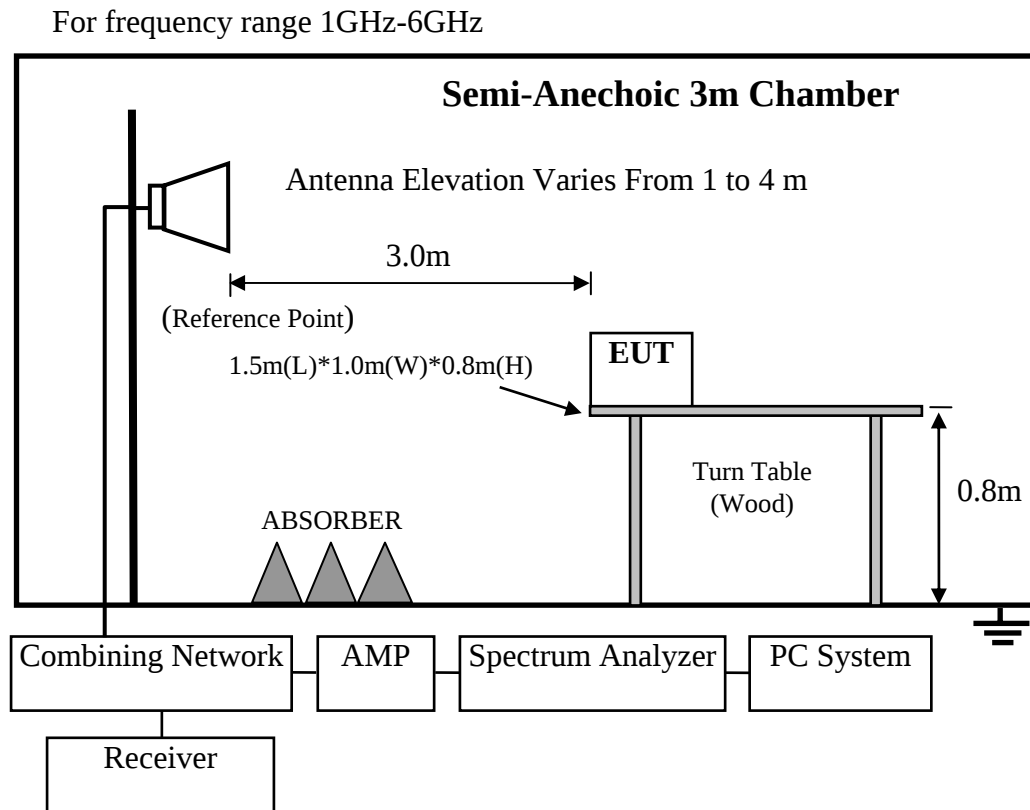
Frequency rang: above 1000MHz

| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal.   | Cal. Interval |
|------|-------------------|--------------|-------------|------------|-------------|---------------|
| 1    | Spectrum Analyzer | Agilent      | E4407B      | MY41440292 | May.08, 12  | 1 Year        |
| 2    | Horn Antenna      | EMCO         | 3115        | 9607-4877  | July.01, 11 | 1 Year        |
| 3    | Horn Antenna      | EMCO         | 3116        | 00060089   | Nov.25, 11  | 1.5 Year      |
| 4    | Amplifier         | Agilent      | 8449B       | 3008A00863 | May.08, 12  | 1 Year        |
| 5    | RF Cable          | Hubersuhner  | SUCOFLEX106 | 77980/6    | Dec.06, 11  | 0.5Year       |
| 6    | RF Cable          | Hubersuhner  | SUCOFLEX106 | 77977/6    | Dec.06, 11  | 0.5Year       |

### 4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz





### 4.3.Radiated Emission Limit

#### 4.3.1. 15.209 limits

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMIT                                                                             |                                   |
|------------------|--------------------|---------------------------------------------------------------------------------------------------|-----------------------------------|
|                  |                    | $\mu\text{V/m}$                                                                                   | $\text{dB}(\mu\text{V})/\text{m}$ |
| 30 ~ 88          | 3                  | 100                                                                                               | 40.0                              |
| 88 ~ 216         | 3                  | 150                                                                                               | 43.5                              |
| 216 ~ 960        | 3                  | 200                                                                                               | 46.0                              |
| 960 ~ 1000       | 3                  | 500                                                                                               | 54.0                              |
| Above 1000       | 3                  | 74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak)<br>54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) |                                   |

- Remark :
- (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  Emission level  $\mu\text{V/m}$
  - (2) The smaller limit shall apply at the cross point between two frequency bands.
  - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

#### 4.3.2. 15.205 Restricted bands of operation

| MHz                        | MHz                   | MHz             | GHz              |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110              | 16.42 - 16.423        | 399.9 - 410     | 4.5 - 5.15       |
| <sup>1</sup> 0.495 - 0.505 | 16.69475 - 16.69525   | 608 - 614       | 5.35 - 5.46      |
| 2.1735 - 2.1905            | 16.80425 - 16.80475   | 960 - 1240      | 7.25 - 7.75      |
| 4.125 - 4.128              | 25.5 - 25.67          | 1300 - 1427     | 8.025 - 8.5      |
| 4.17725 - 4.17775          | 37.5 - 38.25          | 1435 - 1626.5   | 9.0 - 9.2        |
| 4.20725 - 4.20775          | 73 - 74.6             | 1645.5 - 1646.5 | 9.3 - 9.5        |
| 6.215 - 6.218              | 74.8 - 75.2           | 1660 - 1710     | 10.6 - 12.7      |
| 6.26775 - 6.26825          | 108 - 121.94          | 1718.8 - 1722.2 | 13.25 - 13.4     |
| 6.31175 - 6.31225          | 123 - 138             | 2200 - 2300     | 14.47 - 14.5     |
| 8.291 - 8.294              | 149.9 - 150.05        | 2310 - 2390     | 15.35 - 16.2     |
| 8.362 - 8.366              | 156.52475 - 156.52525 | 2483.5 - 2500   | 17.7 - 21.4      |
| 8.37625 - 8.38675          | 156.7 - 156.9         | 2690 - 2900     | 22.01 - 23.12    |
| 8.41425 - 8.41475          | 162.0125 - 167.17     | 3260 - 3267     | 23.6 - 24.0      |
| 12.29 - 12.293             | 167.72 - 173.2        | 3332 - 3339     | 31.2 - 31.8      |
| 12.51975 - 12.52025        | 240 - 285             | 3345.8 - 3358   | 36.43 - 36.5     |
| 12.57675 - 12.57725        | 322 - 335.4           | 3600 - 4400     | ( <sup>2</sup> ) |

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

#### 4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

##### 4.4.1. Wireless N 150 Router (EUT)

Model Number : DIR-524

Serial Number : N/A

##### 4.4.2. Support Equipment : As Tested Supporting System Details, in Section 2.3.

#### 4.5.Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 2.4.

4.5.2. Turned on the power of all equipment.

4.5.3. PC run test software to control EUT work in test mode.

#### 4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

#### 4.7.Radiated Emission Test Results

**PASS.**

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

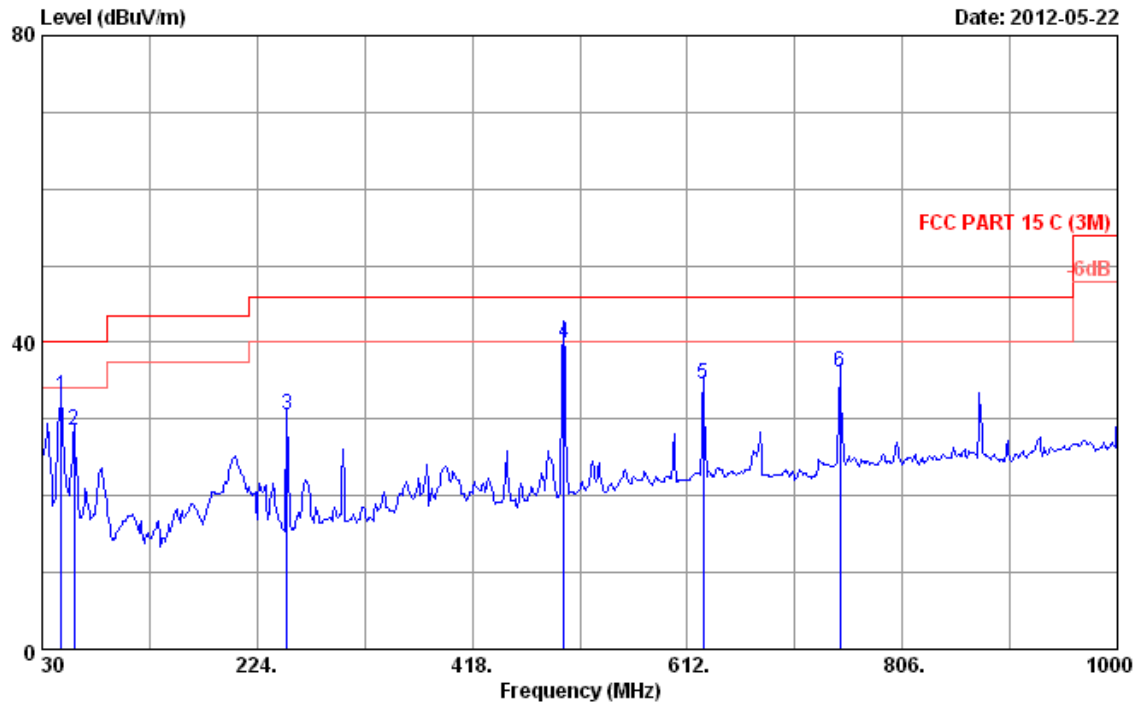
Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

# Frequency: 30MHz~1GHz

Data: 10

File: E:\2012 Report Data\DI-D-LINK\ACS12Q0693.EM6 (10)

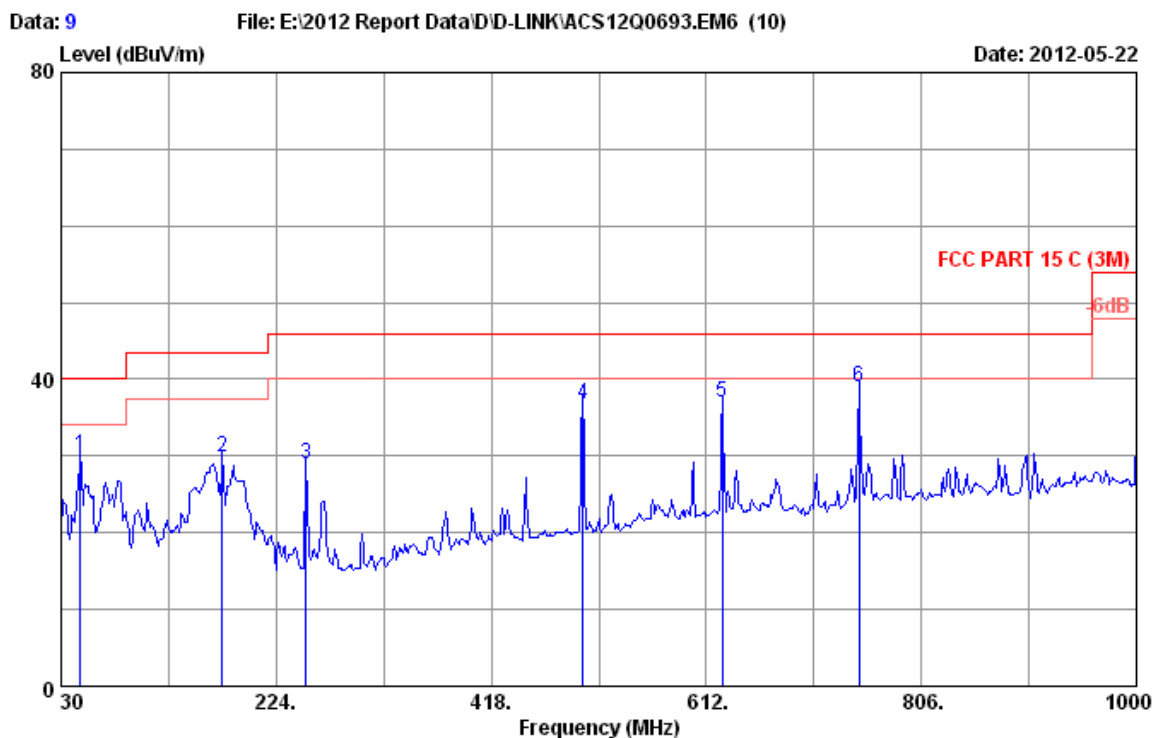
Date: 2012-05-22



Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : Wireless N 150 Router M/N:DIR-524  
 Power rating : DC 5V From Adapter Input AC 120V/60Hz  
 Test Mode : Tx Mode

| No. | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1   | 47.460         | 10.55                    | 0.34                  | 22.13             | 33.02                         | 40.00              | 6.98           | QP     |
| 2   | 59.100         | 6.22                     | 0.40                  | 21.83             | 28.45                         | 40.00              | 11.55          | QP     |
| 3   | 251.160        | 12.90                    | 1.16                  | 16.38             | 30.44                         | 46.00              | 15.56          | QP     |
| 4   | 500.450        | 18.30                    | 1.50                  | 20.05             | 39.85                         | 46.00              | 6.15           | QP     |
| 5   | 626.550        | 20.13                    | 1.77                  | 12.71             | 34.61                         | 46.00              | 11.39          | QP     |
| 6   | 749.740        | 22.00                    | 2.00                  | 12.11             | 36.11                         | 46.00              | 9.89           | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : Wireless N 150 Router M/N:DIR-524  
 Power rating : DC 5V From Adapter Input AC 120V/60Hz  
 Test Mode : Tx Mode

| No. | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|-----|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1   | 47.460         | 10.55                    | 0.34                  | 19.24             | 30.13                         | 40.00              | 9.87           | QP     |
| 2   | 175.500        | 9.65                     | 0.95                  | 19.15             | 29.75                         | 43.50              | 13.75          | QP     |
| 3   | 251.160        | 12.90                    | 1.16                  | 14.88             | 28.94                         | 46.00              | 17.06          | QP     |
| 4   | 500.450        | 18.30                    | 1.50                  | 17.04             | 36.84                         | 46.00              | 9.16           | QP     |
| 5   | 626.550        | 20.13                    | 1.77                  | 15.07             | 36.97                         | 46.00              | 9.03           | QP     |
| 6   | 749.740        | 22.00                    | 2.00                  | 14.98             | 38.98                         | 46.00              | 7.02           | QP     |

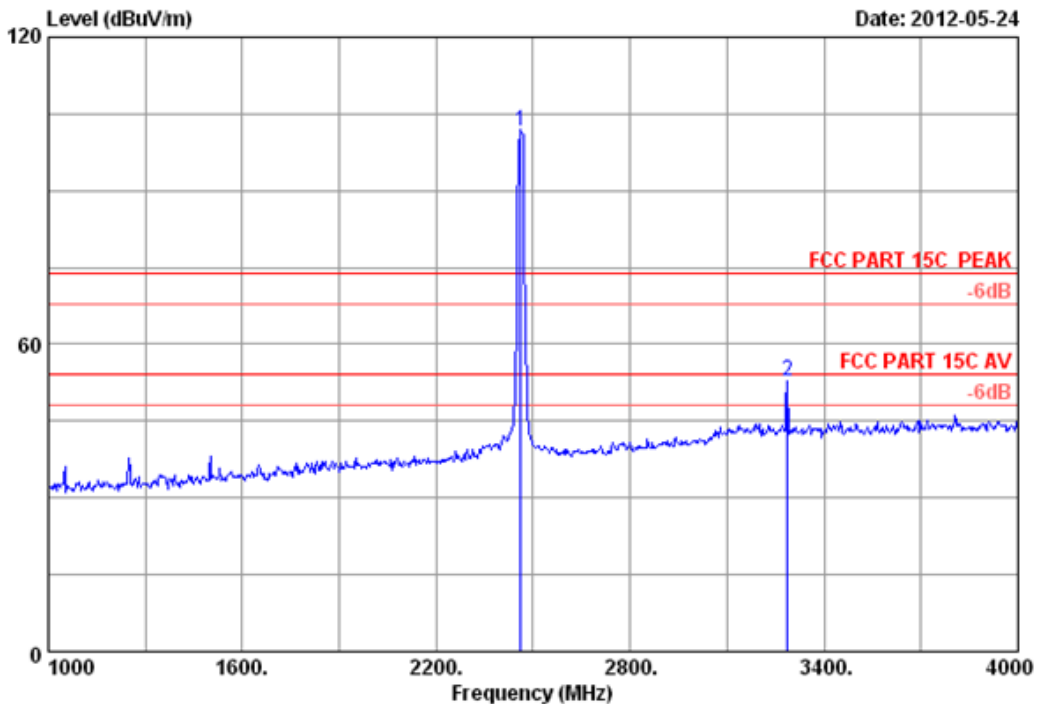
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

# Frequency: 1GHz~18GHz

Data: 52

File: E:\2012 Report\ID\ACS1200693.EM6 (108)

Date: 2012-05-24

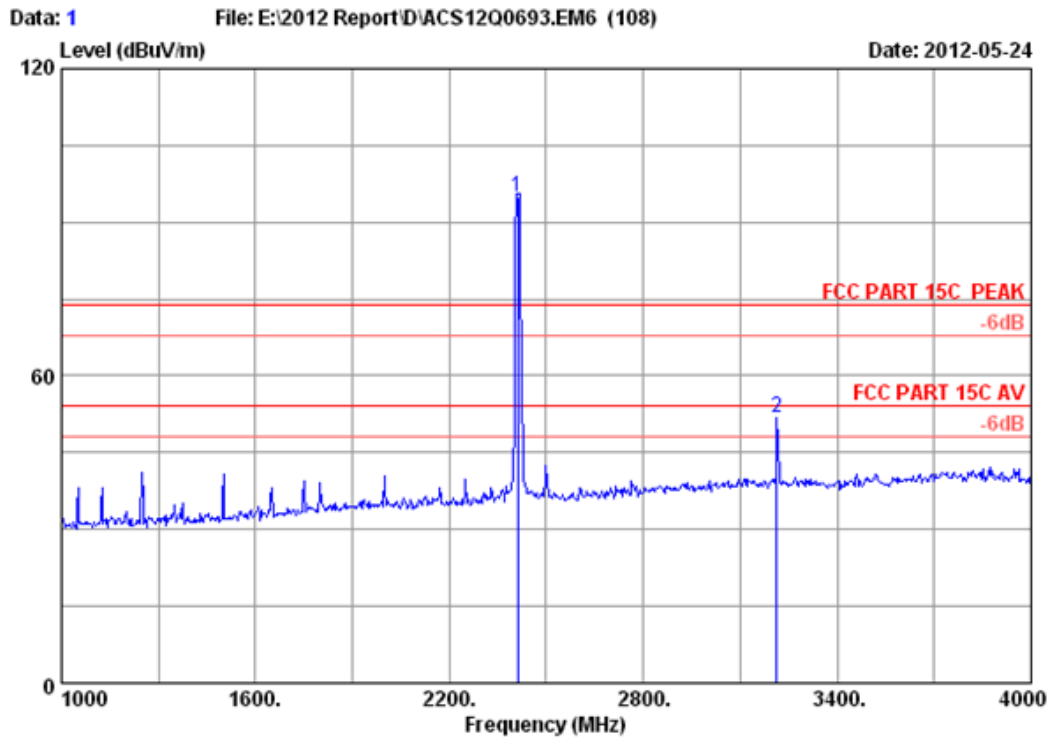


Site no. : 3m Chamber Data no. : 52  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 101.77            | 101.50                        | 74.00              | -27.50         | Peak   |
| 2 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 49.56             | 52.86                         | 74.00              | 21.14          | Peak   |

## Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

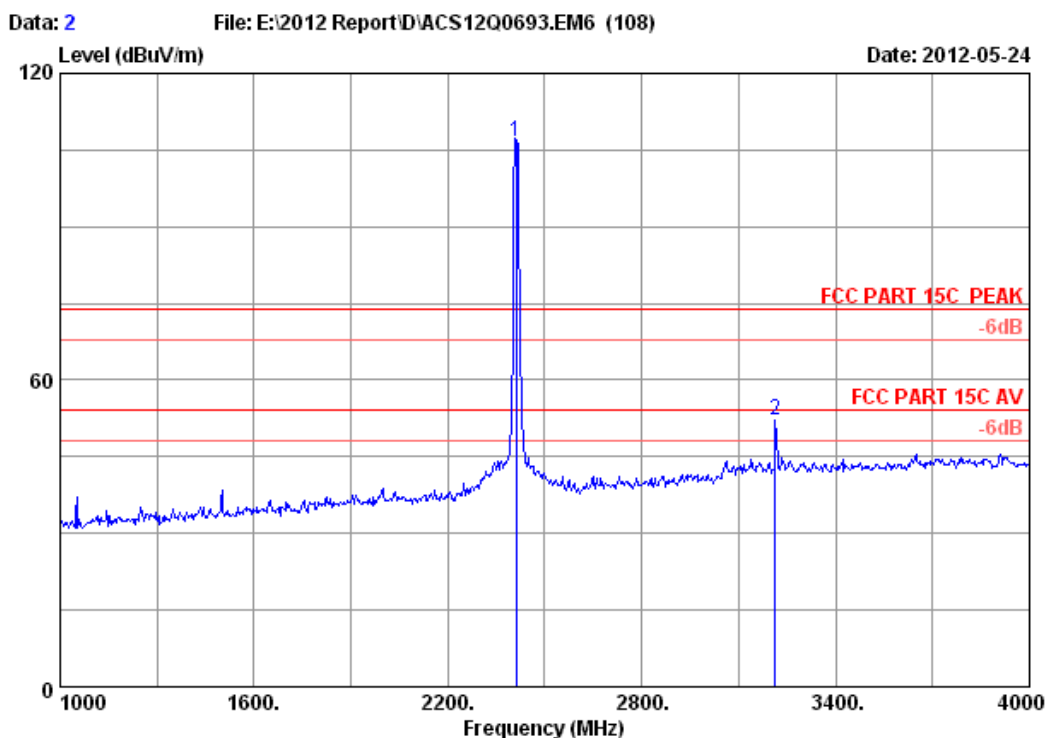


Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 95.50             | 95.07                         | 74.00              | -21.07         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 48.76             | 51.86                         | 74.00              | 22.14          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

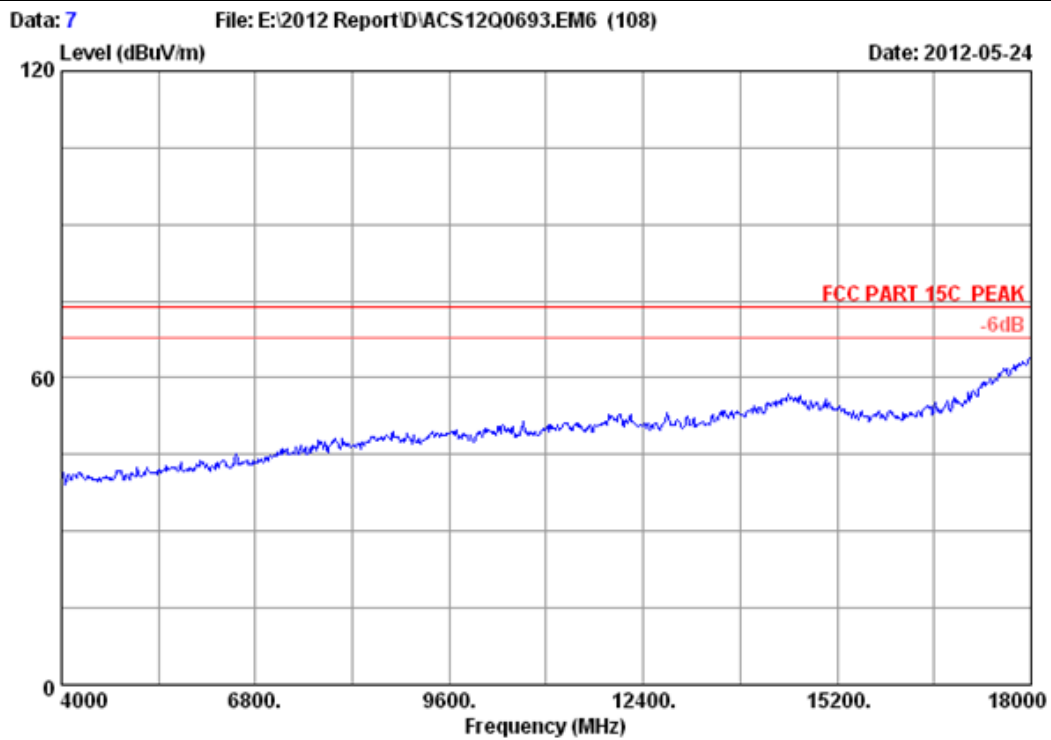


Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 : DIR-524

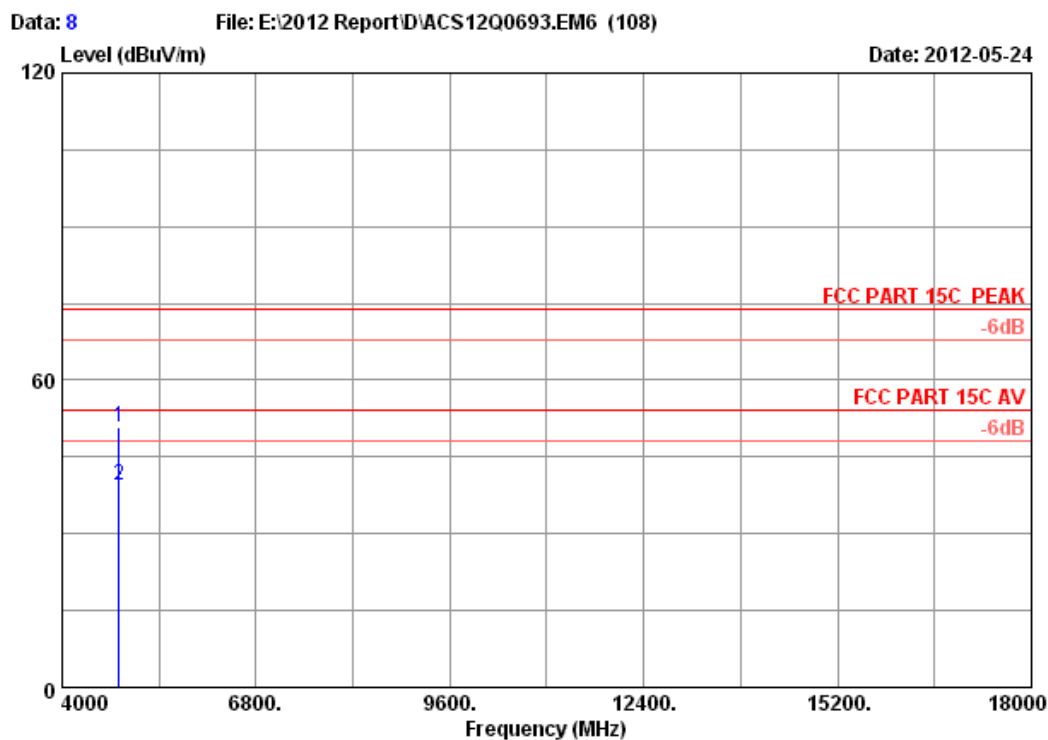
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 106.92            | 106.49                        | 74.00              | -32.49         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 48.91             | 52.01                         | 74.00              | 21.99          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 7          |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11b CH1 2412MHz Tx            |           |              |
|              | : DIR-524                               |           |              |

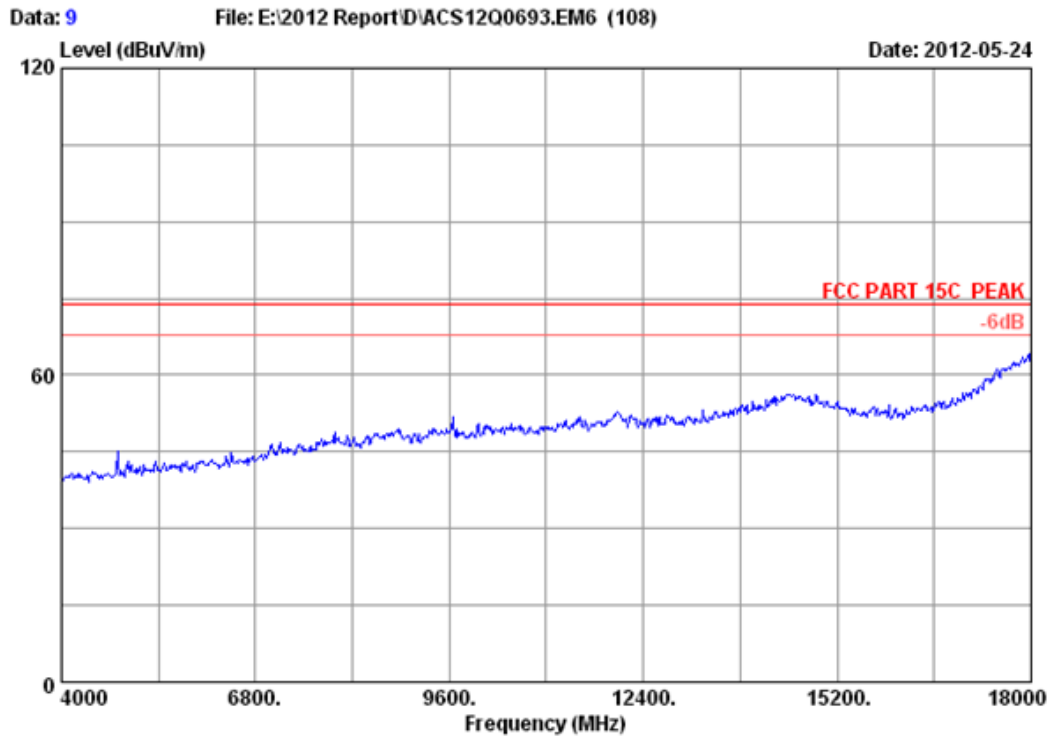


Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 : DIR-524

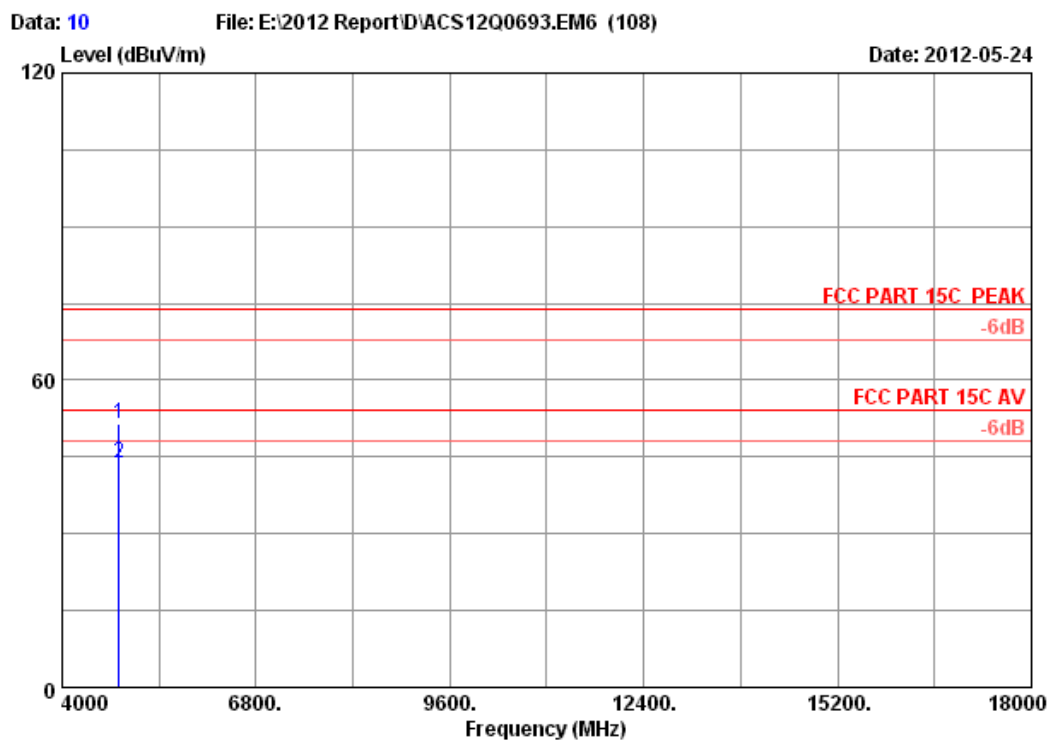
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 43.89             | 50.71                         | 74.00              | 23.29          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 32.62             | 39.44                         | 54.00              | 14.56          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 9        |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11b CH1 2412MHz Tx            |           |            |
|              | : DIR-524                               |           |            |

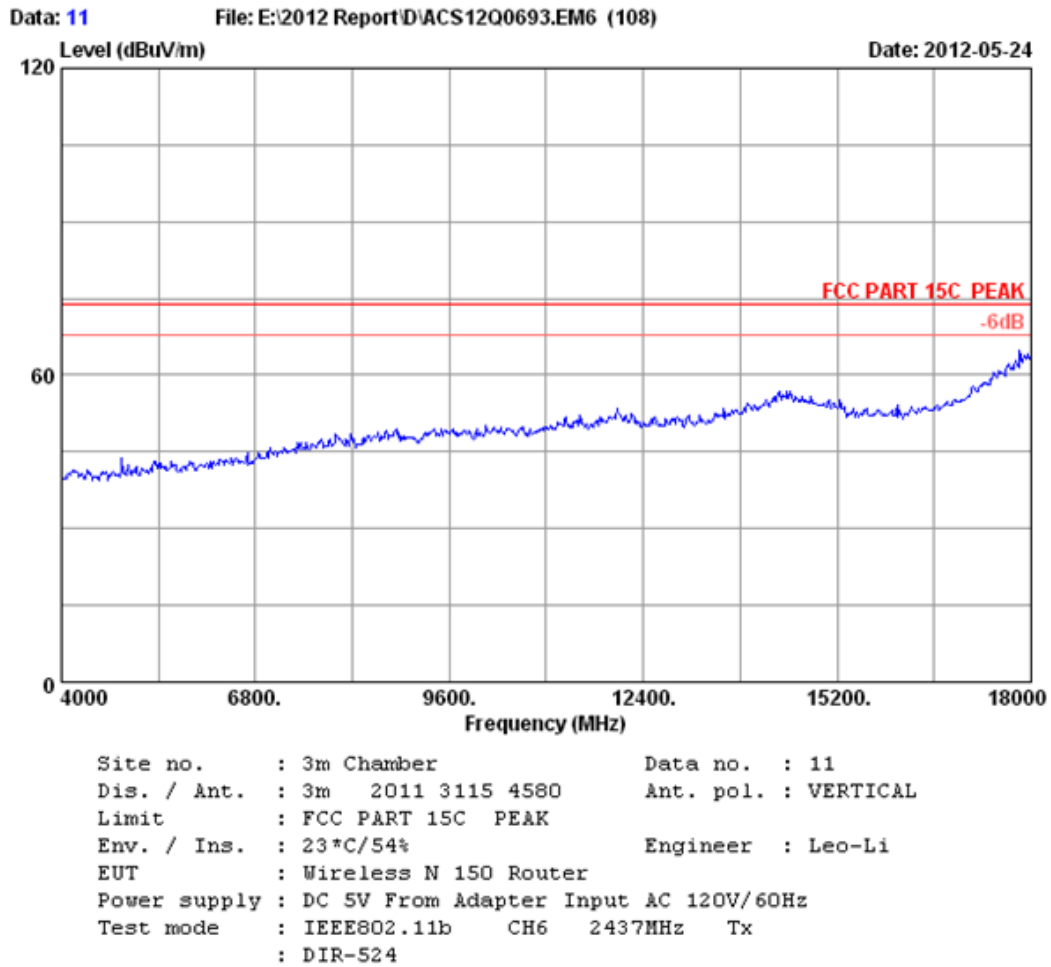


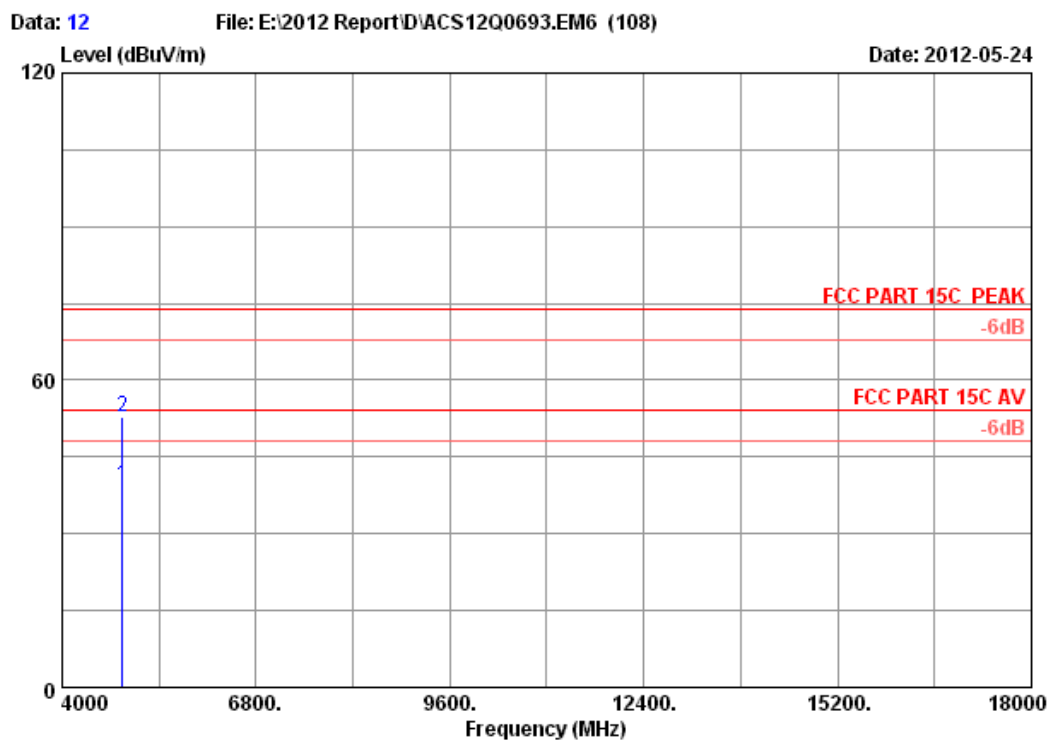
Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 44.63             | 51.45                         | 74.00              | 22.55          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 36.91             | 43.73                         | 54.00              | 10.27          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



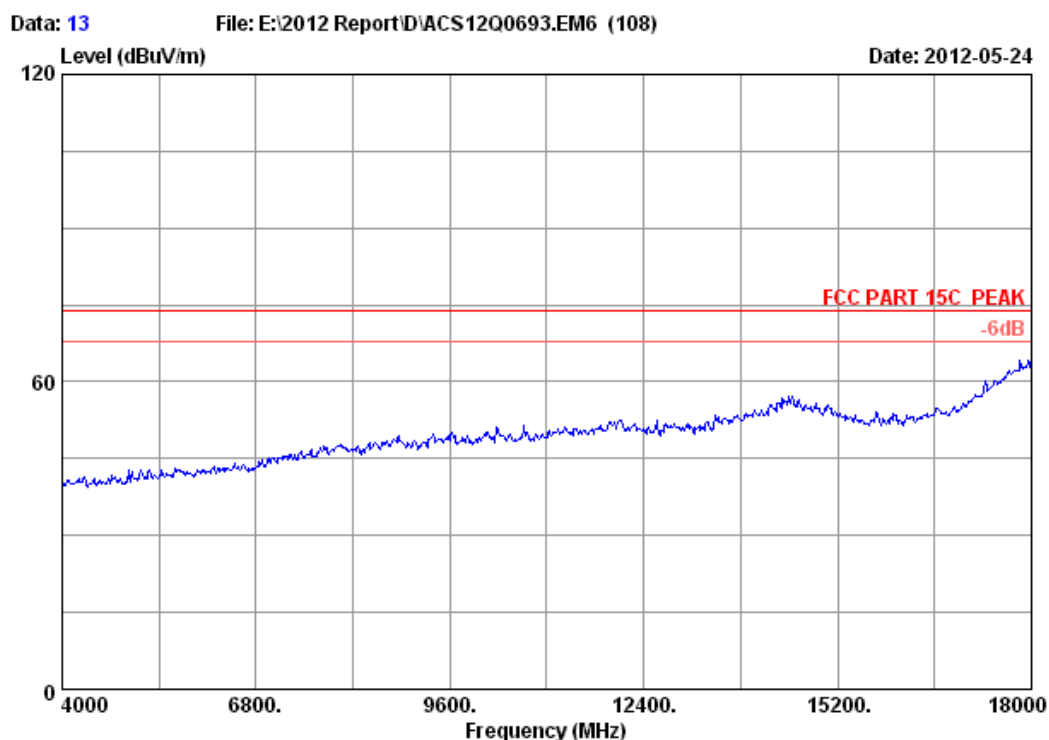


Site no. : 3m Chamber Data no. : 12  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 : DIR-524

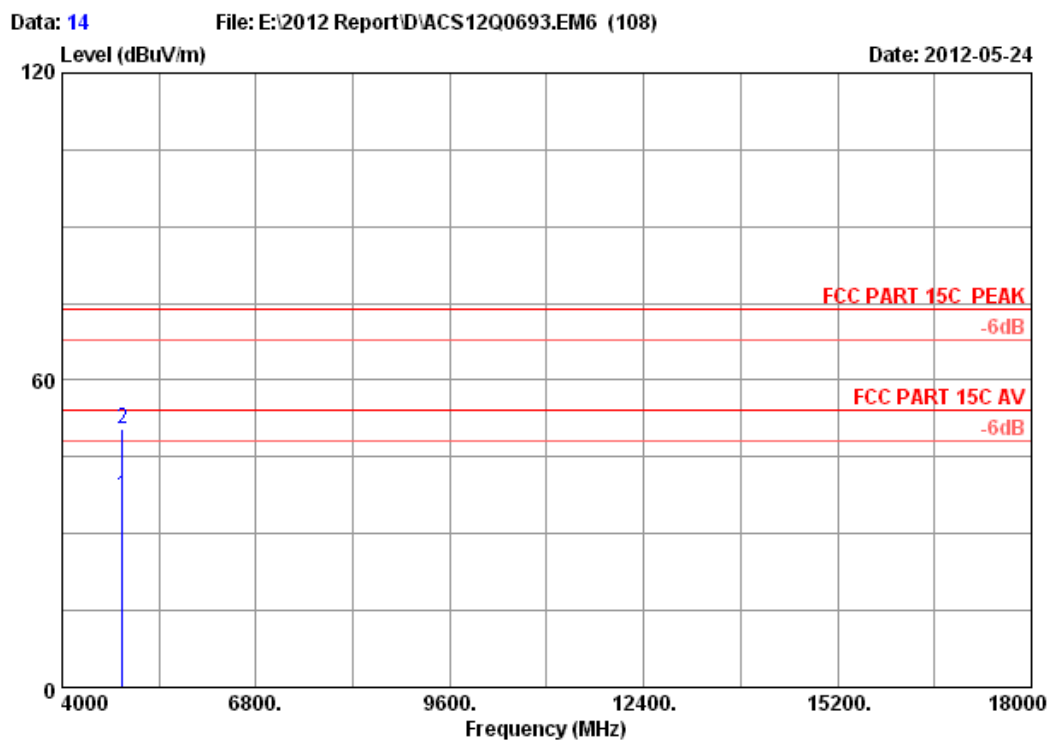
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 32.43             | 39.39                         | 54.00              | 14.61          | Average |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 45.78             | 52.74                         | 74.00              | 21.26          | Peak    |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 13         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11b CH6 2437MHz Tx            |           |              |
|              | : DIR-524                               |           |              |

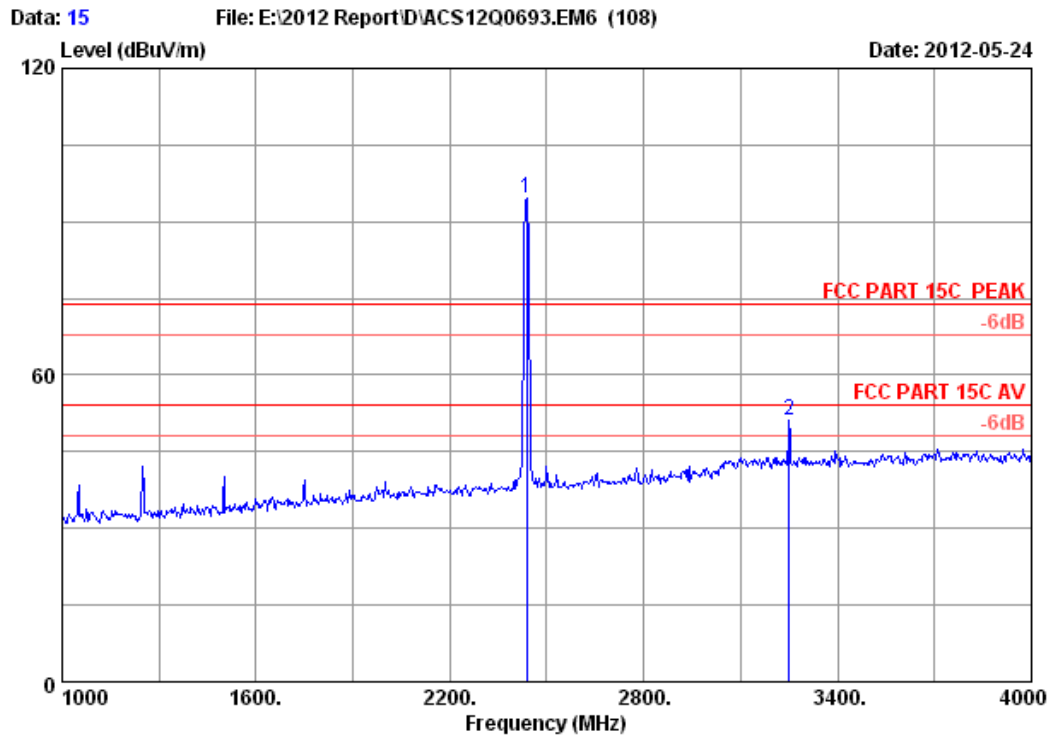


Site no. : 3m Chamber Data no. : 14  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.56             | 37.52                         | 54.00              | 16.48          | Average |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.59             | 50.55                         | 74.00              | 23.45          | Peak    |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

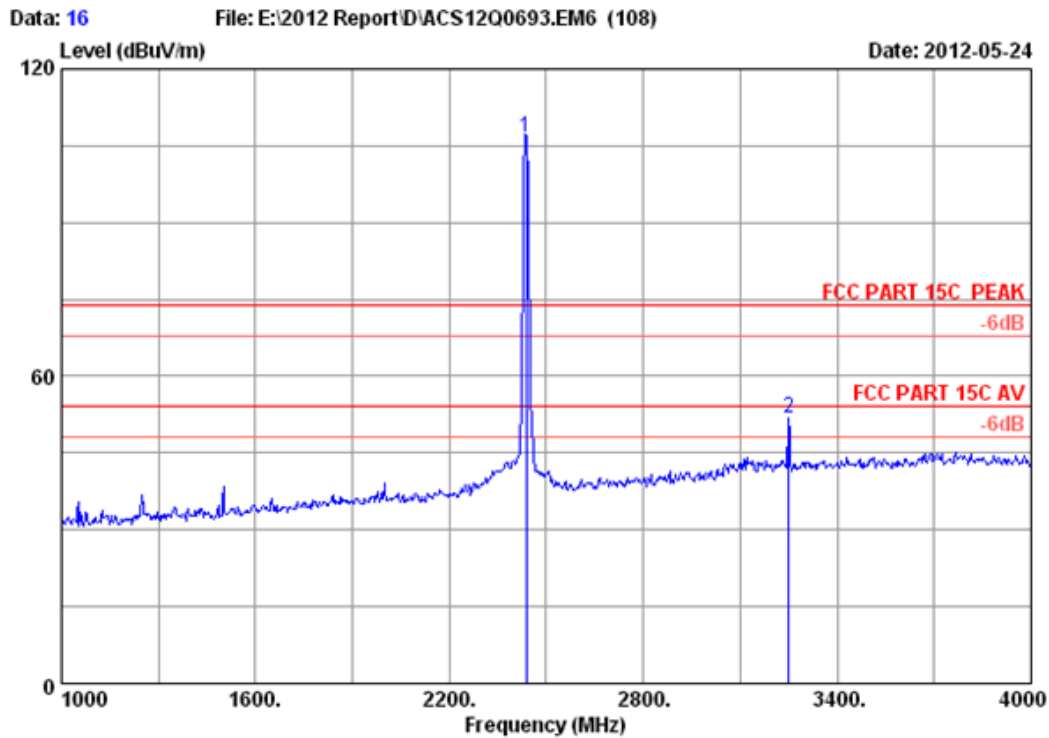


Site no. : 3m Chamber Data no. : 15  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 94.84             | 94.49                         | 74.00              | -20.49         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 47.91             | 51.11                         | 74.00              | 22.89          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

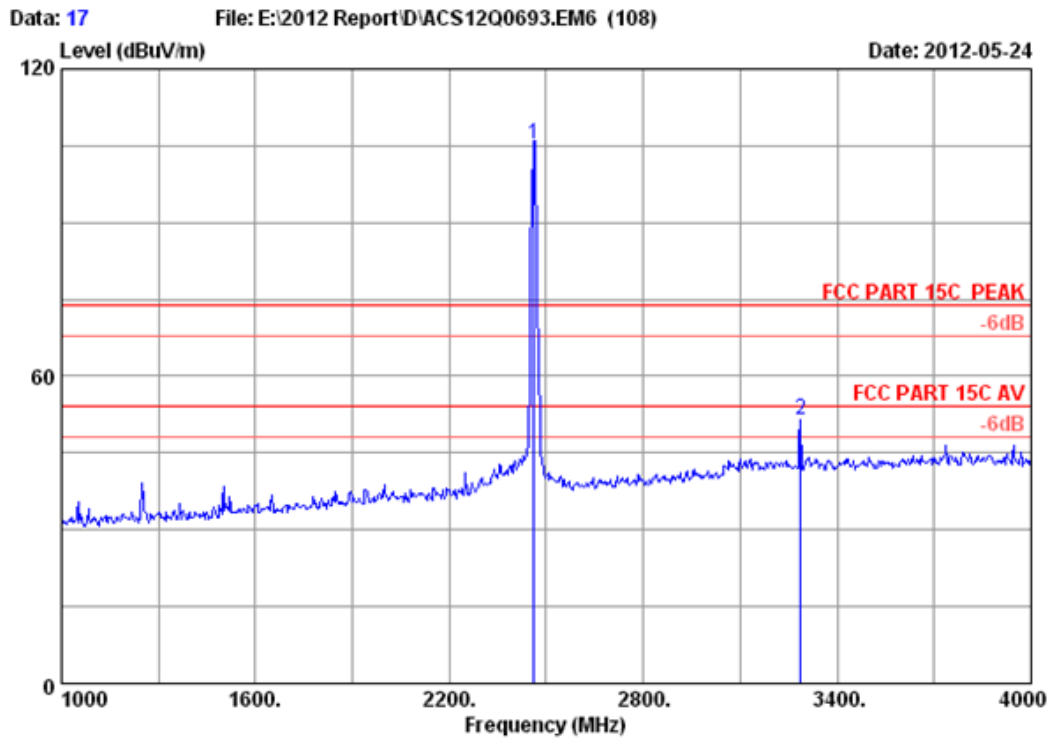


Site no. : 3m Chamber Data no. : 16  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 106.90            | 106.55                        | 74.00              | -32.55         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 48.61             | 51.81                         | 74.00              | 22.19          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

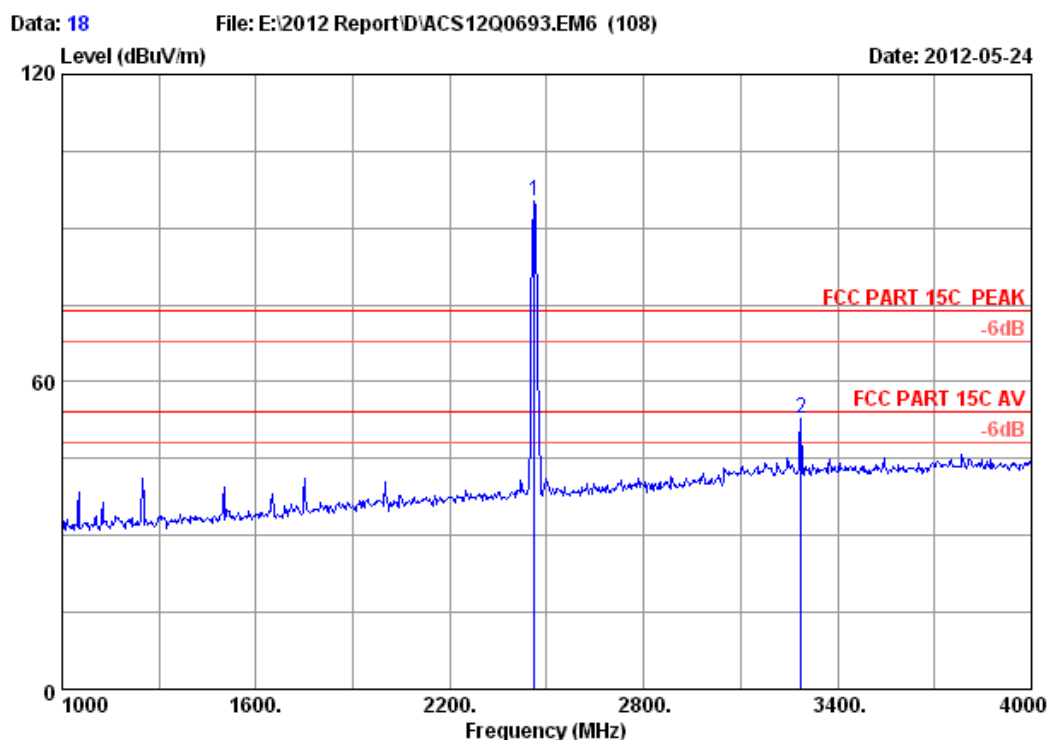


Site no. : 3m Chamber Data no. : 17  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 105.46            | 105.19                        | 74.00              | -31.19         | Peak   |
| 2 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 48.16             | 51.46                         | 74.00              | 22.54          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

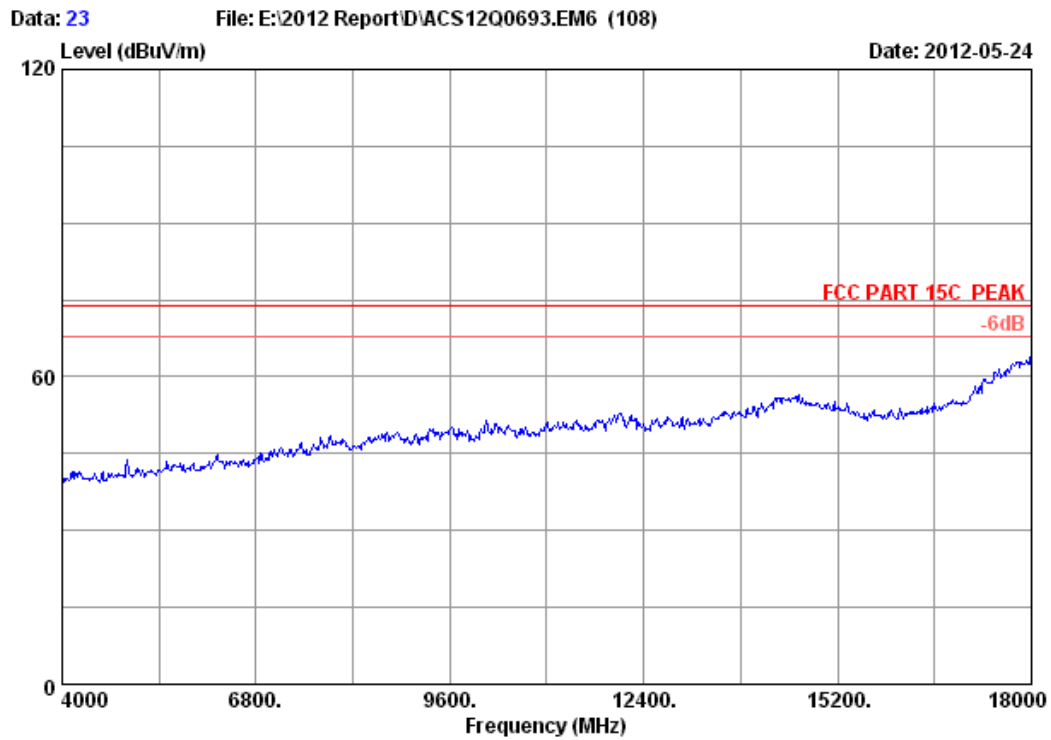


Site no. : 3m Chamber Data no. : 18  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 : DIR-524

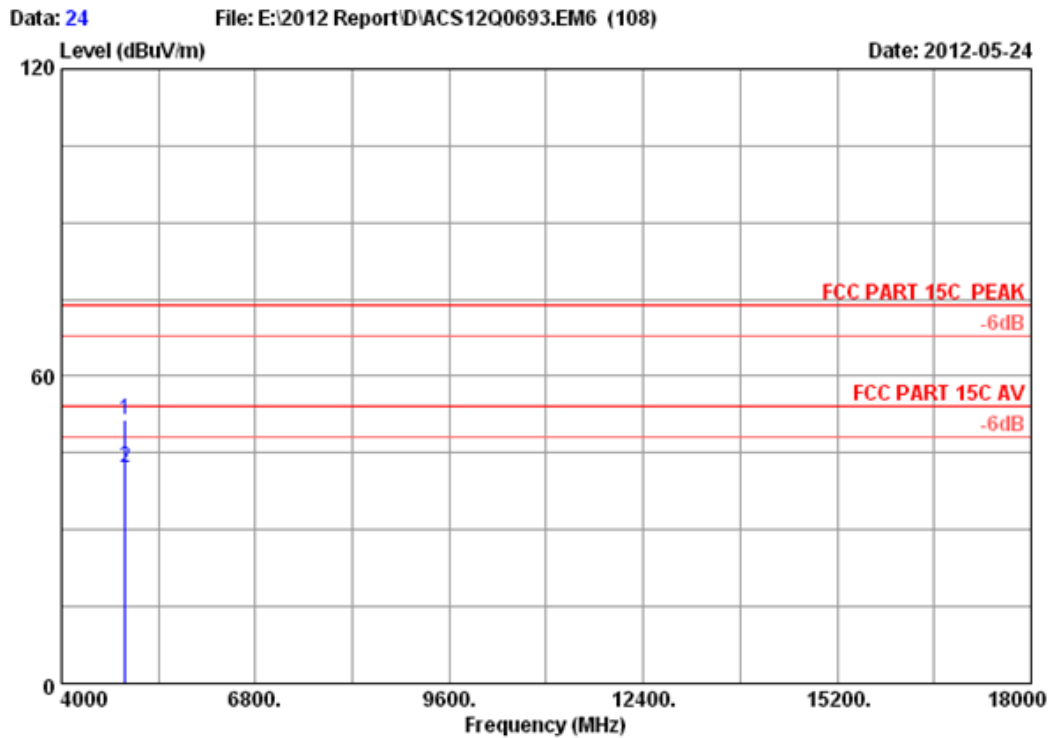
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 95.38             | 95.11                         | 74.00              | -21.11         | Peak   |
| 2 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 49.47             | 52.77                         | 74.00              | 21.23          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 23       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11b CH11 2462MHz Tx           |           |            |
|              | : DIR-524                               |           |            |

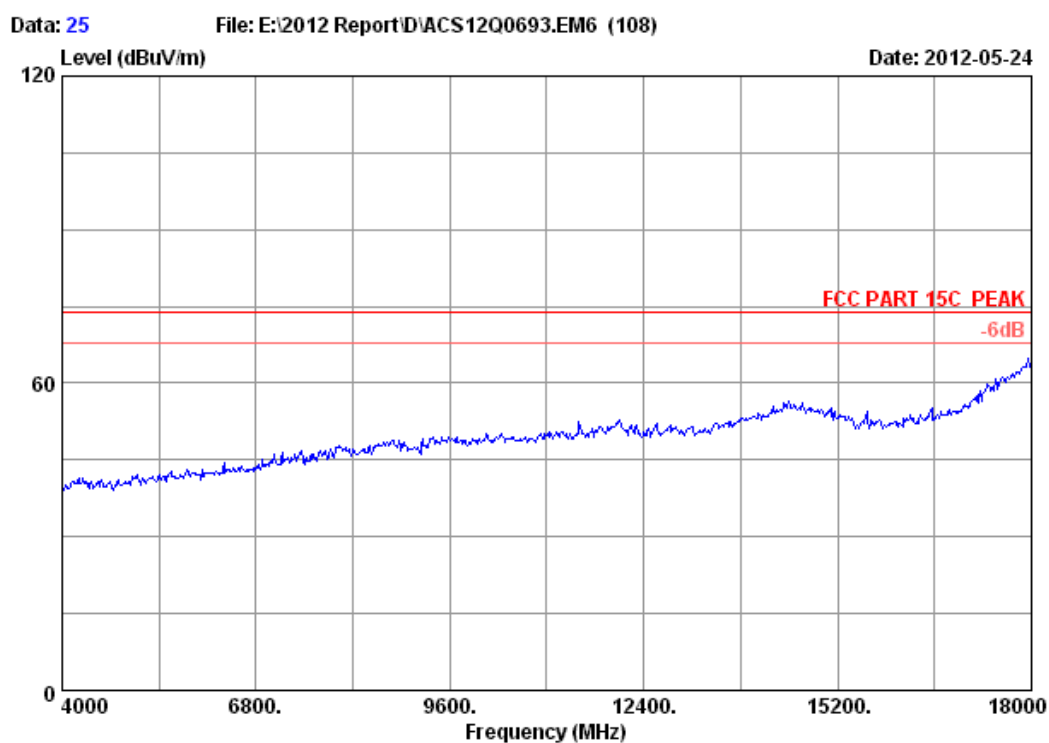


Site no. : 3m Chamber Data no. : 24  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 : DIR-524

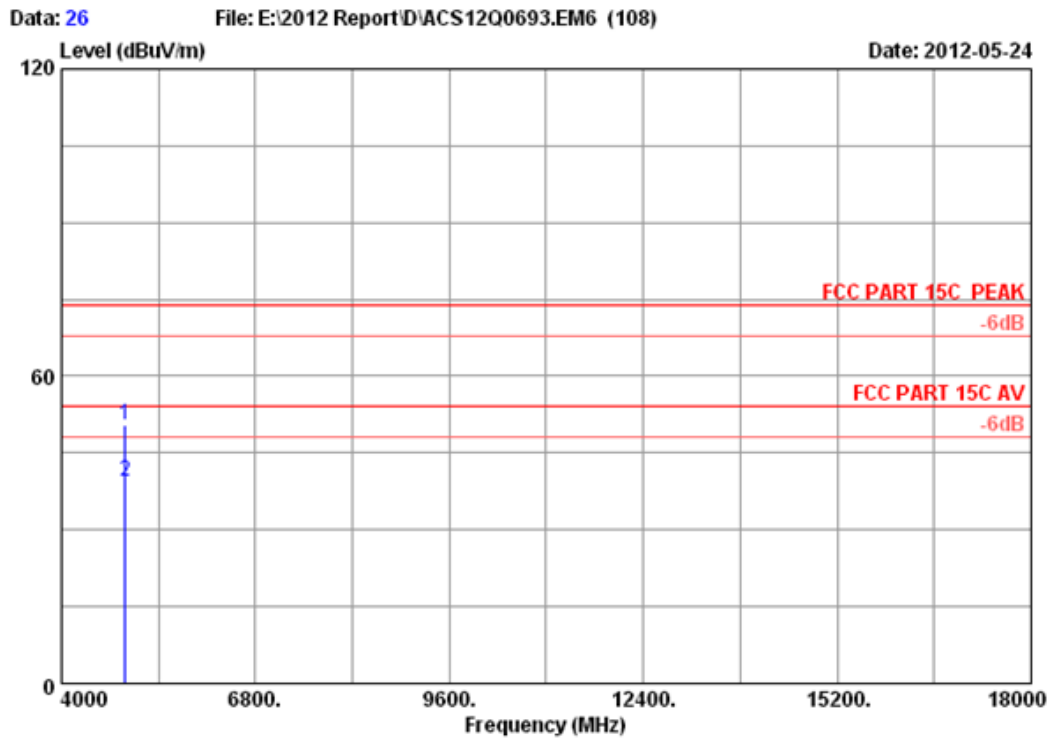
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 44.25             | 51.35                         | 74.00              | 22.65          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 35.10             | 42.20                         | 54.00              | 11.80          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 25         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11b CH11 2462MHz Tx           |           |              |
|              | : DIR-524                               |           |              |

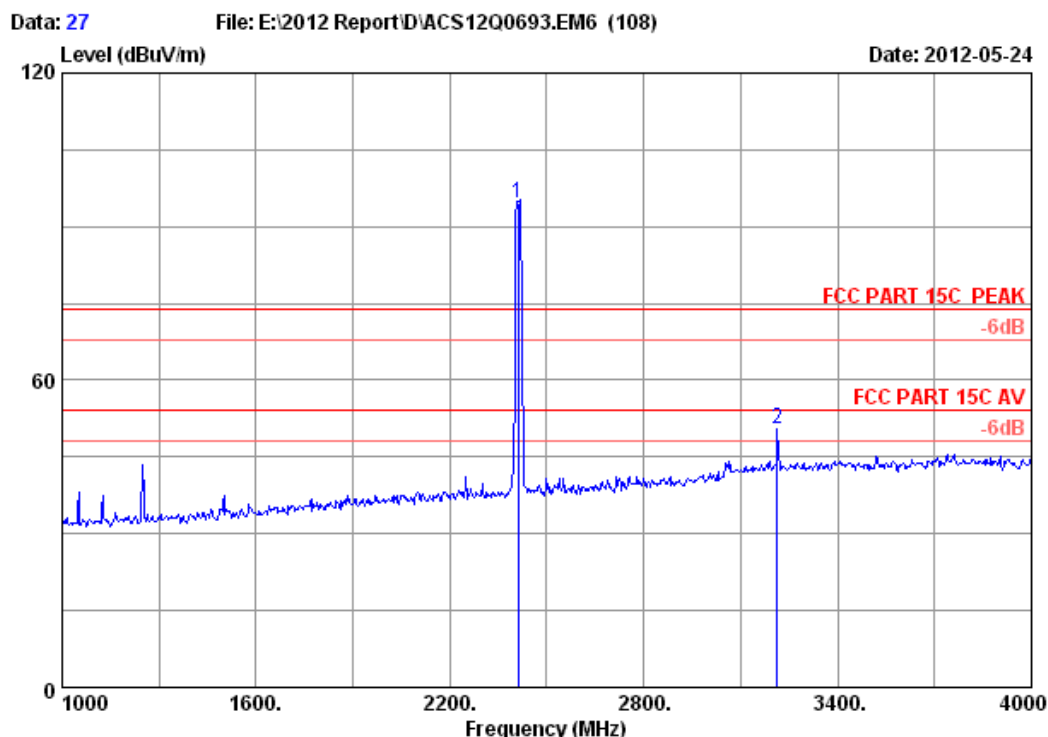


Site no. : 3m Chamber Data no. : 26  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 43.38             | 50.48                         | 74.00              | 23.52          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 32.20             | 39.30                         | 54.00              | 14.70          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

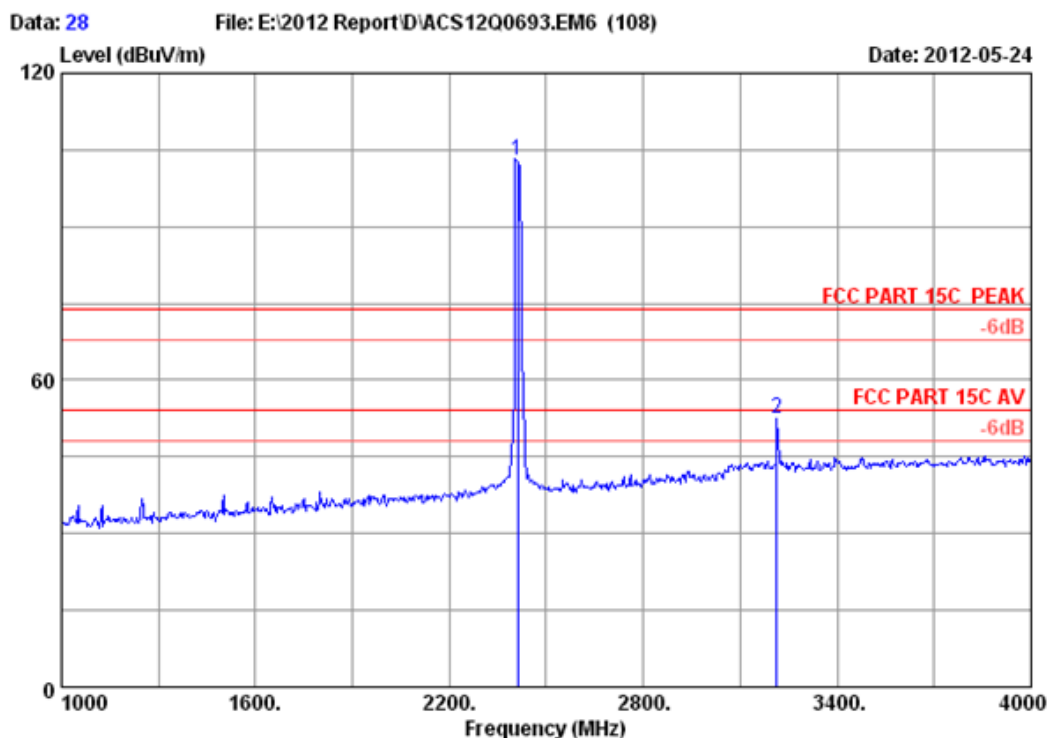


Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 95.18             | 94.75                         | 74.00              | -20.75         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 47.49             | 50.59                         | 74.00              | 23.41          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

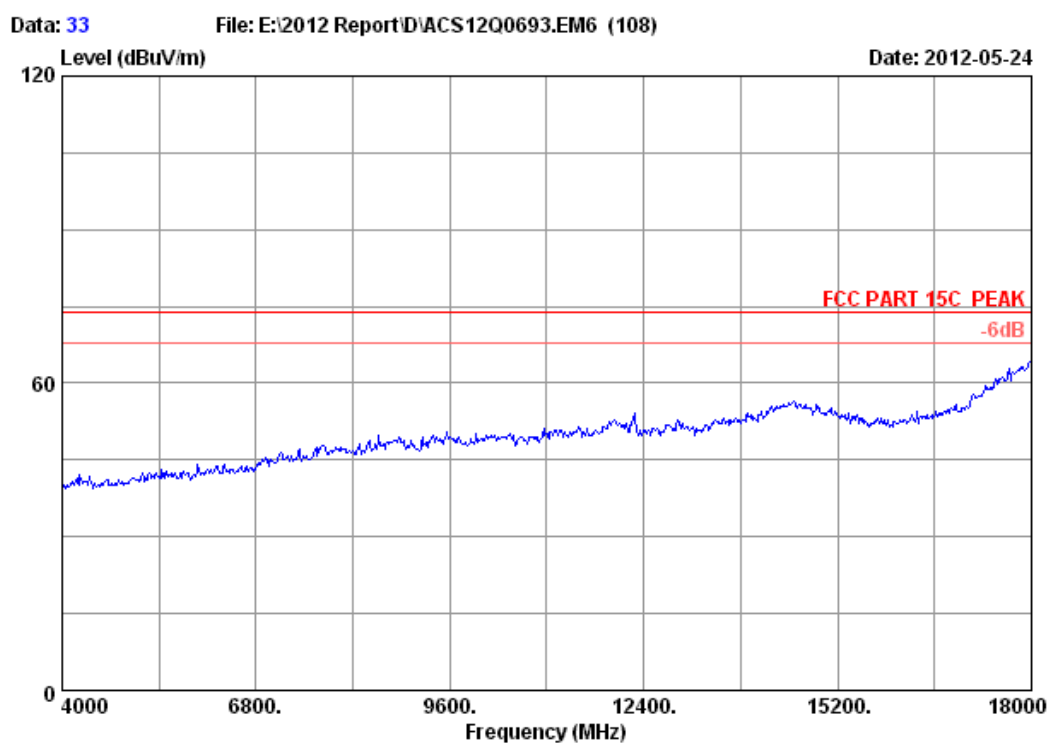


Site no. : 3m Chamber Data no. : 28  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 : DIR-524

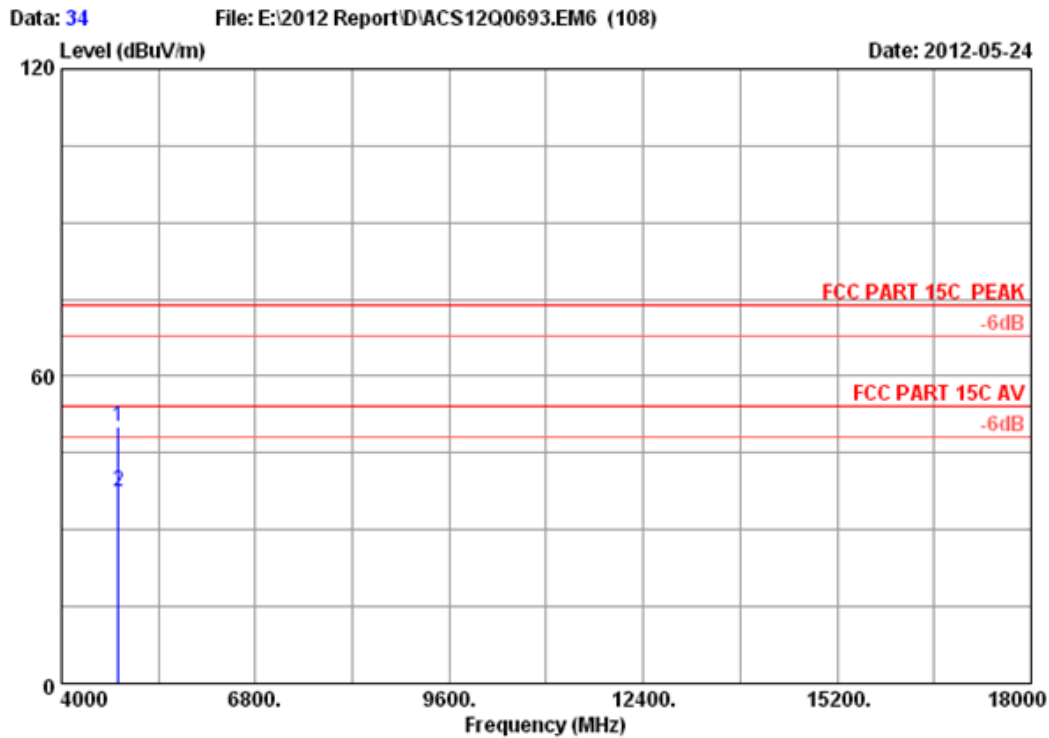
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 103.37            | 102.94                        | 74.00              | -28.94         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 49.45             | 52.55                         | 74.00              | 21.45          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 33         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11g CH1 2412MHz Tx            |           |              |
|              | : DIR-524                               |           |              |

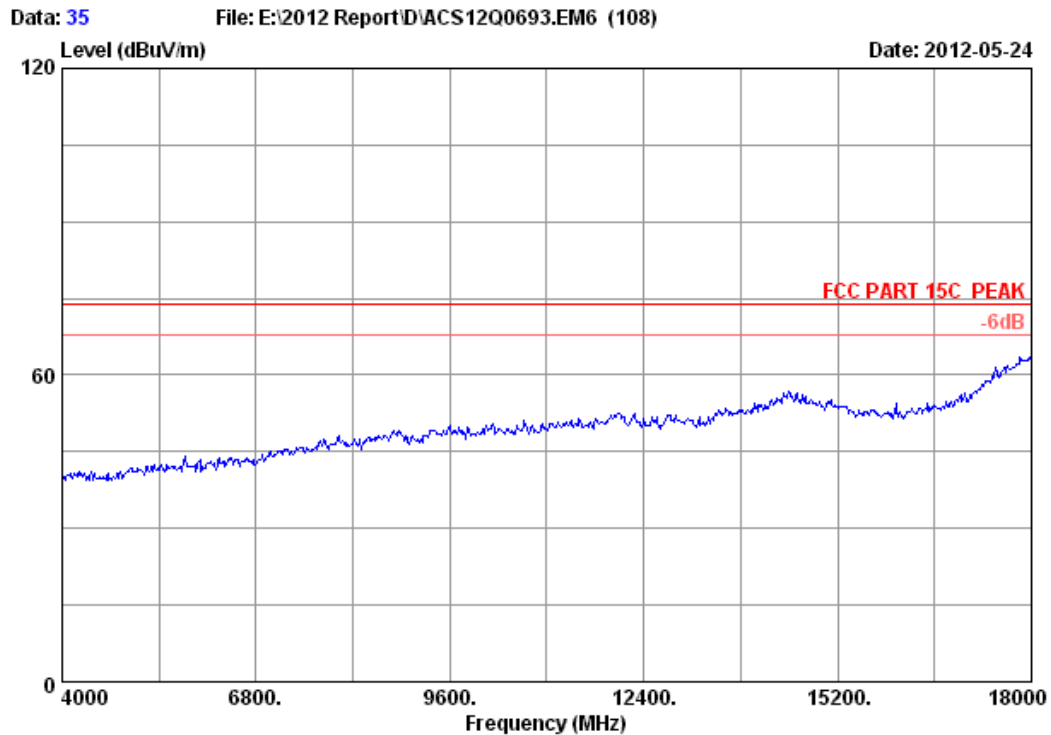


Site no. : 3m Chamber Data no. : 34  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 : DIR-524

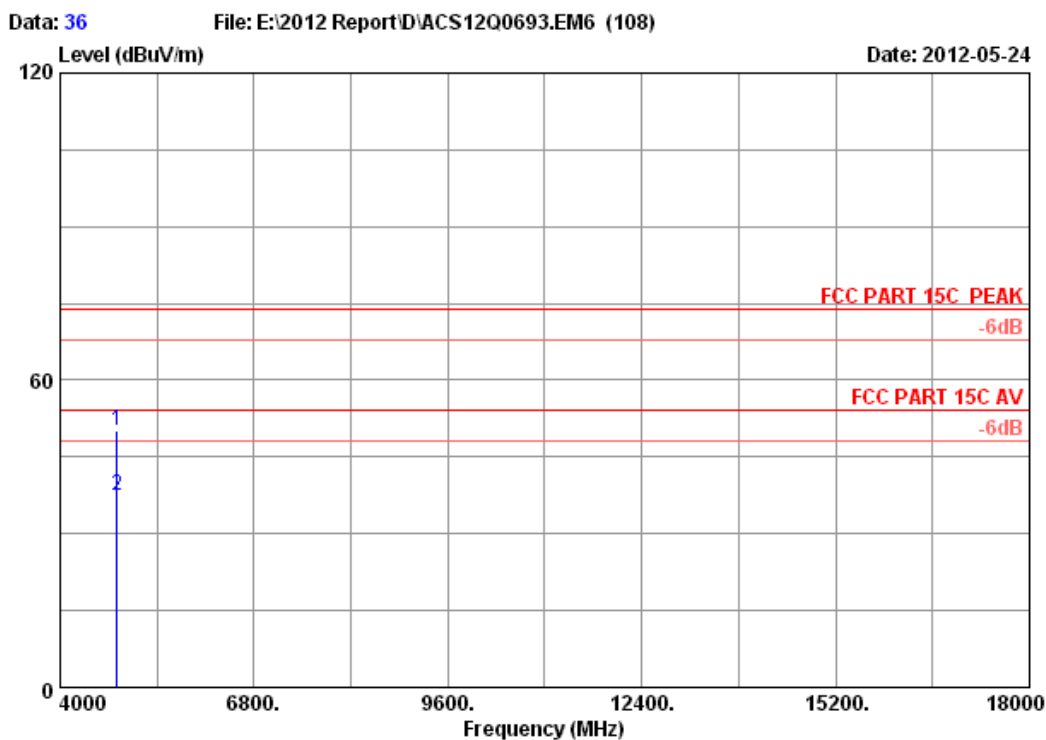
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 43.19             | 50.01                         | 74.00              | 23.99          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 30.47             | 37.29                         | 54.00              | 16.71          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 35       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11g CH1 2412MHz Tx            |           |            |
|              | : DIR-524                               |           |            |

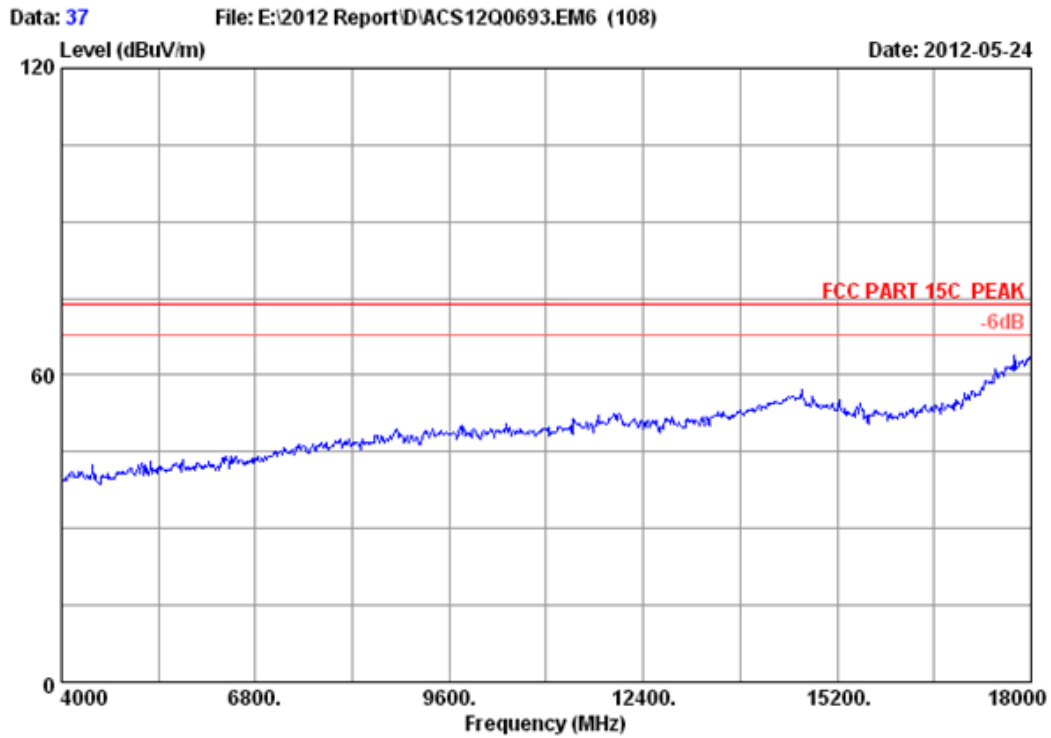


Site no. : 3m Chamber Data no. : 36  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 : DIR-524

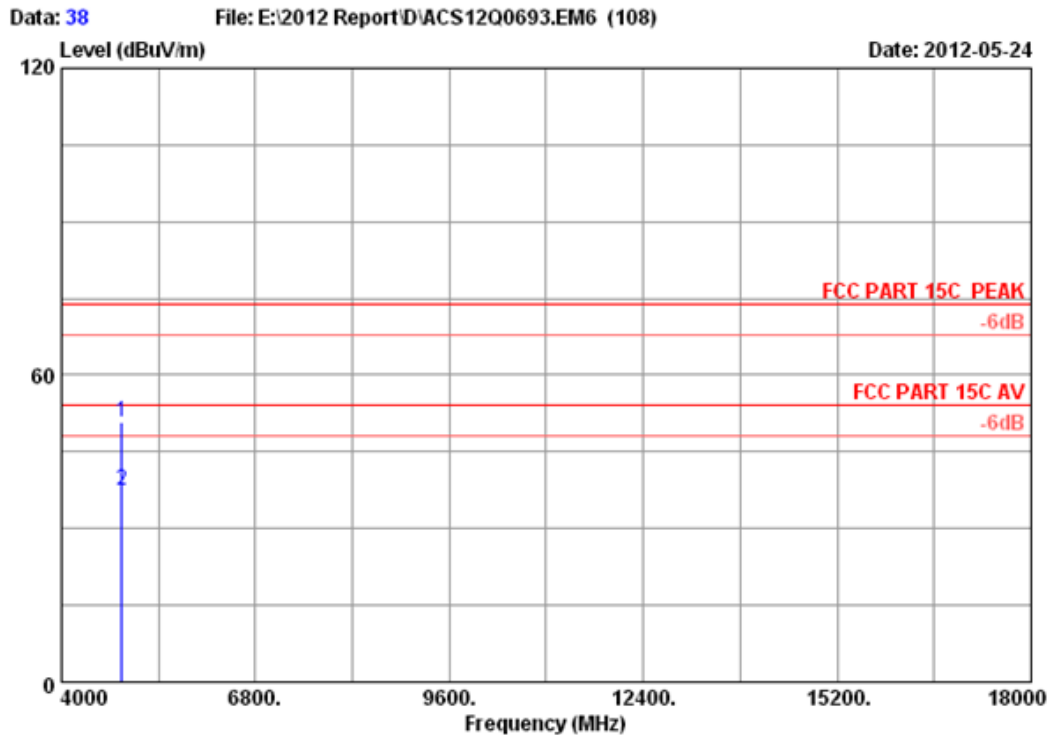
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 43.30             | 50.12                         | 74.00              | 23.88          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 30.57             | 37.39                         | 54.00              | 16.61          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 37       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11g CH6 2437MHz Tx            |           |            |
|              | : DIR-524                               |           |            |

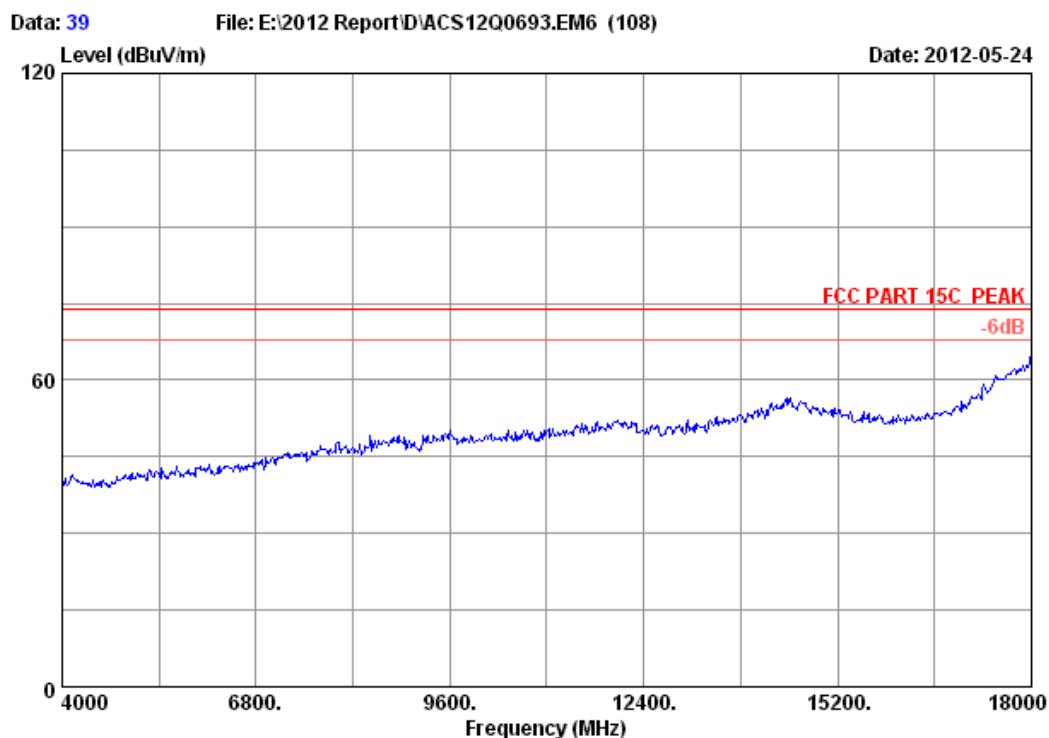


Site no. : 3m Chamber Data no. : 38  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 : DIR-524

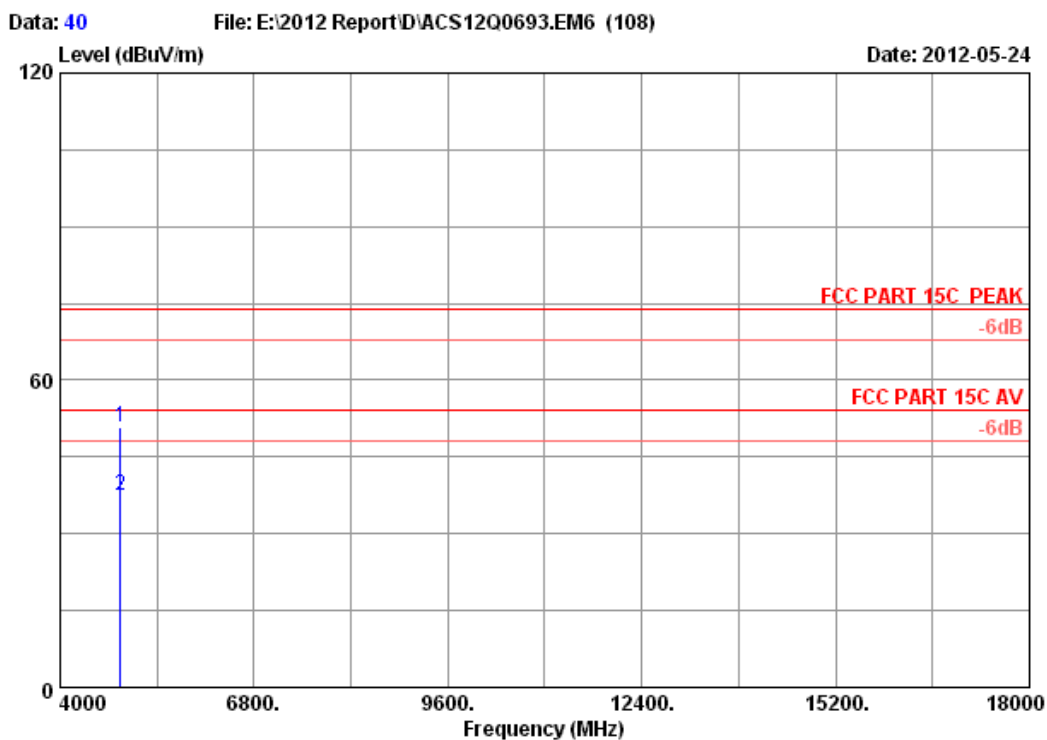
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.87             | 50.83                         | 74.00              | 23.17          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.64             | 37.60                         | 54.00              | 16.40          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 39         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11g CH6 2437MHz Tx            |           |              |
|              | : DIR-524                               |           |              |

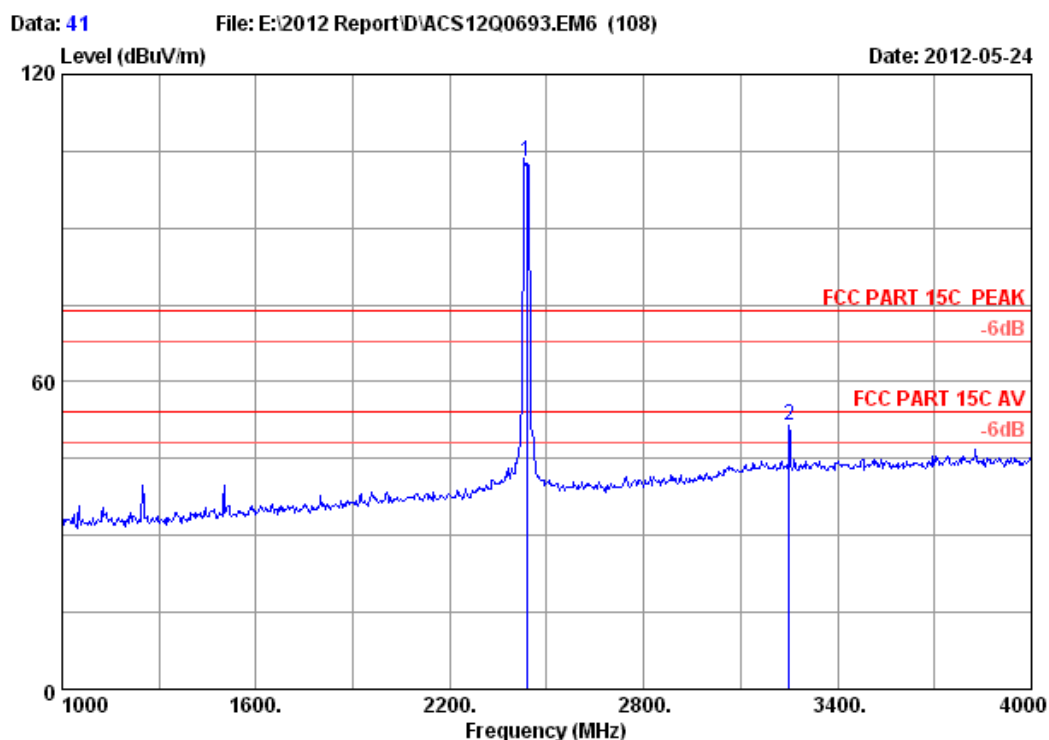


Site no. : 3m Chamber Data no. : 40  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 44.01             | 50.97                         | 74.00              | 23.03          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.35             | 37.31                         | 54.00              | 16.69          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

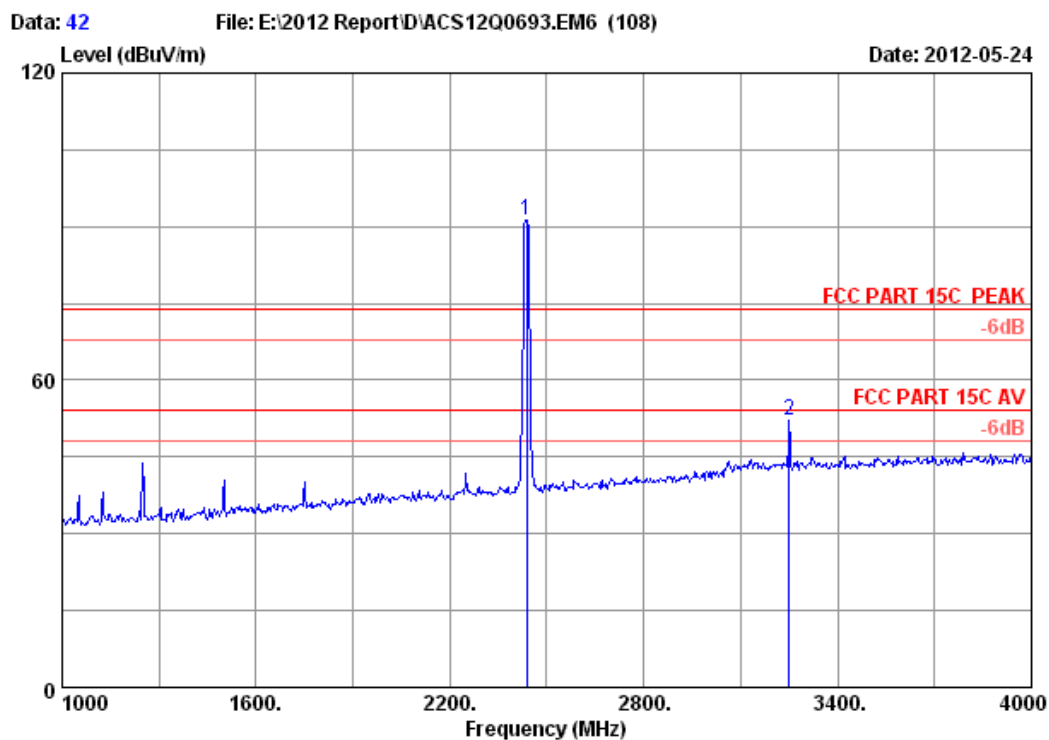


Site no. : 3m Chamber Data no. : 41  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 103.30            | 102.95                        | 74.00              | -28.95         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 48.35             | 51.55                         | 74.00              | 22.45          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

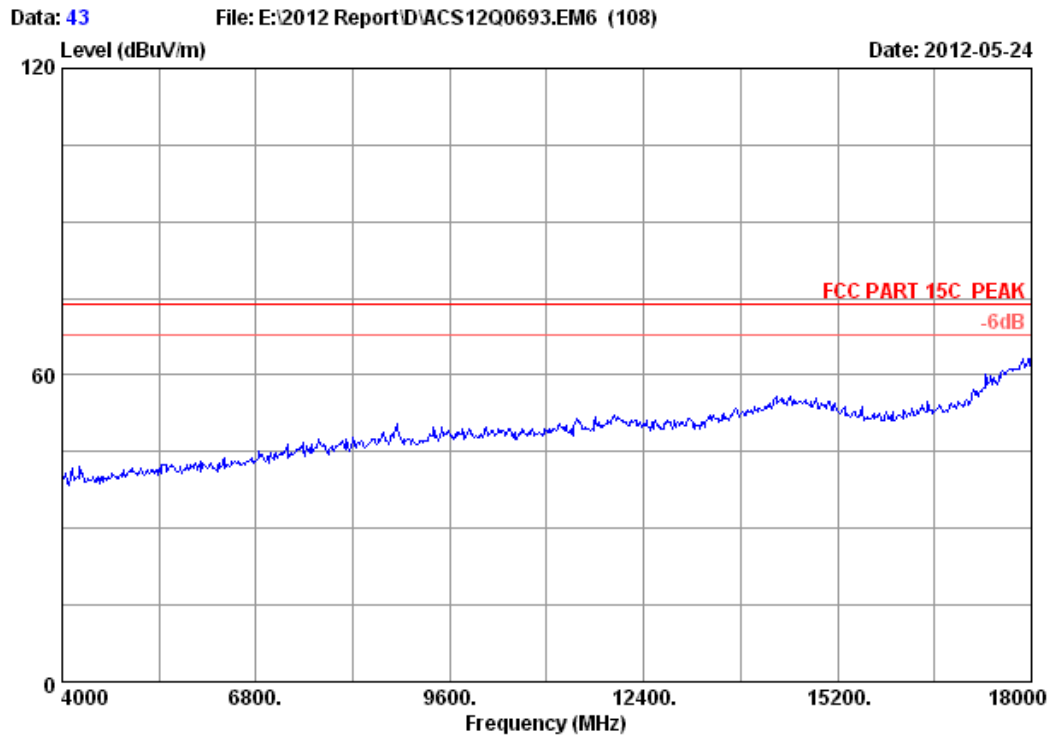


Site no. : 3m Chamber Data no. : 42  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 : DIR-524

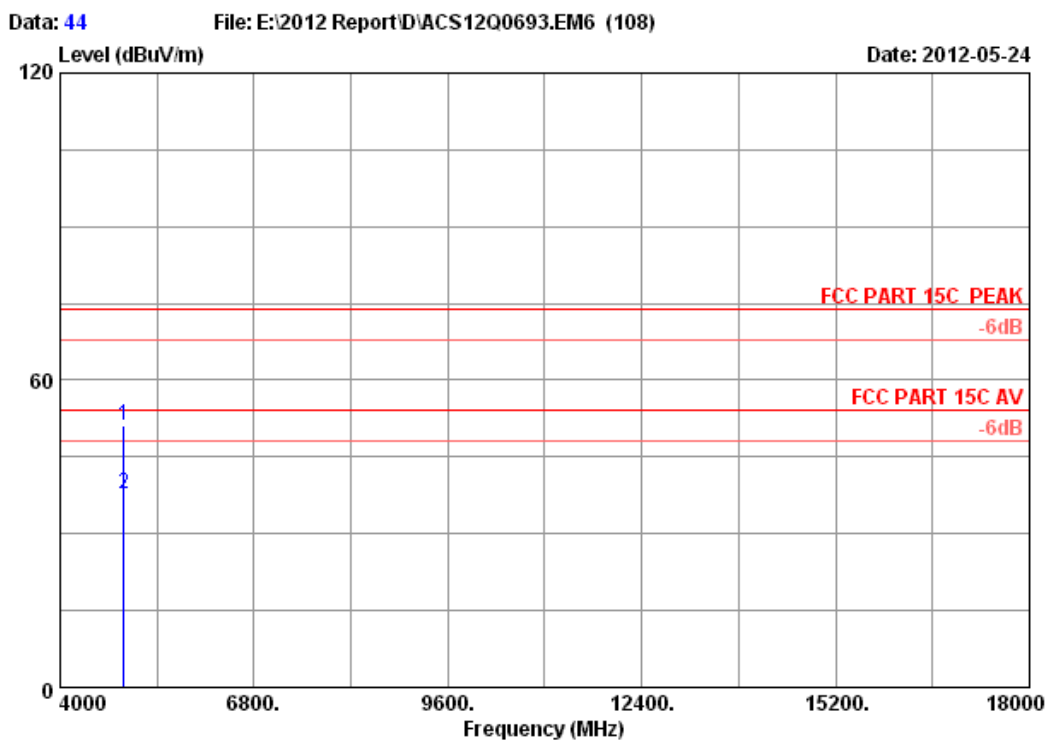
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 91.63             | 91.28                         | 74.00              | -17.28         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 48.97             | 52.17                         | 74.00              | 21.83          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 43         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11g CH11 2462MHz Tx           |           |              |
|              | : DIR-524                               |           |              |

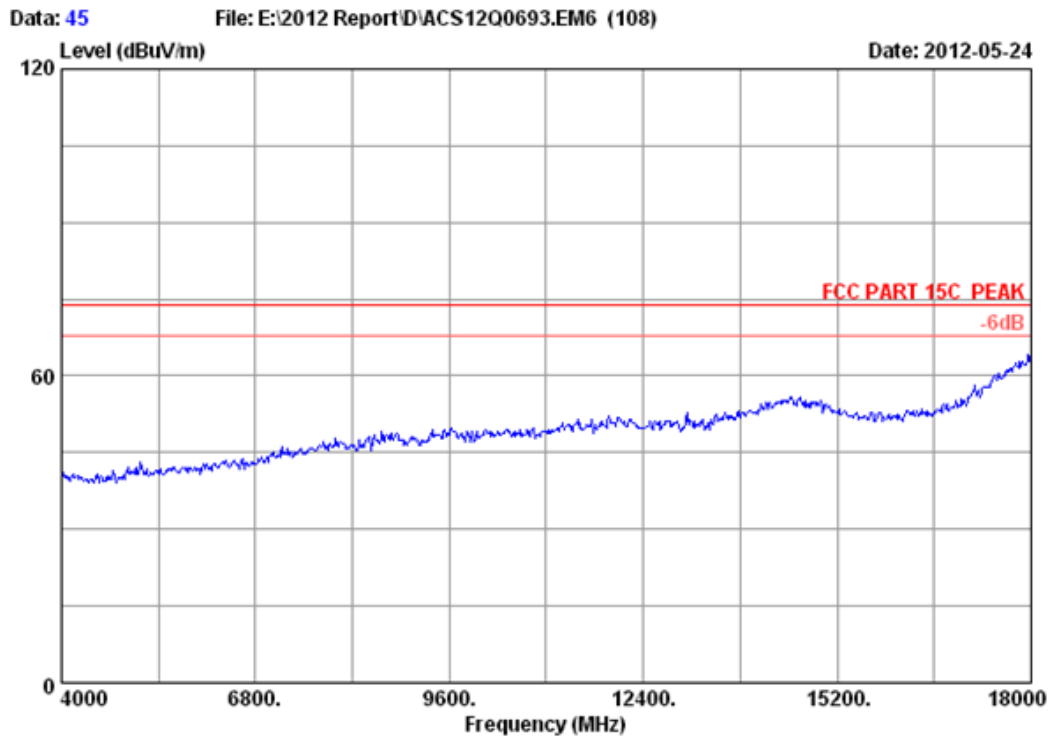


Site no. : 3m Chamber Data no. : 44  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 : DIR-524

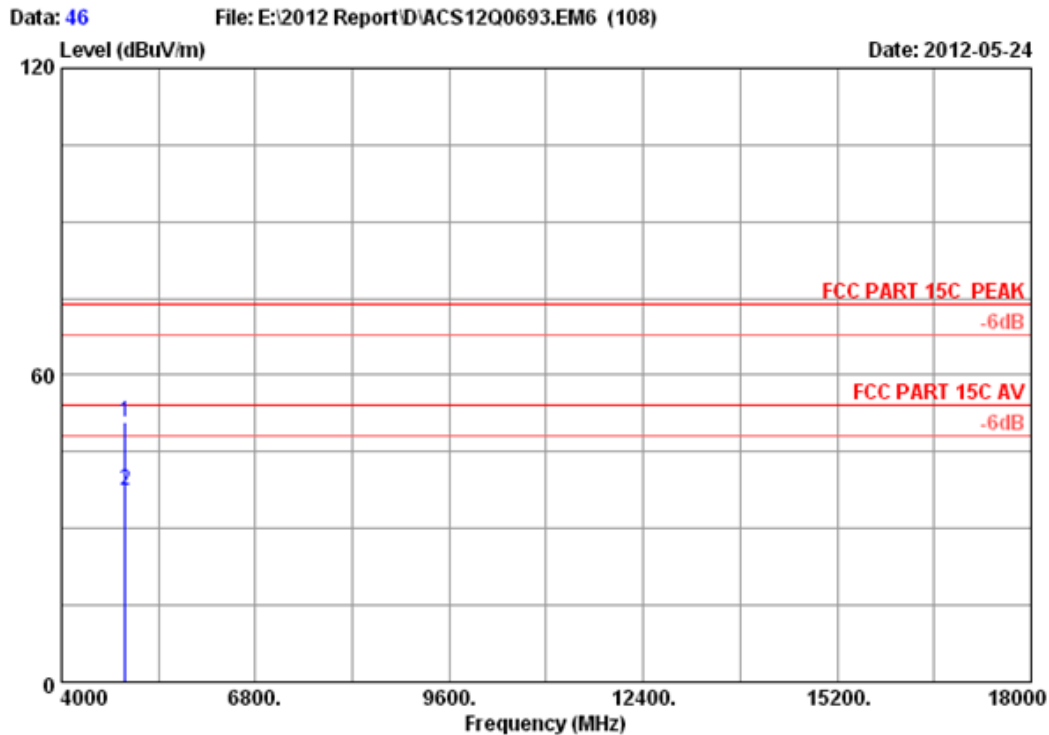
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 44.18             | 51.28                         | 74.00              | 22.72          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 30.55             | 37.65                         | 54.00              | 16.35          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 45       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11g CH11 2462MHz Tx           |           |            |
|              | : DIR-524                               |           |            |

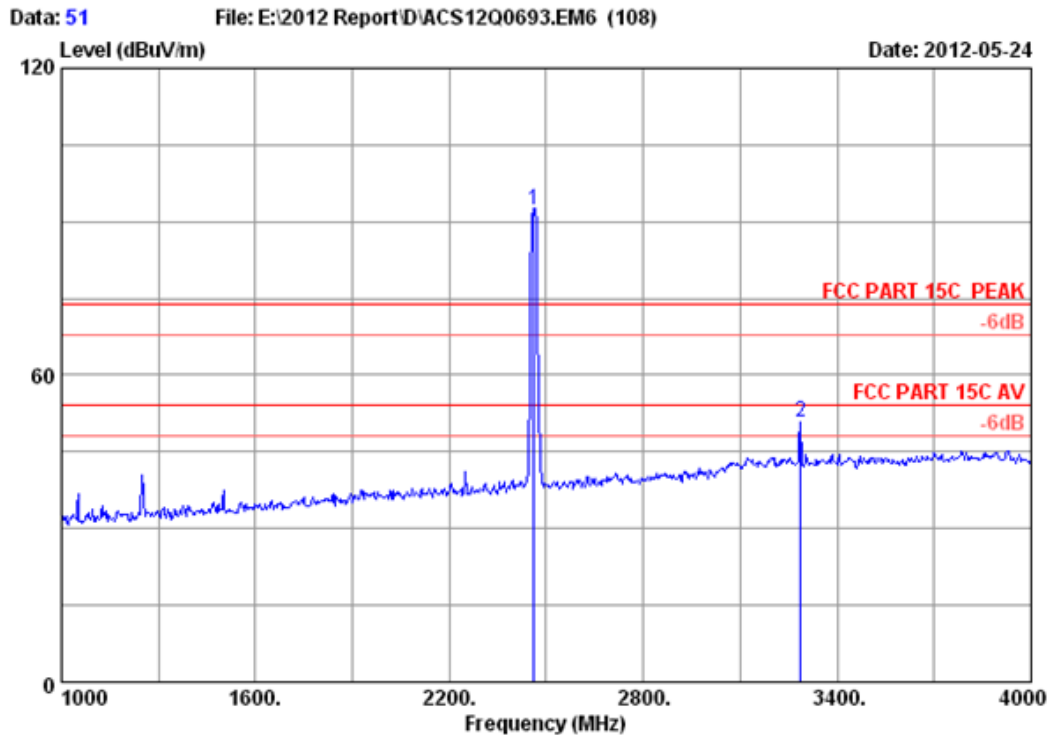


Site no. : 3m Chamber Data no. : 46  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 43.76             | 50.86                         | 74.00              | 23.14          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 30.41             | 37.51                         | 54.00              | 16.49          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

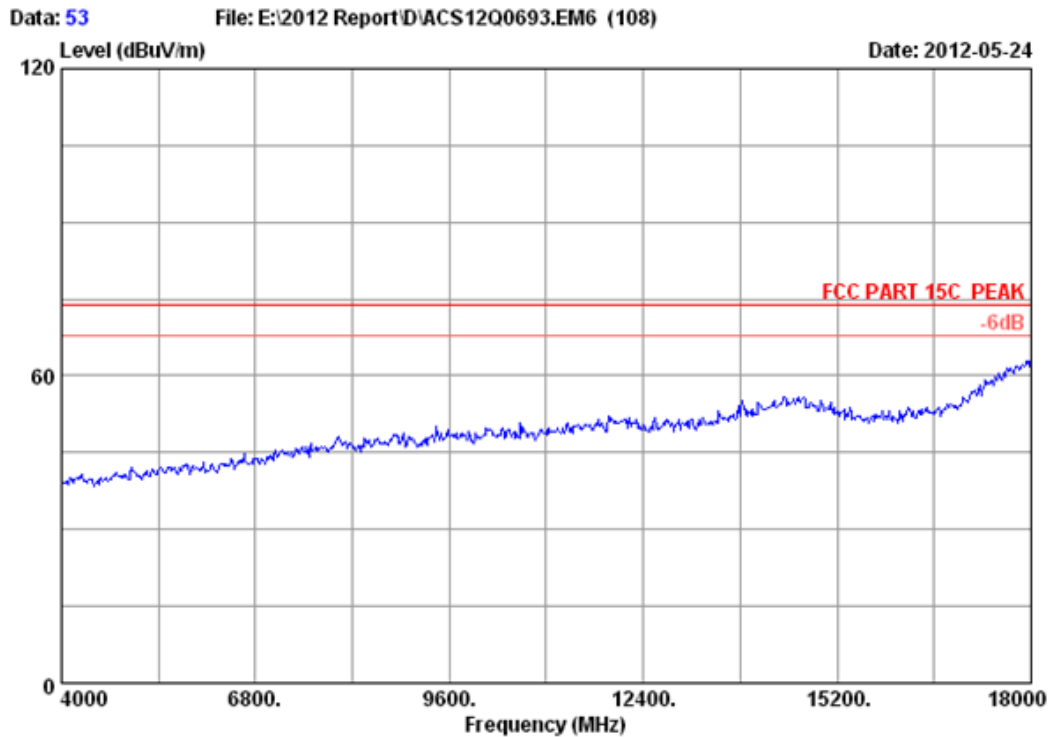


Site no. : 3m Chamber Data no. : 51  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 : DIR-524

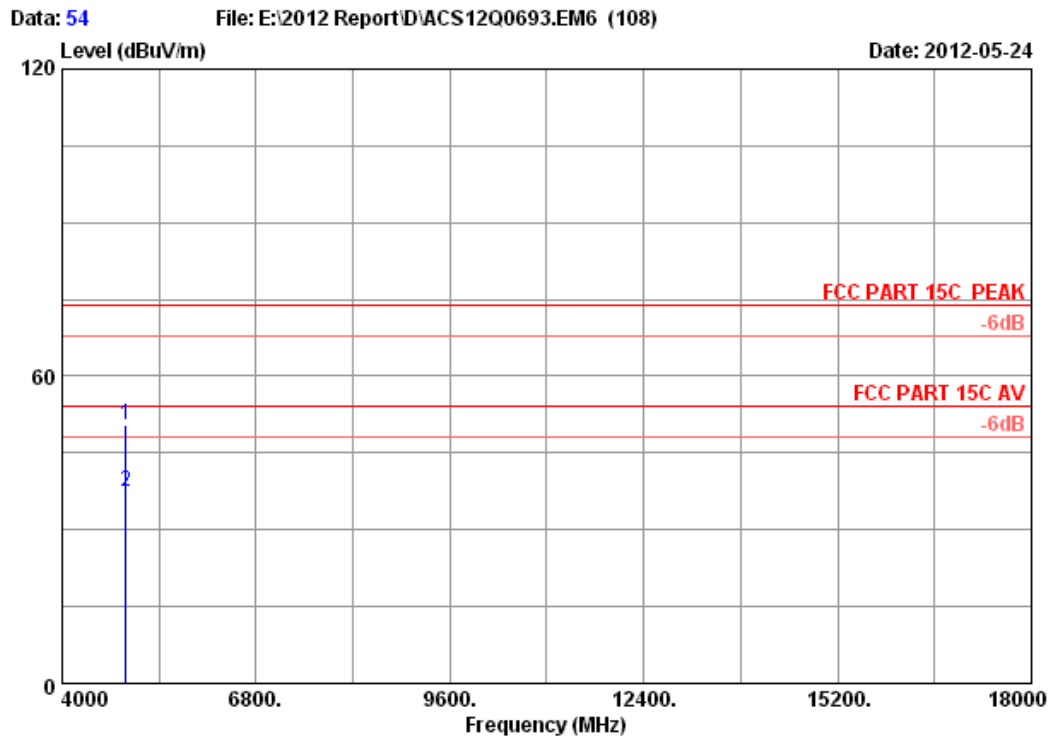
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 92.37             | 92.10                         | 74.00              | -18.10         | Peak   |
| 2 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 47.55             | 50.85                         | 74.00              | 23.15          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 53       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT20 CH11 2462MHz Tx       |           |            |
|              | : DIR-524                               |           |            |

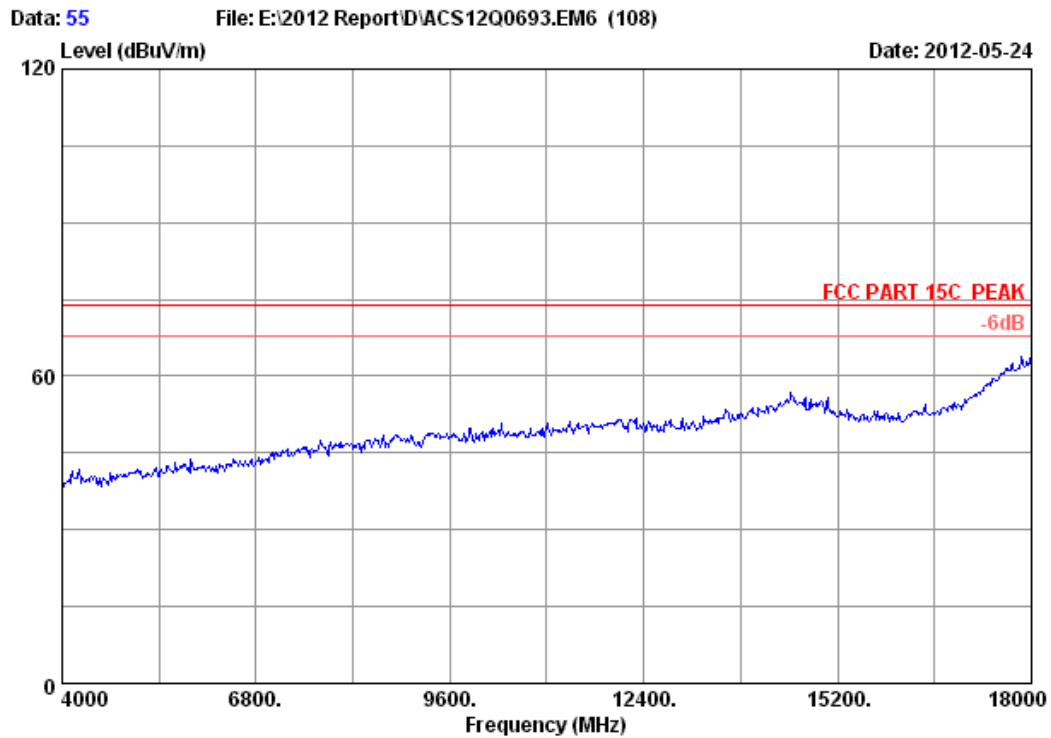


Site no. : 3m Chamber Data no. : 54  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 : DIR-524

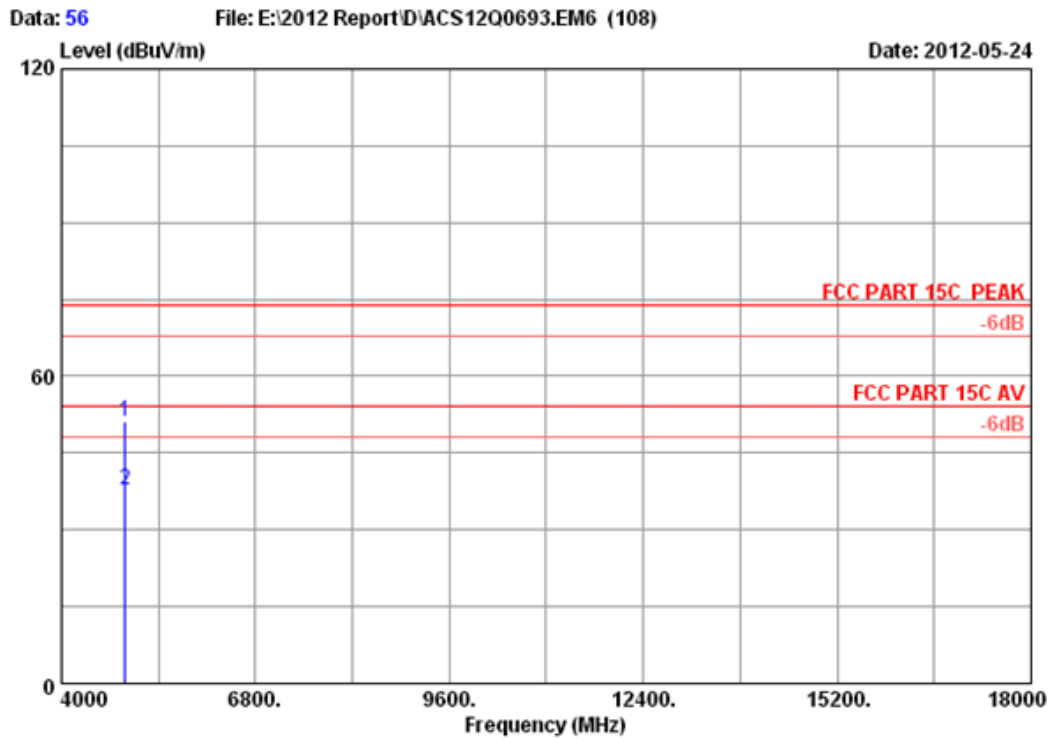
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 43.51             | 50.61                         | 74.00              | 23.39          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 30.48             | 37.58                         | 54.00              | 16.42          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 55         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11nHT20 CH11 2462MHz Tx       |           |              |
|              | : DIR-524                               |           |              |

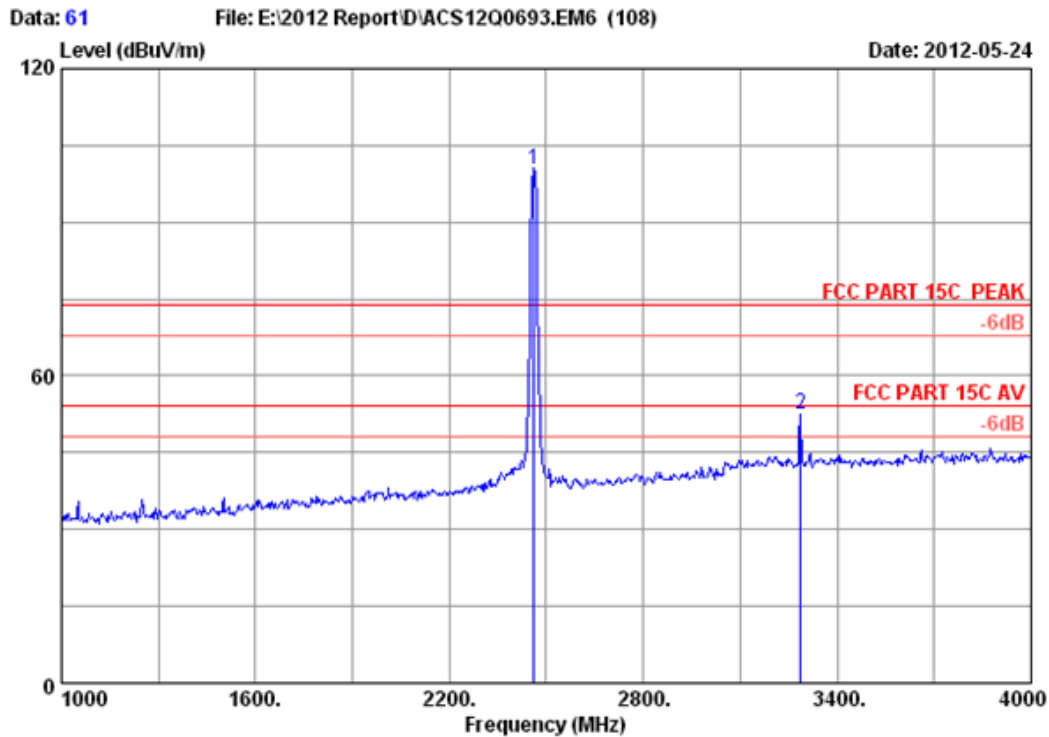


Site no. : 3m Chamber Data no. : 56  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 44.13             | 51.23                         | 74.00              | 22.77          | Peak    |
| 2 | 4924.000       | 33.08                    | 8.62                  | 34.60                  | 30.64             | 37.74                         | 54.00              | 16.26          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

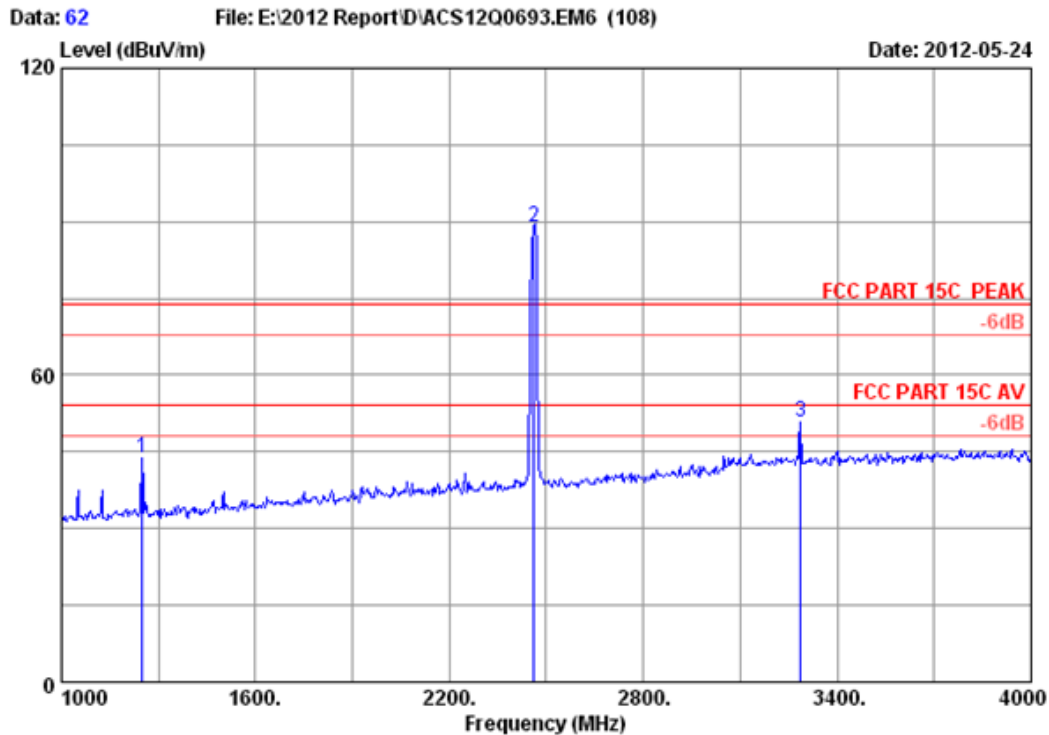


Site no. : 3m Chamber Data no. : 61  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 100.39            | 100.12                        | 74.00              | -26.12         | Peak   |
| 2 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 49.04             | 52.34                         | 74.00              | 21.66          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

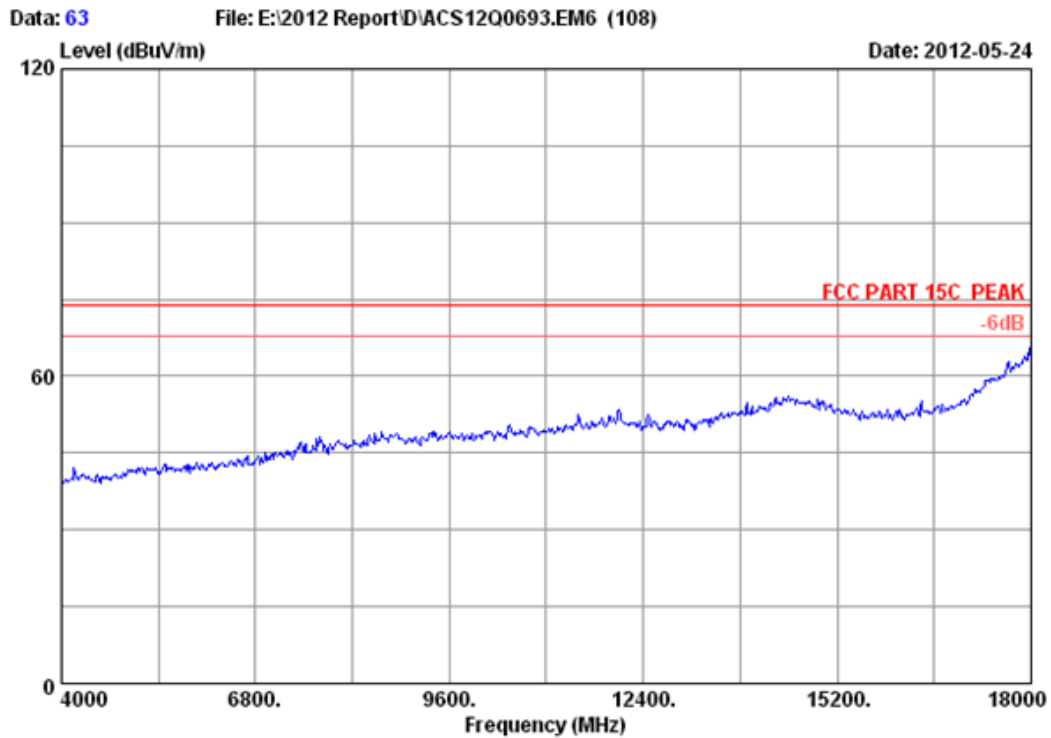


Site no. : 3m Chamber Data no. : 62  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 : DIR-524

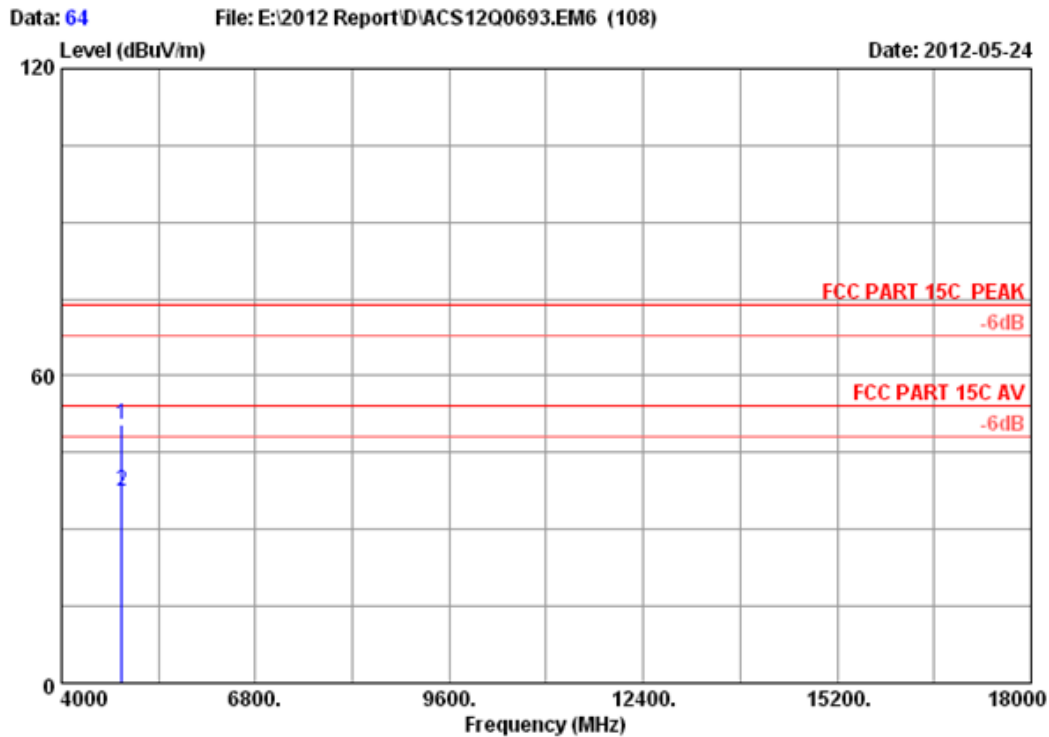
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 1249.000       | 24.58                    | 4.19                  | 34.78                  | 49.92             | 43.91                         | 74.00              | 30.09          | Peak   |
| 2 | 2462.000       | 28.05                    | 6.12                  | 34.44                  | 89.27             | 89.00                         | 74.00              | -15.00         | Peak   |
| 3 | 3286.000       | 30.61                    | 7.22                  | 34.53                  | 47.39             | 50.69                         | 74.00              | 23.31          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 63         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11nHT20 CH6 2437MHz Tx        |           |              |
|              | : DIR-524                               |           |              |

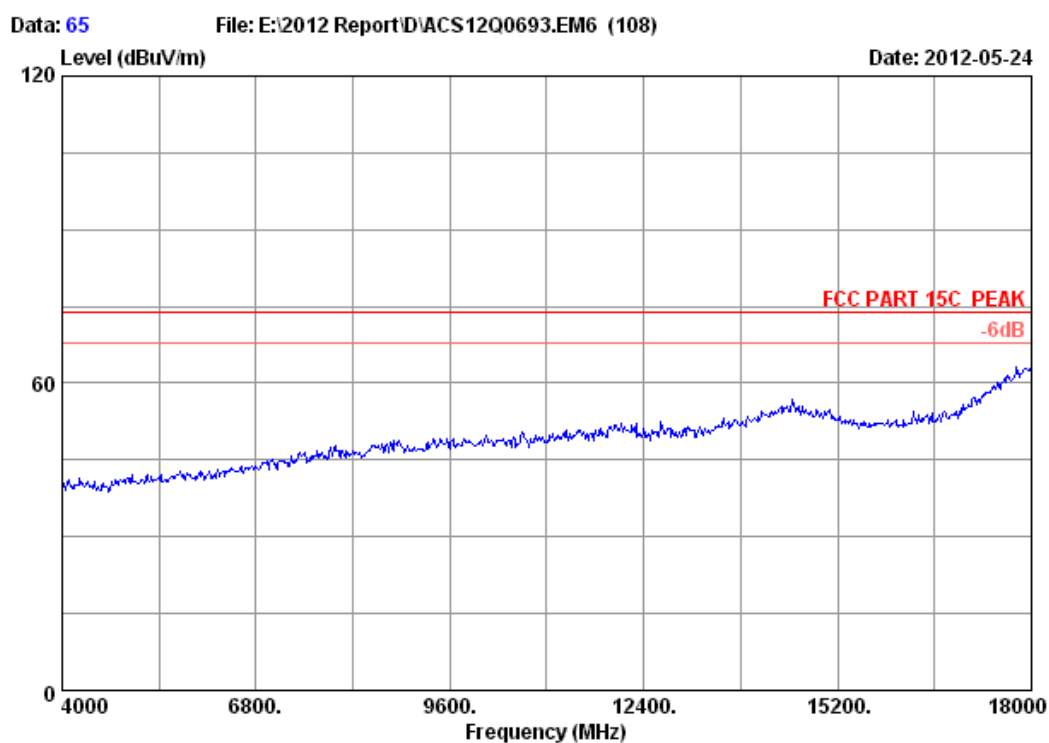


Site no. : 3m Chamber Data no. : 64  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 : DIR-524

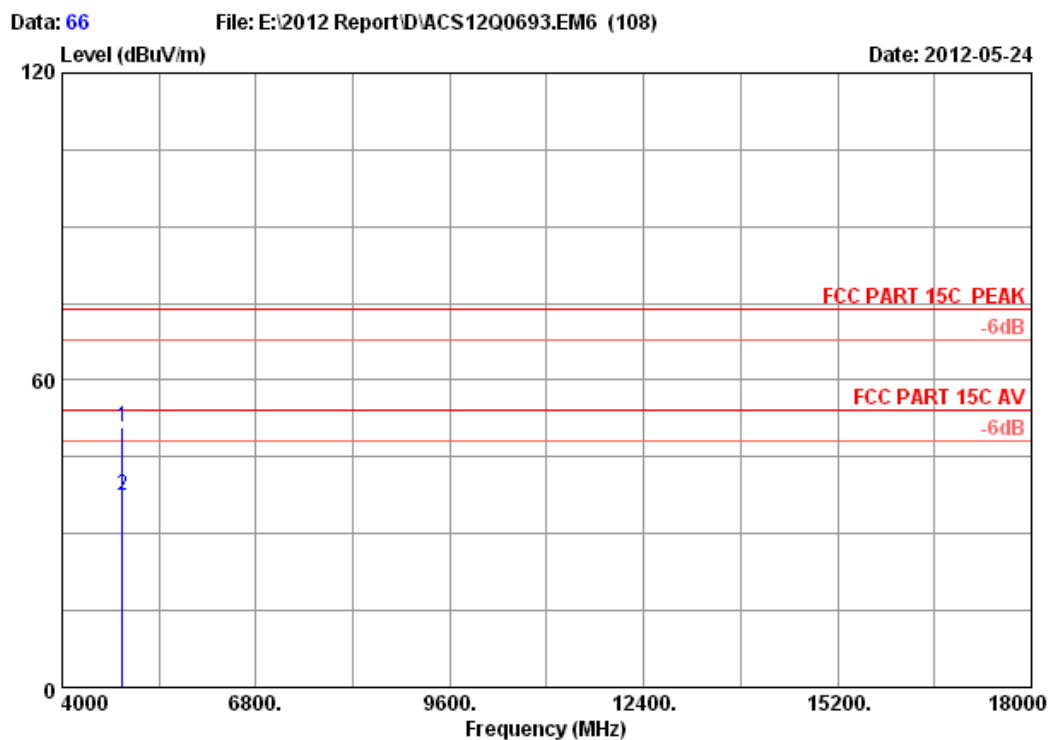
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.62             | 50.58                         | 74.00              | 23.42          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.59             | 37.55                         | 54.00              | 16.45          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 65       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT20 CH6 2437MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

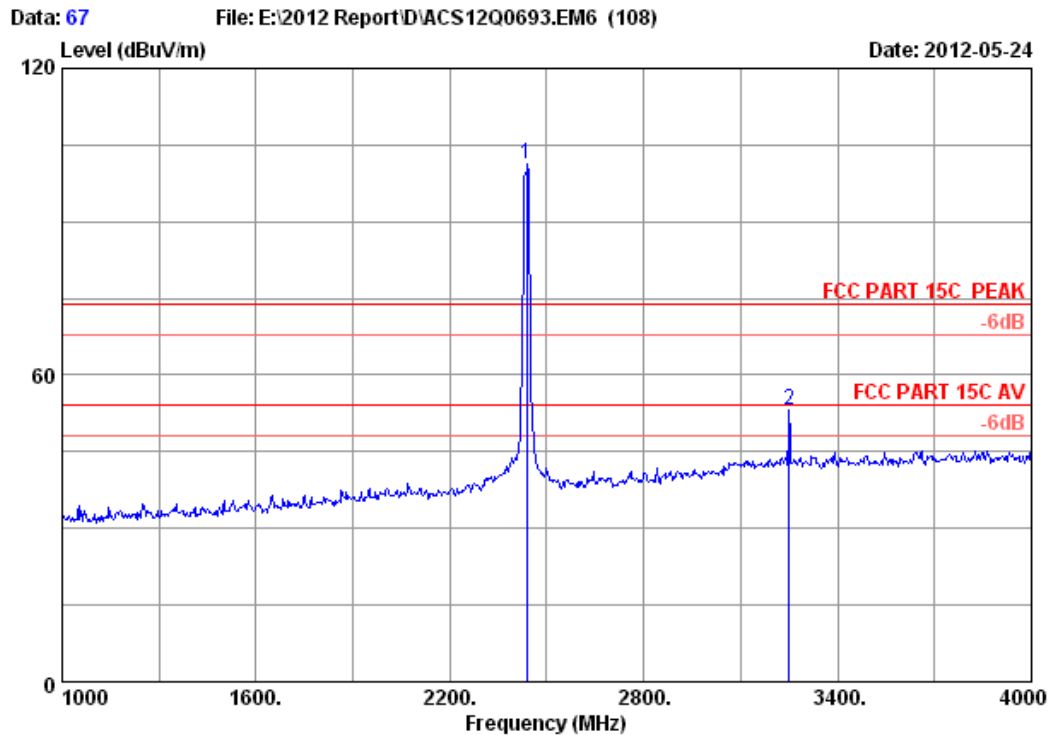


Site no. : 3m Chamber Data no. : 66  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.92             | 50.88                         | 74.00              | 23.12          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.41             | 37.37                         | 54.00              | 16.63          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

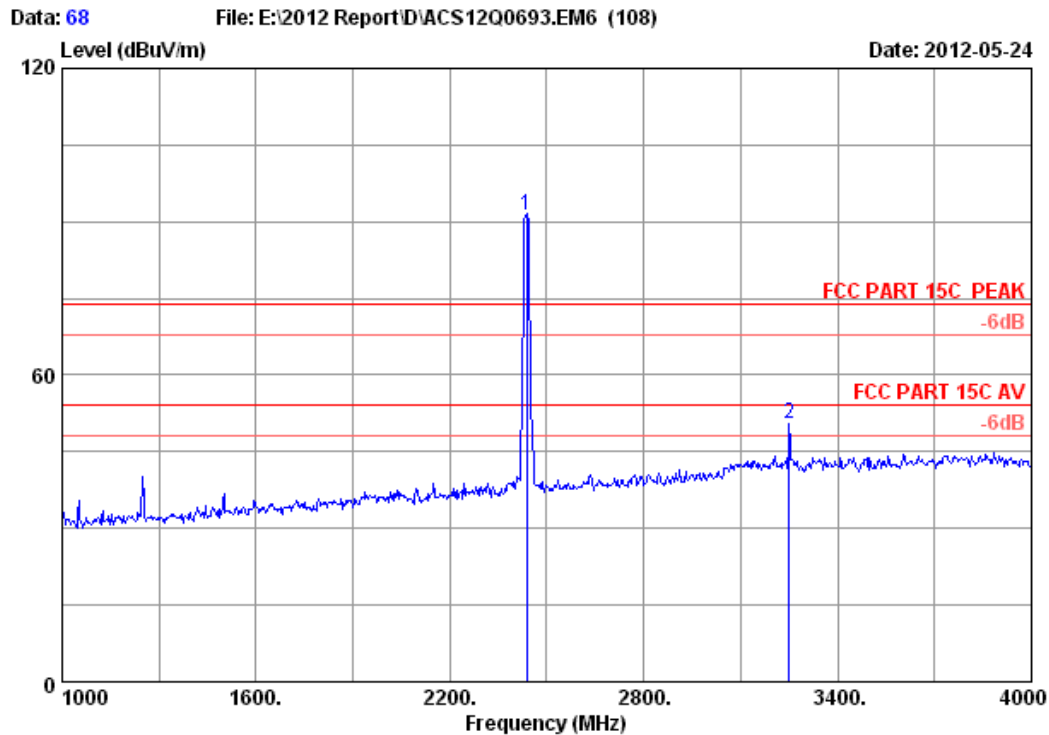


Site no. : 3m Chamber Data no. : 67  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 101.53            | 101.18                        | 74.00              | -27.18         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 49.88             | 53.08                         | 74.00              | 20.92          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

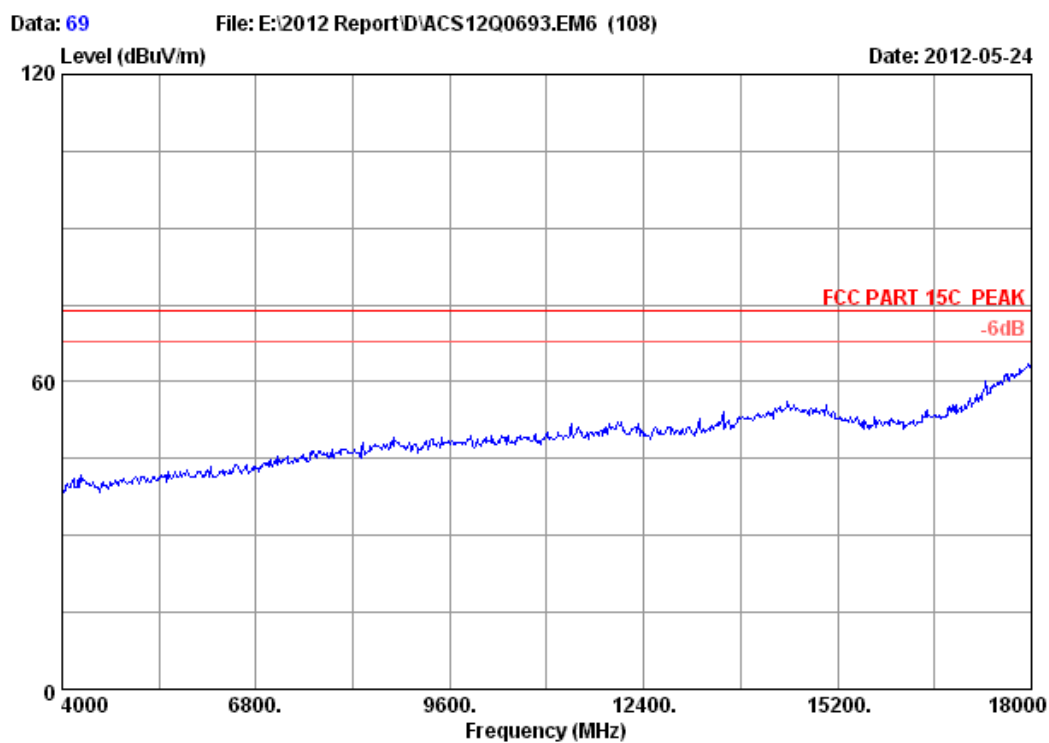


Site no. : 3m Chamber Data no. : 68  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 : DIR-524

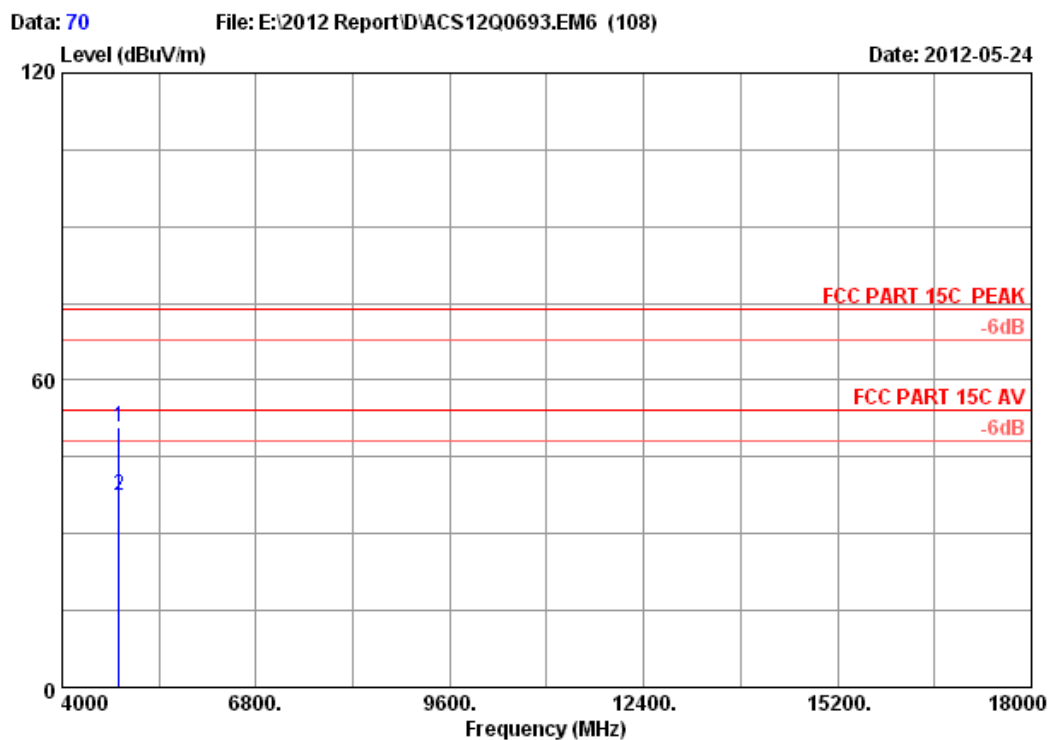
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 91.62             | 91.27                         | 74.00              | -17.27         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 47.24             | 50.44                         | 74.00              | 23.56          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 69       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT20 CH1 2412MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

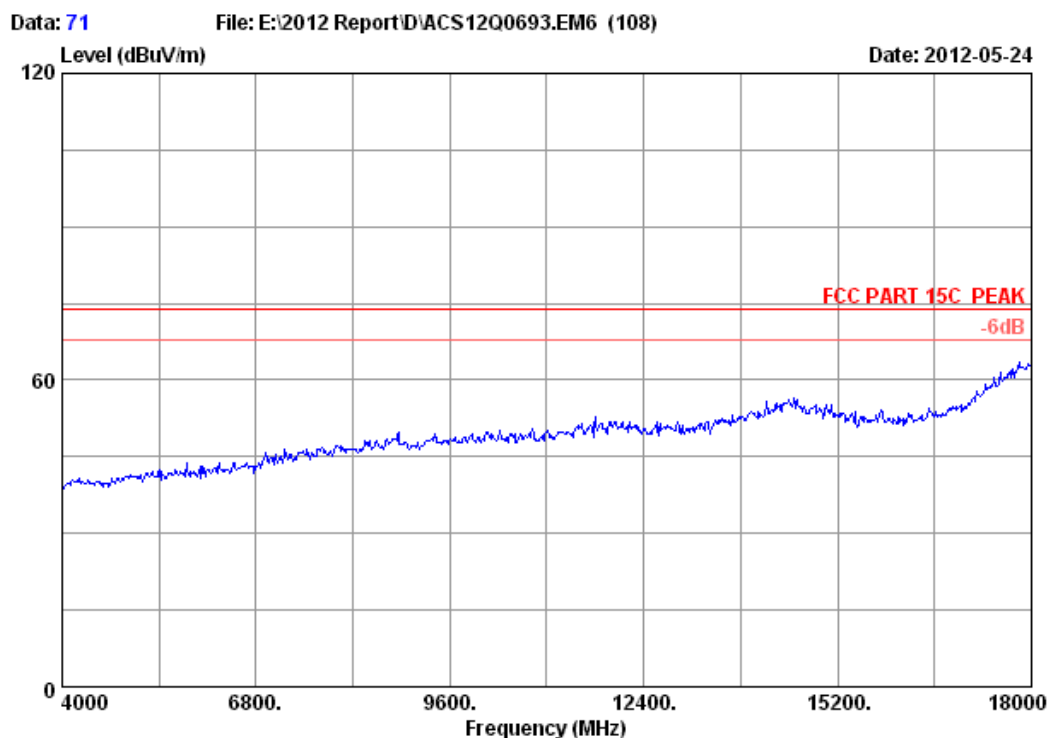


Site no. : 3m Chamber Data no. : 70  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 : DIR-524

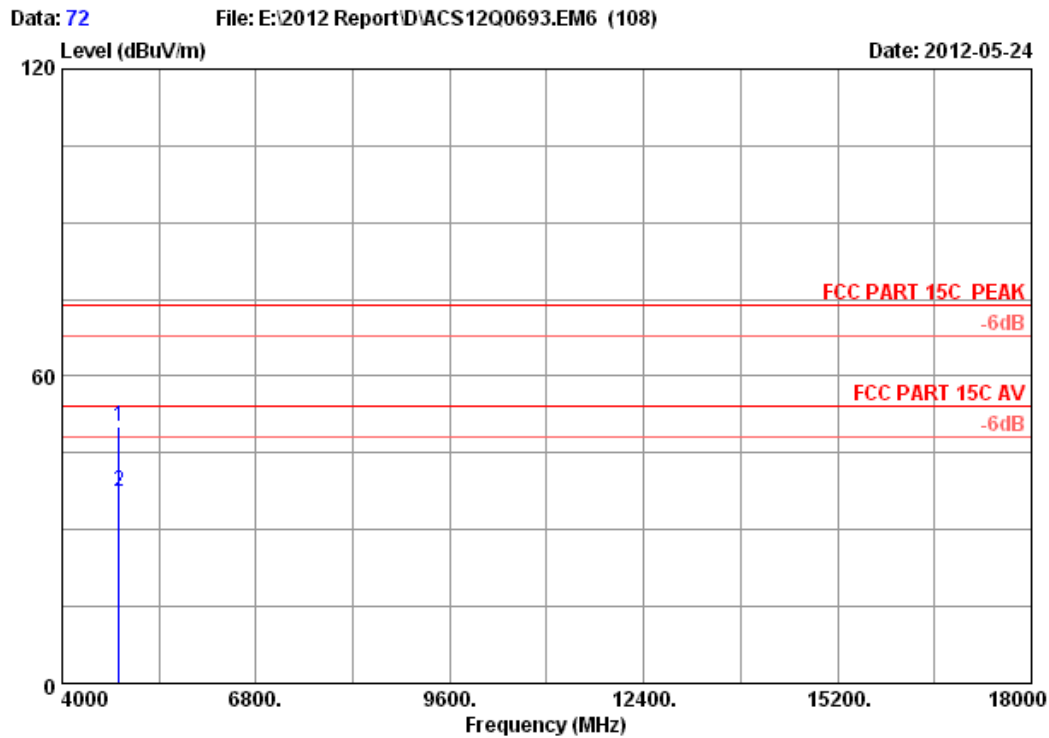
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 43.88             | 50.70                         | 74.00              | 23.30          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 30.69             | 37.51                         | 54.00              | 16.49          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 71         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11nHT20 CH1 2412MHz Tx        |           |              |
|              | : DIR-524                               |           |              |

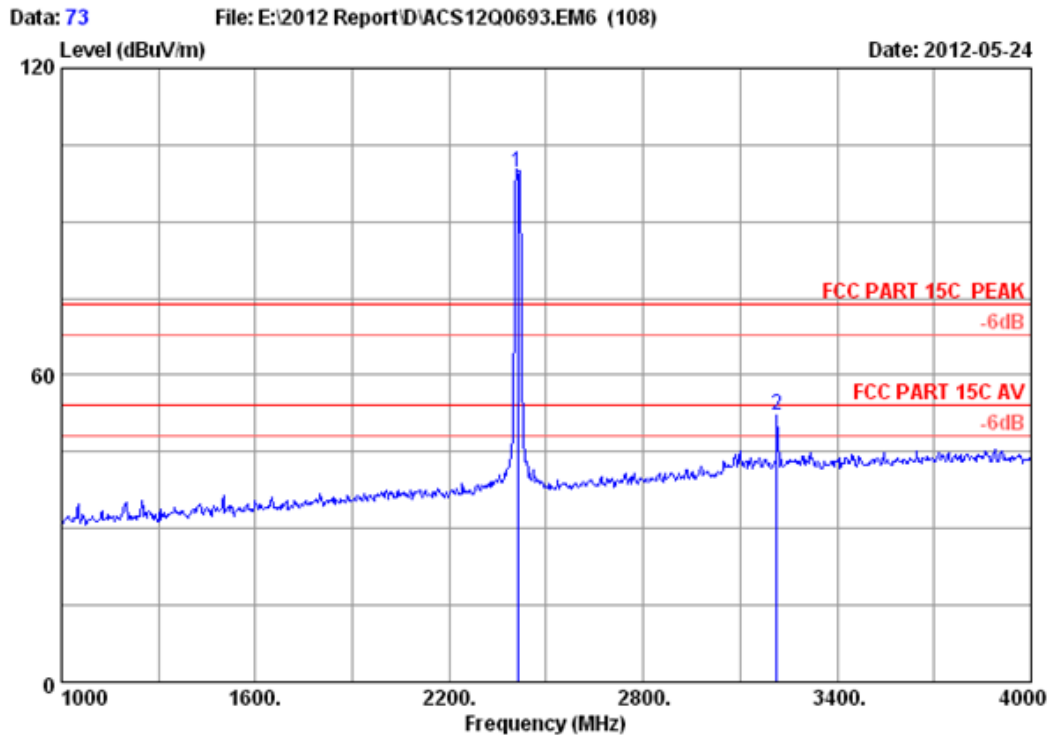


Site no. : 3m Chamber Data no. : 72  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 43.39             | 50.21                         | 74.00              | 23.79          | Peak    |
| 2 | 4824.000       | 32.89                    | 8.53                  | 34.60                  | 30.47             | 37.29                         | 54.00              | 16.71          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

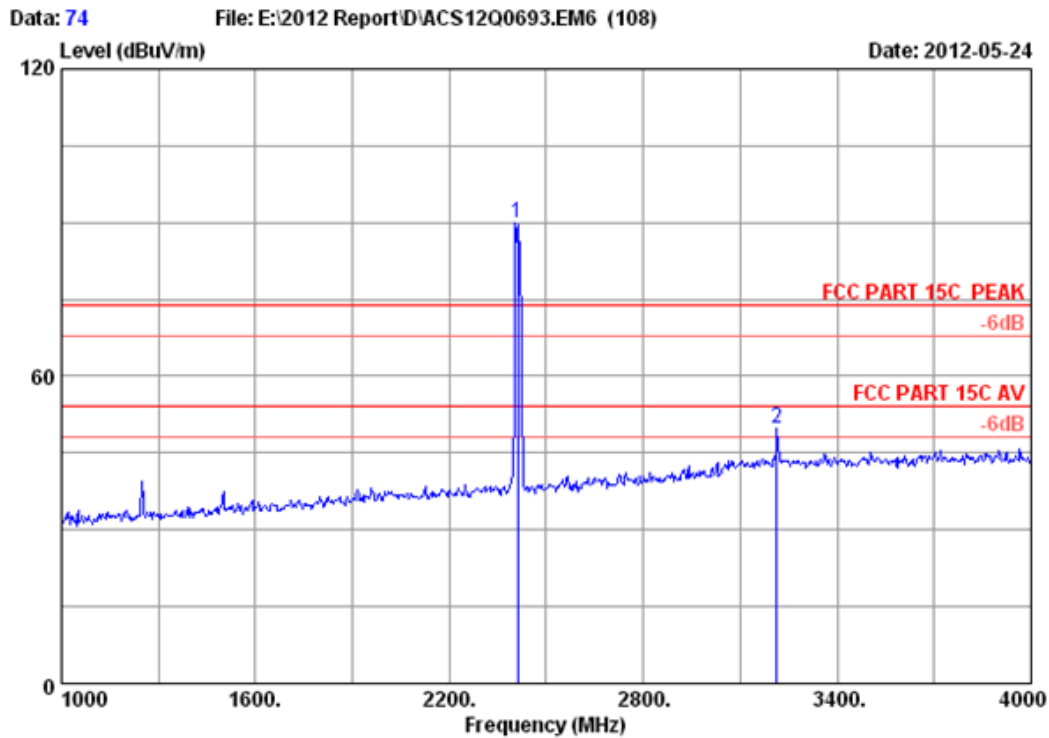


Site no. : 3m Chamber Data no. : 73  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 100.08            | 99.65                         | 74.00              | -25.65         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 48.99             | 52.09                         | 74.00              | 21.91          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

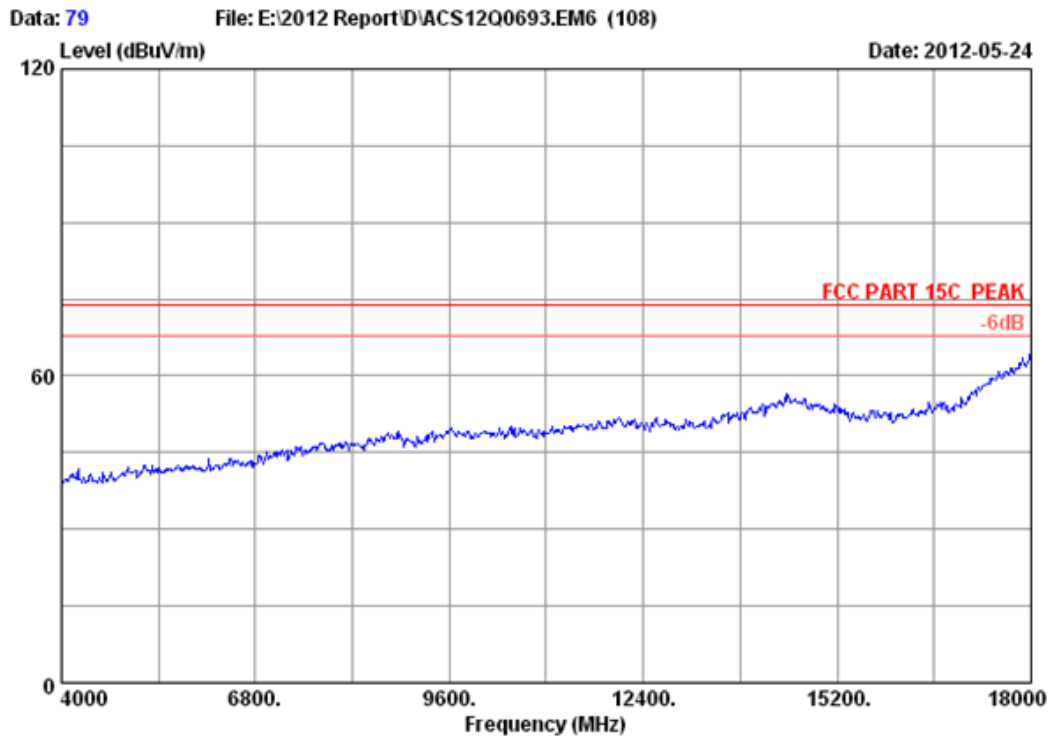


Site no. : 3m Chamber Data no. : 74  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 : DIR-524

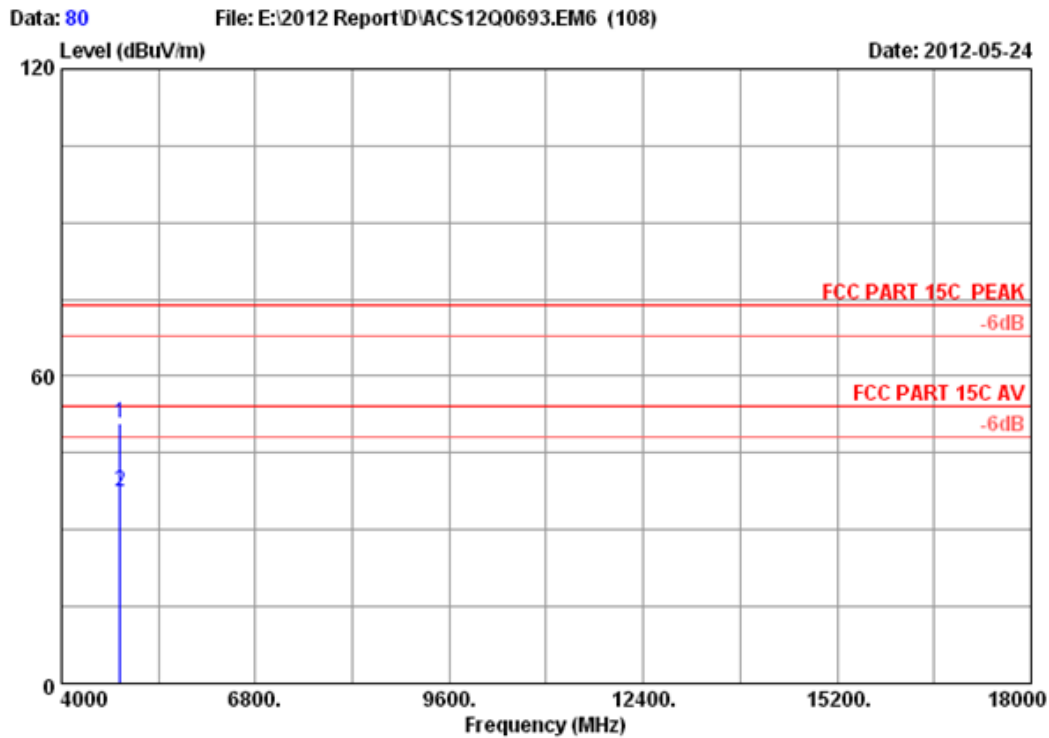
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2412.000       | 27.98                    | 6.03                  | 34.44                  | 90.37             | 89.94                         | 74.00              | -15.94         | Peak   |
| 2 | 3214.000       | 30.46                    | 7.16                  | 34.52                  | 46.76             | 49.86                         | 74.00              | 24.14          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                            |           |              |
|--------------|----------------------------|-----------|--------------|
| Site no.     | : 3m Chamber               | Data no.  | : 79         |
| Dis. / Ant.  | : 3m 2011 3115 4580        | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK        |           |              |
| Env. / Ins.  | : 23°C/54%                 | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router    |           |              |
| Power supply | : DC 5V From Adapter Input | AC        | 120V/60Hz    |
| Test mode    | : IEEE802.11nHT40          | CH1       | 2422MHz Tx   |
|              | : DIR-524                  |           |              |

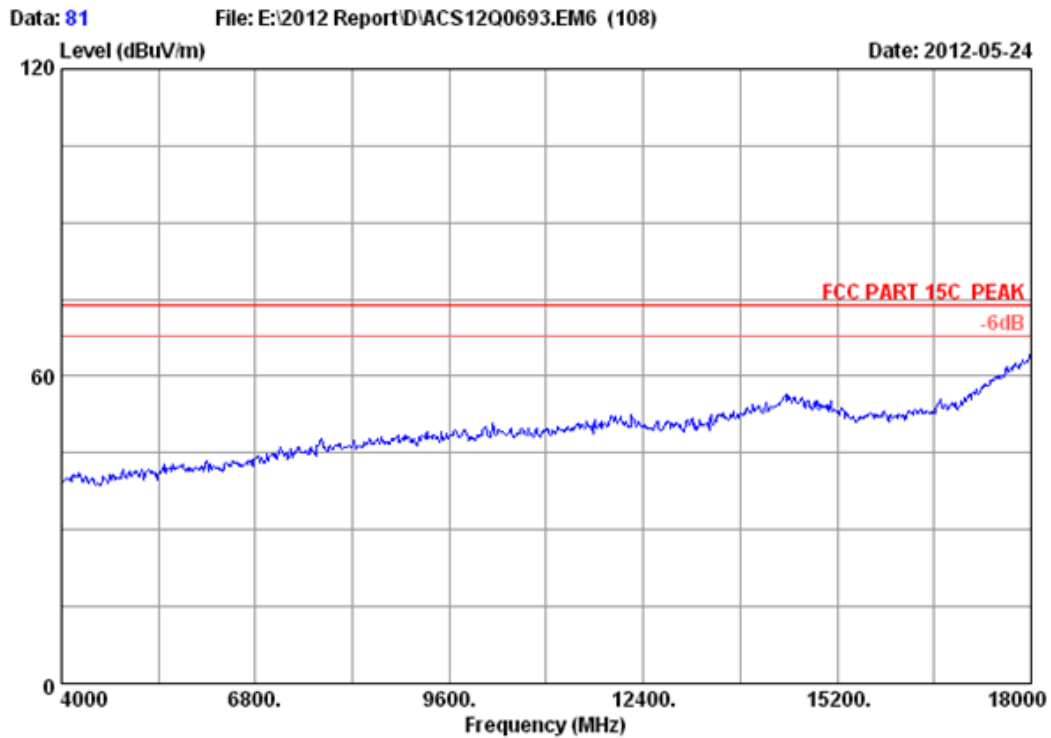


Site no. : 3m Chamber Data no. : 80  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 : DIR-524

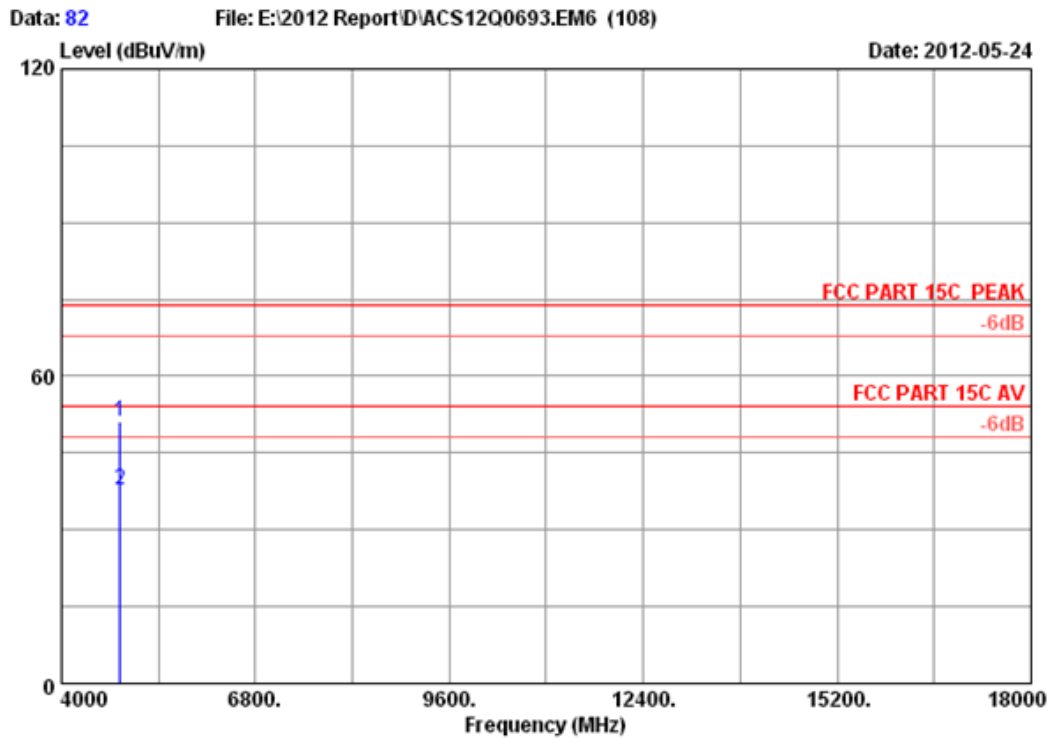
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4844.000       | 32.92                    | 8.55                  | 34.60                  | 43.79             | 50.66                         | 74.00              | 23.34          | Peak    |
| 2 | 4844.000       | 32.92                    | 8.55                  | 34.60                  | 30.68             | 37.55                         | 54.00              | 16.45          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 81       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT40 CH1 2422MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

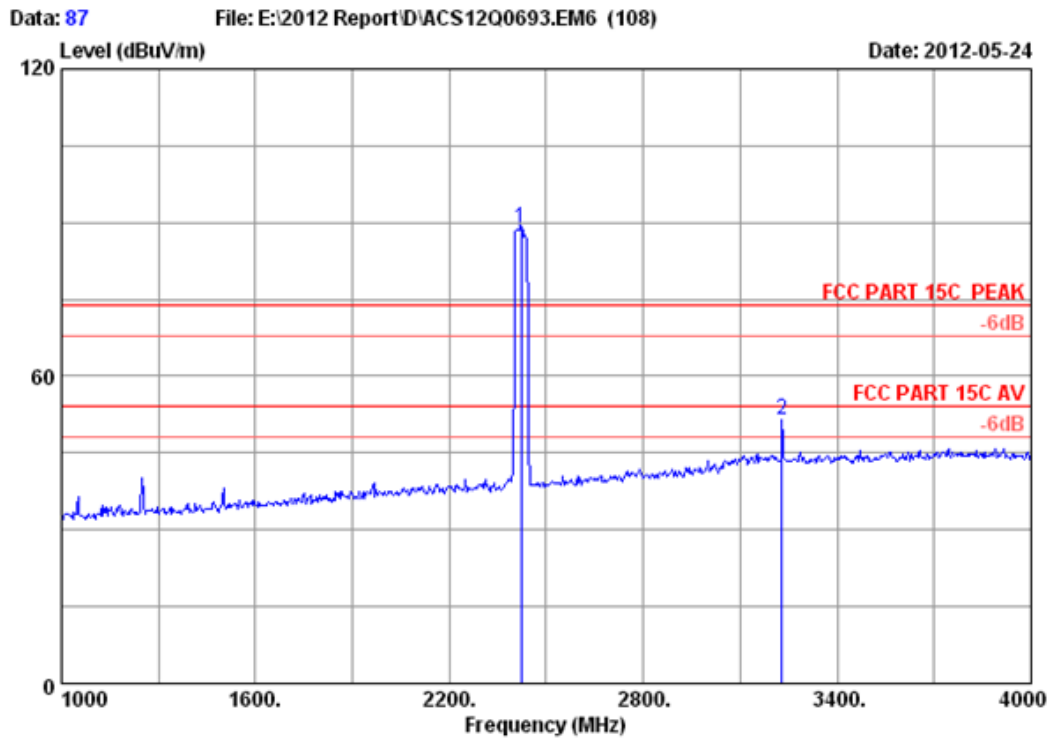


Site no. : 3m Chamber Data no. : 82  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4844.000       | 32.92                    | 8.55                  | 34.60                  | 44.12             | 50.99                         | 74.00              | 23.01          | Peak    |
| 2 | 4844.000       | 32.92                    | 8.55                  | 34.60                  | 30.75             | 37.62                         | 54.00              | 16.38          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

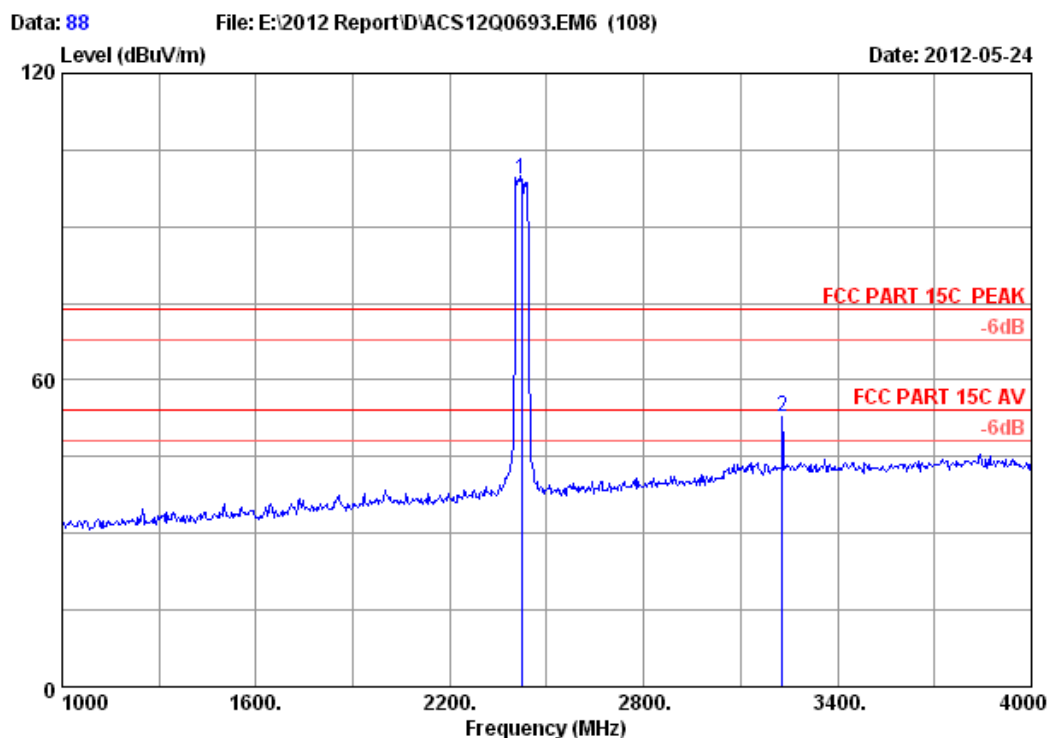


Site no. : 3m Chamber Data no. : 87  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2422.000       | 28.00                    | 6.06                  | 34.44                  | 89.37             | 88.99                         | 74.00              | -14.99         | Peak   |
| 2 | 3229.000       | 30.49                    | 7.16                  | 34.52                  | 48.42             | 51.55                         | 74.00              | 22.45          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

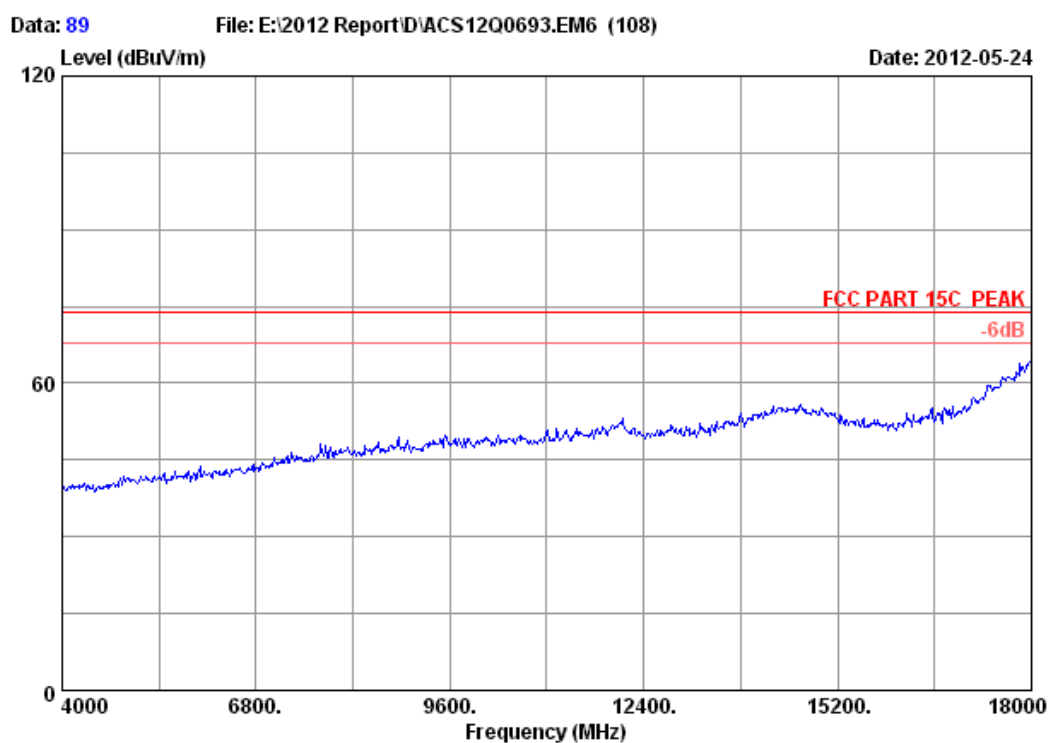


Site no. : 3m Chamber Data no. : 88  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 : DIR-524

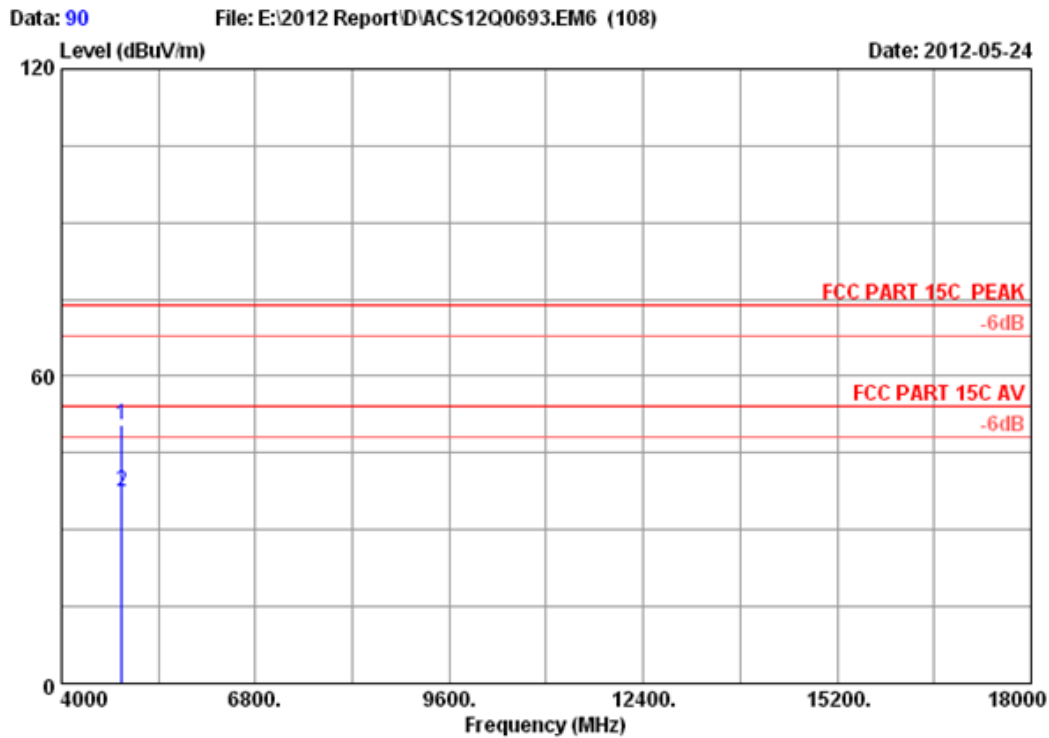
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2422.000       | 28.00                    | 6.06                  | 34.44                  | 99.68             | 99.30                         | 74.00              | -25.30         | Peak   |
| 2 | 3229.000       | 30.49                    | 7.16                  | 34.52                  | 49.69             | 52.82                         | 74.00              | 21.18          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 89       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT40 CH4 2437MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

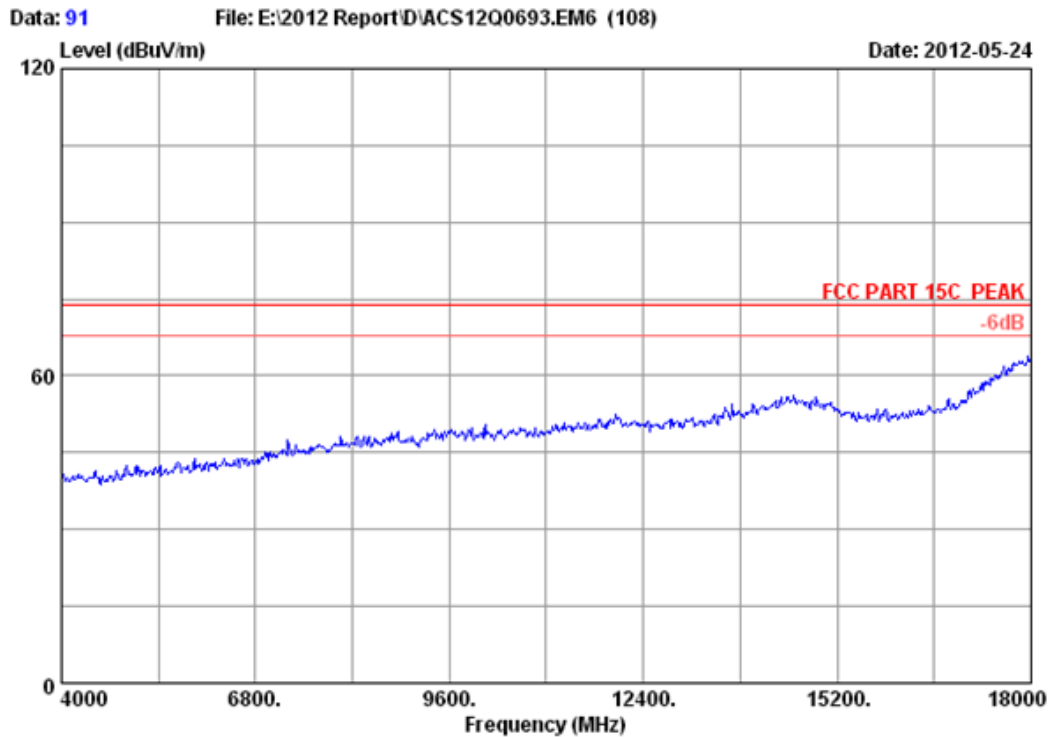


Site no. : 3m Chamber Data no. : 90  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 : DIR-524

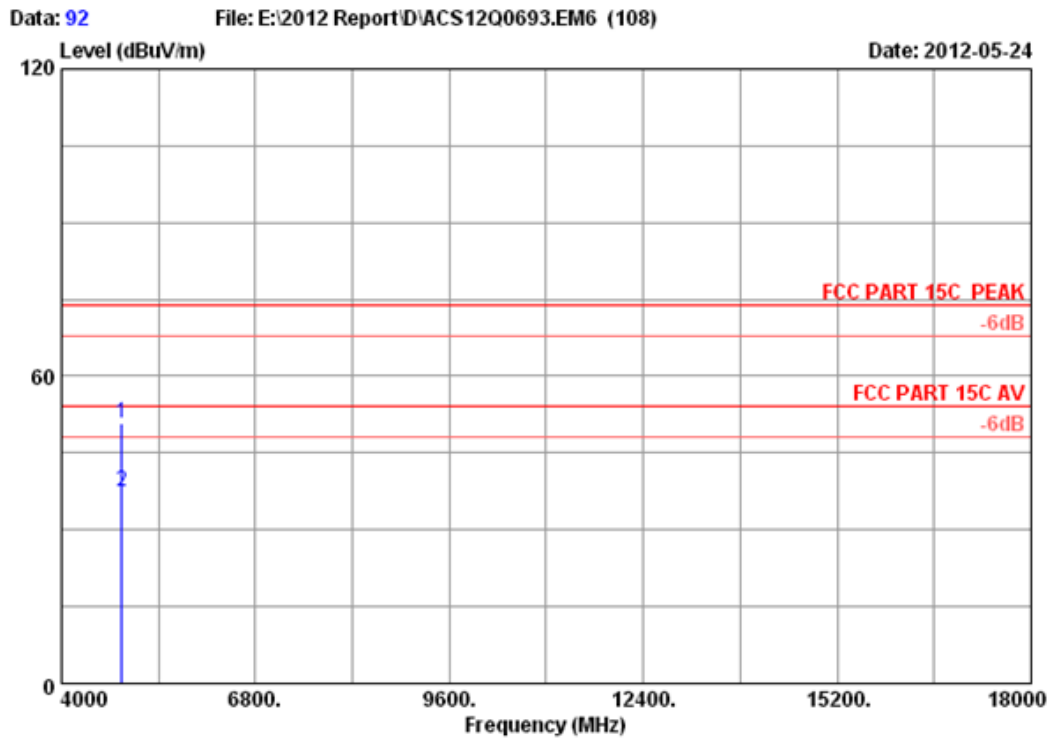
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.67             | 50.63                         | 74.00              | 23.37          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.55             | 37.51                         | 54.00              | 16.49          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 91         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11nHT40 CH4 2437MHz Tx        |           |              |
|              | : DIR-524                               |           |              |

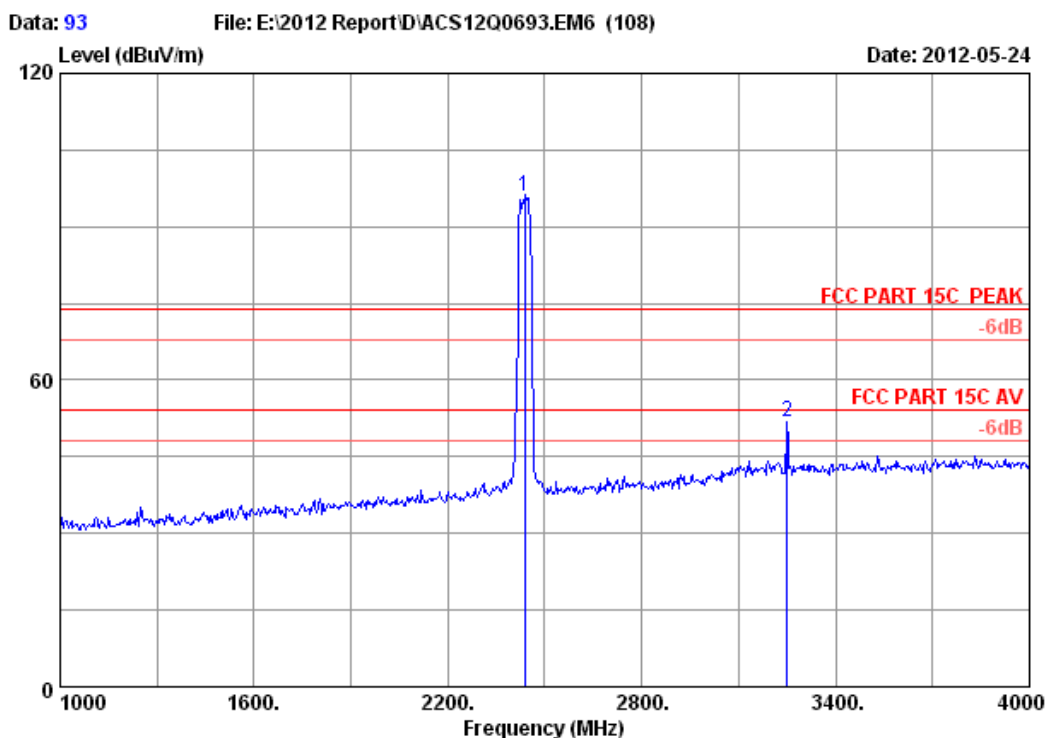


Site no. : 3m Chamber Data no. : 92  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 43.85             | 50.81                         | 74.00              | 23.19          | Peak    |
| 2 | 4874.000       | 32.98                    | 8.58                  | 34.60                  | 30.64             | 37.60                         | 54.00              | 16.40          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

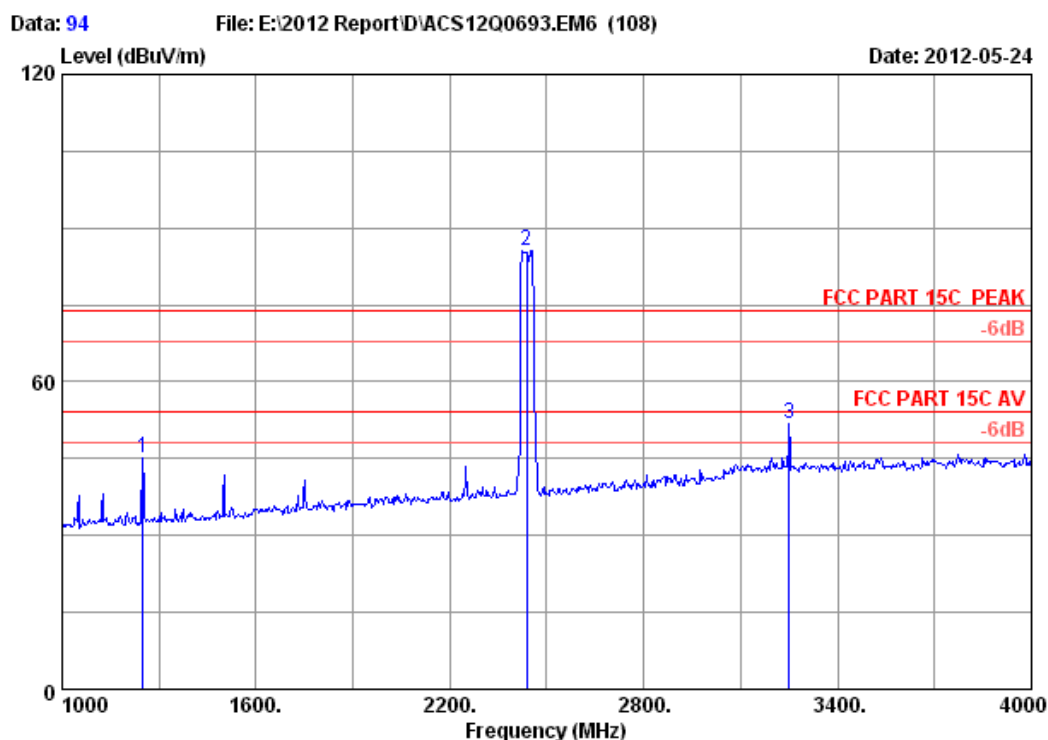


Site no. : 3m Chamber Data no. : 93  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 96.29             | 95.94                         | 74.00              | -21.94         | Peak   |
| 2 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 48.71             | 51.91                         | 74.00              | 22.09          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

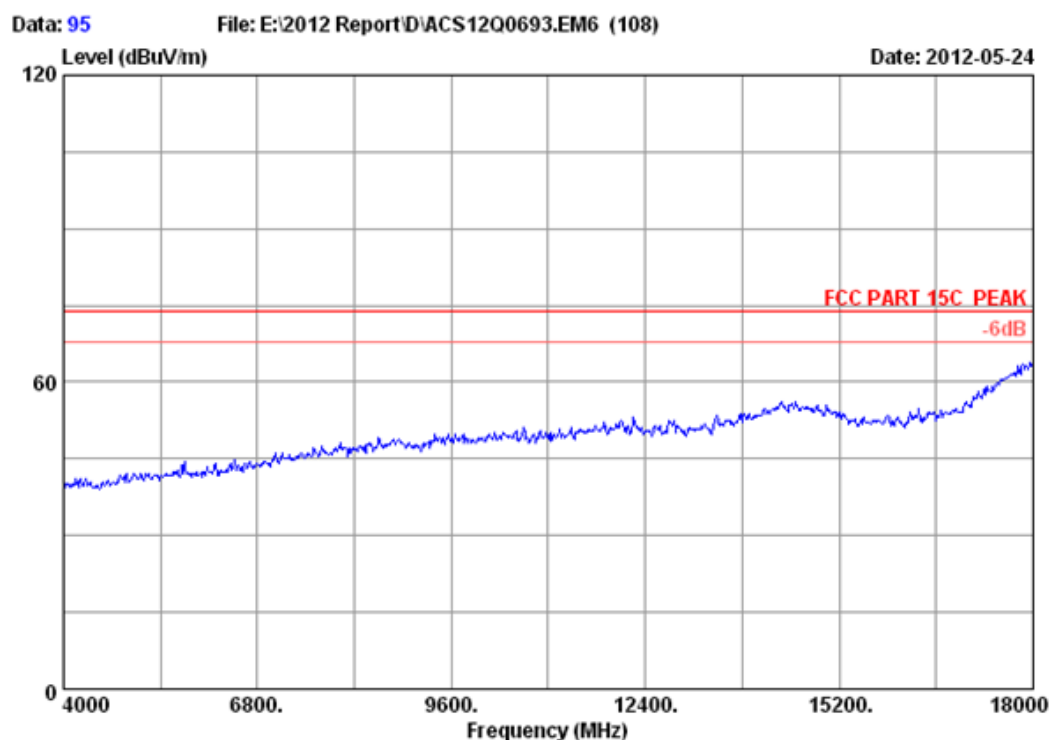


Site no. : 3m Chamber Data no. : 94  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 : DIR-524

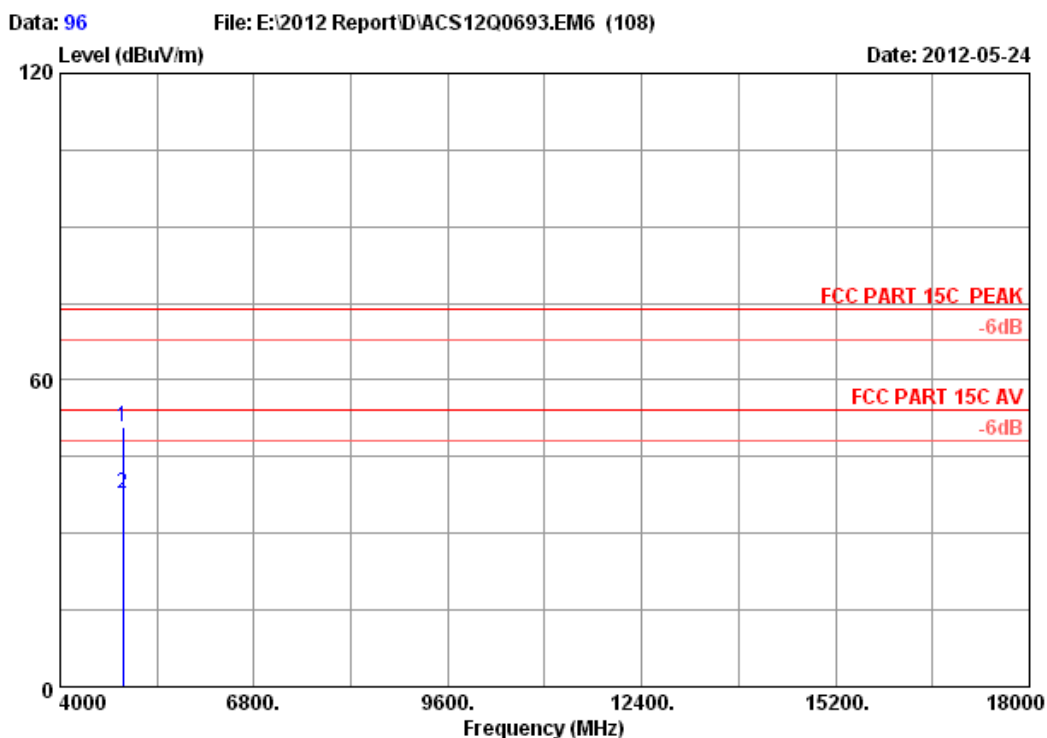
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 1249.000       | 24.58                    | 4.19                  | 34.78                  | 51.15             | 45.14                         | 74.00              | 28.86          | Peak   |
| 2 | 2437.000       | 28.03                    | 6.06                  | 34.44                  | 85.85             | 85.50                         | 74.00              | -11.50         | Peak   |
| 3 | 3250.000       | 30.53                    | 7.19                  | 34.52                  | 48.56             | 51.76                         | 74.00              | 22.24          | Peak   |

**Remarks:**

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |              |
|--------------|-----------------------------------------|-----------|--------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 95         |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : HORIZONTAL |
| Limit        | : FCC PART 15C PEAK                     |           |              |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li     |
| EUT          | : Wireless N 150 Router                 |           |              |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |              |
| Test mode    | : IEEE802.11nHT40 CH7 2452MHz Tx        |           |              |
|              | : DIR-524                               |           |              |

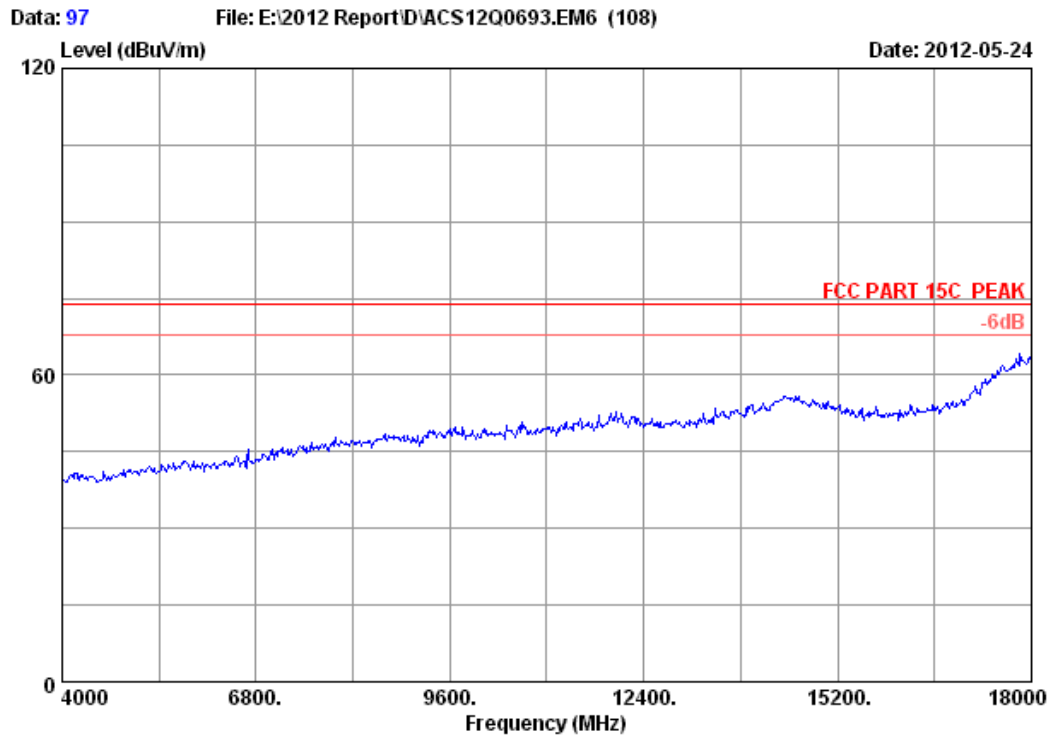


Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 : DIR-524

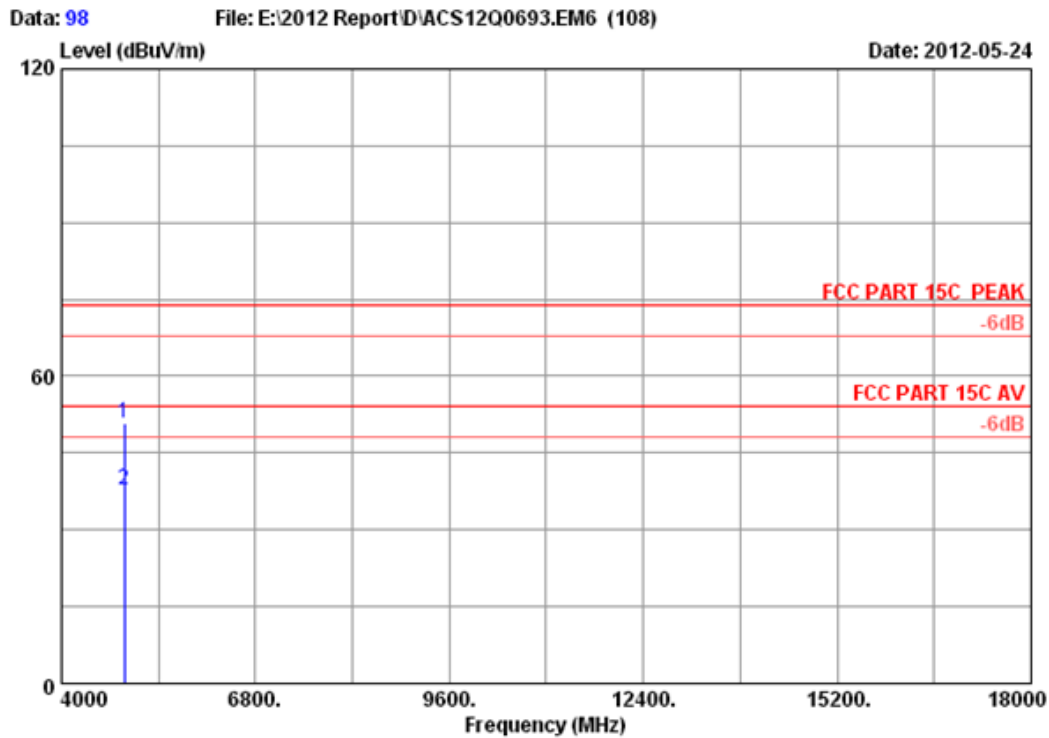
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4904.000       | 33.04                    | 8.61                  | 34.60                  | 43.75             | 50.80                         | 74.00              | 23.20          | Peak    |
| 2 | 4904.000       | 33.04                    | 8.61                  | 34.60                  | 30.64             | 37.69                         | 54.00              | 16.31          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 97       |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT40 CH7 2452MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

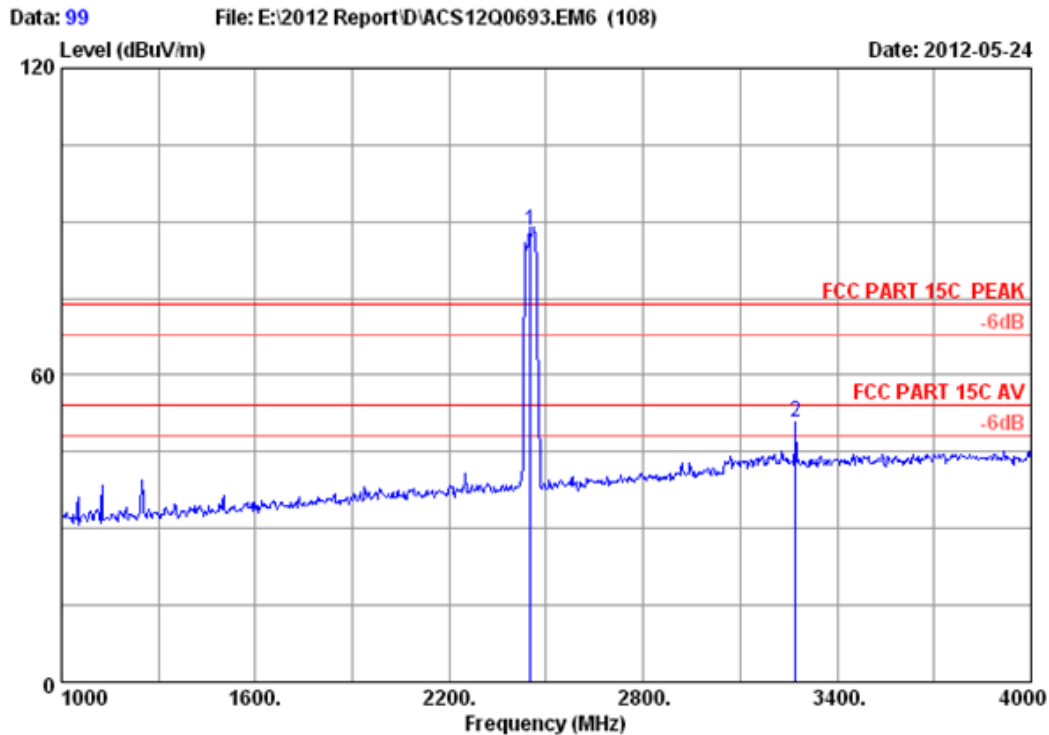


Site no. : 3m Chamber Data no. : 98  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4904.000       | 33.04                    | 8.61                  | 34.60                  | 43.92             | 50.97                         | 74.00              | 23.03          | Peak    |
| 2 | 4904.000       | 33.04                    | 8.61                  | 34.60                  | 30.68             | 37.73                         | 54.00              | 16.27          | Average |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

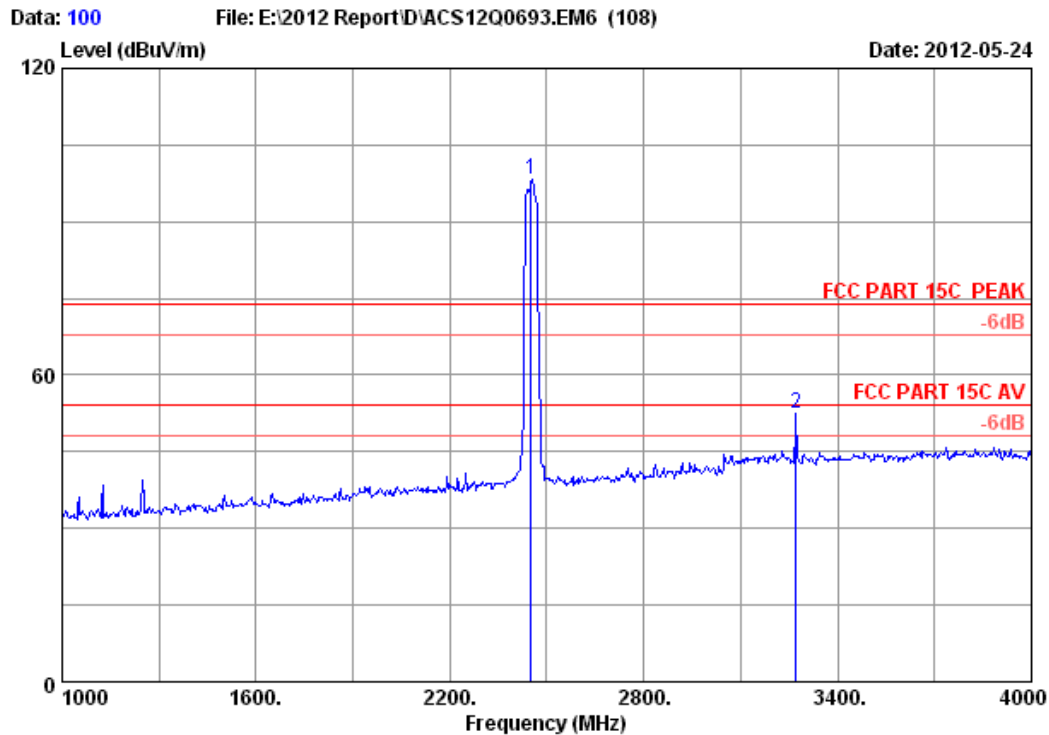


Site no. : 3m Chamber Data no. : 99  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N 150 Router  
 Power supply : DC 5V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 : DIR-524

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2452.000       | 28.03                    | 6.09                  | 34.44                  | 88.66             | 88.34                         | 74.00              | -14.34         | Peak   |
| 2 | 3271.000       | 30.61                    | 7.20                  | 34.53                  | 47.52             | 50.80                         | 74.00              | 23.20          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



|              |                                         |           |            |
|--------------|-----------------------------------------|-----------|------------|
| Site no.     | : 3m Chamber                            | Data no.  | : 100      |
| Dis. / Ant.  | : 3m 2011 3115 4580                     | Ant. pol. | : VERTICAL |
| Limit        | : FCC PART 15C PEAK                     |           |            |
| Env. / Ins.  | : 23°C/54%                              | Engineer  | : Leo-Li   |
| EUT          | : Wireless N 150 Router                 |           |            |
| Power supply | : DC 5V From Adapter Input AC 120V/60Hz |           |            |
| Test mode    | : IEEE802.11nHT40 CH7 2452MHz Tx        |           |            |
|              | : DIR-524                               |           |            |

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2452.000       | 28.03                    | 6.09                  | 34.44                  | 98.55             | 98.23                         | 74.00              | -24.23         | Peak   |
| 2 | 3271.000       | 30.61                    | 7.20                  | 34.53                  | 49.35             | 52.63                         | 74.00              | 21.37          | Peak   |

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

## 5. CONDUCTED SPURIOUS EMISSIONS

### 5.1.Test Equipment

| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal. | Cal. Interval |
|------|-------------------|--------------|-------------|------------|-----------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A      | US44300459 | May.08,12 | 1 Year        |
| 2.   | Attenuator        | Agilent      | 8491B       | MY39262165 | May.08,12 | 1 Year        |
| 3.   | RF Cable          | Hubersuhner  | SUCOFLEX102 | 28618/2    | May.08,12 | 1Year         |

### 5.2.Limit

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

### 5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

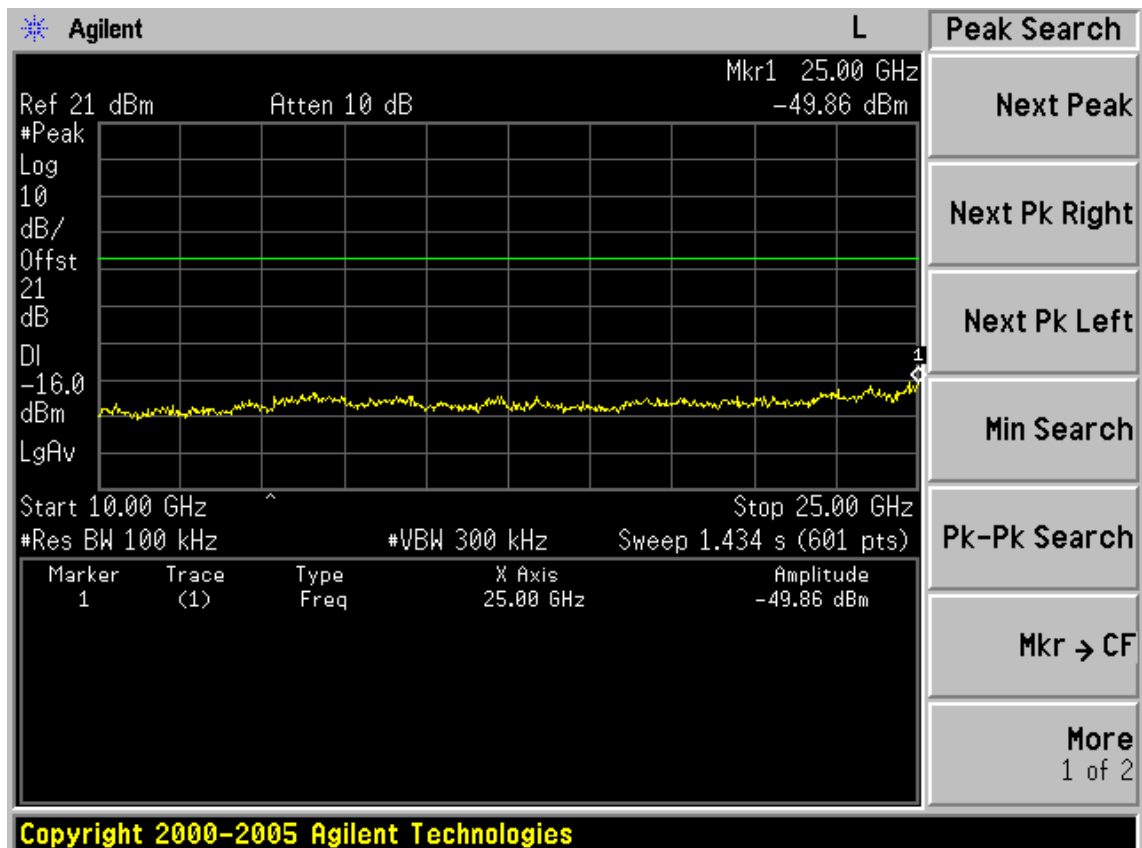
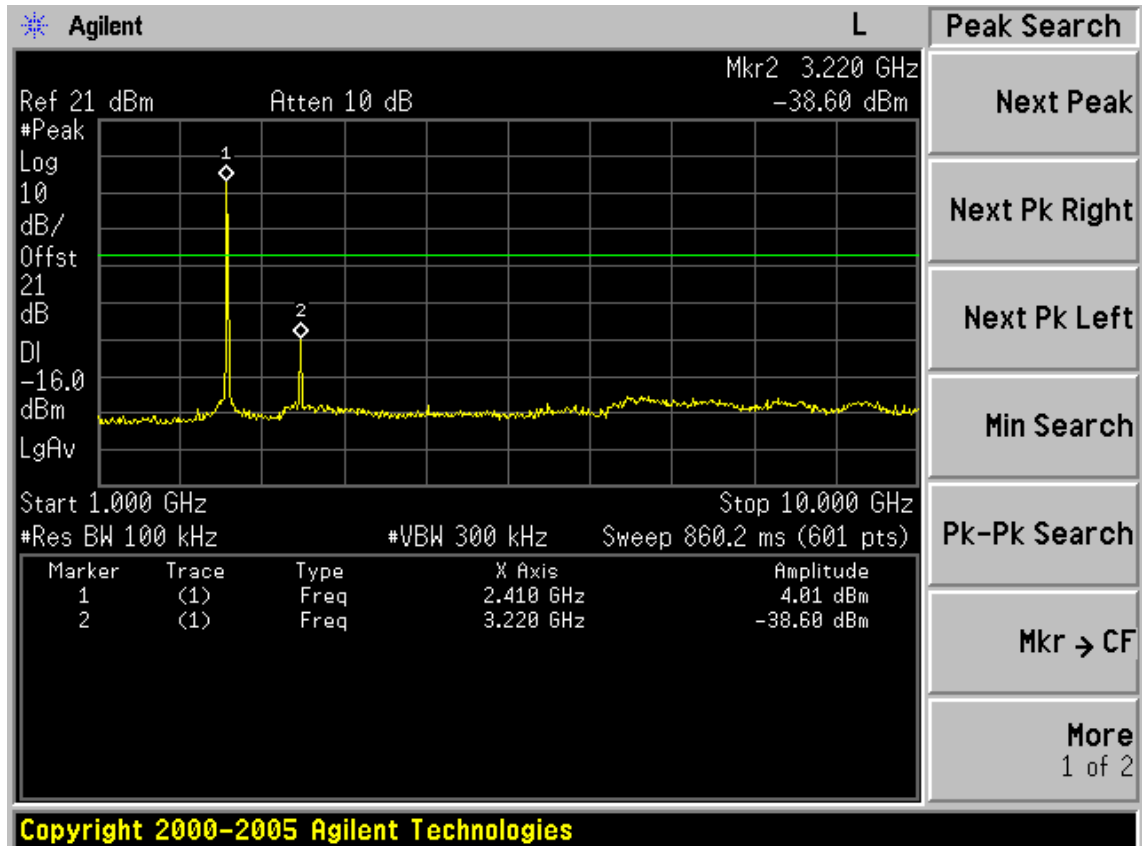
### 5.4.Test result

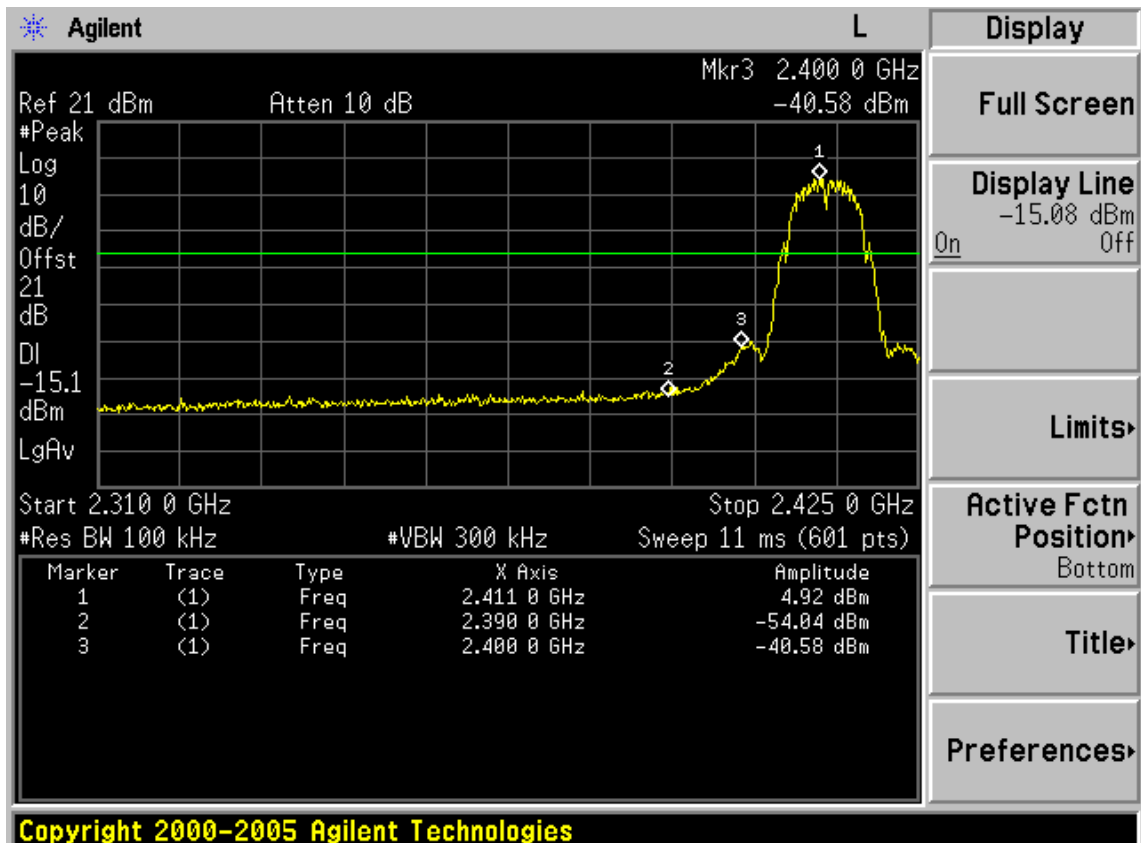
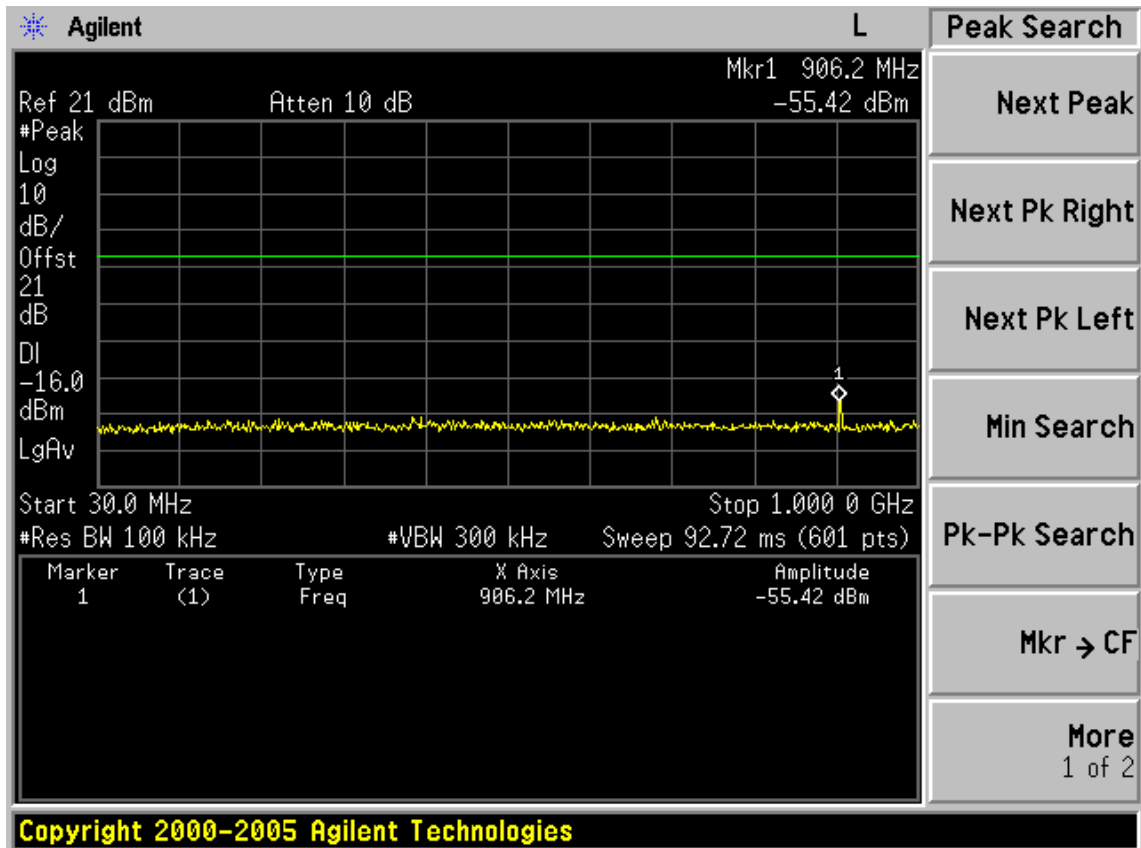
**PASS** (The testing data was attached in the next pages.)

**Chain 0:**

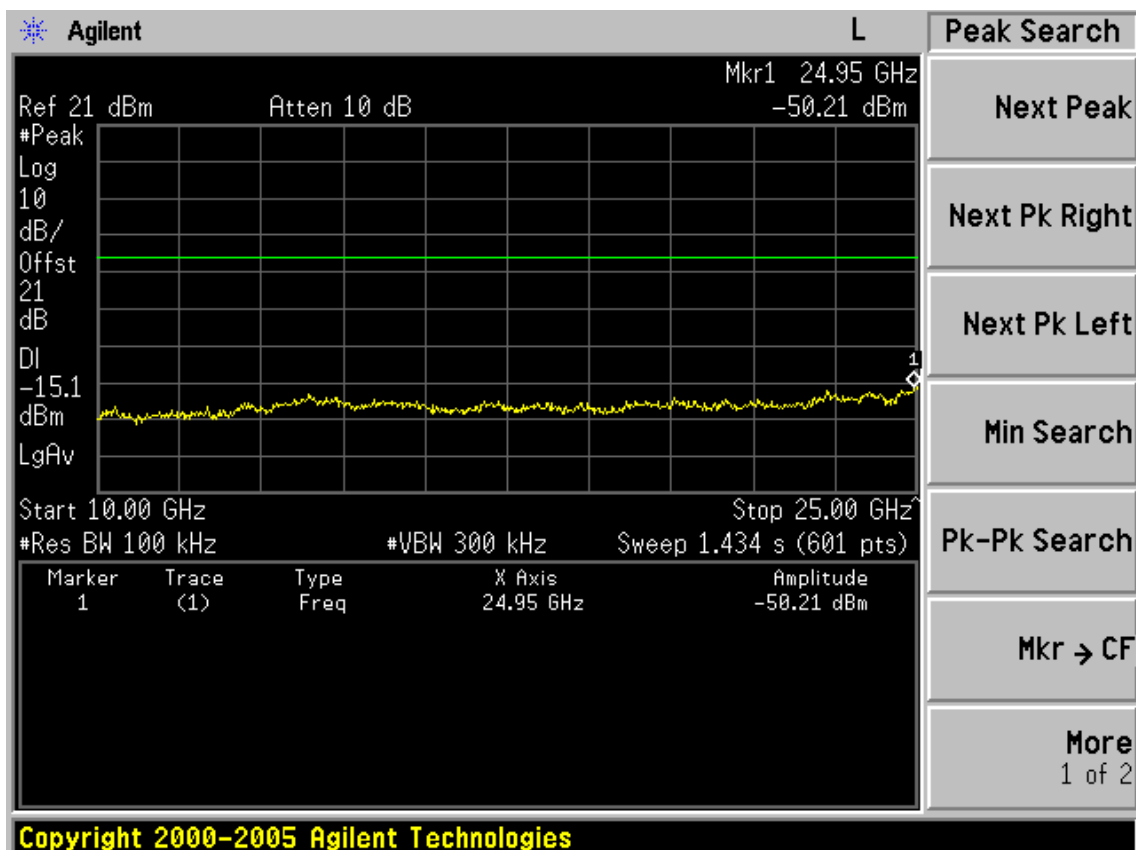
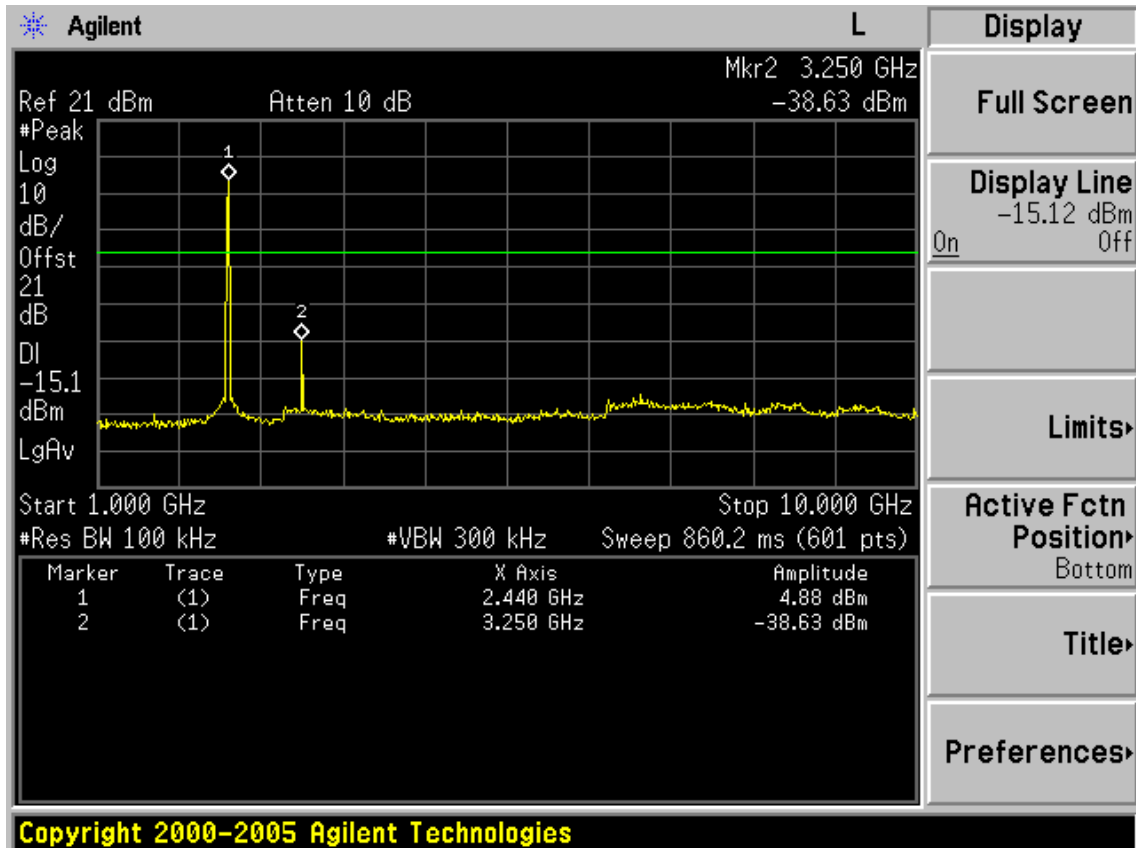
Test Mode: IEEE 802.11b TX

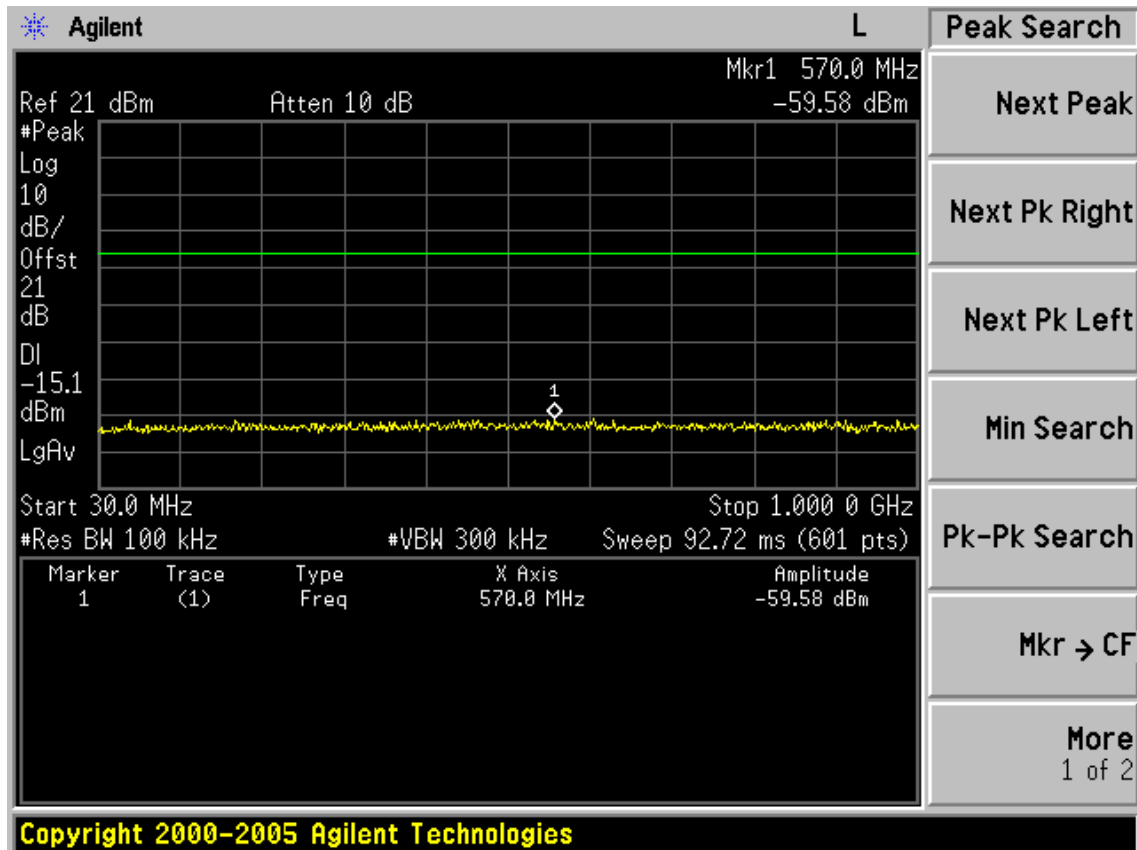
Test CH1: 2412MHz



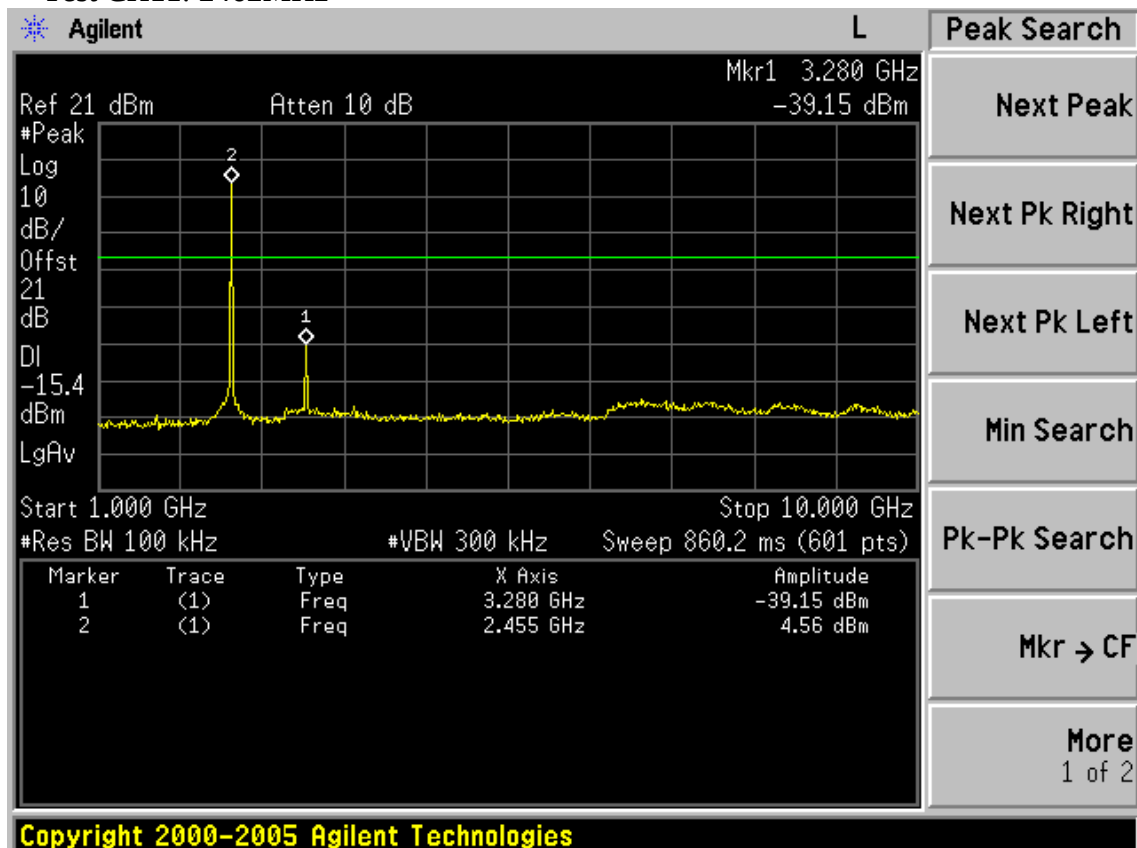


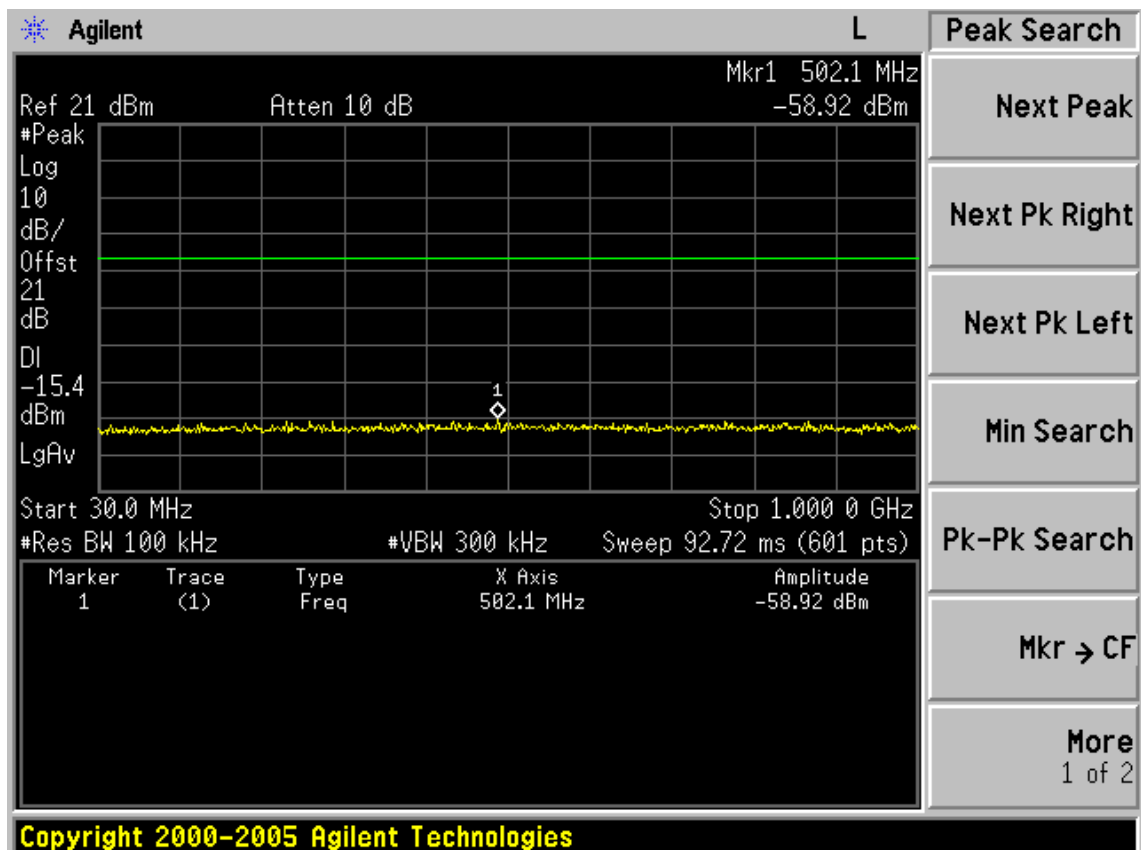
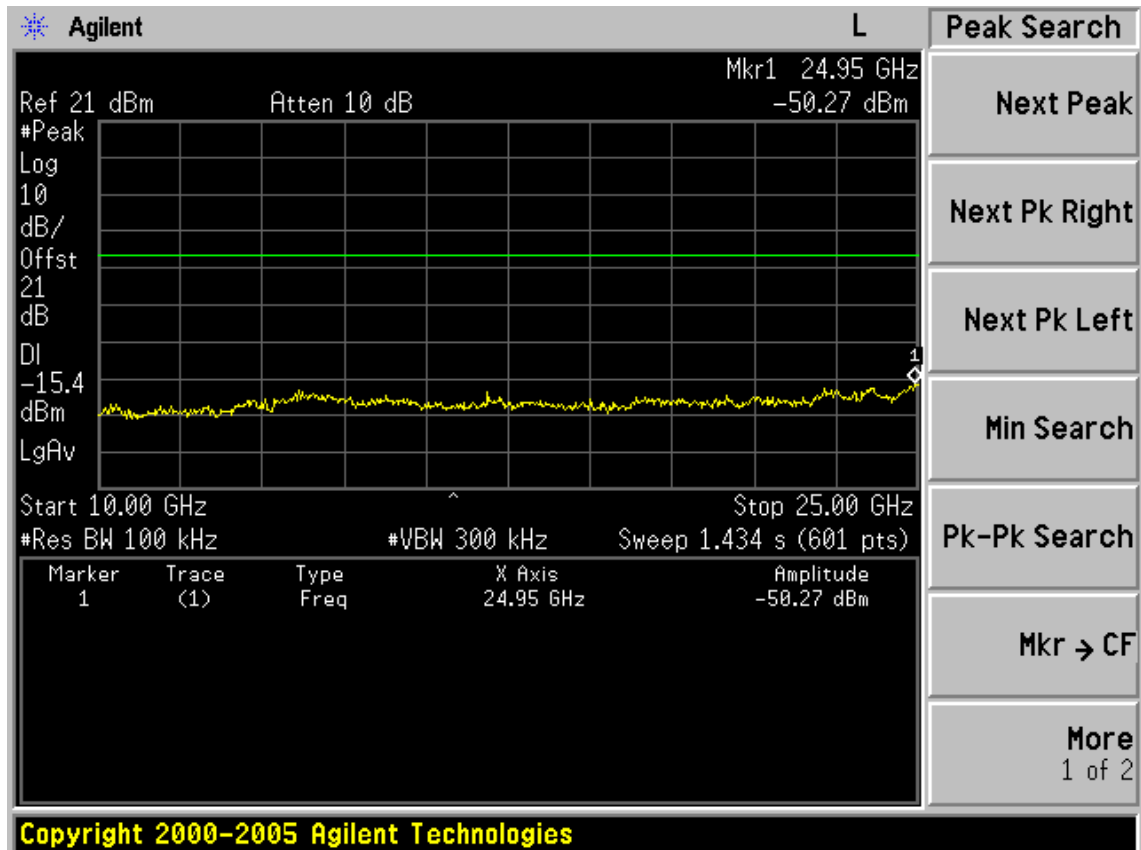
Test CH6: 2437MHz

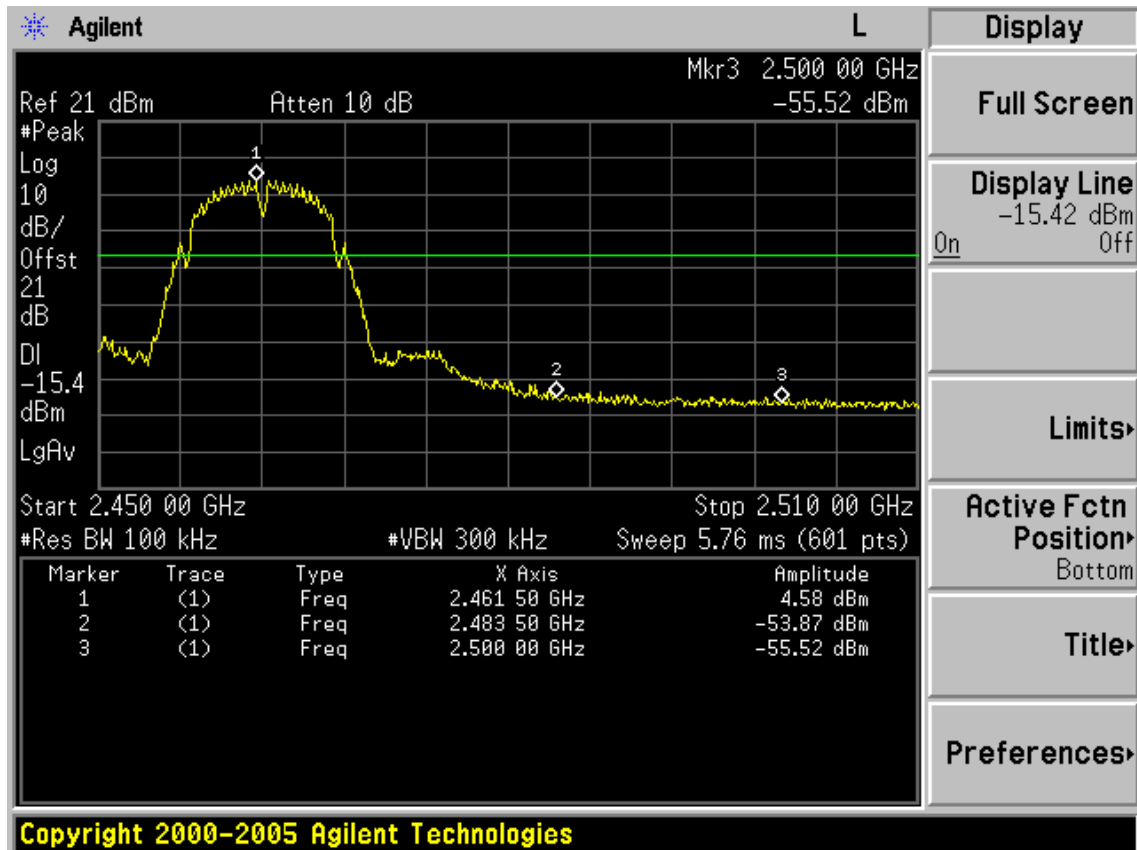




Test CH11: 2462MHz

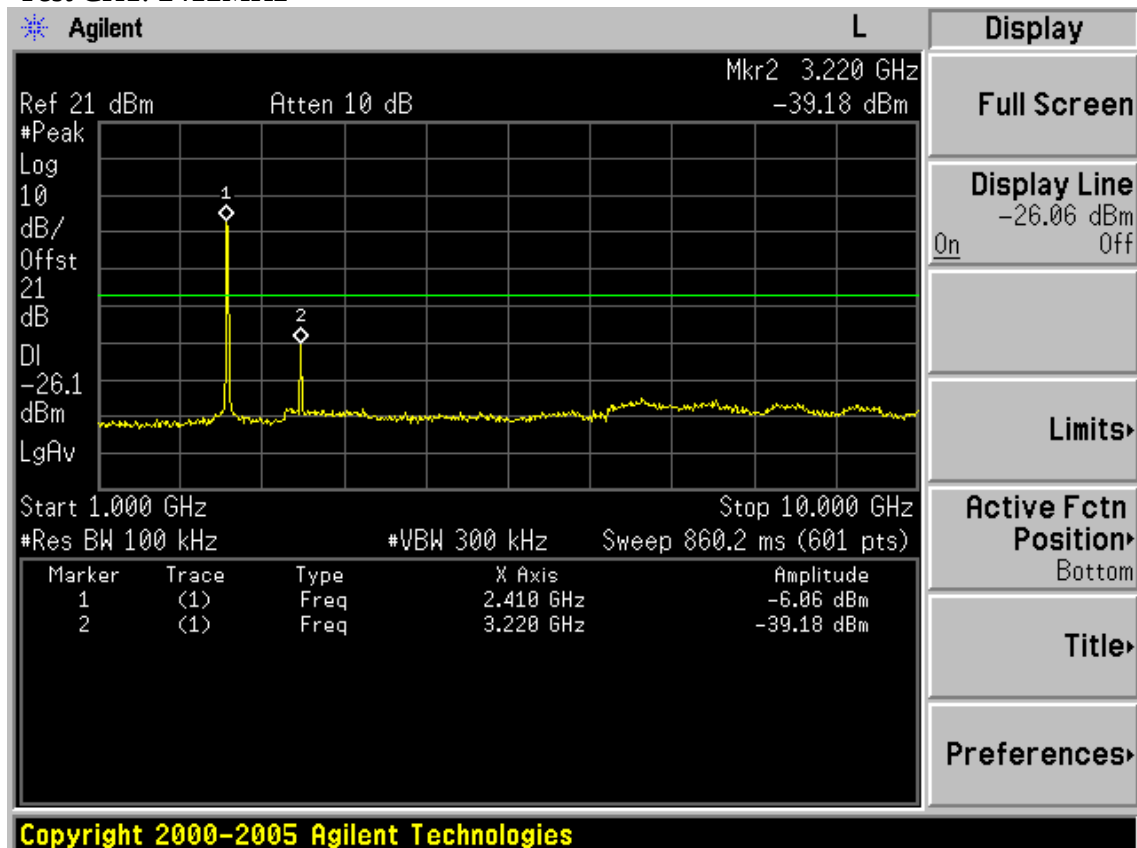


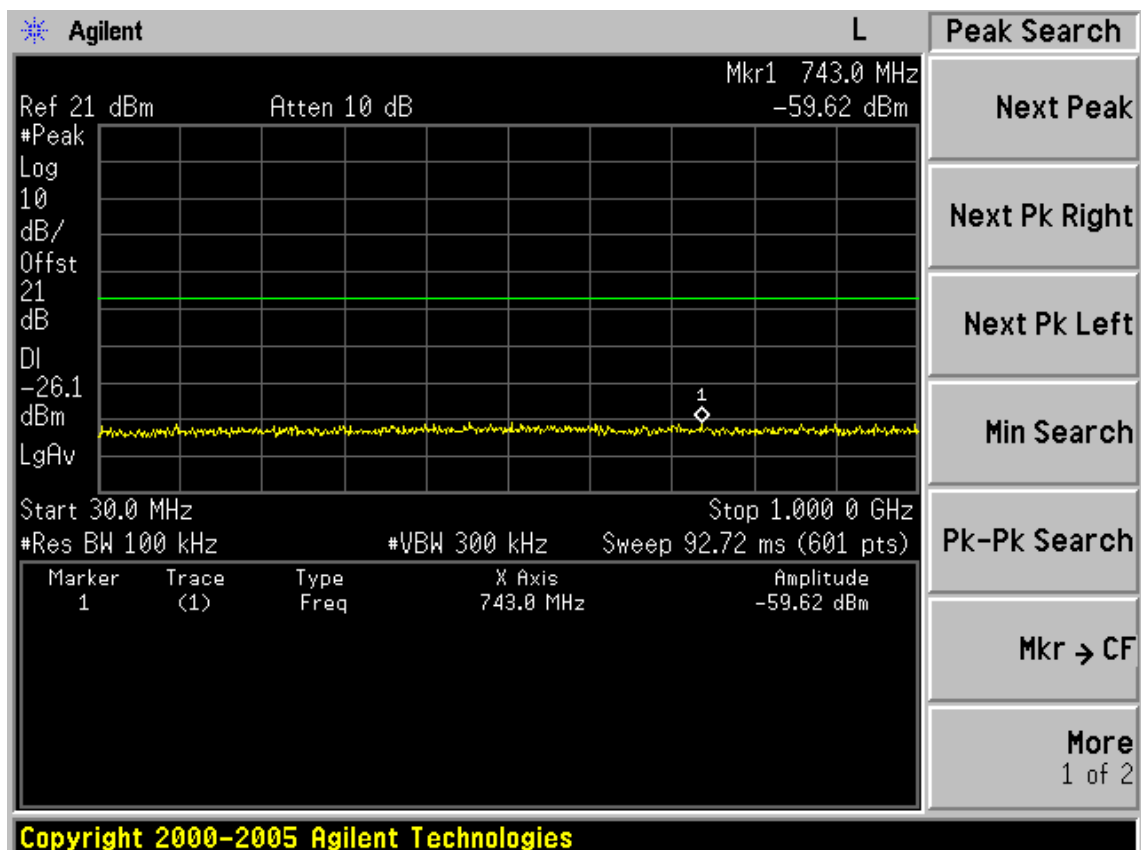
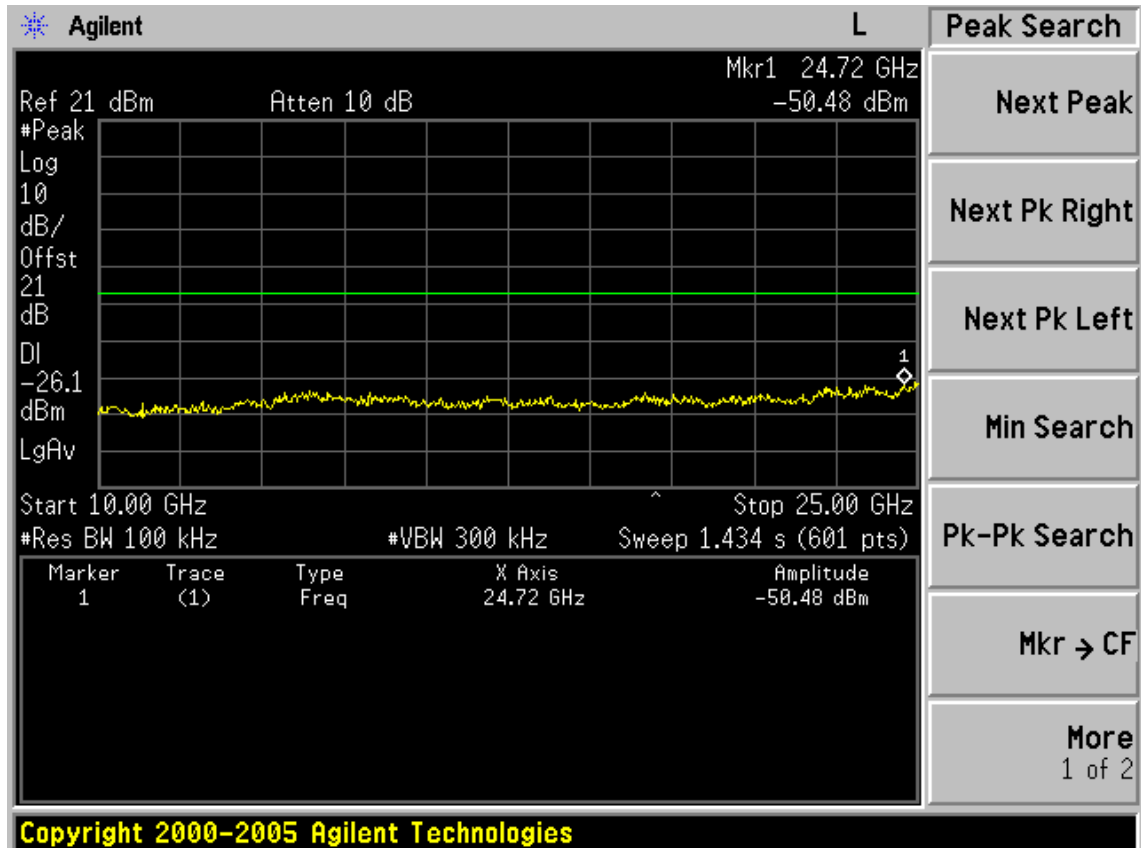


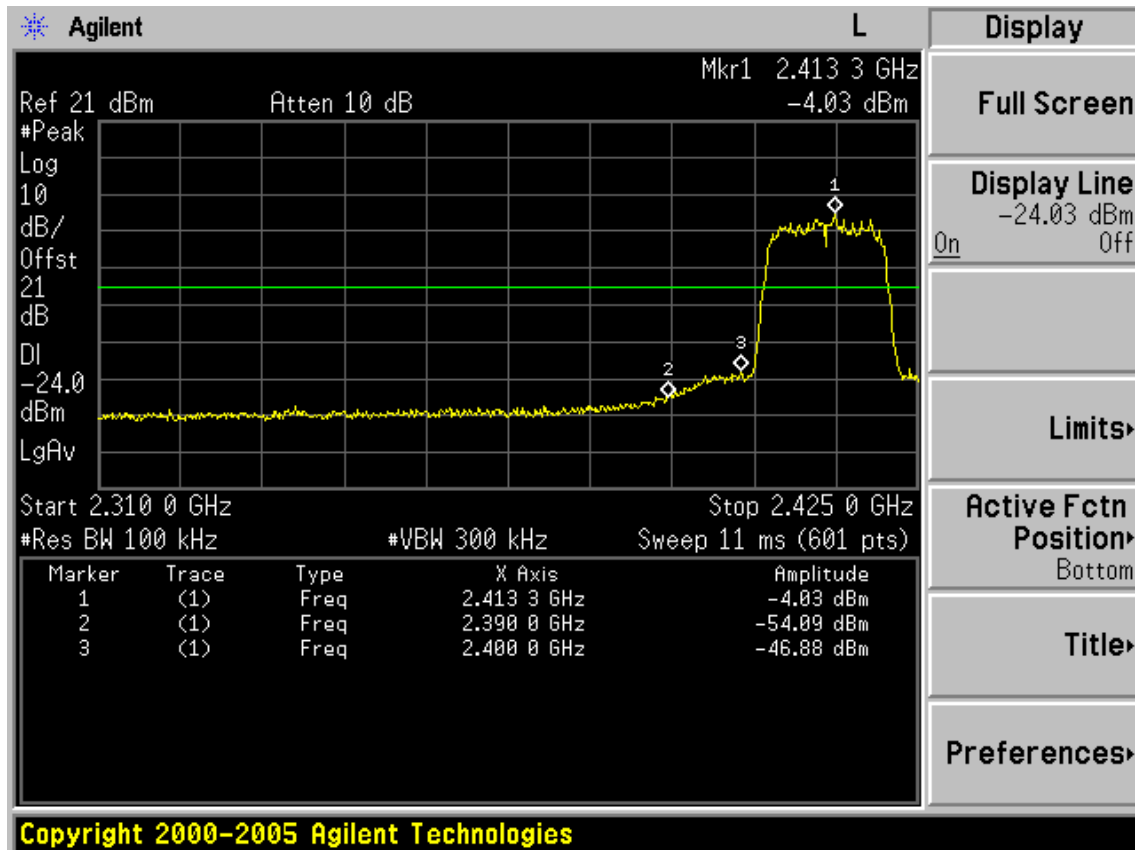


Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz







Test CH6: 2437MHz

